Morphology of the polar ice caps from the THEMIS investigation

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THEMIS Science Team

Outline

- THEMIS Characteristics and Sensitivity
- South polar VIS/IR
- North pole VIS/IR
- Future directions.

THEMIS Characteristics

- bands
- THEMIS as spectrometer
  - "usability" for polar observations, note cold spots
  - T11, T20, T25, (Kieffer/Titus (TES/IRTM), Forget (IRTM))
- THEMIS as a imager
  - THEMIS context - MOC WA/Viking - THEMIS - MOC NA

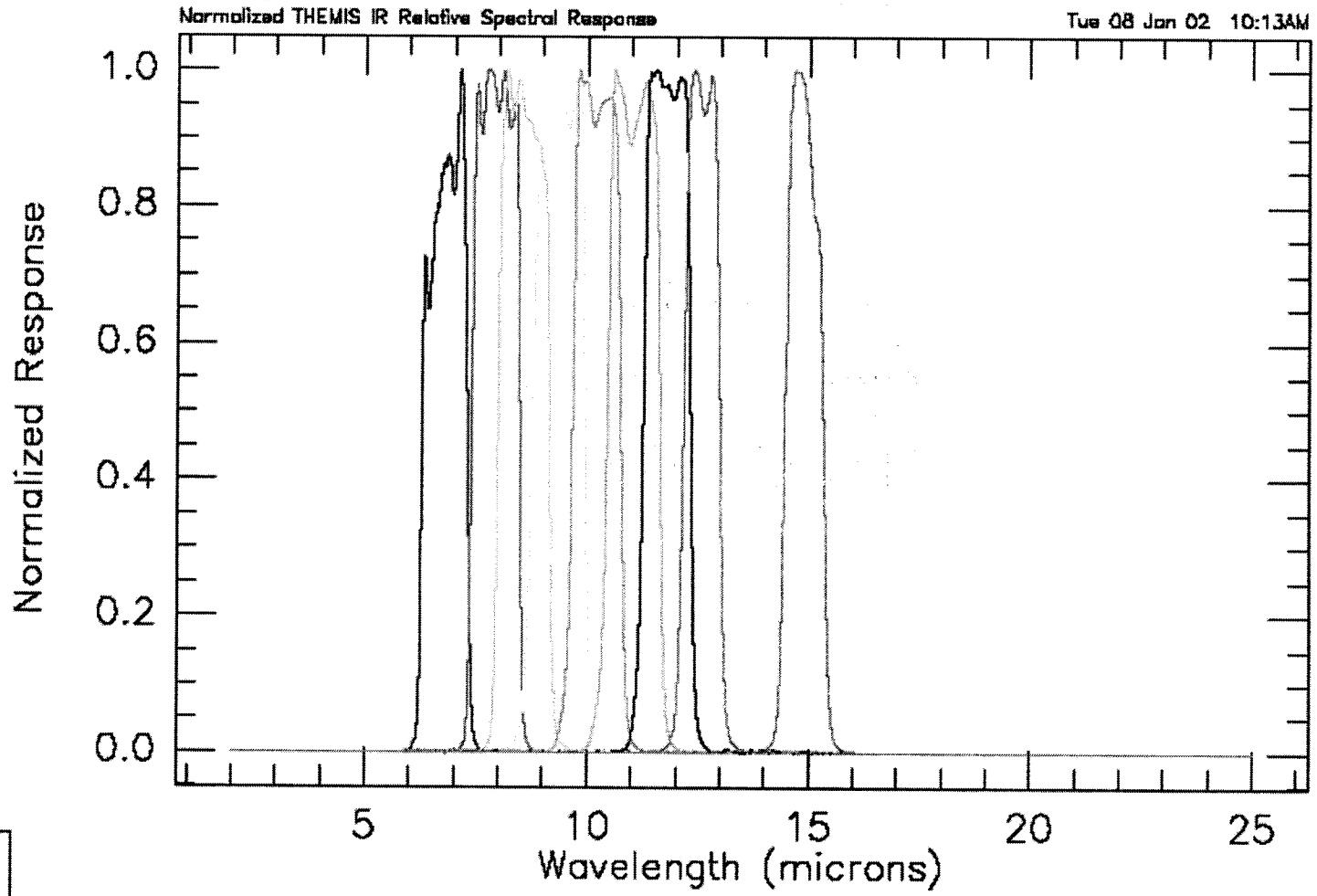
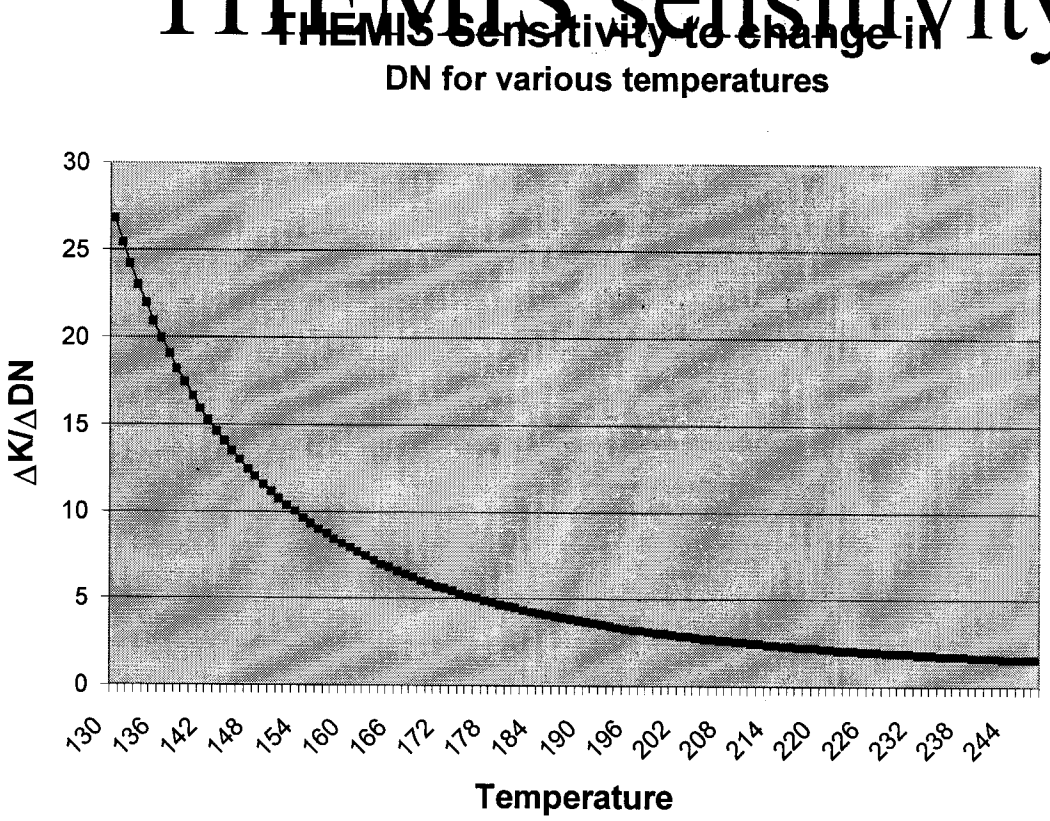


Figure 7-6

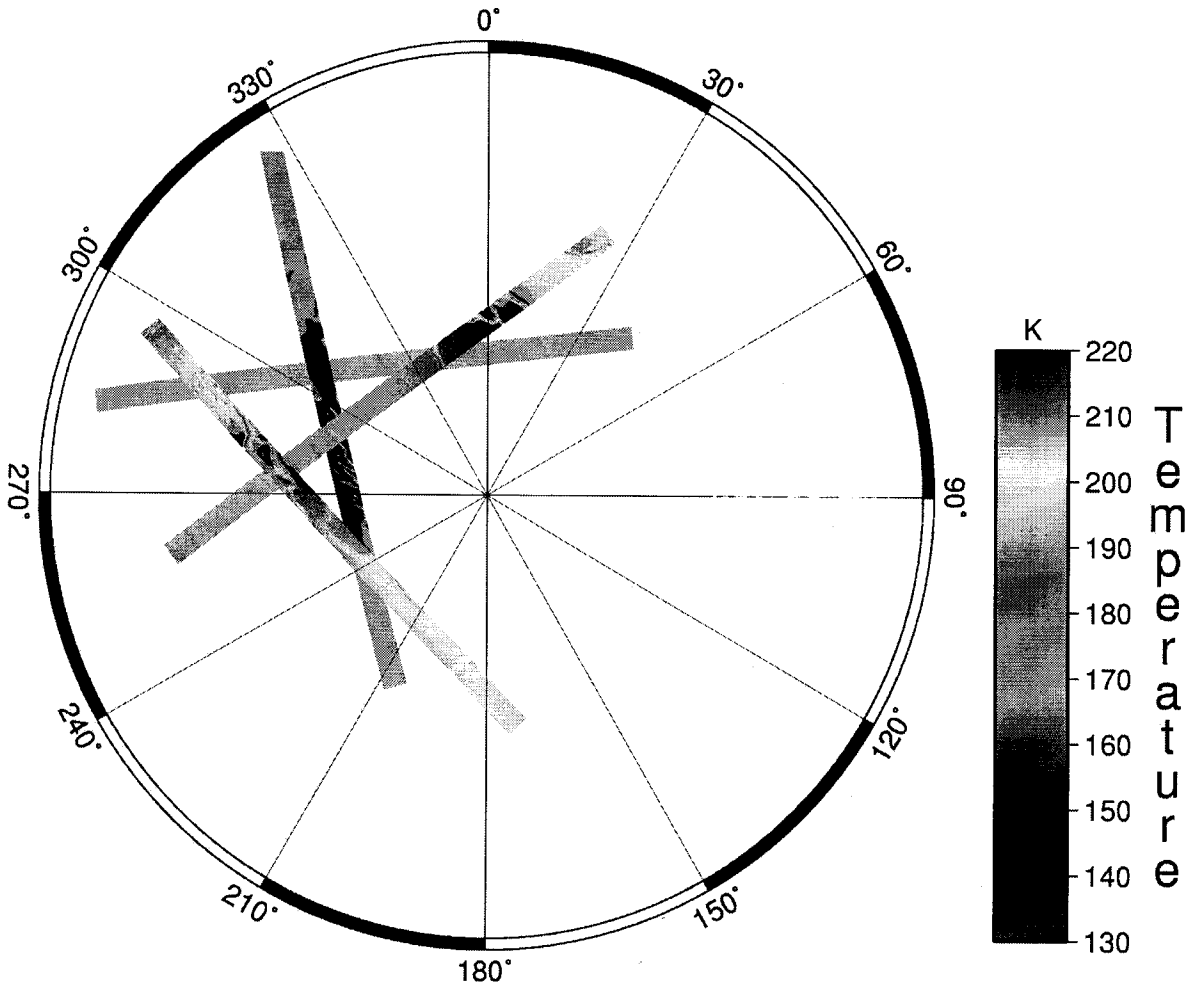
THEMIS Calibration report. Figure 7-6

THEMIS sensitivity



- Resume -> not very good for features in the CO2 ice, but does well for water ice and warmer stuff (such as troughs)

Mars South Pole



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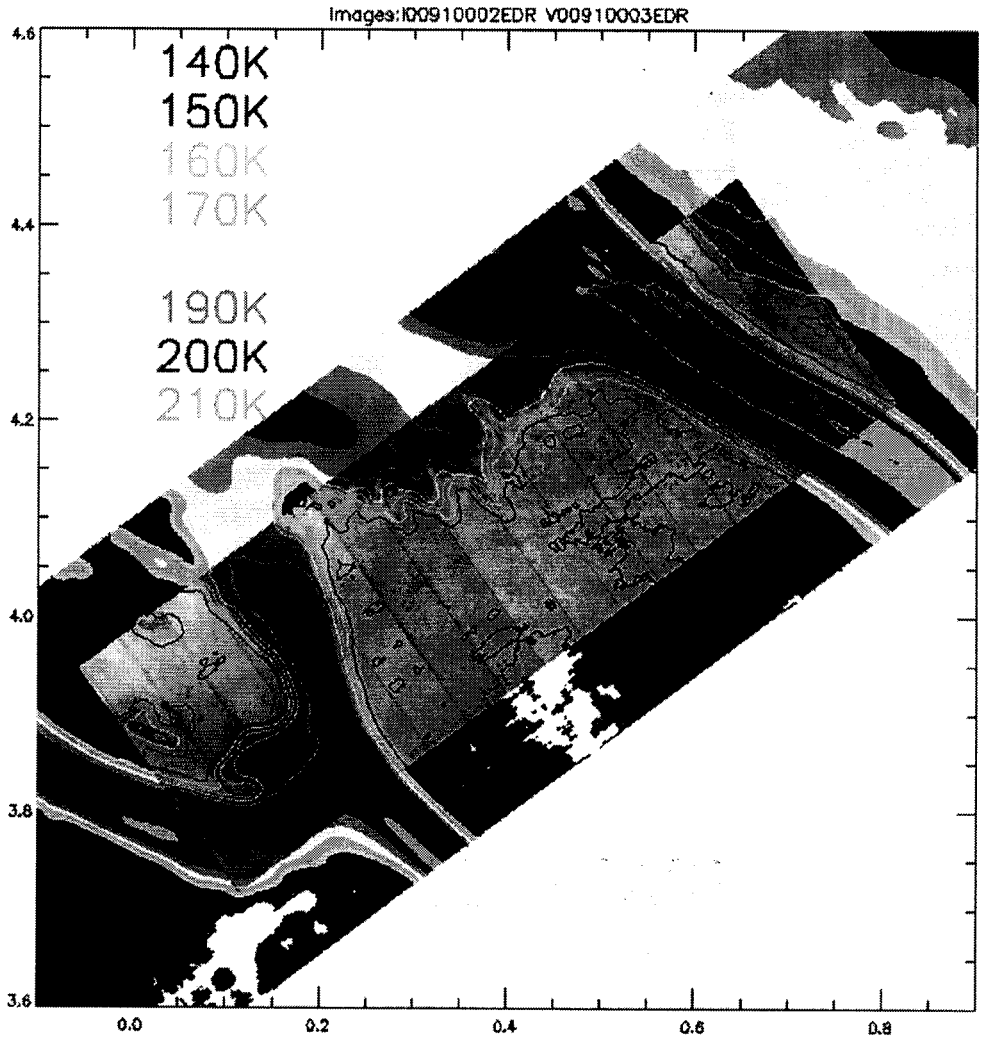
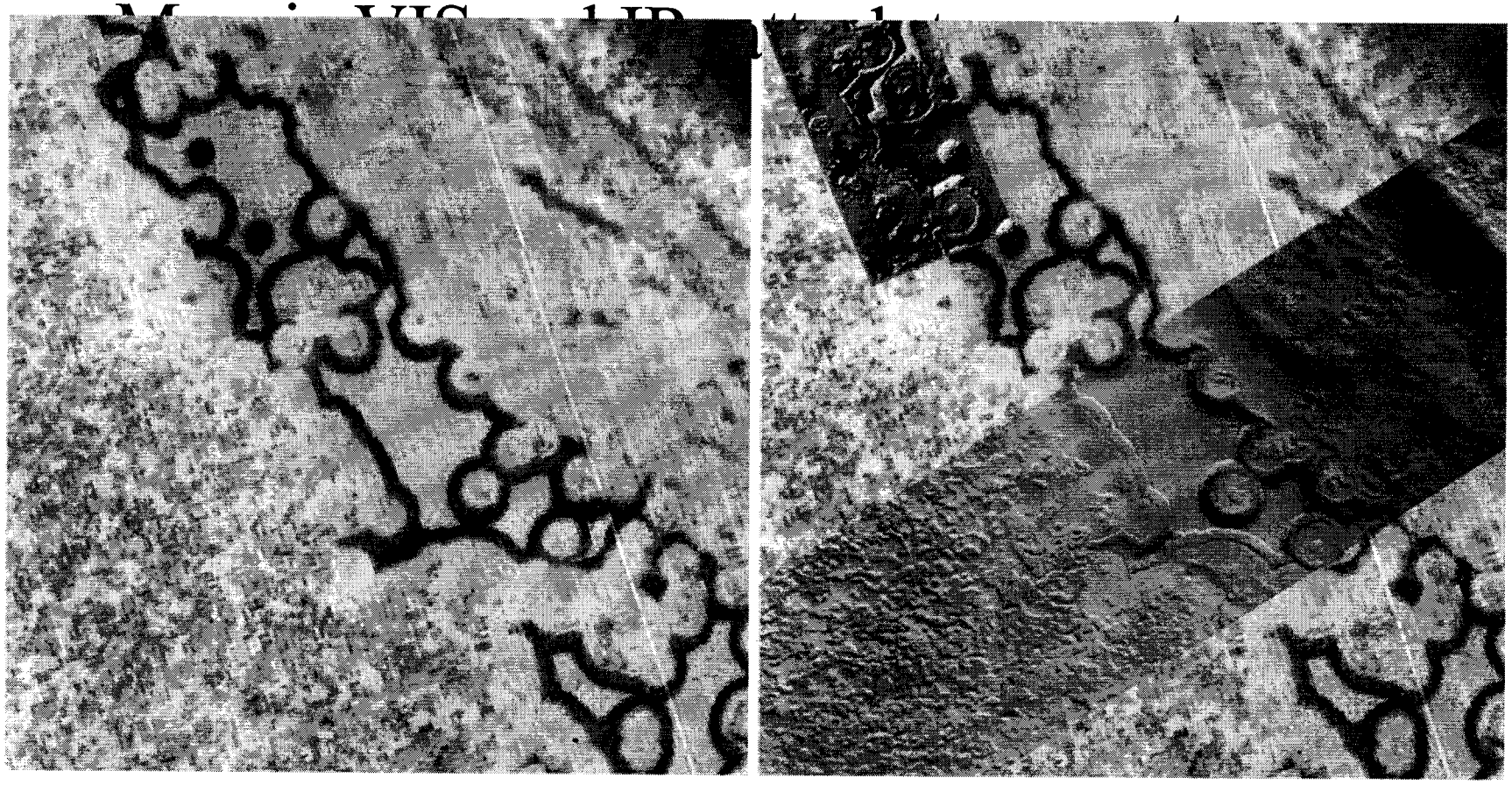
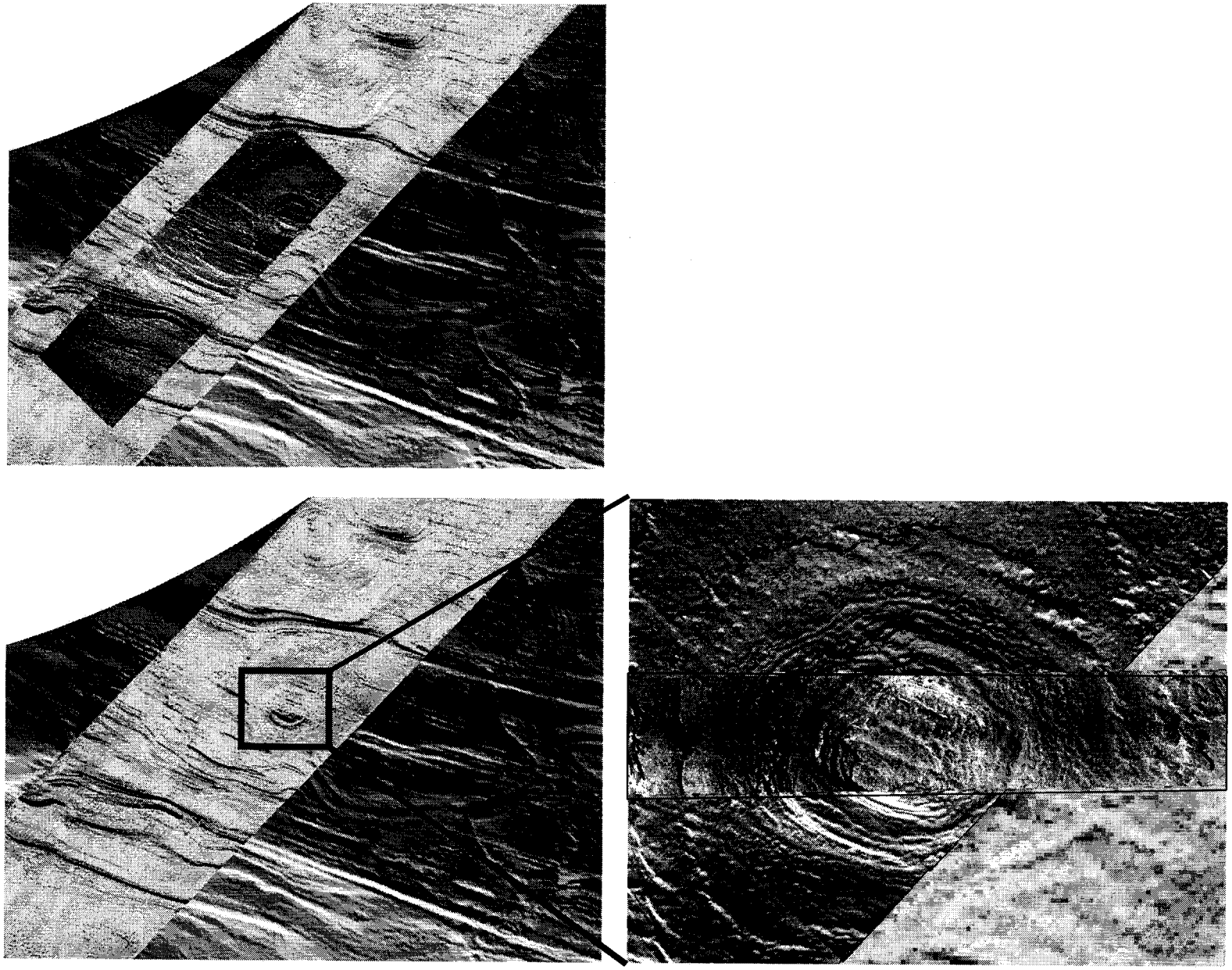
South pole - water ice

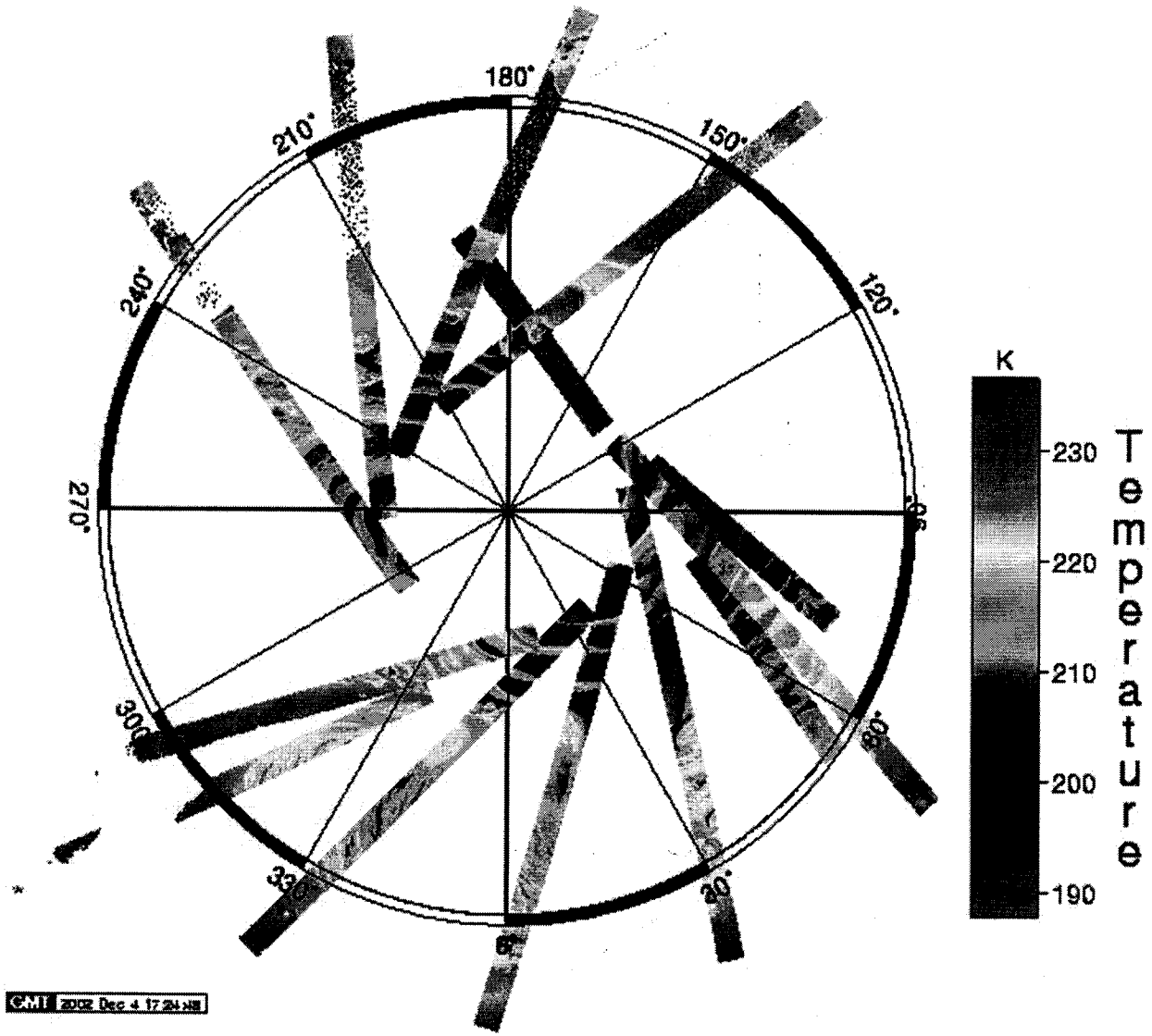


South pole - swiss cheese





Mars South Pole



North pole - VIS

- make VIS + IR figure.

Future directions.