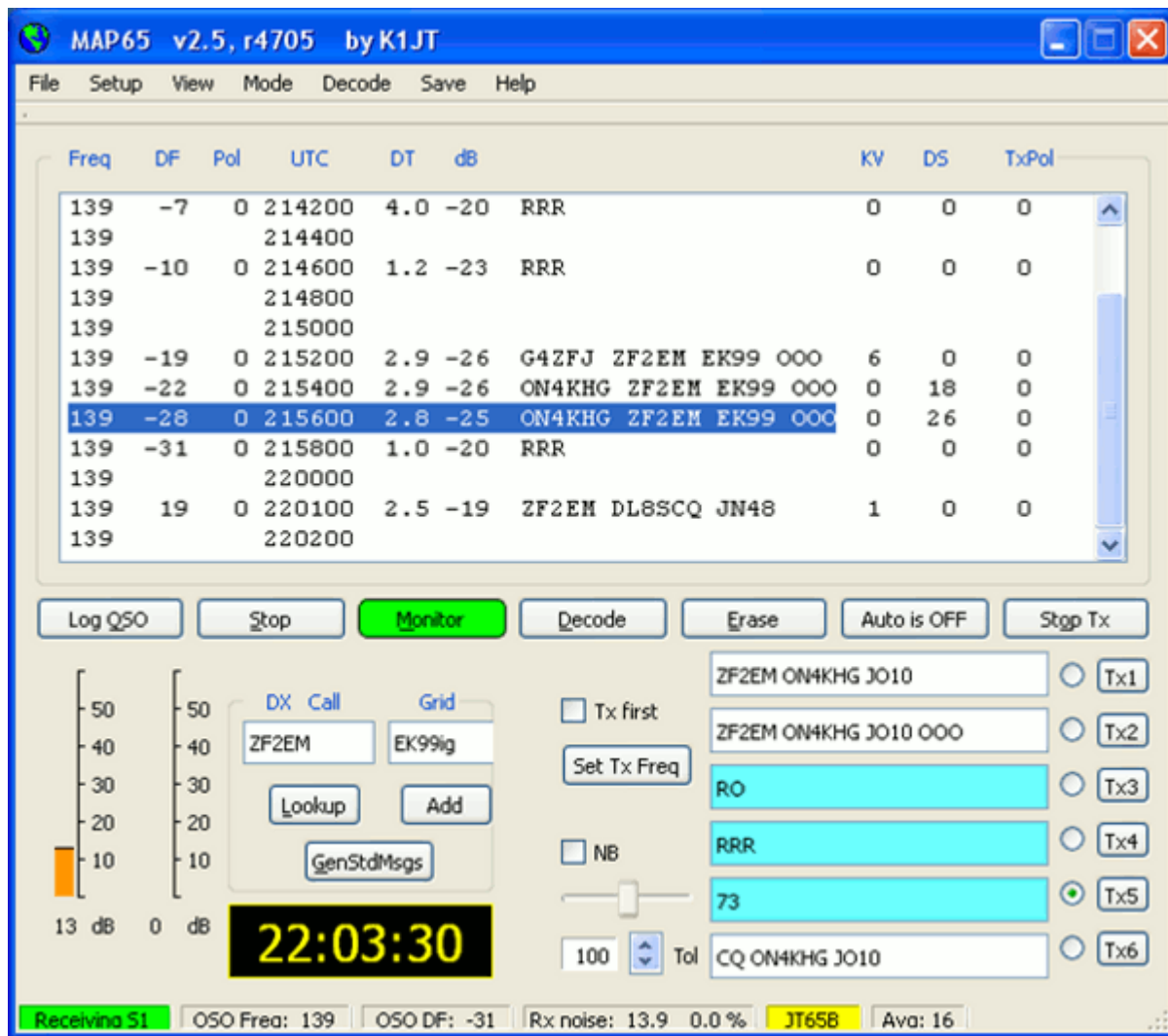


# EME 144 MHz : ZF2EM, DXCC

## #120

Fin mai 2015, Pete, N8PR et Bill, NZ5N, ont activé les îles Cayman, dans les Caraïbes, sous l'indicatif **ZF2EM**. Malgré un système d'antenne modeste et une seule polarisation (2x9 éléments verticaux) du côté des îles Cayman...et du mien, le contact a pu être établi assez facilement (niveau de signal -25 dBJT) avant un maximum de gain de sol de mon côté. Au maximum de mon lobe de gain de sol, ZF2EM était alors reçue -21 dBJT sur ma simple antenne 12 éléments sans élévation. Merci pour ce "new one".

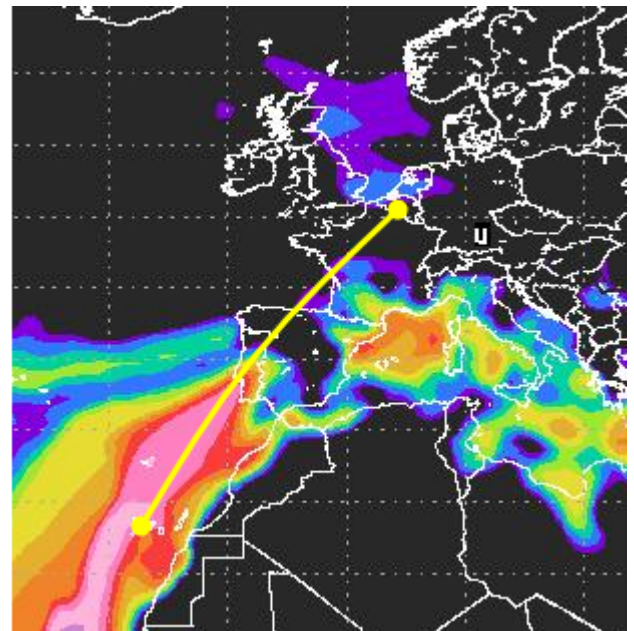
End of May 2015, Pete, N8PR and Bill, NZ5N, have activated the Cayman Islands under the callsign **ZF2EM**. Despite a moderate antenna system and a single polarization (2x9 elements vertical) on the Cayman side...and mine too, the contact has been established somehow easily (signal level -25 dBJT) before a ground gain maximum on my side. At the maximum of my ground gain lobe, ZF2EM was then -21 dBJT on my single 12 elements without elevation. Thanks for this "new one".



## Trois jours à côté du shack radio...

Profitant de l'opportunité de quelques jours de congé, avec la rénovation de la

pièce jouxtant le shack pour objectif, il était facile de surveiller ce qui se passait sur les bandes. J'ai ainsi eu la chance de réaliser quelques beaux DX's sur 144 MHz. Tout a commencé jeudi 14 mai en matinée, par un sked MS avec Fernando, EA8TX (IL18QI). En dépit de la distance de 3018 km et contre toute attente, il a été particulièrement facile de réussir le QSO en juste une heure (et sans assistance d'un chat !). Toutefois, comme dépeint à droite, il convient de mentionner que la tropo maritime entre le Portugal / Espagne et les Iles Canaries était très bonne, un prérequis pour un QSO fructueux. Durant le QSO, j'ai reçu 5 réflexions de Fernando, 3 pings (160ms/6dB, 120ms/2dB et 120ms/6dB) et 2 bursts (340ms/6dB et 4sec/7dB). Ce qui a été décodé durant la plus longue réflexion est visible sur la capture d'écran de WSJT.



WSJT 10.0 r4336a by K1JT

File Setup View Mode Decode Save Band Help

11:11:00

26.3 Time (s) Mon\_150514\_111100.WAV 1 2 3 Freq (kHz)

FileID	T	Width	dB	Rpt	DF	Decoded Text
103001	25.0	300	2	26	-28	ON4KHG EA8TX R26 R26 ON4KHG EA8TX R26 R
103001	24.3	280	2	26	-28	6 ON4KHG EA8TX R26 R26 ON4KHG EA8TX R26
103001	25.0	260	2	26	-27	ON4KHG EA8TX R26 R26 ON4KHG EA8TX R26 P
103001	25.2	780	6	26	-25	N4KHG EA8TX R26 R26 ON4KHG EA8TX R26 R26
103001	25.4	580	5	26	-25	8TX R26 R26 ON4KHG EA8TX R26 R26 ON4KHG
103001	27.1	160	1	26	-244	W0!NW # !&! 0 L W ZN0J
103001	24.3	280	2	26	-28	6 ON4KHG EA8TX R26 R26 ON4KHG EA8TX R26
103001	25.0	260	2	26	-27	ON4KHG EA8TX R26 R26 ON4KHG EA8TX R26 P
103001	22.5	160	4	26	-27	KHG EA8TX R26 R26 ON4KHG

Log QSO Stop Monitor Decode Erase Tx Stop

To radio: EA8TX Lookup  
 Grid: #18qj Add  
 Hot A: 215 Az: 223 El: 0 3017 km  
**2015 May 14 11:11:55** Dsec 0.0  
 S 1 Zap EA8TX ON4KHG Tx1  
 Tol 400 Rx ST EA8TX ON4KHG 26 26 Tx2  
 Tx First  Tx ST EA8TX ON4KHG R26 R26 Tx3  
 Rpt: 26 KHG RRRRRR Tx4  
 Gen Msgs  Auto Is OFF KHG 73 73 Tx5  
 CQ 391 ON4KHG Tx6

1.0000 1.0001 FSK441 Freeze DF: 0 Rx noise: 9 dB T/R Period: 30 s Receiving

Dans l'après-midi, quelques OH on été contactés en Es sur 70 MHz. Le jour suivant, hormis 2 nouveaux initials EME sur 144 MHz en mode numérique (SP5QAT et KB7Q), il y a eu une belle et longue ouverture Es sur 70 MHz. 9H et LZ ont été tous les deux contactés comme nouveaux DXCC's sur cette bande. 9H1BT arrivait particulièrement bien 59+++ pendant plusieurs heures. Ecoutez-le ici :

<http://on4khg.be/wordpress/wp-content/uploads/2015/05/9H1BT-4m-Es-15052015.mp3>



Martin, GM6VXB/P, situé sur l'île North Rona dans le carré "maritime" I079CC a été suffisamment sympa d'accepter une demande de sked MS avec moi. Nous avons débuté le QS0 et j'ai reçu le signal de Martin durant toute une période ; il m'envoyait un rapport de 58 ! Il s'est vite avéré qu'il y avait des conditions tropo entre nous, sur un trajet de 1130 km. Nous avons réalisé le QS0 en SSB et échangé des rapports de 52/53. Bien que les cartes de William Hepburn prédisaient quelques conditions tropo, ce beau QS0 était également quelque peu inattendu. Un grand merci à Martin. Je suis d'autant plus content de ce QS0 que je suis

fasciné par les îles isolées (écossaises). North Rona est à présent inhabitée mais elle l'a été dans le passé ; comment les gens pouvaient-il survivre dans cet environnement hostile ?

La longue ouverture Es sur 70 MHz a finalement atteint une MUF (Maximum Usable Frequency) de 144 MHz dans l'après-midi et SV2DCD, SV6KRV et SV6KRW ont été contactés sur 2m. Après une saison 2014 sans Es, c'était appréciable d'en profiter à nouveau. Ecoutez les signaux de George et Apostolos :

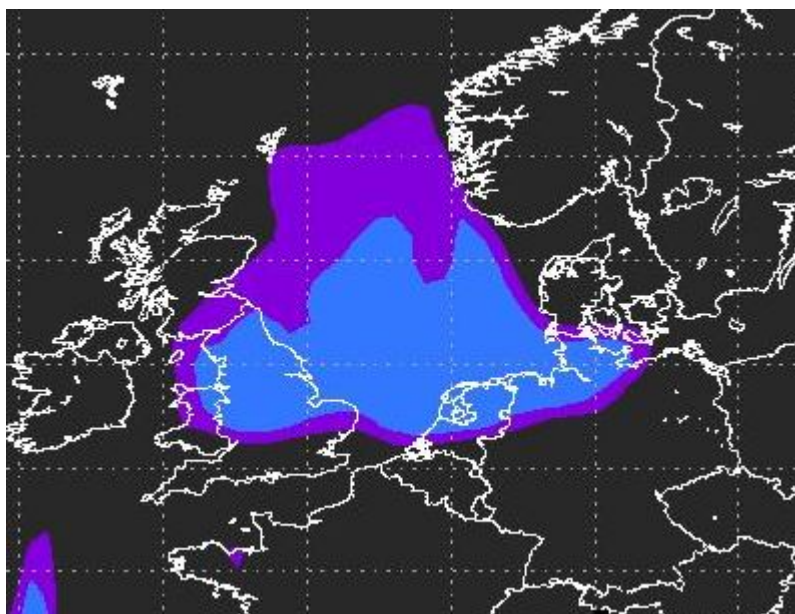
<http://on4khg.be/wordpress/wp-content/uploads/2015/05/SV6KRW-2>

[m-Es-15052015.mp3](#)

<http://on4khg.be/wordpress/wp-content/uploads/2015/05/SV6KRV-2m-Es-15052015.mp3>

Finalement, dans la soirée, quelques OZ ont été contactés sur 144 MHz avec des signaux puissants, particulièrement Dan OZ1BEF, résultat des bonnes conditions tropo au-dessus de la Mer du Nord et qui se sont déplacées vers l'Est. Au même moment, la balise SK6VHF était reçue 599 mais aucune station SM entendue.

Samedi, OE6IWG était contacté comme nouveau initial en EME numérique sur 144 MHz. Le dernier QSO avec Walter remonte à 1998 ; il s'agissait d'un QSO MS en HSCW (High Speed CW), au cours de l'ère "pre-FSK441". Comme cerise sur le gâteau, Jorgen, OZ1HNE, a été contacté en EME CW pendant l'ATP



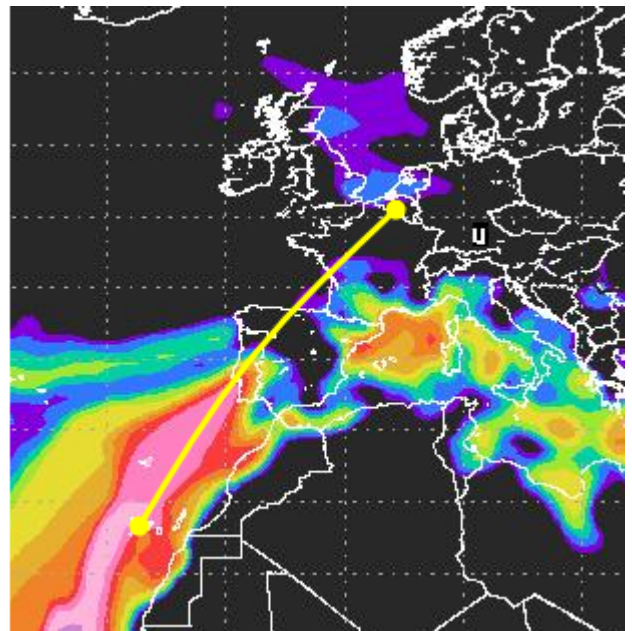
(Activity Time Period), dans le plus pur style random. Jorgen possède une superbe réception, capable d'extraire du bruit mon signal à ERP très modérée. Enfin, les travaux dans la pièce d'à-côté ont progressé dans le bon sens ;o)



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[Three days close to the radio shack...](#)

Taking the opportunity of a few days off, with renovating the room next door to the shack as objective, it was easy to monitor what was going on the bands. Hence, I have been lucky enough to work some nice DX's on 144 MHz. It all started on Thursday May 14th in the morning, with a MS sked with Fernando, EA8TX (IL18QI). Though the 3018 km distance, it unexpectedly succeeded quite easily, in just one hour (and without any chat assistance !). However, as depicted on the right, it is worth to mention that the sea tropo between Portugal / Spain and the Canary Islands was very good, a prerequisite to a successful MS QSO. During the QSO, I received 5 reflections from Fernando, 3 pings (160ms/6dB, 120ms/2dB and 120ms/6dB) and 2 bursts (340ms/6dB and 4sec/7dB). What has been decoded from the longest reflection is shown on the WSJT screenshot.



WSJT 10.0 r4336a by K1JT

File Setup View Mode Decode Save Band Help

11:11:00

26.3 Time (s) Mon\_150514\_111100.WAV 1 2 3 Freq (kHz)

FileID	T	Width	dB	Rpt	DF	Decoded Text
103001	25.0	300	2	26	-28	ON4KHG EA8TX R26 R26 ON4KHG EA8TX R26 R
103001	24.3	280	2	26	-28	6 ON4KHG EA8TX R26 R26 ON4KHG EA8TX R26
103001	25.0	260	2	26	-27	ON4KHG EA8TX R26 R26 ON4KHG EA8TX R26 P
103001	25.2	780	6	26	-25	N4KHG EA8TX R26 R26 ON4KHG EA8TX R26 R26
103001	25.4	580	5	26	-25	8TX R26 R26 ON4KHG EA8TX R26 R26 ON4KHG
103001	27.1	160	1	26	-244	W0!NW # !&! 0 L W ZN0J
103001	24.3	280	2	26	-28	6 ON4KHG EA8TX R26 R26 ON4KHG EA8TX R26
103001	25.0	260	2	26	-27	ON4KHG EA8TX R26 R26 ON4KHG EA8TX R26 P
103001	22.5	160	4	26	-27	KHG EA8TX R26 R26 ON4KHG

Log QSO Stop Monitor Decode Erase Tx Stop

To radio: EA8TX Lookup  
Grid: #18qj Add  
Hot A: 215 Az: 223 El: 0 3017 km  
2015 May 14 11:11:55 Dsec 0.0

S 1 Zap EA8TX ON4KHG Tx1  
Tol 400 Rx ST EA8TX ON4KHG 26 26 Tx2  
Tx First Tx ST EA8TX ON4KHG R26 R26 Tx3  
Rpt: 26 KHG RRRRRR Tx4  
Gen Msgs Auto is OFF KHG 73 73 Tx5  
CQ 391 ON4KHG Tx6

1.0000 1.0001 FSK441 Freeze DF: 0 Rx noise: 9 dB T/R Period: 30 s Receiving

In the afternoon, a few OH stations have been worked on 70 MHz in Es. The following day, beside 2 new 144 MHz EME initials worked in digi mode (SP5QAT and KB7Q), there has been a nice and long Es opening on 70 MHz. 9H and LZ have been both worked as new DXCC's on that band. 9H1BT was coming in 59+++ for several hours. Listen to him here :

<http://on4khg.be/wordpress/wp-content/uploads/2015/05/9H1BT-4m-Es-15052015.mp3>



Martin, GM6VXB/P, located on North Rona island in the "wet" square I079CC was kind enough to accept a MS sked request with me. We started the QSO and I received a full period signal from Martin, sending me a 58 report ! It quickly turned out that there were tropo conditions between us, over that 1130 km path. We made the QSO in SSB and exchanged 52/53 reports. Though the William Hepburn maps were predicting some tropo enhancement, this nice QSO was somehow unexpected too. A big thank to Martin. I'm even more pleased of it that I'm fascinated by these isolated (Scottish) islands. North Rona is now uninhabited but it has been in the past ; how

could people survive in such harsh conditions ?

The long lasting 70 MHz Es opening eventually reached a MUF (Maximum Usable Frequency) of 144 MHz in the late afternoon and SV2DCD, SV6KRV and SV6KRW have been worked on 2m. After the Es-less 2014 season, it was pleasant to work Es again. Listen to George and Apostolos' signals :

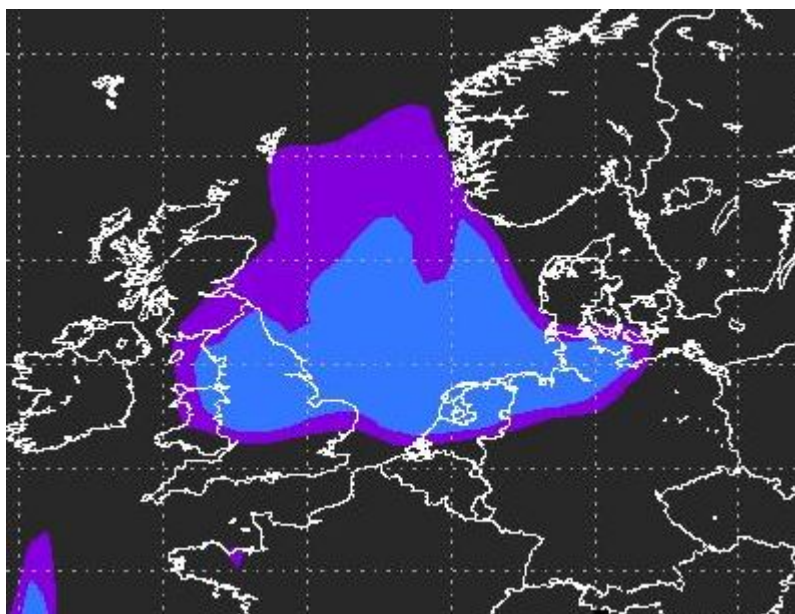
<http://on4khg.be/wordpress/wp-content/uploads/2015/05/SV6KRW-2>



[m-Es-15052015.mp3](#)

<http://on4khg.be/wordpress/wp-content/uploads/2015/05/SV6KRV-2m-Es-15052015.mp3>

Finally, in the evening, a few OZ's were worked on 144 MHz with strong signals, especially Dan OZ1BEF, as a result of the tropo enhancement over the North Sea having moved eastwards. At the same time, the SK6VHF beacon was received 559 but no SM station heard around. On Saturday, OE6IWG was worked in digi EME as a new initial on 144 MHz. The last QSO with Walter dates back from 1998 ; it was a MS QSO in HSCW (High Speed CW), during the "pre-FSK441" era. As a cherry on the cake, Jorgen, OZ1HNE, was worked in CW EME during the ATP



(Activity Time Period), in a pure random style. Jorgen has a superb reception, being able to dig out my very moderate ERP signal out of the noise. Last but not least, the works in the room have progressed the right way ;o)



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## EME 144 MHz : 7Q7EME, DXCC #119

En mai 2015, Eltje, PA3CEE, Hermann, DL2NUD et Rene, PE1L ont été actifs depuis le (lac) Malawi dans le sud de l'Afrique. Le célèbre Atletico team utilisait l'indicatif **7Q7EME**. J'ai pu (facilement) les contacter durant leur premier passage de lune. Un grand merci pour un DXCC de plus les gars !

In May 2015, Eltje, PA3CEE, Hermann, DL2NUD and Rene, PE1L have been active from Malawi (lake) in the South of Africa. The famous Atletico team was using the callsign **7Q7EME**. I have been able to (easily) work them on their first moonpass. Big thanks guys for one more DXCC worked !

The screenshot shows the MAP65 software interface. At the top, the title bar reads "MAP65 v2.5, r4705 by K1JT". Below the title bar is a menu bar with "File", "Setup", "View", "Mode", "Decode", "Save", and "Help".

The main display area contains a table of received signals with the following columns: Freq, DF, Pol, UTC, DT, dB, KV, DS, and TxPol. The table lists several signals, with the one at 070400 kHz highlighted in blue.

Freq	DF	Pol	UTC	DT	dB	KV	DS	TxPol
134			065000					
134	-81	0	065200	6.6	-21	RRR	0	0
134			065400					
134	-90	0	065600	0.6	-21	RRR	0	0
134	-93	0	065800	2.4	-23	DL8MAI 7Q7EME KH77 OOO	1	0
134	-99	0	070000	3.8	-20	RRR	0	0
134			070200					
134	-105	0	070400	2.5	-25	ON4KHG 7Q7EME KH77 OOO	1	59
134	-108	0	070600	0.6	-20	RRR	0	0
129	-208	0	070800	2.3	-25	CQ OE6IWG JN77	1	66
129	-208	0	071000	2.3	-23	CQ OE6IWG JN77	0	21

Below the table are several control buttons: "Log QSO", "Stop", "Monitor" (highlighted in green), "Decode", "Erase", "Auto is ON" (highlighted in red), and "Stop Tx".

On the left side, there are two vertical scales for signal strength, ranging from 0 dB to 50 dB. A digital display shows "07:12:06".

On the right side, there are several input fields and buttons for transmitting. The "Tx1" field contains "OE6IWG ON4KHG JO10". Other fields contain "OE6IWG ON4KHG JO10 OOO", "RO", "RRR", "73", and "CQ ON4KHG JO10".

At the bottom, a status bar shows "Receiving S1", "OSO Freq: 129", "OSO DF: -207", "Rx noise: 13.8 0.0%", "JT65B", and "Ava: 0".

## Subregional VHF contest of May 2015

During the WE of May 2nd and 3rd, 2015, I have been partly taking part to the VHF subregional contest. Not very good propagation, except perhaps towards South-East (see below a recording of IZ1P0A), and a very little participation of French and British stations (these lasts were not in contest however this WE).

# QSO's : 175

Points : 71620

# DXCC : 12 (I, G, F, EA, HB9, OE, OK, OZ, SM, DL, ON, PA)

# WWL : 65

Average km/QSO : 409,3

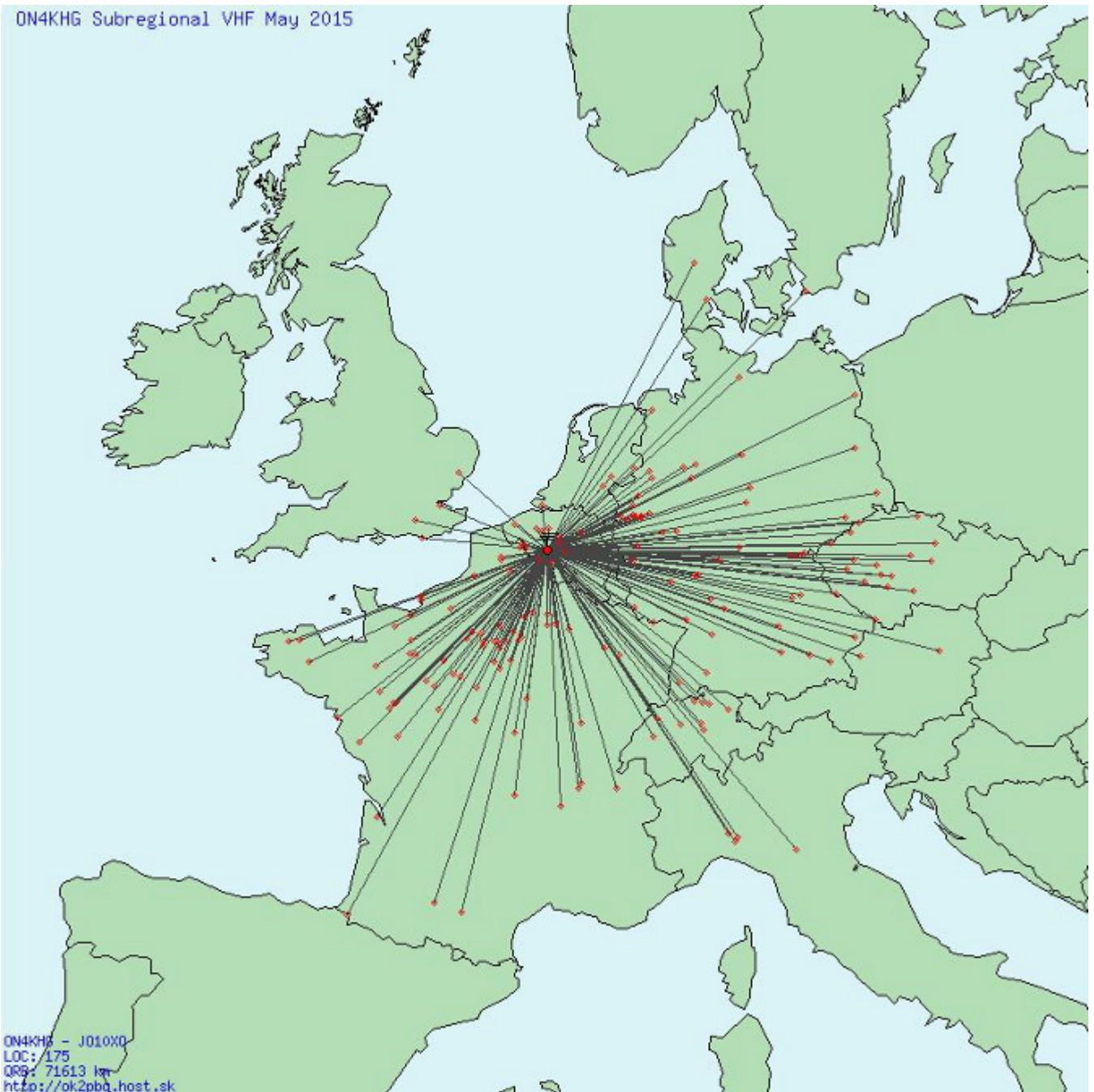
Top 10 DX QSO's :

EA2TO	IN93GF	916 km
OE1W	JN77TX	893 km
IQ4AX	JN54KK	859 km
OK1KHL	J080AC	858 km
OK1KCR	JN79VS	846 km
OL4K	J070TQ	821 km
F6DR0	JN03TJ	820 km
F4CWN	JN03KN	816 km
OK1KKI	JN79NF	813 km
SK7MW	J065MJ	807 km

Listen to the signal of **IZ1P0A** (JN440Q – 766 km) :

<http://on4khg.be/wordpress/wp-content/uploads/2015/05/IZ1P0A-03052015.mp3>

ON4KHG Subregional VHF May 2015



ON4KHG - J010X0  
LOC: 175  
QRG: 71613 kHz  
<http://ok2pbq.host.sk>