THE SIX AND TEN REPORT

November 2005

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Analysis of 28 MHz reports from the UK

28 MHz reports and logs for November 2005 from G2AHU, G3HBR, G3IMW, G3USF, G3YBT, G4JCC, G4UPS, G0AEV, G0IHF and packet cluster reports. Compilation and commentary by G0AEV.

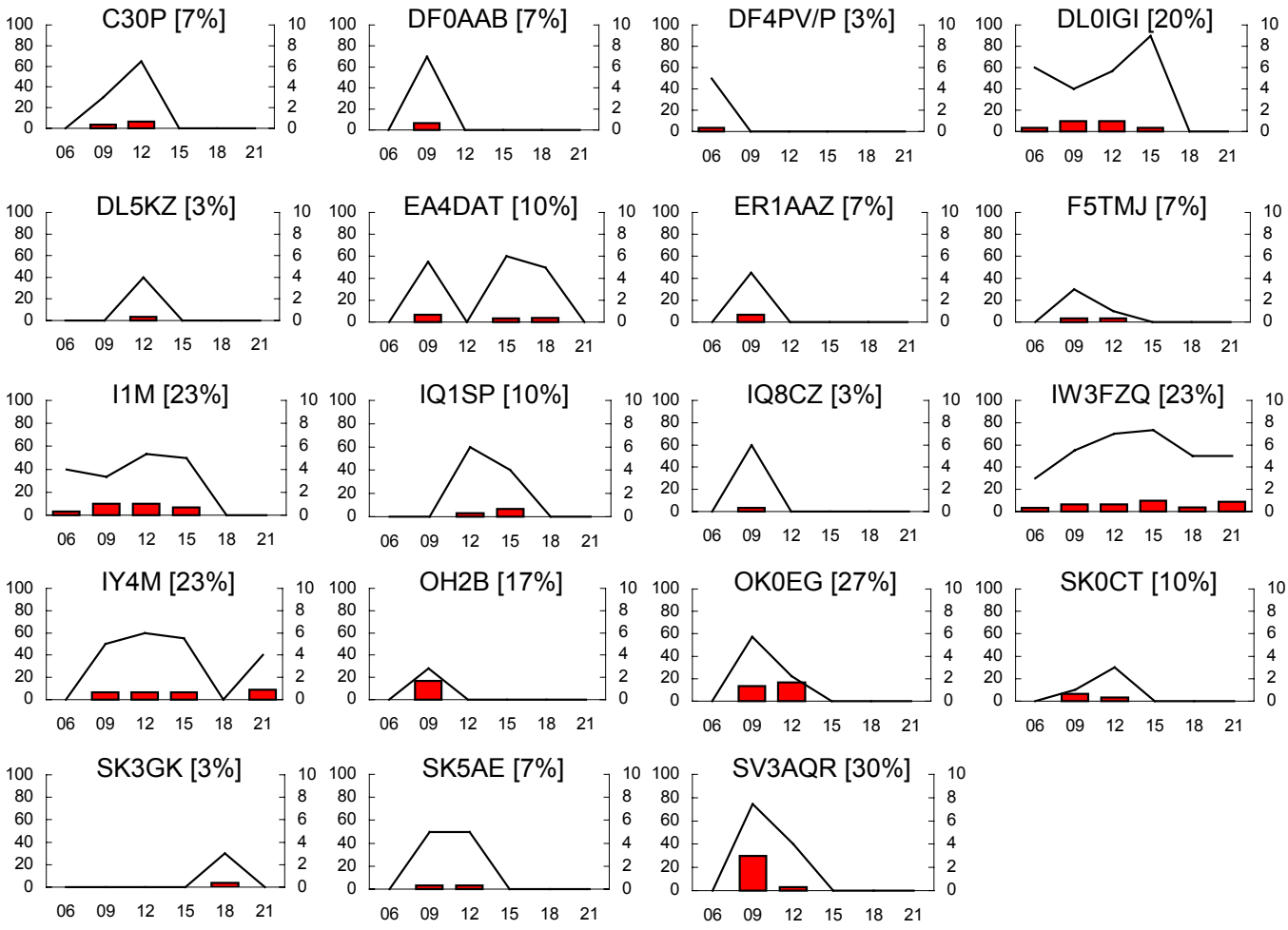
November 10m band conditions can only be described as "poor". But not yet "terrible"! Beacon monitoring identified at least one F or one Es opening on each day of the month. F layer (including TEP) openings to ZS6DN were detected on three-quarters of days, and F2 was available to 4X6TU on a similar number. There were openings to Africa, southern South America, the Middle East on a regular basis, and less frequently to Russia, SE Europe, western Australia and the Caribbean. The latter marked the limits to propagation: there were no openings to USA, Canada, eastern Australia or to most of Asia.

Sporadic E continued to provide openings within Europe, especially in the first half of the month. A number of beacons had daily reliabilities of 20% or more, which is rather good for this time of the year. As noted in Section 2 (6m in UK), the relatively good Es at 28 MHz was not replicated at 50 MHz.

Beacon graphs legend

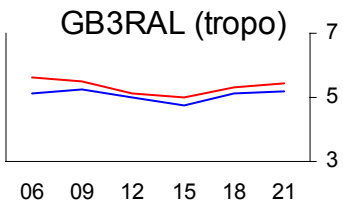
Legend for all beacon graphs in this Section: - graph bars (left Y-axis): beacon reliability as the percentage of days a beacon was heard by any UK observer within each time band. Graph lines (right Y-axis): Signal Strength as the average of the daily maximum Signal reported by any observer in each time 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



Propagation modes for European beacons.

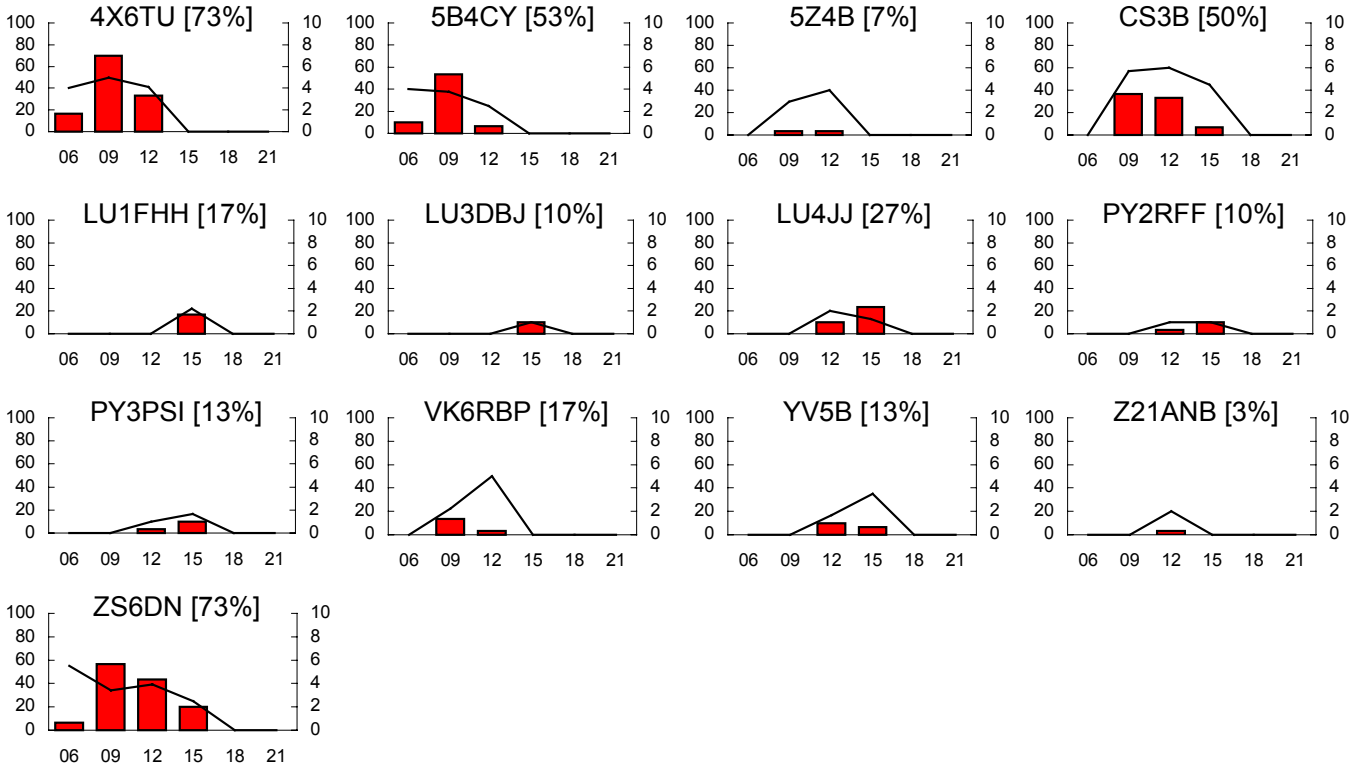
The beacon monitoring results shown on the previous page are due to Sporadic E, with the exception of those for SV3AQR, which was heard by relatively short-skip F2. Some meteor scatter was reported, most frequently from the high-powered DL0IGI, but no one indicated hearing beacons by F back-scatter



November was the first complete month when both GB3RAL beacons (the old beacon on 28.215 and the new beacon on 28.191) have been operational. The graph opposite shows the results of monitoring of these beacons via troposcatter propagation at G0AEV. The upper (red) line is for the new beacon on 28.191 and the lower (blue) line for the original beacon on 28.215. Both beacons show small relative enhancements in signal in the mornings and again in the evenings, but the new beacon is the stronger by roughly half an S-point.

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

Beacon Graphs.



Beacon Notes.

LU4AA is still QRT. OA4B was not heard on 10m but was reported once on 20m (see Section 6 – 14MHz beacons) - possibly the result of a callsign mis-identification? OA4B has been receiving the occasional, often isolated report, over many months and although listener error can not be ruled out, it seems that there is very intermittent activity from this beacon. Clearly the beacon is not fully working properly. Beacons subject to similar uncertainties are 4S7B and VR2B. Other NCDXF/IARU beacons within current range from the UK are operational. As for other beacons, the commonly heard signals are those included above - the beacons are QRV. The situation in LU and PY is "fluid" with beacons coming and going: it's impossible to be sure what is working when.

Suggested propagation modes

All beacons shown in the graphs above were heard by F-layer propagation, predominantly "normal" F2. There may have been some "TEP" involvement on paths to southern Africa.

The distinct improvement in F2 propagation seen in October did not carry through into November. All the DX beacons heard returned poorer results than those of last month. For example, ZS6DN was heard on 100% of days in October and 73% in November; 4X6TU was down from 94% to 73%; 5B4CY down from 81% to 53%; and so on through to the less frequently heard beacons. This downward trend is perhaps best exemplified by the absence this month of propagation to North America. The lists of 10m DX countries heard/worked (below) tell the same story. The drop in band condition occurred despite higher average solar flux and sunspot numbers in November. Geomagnetic conditions were equally "quiet" for both months. Season, and proximity to the equinox, seems to be best answer for the better October propagation.

10m DX in November 2005

The following list of DX countries worked or heard in the UK comes from packet cluster Spots (DX Summit: http://oh2aq.kolumbus.com/dxs/) and from the logs of Six and Ten reporters.

DX in November: 3B9, 4X, 5B, 5Z, 9G, A6, EA8, FH, HC8, J3, KP2, KP4, LU, OD, PJ4, PY, PZ, ST, TM, TZ, UA9, UN, VK(6), ZC, ZS.

Below is the equivalent list for November last year - the difference requires no comment.

DX in November 2004 for comparison: 3B8, 3DA0, 4J, 4L, 4S, 5B, 5N, 5U, 7X, 9K, 9M2, 9M6, 9N, 9Y, A4, A6, A7, A9, BY, C5, C9, CE, CN, CP, CT3, CX, EA8, EL, EP, EY, FH, FR, FY, HC8, HI, HP, HS, J7, JT, JY, KP2, KP4, LU, OD, P4, PY, PZ, ST, SU, T5, TA, TY, UA9/0, UK, UN, V2, V4, V5, VE, VK, VK9C, VP2M, VP5, VP8, VP9, VR, VU, W, XE, YI, YN, Z2, ZC4, ZF, ZP, ZS.

November 2005 was also poor in comparison with October 2005.

DX in October 2005 for comparison: 3B8, 3V, 4X, 5B, 5N, 5R, 5U, 5Z, 6W, 7Q, 7X, 9G, 9J, 9K, 9Y, A2, A4, A6, BY, CE, CT3, CX, EA8, EA9, EK, EX, FR, FY, HK, JY, KP4, LU, PY, PZ, S0, S7, TA, TZ, UA9, UN, V5, VE, VK, VK9X, VQ, VU, W, YA, ZC, ZD7, ZD8, ZS, Antarctica.

Propagation to North America

Unfortunately, there was no repeat of the October openings to North America: no beacons or other stations were reported from USA or Canada this month.

Analysis of 50 MHz reports from the UK

UK 50 MHz reports for November 2005 from G2ADR, G3HBR, G3IMW, G4UPS and via packet cluster spots. Compilation and commentary by G0AEV.

Band conditions on Six were very poor in November, slightly poorer than in October. Sporadic E was almost absent (reported on 5 days only) and there was, of course, no DX propagation (EME excepted). Sporadic E was a particular disappointment as early November often produces one or more good openings. This was the case on 10m where there were Es openings on most days in the first half of the month - unfortunately there was no equivalent propagation on 6m. Scottish stations managed to find a few weak auroras but the only event of any note was an auroral E opening between GM and Scandinavia on 3rd. Most band activity was directed towards digital mode meteor scatter. Significantly more QSOs were made on JT6M meteor scatter than by all other propagation modes combined.

G2ADR heard 5 G stations (4 in an evening contest), which was the sum of his observations for the month. Eric says he is tempted to go into hibernation for the duration of the solar minimum! At least Eric managed to work his old 6m friend VE1ZZ, although only by moving lower in frequency - to 160m.

On the 4th November at 1230 G3HBR worked IS0USL. Signals faded but Brian thought propagation was more like Es than MS as the QSO lasted for several minutes. Ten metre beacon monitoring shows that there was Es to Italy at about this time so Brian's inference is probably correct. No one else noted this opening. The data and commentaries printed in the *Six and Ten Report* benefit enormously from the observations and practical insights provided by individual amateurs, as exemplified in the preceding sentences. Readers will have appreciated the many informative contributions by Brian Hummerstone G3HBR to this 6m section and, in recent years, to our 10m beacon monitoring efforts too. So it is with great regret that I have to report that Brian died suddenly on 16th February 2006. His enlightening comments on six-mete propagation will be greatly missed.[1]

Sporadic E

Sporadic E results tabulated below ordered alphabetically by country prefix. Percentages following the country name are the daily reliability values (the number of days when propagation was reported). The first row of each table, “D” is the day of the month, subsequent rows give the maximum signal strength reported from the UK in each of three hour time bands (“06” for the band 0600 - 0900, “09” for the band 0900 - 1200, etc.). A figure of “0” indicates that signal strength was not reported.

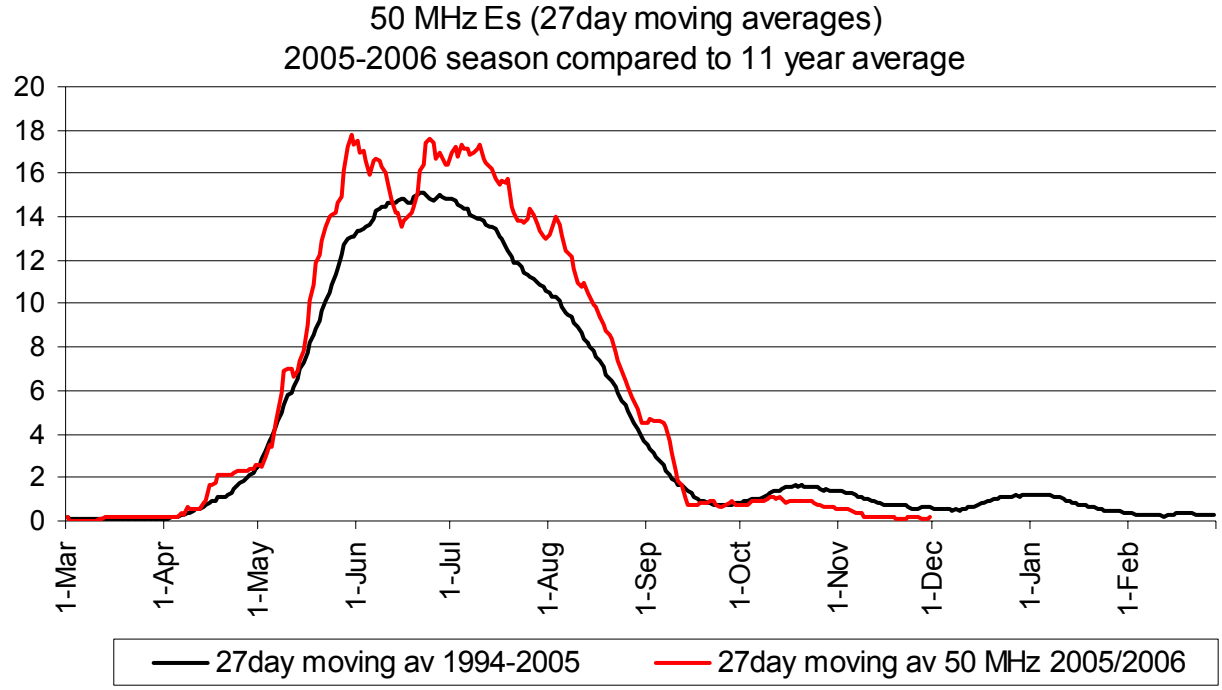
	EA Spain (3%)	EA9 Ceuya/Melilla (3%)	F France (3%)	I/IS/IT Italy (7%)
D	28	13	28	2 4 5
06				
09		9		
12				0 0
15			9	9
18	0		9	
21				

Sporadic E on six was poorer than normal for November with reported activity on only 5 days. This was a little surprising as there was considerably more sporadic E on 10m, more than is usual for this time of the year. In nearly all cases the "quantity" of sporadic E on 6 and 10 are strongly correlated: when sporadic E is reported on one band it is usually also reported on the other. It is true that 10m Es is more extensive (both geographically and temporally) than at 6m, but usually by not very much. Only at times of generally poor sporadic E propagation, almost always outside of the main Es season(s), does propagation at 10m significantly out-perform 6m. Under these circumstances, there seems to be an Es MUF "ceiling" in the region between 30 and 50 MHz.

[1] Several excellent *In Memoriam* notes for G3HBR are published in the UK Six Metre Group's publication *Six News* for April 2006

Es Propagation Summary.

The addition of November data to the graph below (that shows the progression of the 6m Sporadic E year compared to the previous 11 years) reveals some clearer structure to the 2005 autumnal trends. Although the data show no autumnal peak, the tail of the summer season is now seen to continue through October only dropping towards zero in November. The overall pattern of the 2005 data is not too dissimilar to the 11-year average, although at lower absolute levels. The autumnal season, at 6m at least, seems to have been poorer than normal but the timing of peaks and troughs follows the long-term average.



The graph shows 27-day moving averages of the daily country/area counts calculated directly from the data reported each month in the *Six and Ten Report*. The upper (red or paler) line is the moving average data for the year March 2005 to February 2006, a period chosen so that the "Es year" starts and ends at the "Es minimum". The lower (black / darker) line is the 11 year (1995-2005 inclusive) moving average of the same measure.

Tropospheric propagation

Again, there is very little "tropo" to describe this month. Brian G3HBR reports that 10th seemed good for "tropo" as GB3BUX was loud and LX0SIX was audible most of the day (a beacon that Brian doesn't often hear). There were some long distance contacts in the small selection of reports, which suggests that DX-tropo propagation was available but not used much. There is not a great deal of interest (outside of contests) in longer haul inter-UK tropo working at the best of times so when activity levels generally fall (as now), "tropo" mode activity suffers in particular.

10th		G3HBR > LX0SIX "audible most of the day"; also GB3BUX "loud"
20th	0923	PA3DJY > GM4ILS (*Tropo?)*
21st	1130	G3HBR > LX0SIX 529
22nd	2059	G4PCI > GM4NFC
	2129	EI7BMB > G4DEZ
23rd	1858	G0JHC > EI6IZ 419 tropo (460 km) to 579 with meteor scatter.

Aurora

Radio aurora were restricted to the north of Britain and were all short, weak "Scottish Type" events. On 3rd from 19z to 23z there was a reasonably good auroral E opening between GM and Scandinavian countries. This opening was bracketed by weak aurora backscatter at 17z and at 23z.

1st	18z	1806	MM5AJW (IO88) > GB3LER 44a
2nd	21z	2116	GM4ILS > GB3LER 53a
3rd	15z	1655	MM0AMW (IO75) > GB3LER 53a
	21z	2314	MM0AMW > GM4ILS 55a
13th	18z	1924	GM4ILS (IO87) > GB3LER 53a "in/out"
19th	15z	1700	MM0AMW GB3LER 52a
29th	21z	2300	MM0AMW GB3LER53a, also 48256 LA video "loud Au"

Auroral E

3rd	18z	1903	MM5AJW > JX7SIX 579
		1916	LA7SP (JP99) > GB3LER 599
		1926	GM7PBB (IO68) > LA7SIX 546
		1937	GM7PBB > OH9SIX 41
		2003	GM4ILS (IO87) > LA7SP 599 (JP99)
	21z	2209	MM0AMW (IO75) > JX7SIX 579 (also LA video S9)
		2211	MM0AMW > LA7SIX 559
		2239	MM0AMW > OH9SIX 539
		2253	LB6YD (JO57) > GM7PBB 57 "deep QSB"
		2300	OH1GMP (KP10) > GM7PBB
24th	21z	2308	MM0AMW > JX7SIX 539

Meteor Scatter

JT6M activity levels were higher than for other modes by a considerable margin. As noted last month, digital MS is now the only generally available and reliable propagation mechanism at 50 MHz for distances of between 500 and 2,500 km. One possible repercussion of the concentration of effort on JT6M is that potential openings using "traditional" modes may be missed. Perhaps the lack of sporadic E reports this autumn (especially when compared to the higher levels of Es activity identified at 28 MHz) might be due in part to a reduction in monitoring activity? However, it seems that at least one Es event was identified this month directly as a consequence of JT6M activity.

MS heard/worked (mostly via JT6M) in November by day. Weekend days (when activity is likely to be greater) are highlighted. The data seem to indicate a trend of increasing numbers of MS QSOs as the month progressed, though no particular days stand out as having special interest.

Date	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
MS QSOs				1	1	2		1		2	1	3	7	1	2	4	1	1	5	6	3	3	4	1	3	8	4	3	3	1
All JT6M				3	13	7	2	1	2	8	3	5	11	3	3	12	8	6	9	14	6	10	11	1	6	14	22	8	4	3

MS QSOs = all QSOs where MS mode indicated or inferred: mainly digital modes.
All JT6M = all JT6M QSOs/reception reports less those explicitly identified as tropo or Es

MS heard/worked (mainly via JT6M) in November 2005 by hour

Hour	QSOs	Countries	Hour	QSOs	Countries
06z	0		15z	3	EA, SP
07z	1	EA	16z	1	LA
08z	3	I, OZ, SP	17z	5	F, I, SP
09z	12	EA, HB, I, LA, OE, ON, S5	18z	2	EA, LA
10z	6	EA, HB. I, SP	19z	7	EA, LA, OZ, PA
11z	3	EA	20z	9	EA, F, LA, OH
12z	3	EA	21z	3	EA, LA, SP
13z	5	EA, F, LA, ON	22z	3	LA
14z	4	EA, F, SM	23z	1	F

DX Propagation

There was no F2, TEP or Es Dx (i.e. outside of Europe) worked or heard this month

EME

For the record, these are the November (JT65A) moon-bounce reports from the DX cluster

6 1841 K7BV (FN31) > G4IGO (IO80)
12 0117 G4IGO > K1SG
13 0152 M0BCG > K1SG -21db
13 2256 M0BCG > K1SG
24 0015 G4IGO > JR6EXN
29 1339 G4IGO > W1JJ

Solar and Geomagnetic Data for November 2005

Data from Internet sources. Compilation by G0AEV.

Sunspot numbers (SEC)	Mean 32.2	Max 62 (17th)	Min 0 (10-11th)
Solar Flux (28 MHz)	Mean 86.3	Max 102 (19th)	Min 77 (1st, 3rd, 4th)

Solar data for November 2005 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 modes (including TEP), Aurora and Auroral E. F2 critical frequencies are for Chilton in Oxfordshire (data from RAL). SIDC spots are from SIDC, and other solar data from the joint USAF/NOAA daily summaries or directly from SEC.

Energetic Events.

There were 7 M or X class X-ray solar events in November, of which none reached X-class

13th	1429-1456	M2.5
14th	0416-0427	M2.6 Sf
	1416-1423	M3.9,
	2153-2204	M1.0 Sf
15th	1722-1804	M1.4
18th	0024-0046	M1.2 Sf
30th	1746-1755	M1.4

K-indices.

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) when K > 5. There were only 3 days in November when Kp or the UK K-indices reached 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
00	3	1	3	4	2	3	3	1	2	0	1	2	3	4	1	0	1	0	1	1	2	0	1	1	3	2	0	0	2	3
03	2	1	5	4	3	3	1	0	0	0	2	3	4	3	1	2	0	0	0	2	2	1	3	1	4	0	0	1	0	2
06	0	0	3	3	4	2	2	1	0	1	1	2	3	2	2	0	2	1	0	3	0	2	3	2	3	2	1	2	0	2
09	2	0	4	3	1	2	1	1	0	0	1	2	3	2	2	0	1	1	0	2	0	2	2	3	2	2	1	2	1	4
12	2	0	3	3	2	2	1	1	0	0	2	3	3	2	2	1	0	2	1	1	1	2	2	2	1	2	0	4	0	3
15	3	1	4	3	2	2	1	1	1	0	2	3	3	1	0	1	0	1	4	2	1	2	2	2	2	1	1	2	2	1
18	1	3	3	4	1	3	1	0	0	1	1	2	2	2	0	1	0	1	4	1	0	2	1	3	2	0	0	2	1	2
21	2	3	4	2	2	2	1	1	1	1	1	1	3	2	1	1	0	1	3	2	1	2	2	3	1	1	1	3	3	3
Σ	15	9	29	26	17	19	11	6	4	3	11	18	24	18	9	6	4	7	13	14	7	13	16	17	18	10	4	16	9	20

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
00	3	1	2	3	2	3	2	1	2	0	0	2	2	2	1	0	1	0	0	0	2	1	2	2	3	2	0	0	2	2
03	1	1	3	3	2	2	1	0	0	0	1	2	3	2	0	0	0	0	0	2	1	0	1	1	2	0	0	0	0	1
06	0	1	2	2	3	2	1	0	0	0	0	1	2	0	1	0	1	0	0	2	0	1	1	1	2	0	0	1	0	1
09	1	0	2	2	1	2	1	0	1	0	0	1	1	1	0	0	0	0	0	1	1	0	1	1	1	1	0	0	0	3
12	1	1	3	2	1	1	0	0	0	0	1	2	2	1	1	0	0	0	1	1	0	1	1	1	1	1	0	2	0	2
15	3	0	4	2	2	3	1	1	0	0	2	3	3	0	0	1	0	2	3	1	0	3	1	2	2	1	0	1	1	0
18	1	3	4	4	2	3	2	1	0	1	1	3	1	2	1	0	0	2	4	2	1	1	1	2	2	0	1	1	1	2
21	3	3	3	2	3	4	2	0	1	1	1	3	4	2	2	1	0	0	3	3	1	2	3	3	3	2	2	3	5	3
Σ	13	10	23	20	16	20	10	3	4	2	6	17	18	10	6	2	2	4	11	12	6	9	11	13	16	7	3	8	9	14

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
00	3	1	3	3	3	4	2	0	2	0	0	2	3	3	1	0	1	0	0	1	2	2	2	2	4	2	0	0	3	2
03	1	1	3	3	3	2	1	0	0	0	2	2	3	2	0	0	0	0	0	2	1	0	2	1	2	0	1	0	0	2
06	1	1	3	2	3	2	1	0	0	0	1	1	2	1	1	0	2	0	0	2	0	1	2	1	3	1	0	1	1	2
09	1	0	3	2	1	2	1	1	1	0	0	1	2	1	1	0	0	0	0	1	1	1	1	2	1	1	0	1	0	4
12	1	1	3	2	2	2	1	0	0	0	1	3	2	2	1	1	0	1	0	1	0	1	2	1	1	1	0	3	0	3
15	3	1	4	3	2	3	1	1	0	0	2	3	2	1	0	1	0	2	4	2	1	2	2	2	3	1	0	2	1	2
18	2	4	4	4	2	3	1	1	0	1	2	3	2	2	1	1	0	2	4	2	1	2	2	3	2	0	0	2	1	2
21	3	3	3	3	3	3	2	1	1	1	1	3	4	3	2	2	0	0	3	3	1	3	2	3	3	2	2	3	5	3
Σ	15	12	26	22	19	21	10	4	4	2	9	18	20	15	7	5	3	5	11	14	7	12	15	15	19	8	3	12	11	20

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
00	3	1	3	3	3	4	3	1	2	0	1	3	3	3	1	0	1	0	1	1	2	2	2	2	4	2	0	0	3	3
03	1	1	3	3	3	3	1	1	1	0	2	3	4	2	1	1	0	0	1	2	2	1	2	2	2	1	1	0	0	2
06	1	1	3	3	3	2	1	0	0	1	1	1	2	1	1	0	2	1	0	2	1	2	2	2	3	1	0	2	1	2
09	1	0	4	3	2	2	1	1	1	0	1	1	2	1	1	0	1	0	0	2	1	1	1	2	1	1	0	1	1	4
12	2	1	3	3	2	2	1	1	0	0	1	3	2	2	1	1	0	1	1	1	0	2	2	1	1	1	0	3	1	3
15	3	1	4	3	3	4	1	1	1	0	2	3	3	1	0	1	0	2	4	2	1	3	2	2	3	2	1	2	2	2
18	2	4	4	4	2	4	2	1	1	1	2	3	2	2	1	1	0	3	5	2	2	2	2	3	3	1	1	3	2	2
21	3	3	3	3	3	3	2	1	1	1	1	3	4	3	2	2	0	1	4	3	1	3	2	3	3	2	2	4	5	4
Σ	16	12	27	25	21	24	12	7	7	3	11	20	22	15	8	6	4	8	16	15	10	16	15	17	20	11	5	15	15	22

November	28 Areas		-- 50 Areas --				2800	- Spots -		Max			X-ray	Max foF2		Min foF2		-- Particle Fluences --		
2005	Es	F	Es	DX	A	AE	Flux	SEC	SIDC	Kp	Ap	Aa	b.gnd	MHz	Hour	MHz	Hour	2MEV Elec	1MEV Prot	10MEV Prot
01-Nov	3	7	0	0	1	0	77	33	18	3	8	17	A3.5	8.5	12	2.0	04	1.8E+06	2.7E+05	1.3E+04
02-Nov	3	7	2	0	1	0	78	36	19	3	6	15	A3.5	7.5	11	1.7	05	7.1E+06	8.5E+05	1.4E+04
03-Nov	3	10	0	0	1	3	77	24	9	5	24	44	A3.3	7.0	11	1.7	05	9.4E+06	2.1E+06	1.4E+04
04-Nov	7	8	1	0	0	0	77	22	12	4	20	34	A3.2	7.7	12	2.3	05	9.3E+07	2.0E+06	1.3E+04
05-Nov	6	9	1	0	0	0	79	18	12	4	10	24	A3.6	7.6	12	2.3	05	1.8E+08	1.9E+06	1.4E+04
06-Nov	7	11	0	0	0	0	82	34	14	3	10	29	A4.3	7.7	12	1.9	05	1.5E+08	1.1E+06	1.4E+04
07-Nov	0	5	0	0	0	0	79	31	30	3	6	12	A5.2	7.1	12	n.a	n.a.	1.8E+08	1.1E+06	1.5E+04
08-Nov	2	4	0	0	0	0	79	38	8	1	3	7	A4.9	7.0	12	2.0	05	2.4E+08	1.1E+06	1.5E+04
09-Nov	1	4	0	0	0	0	78	13	8	2	3	7	A4.1	8.3	12	2.1	06	3.8E+08	1.4E+06	1.5E+04
10-Nov	1	4	0	0	0	0	78	0	0	1	2	7	A3.1	6.7	11	2.4	06	3.4E+08	1.4E+06	1.5E+04
11-Nov	0	2	0	0	0	0	79	0	0	2	5	12	A2.1	6.8	11	2.7	20	1.1E+08	1.1E+06	1.6E+04
12-Nov	12	6	0	0	0	0	83	11	10	3	10	24	B1.2	8.0	12	2.4	06	2.6E+07	8.1E+05	1.6E+04
13-Nov	1	7	1	0	1	0	88	16	12	4	14	25	B2.4	7.5	14	2.3	06	1.2E+07	3.8E+05	1.6E+04
14-Nov	0	3	0	0	0	0	92	26	19	4	10	15	B3.0	7.4	11	1.8	06	8.3E+06	2.1E+05	1.5E+04
15-Nov	0	4	0	0	0	0	100	32	20	2	4	9	B1.6	7.1	10	2.0	05	2.1E+07	2.1E+05	1.5E+04
16-Nov	0	5	0	0	0	0	94	58	23	2	3	7	B1.0	7.0	10	2.3	21	3.4E+07	2.2E+05	1.5E+04
17-Nov	0	5	0	0	0	0	101	62	24	2	3	5	B1.1	6.6	13	2.4	05	2.9E+07	2.1E+05	1.6E+04
18-Nov	0	1	0	0	0	0	101	51	26	2	4	11	B2.2	6.8	12	2.7	06	1.9E+07	3.7E+05	1.5E+04
19-Nov	0	1	0	0	1	0	102	52	26	4	10	24	B1.6	7.0	12	3.2	05	7.1E+06	6.2E+05	1.4E+04
20-Nov	0	2	0	0	0	0	96	56	33	3	7	19	B1.2	7.2	11	2.0	06	2.2E+06	8.8E+05	1.4E+04
21-Nov	2	2	0	0	0	0	95	45	27	2	3	8	A9.8	6.4	14	2.2	05	2.4E+06	7.2E+05	1.5E+04
22-Nov	0	1	0	0	0	0	93	36	25	2	6	16	A8.2	6.7	12	2.4	21	1.8E+06	7.2E+05	1.4E+04
23-Nov	0	2	0	0	0	0	90	35	24	3	8	14	A6.4	6.5	11	1.8	06	1.7E+06	2.1E+05	1.4E+04
24-Nov	0	3	0	0	0	1	87	30	27	3	9	19	A7.0	6.8	12	2.2	07	5.4E+06	3.9E+05	1.4E+04
25-Nov	1	3	0	0	0	0	80	39	20	4	10	20	A6.7	6.4	14	1.7	06	7.3E+07	5.7E+05	1.5E+04
26-Nov	3	0	0	0	0	0	81	30	15	2	5	12	A7.8	6.1	12	2.1	06	1.3E+08	4.5E+05	1.4E+04
27-Nov	2	0	0	0	0	0	81	26	16	1	2	7	A5.7	6.0	11	1.8	05	1.1E+08	4.4E+05	1.4E+04
28-Nov	5	0	2	0	0	0	82	27	17	4	9	22	A4.6	6.0	15	2.2	06	1.9E+07	8.7E+05	1.4E+04
29-Nov	0	1	0	0	1	0	85	27	16	3	5	19	A4.7	7.0	12	2.5	21	6.2E+06	9.2E+05	1.5E+04
30-Nov	2	4	0	0	0	0	95	57	30	4	10	28	B1.3	7.0	12	2.1	06	4.4E+06	1.3E+06	1.5E+04
Sum	61	121	7	0	6	4														
Average	2.0	4.0	0.2	0.0	0.2	0.1	86.3	32.2	18.0	2.8	7.6	18.0	A8.9	7.0	12	2.2	06	7.3E+07	8.3E+05	1.5E+04
Maximum	12	11	2	0	1	3	102	62	33	5	24	33	B3.0	8.5	15	3.2	04	3.8E+08	2.1E+06	1.6E+04
Minimum	0	0	0	0	0	0	77	0	0	1	2	0	A2.1	6.0	10	1.7	20	1.7E+06	2.1E+05	1.3E+04

50 MHz Outside Britain

Compilation and Commentary by G3USF

Continental Europe, Middle East and Africa

Auroral-Related Propagation

Nov. 3 17-1800 JW9SIX>SM0(55a) JW7SIX>SM0(53a) LA>SM1(mode?) SM0(JO89)>SM1 LA>SM0(57a) LA>SP2(mode?) JW5SIX>SM0(53a) 18-1900 LA7SIX>SM0(mode?) JX7SIX>SM0 LA>SM1(56a) TF3SIX>SM3(559) 19-2000 GB3LER>LA(599 JP99) SM6>LA(519) JX7SIX>OZ(JO55 579) TF3SIX>SM3(559 AE) LA(JP99)>LY(KO24 mode?) 20-2100 LA>LA(58) OH9SIX>OZ(JO55 579)

Other Modes

SV1DH's succinct verdict of 'a poor month' would doubtless be widely echoed. True, RW3AH reported T6X on the 3rd, but this is one of those reports it would be very nice to believe… Likewise with a 'spot' of 5H1HS with 9A7V on the 8th. On firmer ground, we have EZ8CQ into Cyprus and Ukraine on the 4th, but otherwise contacts were entirely within Europe and almost wholly confined to JT6M operation - which usually indicates meteor scatter, with the occasional tropo contact. Occasional reports may have involved Es, for example reception of GB3BUX in Italy on the 5th or reception of the SV9SIX beacon in Germany on the 10th. SV1DH specifically identifies Es on the 10th. He also notes afternoon-type tep on African TV transmissions on five days - but as in October no stations were heard.

Nov. 1, Nov. 2 no reports

Nov. 3 0647 T6X>RW3AH 1004 EA3>OE5(Es) aurora

Nov. 4 0646 5B8AD>EZ8CQ 07-0800 UT7U>EZ8C 15-1600 OH9SIX>OZ 1850-4 EA3>LX(jt) EA3>CN(jt) 19-2000 EA3>S5(jt) 20-2100 OZ>LX(jt) LX>LA(jt) 21-2200 GM>LA(jt) SM5>LA(jt)

Nov. 5 07-0800 OZ>LX(jt) EA3>LX(jt) 1045 G>EB1(ms) 11-1200 ON>EA9(jt) 16-1700 GB3BUX>I5 1759 I1>I5 18-1900 I5>I4 G>SM5(jt) PA>LA(jt) 1935 EA3>F(jt) 20-2100 LA>OH6(jt)

Nov. 6 0748 LZ4>S5(jt) 08-0900 SP9>LA(jt) EA3>LA(jt) S5>LA(jt) OZ>LA(jt) 09-1000 EA3>I2(jt) EA3>F(jt) PA>LA(jt) EA3>PA(ms) 10-1100 EA3>EA9(jt) 11-1200 GW>PA(jt)

Nov. 7 09-1000 OE5>OZ(jt) OZ>LX(jt) YO7>OE5(ms) 2232 YO7>SM5(jt)

Nov. 8 0803 YO7>OZ 0926 F>EB1(ms) 1145 EA3>EB1(ms) 1951 5H1HS>9A7V(?)

Nov. 9 2038 OH6>LA(jt) 21-2200 JW5SIX,JW9SIX>SM0

Nov. 10 11-1200 LZ1JH>DL LZ1>9A SV1SIX>SP9,DL SV9SIX>DL 1513 HB9SIX>DL(t) 17-1800 I6>S5 IK5ZUL>S5(t) 18-1900 UU5SIX>RZ6BN(t) OH0>SM1 SM3>SM1 OH0>S5 OZ>S5 OH0>SM1 OZ>ON S5>DL SM0>SM1 S5>DL 19-2000 G>LA(jt) OH0>S5 SP9>LA(jt) SM7>S5 OH7>LA 20-2100 OH6>LA(jt) SM3>S5 JW9SIX JW7SIX>SM0 OZ>S5 SP9>LA(jt) 21-2200 JW9SIX>SM0 OH6>LA(jt) G>LA(jt)

Nov. 11 1717 HB9SIX>DL(t) 1859 G>EB1(msw)

Nov. 12 0849 OE5>LA(jt) 09-1000 EA3>OE5(jt) 10-1100 IS0>OE5(jt) 12-1300 EA5>ON(ms)

Nov. 13 08-0900 SP9>S5(jt) SP9>I2(jt) 09-1000 UT5G>DL,HB,I1 YO3KWJ>HB EH4>I1 10-1100 EH4>DL,I4,I5,F G>EA9(jt) HB9SIX>DL(t) CN8MC>F EA9>HB,F,9A EA5>9A 11-1200 I5>I0 EA9>F,I1,PA I2>EA5(jt) EA5>9A(ms/Es) 12-1300 G>EA5(ms) 13-1400 G>ON(bs/ms) G>EB1(ms) PA>ON9(jt) PA>EB1(ms) 14-1500 EB1>ON(ms) I5>SP6 20-2100 OH6>LA(jt) SP9>LA(jt) GM>LA(jt) 2319 I9>I8

Nov. 14 0931 G>HB(jt) 1142 YO4>F 1556 EA3>EB1(ms) 16-1700 EA3>9A(jt) I2>EB1(ms) EB1>EI(ms) 2125 SP9>LA

Nov. 15 1438 GD>EB1(ms) 1502 EA5>EA9(ms) 18-1900 I1>EB1(ms) SM5>LA(jt) 1915 PA>LA(jt)

Nov. 16 1237 G>EB1(ms) 1451 CN8MC>F 15-1600 S5>EB1(ms) G>S5(jt) G>EB1(ms) 1623 EA1>EA1(ms) 17-1800 YO7>I3 GB3LER>F(ms) 1936 G>LA(jt)

Nov. 17 0744 LX>PA(jt) 09-1000 F>EB1(ms) 1531 S5>PA(jt) 18-1900 SM5>LX(jt) PA>LX(jt) I3>PA(jt) 20-2100 OH6>LA(jt) 21-2200 G>EB1(ms) PA>EB1(ms) 22-2300 OH6>LA(jt)G>F(jt) LY>LA(jt) 23-2400 OZ>LA(jt)

Nov. 18 10-1100 LX1SIX>DL F>EB1(ms) SM5>LX(jt) 1650 LX>LA(jt) 1833 OE5>LA(sc) 1931 LZ4>ON(jt) 2139 PA>EB1(ms)

Nov. 19 09-1000 G>EB1(ms) 10-1100 LZ4>I3(jt) OH8>LA(jt) I3>EB1(ms) 11-1200 PA>I3(jt) SM0>PA(jt) 14-1500 I5>I3 2056 OH6>LA(jt)

Nov. 20 0750 PA>I2(jt) 08-0900 OH9SIX>OZ PA>LA(jt) 09-1000 I3>PA(jt,t) G>LA(jt) OE5>EB1(ms) PA>EB1(ms) G>LA(ms/t) GM>ON(ms) ON>EB1(ms) HB9SIX>DL(t) 10-1100 GM>EB1(ms) GM>HB(ms) 11-1200 PA>SP9(ms) G>ON(jt) S5>I4 2058 G>LA(ms) 21-2200 OH6>LA(JT) OH7>LA(jt)

Nov. 21 0941 G>EB1(ms) 1512 HB9SIX>DL(t) 21-2200 YO7>9A(jt) SP9>9A(jt) 2239-42 SM5>LA(jt) G>LA(jt) 2311 G>SM5(jt)

Nov. 22 0824-41 OE5>EB1(ms) F>EB1(ms) 1115 G>EB1(ms)1540 F>EB1(ms) 1754 S5>EB1(ms) 18-1900 SP9>LA(jt) SM5>LA(jt) OH6>LA(jt) OH6>PA(ms) 19-2000 PA>LA(jt) G>LA(jt) 20-2100 G>LA(jt) G>EB!(ms) LA>I1(jt) GW>EI 21-2200 I1>EB1(ms) G>EI OZ>LY(jt) 22-2300 F>OZ(jt) G>I1(jt)

Nov. 23 0957 G>EB1(ms) 10-1100 I1>EB1(ms) F>EB1(ms)

Nov. 24 2006 G>LA(jt)

Nov. 25 1350 LA>SM3(jt) 14-1500 G>LA(jt) SM3>LA(ms) 1741 OH6>LA(JT) 18-1900 OH7>LA(JT) OZ>LA(JT) OH7>OZ(JT) OH6>OZ(jt) SP9>SM5(jt) 19-2000 OH7>LA(jt)

Nov. 26 0825 OE5>S5(jt) 0912 SWM3>I1(jt) 1248 G>F(jt) 1346-9 G>LA(jt) SP9>LA(jt) 1424 HB9SIX>DL 15-1600 I4>I5 1836 G>LA(ms) 1943 G>EB1(ms) 2046[9 OH6>LA(jt) G>EB1(ms) 2120 I1>LA(jt)

Nov. 27 08-0900 9A>OZ G>LA(jt) GM>LA(jt) 10-1100 S5>LA(jt) 1412 HB9SIX>DL 1544 G>S5(jt) 1943 G>EB1(ms) 20-2100 G>EB1(ms) G>LA(jt) OH6>LA(jt) 2143 OH7>LA(jt) 2243 GM>I1(jt)

Nov. 28 17-1800 S5>EB1(ms) GB3RMK>F EB1>EI 18-1900 GM>EI(t) F>EI G>EB1(t) GM>F EI>I4 2025-56 F>EB1(ms) G>LA(jt)

Nov. 29 0752 G>EB1(ms) 0843 OE5>EB1(ms) 0915 G>OE5(ms) 1900 OH6>LA(ms) OH8>LA(jt) 2112 G>LA(jt)

Nov. 30 PI7SIX>DL 18-1900 I2>EB1(ms) PA>LA(jt) 21-2200 JW9SIX>LA 2223 G>LA(jt)

50MHz PROPAGATION REPORT FOR NOVEMBER 2005 BY SV1DH

1. Data for all days, except on 5th (29)
2. Relatively good days on : 10
3. 48 MHz AF video (3C+9L) on:2,3,4,13,16 (all A-TEP) (R=17%)
4. 55 MHz AF video (5N) on: NIL
5. Opening to DL on: 10 (E)
6. " to OM on: 10 (E)
7. " to SP on: 10 (E)

8. Special events on:
   2 (2130 FM to TR/B)
   3 (1015 VK8 on 10m+1015-1030 foF2>10, max 10,1/MUF=37Mhz at 1030z)
   6 (2230 FM to ZD7/B)
   7 (2145 FM to ZD7/B)
  11&12 (R=0!)
  12 (0515 VE7 to 48&49Mhz AS or EU? Video + 2200 FM to ZD8)
  13 (6C+1M; 1451 M2 flare)
  14 (7C+3M; 0421 M2.6+1421 M3.9!+2200 M1.0 flares)
  15 (10C+1M; 1751 M1.4 flare)
  18 (4C+1M; 0024 M1.2 flare) A poor month!

9. DXCC entities heard/worked during Nov 2005 : 3 on 1 cont
10. DXCC entities heard/worked on 10th Nov 2005 : 3 on 1 cont.

73 COSTAS

The Americas

Auroral-Related Propagation

Nov. 3 22-2300 VE4ARM>W9(51a) 55MHztv>W9(55a) W8>W9 VE2>W9(52a)

Other Modes

By comparison with Europe, the western hemisphere appears almost buoyant. Contacts between South America and the Caribbean/Central America were reported on every day bar, perhaps, the 11th, with evening type tep apparently the predominant mode. This was only a shade down on the reliability experienced in October 2004. Geography favours Brazil, where almost all call areas had openings. Also, the TR0A beacon was heard in Martinique on the 2nd.

Caribbean/Central America<>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
	+	+	+	+	+	+	+	+	+	+	?	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Caribbean/Central America>South America

PY 28 days	1(KP4) 2(FM) 3(FM,KP4,8P,9Y) 4(FM,KP4,8P) 5(FM,9Y) 6(KP4,9Y) 8(KP4,9Y) 9(FM,KP4,PJ,9Y) 10(KP4) 12(FM,KP4,9Y) 13(FM,KP4) 14(FM,KP4) 15(FM,V4,9Y) 16(FM,KP4,PJ,V4) 17(FM,KP4,V4,9Y) 18(FM,J7) 19(FM,J7,8P,9Y) 20(FM,9Y) 21(FM) 22(FM,KP4,9Y) 23(J3,9Y) 24(FJ,FM,KP4,9Y) 25(FM) 26(FJ,KP4,8P,9Y) 27(FJ,KP4) 28(FM) 29(FJ) 30(FM,KP4)
LU 3 days	1 (KP4) 21(FM,8P) 23(FM,KP4)
CX 3 days	1(FM) 23(KP4) 30(FM)
ZP	1 day 28(9Y)
CE	1 day 23(FM)
FY	1 day 10 (FM)
YV	1 day 11(9Y)
ZD7	2 days 6(FM) 7(FM)
ZD8	1 day 12(FM)

Nov. 1 01-0200 W3>W8(bs) W8>W8 0255 W1>W8 23-2400 PP5AR>FM5JC WP4KJJ>PP5AR,PY3KN CX3AN>FM5JC WP4NEG>PP5AR,PY1WX PY1NIX>WP4NIX LU3HR,PY1FR>WP4NIX

Nov. 2 0004-7 PY1FR,PY2MEM>FM5JC 0110-13 FM1HM>PY5EW 1634 CN8MC>PY3KN 2139-46 TR0A,48250(3C)>FM5JC

Nov. 3 WP4LUU>PP5AR 9Y4AT>PY1WX 1749 8P6SH>FM5JC 22-2300 W1,W3>W1 VE4SPT>W9(ms) 23-2400 8P6SH,ZZ1JDR>FM5JC 8P6SH>PP5XX(fl) FM1HM,9Y4AT,NP3H,WP4NIX>PP5XX PY1NB,PY2SRB,PY9PA>WP4NIX

Nov. 4 00-0100 FM5BW>PP5AR PY2GG>FM5JC W4,W3>W8 01-0200 W3>W8 W1>VE2 0252-9 W0,W1>W8 0329 VE3>W8(ms) 2258 PY1NB>WP4NIX 23-2400 ZZ1JDR,PY2DU,PY1NB>WP3UX 8P6SH>PP5AR

Nov. 5 00-0100 0059 W4>W8 01-0200 W4,W0,W9>W8 02-0300 9Y4AT,YV4AB>PY1WX 03-0400 HC8GR,9Y4AT,YV4AB>PR8ZX W3,W4,W2>W8 13-1400 W4>W4 W0,W9VW>W2 14-1500 W5,W2>W1 VE3,VE6>W4 W4>W2 15-1600 W5>W1 W1,VE3>W4 1659 VE3>W9(ms) 2135 EH8BPX>PR8ZX 2309-11 PR7AB,PY6KR>FM5JC CX4CR>PY2BRZ

Nov. 6 02-0300 W0,W8>W8 13-1400 W4,W1>W4 14-1500 W4>W1,W4 K4AHO,WB5LLI>W3 2556 W1>W1 1724 W4>W3 1841 G4IGO>K7BV/1(eme) 1928 W1>W1(jt) 21-2000 CT3BD>PP5XX 22-2300 EH8BPX>PY1NB,PY3KN CT3BD>PP5AR,PY1NB,ZZ2TUA,PY3KN PY2XAT,LW3EX>N3DB N3DB>PY1NB WP4NIX>PP5JD PY1RO>W3UR 23-2400 NP3H>PP5JD,PP5AR PY2SRB,LU4DMX>N3DB PY1RO>W3UR PY2RML>WP4NIX N3DB>PP5XX CT3BD>PP5XX C6AFP>WZ8D LW3EX>W4TJ PY8ELO>PY1SX 9Y4AT>PP5JD

Nov. 7 00-0100 K1TOL,YV4DYJ>PY1NB K5AB>W3 W4>W8 01-0200 YV4DYJ>PR8ZX W4>W0,W4 0238 W5>W8 03-0400 W0,W3,VE3,W1>W8 1725 W4CHA>W8 1815 W4CHA>W3

Nov. 8 01-0200 W4>W8 W7>W5 9Y4AT>PP5JD 04-0500 W8>W3(ms) 22-2300 PY7>PP5 23-2400 PP5CG>WP3UX

Nov. 9 00-0100 YV4DYJ>CX4CR,PP5JD W8>W1 W0>W8 01-0200 PY1NB>WP3UX HC8GR>PR8ZX 03-0400 W9,W0>W9 21-2200 CT3BD>PP5XX 23-2400 9Y4AT>PP5JD ZZ1JDR>>FM5JC KP4YI,FM1SX,WP4NIX,PJ2BVU>PY1SX FM1HM>PP5JD PJ2BVU>PY5EW,PP5JD

Nov. 10 0001 WP4NIX>PP5JD 04-0400 W0>W8 V44KAI>WP3UX W6>W8 1841 FY7THF>FM5JC 2322 W0>W8

Nov. 11 0107 PY7>PY3 1439 W1>W4(ms) 1631 8P6SH>FM5JC 17-1800 WB0RMO,W5>W9 23-2400 KE4SIX>W9(Es) WB5LLI>W9(Es) 9Y4AT>PP5XX 9Y4AT>YV4FJO

Nov. 12 00-0100 PJ2BVU>PP5XX PY2VA>WP3UX 01-02090 PR5>PP5 W9>W5 PT7VB>PP5,WP3UX LW3EWZ>PR8ZX 02-0300 HK4CZE>PR8ZX F6FHP>K1SG(eme) 0334 N0LL>W8 0400 W4>W8 1303 W4>W414-1500 W1>W4 W0>W1,W4 15-1600 N6NB>W6 1634 W1>W4 22-2300 W3>W3 23-2400 9Y4AT>PP5XX(tep) PY1RY>FM5JC WP4KJJ>PP5XX

Nov. 13 00-0100 W5,W9>W8 W0>W4,W8 01-0200 W6>W7 W9>W8 13-1400 W1,W4>W8 1426-9 W1,W8>W4 17-1800 W1>W1 W3>W3 1916-20 W1,W3>W3 20-2100 W3>W3 22-2300 9Y4AT,FM5JC>PR8ZX PR8ZX>WP3UX 2357 CM4LS>WP4NIX

Nov. 14 00-0100 PP5CG,PP5NW>FM5JC K6FV>W0(Es) W7>W7 02-0300 W0>W8 W8>W9 12-1300 N0LL>W8 1613 W5>W3 2233 W2>W1 23-2400 PP5CG>WP3UX YV4AB>PY1NB

Nov. 15 0248 K5AB>W0 15-1600 VY2,W3>W3 1947 W0>W8 2155 PP2>PY3 22-2300 9Y4AT<>PP5XX(tep) 9Y4AT>PY3KN,PP5JD FM5BW,V44KAI>PP5JD YV4AB>PP5JD

Nov. 16 00-0100 V44KAI>PP5JD PP5JD>WP3UX PJ2BVU>PP5JD,PY1SX PY8>PY1 VY2>W8 01-0200 W8>VY2 VE1>W41150-8 W1>W8 12-1300 W1,W0>W8 W1>VE2 2307 PY6KR>FM5JC

Nov. 17 0238 W1>W8 W9>W9 2250-9 9Y4AT>PY2OC,PY1NB 23-2400 PP5AR>WP3UX PY1NB,PY2RRS,ZZ1JDR,PP5AR>FM5JC YV5LIX>PY1NB V44KAI>PY2OC YV4AB>PY2OC(tep)

Nov. 18 01-0200 W4>W8 14-1500 W4>W8 W0>W3 W9>W9 21-2200 W0>W8 W8>W4(t) 2251 PY9>PP5 23-2400 J79AG>PP5AR,PP5JD,PY2VA,FM5JC FM5JC>PP5AR

Nov. 19 00-0100 PP5AR>FM5JC J79AG>PY2YW 8P6QA,9Y4AT>PP5JD W8>W9(sc,t) 01-0200 PY6>PY2 1231-54 W1>W1 W8>W8 1359 LU7YS>LU2NI 1446 W8>W4 15-1600 W5>W5 W4>W4 2244-5 W0>W8 PY6KR>FM5JC 23-2400 FM1HM>PP5JD PR7,J79AG,FM5JC,9Z4GB,YV5KG>PP5XX YV5KG>PY1FR

Nov. 20 00-0100 PW8TR,9Y4AT>PP5JD YV5IAL,9Z4BM,LU3HY>PR8ZX 0103 YV5KG>PR8ZX 0247 W5>W8(jt) 03-0400 W0>W8 FJ5DX>WP3UX 12-1300 W4,W8,W1,VE2>W8 VY2>W4 13-1400 W4>W8 13-1400 W4>W4,W1 W8>W4 15-1600 W3>W4 W5>W4,W8 1809 PY1>PY2(jt) 23-2400 PP5JD,LW3EWZ,LU5EGY>FM5JC ZZ2>PR8

Nov. 21 00-0100 LU7FA>FM5JC LW3EWZ>PR8ZX W4CHA>W0 YV5KXE>PY1SX PW8>PY1,ZZ2 PW8TR>FM5JC 0233 HC8GR>PR8ZX 0417 HC8GR>YV5LIX 2056 W2>W1 21-2200 W1,W3>W8 W1>VA2 W8>W8 22-2300 W1,W0>W8 8P6SH,PP5JD>FM5JC 23-2400 8P6SH>PY1SX,PY5EW LU5EGY>FM5JC

Nov. 22 00-0100 YY5LKD>PY1SX ZZ1JDR>WP3UX 0151-2 HC8GR,9Y4AT>PP5XX 0225 PY8ELO>LU3HY,LU6HZW 1242 W4>W4 K0KP>W5 21-2200 8P6SH>FM5JC 23-2400 9Y4AT,YV4AB>PP5XX PR8ZX>FM5JC

Nov. 23 00-0100 LW5ET>FM5JC LU5EGY>NP4BM WP4KJJ>CX4CR 0135 W0>W8 02-0300 VE2>W8(ms) VE3>W8(ms) W9>W8(ms) 1249 W0>W8 2013 W2>W1 2155 W0>W8 23-2400 J73SK>PP5AR PR8ZX>WP3UX 9Y4AT>PP5JD YV5ESN>PR8ZX

Nov. 24 00-0100 W4>W8 PW8>PP5 01-0200 FM5JC>PP5JD CE4BJS>FM5JC 02-0300 9Y4AT>PY5IP,PP5JD PY8>PY1 0312 XE2>XE1 0357 W4>W8 04-0500 W2,W3,W1>W8 1208 W1>W4 13-1400 W4,W8>W8 1454 W4>W8(sc) 15-1600 W4>W8(sc) W1>W8(Es) 2335-58 FJ5DX>PP5AR,PP5AR PY1NB>NP4BM

Nov. 25 0345 VE2>W8 1258 W4>W4 14-1500 W1>W8(ms) W1,W8>W4 21-2200 VE1,W2>W4 22-2300 N0LL,WB0RMO,WR9L>W2 22-2300 W0>W2 W4,W1`>W4 W4>W3 23-2400 PY6KR>FM5JC W9>W4

Nov. 26 00-0100 PR8ZX>WP3UX 9Z4GB,LU2DKX>PR9ZX 01-26 W0>W8(ms) 06-0700 W2,N0LL>W8 07-0800 W0>W8 1236 W4>W8 1629-34 W4>W8 20-2100 W1>W5(ms) W6>W6 2235 W4>W1 23-2400 8P6SH,FJ5DX>PP5BJ W4>W1

Nov. 27 00-0100 W3DOG>W5 W4>W1 PY1SX>WP3UX FJ5DX>PY3CQ W4>W2 W4CHA>E8 01-0200 W3HH,K4AHO>W8 W4>W4 02-0300 W4>W8 12-1300 K0KP,W4>W4 1356 W4>W1(Es) 14-1500 W4>W2 W4>W2(ES/ms) W3CMP>W3 W4CHA,W3HH>W9 15-1600 W2>W2 W4,W1>W4 16-1700 W3HH,W4CHA>W3 W8>W4

Nov. 28 01-0200 PY3OL,PY3KN>FM5JC 9Y4AT>ZP6CW 0216 W4>W8 0406 VE2>W8(ms) 21-2200 W4>W4 2235 XE2>XE1

Nov. 29 1442 W3VD>W4 1532 W4>W1 23-2400 FJ5DX>PY2SRB

Nov. 30 0055 FJ5DX>WP3UX 0328 W6>W6 16-1700 W5>W1(Es) W5>W3 2042 W0>W8 23-2400 CX4CR,PY1AT>FM5JC PY1AT>WP3UX

Asia/Pacific

Japan

This is the slimmest report from Hatsuo we have seen to date. Points to note: that Australia was workable on three days and that the bulk of the 'spots' relate to beacons - the surest indicator of propagation possibilities that were not exploited owing to lack of activity. And what of the areas that have no beacon?

6m Results in JA During November 2005 from JA1VOK

Nov 2	0340-0400	V73SIX/B,
	0515-0545	DU1EV/B
5	0320-0400	FK8SIX/B, V73SIX/B, VK4WS, 4RGG/B
8	0340-0500	FK8SIX/B, V73SIX/B
9	0430-0630	FK1TK, 8SIX/B, VK4BLK, 4RGG/B
28	0520-0530	VK3DUT

Elsewhere

And over the rest of that vast area of the world, silence…

Beacon News and 28 MHz Worldwide

Compilation and Commentary by G3USF

Beacon News

Due to publication delays for the main report many of the items below came to hand after the nominal date of the Report.

3582	IZ3DVW reported here (March 2006)
28177	VE2CRH Quebec City (FN46hu) new beacon running 2 watts to vertical, omni, A1, 24/7 (VE2TH March)
28234.5	W1FVB Whitefield NH (FN44EJ) resumed operation with 3 watts to dipole (April 2006 W1FVB) http://Ham.All-Dutch.com
28241.5	F5ZOK new beacon in JN24IL near Montelimar. Email F8AOF@neuf.fr (F8AOF April 2006)
28261.5	N4VBV running 5 watts to attic dipole in Sumter SC (EM893) (N4VBV April 2006)
28273	N5DUH Bossier City LA (EM32DL) reactivated with 2 watts to a dipole (April 2006 N5DUH)
28277.5	DM0AAB new call for DF0AAB (April 2006, EI5FK)
50003 V	E2TH Quebec City remains operational despite earlier reports it was QRT (VE2TH)
50055	EA3SIX reported operational from JN01XL (EA3ERG April 2006)
50060	LU4HH Cordoba (FF78OP) new beacon runs 1 watt to vertical with 3db gain @36 metres (March 2006)
50069	YO4KRB new beacon in KN44HE running 2.5 watts (YO4FYQ, March 2006)
50083	VE2NOQ reported QRT.
50083	DF0ANN in JN59PL reported testing with 200mw (April 2006)

28 MHz Worldwide

While November is usually looked on as part of the autumn peak, the decline from October is perceptible - though partly explained by low activity. As usual contests, controversial though they may be, demonstrated that the band was in somewhat better shape than many seem to have imagined. Africa was reported into Europe on every day but two (the 22nd and 28th), with the noontime period achieving 94 per cent reliability. This was much the best path. Asia and the Middle East began well enough, with openings on the first 17 days, mainly in the morning, but then became patchier for the rest of the month. Overall daily reliability was 75 per cent. South America was reported on twenty days and Australia - mainly from Central Europe (note the contrast with UK beacon reception recorded earlier) - on 19. While G0AEV's UK beacon report noted that there were no reports of North American beacons into the UK during the month, the low-power VE9BEA beacon was in fact copied in EI on the 2nd. In all, signals from North America and the Caribbean were received in Europe on 12 days. This included OH6QU's and SM2M's report of TI8CBT during the evening of the 3rd and WP2Z, worked by a number of European stations on a 180 degree bearing at 1215 on the 26th.

Propagation within Europe, by a mixture of Es, F2, backscatter and, occasionally aurora, was reported every day except the 22nd (when there were no 'spots' at all relating to Europe, the 24th and the 30th. The sole reported auroral event was on the 3rd, when SM2LIY reported the SK0CT beacon and OH9TEN auroral at 1730-1738. SM2M attributed reception of UA1ZOZ, with a 59+ signal at 1929 on the 3rd to auroral E.

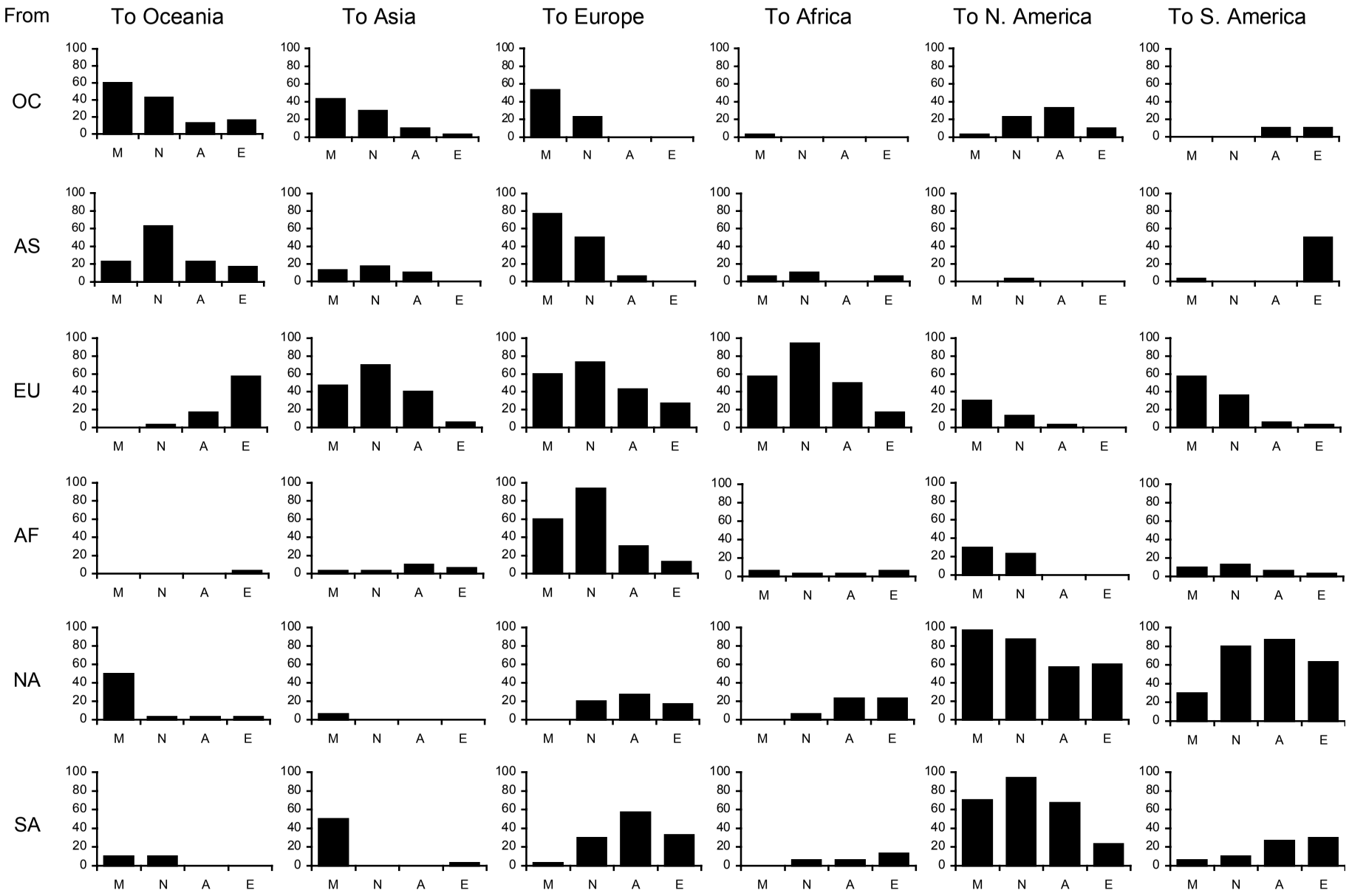
The band was open for contacts within the North and Central American area every day of the month, with local mornings showing a 97 per cent reliability. South America was only slightly less reliable, with openings known to have occurred every day except the 21st, with 94 per cent reliability during the noon period. However, other paths were much less favoured.

Contact between North America and Asia was reported on only one day, the 12th, despite the best efforts of contest operators. Africa was reported on twelve days, mainly during contest weekends and Australia/Pacific on 14.

Paths between Oceania and Asia held up reasonably well, with openings on 24 days, while, within Oceania itself (essentially VK during their summer Es season) openings were noted on no fewer than no fewer than 27 days - something of a record. There were scattered openings between Oceania and South America on six days. However, the evening path from South America to Japan was reported open on 15 days. Since, on most days, these reports related solely to beacon reception this looks like another example of missed opportunities. One exception was the Latin American evening of November 12-13, when numerous contacts were made between JA and PY during a contest.

A couple of contacts that were a little more than run-of-the-mill for this stage in the cycle: EA8ZS working JA3, JA5 and JA6 between 2355 on the 26th and 0005 on the 27th and 9V1CW reporting PZ5C at 1422 on the 27th.

28 MHz Worldwide - November 2005



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

Analysis of 14 MHz beacon reports from the UK

Reports of beacons on 14.1 MHz from G2AHU, G3IMW, G3USF, G4JCC and G0AEV. Compilation by G0AEV.

November 2005 was the first full month of monitoring of beacons on 14.1 MHz. With 5 listeners, the results cover most periods on most days (night-time excepted). Results are reported in the same way as for the 10m beacons: as averages of the best-reported signals in each 3-hour monitoring period. The data are stored in a database with 1 hour period resolution (for subsequent retrieval and analysis).

As Ray G2AHU notes in a letter accompanying his monitoring results, conditions are poor as sunspot minimum is approached. However, it was encouraging to see ZL6B reported on 50% of days and JA2IGY on 20%. The 100% reliability for 4U1UN in the 12z period is also worthy of note. Single hops to 4X6, OH2 and CS3 were very reliable, as might be expected.

The broken-up transmission from 5Z4B might explain the relatively poor showing of this beacon. OA4B is not supposed to be operational, although there have been a number of isolated reports over the months, this month included. However LU4AA is certainly off-air. 4S7B may also be QRT.

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.

Forms for reporting beacons on paper are at http://www.6and10.org.uk/beacon_forms.htm.

Beacon graphs