Jupiter in 2003/04:
INTERIM REPORT ON NORTHERN EQUATORIAL REGION

John Rogers (British Astronomical Association), 2004 March 8

FIGURES (MINIATURES)

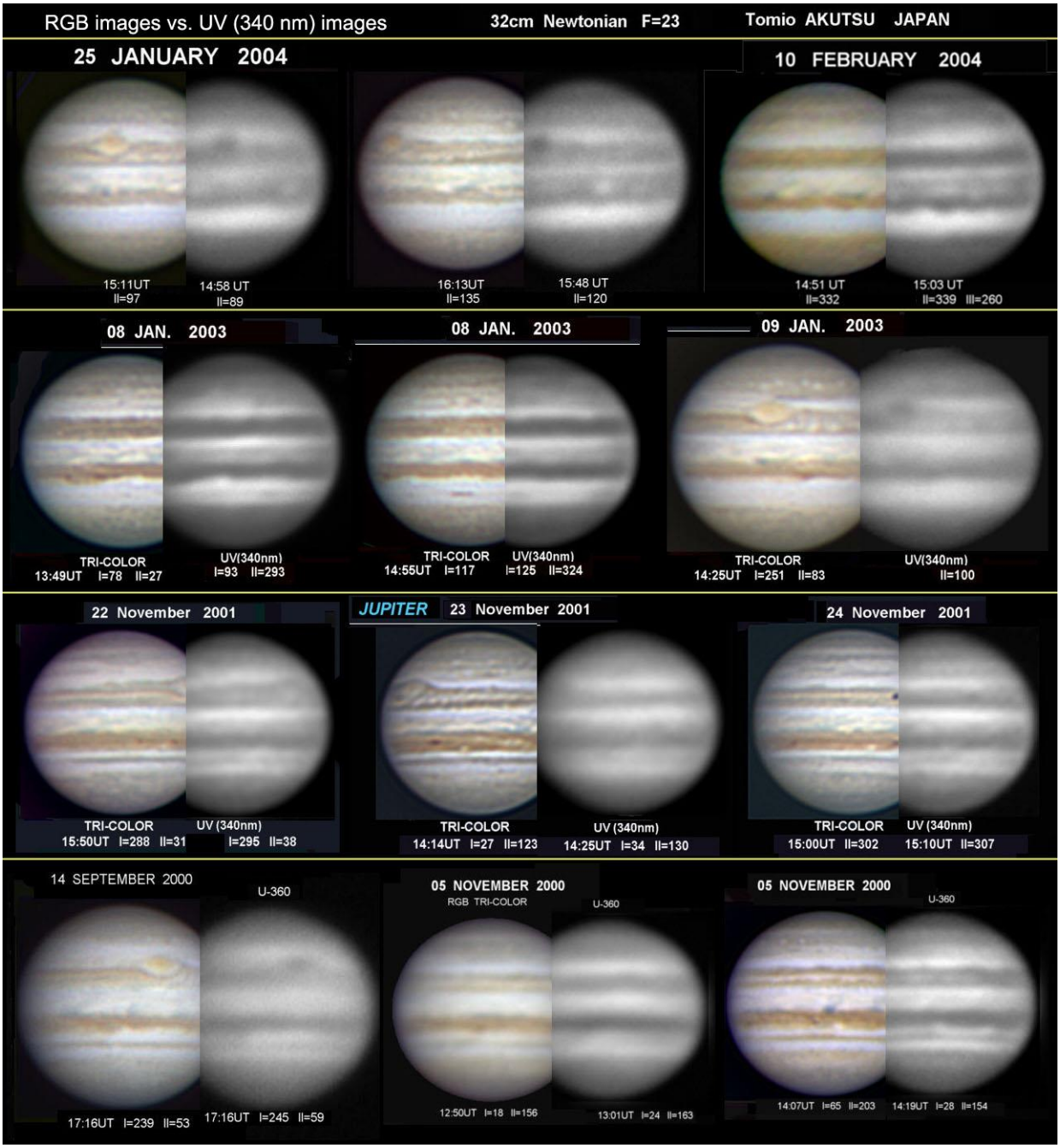

Fig.1: Examples of images in colour and UV by Akutsu, 2000-2004. All images in this report have south up.

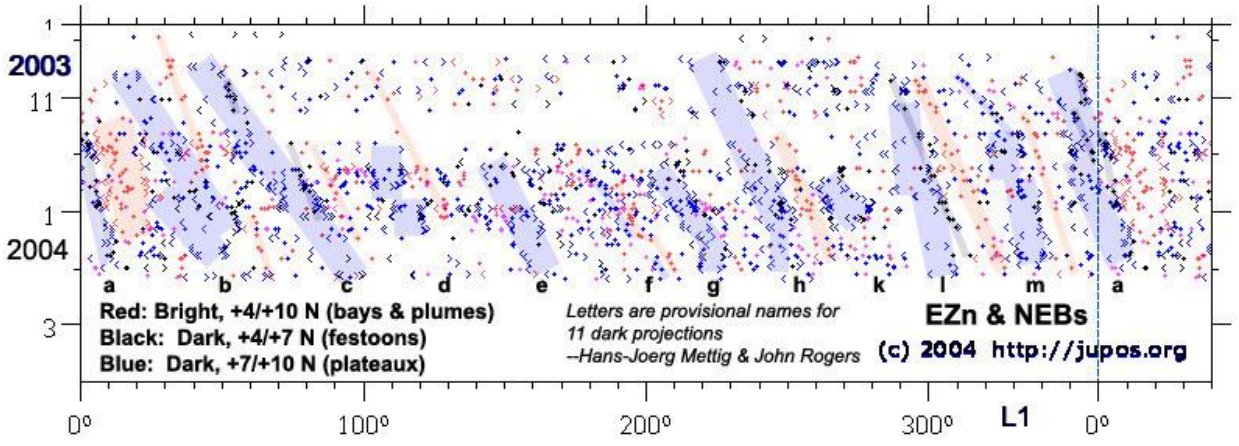

Fig.2: Superimposed JUPOS charts for lats.+4/+7/+10 deg.N, 2003/04, with provisional nomenclature for the major NEBs projections.

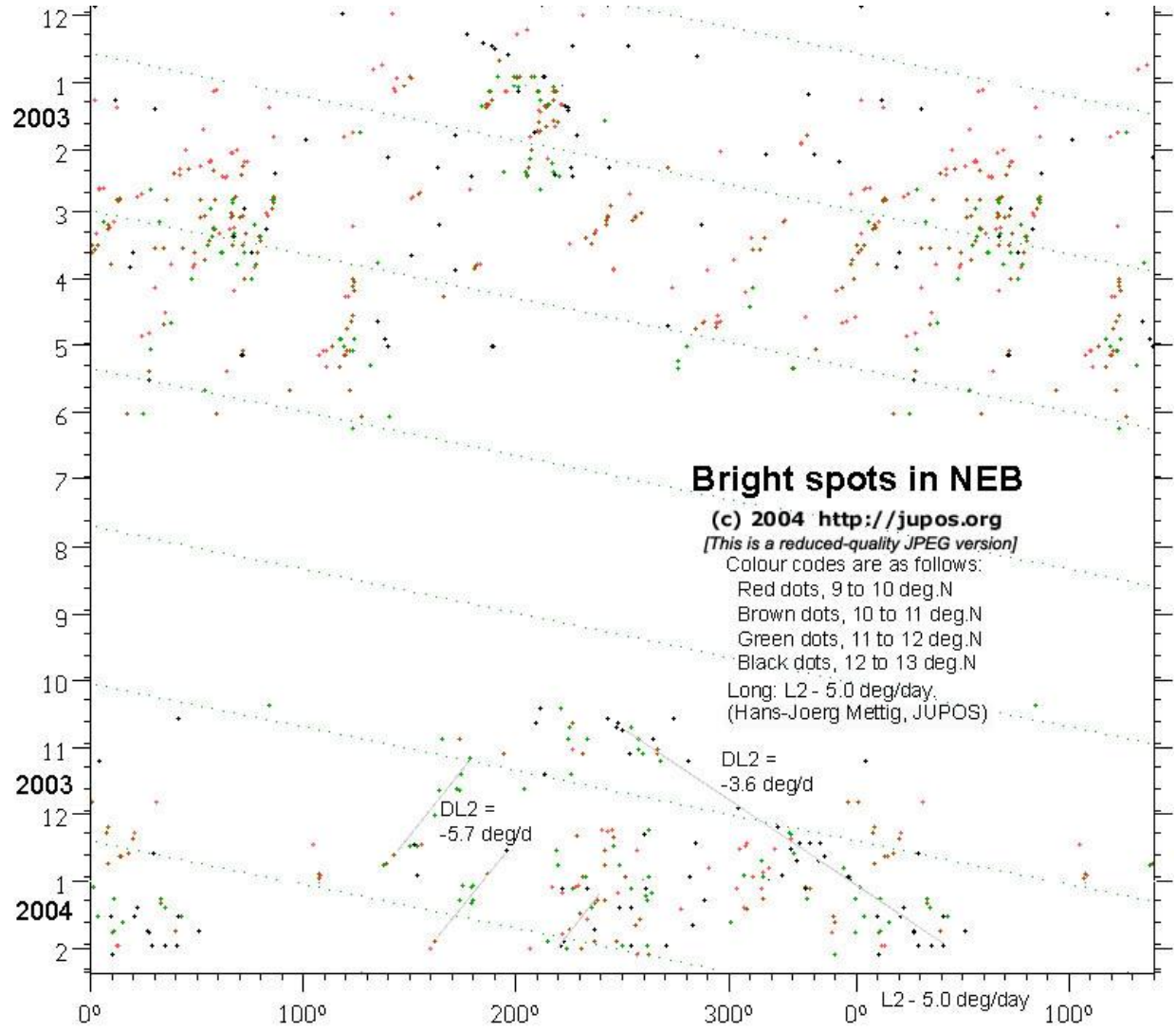

Fig.3: JUPOS chart of NEB rifts, 2002-2004 (by Hans-Joerg Mettig). This shows longitudes of all white spots in the NEB, colour-coded for each one-degree band of latitude, in a longitude system moving at DL2 = -5.0 deg/day.

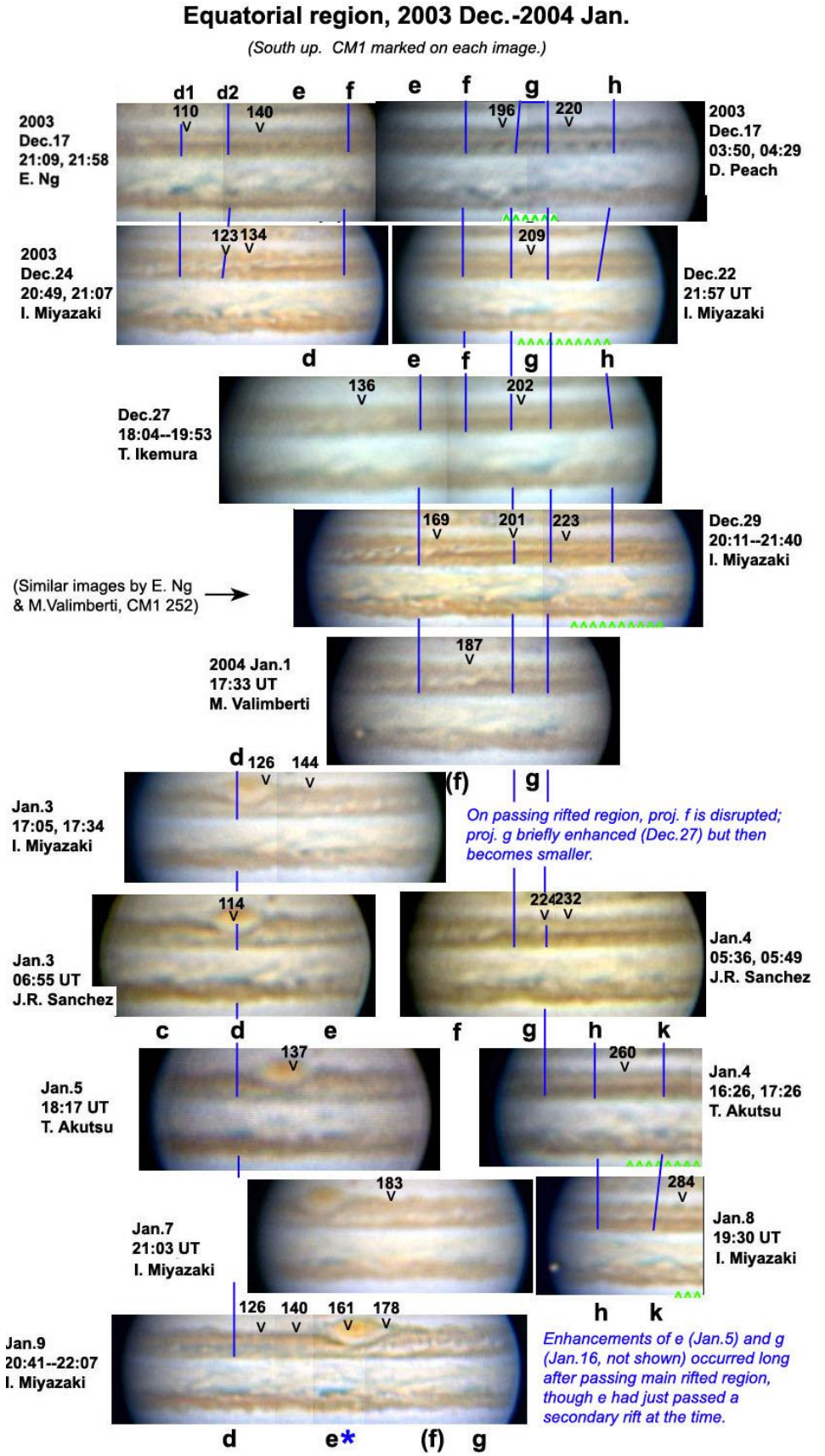

Fig.4: Alignment of images in 2003 Dec.-2004 Jan. Dark NEBs projections are lettered as in Fig.2, and the NEB rifted region is underlined with green zigzag. [2003Dec_EqRset]

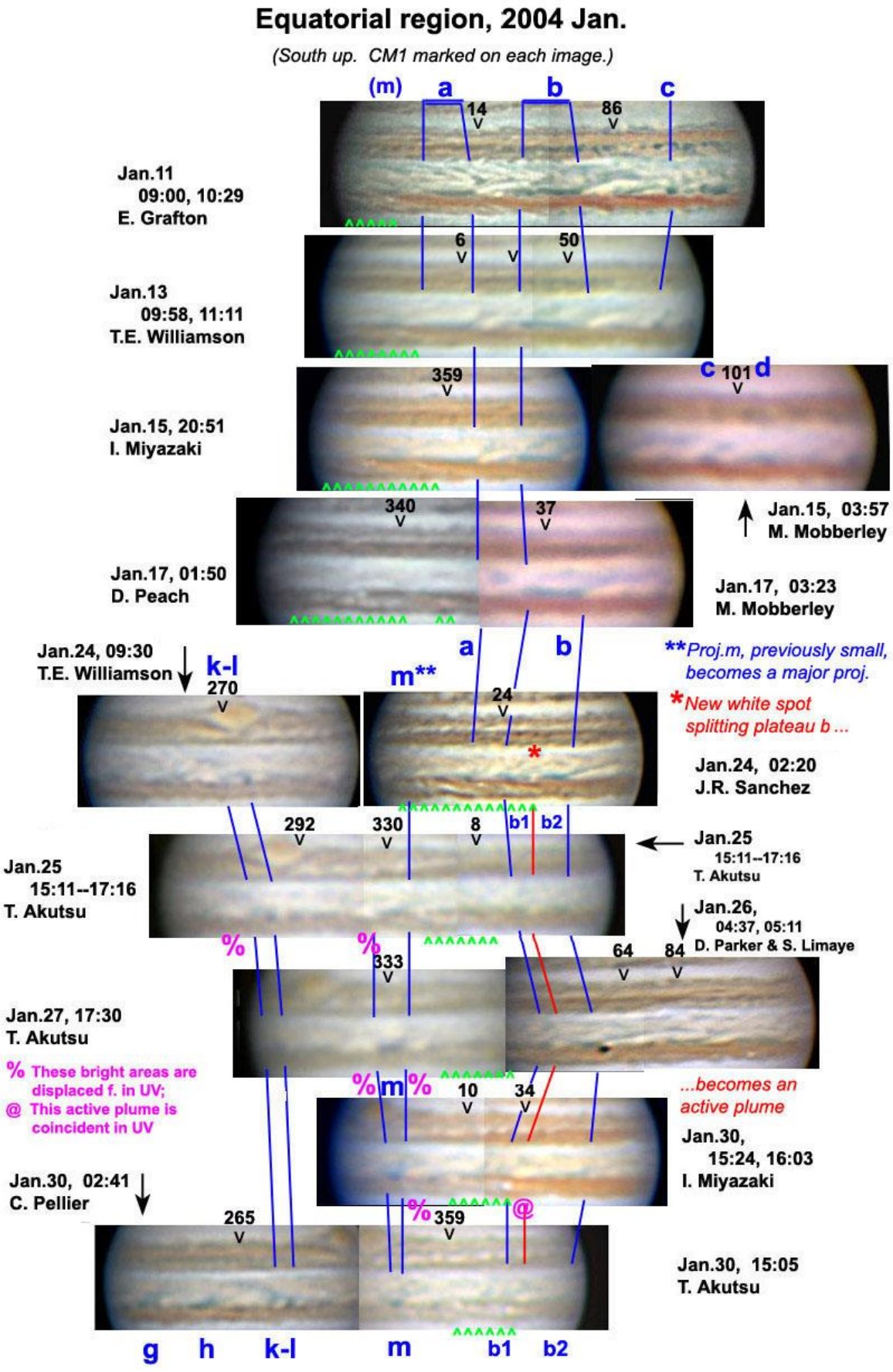

Fig.5: Alignment of images in 2004 Jan. [2004Jan_EqRset2]

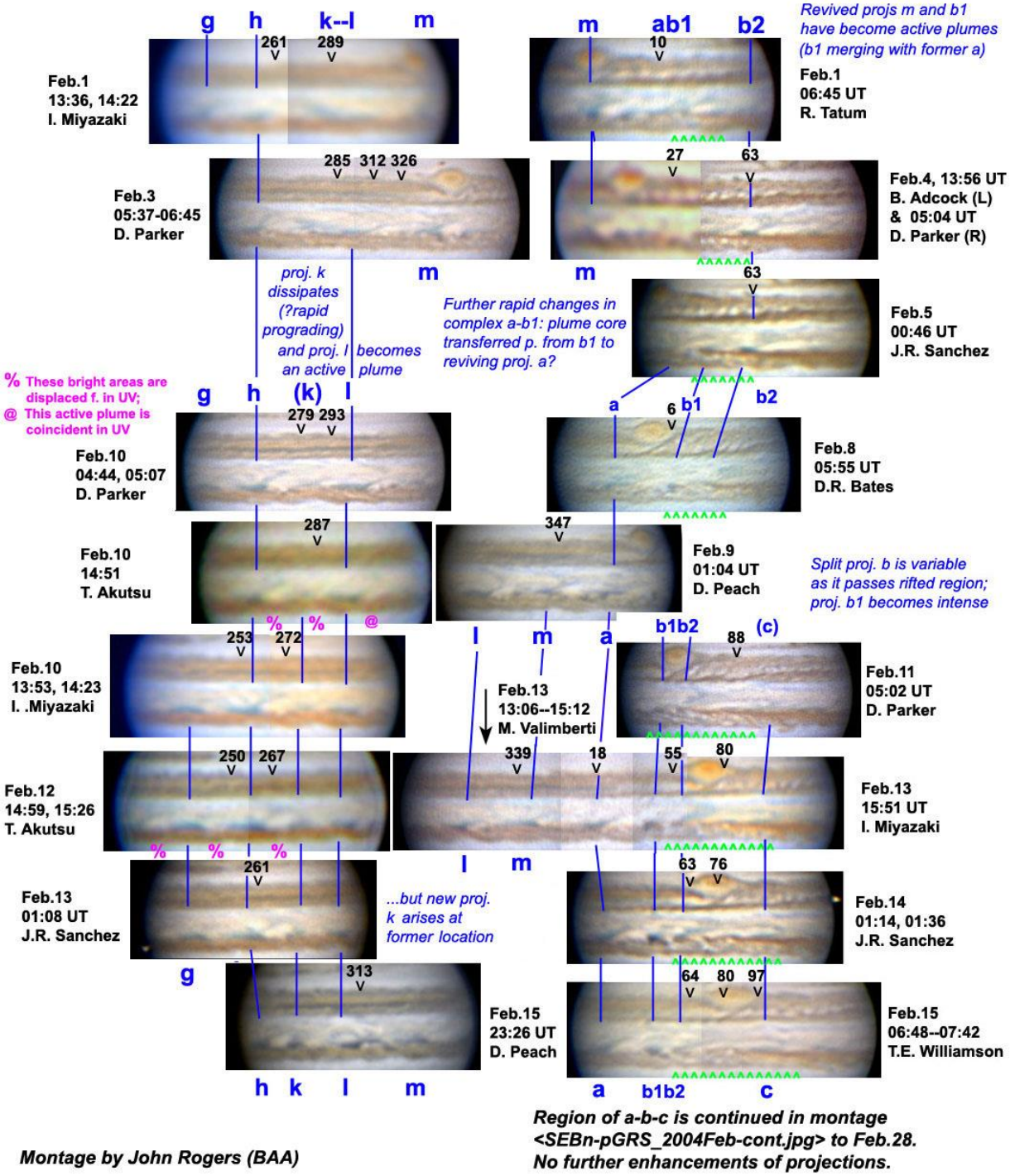

Fig.6: Alignment of images in 2004 Feb. [2004Feb_EqRset]

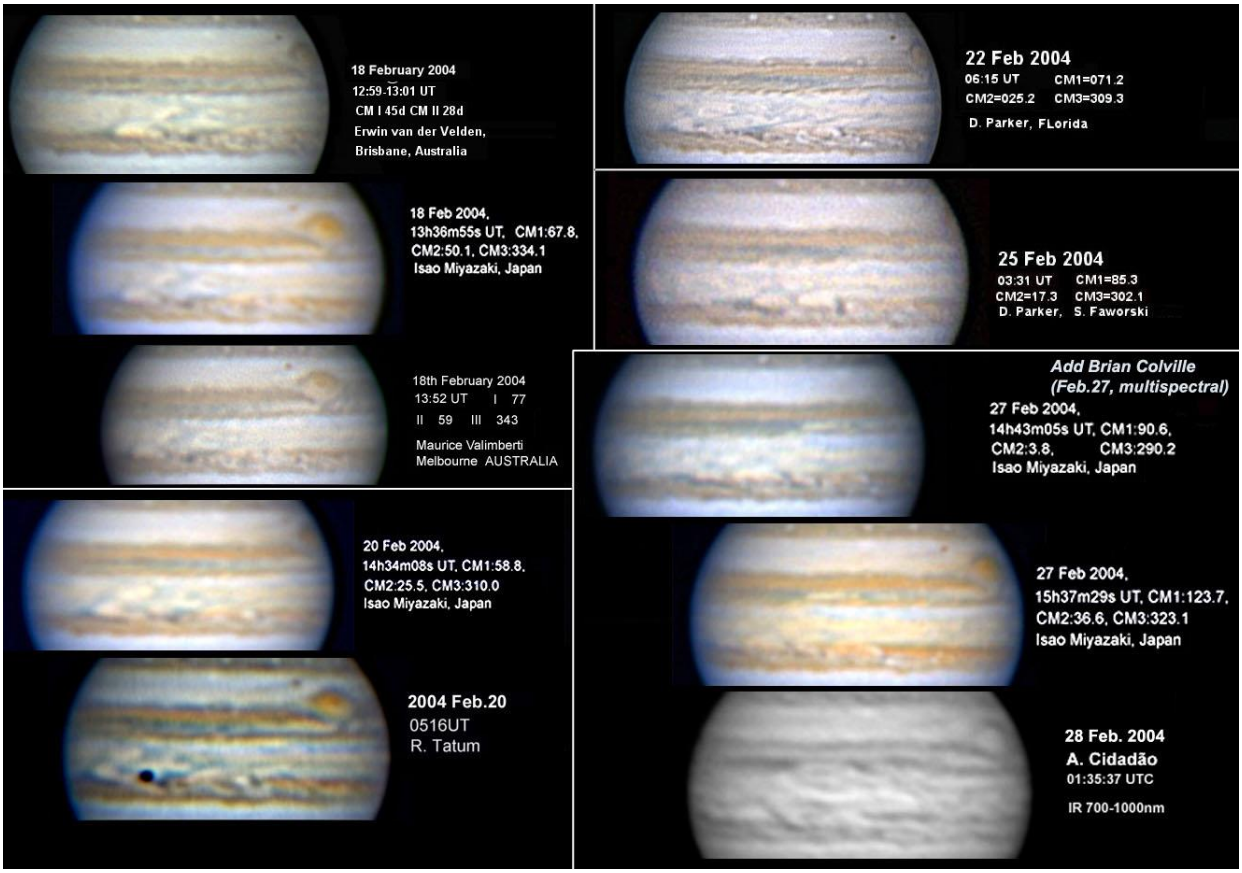

Fig.7: Alignment of images in 2004 Feb., continued, p.the GRS. This also shows the origin of the new South Equatorial Disturbance. [2004Feb_EqRset-cont-pGRS]

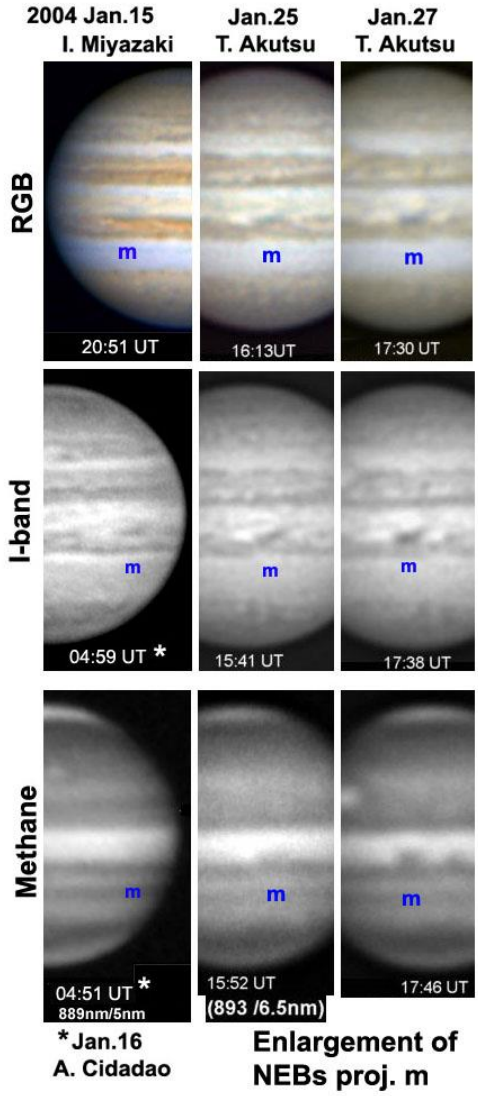

Fig.8: Detail of the enlargement of projection m, at different wavelengths, aligned in latitude. [NEBs_m_enlarge]. I-band shows detail within the main cloud layer; the methane waveband shows hazes above the main cloud layer.

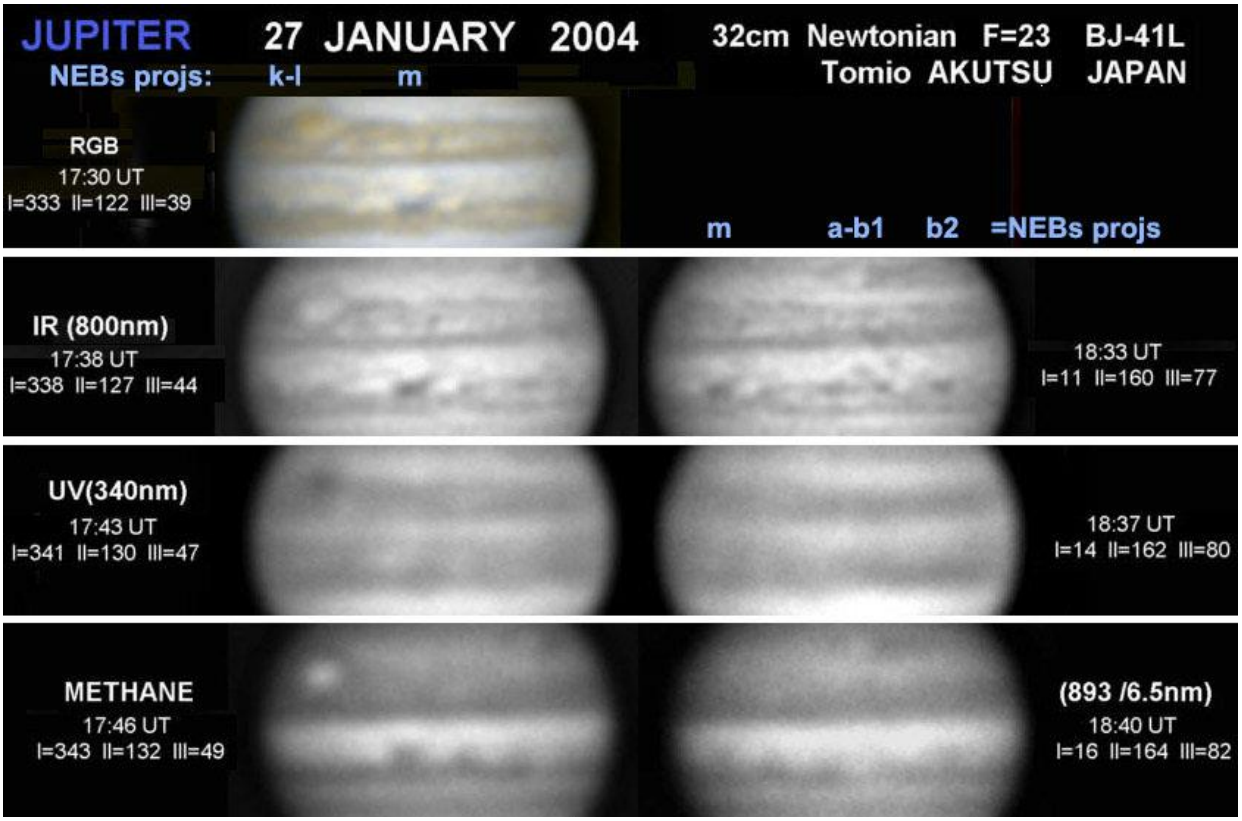

Fig.9: 2004 Jan.27: the equatorial region imaged by T. Akutsu strips in visible colour, I-band, UV, and methane.

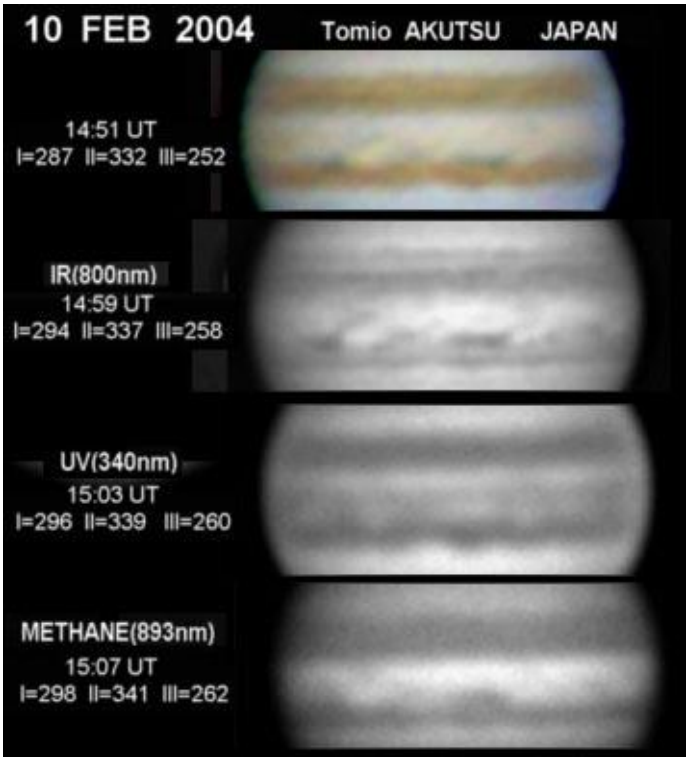

Fig.10: 2004 Feb.10: the equatorial region imaged by T. Akutsu strips in visible colour, I-band, UV, and methane.

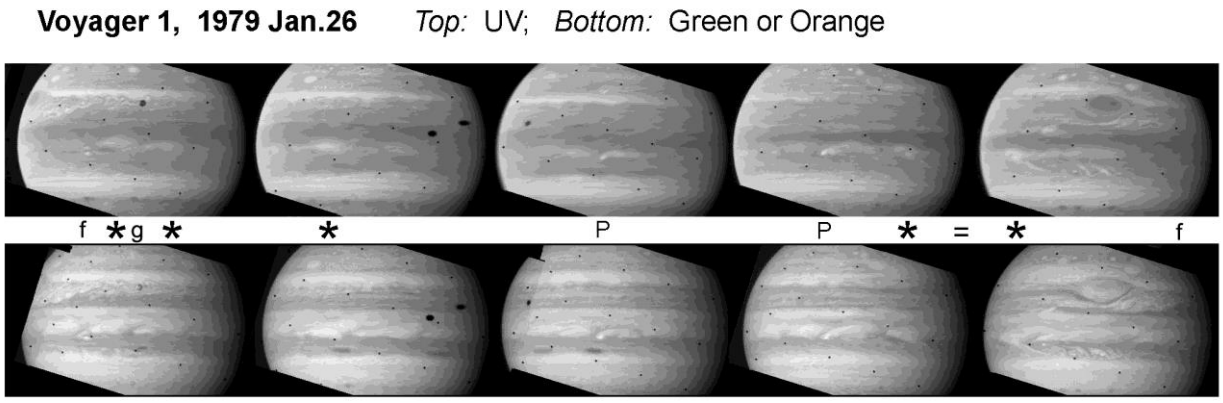

Fig.11: Voyager images on 1979 Jan.26, UV and green filters, taken at 2-hour intervals to cover a whole rotation of the planet. Projections f and g are labelled as in my earlier reports; bright areas centred at different longitudes in UV are marked *; active plumes are marked P. (Amended from an earlier version that was distributed.)

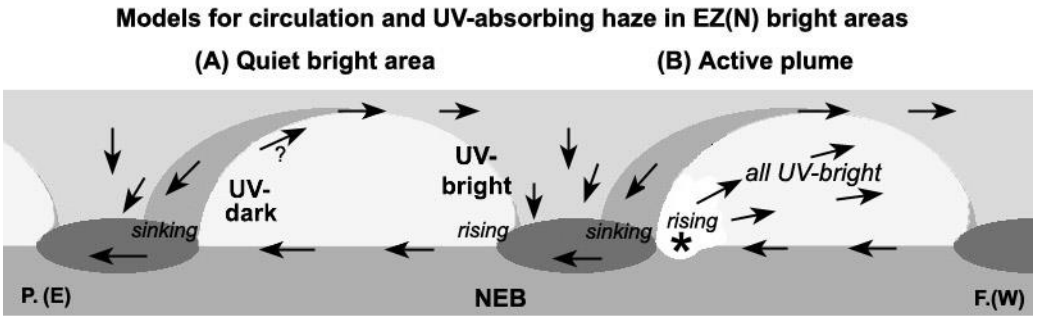

Fig.12: Model for the bright and dark areas of EZ(N), showing the circulation patterns inferred from Galileo and Cassini imaging, and their relationship to visibly bright areas (indicated by the background shading) and UV-bright areas (labelled). It was Cassini's I-band movie, penetrating deeper, which clearly showed the faster NEBs jet in the main clouds. [For more on circulations of these EZ(N) cells, see Minireview, 2001.]
