Combatting Shadows

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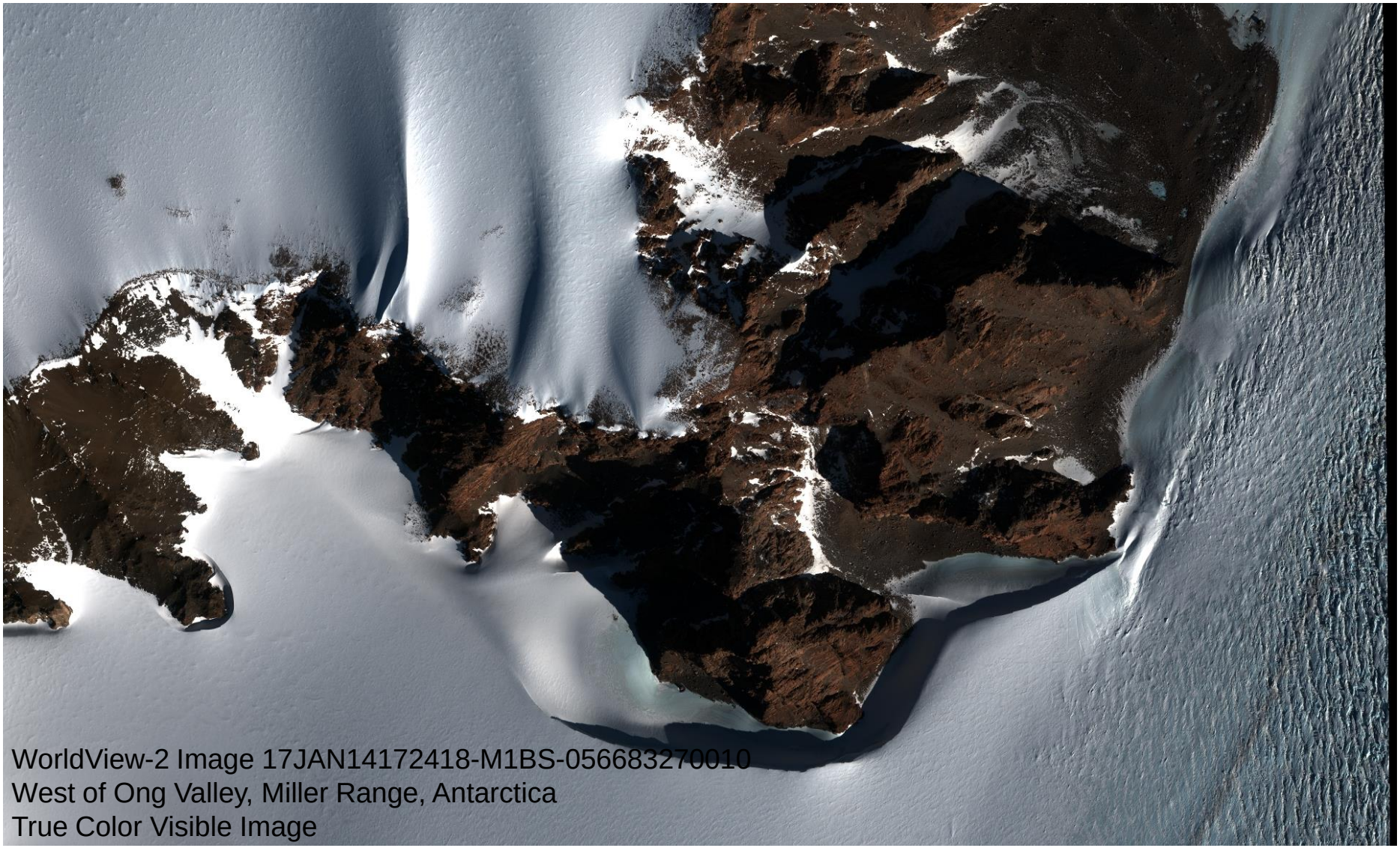
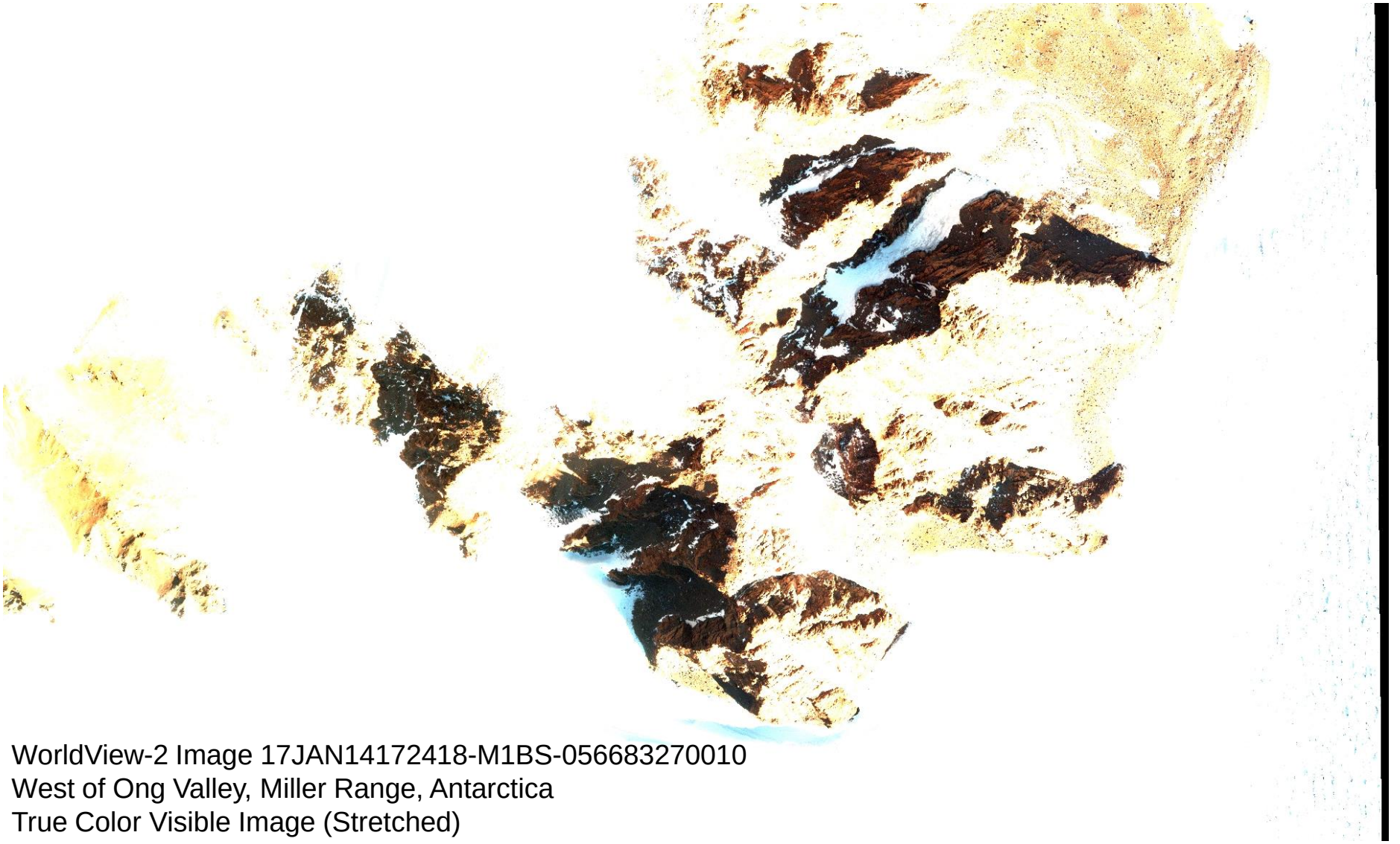
Demonstration of Problematic Shadows



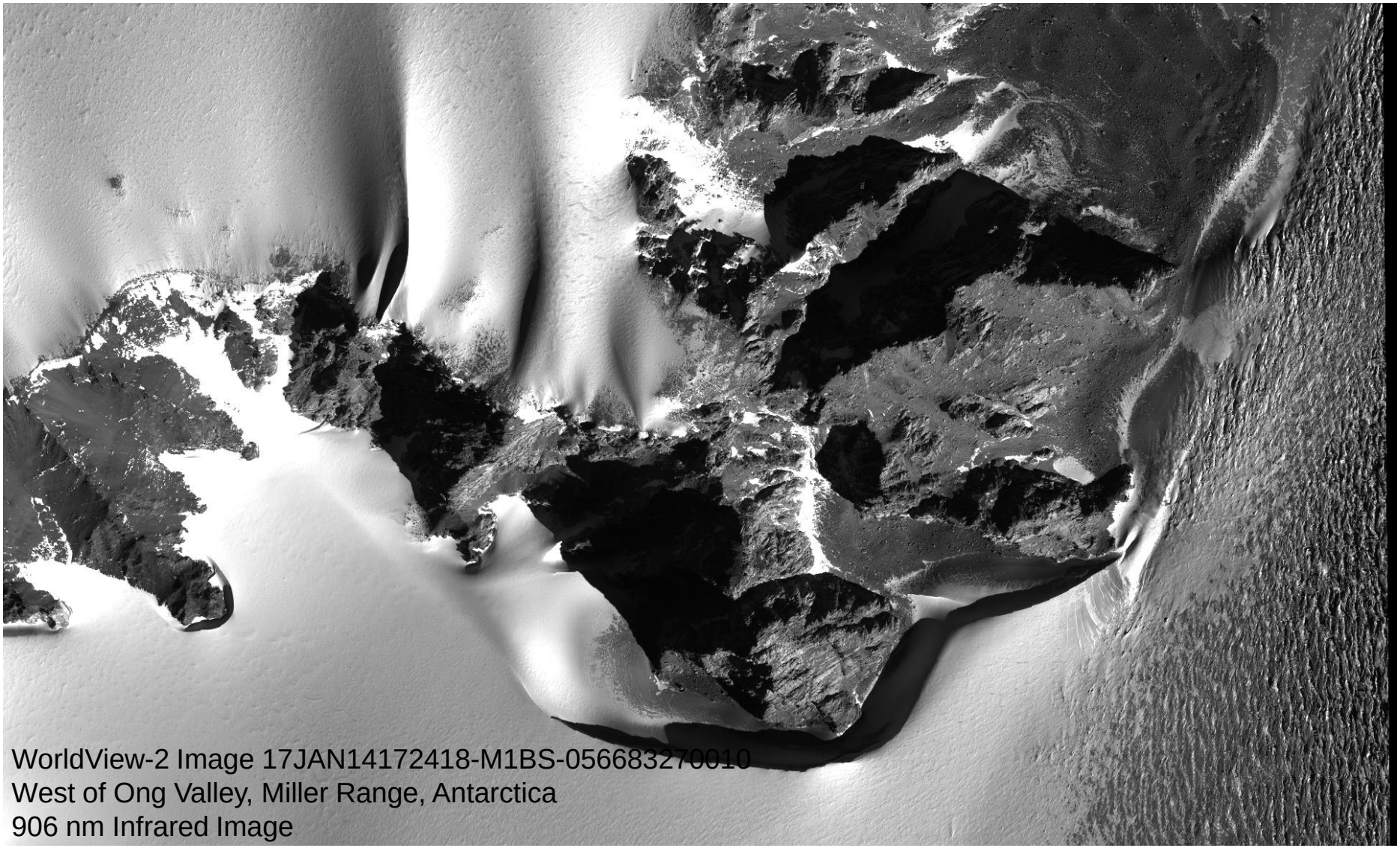
WorldView-2 Image 17JAN14172418-M1BS-056683270010
West of Ong Valley, Miller Range, Antarctica
True Color Visible Image

Demonstration of Problematic Shadows



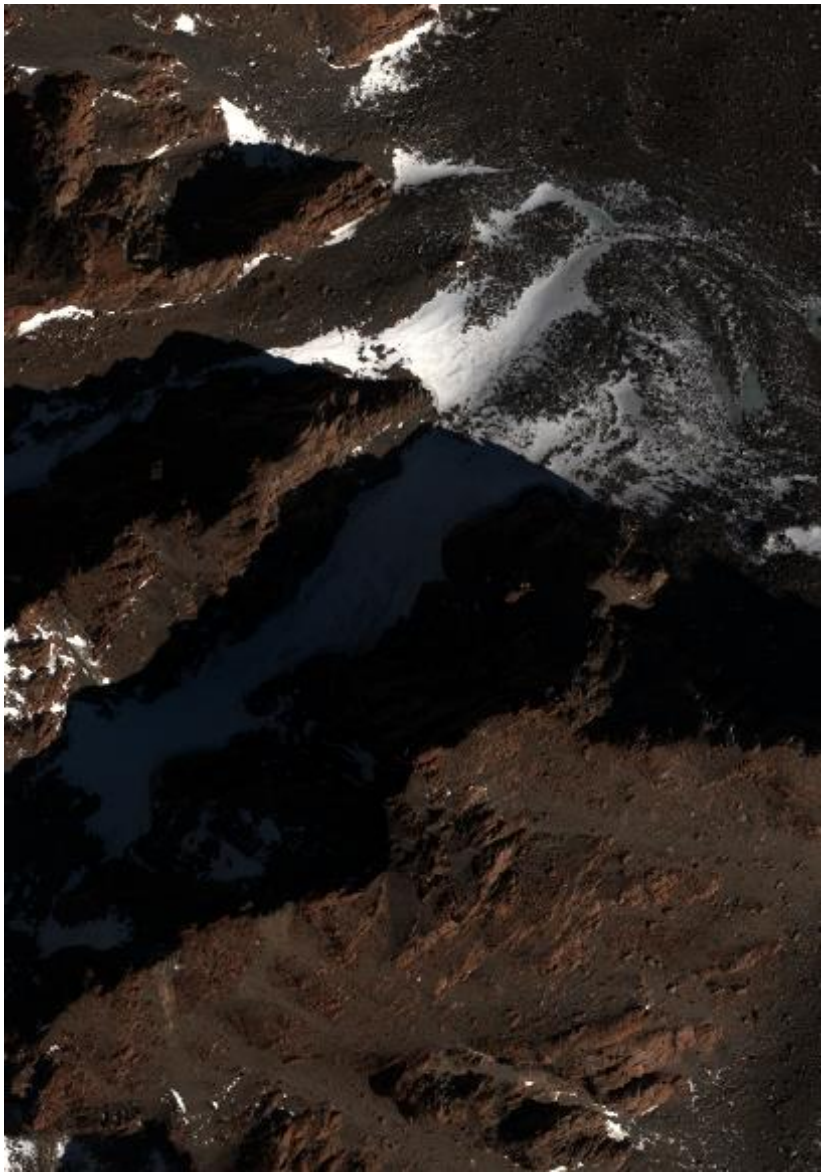
WorldView-2 Image 17JAN14172418-M1BS-056683270010
West of Ong Valley, Miller Range, Antarctica
True Color Visible Image (Stretched)

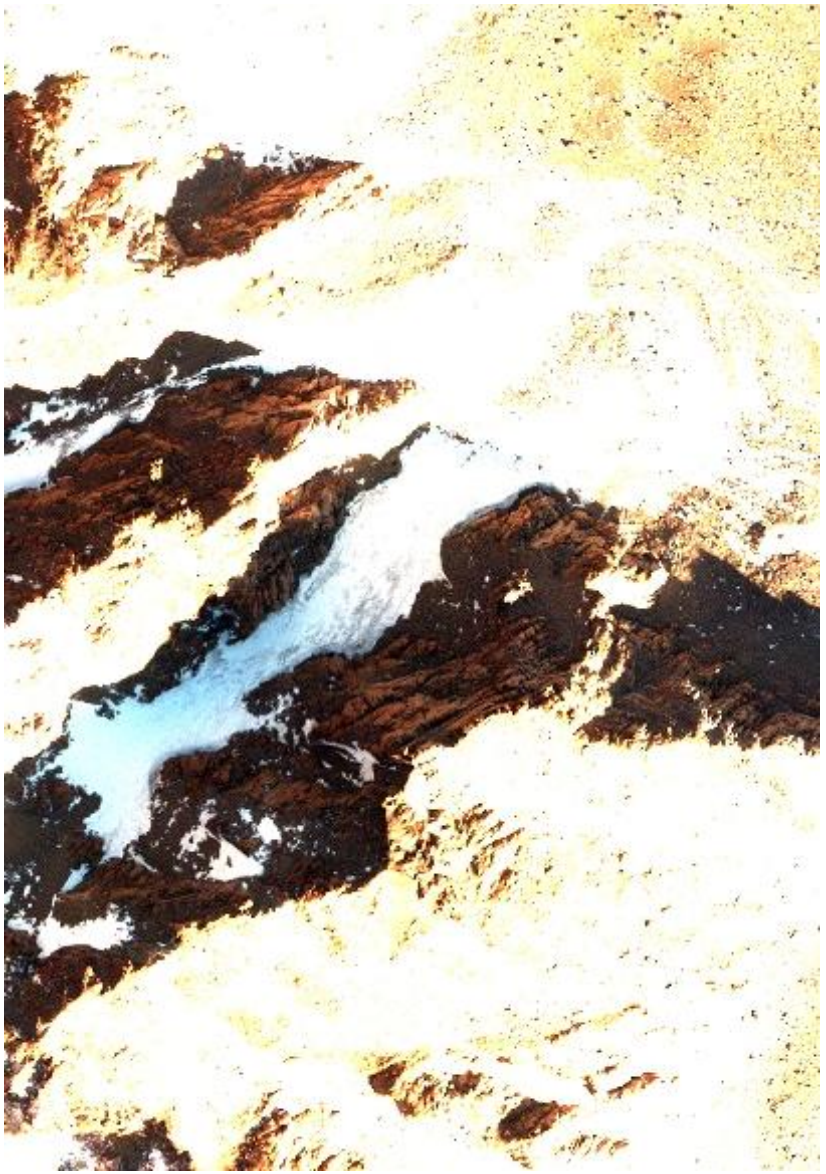
Demonstration of Problematic Shadows



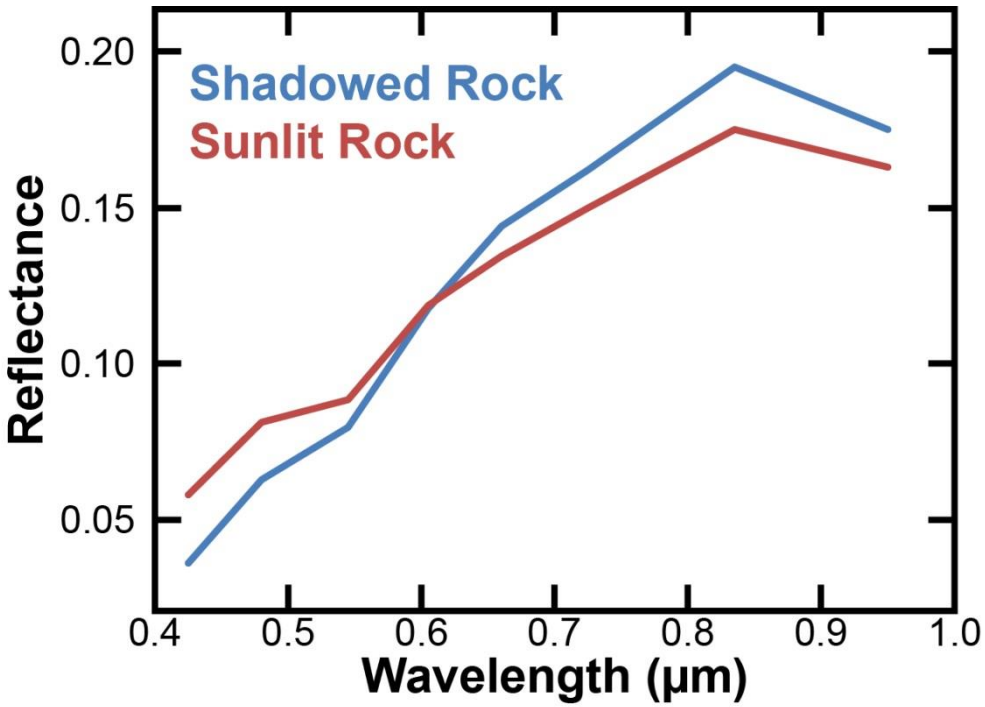
WorldView-2 Image 17JAN14172418-M1BS-056683270010
West of Ong Valley, Miller Range, Antarctica
906 nm Infrared Image

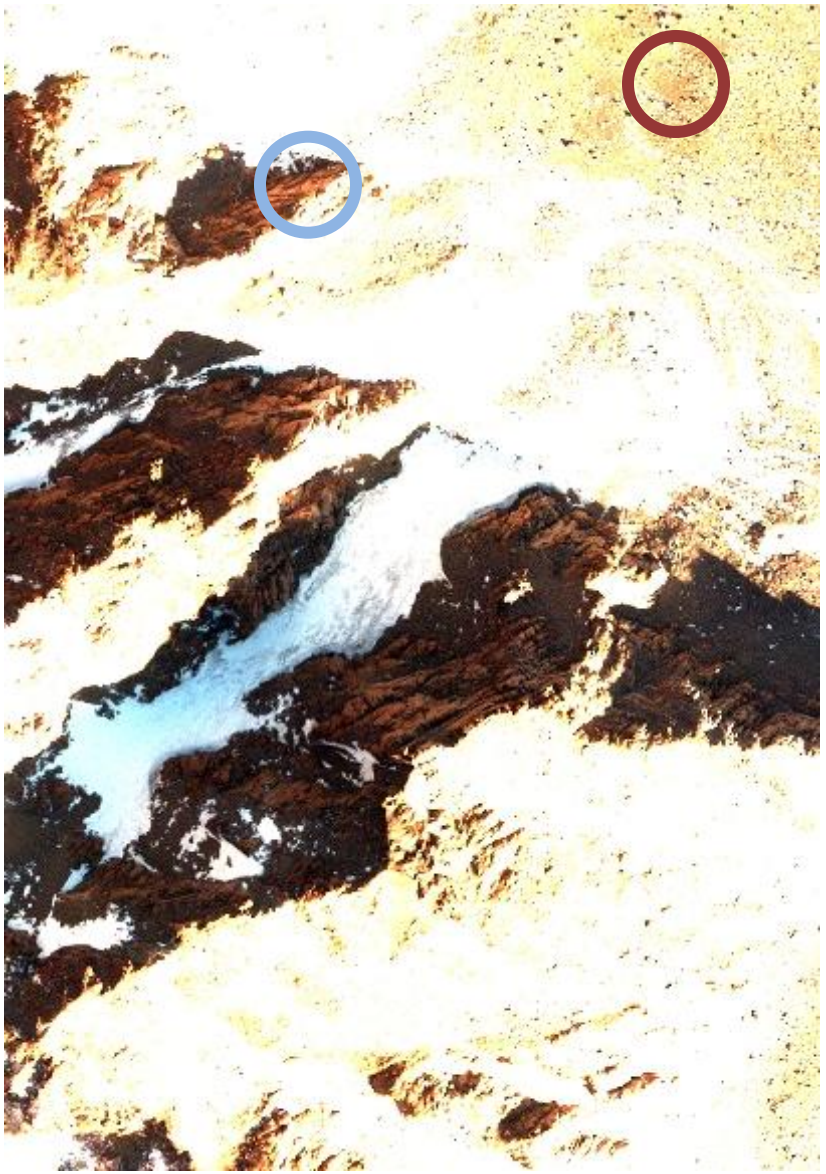
Demonstration of Problematic Shadows





Demonstration of Problematic Shadows





Possible Solutions

- **Continue to use spectral parameters and live with potential problems**
  - Exercise caution, potentially eliminating dark sunlit surfaces?
  - A more liberal approach, potentially incorporating shadows into the analyses?

- **Incorporate DEMs into the shadow removal procedure?**
  - Model shadows using topography and image metadata (solar azimuth + elevation)