

Estimated cliff erosion rates for 500m lengths: Updated June 2009

June 2009 NM

Location	500m Profile number	length metres	Profile Erosion rate	ERYC Post number	Post Erosion rate	Comments	Final estimated erosion rate m/yr
Sewerby	P001	447	0.25	2 3	0.42 0.29	High sheltered cliffs still mainly chalk	0.32
North Bridlington	P002	477	0.08	No post		Stable cliffs	0.08
South Bridlington	P008	390	0.76	5	0.06	Low dunes no apparent erosion	0.06
Wilsthorpe	P009	460	0.43	6	0.61	Low dunes. Recently no apparent erosion so use lower adjacent erosion records	0.06
Wilsthorpe south	P010	500	0.39	7	0.05	Low clay cliff, low erosion rate somewhere between P009 to P010	0.15
North of Fraisthorpe	P011	500	0.30	8	0.11	Low clay cliff, recent erosion rate is low but historical erosion rate suggests higher	0.30
Fraisthorpe	P012	500	0.32	9 10	0.48 0.24	Low clay cliff erosion probable near average for all posts	0.35
South of Fraisthorpe	P013	500	0.62	11	0.74	Low clay cliff, erosion rate starts to increase	0.68
North of Earl's Dyke, N Barmston	P014	500	0.65	No post		Low clay cliff, erosion rate between P13 & P15	0.82
Earl's Dyke, north of Barmston	P015	500	0.96	12 13	1.42 1.41	Low sand covered clay cliffs, post erosion higher than historical rate, average probably between P014 and P016	1.03
North of Barmston	P016	500	1.07	14	1.09	Low clay cliffs, average erosion probably near actual rate	1.24
Low Grounds north of Barmston	P017	500	1.07	15	1.34	Low sandy covered clay cliffs, erosion rate probably a little above recorded average	1.26
North side Barmston at Campsite	P018	432	1.24	16	1.31	Clay cliffs rise towards Barmston	1.28
South side Barmston	P019	432	1.52	17 18	1.39 1.62	Higher clay cliffs opposite Barmston	1.51
Barmston drain area	P020	318	1.47	19	1.42	Lower cliffs at drain, erosion rate complicated by defence works, higher south side, use average from cliff lines	1.66
South of Barmston drain	P021	500	1.70	20	2.43	Low clay cliffs south of Barmston drain area. Recent erosion rate rather high, use average between P20 & P21	1.72
North of Ulrome campsite	P022	500	1.77	21	1.77	Low clay cliffs	1.77
North of Ulrome private defences	P023	344	1.63	22	1.11	Low clay cliffs, historical cliff lines suggest erosion reducing towards Ulrome	1.37
Opposite private defences Ulrome	P024	212	1.50	23	0.80	Cliff erosion rate complicated by defence works	1.15
North Green Lane Ulrome/Skipsea	P025	500	1.55	24	0.90	Recent erosion rates higher than Post Data averages, cliff line drawing suggests profile data about right	1.55
South of Green Lane	P026	500	1.54	25	0.77	Recent erosion rates higher than Post Data averages, cliff line drawing suggests profile data about right	1.54
Opposite Skipsea village	P027	500	1.18	26	0.50	Higher erosion rates further north have not occurred here with recent erosion rates lower than historical rates	0.84
South end of Skipsea village	P028	500	1.15	27	0.63	Higher erosion rates further north have not occurred here with recent erosion rates lower than historical rates	0.89
Withow Gap, Skipsea	P029	500	0.95	28	0.71	Cliff height falls towards Withow Gap	0.83
Golf course north of Skirlington	P030	500	0.97	29	1.34	Relative high cliffs, erosion probably similar to P29 & P31	0.88
North end of Skirlington campsite	P031	500	0.97	30	0.88	Relatively high cliffs	0.93
Middle of Skirlington campsite	P032	500	1.06	31 32	1.01 0.69	Erosion rate from post 32 lower than averages from adjacent data, cliff drawing suggests constant rate between P031 and P033	0.93
South end of Skirlington campsites	P033	500	1.06	33	0.77	High cliffs	0.92
Between Skirlington and Atwick	P034	500	1.13	34	0.96	High cliffs	1.05
Between Skirlington and Atwick	P035	500	1.14	35	1.10	High cliffs	1.12
Opposite Atwick village	P036	500	0.96	36	1.14	High cliffs	1.05

South of Atwick	P037	500	1.09	37 38	0.80 1.02	High cliffs	0.97
Atwick Gap at boat compound	P038	500	0.82	39	0.77	High cliffs to north of Hornsea, lower erosion rate probably due to beach build up at Hornsea	0.80
Campsites to north of Hornsea	P039	500	0.77	40	0.52	High cliffs to north of Hornsea, lower erosion rate probably due to beach build up at Hornsea	0.65
North of Hornsea	P040	500	0.54	41 42	0.34 0.24	High beach to north of Hornsea now protecting cliff face	0.37
North of Hornsea	P041	379	0.44	43	0.04	High beach to north of Hornsea now protecting cliff face	0.24
South of Hornsea	P045	600	1.87	44 45	1.50 2.60	High cliffs with high erosion rates to south of defences	2.99
South of Hornsea	P046	500	2.07	46	3.17	High cliffs with high erosion rates to south of defences	2.62
Rolston	P047	500	1.83	47	2.46	High cliffs with high erosion rates to south of defences cliff line drawings support Post average as being correct	2.46
South of Rolston	P048	500	1.90	No post		High cliffs, erosion rate probably similar to P47 & P49	2.48
Rolston to Mappleton	P049	500	1.83	48 49	2.37 2.62	Natural erosion probably similar to Post average but defences at Mappleton have reduced this since 1991	1.10
North of Mappleton	P050	500	1.54	50	1.99	Natural erosion probably similar to Post average but defences at Mappleton have reduced this since 1991	0.30
Mappleton	P051	250	1.43	51	1.61	Natural erosion probably similar to Post average but defences at Mappleton have reduced this since 1991	0.00
South of Mappleton	P052	250	1.60	52	2.11	South of defences erosion increases again. Post data At edge of defences lower than bit further south	2.53
South of Mappleton	P053	500	1.82	53 54	2.89 2.94	High cliffs. Constantly high erosion losses from Post data suggests these may be nearer to actual rate.	2.92
North of Cowden	P054	500	1.73	55	2.63	High cliffs. Constantly high erosion losses from Post data suggests these may be nearer to actual rate.	2.63
South of Cowden	P055	500	1.85	56 57	2.79 4.81	High cliffs. Constantly high erosion losses from Post data suggests these may be nearer to actual rate.	2.79
North end of MOD site at Cowden	P056	500	1.70	RAF1	2.11	High cliffs. Erosion rate falling south of Cowden, average probably near to Post data between P55 to P57.	2.80
MOD site Cowden	P057	500	1.82	RAF2	2.81	High cliffs. Erosion rate average probably near to Post data.	2.81
MOD site Cowden	P058	500	1.67	No post		High cliffs. Recent erosion rate higher, as GPS survey	2.35
MOD site Cowden	P059	500	1.54	No post		High cliffs. Recent erosion rate higher, as GPS survey	2.31
MOD site Cowden	P060	500	1.55	RAF3	4.15	High cliffs. Recent erosion rate higher, actual rate probably near average of adjacent profiles.	2.28
South end of MOD site Cowden	P061	500	1.46	58a	3.03	High cliffs. Recent erosion rate higher, use average	2.25
Aldbrough North	P062	500	1.33	58	2.23	High cliffs. Recent erosion rate higher, Post about right	2.23
Aldbrough South	P063	500	1.32	No post		Erosion probably nearer averages to adjacent profiles	2.07
South of Aldbrough	P064	500	1.33	59 60	2.05 1.76	High cliffs. Constantly high erosion losses from Post data suggests these may be nearer to actual rate.	1.91
East Newton north	P065	500	1.29	61	1.62	High cliffs. Recent higher erosion rates probably mean actual rate slightly higher than post data	2.10
East Newton	P066	500	1.25	62	2.42	High cliffs. Recent higher erosion rates mean average probably nearer to post data	2.42
East Newton south	P067	500	1.17	63	2.09	High cliffs. Recent higher erosion rates mean average probably a bit higher than post data	2.23
Ringbrough	P068	500	1.10	64	1.79	High cliffs. Recent higher erosion rates mean average probably a bit higher than post data	2.10
South of Ringbrough	P069	500	1.27	65	2.71	High cliffs. Recent higher erosion rates mean average probably near to post data	2.71
Between Rigbrough and Garton	P070	500	1.19	66	2.30	High cliffs. Recent higher erosion rates mean average probably near to post data	2.30
Between Rigbrough and Garton	P071	500	1.36	67	1.90	High cliffs. Recent higher erosion rates mean average probably a bit higher than post data	2.15

Moat Farm, Grimston	P072	500	1.21	68	2.00	High cliffs. Recent higher erosion rates mean average probably near to post data	2.00
Opposite Grimston Hall	P073	500	1.20	No post		High cliffs. Erosion rate near adjacent post data	2.00
South of Grimston	P074	500	1.11	69	2.01	High cliffs. Recent higher erosion rates mean average probably near to post data	2.01
South of Grimston	P075	500	1.10	70	1.86	High cliffs. Recent higher erosion rates mean average probably near to post data	1.86
South of Grimston	P076	500	1.05	71	1.96	High cliffs. Recent higher erosion rates mean average probably near to post data	1.96
North of Pastures Lane, Tunstall	P077	500	0.97	72	1.31	High cliffs. Recent higher erosion rates mean average probably near to post data	1.31
North end of Pastures Lane	P078	500	0.95	73 74	1.21 1.33	High cliffs. Recent higher erosion rates mean average probably near to post data	1.27
North of Tunstall	P079	500	0.94	75	1.71	High cliffs. Recent higher erosion rates mean average probably near to post data	1.71
Opposite Tunstall village	P080	500	0.81	76	1.47	High cliffs. Recent higher erosion rates mean average probably a bit higher than post data	1.70
Opposite Tunstall village	P081	500	0.79	77	1.48	High cliffs. Recent higher erosion rates mean average probably a bit higher than post data	1.65
North end Sand Le Mere campsite	P082	500	0.83	78 79	1.37 1.83	High cliffs. Recent higher erosion rates mean average probably near to post data average	1.60
South end Sand Le Mere campsite	P083	500	0.63	80	1.68	Cliff height lower. Recent higher erosion rates mean average probably near to post data average	1.68
South of Tunstall	P084	500	0.91	81	1.31	Cliff height rises south of Tunstall. Recent higher erosion rates mean average probably near to post data average	1.31
Between Tunstall and Waxholme	P085	500	1.01	82	1.38	High cliffs. Recent higher erosion rates mean average probably near to post data average	1.38
Waxholme	P086	500	0.98	No post		High cliffs. Erosion reducing towards Withernsea	0.98
South of Waxholme	P087	500	0.83	83 84	0.91 0.70	High cliffs. Erosion rate reducing towards Withernsea due to higher beach levels	0.81
Waxholme to Withernsea	P088	500	0.75	85	0.81	High cliffs. Erosion rate reducing towards Withernsea due to higher beach levels	0.78
North of Withernsea	P089	483	0.58	86	0.13	High cliffs. Erosion rate reducing towards Withernsea due to higher beach levels	0.36
South of Withernsea	P094	364	2.28	87 88 89	1.42 2.54 1.93	High cliffs. Erosion rate picks up to south of defences. Post 87 probably lower than average for this area due to proximity to defences	2.25
South of Withernsea	P095	500	1.95	90	2.53	High cliffs. Recent higher erosion rates mean average probably near to post data average	2.53
Withernsea to Holym	P096	500	1.61	91 92	2.68 2.03	High cliffs. Recent higher erosion rates mean average probably near to post data average	2.36
Holym, opposite sewage works	P097	500	1.51	93	2.26	High cliffs. Recent higher erosion rates mean average probably near to post data average	2.26
Holym to Holmpton	P098	500	1.59	94	2.11	High cliffs. Recent higher erosion rates mean average probably near to post data average	2.11
The Runnel, Holmpton	P099	500	1.66	95	1.97	Lower cliffs. Recent higher erosion rates mean average probably near to post data average	1.97
North of Holmpton	P100	500	1.56	No post		Cliff rises towards Holmpton. Erosion as per P99 to P101	1.74
Holmpton	P101	500	1.51	96 97	1.59 1.39	High cliffs. Erosion rate probably near average of all data	1.50
South of Holmpton	P102	500	1.38	98	1.35	High cliffs. Erosion rate probably near average of all data	1.37
South of Holmpton	P103	500	1.48	99	1.25	High cliffs. Erosion rate probably near average of all data	1.37
Between Holmpton & Out Newton	P104	500	1.37	100	1.00	High cliffs. Erosion rate probably near average of all data	1.19
Out Newton	P105	500	1.43	101	1.36	High cliffs. Erosion rate probably near average of all data	1.40
South of Out Newton	P106	500	1.51	102	1.72	High cliffs. Erosion rate probably near average of all data	1.62
South of Out Newton	P107	500	1.58	103	1.18	High cliffs. Erosion rate probably near average of all data	1.38

Dimlington	P108	500	1.57		104	1.88	Very high cliffs. Erosion rate probably near average of all data	1.73
North of Dimlington gas terminals	P109	500	1.50		105	1.03	Very high cliffs. Erosion rate probably near average of all data	1.27
North end Dimlington gas terminals	P110	231	1.73		106	1.47	Cliffs protected by deposition zone of defence works	
South of gas Terminal defences	P113	471	1.68		109	1.38	Low cliffs. Erosion rate probably near average of all data	1.53
South of Easington	P114	481	1.62		110	1.55	Low cliffs Erosion rate probably near average of all data	1.37
					111	0.94		
South of Kilnsea SSSI Dunes	P118	621	2.85		No post		Low cliff rising towards Kilnsea	2.85
North end of campsite, Kilnsea	P119	500	2.33		114	1.77	Variable height cliffs. Erosion rate likely to be near maximum of average of data and increase as protection from remains of MOD defences and fallen concrete structures is lost.	3.04
					115	3.74		
Opposite the Blue Bell, Kilnsea	P120	500	2.16		116	3.46	Variable height cliffs. Erosion rate likely to be near post data average value	3.46
Kilnsea to Spurn	P121	500	2.33		117	1.36	Low cliff. Erosion rate likely to be near average of all data	1.85
North end of Spurn	P122	500	1.92		118	0.96	Low cliff. Erosion rate likely to be near average of all data	1.44