

TABLE DR1. BEDFORM vs VELOCITY DATA

BEDFORM	LOCATION	SUBSTRATE	BOTTOM CURRENT VELOCITY mean velocity (maximum) m/s
current smoothed surface	various - synthesis	mud	<0.2, 0.05-0.15, 0.1-0.2
	various - synthesis	sand	<0.2, <0.4
LINEAR BEDFORMS			
current lineation (on mud or sand substrate) (L=m, H=mm, S=cm-dm)	nova scotian slope gulf of cadiz hebridean margin gulf of cadiz hebridean margin mozambique basin various - synthesis	mud mud mud sand sand mud mud/sand	0.05-0.15, 0.04-0.11 0.1-0.3, <0.2 <0.2 <0.3 0.12-0.15, 0.03-0.3 (0.5) 0.08-0.1 0.1-0.3
current lineation (= sand/gravel stringers) (L=m, H=mm-cm, S=dm)	hebridean margin gulf of cadiz florida straits	sand sand sand(foram)	>0.3, 0.2-0.5 0.3-0.4, 0.3-0.5, 0.3-0.4 0.1-0.4
groove and ridge (= longitudinal ripples) (L=m, H=cm-dm, W=dm, S=dm-m)	nova scotian slope gulf of cadiz blake-bahama basin	mud mud (sandy) mud (foram sand)	0.24, 0.16-0.37, 0.28 0.2-0.5 >0.4
crag and tail (also mound and shadow) (tail L = cm - dm, H=mm-cm)	nova scotian slope faeroe-shetland channel hebridean margin surugu, sagami troughs faro drift synthesis	mud mud/sand mud/sand mud/sand mud mud/sand	0.11-0.21 <0.3, <0.25 0.12-0.15 <0.4 <0.2 0.2-0.4
obstacle and comet scour (also comet scour) (comet L = dm-m)	faeroe-shetland channel surugu, sagami troughs hebridean margin synthesis	sand/gravel mud/sand sand/gravel mud/sand	(0.6->1), 0.5, 0.6 0.37-0.49 0.6->1 0.3- >0.4

obstacle and comet scour (also comet scour) (comet L = 10s - 100s m)	north adriatic iceland-faeroe ridge southwest adriatic	mud/sand sand/gravel mud/sand	0.7 (>0.5), 0.9->1 <0.6
ribbon marks (sand and gravel) (ribbon L=5-50km, W=10-100m, H=m)	faeroe-shetland channel gulf of cadiz southeast greenland florida straits synthesis	sand sand sand sand(foram) sand/gravel	0.75-1.5, 0.9-1, 0.9->1 <1, 1.15-2, <1.5, >1, 0.75-1.5 1 >0.4 0.9-1
furrows (also erosional grooves) (mud, sand and gravel substrates)	north adriatic campos slope faeroe-shetland channel	mud sand sand/gravel	0.7 0.6-1.2 >1.0
Type I - small, shallow: L=1-10km, W=1-20m, D=1-5m, S=5-300m	gulf of cadiz northwest gulf of mexico	sand/gravel mud/sand	1.15-2.0, <1.5, 0.7-1.5 <1.0
Type II - large, deep: L=1-10km, W=10-150m, D=5-30m, S=20-300m	southwest adriatic blake outer ridge bermuda rise various - synthesis various - synthesis	mud/sand mud mud gravel	0.17 (0.6) >0.2 0.2 <0.3 1->1.5
erosive scour/lag deposits	campos slope gibraltar gateway cadiz channel gulf of cadiz faeroe-shetland channel northwest uk slope synthesis	sand/gravel bedrock bedrock/gravel bedrock/gravel bedrock/gravel sand/gravel cohesive sed.	0.6-1.2 2-3, <3, >1 >0.8 (1), 1-2.5, >0.5, >1 1-2.5 0.6->1, <1 >0.4
TRANSVERSE BEDFORMS			
ripples (straight, sinuous, linguoid types) (W = 0.01-1.0m, H = 0.02-0.1m)	hebridean slope rockall margin gulf of cadiz scotian sea surugu, sagami troughs	sand sand sand sand sand	0.15-0.25, 0.03-0.3, 0.48, >0.3, 0.25-0.3 0.2-0.5 0.3-0.4, 0.2-0.3, 0.1-0.4, <0.5, 0.17-0.5 -0.4 0.2-0.49

	florida straits	sand(foram)	<0.6
	faeroe-shetland channel	sand	0.6, 0.25-0.5
	mid-pacific seamounts	sand(foram)	<0.3
	carnegie ridge	sand(foram)	0.17-0.5
	samoan passage	sand	0.2-0.5
	various - synthesis	sand	0.1-0.6, 0.2-0.35
sandwaves (wide range of types, mostly 2D W = 5-500m, H = 0.5-5.0m)	hebridean shelf/slope	sand/gravel	>0.3
	campos slope	sand	>0.6, 0.4-0.7
	gulf of cadiz	sand	0.4-0.75, <1, 0.6-1, 0.25-0.7, 0.5-0.8 <0.75, 0.7->1, 0.4-0.75
	florida straits	sand(foram)	<0.6
	mid pacific seamounts	sand(foram)	<0.3
	southeast greenland	sand	0.7-1
	synthesis	sand	0.9-1
dunes (range of types, mostly 3D W = 0.6-10m, H = 0.1-1.0m)	campos slope	sand	0.9 (1.2)
	gulf of cadiz	sand	0.6-0.8, 0.6-1.0
	faeroe-shetland channel	sand	0.4-1.0, 0.5-0.6 (0.8), 0.7-1
	iceland-faeroe ridge	sand	0.5-0.7
	carnegie ridge	sand(foram)	>0.3, 0.25-0.3
	gulf of mexico	sand	>0.3
	synthesis	sand	0.4-0.75
giant sediment waves (W = 0.5-5 km, H = 10-80 m)	greater antilles outer ridge	mud	0.02-0.17
	hebridean margin	mud	<0.2, 0.15-0.25, <0.25
	corsica channel	mud	0.08-0.17
	north weddell sea	mud	0.02-0.16
	scotia sea	mud	0.17-0.26
	gulf of cadiz	mud	0.1-0.2, 0.1-0.3, 0.1-0.2
	zapiola drift	mud	0.15, 0.1-0.2
	north adriatic	mud	0.02-0.28
	mozambique basin	mud	0.08-0.1
	various - syntheses	mud	0.05-0.2, 0.17-0.25, 0.05-0.2, 0.1-0.3, <0.2

SCALES: L = length, W = width, H = height, D = depth, S = spacing

Where km, m, dm, cm, mm are used without numerical values, this indicates scale is in the order of kilometers, meters, decimeters, centimeters, or millimeters.

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