

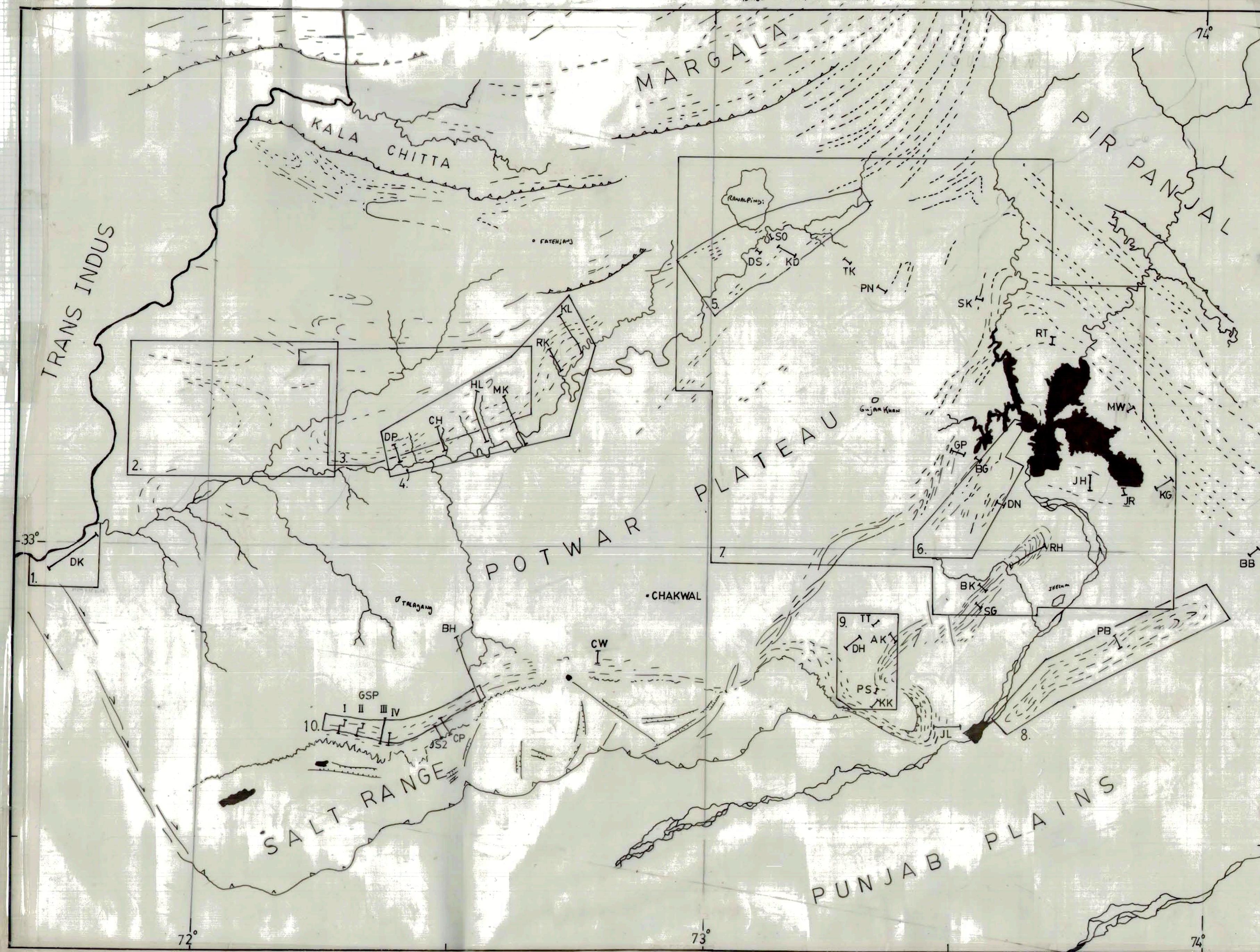
Preliminary map of stratigraphic studies of the Siwalik molasse on the Potwar Plateau

R.G.H. Reynolds 5/81  
BASE 1:1,500,000 LANDSAT

Maps

Detailed maps of the Siwalik Molasse on the Potwar Plateau

1. 1:43,400 Hussain, S.T., Munthe, J., Shah, S.M.I., West, R.M., and Lukacs, J.R., 1979, Neogene stratigraphy and fossil vertebrates of the Daud Khel area, Mianwali District, Pakistan. *Memoirs of the Geol. Survey of Pakistan*, vol. 13, p. 27 pp.
2. 1:253,440 Gill, W.D., 1952, The stratigraphy of the Siwalik Series in the Northern Potwar, Punjab, Pakistan. *Quart. Jour. Royal Geol. Soc. London*, v. 107, p. 375-394.
3. 1:126,720 Martin, N.R., 1962, Tectonic style in the Potwar, West Pakistan. *Col. Bull. Panjab Univ.* v. 2, p. 39-50.
4. 1:200,000 Barry, J.C., Behrensmeier, A.K., and Monaghan, M., 1980, A geologic and biostratigraphic framework for Miocene sediments near Khaur village, Northern Pakistan. *Postilla (Yale Univ.)* v. 183, p. 1-23.
5. 1:126,720 Gill, W.D., 1952, op. cit.
6. 1:126,720 Martin, N.R., 1962, op. cit.
7. 1:100,000 Reynolds, R.G.H., 1980, The Plio-Pleistocene structural and stratigraphic evolution of the Eastern Potwar Plateau, Pakistan. *Dartmouth College PhD thesis* 265pp.
8. 1:156,662 Keller, H.M., Tahirkheli, R.A.K.T., Mirza, M.A., Johnson, G.D., Johnson, N.M., and Opdyke, N.D., 1977, Magnetic polarity stratigraphy of the Upper Siwalik deposits, Pabbi Hills, Pakistan. *Earth Planet. Sci. Lett.* v. 36, p. 187-201.
9. 1:100,000 Johnson, N.M., Opdyke, N.D., Johnson, G.D., Lindsay, E.H. and Tahirkheli, R.A.K., 1982, Magnetic polarity stratigraphy and ages of Siwalik Group rocks of the Potwar Plateau, Pakistan. *Paleogeog. Paleoclim. Paleocool.* v. 37, p. 17-42.
10. Work in progress by Mahmood Raza Yale/Harvard/GSP and Khalid Sheikh GSP/Dartmouth College.



Measured Sections

ABV.	SECTION NAME	METERS	Section Continues (up) or (Down)	Magnetics	Time span (M y)	Volcanic Ashes	Radiometric Dates - GSP	Reference
AK	Andhar kas	1300	Down	Yes	5-13.5	No.	-	5,7
BB	Bhimbur	350	Down & up (?)	Yes	1.5-2.5	2	-	7
BG	Bhangala	700	Down	Yes	1.6-3.5	2	1.1±.1	8
BH	Bhilomar	1250	Down	Yes	7-14	1	8.2±.7, 9.5±.6	5
BK	Basawa Kas	1100	Down	Yes	0.6-3.7	2	2.9±.2	4,7
CH	Choutrwali Kas	1750	?	?	7.7-11	No	-	1
CP	Chita ParWala	600	up	Yes	?	2	-	11
CW	Chakwal/Bhaun (Sauj Kas)	1750	Down	Yes	5-10	No.	-	5,7
DH	Dhalla Nala	?	No	Yes	?	No.	-	Not yet Publish
DK	Daud Khel	2400	No	No	?	No.	-	3
DN	Dina	1050	Down	Yes	0.7-2	No.	-	8
DP	Dhok Pathan	2100	?	?	7.5-11	No.	-	1
DS	Dhok Saiyidan, Shahpur	120	No	Yes	2.4-2.6; 1.6	4	1.6±.2	6.
GP	Ga' da Paik	1450	Down	Yes	1.6-5	5	-	8
GSP I		?	Up and Down	No	?	no	-	9
GSP II		?	Up and Down	No	?	no	-	9
GSP III		720	Up and Down	Yes	?	no	-	9
GSP IV		?	Up and Down	No	?	no	-	9
HL	Hasal Kas	2400	?	?	8-12	no	-	1
JH	Jhel Kas	770	no	yes	1.6-3.5	2	2.4±.2, 2.6±.2	4,7
JL	Jalalpur, Chambal	2100	down	yes	.5-11	2	-	4,5,7
JR	Jari	470	Down	yes	1.5-2.4	3	-	8
JS2	J. Stix 2	560	Up	no	?	1	-	11
KD	Kas Dovac	3360	down	yes	3.5-8	no	-	8
KG	Kas Guma	1250	down	yes	1.5-4	2	-	8
KK	Kotal Kund	1800	down	yes	1.0-11	1	2.5±.2	5
KL	Kaulial Kas	3250	?	?	6.4-12	no	-	1
MK	Malhuwala Kas	2000	?	?	6.4-11	no	-	1
MW	Mawa Kaneli	460	down	yes	2.4-3.4	2	-	8
PB	Pabbi	1030	no	yes	.7-3.1	no	-	4,7
PN	Pandoori	600	down	yes	prob. 4-5	no	-	8
PS	Pind Savikka	600	down	yes	1.5-3.5	13	2.1±.3	2
RH	Rohtas north	1350	down	yes	1.6-4.8	1	-	8
RK	Ratha Kas	1000	?	?	8-9	no	-	1
RT	Rata/Dadial	1000	down	yes	.7-4	3	-	8
SG	Sangol Kas	940	up	yes	3.4-6	no	-	4,7
SK	Sakrana	800	down	yes	2.5-4	no	-	8
SO	Soan	650	down	yes	2.3-4	1	?	6
TK	Trill Kas (Buttar)	1100	down	yes		1 lower	-	10
TT	Tatrot	60	down	yes	4.5-5	no	-	5,7

References for measured sections

1. Barry, J.C., Behrensmeier, A.K., and Monaghan, M., 1980, A geologic and biostratigraphic framework for Miocene sediments near Khaur village, Northern Pakistan. *Postilla*, v. 183, p.1-19.
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4. Johnson, G.D., Johnson, N.M., Opdyke, N.D., and Tahirkheli, R.A.K., 1979, Magnetic reversal stratigraphy and sedimentary tectonic history of the Upper Siwalik Group eastern Salt Range, and southwestern Kashmir. In: A. Farah and K.A. DeJong eds. *Geodynamics of Pakistan*. Geol. Survey of Pakistan, Quetta p. 149-165.
5. Johnson, N.M., Opdyke, N.D., Johnson, G.D., Lindsay, E.H., and Tahirkheli, R.A.K., 1982, Magnetic polarity stratigraphy and ages of Siwalik Group rocks of the Potwar Plateau, Pakistan. *Paleogeog. Paleoclim. Paleocool.* v. 37, p. 17-42.
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11. Stix, J. in preparation. Dartmouth College.