

Articles from Spaceweather.com concerning Increased Aurora Activity

A BURST OF NORTHERN LIGHTS: On Jan. 15th, a burst of Northern Lights startled observers around the Arctic Circle. "The sky exploded over my head!" reports Øystein Lunde Ingvaldsen, who sends this picture from Bø in Vesterålen, Norway:



"The Northern Lights were insane," he says. "To record them, I used a [Nikon D300](#) set at ISO1600 (f/3.5) for a 10 second exposure."

Arctic photographers may wish to take note of those settings, because more auroras are on the way. A solar wind stream is heading toward Earth and it could spark polar geomagnetic storms when it arrives on Jan. 18th or 19th. Be alert for auroras!

The display could intensify even more on Jan. 18th and 19th. That's when a solar wind stream flowing from a coronal hole is expected to reach Earth. High-latitude sky watchers should be [alert](#) for Northern Lights.

April 8, 2010

THE VIEW FROM ANTARCTICA: A high-speed solar wind stream has been blowing around Earth for three days, sparking some of the strongest geomagnetic storms and brightest auroras in years. Here is the view, yesterday, from Antarctica:








"This was the most intense and amazing natural phenomenon I have ever had the privilege of observing," says photographer André Harms. "It was such an exhilarating feeling when the sky just exploded in a kaleidoscope of moving colors."

Harms works at [SANAE IV](#), the South African Antarctic research station in coastal Dronning Maud Land just inside the Antarctic Circle. The base itself is located on top of a distinctive [flat-topped nunatak](#), which offers observers a fine view of the sky. The view could remain colorful for some days to come as the solar wind continues to blow. Stay tuned!

Summary: Solar activity continues to increase after a two-year solar minimum that ranks among the century's deepest.




The return of sunspots and a resurgent solar wind is good news for aurora watchers, who are seeing some of the best displays since ~2006.

	Photographer, Location	Images	Comments
	Albert Jakobsson , Iceland, Glacier Eyjafjallajokull in the south part of Iceland Apr. 4, 2010	#1 , more	I went to see the volcanic eruption in Eyjafjallajokull Glacier persisting into its second week, with lava flows into nearby canyons. In the twilight the auroras begin to dance in the sky and it was breathtaking to say the least. Nikon D200 100 ISO f/3,5-5,6 18-200mm ISO 100, exp 30 sek 18 mm
	Lance Parrish, Skiland, Alaska, 20 miles NE of Fairbanks Apr. 5, 2010	#1 , #2 , #3 , #4	Active displays beginning shortly after midnight which became very active around 1 am local time. Exceptionally fast moving, colorful, horizon to horizon, northern lights which stayed directly overhead for a good while, sort of centered around the big dipper. Many shot at ISO 6400 to shorten the exposure time in an attempt to capture the detail. Nikon D3- ISOs 3200 & 6400 16mm f2.8fisheye and 14-24 mm f2.8. Exposure times from just under 1 second to 4 seconds.
	Tenho Tuomi, near Lucky Lake, SK, Canada Apr. 5, 2010	#1	Aurora, like piano keys. Camera Canon Rebel XT, 20 sec, ISO 1600, 18mm focal length. According to my magnetometer the real aurora came 3 hours later.

	<p>Ian Robins, Ringstad Bø Vesterålen Apr. 4, 2010</p>	<p>#1, #2, #3, #4, more</p>	<p>Last night 4/4/10 It did not even wait for it to get dark before the show started. What a show this is turning out to be a really fantastic month. 30 secs F4 iso 400 12mm for all of these. I like the contrast between the remaining blue in the sky and the stunning green.</p>
	<p>Daryl Pederson, The Denali overlook in south central Alaska. Apr. 3, 2010</p>	<p>#1</p>	<p>I took advantage of the low auroral activity and shot a couple hour time exposure with Denali for a foreground. Nothing Vernal about it, well I guess there is a little green at the bottom right from aurora way north, but the days are much longer as I couldn't start this exposure until after midnight.</p>

more images: [from Ab Kuenzli](#) outside Fairbanks, Alaska; [from Helge Mortensen](#) of Kvaløya, Troms, Norway; [from Stuart Horner](#) of Terrace, British Columbia, Canada

Summary: Solar activity continues to increase after a two-year solar minimum that ranks among the century's deepest. The return of sunspots and a resurgent solar wind is good news for aurora watchers, who are seeing some of the best displays since ~2006. See also [March, 2010](#).

	Photographer, Location	Images	Comments
	<p>Fredrik Broms, Kvaløya, Norway Apr. 2, 2010</p>	<p>#1, #2, #3, more</p>	<p>Here in the North, the nights are getting shorter and brighter very quickly now and the midnight sun period is just around the corner. Tonight's display started just as it got dark enough to see and lasted for the entire night into the early morning. These days are some of the last possibilities to watch the auroras and tonight's outburst was a very nice way to end a great aurora season. It was also the first time for me to watch auroras while at the same time be able to listen at the singing of spring-birds like the oystercatchers which have started to arrive in the North. Nikon D3, Nikkor 20mm f/2.8, ISO 640-800, 4 - 13 sec exposure.</p>
	<p>LeRoy Zimmerman, just outside of Ester, Alaska Apr. 2, 2010</p>	<p>#1, #2, #3, #4, more</p>	<p>For me these were the first auroras of the winter, just as the darkness is slipping away. I missed the earlier strong display just before midnight, and time I got out to my shooting spot, they had pretty much disappeared. So I waited, and some nice, soft, slow, auroras came back between midnight and 3:00am, so I was able to grab a few shots. Whew! Finally! I even managed to catch a small meteor (which I did not see with my eyes) in the center of one of the panos. Canon 5D, f2.8, 1000 ISO, 8 seconds.</p>
	<p>M-P Markkanen, Posio, Finland Apr. 1, 2010</p>	<p>#1, #2, #3, #4</p>	<p>What a lovely moonrise it was ! And when I turned my back the auroras were performing their own show on the northern sky! It's my birthday (yes, I'm Aprils Fool) so nature gave me lovely present, and this wasn't an April joke! Taken with Nikon D80</p>

	<p>Zoltan Kenwell, North of Edmonton, Alberta, Canada Apr. 1, 2010</p>	<p>#1, #2, #3, #4, more</p>	<p>There was a brief low level Aurora event last night. This is what the profile of the Aurora belt looks like at my latitude. Soft and fluffy! A very different view than the lucky ones much closer to the north. Norway, Alaska, etc... Taken with a Canon 5D2 and a Sigma 15mm f2.8 Fisheye lens. 30 second exposure, f2.8, ISO1250</p>
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more images: [from Vesa Särkelä](#) of Kemijärvi, Finland; [from Bernard Marschner](#) of Fairbanks Alaska USA

NORTHERN LIGHTS IN THE USA: On Saturday, April 11th, a coronal mass ejection (CME) hit Earth's magnetic field. The impact caused a [G2-class](#) geomagnetic storm and, for the first time this year, ignited auroras over the continental United States. "The lights were bright enough to produce a reflection from the surface of Lake Superior," says photographer Shawn Malone, who recorded the scene from a beach in Marquette, Michigan:



Northern Lights were also spotted in Maine, Vermont, Wisconsin and Minnesota. Mostly the lights were dim and required a photographic exposure of some tens of seconds for [full effect](#). Nevertheless, they were there. "Lower 48" sightings of auroras are a sign: The deep solar minimum of 2008-2009 has come to an end and a new solar cycle is gaining strength. If forecasters are correct, Solar Max is just two to three years away.