
Some statistics of the activity on 50 MHz by XE stations January 2000 - April 2001

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The Magic Band

In Mexico the Six Meter Band of 50MHz is assigned exclusively to Radio Amateurs with a bandwidth of 4MHz from 50 to 54MHz. As it is located in frequency between the 10 meter and 2 meter bands it is subject to some very interesting propagation characteristics. Whilst there are days during which absolutely nothing may be heard, on others we make very surprising contacts, for this reason it is also known as the "Magic Band".

At the time of writing there are few Mexican stations active on 6m and it is not easy to find information about their activity as contacts between Mexican stations are at the best sporadic.

The Analysis

One of the few sources of historic information available are packet cluster reports. Fortunately the site known as DX Summit (oh2aq.kolumbus.com/dxs) has available historical information which allows to find some extremely interesting data.

To realize the following analysis the past 16 months were studied. This is from 00:00 GMT on the 1st of January 2000 through to the 29th of April 2001 at 23:59 GMT.

It was necessary to filter and correct the information such as deleting self-reporting and messages and reports appearing in the space dedicated to comments were excluded. Obviously incorrect callsigns were corrected. Beacon reports were differentiated from operated stations.

Some examples of the forgoing:

Self-reporting (not considered):

[XE1KK 50130.0](#) [XE1KK](#) The band is open! 0140 19 Feb 2001

Messages (not considered):

[SV1DH 50000.0](#) [XE1KK](#) pse pass 3G0Z to look EU skewe2203 29 Mar 2001

Reports indicated in the comment zone (not considered):

[KB6NAN 50103.0](#) [3D2AG/P](#) hearing [xe1kk/b](#) he will stay o2053 19 Apr 2001

Very many callsign errors were corrected

[K6RMJ 50125.0](#) [XE2XED](#) 0417 09 May 2000

[PY2BW 50130.0](#) [XE1AVV](#) and many other XE's 0214 22 Mar 2000

Beacon reports were differentiated from operator controlled stations:

[K0YW 50023.0](#) [XE1KK](#) still 559 dn67 2028 20 Jun 2000

[V73AT 50028.0](#) [XE2UZL](#) 529 into rj38 2323 05 Nov 2000

What type of activity occurred?

During the past 16 months 442 reports were found on the DX Summit.

45% of these reports were appertaining to the reception of beacons,

	Zone 1	Zone 2	Zone 3
XE1KK/B	127		
XE2UZL/B		48	
XE2KIB/B		10	
XE2HWB/B		4	
XE3RCM/B			8
Total	127	62	8

The location and operating frequencies of these beacons can be seen from the following map.



Which stations were active?

55% of the stations reported to DX Summit were actively operated stations.

Here we found only 32 distinct active individual stations with very unequal levels of activity.

En first place is Roman XE2EED with 30 mentions, almost drawing with him is Bernado XE2HWB with 29 mentions. Other stations with more than 10 reports are: XE1KK, XE1BEF, XE1UN, XE1AVM, XE1J, XE2OR y XE1/G3SVD.

Station	Mentions	State
XE2EED	30	BC
XE2HWB	29	BCS
XE1KK	24	DF
XE1BEF	23	COL
XE1UN	20	DF
XE1AVM	19	COL
XE1J	15	COL
XE2OR	13	COA
XE1/G3SVD	12	MEX
XE1AQX	7	COL
XE1ZOI	6	MEX
XE2TG	6	SON
XE1/SM0OUG	5	MEX
XE1DNF	5	GTO
XE1FLY	4	JAL
XE2DN	4	BC
XE3EB	4	YUC
XE1D	2	DF
XE1V	2	MOR
XE2/K8HGY	2	SON
XE2BHU	2	BC
XE2SOZ	2	SON
XE1/JA8EFY	1	MEX
XE1GRR	1	JAL
XE1IK	1	MOR
XE1OT	1	DF
XE1VIC	1	MEX
XE1XX	1	DF
XE2/K0YO	1	??
XE2EV	1	NL
XE2KIB	1	COA
Total	245	12

Where is the activity?

Going by States we find that even though the states with the highest number of active stations are:- the Federal District, Baja California y the State of México, it is the state of Colima that has the most active 6m addicts, in : Hector, XE1BEF; Ismael, XE1AVM, Pepe, XE1J and Audómaro, XE1AQX.

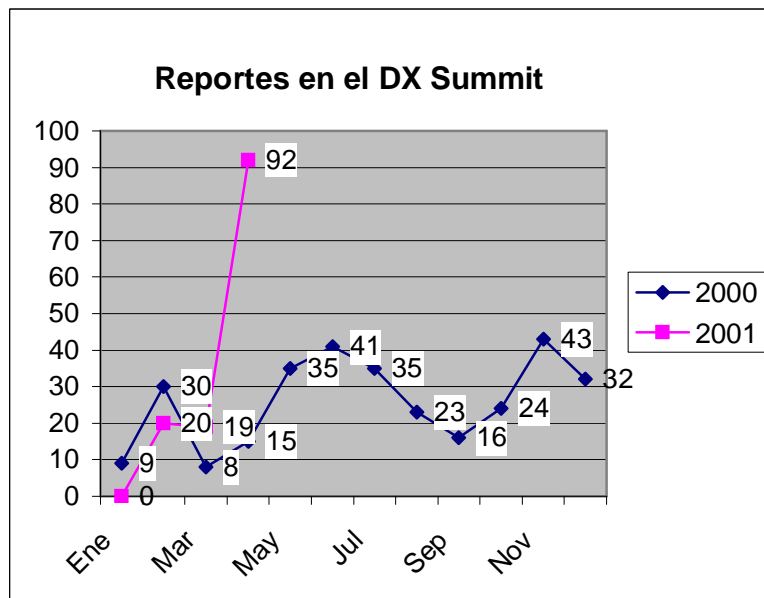
Entidad	Estaciones	Menciones
COL	4	64
DF	5	48
BS	5	36
BCS	1	29
MEX	4	25
COA	2	14
SON	3	10
GTO	1	5
JAL	2	5
YUC	1	4
MOR	2	3
NL	1	1
???	1	1
Total	32	245

An unhappy fact is that it is in only 12 states that we have found 6m activity, this is less than half of the states making up the Federal Republic.

When does the majority of the activity take place?

As the Magic Band is very cyclical it is important to consider in which months these reports on DX Summit show activity/propagation to take place.

From the following graph one can appreciate that during the period under study the majority of dx reports occurred during the months of June, July, August and November. Nevertheless it was this April when the number of mentions was extraordinarily high: 92, when, the graph shows, that in a good month the average would be about 30 mentions.



Who is reporting this activity from Mexico?

These statistics have only been obtained thanks to the stations that have reported us. On the HF bands this is desirable but on 50MHz it is indispensable if we are to take advantage of the limited periods of propagation.

Of these 442 reports exactly half, as may be expected, come from the United States. In second place is Brazil with 8% and in 3rd place Argentina with 8%. With more than 5 reports we find also Panama, Australia, Canada, Japan, Mexico and Chile.

Country	Reports	%
W	221	50%
PY	78	18%
LU	39	9%
HP	21	5%
VK	21	5%
VE	19	4%
JA	8	2%
XE	7	2%
CE	6	1%
YV	4	1%
KH6	3	1%
V7	3	1%
ZP	3	1%
HC	2	0%
ZF	2	0%
CX	1	0%
HR	1	0%
KP4	1	0%
TI	1	0%
YS	1	0%
Total	442	100%

To my great surprise I did not find any reports submitted by our friends from New Zealand, a country which many of us operating in Mexico have contacted during these 16 months. This could be because they prefer to use the 50MHz Propagation Logger (dxworld.com), another report page on the internet, rather than the DX Summit.

Many other countries have heard or worked us but we discovered this from sources other than Dx Summit and because of this, these reports are not considered in these statistics. In the case of XE1KK/B there have been reports from 3D2, 3D2/R, CP, CE0Y, CE0Z, FO, CO, OA, ZK, ZL, KH8, VR6, amongst others.

It is important to mention that 28% of all these reports which we used in this analysis were provided by only six stations. The champion reporter is, PY5CC, one of the great Dxer on this band with 36 messages. In second place is Gerardo, LU8MB always consistent and precise in his reports and the third is the very active José, HP2CWB who was the only station to report the three XE zones. Diana, KB6NAN not only gave many good reports but also consistently advised us by e-mail when there was some good DX. All these together with Jaime, PP5JD and Steve, VK3SIX allowed us to know from their reports when we may be able to make contact with them.

Station	Reports
PY5CC	36
LU8MB	30
HP2CWB	21
KB6NAN	16
PP5JD	11
VK3SIX	10
Total	124

Conclusions

- 1) Outside of a small group of very active stations there is very little Mexican Activity on Six meters.
- 2) This is one of the best moments for the band, it is now or never.
- 3) It is indispensable to submit constant and accurate reports to the Dx cluster of the stations we hear. No report is too much.

Final note: Since the publication in México of this paper two well known DXers, are now quite active on 6m: Vic, XE1VIC and David XE1/AA6RX.