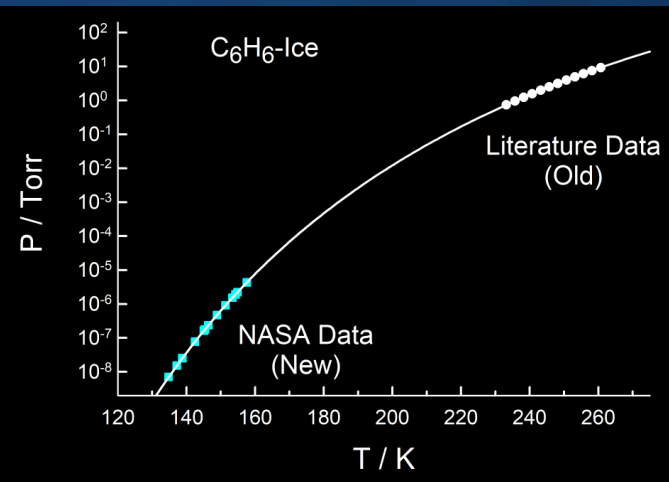


Titan, as seen by the Cassini spacecraft

NASA's Cassini mission found benzene crystals in the atmosphere of Titan, the largest moon of Saturn. The crystals' formation depends on solid benzene's vapor pressure, which is poorly known.

- Vapor pressures of crystalline benzene have been measured in the past, but near 0 °C, far warmer than Titan's atmosphere.
- Accurate analyses of spacecraft results requires vapor-pressure data under -123 °C. We recently have completed such measurements.
- Our new results are Titan relevant. They suggest a higher altitude for crystal formation, and a smaller size for the resulting crystals. Our results also allow a smooth connection to be made to the older data. Also important is that the expertise and technology for this project are now in place for other NASA mission-related science.



Points at the lower-left are the new Titan-relevant measurements