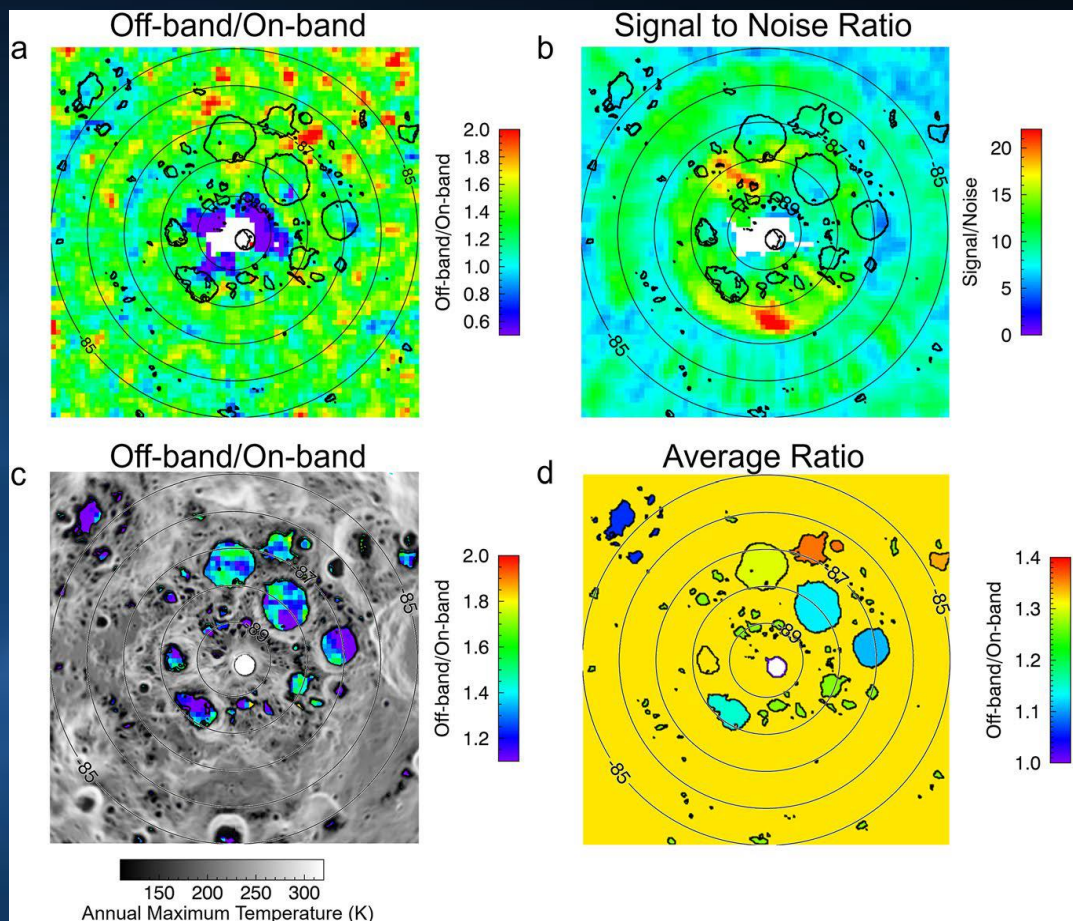


Ultraviolet Survey of Lunar South Pole for Condensed Volatile Molecules



Off-band/On-band albedo ratio of the lunar south pole which is used as an indicator of condensed volatiles, namely H_2O

LRO LAMP FUV observations of the lunar south pole cold traps support the presence of condensed H_2O (water ice) populations.

- A new analysis of Lyman Alpha Mapping Project (LAMP) south pole measurements improves the spectral resolution to 2-nm and incorporates additional years of acquisitions.
- Far-ultraviolet (FUV) band ratios within cold traps are consistent with a small amount of H_2O (0.9-4.9 %wt.) intimately mixed with regolith, and increased porosity within cold traps.
- This initial analysis of an improved LAMP spectral map data set provides the foundation for investigating additional volatile species.