

Geologic map of the Imdr Regio area of Venus.

López, I.¹, Martín, L.², D'Incecco, P.^{3,4}, Lang, N.P.⁵, and Di Achille, G.³

¹Tecvolrisk Research Group. Departamento de Biología, Geología, Física y Química Inorgánica. Universidad Rey Juan Carlos. Spain. (ivan.lopez@urjc.es)

²Volcanology Research Group. Department of Life and Earth Sciences, (IPNA-CSIC). Spain.

³National Institute for Astrophysics (INAF). Astronomical Observatory of Abruzzo, Italy.

⁴Arctic Planetary Science Institute, Rovaniemi, Finland.

⁵Department of Biochemistry, Chemistry, Geology, and Physics. Mercyhurst University. USA.

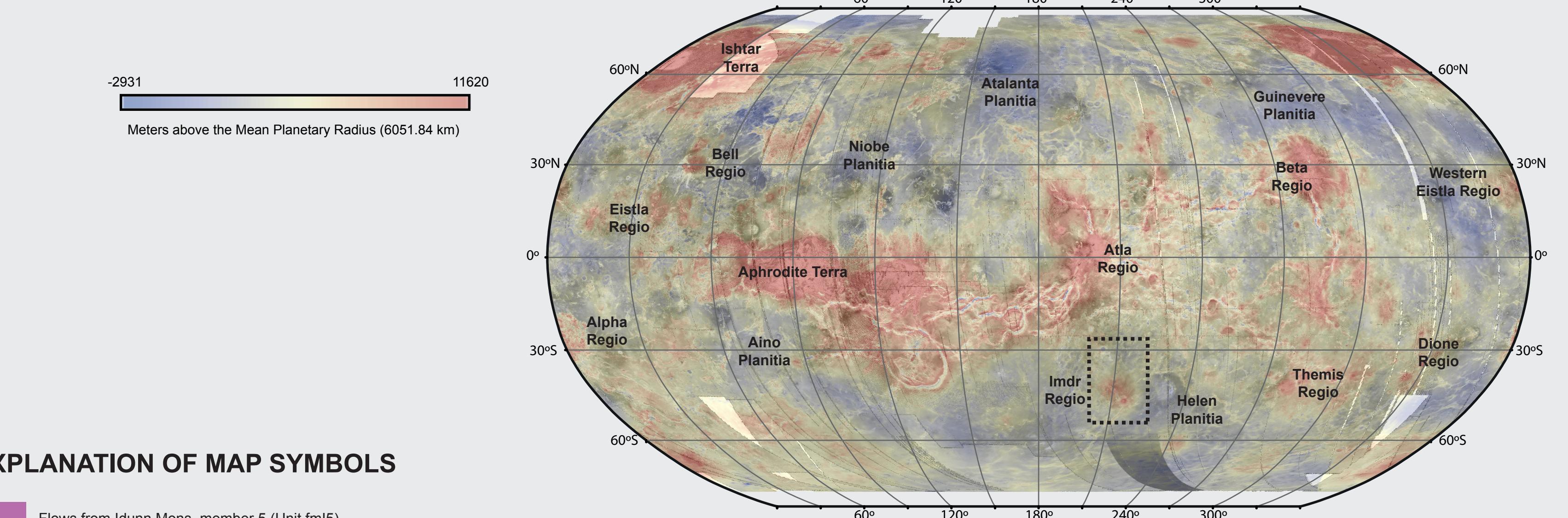


Figure 1. Global map of Venus showing the principal geographic and geologic features of the planet. The box indicates the location of the map area (Left-looking/Cycle 1 Magellan global mosaic and altimetry data in Robinson projection).

EXPLANATION OF MAP SYMBOLS

- Flows from Idunn Mons, member 5 (Unit fm15).
- Flows from Idunn Mons, member 4 (Unit fm14).
- Flows from Idunn Mons, member 3 (Unit fm13).
- Flows from Idunn Mons, member 2 (Unit fm12).
- Flows from Idunn Mons, member 1 (Unit fm11).
- Flows from Olapa Chasma (Unit fchO).
- Flows from unnamed patera (Unit fp).
- Flows from Igirtoq Tholi (Unit ft).
- Flows from Firtos Mons (Unit fmF).
- Flows from Arasy Mons (Unit fmA).
- Flows from Kupo Patera (Unit fpK).
- Shield field and associated materials in eastern Olapa Chasma (Unit sfEO).
- Shield field and associated materials in western Olapa Chasma (Unit sfWO).
- Shield field and associated materials in northern Olapa Chasma (Unit sfNO).
- Shield field and associated materials in eastern Wawalag Planitia (Unit sfW).
- Shield field and associated materials near Payne-Gaposchkin Patera (Unit sfPG).
- Crater flow material, undivided (unit cfmu).
- Crater material, undivided (unit cu).
- Textured plains, undivided (unit tpu).
- Smooth plains, undivided (unit spu).
- Lower plain materials, undivided (unit lpmu).
- Tessera terrain undivided (unit tu).

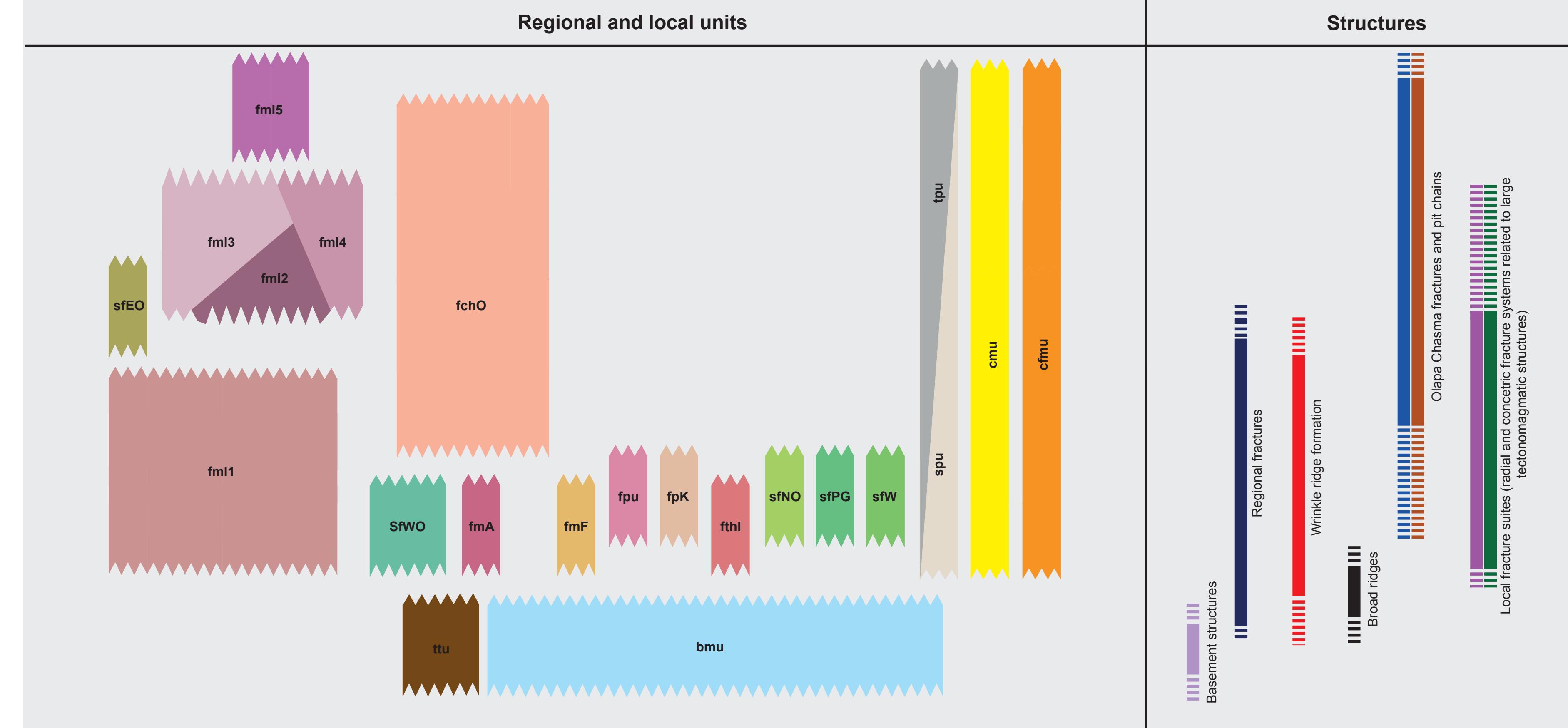
Secondary structures

- Broad topographic rim.
- Pit chain.
- Olapa Chasma fractures (balled when graben).
- Concentric fractures.
- Radial fractures (balled when graben).
- Wrinkle ridges.
- Regional fractures.
- Basement structures.

Primary structures

- Surficial dust cover (impact-related halo).
- Hummocky terrain (debris apron).
- Gradual contact.
- Contact (dashed where approximate).
- Flow lobes.
- Flow direction.
- Channel.
- Large and intermediate volcanic edifices (dashed when embayed or modified).
- Small volcano.
- Crater rim.

SEQUENCE OF MAP UNITS AND STRUCTURES



0 500 km 1000 km
1:5,000,000

Projection: Mercator
Center Longitude: -140.0
Equatorial Radius: 6051800.0
Polar Radius: 6031800.0
Latitude Type: Plate Carree
Minimum Latitude: -55.0
Maximum Latitude: -25.0
Minimum Longitude: -165.0
Maximum Longitude: -135.0

Venus_Magellan-Leftlook-mosaic-global_75m
Venus_Magellan-Rightlook-mosaic-global_75m
Data source: https://map.ngdc.noaa.gov/search/results?q=MAP2&k1=target&v1=Venus
Baseline credits: USGS Astrogeology Science Center
Nomenclature taken from the Gazetteer of Planetary Nomenclature of the International Astronomical Union (IAU)