POSTER SESSION II: EFFUSIVE AND EXPLOSIVE VOLCANISM

6:00 p.m. Town Center Exhibit Area

POSTER LOCATION #311

The Fractal Dimension of Rima Sharp [#1921]

In this paper, we studied the fractal dimension of lunar rille (Rima Sharp) using the successive shift divider (SSD) method with nodes = 25, 50, and 100.

POSTER LOCATION #312

Exploring Meander Development in Planetary Sinuous Rilles [#1612]

We combine a model of supraglacial meander generation to a model of thermal erosion by turbulently flowing lava to simulate planetary sinuous rilles formation.

POSTER LOCATION #313

Morphometric Analysis of Valley Networks and Channels on Venus [#2814]

We present preliminary results of a quantitative morphometric analysis of Venusian channels as a prelude for comparison with channels on other planetary bodies.

POSTER LOCATION #314

Implications for Late Amazonian Magma Migration Derived from New Crater-Count Age Estimates of the Cerberus Channel Flood Lavas, Mars [#1543]

The westward migration of magma from the Olympus Mons/Tharsis region is inferred from new age estimates of the Cerberus channel flood lavas.

POSTER LOCATION #315

A Quantitative Approach to Venus Shield Field Stratigraphy [#2805]

We use a MATLAB GUI to determine the alignment of vents within clusters of shield volcanoes on Venus as an indicator of local stratigraphy.

POSTER LOCATION #316

Distribution of Small (<25 km) Volcanoes in Martian Northern Plains [#2399]

Classification and distribution of small (<25 km) volcanoes observed in the martian northern plains using high-resolution MOLA and CTX data.

POSTER LOCATION #317

A Pyroclastic Origin for Cones in Isidis Planitia: 2. Estimation of Runout Lengths and Preliminary Thermal Calculations [#2767]

We model a large pyroclastic flow to determine if the runout length and heat content of the resulting deposit can provide an origin for thumbprint terrain.

POSTER LOCATION #318

Pyroclastic Eruptions on Mercury: Insights into Eruption Mechanisms from Vent Morphology [#1178]

We assess the range of morphologies associated with mercurian pyroclastic vents, and suggest formation by dike-degassing throughout the history of Mercury.

POSTER LOCATION #319

JWST NIRISS Simulations and Analysis of Vulcanism on Io [#3005]

We present simulated JWST observations of volcanic eruptions on Jupiter’s innermost moon Io using Aperture Masking Interferometry (AMI) mode of JWST NIRISS.

POSTER LOCATION #320

Infrared Thermal Emission Lightcurve for Hot Spots on Io [#1361]

We synthesize an infrared lightcurve of the volcanic thermal emission expected from 242 hot spots for remote disk integrated observations of Io.