JunoCam at PJ45: What the images show
Part II: Jupiter

John Rogers (BAA) (2022 Oct.22)

Figures

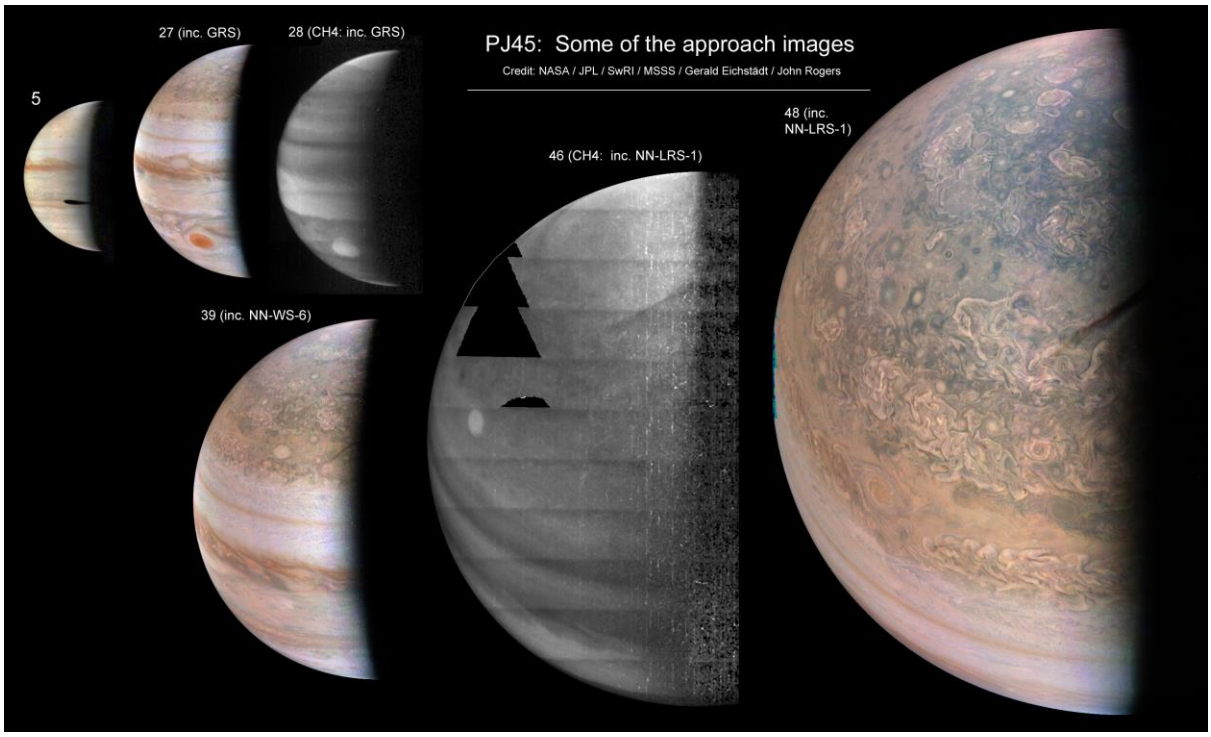

Figure 1. Examples of the inbound images, both RGB and CH4. (The raw methane images had a ‘snowstorm’ of bright pixels and streaks, due to radiation hits and hot pixels; here they have been ‘cleaned up’ by noise removal in Photoshop, and brightness gradients adjusted.)

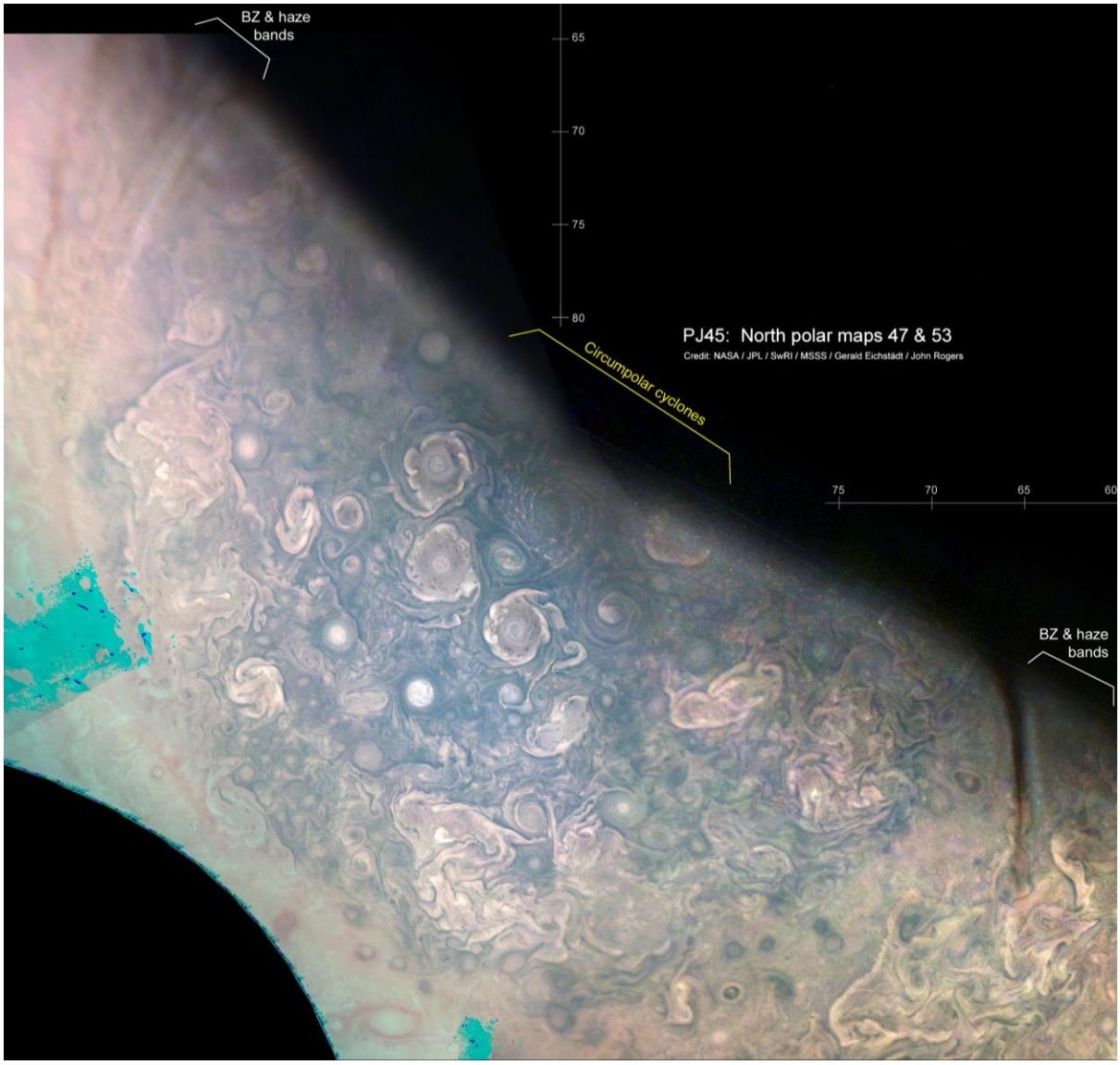

Figure 2. North polar projection map, down to 60°N at the edges.

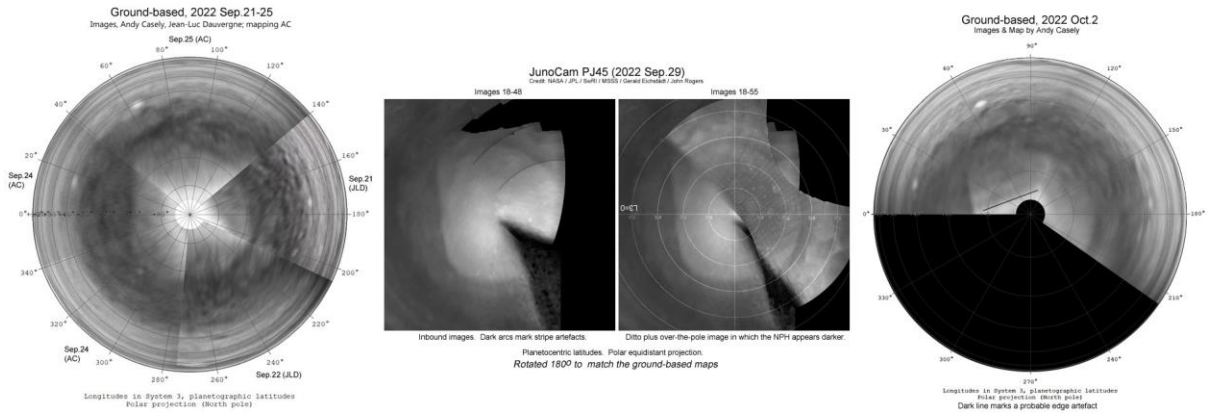

Figure 3. North polar projection maps in the methane band, from JunoCam and from ground-based images several days before and after PJ45. (The maps are rotated 180° relative to Figure 2.)

Figure 4. Images after north pole crossing, showing the linear bands over the Bland Zone. See main text for description. (North is approximately up.)

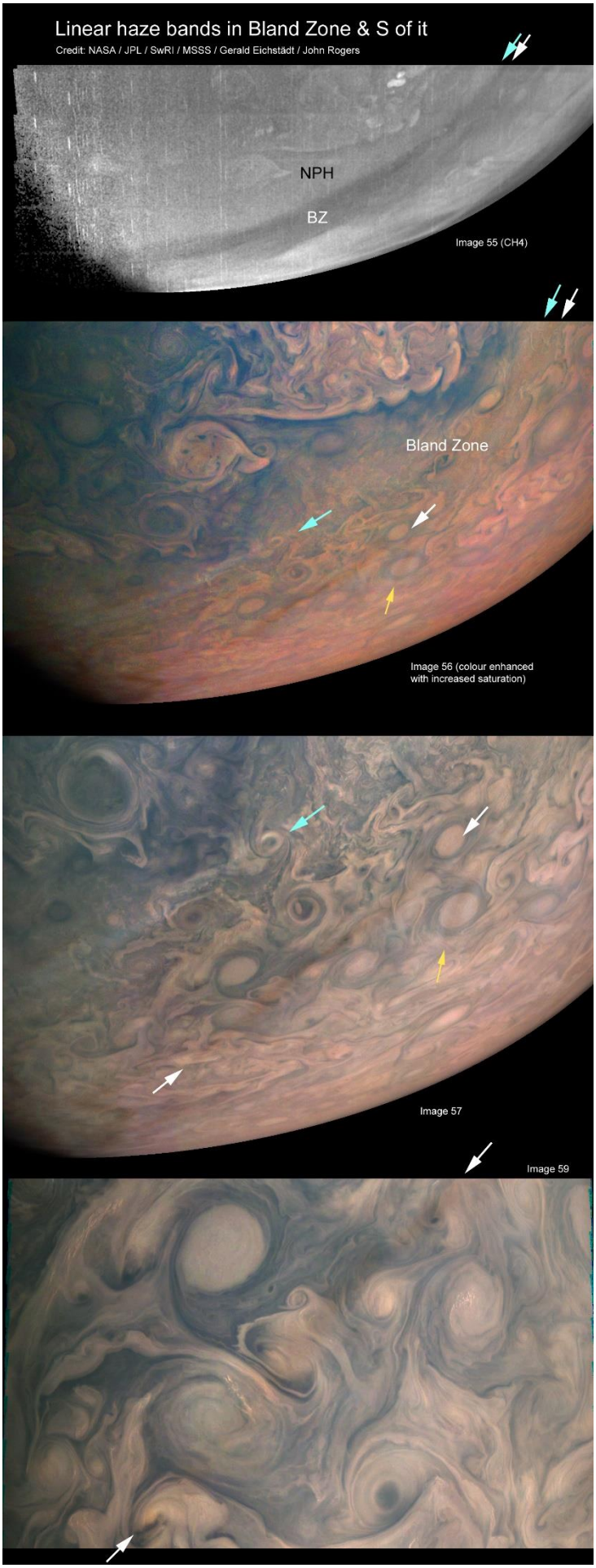

Figure 5. Images from the NPR to the EZ, roughly aligned in latitude (from the initial post on the JunoCam web site). The first 3 images include the Bland Zone with the linear haze bands labelled as in Figure 4. In the subsequent images, lines delineate areas shown separately in excerpts from Gerald's full-resolution versions, in the N4 and N3 domains (insets in this figure) and in NEBn and EZ(N) (Figures 8 & 9A). (North is up in all these images.)

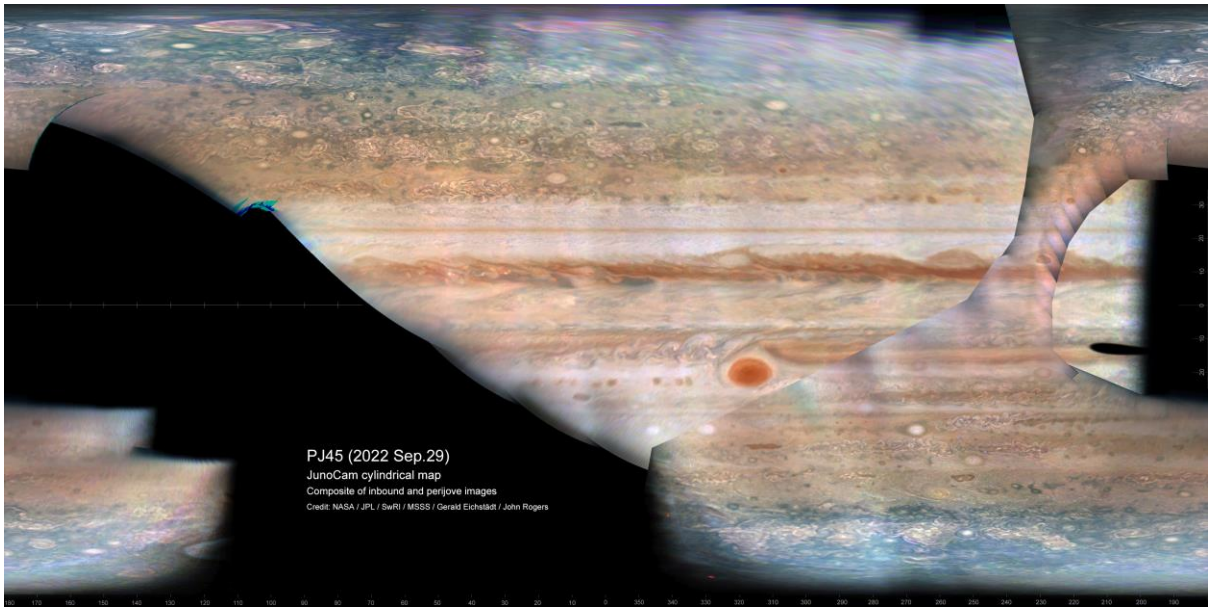

Figure 6. Global cylindrical map at PJ45.

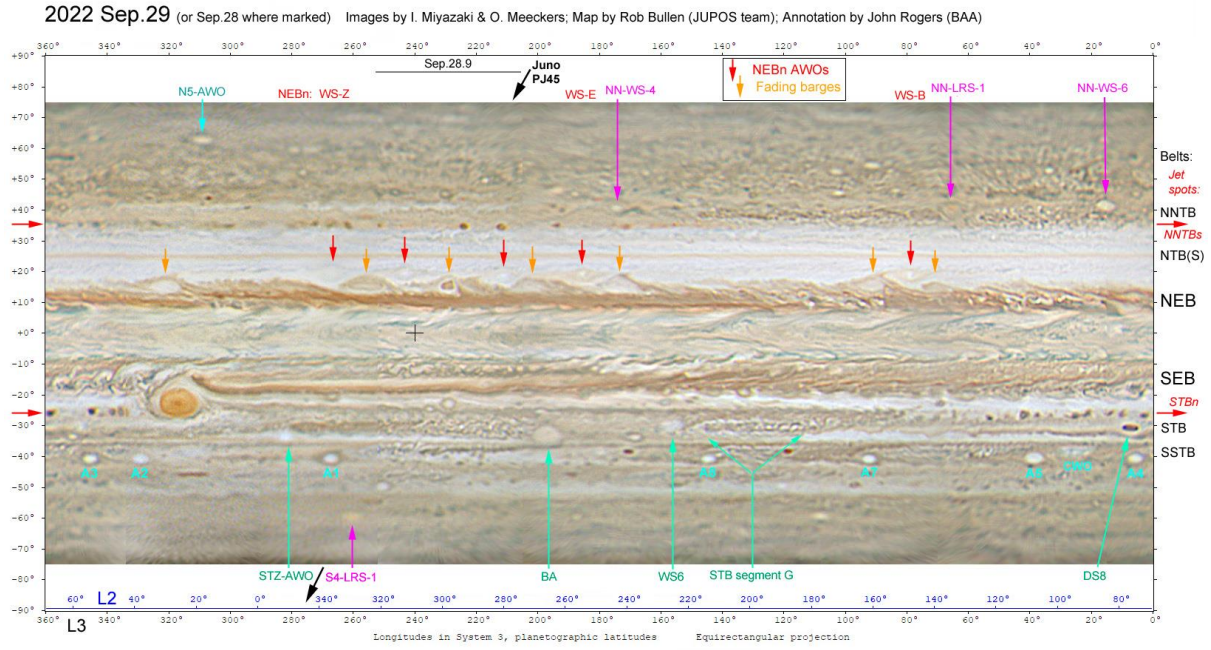

Figure 7. Global ground-based map on the day of PJ45, with the main features labelled.

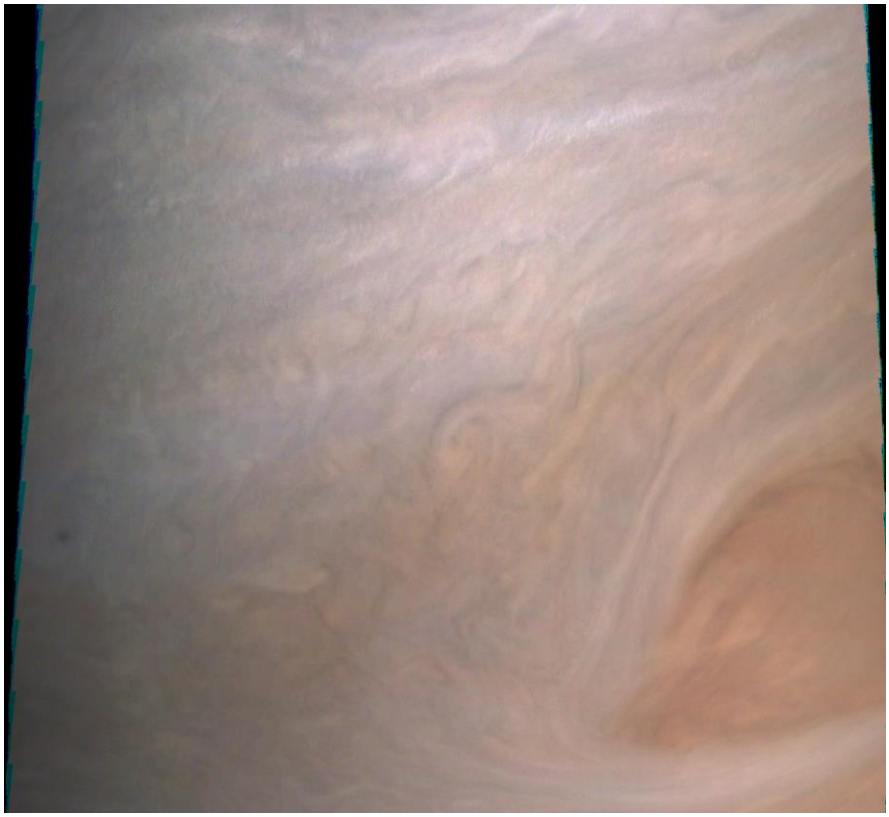

Figure 8. Close-up view (image 67) showing part of the only NEB barge that has not faded, and subtle, semi-regular mesoscale waves in the white NTropZ nearby. (See Figure 5 for context.) Processed by Gerald Eichstädt.

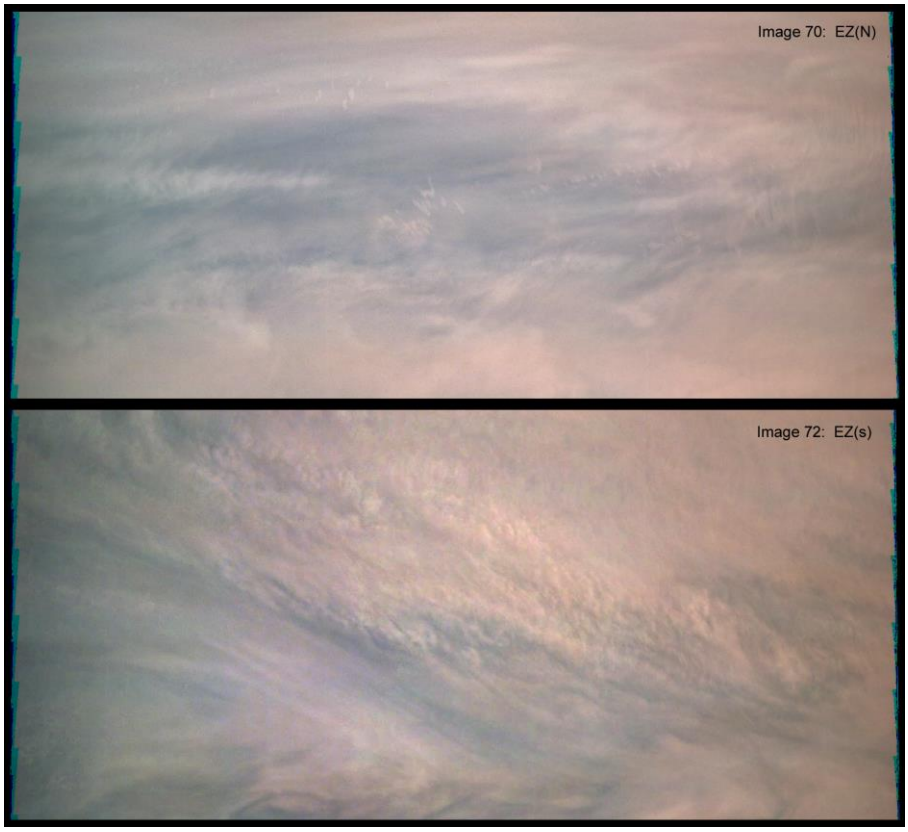

Figure 9. Close-ups of the EZ. (A) Image 70 (without lossy compression): EZ(N). (B) Image 72: EZ(S). Processed by Gerald Eichstädt.

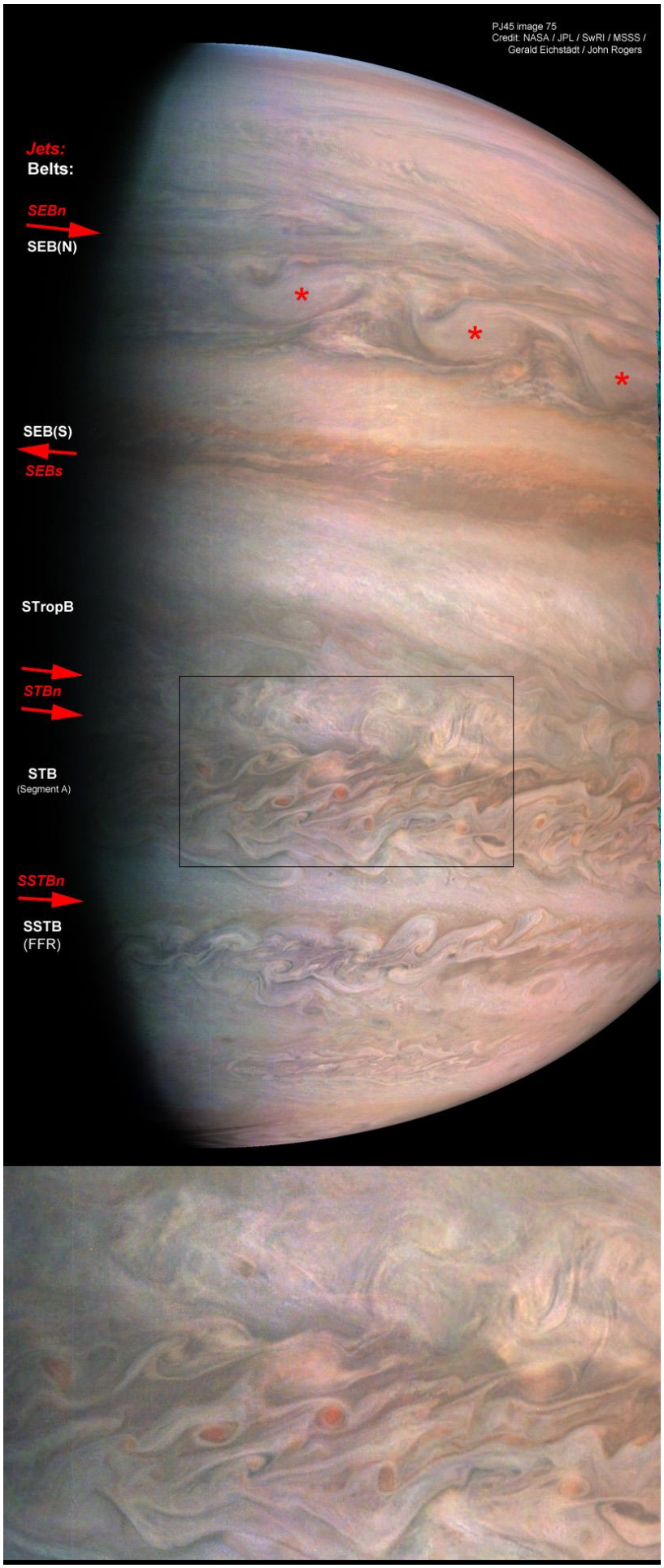

Figure 10. Image covering the SEB and STB (image 75). Red asterisks indicate 'AWOs' (see text). The boxed area is shown at full resolution at the bottom.

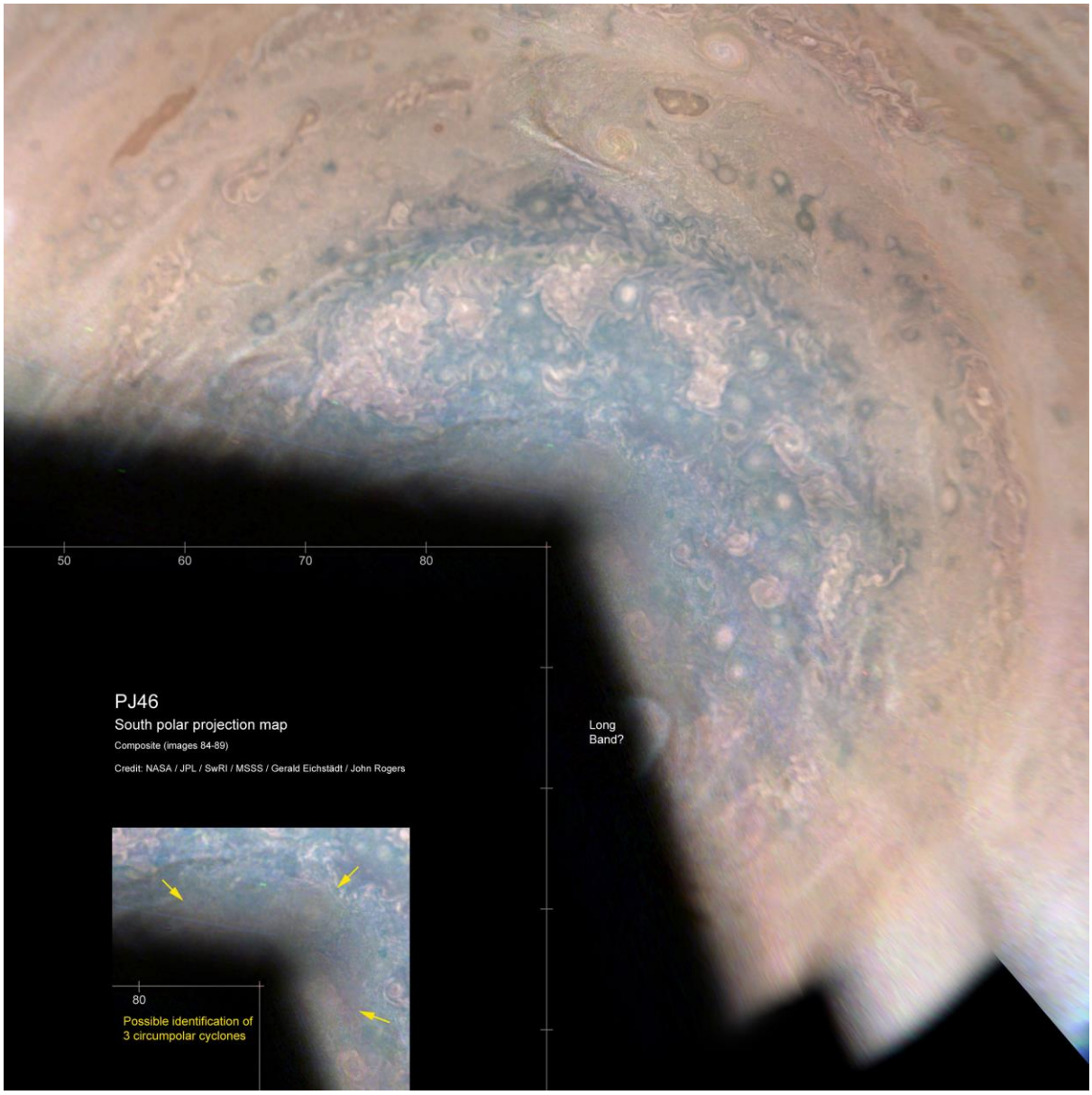

Figure 11. Composite south polar projection map, down to 60°S at the edges.