

Radio Weather Summary for January 2009

At this stage in the cycle one month resembles another, with few, if any, of the basic parameters displaying significant variation. The solar disk was blank every day but six. A new-cycle spot group appeared on the 9th, raising the SSN figure from 0 for five days, while what may have been an old-cycle spot made a fleeting appearance on the 19th, vanishing before firm identification could be established. The solar flux ranged between 69 and 72 – the latter a figure last seen on October 16. The 90-day average was steady at 69 right through the month. All figures in this section are provisional.

	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	31
SSN	0	0	0	0	0	0	0	0	14	17	20	12	11	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0
SFlux	69	70	70	69	69	69	69	69	70	71	70	69	71	71	71	71	72	71	71	70	69	69	70	69	70	70	70	70	69	69	69

Solar wind speeds reported by the ACE spacecraft ranged between 500km/sec on the 19th and 270km/sec on the 25th. Particle densities were low most of the time but 30 per cubic centimetre was reported on the 25th. The X-ray flux was below the minimum reporting threshold for the entire month.

As usual, the table below displays the daily sums of 3-hour K for the three British observatories and the daily planetary Ap indices. There was just one day, the 26th, when the Ap index reached double figures – just. Once again there was not one three-hour period at any of the UK observatories when the reading reached K5 or more. However, there was only one day when the geomagnetic field was recorded as ‘inactive’, with a 0 Ap, compared with five such days in December 2008.

	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	31
LER	10	6	14	5	6	3	1	3	5	6	0	0	7	9	9	3	3	0	11	4	4	0	1	2	3	11	5	2	3	3	8
ESK	13	7	16	6	9	4	3	5	9	6	0	0	9	11	10	5	4	2	12	7	7	2	2	2	3	15	5	3	4	5	12
HAR	15	9	19	11	11	6	4	7	13	10	3	1	11	13	13	7	4	3	16	9	8	2	4	5	6	17	8	3	6	9	13
Ap	6	3	9	4	4	3	3	3	4	4	2	0	3	5	4	2	2	2	9	3	2	1	1	1	1	10	4	2	4	4	7

50MHz

Propagation to and from Britain

Auroral-Related Propagation

Unsurprisingly, given the data reported above, there were no auroral reports, relating to the UK this month.

Other Modes

Meteor/Iono Scatter

The month produced the largest number and greatest range of loggings since the resumption of these reports. The increase was doubtless due in part to the Quadrantids, which peaked on the 3rd – though in previous months a major shower has by no means always led to an increase in the number of reported contacts. Bear in mind that, for many operators, 144 is the band of preference for MS operation. The country breakdown was EA 24; I 16; CT 8; PA 8; SM 7; OZ 7; IS0 5; LA 4; OE 4; OY 3; S5 3; SP 3; DL 2; OK 2; YU 2; HA 2; HB 2; LZ 1; inter-G 1; F 1; OM 1; EA6 1. It is understood that the German administration does not permit MGM modes; the two reports above were presumably by permitted techniques. Note the prevalence of EA this month, by comparison with December, when LA was favoured. Italy barely featured in December but was more strongly represented this time, with Scandinavian contacts less numerous. These are very modest numbers but of course the band of preference for many ms operators is 144. The great majority of operators were using JT6M. A small number of contacts were claimed for mixed ms/tr or ms/Es. There was one report around midnight but then a gap until 0736

Jan 1 1028 LA 1156 IS0 1454 YT1 1532 EB1 1605 OZ7IGY 1633 I4 1658 OZ 2124 OZ

Jan 2 0920 EA1 1004 EA1 1049 EA1 1053 OE5 1057 EB1 1113 EA1 1424 OZ 1531 LA 1539 SP9 1603 LA 2358 PA

Jan 3 0003 SM0 0826 LA 0829 EB1 0830 EB1 1027 HA2 1044 EB1 1115 EB1 1121 SM7 1142 CT 1143 LA 1149 IS0 1157 I4 1159 I4 1205 I4 1207 I0 1212 I4 1212 CT 1213 EB1 1221 F 1221 EB1 1229 CT 1231 EB1 1237 DL 1240 I4 1243 I0 1248 DL 1250 S5 1256 I3 1259 CT 1306 I0 1306 OZ 1319 OY 1321 I5 1327 OK1 1329 OY 1348 OE1 1401 OY 1431 OZ 1438 OK1 1449 OZ 1452 OZ 1620 CT 1629 CT 1649 I4 1741 LZ1 1807 EB1 1808 I4 1938 OZ 1958 HB 2015 SM0

Jan 4 1009 SP9 1011 EB1 1149 HA2 1210 IS0 1319 YT1 1322 PA 1331 G 1445 PA 1536 PA 1754 OZ

Jan 5 1135 EB1 1312 I3

Jan 7 1131 CT

Jan 10 0918 EB1 0938 OE5 1043 SP9 1108 SM7 1112 EA7 1129 EB1 1130 EA7 1140 EA7 1149 EA7 1222 CT

Jan 11 1157 IS0

Jan 12 1518 I5

Jan 13 1249 CT 1326 EA7 1604 EA1 1802 PA 2244 OM5

Jan 14 0907 EB1 1245 LA 1801 PA

Jan 15 1325 PA

Jan 17 0816 S5 0918 IS0

Jan 20 1846 EA6

Jan 21 0841 HB 2226 PA

Jan 22 0736 SM7 0908 OE3

Jan 27 1051 IO

Jan 29 1213 SM7 2035 SP9

Jan 30 1052 S5

Sporadic-e

Every year there is talk of increased sporadic-e over the Christmas/New Year period. This was not one of those years as far as the UK was concerned. There were only three days when Es was reported into the UK and although signals were at times very strong the openings were fairly short. As the table shows, propagation was restricted to southerly or south-easterly directions. By no means all parts of the UK enjoyed even this much sporadic.

	CT	EA	EA6	HG	I	ISO	S5
UTC	3 11 13	11 13	11	11	3 11 12	12	3
03-06							
06-09							
09-12		8	9	9	+		
12-15	+ 9 +	+ 3	9		+ +		5
15-18					6	4	+
18-21					9		
21-24							

Tropo

There were plenty of tropo reports for contacts within Britain during the RSGB contest, though little worthy of note. However, occasional contacts were made at above-average range for tropo and these are listed below.

Jan 3 1421 G4MQL<>OZ6OM(jt/tr) 2241 GB3MCB>GD0TEP

Jan 9 2122 ON0SIX<>M1DUD(569km)

Jan 11 0941 F8DYR<>G3VYF(465km/jt)

Jan 13 2020 PI4D<>G3VYF

Eme

Jan 30 1732 G4IGO>W7GJ 2048 G1OAR>W7GJ 2055 W7GJ>G5WQ 2121 W7GJ<>GM4WJA

Continental Europe, Africa and the Middle East

Auroral-related Propagation

Jan 4 1806 SK3SIX>SM2(wk)

Jan 26 1401 OH9SIX>SM2(KP36 58a) Also on 144MHz 1302-1411 1552-1751

Other Modes

“Another poor month” comments Costas, SV1DH, and with only DL in his log, who can blame him? Many other operators would echo his assessment. Once again, most contacts were by way of JT6M, normally indicative of meteor scatter, though one or two reports suggested it had been used during sporadic-E or tropo conditions. As in the UK, the Quadrantids stimulated an exceptional volume of activity, especially on the 3rd, not least because this proved also to be a good day for tropo and there were also some sporadic-E contacts. In the course of the day almost all Europe seems to have been involved. Es was also identified on the 11th, 12th, 13th, 22nd, 23rd and 24th, though in what appear to have been scattered and relatively brief openings.

The month was also marked by the appearance on two days of E44M, but although doubtless much desired by many he is known to have made only a handful of contacts.

Jan 1 09-1000 PA>IS0(jt) EA7>IS0(jt) LZ1>IT9(jt) 10-1100 EB1>ON(jt) 11-1200 EA7,P>EB1(jt) 12-1300 EB1>CT(jt) 15-1600 EB1>PA(jt) I4>PA(jt) 16-1700 I3,SP9,YU1>PA(jt) 17-1800 EB1>OZ PA>EB1(ms) S5>PA(jt) YT1>PA(ms) I5>EB1(ms) EA1>EB1(ms) 20-2100 YU1>OZ(ms) LA>SP9(jt) DL>PA(ms) 21-2200 SM7>PA(jt) PA>5Q(jt)

Jan 2 0743 EA1>IS0(jt) 0855 OZ>IS0(jt) IT9>HB(ms) EA7>EB1(ms) 09-1000 SP9>OK2(jt) 10-1100 OE5>EB1(ms) PA>OK2(ms) DL>EB1(ms) HA2>PA(ms) 11-1200 PA>OK(ms) YU1>HB(ms) HA2>IT9(ms) HB>HA2(ms) 13-1400 HA2>LA(jt) I5>ON(jt) 14-1500 IT9>SP9(jt) LA>HB(ms) OZ>ON(jt) 15-1600 SM7>ON(jt) SM3>PA(jt) OZ>ON(jt) PA>EB1(ms) SM2>PA(jt) 16-1700 PA>EB1(ms) IS0>OK2(ms) OZ>PA(ms) IS0>EB1(ms) 1941 SM3>OE5(ms) UT4>PA(jt) 2030 SM0>OE5(ms) SM0>PA(jt) 21-2200 SM0>PA(jt) OZ>HB(ms) LA>PA(jt) PA>OE1(jt) PA>LA(jt) LA>OY(ms) OZ>OY(ms) 22-2300 OY>LA(jt) SM0>PA(jt) SM0>OE1(jt) 23-2400 OY>PA(jt) PA>LA(jt) PA>OZ(jt)

Jan 3 07-0800 PA>IS0(jt) SM0>OZ(jt) SM2>OZ(jt) SM2>SM0(jt) SM0>OK(ms) LA>SM0(jt) S5>PA,IS0(ms) PA>LZ1(jt) LA>PA(jt) 08-0900 OH6>PA(ms) EA3>PA(jt) LZ1>IS0(jt) OZ>OH1(ms) EA1>EB1(jt) PA>EB1(ms) SM0>OE1(jt) SM2>PA(ms/Es) I1>IS0(jt) 09-1000 EA7>EB1(ms) OH5>PA(Es) DL>IS0(ms) PA>OH1(ms) HB>IS0(ms) OZ>HA2(ms) LA>OH5(?) DL>PA(tr) IS0>OZ EA7>OK2(ms) OH7>LA(jt) I4>OZ DK>OK1 I0>PA(Es) I1>LZ1(jt) S5>PA OH7>LA(jt) PA>HA2(jt) I4>PA OZ>LA(jt) I5>HA2 10-1100 LZ1>HB(ms) I0>PA I4>OZ LX>I0 I4>DL,SP2 OH7>SM0,OE1 ED3>EA5 S5>OZ S5>HB(ms) I4,S5,UT4>OZ I4>PA HA2>LZ1 I0>DL,OZ I4>DL,IS0 I2>DL,IS0(ms) SM0>OE1(jt) I2>PA I5>OK2 I4>YU7,UT3 I4>PA 11-1200 I4>PA I3>IS0 I1>DL SM0>OE1 OK2>PA(jt) OE5>SQ2(ms) I5>I7 PA>LA(jt) OH8>PA(ms) OZ>HA2(jt) OZ>HB(ms) I5>SV3 HA2>OZ(jt) I4>PA I5>DL(jt) OH8>PA(jt) YU1>(ms) PA>OE1(jt) SM4>PA EB1>EA7(jt) I4,IS0>DL I5>S5,OE4,OM5,SV3 S5>HA2(bs) SM2>OE1 I2>OE4 12-1300 I5>DL(ms),OK2(Es),I3,SQ2,F PA,SM2>OE5(jt) PA>DL,PA,OH5(jt),EB1(jt) SM0>PA(ms) DL>9A(ms),I5 LA>PA(jt) DL>OE4,9A S5>OE1(jt) OE4>LA,OM1 SM0>PA(jt) I5>SQ2 SP9>HA2(jt) OZ>HB(jt) PA>PA(ms) I5>PA I4>LA PA>OH3(Es) SM2>OE1(ms) 13-1400 UX1>HB(ms) ES1>PA(Es) I5>I3(ms) PA>OY(ms) I5>IK2(ms),SP1,ON,DL(ms),DL(Es) I0>ON,SP1 SM2>OY(ms) I4,S5,OE4>DL OH6>SQ2(ms) I2>F(tr) OZ>I3(ms) OK1>OY(ms) OZ>OY(ms) OZ,EA7>EB1(ms) S5>5Q OZ>HB OY>LA(jt) PA>I7(jt) OZ>I7(jt) S5>LA SM0>OY(ms) I5>5Q I0,S5>PA HB>HA2(jt) LA>OY(ms) IT9>I7(jt) OH3>DL(iono/ms 1580km) SP9>I7(jt) PA>OY(ms) I3>DL 14-1500 PA>I7(jt) DL>OH5(jt) PA>I3(ms) I2>IS0 SM2>DL(ms/iono) SQ2>OE1(ms) DL>OY(ms) I5>IS0,OE3,I0 EA7>CT(jt) IT9>OE1(ms) SP9>SQ2(ms) S5>OE3 I4>DL PA>LA(jt) SP9>OE1(ms) OZ>LA(jt) F>CT(jt) SM7>I7(jt) S5>IS0

SM7>OE1(ms) I1>SP9(jt) I4>OE4 I5>HB OZ>PA(jt) 15-1600 OE5>SQ2(ms) I4>OZ| OE5>DL(Es)
I5>SP6(ms) S5,I4,I6>HB SQ2>OE1(jt) S5,I6>OZ I4>PA(Ms) I5,I0,S5,I4,9A>DL PA>OE1 I1>SM7(ms)
SM3>PA(jt) CT>CT(ms) PA>PA(jt) I4>I9 HB>CT(jt) I5>DL(Es) 16-1700 OZ,LZ1>OE1 OZ>EI(ms)
PA>I4(jt) OH5>LA(jt) SM3>LA(jt) PA>OE1(ms) PA>CT(jt) OZ>OE1(jt) PA>EB1(ms) 17-1800
OH5>PA(ms) EA7,PA>EB1(ms) OD5SIX>S5 18-1900 SM0>OE1(ms) 18-1900 I4>EB1(ms)
DL>SQ2(ms) 19-2000 OZ>I3(ms)OZ>HB(jt) LZ1>I4(jt) 21-2200 SM7>PA(jt) EA1>PA(jt) 22-2300
LA>PA9JT)

Jan 4 07-0800 IS0>PA(jt) 08-0900 EA1>EB1(tr) PA>EB1(ms)I6>I5(ms) 09-1000 LA>OE5(ms)
OZ>LZ1(ms) OZ>LA(ms) S5>IS0(jt) SP9>IS0(jt) 10-1100 DL>EB1(ms) 11-1200 OH4>OH5(ms/tr)
1255 HA2>PA 13-1400 EA7>I3(ms) I7>SV1(jt) 14-1500 OZ7IGY>F(ms) CT0SIX>IS0 PA>HA2(jt)
PA>HB(ms) HA2>PA(jt) 16-1700 LA>PA(ms) LA>SV7(jt) 18-1900 LA>LA(jt) 19-2000 LA>LA(ms) 2043
PA>SM7(ms)

Jan 5 13-1400 E44M>OD5LF,4Z4TL,I4 4X>9H 1754 OZ>OH5(ms)

Jan 6 09-1000 EB1>HB(ms) OE5>LA(jt) PA>LA(jt) 10-1100 DL>PA(ms) OE5>PA(ms) EA1>EI(ms)
11-1200 HB>PA(ms) IS0>SV1(jt) 1721 DL>LA 1911 SM2>LA(jr)

Jan 7 08-0900 IS0>EB1(ms) PA>IS0(ms) 1122 LA>PA(ms)

Jan 8 1900 SM2>OZ(jt) 1957 OH2>SP9(jt) 20-2100 OH5>SP9(jt) SP9>LA(ms) 21-2200 SK6>9A(jt)
LA>EB1(ms) SM3>LA(jt) SM3>PA(jt)

Jan 9 1151 LA>LA(jt) 1356 DF0ANN,HB9SIX>DL(tr) 1714 IS1>IS0 20-2100 I8>EB1(ms) 2159
EA3>PA(ms) 22-2300 SM7>PA(jt) EA3>PA(jt)

Jan 10 08-0900 SM6>SP9(jt) E44M>I0,4X 09-1000 PA>Eb1(ms) PA>IS0(ms) EB1>EA7(jt)
EA1>PA(jt) 10-1100 OD5SIX>S5,DL 5B>HA0 SP9>SM7(jt) 11-1200 EA4Q>I4 12-1300 EA7>EB1(ms)
CT>EB1(ms) CT>EA1(ms) EA1>CT(ms) 1310 S5>EB1(ms) 1344 DL>OG2 1519 LA>LA(jt) 1616 I6>F
2005 OE1>SP9(jt)

Jan 11 08-0900 EA3>EA1(ms) EA3>IS0(ms) 09-1000 I6>OZ EA3>SP9(ms) ED7YAD>CN 10-1100
LA>EA3(ms) OZ>EA2 OE5>DL PA>EB1(ms) EC1>OZ SO6>EB1(jt/Es) OZ>OG2 11-1200
CT0SIX,EH1DVY,CT1ART>PA(Es) PA>EB1(ms) IZ1EPM,I0JX>EI EA4>PA,OZ OE5>HB(tr) DL>EA4
HB1BVB>OK2 EC1>DL,OZ ED7YAD>F CT>EA7 EA5>OZ 12-1300 EA1,EA4>PA(Es) OZ>DL
CT,EA4Q>DL(Es) HB9SIX>DL(tr) EA7>PA(Es) EA1>OZ,DL(ES),OE3 EI0SIX>EA5 CT>PA
CT>HB(Es) 13-1400 HB>EB1 DL,PA,F(Es)>EC7 CT>DL,OE1,I2,OE3 EA1<OE3 16-1700 EA1>EA7
OE3XLB>SP6 HB1BVB>SP6 1755 PA>SM2(ms) 19-2000 ED7YAD>CN 1920 SM2>SM0
EA1>EA5(jt)

Jan 12 0831 OE5>HB(tr) OE5>IS0(ms) OE3XLB,HG1BVB>SP6(tr) 10-1100 HB9SIX>DL(tr)
HG1BVB>HA5 LA>OE5(jt) 1242 HG1BVB>YT1(tr) 16-1700 EA2B,EA4Q,CT1ART>OE5(Es)
EA2B>SP9 17-1800 EA4Q>SP9,DL,SP6 F,EA1,EA2>OE4 EA2>OE1(Es) EA2B>SP6
CS1RLA,EA1>OE5 CT1ART>DL EA1>I2,DL,SP6,9A 18-1900 EA2>9A(Es) EC1>OE5,EA2,OE4,HA8
EC1>9A IS0>ON(Es),DL(Es) S5>EA1(Es) IS0>DL EA2B>OE5(Es) EB1>S5 21-2200 I5>EB1(ms)
I5>EA3(jt)

Jan 13 09-1000 OE3XLB,HG1BVB,LX0SIX>OE5(tr) DF0ANN>OE5(Es) 1015-6
HB9SIX,DF0ANN>DL(tr) 11-1200 I0>CT CT>EA7(jt) 12-1300 CT>EB1(ms) 1650 I8>EB1(ms) 23-2400
OM5>PA(jt)

Jan 14 18-1900 EA7>EA1(jt) 1917 EA7>EA7(jt) 2031 EA3>EA1(jt)

Jan 15 1154 LA>PA(jt) 12-1300 EB1>EA7(jt) 13-1400 HB9SIX>DL(tr) 18-1900 I8>OZ(jt)

Jan 16 09-1000 LX0SIX,HB9SIX,OE3XLB.HG1BVB,DF0ANN>OE5MPL(tr) 12-1300 OE5,OE3>SP6
HB9SIX>DL(tr) PA>EB1(ms) 1350 TS7S>F 1421 I5>IS0 1536 YT1>EA3(ms/iono) 1955 I0>I8(ms) 20-
2100 HG1BVB>S5 PA>I8(jt) LA>OH5(ms)

Jan 17 08-0900 PA>EA3(jt) EA7>EA3(jt) 09-10 PA>EB1(ms) EA3>EA7(jt) 1041 OE5>EB1(jt) 12-1300
OE3>DL IS0>DL(iono/ms) EA4>EA3(jt) 13-1400 HB>DL(tr) IQ4AD>DL(tr) I0>EB1(ms) I0>OZ(ms) 16-
1700 ON>LA(ms/iono) ON>LA(jt) ON>CT(jt) ON>OE3(jt) 1809 OM5>OZ(jt) 19-2000 I4>OZ(ms) 20-
2100 LA>OE3(jt) PA>OE3(jt) 2156 OH8>SP9(jt)

Jan 18 0852 PA>EB1(ms) 1053 CU3>EA8 11-1200 I2>I112-1300 I4>SM6(ms)14-1500 LA>SM0(ms)
OZ>SM0(ms) 15-1600 PA>OE3 16-1700 PA>OE3(ms) 17-1800 I4,I6>I0 OE5>I4 2136 SM7>PA(jt)

Jan 19 0824 IS0>EB1(ms) 1630 OZ>OE3(ms)

Jan 20 no reports

Jan 21 09-1000 LZ1>OE3 I5>PA(ms) 18-1900 PA>YL2(jt) OE5>I8(jt)

Jan 22 09-1000 OE3>SM7(ms) EA7>EB1(ms) 12-1300 YL2>PA(jt) 13-1400 YL2>OZ(ms) SM7>YL2
16-1700 OZ7IGY>I7 I0JX>SM7(Es) SQ8,UX1>I1 DL>I7(Es) 17-1800 DL,OZ>I7 SM7>IT9 DL>PA(tr
517km) IT9>OZ(Es/jt) 18-1900 SR2FHM>EA6(Es) S5>OZ(jt) 21-2200 PA>SM0(ms) SO5>PA(jt)

Jan 23 09-1000 S5>PA(ms) S5>SM7(ms) OE5>SM7(jt) SV1SIX>DL(Es) 1346 S5>SM7(ms) 1558
SM7>PA(ms) 1620 F>IS0 17-1800 EA1>EA7 ED7YAD>ON CT1ART>ZB(tr) EA5>EB1

Jan 24 0901 F>SM7(ms) SM7>LA(ms) 1117 LA>YL2(jt) 1312 YT1>SM0(ms) 1433 HB9SIX>DL(tr)
1526 PA>SM0(ms) 1719 EA8>EA5(Es) 1753 W1JJ>EA7DUD(jt) 1844 EA8>EA7 CU3URA>EC7

Jan 25 09-1000 I1>EA7(jt) 1022 DL>SM0(ms) 1251 I0>PA(ms)

Jan 26 1328 DL>OE3 1653 JW7SIX>SM2(59 AuE?)

Jan 27 09-1000 I0>HB(ms) 1618 CT1ART>ZB 1853 OZ>OE1(ms) 19-2000 LA>OE1(jt) OE1>SM7(jt)
S5>OE1(tr) 20-2100 S5>OE1(tr) OM5>OE1(jt) F>DL(jt) F>EA4(jt) EA4>EB1(ms)

Jan 28 no reports

Jan 29 17-1800 EA3>CT 18-1900 LZ2>SP9(jt) 1847 W7GJ>OY3JE(eme -23db) 20-2100 PA>EI(ms)
2104 PA>CT(jt)

Jan 30 0835 EB1>OE5(jt) 1936 ZS6WAS>W7GJ(eme -27db) EA5>EB1(ms) 2059 SP9>SO5(tr) 2140
OH8>PA(jt)

Jan 31 0840 EA7>EB1(ms) 1035 SQ8>SP7(jt) 12-1300 EA5>CT(jt) 1325 UZ5>SP9(jt) 1516
LZ2>S5(jt)

50MHz PROPAGATION REPORT FOR JANUARY 2009 BY SV1DH

1. Data for all days (31)
2. Relatively good days on: NIL
3. 48 MHz AF video (9L+3C) on: NIL
4. 55 MHz AF video (5N) on: NIL
5. Openings to DL: 23(E)
6. Special events on:
 - 09-13(SSN up 20, SFI up 71)
 - 19(SSN=13, SFI=71)
 - 06(1045 YB to I4 on 10m F2)
 - Another very poor month!
7. DXCC entities heard/worked during January 2009: 1 on 1 cont. 73 COSTAS

The Americas

Auroral-related Modes

No reports

Other Modes

Once again we look enviously over the water, where there was an interesting mix of propagation. Trans-equatorial propagation, the most notable DX mode in recent months, was well down on the earlier period, in terms of the number of days in which it was reported, the duration of events and the narrower geographical spread of contacts, which is very evident in the table below. In earlier months

Occurrence of tep and of Sporadic-E (North America)

	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	31
TEP				+	+				+		+	+	+	+									+		+	+	+				+
Es	+	+	+	+	+	+					?			+		+	+	+		+				+	+	+	+	+	+		+

one could feel comfortable in crediting tep as the propagation mode. This month the picture

Countries with trans-equatorial contacts

PY 11 days 4(V4) 5(V4) 9(V4,YV) 11(V4) 12(HH) 14(KP4) 23(V4,9Y) 25(V4,W4,9Y) 26(9Y) 27(YV) 31(V4)

LU 1 day 13(P4)

Is less clear because some openings coincided with widespread sporadic-E. So contacts between W4 and PY2, might have involved tep or multihop Es or tep extended by Es for the final leg northward., northward, stage.

If Europe missed its hoped-for post-Christmas Es season North and Central America most definitely did not. Sporadic-e occurred on at least 18 days and possibly several more. So far, so unremarkable. But where January differed from the preceding months, was in the geographical spread and intensity of the openings, which at one time or other involved all W, VE and XE call districts, almost all countries in Central America, most of the Caribbean and the northern fringe of South America by way of HK, HP and YV. There were many multihop contacts, whether coast to coast within the US or, for instance, YN and TI to W7 or YV to W9,.

The most striking period began on the 24th and continued with little intermission into the 28th (UTC). The detailed listing below does not adequately convey its full extent because the level of activity was exceptionally high; a simple entry of "W1>W4" may represent a dozen or so reports between those two areas. One wonders whether there has ever previously been a midwinter sporadic-e event on such a scale. It will surely live long in the memory of those involved.

Not all reports related to sporadic-e. The detailed reports include many citing ms contacts, which have featured only sparingly in previous Reports, and there were an increased number of contacts attributed to tropo, including one claim to have heard the K0KP beacon at a range of 840 miles. Possible?

Meanwhile, south of the Equator, their summer sporadic-E season continued. Without fuller geographical information one cannot gauge its extent but it probably occurred on about ten days, chiefly between LU and CE. However, there were clear signs that the season was coming to an end.

Jan 1 1235 LU5EGY>CE3SAD 13-1400 LU7FA>CE3SAD W4>W3(Es),W8(Es),W4(tr) 14-1500 V44KAI>FM5AA K4TQR>VE2 W4>W4 15-1600 KA7BGR>W6(ms) WA7X>W6(Tr+ms) W8>W4(ms) K0KP>W7(tr 840m) 16-1700 W7>W7(ms) W8>VE2(ms) W0>W8 W0>W2(ms) 17-1800 C6AFP>W4 W9>W0 W8>W3 21-2200 W0>W7(Es) LU5EGY>CE3SAD

Jan 2 00-0100 W8>W0(sc) 12-1300 W8>W4(tr) W9>W4(ms) 14-1500 W4>W3 1614 IW5DHN>K2ZD(eme -16db) 16-1700 C6AFP>W4 TI2NA>XE3 21-2200 VE2>W3 W4 22-2300 W4>W4(tr) W8>W4 23-2400 LU1FDQ>CA3SOC

Jan 3 00-0100 VE3UBL>VE2 LU1VD>LU1DMA 05-0600 W9>VE3(jt+ssb) W3>VE3(ms) 06-0700 W7>W6 K0KP>VE3(ms) 1230 W4>W9(ms) 1334 W4>W4 1347 W8>W0 14-1500 W4,W8>W4 15-1600 W3>W4(Es) C6AFP>W3 W4 W4>VE3(MS/Es) 16-1700 W3>W8 W3>W8(jt) K0KP>W7(tr) W4>W2 K0KP>VE3(Es) W5>W6 VE9>W3(Es) W3>W4(ms) 17-1800 W2>W0 VE2>W3(ms) W4>VE3(ms) VE2>W3 W8>VE3 W3>VE9(Es) W0,W8>VE3 G5WQ>K2ZD(eme -25db) W4>W4(jt) 18-1900 W5,W6>W0 W4>W4,W3 W2,W8>W4(Es) W3>W4(ms) W0,W9>W1 W6,W7>W6 TI2NA>XE3 W5,W0>W8 W4>W4(Es) W3,W8>W4(ms) K4MHZ>W0(Es) WA7X>W7 19-2000 W7,W0>W6 W4>W0 W7>W7 W4>W9 W7,W0>W8 VE7>W6 W7,W8>W9,VE9 XE1>W5 TI2NA>W4 W0>W3(Es) W9>VE3 W1>W8 20-2100 W9>VE2,W9 W7>W6 W8>W8 W7>W7 W4>W1 YV4AB>W4 22-2300 W8>W4

Jan 4 0007 W4>W4 0126 V44KAI>PY5EW 0240 LU5EGY>LW1EXU 1256 W4>W8 1514 W4>W4 1632 W4,W5>W5 17-1800 TI2NA>KD4ESV,K4RX TI2ALF>W4TAA W3DOG>W3 18-1900 W5>W7(Es) NM7D>W5 W4>W4 N6NB>W5 19-2000 W6>W5,W7(Es) 2348 W5>W7(Es)

Jan 5 00-0100 W7>W5(Es) W5>W6 01-0200 W3,W8>W8 W5>W5 1836 K0KP>W7(tr) 1858 C6AFP>W4 19-2000 VE3UBL>VE2(gw) W9DR/4>W4 W3APL>VE2(ms) 2215 W9DR/4>W4 2333 V44KAI>PY5EW W5>W5

Jan 6 12-1300 C6AFP>KP4>W4 16-1700 W3DOG,K4MHZ>KP4 1854 IW5DHN>VE2XK(eme -18) 20-2100 C6AFP,W9DR/4>W8 2331 VE3UBL>VE2

Jan 7 0128 W0>W0

Jan 8 no reports

Jan 9 23-2400 V44KAI,YV4AB>PY5EW

Jan 10 0232 W8>W0(ms) 13-1400 W6>W4(ms) 13-1400 VE4ARM>VE2(ms) W4>W4(tr) W3>W4(ms) 16-1700 K0KP>VE2(ms) W0>W0 18-1900 KP4>W4 19-2000 V44KAI,YV4AB>KE4WBO 21-2200 W8IF>W4 KD4AOZ,W4IT>W1 22-2300 W4,W5GPM>W1 VE1>W4 23-2400 W4>W1

Jan 11 00-0100 V44KAI>PY5EW 0211 W8>W4 1156 HR9BFS>K2ZD(eme -23) 1227 W1,W4>W4 13-1400 HI8JSG>KP4 W5>W4 13-1400 W3>W1 1723 W4>W4 1848 W4>W8 1857 W5>W4 21-2200 LU9AEA/Y>LW3EX CE2/K2ZRM>LU1DMA 22-2300 LU9AEA/Y,LU1DZK>CE3SAD ZP5PT>LW3EX LU2MCA>LW3EX PY3IOD>LU9HH PY3AT>LU6DC LU1MA>LW3EX 23-2400 LU4DQW,PY5ZW>CE3SAD

Jan 12 00-0100 LU1FVE>CE3SAD VE3UBL>VE2 01-0200 NL7XM/3>VE3 VE2>VE3 02-0300 VE2JCW>BY6NC(eme) 1333 W6>W4 21-2200 LU1FVE>PY4AQA 22-2300 HH07RH>PY6KR

Jan 13 01-0200 P43L>LU1FVE PY2>PY2 LU5CAB>LW1EXU 0237 W2>W4 13-1400 W6>W 4(ms)

Jan 14 00-0100 NP4A>PY4AQA,PY2EU W8>W4 0301 W5>W5 W4>W4 12-1300 W4,W8(sc),C6AFP>W4 1521 WA7X>W7 20-2100 LU5EGY,CX1CCC>PY2MAJ LU5EGY>PY4AQA 21-2200 CX1CCC>PY4AQA 2334 PT1>PY2

Jan 15 00-0100 PY6>PY4 01-0200 W1>W2 1302 CX7TT>W7GJ(eme) 1739 PT1>PY2 22-2300 47.9(CE)>LW3EX PU9>PV8

Jan 16 0311 W7>W5 16-1700 W7>W6(ms) 17-1800 W4>KP4 W3>W3 18-1900 W4>KP4 TI2NA>W9HF/4,KE4WBO W4,YV4AB>KE4WBO 19-2000 TI2NA>W4TAA,N3LL/4 W4>W4(gw) 2025 TI2NA>N3LL/4 2101 47.9(CE)>LU1DMA 22-2300 LU1MA>LW3EX LU9EO>CE3SAD 48.2,48.3(CE)>LW3EX LU6FMC,LU7FTF>CE6RC LW3EX>CA3SOC 23-2400 CE3SOC>LW1EXU CE3ASD>LW3EX 47.9(CE)>LW3EX

Jan 17 00-0100 W2,W3>VE3 12-1300 W4>W4(tr) W4>W9(ms) 13-1400 W4>W4(tr) 1416 W6>VE6(ms) W0>W5(tr 324m) 18-1900 K0KP>W7(tr)19-2000 W1>VE2,VE3 VE2>W8,VE3 W6>W6 W5>W5 W9>W9 W1>W4(Es) W3>W4 20-2100 W4>W8 W8>W9(Es) W4>W4(tr) W1>W8 21-2200 W9>W9 W3>W0 W5,W4>W4 W1>W8 22-2300 48.3(CE)>LW3EX W0>W8 W4>W4 W1>W2 23-2400 W3,W4>W3 W8>W2

Jan 18 00-0100 W8>W4 W9>W9 W3>W2,W3 W2>W2 01-0200 W1>W2,W9 02-0300 W1>VE2,W2 W9>W8 03-0400 W1>W2 04-0800 W4>W2 1156 W1>W4 12-1300 W1>W4 C6AFP>W8 13-1400 W4>W8 W1>W1,W4 W0>W0 14-1500 W1>W1 W0>W8 W1>W9(Es) W0>W9(ms) W9>VE9(Es) W1>W0 W3>W3 W4>W4 W9>VE1,W9,W1,VE2 W4>W2 W0>VE2 W5>W5 W8,VE1>VE1 VE9,VE2>W9 15-1600 W0,W9>VE2 W6>W6 W3,W0,W4,W2>W2 W9>W1,VE2,W2 W3>W4 W4>W4,W5 W1,W9>W0 16-1700 K0KP>W7 W9>W0 W6,W0>W6 W6>W7(ms) VE3,W0,W3,W1,W9>W0 W4>W9(sc) W1,W4,W5>W4 W7>W0(tr) 17-1800 W5>W5 VE7>W7 W8>W0,W3 W4>W4 W1>VE2 18-1900 W1>VE3 W3>W3 W6,W7>W6 W1,W4>W1 W2>W0,VE2 19-2000 W5>W5 W1>W1 W5,W0,W4>W8 20-2100 W8>W8 W9>W9 W4>W4 W3>W3 W6>W6 VE3>VE2

21-2200 VE3>VE2 W7,W6>W6 W5>W5 VP8YLB>NZ0T(??) W1>W0 W7>W7 47.9(CE)>LU1DMA 22-2300 LU7FTF>CE3SAD W5>W5 W6>W7 2345 W1>W8

Jan 19 00-0100 W6>W7,W6 W3>W1(tr) W9>W5 0153 W1>W2 02-0300 W3>W3 W4,W8>W8 03-0400 W1>W8,W2 W2>W2 W6>W6 1851 W9>W4(ms) 1921 W8>W9(ms) 2258 W4>W4

Jan 20 1415-32 W6>W7(ms) W5>W7(ms) 1511 K0KP>W7(Es) K0KP>W7 20-2100 48.3(CE),LU7YS>LW3EX LU9AEA/Y>LU1DMA 21-2200 LU9AEA/Y>LW3EX LU7YS>LW3EX,LW2EQS,LU9HH,CE3SAD CE6RC>CE3SAD,LU9HH 22-2300 LU9AEA/Y>LW3EX,PY3MSF LU1DLL,CX5BW>CE3SAD LU1DVT>LU9HH LU7YS>PY3MSF LU6VK,LU1MPK,LU1MA>LW3EX 23-2400 LU9AEA/U>LW3EX LU7FTF>CE3SAD

Jan 21 2152 47.9(CE)>LU1DMA 2301 VE3UBL>VE2(gw)

Jan 22 1649 W9DR/4>VE2

Jan 23 00-0100 9Y4D,V44KAI>PP5XX 12-1300 W4,W9>W4 W4>W3

Jan 24 0243 W3>W3 0341 WA3TTS>W8 13-1400 W9,W4>W4 W9>W5 W8>W4 14-1500 W4>W8 W7>W7(ms) 16-1700 W1,W4>W1 VE1SMU>W4 VO1ZA>W1 17-1800 W1>W4,W8 VE1>W3(Es),W4 VE9BEA>W3 18-1900 W5GPM>VE2 W4>VE3 VE3>VE1 W4,W8>VE2(Es) VE1SMU>W4 (Strong opening, mainly W4 to W1,VE1,VE2) VE9BEA>W4 VE1>W8 19-2000 W1>W8,W1 W4>VE3 VE9,WA1OJB,W0>W4 VE1,K4TQR,K4MHZ>VE2 VE1SMU>W8 W1>W0 W9,W8>VE1 W5GPM>W3 TI2NA>W5 20-2100 W2,K4MHZ,WA4FC>VE2 W2>W5 W4>W0,W9,W3,W2 VE1>W8,W9 W3HH>W9 W1>W1 VE1SMU,VE3UBL,VO2FUN>W4 VE9>W8 22-2300 W4>W4,VE2,W2(Es),W3 W8>VE9(Es) W2>W0 W1>W9,W4 VO2FUN>W1,VE1 K0KP,K0GUV,VE4ARM>W1 VO1>VE2 W0>VE3 VE3UBL>W4 23-2400 TI2NA>W4(Es) W9DR/4,K4TQR>XE3 VE4VHF>W1 XE3>W4,W3,W1 XE3RCM>W4 W0,KP4,C6AFP>XE3 W7>W7(tr) XE2>TG9AFX

Jan 25 00-0100 W4>W9(Es),VE3 LU5EGY,LU8EML>LW1EXU C6AFP>W8,VE2 W3,K2ZD,VE3SRW>W4 9Y4D>PP5XX KP4>W8 K4TQR>VE3 V44KAI>PY5HOT 01-0200 W4>VE2,VE3,W4,W3,W8,VE9 W2,W4IT>VE2 K0KP>W3 W4>W5 XE1>W4 W9>XE2 W1,KP4,W9DR/4,K4MHZ,VE3SRW,VA2ZFN>W4 XE2K>XE1 C6AFP>W1 VE3SRW,KP4 >W8 02-0300 KP4,VE3,VE2,KP4,W2,W1>W4 W0>W1 VE2>W3,W8 W3,W4>W0(Es) W2>W8,VE2 W3DOG>W9 W9DR/4,K4MHZ>VE2 KP4>W5 K0KP,K9MU,K0GUV>W3 HI8JSG,V44KAI>W4SO 03-0400 W8IF,VE1>W4,W0 HI8JSG>N3LL/4,KE4WBO,N4QV HI8LAM>KE4WBO HI8VB>N3LL/4,N4QV,AJ4MW,W4SO,KE4WBO W9VW>W0(Es) HI8VRS>W4SO VA2ZFN,WA1OJB>W4 C6AFP>W1,W8 VE3>W9,W0 W8EH,W1>W0 W0>W9 KD4AOZ,W9DR/4>VE2 KD4AOZ>VE3 K4TQR>VE3 04-0500 HI8LAM>AC4TO YV4AB>KE4WBO N0LL>W8 WA1OJB>W4 K4MHZ>VE3 W9DR/4>W1 N4EEB>HI8JSG W2>W4 0515 W4>W1 13-1400 HI8LAM,HI8LSM>KP4 W4>W4 W3>W1 CV5A>CX2AAZ 14-1500 WZ8D>W4 WP4O>W4 15-1600 TI2NA>K5YG,K4RX W4,W5>W5 TI2NA>XE2WWW W0>W8 KP4>W4 XE3RCM>W5 C6AFP>W5 16-1700 W5>W4,W6,W5,W0(Es) C6AFP>W5,W8 XE1>XE2,W7(Es),W0,W5 W5>W0(Es) XE2>W4 XE3>W8,W4,W9,W0,W5 W0IJR,K0EC(Es)>W7 VE3>W0 17-1800 XE2>W8,W7,W4,W5(Es),W0 XE3>W0,W5 W5,W0>W0 XE1>W0(Es),XE2,W7 K0EC>W7 W4>KP4 W7>W5(Es),W0 TI2NA>N3LL/4,KE1F/4 W5>W4 K4TQR,VE8BY(Es)>VE2 W5,VE1,VE9,W9>W8 W3>VE3 TI7/N5BEK>N4QV 18-1900 XE1,W7>W7 XE3>W0,KP4 XE2>W6,W7,W0,W4 XE2WWW>W4 TI2NA>KD4ESV,N3LL/4,K0GU,KS7S,K5YG,N4EEB W5>W4,W8 WA3TTS,W8,W7PFR>W0 TI/N5BEK>N3LL/4,K4CVL P43A>N4QV,N3LL/4,W4TAA HI8R>W4TAA KP4>W4 TI2ALF>K0DAN,N3SL,W4TAA,KZ4RR XE1>W0.W4 19-2000 XE1>W8 TI2NA>KC0CF,KE4WBO(Es),K5YG,KI6BPY(Es) XE2>W7,W8,W5,W4 XE1,W5>W5 HI8LAM>XE3,KE4WBO TI2ALF>K4RX,K0GU,KD4ESV,K5SW HP1AC>KE4WBO,K5SW HR2OAV>W5HNE,W5HNC,WA5NFC,W9DR/4,KC0CF,N3LL/4,KD4ESV,K4XZ,WY5I

YV4AB>KE4WBO(ES) TG9SIX>N3LL/4,KE4WBO(ES) XE2WWW>W4,W5 VE7>W7(ES)
TI7/N5BEK>KE4WBO K5SW HI8JSG>WY5I YN2N>AA7A,KD4ESV,K4XZ
TI8II>K5SW,AA5JG,N3LL/4 VE7>W7(ES) 20-2100 TI8II>WA2SEI/4,K4XZ,WY5I,N0LL(ES)
XE2>W4,W5,W0 HI8LAM>NM4O TI2NA>K5SW,W7CNK/5 W5RP>W4 V44KAI>KD4ESV
HP1AC>K4XN,XE3N,KD5PBR,WY5I,K5YG,AJ4F,K8WK,K5RK,N2NL/4
YN2N>N3LL/4,N0II,K5SW,AA5JG,KE4WBO,W4TAA,N9HF,KG8VT
TI7/N5BEK>WY5I,KD4ESV,W4DTA,KE4WBO,W1GUD/4,N0LD WQ4O,NM4O>HI8JSG
HR2OAV>W4DTA XE3RCM>W5,W4 XE3>W0,W5,W8
TI2ALF>K4XZ,WY5I,W4DTA,HI8DSG,AA7A,AE5B,N0LD XE1>W4,W5,W0 XE3,KP4>W4
K5RK,W5HNN,AC4TO,K1TOL>9Z4BM P43A>AE5B 9Y4D>K5RK,W5HNN,K1TOL
TG9SIX>KE4WBO 21-2200 TI2NA>K0GU,WN4CVH,AC7XP,K9RX/7
YN2N>KS7S,W4HY,KI4DJG,K6CWB,W7CNK/5,KD5PBR,K7SP,KY5N,W5VQ XE3>W5,W4,W0
KZ4RR,KI4AOQ,N4AH>HI8JSG HR2OAV>KN4NN,KE4S XE1>W4,W6,W7,W0 XE2WWW>W4,W7
HI8AAX>KI4DJG,N4AH XE2K,KP4>W4 W5>W6,W7
HK3JRL>WD5K,K5SW,W4GCB,W9DR/4,W5HNN,K1TOL,AC4TO,KI4DJG,W4GCB,W1IPL,K5VIP,W5
TFW,W5VQ,W5TFW 9Y4D>W1IPL(ES),N3DB,NZ3M,W1IMM(ES),AK3E,KZ4RR,NZ3M
9Z4BM>NZ3M TI2ALF>N2NL/4,N4CBS,KI4DJG,KD5PBR VE9BEA>W3 CO2WF>K5RK,AJ4F
VE1SMU>W3 TI7WAM>WD5K HI8RVS>FG1GW 22-2300 XE3>W0,W5 XE2>W4,W0,W5
XE1>W5,W4,W0 W6>W0 W3>VE1 TI7WAM>W7CNK/5,K5SW TI2ALF>XE3N W5,W6,W7,W4>W4
HK3JRL>WN4VCH W5>W6,W7,KP4 HI8AAX>FG1GW KP4>W3,W7 CO2WF>AA7A,W0BKR,K9RX/7
W9>VE4(ES),W7 N6NB>W4,W5 YN2N>W5TFW,K0GU,XE3N,N0LL CO2WJ>AJ4F CO2WF>W5OZI
W8>W7 HR2OAV>K5SW,KD5PBR,W5VQ,AA5JG 9Y4D>N9HF/4,N3DB VE1SMU>W3,W8
KI4LRP>HI8JSG V44KAI>KD4ESV TI2NA>W7CNK/5,K0GU 23-2400 W5>W7,W9,W8,W0,W6,KP4
W6>W4(2xES) W4>W7(2xES) XE2K>W4 XE2,W7,W6>W0 W4>VE3,W9,KP4,W0,W5
W3,W4,W5,W8,W9,W0,KP4>W7 W6,W0,KP4>W6 W3>W6(2xES) XE1>W5,W6,W7,W0,W9,W3,W8
XE2>W3,W4,W0 XE2WWW>W1 HI8LAM>K4JAF,K4RX,WY5I,K2DRH/9 TI2NA>W6OUU/7,W7CNK,
HK3O W9>W4,KP4 W6>W3(2xES) W6,W8>W7
HI8JSG>K2DRH/9,KD5M,KP4,W6BXQ,W4TAA,KG4RWO HI8PJP>K2DRH/9 K4RX>PY2KP,PP5XX
HK3O>KD5PBR,TI2AL,W0PTI W4GCB,N3LL/4,K4JER>YV5DRN
YV4AB>AC4TO,KD5M,K4RX,N3LL/4,W4TAA PY2DS>AC4TO AC4TO>PY2KP
YV4DYJ>W4TAA,KD5M

Jan 26 00-0100 YV4DYJ>K2DRH/9,KD4ESV,N3LL/4 XE1>W7,KE4WBO,W4GCB HK3O>W0BKR
HP3AC>W0BKR W7,W0,W8,W5>W6 W5>W5,W6,W8,W7,W4,W0 HP1AC>W0BKR W0,W7,W6>W4
9Y4D>PP5XX XE3>W0 XE2>W9,W3,W4,W0,W5,W1 W5,WB0RMO,W0IJR>W4 V44KAI>W4
YV4AB>KE4WBO K8EB,W3PIE,W8GTX,W5RP>W0 W0,W5,W6,W7,W9>W0
W5GPM,W0MTK,W6,XE2>W4 W7,VE2>W5 K0EC,W0IJR,W6>W9 C6AFP>W0 W7>W4,W9
TG9SIX>K0GU TI2NA>K0GU,K8BWI KP4>W0,W6,W5,W7 HI8JSG>KP4 01-0200
XE2>W9,W6,W5,W0,W7 W7>W7,W5,W0,W4 TI2NA>K6EL,N6ZN,K6QXY W5>W6,W5,W0,W7
W7,W5,W0,W4>XE1 W6>W4,W6,W5,W7 W0>W9,W5,W4,W0 02-0300 XE2WWW>W5,XE1
W5GPM>W7 XE2>W1,W7,W6,W5,W0 WB5LLI,W5RP,VA7SIX,KA7BGR>W0 W6,W5>W6 N0LL>W7
TI2NA>K0GU,K6QXY,KD5PBR,NA6XX,K7JA N0EC,W0IJR>VE7 W7>W6,W7 HI8LAM>KP4
03-0400 W5,WA7X,XE2,W6,W0>W7 XE2,W0>W6 TI2NA>NA6XX XE1>W6,W7
XE1,WA7X,K6FV>VE7 W5>W7 XE2>W0,W6 K6FV>W0 04-0500 W7>W6,W0,W7 XE1>W0 05-0600
XE1,XE2>W6 17-1800 W5>W9 W5>W4 HI8VB,HI8VRS>HI8FLB 18-1900 W4,W9,W5GPM,VE3>W4
V44KAI>KE4WBO,W7CNK/5 W2,W8>W4 C6AFP>W4 W3>W5,W9 W4>W0 19-2000
HI8JSG>K5SW,W9ZR W5>W4 CO2WF>W3,W4 C6AFP>W8,W5,W1,VE2 W9DR/4>VE2
FG5GP>N3LL/4,K5SW TI2NA>N3LL/4 YV4AB>N3LL TI5XP>N3LL/4 W4>W3(bs) TI7/N5BEK>N2NL
20-2100 TI7/N5BEK>N3LL,VA3DX,VE2XK,KD4ESV,W4TAA TI2NA>K1TOL,VE2XK,N8JX
/4,KD4ESV W2,W9>W5 W4,W2,W0,VE3,W3,W5>W4 C6AGN>W1 CO2WF>AC5K
XE2WWW>W4,W9,W3 TI8II>K1TOL,KD4ESV,WD8PTW YN2N>W4TAA,K1TOL KD4AOZ>VE2
W6>W4 21-2200 YN2N>W1IPL,VE2XK,KE1F/4,NP3CW LU5EGY>CE3SAD
W8,W9,W2,W1,W4,W5,W6,VE2>W4 XE3>W5 TI2NA>K5SW ,6Y5IC,N4ZQ,K4MF,VE2XK

XE2WWW>W4,W3,W2 W8IF>W5 W4TQR,WB5LLI>VE2 C6AGN>W2 C6AFP>W8,W3 YN2N>VE2XK
V44KAI>N3DB W5>VE3,VE2,W1,W2,W8 W3APL>W5 W5GPM,W5HN,W3HH>W3
LU1JTW>CE3SAD 22-2300 W2>W0,W5 TI2NA>K2ERG TI2NA>N9UMO
YN2N>VE1XK,N9IW,WP3UX,W3BTX,N3DB,K2OVS,K3ZXL,WA3G KP4>W1,W2,W9,W3,W0,W5
W5>VE2,W2,W9 W4,W5,W6,W8>W9 W2,W3,W4,W5,VE3>W5 C6AGN>W8,W9,W3,W4
KP4,W4,W7,W8>W0 W3APL,W2,W5,W0,KP4>W4 W9BGJ,K9SSH>YV4DYJ
P43A>N2NL,KY5N,N0FW.K9IL,N1BAA,K8SM,N3DB,KC0CF,KA9FOX,N2TU/4,WD5K,
TI7/N5BEK>N2NL,NZ3M,N3DB CO2WF>K4UI,W4TJ YV4DDK>N3DB 23-2400 W5>W1 W9>W2
TI7/N5BEK>K0CER,W4TJ.N2TU/4,K4RX,N3DB,KI4TZ W2>W4
P43A>K4RX,K5SW,W5PF,K4SUS,K4RX YN2N>W4TJ,K4RX,WC8WDT,VA3DX,N4DB,N8UUP
WB5LLI>W0 W5>W5,W8,W4,W7 XE2WWW>W4 CO2WF>K3HX,W5PF,K5SW,AK8A,K8KS,K0GU
XE3>W3 W5,W7,W9,W0>W7 W4>VE3,W0 TI2NA>N3DB,N8UUP,KC0CF,K0GU,K4RX
YV5IAL,V44KAI,9Y4D>PY5HOT K4TQR>W0 P43JB>N2TU,W5PF,K4SUS,N3DB,K5SW,K8KS,
K0GU,K4YYL,K5AB C6AGN>W4,W5,W6,W9,W0 YV4AB>K0GU TI5XP>K0GU

Jan 27 00-0100 P43JB>W4GCB,KC0CF,AD5VJ,W9RM,K0GU,W5VQ,N4QWZ,WY5I,W4JO,
K4UI,KR4WBO,W5HNM,NN4T C6AGN>K4JAF,N4JQQ CO2WF>K5AB,N3DB,W5VQ W5,W0>W7
W4,W9VW,WR9L>W4 W4,W7,W8,W9>W0 P43A>K5AB TI7/N5BEK>N8LIQ YN2N>N8LIQ
YV4AB>KE4WBO W4,W8,W0>W6 W9>XE2 W4,W5,W7,XE2>W0 W6>W6
PY5HOT>YV4DDK TI2NA>W4TJ,K0CER TI2ALF>N2TU/4,WZ8D,K4UI,K4WS 01-0200
YN2N>KC0CF,AC5TM,W0BKR,W5XX W4>W5,W6,W7,W8,W0 CO2WF>N2TU/4,KI4TZ,K4WS
K4TQR>W4 W5>W8 TI2NA>K4WS W6,VE7>W7 YV4AB>KE4WBO W6>W0 02-0300 W6,W7>W0
W5,W6,W7KNT,N7LT>W7 03-0400 W0>W6 W7>W0,W7 KA7BGR>W7 14-1500 W4>W5 15-1600
W4>W7,W6(Es) TI2NA>KD4ESV W4>W4 W5,W7,W0>W7 16-1700 W4>W7,W5,W0 XE2K>W7
W7>W6,W0,W9 17-1800 W7>W5,W8 W5>W4 W4>W8 20-2100 W9DR/4>W2 W5>W5
WP3UX>HI8LAM 22-2300 W5>W4(tr) WZ8D>W4 W5>W8 23-2400 W9DR/4,W9>W5 C6AFP>W3
XE2>W4,W9,W8,W6 C6ANM>W3 K4TQR,K4IDC>W0 C6AGN>W5 W0>W6,W4

Jan 28 00-0100 W4>W6,W0 TI2NA>N3DB W8,W4>W6 W6>W0(Es) W0,WZ8D>W4 W6>W7
W5,W6>W6 14-1500 W8IF,W9>W4 15-1600 W9DR/4,W8,W9,W0>W4 23-2400
TI2NA>KE4WBO,K4RX,C6ANM TI7/N5BEK>W4TAA,K8WK,W1JJ V44KAI>KE4WBO W1>W4
HI8VB>W4TAA W4,C6AFP>W3 W3ALP,NL7XM/2>W4

Jan 29 00-0100 TI2NA>NZ3M,N3DB,W3UR,K4WS,KY5N C6AFP>W3 K4MHZ,W3DOG>W4 01-0200
W9DR/4>W4 C6AFP>W3 W5RP>XE3 02-0300 W4>W4(tr) 14-1500 W3DOG>W4 17-1800
TI2NA>KD4ESV

Jan 30 0122 W0>W3 1643 LU8DIO>CE3SAD 17-1800 ZS6WAS>W7GJ(eme -27db) 1830-44
OZ6ABA>W7GJ(eme) LX1FX>W7GJ(eme -26) TN5SN>W7GJ(-25db)

Jan 31 0104 V44KAI>PP5XX 12-1300 W1>W4 W9>W4(ms) W4>W8(ms) 13-1400 W4>W8(ms)
W4>W3(ms) VE6>W9(ms) C6AFP>W4 W0>W9(iono) 1634 KP4>W4 1706 W4>W3 2249 W4>W5(Es)
2255 W4,W5,W6>W4 23-2400 W5RP,WB5LLI>W4 K4TQR,W9VW,W5HN,W5GPM>XE3(Es)
XE2,W5>W4 WB0RMO>W4 V44KAI>PP5XX

Asia and the Pacific

Asia

Jan 5 1241 LX1FX>JR6EXN(-23db)

Jan 6 0703 46240(QF35)>DU7

Jan 7 0650 BV2NT>DU1GM

Jan 8 03-0400 45239.9,45250(NZ)>DU7 46172,46240(VK)>DU7

Jan 9 07-0800 BV2NT,VR2SIX,VR2UW>DU7/PA0HIP

Jan 10 0453 BV2NT>DU7/PA0HIP

Jan 18 0808 VK2IR>JA1JSC

Jan 22 0443 45250(ZL)>DU7 46240(VK)>DU7

Jan 27 0835 BV2NT>JA3

Australia, New Zealand and Pacific

The southern hemisphere sporadic-E season was in full swing. What follows below, though copious, is nevertheless incomplete. This is because the maximum number of entries for any one day that can be downloaded from the VK logger website is 100 – and on many days there were well over that number. The missing entries mostly related to times towards the end of the UTC day – i.e local mornings. However, we have enough to gain a reasonably clear picture of the month's activities.

The detailed listing below excludes the relatively small number of 'local' contacts reported, to concentrate on those in excess of 300km, some of which would be by tropo, with the likelihood that Es was the agenda increasing very roughly with the distance involved, but it is impossible on the information to hand to distinguish definitively between the two modes. The great bulk of reports, however, were for contacts over more than 1000km. As in December, reports of reception at ranges exceeding the conventional boundary for single-hop propagation were numerous. Where this is the case the distance is indicated, thanks to the distance automatically generated by the VK logger; F2 and tep may reasonably be ruled out, so although on occasion there may have been tropo assistance, it is hard to see how the propagation mode can be anything but Es. There is nothing surprising except that the frequency of these multihop occurrences appears to be much greater than one would have expected. Some appear to require a third hop, such as A35 to VK5, A35 to VK6 and VK5 to ZL3 in the listing for the 1st. DU7/PA0HIP worked into several VK states on the 7th, at ranges exceeding 5000 or, in some cases, 6000km. There were several reports of reception of TV from China, Siberia and south-east Asia at even greater ranges. These may well have involved a mix of modes. There was one report of VK amateur signals into Japan.

Jan 1 00-0100 A35RK>VK7,VK5(4851km) ZL2>VK3(2524km),VK7
VK6>A35RK(6916km),VK4(3745km),VK2(3744km),VK3(4277km) VK2>VK5,VK7 50750(RE79)>VK7
57250(PF96)>VK6 FK8SIX>VK7(1915km) VK5RBV>ZL2(3159km) VK4RTL>ZL2(3426km)
VK4,VK7,VK6>VK5 0130 A35RK>VK6 VK7RST>VK4 VK6>ZL3(5044km) FK8SIX>A35(4070km) 01-
0200 A35>VK7(4190km),VK4(4070km),VK6(6990km) VK7>VK3 VK4>VK5 VK3RMH>VK4
ZL2>VK3(2551km)

Jan 2 00-0100 VK5,VK4RTL,VK2>VK3 ZL3>VK3(2645km) VK7>VK5 VK4RGG>VK6(3636km)
VK2,VK3>VK4 ZL3SIX>A35(2914km) VK8RAS,VK7RAE,VK7RST,VK5>VK2
VK5RBV>ZL2(3159km),VK4 VK2RHV>A35(4375km) VK3RMH>VK4 ZL3>VK5(3014km)
A35>VK3(4646km) VK3>ZL2 FK8SIX>VK5(3059km) ZL3SIX>VK5(3040km) VK7RST,VK7RAE>VK5
ZL3>VK4(3626km) ZL3>VK6(5069km),(4730km) FK8SIX>VK3(2897km)(2630km)
VK8RAS(VK3)>VK5 VK2RSY>VK3 VK5>ZL2(3028km) 01-0200 FK8SIX>ZL2 VK4RTL>ZL2(3426km)
VK5>VK7 VK7,VK3>VK2 VK5RBV>A35(4855km) VK5>VK4,VK3,VK2 VK4>VK3
VK7RST,VK7RAE,VK2RHV>VK5 VK5RBV>VK6 ZL1>VK3(2875km) 02-0300 FK8SIX>VK2 VK6>ZL2

VK5RBV>VK6 ZL2>VK5(3186km) ZL2>VK3(2510km) VK6>VK3(2758km),(2390km)
A35>VK3(4410km) VK6>ZL2(5263km) VK3RMH>VK1(437km),(643km) 0316 ZL4>VK2 incomplete

Jan 3 00-0100 VK5>VK1 VK8RAS>VK6,VK5 VK5RBV>ZL2(3159km) ZL1>VK3(3159km)
VK1,VK2>VK3 A35>ZL4(3116km) VK4RTL>VK5 VK2,VK6>VK4 VK8RAS>ZL2(4151km)
57260(QF23)>VK6 A35>VK2(3706km) 01-0200 VK4>VK6 VK5>A35(4888km)
FK8SIX>ZL2,A35,VK3(2897km) VK7RAE>A35(4403km),VK5 VK2RHV>A35(3680km)
VK7RST>A35(4399km) VK5RBV>A35(4855km),ZL2(3159km) VK3RMH>VK5 A35>ZL3(2902km)
VK4>VK6(3387km) VK8RAS>VK4 A35>VK7(4410km) ZL2>VK3(2523km),VK2 VK4RGG>VK3
64162(QE37)>VK2 02-0300 ZL3SIX>A35(2914km) FK8SIX>A35,ZL2 VK7RST>A35(4399km)
VK2RSY>VK6(3192km) VK6>VK3,ZL2(5271km) VK3RMH>VK6(2651km) VK6>A35(6990km)
VK2RHV>VK6(2651km) VK5>ZL2(3159km) FK8SIX>VK6(4995km) 03-0400 ZL2>VK4(3678km)
VK6>A35(6917km) A35>VK7(4419km) VK2>ZL4 VK5VF>VK7 VK7RAE>VK1
VK6>VK5,VK2(3146km) 55250(RE79)>VK6(5367km) A35>VK4(3433km) VK3RMV>VK7 VK7>VK3
VK6>VK2(3211km) 94-0500 VK6>ZL2(5158km) VK2>VK7 VK6>VK2(3332km) VK6>VK7(2978km)
VK2RHV>ZL2 VK5RBV>VK7,VK6 VK4>ZL2(3431km) 05-0600 VK2>ZL2,ZL3 VK6RSX>VK6
VK6RBU>VK5

Jan 4 00-0100 VK4>ZL3(3865km) VK4RGG>VK3 VK6>ZL3(4974km) VK8RAS>VK3,ZL2(4151km)
VK8>VK2(3167km) VK5RBV>ZL2(3159km) FK8SIX>ZL2 VK8RAS>VK5,VK3 VK2RHV>ZL2
VK4RGG>VK5 VK8>ZL3(5258km) VK8VF>ZL2(5186km) VK5>VK2 VK8>ZL3(5264km)
VK8RAS>A35(5344km) VK4RGG>A35(3400km) VK8>VK2(2932km) FK8SIX>A35,VK6(4995km)
VK2RHV>A35(3680km) VK8>VK2(2912km) VK2RSY>A35(4375km) VK3RMH>A35(4375km)
VK5RBV>A35(4855km) VK3>VK4 VK4>A35(3938km) VK4>ZL3(3632km),ZL2 VK3>VK3(494km) 01-
0200 A35>VK5(4881km) VK8>VK3(3003km) VK6>VK5 VK8RAS>VK5 FK8SIX>VK5(3078km)
VK8RGG>VK5 record incomplete 02-0300 FK8SIX>VK3,VK6 A35RK>VK3,VK6 VK8VF>VK3
VK2>VK6 0733 FK8SIX>VK3(8 hrs) 1010 VK2>VK4

Jan 5 00-0100 50925(ZL)>VK4 VK8VF>ZL2(5186km) ZL1>VK4(2607km) VK3>VK5
ZL4>VK5(2914km) FK8SIX>VK3(2665km) 01-0200 VK8RAS>A35(5344km) VK8>ZL3(5270km)
ZL3SIX>A35(2914km) VK4RGG>A35(3400km),VK7 FK8SIX>A35,VK7(2899km)
VK8VF>A35(5896km) ZL2>VK3(2584km) ZL2>VK5(3145km) VK4RGG>VK4 VK8RAS>ZL2(4151km)
VK3>VK7 55250(AH45)>ZL2 VK7RST>A35(4399km) VK8>VK4 FK8SIX>ZL4(2647km),VK4
VK4>ZL2(3658km) 02-0300 FK8SIX>VK4 A35>VK4(4241km),(3421km)
VK8RAS,ZL3SIX.VK3RMH(738km)>VK2 ZL2>ZL3(561km) A35>VK4(3938km) VK4>ZL4(3036km)
A35>VK2(3706km) VK8VF>ZL2(5186km) VK4RGG>VK4(755km) 02-0300 ZL2>ZL3(561km)
48239.6(OJ03)>ZL2(8818km) A35>VK4(3938km) VK4>ZL4(3036km) A35>VK2(3706km)
VK4RGG>VK4(755km) 03-0400 ZL3SIX>VK4(3173km) VK8RAS>VK3 VK8RAS>ZL3(4151km)
FK8SIX>ZL4(2647km) record incomplete 2207 ZL2>VK2

Jan 6 00-0100 VK2>VK3(929km) ZL3SIX>ZL2(519km)(sc) VK5RBV>ZL2(3159km) VK2RHV>ZL2
VK3>VK2 VK2>VK3(937km) VK8RAS>VK2(4151km) ZL3SIX>VK5(3170km) VK5>ZL2(3124km)
VK2>VK3(629km) VK2>VK3(632km) 01-0200 ZL2>VK3(2524km) ZL2>VK5(3124km)
VK5>ZL3(3071km) ZL1>VK5(3596km) ZL2>VK3(2798km) ZL3SIX>VK3(2630km) FK8SIX>VK4
ZL3SIX>VK4(3173km) 02-0300 VK8RAS,VK2>VK4 ZL3>VK3(2680km) VK8RAS>VK3
FK8SIX,VK2RHV>ZL2 VK5RBV>ZL2(3159km) VK4RGG,VK7RAE>ZL2 03-0400 VK8RAS>VK5
VK4>VK2(541km) FK8RAS>VK4 VK6>VK5 VK2>VK3(933km) VK2RHV,FK8SIX>ZL2 VK6RPH>VK5
VK4RGG>VK2 VK2>ZL2 VK5RBV>ZL2 VK7>VK2(989km) VK7>VK2 06-0700 67250(PF96)>VK6
VK2>VK7 VK2>VK2(426km) ZL2>VK4(3855km) 08-0900 VK2RHV>ZL2 09-1000 VK4RGG>ZL2 20-
2100 VK2RHV>ZL2 VK7RST>VK5 VK5RBV>VK7 ZL3SIX>VK7 21-2200 VK5>VK7 VK2,VK7>ZL4 23-
2400 ZL2MHF>VK3(2854km) VK3RMH>VK3 50750(RE78)>VK3(2827km) ZL1>VK3(3083km)
ZL3SIX>VK1 FK8SIX>VK2 ZL3SIX>VK3(2630km) ZL3SIX>VK2

Jan 7 00-0100 ZL2>VK3 ZL4>VK3(2506km) ZL2>VK7(2441km) ZL2>VK7(2613km)
51670(QG53)>ZL2(2496km) VK2RHV>ZL2 01-0200 ZL2>VK7(2613km) VK2>ZL3 ZL2>VK7(2515km)
ZL3>VK7 0238 ZL3>VK3(2680km) 03-0400 ZL3>VK7 04-0500 VK2RHV>ZL2
51740(QF35)>ZL2(2382km) VK2>ZL2 ZL3>VK7 FK8SIX>VK4 05-0600 57240(QF42)>ZL3
57258(QF46)>ZL3(2342km) 57250(QF02)>ZL3(2783km) 57259(QF23)>ZL3 64260(QF69)>ZL3
64250(QF56)>ZL3 ZL3>VK7 VK2RHV>ZL2 06-0700 ZL3>VK7 FK8SIX>VK4 VK5RBV>ZL2(3159km)
51740(QF35)>ZL2 VK2>ZL3 07-0800 VK2>ZL3 0836 FK8SIX>ZL2 09-1000 VK2RHV>ZL2
VK5RBV>ZL2(3159km) 10-1100 ZK3SIX>VK2 VK2RHV>ZL2 51740(QG53)>ZL2(2383km)
VK5RBV>ZL2(3159km) 20-2100 50750(RE78)>VK3(2827km) VK2RHV>ZL2
51740(QF35)>ZL2(2382km) 21-2200 VK5RBV>VK4 FK8SIX>ZL2 ZL3SIX>ZL2(519km)
VK2RHV>ZL2 51740(QF35)>ZL2(2383km) ZL3SIX>VK7 VK3RMV>ZL3(2668km)
VK5RBV>ZL3(3049km) VK7RST>VK2 VK4>VK3 ZL3SIX>VK3(2630km) VK7RST>ZL3
VK4RGG,VK2RHV,VK2RSY>VK7 VK1>VK4 22-2300 VK1>VK7(861km) VK2>VK7
VK3RMH>VK3(2397km) VK4>VK3,VK7,VK2 VK4RGG>VK5 record incomplete

Jan 8 00-0100 VK2RSY>VK3(929km) VK4RGG>VK3 FK8SIX>VK3(2897km) VK4RGG>VK5
VK2RHV>VK4 FK8SIX>VK5(3059km),VK7(2847km) ZL3>VK4(3563km) VK2RSY>VK5 01-0200
VK2>VK3 FK8SIX>VK7(2847km) VK3RMH>VK7(591km) VK2RHV>VK7 VK3RMV>VK2(918km) 02-
0300 FK8SIX>VK4,VK3(2897km) VK2RHV,FK8SIX>ZL2 03-0400 VK3>VK4 VK4>VK2
VK5>ZL2(3168km) VK5RBV>ZL2(3159km) VK1>VK4 VK2>VK7 04-0500 VK4>VK3,VK8
VK3>VK2(802km) VK8>VK2(3302km) VK8RAS>ZL2(4151km) VK4RGG>VK5 49750(BY)>ZL2 05-
0600 VK3>VK8(3169km)
DU7/PA0HIP>VK3(5870km),VK5(5306km),VK7(6187km),(6190km),VK3(5771km),VK1(5687km),VK2(
5409km),VK5(5271km)VK8(2621km),VK3(5752km) VK4>VK3 VK3>VK8(3140km) 06-0700
DU7/PA0HIP>VK3(5819km),VK7(6187km),VK4(4096km),VK7(6139km) VK5>VK1(946km),VK2
VK4RGG>VK2 49750(BY OL78)>VK4(6273km) 49751(OK59)>VK3(7267km) VK4>VK3
VK8>VK7(3566km) 08-0900 VK4>VK2 VK5RBV>VK4 21-2200 VK5RBV>VK4 51672(QG53)>VK5 22-
2300 VK8RAS>VK5 23-2400 VK8RAS>VK3 VK5>VK3(413) VK3>VK4

Jan 9 00-0100 VK5RBV>VK6 57250(PF96)>VK6 FK8SIX>A35 VK4>VK7 VK6RBU>VK5
VK5RBV>VK2 VK6RPH>VK5 01-0200 VK6>VK5 57260(QG51)>VK6 VK8RAS>VK6,VK3,VK5
49750(UA0 PN49)>VK3(9748km) 49750.1(PN53 UA0)>VK3(9064km) 02-0300 49750(PN23
BY)>VK3(9159km) 49750(BY PN35)>VK3(9340km) 49750(BY OL78)>VK4(6273km) 49750.1(BY
OM92)>VK3(8134km) 49750(BY OM88)>VK3(8822km) 49750.2(BY OM68)>VK3(8950km)
VK8RAS>VK3 VK6RSX>VK6 VK6RSX>VK3(3089km) 03-0400 FK8SIX>A35 VK8RAS>VK5
VK5>VK3 VK5RBV>VK3(444km) VK5RBV>VK6 04-0500 VK6RBU>VK3(2415km)
VK6RPH>VK3(2449km) VK6RSX>VK6 05-0600 VK8RAS>VK4 VK5VF,VK5RBV>VK6 FK8SIX>ZL2
VK5RBV>VK2 record incomplete

Jan 10 00-0100 VK2>VK5(931km) FK8SIX>VK5(3022kmn) VK2,VK4,VK6>VK5 VK4RGG>VK3
VK4RGG>VK7 01-0200 VK5>VK3(638km) VK4RGG>VK7 FK9SIX>VK5(3040km) VK7,VK5>VK4
VK2>VK5(842km) VK7RAE>VK4 02-0300 VK4RGG>VK5 VK5RBV>VK2 03-0400 VK3RMV>VK4
VK4RGG>VK5 0435 FK8SIX>VK4 0501 VK6RSX>VK6 09-1000 VK2>VK7 VK4RGG>VK7
50750(RE78)>VK5(3228km) VK2>VK5 11-1200 51670(QG53)>VK5 VK4RGG>VK5 VK5RBV>VK4
FK8SIX>VK593059km) 12-1300 VK3RMH,VK5RBV>VK4 57260(QF23),57250(QF02),
57249.2(QF33),64260(PP95)>VK4 21-2200 57249.2(RE78)>VK7(2413km) VK3>VK7(508km) 2214
VK3RMH>VK4 2338 50740(RF72)>VK4(2413km)

Jan 11 01-0200 VK8RAS>VK2 VK4RGG>VK5 VK5>VK4 57260(PF96)>VK4 VK5RBV>VK2
VK8RAS>VK3 VK6RPH>VK6 02-0300 VK7RAE>VK6(2905km) FK8SIX>VK5(3022km),(3059km)
FK8SIX>VK2 VK3>VK4 VK6RPH>VK2(3235km) VK4>VK5 VK7RAE>VK6(3894km) VK8RAS>VK5
VK3RMV>VK4 VK5RBV>VK6 P29NB>VK3(3489km),(3473km) VK5RBV>VK4 VK2>VK3(961km)
VK6>VK7(2999km) VK6RPH>VK2(3471km) VK5>VK6 03-0400 P29NB>VK4 VK6>VK2(3246km)

VK6>VK3(2976km) VK5>VK2 VK2>VK7 VK6RPH>VK2(3288km) VK5>VK6
FK8SIX>VK3(2660km),VK4,VK6(5091km),VK6(5097km) VK8RAS>VK3 VK3RMH>VK6(2757km)
VK5RBV>VK4 04-0500 VK4,VK5>VK4 VK5RBV>VK6 VK4RGG>VK5 VK2>VK5
FK8HA>VK3(2679km) VK4ABP>VK4(971km) VK7>VK3(414km) FK8SIX>VK4 VK8RAS>VK5,VK3
FK8SIX>VK5(3056km) 05-0600 VK7>VK3(437km)
VK4,VK6RBU,VK2RSY,VK2RHV,VK3RMH,VK6RPH>VK5 FK8SIX>VK2,VK4 VK6,VK2>VK5
VK8RAS>VK6 FK8SIX>VK6(5091km) VK2>VK6(3293km) 06-0700 VK7RAE,VK6,VK1>VK5
FK8SIX>VK7,VK4 VK5RBV>VK7 VK8RAS>VK6 ZL3>VK5(3064km) 0700 VK4RGG>VK7
Record incomplete

Jan 12 00-0100 VJK4>VK3,VK5 01-0200 VK4,ZL3>VK7 2242 VK4>VK3,VK5 02-0300 VK7RAE>ZL3
VK8RAS>VK5 ZL3>VK7 VK8RAS>VK5 51672(QG53)>VK5 ZL4>VK5(2939km) ZL4>VK7
57250(PF96)>VK6 57260(QF23)>VK6 VK8RAS>VK5 ZL3>VK6(5053km) 03-0400 ZL4>VK4(3217km)
VK8RAS>VK2 VK2RHY>ZL2 07-0800 51670(QG53)>2496km) VK4RGG,VK2>ZL2 08-0900
VK4>ZL2(3041km) 09-1000 VK4>ZL2(2370km) 50750(RG37)>VK4 20-2100 51740(QF35)>ZL2
VK3RMH>VK7(435km) 22-2300 VK2RHV>ZL3 50760(RF73)>VK4 23-2400 ZL2>VK2
55239.6(RE73)(749km),55250(RE79 450km),55263(RE74 878km)>ZL3

Jan 13 0046 FK8SIX>VK4 01-0200 ZL2MHF>VK2(2392km) VK7RAE,VK3>VK4 FK8SIX>VK2 02-
0300 VK8RAS>VK6 VK3RMH,VK3RMV>VK4 VK4RGG>VK3 VK6RSX>VK6 VK4>VK7 VK5RBV>VK6
03-0400 VK7,FK8SIX,VK6RBU(3549km)>VK4 VK4>VK5(3536km) VK4>VK3,VK2 VK6>VK1(3076km)
VK5RBV,FK8SIX>VK2 04-0500 VK4>VK5,VK8 VK2RSY>VK6(3322km) VK2>VK5 FK8SIX>A35
VK8RAS>VK6 VK3RMH>VK6(2757km) 05-0600 VK4>VK7(2723km) VK2>VK5 VK8>VK4(2830km)
VK4>VK2(804km) VK6RBU,VK8RAS,VK6>VK5 FK8SIX>VK2 VK4,VK2>VK3 VK2>VK5
VK6>VK7(2874km) 06-0700 VK8>VK7(3558km),(3566km) VK6>VK7(2875km),(2952km),
(2891km),(2852km) VK8>VK3(3017km) 49750(BY OM88)>VK3(8822km) VK4>VK2 48239.6(HS
OK15)>VK4(6119km) 07-0800 FK8SIX>ZL2 0848 VK4>VK2 11-1200 FK8SIX>VK2 VK6RSX>VK6 22-
2300 FK8SIX>ZL2(2496km) VK8RAS>VK5

Jan 14 00-0100 ZL3>VK1,VK2 VK6>VK5 VK6RPH>VK3(2449km) VK6RBU>VK3(2414km) 01-0200
VK2RHV,VK2RSY>VK7 VK8RAS>VK5 64162(QE37)>VK2 57250(PF96)>VK6(2972km) 02-0300
FK8SIX>VK4 VK5>VK3(389km) VK8RAS>VK3 FK8SIX>A35 50740(RF72)>A35 VK5RBV>VK4
VK2>A35(3792km) VK8RAS>VK3 VK2RHV>A35(3680km) FK8SIX>A35 03-0400 VK4RGG>VK7
VK6>VK5 04-0500 VK8RAS>VK5 FK8SIX>VK2 55250(AH45)>VK2(4408km) VK6RSX>VK6
VK5>VK3(444km) VK6>VK4(3570km) FK8SIX>VK7(2791km) VK7>VK6(2905km) 05-0600 VK3>VK7
FK8SIX>VK7(2848km) 06-0700 FK8SIX>VK3(2660km) VK6RPH>VK5 FK8SIX>VK4 07-0800
FK8SIX>VK4 VK2RHV>ZL2 21-2200 VK3,VK2RHV,VK7RAE,VK3RMV,FK8SIX>VK4 22-2300
VK3>VK4 VK4>VK5 VK4>VK7 VK4>ZL2(3634km) VK2RHV,VK4RGG>ZL2 VK4>ZL4(3911km)
51670(QG53)>ZL2(2496km) 23-2400 VK4>ZL3(3822km) VK4>VK5,VK3,VK7(2651km) VK2>VK2
ZL4>VK2,VK4(3217km) FK8SIX>VK4

Jan 15 00-0100 VK7RAE,VK2RHV>ZL3 ZL3>VK7 VK4>VK4(690km),(855km) VK5RBV>VK6
VK4>VK7(2637km) FK8SIX>ZL2 VK8RAS>ZL2(4151km) VK2RHV>ZL2 VK4RGG>ZL2,VK5
FK8SIX>VK5(3059km) VK8RAS>VK4 01-0200 57260(QF23)>VK6(2649km) 57250(PF96)>VK6
VK4,VK5RBV,VK8RAS,VK3RMH>VK4 FK8SIX>ZL2 VK5>VK6 VK4>VK4(855km) VK8RAS>VK3
VK6>VK2(3093km) 02-0300 VK4>ZL4(2771km) VK5>VK2 VK6,VK8RAS>VK5 VK2>ZL3
VK6>VK4(3405km) VK3RMH>VK6(2757km) VK2RSY>VK6(3295km) VK5VF,VK5RBV>VK6
ZL4>VK4(2552km) 57250(PF96)>VK2 ZL3>VK6(5053km) VK4>ZL4(3877km) FK8SIX>ZL2 03-0400
ZL1,FK8SIX>A35 FK8SIX>VK4 VK7>ZL3 04-0500 ZL3SIX>A35(2914km) VK4RGG>A35(3400km)
ZL4>A35(3116km) FK8SIX>A35 05-0600 VK4RGG>A35(3400km),VK5 VK2,VK5RBV>VK4
FK8SIX>ZL2 08-0900 VK6RBU>VK5 VK2>ZL3 0956 VK8RAS>VK2 21-2200
VK7RAE,VK3RMH,VK1>VK4 22-2300 VK7RAE,VK3RMV,VK5RBV>VK4 FK8SIX>ZL2 23-2400
50740(RF72)>VK2(2496km) VK3>VK4 VK4>VK5 51760(QF58)>ZL2 51670(QG53)>ZL2(2496km)

Jan 16 00-0100 FK8SIX,VK2RHV,VK4RGG>ZL2 57250(PF96)>VK6 FK8SIX>VK4 01-0200 VK5RBV>VK6,A35(4855km) FK8SIX,VK2RHV(3680km),VK2RSY(3746km)>A35 A35>VK2(3889km) FK8SIX>VK1 02-0300 VK6>VK5 VK4RGG>VK2 FK8SIX>VK2 03-0400 VK3>VK4 VK6RPH>VK5 VK7RST,VK7RAE>VK4 VK2>VK5 04-0500 VK4,VK3>VK2 VK3RMH>VK4 VK4RGG>VK3 VK5>VK6 VK8RAS>VK5 FK8SIX>VK2 05-0600 VK4RGG,VK8RAS,FK8SIX>VK5 55250(AH35)(3090km),FK8SIX>ZL2 0743 VK2RHV>ZL2 VK4RGG>VK7 0950 VK2RHV>ZL2 19-2000 50740(RF72)>VK4(2413km) 55239.6(RF73)>VK4 ZL2MHF>VK4(2545km) FK8SIX>VK2 22-2300 VK5RBV>VK3(444km) 23-2400 VK2RHV>ZL2

Jan 17 00-0100 VK6RSX>VK6 01-0200 VK2>ZL2 51740(QF35)>ZL3(2331km) 02-0300 VK2>ZL3 VK5RBV>ZL2(3159km) 03-0400 VK2RHV>ZL2 FK8SIV>VK4 ZL3>VK5(3189km) 04-0500 FK8SIX>VK4 VK5>VK3(413km) ZL3>VK3(2680km) 05-0600 VK4>VK3,VK2 VK8RAS>VK4 49750(BY)>VK3 0615 VK3>VK3(438km) 07-0800 FK8SIX,VK2>VK4 FK8SIX>VK2 VK4>VK3 08-0900 VK4>VK3 VK3>ZL2(2610km) 09-1000 VK5RBV>ZL2(3159km) VK4RGG>VK3 11-1200 VK2>VK4 20-2100 VK2RHV>ZL3 FK8SIX,50760(RF73)>VK4 51740(RF73)>VK4 51740(QF35) 21-2200 ZL3SIX>VK4(3007km) VK2RHV>ZL2(2150km) VK3>ZL3(3290km) VK5>VK3 VK3RMH>VK3 FK8SIX,ZL3SIX>ZL2 ZL3SIX>A35(2914km) 22-2300 VK2>VK4 VK4>ZL4(3403km) 23-2400 VK4>VK2 VK4>ZL2(3633km)

Jan 18 00-0100 VK3>ZL4 FK8SIX>VK4 51670(QG53)>ZL2(2496km) 57250(PF96)>VK6 VK3,VK4>ZL3 VK2,VK8RAS>VK4 01-0200 VK6RBU>VK5 ZL2>VK3(2736km) ZL3>VK5(3014km) ZL3>VK3 VK8>VK2(3138km) VK6>VK5 ZL3SIX>A35(2914km) VK5RBV>VK4 VK6>VK2(3096km) VK8RAS,FK8SIX,VK2>VK4 VK4>ZL1(3488km) VK7>VK2 VK5>VK8 02-0300 VK8>VK5 VK3RMV>ZL1(3017km) VK2>VK7(800km) ZL3SIX>A35(2914km) FK8SIX>A35 51740(QF35)>VK4 VK4>ZL2(2532km) VK2>ZL4 VK3>ZL1(2509km) VK5RBV,VK2RHV,VK2RSY>VK4 VK5RBV,VK5VF>VK2 VK7>VK4(2637km) VK8>VK5,ZL3(5261km) 03-0400 VK1>VK7 VK4>VK7(2520km) VK2>VK3 VK7>VK4(2628km) 04-0500 VK2>VK7 VK5RBV>VK4 VK7RST>VK4(2817km) ZL1>VK5(3207km) A35>ZL3(2885km) VK3>VK1(379km) VK7>VK1(703km) 55250(AH45)>ZL3(3611km) VK3>VK2(416km) VK4>VK7(2833km) ZL1>VK5(3377km) 51657(QG53)>VK7 05-0600 51750>VK7 VK7RST>VK1(874km) VK1>VK3(379km) VK2RHV,VK2RSY>VK7 06-0700 VK2>ZL3 FK8SIX>VK4 ZL2MHF>VK4(3304km) 50750>VK3(2827km) 07-0800 ZL2MHF>VK3(2853km) 55250(RE79)>VK3(2926km) 0819 FK8SIX>ZL2 09-1000 FK8SIX>VK2 51672(QG53)>VK2(400km) 2128 FK8SIX>VK4

Jan 19 00-0100 VK4>VK3 VK5RBV>VK1 VK4RGG>VK7 VK2>VK5 02-0300 FK8SIX>VK4,VK1 VK4>VK2 03-0400 ZL3SIX>VK4(3173km) VK7RAE,FK8SIX>VK4 57250(QH40)>VK2 VK5RBV>ZL3(3049km) VK7RAE,VK2RHV>ZL3 FK8SIX>VK5(3182km),VK3(2897km) VK4RGG>ZL3(2430km) VK4>VK2,VK3 ZL4>ZL1 ZL3SIX>ZL1(771km) 04-0500 VK4>VK2,VK7 55250(RE79)>VK2 VK4>VK5 06-0700 FK8SIX>VK2 08-0900 VK7>VK5 VK2RHV>ZL309-1000 VK7>VK5 FK8SIX>VK4 VK3>VK5 1944 VK2RHV>ZL2 20-2100 VK2RHV>ZL2 21-2200 FK8SIX,VK2>ZL2 22-2300 ZL2>VK5(3280km) VK2>ZL4,ZL2(2346km) 50740(RF73)>VK4 50750(RE78)>VK3(2843km) 23-2400 50750(RE78)>VK2 ZL3>VK3(2680km) ZL3>VK2 55250(RE79)>VK3(2926km) VK7RST>VK4 VK4>VK7,VK3 ZL2>VK2

Jan 20 00-0100 VK7RAE>VK4 VK2>ZL4 57250(PF96)>VK657260(QF23)>VK6(2649km) VK7RST,VK7RAE>VK2 VK4RGG>VK3 01-0200 VK7>VK2,VK4 FK8SIX>VK5(3059km) VK4>VK3 VK3RMH>VK2 02-0300 VK2>VK5,VK7 VK5RBV>ZL3(3049km)ZL3>VK7 VK2RHV>ZL3 03-0400 VK5RBV>VK6 VK3>VK2 VK2RHV>VK7 04-0500 VK7RAE,VK2RHV,VK5RBV(3049km), VK3RMV(2668km) >ZL3 VK4RGG,VK7,VK2RHV,VK8RAS,VK8VF>VK4 ZL3>VK6(5034km) VK7>VK2 ZL2>VK5(3059km) ZL3>VK3(2602km) 05-0600 ZL2MHF>VK3(2854km) FK8SIX>ZL2 ZL3>VK3(2407km) ZL4>VK1,VK3(2636km) VK7RAE>VK3(529km) ZL3SIX>VK3(2680km) VK8RAS>VK2,VK3,VK4 55260(RE54)>VK3(2517km) 60760(RE54)>VK3(2517km) 06-0700

VK7RST>VK1 VK8RAS>VK4 ZL4>VK7 VK7RST>VK1 VK4RGG>ZL2 07-0800 VK5RBV>ZL2
VK7RST>VK1 08-0900 VK2RHV,VK2RSY,FK8SIX(2899km)>VK7 ZL4>VK5(3052km) VK2>VK7
VK5>ZL3(389km) VK3>ZL4(2350km) 09-1000 VK7>VK2 VK5RBV>VK4 VK4>VK3 1323
VK8RAS>VK3 1427 VK7RAE>VK5 21-2200 VK2RHV>ZL2 2247 ZL3>VK3(2680km) VK2RHV>ZL3

Jan 21 00-0100 VK2>VK5 VK4RGG>VK6(3636km) VK5RBV>VK6 VK4>VK2 50750(RF73)>VK4
VK6>VK7(2963km) VK2>VK6(3264km) VK4>VK5 50740(RE78)>VK7(2529km) 01-0200
VK3RMH>VK6(2757km) VK3>VK4 VK6>VK2(3317km) VK7RAE>VK5 VK8RAS>VK6
VK6,VK7RST>VK5 VK4>VK7,VK5 VK6RPH>VK3(2712km) VK2RHV>VK5 VK8>VK3 03-0400
VK8RAS>VK3 VK2>VK5 ZL2>VK2 VK2>VK6(3221km) VK5RBV>VK6 04-0500 VK5RBV>VK6,VK2
VK7>VK4 VK8RAS>VK2 VK4RGG>VK5 VK2,VK6RSX>VK6 05-0600 VK7RAE,VK6RSX>VK5
VK4>VK7 VK5RBV>VK6 VK4RGG>VK5 VK2>ZL3 ZL2>VK5(3239km) 06-0700
VK6RPH>VK3(2449km) VK3RMH,VK7RST>VK4 VK4>VK3 50750(RE78)>VK3(2843km)
VK4,VK7RST(578km)>VK3 VK6RSX>VK6 VK4RGG,VK2RSY,VK2RHV>VK3
VK2RHV,VK5RBV,VK7RAE>ZL2 VK5RBV(3159km)>ZL3(3049km) VK4RGG>VK7 ZL3SIX>VK1
VK6RPH>ZL2(5239km) VK5>VK2 ZL1>VK3(2917km) VK6>ZL3(4968km) 07-0800 ZL2>VK3(2850km)
ZL3>VK5(2906km) 62239.6(RF72)>VK3(2895km) VK2>VK5 data incomplete

Jan 22 00-0100 VK6>VK5 VK4>VK7,VK3 VK8RAS>VK5 01-0200 VK4>VK3 VK4RGG>VK7
VK6>VK2(3144km) VK6>VK6,VK5 VK8RAS,VK2RHV,VK2RSY>VK3 VK2RHV>VK5 02-0300
VK2>VK3 VK2RHV>VK7 VK3RMH>A35(4375km) VK7RST,VK3RMH,VK7RAE>VK4
VK8>VK7(3573km) VK5RBV>VK7,VK3 VK2>VK7 FK8SIX>A35 03-0400 VK7>VK1 VK5RBV>VK6
VK1>VK3 A35>VK3(4646km) VK5RBV>VK3,VK6 VK6>VK3 04-0500 57250(PF96)>VK6 VK7>VK4
05-0600 ZL3SIX>VK3(2389km) VK6>VK5 VK6RBU>VK3 ZL3SIX>VK3(2680km)
55260.4(RE54)>VK3(2517km) 62239.6(RE66)>VK3(2650km) 67740(RE66)>VK3(2680km)
62260.4(RE43)>VK3(2417km) VK7RAE>VK6(2874km) VK7,VK4>VK1 FK8SIX>VK4 08-0900
FK8SIX,VK2RHV>ZL2 11-1200 57250(QF33)>VK4 64260(QF35)>VK4 51740(QF35)>ZL2(2385km)
20-2100 ZL3SIX>VK3 ZL1>ZL3 VK5RBV>ZL3(3049km) VK3RMH>ZL3(2397km) VK7RST>ZL3 21-
2200 VK5>ZL3(3044km) 50750(RE78)>VK3 51671(QG53)>VK3 ZL2SIX>VK3(2441km)
ZL3>VK5(3018km) FK8SIX,VK8RAS>VK4 22-2300 ZL3SIX>VK5(3170km) ZL3>VK6 23-2400
ZL3>VK6(5053km)

Jan 23 00-0100 VK6>ZL3(5049km) 01-0200 VK2RHV,VK1>VK5 08-0900 VK5RBV>VK3 19-2000
VK2RHV,FK8SIX>ZL2 21-2200 FK8SIX>A35 VK4RGG>A35(3400km) ZL4>VK7 A35>VK4(3433km)
VK4>VK3,VK2 50750(RE78)>VK4(2529km) VK4>A35(3426km) ZL2>VK4(2365km) 22-2300
ZL2>VK4(3470km) VK2>ZL2 VK5RBV>VK4 VK4>ZL1(2448km) VK8RAS>ZL2(4251km)
FK8SIX>VK2 VK8RAS>ZL3(4151km) VK2RSY>ZL3 VK5RBV>VK6 23-2400 VK8RAS>VK6
VK4RGG>VK6(3636km) VK4>VK3,VK5 VK8RAS>VK5 VK4>VK3,VK6(3670km)

Jan 24 00-0100 VK8RAS>VK6 VK4>VK5 VK5RBV>ZL2 VK6>VK6 VK5RBV>VK4 0131
ZL3SIX>A35(2914km) 02-0300 FK8SIX>A35 VK4>VK3 03-0400 VK7RAE>VK4
FK8SIX>VK5(3078km),VK2,VK3(2660km),VK4 VK4RGG>VK3 VK3RMV,VK7RAE>VK4
A35>VK3(4645km) 04-0500 VK7RAE>VK4 VK4RGG,VK7RAE>VK5 VK4,VK8RAS>VK3
VK2RHV,VK2RSY,VK5RBV>VK4 05-0600 VK5RBV>VK4 ~~FK8GX~~>ZL1,VK5
VK4RGG>~~FK8GX~~ VK8SIX>VK3 VK3RMH>VK6(2757km) FK8SIX>VK4 VK8RAS>VK2 96-0700
VK6>VK3,VK5 VK2>VK6(3263km) VK4>VK3,VK2 VK6RPH>VK2(3268km) 57250(PF96)>VK6
VK7RAE,VK4>VK5 07-0800 VK6>VK2(3096km) VK3>VK6(2986km) VK6>VK6 50740(RF72)>VK4
50750(RE78)>VK4 VK4,VK6(2589km)>VK3 VK2>VK7 VK6>VK2(3167km) VK8RAS>VK3
VK7RAE>VK6(2905km) VK4RGG>VK6(3636km) VK5RBV>VK6
09-1000 VK6RPH,VK6RSX,VK6RBU,VK8RAS, VK4RGG,FK8SIX,VK8VF,VK5>VK3 data incomplete

Jan 25 01-0200 50740(RF72)>A35 VK6RSX>VK6 VK5RBV>VK1 VK8RAS,FK8SIX>VK4 VK8>VK5
02-0300 FK8SIX>VK4 VK4RGG>VK4 03-0400 FK8SIX>VK4,VK2 51672>VK2 07-0800 VK5>VK2

64252(QF43)>VK4 57260(QF23)>VK3 08-0900 VK5RBV>ZL2 VK2>VK5 50740(RF72)>VK4
VK4>ZL2(2370km) 20-2100 VK5RBV>VK4 55239.6(RF73)>VK4 51675(QG53)>ZL3(2633km) 21-
2200 VK8RAS>VK4 VK4>VK3 VK6RBU>VK4(3546km) VK2RHV>ZL2 VK6RPH>VK4(3511km)
FK8SIX>VK5 VK5RBV>VK4 22-2300 VK4>VK3 FK8SIX>VK2 VK6RPH>VK4(3587km)
VK8RAS>VK2,ZL3(4151km),VK3,VK5,VK6 VK4RGG>VK5 ZL3>VK4(2503km) 23-2400
ZL3SIX>VK4(2511km) VK4>VK3 VK7RAE>VK4 VK4>VK5 50740(RF72)>VK4(2416km)
ZL3SIX>A35(2914km) FK8SIX>A35 VK3>VK4 VK4>A35(3426km)

Jan 26 00-0100 A35>VK2(3842km),VK4(4533km) FK8SIX>VK4 VK5RBV>VK4 ZL3>A35(2885km)
VK8RAS>VK3 FK8SIX>A35,VK5(3059km) 59750(A45)>VK2 VK2>VK1 VK6RSX>VK6 VK5>VK4
VK4>ZL2(2524km) VK5RBV>A35(4855km) 01-0200 VK2>A35(3806km) VK4RGG>VK3,VK5
ZL3SIX>A35(2914km) FK8SIX>A35,VK4 VK2RHV(3680km).VK2RSY(3746km)>A35 VK5RBV>VK1
FK8SIX>VK4 VK2>VK5 02-0300 VK3RMH>A35 VK4RGG,VK2>VK3 FK8SIX>VK3(2897km)
VK2>VK7 0347 57250.8(QF46)>VK4 0450 VK4>VK2 05-0600 VK4>VK2,VK3,VK5 06-0700
VK5RBV>VK2,VK4 VK3RMH,VK3RMV,VK7RST,VK7RAE>VK4 FK8SIX,VK3>VK2
50750(RE78)>VK4 VK7RST>VK3 FK8SIX>VK5,VK4 Z L2MHF>ZL3 ZL3SIX>VK4(2510km) VK2>VK7
VK8RAS>VK3 07-0800 VK4RGG>VK3 VK4>VK2,VK7,ZL3(2696km) VK2,VK1>VK7 VK8RAS>VK3
50750(RE78)>VK4

Jan 27 02-0300 VK5RBV>VK2 55260.4(RE54)>VK2 VK2>ZL4 0817 VK7RAE>ZL3 19-2000 VK3>VK7
VK2RHV>ZL2 51740(QF35)>ZL2(2383km) FK8SIX>ZL2 51670(QG53)>ZL2 2057 FK8SIX>ZL2 21-
2200 FK8SIX>VK1 22-2300 VK4RGG>ZL2 50057.7(QG62)>ZL2 VK2RSY,VK7RAE,VK3RMH>VK4
23-2400 FK8SIX>ZL2 VK7RAE,VK4RGG>VK2 VK3RMH>VK6(2757km) VK5RBV>VK4
VK6RPH>VK3(2740km) 57250(PF96)>VK6

Jan 28 00-0100 VK3>VK6(2749km) VK6RPH>VK5 57250(QF23)>VK6 VK4RGG>VK3 VK5RBV>VK2
VK8RAS>VK3 VK2>VK6 VK6RPH>VK1(3066km) VK3RMH,VK7RST>VK4 55240(RF73)>VK4 01-
0200 VK6>VK1(2978km) VK2>VK5 VK6RPH>VK3(2674m) VK1>VK6(3097km) VK5RBV>VK6 03-
0400 51740(QF35)>VK6(2993km) VK2RHV>ZL3 07-0800 51740(QF35)>ZL2(2383) 08-0900
49750(BY OL88)>VK4(6159km) 09-1000 VK2RHV,51740(QF35)>ZL2 VK2>ZL3 ZL2>VK1 2055
VK2RHV>ZL2 21-2200 ZL2MHF>VK4(3029km) FK8SIX>ZL2 22-2300 VK2RHV>VK4
51670(QG53)>ZL2(2496km) VK4RGG>ZL2 FK8SIX>VK4,ZL3 VK1>VK4 2330 FK8SIX>VK4

Jan 29 00-0100 VK4>VK4(676km,755km) 01-0200 VK8RAS,VK6RSX>VK6 VK6RBU>VK4(3546km)
VK6RPH>VK4(3511km) 02-0300 VK4RTL>VK5 VK6RSX>VK6 49750(OM34)>VK6(7426km) 06-0700
57250(PF96)>VK6 50750(RE78)>VK4(2529km) 08-0900 VK2RHV>ZL2 VK4RGG,FK8SIX>ZL2 19-
2000 VK4RGG>ZL2 20-2100 51740(QF35)>ZL3(2332km) VK4RGG>VK7 51672(QG53)>VK5 21-
2200 VK4>ZL3(3009km) VK7RAE,VK4,FK8SIX>VK5 ZL3>VK7,VK5(3018km) 50760(RE78)>VK4
VK7,VK5,VK3,VK6(3529km)>VK4 22-2300 VK6,VK7(2366km)>VK4 VK8RAS,FK8SIX>VK4
VK2RHV,VK8RAS,FK8SIX(3182km)>VK5 VK8>ZL3(5261km) VK8>ZL3(5261km) VK8RAS>VK3 23-
2400 VK8>VK4(2837km) VK1,VK5RBV,FK8SIX>VK4 VK4,FK8SIX(2780km)>VK7 VK8>VK2(3122km)
50760(RE78)>VK4 VK2>VK2

Jan 30 00-0100 50750(RE78)>VK3 VK8RAS>ZL3(4151km) VK8RAS>VK6,VK4 VK4>VK2,VK7
ZL1>VK7(2450km) 01-0200 ZL3SIX>VK4(3173km) VK4>VK7 VK6RSX>VK6 VK4RGG>VK3
49750(OM34)>VK6(7442km) 02-0300 VK4>VK3 ZL3SIX>VK4(3173km) VK4>ZL4(3217km) 03-0400
VK8VF>VK2(3122km) VK4>VK5,VK1 VK8RAS,VK6RSX>VK4 0458 VK4RGG>VK5 05-0600
VK3RMH>VK4 VK8VF>VK2(3154km) VK5RBV>VK4 06-0700 VK8RAS>VK4,VK6 VK5>VK4
49750(OL88)>VK4(6159km) 07-0800 VK8RAS>VK4 VK8VF>VK2 0958 VK8RAS>VK4 1141
VK8RAS>VK6 21-2200 VK7,VK5RBV,VJ4ABP,ZL3>VK2 22-2300 ZL3>VK2 ZL2MHF>VK4(2546km)
50760(RF73)>VK4 ZL3SIX>VK4 23-2400 ZL1>VK4(RF64) ZL2>VK4(2365km),VK2
VK5RBV(3159km),VK2RHV>ZL2 51740(QF35)>ZL2 51670(QG53)>ZL2(2496km)

55239.6(RF79)>VK4 VK4RGG>VK3 ZL2MHF>VK4(2546km) VK7>VK4
ZL1,VK2,VK7RAE,VK7RST>VK4

Jan 31 00-0100 VK7>VK3(585km) VK4>VK7,VK3,VK1 VK1>VK7(bs) 57250(PF96),VK5RBV>VK6
VK2RHV>VK6(3250km) VK6>VK2 01-0200 VK5RBV>ZL2(3159km) VK2RHV>ZL2
VK8RAS>ZL2(4151km) ZL3SIX>ZL2(519km) VK2RSY>VK6(3194km) VK7>VK4 50750(RE43)>VK7
02-0300 VK6>VK6 ZL3,ZL4>VK7 03-0400 VK6>VK5 VK3RMH>VK6(2653km) VK5RBV>VK6 0407
VK2>VK3 06-0700 VK4RGG>VK7 VK3RMH,VK7RAE,VK7RST>VK4 07-0800 VK6RSX>VK6(sc/ms)
VK3RMH,VK7RST>VK4 08-0900 VK4RGG>VK3 VK7>VK4 09-1000 VK2RHV>ZL2 VK4>VK2 10-
1100 VK1>VK4 VK4>VK3 VK4RTL>VK2 50750(RE78)>VK4(2529km) 21-2200
50740(RF72)>VK4(2413km) 55239.6(RF73)>VK4 FK8SIX>ZL2 51670(QG53)>ZL2 VK4RGG>ZL2
ZL2>VK4(2365km) 22-2300 FK8SIX>VK4 ZL2>VK4(2365km) VK4>VK2 50760(RF64)>VK4 23-2400
VK5,VK3RMH>VK4

28MHz

January is never the best of months on Ten for UK operators, most particularly around solar minimum. In all, 21 'entities' were reported into the UK in the course of the month, of which only E4, TS7C and V5 were outside Europe. Much of the activity was concentrated in the contest weekends, which the few UK participants noted appeared to find very heavy going, with contacts scarce apart from relatively brief periods when continentals were workable due to sporadic-E or backscatter. In all, contacts were made (or beacons heard) on 18 days, but in most cases openings were brief and weak, with only the mornings and midday periods of the 11th and 12th producing strongish Es for a reasonable length of time. Even these were not the substantial openings that we are encouraged to think may happen in the post-Christmas period, and which the Americans certainly experienced at 50MHz this year.

Countries Heard/Worked from the UK

C3 DL EA EA6 EI E4 E7 F HA I IS0 IT LA OE OK SM TS7C V5 YO 5B 9A

That said, 28 different beacons were reported heard in the UK in the course of the month, compared with 27 in January 2008. The table below shows the number of days for each 3-hour time slot for which the beacon is known to have been heard in the UK. As is often the case, DK0TEN was among the most prominent (DL0IGI may have been silent for part of the month), followed by IW3FZQ, the most consistent of the Italian beacons even though supposedly running very low power. SK0CT was again heard more often than the other Scandinavians.

Beacons Reported Heard in the UK

Beacon	6-9	9-12	12-15	15-18	18-21	21-24		Beacon	6-9	9-12	12-15	15-18	18-21	21-24
C3OP		1	1					IQ1SP		1		1	1	1
CS5BTEN		1						I3GNQ		3		2	1	
DB0UM		2	1					IN3KLQ		2		1		
DK0TEN	1	7	2	1		1		IW3FZQ		5	1	1		
DL0IGI		1						IZ3LCJ		1		1		
DM0AAB				1	1			IY4M		2		1		
DM0ING		2	2	1				LA4TEN	1	1	1	1		
EA3TEN		1	3					LA5TEN			1	2		
EA4Q		2	2	1				OE3XAC		2	4			
F5ZUU		1	1					OK0EG	1	1				
F5ZWE		1	1					OK0EG		3	3	1	1	
IW0HK				1				SK0CT		4	2	2		
I1DFS				1				SK5AE		1				
I1M		1	1	1	1			5B4CY	1	1				

The table below shows the number of days in the month when there were reports of propagation between continents or within continents. Thus contacts between points in Oceania, still enjoying summer sporadic-E, were reported every day but two (the 27th and 28th, for no obvious reason), and over the relatively easy path into Asia on 17 days. These were the only routes that offered anything approaching consistency. There were contacts within Europe on all but four days, but this owed a lot to weak scatter modes, often of short duration, or fleeting contest QSOs. One would have been hard put to come across rag-chewing beyond local groundwave range. The only reasonably consistent intercontinental openings were with Africa. Similarly, openings within the North/Central America region were reported every day but the 8th, South America was worked on 15 days. There was great activity during the ARRL contest, but none of it is known to have reached Europe, Africa or Asia. There was some seasonal sporadic-E working within South America, but little evidence of that within southern Africa.

Daily Reliability of Intercontinental and Intracontinental Working

	OC	AS	EU	AF	NA	SA
OC	29	17	2	0	6	1
AS	17	7	9	1	0	0
EU	2	9	27	22	0	2
AF	0	1	22	0	0	3
NA	6	0	0	0	30	15
SA	1	0	2	3	15	16

Where the preceding table sets out the *number* of days when openings were reported, the one below is in the percentage customary in this section, with the daily figures broken down into mornings (before 1130LT), noon (1130-1430) afternoon (1430-1700) and evening (after 1700).

Intercontinental Reliability by Time of Day

	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	73	71	58	52	00	23	35	23	00	00	03	03	00	00	00	00	10	03	00	06	00	03	00	00
AS	19	39	23	06	13	06	06	03	10	16	06	13	00	03	00	00	00	00	00	00	00	00	00	00
EU	06	00	00	00	16	13	06	06	77	74	55	48	19	42	06	23	00	00	00	00	00	00	03	03
AF	00	00	00	00	00	00	00	00	13	06	10	23	00	00	00	00	00	00	00	00	00	00	00	10
NA	00	00	03	16	00	00	00	00	00	00	00	00	00	00	00	00	16	20	19	25	10	13	23	06
SA	00	00	00	03	00	00	00	00	03	03	00	00	00	00	10	00	06	13	23	23	10	06	26	29

Compilation and commentary G3USF. Thanks to G2ADR, G0IHF, SV1DH