Solar Bulletin

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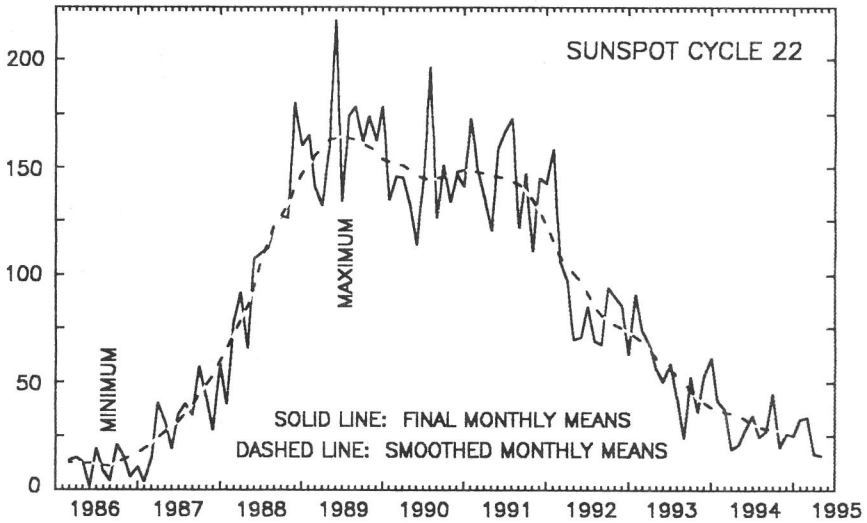
American Relative Sunspot Numbers for May

	R_a Final				
1)	7	11)	13	21)	14
2)	0	12)	25	22)	9
3)	0	13)	36	23)	0
4)	8	14)	36	24)	0
5)	9	15)	39	25)	0
6)	9	16)	42	26)	0
7)	8	17)	43	27)	0
8)	9	18)	40	28)	8
9)	10	19)	32	29)	10
10)	12	20)	24	30)	9
				31)	8

Mean: 14.8
Number of reports: 94



May Summary: Solar activity was very low during the first twelve days of May. Several small filaments disappeared from the Sun, but otherwise little of note was recorded. The geomagnetic field was quiet until May 2nd when a coronal-hole-related, high-speed solar wind stream spawned minor to severe storm conditions which persisted through the 5th. Field conditions then declined to the quiet or active range. The >2 MeV electron fluence was very high and high throughout the interval.

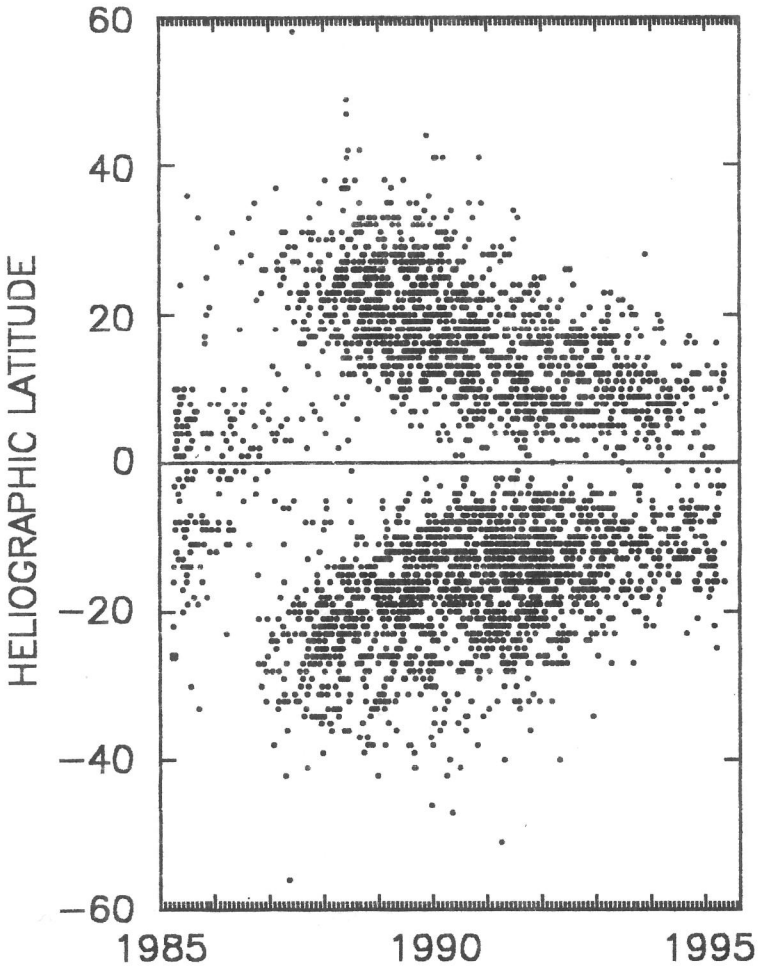
The Sun became a bit more active between the 13th and 17th, after numerous class B and C flares occurred in USAF/NOAA Region 7870 (N09, L032, DAI). Thereafter, activity again returned to a very low level. Region 7872 (N13, L321, BXO) -- determined to be a reverse polarity group by Learmonth, Beijing and SEL Observatories -- rotated onto the visible hemisphere on the 13th. Yohkoh satellite X-ray images showed the group to be compact and moderately bright, but the region died several days later and is not believed to be associated with the coming cycle. Other noteworthy events during the third and fourth weeks included a small filament which disappeared from the Sun's NE quadrant on the 18th. The geomagnetic field was predominately quiet to unsettled or active, with minor to major storm disturbances on the 16th-17th and again on the 24th due to the effects of recurrent coronal holes.

Very low activity levels continued during the remainder of May. The geomagnetic field was quiet until the 30th when storm conditions -- again related to a recurrent coronal hole -- occurred, especially at high latitudes. The >2 MeV electron fluence was mostly normal until month's end, when it entered the high range. The smoothed mean American Relative Sunspot Number for November 1994 is 26.6.

The mean estimated American Relative Sunspot Number for 1-17 June is 17. Solar activity was mainly in the very low range during the first seventeen days of June. Events of interest during the period included a large Southern Hemisphere prominence which erupted out to 0.17 solar radii early on the 4th, small filaments that disappeared on the 6th, and active prominences near the location of spotless Region 7876 (N12) as it rotated around the Sun's west limb on the 8th. The geomagnetic field was mostly quiet. The >2 MeV electron fluence was initially high, declined to moderate midway through the interval, and was normal after the 10th.

[A Portion of the above information was obtained from the **Space Environment Laboratory**]

Cycle 22 Butterfly Diagram; April 1985 - May 1995



The locations of emerging sunspot groups, as issued by the Space Environment Services Center, during solar cycle 22. The first group to appear during this cycle surfaced in the spring of 1985 as cycle 21 declined to a September 1986 minimum; that group is represented by the small square symbol in the Southern Hemisphere at the extreme left. New cycle spots typically emerge 12-18 months before the old cycle ends, at a latitude greater than (±) 25 degrees. Thus far, no cycle 23 spot-groups have appeared during the current cycle.

Sudden Ionospheric Disturbances (SES) Recorded During April 1995

Records were received from A9,40,50,59,61,62,63,65,68,69,70,71,72,73,74,75,76,77,78,80,81,82,83,84,85

Day	Max	Imp	Def	Day	Max	Imp	Def	Day	Max	Imp	Def	Day	Max	Imp	De
12	0828	1-	5	12	1430	2	5	19	1815	1-	5	22	1629	1+	5
12	1020	1+	5	12	1645	1	5	19	2307	1-	5	22	1710	1	5
12	1145	1-	5	13	1200	1-	5	20	2256	1-	5	22	1737	2+	5
12	1244	1	5	13	2242	1	5	21	1338	2+	5	23	1703	2+	5
12	1345	1+	5	19	1139	1	5	22	1150	2+	5	23	2346	2	5
												29	1157	1+	5

Analysts: J. Ellerbe; S. Hansen; M. Hayden; P. King; A. Landry; R. Papp; G. Rosenberg; A. Stokes; M. Taylor; P. Taylor; L. Witkowski

Frequencies recorded (kHz): 16.8; 18.3; 19.6; 20.3; 21.4; 23.4; 24.8; 28.5; 30.6; 48.5; 51.6;

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