THE SIX AND TEN REPORT

October 2005

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Analysis of 28 MHz reports from the UK

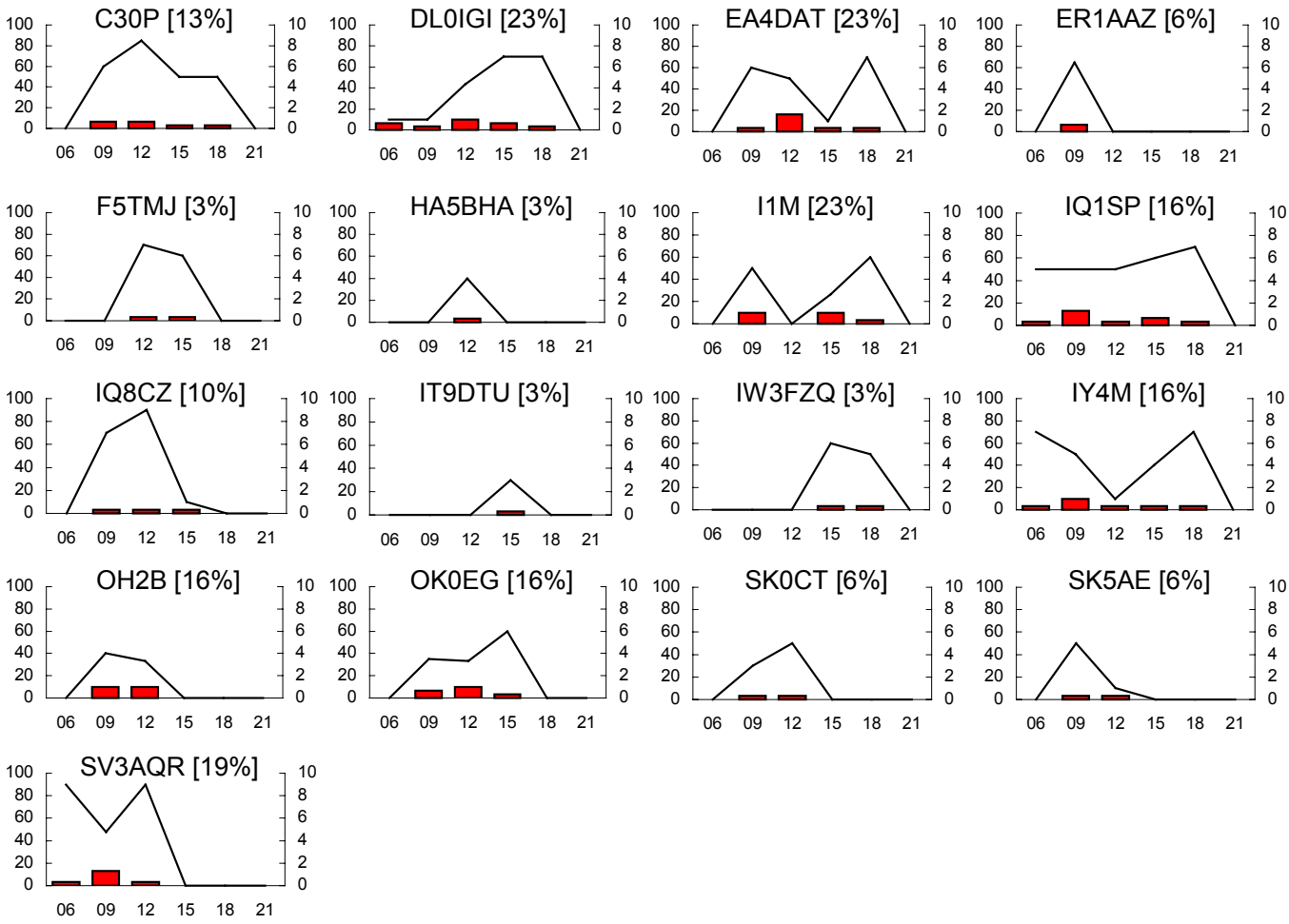
28 MHz reports and logs for October 2005 from G2AHU, G3HBR, G3IMW, G3USF, G3YBT, G4JCC, G4TMV, G4UPS, G0AEV, G0IHF and packet cluster reports. Compilation and commentary by G0AEV.

A combination of proximity to the equinox and low geomagnetic activity helped provide some reasonable F2 propagation on 10 metres despite the very low levels of solar activity. Contests at this time of the year help ensure that there is always some activity on the band, which is why we can report over 50 DX countries (outside of Europe) worked by UK stations on 10m this month. Although propagation was "good" this was only within well-defined limits – mainly to the Middle East, Africa and South America with UA9, VU, VK6 and the eastern seaboard of the USA and Canada available on a less reliable basis. It was particularly good to have some openings to North America – the first (via F2) since the spring and perhaps the last for a longer period. Sporadic E was in evidence throughout October and this mode produced some good openings within Europe. F2 backscatter was workable but generally only by well-appointed stations – no beacons were not reported heard by this mechanism – and there was some direct path F2 propagation to the extremes of Europe (SV through to UA).

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



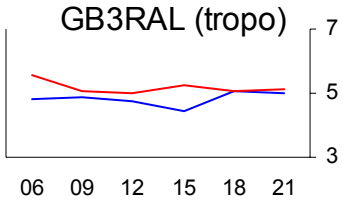
Propagation modes for European beacons.

Sporadic E was still the dominant mode for inter-European working and Es explains most of the results graphed above. Beacon monitoring indicates that there was at least some Es on 2 days out of 3. The Es "MUF" reached 50 MHz on many of these days though, as expected at this time of the year, few openings were extensive either in geographical area or in time. Late October is the time when Es forms a small "peak" (see Section 2 of these reports) and the mode is nearly always in evidence during the CQWW contest when it can be relied upon to provide some propagation.

With the general improvement in F2 conditions (mainly the result of seasonal changes) there was also a little direct F propagation to SV3AQR and ER1AAZ (as well as to UA – an area without beacon coverage, unfortunately). Backscatter was certainly available at times but signals from beacons were too weak to be picked up audibly via this mode. Meteor scatter, from DL0IGI in particular, was reported on many days – these results are not included in the graphs

European Beacon Notes.

There was no known change in the status of European beacons in October other than the arrival of the new GB3RAL beacon on 28.191 MHz on 9th October. The old GB3RAL beacon remains in operation from the same site.



The graph opposite shows the results of monitoring of the two GB3RAL beacons via troposcatter propagation at the QTH of G0AEV. Signals are always audible (reliability 100%) so only signal strength is plotted. The upper (red) line is for the new beacon on 28.191 and the lower (blue) line for the original beacon on 28.215. The new beacon was only transmitting for part of the month so proper comparisons of the two beacons from this graph is not possible. However, reports seem to suggest that the new beacon has the slightly better signal. Brian G3HBR agrees "I was interested to listen to both of the GB3RAL beacons - there is really little to choose between the two signals with me. Maybe 28.191 is a little more consistent."

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

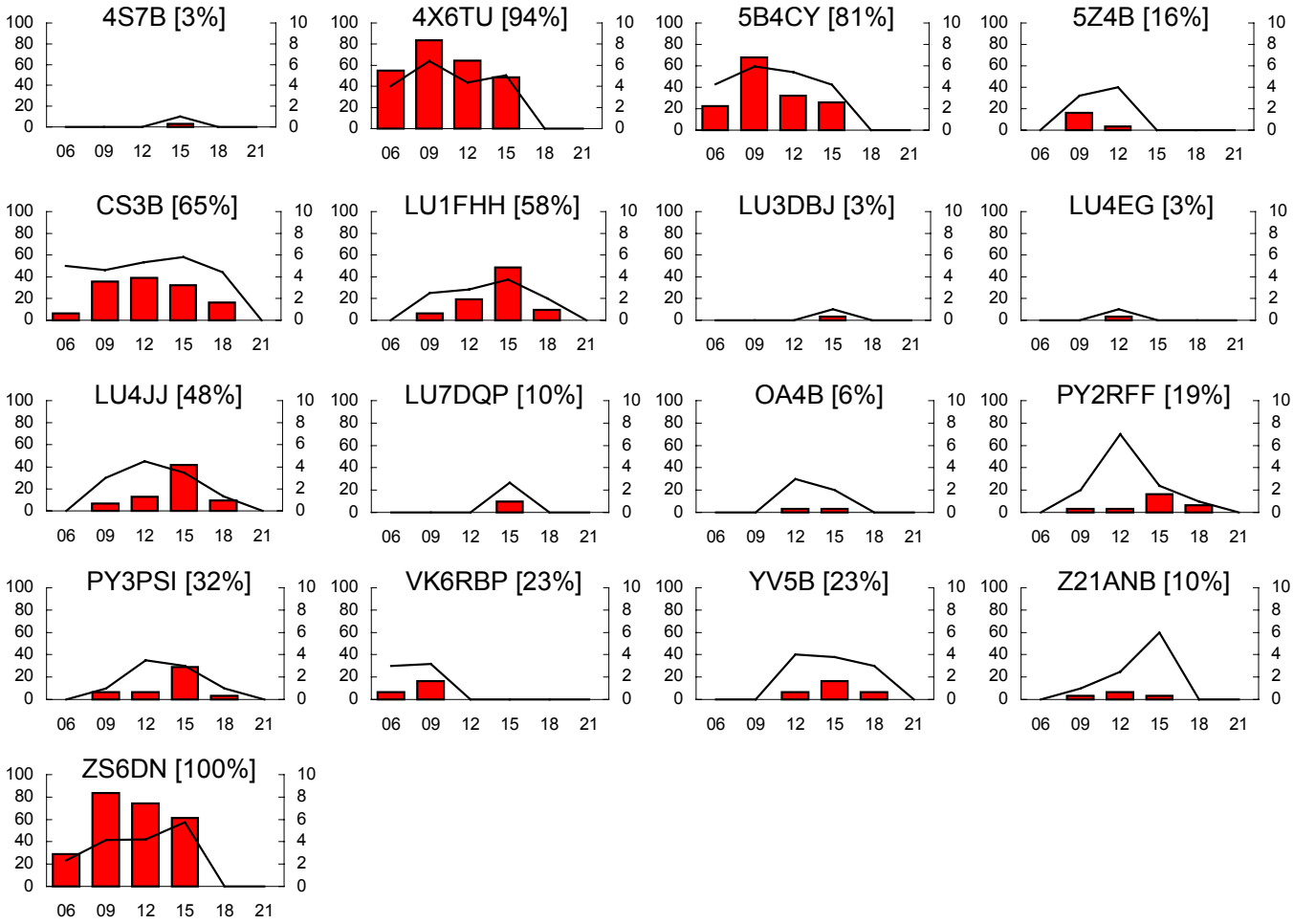
Suggested propagation modes

There was a further improvement in F2 propagation in October with the best conditions occurring in the middle of the month, in more or less the same time period as the monthly high in solar activity. As described in the introduction to this Section, and indicated by the graphs on the following page, 10m was open via direct path F2 to the Middle East, Africa and South America on a regular basis. ZS6DN was reported on every day while 4X6TU and 5B4CY also posted high daily reliabilities. If LU4AA was QRV it would probably have shown that the path to southern South America was open on an equally reliable basis – the lower powered LU1FHH was heard on 58% of days. Outside of the "core" area there was also some propagation (with typical reliabilities of around 1 day in 5.) to western Asiatic Russia, India, Western Australia and (as described below) to eastern USA and Canada.

Beacon Notes.

LU4AA is still QRT. OA4B was reported a couple of times on 10m and on 20m (see Section 6 – 14MHz beacons), but clearly the beacon is not working properly. It may well have been QRT most of the time. 4S7B was reported once, but this may have been a logging error – there were no reports on 20m. 5Z4B has a minor problem with a broken transmission of the callsign. New beacon PY2RFF was reported for the first time – this beacon transmits on 28.176 from Sao Pedro.

Beacon Graphs.



10m DX in October 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. The list shows a strong improvement in numbers of counties over the previous month. This position was the result of both better propagation conditions and higher activity levels. The latter was considerably enhanced by contest activity, especially by activity in the CQWW SSB contest on the last full weekend of October. DX stations abound in this contest and, more importantly, all stations are actively trying for contacts on the band regardless of any perceived conditions.

DX in October[1]: 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.

DX in September for comparison: 7P, 7Q, A6, CE, CX, D4, EA8, HZ, LU, PY, TI, ZD7, ZS.

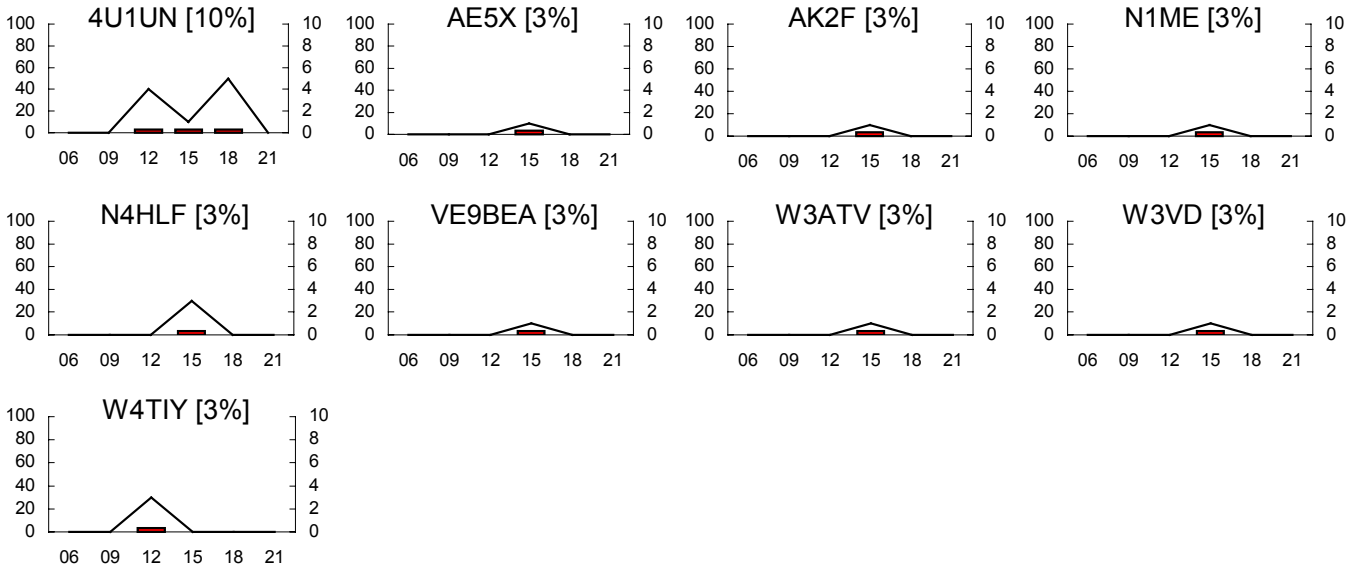
All of the countries heard/worked in October were by F-layer modes (perhaps including TEP at times) whereas in September some of the north African countries may have been heard/worked via sporadic E.

[1] G0AEV's CQWW contest log contained 10 DX counties not reported from other sources

Propagation to North America

For the first time since February 2005, 28 MHz opened via F2 to North America. As can be seen from the graphs below, propagation only extended to the eastern seaboard of the USA and Canada.

Beacons were heard on 4 days and amateurs worked stations on several other days when beacons were not reported. The best day was 16th when 7 beacons were heard. Only 4U1UN was reported on more than one day. To put these numbers into perspective, 42 different beacons from North America were logged in February, but 26 of the beacons reported were heard on one day only and 4U1UN was heard on the same number of days as in October.



Analysis of 50 MHz reports from the UK

UK 50 MHz reports for October 2005 from G2ADR, G2AHU, G3HBR, G3IMW, G4UPS and via packet cluster spots. Compilation and commentary by G0AEV.

My opening comments from last month about poor conditions would do equally well this time. Monitoring efforts by 6&10 reporters and by the wider 6m community in October were poorly rewarded. "Autumnal" sporadic E was detected on almost half of October days but only on a few of these days were openings strong and even these openings were generally restricted to only one or two countries. Most of the Es was to the south (to CN, CT, EA and I). There was only one aurora (31st) but this was a reasonably good event with both aurora and auroral propagation available between GM and Scandinavia. G stations only had propagation to GM, however. Tropospheric propagation of any note was conspicuous by its absence – in reports received, at least. Meteor scatter via JT6A was the location of most band activity.

Our reporters all suffered from lack of propagation. G3HBR thought, "50 MHz conditions have been really quiet with just the odd showings of beacons on this band. Nothing else to say really!" G3IMW said "as last month, again nothing". Jeremy also noted the lack of good auroras.

The only stations heard by G2ADR were 3 Gs in the contest on 16th. Eric thinks that the lack of activity is worse than the lack of propagation and fears that we may loose the band if it appears not to be required by amateurs. A good point – but perhaps activity levels are not quite as poor as Eric implies if you take digital modes into account, which is where a lot of 6m stalwarts have taken their activities. Of the 231 QSO/reception reports and spots in this month's compilation, half (114) were for the JT6M or JT65A modes. Admittedly the total number of QSOs is considerably smaller than seen during the summer when there are 2,500 to 3,000 reports a month.

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.

	CN Morocco (26%)	CT Portugal (19%)	EA Spain (16%)	EA9 Ceuta/Mellila (13%)
D	1 10 11 17 22 23 26 29	1 10 12 17 26 29	1 9 22 23 26	11 25 26 30
06				
09	5 9 5	9	9	5 3
12	4 7 9 4 4	2 9 8 2	0 9 9	5 0
15	7 6	4 9	9	
18	1			
21				

	I/IS/IT Italy (13%)	LY (3%)	LZ (3%)	YU/9A/S5/T9/Z3 Former Yugoslavia (3%)
D	1 4 12 17	13	9	17
06				
09	9			0
12	9 0		6	
15	9	0		
18				
21				

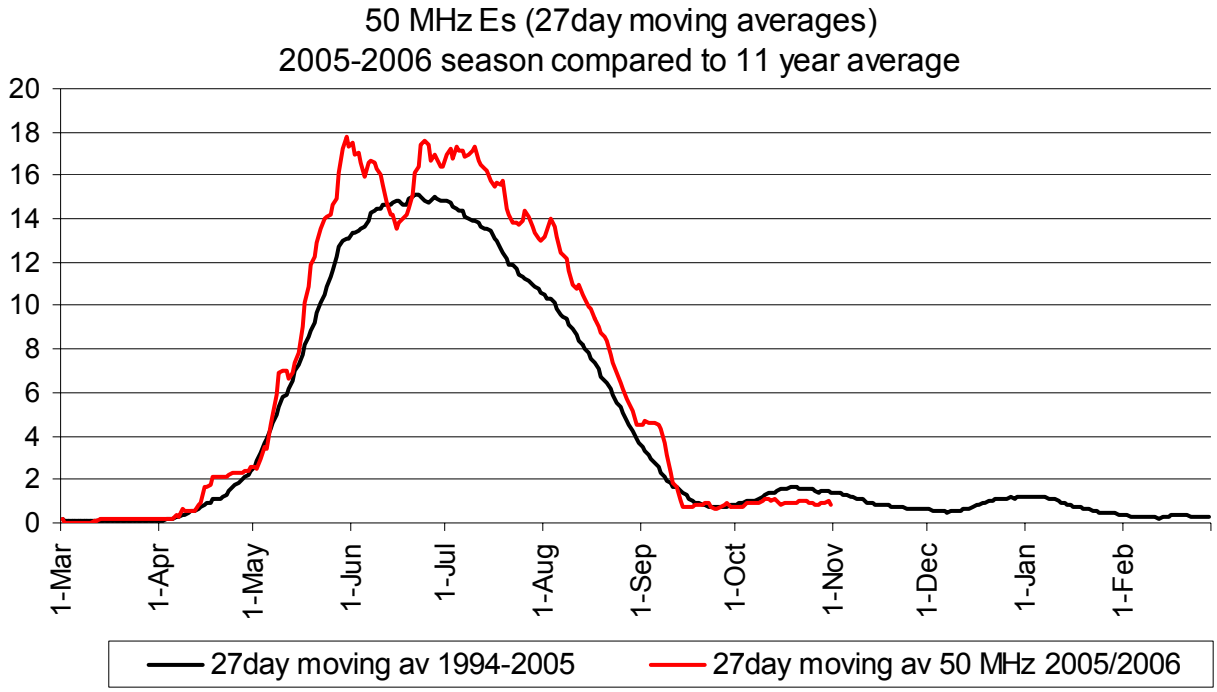
Es Propagation Summary.

The table below displays total counts of country/areas heard/worked via sporadic E by UK amateurs, a summary of the detailed tables presented above.

Es Summary

	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
06																															
09									1	1	2						4								1						
12	2			1					1	2												2	2			4			2	1	
15	3											2	1													1					
18																															
21																															

The Es summary chart shows sporadic E distributed thinly throughout the month – no day or days stand out and there is no trend in activity over the period. When examined in the context of the preceding months, as shown in the graph below, October Es data appears to show a flat trace at an average of about 1 country/area per day. There is no evidence of any "peak" as seen in most years (though November data is needed to complete the moving averages for the second half of the month) but is clearly more than the almost zero level of Es that occurs in Spring.



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.

DX Propagation

Nil.

Tropospheric propagation

Not much "tropo" to report for October. There was a lot of short to medium distance inter-G activity on 16th as the result of a contest, but activity at other times was lacking. No long distance contacts were reported.

9th	06z	0853 ON4IQ >GB3BUX 529 "above normal"
10th		G3HBR> LX0SIX. Brian reported this beacon (not often heard) audible most of the day.
16th		Lots of inter-G short/medium distance contest contacts
21st		1130 G3HBR > LX0SIX 529

Aurora

Only a single aurora appears in October logs (in keeping with the generally quiet sun) but this event produced some reasonable propagation for stations in GM, including a little auroral E to TF and OH during the end phase of the backscatter propagation.

31st	15z	1547	LB6YD (JO59) > GB3LER 51a
		1634	LB1JF (JP32) > GB3LER 41a
		1650-1654	MM5AJW (IO88) > GB3LER 54a; GM7PBB (IO68)> GB3BUX 54a
		1704	EI7BMB > GB3LER 31a
		1738	LA7AJ (JO59) > MM5DWW (IO89) 57a
		1742-1747	LA3BO > GB3LER 57a; G4PCI >GM7PBB 51a; EI5FK > GM7PPB (IO88)
	18z	1803-1807	EI7BMB > GM4WJA; SM0LQB > GB3LER 55a;
		1826	G3WGV (IO84) > GB3LER 57a
		1846-1857	MM0AMW > G4IGO; G8LHT > GM4WJA (IO87)
		1918	MM0BSM (IO86) > GB3LER 53a
		1940-1943	MM0BSM > TF3SIX 52a; MM0AMW > JX7SIX 57a

Auroral E

31st	18z	1938	MM5AJW > OH9SIX 599
		1945	MM5AJW > TF3SIX 559

Meteor Scatter

JT6M activity levels increased over those seen in September and are much higher than during the summer months. Again, I conclude this is a reflection of competition (or lack of it) from other modes – digital MS now being the only reliable terrestrial propagation mechanism for distances 500-2,500 km.

<u>MS heard/worked (mostly via JT6M) in October by day.</u> Weekend days (when activity is likely to be greater) are highlighted.

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	31
MS QSOs	3	5	1				1	2	1		1		1		3	4	2	1			1	3	2		1	1			2	1	1
All JT6M	9	7		3	1		1	7	6		4		3		10	3	4	1	1		5	12	9	1	9	5			9	13	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 October 2005 by hour

Hour	QSOs	Countries	Hour	QSOs	Countries
00z	1	F	15z	1	SP
06z	0		16z	2	EA, S5
07z	4	OE, SM, SP	17z	0	
08z	10	EA, HB, I, OZ, S5, SP	18z	2	OE, OH
09z	7	DL, EA, HB, I, LA	19z	2	EA, LY
10z	3	OE, S5	20z	0	F, LA
11z	2	EA, OE	21z	0	
12z	2	EA, F	22z	0	
13z	0		23z	1	F
14z	0				

EME

For the record, these are the October (JT65A) moon-bounce reports from the DX cluster- more than usually seen.

1 1631 G4PCI > EA3AXV
2 1632 M0BCG > K6MYC-21 dB
2 1645 G4PCI > EA3AXV
8 1738 G4PCI > K7BV-28 dB
9 1541 G4IGO > IW5DHN
9 1743 G4PCI > K7BV-28 dB
9 1916 K7BV/1 > G4IGO
15 0209 G4PCI > W7GJ -26 dB
15 0219 W7GJ > G4PCI -24 dB
16 0343 G4PCI > K1SG -27 dB
16 0412 K1SG > G4PCI -25 dB
17 0514 G4PCI > K6MYC -25 dB
18 0701 G4IGO > K6MYC -21 dB
22 1033 G4PCI > K7AD -25 dB
23 1047 G4PCI > W7GJ -26 dB
23 1230 G4PCI > W7GJ -29 dB
23 1247 W7GJ > G4PCI -26 dB
26 0052 G4IGO > EA3AXV
29 1455 G4PCI > EA3AXV

Solar and Geomagnetic Data for October 2005

Data from Internet sources. Compilation by G0AEV.

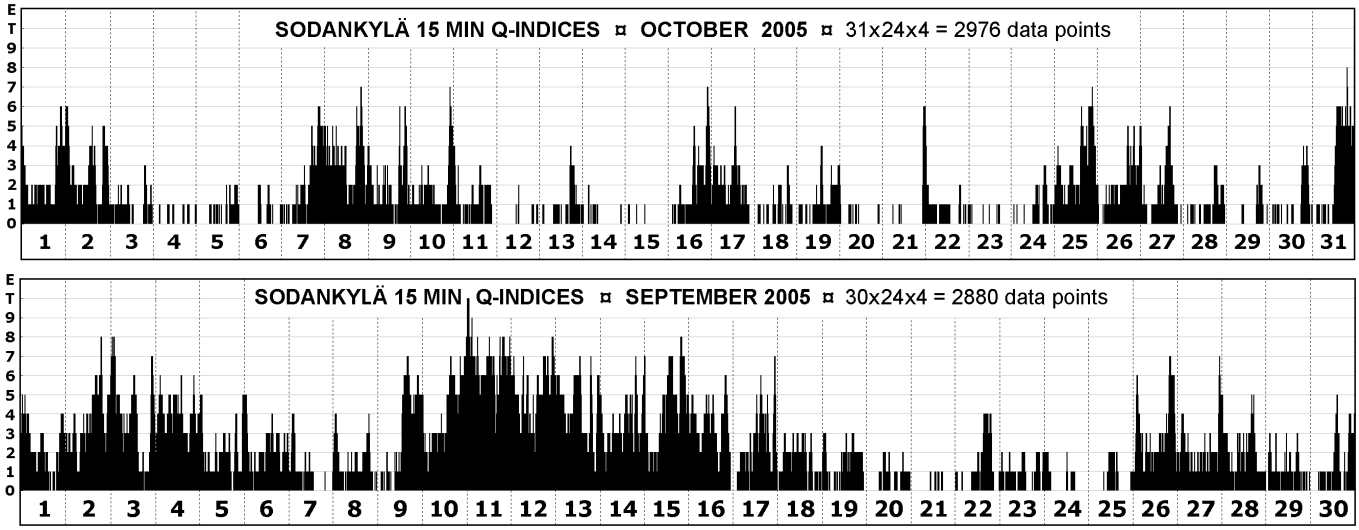
Sunspot numbers (SEC)	Mean 13.0	Max 31 (7th)	Min 0 (1st-3rd, 24th-28th)
Solar Flux (28 MHz)	Mean 76.6	Max 83 (4th)	Min 72 (36th-27th)

Solar data for October 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 from Chilton in Oxfordshire. SIDC spots are from SIDC, and other solar data from the joint USAF/NOAA daily summaries or directly from SEC.

Energetic Events.

There were 37 M or X class X-ray solar events in September (peaking at X17). In contrast this month there are no significant energetic events to report

Q-indices from Sodankylä, Finland (Thanks to OH2LX)



Q-indices for October 2005 with the preceding month below for comparison.

September was magnetically active – October was rather quiet. The difference is obvious when comparing the graphs above.

Geomagnetic data from the Finnish observatories for October are:

Monthly averages	Most disturbed October days:
Sodankylä: monthly Ak average = 12.7 (31.7 in Sep)	Sodankylä: 11th, Ak = 53 (Sep 11th Ak = 183)
Nurmijärvi: monthly Ak average = 7.8 (18.0 in Sep)	Nurmijärvi: 11th, Ak = 22 (Sep 11th Ak =100)

OH2LX's data shows 15th as possibly being an "Exceptionally Quiet Day" (EQD). A number of days might also be described as very quiet. On the 12th Kp was zero for all but one 3 hour period.

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) K > 5. There were only 3 days in October when Kp or the UK K-indices reached 5 or higher.

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	2	1	0	1	1	4	3	2	3	0	1	1	0	1	3	1	2	1	0	4	0	1	4	1	3	1	1	2	1
03	4	3	3	1	1	1	2	4	2	3	2	0	0	2	1	1	4	3	2	0	0	2	0	0	3	2	0	0	0	2	1
06	3	4	2	0	1	1	2	4	1	3	0	0	2	0	0	2	3	1	2	2	0	1	0	0	4	3	0	2	1	0	1
09	3	2	2	0	0	1	2	4	2	3	0	0	1	0	0	2	2	1	2	1	0	0	0	0	4	2	1	2	0	0	2
12	3	2	1	1	1	1	2	3	2	2	1	0	1	0	1	2	3	2	2	0	0	1	1	2	2	1	3	2	0	1	3
15	2	3	1	1	1	1	2	2	1	0	1	0	0	1	0	2	3	1	3	0	1	0	1	2	3	2	2	1	1	0	4
18	3	2	2	1	2	1	3	4	3	1	1	0	2	1	0	2	1	1	0	0	1	1	1	2	3	1	1	1	0	1	3
21	3	2	1	1	1	1	4	3	3	3	2	1	1	0	1	3	1	1	1	1	3	1	1	2	3	1	1	1	1	2	4
Σ	24	22	14	6	7	8	18	28	17	17	10	1	8	5	3	15	20	11	14	5	5	10	4	9	26	13	11	10	4	8	19

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	2	3	2	1	1	1	2	5	2	2	3	0	1	0	0	0	3	0	2	2	0	3	1	1	3	2	2	0	0	1	1
03	2	3	2	1	0	0	1	3	1	2	0	0	0	1	0	1	3	2	2	0	0	1	0	0	4	1	0	0	0	1	1
06	2	2	1	0	0	0	1	3	1	2	1	0	0	0	0	1	2	0	0	0	0	0	0	0	2	2	0	1	0	0	1
09	1	1	1	1	1	1	1	3	1	2	1	0	1	0	1	1	2	1	1	0	0	1	0	0	2	1	2	1	0	0	0
12	1	1	0	1	1	1	2	2	1	2	1	0	1	1	1	2	2	2	1	0	0	1	1	1	1	1	2	1	0	0	2
15	2	3	0	0	1	1	2	2	0	1	2	0	0	0	0	2	2	1	2	0	0	0	0	1	3	4	4	2	1	0	4
18	4	0	1	1	1	1	2	5	3	1	2	0	3	0	0	2	0	2	1	0	0	1	0	2	4	3	3	3	2	3	6
21	3	3	1	0	1	0	5	3	3	2	2	1	0	0	0	3	1	1	2	1	2	1	0	0	3	2	0	2	1	3	4
Σ	17	16	8	5	6	5	16	26	12	14	12	1	6	2	2	12	15	9	11	3	2	8	2	5	22	16	13	10	4	8	19

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	3	2	1	1	2	4	2	3	3	0	1	0	0	0	4	0	2	2	0	4	1	1	4	2	3	0	0	1	1
03	3	3	2	1	0	0	1	3	1	2	1	0	0	1	0	1	3	2	2	0	0	1	0	0	4	1	0	0	0	1	1
06	2	3	2	0	0	0	0	4	2	2	1	0	0	1	0	1	3	1	0	0	0	1	0	0	2	2	0	1	0	0	1
09	2	2	1	1	1	1	1	3	2	2	1	0	1	0	0	1	2	1	1	1	0	1	0	0	3	2	2	1	1	1	1
12	2	2	1	1	1	1	2	3	2	2	2	1	1	1	1	1	2	2	2	0	0	1	1	1	2	2	3	2	0	1	3
15	1	3	1	0	1	2	2	2	1	1	2	0	1	0	0	2	2	2	2	0	0	0	1	2	3	4	4	1	1	1	4
18	4	2	2	1	2	2	2	5	3	1	2	0	3	0	0	3	1	2	1	0	0	2	1	2	4	3	3	3	2	3	5
21	3	3	2	0	1	0	4	3	4	3	2	1	1	1	1	3	0	1	3	1	3	0	0	1	4	2	0	2	1	3	4
Σ	20	22	14	6	7	7	14	27	17	16	14	2	8	4	2	12	17	11	13	4	3	10	4	7	26	18	15	10	5	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	31
00	3	4	3	2	1	1	3	4	2	3	3	0	1	1	0	1	4	1	2	2	0	4	1	1	4	2	3	0	0	1	1
03	3	3	2	1	1	1	1	3	2	2	1	0	1	1	0	1	4	2	2	1	0	2	0	0	4	1	1	0	0	2	1
06	3	4	2	0	0	1	1	4	2	3	1	0	1	1	1	2	3	1	1	1	0	1	0	0	3	3	0	1	1	0	1
09	2	2	1	1	1	1	1	4	2	3	1	0	1	0	0	1	2	1	1	1	0	1	0	0	3	2	2	2	1	1	1
12	1	2	1	1	1	1	2	3	2	2	2	1	1	0	0	1	2	2	2	0	0	1	1	1	1	2	3	2	0	1	3
15	1	4	1	0	1	1	2	2	1	1	2	0	1	0	0	2	3	2	2	0	0	0	1	2	4	4	4	1	1	1	4
18	4	2	2	1	2	2	2	5	4	1	2	0	3	0	1	2	1	2	2	0	0	2	1	2	4	4	3	3	2	3	5
21	4	3	2	0	1	1	5	4	4	3	2	1	1	1	1	4	1	1	2	1	3	1	0	2	4	3	0	2	1	3	4
Σ	21	24	14	6	8	9	17	29	19	18	14	2	10	4	3	14	20	12	14	6	3	12	4	8	27	21	16	11	6	12	20

October	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-Oct	8	2	4	0	0	0	72	0	9	4	13	26	A1.8	5.4	13	2.2	05	6.5E+06	5.7E+05	1.4E+04
02-Oct	3	3	0	0	0	0	75	0	8	4	13	29	A4.6	6.1	15	2.2	04	6.7E+07	8.0E+05	1.5E+04
03-Oct	0	2	0	0	0	0	74	0	10	3	7	12	A5.5	7.1	10	2.3	05	1.3E+08	4.3E+05	1.5E+04
04-Oct	0	2	1	0	0	0	83	15	14	1	4	7	B1.6	7.6	11	2.7	05	1.6E+08	3.6E+05	1.5E+04
05-Oct	0	4	0	0	0	0	81	31	17	2	4	6	B1.3	7.7	10	2.8	04	1.3E+08	4.3E+05	1.6E+04
06-Oct	0	5	0	0	0	0	80	28	15	1	4	8	A8.0	7.6	10	2.3	05	6.8E+07	4.2E+05	1.4E+04
07-Oct	1	5	0	0	0	0	79	31	14	4	11	24	A5.9	7.8	16	2.2	05	1.6E+07	1.2E+06	1.4E+04
08-Oct	2	10	0	0	0	0	78	24	12	4	22	42	A4.4	7.8	09	2.0	04	2.5E+06	1.4E+06	1.4E+04
09-Oct	5	10	2	0	0	0	79	16	10	3	9	22	A4.4	7.1	14	2.0	05	3.8E+07	1.4E+06	1.4E+04
10-Oct	5	9	2	0	0	0	79	11	16	3	10	18	A4.5	7.8	14	2.1	05	2.6E+08	1.7E+06	1.3E+04
11-Oct	0	9	2	0	0	0	78	25	9	3	6	13	A4.3	8.1	15	2.1	05	1.1E+08	6.8E+05	1.4E+04
12-Oct	1	3	2	0	0	0	77	17	14	1	1	4	A3.4	7.8	10	2.3	05	1.3E+08	1.1E+06	1.4E+04
13-Oct	0	3	1	0	0	0	78	11	0	2	4	9	A4.1	7.9	10	2.4	05	9.6E+07	1.2E+06	1.4E+04
14-Oct	2	6	0	0	0	0	78	11	8	2	2	4	A3.5	8.0	12	2.1	05	7.7E+07	1.2E+06	1.4E+04
15-Oct	0	4	0	0	0	0	80	11	8	1	2	5	A3.2	7.5	13	2.1	05	8.7E+07	1.4E+06	1.5E+04
16-Oct	6	23	0	0	0	0	79	11	8	3	8	15	A2.8	8.8	10	2.3	04	1.8E+07	6.7E+05	1.4E+04
17-Oct	2	5	4	0	0	0	78	11	8	4	13	25	A2.8	7.1	12	2.1	05	9.2E+06	7.1E+05	1.5E+04
18-Oct	2	9	0	0	0	0	78	11	8	3	5	11	A3.0	7.5	14	2.2	05	2.2E+07	5.5E+05	1.5E+04
19-Oct	0	8	0	0	0	0	78	30	16	3	7	15	A2.4	7.9	12	2.3	04	2.7E+07	3.9E+05	1.5E+04
20-Oct	0	8	0	0	0	0	77	15	9	2	3	6	A1.2	7.1	14	2.4	05	5.4E+07	4.8E+05	1.4E+04
21-Oct	2	11	0	0	0	0	75	15	8	3	2	5	<A1	7.8	11	2.8	01	6.8E+07	1.3E+06	1.5E+04
22-Oct	1	8	2	0	0	0	75	13	7	4	6	13	<A1	7.8	11	2.2	05	7.6E+05	4.3E+05	1.4E+04
23-Oct	1	12	2	0	0	0	74	11	8	1	2	6	<A1	8.0	11	2.5	05	7.1E+05	2.8E+05	1.4E+04
24-Oct	0	5	0	0	0	0	73	0	0	2	4	10	<A1	7.6	12	3.0	05	7.3E+05	3.7E+05	1.5E+04
25-Oct	5	12	1	0	0	0	73	0	0	4	19	37	<A1	9.2	12	2.3	05	9.0E+05	6.6E+05	1.5E+04
26-Oct	1	7	4	0	0	0	72	0	0	3	8	22	<A1	8.2	11	2.7	05	8.0E+06	4.8E+05	1.4E+04
27-Oct	4	3	0	0	0	0	72	0	0	3	6	19	<A1	7.1	11	2.2	05	2.2E+07	5.2E+05	1.3E+04
28-Oct	2	3	0	0	0	0	73	0	0	2	5	13	<A1	7.4	12	2.7	06	2.0E+07	4.3E+05	1.4E+04
29-Oct	0	4	1	0	0	0	74	11	8	1	2	6	A1.4	n.a.	n.a.	n.a.	n.a.	2.9E+07	4.0E+05	1.5E+04
30-Oct	0	4	1	0	0	0	76	14	9	2	5	12	A2.6	n.a.	n.a.	n.a.	n.a.	1.6E+07	3.6E+05	1.3E+04
31-Oct	3	4	0	0	7	2	78	29	12	4	13	37	A2.9	8.7	11	n.a.	n.a.	2.5E+06	6.8E+05	1.4E+04
Sum	56	203	29	0	7	2														
Average	1.8	6.5	0.9	0.0	0.2	0.1	76.6	13.0	8.5	2.6	7.1	8.5	A3.6	7.6	11	2.3	05	5.4E+07	7.4E+05	1.4E+04
Maximum	8	23	4	0	7	2	83	31	17	4	22	17	B1.6	9.2	16	3.0	06	2.6E+08	1.7E+06	1.6E+04
Minimum	0	2	0	0	0	0	72	0	0	1	1	0	<A1	5.4	09	2.0	01	7.1E+05	2.8E+05	1.3E+04

50 MHz Outside Britain

Compilation and Commentary by G3USF

Continental Europe, Africa and the Middle East

Auroral-Related Propagation

Geomagnetically a quieter month than September and correspondingly little by way of auroral reports from the Continent. There were none on the most disturbed day, the 8th, but that was scarcely surprising, given that the Ap figure was a mere 22. Nor were there any reports on the most disturbed day for the Finnish observatories (the 11th) reported earlier

Oct 16 1514 49750>OH6(KP02 55a)

Oct 25 1700-20 Au>OH5IY 49750>OH6(KP02 55a) 1730-40 Au>OH5 1720-30 AuFM>OH5 1740-1800 AuFM>OH5

Oct 31 1420-1740 Au>OH5 17-1800 GB3LER>EI(31a) GM(IO68)>EI(54a) LA>SM0(57a) 18-1900 GM>EI OH5RAC>SM0(52a) OZ7IGY>SM0(52a) GB3LER>SM0(55a) SM1>SSM0 OH3(KP20)>SM1(57a) SM1>OZ(55a) LA(JP60)>OZ(JO65 57a) 1950-2020 Au>OH5 2016 OH9SIX>OH2HK(Au 33a) 2210-20 Au>OH5

Other Modes

While the Americas enjoyed a reasonable level of tep, Europe's 'season' was confined to reception of the new ZD7VC beacon on the 16th in SV1 and on the 22nd in IT9 and a contact between I8 and TY on the 6th. SV1DH copied 3C and/or 9L TV on fourteen days but no amateur contacts were made. Even when differences of frequency and erp are taken into account it looks as if lack of African amateur activity is a factor in the poor results. It is not known whether the 5T and TR beacons were operational during this period.

While no day passed without any reports, activity levels were low - though the Scandinavian activity contest attracted its usual band of loyal supporters and the occasional relatively distant contact. The great majority of reports involved JT6M operation, with the assumed propagation mode being meteor scatter. Sporadic-E was specifically noted on nine days: the 1st, 8th, 9th, 11th, 12th, 14th, 16th, 22nd and 25th. However, most openings were brief and contacts relatively few. What appears to have been extended tropo - reception of GB3LER in France - occurred on the 2nd and 3rd.

Oct 1 07-0800 UT5G>OZ(Es) 0820 YO3KWJ>OZ 11-1200 S5>I2(ms) EH1DVY,CT0SIX>DL(ES) 12-1300 OH5RAC>DL GB3MCB>I0 S5>DL(t) 13-1400 F>S5(Es) CT0SIX>EI(Es) OE5>S5 LX0SIX>DL(t) 17-1800 GB3MCB>EA7(Es) OZ6VHF,OZ7IGY>EA3

Oct 2 0101 GB3LER>F 08-0900 I2>YO7(jt) 09-1000 LZ4>YO7(jt) I0>I5 10-1100 S5>9A 1253 GB3LER>F 2052 LA>PA(jt) 2101 PA>SM5(jt)

Oct 3 2306 GB3LER>F

Oct 4 1423 9Ltv>SV1 2057 SP9>SM5(jt)

Oct 5 1455 3C,9Ltv>SV1 1713 IK5ZUL>I0

Oct 6 1355 9Ltv>SV1 1550 LX0SIX>ON(t) 1743-55 LY>I8 TY6MJ>IK8MRA(?)

Oct 7 0653 I2>OZ(jt)

Oct 8 0628 SP9>OZ(jt) 10-1100 G>OE5(ms) EA3>OE3 1142 SM5>SP6

Oct 9 08-0900 HB,LX0SIX,GB3BUX>ON SR9>SP8 09-1000 SP9>9A(jt) 10-1100 LX0SIX>PA SP5>9H I0>LY I9>ON SV1SIX,SV9SIX,I9,SV2>SP6 LZ2CM>ON 11-1200 UU5SIX>I5,I4 SV1,I0,SV9SIX,IT9X>SP6 CT>PA I3>LZ5 LZ1JH>I1 9H>SP8,SP9 LZ4>EA5 SP5>I9 12-1300 9H>OZ(Es) SV1SIX>DL(Es) 13-1400 DL>OK1 9L,3Ctv>SV1

Oct 10 10-1100 I>LZ2 LZ2>F UT5G>I5 EH1DVY>DL 11-1200 CN8MC>I2 1705 UT5G>I5 2125 OH7>SM5(jt)

Oct 11 1040 I9>DL CN,CT>I5 CN>I0 12-1300 CN>I9,EA2,I5 EH9>EA2,I2,I5 13-1400 CN>EA2,I5 1403 9L,3Ctv>SV1 16-1700 I2>S5(jt) G>S5(jt) 19-2000 9Ltv>SV1(E-TEP) 20-2100 PA>ON

Oct 12 16-1700 EH9IB>I1,EA7 CT0SIX>IS0 ZB2>I1 CN>I1,I9 17-1800 4N1ZNI,LZ1JH,EA1>IS0 EH9>OE5,I1,F,I4(Es) CN8MC>OE5(Es) IS0>EA1 EH1DVY>9A(Es) SV1SIX>I4 I2>EH5 18-1900 I4>EA7

Oct 13 1438 CT>I8 1609 9Ltv,3Ctv>SV1(A-TEP) 17-1800 SM0,SM3,OZ>SM1 SM7>SM3,SM1 I0>I2 G>LY 18-1900 SK6,OH0,OZ>S5 OH8,SM0>SM3 SM0,SK6,OH0>SM1 19-2000 OH0>SP6 SM7>S5 LA,SM4>OZ SM0>SM1 20-2100 OZ>SM3 OH0>PA

Oct 14 14-1500 EA2>S5(jt) 4X4SIX,SV1SIX>9H 15-1600 OD5SIX>9H,I0 I0,LZ5>9H 4X4SIX>I0,SV1 5B>9H,I0 5B4CY>ER1 SV9SIX>I0,I5 16-1700 I4>I0(bs) SV9>I4 SV1SIX>I0,IS0 SV9SIX>IS0 OD5SIX>LZ1,ER1 4X4SIX>LZ1 17-1800 OD5SIX,4X4SIX>LZ1 SV9SIX>I4 18-1900 SV1SIX>I0,I4 2149 OH6>SM5(jt)

Oct 15 0838 G>S5(jt) 10-1100 HB>DL(t) G>I2(jt) 1200 SP9>LZ1(jt) 1723 SV9SIX>I4

Oct 16 07-0800 I0>OZ,F 08>0900 S5>I5,OZ HB9SIX>DL(t) I0>I2 09-1000 I9>DL(ms) I0>I5 SP9>LZ(jt) LX0SIX>DL(t) G>HB(ms) GD>I5(ms) T6X>RW3AH 1100 S5>9A(t) 1300 9Ltv>SV1 1544 LZ1JH>IS0 16-1700 SV1SIX>9A SV9SIX>I1 TA2,OD5SIX>I0 LZ1JH>IS0,I0 YU1>I9 17-1800 SV9SIX>I4,HA1,S5 SV1SIX>I4,HA1,OE5(ES),OK1,HB I9>I1 18-1900 I9>OE1 EA3>LZ1(jt) 1300-1800 9Ltv,3Ctv>SV1 ZD7VC>SV1DH I9>OE1,HB,DL,SQ9 19-2000 IT9X>EA5 I9>I0 19-2000 ZD7VC>SV1

Oct 17 1058 YO3KWJ>SP9 1928 G>LA(jt) 20-2100 Z3>YO7(jt) 21-2200 YO7>ON(ms) I1>YO7(jt) YO7,PA(jt)

Oct 18 1942 I7>I8 2102 LZ4>I1(jt)

Oct 19 1312 I8>I9 2026 OH6>LU(jt)

Oct 20 1155 I9>I4 1942 LA>OH6(ms) 20-2100 OH7>ON(jt) SP9>ON(jt) OH7>LY(jt)

Oct 21 1204 CN8MC>IS0 1727 ON>LA(jt) 20-2100 LA>OH6(jt) LZ4>I1(jt)

Oct 22 0702 G>OZ(jt) 08-0900 LY>LA(jt) HB>LX(jt) G>HB(ms) 09-1000 LX>LA(jt) EA3>I2(jt) S5>PA(jt) 10-1100 SV1SIX>SP9 SV9SIX>DL SP9>ON ON>EB1(ms) G>ON(jt) 11-1200 I3>ON(jt) SV9SIX>OE5 UU5SIX>I0 EH5>ON(jt) SV1SIX>SP9 G>EA5(jt) I8EMG>ER1 I4>EA5(jt) 12-1300 I9>HB

CN8MC>F 1413 CT>I5 15-1600 HB9SIX>DL(t) 16-1`700 HB>LX(jt) SV1SIX,SV9SIX>DL(Es) 17-1800 EH3>EH5(ms) OH0>SM5 2050 ZD7VC>IT9ESW

Oct 23 08-0900 SP9>LA(jt) I4>I5 G>S5(jt) 0952 G>LA(jt) 10-1100 LZ4>S5(jt) W7GJ>LY2AW(eme) 13-1400 CN8MC,CT>F 14-1500 CT>F 1921 OH7>LA(jt)

Oct 24 1423 HB9SIX>DL(t) 1640 EA3>LA(jt) 1735 OE5>LA(ms) 1946 OH7>LA(jt)

Oct 25 1158 GB3BAA>EA9 18-1900 G>LA(jt) G>OE5(ms) G>OH2(jt) G>SM5(jt) 19-2000 SM5>LX(jt) G>SM5(jt) 20-2100 G>CN(jt)

Oct. 26 0851 G>OE5(ms) 0905 UU5SIX>9A(Es) 11-1200 SV9SIX>I4 UU5SIX>9A CT0SIX>I4 12-1300 UT5G>I5 EH4>I5,I3 SV1SIX>9A EH5>I1,DL I1>PA 13-1400 CN8MC>PA SV1SIX>DL LX0SIX>EA7(Es) EH7>ON G>EH5(jt) GB3MCB>EA7 G>CT EH7>LX PA>EA5(jt) CT>F 14-1500 LZ2>OK2 G>EH7,CT CN>PA EI>CT CT>DL 21-2200 LA7SIX,JW9SIX>OZ JX7SIX>LA

Oct 27 1617 HB9SIX>DL(t) 1840 OH7>LA(jt)

Oct 28 1940 I0>Z3(jt)

Oct 29 0909 UT5G>OZ 1049-58 EA3>S5(jtr) EA3>LA(jt) 12-1300 T9>YO7(jt) 20-2100 OH6>LA(ms) SM5>LA(jt)

Oct 30 0937 G>LA(jt) 1038-45 SV1SIX,SV9SIX>I) 1256 G>EB1(ms) 1319 G>EA9(jt) 1722 G>S5(jt) 1946 OH6>LA(jt) OH6>SP9(jt) SM5>LA(jt) 2240 GM>SM5(jt)

Oct 31 0856 G>S5(jt) 09-1000 S5>EB1(ms) G>EB1(ms) 1023 OH6>SM5(jt) 1139 EA3>LX(jt) aurora

50MHz PROPAGATION REPORT FOR OCTOBER 2005 BY SV1DH

1. Data for all days, except 19-23 and 27-31 (21)
2. Relatively good days on: 9,14,16,22
3. 48 MHz AF video (3C+9L) on: 1,3,4-9,11,13,14,16,17,31
   (also E-TEP on 11,13,16) (R=67%)
4. 55 MHz AF video (5N) on: NIL

5.	Opening	to ZD7	on: 16 (1845-2045! E-TEP)
6.	"	to 4X	on: 14 (E)
7.	"	to OD	on: 14 (E)
8.	"	to 5B	on: 14 (E)
9.	"	to IS	on: 14 (E)
10.	"	to 9H	on: 14 (E)
11.	"	to I	on: 12,14,16,30 (E)
12.	"	to 9A	on: 16,26 (E)
13.	"	to DL	on: 9,22,26 (E)
14.	"	to HB	on: 16 (E)
15.	"	to OE	on: 9,16 (E)
16.	"	to HA	on: 16 (E)
17.	"	to OK	on: 9,16 (E)
18.	"	to SP	on: 9,22 (E)

19. Special events on:
    14 (1400 N.A. on 10m, first of season)
    17 (1945 CT to ZD7/B)
    22 (2045 IT9 to ZD7/B)
    21-28th Xray bgn A0!
    24-28th R=0!

20. DXCC entities heard/worked during Oct 2005 :14 on 3 cont
21. DXCC entities heard/worked on16th Oct 2005 : 7 on 2 cont.

73 de COSTAS

The Americas

Auroral-Related Propagation

Oct 8 01-0200 VE4ARM>W9(EN44 53a) W0(EN35)>W9(EN44 58a) W8(EN91) >W9(EN44 51a) W4>W9(EN44 55a) 0214 VE4SPT>W9(EN44 419 AE)

Other Modes

Contacts between countries in the Caribbean were reported on all but four days, with tep the assumed mode, with the great majority involving Brazil at the southern end. The exception to the broad pattern was a single report of the FY7THF beacon being heard in Martinique. There were no reports of tep extending up into the United States

South America<>Caribbean

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

South America<>Caribbean

PY	25 days	1(9Y) 2(V4,9Y) 3(FM,KP4,9Y) 4(9Y) 5(FM,V4,9Y) 7(FM,9Y) 9(FM,KP4) 10(KP4,V4,9Y) 11(V4,9Y) 12(FM,KP4,9Y) 13(FM) 14(FM,KP4,9Y) 15(KP4,V4) 16(FM,V4,9Y) 17(FM,9Y) 18(FM,KP4,9Y) 19(KP4,V4,9Y) 20(FM,J6,KP4,V4,9Y) 21(FM,J6,KP4,V4,9Y) 22(HI) 23(FM,V4,9Y) 24(FM,PJ,V4,9Y) 25(FM,9Y) 26(FM) 31(FM,8P)
CX	7 days 1	2(FM) 15(KP4) 16(PJ) 17(FM) 19(KP4) 22(KP4) 31(FM,8P)
LU	4 days	15(FM) 19(KP4) 21(FM) 27(FM)
ZP	2 days	16(FM,KP4) 22(KP4)
FY	1 day	15(FM)

There were numerous reports of openings within South America, and due to the configuration of the geomagnetic equator, *some* may have been attributable to tep, though one cannot be certain. These included:

LU<>PY 11, 12, 19,21	FY<>PY 19, 23
CX<>PY 12	ZP<>PY 21
YV<>PY 14 15 17 19	HK<>PY 17
HC8<>PY 14, 15, 19,21	YV<>CX 16

There were also openings between 9G and PT7 on the 1st and 17th and CN to PP1 on the 19th. 3C tv was copied in Martinique on the 5th and 22nd and 9L TV was into Martinique on the 20th, with no amateur contacts being made (both countries were inactive at the time.)

By contrast, US amateurs had a fairly thin time. An occasional JT6M contact was reported and a few specifically attributed to ms, particularly on the 9th. But this was desultory stuff and the only event of note reported was a fairly wide and extended sporadic-E opening on the 20th, which, at best, produced one or two coast to coast contacts.

Oct 1 00-0100 9Y4AT>PP5XX 01-0200 PY2>PR8 9G1MM>PT7VB 02-0300 PY5,9Y4AT,47.9(CE)>PR8ZX 03-0400 PY5>PR8 2359 W0>W8

Oct 2 00-0100 9Y4AT,V44KAI>PP5XX 0336 WR9L>W8 08-0900 K8UK,K8PLF>W4 14-1500 W4>VE2,W5 K5AB>W4 1553 W4CHA>W0 1605 W4>W4 2358 W4>W4

Oct 3 0000 9Y4AT>PY5EW 2339 NP4A>PY2RDZ 2343 PY2ALR>FM5JC

Oct 4 1739 W2>W3 23-2400 W4,W5>W2 W4>W1 2359 9Y4AT>PP5JD

Oct 5 00-0100 W4,W8>W4 V44KAI>PY5EW 2038 W9>W9 2122 3C>FM5JC 22-2300 9Y4AT>PY5EW FM5BW>PP5XX 2349-55 FM5BW>PP5AR V44KAI>PY5EW

Oct 6 0049 W8>W8

Oct 7 0043 W4>W5 0137 FM1HM>PY5EW 2307 9Y4AT>PP5JD

Oct 8 01-0200 aurora 1440 W4>W4 1701 W4>W4 1816 W3>W3 2037 W8>W5

Oct 9 0334 W0>W8 13-1400 W4>W1(sc) W8>W4 W1>W8(ms) 14-1500 W1>W4 W1>W9(ms) VE3>W9(ms) 17-1800 W3>W1 1849 K1TOL>IW5DHN(eme) 20-2100 W4>W4 W3>W3 23-2400 PY8>PY1 FM1HM>PP5AR WP4KJJ>PY2NQ

Oct 10 00-0100 9Y4AT,WP4KJJ>PP1CZ ZP6CW>PR7AR 2025 W8>W4 21-2200 W1>W1 22-2300 9Y4AT,V44KAI>PP5XX

Oct 11 0012 PR7>PP5 01-0200 9Y4AT,YV4AB,LU4HP,LU1HKO,HC8GR>PR8ZX 02-0300 W0>W8 LU5EGY>PR8ZX 23-2400 9Y4AT,V44KAI>PP5XX

Oct 12 00-0100 PY3>PR8 FM1HM>PY1SX,PR8ZX,CX4CR WP3UX>PR8ZX LW6DEX>PR8ZX 01-0200 LU4DMX,LU9EHF,PP5,YV4AB, 9Y4AT,9Z4GB,LU9EFG>PR8ZX FM4BW>PY1SX PY3>PR8 PR8ZX>CX4CR,PY2 02-0300 W1>W8 03-0400 PY3,YV5KG>PR8ZX 22-2300 9Y4AT>PR8ZX WP4LUU>PR8ZX,PY1SX 23-2400 WP4LUU,WP4NIX>PY1SX PY2RML,PY2ALR>WP4NIX FM5BW>PY1SX,PP5AR

Oct 13 00-0100 FM1HM>PY1SX,ZZ2TUA 0111 FM1HM>PY1NB

Oct 14 00-0100 9Y4AT>PP5XX.PR8ZX FM5BW>PP5XX YV4AB>PR8ZX 01-0200 FM1HM>PP1CZ FM1BY>PY!NB 9Z4FZ>PR8ZX 0215 HC8GR>PR8ZX 23-2400 WP4NEG,9Y4AT>PP5JD WP4LUU>PY1SX,PY1NB PY2OC,PY2XAT>WP4NIX WP4NEG>PY2OC

Oct 15 01-0200 YV4AB>ZZ2TUA HC8GR>PY2OC W0>W8 02-0300 W9>W8 YV4AB>PP5JD G4PCI>W7GJ(eme) 15-1600 VE1SMU,W4>W8 W1>W1(jt) 1956 FY7THF>FM5JC 20-2100 CX3AN>WP4NIX,WP3UX LW3EWZ>FM5JC 22-2300 WP3UX>FM5JC PY7>PP5 PT9>PP5,PT7 9Y4AT,V44KAI>PY5EW 23-2400 PP5AR>WP4NIX WP3UX,WP4LUU>CX4CR 48.2(CE)>PP5

Oct 16 00-0100 ZP5CGL>WP3UX,PR8ZX 01-0200 UT7UV>W7GJ(eme) 9Y4AT>PP5JD PR8>PP5 02-0300 PR8>PP5 YY5LKD,PJ2BVU>CX4CR 13-1400 W1>W8(ms) W4>W8 14-1500 W4>W4 W1>W8(ms) 2055 W9>W0 21-2200 W5>W5 23-2400 PJ7/K2GSJ>WP3UX 9Y4AT>PY5EW,PP5NE V44KAI,FM5BW>PY5EW FM5JC>ZP6CW

Oct 17 00-0100 HK4SAN>PY5EW,PP5AR,PP5JD FM5BW,V44KAI>PP5JD 01-0200 9Y4AT>PP5JD, PP5AR,PP5XX HK4BKB>PR8ZX YV4AB>PY5EW FM5BW> CX4CR FM1HM>CX4CR,PP5JD 02-0300 9G5OO>PT7BR,PT7BL 22-2300 W4>W4,W5(Es) W2>W4 23-2400 VE1,W4>W4,W3

Oct 18 00-0100 W4>W8 FM5BW,FM5JC>PP5JD 01-0200 WP4KJJ>PP5JD,PP5AR 9Z4GB>PP5JD,PP5AR 0248 9Y4AT>PP5JD 0339 W7>W7

Oct 19 0021-40 9Y4AT,V44KAI>PY5EW 0125-54 YV4AB,FY7THF,HC8GR>PY5EW 0222-3 HC8GR,9Y4AT>PR8ZX 21-2200 WP3UX,WP4NIX,KP4ED,WP4NEG, PR8ZX>CX4CR LU8DWR>WP3UX LU1DMA>PR8ZX 22-2300 LU8EU,LU7YZ>WP4NIX LU1CGB,LU8EU>PR8ZX LW3DX,CX1AQ,LU8DFN, PY3KN,LU4DPH>WP3UX WP4LUU,WP4NIX>PP1CZ 23-2400 W0>W1 CN2R>PP1CZ WP4NIX>LU7YZ VE2>W4 W8>W8 W0>W1,W0

Oct 20 00-0100 W0>W1,W2,W3 W1,W0>W9 W9>VE2 W9JN>W3 VE4VHF>W3,W5 W9JN,K9MU>W3 N0UD>W0 01-0200 W0>W2,W4,W5,W9 VE2>W5,W0 W6>W0 9Y4AT>PP5JD W1,W2>W6 WA0SSN>W3 W9>W4 W7>W1 W3>W7,W6 W2>W2 W8>W9 W7>W5,W0 02-0300 VE2>W0 W7>W5 N0LL>W2 WB0RMO>W2,VE3 W0MTK>W6 W5,W7>W7 9Y4AT>PR8ZX W6>W4,W3,VE6 PR8ZX>WP3UX KA0CDN>VE3 W4CHA>W3 03-0400 W7>W6,W7 N0UD>W9 FM5BW,J69AZ,WP3UX,V44KAI>PR8ZX KA0CDN.K0EC,N0LL>W8 04-0500 W6>W7 9Y4AT>PP5XX W6>W6 2107 48250(9L)>FM5JC 23-2400 9Y4AT>PP5JD ZZ1JDR>FM5JC, WP3UX PP5JD>FM5JC J69AZ>PP5JD KP4ED>PP5JD,PP5AR FM5JC>PP1CZ 9Y4AT>PY2BK

Oct 21 00-0100 WP4LUU>PP5JD PR8ZX>FM5JC PY3BSG>PY8,FM5JC PY2,PP5,ZP6CW>PR8ZX VP9GE>KA3DQD LU3HR>FM5JC,PR8ZX 01-0200 HC8GR,9Y4AT,WP3UX>PR8ZX J69AZ>PP5AR 1150 W5>W8 2258 PY2SRB>WP3UX 23-2400 PY3DU>FM5JC,WP3UX 9Y4AT,V44KAI,FM5JC>PP5JD WP4LUU>PY1SX

Oct 22 00-0100 ZP6CW>WP3UX HI8ROX>PP5JD 02-0300 W6>W5,W7 W7>W5 1149-52 W1,W2,VE9(Es)>W8 12-1300 W4>W2 VE1>W4 W8>W5 13-1400 W1>W4(sc) W8>W4(bs) W4>KP4 W1>W2 1442-58 W9>W9 KD4NMI>W4 1559 W1>W7(eme) 1953 48250(3C)>FM5JC 22-2300 W0>W1` PY6KR>FM5JC 23-2400 W5>W5 VE3>VE2 J69AZ>FM5JC CX4CR>WP3UX W9>W2 KP4YI>CX4CR

Oct 23 00-0100 W4>W8,W4 W3,W2>W2 W1>W8 01-0200 W3>W6,W8 W5>W5 W4>W4 W8>W2,W8 W9>W9 02-0300 9Y4AT,V44KAI,FY7THF, FM1HM >PY5EW W2>W8 12-1300 W1>W7(eme) G4PCI>W7GJ(eme) 13-1400 KD4NMI>W4 14-1500 WR9L>W2 22-2300 VE7>W6 23-2400 VE7,W7>W6 W4>W4

Oct 24 0013 PY2ALR>FM5JC 03-0400 FM1HM>PP5XX 9Y4AT>PR8ZX V44KAI>WP3UX 0400 PJ2BVU>PR8ZX 2249-51 9Y4AT,V44KAI>PP5XX

Oct 25 0027 W8>W4 2231-58 PY6KR>FM5JC FM5JC>PY1SX 23-2400 FM5BW,9Y4AT>PP5JD

Oct. 26 00-0100 FM5BW>PP1CZ FM1HM>PY5IP W0>W9 21-2200 W3>W1

Oct. 27 02-0300 W0,W9>W8(Es) 2154 LW3EX>FM5JC 22-2300 W4,W8>W4

Oct. 28 0056 W2>W4 0152 K2ZD>W4 1215 W4>W8 1924 W4>W3(sc)

Oct. 29 1154 W0>W1 1258 W8>W8 1732-3 W1,VE1>W4 2336 W8>W8

Oct. 30 00-0100 W0,W3>W8 1249 W4>W8(ms) 13-1400 W4>W8 14-1500 W4>W8,W4 1930 W7>VE7 2221 V44KAI>WP3UX

Oct. 31 00-0100 8P9JG>PP5XX 8P9EG>PP5XX,PP5OZ, PP5AR,PY2EMC, CX4CR,PY5EW,PY2BRZ 8P9BQ>PY2BRZ,PY2EMC CX3AN,PP5AR>FM5JC 8P9AR>PY2NQ 01-0200 8P9BQ>PP5XX,PY1WX 1944 48250(3C?)>PP5XX

Asia and the Pacific

Japan

Lean times in Japan, too. In October 2004 there were openings between JA and ZL on two days and JA<>VK on 22. This year, openings were reported on only three days, to VK3 on one day (nil), VK4 on two days (9), VK6 on one day (19) and VK8 on two days (6). There were no ZL openings.

6m DX results in JA during October from JA1VOK

DATE	TIME(UTC)	STATIONS
10/ 3	0830-0840	XV3AA (JA3-6)
9	0800-0805	VK6JQ (JA5)
10	0345-0430	FK8SIX/B (JA1-3)
12	0340-0430	V73SIX/B
	0550-0600	XV3AA (JA3-6)
17	0315-0445	FK8SIX/B, V73SIX/B, VK4NW,WS,AFL,JOO,ABP/b,RTL/b,8RAS/b
19	0430-0530	DU1EV/B
22	0357-0540	V73SIX/B, VK3EK,3DUT,4WS,4BLK,4RGG/b
23	0620-0640	VK8RAS/b
25	0415-0600	DU1EV/B, VK4RGG/b
27	0350-0400	V73SIX/B
30	0440-0500	V73SIX/B

Elsewhere

No reports

Beacon News and 28 MHz Worldwide

Compilation and Commentary by G3USF

Beacon News

Note: Listings below were compiled after the notional publication date of this report.

28173	DF4PV QRT (March)
28174	9H1IA to be operational 1 August 2006
28202	ZS1J returned to service from new location at Napier, running 5 watts (March)
28213.2	DM0ING Ingelheim (JN49AX) with 10 watts, replacing DF4PV (March)
28222.3	WK4DS call change from KG4WBH (WK4DS Jan.)
28240	YO2X returning to service from a April 2006 operating 10-18Z. (YO2IS March). The 2m beacon will also be returning to service.
28268	VK8VF returned to service from PH57KP with 25 watts to Vertical (March 2006)
28282.8	KAQ2KGP Forestville NY new beacon (Dec. various)
50008	LU1DMA change of frequency, seeks reports (LU1DMA, March)
50030	PY5NN in GG54 new beacon (PP5XX Oct.)
50035	CQ3SIX IM12MP new beacon running 10 watts to halo, horizontal polarization. Keying is fsk. (CT1FFU, March)
50075	NL7XM Easton PA (FN20IP) runs 3 watts to dipole (N-S) (March).
50075	KB3MZY Acme PA (FN00) runs 10 watts to superloop. (March) It is unclear at the time of writing whether the operators were aware they would be sharing a frequency.

28 MHz Worldwide

Compilation and commentary prepared by G3USF

This year's 'autumn peak' was quite modest, but all the same there was a marked seasonal improvement, with some paths proving quite reliable. We have reports on openings between Europe and Africa on all days, with the midday period 97 per cent reliable. Similarly, Europe was able to work into South America every day but one (the 27th, with both the (European) afternoon and evening providing reliability of 90 per cent or better. Asia (including the Middle East) was a slightly more challenging prospect, but openings to Europe were reported on all but two days (the 1st and 3rd), with 90 per cent reliability during mornings in Europe. (As always, these results reflect only to what is reported and unreported contacts may well have lifted the results a little higher.)

Australasia proved more difficult, but even here signals were reported in Europe on 21 days, including every day but one from the 13th onwards. Openings mainly favoured Central Europe, though signals - mainly VK6 - reached western Europe on at least 8 days; FO5TS was worked from France by the long path at 2024 on the 18th. While, as G0AEV has shown, results of beacon monitoring were fairly thin, there were several good openings between Europe and North America, not coincidentally including G<>W2, W3, W4 during the contest on the 9th and Europe into the East Coast between 1630 and 1800 on the 16th when the RTTY event was under way. However extensive G contacts with the East Coast on the 14th owed nothing to contest assistance and EI5FK reported the VE9BEA beacon at 1637 on the 18th. In all, Europe is known to have worked into North America on 13 days - not bad for this late stage in the cycle but a marked decline on the 28 days with reported openings in October 2004.

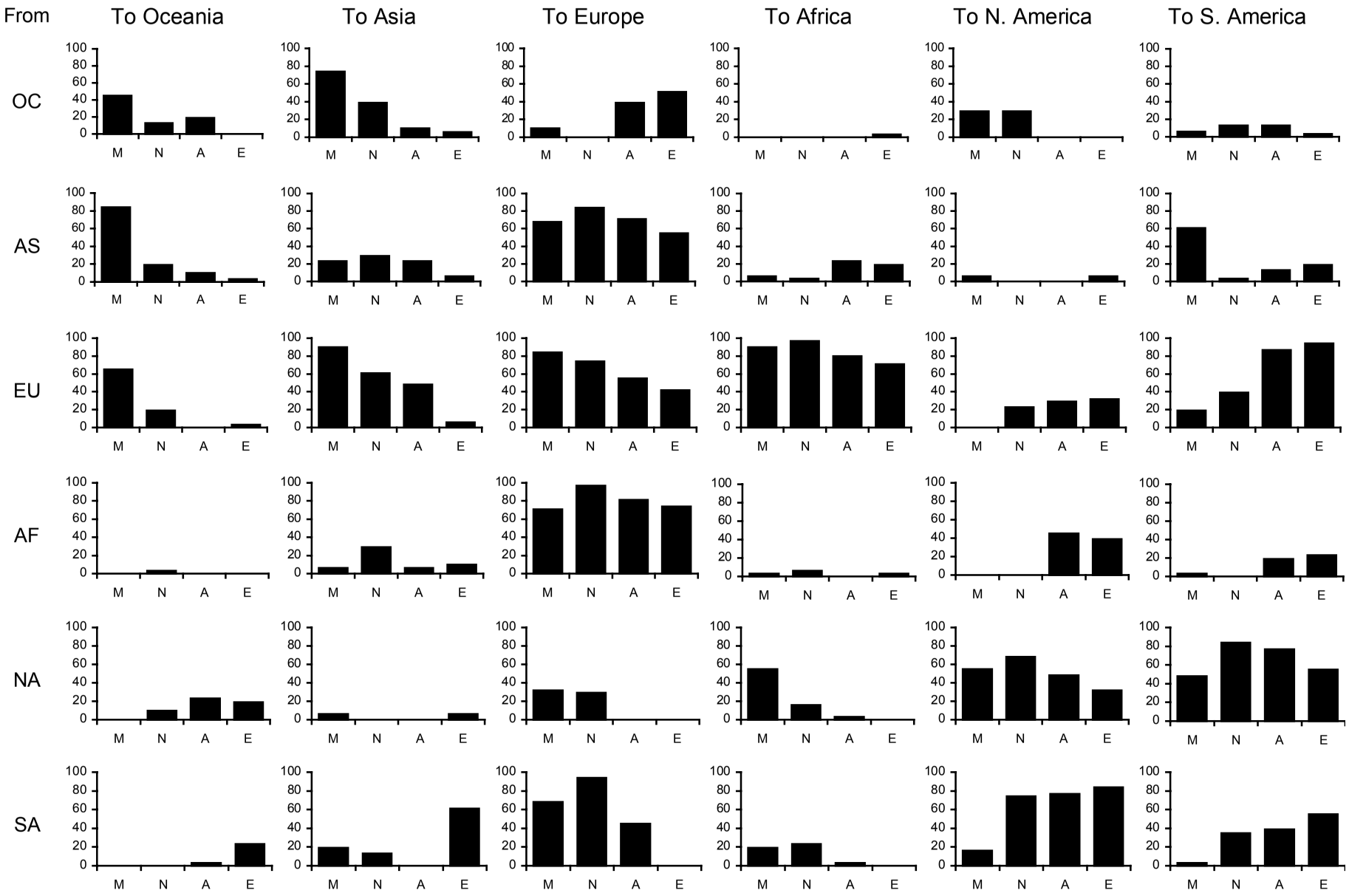
Propagation within Europe is known to have occurred every day except the 3rd, mostly by Es, but F2 was evident between the 'edges' of the continent. Auroral propagation was reported briefly on the 6th (OH5UFO>SM2LIY at 1729 on the 6th, SN2M>OH6QU 59a 1742 and OH8MBN>OH6QU 59A AT 1744)

The most reliable paths from North America were with South America, with propagation on all days and 84 per cent reliability during the North American noon period. However, one of the best openings came relatively late in the day, lasting until around 0400 on the 29th. Other paths were far from matching this, with Africa contacts known on 17 days, the Pacific on 11 and Asia on only 3 - compared with 26 days in October 2004. This included a contact between KD4AFW and JE1LET via a skewed path (beam headings not stated) at 2358 on the 7th. Contacts within North and Central America were reported on 27 days. Unusually, there was no sign of decline in South America to Asia paths, worked on 24 days to 23 in 2004. Asia to Oceania also held up well, with reports every day but three; the Asian morning period achieved 84 per cent reliability.

Finally, EA8KK was heard in Japan at 0156 on the 29th and again at 0222 on the 30th; however, contacts between Asia and Africa were noted on only twelve days.

Graphs of world-wide 28 MHz activity are on the following page

28 MHz Worldwide - October 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 and G4JCC. Compilation by G0AEV.

Systematic monitoring of the NCDXF/IARU beacon chain on 14.1 MHz was suggested by Ray G2AHU as a means of keeping track of propagation during the solar minimum. Although this is the "Six and Ten Report", propagation on 20m provides useful insights for 10m – not least to remind us of how 10 might behave at solar maximum!

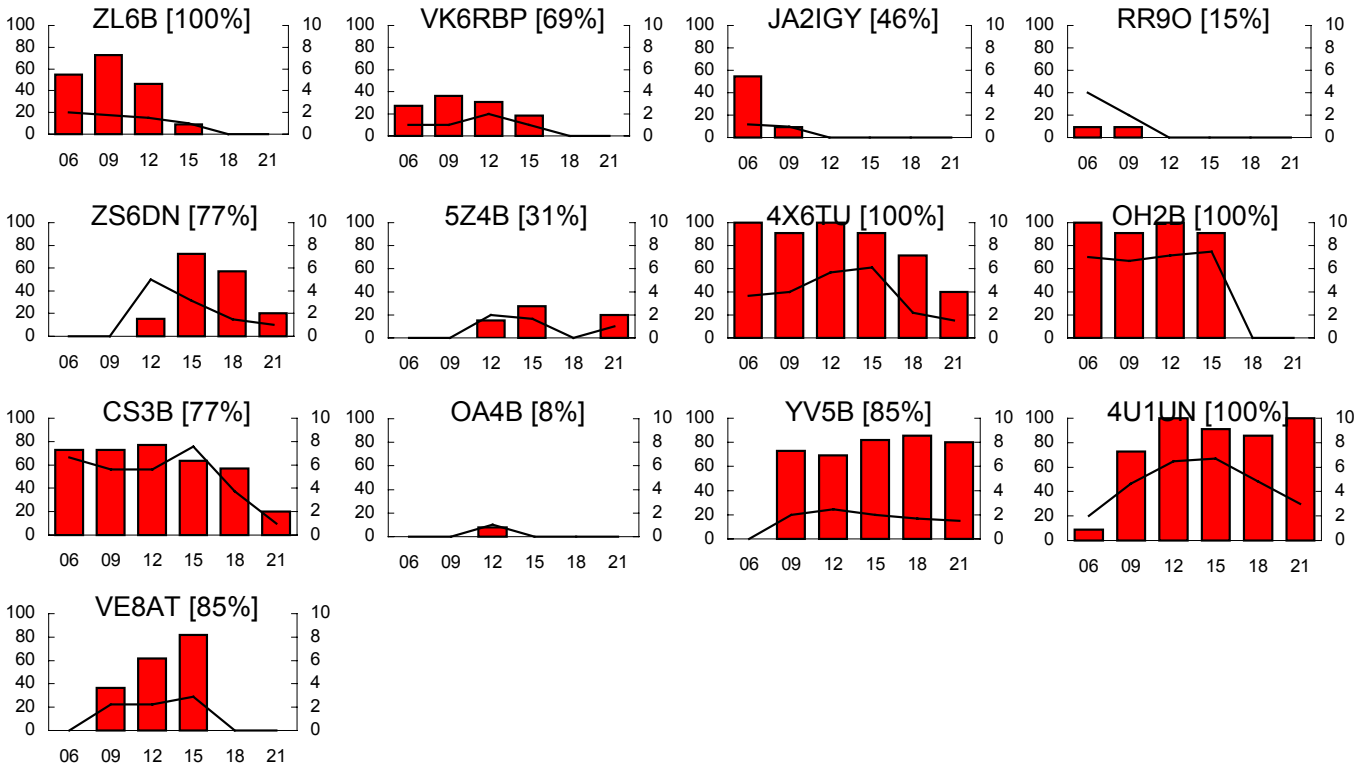
Beacon monitoring began on 19th October so the results below are for one third of October only, and, missing out the period of highest solar activity at mid-month. Geomagnetic disturbances were few and propagation this month was fairly good.

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.explore.plus.com/6and10/beacon_forms.htm.

Beacon graphs



Beacons in ZL, 4X, OH and 4U were heard and reported on every day. OA4B is not functioning properly (and may be off air most of the time). LU4AA and VR2B are currently QRT. 4S7B is probably off (one report on 10m may have been in error). RR9O may also have had outages as the results for this beacon are much poorer than expected. KH6WO is active but was not heard.