Sensitive to Jupiter's stratospheric temperatures, these infrared images were recorded by the Cooled Mid-Infrared Camera and Spectrograph (COMICS) at the Subaru Telescope on the summit of Mauna Kea, Hawaii. Areas of the atmosphere that are more yellow and red indicate the hotter regions. Aurora produce enhanced and variable heating at Jupiter's poles. The heating occurs when the magnetosphere and the solar wind interact and deposit energy into Jupiter's atmosphere. Images were captured less than a day apart, from Jan. 11-12, 2017, and illustrate how quickly the atmosphere varied in response to the solar wind.