Josh Bandfield

If there’s one thing I know for certain…Josh would absolutely hate what I’m about to do

My Early Interactions with Josh

Atmospheric correction and surface spectral unit mapping using Thermal Emission Imaging System data

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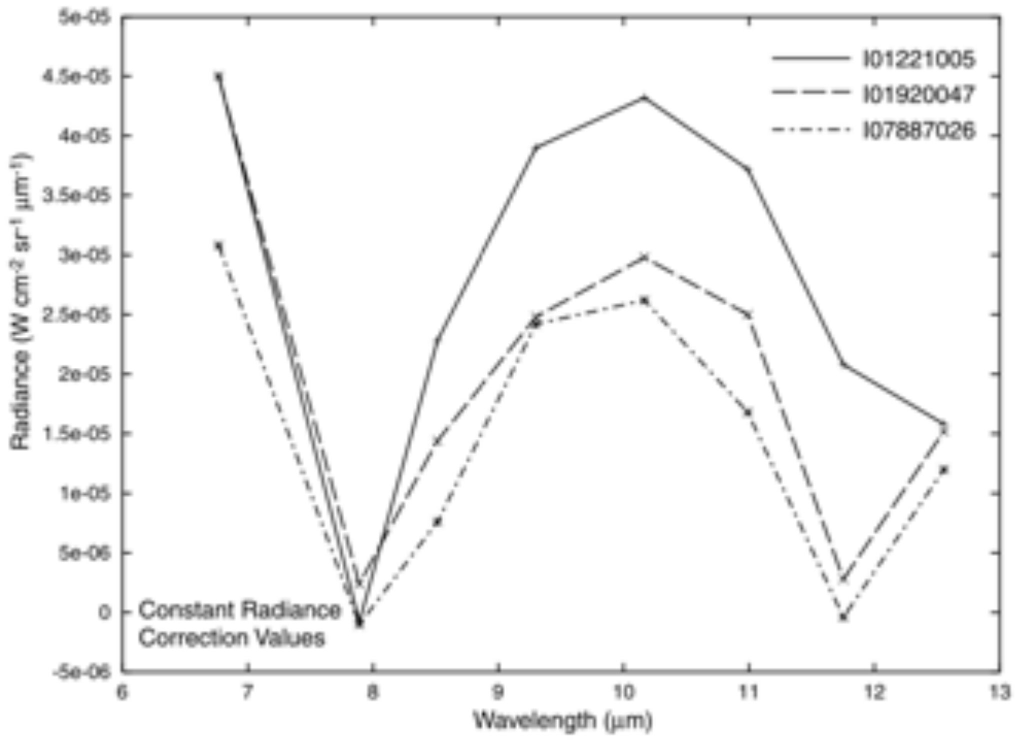

Figure 5. Retrieved constant radiance correction values for I01221005 (solid), I01920047 (dashed), and I07887026 (dash-dotted).

Slightly Later

Derivation of martian surface slope characteristics from directional thermal infrared radiometry

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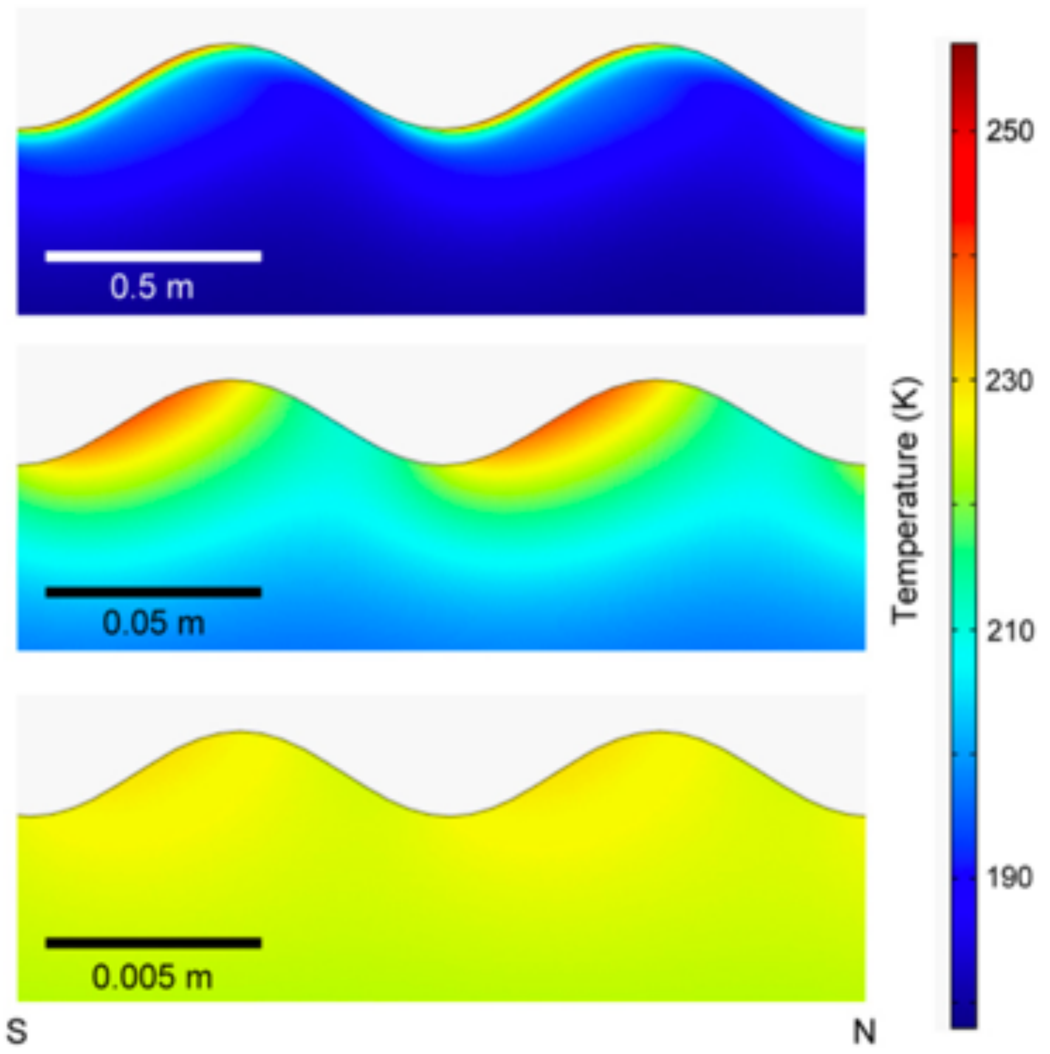

Fig. 3. Temperature cross sections at 1400 H of surfaces with a thermal inertia of 250 $J\,m^{-2}\,K^{-1}\,s^{-1/2}$. The surface features are essentially east–west trending linear grooves which maximizes the solar energy input to sunlit versus shaded surfaces. The wavelength of the features varies from 1 m (top) to 0.01 m (bottom). Surface temperature differences between the sunlit and shaded surfaces with the greatest slopes are listed in Table 1.


"Live"
from Mars

Josh was prolific!

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Our Last Co-Authored Paper

Widespread distribution of OH/H_2O on the lunar surface inferred from spectral data

Joshua L. Bandfield[1*], Michael J. Poston[2,5], Rachel L. Klima[3] and Christopher S. Edwards[4]

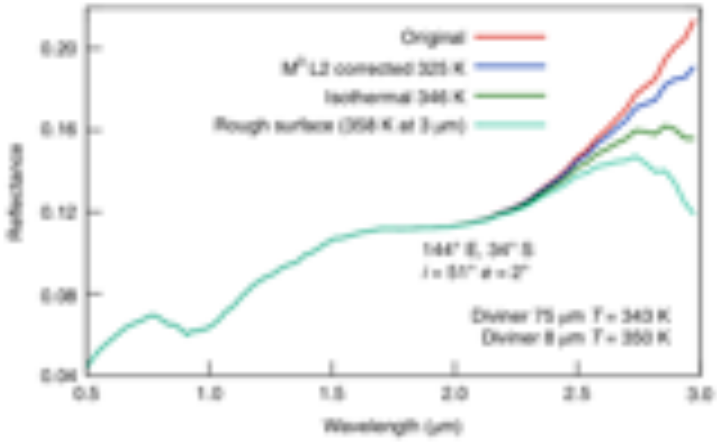
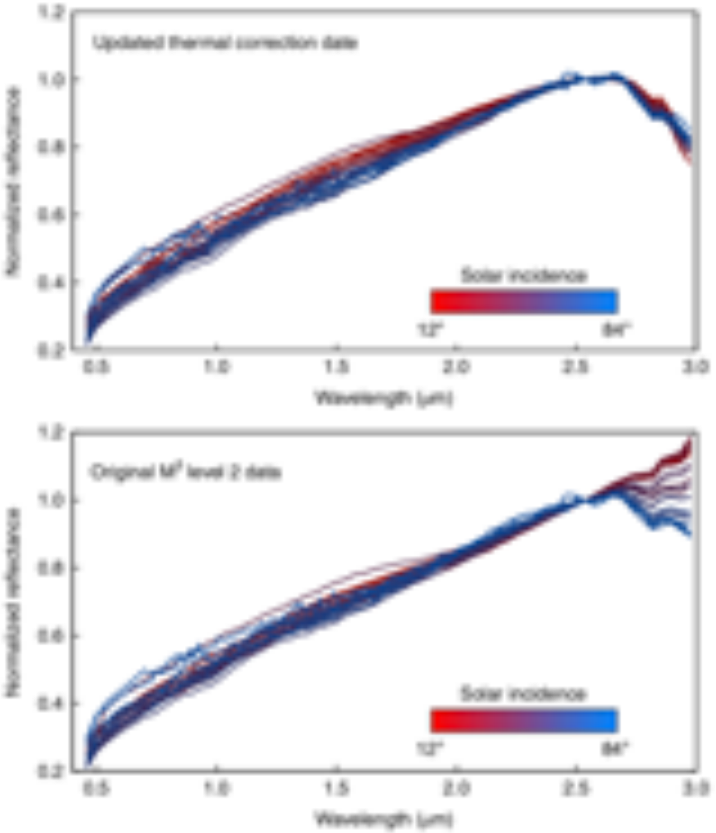


Fig. 1 | Example spectra showing the effects of various thermal corrections on the shape and depth of the 3μm absorption. The original uncorrected (red) and the M³ Level 2 thermally corrected (blue) spectra show little evidence for a 3μm absorption. Thermal corrections using radiative equilibrium, but neglecting surface roughness (green) predict surface temperatures comparable to LRO Diviner measurements, but fail to predict the expected higher brightness temperatures at shorter wavelengths present in both Diviner data and the roughness model (cyan). The data are from M³ image M3G20090125T172601.

because the spectrally broad thermal emission does not modify the



Not only was Josh a prolific scientist, but he had a huge secondary impact