

Table DR10 Compiled Nd-Sr isotopic compositions from sediment sources in the Indus River drainage basin (Karakoram)

Sample name	Formation	Sr (ppm)	Nd (ppm)	$^{87}\text{Sr}/^{86}\text{Sr}$	SE	$^{143}\text{Nd}/^{144}\text{Nd}$	SE	$\epsilon_{\text{Nd}}$
<u>Debon et al., 1987</u>								
KK 157	Karakoram Batholith	438	no data	0.708700	6	no data	no data	no data
KK 160	Karakoram Batholith	544	no data	0.705300	1	no data	no data	no data
KK 159	Karakoram Batholith	355	no data	0.707300	1	no data	no data	no data
KK 163	Karakoram Batholith	78	no data	0.715900	3	no data	no data	no data
KK 164	Karakoram Batholith	199	no data	0.708700	4	no data	no data	no data
KK 165	Karakoram Batholith	105	no data	0.712600	2	no data	no data	no data
KK 145	Karakoram Batholith	333	no data	0.707960	5	no data	no data	no data
KK 145	Karakoram Batholith	19	no data	0.754970	7	no data	no data	no data
KK 151	Karakoram Batholith	378	no data	0.709180	8	no data	no data	no data
KK 144	Karakoram Batholith	224	no data	0.712280	7	no data	no data	no data
KK 154	Karakoram Batholith	247	no data	0.714340	7	no data	no data	no data
KK 155	Karakoram Batholith	218	no data	0.714530	7	no data	no data	no data
KK 153	Karakoram Batholith	160	no data	0.712990	6	no data	no data	no data
KK 12	Karakoram Batholith	144	no data	0.707200	3	no data	no data	no data
KK 11	Karakoram Batholith	137	no data	0.707700	2	no data	no data	no data
KK 13	Karakoram Batholith	102	no data	0.709770	4	no data	no data	no data
KK 10	Karakoram Batholith	68	no data	0.711000	6	no data	no data	no data
KK 9	Karakoram Batholith	65	no data	0.714800	11	no data	no data	no data
KK 33	Karakoram Batholith	9	no data	0.770640	4	no data	no data	no data
KK 40	Karakoram Batholith	66	no data	0.711400	2	no data	no data	no data
KK 42	Karakoram Batholith	395	no data	0.710990	6	no data	no data	no data
PN 45	Karakoram Batholith	354	no data	0.711500	2	no data	no data	no data
PN 45	Karakoram Batholith	5	no data	0.773900	9	no data	no data	no data
KK 57	Karakoram Batholith	340	no data	0.710700	6	no data	no data	no data
KK 100	Karakoram Batholith	344	no data	0.711330	6	no data	no data	no data
KK 100	Karakoram Batholith	12	no data	0.727830	20	no data	no data	no data
KK 92	Karakoram Batholith	298	no data	0.711270	3	no data	no data	no data
PN 43	Karakoram Batholith	264	no data	0.712800	3	no data	no data	no data
PN 43	Karakoram Batholith	7	no data	0.762800	14	no data	no data	no data
KK 226	Karakoram Batholith	265	no data	0.715810	5	no data	no data	no data
KK 58	Karakoram Batholith	201	no data	0.713340	5	no data	no data	no data
KK 93	Karakoram Batholith	140	no data	0.712930	4	no data	no data	no data
<u>Schärer et al., 1990</u>								
K10	Karakoram Batholith	394	15	0.709810	4	0.512154	20	-9.44
K11	Karakoram Batholith	417	10.6	0.718560	3	0.512059	28	-11.29
K21	Southern Karakoram Metamorphic Complex	359	37.1	0.715100	5	0.512055	27	-11.37
K26	Southern Karakoram Metamorphic Complex	333	6.1	0.712800	3	0.512207	20	-8.41
<u>Mahéo et al., 2009</u>								
BD45	Karakoram Batholith	647	35.3	0.708821	12	0.512287	no data	-6.85
BD52	Karakoram Batholith	581	27.5	0.707733	13	0.512176	no data	-9.01
BD83	Karakoram Batholith	406	28.8	0.709704	16	0.512188	no data	-8.78
BD91	Karakoram Batholith	220	18.3	0.712984	10	0.512067	no data	-11.14
BD109	Karakoram Batholith	1076	51.7	0.708887	12	0.512251	no data	-7.55
BD79	Karakoram Batholith	525	64.2	0.709876	9	0.512254	no data	-7.49
<u>Reichardt et al., 2010</u>								
AGH23a	Karakoram Batholith	903.4	81.59	0.708970	/	0.512280	no data	-6.98
AGH25a	Karakoram Batholith	155.61	12.03	0.708310	/	0.512350	no data	-5.62
NBR1b	Karakoram Batholith	363.24	16.05	0.708090	/	0.512340	no data	-5.81
NBR2a	Karakoram Batholith	501.35	24.47	0.708550	/	0.512300	no data	-6.59
NBR3b	Karakoram Batholith	336.8	20.27	0.709630	/	0.512260	no data	-7.37

Table DR10 Compiled Nd-Sr isotopic compositions from sediment sources in the Indus River drainage basin (Kohistan)

Sample name	Formation	Sr (ppm)	Nd (ppm)	$^{87}\text{Sr}/^{86}\text{Sr}$	SE	$^{143}\text{Nd}/^{144}\text{Nd}$	SE	$\epsilon_{\text{Nd}}$
<u>Petterson and Windley, 1985</u>								
A144	Kohistan batholith	140	no data	0.704620	no data	no data	no data	no data
A145	Kohistan batholith	149	no data	0.704300	no data	no data	no data	no data
A149	Kohistan batholith	137	no data	0.704220	no data	no data	no data	no data
A150	Kohistan batholith	114	no data	0.704520	no data	no data	no data	no data
A151	Kohistan batholith	113	no data	0.704560	no data	no data	no data	no data
A153	Kohistan batholith	117	no data	0.704700	no data	no data	no data	no data
A248	Kohistan batholith	91	no data	0.705410	no data	no data	no data	no data
A67	Kohistan batholith	249	no data	0.705860	no data	no data	no data	no data
A68	Kohistan batholith	248	no data	0.705730	no data	no data	no data	no data
A71	Kohistan batholith	262	no data	0.705630	no data	no data	no data	no data
P43	Kohistan batholith	641	no data	0.704310	no data	no data	no data	no data
A135	Kohistan batholith	462	no data	0.704630	no data	no data	no data	no data
A136	Kohistan batholith	571	no data	0.704510	no data	no data	no data	no data
A137	Kohistan batholith	478	no data	0.704830	no data	no data	no data	no data
A138	Kohistan batholith	442	no data	0.704600	no data	no data	no data	no data
A139	Kohistan batholith	451	no data	0.704680	no data	no data	no data	no data
A140	Kohistan batholith	574	no data	0.704490	no data	no data	no data	no data
A117	Kohistan batholith	238	no data	0.705270	no data	no data	no data	no data
A157	Kohistan batholith	381	no data	0.704820	no data	no data	no data	no data
A158	Kohistan batholith	411	no data	0.704600	no data	no data	no data	no data
A159	Kohistan batholith	397	no data	0.704880	no data	no data	no data	no data
A161	Kohistan batholith	559	no data	0.704640	no data	no data	no data	no data
A162	Kohistan batholith	371	no data	0.704830	no data	no data	no data	no data
A163	Kohistan batholith	385	no data	0.704820	no data	no data	no data	no data
A19	Kohistan batholith	114	no data	0.707100	no data	no data	no data	no data
A20	Kohistan batholith	124	no data	0.706790	no data	no data	no data	no data
A21	Kohistan batholith	131	no data	0.706860	no data	no data	no data	no data
A22	Kohistan batholith	82	no data	0.708150	no data	no data	no data	no data
A23	Kohistan batholith	90	no data	0.707830	no data	no data	no data	no data
A25	Kohistan batholith	101	no data	0.707460	no data	no data	no data	no data
A26	Kohistan batholith	104	no data	0.707120	no data	no data	no data	no data
<u>Debon et al., 1987</u>								
KK 198	Kohistan Batholith	289	no data	0.704900	4	no data	no data	no data
KK 199	Kohistan Batholith	61	no data	0.710400	2	no data	no data	no data
KK 194	Kohistan Batholith	54	no data	0.710300	5	no data	no data	no data
KK 195	Kohistan Batholith	35	no data	0.715300	3	no data	no data	no data
KK 215	Kohistan Batholith	129	no data	0.704860	4	no data	no data	no data
KK 215	Kohistan Batholith	8	no data	0.728800	9	no data	no data	no data
KK 212	Kohistan Batholith	144	no data	0.705400	3	no data	no data	no data
KK 212	Kohistan Batholith	8	no data	0.738300	5	no data	no data	no data
<u>George et al., 1993</u>								
G10-A	Kohistan batholith	no data	no data	0.705350	2	no data	no data	no data
G10-D	Kohistan batholith	no data	no data	0.705210	2	0.512670	1	0.62
G10-E	Kohistan batholith	no data	no data	0.705010	2	no data	no data	no data
G10-F	Kohistan batholith	no data	no data	0.705120	6	no data	no data	no data
G10-G	Kohistan batholith	no data	no data	0.705110	5	no data	no data	no data
G10-H	Kohistan batholith	no data	no data	0.705010	2	0.512660	1	0.43
S95	Kohistan batholith	no data	no data	0.704880	3	no data	no data	no data
S6G	Kohistan batholith	no data	no data	0.704800	2	no data	no data	no data
S81	Kohistan batholith	no data	no data	0.707860	2	no data	no data	no data
D17	Kohistan batholith	no data	no data	0.708120	2	no data	no data	no data
S67	Kohistan batholith	no data	no data	0.708460	2	no data	no data	no data
S75	Kohistan batholith	no data	no data	0.709690	2	no data	no data	no data
S76	Kohistan batholith	no data	no data	0.708200	2	no data	no data	no data
G2	Kohistan batholith	no data	no data	0.707520	2	0.512760	3	2.38
G3	Kohistan batholith	no data	no data	0.728320	2	0.512630	4	-0.16
G14	Kohistan batholith	no data	no data	0.705810	2	no data	no data	no data
G23	Kohistan batholith	no data	no data	0.710760	2	no data	no data	no data
S97	Kohistan batholith	no data	no data	0.735460	2	no data	no data	no data
G43	Kohistan batholith	no data	no data	0.760320	2	0.511960	2	-13.23
G35	Kohistan batholith	no data	no data	0.725050	2	no data	no data	no data
G36	Kohistan batholith	no data	no data	0.708380	9	no data	no data	no data
G48	Kohistan batholith	no data	no data	0.756400	5	no data	no data	no data
S66	Kohistan batholith	no data	no data	0.758420	5	no data	no data	no data
D5	Kohistan batholith	no data	no data	0.723500	2	no data	no data	no data
G30	Kohistan batholith	no data	no data	0.740510	2	0.511900	2	-14.40
<u>Khan et al., 1997</u>								
IK 1007	Chilas Complex	427	0.81	0.704050	no data	0.512800	no data	3.16
IK 1009	Chilas Complex	64	0.73	0.704040	no data	0.512840	no data	3.94
IK 1012	Chilas Complex	403	13.6	0.704230	no data	0.512740	no data	1.99
IK 1017	Chilas Complex	446	13	0.704120	no data	0.512740	no data	1.99
PL 28	Chalt Volcanics	71	2.13	0.705160	no data	0.513010	no data	7.26
PL 29	Chalt Volcanics	211	6.9	0.705440	no data	0.513010	no data	7.26
N 115	Chalt Volcanics	67	5.3	0.706760	no data	0.512990	no data	6.87
N 116	Chalt Volcanics	114	7.7	0.705200	no data	0.512950	no data	6.09
N 138	Chalt Volcanics	51	1.36	0.705250	no data	0.512970	no data	6.48
N 139	Chalt Volcanics	845	3.18	0.704930	no data	0.512970	no data	6.48

N 161	Chalt Volcanics	48	1.25	0.705610	no data	0.513000	no data	7.06
IK 580	Chalt Volcanics	91	1.72	0.705490	no data	0.512990	no data	6.87
A 83	Kamila Amphibolites	150	15.4	0.703880	no data	0.513020	no data	7.45
A 86	Kamila Amphibolites	137	16.6	0.703840	no data	0.512990	no data	6.87
A 93	Kamila Amphibolites	169	12.7	0.703660	no data	0.513010	no data	7.26
A 119	Kamila Amphibolites	233	8.4	0.704170	no data	0.512840	no data	3.94
A 121	Kamila Amphibolites	268	5.8	0.704670	no data	0.512830	no data	3.75
A 125	Kamila Amphibolites	257	14	0.704670	no data	0.512740	no data	1.99
<u>Gazis et al., 1998</u>								
PK-90-KK-16	Kohistan Batholite	37.9		0.704440	3	no data	no data	no data
<u>Bignold and Treloar, 2003</u>								
SW3	Kamila Amphibolites	366.67	13.13	0.704460	no data	0.512740	no data	1.99
N433	Jaglot Group	321	14.2	0.703230	no data	0.512940	no data	5.89
TL5	Jaglot Group	311	10.6	0.704070	no data	0.512860	no data	4.33
N434	Jaglot Group	86.7	6.82	0.707910	no data	0.512970	no data	6.48
TL6	Jaglot Group	66.4	3.98	0.707880	no data	0.512300	no data	-6.59
N146	Chalt Volcanics	18.1	1.72	0.705250	no data	0.512960	no data	6.28
N157	Chalt Volcanics	116.6	1.49	0.705140	no data	0.513010	no data	7.26
N158	Chalt Volcanics	50.5	1.38	0.705540	no data	0.513030	no data	7.65
N163	Chalt Volcanics	202.67	1.71	0.705590	no data	0.513030	no data	7.65
<u>Khan et al., 2004</u>								
44D	Kohistan batholith	345	10	0.704430	no data	0.512810	no data	3.36
44E	Kohistan batholith	308	18.6	0.704090	no data	0.512840	no data	3.94
71	Kohistan batholith	193	19.4	0.704060	no data	0.512870	no data	4.53
44B	Kohistan batholith	389	30.6	0.704170	no data	0.512850	no data	4.14
LP-4	Kohistan batholith	419	30.7	0.704120	no data	0.512860	no data	4.33
44C	Kohistan batholith	455	15	0.704040	no data	0.512920	no data	5.50
58	Kohistan batholith	315	13.2	0.704090	no data	0.512850	no data	4.14
73	Kohistan batholith	141	14.8	0.704010	no data	0.512890	no data	4.92
68	Kohistan batholith	364	16.5	0.705000	no data	0.512850	no data	4.14
987-7	Kohistan batholith	no data	no data	0.704440	no data	0.512852	no data	4.17
<u>Jagoutz et al., 2006</u>								
C-7	Chilas Complex	no data	2.018	no data	no data	0.512882	no data	4.76
C-48	Chilas Complex	no data	1.675	no data	no data	0.512900	no data	5.11
C-174	Chilas Complex	no data	0.08	no data	no data	0.512953	no data	6.14
C-218	Chilas Complex	no data	0.86	no data	no data	0.512929	no data	5.68
CO3-43	Chilas Complex	no data	1.061	no data	no data	0.512902	no data	5.15
C03-44	Chilas Complex	no data	1.581	no data	no data	0.512906	no data	5.23
C03-45	Chilas Complex	no data	0.476	no data	no data	0.512895	no data	5.01
<u>Khan et al., 2009</u>								
1	Kohistan batholith	771.61	19.46	0.704135	no data	0.512830	no data	3.75
2	Kohistan batholith	184.25	14.09	0.704785	no data	0.512831	no data	3.76
9	Kohistan batholith	1671.79	81.38	0.704147	no data	0.512840	no data	3.94
16	Kohistan batholith	no data	no data	0.704478	no data	0.512901	no data	5.13
17	Kohistan batholith	no data	no data	0.704459	no data	0.512884	no data	4.80
18	Kohistan batholith	282.31	16.78	0.704881	no data	0.512892	no data	4.95
33	Kohistan batholith	306.88	15.12	0.704693	no data	0.512826	no data	3.67
34	Kohistan batholith	no data	no data	0.704347	no data	0.512827	no data	3.69
41	Kohistan batholith	2542.7	89.39	0.703806	no data	0.512883	no data	4.78
47	Kohistan batholith	no data	no data	0.703942	no data	no data	no data	no data
9	Kohistan batholith	no data	no data	0.704331	no data	0.512908	no data	5.27
61	Kohistan batholith	no data	no data	0.704342	no data	0.512791	no data	2.98
69	Kohistan batholith	no data	no data	0.704233	no data	0.512895	no data	5.01
70	Kohistan batholith	no data	no data	0.704355	no data	0.512942	no data	5.93
72	Kohistan batholith	no data	no data	0.704192	no data	0.512938	no data	5.85
76	Kohistan batholith	1716.62	24.89	0.704085	no data	0.512959	no data	6.26
103	Kohistan batholith	no data	no data	0.704278	no data	0.512911	no data	5.33
8	Kohistan batholith	3596.3	149.77	0.704615	no data	0.512710	no data	1.40
20	Kohistan batholith	676.36	75.29	0.705172	no data	0.512821	no data	3.57
38	Kohistan batholith	216.62	11.68	0.705156	no data	0.512819	no data	3.53
52	Kohistan batholith	477.39	4.36	0.704538	no data	0.512821	no data	3.57
63	Kohistan batholith	no data	no data	0.704070	no data	0.512864	no data	4.41
67	Kohistan batholith	1439.74	83.27	0.704865	no data	0.512781	no data	2.79
96	Kohistan batholith	no data	no data	0.704921	no data	0.512806	no data	3.28
99	Kohistan batholith	no data	no data	0.705109	no data	0.512654	no data	0.31
104	Kohistan batholith	368.02	11.17	0.704236	no data	0.512910	no data	5.31
106	Kohistan batholith	no data	no data	0.704105	no data	0.512929	no data	5.68
108	Kohistan batholith	399.92	11.42	0.704115	no data	0.512932	no data	5.74
111	Kohistan batholith	253.99	10.85	0.704811	no data	0.512841	no data	3.96

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Sample name	Formation	Sr (ppm)	Nd (ppm)	$^{87}\text{Sr}/^{86}\text{Sr}$	SE	$^{143}\text{Nd}/^{144}\text{Nd}$	SE	$\epsilon_{\text{Nd}}$
<u>Allègre and Othman, 1980</u>								
HB68	Ladakh Batholith	no data	no data	0.705000	1	0.512560	3	-1.52
HB74	Ladakh Batholith	no data	no data	0.704800	1	0.512730	3	1.79
<u>Honegger et al., 1982</u>								
HT341	Dras Volcanics	270	no data	0.703650	no data	no data	no data	no data
HT343	Dras Volcanics	247	no data	0.703360	no data	no data	no data	no data
HT342	Dras Volcanics	359	no data	0.703530	no data	no data	no data	no data
HT340	Dras Volcanics	162	no data	0.703490	no data	no data	no data	no data
HT345	Dras Volcanics	445	no data	0.703900	no data	no data	no data	no data
HT346	Dras Volcanics	234	no data	0.705220	no data	no data	no data	no data
HT347	Dras Volcanics	293	no data	0.704920	no data	no data	no data	no data
HT348	Dras Volcanics	539	no data	0.704230	no data	no data	no data	no data
HT349	Dras Volcanics	443	no data	0.704040	no data	no data	no data	no data
HT350	Dras Volcanics	351	no data	0.703980	no data	no data	no data	no data
HT344	Dras Volcanics	167	no data	0.704260	no data	no data	no data	no data
HT407	Dras Volcanics	271	no data	0.704900	no data	no data	no data	no data
HT408	Dras Volcanics	156	no data	0.705670	no data	no data	no data	no data
HT121	Ladakh Batholith	522.5	no data	0.704540	no data	no data	no data	no data
HT123	Ladakh Batholith	686.8	no data	0.703650	no data	no data	no data	no data
HT124	Ladakh Batholith	541.7	no data	0.704150	no data	no data	no data	no data
HT125	Ladakh Batholith	447	no data	0.705260	no data	no data	no data	no data
HT129	Ladakh Batholith	612	no data	0.704450	no data	no data	no data	no data
HT132	Ladakh Batholith	364.8	no data	0.704560	no data	no data	no data	no data
HT133	Ladakh Batholith	328	no data	0.705320	no data	no data	no data	no data
HT134	Ladakh Batholith	190	no data	0.706660	no data	no data	no data	no data
HT135	Ladakh Batholith	349.4	no data	0.704790	no data	no data	no data	no data
HT144	Ladakh Batholith	275.7	no data	0.705750	no data	no data	no data	no data
HT145	Ladakh Batholith	84	no data	0.709230	no data	no data	no data	no data
HT146	Ladakh Batholith	140.6	no data	0.707770	no data	no data	no data	no data
P79	Ladakh Batholith	448	no data	0.707060	no data	no data	no data	no data
<u>Rolland et al., 2002</u>								
L140	Western Ladakh	no data	no data	0.704352	7	0.512838	12	3.90
L156	Western Ladakh	262	4.99	0.705492	17	0.512976	7	6.59
L174	Western Ladakh	128	7.61	0.705059	9	0.513059	5	8.21
L157	Western Ladakh	115	3.21	0.704378	9	0.512989	2	6.85
L116	Western Ladakh	481	26.24	0.704123	12	0.512901	7	5.13
L118	Western Ladakh	954	18.85	0.704312	14	0.512918	9	5.46
L117	Western Ladakh	202	4.82	0.704878	10	0.512985	5	6.77
L144	Western Ladakh	453	18.57	0.704686	11	0.512829	7	3.73
L59	Western Ladakh	238	4.61	0.705454	10	0.512895	14	5.01
L65	Western Ladakh	1132	41.17	0.704859	11	0.512653	4.5	0.29
L55	Western Ladakh	451	17.4	0.709355	9	0.512514	6	-2.42
L55	Western Ladakh	451	17.4	no data	no data	0.512500	5	-2.69
L175	Western Ladakh	219	20.55	no data	no data	0.512726	3	1.72
L179	Western Ladakh	163	19.06	no data	no data	0.512790	5	2.97
L573	Western Ladakh	249	9.7	no data	no data	0.512828	7	3.71
L575	Western Ladakh	200	8.45	no data	no data	0.512827	7	3.69
L318	Eastern Ladakh	417	11.47	no data	no data	0.512759	4	2.37
L317	Eastern Ladakh	265	37.49	no data	no data	0.512729	5	1.77
L424	Eastern Ladakh	430	39.39	no data	no data	0.512877	7	4.67
L352	Eastern Ladakh	no data	no data	0.704460	10	0.512758	8	2.33
L352	Eastern Ladakh	no data	no data	no data	no data	no data	no data	no data
L356	Eastern Ladakh	no data	no data	no data	no data	0.512745	7	2.09
L423	Eastern Ladakh	no data	no data	no data	no data	0.512687	10	0.95
L344	Eastern Ladakh	182	4.6	no data	no data	0.512637	6	-0.02
LK96d	Eastern Ladakh	no data	no data	no data	no data	0.512794	5	3.04
LK16	Eastern Ladakh	no data	no data	no data	no data	0.512676	6	0.74
L397	Eastern Ladakh	no data	no data	no data	no data	0.513130	11	9.60
L399	Eastern Ladakh	66	18.81	no data	no data	0.512206	10	-8.43
<u>Reichardt et al., 2010</u>								
LEH40	Ladakh Batholith	no data	14.21	0.704850	no data	0.512670	no data	0.62
LEH55	Ladakh Batholith	95	5.86	0.707820	no data	0.512620	no data	-0.35
LEH29	Ladakh Batholith	219	9.81	0.704650	no data	0.512740	no data	1.99
LEH38a	Ladakh Batholith	119	11.51	0.705550	no data	0.512700	no data	1.21
LEH38b	Ladakh Batholith	188	22.64	0.705450	no data	0.512720	no data	1.60
LEH52	Ladakh Batholith	350	36.85	0.704850	no data	0.512700	no data	1.21

Table DR10 Compiled Nd-Sr isotopic compositions from sediment sources in the Indus River drainage basin (GHS)

Sample name	Formation	Sr (ppm)	Nd (ppm)	$^{87}\text{Sr}/^{86}\text{Sr}$	SE	$^{143}\text{Nd}/^{144}\text{Nd}$	SE	$\epsilon_{\text{Nd}}$
<u>Allègre and Othman, 1980</u>								
Palung A404	Nepal	no data	no data	0.821310	50	0.511970	4	-13.03
Makalu 132	Nepal	no data	no data	no data	no data	0.512110	10	-10.30
Nepal 22 D. Mani	Nepal	no data	no data	0.743320	40	0.511830	7	-15.76
<u>Vidal et al., 1982</u>								
D45	Nepal-Manaslu	58.3	no data	0.754780	no data	no data	no data	no data
D22	Nepal-Manaslu	131	no data	0.743100	no data	no data	no data	no data
U277	Nepal-Manaslu	46.9	no data	0.763010	no data	no data	no data	no data
U303	Nepal-Manaslu	45	no data	0.761760	no data	no data	no data	no data
U464	Nepal-Manaslu	54	no data	0.763510	no data	no data	no data	no data
U476	Nepal-Manaslu	44.2	no data	0.764770	no data	no data	no data	no data
X12	Nepal-Manaslu	52	no data	0.763850	no data	no data	no data	no data
N67 I	Nepal-Manaslu	7.39	no data	0.787390	no data	no data	no data	no data
N67 II	Nepal-Manaslu	7.65	no data	0.784690	no data	no data	no data	no data
B6	Nepal-Manaslu	104	no data	0.762550	no data	no data	no data	no data
B7	Nepal-Manaslu	91.7	no data	0.754740	no data	no data	no data	no data
T223	Nepal-Manaslu	15.6	no data	0.764350	no data	no data	no data	no data
<u>Ferrara et al., 1983</u>								
GA 1	Nepal-Everest	82	no data	0.769400	4	no data	no data	no data
GA 2	Nepal-Everest	112	no data	0.737500	3	no data	no data	no data
GA 3	Nepal-Everest	105	no data	0.737600	3	no data	no data	no data
GA 4	Nepal-Everest	18.5	no data	0.765200	4	no data	no data	no data
PG 7	Nepal-Everest	16.4	no data	0.782200	20	no data	no data	no data
B 27	Nepal-Everest	33.7	no data	0.752900	10	no data	no data	no data
B 28	Nepal-Everest	92	no data	0.753400	7	no data	no data	no data
B 29	Nepal-Everest	50	no data	0.755300	5	no data	no data	no data
B 50	Nepal-Everest	91	no data	0.750500	9	no data	no data	no data
LH 87	Nepal-Everest	112	no data	0.737100	4	no data	no data	no data
LH 120	Nepal-Everest	275	no data	0.746800	4	no data	no data	no data
G 3	Nepal-Everest	74.2	no data	0.796800	7	no data	no data	no data
PG 8	Nepal-Everest	87.1	no data	0.759200	5	no data	no data	no data
L 79	Nepal-Everest	38.4	no data	0.880900	5	no data	no data	no data
L 82	Nepal-Everest	60	no data	0.862500	3	no data	no data	no data
L 92	Nepal-Everest	147	no data	0.747800	3	no data	no data	no data
L 81	Nepal-Everest	140	no data	0.788800	2	no data	no data	no data
L 94	Nepal-Everest	221	no data	0.743400	2	no data	no data	no data
L 78	Nepal-Everest	220	no data	0.742300	2	no data	no data	no data
<u>Deniel et al., 1987</u>								
DK43	Nepal-Manaslu	8	no data	0.778220	12	no data	no data	no data
DK45	Nepal-Manaslu	4.5	no data	0.832480	26	0.511827	36	-15.82
DK46	Nepal-Manaslu	6.5	no data	0.787040	15	no data	no data	no data
DK47	Nepal-Manaslu	12	no data	0.768640	19	no data	no data	no data
DK48	Nepal-Manaslu	10	no data	0.777130	12	no data	no data	no data
DK49	Nepal-Manaslu	6.5	no data	0.795030	27	no data	no data	no data
DK50	Nepal-Manaslu	5	no data	0.802010	11	no data	no data	no data
DK51	Nepal-Manaslu	66	no data	0.751470	13	no data	no data	no data
DK52	Nepal-Manaslu	82.5	4.3	0.749670	9	0.511817	24	-16.02
DK53	Nepal-Manaslu	146.5	no data	0.744160	12	no data	no data	no data
DK54	Nepal-Manaslu	216	13.7	0.743280	19	0.511880	30	-14.79
DK55a	Nepal-Manaslu	204	11.8	0.742920	8	0.511818	21	-16.00
DK55b	Nepal-Manaslu	72	no data	0.744280	12	no data	no data	no data
DK56	Nepal-Manaslu	104	no data	0.744760	12	no data	no data	no data
DK57	Nepal-Manaslu	4.5	no data	0.801250	9	no data	no data	no data
DK58	Nepal-Manaslu	4	no data	0.771260	18	0.511897	12	-14.45
DK59	Nepal-Manaslu	65	4.3	0.745540	14	0.511819	35	-15.98
DK65	Nepal-Manaslu	49.5	no data	0.760530	no data	no data	no data	no data
DK67	Nepal-Manaslu	83	no data	0.743430	no data	no data	no data	no data
DK72	Nepal-Manaslu	100	no data	0.745190	no data	no data	no data	no data
DK98	Nepal-Manaslu	64	no data	0.754150	no data	no data	no data	no data
DK102	Nepal-Manaslu	61	no data	0.755890	no data	no data	no data	no data
DK111	Nepal-Manaslu	56	no data	0.757940	no data	no data	no data	no data
DK112	Nepal-Manaslu	53	no data	0.750550	no data	no data	no data	no data
DK116	Nepal-Manaslu	54	no data	0.754070	no data	no data	no data	no data
DK136	Nepal-Manaslu	54	no data	0.752570	no data	no data	no data	no data
DK138	Nepal-Manaslu	55.5	no data	0.751800	no data	no data	no data	no data
DK139	Nepal-Manaslu	65.5	no data	0.746900	no data	no data	no data	no data
DK140	Nepal-Manaslu	58.5	no data	0.748720	no data	no data	no data	no data
DK141	Nepal-Manaslu	65.5	no data	0.751620	no data	no data	no data	no data
DK151	Nepal-Manaslu	70.5	no data	0.753470	no data	no data	no data	no data
DK152	Nepal-Manaslu	25.5	no data	0.767410	no data	no data	no data	no data
DK157	Nepal-Manaslu	71.5	no data	0.755250	no data	no data	no data	no data
DK160	Nepal-Manaslu	66	no data	0.755710	no data	no data	no data	no data
DK161	Nepal-Manaslu	72.5	no data	0.755630	no data	no data	no data	no data
DK162	Nepal-Manaslu	43.5	no data	0.761730	no data	no data	no data	no data
DK167	Nepal-Manaslu	63	no data	0.764980	no data	no data	no data	no data
DK180	Nepal-Manaslu	107	no data	0.743900	no data	no data	no data	no data
DK185	Nepal-Manaslu	111	no data	0.749380	no data	no data	no data	no data

DK186	Nepal-Manaslu	103.5	no data	0.749500	no data	no data	no data	no data
DK188	Nepal-Manaslu	87.5	no data	0.748850	no data	no data	no data	no data
DK191	Nepal-Manaslu	69	no data	0.752690	no data	no data	no data	no data
DK195	Nepal-Manaslu	135	no data	0.743590	no data	no data	no data	no data
DK211	Nepal-Manaslu	78	no data	0.745330	no data	no data	no data	no data
DK213	Nepal-Manaslu	63.5	no data	0.763370	no data	no data	no data	no data
DK214	Nepal-Manaslu	54	no data	0.761260	no data	no data	no data	no data
DK217	Nepal-Manaslu	48.5	no data	0.748510	no data	no data	no data	no data
DK220	Nepal-Manaslu	60	no data	0.746330	no data	no data	no data	no data
DK237	Nepal-Manaslu	46.5	no data	0.767920	no data	0.511981	21	-12.82
DK240	Nepal-Manaslu	68	no data	0.747350	no data	no data	no data	no data
DK242	Nepal-Manaslu	99.5	no data	0.746080	no data	no data	no data	no data
DK247	Nepal-Manaslu	56	no data	0.766250	no data	no data	no data	no data
DK268	Nepal-Manaslu	82.5	no data	0.752310	no data	no data	no data	no data
D22	Nepal-Manaslu	131	no data	0.742750	no data	no data	no data	no data
D14	Nepal-Manaslu	88	no data	0.745620	no data	no data	no data	no data
D37	Nepal-Manaslu	81	no data	0.744440	no data	0.511819	15	-15.98
D45	Nepal-Manaslu	58.5	no data	0.754780	no data	no data	no data	no data
DK200	Nepal-Manaslu	108.5	11.6	0.747110	no data	0.511890	40	-14.59
DK202	Nepal-Manaslu	106	no data	0.748650	no data	no data	no data	no data
DK203	Nepal-Manaslu	105	no data	0.749000	no data	no data	no data	no data
DK204	Nepal-Manaslu	105	no data	0.748730	no data	no data	no data	no data
DK205	Nepal-Manaslu	107.5	no data	0.748870	no data	no data	no data	no data
DK206	Nepal-Manaslu	106.5	no data	0.748680	no data	no data	no data	no data
DK207	Nepal-Manaslu	104.5	13.4	0.748950	no data	0.511852	40	-15.33
DK208	Nepal-Manaslu	108.5	15.4	0.748190	no data	0.511909	40	-14.22
DK209	Nepal-Manaslu	102	13	0.750610	no data	0.511972	37	-12.99
DK210	Nepal-Manaslu	109	no data	0.747810	no data	no data	no data	no data
DK244	Nepal-Manaslu	111.8	no data	0.748570	no data	no data	no data	no data
DK168	Nepal-Manaslu	39.5	7	0.771620	no data	no data	no data	no data
DK169	Nepal-Manaslu	40	no data	0.770810	no data	no data	no data	no data
DK170	Nepal-Manaslu	42.5	no data	0.768170	no data	no data	no data	no data
DK171	Nepal-Manaslu	71	no data	0.764790	no data	no data	no data	no data
DK172	Nepal-Manaslu	63.5	6.7	0.765100	no data	0.511948	17	-13.46
DK173	Nepal-Manaslu	52	no data	0.765920	no data	no data	no data	no data
DK174a	Nepal-Manaslu	63	no data	0.759570	no data	0.511889	17	-14.61
DK175	Nepal-Manaslu	54.5	10.7	0.765220	no data	0.511932	21	-13.77
NL219	Nepal-Manaslu	104	no data	0.748410	no data	0.511875	10	-14.88
NL222	Nepal-Manaslu	39.5	no data	0.769610	no data	no data	no data	no data
NL223	Nepal-Manaslu	39	no data	0.770310	no data	no data	no data	no data
NL224	Nepal-Manaslu	54.5	6.2	0.769490	no data	0.511922	10	-13.97
NL225	Nepal-Manaslu	26.5	2.4	0.767760	no data	0.511936	16	-13.69
NL226	Nepal-Manaslu	37	no data	0.770700	no data	no data	no data	no data
NL227	Nepal-Manaslu	22.5	2.2	0.781630	no data	0.511909	15	-14.22
NL206	Nepal-Manaslu	77	4.6	0.742040	no data	0.511829	11	-15.78
NL207	Nepal-Manaslu	71.5	4.9	0.751360	no data	0.511887	17	-14.65
NL208	Nepal-Manaslu	36	2.3	0.759170	no data	0.511907	12	-14.26
NL234	Nepal-Manaslu	no data	6.5	no data	no data	0.511873	18	-14.92
U862	Nepal-Manaslu	no data	no data	no data	no data	0.511838	9	-15.61
NL43	Nepal-Manaslu	157.5	39.6	0.747450	no data	0.511810	14	-16.15
NL58	Nepal-Manaslu	132.5	35.8	0.745130	no data	0.511918	17	-14.04
NL59	Nepal-Manaslu	267	39.9	0.733110	no data	0.511860	15	-15.18
NL74	Nepal-Manaslu	220	37.7	0.733550	no data	0.511844	8	-15.49
NL75	Nepal-Manaslu	48.5	22.9	0.754950	no data	0.511777	18	-16.80
NL76	Nepal-Manaslu	249.5	30.2	0.733220	no data	0.511850	21	-15.37
NL81	Nepal-Manaslu	156.5	no data	0.745960	no data	no data	no data	no data
NL85	Nepal-Manaslu	163	24.2	0.745320	no data	0.511706	19	-18.18
NL86	Nepal-Manaslu	181.5	no data	0.737990	no data	no data	no data	no data
NL93	Nepal-Manaslu	269.5	20.1	0.734350	no data	0.511713	21	-18.04
NL100	Nepal-Manaslu	210.5	no data	0.731130	no data	no data	no data	no data
NL172	Nepal-Manaslu	225.5	no data	0.731140	no data	no data	no data	no data
NL499	Nepal-Manaslu	104	no data	0.728990	no data	no data	no data	no data
NL512	Nepal-Manaslu	90.5	no data	0.744250	no data	no data	no data	no data
$\beta$ 106	Nepal-Manaslu	no data	25.3	no data	no data	0.511903	18	-14.34
$\beta$ 104	Nepal-Manaslu	no data	25.5	no data	no data	0.511905	14	-14.30
U48	Nepal-Manaslu	no data	no data	no data	no data	0.511817	24	-16.02
France-Lanord et al., 1988								
NL428	Central Nepal	231	no data	0.734586	no data	no data	no data	no data
NL623	Central Nepal	772	no data	0.714109	no data	no data	no data	no data
D77	Central Nepal	104	no data	0.789590	no data	no data	no data	no data
D94	Central Nepal	62	no data	0.839590	no data	no data	no data	no data
M84	Central Nepal	43	no data	0.881410	no data	no data	no data	no data
NA116	Central Nepal	66	no data	0.803570	no data	no data	no data	no data
NA155	Central Nepal	78	no data	0.776860	no data	no data	no data	no data
NA156	Central Nepal	62	no data	0.812810	no data	no data	no data	no data
NA216	Central Nepal	21	no data	1.063150	no data	no data	no data	no data
NA218	Central Nepal	67	no data	0.790200	no data	no data	no data	no data
NL478	Central Nepal	44	no data	0.883660	no data	no data	no data	no data
T200	Central Nepal	161	no data	0.755520	no data	no data	no data	no data
U203	Central Nepal	113	no data	0.768020	no data	no data	no data	no data
U284	Central Nepal	61	no data	0.800690	no data	no data	no data	no data
U308	Central Nepal	56	no data	0.839730	no data	no data	no data	no data

U725	Central Nepal	74	no data	0.784870	no data	no data	no data	no data
U925	Central Nepal	83	no data	0.796270	no data	no data	no data	no data
<u>Stern et al., 1989</u>								
LG1	Garhwal	3.34	no data	0.784160	no data	no data	no data	no data
LG2	Garhwal	30.6	3.75	0.784960	no data	0.511930	no data	-13.81
LG3	Garhwal	57.4	no data	0.763540	no data	no data	no data	no data
LG4	Garhwal	61.1	6.13	0.762990	no data	0.511890	no data	-14.59
LG5	Garhwal	53	no data	0.766940	no data	no data	no data	no data
LDG1	Garhwal	47.9	no data	0.778840	no data	no data	no data	no data
BG3	Garhwal	29.2	no data	0.799120	no data	no data	no data	no data
BG4	Garhwal	9.61	no data	0.830970	no data	no data	no data	no data
BG5	Garhwal	34.9	no data	0.792730	no data	no data	no data	no data
BG10	Garhwal	92.5	no data	0.763020	no data	no data	no data	no data
<u>Scaillet et al., 1990</u>								
GB110	Garhwal	36.8	no data	0.789756	15	no data	no data	no data
GB111	Garhwal	34.9	no data	0.795441	16	no data	no data	no data
GB117	Garhwal	48	no data	0.790541	13	no data	no data	no data
GB4	Garhwal	40.8	no data	0.780781	12	no data	no data	no data
GL11	Garhwal	27.3	no data	0.798640	30	no data	no data	no data
GL88	Garhwal	51.9	no data	0.778308	13	no data	no data	no data
GL13	Garhwal	70.7	no data	0.768996	10	no data	no data	no data
GP92	Garhwal	51.5	no data	0.779382	10	no data	no data	no data
<u>Inger et al., 1993</u>								
SKG8	Nepal-Langtang	115.6	no data	0.753940	no data	no data	no data	no data
SKG9	Nepal-Langtang	331.2	no data	0.762010	no data	no data	no data	no data
SKG12	Nepal-Langtang	120.9	9.677	0.753220	no data	0.511900	no data	-14.40
SKG13	Nepal-Langtang	41.9	no data	0.749710	no data	no data	no data	no data
SKG15	Nepal-Langtang	159	16.09	0.737240	no data	0.512050	no data	-11.47
SKG3	Nepal-Langtang	67.4	no data	0.745150	no data	no data	no data	no data
SKG4	Nepal-Langtang	83	no data	0.745790	no data	no data	no data	no data
KG211	Nepal-Langtang	58	no data	0.753420	no data	no data	no data	no data
KG208	Nepal-Langtang	127	15.19	0.757810	no data	0.511740	no data	-17.52
KG210	Nepal-Langtang	66	no data	0.749690	no data	no data	no data	no data
KG214	Nepal-Langtang	144	16.92	0.757110	no data	0.511830	no data	-15.76
KG215	Nepal-Langtang	64	no data	0.751060	no data	no data	no data	no data
SLM1	Nepal-Langtang	54.4	no data	0.825450	no data	no data	no data	no data
LM201	Nepal-Langtang	31	no data	0.783500	no data	no data	no data	no data
SKM2	Nepal-Langtang	34.9	no data	0.803550	no data	no data	no data	no data
SKM3	Nepal-Langtang	35	no data	0.814290	no data	no data	no data	no data
LM207	Nepal-Langtang	24	28.8	0.830520	no data	0.511870	no data	-14.98
LM209	Nepal-Langtang	46	no data	0.831560	no data	no data	no data	no data
LM211	Nepal-Langtang	45	no data	0.876980	no data	no data	no data	no data
SM201	Nepal-Langtang	120	no data	0.757680	no data	no data	no data	no data
SM203	Nepal-Langtang	180	no data	0.750430	no data	no data	no data	no data
SM202	Nepal-Langtang	132	29.29	0.752940	no data	0.512520	no data	-2.30
SM206	Nepal-Langtang	91	no data	0.752630	no data	0.511920	no data	-14.01
SSM6	Nepal-Langtang	111.3	38.07	0.762310	no data	0.511950	no data	-13.42
RM201	Nepal-Langtang	150	no data	0.760750	no data	no data	no data	no data
SNM2	Nepal-Langtang	131.4	no data	0.766090	no data	no data	no data	no data
NM203	Nepal-Langtang	79	no data	0.772030	no data	no data	no data	no data
<u>Parrish et al., 1996</u>								
LT-21	Nepal-Langtang	no data	34.99	no data	no data	0.511826	15	-15.84
LT-22	Nepal-Langtang	no data	45.54	no data	no data	0.511878	14	-14.83
LT-24	Nepal-Langtang	no data	43.54	no data	no data	0.511816	12	-16.03
LT-29	Nepal-Langtang	no data	30.53	no data	no data	0.511691	8	-18.47
<u>Whittington et al., 1999</u>								
93/3b	Zanskar	no data	no data	no data	no data	0.511837	no data	-15.63
34182	Zanskar	no data	no data	no data	no data	0.511868	no data	-15.02
93/14b	Zanskar	no data	no data	no data	no data	0.511906	no data	-14.28
93/20	Zanskar	no data	no data	no data	no data	0.512293	no data	-6.73
93/21	Zanskar	no data	no data	no data	no data	0.511856	no data	-15.25
93/22	Zanskar	no data	no data	no data	no data	0.511856	no data	-15.25
93/24	Zanskar	no data	no data	no data	no data	0.512256	no data	-7.45
93/29	Zanskar	no data	no data	no data	no data	0.512322	no data	-6.16
<u>Ahmad et al., 2000</u>								
C4B	Garwal	no data	no data	0.748800	no data	0.511860	5	-15.18
C7	Garwal	no data	no data	0.777970	no data	0.511754	8	-17.24
C200	Garwal	no data	no data	0.757820	no data	0.511675	8	-18.79
C230	Garwal	no data	no data	0.784400	no data	0.511924	9	-13.93
C235	Garwal	no data	no data	0.790230	no data	0.511702	12	-18.26
C34/97	Garwal	no data	no data	0.741430	no data	0.511700	8	-18.30
KR116	Garwal	no data	no data	0.751490	no data	0.511892	10	-14.55
KR118	Garwal	no data	no data	0.745130	no data	0.511857	11	-15.23
KR120	Garwal	no data	no data	0.906210	no data	0.511884	12	-14.71
KR143	Garwal	no data	no data	0.761720	no data	0.511670	13	-18.88
<u>Robinson et al., 2001</u>								
AG-106	paragneiss	no data	35.16	no data	no data	0.511619	10	-19.88
AG-109	paragneiss	no data	38.69	no data	no data	0.511714	14	-18.02
9TBkal	orthogneiss	no data	27.92	no data	no data	0.512137	30	-9.77
12TBgh	paragneiss	no data	37.85	no data	no data	0.511814	13	-16.07
13TBru	paragneiss	no data	41.77	no data	no data	0.511946	14	-13.50
AG-105	paragneiss	no data	8.85	no data	no data	0.511836	14	-15.64



DDG-98	granite	no data	26.6	no data	no data	0.512034	15	-11.78
DD-40	schist	no data	18.74	no data	no data	0.512248	7	-7.61
<u>Miller et al., 2001</u>								
HF89/90	Mandi	254	no data	0.713500	20	no data	no data	no data
HF06/92	Chandra	54	no data	0.841260	10	no data	no data	no data
HF07/92	Chandra	77	no data	0.798550	6	no data	no data	no data
HF08/92	Chandra	46	no data	0.888740	18	no data	no data	no data
HF09/92	Chandra	67	no data	0.808500	5	no data	no data	no data
HF10/92	Chandra	13	no data	1.384290	11	no data	no data	no data
HF11/92	Chandra	29	no data	1.033330	5	no data	no data	no data
HF13/92	Chandra	56	no data	0.824750	6	no data	no data	no data
HF15/92	Chandra	52	no data	0.938220	8	no data	no data	no data
HF16/92	Chandra	85	no data	0.790880	9	no data	no data	no data
HF17/92	Chandra	68	no data	0.869640	2	no data	no data	no data
HF18/92	Chandra	89	no data	0.776880	5	no data	no data	no data
HF22/92	Chandra	87	no data	0.827610	10	no data	no data	no data
HF142/90	Kaplas	91	no data	0.788410	11	no data	no data	no data
HF143/90	Kaplas	104	no data	0.763070	12	no data	no data	no data
HF145/90	Kaplas	31	no data	0.897910	8	no data	no data	no data
PG9180	Kaplas	94	no data	0.769500	5	no data	no data	no data
PG9136	Kaplas	48	no data	0.869100	8	no data	no data	no data
PG9137	Kaplas	49	no data	0.862900	7	no data	no data	no data
HF68/91	Nyimaling	76	no data	0.795870	12	no data	no data	no data
HF69/91	Nyimaling	43	no data	0.903620	11	no data	no data	no data
HF70/91	Nyimaling	65	no data	0.821620	132	no data	no data	no data
HF01/91	Hanumantibba	154	no data	0.742430	1	no data	no data	no data
WAP28	Chamba	79	no data	0.805950	80	no data	no data	no data
HF29/92	Kinnaur	85	no data	0.764430	1	no data	no data	no data
HF30/92	Kinnaur	123	no data	0.752420	6	no data	no data	no data
HF31/92	Kinnaur	115	no data	0.747590	1	no data	no data	no data
HF32/92	Kinnaur	51	no data	0.821640	12	no data	no data	no data
KAW883	Mandi	14	14.5	1.213000	25	0.511949	7	-13.44
HF67/91	Mandi	21	14.9	1.175800	7	0.511954	9	-13.34
HF63/91	Mandi	114	53.6	0.761560	7	0.511927	11	-13.87
HF64/91	Mandi	152	no data	0.756030	13	no data	no data	no data
HF94/90	Mandi	196	no data	0.724800	11	no data	no data	no data
HF66b/91	Mandi	244	21.7	0.711740	7	0.512327	8	-6.07
HF59/91	Mandi	249	17.4	0.708120	9	0.512569	12	-1.35
HF61/91	Mandi	275	9.9	0.705470	10	0.512531	12	-2.09
HF61/91	Mandi	no data	1.5	no data	no data	0.512380	6	-5.03
HF61/91	Mandi	no data	9	no data	no data	0.512786	6	2.89
HF92/90	Mandi	228	no data	0.712000	13	no data	no data	no data
HF95/90	Mandi	270	no data	0.707500	3	no data	no data	no data
HB06/97	Kinnaur Kailas	42	7.7	0.893940	9	0.511891	13	-14.57
HB18/97	Kinnaur Kailas	106	39.6	0.757030	7	0.512037	3	-11.72
HF05/92	Chandra	64	32.7	0.828490	7	0.511963	6	-13.17
HF73/91	Nyimaling		25.2	no data	no data	0.511981	5	-12.82
HF144/90	Kaplas	74	75.4	0.818450	20	0.511836	6	-15.64
WAP25	Hanumantibba	114	20.3	0.747400	80	0.511920	8	-14.01
T41	Jaspa	31	9.5	1.026450	80	0.512020	11	-12.06
WAP2071	Dhali	64	34.5	0.763990	41	0.511850	4	-15.37
WAP2072	Mashobra	99	34.1	0.744740	14	0.511940	4	-13.62
WAP2075	Khanderghat	52	71.5	0.773120	8	0.511765	10	-17.03
WAP2076	Naldera	113	25.4	0.728090	9	0.511872	6	-14.94
<u>Martin et al., 2005</u>								
502068	Annapurna	no data	35.38	no data	no data	0.511877	6	-14.84
502069	Annapurna	no data	20.23	no data	no data	0.511737	6	-17.58
502070	Annapurna	no data	33.01	no data	no data	0.511843	8	-15.51
502071	Annapurna	no data	36.52	no data	no data	0.511779	6	-16.76
502072	Annapurna	no data	no data	no data	no data	no data		no data
502104	Annapurna	no data	29.63	no data	no data	0.511935	8	-13.71
502105A	Annapurna	no data	34.09	no data	no data	0.511897	5	-14.45
502105B	Annapurna	no data	37.89	no data	no data	0.511783	6	-16.68
502106	Annapurna	no data	28.86	no data	no data	0.511950	6	-13.42
502107	Annapurna	no data		no data	no data	no data		no data
502128	Annapurna	no data	41.3	no data	no data	0.511804	5	-16.27
502129	Annapurna	no data	35.95	no data	no data	0.511868	6	-15.02
502133	Annapurna	no data	29.84	no data	no data	0.511933	6	-13.75
502132	Annapurna	no data	29.91	no data	no data	0.511908	6	-14.24
502152	Annapurna	no data	28.85	no data	no data	0.511903	6	-14.34
502149	Annapurna	no data	36.33	no data	no data	0.511922	7	-13.97
502148	Annapurna	no data	43.6	no data	no data	0.511818	7	-16.00
502147	Annapurna	no data	37.84	no data	no data	0.511741	7	-17.50
402086	Annapurna	no data	30.81	no data	no data	0.511928	7	-13.85
402088	Annapurna	no data	46.04	no data	no data	0.511790	5	-16.54
402090	Annapurna	no data	28.01	no data	no data	0.511671	7	-18.86
402092A	Annapurna	no data	8.5	no data	no data	0.511691	6	-18.47
402092B	Annapurna	no data	26.2	no data	no data	0.511753	7	-17.26
<u>Richards et al., 2005</u>								
W6	Sutlej Valley	135	29.9	0.742983	445	0.511737	11	-17.58
W30.1	Sutlej Valley	76.3	47.6	0.775211	8	0.512224	8	-8.08
W35	Sutlej Valley	120	31.2	0.750056	128	0.511829	5	-15.78



W36	Sutlej Valley	86	32.4	0.742343	8	0.511963	6	-13.17
W41	Sutlej Valley	122	29.7	0.743193	6	0.511977	8	-12.89
W43	Sutlej Valley	51.3	40.5	0.769374	8	0.511791	8	-16.52
W44	Sutlej Valley	121	23.3	0.749676	8	0.511830	6	-15.76
W45	Sutlej Valley	72.7	22.2	0.731099	98	0.511809	9	-16.17
Imayama et al., 2008								
HE 5	eastern Nepal	no data	20.23	no data	no data	0.511967	1.2E-05	-13.09
HE13	eastern Nepal	no data	13.97	no data	no data	0.511708	2.9E-05	-18.14
HE14	eastern Nepal	no data	32.35	no data	no data	0.511872	1.4E-05	-14.94
HE17	eastern Nepal	no data	28.42	no data	no data	0.511741	1.8E-05	-17.50
HE18	eastern Nepal	no data	24.73	no data	no data	0.511798	1.3E-05	-16.39
HE24	eastern Nepal	no data	18.73	no data	no data	0.511714	1.2E-05	-18.02
HE25	eastern Nepal	no data	34	no data	no data	0.512123	1.1E-05	-10.05
HE26	eastern Nepal	no data	11.22	no data	no data	0.511808	1.3E-05	-16.19
HE32	eastern Nepal	no data	57.99	no data	no data	0.511720	1.1E-05	-17.91
HE68	eastern Nepal	no data	28.69	no data	no data	0.511802	8E-06	-16.31
HE71	eastern Nepal	no data	29.17	no data	no data	0.511724	0.00001	-17.83
HE76	eastern Nepal	no data	45.49	no data	no data	0.511831	1.1E-05	-15.74
HE77	eastern Nepal	no data	30.26	no data	no data	0.511713	0.00002	-18.04
HC46	Central Nepal	no data	33.33	no data	no data	0.511928	1.7E-05	-13.85
HC47	Central Nepal	no data	28.22	no data	no data	0.511766	1.8E-05	-17.01
HW8	Western Nepal	no data	30.51	no data	no data	0.511756	5.3E-05	-17.21
HW9	Western Nepal	no data	29.62	no data	no data	0.511733	1.3E-05	-17.65
HW36	Western Nepal	no data	29.04	no data	no data	0.511898	1.4E-05	-14.44

Table DR10 Compiled Nd-Sr isotopic compositions from sediment sources in the Indus River drainage basin (LHS)

Sample name	Formation	Sr (ppm)	Nd (ppm)	$^{87}\text{Sr}/^{86}\text{Sr}$	SE	$^{143}\text{Nd}/^{144}\text{Nd}$	SE	$\epsilon_{\text{Nd}}$
<u>France-Lanord et al., 1988</u>								
AP9	Central Nepal	11	no data	1.509800	no data	no data	no data	no data
AP346	Central Nepal	21	no data	1.680900	no data	no data	no data	no data
AP385	Central Nepal	63	no data	1.030100	no data	no data	no data	no data
AP440	Central Nepal	83	no data	0.833180	no data	no data	no data	no data
AP524	Central Nepal	76	no data	0.964110	no data	no data	no data	no data
AP825	Central Nepal	74	no data	0.825730	no data	no data	no data	no data
AP874	Central Nepal	56	no data	1.017610	no data	no data	no data	no data
AP888	Central Nepal	44	no data	0.899640	no data	no data	no data	no data
NL1	Central Nepal	19	no data	0.936960	no data	no data	no data	no data
NL3	Central Nepal	7	no data	0.867720	no data	no data	no data	no data
NL4	Central Nepal	55	no data	0.939430	no data	no data	no data	no data
<u>France-Lanord et al., 1993</u>								
AP 346	Central Nepal	11.1	44	1.680900	no data	0.511397	28	-24.21
AP 385	Central Nepal	63	36	1.030100	no data	0.511331	25	-25.50
<u>Parrish et al., 1996</u>								
LT-4	Nepal-Langtang	no data	26.36	no data	no data	0.511356	10	-25.01
LT-6	Nepal-Langtang	no data	31.96	no data	no data	0.511348	14	-25.16
LT-7	Nepal-Langtang	no data	54.75	no data	no data	0.511429	14	-23.58
LT-10	Nepal-Langtang	no data	38.68	no data	no data	0.511330	6	-25.52
LT-18	Nepal-Langtang	no data	43.34	no data	no data	0.511296	29	-26.18
LT-19	Nepal-Langtang	no data	38.13	no data	no data	0.511423	7	-23.70
<u>Ahmad et al., 2000</u>								
KR82	Garwal-Inner LH	no data	no data	0.824510	no data	0.511466	6	-22.86
KR113	Garwal-Inner LH	no data	no data	1.047000	no data	0.511367	10	-24.79
KR122	Garwal-Inner LH	no data	no data	0.736920	no data	0.511218	8	-27.70
KR124	Garwal-Inner LH	no data	no data	0.920490	no data	0.511319	10	-25.73
KR126	Garwal-Inner LH	no data	no data	0.877940	no data	0.511328	10	-25.55
KR128	Garwal-Inner LH	no data	no data	0.980430	no data	0.511392	10	-24.31
KR130	Garwal-Inner LH	no data	no data	0.829400	no data	0.511444	8	-23.29
KR134	Garwal-Inner LH	no data	no data	1.043680	no data	0.511402	14	-24.11
KR52	Garwal-Inner LH	no data	no data	0.922380	no data	0.511382	8	-24.50
KR57	Garwal-Inner LH	no data	no data	0.930000	no data	0.511394	20	-24.27
KR1	Garwal-Inner LH	no data	no data	0.733090	no data	0.511378	9	-24.58
KR4	Garwal-Inner LH	no data	no data	0.741230	no data	0.511357	6	-24.99
KR102	Garwal-Inner LH	no data	no data	0.930850	no data	0.511563	16	-20.97
KR85	Garwal-Inner LH	no data	no data	0.732920	no data	0.511575	10	-20.74
KR106	Garwal-Inner LH	no data	no data	1.176450	no data	0.511342	6	-25.28
KR132	Garwal-Inner LH	no data	no data	0.715820	no data	0.511676	20	-18.77
KR38	Garwal-Outer LH	no data	no data	0.823030	no data	0.511713	8	-18.04
KR40	Garwal-Outer LH	no data	no data	0.770910	no data	0.511709	6	-18.12
KR41	Garwal-Outer LH	no data	no data	0.800360	no data	0.511723	12	-17.85
KR44	Garwal-Outer LH	no data	no data	0.815050	no data	0.511713	20	-18.04
KR50	Garwal-Outer LH	no data	no data	0.749930	no data	0.511768	9	-16.97
KR146	Garwal-Outer LH	no data	no data	0.799300	no data	0.511702	9	-18.26
<u>Robinson et al., 2001</u>								
K1-99	shale	no data	29.93	no data	no data	0.511343	14	-25.26
SR-37	shale	no data	20	no data	no data	0.511630	12	-19.66
SR-35	shale	no data	27.79	no data	no data	0.511575	11	-20.74
DD-58	shale	no data	42.22	no data	no data	0.511430	11	-23.56
23TBtu	shale	no data	33.15	no data	no data	0.511630	26	-19.66
23TBSe	phyllite	no data	37.03	no data	no data	0.511339	11	-25.34
CH-1	phyllite	no data	16.16	no data	no data	0.511460	15	-22.98
DD-15	phyllite	no data	52.32	no data	no data	0.511741	25	-17.50
22TBPu	shale	no data	37.77	no data	no data	0.511711	13	-18.08
24TBLi	phyllite	no data	65.18	no data	no data	0.511521	11	-21.79
K3-99	shale	no data	18.42	no data	no data	0.511557	9	-21.09
DD-52	shale	no data	49.94	no data	no data	0.511822	12	-15.92
20TBSI	shale	no data	47.63	no data	no data	0.511444	8	-23.29
18TBBra	shale	no data	38.76	no data	no data	0.511333	42	-25.46
K2-99	phyllite	no data	34.82	no data	no data	0.511369	15	-24.75
AG-103	phyllite	no data	35.31	no data	no data	0.511518	10	-21.85
AG-104	phyllite	no data	21.22	no data	no data	0.511370	12	-24.73
SR-30	gneiss	no data	25.11	no data	no data	0.511647	8	-19.33
AG-111	gneiss	no data	21.96	no data	no data	0.511652	14	-19.23
AG-112	gneiss	no data	25.72	no data	no data	0.511571	11	-20.81
<u>Richards et al., 2005</u>								
W50	Sutlej Valley	120	36.4	0.963838	12	0.511512	8	-21.96
W54	Sutlej Valley	108	62.4	0.884525	8	0.511452	8	-23.14
W58	Sutlej Valley	0.5	3.5	0.782417	24	0.511446	12	-23.25
W59	Sutlej Valley	44.8	40.1	1.243816	10	0.511471	8	-22.76
W60	Sutlej Valley	103	30.6	0.874373	8	0.511579	8	-20.66
W63	Sutlej Valley	20.6	49.2	1.041275	10	0.511427	8	-23.62
W64	Sutlej Valley	42.3	41.7	0.949561	100	0.511273	8	-26.63
W65	Sutlej Valley	125	69.5	0.837226	8	0.511381	8	-24.52
W70	Sutlej Valley	116	25.5	0.775567	161	0.511906	44	-14.28
W77	Sutlej Valley	84.2	33.1	0.752650	10	0.512099	8	-10.51

W78	Sutlej Valley	94.5	41.4	0.763873	87	0.511795	6	-16.44
W79	Sutlej Valley	21.9	14.2	0.945092	10	0.512069	8	-11.10
W80	Sutlej Valley	76.7	32.3	0.769608	8	0.511936	6	-13.69
W83	Sutlej Valley	64.4	47.6	0.803975	8	0.511807	8	-16.21
W87	Sutlej Valley	94	55	0.760474	6	0.512012	8	-12.21
W88	Sutlej Valley	35.1	43.8	0.830286	80	0.511951	6	-13.40
W91	Sutlej Valley	51.5	28.3	0.750875	100	0.512015	8	-12.15
W100	Sutlej Valley	48.2	37.1	0.818893	8	0.511830	6	-15.76
<u>Martin et al., 2005</u>								
502073	Annapurna	no data	no data	no data	no data	no data		no data
502075	Annapurna	no data	8.32	no data	no data	0.511592	5	-20.40
502108	Annapurna	no data	35.16	no data	no data	0.511548	6	-21.26
502097	Annapurna	no data	25.98	no data	no data	0.511428	7	-23.60
502130	Annapurna	no data	29	no data	no data	0.511616	6	-19.94
502134	Annapurna	no data		no data	no data	no data		no data
502131	Annapurna	no data	15.34	no data	no data	0.511568	7	-20.87
502136	Annapurna	no data	21.94	no data	no data	0.511477	6	-22.65
502146	Annapurna	no data	32.08	no data	no data	0.511440	7	-23.37
602002	Annapurna	no data	40.92	no data	no data	0.511462	6	-22.94
402093	Annapurna	no data	28.95	no data	no data	0.511449	6	-23.19
402097	Annapurna	no data	37.52	no data	no data	0.511384	6	-24.46
<u>Imayama et al., 2008</u>								
ME11	eastern Nepal	no data	24.89	no data	no data	0.511600	0.000016	-20.25
ME12	eastern Nepal	no data	67.81	no data	no data	0.511688	0.000015	-18.53
ME15	eastern Nepal	no data	40.2	no data	no data	0.511513	0.000012	-21.95
ME16	eastern Nepal	no data	20.95	no data	no data	0.511630	0.000014	-19.66
ME19	eastern Nepal	no data	46.03	no data	no data	0.511444	0.000012	-23.29
ME22	eastern Nepal	no data	32.65	no data	no data	0.511293	0.000018	-26.24
ME23	eastern Nepal	no data	27.71	no data	no data	0.511502	0.000014	-22.16
ME75	eastern Nepal	no data	44.27	no data	no data	0.511327	0.000026	-25.57
ME76	eastern Nepal	no data	no data	no data	no data	0.511478	0.000023	-22.63
LE20	eastern Nepal	no data	25.34	no data	no data	0.511259	0.000025	-26.90
LE21	eastern Nepal	no data	11.7	no data	no data	0.511334	0.000012	-25.44
LE28	eastern Nepal	no data	43.5	no data	no data	0.511275	0.000014	-26.59
LE78	eastern Nepal	no data	64.81	no data	no data	0.511322	0.000013	-25.67
LE79	eastern Nepal	no data	34.72	no data	no data	0.511512	0.000012	-21.96
LE10	eastern Nepal	no data	37.9	no data	no data	0.511757	0.000017	-17.19
MC49	Central Nepal	no data	29.69	no data	no data	0.511312	0.000031	-25.87
MC69	Central Nepal	no data	9.06	no data	no data	0.511420	0.000018	-23.76
MC74	Central Nepal	no data	36.79	no data	no data	0.511296	0.000033	-26.18
LC50	Central Nepal	no data	24.81	no data	no data	0.511328	0.000011	-25.55
LC70	Central Nepal	no data	13.96	no data	no data	0.511357	0.000013	-24.99
LC71	Central Nepal	no data	35.37	no data	no data	0.511342	0.000013	-25.28
LC72	Central Nepal	no data	25.16	no data	no data	0.511340	0.000015	-25.32
LC73	Central Nepal	no data	29.2	no data	no data	0.511340	0.000014	-25.32
LC53	Central Nepal	no data	10.37	no data	no data	0.511439	0.00001	-23.39
LC54	Central Nepal	no data	35.78	no data	no data	0.511619	0.000011	-19.88
LC55	Central Nepal	no data	25.75	no data	no data	0.511518	0.00002	-21.85
LC56	Central Nepal	no data	34.4	no data	no data	0.511515	0.000015	-21.91
LC57	Central Nepal	no data	23.16	no data	no data	0.511614	0.000014	-19.98
MW7	Western Nepal	no data	35.24	no data	no data	0.511379	0.000016	-24.56
MW35	Western Nepal	no data	47.12	no data	no data	0.512005	0.00001	-12.35
MW38	Western Nepal	no data	38.44	no data	no data	0.511419	0.000014	-23.78
MW61	Western Nepal	no data	41.38	no data	no data	0.511348	0.000016	-25.16
LW4	Western Nepal	no data	17.72	no data	no data	0.511313	0.000024	-25.85
LW5	Western Nepal	no data	30.42	no data	no data	0.511342	0.000011	-25.28
LW62	Western Nepal	no data	5.89	no data	no data	0.511263	0.000018	-26.82
LW64	Western Nepal	no data	1.51	no data	no data	0.511348	0.000026	-25.16
LW65	Western Nepal	no data	27.53	no data	no data	0.511306	0.000014	-25.98
LW68	Western Nepal	no data	4.2	no data	no data	0.511364	0.000017	-24.85
LW39	Western Nepal	no data	31.53	no data	no data	0.511374	0.000012	-24.66
LW40	Western Nepal	no data	16.81	no data	no data	0.511420	0.000014	-23.76
LW43	Western Nepal	no data	22.93	no data	no data	0.511838	0.000013	-15.61
LW63	Western Nepal	no data	no data	no data	no data	0.511262	0.000025	-26.84

Table DR10 Compiled Nd-Sr isotopic compositions from sediment sources in the Indus River drainage basin (THS)

Sample name	Formation	Sr (ppm)	Nd (ppm)	$^{87}\text{Sr}/^{86}\text{Sr}$	SE	$^{143}\text{Nd}/^{144}\text{Nd}$	SE	$\epsilon_{\text{Nd}}$
<u>France-Lanord et al., 1993</u>								
NA 178 Jurassic schist		no data	20.3	no data	no data	0.511795	28	-16.44
NA 181 Cretaceous (Volcaniclastic)		no data	59	no data	no data	0.512405	28	-4.55
87 28 Cretaceous		61	45.5	0.712660	no data	0.512093	13	-10.63
87 32 Trias		45	18.6	0.708990	no data	0.511824	17	-15.88
LA 194 Indus Margin		299	33.2	0.709810	no data	0.511883	9	-14.73
LA 158 Indus Margin		50	23.2	0.729030	no data	0.512046	37	-11.55
25 1 suture Ladak		662	6.4	0.707620	no data	0.512313	34	-6.34
89 1 suture Ladak		258	13.9	0.706060	no data	0.512580	24	-1.13
<u>Robinson et al., 2001</u>								
1TBkag	Cental-Nepal	no data	84.95	no data	no data	0.512322	31	-6.16
2TBpha	Cental-Nepal	no data	33.22	no data	no data	0.511805	15	-16.25
3TBjom	Cental-Nepal	no data	53.17	no data	no data	0.511673	12	-18.82
4TBSya	Cental-Nepal	no data	63.38	no data	no data	0.511671	9	-18.86
5TBMar	Cental-Nepal	no data	64.5	no data	no data	0.511750	11	-17.32
DD-31	Western Nepal	no data	29.59	no data	no data	0.511734	7	-17.63
DD-33	Western Nepal	no data	35.99	no data	no data	0.511610	9	-20.05
<u>Richards et al., 2005</u>								
W3	Sutlej Valley	46.4	32.7	0.764614	8	0.511672	6	-18.84
W18	Sutlej Valley	297	25.7	0.734092	8	0.511769	8	-16.95
W19	Sutlej Valley	99.7	34	0.763873	161	0.511919	13	-14.03
W25	Sutlej Valley	229	13	0.736614	83	0.512238	136	-7.80
ED96/32	Sutlej Valley	93	33.7	0.763114	45	0.511903	13	-14.34
ED96/33	Sutlej Valley	38	43.6	0.793694	35	0.511766	19	-17.01
ED96/57	Sutlej Valley	61	25.7	0.777697	54	0.511796	16	-16.42
ED96/58	Sutlej Valley	87	33.3	0.755977	41	0.512023	10	-12.00
ED96/74	Sutlej Valley	67	25	0.779018	35	0.511946	17	-13.50
ED96/83	Sutlej Valley	53	25.7	0.780820	38	0.511841	16	-15.55
ED96/91	Sutlej Valley	63	32.3	0.771796	47	0.511941	8	-13.60
ED96/99	Sutlej Valley	85	46.8	0.759204	41	0.511919	18	-14.03
<u>Miller et al., 2001</u>								
WAP2069	NW Tindi	89	32.9	0.762680	10	0.511935	2	-13.71
WAP2070	Miyar Tindi	154	40.9	0.750090	14	0.511676	3	-18.77
WAP2073	NE Marwa	197	40	0.741650	8	0.512058	7	-11.31
WAP2074	E Udaipur	268	38.5	0.734500	5	0.511685	5	-18.59
<u>Ahmad et al., 2000</u>								
C29/97	Garwal	no data	no data	0.772290	no data	0.511944	8	-13.54

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