

New Map of Southern Nanga Parbat

Geologic map of outcrops in southern Nanga Parbat Haramosh Massif

M. A. Edwards (1998)

Himalayan Rocks

- Metapelitic schists and gneisses (typically garnetiferous) interlayered with marbles and amphibolites. Part of NW Himalayan cover rocks
- Metapelitic schists and gneisses (typically non-garnetiferous). Probably part of pre-Cambrian core of NPHM
- Undifferentiated interlayered gneisses and schists.
- Migmatitic garnetiferous (pelitic) gneisses
- Streaked quartzofeldspathic mylonite ("Angel Hair") unit
- Lath unit mylonite (including low-strained portions)
- Iskere Gneiss
- Monotonous granitic orthogneiss (including Rupal Chhichi S.Z. - darker blue)

- 50 Local foliation measurement
- 50 Remote foliation measurement
- 50 Local lineation measurement
- Antiform
- Synform
- overturned antiform
- fault gouge
- general direction of wrench component of local displacement
- village
- small village

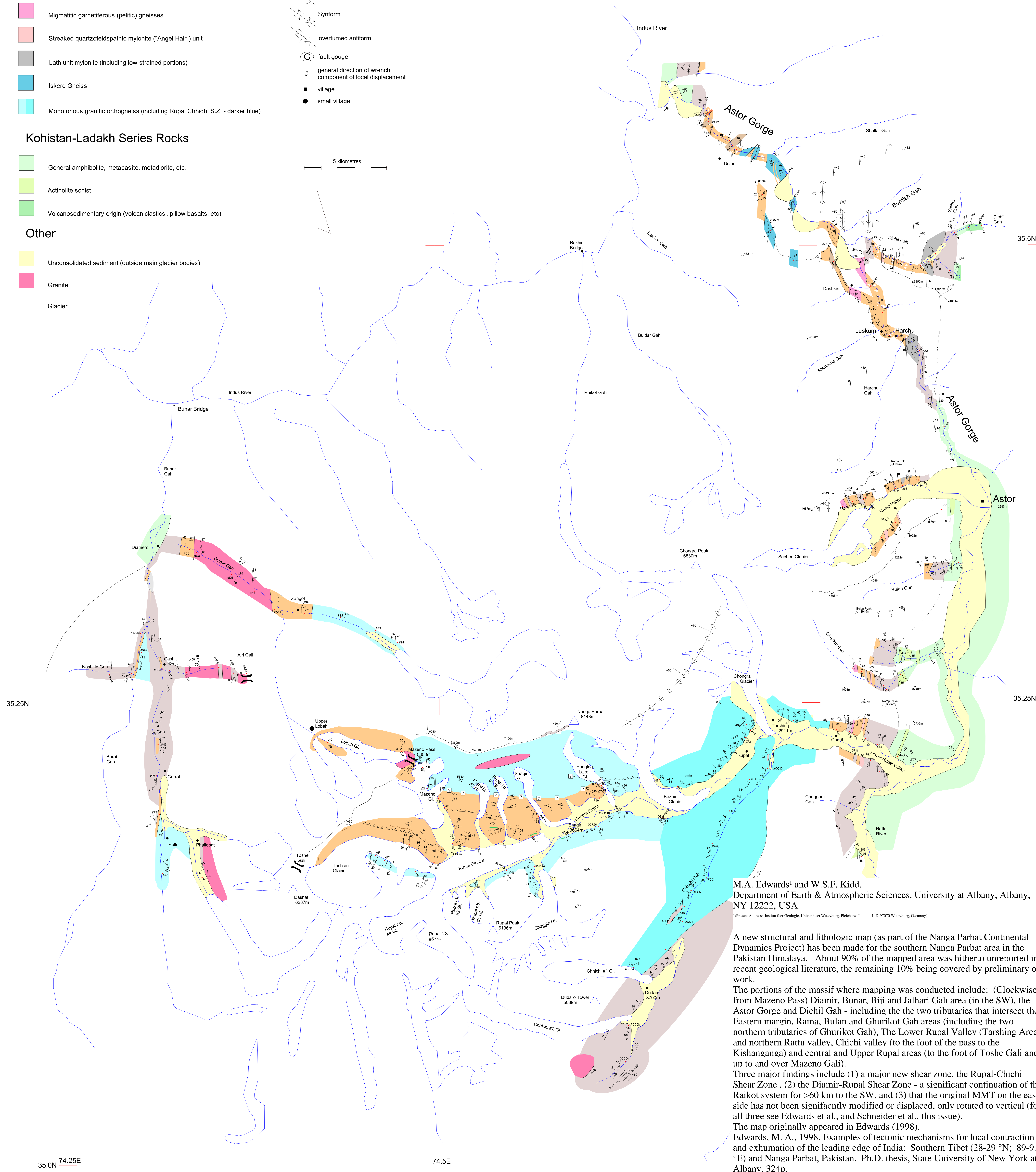
Kohistan-Ladakh Series Rocks

- General amphibolite, metabasite, metadiorite, etc.
- Actinolite schist
- Volcanosedimentary origin (volcaniclastics, pillow basalts, etc)

Other

- Unconsolidated sediment (outside main glacier bodies)
- Granite
- Glacier

5 kilometres



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A new structural and lithologic map (as part of the Nanga Parbat Continental Dynamics Project) has been made for the southern Nanga Parbat area in the Pakistan Himalaya. About 90% of the mapped area was hitherto unreported in recent geological literature, the remaining 10% being covered by preliminary or work.

The portions of the massif where mapping was conducted include: (Clockwise from Mazeno Pass) Diamir, Bunar, Biji and Jalhari Gah area (in the SW), the Astor Gorge and Dichil Gah - including the two tributaries that intersect the Eastern margin, Rama, Bulan and Ghurikot Gah areas (including the two northern tributaries of Ghurikot Gah). The Lower Rupal Valley (Tarshing Area) and northern Rattu valley, Chhichi valley (to the foot of the pass to the Kishanganga) and central and Upper Rupal areas (to the foot of Toshe Gali and up to and over Mazeno Gali).

Three major findings include (1) a major new shear zone, the Rupal-Chhichi Shear Zone, (2) the Diamir-Rupal Shear Zone - a significant continuation of the Raikot system for >60 km to the SW, and (3) that the original MMT on the east side has not been significantly modified or displaced, only rotated to vertical (for all three see Edwards et al., and Schneider et al., this issue).

The map originally appeared in Edwards (1998).
Edwards, M. A., 1998. Examples of tectonic mechanisms for local contraction and exhumation of the leading edge of India: Southern Tibet (28-29°N; 89-91°E) and Nanga Parbat, Pakistan. Ph.D. thesis, State University of New York at Albany, 324p.