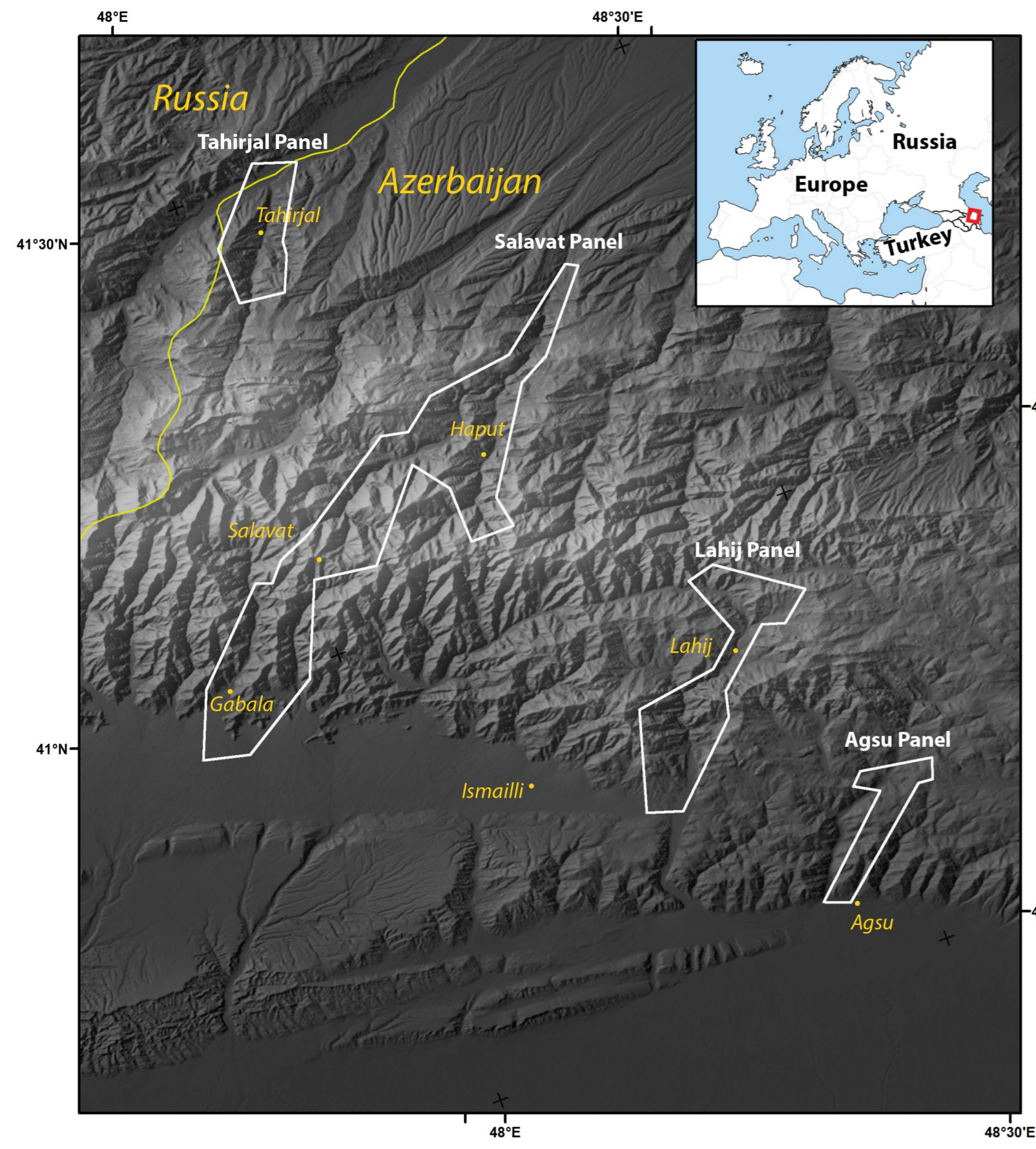


Geological Swath Maps of the Eastern Greater Caucasus, Azerbaijan

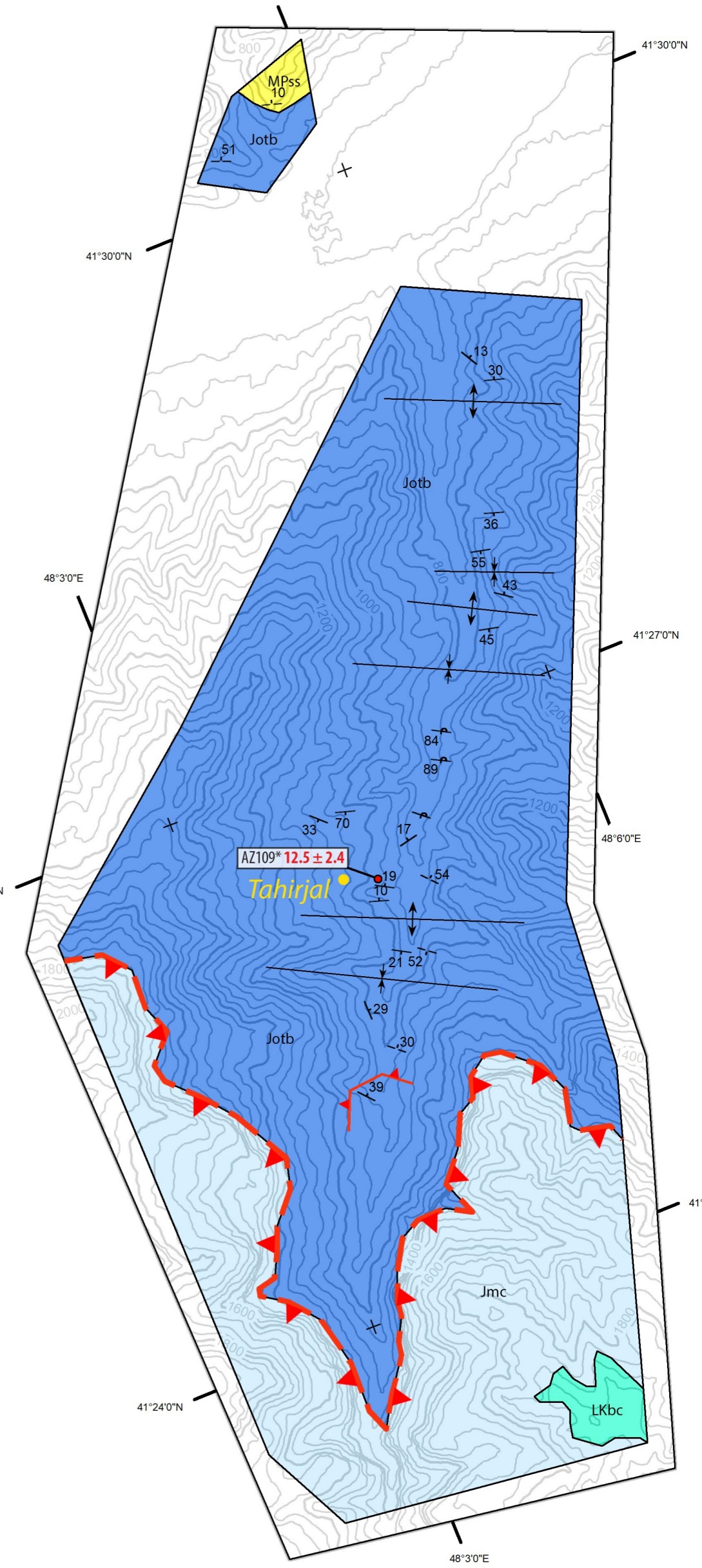
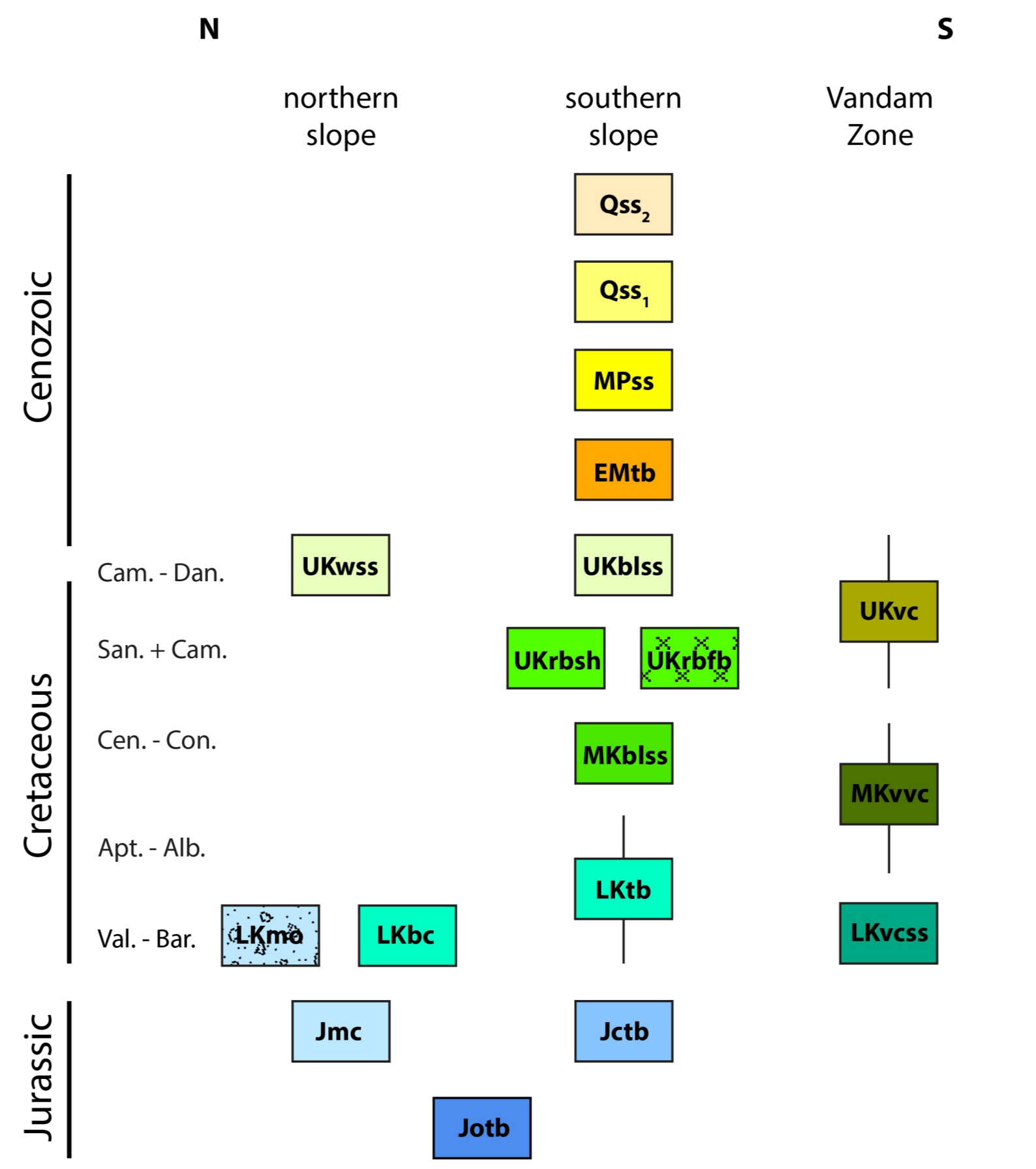
1:50,000 scale

Map projection: Universal Transverse Mercator (UTM) 38N
Datum: WGS 1984

Location



Stratigraphic Age Correlation



Stratigraphic Unit Descriptions

Vandam Zone

- UKvcs** **Upper Cretaceous Vandam carbonates** blue gray lithic-rich calcareous ~10cm bedded sandstone-shale sequence transitioning upward into blue-gray muddy limestone
- MKvvc** **Middle Cretaceous Vandam volcanoclastic sequence** 10 cm - 5 m thick lithic-rich volcanoclastic coarse to medium sandstone beds with thin shale interbeds and some conglomerate intervals. Normal grading, load casts on some beds. 1 - 10 m thick intervals of tuffs. Limestone olistoliths to 10 m.
- LKvcs** **Lower Cretaceous Vandam calcareous sandstone** 3-10 cm gray-white calcareous coarse to fine sandstone with thin (~2 cm) gy shale interbeds, locally with pebble conglomerate with lithic and clay clasts.

- Qss₂** **Quaternary sandstone 2** overlying coarse to fine sandstone, locally conglomeratic, with channel forms
- Qss₁** **Quaternary sandstone 1** coarse to fine sandstone, locally conglomeratic, with discontinuous silt to clay horizons, channel forms
- MPss** **Miocene to Pliocene sandstones** 30 cm - 2 m coarse to medium, lithic-rich gray-tan sandstones
- EMtb** **Eocene to Miocene turbidites** dark gray to black shales with sparse 2-10 cm thick lithic-rich coarse to fine sandstone beds. Local orange staining. Rare intervals are sandstone-rich. Normal grading and fluid escape structures are common in sand beds.

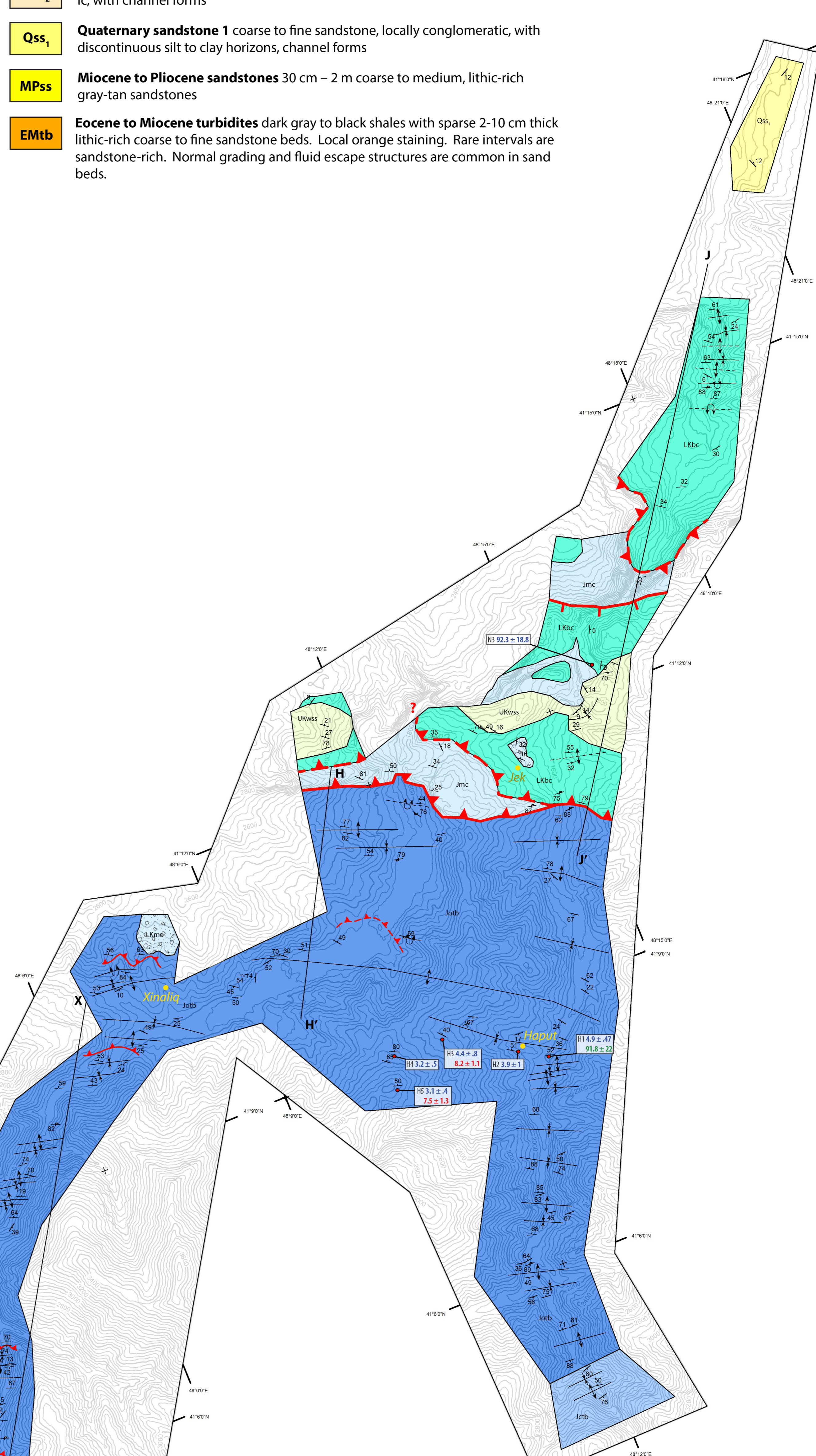
southern slope

- UKbss** **Upper Cretaceous blue sandstone** blue to white sandstone beds dominantly 3-10 cm thick (rarely 1 m thick) interbedded with 5-10 cm gray shale to white marl beds. Normal grading, cross beds, and load casts common.
- UKrbfb** **Upper Cretaceous red, blue fault breccia** brecciated LKrbsh involved in faulting. Chaotic folding and shearing of clay horizons, boudinage of sandstones.
- UKrbsh** **Upper Cretaceous red, blue shale** alternating red-blue mudstone sequence, locally interbedded with bl-gy med-fine sand horizons 3-10 cm thick with hummocky cross stratification.
- MKbss** **Middle Cretaceous blue sandstone** blue-gray sandstone beds 3-10 cm thick (up to 1 m in rare cases) interbedded with 5-10 cm shale beds in turbidite sequences. Normal grading, cross beds, and load casts common.
- LKtb** **Lower Cretaceous turbidites** turbidite sequences of brown 3-10 cm sandstone beds interbedded with 5-10 cm light to dark gray shale intervals. Cone in cone structures and load casts observed, calcareous cementation.
- Jctb** **Upper Jurassic calcareous turbidite** 2-10 cm fine-med, lithic- to qtz-rich ss beds interbedded with 5-10 cm mudst intervals. Normal grading, load casts, and cross beds are common. Lithologically similar to Jobt except carbonate cement is common, fine-grained intervals are often dominantly carbonate mud.

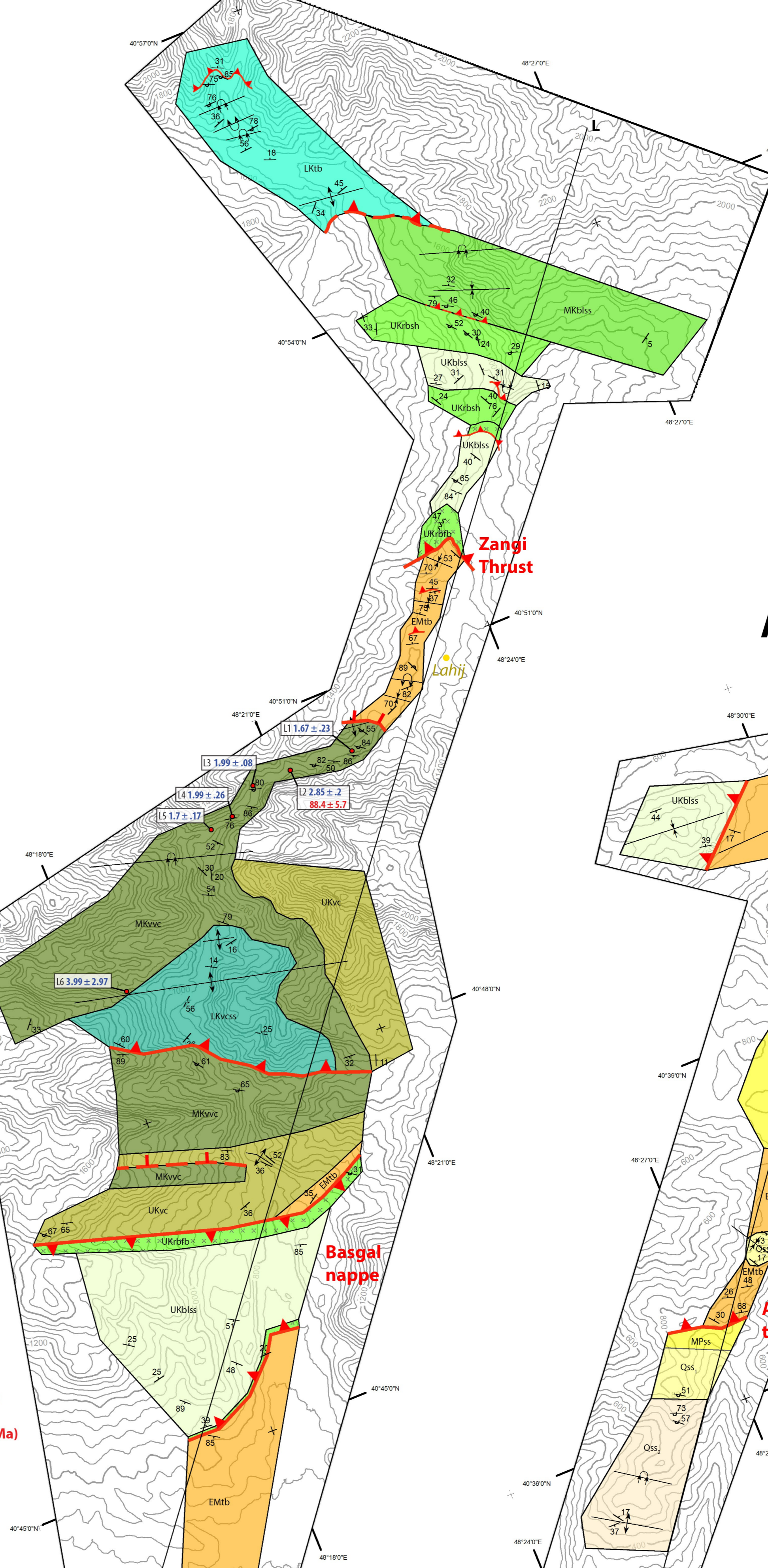
northern slope

- UKvss** **Upper Cretaceous white sandstone** 2-10 cm red to white sandstone beds interbedded with gray shale ~5 cm thick. Basal boulder conglomerate of dominantly limestone clasts, intervals of cobble to boulder conglomerates
- LKbc** **Lower Cretaceous bedded carbonate** well-bedded, oolitic carbonate and gray mudstone. At southern end of exposure area, gray mudstone is dominant, 10 cm - 2 m oolitic limestone beds at irregular intervals with pervasive ripup clasts. At northern end of exposure area, m - 10m oolitic carbonate beds dominant with minor gray to red mudstone. Isolated beds of poorly sorted pebble to boulder conglomerate, clasts include Jmc carbonate, siltst.
- LKmb** **Lower Cretaceous massive olistolith** km-scale olistolith detached from proximal Jmc. Emplacement age uncertain.
- Jmc** **Upper Jurassic massive carbonate** massive carbonates, wackestone to grainstone, grains cm - 10 cm, often ambiguous bedding.
- Jobt** **Middle Jurassic organic-rich turbidites** medium, qtz-rich sandstone to black shale. Sandstone intervals dominantly 2-3 cm thick, up to 10 m in a handful of cases. Cross-bedding, fluid escape structures, load casts, cone-in-cone structures. Local concretions, some of which are siderite.

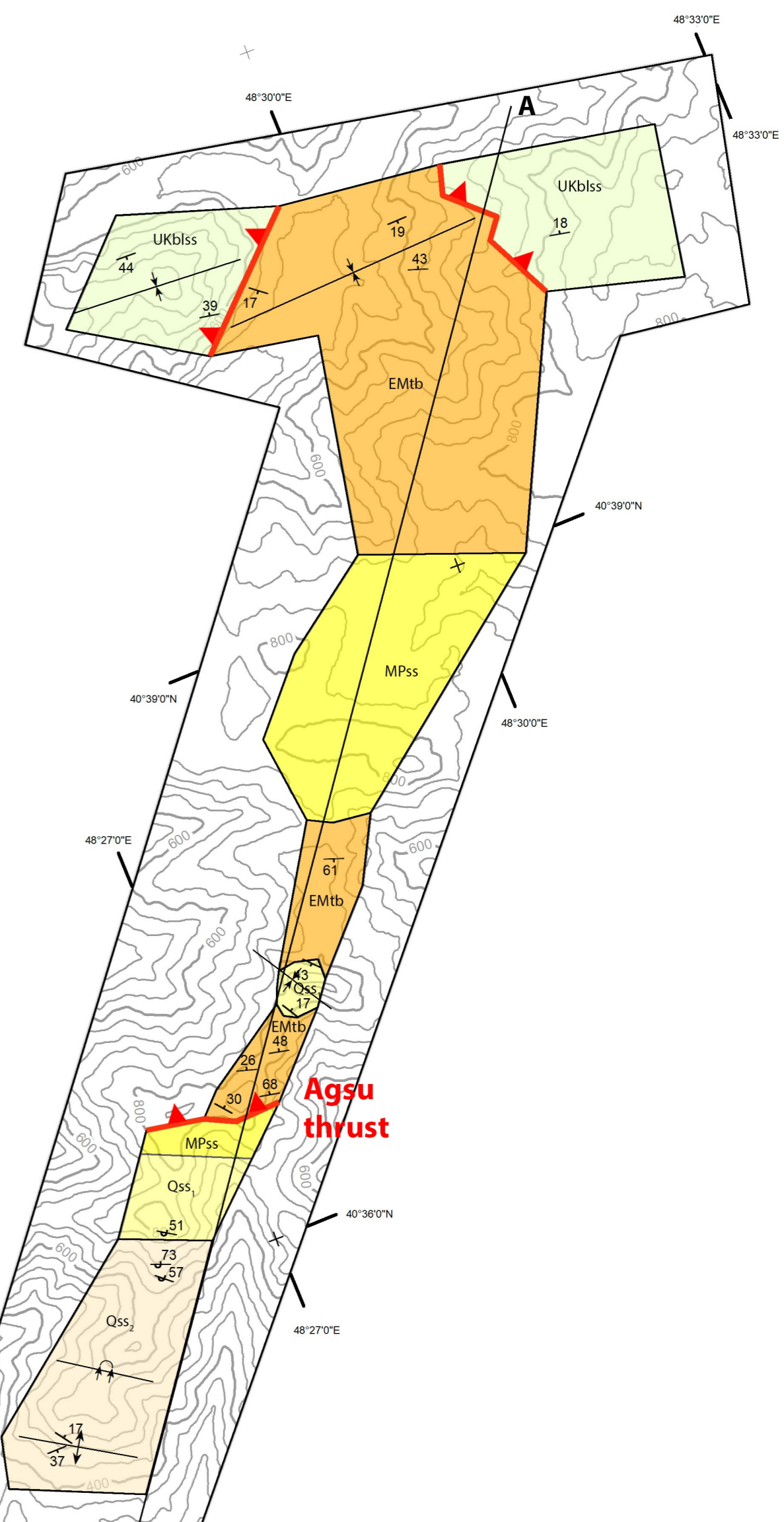
Salavat Panel



Lahij Panel



Agsu Panel



Symbols

- 50 strike and dip
- 50 strike and dip, overturned bed
- 50 strike and dip, sighted
- thermochronometry sample location
- contact (or edge of mapped area)
- thrust fault, major (unit contact; dashed if inferred)
- normal fault, major (unit contact; dashed if inferred)
- thrust fault, minor (within unit; dashed if inferred)
- normal fault, minor (within unit; dashed if inferred)

Thermochronometry age labels

- sample name
- N2 6.3 ± 2.3** Apatite (U-Th)/He age with 1σ standard error (Ma)
- 36.1 ± 2.7** Zircon (U-Th)/He age with 1σ standard error (Ma), if available