

**THE
SIX AND TEN
REPORT
March
2004**

- Section 1. [Analysis of 28 MHz reports from the UK](#)**
- Section 2. [Analysis of 50 MHz reports from the UK](#)**
- Section 3. [Solar and Geomagnetic Data](#)**
- Section 4. [50 MHz outside Britain](#)**
- Section 5. [Beacon news and 28 MHz worldwide](#)**

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Analysis of 28 MHz reports from the UK

28 MHz reports and logs for March 2004 from G2AHU, G3IMW, G3USF, G0AEV, G0IHF and packet cluster reports. Compilation and commentary by G0AEV.

Solar activity indices were higher on average in March than February, while geomagnetic indices were much the same as last month. Despite these favourable trends and the proximity to the spring equinox, 10m band conditions in March were generally considered to have been rather poor and 6m conditions almost non-existent. Brian G3HBR writes "I think conditions have been genuinely poor as apart from 5B4CY and sometimes the ZS1 beacon I have not heard beacons much at all. None of the stations I have worked would be classified as QRP or having poor antenna systems!"

10m propagation to North America was particularly weak with openings restricted to a few days only. Likewise there was virtually no propagation to the east. However, southern paths continued to do well: the ZS6DN beacon was heard on every day and there were good results on all paths to Africa, South America and to Western Australia. There was also a very little propagation to eastern Australia and to New Zealand - a reminder of what proximity to the equinoxes can do for DX propagation under the right circumstances. There was also a little sporadic E, though all the observed Es events were short-lived and only one of these appears to have reached 50 MHz.

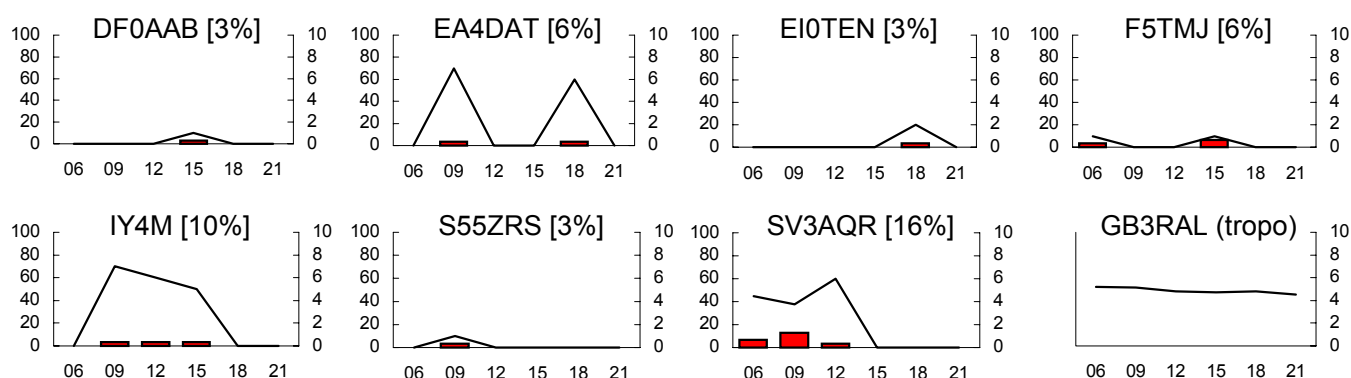
None of this is particularly surprising – sporadic E is expected to be at a minimum in March, and the pattern and geographical extend of F-layer propagation is more or less as expected for the time of year at the current state of the solar cycle.

Beacon graphs legend

Legend for all beacon graphs in this section: - graph bars (left Y-axis): beacon reliability as the percentage of days a beacon was heard by any UK observer within each time band. Graph lines (right Y-axis): signal strength as the average of the daily maximum signal reported by any observer in each time band. Time band codes (X-axis): 6=0600-0900, 9=0900-1200, 12=1200-1500, etc. Callsigns are followed by daily reliability figures, the percentage of days per month when the beacon was reported.

European Propagation / Beacons

European Beacon Graphs.



Propagation modes for European beacons.

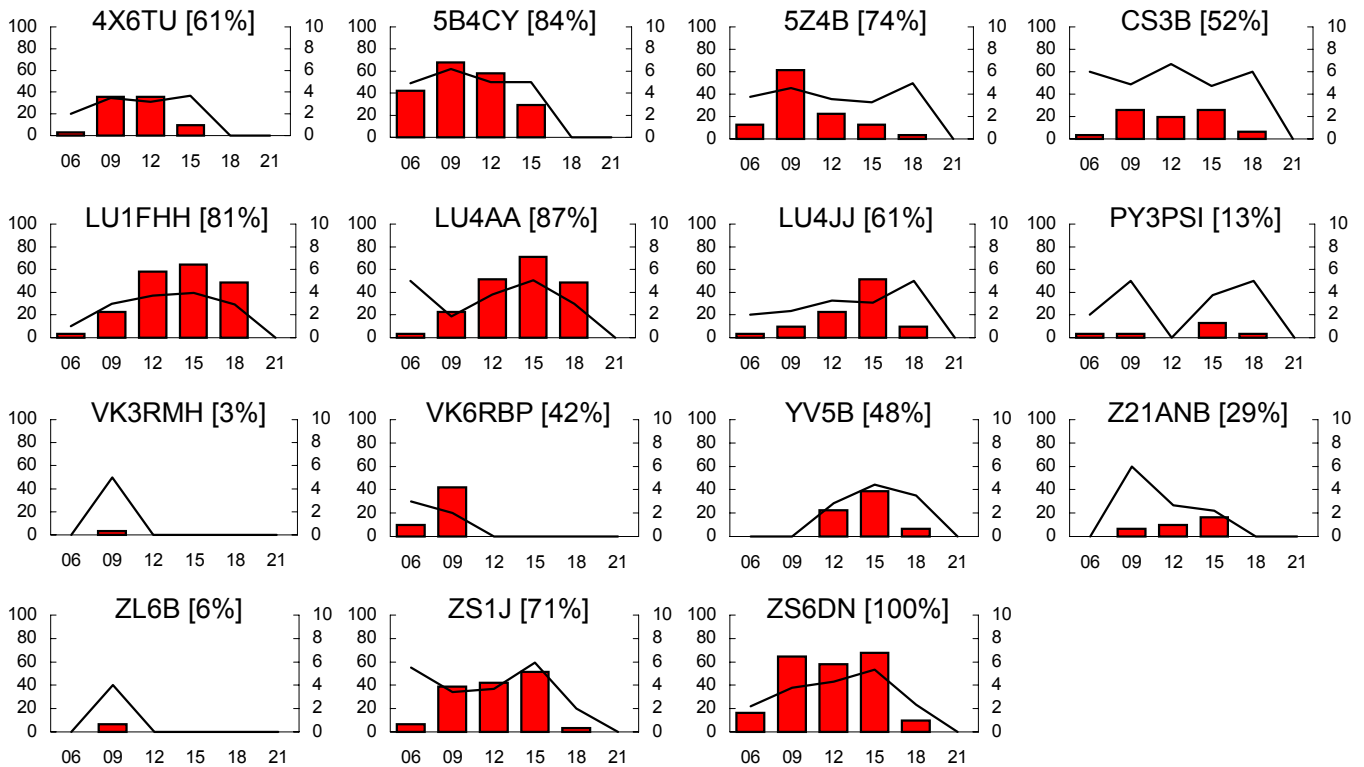
Inter-European propagation was conspicuous by its absence – the results graphed above showing how few beacons were heard. F-layer propagation to SV3AQR was very much weaker than in February and indicates that for most of the time the F2 skip distances were too long, a consequence of the changing seasons. The graph of GB3RAL represents "tropo" at G0AEV – a fairly flat response this month. EI0TEN was by F-layer backscatter and it is possible that the reports of DF0AAB and F5TMJ were also via backscatter. All the other beacons were heard in short sporadic E openings.

European Beacon Notes.

LA4TEN has been reported as being off-air but was heard again in April. The absence of DL0IGI in recent reports is suspicious and this beacon too may not be working. The new Spanish beacon EA4DAT (28.263) was reported twice (via sporadic E) in March – look out for lots of reports from this beacon when the summer Es season gets going. Another new beacon now active (but this one not yet reported in the UK) is OH5RAC (28.233.5) running 6w into a dipole “beaming” 020/200 degrees – this should also provide good signals into Britain via Es. There was a report in March of OH2B but I think this must have been in error as the replacement beacon has not been set-up yet.

Propagation to Asia, Africa, Oceania, South and Central America

Beacon Graphs.



Suggested propagation modes.

All beacons shown in the graphs above were heard by normal F-layer propagation.

Ten metres has now reached the stage when casual listeners find no signals and pronounce the band to be “dead”. Unfortunately when conditions get difficult many operators move to lower frequencies and activity levels fall below those that propagation could actually support. Conditions are clearly much poorer than this time last year but the decline has been on east-west paths: southerly paths continue to do well. For example, the ZS6DN beacon was again heard on every day of the month and there were high daily reliabilities for other African beacons as well as those in Argentina and the Middle East. When it comes to real QSOs rather than beacon monitoring its worth noting that when these circuits are tried with some persistence, success is forthcoming. For example, the recent 3B9C dx-expedition found no problems working the UK on ten metres.

It was again encouraging to see reports of beacons in Australia, New Zealand. I wonder if long path to these areas will be possible – April is a good time for late evening long path to these areas - but I suspect the ionosphere is no longer able to support these paths.

Beacon Notes. CS3B returned to service at the end of February and seems to have been active for all of March, but apparent absences in April suggests there have been further outages. PY3PSI appears to be intermittent. VK6RBP was heard at reliabilities that, after several years of very poor results, are now much as expected. VK6UU has provided some background to the past VK6RBP situation:

“VK6RBP has had a chequered life with 4 multiband verticals failing for various reasons. And the TS50 used had an intermittent fault of going to very low power. At long last this fault has been fixed (dry joint). And the 25A mains power supply feeding VK6RBP failed as well. As a result of this history there have been extended periods of time during which the beacon has either not been on air, or at low power or working into a faulty antenna.”

10m DX in March 2004

The following list of DX countries worked or heard in the UK comes mainly from packet cluster spots (DX Summit: <http://oh2aq.kolumbus.com/dxs/>) with a small contribution from Six and Ten reporters.

DX in March: 3B8, 3B9, 4X, 5B, 5H, 5T, 5V, 7Q, 8P, 9J, 9M2, 9V, 9Y, AP, CE, CX, D4, FY, HI, J8, JY, LU, OD, P4, PY, TJ, TT, V5, VK(6), VP8, VQ, YB, ZC, ZF, ZP, ZS, Antarctica.

The list includes no W or VE spots – although both W and VE beacons were reported by 6&10 members (see below)

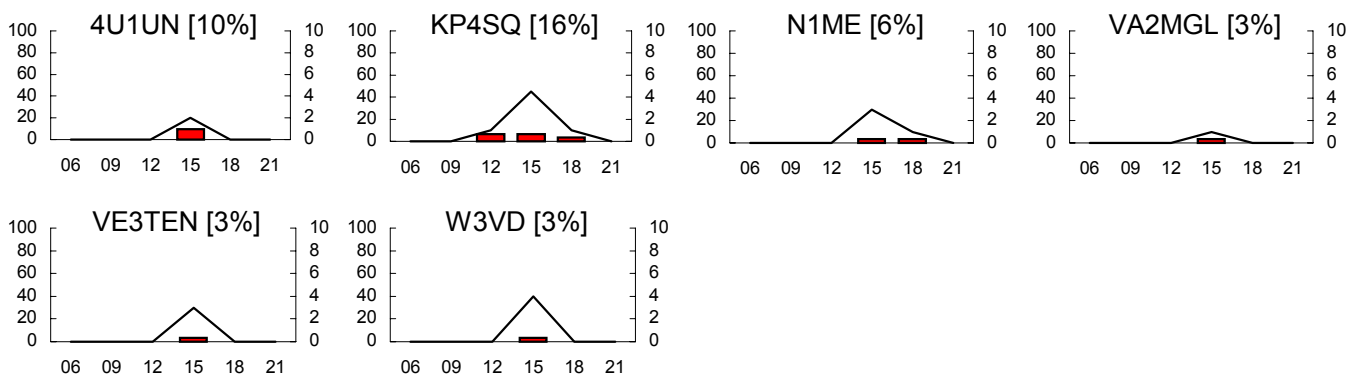
Propagation to North America

Suggested propagation modes.

Propagation to North America was via normal F2, but was restricted geographically to New England, eastern Canada and the Caribbean and openings were rare. KP4SQ had the best reliability figures but even this beacon was only heard on 5 days. 4U1UN was reported on only 3 days. The winter DX season to North America clearly ended quite early this year. The question now is what, if any, propagation to North America, can be expected next winter?

Remember the potential, oft overlooked on 10m, for propagation to Canada and USA by multi-hop Es in June and July.

North American Beacon Graphs



Beacon Notes.

As mentioned in the last Report, it is difficult to use beacon monitoring from the UK to provide any kind of sensible indications of beacon activity in the USA and Canada. Beacons likely to be heard by sporadic E this summer are in the most part those reported above – clearly QRV.

Analysis of 50 MHz reports from the UK

UK 50 MHz reports for March 2004 from G2ADR, G3HBR, G3IMW, G4UPS and via packet cluster spots. Compilation and commentary by G0AEV.

If such a thing is possible, this month was poorer than the last. There was very little 6m propagation reported to/from anywhere in the UK in March 2004. All our reporters sent in "nil" logs and, with a few exceptions, there were no packet cluster spots of anything other than some weak aurora and digital mode meteor scatter contacts. However, the exceptions included one DX report, the first this year.

Brian G3HBR writes "well it's happened, for the first time I can remember since I came on six metres, no one has made it into the log". Ted G4UPS thought that there were "very poor conditions on all bands during March" then (in a quote that I used in error for February in the last Report) "not a peep heard on 6m not even a G or GW station. I have not experienced a complete month without a contact on 6m since I worked on 6m from ZD8TC in 1981!" Eric G2ADR filed a nil return for the second month running. Eric says "I do not remember total zero propagation over two months being observed here before. Let us hope I am not bemoaning a three month dearth at the end of April". Hopefully, this will not occur as sporadic E definitely kicked-in in the second half of April.

Sporadic E

March is usually the poorest month for sporadic E so the absence of anything much to report for this mode is not surprising. On 26th G4FUF spotted 48 MHz video signals by sporadic E followed by a report of "Es to Italy". At about the same time the IY4M beacon was heard on ten metres. Spot details are:

26th 12z 1328 G4FUF spots "VIDEO Es 48250 s9+"
1339 G4FUF reports Es to Italy

DX (F2 and TEP) Propagation

A useful coincidence of F-propagation between southern Europe and southern Africa and Es propagation between the UK and Italy provided an unexpected opportunity for G4FUF to hear a South African station on 6m. F-layer propagation is no longer available for stations at UK latitudes but, as G3USF has been charting in his section of the Report, Mediterranean European countries still have occasional openings to the south. As noted previously, sporadic E is at its annual minimum in March (at least that's the case for Europe) and only one Es event was recorded in March 2004 – which was the opening that extended the ZS path to Britain. As both F2 and Es propagation have such low reliabilities, the chances of the two happening at the same time with the right configuration to permit a G-ZS circuit was really quite small. Listening perseverance and a good set-up at the receiving end helps of course!

26th 12z 1339 G4FUF > ZS6AXT "cq 559"

Tropospheric propagation

It seems that as the possibilities for DX propagation recede further, and in the absence of sporadic E, band activity has plummeted. A pity because tropo scatter is an interesting mode and one available throughout the year (and independent of the solar cycle). I could find no reports of any reasonable tropospheric propagation this time – the following spots being the best I could do.

17th 0013 GM8LFB (IO988) > GB3LER 52 tropo
21st 0859 G4ZTR > ON4GG "cq 'test' 59

Meteor Scatter

Digital mode MS spots/reports were down on previous months. I suspect this reflects lower activity levels rather than a change in the effectiveness of meteor scatter propagation. Perhaps the novelty of these modes has worn off? There were many fewer JT6M spots but people were (instead?) trying FSK441C.

I suppose that digital mode activity could be used to indicate particular features of the availability of meteor scatter propagation. Unfortunately, the inconsistent levels of activity, the uncertainties in distinguishing QSO spots from "CQ" spots on the DX cluster, and the difficulty in distinguishing MS from other weak mode propagation all make this a real challenge. On the other hand there are so few "traditional mode" ms contacts these days – even in major showers – that they provide no useful data either. There was only one such report this time:

18th 0828 F5GTR (IN96) > GB3LER "bursts 529"

Aurora

Geomagnetic activity has been muted for several months running and there were major storms and no significant auroral events. The most magnetically active period was the 9th-12th, with another disturbed period around the 27th. The only reasonable radio aurora was on the 9th – this was a moderate affair with contacts mainly between GM and G, ON and PA, and with some propagation to Scandinavia. No auroral E was associated.

9 th	15z	1642	OZ1DJJ > GB3LER 52a (first report)
		1652	ON1DNF > MM5AJW, 2M0AVY 57a
		1709	EI7IX > GB3LER 51a
		1731	EI6IZ (IO53) > MM0CWJ 57a
		1751-1752	M3DFW (IO95) > MM0CWJ 57A; SM0TSC > GM6VXB
	18z	1803-1809	PA2DB (JO22) > GM6VXB 51a QTF 345; PA2V > GM3WKZ (IO88) 57a
		1843-1857	G4PCI > GM4WJA 52a, GM6VXB 55a, 2M0AVY 55(a?), LA8HGA 51a
11 th	15z	1750	EI7IX > GB3LER 52a
	18z	1803	G4PCI > GB3LER
27 th	15z	1650	GM8LFB (IO88) > GB3LER "auroral"
	21z	2247	GM8LFB spots "aurora in/out all night"
28 th	03z	0335	GM8LFB > GB3LER "going auroral again"
		0344	GM8LFB > OY6SMC "aurora"

Solar and Geomagnetic Data for March 2004

Data supplied by G0CAS (Sun Mag¹) and from Internet sources. Compilation by G0AEV.

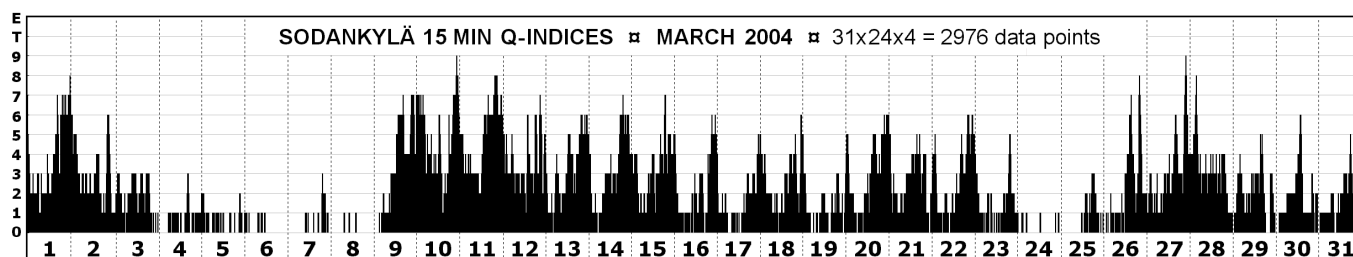
Sunspot numbers (SEC)	Mean 81.0	Max 169 (29 th)	Min 40 (9 th)
Solar Flux (28 MHz)	Mean 112.2	Max 129 (28-29 th)	Min 90 (3 rd)

Solar data for March 2004 are presented in the table at the end of this section. Numbers in the 28 and 50 MHz columns of this table are the total daily “areas” worked/heard from the UK for each of several propagation modes and are a summary of the data presented in the first sections of this Report. On 28 MHz “areas” refer to the number of beacons reported via Es and F-layer, on 50 MHz the number of countries via Es, F-layer, Aurora and Asuroral E. F2 critical frequencies from Chilton in Oxfordshire were not available for March 2004. SIDC spots are from SIDC, and other solar data from the joint USAF/NOAA daily summaries or directly from SEC.

Energetic Events (Flares of M and X class). There were 4 M-class x-ray events in March

6 th	1208-1241	M1.3
18 th	0508-0527	M1.6 SF
24 th	2314-2335	M1.5 SF
25 th	0429-0443	M2.3 SF

Q-indices from Sodankylä, Finland (Thanks OH2LX)



Vaino OH2LX’s data from Finland for March shows 3 periods of unsettled conditions – the first few days of the month, the period commencing on the 9th and days around the 27th. There were several quiet days – Vaino indicates the 8th as being exceptionally quiet but the 6th and 24th were also quiet

Finnish observatories in March 2004:

Monthly averages	Most disturbed day:
Sodankylä: monthly Ak average = 25.6	Sodankylä: 11 March, Ak = 77
Nurmijärvi: monthly Ak average not available	Nurmijärvi: Data unavailable

Global and UK views on geomagnetic activity are given in the K-index tabulations on the following page

¹ Sun Mag: Sunspot and Magnetic data compiled by Neil Clarke G0CAS. Email neil@g0cas.demon.co.uk

K-indices.

There were 11 disturbed days in March when one or more of the UK K indices or the planetary Kp index was 5 or greater. The following four tables present the Kp index (from SEC) and the Lerwick ("KL"), Eskdalemuir ("KE"), and Hartland ("KH") K-indices (from the British Geological Survey). Each table is set out with the day of the month in the top row followed by rows containing the K-values or each 3-hour period. The bottom row of each table is the sum of the K-values for the day. Pale (yellow) shading indicates K = 5, darker grey shading indicates K > 5.

Planetary K (Kp)

KP	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
00	3	4	3	2	2	2	1	1	1	5	4	5	3	3	4	3	1	3	2	3	3	3	3	1	1	1	3	3	2	1	1
03	2	3	2	2	1	2	1	1	2	6	4	5	1	3	3	2	2	3	3	3	3	3	3	1	1	0	1	5	3	2	2
06	4	4	2	1	2	1	2	2	3	6	4	4	4	4	2	1	1	3	0	1	3	3	2	1	1	2	2	3	3	4	3
09	3	3	5	3	2	2	2	2	3	4	3	3	3	4	3	3	2	3	2	2	4	2	2	2	2	1	3	3	3	4	1
12	4	4	4	2	0	2	2	2	4	5	4	3	4	4	3	2	2	3	2	2	3	2	2	2	2	3	3	3	3	4	3
15	4	3	3	3	2	2	3	3	4	3	4	4	4	3	3	3	3	2	2	3	2	3	2	2	3	3	4	3	3	3	2
18	3	3	4	2	3	2	1	2	4	3	5	2	2	3	3	2	2	2	2	2	3	3	3	1	2	3	3	2	3	2	3
21	4	3	2	2	2	1	2	1	5	4	3	3	2	2	2	2	1	2	2	2	2	3	1	0	2	3	4	2	2	1	2
Σ	27	27	25	17	14	14	14	14	26	36	31	29	23	26	23	18	14	21	15	18	23	22	18	10	14	16	23	24	22	21	17

Lerwick K (Shetlands)

KL	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
00	3	5	2	1	2	2	0	0	0	6	4	6	3	3	3	3	2	2	3	3	3	2	3	1	0	0	2	3	1	1	1
03	1	2	1	1	1	1	0	0	1	5	3	3	1	1	2	1	2	2	1	2	2	2	2	0	0	0	2	5	2	1	1
06	2	3	1	1	1	0	0	1	1	4	2	2	3	2	1	1	0	2	0	0	2	2	1	0	0	1	2	3	2	2	2
09	1	1	3	1	1	0	1	1	2	3	1	2	2	2	2	0	1	1	1	1	1	0	1	0	0	1	2	2	1	3	1
12	2	2	2	1	0	0	0	0	2	3	3	2	2	2	3	2	0	1	1	2	2	1	0	0	1	3	3	2	2	4	2
15	5	2	2	2	1	0	0	1	6	2	5	3	2	2	3	3	1	2	1	4	2	3	0	0	2	4	4	3	3	2	2
18	4	4	3	2	0	0	1	0	5	4	6	3	3	4	3	3	3	2	1	2	3	3	3	0	2	5	2	3	2	1	3
21	5	4	0	1	1	0	2	0	6	5	4	3	3	2	2	3	1	3	1	3	1	3	2	1	1	3	4	1	2	1	0
Σ	23	23	14	10	7	3	4	3	23	32	28	24	19	18	19	18	9	15	9	17	16	16	12	2	6	17	21	22	15	15	12

Eskdalemuir K (southern Scotland)

KE	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
00	3	4	2	1	2	2	0	1	1	5	3	5	3	3	3	3	2	2	4	3	3	3	3	1	0	1	2	3	1	1	1
03	2	2	2	1	2	1	0	0	2	4	3	3	2	1	2	1	2	2	1	3	2	2	2	0	0	0	2	4	2	2	1
06	2	3	1	1	1	1	0	1	2	5	3	3	3	2	1	0	1	1	0	1	2	2	1	0	0	1	2	3	2	3	2
09	2	2	3	1	1	0	1	1	2	3	2	3	2	2	2	2	0	1	1	1	1	1	1	0	0	1	3	3	2	3	1
12	3	2	3	0	1	1	0	0	3	3	3	2	2	3	3	2	0	2	1	2	2	2	1	0	1	4	3	3	3	3	2
15	4	3	3	2	1	0	1	1	5	2	5	4	2	2	3	3	1	2	1	4	3	4	1	0	2	4	4	3	3	1	2
18	4	4	3	3	0	0	1	0	4	4	5	4	3	4	3	4	3	3	2	3	3	3	3	0	2	5	3	3	1	1	3
21	4	4	1	1	1	0	2	0	5	5	5	3	3	3	2	3	1	4	2	3	1	3	2	1	1	4	4	1	2	1	1
Σ	24	24	18	10	9	5	5	4	24	31	29	27	20	20	19	18	10	17	12	20	17	20	14	2	6	20	23	23	16	15	13

Hartland K (SW England)

KH	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
00	3	4	2	1	2	2	0	0	1	5	4	5	3	3	3	3	3	3	4	3	4	3	4	2	0	1	2	4	1	1	1
03	2	2	2	1	2	2	0	1	2	5	3	3	1	2	3	2	3	2	2	3	2	3	2	0	0	1	2	4	2	2	1
06	2	4	2	1	1	1	0	2	2	5	3	3	4	2	2	1	1	2	0	1	2	2	2	0	1	2	2	3	2	3	2
09	2	2	4	2	1	1	1	1	3	3	2	3	3	3	3	2	1	1	1	1	1	1	1	0	0	1	4	3	2	4	1
12	3	3	3	1	1	1	0	0	3	4	3	3	3	3	3	2	0	2	1	2	2	2	1	0	1	4	3	2	3	3	2
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18	5	5	3	3	0	0	1	0	4	4	6	4	3	5	4	4	3	3	2	3	4	3	3	0	2	5	3	3	2	1	3
21	5	4	2	1	2	0	2	0	5	5	5	3	3	3	2	3	2	4	2	3	2	3	2	1	1	4	5	2	2	2	1
Σ	26	27	21	13	10	7	5	5	25	33	32	28	22	23	24	20	14	19	13	21	20	21	16	3	7	22	25	25	18	17	13

March 2003	28 Areas			-- 50 Areas --			2800			- Spots -			Max			X-ray			Max foF2			Min foF2			-- Particle Fluences --		
	Es	F	Es	F	Es	DX	A	AE	Flux	SEC	SIDC	Kp	Ap	Aa	b.gnd	MHz	Hour	MHz	Hour	2MEV Elec	1MEV Prot	10MEV Prot	1.7E+06	9.9E+07	1.7E+06	1.2E+04	
01-Mar	0	10	0	0	0	0	0	0	102	66	44	4	18	37	B1.5	n.a.	n.a.	n.a.	n.a.	9.9E+07	1.7E+06	1.2E+04	1.7E+06	9.9E+07	1.7E+06	1.2E+04	
02-Mar	0	3	0	0	0	0	0	0	99	50	31	4	17	37	B1.5	n.a.	n.a.	n.a.	n.a.	9.2E+07	1.0E+06	1.3E+04	1.0E+06	9.2E+07	1.0E+06	1.3E+04	
03-Mar	0	10	0	0	0	0	0	0	90	42	26	5	15	27	B1.3	n.a.	n.a.	n.a.	n.a.	2.6E+08	2.3E+06	1.2E+04	2.3E+06	2.6E+08	2.3E+06	1.2E+04	
04-Mar	1	10	0	0	0	0	0	0	98	53	23	3	7	14	B1.8	n.a.	n.a.	n.a.	n.a.	3.4E+08	1.8E+06	1.2E+04	1.8E+06	3.4E+08	1.8E+06	1.2E+04	
05-Mar	0	9	0	0	0	0	0	0	107	55	35	3	8	10	B3.2	n.a.	n.a.	n.a.	n.a.	2.3E+08	1.2E+06	1.2E+04	1.2E+06	2.3E+08	1.2E+06	1.2E+04	
06-Mar	0	4	0	0	0	0	0	0	105	61	39	2	5	6	B3.1	n.a.	n.a.	n.a.	n.a.	2.9E+08	1.3E+06	1.3E+04	1.3E+06	2.9E+08	1.3E+06	1.3E+04	
07-Mar	0	8	0	0	0	0	0	0	106	53	40	3	6	6	B2.5	n.a.	n.a.	n.a.	n.a.	3.6E+08	1.3E+06	1.3E+04	1.3E+06	3.6E+08	1.3E+06	1.3E+04	
08-Mar	0	5	0	0	0	0	0	0	108	55	35	3	6	9	B1.8	n.a.	n.a.	n.a.	n.a.	1.1E+08	1.1E+06	1.3E+04	1.1E+06	1.1E+08	1.1E+06	1.3E+04	
09-Mar	0	12	0	0	0	0	7	0	109	40	38	5	21	44	B1.9	n.a.	n.a.	n.a.	n.a.	3.1E+07	8.6E+05	1.3E+04	8.6E+05	3.1E+07	8.6E+05	1.3E+04	
10-Mar	0	6	0	0	0	0	0	0	113	56	38	6	40	56	B2.2	n.a.	n.a.	n.a.	n.a.	1.6E+07	2.0E+06	1.3E+04	2.0E+06	1.6E+07	2.0E+06	1.3E+04	
11-Mar	0	4	0	0	0	0	2	0	113	67	38	5	26	65	B2.4	n.a.	n.a.	n.a.	n.a.	2.5E+08	3.3E+06	1.2E+04	3.3E+06	2.5E+08	3.3E+06	1.2E+04	
12-Mar	0	4	0	0	0	0	0	0	108	71	48	5	23	40	B1.9	n.a.	n.a.	n.a.	n.a.	4.7E+08	3.2E+06	1.2E+04	3.2E+06	4.7E+08	3.2E+06	1.2E+04	
13-Mar	0	12	0	0	0	0	0	0	104	61	40	4	15	28	B1.4	n.a.	n.a.	n.a.	n.a.	7.4E+08	1.1E+06	1.2E+04	1.1E+06	7.4E+08	1.1E+06	1.2E+04	
14-Mar	0	13	0	0	0	0	0	0	103	61	38	4	16	33	B1.3	n.a.	n.a.	n.a.	n.a.	3.8E+08	6.9E+05	1.2E+04	6.9E+05	3.8E+08	6.9E+05	1.2E+04	
15-Mar	0	11	0	0	0	0	0	0	101	49	32	4	13	29	B1.3	n.a.	n.a.	n.a.	n.a.	3.2E+08	6.2E+05	1.2E+04	6.2E+05	3.2E+08	6.2E+05	1.2E+04	
16-Mar	1	8	0	0	0	0	0	0	110	53	37	3	8	21	B1.7	n.a.	n.a.	n.a.	n.a.	2.6E+08	4.0E+05	1.3E+04	4.0E+05	2.6E+08	4.0E+05	1.3E+04	
17-Mar	0	10	0	0	0	0	0	0	110	101	48	3	6	13	B2.9	n.a.	n.a.	n.a.	n.a.	2.2E+08	2.9E+05	1.3E+04	2.9E+05	2.2E+08	2.9E+05	1.3E+04	
18-Mar	0	11	0	0	0	0	0	0	115	107	49	3	10	22	B3.9	n.a.	n.a.	n.a.	n.a.	6.0E+07	2.7E+05	1.3E+04	2.7E+05	6.0E+07	2.7E+05	1.3E+04	
19-Mar	0	15	0	0	0	0	0	0	112	89	58	3	6	14	B4.2	n.a.	n.a.	n.a.	n.a.	5.7E+07	3.2E+05	1.3E+04	3.2E+05	5.7E+07	3.2E+05	1.3E+04	
20-Mar	0	18	0	0	0	0	0	0	114	82	50	3	9	23	B2.7	n.a.	n.a.	n.a.	n.a.	6.9E+07	3.9E+05	1.4E+04	3.9E+05	6.9E+07	3.9E+05	1.4E+04	
21-Mar	0	4	0	0	0	0	0	0	111	65	48	4	13	29	B1.6	n.a.	n.a.	n.a.	n.a.	2.9E+07	4.7E+05	1.4E+04	4.7E+05	2.9E+07	4.7E+05	1.4E+04	
22-Mar	2	12	0	0	0	0	0	0	116	87	57	3	11	24	B2.0	n.a.	n.a.	n.a.	n.a.	3.4E+07	6.0E+05	1.3E+04	6.0E+05	3.4E+07	6.0E+05	1.3E+04	
23-Mar	0	8	0	0	0	0	0	0	118	110	61	3	8	15	B2.1	n.a.	n.a.	n.a.	n.a.	2.9E+07	4.3E+05	1.2E+04	4.3E+05	2.9E+07	4.3E+05	1.2E+04	
24-Mar	0	9	0	0	0	0	0	0	120	109	57	2	4	5	B2.7	n.a.	n.a.	n.a.	n.a.	5.1E+07	8.6E+05	1.3E+04	8.6E+05	5.1E+07	8.6E+05	1.3E+04	
25-Mar	0	9	0	0	0	0	0	0	127	128	83	3	8	8	B3.8	n.a.	n.a.	n.a.	n.a.	3.7E+07	1.3E+06	1.2E+04	1.3E+06	3.7E+07	1.3E+06	1.2E+04	
26-Mar	1	6	1	1	1	1	0	0	124	100	84	3	11	30	B2.2	n.a.	n.a.	n.a.	n.a.	2.0E+07	8.8E+05	1.3E+04	8.8E+05	2.0E+07	8.8E+05	1.3E+04	
27-Mar	0	11	0	0	0	0	1	0	128	129	88	4	14	40	B3.4	n.a.	n.a.	n.a.	n.a.	1.1E+07	8.0E+05	1.3E+04	8.0E+05	1.1E+07	8.0E+05	1.3E+04	
28-Mar	0	5	0	0	0	0	2	0	129	125	76	5	17	35	B3.8	n.a.	n.a.	n.a.	n.a.	1.8E+08	1.5E+06	1.3E+04	1.5E+06	1.8E+08	1.5E+06	1.3E+04	
29-Mar	0	4	0	0	0	0	0	0	129	169	66	3	12	20	B3.4	n.a.	n.a.	n.a.	n.a.	3.6E+08	1.2E+06	1.2E+04	1.2E+06	3.6E+08	1.2E+06	1.2E+04	
30-Mar	0	11	0	0	0	0	0	0	127	121	54	4	12	25	B3.1	n.a.	n.a.	n.a.	n.a.	3.1E+08	2.5E+06	1.3E+04	2.5E+06	3.1E+08	2.5E+06	1.3E+04	
31-Mar	1	8	0	0	0	0	0	0	121	95	56	3	7	16	B3.2	n.a.	n.a.	n.a.	n.a.	2.7E+08	1.7E+06	1.3E+04	1.7E+06	2.7E+08	1.7E+06	1.3E+04	
Sum	6	270	1	1	1	12	0	0	112.2	81.0	48.9	3.6	12.6	25.2	B2.4	n.a.	n.a.	n.a.	n.a.	1.9E+08	1.2E+06	1.3E+04	1.2E+06	1.9E+08	1.2E+06	1.3E+04	
Average	0.2	8.7	0.03	0.03	0.4	0.0	0.0	0.0	112.2	81.0	48.9	3.6	12.6	25.2	B2.4	n.a.	n.a.	n.a.	n.a.	1.9E+08	1.2E+06	1.3E+04	1.2E+06	1.9E+08	1.2E+06	1.3E+04	
Maximum	2	18	1	1	7	0	0	0	129	169	88	6	40	65	B4.2	n.a.	n.a.	n.a.	n.a.	7.4E+08	3.3E+06	1.4E+04	3.3E+06	7.4E+08	3.3E+06	1.4E+04	
Minimum	0	3	0	0	0	0	0	0	90	40	23	2	4	5	B1.3	n.a.	n.a.	n.a.	n.a.	1.1E+07	2.7E+05	1.2E+04	2.7E+05	1.1E+07	2.7E+05	1.2E+04	

50 MHz Outside Britain

Compilation and Commentary by G3USF

Europe

Auroral-Related Propagation

A relatively quiet month, geomagnetically speaking. The average daily Ap index of 12.6 compares with 19.4 (smoothed) in March 2003 and 22.4 in what now appears to have been the peak month of the current magnetic cycle, August 2003. Aurora was reported from continental locations on thirteen days. However, signals were reported south of the Baltic-GM line on only three days - the 9th, 11th and 23rd. The 9th was the only day with anything more than a fleeting opening at mid-latitudes. Although many of the northern openings were brief a number lasted several hours. Thanks are as usual due to OH5IY for the OH5 automatically gathered observations which, unlike even our most dedicated reporters, are unsleeping. They result from monitoring SK4MPI (144.912, erp 1500w) and 88.7 and 107.9MHz FM broadcasts. Thanks also to OH2LX for forwarding them.

Mar 1 1640-1700 Au>OH5IY 17-1800 OZ>SM5(55a) LA>OZ(57a) OH9SIX>SM3(579 AE) 1955 OH9SIX>SM2(57a) 2250-2340 Au>OH5

Mar 9 1404 OH9SIX>SM2(57a) 1440-1710 AuFM>OH5 16-1700 SM7>OZ(mode?) OH3>OZ(55a) SM0(JO89)>OZ(55a) OH5(KP30)>OZ(55a) GB3LER>OZ(52a) OY6SMC>OZ(52a) GM>ON 17-1800 GB3LER>EI(51a) LA(JO59)>DL(JO72 55a) OZ>DL(JO72 53a) GM>EI(IO53 57a) ES1>OZ SP4>SM0(mode?) GM>SM0(mode?) 1720-1810 AuFM>OH5 1720-1820 Au>OH5 18-1900 LA(JO59)>PA GM>PA(JO22 51a) GM(IO88)>PA(JO22 57a) SP4>LA)JO59 59a) SM5>SP2(mode?) ON>OZ OZ>SP4(KO03 52a) 2020-30 Au>OH5 2120-30 Au>OH5 2150-2220 Au>OH5 2320-2400 Au>OH5

Mar 10 0000-10 Au>OH5 0040-0120 Au>OH5 0130-50 Au>OH5 0200-40 Au>OH5 1340-1410 Au>OH5 1520-30 Au>OH5 1600-10 AuFM>OH5 2240-2400 Au>OH5

Mar 11 0000-30 Au>OH5 1436 49750>SM5(56a) 1450-1550 Au>OH5 16-1700 LA(JO49)>SM0(JO99)(mode?) SM5>OZ(55a) 1640-1700 Au>OH5 17-1800 SM5>LA(JO49 55a) OZ>SM0(mode?) GB3LER>EI(52a) 1730-50 Au>OH5 18-1900 TF3SIX>SM2(569 KP15) OH3(KP10)>OZ(JO54 55a) 1940-2000 Au>OH5 2200-10 Au>OH5 2340-2400 Au>OH5

Mar 12 0000-10 Au>OH5 0020-50 Au>OH5 15-1600 OH9SIX>SM2(56a) 49750>OZ 1510-20 Au>OH5 17-1800 49750(StPetersburg)> SM0(53a) 2100-10 AuFM>OH5 22-2300 OH9SIX>SM2(57a)

Mar 14 1925 OH9SIX>SM2(56a)

Mar 15 1616 OH9SIX>SM2(55a)

Mar 16 2158 OH9SIX>SM2(57a)

Mar 20 17-1800 OH8SIX>SM2(57a) JW5SIX>SM2(579 AE)

Mar 23 1955 OH6>DL(55a)

Mar 26 1500-20 Au>OH5 1530-1600 Au>OH5 2030-50 Au>OH5 2056 TF3SIX>SM2(559)

Mar 27 16-1700 OH9SIX>SM2(57a) 49750>SM0(59a) 1630-50 Au>OH5 1703 SM0>OZ(51a) 22-2300
OH9SIX>SM2(59a) JW7SIX>SM2(wkAE) 2220-40 Au>OH5

Mar 28 1332 OH9SIX>SM2(56A) 2219 OH9SIX>SM2(59a)

Other Modes

With cycle 23 we at least have the possibility of documenting how far down a cycle it remains possible to work DX. (Too few countries had 50MHz privileges for much of the previous cycle for conclusions to be drawn.) For 'northern' countries the March results are clear enough, and we are unlikely to see anything better than this before the closing year or so of the decade. However, thanks in large part to the seasonal reappearance of tep - both 'afternoon' and 'evening' type - around the middle of the month, the Mediterranean continued to hold up better. While southern Africa was heard or worked on 16 days, compared with 29 in 2003, several openings were substantial in both duration and geographical spread, reaching from Cyprus across to Spain. We are back to the days when IT9, 9H and EA7 are the most consistently favoured. Among the South Africans only ZS6 features in the reports but the more northerly Z2, 7Q and 9J stations held up somewhat better.

Europe<>Southern Africa

	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	
Med							+			+			+		+				+	+	+	+		+	+	+	+	+	+	+	+	
North																											+					

	'Mediterranean'	'Northern Europe'
ZS	9 days 7 19 20 24 26 28 29 30 31	1 day 26(G)
Z2	12 days 7 10 13 15 20 24-30	
7Q	5 days 20 22 24 25 30	
9J	7 days 10 13 15 16 19 21 22 29	

West African amateurs were heard or worked from the Mediterranean on 19 days, compared with 26 in 2003 and 28 in 2002. (However, SV1DH reports TV from 3C and/or 5Z on all but three days, suggesting that some possibilities may not have been exploited.) The most consistent of the West African countries, Gabon, was reported on 11 days compared with 16 in 2003. 5T5SN, a knowledgeable and active operator, was also widely reported along the Mediterranean.

Europe<>West Africa

	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	
Med				+	+	+		+		+	+	+	+	+	+	+				+	+	+	+	+					+	+		
North					+					+																						

	'Mediterranean'	'Northern Europe'
TR	12 days 4 5 8 10-12 15 16 20-24	1 day 5(HB)
5T	10 days 5 6 10 12 13-15 17 29 30	
5V	3 days 10-12	1 day 10(EW)
S9	3 days 15 17 22	

Elsewhere, Reunion made a welcome reappearance, though the beacon regrettably had still not been reactivated. However, the main attraction was of course the 3B9C expedition, listed below as working into Europe on 8 days - but due to the DX summit being out of action for part of the 21st, 22nd and 23rd this may not give them their full due. They are known to have worked into LZ but no reports are to hand of contacts further into Europe. Not surprisingly, they were most consistently reported from 4X, 5B and as far west as 9H/I/IT. The extra mileage to EA proved more challenging.

'Other Africa'	
'Mediterranean'	'Northern Europe'
3B9C	8 days 20 21 25 26 27 29 30 31
FR	5 days 19-21 25 31
9Q	3 days 20 22 26
D2	1 day 31
	1 day 26(LZ)

Mar 1 1540 3Ctv>SV1 1823 PY3OG>CT1EPC

Mar 2 0703 5B>ZC4 1547 S5>I4

Mar 3 no reports

Mar 4 no reports

Mar 5 1351 5T5SN>9H1YZ 14-1500 5T5SN>IK0FTA,IK5YJY,IS0GQX,IW4BET
TR8CA>HB9SJV,IW1AZJ,I8LPR,IS0GQX,IK0FTA,S57RR 15-1600 TR8CA>I2AND,IW4BET,IH9GPI,
5T5SN>SV1DH,IH9GPI,I8LPR 1836 OH6>LA 2112 ZD8VHF>EAKW 2340 G>OZ

Mar 6 0932 I2>OZ 13-1400 HB9SIX>DL I4>OZ 14-1500 OH6>OH1 1511 3Ctv>SV1 16-1700
5T5SN>LZ3CQ SK7>OZ

Mar 7 07-0800 S5>9A OK1>F

Mar 8 no reports

Mar 9 aurora 1842 5B4AV>TR8CA aurora 19-2000 P>ON 2332 EH8>CT3

Mar 10 12-1300 TR8CA>IK0FTA,IZ6ELF 1257 5V7C>I7CSB 13-1400
5V7C>I4EAT,I4YSS,IS0GQX,IK5MEN,IK0BAL,IW1AZJ IH9GPI>TR8CA 15-1600 5V7C>I4EAT
T7>I4,SP6 16-1700 5V7C>EA6VQ,IK5YJY 17-1800
5V7C>IH9GPI,IZ5KV,IT9KSS,EA6VQ,CT1EEN,I0EKY,CT1EPC,EA7KW,I8LPR,IS0GQX
Z22JE>9H1PA 9J2HK>IS0GQX 18-1900 9J2HK>EA6VQ 5V7C>EA5HB,EA5AAJ
5T5SN>IS0GQX,IH9GPI CN8MC>EA7(sc) 21-2200 EH8>CT3 ZD8VHF>EA7KW,9H1YZ . It is
understood that 5V7C made 80 contacts on this day. In addition to countries noted above these
included EW, with SV heard but not worked.

Mar 11 1313 3Ctv,5Ztv>SV1 1540 9H1AW>TR8CA 16-1700 TR0A,3Ctv>SV1 IH9GPI>TR8CA 1954
YV4AB>5T5SN 20-2100 5V7C>9H1YZ,9H1XT,SV3KH

Mar 12 07-0800 OK1>OZ 1038 OE3XLB>SP6 16-1700 9H1AW>TR8CA 5V7C>EA6VQ,I0WTD 17-1800 9Y4AT>5T5SN 5V7C>SV1DH,F6FHP,EA6VQ 5T5SN>EA6VQ,F6FHP 18-1900 CT0SIX,CN8MC>5T5SN 5V7C>EH3LL,EA5RM 5T5SN>EA6VQ,F6FHP,EA5RD 9Y4AT>5T5SN 19-2000 5T5SN>CN8LI, CT1FMX,EA4SV CU3URA>5T5SN FM5WD>EA7(skew),5T5SN EA7>EA5

Mar 13 0727 OK1>OH1 1306 3Ctv>SV1 1442 SQ5>ON 15-1600 ON>LA 9H,IQ4AD>S5 17-1800 IH9GPI>5T5SN 5T5SN>9H1YZ,IK0FTA,IZ0EGC Z22JE>9H1YZ 9J2HK>EA7KW V44KAI>5T5SN 18-1900 5T5SN>F6FHP,EA7KW,EA7BVD, EA5AGR,EA7CU,CT1EPC CU3URA,CU1CB>5T5SN EA3>EA7,EA5 19-2000 EH8>EA7,I9 ZB2IT>5T5SN 5T5SN>CT1DYX

Mar 14 1447 I4>9A 1518 I4>9A 1718 PA>SM0 18-1900 PA>LA 5T5SN>EA6VQ 19-2000 5T5SN>EA5/G0KOM,IS0GQX,EH3LL 2047 ZD8VHF>9H1YZ 21-2200 3Ctv>SV1DH(e-tep) ZD8VHF>SV1(first of season) 2255 ZD8VHF>EA7KW

Mar 15 1250 3Ctv,5Ztv>SV1 1504 IK5ZUL>S5 1555 SV1DH>TR8CA 16-1700 PA>SM0 9H1AW>TR8CA 17-1800 9J2HK>IH9GPI,SV1CER,9H1PI Z22JE>9H1PI 18-1900 5T5SN>IG9GPI 1915 3Ctv>SV1(tep) 20-2100 ZD8VHF>9H1TX,SV1DH S9TX>SV1DH TR0A>SV1DH

Mar 16 0919 OE3XLB>SP6 16-1700 3Ctv>SV1 TR0A>SV1DH 17-1800 EH7KW>TR8CA,EA6VQ 19-2000 CN8MC>EA6 20-2100 LA>SM0 ZD8VHF>EA6,9H1TX

Mar 17 1048 FR1GZ>5B4FL 1127 LX0SIX>DL 1556 OE5>OZ(ms) 1754 LA>OE5 18-1900 5T5SN>EH3LL,F6FHP 19-2000 5T5SN>EA1BL 1909 3Ctv>SV1(e-tep) 21-2200 ZD8VHF>9H1YZ

Mar 18 0828 GB3LER>F 1448 3Ctv>SV1 15-1600 3Ctv>I) 1718 S5>OE6 19-2000 3Ctv>SV1(e-tep) 20-2100 ZD8VHF>EH3LL,IS0GQX

Mar 19 10-1100 FR1GZ>5B4FL,9H1TX 11-1200 FR1GZ>9H1LE ZS6WB>9H1TX 12-1300 ZS6TWB>IW9CER FR1GZ>5B4FL ZS6NK>EA5AGR 13-1400 ZS6NK>IK0FTA,IH9GPI,EH3LL,9A6R,IW9CER ZS6TWB>IW1AZJ 15-1600 FR1AN>5B4FL ZS6NK>SV1DH 16-1700 I9>SV1(bs 220) I9>I8 17-1800 ZS6WB>I9 9H>I9 9Y4AT,V44KAI>5T5SN I9>I8 ZS6TWB>EA7KW 18-1900 9J2KC>IH9GPI,SV1VS,IK7IMO ZD7VC>EA7KW,IK8DYD 1914 I9>IS0 20-2100 OH6>LA ZD8VHF>IS0 GM>SM0

Mar 20 1000 3B9C>5B4FL,IK0FTA FR1GZ>5B4FL,IK4ADE 10-1100 3B9C>9H1TX,5B4FL,IT9KSS,IW5DHN,IK0FTA,IK8YTA,SV1FJA,IK8DYD, SV1VS ZS6AFG>SV1DH FR1GZ>SV1VS 11-1200 YT1>9A 3B9C>IK8DYD,9A8A,SV1DH,I0WTD,IW9CER,SV1VS,9H1TX FR1AN>IK7IMO,SV1VS 12-1300 3B9C>IK8DYD,IK0VAQ EH4>EH5 13-1400 ZS6MRK>SV1DH ZS6TWB>IK6YJY ZS6NK>IW9HHH 14-1500 ZS6OTL>9H1TX,IT9RZR ZS6MRK>5B4FL 15-1600 3B9C>5B4FL,9H1PA 17-1800 Z22JE>5B4FL,EA6VQ,EH3LL FR1AN>5B4FL 7Q7RM>5B4FL ZS6NK>EA7KW 3B9C>5B4FL 1856 FG5FR>EA7KW(skew) 19-2000 9Z4BM(skew),9Y4AT(skew 235)>EA7KW 9H>SV1(bs) 9Q0AR>EA7KW,IS0GQX,EA6VQ 20-2100 TR0A>EA7KW 2132 I4>OZ

Mar 21 07-0800 F>S5 ON>F 09-1000 EA7>ON(ms) I4>I0,DL(t/ms) ON>F(ms) ON>SP6

0944/21-1955/23 data not received

Mar 23 20-2100 OZ>PA I0>S5,I8 I8>I5 21-2200 I5>I8,OZ TR0A>SV1

Mar 24 11-1200 3B9C>5B4FL 1318 TR0A>IK5YJY 15-1600 JY>5B(t) 3B9C>5B4FL 1655 7Q7RM>EA6VQ 17-1800 7Q7RM>EA6VQ,IT9XDJ,EA5CSL,IH9GPI, SV8CS ZS6TWB>9H1TX,SV8CS 18-1900 18-1900 FJ5DX>5T5SN PY1RO>9H1TX,IH0GPI 19-2000 Z22JE>SV8CS FG5FR>5T5SN 2023 ZD8VHF>9H1YZ 2201 PY1RO>EA7KW

Mar 25 09-1000 3B9C>SV1TP 10-1100 3B9C>SV1DH 11-1200 3B9C>5B4FL, IT9GSF,4X5AO 12-1300 FR1GZ>SV8CS 14-1500 3B9C>IK8DYD 16-1700 3B9C>5B4FL,4X4DX,5B4AFB JY>5B FR1AN>4X4DX 18-1900 PY1RO>IT9RZR Z22JE>IT9RZR,5B4AV 7Q7RM>IT9RZR

Mar 26 0754 LX0SIX>PA 0824 LY0SIX>SP6(ms) 10-1100 3B9C>SV1EN,5B4FL, I8LPR,IK7MCJ,IT9KSS 11-1200 3B9C>9A1Z(ms),SV1DH.9H1PA,LZ3CQ 12-1300 3B9C>9H1LE, 9H1XT,5B4FL ZS6AXT>5B4FL 13-1400 3B9C>IK8DYD ZS6OB>SV1DH,IZ0FMA,9H1XT ZS6WB>EH5AX 3B9C>IK0BAL,9H1TX ZS6AXT>G4FUF 14-1500 Z22JE>IT9CVO 1657 3B9C>5B4FL 1702 3B9C>SV1DH 18-1900 FY7THF,CN8MC>EA7KW(sc_240) 19-2000 9Q0AR> 9H1YZ,EA7KW,IH9GPI,CT1CJJ,EA4FX,CN8LI,CT1EAT,EA7ON,EA5VQ 2159 ZD8VHF>9H1YZ

Mar 27 3B9C>9A1Z(F2/Es) 10-1100 3B9C>SV0BAB(?) 11-1200 3B9C>5B4FL 12-1300 3B9C>5B4FL,SV1DH 1804 Z22JE>9H1YZ

Mar 28 0750 LY0SIX>SP6 0948 HB9SIX>DL 1029 LX0SIX>DL 13-1400 ZS6NK>IT9RZR PA>I2 1700 Z22JE>9H1PI 18-1900 ZD7VC>IT9XDJ,EA5CSL, EA5YB,SV3FUO LU1FA>EA7KW 20-2100 ZD7VC>EA7KW,9H1YZ,CT1EPC, 9H1LE,EA7DLD LW1DZ,LU8MB>EA7KW CU7BC>D44TD

Mar 29 07-0800 OE3XLB,LX0SIX>SP6 0959 5B>4X 1257-9 3B9C>5B4FL,IT9XDJ 13-1400 3B9C>9H1XT,SV1DH,I8LPR,EA7KW,IT9XDJ,IW9FBS 14-1500 3B9C>SV1DH,IT9RZR,IT9AMQ,SV8CS ZS6NK>EA7KW SV1>IT9 15-1600 ZS6NK>IW9CER,9A6R,EA5FX,IH9GPI ZS6TWB>IS0GQX,SV1DH 16-1700 ZS6TWB>SV1DH,EA6VQ Z22JE>SV1DH,IH9GPI,9A6R,EA7CD,EA4SV ZS6GVD>IH9GPI,EA6VQ ZS6NK>EA4SV,S57A,9A6R,EA5/G0KOM,EA7VD ZS6TWB>S57RR 17-1800 ZS6BTE>9A6R,IZ1EPM,IZ5EKV ZS6NK>9A6R ZS6DN>IS0GQX,EH3LL ZS6WB>EA7CU ZS6OB>IS0GQX,CT1DHM ZS6GVD>EA7CU ZS6NK>IW1AZJ,IK5MEN 9J2HK>EA5CSL 18-1900 ZS6NK>CT1DHM LU9EHF>EA7KW 19-2000 LW1DZ>EA7KW 5T0EU>EA6VQ CU3URA>EA7(sc 190)

Mar 30 0753 LY0SIX>SP6(ms) 0804 OE3XLB>SP6 11-1200 3B9C>5B4FL,IT9EJW 1252 ZS6NK>9H1YZ 13-1400 ZS6NK>S57RR,IZ5EKV,I8OHQ,9A6R,IW9CER ZS6TWB>IW9CER,9A6R,EA5AX 15-1600 Z22JE>EA7KW,EH3LL,EA5/G0KOM, CT1DHM,IH9GPI,EA5XV 5T0EU>IH9GPI 16-1700 7Q7RM>EA6VQ ZS6TWB>9A6R,EA6VQ,IT9TPJ Z22JE>9A6R ZS6NK>9A6R 17-1800 ZS6NK>IT9TPJ 9J2HK>EA6VQ,IK0BAL,EH3LL 18-1900 49.2(CE)>EA7KW LW3EX,LW1DX>EA7KW 2104 ZD8VHF>9H1YZ

Mar 31 0543 LY0SIX>SP6 11-1200 FR1AN>9H1YZ,4Z5AO 3B9C>9H1YZ,5B4FL, SV1DPI FR1AN>SV1DPI 12-1300 3B9C>I7CSB,IK8HJC,9H1YZ,IT9EJW, I2AND,SV1AMH ZS6NK>SV1DH,IK5MEN 13-1400 ZS6TWB>9H1YZ,IT9GSF, EA5VQ ZS6AVP>9H1YZ 1437 ZS6XJ>SV8CS 15-1600 3B9C>5B4FL 17-1800 ZS6NK>IK7IMO 18-1900 LU1DMA,LW1DZ, CX4CR>EA7KW 19-2000 CU3EM(sc),CX3AN>EA7KW D2PFN>9H1YZ,5B4FL,SV1DH

50MHz PROPAGATION REPORT FOR MARCH 2004 BY SV1DH

1. Data for all days (31)
2. Relatively good days on: 5,7,10,12,14,15,19,20(+),21,22(+),26,29(+),31
3. 48 MHz AF video (3C or 5Z) on: 1,3-24,26-27,29-31 (R=90%)
4. 55 MHz AF video (5N) on: NIL
5. Opening to ZS6 on: 7,19,20,26,29,30,31 (R=22%)
6. " to 7Q on: 20,22
7. " to Z2 on: 7,10,26,29
8. " to 9J on: 15,19,21,22
9. " to TR on: 5,11,15,16,20-23 (R=26%)

- | | | | | |
|-----|---|--------|--------------------------|---------|
| 10. | “ | to S9 | on: 15,17,22 | |
| 11. | “ | to 9Q | on: 22 | |
| 12. | “ | to D2 | on: 31 | |
| 13. | “ | to 5T | on: 5 | |
| 14. | “ | to 5V | on: 12 | |
| 15. | “ | to ZD7 | on: 21 | |
| 16. | “ | to ZD8 | on: 14,15,18,22 | (R=13%) |
| 17. | “ | to FR | on: 19,20,21,31 | |
| 18. | “ | to 3B9 | on: 20,21,25,26,27,29,31 | (R=58%) |
| 19. | “ | to I | on: 7,19,29(B) | (R=10%) |
| 20. | “ | to 9H | on: 13,20(B) | |
| 21. | “ | to S5 | on: 22(E) | |

22. Special events on:

- 1 (1815 CT to PY)
- 4 (2145 EH7 to ZD8+TR)
- 5 (2115 EH7 to ZD8)
- 8 (2000-2145 EH to TR+ZD8+PY1 short)
- 10 (1000-1100 foF2>10, max 10.8 / MUF=34Mhz at 1030+1300-1515 / 1645-1815 5V to I+EH+F+2115 9H+EH7 to ZD8)
- 12 (1915 EH7 to FM scatter)
- 13 (0700 YA to VK6 at 8000 Km)
- 14 (0830 YA to VK6+2100 9H to ZD8+SV to 3C video E-TEP, first of season)
- 16 (2045 9H to ZD8) 17(1045 5B to FR)
- 18 (0830 YA to VK6)
- 19 (0900-1145 foF2>10, max 11.7/MUF=38Mhz at1100 +1030 FR to E.MED+BY! +2045 IS0 to ZD8)
- 20 (0815-1030 foF2>10, max 10.6/ MUF=34Mhz at 1000+0945-1215! 3B9 to 5B+SV+I+9H+9A strong+2100 9H to ZD8)
- 21 (1030+1130 3B9 to E.&C.MED+Far East simultaneously+2045 9H to ZD8)
- 22 (1130+1745 5B to 3B9+1830 EH7 to FY dir.+1930 EH7 to 9Y dir.+2045-2145 CEmuzak !)
- 23 (0745-1200! 3B9 to JA+1330 VQ9 to YB)
- 24 (0900-1000 3B9 to JA+1100 5B to 3B9+1430 3B9 to VR+1515 5B to 3B9+VQ9+1845 9H to PY1+2015 9H to ZD8)
- 25 (0800-1200!! 3B9 to JA>10000Km+0900-1200 3B9 to SV+5B+4X in-out+ 1415 3B9 toVR+1615-1730 5B to 3B9, NIL SV+1830 IT to PY1, NIL SV)
- 26 (0830-1000 3B9 to JA+1030-1230 3B9 to SV+E. MED up S9+20!+1430 PA to 3B9 Es assisted+1830 EH7 to FY scatter)
- 27 (0830-0930 3B9 to JA+HL +0945-1100 fo F2>10, max 10.8/ MUF=34Mhz at 1040)
- 28 (0730-1145! 3B9 to JA+HL +0830 VQ9 to VK8+1400 5B to 3B9, NIL SV +1945 EH7 to LU)
- 29 (0800-0830 3B9 to JA+HL +1230 MUF to HZ>45Mhz+5Z video strong+ 1300-1545! 3B9 to SV1+E. MED +1900 EH7 to LU)
- 30 (1045-1200 foF2>10, max 11.0 /MUF=36Mhz at 1130 + 0700-0945+1130-1145 3B9 to JA+HL +1900 EH7 to LU+2100 9H to ZD8)
- 31 (0715-0900 3B9 to JA +1130-1215 3B9 to SV1+E. MED+1130-1330 MUF to HZ>45Mhz +1900 EH7 to LU+CX)

23. DXCC entities heard/worked during March 2004 : 17 on 2 cont

24. DXCC entities heard/worked on 22nd March 2004 : 7 on 2 cont.

73 COSTAS

The Americas

Auroral-Related Propagation

Mar 9 2216 W8>W1(57a) 23-2400 K0KP>W1(55a) VE4VHF>W3(FM19 53a) N0UD>W0(DN70 55a)
W2>W1 VE1(FN74)>W1(FN32) OX3VHF>W2(mode?) W1(FN35)>W9(EN53)

Mar 10 00-0100 K0KP>VE5(mode?) W0(EN63)>W9(EM48) 01-0200 VA2WW>W1(53a) W8>W1(53a)
W1>W1(53a) 02-0300 N8PUM>W5(52a) K0KP>W1(56a) VE3(FN07)>W158a) W8>W8(EN52)
W7(DN47)>W0(DN70)(mode?) 0440 N8PUM>W8(52a EN65) VE6EMU>VE6(mode?) 0452
VE6>VE5(mode?) 0505 W1>VE6(mode?)

Mar 11 2102 W8>W1(52a)

Mar 12 0002 VE8BY>W1(AE) 0132 VE4VHF>W0(Es+au)

Mar 14 00-0100 K0KP>W9(EN44 54a) VE4ARM>W9(EN44 53a) W8(EN84)>W9(EN44 55a) 0152
VE4ARM>VE5(mode?)

Mar 18 0322 VE4ARM>VE5

Other Modes

Mar 9 2216 W8>W1(57a) 23-2400 K0KP>W1(55a) VE4VHF>W3(FM19 53a) N0UD>W0(DN70 55a)
W2>W1 VE1(FN74)>W1(FN32) OX3VHF>W2(mode?) W1(FN35)>W9(EN53)

Mar 10 00-0100 K0KP>VE5(mode?) W0(EN63)>W9(EM48) 01-0200 VA2WW>W1(53a) W8>W1(53a)
W1>W1(53a) 02-0300 N8PUM>W5(52a) K0KP>W1(56a) VE3(FN07)>W158a) W8>W8(EN52)
W7(DN47)>W0(DN70)(mode?) 0440 N8PUM>W8(52a EN65) VE6EMU>VE6(mode?) 0452
VE6>VE5(mode?) 0505 W1>VE6(mode?)

Mar 11 2102 W8>W1(52a)

Mar 12 0002 VE8BY>W1(AE) 0132 VE4VHF>W0(Es+au)

Mar 14 00-0100 K0KP>W9(EN44 54a) VE4ARM>W9(EN44 53a) W8(EN84)>W9(EN44 55a) 0152
VE4ARM>VE5(mode?)

Mar 18 0322 VE4ARM>VE5

Other Propagation Modes

March was never going to be a fruitful month for propagation between northern Europe and South America, so this month's nil result, compared with one day in 2003 and three in 2002 was only to be expected. For other areas the decline was more dramatic. Iberia fell from 25 days in 2003 and 30 in 2002 to 7, while the Mediterranean dropped from 30 days in 2002 and 18 in 2003 to only two. Openings were concentrated in the last week, when above-average flux levels and a slightly unsettled geomagnetic field offered the most favourable conditions.

There was, not surprisingly, no reported propagation between Europe and North America, but EA7KW reported Caribbean stations on the 12th and 20th over a skewed path. 5T5SN also reported contacts into the Caribbean

Europe<>Mainland South 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
Med																								+	+						
Iberia	+							+																		+		+	+	+	+
North																															

Europe<>Americas			
	'Mediterranean'	'Iberia'	'Northern Europe'
PY	2 days 24 25	3 days 1 8 24	
LU		4 days 28-31	
FY		1 day 26	
CX		1 day 31	
<hr/>			
ZD7	2 days 19 28	2 days 19 28	
ZD8	12 days 10 14-21 24 26 30	6 days 4 5 8 10 14 16 18	
<hr/>			
FM		1 day 12	
FG		1 day 20	
9Y/9Z		1 day 20	

While propagation between South America and the Caribbean was fairly routine, openings from the US were reported on only 9 days (2003 145, 2002 20). Openings seemed somewhat more likely on days when the planetary geomagnetic index was above the monthly average, with the solar flux fractionally over the average level of 112. There were no openings from VE. Indeed, with the exception of one to W6 all were confined to W4 and W5, parts of which are within the tep zone. In the absence of a adequate F2 MUFs or the happy chance of early Es there was little chance of propagation reaching the central or northern states.

North<>South 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
	+										+	+	+	+			+						+				+	+			

North<>South America

LU 9 days	1(W4) 11(W6) 12(W5) 13(W4) 14(W5) 17(W5) 23(W4) 27(W4) 28(W4,W5)
YV 2 days	12(W5) 14(W4)
FY 2 days	12(W5) 13(W4)
HC8 1 day	14(W4,W5)
CX 1 day	23(W4)
YV 1 day	27(W4)
CE 1 day	27(W4)
OA 1 day	14(W4)
HP 1 day	12(W5)

Mar 1 00-0100 VP5/K7BV>PY2 9Y4AT>PU2 FJ5DX>LU 01-0200 OA4B>PY1 1754 VP5/K7BV>W4 2159 W1>W1 22-2300 LU8EHQ>NW5E/4 LU8DWR>NL7AU/4 23-2400 LU8EHQ,LU8DDQ>WP4NEG

Mar 2 0054 W3>W8

Mar 3 no reports ?

Mar 4 no reports?

Mar 5 00-0100 LU8DJF,LU8EMB>WP4NIX 14-1500 W8,W3>W4 2332 LU2EPF>WP4NEG

Mar 6 1318 W8>W4

Mar 7 0116 W8>W4

Mar 8 no reports

Mar 9 00-0100 PY2RO,PY2VA,PP5JD>WP4NEG FG5FP>PP5JD 23-2400 FJ5DX,9Y4AT,V44KAI,WP4NEG,FG5GP>PU2OCZ ZP9>PR7 PR7>PP5

Mar 10 00-0100 PY2,PP5>PR7 5T5SN>PY8AZT CX4>PR7 20-2100 XF4IH>W4 CX4CR>TI2ALF 21-2200 LU9EHF,LU1DMA,LU8DCH,PU2QDX>TI2ALF 2247 CU3URA>PY1

Mar 11 00-0100 VE3>W9 LU5MCC>N6XQ 01-0200 9Y4AT>PU2OCZ 9Z4BM>PY2RO 21-2200 W1,LU9DBP,LW5EE,CX1CV,LU5VV>WP4NEG LU9DBP>WP3YM, NL7AU/4 2227 47.9(CE)>W6

Mar 12 01-0200 W1,W2,VE3,W3>W4 K0ETC>W4 20-2100 HP3XUG,LU9DBP, 9Y4AT>AA5XE LU9DBP>N4ZQ HP3XUG>W5OZI,W5GAI FY7THF>TI2ALF YV4AB>K5AB LU5VV>KG4EFR,KB4ET FG5FR>W5 21-2200 W5RP>TI2ALF 9Y4AT>W4 HP3XUG>K5AB,W5RMH FY1FL>AA5XE XE1>W5 XF4IH>AA5XE 22-2300 XF4IH>TI2ALF,AA5XE,K5XX,NW5E/4,N0JK

Mar 13 00-0100 V44KAI,9Y4AT>PU2OCZ 14-1500 W4>W1,W4 1643 WR9L>W1 1740 W8>W4 18-1900 LU5VV>K4RX FY1FL>NN4X 49.2(CE)>W4 19-2000 W1>W1 LU7WW>K4RX 20-2100 49.2>W4 21-2200 W9>W0 LU1VD>W4SO

Mar 14 0153 OA4B>PP5 15-1600 W1>W1 1730 N0LL>W9 1942 LU5VV>AB5A 21-2200 OA4B>K4RX,NW5E/4,W4SO W4>W5 YV4DDK,HC8GR(sc180)>K4RX 22-2300 HC8GR>AE5B(sc) HC8GR>W5DN,AB5A XF4IH>XE2 23-2400 HI9/PA3GIO>KP4

Mar 15 0256 C6AFP>W8 03-0400 W8,W1(ms)>W4 W3>W1(t) W8>W1(ms) W3>W8 1849
VP9DUB>W1(ms) 22-2300 LU9EHF,LU1DMA,LU1BQ,LU9DFN, LU2DO>TI2ALF 23-2400
KP4>PP5,PU2 9Y4AT>PU2

Mar 16 00-0100 LU>PY8 0204 OA4B>PP5 13-1400 VP9DUB>W1 1554 W0>W1 19-2000 W8>W8 20-2100
W4>W3 LU1BQ,LU1DMA>TI2ALF 21-2200 LU7JTW,LW3DX,LU2EPF>TI2ALF LU2EPF>KP2 23-
2400 PY2FR,PY3OG>KP4

Mar 17 2033 VP9DUB>W1(ms) 21-2200 CE4WJK>KP4,LU LU1FA,LU9EHF>TI2ALF LU>AB5A 22-2300
LU>PP5 PP5LD,LU1DCA >TI2ALF LU8DO>KP4

Mar 18 0012 OA4B>PU2 0204 YV4AB>PY8

Mar 20 0356 OA4B>TI2ALF 1338 W8>W4(sc) 1922 W2>W1 20-2100 W3>W5,W1 2156 ZP5AA>TI2ALF
2236 47.9(CE)>W4

Mar 21 0049 LU>YV5

Mar 23 21-2200 LW3EX,CX5CR,LU1FA>KP4 LU2DEK>KB4ET LU8AHW>NY4PD
LU9DFN>W4DTA,NY4PD CX2AQ>N4GM 22-2300 LU5VV,LU9DFN,LU1FA> W4DTA PY1VU>KP4

Mar 24 0352 6Y5CI>W3 0434 W0>W8 1537 WA8IGY>W2 2042 LU9EO>KP4 21-2200
CE4WJK,LU3HR>KP4 2306 47.9(CE)>W4

Mar 25 0107 9Y4AT>PU2 20-2100 CX2LI,CX2AQ>KP4 21-2200 LW3EX>KP4 2257 LU8ERH>KP4

Mar 26 0048 W5>W5 1854 W3>W4

Mar 27 1446 JM1SZY>W1(eme) 20-2100 49.2(CE),LU2DEK,LU8DIO,CX2AQ>K4RX
LU3CM,CX2AQ>W4SO 21-2200 PY3DU>W4SO LU1VD,CE2/K4UNM,W5OZI(sc)>K4RX

Mar 28 0124 W8>W3(t) 0334 W5>W3 1521 W3>W3 19-2000 FY7THF,FY1FL>TI2ALF 2053 48.3(CE)>W4
21-2200 47.9(CE) W5(bs),LW3EX,LU1FA,LW1DZ>K4RX LU1FA>W5DN,K5IX LU9DFN>K5IX
LW3EX>W5DN

Mar 29 01-0200 FJ5DX,TI2NA>PU2

Mar 30 20-2100 LU5EGL,LU8EHQ,LU8EOT>KP4

Mar 31 2251-8 FJ5DX>PY2 PY2MTV>KP4

Asia/Pacific

Japan

The vernal equinox normally spells good propagation for propagation between Japan and VK/ZL. 2004 was no exception, and results to VK were only slightly down on 2003, with openings on 27 days compared with 29. ZL dropped from 7 days to 6 (2002 and 2001 5). The VK results followed the normal seasonal pattern, favouring VK4, 6 and 8. Contacts were even made on the three most disturbed days, March 10 (Ap 40), March 11 (Ap 26) and March 12 (Ap 23); solar flux on these days was, respectively, 113, 113 and 108) That the more difficult VK2 and VK7 contacts were reported on much fewer days was no surprise, but VK3 -

admittedly not the easiest of paths - fell steeply from 11 days in 2003 to only three. Note, however, how many of the reports relate to beacons.

3B9C was worked from JA on every day it was operational, with ranges up to around 10,000km - implying triple hops. (HL was also worked at comparable QRBs on the 27th, 28th, 29th and 30th. There were no JA reports of working outside the Asia-Pacific area.

Japan<>VK/ZL

	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
VK	+		+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
ZL												+	+	+			+					+				+			+		

VK2 3 days 11 20 21	ZL1 5 days 12-14 21 25
VK3 3 days 12 21 29	ZL2 2 days 14 17
VK4 20 days 7 11-16 18-29 21	ZL3 4 days 13 17 25 28
VK6 27 days 1 3-7 10-29 31	ZL4 1 day 13
VK7 1 day 29	
VK8 23 days 1 3 10-29 31	

6m DX results in JA during March from JA1VOK

DATE	TIME(UTC)	STATIONS
1	0645-0730	VK6RSX/b
	0955-1100	VK6JQ,6RSX/b,8RAS/b
3	0510-1200	VK6JQ,6RSX/b,8RAS/b
4	0740-1230	VK6RSX/b
5	0630-0730	VK6RSX/b
6	0500-0530	VK6RSX/b
	1050-1130	VK6RSX/b
7	0550-0600	VK4JSR (JA7)
9	0445-0500	FK8SIX/B
	0745-0910	9M2TO/B, DU1EV/B
10	0800-0830	VK6RSX/b,8RAS/b
11	0320-0600	FK8SIX/B, VK2ZXC, VK4NW, 4AHW, 4RGG/b, 6RSX/b, 8RAS/b
	1000-1100	VK6JQ, 6RSX/b, 8RAS/b
12	0410-0720	FK8SIX/B, VK3DUT, VK4, 6RSX/b, 8RAS/b, ZL1VHF/b
	1047-1100	N7ET/DU7
13	0152-1030	BG9BA, DU1EV/B, FK8SIX/B, KG6DX, VK4, 6RSX/b, 8RAS/b, ZL1VHF/b, 3JT, 3MH, 3AAU, 3TIC, 3SIX/b, 4WA, 4AAA
14	0400-0830	FK1TK, 8EB, 8SIX/B, V73SIX/B, VK4, 8RAS/b, ZL1VHF/b, 2TPY
	0910-1300	DU1EV/B, VK4, 6JQ, 6RSX/b, 8RAS/b
15	0350-1120	FK1TK, 8GX, 8SIX/B, KG6DX, V73SIX/B, VK4, 6JQ, 6RSX/b, 8RAS/b
16	0210-1100	DU1EV/B, FK8GX, 8SIX/B, VK4, 6JQ, 6RSX/b, 8RAS/b
	0750-0830	9M6SMC/b
17	0350-0600	FK8SIX/B, VK6RSX/b, ZL2TPY, 3TJZ, 3SIX/b
	0915-1000	VK6RSX/b, 8RAS/b
18	0320-0600	C21SIX/b, FK8SIX/B, VK4, 6RSX/b, 8RAS/b

	1000-1130	VK6RSX/b	
19	0445-0500	FK8SIX/B, VK4BLK	
	0900-1200	VK4,6JQ,6RSX/b,8RAS/b	
20	0340-1000	FK8SIX/B, V73SIX/B, VK2YO,2ZXC,VK4,6JQ,6RSX/b,8RAS/b	
	0833-1030	3B9C (JA2-6)	
21	0408-0900	C21SIX/b, DU1EV/B, FK1TK,8SIX/B, V73SIX/B, VK2FHN,2ZXC, VK2RHV/b,3BQS,3CAT,3DUT,VK4,6RSX/b,8RAS/b, ZL1VHF/b	
	0745-0930	3B9C (JA3-6)	
	1120-1200	VK4ABW,4RTL/b,8RAS/b	
22	0400-0900	9M2TO/B, 9M6SMC/b, DU1EV/B, FK8GX,8SIX/B, V73SIX/B, VK4,6RSX/b,8RAS/b	
	0930-1100	3B9C	
	1043-1100	VK6JQ	
23	0330-0700	FK8SIX/B, VK4,6RSX/b,8RAS/b	0753-1200 3B9C
	0845-1330	9M2TO/B, XV3PWP, YB1MH	
24	0020-0230	9M6SMC/b, DU1EV/B	
	0300-1100	9M2TO, 9M6SMC/b, DU1EV/B, FK8SIX/B, VK4,6JQ,6RSX/b, VK8MS,8RAS/b, XV3AA,3PWP, YB1MH,YF1OO/B	
	1400-1500	9M6SMC/b, DU1EV/B	
25	0437-0900	9M2TO, DU1EV/B, FK1TK,8SIX/B, VK4,VK6,8RAS/b,ZL3NE/1,1VHF/b	
	0806-1100	3B9C	
	1145-1450	9M2TO/B, 9M6SMC/b, DU1/GM4COK,DU1EV/B, VK4,6RSX/b, VK8RAS/b, YB0AR,YB1MH,YB1EHR,YF1OO/B	
	1459-1510	VQ9LA (JR6)	
26	0340-1400	FK1TK,8SIX/B, V73SIX/B, VK4,6RSX/b,8RAS/b, YB1MH	
	0740-1000	3B9C (JA3-JA6/JR6)	
27	0300-1130	9M2TO, C21SIX/b, FK8SIX/B, V73SIX/B, VK4,VK6/b,8RAS/b, XV3AA	
	0838-1100	3B9C (JA2-6)	
28	0145-0300	FK8SIX/B, VK4, ZL3TY	
	0450-1100	9M2TO, VK4,VK6,8RAS/b, XV3AA,3PWP	
	0730-1200	3B9C	
	0905-0930	FR1AN (JA3-6)	
29	0220-1200	C21SIX/b, FK1TK,8SIX/B, V73SIX/B, VK3HV,3UH,3DOU,3DUT, VK3ZYS,VK4,6RPH/b,6RSX/b,8RAS/b,7JG	
	0700-1200	3B9C	
	1500-1700	9M6SMC/b, DU1EV/B	
31	0230-1100	FK1TK,8SIX/B, VK4,6RSX/b,8RAS/b	
	0715-1000	3B9C	

Elsewhere

Reporting from elsewhere in Asia was well down on last year, with no reports initiated from Australia or New Zealand, and just a handful from Hong Kong. At times like these, with few really active operators in many countries, beacons become a particularly valuable pointer to openings, though they are not a complete substitute for operators - knowing that a band is open but finding there is nobody out there to contact ultimately becomes very frustrating for anyone who is not a 'beacon junky'! However, a couple of good openings between VK6 and YA were reported at about 8000km range.

There are also reports of KP4 into Hawaii on the 19th, PY<>KH6 on the 21st and HC8>KH6 on the 31st. Looking back, though, in March 2003 contacts between South America and KH6 on no fewer than 14 days and Central/North America on 6 days. These are the paths where cyclical decline was most evident, and which look unlikely to be workable more than very occasionally at this season until the end of the decade.

Mar 13 0514 VK4CXQ>HL1LTC 0709 VK6RSX>YA1D

Mar 14 0635 VK6RSX>HL1LTC 0748 HL1LTC>KG6DX 0834 VK6RSX>YA1D

Mar 15 05-0600 VK4BLK,VK6RSX>HL1

Mar 17 1029 VK6RSX>HL1

Mar 18 0514 VK6RSX>HL1 0830 VK6>YA

Mar 19 0110 WP4LNY>NH7RO

Mar 20 06-0700 VK4ABW,VK6RSX>HL1 1043 3B9C>YA4F

Mar 21 01-0200 PY1WAG,PU2OCZ>NH7RO 0346 VK8RAS>KG6DX 0419 VK4BLK>KG6 0545
VK2ZXC>HL1

Mar 24 0650 VK6RSX>HL1 0826 XV3AA>HL1 0914 3B9C>HL3 14-1500 3B9C,VQ9LA>VR2 VQ9LA>YB0
15-1600 A6,JY>3B9C

Mar 25 0725 9M2TO>DS1 1302 VK4CXQ>VR2 1417 3B9C>VR2

Mar 26 1102 VK6RSX>HL1 1252 3B9C>VR2 1550 VQ9LA>VR2

Mar 27 0408 VK4ABW>HL1 08-0900 VK6AOM,3B9C>DS1,DS4 0950 3B9C>YB5QZ

Mar 28 07-0800 VK6RSX>HL1 3B9C>HL2 09-1000 3B9C>HL2,HL1,DS1(qtf 235),YB0DPO VK4FNQ>HL2
10-1100 VK4CXQ>HL1

Mar 29 0026 LU1DMA>NH7RO 0810 3B9C>HL1

Mar 30 0839 3B9C>BA4TB

Mar 31 2353 HC8GR>NH7RO

Beacon News and 28 MHz Worldwide

Compilation and Commentary by G3USF

Beacon News

- 5290 GB3RAL near Didcot operational in April with temporary antenna, power-stepping transmissions at H+0,15,30 and 45. (GB2RS)
- 14101 AF0H running a 10 watt attended beacon from a site south of St Louis MO (EM47). Antenna is a ground-mounted vertical. Operation mainly local evenings and weekends to comply with FCC regulations (AF0H)
- 28200 VK6RBP has experienced many vicissitudes affecting both TX and antenna but in operation with improved signals
- 28210.6 LA4TEN returned to operation
- 28232.6 N9BPE reported here from 28283 and with 1/2 dip at 20' (K0HA)
- 28233.392 OH5RAC transmission mode is F1. (OH5IY)
- 28247 N7HFK Ogden (UT) is near Salt Lake City vertical antenna a1 24/7
- 28250 W3ATV Trevoise PA reported
- 28252.7 K9ATI QRT
- 28252.3 N9AVY Milton WI (EN52MS) runs 2 watts to J-Pole 24/7 appears to have settled here (K0HA)
- 28264 VK6RWA returned to operation.
- 28280.7 W8EH location corrected to Middletown OH
- 28285.8 WA4ROX Largo FL (EL87) runs 1 watt 24/7 moved from 28298
- 50016 GB3BAA new beacon (April) in IO91PS near Tring (Herts) (GB2RS)
- 50033.082 OH5RAC Kuusankoski KP30HV runs 4 watts of F1 to 3dBd antenna beaming 200 (OH5IY)
- 50060 WB0RMO currently non-op following storm damage (K0HA)
- 50075 KC8SZU new beacon at White Lake MI (EN82FP) running 100 watts to an omni directional horizontal loop. This beacon will operate part-time. (KC8SZU)
- 70070 GB3WSX new beacon (May) Isle of Wight now operational (G4FUF)

28 MHz Worldwide

The trend of recent months broadly continued, with decline most pronounced in the more difficult paths or the less favourable times. Thus the evening path from Asia to Europe has virtually disappeared, as have European evening openings to Oceania. By contrast, some of the easier paths and time periods held up fairly well. The morning path from Europe to southern Africa and afternoons from Europe to South America, seasonally favoured, remained reliable and predictable - though no intercontinental path had a 100% time slot.

That said, Europe<>Africa was reported at some time every day but the 2nd and Europe<>South America is known to have been open every day except the 2nd and 21st (for which the DX Summit record was incomplete). There were reports of contacts within the North/Central America/Caribbean area every day and within Europe on all days but two again the 2nd and 21st.) The XF4H and PA3GIO/HI9 operations were a factor here (just as 5V7C and TJ3G in conjunction with the WPX contest did for Africa). Contacts between Oceania and North America are known to have been made on every day except the 3rd and 8th. For seasonal and cyclical reasons the North Atlantic path was weak. Even so it opened on at least 17 days, mostly from southern Europe and mainly to the Caribbean. However, as G0AEV's 28MHz commentary has already noted, signals did occasionally reach further north. The fact that we know this chiefly from our own reporters is a reminder that not everything reaches even the DX Summit site.

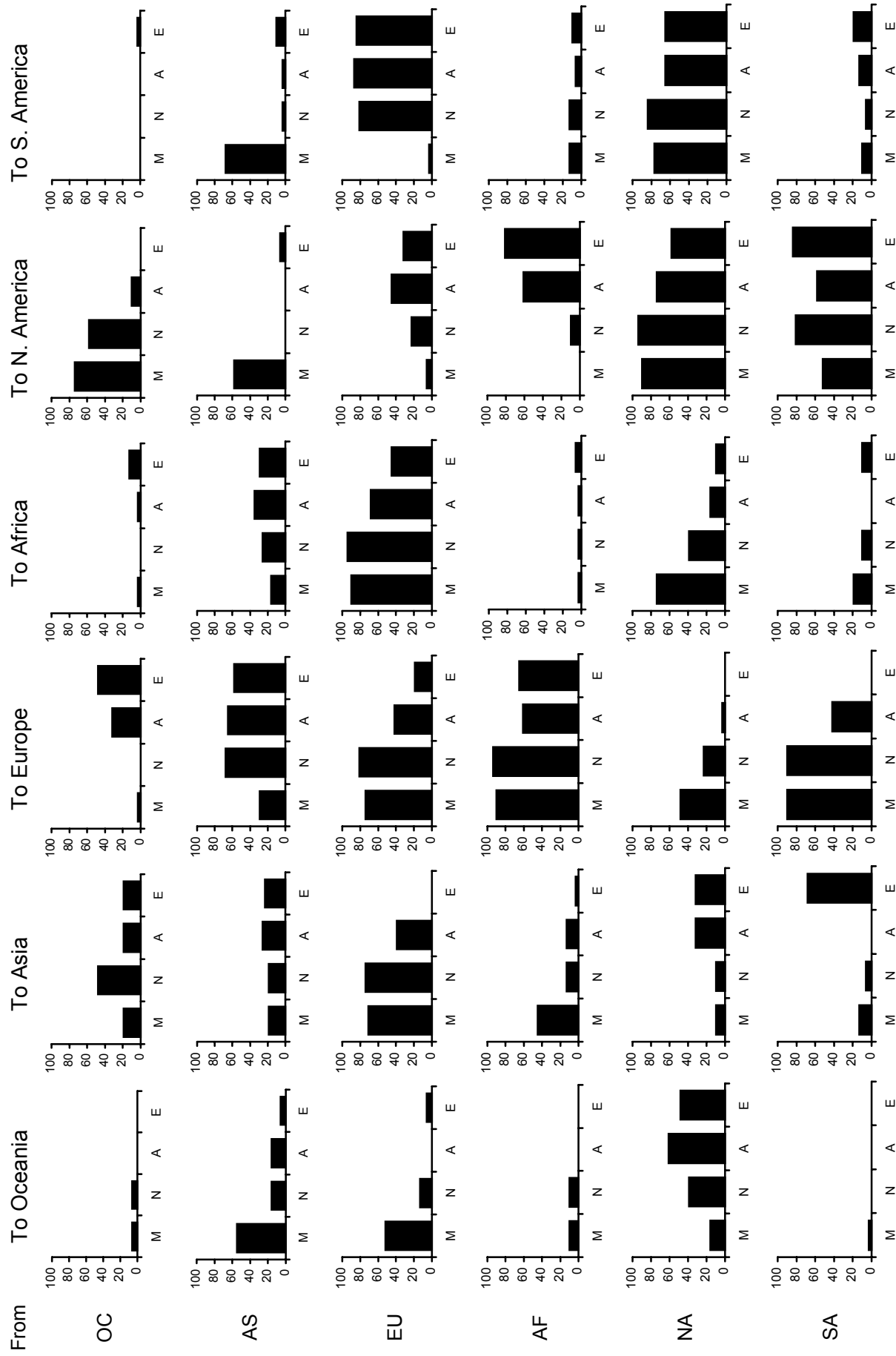
During the contest on March 10 K0HA in Nebraska reported a good opening to IK4GRO, IR4M, OE2S and 9A5Y among others between 1415 and 1440UTC, with CT1BOL and CN2R reaching him via an ESE skew path. Bill notes that this skewed ESE route is normal for him at this stage of the cycle, and assumes that Central European stations would be beaming on the reciprocal skew bearing. On the 31st he reported IS0SDX at 1746 but did not comment on the beam heading. He also worked JA3YBK at 2306UTC on the 7th, the signal reaching him from SW to WSW. NQ4I reported JE1LEI at 2243 on the 10th, also on a skewed path.

Elsewhere, we learn that, in one of those high-latitude auroral-related events we have noted on numerous occasions in the past, Bill copied the SK0CT beacon at 1853 on the 9th. This presumably was a T9 signal, but between 1901 and 1941 he reported SK0HB at 55a, OZ1ING at 599, DL6KVA at 54 from NE and the SK5AE beacon. The only other clearly auroral-related report during the month was a contact between SM5SUH and SM2CEW at 1754 on the 11th.

Among the less-than-routine reports we find 3B9C working into the West Coast at 0400 on the 24th, long path, JH7RTQ in contact with N4QI at 1325 on the 25th, also long path as was JG2TKH<>ZP1C at 1110 on the 27th. While the West Coast remained elusive for Europe, on the 27th EA7ATX was reported by KB6NAN at 1911. Finally, on the 30th I0QM copied the LU1FHH beacon at the relatively late time of 2030.

(28 worldwide graphs on the following page)

28 MHz Worldwide - March 2004



Time bands: M=Morning, N=Noon, A=Afternoon, E=Evening - used for the "To" continent