

Jupiter in 2013/14: The new apparition begins

1. Filenames:

The start of the apparition is the ideal time for all observers who do not yet use the required format to start doing so. All images **must** have filenames which include the date in the order year-month-day, followed by an abbreviation of the observer's name or initials. The format used by the professional PVOL database is becoming most generally accepted:

[jYYYY-MM-DD_HH-MM_filter_obs.jpg](#)

for example:

[j2013-11-01_01-56_rgb_ABC](#) (which includes the time, 01:56 UTC, and observer ABC).

Alternatively, use our own preferred format:

[2013nov01_ABC](#) (and you can include several images in a single JPEG file).

Please do use one of these formats, with exactly the correct punctuation.

2. For people in the UK next week:

The European Planetary Science Congress is in London next week and there is an associated BAA meeting all day on Friday Sep.13. This will be a workshop on "Amateur Contributions to Solar System Studies". Several of our European colleagues will be there giving demonstrations of the use of the JUPOS and fireball-detection software. So it will be a unique opportunity, and anyone is welcome. Details on the BAA web site:

<http://britastro.org/>

--& follow >Meetings >Upcoming meetings;

--or go directly to:

http://britastro.org/baa/index.php?option=com_gcalendar&view=event&eventID=dGFxMTIxOHFING5jOWNvcml0aGI1aHE3OG8gNWFTNDU5dGRhYm9jcmRlcThpOThoZXVpZmdAZw&start=1379026800&end=1379113200&gcid=2&Itemid=100005

3. Jupiter at the start of the new apparition:

Attached is a map made by Marco Vedovato from recent images, and here are some notes on some features of interest, including first results from JUPOS analysis by Gianluigi Adamoli and Michel Jacquesson.

The planet looks generally normal (quite a change from a year ago!).

The NNTB has largely reappeared. NN-LRS-1 is still a large reddish oval, at L2 = 177.

The NTB, following last year's revival, is in a typical state with a N component consisting of narrow grey streaks, and a S component which is bland and pale orange.

The NEB has returned to a normal width, with some dark barges along its irregular N edge, and some typical large dark formations on its S edge.

The SEB is normal, and the usual 'rifting' of the GRS is extensive and active.

The GRS is still strongly orange and isolated, indicating a lack of incoming SEBs disturbances.

The STB comprises a single long dark segment, f. oval BA, to be discussed below.

The nine long-lived SSTB white ovals are all still present.

Major spots of interest:

In the NTropZ, the very long-lived **white spot Z (WSZ)** is still present, at L2 = 226, although it has quite low contrast against the bright NTropZ. It is still rapidly prograding, with DL2 = -23 deg/month. (This is not as fast as its motion last autumn, when it peaked at -42 deg/month.) It will soon be interacting with two dark barges on NEBn. In Chris Go's image on Aug.31, WSZ is remarkably methane-bright.

In the SEB, the strange long-lived **light patch** has now almost reached the p. end of the Red Spot Hollow. In the latest images (Chris Go and Rich Jakiel, Aug.31), it has resolved into a simple oval form, probably an underlying cyclonic oval as has been suggested by a few v-hi-res images in the past. Its interaction with the Red Spot Hollow over the coming days or weeks will be very interesting to observe.

In the STB, **oval BA** is still a well-defined orange oval (see image set and JUPOS chart on next page), and we can now see the aftermath of the collision with STB dark segment D in the last apparition.

As we predicted*, oval BA has accelerated dramatically! Initially, last apparition, it did not do so** – indeed it may even have slowed down (from DL2 = -12 deg/month to ~-9 deg/month). This was probably because, when the incoming STB dark segment arrived f. oval BA, it did not form a long turbulent dark segment as in previous such events, but instead broke up into a chain of cyclonic ovals. Since solar conjunction, this chain has been replaced by a long dark segment after all, and accordingly, oval BA has accelerated at last (to DL2 ~ -16 deg/month).

Moreover, the other expected consequences of the collision are also evident: a very dark collar around oval BA, and dark spots emitted on the STBn jetstream p. it, and in the STZ f. it. The attached image set shows how the STBn p. oval BA, which was tenuous last year, is now much darker with tiny prograding spots (red arrow).

One other feature in the STB deserves attention: a very faint blue-grey streak at L2 ~ 253. This evolved from a very dark spot in 2012, and we have suggested that it is the next STB structured sector, so it will be called STB segment E or, more familiarly, the '**STB Ghost**', since it closely resembles the earlier 'STB Remnant'. (It is best shown in Damian Peach's image on Sep.2.)

*For the background to this event, see our big long-term report on the S.Temp. domain:

<http://www.britastro.org/jupiter/stemp2013.htm>

and our report last apparition:

http://www.britastro.org/jupiter/2012_13report10.htm

**For our last bulletin on the collision in early 2013, see:

http://www.britastro.org/jupiter/2012_13report11.htm

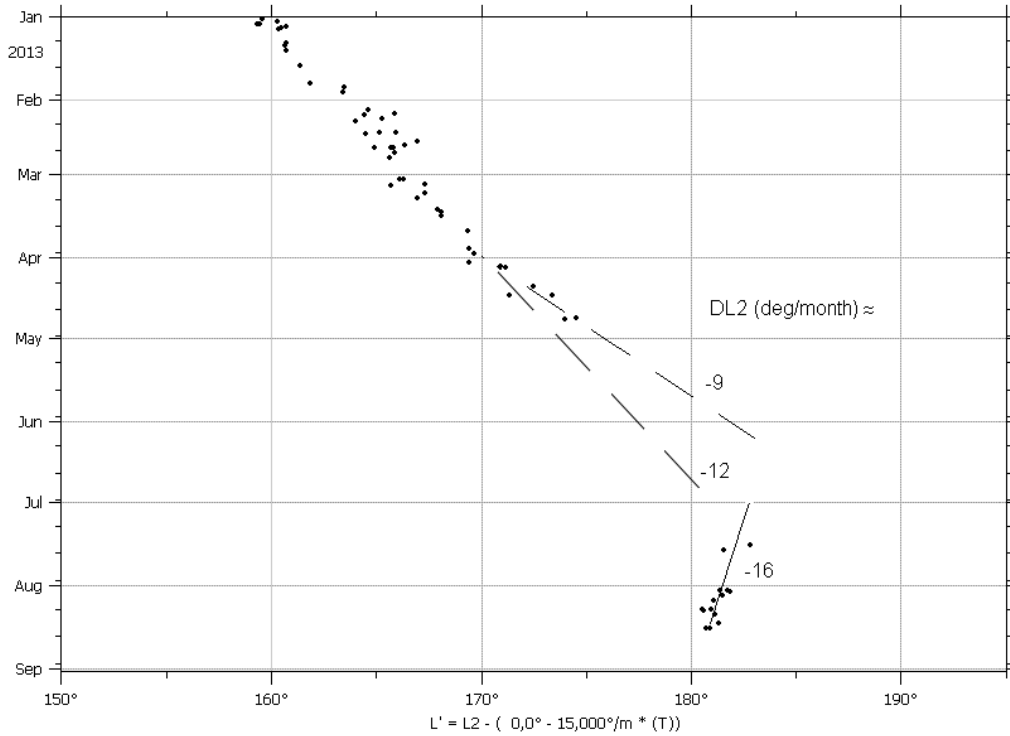
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2013 Sep.3

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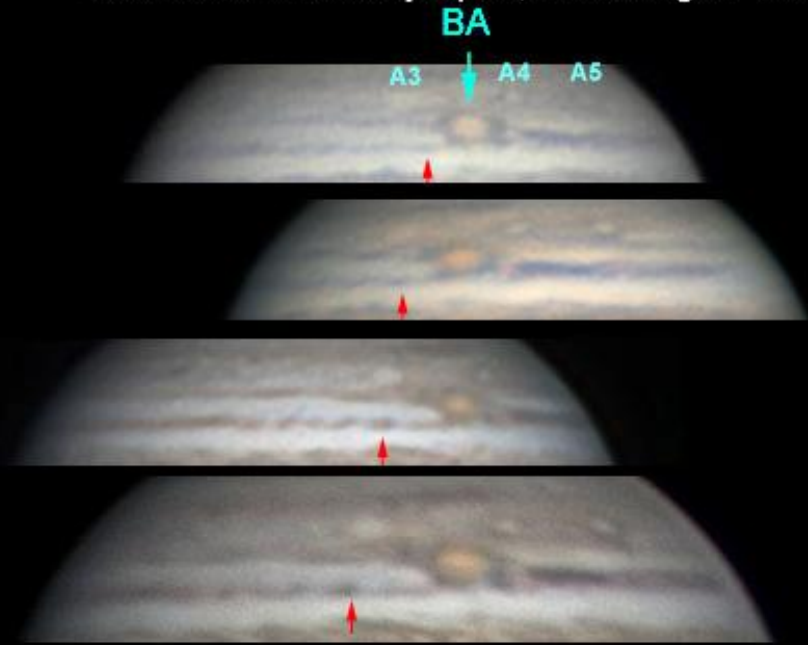
Oval BA, 2013

(JUPOS chart prepared by Gianluigi Adamoli)



Oval BA and STBn jet p. it, 2013 Aug.27-30

[Compiled by John Rogers]



2013
 Aug.27, 03:59 UT
 Ian Sharp (UK)
 CM2 = 36.6

Aug.28, 10:20 UT
 Brian Combs (GA, USA)
 CM2 = 57.1

Aug.30, 10:49 UT
 Gary Walker (GA, USA)
 CM2 = 14.6

Aug.30, 21:14.7 UT
 CM2=32.9
 Tomio Akutsu
 (Philippines)