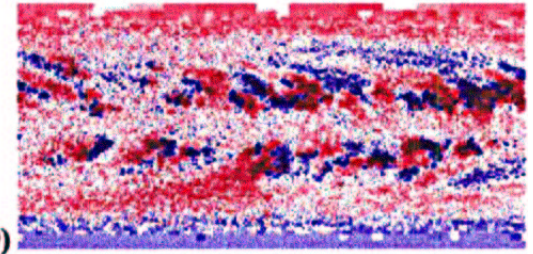
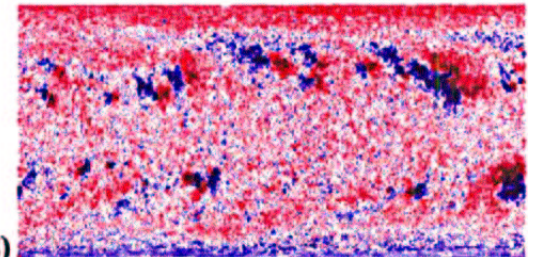


**Examples of CR synoptic maps based on KPNO magnetograms (from the SAIC coronal modeling site <http://haven.saic.com/corona>), showing photospheric magnetic field changes during the rise to the next maximum.**

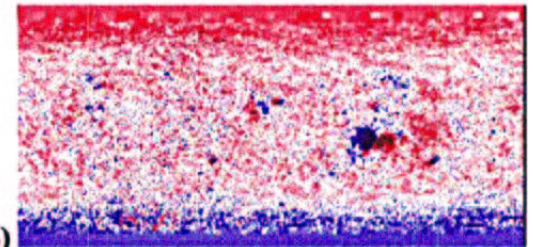
**CR1951 (06/24/99-07/21/99)**

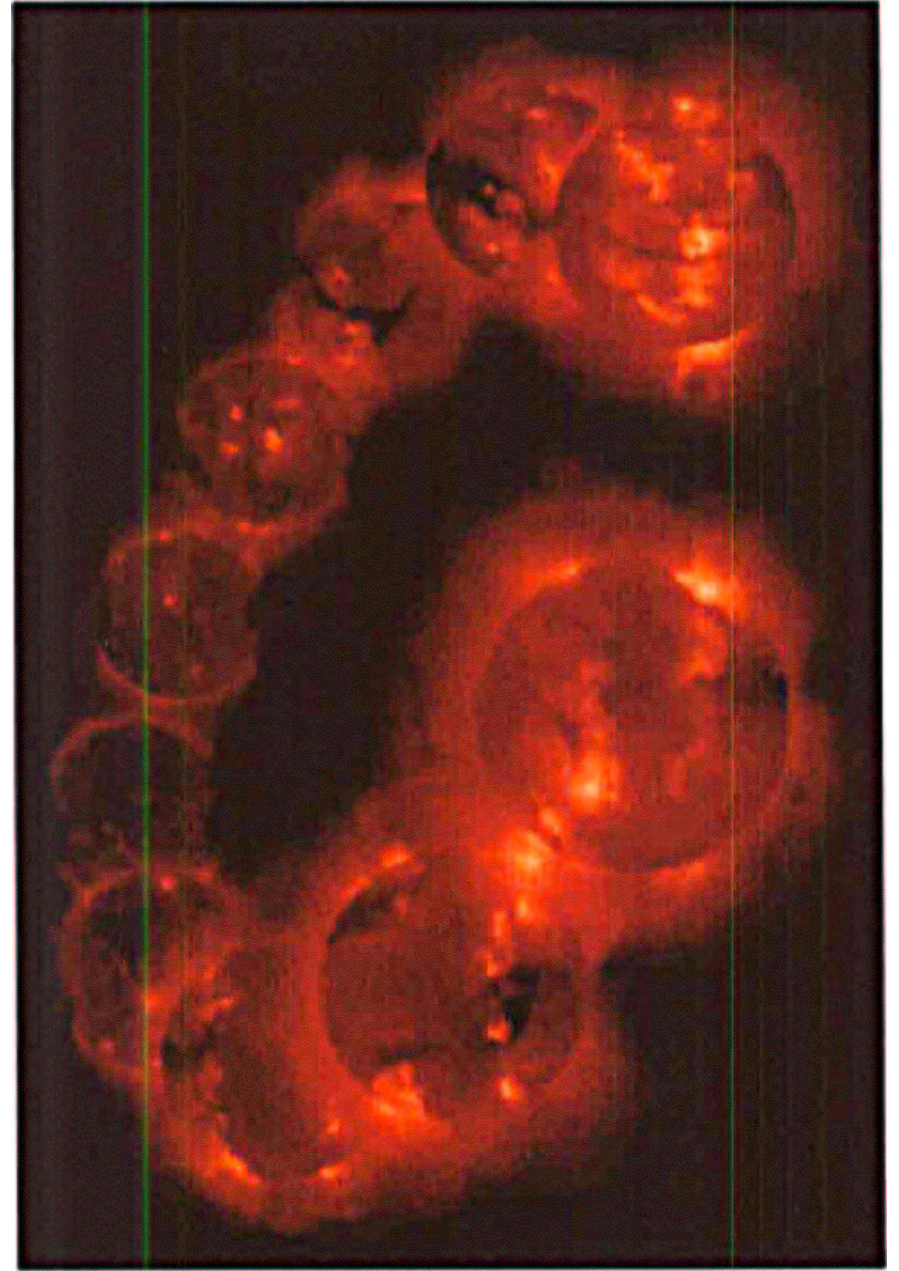
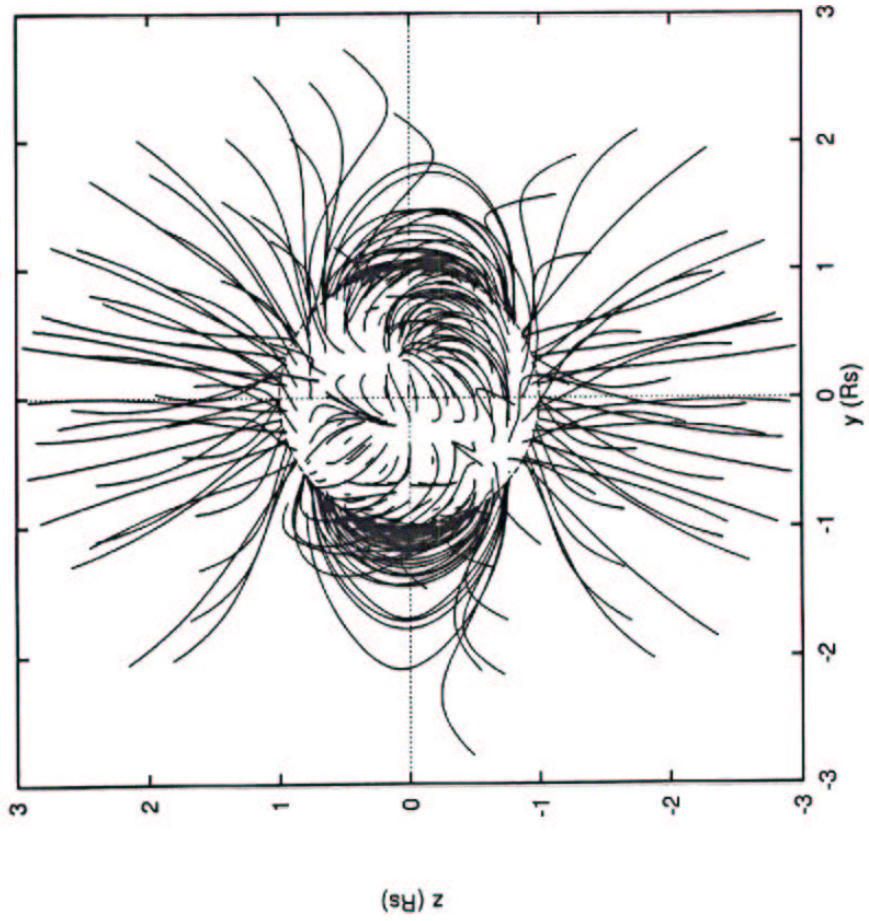


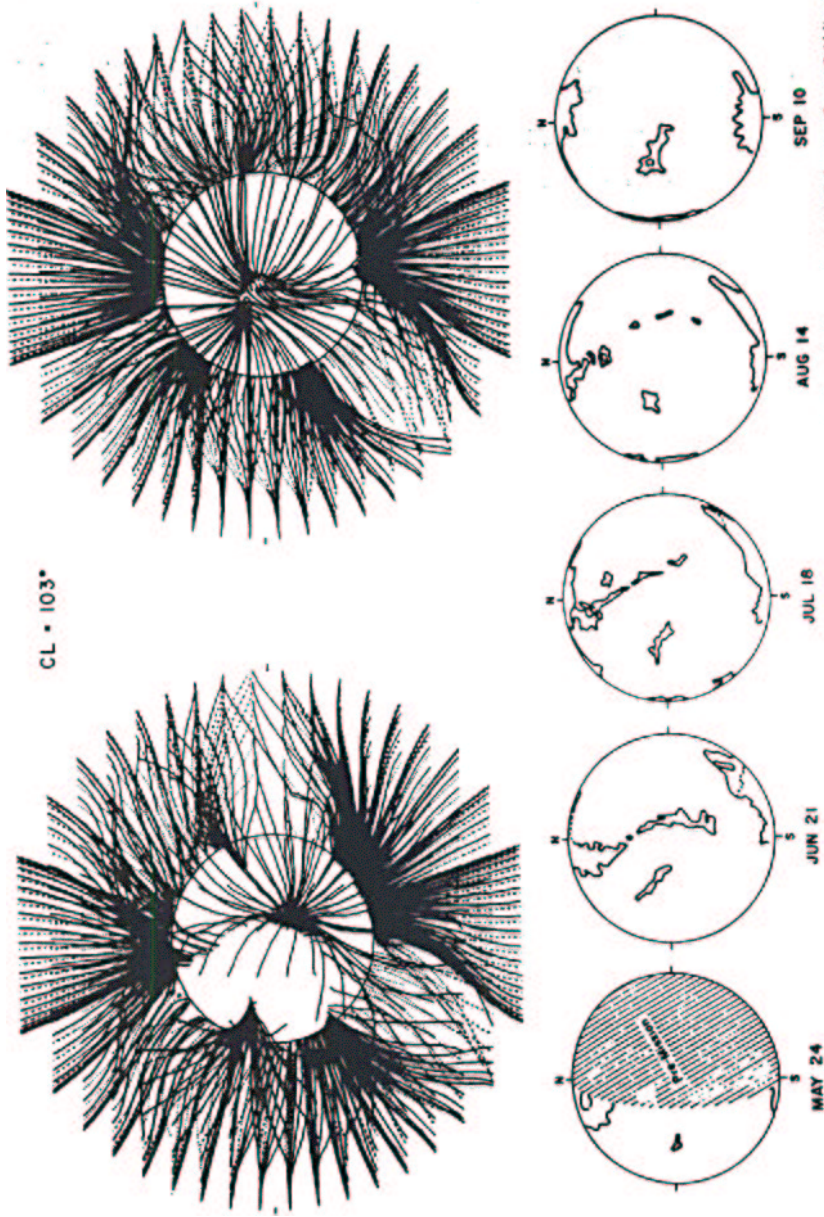
**CR1931 (12/26/97-01/22/98)**



**CR1913 (08/22/96-09/18/96)**



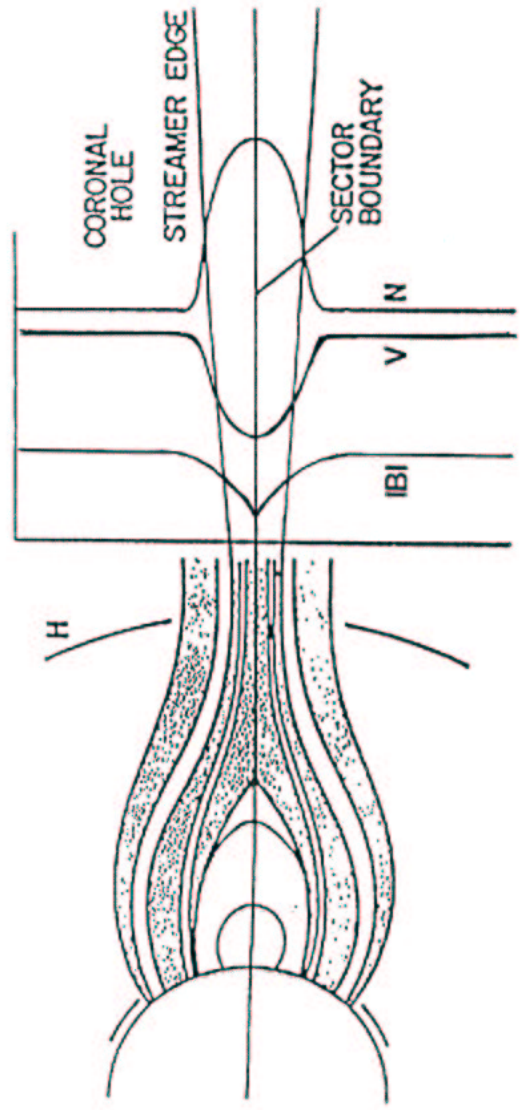




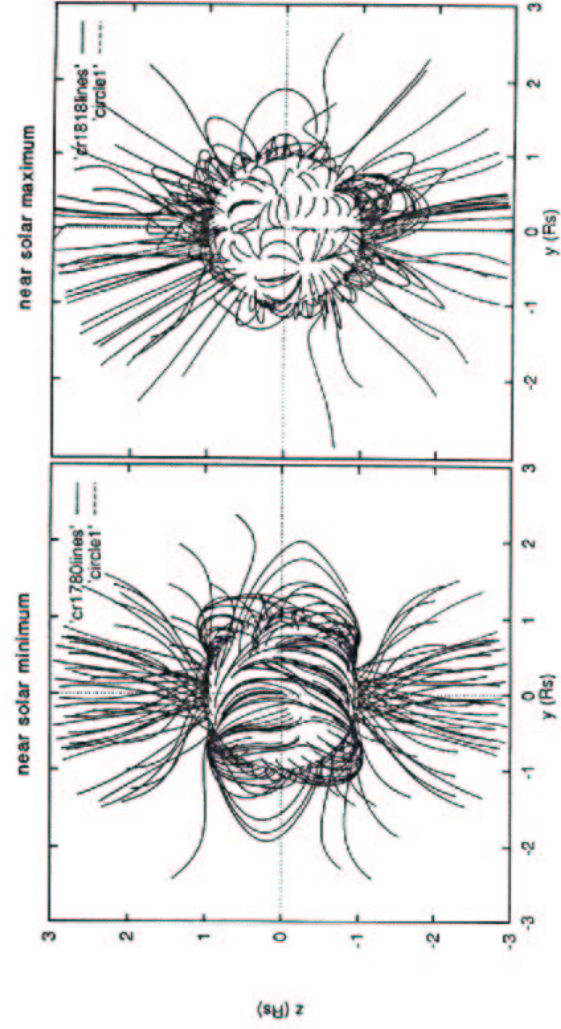
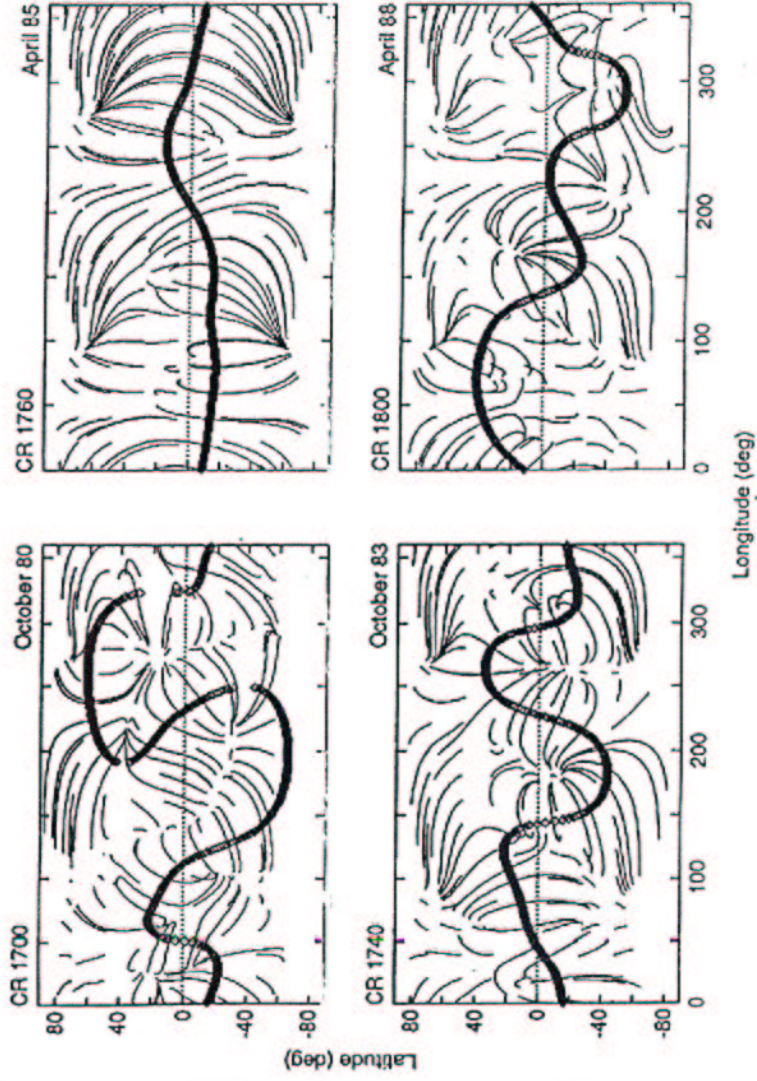
Example of the representation of coronal holes by open field line calculations. Above, plane-of-the-sky projections centered at 103 degrees of open field lines calculated by using magnetic data from two separate solar rotations. The source surface is at 2.6 R<sub>s</sub> and field lines behind the plane of the sky are dashed. Below, coronal hole boundaries centered at the same longitude, as observed from Skylab X-ray observations. The calculations above correspond in time to June 21 (left) and August 14 (right).

### Levine (1977) comparison of source surface model open field lines and Skylab coronal holes

### LATITUDE VARIATION OF SOLAR WIND - CORONAL STREAMER BELT



(Adapted from Feldman et al, 1981)



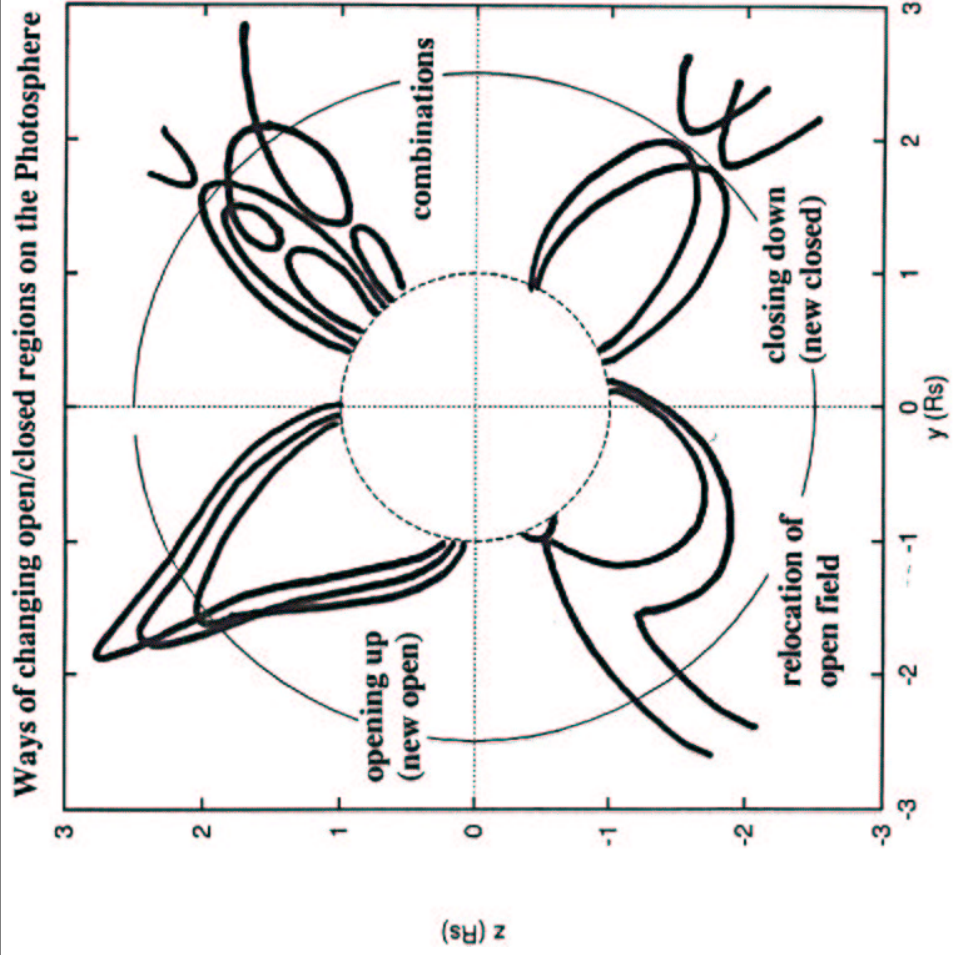
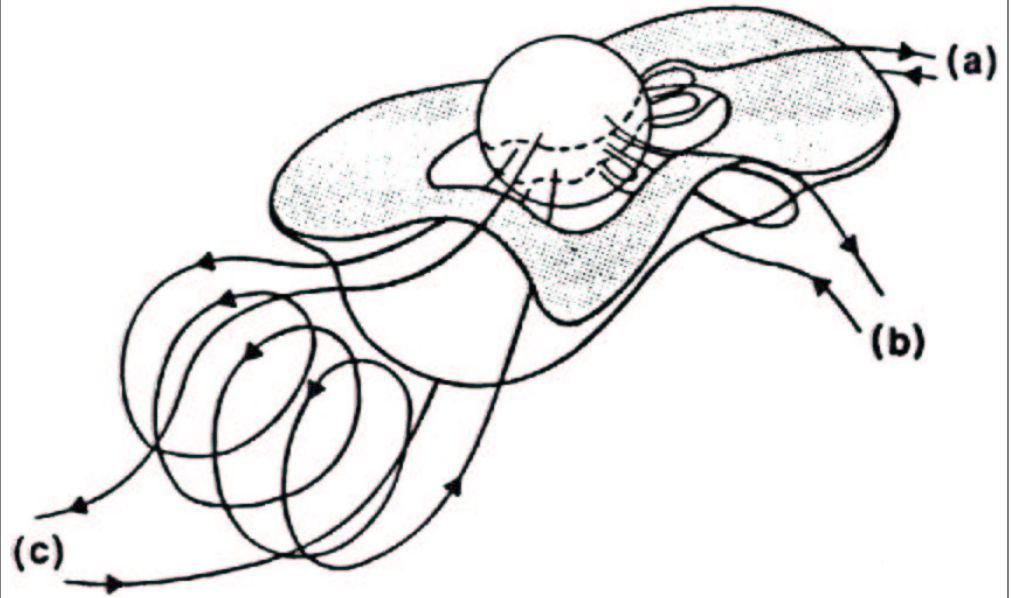
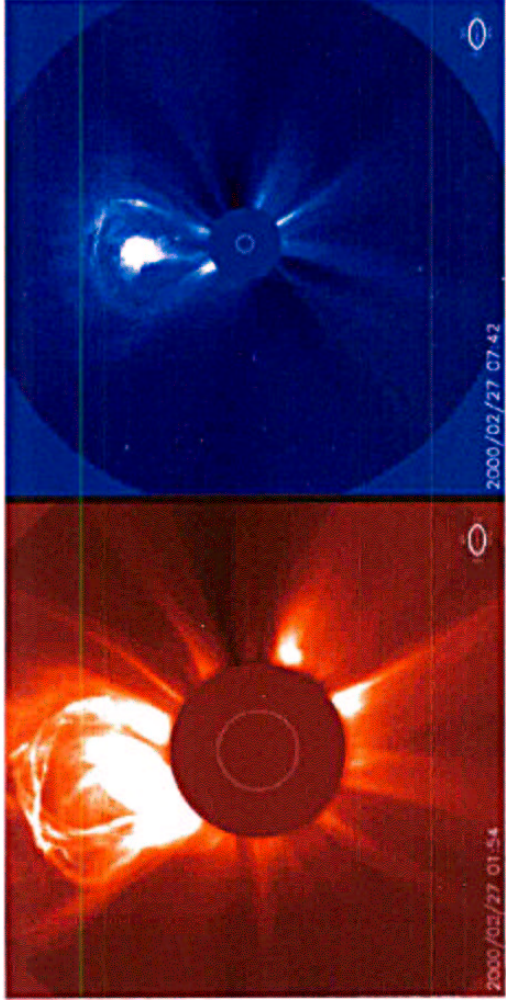


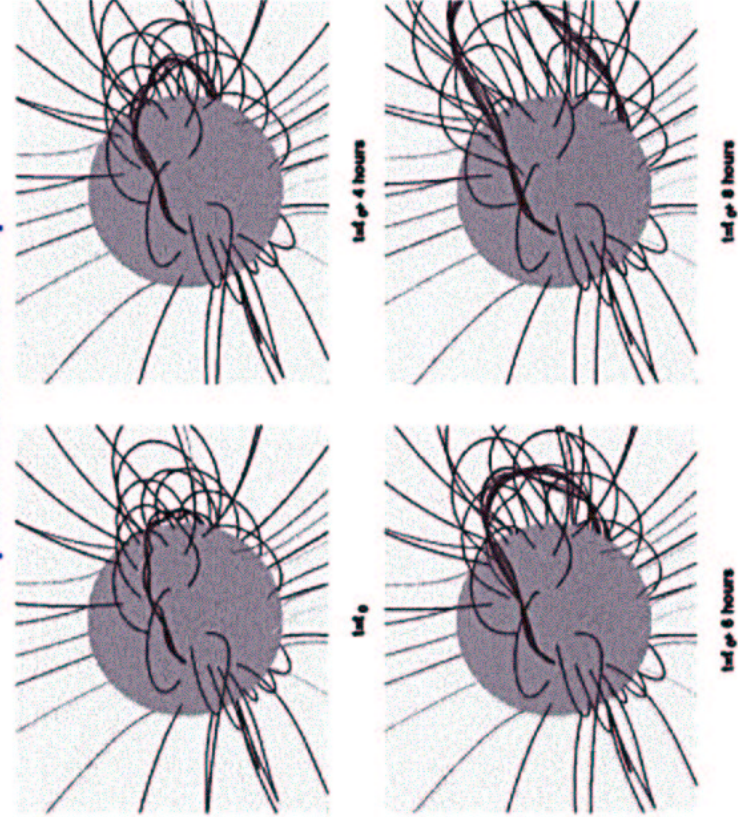
Figure 1



(from Crooker, 1993)



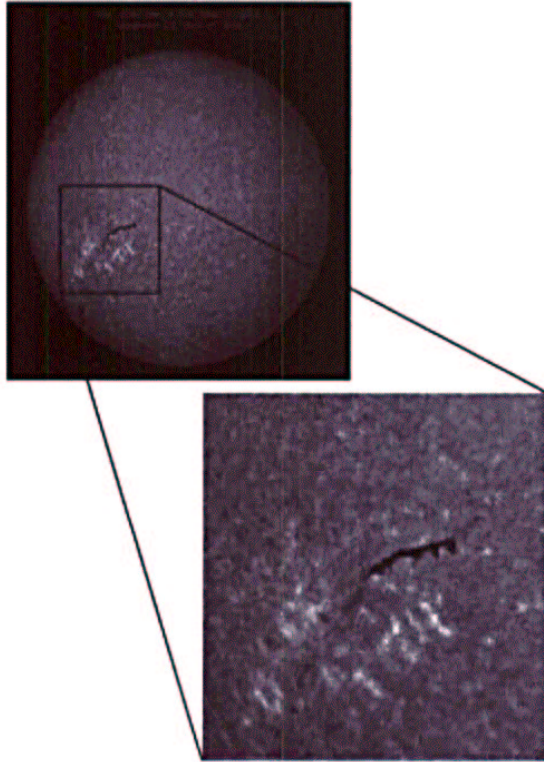
**Eruption of a 3D Flux Rope**



*From Linker et al. (JGR 2001)*

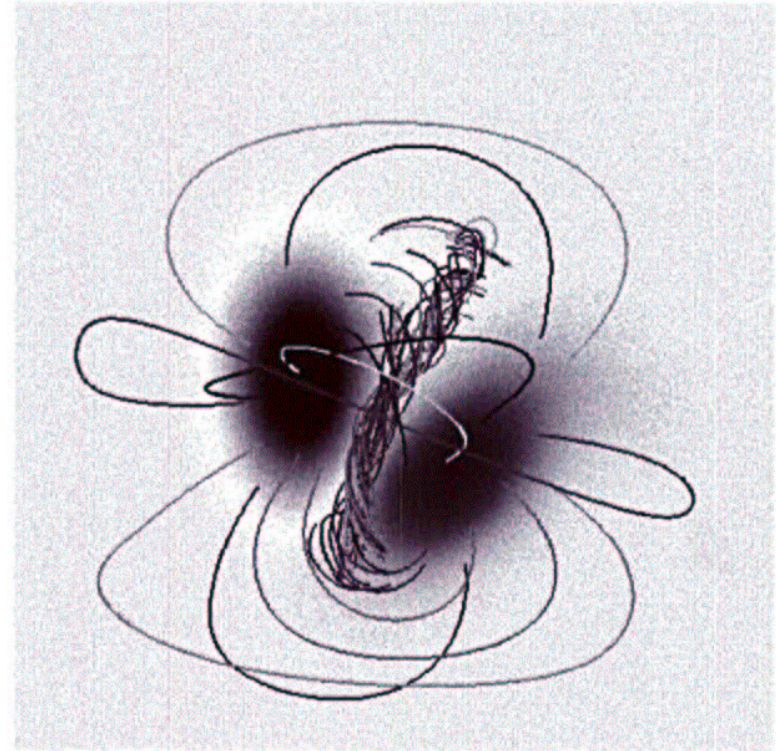
## Sacramento Peak H- $\alpha$ Image

Sept. 23, 1996



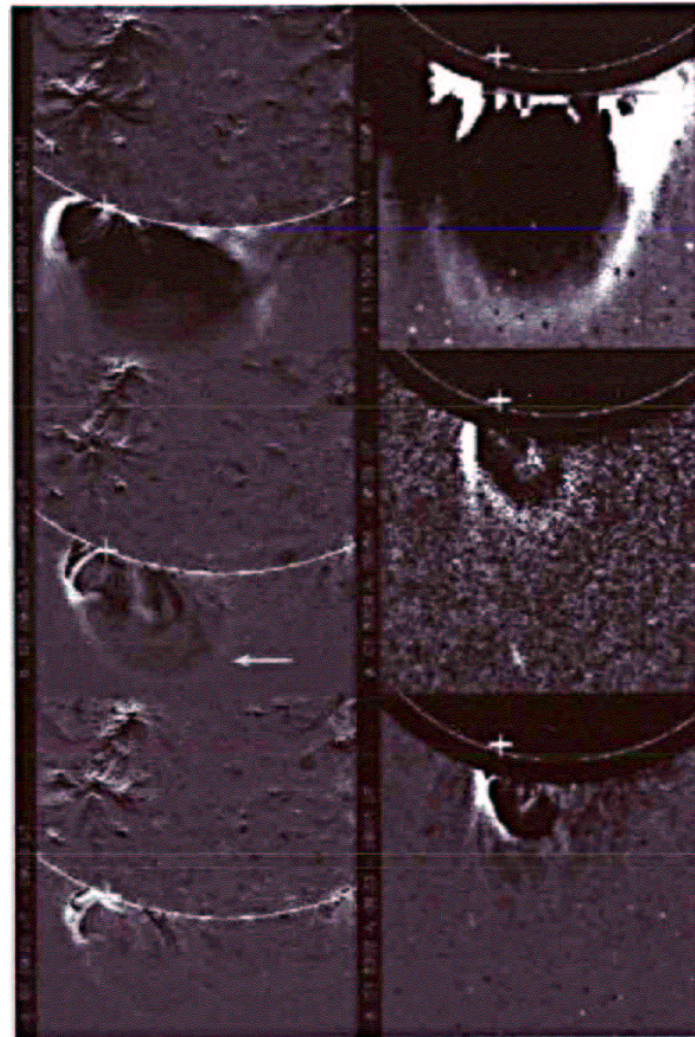
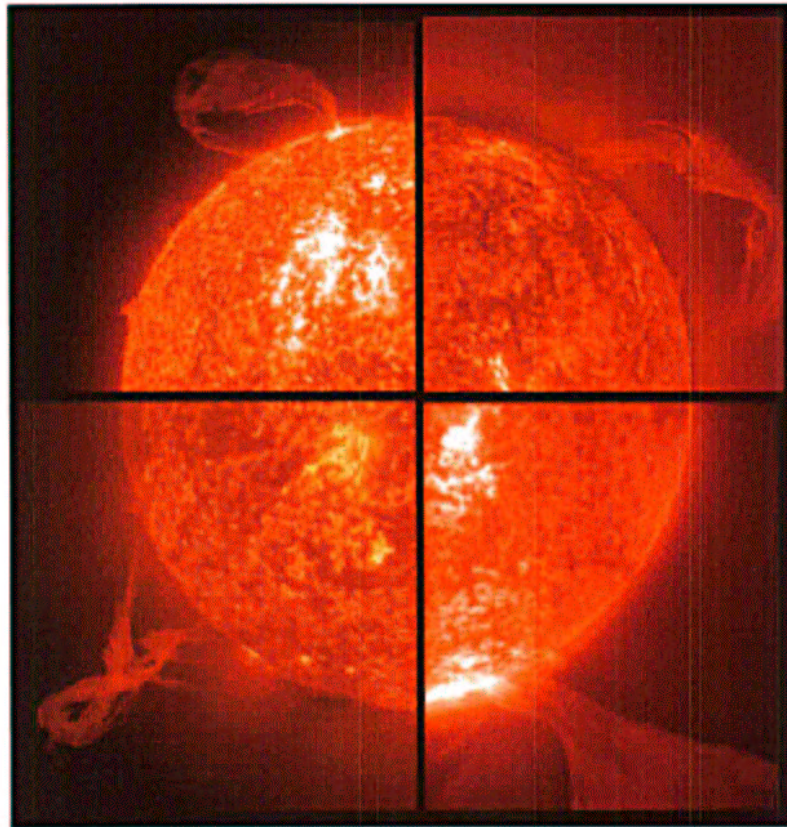
From R. Lionello, SAIC coronal website  
<http://haven.saic.com/corona>

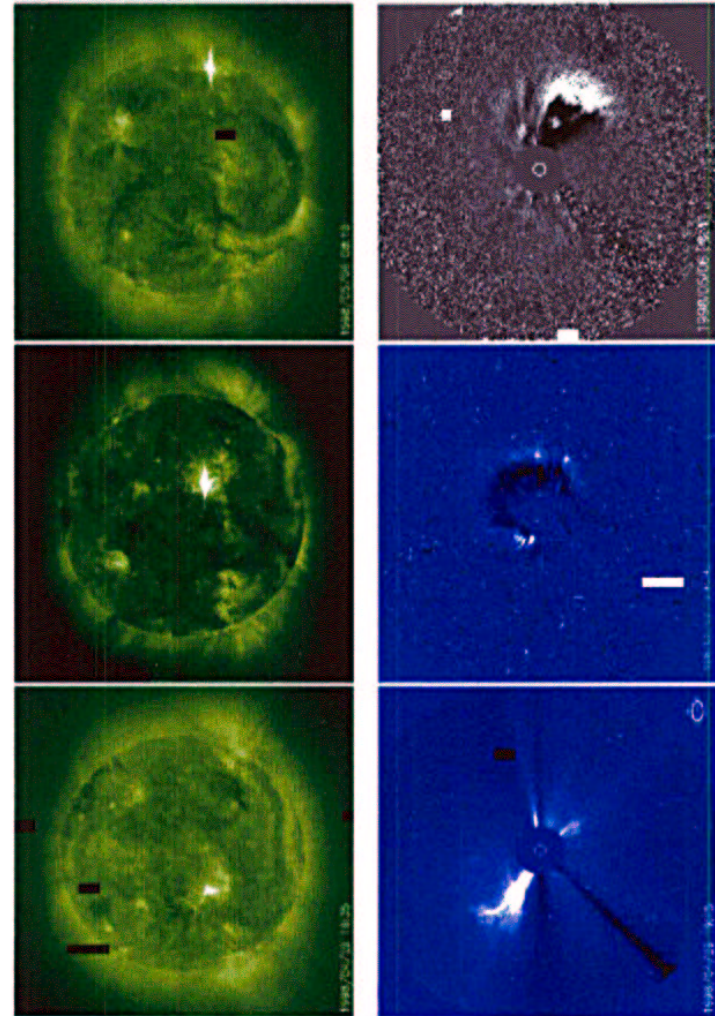
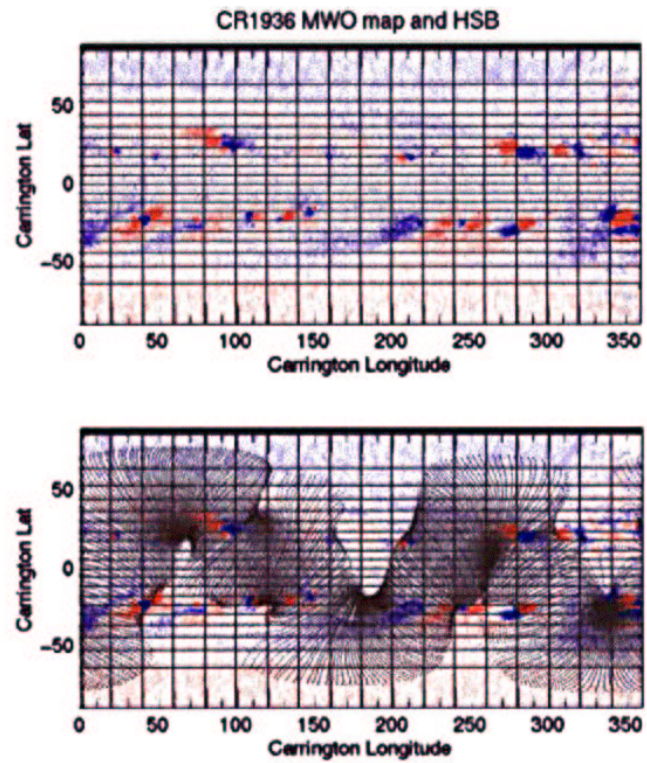
## Phase 3: Flux Emergence

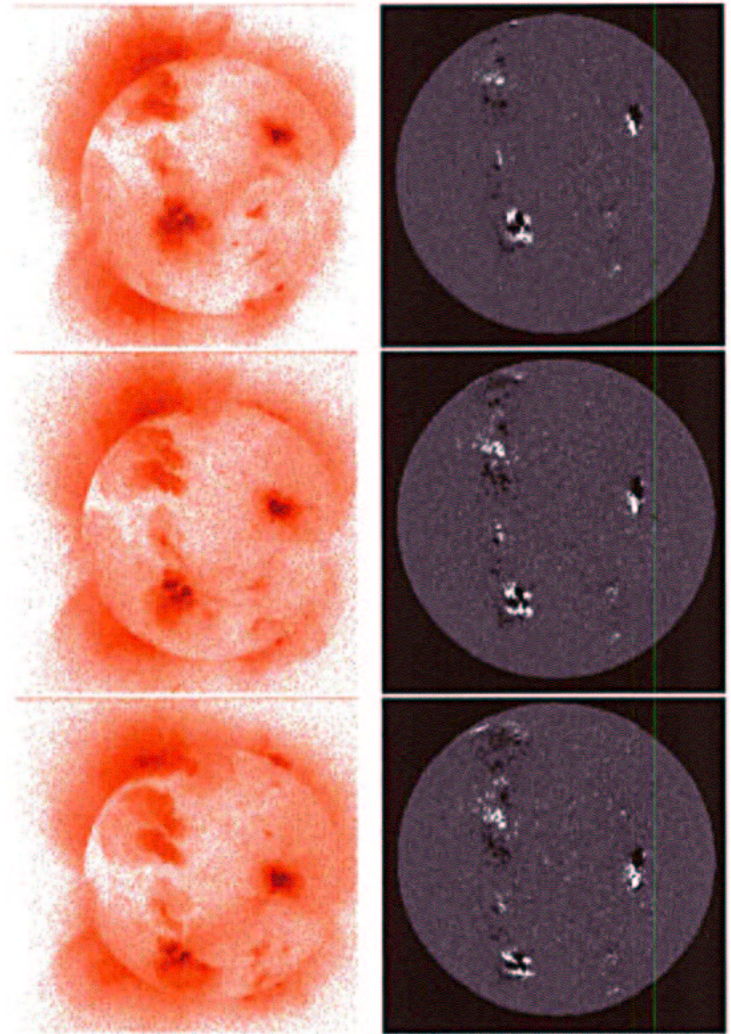
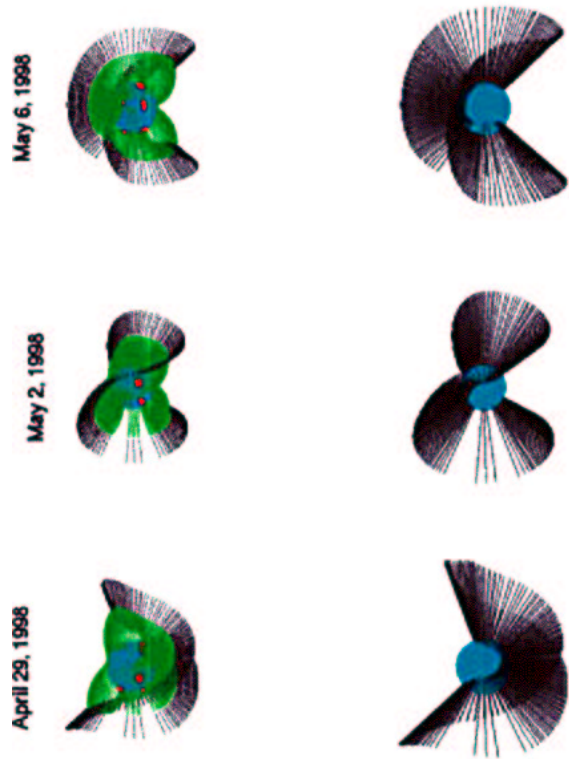


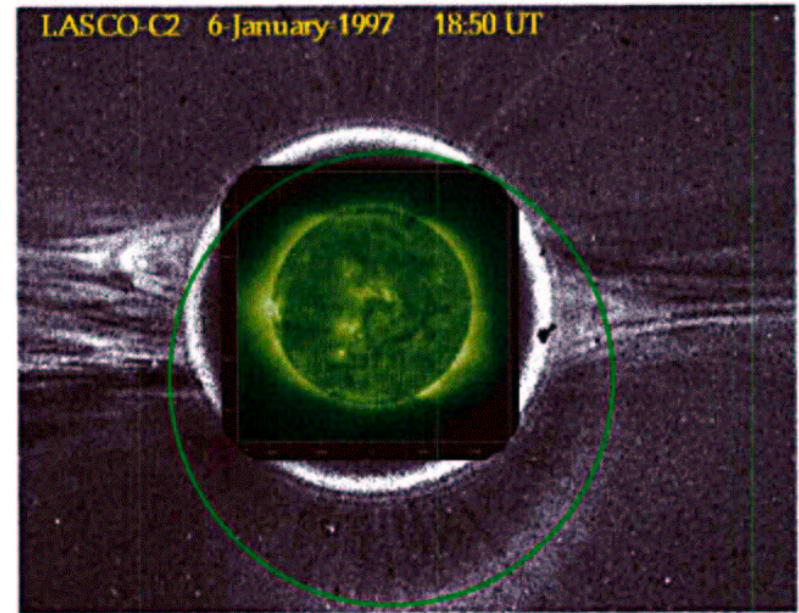
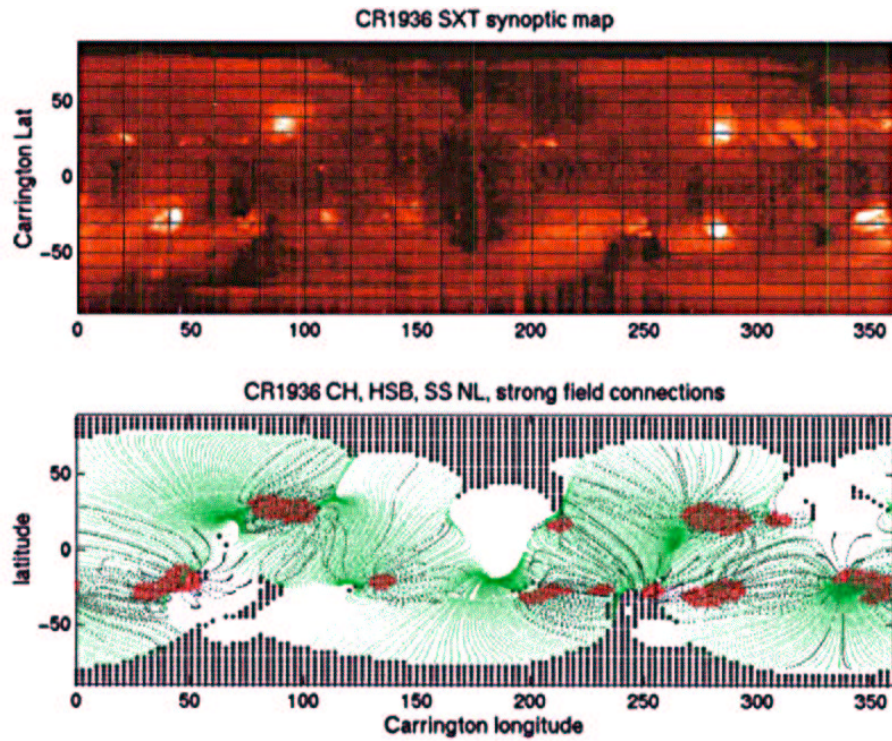
From R. Lionello, SAIC coronal website  
<http://haven.saic.com/corona>

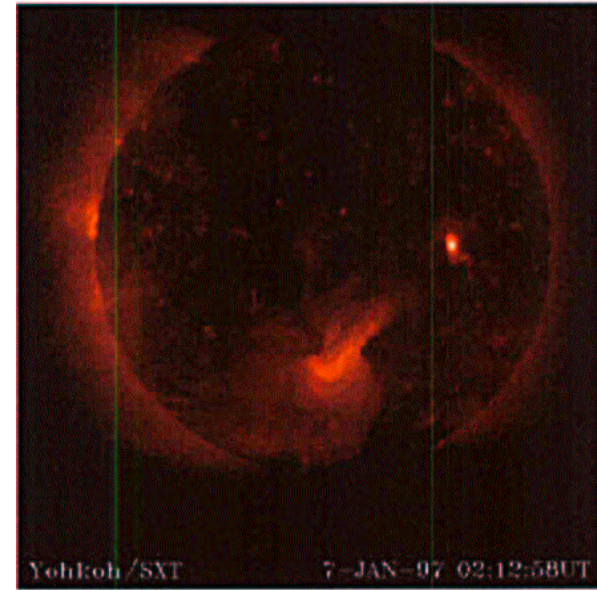
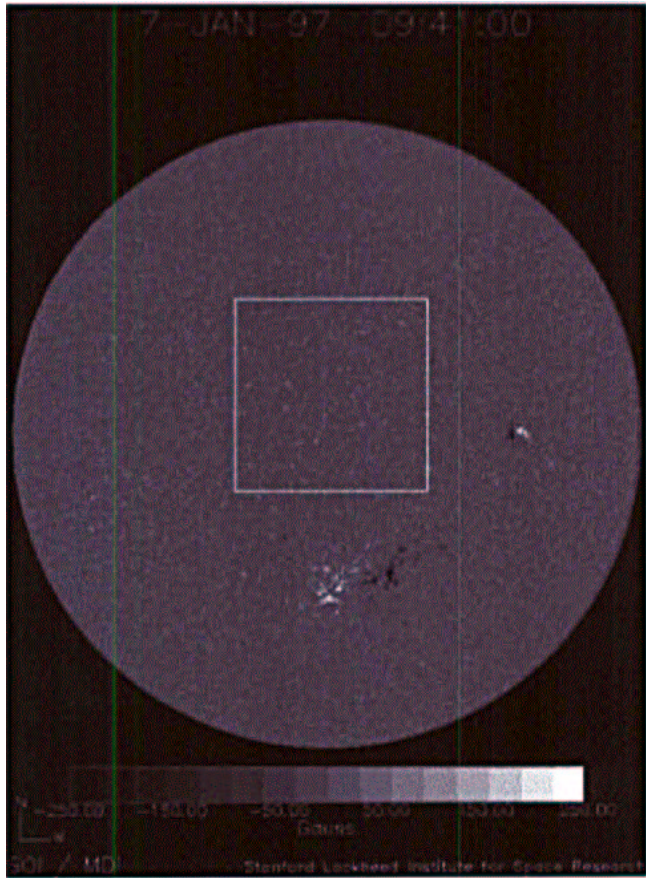


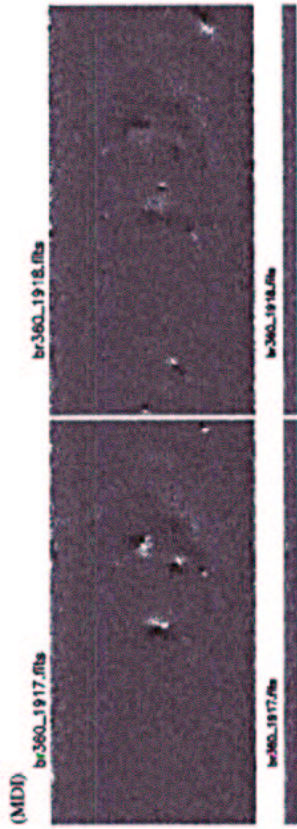






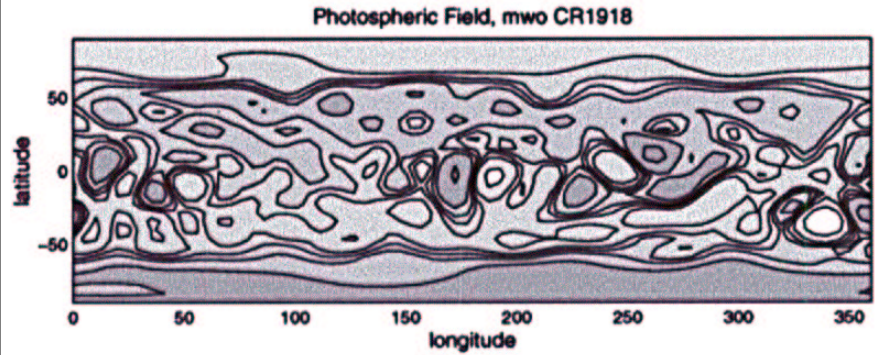
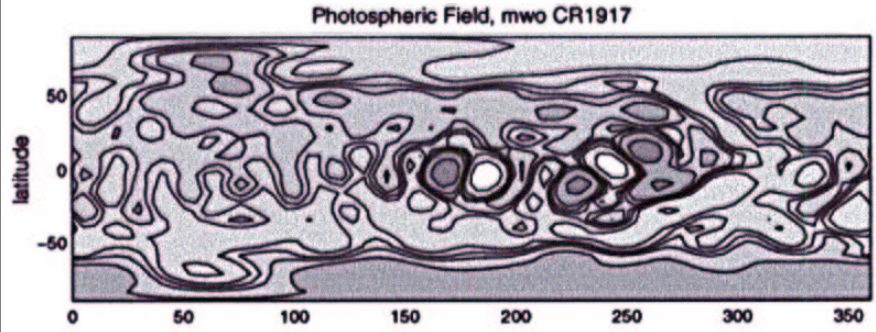




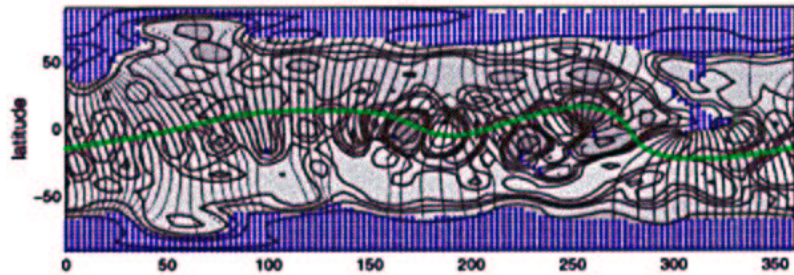


**CR1917 total flux of polar regions (Gauss) : South pole: 3021.38; North pole: 2282.50**  
**CR1917 total flux of regions from left to right (Gauss) :**  
**278.660 , 395.986 , 11173.4 , 329.179 , 851.196 , 5236.27 , 10797.6 , 1757.30**

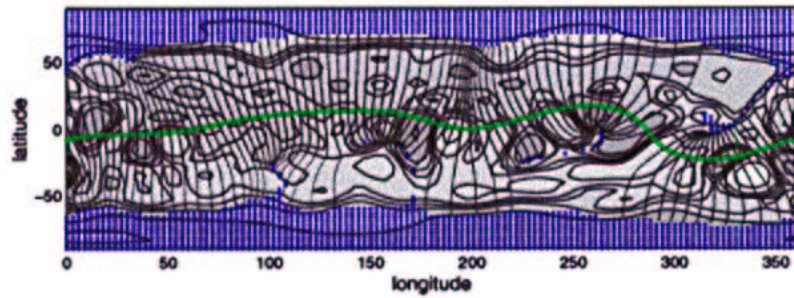
**CR1918 total flux of polar regions (Gauss) : South pole: 3083.44; North pole: 2243.54**  
**CR1918 total flux of regions from left to right (Gauss) :**  
**2155.36 , 2426.32 , 4486.89 , 2153.57 , 180.788 , 1567.62 , 4447.84 , 4098.62**



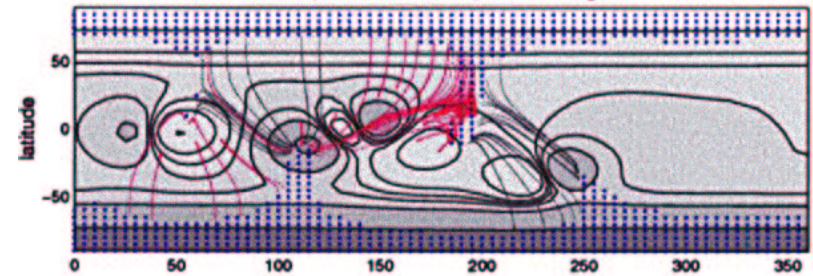
Photos. field and SS neutral line, mwo CR1917



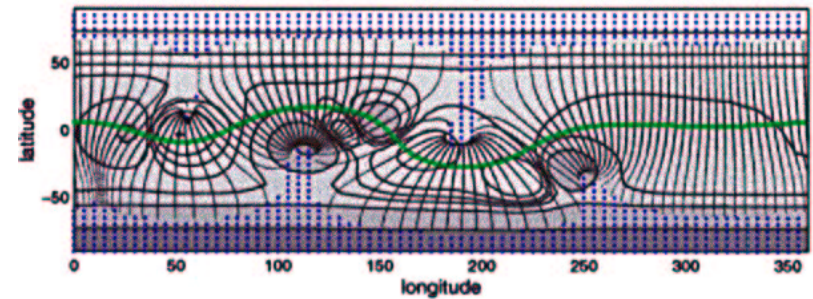
Photos. field and SS neutral line, mwo CR1918

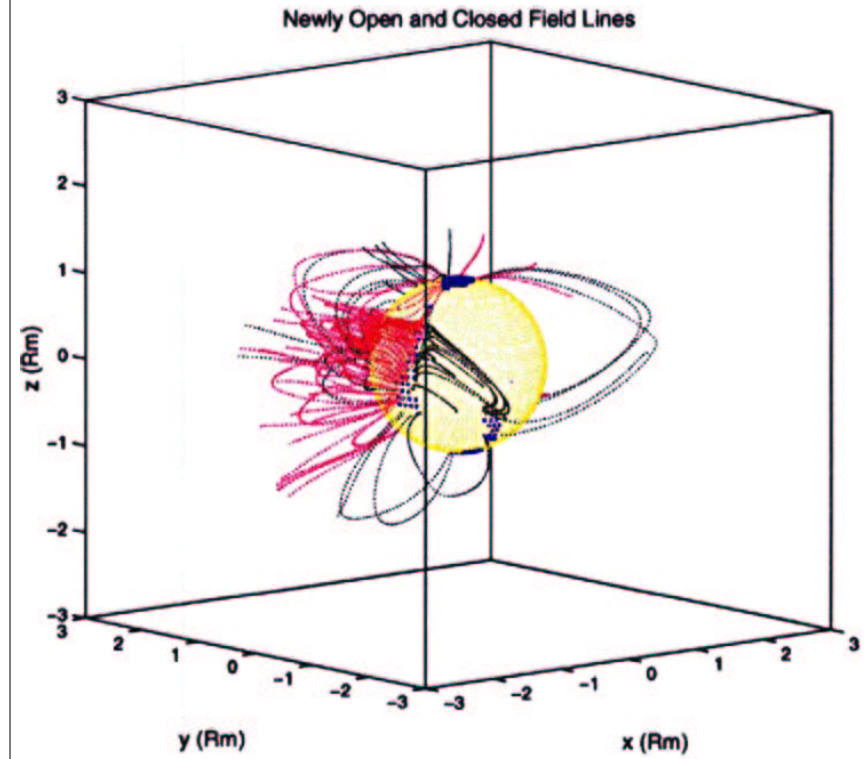
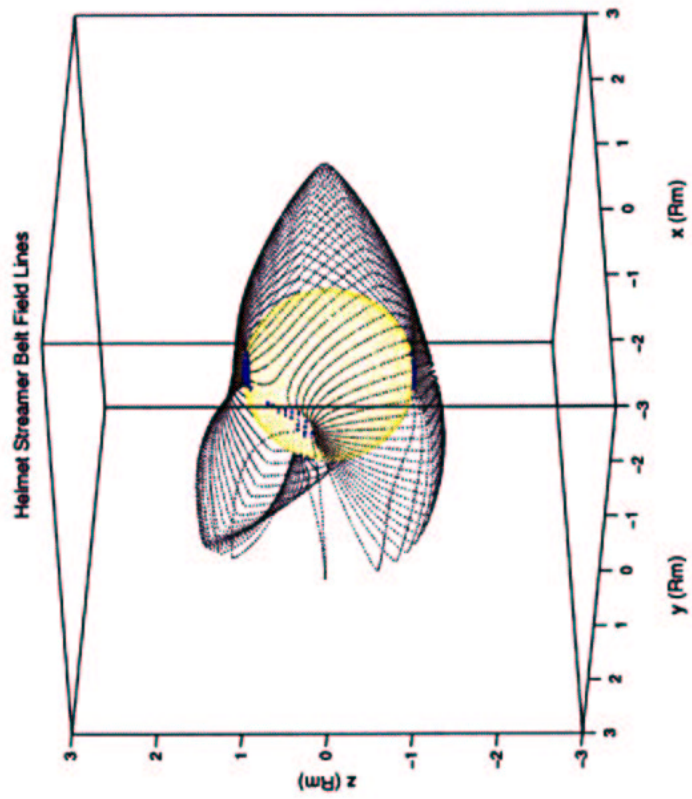


Photospheric Field and Open Field Regions



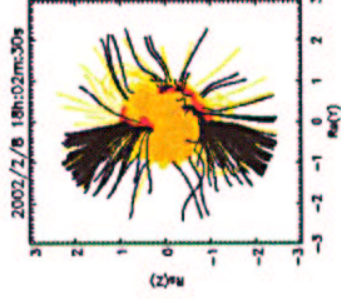
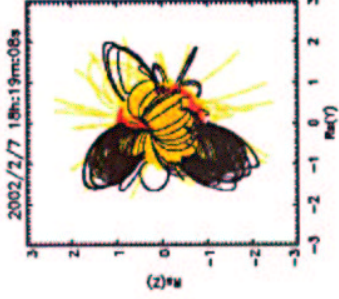
Photos. Field, SS Neutral Line, Helmet Streamer Belt



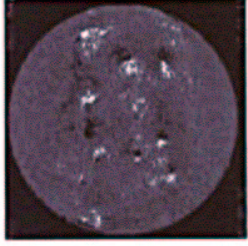
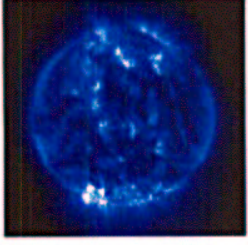




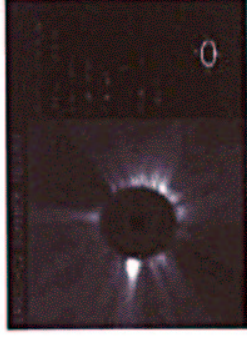
Latest Newly Opening Field Regions from MWO magnetograms



NSO/Kit Peak Coronal Hole Map : HE : SOHO Extreme ultraviolet Imaging Telescope (EIT) Fe XII 171 Å image



868.8 nm photospheric magnetogram from NSO Kitt Peak.



SOHO LASCO white light image (C2)