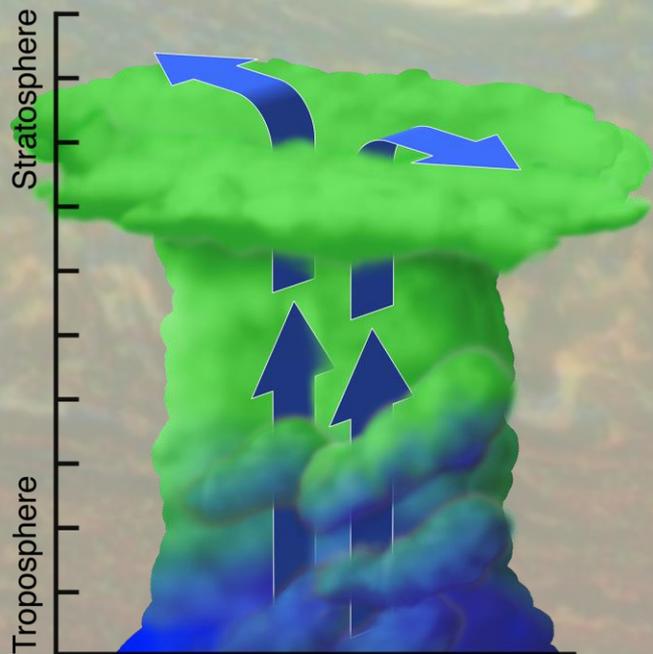
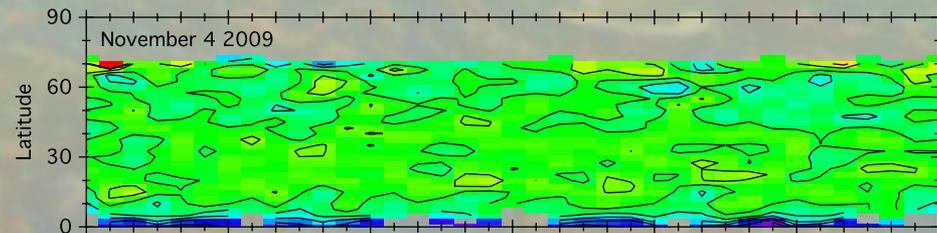


Saturn Storm Serves Up Two “Flavors” of Hydrogen

- A new study of temperature and composition changes shows that air was lofted more than 200 km (120 miles) higher by powerful convective forces during Saturn’s massive storm in 2010-2011 (background image).
- This confirms earlier evidence of powerful convection in Saturn’s atmosphere, revealed by the presence of water ice within storm clouds. Water ice normally resides at the level where water condenses, 200 km deep.
- Cassini used infrared measurements to find a significant change in the “flavor” of hydrogen gas, with deeper *ortho*-rich hydrogen, usually found deeper in the atmosphere (shown in blue, below) replacing the higher altitude *para*-rich “flavor” (green).
- These results inform us about complexity in large-scale storms in giant planet atmospheres.



Before Storm



After Storm

