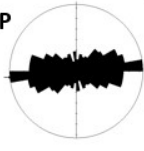
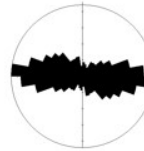
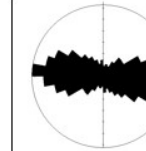
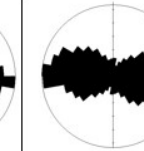
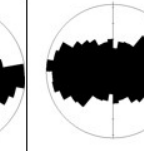
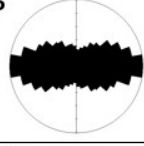
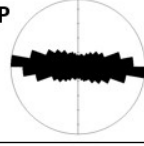
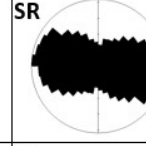
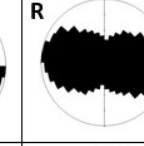
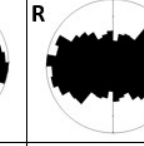
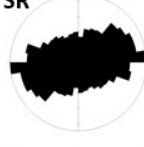
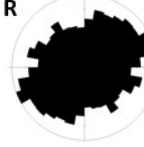
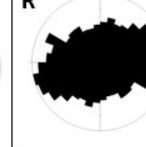
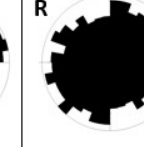
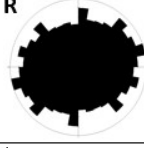
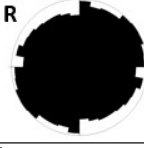
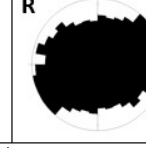
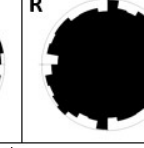
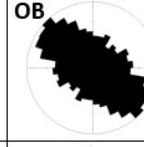
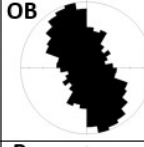
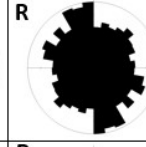
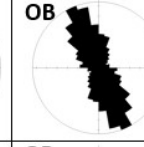
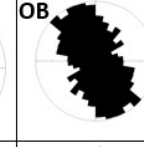
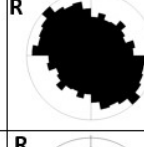
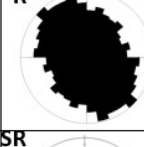
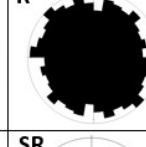
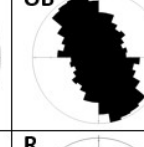
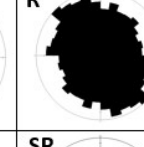
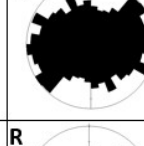
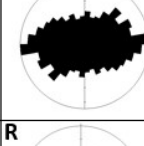
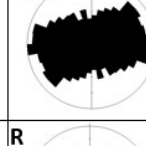
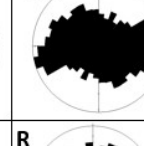
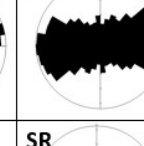
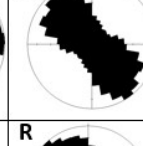
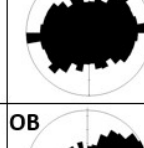
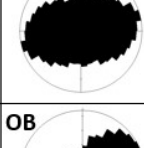
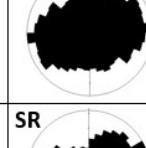
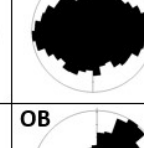
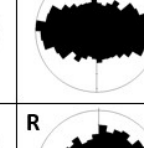
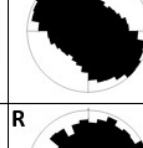
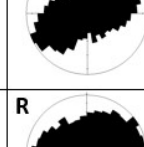
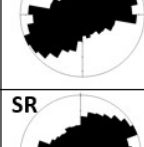
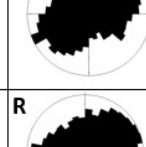
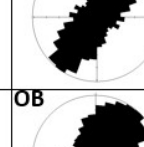
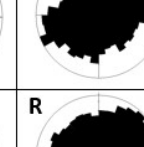
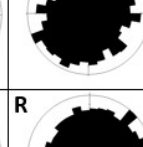
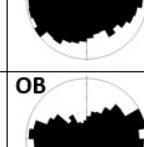
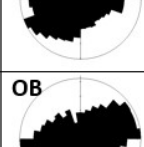
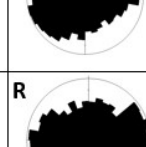
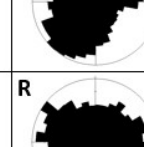
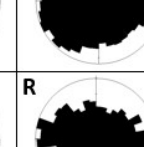
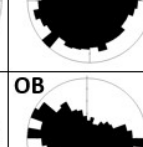
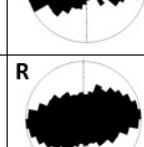
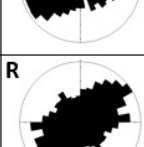
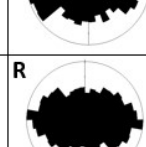
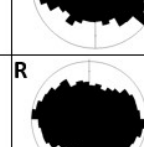
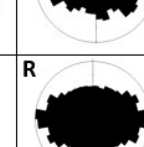
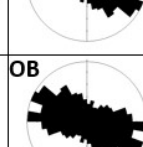








**Table S1.** Rose diagrams showing orientation patterns for contourite, hemipelagite and turbidites. The arrow indicates the direction of the bedding. Contourites are generally random but can show parallel to bedding. Hemipelagites are characterised by a mixture of oblique and random orientations while turbidite are dominantly parallel to bedding. Arrow indicates direction parallel to the bedding. OB= Oblique P= bedding parallel R= random orientation SR= Semi random

S/N	Sediment type/Depth/ Sed. rate	Subset A	Subset B	Subset C	Subset D	Subset E	Subset F
1	Contourite 9 m 25 cm/ky Silt ↔	P 	SR 	P 	P 		
1	Contourite 9 m 25 cm/ky Clay ↔	P 	SR 	P 	P 		
2	Contourite 10 m 25 cm/ky Silt ↔	P 	P 	P 	P 		
2	Contourite 10 m 25 cm/ky Clay ↔	P 	P 	P 	P 		
3	Contourite 14 m 100 cm/ky Silt ↔	OB 	SR 	SR 	OB 		
3	Contourite 14 m 100 cm/ky Clay ↔	SR 	SR 	SR 	SR 		
4	Contourite 15 m 100 cm/ky Silt ↔	OB 	SR 	SR 	P 		
4	Contourite 15 m 100 cm/ky Clay ↔	SR 	P 	SR 	P 		
5	Contourite 16 m 25 cm/ky Silt ↔	OB 	P 	OB 	P 		
5	Contourite 16 m 25 cm/ky Clay ↔	SR 	P 	SR 	P 		

6	Contourite 42 m 40 cm/ky Silt ↔	R	SR	SR	R	SR	P
6	Contourite 42 m 40 cm/ky Clay ↔	R	SR	R	R	SR	SR
7	Contourite 151 m 40 cm/ky Silt ↔	SR	SR	SR	P	R	
7	Contourite 151 m 40 cm/ky Clay ↔	R	R	R	R	R	
8	Contourite 253 m 40 cm/ky Silt ↔	SR	R	OB	R		
8	Contourite 253 m 40 cm/ky Clay ↔	R	R	R	R		
9	Contourite 343 m 40 cm/ky Silt ↔	P	OB	SR	SR		
9	Contourite 343 m 40 cm/ky Clay ↔	SR	SR	SR	R		
10	Contourite 510 m 35 cm/ky Silt ↔	R	R	R	R		
10	Contourite 510 m 35 cm/ky Clay ↔	R	R	R	R		

11	Contourite 563 m 40 cm/ky Silt ↔	P 	SR 	R 	SR 		
11	Contourite 563 m 40 cm/ky Clay ↔	SR 	SR 	SR 	SR 		
12	Contourite 653 m 40 cm/ky Silt ↔	R 	R 	R 	R 		
12	Contourite 653 m 40 cm/ky Clay ↔	R 	R 	R 	R 		
13	Contourite 734 m 25 cm/ky Silt ↔	R 	R 	R 	R 	R 	
13	Contourite 734 m 25 cm/ky Clay ↔	R 	R 	R 	R 	R 	
14	Contourite 763 m 40 cm/ky Silt ↔	P 	R 	P 	P 	P 	
14	Contourite 763 m 40 cm/ky Clay ↔	SR 	SR 	SR 	R 	SR 	
15	Contourite 808 m 25 cm/ky Silt ↔	SR 	P 	P 	P 	P 	
15	Contourite 808 m 25 cm/ky Clay ↔	SR 	P 	SR 	SR 	SR 	

16	Contourite 860 m 40 cm/ky Silt ↔	P											
16	Contourite 860 m 40 cm/ky Clay ↔	P		P		SR		R		R			
17	Contourite 943 m 40 cm/ky Silt ↔	SR		R		R		R					
17	Contourite 943 m 40 cm/ky Clay ↔	R		R		R		R					
18	Hemipelagites 8 m 10 cm/ky Silt ↔	OB		OB		R		OB		OB			
18	Hemipelagites 8 m 10 cm/ky Clay ↔	R		R		R		OB		R			
19	Hemipelagites 10 m 10 cm/ky Silt ↔	R		SR		SR		R		SR		OB	
19	Hemipelagites 10 m 10 cm/ky Clay ↔	R		R		R		R		SR		R	
20	Hemipelagites 15 m 10 cm/ky Silt ↔	OB		OB		SR		OB		R		R	
20	Hemipelagites 15 m 10 cm/ky Clay ↔	R		SR		R		OB		R		R	
21	Hemipelagites 50 m 10 cm/ky Silt ↔	OB		OB		R		R		R		OB	
21	Hemipelagites 50 m 10 cm/ky Clay ↔	R		R		R		R		R		OB	

22	Hemipelagites 57 m 10 cm/ky Silt ↔	R	R	OB	OB	OB	
22	Hemipelagites 57 m 10 cm/ky Clay ↔	R	R	R	R	OB	
23	Hemipelagites 60 m 10 cm/ky Silt ↔	R	R	R	R	R	OB
23	Hemipelagites 60 m 10 cm/ky Clay ↔	R	R	R	R	R	OB
24	Hemipelagites 80 m 10 cm/ky Silt ↔	OB	OB	OB	OB	OB	OB
24	Hemipelagites 80 m 10 cm/ky Clay ↔	OB	R	OB	OB	OB	OB
25	Hemipelagites 117 m 10 cm/ky Silt ↔	R	OB	OB	OB		
25	Hemipelagites 117 m 10 cm/ky Clay ↔	R	OB	OB	SR		
26	Hemipelagite 68 m 10 cm/ky Silt ↔	OB	OB	OB	OB	OB	OB
26	Hemipelagite 68 m 10 cm/ky Clay ↔	OB	SR	OB	OB	SR	OB
27	Turbidite 66 m Silt ↔	OB	P	OB	OB		
27	Turbidite 66 m Clay ↔	OB	P	OB	OB		

28	Turbidite 132 m Silt ↔	P 	OB 	OB 	P 		
28	Turbidite 132 m Clay ↔	P 	OB 	OB 	P 		
29	Turbidite 260 m Silt ↔	P 	P 	P 	P 		
29	Turbidite 260 m Clay ↔	SR 	P 	P 	P 		
30	Turbidite 348 m Silt ↔	P 	P 	P 	P 		
30	Turbidite 348 m Clay ↔	P 	P 	P 	P 		
31	Turbidite 455 m Silt ↔	P 	P 	P 	P 		
31	Turbidite 455 m Clay ↔	P 	P 	P 	P 		
32	Turbidite 541 m Silt ↔	OB 	OB 	P 	P 		
32	Turbidite 541 m Clay ↔	OB 	OB 	P 	P 		
33	Turbidite 543 m Silt ↔	P 	P 	P 	P 		
33	Turbidite 543 m Clay ↔	SR 	P 	P 	P 		

34	Turbidite 655 m Clay ↔	P 	P 	P 	P 		
35	Turbidite 766 m Silt ↔	P 	P 	P 	P 		
35	Turbidite 766 m Clay ↔	P 	SR 	SR 	P 		
36	Turbidite 825 m Silt ↔	P 	P 	P 	P 		
36	Turbidite 825 m Clay ↔	P 	P 	P 	P 		
37	Turbidite 866 m Silt ↔	P 	P 	P 	P 		
37	Turbidite 866 m Clay ↔	P 	P 	P 	P 		
38	Turbidite 985 m Silt ↔	P 	P 	P 	P 		
38	Turbidite 985 m Clay ↔	P 	P 	P 	P 		