Geological Map of the Late Miocene-Pliocene Pisco Formation at Cerro Colorado (Ica Desert, Peru)

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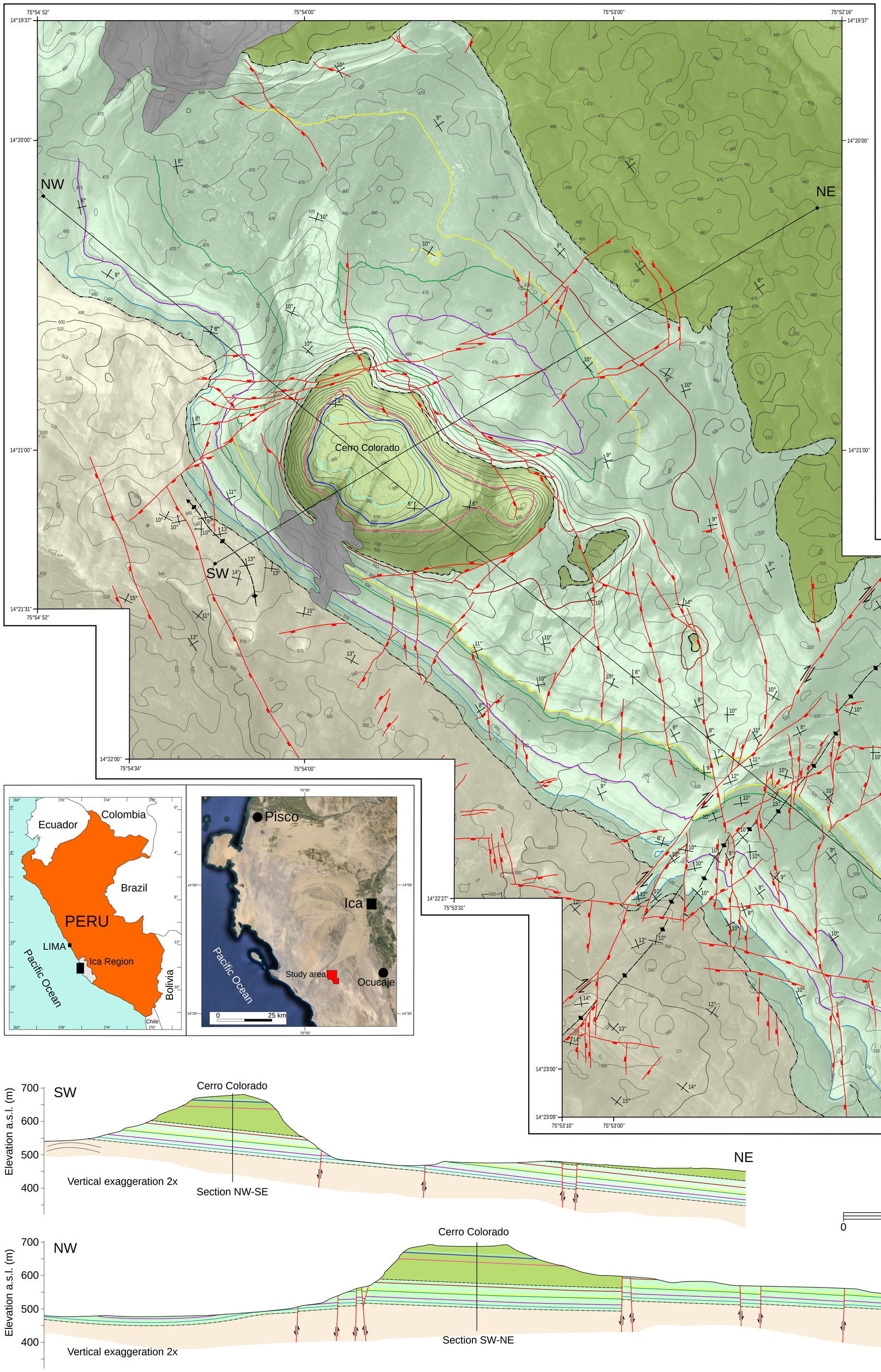

LEGEND

Quaternary deposits

Aeolian deposits (thicker than 1 m)

Pisco Formation (late Miocene-Pliocene)

Cerro Colorado Upper Allomember

This unit is at least 125 m thick. In the lower part, confined by the intraformational unconformity at the base and the Inca marker bed at the top, it is comprised of grey and tan to brown sandstones displaying large and fine-scale cross-bedding and hummocky cross stratification and some diatomite stringers and flecks. Above the Inca marker bed the section becomes diatomaceous and consists mostly of poorly defined beds of massive diatomites and diatomaceous siltstones with intermittent beds of sandstone, volcanic ash, and dolomite.

Intra-synthem Marker beds
- T17
- Ica-Chincha
- Inca

Intraformational unconformity

Cerro Colorado Lower Allomember

This unit unconformably overlies the Chilcatay Formation and is about 75 m thick. Vertical progression of facies includes coarse nearshore conglomerates and massive sandstones grading upwards into vertebrate-rich, white- and yellow-weathering silty sandstones with *Gyrolithes* burrows, diatomites and diatomaceous siltstone intercalated with sandstone, volcanic ash, and dolomite horizons.

Intra-synthem Marker beds
- Paracas
- Wari
- Quechua
- Tiwanaku
- Nazca

Interformational unconformity

Chilcatay Formation (late Oligocene-early middle Miocene)

The estimated thickness of this formation is about 250 m. It consists of basal sandstones, tuffaceous and diatomaceous siltstone indicative of shelf depths and a coastal upwelling regime, intercalated with coarse-grained sandstone.

Symbols

- Normal faults. Rectangles on downthrown block
- Strike and dip of bedding
- Plunging anticline, axial trace
- Oblique strike-slip fault
- Trace of the geological cross section

1:10,000 Scale at full printed size
Contour interval: 10 m
metres
0 500 1000 1500 2000