

Kunio Sayanagi, PI, Hampton University Robert Dillman, Lead Engineer Co-I, LaRC David Atkinson, Science Co-I, JPL Amy Simon, Science Co-I, GSFC Michael H. Wong, Science Co-I, UC Berkeley

Tom Spilker, Mission Architecture Co-I Sarag Saikia, Mission Architecture Co-I, Purdue University Jing Li, Science Collaborator, NASA Ames NASA LaRC Engineering Design Studio

HAMPTON

NASA Langley PURDUE











Notional Payload

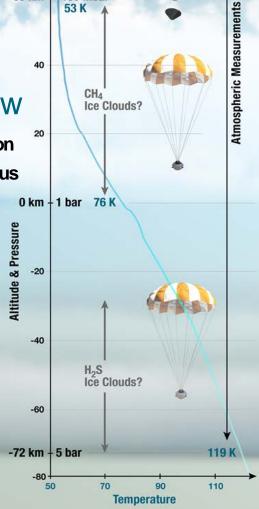
Atmospheric Structure Instrument: Measure stratification NanoChem: Detect cloud-forming molecules Ultra-Stable Oscillator: Measure wind speeds

Additional payload studies: Helium Abundance Detector Mass Spectrometer for isotopic ratios

Notional Mission Overview

Add SNAP to Uranus Orbiter and Probe Mission Orbiter delivers Main Probe and SNAP to Uranus

- + Probes enter summer & winter hemispheres
- + Parachute Descent
- + Detect Seasonal Difference
- + Sample Two Cloud Layers
- + Send data to Orbiter
- + Orbiter relays data to Earth



50 mbar

53 K

CH₄

Ice Clouds?

Atmospheric Entry

Parachute 4 8 1









