

Jupiter in 2024/25, Report no.7

(2026 Jan.)

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Figures (small copies):

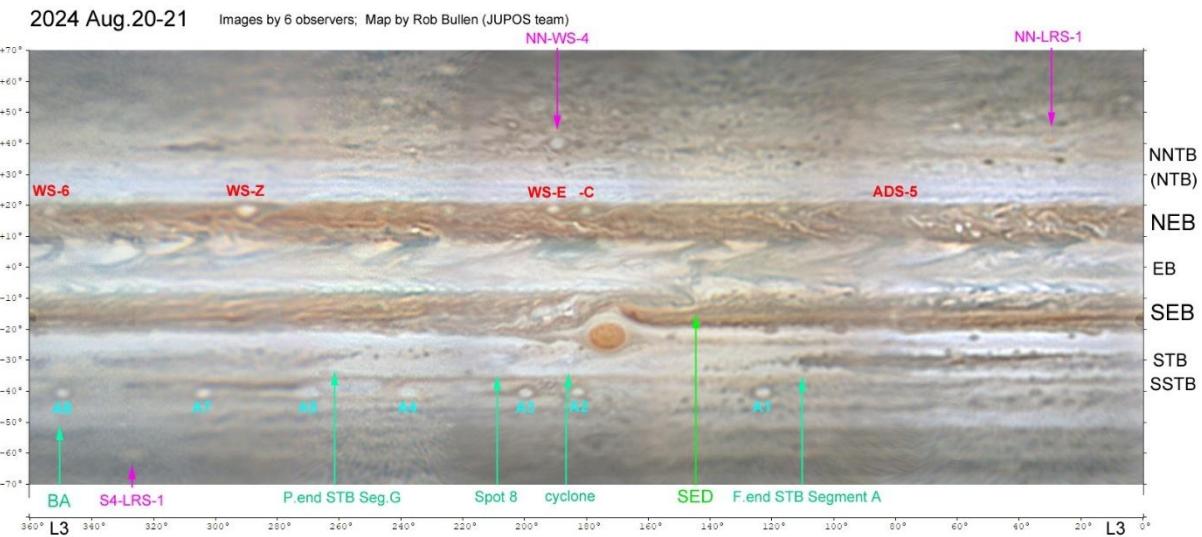


Figure 1A. Map, 2024 Aug.20-21.

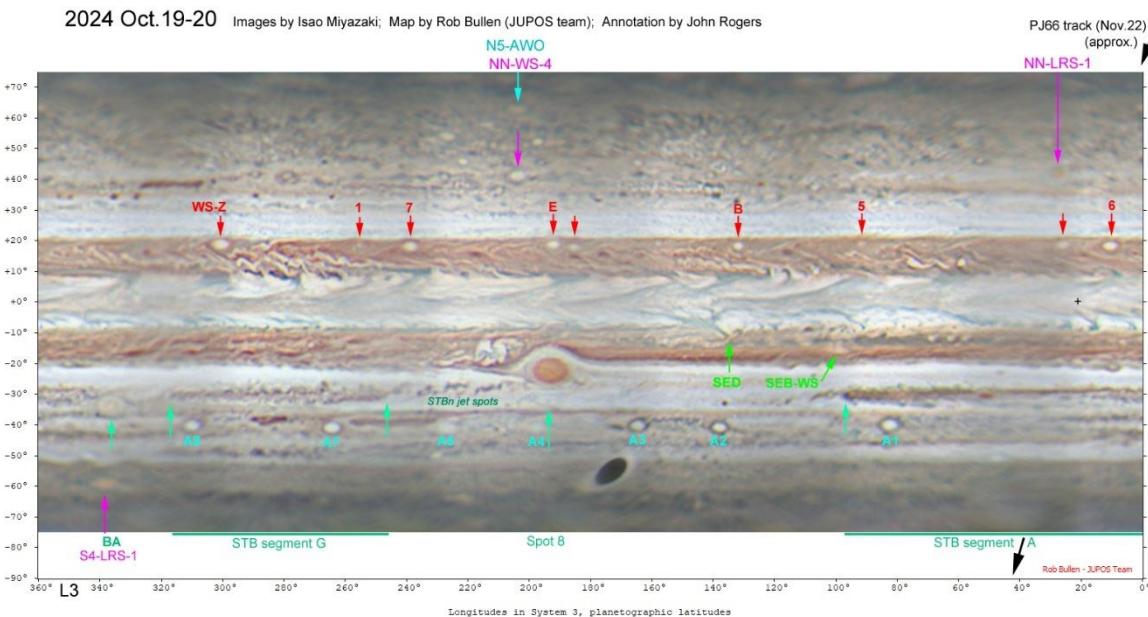


Figure 1B. Map, 2024 Oct.19-20.

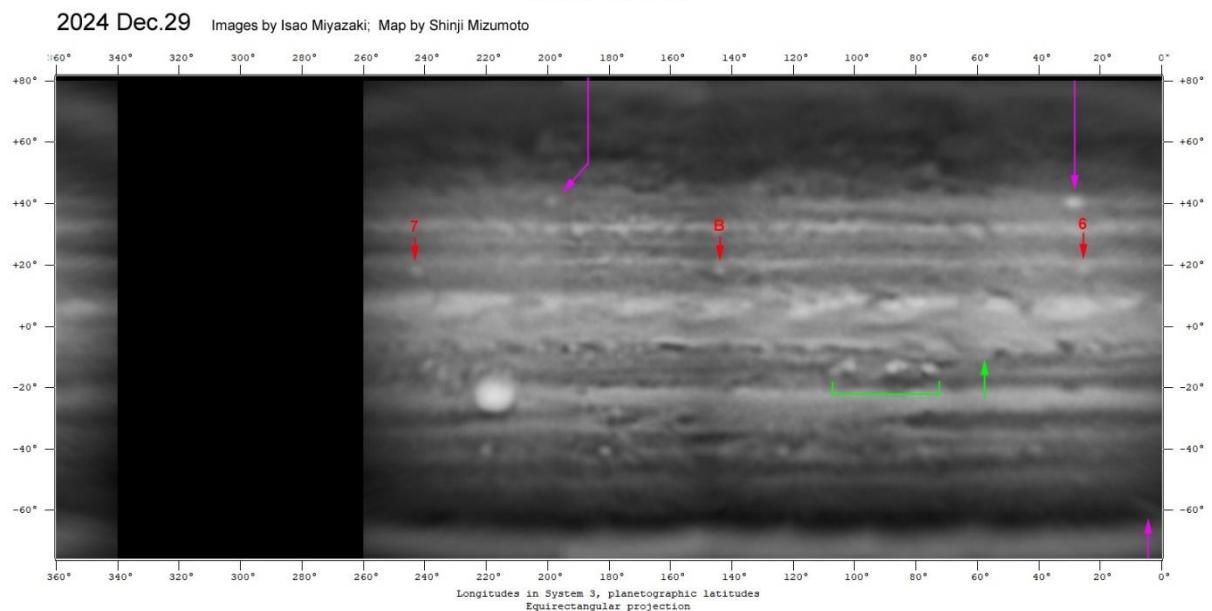
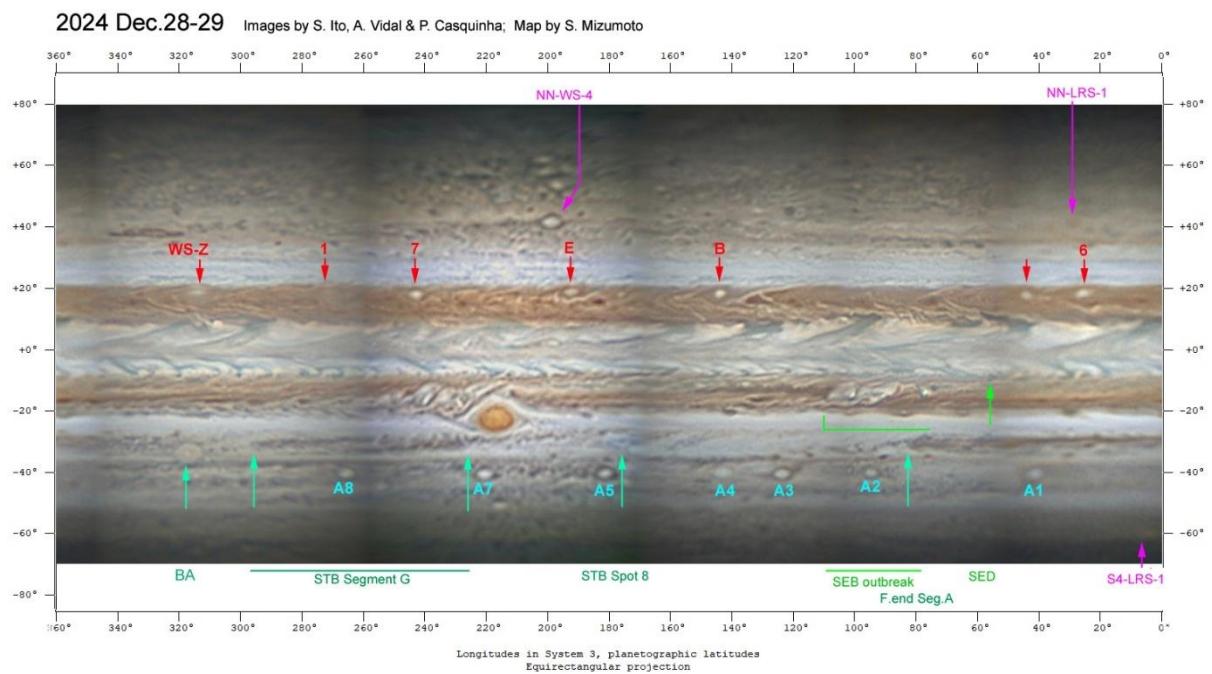


Figure 2. Maps, 2024 Dec.28-29, in RGB (top) and CH4 (bottom).

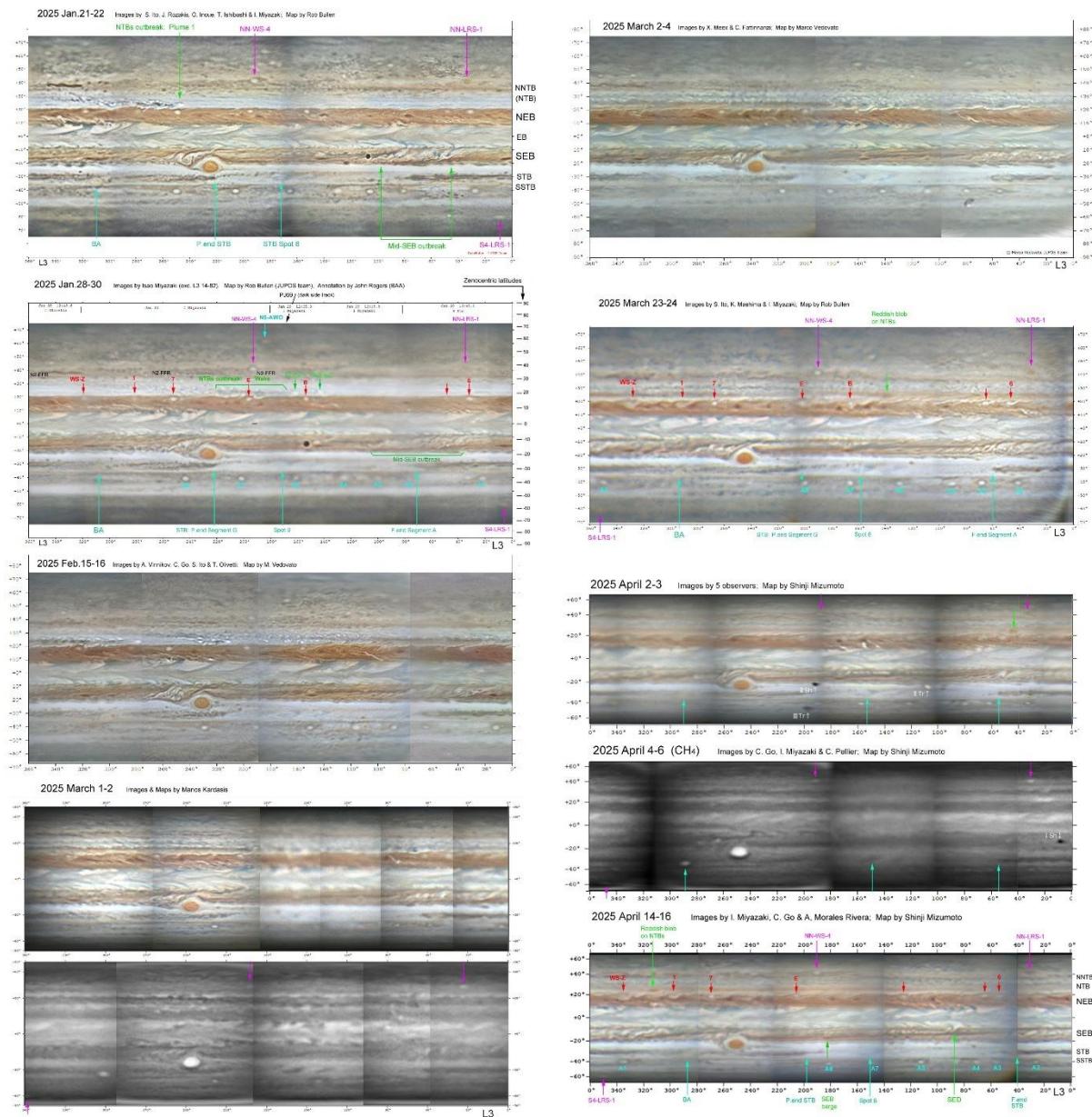


Figure 3. Maps in 2025 Jan. to April.

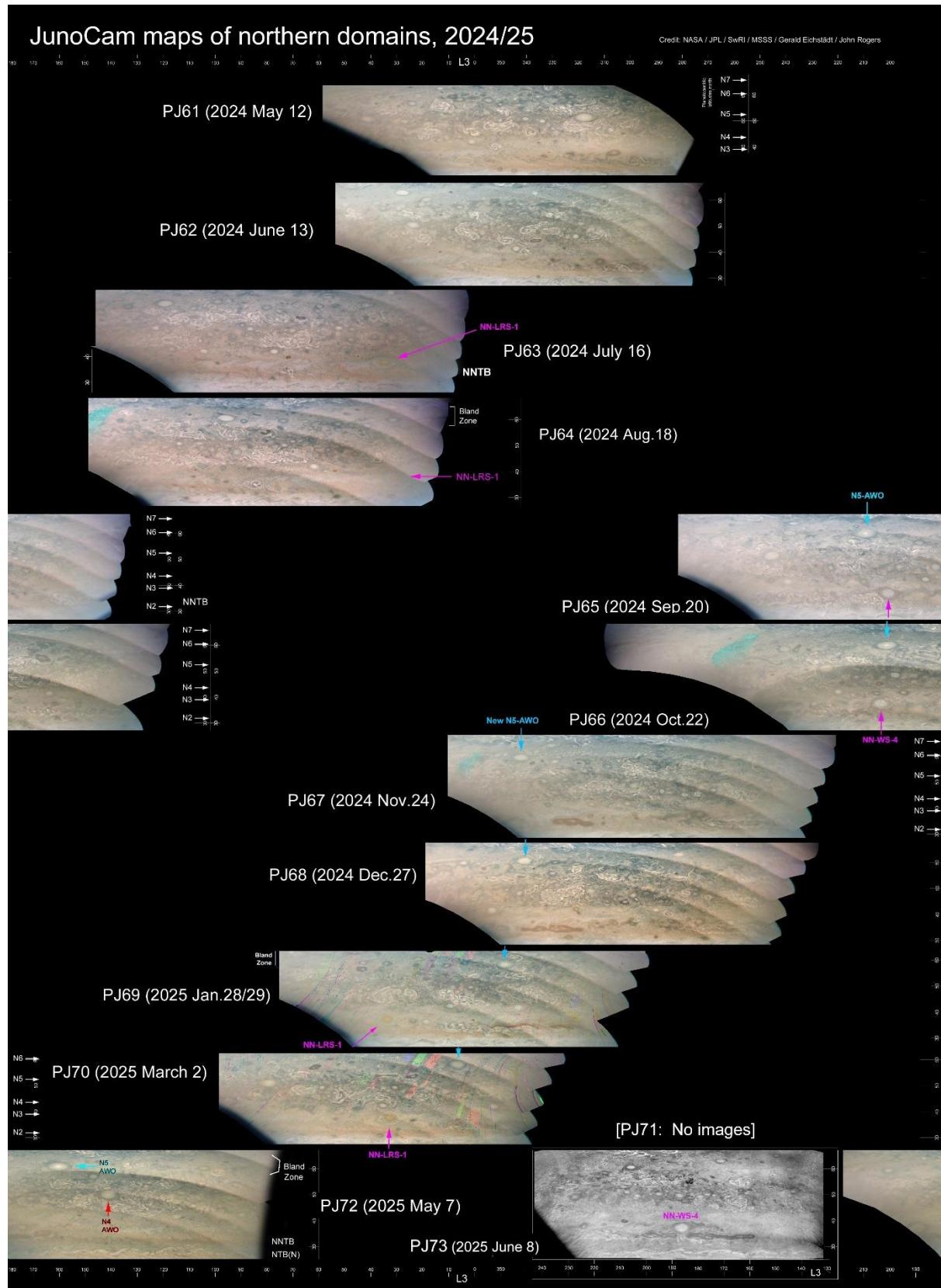


Figure 4. JunoCam cylindrical maps of northern domains, PJ61 to PJ73.

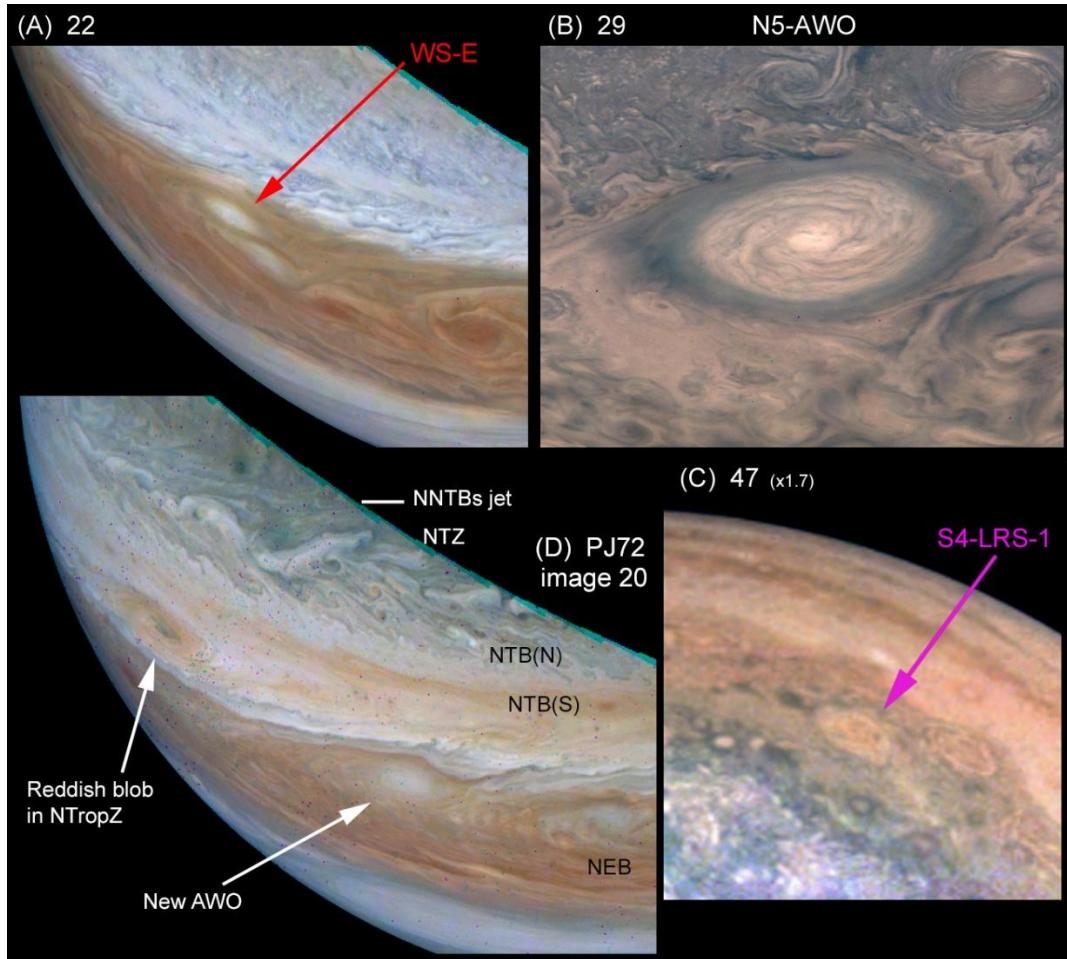


Figure 5. JunoCam images of anticyclonic ovals at PJ66 (A-C) and PJ72 (D), at full resolution, from our PJ66 and PJ72 reports. (A) PJ66 (2024 Oct.22): NEBn WS-E ($L_3 = 192$), with a smaller one; the latter is about one month old, and beginning to swing round WS-E prior to partially merging with it (see BAA 2024/25 Report no.2 & <https://alpo-j.sakura.ne.jp/kk24/j241031r.htm>). (B) The long-lived N5-AWO ($L_3 = 201$). (C) S4-LRS-1 ($L_3 = 338$), which had interacted and probably merged with a newer, smaller AWO a few days earlier and is still somewhat distorted. (D) PJ72 (2025 May 7): The reviving NTB with orange NTB(S) and turbulent NTB(N)/NTZ, and the reddish blob in the NTropZ; and the broadened NEB with a new AWO a few months old. (See our PJ72 report for wider views.)

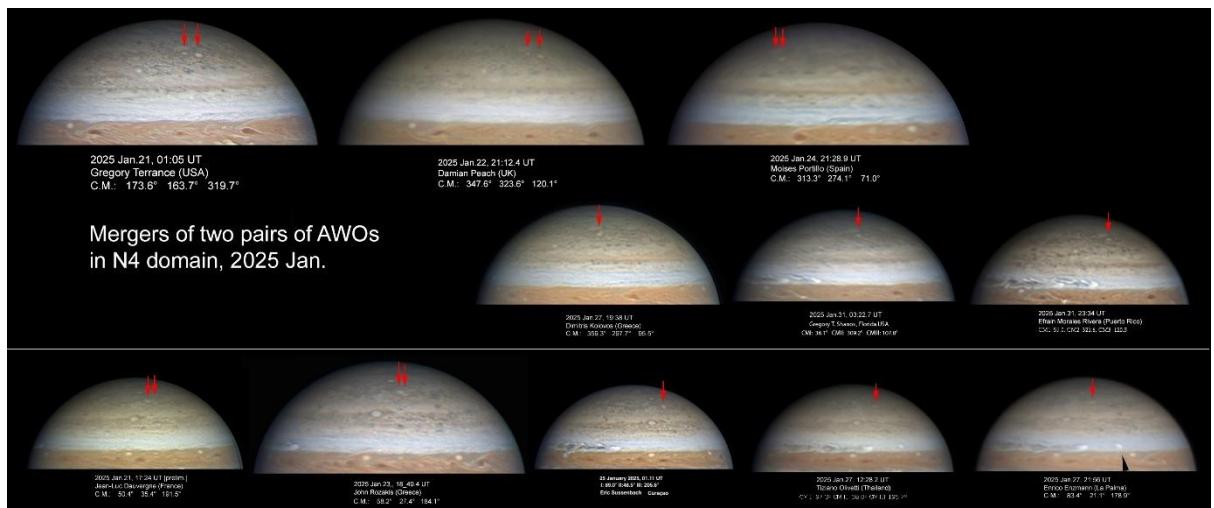


Figure 6. Images in 2025 Jan. showing two mergers between pairs of AWOs in the N4 domain.

NNTB 'barge' becoming masked by light clouds

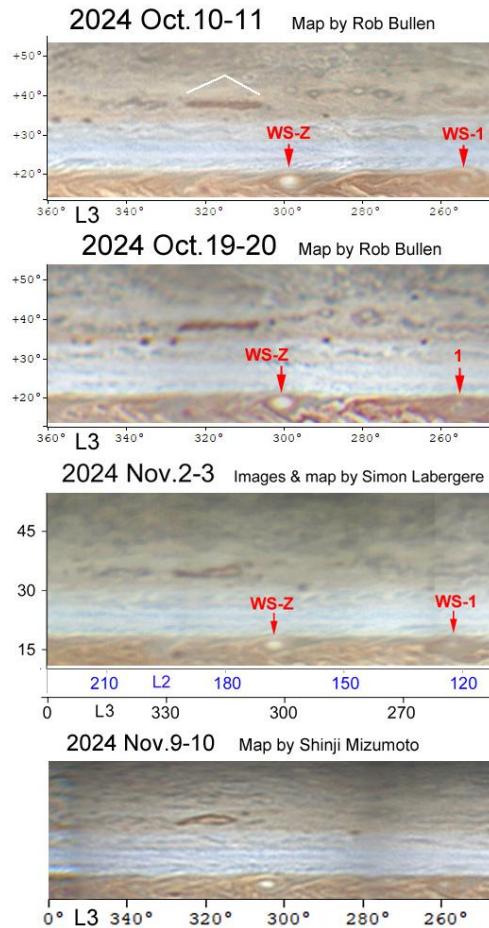


Figure 7. Excerpts from maps in 2024 Oct-Nov. showing a NNTB 'barge' becoming masked by cream-coloured clouds.

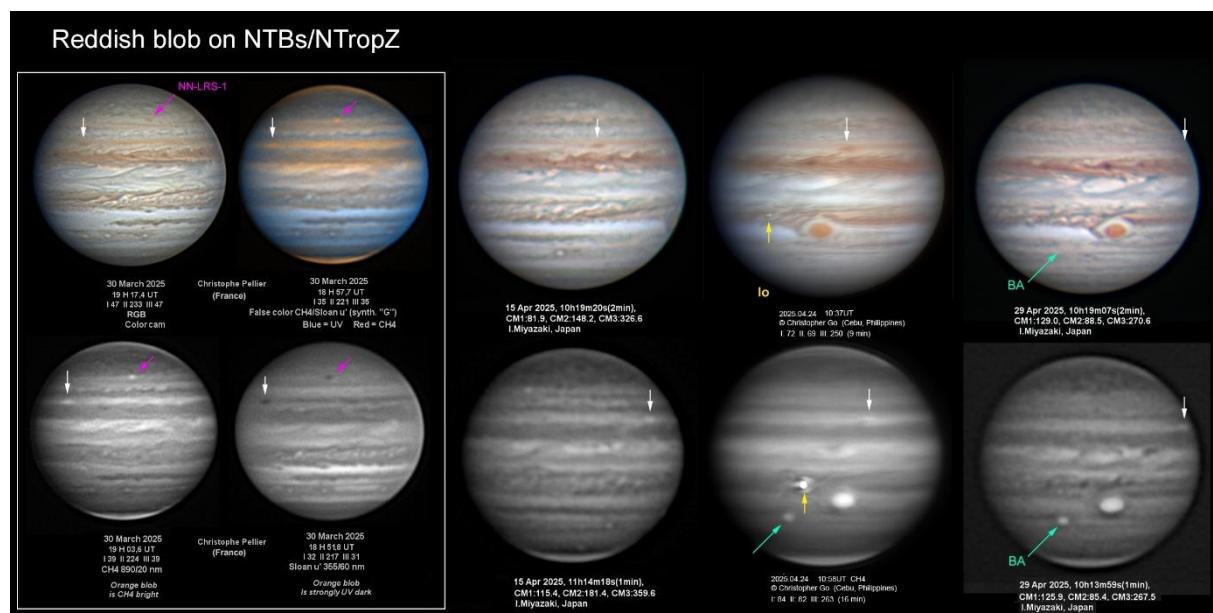


Figure 8. Images in 2025 March & April showing the NTBs/NTropZ 'reddish blob' (white arrow).

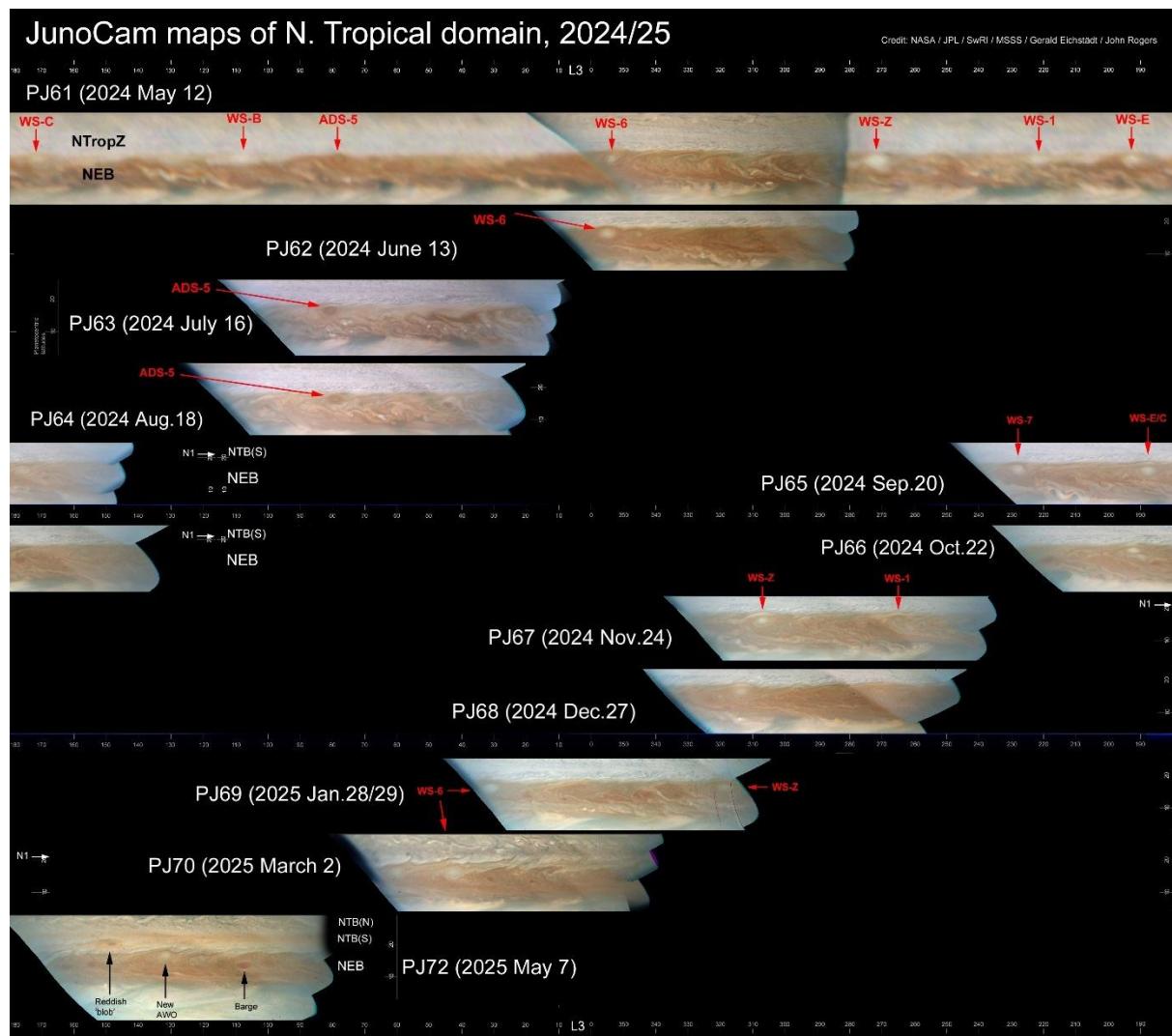


Figure 9. JunoCam cylindrical maps of the N. Tropical domain, PJ61 to PJ72.

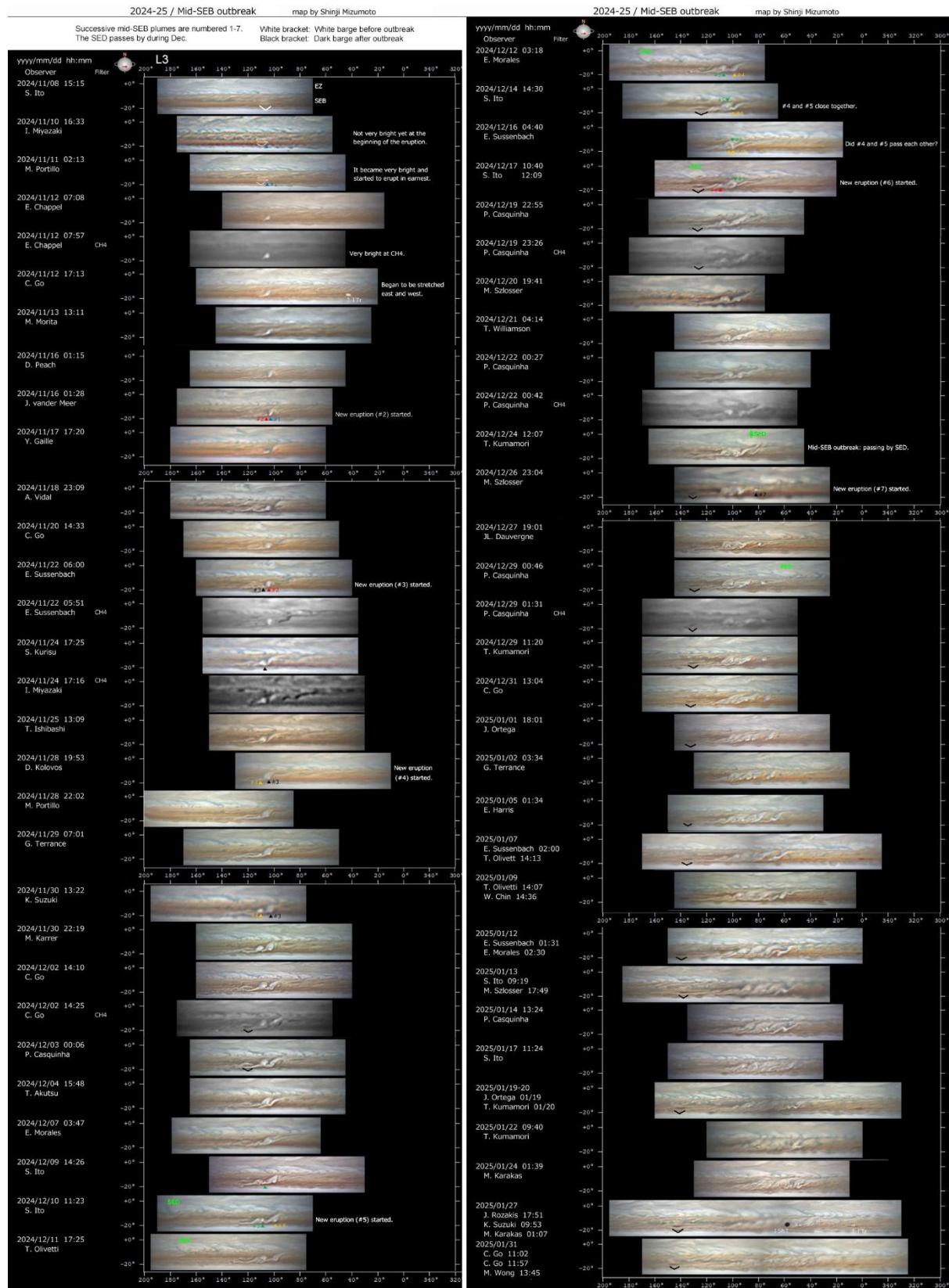


Figure 10A. Subset of S. Mizumoto's daily maps of the mid-SEB outbreak, including several in CH4.

2024-25 Mid-SEB outbreak

← Longitude (deg: L3)

Shinji Mizumoto

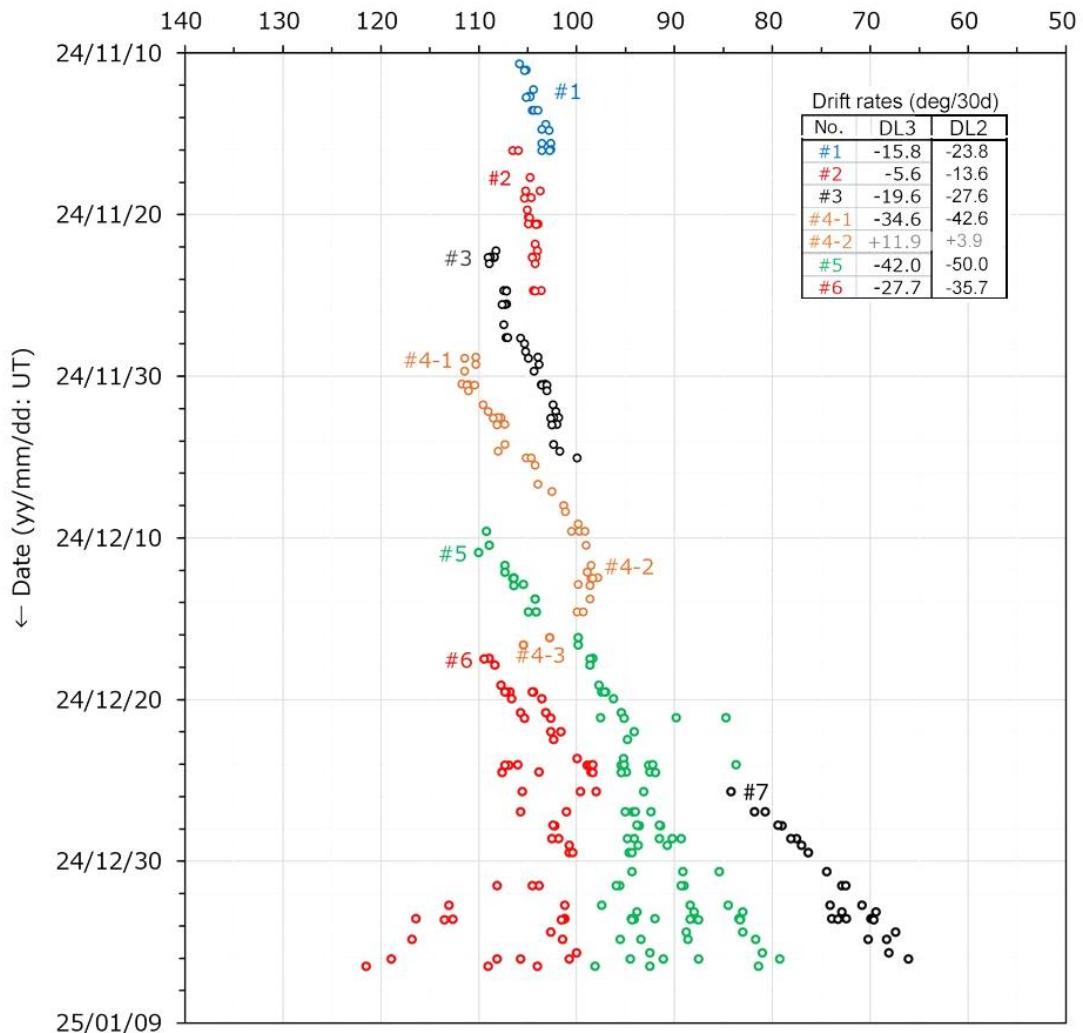


Figure 10B. S. Mizumoto's chart of the white spots in the mid-SEB outbreak, in L3.

2024-25 GRS region drift chart

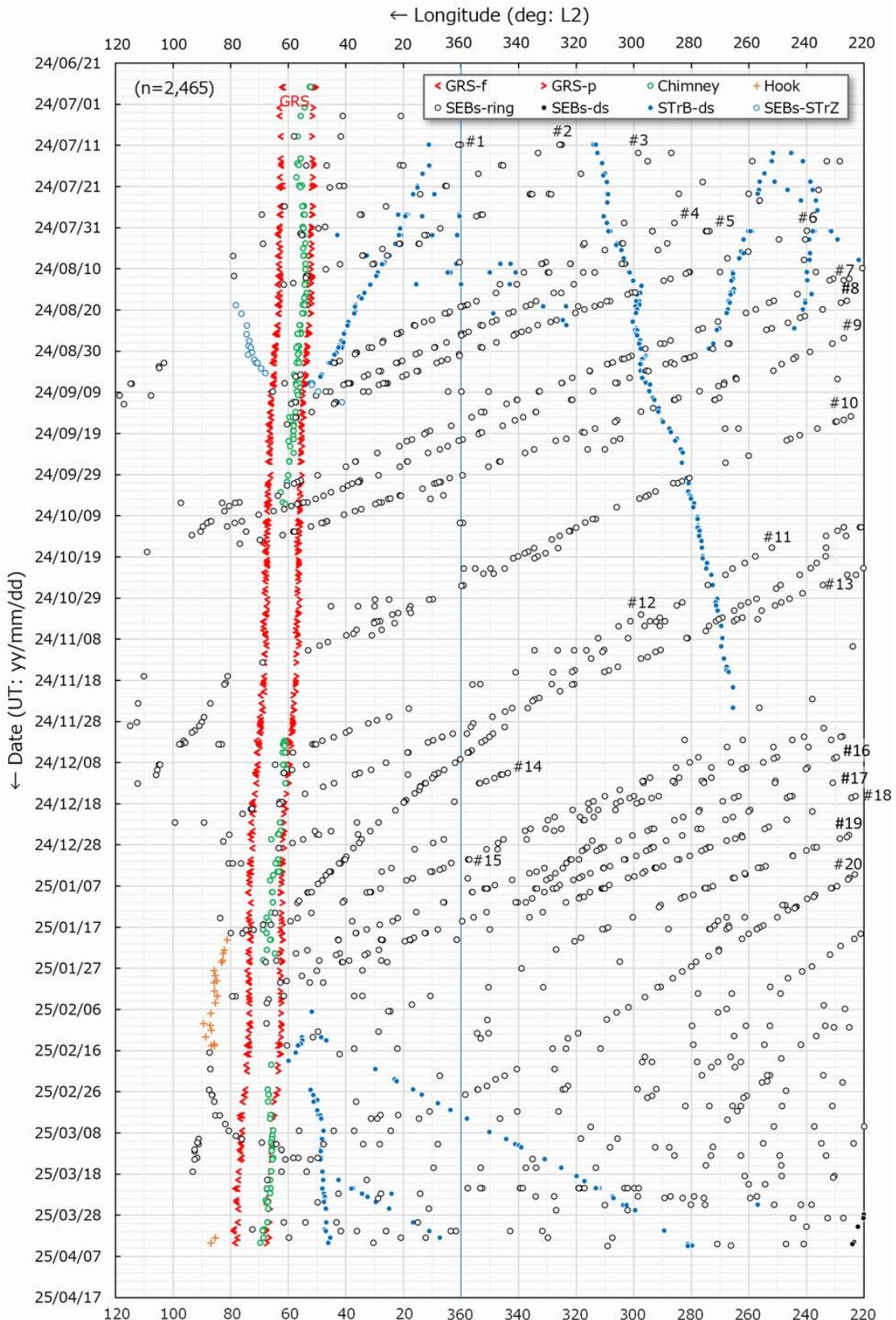


Figure 11. S. Mizumoto's chart of the GRS region, particularly dark spots and rings retrograding in the SEBs jet; plotted in L2.

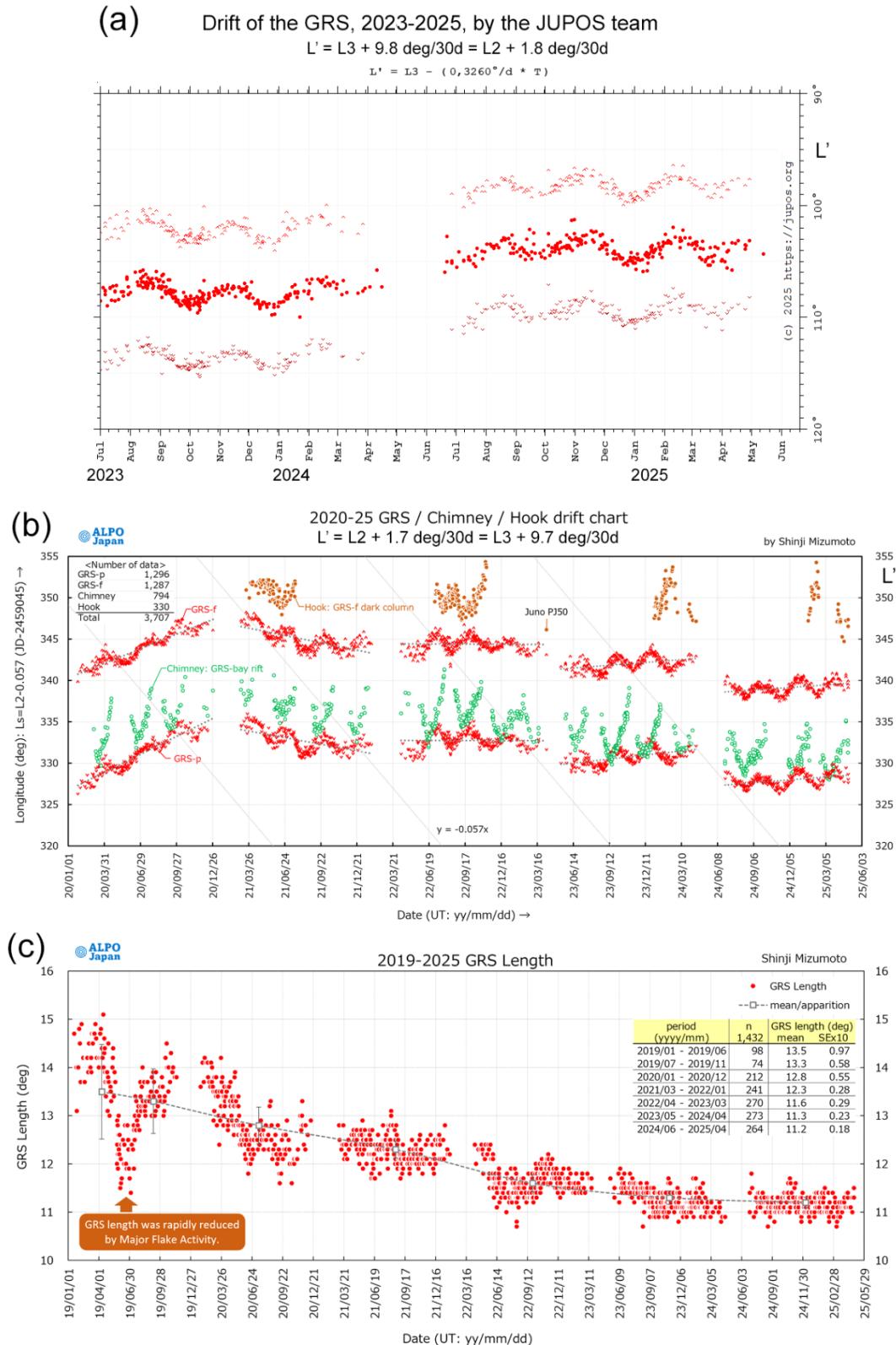


Figure 12. Charts of the GRS longitude, (a) by the JUPOS team, in a system moving at $+1.78 \text{ deg/30d}$ in L_2 ; (b) by Shinji Mizumoto of the ALPO-Japan, in a system moving at $+1.71 \text{ deg/30d}$ in L_2 . The usual 90-day oscillation is obvious, and the acceleration during the latest solar conjunction. Mizumoto also pays careful attention to the intermittent phenomena of the ‘Hook’ (dark band from the SEB around the f. and S sides of the GRS, which appears at intervals of 1-2 years, and generates a S. Tropical Band at the p. side) and the ‘Chimney’ (bright white rift in the rim of the Red Spot Hollow, which appears in synchrony with the 90-day oscillation). (c) Length of the GRS, by S. Mizumoto.

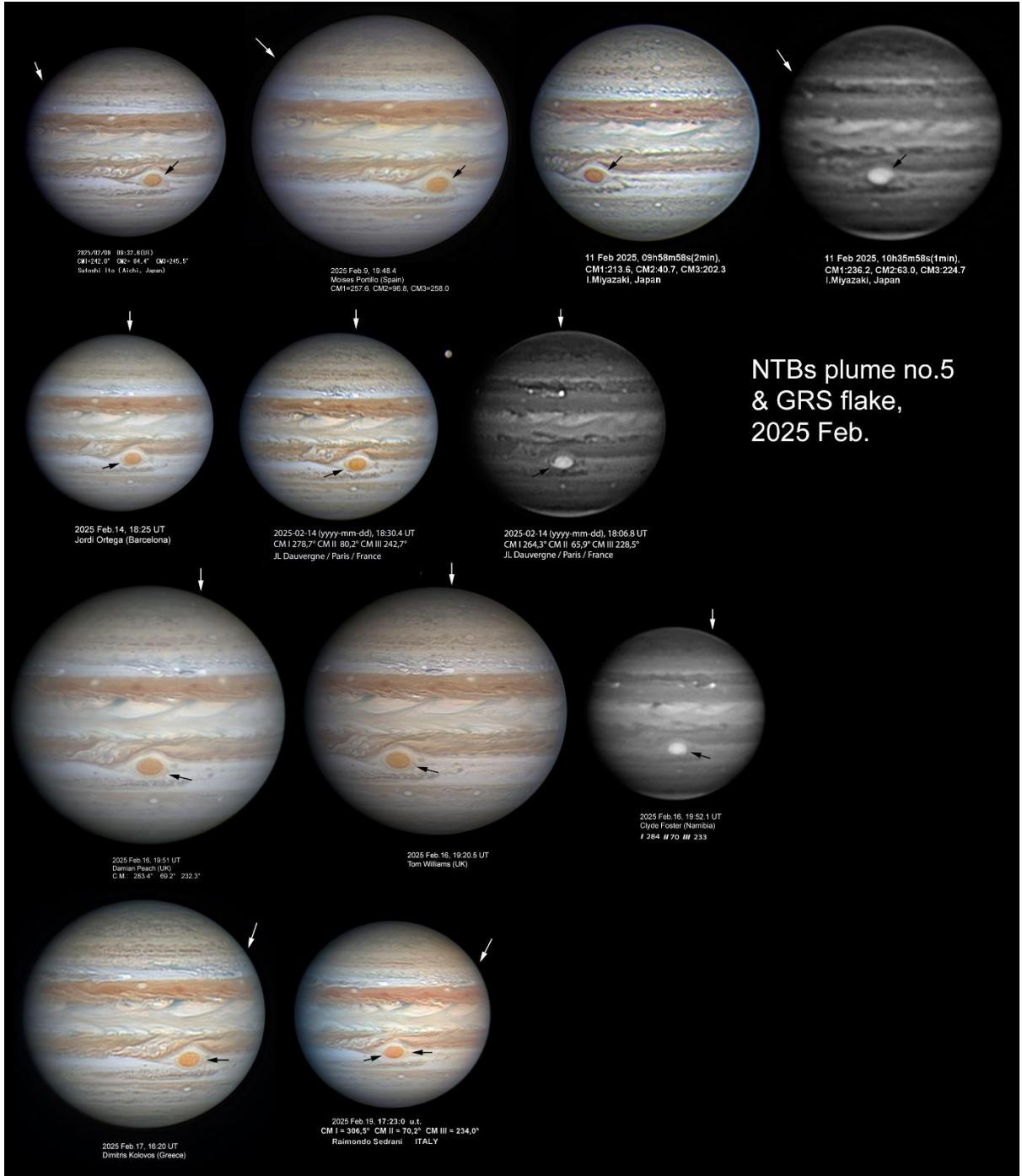


Figure 13. Images showing a red, methane-bright 'flake' at the edge of the GRS, 2025 Feb. The third principal NTBs plume (numbered no.5) is also indicated.

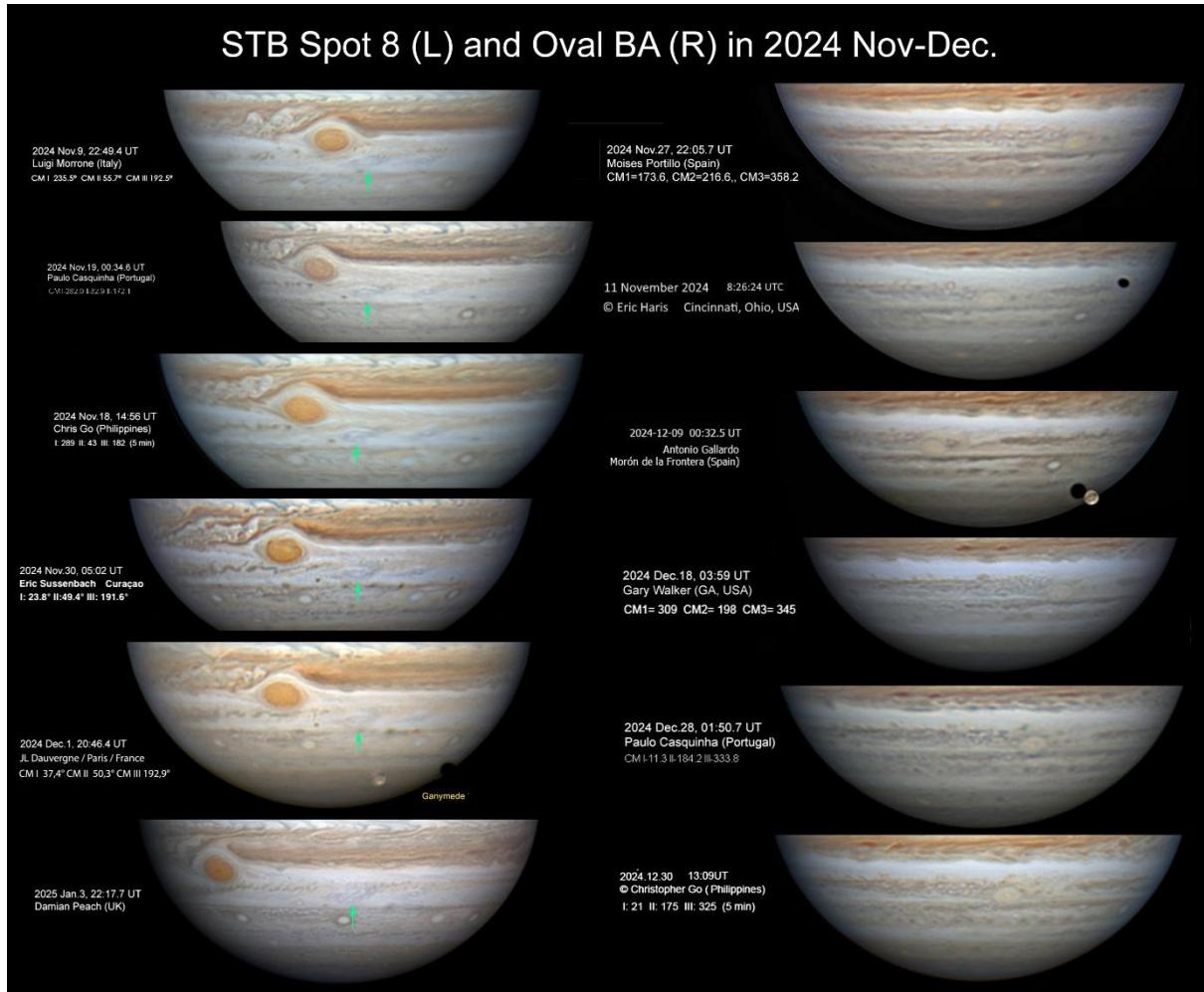


Figure 14. Images of STB Spot 8 and Oval BA in 2024 Nov-Dec.

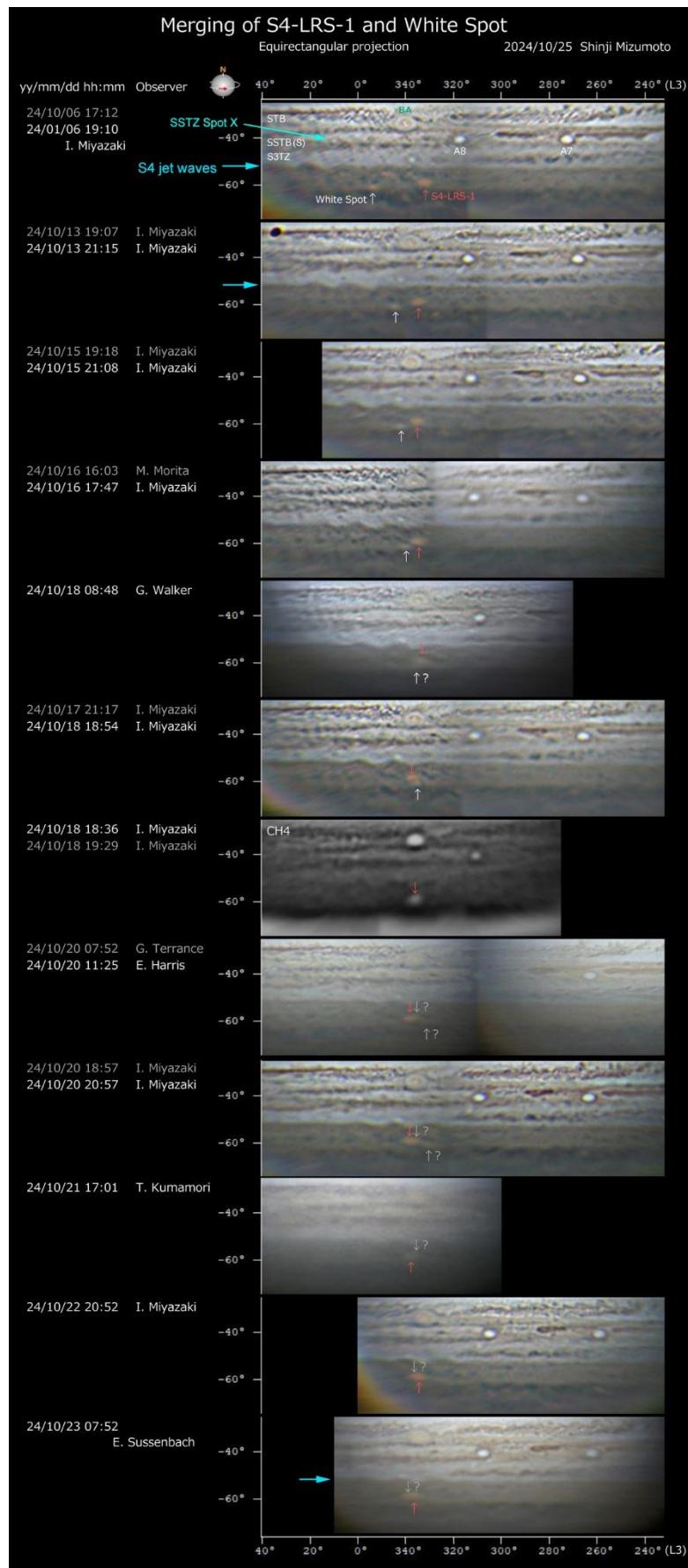


Figure 15. Excerpts from maps by S. Mizumoto, showing S4-LRS-1 interacting with a small AWO. The wave-train on the S4 jet, on the edge of the dark polar region, is also shown.