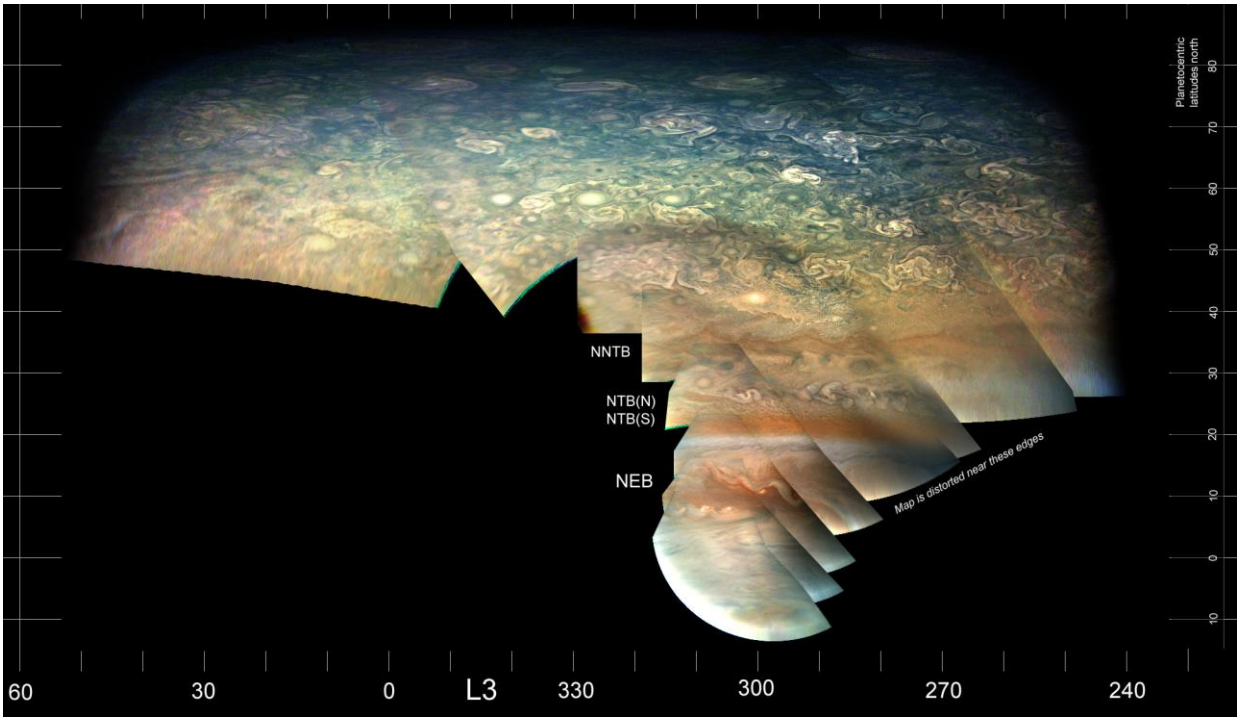
**Juno at Perijove-10 (2017 Dec.16): Parts II: Global maps**

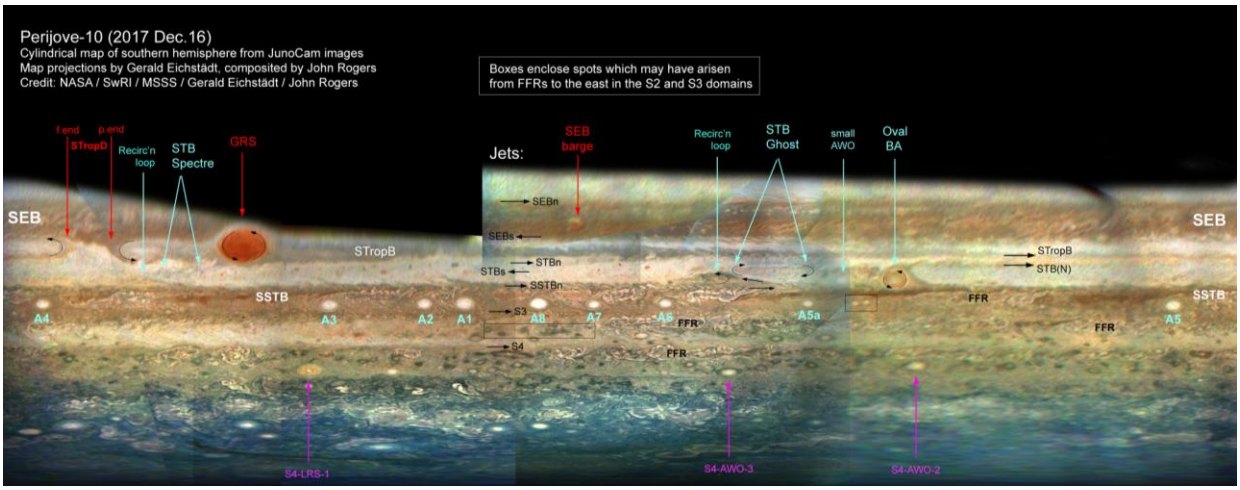
John Rogers (BAA) (2017 Jan.8)

This based entirely on the maps produced from PJ10 images by Gerald Eichstädt.

As there was no inbound coverage, there is no complete northern hemisphere map; but ***Figure N1*** is a map made from the closeup images of the northern hemisphere, which shows the general state of the NNTB, NTB and NEB.

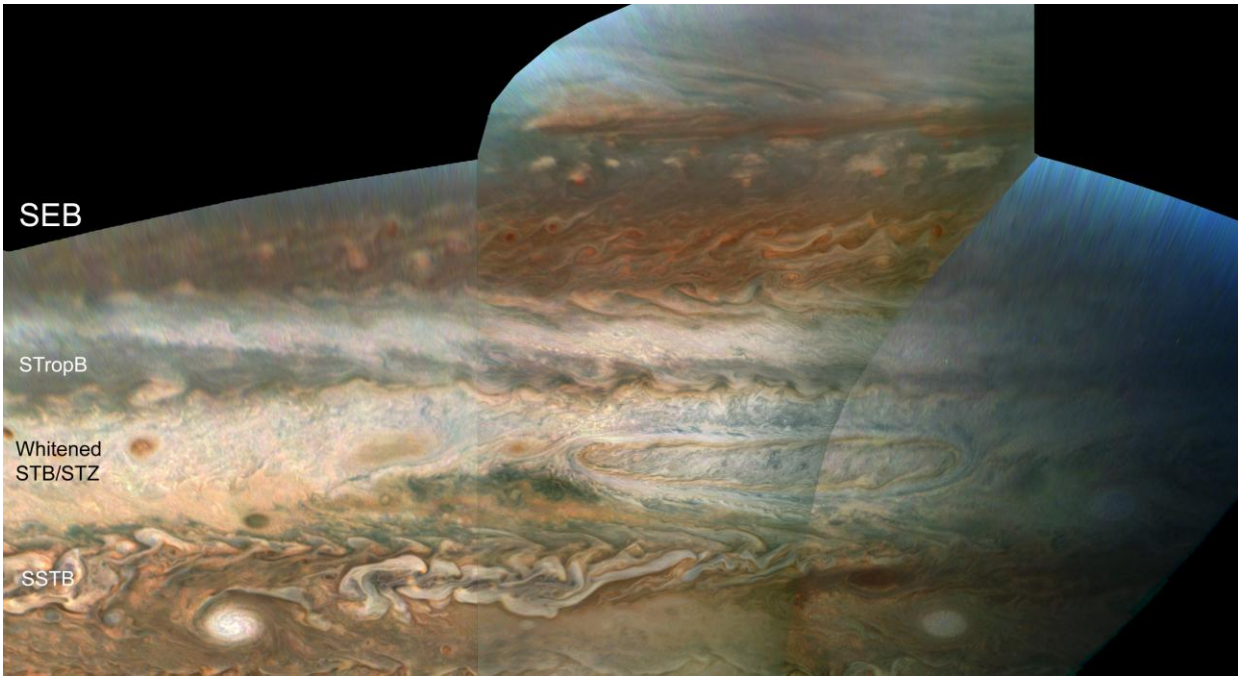



The outbound coverage gave us an excellent southern hemisphere map (***Figure S1*** – unlabelled and labelled). This is very useful as the planet was difficult to observe from Earth at the time, and it records the complex circulation patterns that are developing.




*The South Tropical Disturbance* is well formed, with distinct p. and f. ends. The distance between the p. end of the STropD and the f. end of the GRS has diminished from 41º at PJ9 to 30º at PJ10, so it may be several months before they interact.

*The STB Ghost and Spectre* are faint but coherent. The STB Spectre has drawn ahead of the STropD and is now (early Jan.) starting to pass the GRS. The STB Ghost is shown in hi-res maps in ***Figure S2***, which are blinked in the attached animation. This can be compared with the animation that we posted from the PJ8 images. It clearly confirms the circulation of the Ghost, and especially the strong shear between the prograding SSTBn jet and the retrograding current into the putative recirculation loop (diagrammed in ***Figure S1***). The Ghost will collide with the dark spot(s) f. oval BA soon, most likely in April, although past experience suggests that dramatic interactions could start within several months either side of that time. Now that there is a prominent anticyclonic 'recirculation loop' Sf. the Ghost, it will be particularly interesting to see what happens to this after the collision.




*In the S2 (S.S. Temperate) domain*, all the AWOs persist, along with several FFRs. On the map, a box encloses two tiny AWOs which have probably developed in the wake of the largest FFR and will soon merge with each other and/or with oval A5a, like many previous examples.

*In the S3 domain*, likewise, a box encloses a sprawl of tiny dark rings which probably develop in the wake of a large FFR.