

JunoCam at Perijove-40: What the pictures show

John Rogers (BAA) (2022 March 16)

Figures (miniature copies)

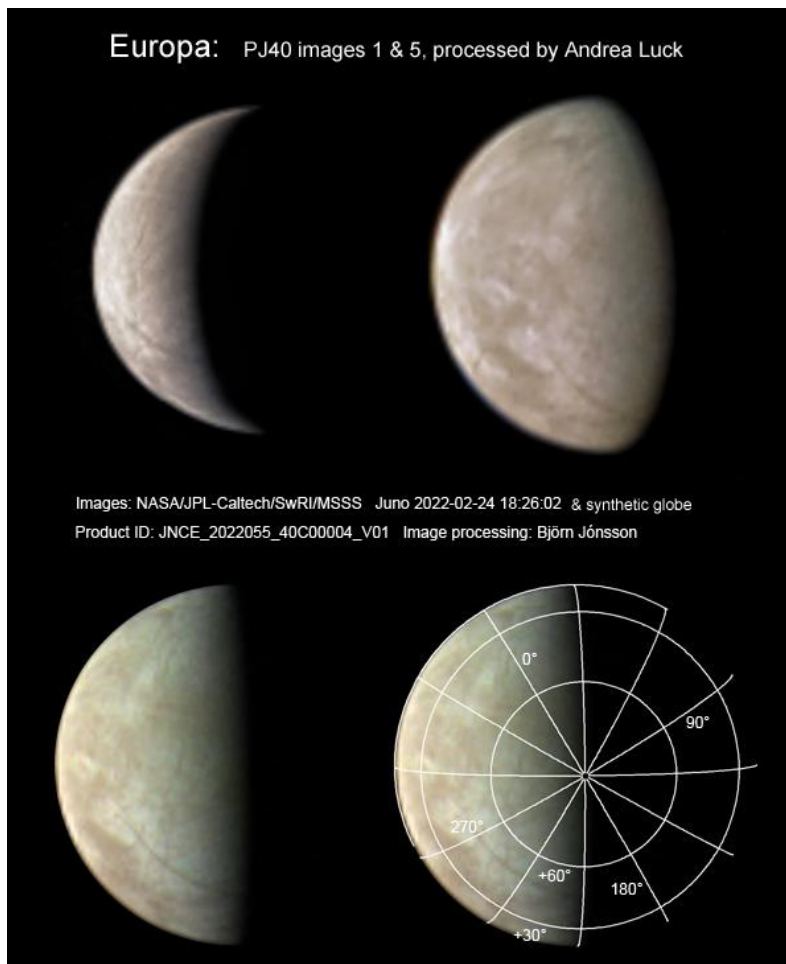


Figure 1: Europa: images processed by Andrea Luck and Björn Jónsson, from the JunoCam web site.

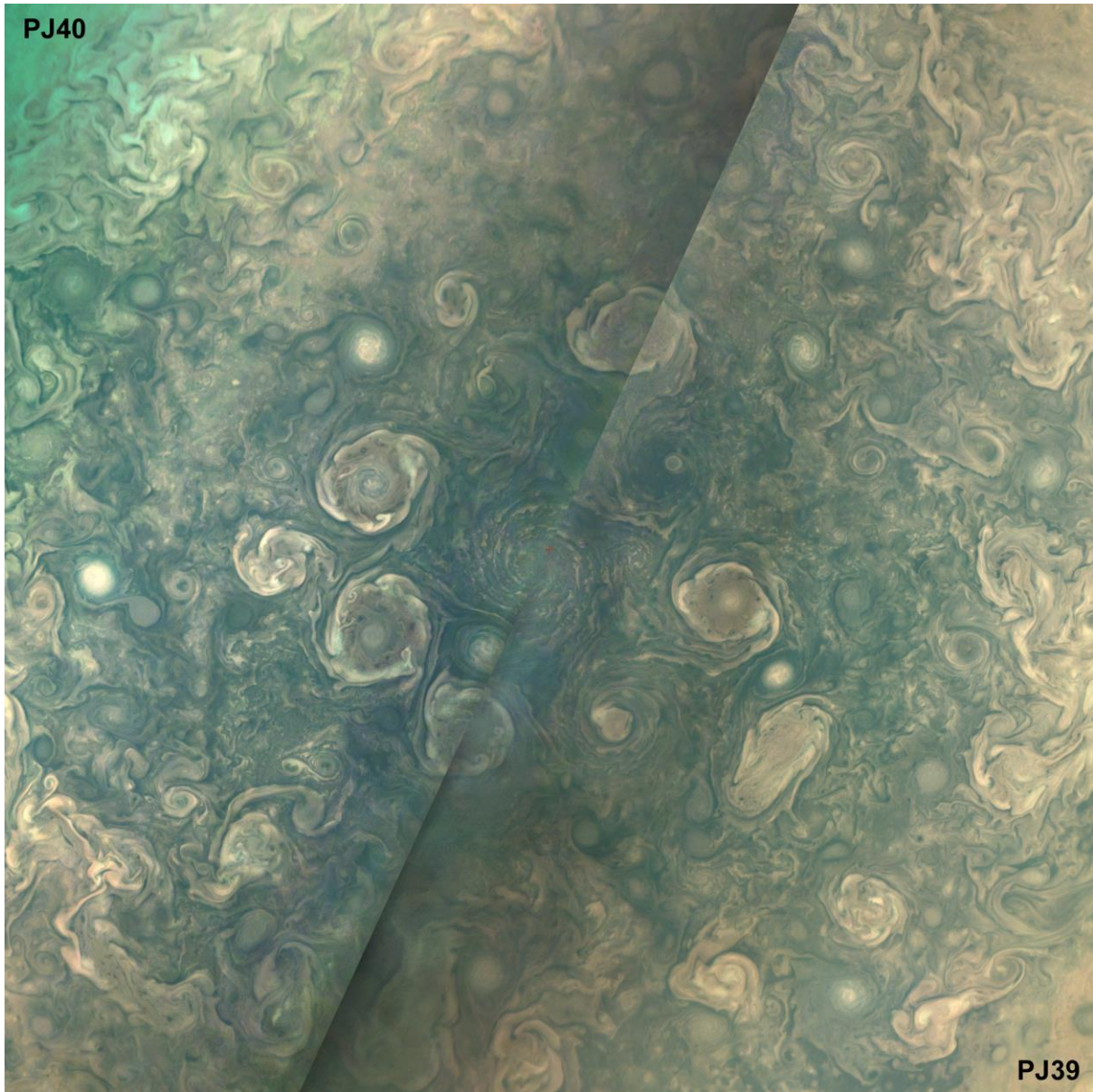


Figure 2: North polar projection map (down to 70°N at edges) from our PJ39 & PJ40 maps.

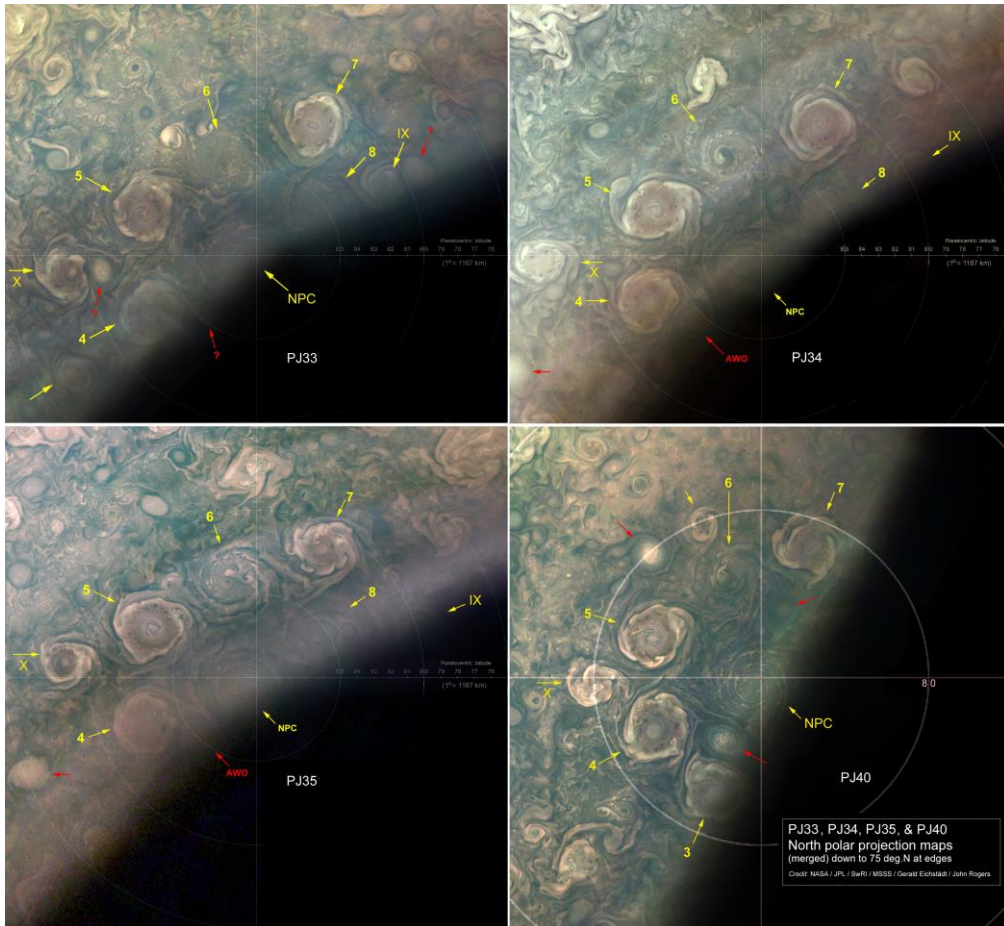


Figure 3: North polar projection maps (down to 75°N at edges) from PJ33-PJ35 and PJ40, showing the stability of the ‘vortex crystal’ of CPCs, including extra cyclones ‘IX’ and ‘X’.

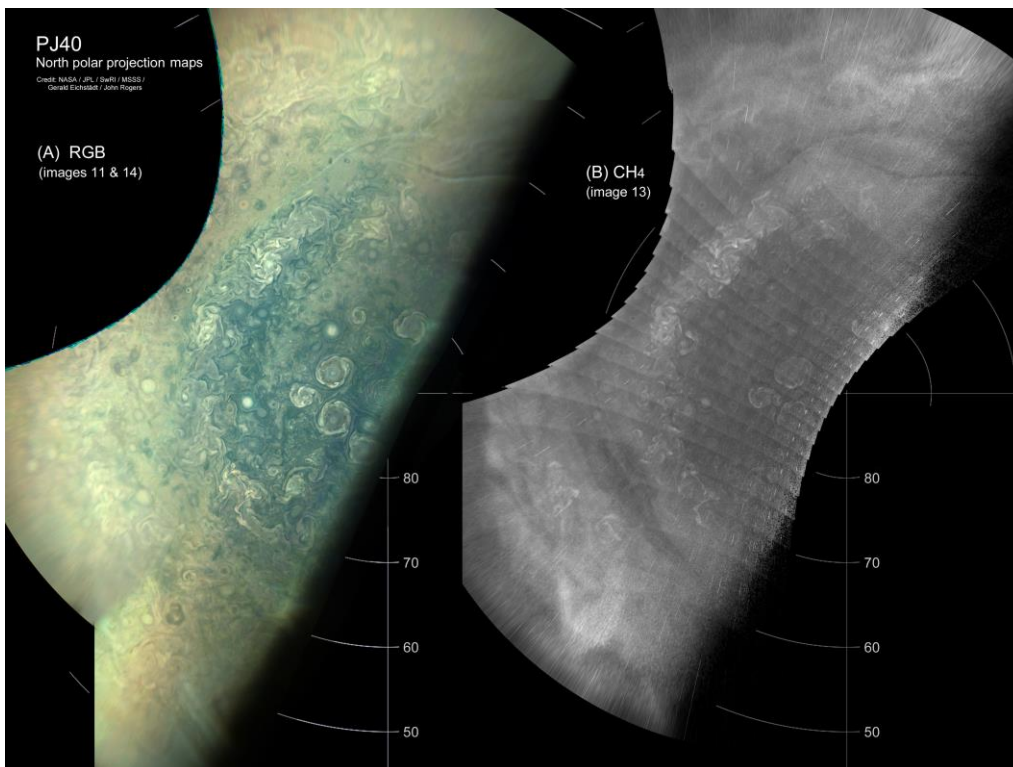


Figure 4: PJ40 north polar projection maps (down to ~45°N at edges): (A) RGB; (B) CH₄.



Figure 5: Hi-res details in northern domains, processed by Gerald Eichstädt.
 Image 18: A bright linear band crossing the Bland Zone (~60-65°N).
 Image 20: Multi-layered extensions of a FFR in northern N4 domain (~42-50°N), possibly pushing south to the N4 jet.
 Image 22: Small cyclone within a pale orange segment of the NNTB.

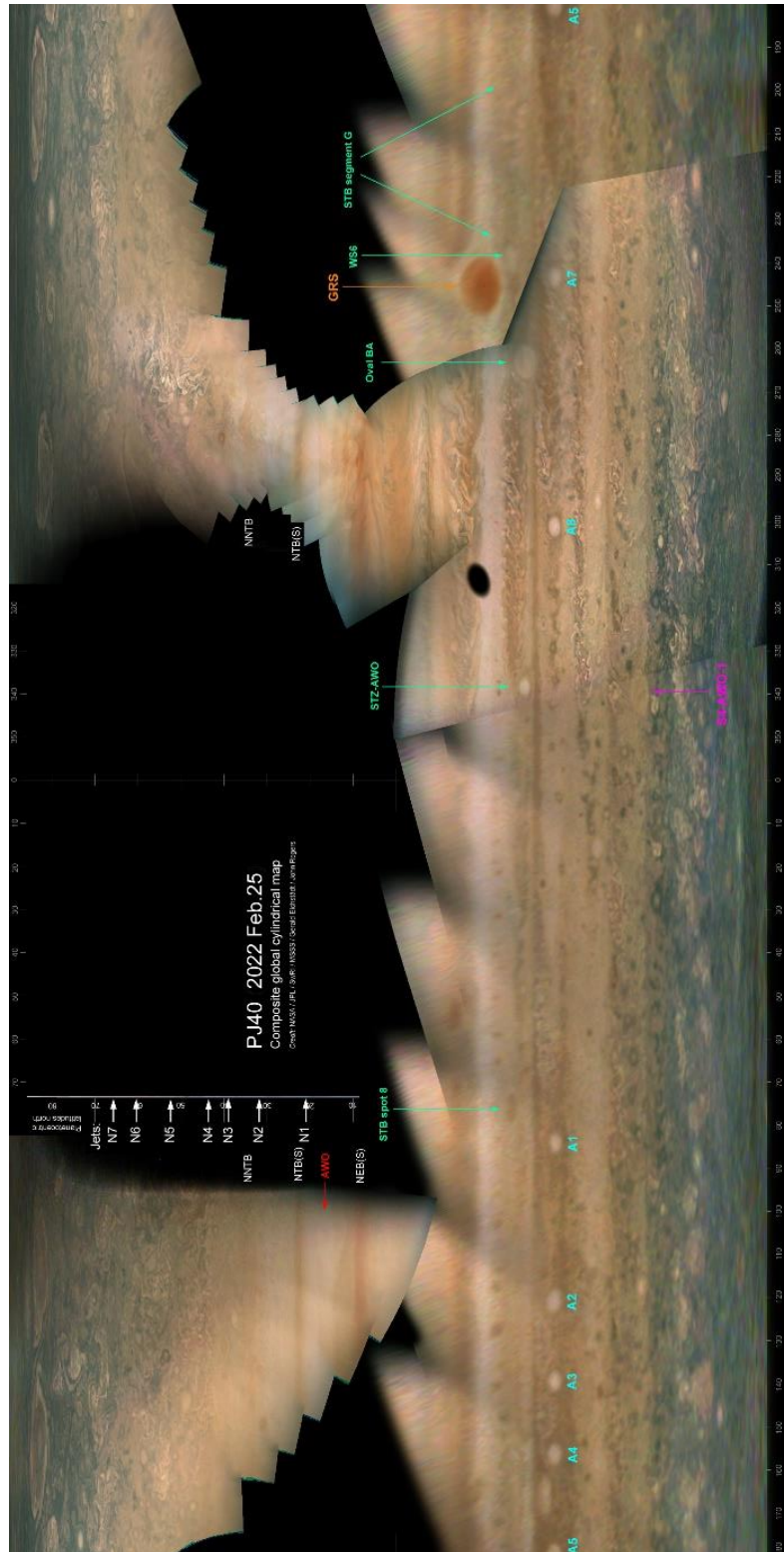


Figure 6: Global cylindrical map.

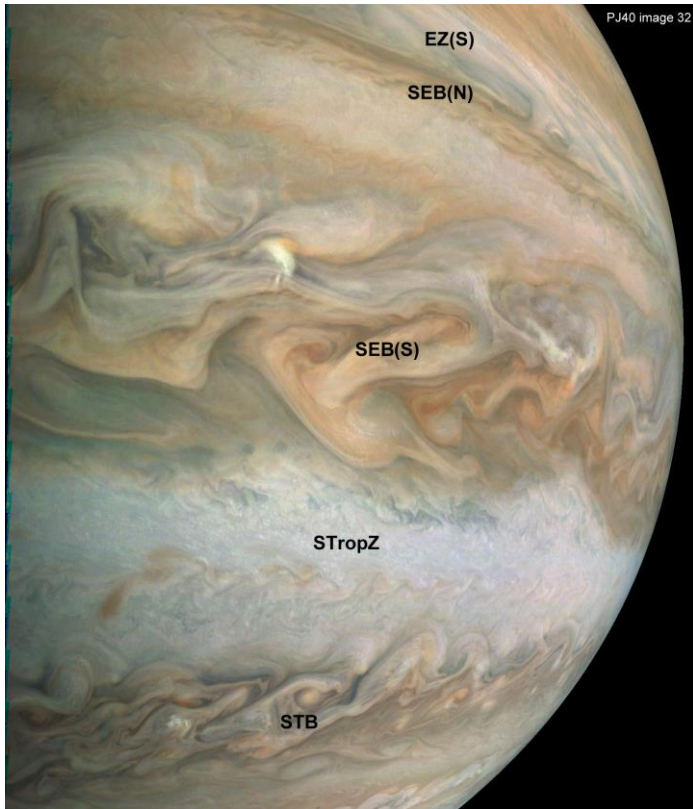


Figure 8. Image of the SEB, processed by Gerald Eichstädt.

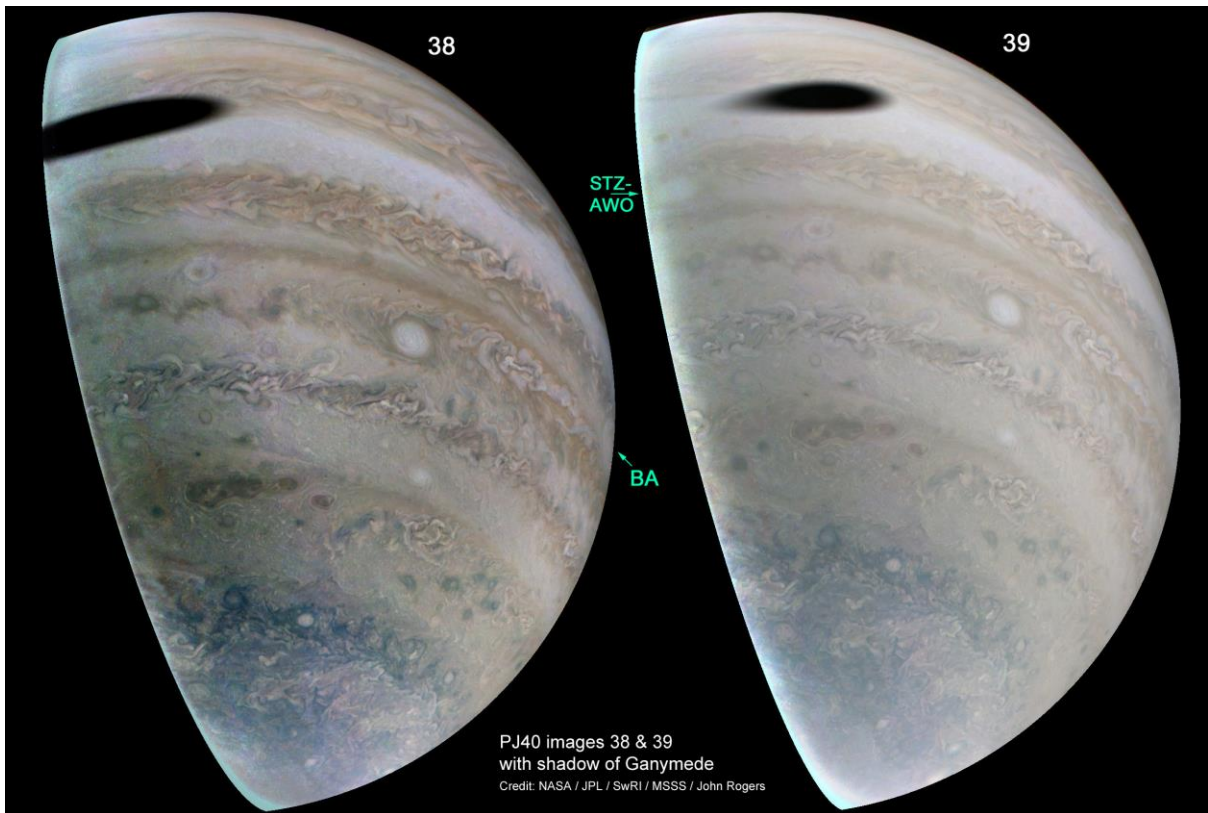


Figure 9. Two images showing the shadow of Ganymede coming onto the disk. The first has been contrast-enhanced, the second just brightened in order to preserve the shadow's wide penumbra. The images show the southern domains well.

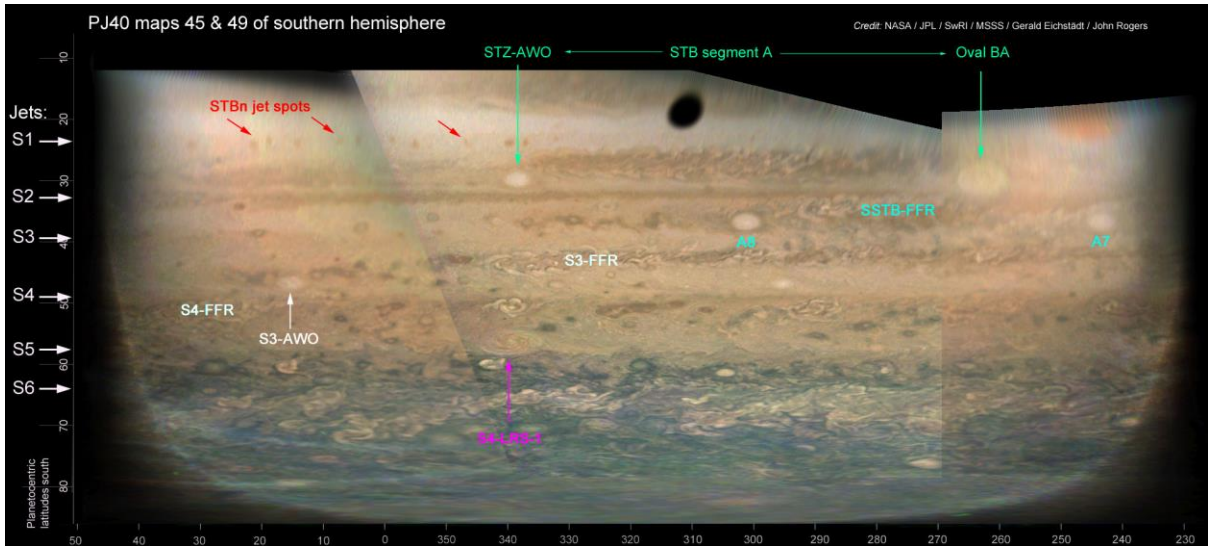


Figure 10. Cylindrical map from two hi-res images covering the STB and southwards. (This shows the patterns of features better than the composite in Fig.6.)

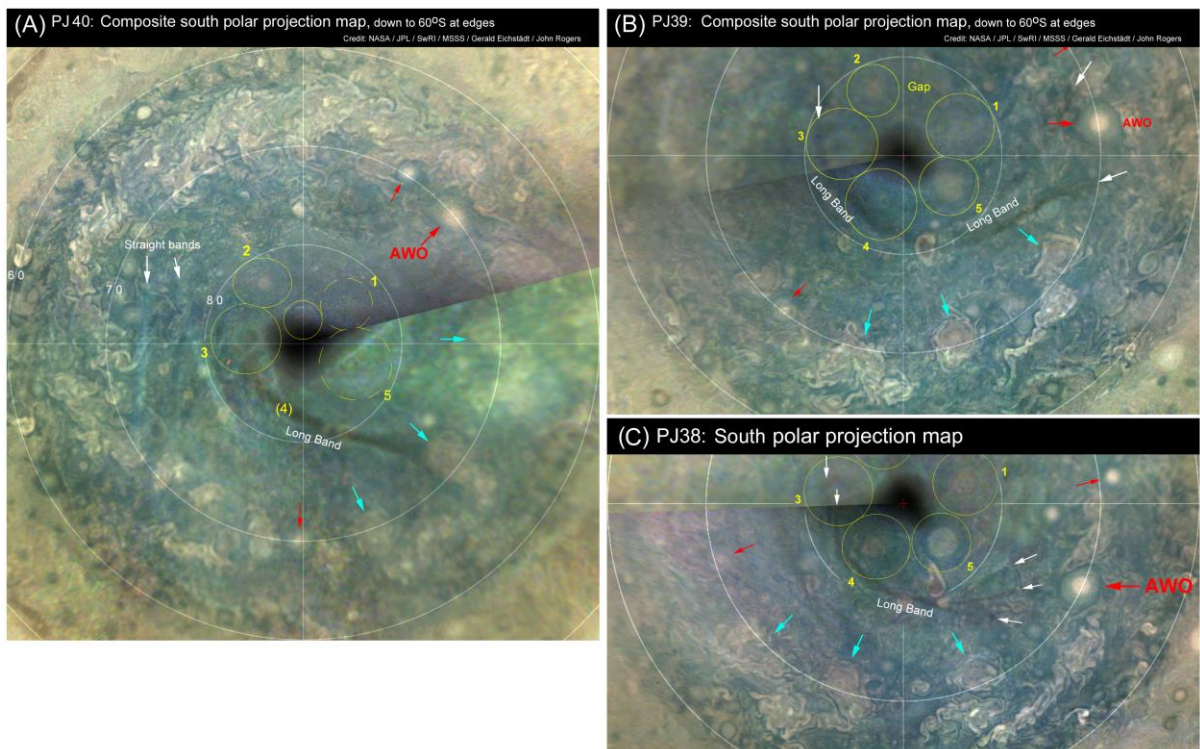


Figure 11. Composite map of the SPR, down to 60°S at edges, with key features labelled, and with parts of the PJ39 and PJ38 maps for comparison. Yellow circles indicate estimated positions of CPCs. Red and cyan arrows indicate the chain of AWOs and FFRs that has probably persisted throughout. [As always, unlabelled copies of maps are available if required.]

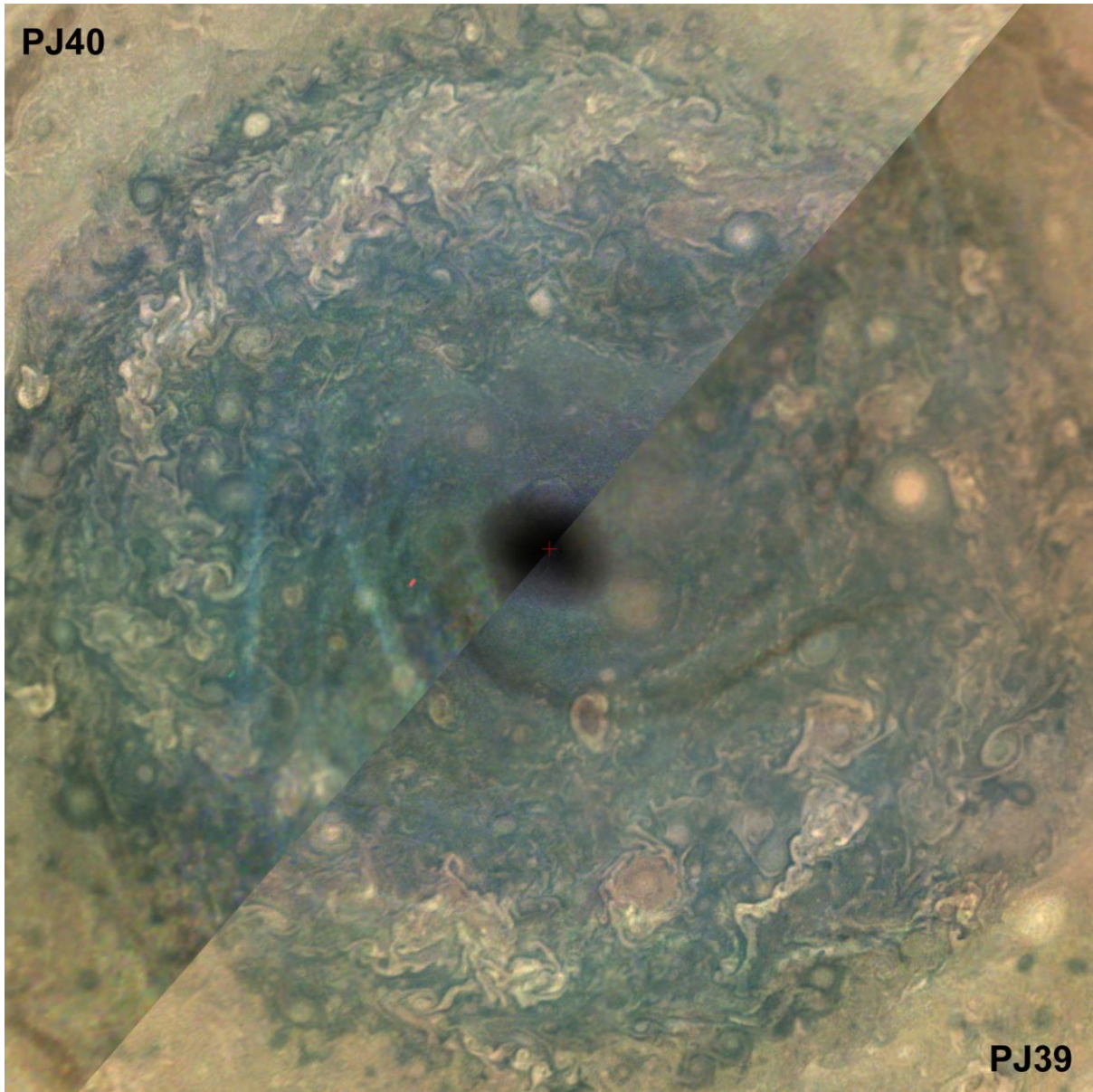


Figure 12. Composite map of the SPR, down to 60°S at edges, combining our PJ39 & PJ40 maps to show the whole region at best resolution.

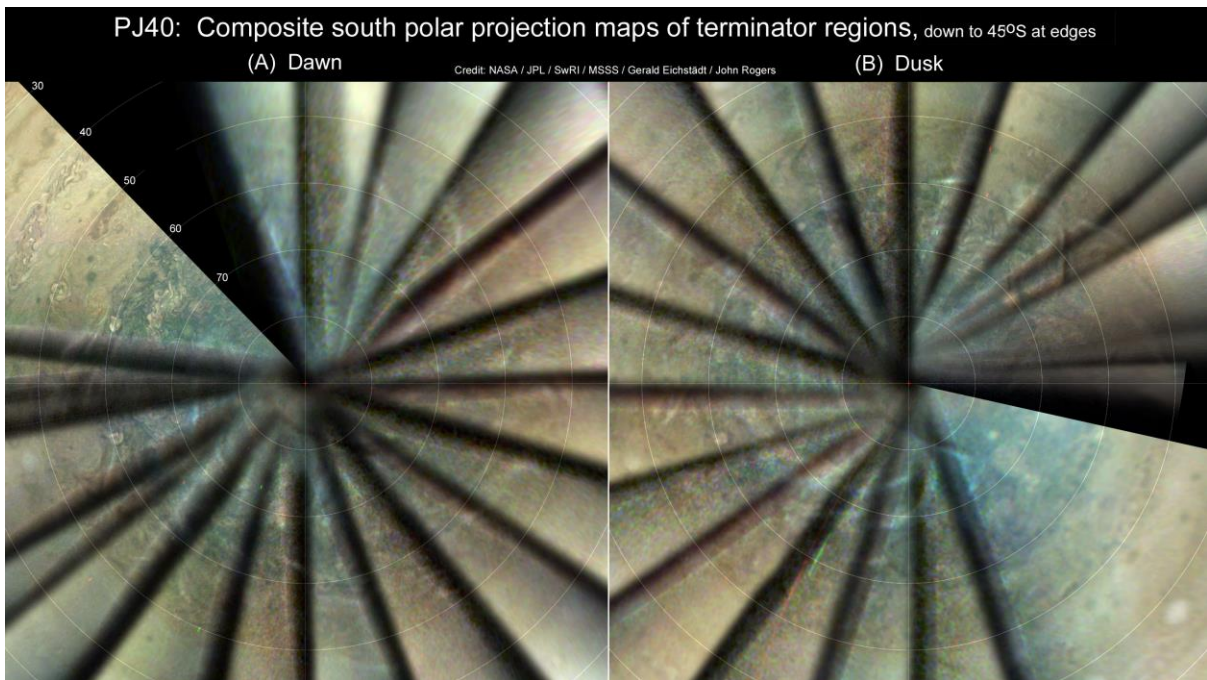


Figure 13. Composite south polar maps of the near-terminator regions, down to 45°S at edges, at dawn (A) & dusk (B).

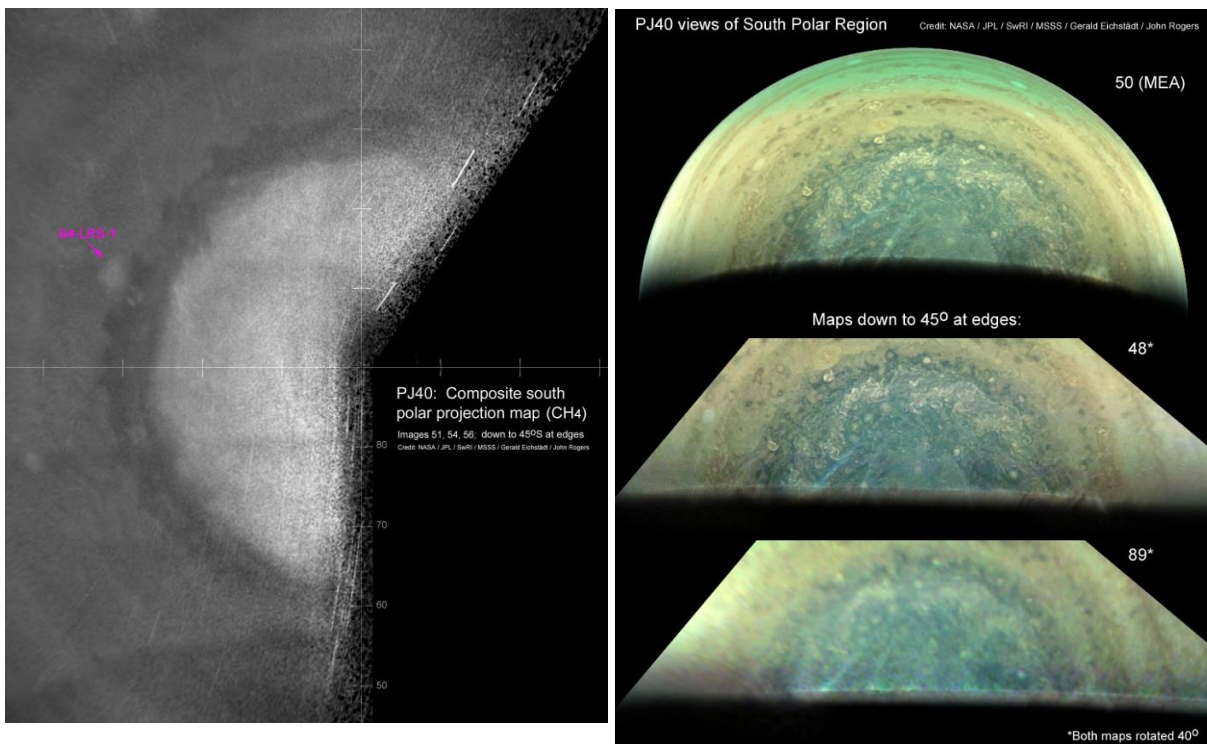


Figure 14. Composite map in methane band, down to 45°S at edges. Just three of the higher-resolution maps were used, omitting all the later maps.

(R)Figure 15. *Top:* Image 50 (MEA), showing the straight bright bands at discordant angles. *Middle & bottom:* Maps of images 48 & 89, one rotation apart. The maps go down to 45°S at edges, and have been rotated 40° here. These images were taken ~10 hours apart and show essentially the same haze patterns at the terminator. They can also be blinked to show the shearing of the FFRs. All processed by Gerald Eichstädt & JHR.