

## Radio Weather Summary for November 2008

Another month when solar activity was mostly 'very low' – though small, new-cycle, C-class flares were spotted on the 3<sup>rd</sup> and 4<sup>th</sup>. As the table below shows, the solar flux varied only between very narrow limits, with a 'high' of 71 and a low of 67. However, the average over the month of 69 units was a point higher than the average for October and, unlike October there were no days with a reading of 66. On may, perhaps, take this as a portent of better times ahead. However, in practical terms, there was of course no detectable impact on propagation. The X-ray flux was reported as A0 throughout the month.

### Solar Flux

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
SFlux	67	69	70	68	68	69	68	68	68	69	71	71	69	68	68	68	68	70	69	70	69	69	69	68	68	68	68	67	68	68

As the table below shows, it was also another quiet month geomagnetically. There were no 3-hour periods when any of the British observatories reported a K above 4 and there were only three days when the Ap figure reached (low) double figures – in all cases the result of coronal hole activity. Solar wind speeds were below average for much of the month; the average solar wind speed on the 22<sup>nd</sup>, 271km/sec, was the lowest ever recorded by the SOHO spacecraft. The lowest spot speed during the month was 269km/sec on the 24<sup>th</sup>; the highest was 660km/sec on the 26<sup>th</sup> and 27<sup>th</sup>.

### Daily Geomagnetic Levels

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
LER	1	4	0	0	0	1	11	16	15	3	1	2	0	0	3	12	5	0	1	1	0	0	1	2	14	13	14	6	2	1
ESK	2	6	1	1	0	1	15	20	19	4	1	4	1	1	6	16	5	0	1	1	0	0	3	3	20	16	25	7	4	2
HAR	6	7	3	1	1	2	16	20	20	4	3	7	2	3	9	17	7	1	3	5	1	1	5	4	22	19	18	11	9	3
Kp		2	1	1	0	1	8	14	12	3	1	2	1	1	6	8	2	1	1	2	1	1	3	0	10	8	7	4	2	1

## 50MHz

### Propagation to and from Britain

Very few contacts were reported to, from or within the UK this month. Of course it is always possible that large numbers went unreported. However, most of our UK reporters drew a blank, apart from stations within regular reach by tropo.

Throughout this report beacon callsigns are given in full.

#### Aurora

In the absence of significant geomagnetic activity it is scarcely surprising we have no auroral reports even from vigilant watchers in the far north.

### Meteor Scatter

Even reports of ms contacts (or JT6M contacts assumed to rely on MS) were fairly thin on the ground. Although the Leonids shower peaked on the 17<sup>th</sup> one could scarcely point to a comparable peak in contacts. That said, MS appears to have been the predominant mode employed by such UK operators who remained active – which, to judge by the results, was fewer than in November 2007.

Nov 1 1218 SP9 1706 LA

Nov 2 1502 I1

Nov 5 1202 S5

Nov 7 0823 SM3

Nov 8 1900 S5

Nov 13 2000 LA 2144 SM6

Nov 16 1321 OH5 1554 S5 2255 LA

Nov 22 2350 LA 2358 LA

Nov 24 1431 SM7

Nov 25 2203 OE1 2245 PA

Nov 30 1302 LA 1642 PA 1919 OZ

### Sporadic-E

November is rarely a great month for 50MHz Es, and so it proved this year, with results well down on October's, though roughly in line with November 2007. The OD5SIX report is interesting because it presumably involved a double hop. It occurred during the most extensive opening of the month on the Continent. All stations reported lay to the south or south-east of the UK, as would be expected.

UTC	CT	EA	I9	IS0	OD
	11	11	1	8	1
06-09					
09-12	9	9	5		3
12-15	8	7		7	
15-18					
18-21					
21-24					

## Continental Europe, Africa and the Middle East

### Aurora

Again, given the generally low level geomagnetic levels that prevailed throughout the month it is scarcely surprising that all three auroral reports come from high geomagnetic latitudes. Additional data relating to 144MHz was not available.

Nov 8 1146 OH9SIX>SM2(55a)

Nov 9 2055 OH9SIX>SM2(57a)

Nov 25 2009 SK3SIX>OH6(53a)

### Other Modes

The month started well with sporadic-E across much of southern and central Europe from the UK to Ukraine, stretching over some four hours and (for some) even reached 70MHz. However, that was about as good as it got, excepting occasional brief Es events. Even SV1DH found little else for the rest of the month. Otherwise, the great majority of reports related to JT6M operation and are assumed to be by meteor scatter. The Leonids may have generated a slight increase in reported contacts. A few reports credited tropo but all seem to have been unremarkable.

Nov 1 08-0900 UT3>I1,I5,LX(Es) PA>EA2(ms) SV5SIX>YL2 UR>DL(Es) UU5SIX>OE4(Es) LZ2CM,YO3JW,SV9SIX>DL(Es) 09-1000 SV9SIX>YL2,LX(Es),UT3,DL SV1SIX>DL,SP6(Es) SV5SIX>SP6(Es),OE4 OD5SIX>HA8,OE4 UT3>IT9 LZ1SJ>DL,SP6(Es),OE4 UR>OE4 SP6,DL>SV3 I7>F EA3SIX>DL IT9>SP6,OE4 10-1100 SV1SIX,SV5SIX>I1 SP5>SV3 SV3,DL>SP9 SV9>I1,SP1,DL IG9>LX(Es),F UU5>9A(Es) IG9>OE4,SP6,DL(Es) SV3,SV9>LX(Es) SV1SIX>DL,OE4(Es) SV9SIX>OE4 EA4Q>9A I4>EA5,EA7 11-1200 EA3>SV3 HG1BVB>SP6(tr) PA>SM7(ms) 1254 IT9X>EA5(Es) 1305 DL>ON 1721 SP9>OH8(jt) 1945 OH2>LA(jt)

Nov 2 0756 SV9SIX 10-11 DL>F LA>LA(jt) OH2>SP9(ms) 11-1200 I9>EA4 SV9SIX,SV5SIX,SV1SIX,IT9X>EA6 CT1ART>I9 12-1300 OH2>SM7(jt) PA>OH8(jt) 13-1400 ED7YAD>I8(Es) CT1ART>I8 I8>9H 2121 SM7>PA(jt)

Nov 3 12-1300 CN8MC,CT1ART>F 2026 I1>9A(tr)

Nov 4 no reports

Nov 5 1041 ED7YAD>ZB

Nov 6 1635 CT1ART>ZB

Nov 7 0900 PA>LA(jt) 1531 SM7>PA(jt) 16-1700 SM7>OH5(ms) OZ7IGY>DL(tr) OH5,OH7>PA(jt) 17-1800 HB9SIX>DL(tr) OE3>OH5(ms) 18-1900 PA>OE3(jt) SM2>PA(jt) 19-2000 SM2>SP9(jt) LA>OH5(ms) SM2>OH5(ms) 2144 OH5>PA(jt)

Nov 8 1121 PA>EA1(ms) 12-1300 IS0>PA(jt) ON0SIX>IS0 1514 S5>PA(jt) 16-1700 I1>SP9(ms) S5>OZ(jt) 17-1800 OZ>S5(iono) S5>IT9(ms) OE3XLB>S5(tr) S5>OH5(ms)

Nov 9 0924 I1>OZ(jt) 1013 I3>SM7(ms) 1321 OH5>LA(jt) 18-1900 SM2>OH5(ms) 19-2000 S5>OH5(ms) SV9SIX>S5(ms)

Nov 10 10-1100 HB>SP9(ms) 1312 PA>LA(ms) 20-2100 SM2>SM7(ms) 21-2200 Sm2>LA(jt)

Nov 11 07-0800 SM6>SP9(jt) 10-1100 ON>SM2(jt) OZ7IGY>I3(ms) ON>I4(jt) ON>SP9(ms) 11-1200 SM2>ON(jt) 1157 EA3SIX>EI 12-1300 CT0SIX>DL(Es) CT1ART>ON(Es) 18-1900 OH>LA(jt)

Nov 12 no reports

Nov 13 0928 CT1ART>ZB(tr)18-1900 OZ7IGY>I3(ms) OZ>PA SM0>SP9(jt) SM6>SM0 A>PA(tr) 19-2000 OH2>SP9(jt) 20-2100 SM2>OH5(ms) I4>SM6 OH0>PA(ms) OE5>LA(ms) OH6>OH8(jt) LA>SP OZ>PA(jt) OZ>SM1 SM5>UX1 LA>PA(jt) OH6>SP9(jt) SP9>OH5(ms) OH6>SK2 21-2200 OH5>SM7(jt) OH6>SM7(jt) SM2>LA(jt) 22-2300 OH2>SM7(jt)

Nov 14-15 no reports

Nov 16 07-0800 OH8>SP9(jt) 0842 OH8>OH5(ms) 09-1000 OH9SIX>OZ OH5>LA(Es) OE5>DL 10-1100 LA>OH5(ms) 1137 LX>IS0(jt) 1256 LA>PA(jt) 1323 OH5>ON(jt) S5>DL S5>OZ(ms) LA>PA(jt) LA>LX(ms) 14-1500 S5>OZ(jt) YT1>OZ(jt) 15-1600 OH6>ON(jt) YT1>S5(jt) I8>IS0(ms) 1634 I1>PA(jt) 17-1800 S5>LA(jt) S5>PA(jt) 1902 SM2>OH5(ms) 21-2200 SM>PA(jt) 22-2300 LA>LA(ms) PA>LA(jt)

Nov 17 0552 SM2>LA 0756 IT9>HB(ms) 08-0900 S5>SM7(ms) OD5SIX>UU2(Es) 09-1000 IS0>IT9(ms) 1456 LA>PA(jt) 1619 SM6>LA(jt) 21-2200 ZL3NW>PE1BTX(eme -14) 22-2300 I1>SM7(ms)

Nov 18 1829 OH6>OH5(jt) 2126 LA>LA(ms)

Nov 19 09-1000 HB9SIX>DL(tr) 1016 HG1BVB>DL(tr) 1909 LA>PA(jt) 2058 SM0>PA(jt) 21-2200 OH8>LA(jt) PA>EA1(ms) LX>EA1(jt)

Nov 20 0954 OH8>PA(t/jt) 10-1100 SM2>SM7(jt) OZ7IGY>I4(ms) SK3SIX>SM7 OH9SIX>PA,DL(Es) DF0ANN>OH1 1757 SM0>OH5(ms) 2029 PA>EA1(jt)

Nov 21 07-0800 EA3>IT9(ms) 1058 OZ7IGY>YT1

Nov 22 11-1200 EA4Q>I4 ED7YAD>I8 1859 OZ7IGY>I3(ms) 23-2400 LA>LA(jt)

Nov 23 1251 SM2>PA(jt) 1335 SM7>PA(jt) 1441 LA>PA(jt) 1552 HB>IT9(ms)

Nov 24 1403 HB9SIX>DL(tr) 21-2200 SM7>PA(ms)

Nov 25 1109 HB9SIX>DL(tr) 1323 LX0SIX>DL(tr) 1803 EA3SIX>EA6(tr) 19-2000 OZ>OE1(jt) DL>OE1(jt) JW5SIX,JW7SIX,JW9SIX>OH5 PA>OE1(ms) 20-2100 OZ>OE1(jt) OZ>HB(jt) OZ>PA(jt) OZ>SM7(tr) 21-2200 OH6>PA(jt) SM7>PA(jt) SM7>OE1(jt)

Nov 26 0806 PA>SM7(ms) 11-1200 OZ7IGY>I3(ms) 13-1400 OZ7IGY>DL(365km) 14-1500 OZ7IGY>I3(tr) 1512 OZ7IGY>OE2

Nov 27 20-2100 I3>OZ(ms)

Nov 28 1433 OZ7IGY>I3(tr) 1522 SM3>PA(jt) 1646 OZ7IGY>I3(ms) 17-1800 OH2>OH5(tr)  
HB9SIX>DL(tr) PA>LA(jt) 1925 OH2>PA(jt)

Nov 29 11-1200 LX0SIX,HB9SIX>DL(tr) 1455 I8>9H

Nov 30 14-1500 PA>LA(jt) OH5>PA)(jt) 1805 LA>OH5(ms) 1950 SM2>OZ(jt)

## 50MHz PROPAGATION REPORT FOR NOVEMBER 2008 BY SV1DH

1. Data for all days (30)
2. Relatively good days on: 1,2
3. 48 MHz AF video (9L+3C) on: NIL
4. 55 MHz AF video (5N) on: NIL
5. " EA6 on: 2
6. " I on: 1
7. " OE on: 1
8. " DL on:1
9. " SP on:1
10. " SV9 on: 15,16(T)
11. Special events on:
  - 1-6 (SSN up 18, SFI up 70)
  - 10-17 (SSN up 21, SFI up 71)
  - 1(0900 IS to PA+ 1400 CT to LX on 4m)
  - 2(SV9/B to I8 tropo
  - 3(1119 C1.6 Xray flare; first cycle 24)
  - 4(0330 C1.0 flare)
  - 8(0615 VK2 to UR on 10
  - 9(0615 ZL to UA on 10m)
  - 10(0715 ZL to UA+0800 VK to UA+UR on 10m)
  - 16(0830 VK6 to F on 10m)
  - 30(1015 VK6 to IT on 10m)
12. DXCC entities heard/worked during Nov 2008 : 6 on 1 cont
13. DXCC entities heard/worked on 1st Nov 2008 : 4 on 1 cont.

73 COSTAS

## The Americas

### Auroral-related Modes

Nov 7 2240 VA2FZN>W1(FN44)

Nov 8 01-0200 K0KP>VE2(FN07 41a) VE8BY>VE2(FN07 53a) 0153 VE3(FN15)>VE2(FN07 55a) 0202 K0KP>VE2(FN07 51a) 0602 VE4SPT>VE7(52a)

Nov 16 00-0100 K0KP>VE2(FN07 31a) 0104 K0KP>VE2(fn07 51a) 02-0300  
VE8BY>VE2(FN07 58a) VE4ARM>VE2(FN07 51a) 03-0400 VE6ARC>W7(55a)  
VE7FG>W7(57a) VY1DX>W7(51a) VE3(FN15)>VE2(FN07 51a) VE2(FN07)>KL7(BP53)  
VE4SPT>VE2(FN07)

## Other Modes

While the equinoctical months are usually seen as the peak period for transequatorial propagation here we are in November and, as the table below shows, contacts apparently by way of tep occurred almost daily. The number of UTC days when tep was reported was slightly up on 2007, while the number of reports showed a substantial increase, with a number of less familiar calls featuring in the detailed listings.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Tep	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+			+	+

Unsurprisingly, the more detailed table below shows that the most reports featured Brazil – the largest country with the largest amateur population; much of it lies near optimum range for tep working. At one time or another all PY call areas made tep contacts but PY2 and PY5 were once again the most favoured. This month's openings, unlike those in October, extended to Chile (tep with Es extension?) and contrasts with last year when Brazil was the only country reporting tep contacts from the southern end. At the northern end, there were no reports of tep reaching the US or, for that matter, central America, for which tep geometry is difficult. All contacts were with either the Caribbean islands or the northern fringe of South America (YV, FY)

**CE** 3 days 11(YV,9Y) 13(KP4) 15(YV)

**CX** 4 days 11(FM,KP4,9Y) 13(KP4) 24(KP4) 25(9Y)

**LU** 5 days 11(FG,V4,YV) 12(YV) 13(KP4) 14(KP4,YV) 25(FM)

**PY** 24 days 1(KP4,YV) 2(FM,HI,KP4,V4) 3(V4) 4(J6) 7(FG,V4) 8(V4) 9(KP4,V4) 10(FG,J6,KP4,V4,YV) 11(FG,V4,YV) 12(HH,YV) 13(FG,FM,KP4,V4,9Y) 14(FM) 15(KP4,V4) 16(FY,KP4,V4) 17(FM,J6,KP4) 18(FM,V4) 20(KP4,V4) 21(FM,KP4,V4) 22(KP4,V4,9Y) 23(J6,KP4,YV) 24(KP4,V4,YV) 26(KP4,V4,YV) 29(FJ,KP4,YV,9Y) 30(KP4,YV)

**ZP** 10(V4)

But tep was not the only attraction. As the southern hemisphere summer gathered momentum, sporadic-E became more frequent. Since virtually nobody identified it as the propagation mode an element of guesswork is needed. There may have been as many as 19 days with Es, mainly between LU and PY, sometimes within PY or LU, where it extended as far as the Tierra del Fuego beacon on several days and sometimes between LU and CE.

As far as one can tell, none of the contacts reported was unusual in propagation terms, but the availability of both tep and Es helped keep activity levels buoyant. All this was in marked contrast with November 2007 when reports attributable to sporadic-E were virtually non-existent. The impression is that there was a substantial increase in activity levels combined with a rather good Es season.

By contrast, activity in the US and Canada appears to have languished at European levels. The only noteworthy feature is the increased level of jt6m/ms working.

Nov 1 00-0100 W0>W8(Es) WP4NUM>PY2MTV LU1EEP,LU3CM,PY3CMY,LU6HCY,  
PY2XAT>YY4ACU W8>W4,W3 VE3UBL>VE3 01-0200 W8>VE2 VE2>W4 1437-44  
KA7BGR>W6 W4>W3 22-2300 48.2,48.3(CE)>LU NP4A>PY5HOT 23-2400 VE3UBL>VE2  
LU7YS>LW3EX NP4A>PY4AQA

Nov 2 00-0100 NP4A>PP5JD,PY3KN,PP2RON,PY2BN V44KAI>PY5HOT  
FM1FV,KP4A>PY5HOT W4>W5 PV8>PY4 01-0200 PU8>PY5 1256 W8>W4(ms) 13-1400  
K8LEE>W0 W0>W8 W4>W4 14-1500 W4>W5 15-1600 W9DR/4>VE2(ms) W0>W8(ms) 1921  
K4TQR>W5 2055 HI8LAM>PV8AZ\_PU9TEP>KP4SQ 2155 HI8LAM>PV8AZ  
TI2NA>XE3ARV,KE4WBO

Nov 3 00-0100 V44KAI>PY4AQA,PU5AAAd W0>VE2(ms) W8IF>W4(Es) 01-0200 W8IF>VE2  
V44KAI>PY2OC 1`34 N3CJM>W3 2337 W3DOG>W2

Nov 4 01-0200 W3DOG>W2 J68B>PY5HOT 12-1300 W4,W5>W4 29-2100  
48.3,49.2(CE)>LW3EX 2121 LU7YS>LW3EX 2242 LU7YS>LW3EX 23-2400 LU7YS>LU5EGY  
W9DR/4,W2>VE3

Nov 5 00-0100 LU7YS>LU1FVE 1317 47.9(CE)>LU1DMA 1414 W5>W4(jt) 1958  
PY2MAJ>LW3EX 20-2100 PY2MAJ>LU1DMA,LU4EFC 21-2200 PY2MAJ>LW3EX  
LU5EGY>PY2MAJ,PU5AAD 22-2300 LU2DEK,LU9EO,LU3CM,LU1EEP,LW3EX,  
LU1DMA>PY5EW 47.9,47.6(CE),LU7YS>LW3EX 23-2400 LU2WC>LW3EX

Nov 6 13-1400 W8>W4(ms) W3>W4(ms) 14-1500 W3>W3(tr) VE3>W3(ms) 1839  
V44KAI>KP2HC 22-2300 LU7YS,LU2WC>LW3EX

Nov 7 01-0200 FG1BW,V44KAI>PY5HOT 1313 W9DR/4>W4(ms) 18-1900 V44KAI>KP2  
KP2>KP4

Nov 8 00-0100 V44KAI>PY2OC VA2FZN>VE3 0333 VE4SPT>VE7(NOT au) 0511  
K0KP>W3(ms) 12-1300 W1,W5,W9>W4 13-1400 W4>W4(tr) 1458 W9>VE3 1554  
K0KP>VE2(ms) 1920 V44KAI>KP2HC 22-2300 V44KAI>FY5LH W7>W7(eme -20) 2329  
LA4AMA>W7GJ(eme -27db)

Nov 9 00-0100 V44KAI>PY2MAJ,PU2WOT 04-0500 W5>W7(Es),W7 14-1500 W1>W0(ms),W1  
W1>W4 15-1600 W8,W4>VE2 16-1700 W2,W0>VE3 W0>VE2 17-1800 W1>VE2 18-1900  
47.9(CE)>LU1DMA LU5EGY,LU1DMA,LU7JTW>PY2MAJ 19-2000 LU1FVE>PY2MAJ  
PY5>PY1 LU5EGY>PY5EW 19-2000 PY2>PY2 20-2100 PY2>PY2 PY1>PY5 PP2>PY3,PP5  
W0IJR>W7 PY4>PP5 PP2RON>LU1DMA 21-2200 PU2>PP5 W7>W5 22-2300  
LU1JEB,LU1FVE>PU2TAC 23-2400 V44KAI>PY5HOT NP4A>PT7ZAP

Nov 10 01-0200 NP4A>PU7MAN 0302 VE3UBL>VE2(gw) 18-1900 PY2MAJ>LU1DMA,  
LU9DFN,LU5EGY,LU8EML,LU1EEP19-2000 CX4AJ,CX2CC>PY2MAJ LU8DDO>PY2MAJ  
LU1EIA>PY5EW 23-2400 V44KAI>PY4ZO,PY2OC,ZP6CW,PY5HOT,PY2HN  
47.9(CE)>LU1DMA PU8>PY4,PY5 KP4BJB>PY5HOT FG5GP,J69B>PY5HOT PU8>PY1,PY2  
LU3HR,LU1FVE>PY8ELO FG5GP>PU5AAD FG1GW>PY5HOT YV4AB>PY

Nov 11 00-0100 9Y4D>PP5VU,PY5HOT,PY1ZV,PP5XX,PU5AAD,LU6HTR  
YV5ESN>PY5HOT,LU6HTR W7>W7(eme -21) LU1FVE>YV5EAH YV4AB>CE3RR  
FG5GP>PP5XX,LU6HTR PU8>PP2 PY8ELO>LU6HTR 01-0200 9Y4A>CE3RR,CA3SOC  
9Y4D>PS8PY 20-2100 HI8LAM>KP4 21-2200 48.2(CE)>LW3EX 22-2300 V44KAI>PY2MAJ  
CE3RR>LU4EFC 23-2400 YV5ESN>PP5XX,PY8ELO NP4A>PU2TAC,PY2SEX,PY3KN,

CX5CR,PY1ZV FG5FG>PU2WOT V44KAI>LW3EX FM5AA>PP5XX,CX3AN,PY1ZV  
9Y4D>PY8ELO,CX5CR

Nov 12 00-0100 NP4A>PU5AAD,PP5VU YV4DYJ>PY1ZV LU1FVE>YV4DYJ.0334  
VE7>W7(ms) 0539 VE7>W7(ms) 1256 W6>W8(ms) 14-1500 W5,W6,W0>W8 1536 W9>W4  
1601 K0KP>W7(ms) 2239 V44KAI>PY2MAJ 23-2400 V44KAI>PP5XX(tep) HH07RH>PY6KR  
NP4A>PY3KN,PY5IP,PU2PAV,PU5AAD LU1FVE>PY8ELO

Nov 13 00-0100 NP4A>PY3KN,PY5HOT,LU1FVE,PU5AAD,LW3EWZ,LU3EE 9Y4D>PP5XX  
LU6HTR>PY8ELO 01-0200 NP4A>LU6HTR,PY4AQA,CE3RR W4>W4 22-2300  
NP4A,V44KAI>PY5HOT NP4A>PY5IP,CX4CR 23-2400 NP4A>PU5AAD,PP5XX,PU2TAC,  
PP2AU,PY5KD,PY5LF FM1FV>PY2MAJ,PY2HL, FG5GP>PU5AAD,PY5HOT,PY2MAJ  
PU2MAC>NP3CW

Nov 14 00-0100 NP4A>LU5HD PY2PAL>FM1FV FM1FV>PP5XX YV4AB>LU5EGY 01-0200  
PY2>PP5 05-0600 K8JA,K2ZD>W4 13-1400 W9DR/4,K4MHZ>W4 W7?W5(ms) 1355  
VE3>W4(Es) 14-1500 W4>W9 W4>W5(ms) VE3>W8 21-2200 48.3(CE),LU7YS>LW3EX

Nov 15 00-0100 V44KAI>PU5AAD 01-0200 YV4AB>CE3RR 1159 VE1>W1(sc) 12-1300  
W7,W9>W0 W9,W3>W3 13-1400 VE1>W3(ms) 14-1500 W7>W0(Es) W5>W7 W9DR/4>VE2  
1523 W5>W5(ms) 1659 W7>W5(ms) 23-2400 NP4A>PY5HOT,PP2AU VE3>VE2

Nov 16 00-0100 V44KAI>PY2MAJ NP4A>PY2MAJ,PY2DA,PY4AQA ON4GG>K2ZD(eme -24)  
01-0200 PU8>PY2 1313 W5>W4 W0>W8 14-1500 W3>W3 WA7X>W6 W4>W4 15-1600  
W4>W4 K0KP>VE2(Es) VE4ARM>VE2(Es) W1>W4 VE3>W4 N8RT>VE3 W0>W3 16-1700  
VE3>W9(tr) W4>VE2,VE3,W4 VE3,W3>W5 W0>W3, 17-1800 W0IJR>W7,VE7(Es) 1823  
VE4ARM>VE2 1925 FY7THF>PV8AZ 23-2400 W5>W4 V44KAI>PY4AQA  
NP4A>PY5IP,PY4AQA

Nov 17 00-0100 NP4A>PU1CCC,PT7ZAP,PT9PA,PU2BFG,PY5HOT,PU2TAC J69B>PP5XX  
WP4AZT>PY4AQA,PY5HOT FM5BH>PY5IP 01-0200 PY2>PY4 FM5BH>PY5HOT 0223  
W1>W8 1458 W7>W0(ms) 16-1700 W8>W3 JR6EXN>K2ZD(eme -24db) 22-2300  
PU9>PP5,PY2 23-2400 NP4A>PP5XX,PT7ZAP PU9>PU2

Nov 18 00-0100 PY8ELO>CA3SOC FM5BH>PY4AQA,PT7ZAP,PU2PAV,PY2HN 01-0200  
V44KAI>PY4AQA W4>W5 0212 W5>W4(Es) 0649 VE7>W7(tr) 1316 ZL3NW>W7GJ(eme -  
23db) VE3>W5(ms) 14-1500 W7GJ>JR6EXN(eme -20db) K2ZD>W7GJ(eme -27db) 15-1600  
W7>W7(ms) 1640 XW1A>W7GJ(eme -25db) 1730 KD4AOZ>W4(Es) 1920 W3>W4 20-2100  
TI2NA>W4 2149 TI2NA>W4

Nov 19 0104 W8>W0(sc) 2302 47.9(CE)>LW3EX

Nov 20 23-2400 00-0100 W4>W4 WP4AZT>PP5XX,PY5IP PY8>PY4 01-0200  
V44KAI>PY4AQA W4>W4 23-2400 PY8>PY4

Nov 21 00-0100 FM5BH,NP4A>PP5XX 01-0200 NP4A>PP5XX,PY4AQA,PT7ZAP  
V44KAI>PY4AQA 12-1300 W8IF>W4(ms) 1300 W4>W3(ms) 1454 48.3(CE)>LW3EX 15-1600  
W3>W4(Es) 23-2400 V44KAI>PP5XX,PY2OC YV4AB>PY2MAJ,PY4AQA  
J69B,WP4AZT,YV5IAL>PP5XX WP4AZT>PY2MAJ YV5IAL>PY4AQA

Nov 22 00-0100 WP4AZT>PY4AQA NP4A>PP5XX,PY4AQA,PY2HL,PV8AZ,PY2EX  
9Y4D>PP5XX,PY4AQA 01-0200 9Y4D>PT7ZAP,PY2KJ W4>W4 WP4AZT>PP5XX 12-1300  
W9DR/4>W4(tr) W4>W3(ms) 1729 W2>W1 2353 V44KAI>PY5HOT



Nov 23 00-0100 NP4A>PY5HOT,PY2OC,PY3NZ WP4AZT>PY2OC 0155 K4MHZ>W4 02-0300 W8>W0,W1 XE2>W5 12-1300 W4,W8>W3 W8>W4 W4>VE3 13-1400 W0>W4 W0>W0 15-1600 W7>W9(Ms) W1>W1 17-1800 W7>XE2(fsk444)

Nov 24 00-0100 V44KAI,YV4AB,YV5IAL>PY4AQA W5GPM,W0>W3 W6>W3 12-1300 W9DR/4,W8IF,WZ8D>W4 1506 W9DR/4>VE2 21-2200 LU8WAT>LW3EX LU1WDY>LW3EX,LU1DMA 22-2300 LW1WDY>CX5CR 23-2400 NP4A>PY2TVI,CX3AN

Nov 25 00-0100 FM5BH>LU4DMX LU1WDY>CE3SNA,CA3SOC LU8WAT>CA3SOC 01-0200 9Y4D>CX7TT 21-2200 WZ8D>W4(sc) 23-2400 PR8ZIX>PY2

Nov 26 00-0100 YV4AB,V44KAI,WP4AZT>PY2SRB W4>VE3 W8>W4(ms) 14-1500 W8IF,WZ8D,K4MHZ>W4 20-2100 V44KAI>W4 21-2200 LW3EX>CE3JPB,CE3SAD CE3JPB,PY2MAJ>LU1DMA TI2NA>W9DR/4 LW3EX,CX1DDO>PY2MAJ LU5EGY>CE3SAD

Nov 27 20-2100 YN2Z>K9ZO LU7YS>LU7HTR CA3SOC,CX5CR>LW3EX 21-2200 LU1DMA>CE3SAD PY5FN,LU6HTR,CE3RR,LU2MCA,LU4HH>LW3EX CE3JPB,LU2MCA,CE3RR>PY3MSF CE3RR,LU6HTR>CX5CR,CE3JPB LU5DDX>LU6HTR,CE3SAD LU7FTF>CE3SAD 23-2400 PY3GH>CX4CR LU8MB,PY2MAJ>LU5DDX LU1DWY>CE3SNA LU7YS>LU4DMX LU6DLL,CX4CR>PY2MAJ LU8MB>LW3EX CE3>CE3 CX4CR>CE3SAD,CE3SIE LU2MCA>LW3EX XE1>W5 LU6HTR,LU1DWY>CE3RR W5>W5(Es)

Nov 28 00-0100 LU5EGY>CE3RR,CE3SAD 01-0200 W7>W3,W4 XE1>W5 W3DOG>W2 VE3>VE2 XE2>W0(Es) W5GPM,W5RP>W7 XE2,W0,W5>W5 W0MTK>W4 N6NB>W4 02-0300 W7>W7,W5 NM7D>W4 W4,XE2,W5HN>W0 W5>W4,W5(Es) XE1WWW>W5(Es) 03-0400 W5>W0 04-0500 W5,W4>W0 0544 W5>W4 1118 W4>W8 12-1300 W8>W4(tr) W8>W5 15-1600 W1>W4 16-1700 W3CCX,NL7XM/W2,W3DOG,W3VD,W1>W4 1758 CX1CCC>PY2 18-1900 CX5CR>PY2MAJ,PU5AAD 20-2100 48.3(CE)>LU LU5EGY,LU7FTF>PY2SRB 22-2300 PY2>PY2

Nov 29 00-0100 W4>W4 01-0200 W3>W8 1327 W8>W5(sc) W4>W3(ms) 14-1500 LU4ECF>PP5XX W3DOG,W9DR/4,K2ZD>W4 W4,W3CCX>W4 15-1600 W6>W5(Es) W3.W4(Es) NL2XM/W2,W3PIE>W4 W4>W8(Es) WA3TTS>W3 16-1700 W3DOG>W2 KD4AOZ>W8(ms) W8>W4(Es) W4>W3(Es) K0KP>VE2 18-1900 W4>W4 23-2400 WA7X>W6 PP5XX>FJ5DX 9Y4D,WP4ESN>PP5XX PT7ZAP>YV5ESN YV5ESN>PP5XX

Nov 30 00-0100 YV5ESN>PP5XX 01-0200 W8>W8 NP4A>PY2MTV 1222 W8>W8(sc) 14-1500 VE3>W0(sc) W8>W0(sc) 1738 W2>W8 20-2100 W4>W8 VE3UBL>VE2(gw) 22-2300 W4>W8 2345 NP4A>PY5IP

## Asia and the Pacific

### Japan

Nov 2 0414 46172(VK)>JA8

Nov 8 2125 RA3YA>JA1ASD(?)

Nov 10 46171.7(QG53)>JA7

Nov 18 0457 45240(ZL)>JA3 0511 46172(VK)>JA3

Nov 16 1133 MM0AMW>JR6EXN(eme -22db) 1307 K7AD>JR6EXN(eme -25)

## **Australia/Pacific**

Another relatively busy month in VK/ZL, with which one should include FK. New Caledonia lies at optimal Es distance from much of eastern and northern Australia. (Sadly, although the FK8SIX beacon was widely heard there was not one report of a contact with the island.) Sporadic-E was clearly the predominant mode, though some contacts were ms-assisted and a few were attributable to tropo. There were a number of reports at more than single-hop range for sporadic-E. The single YF1OO contact with ZL rather tentatively suggested that tep may have been involved.

It is clear from the detailed listings below, which are considerably more substantial than at the same time last year, that our VK/ZL colleagues draw heavily on their beacon network as gauges of conditions and while the numbers of operators is not all that large many of them are ery much on the ball (and they are better than UK operators are reporting what they hear!)

Nov 1 09-0900 FK8SIX>VK4 03-0400 VK7RST>VK7

Nov 2 0134 VK5RBV>VK4 07-0800 VK5RBV>VK4 0847 VK4RTL>VK3 1111 YF1OO>ZL2

Nov 4 0101 VK5RBV>VK3 06-0700 VK3>VK4 07-0800 VK4>ZL3 VK3>VK4 57250(PF96)>VK6 VK6RBU>VK5 2251 FK8SIX>VK2

Nov 5 00-0100 FK8SIX>VK2,VK4

Nov 6 0222 VK8>VK6 0426 VK8MS>VK6

Nov 7 0338-44 VK8RAS,VK5RBV>VK6 07-0800 VK7RAE>VK2 08-0900 VK7RST>VK1,VK3 VK7RAE>VK2 22-2300 FK8SIX>VK4 VK4RTL>VK4 23-2400 VK4ABW>VK5 VK8RAS>VK4 VK4>VK1,VK2 VK6RSX>VK6

Nov 8 00-0100 VK5RBV,VK4>VK2 VK1,VK5>VK4 VK6RBU>VK5 VK8RAS,VK4RTL>VK3 01-0200 VK5>VK4 VK7RAE>VK5 VK4>VK2 VK8RAS,VK4RTL>VK3 57250(PF96)>VK6 02-0300 VK5RBV>VK2,VK4 VK7RAE,VK1>VK4 VK8RAS>VK2,VK4,VK3,VK5 VK5,VK4>VK3 VK4RTL>VK5 VK7,VK5>VK2 03-0400 50750(RE78)>VK5 VK5VF>VK2 0513 P29NB>VK4SIX 1001 49750(OK59)>VK6(5762km) 2050 VK5RBV>VK3 2124 VK4RTL>VK4 2200 VK3>VK7

Nov 9 00-0100 VK4ABP,VK4RTL>VK5 VK4>VK7,VK3 VK4>VK1 VK8RAS>VK4 VK5RBV,VK8RAS,VK4RTL,FK8SIX>VK4 VK5RBV>VK6 VK2>VK7 VK6RSX>VK5 01-0200 VK2,VK5,VK3,VK7>VK4 VK8RAS>VK3 VK5>VK2 VK7RAE,VK3>ZL3 02-0300 VK5RBV,VK7RAE>VK2 VK2RSY>VK5 VK4,VK2>VK7 VK2>VK3 VK3>VK8,VK4 03-0400 VK5RBV>VK2 VK2>VK4 VK5VF>VK2 VK2RHV>VK5 VK1,VK7>VK4 FK8SIX>VK5 VK4ABP>VK3 VK7RAE>VK5 04-0500 VK5RBV>VK7 FK8SIX>VK2 VK4.VK2>VK7 VK7RST>VK3 0503 VK5RBV>VK7 0608 VK4>VK3 08-0900 VK2RHV>ZL3 VK7RAE,VK7RST>VK5 09-1000 VK5VF>VK7 VK7RAE>VK5 10-1100 VK5RBV>VK3 1854 VK5RBV>VK3

Nov 10 0038 VK6RSX>VK6 07-0800 49750(OK59)>VK6 VK4>VK3 2050 VK5RBV>VK3(AE,tr) 2200 VK3>VK7

Nov 11 03-0400 VK4RTL,VK8RAS>VK3 0418 VK4ABP>VK3

Nov 12 no reports

Nov 13 2137-58 VK3mVJ5>VK7

Nov 14 no reports

Nov 15 0219 VK2RSY>VK4 03-0400 VK4RTL>VK3 VK8RAS>VK3,VK5 0747 VK8RAS>VK3 0936 VK4>VK3 20-2100 VK3>VK7 VK5RBV>VK3 22-2300 FK8SIX>VK2,VK4 2337 VK2RHV>VK4

Nov 16 00-0100 VK4>VK5 VK4RTL,VK2RSY,FK8SIX>VK401-0200 VK1,VK2>VK4 VK4RTL>VK5 02-0300 VK4>VK3 VK2RHV,VK5RBV>VK4

Nov 17 22-2300 VK4>ZL2 23-2400 50750(RE78)>VK5(3228km) VK4RGG>VK3 50740(RF72)>VK5(3323km)

Nov 18 00-0100 VK4>VK3 VK6RSX>VK6 01-0200 VK7RAE,VK7RST>VK5 FK8SIX>ZL2 0242 VK3>VK5 04-0500 VK8RAS>VK5,VK3 05-0600 57250(PF96)>VK6 VK6RSX>VK3 VK6RPH,VK6RBU>VK5 VK6RSX>VK6 06-0700 VK6RSX>VK3 0807 VK4RGG>VK5 1450 VK2RHV>VK4 2125 VK5RBV>VK3 22-2300 VK3>VK5 VK6RSX>VK6 VK4RGG>VK4

Nov 19 00-0100 VK5RBV>VK3 VK6RSX>VK6 0337 VK2>VK7 50740(RF72)>VK5(3323km) 04-0500 VK5RBV>ZL3(3049km) VK2>VK7 VK4RGG>VK4 05-0600 VK2>VK7 VK2RSY>VK3 0658 VK4RGG>VK5 06-0700 VK4RGG>VK5,VK4 VK5>VK2 07-0800 51672(QG53)>VK5 VK5RBV>VK4 VK5>VK2 08-0900 VK4ABP>VK3 VK8RAS>VK5,VK3 VK4RGG>VK3 09-1000 51670(QG53)>ZL2 VK7>VK2 11-1200 VK4>VK3 21-2200 VK2RHV>ZL2 23-2400 51672(QG53)>VK5

Nov 20 0050 VK4>VK3,VK5 01-0200 VK4>VK3,VK1 VK6>VK5 VK3>VK7 02-0300 VK2>VK4 VK8RAS>VK5,VK3 VK6>VK5,VK3 VK4>VK5 0351 VK5>VK6 04-0500 VK6>VK6(480km) VK4>VK6 VK5>VK4 VK8RAS,VK6RSX>VK3 05-0600 VK7RAE>VK2 VK8RAS>VK3 06-0700 FK8SIX>VK5 VK2>VK7 07-0800 FK8SIX>VK5 VK5RBV>VK4 VK2RHV>VK5 08-0900 VK5>VK2 09-1000 57250(PF95)>VK6 VK4RGG>VK3 10-1100 VK4RGG>VK5 FK8SIX>VK5(3059km) 11-1200 VK4RGG>VK7 VK4RTL>VK3 1227 VK4ABP>VK3 21-2200 VK3>VK7,VK5 22-2300 VK2RHV>ZL2 23-2400 51740(QF35)>ZL2

Nov 21 00-0100 VK5RBV>VK6 01-0200 VK5RBV,VK5VF>VK6 VK2RHV>ZL2 VK2RSY>ZL3 0221 VK4RGG>VK7 03-0400 VK6RSX,VK8RAS>VK3 VK6>VK2 0403 VK6>VK3 0503 VK6>VK3 2339 51670(QG53)>ZL2

Nov 22 03-0400 VK3>VK4 VK2RHV>ZL3 0459 VK2>ZL3 05-0600 VK2RHV>ZL3 VK1>ZL2 06-0700 VK2RSY,VK2RHV>ZL3 08-0900 51740(QF35)>ZL3 ZL3>VK2 23-2400 51740(QF35)>ZL2 VK2RHV,VK2RSY>ZL3

Nov 23 00-0100 FK8SIX>ZL2 VK6>VK5 57250(PF96)>VK6 0102 FK8SIX,VK2RHV>ZL2 VK2>VK4 0333 VK7RAE>VK5 0647 ZL3SIX>VK3 0712 VK2RHV>ZL2 22-2300 VK5RBV,VK8RAS,VK3RMV,VK4RTL>VK4 VK4RTL,VK4ABP>VK3 23-2400 FK8SIX>VK4 VK4>VK3 VK8RAS,VK4RTL,VK6>VK5 VK7RAE,VK2>VK4

Nov 24 07-0800 VK2>ZL2,ZL3 08-0900 FK8SIX>ZL2,VK3,VK7,VK4 VK4,VK2>ZL2 VK2RHV,VK2RSY>ZL3 VK5RBV>VK7,VK4 VK5RBV>ZL2(3156km) VK7RAE,VK7RST>VK5 ZL3AAV,ZL2AAA>DU7/PA0HIP ZL1,ZL3>VK2 50750(RE43)>VK3(2780km) 09-1000 ZL3>VK2 VK5RBV>ZL2,VK3 FK8SIX>VK2 VK7RST,VK7RAE>VK5 VK5>VK3 VK5RBV,VK2>ZL2 10-

1100 FK8SIX,VK5RBV,VK2RHV,VK4>ZL2 2045 VK5RBV>VK3 22-2300 50740(ZL)>VK3  
51740(QF35)>ZL3

Nov 25 08-0900 2121 51740(QF35)>ZL3

Nov 26 01-0200 FK8SIX,VK5RBV>VK4 VK6RPH,VK6RBU,VK4RTL>VK5 02-0300  
VK5RBV,VK3>VK4 57250(PF96)>VK6 VK4>VK5 03-0400 VK3,VK5>VK4  
51672(QG63),VK4ABP>VK5

Nov 27 0649 FK8SIX>VK4 07-0800 VK2RHV>ZL2 FK8SIX>VK7,VK5 08-0900 VK6RPH>VK5  
1059 VK4RGG>VK7 1925 FK8SIX>ZL2 2118 FK8SIX>ZL2 2126 50750(ZL)>VK2 22-2300  
51670(VK4)>ZL3 ZL2MHF>VK2

Nov 28 23-2400 FK8SIX>VK4 VK1>VK4 VK4>VK2 VK5RBV>VK4

Nov 29 00-0100 VK2RSY,VK2RHV>VK4 VK4>VK4 01-0200 VK2>VK4 0209 VK5RBV>VK4  
0618 VK4RTL>VK4 0904 VK7RAE>VK5 2007 VK4RTL>VK4 2128 VK2RSY>VK4

Nov 30 0300 VK3>VK4 09-1000 VK3>VK4 VK4RTL>VK2 10-1100 VK3>VK4 VK4>VK2 12-1300  
VK5>VK2 2059 VK4RTL>ZL2 2256 VK2RSY>ZL3 23-2400 VK2RHV>ZL3,VK4  
VK1,VK2,VK3RMV>VK4

## 28MHz

### 28 MHz in the UK

A disappointing month in which slightly fewer DXCC "entities" are known to have been received than in November 2007, though they included five continents! The primary reason would seem to be weaker UK openings to/from Europe, particularly during the major international contests.

### Beacons Heard in UK November 2008

Beacon	6-9	9-12	12-15	15-18	18-21	Beacon	6-9	9-12	12-15	15-18	18-21
C30P		1	2			LA4TEN	1	3	2		
CS5BTEN			2			LA5TEN	1	3			
DB0UM		1				OE3XAC	1	3	4		
DK0TEN	4	5	2			OH2B		1			
DL0IGI	2	4	2			OH5RAC		1			
DM0AAB			1	1		OK0EG		3	1		
DM0ING	1	4	1			SK0CT		5	1		
EA3TEN		1				SK5AE	1	2			
EA4Q		2	5			Z21ANB			1		
F5ZUU		1	1			5B4CY	1				
F5ZWE			5								
I1M		2	1								
IZ3LCJ		2	1								
I3GNQ		2									
IY4M		2									
IQ5MR		1	1								

Countries reported heard/worked included A4 C3 CT EA F HA I IT9 LA LU OE OH OK  
OX PY S5 SM VE VK V5 W Z2 3X 5B 5U 9A

Although only one beacon was heard from outside Europe, the range of beacons reported from within Europe, mostly by sporadic-E (though there was some ms reception) was reasonably healthy and similar to November 2007. The table gives the number of days when the beacon was reported, for each 3-hour period of the day (excluding 00-0300 and 21-2400, for which there were no reports. Compared with last month the most noteworthy feature is the disappearance of the (nominally?) qrrp Italian beacons. And the continuing month-by-month consistency of certain beacons such as DK0TEN, SK0CT and EA4Q, none of them running particularly high power.

### 28 MHz Worldwide

A few paths were reasonably consistent but most were spotty at best. Propagation within Europe held up reasonably well thanks to sporadic-E, which was found more often in southern and central Europe than in the UK, and meteor scatter – though that was more frequently noted in reports of beacon reception rather than two-way contacts. 28MHz, it seems, has yet to attract a group of dedicated JT operators comparable to what one finds on 50MHz. In all, there were reports of propagation within Europe every day except the 7<sup>th</sup> and 25<sup>th</sup>. Africa was contacted from Europe on 23 days (considerably more than in November 2007), with the mid-day period as usual the most fruitful. Asia was worked on 11 days, preponderantly in the morning, while South America was worked on 10 days – presumably by F-layer, mostly in the evening. Oceania was also contacted on 11 days, chiefly from southern or south-eastern Europe.

While many northern and central US and Canadian operators bemoaned the number of blank days those in more southerly locations had a more fruitful month. Contacts were reported on 23 days (compared with 28 in November 2007). While paths to South America held up reasonably well reliability was significantly down on November 2007. Paths to Oceania, Asia, Europe and Africa were apparently barely operable from North America and the Caribbean despite the month's major international contests.

Asia worked into Oceania on 25 days but reported few contacts with other continents, apart from those with (predominantly southern/eastern) Europe. Working within Oceania was reported on 15 days, but as the sporadic-E season gathered momentum in the southern hemisphere there are reasons to think that many within Australia passed unreported – unlike those we saw earlier on 50MHz.

In most months we are able to pick out a few reports that are not quite what might have been expected, whether in terms of the season or time of day or simply the stage of the cycle. However, this month produced no such raising of an eyebrow. Neither did it produce any reports of radio aurora on this band. But that is scarcely a surprise. And, as always, the results below relate to what was heard/worked from anywhere in the continent in question, but do not imply they could have been achieved from all parts of that continent.

# Worldwide Intercontinental Daily Reliability at 28MHz.

	OC				AS				EU				AF				NA				SA			
	M	N	A	E	M	N	A	E	M	N	A	E	M	N	A	E	M	N	A	E	M	N	A	E
	%				%				%				%				%				%			
OC	30	27	23	10	10	20	47	53	00	00	17	20	00	00	00	00	06	00	00	00	00	10	00	00
AS	27	57	36	17	27	40	33	13	03	23	30	06	00	03	20	03	00	00	00	00	03	00	00	00
EU	27	06	00	00	23	20	03	00	94	87	63	57	36	63	36	17	00	00	03	00	00	06	10	27
AF	03	00	00	00	06	20	03	00	13	60	47	27	00	30	20	03	00	00	06	06	00	00	06	23
NA	00	03	00	03	00	00	00	00	03	00	00	00	10	06	00	03	43	43	57	47	23	36	57	47
SA	00	00	00	06	00	00	00	03	03	30	06	00	06	23	13	03	10	27	53	73	03	13	33	57

Thanks to G0IHF, SV1DH, G4UPS, G3VYF, G1OAR