IODP Technical Note 5. Shipboard Sedimentologist Handbook.

Appendix 3.1. Compilation of lithostratigraphy methods for previous legs/expeditions.

ODP Leg/ IODP Exp	Leg/Exp title	Sites	Region	Setting	Main Sed. Type	CLASSIFICATION SCHEME(S)														TERRIGENOUS ELEMENTS													
							MG Modification						MG Areas Modified																					
						1. Unspecified source	2. MG	Unmodified	Modified	Minor	Moderate	Significant	Degree/Area Unspecified	Volcaniclastics	Mixed category	Carbonate	Biosiliceous	Glacial/diamict	Other	3. New	1. Udden-Wentworth	2. Shepard Texture Ternary	Original	Modified w/no sand-silt-clay (spokes)	Modified w/side mixtures combined	Divide sand-silt-clay into muddy sand/sandy mud	Modified in other ways	3. Mazzullo Classification	Original	Modified	Mazzullo-based? Ternary or ribbon	4. New
119	Kerguelen Plateau-Prydz Bay	736-746	Antarctica	Intra-oceanic	Pelagic				1		1		X		X		use diamict/ diamictite	Shephard		1		1						1				
120	Kerguelen Island-Prydz Bay	747-751	Antarctica	Intra-oceanic	Pelagic				1		1				X	Issue w/ mixed sed		Glauconite		1		1						1				
121	Broken-Ninetyeast Ridges	752-758	S.Indian	Intra-oceanic	Pelagic			1												1		1						1				
122	Exmouth-Wombat Plateau	759-764	S.Indian	Passive margin	Mixed **S/C**			1												1		1						1				
123	Argo Abyssal Plain	765-766	N.Indian	Intra-oceanic	Mixed **S/C**				1	1									Resediment-ed pelagics, added conglomerate	1		1						1				
124	Celebes abd Sulu Seas	767-771	South China Sea	Magmatic arc	Mixed **S/C/V**				1		1		X		X					1		1						1				
124E	Phillippine Sea	772-777	Philippine Sea	Mixed	Mixed **S/V**				1				X		X																	
125	Izu-Bonin-Mariana Region	778-786	W.Pacific	Mixed	Mixed **S/C/V**	1							X							1		1						1				
126	Bonin Arc-Trench System	787-793	W.Pacific	Mixed	Mixed **S/C/V**				1				X						1	1		1			1				1			
127	Japan Sea	794-797	Japan Sea	Magmatic arc	Mixed **S/V**				1	1								Compl mods		1		1						1				
128	Japan Sea	794, 798-799	Japan Sea	Magmatic arc	Mixed **S/C/V**				1	1					X	X				1								1				
129	Old Pacific Crust	800-802	C. Pacific	Intra-oceanic	Mixed **S/C/V**				1		1					X				1		1						1				
130	Ontong Java Plateau	803-807	S. Pacific	Intra-oceanic	Pelagic			1												1								1				
131	Nankai Trough	808	Philippine Sea	Accretionary prism	Mixed **S/C/V**			1												1		1						1				
132	Western and Central Pacific	809-810	W./C. Pacific	Intra-oceanic	Pelagic			1												1		1						1				
133	Northeast Australian Margin	811-826	S. Pacific	Passive margin	Carbonate							1								1		1						1				
134	Vanuatu (New Hebrides)	827-833	S. Pacific	Mixed	Pelagic				1	1			X							1		1						1				
135	Lau Basin	834-841	S. Pacific	Magmatic arc	Mixed **S/C/V**				1	1			X									1						1				
136	Hawaiian Arch	842-843	C. Pacific	Intra-oceanic	Mixed **S/C/V**				1	1		1								1								no mixed				
138	Eastern Equatorial Pacific	844-854	C. Pacific	Intra-oceanic	Pelagic				1			1				Leg 85				1												
139	Middle Valley, Juan de Fuca Ridge	855-858	C. Pacific	Intra-oceanic	Pelagic/**V**				1	1		1								1		1						1				
141	Chile Triple Junction	859-863	S. Pacific	Intra-oceanic	Mixed **S/C/V**				1			1	X							1				1				1				
143	Guyots	865-870	C. Pacific	Intra-oceanic	Mixed **S/C/V**				1	1				X																		
144	Guyots	871-880	C. Pacific	Intra-oceanic	Mixed **S/C/V**				1			1																				
145	North Pacific Transect	881-887	N. Pacific	Intra-oceanic	Mixed **S/C/V**				1			1								1		1						1				
146 pt.1	Cascadia Margin	888-892	N. Pacific	Convergent margin	**S**iliciclastic				1			1						Leg 124		1			1					1				
146 pt.2	Santa Barbara Basin	893	N. Pacific	Passive margin	Mixed **S/C**				1			1						Leg 124		1			1					1				
147	Hess Deep Rift Valley	894-895	C. Pacific	Intra-oceanic	Mixed **S/C/V**				1			1						Leg 124														
149	Iberia Abyssal Plain	897-901	C. Atlantic	Passive margin	Mixed **S/C/V**				1			1						Leg 124		1			1					1				
150	New Jersey Continental Slope/Rise	902-906	C. Atlantic	Passive margin	Mixed **S/C**			1												1			1					1				
151	N. Atlantic-Arctic Gateway	907-913	N. Atlantic/Arctic	Passive margin	Mixed **S/C/V**												X	Leg 105							1						glacial
152	East Greenland Margin	914-919	N. Atlantic/Arctic	Passive margin	Mixed **S/C/V**				1		1		X				X			1								1				
154	Ceara Rise	925-929	S.Atlantic	Intra-oceanic	Pelagic/**V**			1																				1				
155	Amazon Fan	930-946	C. Atlantic	Passive margin	**S**iliciclastic	1														1		1						1				
156	Northern Barbados Ridge	947-949	Caribbean	Accretionary prism	Mixed **S/C/V**			1												1		1						1				
157	Gran Canaria and Madeira Abyssal Plain	950-956	C. Atlantic	Intra-oceanic	Mixed **S/C/V**			1												1		1						1				
159	Cote d'Ivoire-Ghana transform margin	959-962	C. Atlantic	Passive margin	Mixed **S/C**				1			1								1		1						1				
160	Mediterranean Sea I	963-973	Mediterranean	Intra-oceanic	Mixed **S/C/V**			1																				1				
161	Mediterranean Sea II	974-979	Mediterranean	Passive margin/ Intra-oceanic	Mixed **S/C/V**				1	1			X		micrite					1				1				1				
162	North Atlantic-Arctic Gateway II	980-987	N. Atlantic/Arctic	Intra-oceanic	Mixed **S/C/V**			1												1		1						1				
163	Southeast Greenland Margin	988-990	N. Atlantic/Arctic	Volcanic Rifted margin	Mixed **S/C/V/I**				1		1							Leg 152		1								1				
164	Blake Ridge and Carolina Rise Gas Hydrates	991-997	C. Atlantic	Passive margin	Mixed **S/C**	1																										
165	Caribbean Ocean History and the K/T Boundary Event	998-1002	Caribbean	Intra-oceanic	Mixed **C/V**				1	1			X							1		1						1				
166	Great Bahama Bank	1003-1009	Caribbean	Intra-oceanic	**C**arbonate	1														1		1						1				
167	California Margin	1010-1022	N. Pacific	Passive margin	Mixed **S/C/V**				1	1						X				1								1				
168	Ridge	1023-1032	N. Pacific	Intra-oceanic	Mixed **S/C/V/H/I**			1																				1				
169	Sedimented Ridges II	1035-1038	N. Pacific	Intra-oceanic	Mixed **S/C/V/H/I**													Leg 139														
170	Costa Rica Accretionary Wedge	1039-1043	C. Pacific	Accretionary prism	Mixed **S/C/V**			1																				1				
171B	Blake Nose Transect	1049-1053	N. Atlantic	Passive margin	Mixed **S/C**				1	1				X																		
172	NW Atlantic Sediment Drifts	1054-1064	N. Atlantic	Passive margin/ Intra-oceanic	Mixed **S/C**				1			1								1		1						1				
173	Return to Iberia	1065-1070	N. Pacific	Passive margin/ Intra-oceanic	Mixed **S/C/V/I**				1			1						Leg 149		1			1					1				
174A/B	New Jersey Coastal Plain	Bass River	N. Atlantic	Passive margin	**S**iliciclastic				1			1								1				1				1				
175	Benguela Current	1075-1087	S.Atlantic	Passive margin	Mixed **S/C**				1			1																				
177	Southern Ocean Paleoceanography	1088-1094	S.Atlantic/Antarctic	Intra-oceanic	Pelagic/**S**			1										Leg 113?										1	genetic			
178	Antarctic Glacial History and Sea-Level Change	1095-1103	Antarctic	Intra-oceanic	Mixed **S/C**												X	Leg 105							1						1
180	Western Woodlark Basin	1108-1118	S. Pacific	Intra-oceanic	Mixed **S/C/V**				1	1			X												1						1	
181	Southwest Pacific Gateways	1119-1125	S. Pacific	Passive margin/ Intra-oceanic	Pelagic				1	1				X											1			no mixed				
182	Great Australian Bight	1126-1134	S. Pacific	Passive margin	Mixed **S/C**	1														1		1						1				
183	Kerguelen Plateau-Broken Ridge	1135-1142	Indian Ocean	Intra-oceanic	Mixed **S/C/V/I**				1		1			X	X									1				1				
184	South China Sea	1143-1148	South China Sea	Intra-oceanic	Pelagic	1														1		1						1				
185	Izu-Mariana Margin	801, 1149	S. Pacific	Convergent margin/ Magmatic arc	Mixed **S/C/I**														1										1	1		
186	W. Pacific Geophys. Observatories	1150, 1151	Japan Sea	Convergent margin	Pelagic/**V**				1		1			X					?	1		1						1				
188	Prydz Bay-Cooperation Sea	1165-1167	Antarctic	Intra-oceanic	Mixed **S/C**				1		1			X				X		1			1								1	
189	Tasmanian Gateway	1168-1172	S. Pacific	Intra-oceanic	Pelagic	1																	1								1	
190	Nankai Trough Accret. prism	1173-1178	Philippine Sea	Accretionary prism	Mixed **S/C**			1																								
191	NW Pacific Seismic Observatory/ Hammer Drill	1179-1182	N. Pacific	Intra-oceanic	Pelagic/**I**										X			Leg 185	?									1				
192	Ontong Java Plateau	1183-1187	S. Pacific	Intra-oceanic	Pelagic/ **I**				1	1				X						1								no mixed				
194	Marion Plateau Sea Level	1192-1199	S. Pacific	Passive margin	Mixed **S/C/I**	1														1		1										
195	Seafloor Obs./ Kuroshio Current	1200-1202	C. Pacific	Intra-oceanic	Mixed **S/C/V/I**			1												1		1						add diamict				
197	Hawaiian Hotspot Motion	1203-1206	C. Pacific	Intra-oceanic	Mixed **S/C/V**			1												1		1						1				
198	Shatsky Rise	1207-1214	C. Pacific	Intra-oceanic	Mixed **S/C/V**				1	1				X						1								no mixed				
199	Paleogene Equatorial Transect	1215-1222	C. Pacific	Intra-oceanic	Mixed **S/C/V/I**				1	1				X						1								no mixed	1			
200	Hawaii-2 Observatory (H2O) and Nuaanu Landslide	1223-1224	C. Pacific	Intra-oceanic	Pelagic/ **I**			1												1								1				
201	Eastern Equatorial Pacific/Peru Margin	1225-1231	C. Pacific	Passive margin/ Intra-oceanic	Mixed **S/C/V**				1	1				X						1			1					simplified				
202	Southeast Pacific Transects	1232-1242	S./C. Pacific	Convergent margin	Mixed **S/C/V**				1	1				X						1		1							1			
203	Dynamics of Earth and Ocean Systems	1243	C. Pacific	Intra-oceanic	Mixed **C/I**													Leg 138										modified				
204	Hydrate Ridge, Cascadia Continental Margin	1244-1252	N. Pacific	Accretionary wedge	Mixed **S/V**			1												1		1						1				
205	Costa Rica Convergent Margin	1253-1255	C. Pacific	Convergent margin	Mixed **S/C/V/I**			1												1								1				
206	Superfast Seafloor Spreading	1256	C. Pacific	Intra-oceanic	Mixed **S/C/V/I**				1	1				X						1								1	simplified?				
207	Demerara Rise Transect	1257-1261	C. Atlantic	Intra-oceanic	Pelagic				1	1				X						1								1	simplified?				
208	Walvis Ridge Transect	1262-1267	S. Atlantic	Intra-oceanic	Mixed Pelagic/**V**	1														1			1					no mixed	1			
210	Newfoundland-Iberia Transect	1276-1277	N. Atlantic	Passive margin	Mixed **S/C/I**	1														1				1		1			1			
301	Juan de Fuca Hydrogeology	1026, U1301	N. Pacific	Intra-oceanic	Mixed **S/I**				1	1				X						1							1	no mixed				
302	Arctic Coring Expedition	M0001–M0004	Arctic	Intra-oceanic	Mixed **S/C**													Leg 151						1					1	glacial		
303/306	North Atlantic Climate	–U1308/U1312	N. Atlantic	Intra-oceanic	Mixed **S/C**				1	1				X						1		1						1	1			
307	Modern Carbonate Mounds	U1316–U1318	N. Atlantic	Passive margin	Mixed **S/C**													Dunham+		1		1						1				
308	Gulf of Mexico Hydrogeology	U1319–U1324	C. Atlantic	Passive margin	Mixed **S/C/V**	1														1					1			1				
310	Tahiti Sea Level	M0005–M0026	S. Pacific	Intra-oceanic	Mixed **S/C**													Dunham+														1
311	Cascadia Margin Gas Hydrates	U1325–U1329	N. Pacific	Accretionary prism	Mixed **S/C**				1	1				X						1		1						no mixed				
313	New Jersey Shallow Shelf	M0027–M0029	N. Atlantic	Passive margin	Mixed **S/C**													Leg 174		1				1				1				
314/315/316	NanTroSEIZE Stage 1: Nankai Trough Seismogenesis	C0001–C0006	N. Pacific	Accretionary wedge	Mixed **S/C/V**			1																								
317	Canterbury Basin Sea Level	U1351–U1354	S. Pacific	Passive margin	Mixed **S/C**														1	1					1				1			
318	Wilkes Land Glacial History	U1355–U1361	Antarctica	High Latitude	Mixed **S/C**													Leg 188		1					1			1			glacial	
319	NanTroSEIZE Stage 2: Riser/Riserless Observatory	C0009–C0011	N. Pacific	Accretionary wedge	Mixed **S/C/V**			1																								
320/321	Pacific Equatorial Age Transect	U1331–U1336	C. Pacific	Intra-oceanic	Mixed **P/I**													Leg 199		1								1				
322	NanTroSEIZE Stage 2: Subduction Inputs	C0011, C0012	N. Pacific	Accretionary wedge	Mixed **S/C/V**				1			1						Various		1								1				
323	Bering Sea Paleoceanography	U1339–U1345	Bering Sea	Intra-oceanic	Mixed **S/C**								X						1	1			1						1	1		
324	Shatsky Rise Formation	U1346–U1350	N. Pacific	Intra-oceanic	Mixed **S/C/V/I**			1												1							1					
325	Great Barrier Reef	M0030–M0058	S. Pacific	Passive margin	Carbonate													Dunham+														
327	Juan de Fuca Ridge-Flank Hydrogeology	U1362, U1301, 1027, U1363	N. Pacific	Intra-oceanic	Mixed **S/C/I**													Leg 210		1			1		1				1			
329	South Pacific Gyre Microbiology	U1365–U1371	S. Pacific	Intra-oceanic	Pelagic			1												1									1	glacial		
330	Louisville Seamount Trail	U1372–U1377	S. Pacific	Intra-oceanic	Mixed **S/C/I**				1		1		X	X						1								no mixed				
333	NanTroSEIZE Stage 2: Subduction Inputs, Heat Flow	C0011, C0012, C0018	N. Pacific	Accretionary wedge	Mixed **S/C**			1												1							1					
334	Costa Rica Seismogenesis (A1)	U1378–U1381	C. Pacific	Convergent margin	Mixed **S/C**	1																										
336	Mid-Atlantic Ridge Microbiology	U1382–U1384	C. Atlantic	Intra-oceanic	Pelagic/ **I**	1														1												
338	NanTroSEIZE Stage 3: Plate Boundary Deep Riser 2	C0002, 12, 18, 21, C0022	N. Pacific	Accretionary wedge	Mixed **S/C /V**				1	1			X							1							1					
339	Mediterranean Outflow	U1385–U1391	C. Atlantic	Passive margin	Siliciclastic				1		1			X				?		1					1				1			
340	Lesser Antilles	U1393–U1401	C. Atlantic	Intra-oceanic	Mixed **S/C/V/I**	1														1									1	glacial		
341	Southern Alaska Margin	U1417–U1421	N. Atlantic	Passive margin	Mixed **S/C**								X					178, 317, 318	?	1					1				1	glacial		
342	Newfoundland Sediment Drifts	U1402–U1411	N. Atlantic	Intra-oceanic	Mixed **S/C**				1	1				X														no mixed				
343/343T	Japan Trench Fast Drilling	C0019	N. Pacific	Convergent margin	Mixed **S/C/V**													Exp. 308		1					1				1			
344	Costa Rica Seismogenesis (A2)	U1380, U1381, U1412–U1414	C. Pacific	Convergent margin	Mixed **S/C/V**	1																						1				
346	Asian Monsoon	U1422–U1430	Japan Sea	Intra-oceanic	Mixed **S/C/V**								X					155, 303, 339	1										1	1		
347	Baltic Sea Paleoenvironment	M0059–M0067	Baltic Sea	Passive margin	Mixed **S/C**	1														1		1								glacial		
348	NanTroSEIZE Stage 3: Plate Boundary Deep Riser	C0002	N. Pacific	Accretionary wedge	Mixed **S/C/V**	1																										
349	South China Sea Tectonics	U1431–U1435	South China Sea	Intra-oceanic	Mixed **S/C/V**				1	1				X						1			1					no mixed	1			
350	Izu-Bonin-Mariana Rear Arc	U1436, U1437	N. Pacific	Magmatic arc	Mixed **S/C/V**				1			1	X						1											1		
351	Izu-Bonin-Mariana Arc Origins	U1438	N. Pacific	Magmatic arc	Mixed **S/C/V**													126 + 351	1	1										1		
352	Izu-Bonin-Mariana Fore Arc	U1439–U1442	N. Pacific	Mixed Magmatic arc	Mixed **S/C/V/I**	1														1										1		
353	Indian Monsoon Rainfall	U1443–U1448	S. Indian	Mixed passive margin/Intra-oceanic	Mixed **S/C/V**				1	1				X					?	1			1					1				
354	Bengal Fan	U1449–U1455	S. Indian	Intra-oceanic	Mixed **S/C/V**													155, 339	1				1						1			
355	Arabian Sea Monsoon	U1456–U1457	S. Indian	Intra-oceanic	Mixed **S/C/V**													105, 178		1			1						1			
356	Indonesian Throughflow	U1458–U1464	S. Indian	Passive margin	Mixed **S/C**														1	1			1								1	
359	Maldives Monsoon/Sea Level	U1465–U1472	S. Indian	Intra-oceanic	Carbonate													Dunham+														
361	South African Climates (Agulhas)	U1474–U1479	S. Indian	Passive margin	Mixed **S/C**			1												1									1			
362	Sumatra Subduction Zone	U1480–U1481	S. Indian	Convergent margin	Mixed **S/C/V**				1			1								1		1						1				
363	Western Pacific Warm Pool	U1482–U1490	S. Indian	Passive margin	Mixed **S/C**	1														1			1						1			
364	Chicxulub: K-Pg Impact Crater	M0077	C. Atlantic	Passive margin	Mixed **S/C/V**													Dunham+														
365	NanTroSEIZE Stage 3: Shallow Megasplay LTBM	C0010	N. Pacific	Accretionary wedge	Mixed **S/V**			1										Exp 352		1		1										
366	Mariana Convergent Margin and South Chamorro Seamount	1200, U1491–U1498	S. Pacific	Convergent margin	Mixed **S/C**				1		1		X	X				Exp 352		1								1				1
370	Temperature Limit of Deep Biosphere off Muroto	C0023	N. Pacific	Convergent margin	Mixed **S/C/V**	1																										
					Totals:	20		27	58	28	12	2	17	18	22	7	5	5	34	9	92		40	11	9	4	14		52	16	21	13