Subject: FYI: Es gibt sie noch: Sonnenflecken (ARLP045 Propagation de K7RA)
From: Toby Deinhardt, DD5FZ
Date: Sat, 01 Nov 2008 06:59:00 +0100

Guten Morgen!

FYI – Vielleicht kommen besseren Zeiten.

vy 73 de toby aus Berlin

----- Weitergeleitete Nachricht von memberlist@www.arrl.org -----
Datum: Fri, 31 Oct 2008 17:30:57 -0400
Von: ARRL Web site
Betreff: ARLP045 Propagation de K7RA

SB PROP @ ARL $ARLP045
ARLP045 Propagation de K7RA

ZCZC AP45
QST de W1AW
Propagation Forecast Bulletin 45 ARLP045
From Tad Cook, K7RA
Seattle, WA October 31, 2008
To all radio amateurs

SB PROP ARL ARLP045
ARLP045 Propagation de K7RA

K7RA is on the road for a few days, and this bulletin comes to you via a very weak Wi-Fi signal in Atlanta, Georgia.

Cycle 24 slowly builds momentum. We saw sunspots for eight days in a row, from October 10-17, then twelve days of no spots. Now on October 30 another sunspot appeared, numbered 1007 and from cycle 24. It is a high latitude sunspot, and may provide some fun for this weekend's ARRL CW Sweepstakes. After a calendar year of very few sunspots, this is the fourth time during October that sunspots have emerged, and all from the new solar cycle 24.

Of course Sweepstakes is a domestic North American contest, but it would be nice to have some propagation on 15 and 10 meters.

For a comparison, we look at W6ELprop (http://www.qsl.net/w6elprop/) to compare zero sunspots over this weekend to several days of two sunspot groups (a sunspot number of 24, for example). We will look at two paths, the first from Beaverton, Oregon to Savannah, Georgia, and the second, from Cleveland, Ohio to Central California. Because this is a contest weekend, we will only consider the five bands used in most contests, 80, 40, 20, 15 and 10 meters.

From Oregon to Georgia, with zero sunspots we see little or no likely 10 or 15 meter propagation. 20 meters looks good from 1700-2030z.

40 meter propagation is best from 2230-0130z, fair from 0900-1100z, signals may disappear around 1330-1430z, and there is propagation building throughout the day from 1500-0130z, with the weakest daylight signals around 1730-1900z.

80 meters looks strong 0200-1130z, from after sunset in Oregon until prior to sunrise in Georgia.

With a sunspot number of 24 for several days, 15 meters has a possible opening 1830-1930z, 20 meters 1600-2200z, and 40 meters looks good 2200-0430z, then with excellent signals 0800-1300z, and weakest 1630-2000z. 80 meter propagation should be about the same as with no sunspots.

From Ohio to California, with zero sunspots 15 meters might open 1600-2130z, with a better chance 1730-1930z. 20 meters should be good 1430-1500z, then 1700-2000z, and 2200-2330z. 40 meters should be open nearly around the clock, with weak signals around 1300z, strongest signals

0100–1230z, and strong again at 1400z and again at 2300z. 80 meters should open after 2200z, with strongest signals 0300–1200z, and weak or no signals during daylight from 1500–2200z.

With a sunspot number of 24 sustained for several days, from Ohio to California 15 meters comes alive with excellent signals for most of the day, 1630–2130z. 20 meters opens 1400–0030z with weak spots at 1530z and 2100z. 40 meters should be open 24 hours a day, with strongest signals 0100–1230z, then again around 1400z and 2300z, weakest 1700–2000z. 80 meters looks about the same, but opening slightly later than with zero sunspots.

Propagation programs give us some general guides to openings, based on statistical models using smoothed sunspot numbers.

G3REP, Bob Parkes of West Sussex UK, sends along an interesting link (http://terra1.spacenvironment.net/~ionops/ES4Dintro.html) about visualizing the ionosphere, a subject not mentioned in this bulletin for some time. This bulletin first covered the subject earlier this year on May 2 in ARLP019, which you can find in the archive at http://www.arrl.org/w1aw/prop/.

Bob is now semi–retired, but his telecom engineering work over the past few decades has taken him all over the world. In 1979–1981 he was VS5RP in Brunei, P29PR in Papua New Guinea in 1983–1987, A45XF in Oman from 1992 to 1993, and 4S7RPG in Sri Lanka, 1993–1997. You can read his bio and find a link to his photo at http://www.qrz.com/g3rep.

Joaquin Montoya, EA2CCG wrote this week about conditions last Friday, October 24. He turned on his mobile rig to check conditions before the CQ World Wide DX contest, and found everything dead in the dead of night. Conditions were also poor through the weekend from his location in Spain. But on October 29, perhaps around the time our new sunspot 1004 appeared, he worked WH2P (Guam) on 15 meters. He didn’t say what time that was, but I might wager that it was during his morning hours from 0700–1100z, perhaps around 0900z.

Joaquin has a very interesting blog at http://ea2ccg.blogspot.com/ which I found along with his photo at http://www.qrz.com/ea2ccg by clicking on ’’Detailed info’’.

Many of us in the U.S. (myself included) unfortunately only speak one language, English, and sometimes not that well. But I used the language tool at http://www.google.com/language_tools?hl=en and pasted the http://ea2ccg.blogspot.com URL into the http:// field under ’’Translate a web page’’. Although the translation is rough, sometimes laughable, considering that a mere AI machine did this the result is pretty impressive, and you can definitely understand Joaquin’s fine writing. Check it out. This is really a great blog about amateur radio with impressive photos and other graphic images.

Dave Fisher, KA2CYN of New City, New York, says that during last week’s contest on 10 meters, October 26 with a roof–mounted rotatable multi–band trap dipole he worked a number of South American stations, the furthest ’’in Brazil and Argentina’’. He wonders if it could be F2 propagation, but this was probably E–skip. W7FA (see last week’s bulletin ARLP044) reports more 10 meter propagation from Oregon, on October 22, 2100–2130z, a short opening to LU and PY, just like KA2CYN a few days later.

So what does the upcoming week hold? I don’t know how long this new sunspot will remain. According to the U.S. Air Force and NOAA Space Weather Prediction Center, planetary A index is predicted at 8 for October 31, then a nice low index of 5 for November 1–6. But November 7, look for a big geomagnetic upset, complete with more absorption on HF, especially over polar paths, with a planetary A index of 35. But this may also give VHF operators some nice auroral reflections.

The same forecast does not predict sunspot numbers, but solar flux, which has been right around 67 since October 26. They predict solar flux at 69 for November 1–6, then 70 for November 7–12.

Geophysical Institute Prague predicts ''Relative sunspot number in the range 0–25'' for October 31–November 6. They forecast unsettled geomagnetic conditions for today, October 31, quiet to unsettled November 1, quiet conditions November 2–5, and quiet to unsettled November 6.

It is possible that around November 4 we may see a return of sunspot number 1005.

Just before this bulletin was released, Joaquin EA2CCG wrote: I worked WH2P at 0937z 29 October''.

''Today 31 October we also have good conditions...and a Surprise. On this moment at 1647z listening to LU on 15 meters. This morning I worked VU7NRO on 15 meters, weak but workable. Suddenly 10 meters were also opened, listening to some European beacons. At 1111z I caught a sporadic–E opening on 6 meters and worked 8 European stations from OK, DL, OE and 9A. What a day.''

So the ''wager'' about 0900z turned out to be not far off. This was done looking at W6ELprop, assuming one sunspot.

Also, Jim Henderson, KF7E in Arizona says ''VU4MY was actually workable on 14.240 MHz this morning. Good sign.'' Local morning for Jim might be 1300–1700z. Jim also reported some 17 meter long path propagation to a station that turned out to be a fake, so he doesn't really know where it was. He wrote, ''Back in early 1972 there was a guy signing ZK2 something, with the name of 'Back' or 'Bach'. He would show up every other week or so''.

''In about July of that year I found myself on Niue as ZK2DX (the original issue of that call). On one of my first nights operating, there was ZK2?? with a grand pile on 20m.''

''I would have loved to have seen his face when I called him and said 'Please tell me where on the island you are because I would love to come visit your shack'.

''He vanished forever.''

For more information concerning radio propagation, see the ARRL Technical Information Service at http://www.arrl.org/tis/info/propagation.html. For a detailed explanation of the numbers used in this bulletin, see http://www.arrl.org/tis/info/k9la–prop.html. An archive of past propagation bulletins is at http://www.arrl.org/w1aw/prop/.

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

Instructions for starting or ending email distribution of this bulletin are at http://www.arrl.org/w1aw.html#email.

Sunspot numbers for October 23 through 29 were 0, 0, 0, 0, 0, 0, and 0 with a mean of 0. 10.7 cm flux was 67.2, 67.5, 67.5, 66.9, 67, 67.1, and 66.7 with a mean of 67.1. Estimated planetary A indices were 3, 2, 1, 4, 1, 4 and 11 with a mean of 3.7. Estimated mid–latitude A indices were 3, 0, 1, 3, 1, 5 and 16 with a mean of 4.1. NNNN /EX

----- Ende der weitergeleiteten Nachricht -----