

Data Volume of the Project on

MANAGEMENT OF TIDAL INLETS ALONG WEST COAST

Guidance By

Integrated Coastal and Marine Area

Management – Project Directorate

(ICMAM-PD)

Ministry of Earth Sciences, Govt. of India



Local Implementing Agency

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GROUND WATER TABLE OBSERVATIONS

Reduced levels of Ground water table fluctuation along North-South direction w.r.t. CD

Location : Bengre

Year : 2004

Distance (m)	15/03/04	29/03/04	11/05/04	31/05/04	14/06/04	28/06/04	15/07/04
0	-0.284	-0.484	-0.184	-0.284	-0.034	-0.234	-0.384
325	-0.284	-0.384	0.116	-0.074	0.336	0.086	-0.204
450	-0.294	-0.374	0.276	0.106	0.646	0.176	-0.084
1550	-0.314	-0.364	0.226	0.036	0.586	0.186	-0.214

Distance (m)	31/07/04	16/08/04	31/08/04	20/09/04	04/10/04	02/12/04	18/12/04
0	-0.324	-0.374	-0.484	-0.434	-0.284	-0.284	-0.184
325	-0.104	-0.234	-0.374	-0.434	-0.234	-0.234	-0.224
450	0.056	-0.054	-0.274	-0.334	-0.194	-0.194	-0.144
1550	0.036	-0.044	-0.234	-0.384	-0.164	-0.164	-0.114

Location : Bengre

Year : 2005

Distance	03/01/05	18/01/05	03/02/05	16/02/05	03/03/05	14/03/05	01/04/05	14/04/05	03/05/05
0	-0.184	-0.094	0.023	-0.834	-0.434	-0.234	-0.404	-0.334	-0.384
325	-0.184	-0.134	0.023	-0.614	-0.334	-0.234	-0.314	-0.284	-0.304
450	-0.224	-0.124	0.158	-0.264	-0.414	-0.264	-0.494	-0.274	-0.254
1550	-0.214	-0.064	-0.037	-0.194	-0.364	-0.164	-0.264	-0.304	-0.134

Distance	17/05/05	02/06/05	16/06/05	22/06/05	01/07/05	15/07/05	02/08/05	13/08/05
0	-0.444	-0.294	-0.284	0.616	-0.254	-0.324	0.016	-0.394
325	-0.354	-0.274	-0.084	0.236	-0.024	-0.114	0.386	-0.174
450	-0.364	-0.244	-0.064	1.336	0.126	0.076	0.636	0.076
1550	-0.334	-0.284	0.046	0.866	0.086	0.036	0.726	0.146

Distance	10/09/05	16/09/05	30/09/05	29/10/05	19/11/05	2/12/2005	15/12/05	30/09/05
0	-0.434	-0.354	-0.554	-0.464	-0.414	-0.204	-0.284	-0.394
325	-0.334	-0.254	-0.474	-0.414	-0.324	-0.214	-0.244	-0.344
450	-0.224	-0.124	-0.374	-0.314	-0.234	-0.234	-0.194	-0.294
1550	-0.214	-0.114	-0.374	-0.314	-0.214	-0.194	-0.174	-0.294

Location : Bengre

Year : 2006

Distance	13/01/06	31/01/06	15/02/06	03/03/06	17/03/06	03/04/06
0	-0.164	-0.204	-0.204	-0.184	-0.234	-0.484
325	-0.164	-0.274	-0.204	-0.254	-0.274	-0.374
450	-0.334	-0.244	-0.174	-0.224	-0.254	-0.104
1550	-0.144	-0.204	-0.154	-0.164	-0.264	-0.294

Location : Ullal

Year : 2004

Distance	26/02/04	15/03/04	29/03/04	11/05/04	31/05/04	14/06/04	28/06/04	15/07/04
1500	0.223	0.013	0.133	0.573	0.523	0.603	0.273	0.423
2100	-0.087	-0.207	-0.127	0.543	0.483	1.023	0.273	0.233
2500	-0.042	-0.092	0.008	0.698	0.798	1.268	0.558	0.758
3500	-0.187	-0.267	-0.137	0.533	0.403	0.533	0.363	0.553
4000	-0.187	-0.337	0.113	0.793	0.703	0.403	0.413	0.563

Distance	31/07/04	16/08/04	31/08/04	20/09/04	04/10/04	03/12/04	16/12/04
1500	0.373	0.223	0.123	0.123	0.223	0.223	0.223
2100	0.523	0.303	0.213	0.213	0.133	0.133	0.223
2500	0.738	0.628	0.448	0.448	0.328	0.328	0.228
3500	0.593	0.593	0.493	0.493	0.463	0.463	0.083
4000	0.433	0.463	0.443	0.443	0.463	0.463	0.083

Location : Ullal

Year : 2005

Distance	04/01/05	18/01/05	03/02/05	16/02/05	03/03/05	14/03/05
1500	0.323	0.103	0.023	0.073	-0.107	0.073
2100	0.223	-0.027	0.973	-0.027	-0.177	0.223
2500	0.308	0.108	0.158	0.038	-0.092	0.408
3500	0.463	0.263	-0.037	-0.007	-0.187	-0.207
4000	0.463	0.023	-0.057	-0.087	-0.187	-0.137

Distance	01/04/05	14/04/05	03/05/05	17/05/05	02/06/05	16/06/05
1500	-0.027	0.023	0.073	0.123	0.383	0.473
2100	0.003	-0.027	-0.107	-0.027	0.293	0.423
2500	0.188	0.058	0.058	0.128	0.538	0.708
3500	0.063	0.103	-0.037	0.063	0.603	0.483
4000	0.013	0.113	-0.117	-0.037	0.363	0.263

Distance	22/06/05	01/07/05	15/07/05	02/08/05	13/08/05	10/09/05
1500	0.753	0.403	0.103	0.583	0.203	0.173
2100	1.103	0.263	0.373	0.473	0.213	0.023
2500	1.578	0.548	0.578	0.608	0.408	-0.092
3500	1.003	0.963	0.663	0.763	0.233	0.373
4000	0.763	0.863	0.583	0.383	0.283	0.443

Distance	16/09/05	30/09/05	29/10/05	19/11/05	2/12/05	15/12/05
1500	0.403	-0.027	0.153	0.143	0.493	0.303
2100	0.153	-0.257	0.033	-0.007	0.363	0.093
2500	0.138	-0.052	0.138	0.078	0.308	-0.002
3500	0.313	0.183	0.163	0.143	0.543	0.173
4000	0.263	0.203	0.233	0.193	0.593	0.213

Location : Ullal

Year : 2006

Distance	30/12/05	13/01/06	31/01/06	15/02/06
1500	0.223	0.283	0.183	0.303
2100	-0.027	0.093	-0.027	0.083
2500	0.038	0.208	0.018	0.088
3500	-0.017	0.103	0.093	0.103
4000	0.023	0.193	0.293	0.233

Typical seasonal changes in Ground Water Table along Bengre

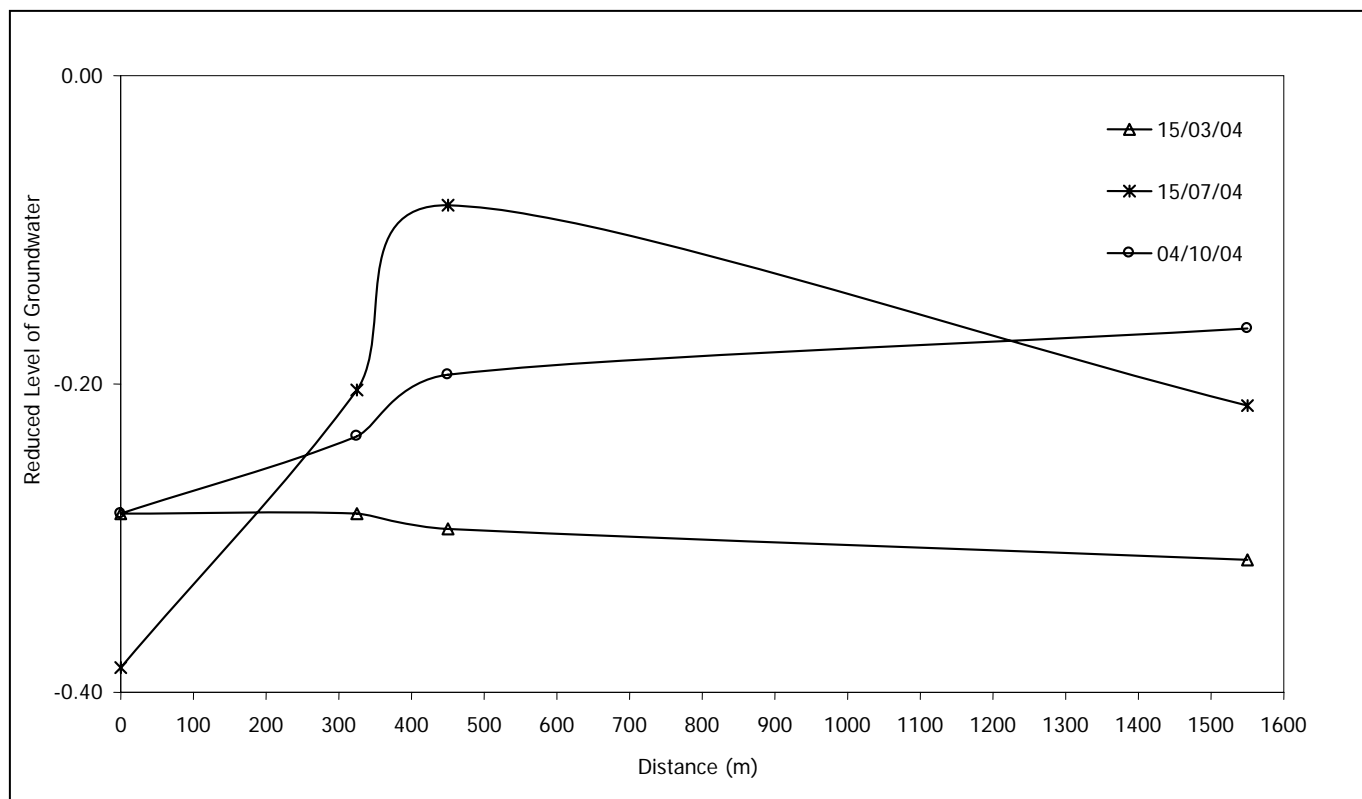


Fig. 1.1 Ground water table fluctuation along north-south direction for the year 2004

Typical seasonal changes in Ground Water Table along Bengre

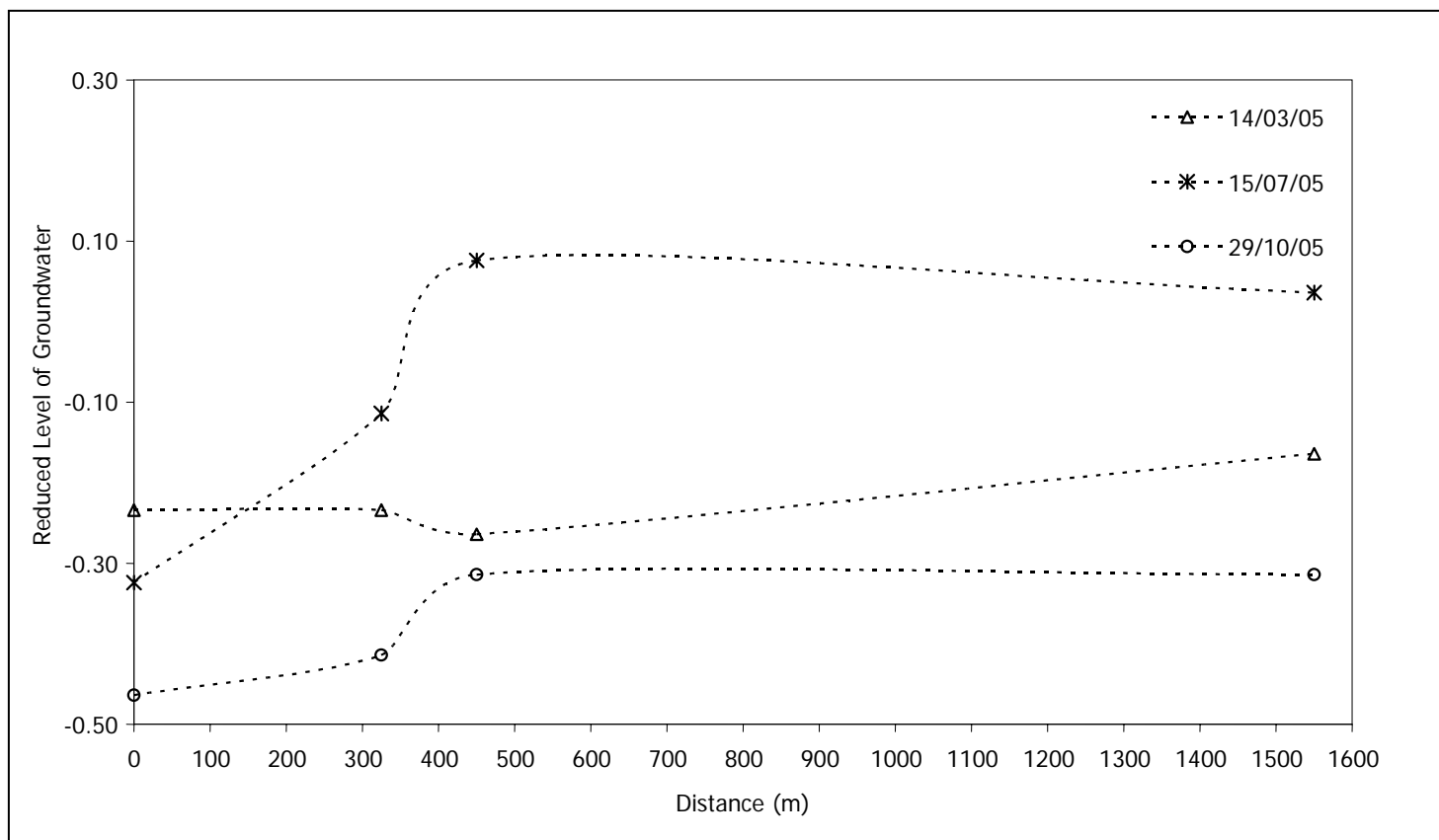


Fig. 1.2 Ground water table fluctuation along north-south direction for the year 2005

Typical seasonal changes in Ground Water Table along Ullal

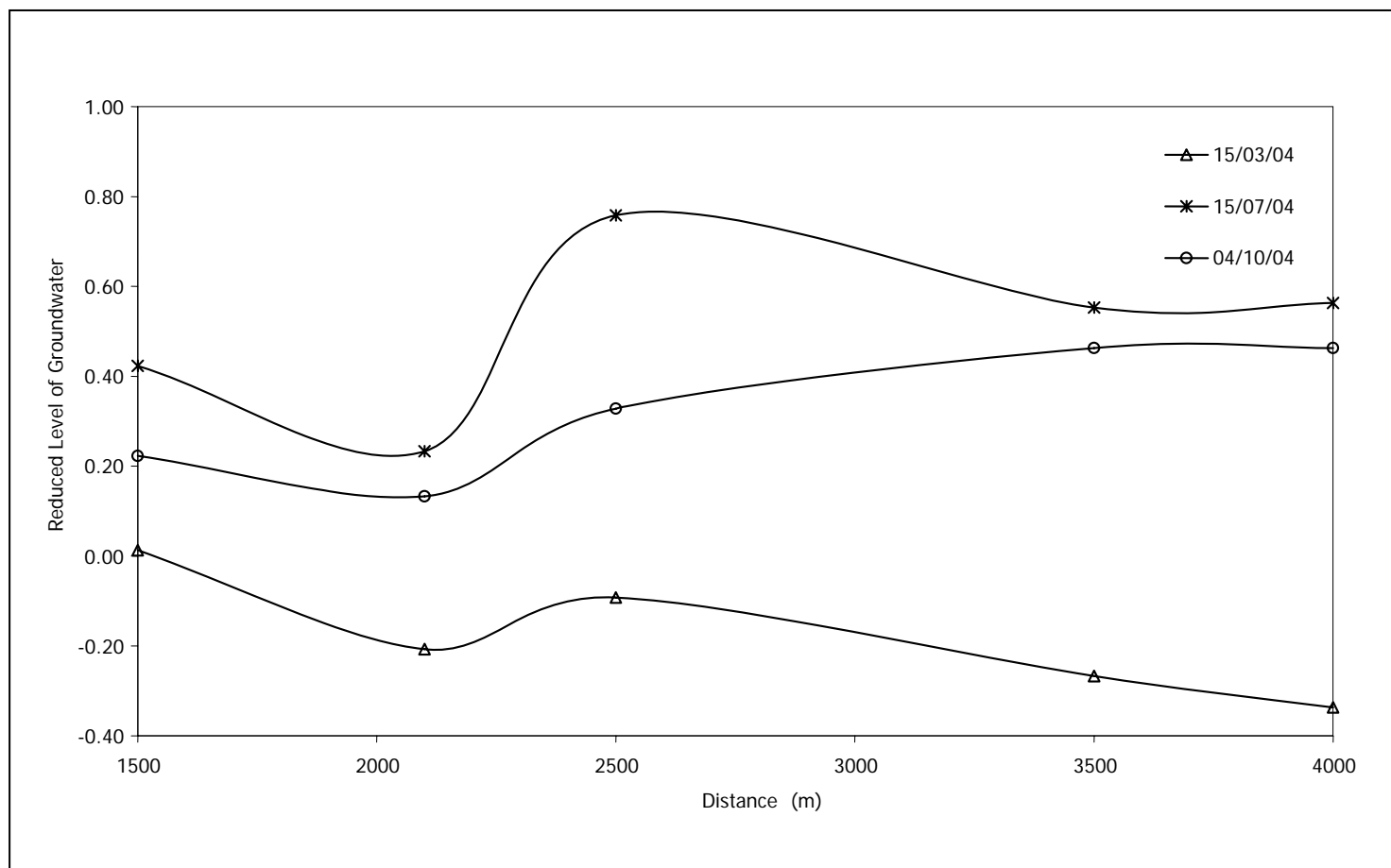


Fig. 1.3 Ground water table fluctuation along north-south direction for the year 2004

Typical seasonal changes in Ground Water Table along Ullal

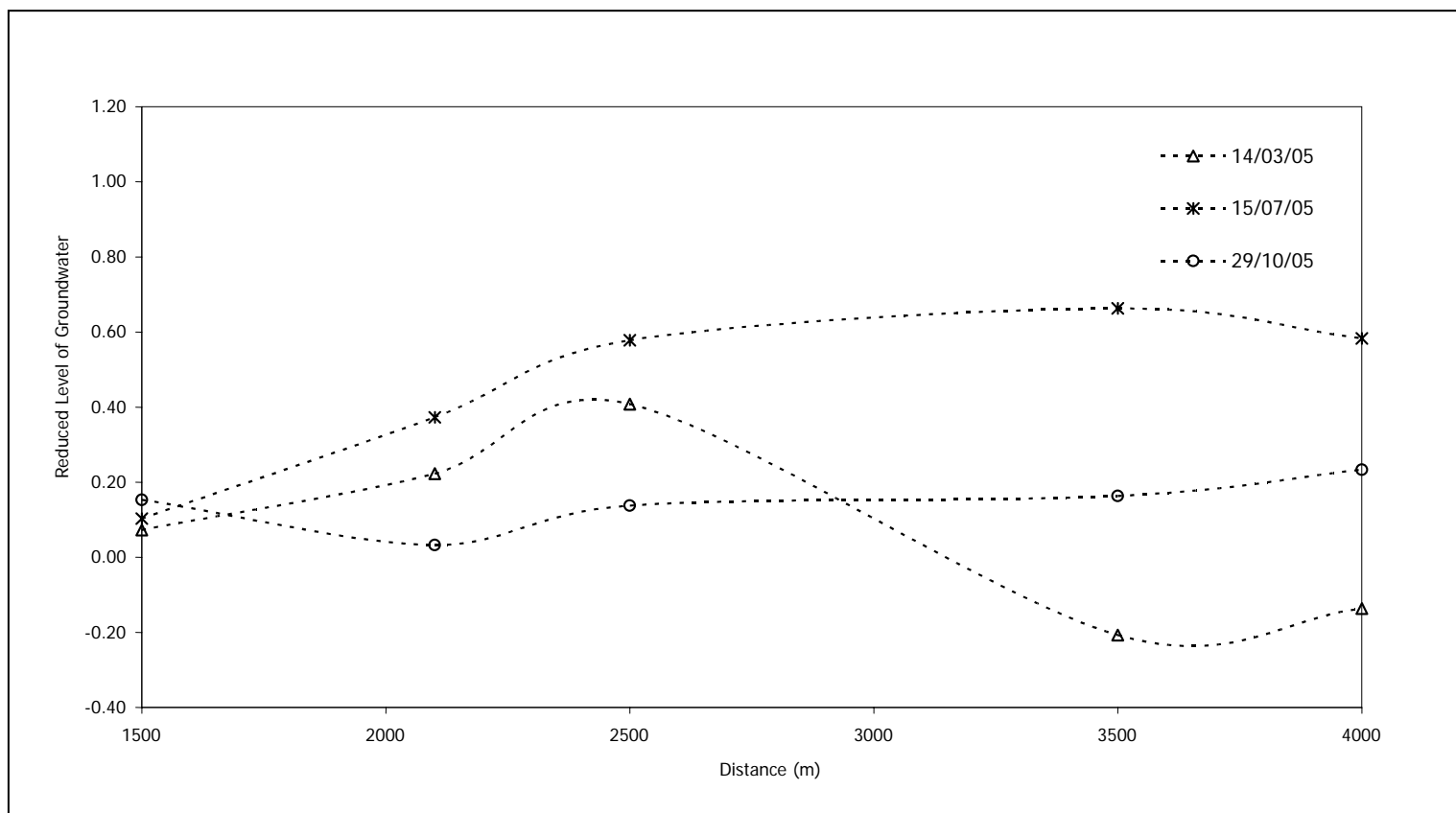


Fig. 1.4 Ground water table fluctuation along north-south direction for the year 2005

Reduced levels of Ground water table fluctuation along East-West direction w.r.t. CD

Location : Bengre

Year : 2005

Well No	Distance	02/06/05	16/06/05	22/06/05	01/07/05	15/07/05	02/08/05	13/08/05
ICB 1	0	-0.294	-0.284	0.616	-0.254	-0.324	0.016	-0.394
ICB 1A	51	-0.299	-0.199	0.961	-0.159	-0.239	0.171	-0.279
ICB 1B	176	-0.134	-0.064	0.916	0.096	-0.014	0.536	-0.014

Well No	Distance	10/09/05	16/09/05	30/09/05	29/10/05	19/11/05	02/12/05	15/12/05	30/12/05
ICB 1	0	-0.434	-0.354	-0.554	-0.464	-0.414	-0.204	-0.284	-0.394
ICB 1A	51	-0.339	-0.339	-0.439	-0.349	-0.269	-0.109	-0.119	-0.139
ICB 1B	176	-0.174	-0.144	-0.214	-0.134	-0.074	0.076	0.066	0.066

Location : Bengre

Year : 2006

Well No	Distance	13/01/06	31/01/06	15/02/06	03/03/06	17/03/06	03/04/06
ICB 1	0	-0.164	-0.204	-0.204	-0.184	-0.234	-0.484
ICB 1A	51	-0.059	-0.159	-0.109	-0.129	-0.279	-0.349
ICB 1B	176	0.146	0.046	-0.054	-0.014	-0.054	-0.354

Typical seasonal changes in Ground Water Table along Bengre

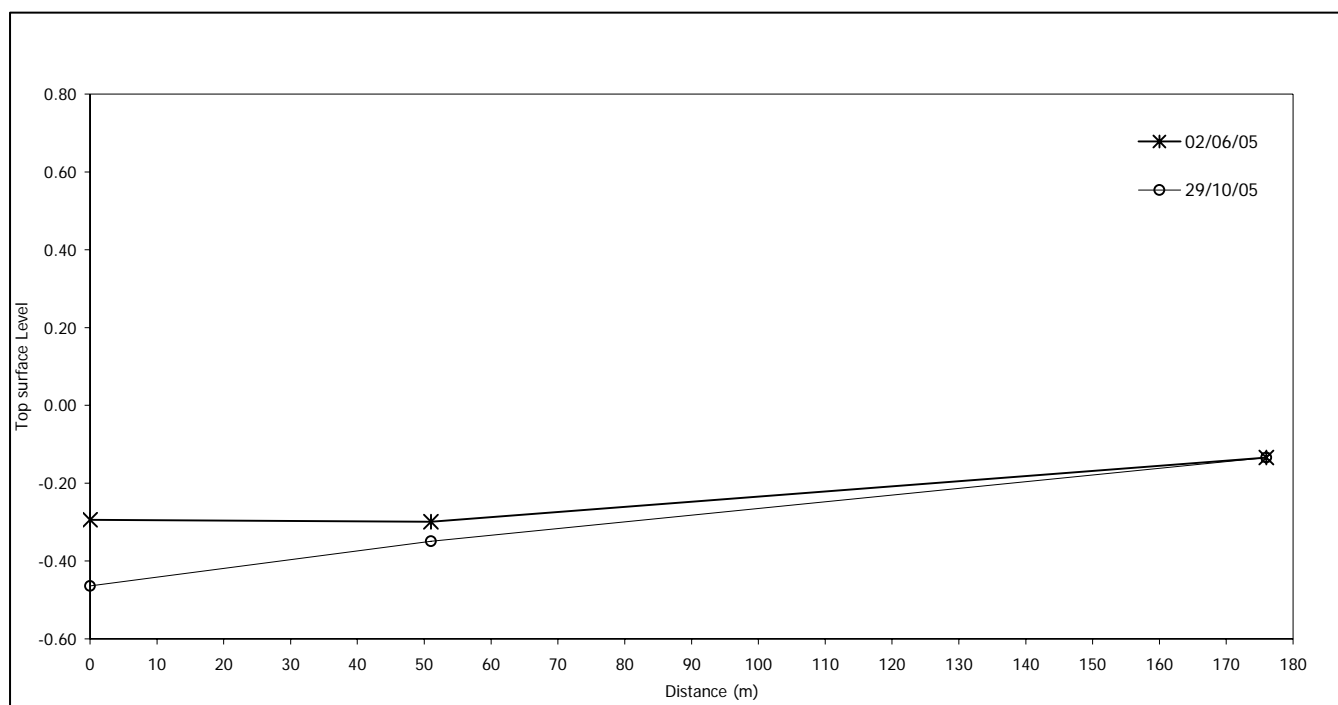


Fig. 1.5 Ground water table fluctuation along east-west direction for the year 2005

Typical seasonal changes in Ground Water Table along Bengre

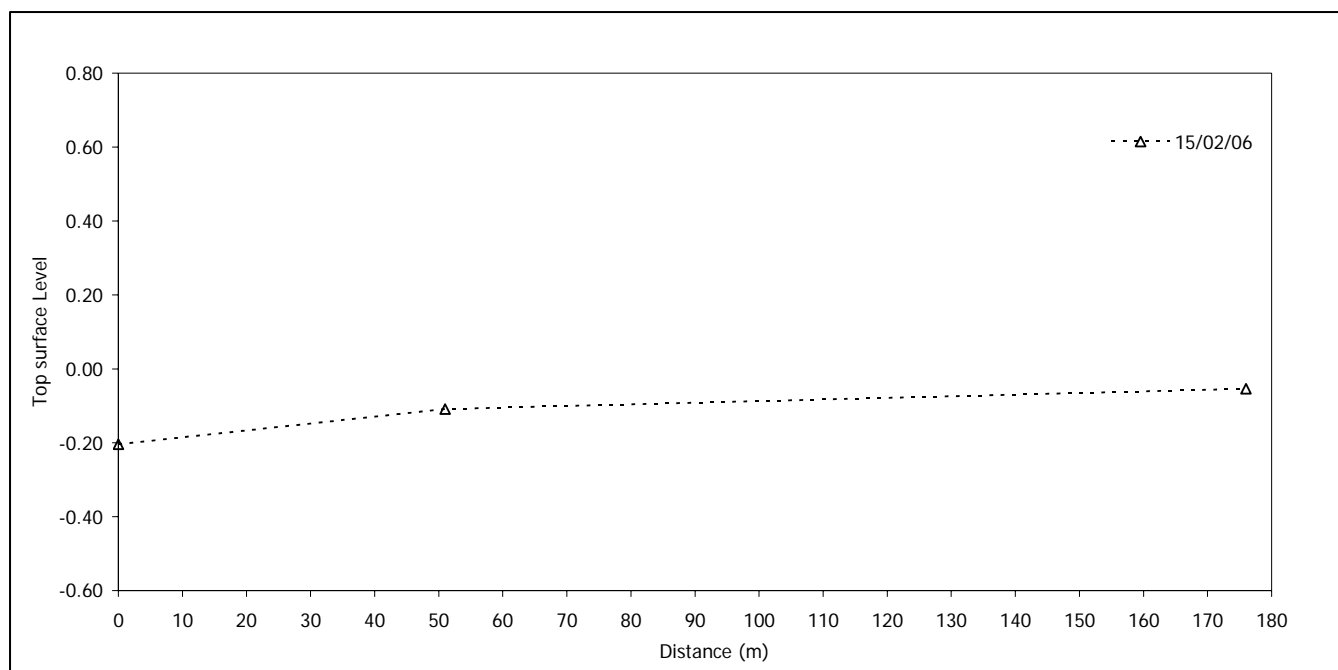


Fig. 1.6 Ground water table fluctuation along east-west direction for the year 2006

Reduced levels of Ground water table fluctuation w.r.t. CD

Location : Bengre

Year : 2005

Well no	Distance	02/06/05	16/06/05	22/06/05	01/07/05	15/07/05	02/08/05	13/08/05
ICB 3	0	0.296	0.476	1.876	0.666	0.616	1.446	0.076
ICB 3A	122	1.211	1.341	2.701	1.411	1.321	1.521	1.311
ICB 3B	216	1.211	1.391	3.311	1.491	1.321	2.331	1.401

Well no	Distance	10/09/05	16/09/05	30/09/05	29/10/05	19/11/05	02/12/05	15/12/05	30/12/05
ICB 3	0	-0.224	-0.124	-0.374	-0.314	-0.234	-0.234	-0.194	-0.294
ICB 3A	122	1.141	1.121	1.011	1.071	1.191	1.281	1.281	1.221
ICB 3B	216	1.231	1.261	1.171	1.211	1.301	1.391	1.401	1.361

Reduced levels of Ground water table fluctuation w.r.t. CD

Location : Bengre

Year : 2006

Well no	Distance	13/01/06	31/01/06	15/02/06	03/03/06	17/03/06	03/04/06
ICB 3	0	-0.294	-0.244	-0.174	-0.294	-0.254	-0.344
ICB 3A	122	1.221	1.271	1.231	1.241	1.181	1.081
ICB 3B	216	1.361	1.371	1.381	1.371	1.281	1.211

Ground Water Table Fluctuation

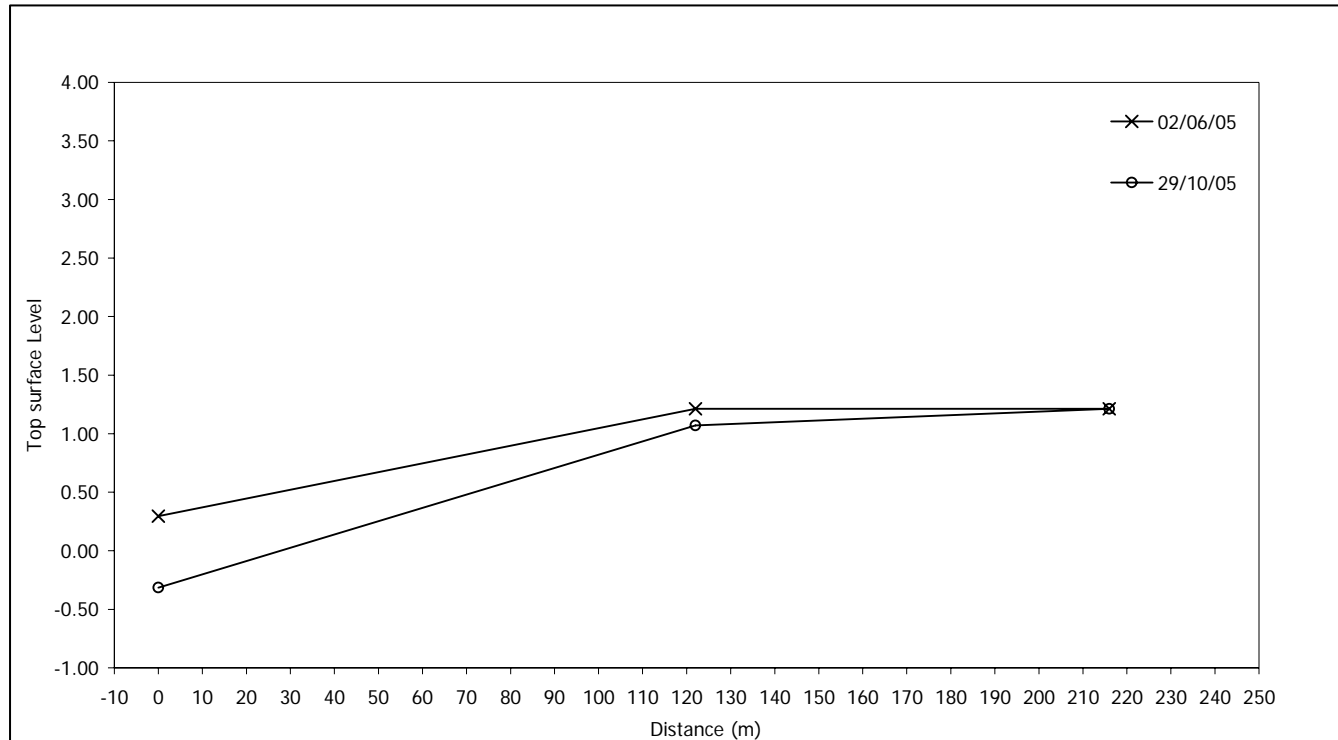


Fig. 1.6 Ground water table fluctuation at Bengre in east-west direction for the year 2005

Ground Water Table Fluctuation

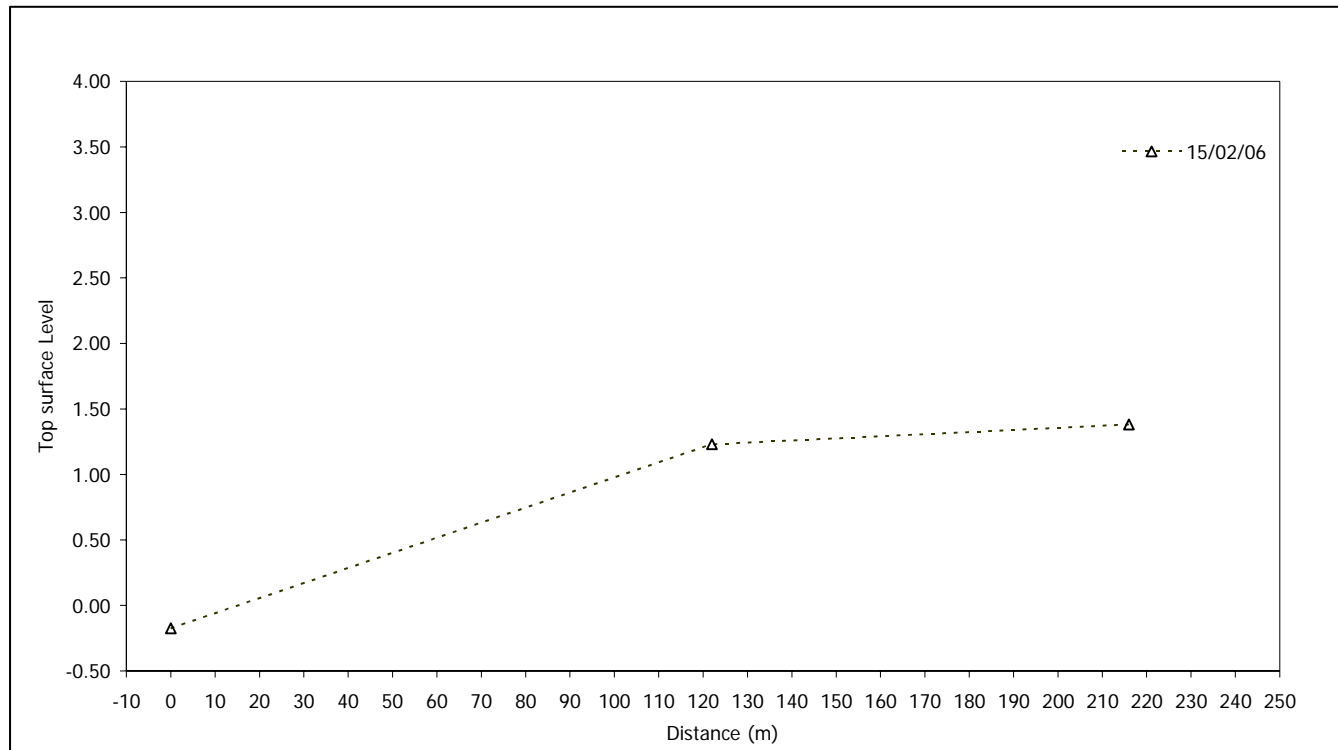


Fig. 1.7 Ground water table fluctuation at Bengre in east west direction for the year 2006

Reduced levels of Ground water table fluctuation w.r.t. CD

Location : Bengre

Year : 2005

Well no	Distance	02/06/05	16/06/05	22/06/05	01/07/05	15/07/05	02/08/05	13/08/05
ICB 4	0	-0.284	0.046	0.886	0.086	0.036	0.726	0.146
ICB 4A	100	-0.984	-0.744	0.196	-0.704	-0.754	-0.094	-0.714

Well no	Distance	10/09/05	16/09/05	30/09/05	29/10/05	19/11/05	2/12/05	15/12/05	30/12/05
ICB 4	0	-0.214	-0.114	-0.374	-0.314	-0.214	-0.194	-0.174	-0.294
ICB 4A	100	-0.944	-0.884	-1.124	-1.034	-1.084	-0.984	-0.884	-1.064

Reduced levels of Ground water table fluctuation w.r.t. CD

Location : Bengre

Year : 2006

Well no	Distance	13/01/06	31/01/06	15/02/06	03/03/06	17/3/06	03/04/06
ICB 4	0	-0.144	-0.204	-0.154	-0.164	-0.264	-0.294
ICB 4A	100	-0.884	-0.934	-0.864	-0.854	-0.944	-1.024

Ground Water Table Fluctuation

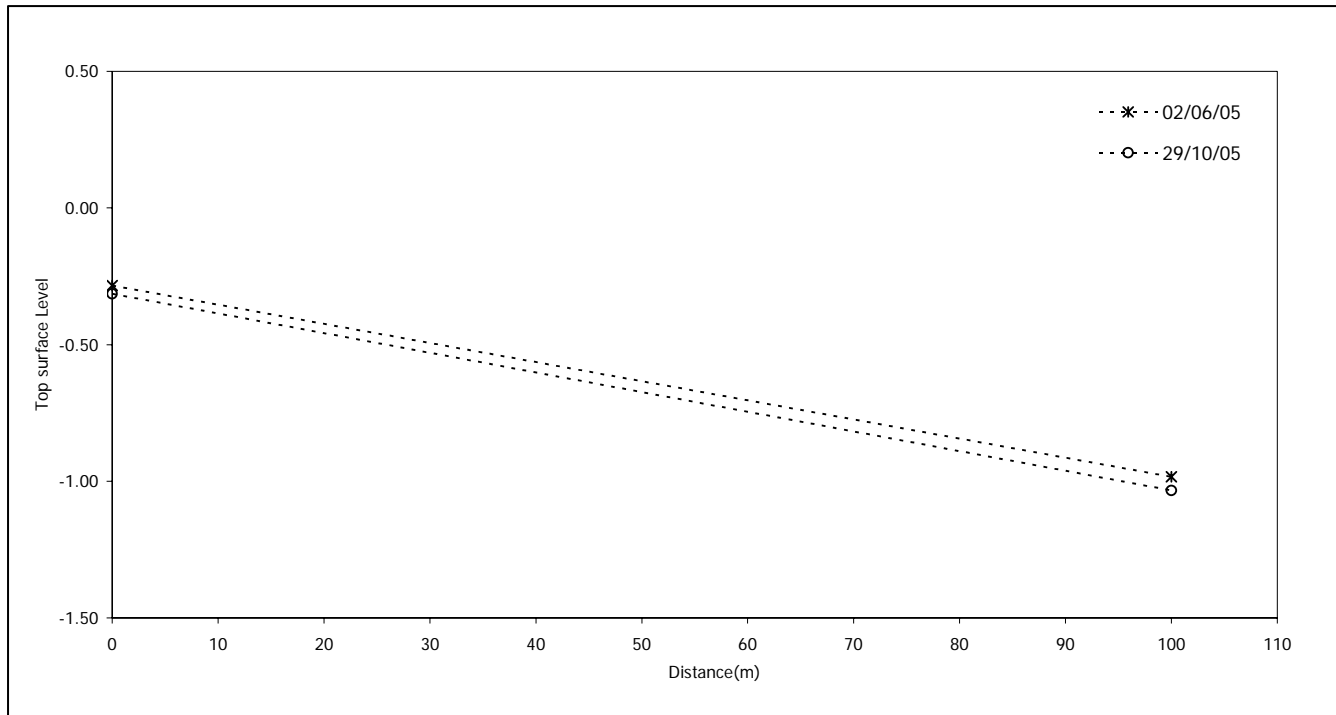


Fig. 1.7 Ground water table fluctuation at Bengre in east-west direction for the year 2005

Ground Water Table Fluctuation

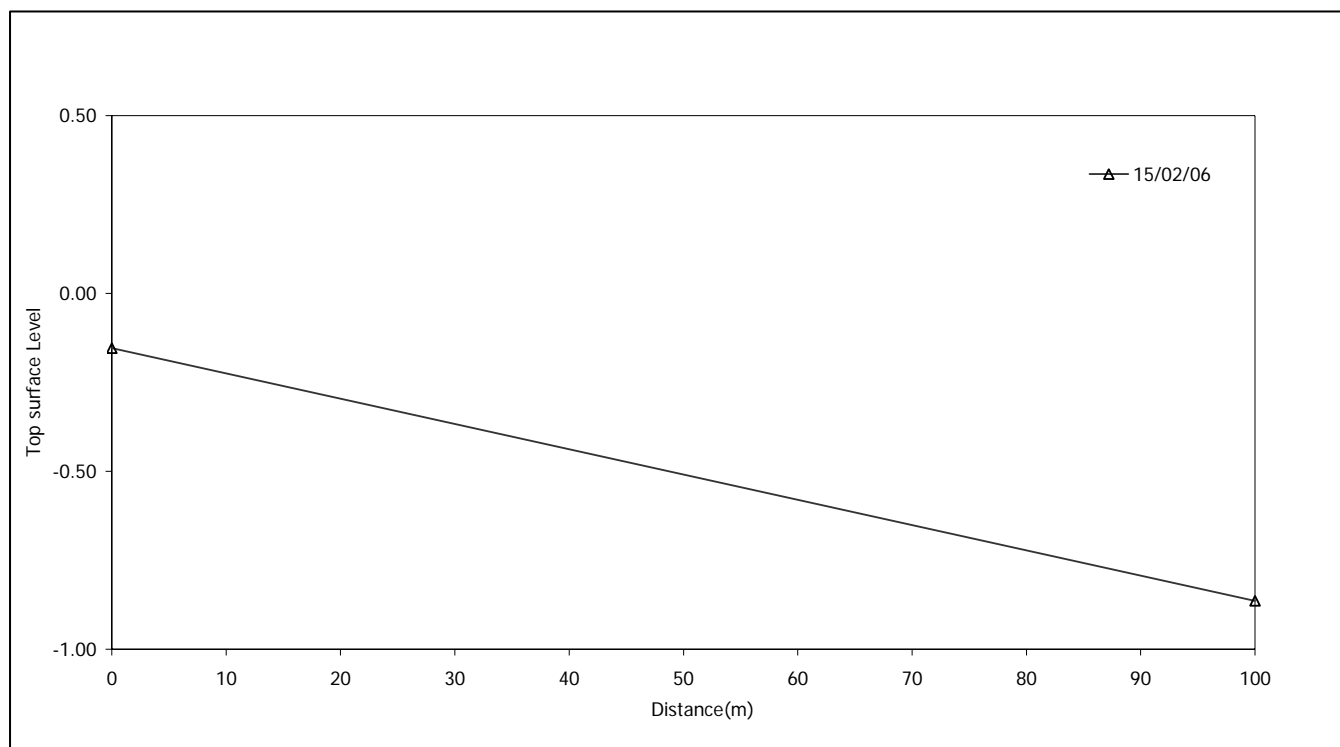


Fig. 1.8 Ground water table fluctuation at Bengre in east west direction for the year 2006

Reduced levels of Ground water table fluctuation w.r.t. CD

Location : Ullal

Year : 2005

Well no	Distance	02/06/05	16/06/05	22/06/05	01/07/05	15/07/05	02/08/05	13/08/05
ICU 1	0	0.443	0.533	0.813	0.463	0.163	0.583	0.203
ICU 1A	337	1.863	1.893	2.473	2.043	1.843	2.613	1.943
ICU 1B	387	1.953	1.953	2.513	2.083	1.903	2.803	2.003
ICU 1C	438	2.178	2.178	2.828	2.378	2.178	2.918	2.198

Well no	Distance	10/09/05	16/09/05	30/09/05	29/10/05	19/11/05	02/12/05	15/12/05	30/12/05
ICU 1	0	0.173	0.403	-0.027	0.153	0.143	0.493	0.303	0.223
ICU 1A	337	1.873	1.663	1.693	1.753	1.873	2.023	2.003	1.953
ICU 1B	387	1.893	2.073	1.843	1.843	1.813	2.183	3.083	2.023
ICU 1C	438	2.228	2.278	2.098	2.028	2.138	2.318	2.218	2.078

Reduced levels of Ground water table fluctuation w.r.t. CD

Location : Ullal

Year : 2006

Well no	Distance	31/01/06	15/02/06	03/03/06	17/03/06
ICU 1	0	0.183	0.303	0.123	0.083
ICU 1A	337	1.923	2.013	1.813	1.833
ICU 1B	387	2.043	2.033	1.793	1.913
ICU 1C	438	2.158	2.218	2.078	2.058

Ground Water Table Fluctuation

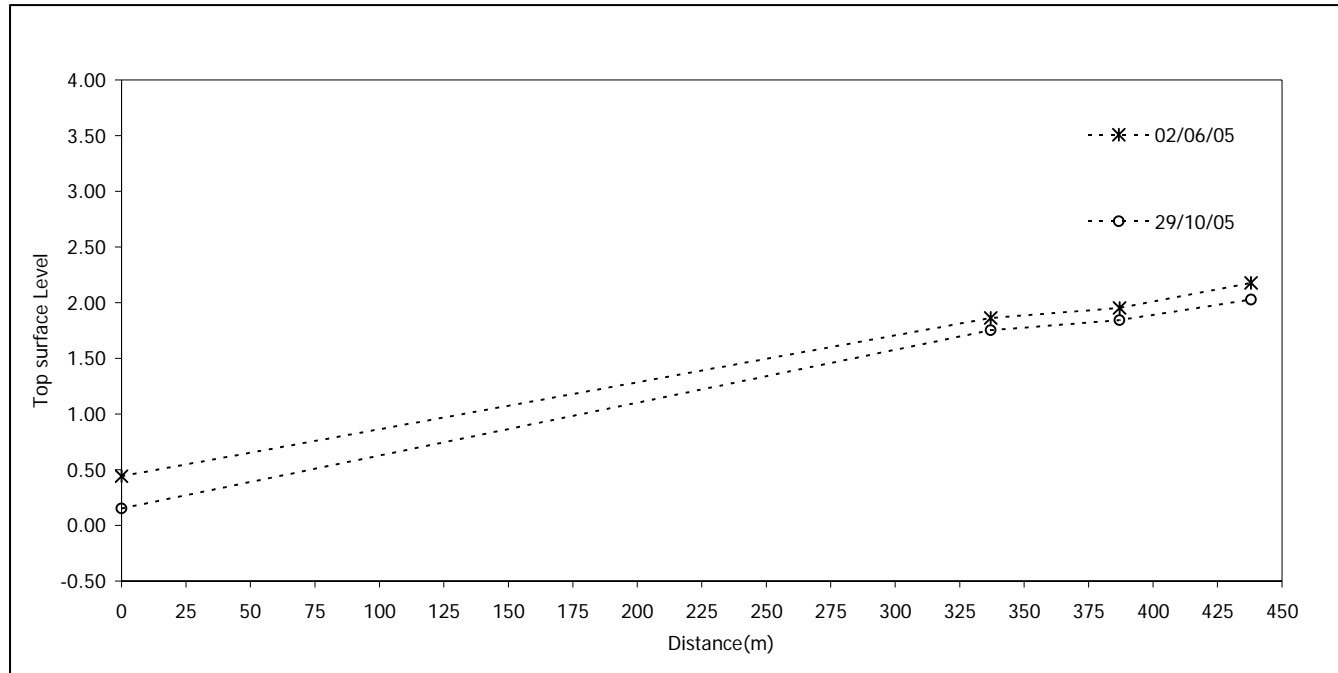


Fig. 1.9 Ground water table fluctuation at Ullal in east-west direction for the year 2005

Ground Water Table Fluctuation

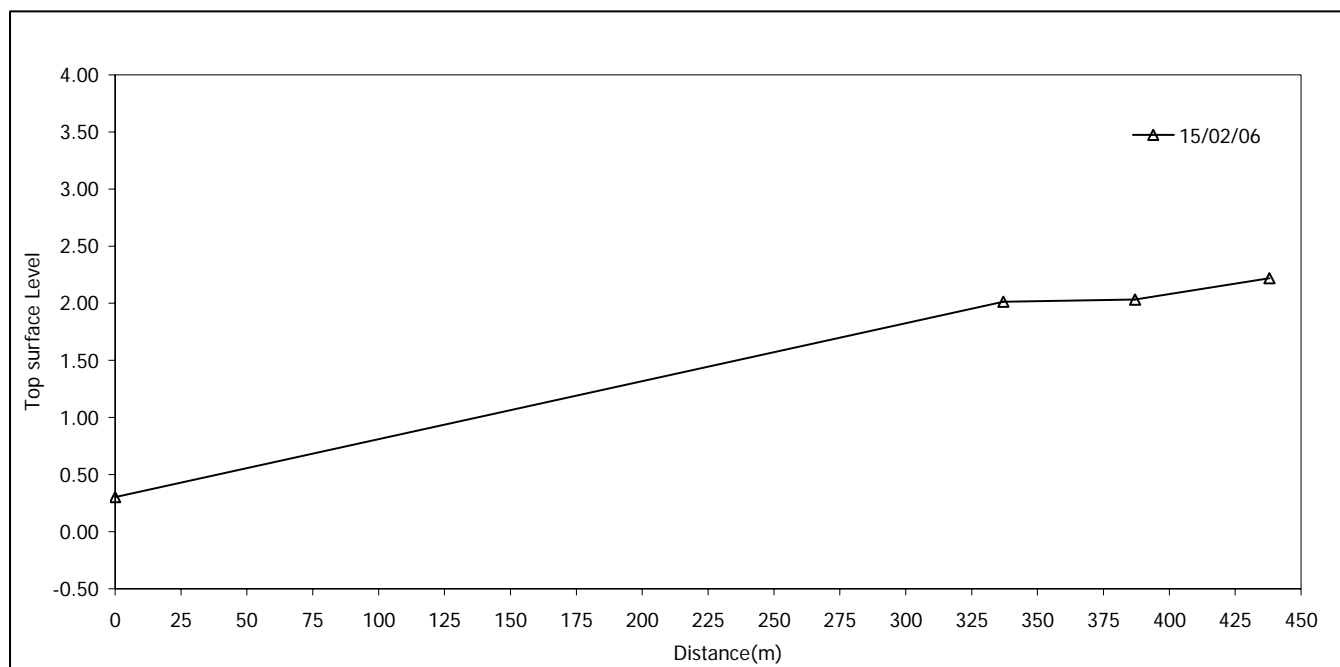


Fig. 1.10 Ground water table fluctuation at Ullal in east-west direction for the year 2006

Reduced levels of Ground water table fluctuation w.r.t. CD

Location : Ullal

Year : 2005

Well no	Distance	02/06/05	16/06/05	22/06/05	01/07/05	15/07/05	02/08/05	13/08/05
ICU 2	0	0.293	0.423	1.103	0.263	0.373	0.473	0.213
ICU 2A	90	0.533	0.653	1.533	0.583	0.593	0.933	0.693
ICU 2B	168	-1.924	-1.794	-1.024	-1.784	-1.814	-1.424	-1.864
ICU 2C	320	-1.489	-1.069	-0.459	-0.999	-0.969	-0.689	-0.929

Well no	Distance	10/09/05	16/09/05	30/09/05	29/10/05	19/11/05	02/12/05	15/12/05	30/12/05
ICU 2	0	0.023	0.153	-0.257	0.033	-0.007	0.363	0.093	-0.027
ICU 2A	90	0.333	0.453	0.153	0.283	0.303	0.523	0.413	0.313
ICU 2B	168	-2.094	-1.944	-2.194	-2.134	-2.094	-1.944	-1.994	-2.104
ICU 2C	320	-1.189	-1.129	-1.479	-1.399	-1.529	-1.609	-1.489	-1.609

Reduced levels of Ground water table fluctuation w.r.t. CD

Location : Ullal

Year : 2006

Well no	Distance	13/01/06	31/01/06	15/02/06	03/03/06
ICU 2	0	0.093	-0.027	-0.027	-0.007
ICU 2A	90	0.433	0.313	0.313	0.043
ICU 2B	168	-1.984	-2.084	-2.084	-2.104
ICU 2C	320	-1.599	-1.619	-1.619	-1.609

Ground Water Table Fluctuation

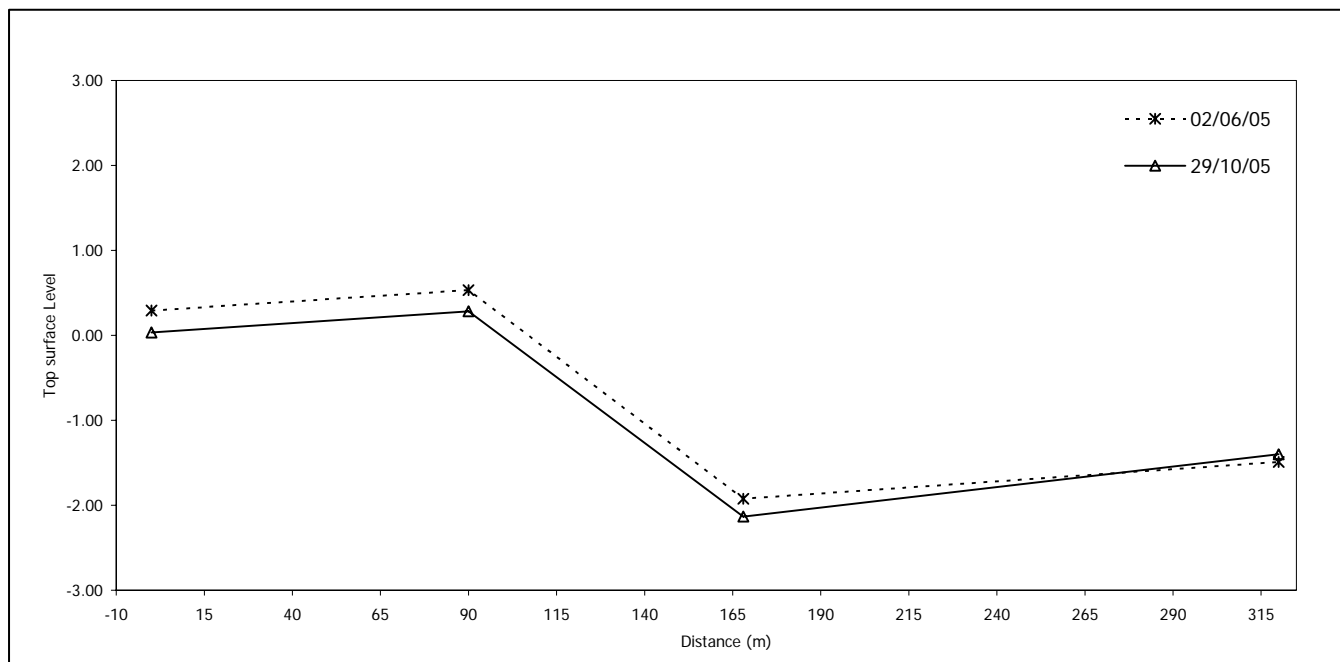


Fig. 1.11 Ground water table fluctuation at Ullal in east-west direction for the year 2005

Ground Water Table Fluctuation

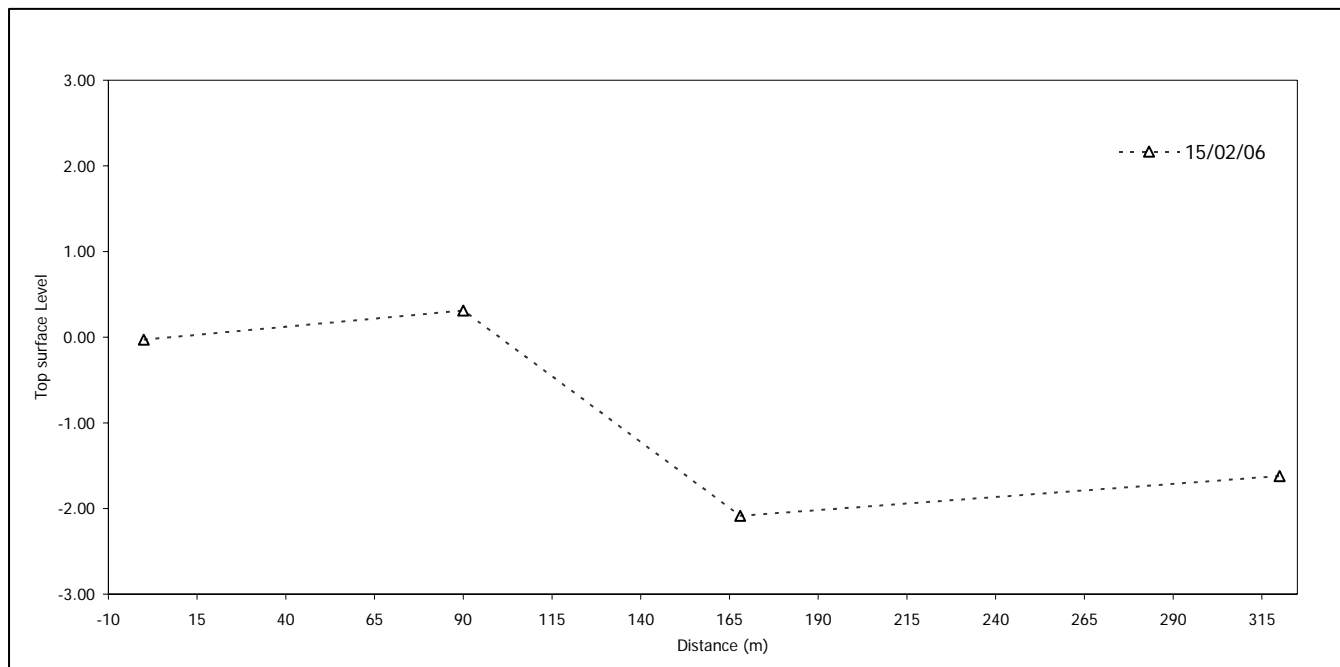


Fig. 1.12 Ground water table fluctuation at Ullal in east-west direction for the year 2006

Reduced levels of Ground water table fluctuation w.r.t. CD

Location : Ullal

Year : 2005

Well no	Distance	02/06/05	16/06/05	22/06/05	01/07/05	15/07/05	02/08/05	13/08/05
ICU 3	0	0.538	0.708	1.578	0.548	0.578	0.608	0.408
ICU 3A	79	0.558	0.918	1.828	0.948	0.758	0.938	0.628
ICU 3B	251	0.053	0.373	1.433	0.713	0.573	1.003	0.643
ICU 3C	425	0.428	0.728	1.578	1.048	0.878	1.478	1.028

Well no	Distance	10/09/05	16/09/05	30/09/05	29/10/05	19/11/05	02/12/05	15/12/05	30/12/05
ICU 3	0	-0.092	0.138	-0.052	0.138	0.078	0.308	-0.002	0.038
ICU 3A	79	0.128	0.288	0.108	0.208	0.228	0.288	0.258	0.088
ICU 3B	251	0.223	0.283	0.023	0.013	-0.027	-0.007	0.003	-0.097
ICU 3C	425	0.808	0.718	0.388	0.528	0.228	0.348	0.348	0.248

Reduced levels of Ground water table fluctuation w.r.t. CD

Location : Ullal

Year : 2006

Well no	Distance	13/01/06	31/01/06	15/02/06	03/03/06	3/4/06
ICU 3	0	0.208	0.018	0.088	0.108	-0.062
ICU 3A	79	0.208	0.088	0.018	0.148	0.008
ICU 3B	251	-0.007	-0.067	-0.087	-0.087	-0.197
ICU 3C	425	0.188	-0.072	0.248	0.148	-0.002

Ground Water Table Fluctuation

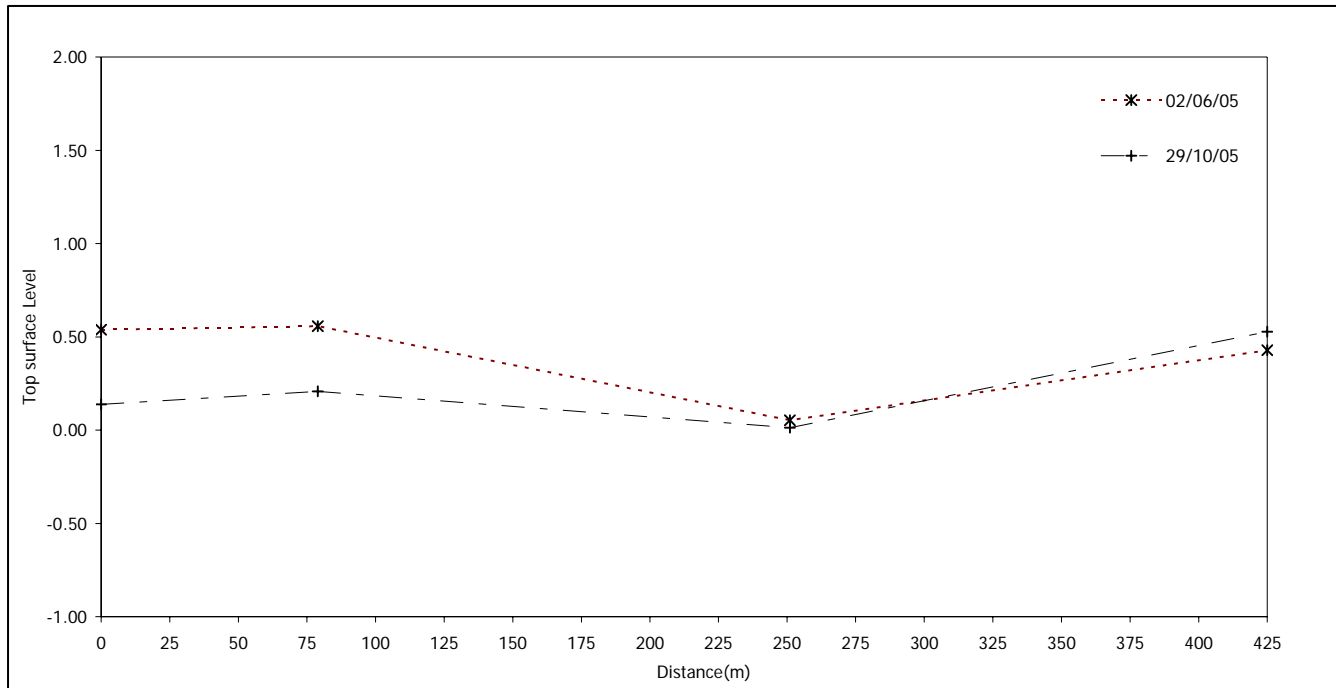


Fig. 1.13 Ground water table fluctuation at Ullal in east-west direction for the year 2005

Ground Water Table Fluctuation

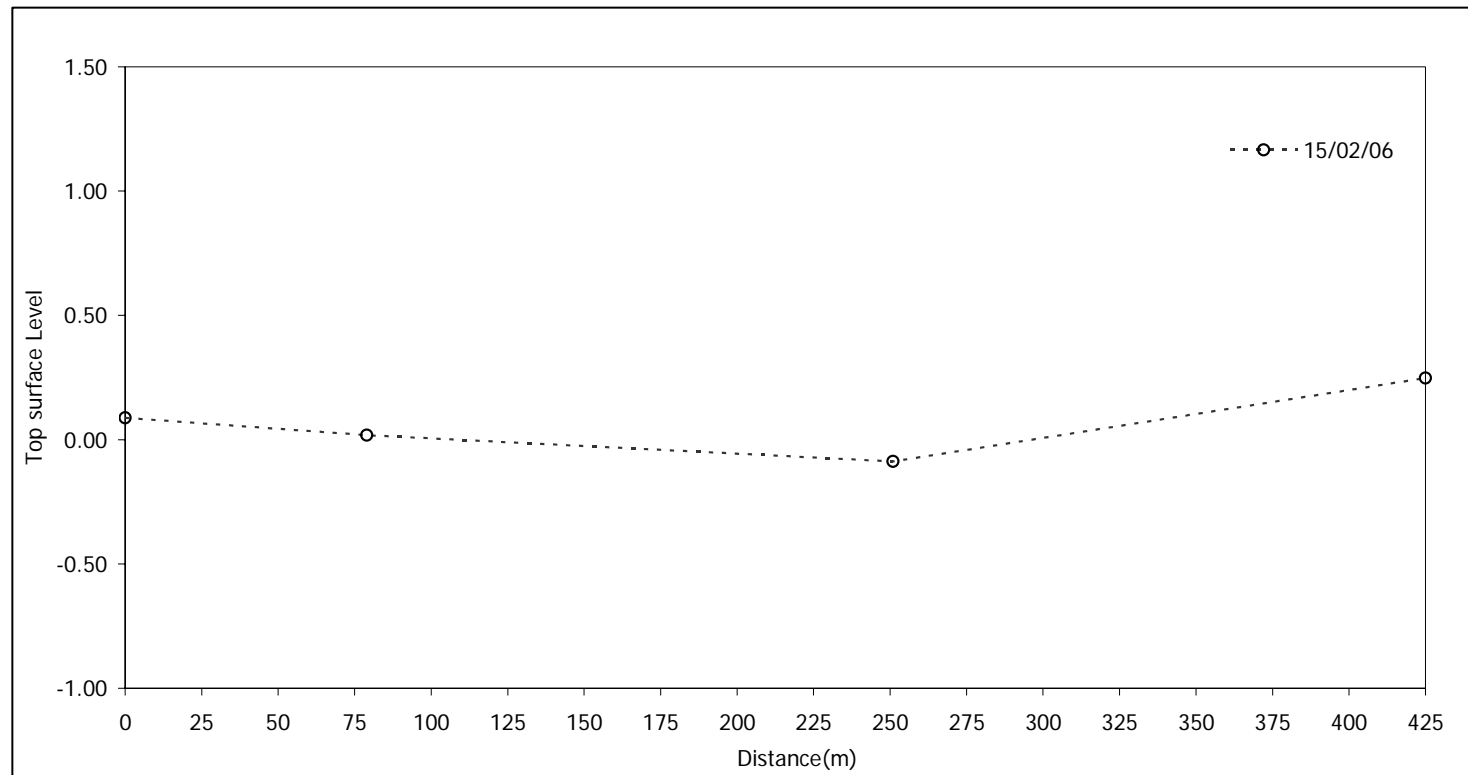


Fig. 1.14 Ground water table fluctuation at Ullal in east-west direction for the year 2006

BEACH PROFILES

Reduced levels at Bengre 0m chainage for the year 2004

1st visit		2nd visit		3rd visit		4th visit		5th visit		6th visit	
Distance	24/02/04	Distance	15/03/04	Distance	29/03/04	Distance	11/05/04	Distance	31/05/04	Distance	14/06/04
0	2.606	0	2.606	0	2.606	0	2.606	0	2.606	0	2.606
10	1.476	10	1.506	10	1.861	10	1.446	10	1.486	10	1.481
20	1.076	20	1.146	20	1.206	20	1.046	20	1.136	20	1.066
30	1.466	30	1.716	30	1.056	30	1.461	30	1.631	30	1.506
40	1.801	40	2.106	40	2.086	40	1.831	40	2.031	40	1.876
50	2.206	50	2.696	50	2.486	42	2.326	50	2.556	50	2.346
60	3.161	59	3.451	60	3.406	43	2.361	53	1.821	60	2.631
63	2.936	63	2.166	61	3.416	53	1.631	63	1.036		
67	1.506	73	2.056	64	2.036	61	0.651				
77	1.036	76	2.211	74	2.056	69	-0.204				
80	1.776	77	1.356	76	2.076	74	-0.904				
84	0.716	84	1.696	77	1.756						
		94	0.056	87	0.376						
				93	-0.274						

7th visit		8th visit		9th visit		10th visit		11th visit		12th visit	
Distance	28/06/04	Distance	14/07/04	Distance	01/08/04	Distance	16/08/04	Distance	30/08/04	Distance	20/09/04
0	2.606	0	2.606	0	2.606	0	2.606	0	2.606	0	2.606
10	1.674	10	1.456	10	1.436	10	1.461	10	1.471	10	1.516
20	1.046	20	1.031	20	1.021	20	1.111	20	1.066	20	1.096
30	1.401	30	1.461	30	1.506	30	1.451	30	1.461	30	1.571
40	1.946	40	1.986	40	1.896	40	1.881	40	1.931	40	1.991
50	2.531	50	2.496	50	2.451	50	2.411	50	2.461	50	2.556
60	2.401	60	2.471	60	2.721	60	2.821	60	2.781	60	2.856
70	2.586	70	2.886	68	3.091	70	3.076	68	3.446	70	3.376
76	2.771	80	1.711	71	2.256	78	2.231	78	2.516	80	2.726
83	1.816	83	1.286			81	1.366	84	1.676	83	2.316
										88	1.346

Reduced levels at Bengre 0m chainage for the year 2004 (Contd...)

13 th visit		14 th visit		15 th visit	
Distance	04/10/04	Distance	02/12/04	Distance	18/12/04
0	2.606	0	2.606	0	2.606
10	1.506	10	1.476	10	1.416
20	1.026	20	1.081	20	0.941
30	1.436	30	1.516	30	1.346
40	1.811	40	1.941	40	1.826
50	2.361	47	2.456	42	1.936
60	2.661	48	1.031	43	1.096
70	2.736	52	0.256	48	-0.009
71	2.732			52	-0.664
73	1.456				
84	0.786				

Reduced levels at Bengre 0m chainage for the year 2005

16th visit		17th visit		18th visit		19th visit		20th visit		21st visit	
Distance	03/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05	Distance	14/03/05
0	2.606	0	2.606	0	2.606	0	2.606	0	2.606	0	2.606
10	1.416	10	1.446	10	1.486	15	1.096	30	1.306	30	1.356
20	1.011	20	1.016	20	1.006	30	1.076	45	1.986	44	2.081
30	1.466	30	1.436	30	1.626	44	1.736	46	2.026	46	1.461
38	1.966	32	2.026	39	2.166	46	1.066	49	1.326	56	1.291
39	1.566	33	1.601	41	1.536	56	0.396	59	0.826	66	1.606
49	0.766	43	1.026	56	0.996	66	0.781	69	1.326	68	0.876
59	0.451	53	1.366	71	1.356	75	1.416	73	1.521	78	-0.464
64	-0.369	60	1.646	81	0.276	76	0.656	74	0.626	83	-0.984
		67	1.286			86	-0.504	84	-0.389		
		72	0.266					87	-0.729		

22nd visit		23rd visit		24th visit		25th visit		26th visit		27th visit	
Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05	Distance	02/06/05	Distance	16/06/05
0	2.606	0	2.606	0	2.606	0	2.606	0	2.606	0	2.606
30	1.326	15	1.281	15	1.276	10	1.461	15	1.216	15	1.306
45	2.056	30	1.426	30	1.436	20	1.006	27	1.401	30	1.506
47	1.426	45	2.221	45	2.176	30	1.431	39	2.036	45	2.231
62	1.431	49	1.436	49	1.441	40	0.836	41	1.496	47	1.771
65	1.426	53	1.636	60	1.521	50	1.836	53	1.441	62	1.851
67	0.821	54	1.066	61	0.756	53	2.071	60	0.506	76	1.996
69	0.361	66	-0.999	71	0.046	55	1.466			80	1.216
79	-0.989					65	1.406				
						67	1.536				
						69	1.111				
						79	0.086				

Reduced levels at Bengre 0m chainage for the year 2005 (Contd...)

28th visit		29th visit		30th visit		31st visit		32nd visit	
Distance	22/06/05	Distance	01/07/05	Distance	15/07/05	Distance	02/08/05	Distance	13/08/05
0	2.606	0	2.606	0	2.606	0	2.606	0	2.606
15	1.191	15	1.256	15	1.286	15	1.836	15	1.266
30	1.266	30	1.386	30	1.261	30	2.601	30	1.346
45	1.956	45	2.071	45	2.031	45	2.406	45	2.076
46	1.666	60	2.796	60	2.801	50	2.466	60	2.836
61	2.126	64	2.826	64	2.896	60	2.146	75	2.641
76	2.151	76	1.626	68	2.371			76	2.166
81	1.576			69	2.111			77	2.246
				79	0.721			78	0.956

33rd visit		34th visit		35th visit		36th visit		37th visit	
Distance	10/09/05	Distance	16/09/05	Distance	30/09/05	Distance	29/10/05	Distance	19/11/05
0	2.606	0	2.606	0	2.606	0	2.606	0	2.606
15	1.281	15	1.296	15	1.326	15	1.136	15	1.206
30	1.426	30	1.396	30	1.516	30	1.236	30	1.326
45	2.156	45	2.126	45	2.276	45	1.891	45	2.016
60	2.916	60	2.911	60	3.071	60	2.531	60	2.771
75	2.456	72	2.731	75	2.716	75	2.271	69	2.751
76	2.136	74	1.856	78	2.286	80	0.221	71	-0.024
86	1.376			81	1.646				
				89	1.271				

Reduced levels at Bengre 0m chainage for the year 2005 (Contd...)

38th visit		39th visit		40th visit	
Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
0	2.606	0	2.606	0	2.606
15	1.271	15	1.906	15	1.256
30	1.351	30	2.256	30	1.371
45	2.066	45	2.936	45	2.096
60	2.726	60	3.716	60	2.886
62	2.801	63	2.156	63	1.326
63	0.701	68	1.886	79	1.566
65	0.221	73	1.256	82	0.476

Reduced levels at Bengre 0m chainage for the year 2006

41st visit		42nd visit		43rd visit		44th visit	
Distance	13/01/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06
0	2.606	0	2.606	0	2.606	0	2.606
15	1.236	15	1.226	15	1.321	15	1.326
30	1.336	30	1.351	30	1.456	30	1.436
45	2.021	45	2.051	45	2.231	45	2.206
60	2.841	60	2.826	60	2.921	60	3.116
63	1.596	63	1.556	65	1.761	64	1.796
75	1.901	68	1.666	73	1.546	68	1.816
77	0.626	69	1.391	75	0.401	81	-0.084
		78	1.476	76	0.176		
		83	0.176				

45th visit		46th visit		47th visit	
Distance	17/3/06	Distance	04/04/06	Distance	24/11/06
0	2.606	0	2.606	0	2.606
15	1.306	15	1.326	15	1.101
30	1.446	30	1.446	30	1.556
45	2.211	45	2.201	45	2.096
60	2.916	60	2.816	60	3.141
64	1.726	64	1.661	62	2.616
68	1.581	69	1.741	64.5	0.646
70	0.506	70	1.271	68.5	-0.159
74	-0.044	75	1.356		
78	-0.464	76	0.861		
		84	0.591		
		94	-0.289		

Seasonal beach profile changes at Bengre 0m

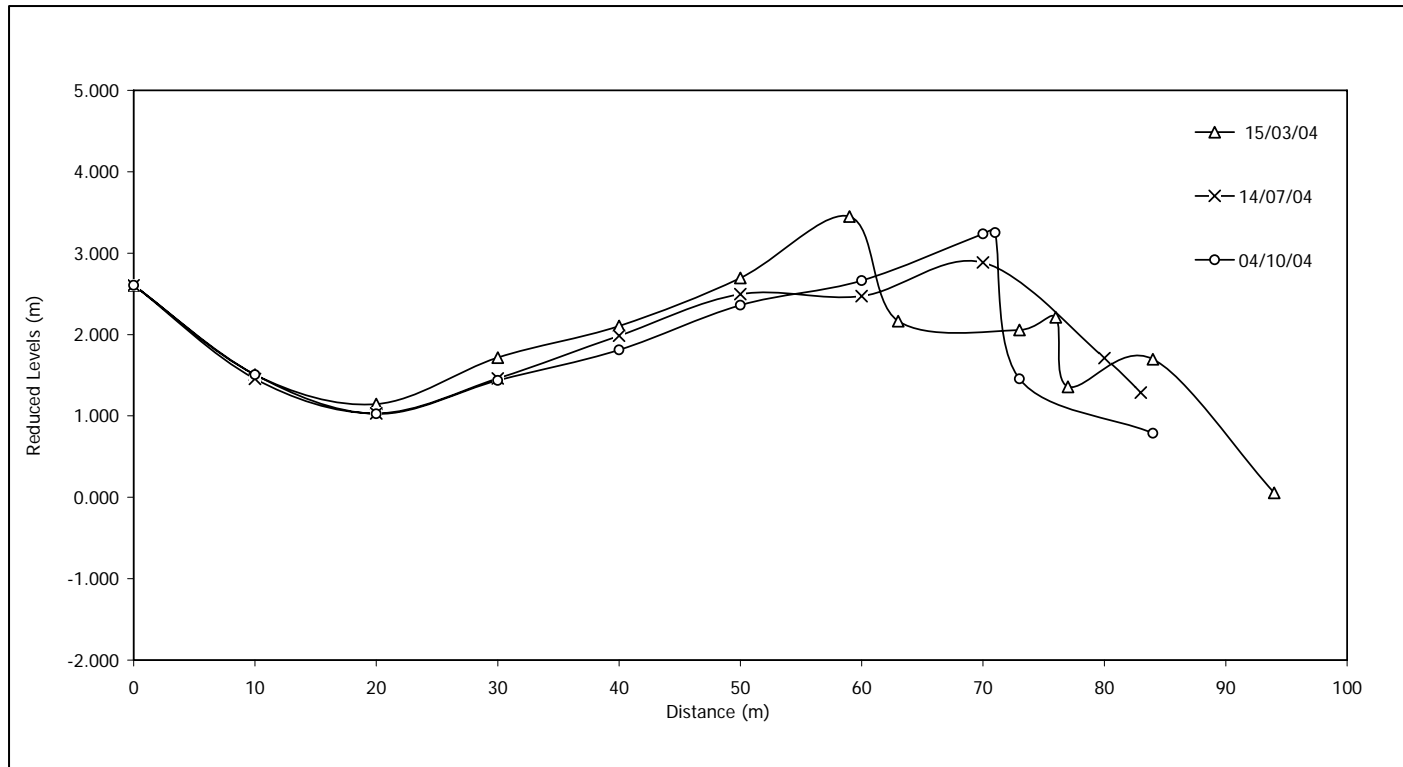


Fig. 2.1 Beach profiles of Bengre 0m chainage (Year 2004)

Seasonal beach profile changes at Bengre 0m

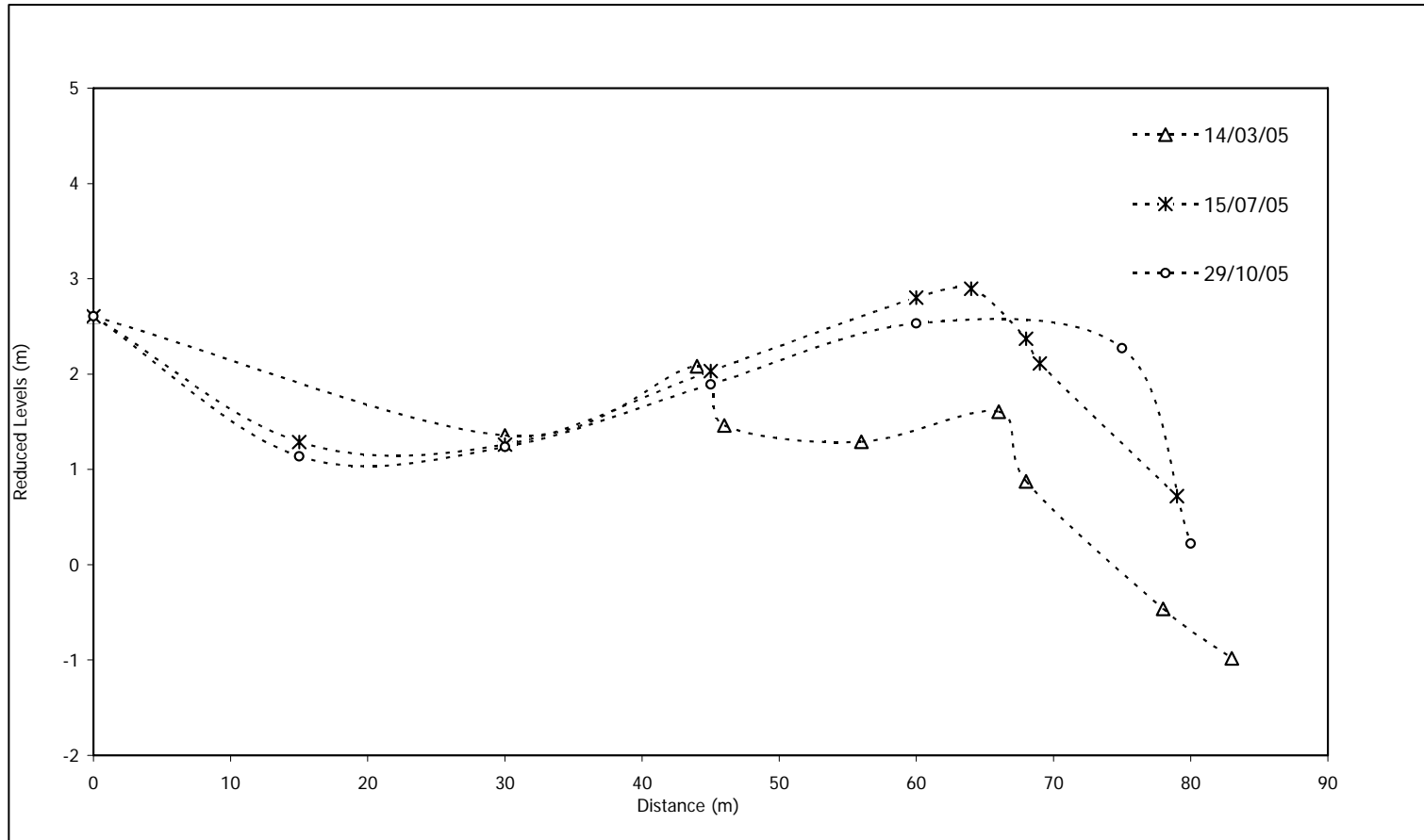


Fig. 2.2 Beach profiles of Bengre 0m chainage (Year 2005)

Seasonal beach profile changes at Bengre 0m

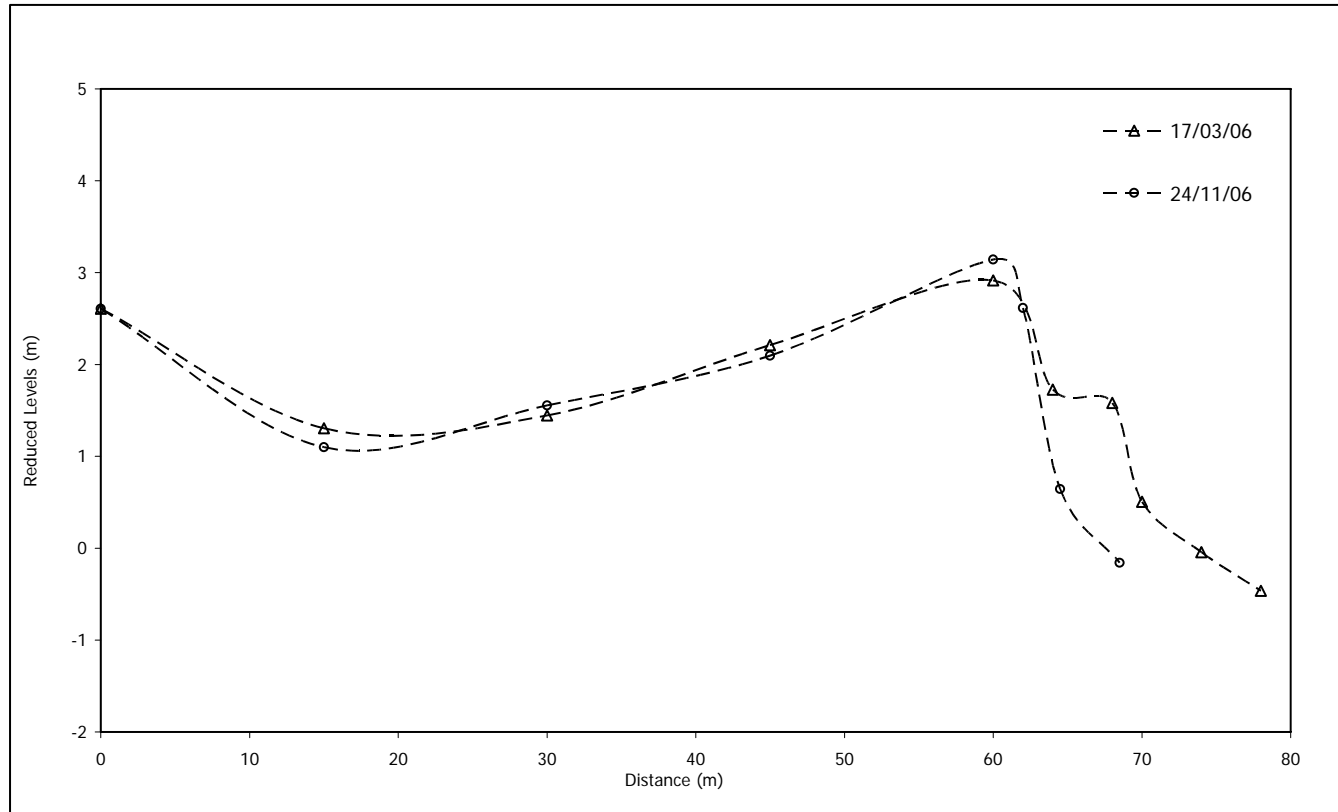


Fig. 2.3 Beach profiles of Bengre 0m chainage (Year 2006)

Yearly beach profile changes at Bengre 0m

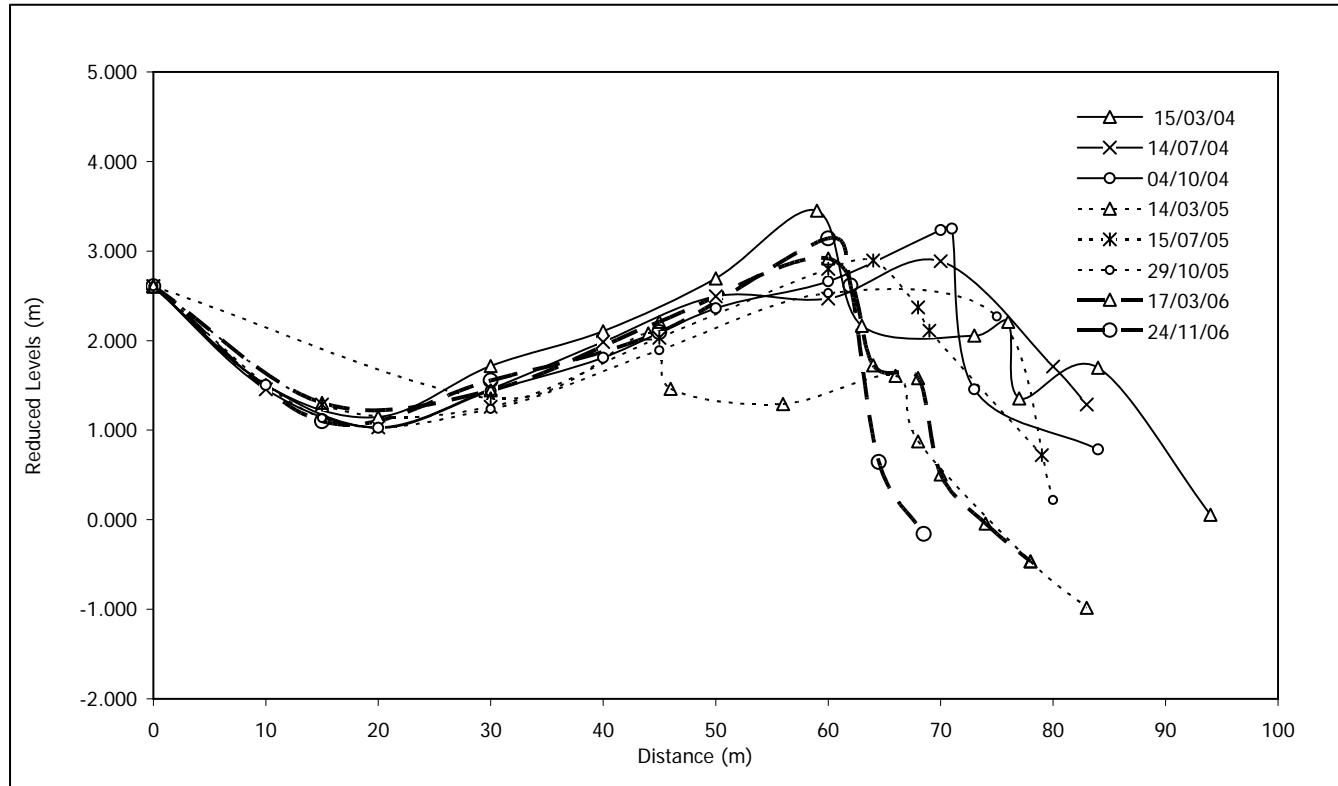


Fig. 2.4 Beach Profiles Of Bengre 0m chainage (From 2004 to 2006)

Reduced levels at Bengre 200m chainage for the year 2004

1st visit		2nd visit		3rd visit		4th visit		5th visit		6th visit	
Distance	24/02/04	Distance	15/03/04	Distance	29/03/04	Distance	11/05/04	Distance	31/05/04	Distance	14/06/04
0	1.806	0	1.806	0	1.806	0	1.806	0	1.806	0	1.806
10	0.751	10	0.781	10	0.821	10	0.811	10	0.826	10	0.791
20	0.961	20	0.966	20	0.826	20	0.941	20	0.936	20	0.931
30	1.451	30	1.466	30	1.441	30	1.451	30	1.566	30	1.431
40	1.496	40	1.566	40	1.471	40	1.536	40	1.611	40	1.491
50	1.451	50	1.356	50	1.246	50	1.531	50	1.526	50	1.291
60	2.081	60	2.181	60	1.986	60	2.291	60	2.381	60	1.976
70	2.876	70	2.956	70	2.816	70	2.971	70	3.181	70	2.781
80	2.831	80	2.976	80	2.891	78	3.041	80	3.111	80	2.991
86	2.826	86	3.066	87	2.891	84	2.821	85	3.146	90	2.506
88	2.021	88	2.146	89	2.041	85	2.416	87	2.656	100	2.641
98	2.026	98	2.191	99	2.036	95	2.431	97	3.036	110	3.241
105	2.061	104	2.271	105	2.246	105	2.321	105	3.036	120	2.901
112	1.207	114	0.771	109	1.406	115	1.496	107	2.221		
		120	-0.154	118	-0.259	125	0.381				

Reduced levels at Bengre 200m chainage for the year 2004 (Contd...)

7 th visit		8 th visit		9 th visit		10 th visit		11 th visit		12 th visit	
Distance	28/06/04	Distance	14/07/04	Distance	01/08/04	Distance	16/08/04	Distance	30/08/04	Distance	20/09/04
0	1.806	0	1.806	0	1.806	0	1.806	0	1.806	0	1.806
10	0.771	10	0.776	10	0.781	10	0.871	10	0.806	10	0.872
20	0.821	20	0.841	20	0.891	20	0.941	20	0.986	20	0.938
30	1.411	30	1.456	30	1.361	30	1.471	30	1.426	30	1.421
40	1.406	40	1.446	40	1.436	40	1.376	40	1.436	40	1.436
50	1.196	50	1.316	50	1.261	50	1.561	50	1.206	50	1.301
60	1.856	60	1.956	60	1.826	60	2.366	60	2.001	60	1.901
70	2.636	70	2.721	70	2.676	70	2.921	70	2.741	70	2.791
80	2.831	80	2.951	80	2.816	80	2.671	80	2.891	80	2.851
87	2.821	87	3.016	87	2.811	83	2.381	85	2.966	86	2.806
89	2.366	90	2.431	89	2.326	84	2.541	87	2.426	88	2.391
99	2.491	100	2.681	99	2.501	94	3.091	97	2.616	98	2.581
109	3.011	110	3.186	109	3.041	104	3.226	107	3.161	108	3.121
118	2.896	120	3.336	119	3.206	114	2.706	117	3.471	118	3.196
128	1.906	130	2.576	127	2.971	124	2.796	127	2.641	128	2.756
133	1.451	140	2.501	129	2.671	127	2.771	137	2.776	138	2.811
		147	2.216	133	2.611	129	2.276	147	1.156	139	1.971
		149	1.481	137	2.696	136	1.316			142	1.011
				138	2.061						
				140	1.551						

Reduced levels at Bengre 200m chainage for the year 2004 (Contd...)

13th visit		14th visit		15th visit	
Distance	04/10/04	Distance	02/12/04	Distance	18/12/04
0	1.806	0	1.806	0	1.806
10	0.826	10	0.736	10	0.876
20	0.941	20	0.921	20	0.921
30	1.421	30	1.296	30	1.356
40	1.431	40	1.396	40	1.296
50	1.271	50	1.206	50	0.961
60	1.881	60	1.331	60	1.751
70	2.716	70	2.041	70	2.431
80	2.841	80	2.601	80	2.641
87	2.831	86	2.741	85	2.731
89	2.301	89	2.816	87	2.166
99	2.511	99	2.211	97	2.381
109	3.061	109	2.406	108	2.946
119	3.141	119	2.861	113	1.796
129	2.766	127	3.211	118	0.591
137	2.831	128	2.431	123	-0.319
146	0.601	135	0.941		

Reduced levels at Bengre 200m chainage for the year 2005

16th visit		17th visit		18th visit		19th visit		20th visit		21st visit	
Distance	03/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05	Distance	14/03/05
0	1.806	0	1.806	0	1.806	0	1.806	0	1.806	0	1.806
10	0.876	10	0.796	15	0.906	20	0.876	30	1.226	30	1.266
20	1.026	20	0.826	30	1.376	40	1.336	60	1.526	60	1.576
30	1.401	30	2.006	45	1.396	70	2.296	64	1.826	86	2.601
40	1.356	40	1.416	60	1.876	96	1.706	69	2.156	88	2.001
50	1.646	50	1.226	75	2.736	99	2.296	84	2.491	110	2.841
60	2.526	60	2.036	86	2.836	114	2.566	88	2.631	115	2.211
70	2.821	70	2.736	89	2.186	121	1.796	91	1.996	128	2.311
80	3.106	80	2.886	104	2.866	128	2.076	106	2.526	143	0.086
85	3.176	84	2.896	112	3.236	137	1.286	113	2.826	157	-1.064
87	2.671	86	2.356	118	2.506	144	-0.144	118	2.071		
97	3.001	96	2.346	128	2.616			128	2.231		
107	3.601	106	3.276	138	1.056			138	1.441		
112	2.866	108	3.286					139	1.311		
117	1.916	114	2.486					149	-0.349		
127	1.921	124	2.696								
131	1.776	134	1.106								
137	0.856										

Reduced levels at Bengre 200m chainage for the year 2005 (Contd...)

22nd visit		23rd visit		24th visit		25th visit		26th visit		27th visit	
Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05	Distance	02/06/05	Distance	16/06/05
0	1.806	0	1.806	0	1.806	0	1.806	0	1.806	0	1.806
30	1.341	30	1.381	30	1.576	30	1.401	30	1.366	30	1.496
60	1.846	60	2.091	60	2.461	60	1.891	60	1.886	60	2.001
75	2.761	75	2.866	75	3.341	75	2.851	75	2.781	75	2.036
86	2.881	84	2.666	83	3.181	86	2.941	85	2.736	88	3.376
89	2.221	87	2.166	86	2.531	88	2.361	87	2.216	90	2.741
104	2.951	92	2.966	91	3.526	103	3.021	97	2.661	105	3.501
111	3.236	99	3.206	97	3.836	111	3.296	107	2.241	111	3.801
117	2.496	105	2.376	104	2.991	112	3.036	109	2.991	112	3.426
132	2.776	117	2.866	116	3.571	126	2.781	110	2.256	117	2.996
133	2.081	122	1.661	118	2.491	134	1.061			127	1.321
140	0.156	127	0.571	122	1.506						
148	-0.359	132	-0.044								

28th visit		29th visit		30th visit		31st visit		32nd visit		33rd visit	
Distance	22/06/05	Distance	01/07/05	Distance	15/07/05	Distance	02/08/05	Distance	13/08/05	Distance	10/09/05
0	1.806	0	1.806	0	1.806	0	1.806	0	1.806	0	1.806
30	1.376	30	1.356	30	1.381	30	1.356	30	1.376	30	1.356
60	1.781	60	1.946	60	2.001	60	2.136	60	1.926	60	1.831
75	2.756	75	2.926	85	2.666	75	2.726	75	2.751	90	2.326
88	2.916	87	2.976	88	2.171	78	2.696	85	2.771	105	3.121
90	2.436	90	2.626	103	3.056	93	2.131	88	2.176	108	3.271
105	2.911	105	3.316	110	3.331	105	2.821	103	2.961	111	2.486
115	3.276	113	3.386	113	2.986	107	2.996	116	2.941	126	2.191
120	1.616	124	2.336	116	2.851	109	2.556	118	2.431	134	1.756
				118	2.216	127	2.176	133	2.076	149	0.846
				120	1.781	135	1.301	148	0.821	164	1.306
				124	1.051			163	-0.194	169	0.436

Reduced levels at Bengre 200m chainage for the year 2005 (Contd...)

34 th visit		35 th visit		36 th visit		37 th visit		38 th visit		39 th visit	
Distance	16/09/05	Distance	30/09/05	Distance	29/10/05	Distance	19/11/05	Distance	02/12/05	Distance	15/12/05
0	1.806	0	1.806	0	1.806	0	1.806	0	1.806	0	1.806
30	1.356	30	1.366	30	0.976	30	1.426	30	1.161	30	1.276
60	2.391	60	1.801	60	1.566	60	2.046	60	1.941	60	1.756
75	2.671	90	2.281	90	1.681	90	2.626	90	2.096	90	2.216
80	2.681	120	2.431	115	2.456	120	2.516	113	2.746	120	2.686
83	2.156	150	0.766	120	1.901	135	2.566	116	2.246	134	2.566
98	2.826	180	0.966	139	1.476	158	0.856	131	2.301	136	1.266
108	3.031	190	1.156	144	0.931	162	0.641	136	1.721		
113	2.481	195	0.826	157	1.426						
136	1.636	213	0.951	158	0.941						
145	0.666										
172	1.371										
174	0.941										
187	1.486										

39 th visit		40 th visit	
Distance	15/12/05	Distance	30/12/05
0	1.806	0	1.806
30	1.276	20	1.356
60	1.756	60	1.656
90	2.216	88	2.856
120	2.686	90	2.496
134	2.566	111	3.256
136	1.266	116	2.666
		123	2.536
		128	1.096

Reduced levels at Bengre 200m chainage for the year 2006

41 st visit		42 nd visit		43 rd visit		44 th visit	
Distance	13/01/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06
0	1.806	0	1.806	0	1.806	0	1.806
30	1.346	30	1.336	30	1.416	30	1.496
60	1.726	60	1.701	60	1.961	60	1.896
86	2.901	87	2.766	90	2.906	86	2.946
90	2.291	90	2.131	100	2.716	89	2.376
115	3.161	117	2.966	102	2.276	115	3.176
120	2.691	120	1.506	127	3.101	116	2.246
127	2.671	125	0.506	128	2.346	118	0.966
128	2.141			142	1.356	125	0.086
133	1.146						

45 th visit		46 th visit		47 th visit	
Distance	17/3/06	Distance	04/04/06	Distance	24/11/06
0	1.806	0	1.806	0	1.806
30	1.416	30	1.396	30	1.481
60	1.896	60	1.926	60	2.396
86	2.886	86	3.141	80	3.201
88	2.341	89	2.471	84	2.631
110	3.291	104	3.231	92	2.986
114	3.156	116	2.996	98	3.381
116	2.321	117	2.451	101	2.126
126	2.121	132	1.806	105	1.816
131	1.206	137	0.601	107	1.256
137	0.276	142	-0.109	117	1.201
				127	1.346
				137	1.751
				151	2.326
				155	1.526
				160	0.676

Seasonal beach profile changes at Bengre 200m

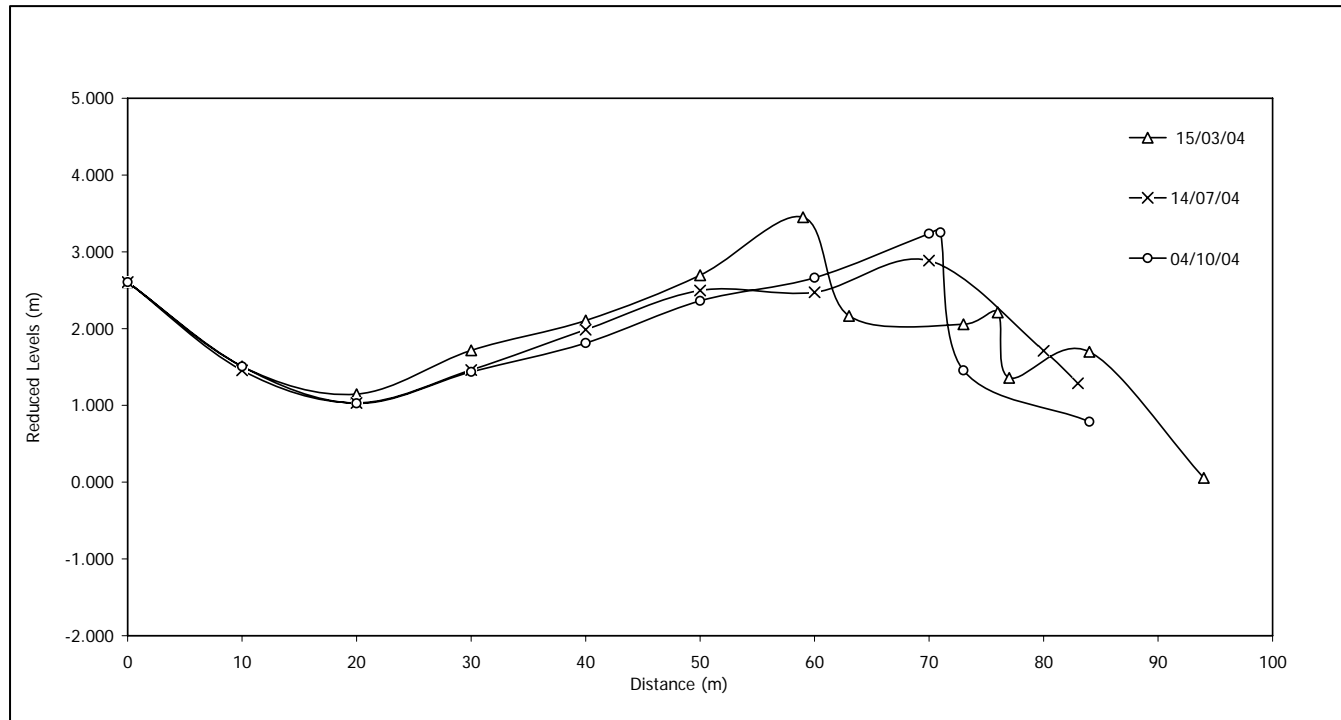


Fig. 2.5 Beach profiles of Bengre 200m chainage (Year 2004)

Seasonal beach profile changes at Bengre 200m

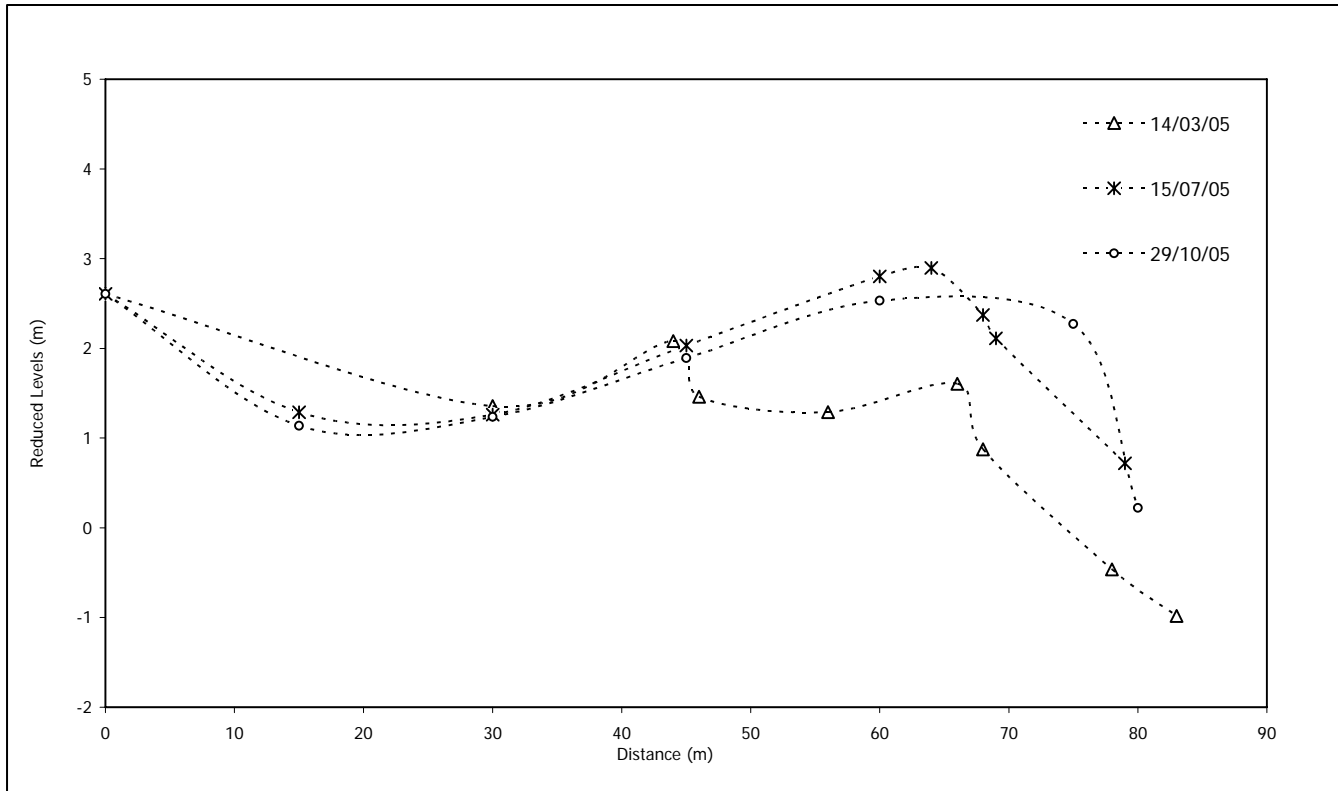


Fig. 2.6 Beach profiles of Bengre 200m chainage (Year 2005)

Seasonal beach profile changes at Bengre 200m

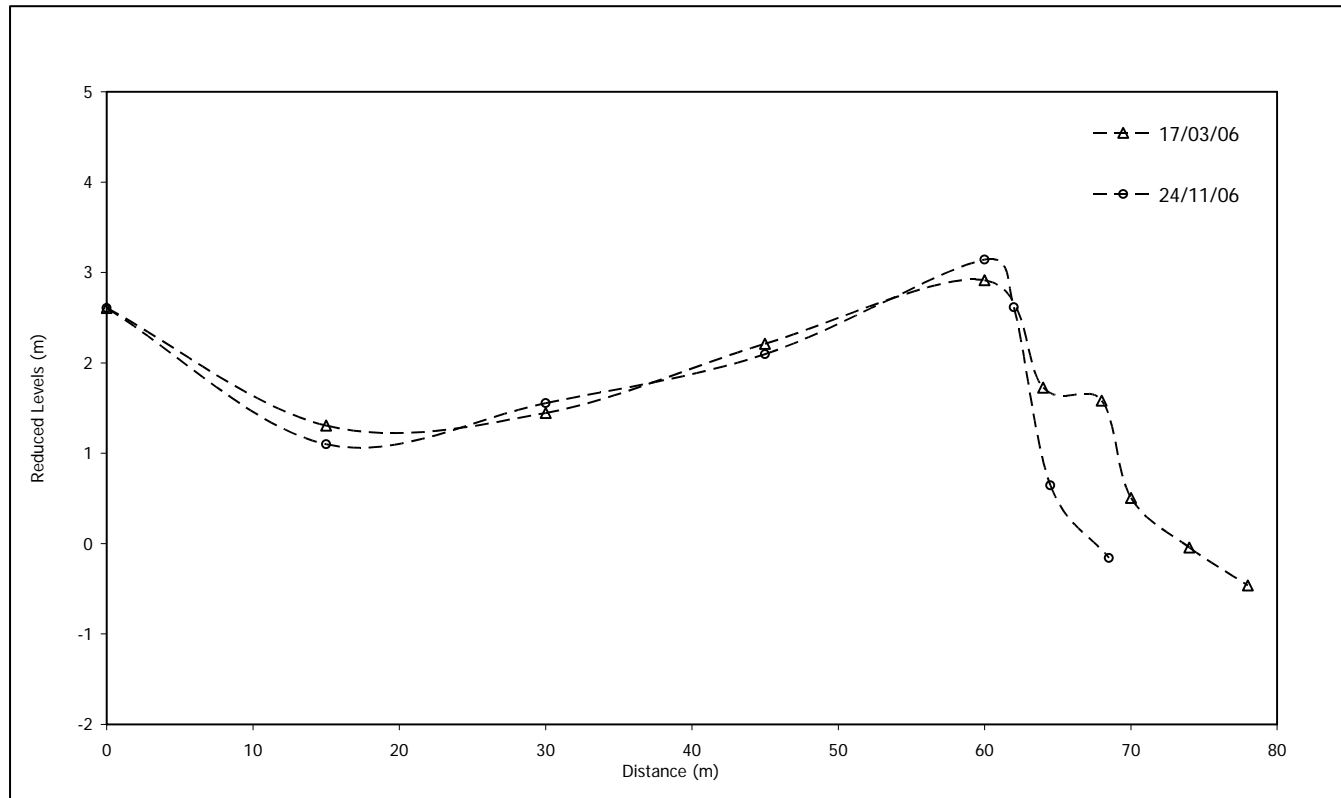


Fig. 2.7 Beach profiles of Bengre 200m chainage (Year 2006)

Yearly beach profile changes at Bengre 200m

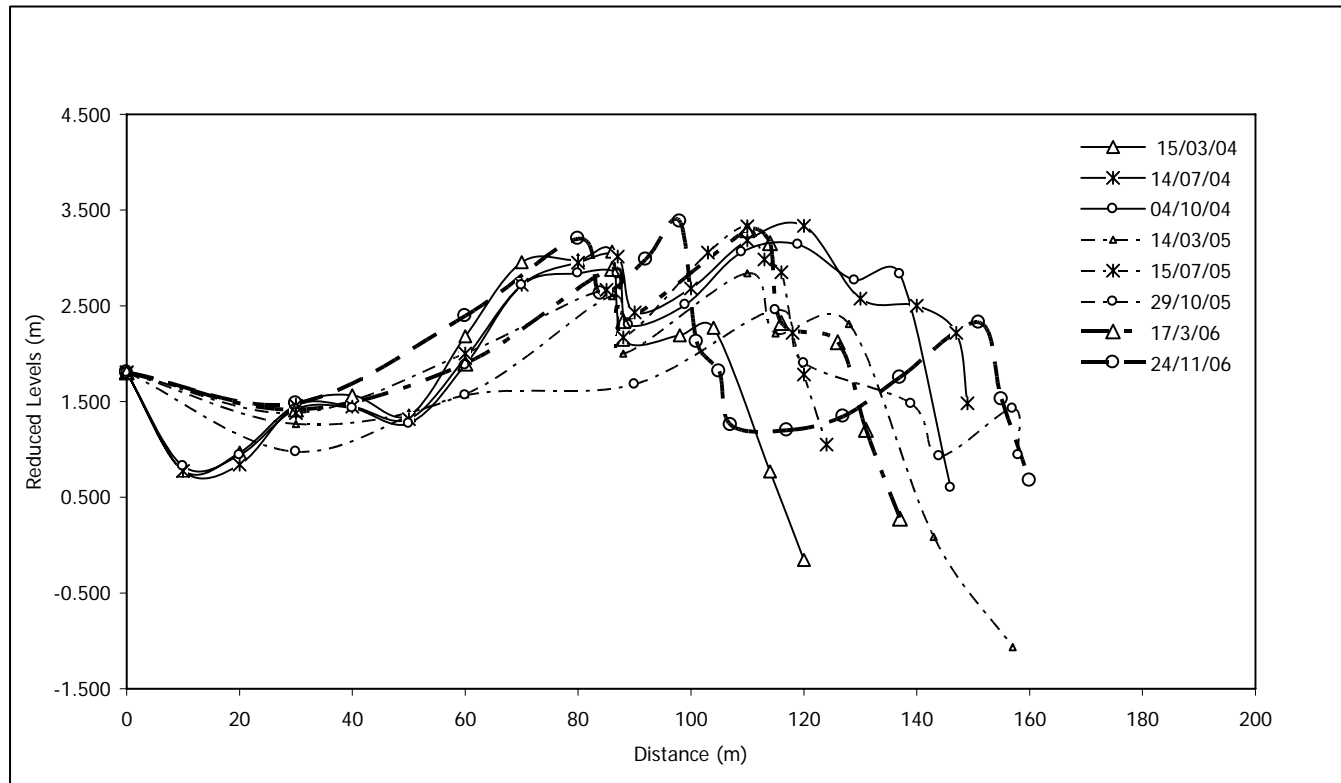


Fig. 2.8 Beach Profiles Of Bengre 200m chainage (From 2004 to 2006)

Reduced levels at Bengre 300m chainage for the year 2004

1st visit		2nd visit		3rd visit		4th visit		5th visit		6th visit	
Distance	24/02/04	Distance	15/03/04	Distance	29/03/04	Distance	11/05/04	Distance	31/05/04	Distance	14/06/04
0	3.151	0	3.151	0	3.151	0	3.151	0	3.151	0	3.151
10	1.471	10	1.561	10	1.561	10	1.561	10	1.541	10	1.526
20	1.401	20	1.641	20	1.611	20	1.581	20	1.611	20	1.601
30	1.301	30	1.611	30	1.521	30	1.491	30	1.151	30	1.136
40	1.281	40	1.261	40	1.161	40	1.101	40	1.386	40	1.376
50	1.281	50	1.541	50	1.441	50	1.391	50	1.636	50	1.646
60	1.551	60	1.941	60	1.761	60	1.711	60	2.391	60	2.376
70	2.321	70	2.671	70	2.441	70	2.536	70	3.086	70	3.036
80	3.086	80	3.511	80	3.246	80	3.311	80	3.191	80	3.141
90	2.826	90	3.476	90	3.266	88	3.086	90	3.326	90	3.421
100	3.361	100	3.641	100	3.581	98	3.501	100	3.541	100	3.686
110	3.441	110	3.726	110	3.456	108	3.601	107	3.546	110	2.661
120	3.146	120	3.291	121	3.446	112	3.416	109	2.851		
125	2.641	121	3.206	129	2.741	122	1.691				
130	1.646	131	1.561	130	1.941	132	0.321				
		141	0.011	140	-0.069						

Reduced levels at Bengre 300m chainage for the year 2004 (Contd...)

7 th visit		8 th visit		9 th visit		10 th visit		11 th visit		12 th visit	
Distance	28/06/04	Distance	14/07/04	Distance	01/08/04	Distance	16/08/04	Distance	30/08/04	Distance	20/09/04
0	3.151	0	3.151	0	3.151	0	3.151	0	3.151	0	3.151
10	1.546	10	1.586	10	1.521	10	1.606	10	1.616	10	1.681
20	1.606	20	1.621	20	1.606	20	1.641	20	1.616	20	1.651
30	1.151	30	1.451	30	1.406	30	1.441	30	1.636	30	1.466
40	1.371	40	1.296	40	1.411	40	1.256	40	1.451	40	1.206
50	1.626	50	1.396	50	1.296	50	1.401	50	1.226	50	1.421
60	2.391	60	1.726	60	1.436	60	1.796	60	1.456	60	1.756
70	3.041	70	2.176	70	1.226	70	2.451	70	1.896	70	2.281
80	3.131	80	2.866	80	2.346	80	3.151	80	2.516	80	2.950
90	3.426	89	3.506	90	3.081	90	3.371	90	3.236	90	3.401
100	3.676	90	3.486	98	3.441	101	3.481	100	3.631	100	2.571
110	3.536	100	3.566	101	3.266	103	2.941	110	3.846	110	3.441
113	3.466	107	3.531	111	3.546	111	2.321	113	3.171	113	3.551
115	2.901	109	3.006	121	3.636			122	2.276	122	2.246
117	2.641	119	2.096	125	3.631			123	1.621	124	1.741
123	0.926	124	1.606	127	2.996			131	0.58	133	1.891
				134	2.406					136	1.881
				139	1.236					137	1.341
										139	0.901

Reduced levels at Bengre 300m chainage for the year 2004 (Contd...)

13 th visit		14 th visit		15 th visit	
Distance	04/10/04	Distance	02/12/04	Distance	18/12/04
0	3.151	0	3.151	0	3.151
10	1.681	10	1.651	10	1.571
20	1.646	20	1.751	20	1.641
30	1.466	30	1.451	30	1.451
40	1.131	40	1.141	40	1.301
50	1.436	50	2.401	50	1.461
60	1.736	60	1.796	60	1.921
70	2.301	70	2.411	70	2.461
80	3.016	80	3.151	80	3.336
90	3.286	90	3.211	90	3.391
100	3.486	100	3.331	100	3.446
110	3.426	110	3.391	106	3.366
111	3.341	118	2.346	111	2.706
119	2.291	128	2.591	121	2.851
120	1.896	138	3.036	128	2.971
130	2.146	144	1.516	138	0.926
134	2.126			142	0.336
137	1.336				

Reduced levels at Bengre 300m chainage for the year 2005

16th visit		17th visit		18th visit		19th visit		20th visit		21st visit	
Distance	03/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05	Distance	14/03/05
0	3.151	0	3.151	0	3.151	0	3.151	0	3.151	0	3.151
10	1.541	10	1.541	15	1.561	30	1.511	30	1.156	30	2.351
20	1.621	20	1.551	30	1.381	60	2.761	60	1.541	60	1.621
30	1.471	30	1.471	45	1.171	90	3.021	90	3.101	90	2.956
40	1.376	40	1.111	60	1.701	105	3.001	105	3.291	111	3.306
50	1.786	50	1.331	75	2.611	111	2.971	113	3.261	114	2.776
60	2.636	60	1.691	90	3.151	117	2.251	118	2.651	124	2.596
65	3.466	70	2.431	105	3.321	105	2.126	124	2.641	134	1.546
75	3.666	80	3.171	113	3.361	113	2.061	129	2.166	144	0.431
85	3.786	90	3.121	115	2.971	115	1.536	130	1.751	151	0.031
88	3.786	100	3.281	125	2.661	125	-0.089	136	1.551		
90	3.306	110	3.491	126	2.411			146	0.651		
100	3.156	114	2.761	135	1.831						
101	2.176	122	2.741	145	0.431						
105	1.056	132	1.331								
		133	0.021								

Reduced levels at Bengre 300m chainage for the year 2005 (Contd...)

22nd visit		23rd visit		24th visit		25th visit		26th visit		27th visit	
Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05	Distance	02/06/05	Distance	16/06/05
0	3.151	0	3.151	0	3.151	0	3.151	0	3.151	0	3.151
30	1.426	30	1.476	30	1.526	30	1.496	30	1.436	30	1.561
60	1.746	60	1.761	60	1.806	60	1.721	60	1.706	60	1.971
75	2.751	75	2.856	90	3.376	90	3.036	75	2.856	90	3.521
90	3.211	82	3.256	105	3.721	105	3.311	90	2.991	105	3.901
105	3.251	92	3.381	110	3.786	115	3.731	105	3.401	112	4.041
116	3.416	107	3.426	117	3.221	117	3.331	118	3.381	113	3.096
119	2.866	110	2.876	129	3.481	132	3.141			117	1.961
129	2.671	120	2.646	134	3.176	134	3.166				
134	2.216	131	2.461	142	2.026	135	2.686				
144	2.201	142	0.586	147	1.241	140	1.471				
159	0.901										
169	0.051										

28th visit		29th visit		30th visit		31st visit		32nd visit		33rd visit	
Distance	22/06/05	Distance	01/07/05	Distance	15/07/05	Distance	02/08/05	Distance	13/08/05	Distance	10/09/05
0	3.151	0	3.151	0	3.151	0	3.151	0	3.151	0	3.151
30	1.471	30	1.456	30	1.461	30	1.461	30	0.431	30	1.436
60	1.556	60	1.876	45	1.631	60	2.851	60	1.726	60	1.526
75	2.701	75	3.016	60	2.961	75	3.111	90	3.156	90	3.051
90	3.221	85	3.401	70	3.231	83	3.301	101	3.301	120	2.031
105	3.401	87	3.111	85	3.416	87	2.921	102	3.001	135	1.791
110	3.586	102	3.416	86	2.861	91	2.001	112	2.076	138	1.826
111	1.716	103	2.871	93	2.656			116	2.371	143	0.616
113	1.226	108	2.051	102	0.696			118	1.421		
								122	0.606		

Reduced levels at Bengre 300m chainage for the year 2005 (Contd...)

34rth visit		35rth visit		36th visit		37th visit	
Distance	16/09/05	Distance	30/09/05	Distance	29/10/05	Distance	19/11/05
0	3.151	0	3.151	0	3.151	0	3.151
30	1.461	30	2.471	30	1.621	30	1.571
60	1.756	60	1.641	60	1.676	60	1.831
90	3.156	90	3.036	90	2.761	90	3.306
97	3.111	120	1.931	120	1.826	120	2.451
102	2.506	135	2.041	121	1.456	121	2.326
117	1.991	140	1.981	139	2.041	139	3.176
118	1.601	152	1.021	142	1.481	142	2.056
133	1.666			164	1.981		
138	1.326			167	1.191		
				172	1.621		

38th visit		39th visit		40th visit	
Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
0	3.151	0	3.151	0	3.151
30	1.446	30	1.461	30	0.761
60	1.556	60	1.291	60	1.131
90	2.806	90	2.941	98	2.636
120	1.871	120	1.651	103	2.071
140	1.961	150	1.821	133	1.251
143	1.601	165	2.561	164	2.451
164	2.681	166	2.061	174	0.611
165	2.306				

Reduced levels at Bengre 300m chainage for the year 2006

41st visit		42nd visit		43rd visit		44th visit	
Distance	13/01/2006	Distance	31/01/2006	Distance	15/02/06	Distance	03/03/06
0	3.151	0	3.151	0	3.151	0	3.151
30	1.486	30	2.399	30	1.511	30	1.561
60	1.696	60	2.566	60	1.531	60	1.761
90	3.076	90	4.041	90	3.431	84	3.451
100	3.296	105	4.201	120	3.481	101	3.371
110	2.296	135	4.141	135	1.661	116	2.081
140	2.596	153	3.921	165	2.791	148	2.991
148	2.966	156	3.001	170	2.926	155	1.511
155	1.641	163	2.271	177	1.611	163	0.221

45th visit		46th visit		47th visit	
Distance	17/3/06	Distance	04/04/06	Distance	24/11/06
0	3.151	0	3.151	0	3.151
30	1.481	30	1.456	4	4.096
60	1.856	60	1.746	16	3.336
92	3.421	84	3.416	28	3.266
107	3.451	100	3.281	30	3.726
133	2.206	115	2.071	38	3.156
148	2.091	130	2.186	40	3.361
163	3.031	148	2.956	45	3.936
180	1.941	155	1.661	55	3.666
187	0.831	164	0.411	62	4.531
194	0.231			72	3.366
				82	2.416
				106	4.246

Seasonal beach profile changes at Bengre 300m

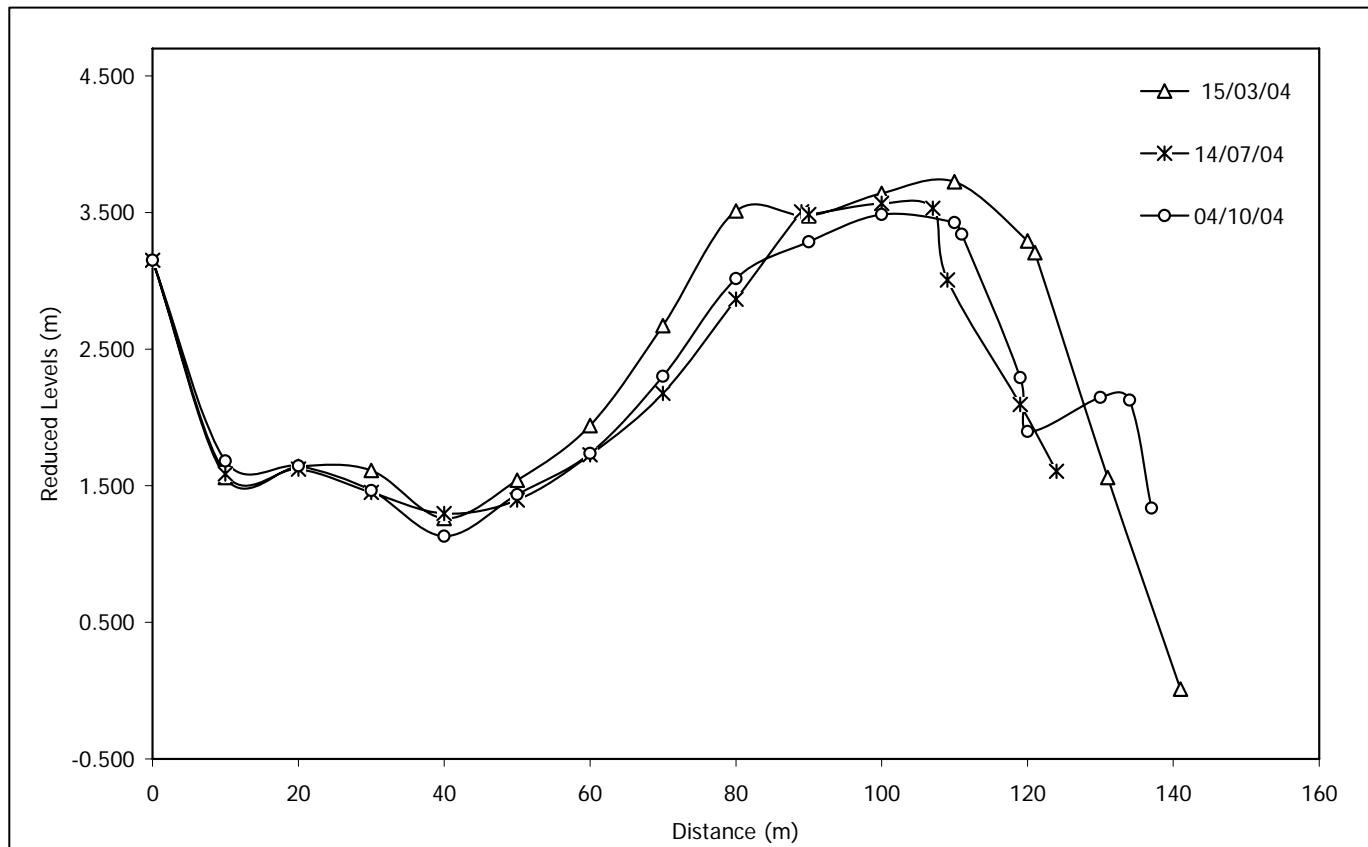


Fig. 2.9 Beach Profiles of Bengre 300m chainage (Year 2004)

Seasonal beach profile changes at Bengre 300m

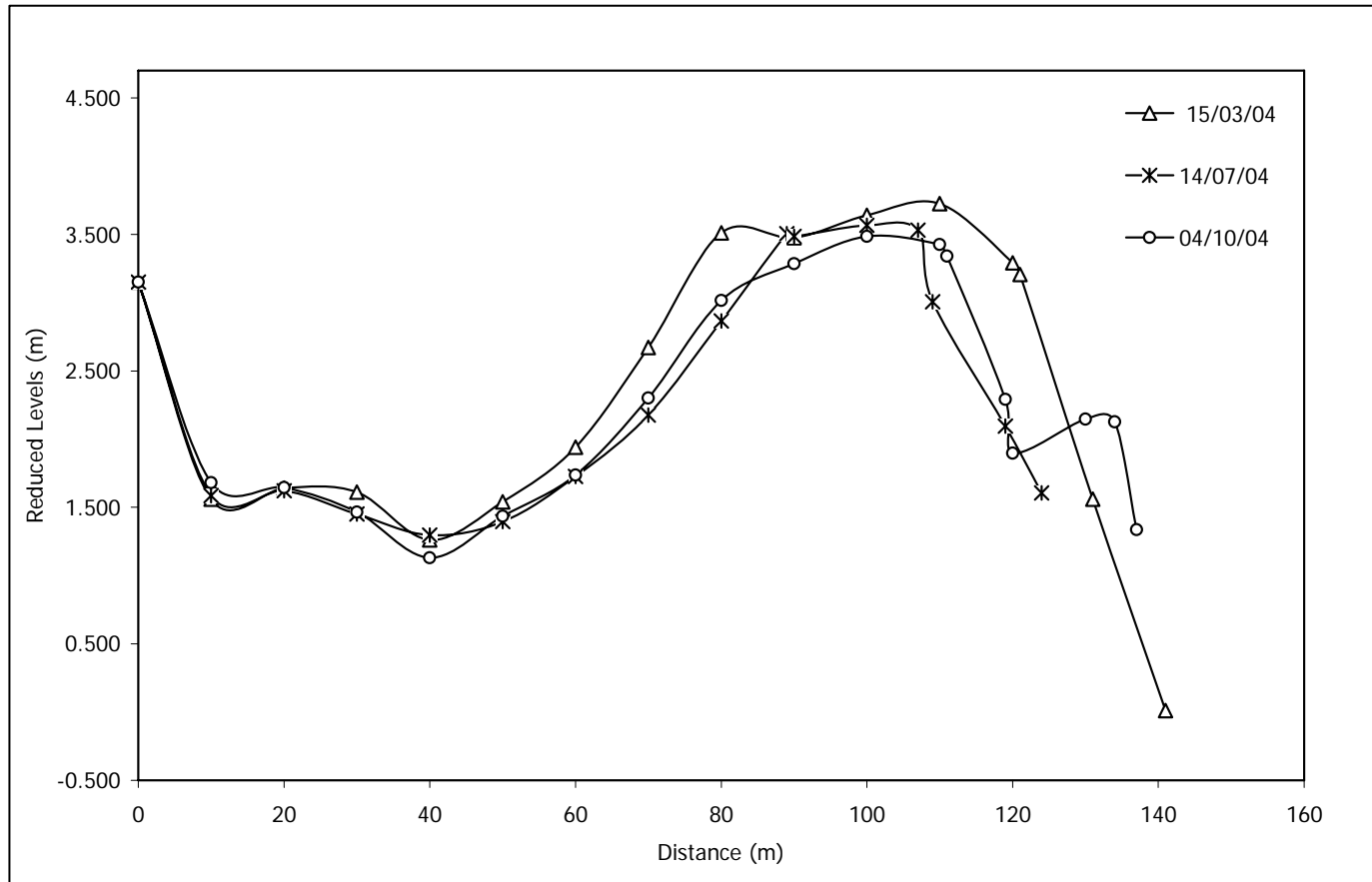


Fig. 2.10 Beach Profiles of Bengre 300m chainage (Year 2004)

Seasonal beach profile changes at Bengre 300m

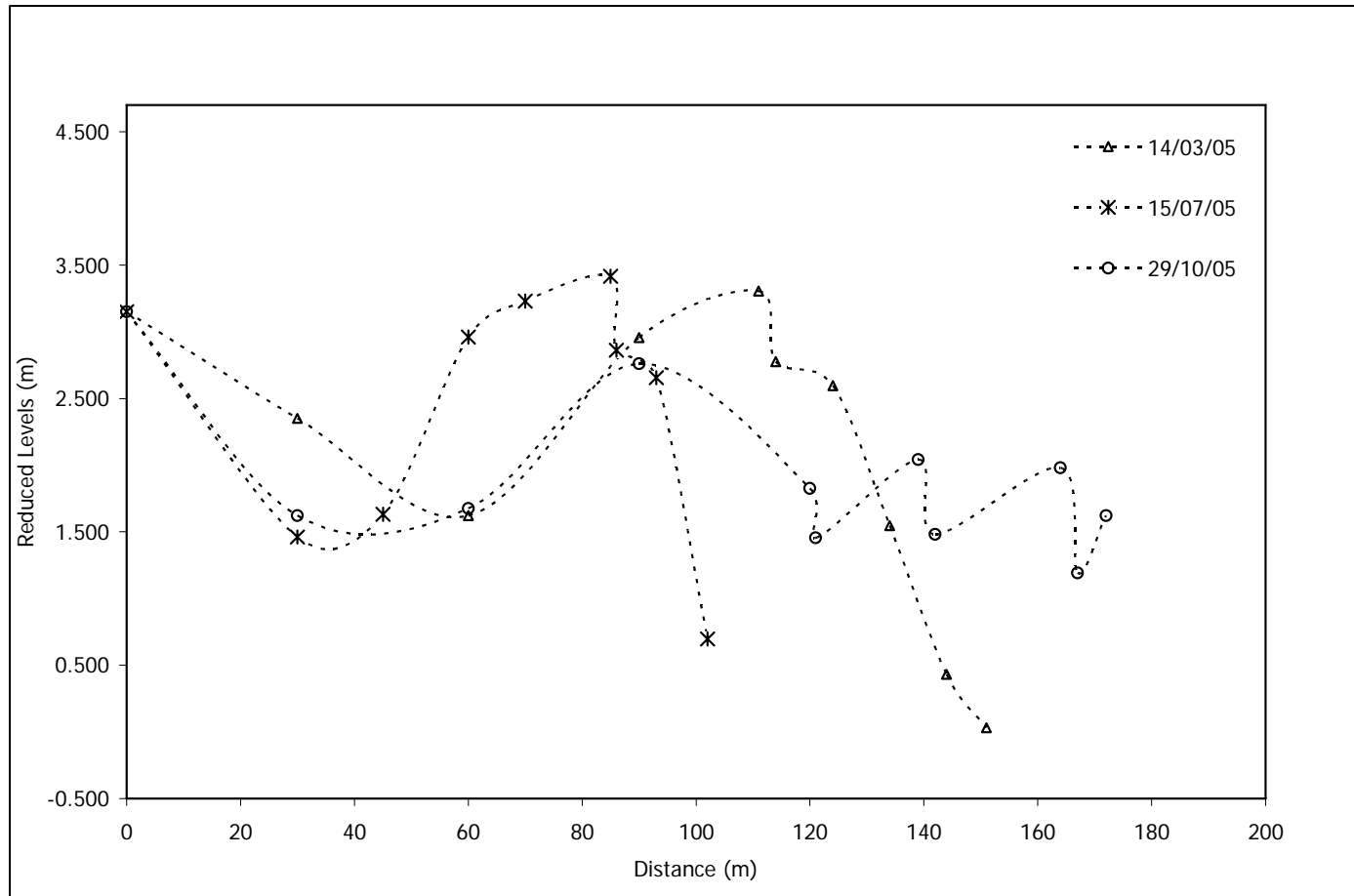


Fig. 2.11 Beach Profiles of Bengre 300m chainage (Year 2005)

Seasonal beach profile changes at Bengre 300m

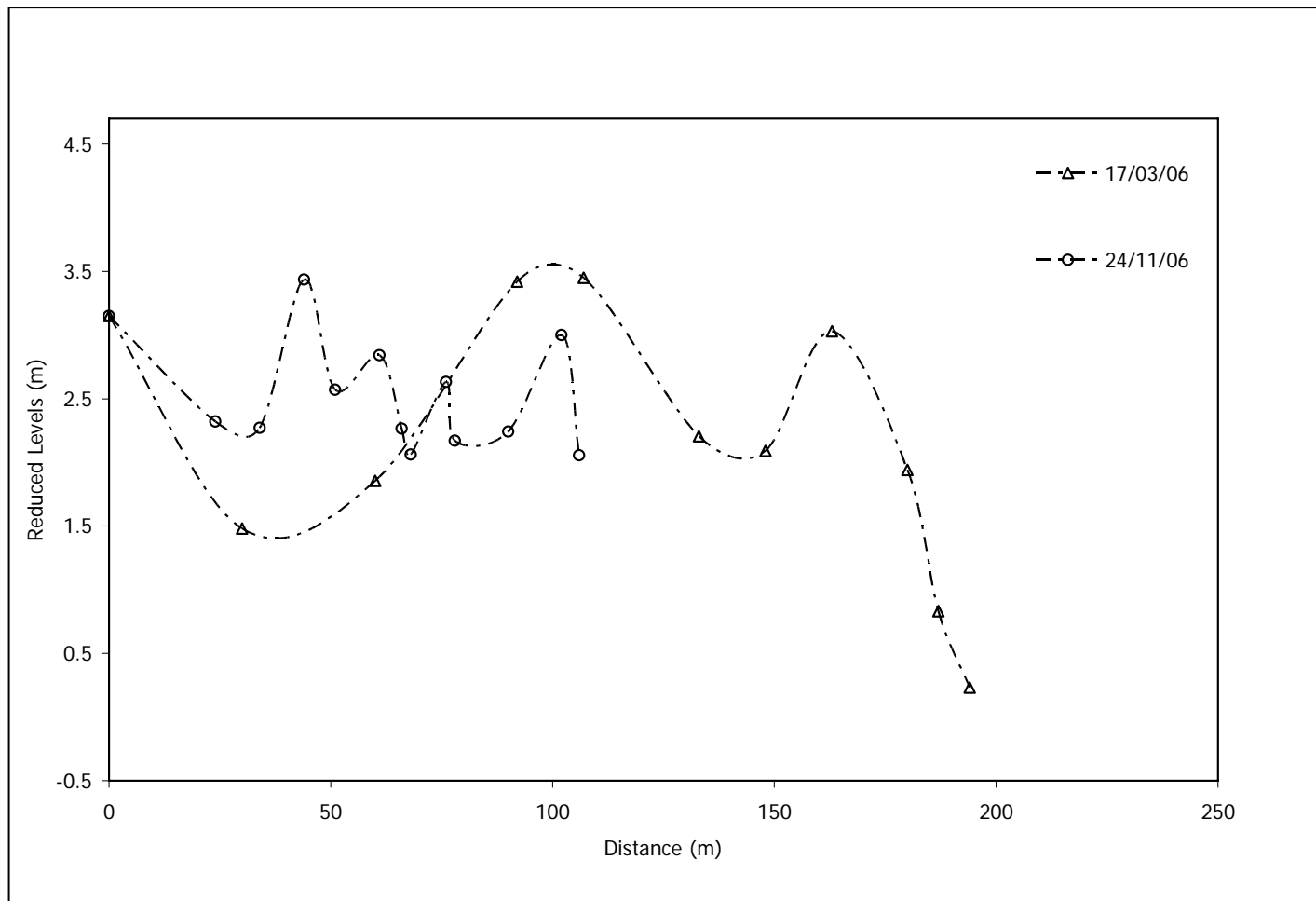


Fig. 2.12 Beach Profiles of Bengre 300m chainage (Year 2006)

Yearly beach profile changes at Bengre 300m

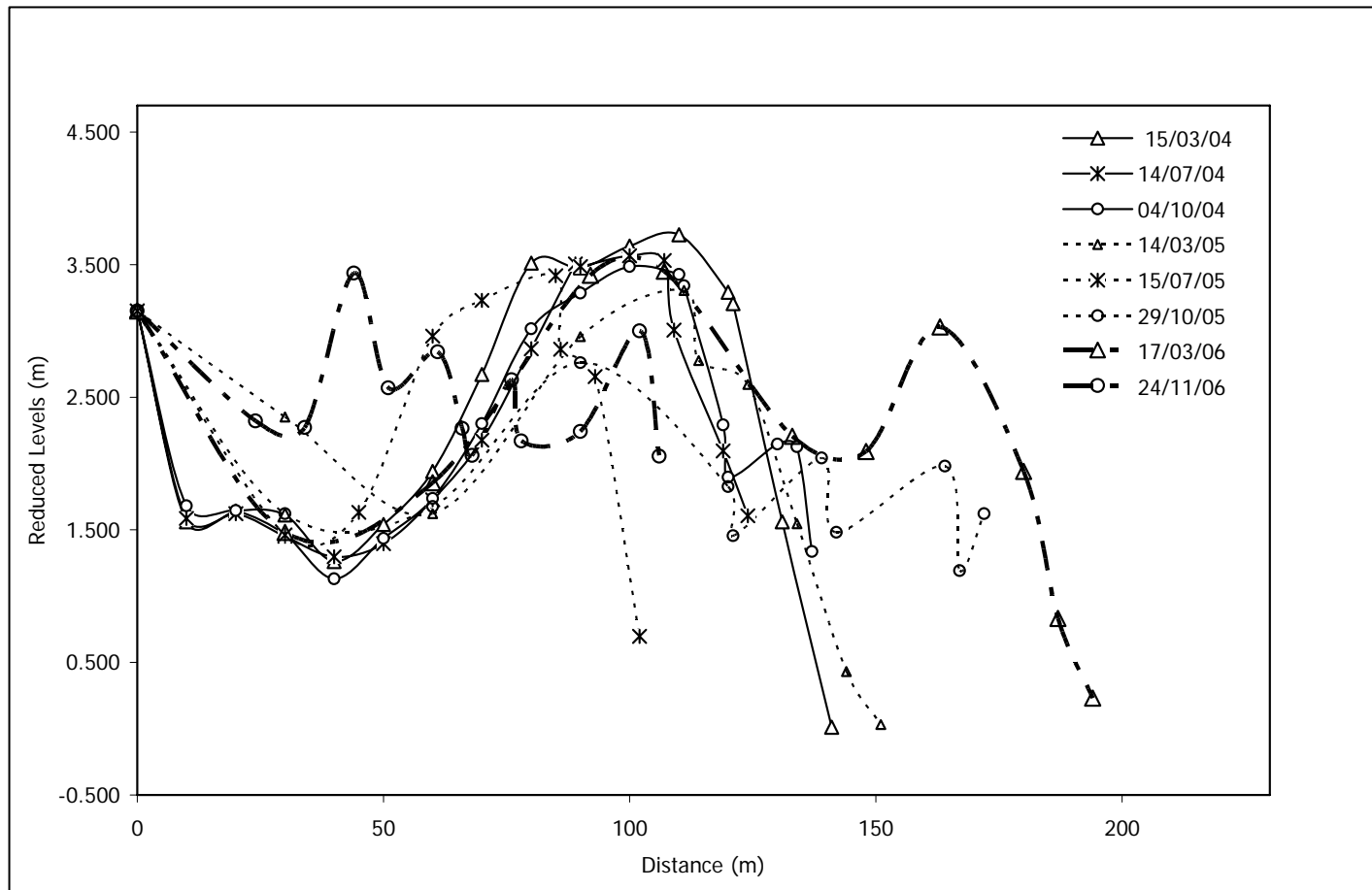


Fig. 2.13 Beach Profiles of Bengre 300m chainage (From 2004 to 2006)

Reduced levels at Bengre 1600m chainage for the year 2004

1st visit		2nd visit		3rd visit		4th visit		5th visit		6th visit	
Distance	24/02/04	Distance	15/03/04	Distance	29/03/04	Distance	11/05/04	Distance	31/05/04	Distance	14/06/04
0	2.531	0	2.531	0	2.531	0	2.531	0	2.531	0	2.531
10	1.581	10	1.451	10	1.611	10	1.581	10	1.621	10	1.571
20	1.511	20	1.271	20	1.561	20	1.561	20	1.576	20	1.481
30	1.581	30	1.201	30	1.541	30	1.491	30	1.546	30	1.501
40	1.761	40	1.321	40	1.721	40	1.751	40	1.731	40	1.711
50	2.031	50	1.441	50	1.931	50	1.981	50	2.046	50	1.901
60	2.121	60	1.581	60	2.091	60	2.176	60	2.176	60	2.041
70	2.591	70	1.681	70	2.376	70	2.416	70	2.741	70	2.341
80	2.806	80	1.956	80	2.766	80	2.806	80	2.771	80	2.626
90	2.611	90	1.951	90	2.831	90	2.841	90	2.946	90	2.571
100	2.976	100	1.761	100	2.811	100	2.826	100	3.156	100	2.601
110	2.426	110	2.021	110	3.061	110	3.081	105	2.771	110	2.781
120	2.611	120	1.496	120	2.471	120	2.526	119	2.936	120	2.441
125	2.651	130	1.566	130	2.676	130	2.811	121	1.416	130	2.666
130	1.731	139	1.741	138	2.751	131	2.351	129	1.341	135	1.936
140	0.626	145	0.286	143	1.606	141	0.411			140	1.131
		155	-1.109	149	0.951						
		165	-1.729	154	0.011						
				164	-0.729						

Reduced levels at Bengre 1600m chainage for the year 2004 (Contd...)

7 th visit		8 th visit		9 th visit		10 th visit		11 th visit		12 th visit	
Distance	28/06/04	Distance	14/07/04	Distance	01/08/04	Distance	16/08/04	Distance	30/08/04	Distance	20/09/04
0	2.531	0	2.531	0	2.531	0	2.531	0	2.531	0	2.531
10	1.596	10	1.571	10	1.516	10	1.451	10	1.596	10	1.601
20	1.496	20	1.511	20	1.536	20	1.336	20	1.561	20	1.521
30	1.506	30	1.496	30	1.671	30	1.391	30	1.486	30	1.521
40	1.731	40	1.681	40	1.796	40	1.546	40	1.691	40	1.691
50	1.981	50	1.886	50	2.096	50	1.761	50	2.141	50	1.896
60	2.036	60	2.101	60	2.201	60	1.836	60	2.356	60	2.101
70	2.326	70	2.286	70	2.596	70	2.151	70	2.871	70	2.346
80	2.611	80	2.696	80	2.891	80	2.681	80	2.886	80	2.701
90	2.546	90	2.721	90	2.726	90	2.686	90	2.766	90	2.726
100	2.581	100	2.671	100	2.921	100	2.761	100	3.066	100	2.666
110	2.766	110	2.921	110	2.996	110	2.851	110	3.426	110	2.971
120	2.341	120	2.661	120	2.901	120	2.756	117	3.616	120	2.731
130	3.026	130	2.966	124	3.076	124	2.866	118	3.096	126	2.861
133	2.881	132	2.996	125	2.416	126	2.531	128	1.936	136	1.606
137	2.186	135	1.636	127	1.716	134	1.287	138	1.296	146	0.556
146	0.796	140	0.891							149	0.181

Reduced levels at Bengre 1600m chainage for the year 2004 (Contd...)

13 th visit		14 th visit		15 th visit	
Distance	04/10/04	Distance	02/12/04	Distance	18/12/04
0	2.531	0	2.531	0	2.531
10	1.586	10	1.536	10	1.056
20	1.501	20	1.451	20	1.446
30	1.481	30	1.466	30	1.416
40	1.666	40	1.616	40	1.556
50	1.871	50	1.796	50	1.686
60	2.041	60	1.936	60	2.606
70	2.271	70	2.186	70	1.996
80	2.636	80	2.636	80	2.426
90	2.711	90	2.581	90	2.396
100	2.576	100	2.616	100	2.416
110	2.911	110	2.841	110	2.586
120	2.671	120	2.401	120	2.156
127	2.831	130	2.586	130	2.266
130	2.381	140	2.136	134	2.166
140	1.701	146	1.076	140	1.546
150	0.911			150	0.096
152	0.466			153	-0.364

Reduced levels at Bengre 1600m chainage for the year 2005

15th visit		16th visit		17th visit		18th visit		19th visit		20th visit	
Distance	18/12/04	Distance	03/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05
0	2.531	0	2.531	0	2.531	0	2.531	0	2.531	0	2.531
10	1.056	10	1.536	10	1.696	15	1.486	45	1.586	45	1.821
20	1.446	20	1.426	20	2.116	60	2.006	90	2.446	90	2.936
30	1.416	30	1.371	30	2.216	105	2.766	126	2.506	120	3.116
40	1.556	40	1.516	40	1.916	120	2.576	138	1.876	127	3.271
50	1.686	50	1.621	50	2.126	135	2.496	150	-0.514	138	2.816
60	2.606	60	1.776	60	2.326	144	1.696			139	2.136
70	1.996	70	1.906	70	2.686	153	-0.274			147	0.516
80	2.426	80	2.281	80	3.056					156	0.116
90	2.396	90	2.426	90	3.046						
100	2.416	100	2.376	100	3.096						
110	2.586	110	2.466	110	3.226						
120	2.156	120	2.406	120	3.066						
130	2.266	130	2.311	130	2.866						
134	2.166	140	2.176	137	2.296						
140	1.546	145	1.851	147	0.616						
150	0.096	150	1.001								
153	-0.364	155	0.116								
		157	-0.344								

Reduced levels at Bengre 1600m chainage for the year 2005 (Contd...)

21st visit		22nd visit		23rd visit		24th visit		25th visit		26th visit	
Distance	14/03/05	Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05	Distance	02/06/05
0	2.531	0	2.531	0	2.531	0	2.531	0	2.531	0	2.531
30	1.356	30	1.531	30	1.506	30	1.596	30	1.561	30	1.921
60	1.831	60	2.121	60	2.011	60	2.136	60	2.216	60	2.841
90	2.581	90	2.876	90	2.696	90	2.881	90	2.976	90	2.981
120	2.571	120	2.841	120	2.686	120	3.016	120	3.071	120	3.321
128	2.706	135	2.901	132	2.636	124	3.056	131	3.101	131	2.696
134	2.586	137	2.476	134	2.146	129	2.791	133	2.751	143	3.116
135	2.196	140	2.091	139	1.956	139	2.956	143	1.211		
145	0.591	150	0.361	144	0.896	144	2.766				
155	-0.659	158	-0.309	149	0.166	150	1.631				
				154	0.041	160	0.376				

27th visit		28th visit		29th visit		30th visit		31st visit		32nd visit	
Distance	16/06/05	Distance	22/06/05	Distance	01/07/05	Distance	15/07/05	Distance	02/08/05	Distance	13/08/05
0	2.531	0	2.531	0	2.531	0	2.531	0	2.531	0	2.531
30	1.616	30	1.506	30	1.516	30	1.586	30	1.456	30	1.461
60	2.146	60	2.041	60	2.021	60	2.216	60	1.961	60	1.926
90	2.866	90	2.756	90	2.781	90	2.921	90	2.706	90	2.576
120	2.841	120	2.771	105	2.856	105	3.211	120	2.831	120	2.766
135	2.646	135	2.906	117	3.031	106	2.761	123	2.946	123	2.851
145	1.106	140	1.656	130	3.141	115	1.301	124	2.636	126	2.446
				131	2.441			139	1.866	139	2.336
				133	1.846			144	1.301	140	1.841
										153	0.436

Reduced levels at Bengre 1600m chainage for the year 2005 (Contd...)

33rd visit		34rth visit		35rth visit		36th visit	
Distance	10/09/05	Distance	16/09/05	Distance	30/09/05	Distance	29/10/05
0	2.316	0	2.316	0	2.316	0	2.316
30	1.396	30	1.396	30	1.406	30	1.386
60	1.846	60	1.846	60	1.871	60	1.636
90	2.551	90	2.551	90	2.511	90	2.131
120	2.781	120	2.781	120	2.646	120	2.211
121	2.771	121	2.771	135	2.116	122	2.296
123	2.306	123	2.306	141	2.256	125	1.831
135	2.351	135	2.351	151	1.526	138	1.121
145	0.371	145	0.371				

37th visit		38th visit		39th visit		40th visit	
Distance	19/11/05	Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
0	2.316	0	2.316	0	2.316	0	2.316
30	1.461	30	1.566	30	1.411	30	1.516
60	1.936	60	1.791	60	1.906	60	1.976
90	2.636	90	2.506	90	2.506	90	2.666
120	2.836	120	2.626	120	2.646	122	2.926
122	1.416	122	2.286	130	2.261	124	2.596
125	0.566	129	2.201	132	1.436	128	2.446
		134	1.021	136	0.586	133	1.236
						138	0.656

Reduced levels at Bengre 1600m chainage for the year 2006

41st visit		42nd visit		43rd visit		44th visit	
Distance	13/01/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06
0	2.316	0	2.316	0	2.316	0	2.316
30	1.476	30	1.461	30	1.461	30	1.496
60	1.991	60	2.086	60	1.996	60	2.016
90	2.751	90	1.831	90	2.696	90	2.721
120	3.036	123	3.086	121	2.811	120	2.901
126	2.596	159	2.521	125	2.381	127	2.366
129	1.761	202	1.746	128	2.331	131	1.676
140	0.816	210	0.306	130	1.791	138	1.456
				138	1.301	158	-0.404
				150	-0.029		

45th visit		46th visit		47th visit		47th visit cont...	
Distance	17/3/06	Distance	04/04/06	Distance	24/11/06	Distance	24/11/06
0	2.316	0	2.316	0	2.316	146	1.496
30	1.511	30	1.581	15	1.526	147	1.086
60	2.036	60	2.036	30	1.536	155	1.056
90	2.726	90	2.756	45	1.736	170	1.546
120	2.906	112	2.946	60	1.991	172	1.261
124	2.491	114	2.521	75	2.431	174	0.636
127	2.366	117	2.426	85	2.696	132	2.596
130	1.756	120	1.761	97	2.711	138	1.666
137	1.476	128	1.4415	112	2.891		
140	1.126	138	0.156	127	2.941		
150	-0.194	148	0.096	132	2.596		
		156	-0.544				

Seasonal beach profile changes at Bengre 1600m

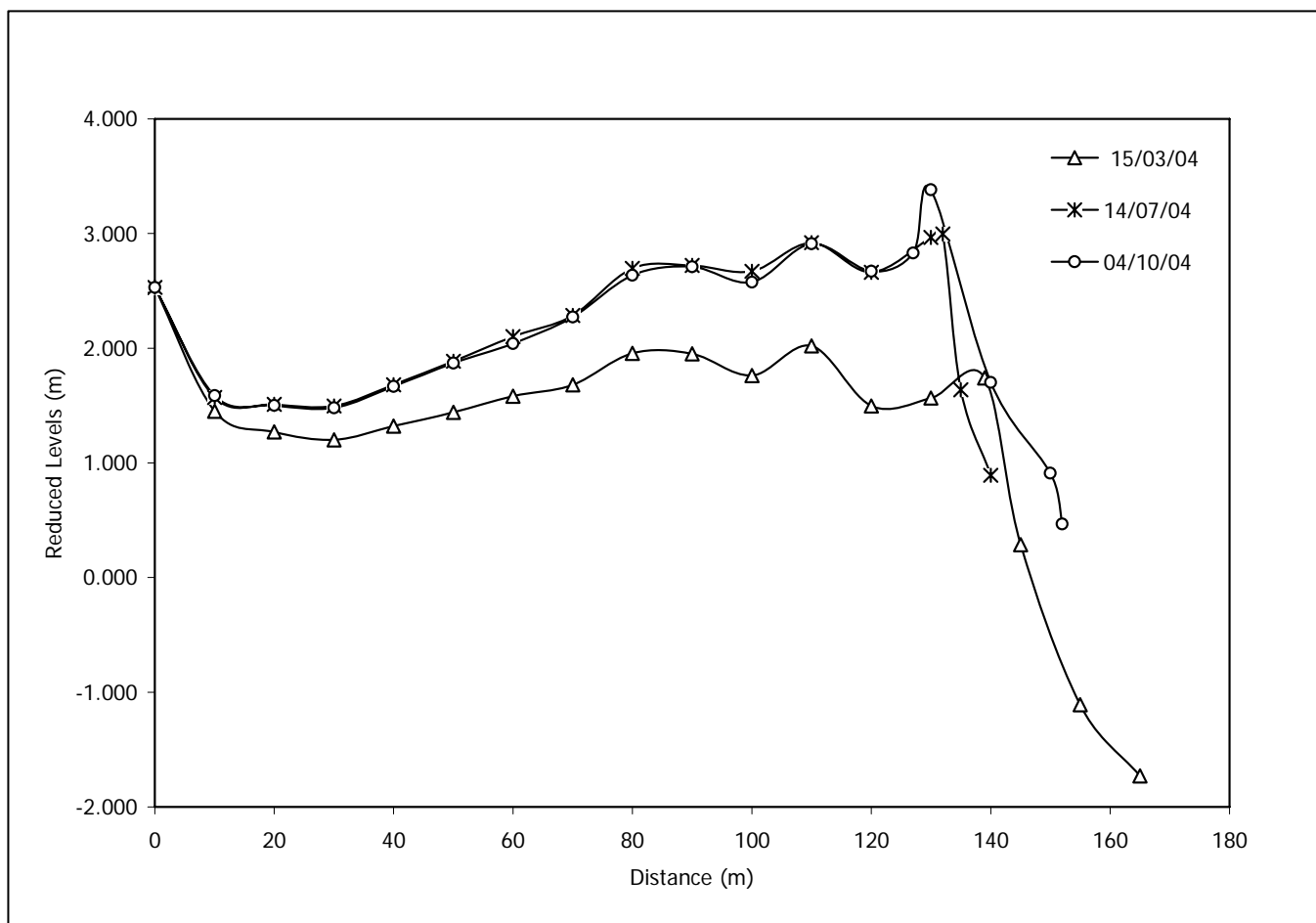


Fig. 2.14 Beach Profiles of Bengre 1600m chainage (Year 2004)

Seasonal beach profile changes at Bengre 1600m

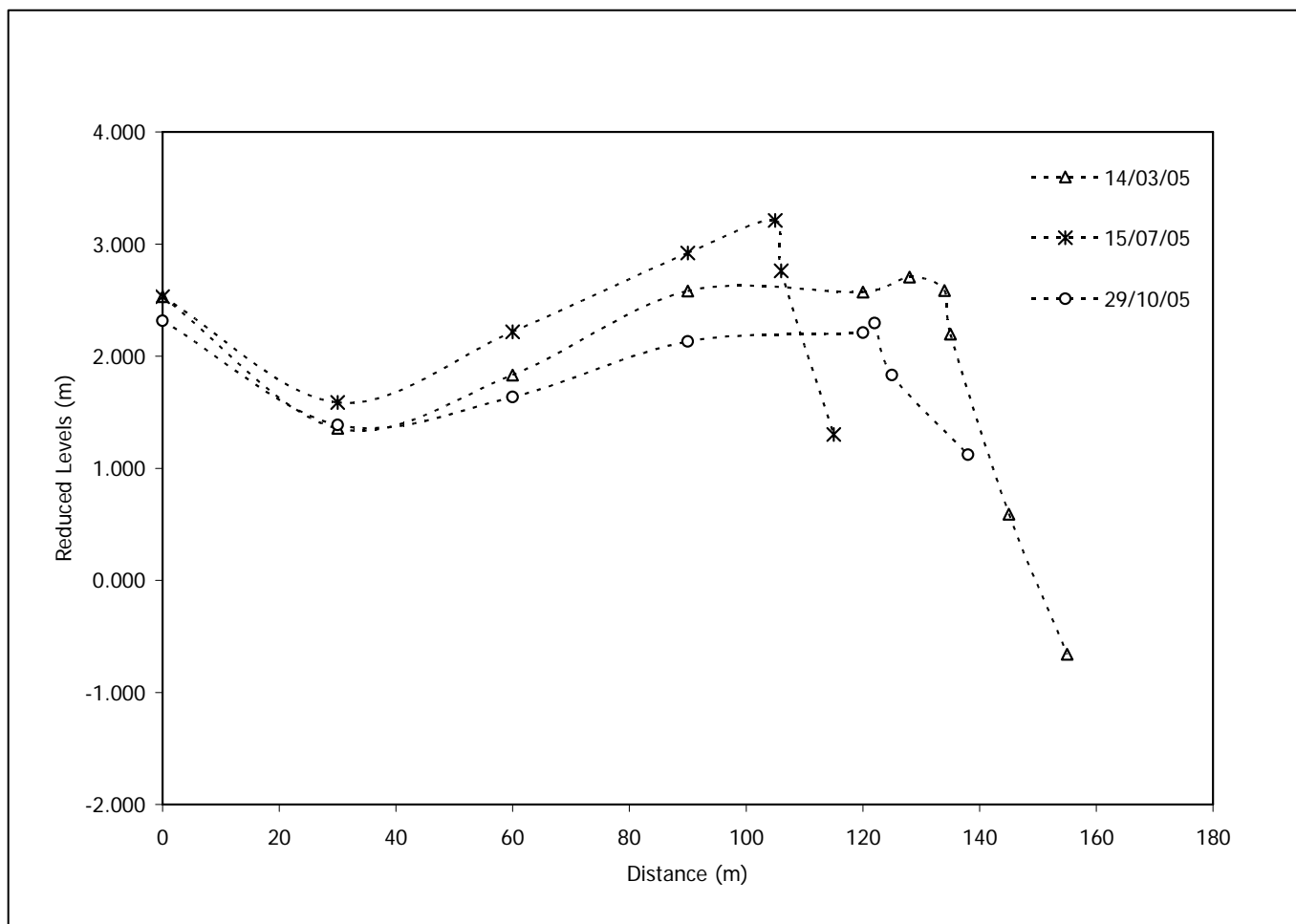


Fig. 2.15 Beach Profiles of Bengre 1600m chainage (Year 2005)

Seasonal beach profile changes at Bengre 1600m

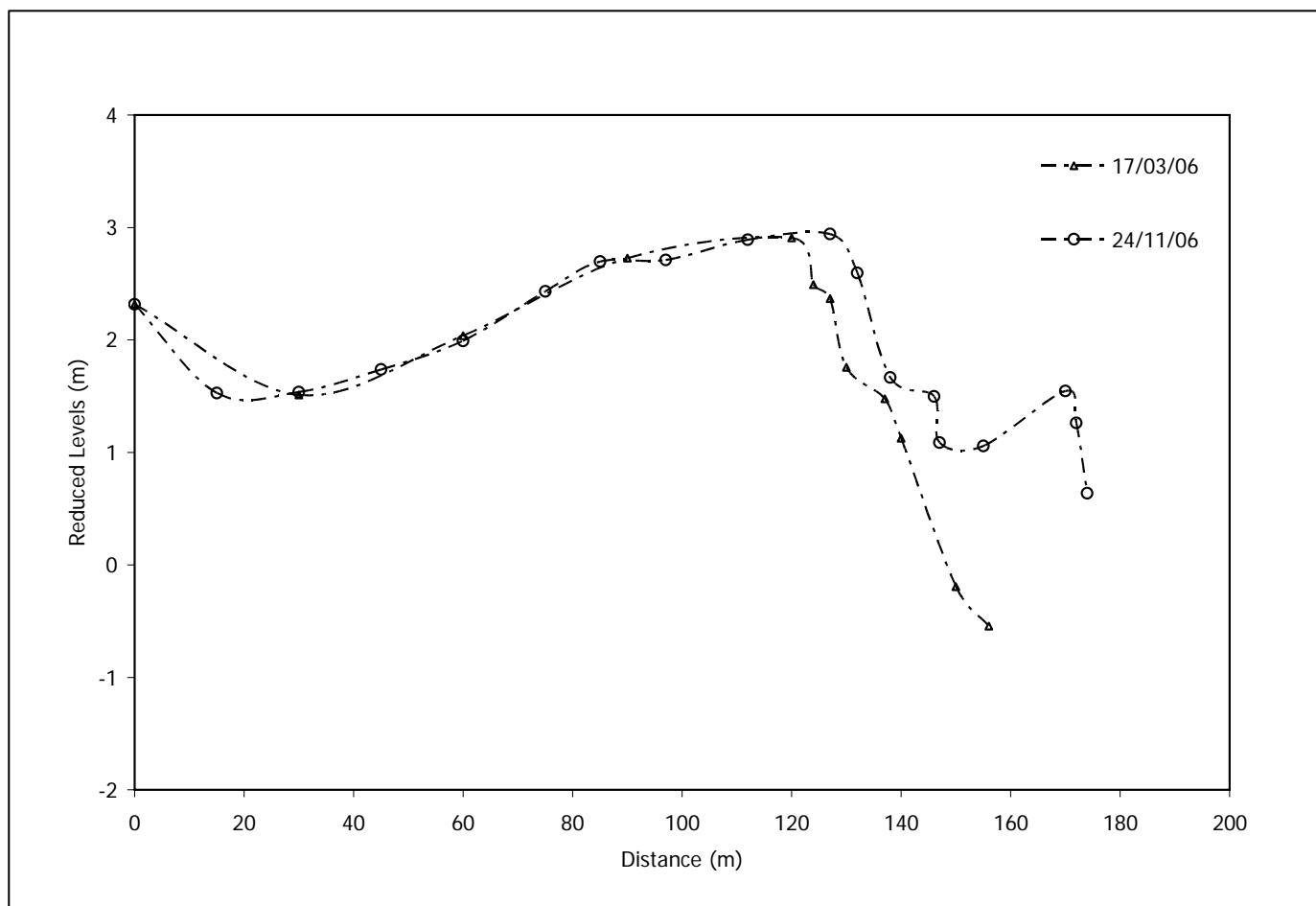


Fig. 2.16 Beach Profiles of Bengre 1600m chainage (Year 2006)

Yearly beach profile changes at Bengre 1600m

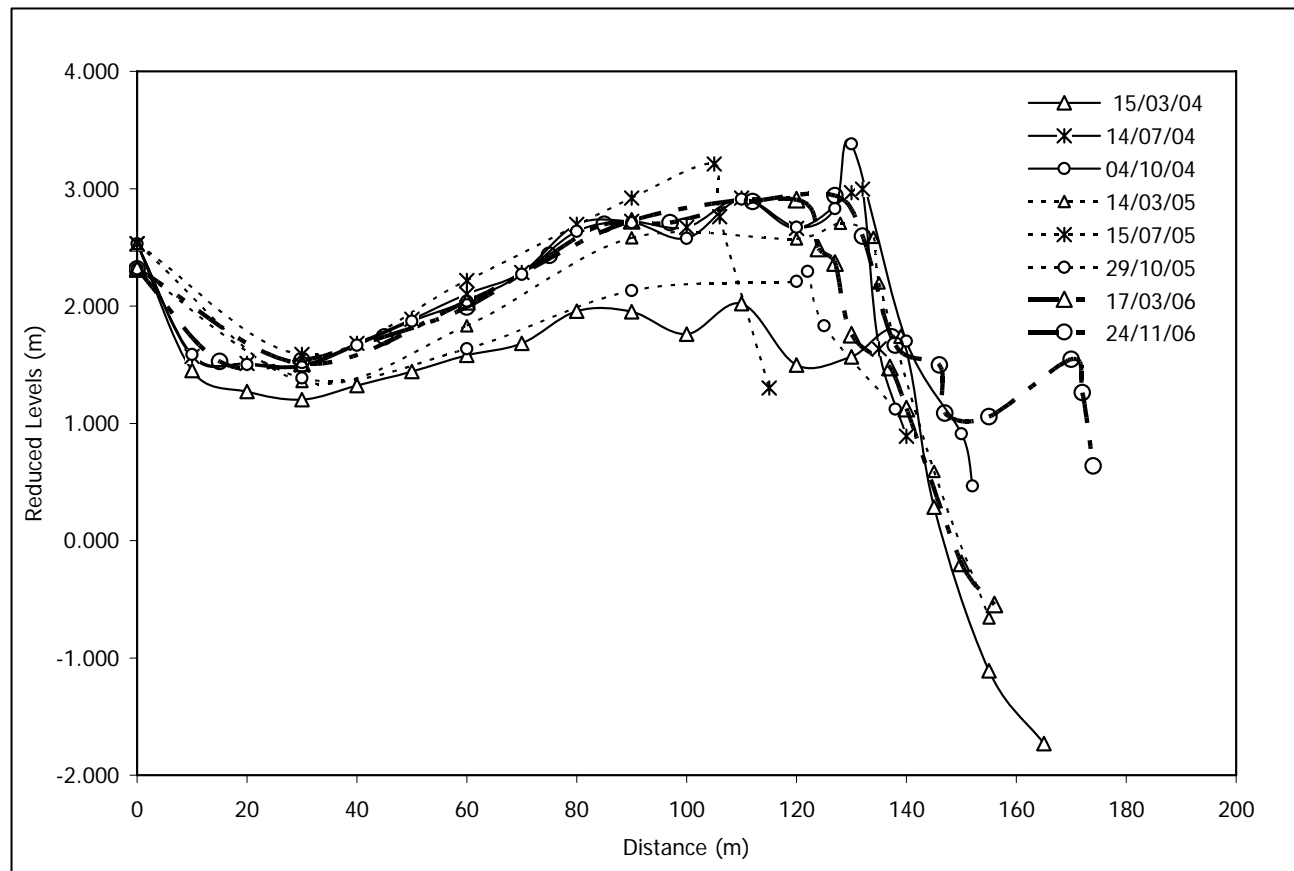


Fig. 2.17 Beach Profiles of Bengre 1600m chainage (From 2004 to 2006)

Reduced levels at Ullal 0m chainage for the year 2004

1st visit		2nd visit		3rd visit		4th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04
0	2.324	0	2.319	0	2.349	0	1.789
5	0.379	5	0.414	5	1.464	5	0.749

5th visit		14th visit		15th visit	
Distance	01/06/04	Distance	03/12/04	Distance	16/12/04
0	1.989	0	0.388	0	0.368
5	0.964	5	0.438	5	0.518
		10	0.298	10	0.278
				15	-0.487

Note: No data is available from 6th to 13th visit.

Reduced levels at Ullal 0m chainage for the year 2005

16th visit		17th visit		18th visit		19th visit		20th visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05
0	2.423	0	2.253	0	3.113	0	1.563	0	3.338
5	2.453	5	2.353	5	2.613	5	1.653	2	2.963
10	2.643	10	2.383	7	2.673	7	1.653	4	2.428
16	2.683	12	1.353	8	2.073	12	0.818	6	2.123
17	1.543	16	0.953	13	1.643	17	0.113	10	1.828
				18	1.003	21	-0.067		
				20	0.713				

22nd visit		23rd visit		24th visit		25th visit		26th visit	
Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05	Distance	02/06/05
0	2.228	0	2.743	0	1.603	0	2.313	0	2.533
5	1.458	5	1.993	5	1.183	10	1.833	5	2.788
7	1.068	10	1.428	10	0.943	13	1.403	10	2.633
				15	0.583			15	2.143

37th visit		38th visit		39th visit		40th visit	
Distance	19/11/2005	Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
0	2.123	0	2.288	0	4.513	-10	5.218
10	1.273	10	2.028	5	4.503	0	5.158
20	0.933	20	2.268	10	4.573	5	5.458
		30	2.518	15	4.313	10	5.438
				20	3.233	15	3.588
						18	3.688

Note: No data is available from 27th -36th visit.

Reduced levels at Ullal 0m chainage for the year 2006

41st visit		42nd visit		43rd visit		44th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06
-17	4.753	-10	2.913	-10	5.628	-20	3.568
-10	5.063	0	5.463	0	5.858	-10	3.478
0	4.958	5	2.013	5	5.358	0	3.568
5	5.078	10	1.743	10	4.908	5	3.668
7	4.333			15	4.808	10	2.418

45th visit		46th visit		47th visit	
Distance	17/03/06	Distance	04/04/06	Distance	24/11/06
-20	3.018	-10	2.313	-15	1.693
-10	4.078	-5	2.753	-10	1.318
0	2.888	0	2.623	-5	1.128
5	1.918	5	1.783	0	1.033
				5	-0.007

Seasonal beach profile changes at Ullal 0m

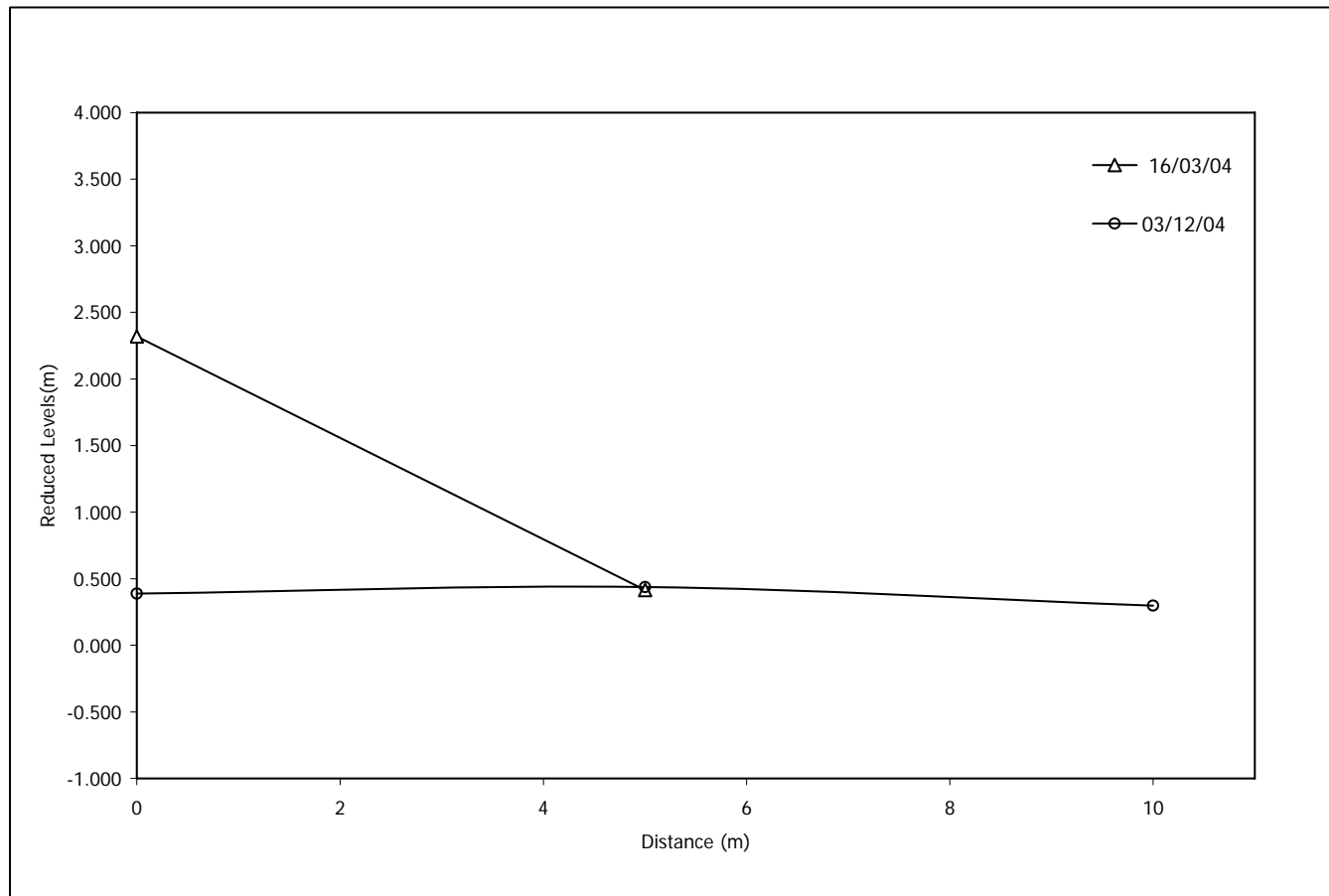


Fig. 2.18 Beach Profiles of Ullal 0m chainage (Year 2004)

Seasonal beach profile changes at Ullal 0m

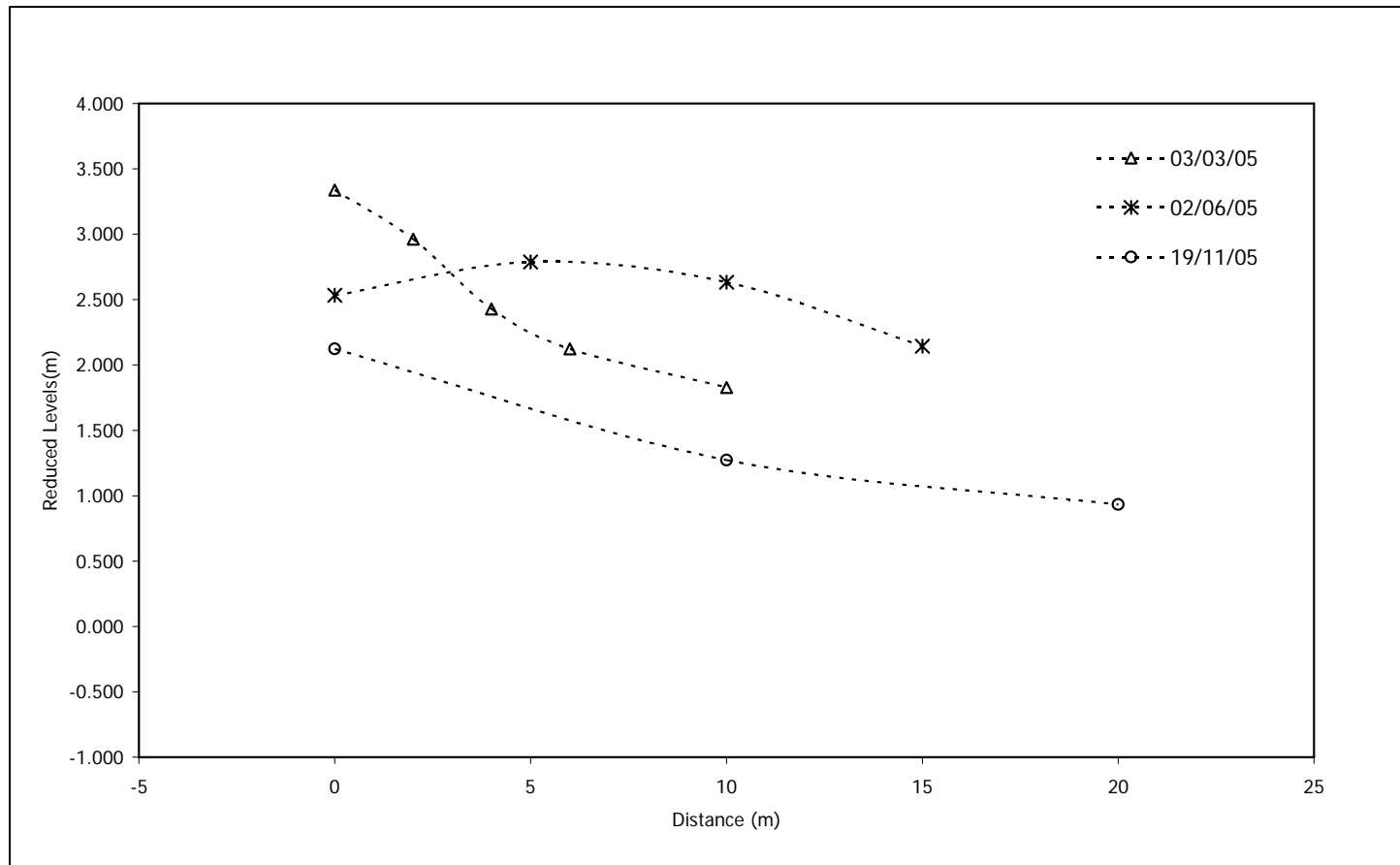


Fig. 2.19 Beach Profiles of Ullal 0m chainage (Year 2005)

Seasonal beach profile changes at Ullal 0m

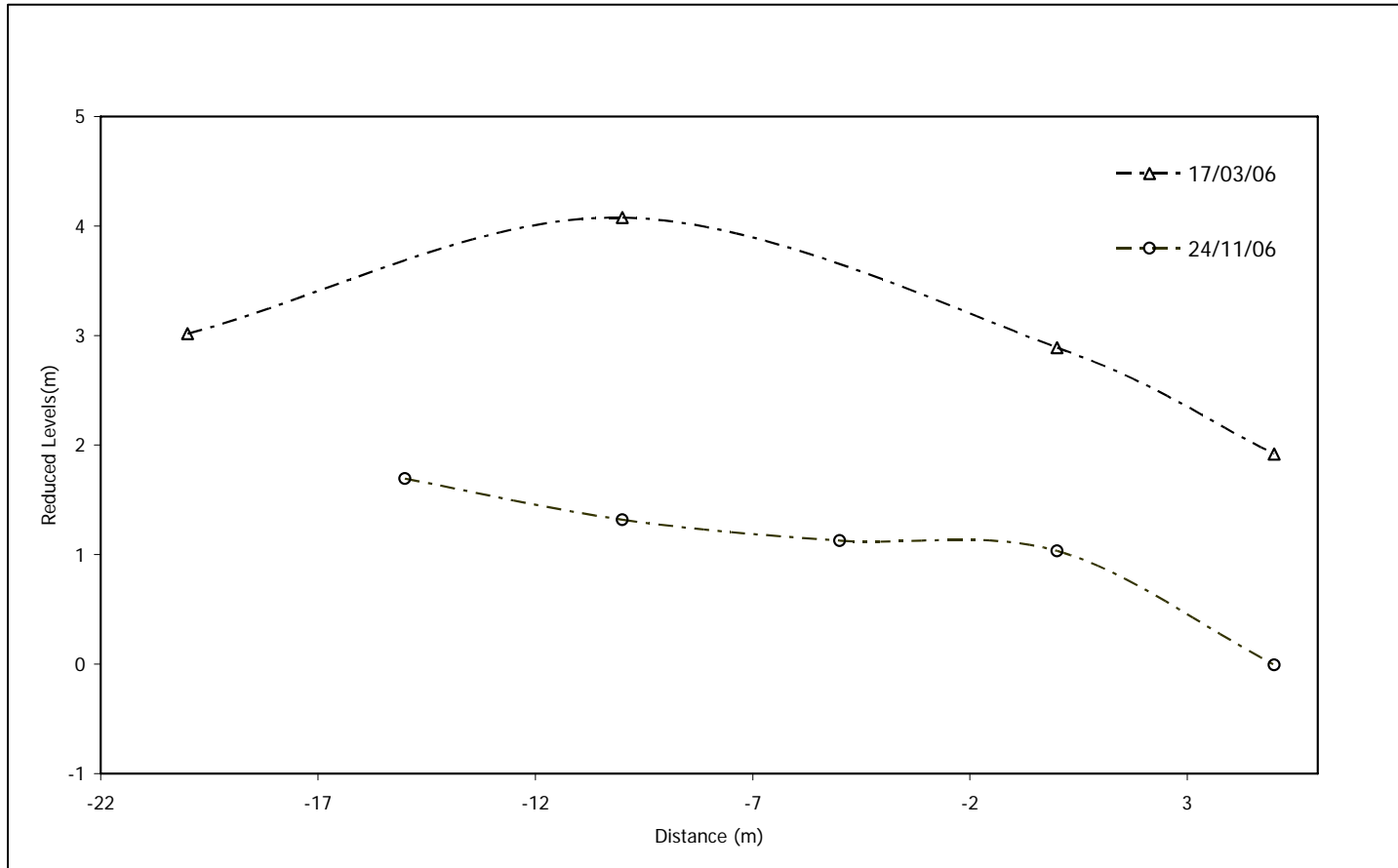


Fig. 2.20 Beach Profiles of Ullal 0m chainage (Year 2006)

Yearly beach profile changes at Ullal 0m

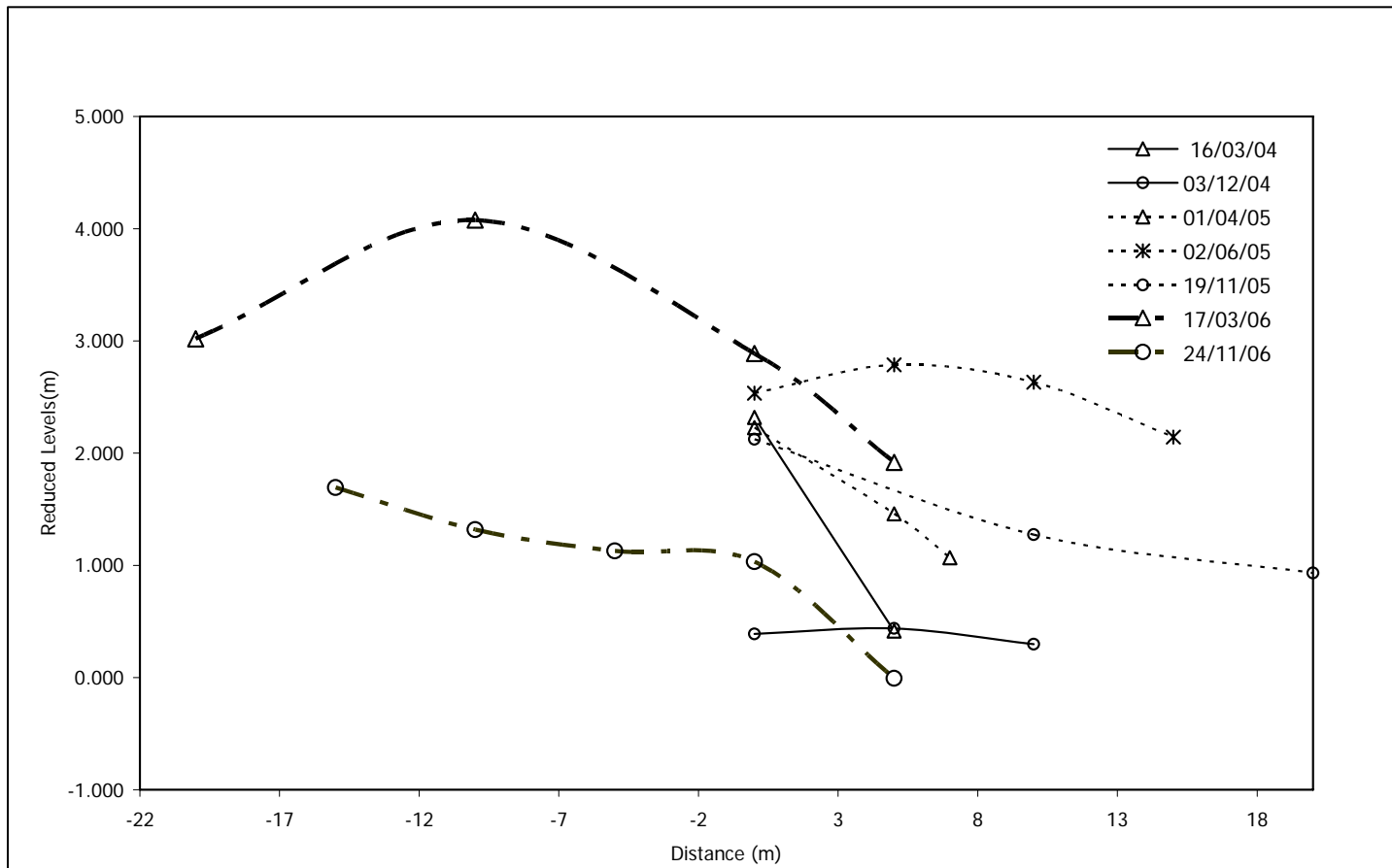


Fig. 2.21 Beach Profiles of Ullal 0m chainage (From 2004 to 2006)

Reduced levels at Ullal 50m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04
-23	-0.806	-20	-0.306	-25	-0.656	-24	-0.826
-20	-0.296	-15	0.774	-15	0.284	-19	0.419
-14	-0.026	-10	1.934	-5	0.314	-14	1.674
-10	0.294	-5	1.849	0	-0.326	-10	1.989
-5	0.789	0	1.069	5	-0.716	-5	2.224
0	0.964	5	0.574	10	-1.156	0	0.989
5	1.089					5	2.539
10	0.964					10	1.644
14	0.689					15	0.989

Note: No data is available from 6th – 12th

5 th visit		13 th visit		14 th visit		15 th visit	
Distance	01/06/04	Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
-15	0.754	-40	1.993	-50	-1.862	-50	-1.047
-10	1.544	-30	2.753	-40	-0.862	-40	-0.277
-5	2.054	-20	2.898	-30	-0.192	-30	0.318
0	2.334	-10	3.503	-20	0.263	-20	0.738
5	2.434	0	3.758	-10	0.593	-10	1.108
10	2.219	5	3.323	0	1.298	0	1.698
15	1.564	10	2.283	5	1.293	5	1.578
				10	1.283	10	1.498
				15	1.268	15	1.418
				20	0.708	20	0.953
				22	0.238	25	0.718

Reduced levels at Ullal 50m chainage for the year 2005

16th visit		17th visit		18th visit		19th visit		20th visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05
-23	0.088	-19	1.413	-18	1.323	-26	-0.787	-14	2.233
-18	1.188	-17	2.383	-15	2.833	-18	0.368	-12	3.043
-17	2.638	-10	2.763	-10	3.183	-16	1.678	-10	3.498
-10	3.033	0	3.543	0	4.008	-10	2.273	0	4.343
0	3.773	5	3.803	5	4.183	-5	2.638	2	4.343
5	3.913	7	2.903	7	2.733	0	2.893	4	3.478
10	4.183	9	2.753	12	1.563	2	2.863	6	2.788
15	4.283			16	0.913	4	2.378	11	1.688
17	4.193					6	1.828		
19	2.298					8	1.228		
22	1.468					10	0.753		
						15	0.033		

21st visit		22nd visit		23rd visit		24th visit		25th visit	
Distance	14/03/05	Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05
-21	0.870	-18	1.763	-26	1.863	-22	0.583	-18	2.068
-16	1.295	-15	2.573	-25	2.463	-20	1.403	-10	2.848
-11	1.735	-10	3.388	-20	2.883	-10	2.573	0	3.558
-6	2.195	-5	3.698	-15	3.258	0	3.198	8	3.873
-3	2.805	0	3.838	-10	3.613	5	3.428	18	1.848
0	2.940	5	2.998	-5	3.943	10	3.143	21	1.048
2	2.910	10	2.103	0	4.113	15	1.558		
5	2.280	15	1.328	5	3.873	19	0.743		
8	1.825			10	3.603				
				15	2.983				

Reduced levels at Ullal 50m chainage for the year 2005 (Contd...)

26th visit		27th visit		32nd visit		34th visit		35th visit	
Distance	02/06/05	Distance	16/06/05	Distance	13/08/05	Distance	16/09/05	Distance	30/09/05
-25	1.538	-10	1.603	0	-0.352	-10	2.038	-30	2.668
-20	2.368	-5	2.348	5	-0.967	-5	2.578	-20	2.518
-15	2.903	0	2.773			0	2.948	-10	2.553
-10	3.288	4	3.113			5	3.148	0	2.618
-5	3.648	6	1.893			7	2.598	5	2.403
0	2.863	8	1.283					10	1.673
5	3.443								
10	2.823								
15	1.948								

Note: No data is available from 28th – 31st

36th visit		37th visit		38th visit		39th visit		40th visit	
Distance	29/10/05	Distance	19/11/05	Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
-20	2.292	-20	2.083	-30	1.618	-40	3.773	-50	4.628
-10	2.602	-10	2.563	-20	2.198	-30	4.213	-40	5.258
0	3.262	0	2.883	-10	2.648	-20	4.533	-30	5.738
10	3.552	10	3.078	0	2.798	-10	4.743	-20	6.008
20	3.032	20	2.253	10	2.938	0	4.493	-10	6.208
23	2.237	25	1.653	20	2.758	5	4.503	0	5.883
				30	2.518	10	3.893	3	5.958
				40	2.413	15	3.053	5	5.528
				45	1.868			10	4.258

Reduced levels at Ullal 50m chainage for the year 2006

41st visit		42nd visit		43rd visit		44th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06
-40	4.668	47-	2.128	-40	5.508	-50	3.648
-30	5.393	37-	5.463	-30	6.008	-40	4.208
-20	5.913	27-	3.483	-20	6.818	-30	4.618
-10	5.578	17-	3.998	-10	7.158	-20	4.938
0	5.628	7-	4.298	0	6.998	-10	4.683
2	5.583	0	2.128	5	6.358	0	4.168
5	4.683	3	2.923	10	5.873	5	4.403
9	4.048	6	2.213	15	5.458	10	3.268
		9	1.763				

45th visit		46th visit		47th visit	
Distance	17/3/06	Distance	04/04/06	Distance	24/11/2006
-50	2.578	-40	2.543	-55	1.593
-40	3.118	-30	3.073	-45	1.753
-30	3.818	-20	3.728	-35	2.263
-20	4.278	-10	3.643	-25	1.738
-10	3.748	0	3.783	-20	1.243
0	3.618	1	2.938	-10	1.518
5	2.958	6	1.913	5	1.033
10	2.143			10	-0.007
15	1.688				

Seasonal beach profile changes at Ullal 50m

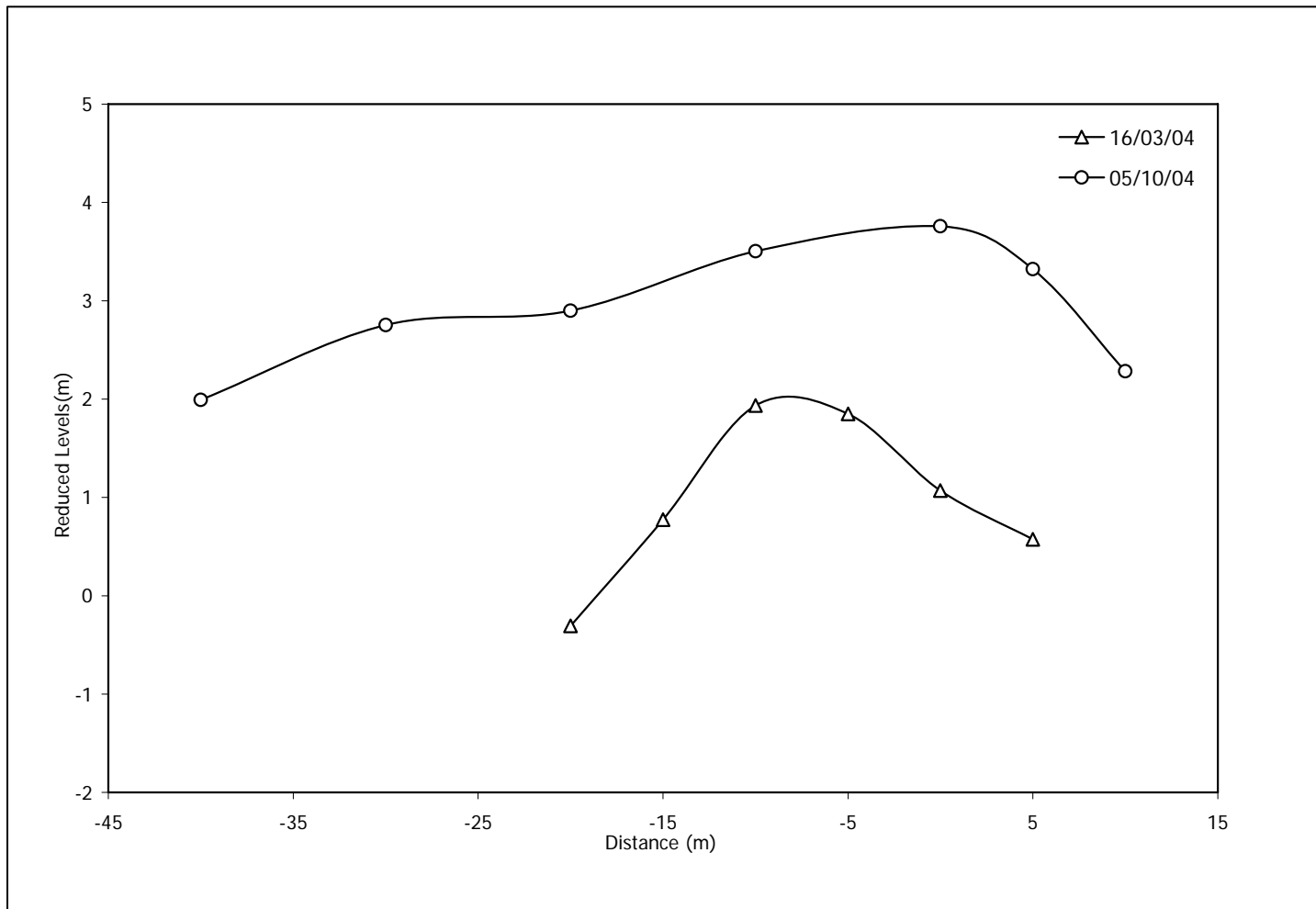


Fig. 2.22 Beach profiles at 50m chainage (Year 2004)

Seasonal beach profile changes at Ullal 50m

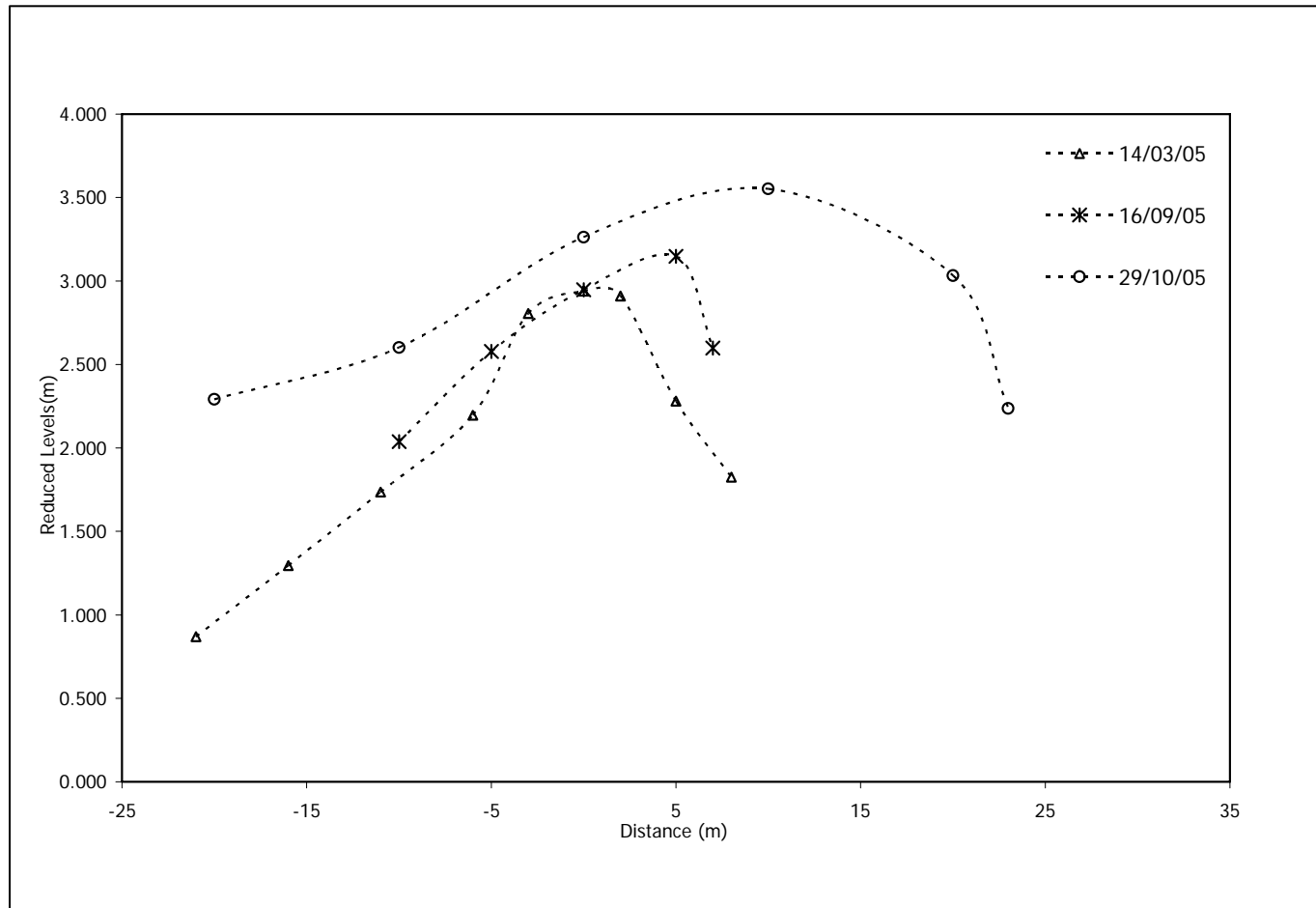


Fig. 2.23 Beach profiles at 50m chainage (Year 2005)

Seasonal beach profile changes at Ullal 50m

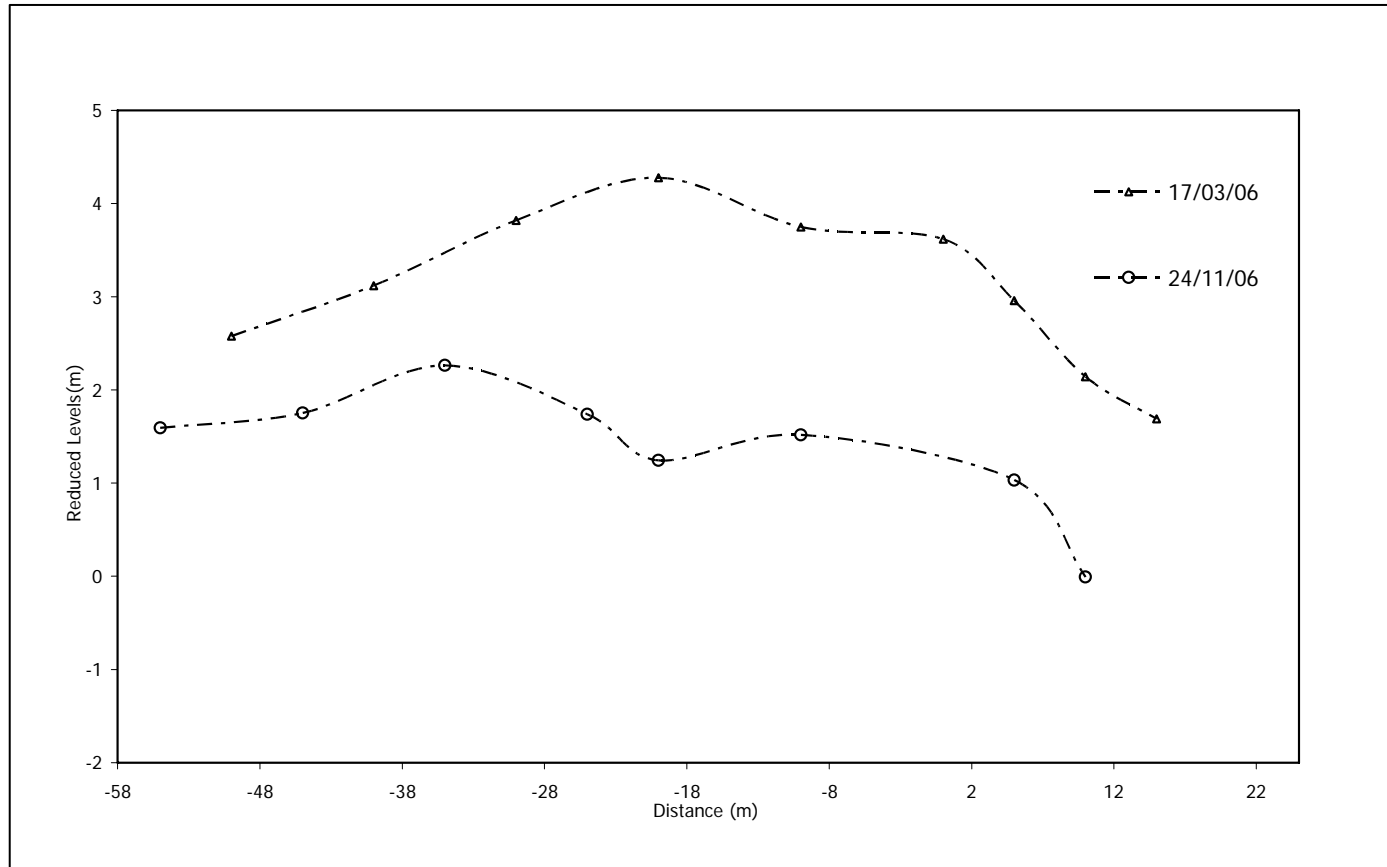


Fig. 2.24 Beach profiles at 50m chainage (Year 2006)

Yearly beach profile changes at Ullal 50m

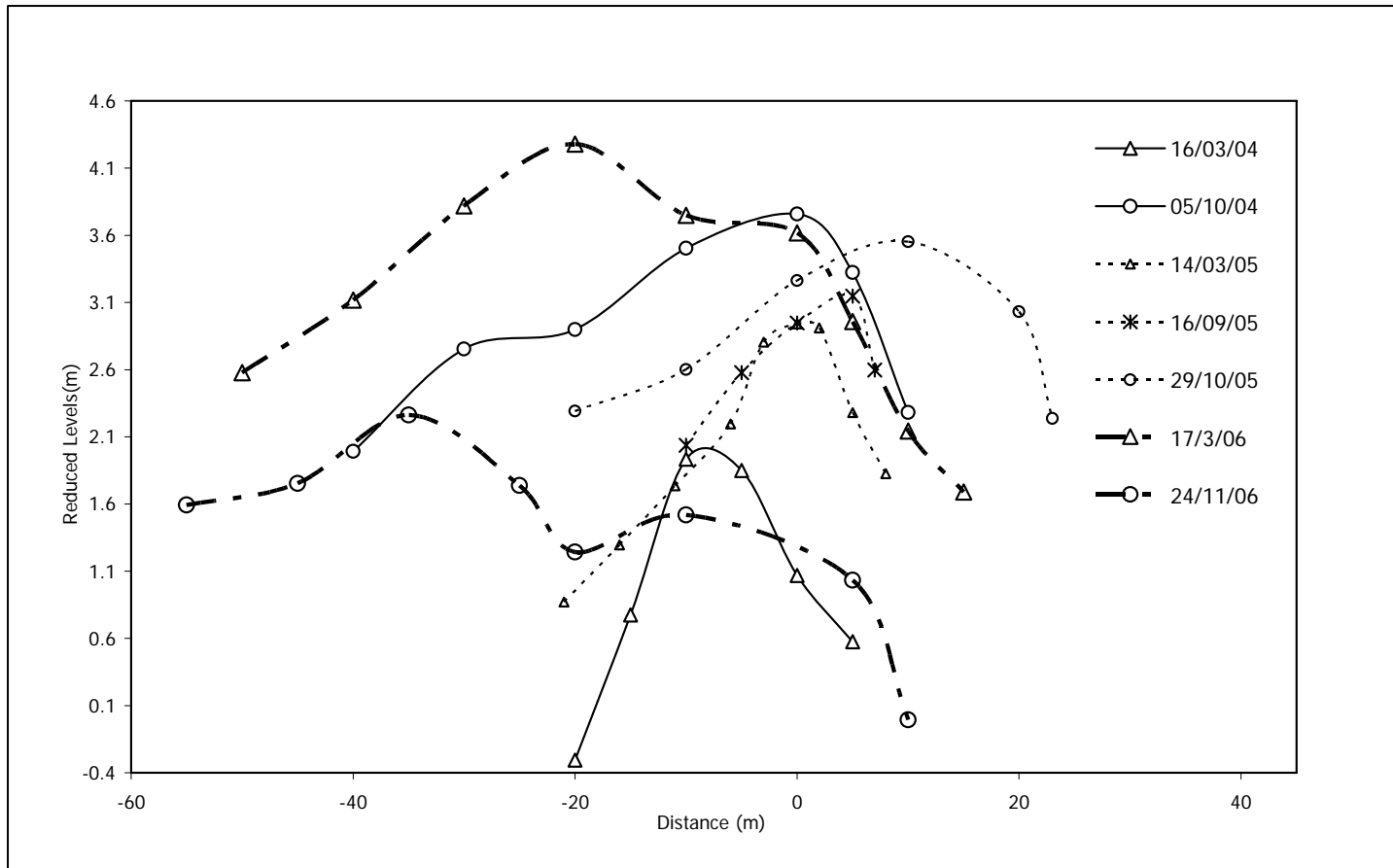


Fig. 2.25 Beach profiles at 50m chainage (From 2004 to 2006)

Reduced levels at Ullal 100m chainage for the year 2004

1st visit		2nd visit		3rd visit		4th visit		5th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04	Distance	01/06/04
-25	0.569	-24	-0.821	-26	-0.621	-30	-0.271	-15	-0.156
-20	0.429	-19	-0.151	-21	-0.166	-25	0.429	-10	0.619
-15	0.709	-14	0.654	-13	0.289	-20	1.689	-5	1.224
-10	0.599	-10	0.564	-8	0.624	-15	1.834	0	2.324
-5	0.329	-5	0.649	-5	0.799	-10	2.079	5	2.774
0	1.259	0	1.259	0	1.359	-5	2.469	10	2.809
5	1.469	5	1.769	8	1.589	0	2.624	15	2.154
10	1.799	10	1.384	12	0.674	3	2.619		
15	1.419	15	0.854	17	-0.031	8	2.169		
20	0.859	20	0.459	20	0.294	13	1.729		
25	0.429	25	-0.036			18	1.324		
						23	0.979		

Note: 6th to 11th visit data not available

12th visit		13th visit		14th visit		15th visit	
Distance	21/09/04	Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
-30	1.048	-37	1.038	-57	0.103	-60	0.908
-20	2.048	-30	2.183	-50	0.143	-50	0.963
-10	2.373	-20	2.808	-40	0.188	-40	1.023
0	3.518	-10	3.443	-30	0.583	-30	1.383
10	2.168	0	3.993	-20	1.923	-20	2.493
		5	3.483	-10	2.453	-10	2.903
		10	1.993	0	2.303	0	2.803
				5	1.483	5	2.323
				10	1.458	10	1.998
				15	0.973	15	1.793
				20	0.443	20	1.198

Reduced levels at Ullal 100m chainage for the year 2005

16th visit		17th visit		18th visit		19h visit		20th visit		21st visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05	Distance	16/03/05
-76	-0.052	-78	0.813	-90	0.313	-86	-0.487	-86	1.118	-65	1.07
-75	0.493	-70	1.163	-80	1.153	-80	0.233	-80	1.533	-55	1.42
-70	0.873	-60	1.153	-70	1.613	-70	0.503	-70	1.848	-45	1.64
-60	1.138	-50	1.253	-60	1.623	-60	0.283	-60	1.973	-35	1.72
-50	1.308	-40	1.153	-50	1.643	-50	0.363	-50	1.828	-25	1.845
-40	1.248	-30	1.503	-40	1.513	-40	0.313	-40	1.933	-15	2.45
-30	1.453	-20	2.453	-30	1.883	-30	0.533	-30	2.158	-5	3.58
-20	2.378	-10	3.013	-20	2.823	-20	1.503	-20	2.778	0	3.865
-10	2.933	0	3.363	-10	3.393	-10	2.043	-10	3.353	5	3.56
0	3.403	10	3.513	0	3.823	0	2.513	0	4.018	10	2.78
5	3.393	11	3.253	10	3.913	5	2.623	3	4.073	15	2.27
10	3.283	12	3.053	13	3.793	7	2.663	5	3.423	20	1.8
15	3.023	16	1.753	16	1.843	9	1.748	8	2.853	22	1.64
16	2.763	18	1.273	20	1.053	14	0.593	11	2.148		
21	1.288					16	2.183	13	1.628		
								17	1.478		

Reduced levels at Ullal 100m chainage for the year 2005 (Contd...)

22nd visit		23rd visit		24th visit		25th visit		26th visit		27th visit	
Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05	Distance	02/06/05	Distance	16/06/05
-84	0.738	-110	0.548	-99	-0.017	-108	-0.247	-120	0.098	-120	0.523
-74	1.028	-100	1.003	-90	0.383	-98	0.548	-110	0.448	-110	0.723
-64	1.213	-90	1.493	-80	0.643	-88	0.738	-100	0.498	-100	0.943
-54	1.368	-80	1.478	-70	0.928	-78	0.848	-90	0.438	-90	1.123
-44	1.508	-70	1.528	-60	0.983	-68	0.733	-80	0.418	-80	1.323
-34	1.413	-60	1.563	-50	1.143	-58	0.993	-70	0.498	-70	1.363
-24	2.128	-50	1.548	-40	1.158	-48	0.988	-60	0.773	-60	1.403
-14	3.188	-40	2.043	-30	1.208	-38	1.408	-50	1.078	-50	1.273
-4	3.838	-30	2.603	-20	2.203	-28	2.088	-40	1.728	-40	0.983
0	3.528	-20	3.113	-10	3.053	-18	2.783	-30	2.563	-30	1.443
5	3.038	-10	3.518	0	2.703	-8	3.173	-20	3.018	-20	2.483
10	2.743	0	4.648	5	2.613	-5	2.788	-10	3.068	-10	2.613
15	2.058	1	4.208	10	2.573	0	3.968	0	3.473	0	3.243
19	1.348	6	4.268	15	2.253	10	2.608	5	3.223	5	3.503
		11	3.468	20	1.463	16	2.633	10	2.738	7	3.553
		16	3.163	22	0.893	26	2.618	14	2.108	9	2.653
		21	2.898							14	1.703

Reduced levels at Ullal 100m chainage for the year 2005 (Contd...)

30th visit		32nd visit		34rth visit		35th visit		36th visit	
Distance	15/07/05	Distance	13/08/05	Distance	16/09/05	Distance	30/09/05	Distance	29/10/05
0	3.448	-80	0.673	-40	1.388	-40	1.303	-120	1.192
10	2.528	-70	0.573	-30	1.808	-30	1.513	-110	1.392
20	1.518	-60	0.503	-20	2.373	-20	2.243	-100	1.642
		-50	0.448	-10	2.578	-10	3.158	-90	1.672
		-40	0.323	0	2.763	0	3.588	-80	1.682
		-30	0.193	5	3.233	5	2.418	-70	1.612
		-20	0.513	7	2.638	10	1.973	-60	1.412
		-10	1.518			15	1.093	-50	1.637
		0	1.103					-40	1.512
		5	0.268					-30	1.712
		10	-0.047					-20	2.562
		15	-0.382					-10	3.062
								0	2.742
								10	3.162
								20	2.932
								30	2.842
								35	2.232

Reduced levels at Ullal 100m chainage for the year 2005 (Contd...)

37th visit		38th visit		39th visit		40th visit	
Distance	19/11/05	Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
-60	2.288	-60	1.673	-70	2.953	-62	4.528
-50	2.373	-50	1.218	-60	2.773	-52	4.308
-40	1.633	-40	1.343	-50	3.133	-42	4.848
-30	1.423	-30	1.928	-40	4.073	-32	5.388
-20	1.453	-20	2.433	-30	3.753	-22	5.308
-10	0.793	-10	2.038	-20	3.653	-20	6.028
0	2.558	0	2.368	-10	3.853	-10	5.728
10	2.813	10	2.448	0	4.503	0	6.088
17	3.168	20	4.168	5	3.703	5	5.828
20	1.953	30	2.898	10	2.753	10	5.028
22	1.073	35	2.908			15	4.308
		38	2.313			20	4.028
		43	1.743				

Reduced levels at Ullal 100m chainage for the year 2006

41st visit		42nd visit		43rd visit		44th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06
-70	4.233	-60	2.463	-70	5.323	-80	3.248
-60	4.023	-50	2.453	-60	5.168	-70	3.018
-50	4.428	-40	3.233	-50	6.048	-60	3.738
-40	5.023	-30	3.073	-40	5.998	-50	4.158
-30	4.988	-20	3.363	-30	6.318	-40	4.038
-20	5.373	-10	3.483	-20	6.533	-30	4.318
-10	5.583	0	3.553	-10	6.908	-20	4.418
0	5.783	5	3.103	0	6.498	-10	4.668
5	5.163	10	2.183	5	5.793	0	4.358
8	4.573			10	5.048	5	3.818
13	3.933					10	3.168
						15	2.758

45th visit		46th visit		47th visit	
Distance	17/03/06	Distance	04/04/06	Distance	24/11/06
-80	2.198	-55	2.003	-90	0.293
-70	2.408	-45	2.468	-80	-0.057
-60	2.908	-35	2.893	-70	0.343
-50	3.258	-30	2.778	-60	1.093
-40	3.128	-20	3.258	-50	2.143
-30	3.478	-10	3.523	-45	1.913
-20	3.578	0	3.793	-35	2.193
-10	3.898	5	2.683	-25	2.233
0	3.878	10	1.573	-15	2.373
5	2.468	13	1.143	-5	2.193
10	1.598			0	1.563
				5	0.953
				10	0.623
				15	0.343

Seasonal beach profile changes at Ullal 100m

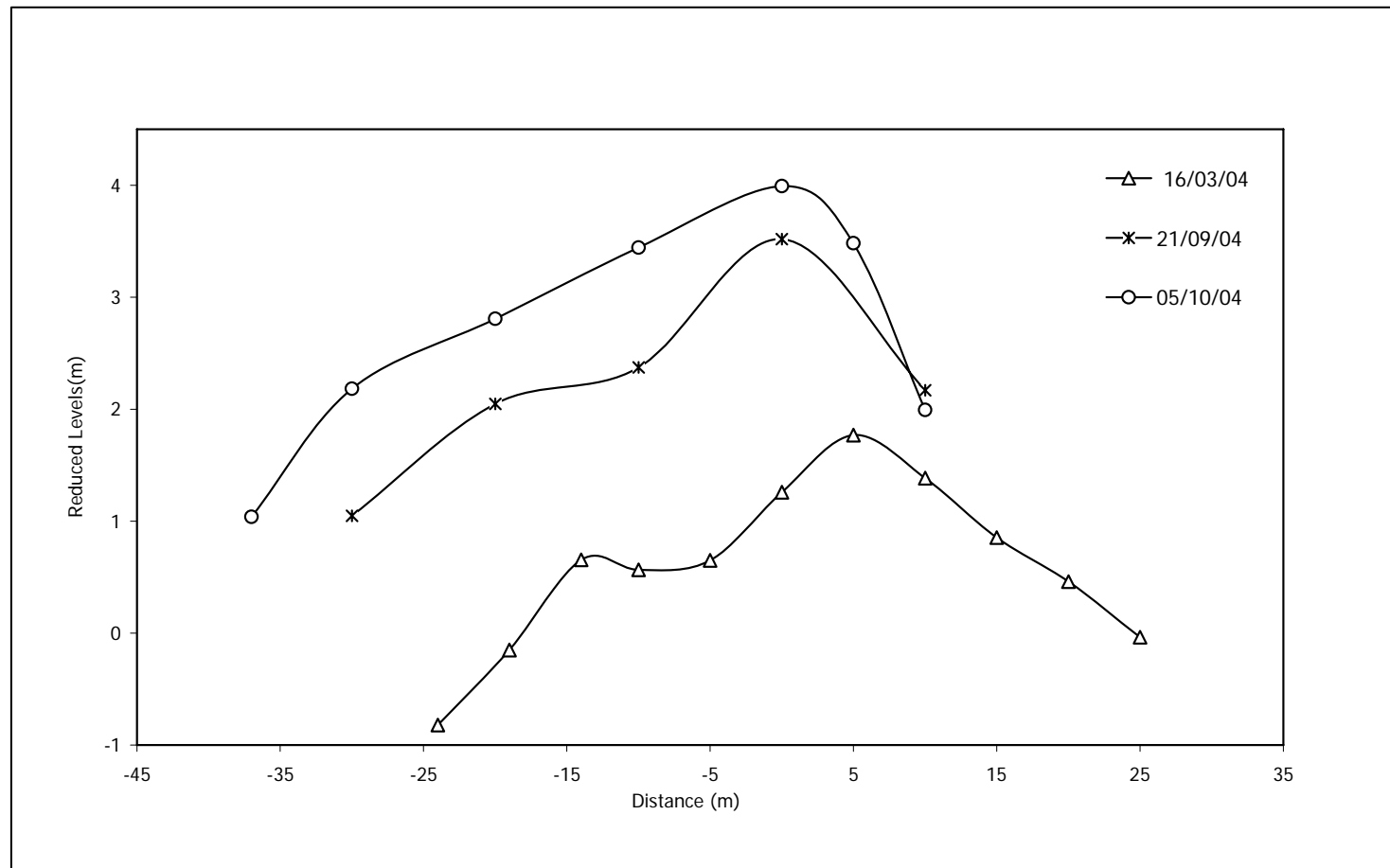


Fig. 2.26 Beach profiles at 100m chainage (Year 2004)

Seasonal beach profile changes at Ullal 100m

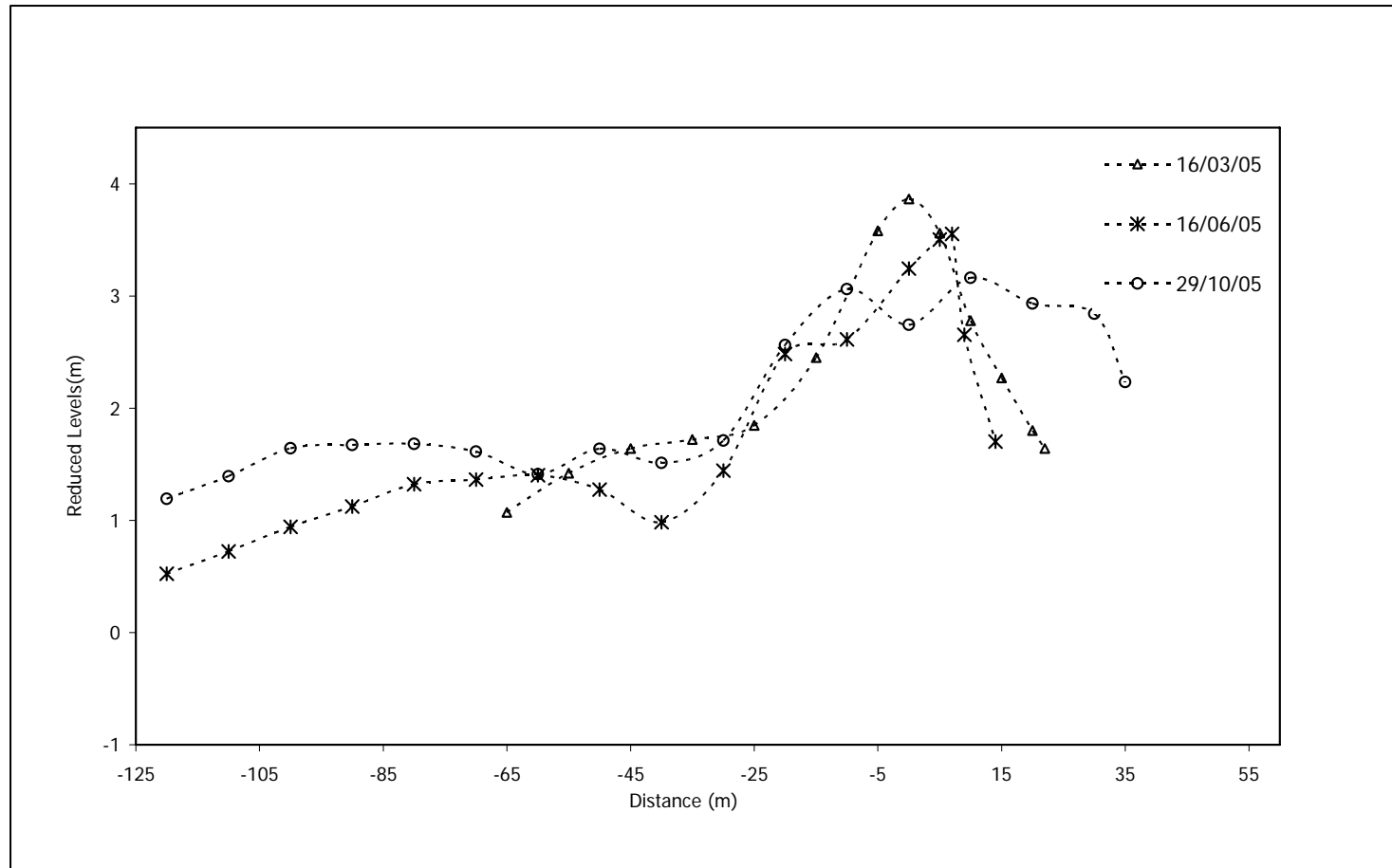


Fig. 2.27 Beach profiles at 100m chainage (Year 2005)

Seasonal beach profile changes at Ullal 100m

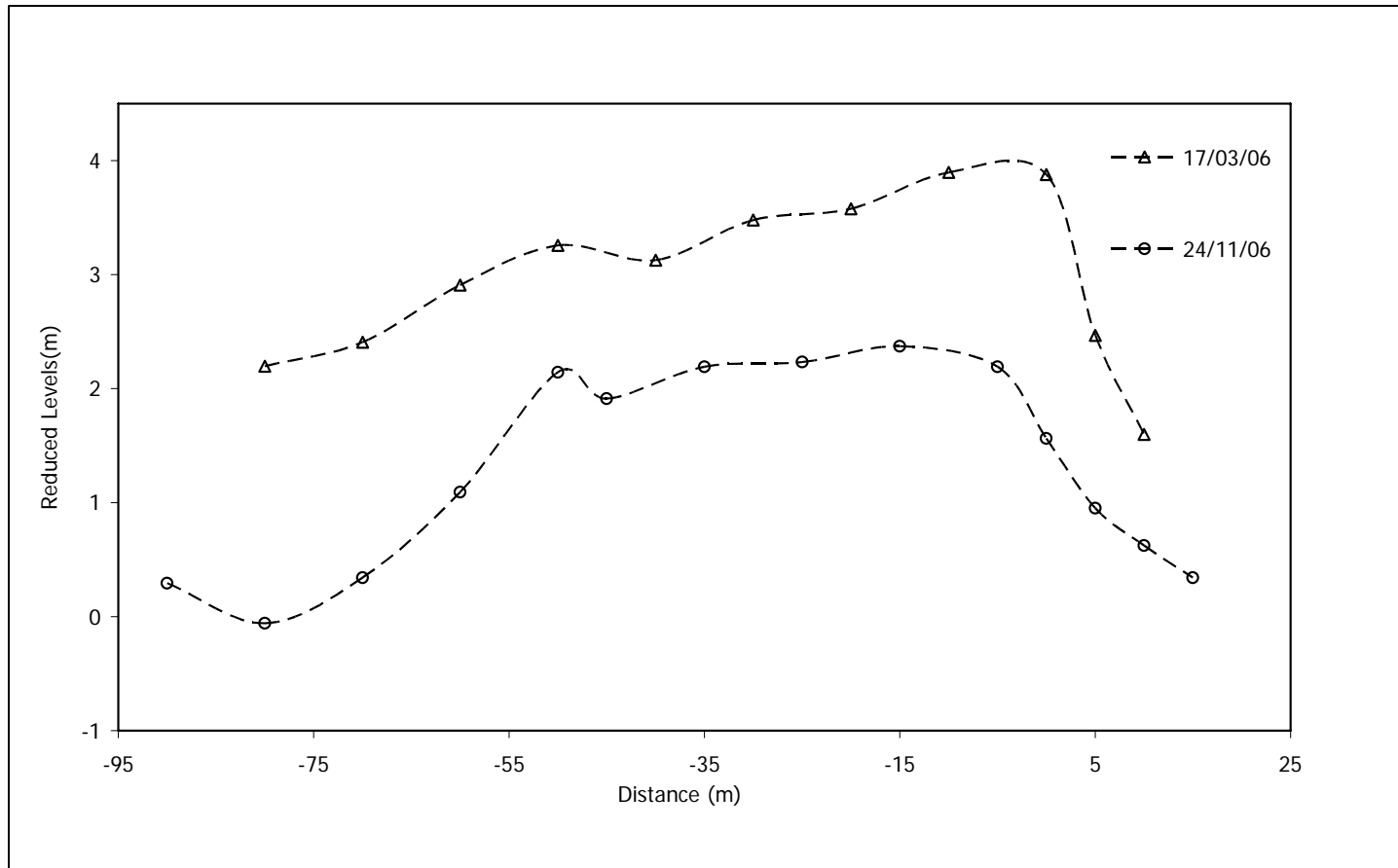


Fig. 2.28 Beach profiles at 100m chainage (Year 2006)

Yearly beach profile changes at Ullal 100m

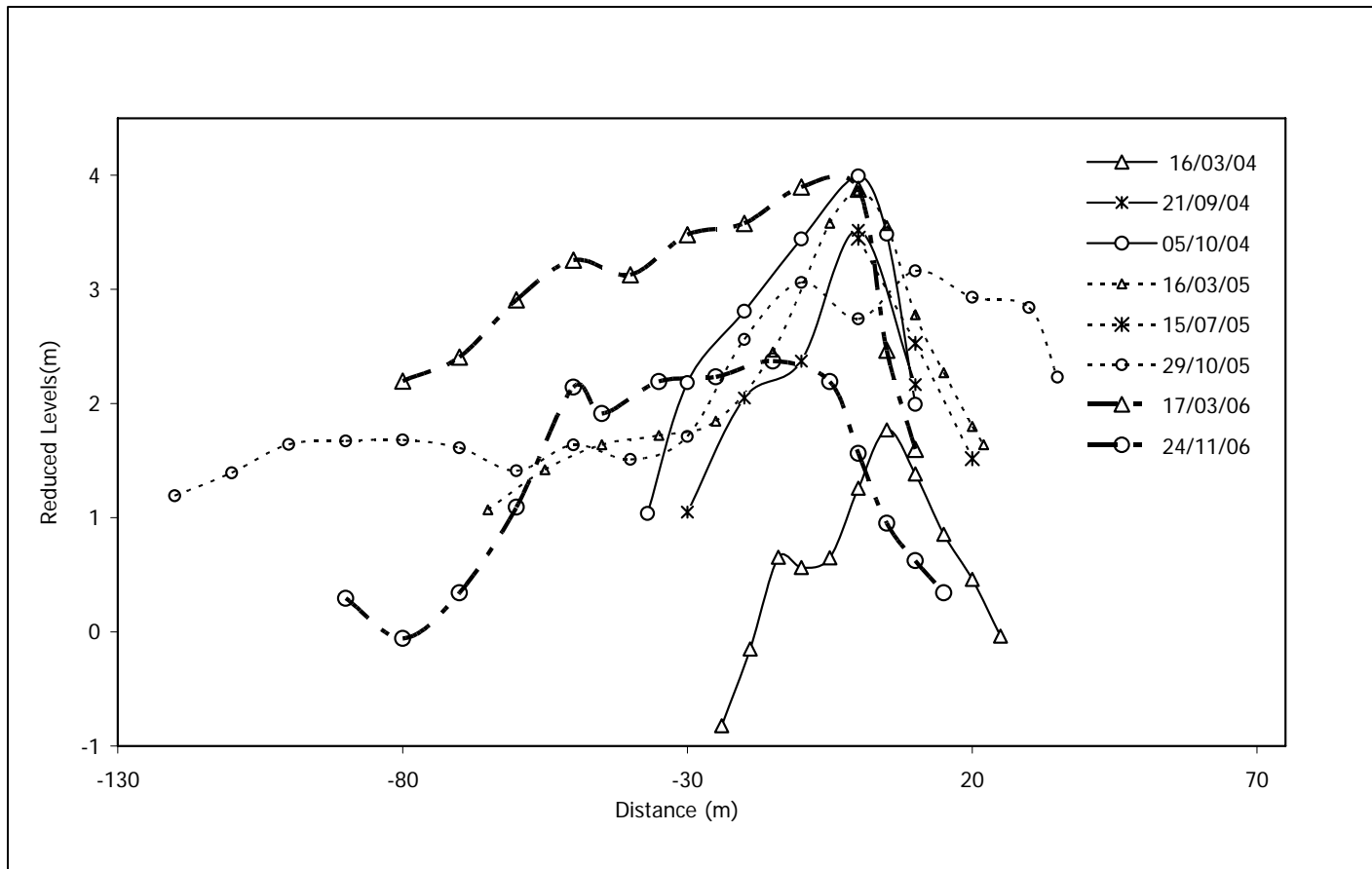


Fig. 2.29 Beach profiles at 100m chainage (From 2004 to 2006)

Reduced levels at Ullal 150m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04	Distance	01/06/04
-94	-0.626	-105	-0.211	-109	-1.306	-104	-0.636	-74	0.769
-90	-0.146	-97	-0.121	-101	-0.891	-94	-0.176	-64	0.809
-80	0.055	-77	0.354	-86	-0.641	-84	0.304	-54	0.699
-70	0.344	-57	0.569	-71	-0.191	-74	0.824	-44	0.624
-60	0.384	-37	0.134	-56	0.109	-64	1.349	-34	0.514
-50	0.494	-17	0.799	-41	0.209	-54	1.514	-24	0.484
-40	0.254	-13	2.119	-26	0.259	-39	0.834	-14	0.934
-30	0.214	-10	2.444	-16	0.609	-19	0.814	-12	2.304
-20	0.144	-5	2.824	-12	2.524	-14	2.499	-5	2.894
-15	1.274	0	3.049	0	3.084	-5	3.019	0	3.074
-10	2.454	5	2.274	5	2.689	0	3.079	5	2.804
-5	2.814	10	1.884	10	2.294	5	2.584	10	2.789
0	3.149	15	1.854	15	2.239	10	2.374	15	2.834
5	2.154	19	1.724	18	1.804	15	2.069	20	2.374
10	1.884	24	0.764	23	1.024	20	1.649	25	1.804
15	1.794	29	-0.166	29	0.369	25	1.139		
20	1.384					29	0.629		
25	0.404								

Note: No data available for 6th, 8th to 11th visit.

Reduced levels at Ullal 150m chainage for the year 2004 (Contd...)

7th visit		12th visit		13th visit		14th visit		15th visit	
Distance	29/06/04	Distance	21/09/04	Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
-130	0.419	-45	1.488	-43	1.073	-44	0.173	-45	1.003
-120	0.479	-35	2.663	-36	1.713	-34	0.508	-35	1.298
-110	0.679	-25	2.448	-30	1.663	-24	1.698	-30	2.243
-100	0.969	-24	2.993	-20	2.403	-20	2.173	-20	2.688
-90	1.159	-20	3.608	-19	3.113	-10	2.973	-10	3.408
-80	1.294	-10	4.763	-10	4.078	0	2.678	0	2.788
-70	1.414	0	4.788	0	4.353	5	1.618	5	2.683
-60	1.239	5	3.338	5	3.623	10	1.053	10	1.903
-50	0.964			10	3.118	15	0.538	15	1.303
-40	0.839			15	2.543	20	0.083	20	0.938
-30	1.159								
-20	1.709								
-10	2.359								
0	2.869								
3	2.589								
8	1.729								

Reduced levels at Ullal 150m chainage for the year 2005

16th visit		17th visit		18th visit		19th visit		20th visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05
-48	-0.067	-41	0.483	-53	0.273	-52	-0.832	-50	0.718
-38	0.558	-34	0.783	-43	0.833	-42	-0.532	-45	1.148
-28	1.098	-24	1.263	-33	1.433	-32	0.118	-35	1.918
-18	1.798	-21	2.533	-23	2.303	-22	0.748	-25	3.738
-16	2.703	-15	3.113	-21	3.018	-20	1.673	-22	2.488
-10	3.228	-5	3.203	-14	3.668	-13	1.908	-14	3.348
0	3.663	-4	2.713	-4	4.018	-3	1.628	-4	3.833
2	3.548	0	2.603	-2	3.533	-1	2.048	-2	3.368
3	3.123	5	2.773	0	3.268	0	2.148	0	3.168
8	2.863	9	2.813	5	3.283	5	1.938	5	3.213
13	2.963	14	2.123	9	3.423	10	2.093	10	3.338
18	2.988	19	1.523	11	3.263	13	2.148	12	2.673
23	2.208			16	2.463	16	1.438	14	2.218
28	1.483			21	1.383	21	0.443	19	1.198
30	0.958								

21st visit		22nd visit		23rd visit		24th visit		25th visit	
Distance	14/03/05	Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05
-40	0.47	-51	-0.567	-52	0.578	-45	-0.047	-58	0.383
-30	1.28	-49	-0.447	-42	1.428	-40	0.353	-53	0.643
-20	2.25	-39	0.128	-32	2.158	-30	0.913	-43	1.038
-10	3.18	-29	1.238	-22	3.013	-20	1.873	-33	1.773
-5	3.465	-19	2.088	-12	3.838	-10	2.763	-23	2.688
0	3.53	-9	3.093	-2	4.303	0	2.888	-13	3.498
5	2.920	-4	3.408	0	4.223	5	2.333	-3	4.008
10	2.330	0	3.839	5	3.688	10	1.798	0	3.603
15	1.970	5	3.328	10	3.243	15	1.028	10	2.878
19	1.525	8	2.758	15	2.838	20	-0.067	17	2.408
		11	2.128	20	2.123			24	1.268
		16	1.478						

Reduced levels at Ullal 150m chainage for the year 2005 (Contd...)

26th visit		27th visit		30th visit		32nd visit		34th visit	
Distance	02/06/05	Distance	16/06/05	Distance	15/07/05	Distance	13/08/05	Distance	16/09/05
-62	-0.282	-50	0.063	-50	0.848	-40	-0.442	-44	0.608
-52	-0.032	-40	0.563	-40	1.148	-30	-0.042	-39	1.258
-42	1.138	-30	1.448	-30	1.448	-20	0.718	-29	2.188
-32	2.038	-20	2.573	-20	2.263	-10	1.803	-19	3.323
-22	2.888	-10	3.393	-10	3.158	0	2.608	-9	3.868
-12	3.653	0	3.673	0	3.948	3	1.958	-6	3.353
-2	3.918	5	3.453	1	4.008	8	1.963	0	3.463
0	3.608	7	3.283	4	2.618	13	1.228	5	3.618
5	2.963	12	2.443	9	1.768	18	0.338	7	3.663
10	2.218	17	1.613	14	1.248			8	3.048

35th visit		36th visit		37th visit		38th visit		39th visit		40th visit	
Distance	30/09/05	Distance	29/10/05	Distance	19/11/05	Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
-50	0.688	-40	0.962	-50	0.363	-50	0.228	-50	1.253	-81	2.628
-40	1.323	-30	1.272	-40	1.153	-40	1.023	-40	2.323	-71	3.548
-30	2.143	-20	1.932	-30	2.078	-30	2.048	-30	3.383	-61	4.448
-20	3.138	-10	3.022	-20	2.978	-20	3.098	-20	4.383	-51	5.008
-10	3.993	0	3.872	-10	3.723	-10	3.133	-10	3.373	-41	6.168
0	3.733	10	3.592	0	3.358	0	3.518	0	3.733	-31	5.698
4	2.838	20	3.542	2	3.048	10	2.618	5	3.073	-30	5.23
9	2.228	30	2.612	7	2.853	20	2.708	10	2.923	-20	5.413
14	1.323	37	2.572	12	3.013	30	2.908			-10	5.418
		42	1.612	17	3.203	40	2.873			0	5.658
				19	2.353	46	2.298			5	5.338
				21	1.213	51	1.893			10	4.788
										15	4.128
										20	2.828

Reduced levels at Ullal 150m chainage for the year 2006

41 st visit		42 nd visit		43 rd visit		44 th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06
-82	3.433	-63	1.038	-77	3.858	-77	1.948
-72	4.413	-53	1.903	-67	4.458	-67	2.138
-62	5.423	-43	3.203	-57	5.168	-57	2.988
-52	6.003	-33	4.143	-52	6.458	-47	5.078
-50	5.693	-23	3.903	-50	7.348	-37	5.248
-40	5.313	-20	3.543	-40	6.958	-27	4.998
-30	5.773	-10	3.543	-30	6.998	-22	4.418
-20	5.573	0	3.783	-20	6.498	-20	4.733
-10	5.563	4	3.263	-10	6.848	-10	4.368
0	4.973	9	2.693	0	6.318	0	3.578
5	4.523	14	1.993	5	5.723	4	2.978
7	3.963	19	1.383	10	5.218	9	2.598
11	3.563			15	4.808	13	2.368

45 th visit		46 th visit		47 th visit	
Distance	17/03/06	Distance	04/04/06	Distance	24/11/06
-70	1.018	-75	0.263	-88	-1.007
-60	1.863	-65	1.053	-83	0.608
-50	2.768	-55	2.023	-78	1.888
-40	3.918	-45	3.318	-66	2.903
-30	4.363	-35	4.108	-56	2.798
-20	3.693	-25	3.728	-46	2.253
-10	3.868	-20	3.283	-44	2.333
0	4.068	-10	3.473	-30	2.318
5	3.088	0	3.738	-20	1.928
10	2.118	5	2.698	-10	0.928
15	1.618	10	1.733	0	0.638
		12	1.213	5	0.093

Seasonal beach profile changes at Ullal 150m

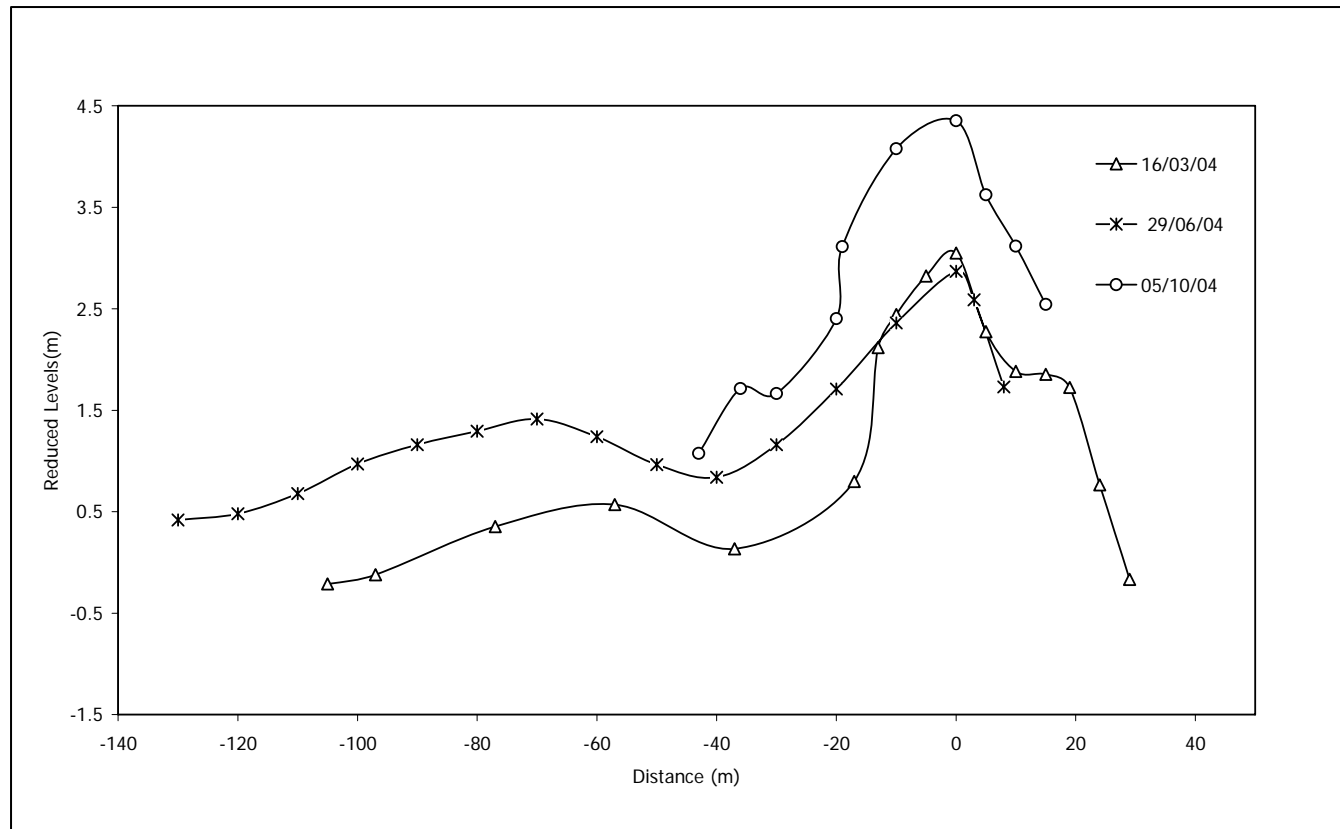


Fig. 2.30 Beach profiles at 150m chainage (Year 2004)

Seasonal beach profile changes at Ullal 150m

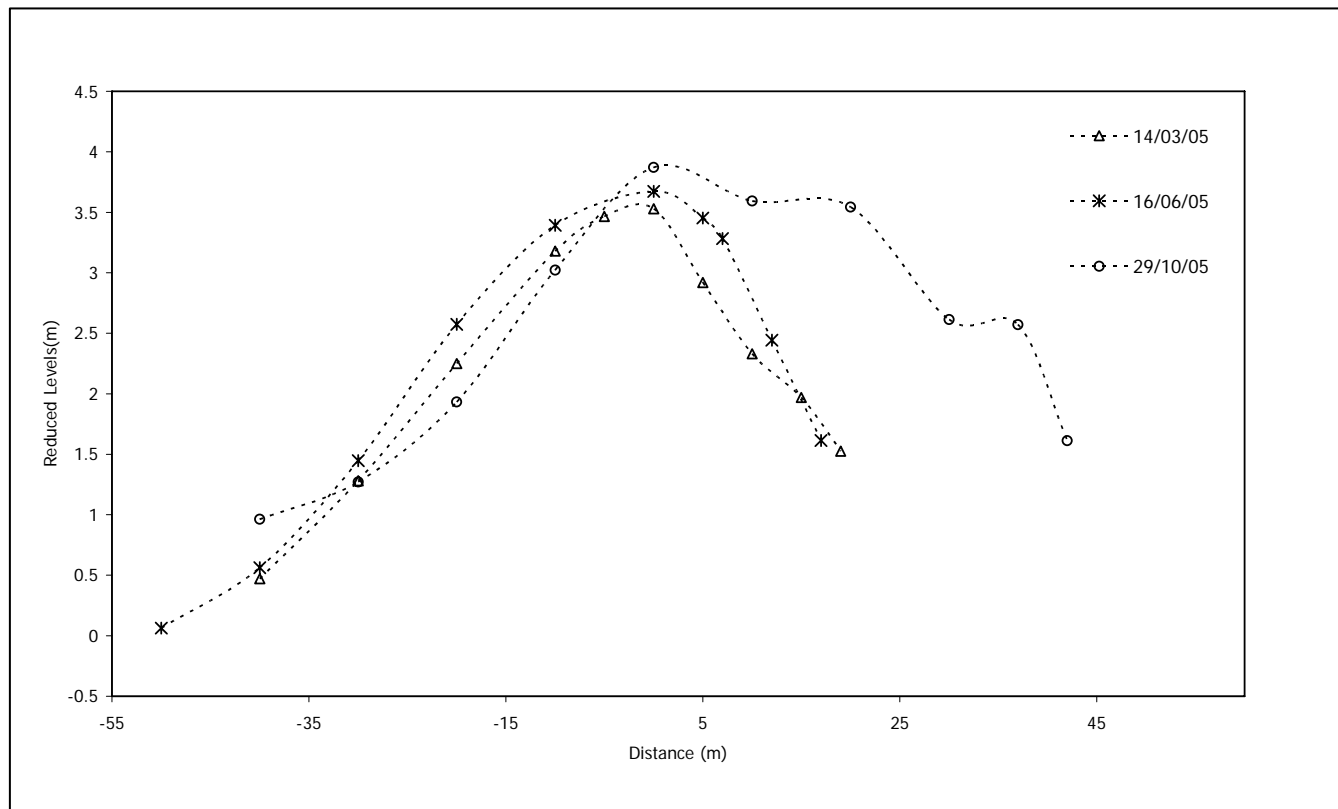


Fig. 2.31 Beach profiles at 150m chainage (Year 2005)

Seasonal beach profile changes at Ullal 150m

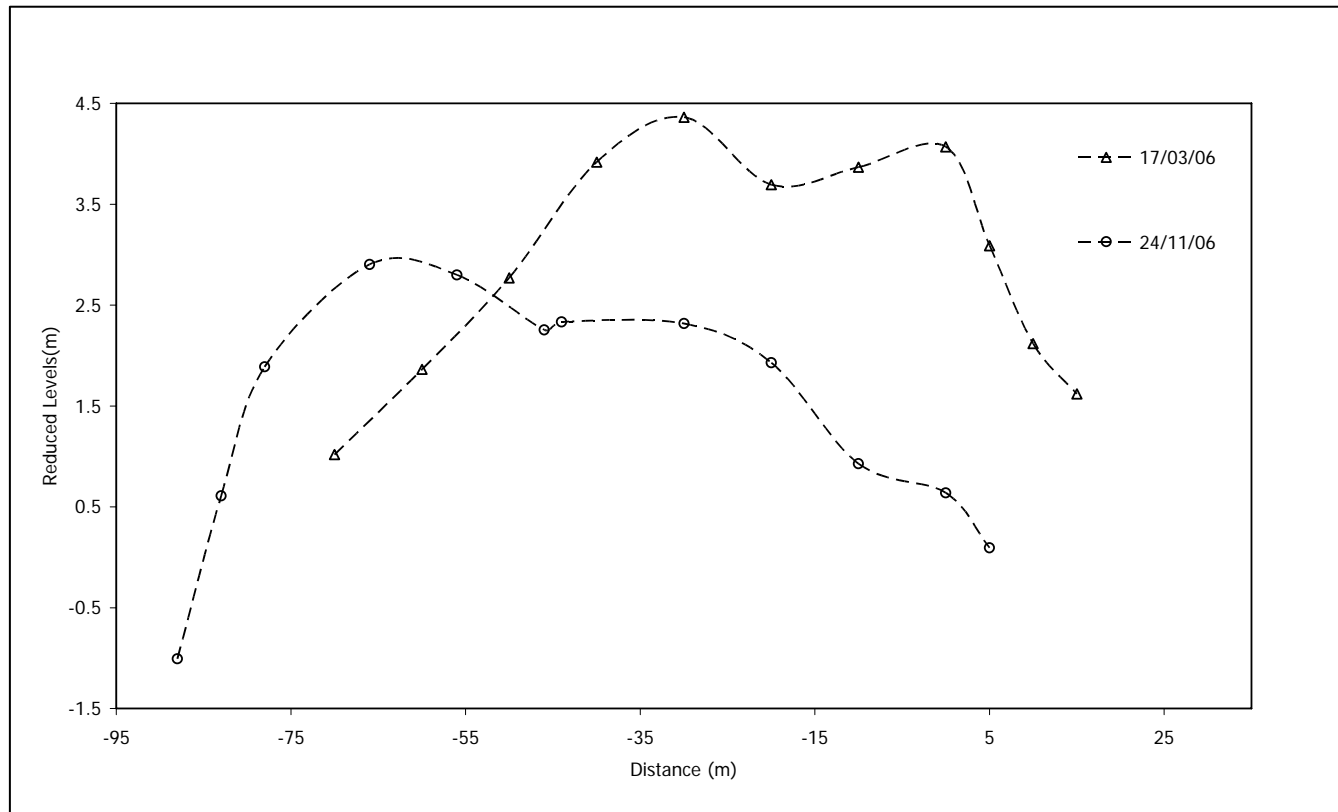


Fig. 2.32 Beach profiles at 150m chainage (Year 2006)

Yearly beach profile changes at Ullal 150m

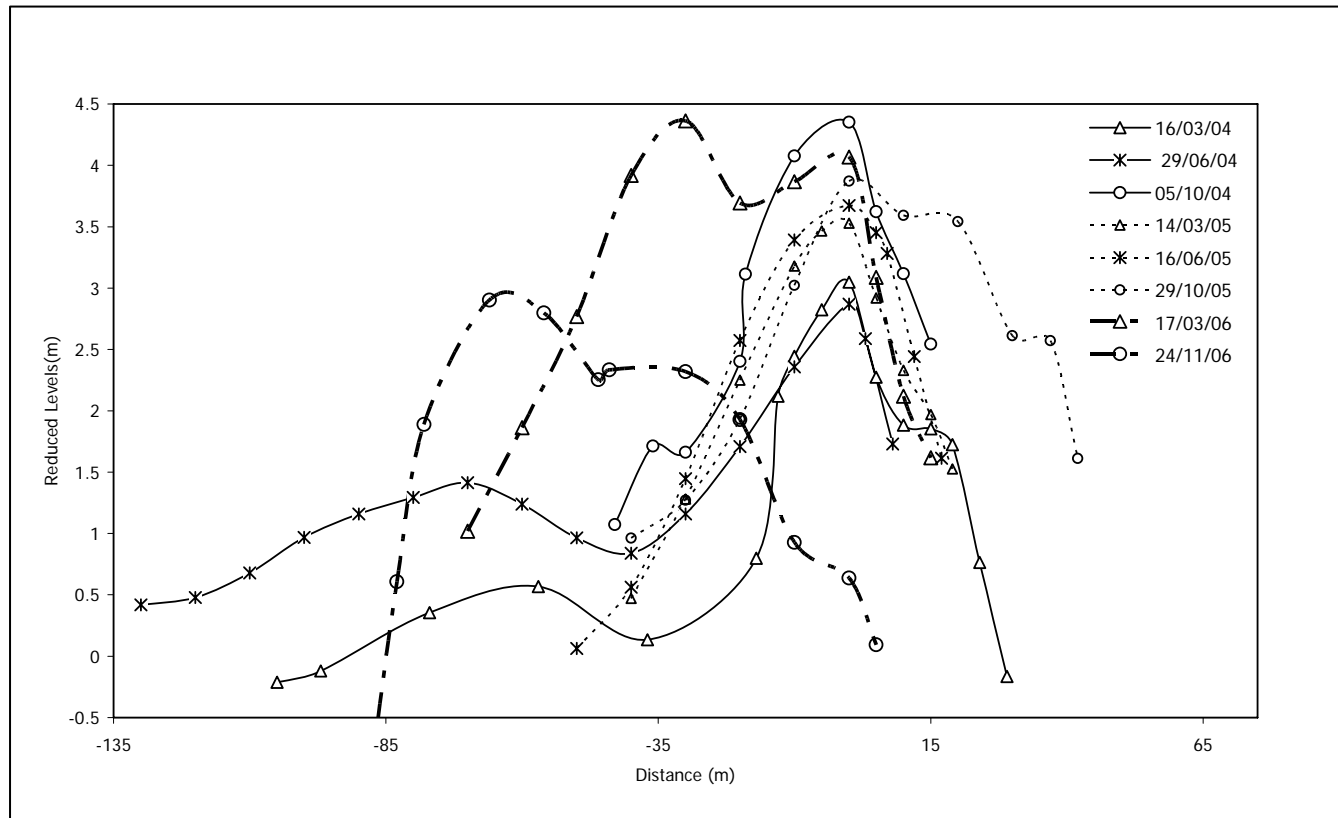


Fig. 2.33 Beach profiles at 150m chainage (From 2004 to 2006)

Reduced levels at Ullal 200m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04	Distance	01/06/04
-50	-0.421	-55	-0.691	-53	-0.926	-53	-0.886	-32	0.164
-40	0.429	-50	-0.491	-48	-0.526	-43	-0.496	-20	1.319
-30	1.009	-45	0.009	-39	0.324	-33	0.084	-15	1.859
-20	1.779	-40	0.364	-34	0.999	-29	0.724	-10	2.689
-10	2.649	-35	0.404	-25	0.959	-19	1.129	-5	3.049
0	3.189	-30	1.284	-15	2.289	-6	1.804	0	3.184
5	2.319	-25	1.319	-5	3.054	-5	2.934	5	2.824
10	1.539	-20	1.824	0	3.319	0	3.314	10	2.734
15	1.029	-15	2.224	5	2.289	5	2.759	13	2.239
20	0.539	-10	2.634	8.5	1.774	10	2.539	18	1.534
		-5	3.059	14	0.804	15	2.239		
		0	3.194	19	0.224	19	1.169		
		5	2.159	24	-0.426	24	0.614		
		10	1.459						
		15	0.674						
		20	0.009						
		25	-0.391						

Note: No data is available for 6th, 8th to 11th visit.

7th visit		12th visit		13th visit		14th visit		15th visit	
Distance	29/06/04	Distance	21/09/04	Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
-42	-0.111	0	3.903	-42	1.253	-44	0.028	-45	0.638
-35	0.499	5	2.653	-36	1.693	-34	0.233	-35	0.563
-25	1.619			-26	2.448	-24	0.828	-25	0.968
-15	2.524			-16	3.733	-14	2.298	-15	2.543
-5	3.274			-6	4.713	-4	3.123	-5	3.218
0	3.834			-5	4.273	0	2.428	0	2.368
2	2.759			0	3.483	5	1.498	5	1.733
7	1.099			5	3.153	10	0.683	10	1.158
				10	2.693	14	0.108	15	0.328
				14	1.973				

Reduced levels at Ullal 200m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05
-50	-0.087	-24	0.283	-50	0.413	-42	-1.132	-50	-0.182
-40	0.473	-20	0.803	-44	0.913	-32	-0.102	-45	0.338
-30	1.128	-15	1.653	-34	1.523	-22	0.678	-35	1.068
-20	2.283	-10	2.813	-24	2.263	-12	1.918	-25	1.988
-10	3.328	-5	3.693	-14	3.423	-2	2.788	-15	3.168
0	2.613	0	2.523	-4	3.253	-1	1.968	-5	3.973
5	2.568	5	2.563	-2	3.433	0	1.768	-3	3.373
10	2.743	10	2.623	0	3.253	5	1.708	0	2.913
15	2.478	15	2.003	10	3.173	10	1.853	5	2.923
20	1.858	20	1.283	12	2.533	15	1.663	10	3.088
25	1.188			17	2.113	17	1.373	13	3.033
29	0.548			21	1.313	22	0.858	15	2.643
						27	0.213	17	2.263
						32	-0.467	22	1.188
								24	0.838

21 st visit		22 nd visit		23 rd visit		24 th visit		25 th visit	
Distance	14/03/05	Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05
-50	-0.080	-28	0.628	-46	0.698	-44	-0.047	-49	0.208
-43	0.120	-18	1.703	-36	1.048	-34	0.353	-43	0.658
-33	0.920	-8	2.728	-26	1.348	-24	0.723	-33	1.138
-23	1.300	-4	3.068	-24	1.548	-22	1.458	-23	1.823
-22	1.795	0	2.743	-23	2.143	-12	2.513	-13	3.153
-13	2.665	4	2.488	-13	3.098	-2	3.288	-3	3.888
-3	3.530	8	1.633	-3	3.868	-1	2.928	0	3.223
0	2.955	13	0.268	-2	3.298	0	2.728	5	2.658
5	2.600			0	3.058	4	1.958	10	2.418
10	2.110			5	2.263	8	1.297	15	2.928
15	1.735			10	1.498	12	0.613	20	1.063
				14	1.098	16	-0.047		

Reduced levels at Ullal 200m chainage for the year 2005 (Contd...)

26 th visit		27 th visit		30 th visit		32 nd visit		34 th visit	
Distance	02/06/05	Distance	16/06/05	Distance	15/07/05	Distance	13/08/05	Distance	16/09/05
-52	-0.152	-50	0.123	-40	0.848	-43	-0.442	-46	0.988
-42	1.568	-42	0.523	-30	1.248	-33	-0.042	-30	2.728
-32	1.288	-32	1.223	-20	2.478	-23	1.243	-20	3.758
-22	2.418	-22	2.343	-10	2.558	-13	2.323	-10	4.323
-12	3.398	-12	3.293	0	3.998	-3	2.798	0	3.733
-2	2.768	-2	3.518	2	3.398	-1	2.233	5	3.828
0	3.378	0	3.423	4	2.718	0	2.108	9	3.708
5	2.823	5	2.948	9	1.818	5	1.943	11	2.978
10	2.123	10	3.033	14	1.218	10	1.048		
14	1.458	15	3.063			15	0.178		
		20	2.083						

35 th visit		36 th visit		37 th visit		38 th visit		39 th visit		40 th visit	
Distance	30/09/05	Distance	29/10/05	Distance	19/11/05	Distance	2/12/05	Distance	15/12/05	Distance	30/12/05
-40	0.723	-40	1.012	-40	0.603	-40	0.473	-40	0.853	-56	2.828
-30	1.673	-30	1.412	-30	1.333	-30	1.518	-30	1.853	-46	4.128
-20	3.003	-20	2.472	-20	2.653	-20	2.628	-20	3.193	-36	5.328
-10	3.943	-10	3.492	-10	3.653	-10	3.518	-10	4.063	-26	5.868
0	3.948	0	4.092	0	4.158	0	4.103	0	4.043	-16	6.158
5	3.338	7	3.692	5	3.723	3	3.643	5	3.473	-15	5.458
10	2.493	9	2.947	6	3.333	7	3.488	10	3.413	-10	5.333
15	1.518	14	2.972	11	3.193	11	3.268	15	3.023	0	4.378
		17	2.412	16	3.073	15	2.918	20	2.903	7	4.198
		22	1.612	21	2.573	19	2.548	25	2.243	12	3.898
				31	1.418					17	3.098
										22	3.048
										27	1.978

Note: No data is available for 33rd visit.

Reduced levels at Ullal 200m chainage for the year 2006

41 st visit		42 nd visit		43 rd visit		44 th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06
-64	2.973	-60	1.133	-57	4.523	-82	1.968
-54	3.833	-52	2.143	-52	5.308	-72	2.468
-44	5.028	-42	3.253	-48	6.448	-62	3.378
-34	5.873	-32	4.103	-38	7.238	-52	4.568
-24	5.753	-22	3.983	-25	6.768	-42	5.318
-20	5.163	-20	3.493	-20	6.173	-32	5.128
-10	5.033	-10	3.338	-10	5.483	-30	4.658
0	4.673	0	3.198	0	4.863	-20	4.558
3	4.073	4	2.753	5	4.693	-10	4.393
7	3.538	8	2.313	10	4.383	0	3.928
		13	1.893			3	3.448
		18	1.383			7	2.628
						11	2.203

45 th visit		46 th visit		47 th visit	
Distance	17/03/06	Distance	04/04/06	Distance	24/11/06
-72	0.898	-64	0.823	-63	-0.507
-62	2.098	-54	2.298	-53	1.183
-52	3.018	-44	3.283	-43	2.208
-42	4.068	-34	4.163	-33	3.013
-32	4.693	-24	3.993	-23	2.888
-22	4.318	-20	3.418	-20	2.383
-20	3.798	-10	3.293	-10	2.293
-10	3.768	0	3.253	0	1.823
0	3.588	1	2.598	2	1.293
5	2.743	6	1.778	5	1.058
10	1.968	11	0.828	10	0.493
15	1.628			15	-0.257

Seasonal beach profile changes at Ullal 200m

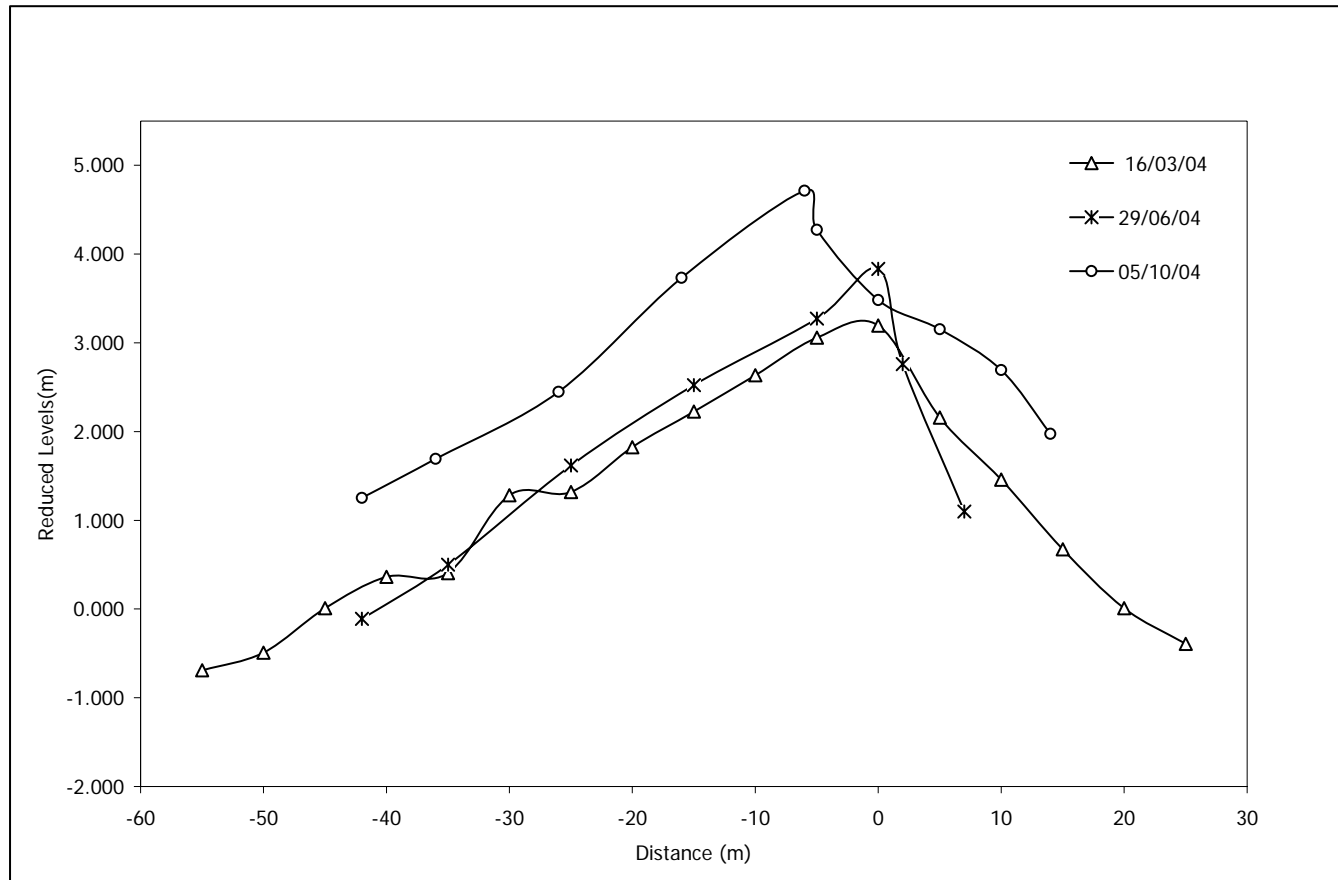


Fig. 2.34 Beach profiles at 200m chainage (Year 2004)

Seasonal beach profile changes at Ullal 200m

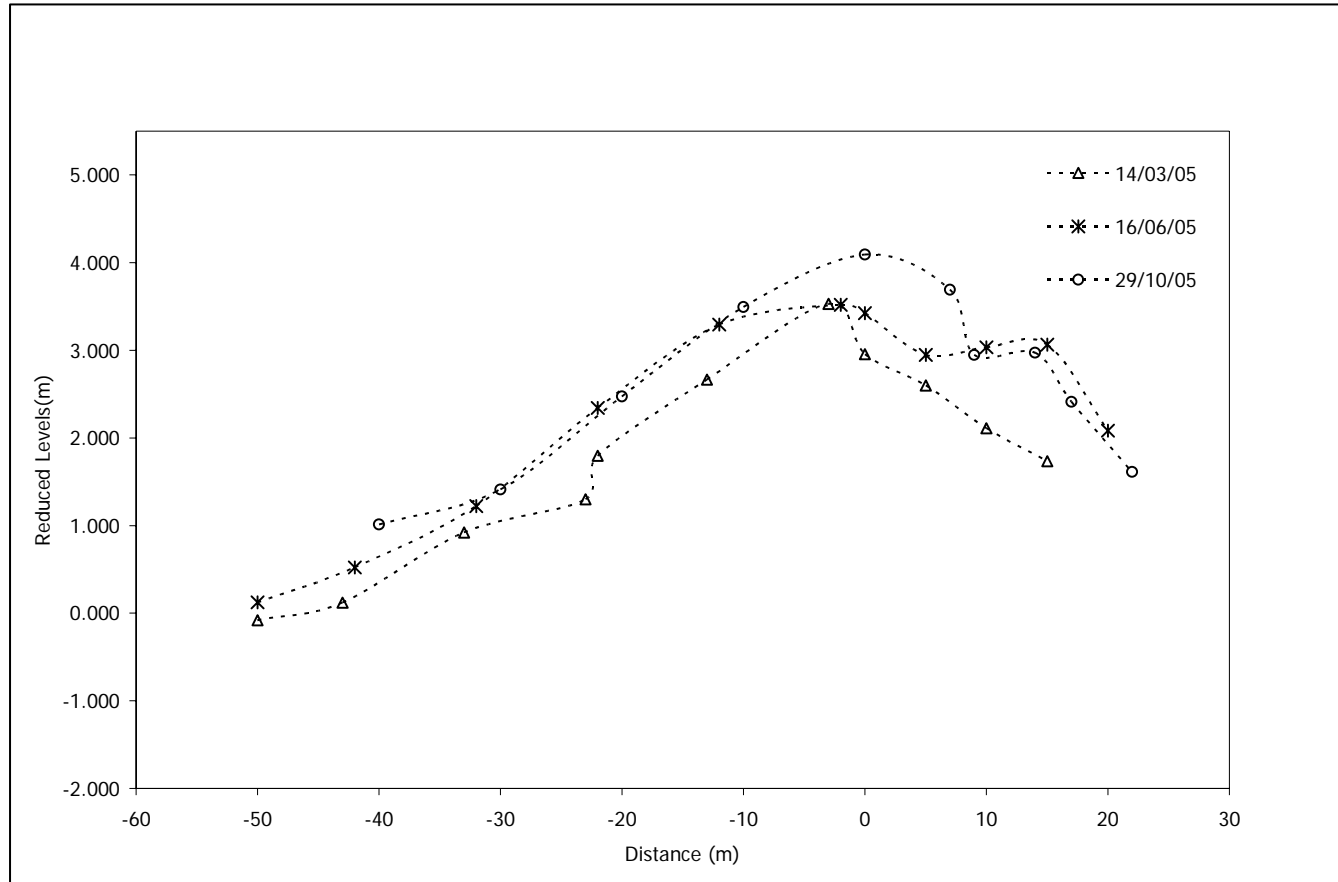


Fig. 2.35 Beach profiles at 200m chainage (Year 2005)

Seasonal beach profile changes at Ullal 200m

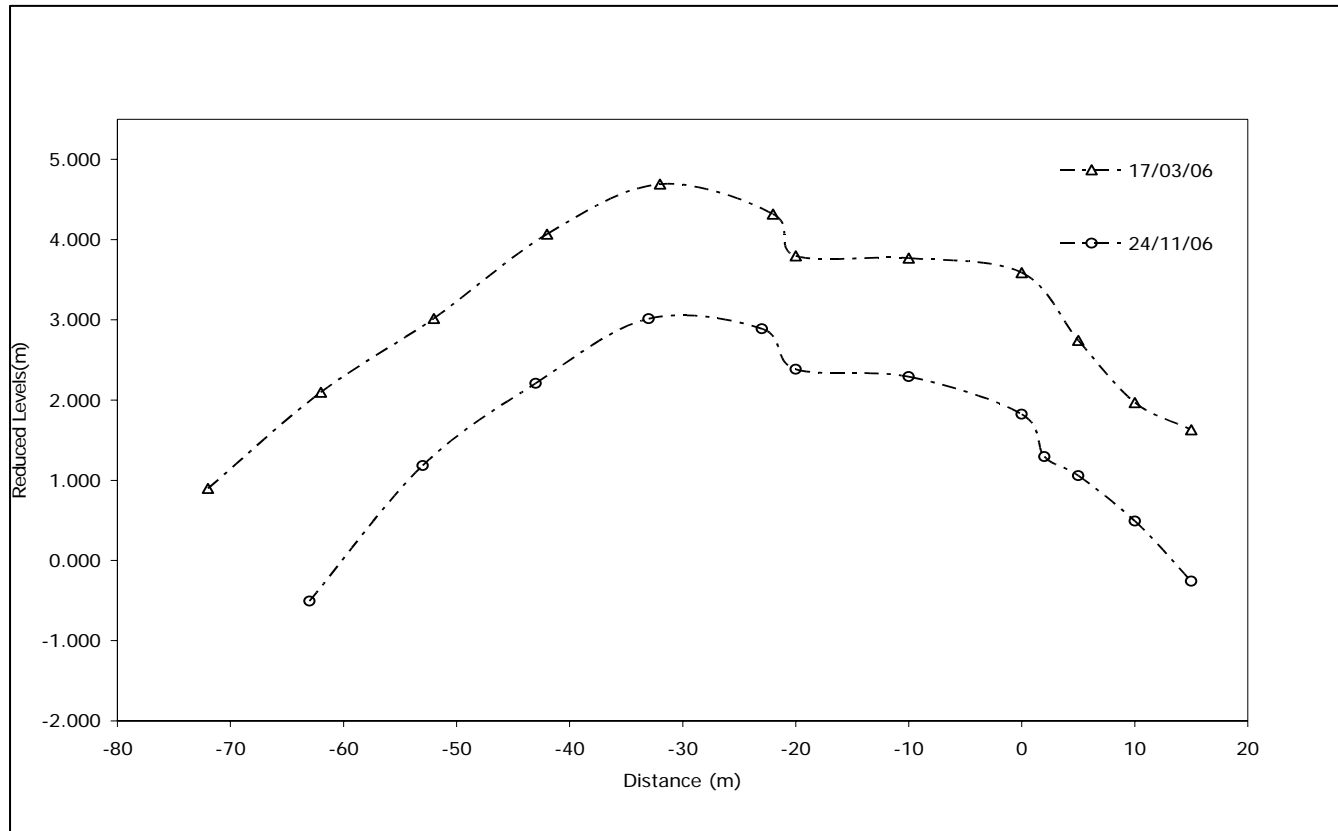


Fig. 2.36 Beach profiles at 200m chainage (Year 2006)

Yearly beach profile changes at Ullal 200m

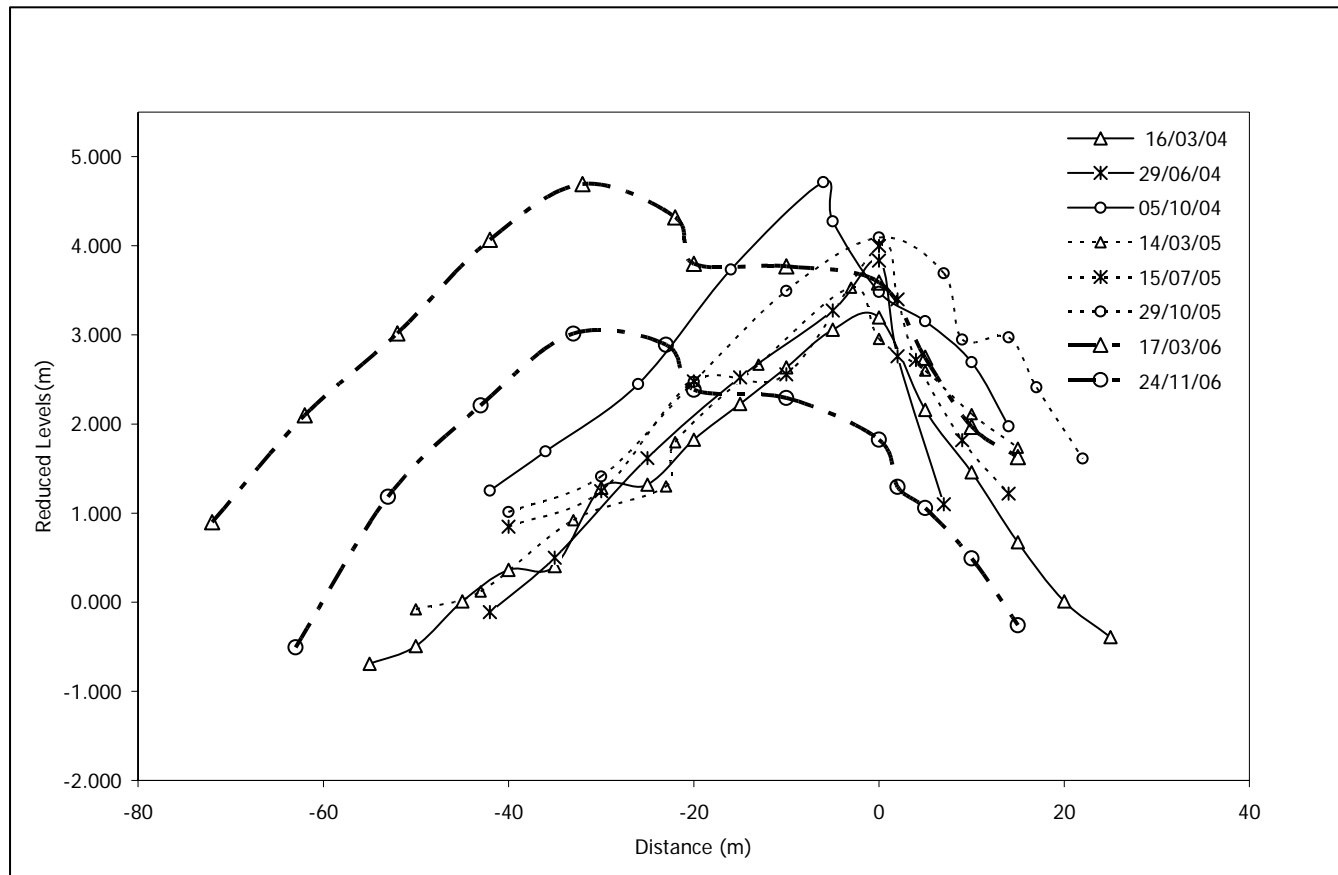


Fig. 2.37 Beach profiles at 200m chainage (From 2004 to 2006)

Reduced levels at Ullal 250m chainage for the year 2004

1st visit		2nd visit		3rd visit		4th visit		5th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04	Distance	01/06/04
0	2.904	0	2.979	0	2.924	0	3.144	0	3.149
5	3.259	5	3.259	8	3.244	6	3.389	5	3.349
10	2.424	8	3.264	11	1.949	11	2.739	10	2.709
15	1.674	11	1.979	17	1.329	16	2.424	15	2.669
20	1.419	21	1.424	22	0.779	21	2.129	18	1.689
25	1.004	23	1.324	27	0.579	26	1.959		
		28	0.594			31	1.054		
		33	-0.006						

Note: No data is available for 6th, 8th to 11th visit.

7th visit		12th visit		13th visit		14th visit		15th visit	
Distance	29/06/04	Distance	21/09/04	Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
0	3.134	0	3.943	0	3.533	0	2.433	0	2.868
5	3.489	5	2.248	5	1.983	5	2.898	5	2.958
10	3.554			8	1.263	10	1.253	10	1.648
12	2.919					12	0.943	15	1.268
17	1.839								

Reduced levels at Ullal 250m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05
0	2.928	0	2.993	0	2.998	0	2.138	0	3.038
5	2.623	5	2.703	5	3.213	5	1.828	5	2.943
10	2.188	10	2.343	10	1.833	10	1.288	10	2.813
15	1.648	15	1.823	15	1.483	15	0.788	12	2.713
20	1.078	20	0.633	20	0.933	20	0.343	15	2.188
24	0.553			22	0.633	25	-0.212	20	1.218
								21	0.718

21 st visit		22 nd visit		23 rd visit		24 th visit		25 th visit	
Distance	14/03/05	Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05
0	4.260	0	2.403	0	3.008	0	3.003	0	3.463
5	3.020	5	1.348	5	3.650	2	2.343	5	2.433
10	2.040	10	0.248	10	1.298	6	1.353	10	1.568
						10	0.553	14	0.793

26 th visit		27 th visit		32 nd visit		35 th visit		36 th visit	
Distance	02/06/05	Distance	16/06/05	Distance	13/08/05	Distance	30/09/05	Distance	29/10/05
0	2.673	0	3.303	0	1.608	0	3.038	0	4.112
5	1.933	2	3.333	5	0.468	5	2.528	2	2.682
9	1.378	4	3.238			10	1.518	7	1.522
		9	2.493					12	0.962
		11	1.973						

Note: No data is available for 28th to 31st and 33rd visit.

Reduced levels at Ullal 250m chainage for the year 2005 (Contd...)

37th visit		38th visit		39th visit		40th visit	
Distance	19/11/05	Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
0	3.288	0	2.993	0	4.743	0	2.848
4	2.753	5	2.313	5	3.793	5	2.598
5	2.403	10	1.853	10	3.243	10	2.443
9	1.948	15	1.543	15	2.843	15	2.078
11	1.263			20	2.083		
16	0.353						

Reduced levels at Ullal 250m chainage for the year 2006

41 st visit		42 nd visit		43 rd visit		44 th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06
0	4.263	0	2.603	0	4.838	0	3.258
7	3.773	5	2.143	5	4.513	5	2.668
14	3.173	10	1.963	10	4.123	10	2.348
		15	1.583	15	3.778	15	1.898

45 th visit		46 th visit		47 th visit	
Distance	17/03/06	Distance	04/04/06	Distance	24/11/06
0	2.818	0	2.403	0	1.913
5	2.238	5	1.088	2	1.493
10	1.628	10	0.493	5	1.193
				9	0.493

Seasonal beach profile changes at Ullal 250m

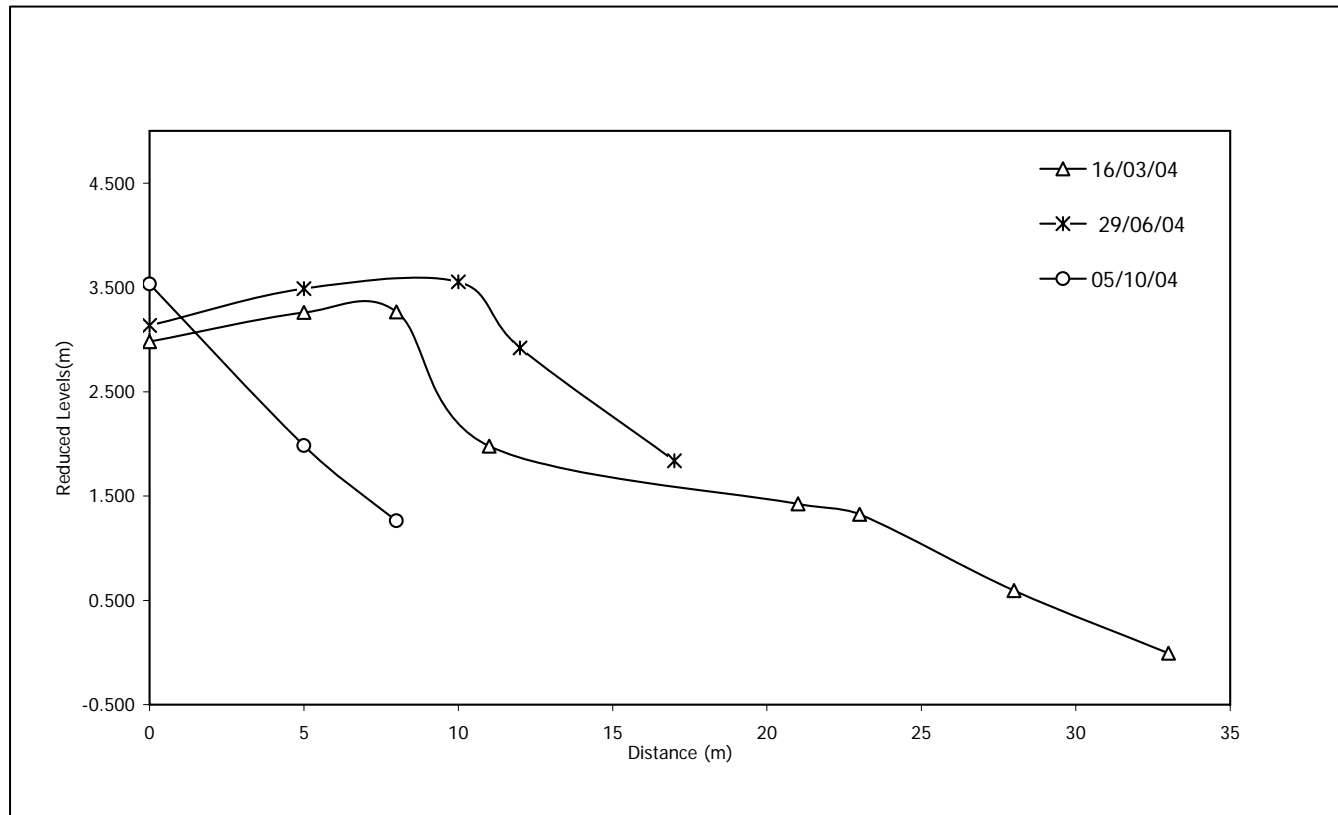


Fig. 2.38 Beach profiles at 250m chainage (Year 2004)

Seasonal beach profile changes at Ullal 250m

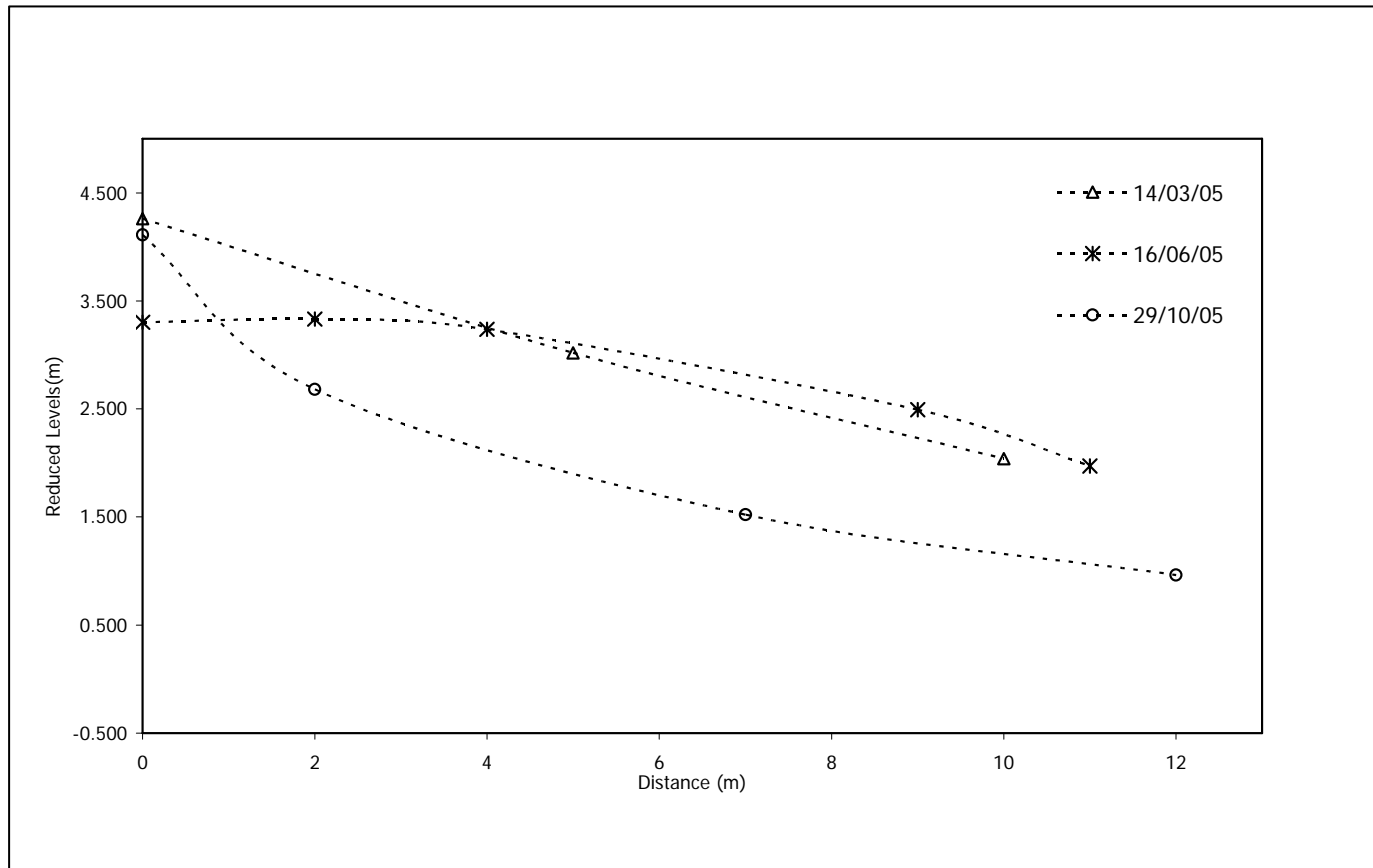


Fig. 2.39 Beach profiles at 250m chainage (Year 2005)

Seasonal beach profile changes at Ullal 250m

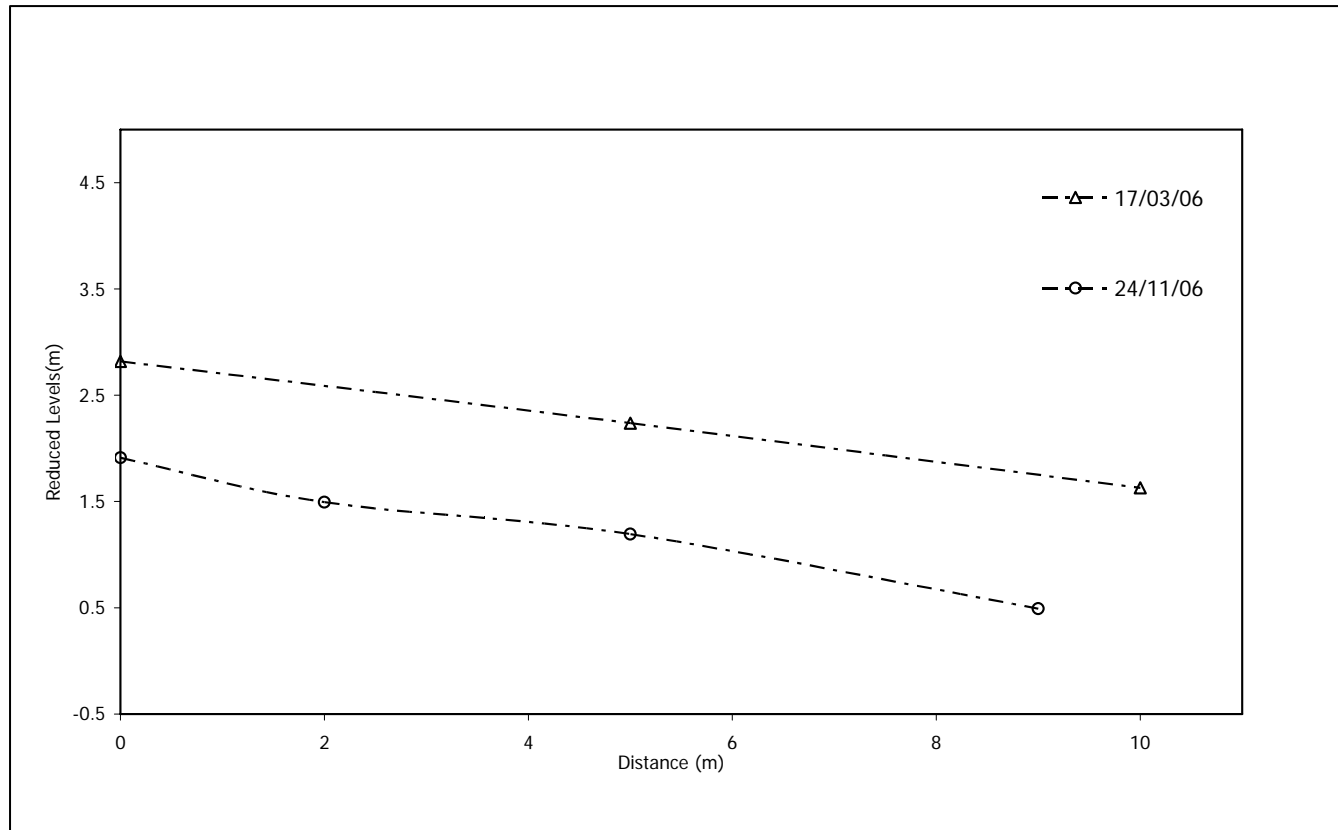


Fig. 2.40 Beach profiles at 250m chainage (Year 2006)

Yearly beach profile changes at Ullal 250m

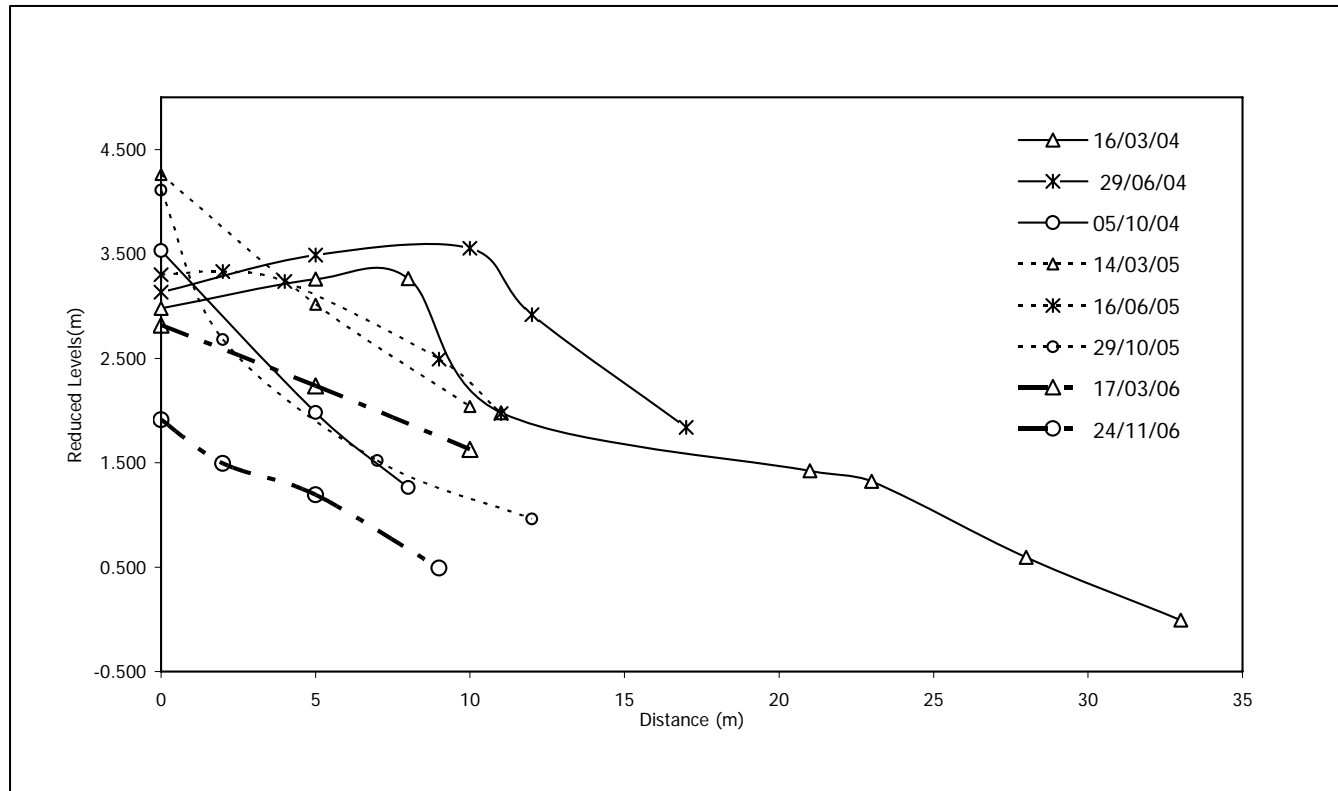


Fig. 2.41 Beach profiles at 250m chainage (From 2004 to 2006)

Reduced levels at Ullal 300m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04	Distance	01/06/04
0	2.954	0	2.959	0	3.149	0	3.364	0	4.029
5	2.574	5	3.634	5	2.964	3	3.459	1	4.094
10	2.034	8	3.574	8	2.064	8	2.954	2	3.674
15	1.364	10	2.774	13	1.434	13	2.444	7	3.514
		15	2.124	18	0.624	18	1.684	12	2.734
		25	1.919	23	-0.186	23	1.064	17	2.309
		30	0.189						

Note: No data is available for 6th, 8th to 11th visit.

7 th visit		12 th visit		13 th visit		14 th visit		15 th visit	
Distance	29/06/04	Distance	21/09/04	Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
0	2.899	0	3.283	0	2.933	0	2.723	0	3.133
5	2.304	5	2.948	5	1.948	5	1.503	5	2.103
10	1.569			7	1.193	10	0.303	10	0.998
15	0.769								

Reduced levels at Ullal 300m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05
0	3.043	0	2.833	0	3.313	0	2.163	0	2.198
5	2.853	5	2.033	3	2.663	2	1.933	5	2.938
10	2.383	10	1.183	8	2.083	7	1.268	6	2.858
15	1.723	11	0.993	13	1.393	12	0.723	11	2.138
19	1.003			17	0.673	17	0.283	16	1.443
						20	-0.077	20	1.088

21 st visit		22 nd visit		23 rd visit		24 th visit		25 th visit	
Distance	14/03/05	Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05
0	2.695	0	2.678	0	2.573	0	2.768	0	3.123
5	2.040	5	1.448	5	1.583	5	1.928	5	2.348
		10	0.728	10	0.983	10	1.208	10	1.253

26 th visit		27 th visit		30 th visit		32 nd visit		34 th visit	
Distance	02/06/05	Distance	16/06/05	Distance	15/07/05	Distance	13/08/05	Distance	16/09/05
0	2.568	0	3.193	0	4.098	0	1.568	0	3.803
5	1.873	5	2.513	2	3.388	5	0.413	3	3.618
		6	2.063	7	2.438			5	3.003
				12	1.643			7	2.628
				16	1.108				

Note: No data is available for 31st and 33^d visit.

Reduced levels at Ullal 300m chainage for the year 2005 (Contd...)

35 th visit		36 th visit		37 th visit		38 th visit		39 th visit		40 th visit	
Distance	30/09/05	Distance	29/10/05	Distance	19/11/05	Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
0	3.263	0	3.752	0	2.498	0	2.988	0	2.953	0	3.338
5	2.453	5	2.842	5	1.783	4	2.633	5	3.453	5	2.778
10	1.263	10	1.447	7	0.973	7	2.293	10	3.098	10	2.558
		15	0.562	11	0.753	9	1.868	15	2.453	15	1.998
				16	0.353			22	1.863	20	1.353

Reduced levels at Ullal 300m chainage for the year 2006

41 st visit		42 nd visit		43 rd visit		44 th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06
0	3.773	0	2.683	0	4.868	0	3.268
5	2.653	5	2.223	5	4.378	5	2.858
12	2.103	10	1.983	10	3.878	10	2.458
		15	1.763	15	3.763	15	1.883
		20	0.833				

45 th visit		46 th visit		47 th visit	
Distance	17/03/06	Distance	04/04/06	Distance	24/11/06
0	2.188	0	1.813	0	2.028
5	2.018	5	1.048	2	1.288
10	1.188	10	0.443	5	0.273

Seasonal beach profile changes at Ullal 300m

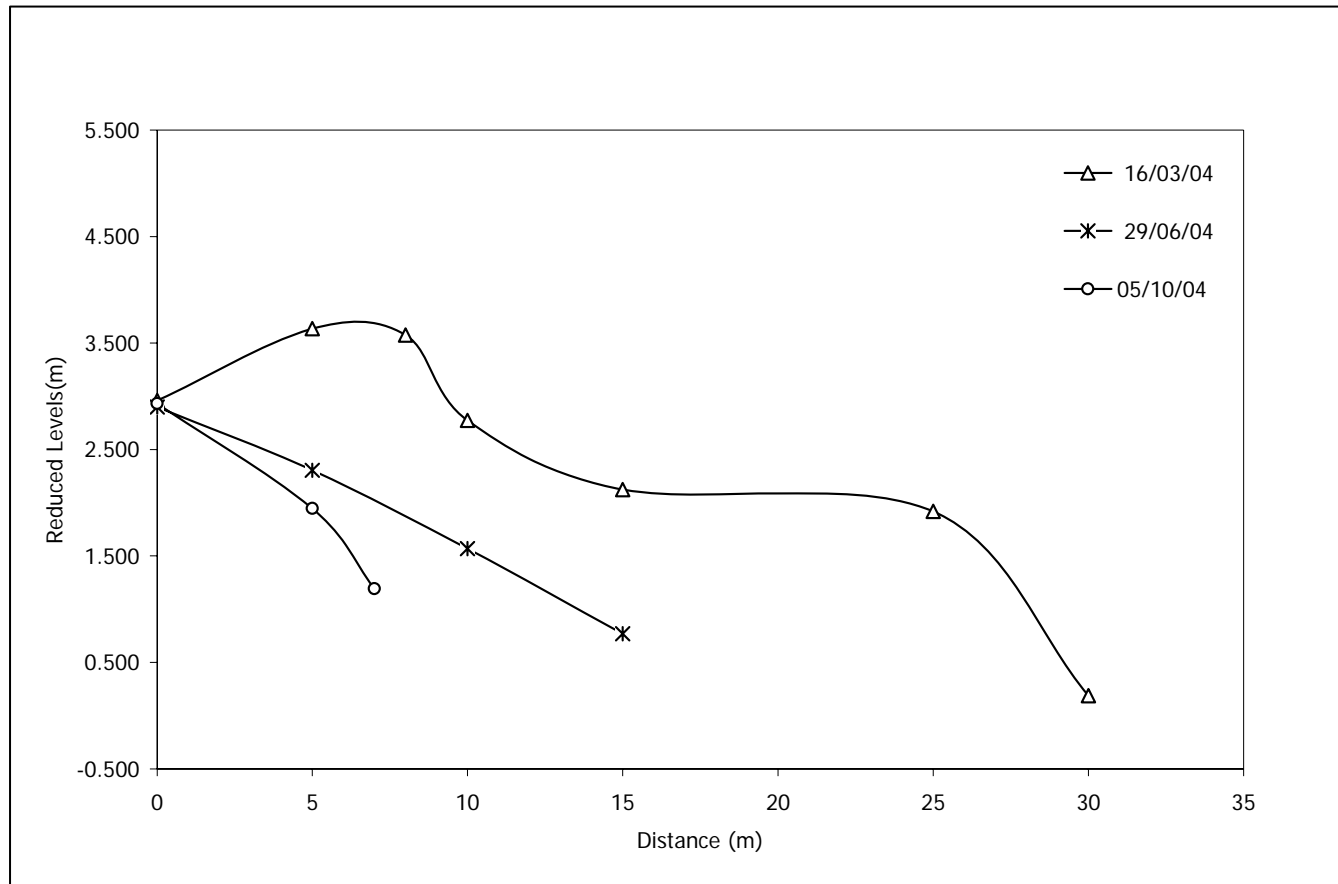


Fig. 2.42 Beach profiles at 300m chainage (Year 2004)

Seasonal beach profile changes at Ullal 300m

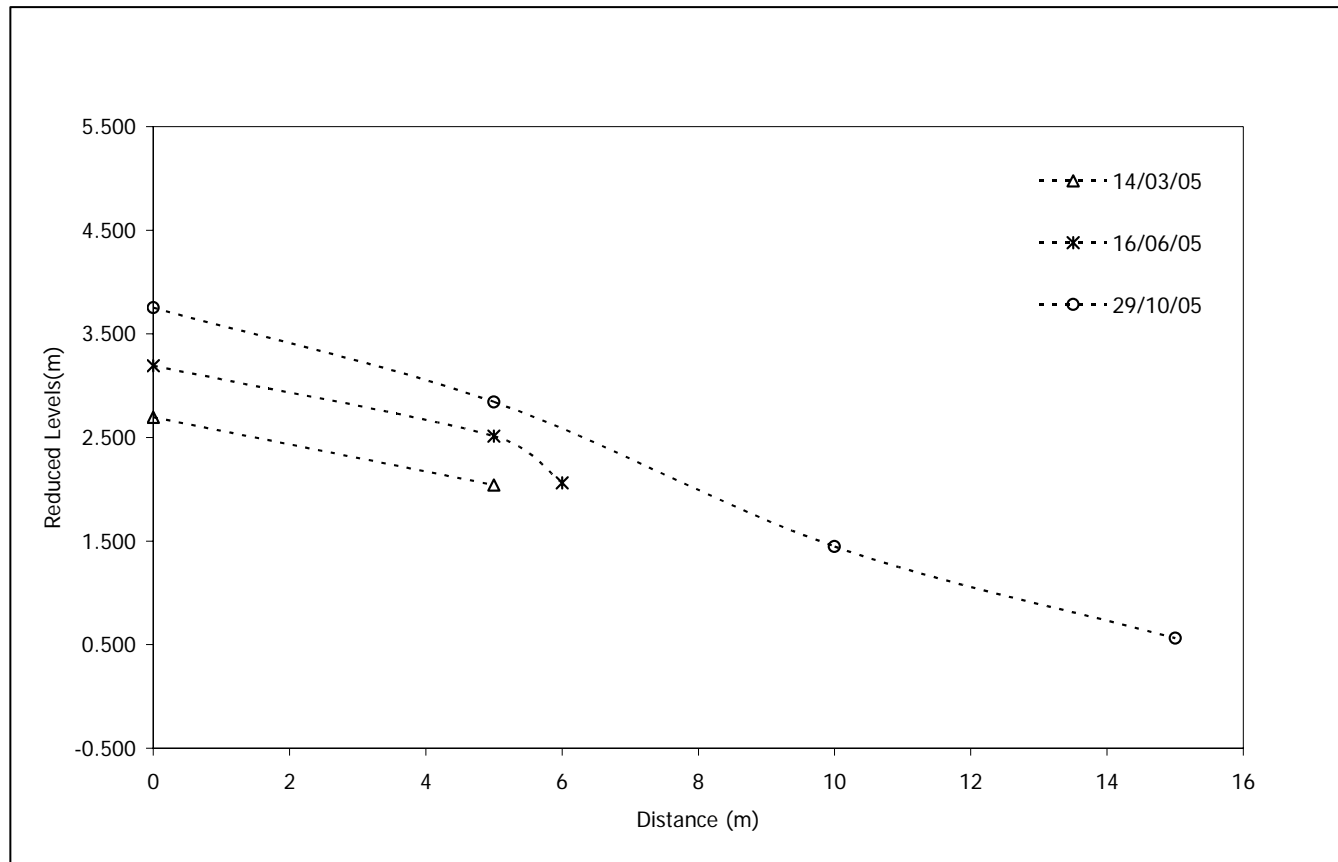


Fig. 2.43 Beach profiles at 300m chainage (Year 2005)

Seasonal beach profile changes at Ullal 300m

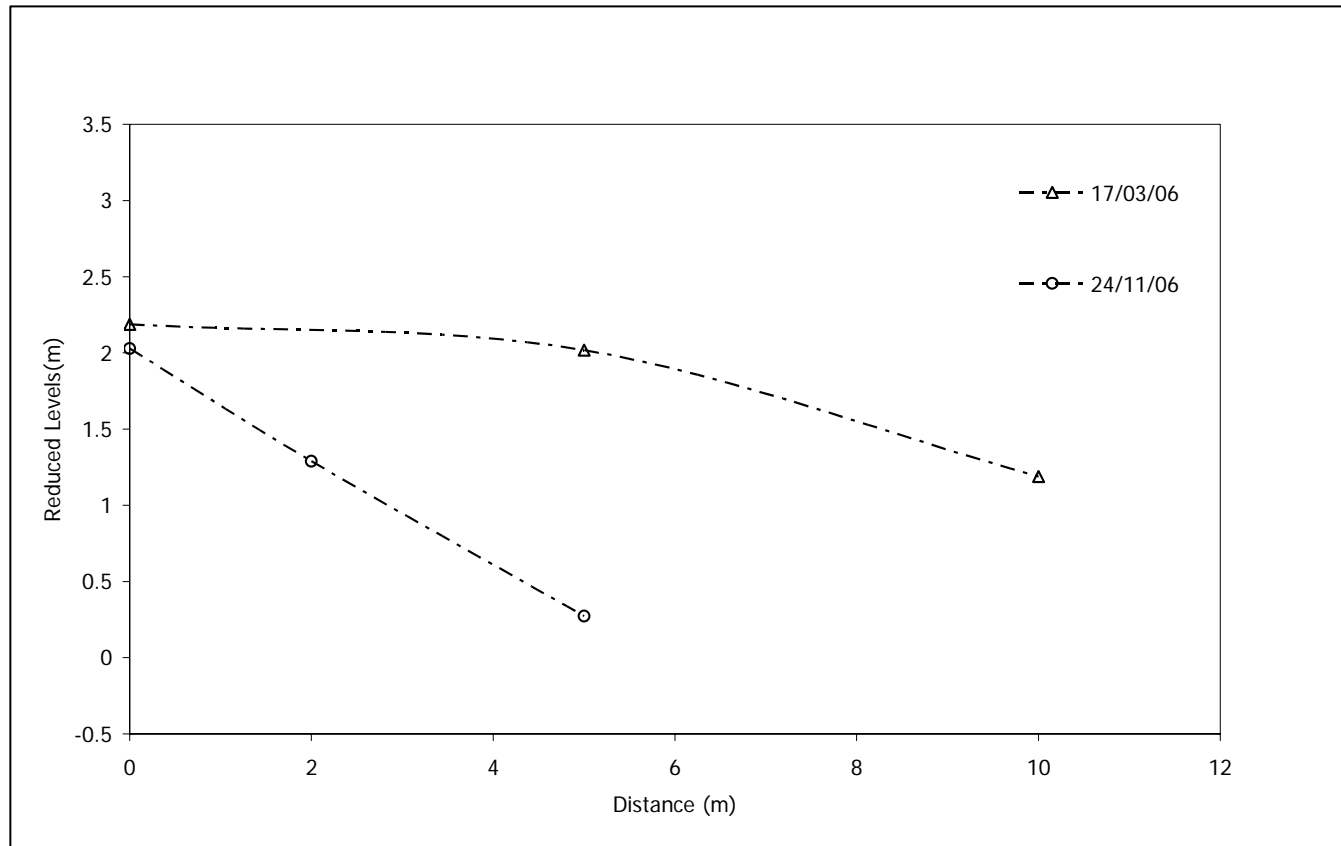


Fig. 2.44 Beach profiles at 300m chainage (Year 2006)

Yearly beach profile changes at Ullal 300m

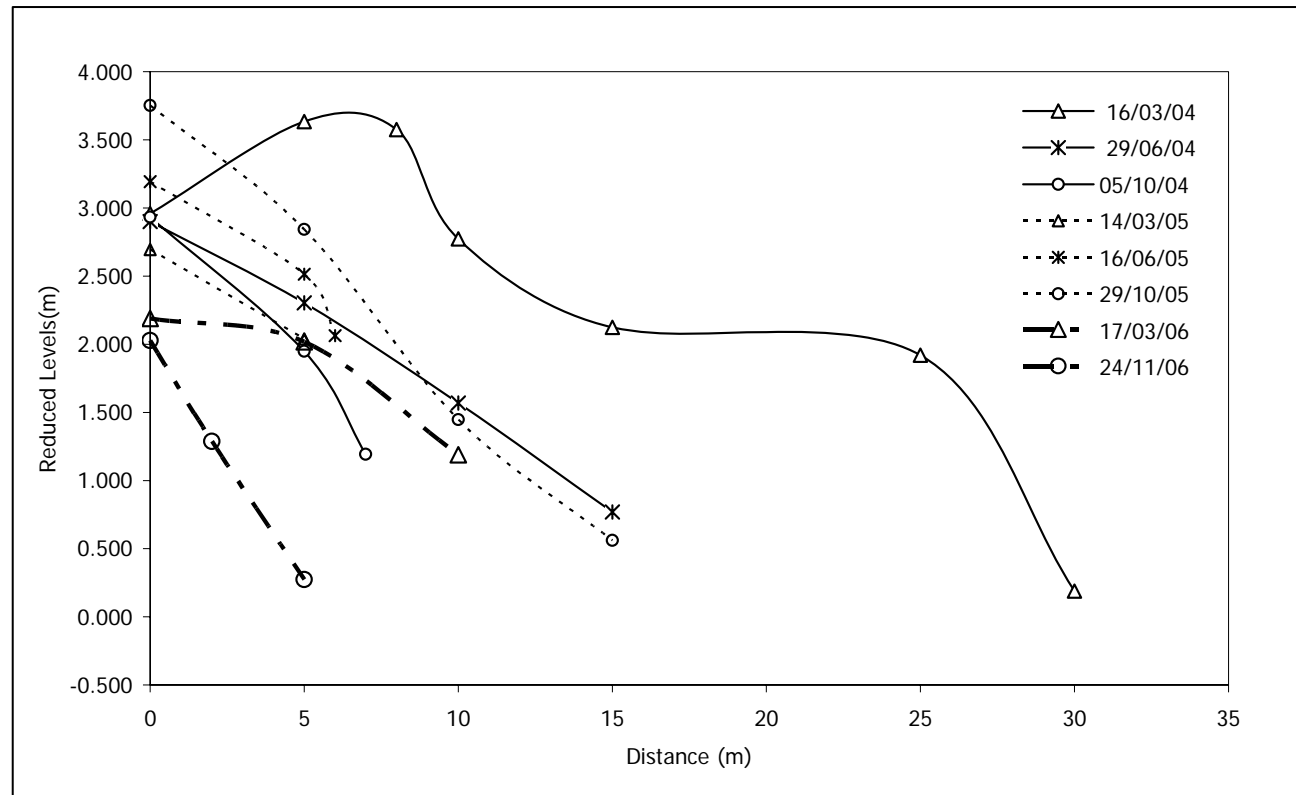


Fig. 2.45 Beach profiles at 300m chainage (From 2004 to 2006)

Reduced levels at Ullal 350m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04	Distance	01/06/04
0	3.479	0	3.649	0	3.299	0	2.764	0	3.019
5	2.364	5	3.469	3	1.959	5	2.249	5	3.099
10	1.434	6	2.919	8	1.109	10	1.679	10	3.124
		16	1.339	13	0.299	15	1.214	16	2.154
		21	0.484	18	0.239				

Note: No data is available for 6th, 8th to 11th visit.

7 th visit		12 th visit		13 th visit		14 th visit		15 th visit	
Distance	29/06/04	Distance	21/09/04	Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
0	2.259	0	3.728	0	2.858	0	2.448	0	2.468
5	1.819	5	2.483	5	1.893	5	1.983	5	2.633
12	1.349								

Reduced levels at Ullal 350m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit	
Distance	04/01/05	Distance	18/1/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05
0	3.103	0	2.903	0	3.323	0	2.323	0	3.738
5	2.323	2	2.113	2	2.643	1	2.173	2	3.698
10	1.403	6	1.283	7	1.823	4	1.633	7	2.568
14	0.083			12	0.943	9	0.808	12	1.733
						14	-0.017	14	1.438

21 st visit		22 nd visit		23 rd visit		24 th visit		25 th visit	
Distance	14/03/05	Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05
0	2.905	0	3.528	0	2.348	0	2.918	0	3.138
5	1.925	5	1.973	5	1.698	5	2.108	5	2.438
10	1.130	10	1.243	10	1.183	10	1.678	10	1.578
						15	1.213	15	0.798
						20	0.448		

26 th visit		27 th visit		30 th visit		32 nd visit	
Distance	02/06/05	Distance	16/06/05	Distance	15/07/05	Distance	13/08/05
0	2.313	0	2.613	0	3.703	0	0.403
4	1.628	4	1.653	2	3.063	5	-0.097
				7	2.408		
				12	1.788		
				17	1.033		

Note: No data is available for 28-29th, 31st visit.

Reduced levels at Ullal 350m chainage for the year 2005 (Contd...)

34 th visit		35 th visit		36 th visit		37 th visit	
Distance	16/09/05	Distance	30/09/05	Distance	29/10/05	Distance	19/11/05
0	3.763	0	2.378	0	3.562	0	2.573
4	3.613	5	1.744	5	2.482	5	2.133
9	2.783	10	0.778	10	1.842	8	1.393
						13	0.758
						18	0.428

38 th visit		39 th visit		40 th visit	
Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
0	3.373	0	4.123	0	2.598
5	3.068	3	3.643	5	1.998
9	2.208	8	4.193	10	1.378
11	2.293			15	1.018

Reduced levels at Ullal 350m chainage for the year 2006

41 st visit		42 nd visit		43 rd visit		44 th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06
0	3.558	0	2.573	0	5.048	0	3.338
5	3.243	5	2.163	5	4.498	5	2.848
10	2.703	11	1.693	10	4.123	10	2.388
15	2.198	15	1.083	15	3.758		

45 th visit		46 th visit		47 th visit	
Distance	17/03/06	Distance	04/04/06	Distance	24/11/06
0	2.328	0	1.923	0	1.903
5	1.738	5	1.588	1	1.033
10	1.283	10	1.083	3	0.123
15	1.088	13	0.478		

Seasonal beach profile changes at Ullal 350m

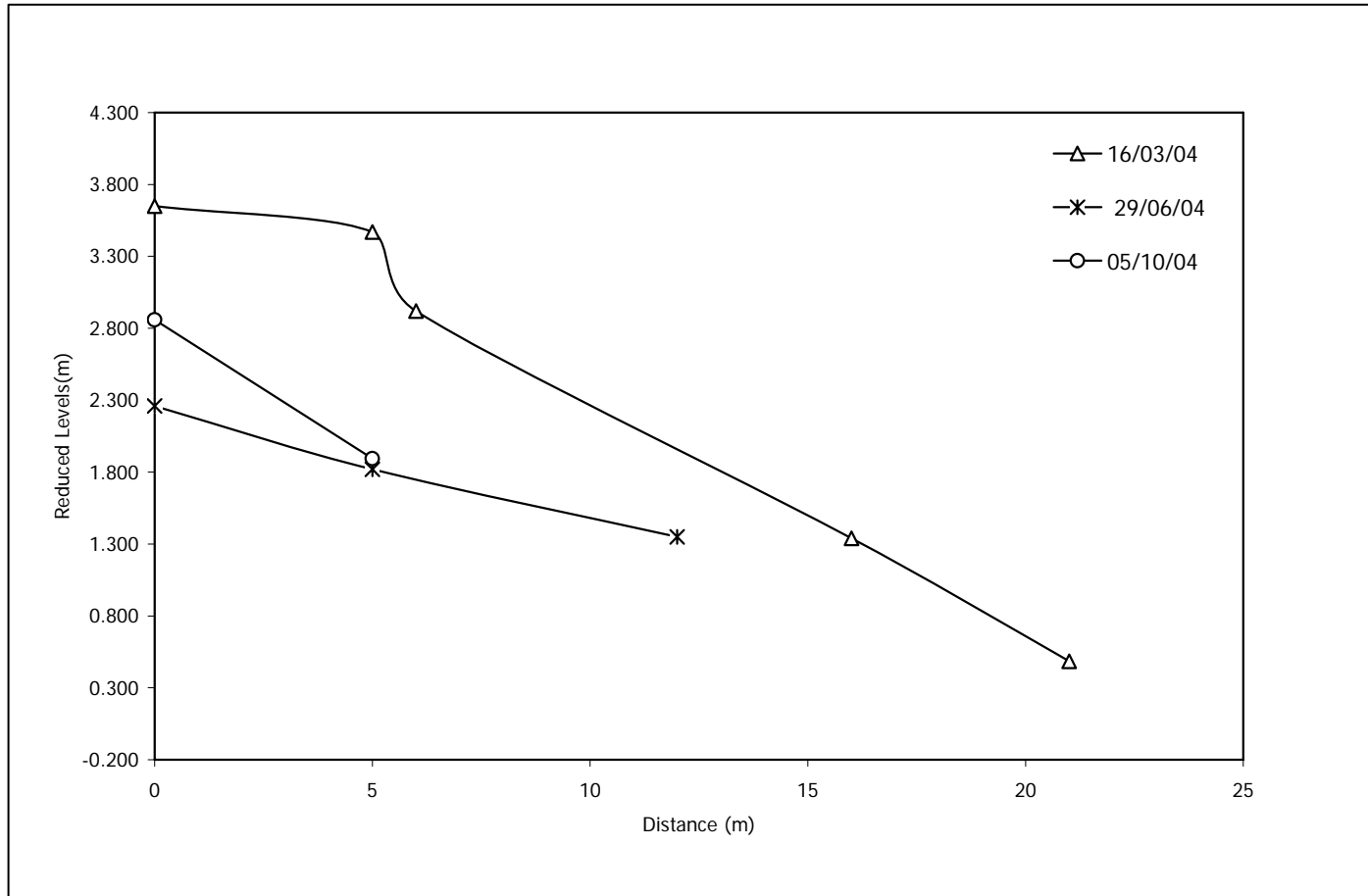


Fig. 2.46 Beach profiles at 350m chainage (Year 2004)

Seasonal beach profile changes at Ullal 350m

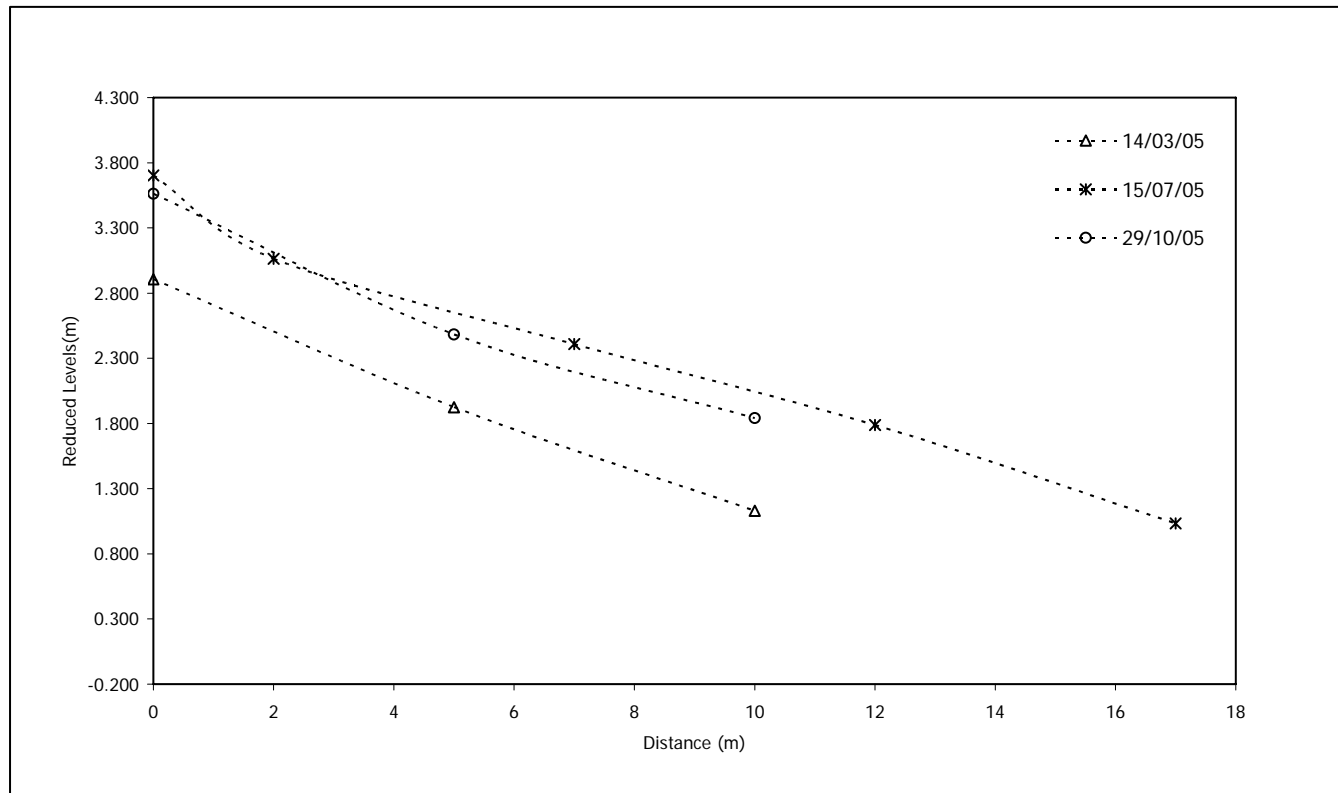


Fig. 2.47 Beach profiles at 350m chainage (Year 2005)

Seasonal beach profile changes at Ullal 350m

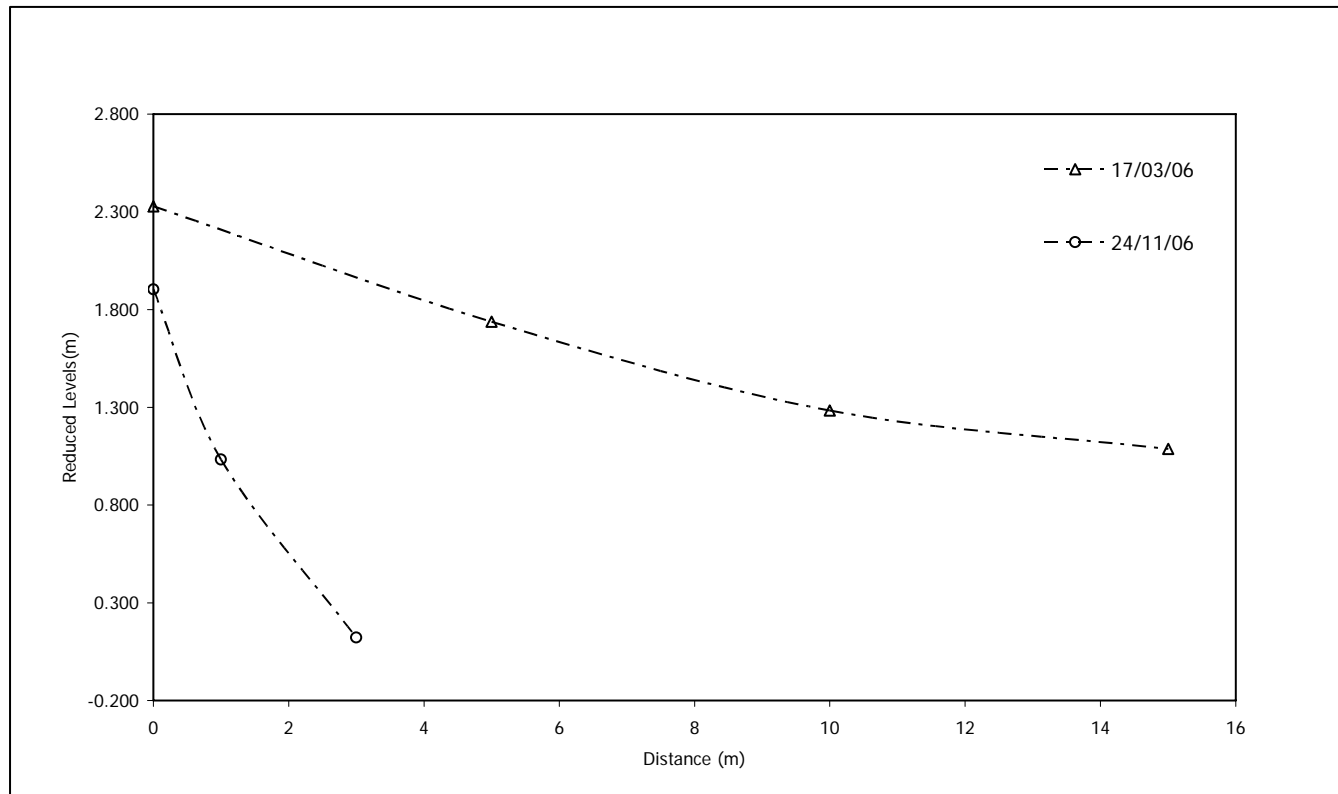


Fig. 2.48 Beach profiles at 350m chainage (Year 2006)

Yearly beach profile changes at Ullal 350m

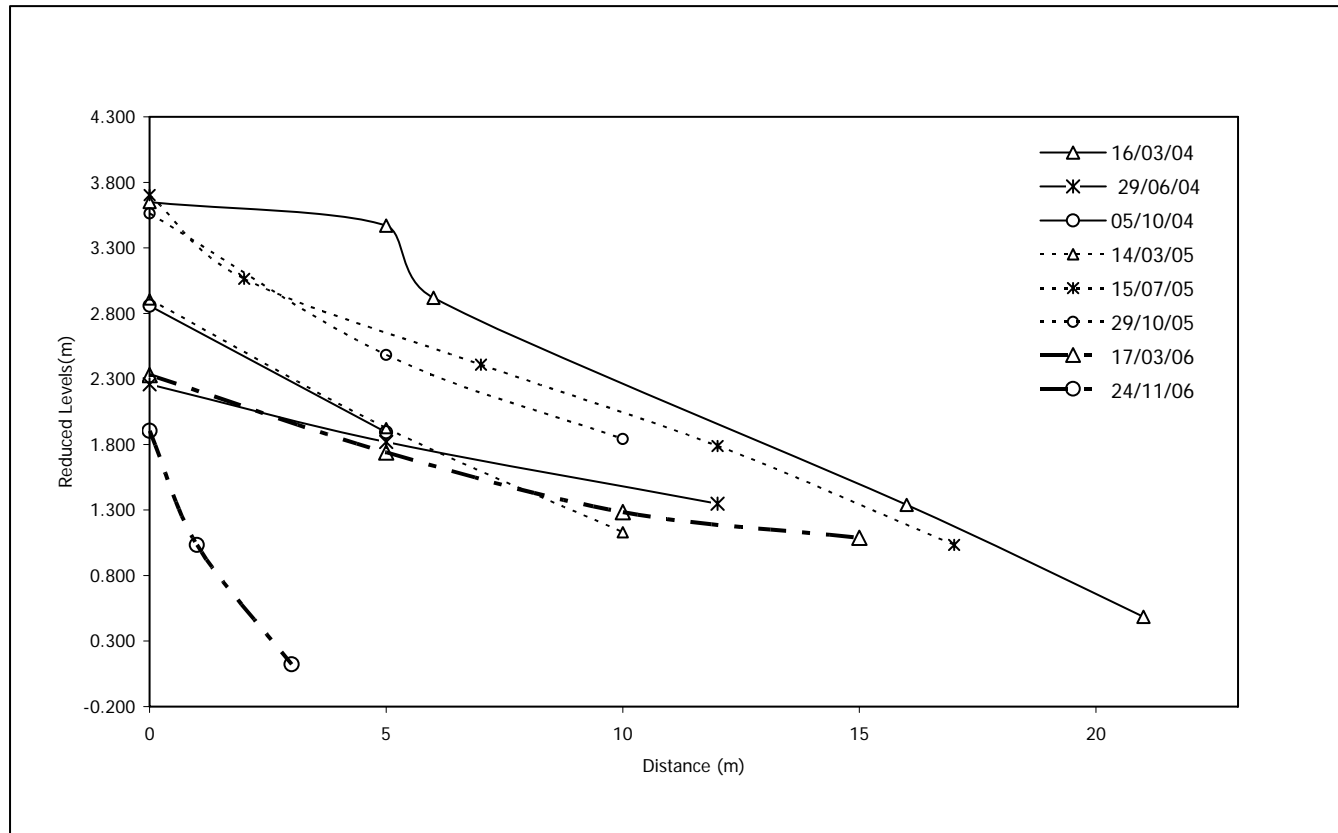


Fig. 2.49 Beach profiles at 350m chainage (From 2004 to 2006)

Reduced levels at Ullal 400m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04	Distance	01/06/04
0	3.384	0	3.779	0	3.369	0	2.754	0	3.554
5	2.184	3	3.534	2	3.044	5	2.354	5	3.564
10	1.124	13	1.124	7	1.739	10	2.154	10	3.584
				12	1.084	15	1.424	15	2.574
				17	0.349			19	2.259

7 th visit		12 th visit		13 th visit		14 th visit		15 th visit	
Distance	29/06/04	Distance	21/09/04	Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
0	2.779	0	3.728	0	2.688	0	2.273	0	2.493
3	2.559	5	2.403	4	1.408	5	1.613	5	2.073
8	1.824					10	0.833	10	1.438
13	1.119								

Note: No data is available for 6th, 8th to 11th visit.

Reduced levels at Ullal 400m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit	
Distance	04/01/05	Distance	18/01/04	Distance	02/03/05	Distance	16/02/05	Distance	03/03/05
0	2.763	0	2.983	0	3.133	0	2.553	0	3.983
5	2.138	1	2.303	3	2.633	2	2.198	1	3.593
10	1.273	6	1.053	8	1.823	3	1.783	6	2.243
14	0.558			13	1.043	8	0.648	8	1.693
						13	-0.217		

21 st visit		22 nd visit		25 th visit		26 th visit		27 th visit	
Distance	14/03/05	Distance	01/04/05	Distance	17/05/05	Distance	02/06/05	Distance	16/06/05
0	3.305	0	4.178	0	3.108	0	2.603	0	2.583
5	2.395	4	3.008	5	2.478	5	1.963	2	2.103
10	1.205	9	2.258	10	1.783			6	1.388
15	0.505	14	1.643	15	0.968				
		19	1.053						

30 th visit		32 nd visit		34 th visit		35 th visit		36 th visit	
Distance	15/07/05	Distance	13/08/05	Distance	16/09/05	Distance	30/09/05	Distance	29/10/05
0	2.638	0	1.138	0	3.788	0	2.648	0	3.662
5	1.903	5	0.698	5	3.753	5	2.278	5	2.632
10	1.168			10	2.658	10	1.738	10	2.617
14	0.743							15	1.932

Note: No data is available for 28-29th, 31st visit.

Reduced levels at Ullal 400m chainage for the year 2005 (Contd...)

37 th visit		38 th visit		39 th visit		40 th visit	
Distance	19/11/05	Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
0	1.783	0	3.633	0	5.093	0	3.058
4	2.403	4	3.248	5	4.393	4	2.478
7	1.603	7	2.708	10	3.793	9	1.738
12	0.463	9	2.533	15	2.943	14	1.058

Reduced levels at Ullal 400m chainage for the year 2006

41 st visit		42 nd visit		43 rd visit		44 th visit	
Distance	13/1/2006	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06
0	3.768	0	2.478	0	5.373	0	3.583
5	3.273	3	1.983	5	4.838	5	2.793
10	2.348	6	1.698	10	4.403	10	2.293
		11	1.043	15	4.063		

45 th visit		46 th visit		47 th visit	
Distance	17/03/06	Distance	04/04/06	Distance	24/11/06
0	2.613	0	1.518	0	1.768
5	1.988	5	0.938	2	0.768
8	1.528	10	0.413	4	1.058
12	1.218				

Seasonal beach profile changes at Ullal 400m

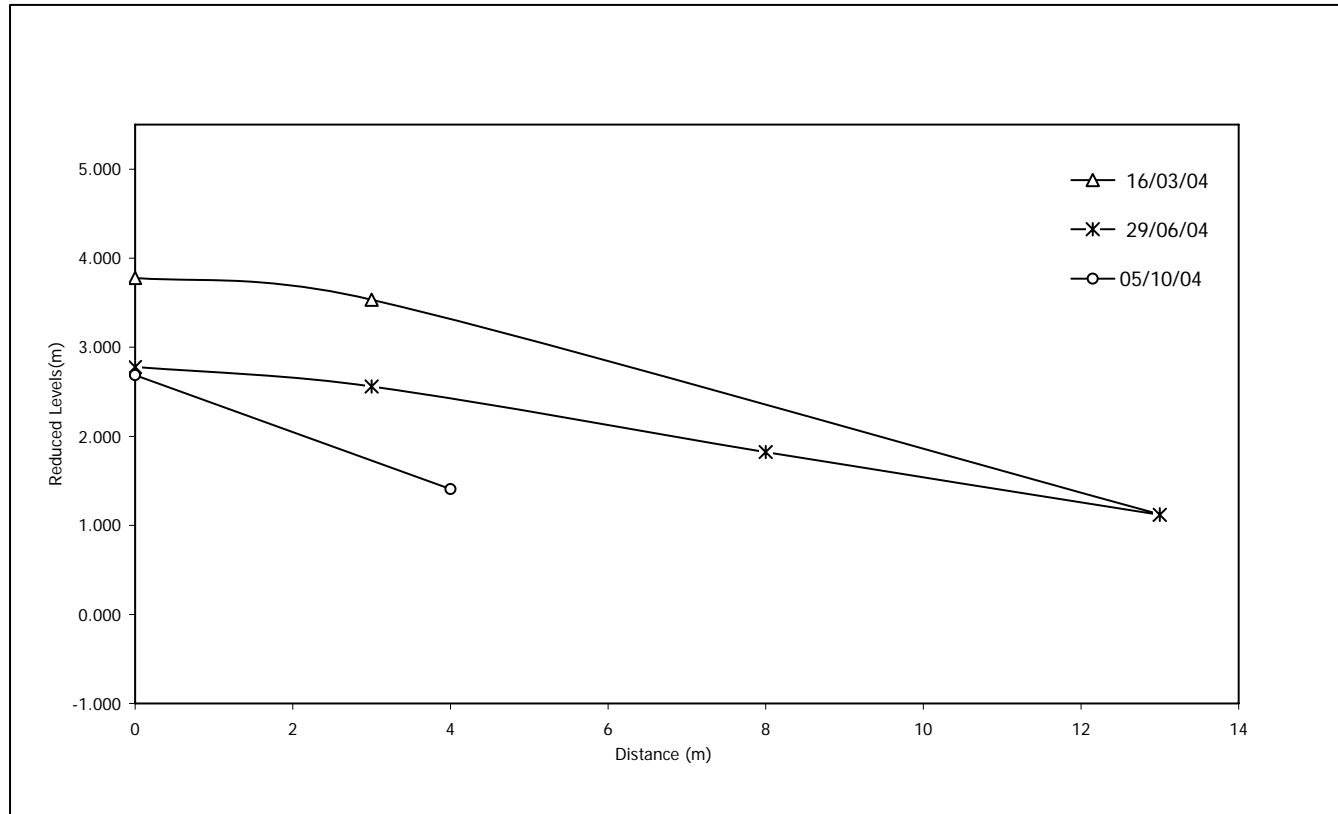


Fig. 2.50 Beach profiles at 400m chainage (Year 2004)

Seasonal beach profile changes at Ullal 400m

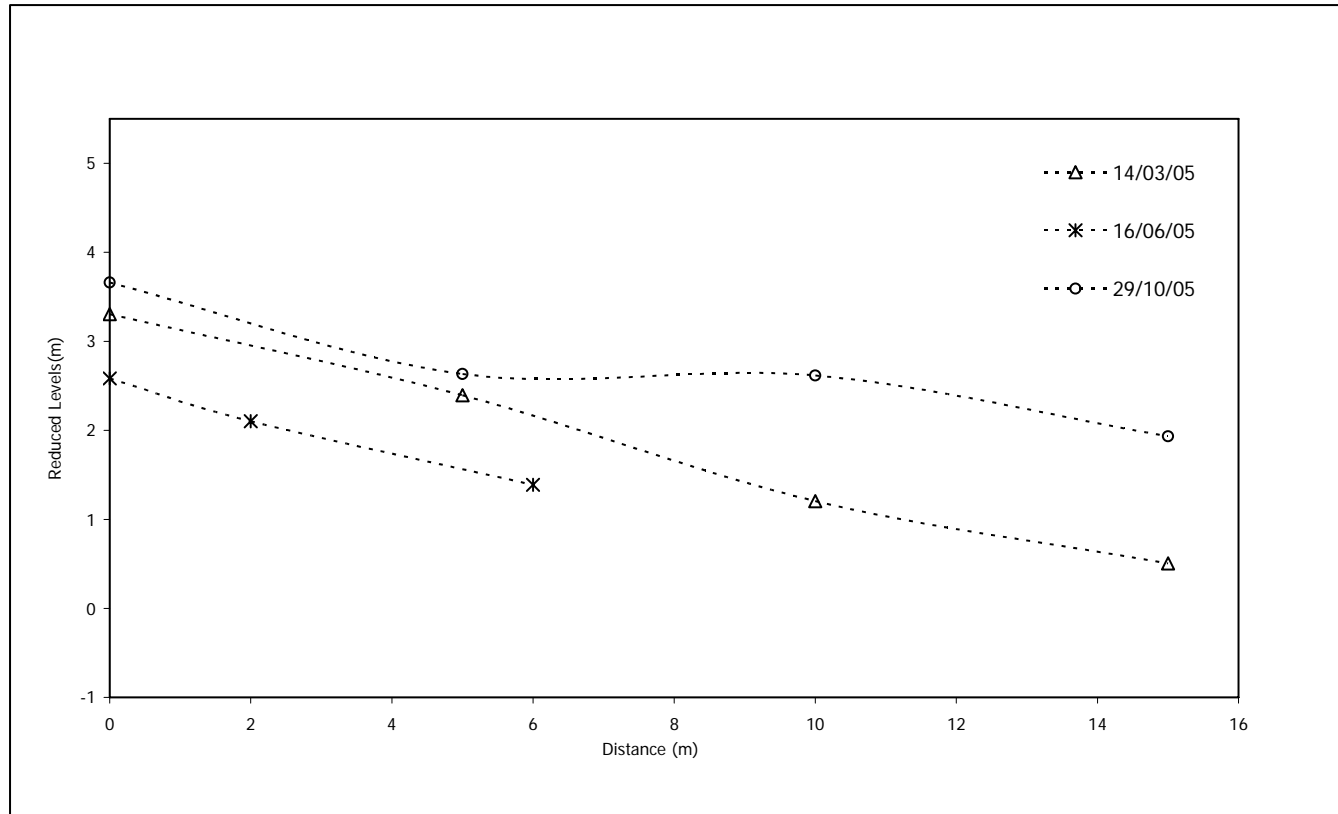


Fig. 2.51 Beach profiles at 400m chainage (Year 2005)

Seasonal beach profile changes at Ullal 400m

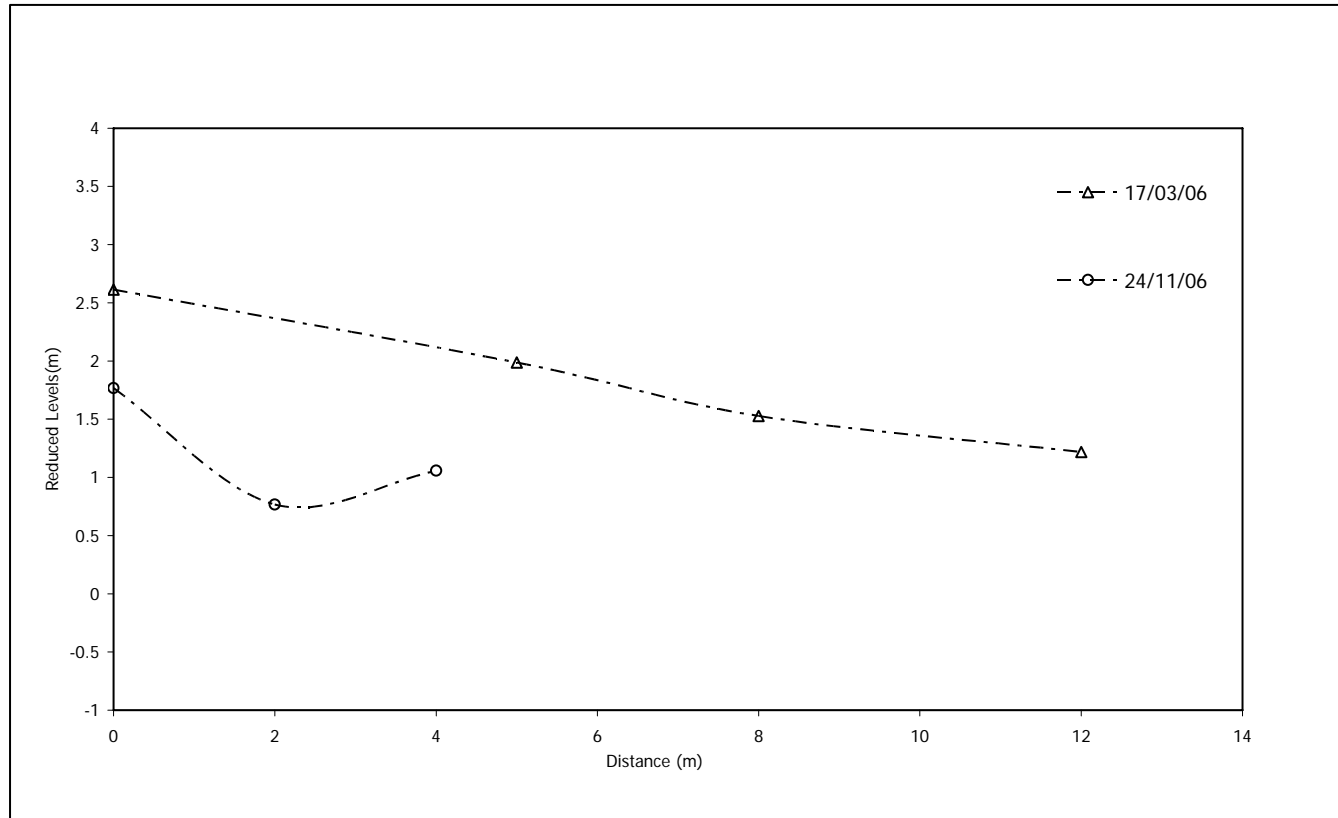


Fig. 2.52 Beach profiles at 400m chainage (Year 2006)

Yearly beach profile changes at Ullal 400m

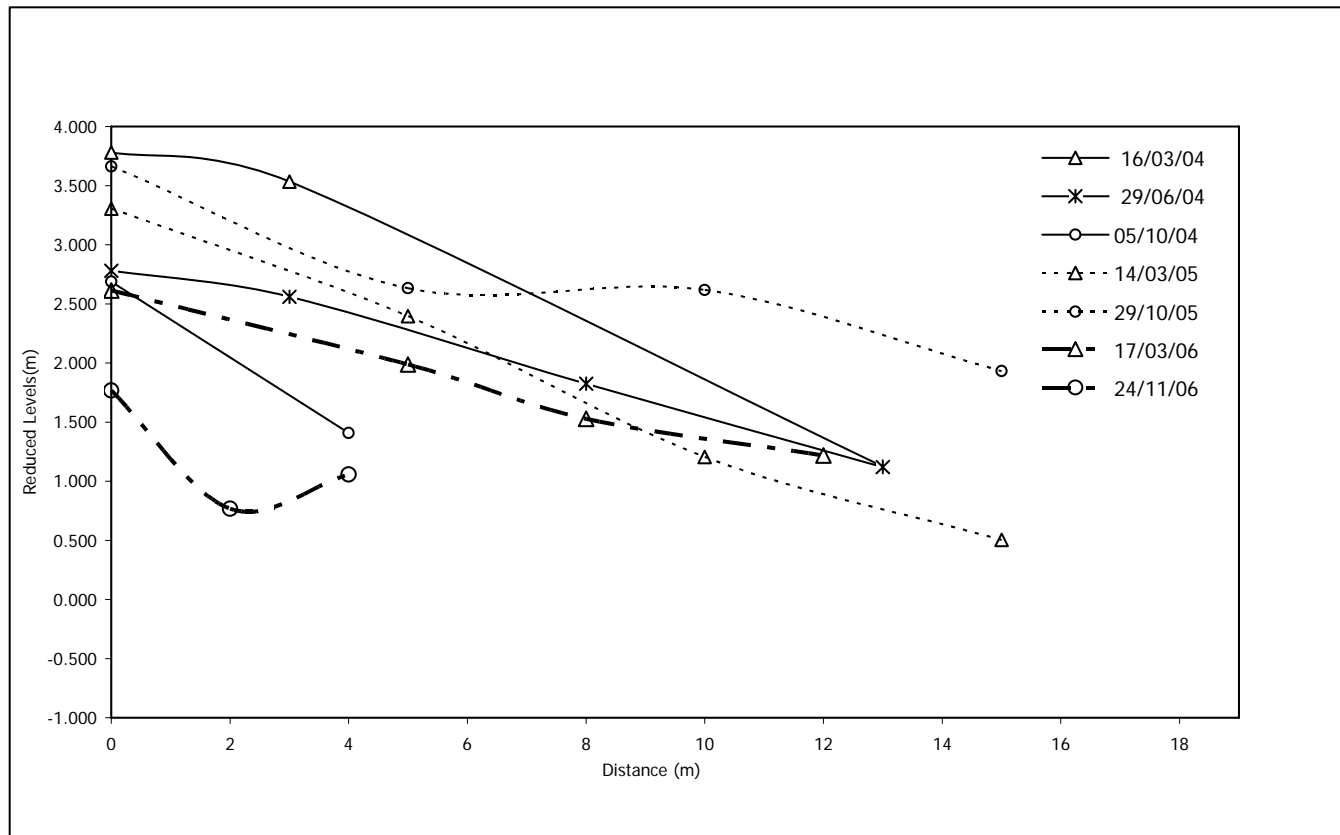


Fig. 2.53 Beach profiles at 400m chainage (From 2004 to 2006)

Reduced levels at Ullal 450m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04	Distance	01/06/04
0	3.889	0	3.649	0	3.749	0	2.229	0	2.689
5	2.349	3	3.714	4	2.564	5	1.394	5	2.664
10	1.319	5	3.014	8	1.824	10	1.371	10	2.709
13	0.799	15	1.029	13	0.919	15	0.499	15	2.024
				18	-0.011			18	1.599

7 th visit		12 th visit		13 th visit		14 th visit		15 th visit	
Distance	29/06/04	Distance	21/09/04	Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
0	2.779	0	3.833	0	3.603	0	2.568	0	2.673
3	2.559	3	2.598	4	2.158	5	1.603	5	1.913
8	1.824					8	0.308	10	0.678
13	1.119								

Note: No data is available for 6th, 8th to 11th visit.

Reduced levels at Ullal 450m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05
0	3.008	0	2.753	0	3.043	0	2.328	0	3.663
5	2.458	5	1.743	5	2.203	3	2.133	3	3.093
10	1.653	10	0.823	10	1.333	8	1.223	5	2.543
15	0.713			13	0.933	12	0.323	10	1.463
								12	0.483

21 st visit		22 nd visit		23 rd visit		24 th visit		25 th visit	
Distance	14/03/05	Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05
0	3.200	0	3.358	0	2.258	0	2.978	0	3.383
5	2.220	5	2.578	5	1.678	5	2.158	5	2.793
10	2.285	10	2.108	10	1.228	10	0.463	10	2.023
14	0.795	15	1.688	15	0.673	14	0.318	13	1.283
		20	1.148						

26 th visit		27 th visit		30 th visit		32 nd visit		34 th visit	
Distance	02/06/05	Distance	16/06/05	Distance	15/07/05	Distance	13/08/05	Distance	16/09/05
0	2.493	0	1.958	0	2.893	0	0.723	0	3.513
5	2.143	5	1.253	5	2.368	5	0.323	5	3.058
9	1.773			10	1.918				
				15	0.993				

Note: No data is available for 28-29th, 31st visit.

Reduced levels at Ullal 50m chainage for the year 2005 (Contd...)

35 th visit		36 th visit		37 th visit		38 th visit		39 th visit		40 th visit	
Distance	30/09/05	Distance	29/10/05	Distance	19/11/05	Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
0	2.633	0	3.668	0	2.613	0	3.573	0	4.753	0	2.778
5	2.423	3	3.038	5	2.003	4	3.148	5	3.893	5	1.958
10	2.098	8	2.673	7	1.313	7	2.563	10	2.833	10	1.318
15	1.208	10	1.748	12	0.613					15	0.838
		13	0.983								

Reduced levels at Ullal 50m chainage for the year 2006

41 st visit		42 nd visit		43 rd visit		44 th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06
0	3.673	0	2.418	0	5.543	0	3.353
5	3.173	5	1.953	5	4.773	5	2.653
10	2.423	10	1.233	10	4.223	10	2.178

45 th visit		46 th visit		47 th visit	
Distance	17/03/06	Distance	04/04/06	Distance	24/11/06
0	2.803	0	3.828	0	2.273
5	2.258	5	1.168	1	0.918
10	1.508	10	0.448	5	0.113
14	1.088				

Seasonal beach profile changes at Ullal 450m

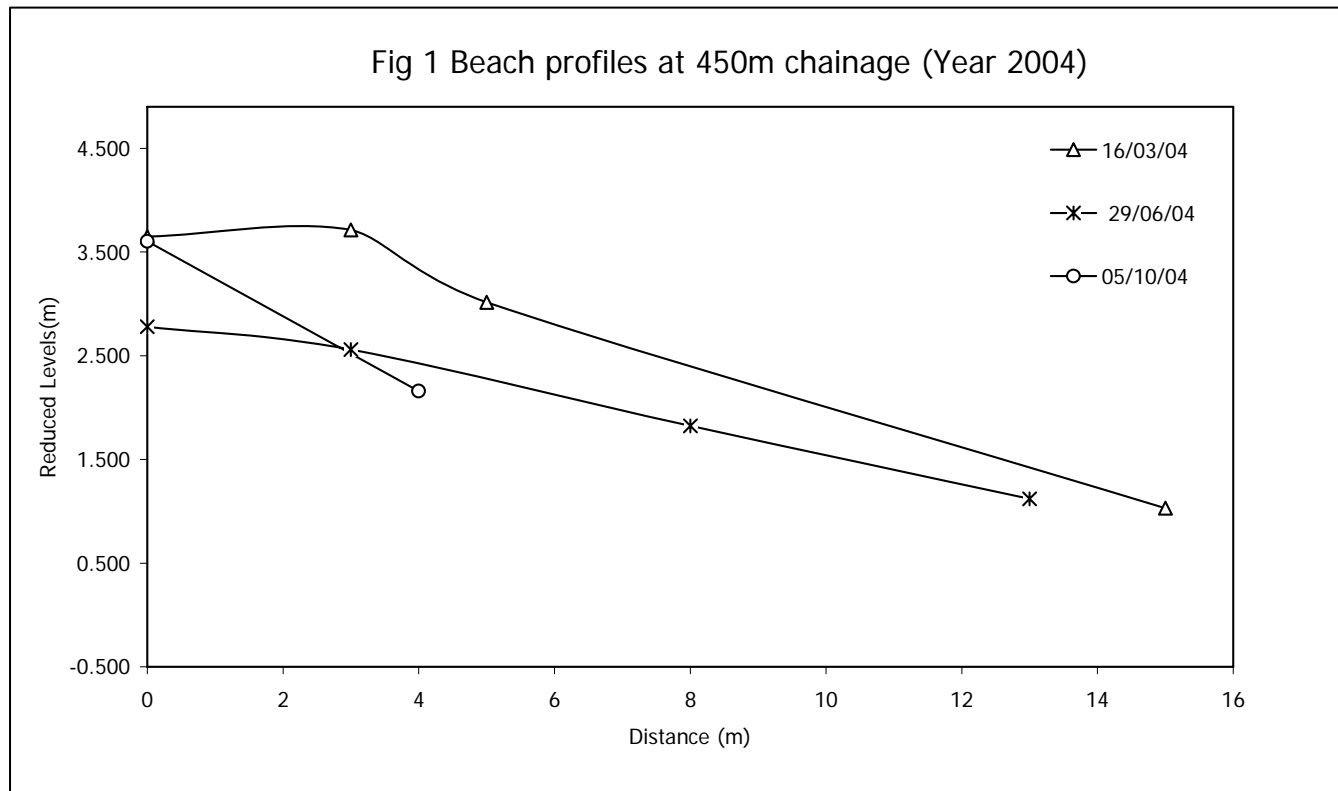


Fig. 2.54 Beach profiles at 450m chainage (Year 2004)

Seasonal beach profile changes at Ullal 450m

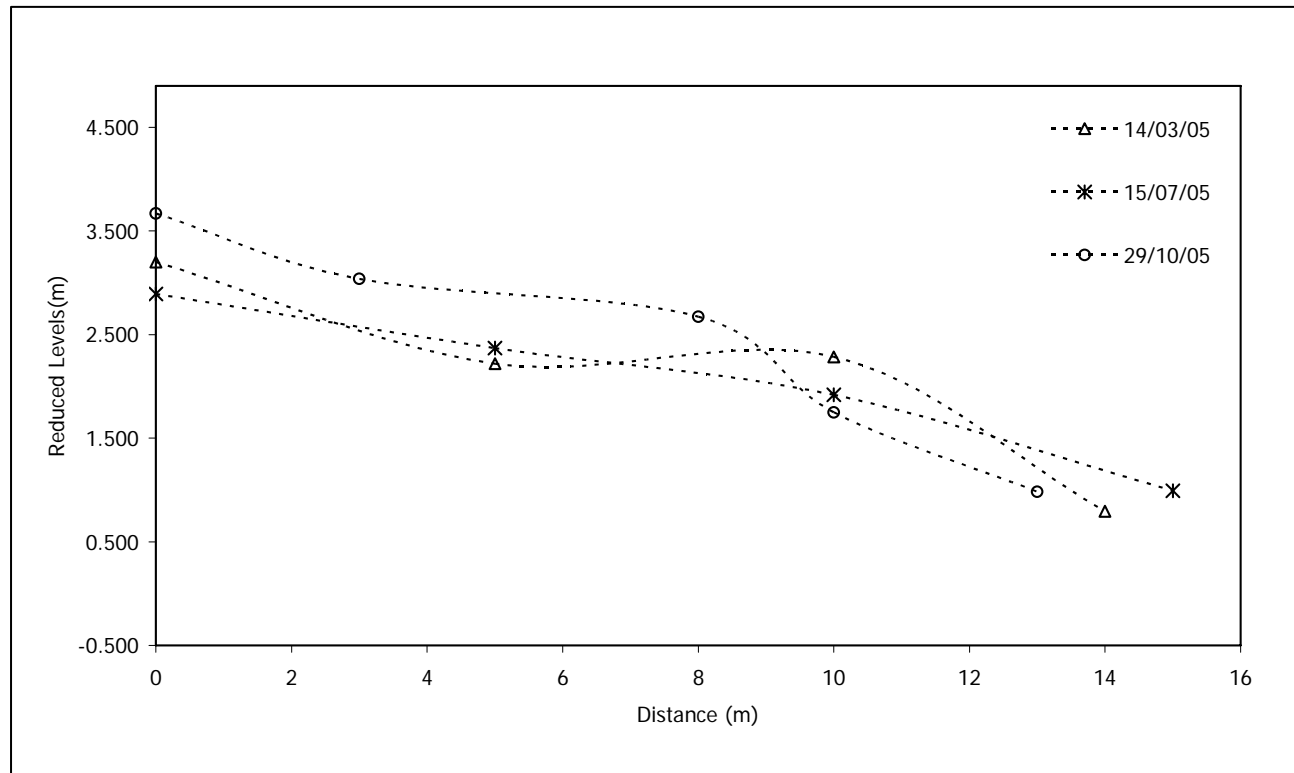


Fig. 2.55 Beach profiles at 450m chainage (Year 2005)

Seasonal beach profile changes at Ullal 450m

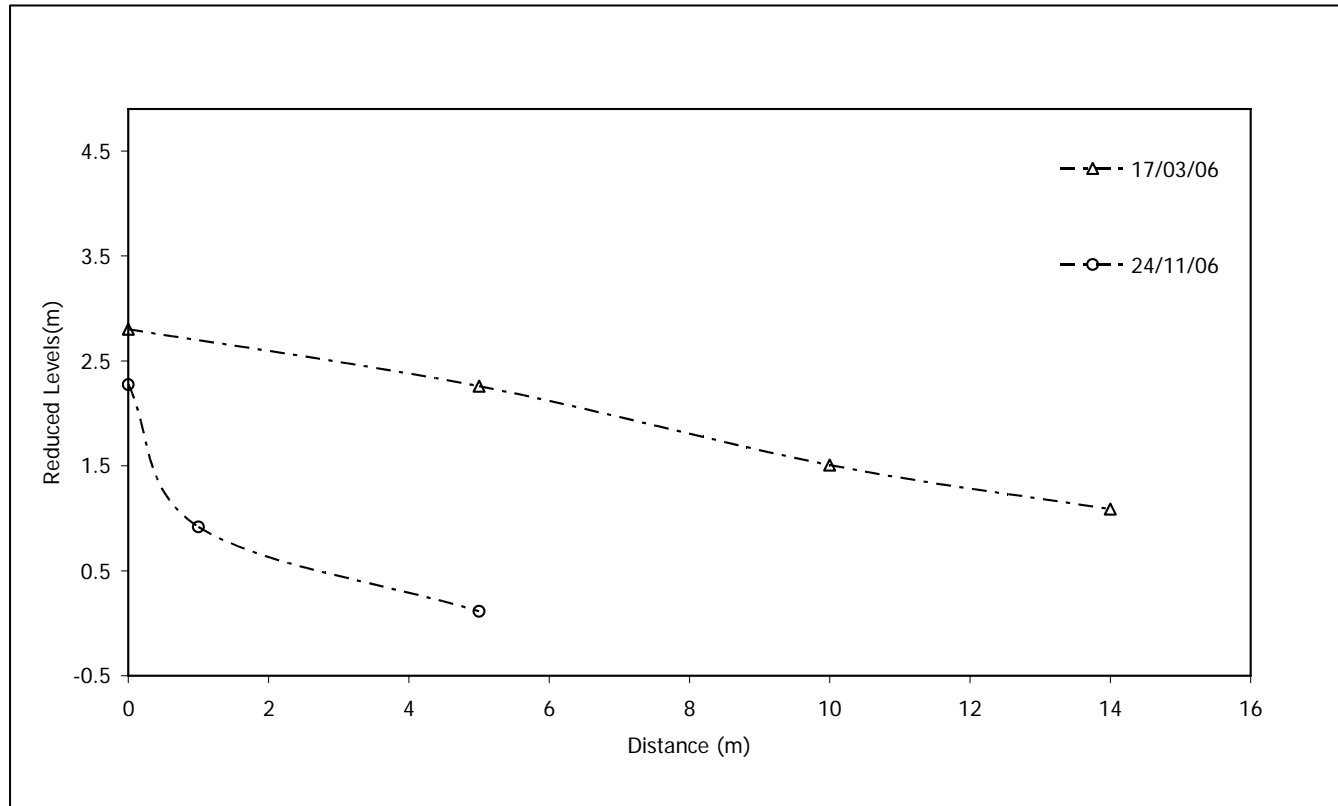


Fig. 2.56 Beach profiles at 450m chainage (Year 2006)

Yearly beach profile changes at Ullal 450m

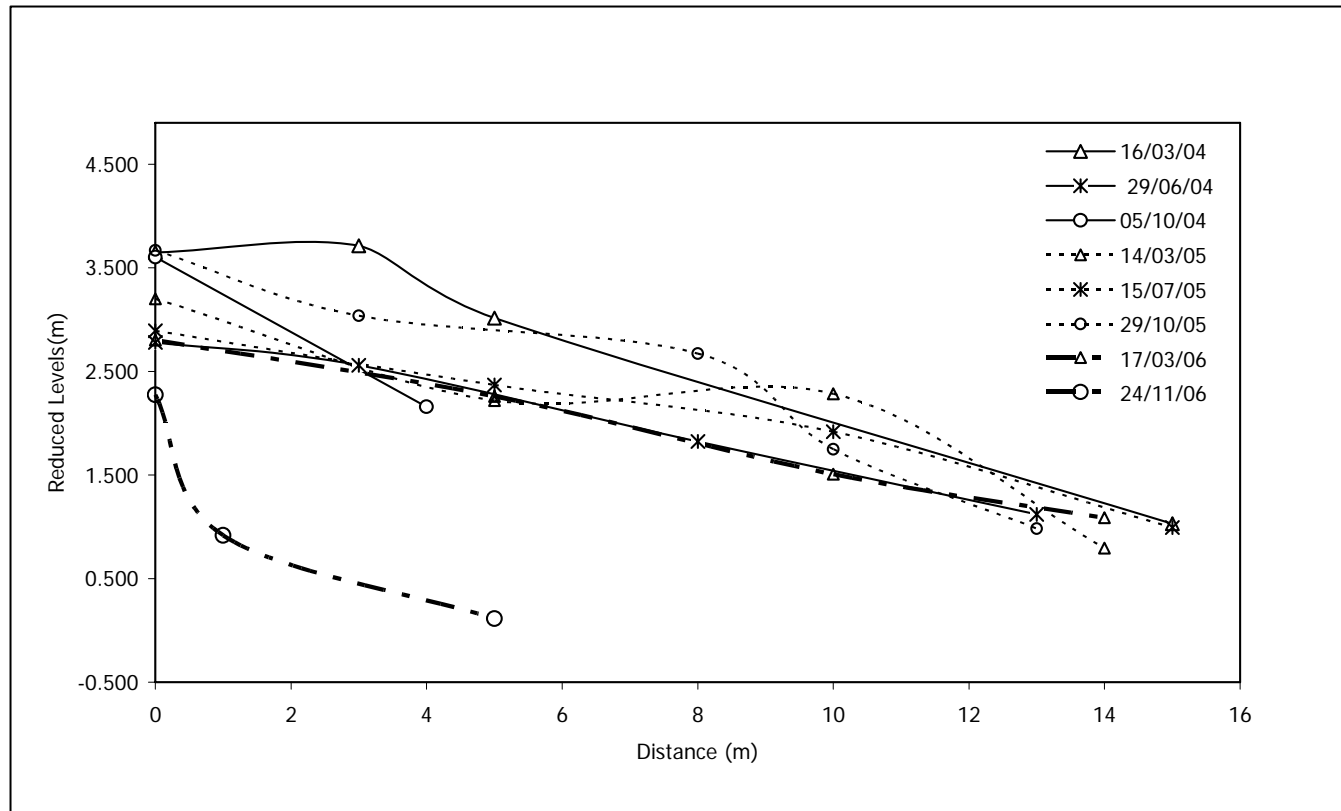


Fig. 2.57 Beach profiles at 450m chainage (From 2004 to 2006)

Reduced levels at Ullal 500m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04	Distance	01/06/04
0	3.804	0	3.804	0	3.649	0	2.469	0	3.129
5	2.504	3	2.504	3	3.364	5	1.969	5	3.154
10	1.379	6	1.379	6	2.229	10	1.829	10	3.144
12	0.914	16	0.914	11	1.154	17	1.459	16	2.444
				16	0.074			19	1.894

7 th visit		12 th visit		13 th visit		14 th visit		15 th visit	
Distance	29/06/04	Distance	21/09/04	Distance	5/10/2004	Distance	3/12/04	Distance	16/12/04
0	2.194	0	3.183	0	2.388	0	2.133	0	2.723
5	1.574	5	2.463	5	2.048	5	1.738	5	2.298
10	0.969					8	1.453	10	1.768

Note: No data is available for 6th, 8th to 11th visit.

Reduced levels at Ullal 500m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit		21 st visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05	Distance	14/03/05
0	2.743	0	2.783	0	2.953	0	2.583	0	3.343	0	2.825
5	2.078	5	1.943	5	1.943	5	1.613	3	2.693	5	1.230
10	1.138	10	1.183	10	1.113	10	0.763	4	2.333	10	1.055
12	0.458			12	0.783	14	0.163	9	1.323		
								11	0.783		

22 nd visit		23 rd visit		24 th visit		25 th visit		26 th visit		27 th visit	
Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05	Distance	02/06/05	Distance	16/06/05
0	3.278	0	2.198	0	2.508	0	3.403	0	2.883	0	2.448
5	2.433	5	1.498	4	1.578	5	2.593	5	2.273	5	1.773
10	1.308	10	0.883			10	1.468				
14	0.788	15	0.388								

30 th visit		32 nd visit		34 th visit		35 th visit		36 th visit		37 th visit	
Distance	15/07/05	Distance	13/08/05	Distance	16/09/05	Distance	30/09/05	Distance	29/10/05	Distance	19/11/05
0	2.513	0	0.638	0	3.583	0	2.448	0	3.123	0	2.293
5	2.133	5	0.188	5	2.963	5	2.223	5	2.558	5	1.778
10	1.538	9	-0.232			10	1.518	10	1.648	10	1.123
15	0.998					15	0.798	15	0.793	15	0.328

Note: No data is available for 28-29th, 31st visit.

Reduced levels at Ullal 500m chainage for the year 2005 (Contd...)

38th visit		39th visit		40th visit	
Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
0	3.163	0	4.263	0	3.098
4	2.853	5	3.173	5	2.588
9	2.498	10	2.993	10	1.938
		15	2.293	15	1.178

Reduced levels at Ullal 500m chainage for the year 2006

41 st visit		42 nd visit		43 rd visit		44 th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06
0	3.553	0	2.653	0	2.483	0	3.563
5	3.058	5	2.053	5	2.113	5	2.863
10	2.568	10	1.513	10	1.773	10	2.383
				15	1.373	15	1.848

45 th visit		46 th visit		47 th visit	
Distance	17/03/06	Distance	04/04/06	Distance	24/11/06
0	2.623	0	2.048	0	2.938
5	1.978	5	1.123	1	1.203
10	1.338	10	0.473		

Seasonal beach profile changes at Ullal 500m

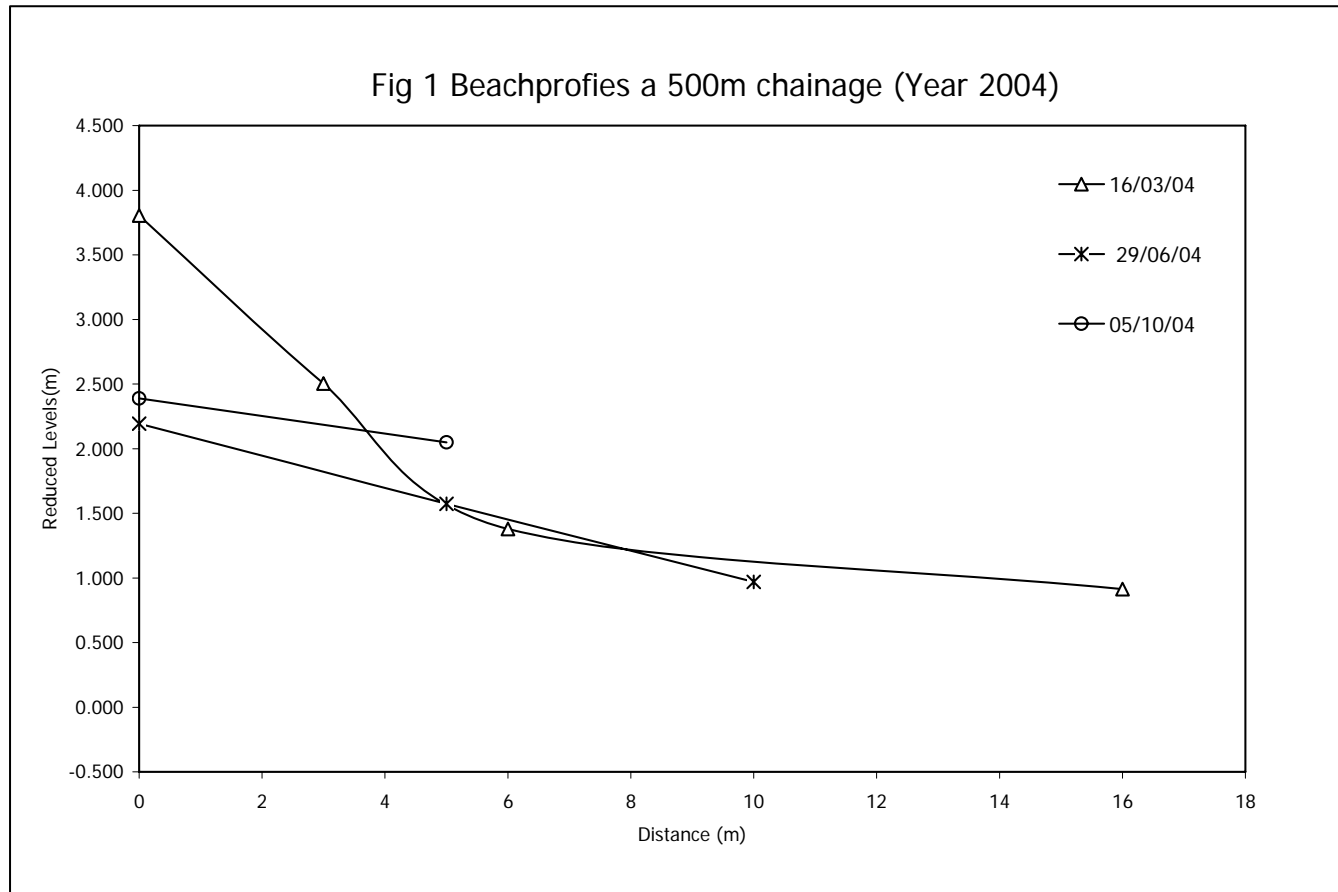


Fig. 2.58 Beach profiles at 500m chainage (Year 2005)

Seasonal beach profile changes at Ullal 500m

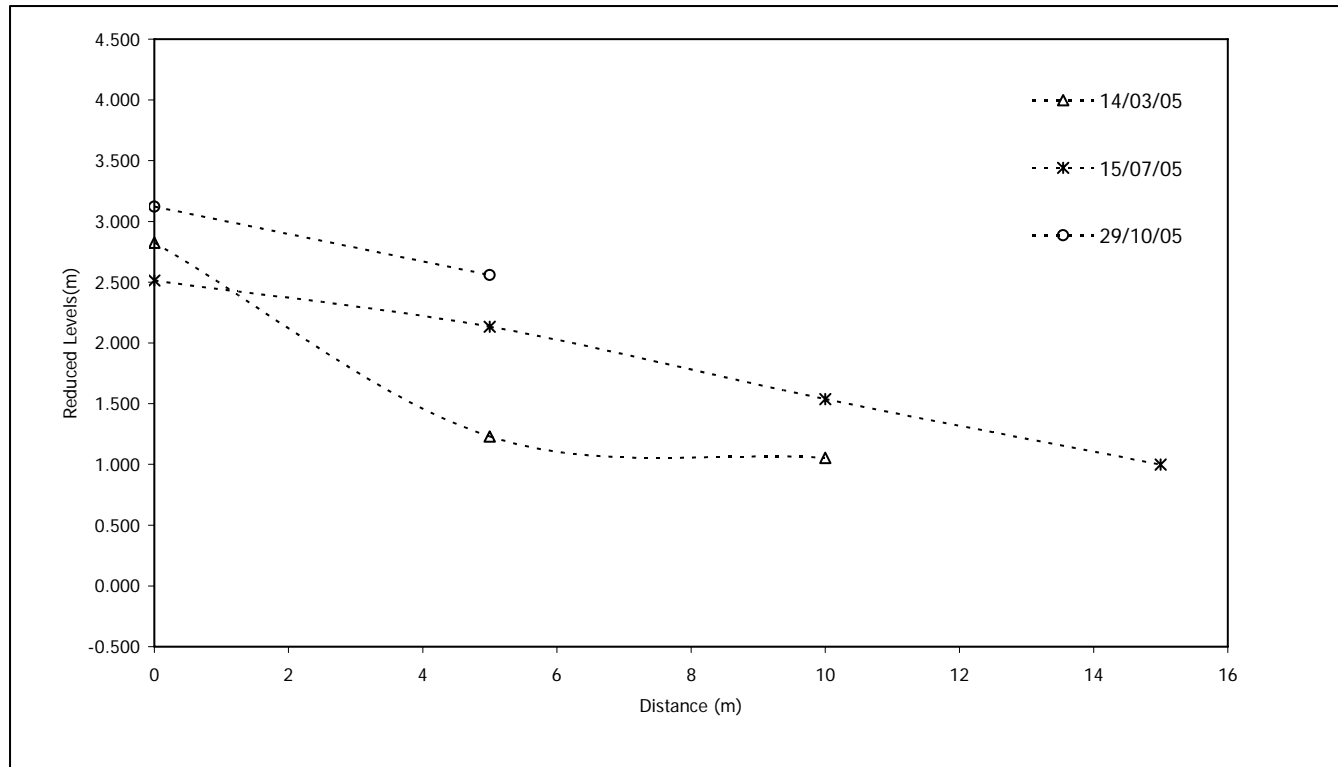


Fig. 2.59 Beach profiles at 500m chainage (Year 2005)

Seasonal beach profile changes at Ullal 500m

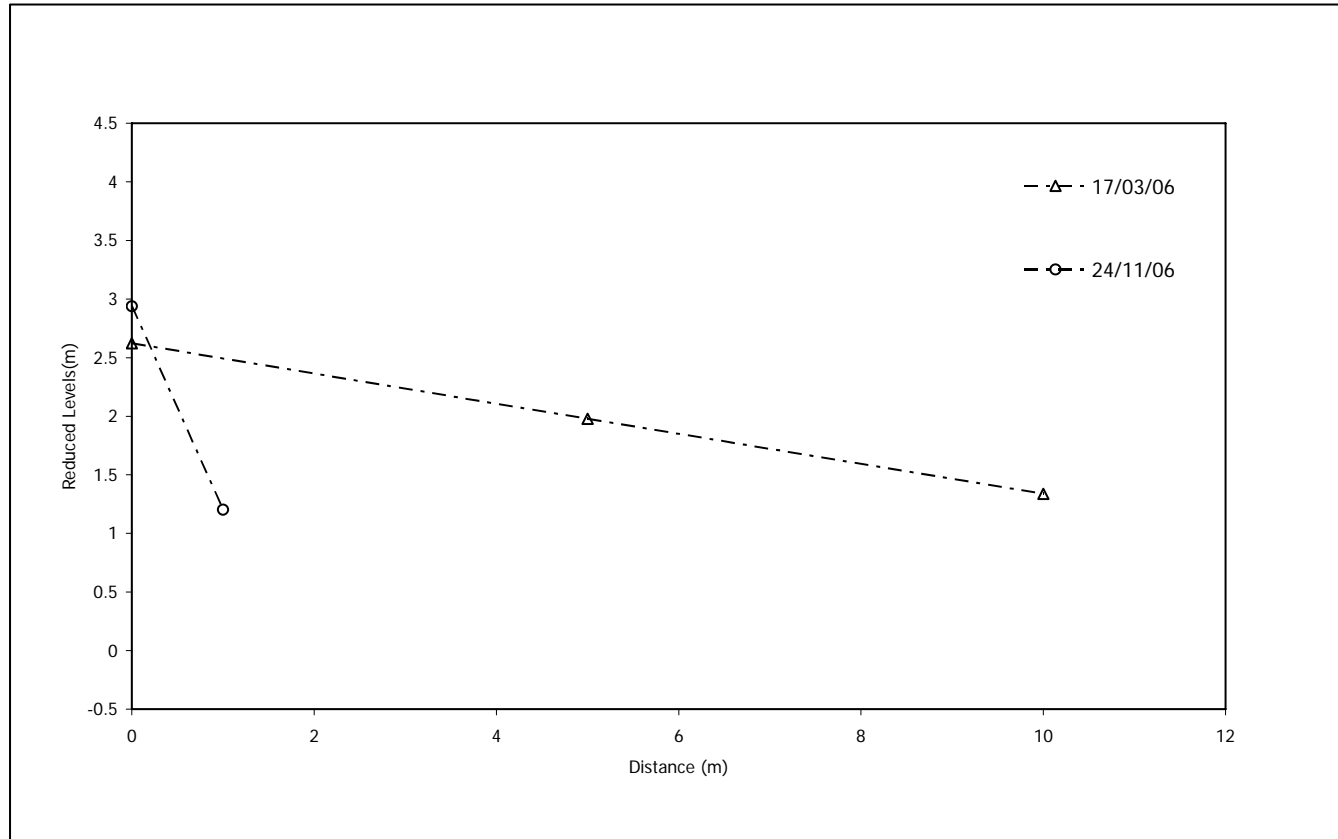


Fig. 2.60 Beach profiles at 500m chainage (Year 2006)

Yearly beach profile changes at Ullal 500m

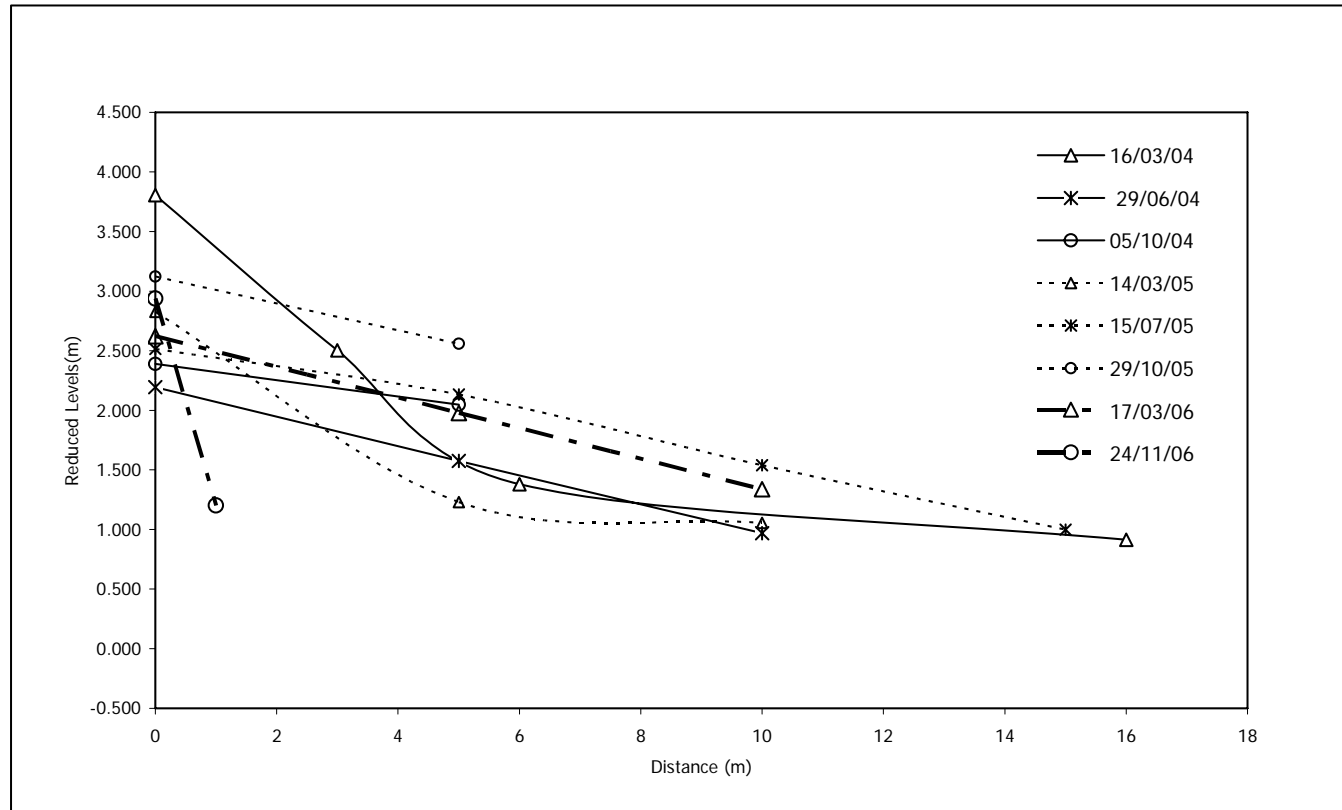


Fig. 2.61 Beach profiles at 500m chainage (From 2004 to 2006)

Reduced levels at Ullal 550m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04	Distance	01/06/04
0	3.799	0	3.814	0	3.709	0	1.564	0	2.549
5	2.439	2	3.594	2	3.519	6	1.334	5	2.534
10	1.209	9	1.784	6	2.264	12	1.119	10	2.229
		14	0.799	11	1.174	18	0.834	16	1.659
				15	1.324			18	1.114

7 th visit		12 th visit		13 th visit		14 th visit		15 th visit	
Distance	29/06/04	Distance	21/09/04	Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
0	2.484	0	3.248	0	2.998	0	2.183	0	2.648
3	2.234	1	2.813	3	2.563	5	1.118	5	1.685
9	1.359								

Note: No data is available for 6th, 8th to 11th visit.

Reduced levels at Ullal 550m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit		21 st visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05	Distance	14/03/05
0	2.388	0	2.233	0	2.863	0	1.713	0	3.238	0	2.825
5	1.398	5	1.103	5	1.948	5	0.673	5	2.158	5	1.670
9	0.598	6	0.783	10	1.093	8	0.168	10	1.243	10	0.880

22 nd visit		23 rd visit		24 th visit		25 th visit		26 th visit		27 th visit	
Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05	Distance	02/06/05	Distance	16/06/05
0	3.328	0	2.318	0	2.153	0	2.983	0	2.853	0	2.343
5	1.938	5	1.448	4	1.543	5	1.878	4	2.243	4	1.913
10	0.973	10	0.618	8	1.028	10	0.883				
13	0.468										

30 th visit		36 th visit		37 th visit		38 th visit		39 th visit		40 th visit	
Distance	15/07/05	Distance	29/10/05	Distance	19/11/05	Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
0	2.703	0	3.363	0	2.383	0	3.558	0	3.973	0	2.293
5	1.923	5	2.708	5	2.043	5	3.158	5	3.403	4	1.953
10	1.453	10	2.283	7	1.353	8	2.798	10	2.733	9	1.393
				12	0.773					14	1.143

Note: No data is available for 28-29th, 31st visit.

Reduced levels at Ullal 550m chainage for the year 2006

41 st visit		42 nd visit		43 rd visit		44 th visit		45 th visit		46 th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06	Distance	17/03/06	Distance	04/04/06
0	3.853	0	2.983	0	2.993	0	3.918	0	2.818	0	2.803
5	3.163	5	2.483	5	2.438	5	3.093	3	2.408	5	1.633
10	2.653	10	1.723	10	1.813	9	2.403	7	1.858	10	0.778
				15	1.333	14	2.083	11	1.158		

Note: No data is available for 47th visit.

Seasonal beach profile changes at Ullal 550m

Fig 1 Beach profiles at 550m chainage (Year 2004)

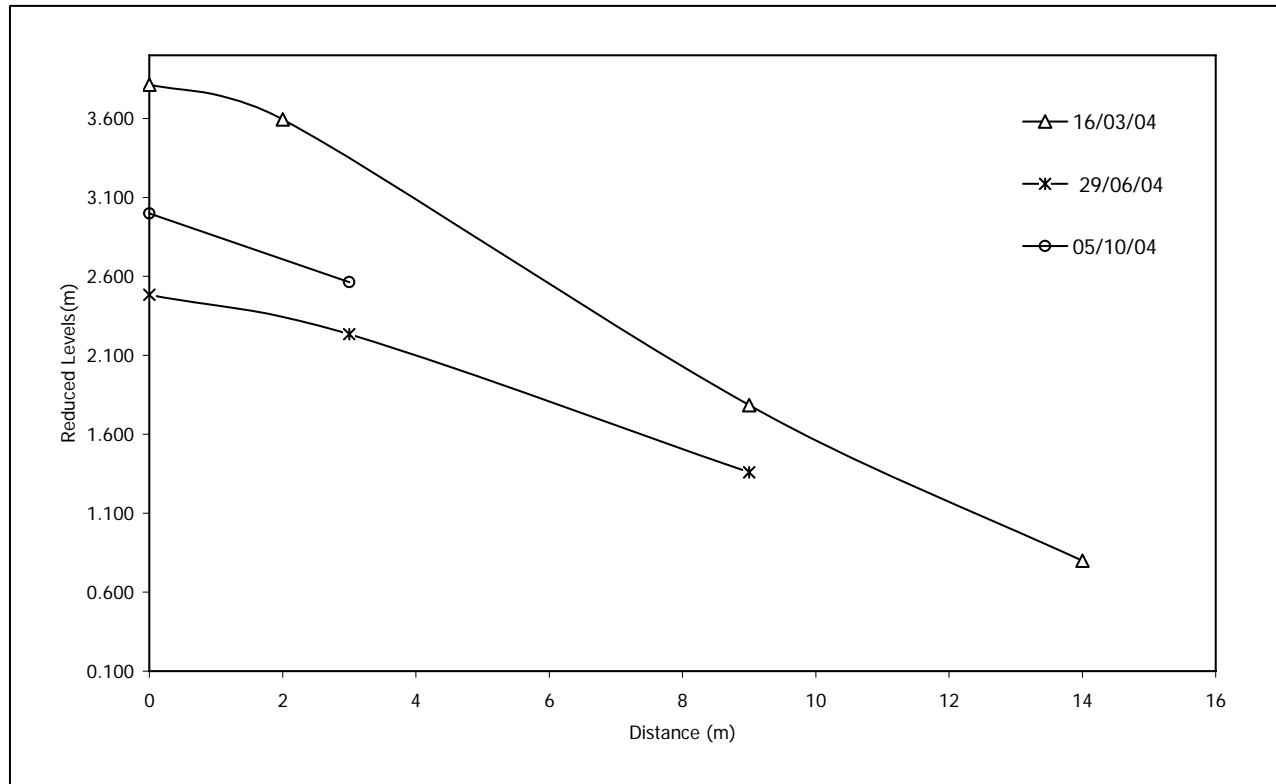


Fig. 2.62 Beach profiles at 550m chainage (Year 2005)

Seasonal beach profile changes at Ullal 550m

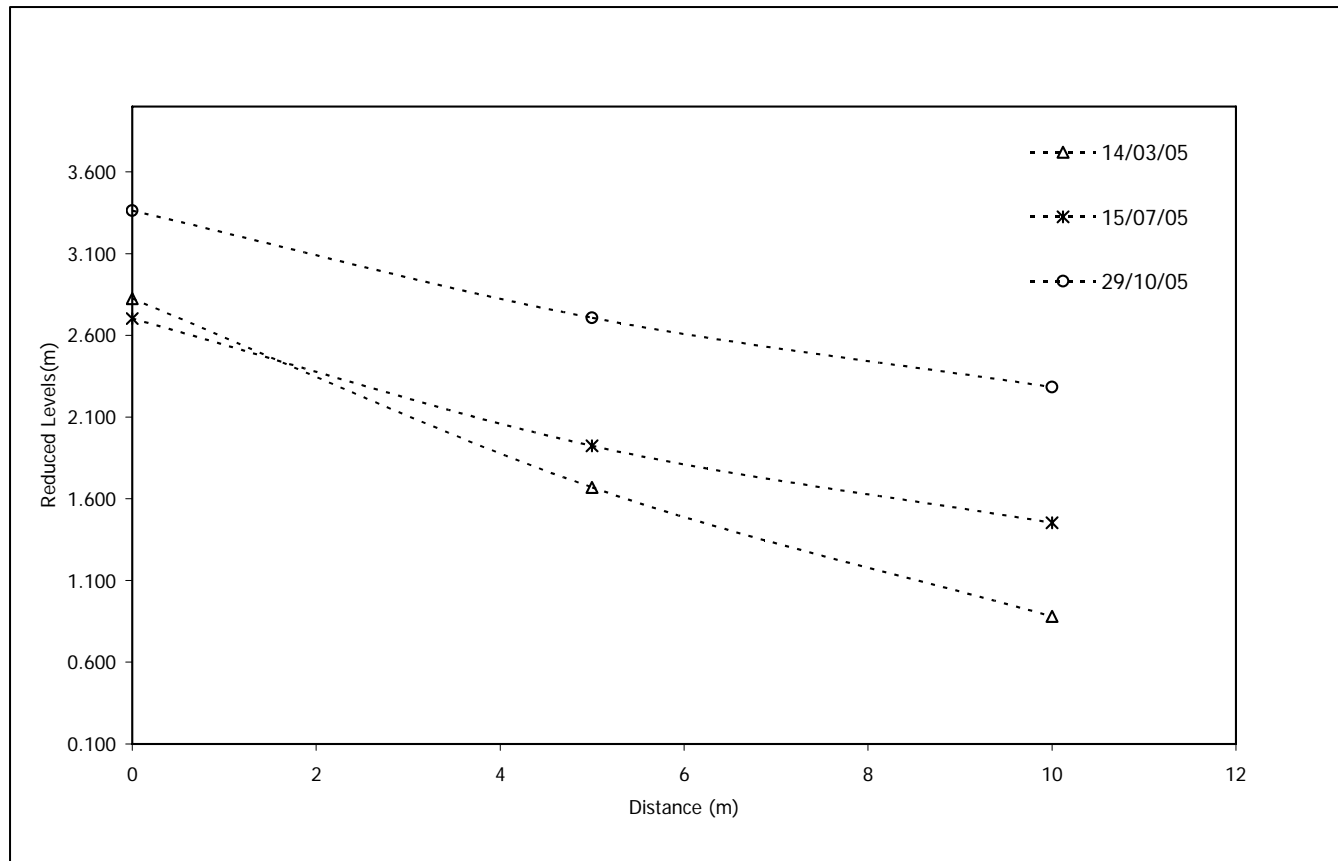


Fig. 2.63 Beach profiles at 550m chainage (Year 2005)

Yearly beach profile changes at Ullal 550m

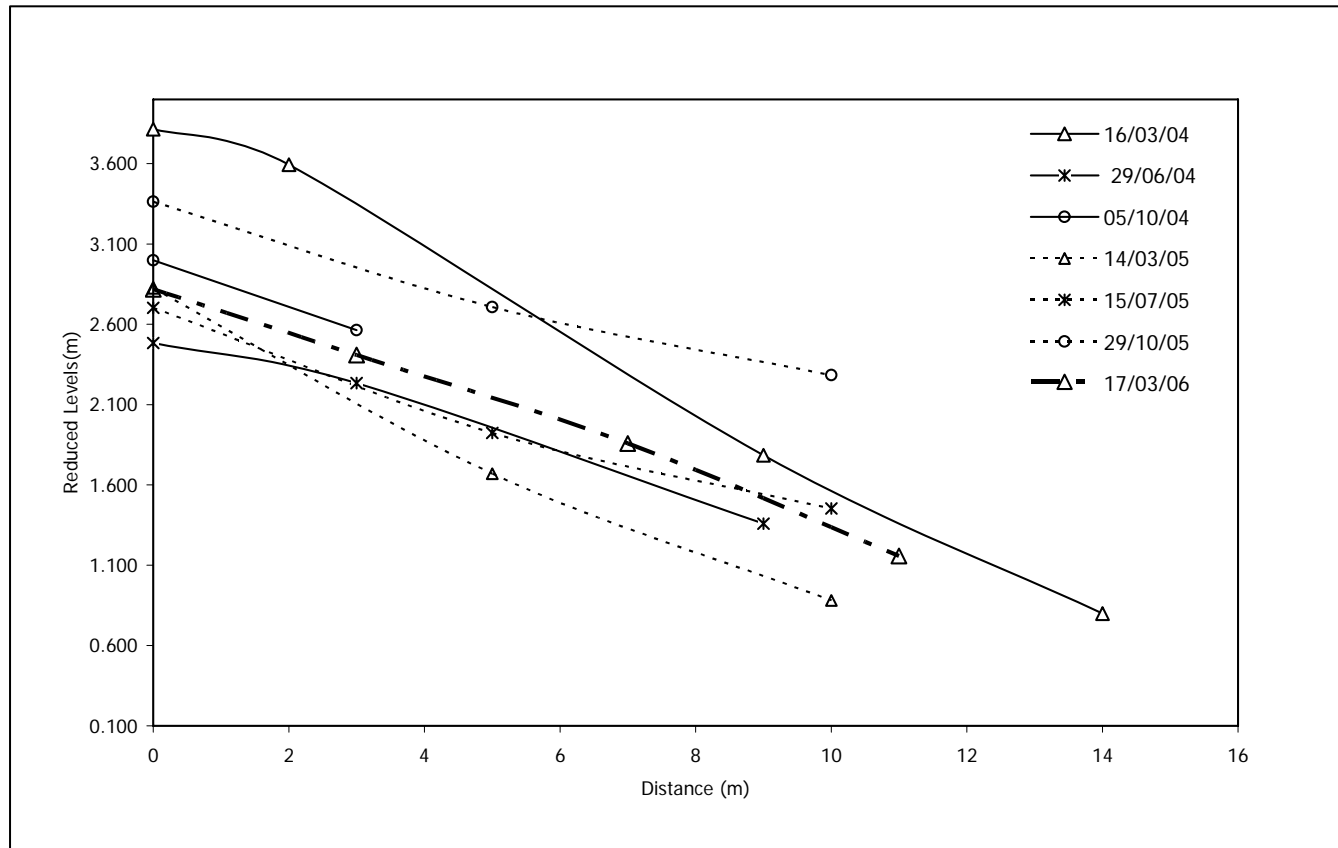


Fig. 2.64 Beach profiles at 550m chainage (From 2004 to 2006)

Reduced levels at Ullal 600m chainage for the year 2004

1st visit		2nd visit		3rd visit		4th visit		5th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04	Distance	01/06/04
0	3.939	0	3.939	0	3.899	0	2.264	0	2.994
5	3.094	2	4.004	4	3.164	5	1.884	5	2.779
10	2.214	4	3.109	9	2.179	10	2.084	11	2.469
13	1.544	14	0.944	13	1.119	16	1.844	16	2.094
				17	0.419	19	1.094	19	1.734

7th visit		12th visit		13th visit		14th visit		15th visit	
Distance	29/06/04	Distance	21/09/04	Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
0	1.509	0	3.168	0	2.298	0	2.683	0	3.083
5	0.869	2	1.578	2	1.903	5	2.123	5	1.653

Note: No data is available for 6th, 8th to 11th visit.

Reduced levels at Ullal 600m chainage for the year 2005

Year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05
0	1.863	0	1.843	0	3.133	0	1.933	0	2.963
5	1.003	5	0.823	2	2.583	5	0.703	5	1.963
9	0.168			7	1.093	7	0.223	7	1.443

21 st visit		22 nd visit		23 rd visit		24 th visit		25 th visit	
Distance	14/03/05	Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05
0	1.770	0	3.278	0	2.168	0	2.178	0	2.508
5	0.960	5	2.433	5	1.298	4	1.443	5	1.613
8	0.490	10	1.308	10	0.548	8	0.638	10	0.743
		14	0.788						

26 th visit		27 th visit		30 th visit		32 nd visit	
Distance	02/06/05	Distance	16/06/05	Distance	15/07/05	Distance	13/08/05
0	2.918	0	2.563	0	2.318	0	0.298
5	2.198	2	2.363	5	1.408	5	-0.192
				10	0.803		

Note: No data is available for 28-29th, 31st visit.

Reduced levels at Ullal 600m chainage for the year 2005 (Contd...)

34rth visit		35th visit		36th visit		37th visit	
Distance	16/09/05	Distance	30/09/05	Distance	29/10/05	Distance	19/11/05
0	3.478	0	2.308	0	3.358	0	1.598
5	2.798	5	1.998	5	2.788	5	0.768
		10	1.483	10	2.148	10	0.103
				15	1.503		

38th visit		39th visit		40th visit	
Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
0	3.758	0	3.963	0	2.283
5	3.268	5	3.503	4	1.783
10	2.723	10	2.353	8	1.233
				12	0.908

Reduced levels at Ullal 600m chainage for the year 2006

41 st visit		42 nd visit		43 rd visit		44 th visit		45 th visit		46 th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06	Distance	17/03/06	Distance	04/04/06
0	3.728	0	3.093	0	2.863	0	3.333	0	2.978	0	1.963
5	3.183	5	2.633	5	2.303	5	2.713	3	2.038	5	1.033
10	2.638	8	1.963	10	1.773	10	2.203	7	1.448	7	0.368
								11	0.928		

Note: No data is available for 47th visit.

Seasonal beach profile changes at Ullal 600m

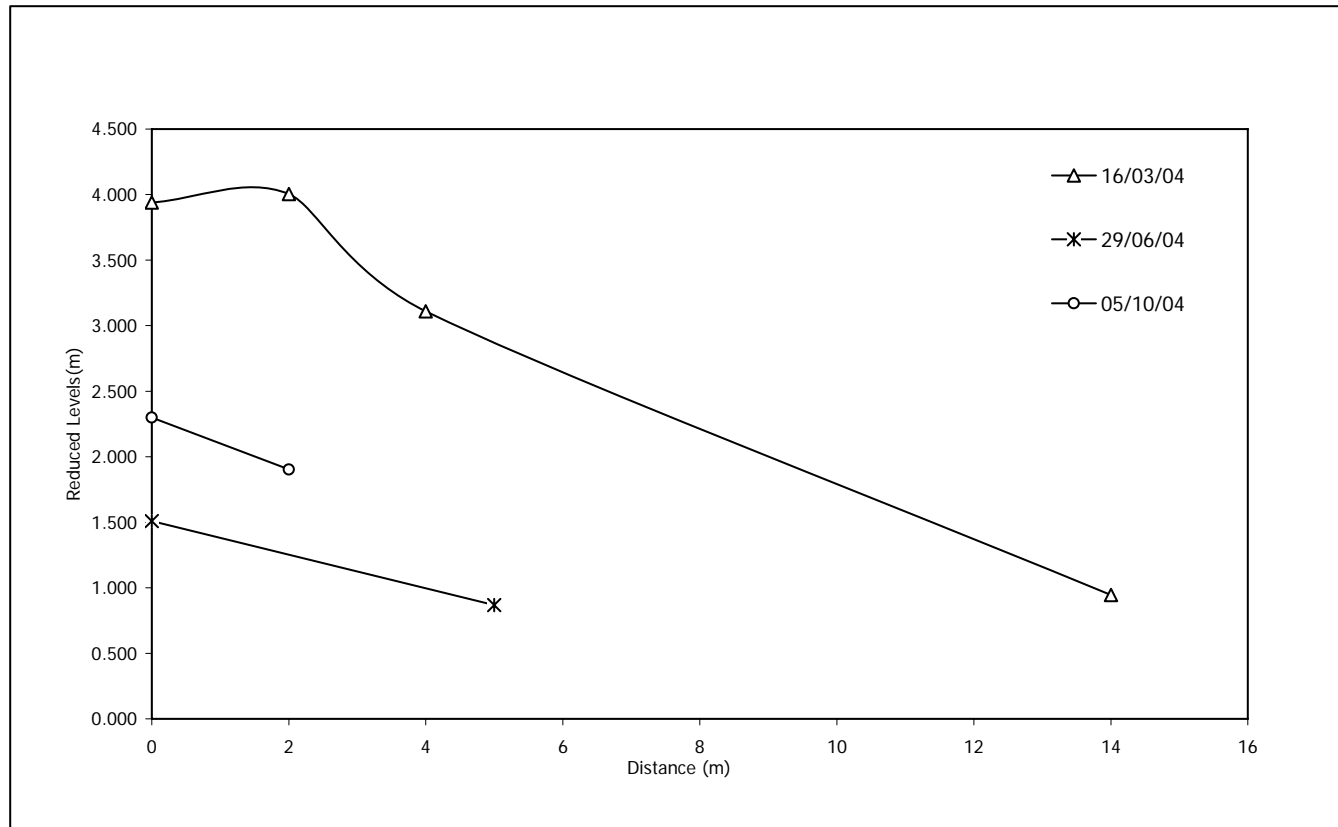


Fig. 2.65 Beach profiles at 600m chainage (Year 2005)

Seasonal beach profile changes at Ullal 600m

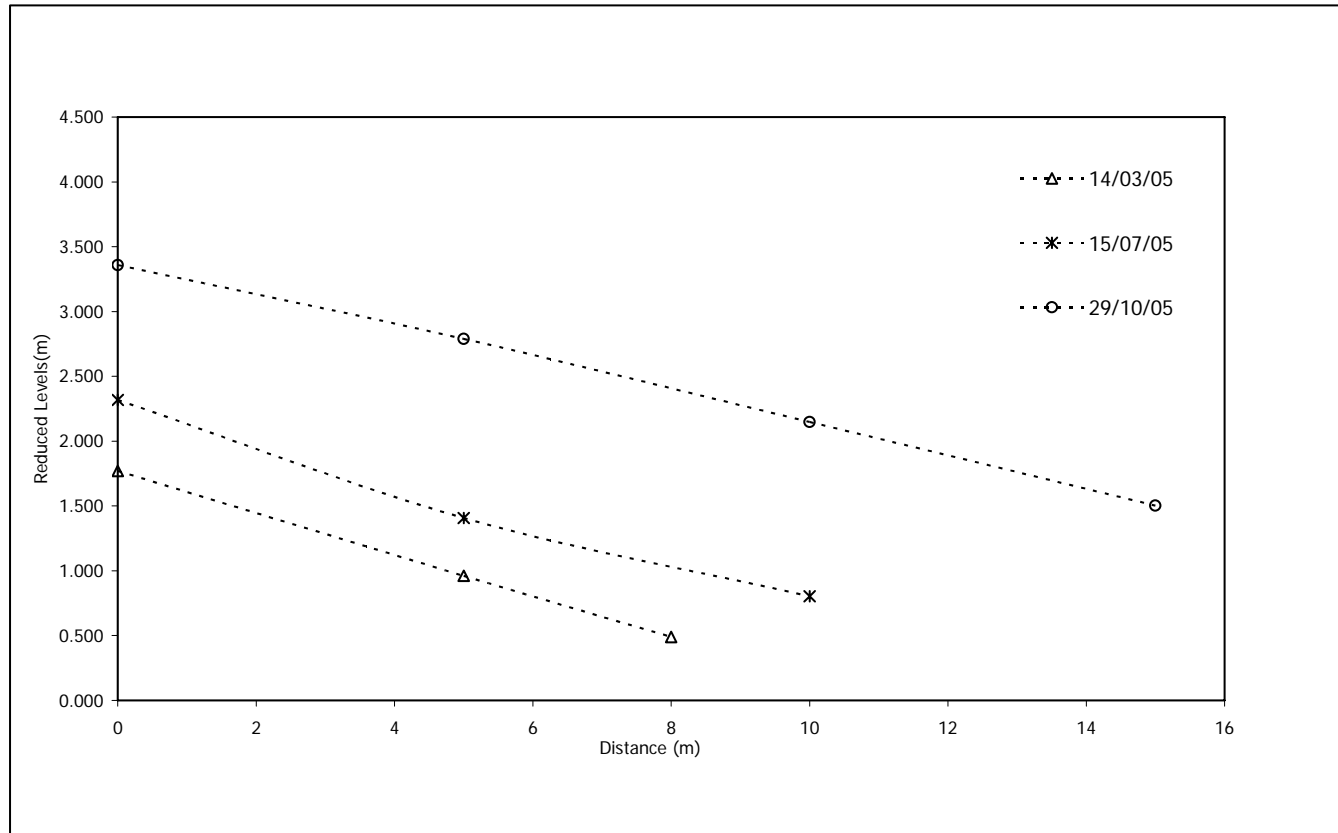


Fig. 2.66 Beach profiles at 600m chainage (Year 2005)

Yearly beach profile changes at Ullal 600m

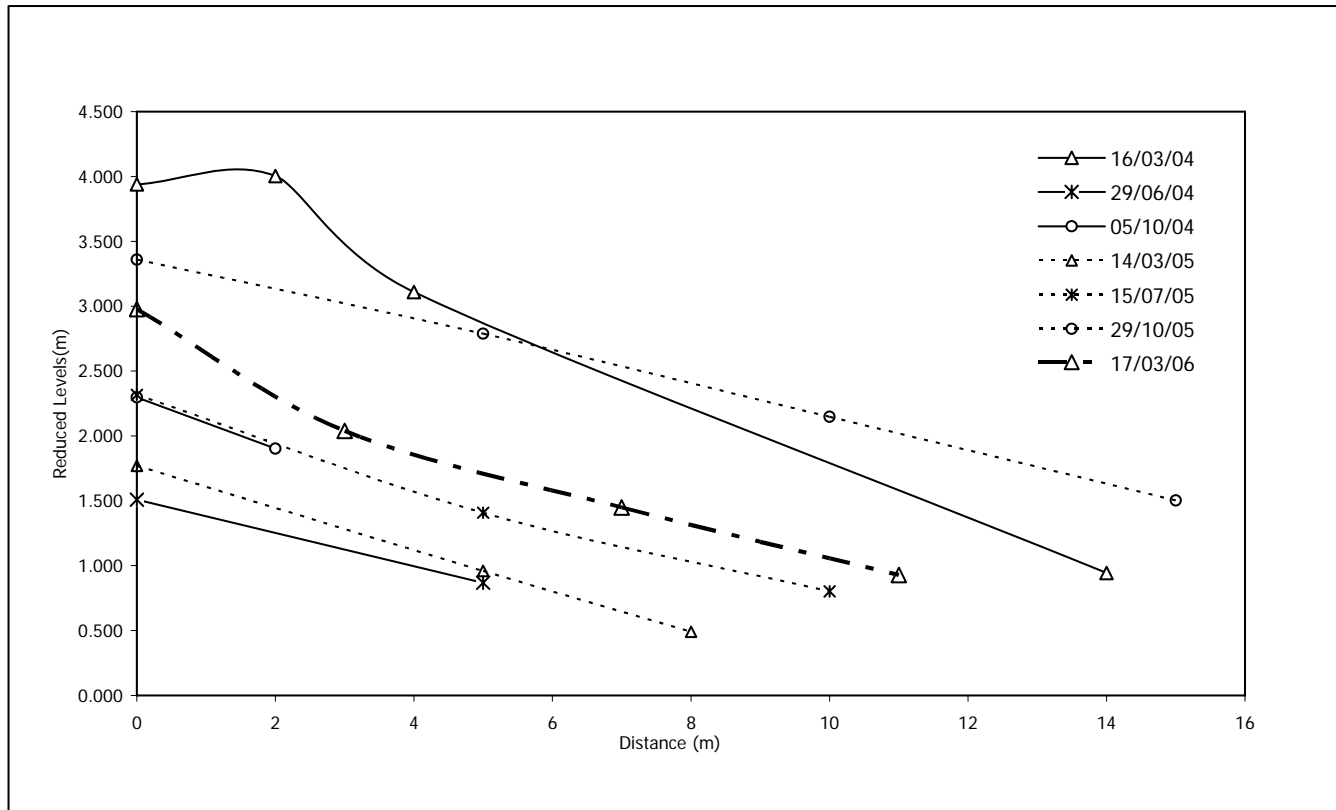


Fig. 2.67 Beach profiles at 600m chainage (From 2004 to 2006)

Reduced levels at Ullal 650m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04	Distance	01/06/04
0	3.949	0	4.214	0	3.994	0	2.074	0	3.539
5	2.994	2	3.199	2	3.629	5	1.399	5	2.964
10	2.199	6	2.594	5	2.929	10	1.254	10	2.684
14	1.374	16	0.759	10	2.134	16	0.979	15	2.299
				20	0.454	21	0.544	20	1.839

7 th visit		12 th visit		13 th visit		14 th visit		15 th visit	
Distance	29/06/04	Distance	21/09/04	Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
0	0.934	0	2.718	0	2.313	0	3.813	0	3.793
5	0.144	3	0.713	3	1.368	5	2.933	5	3.288
						8	2.323	10	2.993

Note: No data is available for 6th, 8th to 11th visit.

Reduced levels at Ullal 650m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05
0	1.813	0	1.723	0	3.693	0	2.163	0	2.453
5	1.593	4	0.783	2	3.353	5	1.023	5	1.578
9	0.663			5	2.303	7	0.583	10	0.773
				10	1.203				

21 st visit		22 nd visit		23 rd visit		24 th visit		25 th visit	
Distance	14/03/05	Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05
0	1.925	0	3.358	0	1.618	0	2.323	0	2.338
5	1.245	5	2.578	5	0.863	4	1.693	5	1.558
7	0.865	10	2.108	10	0.163	8	0.978	10	0.783
		15	1.688						
		20	1.148						

26 th visit		27 th visit		30 th visit		32 nd visit		34 th visit	
Distance	02/06/05	Distance	16/06/05	Distance	15/07/05	Distance	13/08/05	Distance	16/09/05
0	2.643	0	3.063	0	3.058	0	1.363	0	3.843
5	2.188	5	2.498	10	1.678	5	0.808	4	3.108
		9	2.123	15	1.078				

Note: No data is available for 28-29th, 31st visit.

Reduced levels at Ullal 650m chainage for the year 2005 (Contd...)

35th visit		36th visit		37th visit		38th visit		39th visit		40th visit	
Distance	30/09/05	Distance	29/10/05	Distance	19/11/05	Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
0	2.828	0	1.928	0	2.443	0	3.393	0	3.853	0	3.188
5	2.478	5	1.243	1	1.633	5	2.893	5	3.553	4	2.348
10	2.043	10	0.773	6	0.548	9	2.508	7	2.963	8	2.053
15	1.493			11	-0.107			9	2.353	12	1.658

Reduced levels at Ullal 650m chainage for the year 2006

41 st visit		42 nd visit		43 rd visit		44 th visit		45 th visit		46 th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06	Distance	17/03/06	Distance	04/04/06
0	3.693	0	2.498	0	2.993	0	3.258	0	3.378	0	1.258
5	2.968	4	1.963	5	2.438	4	2.738	3	2.528	5	0.613
8	2.363	9	1.643	10	1.813	9	2.288	6	1.708		
				15	1.333			9	1.098		

Note: No data is available for 47th visit.

Seasonal beach profile changes at Ullal 650m

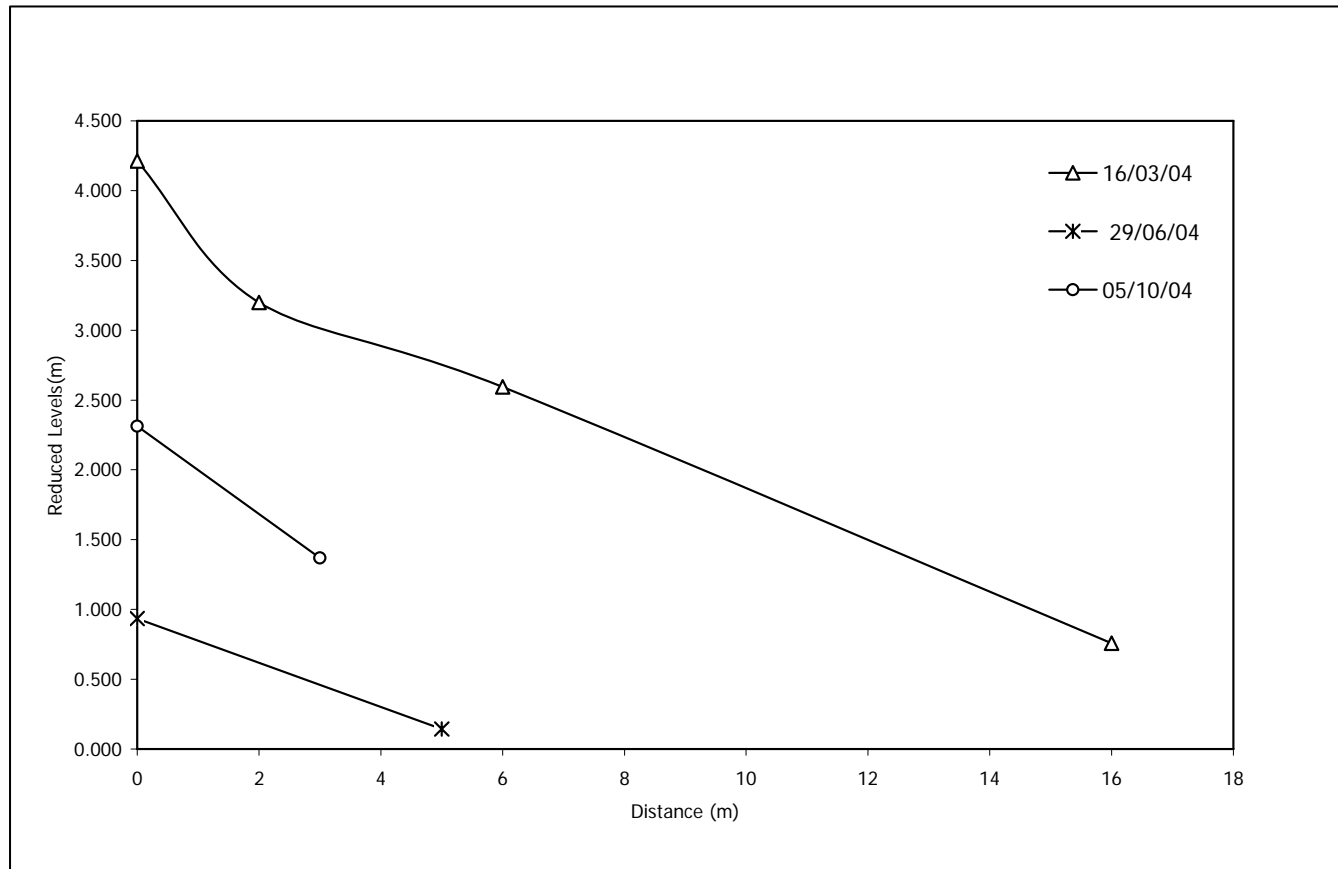


Fig. 2.68 Beach profiles at 650m chainage (Year 2004)

Seasonal beach profile changes at Ullal 650m

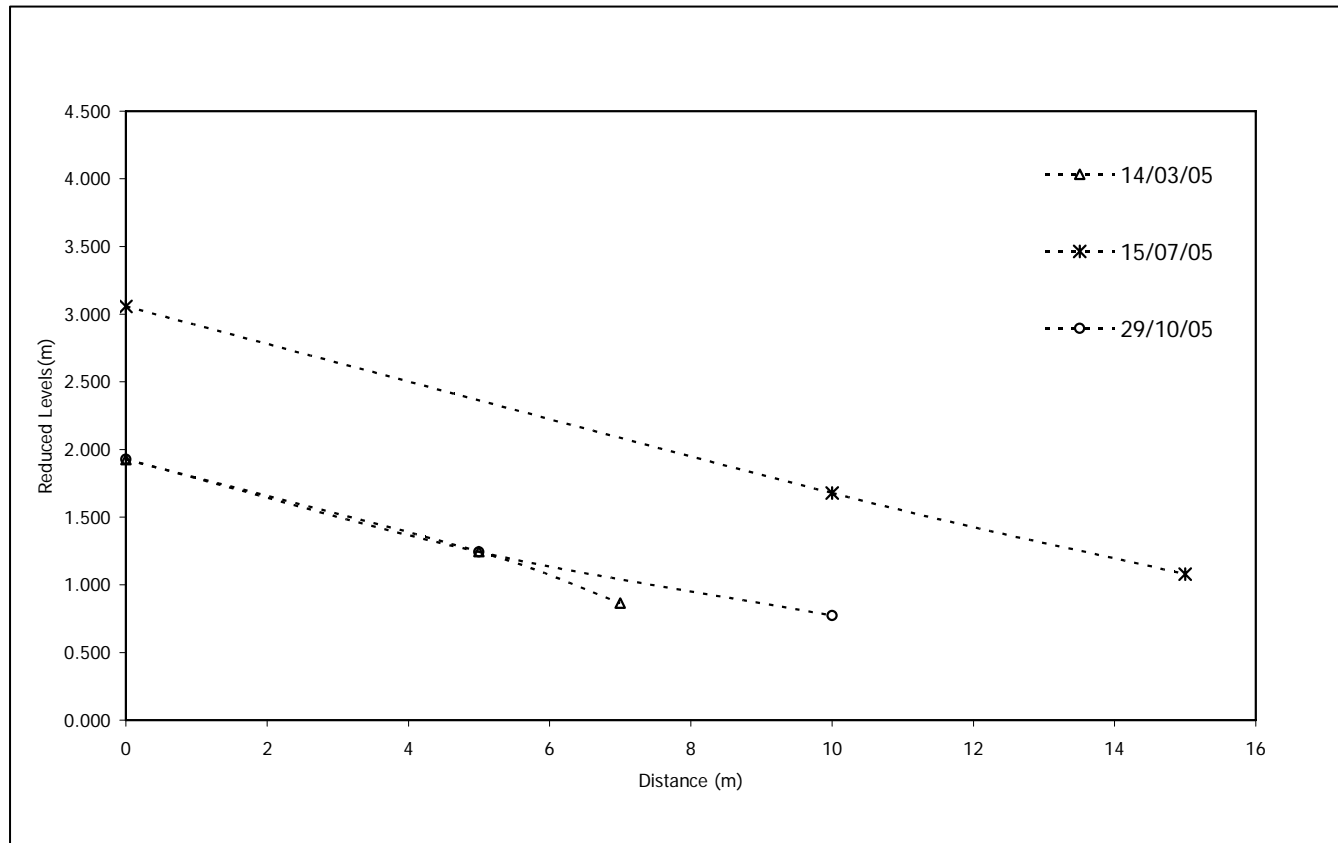


Fig. 2.69 Beach profiles at 650m chainage (Year 2005)

Seasonal beach profile changes at Ullal 650m

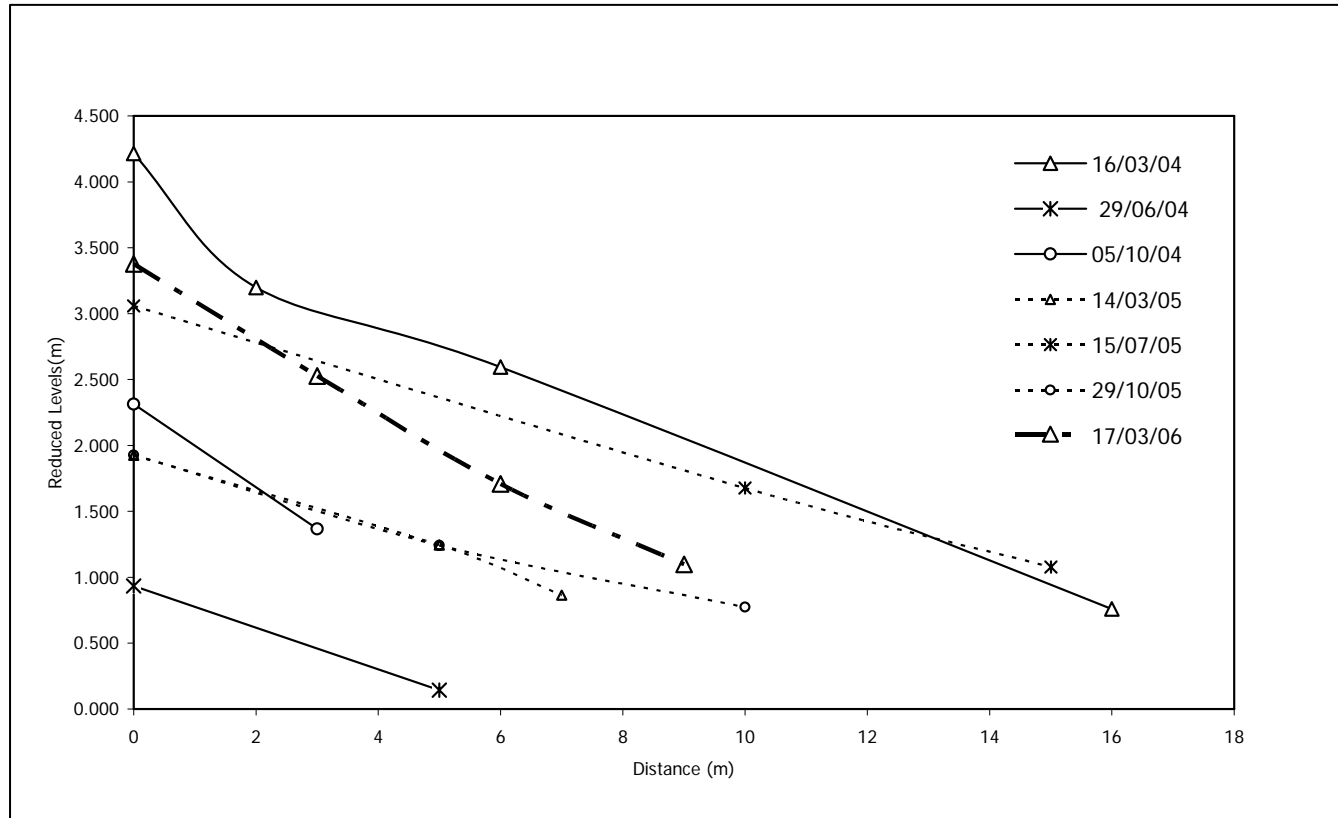


Fig. 2.70 Beach profiles at 650m chainage (From 2004 to 2006)

Reduced levels at Ullal 700m chainage for the year 2004

1st visit		2nd visit		3rd visit		4th visit		5th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04	Distance	01/06/04
0	4.049	0	4.254	0	4.064	0	3.844	0	4.304
5	3.174	2	3.874	4	3.634	2	3.849	2	4.279
10	2.289	10	2.479	10	2.504	4	2.534	5	3.084
15	1.649	20	0.809	15	1.874	9	2.154	10	3.169
				20	1.234	14	2.004	15	3.119
				24	0.394	19	1.714	20	2.944
						24	1.199	23	2.159
								27	1.744

7th visit		12th visit		13th visit		14th visit		15th visit	
Distance	29/06/04	Distance	21/09/04	Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
0	1.374	0	2.013	0	1.883	0	3.248	0	3.363
5	0.544	5	1.088	2	1.128	5	3.128	5	3.283
						10	1.523	10	1.988

Note: No data is available for 6th, 8th to 11th visit.

Reduced levels at Ullal 700m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05
0	2.143	0	2.273	0	2.723	0	2.148	0	2.073
5	1.188	5	1.153	5	1.633	2	1.693	2	1.623
10	0.153			8	0.953	7	0.808	7	0.638
						8	0.448	8	0.378

21 st visit		22 nd visit		23 rd visit		24 th visit		25 th visit	
Distance	14/03/05	Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05
0	2.335	0	1.993	0	1.923	0	1.983	0	2.843
5	1.495	5	1.308	5	1.038	4	1.938	5	1.728
10	0.975	10	0.673	9	0.458	8	0.913	10	1.633
		15	0.018					15	0.873

26 th visit		27 th visit		30 th visit		35 th visit	
Distance	02/06/05	Distance	16/06/05	Distance	15/07/05	Distance	30/09/05
0	2.513	0	3.253	0	3.023	0	2.938
5	1.958	5	2.788	5	2.438	2	2.478
				15	1.343	4	1.958
						9	1.278

Note: No data is available for 28-29th, 31st visit.

Reduced levels at Ullal 700m chainage for the year 2005 (Contd...)

36 th visit		37 th visit		38 th visit		39 th visit		40 th visit	
Distance	29/10/05	Distance	19/11/05	Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
0	1.908	0	2.253	0	3.578	0	4.083	0	3.133
2	1.168	1	0.548	2	2.408	5	3.353	3	3.198
4	0.428	6	0.093	6	2.208	7	2.553	8	2.383
9	-0.272	11	-0.497					12	2.108
								17	1.508

Reduced levels at Ullal 700m chainage for the year 2006

41 st visit		42 nd visit		43 rd visit		44 th visit		45 th visit		46 th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06	Distance	17/03/06	Distance	04/04/06
0	4.038	0	3.323	0	3.048	0	3.978	0	3.013	0	2.478
10	3.663	5	3.403	5	3.133	5	4.068	4	2.993	5	1.568
15	2.543	10	2.843	10	1.478	8	3.273	8	1.133	10	0.778
18	2.293	15	2.423			12	2.503			12	0.448
		20	1.763								

Note: No data is available for 47th visit.

Seasonal beach profile changes at Ullal 700m

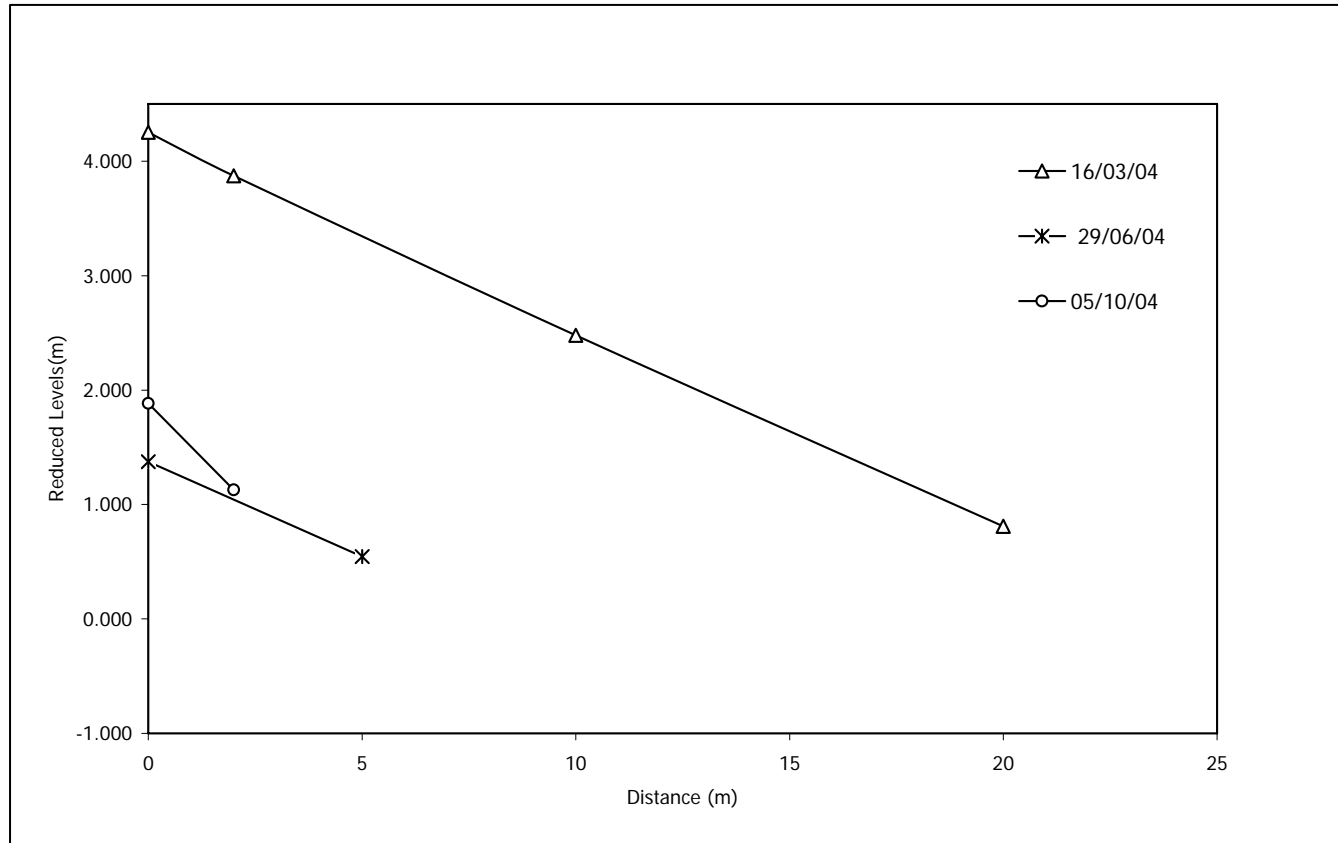


Fig. 2.71 Beach profiles at 700m chainage (Year 2004)

Seasonal beach profile changes at Ullal 700m

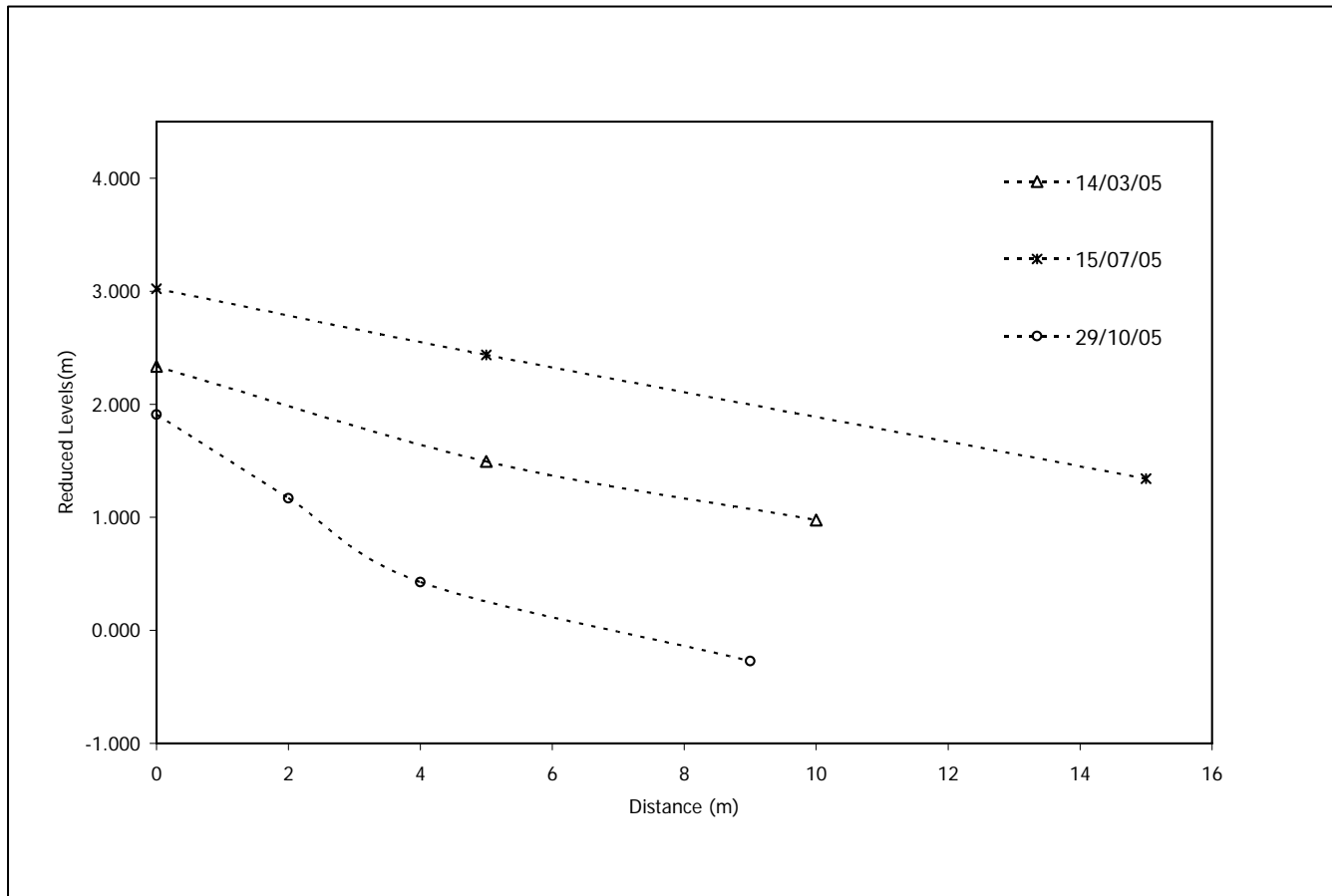


Fig 2.72 Beach profiles at 700m chainage (Year 2005)

Yearly beach profile changes at Ullal 700m

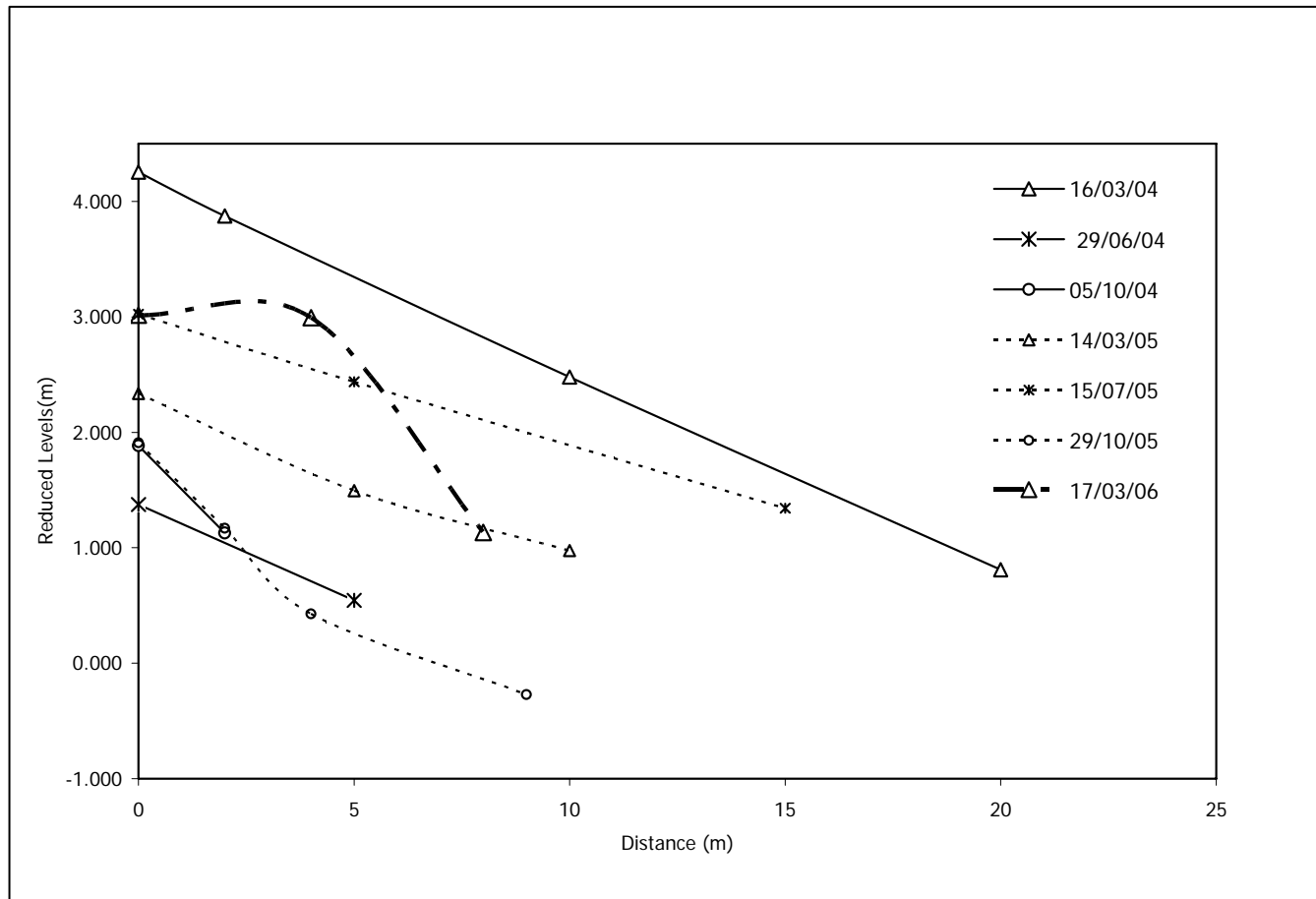


Fig. 2.73 Beach profiles at 700m chainage (From 2004 to 2006)

Reduced levels at Ullal 750m chainage for the year 2004

1st visit		2nd visit		3rd visit		4th visit		5th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04	Distance	01/06/04
0	4.169	0	4.314	0	4.119	0	2.734	0	4.069
5	3.339	4	4.104	3	3.584	2	2.739	2	4.064
10	2.689	8	3.234	7	3.264	4	1.804	4	3.494
15	1.819	18	1.524	12	2.244	9	1.484	9	3.424
				17	1.434	14	1.394	14	3.189
				21	0.824	19	1.264	19	2.829
						24	0.854	24	2.039

7th visit		12th visit		13th visit		14th visit		15th visit	
Distance	29/06/04	Distance	21/09/04	Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
0	1.099	0	2.523	0	2.143	0	3.203	0	3.558
5	0.334	5	0.983	2	1.348	3	2.548	5	2.873

Note: No data is available for 6th, 8th to 11th visit.

Reduced levels at Ullal 750m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05
0	1.948	0	2.463	0	2.453	0	1.863	0	1.883
5	1.108	5	1.423	5	1.583	5	1.173	1	1.603
10	0.213			6	1.343			6	0.648
								8	0.328

21 st visit		22 nd visit		23 rd visit		24 th visit		25 th visit	
Distance	14/03/05	Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05
0	2.378	0	1.913	0	1.848	0	1.873	0	1.898
4	1.778	5	1.228	5	0.938	3	1.088	4	1.018
		10	0.483						

26 th visit		27 th visit		30 th visit		34 th visit	
Distance	02/06/05	Distance	16/06/05	Distance	15/07/05	Distance	30/09/05
0	2.888	0	2.888	0	1.958	0	3.188
5	2.478	4	2.518	5	1.553	5	2.843
				10	1.143	10	2.243

Note: No data is available for 28-29th, 31-33^d visit and also for the year 2006.

Seasonal beach profile changes at Ullal 750m

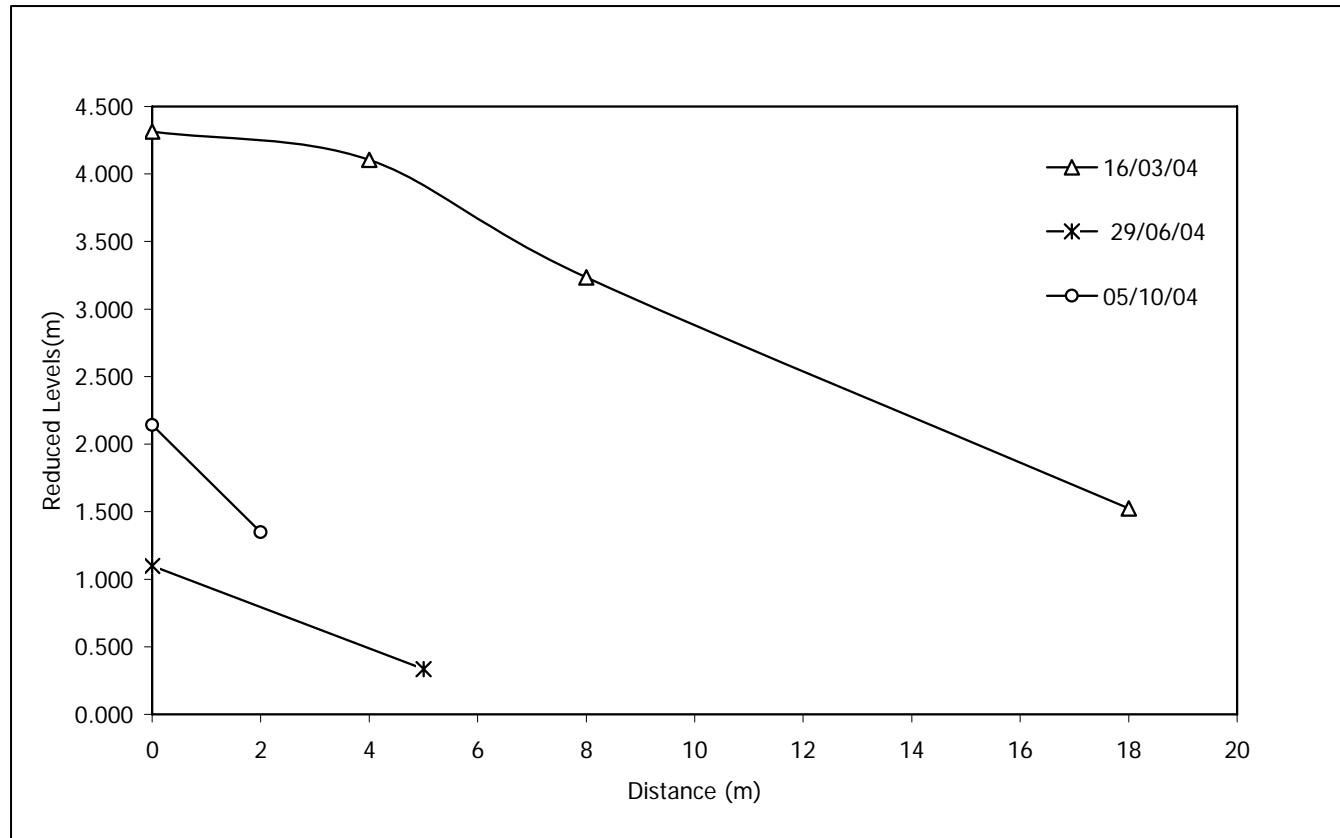


Fig. 2.74 Beach profiles at 750m chainage (Year 2004)

Seasonal beach profile changes at Ullal 750m

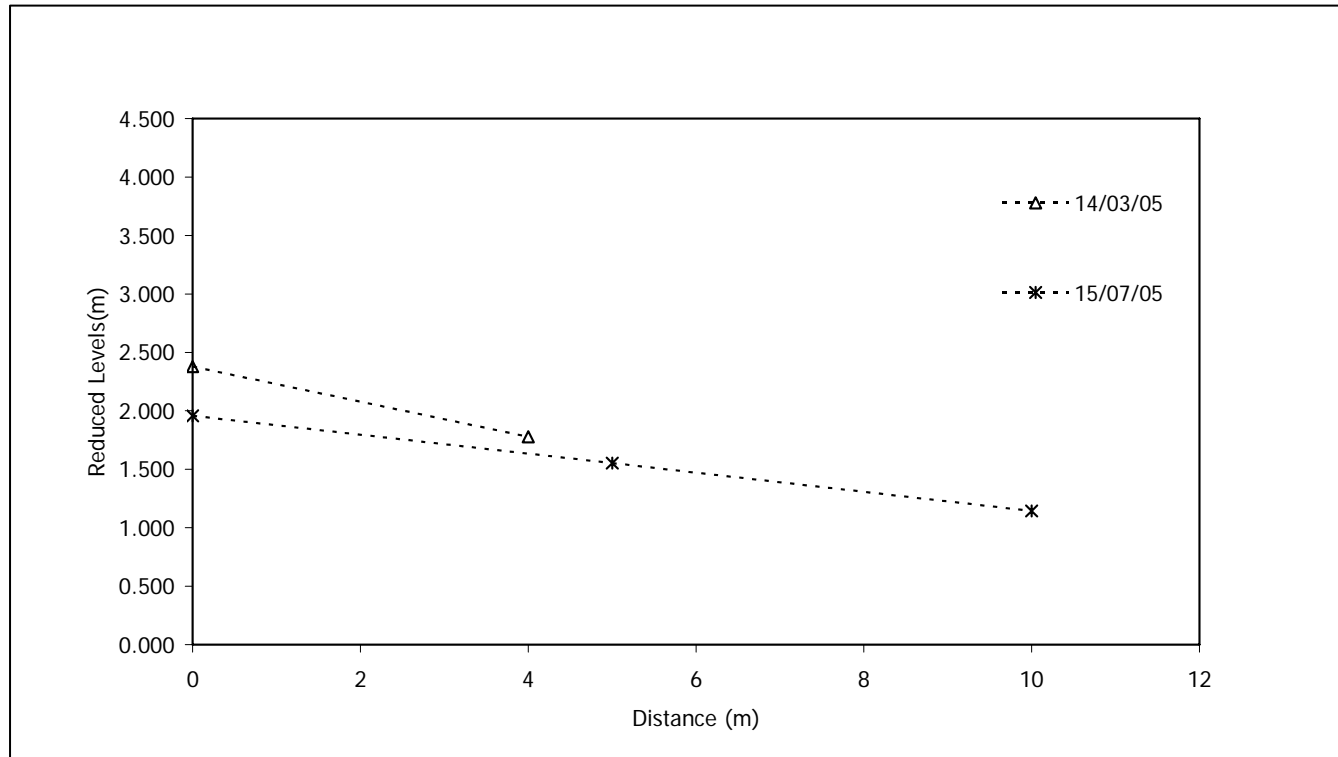


Fig. 2.75 Beach profiles at 750m chainage (Year 2005)

Yearly beach profile changes at Ullal 750m

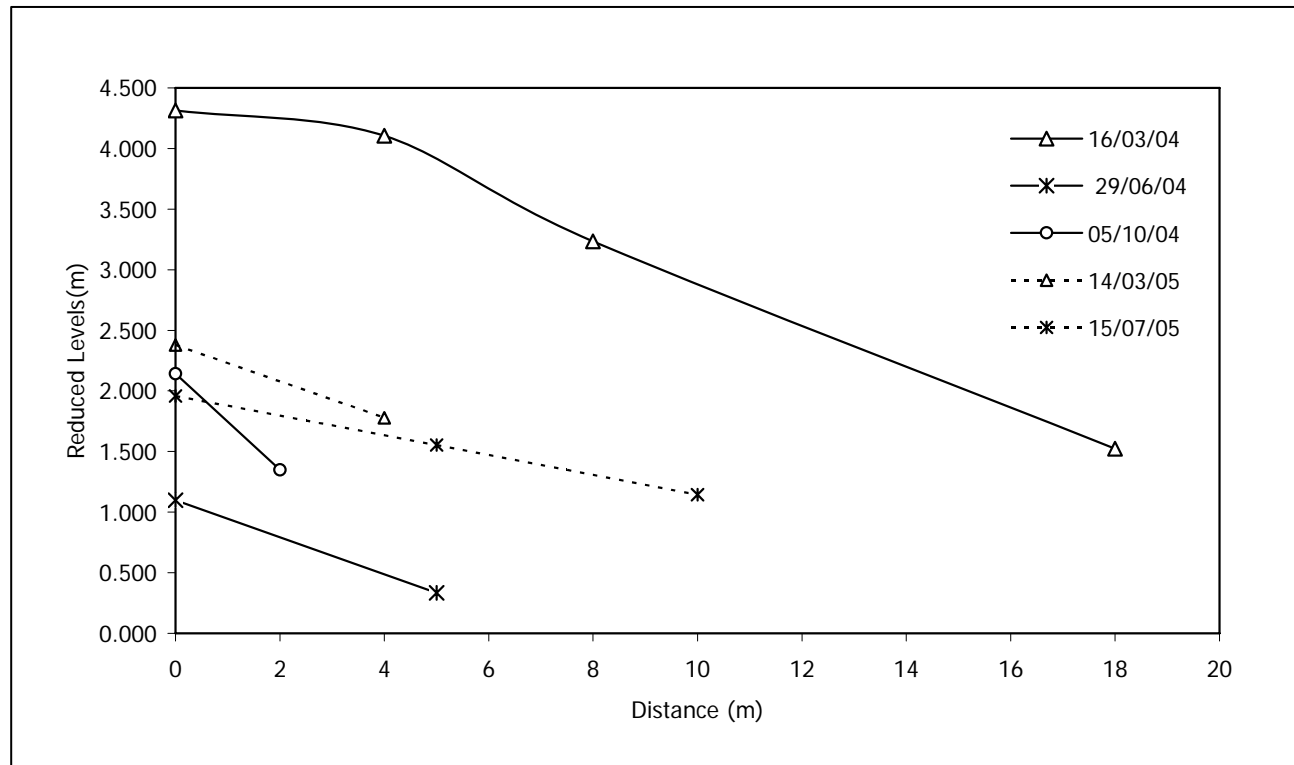


Fig. 2.78 Beach profiles at 750m chainage (From 2004 to 2006)

Reduced levels at Ullal 800m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04	Distance	01/06/04
0	3.499	0	3.814	0	3.779	0	3.704	0	3.744
5	3.529	2	4.019	4	3.459	2	3.424	5	3.234
10	2.549	5	3.469	7	2.839	7	2.344	10	3.014
14	1.929	15	1.944	12	2.539	12	2.314	15	2.669
				17	1.749	17	2.294	20	2.039
				22	0.639	22	2.154		

7 th visit		12 th visit		20 th visit		21 st visit		22 nd visit	
Distance	29/06/04	Distance	21/09/04	Distance	03/03/05	Distance	14/03/05	Distance	01/04/05
0	1.834	0	1.218	0	1.683	0	2.293	0	0.898
5	0.909	3	0.808	5	1.033	4	1.618	2	0.588
				6	0.823				

Note: No data is available for 6th, 8th to 11th visit.

Reduced levels at Ullal 800m chainage for the year 2005

20 th visit		21 st visit		22 nd visit		23 rd visit		24 th visit	
Distance	03/03/05	Distance	14/03/05	Distance	01/04/05	Distance	14/04/05	Distance	03/05/05
0	1.683	0	2.293	0	0.898	0	0.773	0	2.533
5	1.033	4	1.618	2	0.588	2	0.473	2	2.238
6	0.823								

25 th visit		26 th visit		27 th visit	
Distance	17/05/05	Distance	02/06/05	Distance	16/06/05
0	1.708	0	3.048	0	2.968
5	1.148	2	2.878	4	1.968

Note: No data is available for 28-29th, 31st visit and also for the year 2006.

Seasonal beach profile changes at Ullal 800m

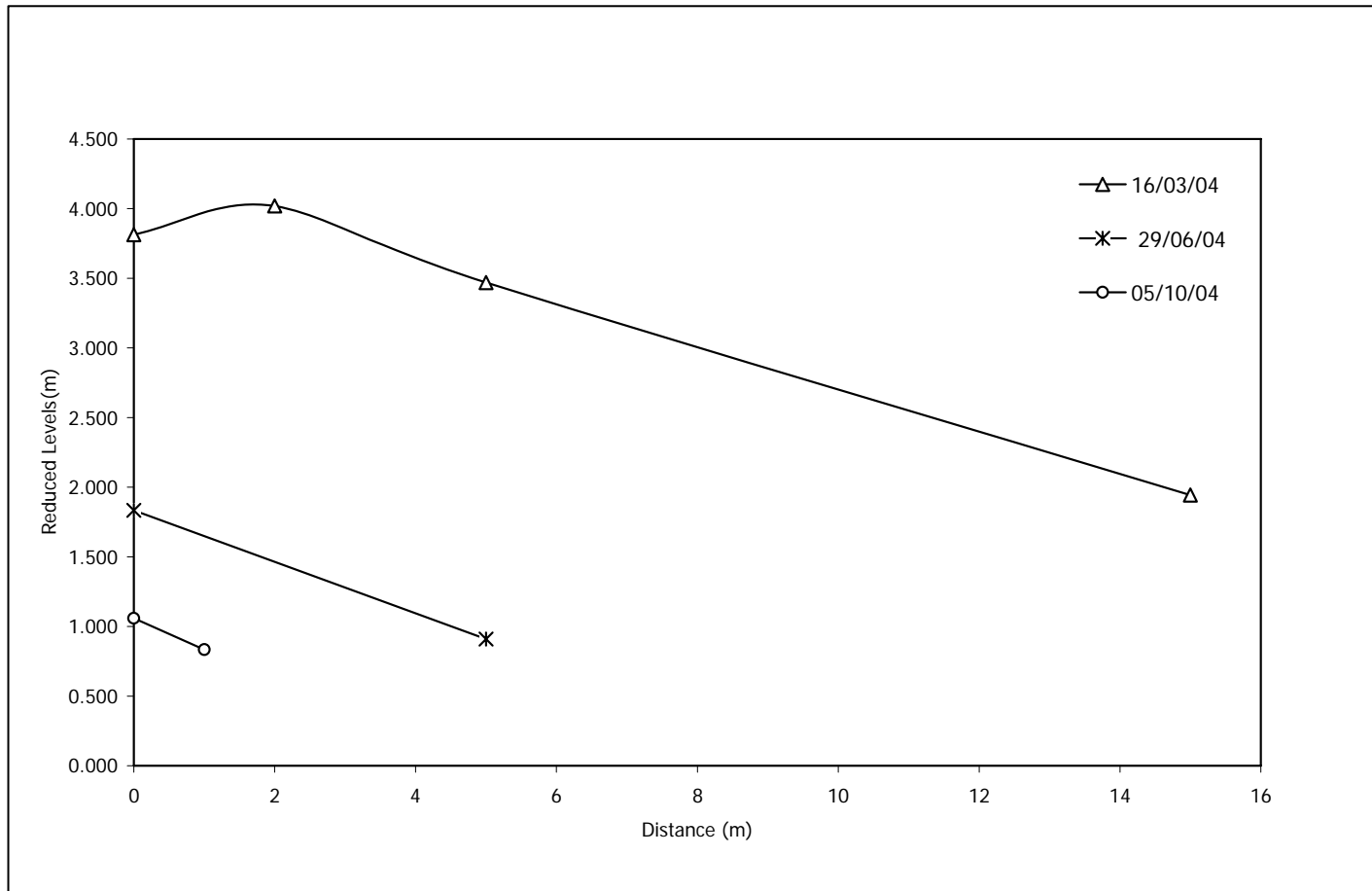


Fig. 2.79 Beach profiles at 800m chainage (Year 2004)

Seasonal beach profile changes at Ullal 800m

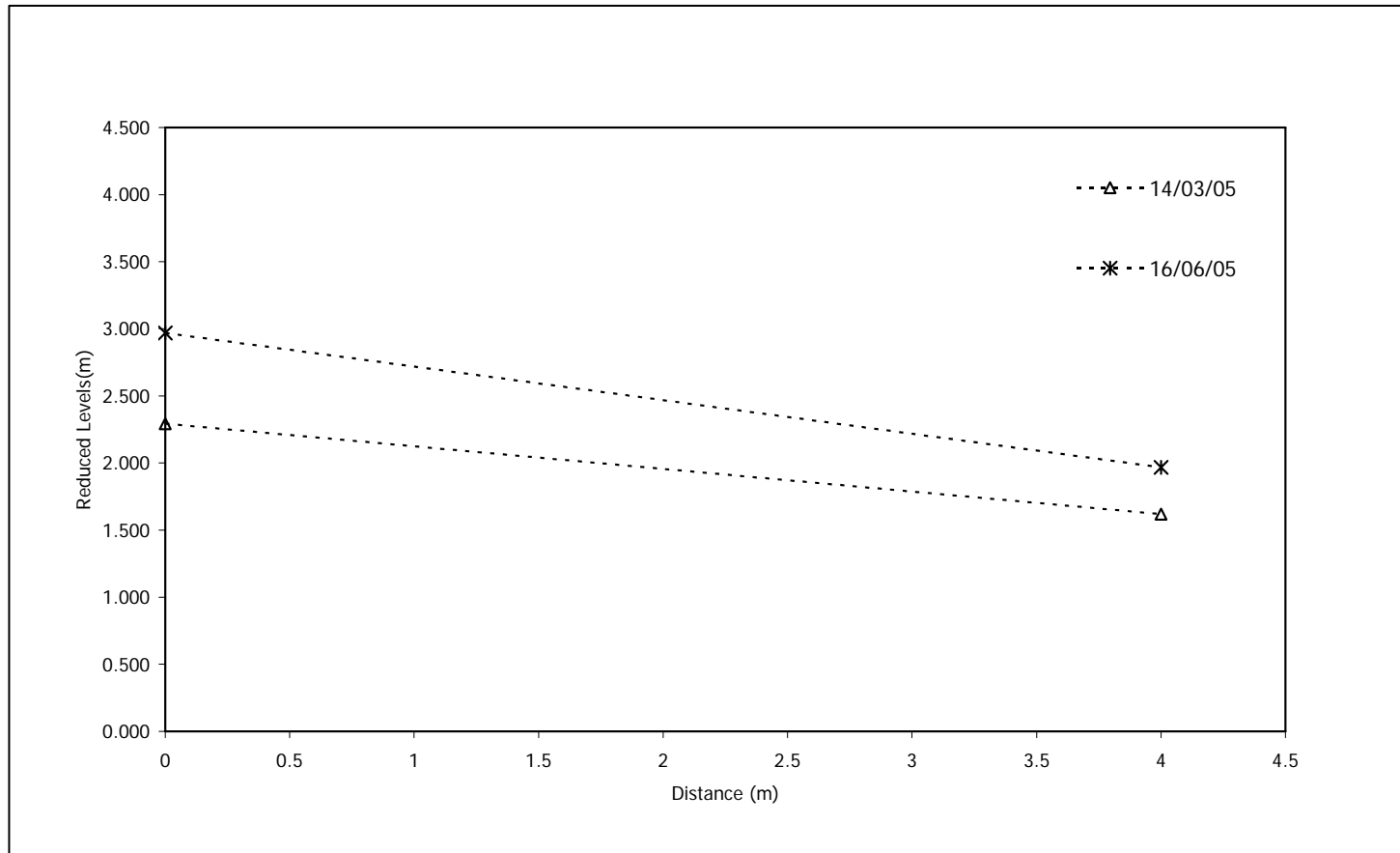


Fig. 2.80 Beach profiles at 800m chainage (Year 2005)

Yearly beach profile changes at Ullal 800m

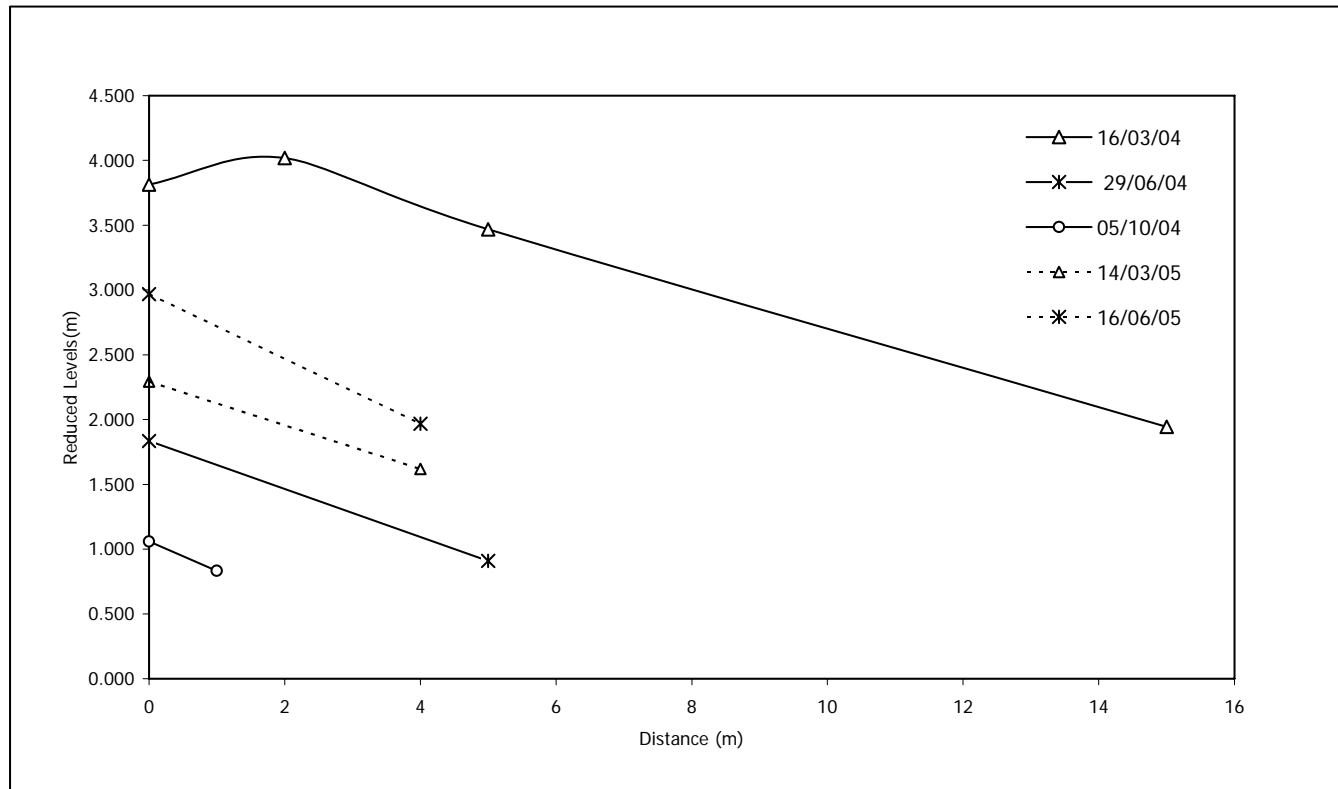


Fig. 2.81 Beach profiles at 800m chainage (From 2004 to 2006)

Reduced levels at Ullal 850m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04	Distance	01/06/04
0	4.209	0	4.019	0	4.269	0	2.019	0	3.314
5	3.219	5	4.349	3	3.709	5	1.699	5	3.449
10	2.579	10	3.859	8	3.129	10	1.794	10	3.414
14	1.459	14	3.159	13	2.489	15	1.809	15	2.749
		19	1.599	18	1.619	21	1.254	21	2.769

7 th visit		12 th visit		13 th visit		14 th visit		15 th visit	
Distance	29/06/04	Distance	21/09/04	Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
0	1.664	0	1.703	0	1.563	0	2.368	0	2.193
1	1.414			3	0.768	5	1.548	5	1.728
6	0.614					7	1.098	8	0.953

Note: No data is available for 6th, 8th to 11th visit.

Reduced levels at Ullal 850m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05
0	2.633	0	2.693	0	2.443	0	2.123	0	1.688
5	1.813	5	1.673	5	1.523	5	1.263	5	0.863
10	0.888	9	0.923	10	0.683	9	0.808	8	0.333

21 st visit		22 nd visit		23 rd visit		24 th visit		25 th visit	
Distance	14/03/05	Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05
0	2.583	0	0.903	0	1.653	0	3.008	0	2.808
4	1.728	5	0.363	5	0.958	5	2.608	5	1.823
7	1.158					10	1.643	8	1.198

26 th visit		27 th visit		30 th visit		32 nd visit	
Distance	02/06/05	Distance	16/06/05	Distance	15/07/05	Distance	13/08/05
0	3.353	0	2.793	0	1.998	0	1.773
4	2.898	4	2.243	5	1.383	5	0.843

36 th visit		37 th visit		39 th visit		40 th visit	
Distance	29/10/05	Distance	19/11/05	Distance	15/12/05	Distance	30/12/05
0	2.743	0	2.428	0	3.273	0	2.783
5	2.083	5	1.888	5	2.783	4	2.223
						9	1.283

Note: No data is available for 28-29th, 31st visit.

Reduced levels at Ullal 850m chainage for the year 2006

41 st visit		42 nd visit		43 rd visit		44 th visit		45 th visit		46 th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06	Distance	17/03/06	Distance	04/04/06
0	3.073	0	2.988	0	2.758	0	2.373	0	2.878	0	2.038
4	2.408	5	2.573	5	2.148	5	0.993	4	2.188	5	0.803
8	1.698	10	1.903	9	1.678			8	1.003		
13	1.323										

Note: No data is available for 47th visit.

Seasonal beach profile changes at Ullal 850m

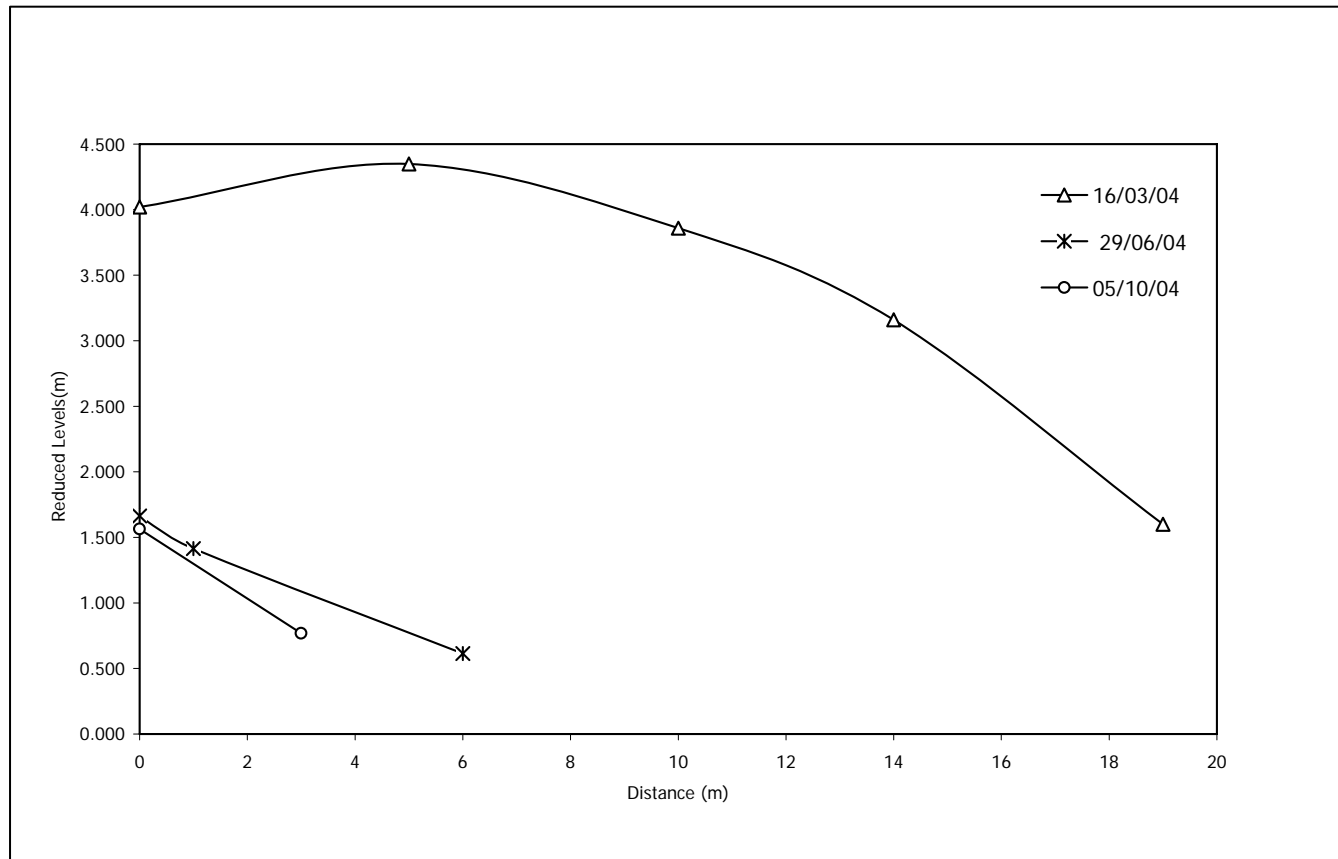


Fig. 2.82 Beach profiles at 850m chainage (Year 2004)

Seasonal beach profile changes at Ullal 850m

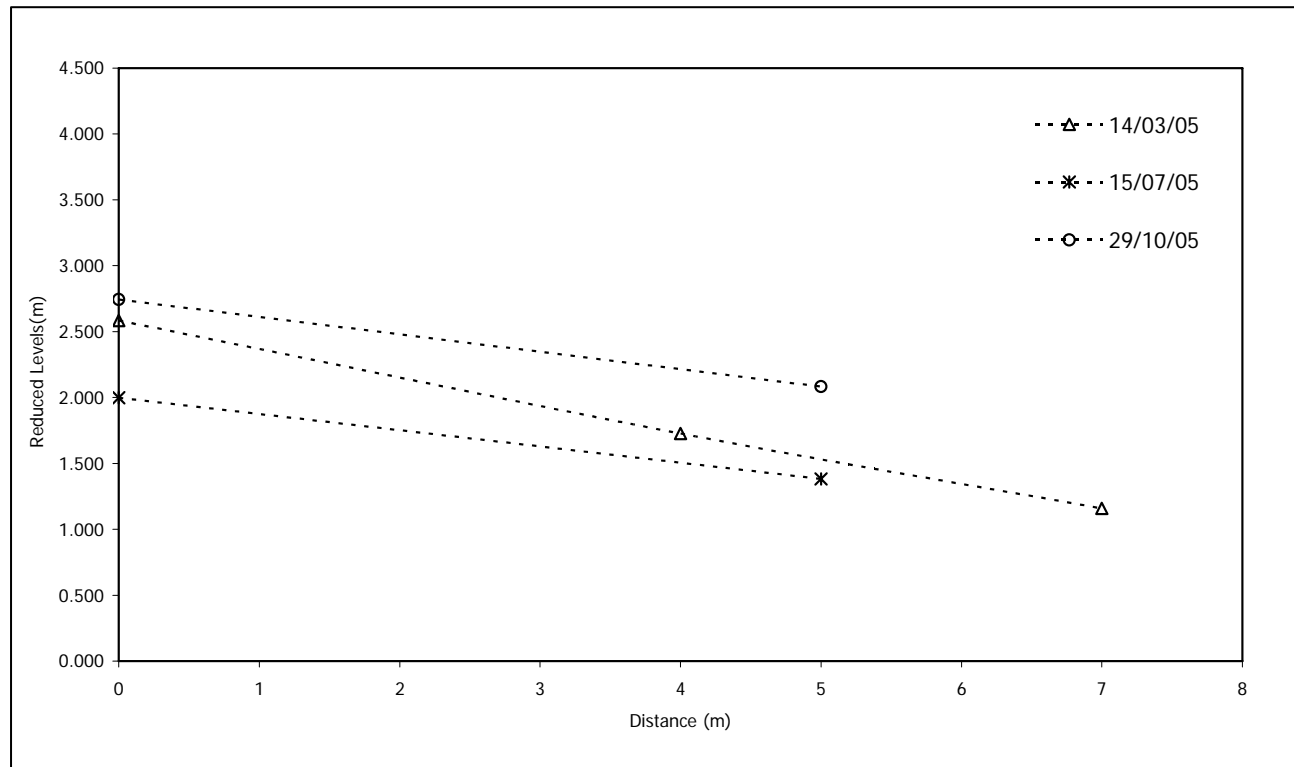


Fig. 2.83 Beach profiles at 850m chainage (Year 2005)

Yearly beach profile changes at Ullal 850m

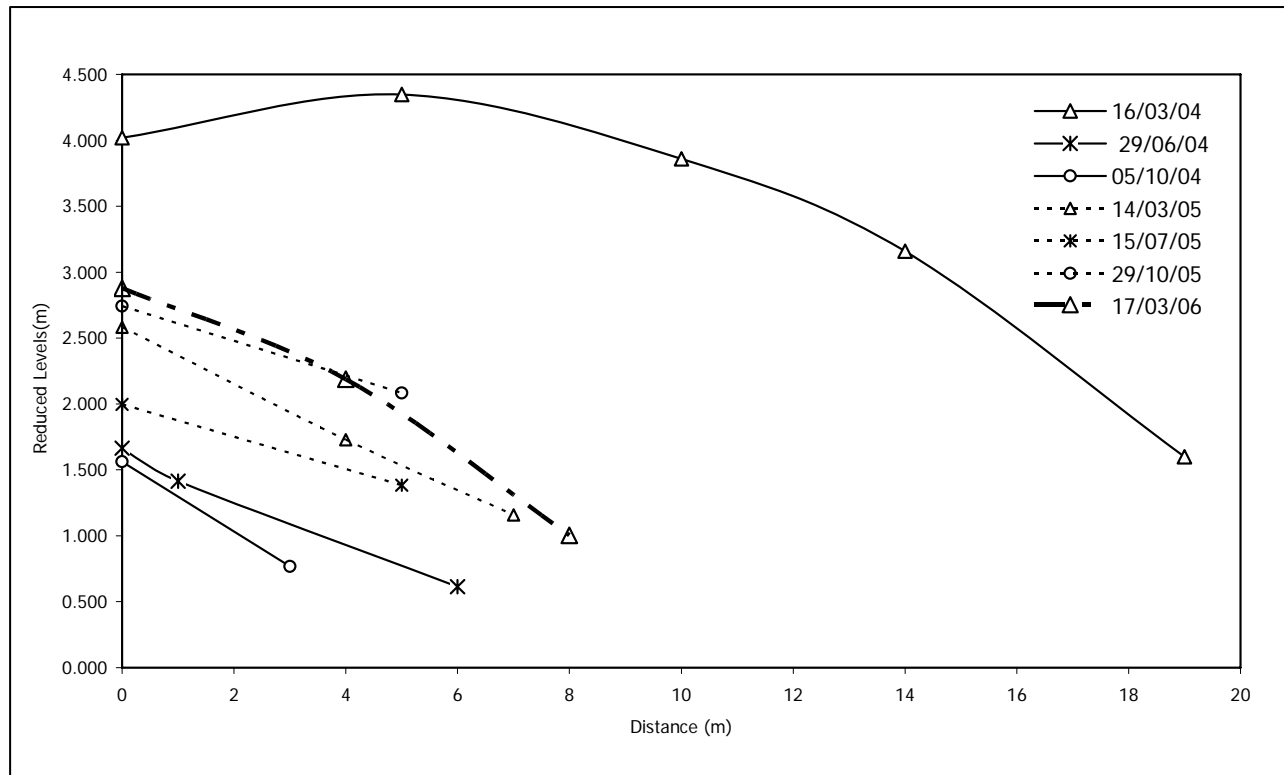


Fig. 2.84 Beach profiles at 850m chainage (From 2004 to 2006)

Reduced levels at Ullal 900m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04	Distance	01/06/04
0	4.139	0	4.179	0	3.894	0	4.264	0	4.389
5	3.419	3	3.864	3	3.854	2	3.984	5	3.789
10	2.809	5	3.259	6	3.264	3	3.504	10	3.149
15	1.999	12	2.779	11	2.894	8	3.064	15	2.279
		20	1.269	16	2.194	13	2.404	21	2.049
				21	1.294	17	1.914		

7 th visit		12 th visit		13 th visit		14 th visit		15 th visit	
Distance	29/06/04	Distance	21/09/04	Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
0	1.524	0	2.568	0	1.773	0	1.803	0	2.643
5	0.734	3	1.673	3	0.933	5	1.133	5	2.178
10	0.044					8	0.868	10	1.288

Note: No data is available for 6th, 8th to 11th visit.

Reduced levels at Ullal 900m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05
0	3.043	0	2.573	0	3.143	0	2.923	0	3.258
5	2.248	5	1.643	5	2.193	2	2.593	2	2.888
10	1.388	10	1.113	11	1.233	3	2.163	4	2.223
						8	1.333	9	1.323
						12	0.743	14	0.708

21 st visit		22 nd visit		23 rd visit		24 th visit		25 th visit	
Distance	14/03/05	Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05
0	3.278	0	2.638	0	2.348	0	2.503	0	3.318
5	2.558	5	2.078	5	1.193	5	2.393	5	2.613
10	1.463	7	1.546	10	0.923	10	1.163	10	1.558

Note: No data is available for 28-29th, 31st visit.

Reduced levels at Ullal 900m chainage for the year 2005 (Contd...)

26 th visit		27 th visit		30 th visit		32 nd visit		34 th visit		35 th visit	
Distance	02/06/05	Distance	16/06/05	Distance	15/07/05	Distance	13/08/05	Distance	16/09/05	Distance	30/09/05
0	3.323	0	3.158	0	1.523	0	2.303	0	3.518	0	3.163
5	2.903	5	2.398	5	1.238	5	1.163	4	3.013	5	2.613
				10	0.958					10	1.833

36 th visit		37 th visit		38 th visit		39 th visit		40 th visit	
Distance	29/10/05	Distance	19/11/05	Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
0	3.393	0	2.403	0	3.283	0	3.163	0	2.863
5	1.773	5	1.508	3	3.133	2	2.733	4	2.323
		9	1.168			7	2.523	9	1.728
								14	1.133

Reduced levels at Ullal 900m chainage for the year 2006

41 st visit		42 nd visit		43 rd visit		44 th visit		45 th visit		46 th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06	Distance	17/03/06	Distance	04/04/06
0	2.853	0	2.943	0	2.873	0	2.903	0	2.383	0	2.548
4	2.283	5	2.243	5	2.093	5	2.063	3	1.678	1	1.778
8	1.673	10	1.678	9	1.633	9	1.483	5	1.268	6	1.108
11	1.373					13	1.178	8	0.928	9	0.763

Note: No data is available for 47th visit.

Seasonal beach profile changes at Ullal 900m

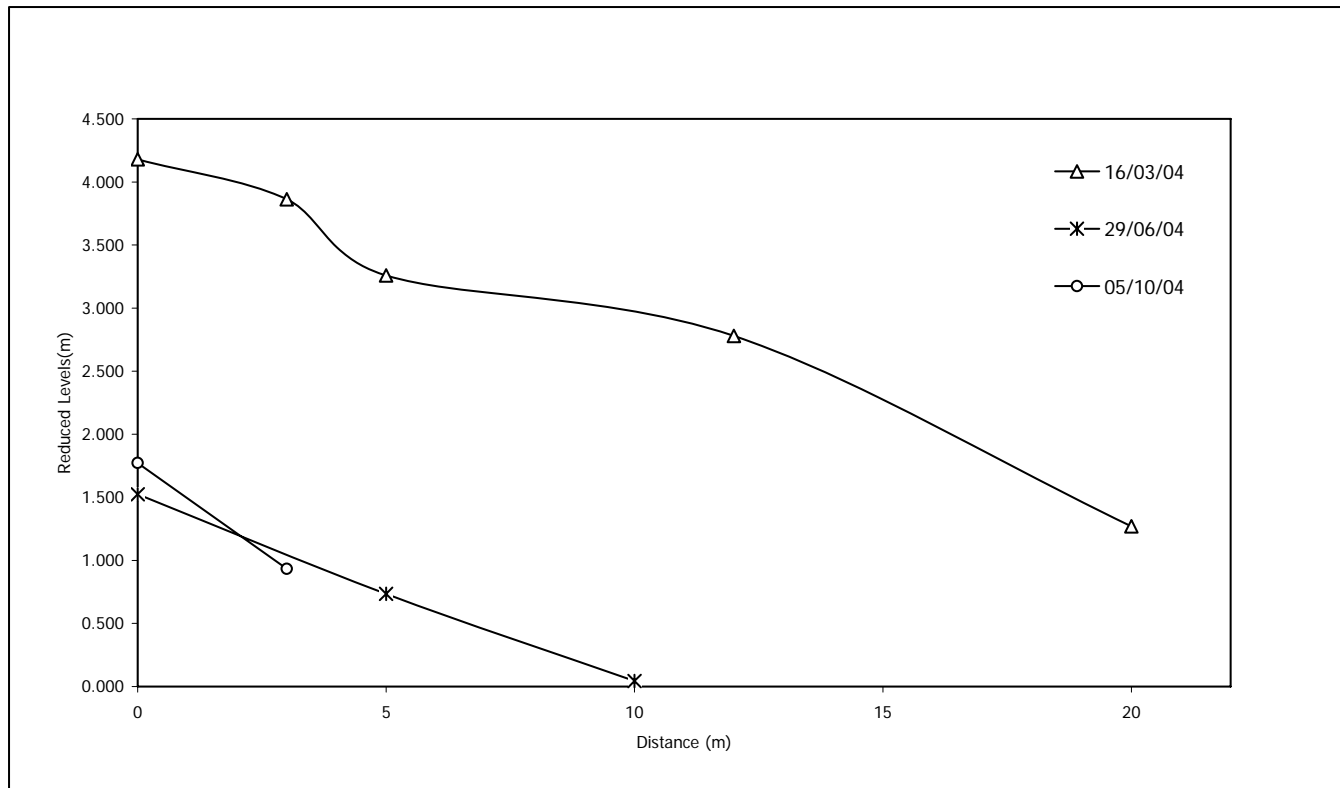


Fig. 2.85 Beach profiles at 900m chainage (Year 2004)

Seasonal beach profile changes at Ullal 900m

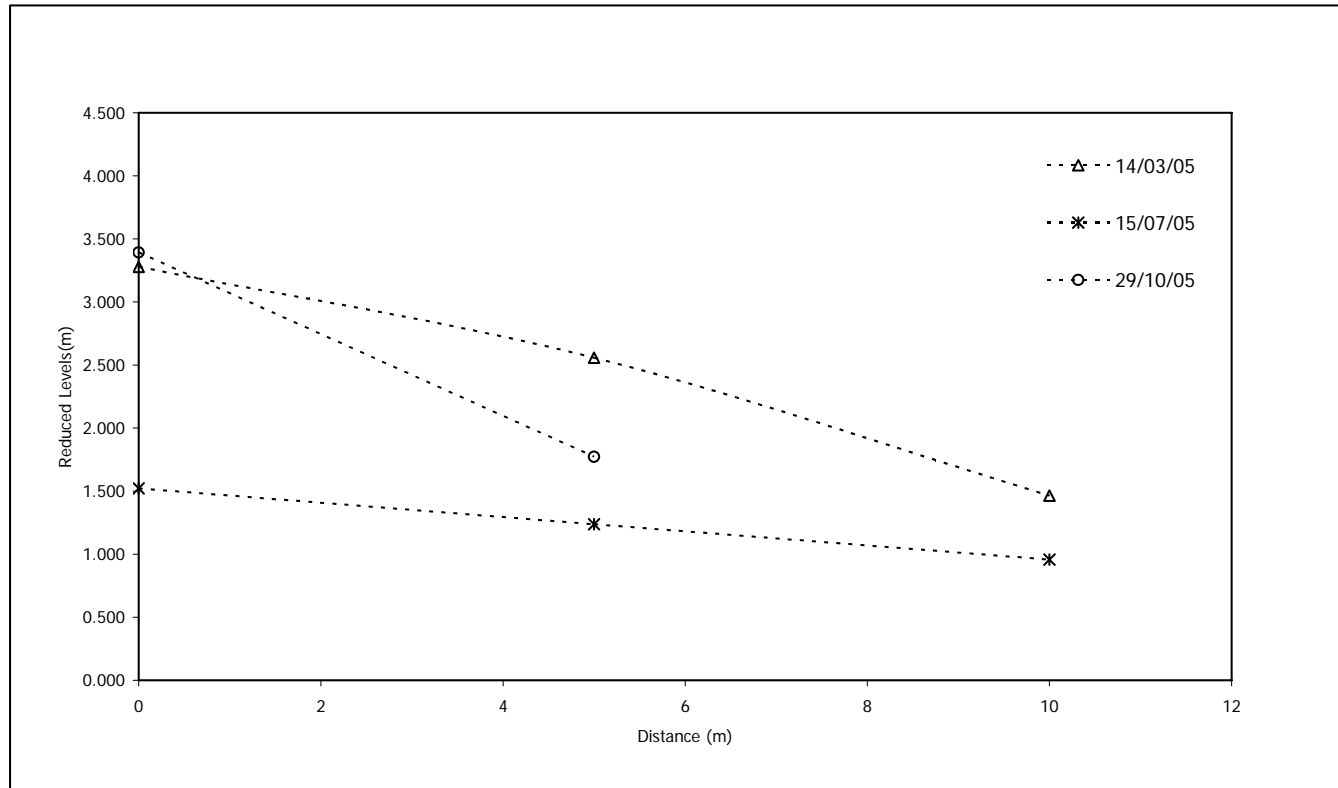


Fig. 2.86 Beach profiles at 900m chainage (Year 2005)

Yearly beach profile changes at Ullal 900m

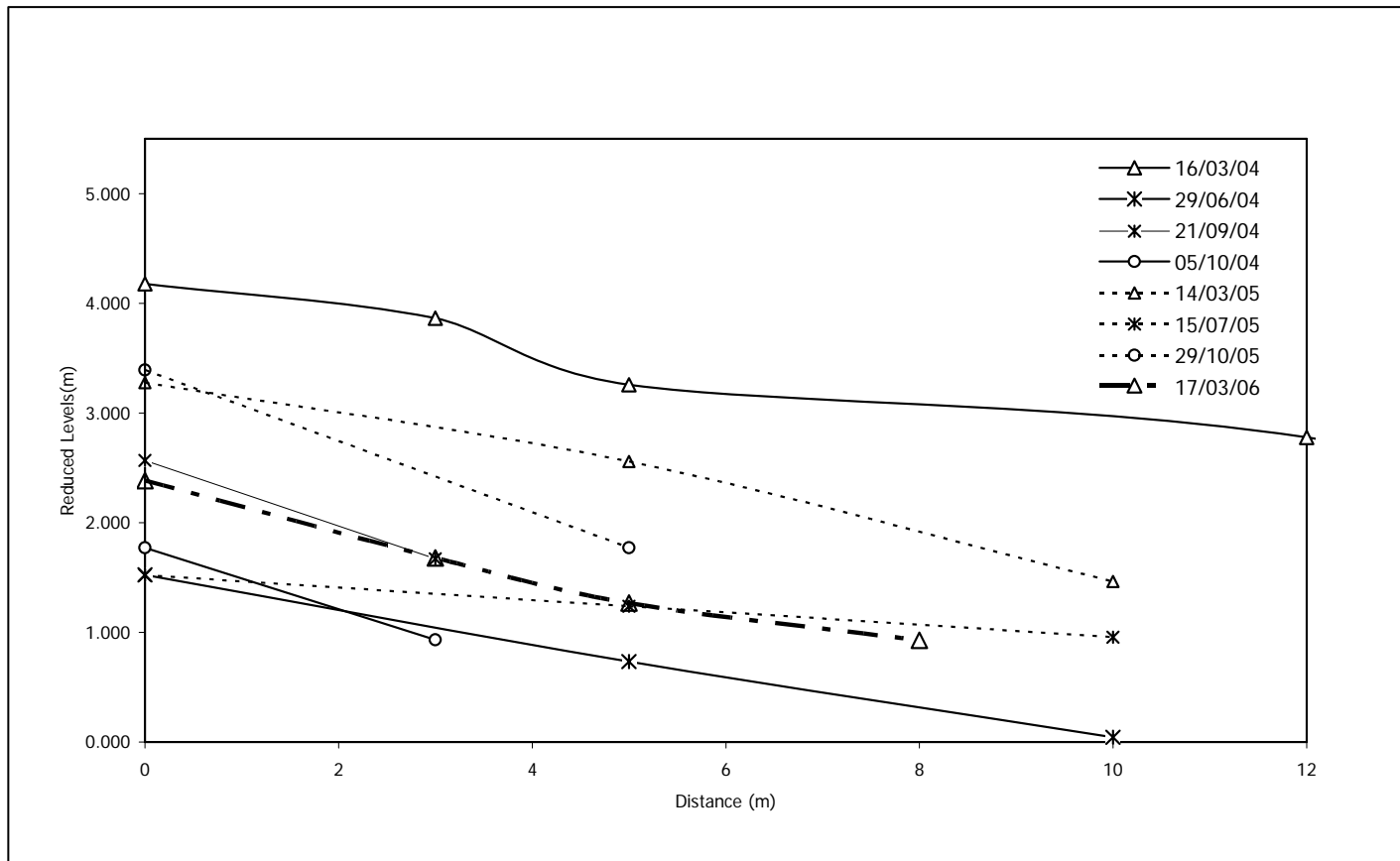


Fig. 2.87 Beach profiles at 900m chainage (From 2004 to 2006)

Reduced levels at Ullal 950m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04	Distance	01/06/04
0	4.439	0	4.454	0	4.129	0	3.934	0	4.169
5	4.279	2	4.334	2	3.834	1	3.654	5	3.834
10	2.989	3	3.889	4	3.354	6	3.084	10	3.309
15	2.734	13	2.814	9	2.969	11	2.624	16	2.519
		20	1.739	14	2.564			21	2.284
				19	1.754				

7 th visit		12 th visit		13 th visit		14 th visit		15 th visit	
Distance	29/06/04	Distance	21/09/04	Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
0	1.364	0	2.393	0	2.078	0	2.518	0	2.673
5	1.414	3	1.738	2	1.623	5	1.868	5	1.833
7	1.394					10	1.073	10	1.228
8	0.934								
13	-0.106								

Note: No data is available for 6th, 8th to 11th visit.

Reduced levels at Ullal 950m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05
0	2.838	0	2.293	0	3.423	0	2.838	0	3.158
5	2.013	5	1.593	5	3.198	2	2.423	2	3.028
10	1.133	7	1.063	8	2.613	4	1.948	4	2.353
				13	1.723	9	1.113	9	1.448
				18	1.103	12	0.638	14	0.508
								18	0.208

21 st visit		22 nd visit		23 rd visit		24 th visit		25 th visit	
Distance	14/03/05	Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05
0	3.428	0	3.458	0	2.908	0	3.458	0	3.223
5	2.533	3	3.003	5	2.413	2	2.823	5	1.978
10	1.808	5	2.138	10	1.583	7	2.333	8	1.168
15	1.058	10	1.303	15	0.843	12	1.708		
		15	0.628						

26 th visit		27 th visit		30 th visit		34 th visit		39 th visit		40 th visit	
Distance	02/06/05	Distance	16/06/05	Distance	15/07/05	Distance	16/09/05	Distance	15/12/05	Distance	30/12/05
0	3.523	0	3.743	0	0.913	0	2.443	0	2.683	0	2.643
5	2.803	2	3.163	5	1.023			2	2.043	5	2.033
		7	1.958	10	1.073			7	1.423	8	1.823
										10	1.333

Note: No data is available for 28-29th, 31st visit.

Reduced levels at Ullal 950m chainage for the year 2005 (Contd...)

35 th visit		36 th visit		37 th visit		38 th visit		39 th visit		40 th visit	
Distance	30/09/05	Distance	29/10/05	Distance	19/11/05	Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
0	3.028	0	2.628	0	2.078	0	3.083	0	2.683	0	2.643
5	2.468	5	1.908	5	1.458	5	2.333	2	2.043	5	2.033
7	2.238			9	0.823			7	1.423	8	1.823
11	1.343									10	1.333

Reduced levels at Ullal 950m chainage for the year 2006

41 st visit		42 nd visit		43 rd visit		44 th visit		45 th visit		46 th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06	Distance	17/03/06	Distance	04/04/06
0	2.068	0	2.433	0	2.303	0	2.233	0	2.433	0	2.273
5	1.373	5	2.023	5	2.033	5	1.743	2	1.648	2	1.878
		10	1.163	9	1.633	9	1.173	4	1.203	6	1.433
								7	0.928	10	0.813

Note: No data is available for 47th visit.

Seasonal beach profile changes at Ullal 950m

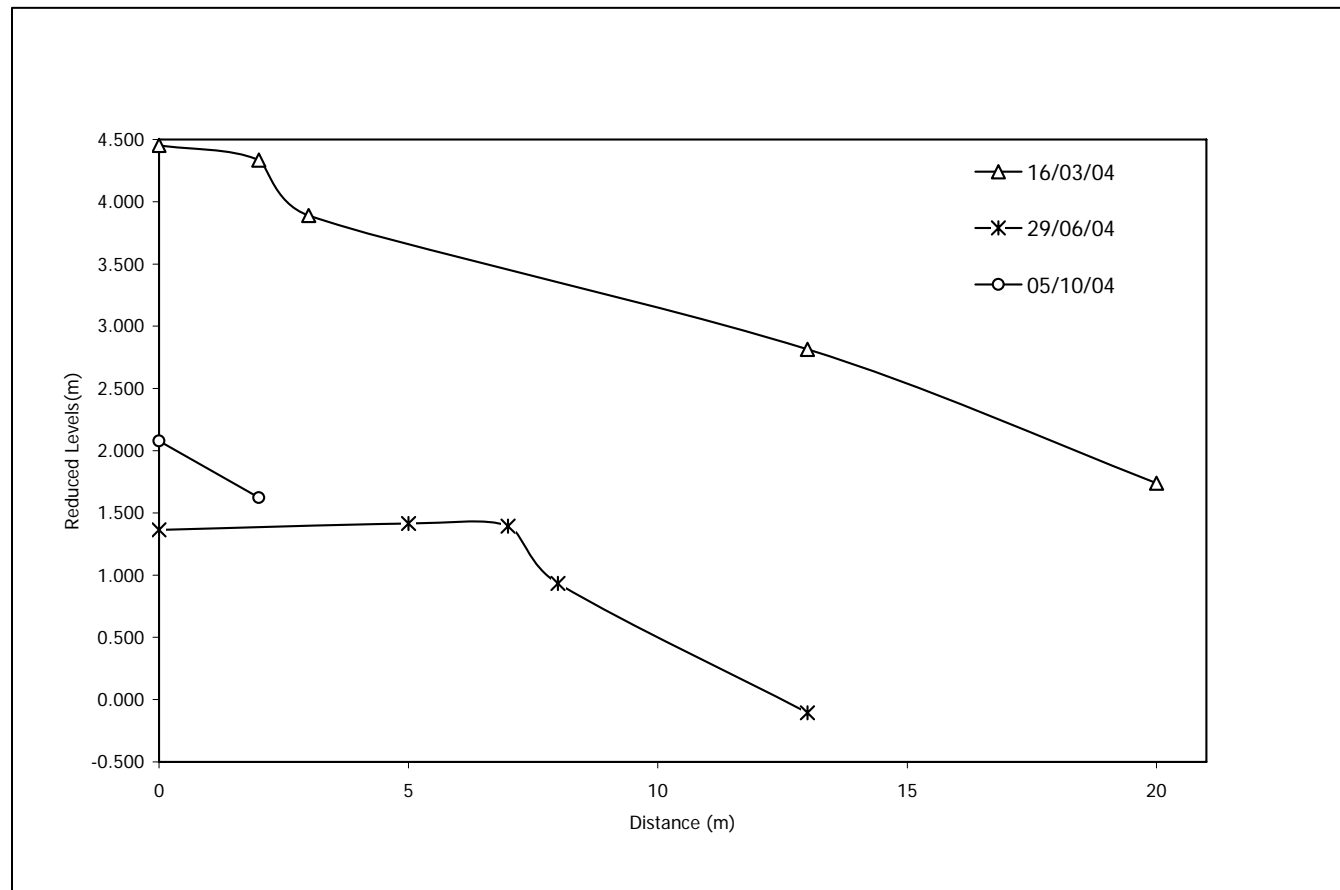


Fig. 2.87 Beach profiles at 950m chainage (Year 2004)

Seasonal beach profile changes at Ullal 950m

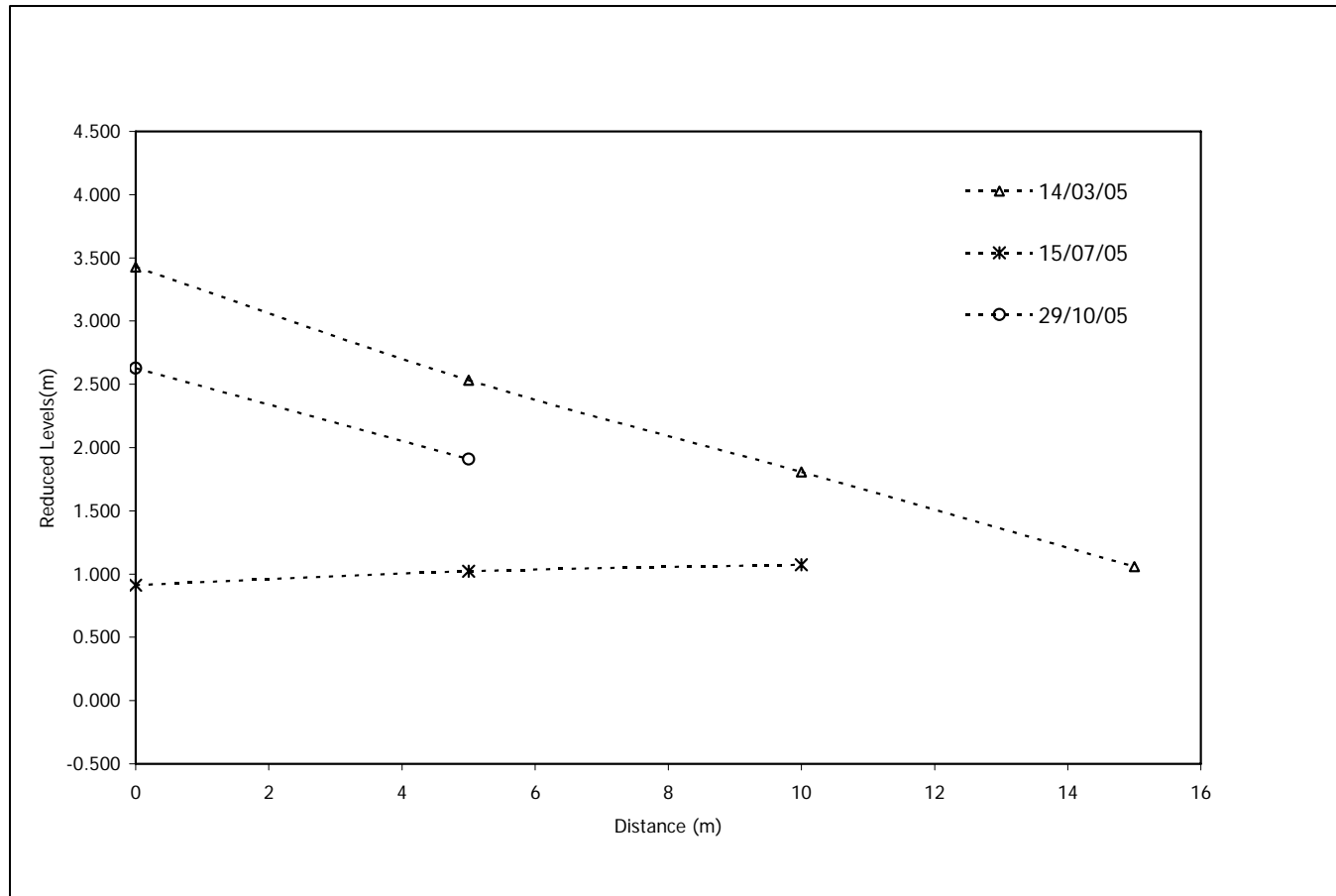


Fig. 2.88 Beach profiles at 950m chainage (Year 2005)

Yearly beach profile changes at Ullal 950m

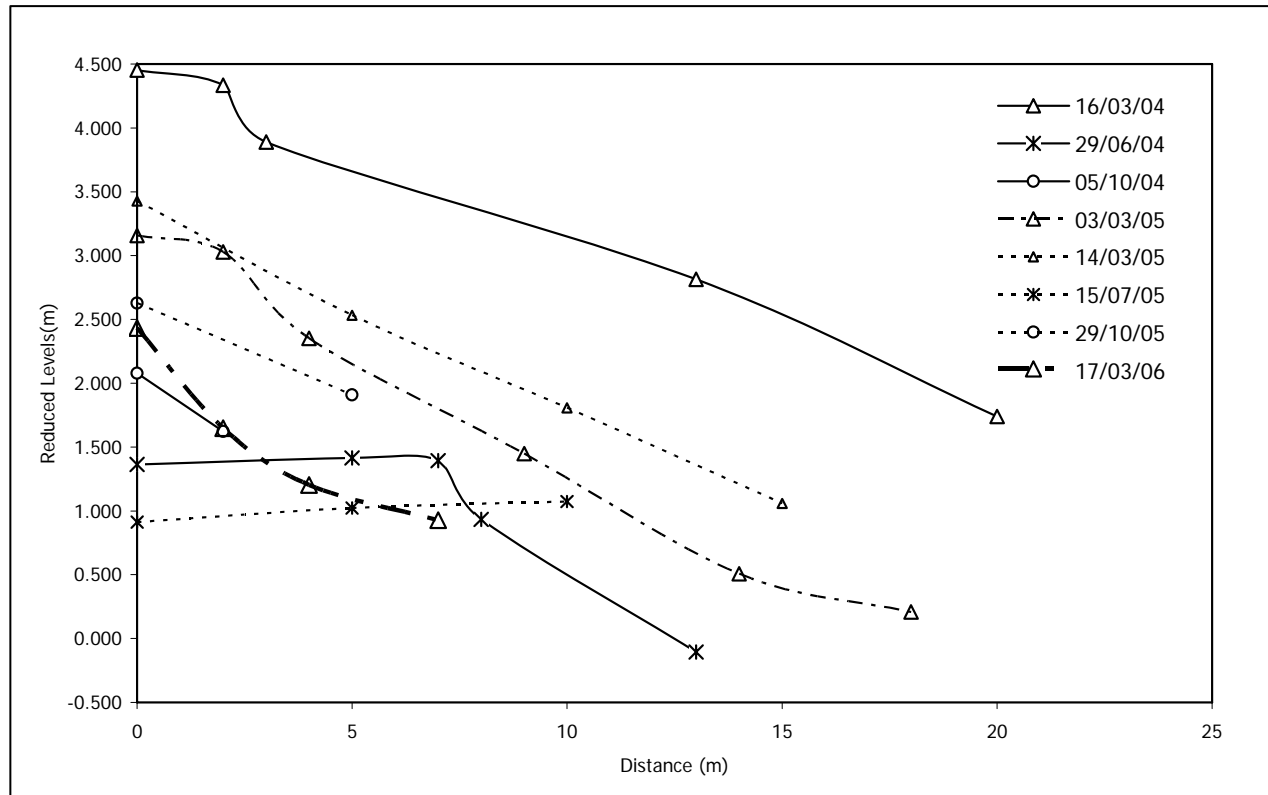


Fig. 2.89 Beach profiles at 950m chainage (From 2004 to 2006)

Reduced levels at Ullal 1000m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit		6 th visit	
Distance	27/02/04	Distance	16/03/04	Distance	30/03/04	Distance	12/05/04	Distance	01/06/04	Distance	14/06/04
0	3.953	0	3.953	0	3.953	0	3.953	0	3.953	0	3.953
5	2.848	5	2.993	5	3.098	5	3.438	5	3.413	5	2.183
10	2.708	10	2.863	10	2.953	10	2.883	10	2.758	10	1.673
15	2.303	14	2.808	14	2.668	15	2.173	15	2.293		
20	1.263	19	1.798	19	1.653						
		24	1.018	24	1.778						

7 th visit		9 th visit		10 th visit		11 th visit		12 th visit		13 th visit	
Distance	28/06/04	Distance	01/08/04	Distance	16/08/04	Distance	31/08/04	Distance	21/09/04	Distance	05/10/04
0	3.953	0	3.953	0	3.953	0	3.953	0	3.953	0	3.953
5	2.948	5	2.593	4	1.713	5	2.098	5	2.578	2	2.983
10	2.848					10	1.283	10	1.718	3	2.588
15	2.478									8	1.563
20	1.668										

14 th visit		15 th visit	
Distance	03/12/04	Distance	16/12/04
0	3.953	0	3.953
3	3.308	2	3.373
8	2.548	7	2.253
		12	1.328
		17	0.668

Note: No data is available for 8th visit.

Reduced levels at Ullal 1000m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit		21 st visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05	Distance	14/03/05
0	3.953	0	3.953	0	3.953	0	3.953	0	3.953	0	3.953
5	3.058	3	3.233	2	3.303	3	3.468	3	3.668	5	2.678
10	2.248	8	2.133	7	2.613	5	1.743	5	3.088	9	1.783
15	1.413	13	1.063	11	1.543	10	1.178	7	2.513	13	1.058
		18	0.163	16	0.663			8	2.133		
								13	1.228		
								18	0.808		

22 nd visit		23 rd visit		24 th visit		25 th visit		26 th visit	
Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05	Distance	02/06/05
0	3.953	0	3.953	0	3.953	0	3.953	0	3.953
2	3.463	2	4.178	3	3.843	7	2.923	8	3.373
4	3.113	5	2.778	8	2.528	12	1.798	10	2.823
9	2.058	10	1.878	13	1.238	15	1.163		
14	1.373								
19	0.578								

Note: No data is available for 26-40th visit.

Seasonal beach profile changes at Ullal 1000m

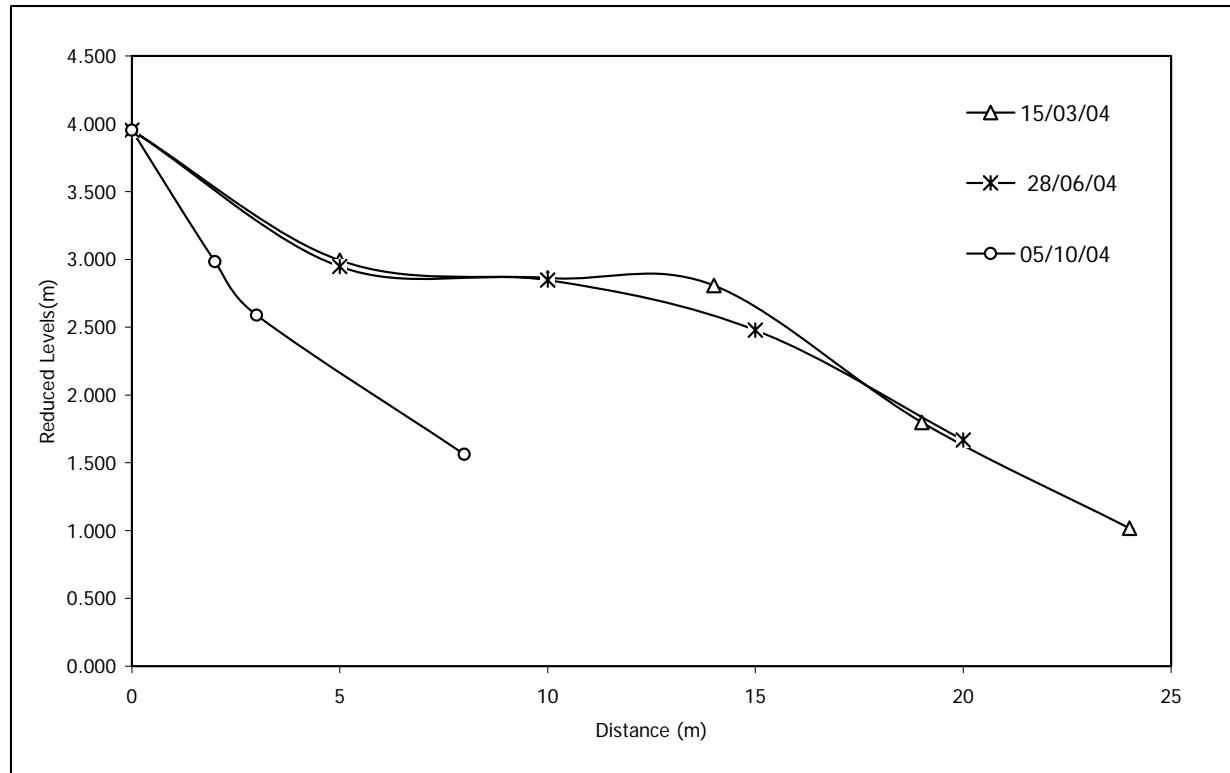


Fig. 2.90 Beach profiles at 1000m chainage (Year 2004)

Seasonal beach profile changes at Ullal 1000m

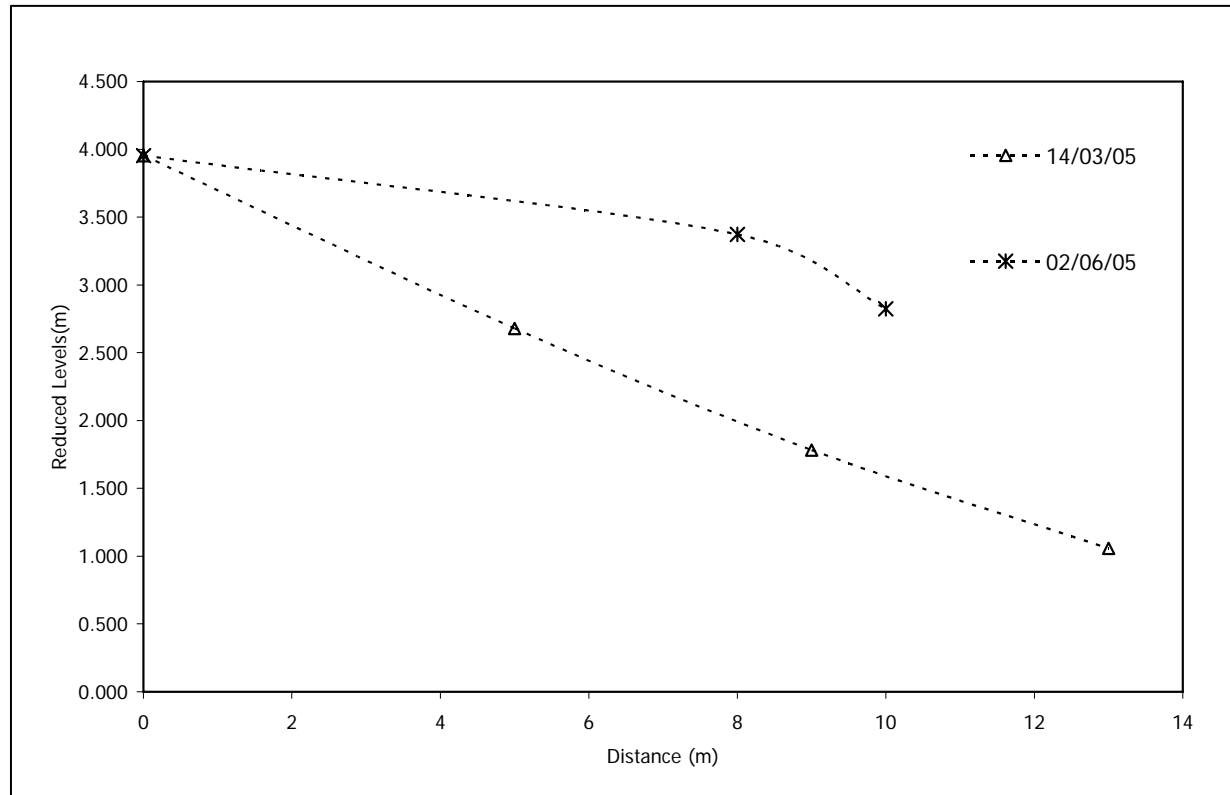


Fig. 2.91 Beach profiles at 1000m chainage (Year 2005)

Yearly beach profile changes at Ullal 1000m

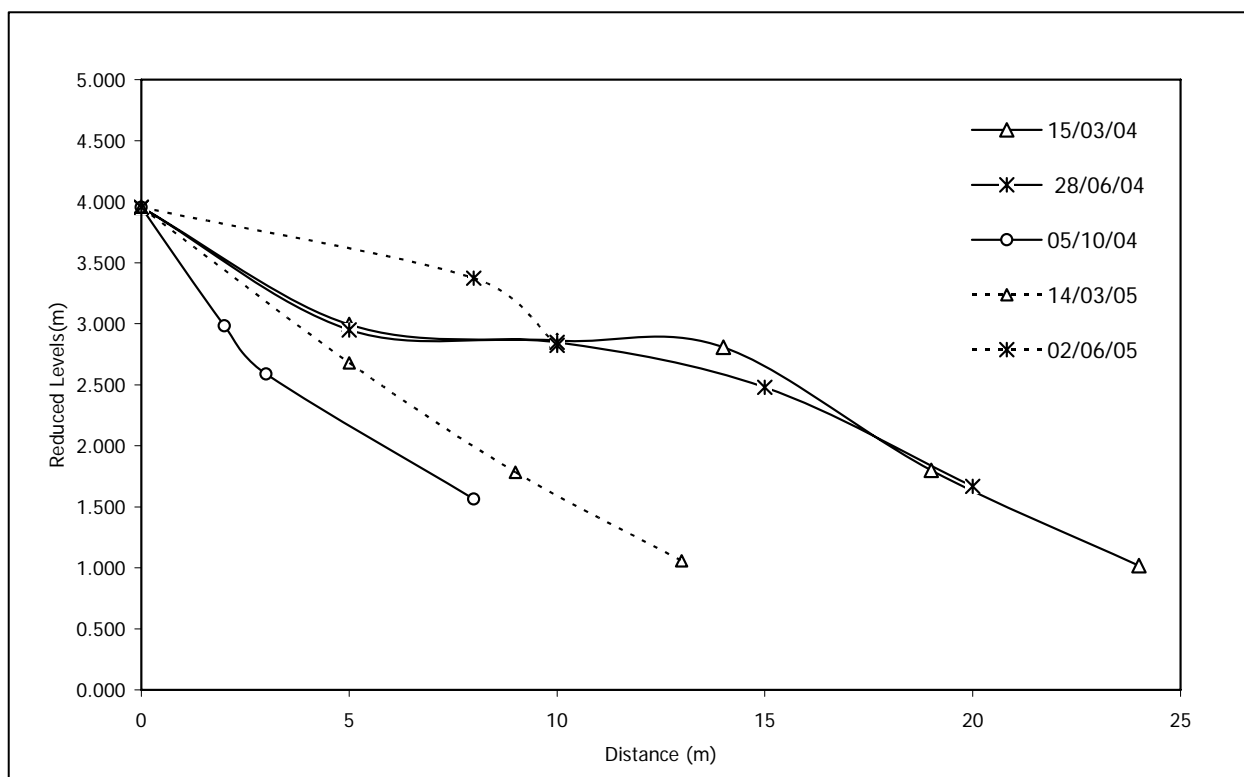


Fig. 2.92 Beach profiles at 1000m chainage (From 2004 to 2006)

Reduced levels at Ullal 1500m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit	
Distance	26/02/04	Distance	15/03/04	Distance	29/03/04	Distance	11/05/04	Distance	31/05/04
0	4.208	0	4.208	0	4.208	0	4.208	0	4.208
5	3.563	5	3.618	5	3.573	4	3.118	5	4.673
12	2.633	12	2.768	12	2.603	11	2.533	13	4.008
17	2.078	17	2.233	17	2.113	16	1.678	18	3.138
22	1.253	22	1.138	22	1.188			21	2.703

6 th visit		7 th visit		8 th visit		9 th visit		10 th visit	
Distance	14/06/04	Distance	28/06/04	Distance	14/07/04	Distance	01/08/04	Distance	17/08/04
0	4.208	0	4.208	0	4.208	0	4.208	0	4.208
5	4.308	5	4.313	4	3.788	5	3.498	5	3.393
				8	2.888	10	2.888	10	2.783
				13	2.053				

11 th visit		12 th visit		13 th visit		14 th visit		15 th visit	
Distance	31/08/04	Distance	21/09/04	Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
0	4.208	0	4.208	0	4.208	0	4.208	0	4.208
5	3.335	5	3.455	5	3.385	5	3.425	5	3.813
10	2.567	10	2.715	10	2.630	10	2.740	10	2.683
								15	1.768
								20	1.253

Reduced levels at Ullal 1500m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit		21 st visit	
Distance	04/01/05	Distance	18/1/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05	Distance	14/03/05
0	4.208	0	4.208	0	4.208	0	4.208	0	4.208	0	4.208
5	3.473	4	4.018	5	3.538	7	3.768	7	3.788	7	3.748
10	2.648	9	3.628	13	1.513	12	2.628	14	3.613	14	3.373
15	2.163	14	2.188	16	1.078	17	1.458	21	1.548	21	1.453
20	1.583	19	1.418			19	1.188				

22 nd visit		23 rd visit		24 th visit		25 th visit		26 th visit		27 th visit	
Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05	Distance	02/06/05	Distance	16/06/05
0	4.208	0	4.208	0	4.208	0	4.208	0	4.208	0	4.208
7	3.810	7	3.748	7	3.618	7	4.183	7	4.158	7	3.958
14	3.335	14	3.373	12	2.638	12	2.718	12	2.748	12	2.548
21	1.453	21	1.453	17	1.948	17	2.213	17	2.288		
						22	1.233	22	1.308		

Note: No data is available for 28-40th visit.

Seasonal beach profile changes at Ullal 1500m

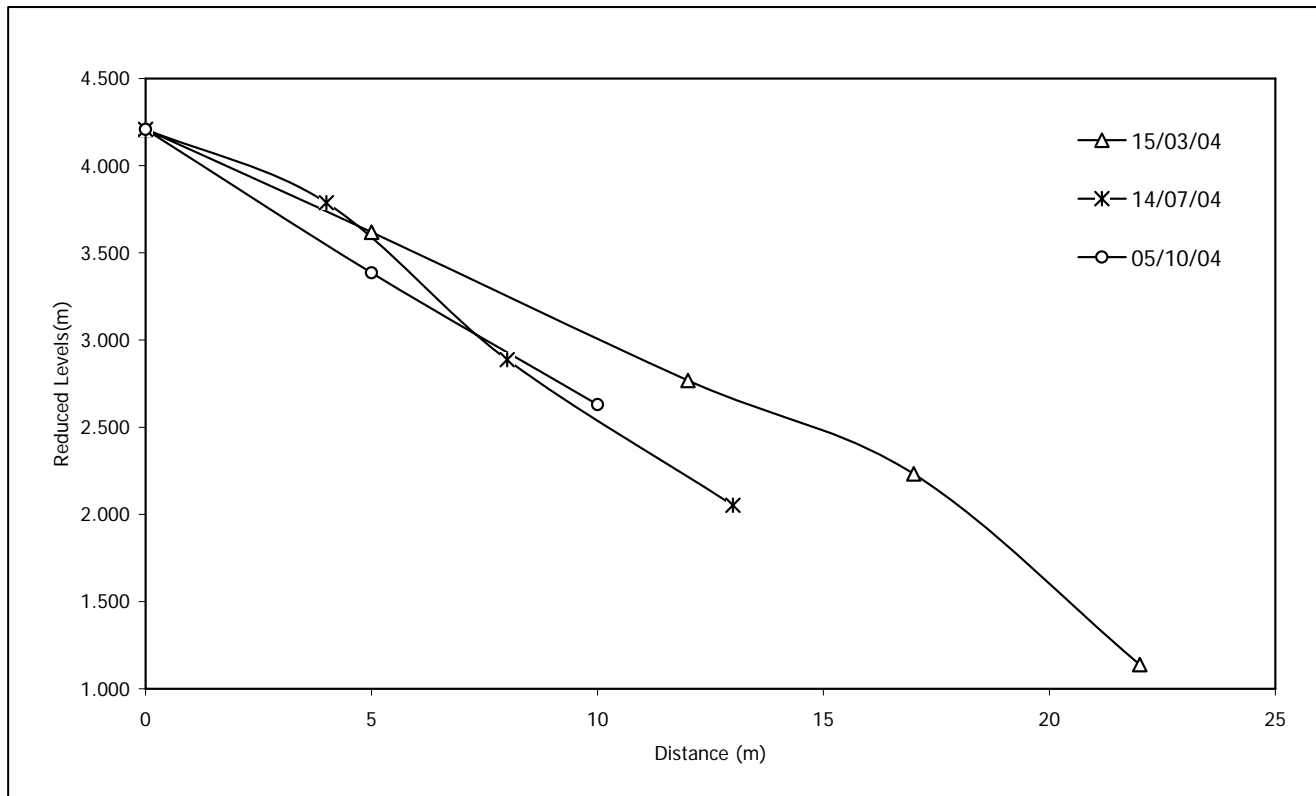


Fig. 2.93 Beach profiles at 1500m chainage (Year 2004)

Seasonal beach profile changes at Ullal 1500m

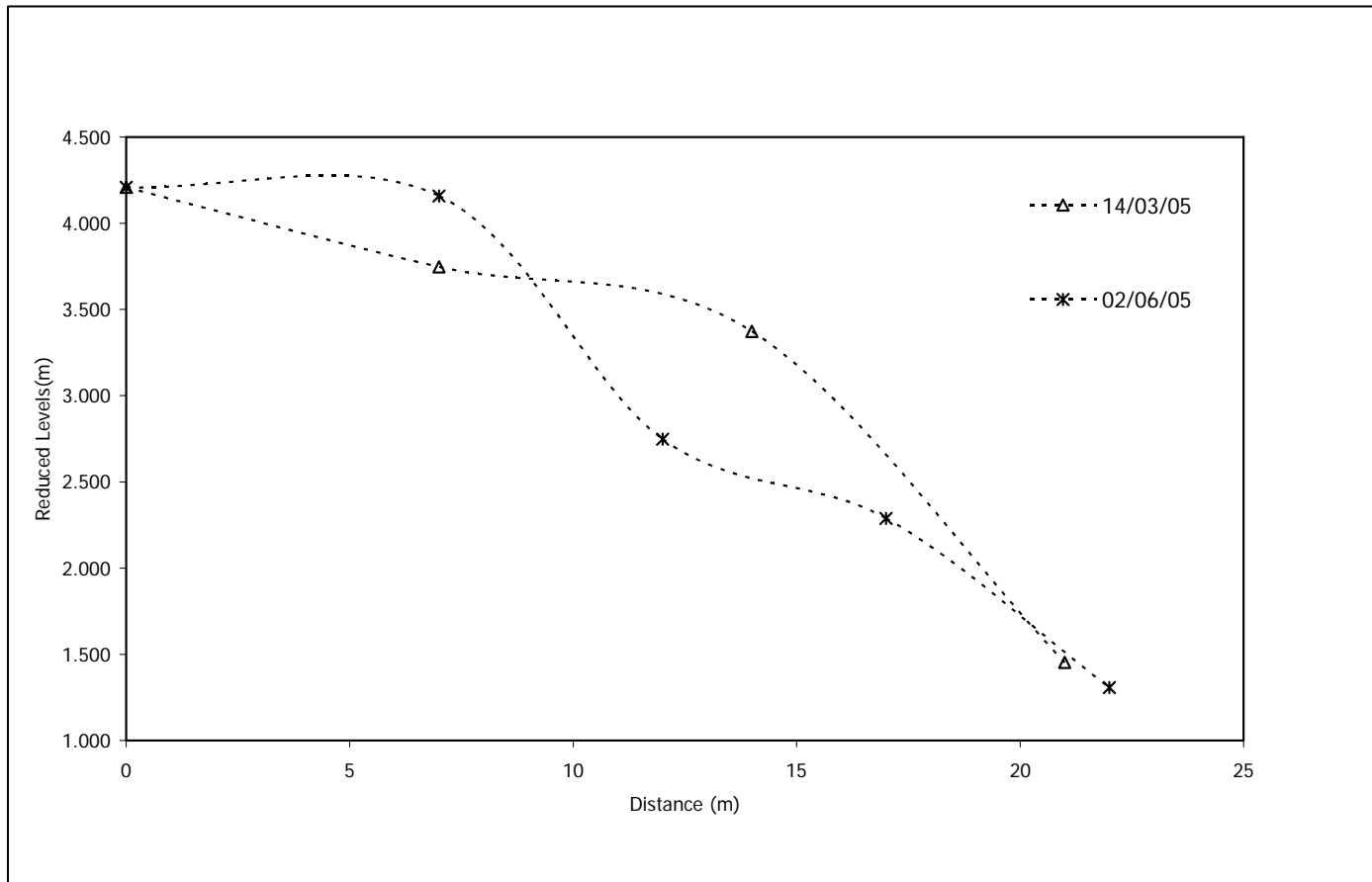


Fig. 2.94 Beach profiles at 1500m chainage (Year 2005)

Yearly beach profile changes at Ullal 1500m

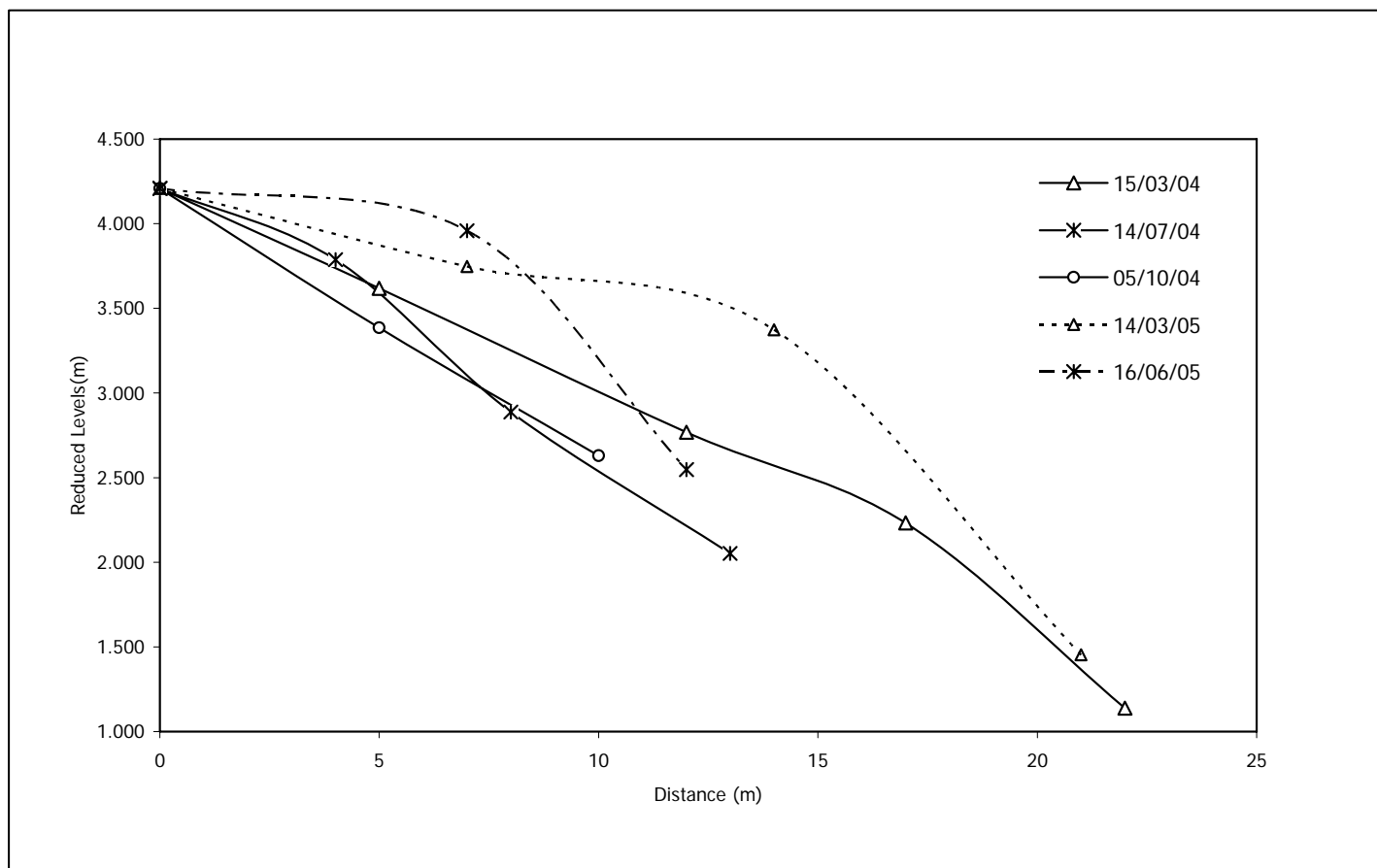


Fig. 2.95 Beach profiles at 1500m chainage (From 2004 to 2006)

Reduced levels at Ullal 2000m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit	
Distance	26/02/04	Distance	15/03/04	Distance	29/03/04	Distance	11/05/04	Distance	31/05/04
0	4.183	0	4.183	0	4.183	0	4.183	0	4.183
7	3.313	6	3.388	7	3.413	7	3.093	7	2.978
12	2.313	11	2.558	12	2.578	8	2.508	12	2.428
17	2.108	16	2.283	17	2.278	16	1.653	17	2.118
20	1.723	21	2.028	22	2.123			22	1.598
25	0.818	26	1.008	25	1.883			27	0.973
		30	0.463	30	0.893				
				40	0.083				

6 th visit		7 th visit		10 th visit		11 th visit		12 th visit	
Distance	14/06/04	Distance	28/06/04	Distance	17/08/04	Distance	31/08/04	Distance	21/09/04
0	4.183	0	4.183	0	4.183	0	4.183	0	4.183
5	3.178	5	2.578	4	3.293	5	3.263	5	2.408
10	2.783	10	1.848	14	1.653	10	2.518	10	1.853
		13	1.378			15	2.063	15	1.558
						20	1.358	20	0.868
						23	0.818		

13 th visit		14 th visit		15 th visit	
Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
0	4.183	0	4.183	0	4.183
10	2.558	6	3.163	5	3.073
17	2.348	12	2.673	10	2.583
22	2.443	17	2.438	10.5	2.453
		20	2.278	16	2.138
		30	1.485	21	1.418
				26	0.948
				31	0.533

Reduced levels at Ullal 2000m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit		21 st visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05	Distance	14/03/05
0	4.183	0	4.183	0	4.183	0	4.183	0	4.183	0	4.183
5	3.133	5	3.053	5	2.963	5	3.333	5	2.938	5	3.098
10	2.658	10	2.638	10	2.533	10	3.203	10	2.428	10	2.753
15	2.323	15	2.278	15	2.228	15	2.248	15	1.948	15	1.858
20	2.328	20	2.208	20	2.368	20	2.278	20	2.068	20	1.538
25	1.828	24	2.118	23	2.258	22	2.338	24	2.038	24	1.218
30	1.253	28	1.508	28	1.723	27	1.838	26	1.648		
		33	0.868	33	1.033	33	0.993	31	0.388		
		38	-0.057			35	0.688	32	0.188		

22 nd visit		23 rd visit		24 th visit		25 th visit		26 th visit		27 th visit	
Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05	Distance	02/06/05	Distance	16/06/05
0	4.183	0	4.183	0	4.183	0	4.183	0	4.183	0	4.183
7	3.103	5	3.068	5	2.998	7	2.838	5	3.208	6	3.338
12	2.693	10	2.588	10	2.263	12	2.223	10	3.188	11	3.058
16	1.933	14	1.968	15	1.748	17	1.883	15	2.858	16	2.898
21	1.693	19	1.408	20	1.443	21	1.843	20	2.198	21	2.138
26	1.233	24	0.923	25	1.138	26	1.103	25	1.578	24	1.658
31	0.848			30	0.558						

Note: No data is available for 28-40th visit and also for the year 2006.

Seasonal beach profile changes at Ullal 2000m

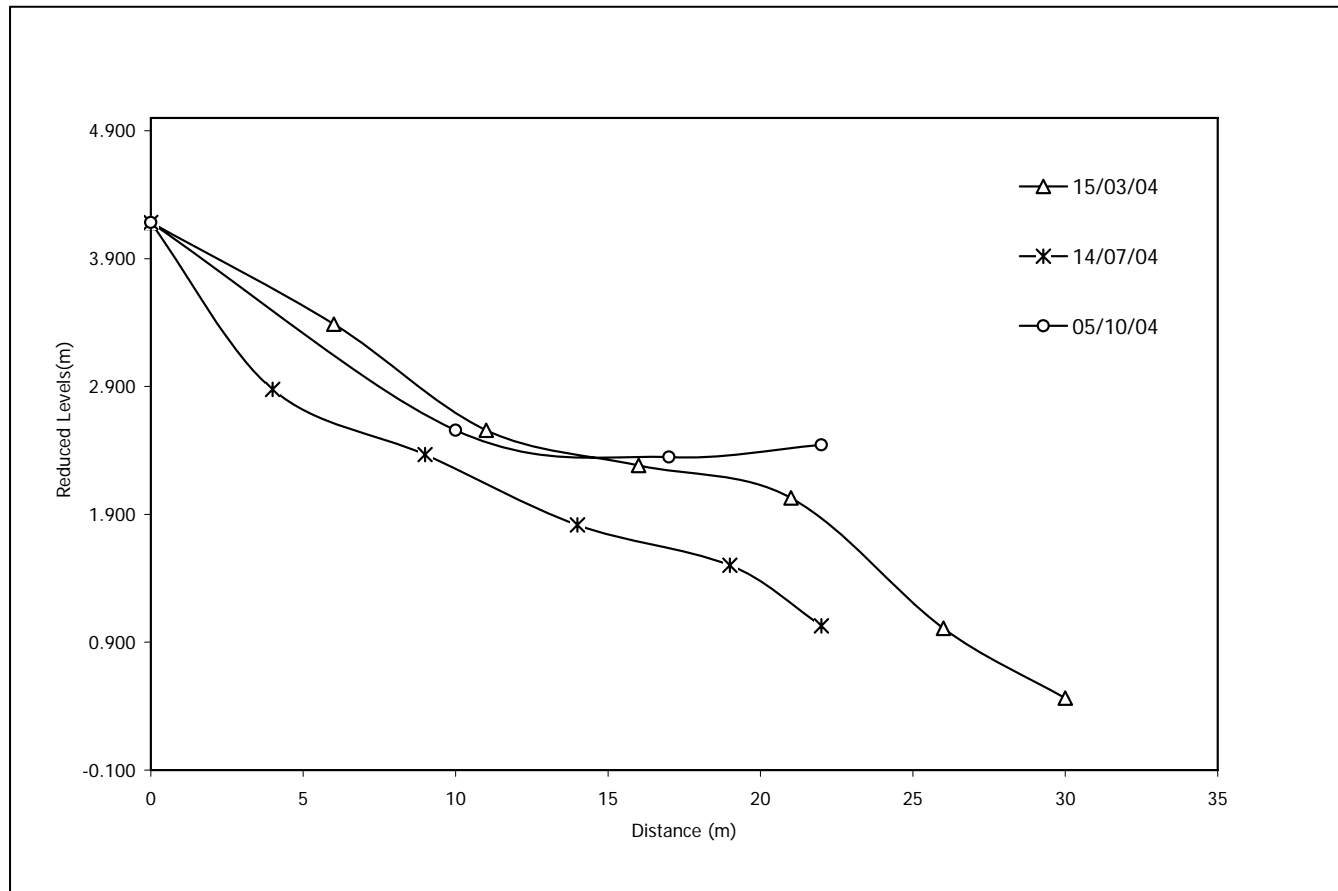


Fig. 2.96 Beach profiles at 2000m chainage (Year 2004)

Seasonal beach profile changes at Ullal 2000m

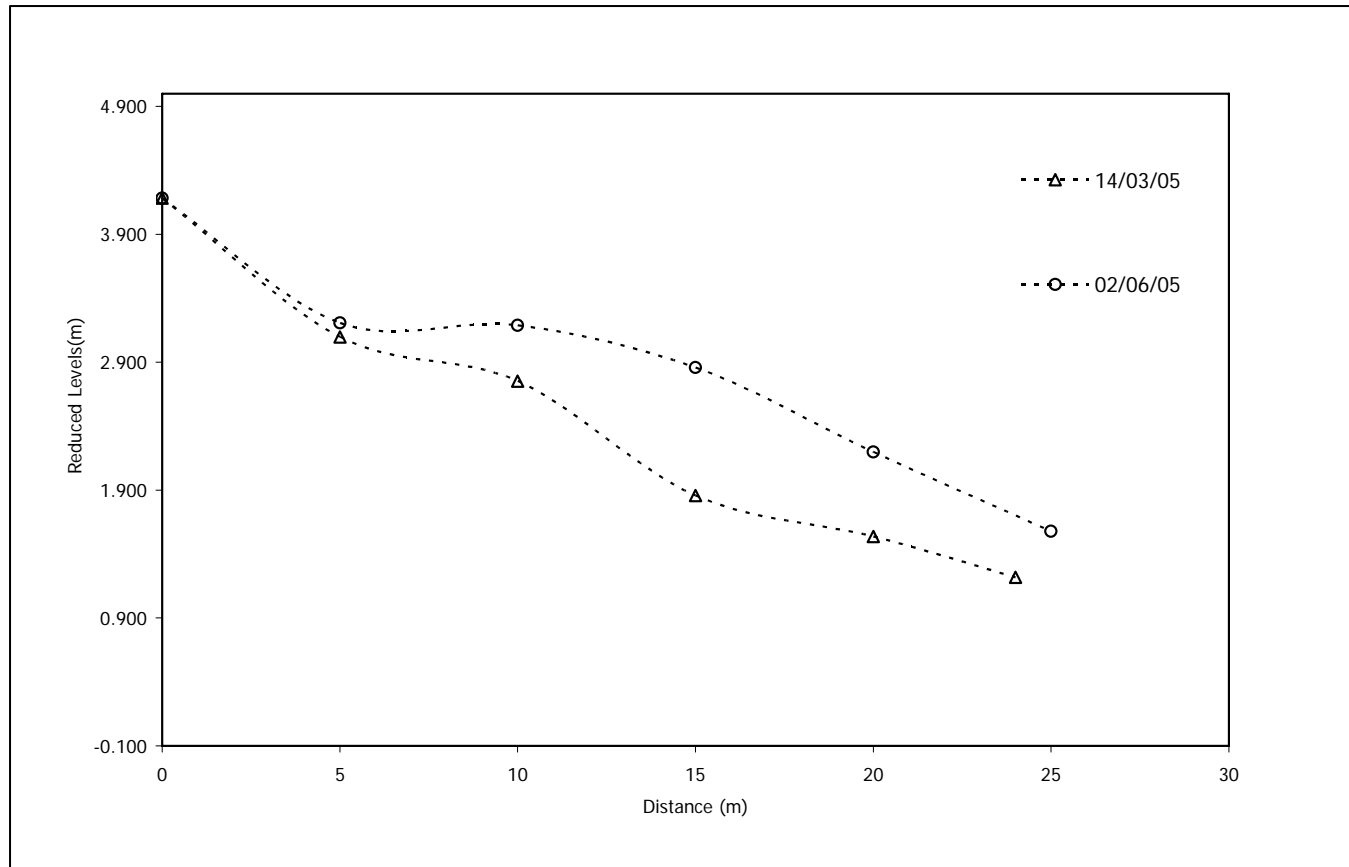


Fig. 2.97 Beach profiles at 1500m chainage (Year 2005)

Yearly beach profile changes at Ullal 2000m

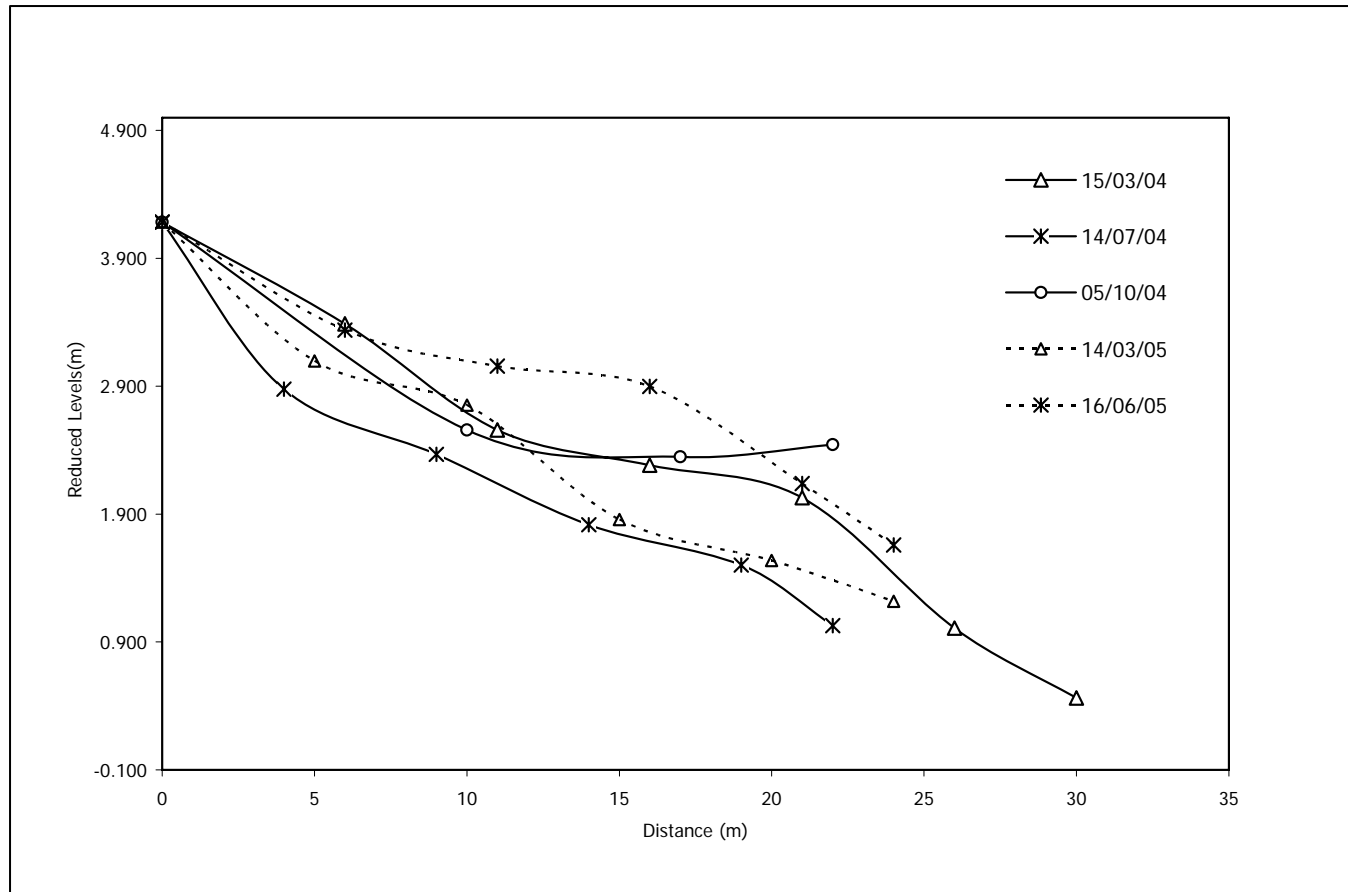


Fig. 2.98 Beach profiles at 2000m chainage (From 2004 to 2006)

Reduced levels at Ullal 2500m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit	
Distance	26/02/04	Distance	15/03/04	Distance	29/03/04	Distance	11/05/04	Distance	31/05/04
0	4.423	0	4.423	0	4.423	0	4.423	0	4.423
6	3.933	7	3.858	6	3.933	6	3.903	6	3.928
12	3.038	12	2.893	12	3.123	13	2.488	12	2.868
17	2.263	17	1.903	18	1.968	16	1.988	17	2.048
22	1.298	21	1.363	21	0.963				

6 th visit		7 th visit		10 th visit		11 th visit		12 th visit	
Distance	14/06/04	Distance	28/06/04	Distance	17/08/04	Distance	31/08/04	Distance	21/09/04
0	4.423	0	4.423	0	4.423	0	4.423	0	4.423
5	3.923	5	3.908	6	3.953	6	3.933	6	3.888
10	2.823	10	2.813	13	2.543	11	3.218	11	3.058
				22	1.183	16	2.388	16	2.408
						21	2.223	22	2.083
						24	1.603	25	1.438

13 th visit		14 th visit		15 th visit	
Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
0	4.423	0	4.423	0	4.423
6	3.943	6	4.023	6	3.843
11	3.063	12	3.028	11	3.083
21	1.858	17	2.373	16	1.933
24	1.058	20	1.598	21	1.543
				26	1.243

Reduced levels at Ullal 2500m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit		21 st visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05	Distance	14/03/05
0	4.423	0	4.423	0	4.423	0	4.423	0	4.423	0	4.423
7	4.128	6	4.103	6	4.078	7	4.098	5	4.833	5	4.083
13	3.088	11	3.123	11	2.893	14	2.853	6	4.083	6	3.458
18	2.473	16	2.413	16	2.243	19	2.303	12	2.858	12	2.608
23	1.803	21	1.603	21	1.918	24	1.553	17	2.393	17	2.078
		26	0.713	27	1.398	29	1.053	22	1.883		
								27	1.453		

22 nd visit		23 rd visit		24 th visit		25 th visit		26 th visit		27 th visit	
Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05	Distance	02/06/05	Distance	16/06/05
0	4.423	0	4.423	0	4.423	0	4.423	0	4.423	0	4.423
7	4.128	5	4.108	5	4.093	7	4.103	7	4.058	7	4.123
12	3.328	11	3.503	10	3.248	12	3.673	12	3.318	12	3.543
17	2.508	16	2.843	15	2.408	17	2.688	17	2.448	14	2.958
21	1.823	21	2.263	16	2.043	18	2.408			19	1.923
		26	1.813			23	1.463				

Note: No data is available for 28-40th visit and also for the year 2006.

Seasonal beach profile changes at Ullal 2500m

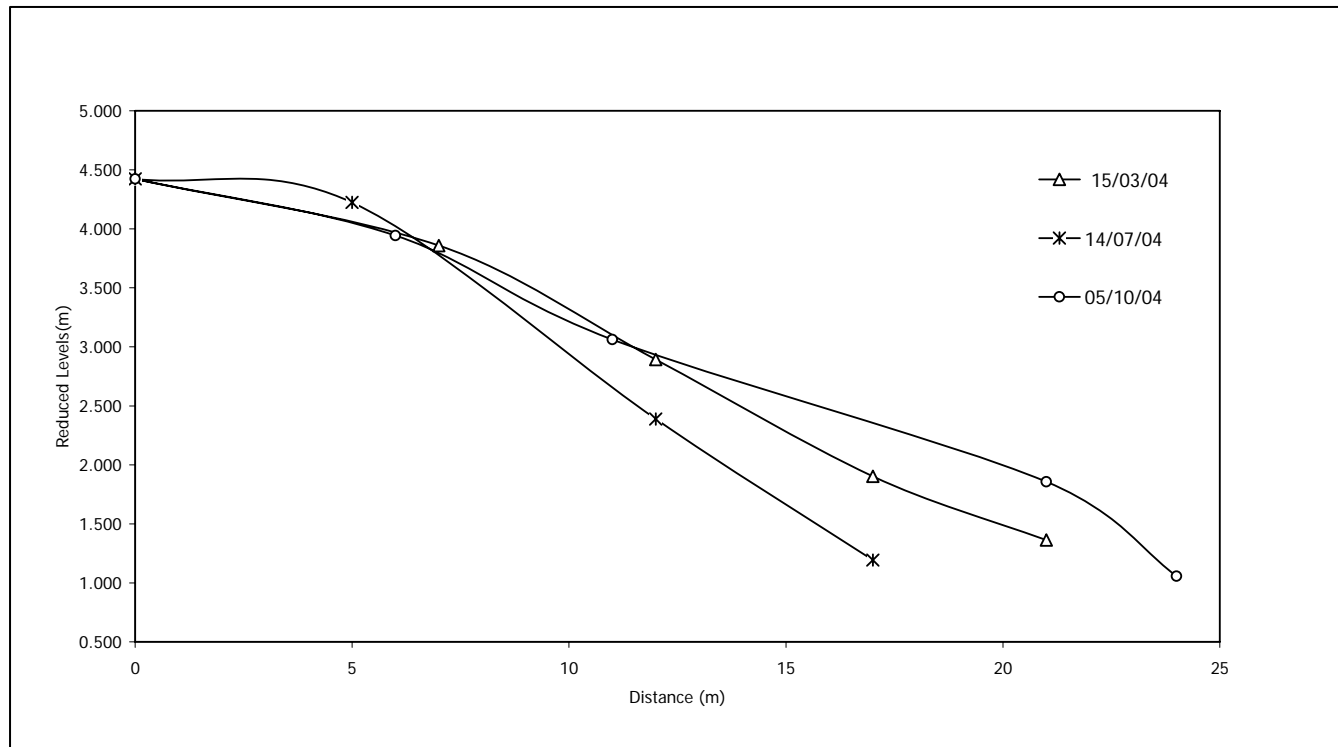


Fig. 2.99 Beach profiles at 2500m chainage (Year 2004)

Seasonal beach profile changes at Ullal 2500m

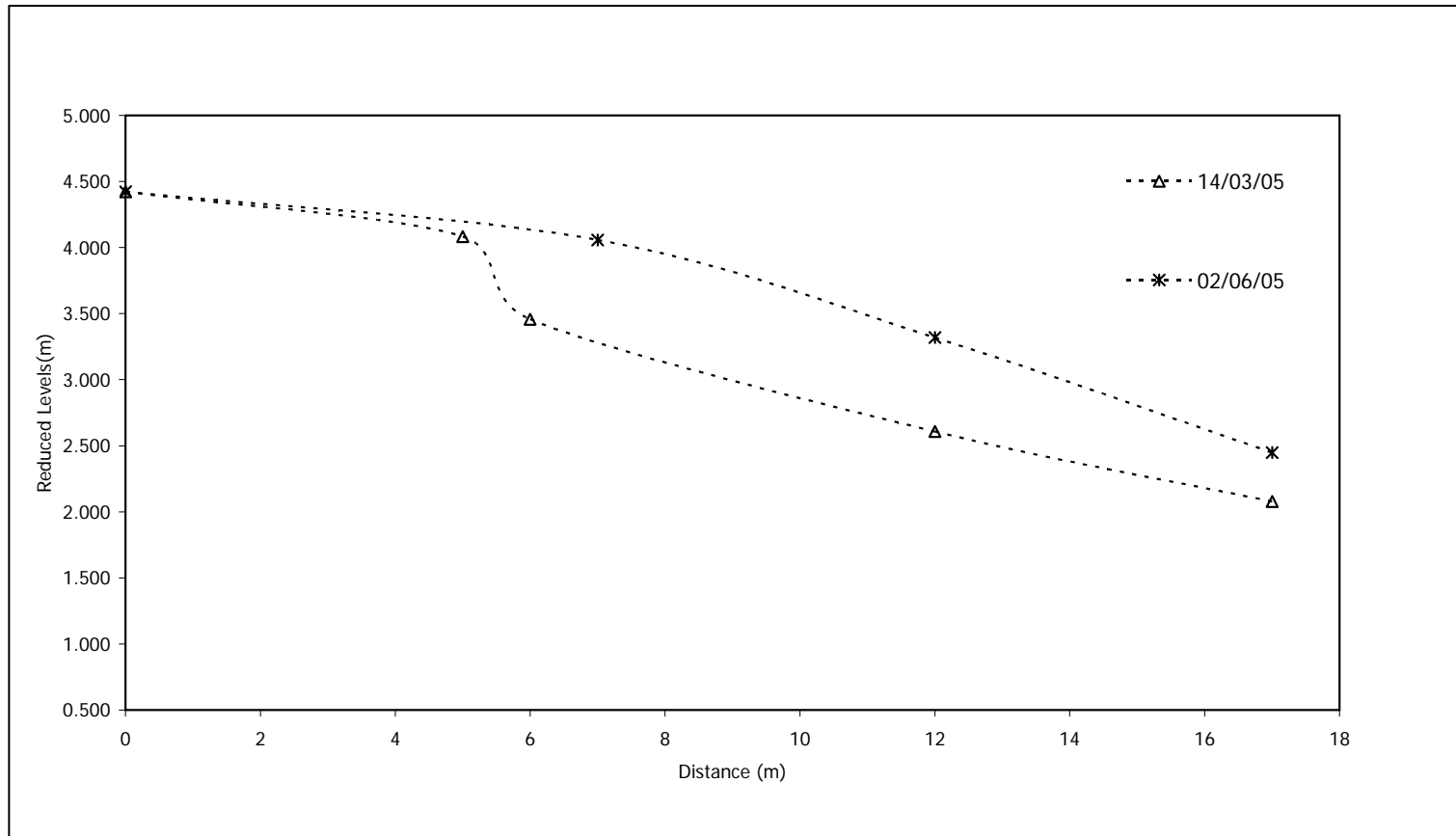


Fig. 2.100 Beach profiles at 2500m chainage (Year 2005)

Yearly beach profile changes at Ullal 2500m

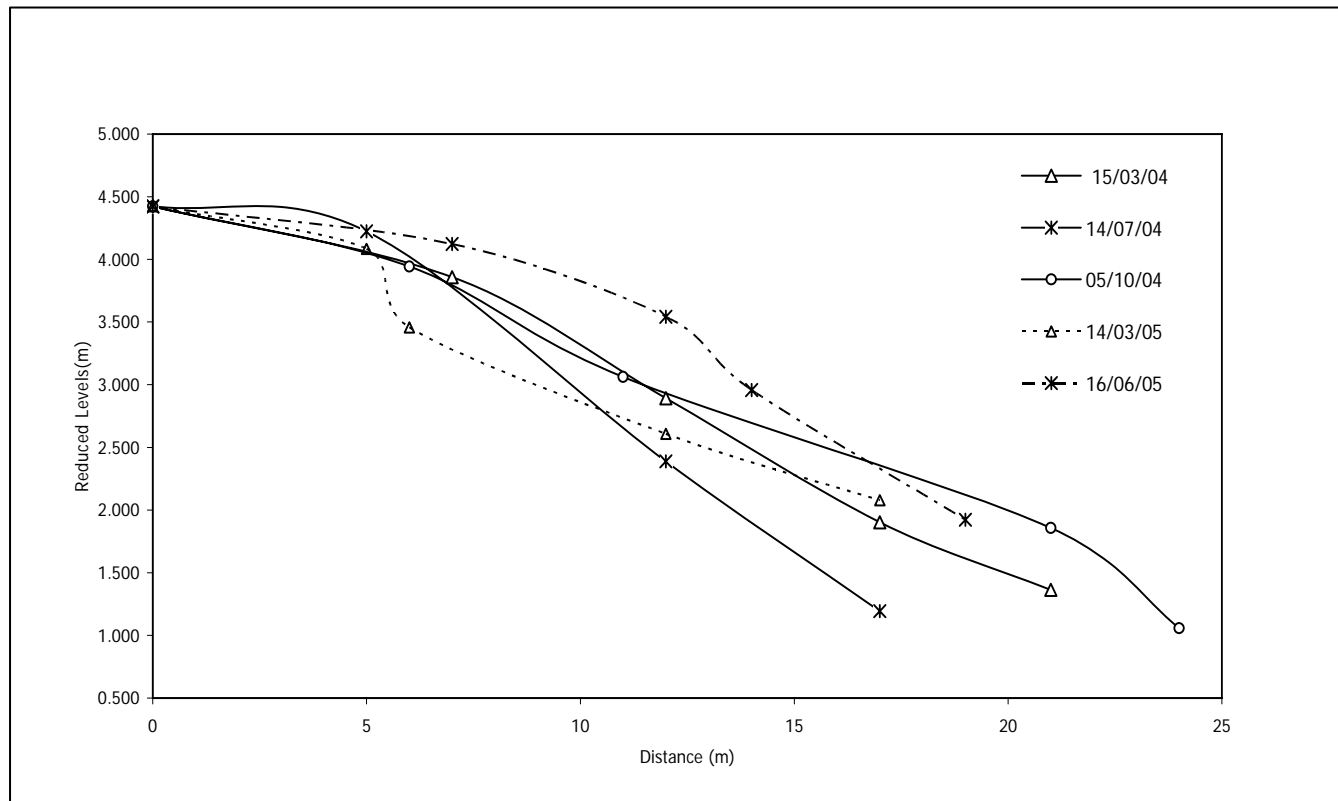


Fig. 2.101 Beach profiles at 2500m chainage (From 2004 to 2006)

Reduced levels at Ullal 3000m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit	
Distance	26/02/04	Distance	15/03/04	Distance	29/03/04	Distance	11/05/04	Distance	31/05/04
0	4.428	0	4.428	0	4.428	0	4.428	0	4.428
5	3.978	5	3.958	5	3.988	7.5	4.023	7	4.018
10	3.778	10	3.803	10	3.858	9	3.503	9	3.033
15	2.728	15	2.713	15	2.638	17	2.678	14	2.218
20	2.533	20	2.443	20	2.153	20	1.253	19	1.703
25	1.603	25	1.713	25	1.308			24	1.188
30	0.533	30	0.918	30	0.278				
		34	0.468						

6 th visit		7 th visit		10 th visit		11 th visit		12 th visit	
Distance	14/06/04	Distance	28/06/04	Distance	17/08/04	Distance	31/08/04	Distance	21/09/04
0	4.428	0	4.428	0	4.428	0	4.428	0	4.428
5	2.633	2	4.363	1	3.458	1	3.508	1	3.873
		4	3.053	2	2.808	2	3.428	3	3.213
		9	2.173	12	1.508	7	2.483	8	2.533
		14	2.003	22	0.878	12	2.113	13	2.193
		19	2.078	29	0.288	17	1.973	18	2.148
		22	1.958			22	1.658	23	1.983
		23	1.618			27	1.018	28	1.333
		26	1.118					31	0.738

13 th visit		14 th visit		15 th visit	
Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
0	4.428	0	4.428	0	4.428
1	3.988	1	3.798	1	3.813
3	4.243	2	3.368	5	2.908
13	2.218	7	2.603	11	2.478
23	2.243	12	2.303	16	2.363
30	1.633	17	2.288	21	2.448
		28	0.393	26	1.808
				31	1.243
				36	0.608

Reduced levels at Ullal 3000m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05
0	4.428	0	4.428	0	4.428	0	4.428	0	4.428
1	3.858	1	3.988	1	3.858	1	3.338	1	3.828
3	3.243	3	3.258	3	3.218	3	2.618	4	3.018
8	2.553	8	2.608	8	2.528	8	2.018	14	2.333
13	2.343	13	2.388	13	2.318	13	1.813	24	2.443
18	2.423	18	2.488	18	2.428	18	1.868	30	2.148
23	2.433	23	2.508	23	2.408	22	1.818	36	1.028
28	2.003	27	2.258	27	2.128	27	1.478		
33	1.213	31	1.418	32	1.563	32	0.918		
		36	0.778	37	1.088	35	0.318		
		38	0.578						

21 st visit		22 nd visit		23 rd visit		24 th visit		25 th visit	
Distance	14/03/05	Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05
0	4.428	0	4.428	0	4.428	0	4.428	0	4.428
1	3.778	2	3.788	3	3.538	2	4.073	1	3.788
4	3.308	7	3.293	8	3.178	5	3.458	4	3.023
14	2.723	12	3.168	13	2.998	10	3.148	9	2.653
16	2.393	13	3.088	18	2.558	15	2.703	14	2.553
18	2.053	16	2.548	23	2.338	20	2.213	19	2.348
20	1.843	21	2.388			25	1.838	24	2.308
22	1.643	24	2.348			30	1.298	29	1.463
27	1.178	28	1.828						
31	0.903								

Reduced levels at Ullal 3000m chainage for the year 2005 (Contd...)

26 th visit		27 th visit		30 th visit		32 nd visit		33 rd visit		34 th visit	
Distance	02/06/05	Distance	16/06/05	Distance	15/07/05	Distance	13/08/05	Distance	10/09/05	Distance	16/09/05
0	4.428	0	4.428	0	4.428	0	4.428	0	5.363	0	4.428
1	3.803	2	3.778	1	3.423	2	4.673	2	4.568	2	4.708
2	3.448	4	3.308	2	2.513	3	3.803	4	3.593	4	3.513
7	3.323	9	3.263	7	1.653	8	2.233	9	3.138	9	3.088
12	3.358	14	3.273					14	2.498	14	2.368
17	2.978	19	2.723							19	1.763
22	2.318	24	1.723								
27	1.373										

35 th visit		36 th visit		37 th visit		38 th visit		39 th visit		40 th visit	
Distance	30/09/05	Distance	29/10/05	Distance	19/11/05	Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
0	5.363	0	5.363	0	5.363	0	5.363	0	5.363	0	5.363
1	4.703	2	4.788	1	4.613	2	4.533	1	4.618	1	4.603
3	3.723	6	3.743	4	3.683	6	3.608	3	3.788	3	3.633
8	3.053	16	3.043	9	3.208	13	3.203	8	3.388	8	3.283
13	2.453	26	3.063	14	3.333	18	3.403	13	3.303	12	3.413
18	2.038	31	1.883	19	2.348	20	3.088	18	3.388	17	3.163
23	1.623			25	1.838	22	2.383	23	2.558	23	2.693
28	1.143									27	1.243

Reduced levels at Ullal 3000m chainage for the year 2006

41 st visit		42 nd visit		43 rd visit		44 th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06
0	5.363	0	5.363	0	5.363	0	5.363
1	4.433	1	4.373	1	4.403	1	4.358
3	3.553	3	3.563	3	3.628	4	3.608
8	3.153	8	3.228	8	3.253	7	3.248
13	3.263	13	3.398	15	3.403	17	3.398
18	3.313	15	2.813	19	2.968	22	2.548
23	2.558	19	1.883	22	1.948		
25	1.568			25	1.473		

45 th visit		46 th visit		47 th visit	
Distance	17/03/06	Distance	04/04/06	Distance	24/11/06
0	5.363	0	5.363	0	5.363
1	4.398	2	4.268	2	3.538
3	3.473	4	3.503	7	3.143
8	3.318	9	3.233	11	2.483
10	3.398	14	3.428	16	2.053
14	2.583	19	2.203	21	1.313
17	1.963				

Seasonal beach profile changes at Ullal 3000m

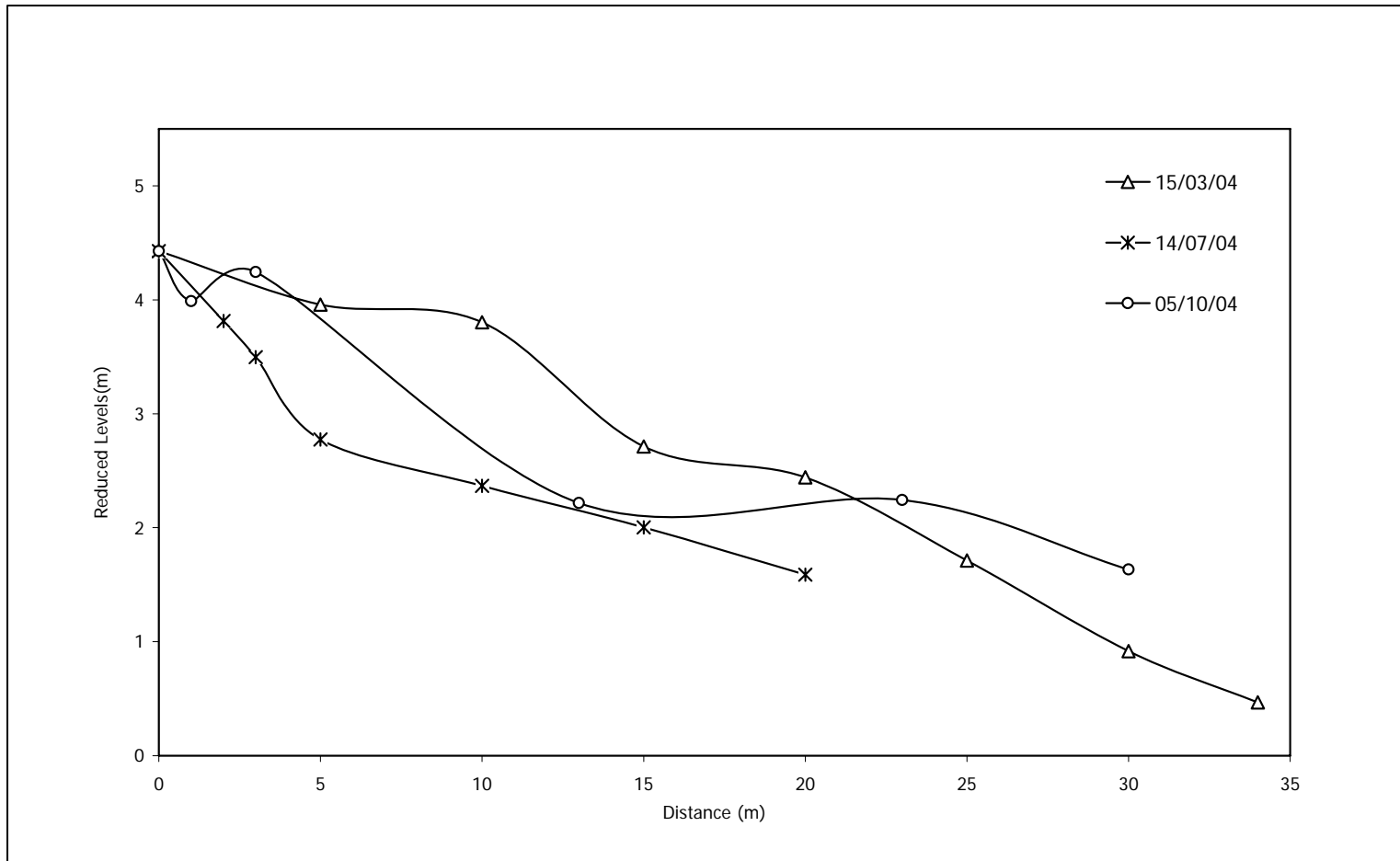


Fig. 2.102 Beach profiles at 3000m chainage (Year 2004)

Seasonal beach profile changes at Ullal 3000m

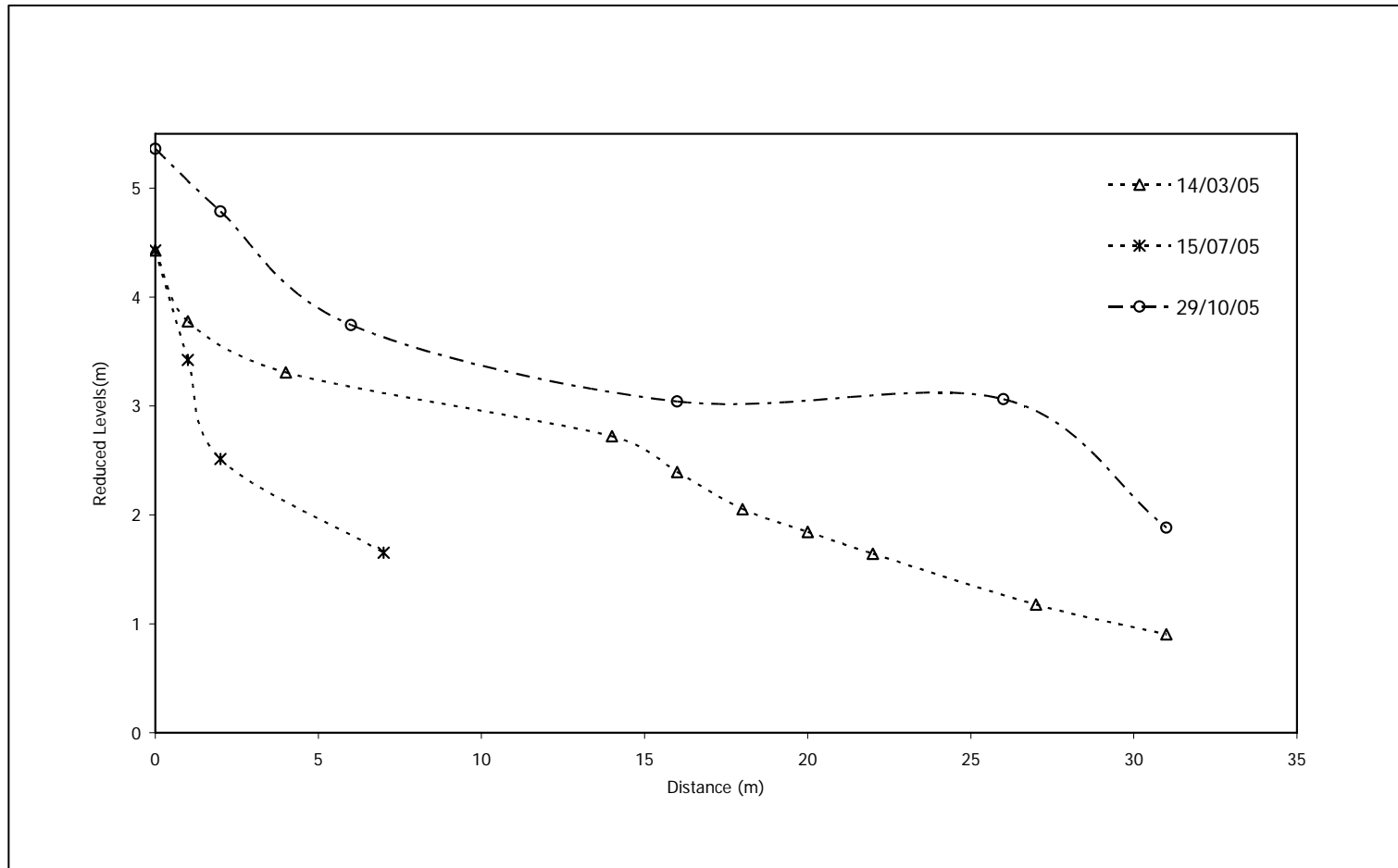


Fig. 2.103 Beach profiles at 3000m chainage (Year 2005)

Seasonal beach profile changes at Ullal 3000m

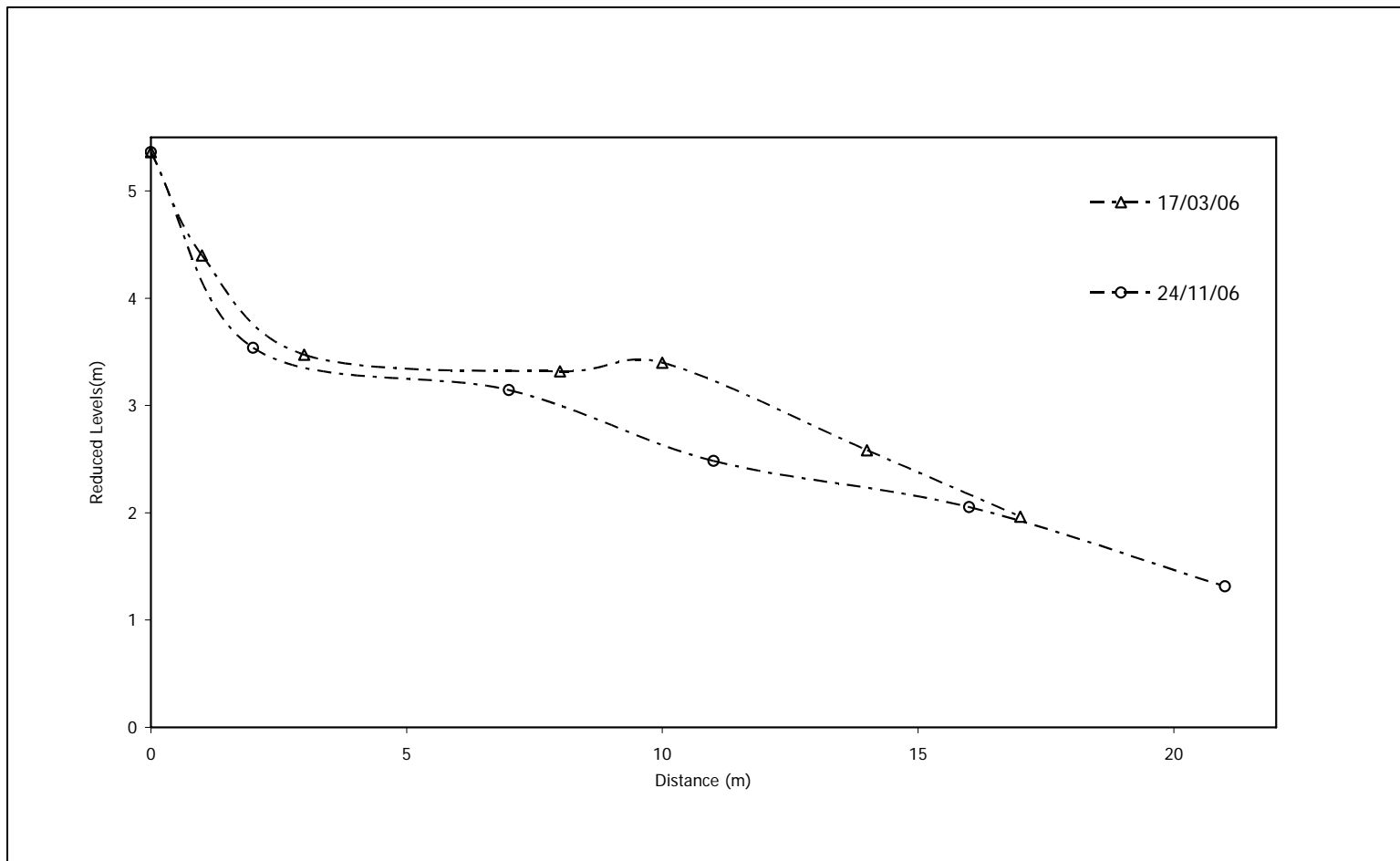


Fig. 2.104 Beach profiles at 3000m chainage (Year 2006)

Yearly beach profile changes at Ullal 3000m

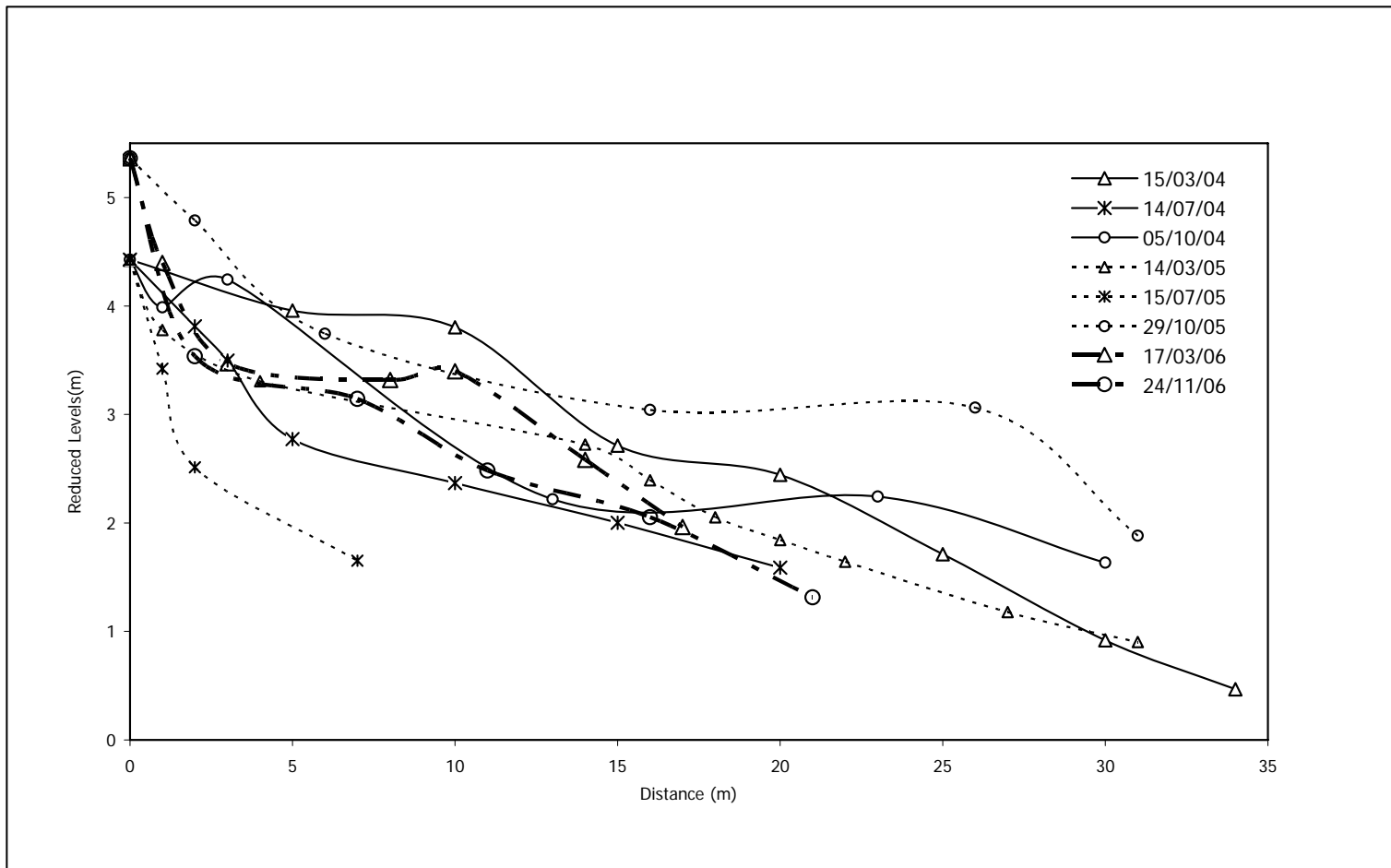


Fig. 2.105 Beach profiles at 3000m chainage (From 2004 to 2006)

Reduced levels at Ullal 3500m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit	
Distance	26/02/04	Distance	15/03/04	Distance	29/03/04	Distance	11/05/04	Distance	31/05/04
0	4.288	0	4.288	0	4.288	0	4.288	0	4.288
5	3.628	13	2.903	5	3.593	9	3.613	9	3.753
13	4.328	18	1.888	13	2.233	12	2.043	15	0.653
18	1.138	23	0.923	18	1.313				
				23	0.133				

6 th visit		7 th visit		10 th visit		11 th visit		12 th visit	
Distance	14/06/04	Distance	28/06/04	Distance	17/08/04	Distance	31/08/04	Distance	21/09/04
0	4.288	0	4.288	0	4.288	0	4.288	0	4.288
5	3.748	5	3.588	6	2.833	5	3.638	4	3.598
10	2.898	10	2.398	10	0.853	10	2.418	6	2.993
		12	2.098			15	1.473	11	2.363
		15	1.098			20	0.658	16	2.363
								21	1.013
								24	0.518

13 th visit		14 th visit		15 th visit	
Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
0	4.288	0	4.288	0	4.288
6	2.893	4	3.168	4	3.588
15	1.888	9	2.593	7	2.903
20	1.238	14	2.098	12	2.413
		19	1.748	17	1.743
		24	1.093	22	1.078
				27	1.258
				32	1.013

Reduced levels at Ullal 3500m chainage for the year 2005

16th visit		17th visit		18th visit		19th visit		20th visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05
0	4.288	0	4.288	0	4.288	0	4.288	0	4.288
5	3.408	6	2.938	6	3.063	6	2.903	5	3.388
10	2.638	11	2.468	16	2.093	11	2.458	10	2.658
15	2.248	16	2.068	20	1.893	16	2.168	15	2.283
20	2.053	20	1.808	25	1.403	21	1.888	18	2.243
25	1.568	25	1.018	28	1.053	26	1.188	20	2.038
29	1.063	30	0.408			30	0.608	25	1.603
								27	0.808

21st visit		22nd visit		23rd visit		24th visit		25th visit	
Distance	14/03/05	Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05
0	4.288	0	4.288	0	4.288	0	4.288	0	4.288
7	3.023	7	4.003	7	3.028	6	2.963	8	3.013
12	2.658	12	3.638	12	2.688	11	2.618	13	2.643
17	2.158	17	3.228	17	2.293	16	2.243	18	2.293
22	1.638	21	2.943	21	1.828	21	1.453	23	1.343
25	1.343	25	2.153						

Reduced levels at Ullal 3500m chainage for the year 2005 (Contd...)

26th visit		27th visit		30th visit		34th visit		35th visit	
Distance	02/06/05	Distance	16/06/05	Distance	15/07/05	Distance	16/09/05	Distance	30/09/05
0	4.288	0	4.288	0	4.288	0	4.288	0	4.288
7	3.493	6	3.533	10	2.143	5	3.608	3	4.678
12	2.848	11	2.718	15	1.503	8	3.353	6	4.533
17	2.003					11	1.523	11	2.608
22	1.148					15	0.993	16	2.353
								21	1.443

36th visit		37th visit		38th visit		39th visit		40th visit	
Distance	29/10/05	Distance	19/11/05	Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
0	4.288	0	4.288	0	4.288	0	4.288	0	4.288
5	4.953	4	4.328	4	4.318	3	4.258	5	4.303
15	2.948	9	3.183	9	2.873	8	2.888	12	2.813
22	1.788	14	1.813	14	1.613	13	1.988	17	1.953
		19	0.738			18	1.178	21	1.268
								25	0.293

Reduced levels at Ullal 3500m chainage for the year 2006

41 st visit		42 nd visit		43 rd visit		44 th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06
0	4.288	0	4.288	0	4.288	0	4.288
5	4.268	5	4.268	5	4.363	5	4.278
10	2.998	10	2.923	12	2.858	10	2.858
15	2.218	14	2.253	17	2.048	15	2.213
18	1.433	18	1.713	22	1.003	18	1.588
21	0.808	22	0.978	27	0.553		

45 th visit		46 th visit		47 th visit	
Distance	17/03/06	Distance	04/04/06	Distance	24/11/06
0	4.288	0	4.288	0	4.288
5	4.338	5	4.263	5	3.818
11	3.058	7	2.933	10	2.448
16	1.898	12	1.938	15	1.548
21	1.058	17	0.828	20	1.278
				25	0.888

Seasonal beach profile changes at Ullal 3500m

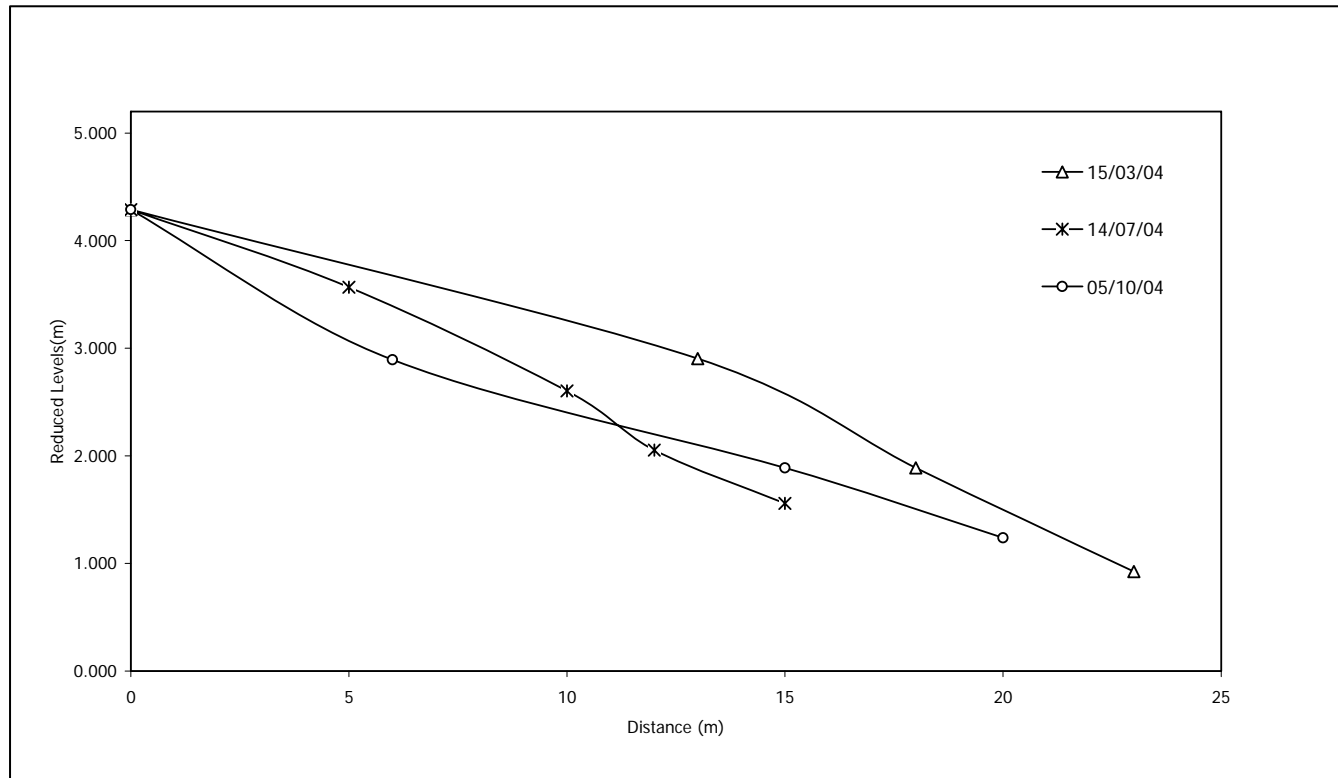


Fig. 2.106 Beach profiles at 3500m chainage (Year 2004)

Seasonal beach profile changes at Ullal 3500m

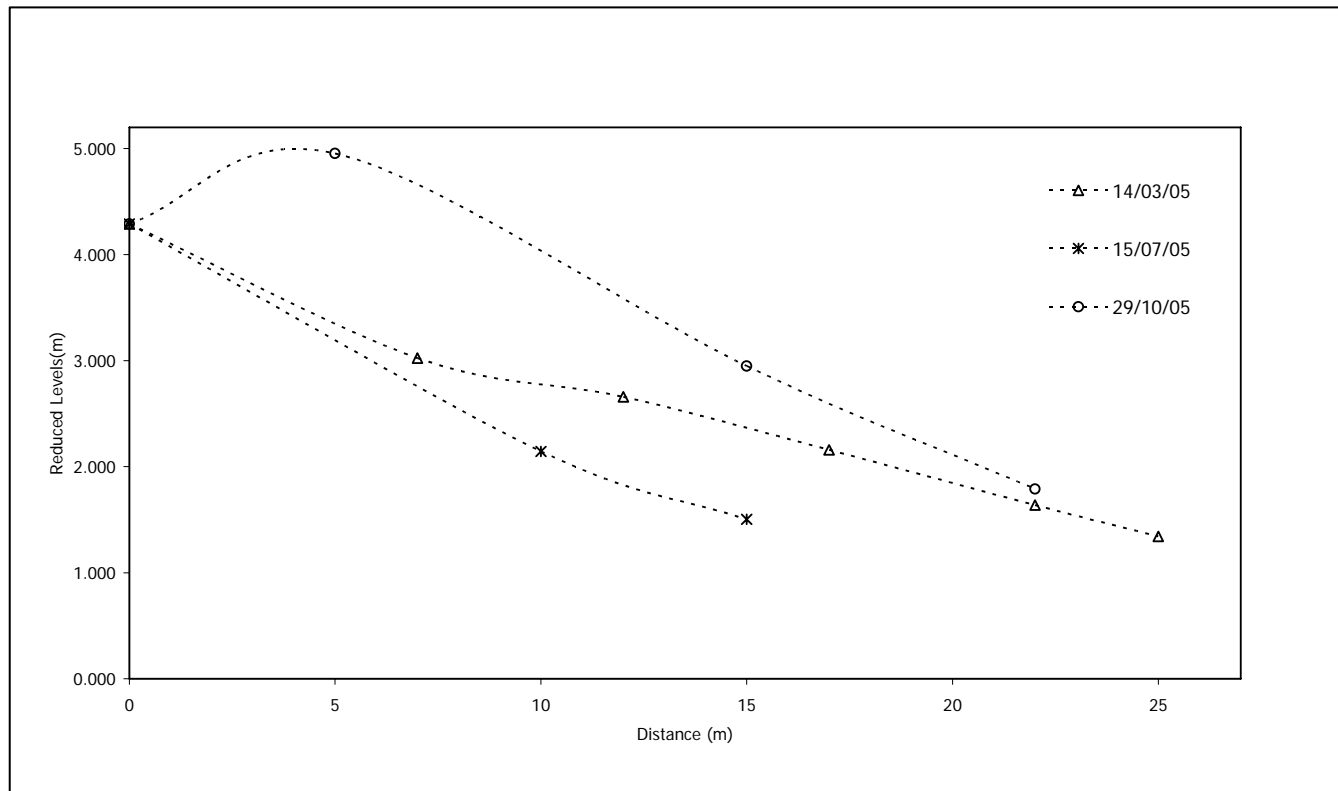


Fig. 2.107 Beach profiles at 3500m chainage (Year 2005)

Seasonal beach profile changes at Ullal 3500m

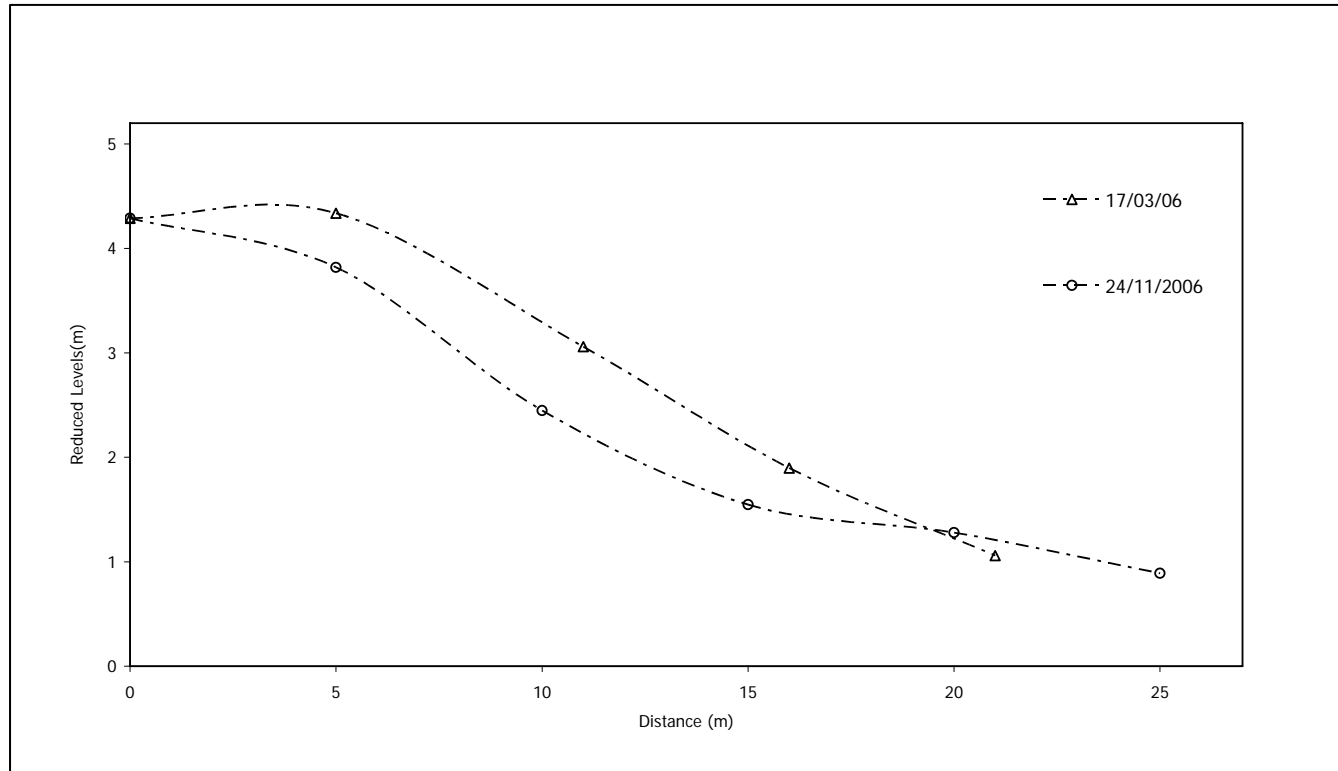


Fig. 2.108 Beach profiles at 3500m chainage (Year 2006)

Yearly beach profile changes at Ullal 3500m

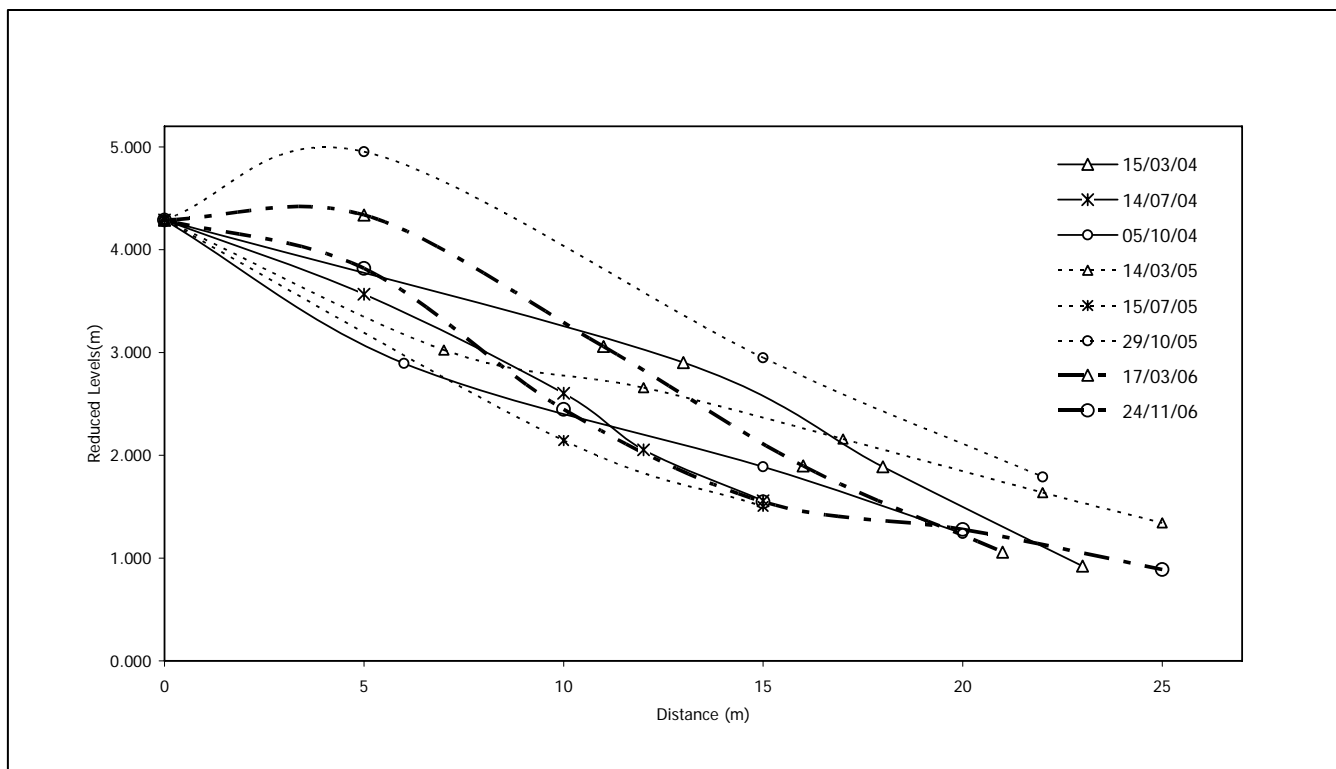


Fig. 2.109 Beach profiles at 3500m chainage (From 2004 to 2006)

Reduced levels at Ullal 4000m chainage for the year 2004

1 st visit		2 nd visit		3 rd visit		4 th visit		5 th visit	
Distance	26/02/04	Distance	15/03/04	Distance	29/03/04	Distance	11/05/04	Distance	31/05/04
0	3.718	0	3.718	0	3.718	0	3.718	0	3.718
9	2.288	10	2.193	5	2.958	5	2.958	8	2.608
14	1.968	15	1.943	9	2.318	7	2.033	13	2.373
19	1.798	20	1.868	14	1.953	17	1.918	15	1.903
24	1.448	25	1.508	19	1.738			20	1.583
29	0.573	28	1.243	24	1.328			25	1.453

6 th visit		7 th visit		8 th visit		9 th visit		10 th visit	
Distance	14/06/04	Distance	28/06/04	Distance	14/07/04	Distance	01/08/04	Distance	17/08/04
0	3.718	0	3.718	0	3.718	0	3.718	0	3.718
7	0.968	10	1.683	8	2.083	6	2.318	8	1.678
		15	1.918	13	2.132	11	1.858	18	0.748
		18	1.578	15	2.033	16	1.158		
		21	1.258	17	1.723	21	0.653		
				22	0.893				

11 th visit		12 th visit		13 th visit		14 th visit		15 th visit	
Distance	31/08/04	Distance	21/09/04	Distance	05/10/04	Distance	03/12/04	Distance	16/12/04
0	3.718	0	3.718	0	3.718	0	3.718	0	3.718
5	2.193	6	2.631	5	2.463	6	2.473	5	2.563
10	2.103	11	2.596	15	2.333	11	2.533	10	2.618
15	1.773	16	2.426	25	0.663	16	2.193	15	2.198
20	1.238	21	1.921	27	0.598	21	2.038	16	0.998
25	0.513	26	1.171			26	1.693	21	0.513
								26	0.168

Reduced levels at Ullal 4000m chainage for the year 2005

16 th visit		17 th visit		18 th visit		19 th visit		20 th visit	
Distance	04/01/05	Distance	18/01/05	Distance	03/02/05	Distance	16/02/05	Distance	03/03/05
0	3.718	0	3.718	0	3.718	0	3.718	0	3.718
6	2.558	5	2.553	6	2.538	5	2.553	7	2.568
11	2.573	10	2.553	16	2.173	10	2.603	12	2.583
16	2.418	14	2.353	20	1.613	15	2.203	17	2.343
21	1.728	19	1.633	25	1.103	20	1.713	22	2.018
26	1.013	24	0.883	27	0.643	25	0.953	26	1.473
		29	0.503					31	0.543

21 st visit		22 nd visit		23 rd visit		24 th visit		25 th visit	
Distance	14/03/05	Distance	01/04/05	Distance	14/04/05	Distance	03/05/05	Distance	17/05/05
0	3.718	0	3.718	0	3.718	0	3.718	0	3.718
7	2.853	7	2.883	6	2.928	5	2.878	6	2.893
12	2.808	12	2.948	11	3.068	10	2.893	11	2.923
14	2.768	14	2.848	16	2.858	15	2.433	16	2.678
16	2.478	19	2.193	21	2.258	16	2.123	21	1.568
21	2.148	23	1.508			21	1.288		
26	1.353	28	0.728						

26 th visit		27 th visit		29 th visit		30 th visit	
Distance	02/06/05	Distance	16/06/05	Distance	01/07/05	Distance	15/07/05
0	3.718	0	3.718	0	3.718	0	3.718
5	4.578	5	4.583	3	3.438	3	3.833
10	4.438	10	3.493	5	2.623	5	2.553
15	3.918	15	2.923	15	1.558	10	2.133
20	3.098					15	1.743
						19	1.443

Reduced levels at Ullal 4000m chainage for the year 2005 (Contd...)

32 nd visit		33 rd visit		34 th visit		35 th visit		36 th visit	
Distance	13/08/05	Distance	10/09/05	Distance	16/09/05	Distance	30/9/05	Distance	29/10/05
0	3.718	0	4.363	0	4.363	0	4.363	0	4.363
4	1.858	2	2.448	3	2.328	2	2.753	2	3.728
8	1.783	7	2.363	7	2.353	5	2.158	14	2.298
15	0.848	12	2.418	8	1.573	7	1.313	19	1.608
		17	1.778	13	0.718	12	1.248	24	0.878
						17	1.248		
						20	0.678		

37th visit		38th visit		39th visit		40th visit	
Distance	19/11/05	Distance	02/12/05	Distance	15/12/05	Distance	30/12/05
0	4.363	0	4.363	0	4.363	0	4.363
3	2.7526	3	2.648	3	2.703	5	2.623
8	2.598	5	2.668	8	2.593	8	2.593
10	2.348	9	2.348	13	2.313	13	2.103
12	1.208			18	1.563	18	1.013
17	0.788					23	0.313

Reduced levels at Ullal 4000m chainage for the year 2006

41 st sit		42 nd visit		43 rd visit		44 th visit	
Distance	13/1/06	Distance	31/01/06	Distance	15/02/06	Distance	03/03/06
0	4.363	0	4.363	0	4.363	0	4.363
4	2.593	5	2.598	5	2.548	5	2.633
8	2.593	10	2.643	10	2.618	10	2.658
11	1.158	15	2.273	15	2.503	15	2.368
		20	1.653	17	1.848	17	1.623
		23	0.793	23	0.688		

45 th visit		46 th visit		47 th visit	
Distance	17/03/06	Distance	04/04/06	Distance	24/11/06
0	4.363	0	4.363	0	4.363
5	2.658	5	2.648	7	2.058
10	2.613	10	2.683	17	2.483
15	1.868	15	1.853	27	2.858
19	0.893	20	0.898	32	2.083
				36	1.393

Seasonal beach profile changes at Ullal 4000m

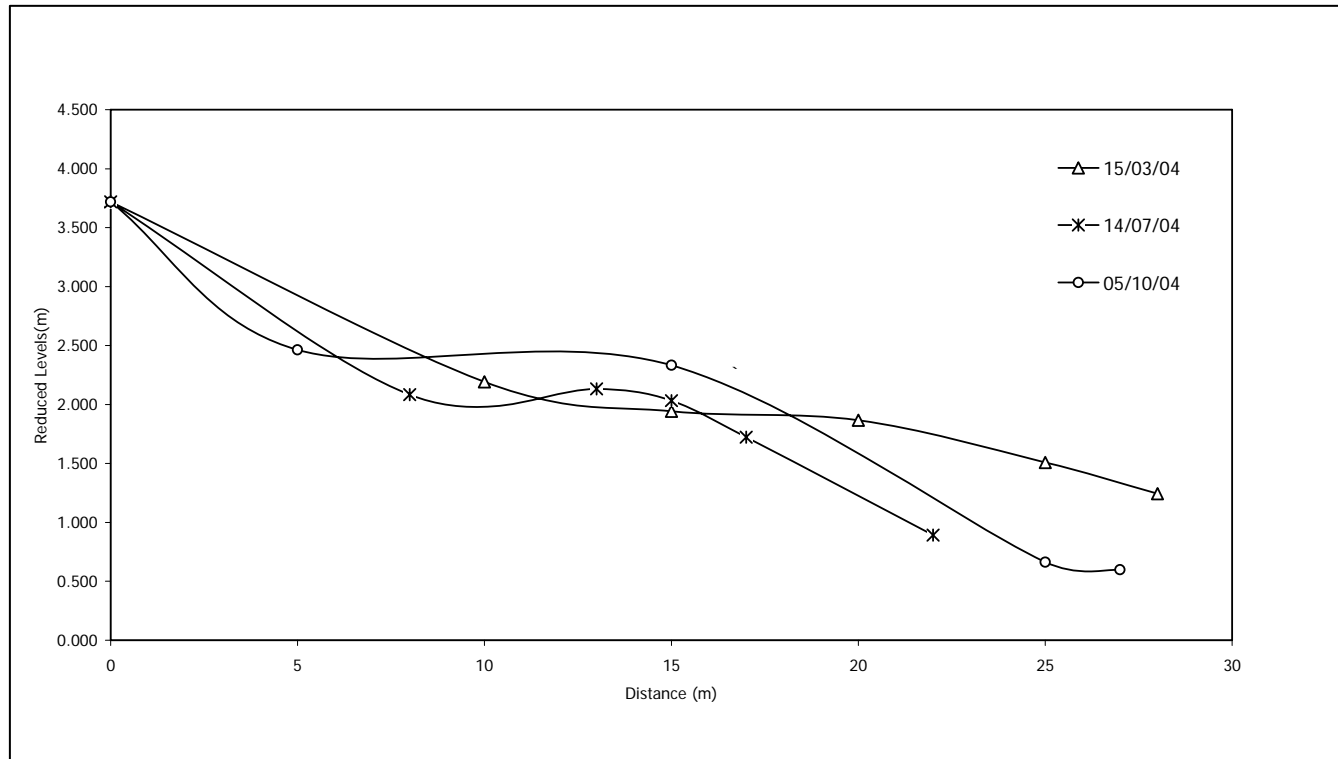


Fig. 2.110 Beach profiles at 4000m chainage (Year 2004)

Seasonal beach profile changes at Ullal 4000m

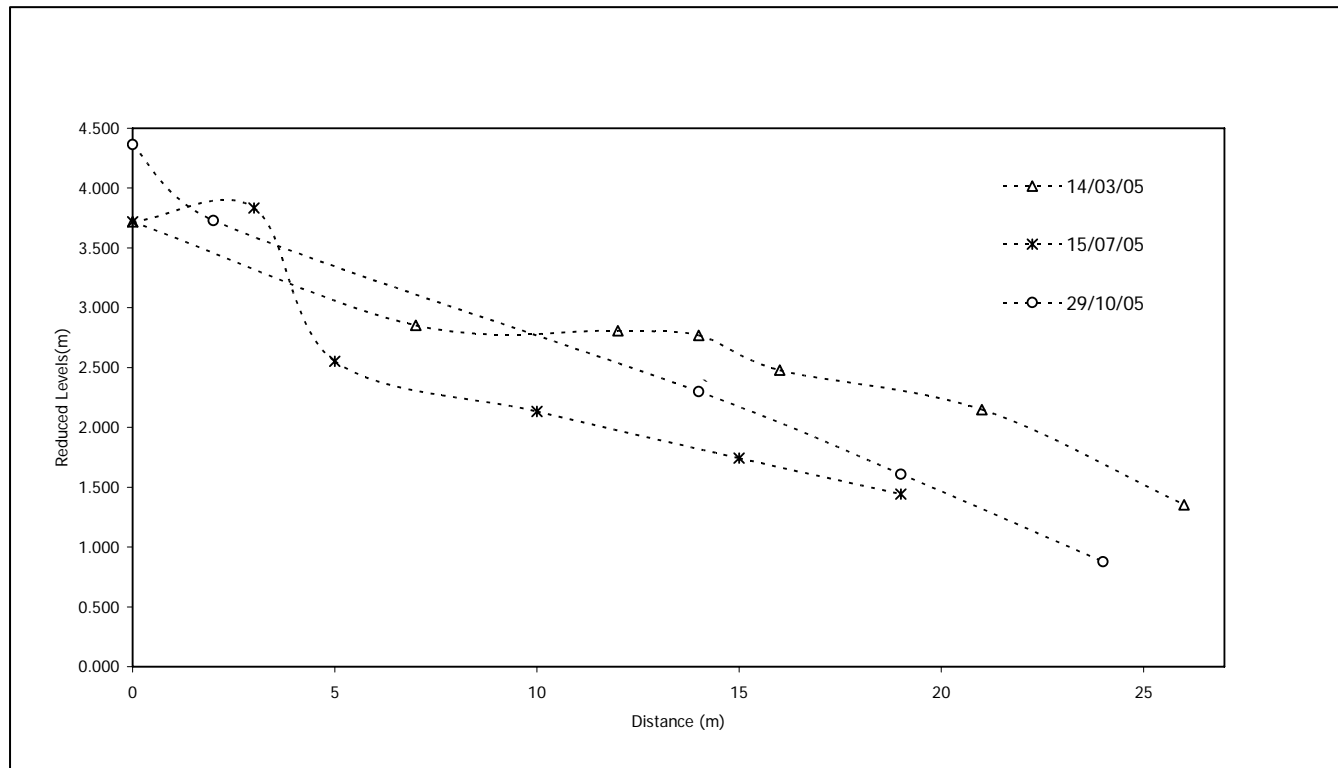


Fig. 2.111 Beach profiles at 4000m chainage (Year 2005)

Seasonal beach profile changes at Ullal 4000m

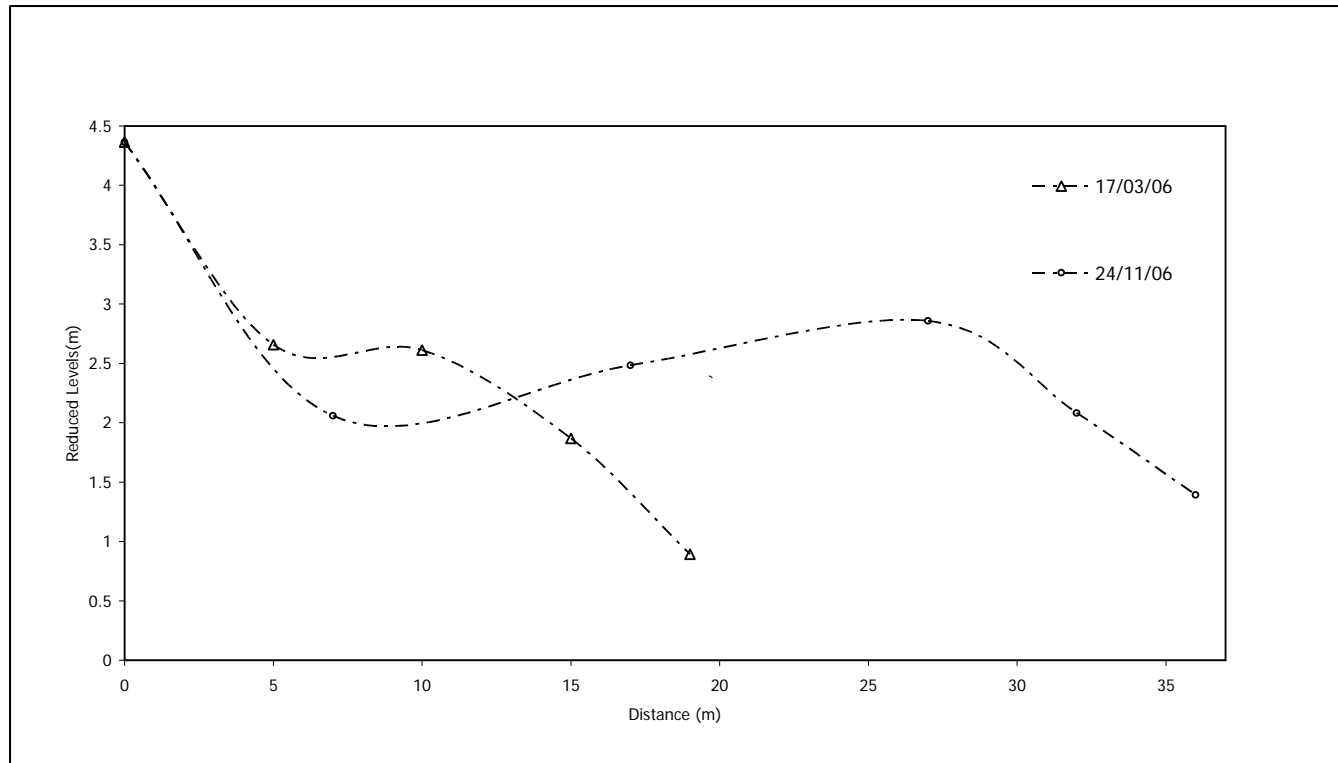


Fig. 2.112 Beach profiles at 4000m chainage (Year 2006)

Yearly beach profile changes at Ullal 4000m

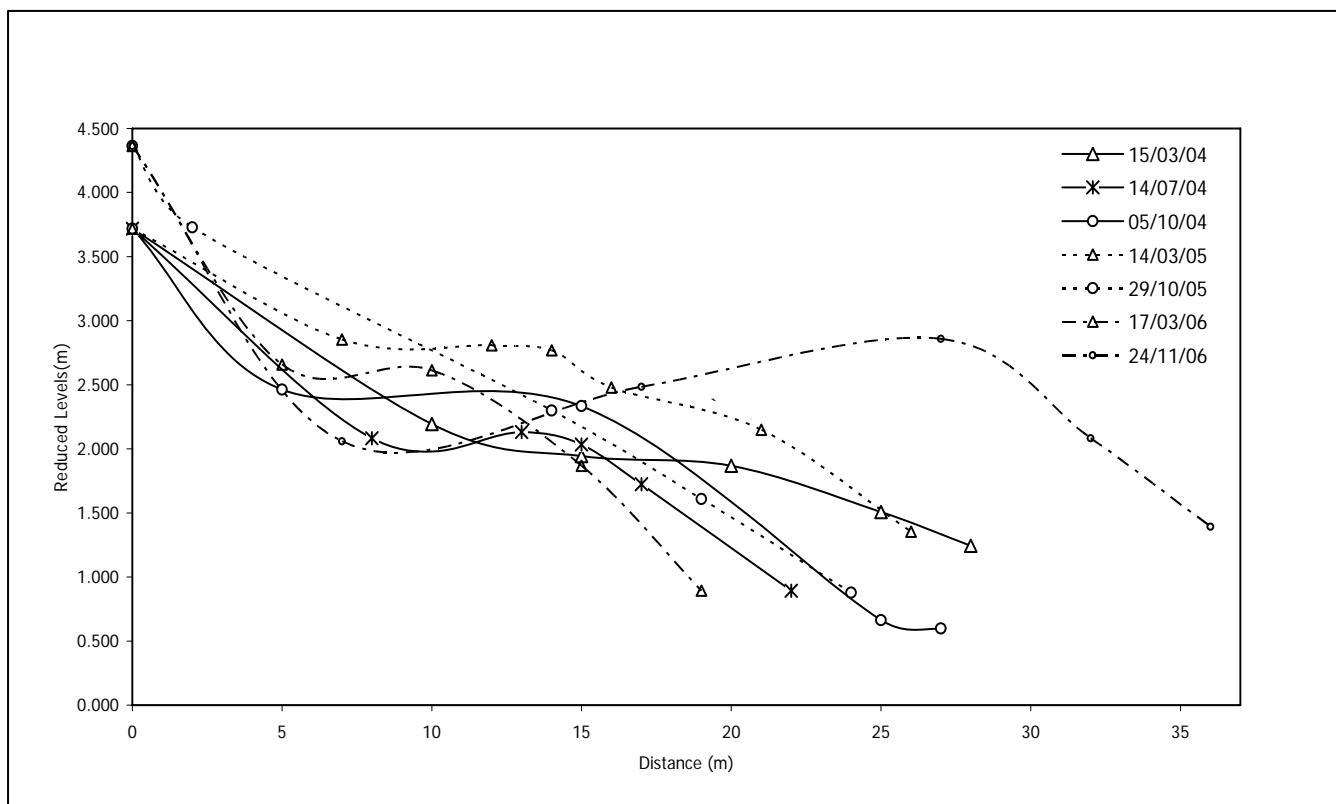


Fig. 2.113 Beach profiles at 4000m chainage (From 2004 to 2006)

SHORELINE CHANGES

Shoreline changes at Bengre w.r.t. LWL for the year 2004

Chainage	24/02/04	15/03/04	29/03/04	11/05/04	31/05/04
0	84	94	93	74	63
200	112	120	118	125	107
300	130	141	140	132	109
1600	140	165	164	141	129

Chainage	14/06/04	28/06/04	14/07/04	31/07/04	16/08/04
0	60	83	83	71	81
200	120	133	149	140	136
300	110	123	124	139	111
1600	140	146	140	127	134

Chainage	30/08/04	20/09/04	04/10/04	02/12/04	18/12/04
0	84	88	84	52	52
200	147	142	146	135	123
300	131	139	137	144	142
1600	138	149	152	146	153

Shoreline changes at Bengre w.r.t. LWL for the year 2005

Chainage	03/01/05	18/01/05	03/02/05	16/02/05	03/03/05	14/03/05	01/04/05	14/04/05	03/05/05	17/05/05
0	64	72	81	86	87	83	79	66	71	79
200	137	134	138	144	149	157	148	132	122	134
300	105	133	145	146	146	151	169	142	147	140
1600	157	147	153	150	156	155	158	154	160	143

Chainage	02/06/05	16/06/05	22/06/05	01/07/05	15/07/05	02/08/05	13/08/05	10/09/05	16/09/05
0	60	80	81	76	79	60	78	86	74
200	110	127	120	124	124	135	163	169	187
300	118	117	113	108	102	91	122	143	138
1600	143	145	140	133	115	144	153	145	145

Chainage	30/09/05	29/10/05	19/11/05	02/12/05	15/12/05	30/12/05
0	89	80	71	65	73	82
200	213	158	162	136	136	128
300	152	172	142	165	166	174
1600	151	138	125	134	136	138

Shoreline changes at Bengre w.r.t. LWL for the year 2006

Chainage	13/01/06	31/01/06	15/02/06	3/3/06	17/03/06	4/4/06
0	77	83	76	81	78	94
200	133	125	142	125	137	142
300	155	163	177	163	194	164
1600	140	210	150	158	156	148

Seasonal shoreline changes at Bengre

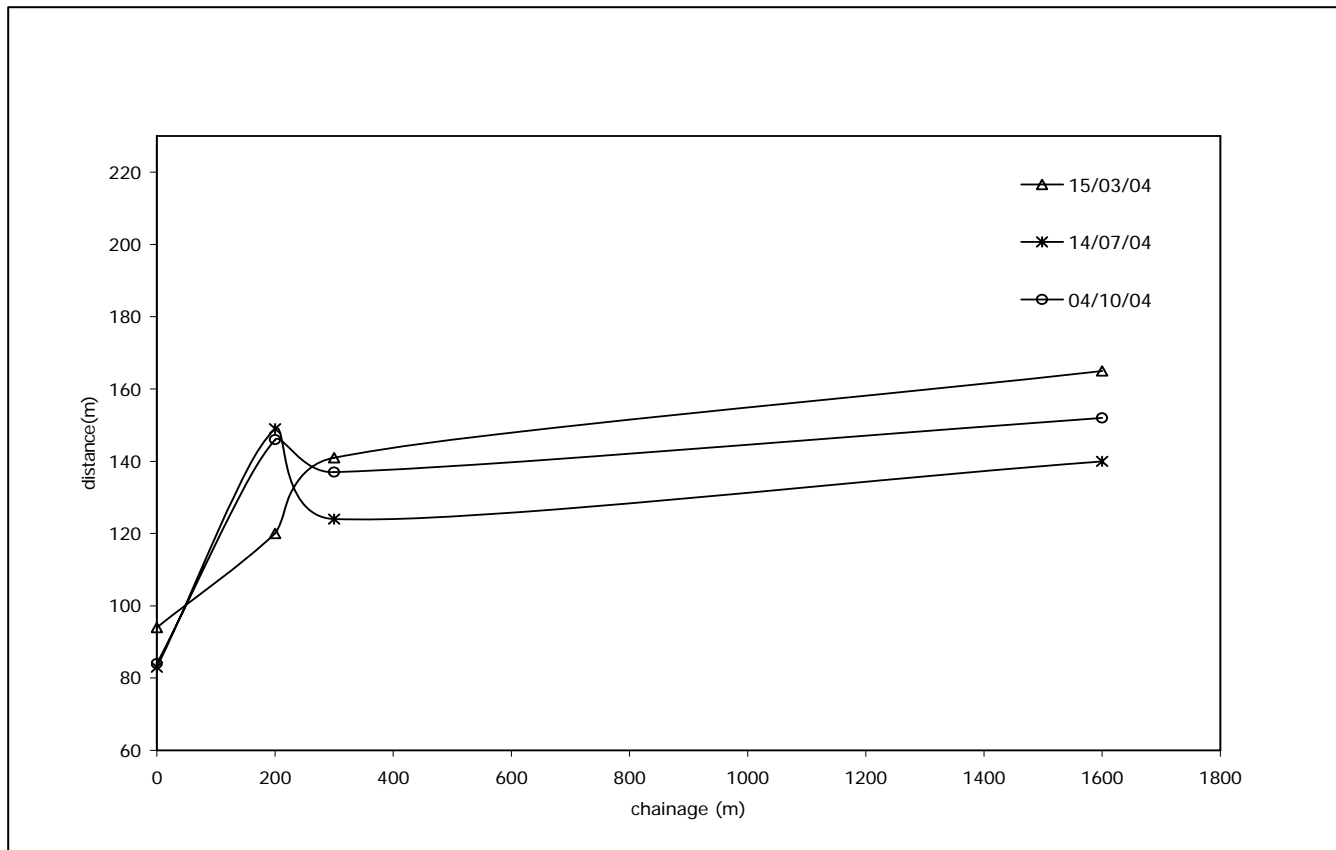


Fig. 3.1 Shoreline changes at Bengre (year 2004)

Seasonal shoreline changes at Bengre

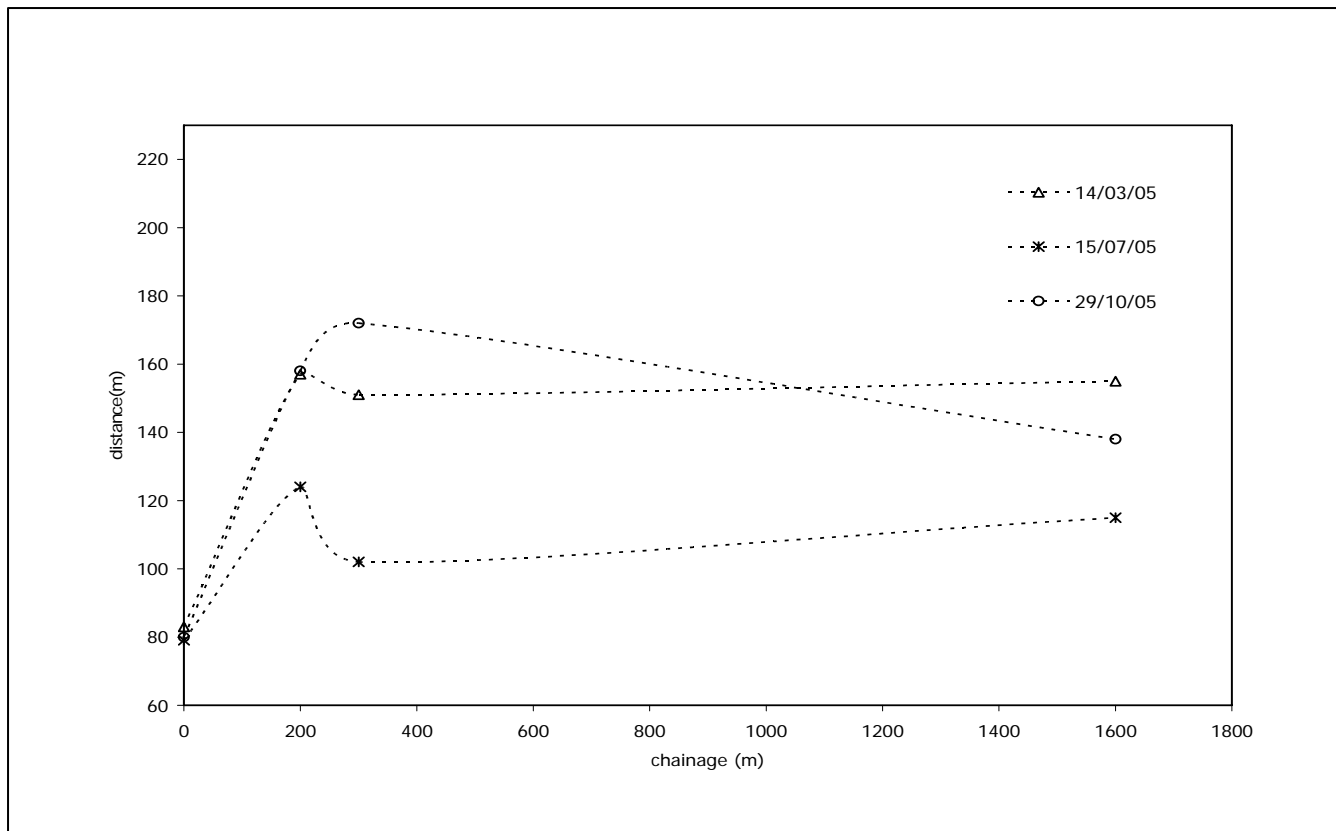


Fig. 3.2 Shoreline changes at Bengre (year 2005)

Seasonal shoreline changes at Bengre

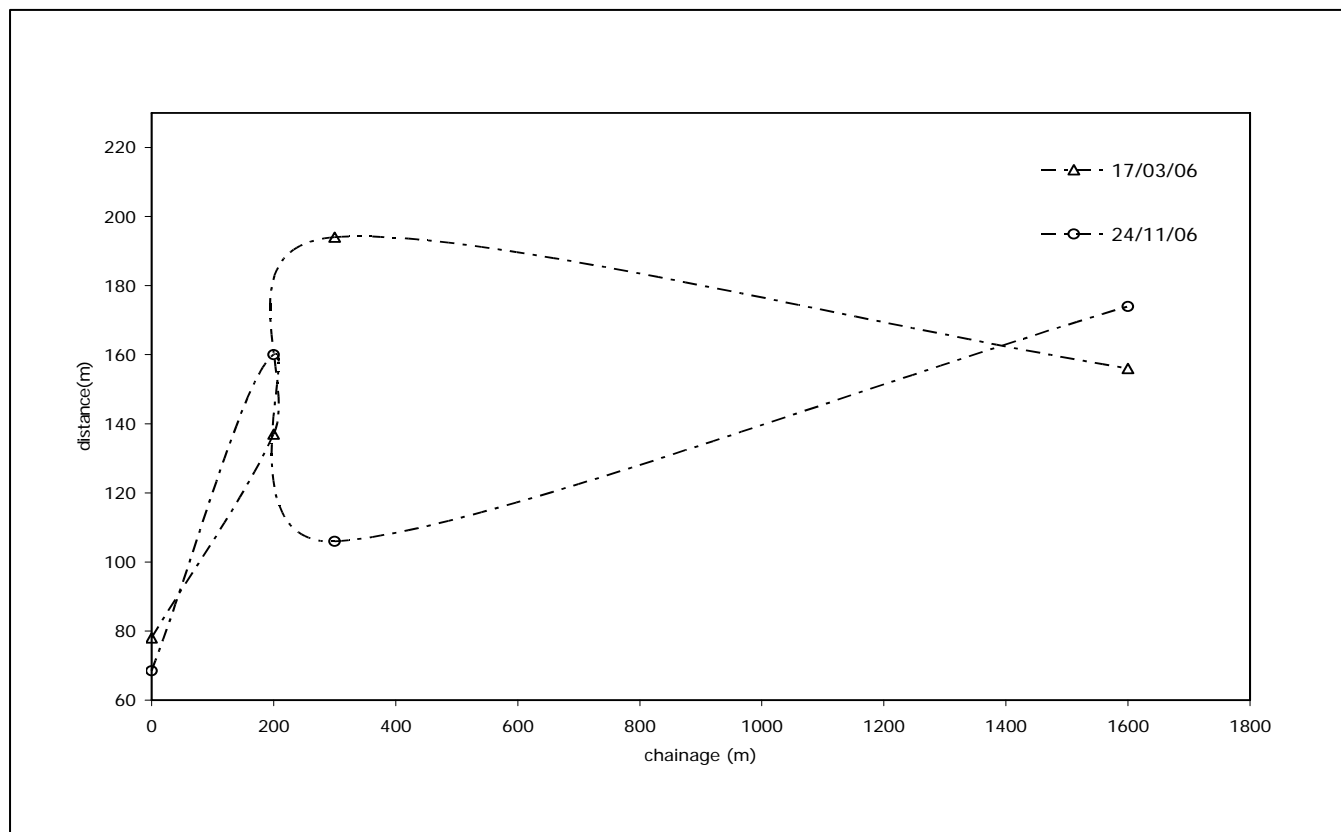


Fig. 3.3 Shoreline changes at Bengre (year 2006)

Shoreline changes at Bengre w.r.t. LWL for the year 2004

Chainage	27/02/04	16/03/04	30/03/04	12/05/04	01/06/04	15/06/04	29/06/04	15/07/04	01/08/04	17/08/04	31/08/04	21/09/04
0	5	5	5	5	5							
50	14	5	10	15	15							
100	25	25	20	23	15							10
150	25	29	29	29	25		8					5
200	20	25	24	24	18		7					5
250	25	33	27	31	18		17					5
300	15	30	23	23	17		15					5
350	10	21	18	15	16		12					5
400	10	13	17	15	19		13					5
450	13	15	18	15	18		13					3
500	12	16	16	17	19		10					5
550	10	14	15	18	18		9					1
600	13	14	17	19	19		5					2
650	14	16	20	21	20		5					3
700	15	20	24	24	27		5					5
750	15	18	21	24	24		5					5
800	14	15	22	22	20		5					3
850	14	19	18	21	21		6					0
900	15	20	21	17	21		10					3
950	15	20	19	11	21		13					3
1000	20	24	24	15	15	10	20		5	4	10	10
1500	22	22	22	16	21	5	5	13	10	10	10	10
2000	25	30	14	16	27	10	13	22	20	14	23	20
2500	22	21	21	16	17	10	10	17	22	22	24	25
3000	30	34	30	20	24	5	26	20	28	29	27	31
3500	18	23	23	12	15	10	15	15	17	10	20	24
4000	29	28	24	17	25	21	21	22	21	18	25	26

Shoreline changes at Bengre w.r.t. LWL for the year 2004 (Contd...)

Chainage	05/10/04	03/12/04	16/12/04
0		10	15
50	10	22	25
100	10	20	20
150	15	20	20
200	14	14	15
250	8	12	15
300	7	10	10
350	5	12	15
400	4	10	10
450	5	8	10
500	3	8	10
550	2	5	5
600	3	5	5
650	2	8	10
700	2	10	10
750	1	3	5
800	3	3	5
850	3	7	8
900	3	8	10
950	2	10	10
1000	8	8	17
1500	12	12	20
2000	22	25	31
2500	24	20	26
3000	30	32	36
3500	20	24	32
4000	27	26	26

Shoreline changes at Bengre w.r.t. LWL for the year 2005

Chainage	04/01/05	18/01/05	03/02/05	16/02/05	03/03/05	14/03/05	01/04/05	14/04/05	03/05/05	17/05/05	02/06/05	16/06/05	01/07/05	15/07/05
0	17	16	20	21	10		7	10	20	13	15			
50	22	9	16	15	11	8	15	15	19	21	15	8		
100	21	18	20	16	17	22	19	21	22	26	14	14		20
150	30	19	21	21	19	19	16	20	20	24	10	17		14
200	29	20	21	32	24	15	13	14	16	20	14	20		14
250	24	20	22	25	21	10	10	10	10	14	9	11		
300	19	11	17	20	20	5	10	10	10	10	5	6		16
350	14	6	12	14	14	10	10	10	20	15	5	4		17
400	14	6	13	13	8	15	19	15	20	15	5	6		14
450	15	10	13	12	12	14	20	15	14	13	9	5		15
500	12	10	12	14	11	10	14	15	4	10	5	5		15
550	9	6	10	8	10	10	13	10	8	10	4	4		10
600	9	5	7	7	7	8	12	10	8	10	5	2		10
650	9	4	10	7	10	7	12	10	8	10	5	9		15
700	10	5	8	8	8	14	15	9	8	15	5	5		15
750	10	5	6	5	8	4	10	5	3	4	5	4		10
800	5	5	5	6	6	4	2	2	2	5	2	4		5
850	10	9	10	9	8	7	5	5	10	8	4	4		10
900	10	10	11	12	14	10	7	10	10	10	5	5		10
950	10	7	18	12	18	15	15	15	12	8	5	7		
1000	15	18	16	10	18	13	19	15	13	15	10			
1500	20	19	16	19	21	21	22	21	17	22	22	12		
2000	30	38	33	35	32	22	31	24	30	26	25	24		
2500	23	26	27	29	27	27	21	26	16	23	17	19		
3000	33	38	37	35	36	31	28	23	30	29	27	24		15
3500	29	30	28	30	27	25	25	21	21	23	22	11		15
4000	26	29	27	25	31	21	26	21	21	21	20	15	15	19

Shoreline changes at Bengre w.r.t. LWL for the year 2006

Chainage	13/01/06	31/01/06	15/02/06	3/3/2006	17/03/06	4/4/2006	24/11/06
0	7	10	15	10	5	5	5
50	9	9	15	10	15	6	10
100	13	10	10	15	10	13	15
150	11	19	15	13	15	12	5
200	7	18	10	11	15	11	15
250	14	15	15	15	10	10	9
300	12	20	15	15	10	10	5
350	15	15	15	10	15	13	3
400	10	11	15	10	12	10	4
450	10	10	10	10	14	10	5
500	10	10	15	15	10	10	1
550	10	10	15	14	11	10	
600	10	8	10	10	11	7	
650	8	9	15	9	9	5	
700	18	20	10	12	8	12	
750							
800							
850	13	10	9	5	8	5	
900	11	10	9	13	8	9	
950	5	10	9	9	7	10	
1000							
1500							
2000							
2500							
3000	25	19	25	22	17	19	21
3500	21	22	27	18	21	17	15
4000	11	23	23	17	19	20	36

Seasonal shoreline changes at Ullal

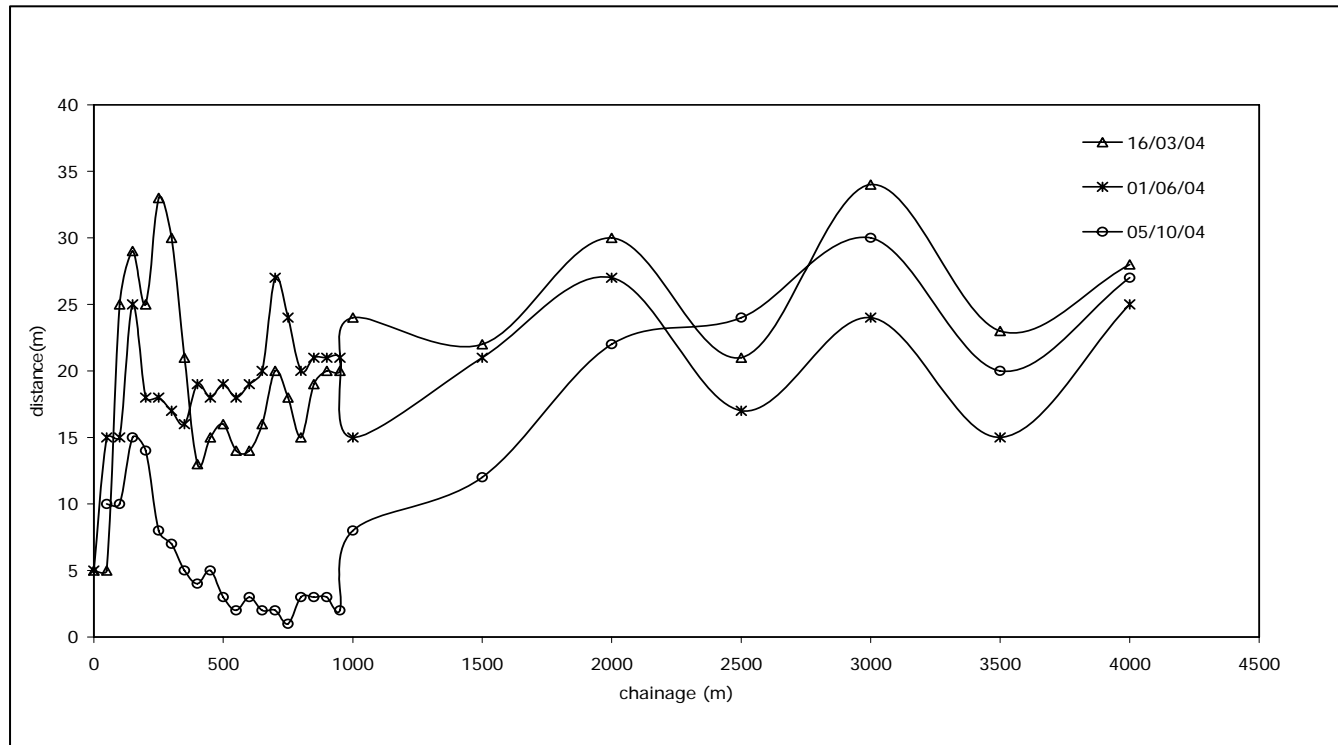


Fig. 3.4 Shoreline changes at Ullal (year 2004)

Seasonal shoreline changes at Ullal

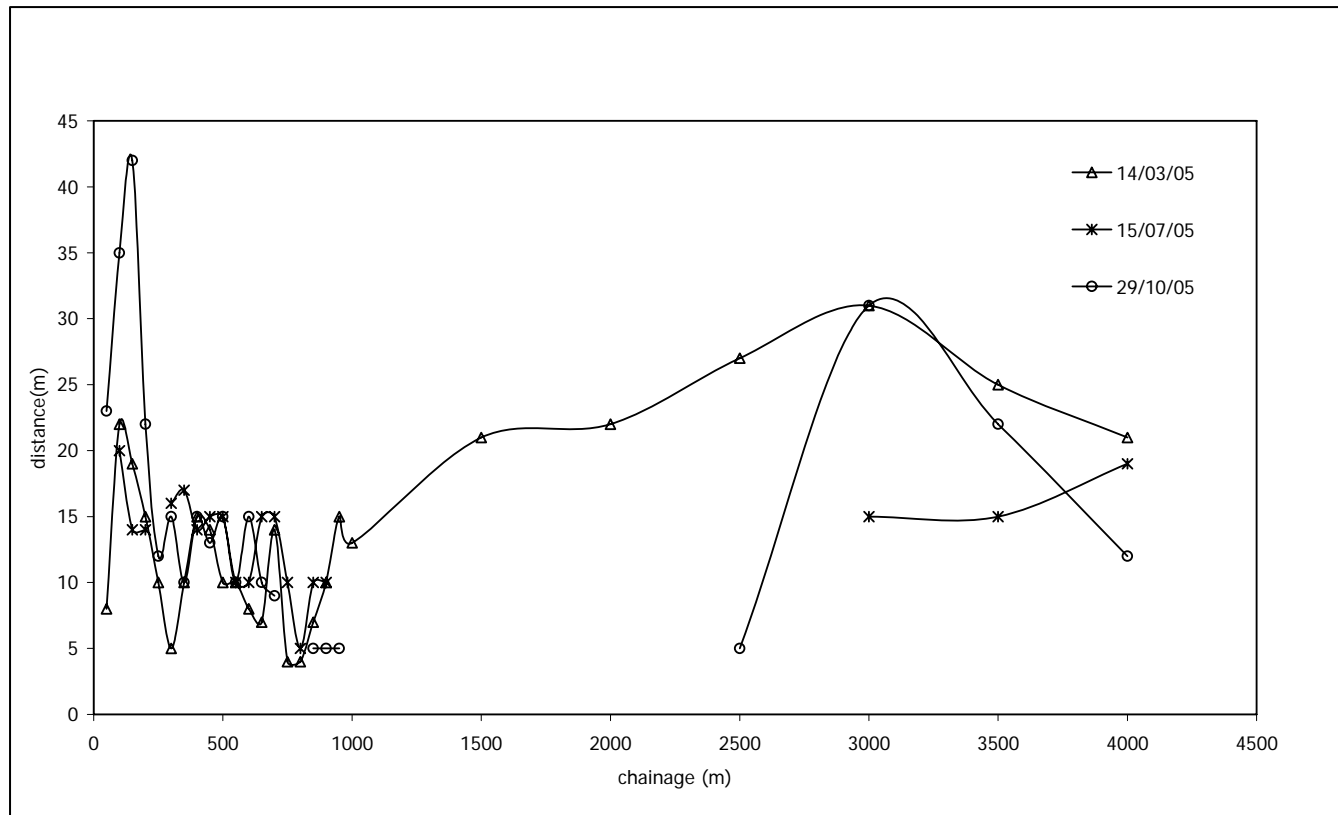


Fig. 3.5 Shoreline changes at Ullal (year 2005)

Seasonal shoreline changes at Ullal

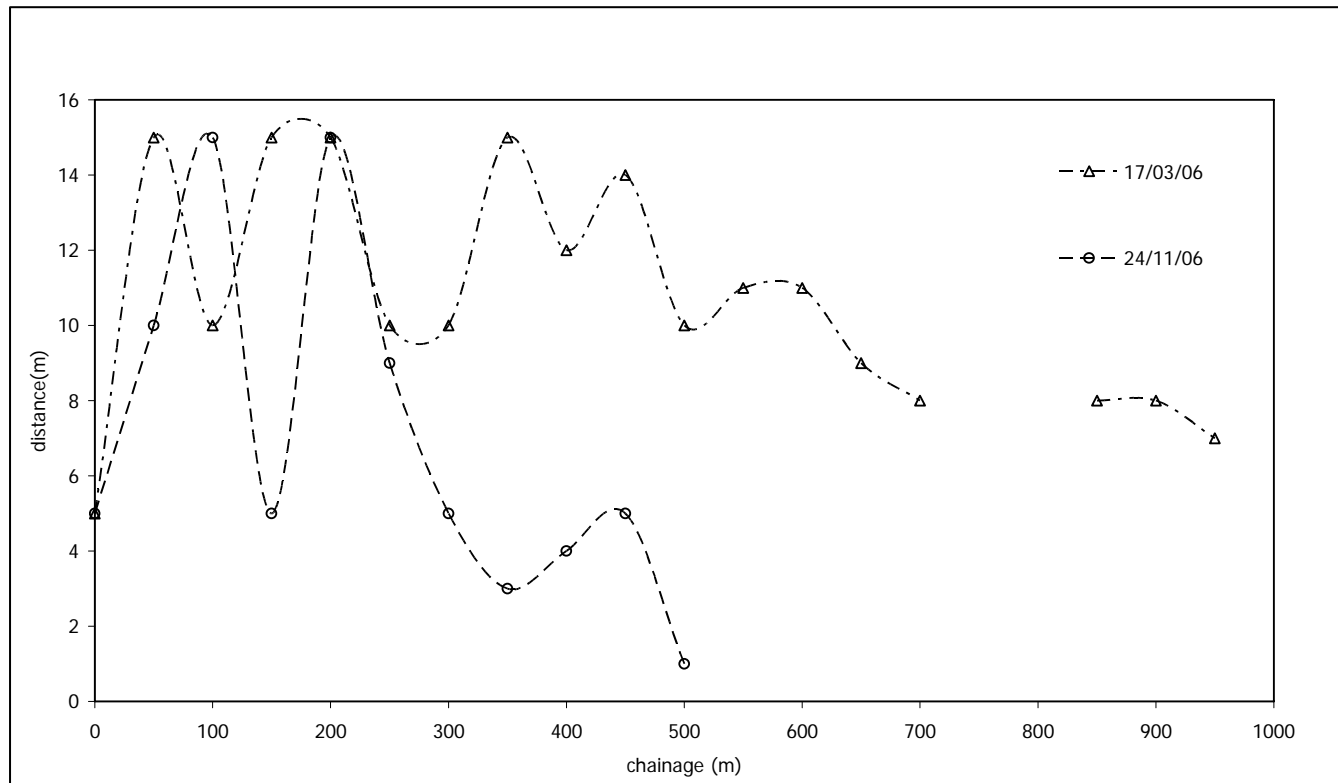


Fig. 3.6 Shoreline changes at Ullal (year 2006)

Seasonal shoreline changes at Ullal

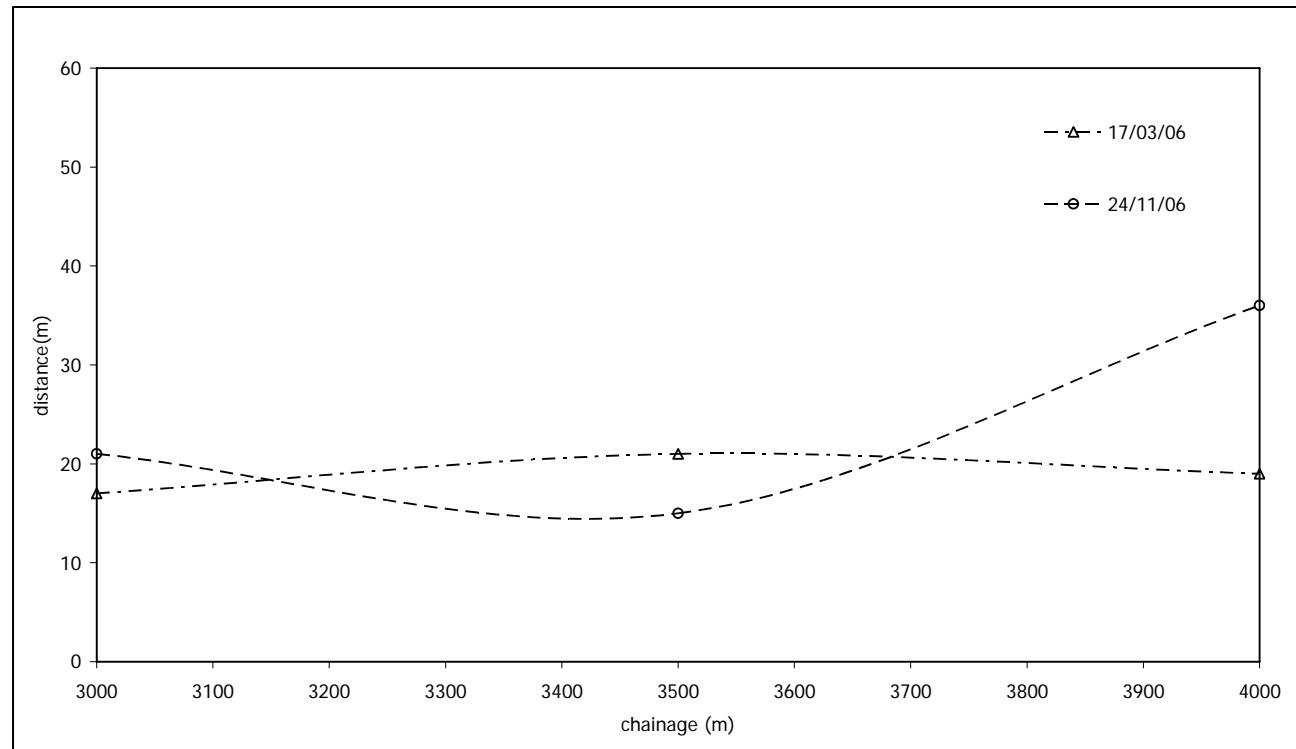


Fig. 3.7 Shoreline changes at Ullal (year 2006)

SEDIMENT TREND MATRIX

Sediment Trend Matrix for the pre-monsoon period of 2004

		Sediment source																						
Sediment deposit	Location	1	2	3	4	5	7	9	11	13	15	17	19	21	23	25	26	27	28	29	30	31		
		C	C	C	F	C	F	C	C	C	C	C	C	C	C	C	C	F	C	C	C	C	Mean	
	1		B	P	P	P	P	P	P	P	B	P	P	P	P	P	P	P	B	B	P	P	S.D.	
			-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	+	-	-	-	-	Skewness	
		F		C	C	F	F	F	F	F	F	F	S	C	F	F	F	F	F	F	F	F	Mean	
	2	P		P	P	P	P	P	P	P	B	P	P	P	P	P	P	P	B	B	P	P	S.D.	
		+		-	-	-	+	+	-	-	-	-	-	-	-	-	-	+	-	+	-	-	Skewness	
		F	F		C	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	Mean	
	3	B	B		P	P	P	P	P	P	B	P	B	B	B	B	P	B	B	B	B	P	S.D.	
		+	+		-	-	+	+	-	-	-	-	-	-	-	-	+	+	-	+	+	-	Skewness	
		F	F	F		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	Mean	
	4	B	B	B		B	P	B	P	P	B	B	B	B	B	B	P	B	B	B	B	P	S.D.	
		+	+	+		+	+	+	-	-	+	-	-	-	+	+	+	+	+	+	+	-	Skewness	
		C	C	C	C		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	Mean	
	5	B	B	B	P		P	P	P	P	B	B	B	B	B	B	P	B	B	B	B	P	S.D.	
		+	+	+	-		+	+	-	-	-	-	-	-	+	-	+	+	-	+	+	-	Skewness	
	F	C	C	C	F		F	C	C	C	C	C	C	C	C	C	F	C	C	C	C	Mean		
7	B	B	B	B	B		B	B	B	B	B	B	B	B	B	B	B	B	B	B	P	S.D.		
	-	-	-	-	-		+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Skewness		
	C	C	C	C	F	C		C	C	C	C	C	C	C	C	C	F	C	C	C	C	Mean		
9	B	B	B	P	B	P		P	P	B	B	B	B	B	B	P	B	B	B	B	P	S.D.		
	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	Skewness		

		Sediment source																						
Sediment deposit	Location	1	2	3	4	5	7	9	11	13	15	17	19	21	23	25	26	27	28	29	30	31		
		F	C	C	C	F	F	F		F	F	C	C	C	F	F	F	F	F	F	F	F	Mean	
	11	B	B	B	B	B	P	B		B	B	B	B	B	B	B	B	B	B	B	B	P	S.D.	
		+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	Skewness	
		F	C	C	C	F	F	F	C	C		C	C	C	F	C	F	F	F	F	C	F	F	Mean
	15	P	P	P	P	P	P	P	P	P		P	P	P	P	P	P	P	B	B	P	P	S.D.	
		+	+	+	-	+	+	+	-	-		-	-	-	+	-	+	+	-	+	+	-	Skewness	
		F	C	C	C	F	F	F	F	F	F		C	C	F	F	F	F	F	F	F	F	Mean	
	17	B	B	B	P	P	P	P	P	P	B		B	B	B	B	P	B	B	B	B	P	S.D.	
		+	+	+	+	+	+	+	-	-	+		+	-	+	+	+	+	+	+	+	+	Skewness	
		F	S	C	C	F	F	F	F	F	F	F		C	F	F	F	F	F	F	F	F	Mean	
	19	B	B	P	P	P	P	P	P	P	B	P		B	B	P	P	P	B	B	B	P	S.D.	
		+	+	+	+	+	+	+	-	-	+	-		-	+	+	+	+	+	+	+	-	Skewness	
		F	F	C	C	F	F	F	F	F	F	F	F		F	F	F	F	F	F	F	F	Mean	
	21	B	B	P	P	P	P	P	P	P	B	P	P		P	P	P	P	B	B	B	P	S.D.	
		+	+	+	+	+	+	+	-	-	+	+	+		+	+	+	+	+	+	+	+	Skewness	
		F	C	C	C	F	F	F	C	C	C	C	C	C		C	F	F	F	C	C	F	Mean	
	23	B	B	P	P	P	P	P	P	P	B	P	P	B		P	P	P	B	B	B	P	S.D.	
		+	+	+	-	-	+	+	-	-	-	-	-	-		-	+	+	-	+	+	-	Skewness	
		F	C	C	C	F	F	F	C	C	F	C	C	C	F		F	F	F	F	F	F	Mean	
	25	B	B	P	P	P	P	P	P	P	B	P	B	B	B		P	P	B	B	B	P	S.D.	
	+	+	+	-	+	+	+	-	-	+	-	-	-	+		+	+	+	+	+	-	Skewness		

		Sediment source																						
Sediment deposit	Location	1	2	3	4	5	7	9	11	13	15	17	19	21	23	25	26	27	28	29	30	31		
		F	C	C	C	F	F	F	C	C	C	C	C	C	C	C		F	F	C	C	C	Mean	
	26	B	B	B	B	B	P	B	P	P	B	B	B	B	B	B		B	B	B	B	P	S.D.	
		+	+	-	-	-	+	+	-	-	-	-	-	-	-	-		+	-	+	-	-	Skewness	
		-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-		-	-	-	-	Skewness	
		F	C	C	C	F	F	F	C	C	C	C	C	C	C	C	C	C	F		C	C	C	Mean
	28	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	S.D.
		+	+	+	-	+	+	+	-	-	+	-	-	-	+	-	+	+		+	+	-	Skewness	
		F	C	C	C	F	F	F	C	C	F	C	C	C	F	C	F	F	F		F	F	Mean	
	29	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	B		P	P	S.D.
		+	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	+	-		-	-	Skewness	
		F	C	C	C	F	F	F	C	C	C	C	C	C	C	F	C	F	F	F	C		F	Mean
	30	B	B	P	P	P	P	P	P	P	B	P	P	P	P	P	P	P	P	B	B		P	S.D.
		+	+	-	-	-	+	+	-	-	-	-	-	-	-	-	+	+	-	+		-	Skewness	
		F	C	C	C	F	F	F	C	C	C	C	C	C	C	C	F	F	F	F	C	C		Mean
	31	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		S.D.
		+	+	+	+	+	+	+	-	-	+	-	+	-	+	+	+	+	+	+	+		Skewness	

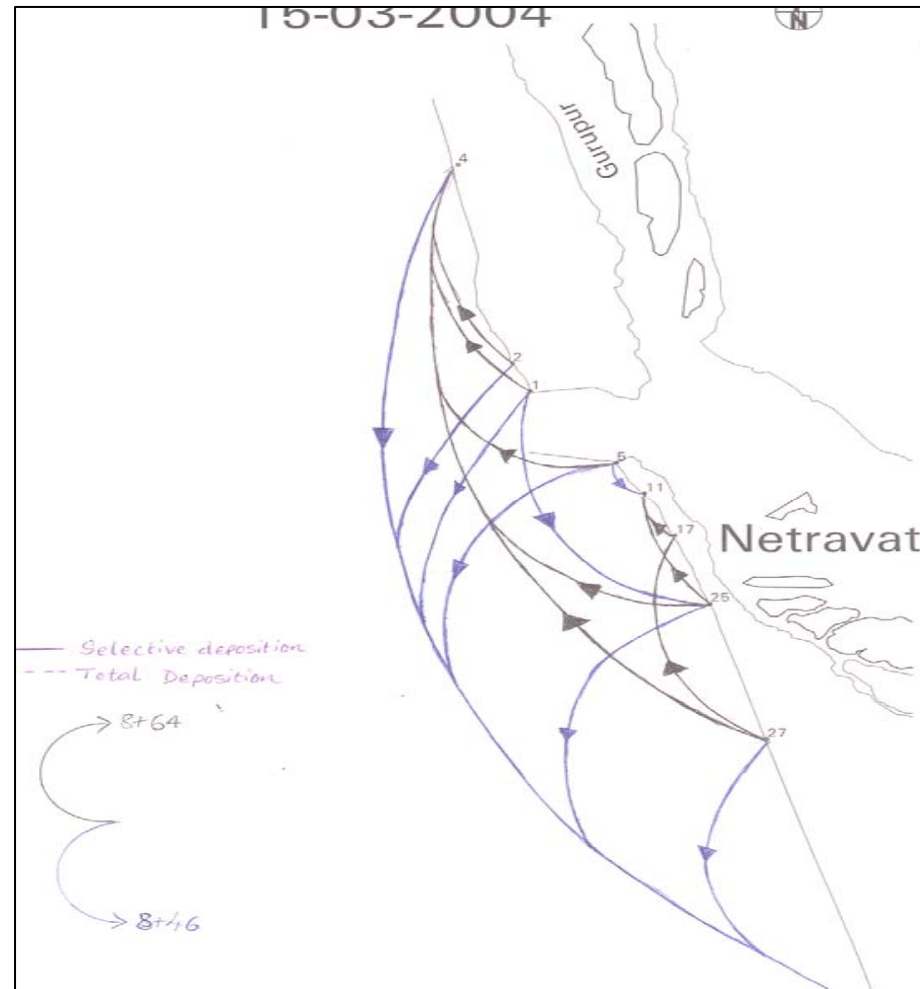


Fig. 4.1 Sediment movement path for the pre monsoon period (year 2004)

Sediment Trend Matrix for the monsoon period of 2004

		Sediment source																																	
Sediment deposit	Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
			F	F	C	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F	F	F	F	F	F	F	F	C	C	F	F	Mean		
	1		B	P	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	S.D.	
			-	+	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	Skewness		
		C		C	C	F	F	F	F	F	C	F	F	C	C	C	F	C	S	F	F	F	F	F	F	F	C	C	C	C	C	C	C	Mean	
	2	P		P	P	B	P	P	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	P	B	B	B	S.D.	
		+		+	+	+	+	+	-	-	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	Skewness	
		C	F		C	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F	F	F	F	F	F	F	C	F	C	C	F	F	Mean	
	3	B	B		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	S.D.	
		-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Skewness	
		F	F	F		F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	C	C	F	F	Mean	
	4	P	B	P		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	S.D.
		+	-	+		+	-	+	-	-	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	Skewness	
		C	C	C	C		C	C	F	F	C	F	F	C	C	C	F	C	C	C	C	F	F	S	F	C	C	C	C	C	C	C	C	C	Mean
	5	P	P	P	P		P	P	P	B	B	B	B	P	B	B	B	B	B	B	B	B	B	B	B	B	B	P	B	P	B	P	B	B	S.D.
		-	-	+	-		-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	Skewness	
	C	C	C	C	F		C	F	F	C	F	F	C	C	C	F	C	C	F	C	F	F	F	F	F	C	C	C	C	C	C	C	C	Mean	
6	P	B	P	P	B		S	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	P	B	B	B	B	S.D.	
	+	-	+	+	+		+	-	-	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	Skewness		
	C	C	C	C	F	F		F	F	C	F	F	C	C	C	F	C	C	F	C	F	F	F	F	F	C	C	C	C	C	C	C	C	Mean	
7	P	B	P	P	B	S		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	P	B	B	B	B	S.D.	
		-	-	+	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	Skewness		

		Sediment source																																
Sediment deposit	Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean	
		C	C	C	C	C	C	C		F	C	F	F	C	C	C	F	C	C	C	C	C	F	C	F	C	C	C	C	C	C	C		
	8	P	P	P	P	B	P	P		B	B	B	B	P	B	B	B	B	B	B	B	B	B	B	B	B	P	B	P	B	P	B	S.D.	
		+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+	+	+	-	+	+	+	Skewness
	9	C	C	C	C	C	C	C	C		C	C	C	C	C	C	F	C	C	C	C	C	C	F	C	C	C	C	C	C	C	C	C	Mean
		P	P	P	P	P	P	P	P		P	B	B	P	B	B	B	B	B	B	B	B	P	B	B	B	B	P	B	P	P	P	B	S.D.
		+	+	+	+	+	+	+	-		+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+	+	+	-	+	+	+	Skewness
	10	C	F	C	C	F	F	F	F	F		F	F	C	F	S	F	F	F	F	F	F	F	F	F	F	C	F	C	C	F	F	Mean	
		P	P	P	P	P	P	P	P	B		B	B	P	B	B	B	B	B	B	B	P	B	B	B	B	B	P	B	P	B	P	B	S.D.
		+	-	+	-	+	-	+	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	Skewness
	11	C	C	C	C	C	C	C	C	F	C		C	C	C	C	F	C	C	C	C	C	F	C	F	C	C	C	C	C	C	C	C	Mean
		P	P	P	P	P	P	P	P	P	P		B	P	B	P	B	P	B	B	B	P	B	P	B	P	P	P	B	P	P	P	P	S.D.
		+	+	+	+	+	+	+	-	-	+		-	-	+	+	-	+	-	-	+	-	-	-	-	-	-	+	-	-	-	+	+	Skewness
	12	C	C	C	C	C	C	C	C	F	C	F		C	C	C	F	C	C	C	C	C	F	C	F	C	C	C	C	C	C	C	C	Mean
		P	P	P	P	P	P	P	P	P	P	P		P	B	P	B	P	P	B	B	P	B	P	B	P	P	P	B	P	P	P	P	S.D.
		+	+	+	+	+	+	+	-	-	+	+		-	+	+	-	+	-	-	+	-	-	-	-	-	-	+	+	-	-	+	+	Skewness
	13	F	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	C	C	F	F	Mean
		P	P	P	P	B	P	P	B	B	B	B	B		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	P	B	P	B	S.D.
		+	+	+	+	+	+	+	-	-	+	+	+		+	+	-	+	-	-	+	-	-	-	-	-	-	+	+	-	-	+	+	Skewness
	14	C	F	C	C	F	F	F	F	F	C	F	F	C		C	F	C	F	F	F	F	F	F	F	F	C	C	C	C	F	C	Mean	
		P	P	P	P	P	P	P	P	P	P	P	P	P		P	B	P	P	P	P	P	P	B	P	P	P	P	P	P	P	P	P	S.D.
		+	+	+	+	+	+	+	-	-	+	-	-	-		+	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	+	Skewness

		Sediment Source																																
Sediment deposit	Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
		C	F	C	C	F	F	F	F	F	S	F	F	C	F		F	F	F	F	F	F	F	F	F	F	C	F	C	C	F	F	Mean	
	15	P	P	P	P	P	P	P	P	P	P	B	B	P	B		B	B	B	B	B	P	B	B	B	B	P	B	P	P	P	B	S.D.	
		+	-	+	-	+	-	+	-	-	+	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	Skewness	
		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C		C	C	C	C	C	F	C	C	C	C	C	C	C	C	C	Mean	
	16	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	S.D.	
		+	+	+	+	+	+	+	-	-	+	+	+	+	+	+		+	+	+	+	+	+	+	-	+	+	+	+	-	+	+	+	Skewness
		C	F	C	C	F	F	F	F	F	C	F	F	C	F	C	F		F	F	F	F	F	F	F	F	C	C	C	C	C	F	F	Mean
	17	P	P	P	P	P	P	P	P	P	P	B	B	P	B	P	B		B	B	B	P	B	P	B	P	P	B	P	P	P	P	P	S.D.
		+	+	+	+	+	+	+	-	-	+	-	-	-	+	+	-		-	-	+	-	-	-	-	-	+	-	-	-	+	+	+	Skewness
		C	S	C	C	F	F	F	F	F	C	F	F	C	C	C	F	C		F	F	F	F	F	F	C	C	C	C	C	C	C	C	Mean
	18	P	P	P	P	P	P	P	P	P	P	P	B	P	B	P	B	P		B	B	P	B	P	B	P	P	B	P	P	P	P	P	S.D.
		+	+	+	+	+	+	+	-	-	+	+	+	+	+	+	-	+		+	+	+	-	-	-	+	+	+	+	-	-	+	+	Skewness
		C	C	C	C	F	C	C	F	F	C	F	F	C	C	C	F	C	C		C	F	F	F	F	C	C	C	C	C	C	C	C	Mean
	19	P	P	P	P	P	P	P	P	P	P	P	P	P	B	P	B	P	P		B	P	B	P	B	P	P	B	P	P	P	P	P	S.D.
		+	+	+	+	+	+	+	-	-	+	+	+	+	+	+	-	+	-		+	+	-	-	-	+	+	+	+	-	-	+	+	Skewness
		C	C	C	C	F	F	F	F	F	C	F	F	C	C	C	F	C	C	F		F	F	F	F	C	C	C	C	C	C	C	C	Mean
	20	P	P	P	P	P	P	P	P	P	P	P	P	P	B	P	B	P	P	P		P	B	P	P	P	P	P	P	P	P	P	P	S.D.
		+	+	+	+	+	+	+	-	-	+	-	-	-	+	+	-	-	-	-		-	-	-	-	-	+	-	-	-	+	+	+	Skewness
		C	C	C	C	C	C	C	F	F	C	F	F	C	C	C	F	C	C	C	C		F	C	F	C	C	C	C	C	C	C	C	Mean
	21	P	P	P	P	P	P	P	P	B	B	B	B	P	B	B	B	B	B	B	B		B	B	B	B	P	B	P	B	P	B	B	S.D.
		+	+	+	+	+	+	+	-	-	+	+	+	+	+	+	-	+	-	-	+		-	-	-	+	+	+	-	-	+	+	+	Skewness

		Sediment source																																
Sediment deposit	Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C		C	C	C	C	C	C	C	C	C	Mean	
	22	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	B	P	P	P	P	P		P	P	P	P	P	P	P	P	P	S.D.	
		+	+	+	+	+	+	+	-	-	+	+	+	+	+	+	-	+	+	+	+	+		-	-	+	+	+	-	-	+	+	Skewness	
		C	C	C	C	S	C	C	F	F	C	F	F	C	C	C	F	C	C	C	C	F	F		F	C	C	C	C	C	C	C	Mean	
	23	P	P	P	P	P	P	P	P	P	P	B	B	P	B	P	B	B	B	B	B	P	B		B	P	P	B	P	P	P	P	S.D.	
		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	-	+	+	+	+	Skewness	
		C	C	C	C	C	C	C	C	F	C	C	C	C	C	C	F	C	C	C	C	C	F	C		C	C	C	C	C	C	C	Mean	
	24	P	P	P	P	P	P	P	P	P	P	P	P	P	P	B	P	B	P	P	P	B	P	B	P		P	P	P	P	P	P	P	S.D.
		+	+	+	+	+	+	+	-	-	+	+	+	+	+	+	-	+	+	+	+	+	+	-		+	+	+	-	+	+	+	+	Skewness
		C	F	C	C	F	F	F	F	F	C	F	F	C	C	C	F	C	F	F	F	F	F	F	F		C	C	C	C	C	C	Mean	
	25	P	P	P	P	P	P	P	P	P	P	B	B	P	B	P	B	B	B	B	B	P	B	B	B		P	B	P	P	P	P	B	S.D.
		+	+	+	+	+	+	+	-	-	+	+	+	+	+	+	-	+	-	-	+	-	-	-	-		+	+	-	-	+	+	Skewness	
		C	F	F	C	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F	F	F	F	F	F		F	C	C	F	F	Mean	
	26	P	P	P	P	B	P	P	B	B	B	B	B	P	B	B	B	B	B	B	B	B	B	B	B	B		B	P	B	P	B	S.D.	
		+	+	+	+	+	+	+	-	-	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-		-	-	-	+	+	Skewness	
		C	F	C	C	F	F	F	F	F	C	F	F	C	F	C	F	F	F	F	F	F	F	F	F	F	C		C	C	F	F	Mean	
	27	P	P	P	P	P	P	P	P	P	P	P	P	P	B	P	B	P	P	P	B	P	B	P	B	P	P		P	P	P	P	S.D.	
		+	+	+	+	+	+	+	-	-	+	+	-	-	+	+	-	+	-	-	+	-	-	-	-	-	+		-	-	+	+	Skewness	
		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F			S	F	F	Mean	
	28	P	B	P	P	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B			B	B	B	S.D.	
		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	Skewness	

		Sediment source																															
Sediment deposit	Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	S		F	F	Mean	
	29	P	P	P	P	P	P	P	P	B	P	B	B	P	B	B	B	B	B	B	B	P	B	B	B	B	P	B	P		P	B	S.D.
		+	+	+	+	+	+	+	-	-	+	+	+	+	+	+	-	+	+	+	+	+	+	-	-	+	+	+	-		+	+	Skewness
		C	F	C	C	F	F	F	F	F	C	F	F	C	C	C	F	C	F	F	F	F	F	F	F	F	C	C	C	C		C	Mean
	30	P	P	P	P	B	P	P	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	P	B		B	S.D.
		-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	Skewness
		C	F	C	C	F	F	F	F	F	C	F	F	C	F	C	F	C	F	F	F	F	F	F	F	F	C	C	C	C	F		Mean
31	P	P	P	P	P	P	P	P	P	P	B	B	P	B	P	B	B	B	B	B	P	B	B	B	P	P	B	P	P	P		S.D.	
	+	+	+	+	+	+	+	-	-	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+		Skewness

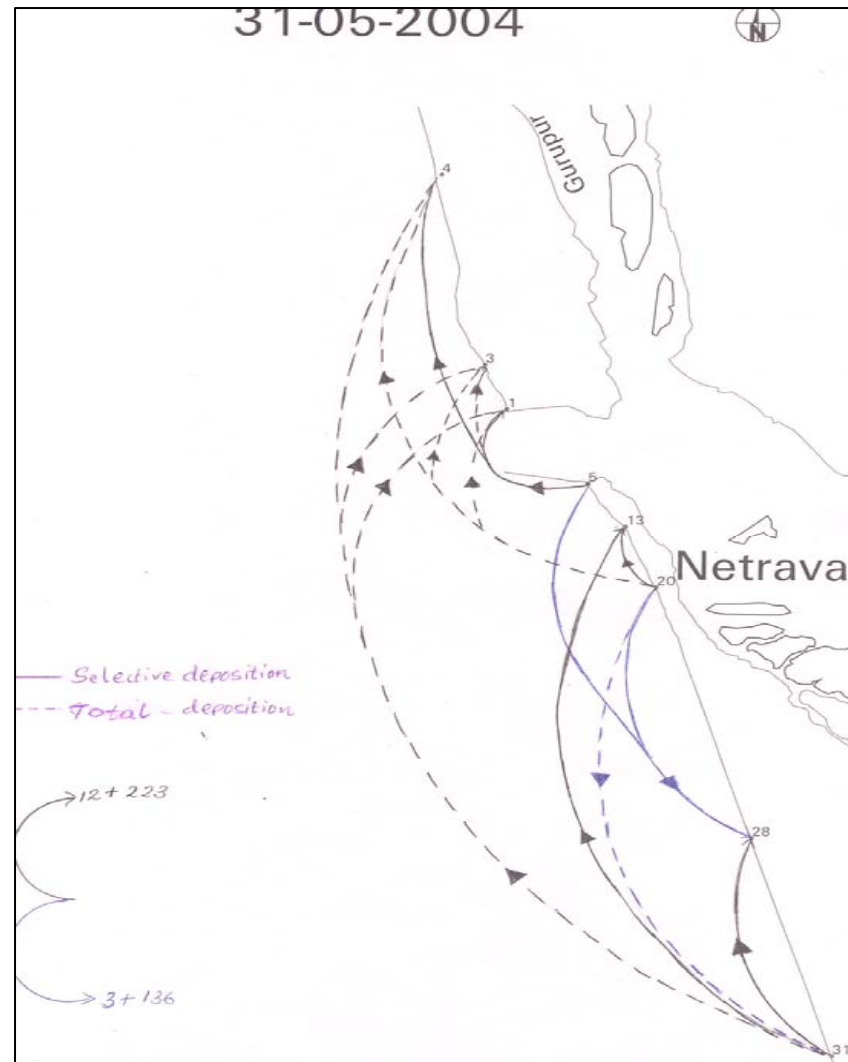


Fig. 4.2 Sediment movement path for the monsoon period.(year 2004)

Sediment Trend Matrix for the post-monsoon period of 2004

		Sediment Source																																
Sediment deposit	Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
			C	C	C	F	F	F	F	F	F	F	F	F	F	C	F	C	F	F	F	F	F	F	F	F	F	F	C	C	C	C	Mean	
	1		B	P	P	P	P	P	B	B	P	B	B	B	B	B	B	B	B	P	B	P	B	B	B	B	P	P	B	B	B	B	S.D.	
			-	-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	+	+	-	-	-	-	-	-	+	-	-	-	-	Skewness	
		F		F	C	F	F	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	Mean	
	2	P		P	P	P	P	P	P	P	P	P	P	P	P	P	B	P	B	P	P	P	P	B	P	P	P	P	B	P	P	B	S.D.	
		+		+	+	+	-	+	+	+	+	+	+	+	+	-	+	+	+	+	+	-	+	+	-	+	+	+	+	+	+	-	+	Skewness
		F	C		C	F	F	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F	F	F	F	F	F	F	F	C	C	F	Mean
	3	B	B		B	P	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	P	B	B	B	B	B	S.D.
		+	-		-	S	-	-	-	+	+	+	+	+	+	-	+	+	+	+	+	-	+	-	-	+	S	+	-	-	-	-	+	Skewness
		F	F	F		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	Mean
	4	B	B	P		P	P	P	B	B	P	B	B	B	B	B	B	B	B	B	P	B	P	B	B	B	B	P	P	B	B	B	B	S.D.
		+	-	+		+	-	+	+	+	+	+	+	+	+	-	+	+	+	+	+	-	+	+	-	+	+	+	+	+	+	-	+	Skewness
	C	C	C	C		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	S	C	C	C	C	C	Mean	
5	B	B	B	B		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	S	B	B	B	B	B	S.D.	
	+	-	S	-		-	-	-	+	+	+	+	+	+	-	+	+	+	+	+	-	+	-	-	+	S	+	-	-	-	-	+	Skewness	
	C	C	C	C	F		C	C	C	C	C	C	C	C	C	C	C	C	C	C	F	C	F	C	C	F	C	C	C	C	C	C	Mean	
6	B	B	P	B	P		B	B	B	B	B	B	B	B	B	B	B	B	S	B	B	B	B	B	B	P	B	B	B	B	B	B	S.D.	
	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Skewness	
	C	C	C	C	F	F		F	C	C	C	C	C	C	C	S	C	C	C	C	F	C	F	S	C	F	C	C	C	C	C	C	Mean	
7	B	B	P	B	P	P		B	B	P	B	B	B	B	B	B	B	B	P	B	P	B	B	B	B	P	P	B	B	B	B	B	S.D.	
		+	-	+	-	+	-		+	+	+	+	+	+	+	-	+	+	+	+	+	-	+	+	-	+	+	+	+	+	-	+	Skewness	

		Sediment Source																																
Sediment deposit	Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
		C	C	C	C	F	F	C		C	C	C	C	C	C	C	C	C	C	C	C	F	C	F	C	C	F	C	C	C	C	C	C	Mean
	8	P	B	P	P	P	P	P		P	P	B	B	P	P	B	B	B	B	P	B	P	B	B	P	P	P	P	B	B	P	B	S.D.	
		+	-	+	-	+	-	-		+	+	+	+	+	+	-	+	+	+	+	+	-	+	+	-	+	+	+	+	+	-	+	Skewness	
		C	C	C	C	F	F	F	F		F	C	C	C	C	C	F	C	C	C	C	F	C	F	F	F	F	C	C	C	C	C	C	Mean
	9	P	B	P	P	P	P	P	B		P	B	B	P	P	B	B	B	B	P	B	P	B	B	B	B	P	P	B	B	B	B	B	S.D.
		+	-	-	-	-	-	-	-		-	-	+	+	+	-	+	+	+	+	+	-	+	-	-	-	-	+	-	-	-	-	+	Skewness
		C	C	C	C	F	F	F	F	C		C	C	C	C	C	F	C	C	C	C	F	C	F	F	F	F	C	C	C	C	C	C	Mean
	10	B	B	P	B	P	P	B	B	B		B	B	B	B	B	B	B	B	P	B	B	B	B	B	B	P	B	B	B	B	B	B	S.D.
		+	-	-	-	-	-	-	-	+		+	+	+	+	-	+	+	+	+	+	-	+	-	-	-	-	+	-	-	-	-	+	Skewness
		C	C	C	C	F	F	F	F	F	F		C	F	F	C	F	C	C	C	F	F	C	F	F	F	F	C	C	C	C	C	C	Mean
	11	P	B	P	P	P	P	P	P	P	P		P	P	P	P	B	P	B	P	P	P	P	B	P	P	P	P	B	P	P	B	P	S.D.
		+	-	-	-	-	-	-	-	+	-		+	+	+	-	+	+	+	+	+	-	+	-	-	-	-	+	-	-	-	-	+	Skewness
		C	C	C	C	F	F	F	F	F	F	F		F	F	C	F	C	C	C	F	F	F	C	F	F	F	F	C	C	C	C	C	Mean
	12	P	B	P	P	P	P	P	P	P	P	B		P	P	P	B	B	B	P	B	P	B	B	P	P	P	P	B	B	P	B	B	S.D.
		+	-	-	-	-	-	-	-	-	-	-		-	+	-	+	+	-	+	+	-	-	-	-	-	-	+	-	-	-	-	+	Skewness
		C	C	C	C	F	F	F	F	F	F	C	C		C	C	F	C	C	C	C	F	C	F	F	F	F	C	C	C	C	C	C	Mean
	13	P	B	P	P	P	P	P	B	B	P	B	B		P	B	B	B	B	P	B	P	B	B	B	B	P	P	B	B	B	B	B	S.D.
		+	-	-	-	-	-	-	-	-	-	-	+		+	-	+	+	+	+	+	-	+	-	-	-	-	+	-	-	-	-	+	Skewness
		C	C	C	C	F	F	F	F	F	F	C	C	F		C	F	C	C	C	F	F	C	F	F	F	F	C	C	C	C	C	C	Mean
	14	P	B	P	P	P	P	P	B	B	P	B	B	B		B	B	B	B	P	B	P	B	B	B	B	P	P	B	B	B	B	B	S.D.
		-	-	-	-	-	-	-	-	-	-	-	-	-		-	+	-	-	+	-	-	-	-	-	-	-	+	-	-	-	-	-	Skewness

		Sediment source																																
Sediment deposit	Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
		F	F	F	C	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	Mean	
	15	P	B	P	P	P	P	P	P	P	P	B	B	P	P		B	B	B	P	B	P	B	B	P	P	P	P	B	B	P	B	S.D.	
		+	+	+	+	+	-	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Skewness	
		C	C	C	C	F	F	S	F	C	C	C	C	C	C	C		C	C	C	C	F	C	F	S	C	F	C	C	C	C	C	Mean	
	16	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P	P	P	B	P	P	P	P	B	P	P	B	S.D.	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	+	-	-	-	-	-	-	-	+	-	-	-	-	Skewness	
		F	C	C	C	F	F	F	F	F	F	F	F	F	F	C	F		F	F	F	F	F	F	F	F	F	F	C	C	C	C	Mean	
	17	P	B	P	P	P	P	P	P	P	P	B	P	P	P	P	B		B	P	P	P	B	B	P	P	P	P	B	B	P	B	S.D.	
		+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+		-	+	+	-	-	-	-	-	-	+	-	-	-	-	+	Skewness
		C	C	C	C	F	F	F	F	F	F	F	F	F	F	C	F	C		F	F	F	C	F	F	F	F	F	C	C	C	C	Mean	
	18	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	B	P		P	P	P	P	B	P	P	P	P	B	P	P	B	S.D.	
		+	-	-	-	-	-	-	-	-	-	-	+	-	+	-	+	+		+	+	-	+	-	-	-	-	+	-	-	-	-	+	Skewness
		C	C	C	C	F	F	F	F	F	F	F	C	F	F	C	F	C	C		F	F	C	F	F	F	F	C	C	C	C	C	Mean	
	19	B	B	P	B	P	S	B	B	B	B	B	B	B	B	B	B	B		B	B	B	B	B	B	B	P	B	B	B	B	B	S.D.	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	+	-	-	-	-	Skewness	
		C	C	C	C	F	F	F	F	F	F	C	C	F	C	C	F	C	C	C		F	C	F	F	F	F	C	C	C	C	C	Mean	
	20	P	B	P	P	P	P	P	P	P	P	B	P	P	P	P	B	B	B	P		P	B	B	P	P	P	P	B	B	P	B	S.D.	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	+		-	-	-	-	-	-	+	-	-	-	-	Skewness
		C	C	C	C	F	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C		C	C	C	C	F	C	C	C	C	C	Mean	
	21	B	B	P	B	P	P	B	B	B	P	B	B	B	B	B	B	B	B	P	B		B	B	B	B	P	P	B	B	B	B	S.D.	
		+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	-	+	+	+	+	+		+	+	-	+	+	+	+	+	-	+	Skewness

		Sediment source																																	
Sediment deposit	Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
		C	C	C	C	F	F	F	F	F	F	F	F	F	F	C	F	C	F	F	F	F		F	F	F	F	F	C	C	C	C	Mean		
	22	P	B	P	P	P	P	P	P	P	P	B	P	P	P	P	B	P	B	P	P	P		B	P	P	P	P	B	P	P	B	S.D.		
		+	-	-	-	-	-	-	-	-	-	-	+	-	+	-	+	+	-	+	+	-		-	-	-	-	+	-	-	-	+	Skewness		
		C	C	C	C	F	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	F	C		C	C	F	C	C	C	C	C	Mean	
	23	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P	B	P	P	B	S.D.		
		+	-	+	-	+	-	-	-	+	+	+	+	+	+	+	-	+	+	+	+	+	-	+		-	+	+	+	+	-	-	-	+	Skewness
		C	C	C	C	F	F	S	F	C	C	C	C	C	C	C	C	S	C	C	C	C	F	C	F		C	F	C	C	C	C	C	Mean	
	24	P	B	P	P	P	P	P	B	P	P	B	B	P	P	B	B	B	B	P	B	P	B	B		P	P	P	B	B	P	B	S.D.		
		+	+	+	+	+	-	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	Skewness	
		C	C	C	C	F	F	F	F	C	C	C	C	C	C	C	C	F	C	C	C	C	F	C	F	F		F	C	C	C	C	C	Mean	
	25	P	B	P	P	P	P	P	B	P	P	B	B	P	P	B	B	B	B	P	B	P	B	B	B		P	P	B	B	B	B	B	S.D.	
		+	-	-	-	-	-	-	-	+	+	+	+	+	+	+	-	+	+	+	+	+	-	+	-	-		-	+	-	-	-	-	+	Skewness
		C	C	C	C	S	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C		C	C	C	C	C	C	Mean	
	26	B	B	B	B	S	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		B	B	B	B	B	B	S.D.	
		+	-	S	-	S	-	-	-	+	+	+	+	+	+	+	-	+	+	+	+	+	-	+	-	-	+		+	-	-	-	+	Skewness	
		C	C	C	C	F	F	F	F	F	F	F	C	F	F	C	F	C	C	F	F	F	C	F	F	F	F		C	C	C	C	Mean		
	27	B	B	P	B	P	P	B	B	B	P	B	B	B	B	B	B	B	B	P	B	B	B	B	B	B	P		B	B	B	B	S.D.		
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	Skewness		
		F	C	C	C	F	F	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F	F	F	F	F			C	C	F	Mean		
28	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			P	P	B	S.D.			
	+	-	+	-	+	-	-	-	+	+	+	+	+	+	+	-	+	+	+	+	+	-	+	+	-	+	+	+		-	-	+	Skewness		

		Sediment source																																
Sediment deposit	Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
		F	C	F	C	F	F	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F	F	F	F	F	F	F		C	F	Mean	
	29	P	B	P	P	P	P	P	P	P	P	B	P	P	P	P	B	P	B	P	P	P	B	B	P	P	P	P	B		P	B	S.D.	
		+	-	+	-	+	-	-	-	+	+	+	+	+	+	-	+	+	+	+	+	+	-	+	+	-	+	+	+	+		-	+	Skewness
		F	C	F	C	F	F	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F		F	Mean
	30	P	B	P	P	P	P	P	B	P	P	B	B	P	P	B	B	B	B	P	B	P	B	B	B	P	P	P	B	B		B	S.D.	
		+	+	+	+	+	-	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+		+	Skewness
	F	C	C	C	F	F	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F	F	F	F	F	F	C	C	C			Mean	
31	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		S.D.	
		+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	+	+	-	-	-	-	-	-	+	-	-	-		Skewness	

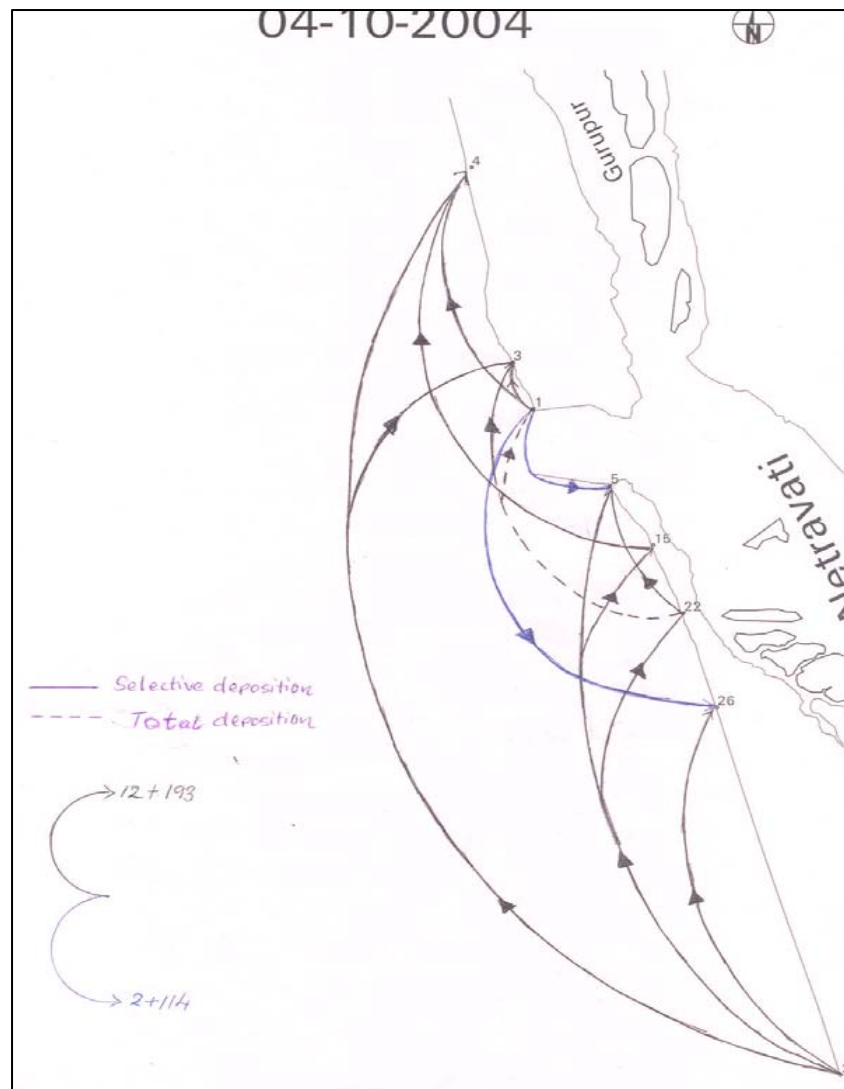


Fig. 4.3 Sediment movement path for the post monsoon period. (year 2004)

Sediment Trend Matrix for the pre-monsoon period of 2005

Sediment source																																			
Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
		C	C	C	F	F	C	F	C	C	F	C	F	F	C	C	C	C	C	F	C	F	F	C	S	F	C	C	C	C	C	Mean			
1		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	B	P	P	P	P	P	P	P	P	S.D.			
		-	-	-	+	+	+	+	+	+	+	+	-	+	+	-	+	-	+	+	+	-	+	+	+	+	-	+	-	-	-	Skewness			
	F		F	C	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	Mean			
2	B		B	B	P	B	P	B	P	B	B	P	P	B	P	P	B	P	B	B	B	B	B	B	B	P	P	P	P	P	P	S.D.			
	+		+	+	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	-	Skewness		
	F	C		C	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	Mean			
3	B	P		B	P	P	P	B	P	B	B	P	P	B	P	P	P	P	B	B	B	P	B	B	P	P	P	P	P	P	P	P	S.D.		
	+	-		+	+	+	+	+	+	+	+	+	-	+	+	-	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	-	Skewness		
	F	F	F		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	Mean			
4	B	P	P		P	P	P	P	P	P	P	P	P	P	P	P	P	P	B	P	P	P	B	P	P	P	P	P	P	P	P	S.D.			
	+	-	-		+	+	+	+	+	+	+	+	-	+	+	-	+	-	+	+	+	-	+	+	+	+	-	+	-	-	-	Skewness			
	C	C	C	C		C	C	C	C	C	C	C	F	C	C	C	C	C	C	C	C	C	C	C	C	C	F	C	C	C	C	Mean			
5	B	B	B	B		B	P	B	P	B	B	B	B	B	P	P	B	B	B	B	B	B	B	B	B	P	P	B	B	P	P	S.D.			
	-	-	-	-		-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Skewness			
	C	C	C	C	F		C	C	C	C	C	C	F	C	C	C	C	C	C	C	C	F	F	C	C	F	C	C	C	C	C	Mean			
6	B	P	B	B	P		P	B	P	B	B	P	P	B	P	P	B	P	B	B	B	B	B	B	B	P	P	P	P	P	P	S.D.			
	-	-	-	-	+		+	+	+	+	+	+	-	+	+	-	+	-	+	+	+	-	+	+	+	-	-	+	-	-	-	Skewness			
	F	C	C	C	F	F		F	F	F	F	F	F	F	F	C	F	C	F	F	F	F	F	C	F	F	C	F	C	C	C	Mean			
7	B	B	B	B	B	B		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	P	B	B	B	B	B	S.D.			
	-	-	-	-	+	-		+	-	+	+	+	-	+	-	-	+	-	-	-	-	-	-	-	+	-	-	-	-	-	-	Skewness			

		Sediment source																																		
Sediment deposit	Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
		C	C	C	C	F	F	C		C	C	C	C	F	F	C	C	C	C	C	C	C	F	F	C	C	F	C	C	C	C	C	C	Mean		
	8	B	P	P	B	P	P	P		P	B	B	P	P	P	P	P	P	P	B	P	B	P	B	B	P	P	P	P	P	P	P	P	S.D.		
		-	-	-	-	+	-	-		-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Skewness		
		F	C	C	C	F	F	C	F		F	F	F	F	F	C	C	F	C	F	F	F	F	F	C	F	F	C	C	C	C	C	C	Mean		
	9	B	B	B	B	B	B	P	B		B	B	B	B	B	P	P	B	B	B	B	B	B	B	B	B	B	P	P	B	B	P	P	S.D.		
		-	-	-	-	+	-	+	+		+	+	+	-	+	-	-	+	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	Skewness	
		F	C	C	C	F	F	C	F	C		F	F	F	F	C	C	C	C	F	F	F	F	F	C	F	F	C	C	C	C	C	C	Mean		
	10	B	P	P	B	P	P	P	P	P		B	P	P	P	P	P	P	P	B	P	B	P	B	P	P	P	P	P	P	P	P	P	P	S.D.	
		-	-	-	-	+	-	-	+	-		+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Skewness	
		C	C	C	C	F	F	C	F	C	C		C	F	F	C	C	C	C	C	F	C	F	F	C	C	F	C	C	C	C	C	C	C	Mean	
	11	B	P	P	B	P	P	P	P	P	P		P	P	P	P	P	P	P	B	P	P	P	B	P	P	P	P	P	P	P	P	P	P	S.D.	
		-	-	-	-	+	-	-	-	-	-		+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Skewness
		F	C	C	C	F	F	C	F	C	C	F		F	F	C	C	C	C	F	F	F	F	F	C	F	F	C	C	C	C	C	C	C	Mean	
	12	B	B	B	B	P	B	P	B	P	B	B		P	B	P	P	B	B	B	B	B	B	B	B	B	B	P	P	B	B	P	P	P	S.D.	
		-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Skewness
	C	C	C	C	C	C	C	C	C	C	C	C		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	Mean		
13	B	B	B	B	P	B	P	B	P	B	B	B		B	P	P	B	B	B	B	B	B	B	B	B	B	P	P	B	B	P	P	P	S.D.		
	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Skewness		
	C	C	C	C	F	F	C	C	C	C	C	C	F		C	C	C	C	C	C	C	C	F	F	C	C	F	C	C	C	C	C	C	Mean		
14	B	P	P	B	P	P	P	B	P	B	B	P	P		P	P	P	P	B	B	B	P	B	B	B	P	P	P	P	P	P	P	P	S.D.		
	-	-	-	-	+	-	-	+	-	+	+	+	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Skewness	

		Sediment Source																																	
Sediment deposit	Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
		F	C	C	C	F	F	C	F	F	F	F	F	F	F		C	F	C	F	F	F	F	F	C	F	F	C	C	C	C	C	Mean		
	15	B	B	B	B	B	B	P	B	B	B	B	B	B	B		B	B	B	B	B	B	B	B	B	B	B	P	B	B	B	B	B	S.D.	
		-	-	-	-	+	-	+	+	+	+	+	+	+	-	+		-	+	-	+	+	+	-	-	-	+	-	-	-	-	-	-	Skewness	
		F	C	C	C	F	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	C	Mean	
	16	B	B	B	B	B	B	P	B	B	B	B	B	B	B	P		B	B	B	B	B	B	B	B	B	B	P	B	B	B	B	B	S.D.	
		+	-	+	+	+	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	-	Skewness
		F	C	C	C	F	F	C	F	C	F	F	F	F	F	C	C		C	F	F	F	F	F	C	F	F	C	C	C	C	C	C	Mean	
	17	B	P	B	B	P	P	P	B	P	B	B	P	P	B	P	P		P	B	B	B	B	B	B	B	B	P	P	P	P	P	P	S.D.	
		-	-	-	-	+	-	-	+	-	+	+	+	-	+	-	-		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	Skewness
		F	C	C	C	F	F	F	F	F	F	F	F	F	F	F	C	F		F	F	F	F	F	F	F	F	F	C	F	C	C	C	Mean	
	18	B	B	B	B	P	B	P	B	P	B	B	P	P	B	P	P	B		B	B	B	B	B	B	B	B	P	P	B	B	P	P	S.D.	
		+	-	-	+	+	+	+	+	+	+	+	+	+	-	+	+	-	+		+	+	+	-	+	+	+	+	+	-	+	-	-	-	Skewness
		F	C	C	C	F	F	C	F	C	C	F	C	F	F	C	C	C	C		F	C	F	F	C	F	F	C	C	C	C	C	C	Mean	
	19	B	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	B	P	P	P	P	P	P	P	P	P	S.D.	
		-	-	-	-	+	-	+	+	+	+	+	+	-	+	-	-	+	-		+	+	-	-	-	+	-	-	-	-	-	-	-	-	Skewness
	C	C	C	C	F	F	C	F	C	C	C	C	C	F	F	C	C	C	C		C	F	F	C	C	F	C	C	C	C	C	C	Mean		
20	B	P	P	B	P	P	P	B	P	B	B	P	P	P	P	P	P	P	B		B	P	B	B	P	P	P	P	P	P	P	P	S.D.		
	-	-	-	-	+	-	+	+	+	+	+	+	+	-	+	-	-	+	-	-	+	-	-	-	+	-	-	-	-	-	-	-	-	Skewness	
	F	C	C	C	F	F	C	F	C	C	F	C	F	F	C	C	C	C	F	F		F	F	C	F	F	C	C	C	C	C	C	Mean		
21	B	P	P	B	P	P	P	P	P	P	B	P	P	P	P	P	P	P	B	P		P	B	P	P	P	P	P	P	P	P	P	S.D.		
	-	-	-	-	+	-	+	+	+	+	+	+	+	-	+	-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	Skewness	

		Sediment Source																																	
	Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
Sediment deposit		C	C	C	C	F	C	C	C	C	C	C	C	F	C	C	C	C	C	C	C	C		F	C	C	F	C	C	C	C	C	Mean		
	22	B	P	B	B	P	P	P	B	P	B	B	P	P	B	P	P	P	P	B	B	B		B	B	P	P	P	P	P	P	P	S.D.		
		+	+	+	+	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	Skewness		
		C	C	C	C	F	C	C	C	C	C	C	C	F	C	C	C	C	C	C	C	C	C		C	C	F	C	C	C	C	C	Mean		
	23	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P	P	P	P	P	P	S.D.	
		-	-	-	-	+	-	+	+	+	+	+	+	-	+	+	-	+	-	+	+	+	-		+	+	-	-	+	-	-	-	-	Skewness	
		F	C	C	C	F	F	F	F	F	F	F	F	F	F	F	C	F	C	F	F	F	F	F		F	F	C	F	C	C	C	Mean		
	24	B	P	P	B	P	P	P	P	P	B	B	P	P	P	P	P	P	P	B	P	B	P	B		P	P	P	P	P	P	P	P	S.D.	
		-	-	-	-	+	-	+	+	+	+	+	+	-	+	+	-	+	-	+	+	+	-	-		+	-	-	-	-	-	-	-	-	Skewness
		S	C	C	C	F	F	C	F	C	C	F	C	F	F	C	C	C	C	C	C	F	C	F	F	C		F	C	C	C	C	C	Mean	
	25	B	P	B	B	P	P	P	B	P	B	B	P	P	B	P	P	P	P	B	B	B	B	B	B		P	P	P	P	P	P	P	S.D.	
		-	-	-	-	+	-	-	+	-	+	+	+	-	+	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	Skewness
		C	C	C	C	C	C	C	C	C	C	C	C	C	F	C	C	C	C	C	C	C	C	C	C	C	C		C	C	C	C	C	Mean	
	26	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		B	B	B	B	B	S.D.	
		-	-	-	-	+	+	+	+	+	+	+	+	-	+	+	-	+	-	+	+	+	-	+	+	+		-	+	-	-	-	-	-	Skewness
		F	C	C	C	F	F	F	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F	F	F	F	F		F	C	F	C	Mean	
27	B	B	B	B	B	B	P	B	B	B	B	B	B	B	P	P	B	B	B	B	B	B	B	B	B	B	P		B	B	B	B	S.D.		
	+	-	-	+	+	+	+	+	+	+	+	+	-	+	+	-	+	+	+	+	+	+	-	+	+	+	+		+	+	+	-	-	Skewness	
	F	C	C	C	F	F	C	F	F	F	F	F	F	F	F	C	F	C	F	F	F	F	F	C	F	F	C		C	C	C	C	Mean		
28	B	B	B	B	P	B	P	B	P	B	B	P	P	B	P	P	B	P	B	B	B	B	B	B	B	B	P	P		P	P	P	S.D.		
	-	-	-	-	+	-	+	+	+	+	+	+	-	+	+	-	+	-	+	+	+	-	-	+	+	-	-		-	-	-	-	-	Skewness	

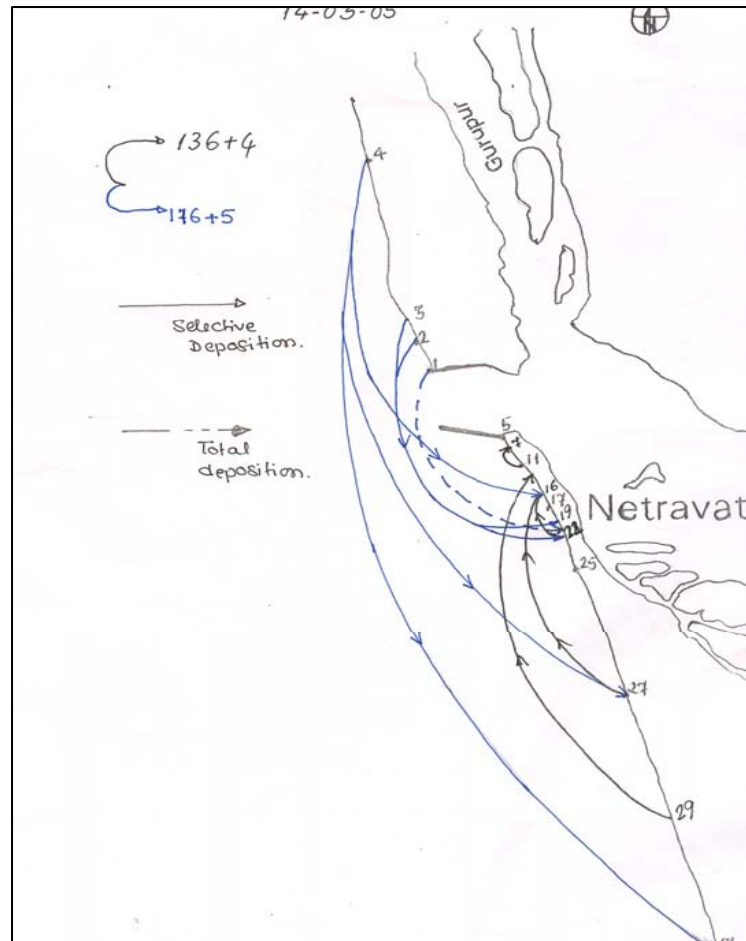


Fig. 4.4 Sediment movement path for the pre monsoon period. (year 2005)

Sediment Trend Matrix for the monsoon period of 2005

Sediment deposit	Sediment source																																	
	Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
	1		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F	Mean	
			B	B	P	B	B	B	B	P	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	P	B	B	S.D.	
			+	+	-	-	-	-	+	-	-	-	-	+	-	-	-	-	+	+	-	-	+	+	+	-	+	+	+	-	+	+	+	Skewness
	2	C		F	F	F	F	F	F	F	F	F	C	F	C	F	F	C	C	F	F	F	C	C	C	C	C	C	C	F	F	C	C	Mean
		P		B	P	B	B	B	S	P	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	P	B	B	S.D.
		-		+	-	-	-	-	+	-	-	-	-	+	-	-	-	-	+	-	-	-	+	+	-	-	+	-	+	-	+	-	-	Skewness
	3	C	C		F	F	F	F	F	F	F	C	C	F	C	C	F	C	C	F	F	F	C	C	C	C	C	C	C	C	C	C	C	Mean
		P	P		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	B	P	P	P	P	P	P	P	P	P	P	P	P	P	S.D.
-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+	-	-	-	Skewness	
4	C	C	C		F	F	F	C	F	F	C	C	F	C	C	F	C	C	C	F	C	C	C	C	C	C	C	C	C	C	C	C	C	Mean
	B	B	B		B	B	B	B	P	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	P	B	B	S.D.	
	+	+	+		+	-	-	+	-	-	+	+	+	+	+	-	+	+	-	-	+	+	+	+	+	+	+	+	+	-	+	+	+	Skewness
5	C	C	C	C		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	Mean
	P	P	B	P		P	B	P	P	B	B	P	B	B	B	B	P	B	B	B	B	B	B	B	B	B	B	B	B	P	B	B	S.D.	
	+	+	+	-		-	-	+	-	-	-	+	+	+	-	-	+	+	-	-	+	+	+	+	-	+	+	+	-	+	+	+	+	Skewness
6	C	C	C	C	F		C	C	F	C	C	C	F	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	Mean
	P	P	B	P	B		B	P	P	B	B	B	B	B	B	B	P	B	B	B	B	B	B	B	B	B	B	B	B	P	B	B	S.D.	
	+	+	+	+	+		+	+	-	-	+	+	+	+	+	-	+	+	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	Skewness
7	C	C	C	C	F	F		C	F	C	C	C	F	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	Mean
	P	P	B	P	P	P		P	P	B	B	P	B	B	B	B	P	P	B	B	B	B	P	P	B	B	P	B	P	B	P	P	P	S.D.
	+	+	+	+	+	-		+	-	-	+	+	+	+	+	-	+	+	-	-	+	+	+	+	+	+	+	+	-	+	+	+	+	Skewness
8	C	C	C	F	F	F	F		F	F	C	C	F	C	C	F	C	C	F	F	F	C	C	C	C	C	C	C	C	C	C	C	C	Mean
	P	S	B	P	B	B	B		P	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	P	B	B	B	S.D.
	-	-	+	-	-	-	-		-	-	-	+	-	-	-	-	+	-	-	-	-	+	-	-	+	-	+	-	+	-	+	-	-	Skewness
9	C	C	C	C	F	C	C	C		C	C	C	F	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	Mean
	B	B	B	B	B	B	B	B		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	S.D.
	+	+	+	+	+	+	+	+		-	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Skewness
10	C	C	C	C	F	F	F	C	F		C	C	F	C	C	F	C	C	C	F	C	C	C	C	C	C	C	C	C	C	C	C	C	Mean
	P	P	B	P	P	P	P	P	P		P	P	B	B	P	B	P	P	B	B	P	P	P	P	P	B	B	P	P	P	P	P	P	S.D.
	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Skewness

Sediment deposit		Sediment source																																
	Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
		C	C	F	F	F	F	F	F	F	F		C	F	C	S	F	C	C	F	F	F	C	C	C	C	C	C	S	S	C	C	Mean	
	11	P	P	B	P	P	P	P	P	P	B		P	B	B	B	B	P	P	B	B	B	B	P	P	B	B	P	B	P	P	P	S.D.	
		+	+	+	-	+	-	-	+	-	-		+	+	+	+	-	+	+	-	-	+	+	+	-	+	+	+	-	+	+	+	+	Skewness
		C	F	F	F	F	F	F	F	F	F	F		F	C	F	F	C	C	F	F	F	C	C	C	C	C	C	F	F	C	C	Mean	
	12	P	P	B	P	B	P	B	P	P	B	B		B	B	B	B	P	B	B	B	B	B	B	B	B	B	B	B	P	B	B	S.D.	
		-	-	+	-	-	-	-	-	-	-	-		-	-	-	-	+	-	-	-	-	+	-	-	-	-	+	-	+	-	-	Skewness	
	C	C	C	C	F	C	C	C	C	C	C	C		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	Mean	
13	P	P	B	P	P	P	P	P	P	P	P	P		B	P	B	P	P	B	B	P	P	P	P	B	P	P	P	P	P	P	P	S.D.	
	+	+	+	-	-	-	-	+	-	-	-	+		+	-	-	+	+	-	-	+	+	+	+	-	+	+	+	-	+	+	+	+	Skewness
	C	F	F	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F	F	Mean	
14	P	P	B	P	P	P	P	P	P	P	P	P	P		P	B	P	P	B	B	P	P	P	P	B	P	P	P	P	P	P	P	S.D.	
	+	+	+	-	-	-	-	+	-	-	-	+	-		-	-	+	+	-	-	+	+	+	+	-	+	+	+	-	+	+	+	+	Skewness
	C	C	F	F	F	F	F	F	F	F	S	C	F	C		F	C	C	F	F	F	F	C	C	C	C	C	C	S	S	C	C	Mean	
15	P	P	B	P	P	P	P	P	P	B	P	P	B	B		B	P	P	B	B	B	B	B	P	P	B	B	P	P	P	P	P	S.D.	
	+	+	+	-	+	-	-	+	-	-	-	+	+	+		-	+	+	-	-	+	+	+	+	-	+	+	+	-	+	+	+	+	Skewness
	C	C	C	C	F	F	F	C	F	C	C	C	F	C	C		C	C	C	F	C	C	C	C	C	C	C	C	C	C	C	C	C	Mean
16	P	P	B	P	P	P	P	P	P	P	P	P	P	P	P		P	P	B	P	P	P	P	P	P	B	P	P	P	P	P	P	P	S.D.
	+	+	+	+	+	+	+	+	-	-	+	+	+	+	+		+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Skewness
	C	F	F	F	F	F	F	F	F	F	F	F	F	C	F	F		F	F	F	F	F	C	C	C	C	C	F	F	F	C	F	Mean	
17	P	P	B	P	B	B	B	P	P	B	B	B	B	B	B	B		B	B	B	B	B	B	B	B	B	B	B	B	P	B	B	S.D.	
	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	+	-	-	-	-	-	-	+	-	-	-	Skewness	
	C	F	F	F	F	F	F	F	F	F	F	F	F	C	F	F	C		F	F	F	F	C	C	C	C	C	F	F	C	S	Mean		
18	P	P	B	P	P	P	B	P	P	B	B	P	B	B	B	B	P		B	B	B	B	P	B	B	B	B	B	B	P	P	P	S.D.	
	-	+	+	-	-	-	-	+	-	-	-	+	-	-	-	-	+		-	-	+	+	-	-	+	+	+	-	+	+	+	+	Skewness	
	C	C	C	F	F	F	F	C	F	F	C	C	F	C	C	F	C	C		F	C	C	C	C	C	C	C	C	C	C	C	C	C	Mean
19	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			P	P	P	P	P	P	P	P	P	P	P	P	P	S.D.	
	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+	Skewness
	C	C	C	C	F	F	F	C	F	C	C	C	F	C	C	C	C	C		C	C	C	C	C	C	C	C	C	C	C	C	C	C	Mean
20	P	P	B	P	P	P	P	P	P	P	P	P	P	P	P	B	P	P	B			P	P	P	P	B	P	P	P	P	P	P	P	S.D.
	+	+	+	+	+	+	+	+	-	-	+	+	+	+	+	-	+	+	-			+	+	+	+	+	+	+	+	+	+	+	+	Skewness

	Location	Sediment source																																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
Sediment deposit		C	C	C	F	F	F	F	C	F	F	C	C	F	C	C	F	C	C	F	F		C	C	C	C	C	C	C	C	C	C	Mean	
	21	P	P	B	P	P	P	P	P	B	P	P	B	B	P	B	P	P	B	B		P	P	P	B	B	P	P	P	P	P	S.D.		
		-	-	+	-	-	-	-	+	-	-	-	+	-	-	-	-	+	-	-	-		+	-	-	+	-	+	-	+	-	-	Skewness	
		C	F	F	F	F	F	F	F	F	F	F	F	F	C	F	F	C	C	F	F	F		C	C	C	C	C	F	F	C	C	Mean	
	22	P	P	B	P	P	P	P	P	P	B	P	P	B	B	P	B	P	P	B	B	B		P	P	B	B	P	P	P	P	P	S.D.	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	Skewness	
		C	F	F	F	F	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F	F		C	F	F	F	F	F	F	F	Mean	
	23	P	P	B	P	P	P	B	P	P	B	B	P	B	B	B	B	P	B	B	B	B	B		B	B	B	B	B	B	P	P	P	S.D.
		-	+	+	-	-	-	-	+	-	-	-	+	-	-	-	-	+	+	-	-	+	+		-	+	+	+	+	-	+	+	+	Skewness
		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F	F	Mean	
	24	P	P	B	P	P	P	B	P	P	B	B	P	B	B	B	B	P	P	B	B	B	B	P		B	B	B	B	B	P	P	P	S.D.
		+	+	+	-	+	-	-	+	-	-	+	+	+	+	+	-	+	+	-	-	+	+	+		+	+	+	-	+	+	+	+	Skewness
		C	F	F	F	F	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F	F	C	C		F	F	F	F	F	F	F	Mean
	25	P	P	B	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	B	P	P	P	P	P		P	P	P	P	P	P	P	S.D.
		-	-	+	-	-	-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	+	-	-		-	+	-	+	-	-	-	Skewness
		C	F	F	F	F	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F	F	C	C	C		F	F	F	C	F	Mean	
	26	P	P	B	P	P	P	P	P	P	P	P	P	B	B	P	B	P	P	B	B	P	P	P	P	B		P	P	P	P	P	P	S.D.
		-	+	+	-	-	-	-	+	-	-	-	+	-	-	-	-	+	-	-	-	+	+	-	-	+		+	-	+	+	-	-	Skewness
		C	F	F	F	F	F	F	F	F	F	F	F	F	C	F	F	C	F	F	F	F	F	C	C	C	C		F	F	C	F	Mean	
	27	P	P	B	P	P	P	B	P	P	B	B	P	B	B	B	B	P	P	B	B	B	B	P	P	B	B		B	P	P	P	P	S.D.
		-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	-	-	+	-	-	-	Skewness
		C	C	F	F	F	F	F	F	F	F	S	C	F	C	S	F	C	C	F	F	F	C	C	C	C	C	C		S	C	C	Mean	
	28	P	P	B	P	P	P	P	P	P	B	P	P	B	B	B	B	P	P	B	B	B	B	P	P	B	B	P		P	P	P	P	S.D.
		+	+	+	+	+	-	+	+	-	-	+	+	+	+	+	-	+	+	-	-	+	+	+	+	+	+	+		+	+	+	+	Skewness
		C	C	F	F	F	F	F	F	F	F	S	C	F	C	S	F	C	C	F	F	F	C	C	C	C	C	C	S		C	C	Mean	
	29	B	B	B	B	B	B	B	B	P	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		B	B	B	S.D.
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	Skewness
		C	F	F	F	F	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F	F	C	C	C	F	F	F	F		F	Mean	
	30	P	P	B	P	P	P	B	P	P	B	B	P	B	B	B	B	P	B	B	B	B	B	B	B	B	B	B	B	P		B	S.D.	
		-	+	+	-	-	-	-	+	-	-	-	+	-	-	-	-	+	-	-	-	+	+	-	-	+	-	+	-	+		-	Skewness	

Sediment deposit		Sediment source																															
	Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
		C	F	F	F	F	F	F	F	F	F	F	F	F	C	F	F	C	S	F	F	F	F	C	C	C	C	C	F	F	C		Mean
	31	P	P	B	P	P	P	B	P	P	B	B	P	B	B	B	B	P	B	B	B	B	B	B	B	B	B	B	B	P	P		S.D.
		-	+	+	-	-	-	-	+	-	-	-	+	-	-	-	-	+	-	-	-	+	+	-	-	+	+	+	-	+	+		Skewness

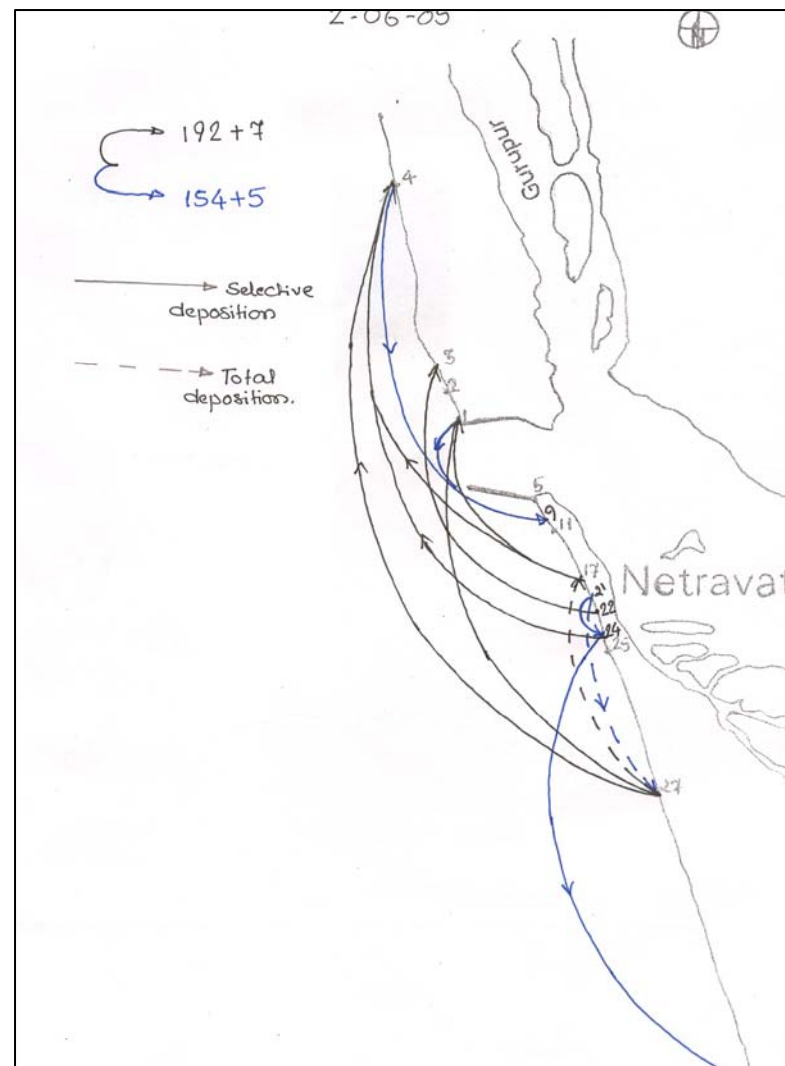


Fig. 4.5 Sediment movement path for the monsoon period. (year 2005)

Sediment Trend Matrix for the post-monsoon period of 2005

	Sediment source																				
	Location	1	2	3	4	6	7	8	9	11	12	14	15	16	17	18	19	23	29	31	
Sediment deposit			F	F	C	F	C	C	C	F	F	C	C	C	F	C	F	C	F	F	Mean
	1		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	P	S.D.
			-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	Skewness
		C		C	C	C	C	C	C	C	F	C	C	C	C	C	F	C	C	C	Mean
	2	P		P	B	B	P	P	P	B	B	B	B	B	B	B	B	B	P	P	S.D.
		+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Skewness
		C	F		C	C	C	C	C	C	F	C	C	C	F	C	F	C	C	C	Mean
	3	P	B		B	B	P	P	P	B	B	B	B	B	B	B	B	B	P	P	S.D.
		+	-		-	+	-	+	+	-	-	-	-	-	-	-	-	-	-	-	Skewness
		F	F	F		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	Mean
	4	P	P	P		B	P	P	P	B	B	B	B	B	B	B	B	P	P	P	S.D.
		+	-	+		+	+	+	+	+	+	+	+	-	+	-	+	+	-	-	Skewness
		C	F	F	C		C	C	C	C	F	C	C	C	F	C	F	C	C	F	Mean
	6	P	P	P	P		P	P	P	P	B	B	B	B	B	B	B	P	P	P	S.D.
		+	-	-	-		-	+	+	-	-	-	-	-	-	-	-	-	-	-	Skewness
		F	F	F	C	F		F	C	F	F	F	F	C	F	C	F	C	F	F	Mean
	7	P	B	B	B	B		P	P	B	B	B	B	B	B	B	B	B	P	P	S.D.
		+	-	+	-	+		+	+	-	-	-	-	-	-	-	-	-	-	-	Skewness
		F	F	F	C	F	C		C	F	F	F	F	C	F	C	F	C	F	F	Mean
	8	P	B	B	B	B	B		B	B	B	B	B	B	B	B	B	B	B	P	S.D.
		+	-	-	-	-	-		+	-	-	-	-	-	-	-	-	-	-	-	Skewness

	Sediment source																				
	Location	1	2	3	4	6	7	8	9	11	12	14	15	16	17	18	19	23	29	31	
Sediment deposit		F	F	F	C	F	F	F		F	F	F	F	F	F	F	F	C	F	F	Mean
	9	P	B	B	B	B	B	P		B	B	B	B	B	B	B	B	B	B	P	S.D.
		-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	Skewness
		C	F	F	C	F	C	C	C		F	C	C	C	F	C	F	C	C	F	Mean
	11	P	P	P	P	B	P	P	P		B	B	B	B	B	B	B	P	P	P	S.D.
		+	-	+	-	+	+	+	+		+	-	-	-	-	-	-	-	-	-	Skewness
		C	C	C	C	C	C	C	C	C		C	C	C	C	C	C	C	C	C	Mean
	12	P	P	P	P	P	P	P	P	P		P	P	P	B	P	P	P	P	P	S.D.
		+	-	+	-	+	+	+	+	-		-	-	-	-	-	-	-	-	-	Skewness
		F	F	F	C	F	C	C	C	F	F		C	C	F	C	F	C	F	F	Mean
	14	P	P	P	P	P	P	P	P	P	B		B	B	B	P	B	P	P	P	S.D.
		+	-	+	-	+	+	+	+	+	+		-	-	-	-	-	-	-	-	Skewness
		F	F	F	C	F	C	C	C	F	F	F		C	F	C	F	C	F	F	Mean
	15	P	P	P	P	P	P	P	P	P	B	P		P	B	P	B	P	P	P	S.D.
		+	-	+	-	+	+	+	+	+	+	+		-	+	-	+	+	-	-	Skewness
		F	F	F	C	F	F	F	C	F	F	F	F		F	S	F	C	F	F	Mean
	16	P	P	P	P	P	P	P	P	P	B	P	B		B	P	B	P	P	P	S.D.
		+	-	+	+	+	+	+	+	+	+	+	+		+	-	+	+	+	-	Skewness
		C	F	C	C	C	C	C	C	C	F	C	C	C		C	F	C	C	C	Mean
	17	P	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P	P	S.D.
		+	-	+	-	+	+	+	+	+	+	+	-	-		-	+	+	-	-	Skewness
		F	F	F	C	F	F	F	C	F	F	F	F	S	F		F	C	F	F	Mean
	18	P	P	P	P	P	P	P	P	P	B	B	B	B	B		B	P	P	P	S.D.
		+	-	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	Skewness

	Location	Sediment source																			
		1	2	3	4	6	7	8	9	11	12	14	15	16	17	18	19	23	29	31	
Sediment deposit		C	C	C	C	C	C	C	C	C	F	C	C	C	C	C		C	C	C	Mean
	19	P	P	P	P	P	P	P	P	P	B	P	P	P	B	P		P	P	P	S.D.
		+	-	+	-	+	+	+	+	+	+	+	-	-	-	-		+	-	-	Skewness
		F	F	F	C	F	F	F	F	F	F	F	F	F	F	F	F		F	F	Mean
	23	P	P	P	B	B	P	P	P	B	B	B	B	B	B	B	B		P	P	S.D.
		+	-	+	-	+	+	+	+	+	+	+	-	-	-	-	-		-	-	Skewness
		C	F	F	C	F	C	C	C	F	F	C	C	C	F	C	F	C		F	Mean
	29	P	B	B	B	B	B	P	P	B	B	B	B	B	B	B	B	B		P	S.D.
		+	-	+	+	+	+	+	+	+	+	+	+	-	+	-	+	+		-	Skewness
		C	F	F	C	C	C	C	C	C	F	C	C	C	F	C	F	C	C		Mean
	31	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		S.D.
		+	-	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+	+		Skewness

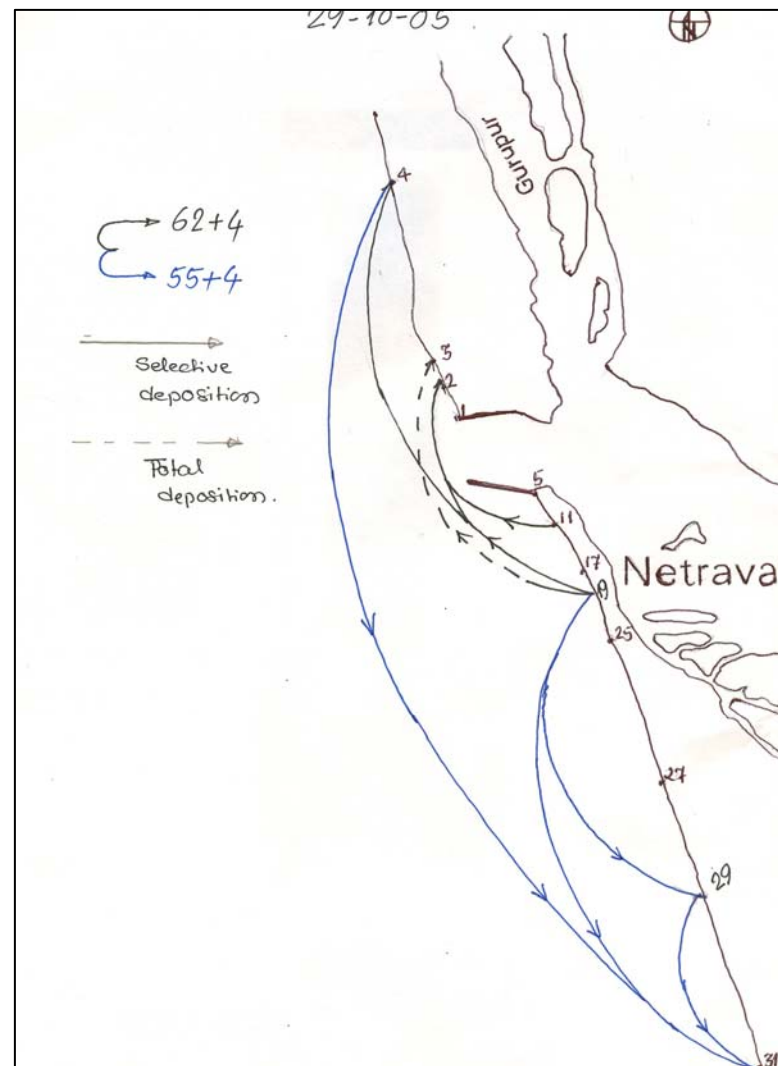


Fig. 4.6 Sediment movement path for the post monsoon period (Year 2005)

Sediment Trend Matrix for the pre-monsoon period of 2006

Sediment deposit

	Location	Sediment source																									
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	23	24	29	30	31		
Sediment deposit		C	C	C	C	F	C	C		C	C	C	F	F	C	F	F	F	C	F	C	C	C	C	C	Mean	
	8	B	P	P	P	P	P	P		P	P	P	P	P	P	P	P	B	P	P	B	B	P	P	P	S.D.	
		-	-	-	+	-	-	-		-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	Skewness	
		C	C	C	C	F	F	F	F		C	C	F	F	C	F	F	F	C	F	C	C	C	C	C	Mean	
	9	B	B	P	B	B	B	B	B		P	P	B	P	B	P	P	B	B	P	B	B	B	B	B	S.D.	
		-	-	-	+	+	+	+	+		-	-	+	+	-	+	-	-	-	+	+	-	-	-	-	Skewness	
		C	C	C	C	F	F	F	F	F		C	F	F	C	F	F	F	C	F	C	C	C	C	C	Mean	
	10	B	B	B	B	B	B	B	B	B		P	B	P	B	P	P	B	B	P	B	B	B	B	B	S.D.	
		-	-	+	+	+	+	+	+	+		-	+	+	+	+	-	-	-	+	+	-	-	-	-	Skewness	
		C	C	C	C	F	F	F	F	F	F		F	F	C	F	F	F	C	F	C	C	C	C	C	Mean	
	11	B	B	B	B	B	B	B	B	B	B		B	B	B	P	B	B	B	P	B	B	B	B	B	S.D.	
		-	-	+	+	+	+	+	+	+	+		+	+	+	+	-	-	-	+	+	+	-	-	-	Skewness	
		C	C	C	C	C	C	C	C	C	C	C		F	C	F	C	C	C	F	C	C	C	C	C	Mean	
	12	B	B	P	P	B	B	B	B	P	P	P		P	B	P	P	B	B	P	B	B	B	B	B	S.D.	
		-	-	-	+	+	+	+	+	-	-	-		+	-	+	-	-	-	+	-	-	-	-	-	Skewness	
		C	C	C	C	C	C	C	C	C	C	C	C		C	C	C	C	C	C	C	C	C	C	C	Mean	
	13	B	B	B	B	B	B	B	B	B	B	P	B		B	P	P	B	B	P	B	B	B	B	B	S.D.	
		-	-	-	+	-	-	-	-	-	-	-	-		-	-	-	-	-	+	-	-	-	-	-	Skewness	
		F	F	F	C	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F	F	F	F	F	Mean	
	14	B	P	P	P	B	B	P	B	P	P	P	P	P		P	P	B	B	P	B	B	B	B	P	S.D.	
		-	-	+	+	+	+	+	+	+	-	-	+	+		+	-	-	-	+	+	-	-	-	-	Skewness	

		Sediment source																											
Sediment deposit	Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	23	24	29	30	31				
		C	C	C	C	C	C	C	C	C	C	C	C	F	C		C	C	C	F	C	C	C	C	C	C	Mean		
	15	B	B	B	B	B	B	B	B	B	B	B	B	B	B		B	B	B	P	B	B	B	B	B	B	S.D.		
		-	-	-	+	+	+	+	+	-	-	-	-	+	-		-	-	-	+	-	-	-	-	-	-	Skewness		
		C	C	C	C	C	C	C	C	C	C	C	C	F	F	C	F		C	C	F	C	C	C	C	C	Mean		
	16	B	B	B	B	B	B	B	B	B	B	B	P	B	B	B	P		B	B	P	B	B	B	B	B	S.D.		
		+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	-	+	+	+	-	-	-	Skewness		
		C	C	C	C	F	C	C	C	C	C	C	C	F	F	C	F	F		C	F	C	C	C	C	C	Mean		
	17	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P	P	P	P	S.D.		
		-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-		-	+	+	+	-	-	-	Skewness		
		F	F	F	C	F	F	F	F	F	F	F	F	F	F	C	F	F	F		F	F	C	C	C	C	Mean		
	18	B	P	P	P	B	B	P	B	P	P	P	P	P	P	P	P	P	B		P	B	B	P	P	P	S.D.		
		+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	-	-	-	Skewness		
		C	C	C	C	C	C	C	C	C	C	C	C	C	F	C	C	C	C	C		C	C	C	C	C	Mean		
	19	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		B	B	B	B	B	S.D.		
		-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	Skewness		
		F	F	F	C	F	F	F	F	F	F	F	F	F	F	C	F	F	F	C	F		C	C	C	C	Mean		
	23	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	B	P	P		B	P	P	P	S.D.		
		-	-	-	+	+	+	+	+	+	-	-	-	+	+	-	+	-	-	-	+		-	-	-	-	Skewness		
		F	F	F	C	F	F	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F		C	C	C	Mean		
	24	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	B	P	P	P		P	P	P	S.D.		
	-	-	+	+	+	+	+	+	+	+	+	-	+	+	+	+	-	-	-	+	+		-	-	-	Skewness			
	F	F	F	C	F	F	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F		C	C	C	Mean			
	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	B	P	P	P		P	P	P	S.D.			
	-	-	+	+	+	+	+	+	+	+	+	-	+	+	+	+	-	-	-	+	+		-	-	-	Skewness			

		Sediment source																									
Sediment deposit	Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	23	24	29	30	31		
		F	F	F	C	F	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F		C	F	Mean	
	29	B	P	P	P	B	B	P	B	P	P	P	P	P	P	P	P	B	B	P	B	B		B	P	S.D.	
		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	Skewness	
		F	F	F	C	F	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F	F	F		F	Mean
	30	B	P	P	P	B	B	P	B	P	P	P	P	P	P	P	P	B	B	P	B	B	P		P	S.D.	
		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-		-	Skewness	
		F	F	F	C	F	F	F	F	F	F	F	F	F	C	F	F	F	F	F	F	F	F	C	C		Mean
31	B	P	P	P	B	B	P	B	P	P	P	P	P	B	P	P	B	B	P	B	B	B	B			S.D.	
		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	+		Skewness	

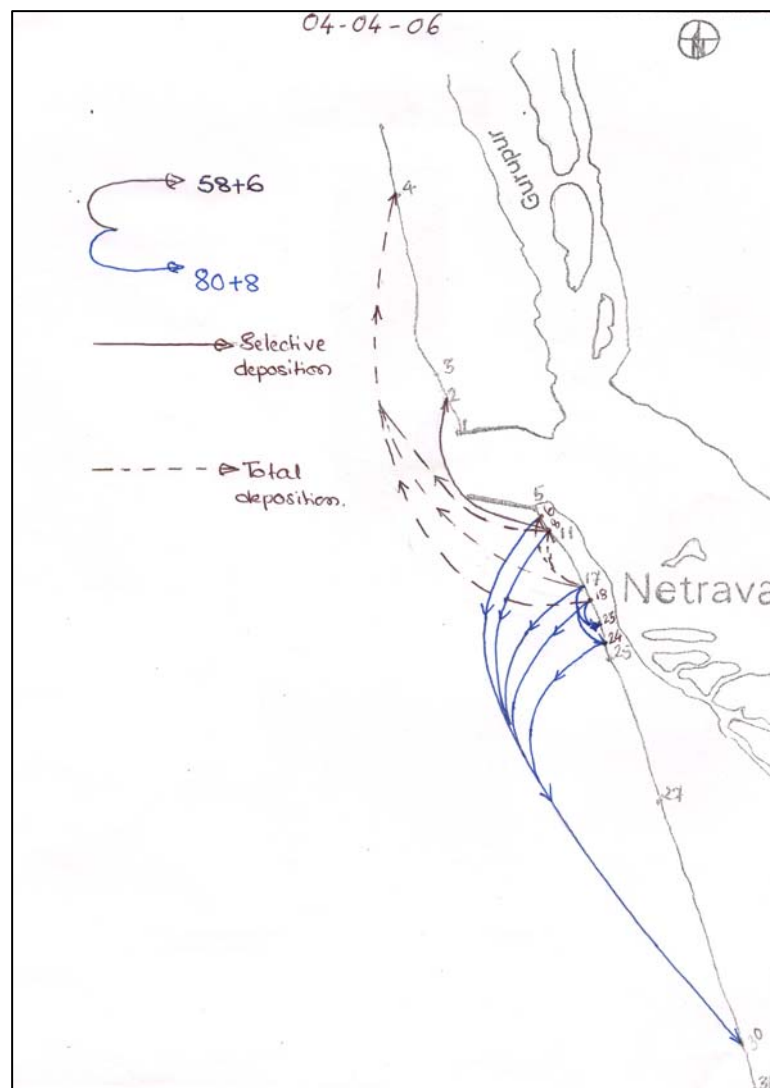


Fig. 4.7 Sediment movement path for the pre monsoon period (Year 2006)

GRAIN SIZE CHARACTERISTICS

Grain Size Characteristics at Ullal

Date	Observed minimum: (Median size D ₅₀)			Observed maximum: (Median size D ₅₀)			Classification
	Grain Size(mm)	At cross Section	Chainage (m)	Grain Size(mm)	At cross Section	Chainage (m)	
24/02/04	0.410	U17	4000	0.810	U1	0	FS-MS
15/03/04	0.350	U9	800	1.250	U1	0	FS-MS
29/03/04	0.290	U3	200	0.710	U1	0	FS-MS
11/05/04	0.420	U14	2500	0.900	U9,U16	800,3500	MS
01/06/04	0.410	U14,U15	2500, 3000	0.810	U9A	850	FS-MS
14/06/04	0.410	U2A	150	0.830	U6	500	FS-MS
28/06/04	0.410	U3	200	0.670	U14	2500	FS-MS
14/07/04	0.240	U13	2000	0.710	U14	2500	FS-MS
31/07/04	0.400	U8	700	0.650	U9A	850	FS-MS
16/08/04	0.410	U9,U16	800, 3500	0.900	U6A	550	FS-MS
31/08/04	0.410	U3	200	0.630	U16	3500	FS-MS
20/09/04	0.370	U15	3000	0.550	U17	4000	FS-MS
04/10/04	0.400	U6	500	0.810	U9	800	FS-MS
03/12/04	0.390	U5A	450	0.400	U2A	150	FS
06/12/04	0.390	U14	2500	0.920	U6	500	FS-MS
03/01/05	0.420	U4A	350	1.140	U5	400	MS
18/01/05	0.470	U2A,U1,U3A	150, 0, 250	1.210	U5	400	MS
03/02/05	0.440	U8A	750	1.230	U5	400	MS
16/02/05	0.470	U14,U16	2500, 3500	2.830	U1	0	MS-CS
03/03/05	0.390	U13,U14,U15	2000, 2500, 3000	2.110	U5	400	FS-CS
14/03/05	0.390	U17	4000	1.520	U5	400	FS-MS
01/04/05	0.390	U13	2000	1.460	U6	500	FS-MS
14/04/05	0.290	U5A	450	1.190	U1	0	FS-MS
03/05/05	0.350	U6A	550	1.270	U1A	50	FS-MS

Date	Observed minimum: (Median size D ₅₀)			Observed maximum: (Median size D ₅₀)			Classification
	Grain Size(mm)	At cross Section	Chainage (m)	Grain Size(mm)	At cross Section	Chainage (m)	
17/05/05	0.380	U7A	650	1.410	U1	0	FS-MS
02/06/05	0.400	U10A	950	1.370	U1	0	FS-MS
16/06/05	0.390	U7,U7A	600, 650	1.250	U5	400	FS-MS
01/07/05	0.330	U15	3000	1.410	U10A	950	FS-MS
15/7/05	0.384	U 6 A	550	1.717	U 10 A	950	FS-MS
14/8/05	0.354	U 10	900	0.758	U 4 A	350	FS-MS
10/9/05	0.401	U 14	2500	0.595	U 16	3500	FS-MS
16/9/05	0.366	U 15	3000	1.366	U 1	0	FS-MS
30/9/05	0.401	U 4 A	350	1.320	U 1	0	FS-MS
29/10/05	0.330	U 6 A	550	1.320	U 1	0	FS-MS
19/11/05	0.33	U1	0	1.23	U4	300	FS-MS
02/12/05	0.46	U5	400	1.86	U5A	450	MS
15/12/05	0.35	U1	0	1.32	U6	500	FS-MS
30/12/05	0.39	U3A,U16	250,3500	1.27	U1	0	FS-MS
13/01/06	0.35	U15	3000	1.32	U1	0	FS-MS
31/01/06	0.3	U16	3500	1.57	U 4	300	FS-MS
15/02/06	0.4	U6A	550	1	U5	400	FS-MS
03/03/06	0.37	U17	4000	0.76	U5	400	FS-MS
17/03/06	0.37	U6	500	0.93	U5	400	FS-MS
04/04/06	0.5	U5A	450	0.62	U5	400	FS-MS

Grain Size Characteristics at Bengre

Date	Observed minimum: (Median size D ₅₀)			Observed maximum: (Median size D ₅₀)			Classification
	Grain Size(mm)	At cross Section	Chainage (m)	Grain Size(mm)	At cross Section	Chainage (m)	
24/02/04	0.210	B4	1600	0.460	B1	0	FS-MS
15/03/04	0.170	B4	1600	0.460	B1	0	FS-MS
29/03/04	0.230	B4	1600	0.440	B1	0	FS-MS
11/05/04	0.410	B2	200	0.740	B3	300	FS-MS
01/06/04	0.410	B4	1600	0.530	B1	0	FS-MS
14/06/04	0.420	B4	1600	0.550	B2	200	MS
28/06/04	0.460	B4	1600	0.680	B1	0	MS
14/07/04	0.420	B4	1600	0.520	B1	0	MS
31/07/04	0.430	B4	1600	0.490	B1	0	MS
16/08/04	0.380	B4	1600	0.440	B1	0	FS-MS
31/08/04	0.340	B2	200	0.620	B3	300	FS-MS
20/09/04	0.270	B4	1600	0.420	B3	300	FS
04/10/04	0.310	B4	1600	0.460	B1	0	FS
03/12/04	0.410	B3	300	0.470	B1	0	FS-MS
06/12/04	0.400	B4	1600	0.550	B2	200	FS-MS
03/01/05	0.390	B3,B4	300, 1600	0.420	B1	0	FS
18/01/05	0.340	B4	1600	0.590	B1	0	FS-MS
03/02/05	0.380	B4	1600	0.680	B1	0	FS-MS
16/02/05	0.320	B4	1600	0.420	B1,B2	0,200	FS
03/03/05	0.290	B4	1600	0.730	B2,B3	200, 300	FS-MS
14/03/05	0.330	B4	1600	0.500	B1	0	FS-MS
01/04/05	0.410	B2,B3,B4	200, 300, 1600	0.780	B1	0	FS-MS
14/04/05	0.233	B4	1600	0.450	B1,B3	0, 300	FS-MS
03/05/05	0.380	B4	1600	0.450	B3	300	FS-MS
17/05/05	0.400	B4	1600	0.500	B3	300	FS-MS
02/06/05	0.420	B1	0	0.590	B4	1600	MS
16/06/05	0.550	B3	300	0.870	B1	0	MS
01/07/05	0.620	B1	0	0.660	B2,B3	200, 300	MS

Date	Observed minimum: (Median size D ₅₀)			Observed maximum: (Median size D ₅₀)			Classification
	Grain Size(mm)	At cross Section	Chainage (m)	Grain Size(mm)	At cross Section	Chainage (m)	
15/7/05	0.473	B 2	200	0.785	B 1	0	MS
02/8/05	0.500	B 3	300	0.637	B 1	0	MS
14/8/05	0.358	B 4	1600	0.697	B 2	200	FS-MS
10/9/05	0.354	B 4	1600	0.624	B 2	200	FS-MS
16/9/05	0.435	B 3	300	0.669	B 1	0	MS
30/9/05	0.233	B 4	1600	0.660	B 2	200	FS-MS
29/10/05	0.233	B 4	1600	0.660	B 2	200	FS-MS
19/11/05	0.35	B4	1600	0.62	B3	300	FS-MS
02/12/05	0.47	B4	1600	0.66	B1,B2	0,200	MS
15/12/05	0.41	B3	300	0.85	B4	1600	FS-MS
30/12/05	0.17	B 4	1600	0.62	B 1	0	FS-MS
13/01/06	0.45	B 2	200	0.8	B4	1600	MS
31/01/06	0.22	B 4	1600	0.8	B3	300	FS-MS
15/02/06	0.18	B 4	1600	0.81	B 1	0	FS-MS
03/03/06	0.18	B 4	1600	0.81	B3	300	FS-MS
17/03/06	0.18	B 4	1600	0.65	B2	200	FS-MS
04/04/06	0.21	B 4	1600	0.63	B1,B2,B3	0,200,300	FS-MS

ASTM (unified) Classification

2.00mm < Coarse sand < 4.76mm

0.42mm < Medium sand < 2.00mm

0.074mm < Fine sand < 0.42mm

TIDE POLE MEASUREMENTS

Tide pole readings at Gurupur River during April 2004

Date/ Time	Tide pole reading(cms)									
	21/04/04	22/04/04	23/04/04	24/04/04	25/04/04	26/04/04	27/04/04	28/04/04	29/04/04	30/04/04
8:00 AM		0.48	0.46	0.43	0.43	0.51	0.66	0.8	1.07	1.23
8:15 AM		0.55	0.47	0.44	0.43	0.52	0.64	0.82	1.06	1.21
8:30 AM		0.61	0.52	0.45	0.44	0.53	0.63	0.78	1.04	1.21
8:45 AM		0.65	0.59	0.48	0.47	0.48	0.59	0.74	1	1.18
9:00 AM		0.7	0.63	0.52	0.5	0.49	0.58	0.73	0.96	1.15
9:15 AM		0.77	0.69	0.55	0.53	0.5	0.59	0.71	0.93	1.1
9:30 AM		0.81	0.73	0.59	0.55	0.52	0.57	0.69	0.89	1.09
9:45 AM		0.89	0.82	0.69	0.57	0.54	0.56	0.68	0.88	1.12
10:00 AM		0.96	0.88	0.77	0.6	0.57	0.57	0.71	0.87	1.12
10:15 AM		1.03	0.94	0.79	0.67	0.58	0.59	0.69	0.86	1.05
10:30 AM		1.1	0.99	0.89	0.73	0.65	0.61	0.68	0.85	1.02
10:45 AM		1.2	1.06	0.96	0.76	0.7	0.63	0.68	0.83	0.98
11:00 AM	1.34	1.28	1.14	1.03	0.87	0.72	0.69	0.7	0.82	0.95
11:15 AM	1.43	1.33	1.21	1.03	0.93	0.78	0.73	0.72	0.8	0.95
11:30 AM	1.48	1.4	1.38	1.07	0.98	0.8	0.74	0.74	0.78	0.92
11:45 AM	1.54	1.47	1.4	1.08	1.06	0.8	0.77	0.73	0.78	0.88
12:00 PM	1.58	1.54	1.45	1.12	1.09	0.89	0.83	0.76	0.77	0.86
12:15 PM	1.63	1.59	1.48	1.26	1.17	0.94	0.86	0.79	0.79	0.83
12:30 PM	1.64	1.6	1.52	1.33	1.2	0.98	0.88	0.82	0.81	0.79
12:45 PM	1.64	1.62	1.56	1.42	1.24	1.05	0.9	0.85	0.82	0.79
1:00 PM	1.64	1.67	1.6	1.48	1.29	1.11	0.93	0.88	0.83	0.79
1:15 PM	1.64	1.7	1.65	1.49	1.33	1.14	0.99	0.91	0.85	0.78
1:30 PM	1.63	1.73	1.67	1.56	1.37	1.18	1.01	0.97	0.88	0.78
1:45 PM	1.61	1.68	1.7	1.58	1.43	1.26	1.08	1	0.9	0.8
2:00 PM	1.58	1.67	1.72	1.62	1.49	1.3	1.16	1.03	0.93	0.82
2:15 PM	1.58	1.67	1.74	1.63	1.54	1.38	1.21	1.06	0.98	0.85
2:30 PM	1.54	1.63	1.75	1.63	1.56	1.39	1.27	1.13	1.01	0.9
2:45 PM	1.5	1.62	1.72	1.6	1.57	1.4	1.3	1.17	1.03	0.92

Tide pole readings at Gurupur River during April 2004 (Contd...)

Date/ Time	Tide pole reading(cms)									
	21/04/04	22/04/04	23/04/04	24/04/04	25/04/04	26/04/04	27/04/04	28/04/04	29/04/04	30/04/04
3:00 PM	1.44	1.59	1.72	1.6	1.58	1.46	1.35	1.23	1.07	0.94
3:15 PM	1.41	1.56	1.67	1.6	1.59	1.49	1.38	1.24	1.1	0.98
3:30 PM	1.4	1.51	1.64	1.59	1.6	1.49	1.4	1.28	1.13	1.01
3:45 PM	1.33	1.49	1.61	1.58	1.59	1.56	1.42	1.3	1.16	1.04
4:00 PM	1.27	1.44	1.57	1.56	1.58	1.5	1.43	1.33	1.23	1.07
4:15 PM	1.2	1.4	1.53	1.55	1.54	1.5	1.44	1.36	1.27	1.08
4:30 PM	1.13	1.33	1.48	1.54	1.53	1.49	1.44	1.38	1.28	1.1
4:45 PM	1.11	1.3	1.44	1.5	1.52	1.48	1.47	1.42	1.33	1.17
5:00 PM	1.05	1.24	1.35	1.45	1.5	1.46	1.48	1.45	1.35	1.21
5:15 PM	0.99	1.21	1.33	1.41	1.48	1.45	1.51	1.47	1.38	1.26
5:30 PM	0.97	1.17	1.31	1.36	1.45	1.45	1.51	1.47	1.43	1.32
5:45 PM	0.93	1.13	1.24	1.3	1.43	1.44	1.52	1.48	1.47	1.35
6:00 PM	0.91	1.05	1.23	1.27	1.37	1.42	1.48	1.49	1.48	1.38

Tide at Gurupur River during April 2004

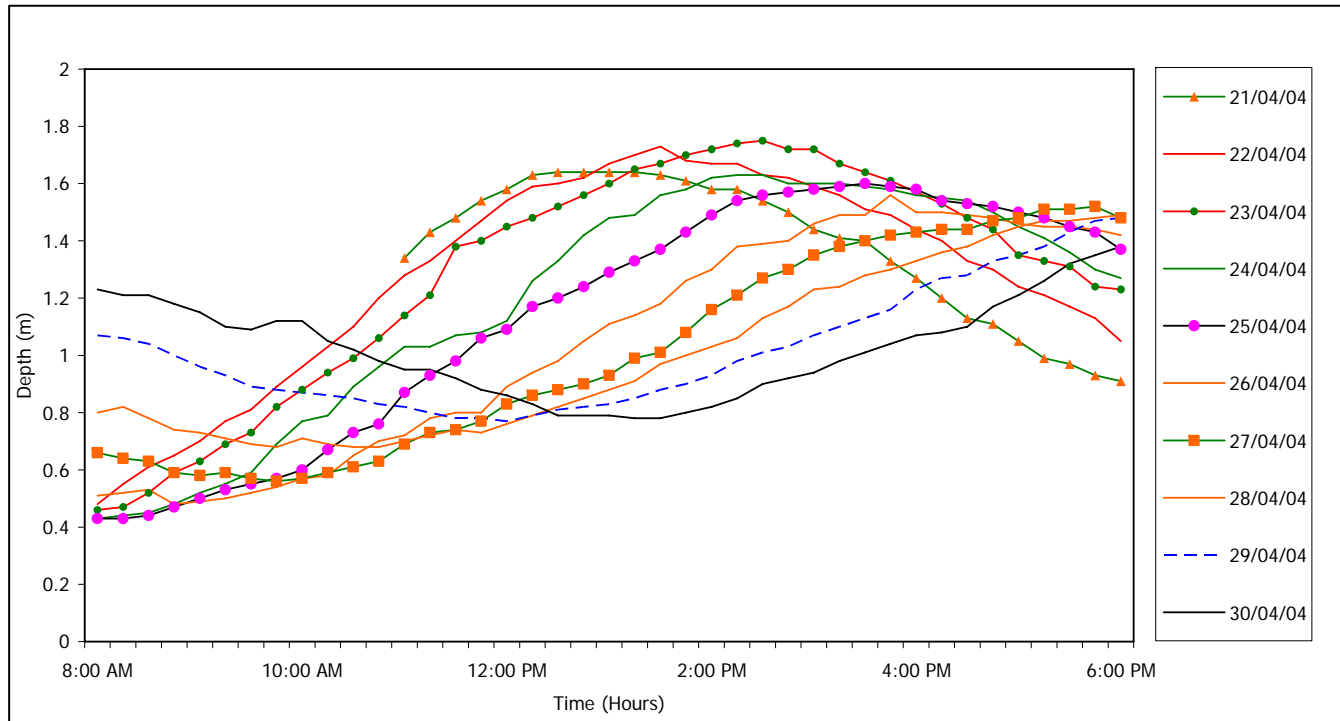


Fig. 6.1 Variation of the tide level at Gurupur River. (First Phase 21-04-04 to 30-04-04).

Tide pole readings at Netravathi River during May 2004

	Tide pole reading(cms)					
Date / Time	20/05/04	21/05/04	22/05/04	23/05/04	24/05/04	25/05/04
8:00 AM	1.04	0.97	0.88	0.87	1.06	0.93
8:15 AM	1.11	1.00	0.90	0.88	1.03	0.90
8:30 AM	1.19	1.06	0.91	0.91	0.99	0.88
8:45 AM	1.26	1.09	0.93	0.94	0.97	0.85
9:00 AM	1.32	1.16	0.99	0.95	0.94	0.85
9:15 AM	1.40	1.20	1.07	0.97	0.90	0.84
9:30 AM	1.48	1.29	1.14	1.01	0.92	0.89
9:45 AM	1.57	1.36	1.20	1.08	0.99	0.91
10:00 AM	1.62	1.45	1.27	1.15	1.04	0.94
10:15 AM	1.69	1.53	1.35	1.19	1.10	1.00
10:30 AM	1.77	1.60	1.42	1.28	1.15	1.00
10:45 AM	1.82	1.69	1.49	1.37	1.20	1.12
11:00 AM	1.89	1.73	1.55	1.43	1.26	1.16
11:15 AM	1.95	1.77	1.61	1.50	1.31	1.20
11:30 AM	1.98	1.83	1.66	1.58	1.35	1.26
11:45 AM	2.01	1.92	1.72	1.61	1.41	1.29
12:00 PM	2.04	1.97	1.78	1.64	1.46	1.35
12:15 PM	2.05	1.98	1.83	1.69	1.54	1.42
12:30 PM	2.07	2.01	1.88	1.74	1.60	1.47
12:45 PM	2.06	2.02	1.91	1.81	1.65	1.53
1:00 PM	2.03	2.04	1.93	1.86	1.69	1.59
1:15 PM	2.07	2.04	1.95	1.89	1.74	1.64
1:30 PM	1.99	2.03	1.96	1.93	1.79	1.69
1:45 PM	1.98	2.02	1.97	1.98	1.84	1.72
2:00 PM	1.96	2.02	1.97	2.02	1.87	1.74
2:15 PM	1.94	2.01	1.96	1.98	1.90	1.77
2:30 PM	1.92	2.00	1.96	2.03	1.92	1.81
2:45 PM	1.89	1.97	1.95	1.96	1.94	1.86

Tide pole readings at Netravathi River during May 2004 (Contd...)

	Tide pole Reading(cms)					
Date / Time	20/05/04	21/05/04	22/05/04	23/05/04	24/05/04	25/05/04
3:00 PM	1.85	1.93	1.94	1.93	1.93	1.89
3:15 PM	1.79	1.90	1.94	1.93	1.97	1.92
3:30 PM	1.73	1.84	1.90	1.91	1.93	1.94
3:45 PM	1.68	1.79	1.82	1.88	1.90	1.96
4:00 PM	1.63	1.73	1.79	1.86	1.86	1.96
4:15 PM	1.58	1.67	1.73	1.83	1.84	1.90
4:30 PM	1.55	1.62	1.67	1.80	1.81	1.85
4:45 PM	1.50	1.58	1.62	1.78	1.78	1.84
5:00 PM	1.46	1.55	1.58	1.75	1.76	1.81
5:15 PM	1.4	1.52	1.56	1.70	1.70	1.77
5:30 PM	1.39	1.49	1.54	1.67	1.68	1.75
5:45 PM	1.38	1.47	1.49	1.64	1.67	1.75
6:00 PM	1.36	1.44	1.47	1.58	1.61	1.72

Tide at Netravathi River during May 2004

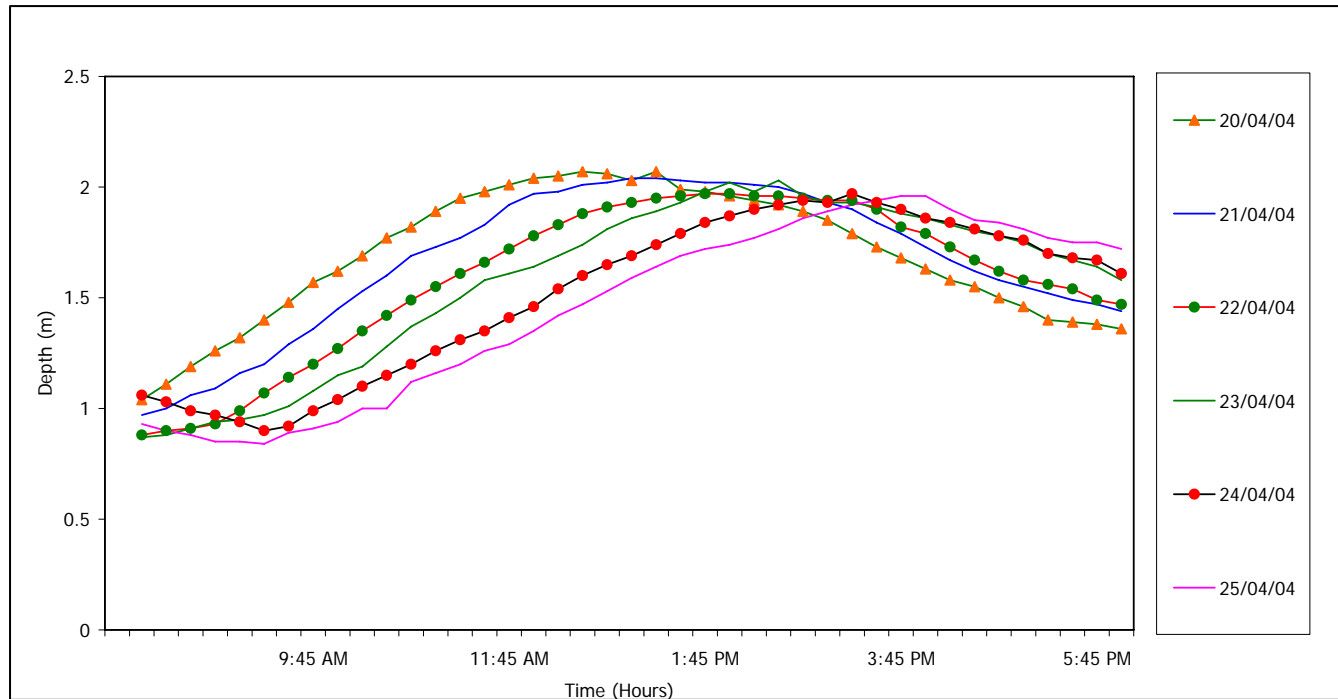


Fig. 6.2 Variation of the tide level at Netravathi River. (First Phase 21-04-04 to 30-04-04).

Tide pole readings at Gurupur River during October 2004

Date:	18/10/04	19/10/04	20/10/04	21/10/04	22/10/04	23/10/04	24/10/04	25/10/04	26/10/04	27/10/04
12:00 AM		81	60	40	33	40	64	90	146	144
12:15 AM		89	64	46	35	39	60	86	137	140
12:30 AM		96	70	50	41	40	59	79	134	137
12:45 AM		102	79	55	44	36	55	75	126	133
1:00 AM		110	86	60	45	45	55	71	124	129
1:15 AM		117	91	67	45	48	54	67	122	126
1:30 AM		121	97	72	52	50	51	65	121	120
1:45 AM		127	103	76	59	53	51	63	120	114
2:00 AM		128	110	83	61	55	53	60	116	106
2:15 AM		131	115	88	67	56	55	59	108	101
2:30 AM		135	120	92	71	60	57	59	101	95
2:45 AM		136	124	99	75	66	59	58	93	91
3:00 AM		137	128	103	82	74	62	59	86	85
3:15 AM		135	130	108	89	83	65	61	82	83
3:30 AM		134	131	112	92	84	68	65	79	81
3:45 AM		133	132	117	103	86	71	68	75	80
4:00 AM		134	133	119	105	95	75	69	73	80
4:15 AM		132	133	121	106	97	78	71	70	79
4:30 AM		125	134	122	108	98	81	72	72	79
4:45 AM		124	135	123	110	101	88	76	73	78
5:00 AM		122	134	123	115	105	95	83	74	78
5:15 AM		111	130	124	118	109	99	87	79	79
5:30 AM		108	125	125	124	116	105	93	82	86
5:45 AM		103	122	125	127	121	109	97	85	90
6:00 AM		97	120	126	129	124	112	101	90	93
6:15 AM		93	115	125	130	129	115	105	96	95
6:30 AM		93	111	124	131	131	125	109	100	101
6:45 AM	72	91	106	118	131	134	129	114	103	106
7:00 AM	70	86	100	114	131	138	131	118	107	111

Tide pole readings at Gurupur River during October 2004 (Contd...)

Date:	18/10/04	19/10/04	20/10/04	21/10/04	22/10/04	23/10/04	24/10/04	25/10/04	26/10/04	27/10/04
7:15 AM	69	84	96	112	128	139	135	124	114	114
7:30 AM	68	82	94	110	127	140	139	128	120	118
7:45 AM	70	81	93	104	126	139	143	132	123	124
8:00 AM	73	78	88	101	122	139	144	137	127	129
8:15 AM	73	76	87	98	119	137	144	141	132	134
8:30 AM	74	75	86	95	116	136	145	142	137	136
8:45 AM	77	76	85	91	112	134	146	145	141	140
9:00 AM	81	77	84	87	110	132	143	148	143	145
9:15 AM	82	79	83	85	109	128	142	150	147	147
9:30 AM	86	83	83	85	106	125	142	150	149	151
9:45 AM	90	85	83	84	101	120	140	149	146	154
10:00 AM	93	86	84	81	98	113	134	144	145	156
10:15 AM	95	89	83	80	97	107	129	136	145	153
10:30 AM	98	90	84	79	91	104	125	135	143	150
10:45 AM	99	93	85	81	88	100	120	134	141	150
11:00 AM	104	94	87	81	85	97	111	130	140	148
11:15 AM	106	95	90	80	83	94	108	124	136	147
11:30 AM	110	98	91	79	82	89	104	118	131	143
11:45 AM	114	102	93	80	80	84	99	108	128	138
12:00 PM	116	104	95	82	79	80	94	101	121	133
12:15 PM	119	107	96	83	79	78	85	85	112	129
12:30 PM	120	108	96	85	79	74	80	88	105	123
12:45 PM	121	113	99	86	80	72	76	82	97	120
1:00 PM	122	115	102	87	80	70	72	77	93	112
1:15 PM	120	115	104	89	80	69	70	70	85	100
1:30 PM	118	115	106	90	82	69	68	65	76	90
1:45 PM	115	115	107	91	82	68	64	58	68	84
2:00 PM	110	114	106	91	83	68	60	51	64	73
2:15 PM	104	111	106	92	83	68	56	47	60	68
2:30 PM	99	108	104	94	83	70	55	41	57	62
2:45 PM	97	107	103	95	83	70	52	36	45	50

Tide pole readings at Gurupur River during October 2004 (Contd...)

Date:	18/10/04	19/10/04	20/10/04	21/10/04	22/10/04	23/10/04	24/10/04	25/10/04	26/10/04	27/10/04
3:00 PM	92	103	104	96	85	69	51	35	38	45
3:15 PM	84	99	103	95	88	71	51	34	34	38
3:30 PM	80	97	100	97	89	74	53	38	31	31
3:45 PM	74	93	97	99	91	75	58	39	28	30
4:00 PM	66	87	99	99	92	76	60	40	26	28
4:15 PM	58	81	95	98	94	78	64	41	28	28
4:30 PM	48	77	86	96	95	80	65	44	30	22
4:45 PM	38	70	86	95	96	83	70	49	32	22
5:00 PM	30	66	84	95	99	87	71	50	35	25
5:15 PM	22	59	80	93	100	88	73	55	39	27
5:30 PM	15	50	76	91	101	93	78	58	41	27
5:45 PM	9	41	69	89	101	97	83	60	44	30
6:00 PM	0	37	65	85	102	100	88	61	51	34
6:15 PM	-2	30	59	84	102	101	90	74	57	39
6:30 PM	-6	23	52	81	102	105	97	81	60	45
6:45 PM	-10	16	48	78	103	107	100	83	68	52
7:00 PM	-12	7	41	83	101	109	108	89	74	59
7:15 PM	-12	5	35	69	98	111	109	91	81	65
7:30 PM	-11	3	32	66	95	112	112	100	88	71
7:45 PM	-9	0	26	60	90	114	116	104	94	78
8:00 PM	-7	-2	22	53	90	110	117	109	101	85
8:15 PM	-5	-1	14	49	88	110	119	118	110	92
8:30 PM	-3	-2	13	42	83	110	120	122	117	98
8:45 PM	-1	0	12	39	80	109	121	123	121	104
9:00 PM	0	4	8	36	75	102	123	126	125	111

Tide pole readings at Gurupur River during October 2004 (Contd...)

Date:	18/10/04	19/10/04	20/10/04	21/10/04	22/10/04	23/10/04	24/10/04	25/10/04	26/10/04	27/10/04
9:15 PM	5	8	11	34	73	101	125	128	130	120
9:30 PM	12	9	12	33	68	98	122	134	135	128
9:45 PM	18	11	13	30	65	97	121	136	140	134
10:00 PM	25	17	17	30	60	94	120	139	145	140
10:15 PM	30	18	19	30	56	87	119	140	148	145
10:30 PM	34	25	20	29	54	84	115	143	149	148
10:45 PM	42	33	21	29	52	80	111	144	152	153
11:00 PM	49	37	25	29	49	76	108	146	153	155
11:15 PM	52	42	27	29	46	72	105	149	151	156
11:30 PM	63	47	30	31	44	69	101	153	150	158
11:45 PM	72	53	35	31	41	69	96	148	148	158

Tide pole readings at Gurupur River during October 2004 (Contd...)

Date:	28/10/04	29/10/04	30/10/04	31/10/04	01/11/04	02/11/04
12:00 AM	157	161	161	153	134	125
12:15 AM	153	161	166	156	137	130
12:30 AM	151	161	170	160	142	136
12:45 AM	149	161	169	161	148	141
1:00 AM	146	158	166	164	157	145
1:15 AM	141	149	163	166	155	151
1:30 AM	136	140	160	165	152	155
1:45 AM	130	134	158	164	150	159
2:00 AM	124	129	155	164	147	163
2:15 AM	118	122	152	163	144	167
2:30 AM	113	120	149	159	138	169
2:45 AM	106	114	145	155	131	168
3:00 AM	101	110	141	154	128	166
3:15 AM	97	107	135	149	127	163
3:30 AM	93	103	131	142	125	160
3:45 AM	87	100	126	135	121	156
4:00 AM	83	95	118	129	120	152
4:15 AM	80	92	112	126	118	148
4:30 AM	75	89	107	124	116	145
4:45 AM	74	84	102	119	116	142

Tide pole readings at Gurupur River during October 2004 (Contd...)

Date:	28/10/04	29/10/04	30/10/04	31/10/04	01/11/04	02/11/04
5:00 AM	75	84	98	114	115	139
5:15 AM	74	83	95	107	114	135
5:30 AM	74	79	92	102	113	130
5:45 AM	76	77	89	100	110	126
6:00 AM	80	80	89	98	104	123
6:15 AM	84	82	90	95	101	119
6:30 AM	88	85	90	95	101	117
6:45 AM	95	89	92	93	101	115
7:00 AM	99	93	93	94	96	111
7:15 AM	104	95	95	94	96	
7:30 AM	106	98	97	95	96	
7:45 AM	110	104	100	97	97	
8:00 AM	114	107	104	99	99	
8:15 AM	116	113	109	102	99	
8:30 AM	121	117	114	105	103	
8:45 AM	125	119	116	108	105	
9:00 AM	130	122	119	112	107	
9:15 AM	136	127	120	114	109	
9:30 AM	142	130	124	117	110	
9:45 AM	145	133	127	120	112	
10:00 AM	148	135	131	122	113	
10:15 AM	149	137	134	124	115	
10:30 AM	148	140	138	127	117	
10:45 AM	146	143	140	128	120	
11:00 AM	145	145	143	129	122	
11:15 AM	144	147	143	132	126	
11:30 AM	141	148	146	136	130	
11:45 AM	139	145	146	138	132	
12:00 PM	137	142	147	140	133	
12:15 PM	133	138	142	142	134	
12:30 PM	125	135	138	140	135	

Tide pole readings at Gurupur River during October 2004 (Contd...)

Date:	28/10/04	29/10/04	30/10/04	31/10/04	01/11/04	02/11/04
12:45 PM	121	131	133	136	136	
1:00 PM	114	126	130	132	134	
1:15 PM	105	118	126	128	130	
1:30 PM	98	113	121	124	128	
1:45 PM	89	107	115	117	126	
2:00 PM	81	100	108	112	123	
2:15 PM	74	92	104	105	121	
2:30 PM	67	86	98	101	118	
2:45 PM	58	75	90	97	114	
3:00 PM	50	68	82	81	107	
3:15 PM	43	59	74	83	103	
3:30 PM	36	54	65	76	96	
3:45 PM	29	46	56	70	90	
4:00 PM	24	40	53	64	85	
4:15 PM	20	35	48	59	78	
4:30 PM	15	28	40	55	72	
4:45 PM	14	22	36	45	65	
5:00 PM	14	20	30	38	62	
5:15 PM	15	18	26	31	57	
5:30 PM	15	14	21	28	52	
5:45 PM	17	13	20	25	47	
6:00 PM	20	15	20	21	42	
6:15 PM	24	17	20	20	40	
6:30 PM	28	22	21	22	38	
6:45 PM	36	25	24	22	36	
7:00 PM	40	31	26	23	34	
7:15 PM	45	35	28	25	33	
7:30 PM	55	40	34	29	32	
7:45 PM	63	49	39	33	33	
8:00 PM	67	55	44	39	35	
8:15 PM	76	61	50	42	39	

Tide pole readings at Gurupur River during October 2004 (Contd...)

Date:	28/10/04	29/10/04	30/10/04	31/10/04	01/11/04	02/11/04
8:30 PM	83	66	55	44	44	
8:45 PM	91	75	61	46	48	
9:00 PM	103	82	68	50	52	
9:15 PM	113	89	74	56	57	
9:30 PM	120	96	80	63	63	
9:45 PM	123	103	86	70	69	
10:00 PM	131	110	96	78	74	
10:15 PM	140	118	104	85	81	
10:30 PM	143	126	113	96	86	
10:45 PM	145	134	120	104	92	
11:00 PM	152	141	129	109	99	
11:15 PM	157	148	135	117	105	
11:30 PM	160	152	142	126	113	
11:45 PM	161	156	147	130	118	

Tide at Gurupur River during October 2004

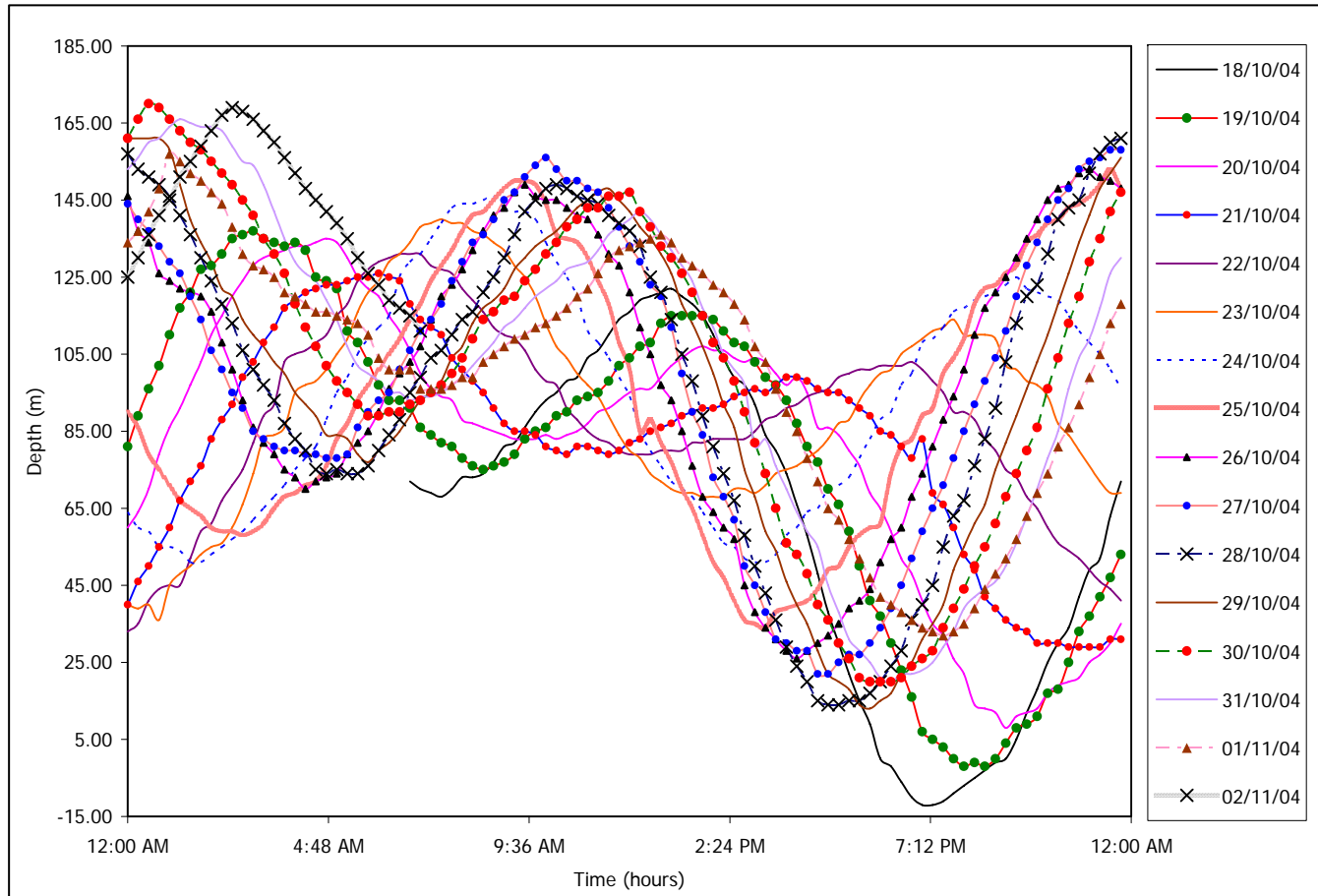


Fig. 6.3 Variation of the tide level at Gurupur River. (Second phase 18-10-04 to 02-11-04)

Tide pole readings at Netravathi River during October 2004

Date:	18/10/04	19/10/04	20/10/04	21/10/04	22/10/04	23/10/04	24/10/04	25/10/04	26/10/04	27/10/04
12:00 AM		209	186	165	158	163	186	207	236	266
12:15 AM		215	189	172	160	163	183	203	225	252
12:30 AM		222	200	178	166	163	181	199	222	259
12:45 AM		231	205	182	170	165	179	196	218	244
1:00 AM		240	213	187	172	169	177	190	209	249
1:15 AM		244	219	193	178	173	175	183	205	235
1:30 AM		248	226	198	186	174	173	181	200	238
1:45 AM		254	230	202	191	176	175	179	197	234
2:00 AM		259	236	208	194	179	176	178	196	222
2:15 AM		267	243	214	197	183	175	177	180	227
2:30 AM		262	245	218	201	187	180	182	173	220
2:45 AM		260	248	226	205	190	183	184	170	215
3:00 AM		259	254	230	209	195	187	187	168	210
3:15 AM		257	253	235	213	199	191	200	165	205
3:30 AM		251	254	240	217	205	195	203	164	198
3:45 AM		243	254	243	220	210	198	205	163	195
4:00 AM		239	254	248	224	212	200	208	162	195
4:15 AM		238	254	247	228	216	202	211	162	196
4:30 AM		235	254	246	232	220	207	213	160	198
4:45 AM		232	254	245	235	225	213	215	158	200
5:00 AM		229	252	245	238	230	220	215	156	201
5:15 AM		227	250	245	244	234	226	217	165	205
5:30 AM		226	243	244	249	243	230	219	175	206
5:45 AM		223	240	244	250	245	235	222	186	209
6:00 AM		217	238	244	253	249	240	228	197	215
6:15 AM		215	235	244	255	253	243	229	206	220
6:30 AM		215	232	242	253	255	248	230	213	225
6:45 AM		213	227	236	254	260	255	237	221	230

Tide pole readings at Netravathi River during October 2004 (Contd...)

Date:	18/10/04	19/10/04	20/10/04	21/10/04	22/10/04	23/10/04	24/10/04	25/10/04	26/10/04	27/10/04
7:00 AM	193	209	224	234	251	261	257	244	230	235
7:15 AM	194	208	220	233	251	263	259	249	237	238
7:30 AM	195	204	217	229	249	263	262	254	241	243
7:45 AM	195	201	209	226	247	260	267	258	247	247
8:00 AM	195	200	209	224	242	258	265	260	254	253
8:15 AM	195	198	209	221	239	257	264	265	257	258
8:30 AM	198	196	208	218	235	255	264	268	262	263
8:45 AM	200	199	207	214	233	252	264	270	265	265
9:00 AM	204	199	207	209	231	251	264	272	268	267
9:15 AM	207	200	205	209	230	247	263	273	270	270
9:30 AM	212	198	204	209	227	243	263	271	270	275
9:45 AM	215	198	204	206	225	239	259	270	270	276
10:00 AM	217	200	203	204	221	234	252	264	269	279
10:15 AM	220	203	205	201	218	229	250	260	267	279
10:30 AM	220	209	206	201	214	222	245	256	263	277
10:45 AM	222	205	208	201	211	220	237	251	262	274
11:00 AM	226	218	210	200	206	218	223	245	258	271
11:15 AM	230	220	212	200	205	216	227	241	255	268
11:30 AM	233	223	216	202	204	210	223	237	250	264
11:45 AM	237	225	217	204	202	206	220	228	244	260
12:00 PM	240	227	217	205	201	200	214	221	239	257
12:15 PM	242	229	219	205	201	197	205	214	233	250
12:30 PM	243	230	220	206	201	194	202	207	225	244
12:45 PM	244	236	222	207	200	190	196	203	218	237
1:00 PM	245	239	225	209	200	189	192	195	211	228
1:15 PM	241	240	227	212	202	188	189	190	204	218
1:30 PM	238	239	230	212	204	190	185	186	198	210
1:45 PM	235	237	229	214	205	190	180	178	192	201
2:00 PM	230	235	227	214	205	190	179	171	186	193

Tide pole readings at Netravathi River during October 2004 (Contd...)

Date:	18/10/04	19/10/04	20/10/04	21/10/04	22/10/04	23/10/04	24/10/04	25/10/04	26/10/04	27/10/04
2:15 PM	223	230	226	215	205	191	175	166	179	187
2:30 PM	221	227	225	217	205	191	175	162	171	186
2:45 PM	215	225	225	218	207	192	174	157	160	185
3:00 PM	210	224	224	220	209	193	174	156	155	184
3:15 PM	205	222	222	221	210	193	175	157	153	180
3:30 PM	200	220	220	221	213	195	177	160	151	181
3:45 PM	195	215	219	223	215	196	180	161	148	178
4:00 PM	188	209	222	220	216	198	183	163	148	170
4:15 PM	178	204	217	220	218	199	186	163	150	168
4:30 PM	168	199	214	220	220	205	190	167	152	165
4:45 PM	158	196	207	218	222	207	194	170	155	167
5:00 PM	149	186	205	215	225	212	197	176	158	168
5:15 PM	142	178	201	214	225	214	200	178	161	168
5:30 PM	136	170	196	212	223	217	204	185	164	169
5:45 PM	127	164	189	211	222	220	209	190	169	160
6:00 PM	119	155	185	205	222	223	211	192	176	154
6:15 PM	116	145	180	205	222	224	215	198	180	157
6:30 PM	112	141	174	204	222	225	219	203	188	160
6:45 PM	108	135	168	200	222	227	224	208	195	165
7:00 PM	108	130	161	195	221	232	228	214	201	180
7:15 PM	109	126	155	192	220	232	232	216	206	186
7:30 PM	107	124	150	189	217	235	235	220	212	196
7:45 PM	108	122	146	183	214	236	239	228	220	205
8:00 PM	109	124	139	175	213	234	242	236	226	210
8:15 PM	110	124	133	168	210	232	243	245	234	218
8:30 PM	120	125	132	166	205	231	243	248	241	226
8:45 PM	122	125	131	160	199	229	244	253	246	233
9:00 PM	125	126	132	158	197	223	245	254	250	242
9:15 PM	133	130	134	157	193	219	247	254	256	249

Tide pole readings at Netravathi River during October 2004 (Contd...)

Date	18/10/04	19/10/04	20/10/04	21/10/04	22/10/04	23/10/04	24/10/04	25/10/04	26/10/04	27/10/04
9:30 PM	138	134	135	156	189	218	245	254	260	254
9:45 PM	143	139	138	152	186	217	244	254	265	261
10:00 PM	150	139	142	151	181	216	240	256	269	267
10:15 PM	155	142	143	154	179	209	239	258	270	270
10:30 PM	158	152	144	150	178	206	235	255	275	272
10:45 PM	160	159	145	152	177	205	232	254	275	275
11:00 PM	167	166	149	150	170	202	228	250	275	278
11:15 PM	177	170	152	150	166	200	224	245	274	280
11:30 PM	190	175	156	154	165	190	220	240	273	281
11:45 PM	200	180	160	156	160	187	214	238	270	279

Tide pole readings at Netravathi River during October 2004 (Contd...)

Date	28/10/04	29/10/04	30/10/04	31/10/04	01/11/04	02/11/04
12:00 AM	278	290	273	290	263	233
12:15 AM	277	283	286	292	269	239
12:30 AM	274	277	293	295	274	240
12:45 AM	271	271	289	293	278	240
1:00 AM	267	265	282	291	282	244
1:15 AM	261	247	278	287	288	248
1:30 AM	255	247	274	284	288	253
1:45 AM	251	243	269	280	290	254
2:00 AM	247	237	262	279	287	258
2:15 AM	241	235	256	277	283	262
2:30 AM	232	230	252	273	278	268
2:45 AM	228	228	248	270	276	276
3:00 AM	222	224	245	268	272	284
3:15 AM	218	222	240	265	270	284
3:30 AM	212	220	235	263	265	284
3:45 AM	208	220	232	259	261	270
4:00 AM	207	215	230	254	258	268
4:15 AM	205	213	229	249	255	265
4:30 AM	204	210	229	245	251	265
4:45 AM	206	210	223	243	245	263
5:00 AM	205	205	220	239	241	262
5:15 AM	205	203	215	234	238	255
5:30 AM	205	201	211	228	235	250
5:45 AM	206	201	210	221	230	249
6:00 AM	205	201	210	217	224	243
6:15 AM	208	204	213	214	224	240
6:30 AM	213	208	213	213	222	238
6:45 AM	220	210	215	215	221	237

Tide pole readings at Netravathi River during October 2004 (Contd...)

Date	28/10/04	29/10/04	30/10/04	31/10/04	01/11/04	02/11/04
7:00 AM	222	215	216	215	217	235
7:15 AM	229	217	218	215	216	
7:30 AM	231	225	219	217	218	
7:45 AM	234	227	222	217	220	
8:00 AM	236	233	227	221	222	
8:15 AM	241	238	232	225	224	
8:30 AM	246	240	236	228	227	
8:45 AM	252	243	239	230	228	
9:00 AM	255	245	242	234	230	
9:15 AM	261	253	244	235	233	
9:30 AM	262	256	246	240	234	
9:45 AM	270	258	253	242	235	
10:00 AM	273	258	254	245	238	
10:15 AM	273	258	255	245	238	
10:30 AM	271	260	259	249	240	
10:45 AM	268	262	263	250	243	
11:00 AM	268	266	265	250	245	
11:15 AM	266	268	268	255	250	
11:30 AM	264	270	268	260	254	
11:45 AM	261	267	265	260	256	
12:00 PM	258	264	264	260	257	
12:15 PM	253	258	263	260	259	
12:30 PM	248	253	260	260	259	
12:45 PM	244	249	255	257	258	
1:00 PM	238	245	250	255	255	
1:15 PM	229	235	247	250	250	
1:30 PM	227	231	243	243	248	
1:45 PM	216	228	234	238	245	
2:00 PM	203	218	228	233	241	
2:15 PM	194	210	224	225	239	
2:30 PM	185	199	220	221	237	

Tide pole readings at Netravathi River during October 2004 (Contd...)

Date	28/10/04	29/10/04	30/10/04	31/10/04	01/11/04	02/11/04
2:45 PM	178	186	216	218	233	
3:00 PM	171	184	208	216	227	
3:15 PM	164	175	196	210	224	
3:30 PM	157	169	182	205	221	
3:45 PM	150	164	175	200	212	
4:00 PM	148	158	173	192	203	
4:15 PM	138	150	169	185	198	
4:30 PM	138	147	165	173	192	
4:45 PM	143	142	159	164	185	
5:00 PM	149	139	152	158	180	
5:15 PM	148	137	148	153	175	
5:30 PM	150	135	146	150	170	
5:45 PM	154	135	143	146	166	
6:00 PM	156	136	138	143	161	
6:15 PM	157	139	135	142	159	
6:30 PM	157	143	140	140	157	
6:45 PM	160	152	143	138	156	
7:00 PM	165	155	147	140	151	
7:15 PM	170	160	152	142	151	
7:30 PM	185	164	156	148	155	
7:45 PM	195	170	157	152	157	

Tide pole readings at Netravathi River during October 2004 (Contd...)

Date	28/10/04	29/10/04	30/10/04	31/10/04	01/11/04	02/11/04
8:00 PM	208	180	168	158	160	
8:15 PM	218	187	175	161	164	
8:30 PM	224	195	180	168	168	
8:45 PM	233	204	199	172	170	
9:00 PM	240	210	199	176	175	
9:15 PM	247	210	204	180	180	
9:30 PM	255	220	209	185	184	
9:45 PM	263	227	215	190	188	
10:00 PM	267	232	217	197	192	
10:15 PM	270	240	228	208	197	
10:30 PM	275	244	232	215	204	
10:45 PM	280	250	241	222	207	
11:00 PM	283	256	244	235	212	
11:15 PM	285	260	250	242	217	
11:30 PM	288	268	254	252	222	
11:45 PM	288	273	260	258	228	

Tide at Netravathi River during October 2004

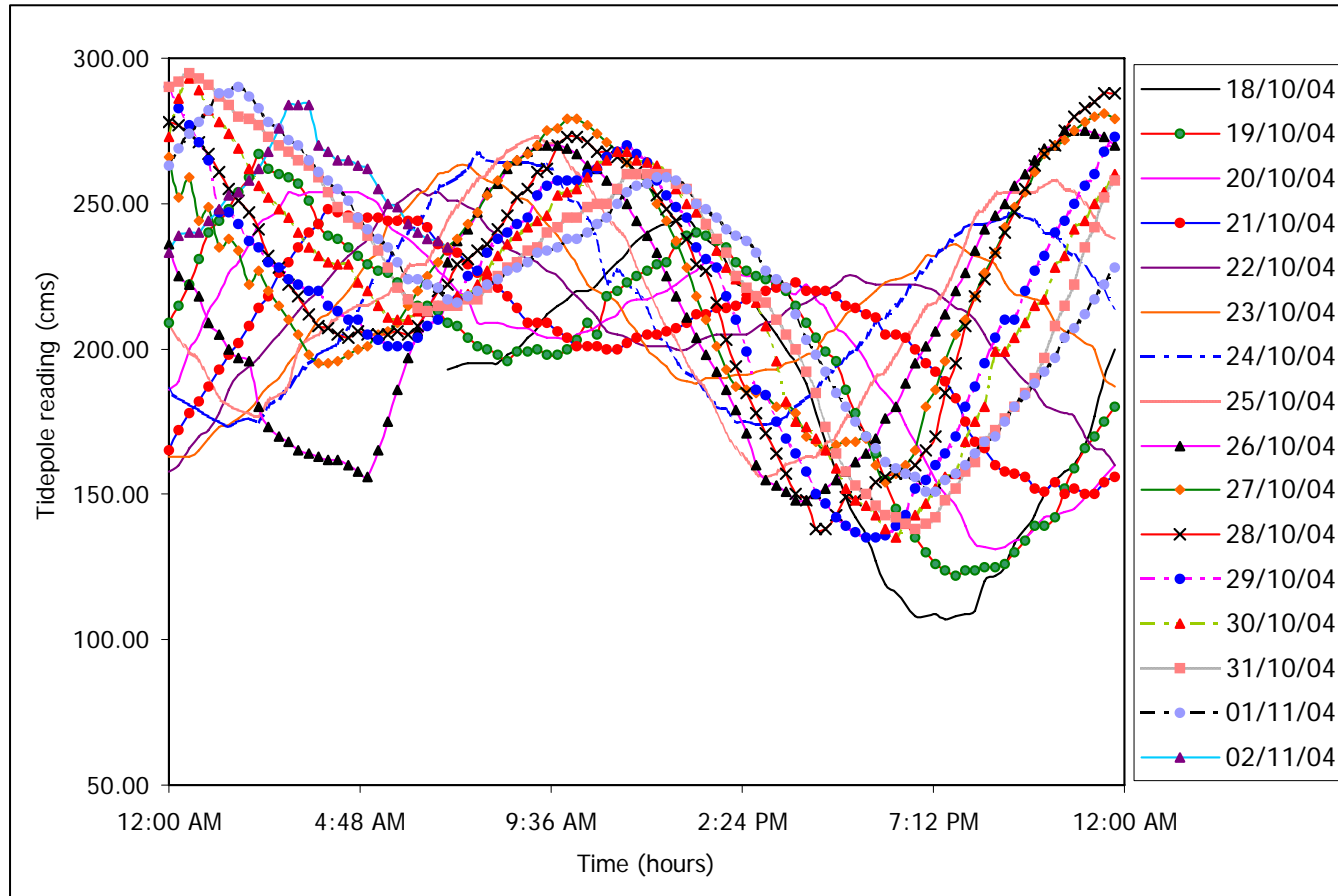


Fig. 6.4 Variation of the tide level at Netravathi River. (Second phase 18-10-04 to 02-11-04)

Tide pole readings at Gurupur River during March 2005

Tide pole reading (cms)										
Date/time	02/03/05	03/03/05	04/03/05	05/03/05	06/03/05	07/03/05	08/03/05	09/03/05	10/03/05	11/03/05
12:00 AM	122.00	116.00	111.00	110.00	151.00	113.00	129.00	146.00	157.00	170.00
12:15 AM	128.00	119.00	114.00	111.00	150.00	111.00	126.00	140.00	155.00	172.00
12:30 AM	132.00	123.00	116.00	112.00	148.00	105.00	119.00	135.00	153.00	166.00
12:45 AM	135.00	127.00	118.00	112.00	147.00	102.00	115.00	130.00	146.00	157.00
1:00 AM	138.00	130.00	121.00	112.00	145.00	101.00	110.00	125.00	140.00	153.00
1:15 AM	141.00	131.00	122.00	114.00	143.00	99.00	106.00	109.00	135.00	151.00
1:30 AM	144.00	133.00	123.00	117.00	143.00	97.00	104.00	109.00	131.00	145.00
1:45 AM	148.00	135.00	126.00	119.00	142.00	96.00	102.00	105.00	125.00	140.00
2:00 AM	149.00	136.00	128.00	122.00	142.00	94.00	94.00	100.00	114.00	131.00
2:15 AM	148.00	137.00	130.00	125.00	140.00	95.00	91.00	93.00	108.00	124.00
2:30 AM	147.00	138.00	131.00	125.00	141.00	95.00	90.00	87.00	97.00	115.00
2:45 AM	145.00	139.00	131.00	125.00	142.00	92.00	87.00	80.00	90.00	102.00
3:00 AM	141.00	139.00	130.00	125.00	142.00	92.00	86.00	75.00	84.00	96.00
3:15 AM	135.00	136.00	132.00	124.00	143.00	92.00	83.00	71.00	76.00	89.00
3:30 AM	130.00	131.00	130.00	124.00	144.00	93.00	81.00	67.00	68.00	80.00
3:45 AM	126.00	128.00	130.00	123.00	145.00	93.00	81.00	65.00	64.00	69.00
4:00 AM	122.00	125.00	129.00	120.00	145.00	93.00	80.00	63.00	61.00	60.00
4:15 AM	117.00	120.00	129.00	119.00	146.00	105.00	80.00	61.00	60.00	51.00
4:30 AM	112.00	116.00	125.00	119.00	146.00	109.00	80.00	60.00	59.00	43.00
4:45 AM	106.00	112.00	126.00	117.00	147.00	111.00	79.00	60.00	57.00	40.00
5:00 AM	99.00	105.00	128.00	115.00	147.00	113.00	79.00	60.00	53.00	35.00
5:15 AM	91.00	100.00	112.00	114.00	147.00	105.00	88.00	61.00	51.00	33.00
5:30 AM	85.00	93.00	110.00	114.00	148.00	109.00	90.00	61.00	47.00	30.00
5:45 AM	77.00	90.00	105.00	111.00	149.00	109.00	92.00	61.00	48.00	28.00
6:00 AM	71.00	82.00	100.00	109.00	150.00	111.00	95.00	61.00	53.00	28.00
6:15 AM	64.00	74.00	97.00	105.00	145.00	109.00	99.00	61.00	54.00	30.00
6:30 AM	56.00	68.00	92.00	103.00	143.00	112.00	104.00	61.00	59.00	30.00
6:45 AM	49.00	62.00	84.00	98.00	140.00	115.00	104.00	61.00	62.00	32.00

Tide pole readings at Gurupur River during March 2005 (Contd...)

Tide Pole reading (cms)										
Date/time	02/03/05	03/03/05	04/03/05	05/03/05	06/03/05	07/03/05	08/03/05	09/03/05	10/03/05	11/03/05
7:00 AM	44.00	55.00	79.00	93.00	135.00	115.00	108.00	61.00	68.00	37.00
7:15 AM	31.00	46.00	70.00	88.00	128.00	114.00	110.00	61.00	72.00	42.00
7:30 AM	24.00	42.00	63.00	84.00	125.00	114.00	113.00	61.00	78.00	46.00
7:45 AM	20.00	33.00	56.00	78.00	118.00	113.00	115.00	61.00	83.00	54.00
8:00 AM	17.00	27.00	50.00	72.00	120.00	111.00	119.00	108.00	88.00	60.00
8:15 AM	15.00	24.00	44.00	67.00	113.00	109.00	119.00	11.00	93.00	67.00
8:30 AM	12.00	19.00	39.00	62.00	109.00	108.00	122.00	114.00	98.00	74.00
8:45 AM	17.00	17.00	35.00	56.00	98.00	105.00	124.00	119.00	102.00	80.00
9:00 AM	18.00	15.00	29.00	51.00	92.00	102.00	125.00	122.00	109.00	86.00
9:15 AM	19.00	16.00	26.00	48.00	90.00	98.00	123.00	124.00	116.00	93.00
9:30 AM	21.00	17.00	24.00	40.00	84.00	96.00	122.00	127.00	120.00	100.00
9:45 AM	23.00	17.00	22.00	38.00	82.00	93.00	118.00	130.00	126.00	105.00
10:00 AM	27.00	18.00	20.00	35.00	76.00	88.00	115.00	132.00	131.00	112.00
10:15 AM	29.00	18.00	17.00	28.00	71.00	83.00	113.00	130.00	135.00	115.00
10:30 AM	34.00	20.00	16.00	25.00	67.00	78.00	107.00	130.00	139.00	124.00
10:45 AM	39.00	21.00	16.00	23.00	65.00	72.00	102.00	129.00	141.00	130.00
11:00 AM	44.00	24.00	15.00	17.00	60.00	65.00	97.00	127.00	143.00	134.00
11:15 AM	47.00	28.00	19.00	16.00	59.00	60.00	93.00	124.00	143.00	140.00
11:30 AM	51.00	34.00	23.00	16.00	58.00	56.00	88.00	120.00	142.00	145.00
11:45 AM	57.00	37.00	27.00	16.00	59.00	53.00	83.00	115.00	140.00	147.00
12:00 PM	62.00	40.00	30.00	19.00	61.00	45.00	79.00	111.00	137.00	148.00
12:15 PM	67.00	45.00	32.00	21.00	64.00	41.00	71.00	104.00	133.00	150.00
12:30 PM	75.00	50.00	36.00	23.00	66.00	38.00	64.00	95.00	127.00	147.00
12:45 PM	82.00	55.00	40.00	25.00	70.00	33.00	58.00	91.00	124.00	141.00
1:00 PM	88.00	62.00	45.00	28.00	74.00	28.00	53.00	87.00	119.00	136.00
1:15 PM	95.00	67.00	48.00	30.00	76.00	23.00	43.00	78.00	111.00	129.00
1:30 PM	100.00	74.00	53.00	33.00	79.00	18.00	38.00	70.00	102.00	130.00
1:45 PM	104.00	79.00	58.00	36.00	80.00	20.00	31.00	64.00	96.00	128.00

Tide pole readings at Gurupur River during March 2005 (Contd...)

Tide Pole reading (cms)										
Date/time	02/03/05	03/03/05	04/03/05	05/03/05	06/03/05	07/03/05	08/03/05	09/03/05	10/03/05	11/03/05
2:00 PM	109.00	86.00	65.00	38.00	82.00	17.00	26.00	55.00	89.00	123.00
2:15 PM	112.00	93.00	68.00	42.00	86.00	16.00	24.00	45.00	80.00	114.00
2:30 PM	116.00	97.00	74.00	45.00	89.00	16.00	20.00	37.00	69.00	107.00
2:45 PM	119.00	102.00	78.00	49.00	93.00	18.00	14.00	31.00	63.00	99.00
3:00 PM	122.00	107.00	83.00	54.00	97.00	20.00	11.00	29.00	55.00	89.00
3:15 PM	125.00	110.00	88.00	59.00	105.00	22.00	13.00	25.00	49.00	78.00
3:30 PM	129.00	114.00	93.00	65.00	110.00	23.00	9.00	18.00	41.00	72.00
3:45 PM	131.00	117.00	98.00	72.00	115.00	28.00	10.00	14.00	35.00	65.00
4:00 PM	129.00	121.00	104.00	77.00	122.00	31.00	14.00	14.00	31.00	57.00
4:15 PM	127.00	123.00	107.00	83.00	128.00	36.00	16.00	12.00	27.00	52.00
4:30 PM	124.00	123.00	111.00	88.00	134.00	39.00	19.00	13.00	24.00	48.00
4:45 PM	122.00	126.00	113.00	92.00	138.00	45.00	24.00	15.00	19.00	40.00
5:00 PM	120.00	127.00	117.00	96.00	141.00	51.00	28.00	15.00	17.00	34.00
5:15 PM	118.00	125.00	122.00	101.00	145.00	55.00	30.00	19.00	18.00	31.00
5:30 PM	115.00	124.00	124.00	102.00	150.00	59.00	38.00	23.00	19.00	28.00
5:45 PM	111.00	123.00	126.00	111.00	155.00	66.00	49.00	25.00	18.00	25.00
6:00 PM	109.00	121.00	126.00	112.00	158.00	72.00	53.00	34.00	23.00	26.00
6:15 PM	102.00	119.00	127.00	116.00	160.00	73.00	55.00	38.00	31.00	28.00
6:30 PM	98.00	117.00	126.00	119.00	165.00	84.00	59.00	44.00	35.00	31.00
6:45 PM	96.00	115.00	126.00	123.00	168.00	90.00	65.00	49.00	43.00	33.00
7:00 PM	92.00	112.00	127.00	127.00	174.00	97.00	77.00	57.00	48.00	41.00
7:15 PM	84.00	110.00	127.00	130.00	174.00	104.00	81.00	68.00	55.00	50.00
7:30 PM	89.00	109.00	127.00	132.00	175.00	105.00	88.00	78.00	62.00	53.00
7:45 PM	86.00	107.00	128.00	133.00	176.00	116.00	97.00	83.00	70.00	60.00
8:00 PM	83.00	105.00	125.00	134.00	175.00	120.00	105.00	88.00	76.00	68.00
8:15 PM	80.00	103.00	124.00	134.00	175.00	126.00	114.00	96.00	84.00	75.00
8:30 PM	81.00	102.00	125.00	132.00	174.00	129.00	120.00	105.00	93.00	79.00
8:45 PM	80.00	99.00	127.00	130.00	174.00	139.00	126.00	114.00	100.00	85.00

Tide pole readings at Gurupur River during March 2005 (Contd...)

Tide Pole reading (cms)										
Date/time	02/03/05	03/03/05	04/03/05	05/03/05	06/03/05	07/03/05	08/03/05	09/03/05	10/03/05	11/03/05
9:00 PM	71.00	95.00	125.00	129.00	171.00	144.00	132.00	119.00	107.00	92.00
9:15 PM	82.00	94.00	118.00	127.00	189.00	146.00	138.00	123.00	115.00	97.00
9:30 PM	83.00	93.00	114.00	126.00	168.00	148.00	145.00	134.00	122.00	104.00
9:45 PM	84.00	93.00	111.00	125.00	166.00	149.00	147.00	140.00	130.00	110.00
10:00 PM	87.00	94.00	108.00	123.00	165.00	149.00	150.00	147.00	136.00	120.00
10:15 PM	89.00	95.00	107.00	121.00	164.00	148.00	154.00	150.00	145.00	127.00
10:30 PM	92.00	97.00	105.00	118.00	163.00	148.00	155.00	156.00	150.00	137.00
10:45 PM	95.00	100.00	105.00	115.00	158.00	147.00	155.00	158.00	157.00	143.00
11:00 PM	99.00	104.00	105.00	111.00	155.00	145.00	155.00	163.00	162.00	150.00
11:15 PM	105.00	106.00	106.00	110.00	154.00	142.00	155.00	164.00	165.00	157.00
11:30 PM	108.00	108.00	110.00	109.00	154.00	139.00	163.00	164.00	168.00	161.00
11:45 PM	114.00	110.00	110.00	108.00	153.00	135.00	150.00	162.00	170.00	163.00

Tide pole readings at Gurupur River during March 2005 (Contd...)

Tide Pole reading (cms)					
Date/time	12/03/05	13/03/05	14/03/05	15/03/05	16/03/05
12:00 AM	166.00	156.00	142.00	129.00	120.00
12:15 AM	165.00	164.00	146.00	134.00	124.00
12:30 AM	167.00	166.00	150.00	137.00	125.00
12:45 AM	164.00	168.00	152.00	140.00	130.00
1:00 AM	160.00	165.00	153.00	142.00	134.00
1:15 AM	155.00	166.00	153.00	143.00	135.00
1:30 AM	149.00	163.00	151.00	144.00	137.00
1:45 AM	142.00	156.00	148.00	144.00	138.00
2:00 AM	136.00	151.00	146.00	144.00	137.00
2:15 AM	129.00	150.00	140.00	141.00	136.00
2:30 AM	124.00	140.00	138.00	136.00	136.00
2:45 AM	118.00	136.00	131.00	134.00	137.00
3:00 AM	111.00	128.00	123.00	127.00	130.00
3:15 AM	99.00	118.00	118.00	123.00	125.00
3:30 AM	90.00	113.00	110.00	119.00	122.00
3:45 AM	74.00	100.00	103.00	114.00	116.00
4:00 AM	69.00	91.00	96.00	108.00	111.00
4:15 AM	61.00	80.00	89.00	102.00	110.00
4:30 AM	54.00	72.00	81.00	95.00	104.00
4:45 AM	47.00	62.00	71.00	82.00	97.00
5:00 AM	39.00	53.00	61.00	79.00	91.00
5:15 AM	33.00	45.00	52.00	71.00	86.00
5:30 AM	28.00	38.00	45.00	63.00	79.00
5:45 AM	20.00	30.00	36.00	54.00	69.00

Tide pole readings at Gurupur River during March 2005 (Contd...)

Tide Pole reading (cms)					
Date/time	12/03/05	13/03/05	14/03/05	15/03/05	16/03/05
6:00 AM	19.00	25.00	31.00	40.00	65.00
6:15 AM	15.00	20.00	26.00	35.00	58.00
6:30 AM	10.00	15.00	18.00	33.00	52.00
6:45 AM	12.00	11.00	9.00	28.00	45.00
7:00 AM	12.00	8.00	3.00	22.00	38.00
7:15 AM	12.00	8.00	3.00	14.00	34.00
7:30 AM	17.00	8.00	4.00	10.00	
7:45 AM	24.00	10.00	4.00	8.00	
8:00 AM	29.00	16.00	5.00	4.00	
8:15 AM	36.00	20.00	6.00	6.00	
8:30 AM	45.00	24.00	6.00	6.00	
8:45 AM	49.00	32.00	10.00	8.00	
9:00 AM	56.00	39.00	14.00	11.00	
9:15 AM	65.00	47.00	20.00	17.00	
9:30 AM	72.00	52.00	25.00	19.00	
9:45 AM	77.00	61.00	33.00	24.00	
10:00 AM	82.00	65.00	38.00	31.00	
10:15 AM	88.00	72.00	45.00	36.00	
10:30 AM	96.00	73.00	53.00	41.00	
10:45 AM	104.00	85.00	60.00	44.00	
11:00 AM	110.00	91.00	65.00	52.00	
11:15 AM	116.00	100.00	71.00	58.00	
11:30 AM	123.00	109.00	79.00	63.00	
11:45 AM	130.00	115.00	86.00	70.00	
12:00 PM	136.00	123.00	92.00	77.00	

Tide pole readings at Gurupur River during March 2005 (Contd...)

Tide Pole reading (cms)				
Date/time	12/03/05	13/03/05	14/03/05	15/03/05
12:15 PM	138.00	127.00	101.00	83.00
12:30 PM	140.00	131.00	107.00	89.00
12:45 PM	143.00	138.00	115.00	96.00
1:00 PM	143.00	142.00	120.00	104.00
1:15 PM	141.00	142.00	125.00	110.00
1:30 PM	140.00	145.00	128.00	115.00
1:45 PM	138.00	146.00	131.00	118.00
2:00 PM	134.00	146.00	133.00	123.00
2:15 PM	131.00	143.00	136.00	127.00
2:30 PM	130.00	140.00	138.00	130.00
2:45 PM	124.00	138.00	137.00	134.00
3:00 PM	116.00	134.00	133.00	136.00
3:15 PM	110.00	125.00	132.00	136.00
3:30 PM	101.00	121.00	130.00	136.00
3:45 PM	96.00	118.00	128.00	135.00
4:00 PM	88.00	109.00	125.00	130.00
4:15 PM	78.00	106.00	121.00	129.00
4:30 PM	70.00	99.00	117.00	128.00
4:45 PM	62.00	90.00	112.00	125.00
5:00 PM	57.00	85.00	106.00	119.00
5:15 PM	51.00	79.00	100.00	115.00
5:30 PM	46.00	74.00	94.00	110.00
5:45 PM	47.00	67.00	88.00	107.00
6:00 PM	46.00	60.00	81.00	101.00
6:15 PM	43.00	56.00	77.00	94.00
6:30 PM	40.00	54.00	71.00	91.00
6:45 PM	41.00	52.00	67.00	88.00
7:00 PM	45.00	51.00	65.00	85.00
7:15 PM	51.00	50.00	62.00	82.00
7:30 PM	53.00	51.00	62.00	79.00

Tide pole readings at Gurupur River during March 2005 (Contd...)

Tide Pole reading (cms)				
Date/time	12/03/05	13/03/05	14/03/05	15/03/05
7:45 PM	55.00	54.00	61.00	78.00
8:00 PM	58.00	57.00	62.00	77.00
8:15 PM	60.00	60.00	64.00	74.00
8:30 PM	66.00	64.00	66.00	75.00
8:45 PM	75.00	68.00	70.00	76.00
9:00 PM	81.00	72.00	72.00	77.00
9:15 PM	88.00	78.00	75.00	78.00
9:30 PM	92.00	86.00	78.00	80.00
9:45 PM	98.00	92.00	85.00	83.00
10:00 PM	105.00	99.00	90.00	89.00
10:15 PM	114.00	103.00	96.00	95.00
10:30 PM	119.00	110.00	101.00	97.00
10:45 PM	126.00	115.00	108.00	98.00
11:00 PM	131.00	119.00	111.00	100.00
11:15 PM	138.00	126.00	103.00	107.00
11:30 PM	145.00	133.00	119.00	110.00
11:45 PM	151.00	139.00	126.00	116.00

Tide at Gurupur River during March 2005

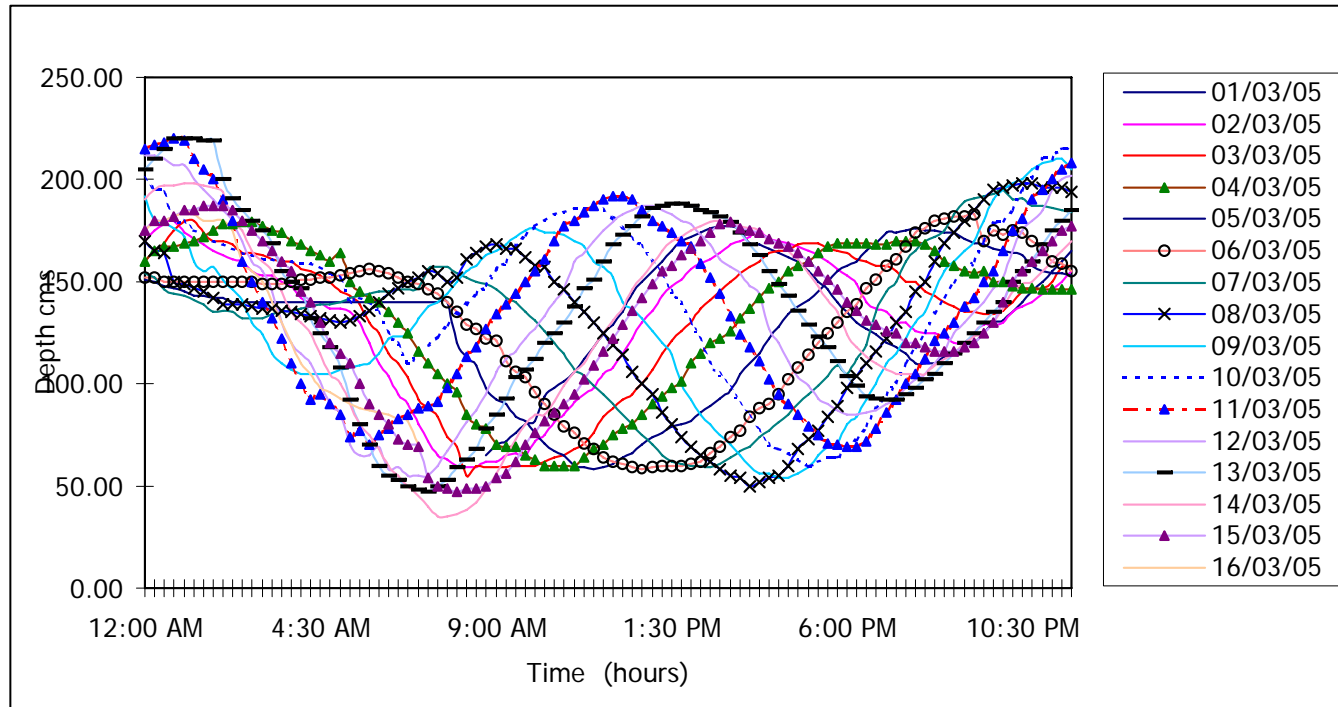


Fig. 6.5 Variation of the tide level at Gurupur River. (Third phase 02-03-05 to 16-03-05)

Tide pole readings at Netravathi River during March 2005

Tide Pole reading (cms)											
Date/time	01/03/05	02/03/05	03/03/05	04/03/05	05/03/05	06/03/05	07/03/05	08/03/05	09/03/05	10/03/05	11/03/05
12:00 AM		170.00	160.00	160.00	151.00	152.00	154.00	170.00	192.00	200.00	215.00
12:15 AM		175.00	165.00	165.00	150.00	152.00	152.00	165.00	180.00	195.00	217.00
12:30 AM		178.00	169.00	167.00	148.00	150.00	146.00	164.00	179.00	194.00	218.00
12:45 AM		180.00	175.00	167.00	147.00	150.00	144.00	150.00	176.00	180.00	220.00
1:00 AM		174.00	180.00	169.00	145.00	150.00	143.00	149.00	172.00	179.00	219.00
1:15 AM		171.00	180.00	170.00	143.00	150.00	141.00	147.00	160.00	175.00	210.00
1:30 AM		168.00	174.00	172.00	143.00	150.00	139.00	145.00	155.00	173.00	205.00
1:45 AM		165.00	170.00	175.00	142.00	150.00	135.00	142.00	157.00	170.00	200.00
2:00 AM		163.00	170.00	178.00	142.00	150.00	136.00	139.00	151.00	168.00	190.00
2:15 AM		161.00	168.00	178.00	140.00	150.00	135.00	139.00	146.00	166.00	180.00
2:30 AM		160.00	164.00	179.00	140.00	150.00	132.00	139.00	141.00	164.00	160.00
2:45 AM		155.00	164.00	179.00	140.00	150.00	132.00	138.00	130.00	163.00	150.00
3:00 AM		153.00	163.00	177.00	140.00	149.00	132.00	137.00	124.00	161.00	140.00
3:15 AM		153.00	161.00	175.00	140.00	149.00	134.00	137.00	115.00	161.00	132.00
3:30 AM		150.00	160.00	174.00	140.00	149.00	135.00	136.00	110.00	160.00	122.00
3:45 AM		148.00	160.00	170.00	140.00	150.00	136.00	135.00	107.00	160.00	110.00
4:00 AM		142.00	156.00	168.00	140.00	151.00	137.00	134.00	105.00	159.00	100.00
4:15 AM		140.00	155.00	165.00	140.00	151.00	138.00	133.00	105.00	159.00	92.00
4:30 AM		140.00	153.00	163.00	140.00	152.00	139.00	132.00	105.00	157.00	95.00
4:45 AM		137.00	150.00	160.00	140.00	152.00	139.00	131.00	105.00	154.00	90.00
5:00 AM		137.00	145.00	164.00	140.00	153.00	140.00	130.00	107.00	152.00	85.00
5:15 AM		135.00	143.00	150.00	140.00	154.00	142.00	131.00	108.00	140.00	74.00
5:30 AM		130.00	139.00	145.00	140.00	155.00	143.00	133.00	109.00	142.00	77.00
5:45 AM		120.00	130.00	142.00	140.00	156.00	144.00	136.00	110.00	140.00	70.00
6:00 AM		110.00	125.00	140.00	140.00	155.00	145.00	140.00	115.00	135.00	75.00
6:15 AM		104.00	115.00	135.00	140.00	154.00	145.00	144.00	122.00	125.00	78.00
6:30 AM		95.00	110.00	130.00	140.00	152.00	146.00	147.00	123.00	120.00	83.00
6:45 AM		90.00	103.00	125.00	140.00	150.00	146.00	150.00	124.00	110.00	85.00

Tide pole readings at Netravathi River during March 2005 (Contd...)

Tide Pole reading (cms)											
Date:	01/03/05	02/03/05	03/03/05	04/03/05	05/03/05	06/03/05	07/03/05	08/03/05	09/03/05	10/03/05	11/03/05
7:00 AM		80.00	92.00	116.00	140.00	149.00	147.00	152.00	132.00	115.00	88.00
7:15 AM		72.00	88.00	110.00	140.00	146.00	156.00	155.00	138.00	119.00	89.00
7:30 AM		65.00	84.00	105.00	140.00	144.00	157.00	154.00	140.00	123.00	91.00
7:45 AM		63.00	74.00	100.00	140.00	140.00	157.00	150.00	144.00	129.00	98.00
8:00 AM		60.00	69.00	96.00	120.00	135.00	154.00	152.00	150.00	134.00	105.00
8:15 AM		59.00	55.00	85.00	113.00	129.00	152.00	161.00	155.00	139.00	113.00
8:30 AM		59.00	60.00	80.00	109.00	127.00	150.00	164.00	158.00	144.00	118.00
8:45 AM	65.00	62.00	59.00	78.00	98.00	122.00	149.00	167.00	163.00	148.00	127.00
9:00 AM	70.00	62.00	59.00	70.00	92.00	121.00	146.00	168.00	165.00	156.00	134.00
9:15 AM	72.00	65.00	59.00	69.00	90.00	111.00	142.00	166.00	168.00	160.00	139.00
9:30 AM	76.00	66.00	60.00	69.00	84.00	106.00	140.00	166.00	172.00	167.00	144.00
9:45 AM	80.00	65.00	60.00	65.00	82.00	103.00	135.00	162.00	175.00	173.00	150.00
10:00 AM	82.00	72.00	60.00	63.00	76.00	96.00	131.00	158.00	176.00	177.00	155.00
10:15 AM	94.00	75.00	62.00	60.00	71.00	90.00	126.00	157.00	174.00	180.00	161.00
10:30 AM	98.00	81.00	64.00	60.00	67.00	85.00	120.00	150.00	174.00	183.00	170.00
10:45 AM	101.00	85.00	65.00	60.00	65.00	79.00	115.00	146.00	173.00	184.00	177.00
11:00 AM	106.00	91.00	68.00	60.00	60.00	76.00	107.00	140.00	170.00	186.00	180.00
11:15 AM	112.00	95.00	71.00	64.00	59.00	71.00	104.00	135.00	167.00	186.00	184.00
11:30 AM	118.00	98.00	76.00	68.00	58.00	68.00	99.00	130.00	160.00	186.00	187.00
11:45 AM	124.00	105.00	84.00	70.00	59.00	64.00	95.00	125.00	157.00	185.00	190.00
12:00 PM	129.00	108.00	88.00	75.00	61.00	62.00	90.00	119.00	152.00	181.00	192.00
12:15 PM	135.00	115.00	92.00	78.00	64.00	61.00	85.00	114.00	140.00	176.00	192.00
12:30 PM	144.00	122.00	95.00	80.00	66.00	59.00	80.00	106.00	137.00	171.00	190.00
12:45 PM	150.00	130.00	100.00	85.00	70.00	58.00	75.00	100.00	132.00	167.00	185.00
1:00 PM	155.00	136.00	107.00	90.00	74.00	59.00	70.00	95.00	126.00	160.00	180.00
1:15 PM	160.00	143.00	115.00	94.00	76.00	60.00	65.00	86.00	120.00	153.00	177.00
1:30 PM	165.00	148.00	121.00	98.00	79.00	60.00	62.00	80.00	114.00	145.00	174.00
1:45 PM	170.00	151.00	126.00	101.00	80.00	60.00	61.00	74.00	100.00	140.00	170.00
2:00 PM	172.00	156.00	130.00	110.00	82.00	61.00	60.00	69.00	92.00	130.00	167.00
2:15 PM	174.00	159.00	137.00	115.00	86.00	62.00	60.00	65.00	85.00	122.00	159.00

Tide pole readings at Netravathi River during March 2005 (Contd...)

Tide Pole reading (cms)											
Date:	01/03/05	02/03/05	03/03/05	04/03/05	05/03/05	06/03/05	07/03/05	08/03/05	09/03/05	10/03/05	11/03/05
2:30 PM	176.00	161.00	141.00	120.00	89.00	66.00	59.00	62.00	80.00	110.00	152.00
2:45 PM	177.00	164.00	145.00	122.00	93.00	69.00	61.00	58.00	75.00	105.00	144.00
3:00 PM	177.00	168.00	150.00	126.00	97.00	74.00	64.00	55.00	70.00	98.00	133.00
3:15 PM	175.00	170.00	154.00	132.00	105.00	77.00	67.00	54.00	65.00	90.00	124.00
3:30 PM	169.00	172.00	157.00	137.00	110.00	84.00	69.00	50.00	60.00	84.00	118.00
3:45 PM	168.00	175.00	160.00	142.00	115.00	88.00	74.00	52.00	56.00	77.00	116.00
4:00 PM	166.00	171.00	164.00	147.00	122.00	90.00	77.00	54.00	56.00	70.00	102.00
4:15 PM	164.00	170.00	165.00	150.00	128.00	95.00	81.00	55.00	54.00	68.00	95.00
4:30 PM	162.00	169.00	165.00	155.00	134.00	102.00	85.00	60.00	54.00	66.00	90.00
4:45 PM	160.00	167.00	168.00	158.00	138.00	108.00	90.00	68.00	56.00	63.00	85.00
5:00 PM	155.00	165.00	169.00	160.00	141.00	114.00	95.00	73.00	59.00	60.00	79.00
5:15 PM	150.00	163.00	169.00	164.00	145.00	120.00	99.00	77.00	65.00	62.00	75.00
5:30 PM	146.00	160.00	166.00	167.00	150.00	125.00	104.00	84.00	69.00	64.00	71.00
5:45 PM	140.00	156.00	165.00	169.00	155.00	130.00	109.00	89.00	71.00	64.00	70.00
6:00 PM	135.00	153.00	164.00	169.00	158.00	135.00	105.00	98.00	80.00	68.00	69.00
6:15 PM	130.00	149.00	161.00	169.00	160.00	139.00	112.00	104.00	84.00	73.00	69.00
6:30 PM	127.00	140.00	160.00	169.00	165.00	147.00	119.00	110.00	92.00	79.00	72.00
6:45 PM	124.00	137.00	158.00	168.00	168.00	151.00	135.00	116.00	100.00	88.00	78.00
7:00 PM	120.00	135.00	158.00	168.00	174.00	158.00	145.00	122.00	110.00	95.00	86.00
7:15 PM	118.00	130.00	155.00	170.00	174.00	161.00	150.00	130.00	115.00	100.00	92.00
7:30 PM	115.00	130.00	150.00	170.00	175.00	167.00	160.00	135.00	122.00	110.00	100.00
7:45 PM	110.00	126.00	150.00	170.00	176.00	174.00	165.00	145.00	130.00	118.00	105.00
8:00 PM	110.00	125.00	145.00	168.00	175.00	176.00	170.00	150.00	135.00	125.00	112.00
8:15 PM	110.00	125.00	143.00	165.00	175.00	180.00	172.00	160.00	145.00	134.00	121.00
8:30 PM	113.00	123.00	140.00	160.00	174.00	181.00	175.00	169.00	155.00	142.00	125.00
8:45 PM	115.00	120.00	138.00	158.00	174.00	182.00	183.00	174.00	160.00	150.00	130.00
9:00 PM	119.00	120.00	135.00	155.00	171.00	182.00	189.00	180.00	165.00	155.00	138.00
9:15 PM	120.00	125.00	135.00	154.00	169.00	183.00	191.00	185.00	170.00	160.00	142.00
9:30 PM	125.00	129.00	134.00	155.00	168.00	170.00	192.00	190.00	180.00	170.00	150.00
9:45 PM	130.00	129.00	134.00	150.00	166.00	175.00	193.00	195.00	190.00	178.00	155.00

Tide pole readings at Netravathi River during March 2005 (Contd...)

Tide Pole reading (cms)											
Date:	01/03/05	02/03/05	03/03/05	04/03/05	05/03/05	06/03/05	07/03/05	08/03/05	09/03/05	10/03/05	11/03/05
10:00 PM	131.00	130.00	136.00	150.00	165.00	173.00	195.00	196.00	195.00	180.00	165.00
10:15 PM	135.00	135.00	140.00	148.00	164.00	175.00	190.00	197.00	198.00	185.00	175.00
10:30 PM	140.00	138.00	145.00	147.00	163.00	174.00	191.00	198.00	200.00	195.00	181.00
10:45 PM	145.00	140.00	146.00	147.00	158.00	170.00	187.00	198.00	205.00	200.00	190.00
11:00 PM	150.00	144.00	147.00	146.00	155.00	166.00	187.00	196.00	208.00	210.00	195.00
11:15 PM	155.00	146.00	150.00	146.00	154.00	160.00	186.00	196.00	209.00	210.00	200.00
11:30 PM	160.00	150.00	157.00	146.00	154.00	159.00	185.00	196.00	210.00	215.00	205.00
11:45 PM	165.00	155.00	158.00	146.00	153.00	155.00	184.00	194.00	205.00	215.00	208.00

Tide pole readings at Netravathi River during March 2005 (Contd...)

Tide Pole reading (cms)					
Date/ time	12/03/05	13/03/05	14/03/05	15/03/05	16/03/05
12:00 AM	212.00	205.00	190.00	175.00	175.00
12:15 AM	212.00	210.00	195.00	180.00	179.00
12:30 AM	210.00	215.00	197.00	180.00	180.00
12:45 AM	207.00	220.00	197.00	182.00	182.00
1:00 AM	207.00	220.00	198.00	185.00	184.00
1:15 AM	200.00	220.00	198.00	185.00	183.00
1:30 AM	195.00	219.00	197.00	187.00	180.00
1:45 AM	190.00	219.00	196.00	187.00	180.00
2:00 AM	185.00	200.00	194.00	187.00	180.00
2:15 AM	180.00	191.00	180.00	185.00	175.00
2:30 AM	170.00	185.00	175.00	180.00	160.00
2:45 AM	160.00	180.00	165.00	175.00	155.00
3:00 AM	155.00	175.00	160.00	170.00	150.00
3:15 AM	145.00	169.00	155.00	165.00	140.00
3:30 AM	130.00	155.00	145.00	160.00	130.00
3:45 AM	120.00	150.00	135.00	155.00	120.00
4:00 AM	115.00	147.00	130.00	145.00	110.00
4:15 AM	110.00	132.00	125.00	140.00	105.00
4:30 AM	105.00	125.00	115.00	130.00	98.00

Tide pole readings at Netravathi River during March 2005 (Contd...)

Tide Pole reading (cms)					
Date/ time	12/03/05	13/03/05	14/03/05	15/03/05	16/03/05
4:45 AM	90.00	118.00	105.00	120.00	96.00
5:00 AM	85.00	108.00	100.00	115.00	93.00
5:15 AM	70.00	92.00	90.00	110.00	90.00
5:30 AM	65.00	80.00	80.00	100.00	88.00
5:45 AM	65.00	70.00	75.00	90.00	87.00
6:00 AM	69.00	60.00	68.00	85.00	86.00
6:15 AM	58.00	55.00	60.00	80.00	85.00
6:30 AM	59.00	53.00	55.00	73.00	83.00
6:45 AM	55.00	50.00	50.00	70.00	82.00
7:00 AM	55.00	48.00	45.00	69.00	70.00
7:15 AM	55.00	47.00	40.00	54.00	
7:30 AM	60.00	50.00	35.00	50.00	
7:45 AM	67.00	53.00	35.00	49.00	
8:00 AM	74.00	59.00	36.00	47.00	
8:15 AM	81.00	63.00	38.00	49.00	
8:30 AM	87.00	68.00	42.00	49.00	
8:45 AM	95.00	78.00	48.00	50.00	
9:00 AM	106.00	85.00	56.00	54.00	
9:15 AM	112.00	93.00	65.00	56.00	
9:30 AM	116.00	103.00	73.00	62.00	
9:45 AM	122.00	107.00	80.00	70.00	
10:00 AM	127.00	112.00	85.00	76.00	
10:15 AM	133.00	120.00	85.00	82.00	
10:30 AM	140.00	125.00	91.00	86.00	
10:45 AM	146.00	130.00	99.00	90.00	
11:00 AM	160.00	138.00	106.00	95.00	
11:15 AM	164.00	147.00	110.00	102.00	
11:30 AM	170.00	151.00	118.00	109.00	
11:45 AM	175.00	160.00	125.00	116.00	
12:00 PM	179.00	168.00	131.00	122.00	

Tide pole readings at Netravathi River during March 2005 (Contd...)

Tide Pole reading (cms)					
Date/ time	12/03/05	13/03/05	14/03/05	15/03/05	16/03/05
12:15 PM	183.00	173.00	137.00	129.00	
12:30 PM	185.00	177.00	146.00	136.00	
12:45 PM	187.00	182.00	152.00	142.00	
1:00 PM	187.00	186.00	159.00	149.00	
1:15 PM	185.00	187.00	165.00	155.00	
1:30 PM	183.00	188.00	170.00	158.00	
1:45 PM	180.00	188.00	172.00	163.00	
2:00 PM	178.00	187.00	175.00	166.00	
2:15 PM	173.00	185.00	177.00	170.00	
2:30 PM	168.00	184.00	179.00	174.00	
2:45 PM	161.00	182.00	180.00	178.00	
3:00 PM	157.00	179.00	179.00	179.00	
3:15 PM	154.00	174.00	177.00	176.00	
3:30 PM	148.00	168.00	176.00	175.00	
3:45 PM	144.00	163.00	175.00	174.00	
4:00 PM	127.00	155.00	170.00	171.00	
4:15 PM	120.00	149.00	169.00	169.00	
4:30 PM	111.00	143.00	165.00	167.00	
4:45 PM	103.00	136.00	161.00	164.00	
5:00 PM	99.00	129.00	154.00	160.00	
5:15 PM	93.00	123.00	148.00	155.00	
5:30 PM	90.00	118.00	141.00	151.00	
5:45 PM	87.00	112.00	135.00	146.00	
6:00 PM	85.00	104.00	124.00	140.00	
6:15 PM	85.00	99.00	118.00	136.00	
6:30 PM	86.00	94.00	113.00	131.00	
6:45 PM	87.00	93.00	110.00	129.00	
7:00 PM	90.00	92.00	107.00	126.00	
7:15 PM	93.00	92.00	105.00	125.00	
7:30 PM	98.00	95.00	105.00	120.00	

Tide pole readings at Netravathi River during March 2005 (Contd...)

Tide Pole reading (cms)					
Date/ time	12/03/05	13/03/05	14/03/05	15/03/05	16/03/05
7:45 PM	102.00	98.00	105.00	120.00	
8:00 PM	105.00	102.00	105.00	118.00	
8:15 PM	110.00	105.00	109.00	116.00	
8:30 PM	116.00	110.00	112.00	116.00	
8:45 PM	125.00	115.00	115.00	116.00	
9:00 PM	130.00	120.00	120.00	118.00	
9:15 PM	135.00	125.00	123.00	120.00	
9:30 PM	140.00	130.00	125.00	125.00	
9:45 PM	147.00	135.00	130.00	130.00	
10:00 PM	152.00	140.00	137.00	140.00	
10:15 PM	165.00	150.00	145.00	150.00	
10:30 PM	175.00	155.00	149.00	155.00	
10:45 PM	180.00	160.00	150.00	160.00	
11:00 PM	185.00	168.00	155.00	165.00	
11:15 PM	195.00	175.00	160.00	170.00	
11:30 PM	200.00	180.00	165.00	175.00	
11:45 PM	202.00	185.00	170.00	177.00	

Tide at Netravathi River during March 2005

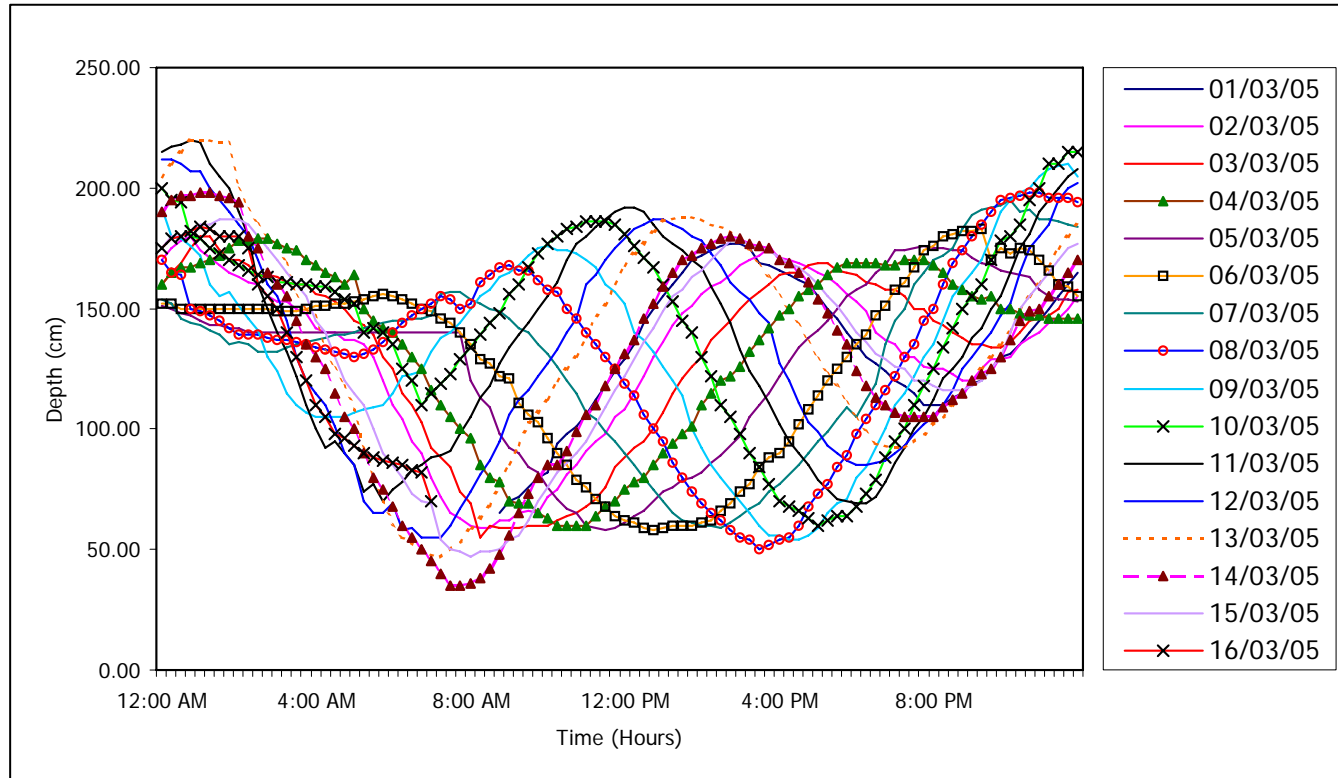


Fig. 6.6 Variation of the tide level at Netravathi River. (Third phase 02-03-05 to 16-03-05)

Tide pole readings at Gurupur River during October 2005

Tide pole reading (cms)										
Date/Time	07/10/05	08/10/05	09/10/05	10/10/05	11/10/05	12/10/05	13/10/05	14/10/05	15/10/05	16/10/05
12:00 AM		105.00	84.00	64.00	56.00	40.00	40.00	70.00	100.00	130.00
12:15 AM		113.00	94.00	71.00	60.00	52.00	49.00	69.00	94.00	124.00
12:30 AM		120.00	98.00	77.00	64.00	58.00	50.00	68.00	87.00	118.00
12:45 AM		127.00	105.00	83.00	70.00	60.00	58.00	67.00	85.00	113.00
1:00 AM		132.00	112.00	91.00	76.00	62.00	59.00	64.00	80.00	106.00
1:15 AM		137.00	117.00	97.00	80.00	67.00	60.00	62.00	82.00	99.00
1:30 AM		139.00	120.00	102.00	84.00	70.00	67.00	60.00	70.00	92.00
1:45 AM		140.00	120.00	108.00	90.00	75.00	69.00	58.00	68.00	89.00
2:00 AM		145.00	130.00	111.00	96.00	78.00	67.00	56.00	67.00	82.00
2:15 AM		145.00	134.00	118.00	98.00	80.00	69.00	54.00	63.00	77.00
2:30 AM		139.00	132.00	121.00	104.00	80.00	73.00	65.00	62.00	70.00
2:45 AM		139.00	137.00	124.00	110.00	88.00	77.00	65.00	60.00	67.00
3:00 AM		137.00	137.00	127.00	113.00	94.00	82.00	67.00	60.00	64.00
3:15 AM		138.00	136.00	130.00	117.00	100.00	86.00	72.00	60.00	62.00
3:30 AM		136.00	137.00	131.00	123.00	105.00	90.00	76.00	63.00	60.00
3:45 AM		131.00	137.00	133.00	128.00	110.00	97.00	80.00	63.00	59.00
4:00 AM		132.00	132.00	134.00	130.00	114.00	100.00	85.00	67.00	59.00
4:15 AM		124.00	132.00	136.00	131.00	118.00	104.00	90.00	71.00	58.00
4:30 AM		120.00	130.00	138.00	134.00	119.00	110.00	93.00	77.00	58.00
4:45 AM		117.00	128.00	134.00	138.00	129.00	115.00	97.00	82.00	70.00
5:00 AM		109.00	125.00	134.00	139.00	129.00	118.00	103.00	87.00	72.00
5:15 AM		105.00	120.00	132.00	139.00	135.00	124.00	109.00	91.00	77.00
5:30 AM		102.00	117.00	130.00	139.00	140.00	135.00	118.00	94.00	81.00
5:45 AM		95.00	115.00	127.00	140.00	140.00	137.00	123.00	101.00	86.00
6:00 AM		93.00	111.00	125.00	140.00	143.00	140.00	129.00	109.00	91.00
6:15 AM		92.00	108.00	123.00	139.00	148.00	144.00	135.00	111.00	100.00
6:30 AM		90.00	104.00	119.00	139.00	150.00	150.00	140.00	119.00	108.00
6:45 AM		89.00	100.00	120.00	140.00	150.00	150.00	148.00	128.00	113.00

Tide pole readings at Gurupur River during October 2005 (Contd...)

Tide pole reading(cms)										
Date/ Time	07/10/05	08/10/05	09/10/05	10/10/05	11/10/05	12/10/05	13/10/05	14/10/05	15/10/05	16/10/05
7:00 AM		85.00	97.00	118.00	138.00	149.00	152.00	152.00	135.00	117.00
7:15 AM		82.00	96.00	113.00	135.00	148.00	157.00	153.00	143.00	124.00
7:30 AM		80.00	95.00	112.00	131.00	148.00	156.00	158.00	147.00	131.00
7:45 AM		82.00	92.00	109.00	130.00	147.00	156.00	162.00	152.00	135.00
8:00 AM		83.00	90.00	104.00	129.00	145.00	157.00	163.00	156.00	142.00
8:15 AM		84.00	88.00	106.00	125.00	143.00	157.00	166.00	161.00	146.00
8:30 AM		85.00	87.00	102.00	123.00	139.00	157.00	167.00	163.00	152.00
8:45 AM		87.00	87.00	101.00	120.00	138.00	157.00	167.00	166.00	157.00
9:00 AM		89.00	88.00	101.00	119.00	137.00	154.00	167.00	168.00	160.00
9:15 AM		92.00	91.00	100.00	117.00	133.00	151.00	165.00	168.00	163.00
9:30 AM		95.00	92.00	98.00	114.00	131.00	150.00	161.00	171.00	166.00
9:45 AM		99.00	94.00	100.00	115.00	130.00	146.00	158.00	169.00	168.00
10:00 AM		100.00	94.00	99.00	113.00	127.00	143.00	156.00	163.00	168.00
10:15 AM		102.00	97.00	102.00	111.00	124.00	141.00	153.00	162.00	167.00
10:30 AM		105.00	101.00	102.00	100.00	123.00	137.00	150.00	162.00	164.00
10:45 AM		107.00	103.00	102.00	100.00	120.00	132.00	148.00	160.00	161.00
11:00 AM		111.00	105.00	107.00	110.00	118.00	129.00	142.00	157.00	159.00
11:15 AM		117.00	108.00	108.00	112.00	117.00	126.00	137.00	150.00	155.00
11:30 AM		119.00	111.00	109.00	112.00	117.00	121.00	132.00	146.00	151.00
11:45 AM		121.00	113.00	110.00	112.00	114.00	118.00	125.00	139.00	147.00
12:00 PM		125.00	116.00	112.00	111.00	111.00	117.00	118.00	132.00	140.00
12:15 PM		128.00	118.00	116.00	113.00	111.00	112.00	112.00	126.00	133.00
12:30 PM		129.00	118.00	119.00	113.00	110.00	110.00	107.00	117.00	128.00
12:45 PM		132.00	121.00	120.00	114.00	110.00	107.00	102.00	107.00	120.00
1:00 PM		132.00	123.00	121.00	114.00	109.00	102.00	98.00	100.00	110.00
1:15 PM		130.00	125.00	122.00	117.00	108.00	100.00	93.00	95.00	100.00
1:30 PM		127.00	126.00	122.00	118.00	110.00	99.00	89.00	85.00	102.00
1:45 PM		125.00	126.00	120.00	120.00	109.00	98.00	81.00	80.00	86.00
2:00 PM		120.00	125.00	120.00	120.00	108.00	97.00	80.00	69.00	73.00
2:15 PM		119.00	120.00	120.00	121.00	110.00	96.00	78.00	65.00	67.00

Tide pole readings at Gurupur River during October 2005 (Contd...)

Tide pole reading(cms)										
Date/ Time	07/10/05	08/10/05	09/10/05	10/10/05	11/10/05	12/10/05	13/10/05	14/10/05	15/10/05	16/10/05
2:30 PM		114.00	120.00	120.00	122.00	111.00	96.00	75.00	60.00	59.00
2:45 PM		109.00	118.00	121.00	122.00	115.00	98.00	73.00	58.00	50.00
3:00 PM		104.00	111.00	123.00	123.00	116.00	99.00	71.00	54.00	46.00
3:15 PM		100.00	109.00	118.00	122.00	116.00	99.00	70.00	50.00	38.00
3:30 PM		97.00	107.00	118.00	123.00	117.00	100.00	72.00	50.00	32.00
3:45 PM		90.00	104.00	116.00	122.00	118.00	102.00	78.00	50.00	30.00
4:00 PM		82.00	98.00	113.00	121.00	121.00	106.00	78.00	50.00	30.00
4:15 PM		79.00	94.00	110.00	119.00	121.00	108.00	81.00	51.00	27.00
4:30 PM		69.00	88.00	106.00	119.00	122.00	110.00	87.00	53.00	29.00
4:45 PM		61.00	82.00	102.00	117.00	123.00	111.00	90.00	57.00	31.00
5:00 PM		52.00	76.00	100.00	115.00	124.00	113.00	93.00	58.00	34.00
5:15 PM		44.00	67.00	96.00	112.00	124.00	117.00	98.00	66.00	34.00
5:30 PM		40.00	58.00	90.00	110.00	123.00	120.00	100.00	71.00	40.00
5:45 PM		36.00	51.00	87.00	108.00	124.00	120.00	103.00	77.00	47.00
6:00 PM		29.00	46.00	83.00	105.00	123.00	123.00	109.00	82.00	52.00
6:15 PM		22.00	41.00	78.00	102.00	125.00	125.00	112.00	87.00	58.00
6:30 PM		16.00	36.00	70.00	100.00	123.00	128.00	118.00	93.00	67.00
6:45 PM		10.00	29.00	68.00	97.00	120.00	130.00	120.00	98.00	70.00
7:00 PM		9.00	26.00	65.00	92.00	120.00	130.00	125.00	103.00	77.00
7:15 PM		8.00	23.00	57.00	89.00	117.00	135.00	130.00	110.00	85.00
7:30 PM	9.00	8.00	18.00	50.00	85.00	115.00	133.00	135.00	116.00	91.00
7:45 PM	10.00	7.00	15.00	46.00	79.00	110.00	133.00	138.00	121.00	98.00
8:00 PM	11.00	7.00	12.00	35.00	72.00	108.00	134.00	141.00	127.00	103.00
8:15 PM	13.00	5.00	12.00	29.00	69.00	95.00	132.00	142.00	133.00	110.00
8:30 PM	17.00	10.00	12.00	29.00	62.00	90.00	130.00	147.00	138.00	115.00
8:45 PM	23.00	14.00	12.00	29.00	63.00	88.00	127.00	148.00	140.00	127.00
9:00 PM	27.00	17.00	12.00	29.00	58.00	87.00	125.00	147.00	145.00	130.00
9:15 PM	32.00	20.00	15.00	30.00	52.00	86.00	122.00	144.00	147.00	138.00
9:30 PM	38.00	26.00	20.00	31.00	50.00	84.00	119.00	142.00	150.00	148.00
9:45 PM	47.00	27.00	22.00	32.00	50.00	80.00	116.00	141.00	150.00	150.00

Tide pole readings at Gurupur River during October 2005 (Contd...)

Tide pole reading(cms)										
Date/ Time	07/10/05	08/10/05	09/10/05	10/10/05	11/10/05	12/10/05	13/10/05	14/10/05	15/10/05	16/10/05
10:00 PM	51.00	31.00	25.00	33.00	49.00	78.00	112.00	139.00	151.00	155.00
10:15 PM	62.00	38.00	28.00	35.00	49.00	75.00	108.00	137.00	151.00	159.00
10:30 PM	70.00	47.00	32.00	35.00	49.00	70.00	106.00	132.00	150.00	158.00
10:45 PM	74.00	53.00	38.00	37.00	48.00	65.00	100.00	132.00	148.00	160.00
11:00 PM	79.00	56.00	41.00	40.00	47.00	63.00	90.00	119.00	146.00	160.00
11:15 PM	85.00	65.00	47.00	44.00	47.00	61.00	85.00	114.00	145.00	160.00
11:30 PM	90.00	68.00	53.00	49.00	46.00	59.00	80.00	110.00	137.00	159.00
11:45 PM	94.00	80.00	59.00	50.00	47.00	48.00	78.00	107.00	134.00	157.00

Tide pole readings at Gurupur River during October 2005 (Contd...)

Tide pole reading(cms)						
Date/Time	17/10/05	18/10/05	19/10/05	20/10/05	21/10/05	22/10/05
12:00 AM	153.00	166.00	166.00	155.00	130.00	112.00
12:15 AM	150.00	164.00	168.00	159.00	138.00	120.00
12:30 AM	148.00	161.00	168.00	161.00	140.00	125.00
12:45 AM	146.00	159.00	169.00	162.00	150.00	130.00
1:00 AM	140.00	155.00	169.00	164.00	154.00	141.00
1:15 AM	133.00	149.00	168.00	164.00	158.00	148.00
1:30 AM	130.00	145.00	168.00	165.00	157.00	152.00
1:45 AM	122.00	139.00	160.00	165.00	157.00	158.00
2:00 AM	118.00	135.00	158.00	165.00	158.00	166.00
2:15 AM	105.00	128.00	153.00	163.00	158.00	166.00
2:30 AM	97.00	118.00	148.00	160.00	158.00	164.00
2:45 AM	89.00	111.00	138.00	151.00	156.00	160.00
3:00 AM	84.00	102.00	127.00	150.00	151.00	158.00
3:15 AM	78.00	100.00	119.00	140.00	149.00	156.00
3:30 AM	74.00	98.00	114.00	134.00	146.00	154.00
3:45 AM	70.00	88.00	106.00	124.00	140.00	150.00
4:00 AM	69.00	85.00	99.00	120.00	133.00	146.00
4:15 AM	65.00	76.00	93.00	113.00	128.00	140.00
4:30 AM	65.00	74.00	87.00	110.00	125.00	135.00
4:45 AM	67.00	72.00	82.00	104.00	124.00	128.00
5:00 AM	69.00	72.00	79.00	96.00	113.00	124.00
5:15 AM	69.00	70.00	79.00	90.00	105.00	118.00
5:30 AM	79.00	70.00	79.00	86.00	96.00	114.00
5:45 AM	81.00	71.00	79.00	83.00	92.00	111.00

Tide pole readings at Gurupur River during October 2005 (Contd...)

Tide pole reading(cms)						
Date/Time	17/10/05	18/10/05	19/10/05	20/10/05	21/10/05	22/10/05
6:00 AM	83.00	73.00	81.00	82.00	89.00	108.00
6:15 AM	90.00	80.00	84.00	80.00	88.00	105.00
6:30 AM	95.00	82.00	88.00	79.00	86.00	101.00
6:45 AM	100.00	89.00	85.00	83.00	88.00	98.00
7:00 AM	108.00	84.00	87.00	86.00	86.00	95.00
7:15 AM	114.00	103.00	90.00	85.00	83.00	93.00
7:30 AM	118.00	107.00	93.00	85.00	83.00	91.00
7:45 AM	125.00	110.00	100.00	88.00	82.00	91.00
8:00 AM	130.00	120.00	102.00	90.00	82.00	88.00
8:15 AM	138.00	124.00	105.00	97.00	84.00	89.00
8:30 AM	141.00	129.00	110.00	100.00	88.00	89.00
8:45 AM	146.00	135.00	117.00	107.00	91.00	91.00
9:00 AM	149.00	138.00	122.00	111.00	95.00	93.00
9:15 AM	154.00	141.00	124.00	112.00	99.00	94.00
9:30 AM	158.00	150.00	129.00	115.00	102.00	99.00
9:45 AM	162.00	153.00	136.00	121.00	108.00	103.00
10:00 AM	165.00	157.00	139.00	125.00	111.00	104.00
10:15 AM	167.00	160.00	145.00	126.00	112.00	106.00
10:30 AM	164.00	162.00	148.00	128.00	115.00	108.00
10:45 AM	165.00	163.00	150.00	132.00	118.00	111.00
11:00 AM	163.00	163.00	150.00	136.00	120.00	115.00
11:15 AM	162.00	162.00	152.00	140.00	122.00	117.00
11:30 AM	162.00	159.00	155.00	140.00	126.00	118.00
11:45 AM	156.00	157.00	156.00	140.00	126.00	
12:00 PM	153.00	153.00	155.00	144.00	130.00	
12:15 PM	148.00	153.00	150.00	147.00	133.00	
12:30 PM	143.00	147.00	146.00	147.00	135.00	
12:45 PM	136.00	143.00	143.00	140.00	133.00	

Tide pole readings at Gurupur River during October 2005 (Contd...)

Tide pole reading(cms)					
Date/Time	17/10/05	18/10/05	19/10/05	20/10/05	21/10/05
1:00 PM	128.00	137.00	137.00	135.00	133.00
1:15 PM	118.00	130.00	130.00	131.00	132.00
1:30 PM	108.00	124.00	125.00	128.00	127.00
1:45 PM	96.00	111.00	122.00	123.00	124.00
2:00 PM	86.00	98.00	117.00	118.00	118.00
2:15 PM	77.00	87.00	100.00	110.00	113.00
2:30 PM	68.00	79.00	94.00	104.00	110.00
2:45 PM	59.00	69.00	84.00	99.00	106.00
3:00 PM	53.00	61.00	76.00	90.00	99.00
3:15 PM	44.00	49.00	66.00	80.00	95.00
3:30 PM	38.00	46.00	55.00	73.00	88.00
3:45 PM	33.00	38.00	46.00	64.00	82.00
4:00 PM	28.00	31.00	37.00	52.00	74.00
4:15 PM	22.00	23.00	30.00	44.00	66.00
4:30 PM	20.00	16.00	21.00	39.00	60.00
4:45 PM	18.00	13.00	17.00	30.00	52.00
5:00 PM	17.00	9.00	12.00	23.00	43.00
5:15 PM	18.00	6.00	5.00	16.00	37.00
5:30 PM	20.00	4.00	5.00	11.00	30.00
5:45 PM	26.00	6.00	3.00	6.00	23.00
6:00 PM	30.00	6.00	1.00	0.00	17.00
6:15 PM	38.00	9.00	0.00	-1.00	13.00
6:30 PM	40.00	19.00	0.00	-6.00	9.00
6:45 PM	47.00	20.00	7.00	-1.00	5.00
7:00 PM	56.00	24.00	9.00	0.00	5.00
7:15 PM	59.00	32.00	10.00	2.00	5.00
7:30 PM	63.00	40.00	15.00	5.00	5.00
7:45 PM	72.00	49.00	22.00	9.00	8.00

Tide pole readings at Gurupur River during October 2005 (Contd...)

Tide pole reading(cms)					
Date/Time	17/10/05	18/10/05	19/10/05	20/10/05	21/10/05
8:00 PM	82.00	57.00	30.00	12.00	11.00
8:15 PM	88.00	67.00	41.00	19.00	15.00
8:30 PM	96.00	69.00	49.00	28.00	21.00
8:45 PM	103.00	77.00	50.00	35.00	24.00
9:00 PM	111.00	87.00	63.00	38.00	30.00
9:15 PM	120.00	95.00	68.00	47.00	36.00
9:30 PM	130.00	100.00	79.00	52.00	40.00
9:45 PM	140.00	110.00	85.00	59.00	45.00
10:00 PM	145.00	125.00	90.00	68.00	50.00
10:15 PM	153.00	129.00	100.00	78.00	60.00
10:30 PM	155.00	138.00	112.00	85.00	69.00
10:45 PM	159.00	142.00	121.00	91.00	75.00
11:00 PM	164.00	150.00	132.00	98.00	80.00
11:15 PM	167.00	159.00	139.00	110.00	88.00
11:30 PM	170.00	162.00	146.00	116.00	92.00
11:45 PM	169.00	166.00	150.00	125.00	100.00

Tide at Gurupur River during October 2005

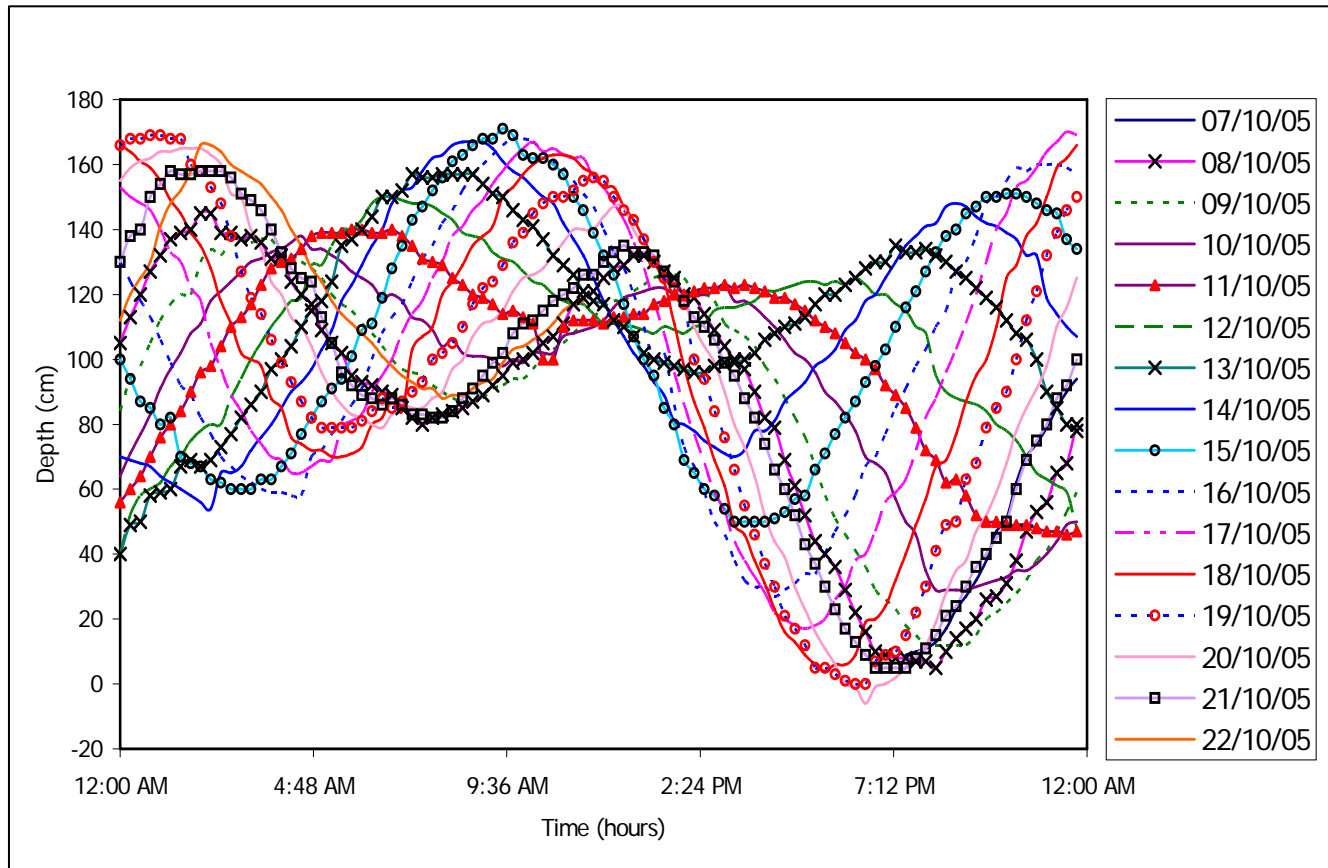


Fig. 6.7 Variation of the tide level at Gurupur River. (Fourth phase 07-10-05 to 22-10-05)

Tide pole readings at Netravathi River during October 2005

Tide pole reading in cm									
Date/ Time	08/10/05	09/10/05	10/10/05	11/10/05	12/10/05	13/10/05	14/10/05	15/10/05	16/10/05
12:00 AM		170.00	160.00	150.00	125.00	130.00	158.00	170.00	193.00
12:15 AM		175.00	168.00	155.00	130.00	134.00	157.00	165.00	190.00
12:30 AM		182.00	175.00	160.00	140.00	136.00	155.00	160.00	187.00
12:45 AM		190.00	180.00	165.00	145.00	140.00	153.00	155.00	184.00
1:00 AM		200.00	185.00	170.00	150.00	144.00	150.00	148.00	180.00
1:15 AM		205.00	190.00	173.00	155.00	147.00	149.00	142.00	178.00
1:30 AM		212.00	195.00	178.00	160.00	150.00	148.00	138.00	175.00
1:45 AM		218.00	200.00	182.00	165.00	155.00	147.00	136.00	170.00
2:00 AM		225.00	205.00	185.00	170.00	158.00	147.00	135.00	168.00
2:15 AM		230.00	210.00	190.00	180.00	167.00	146.00	134.00	165.00
2:30 AM		230.00	215.00	195.00	190.00	167.00	144.00	133.00	162.00
2:45 AM		229.00	216.00	200.00	195.00	171.00	143.00	131.00	160.00
3:00 AM		227.00	217.00	205.00	200.00	175.00	142.00	130.00	158.00
3:15 AM		227.00	218.00	210.00	205.00	180.00	141.00	130.00	154.00
3:30 AM		225.00	220.00	215.00	210.00	184.00	140.00	135.00	150.00
3:45 AM		223.00	222.00	220.00	215.00	190.00	138.00	139.00	145.00
4:00 AM		220.00	225.00	225.00	225.00	195.00	140.00	142.00	140.00
4:15 AM		216.00	227.00	227.00	230.00	200.00	143.00	145.00	137.00
4:30 AM		212.00	230.00	228.00	231.00	205.00	148.00	140.00	135.00
4:45 AM		210.00	227.00	229.00	230.00	210.00	153.00	145.00	140.00
5:00 AM		208.00	224.00	230.00	228.00	215.00	160.00	150.00	145.00
5:15 AM		207.00	220.00	230.00	226.00	220.00	165.00	157.00	149.00
5:30 AM		206.00	219.00	229.00	224.00	221.00	170.00	167.00	156.00
5:45 AM		205.00	218.00	229.00	220.00	220.00	180.00	173.00	159.00
6:00 AM		203.00	214.00	228.00	215.00	218.00	190.00	180.00	168.00
6:15 AM		200.00	212.00	228.00	210.00	214.00	200.00	185.00	173.00
6:30 AM		197.00	211.00	227.00	207.00	215.00	210.00	193.00	179.00
6:45 AM		192.00	209.00	226.00	206.00	216.00	218.00	200.00	184.00
7:00 AM		189.00	208.00	225.00	205.00	220.00	222.00	210.00	189.00

Tide pole readings at Netravathi River during October 2005 (Contd...)

Tide pole reading in cm									
Date / Time	08/10/05	09/10/05	10/10/05	11/10/05	12/10/05	13/10/05	14/10/05	15/10/05	16/10/05
7:15 AM		188.00	205.00	225.00	204.00	225.00	225.00	215.00	194.00
7:30 AM		187.00	203.00	220.00	208.00	229.00	227.00	220.00	203.00
7:45 AM		186.00	200.00	219.00	214.00	225.00	232.00	222.00	206.00
8:00 AM		185.00	199.00	219.00	213.00	225.00	234.00	225.00	210.00
8:15 AM	175.00	180.00	198.00	217.00	212.00	225.00	232.00	228.00	215.00
8:30 AM	177.00	175.00	197.00	213.00	211.00	228.00	233.00	230.00	223.00
8:45 AM	180.00	179.00	196.00	210.00	210.00	225.00	235.00	235.00	230.00
9:00 AM	181.00	180.00	194.00	209.00	208.00	224.00	235.00	238.00	235.00
9:15 AM	185.00	182.00	194.00	208.00	205.00	219.00	230.00	236.00	237.00
9:30 AM	187.00	185.00	193.00	208.00	202.00	214.00	229.00	240.00	239.00
9:45 AM	190.00	187.00	192.00	207.00	202.00	217.00	227.00	235.00	240.00
10:00 AM	195.00	189.00	191.00	206.00	198.00	212.00	225.00	231.00	240.00
10:15 AM	198.00	195.00	195.00	204.00	197.00	210.00	223.00	230.00	235.00
10:30 AM	200.00	197.00	197.00	202.00	195.00	206.00	220.00	228.00	230.00
10:45 AM	205.00	199.00	198.00	201.00	190.00	202.00	217.00	225.00	226.00
11:00 AM	205.00	200.00	199.00	200.00	189.00	200.00	214.00	223.00	220.00
11:15 AM	208.00	202.00	200.00	198.00	188.00	198.00	210.00	220.00	217.00
11:30 AM	210.00	203.00	200.00	196.00	185.00	193.00	205.00	215.00	215.00
11:45 AM	215.00	207.00	203.00	195.00	184.00	188.00	200.00	210.00	210.00
12:00 PM	220.00	211.00	205.00	193.00	182.00	185.00	190.00	203.00	207.00
12:15 PM	225.00	209.00	209.00	191.00	180.00	180.00	182.00	189.00	198.00
12:30 PM	225.00	211.00	211.00	190.00	180.00	179.00	179.00	184.00	193.00
12:45 PM	227.00	214.00	215.00	185.00	179.00	173.00	177.00	179.00	189.00
1:00 PM	227.00	218.00	216.00	185.00	178.00	170.00	167.00	165.00	180.00
1:15 PM	225.00	219.00	216.00	187.00	178.00	170.00	162.00	160.00	170.00
1:30 PM	220.00	220.00	214.00	190.00	177.00	169.00	152.00	151.00	160.00
1:45 PM	216.00	218.00	213.00	190.00	177.00	167.00	150.00	144.00	150.00
2:00 PM	215.00	204.00	212.00	192.00	179.00	166.00	150.00	137.00	140.00
2:15 PM	209.00	200.00	208.00	194.00	180.00	165.00	149.00	133.00	132.00
2:30 PM	205.00	207.00	209.00	194.00	182.00	165.00	148.00	130.00	122.00

Tide pole readings at Netravathi River during October 2005 (Contd...)

Tide pole reading in cm									
Date / Time	08/10/05	09/10/05	10/10/05	11/10/05	12/10/05	13/10/05	14/10/05	15/10/05	16/10/05
2:45 PM	200.00	205.00	209.00	194.00	185.00	167.00	145.00	128.00	114.00
3:00 PM	195.00	203.00	211.00	191.00	187.00	168.00	142.00	125.00	108.00
3:15 PM	192.00	201.00	212.00	190.00	185.00	170.00	140.00	123.00	105.00
3:30 PM	190.00	197.00	209.00	189.00	187.00	170.00	145.00	120.00	100.00
3:45 PM	183.00	192.00	208.00	190.00	190.00	169.00	148.00	120.00	99.00
4:00 PM	177.00	185.00	206.00	190.00	192.00	173.00	150.00	119.00	99.00
4:15 PM	170.00	180.00	202.00	189.00	191.00	175.00	154.00	118.00	95.00
4:30 PM	163.00	175.00	198.00	187.00	190.00	179.00	157.00	125.00	97.00
4:45 PM	155.00	168.00	197.00	186.00	190.00	182.00	160.00	132.00	100.00
5:00 PM	145.00	162.00	194.00	186.00	191.00	185.00	165.00	140.00	110.00
5:15 PM	135.00	150.00	190.00	185.00	191.00	190.00	168.00	151.00	112.00
5:30 PM	130.00	145.00	182.00	180.00	191.00	191.00	172.00	150.00	115.00
5:45 PM	125.00	138.00	180.00	179.00	192.00	191.00	176.00	149.00	118.00
6:00 PM	120.00	134.00	175.00	175.00	192.00	193.00	180.00	150.00	125.00
6:15 PM	115.00	130.00	174.00	173.00	192.00	194.00	184.00	159.00	130.00
6:30 PM	110.00	125.00	170.00	170.00	191.00	196.00	186.00	162.00	140.00
6:45 PM	100.00	120.00	165.00	169.00	192.00	199.00	190.00	162.00	147.00
7:00 PM	99.00	115.00	150.00	165.00	192.00	204.00	193.00	174.00	152.00
7:15 PM	99.00	110.00	155.00	160.00	189.00	204.00	196.00	180.00	160.00
7:30 PM	99.00	109.00	145.00	155.00	188.00	203.00	200.00	185.00	165.00
7:45 PM	96.00	108.00	140.00	150.00	185.00	203.00	205.00	190.00	170.00
8:00 PM	95.00	108.00	138.00	145.00	184.00	202.00	208.00	199.00	174.00
8:15 PM	95.00	105.00	125.00	140.00	180.00	200.00	210.00	200.00	180.00
8:30 PM	105.00	105.00	123.00	135.00	177.00	197.00	213.00	207.00	185.00
8:45 PM	110.00	107.00	120.00	130.00	174.00	195.00	215.00	215.00	190.00
9:00 PM	115.00	110.00	125.00	125.00	171.00	193.00	210.00	217.00	198.00
9:15 PM	120.00	112.00	126.00	123.00	167.00	180.00	213.00	220.00	203.00
9:30 PM	123.00	115.00	126.00	122.00	163.00	179.00	215.00	220.00	210.00
9:45 PM	125.00	117.00	127.00	121.00	160.00	178.00	216.00	219.00	218.00
10:00 PM	130.00	120.00	128.00	120.00	155.00	176.00	216.00	220.00	222.00

Tide pole readings at Netravathi River during October 2005 (Contd...)

Tide pole reading in cm									
Date / Time	08/10/05	09/10/05	10/10/05	11/10/05	12/10/05	13/10/05	14/10/05	15/10/05	16/10/05
10:15 PM	135.00	122.00	129.00	117.00	150.00	175.00	213.00	218.00	225.00
10:30 PM	142.00	125.00	130.00	115.00	145.00	173.00	209.00	219.00	224.00
10:45 PM	145.00	130.00	131.00	115.00	140.00	170.00	205.00	215.00	228.00
11:00 PM	150.00	135.00	135.00	118.00	138.00	168.00	200.00	210.00	230.00
11:15 PM	156.00	140.00	137.00	119.00	135.00	165.00	195.00	203.00	230.00
11:30 PM	160.00	150.00	140.00	119.00	131.00	163.00	189.00	198.00	224.00
11:45 PM	165.00	155.00	145.00	120.00	128.00	160.00	176.00	195.00	220.00

Tide pole readings at Netravathi River during October 2005 (Contd...)

Tide Pole reading (cms)						
Date / Time	17/10/05	18/10/05	19/10/05	20/10/05	21/10/05	22/10/05
12:00 AM	215.00	235.00	230.00	229.00	204.00	210.00
12:15 AM	212.00	230.00	230.00	231.00	210.00	212.00
12:30 AM	210.00	224.00	229.00	235.00	215.00	216.00
12:45 AM	206.00	220.00	227.00	235.00	217.00	218.00
1:00 AM	201.00	215.00	226.00	234.00	220.00	220.00
1:15 AM	196.00	212.00	223.00	233.00	222.00	222.00
1:30 AM	190.00	216.00	220.00	231.00	225.00	224.00
1:45 AM	185.00	210.00	217.00	228.00	227.00	226.00
2:00 AM	180.00	205.00	215.00	218.00	227.00	228.00
2:15 AM	175.00	195.00	214.00	215.00	225.00	228.00
2:30 AM	169.00	180.00	212.00	212.00	220.00	224.00
2:45 AM	164.00	170.00	210.00	208.00	215.00	222.00
3:00 AM	155.00	160.00	207.00	204.00	213.00	220.00
3:15 AM	148.00	152.00	198.00	200.00	210.00	216.00
3:30 AM	140.00	147.00	192.00	196.00	205.00	214.00
3:45 AM	138.00	143.00	185.00	190.00	203.00	212.00
4:00 AM	136.00	140.00	175.00	185.00	200.00	206.00
4:15 AM	136.00	138.00	165.00	180.00	195.00	204.00
4:30 AM	140.00	138.00	155.00	175.00	190.00	198.00
4:45 AM	143.00	138.00	150.00	170.00	185.00	195.00
5:00 AM	148.00	140.00	147.00	165.00	178.00	191.00
5:15 AM	150.00	142.00	146.00	160.00	170.00	186.00
5:30 AM	153.00	143.00	144.00	155.00	162.00	184.00
5:45 AM	155.00	144.00	144.00	152.00	157.00	180.00

Tide pole readings at Netravathi River during October 2005 (Contd...)

Tide Pole reading (cms)						
Date / Time	17/10/05	18/10/05	19/10/05	20/10/05	21/10/05	22/10/05
6:00 AM	158.00	146.00	145.00	150.00	155.00	175.00
6:15 AM	162.00	150.00	148.00	148.00	153.00	170.00
6:30 AM	168.00	155.00	155.00	152.00	151.00	166.00
6:45 AM	173.00	162.00	156.00	155.00	151.00	164.00
7:00 AM	180.00	170.00	158.00	157.00	153.00	162.00
7:15 AM	185.00	175.00	160.00	158.00	150.00	161.00
7:30 AM	190.00	179.00	163.00	158.00	150.00	160.00
7:45 AM	196.00	184.00	170.00	160.00	151.00	160.00
8:00 AM	202.00	193.00	173.00	164.00	152.00	159.00
8:15 AM	208.00	197.00	178.00	168.00	153.00	158.00
8:30 AM	212.00	200.00	181.00	170.00	160.00	160.00
8:45 AM	217.00	202.00	190.00	174.00	166.00	165.00
9:00 AM	224.00	208.00	194.00	180.00	169.00	167.00
9:15 AM	228.00	211.00	198.00	183.00	173.00	169.00
9:30 AM	229.00	218.00	200.00	187.00	176.00	171.00
9:45 AM	233.00	222.00	205.00	190.00	180.00	175.00
10:00 AM	236.00	222.00	210.00	193.00	180.00	178.00
10:15 AM	237.00	230.00	214.00	197.00	184.00	180.00
10:30 AM	235.00	232.00	214.00	198.00	184.00	181.00
10:45 AM	235.00	230.00	218.00	200.00	187.00	185.00
11:00 AM	230.00	228.00	219.00	202.00	190.00	190.00
11:15 AM	226.00	226.00	220.00	207.00	192.00	190.00
11:30 AM	222.00	225.00	220.00	208.00	199.00	190.00
11:45 AM	219.00	220.00	222.00	210.00	202.00	192.00
12:00 PM	215.00	220.00	225.00	210.00	203.00	195.00
12:15 PM	209.00	219.00	220.00	214.00	205.00	198.00
12:30 PM	202.00	216.00	215.00	215.00	205.00	
12:45 PM	198.00	211.00	210.00	210.00	202.00	

Tide pole readings at Netravathi River during October 2005 (Contd...)

Tide Pole reading (cms)					
Date / Time	17/10/05	18/10/05	19/10/05	20/10/05	21/10/05
1:00 PM	190.00	204.00	206.00	203.00	200.00
1:15 PM	180.00	199.00	200.00	199.00	198.00
1:30 PM	172.00	194.00	196.00	197.00	190.00
1:45 PM	162.00	179.00	190.00	190.00	189.00
2:00 PM	150.00	168.00	188.00	186.00	186.00
2:15 PM	141.00	153.00	179.00	180.00	179.00
2:30 PM	136.00	147.00	167.00	171.00	178.00
2:45 PM	122.00	135.00	156.00	169.00	175.00
3:00 PM	116.00	124.00	149.00	160.00	171.00
3:15 PM	109.00	115.00	136.00	154.00	164.00
3:30 PM	103.00	110.00	128.00	141.00	159.00
3:45 PM	96.00	101.00	115.00	136.00	151.00
4:00 PM	95.00	99.00	102.00	120.00	140.00
4:15 PM	90.00	88.00	99.00	115.00	134.00
4:30 PM	87.00	82.00	90.00	104.00	126.00
4:45 PM	86.00	79.00	84.00	100.00	118.00
5:00 PM	88.00	76.00	80.00	90.00	110.00
5:15 PM	89.00	73.00	73.00	81.00	103.00
5:30 PM	91.00	74.00	72.00	79.00	97.00
5:45 PM	99.00	78.00	72.00	74.00	90.00
6:00 PM	104.00	78.00	72.00	69.00	85.00
6:15 PM	108.00	83.00	68.00	68.00	80.00
6:30 PM	114.00	89.00	68.00	68.00	78.00
6:45 PM	120.00	92.00	75.00	70.00	77.00
7:00 PM	129.00	100.00	78.00	70.00	77.00
7:15 PM	140.00	108.00	85.00	74.00	76.00
7:30 PM	145.00	116.00	90.00	80.00	76.00
7:45 PM	151.00	122.00	100.00	85.00	80.00
8:00 PM	160.00	132.00	110.00	90.00	84.00
8:15 PM	165.00	140.00	120.00	95.00	90.00
8:30 PM	170.00	142.00	128.00	100.00	95.00
8:45 PM	180.00	150.00	133.00	105.00	100.00

Tide pole readings at Netravathi River during October 2005 (Contd...)

Tide Pole reading (cms)					
Date / Time	17/10/05	18/10/05	19/10/05	20/10/05	21/10/05
9:00 PM	190.00	161.00	140.00	110.00	105.00
9:15 PM	195.00	173.00	145.00	115.00	110.00
9:30 PM	200.00	182.00	150.00	125.00	115.00
9:45 PM	208.00	190.00	160.00	135.00	120.00
10:00 PM	215.00	200.00	170.00	142.00	130.00
10:15 PM	221.00	205.00	180.00	150.00	140.00
10:30 PM	226.00	210.00	190.00	160.00	152.00
10:45 PM	232.00	218.00	200.00	170.00	165.00
11:00 PM	238.00	225.00	210.00	180.00	180.00
11:15 PM	240.00	230.00	218.00	190.00	190.00
11:30 PM	242.00	232.00	221.00	196.00	200.00
11:45 PM	237.00	233.00	225.00	200.00	208.00

Tide at Netravathi River during October 2005

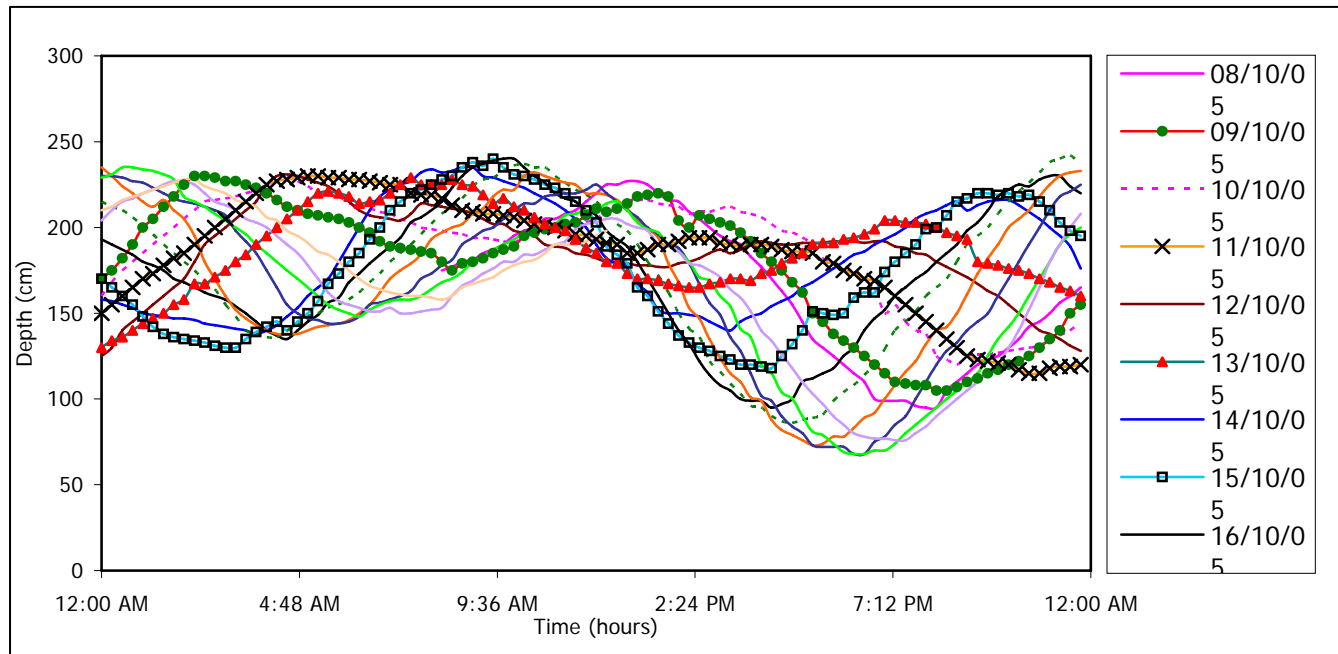


Fig. 6.8 Variation of the tide level at Netravathi River (Fourth phase 07-10-05 to 22-10-05)

GRID SAMPLE CHARACTERISTICS

Location sketch of sample points taken during November 2005

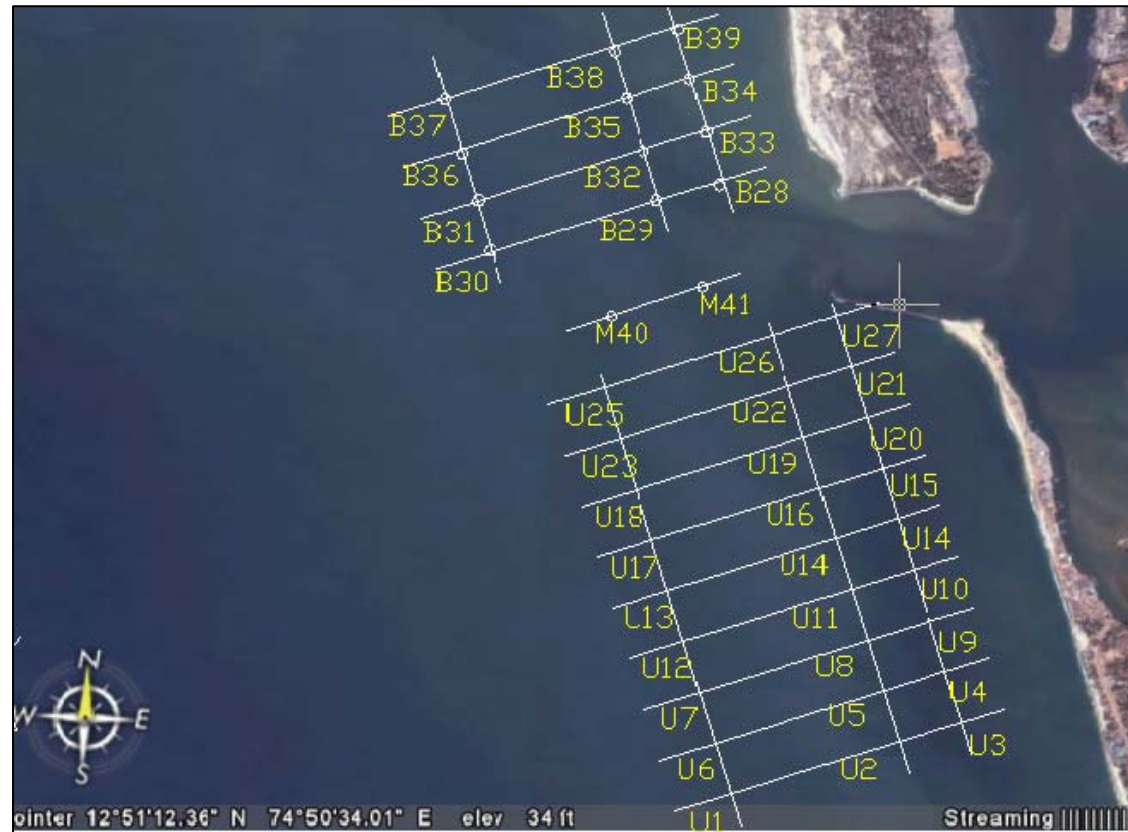


Fig. 7.1 Location sketch showing various grid points

Grain size characteristics of grid samples during November 2005

Bengre

Sample no	D16 (μm)	D50 (μm)	D84 (μm)
B28	189.5	108.8	78
B33	171	100.2	77
B34	210	117	79.7
B39	153.9	94.8	75.9
B29	0.75	1.9	3.2
B32	3.55	11.2	43.2
B35	4.35	13.64	49
B38	3.64	11.87	45.44
B30	3.93	11.79	39.06
B31	0.75	1.95	3.1
B36	3.46	12.23	52.86
B37	3.46	11.14	41.2

River Mouth

Sample no	D16 (μm)	D50 (μm)	D84 (μm)
M40	3.21	11.23	49.01
M41	225.3	165	148.7

Ulla

Sample no	D16 (µm)	D50 (µm)	D84 (µm)
U3	4.31	15.1	81.18
U4	140	93	77
U9	4.81	82.7	196.31
U10	4.4	26.68	145.04
U15	183	108.8	79.9
U16	176	108.8	77
U21	138	88	31
U22	143	89	74
U2	4.46	15.71	66.34
U5	3.21	8.98	24.18
U8	3.93	15.58	73.38
U11	4.69	16.58	68.63
U14	3.95	12.13	44.3
U17	3.72	13.36	50.26
U20	5.2	17.5	81.18
U23	3.83	16.41	94.44
U26	12.87	105.43	196.19
U1	7.57	81.39	206.47
U6	3.93	14.55	63.07
U7	3.78	13.87	57.02
U12	4.03	16.78	64.69
U13	3.95	16.68	87.56
U18	3.41	13.8	66.34
U19	3.41	12.99	52.86
U24	3.55	12.04	42.12
U25	3.74	15.34	87.56

Grain Size Distribution Curve

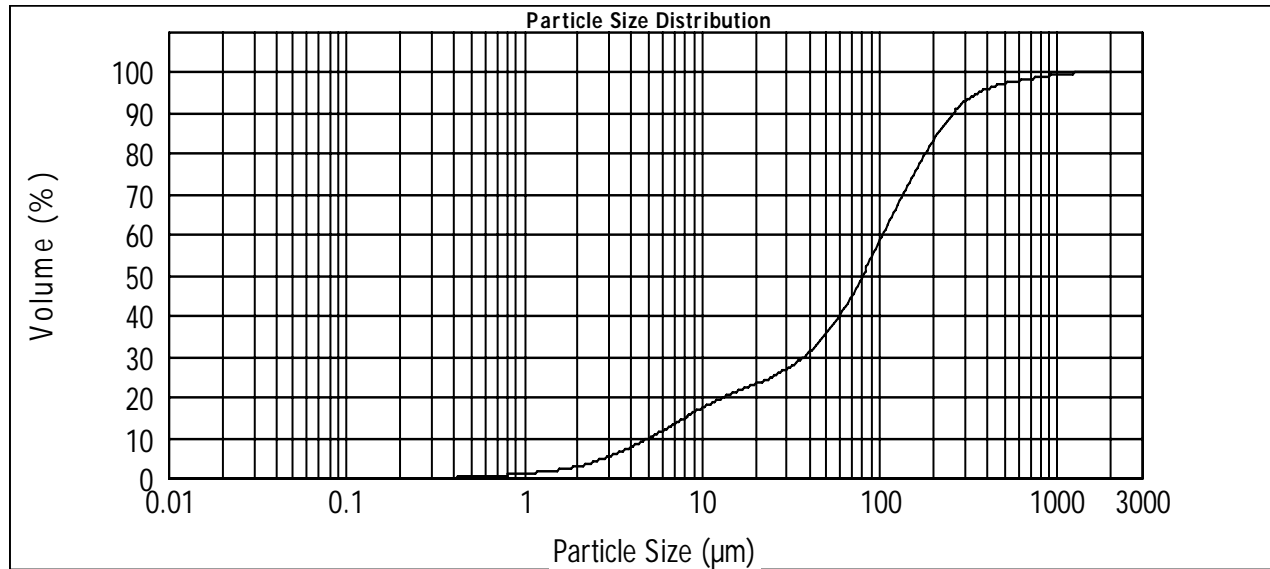


Fig. 7.2 Grid point U1

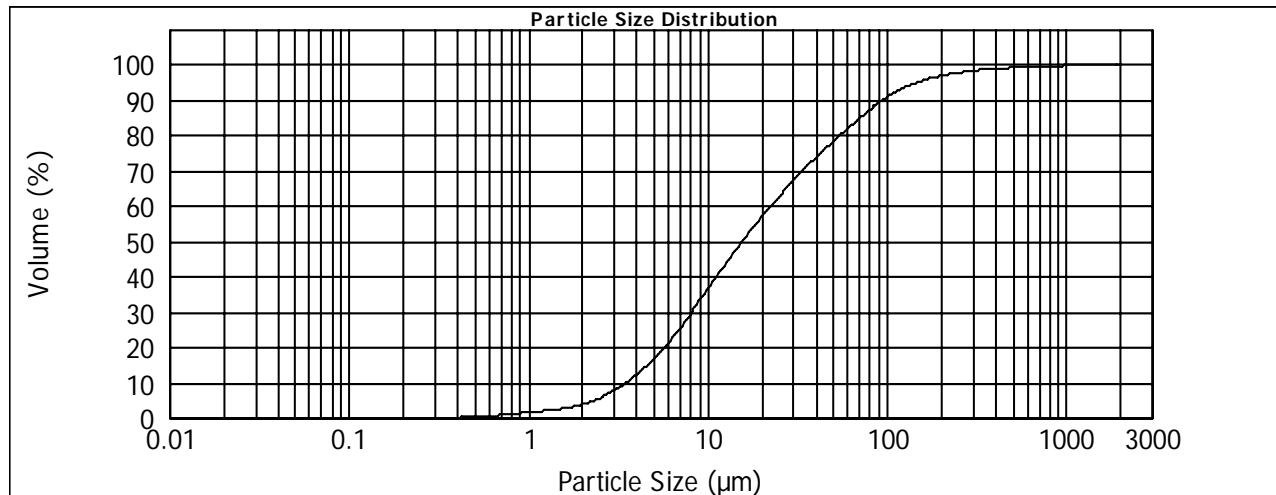


Fig. 7.3 Grid point U2

Grain Size Distribution Curve

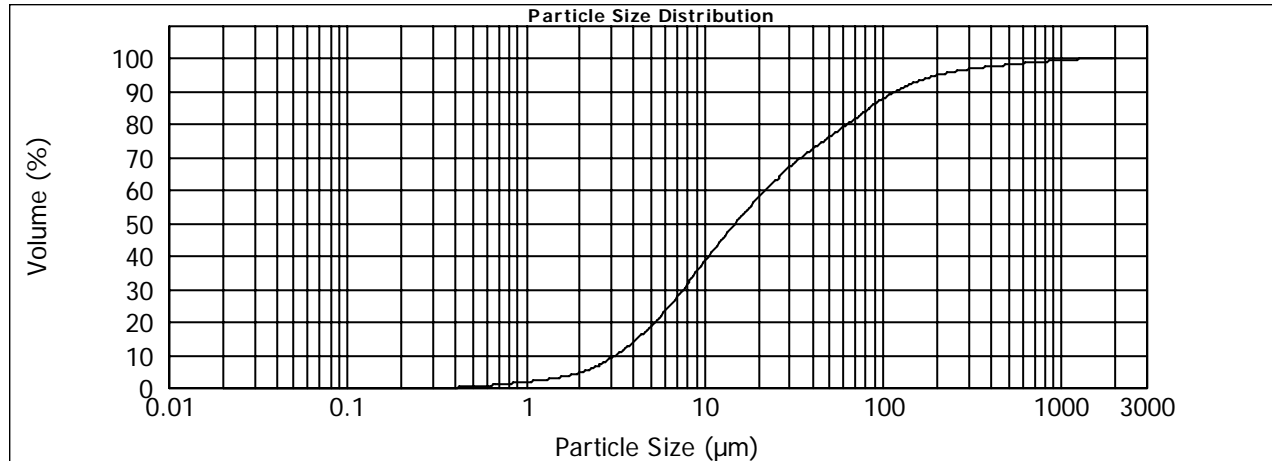


Fig. 7.4 Grid point U3

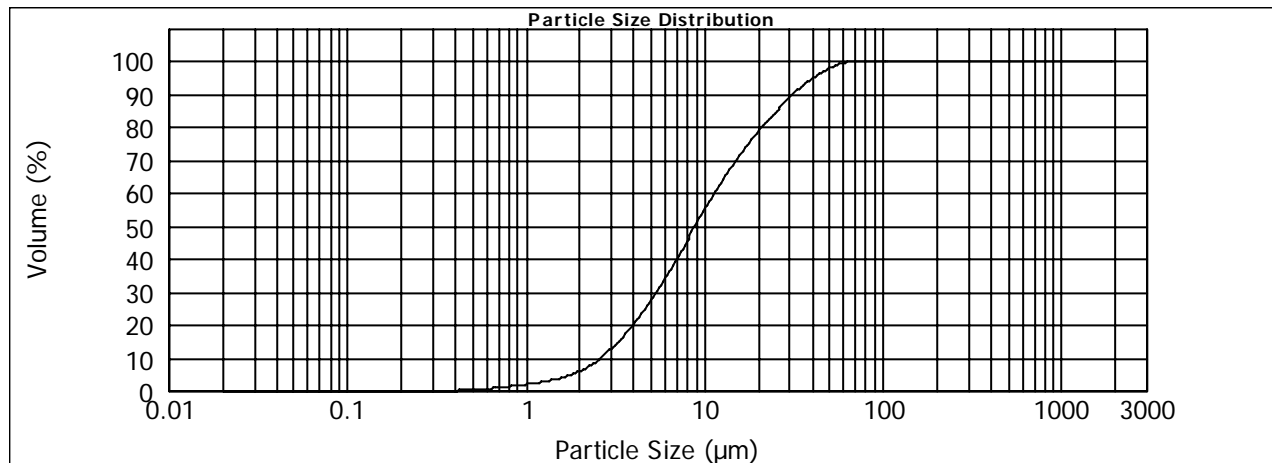


Fig. 7.5 Grid point U5

Grain Size Distribution Curve

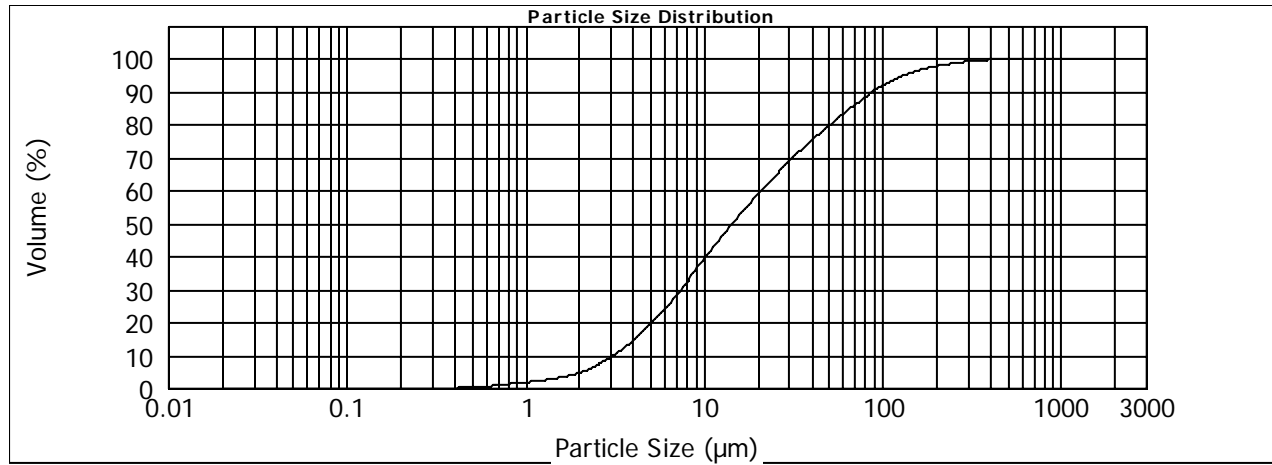


Fig. 7.6 Grid point U6

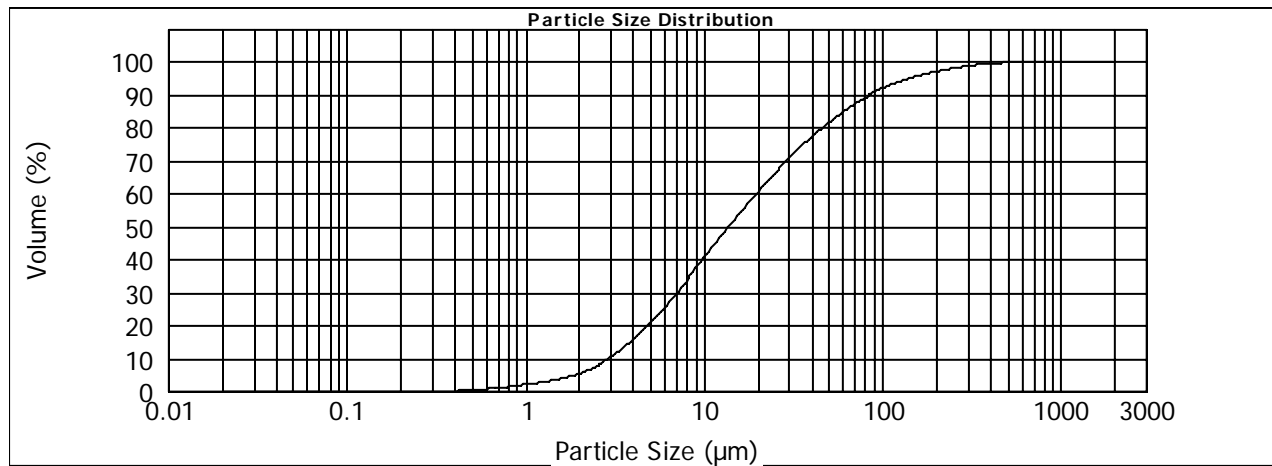


Fig. 7.7 Grid point U6

Grain Size Distribution Curve

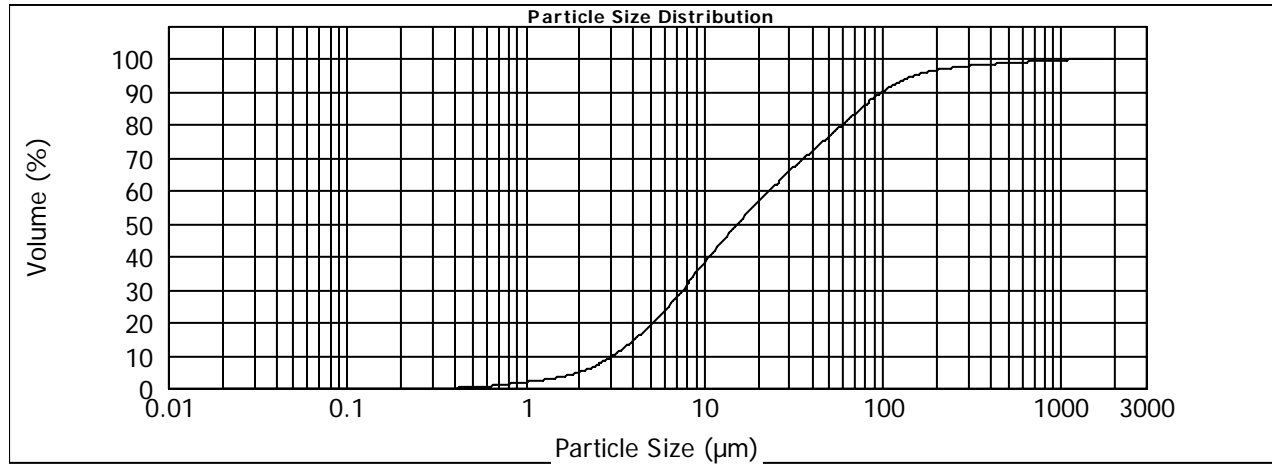


Fig. 7.8 Grid point U8

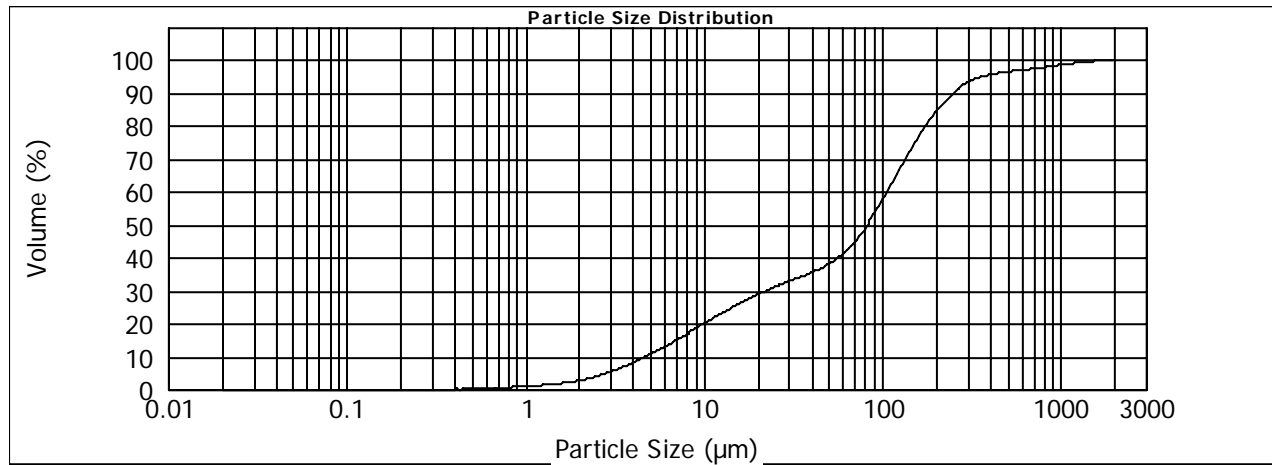


Fig. 7.9 Grid point U9

Grain Size Distribution Curve

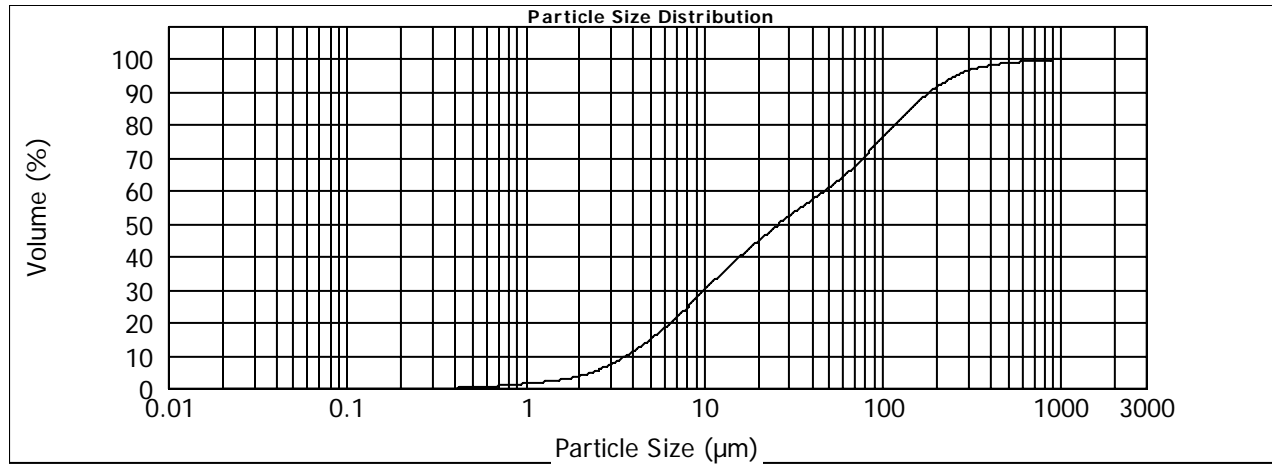


Fig. 7.10 Grid point U10

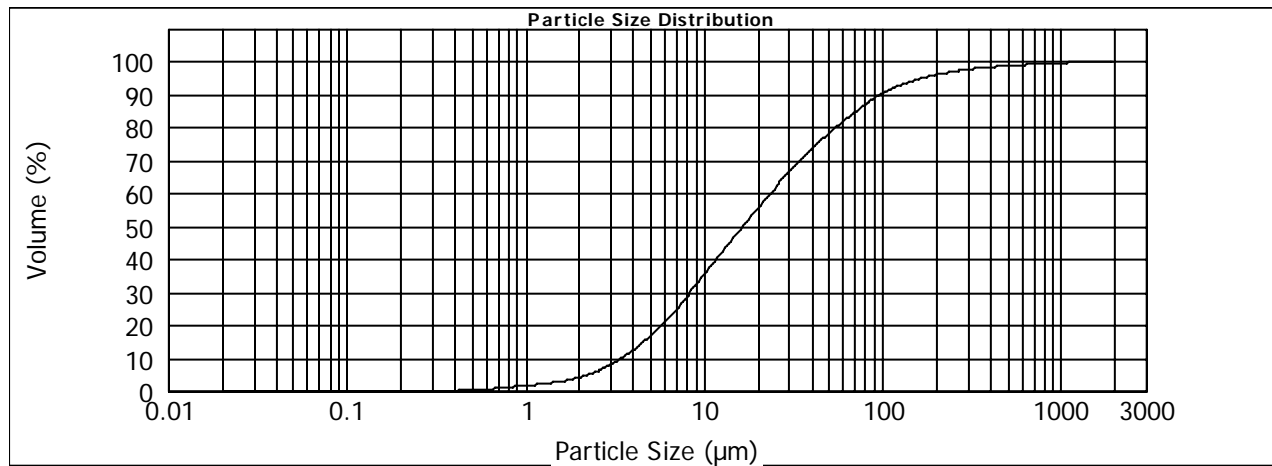


Fig. 7.11 Grid point U11

Grain Size Distribution Curve

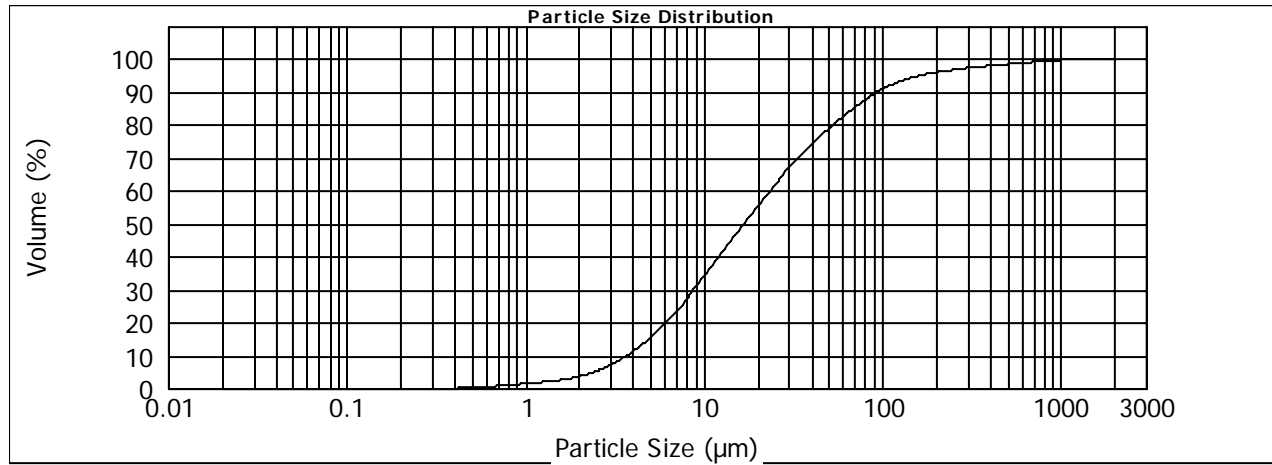


Fig. 7.12 Grid point U12

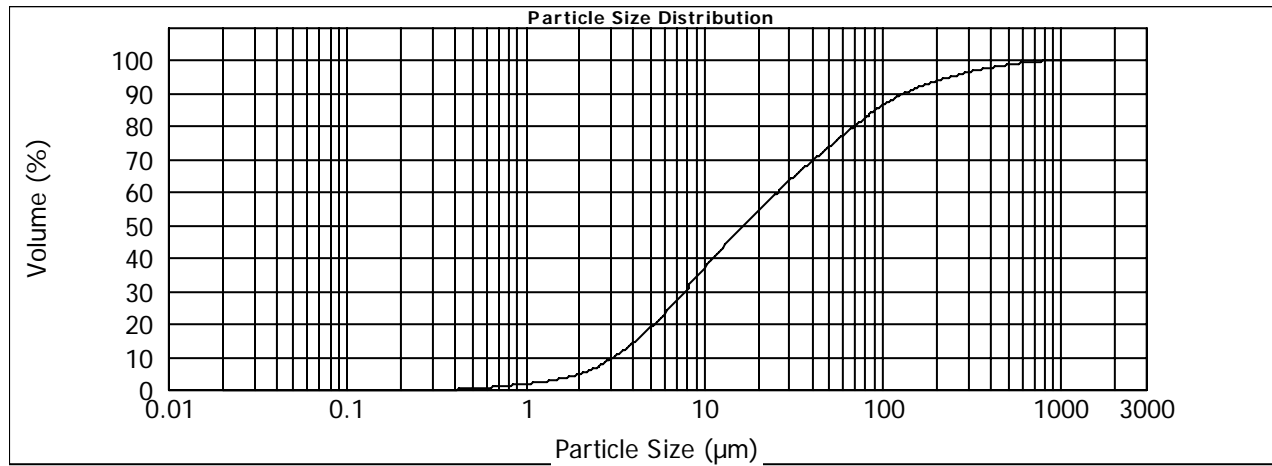


Fig. 7.13 Grid point U13

Grain Size Distribution Curve

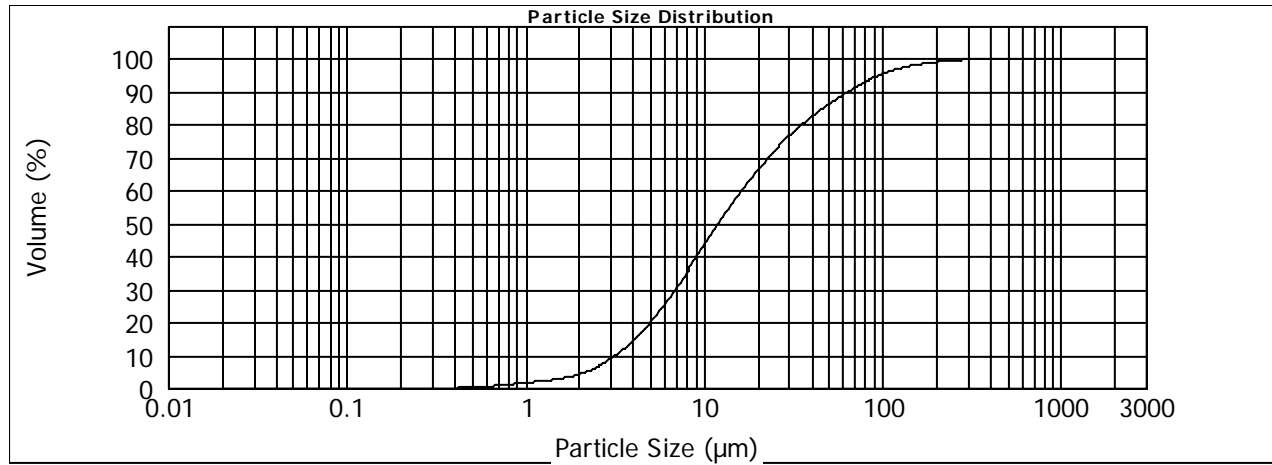


Fig. 7.14 Grid point U14

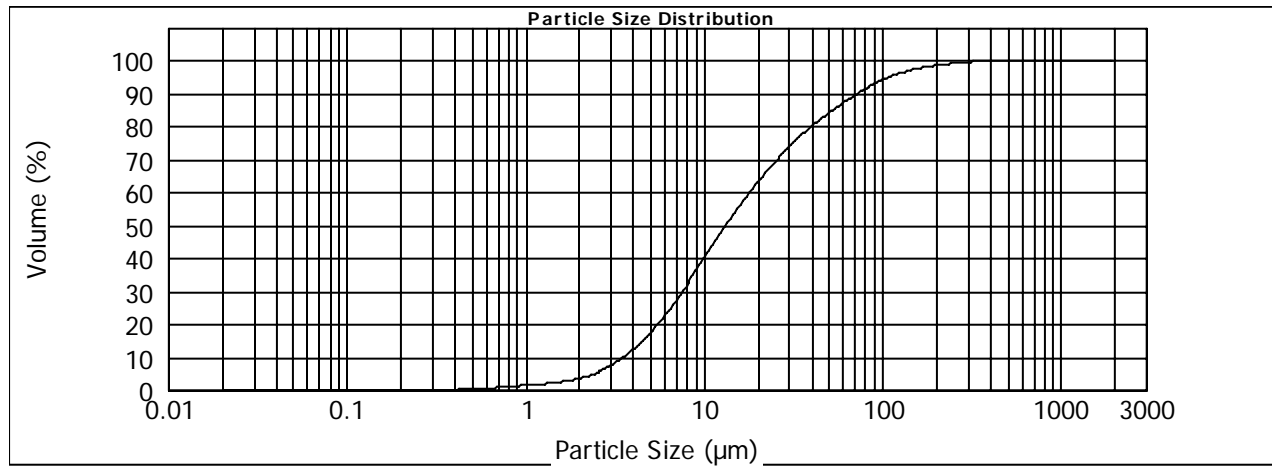


Fig. 7.15 Grid point U17

Grain Size Distribution Curve

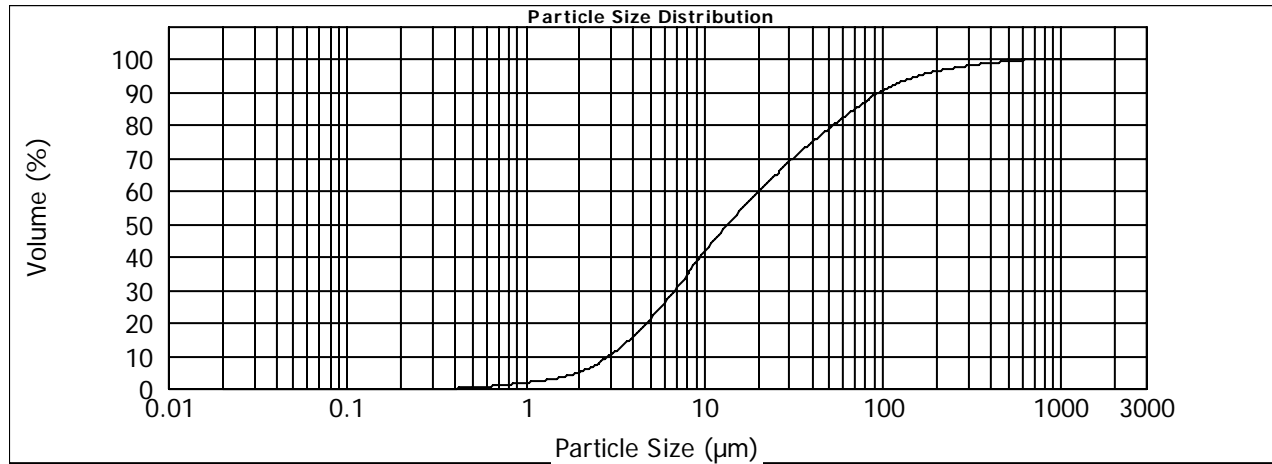


Fig. 7.16 Grid point U18

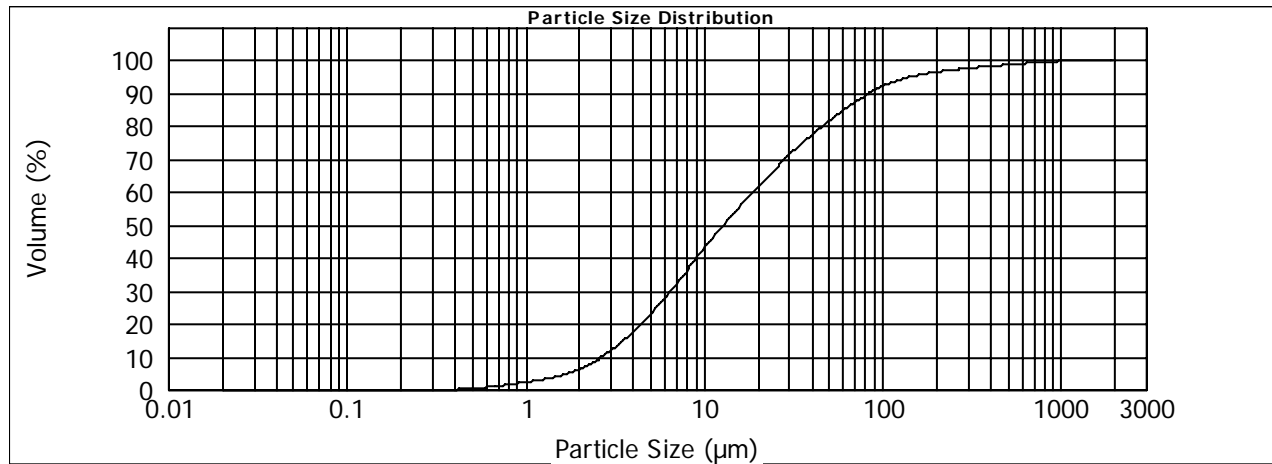


Fig. 7.17 Grid point U19

Grain Size Distribution Curve

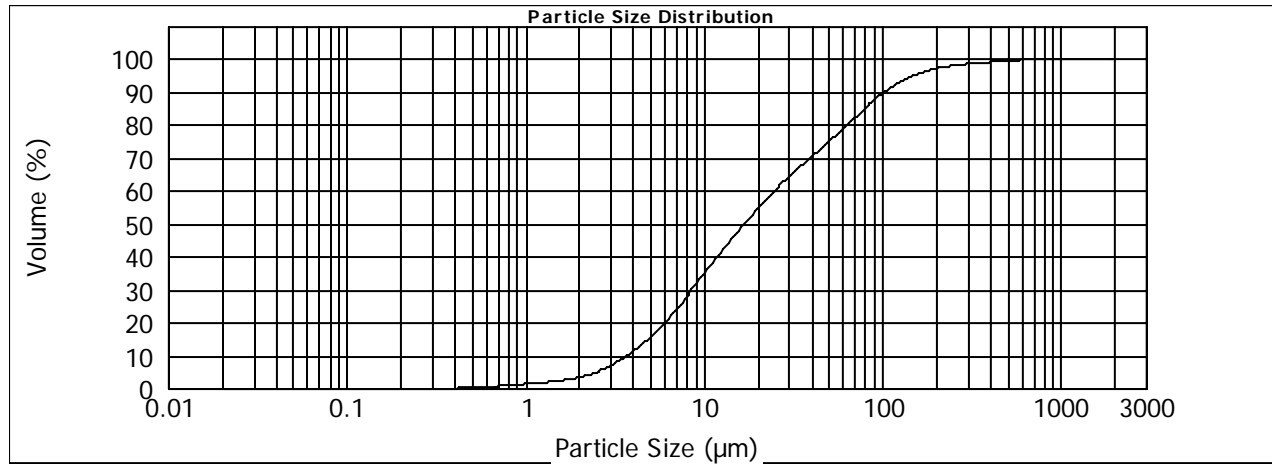


Fig. 7.18 Grid point U20

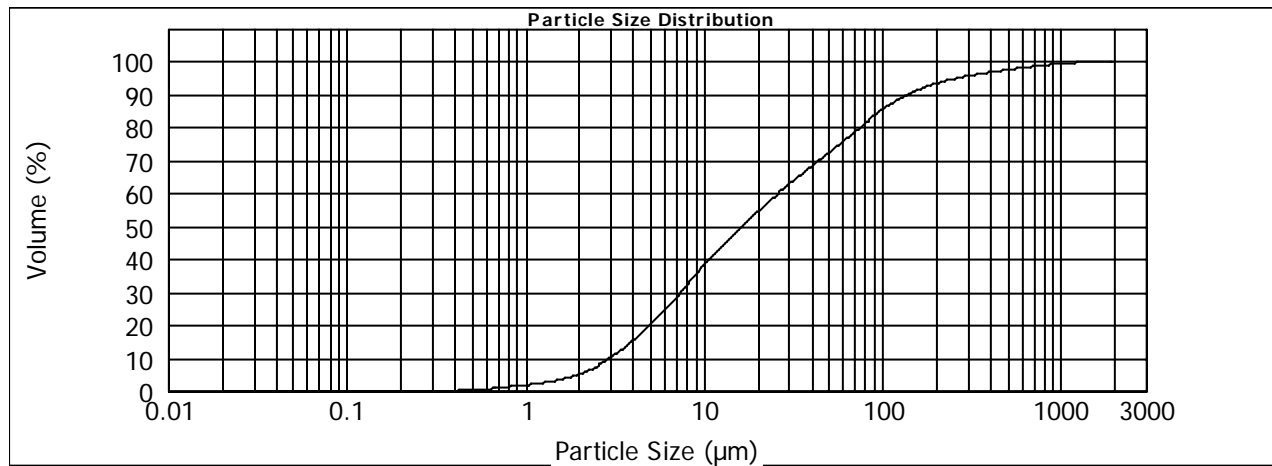


Fig. 7.19 Grid point U23

Grain Size Distribution Curve

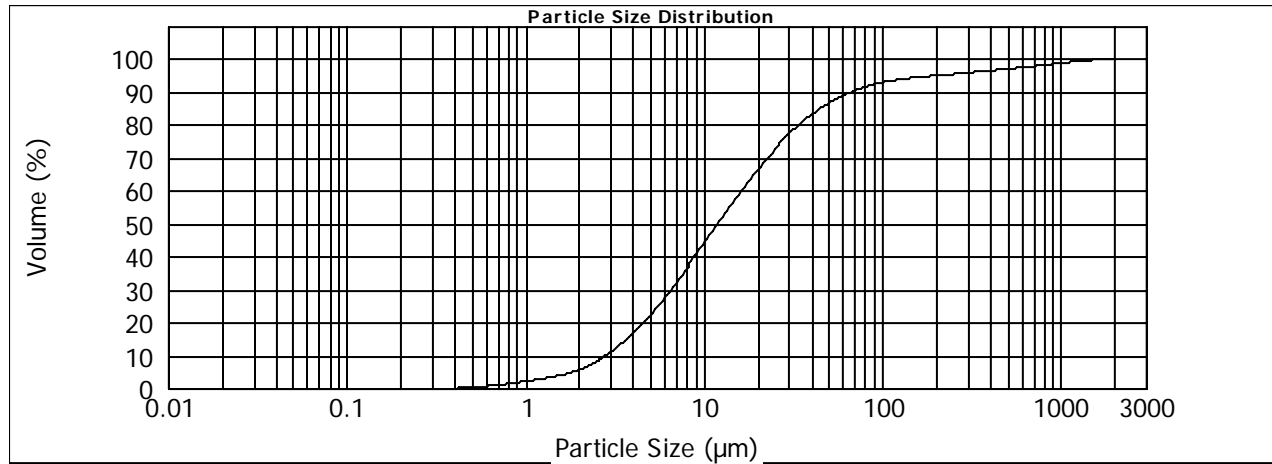


Fig. 7.20 Grid point U24

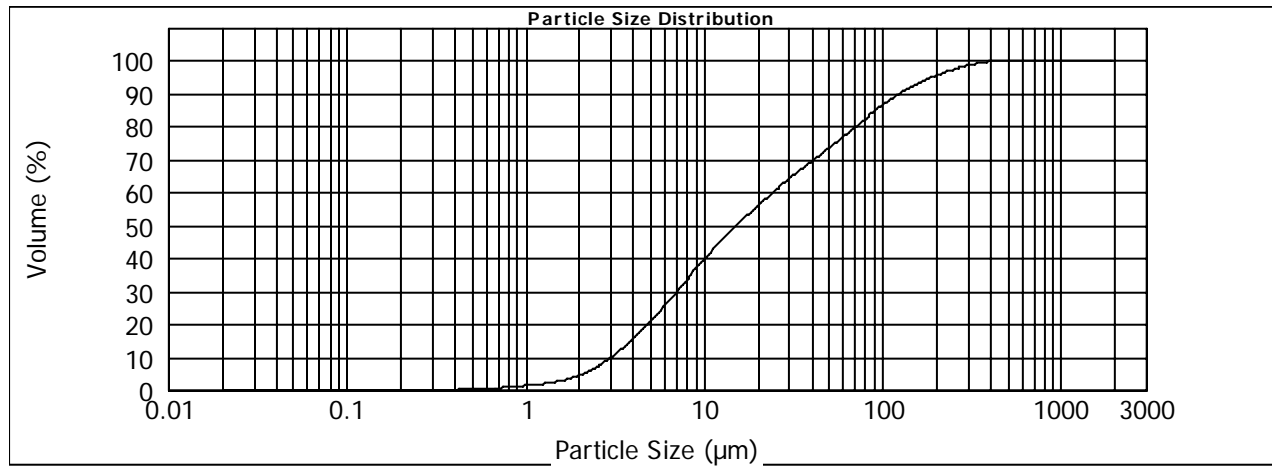


Fig. 7.21 Grid point U25

Grain Size Distribution Curve

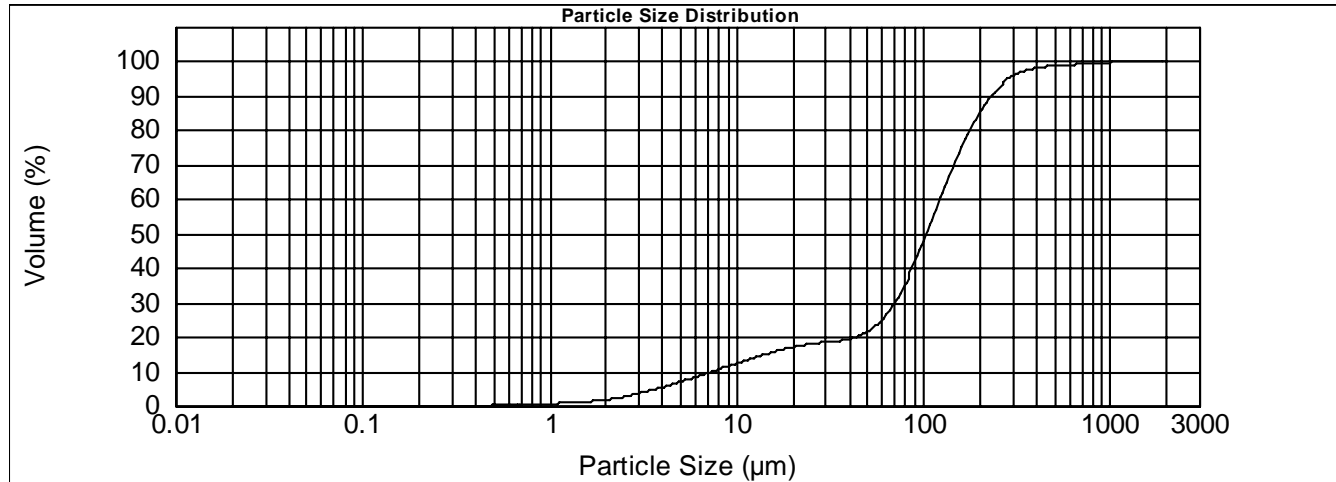


Fig. 7.22 Grid point U26

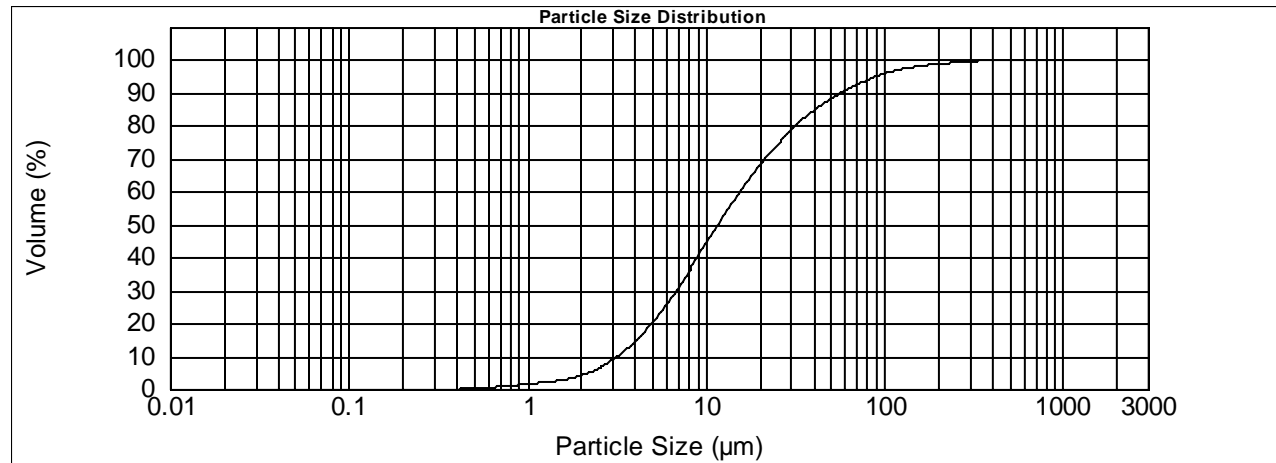


Fig. 7.23 Grid point B30

Grain Size Distribution Curve

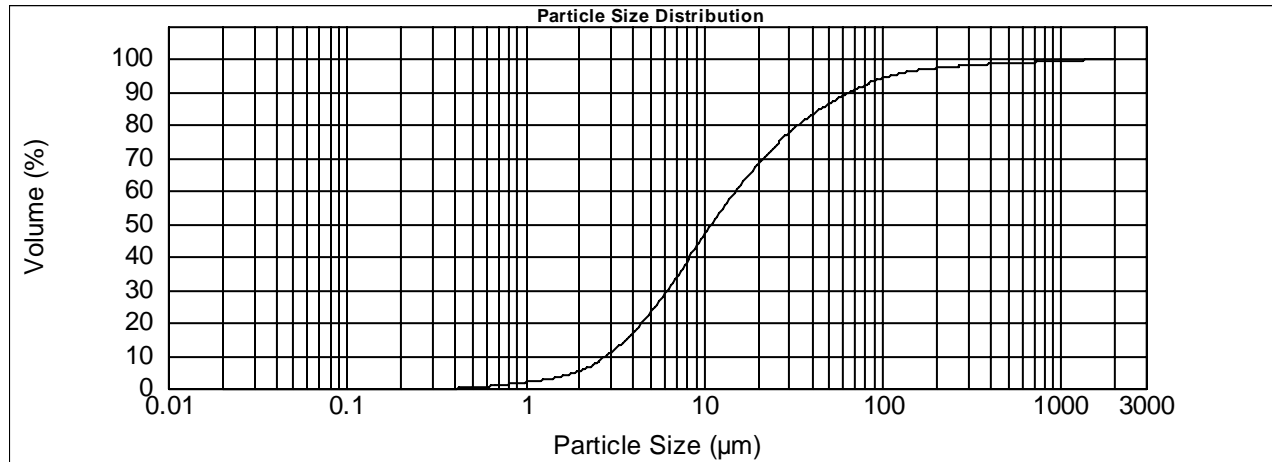


Fig. 7.24 Grid point B32

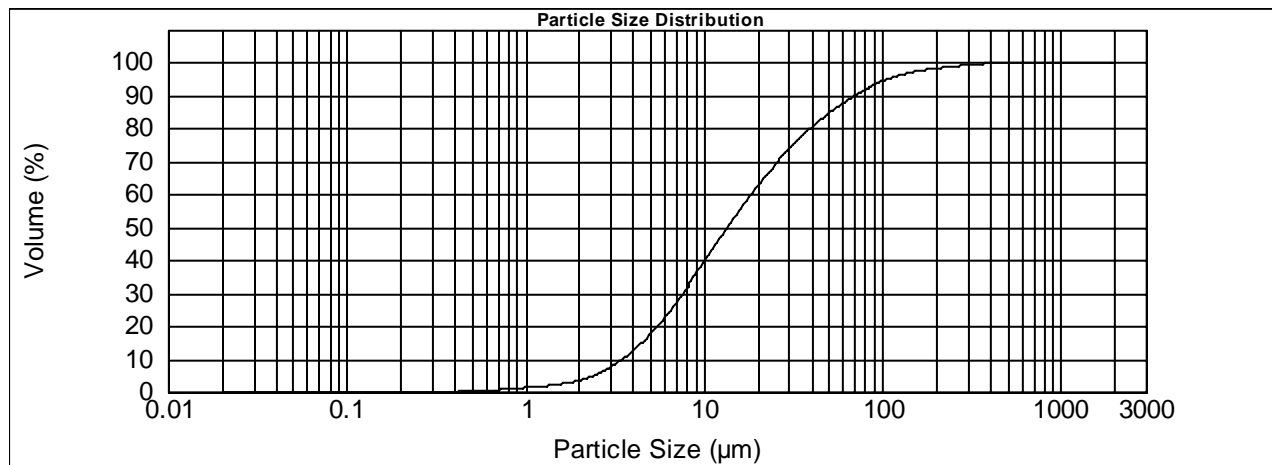


Fig. 7.25 Grid point B35

Grain Size Distribution Curve

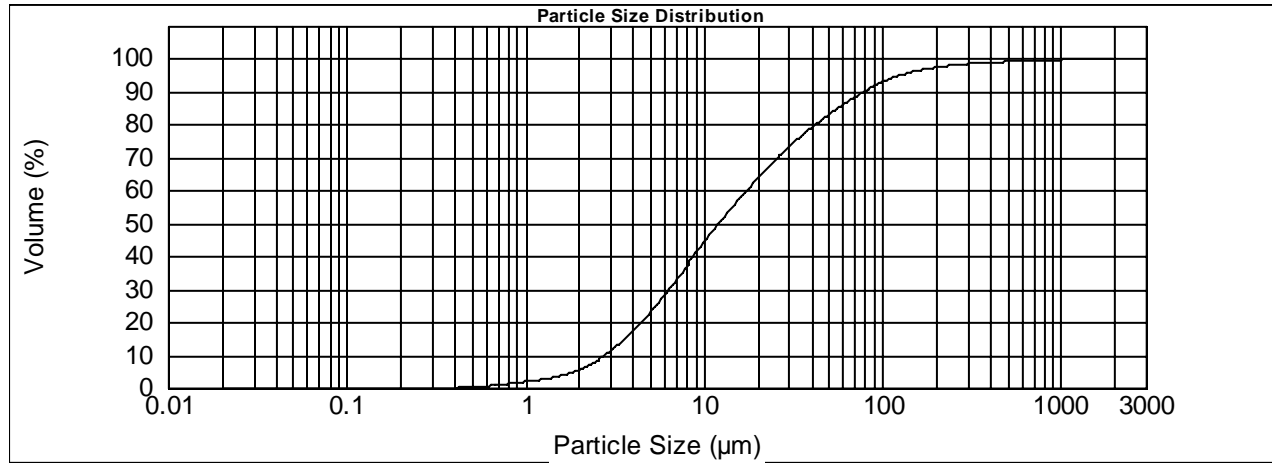


Fig. 7.26 Grid point B36

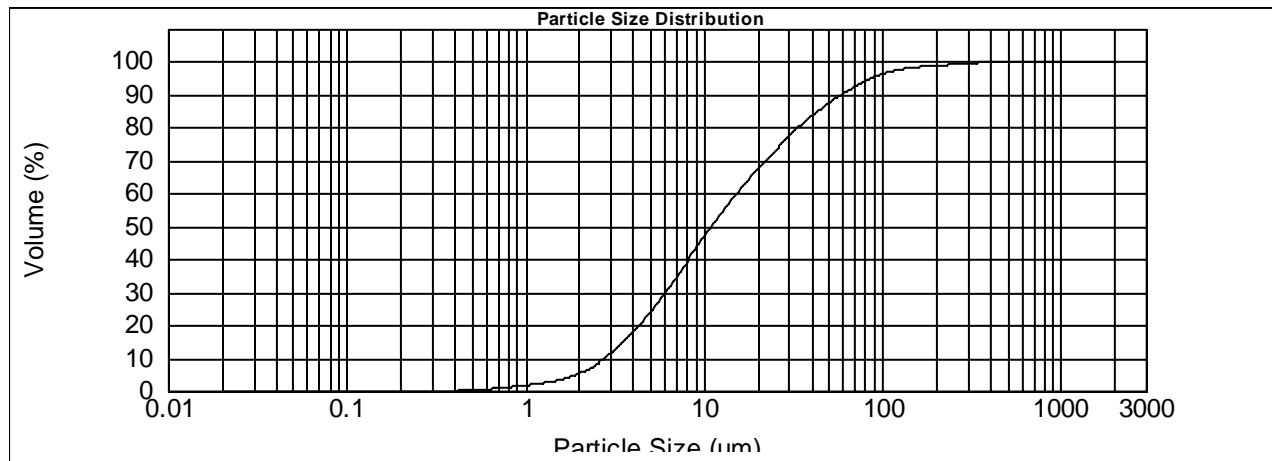


Fig. 7.27 Grid point B37

Grain Size Distribution Curve

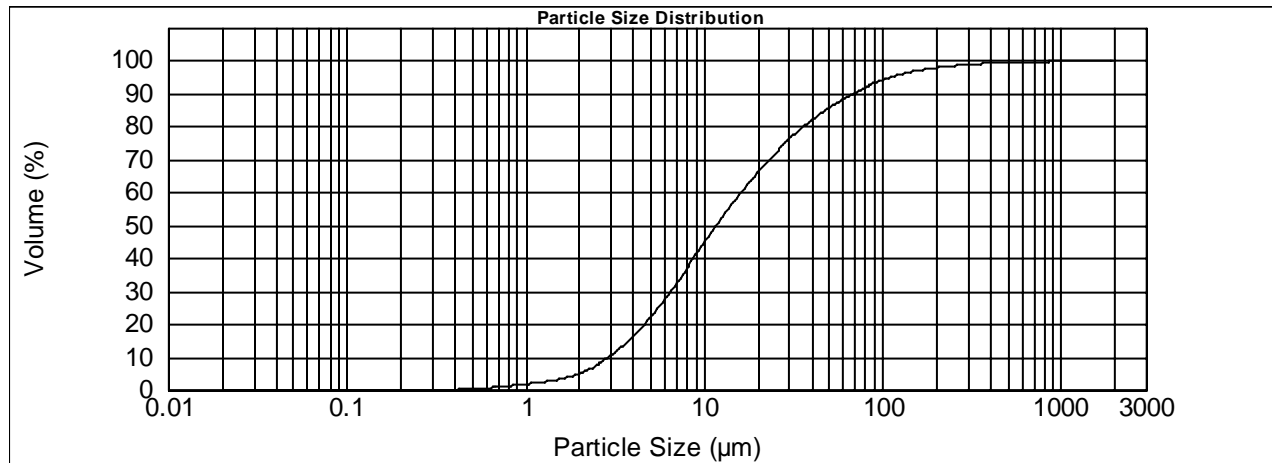


Fig. 7.28 Grid point B38

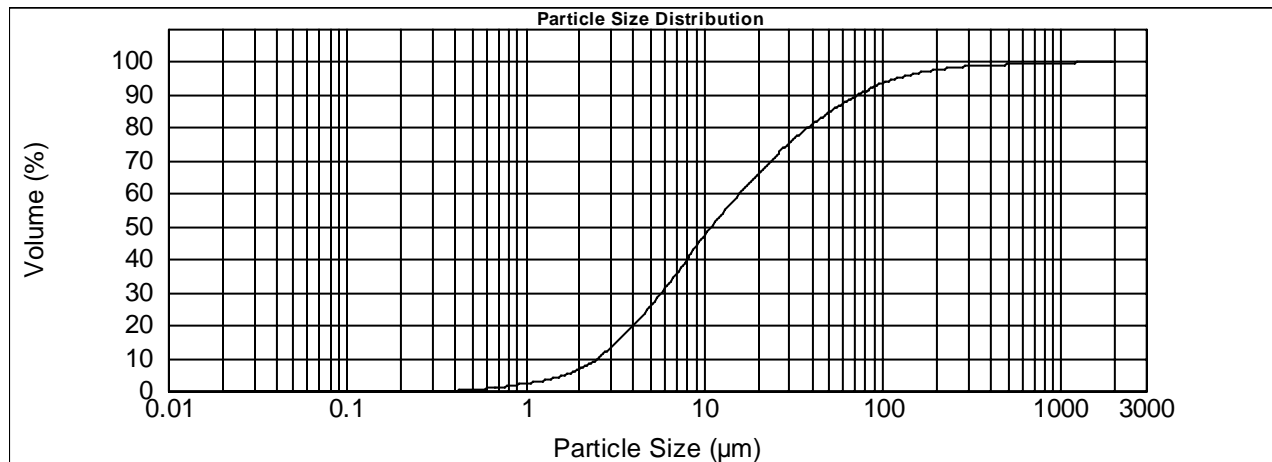


Fig. 7.29 Grid point M40

Grain Size Distribution Curve

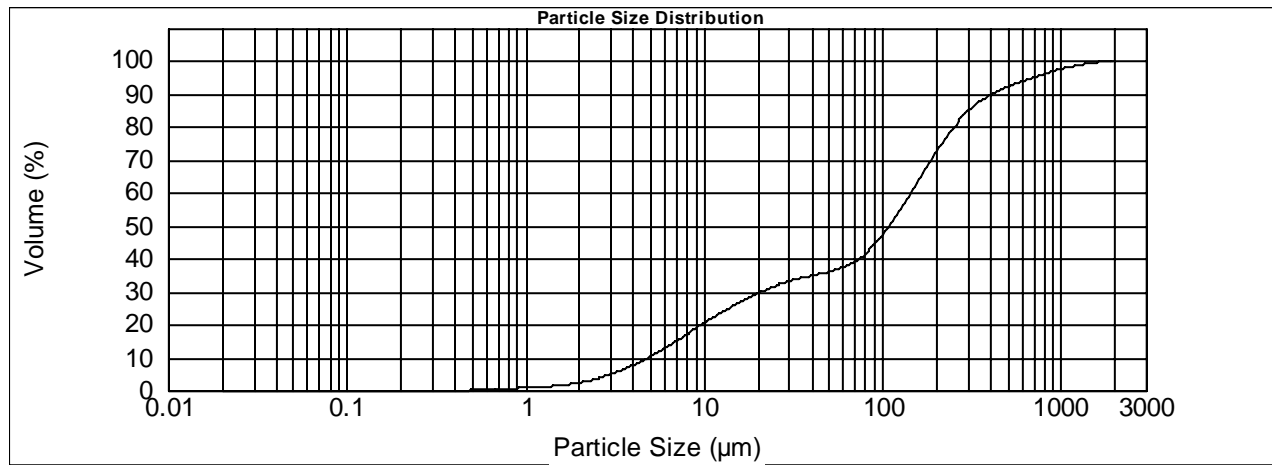


Fig. 7.30 Grid point G46

Cumulative Frequency Distribution Curve

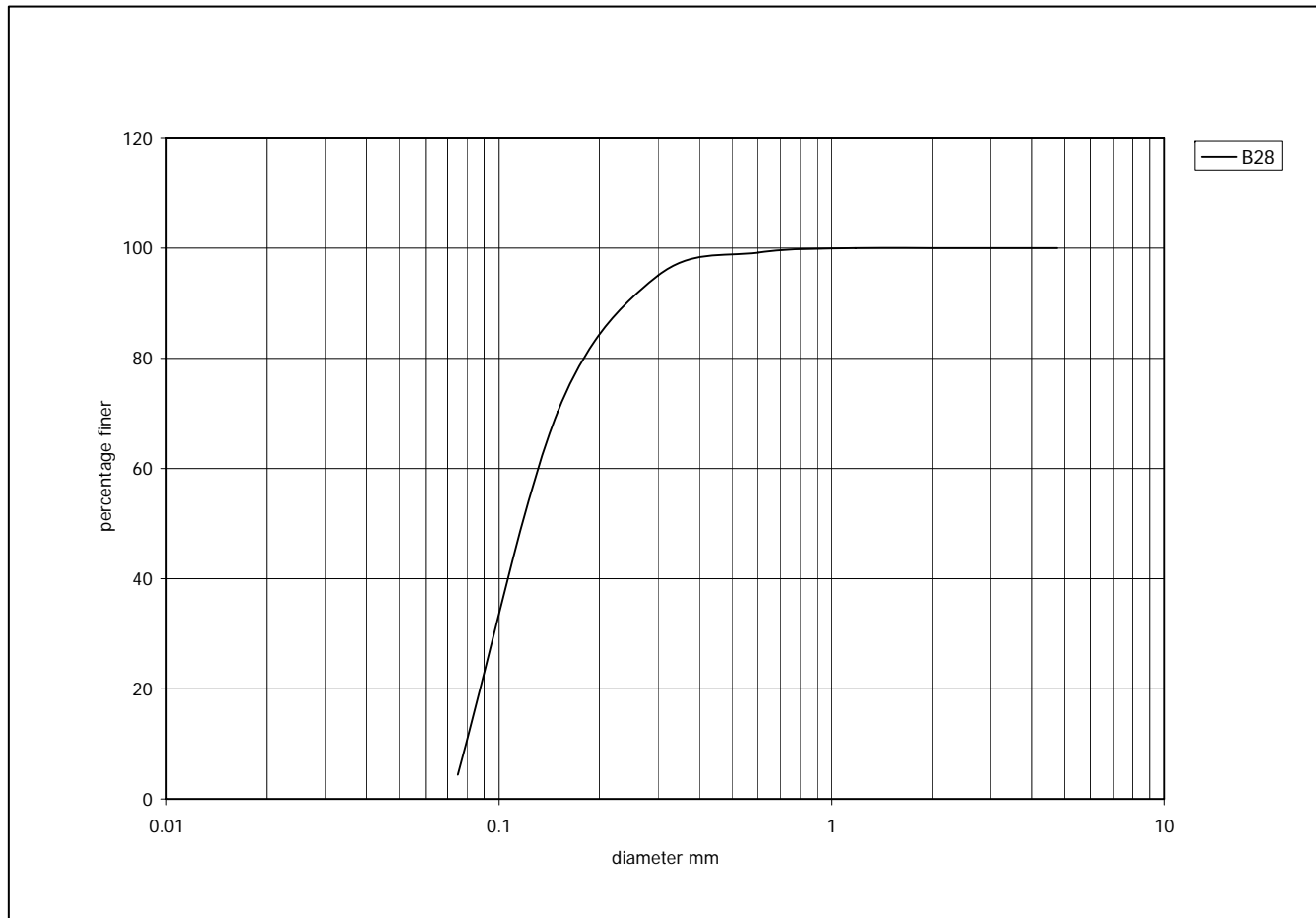


Fig. 7.31 Grid point B28

Cumulative Frequency Distribution Curve

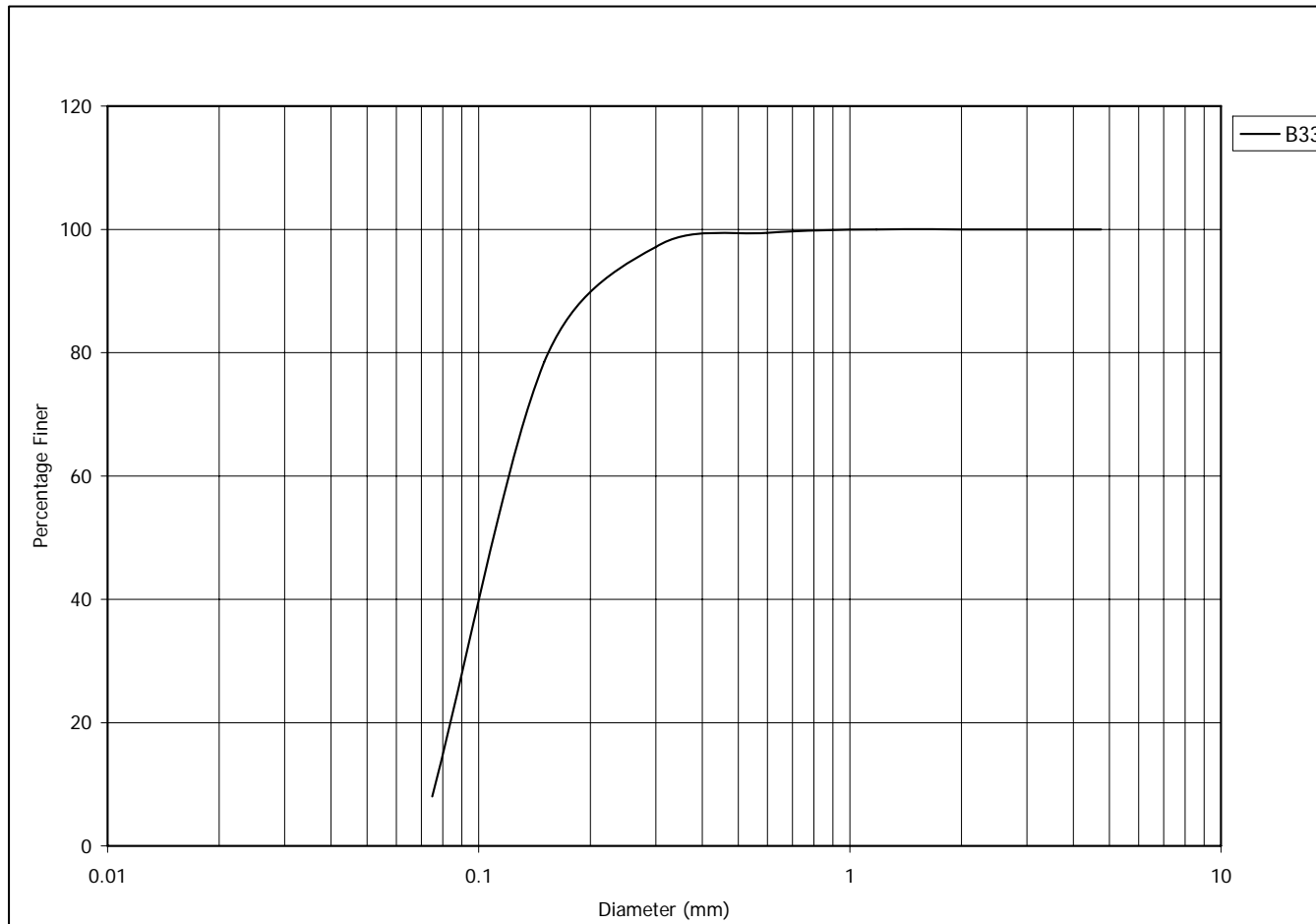


Fig. 7.32 Grid point B33

Cumulative Frequency Distribution Curve

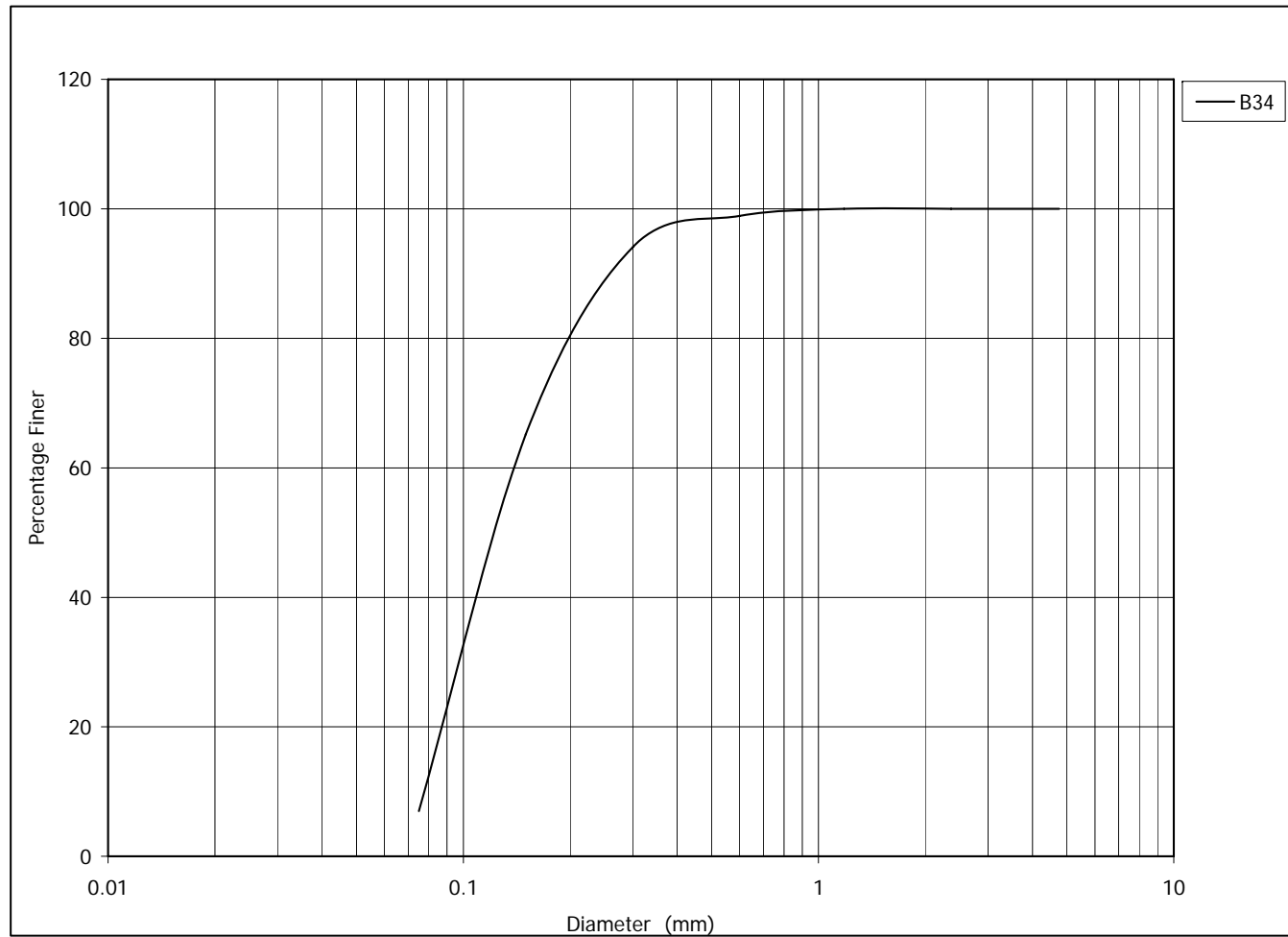


Fig. 7.33 Grid point B34

Cumulative Frequency Distribution Curve

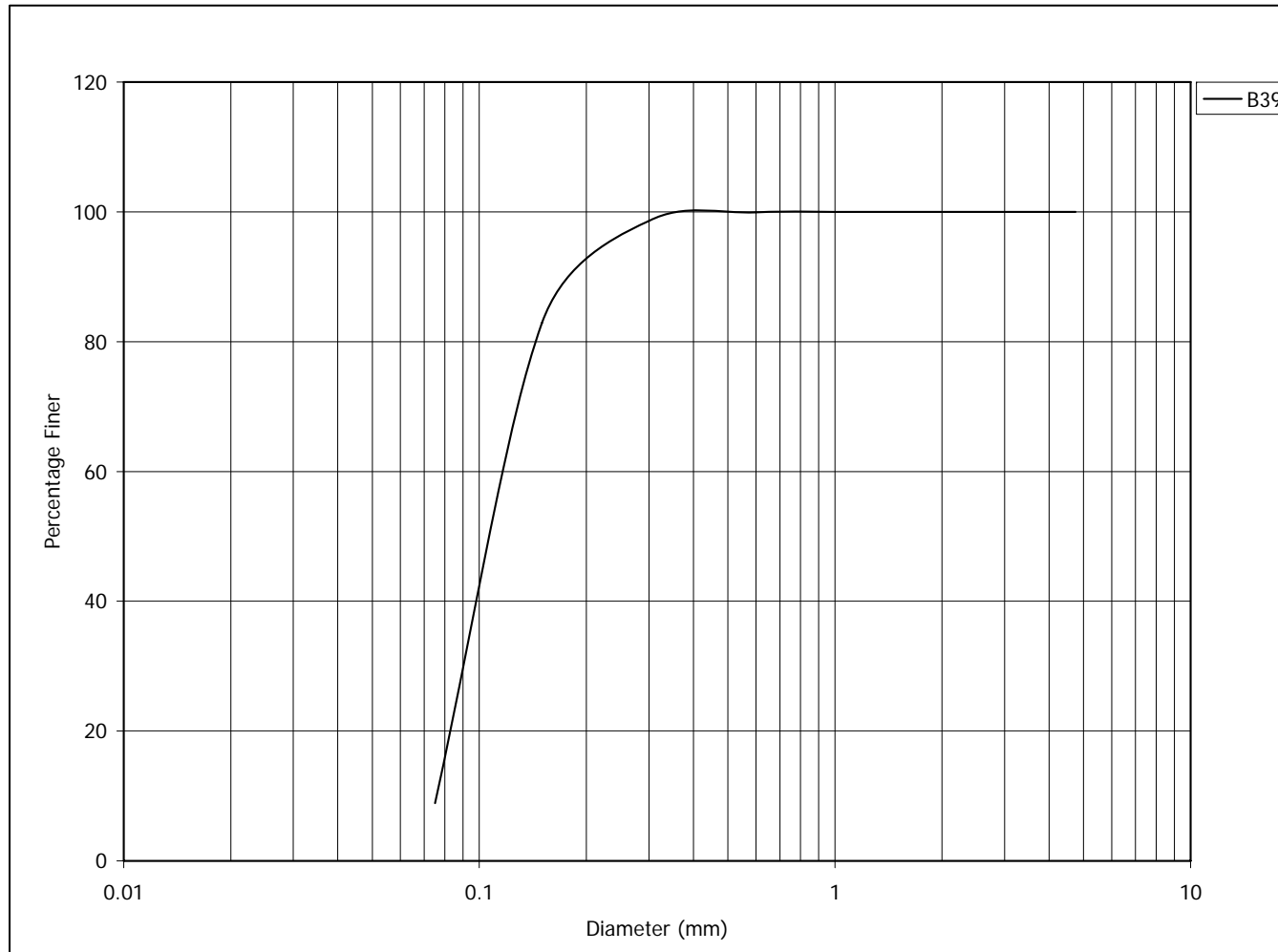


Fig. 7.34 Grid point B39

Cumulative Frequency Distribution

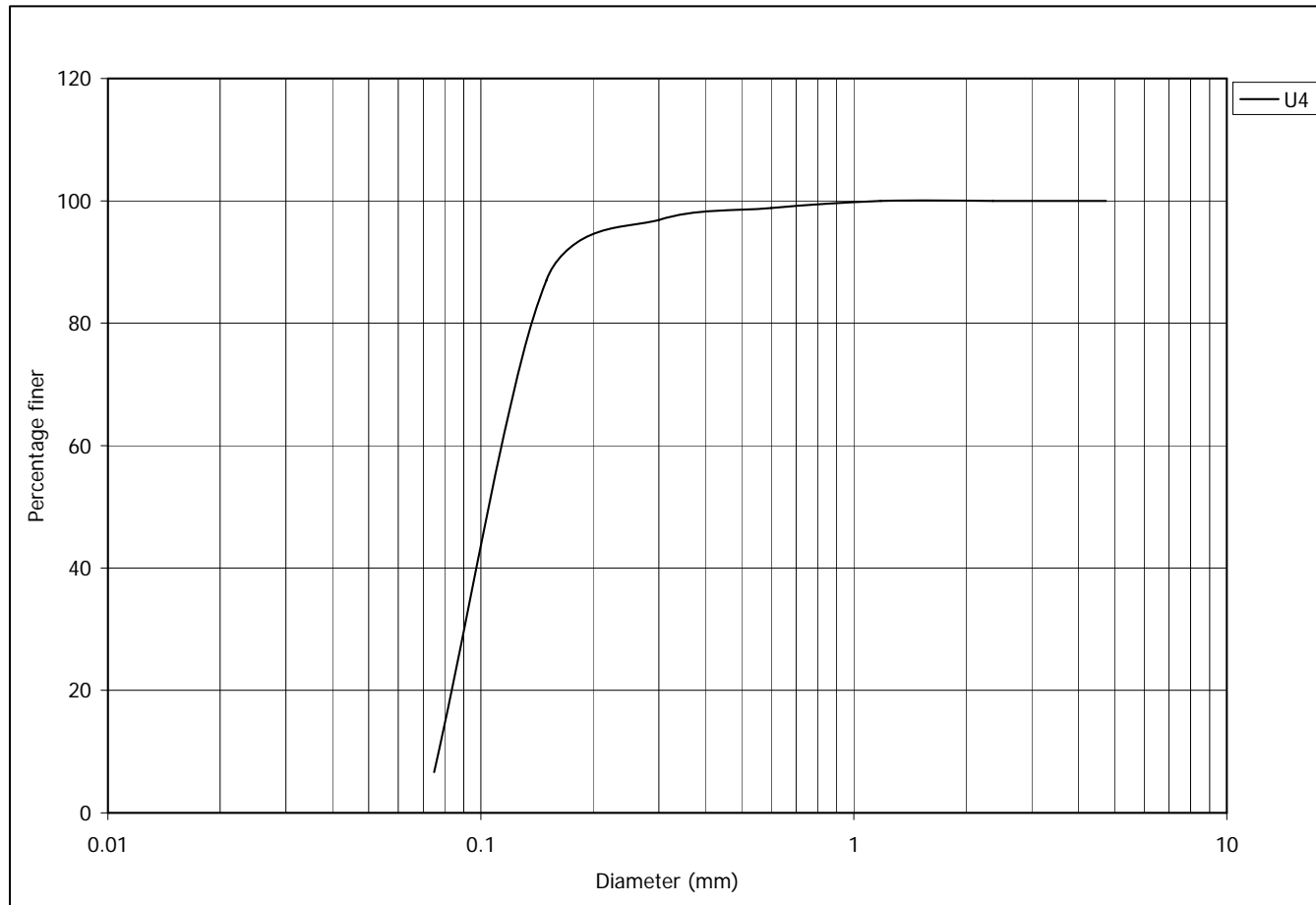


Fig. 7.35 Grid point U4

Cumulative Frequency Distribution Curve

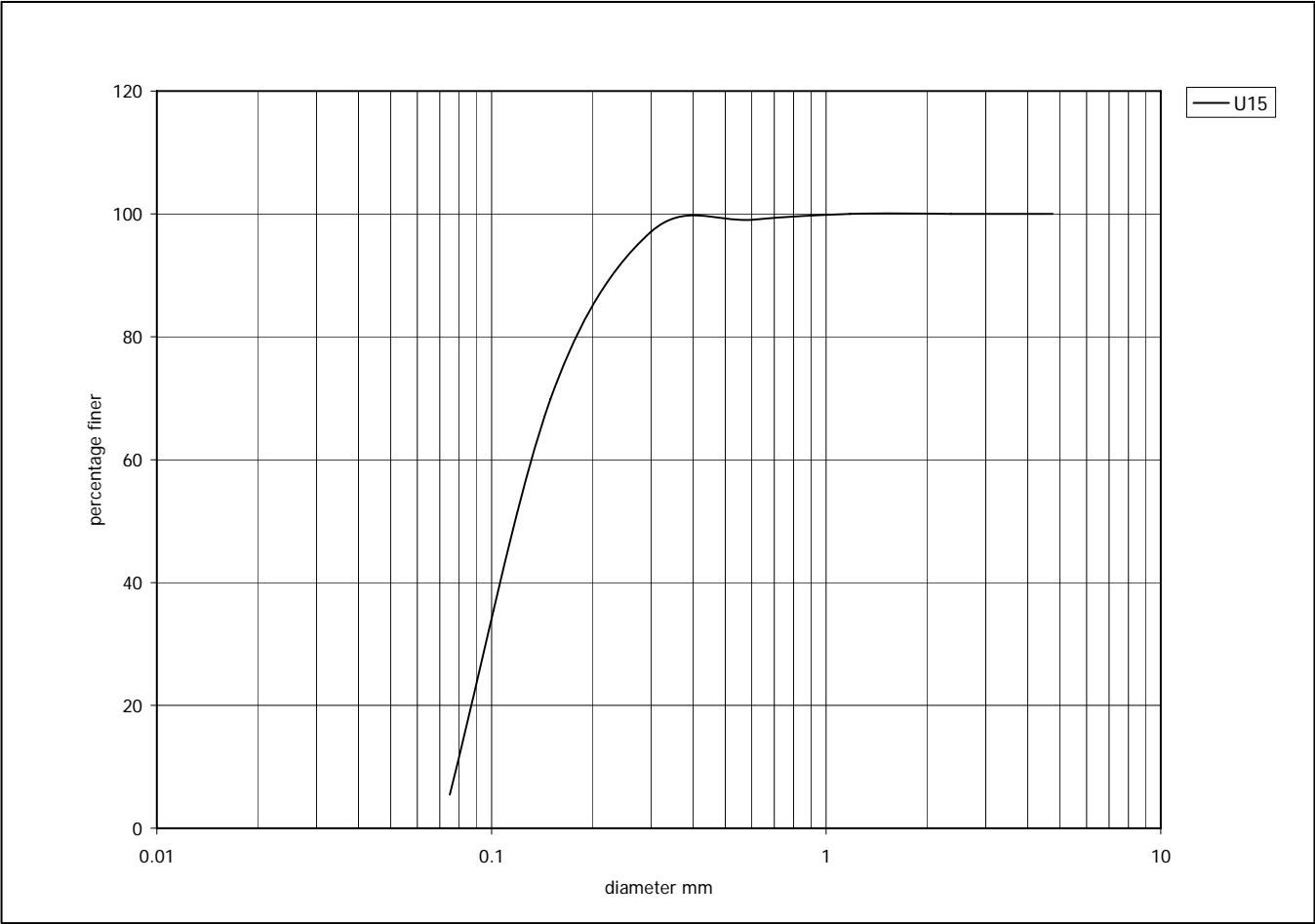


Fig. 7.36 Grid point U15

Cumulative Frequency Distribution Curve

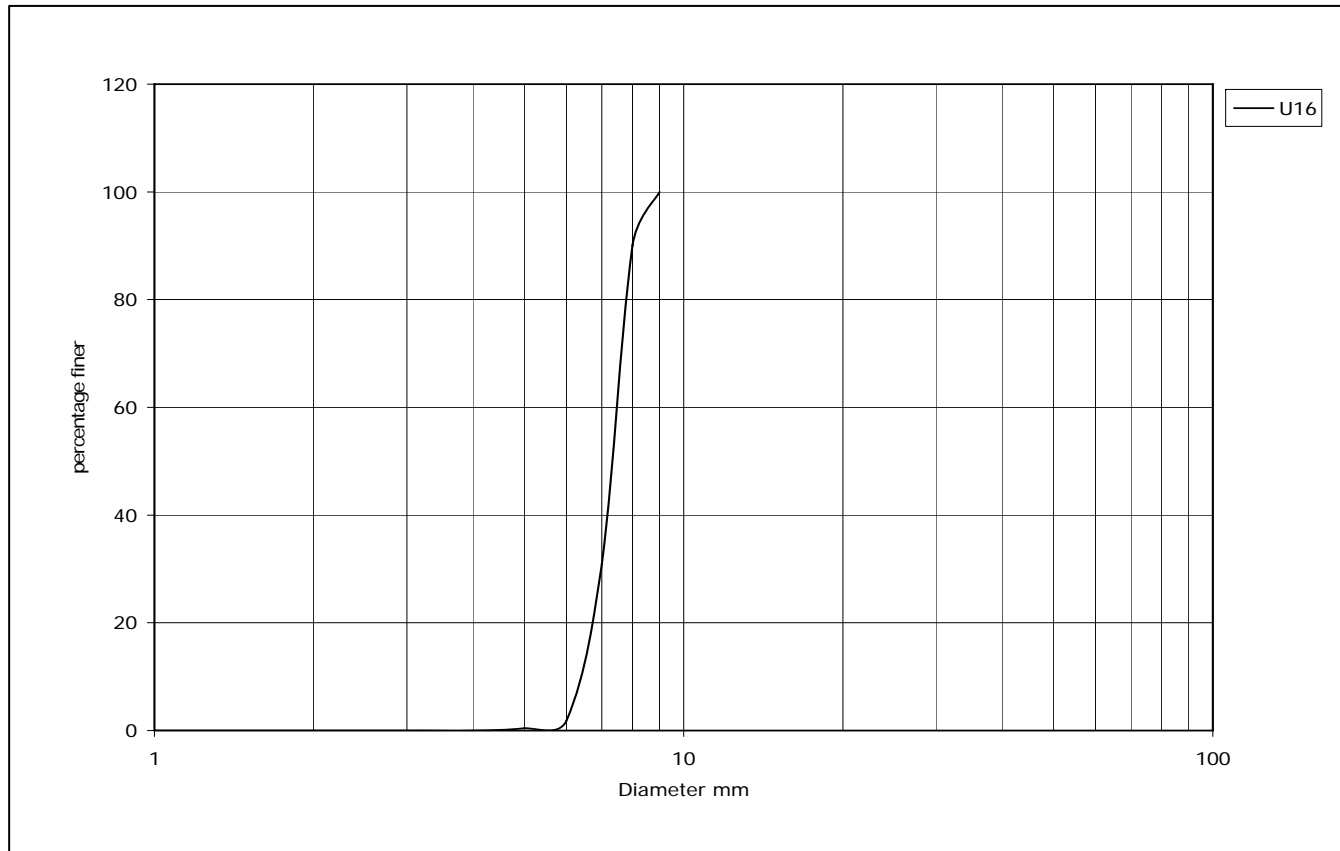


Fig. 7.37 Grid point U16

Cumulative Frequency Distribution Curve

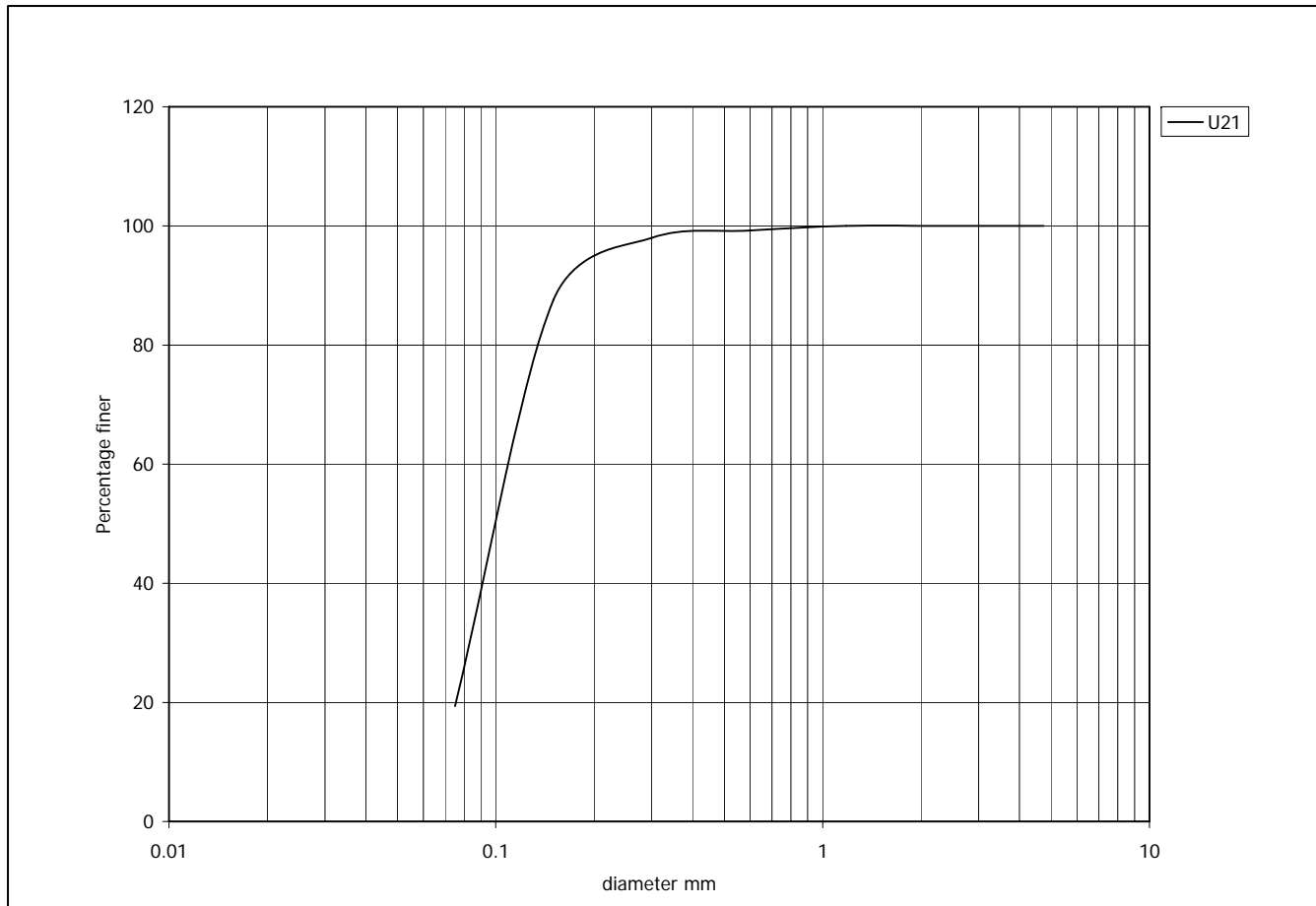


Fig. 7.38 Grid point U21

Cumulative Frequency Distribution Curve

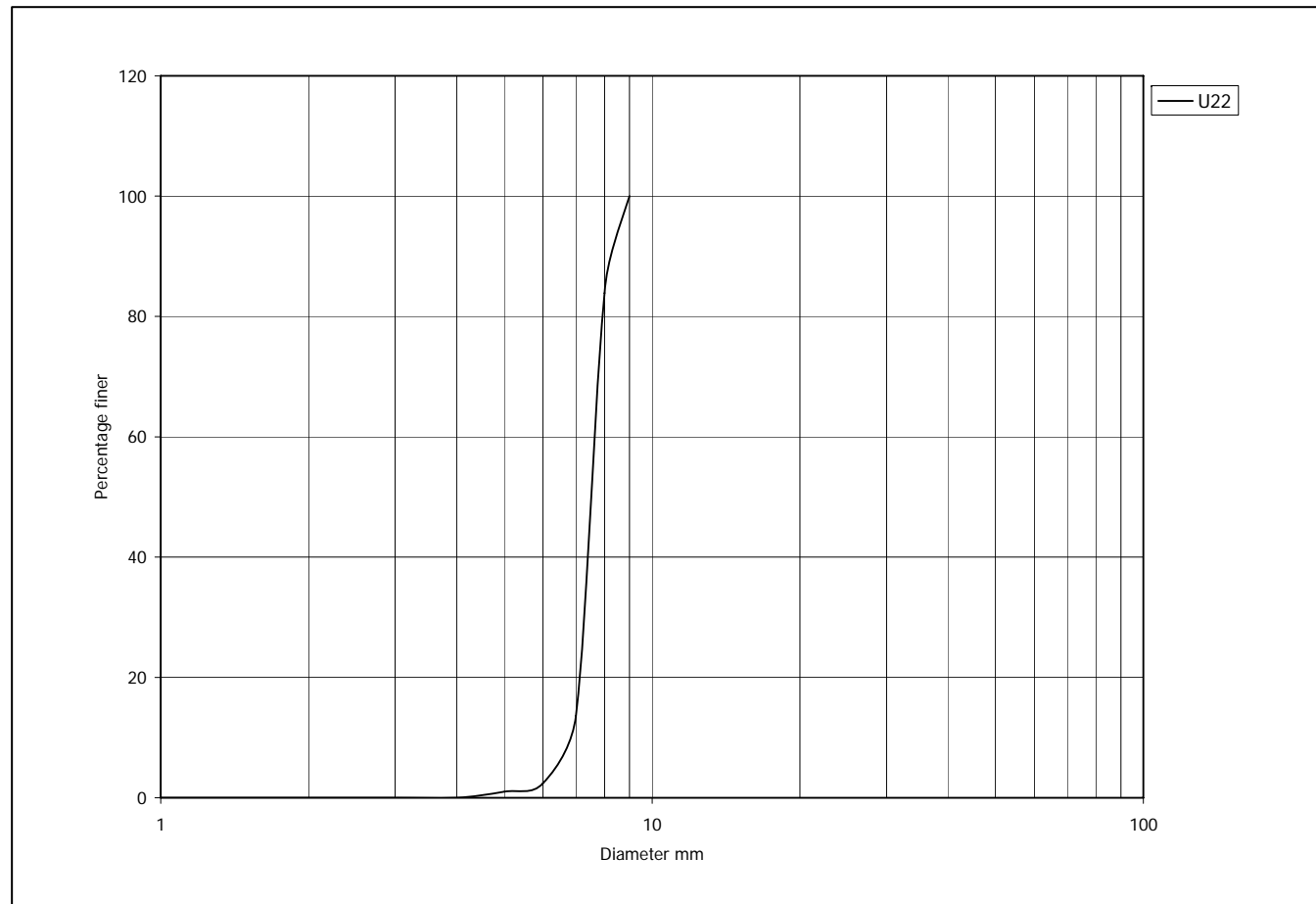


Fig. 7.39 Grid point U22

Cumulative Frequency Distribution Curve

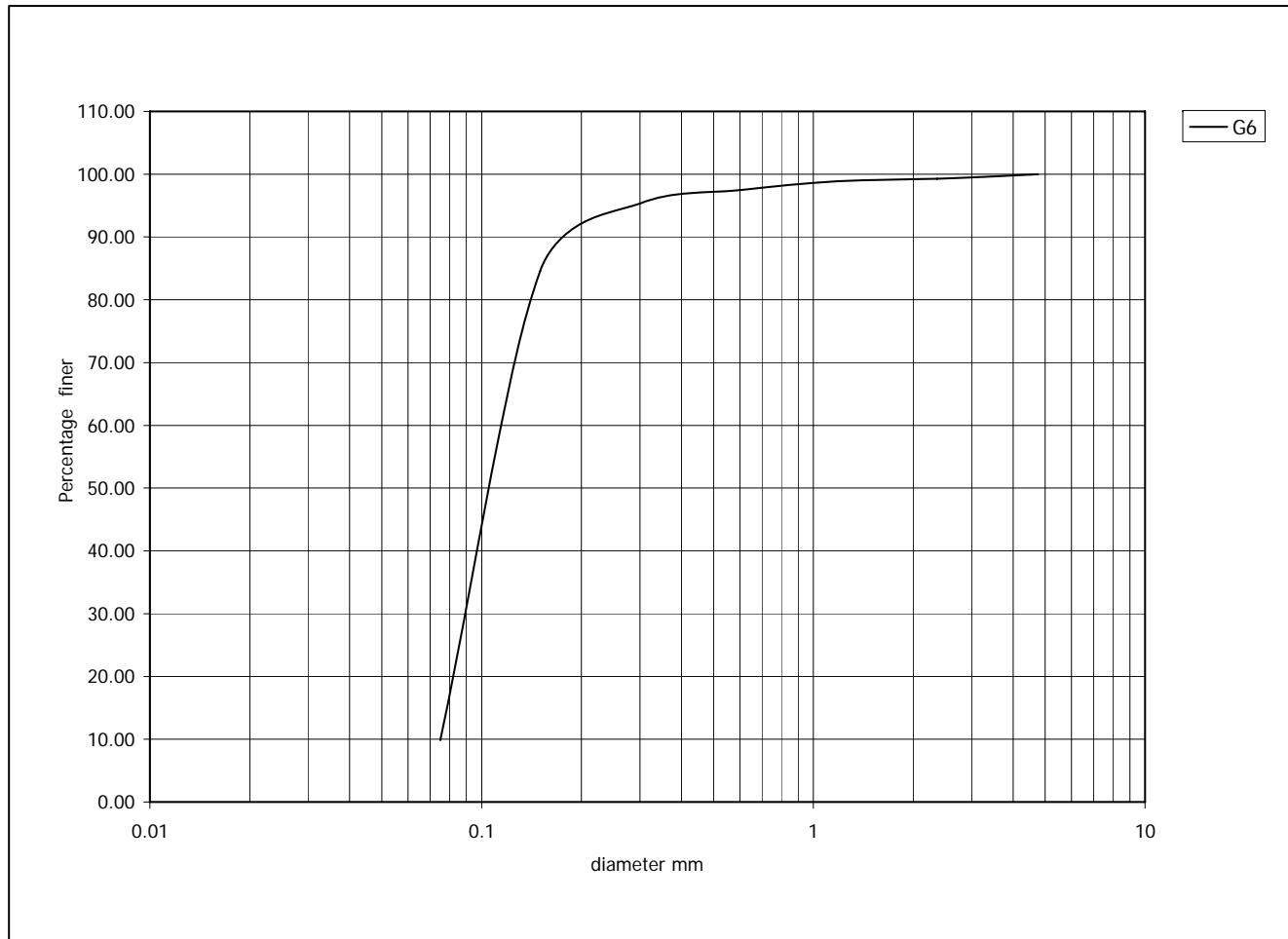


Fig. 7.40 Grid point G6

Cumulative Frequency Distribution Curve

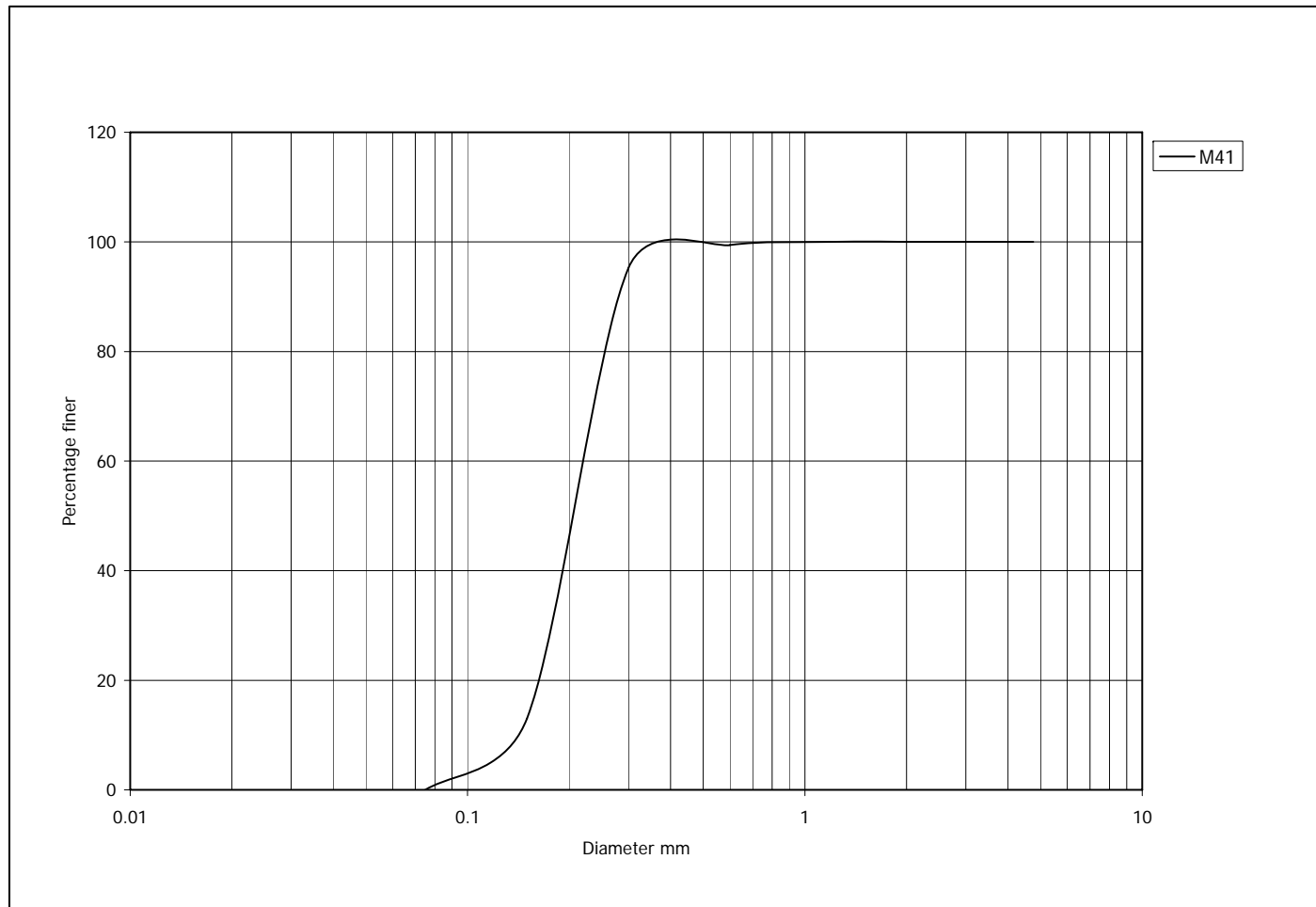


Fig. 7.41 Grid point M41

Grain Size Distribution Curve

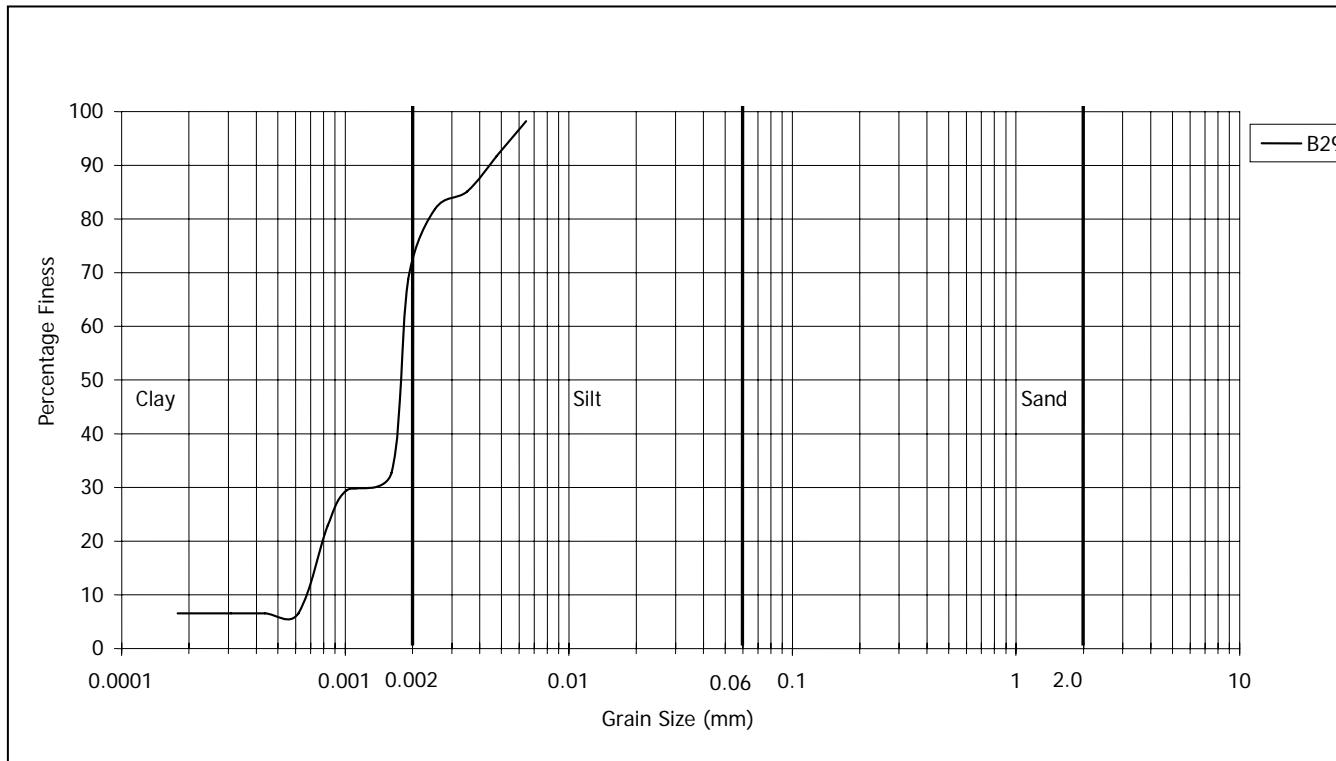


Fig. 7.42 Grid point B29

Grain Size Distribution Curve

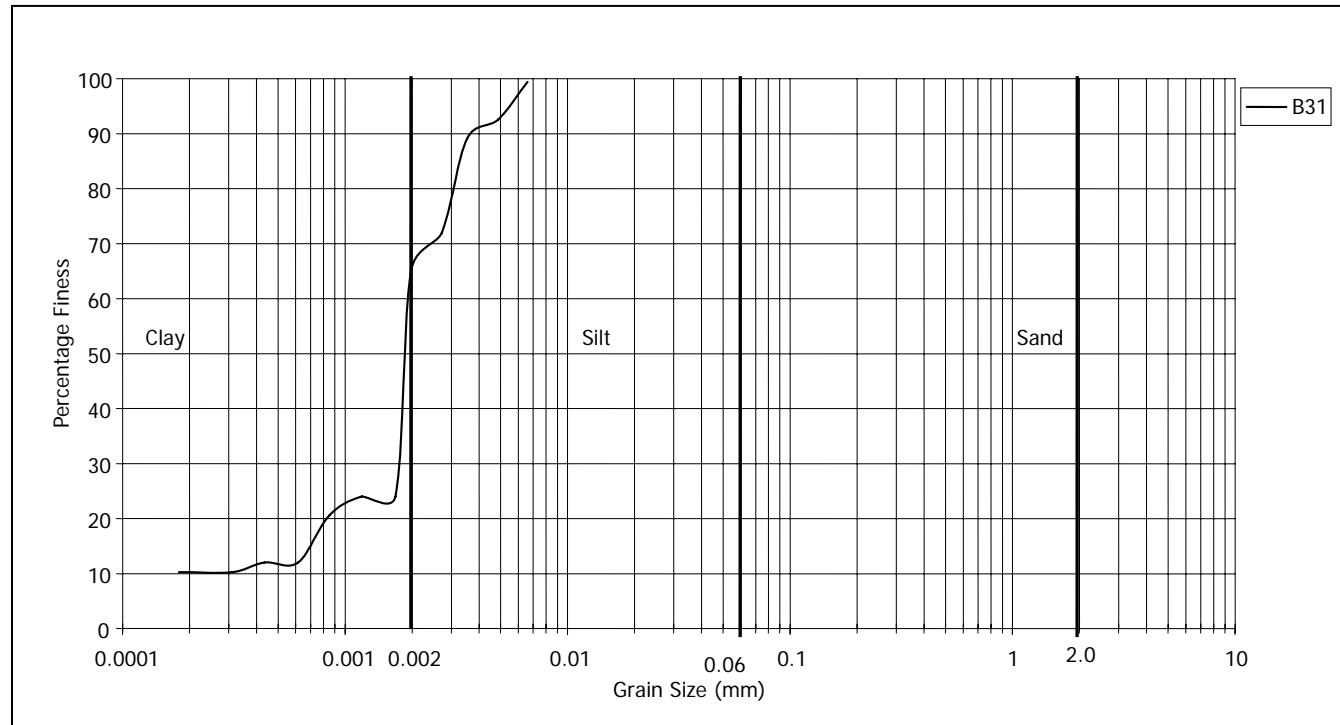


Fig. 7.43 Grid point B31

Sixth Phase Grid Samples

sample no	D16 (mm)	D50 (mm)	D84 (mm)	sample no	D16 (mm)	D50 (mm)	D84 (mm)	Sample no	D16 (mm)	D50 (mm)	D84 (mm)
B36	0.0018	0.018	0.025	B35	0.00075	0.008	0.016	B34	0.0016	0.006	0.014
B37	0.0045	0.008	0.011	B38	0.0009	0.0038	0.012	B39	0.0015	0.0025	0.0071
B42	0.0048	0.0082	0.009	B41	0.0011	0.004	0.022	B40	0.00042	0.005	0.012
B43	0.005	0.009	0.014	B44	0.0013	0.018	0.025	B45	0.0012	0.0072	0.013
B48	0.00104	0.0067	0.018	B47	0.0013	0.0034	0.0078	B46	0.0012	0.0022	0.007
B49	0.00065	0.0085	0.011	B50	0.00097	0.0024	0.00447	B51	0.0024	0.0045	0.0082

Bengre grid

Ullal grid

sample no	D16 (mm)	D50 (mm)	D84 (mm)	sample no	D16 (mm)	D50 (mm)	D84 (mm)	Sample no	D16 (mm)	D50 (mm)	D84 (mm)
				U2	0.00032	0.0029	0.01	U3	0.0005	0.0058	0.018
U6	0.0047	0.008	0.011	U5	0.0038	0.013	0.018	U4	0.001	0.01	0.022
U7	0.0045	0.007	0.0082	U8	0.00025	0.0068	0.018	U9	0.0016	0.008	0.013
U12	0.0028	0.0047	0.0078	U11	0.0005	0.0062	0.013	U10	0.0006	0.0075	0.02
U13	0.003	0.0052	0.009	U14	0.0045	0.008	0.015	U15	0.00028	0.00345	0.014
U18	0.0028	0.0085	0.011	U17	0.0013	0.0025	0.007	U16	0.00027	0.003	0.0055
U19	0.0013	0.006	0.009	U20	0.004	0.0071	0.013	U21	0.00032	0.0048	0.014
U24	0.0041	0.008	0.0085	U23	0.0034	0.007	0.01	U22	0.001	0.0045	0.0085
U25	0.0046	0.0068	0.0092	U26	0.0005	0.0078	0.01	U27	0.0013	0.008	0.015
U30	0.003	0.0071	0.011	U29	0.0022	0.0055	0.0072	U28	0.00175	0.006	0.018
U31	not	taken		U32	sieve only			U33	0.00055	0.002	0.005

Location sketch of sample points taken during May 2006



Fig. 7.44 Location sketch showing various grid points

Grain size characteristics of grid samples during May 2006

River Mouth

Sample No.	D16 (mm)	D50 (mm)	D84 (mm)
M52	0.0019	0.009	0.015
M53	0.0028	0.007	0.009
M54	sieve only		
M55	Not taken		
M56	sieve only		
M57	0.0021	0.0075	0.008

Grain Size Distribution Curve

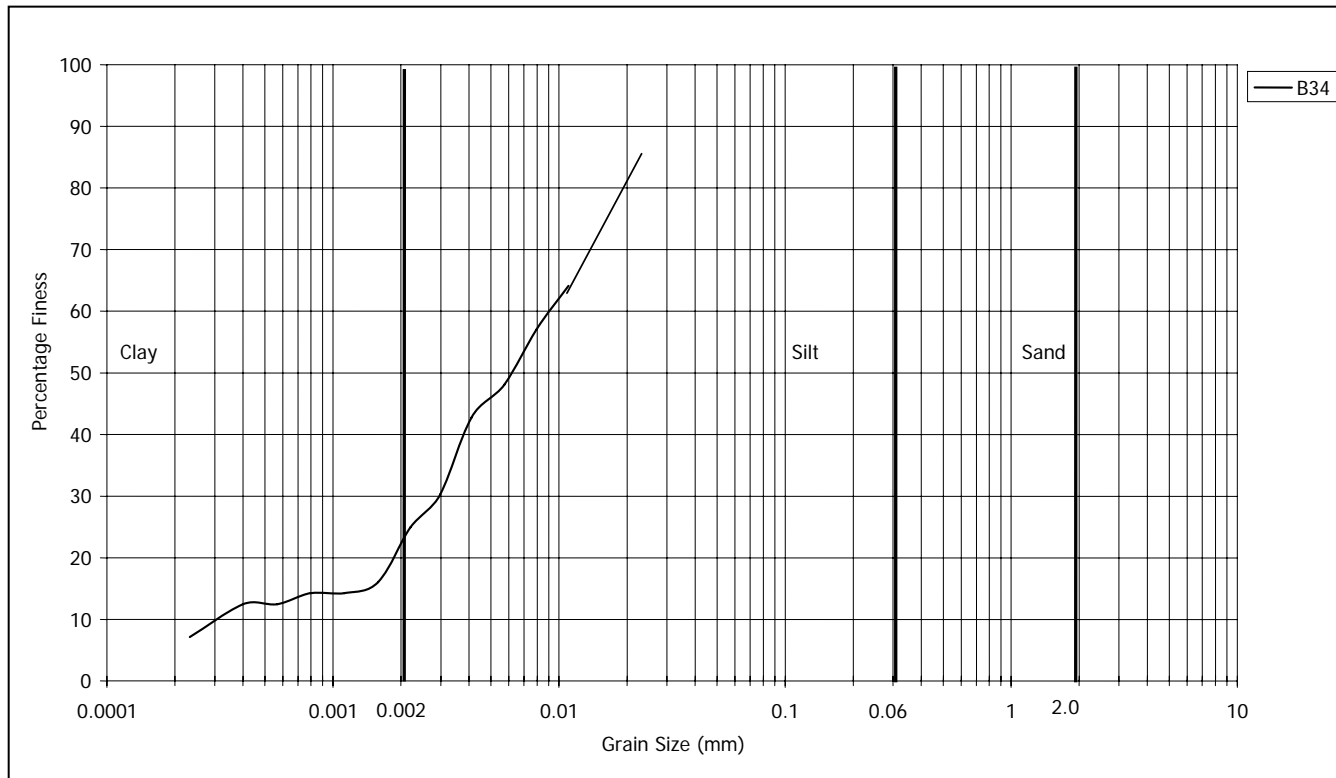


Fig. 7.45 Grid point B34

Grain Size Distribution Curve

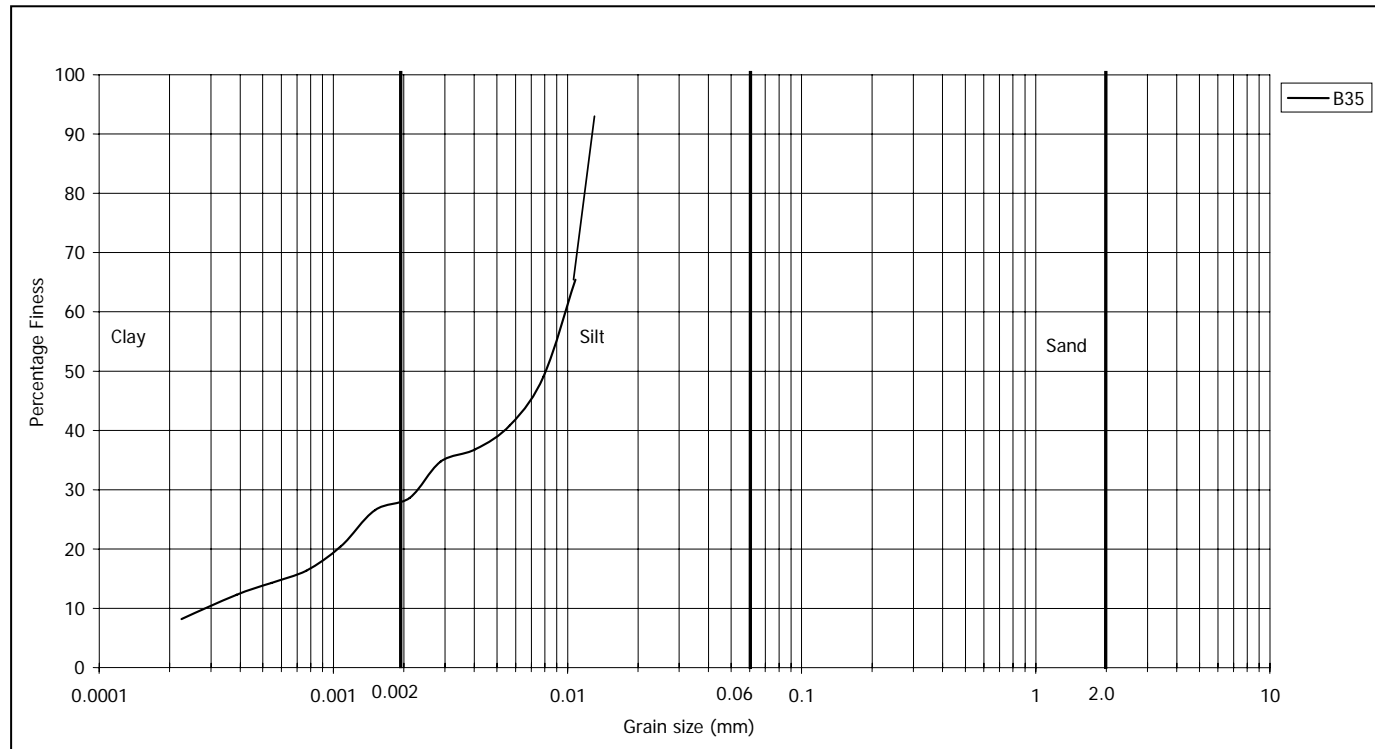


Fig. 7.46 Grid point B35

Grain Size Distribution Curve

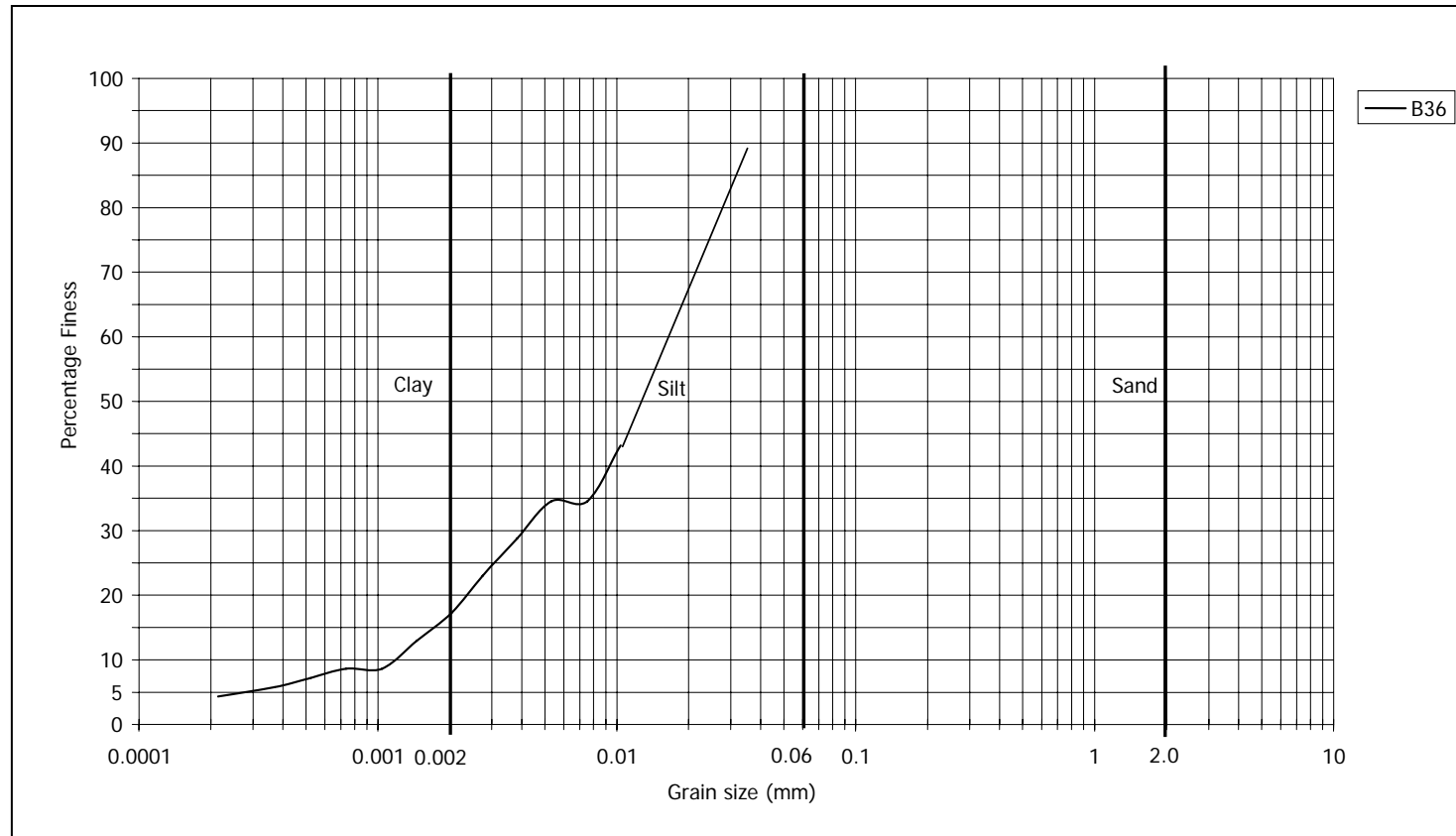


Fig. 7.47 Grid point B36

Grain Size Distribution Curve

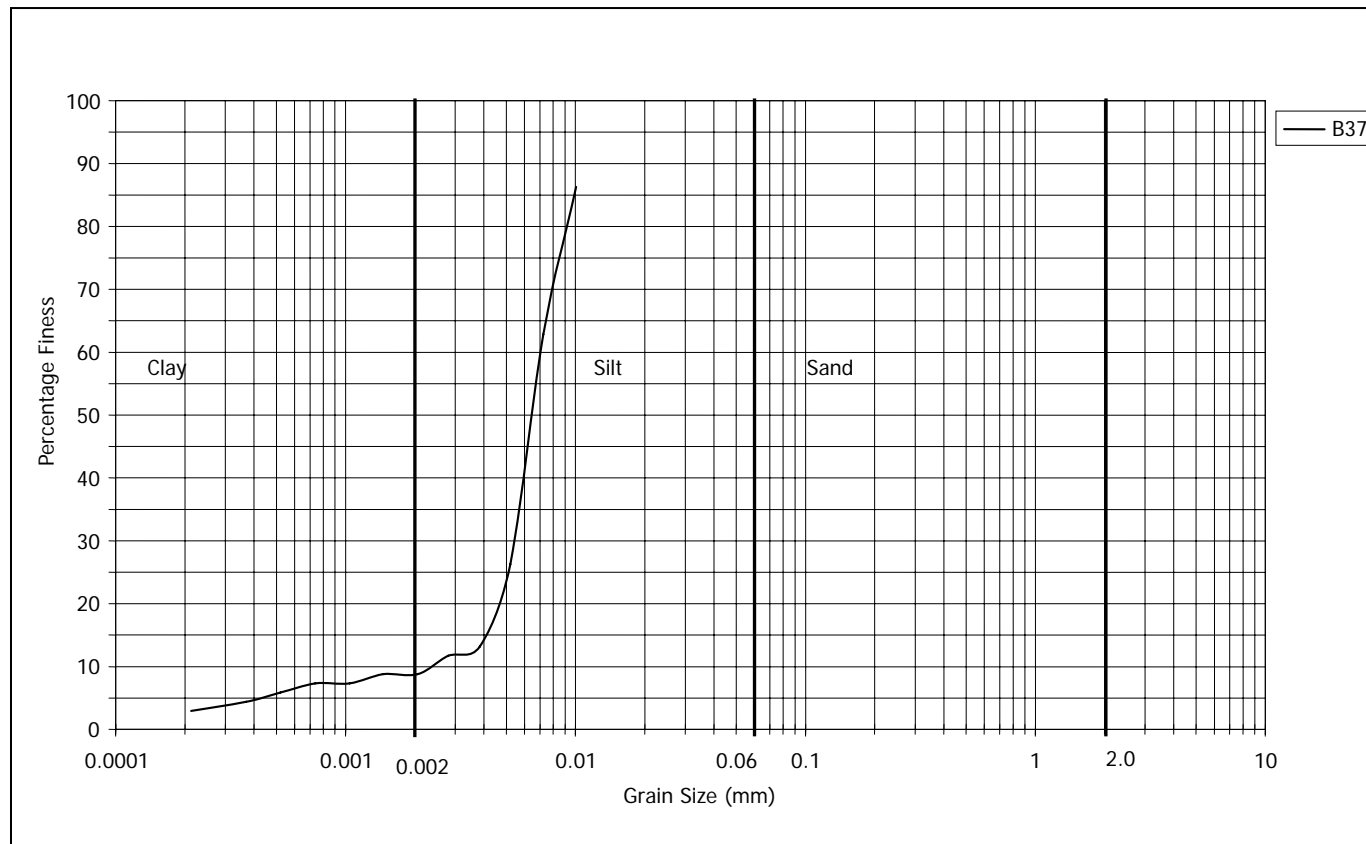


Fig. 7.48 Grid point B37

Grain Size Distribution Curve

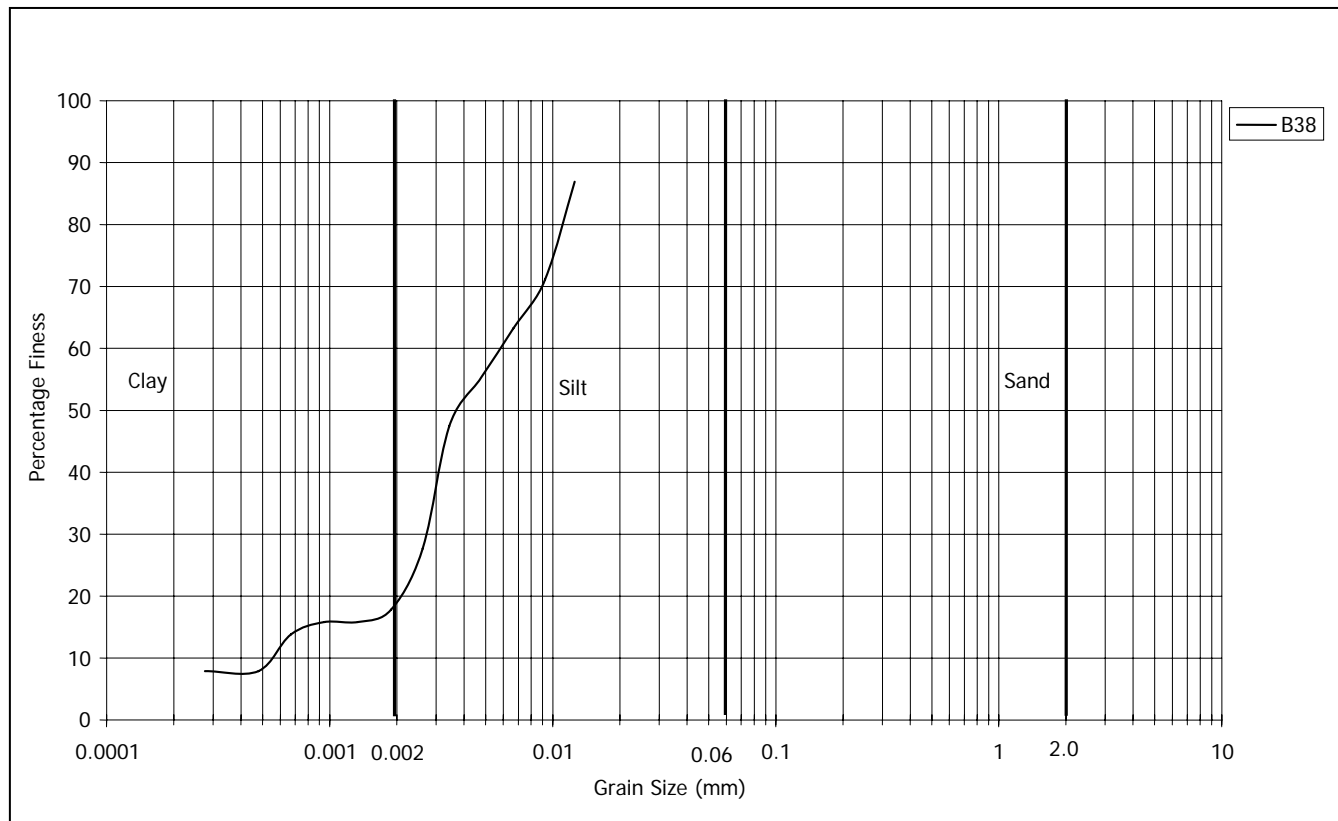


Fig. 7.49 Grid point B38

Grain Size Distribution Curve

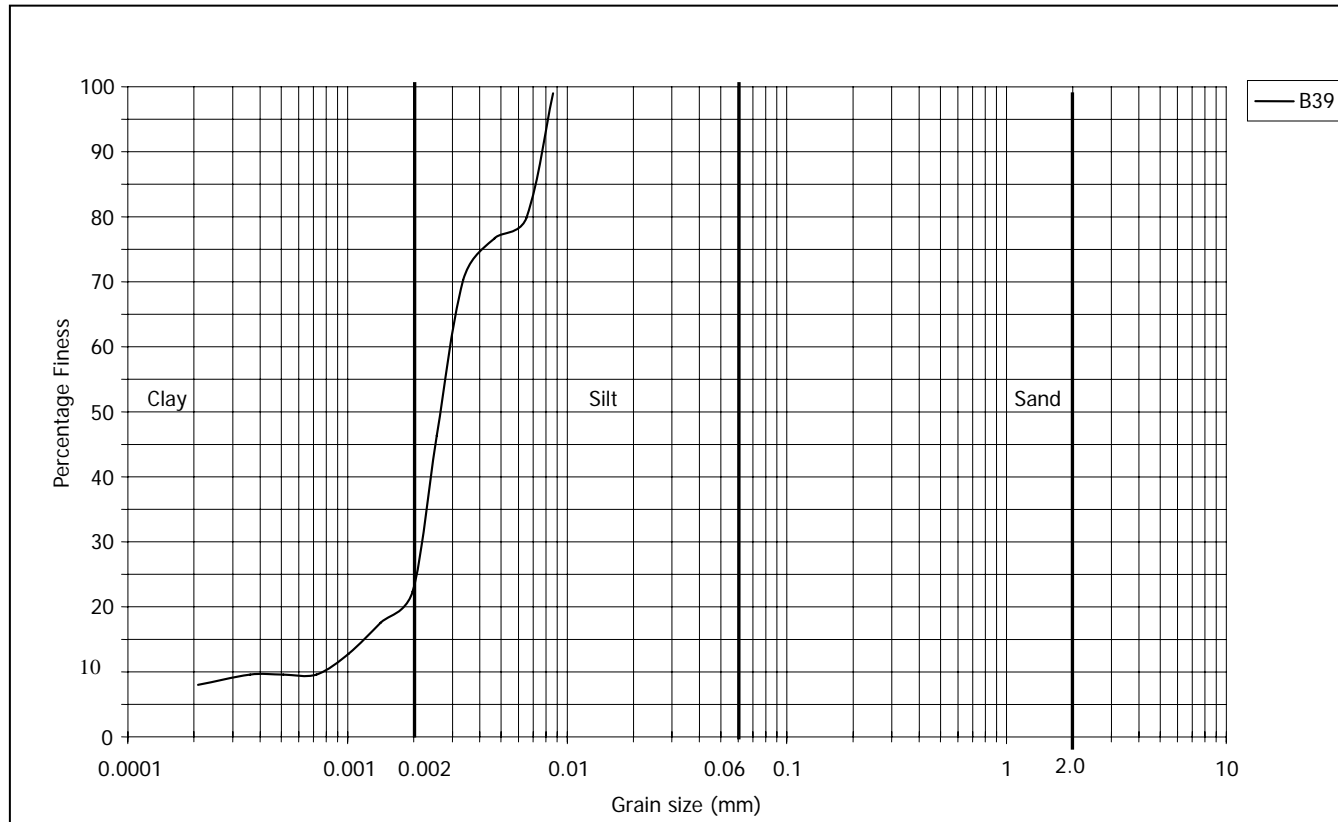


Fig. 7.50 Grid point B39

Grain Size Distribution Curve

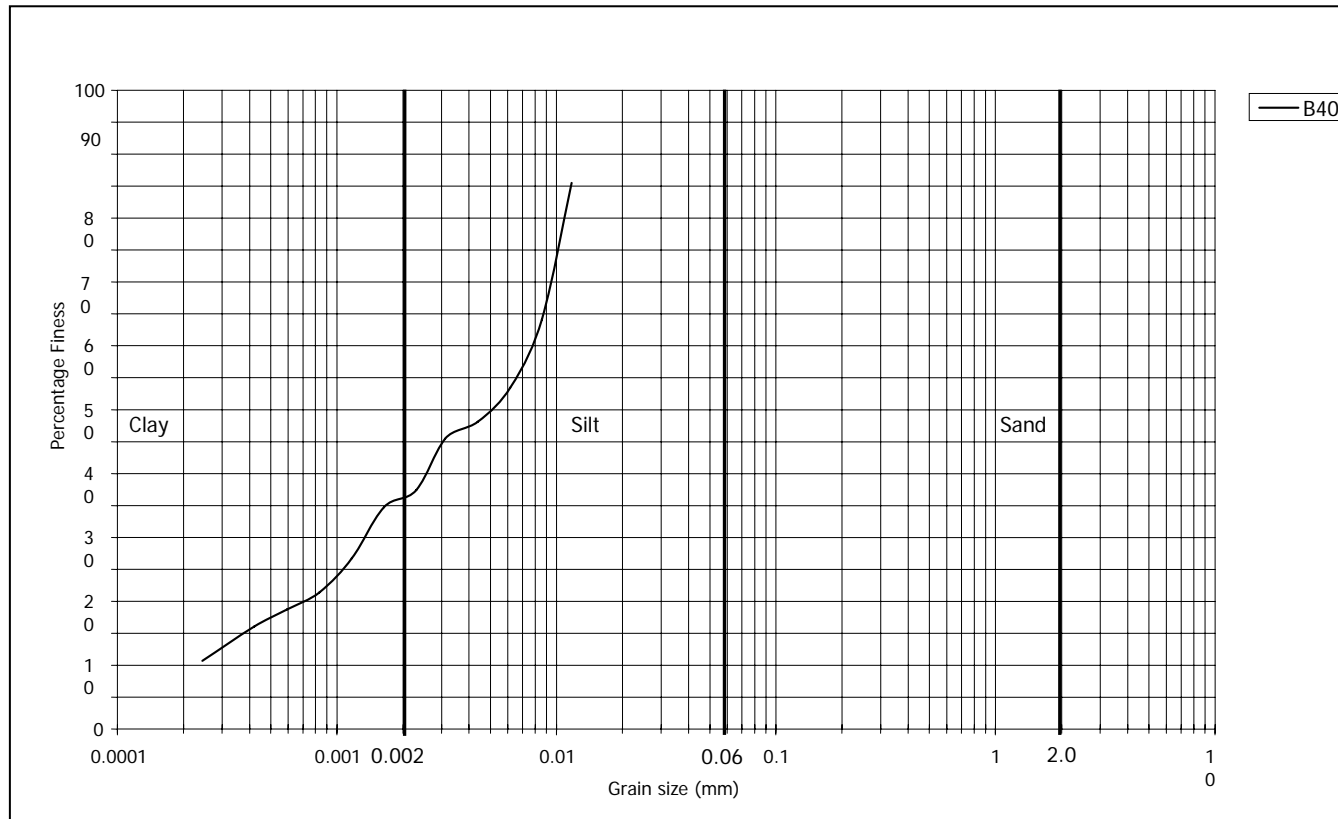


Fig. 7.51 Grid point B40

Grain Size Distribution Curve

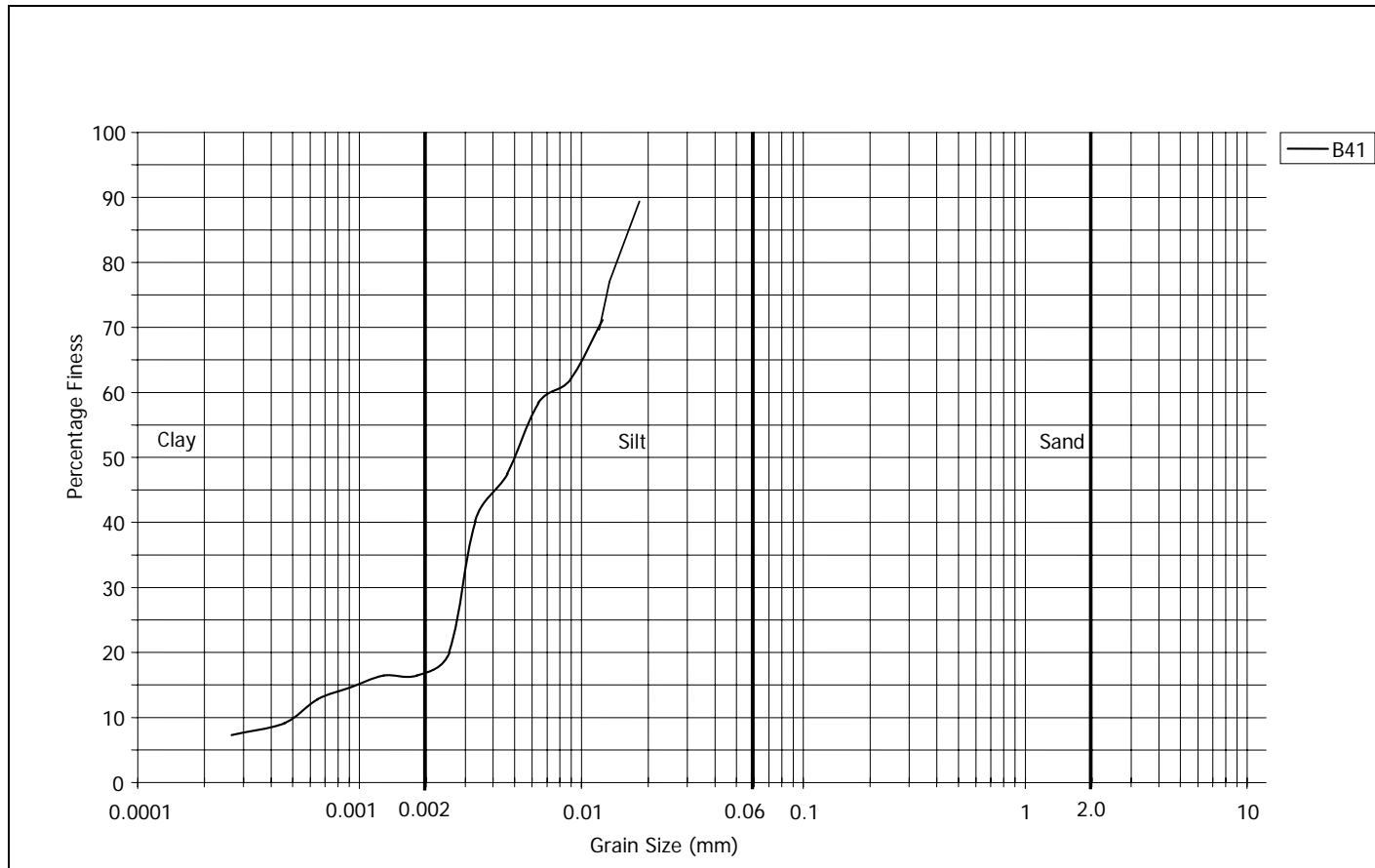


Fig. 7.52 Grid point B41

Grain Size Distribution Curve

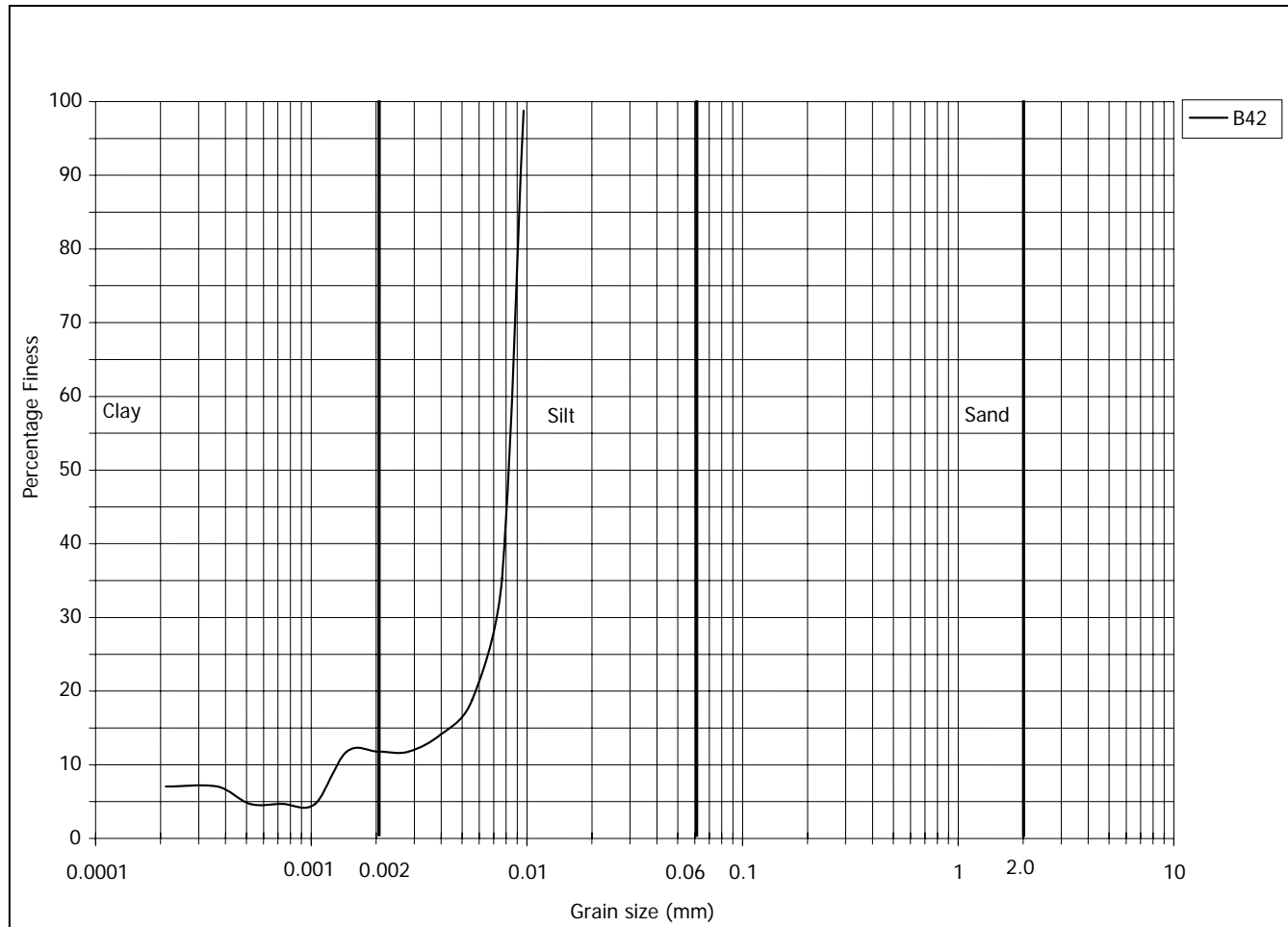


Fig. 7.53 Grid point B42

Grain Size Distribution Curve

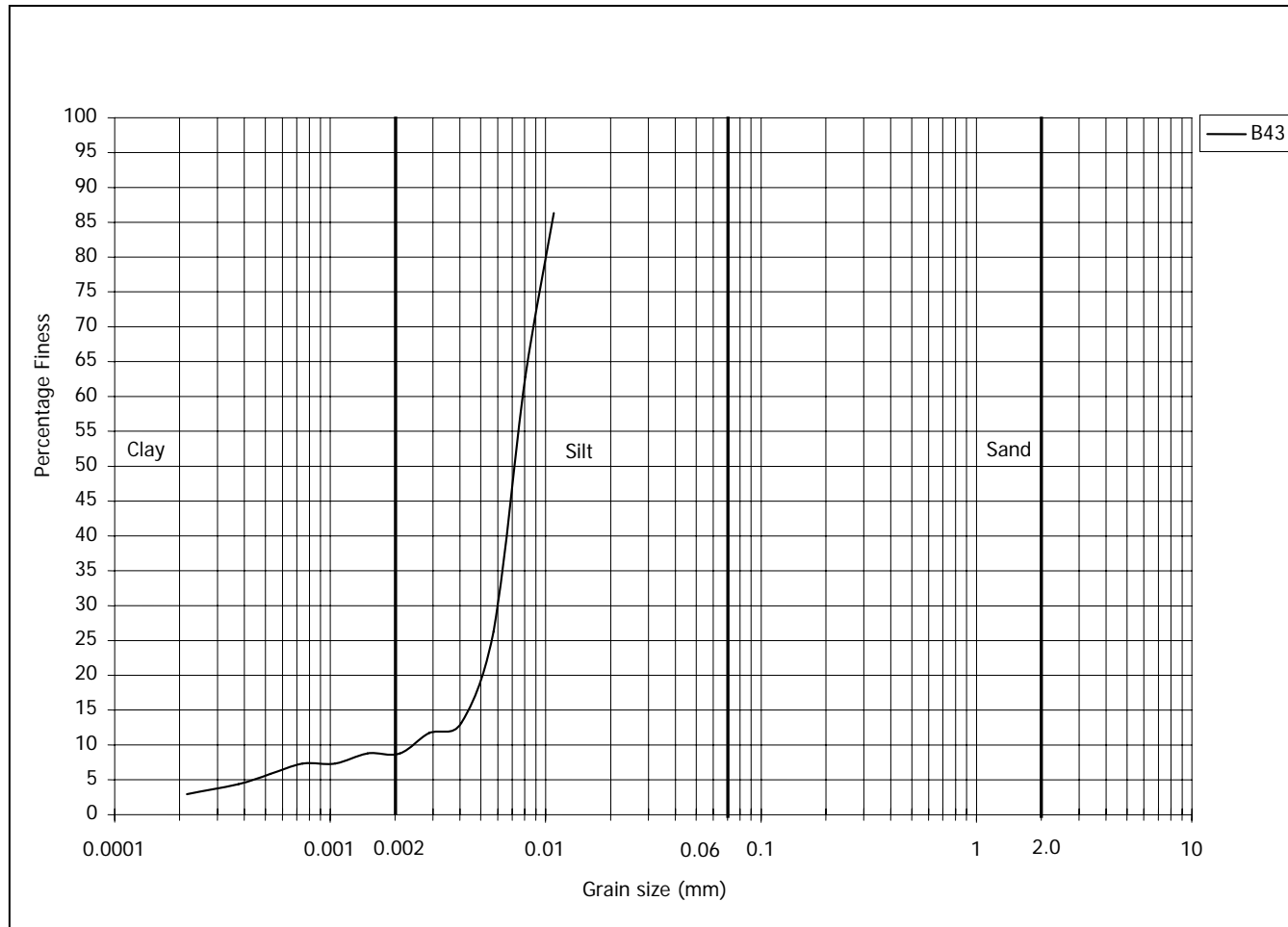


Fig. 7.54 Grid point B43

Grain Size Distribution Curve

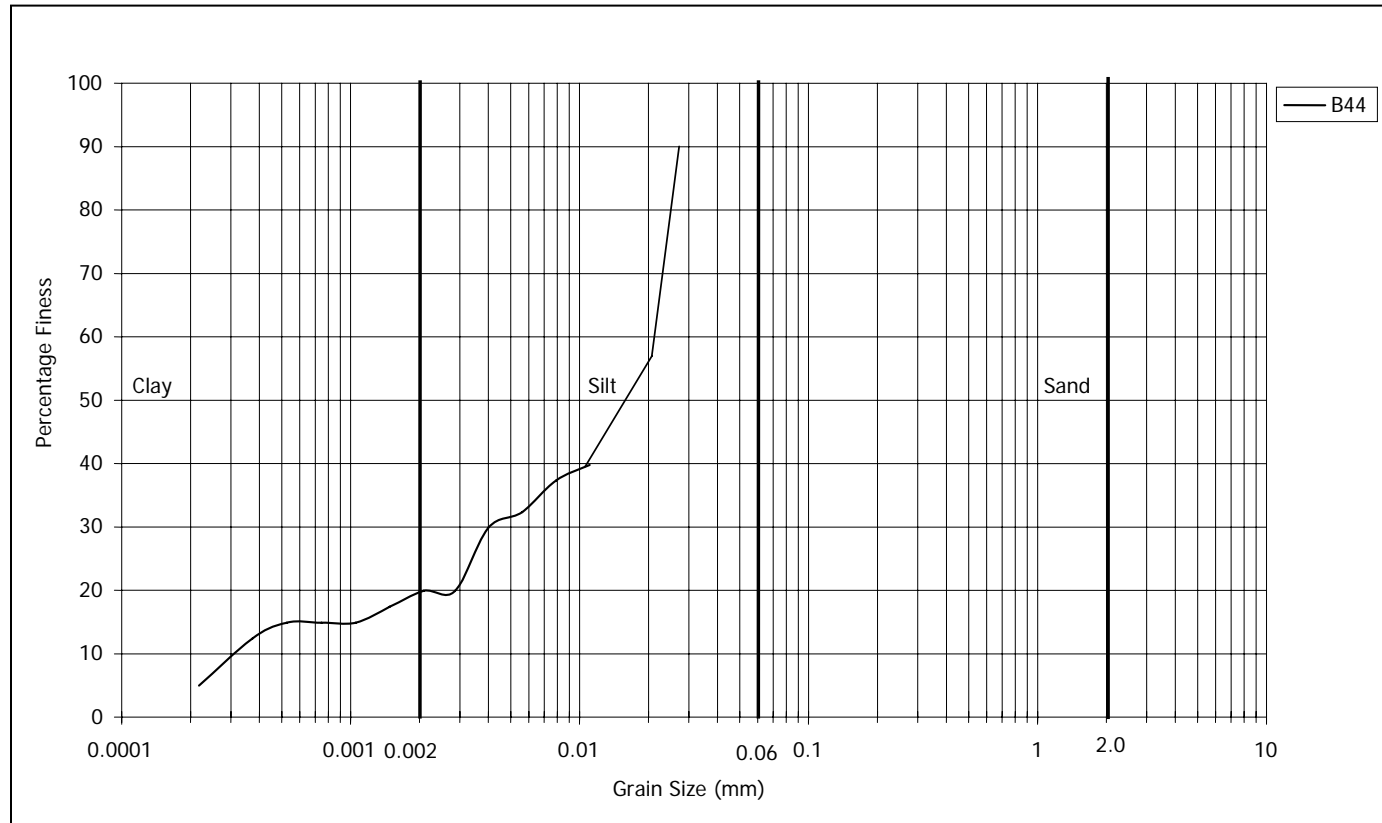


Fig. 7.55 Grid point B44

Grain Size Distribution Curve

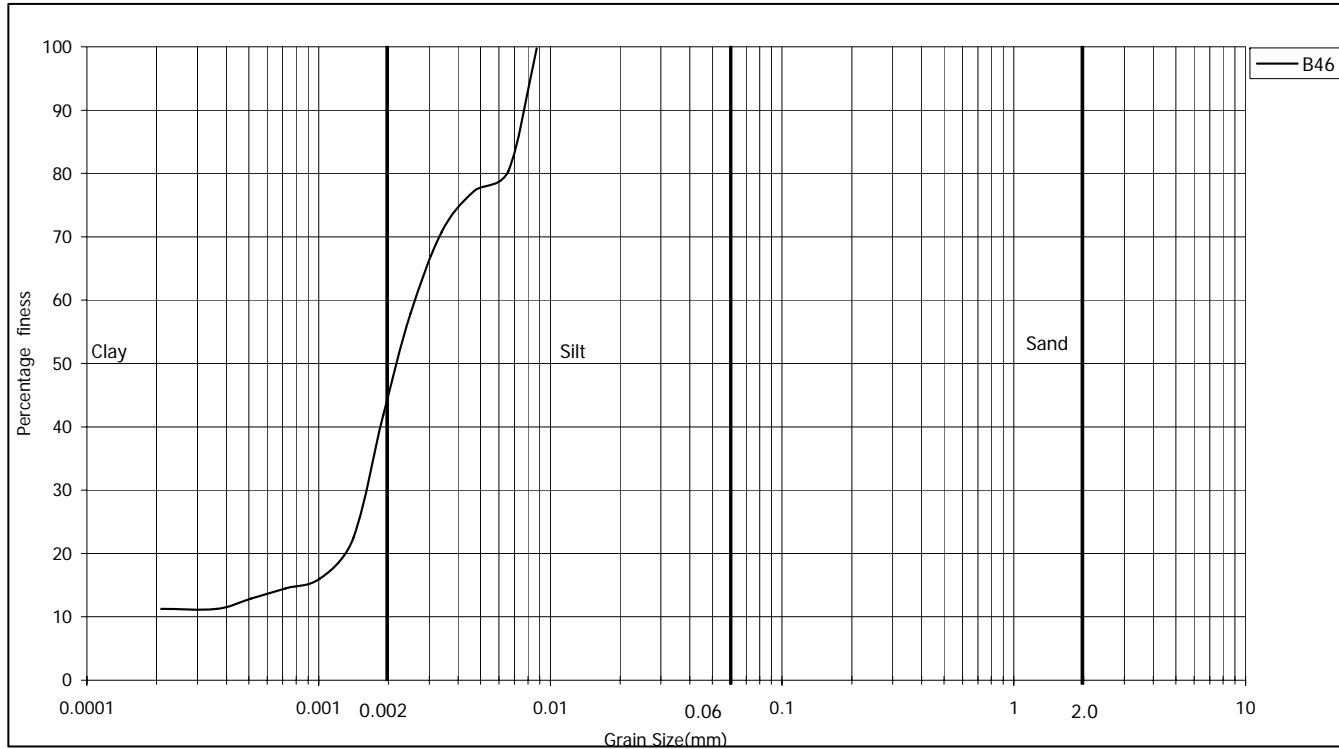


Fig. 7.56 Grid point B46

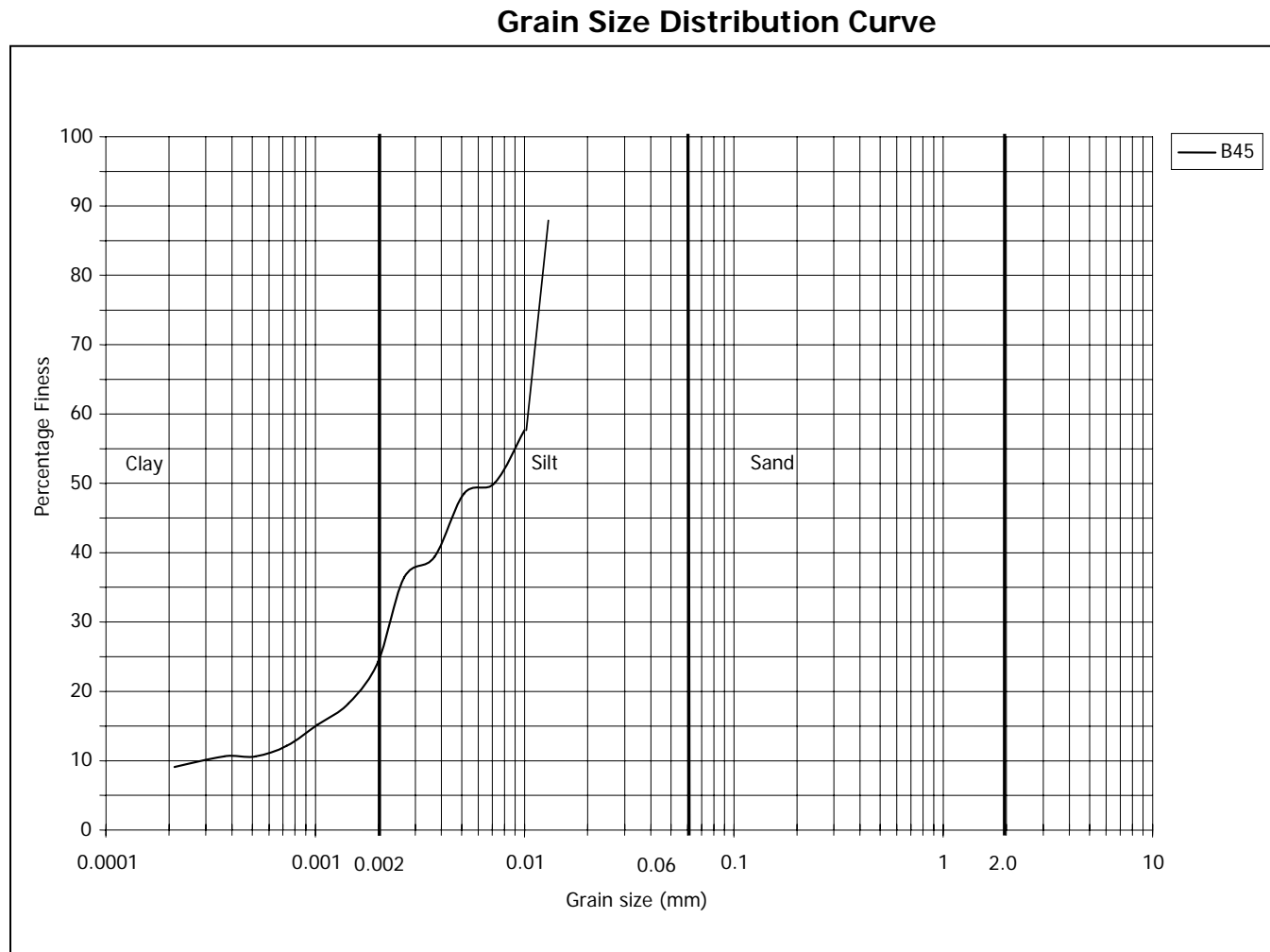


Fig. 7.57 Grid point B45

Grain Size Distribution Curve

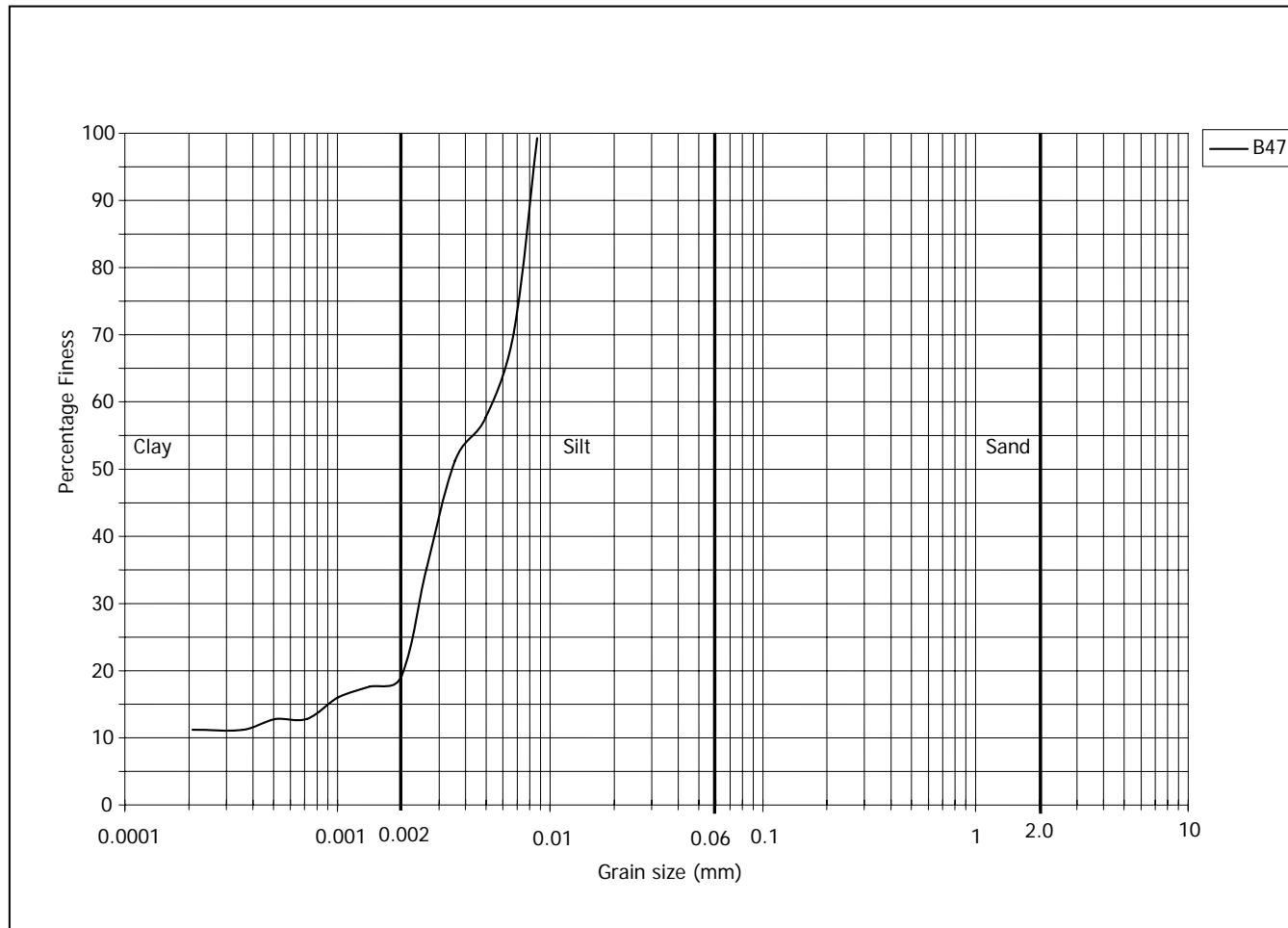


Fig. 7.58 Grid point B47

Grain Size Distribution Curve

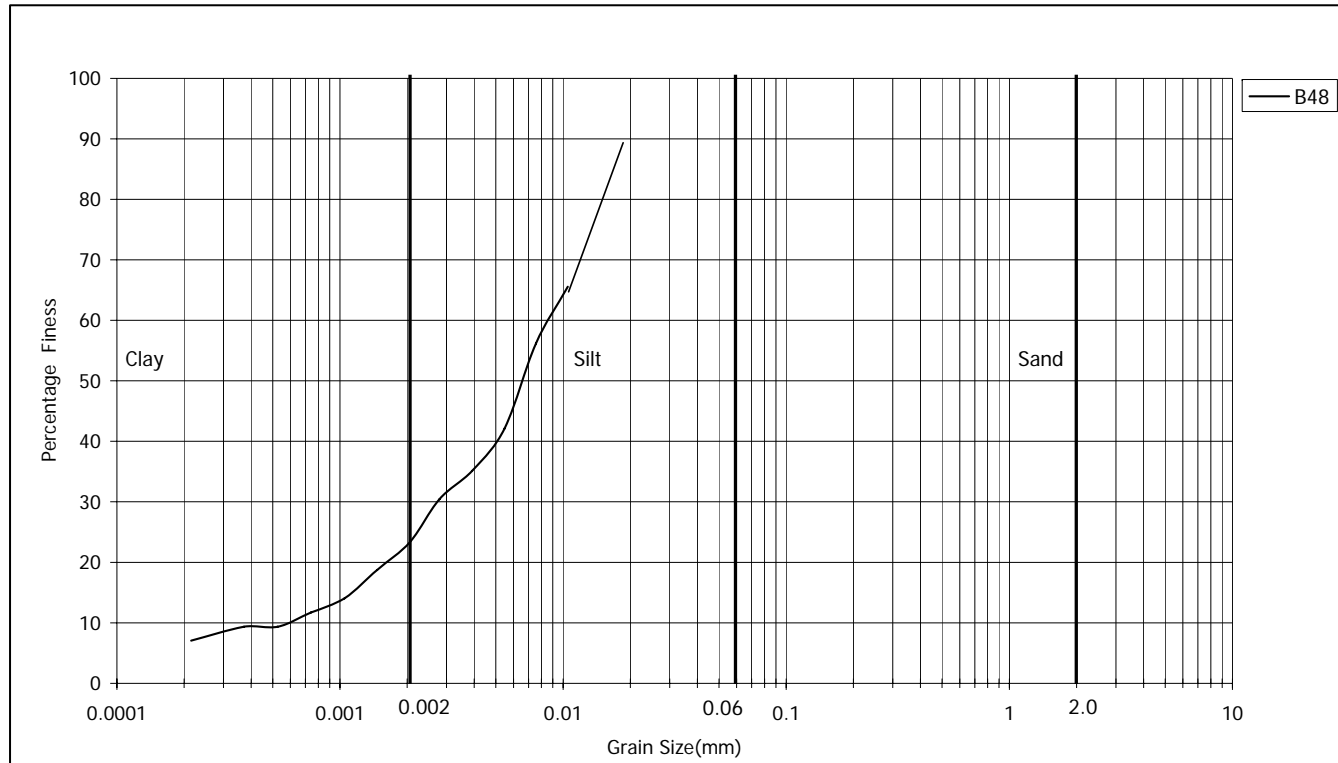


Fig. 7.59 Grid point B48

Grain Size Distribution Curve

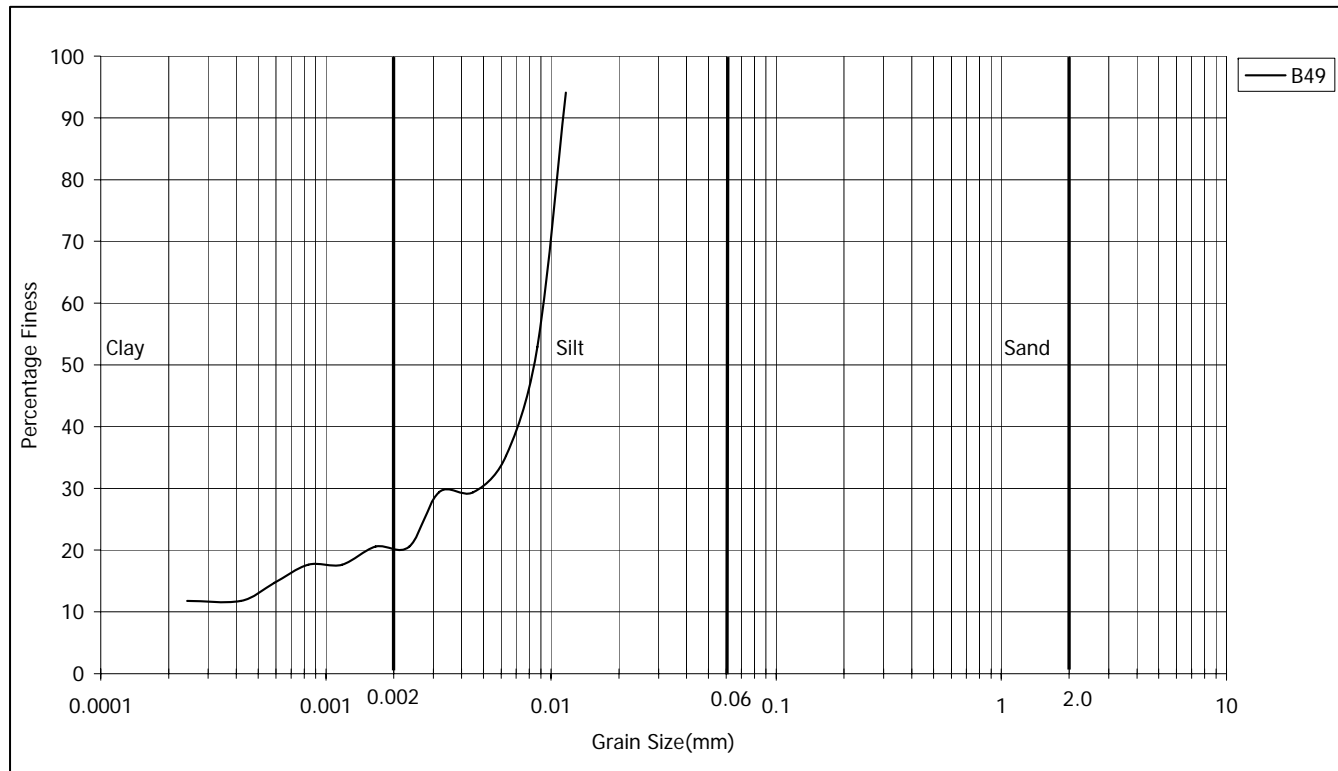


Fig. 7.60 Grid point B49

Grain Size Distribution Curve

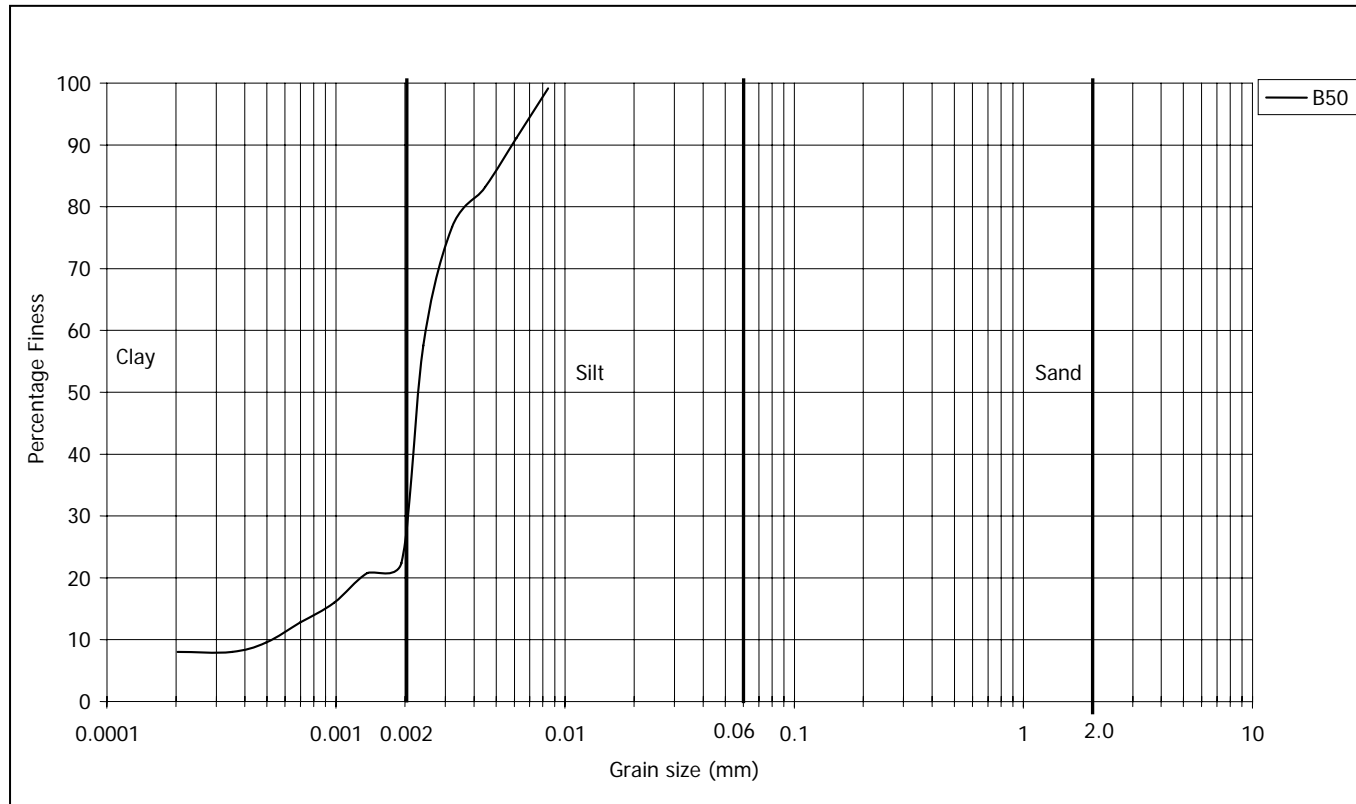


Fig. 7.61 Grid point B50

Grain Size Distribution Curve

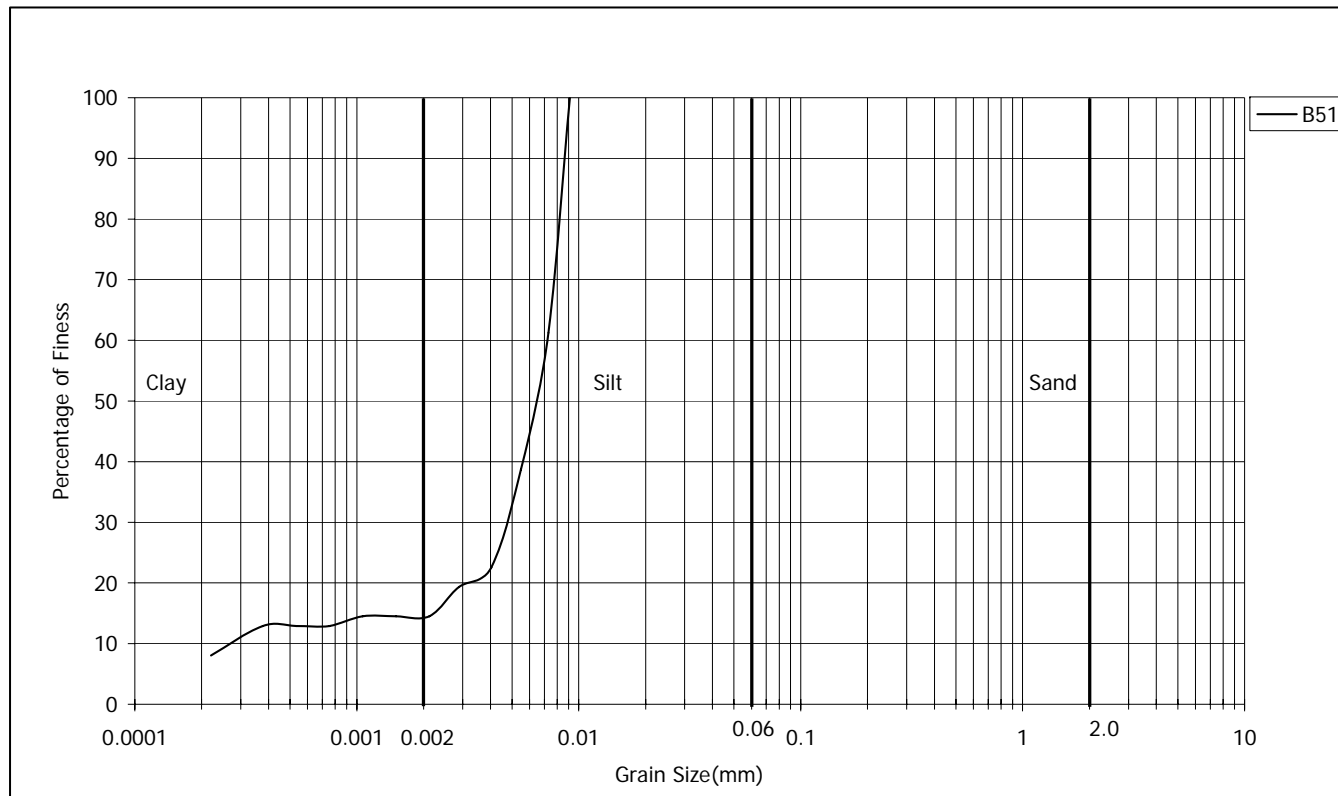


Fig. 7.62 Grid point B51

Grain Size Distribution Curve

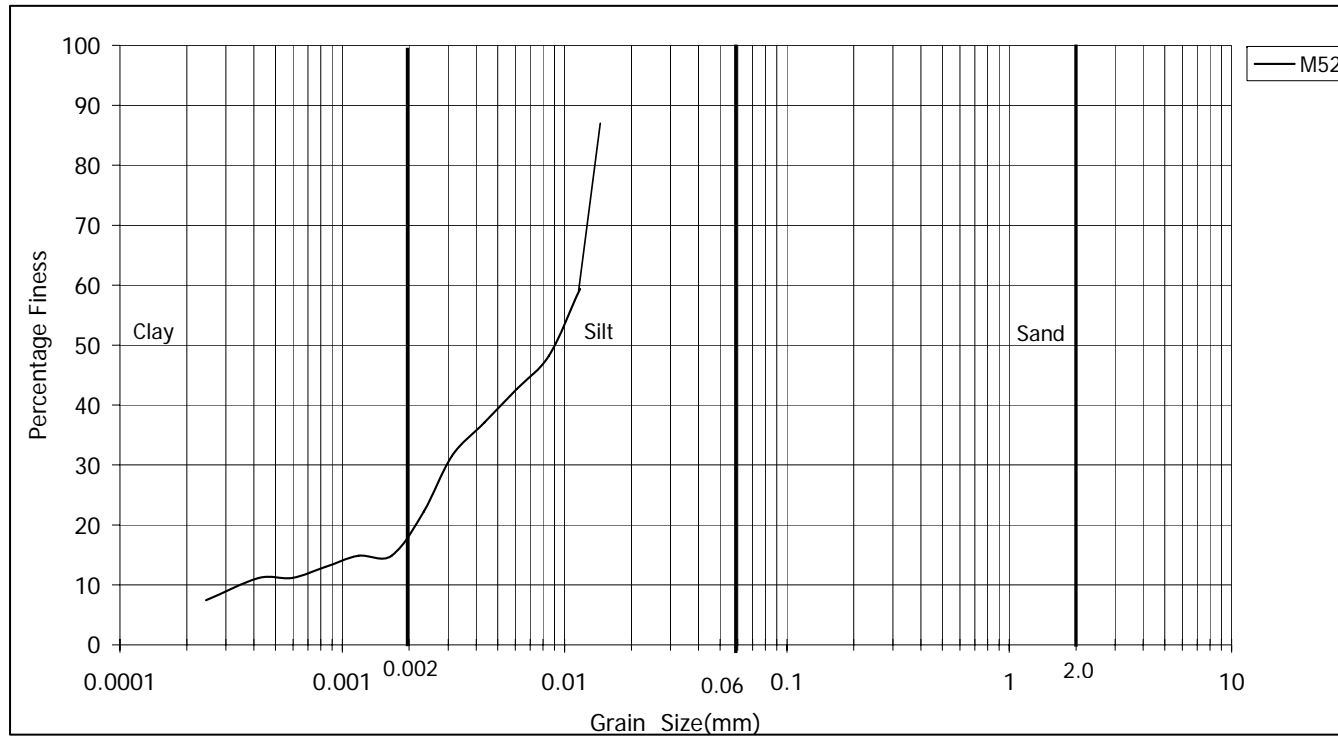


Fig. 7.63 Grid point M52

Grain Size Distribution Curve

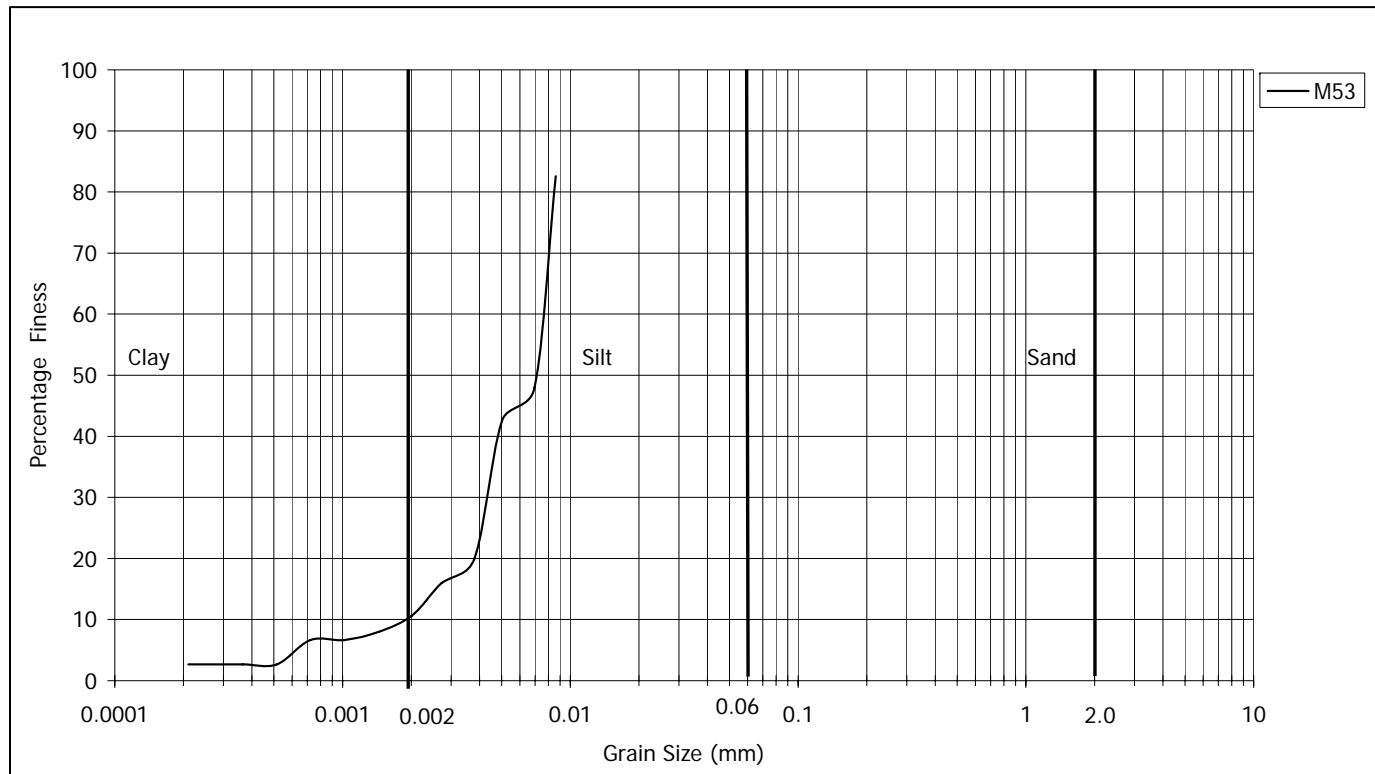


Fig. 7.64 Grid point M53

Grain Size Distribution Curve

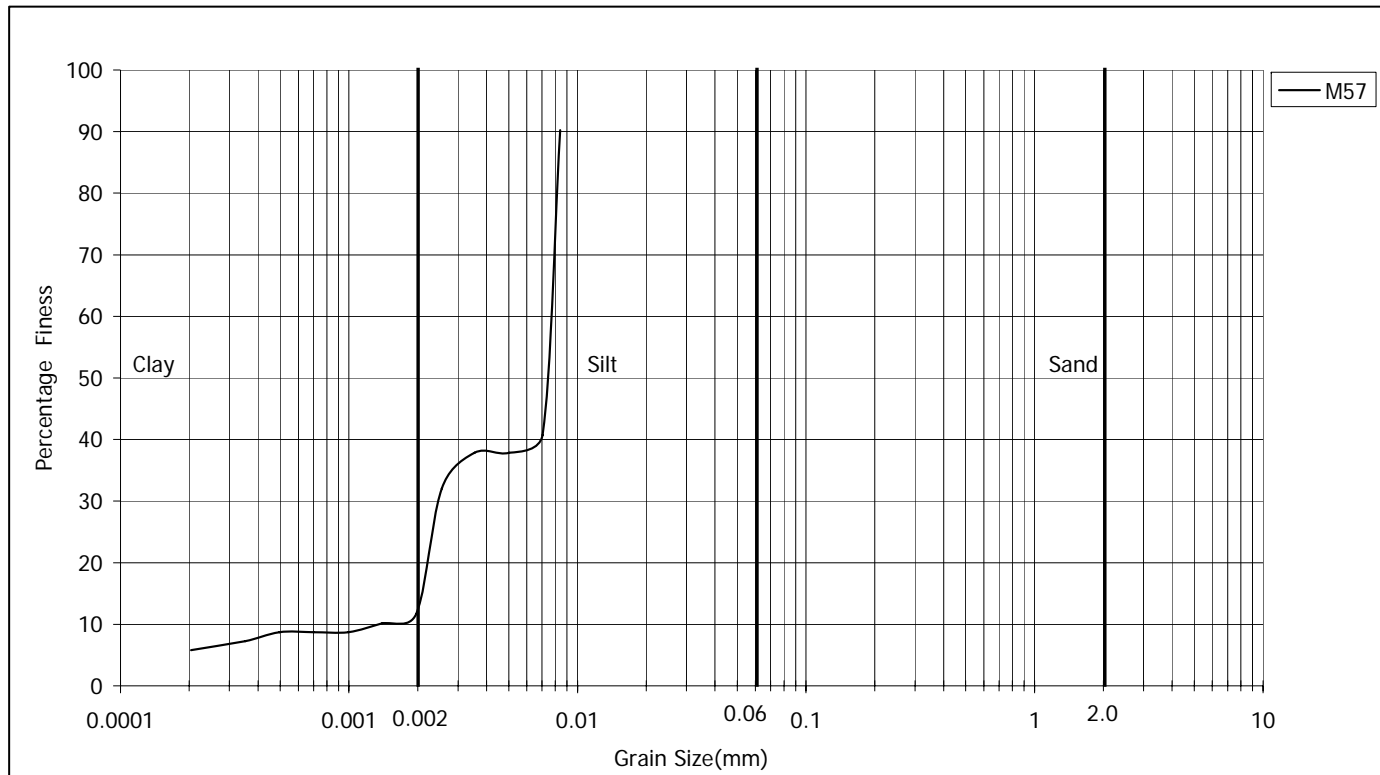


Fig. 7.65 Grid point M57

Grain Size Distribution Curve

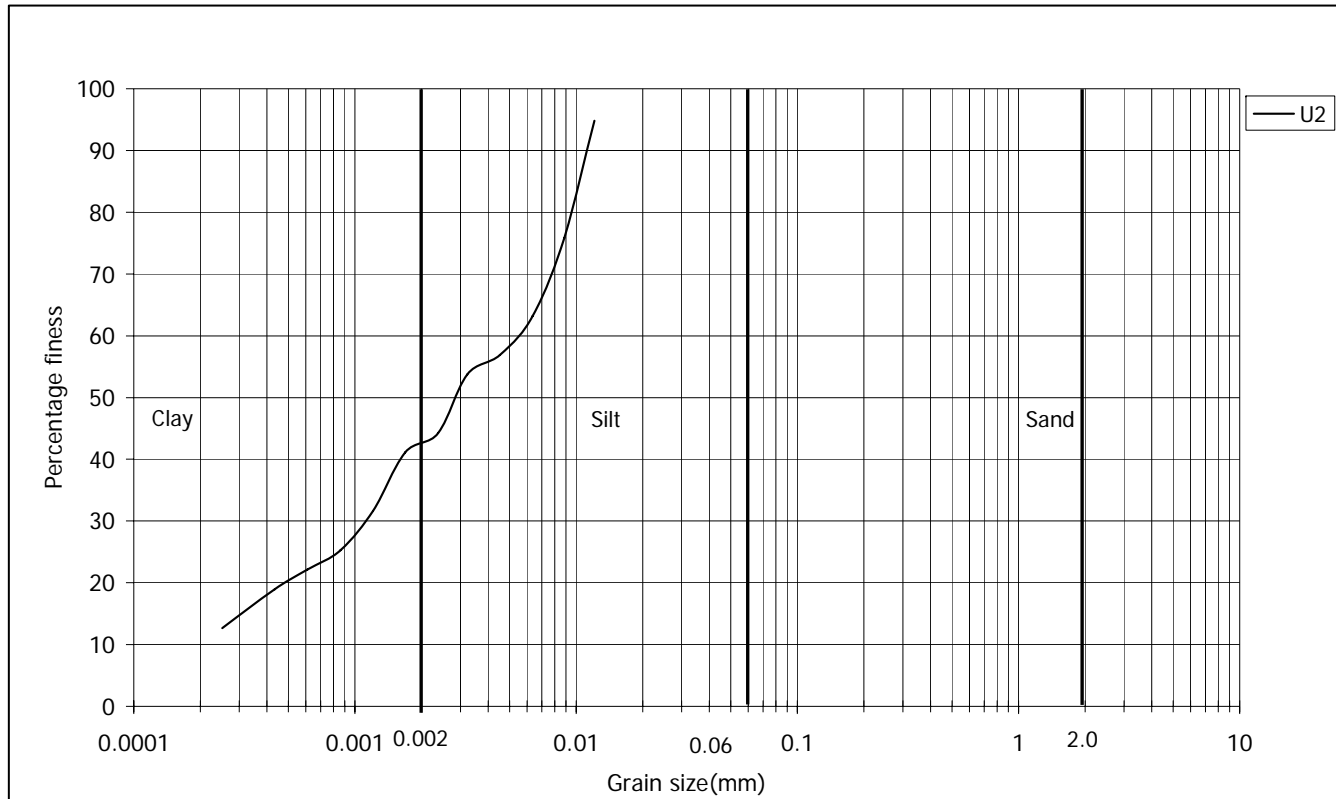


Fig. 7.66 Grid point U2

Grain Size Distribution Curve

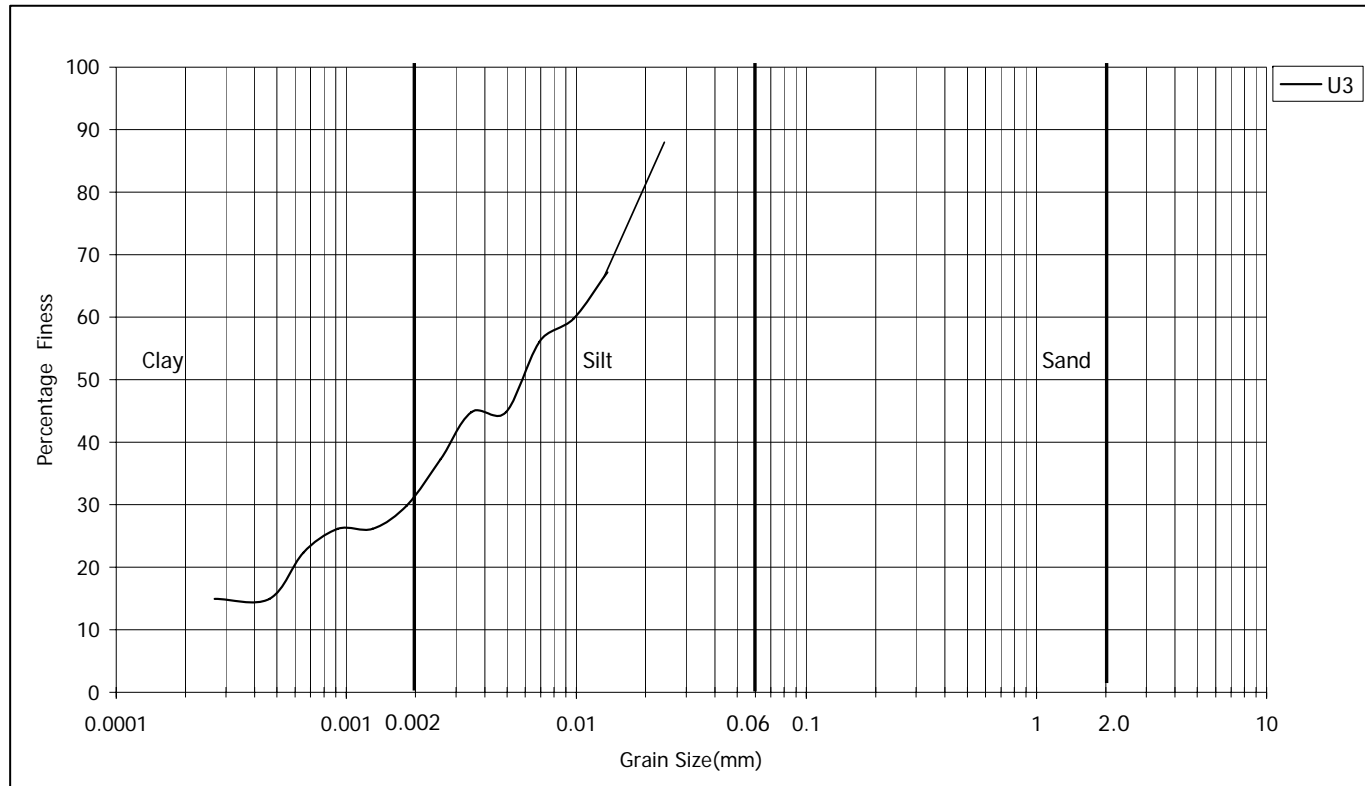


Fig. 7.67 Grid point U4

Grain Size Distribution Curve

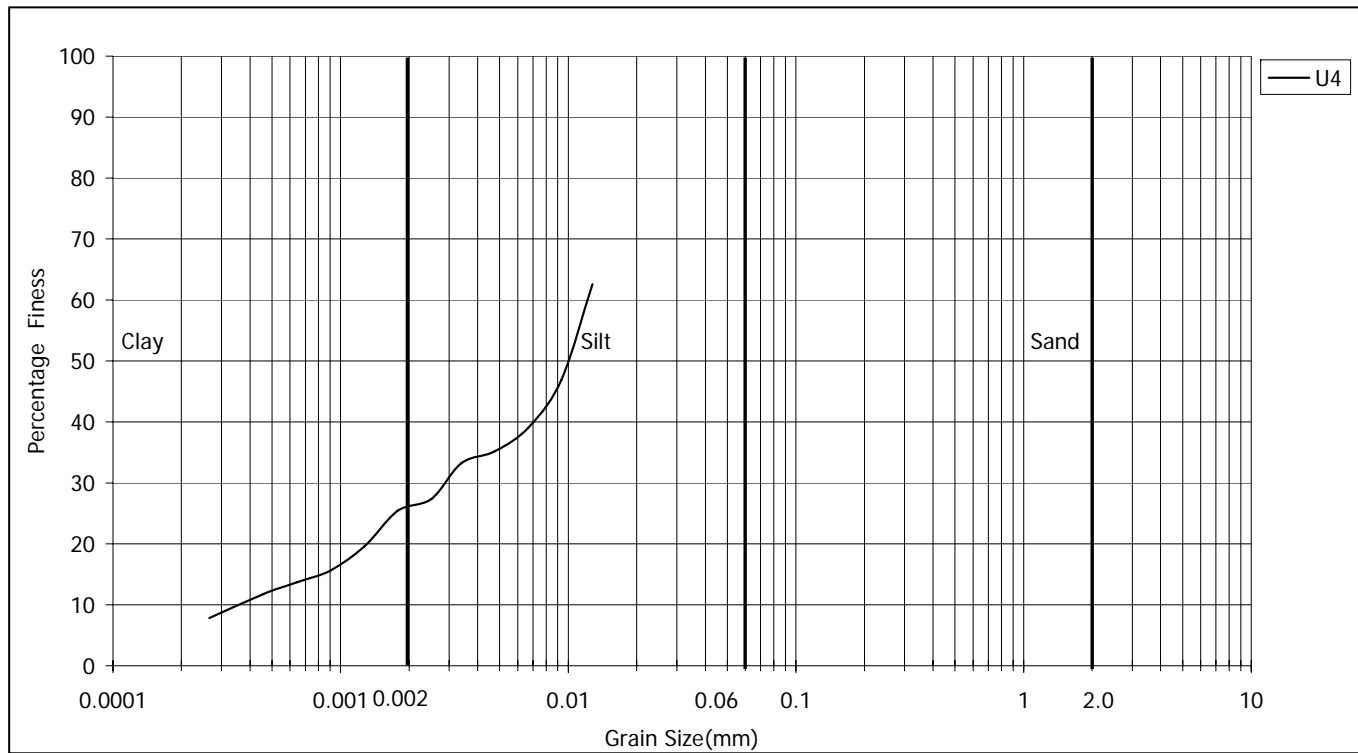


Fig. 7.68 Grid point U4

Grain Size Distribution Curve

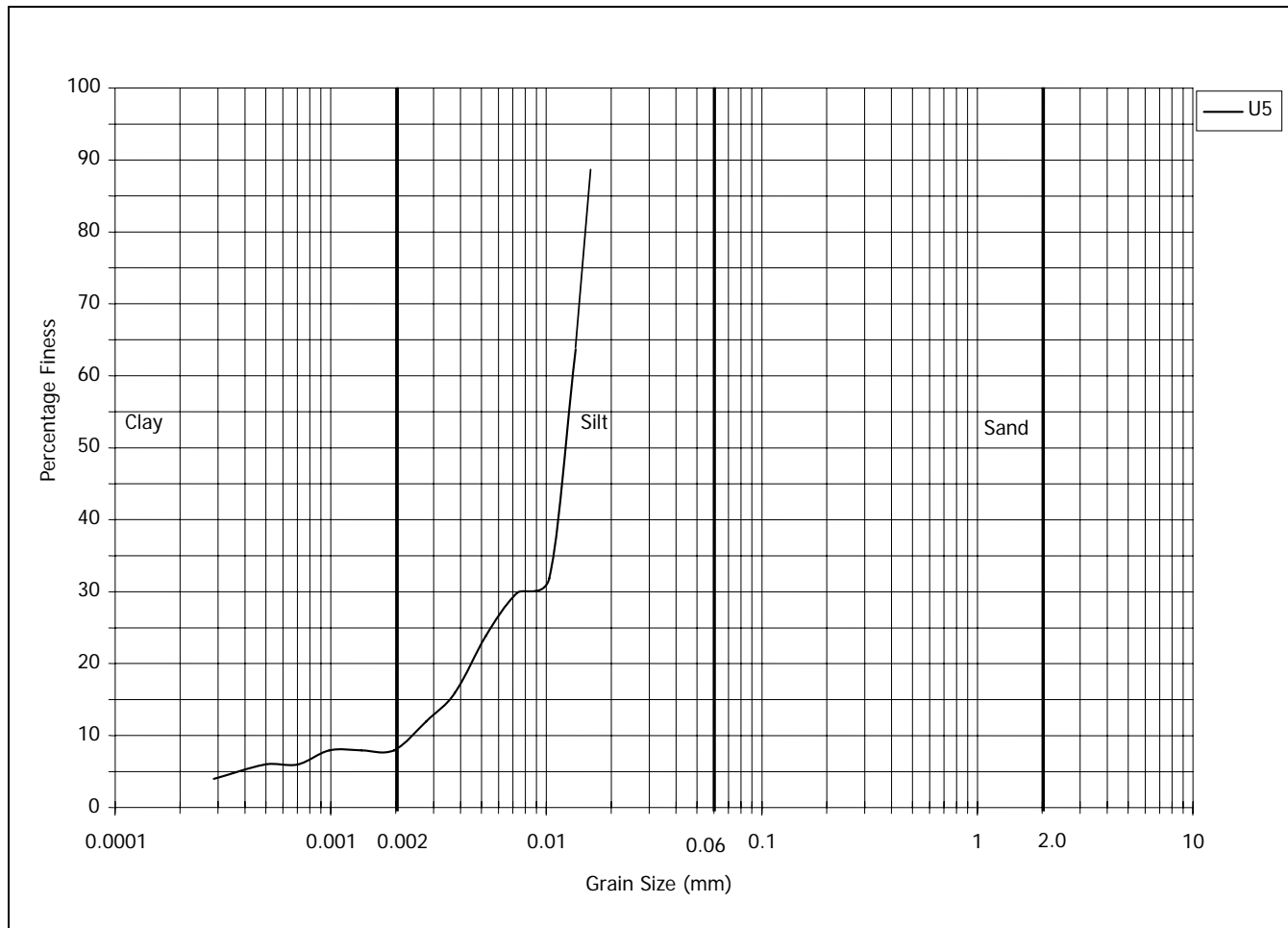


Fig.7.69 Grid point U5

Grain Size Distribution Curve

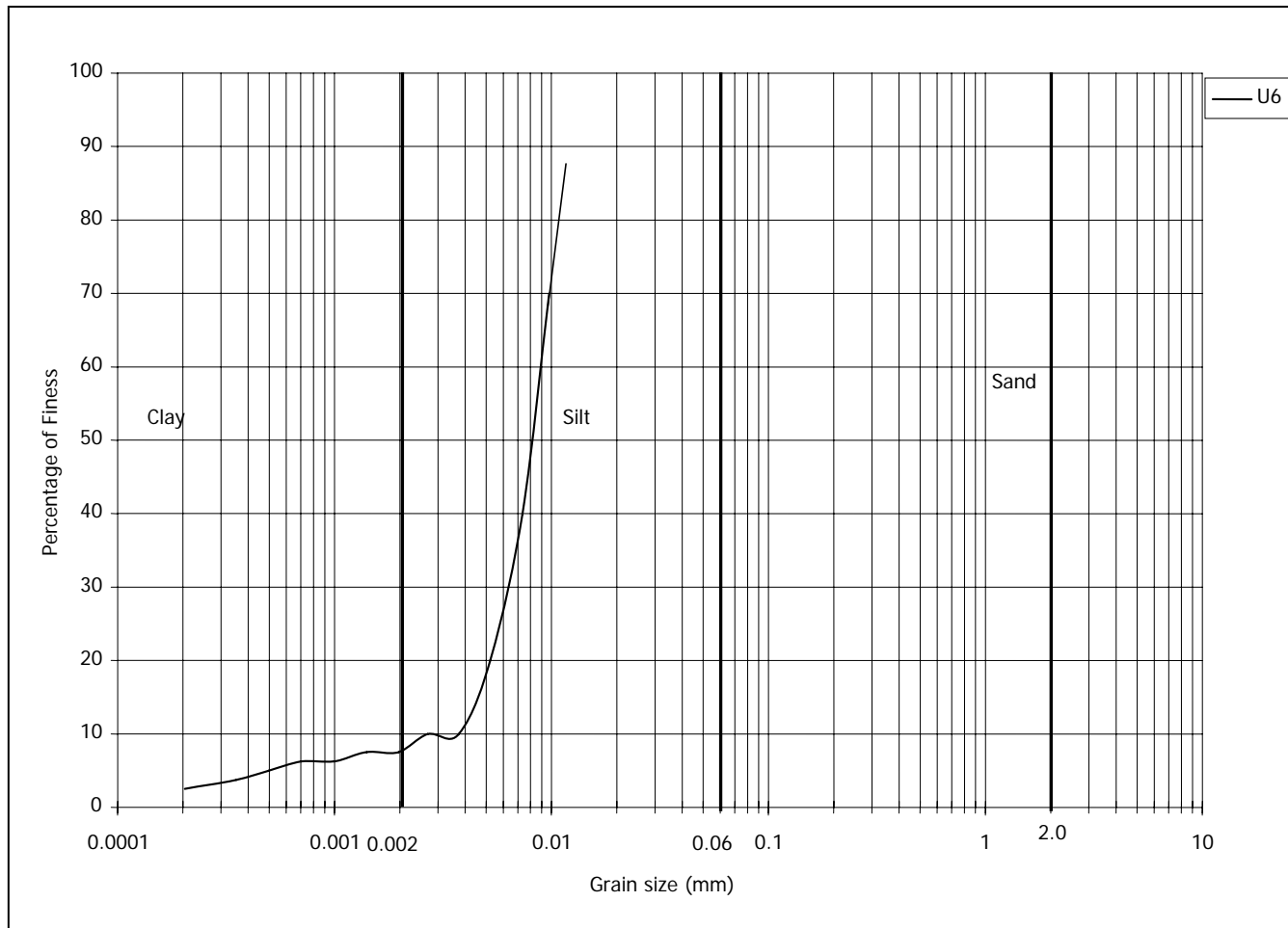


Fig. 7.70 Grid point U6

Grain Size Distribution Curve

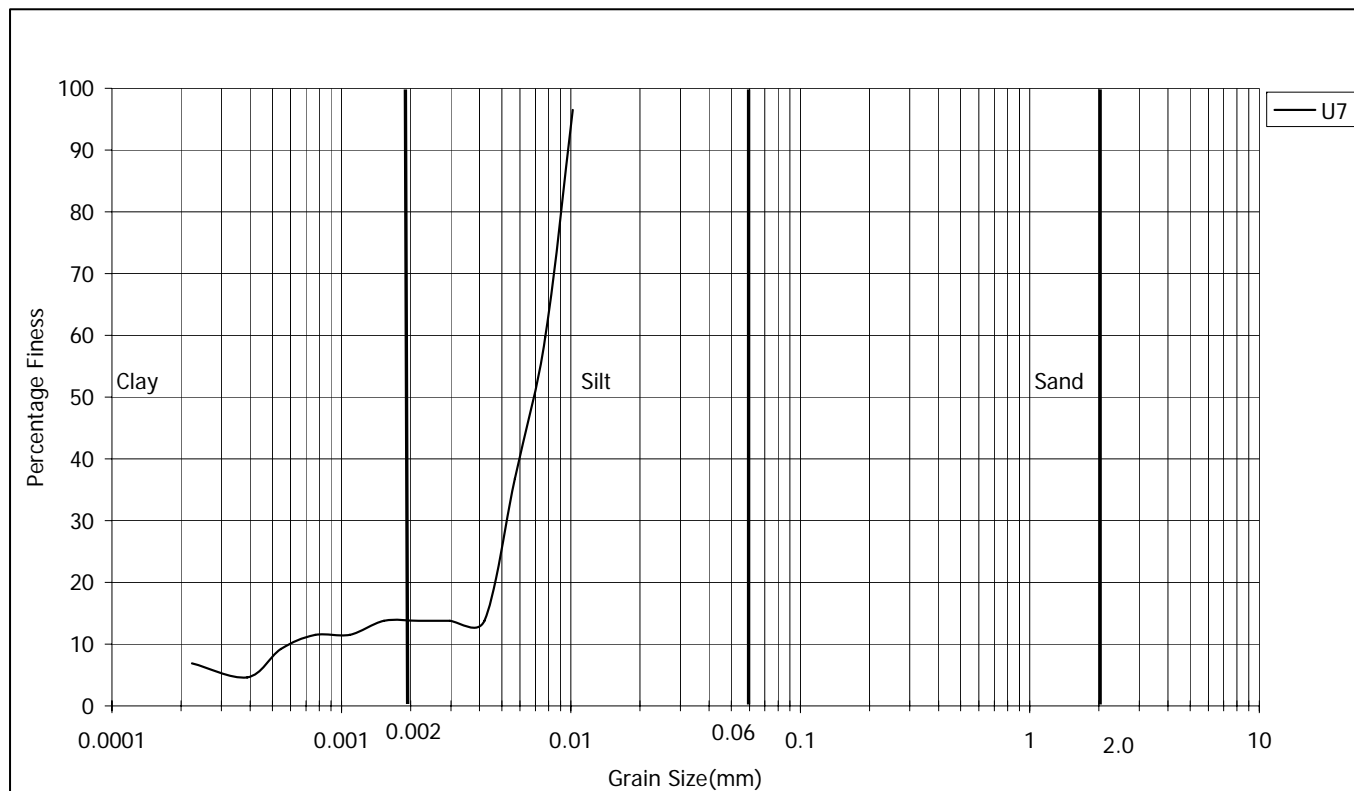


Fig. 7.71 Grid point U7

Grain Size Distribution Curve

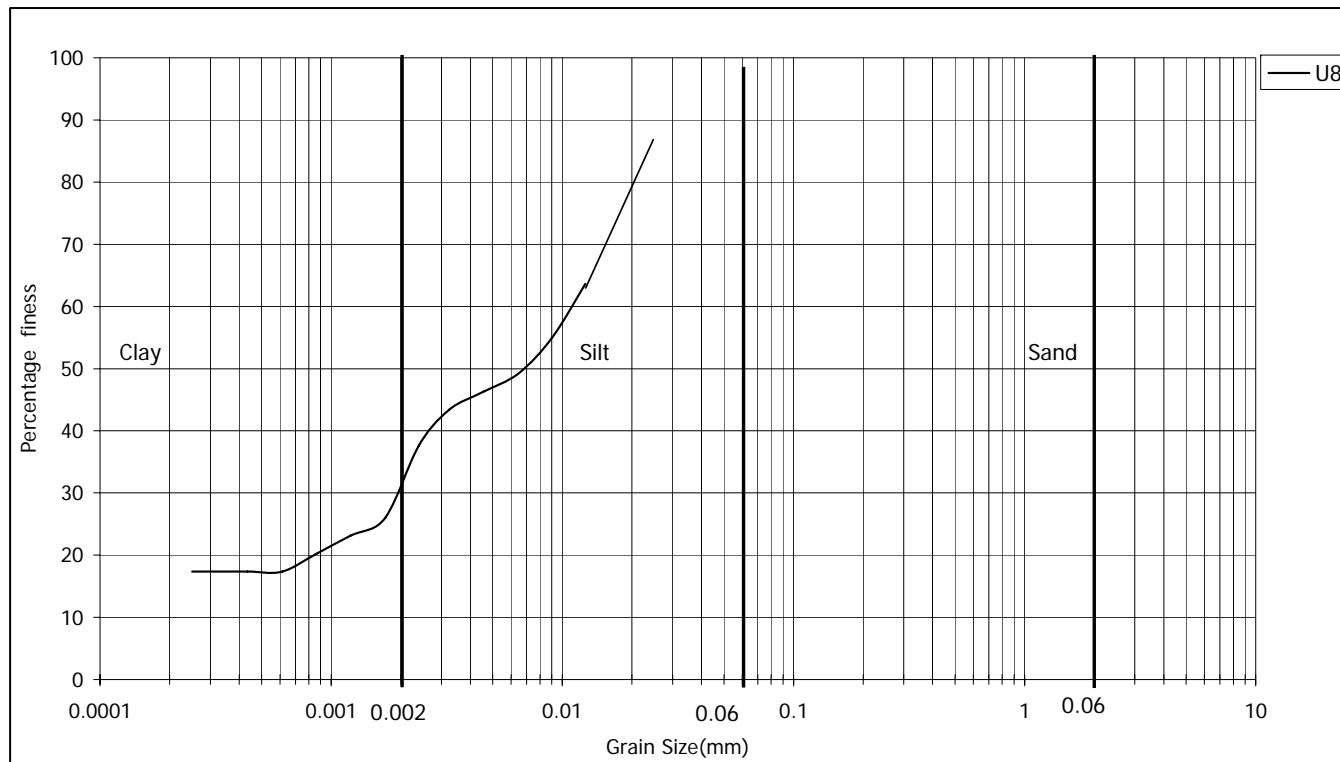


Fig. 7.72 Grid point U8

Grain Size Distribution Curve

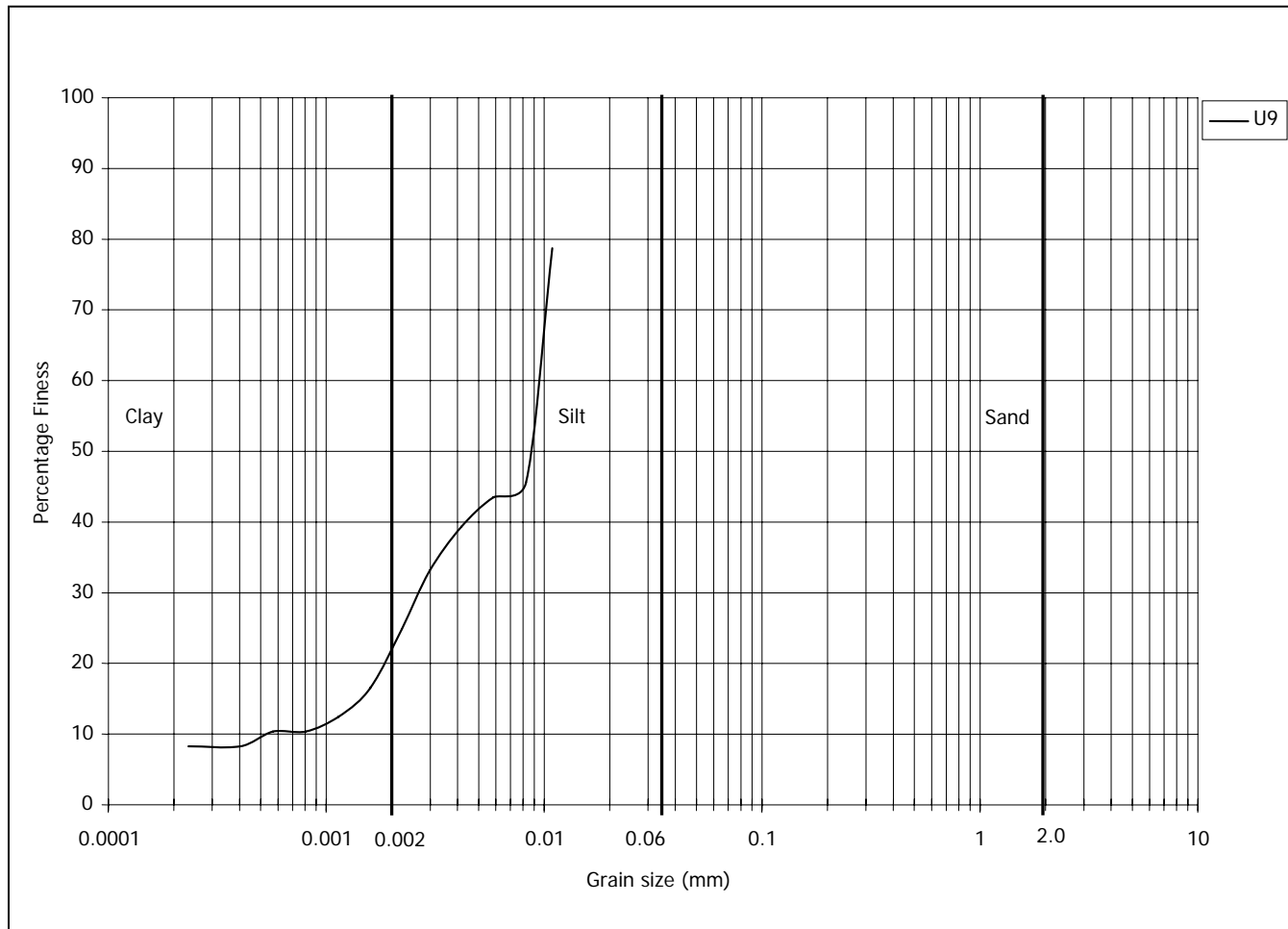


Fig. 7.73 Grid point U9

Grain Size Distribution Curve

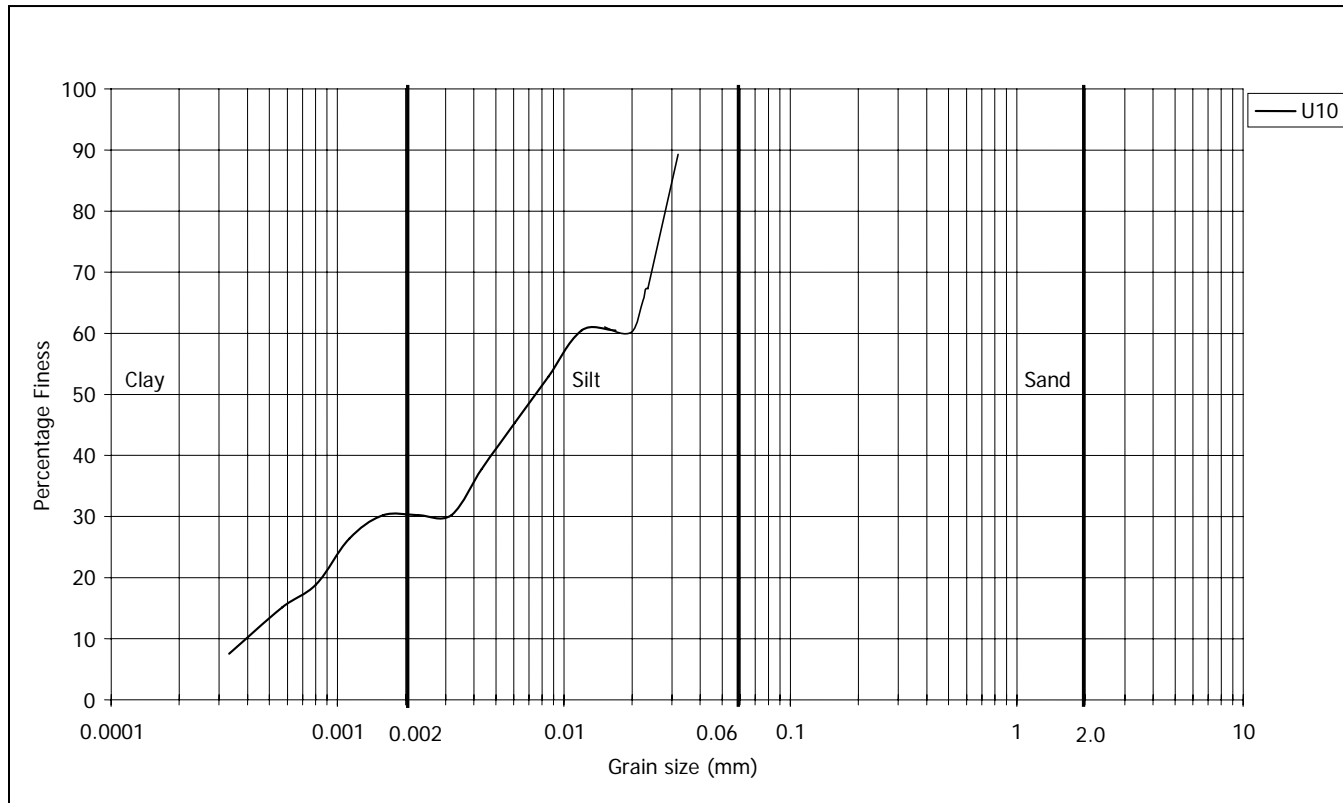


Fig. 7.74 Grid point U10

Grain Size Distribution Curve

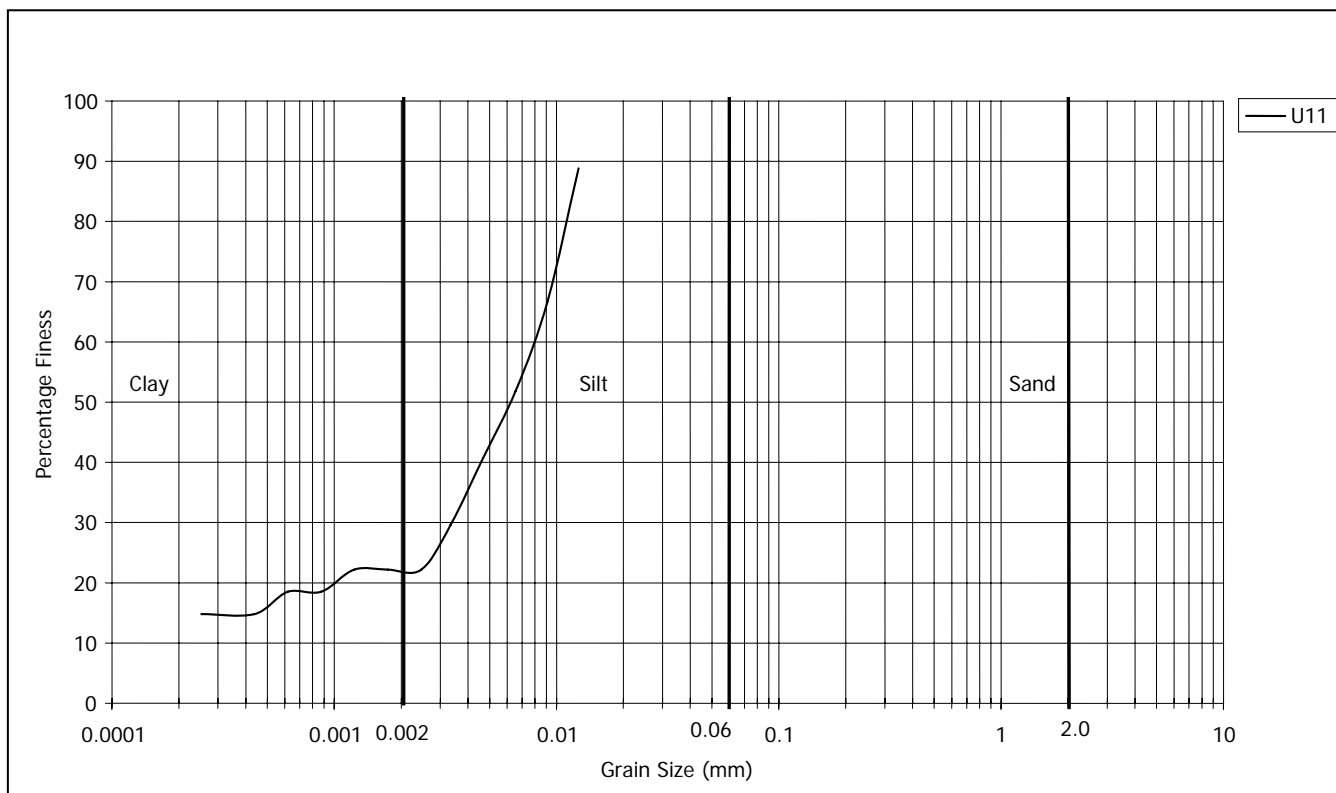


Fig. 7.75 Grid point U11

Grain Size Distribution Curve

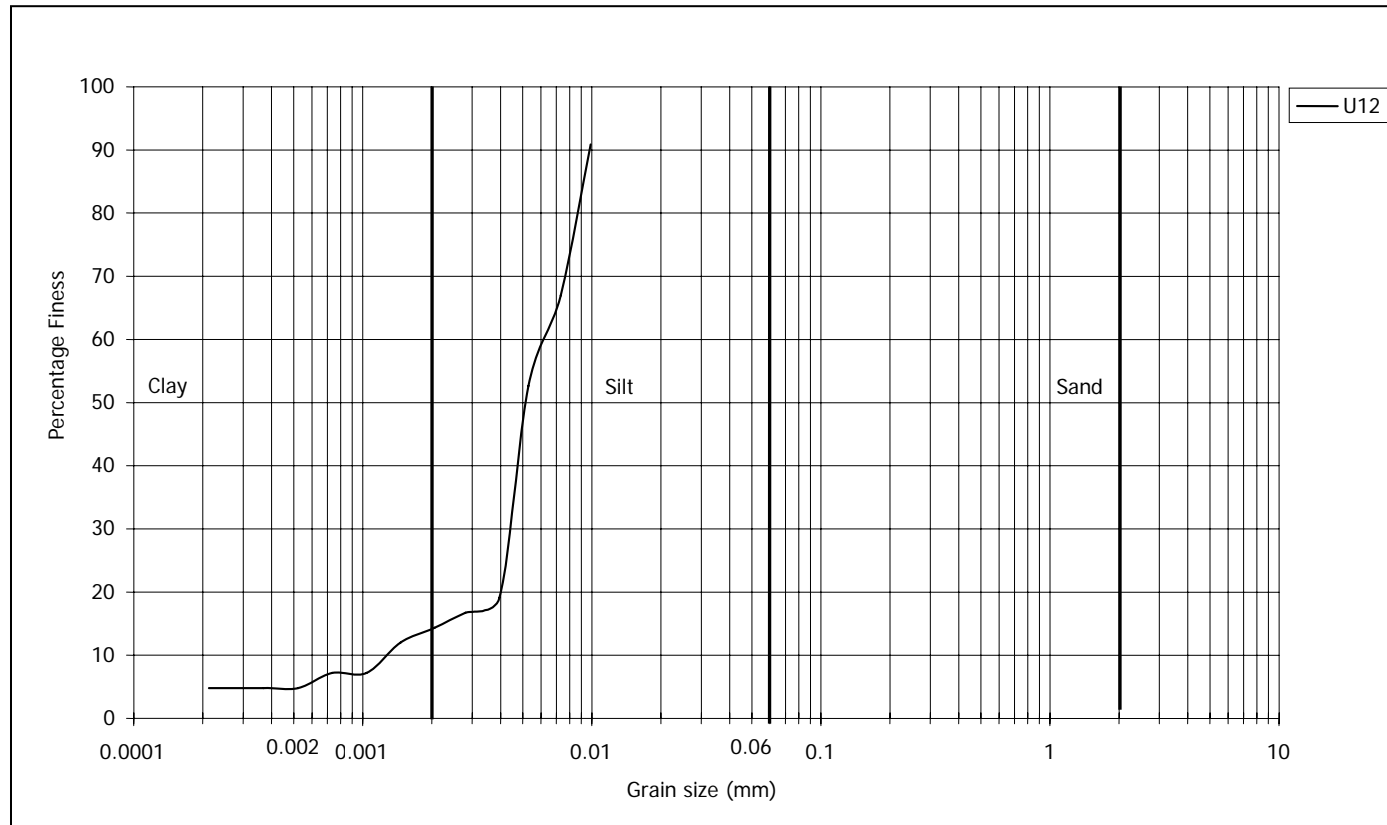


Fig. 7.76 Grid point U12

Grain Size Distribution Curve

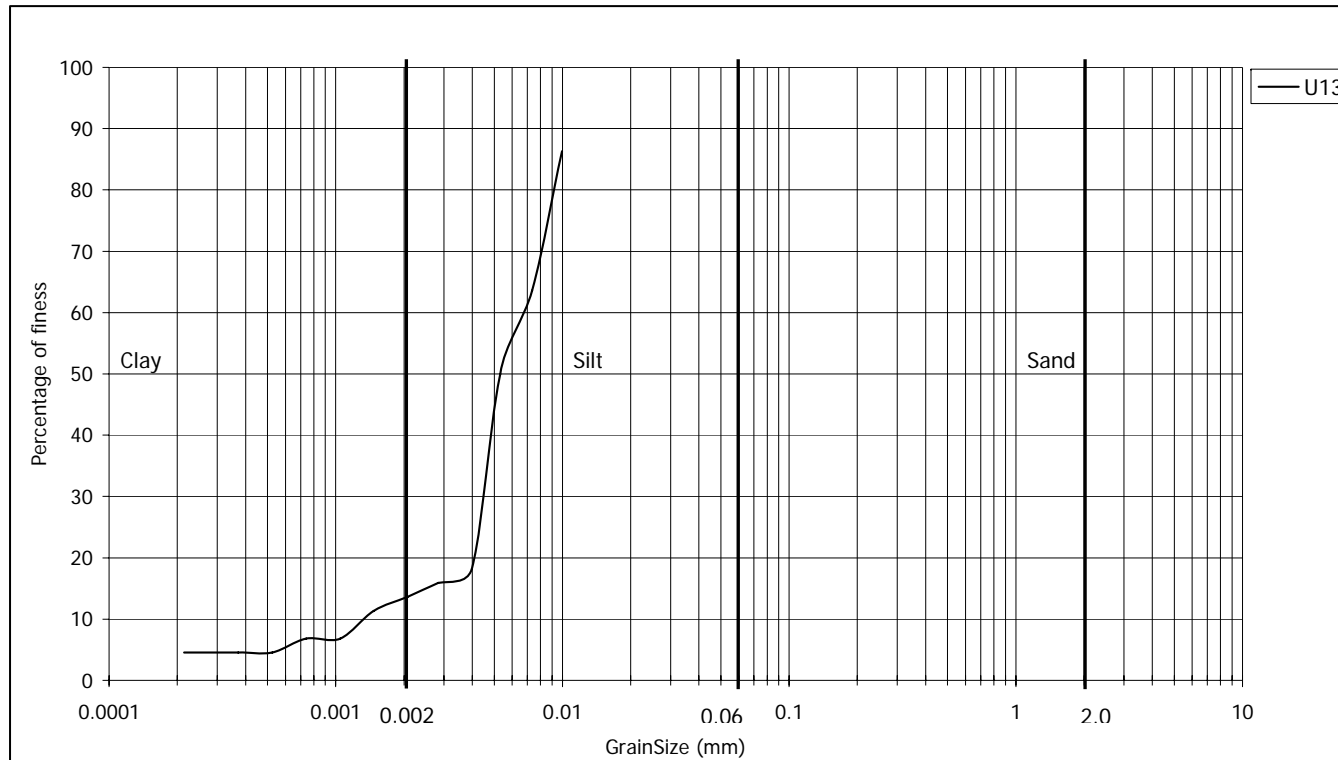


Fig. 7.77 Grid point U13

Grain Size Distribution Curve

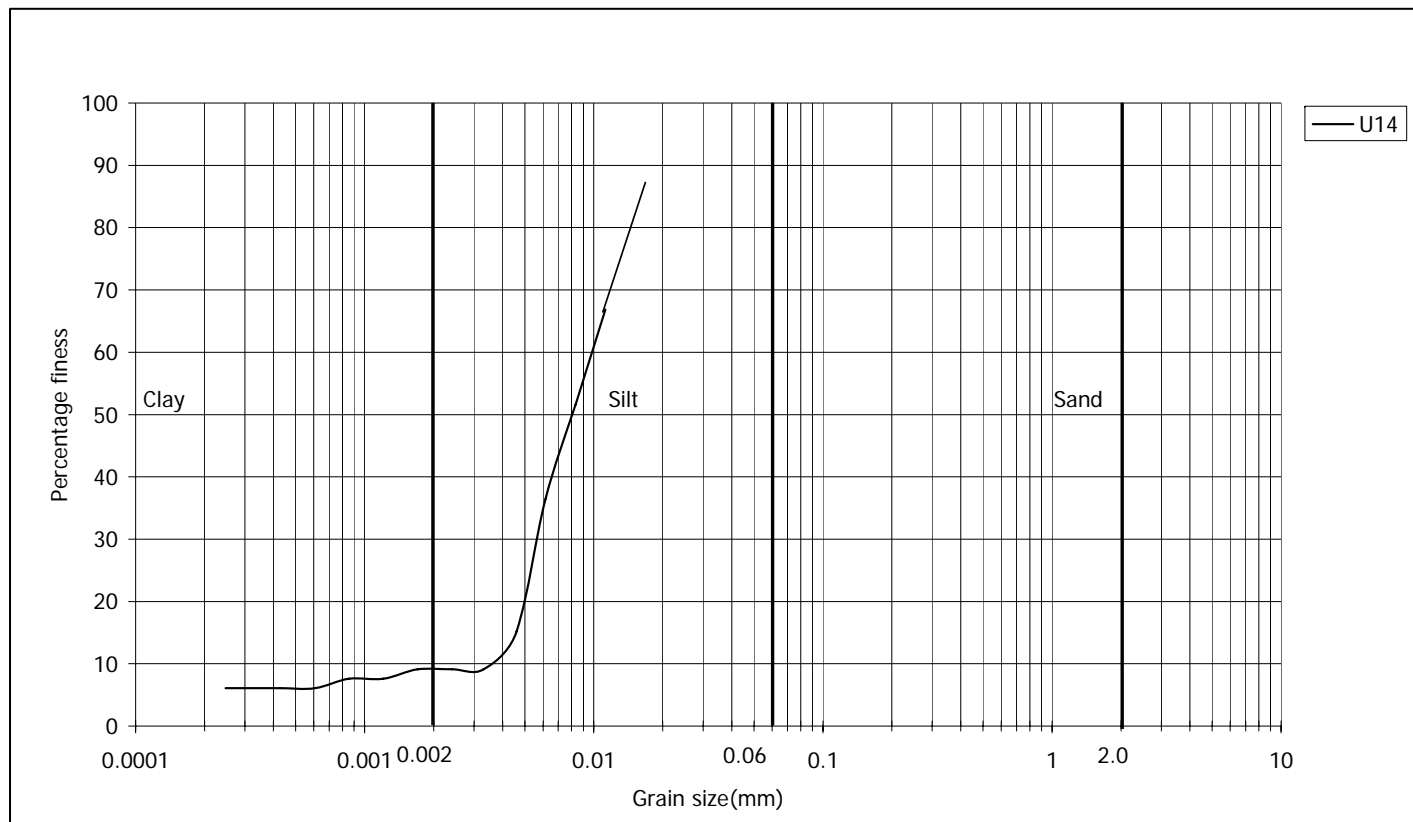


Fig. 7.78 Grid point U14

Grain Size Distribution Curve

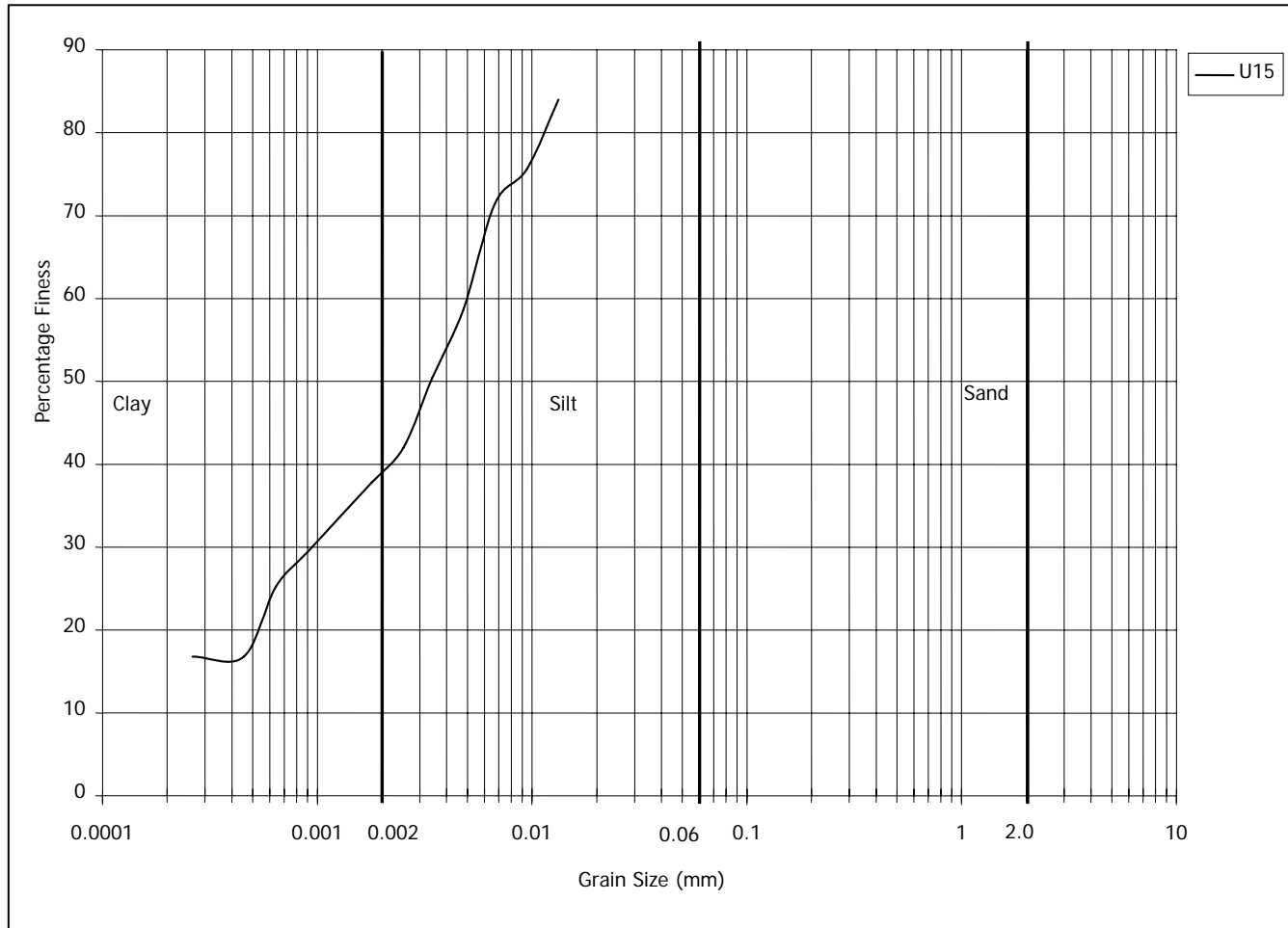


Fig. 7.79 Grid point U15

Grain Size Distribution Curve

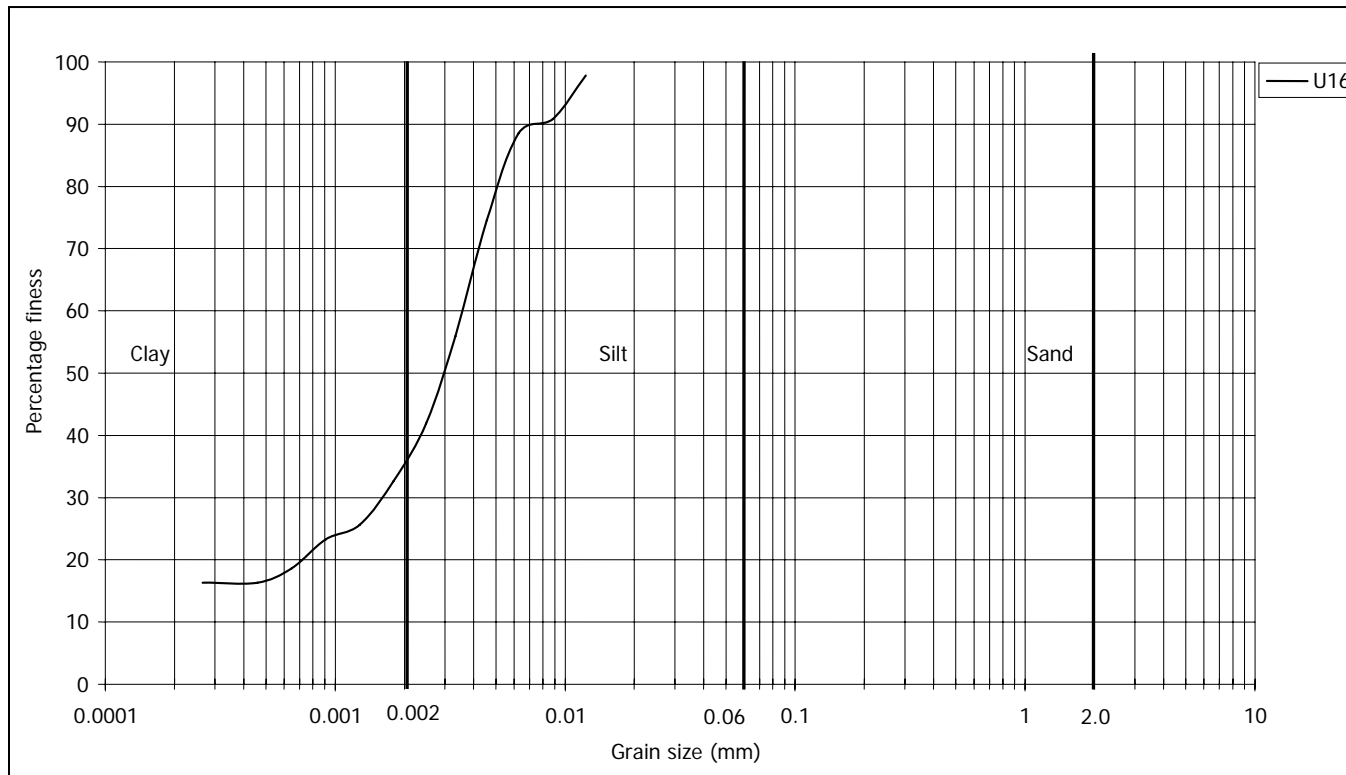


Fig.7.80 Grid point U16

Grain Size Distribution Curve

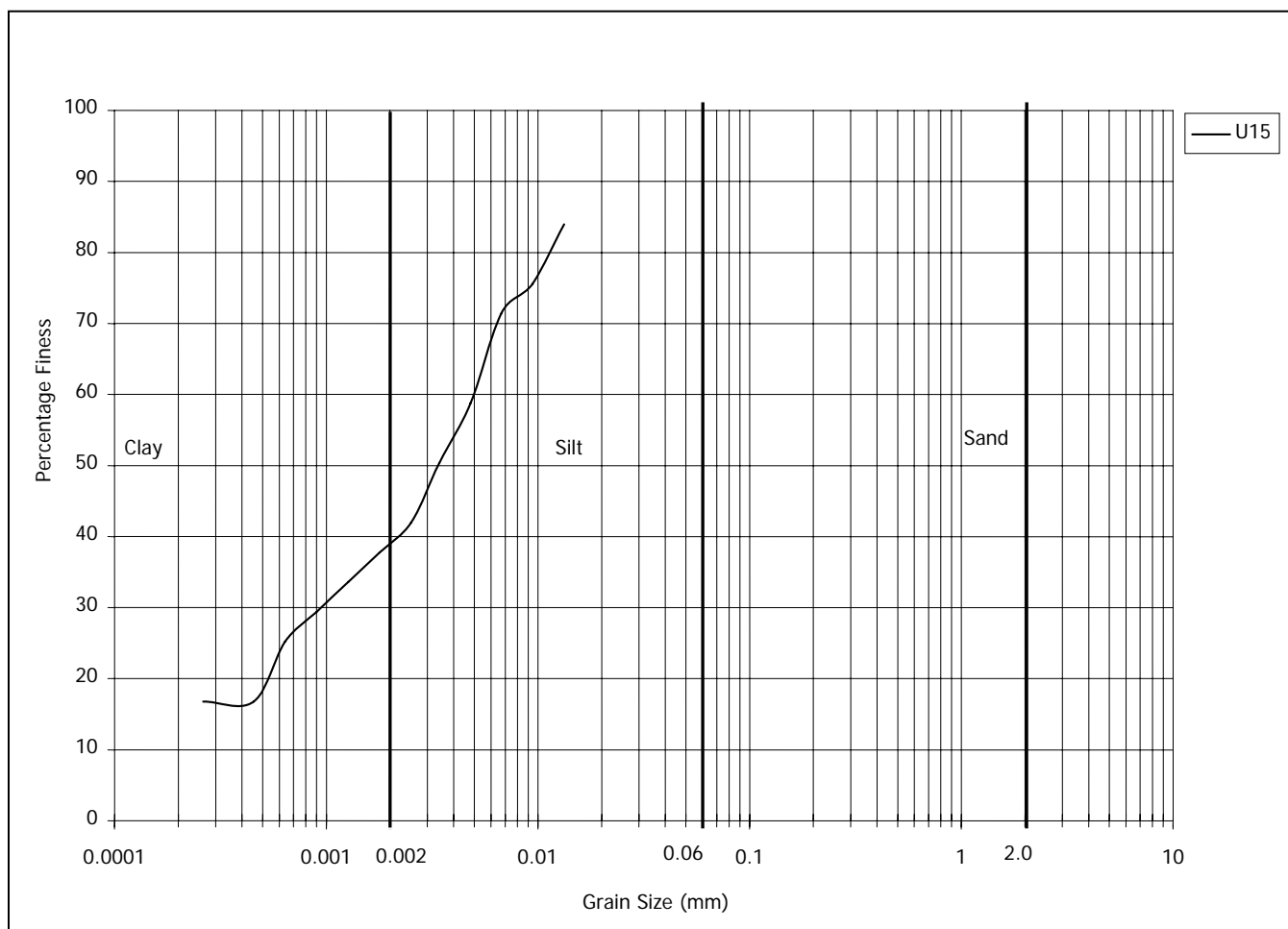


Fig. 7.81 Grid point U15

Grain Size Distribution Curve

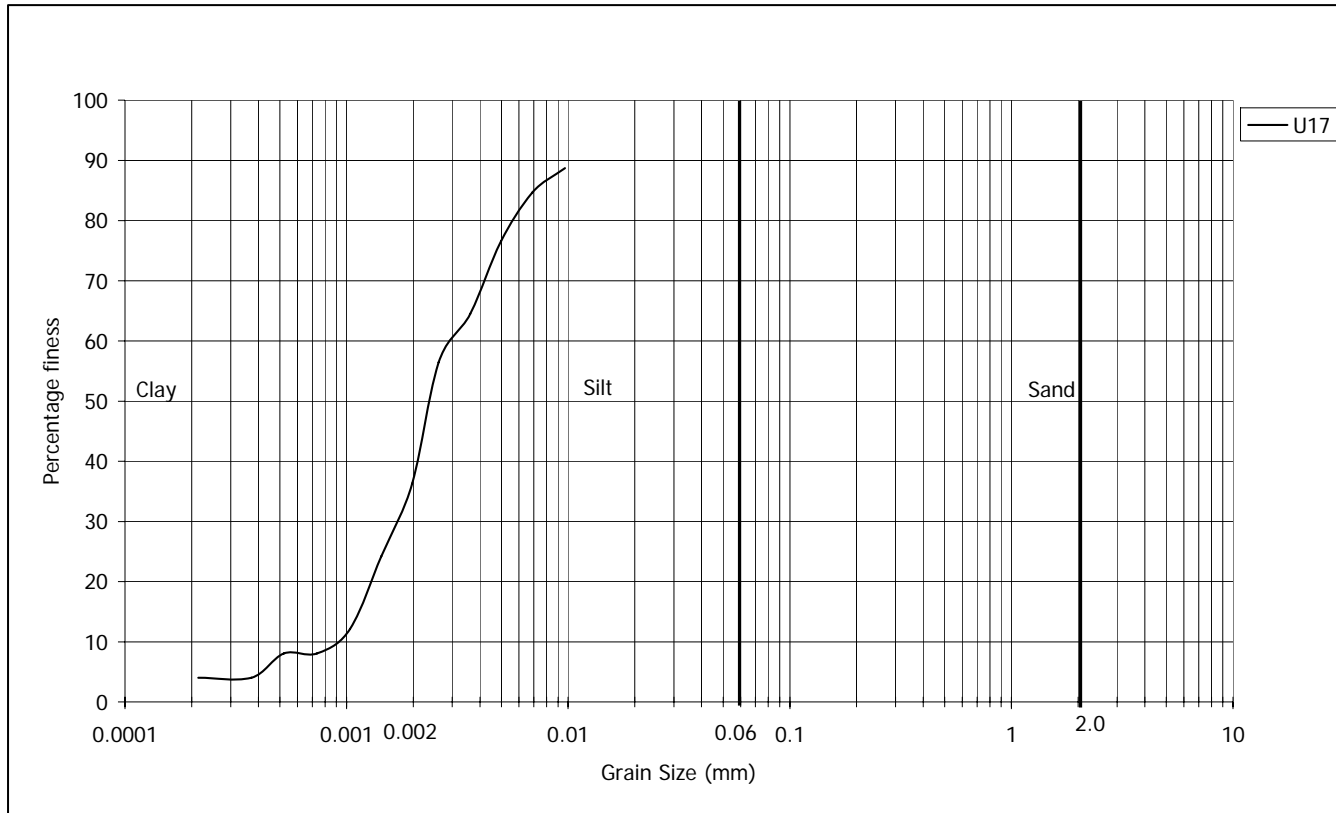


Fig. 7.82 Grid point U17

Grain Size Distribution Curve

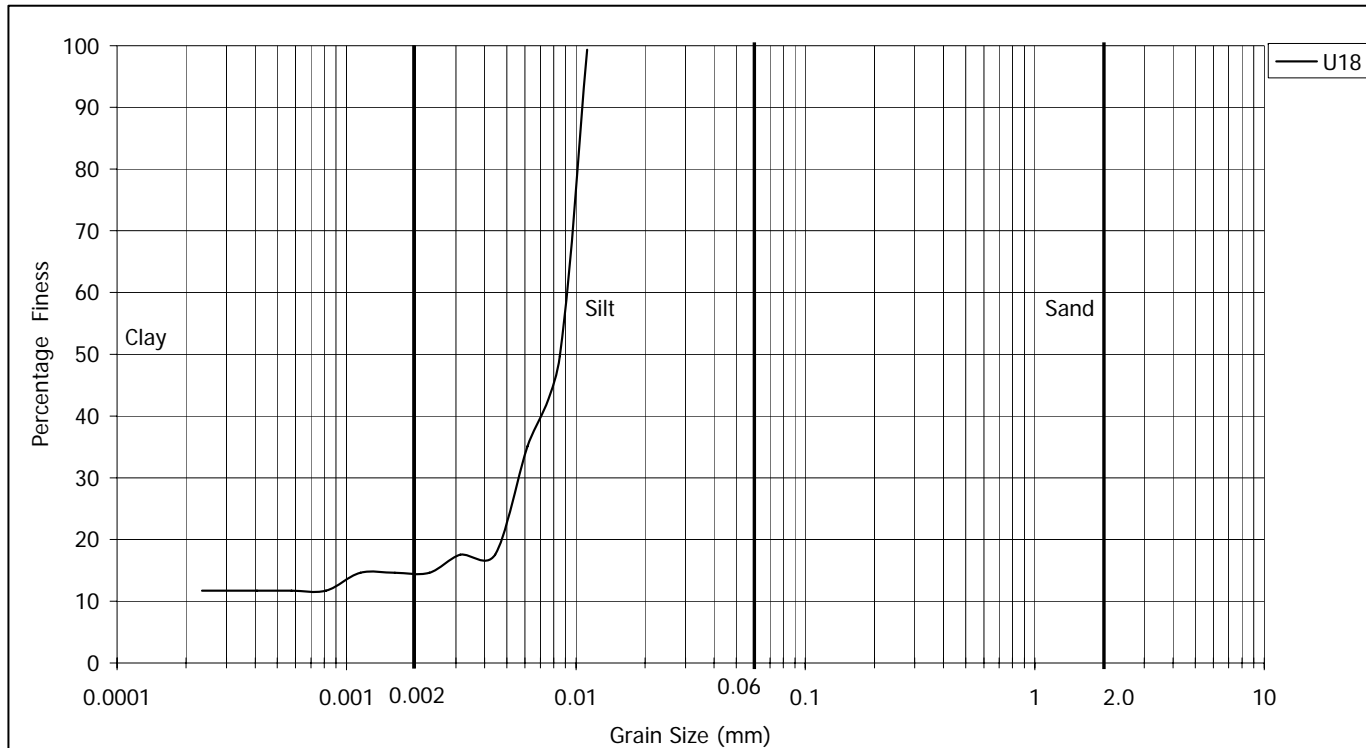


Fig. 7.83 Grid point U18

Grain Size Distribution Curve

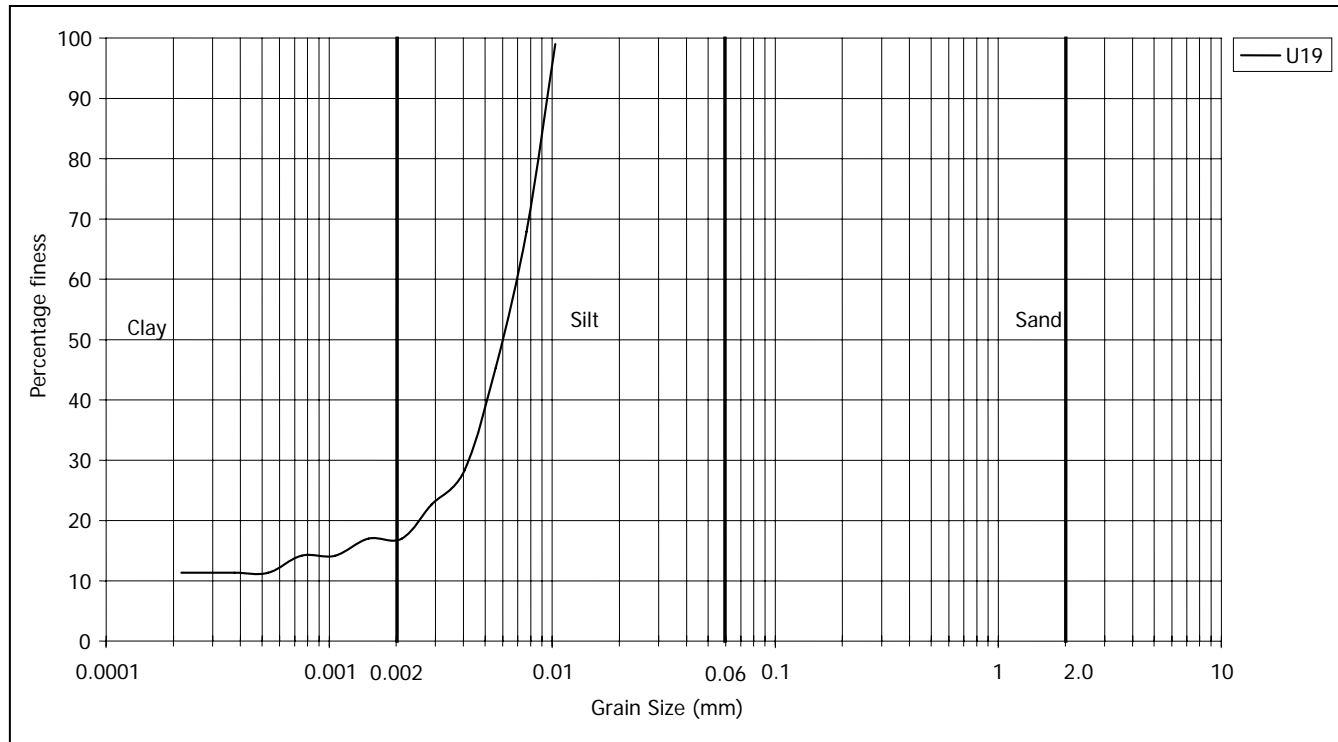


Fig. 7.84 Grid point U19

Grain Size Distribution Curve

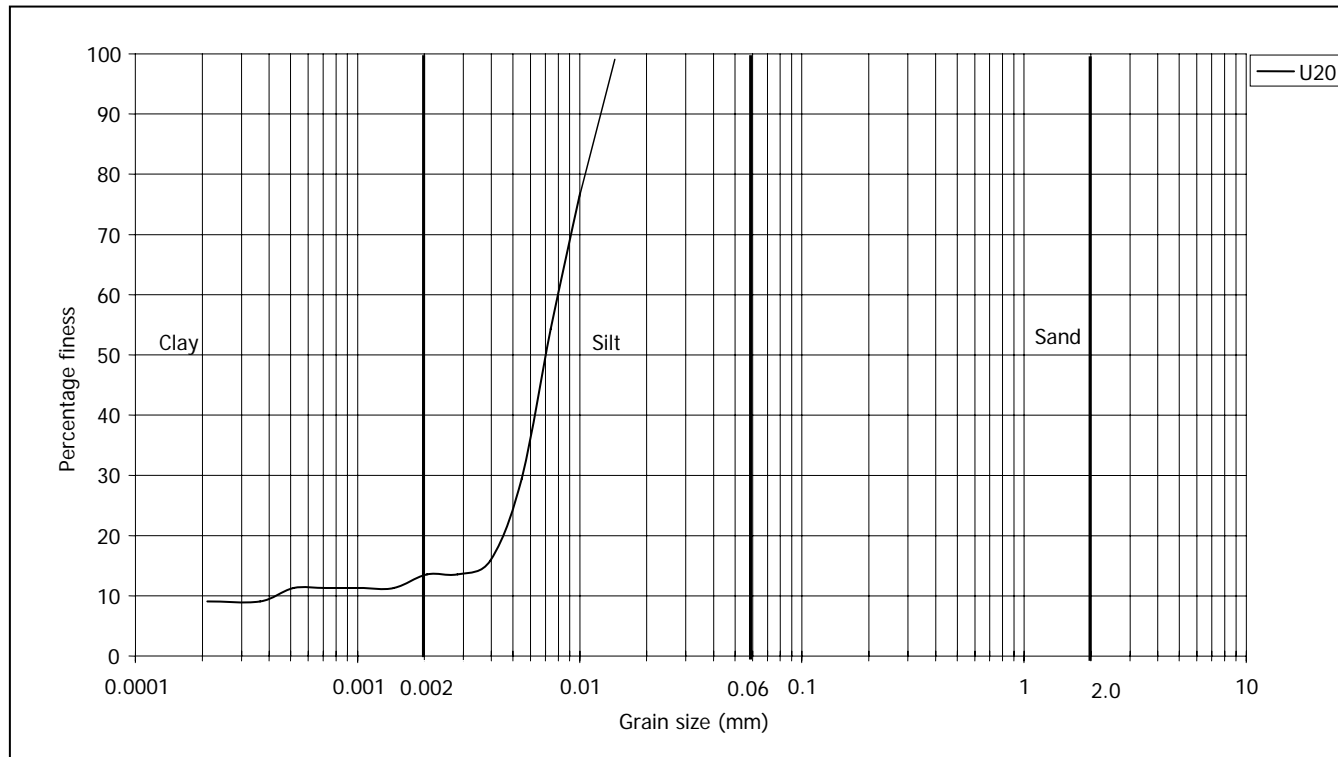


Fig. 7.85 Grid point U20

Grain Size Distribution Curve

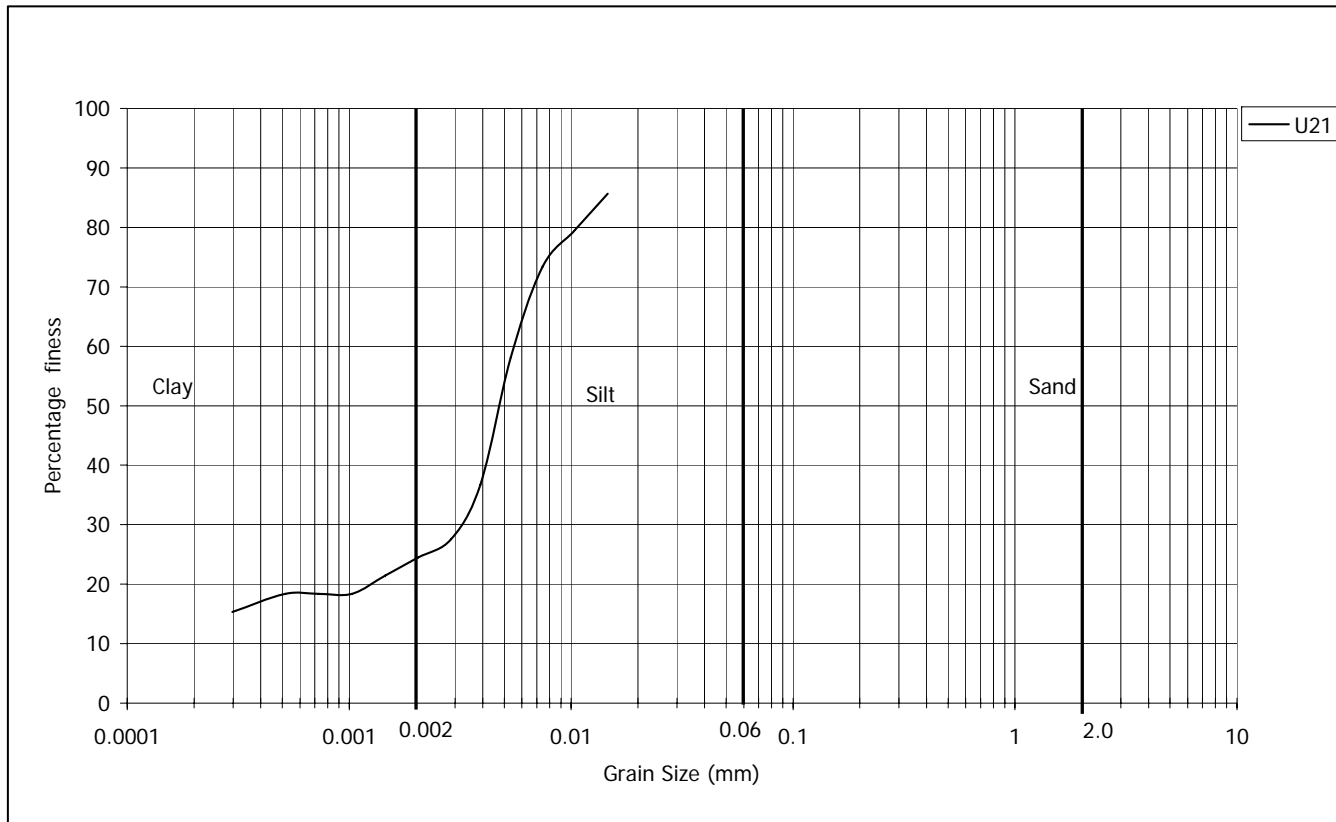


Fig. 7.86 Grid point U21

Grain Size Distribution Curve

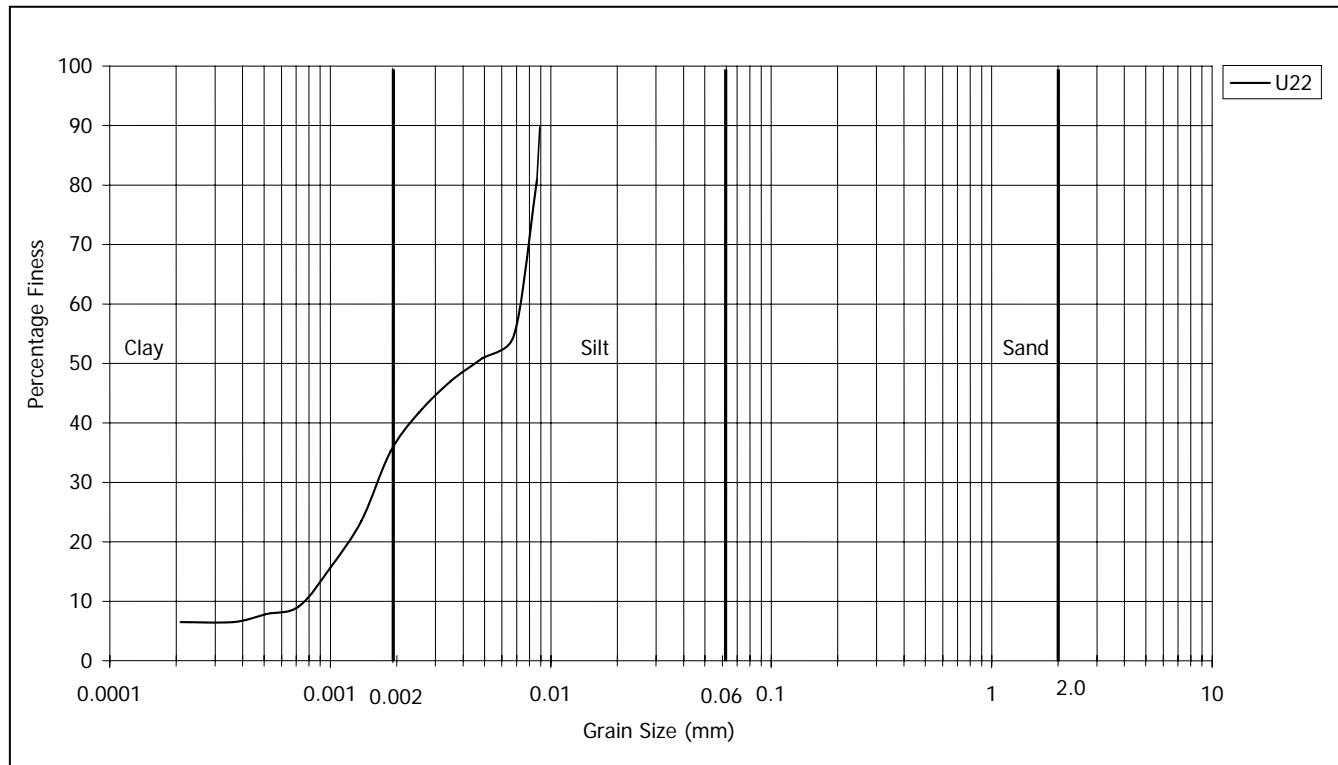


Fig. 7.87 Grid point U22

Grain Size Distribution Curve

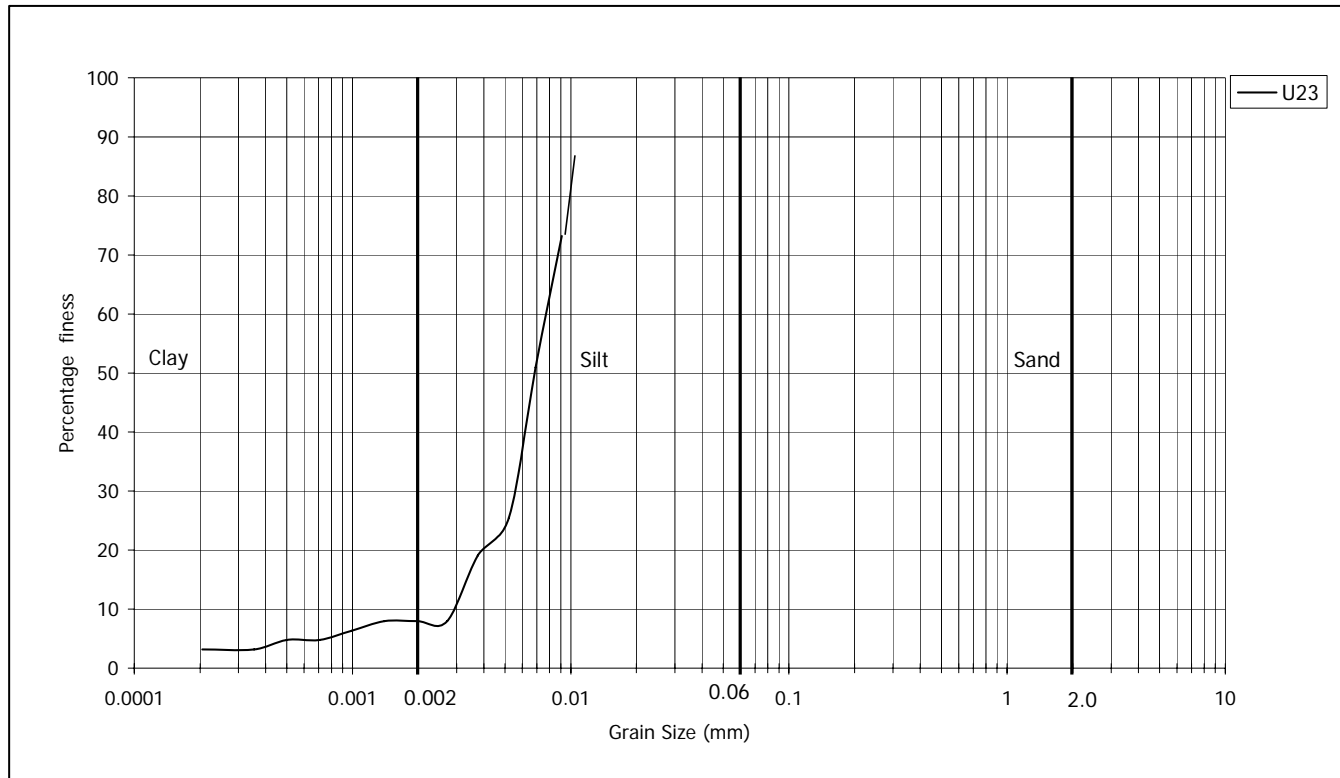


Fig. 7.88 grid point U23

Grain Size Distribution Curve

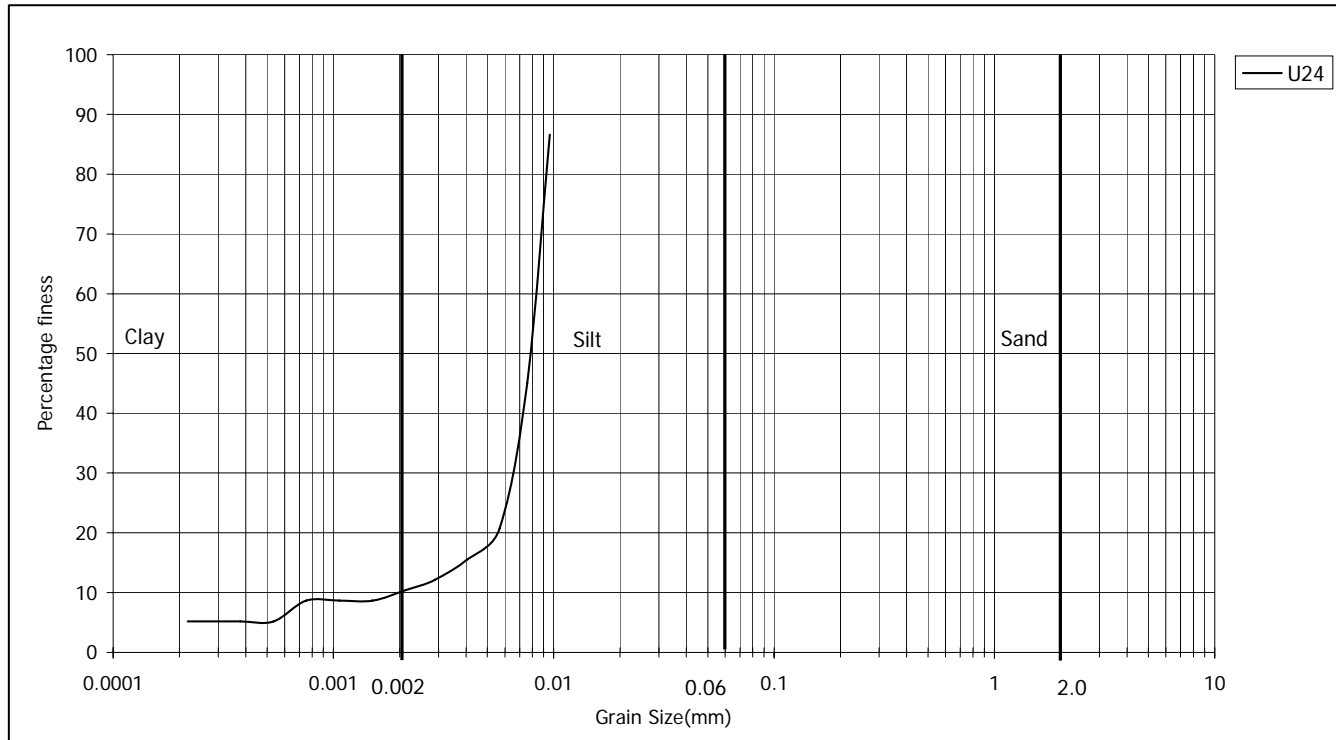


Fig. 7.89 Grid point U24

Grain Size Distribution Curve

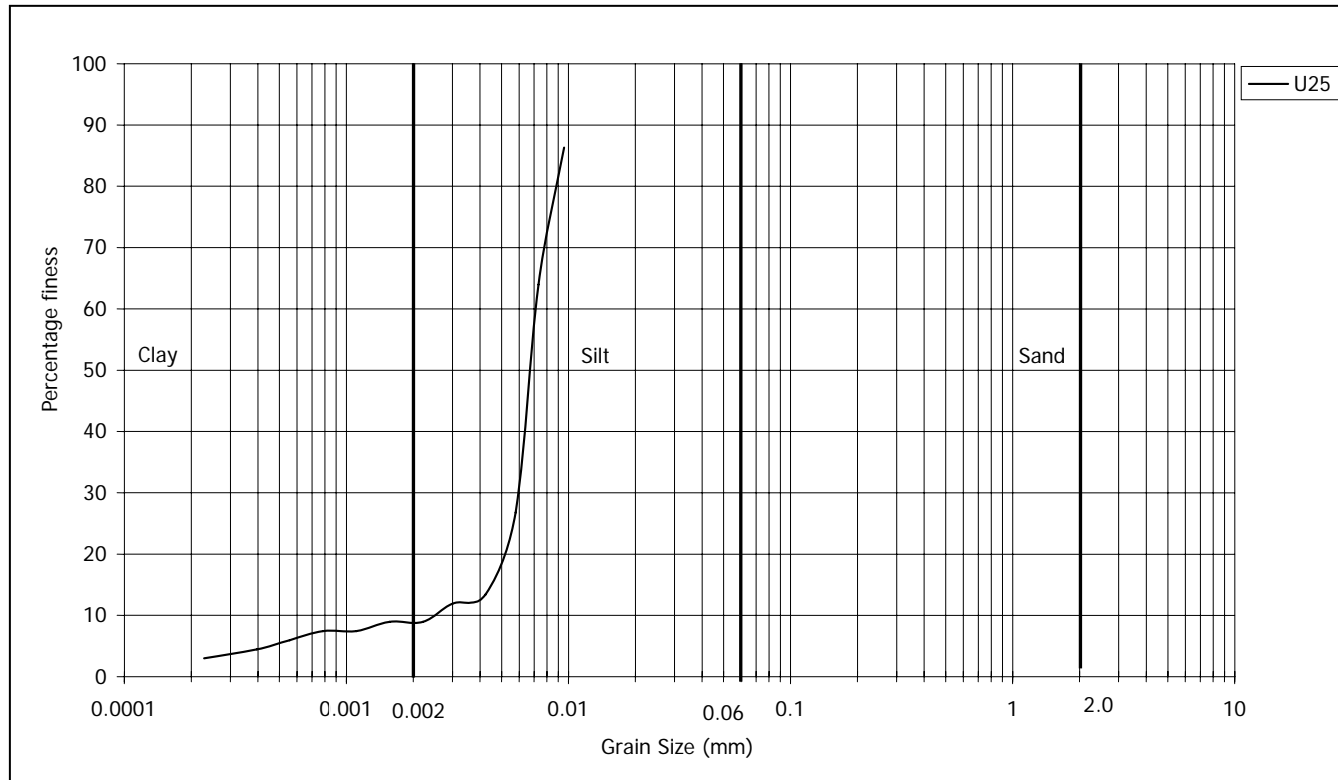


Fig. 7.90 Grid point U25

Grain Size Distribution Curve

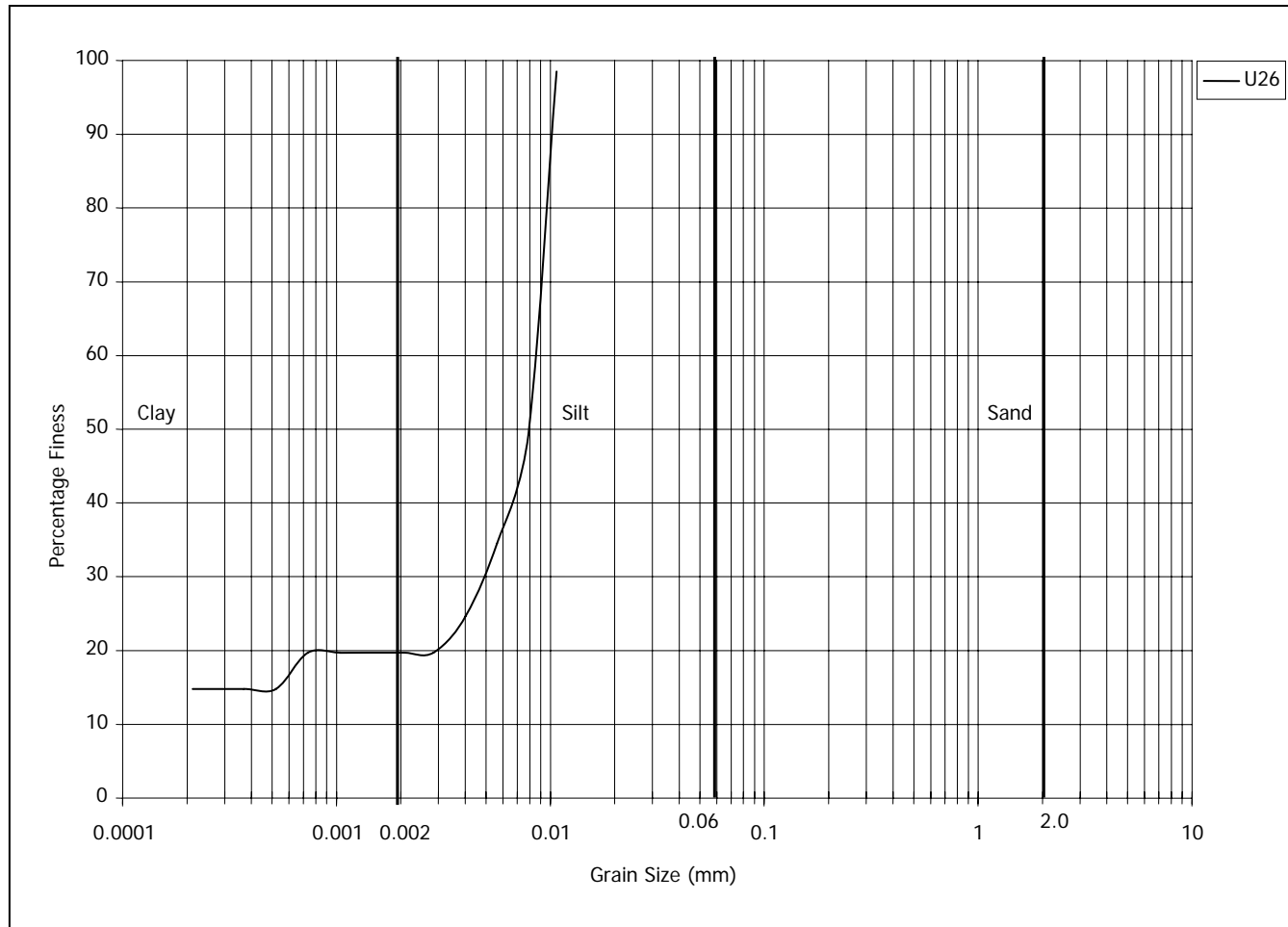


Fig. 7.91 Grid point U26

Grain Size Distribution Curve

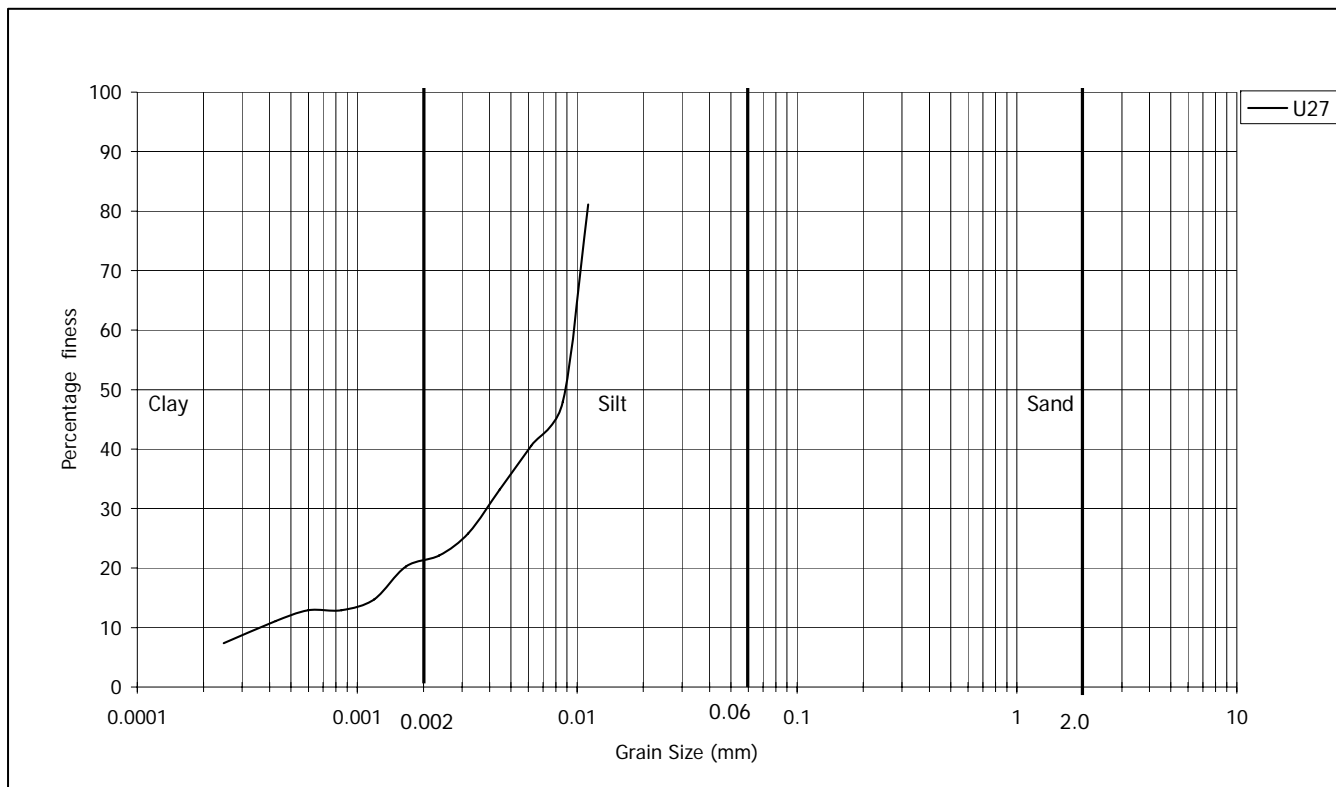


Fig. 7.92 Grid point U27

Grain Size Distribution Curve

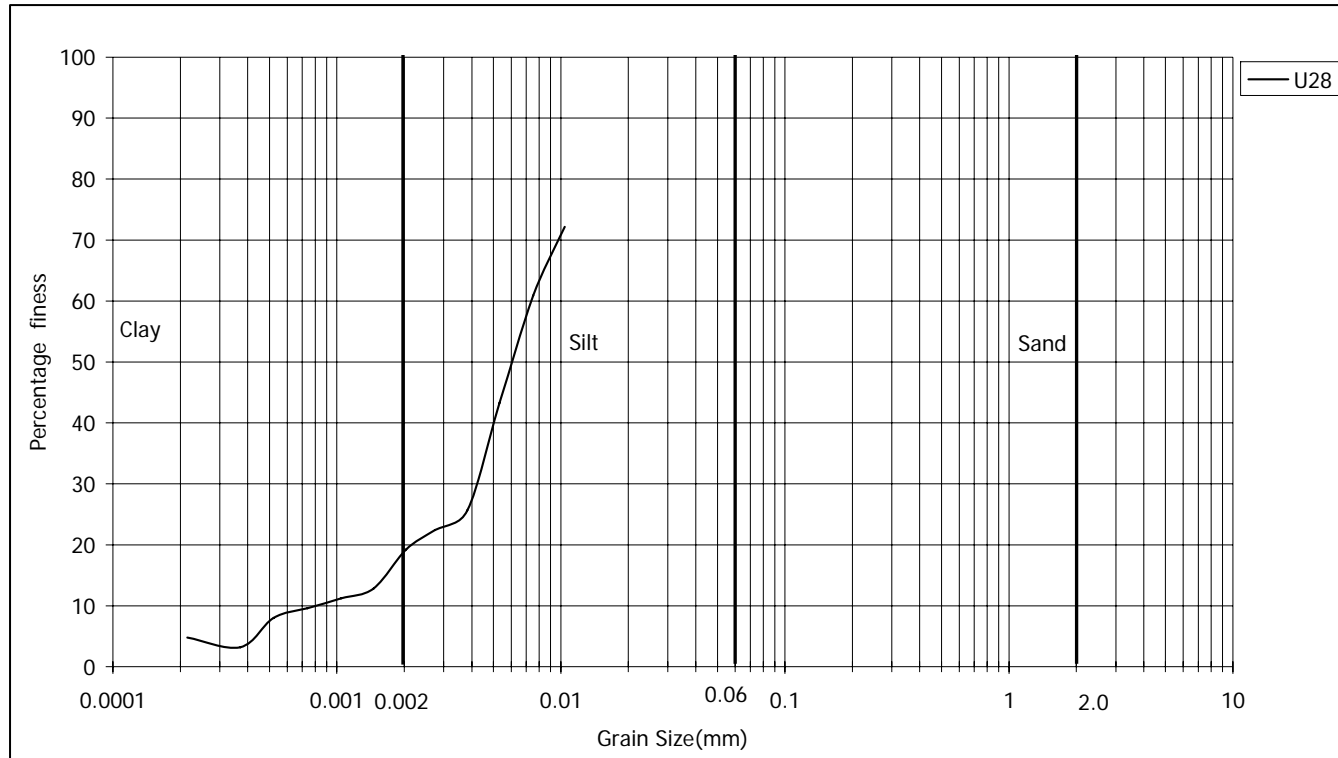


Fig. 7.93 Grid point U28

Grain Size Distribution Curve

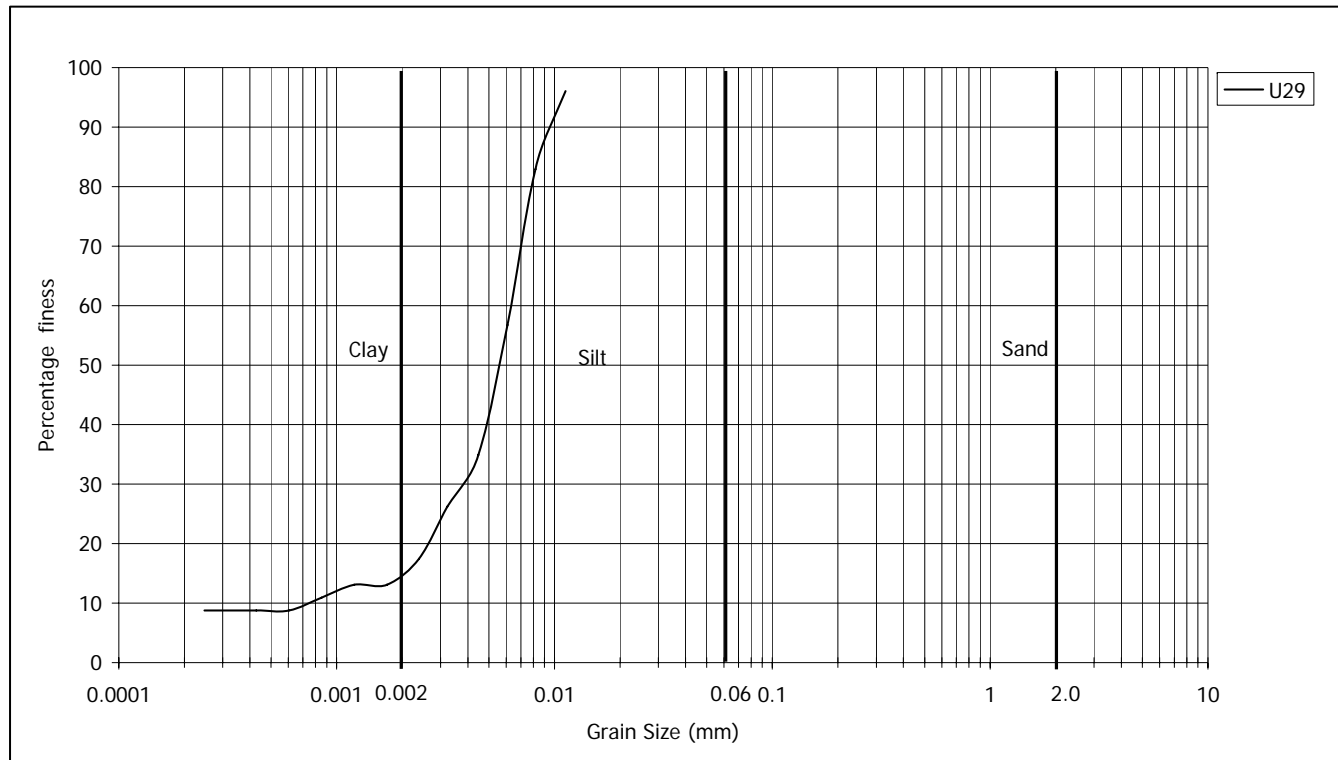


Fig. 7.94 Grid point U29

Grain Size Distribution Curve

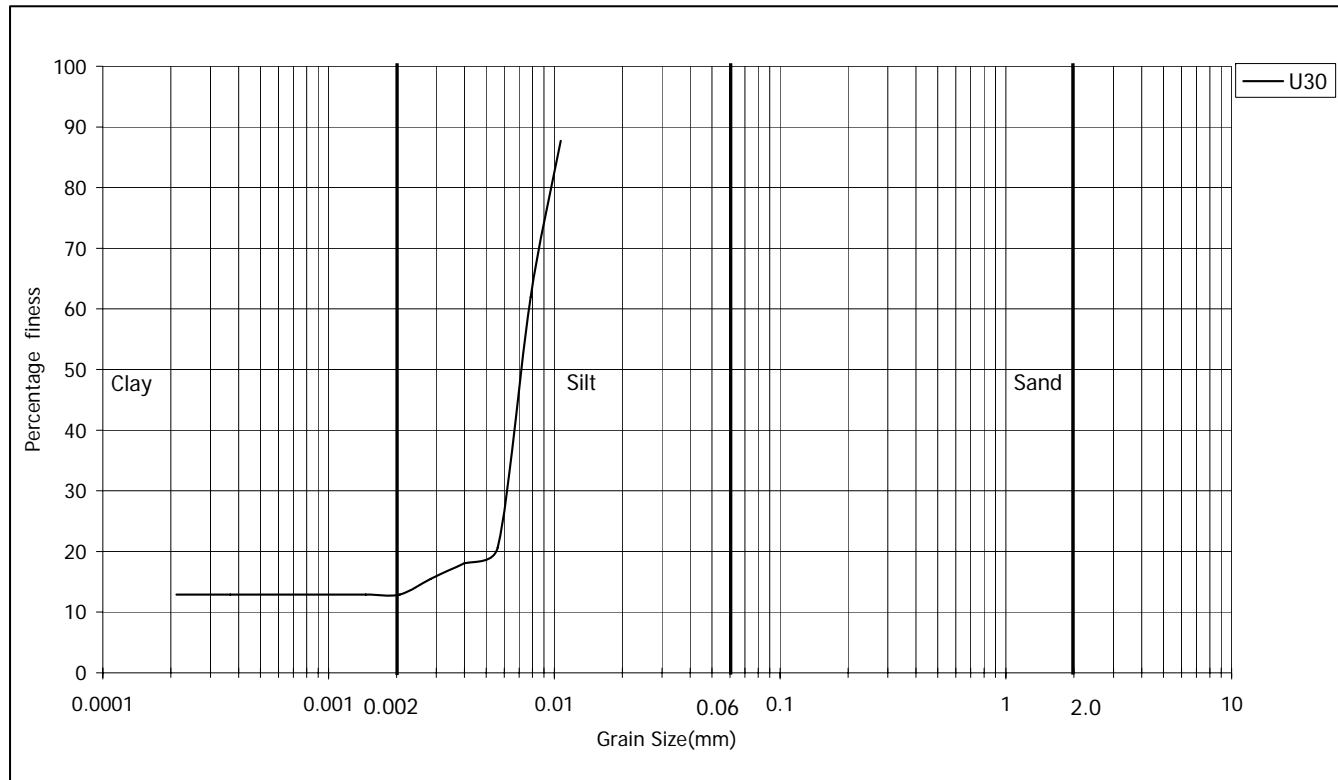


Fig. 7.95 Grid point U30

Grain Size Distribution Curve

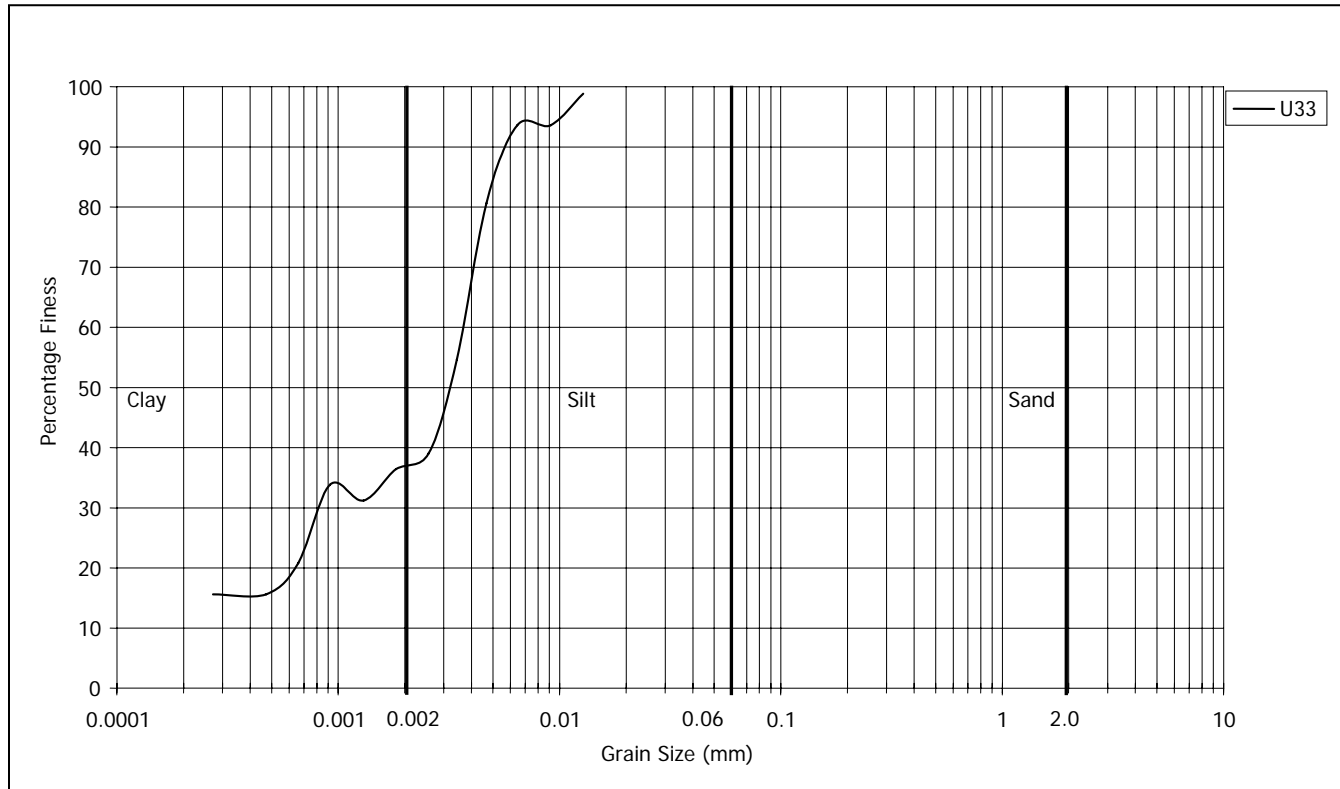


Fig. 7.96 Grid point U33

Cumulative Frequency Distribution curve

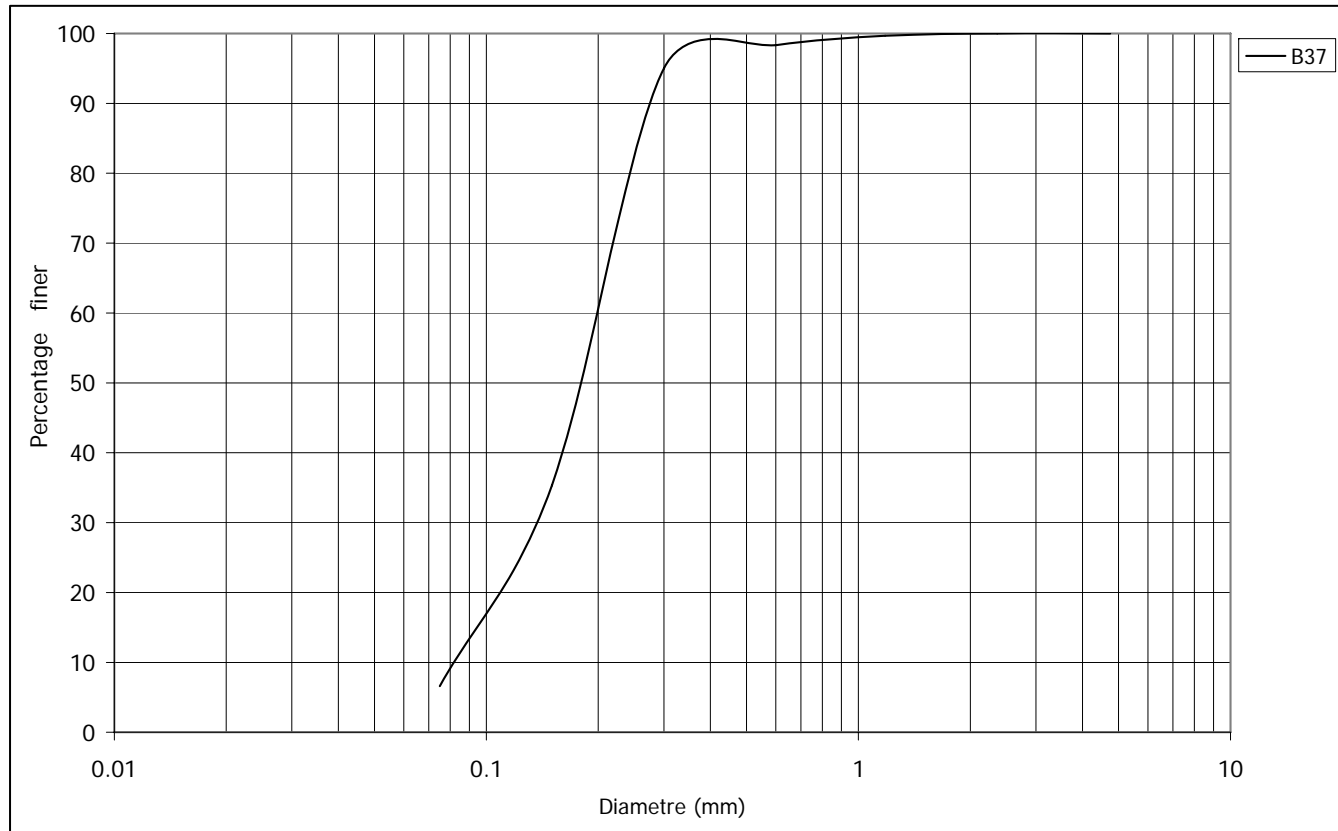


Fig. 7.97 Grid point B37

Cumulative Frequency Distribution curve

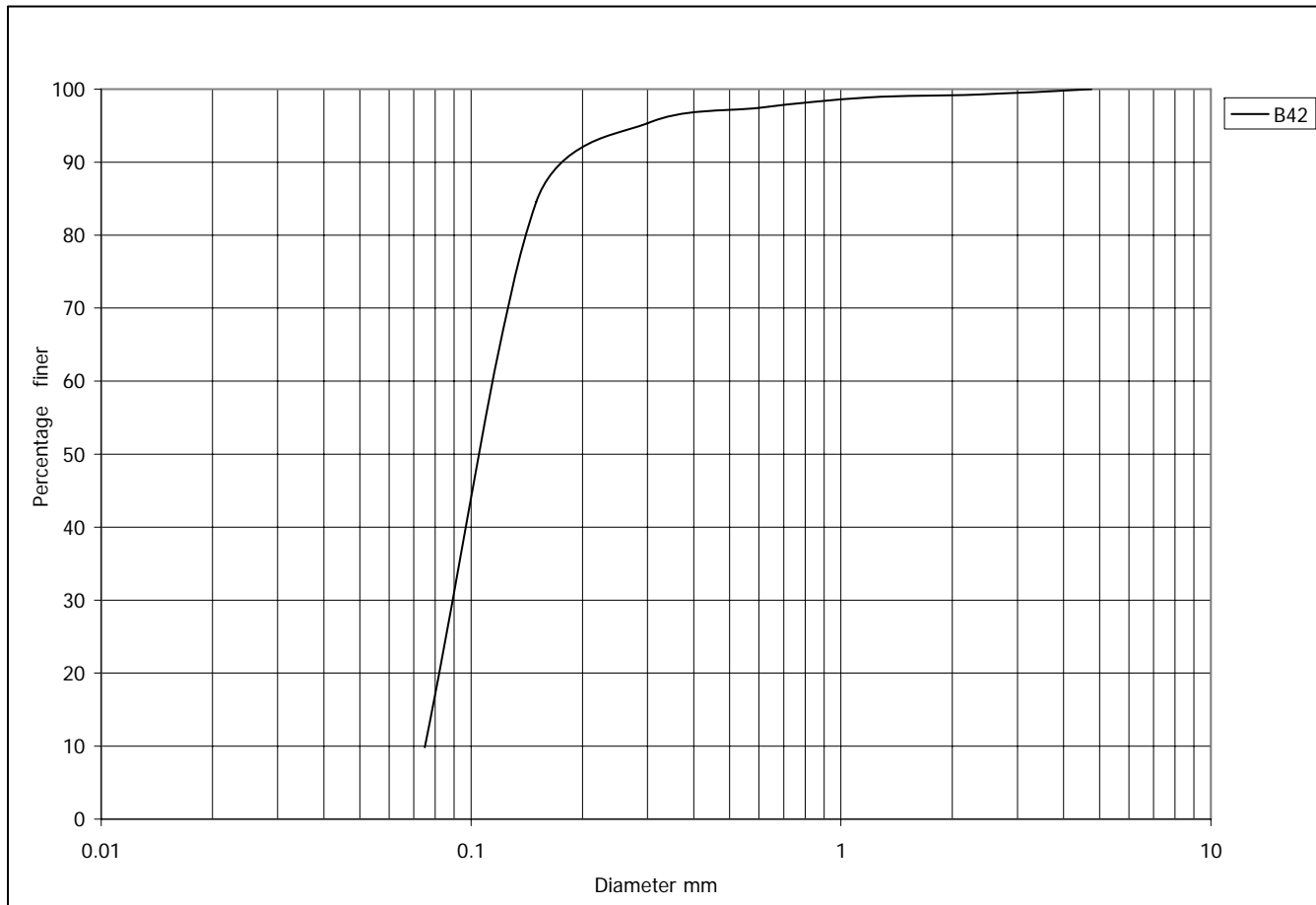


Fig. 7.98 Grid point B42

Cumulative Frequency Distribution curve

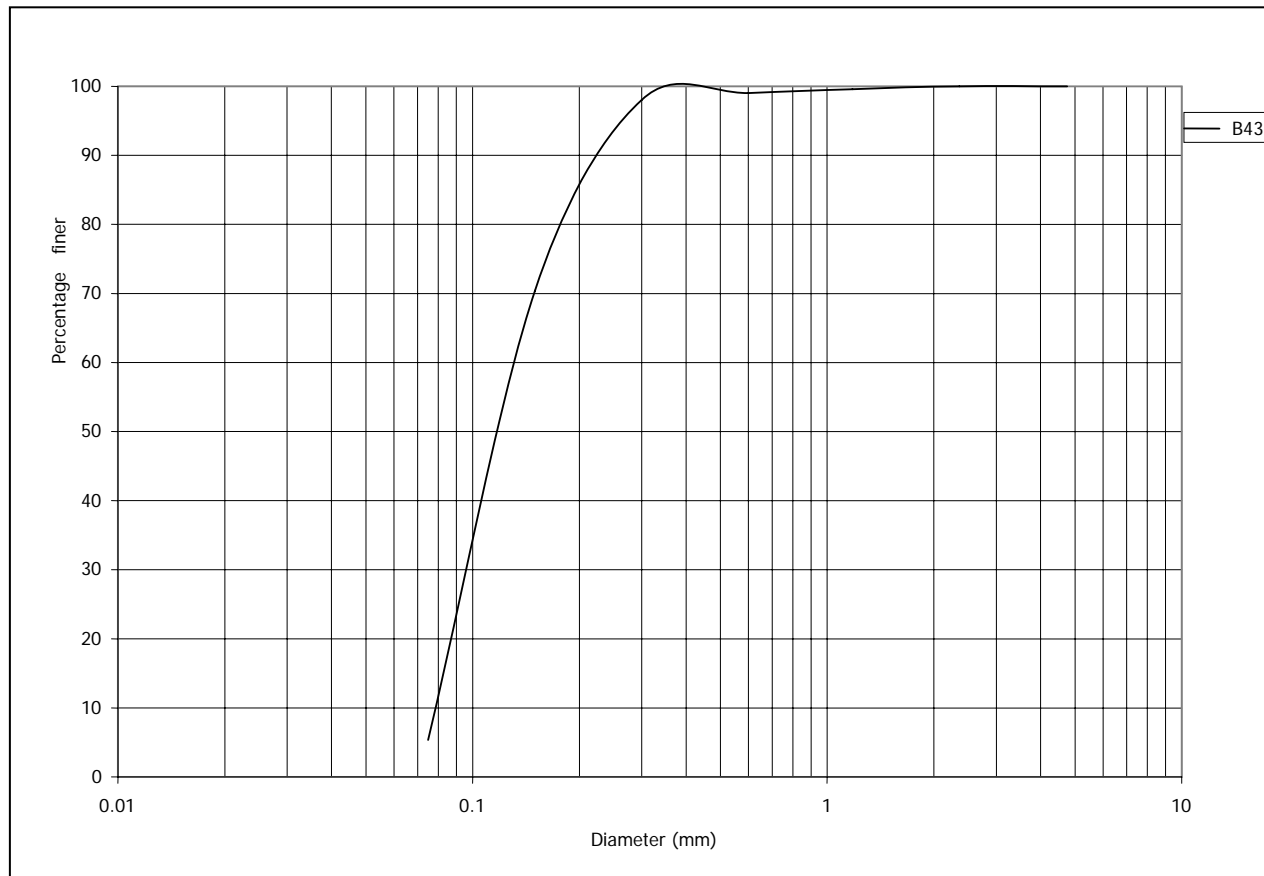


Fig. 7.99 Grid point B43

Cumulative Frequency Distribution curve

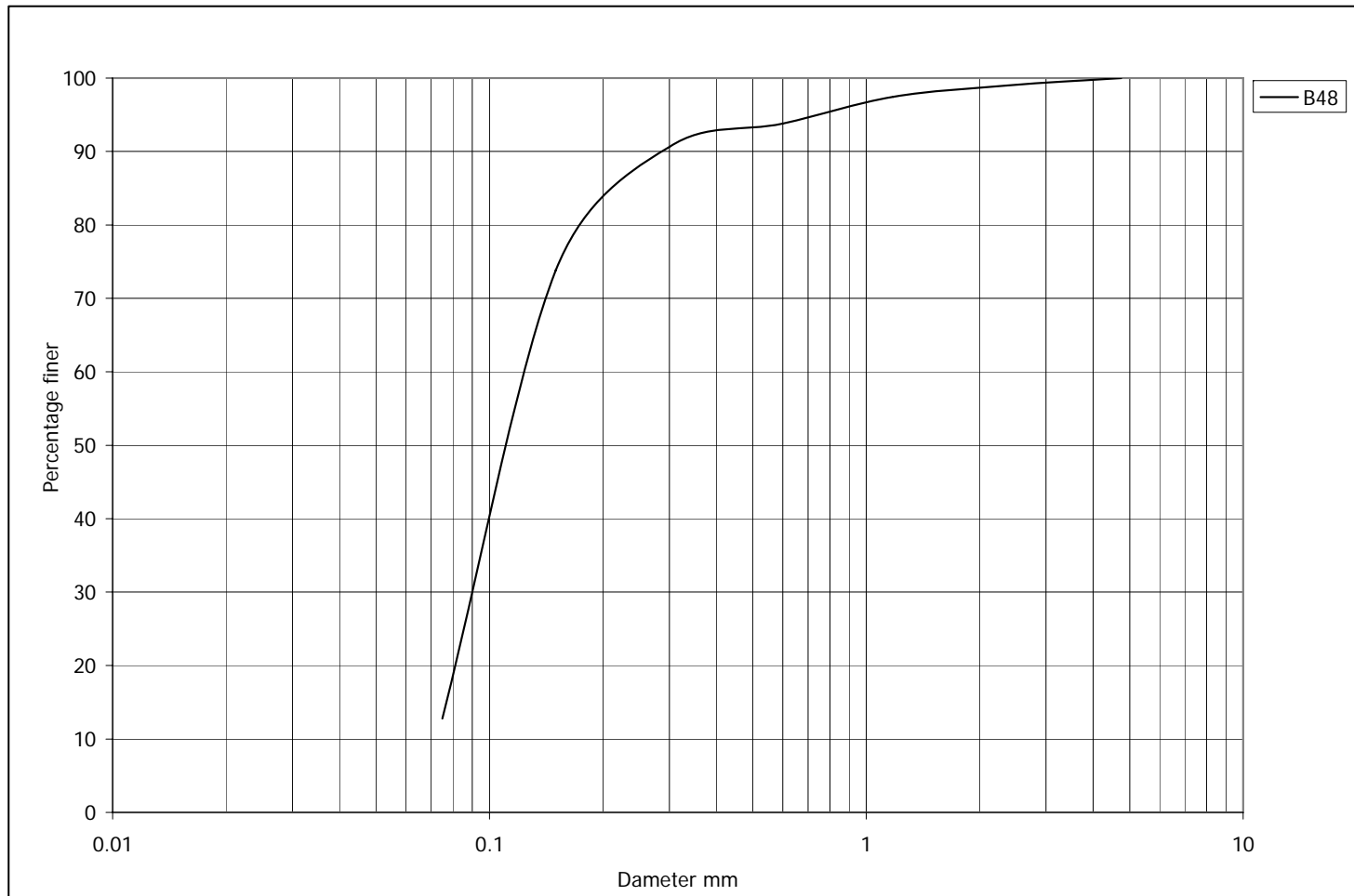


Fig. 7.100 Grid point B48

Cumulative Frequency Distribution curve

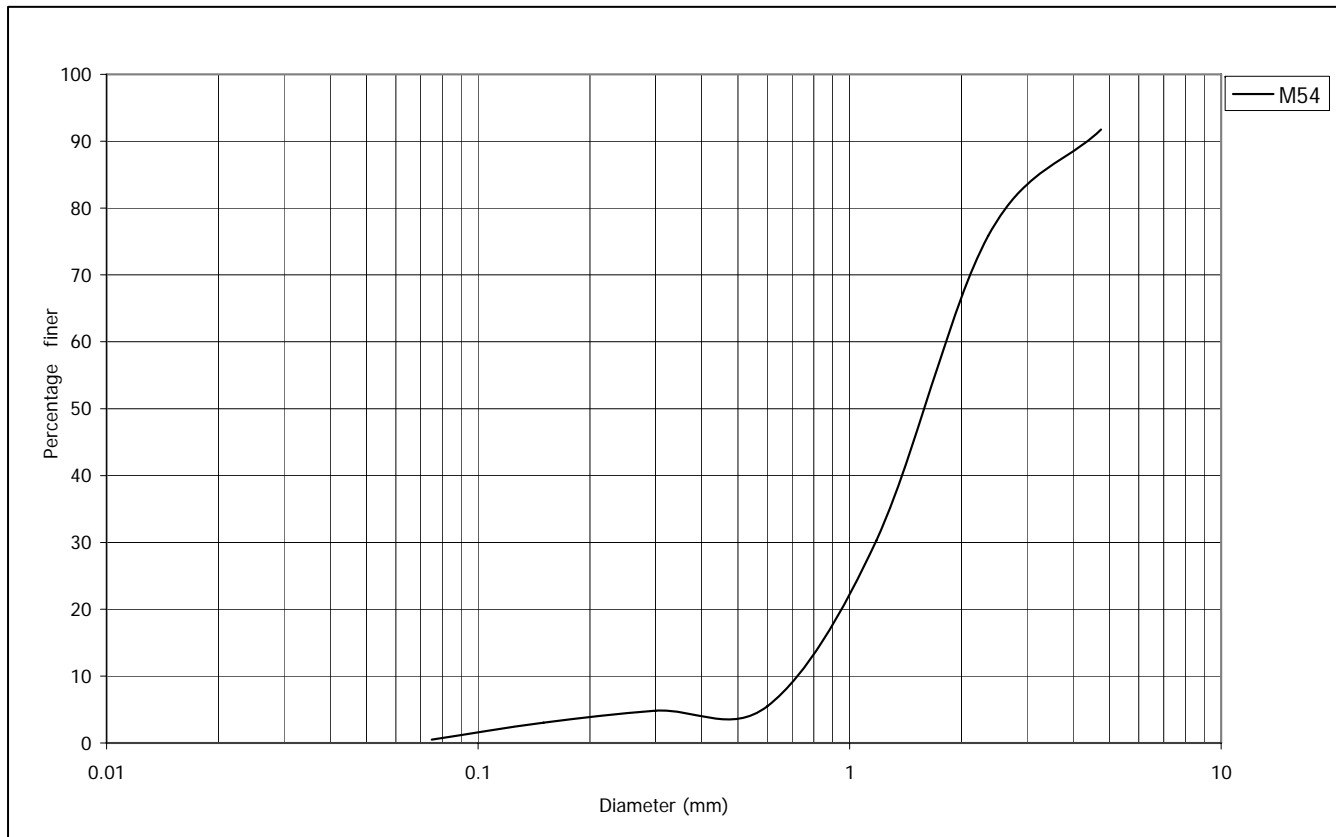


Fig. 7.101 Grid point M54

Cumulative Frequency Distribution curve

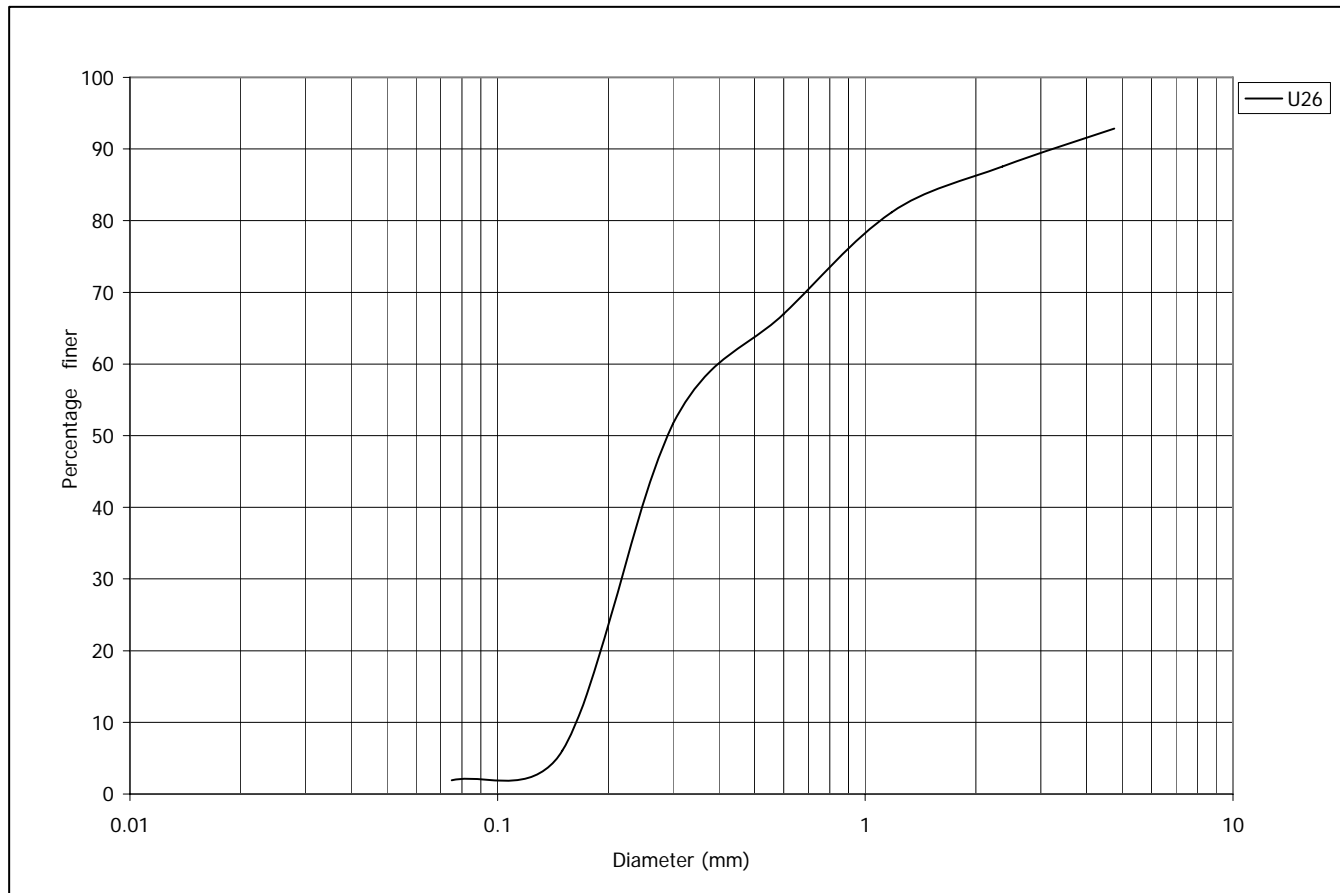


Fig. 7.102 Grid point U26

Cumulative Frequency Distribution curve

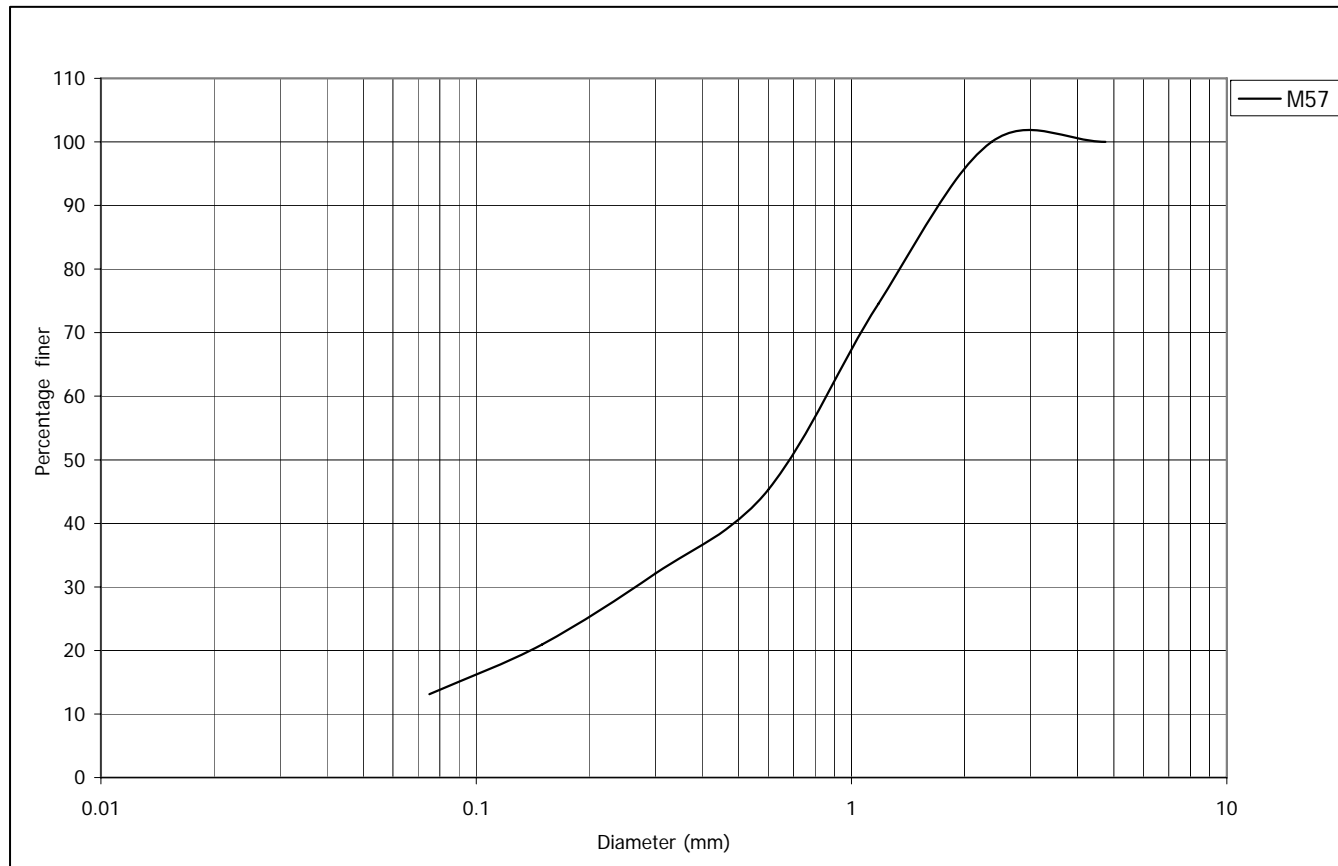


Fig. 7.103 Grid point M57

Cumulative Frequency Distribution curve

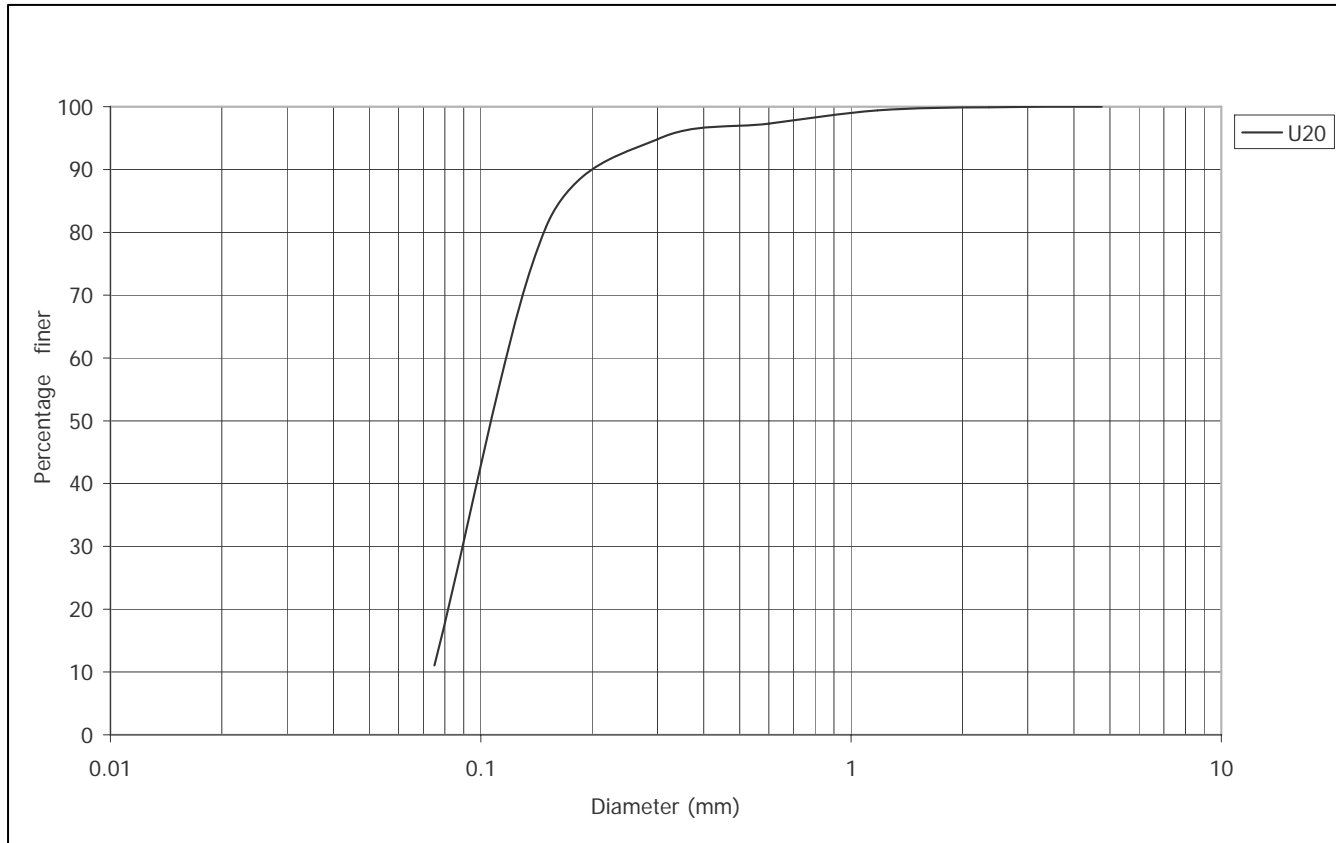


Fig. 7.104 Grid point U20

Cumulative Frequency Distribution curve

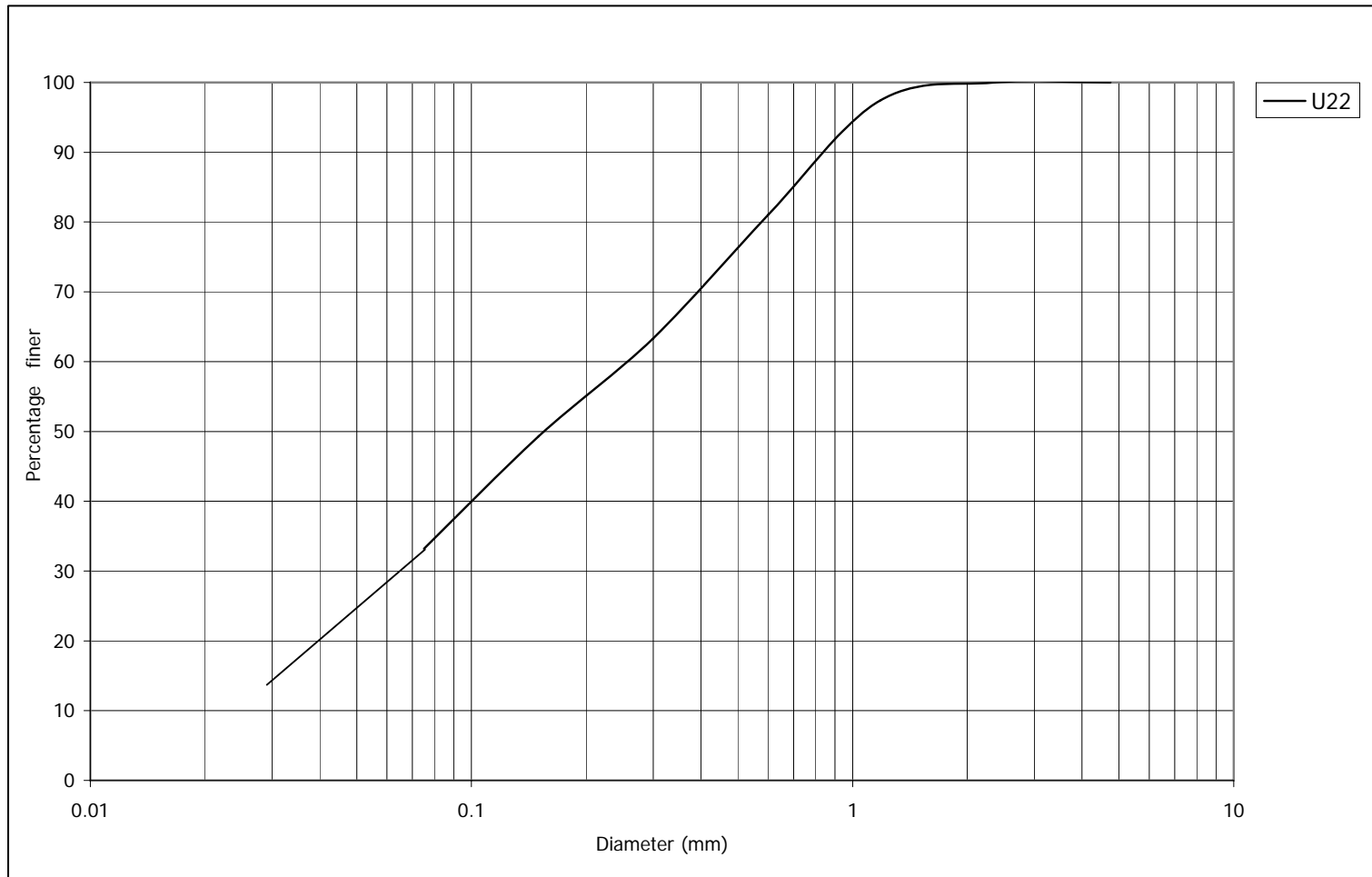


Fig. 7.105 Grid point U22

Cumulative Frequency Distribution curve

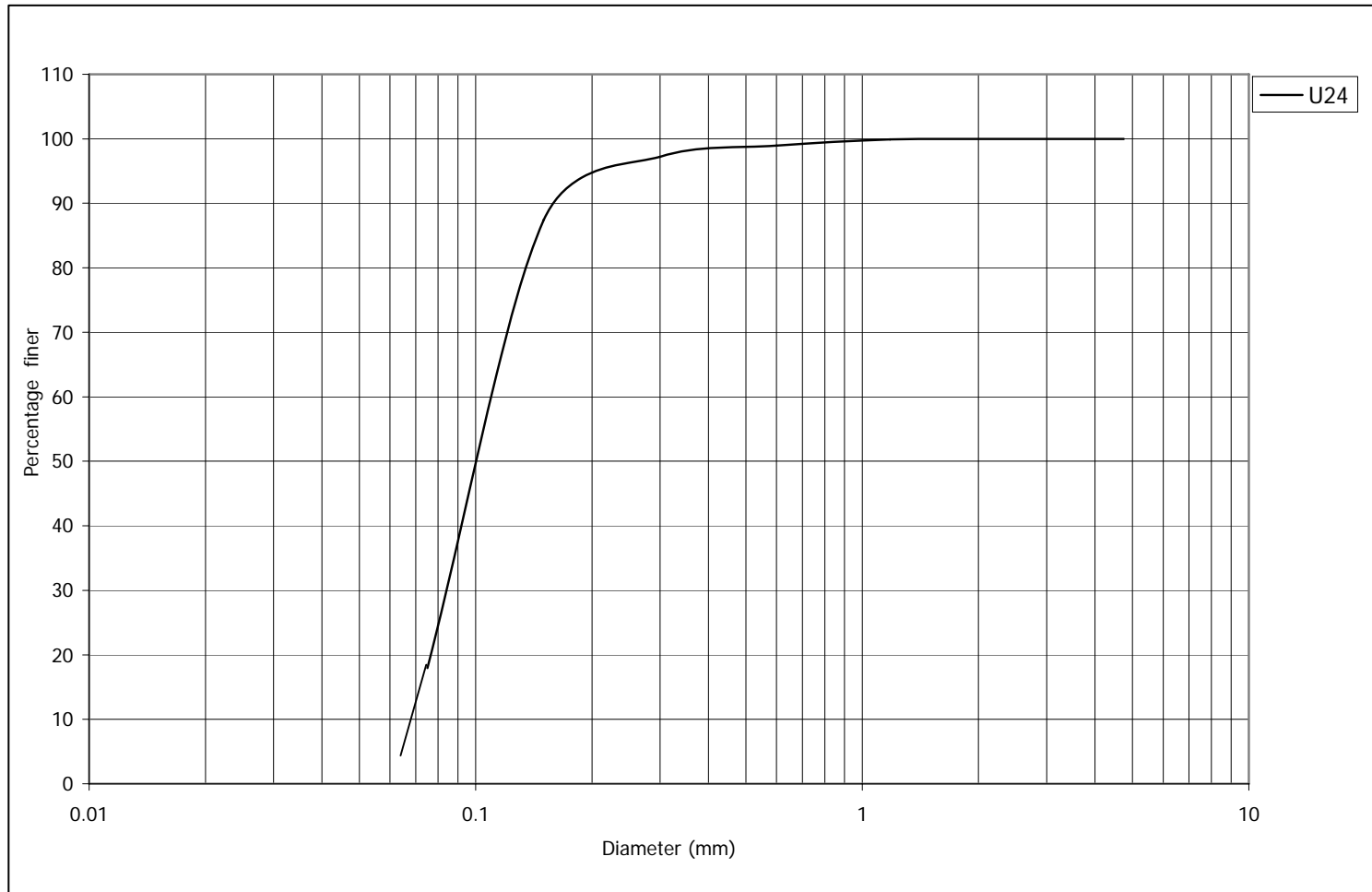


Fig. 7.106 Grid point U24

Cumulative Frequency Distribution curve

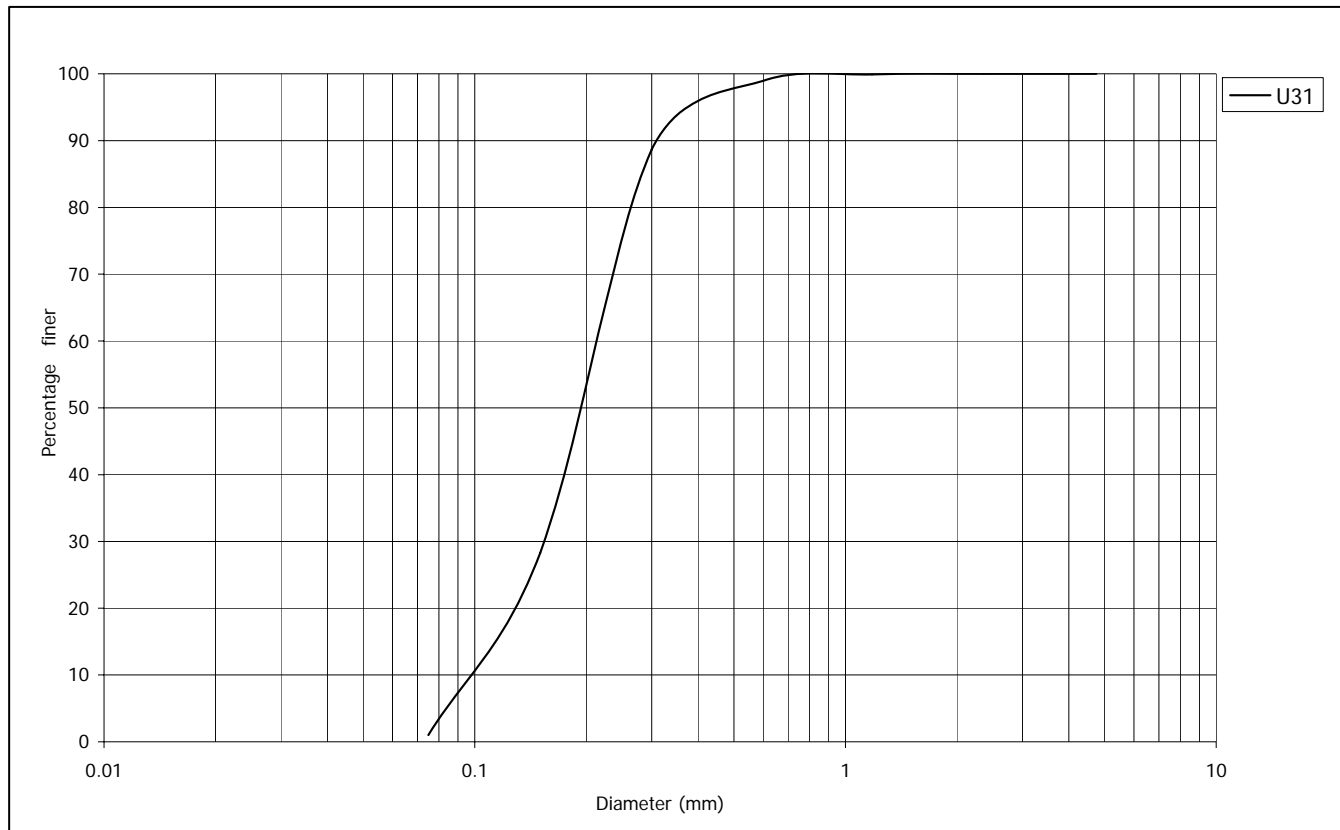


Fig. 7.107 Grid point U31

Cumulative Frequency Distribution curve

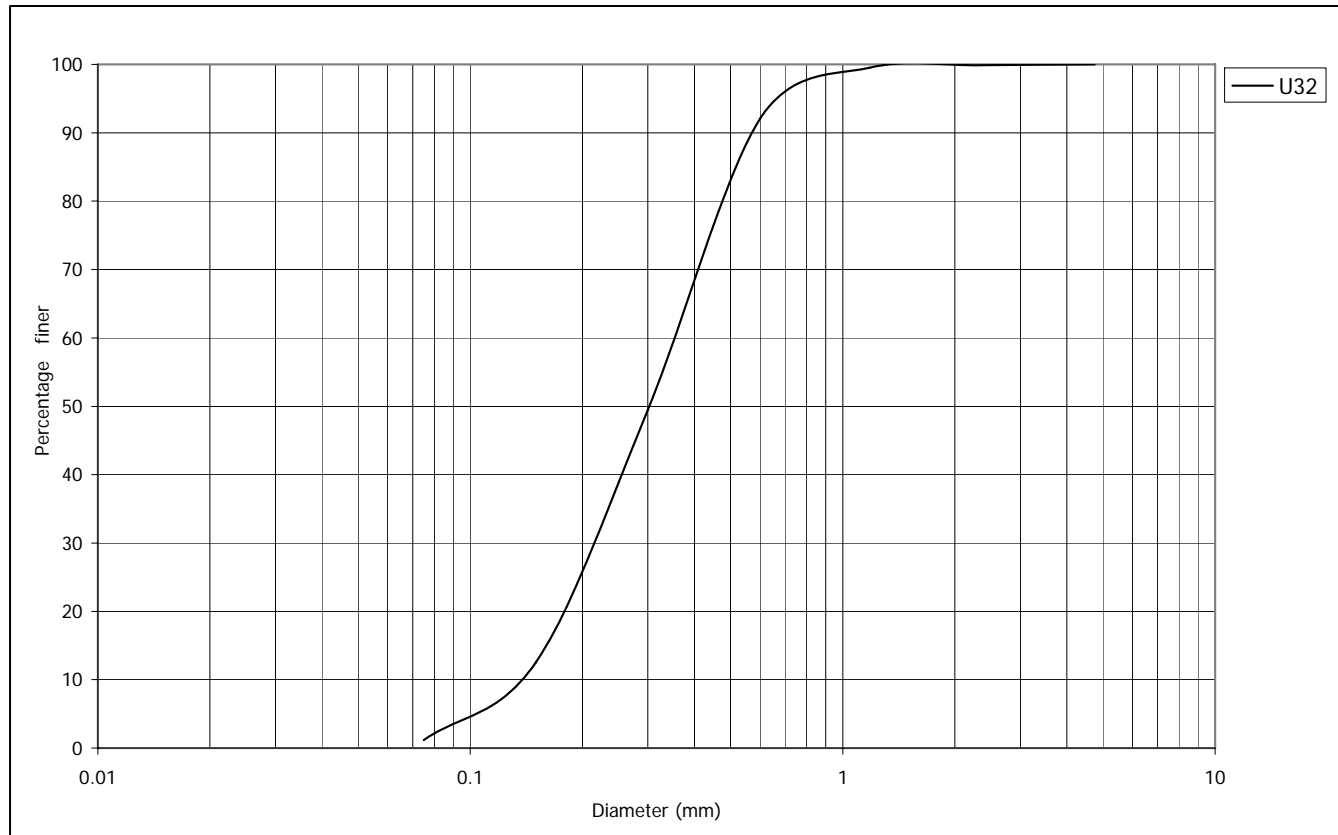


Fig. 7.108 Grid point U32

ANNEXURE

ANNEXURE

The raw data collected during different phases of measurements are summarised in the table below.

Sl.No.	Phase	Parameter	Location	Duration		Reference in CD
				From	To	
1	I	Waves	Ullal 6m depth	20-04-2004	06-05-2004	Phase-I\WAVESTAT
2		Tides				Phase-I\TIDESTAT
3		Currents				Phase-I\Current
4	II	Waves	Ullal 6m depth	18-10-2004	02-11-2004	Phase-II\WAVESTAT
5		Tides				Phase-II\TIDESTAT
6		Currents				Phase-II\Current-6m
7			Ullal 10m depth			Phase-II\Current-10m
8	III	Waves	Ullal 6m depth	01-03-2005	16-03-2005	Phase-III\WAVESTAT
9		Tides				Phase-III\TIDESTAT
10		Currents				Phase-III\Current-6m
11			Ullal 10m depth			Phase-III\Current-10m
12	IV	Waves	Ullal 10m depth	08-10-2005	22-10-2005	Phase-IV\WAVESTAT-10m-Ullal
13		Tides				Phase-IV\TIDESTAT-10m-Ullal
14		Currents				Phase-IV\Current-10m-Ullal
15		Waves	Phase-IV\WAVESTAT-6m-Ullal			
16		Tides	Phase-IV\TIDESTAT-6m-Ullal			
17		Currents	08-10-2005	15-10-2005	Phase-IV\Current-6m-Ullal	
18		Waves	Gurupur River, Netravathi River and Bengre 6m	08-10-2005	22-10-2005	Phase-IV\WAVESTAT-Rivers_6m-Bengre
19		Tides				Phase-IV\TIDESTAT-Rivers_6m-Bengre
20		Currents				Phase-IV\Currents-Rivers_6m-Bengre

21	V	Waves	Ullal 10m depth	03-05-2006	18-05-2006	Phase-V\WAVESTAT-10m-Ullal
22		Tides				Phase-V\TIDESTAT-10m-Ullal
23		Currents				Phase-V\Current-10m-Ullal
24		Waves	Ullal 6m depth	03-05-2006	18-05-2006	Phase-V\WAVESTAT-6m-Ullal
25		Tides				Phase-V\TIDESTAT-6m-Ullal
26		Currents				Phase-V\Current-6m-Ullal
27		Waves	Bengre 6m depth	03-05-2006	18-05-2006	Phase-V\WAVESTAT-6m-Bengre
28		Tides				Phase-V\TIDESTAT-6m-Bengre
29		Currents				Phase-V\Current-6m-Bengre
30		Tides	Gurupur River	09-05-2006	18-05-2006	Phase-V\TIDESTAT-Gurupur
31		Currents		03-05-2006	18-05-2006	Phase-V\Current-Gurupur
32			Netravathi River	03-05-2006	17-05-2006	Phase-V\Current-Netravathi
33	VI	Waves	Ullal 8m depth	31-10-2006	15-11-2006	Phase-VI\WAVESTAT-8m-Ullal
34		Tides				Phase-VI\TIDESTAT-8m-Ullal
35		Currents				Phase-VI\Current-8m-Ullal
36		Waves	Ullal 6m depth			Phase-VI\WAVESTAT-6m-Ullal
37		Tides				Phase-VI\TIDESTAT-6m-Ullal
38		Currents				Phase-VI\Current-6m-Ullal
39		Waves	Bengre 8m depth			Phase-VI\WAVESTAT-8m-Bengre
40		Tides				Phase-VI\TIDESTAT-8m-Bengre
41		Currents				Phase-VI\Current-8m-Bengre
42		Waves	River mouth 11m depth	02-11-2006	15-11-2006	Phase-VI\WAVESTAT-11m-Rivermouth
43		Tides				Phase-VI\TIDESTAT-11m-Rivermouth
44		Waves	Netravathi River	31-10-2006	15-11-2006	Phase-VI\WAVESTAT-Netravathi
45		Tides				Phase-VI\TIDESTAT- Netravathi
46		Currents				Phase-VI\Current- Netravathi
47		Waves	Gurupur River			Phase-VI\WAVESTAT-Gurupur
48		Tides				Phase-VI\TIDESTAT- Gurupur