



The current solar cycle minimum

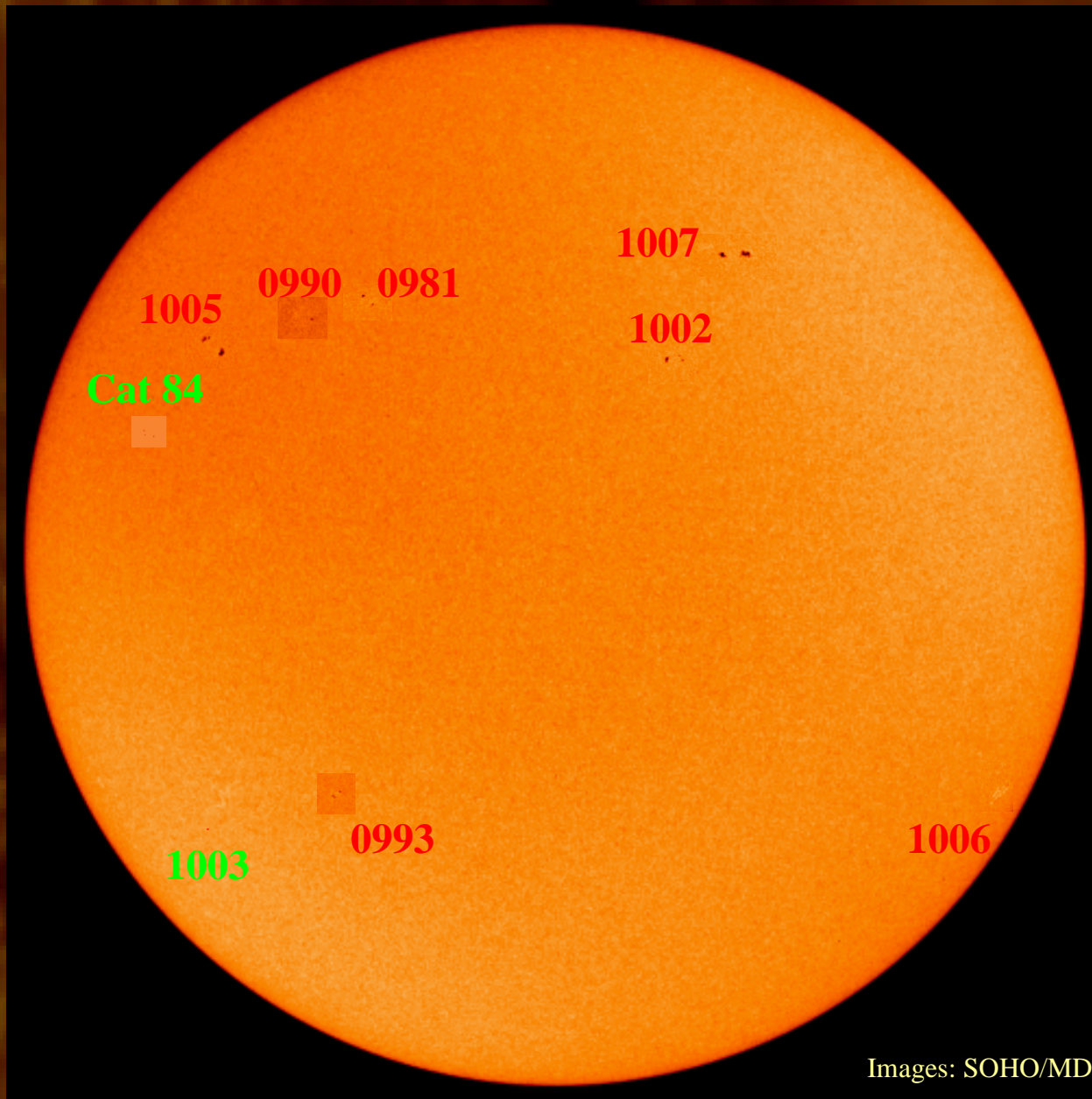
Jan Janssens

08 Nov 08

The groups of SC24 thus far

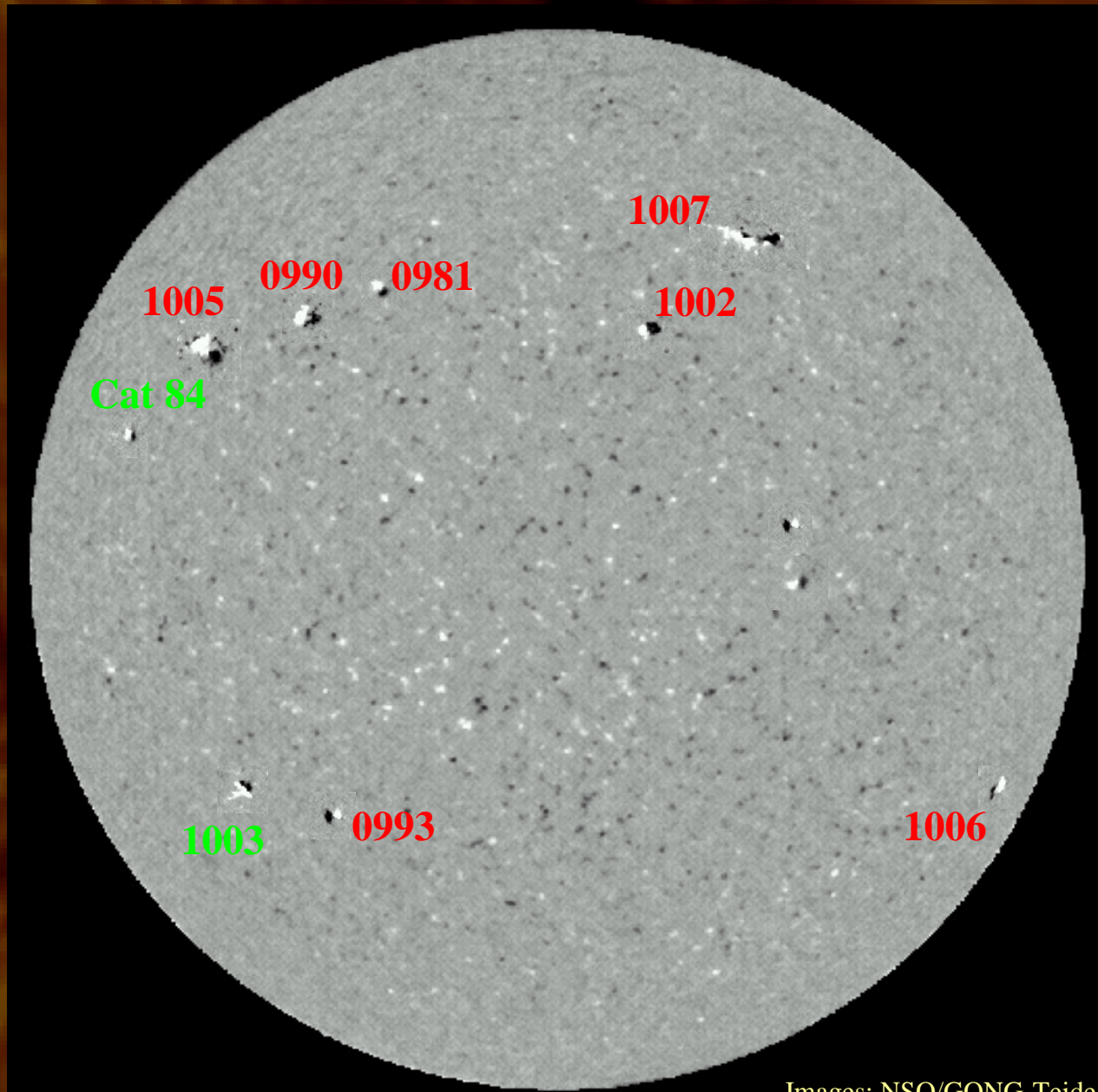
Period	NOAA	Lat	Long	Max. Area	CV
04-06 Jan 08	0981	N28	244	20	Cso
14-15 Apr 08	0990	N26	359	10	Bxo
04-05 May 08	0993	S30	085	20	Bxo
<i>21-22 Aug 08</i>	<i>Cat 84</i>	<i>N15</i>	<i>067</i>	<i>10?</i>	<i>Bxi</i>
22-23 Sep 08	1002	N25	076	30	Dso
<i>04 Oct 08</i>	<i>1003</i>	<i>S23</i>	<i>222</i>	<i>10</i>	<i>Axx</i>
11-16 Oct 08	1005	N26	119	70	Cso
16-17 Oct 08	1006	S27	156	30	Axx
30Oct-07Nov	1007	N34	255	80	Dso

The groups of SC24 thus far



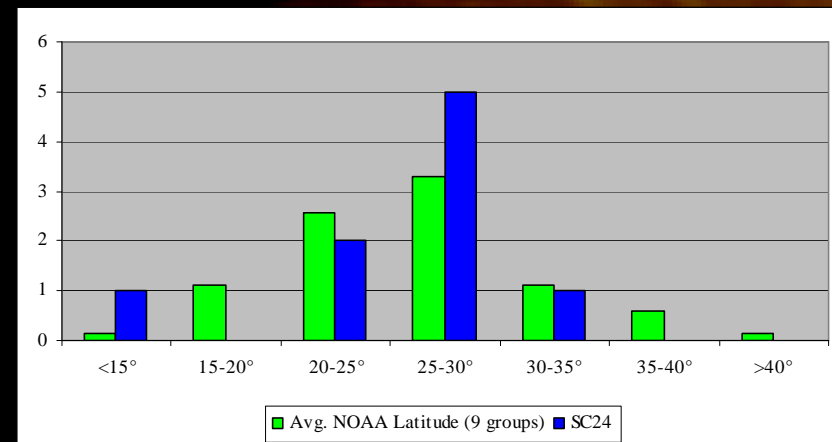
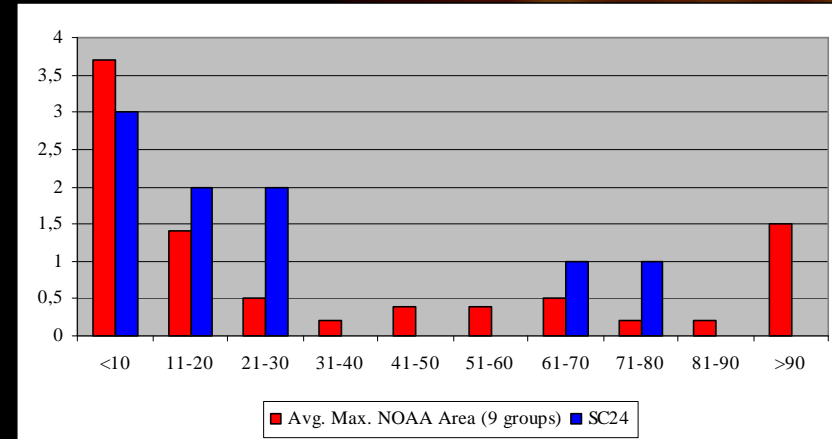
Images: SOHO/MDI

Magnetogram – SC24-groups

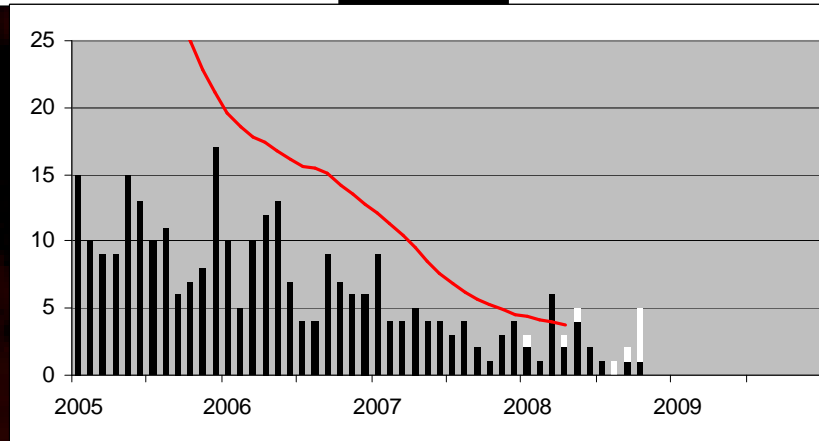
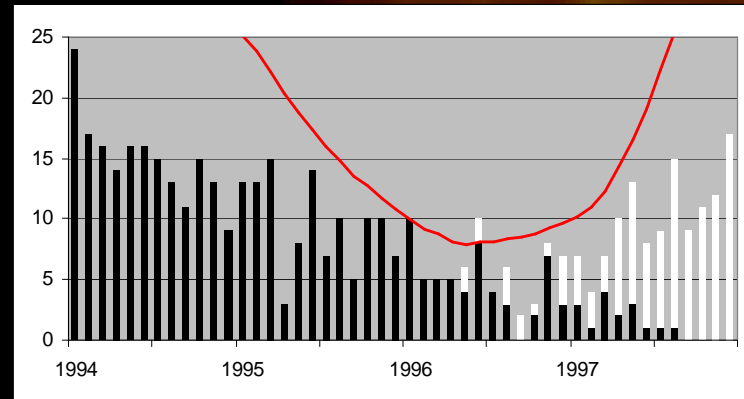
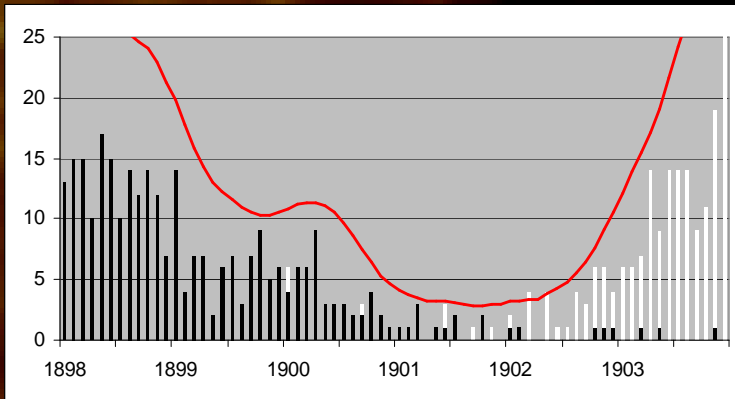
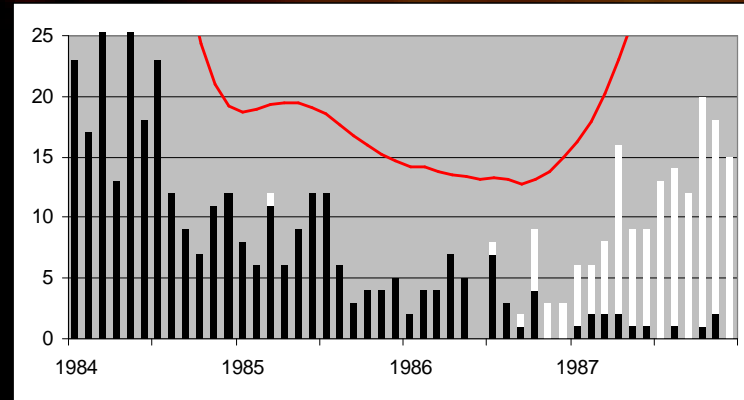
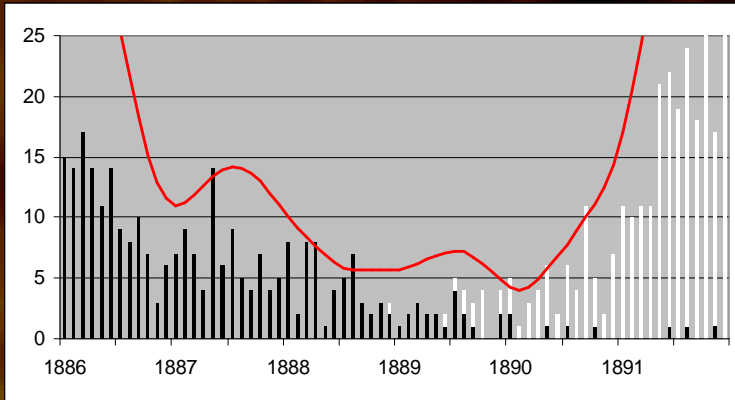


Max. Sunspot Area and Latitude

- Based on first 20 groups of SC12, 13, 14, 21, 22 and 23
 - Reduced to 9 groups (= SC24)
- Maximum area
 - Mack of really big group (A > 90MH)
- Latitude
 - Normal

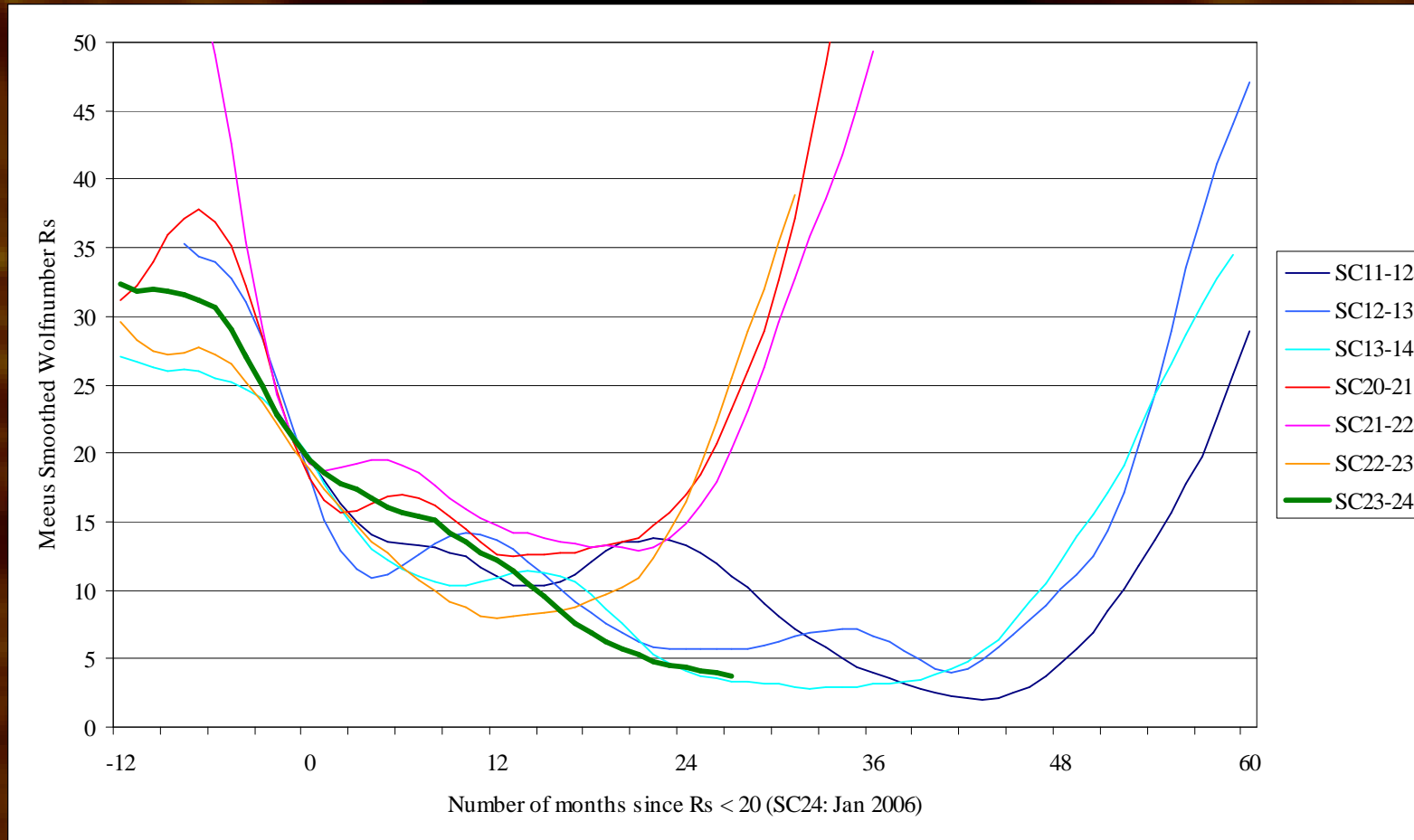


Old versus New, Wolfnumber



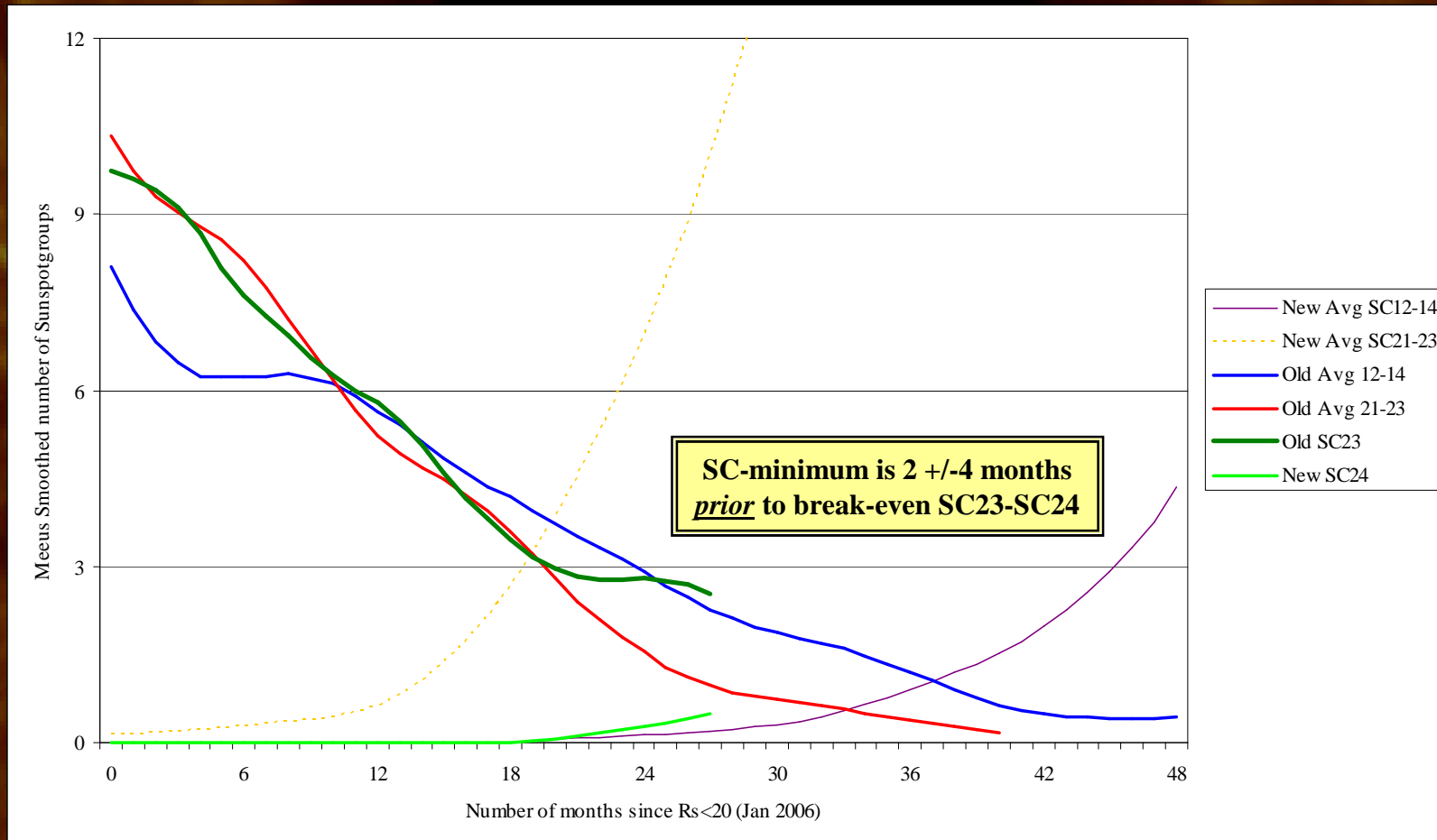
Wolfnumbers: SIDC
Groups: NOAA/Greenwich

Evolution Wolfnumber during SC-transit



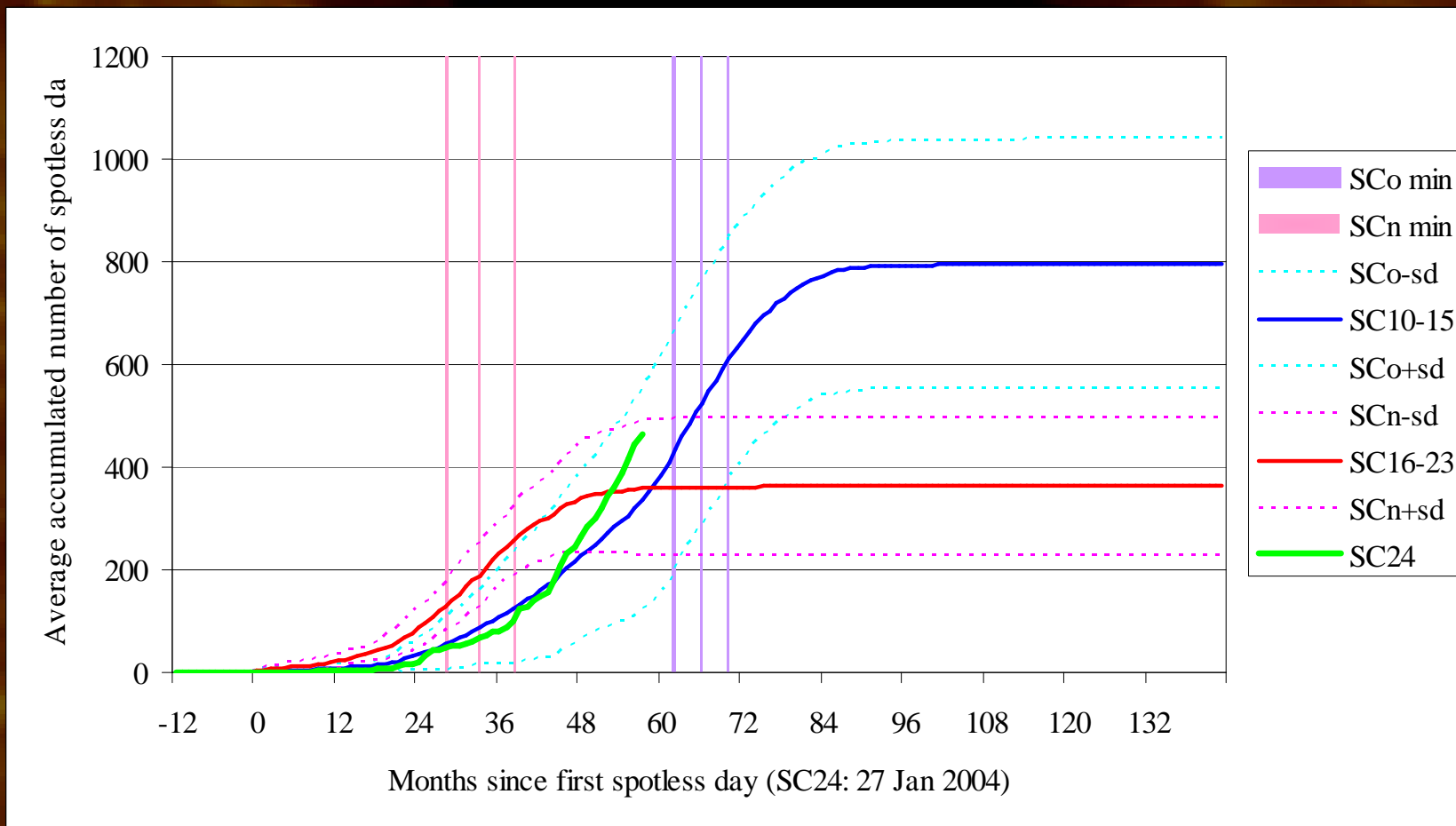
***If* SC23-24 similar to cycle transits SC12-14, R_{min} in **April 2009** +/- 6 months ($R = 3 +/- 1$)**

Old and new cycle groups during SC-transit



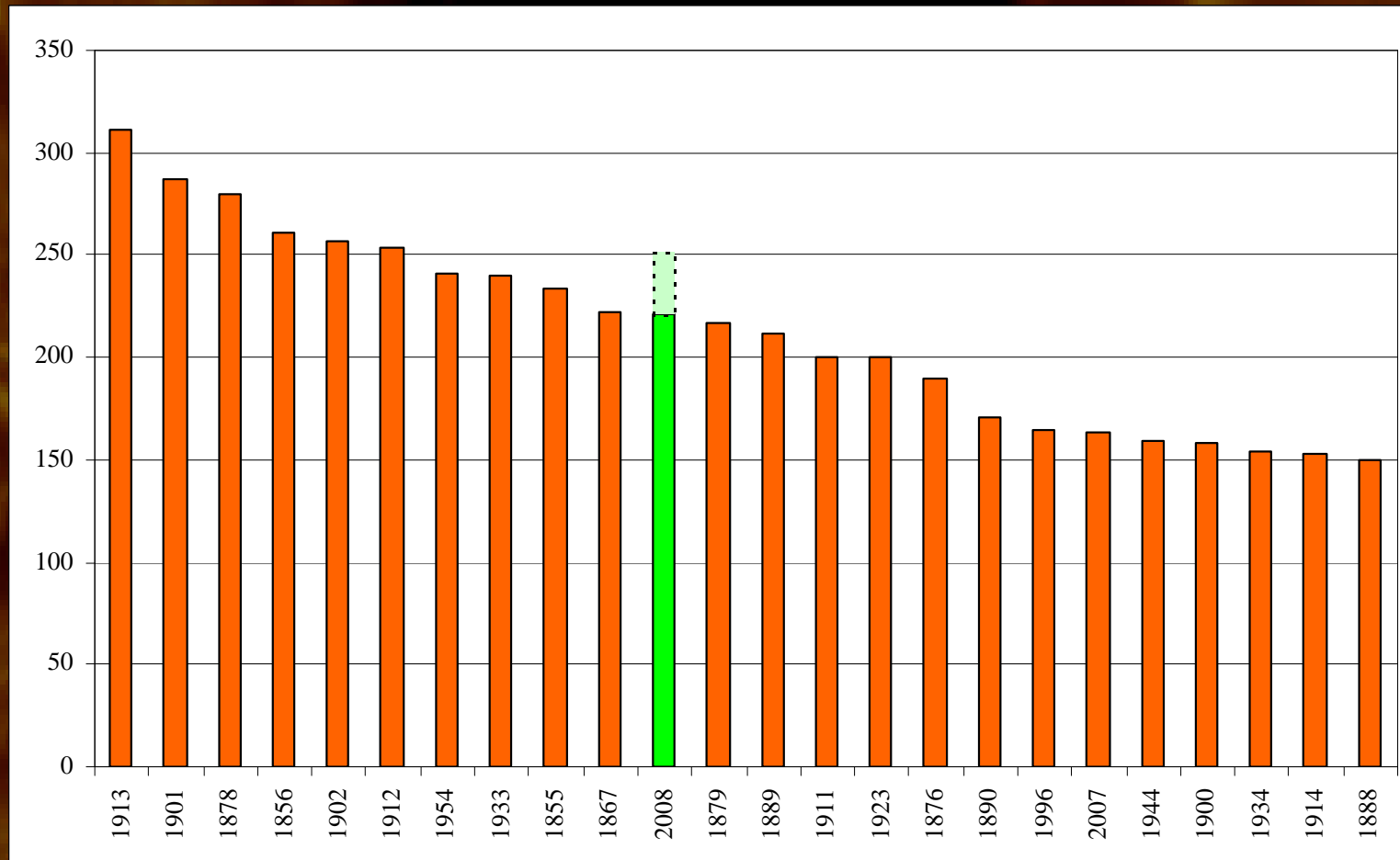
If decrease SC23 similar to cycle decrease SC11-13, Rmin in **February 2009 +/- 10 months**
If decrease SC23 similar to cycle decrease SC20-22, Rmin in **October 2008 +/- 10 months**

Number of spotless days

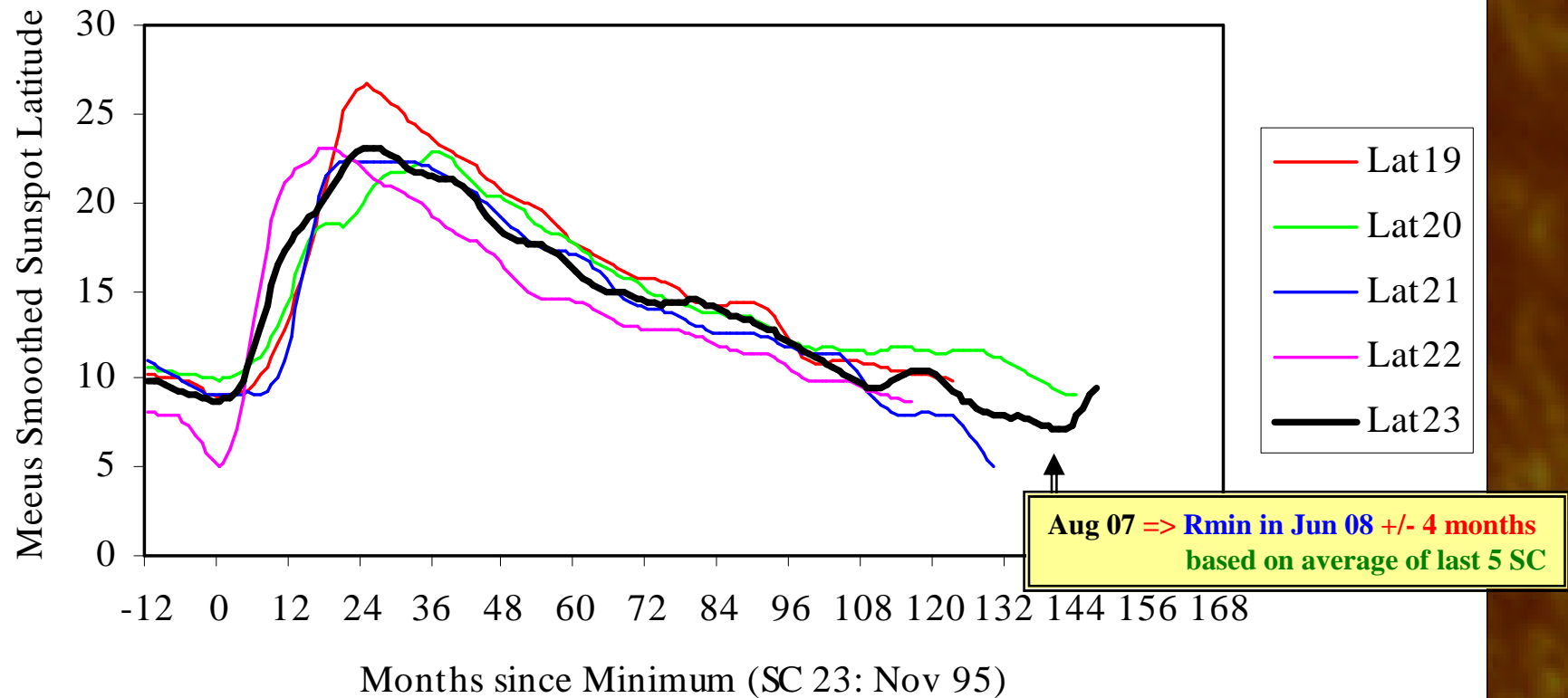


If SC23-24 similar to cycle transits SC10-15, Rmin in July 2009 +/- 4 months (R0 : 800 +/- 250)

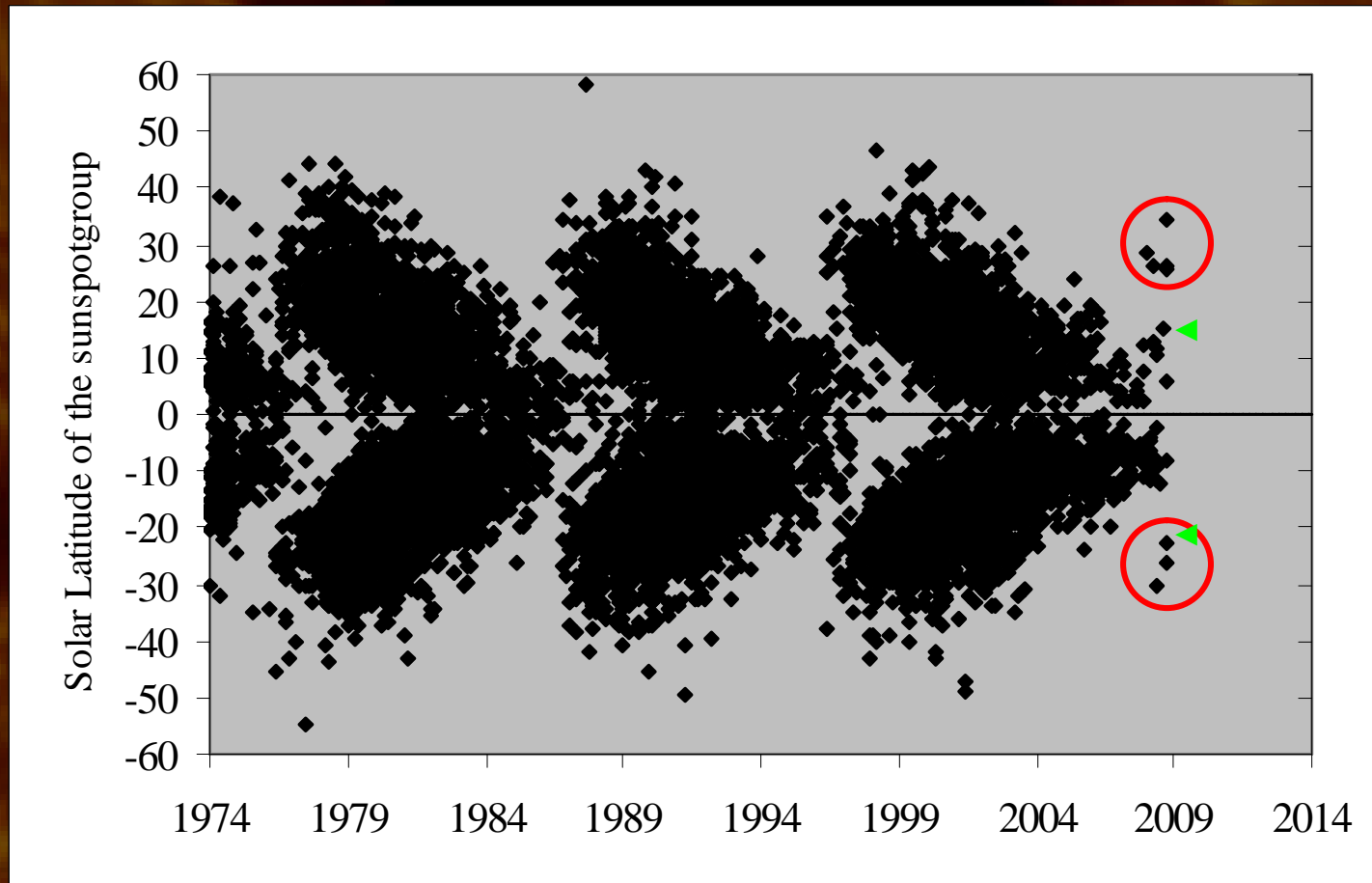
Years with spotless days since 1849



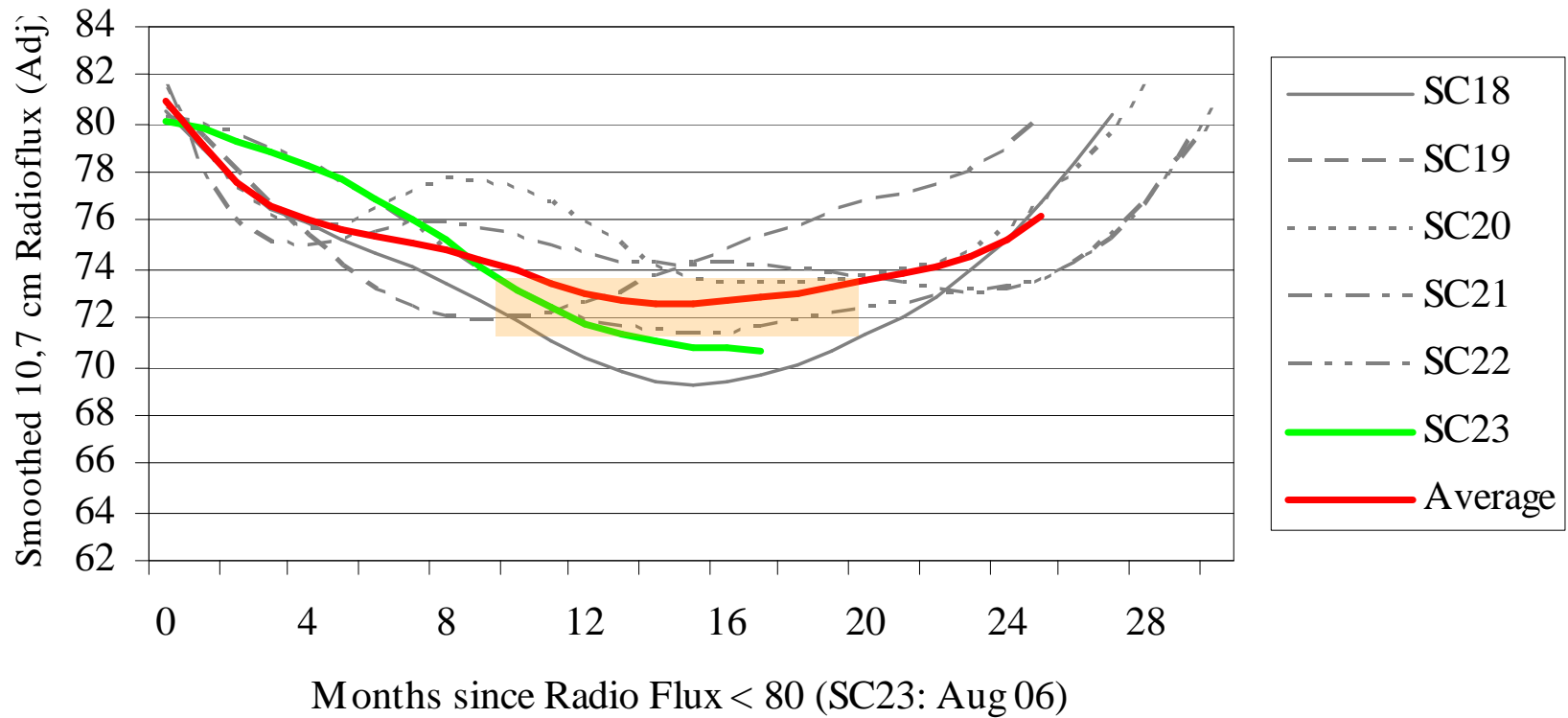
Latitude of sunspot groups



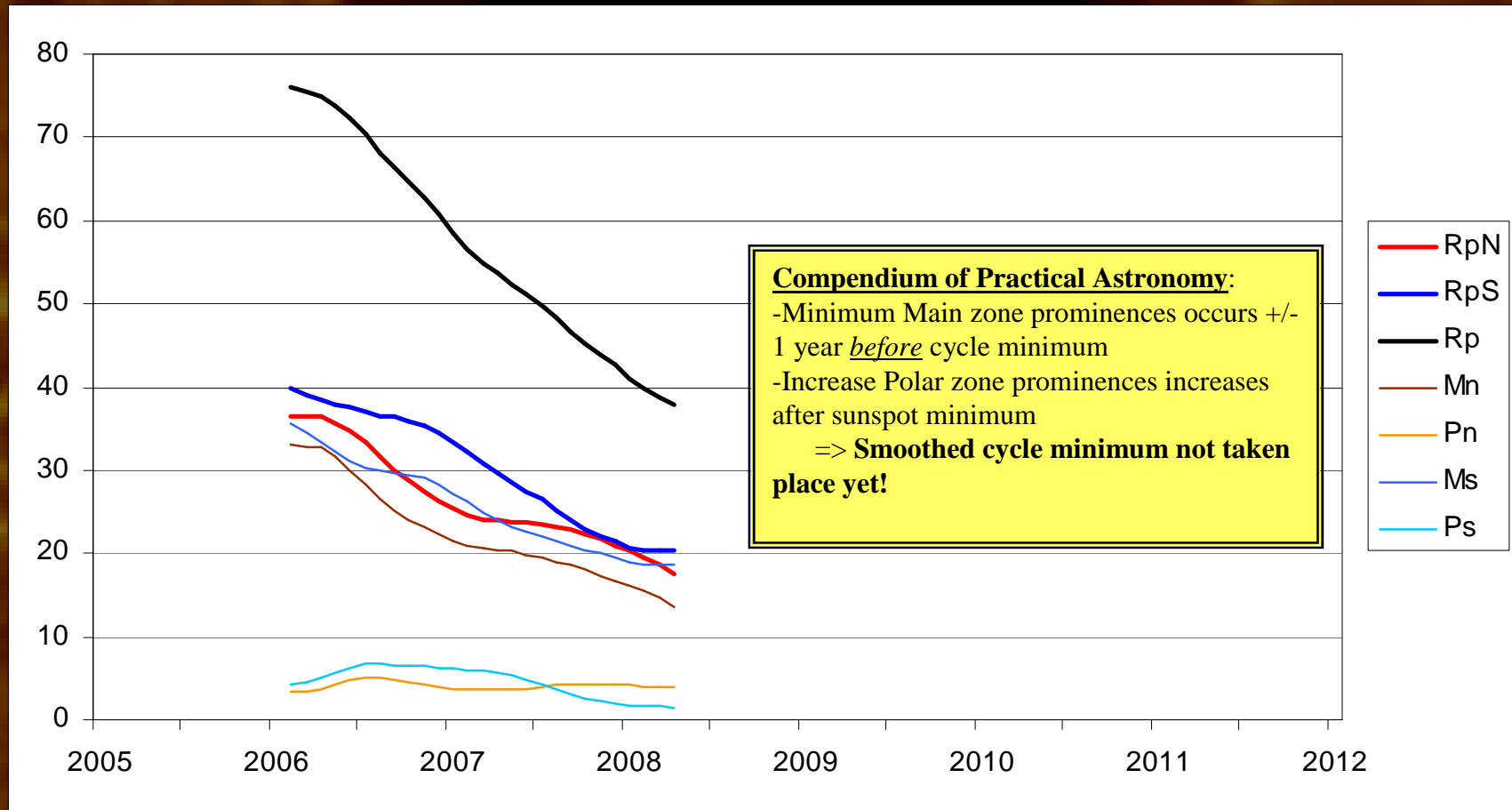
Butterfly-diagram



10,7 cm Radio Flux

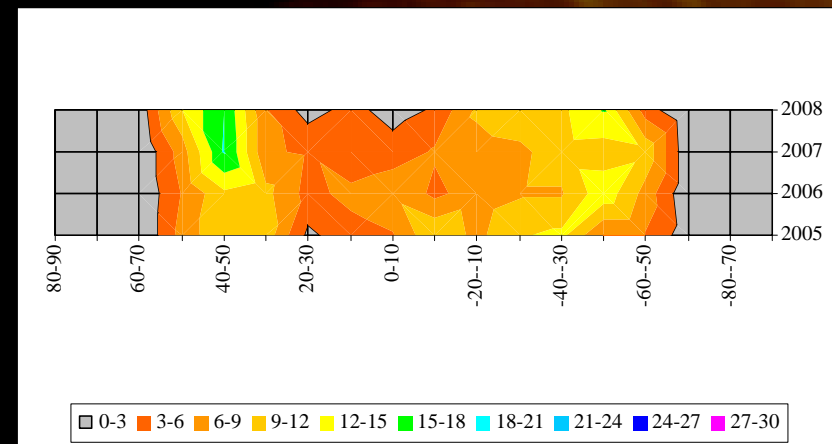
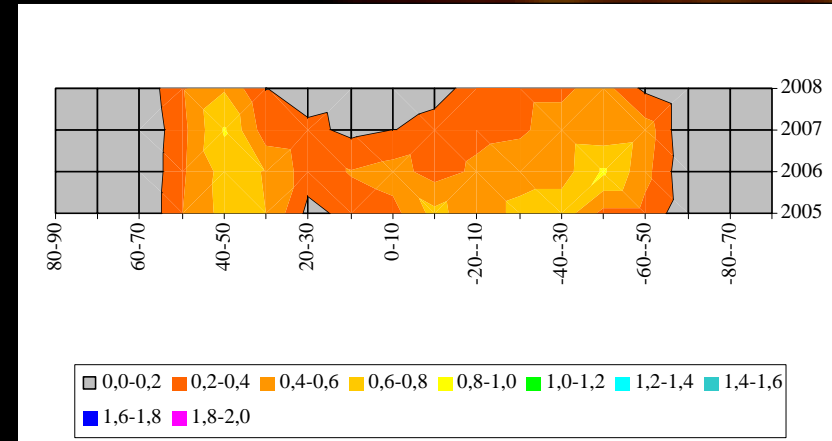


Prominencenumber (JJ)



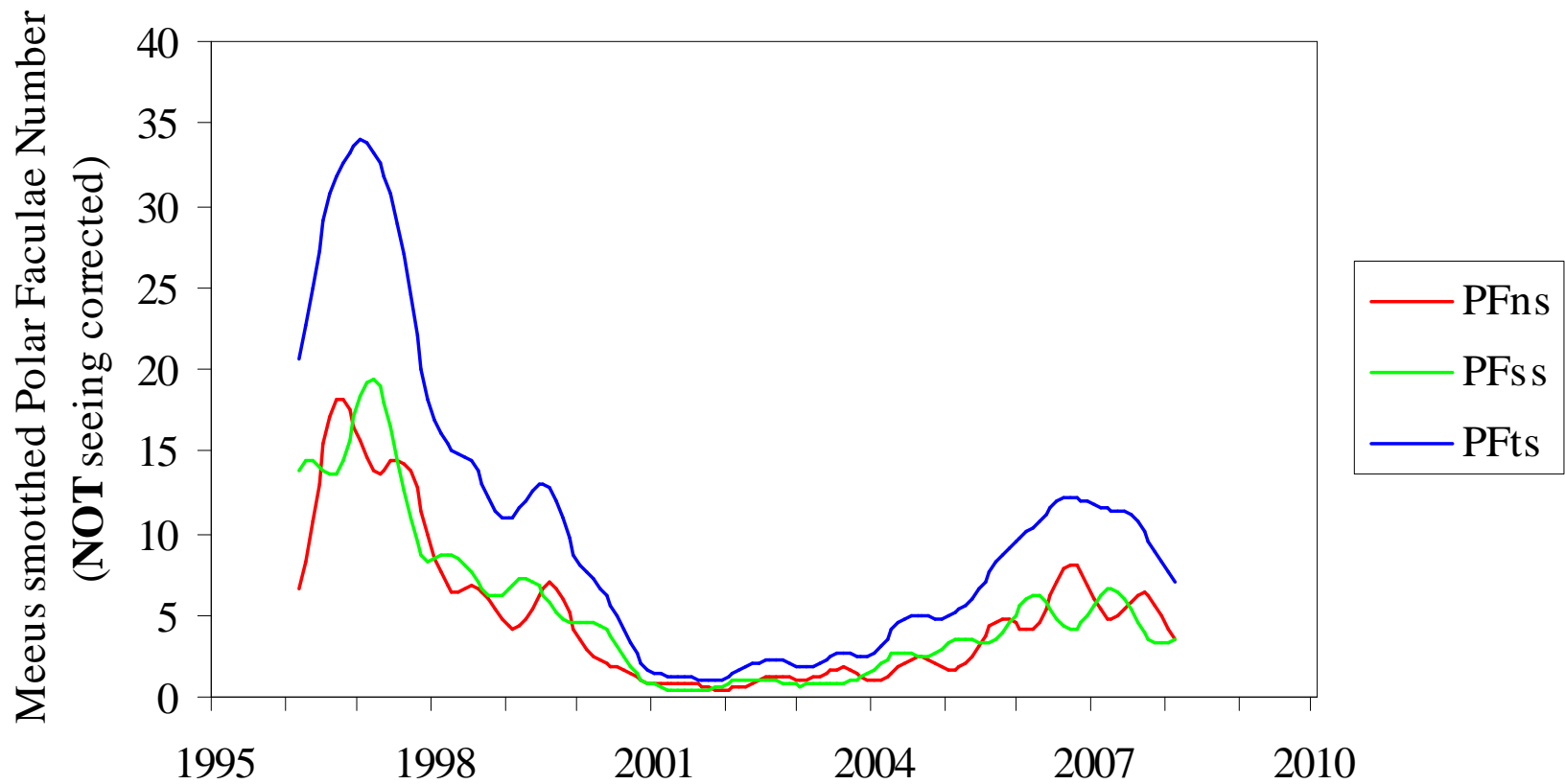
Prominences

- Number (per observation) continues to decrease
 - Especially in northern main zone
- Percentage increase in area adjacent to 50° latitude
 - +50° “barrier”



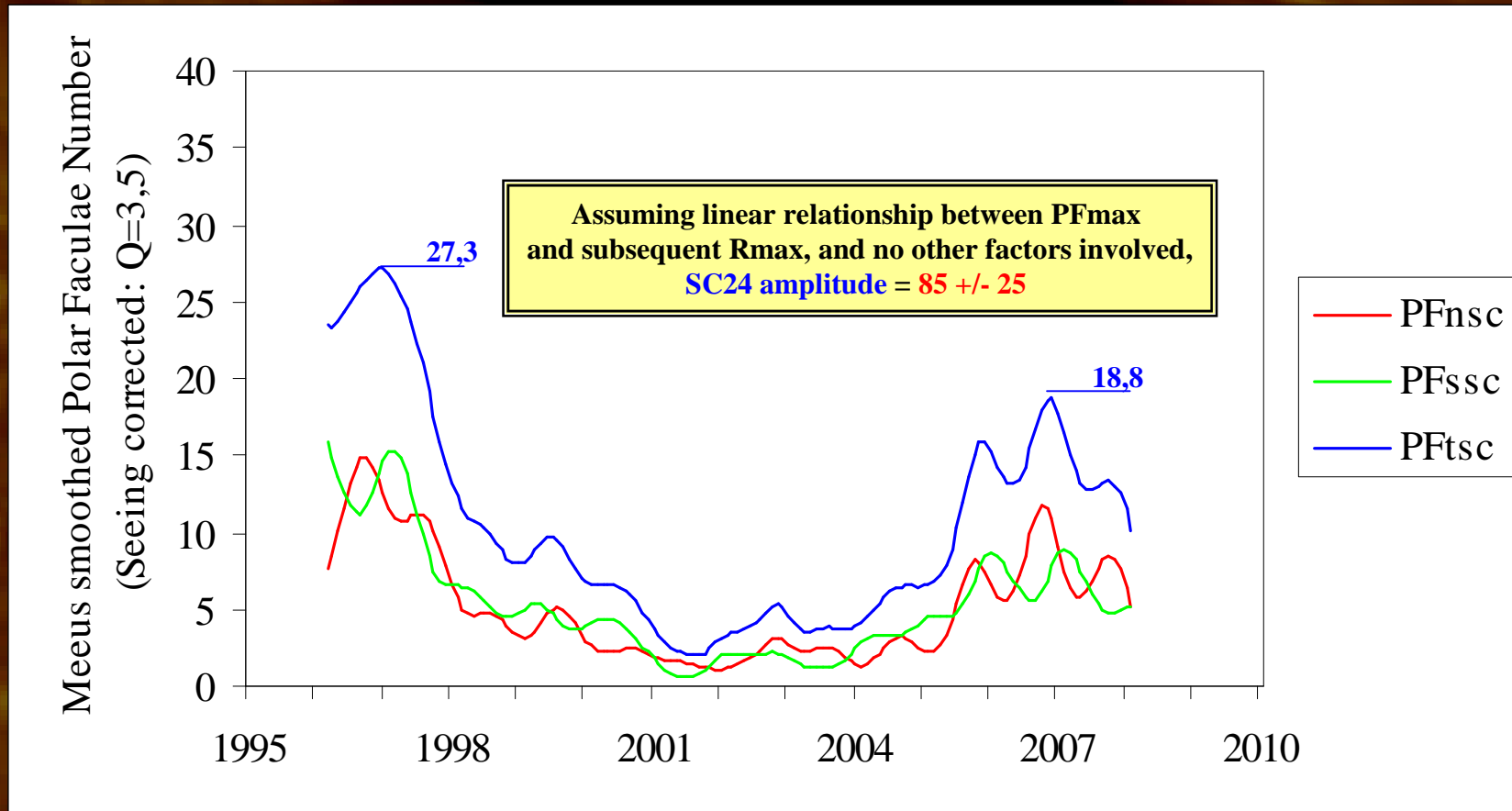
Polar faculae

Jan Janssens



Polar faculae

Jan Janssens



Questions?

Spike and Suzy

The 24th solar cycle

