Jupiter in 2015-16: Interim report no.3

-- John Rogers (BAA), using information from the JUPOS team. (2016 Feb.24)

Mini-Figures

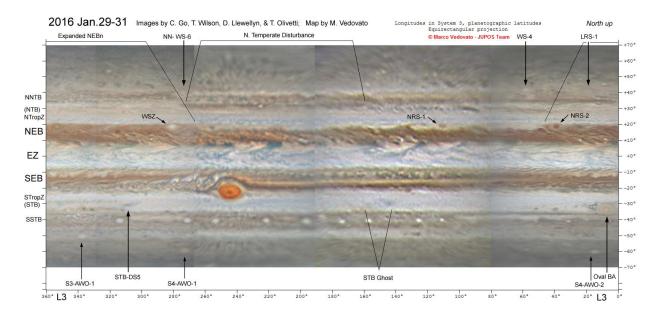


Fig.1. Map of the planet on 2016 Jan.29-31, in L3, with major features labelled. (See Fig.S-1 for version in L2 with south up.)

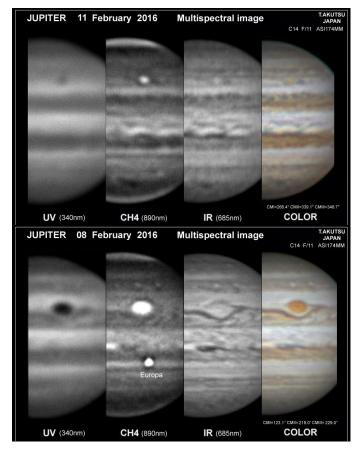


Fig.2. Aligned images in visible, IR, UV, and methane band, by Tomio Akutsu. South is up in this set. In the southern hemisphere, note oval BA (top & bottom panels) and the GRS (middle panel) which are dark in UV, bright in methane and IR, and red in visible light. The NEB is broadened alongside oval BA but not alongside the GRS; this applies in the methane images as well as the colour images. In the methane images, the EZ extends further north than in the other wavebands, and there is a very dark NTB(S).

[continued below]

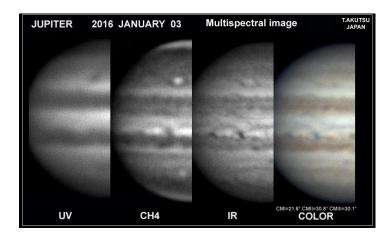


Fig.2 (continued).

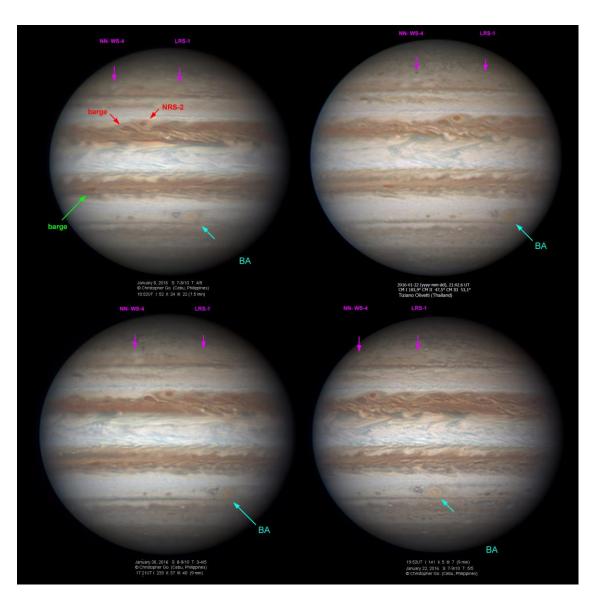


Fig.3. Some of the best images showing NN-LRS-1 and WS-4; the barge in the SEB; Oval BA; and the f. end of the NEB expansion event including the new NEBn Red Spot 2 and the new barge.



Fig.4. Some of the best images of the GRS side, with important spots labelled: NN-WS-6, which twice becomes entangled with streamers from an adjacent folded filamentary region (FFR) in the NNTB; WSZ, near the p. end of the NEBn expansion; STB-DS5; and S2 AWOs A2 to A5, with segments of the SSTB that are either turbulent (FFR) or whitened. A retrograding spot from the SEBs jet (red arrow) enters the Red Spot Hollow on Jan.1, and seems to be torn apart north of the GRS by Jan.4.

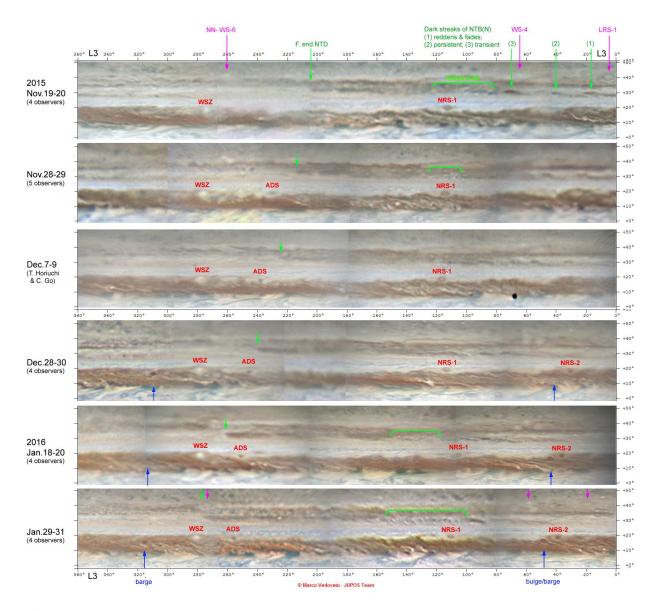


Fig.5. Maps of the northern hemisphere, in L3, with important features labelled. (See Fig.S-5 for version in L2 with south up.)

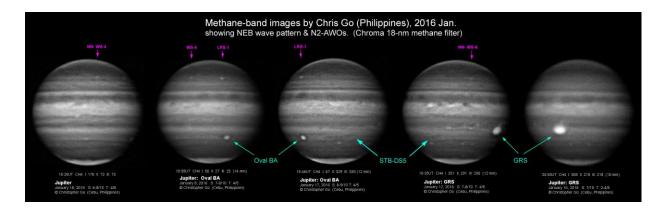


Fig.6. Methane images by Chris Go in 2016 Jan. Some anticyclonic ovals are marked including those in the N2 domain.

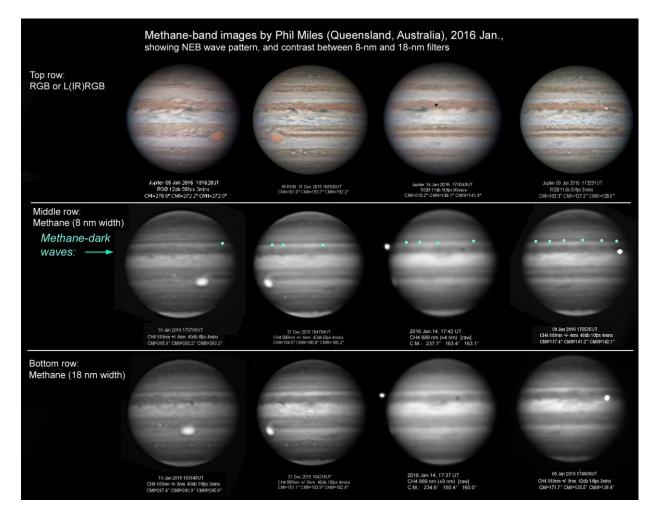


Fig.7. Methane images by Phil Miles on New Year's Eve and in 2016 Jan. Methane-dark waves on the NEB are marked by cyan dots above.

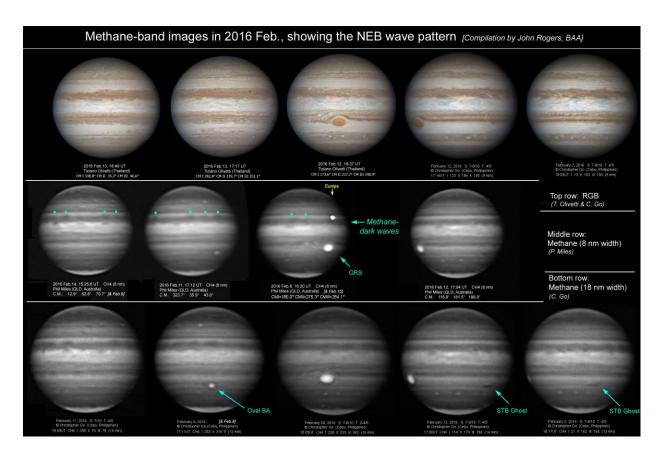


Fig.8. Methane images by Phil Miles and by Chris Go in 2016 Feb. Methane-dark waves on the NEB are marked by cyan dots above.

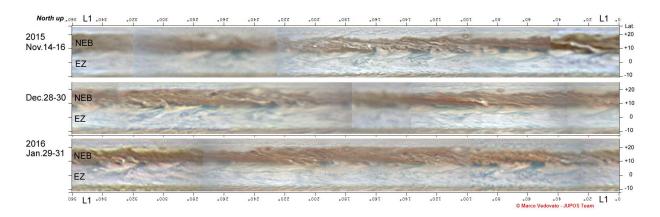


Fig.9. Maps of the equatorial region, 2015 Nov. to 2016 Jan, aligned in L1. (See Fig.S-9 for version with more frequent maps, with south up.)

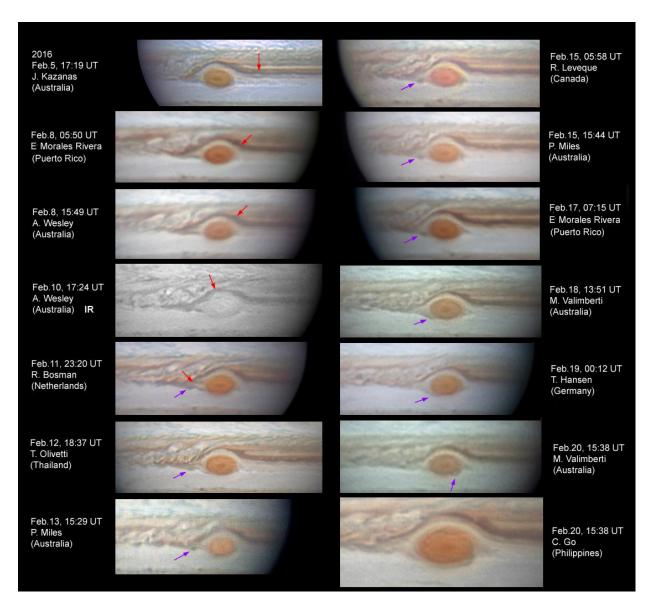


Fig.10. A retrograding spot on the SEBs jet (red arrow) enters the Red Spot Hollow on Feb.8, and reaches the f. end, where it seems to generate a dark spot that, after 6 days hesitation, streams around the N side of the GRS (purple arrow).

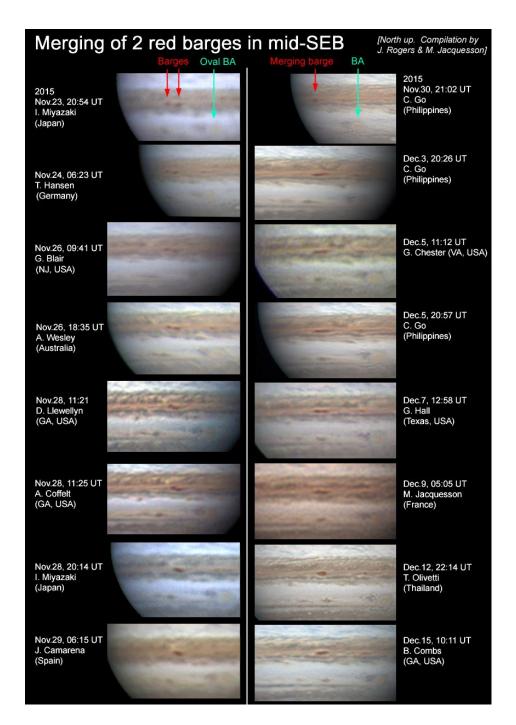


Fig.11. Two small barges merge in the SEB.

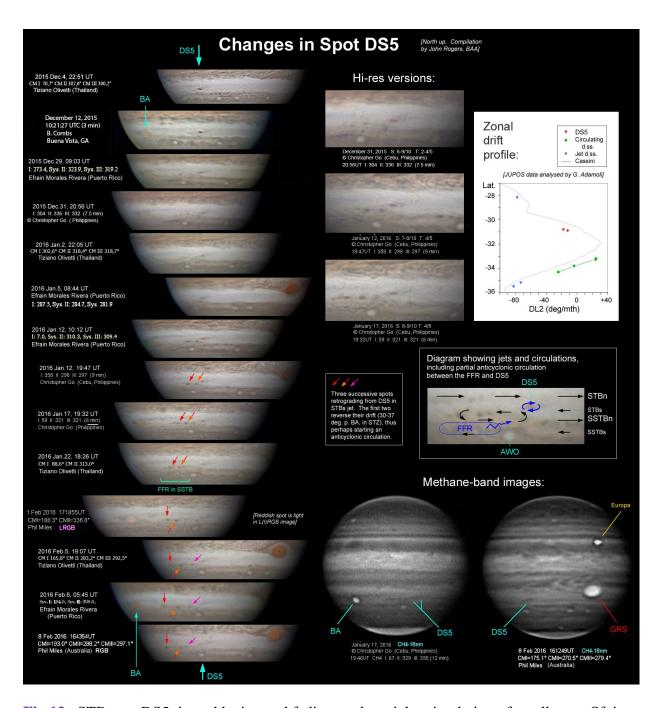


Fig.12. STB spot DS5: its reddening and fading, and partial recirculation of small spots Sf. it.