A strong backhand slap from end of solar storm (Update)

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The northern lights or aurora borealis fill the western sky Friday, March 9, 2012, above the Russian Orthodox Saint Nicholas Memorial Chapel in Kenai, Alaska. The display of lights came in the aftermath of a solar storm that struck Earth on Thursday. (AP Photo/Peninsula Clarion, M. Scott Moon) MAGS OUT, NO SALES

The solar storm that seemed to be more fizzle than fury got much stronger early Friday before fading again.

At its peak, it was the most potent solar storm since 2004, space weather

forecasters said.

No power outages or other technological disturbances were reported from the solar storm that started to peter out late Friday morning.

Solar storms, which can't hurt people, can disturb electric grids, GPS systems, and satellites. They can also spread colorful Northern Lights further south than usual, as the latest storm did early Friday.

And more storms are coming. The federal government's Space Weather Prediction Center says the same area of the sun erupted again Thursday night, with a milder storm expected to reach Earth early Sunday.

The latest storm started with a flare on Tuesday, and had been forecast to be strong and direct, with one scientist predicting it would blast Earth directly like a punch in the nose. But it arrived Thursday morning at mild levels - at the bottom of the government's 1-5 scale of severity. It strengthened to a level 3 for several hours early Friday as the storm neared its end. Scientists say that's because the magnetic part of the storm flipped direction.

"We were watching the boxer, expecting the punch. It didn't come," said physicist Terry Onsager at the National Oceanic and Atmospheric Administration's space weather center in Boulder, Colo. "It hit us with the back of the hand as it was retreating."

Forecasters can predict a solar storm's speed and strength, but not the direction of its magnetic field. If it is northward, like Earth's, the jolt of energy flows harmlessly around the planet, Onsager said. A southerly direction can cause power outages and other problems.

Thursday's storm came in northerly, but early Friday switched to the fierce southerly direction. The magnetic part of the storm spent several

hours at that strong level, so combined with strong radiation and radio levels, it turned out to be the strongest solar storm since November 2004, said NOAA lead forecaster Bob Rutledge.

Skywatchers reported to NOAA shimmering colorful auroras in Michigan, Wisconsin and Seattle - areas that don't normally see the Northern Lights - Rutledge said. Other space weather enthusiasts reported auroras in Alaska, Minnesota, and North Dakota and in the southern hemisphere in Australia and New Zealand.

"Up north, they got a great display," said NASA solar physicist David Hathaway.

By late Friday morning the storm was essentially over, forecasters said. But they had a new flare from the same sunspot region to watch. Preliminary forecasts show it to be slightly weaker than the one that just hit, arriving somewhere around 1 a.m. EST Sunday.

The storms are part of the sun's normal 11-year cycle, which is supposed to reach a peak next year.

"This is what we're expecting as we approach solar maximum,"" Onsager said. "We should be seeing this for the next few years now."

More information: NOAA Space Weather Prediction Center: http://www.swpc.noaa.gov