UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

COLOMBIA INSTITUTO NACIONAL DE INVESTIGACIONES
GEOLOGICO-MINERAS

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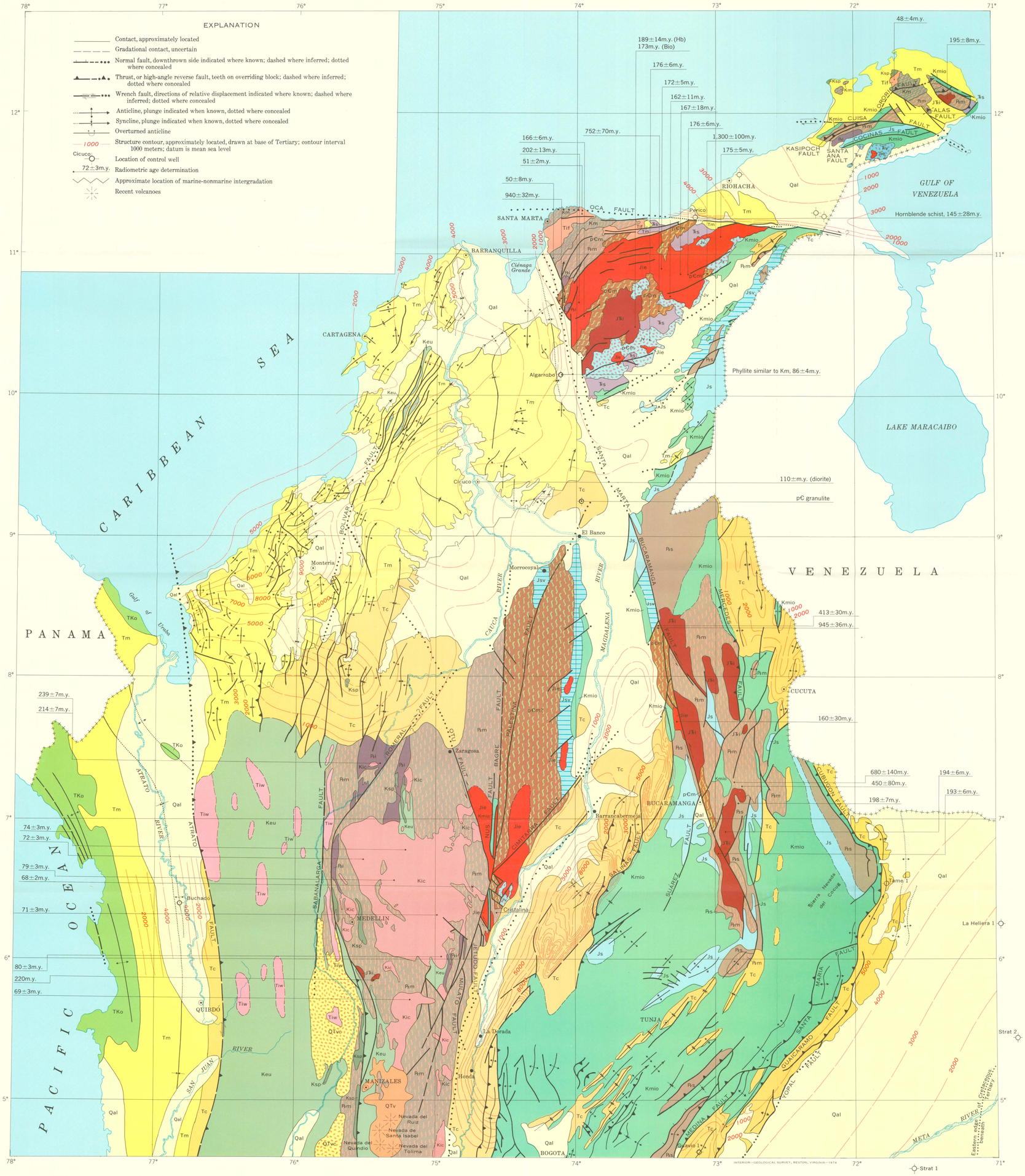
PLATE 1

GEOLOGIC AND TECTONIC MAP OF THE NORTHERNMOST ANDES, COLOMBIA

PREPARED UNDER THE AUSPICES OF THE
GOVERNMENT OF COLOMBIA
AND THE
AGENCY FOR INTERNATIONAL DEVELOPMENT
U.S. DEPARTMENT OF STATE



EXPLANATION

STRATIFIED SEQUENCES

- Qal — Alluvium, especially in subsiding areas and in areas inundated by seasonal flooding
- QTv — Lavas and pyroclastic rocks related to late Tertiary to Holocene Andean volcanism
- QTvc — QTv and Tc, undifferentiated
- Tc — Lacustrine to continental sedimentary rocks deposited as piedmont accumulations; preserved in elongate synclinal belts
- Tm — Marine clastic sedimentary rocks with minor limestone, shelf deposits (Guajira), and coastal wedges (Caribbean and Pacific coasts)
- TKo — Cretaceous and Eocene basaltic rocks containing geophysical evidence of oceanic crustal origin
- Kmio — Miogeosynclinal sedimentary rocks of the Eastern Cordillera, extending into the Llanos Basin and into western Venezuela
- Keu — Eugeosynclinal sedimentary rocks, including volcanic rocks; probably include parts of the Dagua Group (Mesozoic)
- Km — Low-rank metamorphic rocks of the northern coastal belt, probably metamorphosed during Late Cretaceous to Eocene
- Js — Mainly nonmarine red beds of continental origin; may ascend to Lower Cretaceous in the northern Serrania de Perija; marine in the Guajira Basin
- Jv — Volcanic rocks, in part penecontemporaneous with batholiths of the Sierra Nevada de Santa Marta; may extend into the Serrania de Perija and into the Central Cordillera (include Morrocoyal Formation)
- Jsv — Js and Jv, undifferentiated
- Trs — Marine and continental red beds of the Sierra Nevada de Santa Marta, appear to pass southward into red beds (Js) of the Eastern Cordillera
- Tv — Submarine and subaerial lavas and pyroclastic rocks
- Pzs — Mainly miogeosynclinal sedimentary rocks, eugeosynclinal affinities in western Antioquia; include Bocas Formation of Santander region locally
- Pzm — Metamorphosed sedimentary rocks of low to high rank; in Santander region, mainly pre-Devonian, including Precambrian locally
- pCm — Paraschist, paragneiss, and granulite; anatectite and (or) migmatite locally

OROGENESIS AND MAGMATISM

- Tiw — Regional uplift (Pliocene-Pleistocene); Andean volcanism along major rift zones; Miocene Andean orogeny
- Tif — Middle Tertiary stocks and batholiths, mainly along the Western Cordillera
- Kic — Middle Eocene batholiths and stocks associated with the outermost fold belt of the Andean Cordillera in the Sierra Nevada de Santa Marta-Guajira Peninsula region
- Ksp — Upper Cretaceous batholiths and stocks associated with orogeny in the Central Cordillera
- Jie — Mafic and ultramafic intrusive rocks, including serpentinite, in the western part of the Central Cordillera, Western Cordillera, and Guajira Peninsula
- JTri — Middle Jurassic batholiths of calc-alkaline to potassic composition in the Sierra Nevada de Santa Marta, Eastern Cordillera, and Guajira(?) Peninsula, possibly a continuation of Triassic-Jurassic magmatism
- Pzi — Upper Triassic-Lower Jurassic batholiths associated with orogeny in the Sierra Nevada de Santa Marta and Eastern Cordillera
- pCm — Upper Paleozoic plutons and stocks; strong metamorphism mainly in Central Cordillera, also in Sierra Nevada de Santa Marta and Guajira Peninsula

Late Ordovician orogeny of Eastern Cordillera and Llanos Basin

Precambrian orogenies of 1,350 and 950 m.y.

CENOZOIC — QUATERNARY, TERTIARY
MESOZOIC — CRETACEOUS, JURASSIC, TRIASSIC
PALEOZOIC
PRECAMBRIAN

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