SB PROP @ ARL $ARLP046
ARLP046 Propagation de K7RA

ZCZC AP46
QST de W1AW
Propagation Forecast Bulletin 46 ARLP046
>From Tad Cook, K7RA
Seattle, WA November 14, 2014
To all radio amateurs

SB PROP ARL ARLP046
ARLP046 Propagation de K7RA

This was one of those confounding weeks when the average daily sunspot number was down, while the average daily solar flux rose. Compared with the previous seven days, for November 6 to 12 average daily sunspot number declined 10.7 points to 85, while average daily solar flux rose 11.5 points to 139.4.

The latest prediction from the USAF/NOAA 45 day outlook has solar flux at 165 on November 14, 180 on November 15 and 16, then 185, 190, 195, 200 and 195 on November 17 to 21, then 190, 170, 150, 135 and 125 on November 22 to 26, 105 on November 27 and 28, 100 on November 29 and 30, 90 on December 1 to 3, and bottoming out at 80 on December 5. It then rises to a short term maximum of 200 on December 16 and 17 before dropping below 100 by the end of the year.

Predicted planetary A index is 8 on November 14 and 15, 12 on November 16 to 18, 10 on November 19, 8 on November 20 and 21, 12 on November 22 to 24, 8 on November 25, and 5 on November 26 to 29. It then rises to a high of 22 on December 6 and again on December 26.

Petr Kolman, OK1MGW of the Czech Propagation Interest Group has a geomagnetic forecast for us. He sees the geomagnetic field quiet to unsettled November 14 and 15, active to disturbed November 16, quiet to active November 17 to 19, mostly quiet November 20 and 21, quiet to active November 22, quiet to unsettled November 23 and 24, quiet to active November 25, mostly quiet November 26, quiet November 27 to 30, active to disturbed December 1, quiet on December 2 and 3, quiet to unsettled December 4 to 6, quiet to active December 7, quiet to unsettled December 8, and mostly quiet December 9 and 10.

Pete Heins, N6ZE of Thousand Oaks, California sent this report of a six meter opening:

"There was an extensive F-2 opening on Monday afternoon, 10 November 2014.

I worked ZL1RS (6470 mi) in New Zealand and CX7CO (6259 mi) in Uruguay. I also had a QSO with KH6HI (2537 mi) near Honolulu, HI for new grid, BL01, on 6 meters from my DM04ne QTH in SoCal."

Later he wrote, "Actually I discovered that I have worked BL01 in the past! I run 100w to a 5 element yagi about 15 feet above ground level with lots of nearby obstructions."

Jon Jones, N0JK of Lawrence, Kansas wrote about the same six meter opening:

"On the afternoon of November 10, the 6 meter band opened between Hawaii and the mainland states starting around 2000z.

I worked Jim KH6/K6MIO grid BK29 at 2132z from Lawrence, KS on 50.120 MHz.

I received a "5x2" report from Jim. He had a big pileup calling and heavy QSB - up well over S-9 then down in the noise then back. Also heard him work fellow locals N0CWR and N0XA. I heard KH6U on 50.115 but very weak.

I had been out with our 3 year old grand daughter at a church playground in Lawrence that afternoon to let her play. It was so nice out, 74 degrees F and sunny. I checked my cell phone while watching her and saw the spots for the Hawaiian stations on 6. Packed her up and back home - we live 5 minutes away. I listened first on the home setup - (dipole in attic) and heard K6MIO/KH6 on 50.120. Figured better to try for a contact from home than go out portable and possibly lose propagation. I had just moved the dipole to favor propagation to the Pacific rather than South America last week. After I worked Jim I went out portable. Jim was Q5, S1 to 2 on just a whip. But band dropped by the time I got the yagi up. Missed KH7Y while I was putting the antenna and masts in the car. KH7Y worked N0XA and N0CWR (plus many others).

First F2 opening from the Midwest to Hawaii in solar cycle 24. The last one I worked was November, 2001. The geomagnetic field was active on the 10th."

Here is another article with an update on that recent monster sunspot:

http://uncovermichigan.com/content/21856-ar-2192-just-rotates-out-earth-s-view

In this video, it looks to me like the sun is rotating backward, although a reader comment shows that at least one reader sees it rotating in the correct direction, left to right.

http://sploid.gizmodo.com/awesome-ultra-hd-timelapse-shows-the-biggest-sunspot-1657172893/+jesusdiaz

More:

http://www.space.com/27719-huge-sunspot-ar2192-solar-storms.html

http://www.abc.net.au/science/articles/2014/11/14/4127950.htm

Don't forget the ARRL SSB Sweepstakes this weekend. Details are here: http://www.arrl.org/sweepstakes

Here is a YouTube recording of WA2TPU working a couple of stations in South Africa running 5 watts, although it is not clear if they are on 15 or 20 meters.

https://www.youtube.com/watch?v=NU5i_09nWjg

For more information concerning radio propagation, see the ARRL Technical Information Service at http://arrl.org/propagation-of-rf-signals. For an explanation of the numbers used in this bulletin, see http://arrl.org/the-sun-the-earth-the-ionosphere. An archive of past propagation bulletins is at http://arrl.org/w1aw-bulletins-archive-propagation. More good information and tutorials on propagation are at http://k9la.us/.

Monthly propagation charts between four USA regions and twelve overseas locations are at http://arrl.org/propagation.

Instructions for starting or ending email distribution of ARRL bulletins are at http://arrl.org/bulletins.

Sunspot numbers for November 6 through 12 were 107, 96, 92, 78, 63, 70, and 89, with a mean of 85. 10.7 cm flux was 135.5, 145.5, 132, 131.7, 136.1, 142.3, and 152.9, with a mean of 139.4. Estimated planetary A indices were 9, 12, 8, 9, 23, 12, and 8, with a mean of 11.6. Estimated mid-latitude A indices were 8, 10, 8, 8, 16, 9, and 6, with a mean of 9.3.
NNNN
/EX