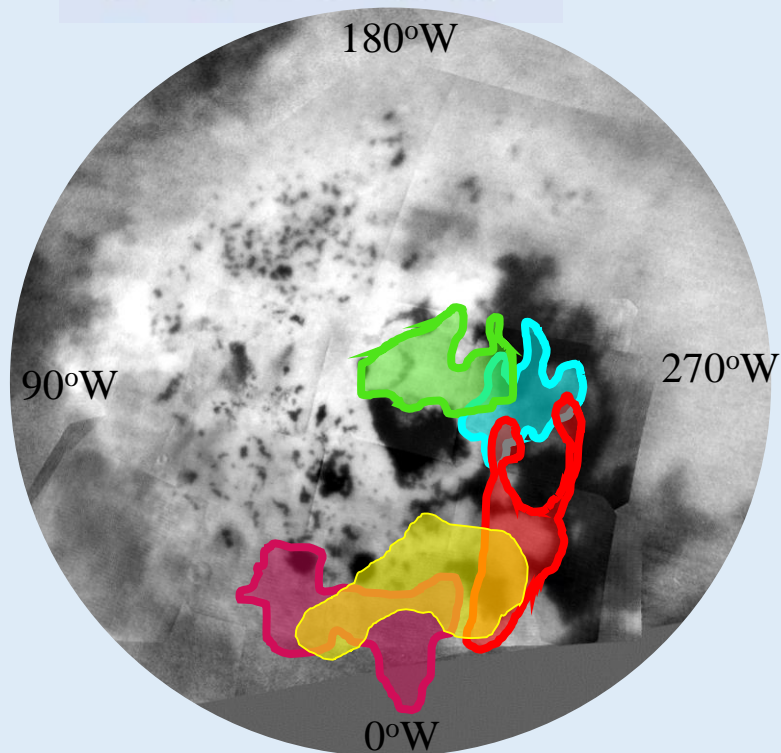


Titan's north pole: cold, wet, and bright



- We observe bright areas that we call Bright Ephemeral Features (BEF) on Titan's north pole that appear, disappear, and shift from flyby to flyby using the *Cassini* VIMS (Visual and Infrared Mapping Spectrometer) data.
- These bright areas are broad specular reflections that overlay large (greater than the surface area of Lake Superior) solid surfaces, and are always accompanied by specular reflections.
- Our analysis suggests the BEFs could be recently rain-wetted regions that reflect brightly at suitable observation geometries or near-surface fogs caused by precipitation.

Up : extent of Bright Ephemeral Features on a polar stereo ISS (Imaging Science Subsystem) map of Titan's north pole. Down : Timeline of the BEFs observed

Image taken at University of Idaho parking : orange arrow shows specular reflection from a car's back windshield while yellow arrow shows the broad specular reflection aka wet-sidewalk effect.

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