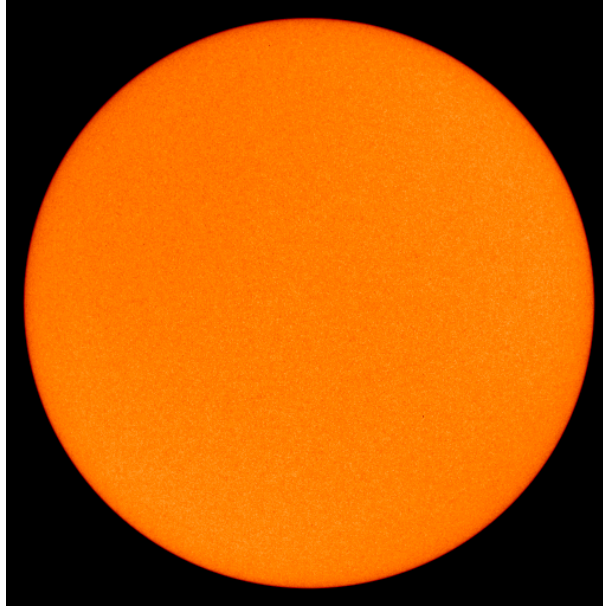


SUN RUN OF 41 DAYS WITHOUT A SPOT 10TH LONGEST

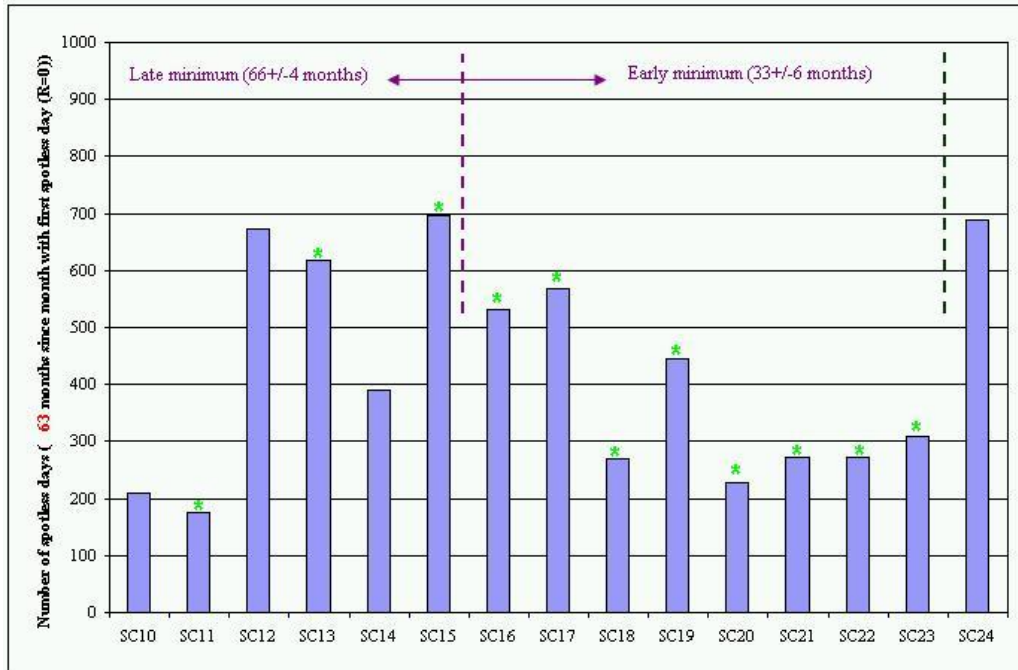
Today, Thursday, August 20th marked the 41st straight day without a sunspot, one of the longest stretches this solar minimum.



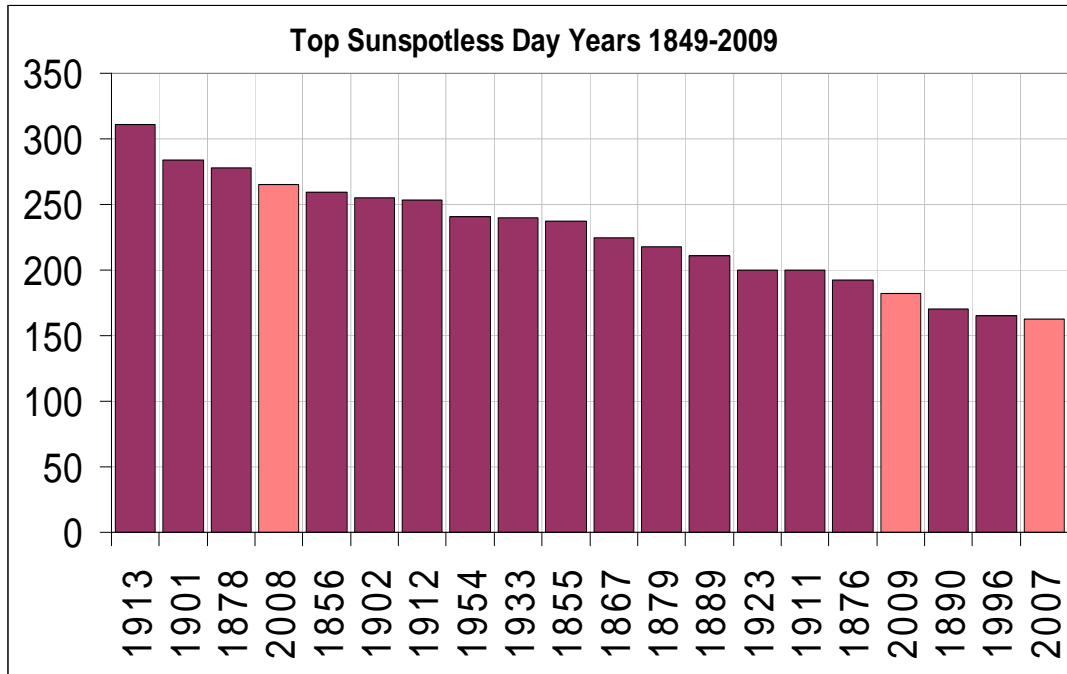
In fact it rises into 10th place among all spotless periods since 1849 (first table [here](#))

Rank	SC	Begin	End	Days	Rank	SC	Begin	End	Days
1	15	08 Apr 1913	08 Jul 1913	92	20	12	30 Jun 1878	25 Jul 1878	26
2	14	11 Mar 1901	18 Mei 1901	68	20	11	05 Jun 1867	30 Jun 1867	26
3	12	16 Feb 1879	10 Apr 1879	54	20	11	20 Jul 1867	14 Aug 1867	26
4	14	17 Mar 1902	04 Mei 1902	48	21	24	23 Jun 2008	17 Jul 2008	25
4	10	14 Aug 1855	01 Oct 1855	48	21	14	27 Jun 1901	21 Jul 1901	25
5	12	04 Apr 1878	20 Mei 1878	47	21	10	16 Sep 1856	10 Oct 1856	25
6	14	16 Jan 1902	01 Mar 1902	45	22	21	08 Jul 1976	31 Jul 1976	24
6	12	14 Sep 1878	28 Oct 1878	45	22	15	13 Aug 1912	05 Sep 1912	24
7	15	21 Jan 1912	03 Mar 1912	43	22	15	19 Nov 1912	12 Dec 1912	24
8	23	13 Sep 1936	24 Oct 1936	42	22	14	13 Sep 1901	06 Oct 1901	24
9	10	22 Apr 1856	01 Jun 1856	41	23	15	01 Nov 1913	23 Nov 1913	23
10	14	26 Nov 1901	04 Jan 1902	40	23	15	10 Jan 1914	01 Feb 1914	23
11	16	06 Jan 1924	13 Feb 1924	38	23	12	25 Nov 1876	17 Dec 1876	23
11	15	15 Jul 1913	22 Aug 1913	38	23	12	05 Jan 1879	27 Jan 1879	23
12	11	29 Dec 1866	04 Feb 1867	38	23	11	02 Dec 1866	24 Dec 1866	23
12	10	12 Dec 1855	18 Jan 1856	38	23	10	17 Mar 1856	08 Apr 1856	23
13	12	17 Mei 1876	22 Jun 1876	37	24	24	20 Jan 2009	10 Feb 2009	22
13	12	27 Jul 1878	01 Sep 1878	37	24	24	18 Nov 2008	09 Dec 2008	22
14	18	18 Apr 1944	23 Mei 1944	36	24	24	06 Sep 2007	27 Sep 2007	22
14	17	05 Nov 1933	10 Dec 1933	36	24	15	28 Jan 1913	18 Feb 1913	22
15	11	20 Apr 1867	24 Mei 1867	35	24	14	03 Aug 1839	24 Aug 1839	22
16	24	21 Jul 2008	20 Aug 2008	31	25	22	23 Dec 1885	12 Jan 1886	21
16	17	12 Dec 1933	11 Jan 1934	31	25	15	11 Sep 1911	01 Oct 1911	21
16	15	12 Jul 1912	11 Aug 1912	31	25	15	30 Dec 1911	19 Jan 1912	21
16	14	25 Nov 1900	25 Dec 1900	31	25	15	15 Mar 1913	04 Apr 1913	21
17	19	03 Jun 1954	02 Jul 1954	30	25	15	19 Feb 1914	11 Mar 1914	21
17	17	13 Jul 1933	11 Aug 1933	30	25	13	14 Apr 1889	04 Mei 1889	21
17	14	08 Jul 1902	06 Aug 1902	30	25	12	10 Feb 1878	02 Mar 1878	21
18	24	09 Oct 2007	05 Nov 2007	28	25	12	14 Mei 1879	03 Jun 1879	21
19	24	13 Dec 2008	08 Jan 2009	27	25	10	14 Jul 1855	03 Aug 1855	21
19	19	12 Jan 1954	07 Feb 1954	27	26	24	05 Feb 2008	24 Feb 2008	20
19	18	03 Feb 1944	29 Feb 1944	27	26	18	02 Jan 1944	21 Jan 1944	20
19	16	17 Feb 1923	15 Mar 1923	27	26	17	13 Aug 1933	01 Sep 1933	20
19	15	20 Oct 1912	15 Nov 1912	27	26	15	19 Mar 1912	07 Apr 1912	20
20	15	15 Jan 1911	09 Feb 1911	26	26	14	30 Aug 1902	18 Sep 1902	20
20	15	10 Sep 1913	05 Oct 1913	26	26	12	17 Apr 1876	06 Mei 1876	20
20	13	16 Nov 1889	11 Dec 1889	26	26	10	25 Feb 1856	15 Mar 1856	20
20	13	16 Mar 1890	10 Apr 1890	26	26	19	13 Feb 1953	04 Mar 1953	20
20	12	02 Sep 1875	27 Sep 1875	26					

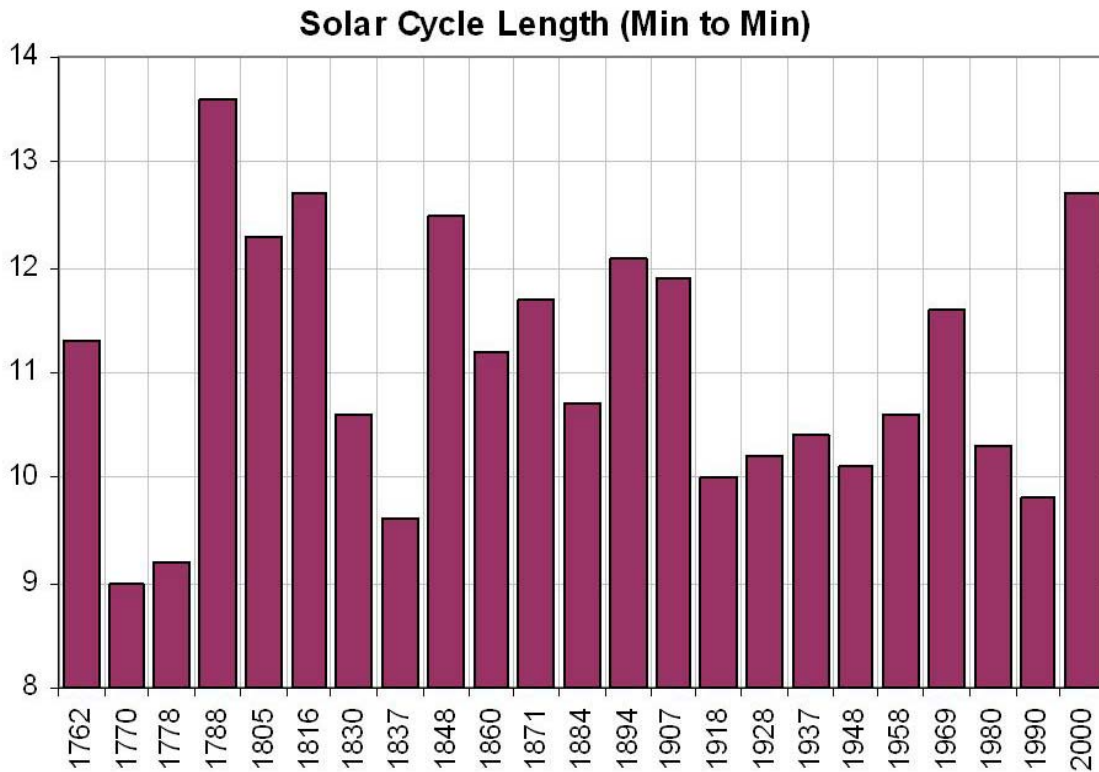
The total number of spotless days this transition from cycle 23 to 24 is now 694 rapidly approaching the approximate number leading into cycle 15 in the early 1900s.



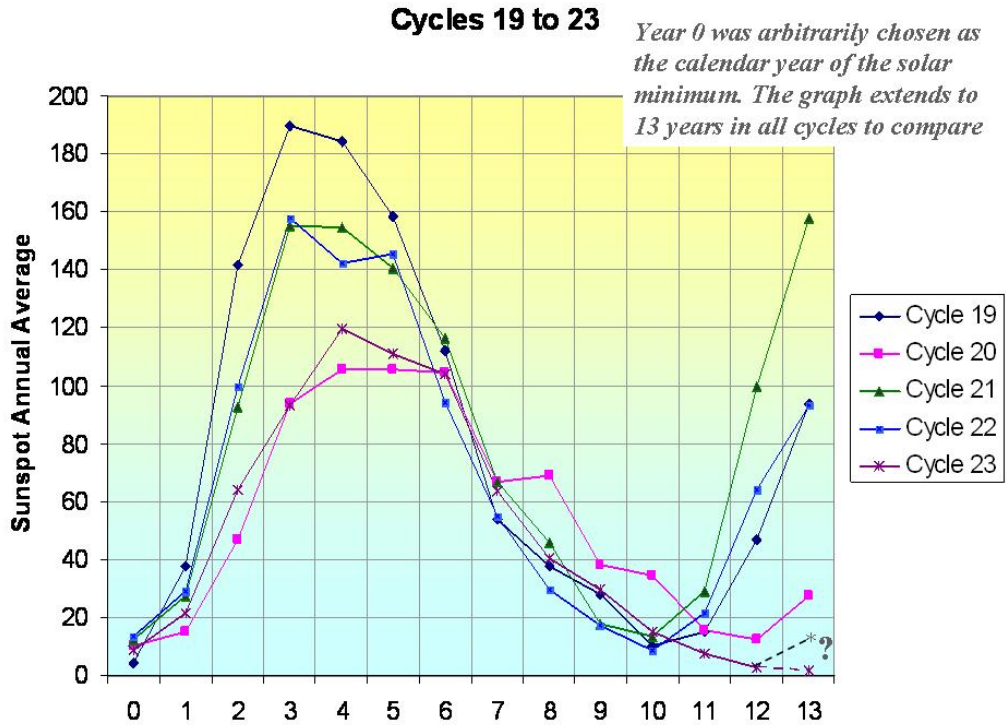
We have had 183 spotless days this year (79% of the days). We are in the top 20 years in 17th place. We will very likely rapidly rise up the list in upcoming weeks and rival 2008's 265 days and likely end in the top 5 years. 2007, 2008, 2009 will only have 1911, 1912, 1913 in the top 20 as string of 3 per transition.



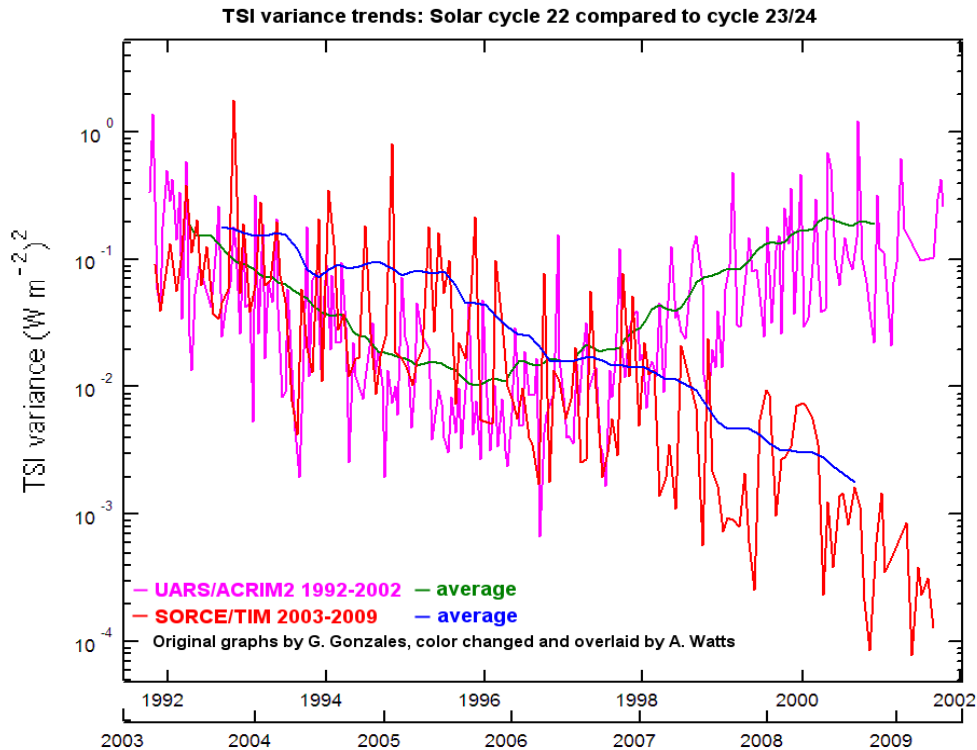
The cycle minimum probably was December, 2008. January 2009 13 month average came up a bit due to slight bump in activity in June and July but if August should end up sunspotless and September low, we could have a double bottom. The 12.7 years assuming December 2008 was longest in two centuries.



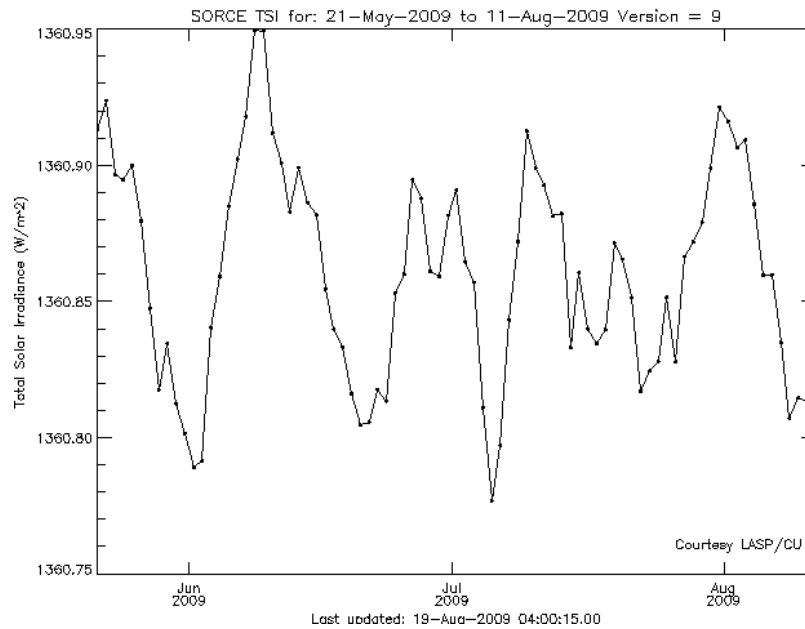
You can see on this chart, by 13 years after the solar minimum year, most of the last 5 cycles already had recovered, in one case already to the solar max.



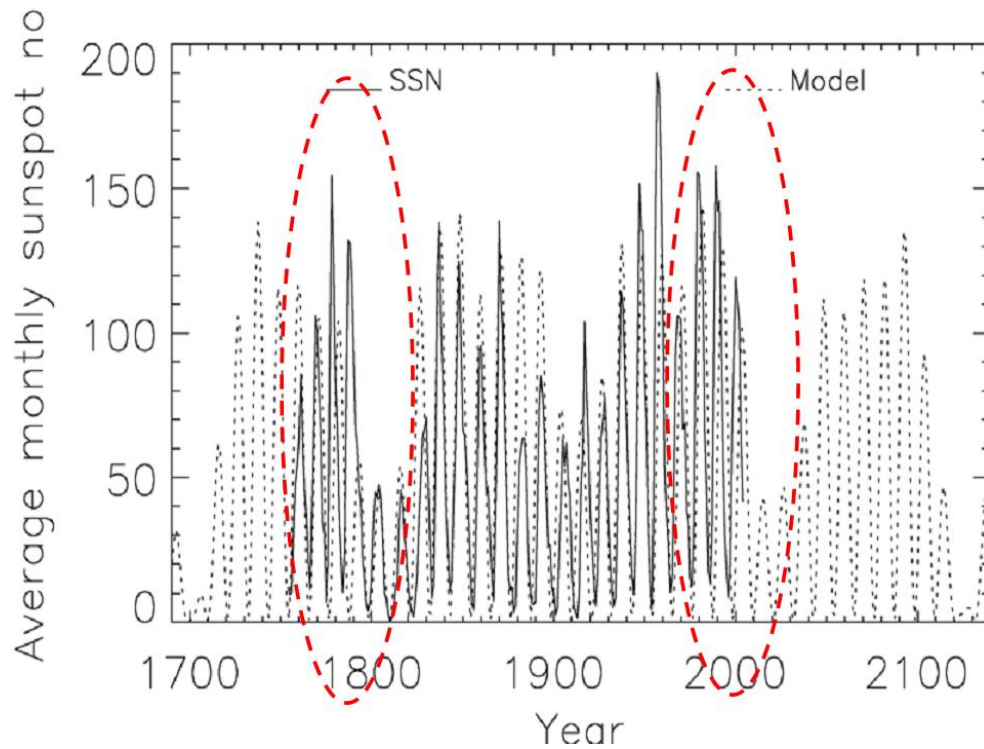
This cycle has continued to decline in the solar irradiance, solar flux, sunspot number and geomagnetic activity after 10 years. On the following chart produced by Anthony Watts, you can see the Total Solar Irradiance declining whereas the prior cycle was rebounding.



The *SORCE* TSI daily plots from May 21, 2009 to August 11 has shown some ups and downs but latest value was near the bottom.



[Clilverd et al 2006](#) suggests using a statistical analysis of the various cycles (11, 22, 53, 88, 105, 213, and 426 years) shows the next two cycles will likely be very quiet much like those of 200 years ago in the early 1800s, the so called Dalton Minimum, the time of Dickens (with snows and cold in London like last winter).



See what David Archibald shows what the result might be if Clilverd is correct [here](#).
Some have not ruled out an even stronger [Maunder like Minimum](#).