

Propagation de K7RA

03 November, 2012

ARLP044

Solar activity quieted this week. Average daily sunspot numbers were down nearly 37 points to 58.4. Average daily solar flux declined 27 points to 116.9.

Predicted solar flux values are 100 for November 2-3, 105 on November 4-5, 110 on November 6-9, 120 on November 10-11, 125 on November 12-13, 130 on November 14, and peaking at 135 on November 15-20, then 130, 125 and 120 on November 21-23, and 115 on November 24-26. It then drops to a minimum of 100 on November 29 through December 1, then back to a high of 135 by mid-December.

The predicted planetary A index is 10 and 8 on November 2-3, 5 on November 4-5, 7 on November 6-7, then 10, 12 and 15 on November 8-10, 5 on November 11 through December 4, and 10, 20 and 15 again on December 5-7, followed by a quiet 5 again through December 16.

A coronal mass ejection hit Earth's magnetic field at 1530 UTC on October 31. This sparked aurora and contributed to the planetary and mid-latitude A index of 17 on November 1, with the college A index (in Alaska) at a stormy 48. The activity is subsiding, with a declining A index through the weekend.

This will be important to domestic HF contesters, as the ARRL November CW Sweepstakes is this weekend. Conditions should be pretty good for the contest.

The geomagnetic forecast from OK1HH says quiet to unsettled activity November 2-3, mostly quiet November 4, quiet to active November 5-6, quiet to unsettled November 7-8, quiet to active November 9, active to disturbed November 10, quiet to active November 11, mostly quiet November 12-14, quiet November 15-18, mostly quiet November 19, quiet November 20-22, and mostly quiet November 23-24.

Last weekend (October 27-28) was the SSB portion of the CQ World Wide DX Contest. The CW weekend is right after Thanksgiving, November 24-25. Jeff Hartley, N8II in West Virginia reports: "I operated 10 meters single band in the contest, but the band was nearly closed as expected at the start, so I migrated down for a few 20 meter Qs. 20 was open nearly world wide for the first 2 hours with excellent conditions over the pole from just west of JA all the way across to northern Europe; there were also a few very southwestern Europeans workable and the Middle East was loud as usual at that time of day. I worked many Russians including all call areas. RT4RO was S9+25-30 dB. BA, YE2, A7, VU, EY were all logged along with some very loud Africans (C5A, D4C, 5Z4EE). VK1CC called in via long path around 0100z, unusual to work that path so late.

This was probably the best 20 meters has ever been at the contest start in my many years of contesting.

"The solar flux averaged around 120 over the weekend with Saturday being slightly better. This allowed excellent conditions to all of Europe and fairly long openings to Russia including zone 17 UA9s.

But propagation was very limited to central Asia (worked two UNs with good signals Sunday) and the Far East (none logged) beyond JA; conditions were better to there last year. Good European conditions and activity allowed me to make over 2,150 QSOs with 1,000 in the log by 1715Z Saturday! There was activity up to above 28.8 MHz during the peak time to Europe. Even stations with poor antennas and running QRP were easy to work for hours. Conditions to the south Pacific were rather poor (worse than expected) except from 2300-2330z the last day; mid afternoon to late afternoon. Sunday was pretty much dead that direction except for KH6. KH2/KH0 stations were extremely loud from 2100z until 2300z, much louder than the JAs, about 10 stations were logged total from those 2 countries."

Steve Brunt, K6AAB of Fresno, California reports, "Conditions this weekend were fabulous! 10 meters was open until 0200z on the West Coast. Could have worked 10 single band, but didn't. 15 meters was also great with worldwide openings. 20 meters was open, but odd propagation. I could hear lots of Eastern Europeans, but couldn't work them. I

completely missed Zone 15 on 20."

Jon Jones, N0JK in Kansas reports, "Sunday afternoon there were great conditions in the CQ WW SSB contest to the Far East. Many Japanese stations were 20 over S9 on 10 meters just before sunset Sunday afternoon. I worked AH2, AH0, Japan, China, and Hawaii with 100 watts and a CB mag-mount whip. Most stations worked on first or second call."

If you would like to make a comment or have a tip for our readers, mail the author at, k7ra@arrl.net.

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>.

Find more good information and tutorials on propagation at <http://myplace.frontier.com/~k9la/>.

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 October 25 through 31 were 58, 71, 59, 55, 75, 56, and 35, with a mean of 58.4. 10.7 cm flux was 130, 130.7, 121.7, 117, 108.4, 106.3, and 104.2, with a mean of 116.9. Estimated planetary A indices were 4, 4, 4, 3, 3, 2, and 5, with a mean of 3.6. Estimated mid-latitude A indices were 3, 4, 3, 3, 2, 1, and 5, with a mean of 3.

Source: [The American Radio Relay League](#)

• All propagation reports can be found at:
<http://www.southgatearc.org/propagation>