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First results from the infrared Juno spectral/imager JIRAM at Jupiter

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JIRAM, the Jovian InfraRed Auroral Mapper on board Juno, is equipped with an infrared camera and a spectrometer working in the spectral range 2-5 μm. The primary scientific objectives of the instrument are the study of the infrared aurora, the concentrations of some atmospheric compounds like water, ammonia and phosphine in the Jupiter troposphere and, in particular, in the hot spots and below the cloud deck. Secondary JIRAM objectives are the study of Jupiter's clouds and, to some extent, the dynamics of the atmosphere.
So far the instrument was able to get its observations during the first fly-by (PJ1) when JIRAM was operating. Results from data collected during PJ1 about auroras and atmosphere will be presented. We will also show data from the PJ4 pass if the fly-by, which will take place in February, will be successful. A complete coverage of the planet will be obtained after PJ4.