PIC DU MIDI OBSERVATIONS OF DUAL "DISPARITION BRUSQUE"

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The relatively new H-alpha coronograph (see figure 1) aimed at supporting the coronal observations during the SOHO era is now in operation using a 1K $\times$ 1K CCD camera. Routine observations are performed every day, with the help of 40 amateurs (teams of two or three) from Europe.

To demonstrate its capabilities, we picked an interesting event observed on June 29, 1994 from 6:35 to 15:10 U.T. We observed almost simultaneously 2 Disparition-s Brusques of the large prominences oppositely situated at the both limbs of the SUN, see Figure 2. This seems to be the first observation ever done of such an interesting event. The almost perfect phasing of the phenomena and its scale strongly suggest that the destabilisation effect (large scale instability) responsible for the double diametrically opposite - D.B. is a global phenomenon. The chronology of events seen at the same time with SXT (H. Hudson, private comm.) suggests that several phenomena were simultaneously occuring around the Sun (flare, ejections, cusp appearance, etc...).

Note added after the show of the poster:

In this poster, we showed the images of the events. Because of the apparent uniqueness of this observation, the sequence of images was open to discussion. We believe that the so-called "Halo" CME's are probably the coronal counterparts of such chromospheric global events. Assuming that both a D.B. and a CME could be due to the emergence of a new magnetic flux at the surface, close to a disappearing filament (S. Martin, this conference), we suggest that a dual emergence, simultaneously at diametrically opposite limbs, could explain our observation. From the global dynamo mechanism effects and subsequent evolution of the magnetic flux ropes through the solar surface, such dual emergence is possible (A. Rusmaikin, private comm.). It is clear that, up to now, such dual event was not observed because new emerging magnetic fluxes were observed on the visible solar disc and its opposite "limb" counterpart, if it exists, appears only on the hidden face of the Sun.

\begin{figure}[h]
\centering
\includegraphics[width=0.8\textwidth]{Fig_1.png}
\caption{Full field of view picture obtained on June 29, 1994 from a sequence of CCD-images made through an H$\alpha$ filter of 0.5nm FWHM with the 15 cm-Lyot coronograph of Pic du Midi Observatory. Note the D.B.s appearing at opposite limbs near Ap = 70° and Ap = 244°.}
\end{figure}
Fig. 2. Mosaic of pictures taken from the sequence of images as shown on figure 1. A narrow f.o.v. is picked up at each moment shown in U.T. The E-limb and the W-Limb D.B.s are shown at the top and the bottom of each raw. Note the perfect synchronism of the opposite limbs events.
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