

All stacks mapped to polar stereographic projection at 86 m/pixel and maptrim'd to the following:

lat: 88.25 - 89.5 N

lon: 130 - 184 E

1. DEM (km)
2. Azimuth (degrees - orientation of crater wall): -180 - +180
3. Slope (degrees): 0 - 90
4. Maximum Incident Solar Flux ($W m^{-2}$)
5. Maximum Temperature (K) - All temperature and depth models are calculated over a two-year illumination cycle using MLA+SfS DEMs
6. Average Temperature (K)
7. Minimum Temperature (K)
8. Anthracene depth (m) - All stability depth models are calculated up to 2.5m beneath the surface. Negative values are thermally stable at the surface!
9. Coronene Depth (m)
10. Ice Depth (m)
11. Sulfur Depth (m)
12. Radar (radar3b - reflectance values)
13. EW1009029607B Simulation (All simulations: radiance received by MDIS - Intensity/Flux)
14. EW1009029608B Simulation
15. EW1010210689B Simulation
16. EW1010210690B Simulation
17. EW1010210679B Simulation
18. EW1010210690B Simulation
19. EW1009865005B (WAC-B broadband filter: all broadband images are DN values corrected for dark, smear, and non-linearity)
20. EW1010210679B
21. EW1010210690B

22. EW1025333800B

File cub names (used for cubeit):

run-DEM-final-Tolkien_86mpp_trim.cub

run-DEM-final-Tolkien_azim_86mpp_trim.cub

run-DEM-final-Tolkien_slp_86mpp_trim.cub

maxinflux_1h_Tolkien_SfS_86mpp_trim.cub

Tolkien_Tmax_86mpp_trim.cub

Tolkien_Tav_86mpp_trim.cub

Tolkien_Tmin_86mpp_trim.cub

Tolkien_Danth_86mpp_trim.cub

Tolkien_Dcor_86mpp_trim.cub

Tolkien_Dice_86mpp_trim.cub

Tolkien_Dsulf_86mpp_trim.cub

radar3b.map2_86mpp_Tolkientrim.cub

simulationMDIS_Tolkien_EW1009029607B_all_86mpp_trim.cub

simulationMDIS_Tolkien_EW1009029608B_all_86mpp_trim.cub

simulationMDIS_Tolkien_EW1010210689B_all_86mpp_trim.cub

simulationMDIS_Tolkien_EW1010210690B_all_86mpp_trim.cub

simulationMDIS_Tolkien_EW1010210679B_all_86mpp_trim.cub

simulationMDIS_Tolkien_EW1010210690B_all_86mpp_trim.cub

EW1009865005B_86mpp_trim_pad_trans0_darknorespo.cub

EW1010210679B_86mpp_trim_pad_trans0_darknorespo.cub

EW1010210690B_86mpp_trim_pad_trans0_darknorespo.cub

EW1025333800B_86mpp_trim_pad_trans0_darknorespo.cub