

Radio Weather Summary for March 2009

We still await the official confirmation that cycle 23 has given way to cycle 24; the latest smoothed sunspot numbers to hand, for September 2008, still show a downward trend. Meanwhile, the provisional data to hand show that the long, deep minimum continues, even though the last few days of the month suggested some very minor cheer. The sun was spotless every day but two (or maybe three if the spot SDIC belatedly discovered making a fleeting, weak, appearance on the 26th is included). Either way, the table below presents an impressive display of zero's. The solar flux, averaging 70 over the month, varied only between 68 and 72. The 90-day average was 70 throughout the month. There were no flares of magnitude C or above. The X-ray flux continues to be below the minimum reporting threshold. Incidentally, a recent commentary, which concluded that we still do not fully understand the underlying physics of the Sun, noted that the 'radio sun' (at 2800MHz) is currently at its 'dimmiest' since 1955. BBC Radio 4 carried a report in similar vein.

	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	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	?	0	0	0	0	0
SFlux	69	69	69	70	69	69	69	69	68	69	69	69	68	69	68	69	69	68	69	69	70	69	68	69	69	69	72	71	71	71	71

Since the geomagnetic cycle lags behind the sunspot cycle it may well not have reached minimum yet. G0CAS notes that, during cycle 20 (1964-76) there were 1,820 days when the Ap index was under 7. There were 1,170 in cycle 21 and 1,280 in cycle 22. But, as of mid-April 2009, there had been no fewer than 2,170 in cycle 23. March 2009 had 23 such 'quiet' days; the index reached double figures only twice. The three UK observatories once again did not report a single 3-hour period with a K figure greater than 4. However, there were brief periods on March 3, 13, 14 and 21 when high-latitude visual or radio aurora occurred at either 50 or 144MHz.

	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	2	0	11	11	4	1	1	11	0	5	6	11	19	10	11	6	8	1	7	5	11	7	2	10	11	11	8	6	3	7	2
ESK	5	2	14	13	6	3	1	15	1	6	7	13	22	13	14	9	9	3	9	7	13	8	2	12	13	12	9	5	6	8	4
HAR	6	2	15	15	7	4	1	15	3	7	7	15	24	17	14	9	9	4	10	6	15	10	3	14	17	12	10	6	6	9	4
Ap	4	2	5	7	3	2	1	8	2	3	3	6	16	8	7	5	3	1	3	4	8	4	3	8	10	7	4	4	5	4	4

Coronal holes 363, 363 and 364 made themselves felt during the 10th to the 14th and coronal hole 365 brought coronal streams between the 20th and the 24th. Solar wind speeds ranged between a low of 275km/sec on the 19th and a high point of 563 km/sec on the 25th. Particle densities were in single figures most of the time but were reported up to 22 per cubic centimeter on the 5th. Bz was mostly contained within the range plus/minus four nanoTeslas but fluctuated between plus 15 and minus 11 nanoTeslas during the disturbance on the 13th.

50MHz

Propagation to and from Britain

Another month with slim pickings, in which most reporters were using JTSM around 230 and identifying meteor scatter as the propagation mode, though there were no major meteor showers. While there appeared to be a few regular skeds most contacts seem to have been random. The number of entities reported worked from the UK – 17 - was wider than usual, though still unimpressive. The missing included OK, OM and DL (though JT is not authorized in DL). Iberia was the most favoured area. The 'country' breakdown was EA 18, CT 10, EA6 7, SM 4, OH 3, IS 2, S5 2, LA 2, PA 2, OE 2, OZ 2, I 2, F 1, HA 1, SP 1, YT 1, 9A 1. There were also three reports of JT/ms working within the UK. The earliest contact was reported at 0838, the latest at 2134. Here, as elsewhere, it should always be remembered, this survey is necessarily confined to what is reported.

Throughout this Report, as usual, beacon call signs are given in full, as are those for contacts of more than routine interest, whether in DX terms or propagation terms.

Meteor Scatter/JT

Mar 2 1542 CT 1552 EA2 1604 EA7 1903 9A 2134 G-GW

Mar 3 1944 OZ

Mar 4 0922 EA6

Mar 5 1021 S5 OZ (untimed)

Mar 7 1034 HA2 1133 S5

Mar 8 1010 IS0

Mar 9 1658 EA2

Mar 10 0839 EA6 0941 CT 0954 CT 0956 CT

Mar 11 1041 CT 1559 EA6 1613 EA7 1654 F

Mar 12 untimed EB1, OH6, SM3, OH8, SM0

Mar 13 0921 CT 0924 EA3 0938 EA3

Mar 14 0927 EB1 1420 EA3(+Es) 1538 EB1 1715 OH7 1814 CT 1851 EA5 1941 LA 1945 G-GW untimed I, OH7, SM7

Mar 15 0909 EA6 0947 LA 1014 SM7 1151 CT 1151 EA6 1159 EA5 1211 EB1

Mar 19 0758 G-GM 2100 PA

Mar 20 0854 OE5 0855 PA 1505 CT 1702 EB1

Mar 21 0738 SP9 1334 EB2 1422 EA5 1445 I8

Mar 22 0855 OE5 1103 IS0

Mar 24 1045 SM2

Mar 26 1417 EB1

Mar 27 1052 EA6 1103 EA3 1119 CT 1152 EA3

Mar 28 1407 YT1

Tropo

Contacts attributable to tropo were somewhat more frequent, due principally to contest activity in the UK, ON and PA. The list below notes only contacts reported with stations outside the UK. (There were none of particular note within the UK.) Most were with stations in eastern England and the near-continent. The exception is DH6JL's report of the Buxton beacon (which subsequently closed down temporarily because of damage to the antenna.)

Mar 7 17-1800 ON8DM,ON7USB>G3VYF 1838 OQ5A>G4PTJ 1925 OQ5A>G3VYF

Mar 8 1042 ON8DM>2E0IAF 1324 ON7USB>2E0IAF 1649 F4DXU>G3VYF(jt)

Mar 13 1128 ON8DM>G3FWX 1129 ON8DM>M0YMJ 1148 ON8DM>G3VYF

Mar 14 0756 ON8DM>G0FWX 1501 GB3BUX>DH6JL

Mar 15 0740 ON8DM>2E0IAF 0755 ON7USB>2E0IAF

Mar 16 0900 F8DYR>G3VYF

Mar 18 1350 GB3MCB>EB1EHO

Mar 19 1641 G8JJE>ON8DM

Mar 24 2047 ON7USB>M5BFL 2112 ON7USB>2E0IAFseveral inter-G contest contacts

Aurora

No UK reports on 50MHz, though GM4IPD reported SK4MPI auroral (on 144MHz) at 0233 on the 13th

EME

Mar 30 0729 ZL3NW>G5WQ

Continental Europe, Africa and the Middle East

Auroral-related Propagation

None on 50 MHz. 2m Auroral activity reported in Scandinavia around 2150 on the 3rd. On the 14th there were a few North American reports early in the UTC day, followed by a clutch of 144MHz reports from Scandinavia around 1452 and 1834. On the 14th there were 2m reports from Scandinavia between 1613 and 1638. Brief 2m aurora was worked around 1233 and 2103 on the 21st and there was also a 2m event in Scandinavia 1704-1736 UTC.

Other Modes

Another poor month, comments Costas, SV1DH, and his report certainly warrants such a verdict, even though he is well to the south of most of us and might have hoped for at least a glimpse of tep. The most notable event of the month was IW5DHN's report of the Cook Islands dxpedition station, E51SIX, by EME on the 26th. Otherwise, the month's reports are predominantly due to the JT6M/ms operating that has sustained such activity as the band has attracted in recent months, together with a more substantial helping of tropo reports, none of them exceptional. There were no reports of sporadic-E. There were four days when no activity was reported.

Mar 1 10-1100 PA>HA2(jt) 11-1200 F>CT(jt) F>OZ(ms) PA>S5(jt)

Mar 2 1033 ED7YAD>ZB(tr) 15-1600 CT>EA7,EA5 15-1600 PA>EA2(jt) CT>EA2(jt) 16-1700 PA>CT(jt) 1723 EA6>EA7(jt)

Mar 3 1014 EA5>CT(jt) 20-2100 EA6>I4(ms) EA6>PA(ms) 2255 CS5>CT

Mar 4 08-0900 EA6>EA7(jt) EA6>DL 10-1100 EA7>EA6 1106 ED7YAD>ZB(tr) 1538 I9>I8 1646 HB9SIX>DL(tr)

Mar 5 nil

Mar 6 1252 HB9SIX>DL(tr)

Mar 7 1313 YT1>SM0(ms) 1648 ON>F 1718 ON>PA(tr) 1738 F>I1(tr) 1838 ON>DL

Mar 8 0626 SP5>SP7 09-1000 ON>SP3 ED7YAD>CN ED7YAD>ZB(tr) ON>PA 1049 ON>LZ1(ms) 12-1300 ON>EA3(ms+tr) 1239 EA3>SP3 13-1400 SQ9>OK 2159 LA>LA(jt)

Mar 9 nil

Mar 10 09-1000 EA7>EA2(jt) EA6>EA2(ms) DL>EA6(Es) EA7>EA1(ms) EA1>CT(jt) ED7YAD>ZB(tr) 10-1100 HB>SM7(ms) CT>EA2(jt) F>I1(tr) EA6>EA1(jt) 1124 HB>EA6(ms) 1259 EA7>EA1(jt) 14-1500 LX>EA6(ms) LX>CT(jt) 15-1600 EA7>EA2(jt) EA6>EA7(jt) 16-1700 OH8>OZ 17-1800 LA>OH8(ms) S5>PA(jt) 19-100 9A>PA(jt) EA8>CU3 19-2000 CT3>EA8 CU3>CU1 2053 EA6>9A(jt)

Mar 11 0858 EA7>EA6(ms) 10-1100 CT>EA6(jt) HB9SIX>DL(tr) 11-1200 EA6>EA5(ms) 1433 EC7>ZB(ms) 1716 EB1>SM7 1908 CU1>CU3

Mar 12 0721 EA6>EA5(jt) EA6>PA(jt) 08-0900 EA6>DL(jt) EA6>EA7(jt) 09-1000 CT>EB1(ms) CT>EB1(ms) EA1>CT(ms) 1035 CT>EA5(jt) 18-1900 I0>S5 CU1>CU3 19-2000 OH6>SM2 OH0>S5 PA>ON SM3>SP9(ms) EA6>S5(jt) S5>9A(jt) 20-2100 8S5>SP9(jt) OZ>DL SM3>S5(jt) 21-2200 I2>I4 S5>SM3(jt) SM3>LA(ms) OH0>OZ(tr) CT3>EA8 22-2300 S5>LA(jt) SM0>LA(ms) OH2>LA(ms) PA>ON

Mar 13 08-0900 F>F(jt) LA>EA5(jt) 09-1000 EA3>F(jt) 1416 ON>I8 1640 EA3>EA7(jt)

Mar 14 0849 EA4>EB1(ms) 0943 SM7>EB1(ms) 10-1100 EA5>EB1(ms) F>EB1(ms) 1159 9H>I8 1336 I5>EB1(ms) 14-1500 I5>EA3(Es) I5>PA(ES) EA3>PA(Es) 15-1600 EA3>PA 1547 EB1>PA(jt) 17-1800 LA>EA6(ms) F>EA6(ms) OH7>OZ(jt) EA6>F(jt) 1952 SP9>OH7(jt) 20-2100 F>EB1(ms)

Mar 15 07-0800 ON>SQ2 EA6>EB1(ms) ON>F 08-0900 ON>EA3(ms) ON>PA HB>EB1(ms) S5>I3 F>F 09-1000 EA2>EA3(tr) EA5>IT9(ms) ON>EA8(ms) IS0>EA6(tr) EA6>EA5 ON>PA 10-1100 ON>PA S5>OK1(jt) ON>S5 SM7>SP9(ms) ON>EA3(ms) 11-1200 EA6>PA(jt) EA4>CT(jt) EA5>CT(ms) 12-1300 YT1>OK1(jt) UZ5>EA6(jt) 1531 EB1>CT(ms) 1623 EA5>EA3(tr) 17-1800 LZ2>Z3(bs) EA3>EA5(tr) OH7>OK1(jt) EA4>EA5 I0>I6 1844 OK1>EA3(ms) 19-2000 HB>OK1(jt) PA>OH7(jt) LA>OH7(jt) PA>EB2(jt) 20-2100 OH6>LA(jt) OH7>LA(jt) PA>EA6(ms) SP9>OH7 EB1>DL(jt) 21-2200 OH8>SP9(ms) EA6>DL(jt) OH8>LA(ms) PA>LA(ms)

Mar 16 1736 EA4Q>EA5(tr) 1852 F>OZ(jt) 2014 oh8>la(JT) 2200 lx>dl

Mar 17 1955 OH8>LA(jt)

Mar 18 0915 EA7>EB1(ms) 10-1100 LA>EA5(jt) 1342 I2>EA5(jt) 16-1700 EA7>EA1(ms)

Mar 19 0824 IT9>I8 0955 EA4>EA5 1646 ED7YAD>ZB(tr) 1742 EA4>EA5(tr)

Mar 20 1213 HB9SIX>DL(tr) 1910 EA7>ZB

Mar 21 1247 EB2>EB1(tr) 14-1500 EA5>CT(ms) EB2>EB1(tr) I2>I1_EB1>I8(jt) OZ>I8 I2>EA3 17-1800 EA6>EB1(ms) 19-2000 SP9>OH7(ms) 2047 SO5>OZ(jt)

Mar 22 0850 OE5>DL 09-1000 OE5>EA3(ms) OE5>DL 10-1100 S5>EA3 K2ZD>PE1BTX(eme -26) IS0>HB,EA5(jt) S5>OE5,DL OE5>DL 11-1200 OE5>DL IS0>CT(ms) SP9>I8(jt) 15-1600 IT9>I8 HA8>HA3(tr)

Mar 23 no reports

Mar 24 2148 OE1>OH7(jt)

Mar 25 1307 I8>EA5(jt) 15-1600 OE5>OZ(jt) 1832 OM5>OZ(jt)

Mar 26 1059 IT9>I8 1745 E51SIX>IW5DHN(eme -23) 1914 OH8>OZ(jt)

Mar 27 1709 EA4Q>EA5(tr)

Mar 28 1058 SM2>ON 1145 HB9SIX>DL(tr) 1554 LA>SP9(ms)

Mar 29 07-0800 HB,F>EB1(ms) 08-0900 OE5>EB1(ms) EB1>EB3(ms) OE5>EA2 09-1000 EA3>ON ED7YAD>ZB(tr) OE5>DL 1056 I9>EA3 16-1700 DL>LX 1947 PA>OH7(jt)

Mar 30 0941 EB1>EA7(ms) 1430 IT9>I8 17-1800 IOJX>9A(tr) 18-1900 S5>OZ(jt) SA5>PA(jt) 19-2000 LA>OZ(jt) 2059 LA>LA(ms)

Mar 31 no reports

50MHz PROPAGATION REPORT FOR MARCH 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. Special events on:
 - 6(SSN=12, SFI=69 + 0330 PY2 to JA6 on 10m F2)
 - 7(SSN=12, SFI=69)
 - 13(0500 VK4 to W6 on 10m F2)
 - 14(0200 VK4 to W5 on 10m F2)
 - 23(1445 G to VP8 on 10m F2)
 - 24(0830 VK4 to 4X on 10m F2)
- Another very poor month...

73 COSTAS

The Americas

Auroral-related Modes

Mar 13 00-0100 K0KP>VE2(FN07 41a) VE2(FN07)>VE2(FN15 55a) VE3(FN15)>VE2(FN07 55a)VE3(FN04)>VE3(FN15 52a) VE3(FN15)>VE3(FN25) K0KP>W9(53a) VE2(FN97)>VE3(FN04 51a) VE2(FN08)>VE3(FN15) VE3(FN24)>VE3(FN15 51a)

Other Modes

A more interesting mix than some, this month. Judging by the reports, most of North America had a rather thin time on a quiet band with low activity levels. By no means all reports suggest a propagation mode and often one could not be inferred from contextual data. A few reports, mainly from southern states, suggested sporadic-E; very likely there could have been a few more among reports that failed to suggest a propagation mode, such as KD4ESV's reception of TI2NA - but there we are into guesswork. Contacts between Caribbean islands and the USA were strikingly absent. As noted in the February Report, an increasing number of contacts were credited to meteor scatter, some using fsk441, none mentioning JT6M. Some reports simply

credit 'scatter'. There was also some tropo working, but none of it seems to have been beyond routine ranges.

Once again, much of the most interesting propagation involved South America. The tables below represent a best estimate of the occurrence of tep. While some reports, such as V44KAI<>PY5HOT, follow a well-established pattern, at well-established times, in several instances the mode of propagation was uncertain. In particular, there were contacts between OA and LU on the 15th, 24th, 30th and 31st and between OA and PY on the 24th. With most of OA lying close to the geomagnetic equator, tep seems unlikely to have been the propagation mode and these contacts have not been included in the tabulation. However, HK contacts with CE and PY, where the path geometry is rather easier, are included. (The OA contacts with YV and FY on the 25th are interesting, although not involving tep. These paths are not often reported, so it is unclear what would be 'normal' propagation patterns.) The tables below suggest that tep occurred on at least 18 UTC days, compared with 12 in January and 15 in February, with the occurrence rate increasing after the equinox.

TEP days in March 2009

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

Trans-equatorial propagation March 2009

CE 3 days 24(HK,KP4) 26(HK,KP4,P4) 28(HK,KP4)

LU 7 days 8(YV) 13(YV) 23(KP4) 24(KP4) 26(P4) 29(KP4) 31(XE)

PY 15 days 1(V4) 3(V4,8P), 8(V4,8P) 11(9Z) 13(YV) 17(V4) 18(V4) 21(V4) 22(V4) 23(V4) 24(KP4,V4) 25(HK,KP4,YV,8P,9Y) 26(HK,KP4,V4) 27(KP4) 28(KP4)

ZP 3 days 6(V4,YV) 13(PY) 25(YV)

Mar 1 00-0100 TI2N>XE1AO 0236 V44KAI>PY5HOT 12-1300 W4>W3(ms) 1358 W4>W4 14-1500 ZS6WAB>K2ZD(eme -25) W4>W4 16-1700 W0>W8 VE1>W4 17-1800 VE1>W4 18-1900 W4>VE1 LU1DMA,LU5EGY>PY2MAJ 20-2100 C6AFP>W4 VE3>W8 2149 W7>W7 2222 W0MTK>W7

Mar 2 0144 W0MTK>W7 02-0300 WB0RMO,W7KNT,K0UO>W7 W7>W7 N6NB>W5 03-0400 W5GPM>W7(Es) 1129 W3>W3 18-1900 N0LL>W4 W8>W5(Es) 19-2000 W5>W8

Mar 3 00-0100 V44KAI,8P6DV>PY5HOT 13-1400 K4MHZ>W4(ms)

Mar 4 1312 K4MHZ>W4(ms) 1509 W0>W4 2202 PY2>PY2 2357 W8>W8

Mar 5 00-0100 W1>W2 W4>W3 0107 W4>W3 0310 K4MHZ>W4(Es) 1630 K0KP>W7(tr) 18-1900 K4MHZ,W3DOG,WZ8D>W4 1934 WZ8D>W4(Es) 2128 C6AFP>W4 2326 C6AFP>W4

Mar 6 0113-4 V44KAI,YV4AB>ZP6CW

Mar 7 0241 W6>W5 1351 W0>W3(ms) W8>W3(ms) 1420 W4>W8(Es) 14-1500 W0>W3(ms) 1652 C6AFP>W4 1726 W9DR>W9 2157 TI2N>XE1AO

Mar 8 00-0100 V44KAI,8P6DV>PY5HOT TI2N>XE1AO 0256 YV4AB>LU8MB 12-1300 W4>W3(ms)

Mar 9 1149 E5>W4(ms) 1940 W3>W4,W8 2156 W2>W8

Mar 10 1628 C6AFP>W4 2026 W5>W5

Mar 11 0028 YV4AB>PY5HOT 0147 9Z4AMA>PY5HOT 02-0300 W2>W8 YV4AB>LU8MB 0309 HK3O>HK3DES 1152 WA1OJB>W1 14-1400 C6AFP>W4 1807 47.9(CE)>LW3EX 2241 W3>W3

Mar 12 0006 W8>W3(gw) 0207 W0>W3(ms) 1206 W4>W4 1491 W9>W4(ms) 15-1600 W3>W4(ms) W4>W4(ms)

Mar 13 00-0100 YV4AB>PY5HOT 01-0200 YV4AB>ZP6CW,PY5HOT aurora V44KAI>ZP6CW,PY5HOT 1345 W9DR/4>W4(Es/ms) 1417 W4>W4 1517 LU7YS>LW3EX 48.3(CE)>LW3EX

Mar 14 0333 W4>W3 1216 W9DR/4>VE3 13-1400 W4>W3(gw) W8,W3>W3 14-1500 W3>W3 VE3UBL>VE2 W8>W4(ms) TI2NA>KD4ESV 1546 W0>VE6(ms) 1642 W3>VE2(fsk441) 17-1800 W9>W3 W4>W4(gw) 18-1900 W4>W8 W5>W4 2154 PY9>PV8 2222 W3>VE2(fsk441)

Mar 15 0518 SM7FJE>K2ZD(eme -22db) 1258 W8>W0(sc) 1325 W0>W4 W9>W0 15-1600 NL7XM/3>VE2(tr/sc) VA2ZFN>VE2(gw) 2051 W4>W4 21-2200 W2>W3(gw) W8>W8 2257 OA3CVQ>LW3EX 23-2400 OA3CVQ>LU1DMA W3>W2

Mar 16 2156 W3>W3 22-2300 W3,W9>W3 W5>W5 23-2400 W3>W3 W8>W0(ms)

Mar 17 00-0100 W8>W3(gw) W4>W4(sc) 01-0200 W4>W8 W4>W8(sc) W4>W4 02-0300 W4>W3(ms) W3>W3 1123 W5>W4(sc) W4>W4(tr) 1628 C6AFP>W4 1841 W4>W4 2121 W8>W3 2243 VE3UBL>VE3 23-2400 V44KAI>PY5HOT,PY2HN

Mar 18 0112 V44KAI>PY5HOT 0224 W3>VE2(fsk441)

Mar 19 0214 W4>W3(ms) 1140 WA1OJB>W1

Mar 20 nil

Mar 21 0240 V44KAI>PY5HOT 12-1300 W3,W8>W0(Es) W4>W4 W8>W3 W4>W8 W4>W9(ms) W1>W0(Es) 1431 W8>VE2(fsk441) W8>W5(Es) 15-1600 W8>VE2(ms) W2>VE2 1719 VE3UBL>VE2 20-2100 4U1UN>W2 22-2300 W4>W8

Mar 22 13-1400 W4>W3 14-1500 WA3TTS>W3 W8>VE2(ms) W4>E4 16-1700 WA3TTS>W2 20-2100 W8>W8 48.3,49.2(CE),LU7YS>LW3EX W3>W3 21-2200 CE3>CE3 W4>W4 2358 V44KAI>PY5HOT

Mar 23 00-0100 V44KAI>PY5HOT NP4A>PY5HOT,LW3EX,LU2MCA/M 01-0200 NP4A>LU6QI W8>W3 LU8DCH,LU6QI 0221-33 LU1MA>LU6QI W8>W2 1430 W8>W4

Mar 24 00-0100 NP4A>CE3SAD,LU8MB,LW3EX W4>W4 CE3AA>NP4A 01-0200 OA4TT>LW3EX,LU4DMX,LW1EXU HK3O>CE3SAD 02-0300 LU5EGY,LU5FB>OA4TT OA4TT>PY5HOT 17-1800 W5GPM>W4 18-1900 W4>W0 C6AFP>W5 23-2400 ZP5>ZP6 WP3UX,V44KAI>PY5HOT

Mar 25 00-0100 8P6DV,YV5ESN,KP4CAT>PY5HOT NP4A>PY5HOT,CX4CR,PU2VDC,LU4DMX,ZP6DEM 9Y4D,KP4BJB>PY5HOT 01-0200 KP4EIT,WP4WR>PY5HOT NP4A>PY2REK,PY5HOT,PY2HN,LU4DMX W4>W3 V44KAI>PY4AQA 02-0300 YV4AB>ZP6CW HK3O>CE3AA,PY5HOT HK3DES>PY5HOT W4>W4 03-0400 HK3O>PY2KP FY7THF>OA4TT YV5IAL,HK3O>PY5HOT YV4AB>OA4TT 0404 KD4AOZ>W4 1346 W4>W3 1531 VE3>W3 1832 LU5FB,LU5EGY>PTY2MAJ 2352 NP4A>PY5HOT,PU2VDC

Mar 26 00-0100 NP4A>PY2HN,PY2SP,PY2REK,CE3SAD W4>W4,W3 V44KAI>PY2HN 01-0200 HK3DES>CE3SAD HK3O>CE3SOC P49MR>CE3SAD 02-0300 LU6MCA/M>CE3RR V44KAI>OA4TT P49MR>LU6QI 1148 W4>W4(tr) 1337 W4>W3(ms)

Mar 27 0727 W7>W7 1413 W4>W3(ms) 1547 TI2NA>KD4ESV 17-1800 LU1DMA,CX5CR>CA3SOC 20-2100 PY2MAJ>LW3EX,LU1DMA 22-2300 47.9(CE)>LW3EX 2250 W2>W1 23-2400 NP4A>PY5HOT

Mar 28 00-0100 NP4A>PY5HOT 0143 CA3SOC>HK3DES 02-0300 HK3DES>CE3RR NP4A>CA3SOC,CE3RR 127 W4>W3(ms) 1205 W4>W4 12-1300 W3>W3(bs) W8>W0 W4>W3 14-1500 W4>W3 15-1600 W4>W3(fsk441) W9>W3(fsk441) 1614 VE2>W3,W4 19-2000 LU5EGY,CX5CR>PY2MAJ 20-2100 LU6DLB,CX5CR,LU5FB,LU4EFC,LU7FTF>PY2MAJ W0>W8 2157 OA4B>LW3EX 2216 W4>W8

Mar 29 0038 K1WHS>KE4WBO(eme -25) 0244 E51SIX>N5DG(eme -24) 11-1200 W4>W3(ms) W4,W5>W4 12-1300 W4>W3(ms) W8>W3(ms) 13-1400 W3,W4>W3 W4>W3(ms) W8>W0 W3>W3 21-2200 PY2MAJ>CA3SOC KP4EIT>LU89DQ 2226 W8>W8 2341 W8>W0

Mar 30 1849 PY2MAJ>LW3EX 2112 PP2SIX>CE3SAD CE3AA>LW3EX,PY2UDX>CE3SAD OA4B>LW3EX PY2CUK>CA3SOC 22-2300 PY2SEX>CE3SAD CE3SAD,CA3SOC>PY2SRB 2234 W9DR/4W4

Mar 31 12-1300 W4>W8 1429 W4>W3(ms) 1907 49.2(CE)>LW3EX 21-2200 PP2SIX>CE3SAD LU5CAB,LU9AEA,LU3DDH>PY5HOT 22-2300 XE3ARV>LW3EX LU5EGY>XE3ARV 47.9(CE)>XE3ARV OA4B>LW3EX

Asia and the Pacific

Asia

Rather greater activity reported from Asia than for some time – though nothing from YF and little from VR2 or 9M and PA0HIP/DU7 remains the only representative of the Philippines. A little surprisingly, there were no reports of the BV2NT

beacon. Two DU reports specifically mention equatorial spread-F, an effect which, when occurring around the equator, is associated with ionospheric irregularities, usually during the local night-time.

Mar 5 0720 HR9BFS>JR6EXN(eme -23db)

Mar 6 0739 BYtv>DU7 1332 VR2SIX>DU7(spread F)

Mar 8 1402 BY/HStv>DU7(spread F) 1410 YT1AR>JR6EXN(eme -24db)

Mar 11 1932 OZ4LP>JR6EXN(-22db) 2030-9 G4IGO>JR6EXN(-25db) OZ6ABA>JR6EXN(-22db)

Mar 15 0519 46171.8(VK4tv QG53)>JA7 0635 VK4tv>JE1CUS 0717 VK4ABW>JA6TEW 0759 VK8RAS>JA5FFJ,JA6TEW 08-0900 VK4VC>JA6TEW VK4ABW>JE2XBY VK5BC>JE6AZU JD1>JA2 VK6RSX>JG3LEB

Mar 16 0924 VR2SIX>JA6

Mar 17 0629-40 VK8RAS>JA1 VK4BLK>JA3

Mar 18 0424 46171.8(QG53)>JA7 0822-46 BY/UA0tv>DU7 DU7>JA3,JA6 09-1000 9M6RXO>JA6 DS4DBF>9M6

Mar 19 1206 BYtv>DU7(spread F)

Mar 22 0854 BYtv>DU7

Mar 26 0304 46171.8(QG53)>JA7

Mar 31 0717 JA6YBR>JA7

Oceania

Mar 1 0155 FK8SIX>VK4 0326 49750(OM34 BY)>VK6 2230 FK8SIX>A35 2332 FK8SIX>A35

Mar 2 0010 FK8SIX>A35

Mar 7 2300 VK4>VK4

Mar 11 0733 49750 (BYtv OM44)>VK4

Mar 12 0414 49750 (BYtv OM34)>VK6

Mar 13 0224 VK2>VK3 0349 VK8RAS>VK5 0500 FK8SIX>A35 0635 49750(BYtv OM44)>VK4

Mar 14 0337 FK8SIX>VK2 06-0700 49750(PN53)>VK4 JA2IGY>VK4EK. JE7YNQ>VK4 0947 VK2>VK4

Mar 15 0246 57250(QF02)>VK4 0328 49750(OM34)>VK6 0556 JE7YNQ>VK4 06-0700 JE7YNQ>VK4 JA1ZYK>VK4 VK2>VK4 JA1RJU>VK4 VK8RAS>JE2XBY 49750(BYtvOM44)>VK4 07-0800 49750(PN53)>VK4 49750(OM34)>VK6 VK8RAS>JE2XBY,7N4QUK JA6TEW>VK4ABW 08-0900 JA6YBR>VK5BC JA5FFJ>VK4ABW JA6TEW>VK5BC

Mar 16 0240 49750(OM34)>A35

Mar 17 0517 FK8SIX>VK4 0651 JE7YNQ>VK4EK 1036 VK4RGG>VK3 1207 VK5>VK2

Mar 18 0813 49750(MEtv LN20)>VK4 0819 49750(BYtvOM44)>VK4

Mar 19 2200 VK3>VK5

Mar 20 00-0100 VK5RBV,VK3RMH,VK7RAE>VK3

Mar 23 07-0800 VK7RAE>VK7 2135 ZL3SIX>ZL2

Mar 25 02-0300 VK4RGG>VK5 57260(QG51)>VK5

Mar 26 2335 VK4RGG>VK4

Mar 27 0751 49750(OM34)>VK6

Mar 28 0743 49750(OM34)>VK6 2323 VK9LA/b(QF98)>VK4(probable)

Mar 29 VK6RSX>VK6

Mar 30 0001 VK5RBV>VK6 0332 49750(OM34)>VK6 2333 VK5RBV>VK3

Mar 31 49750(BYtv OM43)>VK4

28MHz

28 MHz in the UK

Things could hardly have got worse than in February, so in that light the ten 'entities' reported into the UK during March represented a modest –well, minimal - recovery. They were DL ES F HZ LA PY SM UA VP8 9A. Only three beacons were reported. G4UPS reported that, apart from SK0CT on the one day he heard no signals at all on 28MHz; G0IHF thought he was going to experience a blank month until he was 'save by the bell' with EA3TEN on the 31st. To some extent this was because geography was against them – not just G0IHF up in the Warrington area, but also Ted in the south-west. For such propagation as there was in Europe favoured

UTC	06-09	09-12	12-15	15-18	18-21	21-24
EA3TEN			2			
LA5TEN			9			
SK0CT		8				

more southerly latitudes. There were very few reports from northern Europe. The apparently healthy picture in the table immediately below, showing propagation within Europe almost every day is, as noted last month, rather misleading because it mostly represents brief events with weak signals, particularly via meteor scatter captured by automatic monitoring. Reports like OH1JO's reception of LA4TEN by Es at 1524 on the 22nd were very much the exception. Yet a few good contacts were made outside Europe, including VK9AA with 5B8AD at 0821 on the 2nd (if one counts 5B with Europe) and K1LZ with 5B4AII at 1154 on the 28th. Also, veteran DXer

DJ1AA with K1TTT in the ARRL contest at 1422 on the 7th. Contacts were also reported between KP4 and EA4 at 2013 on the 13th and DL and KP4 at 2304 on the 6th - and interestingly late hour that encourages one to speculate about the propagation mode involved. It was no surprise that the continent most worked outside Europe was Africa, on 18 days, compared with 11 in February, followed by South America on 13 days, compared with 4 last month. The contrast between the absence of an evening path during the first half of the month with its consistency from the 15th onwards is striking.

Contacts were reported within North America (including Central America and the Caribbean) on almost as many days as Europe. However, these were almost all at reasonably good-strength; there was almost no weak-signal operation. However, latitude effects were no less obvious here. Although almost the entire US lies south of the UK, most of the time stations in the deep south were markedly more successful than those closer to the Canadian border. As for the Canadians themselves, they seem mostly to have had as thin a time as most Europeans. The one reasonably reliable path out of North America was, as usual, to South America, which opened every day except the 31st. On one evening PY2XC heard at least 10 low-power US beacons and there were strong north-openings lasting several hours during the WPX contest on the 28th and 29th, bringing a level of activity to the band that surely would not have occurred without the stimulus offered by the contest.

Number of UTC Days with Propagation Reported, March 2009

	OC	AS	EU	AF	NA	SA
OC	17	27	1	1	9	7
AS	27	23	6	3	0	3
EU	1	6	29	18	9	13
AF	1	3	18	2	4	9
NA	7	0	10	4	28	30
SA	7	3	13	9	30	20

Reciprocally, of course, South Americans were able to work North America every day but one, particularly during their evening and working within South America was fairly

common, thanks in part to remnants of the southern hemisphere summer sporadic-E season. Paths between parts of Africa and South America appear fairly easy but, as always, the results are affected by the lack of active stations in Africa.

Daily Reliability within and Between Continents

	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	16	23	26	23	10	42	39	45	00	00	03	03	00	00	00	03	10	13	00	06	10	13	03	00
AS	35	48	35	10	06	32	61	29	00	03	10	10	00	03	03	06	00	00	00	00	06	03	00	00
EU	03	00	00	00	00	10	06	03	87	87	61	61	06	16	32	23	00	06	10	13	00	03	10	00
AF	03	00	00	00	03	06	00	03	06	19	32	23	00	03	03	03	00	00	03	10	00	00	03	29
NA	00	00	06	19	03	00	00	00	16	03	13	03	00	00	06	00	29	52	48	74	23	71	84	84
SA	00	00	00	06	00	03	00	06	03	26	35	06	03	19	10	13	00	39	58	90	03	29	39	45

M Before 1130 LMT N = 1130-1430 LMT A = 1430-1700 LMT E= after 1700LMT

With the arrival of the equinox, propagation between Asia and VK/ZL showed an improvement, compared with February. For the most part contacts lay between South and East Asia and VK, but VK4CK reported the 4X6TU beacon weakly at 0841 on the 31st. Working within Asia was also improved, thanks in no small degree to an increase in activity in Malaysia. However, propagation within the VK/ZL area was down, reflecting the falling away of seasonal sporadic-E. VK4CQ reported the W6PC/4 beacon at 2347 on the 27th, the most notable reflection of a strengthening of the North America path

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