Annex 1 A. Documented and extrapolated values of DSi for the different COSCATs (numbering and names after Meybeck et al. 2006) for Africa.

COSCAT Nr.	COSCAT name	A (M km^2)	Q (km^3/y) (nat if avail.)	Rivers documented	Doc. conc. of DSi (mg/l)	Ref.	% of Q doc.	% of A doc.	% of Si flux doc.	DSi (mg/l) conc. used f. extrapolation	Extrapolation method	Budget Results (SiO_2)			
												Concentration		Flux (Mt/y)	Yield (t/km^2/y)
												(mg/l)	(µmol/l)		
0001	Algerian Basin	0.255	22.00	-	-		0	0	0	8.0	As Sebou, Sous	8.0	132.8	0.18	0.69
0002	South Ionian Sea	2.255	1.07	-	-		0	0	0	8.0	As Sebou, Sous	8.0	132.8	0.01	0.00
0003	East Mediterranean	4.525	83.20	Nile	12.8	96010	100	63.4	100	-		12.8	212.5	1.06	0.4
0004	West Red Sea	0.331	4.79	-	-		0	0	0	18.0	As Blue Nile	18.0	298.8	0.09	0.26
0005	South Aden Gulf	0.103	0.00	-	-		0	0	0	15.0	Estimate	15.0	249.0	0.00	0.00
0006	Somali Coast	1.357	18.40	Tana (Kenya)	20.0	95001	25.8	3.1	31.7	15.0	Estimate	16.3	270.4	0.30	0.22
0007	Zanzibar Coast	0.854	160.04	-	-		0	0	0	15.0	Mainly as Zambezi	15.0	249.0	2.40	2.81
0008	North Madagascar Coast	0.169	114.18	-	-		0	0	0	15.0	Mainly as Zambezi	15.0	249.0	1.71	10.14
0009	Mascarenes-Madagascar Basin	0.208	190.02	-	-		0	0	0	15.0	Mainly as Zambezi	15.0	249.0	2.85	13.70
0010	South West Madagascar	0.239	69.43	-	-		0	0	0	15.0	Mainly as Zambezi	15.0	249.0	1.04	4.36
0011	Mozambique Coast	1.732	434.64	Zambezi	15.5	77049	24.4	76.8	25.0	15.0	Mainly as Zambezi	15.1	251.0	6.57	3.79
0012	Agulhas Basin	0.876	37.93	Limpopo	17.7	63024	68.5	50.2	68.5	17.7	As Limpopo	17.7	293.8	0.67	0.77
0013	Cape Basin	1.295	11.44	Orange	16.9	62008	99.3	77.2	99.3	16.9	As Orange	16.9	280.5	0.19	0.15
0014	Angola Basin	4.380	1505.91	Congo / Zaire	10.4	92054	79.7	84.4	77.2	12.0	Estimate	10.7	177.4	16.09	3.67
0015	Sao Tome - Principe Basin	0.527	418.47	Sanaga, Ogooue, Nyong	15.5 11.4 7.1	78173 Est. van Bennekom MI 103	50.5	65.1	50.5	12.4	Mean of documented values	12.4	205.4	5.18	9.82
0016	Niger Delta Cone	2.461	423.62	Niger	14.0	91096	36.4	48.8	34.8	15.0	Estimate	14.6	243.0	6.20	2.52
0017	Guinea Basin	0.778	137.65	Bandama, Comoe, Sassandra, Volta	19.9 14.9 20.8 17.0	94035 82055 82055 Estimate Pre-dam	50.6	83.8	50.6	18.4	Mean of documented values	18.4	304.8	2.53	3.25
0018	Sierra Leone Basin	0.257	367.85	Cavally, Konkoure	18.0 5.6	82055 90093	9.5	17.4	9.8	10.0	Estimate	10.0	166.5	3.69	14.36
0019	Cape Verde Basin	1.105	122.76	Senegal, Gambia	11.9 10.8	63024 84072	23.9	43.7	26.9	10.0	Estimate	10.4	172.9	1.28	1.16
0020	South Canary Basin	2.175	0.00	-	-		0	0	0	10.0	Estimate	10.0	166.0	0.00	0.00
0021	North Canary / Madeira Basin	0.361	9.45	Sebou, Sous	10.6 7.3	89014 89014	70.0	15.2	70.0	10.4	Mean of documented values	10.4	173.4	0.10	0.27
Total	Africa	23.244	4132.85	20 rivers documented	11.7		46.9	46.3	43.5	13.4		12.6	209.4	52.14	1.99

References : 62008 De Villiers (1962), 63024 Livingstone (1963), 77049 Hall et al. (1977), 78173 Olivry and Noah (1978), 82055 Iltis and Leveque (1982), 84072 Lesack et al. (1984), 89014 Snoussi et al. (1989), 90093 Meybeck pers. comm.., 91096 Degens et al. (1991), 92054 Meybeck (1978), 94035 Bahire (1994), 95001 GEMS (1995), 96010 Meybeck (1996), MI 103 Meybeck pers. comm..

Annex 1 B. Documented and extrapolated values of DSi for the different COSCATs (numbering and names after Meybeck et al. 2006), Europe & Greenland.

COSCAT Nr.	COSCAT name	A (M km^2)	Q (km^3/y) (nat if avail.)	Rivers documented	Doc. conc. of DSi (mg/l)	Ref.	% of Q doc.	% of A doc.	% of Si flux doc.	DSi (mg/l) conc. used f. extrapolation	Extrapolation method	Budget Results (SiO_2)			
												Concentration		Flux	Yield
												(mg/l)	(µmol/l)	(Mt/y)	(t/km2/y)
0401	Iberian-Biscay Plains	0.819	218.28	Loire, Seine, Garonne, Guadalquivir, Adour, Minho	8.0; 6.3 4.0 15.0 12.0; 3.6	83247; 94036 82092 77144 89014; 74111	41.7	41.2	43.0	7.0	Estimate	7.1	118.7	1.56	1.91
0402	Hutton-Rockall Basin	0.231	165.44	Thjorsa, Olfusa	14.4 14.4	94030 94030	16.0	5.8	21.5	10.0	Estimate	10.7	177.7	1.77	7.65
0403	North Sea	0.871	339.41	Rhine, Elbe, Weser, Meuse, Thames, Trent	5.2; 3.9 4.0 8.7 12.3 7.5	89173; Estimate 81186 95001 95001 95001	35.3	53.8	36.8	5.0	Estimate	5.1	85.0	1.74	2.00
0404	South Baltic Sea	0.694	138.56	Nemanus, Daugava, Gauja, Lielupe, Wisla, Venta	2.1 2.8 3.0 2.4 8.0; 2.3	96004 91035 96004 96004 63024; 96004	57.5	59.1	57.5	4.8	Mean of documented values	4.8	80.4	0.67	0.97
0405	Botnian Bay	0.481	124.63	Tornionjoki, Dalalven	7.1 4.8	95001 95001	21.7	13.4	21.7	5.8	Mean of documented values	5.8	96.6	0.73	1.51
0406	Gulf of Finland	0.446	124.54	Neva, Kymijoki	0.1 2.3	95001 95001	70.7	71.6	28.7	2.0	Estimate	0.8	13.6	0.10	0.23
0407	Norwegian Basin	0.237	160.11	-	-		0	0	0	6.0	Estimate	6.0	99.6	0.96	4.05
0408	Barents Sea	1.365	397.70	N. Dvina, Pechora, Mezen, Onega, Kola	7.5 6.0 6.1 7.4; 2.3	00100 00100 00100 00100; 96004	71.8	60.1	71.8	6.6	Mean of documented values	6.6	110.0	2.63	1.93
0409	Nansen Basin	0.031	1.44	-	-		0	0	0	6.6	As Barents Sea	6.6	110.0	0.01	0.31
0411	Azov Sea	0.572	49.40	Don, Kuban	4.4; 2.6	95001; 95001	84.4	83.9	84.4	3.8	Mean of doc. val.	3.8	63.3	0.19	0.33
0412	North Black Sea	1.510	276.96	Danube, Dnepr, Dnestr	5.0 3.4; 4.1	79101 89060; 89060	96.5	92.2	96.5	4.6	Mean of documented values	4.6	77.1	1.29	0.85
0413	North East Black Sea	0.011	2.11	-	-		0	0	0	4.0	Estimate	4.0	66.4	0.01	0.77
0414	West Aegean Sea	0.213	42.96	-	-		0	0	0	6.0	Estimate	6.0	99.6	0.26	1.21
0415	North Ionian Sea	0.068	28.87	-	-		0	0	0	6.0	Estimate	6.0	99.6	0.17	2.57
0416	Adriatic Sea	0.256	167.72	Po	4.0	85200	27.4	27.4	27.4	4.0	As documented	4.0	66.4	0.67	2.62
0417	Tyrrhenian Basin	0.058	22.84	-	-		0	0	0	4.0	Estimated as Po	4.0	66.4	0.09	1.57
0418	Balearic Basin	0.343	95.58	Rhone	4.0	Estimate	62.7	27.9	52.7	6.0	Estimate	4.7	78.5	0.45	1.32
0501	N. Greenland Coast	0.010	1.29	-	-		0	0	0	4.0	Estimate	4.0	66.4	0.01	0.49
0502	Greenland Sea	0.074	12.83	-	-		0	0	0	4.0	Estimate	4.0	66.4	0.05	0.69
0503	Irminger Basin	0.008	0.91	-	-		0	0	0	4.0	Estimate	4.0	66.4	0.00	0.48
0504	SW Greenland Coast	0.051	24.99	-	-		0	0	0	4.0	Estimate	4.0	66.4	0.10	1.97
0505	East Baffin Bay	0.089	11.81	-	-		0	0	0	4.0	Estimate	4.0	66.4	0.05	0.53
Total	Europe and Greenland	8.439	2408.38	36 rivers documented	5.3		47.0	53.0	44.3	5.9		5.6	93.1	13.51	1.60

References : 00100 Gordeev (2000)., 63024 Livingstone (1963), 74111 D.G.S.H. (1974), 77144 D.G.O.H. (1977), 79101 Meybeck (1979), 81186 Forstner & Whittman (1981), 82092 Meybeck pers. comm., 83247 GEMS (1983), 85200 Pettine et al. (1985), 89014 Snoussi et al. (1989), 89060 Zakrevskii et al. (1989), 89173 Van der Weijden & Middelburg (1989), 91035 Tsirkunov et al. (1991), 94030 Gislason & Armannsson (1994), 94036 Cossa et al. (1994), 95001 GEMS (1995), 96004 Tsirkunov et al. (1996).

Annex 1 C. Documented and extrapolated values of DSi for the different COSCATs (numbering and names after Meybeck et al. 2006) for North America.

COSCAT Nr.	COSCAT name	A (M km2)	Q (km3/y) (nat if avail.)	Rivers documented	Doc. conc. of DSi (mg/l)	Ref.	% of Q doc.	% of A doc.	% of Si flux doc.	DSi (mg/l) conc. used f. extrapolation	Extrapolation method	Budget Results (SiO_2)			
												Concentration		Flux (Mt/y)	Yield (t/km2/y)
												(mg/l)	(µmol/l)		
0801	Panama Gulf	0.046	53.36	-	-		0	0	0	20.0	Estimate	20.0	332.0	1.07	23.26
0802	Guatemala Basin	0.108	106.65	-	-		0	0	0	22.0	Estimate	22.0	365.2	2.35	21.66
0803	Tehuantepec Basin	0.244	60.60	-	-		0	0	0	25.0	Estimate	25.0	415.0	1.52	6.22
0804	Rivera Basin	0.269	24.92	Ameca	30.1	71022	12.0	4.5	12.0	30.1	As documented	30.1	499.7	0.75	2.79
0805	California Gulf	1.045	22.73	Colorado(Ari)	12.7	24002	81.4	61.2	78.7	15.0	Estimate	13.1	217.3	0.30	0.28
0806	Baja Calif. Coast	0.065	0.00	-	-		0	0	0	15.0	Estimate	15.0	249.0	0.00	0.00
0807	San Francisco Coast	0.252	119.48	San Joaquin, Sacramento	15.8 23.5	77068 24002	32.2	59.4	32.2	19.9	Mean of doc. values	19.9	329.9	2.37	9.40
0808	South Cascadia Basin	0.836	319.88	Columbia, Klamath, Rogue, Eel, Humptulips, Umpqua	13.5 18.0;21.8 9.4; 10.3 17.3	24002 77080; 77068 24002; GS25 77068	85.0	87.1	85.0	13.9	Mean of documented values	13.9	230.9	4.45	5.32
0809	North Cascadia Basin	0.509	405.48	Fraser, Skeena, Quinault	3.1; 4.8 4.5	96035; 95001 GS22	42.6	54.2	42.6	3.7	Mean of doc. values	3.7	60.6	1.48	2.91
0810	Gulf of Alaska	0.392	300.46	Stikine, Susitna, Matanuska	6.0; 6.7 8.0	76128; 77068 GS18	33.4	27.7	33.4	6.4	Mean of doc. values	6.4	106.6	1.93	4.92
0811	S. Aleutian Coast	0.019	24.00	-	-		0	0	0	6.4	As Alaska Gulf	6.4	106.6	0.15	8.17
0812	East Aleutian Basin	0.285	156.40	Kuskokwim	7.6	76068	38.3	43.2	38.3	7.6	As documented	7.6	126.2	1.19	4.18
0813	Norton Gulf	0.920	210.27	Yukon	6.9	95001	95.6	92.3	95.2	7.6	As E. Aleutian	6.9	115.1	1.46	1.58
0814	East Chukchi Coast	0.157	16.10	Kobuk	3.4	91088	100.0	19.8	100.0	3.4	As documented	3.4	56.6	0.05	0.35
0815	Beaufort Sea	2.270	345.10	Mackenzie, Anderson, Peel, Arctic Red	3.7 2.7 3.0 1.3	95001 82205 NWT Wat. Qual. 60 73 86216	100.0	84.6	100.0	2.0	Estimate	3.6	59.9	1.25	0.55
0816	Canadian Archipelago Basin	1.142	53.41	Back, Hayes, Ellice, Coppermine	0.4; 2.7 0.8; 0.6	76128; 78172 82205; NWT09	100.0	30.0	100.0	1.4	Mean of doc. values	1.4	23.1	0.07	0.07
0817	West Hudson Bay	2.412	298.02	Nelson, Churchill (Hud), Thelon, Kazan, Quoich, Seal	1.4 1.4 0.5; 0.2 0.2; 1.7	78172 95001 76131; 76131 82205; 78172	61.5	71.8	61.5	1.1	Mean of documented values	1.1	19.0	0.34	0.14
0818	James Bay	0.727	281.25	La Grande, Eastmain	2.6 3.0	86030 86030	29.5	19.8	29.5	2.7	Mean of doc. values	2.7	45.5	0.77	1.06
0819	East Hudson Bay	0.190	57.68	-	-		0	0	0	2.7	As James Bay	2.7	45.5	0.16	0.83
0820	Foxe Basin	0.282	24.79	-	-		0	0	0	NA	NA	0.0	0.0	0.00	0.00
0821	Ungava Basin	0.438	192.57	Koksoak	2.0	Estimate	28.1	30.3	28.1	2.0	Estimate	2.0	33.2	0.39	0.88
0822	Frobisher&Cumberl.	0.097	15.48	-	-		0	0	0	2.0	Estimate	2.0	33.2	0.03	0.32
0823	West Baffin Bay	0.289	9.24	-	-		0	0	0	2.0	Estimate	2.0	33.2	0.02	0.06
0824	Labrador Coast	0.265	147.62	-	-		0	0	0	3.0	Estimate	3.0	49.8	0.44	1.67
0825	Saint Lawrence Gulf	1.563	629.10	Saint Lawrence, Saguenay, Côte Nord rivers, Moisie	6.6 4.1 3.5 3.0	24002 70100 70100 70100	79.6	80.2	86.3	3.5	Estimate	5.2	86.9	3.29	2.11
0826	Newfoundland Coast	0.100	78.57	-	-		0	0	0	3.5	Estimate	3.5	58.1	0.27	2.76
0827	New England Coast	0.579	310.19	Susquehanna, Saint John, Hudson,	4.6 2.7; 1.4	77068 95001; 77068	55.9	50.8	55.9	4.7	Mean of documented	4.7	78.1	1.46	2.52

				Potomac, Connecticut, Delaware, Penobscot, Kennebec, James	6.0 5.1 9.0 3.2 3.5; 18.0	95001 77068 24002 77068 77068; 24002					values				
0828	Blake-Nares Basin	0.452	113.30	Altamaha, Santee, Savannah, Cape Fear, Neuse, Pee Dee	11.5; 9.8 23.0 7.7; 10.0 19.0	77068; 77068 24002 77068; 77068; 24002	58.6	31.4	58.6	14.7	Mean of documented values	14.7	244.0	1.67	3.68
0829	N. Venezuela Basin	0.015	4.35	-	-		0	0	0	10.0	Estimate	10.0	166.0	0.04	2.97
0830	N. Colombia Basin	0.211	266.58	-	-		0	0	0	12.0	Estimate	12.0	199.2	3.20	15.15
0831	Yucatan-Cayman	0.291	143.16	-	-		0	0	0	15.0	Estimate	15.0	249.0	2.15	7.37
0832	Campeche Bank	0.326	200.52	-	-		0	0	0	10.0	Estimate	10.0	166.0	2.01	6.15
0833	West Mexican Gulf	1.410	59.66	Rio Grande (US), Brazos (Tex), Colorado (Tex), Nueces	28.9 9.1 10.1 13.4	24002 77068 77068 77068	44.0	80.2	60.0	12.0	Estimate	16.8	278.8	1.00	0.71
0834	North Mexican Gulf	3.685	825.50	Mississippi, Sabine, Suwannee, Neches, Escambia, Mobile / Alabama	11.0; 8.0 6.1; 9.9 7.9 22.9	24002; 77068 77068; 77068 77068 24002	80.6	86.1	83.2	10.0	Estimate	11.6	192.3	9.56	2.60
Total	North America	21.890	5876.42	65 rivers documented	7.6		51.6	60.2	49.0	8.5		8.0	133.3	47.18	2.16

NA: Not Available. References : 24002 Clarke (1924), 70100 M.R.N. (1970), 71022 Drever (1971), 76068 Meybeck pers. comm.., 76128 Environment Canada (1976), 76131 Meybeck pers. comm., 77068 Briggs & Ficke (1977), 77080 Meybeck pers. comm., 78172 I.W.D. (1978), 82205 Environment Canada (1982), 86030 Messier et al. (1986), 86216 Brunskill (1986), 91088 Telang et al. (1991), 95001 GEMS (1995), 96035 Harrison et al. (1991) and Meybeck pers. comm., GS18 Meybeck pers. comm., GS22 Meybeck pers. comm., GS25 Meybeck pers. comm., NWT Wat. Qual. 60 73, NWT 09 Meybeck pers. comm..

Annex 1 D. Documented and extrapolated values of DSi for the different COSCATs (numbering and names after Meybeck et al. 2006) for South America.

COSCAT Nr.	COSCAT name	A (M km^2)	Q (km^3/y) (nat if avail.)	Rivers documented	Doc. conc. of DSi (mg/l)	Ref.	% of Q doc.	% of A doc.	% of Si flux doc.	DSi (mg/l) conc. used f. extrapolation	Extrapolation method	Budget Results (SiO_2)			
												Concentration		Flux (Mt/y)	Yield (t/km2/y)
												(mg/l)	(µmol/l)		
1101	South Colombia Bas.	0.359	305.15	Magdalena	12.6	79101	77.7	65.5	77.7	12.6	As documented	12.6	209.2	3.84	10.72
1102	South Venezuela Bas.	0.250	69.78	-	-		0	0	0	12.6	As Magdalena	12.6	209.2	0.88	3.52
1103	North Guiana Coast	1.350	1398.31	Orinoco	6.3	89119	81.2	81.5	73.1	10.0	Estimate	7.0	116.1	9.78	7.25
1104	South Guiana Coast - Amazon Cone	7.107	7557.64	Amazon, Tocantins, Maroni, Suriname, Approuage	6.9 11.6 11.5 8.7 15.0	92035 95011 69068 69068 74112	93.2	97.9	89.9	11.0	Estimate	7.5	123.9	56.39	7.93
1105	Ceara Abyssal Plain	0.796	206.67	-	-		0	0	0	11.0	Estimate	11.0	182.6	2.27	2.86
1106	North Brazilian Basin	1.105	191.84	Sao Francisco	10.0	Estimate	46.9	57.0	46.9	10.0	Estimate	10.0	166.0	1.92	1.74
1107	Santos Plateau	0.446	251.61	-	-		0	0	0	10.0	Estimate	10.0	166.0	2.52	5.64
1108	Rio de la Plata Coast	3.078	878.70	Parana, Uruguay	17.1 15.0	91089 79101	81.1	98.2	85.7	12.0	Estimate	15.8	262.1	13.88	4.51
1109	Pampa Coast	1.047	62.92	Negro (Arg)	16.3	Meybeck & Ragu (1995)	46.9	9.3	46.9	16.3	As documented	16.3	270.6	1.03	0.98
1110	Patagonia Coast	0.564	105.66	-	-		0	0	0	8.0	Estimate	8.0	132.8	0.85	1.50
1111	Chile Trench	0.202	162.02	-	-		0	0	0	12.0	Estimate	12.0	199.2	1.94	9.60
1112	Mocha-Gufao Coast	0.291	351.48	Bio Bio	19.0	91098	7.2	8.2	8.9	15.0	Estimate	15.3	253.8	5.37	18.47
1113	Chile Basin	0.406	19.60	-	-		0	0	0	15.0	Estimate	15.0	249.0	0.29	0.72
1114	Peru Basin	0.140	14.34	-	-		0	0	0	15.0	Estimate	15.0	249.0	0.22	1.54
1115	Guayaquil Gulf	0.099	28.99	-	-		0	0	0	15.0	Estimate	15.0	249.0	0.43	4.40
1116	Galapagos Basin	0.148	242.01	-	-		0	0	0	20.0	Estimate	20.0	332.0	4.84	32.68
Total	South America	21.890	5876.42	12 rivers documented	8.0		78.3	69.4	70.1	12.4		9.0	149.2	106.45	6.12

References : 69068 Eisma & Van Bennekom (1969), 74112 Roche et al. (1974), 79101 Meybeck (1979), 89119 Lewis & Saunders (1989), 91089 Depetris & Paolini (1991), 91098 Petersen & Sangfors (1991), 92035 Probst (1992), 95011 Hieronymus et al. (1995).

Annex 1 E. Documented and extrapolated values of DSi for the different COSCATs (numbering and names after Meybeck et al. 2006) for Asia.

COSCAT Nr.	COSCAT name	A (M km^2)	Q (km^3/y) (nat if avail.)	Rivers documented	Doc. conc. of DSi (mg/l)	Ref.	% of Q doc.	% of A doc.	% of Si flux doc.	DSi (mg/l) conc. used f. extrapolation	Extrapolation method	Budget Results (SiO_2)			
												Concentration		Flux (Mt/y)	Yield (t/km2/y)
												(mg/l)	(µmol/l)		
1301	East Levantine Basin	0.206	52.89	Manavgat	4.9	70027	7.7	0.6	7.7	4.9	As documented	4.9	81.3	0.26	1.26
1302	W Levantine Basin	0.092	19.95	-	-		0	0	0	4.9	As Manavgat	4.9	81.3	0.10	1.06
1303	South Black Sea	0.321	79.12	Sakarya, Inguri, Rioni	11.8; 4.4 4.4	95001; 96004 96004	26.1	24.2	22.3	8.0	Estimate	7.6	126.3	0.60	1.88
1307	West Kara Sea	3.666	878.63	Ob, Pur, Nadym	10.2; 7.3 8.7	00100; 00100 00100	54.8	74.2	60.1	8.0	Estimate	9.1	150.4	7.96	2.17
1308	East Kara Sea	2.984	699.56	Yenisey	6.4	00100	88.6	86.9	86.1	8.0	Estimate	6.5	108.5	4.57	1.53
1309	West Laptev Sea	3.257	663.40	Lena, Khatanga, Olenek, Anabar	4.2 3.2 2.7; 2.6	00100 00100 00100; 00100	100.0	97.3	100.0	3.0	Estimate	3.9	65.4	2.62	0.80
1310	East Laptev Sea	0.351	36.39	Yana	3.1	00100	94.3	67.7	94.4	3.0	Estimate	3.1	51.4	0.11	0.32
1311	East Siberian Sea	1.317	193.00	Kolyma, Indigirka	3.9 2.8	00100 00100	100.0	77.6	100.0	3.0	Estimate	3.6	59.0	0.69	0.52
1312	New Siberia Plateau	0.031	1.92	-	-		0	0	0	2.0	Estimate	2.0	33.2	0.00	0.12
1313	West Chukchi Sea	0.100	25.79	Amguema	5.9	00100	35.7	29.6	35.7	5.9	As documented	5.9	97.1	0.15	1.51
1314	Anadyr Gulf	0.298	65.07	Anadyr	8.3	SH007	97.9	67.0	97.9	8.3	As documented	8.3	138.0	0.54	1.81
1315	West Aleutian Basin	0.173	59.67	-	-		0	0	0	8.0	Estimate	8.0	132.8	0.48	2.75
1316	SE Kamchatka Coast	0.109	65.97	Kamchatka	12.6	96004	50.2	51.2	50.2	12.6	As documented	12.6	209.2	0.83	7.62
1317	East Okhotsk Sea	0.411	116.46	Penzhina, Tauy	5.4; 4.2	96004; 96004	29.3	23.5	20.6	8.0	Estimate	7.1	118.2	0.83	2.02
1318	NW Okhotsk Sea	1.989	432.57	Amur	2.2	96004	79.5	93.2	62.5	5.0	Est. as Penzhina	2.7	45.4	1.18	0.59
1319	SW Okhotsk Sea	0.075	29.73	-	-		0	0	0	5.0	Estimate	5.0	83.0	0.15	2.00
1320	West Japan Sea	0.268	84.27	-	-		0	0	0	17.1	As East Japan Sea	17.1	284.5	1.44	5.39
1321	East Japan Sea	0.150	157.05	Shinano, Ishikari, Agano, Mogami, Teshio	17.0 20.9 13.8 17.6 14.7	60020 60020 60020 60020 60020	40.8	31.4	40.8	17.1	As documented	17.1	284.5	2.69	17.93
1322	Japan Trench	0.119	91.02	Tone, Kitakami, Tokachi	21.1 19.6 29.9	60020 60020 60020	31.4	29.9	31.4	24.0	As documented	24.0	397.9	2.18	18.26
1323	Philippines Sea	0.228	240.00	Kiso, Tenryu, Yodo	15.5; 12.9 8.2	60020; 60020 60020	10.5	9.7	10.6	12.0	Estimate	12.0	199.5	2.88	12.64
1324	East Yellow Sea	0.216	115.42	-	-		0	0	0	6.0	Estimate	6.0	99.6	0.69	3.21
1325	Pohai Gulf	1.554	66.09	Huang He, Liao, Luan	7.7 1.8; 4.7	82093 94013; 94013	92.9	65.9	93.9	5.0	Estimate	5.8	96.7	0.39	0.25
1326	West Yellow Sea	2.288	1098.37	Chang Jiang, Fuchun Jiang, Menjiang	6.5 4.7 11.7	87186 93023 87186	93.2	84.1	89.4	11.0	Estimate	7.0	116.6	7.71	3.37
1327	North SouthChina Sea	0.967	589.38	Zhujiang, Hong, Dongjiang, Jiulong, Hanjiang	8.5 10.0 11.2 17.0 15.4	94013 82056 87186 87186 87186	93.0	64.7	91.9	11.0	Estimate	9.6	159.2	5.65	5.84
1328	East SouthChina Sea	0.349	636.47	-	-		0	0	0	12.0	Est. as Mahakam	12.0	199.2	7.64	21.89
1329	West SouthChina Sea	1.493	1550.49	Mekong, Chao Phrya,	8.9 15.8	76129 59001	40.4	68.4	33.8	15.0	Estimate	13.5	224.1	20.93	14.02

				Ban Pakong, Musi, Kelantan, Mae Klong	5.4 24.5; 12.0 14.1	88228 95001; 95001 59001									
1330	Sunda Strait	0.546	665.75	Barito, Mahakam, Brantas, Cimanuk, Citarum, Solo	9.3 11.8 45.0 19.2 30.0; 19.6	78170 84216 95001 78170 95001; 78170	31.7	30.9	31.7	13.9	As documented	13.9	231.5	9.29	17.01
1331	Sulu-Celebes Sea	0.356	424.64	-	-		0	0	0	12.0	Est. as Mahakam	12.0	199.2	5.10	14.32
1332	Banda Sea	0.191	152.76	-	-		0	0	0	12.0	Est. as Mahakam	12.0	199.2	1.83	9.59
1333	South Timor Coast	0.012	6.83	-	-		0	0	0	20.0	Estimate	20.0	332.0	0.14	11.20
1334	Java Trench	0.166	216.59	Citanduy, Serayu	13.3 33.4	78170 78170	4.8	4.4	4.8	23.3	As documented	23.3	386.0	5.04	30.37
1335	Andaman Sea	0.958	1059.95	Irrawaddy	9.0	Estimate	45.9	42.8	45.9	9.0	Est. as Mekong	9.0	149.4	9.54	9.95
1336	Bengal Gulf	1.818	1490.73	Ganges, Brahmaputra	8.0 7.8	84221 89049	67.3	89.7	57.5	12.0	Estimate	9.2	153.5	13.78	7.58
1337	East Deccan Coast	1.120	306.07	Godavari, Krishna, Mahanadi, Cauweri	18.1 18.1 13.3 19.0	93014 Estimate 84207 83241	72.5	71.6	72.5	16.7	As documented	16.7	277.6	5.12	4.57
1338	Laccadive Basin	0.122	84.69	Sri Lanka rivers	13.1	66042	49.6	53.3	49.6	13.1	As documented	13.1	217.0	1.11	9.08
1339	West Deccan Coast	0.337	168.06	Narmada, Tapti	9.0; 16.0	83241; 83241	34.9	48.6	34.9	11.1	As documented	11.1	185.0	1.87	5.55
1340	Indus Delta Coast	1.390	154.95	Indus	14.0	91091	58.1	65.9	58.1	14.0	As documented	14.0	232.4	2.17	1.56
1341	Oman Gulf	0.265	0.63	-	-		0	0	0	10.0	Estimate	10.0	166.0	0.01	0.02
1342	Persian Gulf	2.469	118.64	Shatt el Arab	6.9	79101	38.6	21.9	30.2	10.0	Estimate	8.8	146.2	1.04	0.42
1343	South Arabian Coast	0.799	1.30	-	-		0	0	0	30.0	Estimate Peridotite	30.0	498.0	0.04	0.05
1344	East Red Sea	0.441	0.00	-	-		0	0	0	18.0	Est. as Blue Nile	18.0	298.8	0.00	0.00
Total	Asia	34.004	12900.27	69 rivers documented	8.2		54.6	63.1	44.7	12.2		10.0	166.5	129.35	3.80

References : 00100 Gordeev (2000), 59001 Kobayashi (1959), 60020 Kobayashi (1960), 66042 Kobayashi (1966), 70027 Bakalowicz (1970), 76129 Carbonnel & Meybeck (1976), 78170 D.G.W.R.D. (1978), 79101 Meybeck (1979), 82056 Ming-hui et al. (1982), 82093 Degens (1982), 83241 Subramanian (1983), 84207 Ray et al. (1984), 84216 Meybeck (1984), 84221 Sarin & Krisnaswami (1984), 87186 Zhang et al. (1987), 88228 Windom et al. (1988), 89049 Sarin et al. (1989), 91091 Subramanian & Ittekkot (1991), 93014 Somayajulu et al. (1993), 93023 Shengquan et al. (1993), 94013 Zhang et al. (1994), 95001 GEMS (1995), 96004 Tsirkunov et al. (1996), SH007 Meybeck pers. comm..

Annex 1 F. Documented and extrapolated values of DSi for the different COSCATs (numbering and names after Meybeck et al. 2006) for Australasia.

COSCAT Nr.	COSCAT name	A (M km^2)	Q (km^3/y) (nat if avail.)	Rivers documented	Doc. conc. of DSi (mg/l)	Ref.	% of Q doc.	% of A doc.	% of Si flux doc.	DSi (mg/l) conc. used f. extrapolation	Extrapolation method	Budget Results (SiO_2)			
												Concentration		Flux (Mt/y)	Yield (t/km2/y)
												(mg/l)	(µmol/l)		
1401	Caroline-Bismarck Bas.	0.321	457.70	Sepik	12.5	83058	26.2	24.5	26.2	12.5	As documented	12.5	207.5	5.72	17.84
1402	Salomon Sea	0.095	134.51	-	-		0	0	0	12.5	Estimate as Sepik	12.5	207.5	1.68	17.71
1403	Coral Sea	0.659	417.47	Fitzroy East, Burdekin, Fly, Kikori, Purari	15.0 18.5 9.0; 8.0 13.8	75115 75115 83058; 83058 83058	67.0	57.7	67.0	10.7	As documented	10.7	177.9	4.47	6.79
1404	North Fiji Basin	0.015	16.55	-	-		0	0	0	20.0	Estimate	20.0	332.0	0.33	21.96
1405	South Fiji Basin	0.055	46.08	-	-		0	0	0	20.0	Estimate	20.0	332.0	0.92	16.66
1406	Kermadec Basin	0.065	36.78	Waimakariri	7.0	75111	10.3	4.9	10.3	7.0	As documented	7.0	116.2	0.26	3.94
1407	Campbell Basin	0.079	41.27	Clutha, Waitaki	3.2 5.0	85202 75111	74.9	34.0	74.9	3.9	As documented	3.9	64.8	0.16	2.05
1408	New Caledonia Basin	0.082	53.51	Waikato	28.0	95001	22.6	16.8	29.0	20.0	Estimate	21.8	362.1	1.17	14.29
1409	Challenger Plateau	0.042	102.52	-	-		0	0	0	3.9	Est. as Campbell	3.9	64.8	0.40	9.45
1410	West Tasman Sea	0.290	41.80	-	-		0	0	0	12.0	Estimate	12.0	199.2	0.50	1.73
1411	SE Australia Coast	1.198	46.38	Murray	18.1	Burdekin GLO23	50.9	88.5	65.2	10.0	Estimate	14.1	234.2	0.65	0.55
1412	Great Australian Bay	1.053	6.71	-	-		0	0	0	10.0	Estimate	10.0	166.0	0.07	0.06
1413	West Australian Coast	0.472	9.32	-	-		0	0	0	12.0	Estimate	12.0	199.2	0.11	0.24
1414	Rowley Shelf	0.920	11.27	-	-		0	0	0	14.0	Estimate	14.0	232.4	0.16	0.17
1415	South Arafura-Timor Basin	1.108	121.53	Flinders, Mitchell	14.8 18.0	75115 75115	11.1	16.2	11.1	17.5	As documented	17.5	290.9	2.13	1.92
1416	North Arafura Sea	0.274	360.60	-	-		0	0	0	10.0	Est. as Fly, Kikori	10.0	166.0	3.61	13.17
1417	Pacific Islands	0.017	12.16	-	-		0	0	0	20.0	Estimate	20.0	332.0	0.24	14.51
Total	Australasia	6.745	1916.16	13 rivers documented	11.7		25.2	25.8	25.0	11.8		11.8	195.7	22.59	3.35

References : 75115 A.W.R.C. (1975), 83058 Petr (1983), 85202 Bryers (1985), 95001 GEMS (1995), GLO23 Meybeck pers. comm..

Additional references

Dissolved silica (from the PRISRI database):

PRISRI is a global set of pristine to subpristine (i.e., some atmospheric pollution is possible) water composition of rivers and tributaries (1200 river lines), encompassing all continents, including endorheic basins. The largest basins as the Amazon, Mackenzie, Lena, Yenisei or the Mekong, have been subdivided in smaller tributaries (0.1 to 1 million km^2). In some regions (e.g., Indonesia, Japan), smaller tributaries (1000 to 10 000 km^2) have been considered. In the northern temperate regions only the most reliable historic analyses on basins with limited human influence have been considered. For example, in North America (Alaska, Central USA, Rocky Mountain river basins, Pacific Coast), the US Geological Survey data from 1909 to 1965 have been considered. The PRISRI data set results from the compilation of more than 200 references, some of them are explicitly given in previous works (Meybeck, 1979; Meybeck and Ragu, 1995, see complete reference in the main manuscript). The PRISRI analysis for major ions and dissolved silica is fully detailed in a previous work (Meybeck, 2003, complete reference in the main manuscript), including the global statistical distribution of dissolved silica concentration, and the distribution of dissolved silica for selected regions (Central and Lower Amazon, Japan, Andean Amazon Basin, Thailand, Mackenzie Basin, French streams draining monolithological basins).

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Particulate silica (from the GLOMET database):

GLOMET is a register of chemical composition of particulates in world rivers and tributaries presently composed of 1048 analyses ("river lines") of riverine fine sediments and suspended matter (SPM). It combines both subpristine rivers (e.g., Amazon, Congo, Mackenzie, Lena river basins and their tributaries) and very impacted rivers as in Western Europe, NE USA, and in some basins in China, India, Egypt etc.. These data originate from references which cannot all be detailed here. As such, GLOMET covers a large gradient of lithologies, of climatic and tectonic conditions and of human impacts, from all continents (with limited analyses from Australasia).

In this database, total silica content – i.e. after complete digestion – is not the most commonly analysed major element (Al and Fe are much more frequent). The median content of Si in this database is 260 000 ppm for 160 analyses, including the deposited sediments that are coarser than SPM, and generally richer in Si. The silica content interdeciles of the GLOMET database are 220 000 and 300 000 ppm.

The data base for silica analysis in river SPM and / or freshly deposited fine-grained sediments (part of the GLOMET data base) originates, among others, from the following sources:

- Global river basins: Martin and Meybeck (1979), Thomas and Martin (1982), Meybeck (1984), Gaillardet et al. (1999)
- New Zealand: Churchman et al. (1988)
- Marocco: Snoussi (1988)

- China: Qu et al. (1990), Qu et al. (1993), Chen and Wang (1995), Chen et al. (2000)
- W. Africa: Orange (1992), Dupré et al. (1996)
- European rivers, floodplain sediments and bed sediments: De Vos et al. (1996), Salminen et al. (2005), De Vos and Tarvainen (2006)
- US and Canada rivers: Wagemann et al. (1977), Canfield (1997), Gaillardet et al. (2003)
- Amazon and tributaries : Gaillardet et al. (1997), Elbaz-Poulichet et al. (1999),
- Négrel (1997),
- Indian rivers: Singh and Hasnain (1998), Dekov et al. 1999
- Carbonate-free shale: Mc Lennan and Murray (1999)
- Australia and Papua rivers: Olley and Caitcheon (2000), Haynes and Kwan (2002)
- Mexico: Rosales-Hoz et al. (2003)
- Iceland: Stefansdottir and Gislason (2005)

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