



3D MODEL PARAMETERS

Lunar Sample 67016,2: High-Resolution Precision Photography (HRPP) was captured on 2017:11.30:10 for Astromaterials 3D in the Lunar Sample Laboratory Facility at Johnson Space Center by Erika Blumenfeld. 3D reconstructions of HRPP were produced for Astromaterials 3D in the Image Science Analysis Group at Johnson Space Center by Joseph Aebersold using SFM software and photogrammetric principles.

HRPP Info:

- Camera: Hasselblad H4D-60; Lens: HC 120 II; Mega Pixels: 60; Photos: 240; Total Size: 80.5 GB
- Images were taken in rotation every 15-degrees on both hemispheres at 0, 15, 30, 45 and 60-degree elevations.

Full Resolution Model:

- 3D Mesh: Date: 2020:08:10; Processing time: 8 hours; Format: Wavefront Object (.obj); Faces: 498,570; Vertices: 249,285; Size: 150 MB
- Color Texture: Format: Tag Image File Format (.tif); Resolution: 4200 x 4200; Size: 117 MB; Mapping Format: Wavefront Material Template Library (.mtl)
- Scale: Units: Meters; Targets: 121; Bars: 3602; Total Error: .000371 meters

Low Resolution Model:

- 3D Mesh: Date: 2020:08:10; Processing time: 8 hours; Format: Wavefront Object (.obj); Faces: 100,000; Vertices: 50,000; Size: 9.76 MB
- Color Texture: Format: Joint Photographic Experts Group (.jpg); Resolution: 4200 x 4200; Size: 3.73 MB; Mapping Format: Wavefront Material Template Library (.mtl)
- Scale: Units: Meters; Targets: 121; Bars: 3602; Total Error: .000371 meters

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For a list of current publications to cite by the authors of Astromaterials 3D, please visit:

<https://ares.jsc.nasa.gov/astromaterials3d/faqs.htm#publications>

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