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Recent results from the imagery of Juno's Stellar Reference Unit

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The Juno Mission has recast its spacecraft engineering star camera as a visible wavelength science imager. Developed and primarily used to support onboard attitude determination, Juno's Stellar Reference Unit (SRU) has been put to use as an in situ high energy particle detector for profiling Jupiter's radiation belts and as a low light sensitive camera for exploring multiple phenomena and features of the Jovian system. Juno's unprecedented polar orbit and closest approach of ~4000 km have yielded high resolution SRU imagery of Jupiter's lightning and aurorae from as little as 50,000 km from the 1 bar level and unique Jovian dust ring and satellite images. We will present recent SRU results and discuss the implications for Jupiter's atmosphere that stem from the SRU lightning observations.