

# Solar Cycle Update

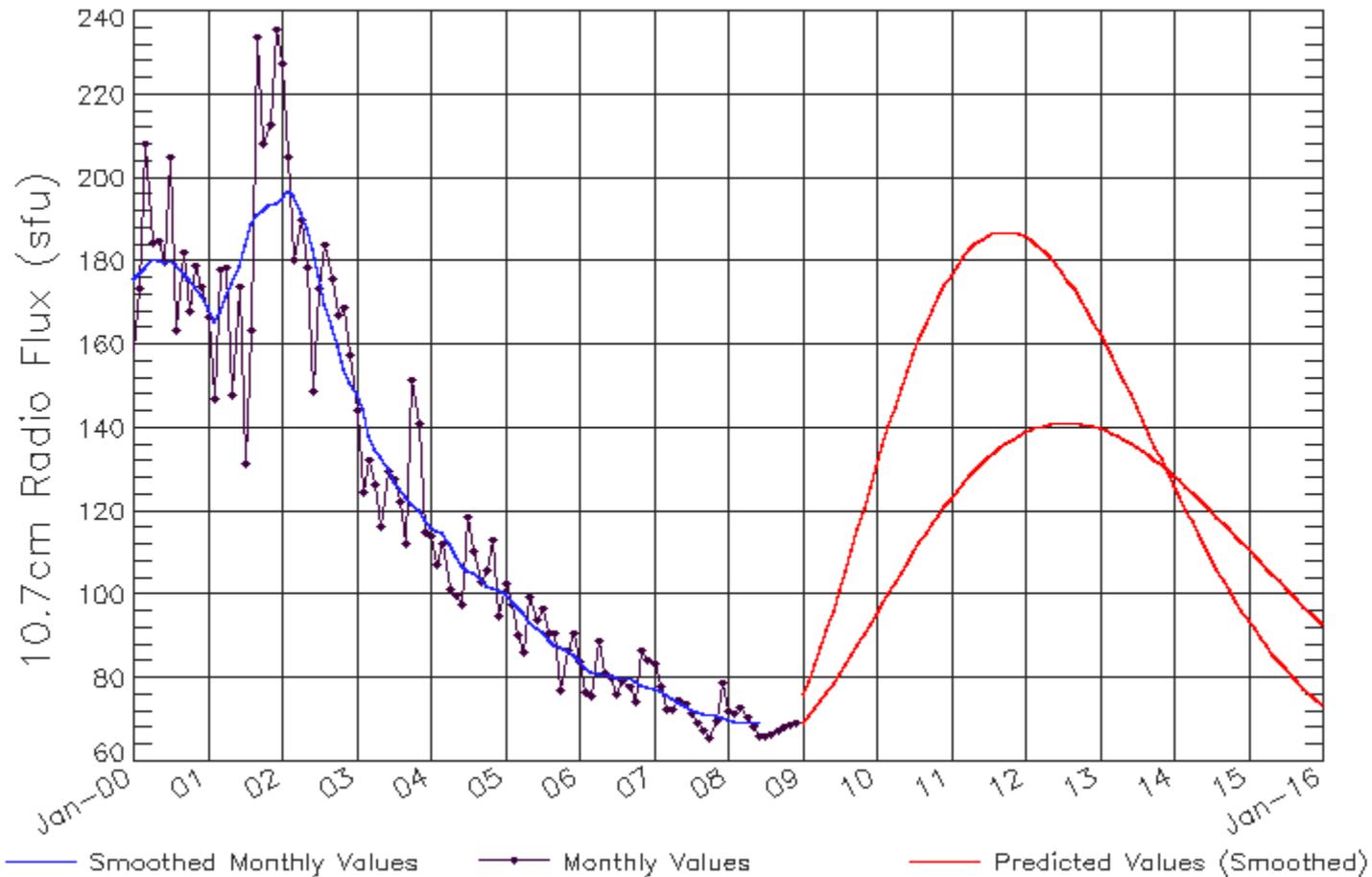
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**O. C. St. Cyr (NASA-GSFC)**

**H. Xie (CUA)**

# The Official NOAA Viewpoint (Jan 2009)

ISES Solar Cycle F10.7cm Radio Flux Progression  
Data Through 31 Dec 08



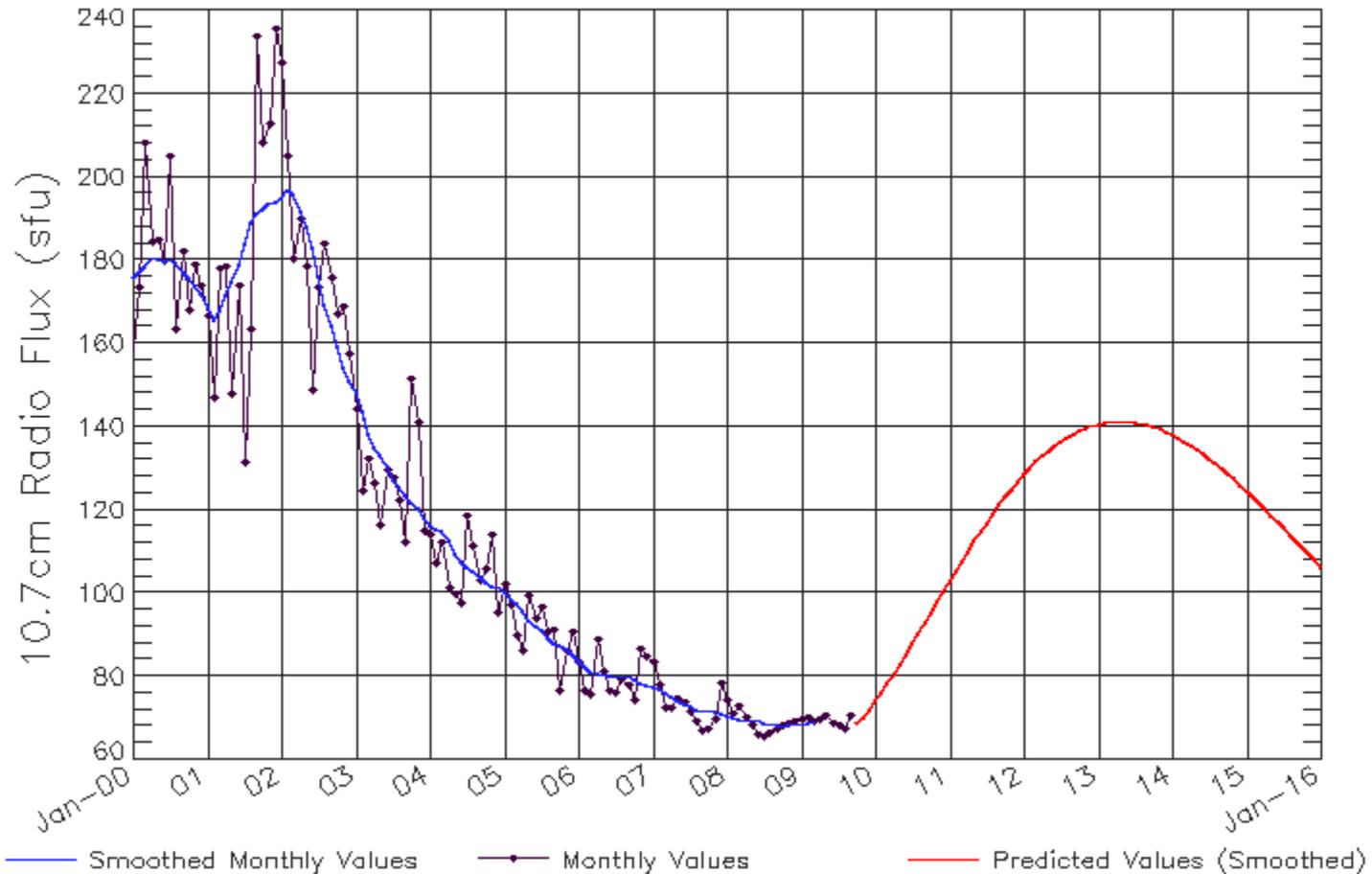
Updated 2009 Jan 3

NOAA/SWPC Boulder, CO USA

St. Cyr – STEREO SWG – New Hampshire – Oct 2009

# The Official NOAA Viewpoint (Sep 2009)

ISES Solar Cycle F10.7cm Radio Flux Progression  
Data Through Sep 09

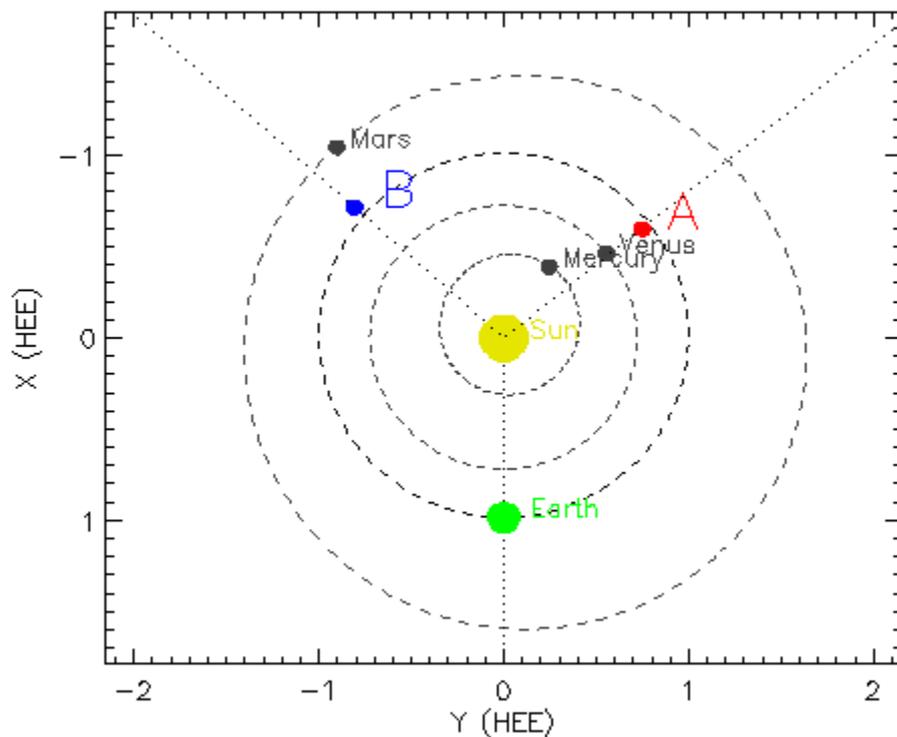


Updated 2009 Oct 6

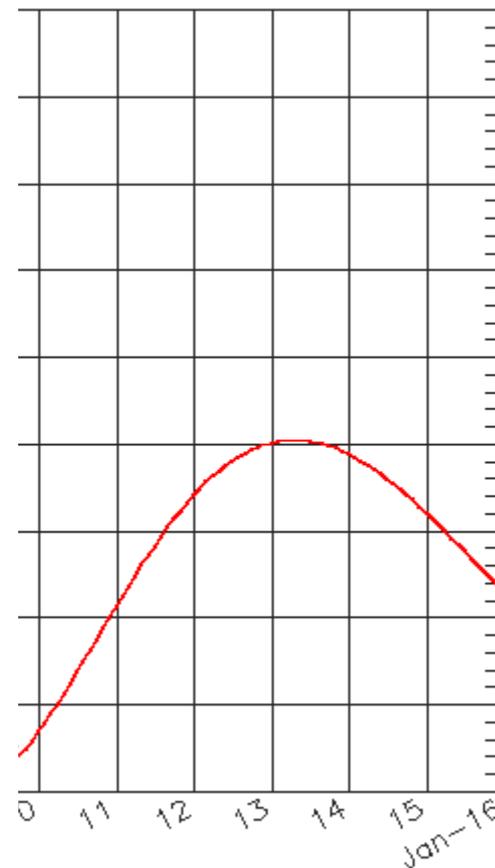
NOAA/SWPC Boulder, CO USA

St. Cyr – STEREO SWG – New Hampshire – Oct 2009

# STEREO Locations in January 2013



Flux Progression



— Predicted Values (Smoothed)

NOAA/SWPC Boulder, CO USA

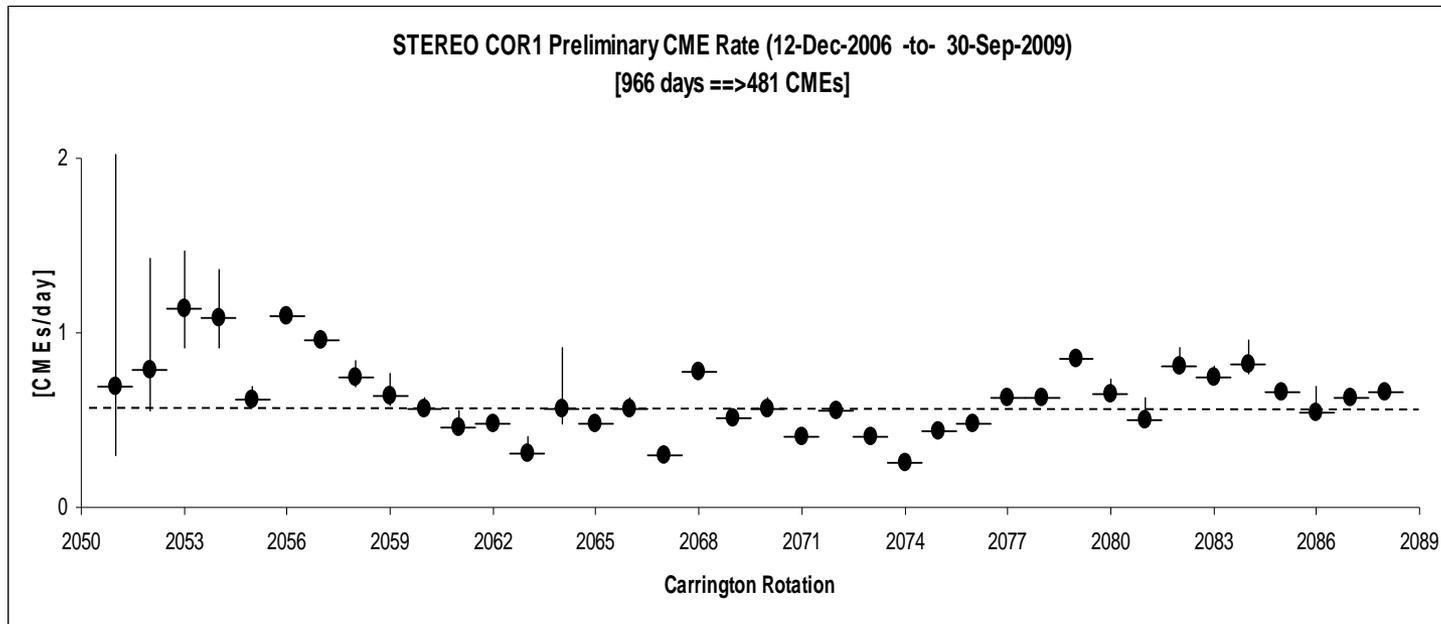
St. Cyr – STEREO SWG – New Hampshire – Oct 2009

## Preliminary CME Catalogue

St. Cyr (Jan-Aug 2007)

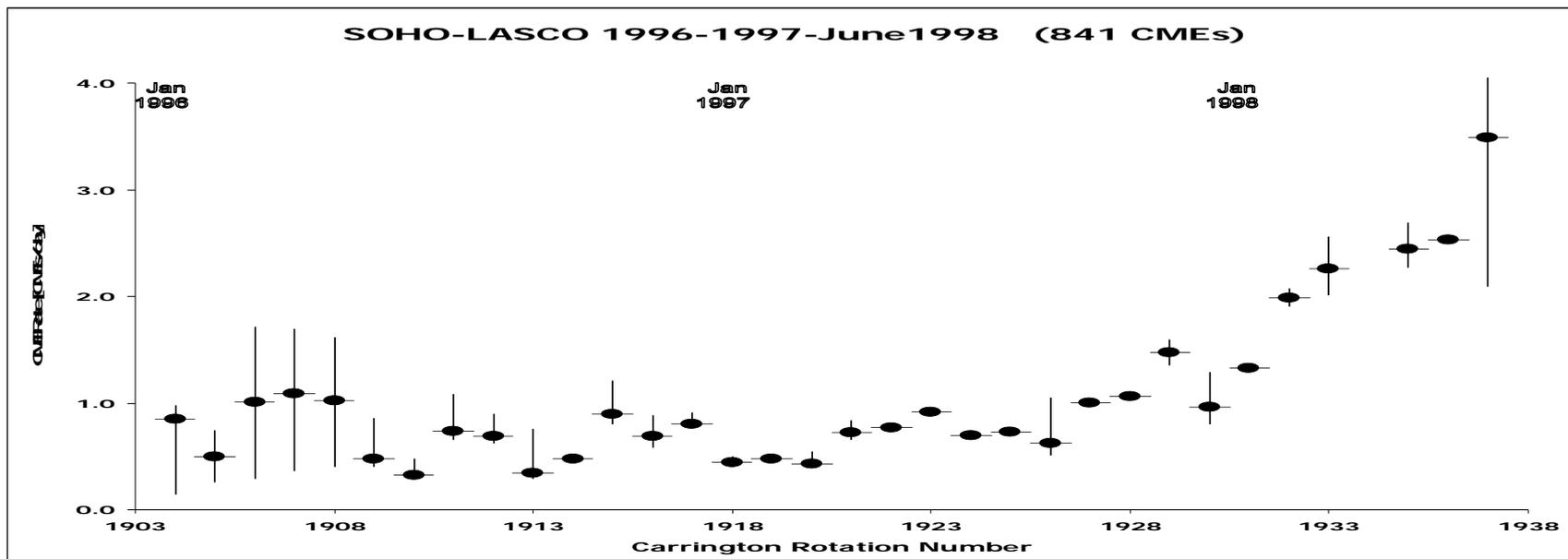
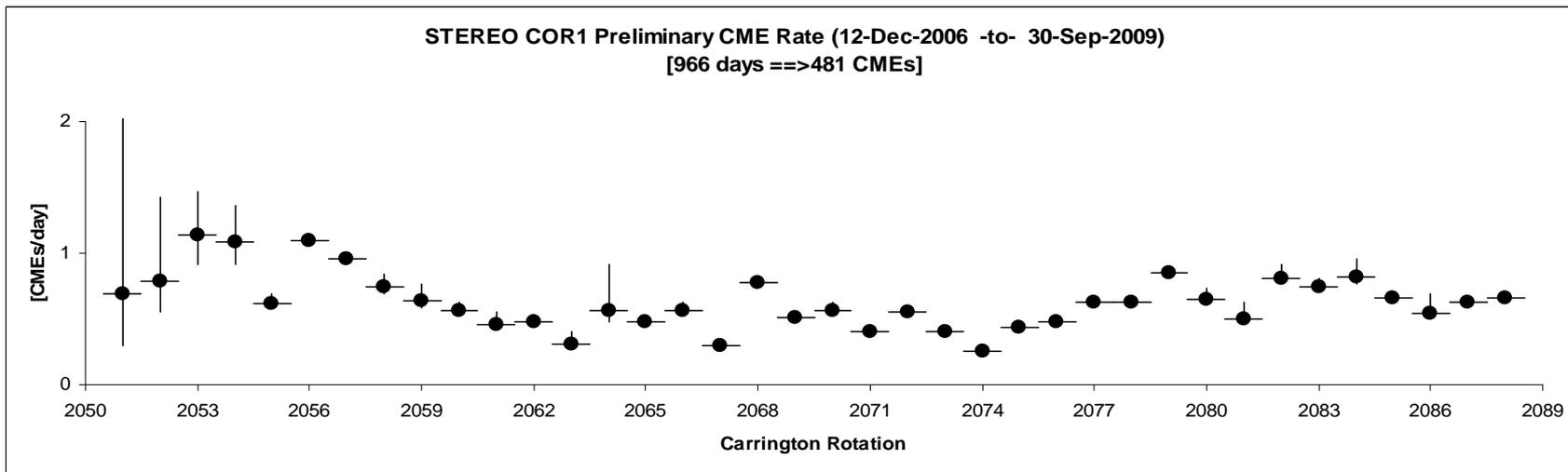
Hong Xie (Sep 2007-Sep2008)

St. Cyr (Oct 2008-Jan2009)

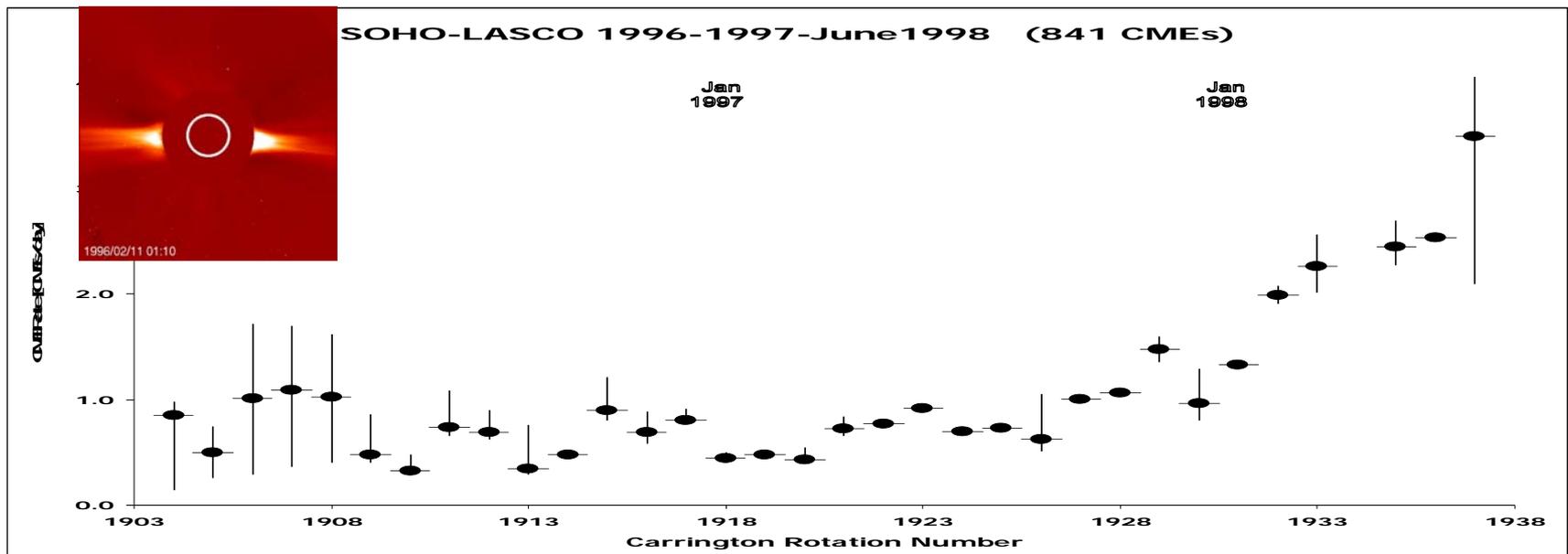
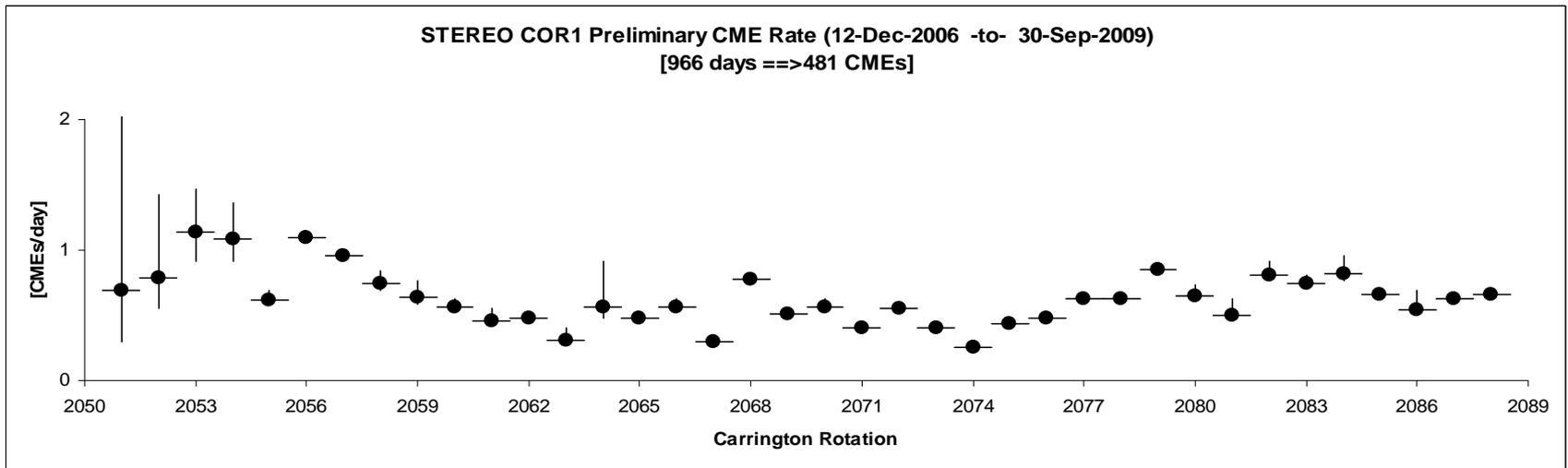


SOHO LASCO  
CME Rate in  
1996-1997 was  
~0.5 CMEs/day

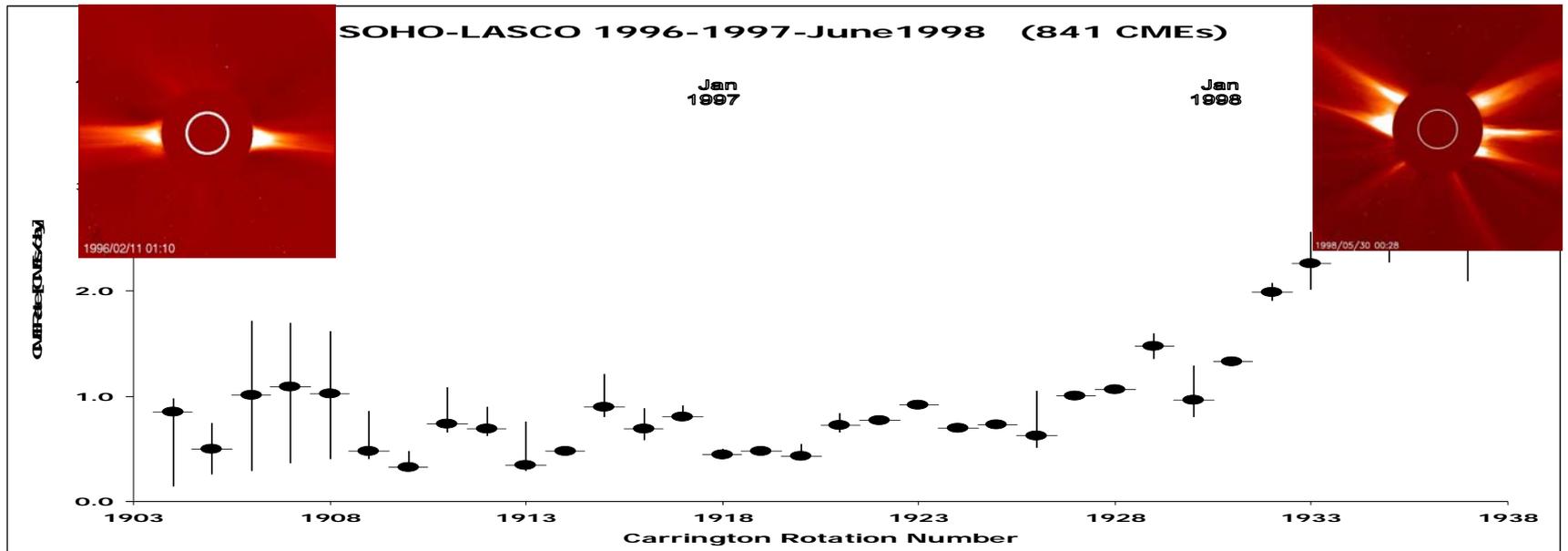
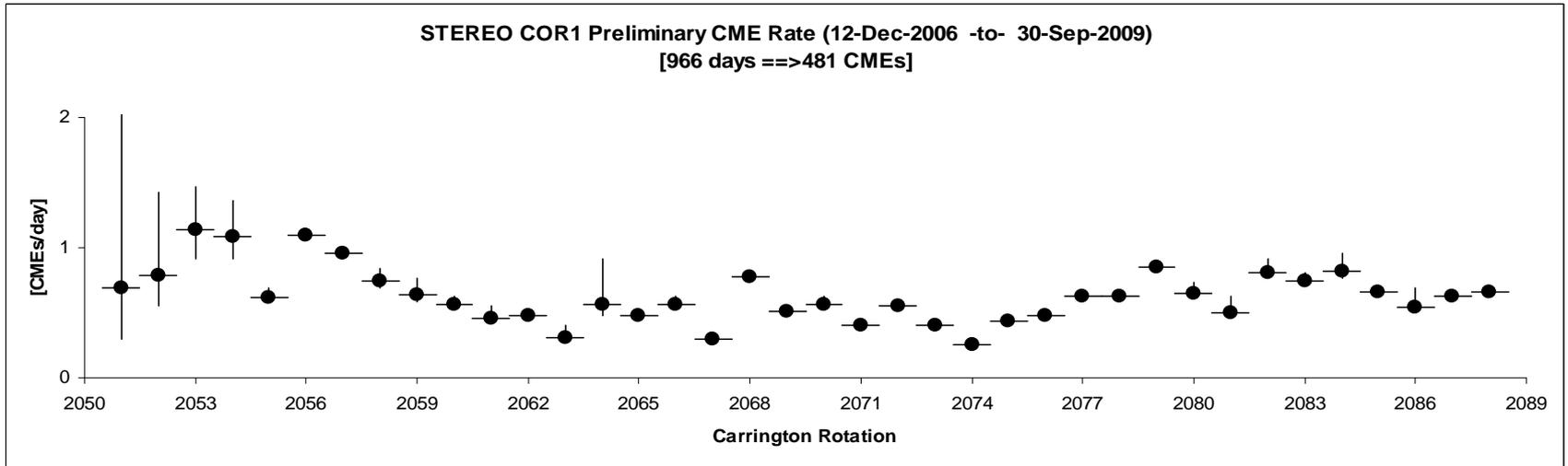
# STEREO & SOHO CME Rates



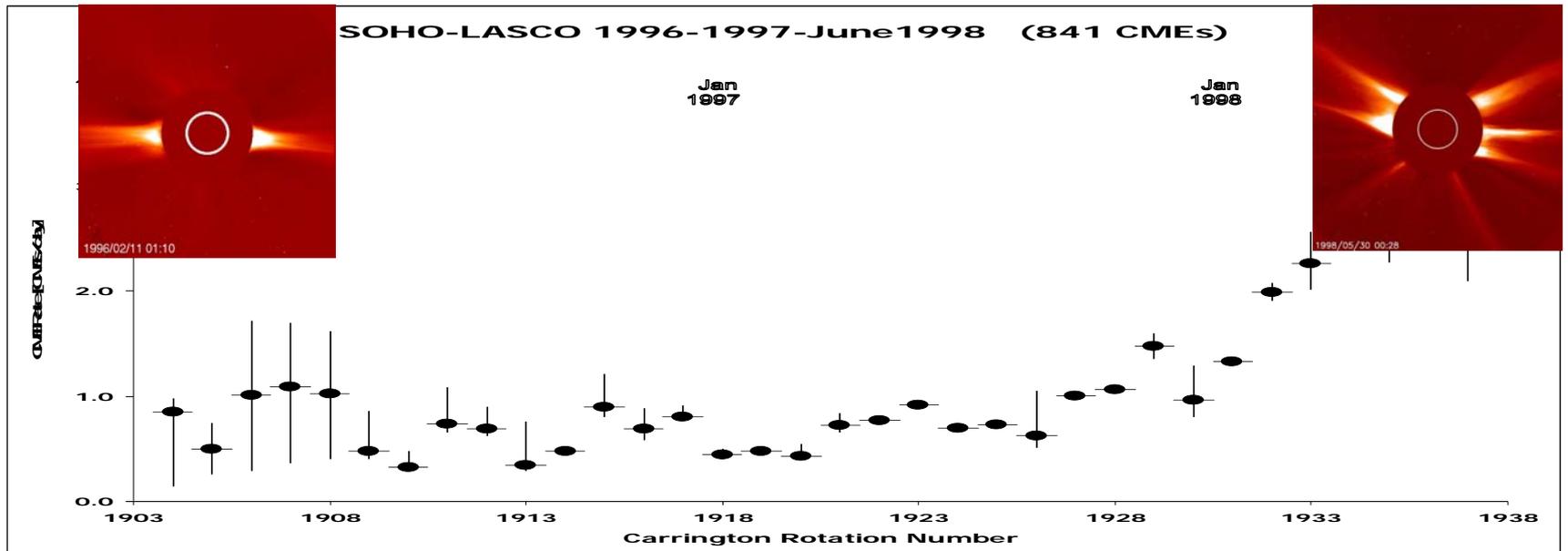
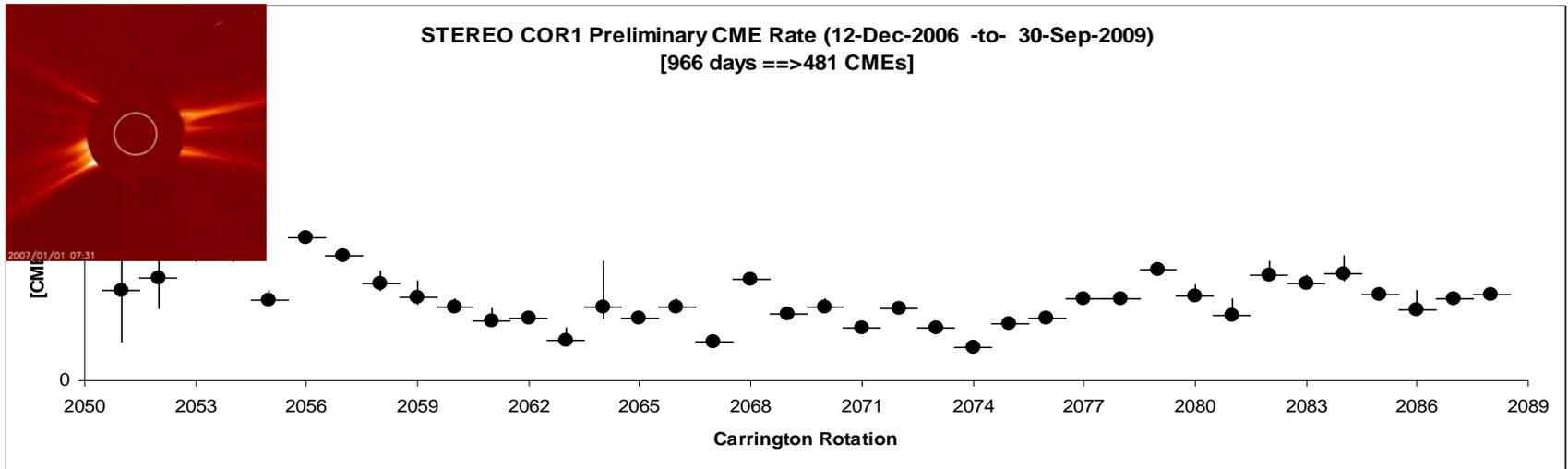
# STEREO & SOHO Morphology



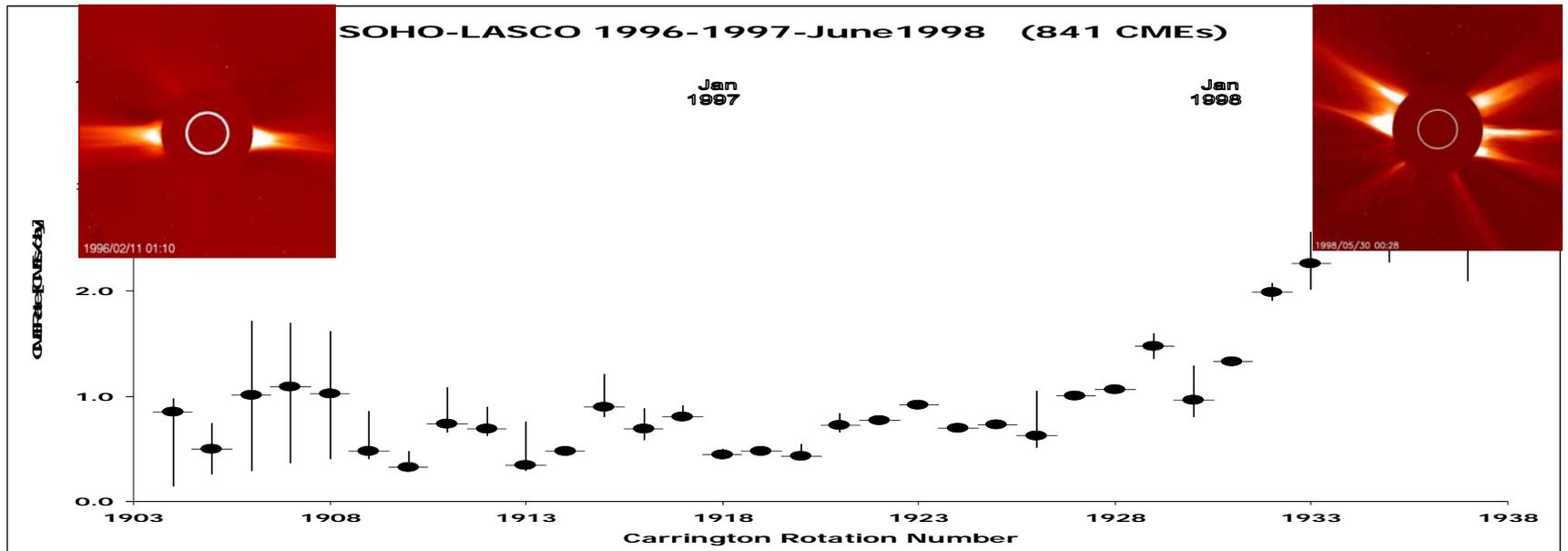
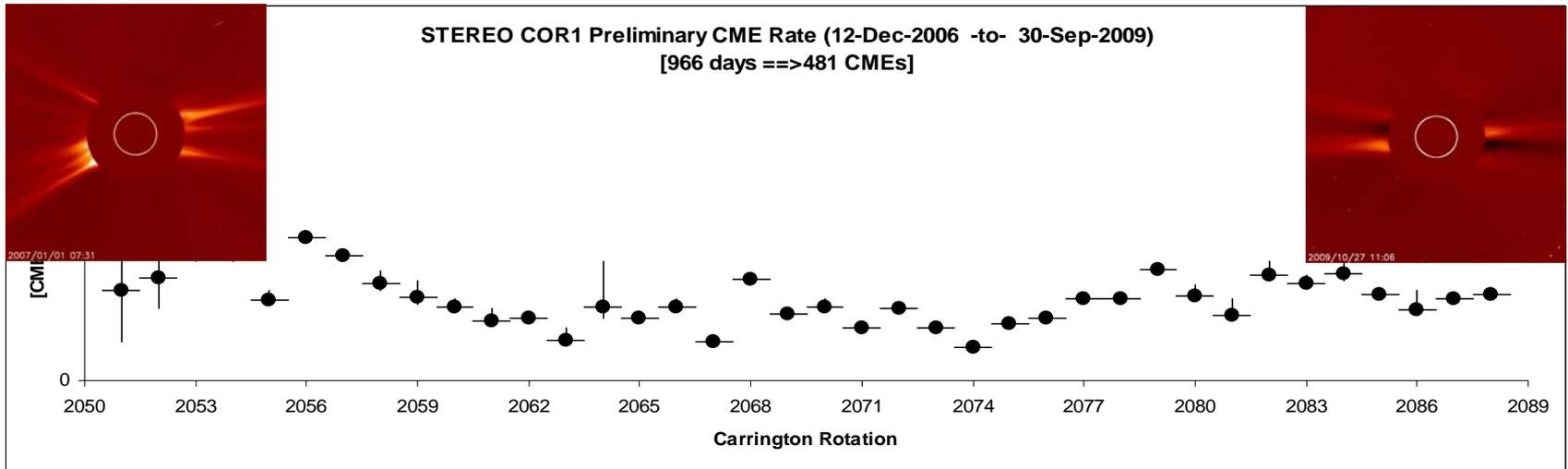
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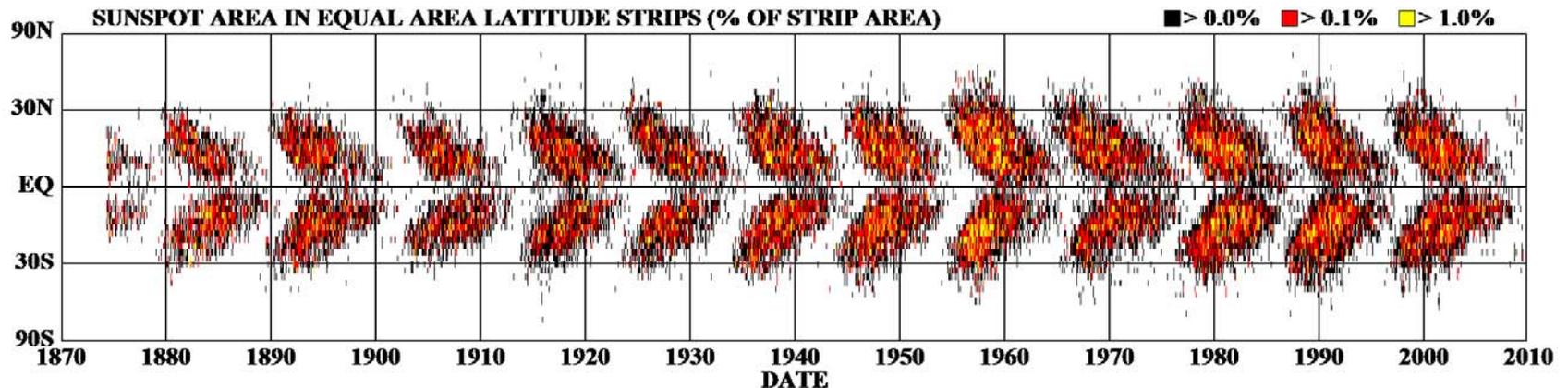


# STEREO & SOHO Morphology



# The Activity this Weekend

## DAILY SUNSPOT AREA AVERAGED OVER INDIVIDUAL SOLAR ROTATIONS

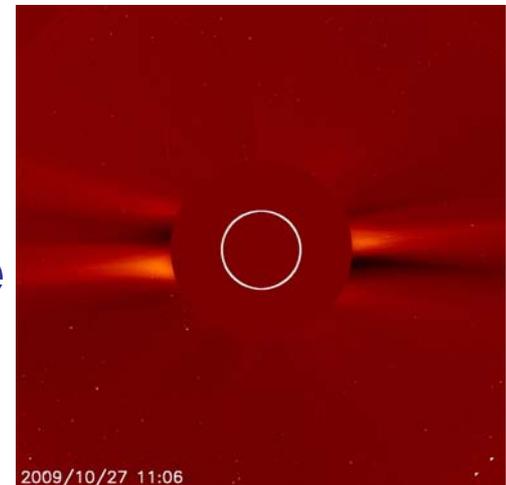


•:Product: Report of Solar-Geophysical Activity :Issued: 2009 Oct 26 2201 UTC # Prepared jointly by the U.S. Dept. of Commerce, NOAA, # Space Weather Prediction Center and the U.S. Air Force. # Joint USAF/NOAA Report of Solar and Geophysical Activity SDF Number 299 Issued at 2200Z on 26 Oct 2009 IA. Analysis of Solar Active Regions and Activity from 25/2100Z to 26/2100Z: Solar activity was low. A C1 flare was observed at 26/1906Z from Region 1029 (N16W29).

DATE

# Summary

- NOAA/NASA Solar Cycle 24 Panel predict a smaller and later maximum
- CR-averaged CME rate continues to be  $\sim 0.5/\text{day}$ , typical of solar minimum
- We appear to be only part-way through solar minimum phase based on
  - Duration of CME rate and 2800 MHz
  - Morphology of the white-light corona
- But, recent activity is at solar max latitude



# Bonus Announcement!

- 2009  
Heliophysics  
Roadmaps now  
available!

