JunoCam at PJ57: Part II: Jupiter

John Rogers (BAA) (2024 March 4)

Figures (small copies; full-size figures are in ZIP file):

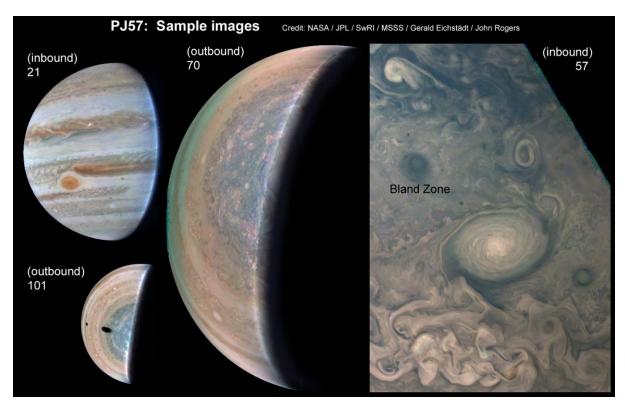


Figure 1. A selection of images from beginning to end of the Jupiter flyby. All processed by Gerald Eichstädt, contrast enhanced by JHR. *Image 21:* GRS.

Image 57 (detail): the large long-lived AWO on the N edge of the N5 domain (north is up). Image 70: first image after perijove, looking down on the south pole; note the dense pattern of haze bands visible on the terminator. The blue-green area is due to saturation as this is one of the outbound images given longer exposure in order to improve terminator detail. Image 101: Final image, including shadows of Europa and Ganymede.

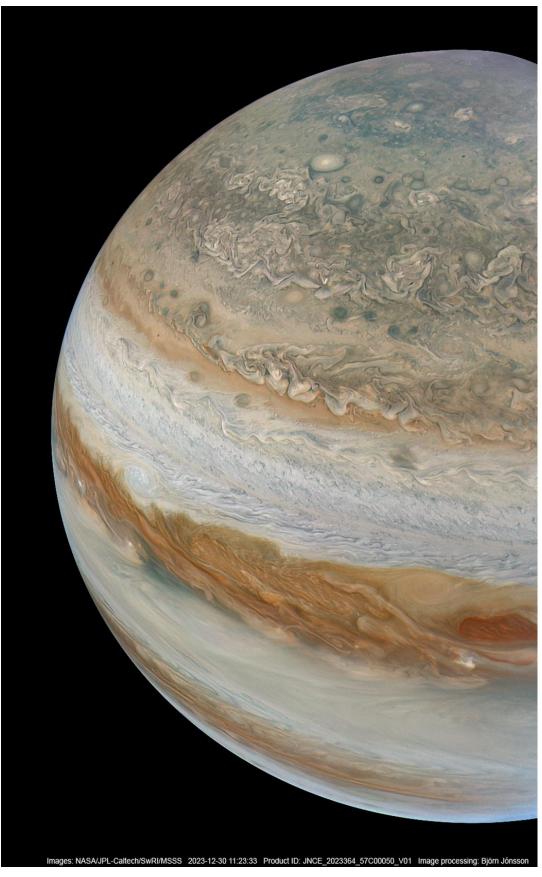


Figure 2. Image 50, processed by Björn Jónsson (with sharpening), showing important features in the NEB. (For a similar image that is unsharpened and labelled, see our 2023/24 *Report no.4.*)

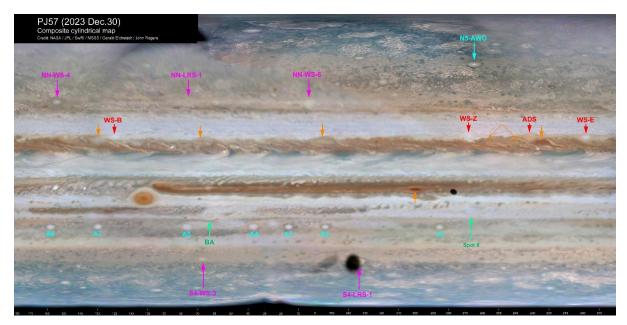


Figure 3. Global map from the PJ57 images, made by Gerald Eichstädt. This is mainly from inbound images, except the high southern latitudes from outbound images (including the shadow of Ganymede). Long-lived features are labelled; an unlabelled version is provided in the ZIP file. Orange arrows indicate barges, in the NEB and SEB, or faded barges.

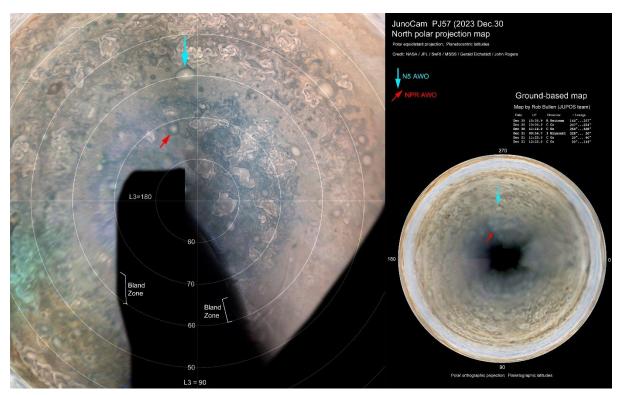


Figure 4. North polar projection maps of the JunoCam and ground-based images. The best match between them is with Chris Go's images (L3 207-328) taken at the same time as Juno's approach.

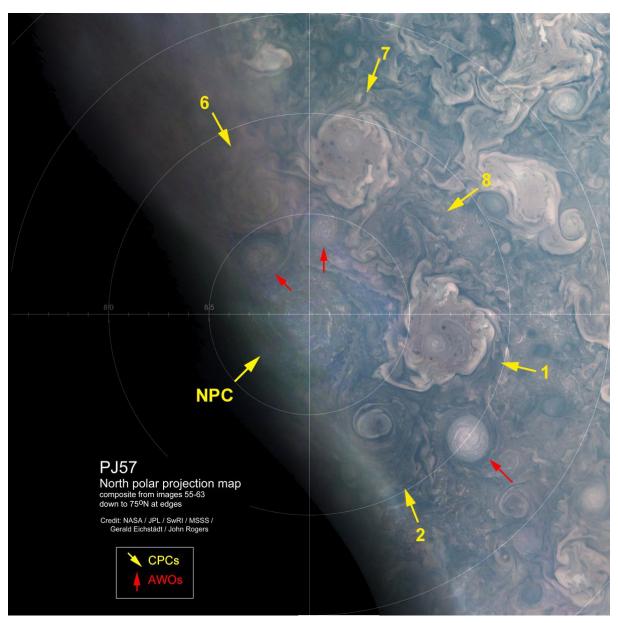


Figure 5. North polar projection map down to 75°N showing the circumpolar cyclones (CPCs) and three AWOs (red arrows). This copy is at reduced resolution.



Figure 6. Excerpt from the north polar map at full resolution, showing CPC-1 and one AWO, from images 60 & 62.



Figure 7. South polar projection map (Gerald Eichstädt's automated assembly.)

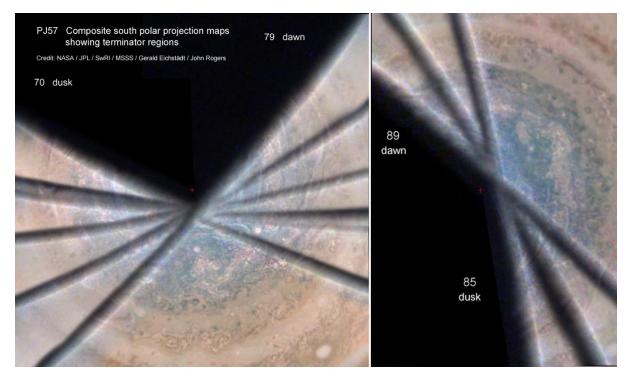


Figure 8. Composites of south polar projection maps emphasising the terminator regions, to show elevated haze structures.

Figure 9. Three south polar projection maps showing different aspects of the Long Band under different lighting. Arrows indicate its left and right portions. The central panel is from Figure 8.

