

Radio Weather Summary for January 2010

A year since the end of cycle 23 December 1999 was the first month when signs of the new cycle became substantially apparent. This month brought confirmation that cycle 24 was under way, albeit slowly and modestly. The Sun was spotted every day but one and the sunspot number rose above recent levels to 41 on the 13th. The solar flux began and ended at 75 but, in between, rose into the 90s on three days, averaging 00 over the month. The 90-day average gained 3 points from 74 to 77. The X-ray flux, which for so long in 2009 was returned as A0 – below the minimum reporting threshold – was now above it every day and into the B range on no fewer than 10 days.

	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
SS N	16	22	20	15	13	12	15	14	20	25	35	35	41	35	26	24	16	14	0	14	17	30	40	32	23	28	15	13	12	25	14
ISFlux	75	78	76	73	77	77	78	77	82	84	89	93	91	90	85	84	83	82	84	82	83	82	85	85	81	77	78	76	73	75	75
XFlux	A4.7	A5.8	A3.9	A3.0	A3.4	A3.3	A4.1	A3.1	A6.3	A7.5	B1.0	B1.1	A9.0	B1.0	B1.4	B1.1	B1.9	B3.3	B5.0	B1.5	A8.4	A8.0	A7.8	A7.1	A7.1	A6.3	A6.2	A2.6	A2.4	A3.3	

Provisional Sunspot numbers, solar flux and X-ray flux January 2010

The month brought a substantial crop of solar flares, most of them small in the C-class range, but also including four M-class flares, the first in cycle 24. The largest was an M3.4 on the 20th.

Jan			Jan		Jan	
2	C1.0 C2.6 C2.0		12	C1.1	19	C5.2 C4.9 C1.0 M2.3 C2.3 C5.0 M1.7 C4 C7
3	C2.0		15	C1.3	20	9C 4M
4	C1.3		17	C2.1	21	C4.9 C2.3 C1.0
9	C1.0		18	C1.9		

Solar Flares in January 2010

However, the most important factor in day-to-day variance remains geomagnetic levels, which were almost unremittingly low or very low. The table below shows the daily total of the 8 3-hour K reports for the three British observatories together with the daily planetary Ap figure. As it shows, there was just one day when the Ap reached double figures, the 20th, and only 7 of the 744 3-hour periods from the three observatories combined were rated at K4. There were no reports of K5 or higher. For most of the month the interplanetary magnetic field varied no more than between +/- 1.6 nanoTeslas. The 20th (-17/+15) was the exception. Particle densities were also low, though 48 per cubic centimetre was reported on the 20th. Coronal hole effects were noted on the 11th-14th and 20th-21st. Mostly below average, solar wind speeds ranged between 270k/sec on several days and 596km/sec on the 12th, impelled by a strong CME.

	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	0	0	4	0	0	0	0	1	0	2	6	4	9	4	7	1	0	0	0	12	3	3	7	7	3	5	1	5	0	6	4
ESK	1	1	5	1	1	1	0	1	0	4	9	5	13	8	9	0	0	2	2	15	7	6	7	7	4	5	2	6	2	9	6
HAR	0	0	4	0	0	0	0	1	0	2	7	4	9	4	7	1	0	1	0	12	3	3	7	7	3	5	1	4	0	6	4
Ap	1	0	3	2	1	1	1	1	1	2	6	3	6	4	3	1	1	3	1	14	4	2	4	4	3	3	2	3	2	4	3

Geomagnetic Levels at UK Observatories and Daily Planetary Ap Totals

50MHz

Propagation to and from Britain

Auroral

Jan. 19 1959 OZ7IGY/b>G4IGO(439 AuE)

Jan. 20 17-1800 OY6BEC/b(IP62)>GM8LFB(IO88 54a) GB3LER/b>GM8LFB(au/tr)

Sporadic-e

Unlike 2009, this year brought the UK a substantial post-Christmas bout of sporadic-E. Openings that can reasonably be attributed to Es occurred on at least ten days (compared with four a year previously) and, as the table below illustrates, at one time or other involved all the continent's main regions (though by no means every country). There was propagation to thirteen countries on the 19th and twelve the following day. In Jan all January 2009 seven countries were worked from the UK. This year there were 27, including G4IGO<>5B and, clearly a second hop and G4IGO<>SV2, which might well have done.

					OE				
					OZ	SP			
					LY	I			
					LA	F		LZ	5B
					ES	HA		LA	SP
					OY	OY		SV	YO
					OH	G	HA	EA6	EA
					SP	OE	S5	EA	YU
					SM	EA	HB	CT	DL
				I	OK	LX	LZ	YU	I
I				OH	EA	F	DL	OE	HA
EA	HB	UR	CT	DL	DL	HB	I	UR	HA
1	3	5	11	18	19	20	21	22	31

At the other end of the distance scale there were inter-G reports on the 20th, including the GB3MCB beacon being heard in the Shetland islands, almost certainly attributable to Es. (A GM<>PA contact on the 19th should probably also be added to the list.)

[illegible][illegible]

	SP	SV	S5	UR	YO	YU/9A	5B
UTC	19 20 31	10 22	21 22 31	5 22 31	22	22 31	31
06-09							
09-12	+ 1			7			
12-15	1	+		9			
15-18	+ 5	5	9 6 +	7	9	7 +	+
18-21	7		8				
21-24							

Some openings were quite focused geographically, such as one on the 1st, lasting about an hour, to Italy, and a similar one on the 18th. More unusually, on the 19th 50MHz was open for around nine hours to a broad range of countries and directions, making this – if memory serves correctly – one of the best winter seasons in recent years.

No contacts were reported before 0900UTC and none were for times after 2100. The period between 1500 and 1800 proved by far the most productive source of reports, though whether this reflects the time-distribution of propagation or whether it reflects operator activity is unclear. In the preceding table, as usual a '+' appears when signal strength was not given. Where a strength report appears this is the highest number for that particular 3-hour period.

Jan. 1 13-1400 **EA4UW**/b>G3XGS 16-1700 **IW3FZQ**>G7RAU(7)(Es) **I4**>G7RAU(9) **I5MXX**(3),**IQ4AD**(6)>G7RAU GB3BAA>**I5**(9) **I4**>G4HGI(Es) **I4**>MH0HMY(Es) **I4**>M0PNN(Es) G4DEZ>**I5,I7 I4**>G7RAU(Es)(9) **I0**>G7RAU(Es)(9) **I3**>G7RAU(Es) G3UUT>**I5**

Jan. 3 12-1300 **HB**>G3XGS(Es)

Jan. 5 10-1100 UR0DMW>G3VYF(7)

Jan. 11 0953 **CS5BLA**/b>G3VYF 10-1100 **CS5BCP**/b>G4BRK **OH1**>GM4WMM **OH3**>GM8LFB(59) 11-1200 **OH2**>GW8ASD **OH1**>G0PQO

Jan. 18 14-1500 GW3RBM>**DK1MAX GB3RAL**/b>DL(Es/jt) GB3MCB/b>**DL**(7) 15-1600 **I0ICR**/b>G0JHC(9) **IQ3AD**/b>G0JHV(7) **I0JX**/b>G0JHC(9) **IW0DAQ**/b>G0JHC(9) **IK5ZUL**/b>G0JHC(9) **IZ1EPM**/b>G0JHC(7) **I5**>MM0BSM **EB1**>G0JHC()

Jan. 19 11-1200 GB3LER>**DK2EA**(9),**DK1MAX**(9)GB3LER>**F1NUM**(6) GB3LER>**OK1RD**(9) GB3MCB>**SM7**(7) **SR9FHA**/b>GM8FLB 12-1300 GM8LFB>**SP3**(Es),**SP1,SR2FHM**(1) **OH3MF**>GM4ZMK(1) G3USR>**OH1**(9) G4MBN>**OH1**(7) **ES9**>G6GWX(2)(Es) **OY**>MU0FAL **OY**>G6GWX(Es)(9) 5A5K>GM4ZMK(5) 5A5K>GM8LFB(9) **OH6**>G3USR **SM6**>GN4ZMK(4) G4CPA>**OH3** G6GTO>**OH1**(7) **ES2**>GM4ZMK(5) G4MBN>**OH1**(9) G4DEZ>**OH1**(9) **ES2**>GM4WZL(9) GB3RAL>**OH1**(4) GB3RMK>**SM7**(Es) 13-1400 MM0AMW>**OH6** 15-1600 **SM0**>G0PQO **SM3**>G3VYF(Es)(9) 16-1700 GB3BAA/b>**OH8**(3) G3VYF>**OH8**(7) **ES6**>GM4ZMK>Es)(5) G7KHF>**OH6 OH2**>G4CPA 17-1800 **ES4,OH5RAC**/b>G4IGO **OH3**>G4FUF(9) **LA**>G4FUF G4DEZ>**SM0 ES4**>G4IGO(5) **G4DES**>SM7 G3USR>**SM0** GI4OWA>**DL**(Es)(9) **OH5RAC**>G3VYF(5)(Es) **ES6**>G3USR **LY0SIX**>G3VYF(Es)(6) **DL**>MM0AMW(Es) 18-1900 G4DEZ>**SK2**(Es) MM0AMW>**SK2**(Es) M1BTI>**SK2**(Es)(1) SA3>MM0JMK 19-2000 GB3LER>**DL**(5) **OH9SIX**>MM0AMW(5) **OZ**>GM4ZMK(7) **ES6**>GI4OWA(Es) MM0AMW>**OZ**(9) GB3RMK>**DL**(Es)(7) MM0AMW>**SM7 SK3SIX**>G4BRK(Es)(3) **OZ7IGY**>GM4ZMK(5) MM0AMW>**OZ**(9) GM4ZMK>**OZ**(7) GM4WJA>**SP6**(7) **OZ7IGY**>GI4OWA(Es)(7) G4IGO>**OZ** GM4LFB>**DL**(Es) MM0AMW>**SP1 LA**>G4IGO(7)(Es) MW0CPC>**OZ LY3W**>GM4ZMK(3) **SK3SIX**>G4IGO(7) G4BRK>**LA**(Es) MM5DWW>**DL**(Es)(9) 20-2100 GM8LFB>**DL**(Es) **LY2**>GM4ZMK(5) **OZ**>MM0AMW(9) **LA**>G8HGN(Es) MM5DWW>**DL OH6**>G4IGO(9) GM9LFB>**DL**(Es) GM4WZL>**SM7** GM4ZMK>**LY2** MW0CBC>**LA**(Es) **SK3SIX**>G3XGS MM5DWW>**OE3**(Es) GB3RMK>**SP6**(4)

SP3>>GM4WZL(9) MW0JMK>OZ(9) GM4WZL>LY2 GM4WZL>SP5(Es) GM8LFB>DL
GM4DZX>DL SP3>GM4WZL(9) OZ>GM4ZMK(7) MM5DWW>OE4 GM8LFB>OK1
MW0CBC(Es) GM4WZL>OZ MM0AMW>OZ(Es) OZ>GM4ZMK(9) MM5DWW>DL
SK3SIX>G4ZFJ GB3LER>DL(8) G3RIK>OH1(3) MM5DWW>PA(2)? GM0GOV>OZ
GB3MCB>OH1(4) GM4ILS>DL(Es) MM5DWW>DL(9) GB3RMK>DL GB3LER>DL(5)

Jan. 20 11-1200 **HB9SIX>GM8LFB(ES)(2) GB3RMK/b>DL(Es)(7) GM8LFB>DL**
GB3RMK/b>SP6(Es)(1) 12-1300 GM8LFB>LX(Es) 13-1400 GB3MCB>GM8LFB(Es)(2)
OY6BEC>G4RRA(Es)(5) GB3MCB>GM4ZMK(9) GB3RMK>G4RRA(Es)(5) 15-1600
GB3LER>DL(Es) DL>GM8LFB(Es) MM5DWW>DL(9) GB3RMK>D MM5DWW>F7) G0JPH>G
GB3BAA>EA7(3) GB3LER>OE4(5) MM0BSM>OE4 G4RRA>SP1 G4RRA>DL(Es)(9)
MM0BSM>DL(9) MM0BSM>HA8 IQ4AD>MM0BSM(5) 16-1700 HG7BVA>GM4ZMK
GB3BAA/b>EA7AGX(3)

Jan. 21 12-1300 **HB9SIX/b>GM8LFB(wk) IY4AD/b>GM8LFB(Es wk) 16-1700**
HG1BVB/b>G3TCT(Es)(7) S55ZRS/b(7)>G3VYF OE3XLB(6)>G3TCT G4RRA>HA8
S5>G4RRA,G3VYF(9) G4RRA>OE4VIE(Es)(9) S5>G0PQO,G3VQO 17-1800
OE3XLB/b>G4RRA G4DEZ>I5(9) I0>GW8ASD(Es) I5>G3VYF(Es)(7) HB9SIX>G4RRA(Es)(5)
G4DEZ>HA8 I2>G0PQO G4RRA>S5(Es)(6) G4DEZ>I5 GM4PTT>I5 I0>G3VYF
HB9SIX>G4IGO(9) 2E0JJR>S5(Es) I5>G3VYF(7) MW0CBC>HA8 MW0CBC>I5
HG7BVA/b>G3VYF(8) G1SWN>I5(5) MW0CNC>I5 I5>G4IGO(4sc) IW3FZQ/b>G4IGO(5)
GW8ASD>I5

Jan. 22 14-1500 **UR0DMW/b>G4IGO(9) HG7BVA/b>G3VYF(ES)(7) 15-1600 G3VYF>HA8(9)**
LZ1>G3VYF(Es)(7) CS5BLA/b>G4RRA(9)(Es) G3VYF>LZ1(9) LZ2CM/b>G3XGS(1) 15-1600
GB23BAA>LZ1(5) CS5BCP/b>P0PDR(Es)(3) YO7>G3VYF(Es)(9) G0PDR>CS5BLA/b(Es)(4)
YT2AAA(Es)(7)>G3VYF GB3LER>EA6(5) CS5BLA/b>M3SWK(9) 16-1700 GB3MCB>OE5(Es)
GM8FLB>I5(4) I5>G7KHF(9) GB3BAA>I8(9) I5MXX>GM4ZMK(Es)(1) I5>G(8) I0ICR/b>G3XGS
SV2>G4IGO(5) IW0DAQ/b>GM4ZMK(Es)(2) I4>G7KHF(9) IQ4AD>G4XGS(7) GB3RAL>I8(3)
GB3MCB>S5(Es)(6) IW0DAQ/b>G3XGS G4KUX>EA6 I5>M3SWK(Es)(7) GM4NFC>I5
IZ1EPM/b>G4RRA(Es) I5>M3SWK(Es) G4RRA>9A|(Es) I8>G3VYK(Es)(9) EA3>M3SWK(Es)
GJ0JSY>I5 17-1800 GJ0JSY>9A 2E0JJR>I8 I5,I0,I1>G6GWX(9) M0EMM>EA6(9)
EA3>G4IGO(9) EA5>G4DEZ EA5>GW8ASD(Es) EA5>G3XGS(7) 18-1900 EA5>G3VYF(Es)(9)

Jan. 31 16-1700 **HG7BVA>G5WQ(7) HG7BVA>G3VYF(ES)(7) 17-1800 HG1BVB>G5WQ**
GB3BAA>DL(8) OE3XLB>G4IGO(9) I4>G5WQ OE3XAC>G0CHE(7) YU1>G3VYF(Es)(9)
S5>G5WQ G4BRK>HA8 HA8>G3VYF(Es)(8) GB3RAL>DL(Es)(8)
OE3>G4FUF(Es)M5BFL>DL(Es) HA3>G4FUF(Es) G4IGO>HA8 I4>G4FUF(Es) G4IGO>DL(Es)
G8HVV>HA8 G4IGO>OE3(Es) OE3>G5WQ M0DXR>OE1 G4IGO>OE1 G8HVV>OE3(Es)
M5BFL>OE3 I5>G3VYF(Es)(7) G4BRK>DL OE1>MW0HMV(Es) M0XLT.OE3(Es) G0JHC>YU1
G4IGO>5B4AIF G4IGO>YU1 M0URX>SP7(Es)(5) G4RRA>UT5(7) UR0DMW/b>G7RAU(Es)(5)
UT5>G4RRA(Es) 18-1900 S5>G7RAU(Es)(8) S5>G4HGI(Es)

Tropo

There was substantial activity during the contest on the weekend of the 26-27th, but reported distances were unremarkable.

MS/jt6m

A familiar picture: reports scattered thinly across 14 days with scant any increase for the major meteor shower at the start of the month. Relatively few specified ms as the

mode, though the contest strongly suggested this was the mode. Countries contacted were CT, EA, HA, HB, I, IS0, LA, OE, OH, OK, OZ, SM, S5, T7, YU, 9A.

Jan. 1 12-1300 OH6(jt) 13-1400 SM0 16-1700 CT(jt) 17-1800 I0(jt) HB(ms) YU1(ms) 19-2000 OE5(jt)

Jan. 2 10-1100 HB(ms) 11-1200 I1(jt) 12-1300 CT(ms) 13-1400 HA8(2) 14-1500 I0(jt) 20-2100 S5(jt)

Jan. 3 09-1000 I0(jt) I4(jt) 16-1700 9A(Es/iono) 19-2000 OE1(ms)

Jan. 4 09-1000 HB(jt) 10-1100 I3(ms) 17-1800 YU1(ms)

Jan. 6. 0810 YU1(ms)

Jan. 7 00 CT 0953 EA7(ms) 1212 I4(ms)

Jan.9 0905 T7, OZ(ms)

Jan. 10 11-1200 CT(ms) 1334 9A(ms) 2024 LA(ms)

Jan. 16 1206 CT(jt)

Jan 19 1855 9A(ms/iono)

Jan. 21 0745 OK1(ms) 08-0900 LA(2) LA(ms) 0937 IS0(ms)

Jan. 24 0818 EB1(ms)

Jan. 26 2041 LA(ms) 2131 9A

Jan.31 1216 9A(ms)

EME

Jan. 2 09-1000 GM4WJA>W7GJ(eme)

Jan. 3 20-2100 G5WQ>JR6EXN(-23)

Uncertain

Jan. 3 12-1400 G4DEZ>OK1

Jan. 9 0748 T70A>G4JZF

Jan. 12 1651 GB3RAL>OY1CT 1735 GM4WMM>F6GEX 1854 GM4WMM>ON4JM
1915 GM4WMM>G3USR

Jan. 19 1027 GB3MCB>F1NUM(IN88)(9) GM3LFB>SQ9IAU(5)

Jan. 21 1229 ON0SIX/b>GM4ZMK(1)

Continental Europe, Africa and the Middle East

Auroral-related Propagation

Given the generally low levels of magnetic noted earlier it is scarcely surprising that such auroral working as was reported was essentially confined to Scandinavia. What is more noteworthy is that there were auroral reports on four days (11, 13, 14, 17) when geomagnetic readings were so low – though signal strengths on those days were only middling.

Jan. 11 18-1900 OH8>SM2 OH5RAC>OH8(KP34)(55a) OH9SIX>OH8) SM2(KP03)>OH8(KP34) 20-2100 OH8(KP34)>OH3(KP20)(44a)

Jan. 13 1824 LA>SM3 2210 JW5SIX>SM3(Ae)

Jan. 14 OH9SIX>SM2(53a)

Jan. 17 17-1800 SK3SIX>SM2A(53a,KP04) SM2A>OH8UV(KP34)57a 18-1900 LB7Q(JP50)>OZ6PI(JO47)(59a) SK3SIX/b>OH2(KP31)(55a ES1>OH1(KP11)(55a) OH3>OH1(KP11)(54a)

Jan. 20 17-1800 SK3SIX>SM2(KP04 53a) SM2(KP04)>OH8(KP34)(57a) ES1KO29>OH8(KP34)(59a) 18-1900 LA(JP50)>OZJO47) SM3SIX>OH2(KP31)(55a) ES1>OH1(KP11)(55a) OH3>OH1(KP11 54a) 19-2000 OH3(OH8(KP34)(55a) OH6(KP31)(OH8(KP34)(55a) 20-2100 SK3SIX>LA(JP50) SM3>OH1(KP11)(55a) 21-2200 SK3SIX>LA(JP50) 2337 Au on 144

Other Modes

“Another poor month” laments Costas, SV1DH. And so it was for him, with propagation on just one day, the 4th. (However, this was slightly better than in 2009). Many others did better, including UK operators as already noted. In fact almost everywhere else across the continent had some good days. Propagation modes are no always easy to determine; where one is indicated this reflects the operator’s judgment, which may not always have been well-founded. Assuming that they were correct, Es occurred in one part or other of continental Europe on at least ten days: January 4, 5, 9, 10, 11, 18, 19, 20, 24 and 31, with the 20th a particularly good day – not a bad haul for a normally quiet month. There were few outstanding contacts. The best were with A6 on the 21st and 24th. On the 23rd a contact was reported between two ZS stations. These were unremarkable but were the first signs of life from down there in many months.

Otherwise, activity seems mainly to have been a mix of jt6m/ms/iono (the Quadrantids peaked on the 3rd), tropo over unremarkable ranges and periodic bouts of Es, which at times reached 4m. Sporadic-E signals were at times very strong, but as is often the case with that mode, coverage was patchy. Northern areas, including the UK, fared relatively well while SV1DH was among those unfortunate enough to have very little propagation

Jan. 1 20-2100 I0>I5(jt)

Jan. 2 07-0800 W7GJ>DJ5JK(-20) 11-1200 EA7>CT(jt) 12-1300 EA3>EA6(tr)
ON>HA(jt) CT>EA7(jt) 14-1500 I0>IT9(ms) 17-1800 S5>PA(jt) 19-2000 OM5>LA(ms)
S5>OZ(ms) OK1>LA(ms) 20-2100 OZ>OE1(ms) OE5>SP9(ms) 22-2300 I0>OE1(ms)

Jan. 3 09-1000 HB9SIX/b>DL(tr) 10-1100 EA5>EA3 11-1200 EA2,EA6>PA I5>I4(tr/ms)
LX0SIX/b>DL(tr) EA2>CT(jt) 12-1300 OE5>EA3 EA4>9A(iono) YU1>I8(tr) EA2>OK1
EA6>9A OK>EA2(iono) YT1>HA8 9A>I1(jt) EA7>CT(jt) YT1>9A(tr) YT1>OZ
EA3>9A(iono) 13-1400 HB.OK1(jt) 14-1500 OZ7IGY/b>I5 SM7,YL2>YT1 I1>CT(jt)
OE5>ON(ms) YU1>ON(ms) 15-1600 9A>SM7 16-1700 DL>9A(tr) SM7>OZ
SV3BSF/b>DL(Es/ms) 9A>I4 I0>ON(ms) OH9SIX/b>OZ I4>ON(ms) 18-1900
EA3>EA7,OE5 SM7>HB(ms) 19-2000 EA3>EA7,OE1(ms) 20-2100 ZL3NW>9A6CW(-
22) 23-2400 SM4>OE1(jt)

Jan. 4 09-1000 E51WL>OK1RD(-29) 10-1100 SV1SIX/b,SV3BSF/b, SV5SIX/b,
SV9SIX/b>UR SV3BSF,SV9SIX,SV1SIX>OE5 SV1SIX/b,SV9SIX/b>DL 9H1SIX/b>HA8
I4>I3 EA4Q/b>HA8 LZ2CM/b,LZ1SJ/b>I5 11-1200 LZ1>I5,I1 HA5>LA(ms)
SV3BSF/b,SV9SIX>OK1 UR0DMW/b>SP8 SP8,SP9>IT9 I7,I8,SV3BSF/b>HA8
SV1SIX/b>SP8 IS0>YO5 LZ2CM/b>I5 HG8BVB/b>I4 OE3>I7 SV1,SV2>DL 12-1300
SP9>I0,I7 LZ1SJ/b>OE4,OE5 UR>I5,I8 I8>SP6 IS0>HA8 SV3BSF/b>SP9 YU7>I3,I5
IT9>SP8 I0>YO6,YT9 I7,LZ1,I8,IT9>OM1 LZ2CM/b>OE5 LZ1>LA(ms) IT9>SP1 13-
1400 OH9,I0>OZ(jt) LZ1>DL(tr) LZ1>F(Es) SV3BSF/b>DL SV5SIX/b>DL(Es) UR>I8(Es)
I8>OZ LX0SIX/b>LZ1 HA8>I8 SV2>DL,OM 14-1500 UR0DMW/b>I1(Es) 15-1600
SR9FHA/b>I5 17-1800 OE3XLB>F(Es) OE3XAC/b,OE3XLB/b,HG1BVB/b>DL(tr)

Jan. 5 0616 IT9>SP7 08-0900 IW3FZQ/b>OH1 OH5RAC/b>DL(Es) ON0SIX/b>I7
OH5RAC/b>SP6 10-1100 ON0SIX/b>I7 OZ7IGY/b>9A(iono) 11-1200 9A>OK1
OE4>SM7

Jan. 6 0550 HG1BVB/b>SP6 06-0700 SV3BSF/b,OH5RAC/b>SP6 0737-53 HB>IT9
IQ0AH/b>IS0 12-1300 I0>OK1

Jan. 7 07-0800 HG1BVB/b>SP6(tr) 1448 I1ICR/b>9A 1807 HB9SIX/b>DL(tr)

Jan. 8 0851 HB9SIX>DL(tr)

Jan. 9 07-0800 T7>DL(tr),IT9,OZ I4,I0>I1 08-0900 T7>OE5(tr) I0>I8
T7>DL,ES1(Es),OE3(Es) 09-1000 T7>SP6,OE5,SP7 I2,I4>I8 10-1100 I5>I1 11-1200
I4>I8 T7,I8>DL T7>SM7 12-1300 I0>I1 T7>OE4,PA(ms),I4,OK1 I5>I7 I4>DL(tr)
EA7>EA1(jt) I3>OE5(tr),DL(tr) 13-1400 I5>I1T7>SM7,I8

Jan. 10 0852 IQ0AH/b>IS0 0940 EA3>ON(jt) 11-1200 OH0SIX>DL(Es/ms)
OH3>DL(Es/ms) 13-1400 9A>IT9(Es) SV3BSF/b>ON

Jan. 11 10-1100 OH9SIX/b,OH0SIX,OH6>DL(Es) OZ7IGY/b>OH1 11-1200
OH9SIX/b>PA UR0DMW>UR OH9SIX/b>SM7 12-1300 OH5RAC./b>YL2

Jan. 12 0723 OH9SIX>YL2(tr) 16-1700 SK3SIX/b>LA ON0SIX,HB9SIX/b>OY 19-2000
OY6BEC/b>ON,PA

Jan. 16 0952 EA1>EA7(jt)

Jan. 18 1022 SV3BSF/b>DL(Es) 1109 SV3BSF/b>SP6(Es) 14-1500 EI0SIX/b>DL(Es)
15-1600 CS5BLA/b>DL(Es) EA6>OZ CS5BCP/b>OE5(Es) I3>CT EA4,CT>DL
DF0ANN/b>OK1 CS5BLA/b>OE5(Es) 16-1700 S5>I5,CT CT>EA7

Jan. 19 11-1200 OY6BEC/b>DL ON0SIX/b>OH6 SK3SIX/b>F EI0SIX>SM7 12-1300
SM6,OH2>EI(Es) OY>SM7 OY6BEC>OK1,DL(Es),SM7 EI0SIX>OZ,OH1 15-1600
SM3>DL(Es) OE2,SM0,OH0SIX/b,OH9SIX/b,SM2(Es)>DL SK3SIX/b>SP6 16-1700
ON0SIX/b>I8 SM7>DL(Es) OH5RAC>YO5(Es),DL(Es) DL>SM7,OH6(Es)
5A5,OE5>OK1 ES6>DL,PA OH9SIX/b,OY>DL(Es) LX0SIX>I8
DL>OH8,OH2,ES4(Es),RW1 SM2,SM3>DL(9) SK3SIX>9A(Es) ES4>LX,PA(Es) 17-
1800 ES6,SM2>PA ES4,OH5RAC/b,F,OH6,LA,SP1(Es),SM2(Es), OH9SIX/b,SK3SIX,
YL2,OH2,OH6 >DL OK1>SP6,SP1 ON0SIX/b>9A(Es) I2,F,OE5,PA>OH6
SK3SIX/b>ON,PA ES2>F(Es) SM2>I4,9A S5>OZ ON>YL2 18-1900 S5>SM4,SM7,DL
F,9A>SM2 I2>SM7 SM3,SK3SIX/b,YL2>F EI0SIX/b>SK2 OY6BEC/b>OZ 19-2000
OY6BEC/b>DL,9A(Es) OZ>9A(Es) OY>OK1,SM7,SP5(Es) 20-2100
OY>DL(Es),F(7),SM7,SP5(Es) EI>OZ OY6BEC>SP6(1) OY>OK1 EI>OZ OY>OE3

Jan. 20 04-0500 LX0SIX/b,ON0SIX/b(Es)>OH2 09-1000 OH5RAC/b>SP6 10-1100
OH9SIX>SP6(Es) 11-1200 DL>SP1 OH9SIX/b,OY6BEC/b>DL(Es) 12-1300
OH0SIX/b,EI0SIX/b>DL(Es) 15-1600 OY6BEC/b>DL I2>EI(Es) EI>HB 1608
EI0SIX/b>I5 1753 I1>CT(jt) 19-2000 SM6>SM2

Jan. 21 13-1400 A6GTR>YO4 A6JNT>YO5 15-1600 EA6>EA7 IT9>I8 OZ7IGY/b>I8
I0>EA1 I5>F 18-1900 I2>F(tr) 2006 CS5BCP/b>I5

Jan. 22 1330 OY6BEC/b>F(Es) 14-1500 UR0MDW/b>DL(Es) OY6BEC/b>F(Es)
OZ7IGY/b>I8 UU5SIX/b>9A,E7 I8>SM7 SR9FHA/b>F(Es) 15-1600 I8>OZ UU5SIX/b>I4
EA4Q/b>EI LZ1>DL DL>HA8 LZ1>PA(Es) PA>YT2 CS5BLA/b>F HA8,CT0SIX/b>F
LZ1,I7>DL SV3BSF/b>OK1,F,DL F,ON0SIX/b,LX0SIX/b,PA,HB>LZ1
TA2>OK1,DL,HA8,OE5,SP9 SR2FHM/b>I8 EI0SIX/b>EA7 I8>SP1,DL
HB9SIX/b,HA8,YT1>F SV1SIX,SV3,SV9>DL I2,IQ4AD/b>EI OM3>OK1 SP7>I5 E7>PA
YT2>ON SV3BSF/b,I5>PA YT2,SV3>LX EA6>HA6 IZ1EPM/b>HA8
SV1SIX,SV3BSF/b>OE5 SV3>ON 16-1700 I8>LY3,F EA1>ON
PA,SV8,SV5SIX,TA2>DL,HA8,YO2,I3,S5 YK6CB(?)>YO3 ON,DL>SV3 I7>ON,PA,RZ6
F>YT2 JY6MS>YO3 F,DL,OE5>I8 HB9EME/b>LZ1 I5>LX IZ1EP>LZ1
EA4Q/b>HA6,OM5,DL FX4SIX/b,CS5BCP/b,EA1,EA4>DL EA3>SP7 EA6>SP1,DL
ON0SIX/b,DL>EA1 9A,DL>EA2 SV3BSF/b>F CU3URA/b>OE5 EA5>PA IZ1EPM>I8,9A
EA5>OZ EA6>ON 17-1800 OE9,OE3,DL>EA1 DL,F>I8 EA5>OZ,OE3
EA4UW/b>DL,SP1 CU3URA/b>9A,OE5 ON0SIX/b,I1,EA1,EA6>I8,EA4
EA4Q./b,CS5BCP/b>OE5 HB,I5>EA2 EA1>SP6,9A,DL,OE3,S5,I1 LX>EA2,EA5
OZ7IGY/b>SP1 EA7>ON,DL,PA,F I1,EA1>IT9 CS5BLA/b,HB9SIX/b,CS5BCP/b>DL
CS5BCP>9A EA2,LX0SIX/b>I8 18-1900 CS5BCP/b>DL EA6>F,I8 EA1>I5 OE5>CT
CU3URA/b>I4,EA6 SV3BSF/b>EA6,EA5 EA6,EA4Q>I8 19-2000 EA6,EA5>I8

Jan. 23 04-0500 ZS6BUN,ZS2ACP>ZS6TA 1549 SK3SIX>LA

Jan. 24 08-0900 IQ4AD/b>IS0 0906 EA7>EA1(ms) 11-1200 EA1>EA7 LX0SIX/b>DL(tr)
HA3MRB>A61MV

Jan. 25 1007 OH9SIX/b>DL(Es) 17-1800 9H1SIX/b>SP7 HG7BVA/b>IS0

Jan. 26 2029 OZ>LA(tr)

Jan. 27 1120 EA2>S5 1351 HB9SIX/b>DL(tr)

Jan. 29 1127 SV3BSF/b>DL(ms) 1428 4X>LZ2 1613 HA3>4X 17-1800
CS5BCP/b,CS5BLA/b> I4 CS5BCP/b>I4,9A,I5,DL CS5BLA/b>I5,DL I4>CT EA7,CT>DL
18-1900 CS5BLA/b>I5 EA7>DL S5>I5 CS5BCP>I0

Jan. 30 04-0500 W7GJ>OK1DO(eme -19) OH6MIK>W7GJ(eme -21) 0545
NN7J>S57RR(eme -20) 1554 I9>I8

Jan. 31 HB9SIX/b>DL(tr) 1237 IT9>9A(ms) 16-1700 ST2FHM/b>I1(Es) OZ7IGY/b>EA3
LY0SIX>DL(Es) OH5RAC>I4 17-1800 FX4SIX>DL(Es) OZ7IGY/b>I5 F>OE3,YO5
F>OZ(Es) YU1,EI0SIX/b>DL(Es) OZ>I5,I0 HB>ON I4>PA,OZ YU1>OZ ON,F>SP5
LX,F,ON(Es)>SP7 I0,I4,I5>DL OZ>EA3 EA6>EA3(tr) I1>SM7 HA8>OG2 OZ7IGY>F(Es)
SP5>F 18-1900 F>DL UR>DL(Es) HG1BVB/b>OH5(Es) SM6>HA8 SQ5>F
OH5SVF/b>OE5(Es) HA1>OH1 S55ZRS/b>ES2 19-2000 ES2>I4,OE3 YT1>YO9

50MHz PROPAGATION REPORT FOR JANUARY 2010 BY SV1DH

1. Data for all days (31)
2. Relatively good days on: 4,22
3. 48 MHz AF video (9L+3C) on: NIL
4. 55 MHz AF video (5N) on: NIL
5. Openings to DL: 4,22(E)
6. " OE: 4,22(E)
7. " SP: 4(E)
8. " UR: 4(E)
9. Special events on:
 - 01-031, except on 6,19th (SSN up 41, SFI up 93,Xray background up B5.0, flares up M3.4! class)
 - 2(0724 C1.0+1416 C2.6+2319 C3.1 flares)
 - 3(0122 C2.0 flare+0745 VK3 to UR on 10m, F2)
 - 4(0340 C1.3 flare+0015 45Mhz ZL video to W4+**1200 SV14/B to OE on 4m Es+2100 48Mhz FM CE to ZL2**)
 - 5(2000 48 FM CE to ZL2+2130 45 ZL video to CE+**2200 VK3 to CE1 on 6m, Es+2230 ZL4 to CE3 on 6m Es**)
 - 7(**0130 FK/B to W7 on 6m Es? +0230 VK4 to W7 on 6m Es?**+1145 9M2 to Z2 on 10m, F2)
 - 9(1523 C1.0 flare)
 - 10(**1400 SV3/B to G+ON on 6m, Es**)
 - 11(1015 VK6 to F on 10m, F2)

12(1320 C1.1 flare+ 0130 VK4 to W3 on 10m, F2)
 15(0841 C1.3 flare+ 1030 9M2 to ZS6 on 10m, F2)
 17(2233 C2.1 flare)
 18(2030 C4.9 flare+ **1230 SV3/B to SP+DL on 6m, Es**)
 19(6C+2M class flares!! 1341 M2.3 **first M class flare of cycle 24** +2035
 M1.7 flare+ **Es on N.EU all morning**)
 20(9C+4M flares!! 0727 M1.0+0749 M1.6+1059 M1.8+1755 M3.4 Xray
 flares+1230 9M2 to ZS6 on 10m, F2 + **Es on N.EU all morning**)
 21(3C class flares, up to C4.9)
 22(**1530 SV3/B to OK+DL+PA +1600 SV3/B to LX+ON +SV2 to G +TA to G**
 2Es!+1700 SV3/B to F+1830 SV3/B to EA5,6 all on 6m, Es +2330 ZL2
 to LU on 10m, F2)
 23(**0900 SV9 to OK on 6m, Es**)
 24(1100 9M2 to ZS6+1200 9M2 to Z2 on 10m, F2)
 25(1030 9M2 to 3B8 on 10m, F2)
 26(1215 9M2 to 4X+3B8+ZS6+1300 9M2 to Z2 on 10m, F2)

27(1245 9M2 to 3B8+Z2+ZS6 on 10m, F2)
 28(1200+1500 9M2 to 3B8+Z2+ZS6 on 10m, F2)
 29(1100 9M2 to Z2 on 10m, F2)
 30(1030 9M2 to Z2+ZS6 on 10m, F2)
 31(1730 G to S5 on 4m, Es)

Another poor month!

10. DXCC entities heard/worked during January 2010: 4 on 1 cont.
11. DXCC entities heard/worked during 4th Jan 2010: 4 on 1 cont.

73 COSTAS

The Americas

Auroral-related Modes

Jan. 20 18-1900 K0KP/b>VE2(FN07)(41a) 23-2400 K0KP/b>K9MU(starting auroral)
 W8(EN84)>VE2(FN07)

Other Modes

For most North American operators this was an unexciting month with low activity levels, apart from the 23rd, 24th and 30th, and even fewer openings of more than passing interest. The highlights were reception of the E51USA beacon by NA6XX on the 3rd and the NH6P beacon claimed by KS7DX on the 3rd. The latter also reported hearing FK8SIX on the 6th and VK4MA on the 17th. The only other North American operator reporting transpacific contacts was K6QXY, who worked a couple of ZLs on the 20th. Additionally, KE4WBO heard ZL tv around 45MHz on the 4th. A fairly meagre haul, one might well think, but more than we saw last year. If that was the good news, the bad news is that winter-Es appeared to be well down on 2009, when there

were several strong openings and a number of coast-to-coast multiple-hop contacts were reported. Openings to the Caribbean were scarce: V4 to W4 on the 21st, and openings to TI on the 4th, 6th, 21st and 23rd

The picture was brighter in South America, where the summer sporadic-E season was under way. Activity levels continued to increase, though few contacts were of particular note. One that was more than routine was on the 5th, between VK3AUU and CE1/K7CA in the Antofagasta region of northern Chile. Chilean broadcasters on 48-49MHz were also copied in New Zealand on several occasions, possibly by multi-hop Es. Certainly Es was the most likely mode for many contacts within South America, notably within Argentina and between Argentina and Chile, and also those involving Uruguay. There were no reports relating to either Paraguay or the Falklands. Reception of the OA4B beacon by CE1/K7CA on the 1st had a scarcity value without being remarkable in propagation terms.

In the table below the lower grouping includes contacts to the south of the geomagnetic equator, which are thought to be by way of seasonal sporadic-E – some 18 days. The upper grouping is of contacts spanning the geomagnetic equator. These are probably, but not conclusively, attributable to tep, with Es involvement also possible. This group covers 17 days – well in advance of the 12 days with similar openings in 2009. Now, as then, V44KAI was the main source at the northern end. At the southern end Brazil's 4th district (Minas Gerais) and 2nd district (Sao Paolo), both lying towards the south of the country, were the most frequent destinations. A little surprisingly, perhaps, nothing was heard from Paraguay, which is usually an occasional contributor.

South American Propagation January 2010	
V44 to PY 15 days 1,2,3,4,5,10,11,14,18,20,21,22,24,25,26	V44 to LU 2 days 4,12
YV to PY 4 days 14,18,20,26	V44 to CX 1 day 4
KP4 to PY 3 days 5, 12, 18	YV to LU 5 days 12,18,24,26
9Y to PY 2 days 2,5	29
FY to PY 1 day 4	
<hr/>	
LU to CE 16 days 4,5,6,7,9,10,11,12,15,17,19,27,28,29,30,31	CE to CX 2 days 11,17
LU to CX 3 days 11,16,31	CE to PY 1 day 9
LU to PY 6 days 4, 7,8,9,10,11	

Jan. 1 00-0100 4A1DDXE(?)>XE1 NL7XM/b,W1,W2,W3CCX/b,VE2,W9>W9 W7>W7 W0>VE3 C6AFP/b>W4 K4TQR,W8>VE2 W2>W2 W5>XE1,XE2 XE2WHB,W3>XE1 01-0200 4A1DXXE>XE1 VE4ARM/b,K0KP/b>W9 W7>W7 W0>VE3 04-0500 W6>W7 PU1>PY1 13-1400 W7>W4 W9>VE3 K0KP/b>VE3(Es) 14-1500 W3,W4,W8>W4 15-1600 OA4B/b>CE1/K7CA 18-1900 W0>W0 W1>W8 W3>VE1(sc) VY2>W3 19-2000 ZF2BI>W4 21-2200 W6>W6,W7 W7,VE7>W7 22-2300 W8>W0 23-2400 V44KAI>PY2OC W4>W8

Jan. 2 00-0100 C6AFP>W4 01-0200 PU2>PY2 06-0700 E51WL>W7GJ(eme) 09-1000 K7XQ>W7GJ(-11) ZL3NW>W7GJ(-17) 12-1300 W4>W4 13-1400 W4>W4 14-1500 49.2(CE)>LW3EX 15-1600 W5>W0(ms) 19-2000 W9DR/4/b,C6AFP/b>W8 23-2400 NH6P/b>KS7DX V44KAI/b,9Y4D>PY2REK 9Y4D>PY5AB PU2>PY2

Jan. 3 00-0100 W9>W5(ms) C6AFP/b>W4 W3HH/4/b,W5>W4 01-0200 E51USA/b>NA6XX 06-0700 TN5SN>K2ZD(-25) XE2K/b>W7(Es) W7>W6(Es/jt) 12-1300 W8>W4(iono) W3>W8(MS) 13-1400 W4,W0,VE4>W8 VE2>W0(sc) C6AFP/b>W8,W4 N8PUM/b>VE2 14-1500 HI8LAM>KP4EIT W8>VE2(ms) W3>W8(sc) W4>W4,VE2 15-1600 W5,W9>W9(ms) W8>W1 16-1700 W1>VE2(ms) 17-1800 W0>VE2 18-1900 W8,W9>W5 19-2000 47.9(CE)>LW3EX W5>W9(Es) 20-2100 W0>W0 47.9(CE)>LU1DMA 21-2200 W0>W8,W0 K0KP/b>VE7 23-2400 TI2NA/b,C6AFP/b>W4 V44KAI/b>PU4CQQ

Jan. 4 00-0100 45250(ZL)>KE4WBO V44KAI>CX7IT W4>W4 03-0400 W4>W1 04-0500 K4TQR/b>VE2 11-1200 W9DR/4/b>W8(ms) 12-1300 W5,W9DR/4/b,C6AFP/b>W8(ms) 13-1400 W4,W5>W1(Es) 14-1500 W1>W0,W5 W4CHA/b,W9>VE2 K4TQR/b>W3 W3DOG/b>W5 W1,W2,W9,VE3>W4 VE3>W2,W5 N0LL/b,K0KP/b>W7 W9DR/4/b,W2>W5 W9DR/4/b>W0 15-1600 W4>W2 XE3RCM/b>W7 VE2RCS/b>W4 W4CHA/b,W5>VE3 KD4AOZ/b>VE2 N8PUM/b,W3,W0>W4 TI2NA>KS7DX W2,W9>W2(tr) C6AFP/b>W8 16-1700 C6AFP/b>W3,VE3 W9,W0>W4 W4PLB/b,W9>W9 VE3>W5 17-1800 W4PLB/b>W9 49.2(CE)>LW3EX VE3>W0 18-1900 N0LL/b>W5,W8 VE3>W0 WZ8D/b>W4 19-2000 C6AFP/b>W8 CE3AA/b>LW3EX 20-2100 FY7THF/b,PR8ZX/b>PT7IT PY2MAJ>LW3EX 21-2200 LW3SX,LU1FVE,LU7FTF,LU5EGY>PY4AQA PTY4AQA>LW3EX 22-2300 PY2REK,PU2VX,PY2AB,PU2PAV>LU1FVE 23-2400 PT9IR>LW3EX,LU8EML V44KAI/b>PY4AQA,LU4CQQ

Jan. 5 00-0100 V44KAI>PS8RF W8>W0 01-0200 KP4EIT>PY5HOT W4>W4 9Y4D>PU2PJA PY2REK>WP4LUA,KP4EIT V44KAI/b>PY2REK 02-0300 W1>W2(tr) W4>W4 03-0400 W2>W2(tr) 10-1100 W9DR/4/b>W0(ms) VK4CZ>W7GJ(-25) 11-1200 W5>W5 13-1400 W5<>W5 CE3AA/b>LW3EX 14-1500 LU9YD>LW3EX LU9AEA,LU9DPH>CA3SOC 15-1600 CE3AA/b,CE3SX,CE3ASD>LW3EX LU8EML>CE3SX 16-1700 W7>W7 CE4WJK>LW3EX 17-1800 CA3SOC,CE3ASD,CE3SX,CE3PG>LW3EX LU5EGY>CE3SX CE3AA/b,LU8YD>LW3EX 18-1900 CE3AA/b>LW3EX VK3AUU>CE1/K7CA CA3SOC>LW3EX 21-2200 45249(ZL)>CE3SX 22-2300 45260(ZL)>CA3SOC CE5DXW>LW3EX 23-2400 49.2(CE)>LW3EX

Jan. 6 00-0100 W2>W8 1317 W4>W5 15-1600 W4>W5 TI2NA>KS7DX 18-1900 N0LL/b,W9>W8 19-2000 47.9(CE)>LW3EX VE7>W6 CE3AA/b>LU1WI 20-2100 W8>W9 CA3SOC>LU1WI LU7YS>LW3EX 21-2200 CE3AA/b>LU1WI 22-2300 CA3SOC,LU7YS>LU1WI 23-2400 K2ZD/b>W4(Es) FK8SIX>KS7DX

Jan. 7 00-0100 VK4MA>KS7DX W5>W5

Jan. 7 1538 48.3,9.2(CE)>LW3EX 16-1700 CE3AA/b>LU1DMA LU8EML/b>PY4 LU4CAC>CA3SOC 1747 W6>W7 18-1900 CE3AA/b>LU1DMA 47.9,48.3(CE)>LU1DMA LU8EML/b,LU5EGY/b>PY4AQA CA3SOC>LW3EX 1958 C6AFP>KE4WBO 20-2100 CE1/K7CA>LW3EX 2241 CE1/K7CA>LW3EX

Jan. 8 10-1100 W4CHA/b,W3HH/4/b,WZ8D/b,W8IF/b,C6AFP/b>KE4WBO 11-1200 LU5EGY/b,LU7FTF/b>PY4AQA 1345 LU5EGY/b,LU7FTF>PY4AQA 15-1600 W9DR/4/b>W0 VE3>W5,W0 1627 VE3>W0 18-1900 W8>W4 1907 W4>W8 22-2300 PU2>PY2 48.3(CE)>LW3EX 2331 PU1>PY1

Jan. 9 0122 W9DR/4/b,W4CHA/b>W4 01-0200 W8IF/b>W4 10-1100 W4>W5,W0,W4 11-1200 W9>W4 11-1200 KA7BGR/b>W6(ms) W3>W4 15-1600 W7,N0LL/b,K0KP/b>W7 PR8ZIX/b>PT7 N0LL/b>W8 1651-2 VE3>W0 C6AFP>KE4WBO(snow scatter!) 17-1800 VE3>W7 LU8DCH/b>LW3EX 18-1900 C6AFP>W3 W9DR/b>W3(Es) W8>W8 19-2000 LU8DCH/b,PT9IR>LW3EX 20-2100 W8IF/b>W4PT9>PU4 CE1/K7CA>LW3EX,PT9IR,LU5DDX

LU4DMX,LU5DLE,LU5EGY/b,LU7FTF/b,LW2ETU>PT9IR 21-2200 LU2WC>CE4WJK
PT9IR>LW3EX 22-2300 LU1EIA,CX2TQ,LU5EG,LU8EML,LU1DA,LU8DO, LU1FVE,
LU7FTF/b,LU8VEU,LU9HPO,LU4DMX,LU5DLE,LU5EGY/b,LW2ETU/b>PT9IR
PT9>PU4 CE1/K7CA>LW3EX LU1FVE>PY2REK LU1WI,LU8VEU>CE4WJK
CE5DXU>LU1FVE 23-2400 LU1EIA,LU3CGG,CX2TQ,LU5EG,LU1DA>PT9IR

Jan. 10 00-0100 LU8DO,LU1FVE,LU7FTF/b>PT9IR 01-0200 CE4WJK>LU2WC 1725
W0>W0 18-1900 W7>VE6 1926 W8>W9 21-2200 CE3AA/b>LW3EX,LU7YS
CE4WJK>LW4EU 22-2300 CE4WJK>LW4EU LW3EX,LU7FA>CE3SX
LU4HH/b,LU8MB>PT9IR W4CHA/b>W4 CE1/K7CA>LW3EX 23-2400
LU8WAT>CE4WJK V44KAI>PY4AQA

Jan. 11 00-0100 V44KAI>PY4AQA,PU4CQQ CE5DXU>LU1FVE 01-0200
W8IF/b,C6AFP/b>W4 12-1300 47.9(CE)>LU1DMA 1347 CE3AA/b>LW3EX 19-2000
49.2(CE)>LW3EX CE3AA/b>LW3EX CE4WJK>CX2CC,LW3EX
LU8DCH,LU4HH>LW3EX 20-2100 CA3SOC>LW3EX 21-2200
LW3EX,LU7FSM,LU8DIO,LU4DPH >PU2PJA PY2UDX>LW3EX 22-2300
LU6DHO,CX4DO,CX2TQ>PU2PJA PU2PAV>LW3EX LU5EGY/b>PY4AQA
CE2PCD,PY4AQA>LW3EX 23-2400 PY2MAJ>LW3EX LU8EML/b,CE5DXU,LW2ETU/b
>PY4AQA V44KAI>PU4CQQ LU8EML/b,LU5EGY>PY4AQA CE5DXU>LU7HCS

Jan. 12 00-0100 YV4AB/b,CE3AA/b,V44KAI/b,YV5OK/b,CE5DXU>LW3EX PY4>PU4
0111 KP4EIT>PU4CQQ 02-0300 W4>W4 W5>W5 2154 48.0(CE)>LW3EX 2255
CE5DXU>LW3EX

Jan. 13 1150 48.3(CE)>LW3EX 2153 47.9(CE)>LW3EX

Jan. 14 00-0100 V44KAI>PY4AQA,PU4CQQ YV4AB>PY4AQA 01-0200 PU4>PY4 14-
1500 W9>W5 1508 W3>W5 1639 W7>W5 1745 W9>W5 21-2200 W0>W5 2329
W6>W5

Jan. 15 1313 CE3AA/b>LW3EX 1421 LU5EGY/b>CA3SOC 1525 LU7YS>LW3EX 21-
2200 W8>W4 2222 LU8WAT/R>CA3SOC 2347 48.3(CE)>LW3EX

Jan. 16 1313 W4>W4 2219 PY1>PU4

Jan. 17 0532 W0>W9 2036 W4>W5 22-2300 LU8WAT/R>CA3SOC
CX6TN,CX2CC>CA3SOC 23-2400 CE3AA/b,CA3SOC,LU7YS>LW3EX
LU7YS>CA3SOC

Jan. 18 00-0100 YV4AB>LW3EX V44KAI/b>PY4AQA,PU4CQQ KP4EIT>PU4CQQ 01-
0200 PY4>PU4 YV4DYJ>PU4CQQ YV4AB>PY4AQA 10-1100 W4.W8>W3 13-1400
W9DR/4/b,W4CHA/b,W8IF/b,WA4FC,,C6AFP/b>W4 15-1600 W8IF/b,W3DOG/b>W4
N0LL>W5 W0>W0,W8 2149 V44KAI/b>PU4CQQ,PY4XX 22-2300 PY2BC>NP3CW
2349 V44KAI/b>PU4CQQ

Jan. 19 0120 W8IF/b>W4(Es) 15-1600 CE3AA/b>LU1WI LU7YS>CE4WJK
CA3SOC>LU7YS 18-1900 W8IF/b,W3CCX/b,WZ8D/b>W4 19-2000 CE3AA/b>
LW2EQS C6AFP/b>W4 LU5EGY/b>CA3SOC 2019 W0>W0 2243 W4>W3

Jan. 20 00-0100 V44KAI/b>PY4AQA,PY2OC,PU4CQQ YV4AB/b>PY4AQA 1817
N0LL/b>W7 19-2000 W4>W3 19-2000 PU2>PY2 W1JJ>W7GJ(eme -17) 22-2300
W4>W2(tr) K0KP/b>VE2 23-2400 ZL3NW>W7GJ(eme) W0>W0 V44KAI/b>PY2REK

Jan. 21 00-0100 W5>W4 VE3>VE2(gw) W8IF/b,WB0RMO/b,W4CHA/b>W4 02-0300
V44KAI/b>PU4CQQ W5>W5 W0>W4 12-1300 W 4>W0 ZF1EJ>W4 14-1500 N0LL/b>W3 15-
1600 W5,W0,W9,W7>W8 W9,W7>W0 16-1700 W8,W0>W9 N0LL/b>W5,W6 W7KNT/b>W0 17-
1800 W9>W0 22-2300 V44KAI/b,C6AFP/b>W4 W4CHA/b>KP2 KP4>W4 C6AFP>KP2
TI2NA/b>KE4WBO 23-2400 V44KAI/b>W4 TI5KD>W4 23-2400 W0>KP2 W4,W9>KP4
C6ANX>KP4 TI5KD>N3LL/4,W4ABC

Jan 22 00-0100 V44KAI>PY2OC, PU4CQQ,PU2LBD VE3>W0 W4>W9 12-1300 W4>W4 17-
1800 VE3>W0(Es/ms) VE3>W9 18-1900 W8>W5 VE3>W0 20-2100 W8>W9 20-2100 W1>W1
W9,VE3>W9 22-2300 W8>W9 2259 W3>W1

Jan. 23 01-0200 W1>W1 TI2NA>W4 0254 W5>W4 03-0400 W8>W1(Es) W4>W5 12-1300
W4>W4,W0 13-1400 W9,W8>W0 W4,W8>W4 14-1500 W8,W4>W0 PY4>PU4 W9DR/4/b>W0
W9>W9 W5>VE2 15-1600 W8GTX/b,W5>W5 W9DR/4/b,W5,W8,W3>W0 W5,W8,W9,VE3>W9
K4TQR/b>VE2 16-1700 W4,W8>W0 17-1800 W0>W9(tr) W5>W0 19-2000 W1,W0>W1 W5>W5
W9>W0,W9,W4 W6>W7 VE1>VE1 W1,W2,W3,W5>W2 W8,W3>W3 20-2100 W4,W3,W2>W4
W3>W3,W2 W1>W1,W2 VE3>W0 W7>VE7 W9>W9 21-2200 W9>W4 VE7>W6(Es) W1>W1
W8>W9 22-2300 W4>W4 W3>W1,W3 W 9>W9 W7>W7,W6,VE7,W0 23-2400
W9,W5,W8,W4.W2>W4 W7>W6,W7,W8 W1,W8>W1 W0>W0 W3>W3,W8 VE2>W2

Jan. 24 00-0100 W7>W8 W1>W1,W5 W6>W6 W8,W9>W9 V44KAI>PU4CQQ W5>W5 W4>W4
01-0200 YV4AB>LU8EML W8,W9>W8 W5>W5 W2>W2 W0>W0 W3>W3 02-0300 W9>W9,W0
W6>W6 W1>W1 03-0400 VE7>W9,W6 W3>W3 W6>W7 W1>W8 04-0500 W2>W8 W9>W9 07-
0800 W1>W1 10-1100 W3>W2 11-1200 W1>W0,W1 W9DR/4/b>W4 12-1300 W1,W4>W4
W2>W3 ZF1EJ>W9 W4>VE2(ms) W3>W3 13-1400 W3,W5,W2>W4 W1>W4(ms) W2>W2 14-
1500 W4>W4 W1>W0(sc) W3,W9,W0,VE3>VE3 W3>W9(ms) W0>W0 W1>W4 15-1600
W3>W3,W4 VE1>VE1 W5>W5 W1,W3>W8 W4>W4 W2>W9(ms) W1>W0 16-1700 W1>W1,W2
W5>W5 W7>W7(tr) VE3>W0(ms) W2,W3,W4>W4 W9>W9 17-1800 W1>W1 VE3,W4>W4
W5>W5 W9,W5>W9 18-1900 W0>W9,W5,W8,VE3 W4>W3,W4 W3,W8>W3 W2>W2,VE3
W1>W1 18-1900 W2>VE2 19-2000 W0>W8,W0,W9,W4 W6,W7>W6 W7>W7 W3>W3 20-2100
W0>W8 W3>VE2 W4,W9>W4 VE3>VE2 21-2200 W9>W9 W3>W3 W4>W2 22-2300
W9>W9,W0 W1>W1 W4>W4 W2>W2

Jan. 25 00-0100 W3,W9>W8 W3>W2 V44KAI>PY2OC,PU4CQQ W4>W4 01-0200 W8>W3,W9
W4>W4 K2ZD>W7GJ(eme -23) 18-1900 N0LL/b>W7 1958 W7>W7 20-2100 KP4,C6AFP/b>W4
21-2200 LU7FTF>LU7YS 22-2300 PU2>PU2

Jan. 26 00-0100 V44KAI/b>PS8RF,PY2OC YV4AB/b>LU8EML LU7YS>LU8EML 01-0200
PY4>PY4 V44KAI/b>PY4AQA,PU4CQQ W7>VE7 YV4AB/b>PY4AQA.LU7HZ
YV5OK>PY4AQA 17-1800 W8IF/b,WZ8D/b>W4 21-2200 LU8XW/b>LU1WI 23-2400
LU2WC>CX2UA K2ZD>W7GJ(eme -21) W4>W8 LU8WAT>CX2UA

Jan. 27 00-0100 LU2WC>LU7HZ 12-1300 W9DR/4/b>W0 W4>W4 14-1500
LU7FTF,CE4WJK>LU1WI 15-1600 W5>W5(bs),W1 1845 W5>W0 2051 W4>W0 21-2200
W8>W0 W0>W9,W0

Jan. 28 00-0100 W0>W8,W3 ZS6NK>K2ZD(eme -27db) 21-2200 W8>W4 22-2300 W8>W4
LU8EML/b,LU7FTF/b>CE6RC 23-2400 LU5EGY/b,LU7FTF/b>CE6RC W4>W8

Jan. 29 00-0100 YV4AB/b>LU8EML 0436 W9>W0 0802 XE1>XE2 20-2100
LU5EGY/b,LU8EML/b>CE6RC 2247 LU8EML/b>CE6RC

Jan. 30 1314-22 W4>W4,W0 1422 W0>W0 20-2100 W5>W4 21-2200 W8>W0 23-2400
LU5EGY/b>CE6RC LU7YS>LU9DO LU9DO,LU7FTF/b,CE3AA/b>CE6RC

Jan. 31 00-0100 W5>W4(Es) W5>W3 01-0200 W4>W5(tr) LU7FTF/b>CE6RC CA3SOC/b>CE3
0239 PY2>PU2 K7CW>W7GJ(eme -22) W7CE>W7GJ(eme -18) 1418 W9DR/4/b>W0 16-1700
W4>VE3,W3,W8,W2,W1,W0 WB5LLI/b>W3 W1>W8 W9>VE3,W8(Es) W3HH/4/b>VE1
W4>W9(Es) 17-1800 W1,VE1,VE2,W0,W4,W3,W8,W9>W4 W5,W8,KD4AOZ/b,K4TQR/b>VE3
W2>W8 VE2,W3DOG/b>W5 18-1900 W4>W0,W2,VE2,VE3,W1 VE1,VE2,N0LL/b>W5
W1,W8>W9 W2>VE2,W9 19-2000 W4>VE3(Es),VE1,W1,W2,W3 20-2100 W3,VE3,W2,VE2,
W1,W4>W4 NL7XM/b/W2>W4 W2>W8 21-2200 W8,VE3,W2,W3,W1>W4 W2>W2,W5
KD4AOZ>VE2 W1,W2>W0 WA4FC/b>W9 22-2300 VE2,VE3,W2,W3,W4,W5,W8,W0>W4
VE3,W3,W5>W5 W0>W0,W3,W5 C6ANX>W1,W3,W0 C6AGN>W0,W5,W1
XE1MEX>TI7/N5BEK 23-2400 C6AGN>W2,W8,W9 C6ANM>W1,W2,W3,W4 W9>VE3
C6ANX>W2,W3,W8 W1,W0,W3,K2ZD/b,W9,VE3>W4 W3>W0 W1,W2,W3,W8,W4>W5 W8>W2
W3HH/4/b>VE2 W5>W3 LU7YS>LU8EML LU8EML/b,LU5EGY/b,LU7FTF/b>CE6RC
LU7YS>CX2UA W1>W1

Asia and the Pacific

Asia

A thin month for much of Asia at 50MHz. Japan reported only occasional openings to Taiwan, Hong Kong and the Philippines. Most reported activity centered on Willem, DU7/PA0HIP, whether on the 50MHz band or in monitoring television slightly below 50MHz. The 'R' squares correspond to New Zealand and the 'Q' squares to Australia (mostly the eastern states. He recorded contacts with ZL on the 4th, 25th and 28th and with VK on the 25th and 29th, at distances at times exceeding 7,000km. There was a report of JA-VK working on the 5th but no clear confirmation. All this was very much on a par with results reported in January 2009.

Jan. 4 03-0400 45250(ZL)>DU7 04-0500 ZL3NW>DU7/PA0HIP 0715 BV2YA>JA5 08-0900
BV2YA>JA3(Es)

Jan. 6 0509 VR2SIX>JA6

Jan.13 04-0500 46240(QF35)>DU7

Jan 14 05-0600 46240(QF35)>DU7

Jan. 16 45260(RF74),46240(QG35),45250(RE43)>DU7 04-0500 A35A>DU7

Jan. 20 48250(LL75 Dubai)>DU7

Jan. 22 06-0700 49739.6(MN73 Kyrg)>DU7

Jan. 23 03-0400 46240(QF35)>DU7 04-0500 JR6YAG>DU7 06-0700
VR2SIX,BV2YA,JR6YAG>DU7

Jan. 25 ZL3NW>DU7/PA0HIP(7720km) 03-0400 45250(RE78),46240(QF35)(45240(RF72)>DU7 05-0600 VK3AUU,VR2SIX>DU7/PA0HIP 0606 VK4EK>DU7/PA0HIP 08-0900 BV2YA,JR6YAG>DU7

Jan. 26 04-0500 46240(QF35),45240(RF72)>DU7 05-0600 46172(QG53)>DU7 1217 BV2YA>DU7

Jan 27 06-0700 45260(QF35)>DU7

Jan. 29 05-0600 48250(RE78)>DU7 06-0700 ZL3NW>DU7 07-0800 VK7AC,VK5BC>DU7

Jan. 31 03-0400 45250(RE78)>DU7 1215 K2ZD>JR6EXN(eme -22)

Oceania

High summer in the southern hemisphere and therefore reports are plentiful. The listing below is not quite a comprehensive record of reports because the otherwise excellent VK logger can only be persuaded to download a maximum of 100 spots for any given day. (Why?) This limit was easily exceeded on the busier days – hence the recurring ‘incomplete’ in the listings. Pity. The listing excludes local contacts and TV reports within the VK-ZL area but includes those from further afield and those for frequencies above 50MHz. Long-range TV ‘spots’ were less numerous than in January 2009 and mostly relate to Thai TV; Siberia and mainland China proved elusive.

Among amateur contacts there were few that could be accounted ‘DX’, notably reception of the Guam beacon and a VK7-9V contact on the 1st and a couple of ZL contacts with K6QXY on the 20th. A modest haul. The majority of reports related to sporadic-E (or Es scatter) within Australia or with New Zealand. A considerable number of reports are underscored but the great majority of these signal exotic calls rather than particularly interesting propagation. The New Caledonia beacon, FK8SIX, a regular visitor, lies within single hop range for most VK operators. (Only a couple of actual contacts were reported between VK and FK). The E51USA beacon and A35A are both near-neighbours for many VK and ZL operators as were the VK9WBN, VK9NA and YJ0MM expeditions. On the other hand, a substantial number of the contacts reported within or between VK-ZL necessitated a second hop. The prevalence of multi-hop contacts was a notable feature of last January’s report. On a purely impressionistic assessment such contacts were less common this year.

Jan. 1 00-0100 VK2>VK3 VK2RHV,VK2RSY>VK7 VK5RBV,VK5VF,VK3RMH>VK2 E51USA>ZL2,ZL3,VK5 AH2G/b>VK4BOF 01-0200 E51USA>VK2,VK3 VK2>VK3 E51CG>VK4,VK5 VK4RGG,FK8SIX,V K5,ZL4>A35A FK8,VK3>VK4 AH2OTE>VK4 ZL1,VK5>VK4 VK2RSY,VK2RHV,FK8SIX>VK5 VK1>VK3 02-0300 VK3>VK1 FK8SIX,ZL3,ZL2MHF>VK5 VK2>VK3,VK7 57260(QF23)>VK6 59700(AH45)>VK2 03-0400 ZL3SIX>VK3,VK4 VK5RBV>ZL3 VK2,VK1>VK7 50750(RG43)>VK7 55250(AH45)>VK2 ZL2>VK3 ZL2>VK5 04-0500 ZL2>VK5 VK7>VK2 FK8SIX,E51USA>VK4 information for remainder of day incomplete 0845 48239.5(9N2)>VK3 09-1000 VK6>VK2 9V1TT>VK7AC

Jan. 2 00-0100 VK5RBV,VK5VF>VK2 VK2RSY,VK3>VK4 55250(AH45)>VK2 VK4RGG,VK2>VK5 01-0200 VK3RMH>VK4 VK4RGG>VK7,VK2 VK3>VK2 57250(PF96),57260(QF23)>VK6 VK5>VK2,VK4 VK2RSY>VK4 VK4RTL>VK2 VK7>VK2,VK3 02-0300 VK6RPH,VK6RBU,VK4RGG,VK8RAS>VK5 VK6>VK2 VK4RTL>VK3 03-0400 VK8RAS>VK3,VK5,VK6 VK6>VK5 VK5RBV>VK4 VK6RBU>VK4 VK4>VK2 FK8SIX>A35A 04-0500 VK4RGG>VK3,VK7 VK2>VK4 VK9NA>VK2,VK4 FK8SIX,VK9NA>A35A VK8RAS>VK3,VK5 E51USA>ZL2TPY VK5>VK6 FK8SIX>VK2 VK4>VK3 VK4>A35A 05-0600

VK6RBU,VK5VF>VK6 VK8RAS>VK2 incomplete 0600 VK9NA>VK3AKK 07-0800
VK9NA>VK1,VK2,VK3,VK4 09-1000 VK6>VK3 19-2000 E51USA/b>ZL2TPY 23-2400
A35A>VK2OC E51CG>ZL2AJ

Jan. 3 00-0100 A35A>VK2FAD VK9NA>VK4MA FK8SIX,VK4RGG,VK8RAS>VK4
FK8SIX,E51USA>ZL2TPY E51USA>VK2,VK4 E51WL/b>VK1 55239.6(RF73)>VK4
E51CG>VK2,VK4 01-0200 VK8RAS>VK6 FK8SIX,E51CG>VK4 FK8SIX,VK2RHV,VK5>VK4
FK8SIX,VK4>VK2 57250(PF96)>VK6 VK4>VK6 02-0300 VK9NA>VK4EKM
FK8SIX,VK9WBM>VK4 VK4>VK2 03-0400 VK9WBM>VK7IR VK2,VK5>VK4
VK4RGG>VK2,A35A VK4RTL,VK9WBM>A35A 04-0500 FK8SIX>VK4,VK5 55250(AH45)>VK2
A35A>VK4 VK4RTL>VK2,VK5 E51USA>ZL2 VK9WBM>A35A<VK2,VK4 VK9NA>A35A
FK8SIX>VK5 05-0600 VK2,VK4>VK5 3D2JS>A35A,VK4 FK8SIX>VK4 incomplete
VK9WBM>VK7IR 06-0700 VK9WBM>VK2IR 21-2200 E51USA>ZL2TPY

Jan. 4 00-0100 E51USA/b>VK3AKK,ZL2,ZL3 VK4RTL>VK8 VK2RSY>VK5 FK8SIX>VK2 01-
0200 E51USA/b>VK3OT,ZL2,ZL3 VK5>ZL3 02-0300 E51USA/b>VK3AKK E51WL>VK7
E51CG>VK7 VK8RAS,VK4RTL>VK4 ZL2,ZL3>E51CG E51CG>VK2,VK4 FK8SIX>ZL2,VK2 03-
0400 E51USA/b>VK2,VK4,VK7,ZL2 FK8SIX,ZL2MHF>VK2 ZL1>ZL4 ZL2>VK7 04-0500
VK9NA>ZL4PW,ZL2 ZL1>ZL4 ZL3,E51USA/b>VK2 E51USA/b>A35A,VK4,VK7
55250(AH45)>VK2 05-0600 VK4>A35A FK1TK>VK4 49750(OM34)>ZL1 E51USA>VK4
VK2RHV,FK8SIX>ZL2 ZL>ZL4 FK8SIX>VK2 06-0700 FK8SIX>E51CG 50750(ZL)>VK7
E51CG>VK4 VK8RAS>VK2 20-2100 ZL3SIX,VK2RHV>ZL2 21-2200 48000(CE)>ZL2TPY 22-
2300 ZL2MHF>VK4 23-2400 VK4>VK2 23-2400 VK4>VK7 ZL2,FK8SIX>VK4 VK2>ZL1
VK5RBV>VK2 VK2RSY>ZL3

Jan. 5 00-0100 ZL2MHF>VK2 VK4RGG>VK7 VK2>VK3,VK5 VK4>VK3 01-0200
VK5VF,VK5RBV>VK2 VK4>VK3,VK7 VK2>VK3,VK7 ZL3SIX>VK4 02-0300
VK4>ZL4,ZL3,VK2,VK7 VK5RBV>VK2 VK8RAS,VK2RSY,ZL2,VK3>VK5 03-0400
VK3,VK4RGG>VK5 VK5RBV,VK3>ZL3 VK5,ZL2>VK2 45239.6(RF72)>VK3 ZL1>VK9NA 04-
0500 VK7>VK2,VK3,VK4 VK7RST,VK7RAE>VK3 05-0600 VK2RSY,VK3,VK4>VK7
VK9NA>VK3,VK7 VK3>VK4 06-0700 ZL1>ZL4 VK8RAS>VK3 VK2RSY>ZL3 VK5RBV>ZL2 07-
0800 VK7RAE,VK3RMV,VK3RMH>VK4 ZL3>VK2 08-0900 57240(QF42)>VK4 VK3,VK4 >VK2
VK7RST>VK7 JAs>VK2IR incomplete 12-1300 W7GJ>VK4CZ(eme -18)

Jan. 6 00-0100 VK7>VK4 VK5VF>VK3 VK7RST>VK2 01-0200 ZL3SIX,VK8RAS,VK3RMH>VK5
VK3>ZL3 VK7RAE>VK4 02-0300 VK4RGG>VK7 05-0600 55260(RE54)>VK2 VK7>ZL2 06-
0700 VK3>ZL1,ZL2,ZL3 VK3>ZL3 07-0800 ZL3,ZL2MHF,ZL4>VK2 VK7>ZL2 08-0900 VK7>ZL4
51740(QF35)>ZL2 ZL3SIX>VK7 VK2>ZL2,ZL4 09-1000 ZL2,ZL3>VK2 VK2RSY,VK7RAE>ZL3
10-1100 VK2,VK4>ZL3 19-2000 VK3>VK7 20-2100 55240(RF73),VK4>VK2 48.2(CE)>ZL2TPY
VK9NA>VK3OT 21-2200 VK9NA>VK7XI 51740(QF35),ZL3SIX(bs)>ZL2 51670(QF53)>ZL2 22-
2300 ZL2,VK7RJE,ZL3SIX>VK4 VK2,VK3,VK5>VK9NA VK8RAS>VK3,VK5 VK2,VK3>VK4
VK5RBV,VK4RTL,VK5VF,VK8RAS>VK2 VK4RGG>ZL2,VK3 23-2400 VK4>VK3
VK9NA>VK2,VK3,VK7 VK4RTL,FK8SIX>VK2 VK7,VK8RAS,VK5RBV>VK4
VK8RAS,VK4RGG>VK3 VK9WBM>VK3OT

Jan.7 00-0100 VK4RGG,VK7RAE,ZL1>VK5 FX8SIXA35A VK2>ZL3 VK5RBV>VK6
VK9NA>VK2,VK7 E51USA/b>VK3 VK7RAE>VK5 VK9WBM>VK5,VK7 01-0200
E51USA/b,VK6>VK3 VK9WBM>VK3,VK5,VK7 57250(PF96)>VK6 VK6>VK3,VK4,VK5
VK4RTL>VK2 VK8RAS>VK5 57260(QG51')>VK6 02-0300 VK9WBM>VK4
VK2,VK5,VK6,FK8SIX>VK4 E51USA/b,FK8SIX,VK4RTL,VK6>VK2 VK5VF,VK5RBV>VK6
VK9NA>VK2,VK5,VK6 VK8RAS/b>VK3 03-0400 FK8SIX>VK5VG>VK4 VK6>VK2,VK4
VK9WBM>VK8RAS>VK6 E51USA/b,VK8RAS>VK3 VK2RSY>VK5 VK8RAS>VK3
VK9NA>VK2.VK4 04-0500 VK8VF>VK3 VK2>VK4 VK2RSY,VK6>VK5

VK7RST,VK5RBV,VK8>VK4 57250(PF96),57260(QF23)>VK6 VK4RGG,VK4RTL,VK8RAS>
VK3 VK4RGG>VK6,VK7 05-0600 VK4>VK8 VK8VF>VK3 incomplete18-1900 E51USA>ZL2TPY
19-2000 E51WL>ZL1RS 20-2100 E51USA/b>ZL2TPY A35A>ZL1RS,VK3OT E51WL>ZL1RS
CEMuzak>ZL2TPY 22-2300 ZL4>VK3 ZL3>VK3 23-2400 A35A>ZL1RS,VK3

Jan. 8 00-0100 VK4RTL,VK7RST,VK7RAE,ZL2MHF>VK2 VK5>VK6,VK4,ZL3 ZL4>VK3
ZL3SIX>VK3,VK4 VK5RBV>ZL3,VK6 VK6RPH>ZL1 VK4>VK3 ZL1>VK6 ZL4>VK1
ZL2MHF,VK7RST,VK3>A35A VK7RAE>VK4 01-0200 VK2,VK4>VK3 ZL3SIX>VK2 VK1>ZL3
57250(PF96),50740(RF72)>VK6 FK8SIX>A35A VK5,VK6RPH>ZL3 02-0300
VK4RGG>VK3,VK7 VK6RPH>ZL1,ZL2 ZL2>VK7 ZL4>VK1,VK7 55250(RE7i9)>VK2
ZL1,VK5RBV>VK6 ZL1,VK4>VK3 VK7RST>VK4 VK6>VK3 03-0400 VK4>VK3 VK3,VK6>ZL1
ZL3SIX>VK4 VK8RAS>ZL1 VK4RGG>VK3 VK4,VK6>VK5 04-0500 ZL4,ZL2MHF>VK2
VK6RPH>ZL1 VK4>VK3,VK7 VK6>VK3 VK4RTL>ZL3 50172(QG53)>VK6 05-0600 VK4>VK3
VK8RAS,VK4RGG>VK5 VK7>VK4 06-0700 FK8SIX>A35A 07-0800 VK5RBV>VK2
VK8VF,VK7RAE,VK3RMV>ZL3 VK2RSY>VK7 08-0900
VK7RAE,VK7RST,VK2RSY,VK5RBV>ZL3 ZL3SIX>VK7 VK2>ZL4 09-1000 VK4RTL>VK8
VK5VF,VK5RBV,VK3RMH>ZL3 VK2RSY>VK7 incomplete

Jan. 9 01-0200 E51USA/b>A35A 03-0400 VK8RAS>VK5
VK8RAS,VK8VF,VK5RBV,VK7RAE>VK3 05-0600 VK8VF,VK5RBV,VK7RAE>VK3 08-0900
55240(RF73)>VK2 19-2000 VK2RSY>VK4 20-2100 FK8SIX>VK4 21-2200 ZL3SIX>ZL2
ZL3SIX,ZL2>V K3 22-2300 50750(RE78)>VK2 ZL2>VK3,VK4 ZL4>VK4 23-2400
ZL2,ZL3SIX/b>VK3 23-2400 ZL3>VK3 VK4RGG,VK3RMH,VK5RBV>ZL3

Jan. 10 00-0100 VK1>VK9NA ZL3SIX>VK5 51670(QE53)>ZL2 FK8SIX>ZL2 ZL2,ZL4>VK3 01-
0200 VK9NA>ZL2TPY,VK7XX,VK1,VK2,VK3,VK4 VK7RAE>VK3 06-0700 ZL1>ZL3 07-0800
VK2RSY>VK4 10-1100 ZL1,VK7>ZL3 VK2RSY,VK7RAE>VK4 VK4RGG,ZL3SIX>VK7
E51USA/b>ZL2 VK2RSY,VK7RST,VK3,VK5>VK7 51740(QF35)>ZL2 20-2100
ZL3,VK4RGG>VK7 21-2200 E51USA/b>ZL2TPY ZL3SIX>VK7 22-2300 ZL3SIX>VK3
VK3,VK2RSY,VK7RST,VK4>VK7 51740(QF35)>ZL2 VK7RAE>VK4 23-2400 ZL3SIX>ZL2
VK2>VK5

Jan. 11 06-0700 VK2RSY>ZL3 07-0800 55240(RF73)>VK2 19-2000 ZL3SIX>ZL2 20-2100
48.0(FF46 CE)>ZL2 22-2300 VK4RGG>VK7 23-2400 VK4>VK7

Jan. 12 00-0100 VK4>VK5 01-0200 VK4>VK3,VK5 VK4RTL>VK5 51672(QG53)>VK7 02-0300
VK4RGG>VK3 VK4>VK7 03-0400 64240(QG62)>VK2 VK4>VK7 04-0500 VK4>VK2,VK7
VK2>VK5 51672(QG53)>VK5 51740(QF35)>A35A VK3RMV>VK2 57250(QF02)>VK2
VK2RSY>A35A VK2,VK4>VK1 05-0600 VK5RBV>VK2 VK4RGG,VK4ABP>VK1
FK8SIX>VK2,VK5 VK4>VK3 VK1,VK2>VK5 06-0700 VK2>VK3,VK5 VK4>VK3 VK7RST>ZL3
07-0800 VK2RSY>ZL3 08-0900 VK7RAE,VK5RBV>ZL3 09-1000 VK7RAE>ZL3 10-1100
50740(RF72),50760(RE78)>VK3 21-2200 55260(RE54)>VK2 22-2300 51740(QF35)>ZL2
VK7RAE,VK3RMH>VK4 23-2400 ZL3SIX>VK3 VK5RBV>VK2

Jan. 13 00-0100 VK1,VK9NA>ZL4 VK4,ZL3SIX>VK5 ZL3SIX,FK8SIX>VK3 01-0200
ZL4,VK3>VK4 VK7RAE,VK2RSY,VK5VF,VK5RBV>ZL3 ZL2,VK4>VK5 ZL3SIX>VK2,VK4
55260(RE54),55250(RE79),62600(RE43)>VK2 VK2>VK4 VK1>VK9WBM VK2RHV>VK2,ZL2
ZL4,VK9WBM>VK3 02-0300 57250(PF96)>VK2 ZL2>VK7 VK4>VK3 VK2RHV,VK2RSY>VK3
03-0400 VK4RTL>VK2 VK7RAE>VK5 VK9NA>VK2,VK4 57450(PF96),VK5RBV>VK7 ZL3>VK4
VK2RSY,VK4RGG>VK3 05-0600 VK7>VK5 VK7RST>VK3 VK2RHV>VK4 VK9NA>VK3,VK2
06-0700 VK9NA>VK4,VK7 VK2RHV>VK4 VK2RSY,VK2RHV,FK8SIX>VK7
VK2RHV,VK5VF,VK3RMH>ZL3 09-1000 VK5RBV>VK4 51740(QE35)>ZL2 20-2100 VK7>VK5
21-2200 VK2RSY>VK2,VK4 23-2400 VK5RBV>VK6

Jan. 14 00-0100 51670(QG53)>ZL2 01-0200 VK5RBV>VK6 VK3,VK7RAE>VK4 02-0300 VK4>VK3,VK5 VK2RSY,VK2RHV,VK5RBV>A35A FK8SIX>VK2 03-0400 VK8RAS,VK4RTL>VK3 ZL2,VK2,VK7>VK4 VK2,,VK5RBV,FK8SIX>A35A FK8SIX>VK2 VK7RAE,VK3RMH,VK2RHV>VK4 04-0500 VK4RTL>VK2 FK8SIX>VK3 VK7>VK4 05-0600 VK5RBV>VK2 VK4>VK5,ZL3 VK2RSY>VK7 incomplete

Jan. 15 00-0100 ZL3>VK2 VK3>VK4 VK7>ZL3 01-0200 ZL3SIX,ZL2MHF>VK2 55260(RE54)>VK2 VK2,ZL1>VK7 02-0300 VK5RBV>VK4 ZL3SIX>VK3 04-0500 VK2>VK7 ZL3SIX>VK3 05-0600 VK7>VK2 ZL3SIX>VK3 06-0700 VK2RSY,VK2RHV>VK7 ZL3SIX>VK5 07-0800 64162(QE37)>ZL3 VK5VF>VK6 08-0900 57250(PF96)>VK6 10-1100 VK4RGG>VK2 11-1200 ZL3SIX>VK2 21-2200 VK4RGG>VK5 VK3RMV,VK7,VK2RSY>VK4 22-2300 VK5VF,VK5RBV,VK1>VK4 57250(QH40)>VK2 VK4RTL>VK2 23-2400 VK8RAS>VK2,VK3,VK5,VK1 VK4>VK2 VK3RTL,VK4RGG>VK3 FK8SIX>ZL2

Jan. 16 00-0100 VK8RAS>VK2 VK8>VK1,VK5 FK8SIX,VK4>VK3 VK5RBV>VK4 VK7RST<>VK5 01-0200 51762(QG53)>VK6 02-0300 VK2RSY>VK4 FK8SIX,VK5RBV>A35A VK7RST,VK4RTL>VK3 03-0400 ZL3SIX,VK5RBV>VK4 VK2RHV>ZL3 VK3>VK7 04-0500 VK4>VK3,VK7 A35A>E51CG FK8SIX>VK3,VK4 VK2,VK4>VK3 VK4RGG>VK5 55250(AH45)>VK2 05-0600 ZL3SIX,VK4RTL>VK2 ZL3SIX,FK8SIX>VK3 VK5RBV,VK4RGG>ZL2 06-0700 FK8SIX>VK2,VK3 ZL2>VK3,VK5 VK8RAS>VK5 VK4,VK8RAS>VK2 VK8VF>VK4 07-0800 VK8RAS,ZL2,VK4>VK3 VK4>VK1,VK3 FK8SIX,VK4RGG,VK3,VK5RBV,ZL3>VK2 VK5RBV,VH2RHV>ZL2 08-0900 ZL3,VK3>VK2 VK3,VK5>VK4 VK2RSY>VK5,VK7 VK5RBV,51740(QF35)>ZL2 09-1000 VK4>VK3,VK5,VK7 VK5>ZL2 51760(QF58),VK2>ZL2 incomplete 2204 JA7(?)>VK2

Jan. 17 00-0100 VK2,VK5RBV>VK4 VK2RHV>ZL2 01-0200 VK4>VK5 VK3RMH>VK4 50740(RF72),50760(RF81)>VK4 VK2,ZL3>ZL2 02-0300 51760(QF58),VK2RHV,VK8RAS,FK8SIX>ZL2 VK4RGG,VK4RTL>VK3 ZL2MHF>VK2 VK4,51762(QF53)>VK5 03-0400 ZL2SIX,VK4RGG>VK2 VK2RHV>ZL2,VK5 VK4RGG>ZL1 FK8SIX,VK3RMH,VK5>VK4 04-0500 50760(RF64),ZL1>A35A VK4RGG>VK3 VK2RHV>VK6 05-0600 VK5RBV>VK4 06-0700 VK6RPH>VK5 VK5RMV,VK6RPH>VK2 57250(PF96)>VK6 VK6>VK2 07-0800 VK2,VK5>VK6 08-0900 57250(PF96)>VK6 FK8SIX,VK3RMH>VK4 VK5>VK6 09-1000 VK5>VK2,VK6 ZL2>VK2 51740(QF35)>ZL2 10-1100 VK8RAS>VK6 11-1200 VK2RHHV>ZL2 19-2000 VK5RBV>VK2 20-2100 VK4RGG>VK2 VK7>VK2,VK4 21-2200 ZL3SIX>ZL2 VK7>VK3 22-2300 VK5RBV>VK4

Jan.18 00-0100 VK4>VK3,VK5 02-0300 VK8RAS>VK6 03-0400 ZL3SIX>ZL1 05-0600 VK4RGG,51670(QG53),FK8SIX>ZL2 52260(RE43)>VK2 09-1000 VK7RST,VK7RAE>VK2 51740(QF35)>ZL2 19-2000 VK4>VK2 22-2300 VK8VF>VK4 23-2400 FK8SIX>VK4

Jan. 19 02-0300 VK6s>VK3 04-0500 50760(RF64)>A35A 05-0600 VK5RBV>VK6 06-0700 VK5RBV>VK6 08-0900 VK6RPH>VK5 VK5RBV>VK6 19-2000 VK2>VK4 10-1100 VK3>VK5 22-2300 VK5>VK3 55250(AH45)>VK2 23-2400 VK2,VK4,VK5>VK7 VK7RST,VK5RBV>VK4 VK2RSY>ZL3

Jan. 20 00-0100 VK6RPH>VK6 01-0200 K6QXY>ZL2DX,ZL3NW 03-0400 VK2>VK5 04-0500 VK5RBV>VK3 05-0600 57250(PF96)>VK4 19-2000 VK2>VK7 20-2100 VK4>VK2(ms) 21-2200 VK2>VK4 VK7RAE>VK3(tr) VK4RGG>VK3

Jan. 21 01-0200 VK2,FK8IA>VK4 02-0300 FK8IA>VK2 57260(QF23)>VK4 VK2RSY>VK5 03-0400 VK5RBV>VK2,VK4 VK2RSY>VK5 VK3RMV>VK4 04-0500 VK7>VK5 VK4>VK3,ZL3 05-0600 VK3RMH,VK7RAE>VK5 VK4>VK3 06-0700 VK4>VK3 VK5>VK4(Es),VK7 07-0800

VK3>VK4 08-0900 48239.6(OJ03 9M)>VK6 09-1000 VK8VF>VK3 12-1300 VK3>VK4 19-2000 VK5RBV>VK2

Jan. 22 0411 DU7/PA0HIP>VK3OT,VK2,VK5 0557 VK8RAS/b>VK3 07-0800 49751(OM34)>VK6 08-0900 VK4RHT>VK5 09-1000 VK8RAS,VK4RTL>VK5 VK8RAS>VK4 18-1900 VK5RBV>VK2

Jan. 23 00-0100 VK7RAE ,VK7RST,VK3,VK5,VK8RAS,ZL3>VK2 VK5RBV>ZL1 VK4>VK3,VK5 VK2>VK5,ZL3 01-0200 ZL3,VK5,VK4RGG>VK2 VK4RTL,VK2RHV>VK5 VK5RBV,VK2>VK4 VK4RTL>VK3 02-0300 VK8RAS,VK4RGG,VK4RTL,VK5>VK2 VK4RTL,VK4RGG>VK3 VK8RAS>VK2,VK5 03-0400 VK4>VK2,VK5 VK4RGG,VK8RAS,VK5RBV,VK4RTL>VK3 04-0500 VK4RTL,VK2>VK3 VK5RBV,VK8RAS>VK2 50740(RF72)>A35A 05-0600 VK8RAS>VK5,VK6 06-0700 48239(OJ03)>VK6 08-0900 49750(PN53)>VK6 20-2100 VK2>VK7 21-2200 VK4>VK7 22-2300 51740(QF35)>ZL2,ZL3 VK2,VK5.VK7>VK4 VK5>VK1 23-2400 VK5RBV>VK4 VK8RAS>VK5

Jan. 24 00-0100 VK4>VK5 57250(PF96)>VK6 01-0200 VK6>VK5 57250(PF96)>VK6 02-0300 VK5VF>VK6 03-0400 VK6>VK3 VK5>VK5(345km) VK4RGG,VK2RSY>ZL1 VK4RGG>ZL2 04-0500 FK8SIX>A35A 06-0700 VK8>VK4 FK8SIX>VK2,VK4,ZL1 VK7RAE>VK3 VK4RGG>ZL1 07-0800 ZL1>VK8 08-0900 VK4,VK2RSY,VK2RHV>ZL1 09-1000 VK7RAE>VK3 19-2000 50740(RF72)>A35A 20-2100 50760(RF64)>A35A VK7RAE,VK4>VK3 51670(QG53)>ZL2 21-2200 50760>A35A 51760(QF58),51740(QF35),ZL3SIX,VK2RHV>ZL2 22-2300 ZL3SIX,ZL2MHF>VK2 23-2400 VK5,VK4RGG>VK3

Jan.25 00-0100 VK2>VK4,VK5 VK5,VK7RST>ZL3 A35A>ZL1 VK4>VK3 01-0200 ZL3SIX/b>VK3,VK5 VK4RGG>VK3 VK2RSY,VK3RMH,VK7RST>VK4 VK2RHV,VK7RST,VK7RAE>ZL3 50740(RF72)>A35A 02-0300 A35A,VK2> VK3 FK8SIX,VK3>A35A VK5>VK1,VK2,ZL1 ZL3>VK7 VK3>ZL4 03-0400 VK3,VK5>VK4 YJ0MM>ZL2,ZL3,ZL4,VK4 ZL4>VK2 VK7RAE>VK3 ZL3>VK5 48239(OJ03)>VK6 ZL1>A35A W7GJ>ZL1RS VK4RGG>ZL1 YJ0MM>VK3,ZL4LV,ZL1RS FK8SIX,ZL3SIX/b>VK3 04-0500 VK5>VK4,ZL1 FK8SIX>VK2 VK5RBV>VK6 05-0600 DU7/PA0HIP>VK1 VK4RGG,VK3 48239(OJ03)>ZL2 57250(OJ03)>ZL1 06-0700 FK8SIX>VK4 VK7RAE>ZL3 VK5RBV,VK4RTL>VK2 DU7/PA0HIP>VK3OT.VK5ZE,VK2APG,VK2QO,VK5AYD VK8VF>VK4 48239(OJ03)>VK2 ZL2MHF,ZL4>VK7 0744 DU7/PA0HIP>VK2ZT,VK5BC,VK2APG,VK2HN VK7RST>ZL3 VK8VF>VK2 YJ0MM>VK7AC incomplete 2050 E51USA/b>ZL2TPY 2122 E51USA/b>VK4CZ 2211 E51CG>ZL1RS

Jan. 26 00-0100 VK4,VK8RAS>VK2 VK2RHV>VK7 ZL1,50740(RF72)>A35A 02-0300 VK8RAS>VK4,VK6 FK8SIX>ZL1,A35A VK5>VK6 ZL1,50740(RF72)>A35A ZL1>VK4 50760(RF81)>VK4 03-0400 VK4RGG>ZL1 FK8SIX>A35A 04-0500 VK2,FK8SIX>A35A FK8SIX,VK4RGG,VK2>ZL1 VK4RGG>VK2 VK2RHV,VK4RGG>ZL2 05-0600 YJ0MM>VK5BC,VK3ZJ,ZL1,ZL3,VK3,VK4,VK5 48239.6(OJ03)>ZL2 FK8SIX>A35A,VK3,VK4,VK5,ZL2,VK2RHV 06-0700 55250(AH45)>VK2 VK8RAS>ZL2 VK5>VK4 ZL3SIX>ZL2 FK8SIX>A35A YJ0MM>VK5PJ,ZL3 VK2>ZL4 VK2RHV,VK2RSY,VK8RAS>ZL3 57260(QG51)>VK6 VK5RBV,VK7RAE>ZL1 VK2RHV,VK4RGG>ZL2 incomplete 0855 ZL3>VK3 1947 E51USA/b>ZL1RS 20-2100 E51USA/b>VK4CZ E51CG>ZL1RS,VK4CZ,VK4WR

Jan. 27 00-0100 VK2>VK3 VK4RTL>VK5 ZL3,VK5RBV>VK2 YJ0MM>VK3OT 01-0200 VK5RBV,FK8SIX>VK4 VK4RTL>VK3 VK5VF,VK2,VK3>VK7 YJ0MM>VK3,VK4 02-0300 YJ0MM>VK5DK,VK2,VK4,VK5 51740(QF35)>ZL2 A35A>VK4 03-0400 FK8SIX>VK4 YJ0MM>VK4CC,VK2,VK3,VK5 04-0500 YJ0MM>VK2DAG,VK3,VK4,A35A FK8SIX,A35A>VK4 05-0600 VK4RTL>VK5 06-0700 YJ0MM>VK4 VK8RAS,VK4RTL>VK2 VK8RAS>VK6 07-0800

51670(QG53),VK4RGG,VK2>ZL2 08-0900 VK4RTL>VK5 51760(QF58)>ZL2 10-1100
 VK7RAE>VK3 11-1200 57260(QG51)>VK6 18-1900 50760(RE64)>A35A A35A>ZL1 19-2000
FK8SIX>ZL1,A35A E51USA/b>ZL1RS 20-2100 FK8SIX>VK2 21-2200
 VK2RHV,51760(QG53),VK4RGG>ZL2 50760(RF64,ZL2>VK4 VK2RHV,FK8SIX,VK4RGG>ZL1
E51USA>ZL1,ZL2 ZL3SIX,51670(QG53)>ZL2 22-2300 51740(QF35),VK2RSY>ZL3
 ZL2MHF>VK4 E51USA>ZL2 23-2400 E51USA>A35A E51WL>ZL2
E51CG>ZL2TPY,VK2,FK8SIX

Jan. 28 00-0100 E51WL>VK2,ZL3,VK4,VK5,A35A E51USA>VK5,ZL1,ZL2,VK2
 ZL1>VK4,ZL3,A35A 01-0200 E51USA>A35A E51WL>ZL3,ZL2MHF,A35A 55250>VK2
 VK6RPH>VK5 51670(QG53)>ZL2 VK5>VK6 02-0300 55250(AH45)>ZL3
 VK2RHV>FK8SIX>A35A E51USA>VK5,ZL2 57250(PF96)>VK6 55250(AH45)>A35A
E51WL>ZL2,ZL3,ZL4 A35A>ZL3 VK4RGG>A35A ZL2>VK3 51740(QF35)>ZL1 A35A>VK7
 VK4RGGG,VK2RHV,VK6RPH>ZL2 51670(QF53),VK2RHV>ZL2 03-0400 VK2>ZL3 A35A>VK7
E51USA<>VK4 57250((PF96)>VK6 FK8SIX>A35A VK6RPH>VK5 04-0500 A35A>VK6
FK8SIX.VK4>ZL2 VK6RPH,VK5VF,VK5RBV VK5RBV,ZL2MHF,VK6RPH>ZL2
A35A>E51CG.VK7 ZL3>VK2,VK5,VK6RPH,VK7,VK8RAS ZK1WL>E51CG incomplete 05-0600
 ZL2>VK3 E51CG>VK6 VK6>VK7 VK8VF/b,VK6RPH>VK3 0613 VK6>VK3,VK7 07-0800
 ZL4>ZL2 ZL3SIX>VK3

Jan. 29 00-0100 VK4RGG>VK2,VK3,VK5 VK4RTL>VK3 VK1,VK5RBV,VK7RAE 01-0200
 VK4RGG,VK2>VK5 02-0300 VK4VK5 VK2,VK3>VK4 03-0400 VK5RBV>VK3 ZL3SIX>A35A 04-
 05090 55250(PF96),VK5RBV>VK6 VK6RPH>VK5 05-0600 ZL3SIX>ZL4 VK6>VK5 06-0700
 VK2,VK4RGG,FK8SIX>ZL257250>VK6 07-0800 DU7/PA0HIP>VK7AC
 VK5RBV,5170(QG53),VK4RGG>ZL2 VK3RMH>ZL3 ZL3SIX,ZL2>A35A VK3>VK7
 51760(QF58)>QF58>ZL2 08-0900 57250(PF96)>VK6 48239.6(OJ03)>ZL2 09-1000
 VK5,FK8SIX,VK6RPH>ZL2 VK4>ZL4 VK7>VK2 10-1100 VK6RPH>ZL2 48239...6(OJ03)>ZL2
 VK4,VK5>VK7 11-1200 VK5RBV>VK7 VK2,VK4>VK3 12-1300 VK7RST,VK7RAE,VK3>VK5 19-
 2000 VK4RGG,51670(QG53),FK8SIX>ZL1 VK4RTL>VK2 incomplete 2100 VK4RTL>VK3

Jan. 30 00-0100 VK4RGG,VK3>VK5 ZL3SIX>VK2 01-0200 57250(PF96)>VK6
 VK6RPH,VK8RAS,VK6RBU,VK5RBV>VK5 VK6RPH>VK2 02-0300 VK3RMH>VK6 03-0400
 51740(QF35)>ZL2 04-0500 VK2>VK5,ZL2 VK6>VK5 VK8RAS>VK2 05-0600 VK4>VK7
 VK8RAS,ZL3SIX>VK1 VK4RTL>VK5 VK4RGG>VK3 VK2>ZL3
FK8SIX,51740(QF35),51760(RF58)>ZL2 57250(PF96),57260(OG51)>VK6 06-0700
 ZL2,VK7RST>VK4 VK6RPH>VK5 VK8RAS,VK5RBV>VK6 07-0800 VK2,VK6,ZL1>VK3
 28239(OJ03),51740(RF35),VK4RGG,VK2,VK3RMH>ZL2 ZL3,VK6RPH>ZL1
 VK6RPH,VK6RBU>VK4 VK6>VK7,ZL1,ZL3 57260(QG51)>VK6 VK6>ZL1 08-0900 ZL2>VK3
 VK6>ZL2,ZL3,VK7 ZL2MHF,ZL3SIX>VK2 VK6RPH>VK3,VK7 64240(OF85)>VK3 incomplete

Jan. 31 00-0100 ZL3>VK2 VK5>VK3 01-0200 ZL3SIX>VK4 E51USA>ZL1 02-0300
 VK4RTL>VK5 VK8RAS>VK4 04-0500 E51USA>ZL1,ZL2 05-0600 VK4>VK2 VK5RBV>VK4
 57260(QG51)>VK6 06-0700 VK5>VK4 VK4RTL>VK2 08-0900 VK2RSY>VK4 VK4RTL>VK3 10-
 1100 VK3,VK5,FK8SIX>VK4 19-2000 50740(RF72)>A35A 20-2100 E51USA>ZL1RS
 VK5RBV>VK4 23-2400 VK4RGG,VK8RAS,VK7RAE,VK5RBV>VK4 VK4RTL>VK2,VK5

28MHz

While January is never the best of months for those of us in the northern hemisphere we can take some cheer from the fact that the month's fairly modest crop of entities reported heard/worked in the UK was an improvement over the same month last year: 31 compared with 21: viz: CT,CT2,C3,DL,EA,EA8,F,HA,I,IS0,LA,LU,LY,OE, OH,OK,OM,

ON,OY,OZ,PA,PY,SM,SP,SV,S5,T7,UA,UR,W,YL,YO,YU,ZD7,9A. The table below indicates the dates on which the band is known to have been open. As always there may also have been unreported openings, so this is a minimal or 'worst case' view of propagation. However, PY, LU and ZD7 are the only countries outside Europe to have been logged.

28 MHz to and from the UK

	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
	+		+	+	+			+		+	+	+						+	+	+	+	+	+			+		+	+		+

While the country count may have been up on 2009 the number of beacons reported was lower - 23 against 28. It is reasonably clear that sporadic-e was the most frequent propagation mode,

	C30P	DB0UM	DF0ANN	DK0TEN	DL0IGI
UTC	11 22	1 12 18 19 20 22	18 20 21	4 5 8 18 20 21 22	4 8 18 19 20 21 22 23 28 29
03-06					
06-09	+				
09-12		2 1 2 3		+ 3	++ 5 9 +
12-15		3	+	9 2 5	4 2 +
15-18	2	1	3 1	5 + 5 7	7 + 8 5 1 1 +
18-21				+	
21-24					

but the substantial number of weak-signal reports at the S1-3 level suggests that signals were scattered rather than fully "reflected". It is possible that one or two of the Scandinavian beacons were received by auroral-e. With the exception of LU8EML, probably by way of mixed-mode

	DM0AAB	DM0ING	EA3TEN	EA4Q	F5ZUU	F5ZWE
UTC	18 21	18 19 20 21	8 11 18 20 22	5 18 20 22 28 29 31	1	1 4 11 18 20
03-06						
06-09			+			
09-12		1 1				2
12-15		3	4 4	2 1 7	9	9+ + 5
15-18	1 5	+ 1		2 4 1 2	9	+
18-21			1	1 + +		
21-24						

propagation, all the beacons heard except SV3AQR lay within single-hop range for UK operators, without being notably close-in. The list of most-reported beacons mostly includes the usual regulars like DL0IGI (10 days), EA4Q(7), SK0CT(7) and IW3FZQ(8), together with OH9TEN(8) and OK0EG(7), which are not quite as consistent. A number of the low-power

	F5ZWE	I3GNQ	IW3FZQ	IZ3LCJ	IY4M	IZ8DZB
UTC	22 24 28	22	5 12 18 19 20 21 28 29	18 21 22 28	12 18 21 22	10 11 12 18
03-06						
06-09						1
09-12	5		+			
12-15	5 +			2 +		
15-18	6 +	+	7 + 1 1 2 2	2 4 7 2	1 1 5	1 1
18-21			+ 5 7		4 1	5 1
21-24						

Italian beacons were not reported at all, or only on the more intense days.

	IZ8DZB	IW0HK	LA4TEN	LA5TEN	OH2B	OH9TEN
UTC	20 22 29	22	10 19 20	8 10 15 19 20 26	8 19 20	3 8 10 19 20 21 22 23
03-06						
06-09				+	2	
09-12			5 5	1 1 5 5	7	5 5
12-15	+		+	5 5		
15-18	8 +	+		5 9	7	9 3
18-21					7	2
21-24						+ 4 +

The figures in the table correspond to reported signal strengths. + is used where no signal report was given.

	OK0EG	SK5AE	SK0CT	SV3AQR	LU8EML
UTC	2 4 12 18 19 20 22	19 20 22 26	1 10 12 15 19 20 22	8 22	23
03-06					
06-09				2	
09-12	5 1	+ 9	+ 4 2 9		
12-15	+ 3	5	+ 9 3		+
15-18	2 + + +	4 2	5	+	
18-21	1	4	5		
21-24		4	5		

The table below shows the number of days for each three-hour period for which each beacon is known to have been heard. There were no reports for between 0000 and 0100 UTC and there were few before 0900 or after 2100, except in Scandinavia - unlike the summer sporadic-E season, when reports are somewhat more spread across the UTC day.

	3-6	6-9	9-12	12-15	15-18	18-21	21-24		3-6	6-9	9-12	12-15	15-18	18-21	21-24
C30P		1			1			IZ3LCJ				2	4		
DB0UM			4	1	1			IY4M					3	2	
DF0ANN				1	2			IZ8DZB		1		1	4	2	
DK0TEN			2	3	4	1		IW0HK					1		
DL0IGI			5	3	7			LA4TEN			2	1			
DM0AAB					2			LA5TEN		1	4	2	2		
DM0ING					2			OH2B		1	1		1	1	
EA3TEN		2		2		1		OH0TEN			2		2	1	3
EA4Q				3	4	3		OK0EG			2	2	4	1	
F5ZUU				1	1			SK5AE			2	1	2	1	1
F5ZWE			2	6	3			SK0CT			4	3	1	1	1
I3GNQ					1			SV3AQR					1		
IW3FZQ			1	6	3			LU8EML				1			
	-	3	5	26	31	5	-		-	3	17	13	25	9	5

Worldwide

January is never the best of months on ten metres, particularly during a sustained solar minimum. So there is plenty in the tables below for people who tend to see glasses as half empty. But, for those of a more optimistic disposition, as long-term aficionados of this band need to be, this month showed some signs of light at the end of the tunnel. While Oceania showed poorer results than in 2009, a number of paths showed improvement – very modest improvement, to be sure, but improvement all the same. So, the January 2009 equivalent showed Europe the only other continent worked from Africa; this year shows contacts with Asia and South America. The Asian reports were mainly for reception of South African beacons in Malaysia. Similarly, there was a modest improvement in propagation between South America and Oceania, consistent with openings noted on 50MHz.

	OC	AS	EU	AF	NA	SA
OC	20	26	3	0	2	4
AS	26	9	11	15	0	0
EU	3	11	30	21	1	7
AF	0	15	21	0	0	7
NA	2	0	1	0	25	18
SA	4	0	7	7	18	16

UTC days with propagation reported between or within continents

The following table tells a similar story: the number of periods recorded as 'nil' shows a decline over the previous year – although all too many remain to remind us that there is

	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	39	42	27	19	00	45	52	58	00	00	03	10	00	00	00	00	00	06	00	00	10	06	00	00
AS	35	61	23	13	19	19	13	06	03	03	10	13	00	03	29	19	00	00	00	00	00	00	00	00
EU	10	00	00	00	10	10	13	06	84	84	87	90	19	45	32	16	00	00	03	00	00	03	00	19
AF	00	00	00	00	10	29	13	03	00	32	42	23	03	06	10	03	00	00	00	00	00	00	10	16
NA	00	00	03	03	00	00	00	00	03	03	00	00	03	03	00	00	39	42	52	65	13	35	16	26
SA	00	00	00	13	00	00	00	00	03	06	19	10	03	13	06	10	00	29	32	26	06	10	45	39

Reliability Between or Within Continents During the Main Periods of the day

still a long way to go before this is a reliable, consistent band over the majority of paths. That said, the month few notable events. Candidates for inclusion included W0YR with F2LG and G3TBK around 1448 on the 22nd, an opening between ZS to SM, LZ and UR between 2044 and 2109 on the 24th, reception of GB3RAL by GM8LFB at 1152 on the 4th, with other inter-G working on the evening of the 19th and 20th. G0UNJ reported working SQ2JAM at 2124 on the 31st. The DL contest on the 10th brought widespread European working at predominantly weak signal levels. Sporadic-e was also evident on the 1st, 2nd, 12th and 18th

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