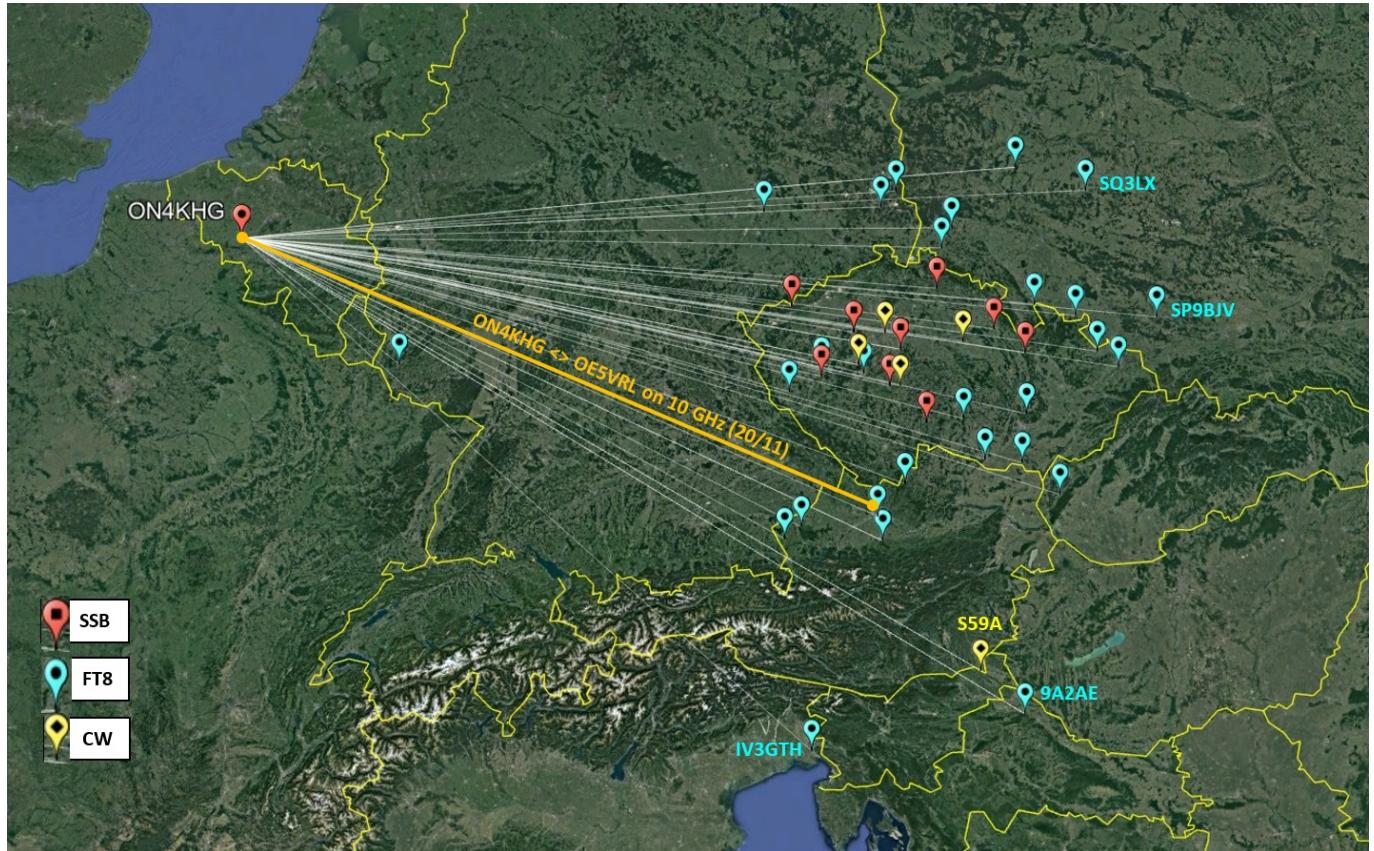


# Tropo 144 MHz & 10 GHz

## Novembre/er 2021

Belle ouverture Tropo ces 19, 20 et 21 novembre 2021. Depuis chez moi, pas de super DX's possibles (juste un peu plus de 1000 km) mais des signaux assez forts, surtout vers OK. La carte ci-dessous montre les QSO's réalisés, en CW, SSB et FT8 sur 144 MHz. La cerise sur le gâteau fût le QSO en CW avec S59A (JN76XQ), 519/519. Le 10 GHz s'est également ouvert. Après deux tentatives infructueuses, la troisième sur 10 GHz avec Rudi, OE5VRL, fût la bonne ! Nous avons fait QSO sur 10.368,120 MHz en CW 559/539. La distance entre JN78DK et J010X0 (mon QRA locator) est de 783 km. C'est évidemment mon nouveau record de distance en Tropo sur 10 GHz ! Merci à Matej, OK1TEH, de m'avoir averti de la présence de Rudi sur l'air.

Nice Tropo opening these 19, 20 and 21 November 2021. From my location, no super DX's possible (just over 1000 km) but quite strong signals, especially towards OK. The map below shows the QSO's made, in CW, SSB and FT8 on 144 MHz. The icing on the cake was the CW QSO with S59A (JN76XQ), 519/519. 10 GHz also opened up. After two unsuccessful attempts, the third one on 10 GHz with Rudi, OE5VRL, was the right one ! We made a QSO on 10.368,120 MHz in CW 559/539. The distance between JN78DK and J010X0 (my QRA locator) is 783 km. This is obviously my new distance record in Tropo on 10 GHz ! Thanks to Matej, OK1TEH, for alerting me on Rudi's presence on the air.



# Marconi Memorial VHF CW Contest 2021

Compte rendu du contest MMC VHF des 6 et 7 novembre 2021 ; il s'agit du seul contest VHF dédié uniquement à la télégraphie (CW), et un de mes préférés !

Le samedi, jusque début de soirée, j'ai opéré la station OR6T (J020KV), à 100 km de la maison. Belle station de contest, très compétitive ! J'étais accompagné de Karel, ON4FI. De retour à la maison, j'ai opéré durant 2 heures, à la recherche des DX's uniquement, pas de CQ's. Déjà 4 QSO's à plus de 800 km, dont OK1KTW (908 km) et IK4PMB (859 km). Après la nuit, retour aux affaires le dimanche dès 7h UTC. Et ce, jusqu'à la fin du contest, à l'exception d'une heure d'arrêt. Au total donc, 5 heures d'activité depuis OR6T et 8 heures depuis ma station personnelle. Dès la reprise le dimanche, OM2Y (990 km) et OM3KII (1005 km) sont dans le log ! Je suis

fort sollicité sur "KST", mais j'ai fait beaucoup de DX's sans prise de sked, en total random, ce que je préfère. Essai avec 9A2AE (1051 km, JN86HF), j'entends Zvonko assez pour faire un QSO, mais lui ne m'entend malheureusement pas. La propagation me semble un peu au-dessus de la moyenne, tous azimuths. La bande est peu bruyante et les signaux sont relativement forts. Toujours en mode recherche des DX's (mode S&P), les QSO's s'enchainent. IQ5NN en JN63GN (1016 km) est dans le log, ce sera mon meilleur DX du contest. D'autres stations italiennes (6 en tout) seront contactées, plus de 20 stations OK aussi. Guy, F2CT (900 km), et quelques stations de la région de Toulouse seront aussi dans le log. J'étais majoritairement tourné vers l'est, direction dans laquelle il y a habituellement le plus d'activité. A part quelques CQ's en fin de contest, 95% du trafic a été réalisé en S&P, ce qui explique le nombre limité de contacts, mais aussi une moyenne par QSO de près de 600 km. Contest très plaisant donc, je ne m'y suis pas ennuyé une seule seconde ! Le Top 10 DX QSO's et la carte montrés ici ne concernent que le trafic réalisé depuis la maison.

Station utilisée : 2x9 él. DK7ZB et 1,2kW

Report of the VHF MMC contest of November 6 and 7, 2021; it is the only VHF contest dedicated only to telegraphy (CW), and one of my favorites !

On Saturday, until early evening, I operated the OR6T station (J020KV), 100 km from home. Nice contest station, very competitive ! I was accompanied by Karel, ON4FI. Back at home, I operated for 2 hours, looking for DX's only, no CQ's. Already 4 QSO's at more than 800 km, including OK1KTW (908 km) and IK4PMB (859 km). After the night, back to business on Sunday as from 7h UTC. And this until the end of the contest, with the exception of a one-hour break. In total, 5 hours of activity from OR6T and 8 hours from my personal station. As soon as I resumed on Sunday, OM2Y (990 km) and OM3KII (1005 km) were in the log ! I'm much requested on KST, but I did a lot of DX's without sked, in total random, which I prefer. Trial with 9A2AE (1051 km, JN86HF), I can hear Zvonko enough to make a QSO, but unfortunately he can't hear me. The propagation seems to be a little above average, all azimuths. The band is not very noisy and the signals are relatively strong. Still searching for DX's (S&P mode), the QSO's are following one after the other. IQ5NN in JN63GN (1016 km) is in the log, it will be my best DX of the contest. Other Italian stations (6 in all) will be contacted, more than 20 OK stations too. Guy, F2CT (900 km), and some stations in the Toulouse area will also be in the log. I was mostly heading East, the direction in which there is usually the most activity. Apart from a few CQ's at the end of the contest, 95% of the traffic was in S&P, which explains the limited

number of contacts, but also an average per QSO of almost 600 km. Very pleasant contest, I was not bored for a second ! The Top 10 DX QSO's and the map shown here are only for the traffic made from home.

Station used : 2x9 el. DK7ZB and 1,2kW

# QSO's : 76

Points : 45453

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

# WWL : 40

Average km/QSO : 598

Top 10 DX QSO's :

IQ5NN	JN63GN	1016 km
OM3KII	JN88UU	1005 km
OM2Y	JN88RS	990 km
IK4ZHH	JN63AX	955 km
OK1KTW	JN89IW	908 km
F2CT	IN93GJ	900 km
IW5BUX	JN54PF	897 km
IK5AMB	JN54PF	897 km
OL5M	J080FF	885 km
IK4PMB	JN54MM	859 km



# **IARU Region 1 U/SHF Contest**

## **2021 – 10 GHz**

Compte rendu du contest IARU R1 U/SHF des 2 et 3 Octobre 2021 (bande 10 GHz). J'ai été actif environ 9 heures sur les 24 que compte le contest. Il y a exactement 20 ans que je n'avais plus participé à un contest hyperfréquences ! A l'époque, c'était uniquement en portable. Depuis août 2021, j'ai remonté une station 10 GHz en fixe à

la maison. Cette station est certes modeste (2,5W et une parabole Procom prime focus de 48 cm de diamètre), mais semble répondre pleinement aux attentes. N'étant actif que sur 144 MHz et 10 GHz, il ne m'était pas possible durant ce contest de monter successivement d'une bande vers la bande de fréquence supérieure. Aussi, la majorité des skeds ont été pris sur le chat d'ON4KST, à l'exception de quelques QSO's réalisés en random, grâce au rain-scatter largement présent ce WE de contest. Sur les 22 QSO's réalisés, exactement la moitié ont été faits en CW ! En fin de contest, j'ai tenté un QSO avec Rudi, OE5VRL (plus de 780 km de distance, ce qui est énorme sur 10 GHz) ; nous nous sommes entendus mais n'avons pas pu malheureusement compléter le QSO (en airplane-scatter, "AS"). A part un QSO avec F6DKW, aucune (ou presque) activité en France. Surprenant pour un contest IARU. Les journées d'activité hyper semblent recueillir bien plus de succès.

Station utilisée : parabole PF Procom de 48 cm et 2,5W

Report of the IARU R1 U/SHF contest of October 2nd and 3rd 2021 (10 GHz band). I was active for about 9 hours out of the 24 hours of the contest. It has been exactly 20 years since I last participated in a microwave contest ! At that time, it was only in portable. Since August 2021, I have set up a fixed 10 GHz station at home. This station is admittedly modest (2.5W and a 48 cm diameter Procom prime focus dish), but seems to fully meet the expectations. Being active only on 144 MHz and 10 GHz, it was not possible for me during this contest to successively move up one band to the higher frequency band. So, most of the skeds were taken on the ON4KST chat, except for a few QSO's made in random, thanks to the rain-scatter widely present this contest WE. On the 22 QSO's made, exactly half were made in CW ! At the end of the contest, I tried a QSO with Rudi, OE5VRL (more than 780 km distant, which is huge on 10 GHz); we heard each other but unfortunately could not complete the QSO (in airplane-scatter, "AS"). Apart from a QSO with F6DKW, no (or almost no) activity in France. Surprising for an IARU contest. The hyper activity days seem to be much more successful.

Station used: 48 cm Procom PF dish and 2.5W

# QSO's : 22

Points : 4658

# DXCC : 5 (G, F, PA, DL, ON)

# WWL : 12

Average km/QSO : 212

Top 10 DX QSO's :

DR9A	JN48EQ	382 km
G40DA	I092WS	370 km
PI4GN	J033II	359 km
DL3IAE	JN49DG	343 km
DL3IAS/P	JN49B0	317 km
DF0MU	J032PC	285 km
G4ZTR	J001KW	260 km
G0WZV	J001KV	258 km
G3XDY	J002OB	250 km
F6DKW	JN18CS	239 km





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# IARU Region 1 VHF Contest

## 2021

Compte rendu du contest IARU R1 VHF des 4 et 5 septembre 2021. J'ai été actif environ 15 heures sur les 24 que compte le contest. Comme d'habitude, je me suis attaché principalement à chercher les DX's (mode "S&P"), pas à faire beaucoup de QSO's, même si j'ai quand-même appelé "CQ" de temps-en-temps (avec quelques pile ups à la clé). Il restait un peu de la bonne propagation des jours précédents sur la Mer du Nord, mais aussi vers l'Est. Enfin, l'ère "covid" semble derrière nous, il y a longtemps que nous n'avions plus vécu un contest avec autant d'activité. C'était un réel plaisir ! Au final, 20 DXCC et 90 WWL contactés en un contest ! Un sked tenté avec 0Y9JD, nous nous sommes entendus mais n'avons pas pu compléter le QSO

malheureusement. Particulièrement content aussi du QSO avec F6KEH/P en JN13LP, dans le département 34. Département avec lequel c'était mon 1er QSO tropo en 34 ans d'activité VHF !

Station utilisée : 2x9 él. DK7ZB et 1,2kW

Report of the IARU R1 VHF contest of September 4th and 5th 2021. I was active for about 15 hours out of the 24 hours of the contest. As usual, I was mainly looking for DX's ("S&P" mode), not doing many QSO's, even if I did call "CQ" from time to time (with a few pile ups). There was still some of the good propagation of the previous days over the North Sea, but also towards the East. Finally, the "covid" era seems to be behind us, it's been a long time since we experienced a contest with so much activity. It was a real pleasure ! In the end, 20 DXCC and 90 WWL contacted in one contest ! A sked attempted with 0Y9JD, we heard each other but unfortunately could not complete the QSO. Particularly happy also with the QSO with F6KEH/P in JN13LP, in the department 34. Department with which it was my 1st QSO in 34 years of VHF activity !

Station used : 2x9 el. DK7ZB and 1,2kW

# QSO's : 222

Points : 103727

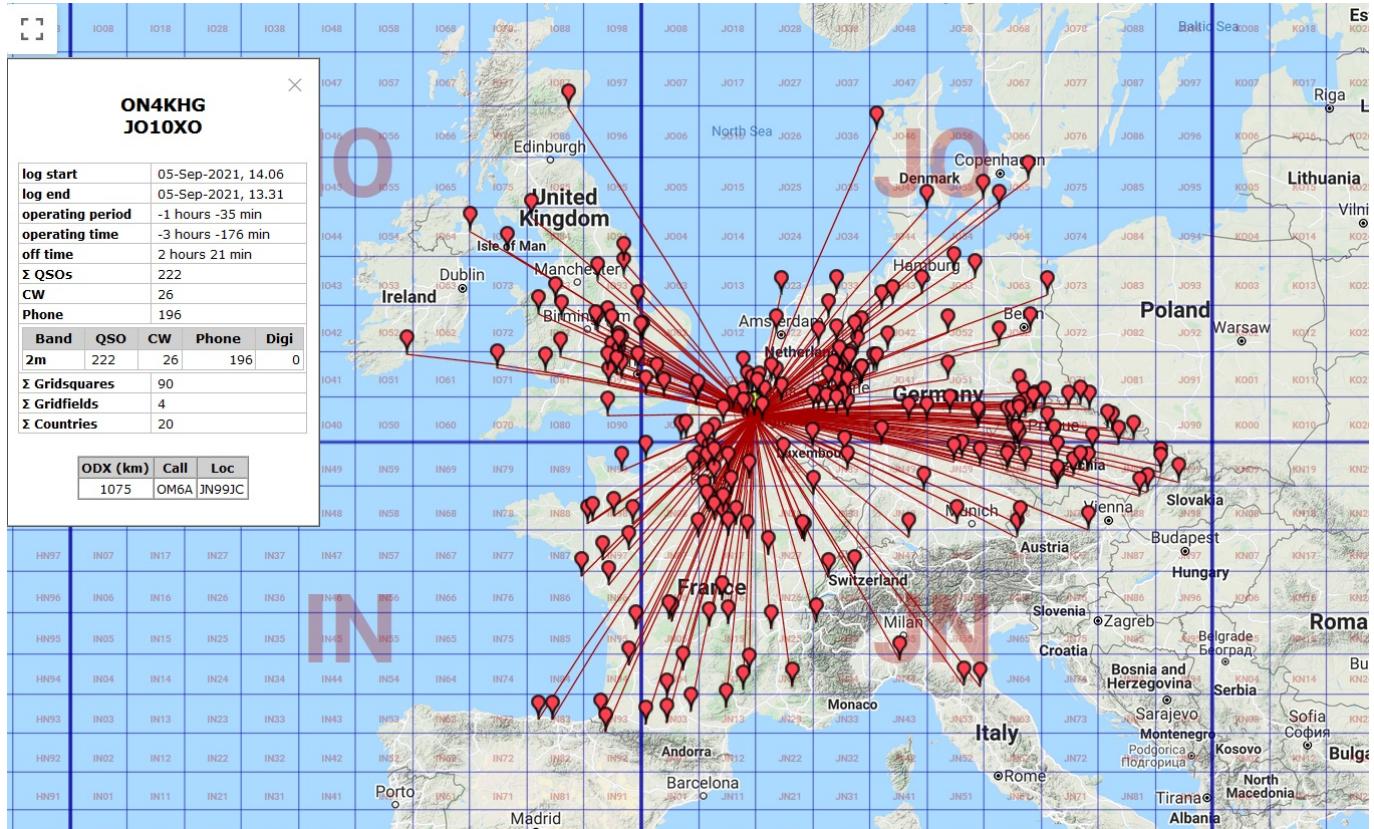
# DXCC : 20 (G, GM, GI, GW, GD, EI, LX, HB9, I, OE, OK, OM, DL, ON, PA, F, EA, SP, SM, OZ)

# WWL : 90

Average km/QSO : 467

Top 10 DX QSO's :

OM6A	JN99JC	1074 km
OM3W	JN99CH	1027 km
OL9W	JN99CL	1023 km
OM3KII	JN88UU	1005 km
OM2Y	JN88RS	990 km
EA1SA	IN83EI	989 km
EA2XR	IN83KI	967 km
OK6M	J0800B	941 km
EA2T	IN93IA	932 km
I02V	JN54WE	928 km



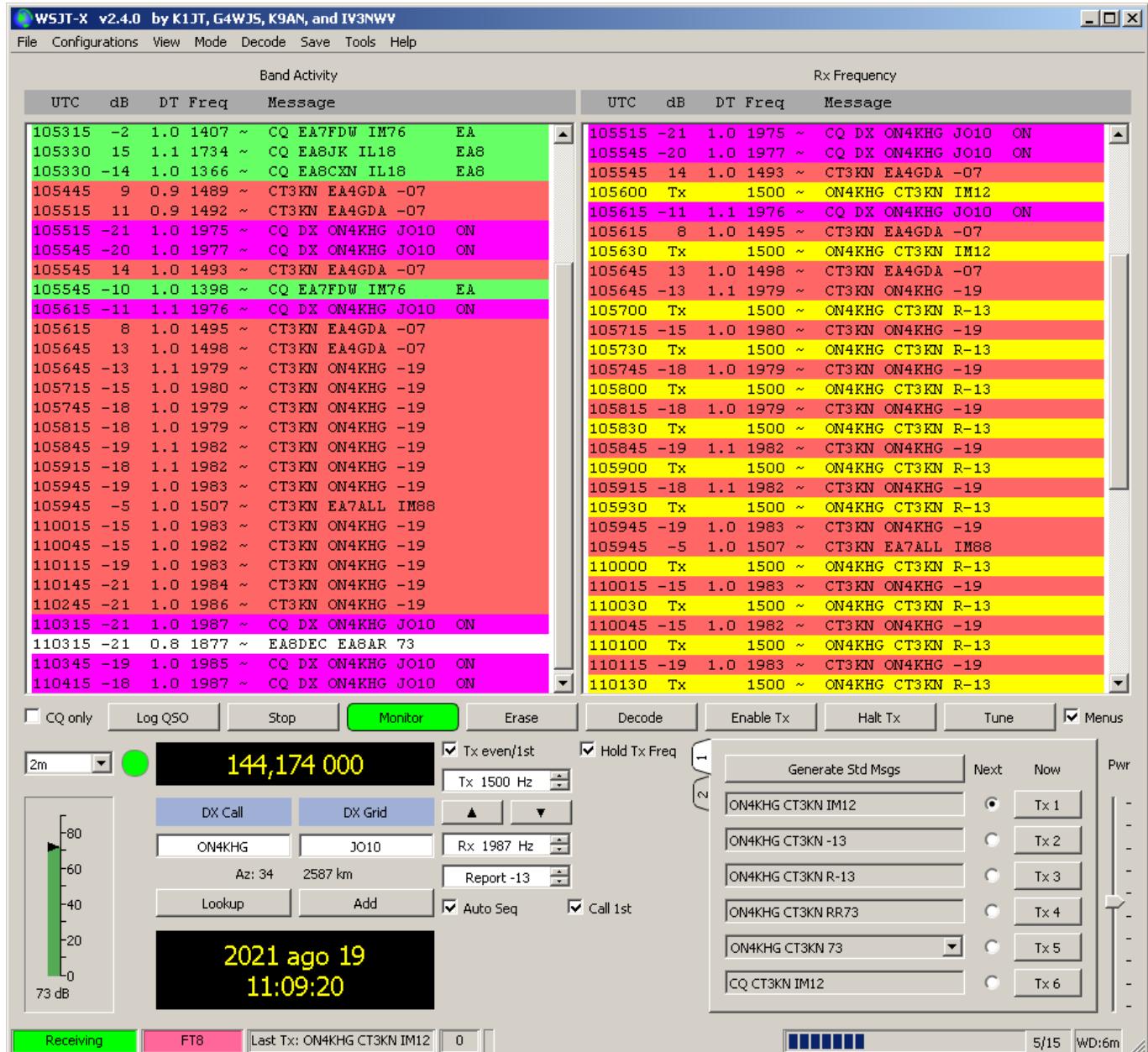
## CT3 <> ON Tropo path on 144 MHz

On August 19th, 2021, I had the surprise to see "CT3KN" (IM12MT) on my screen in FT8 on 144 MHz at 10:56 UTC. Unfortunately, we couldn't make a 2 ways QSO over that 2614 km path, 2-3 dB were missing to achieve it ! In 2011 and 2019, I already worked the Azores Islands (CU8) on 144 MHz in Tropo. Nevertheless, I never thought the path to CT3 (Madeira Island) would ever been possible. Indeed, if the sea propagation seems sometimes without "limits" (see the QSO's on 144 MHz between D4 and EA8 and the Caribbean Islands), when there is land in between, that is another story. If on the path to the Azores the amount of land is very limited, on the path to Madeira, there is about 750 km of land to cross, with as many opportunities to have the tropo sea duct being interrupted.

Nevertheless, knowing that G stations as close to me as J001/02 made their way to the Ricardo (CT3KN)'s log on August 18th evening, I called "CQ" from time to time with the antennas heading to the Azores on the 19th. And it paid ! Below a screenshot taken at my station :



And here is the screen at Ricardo' side at the same time :



Ricardo is using 80W and 2×9 elements antennas. I'm using 1,2 kW and 2×9 elements too. It makes a difference of more than 10 dB, which is somehow reflected in the reports seen. I saw Ricardo -19 dB at best and he saw me -11 at best. At -11 dB, my signal was barely audible in a reduced bandwidth. Hence, even in CW, a QSO would have been hard to achieve (at same RF power level both sides).

In the morning of August 19th, 2 EA1 stations lying on the path (both in IN73DM) have been worked too. EB1B has been worked at 07:27 UTC and EB1FNS at 09:42 UTC.

After analysis of the PSK Reporter data and my log, one can see :

- 06:22 UTC : CT2HXM (IN60CR) sees my signal -12 dB. Thierry sees also G0MBL in J001 at 07:23 UTC, nobody else around or in between. This can be MS or

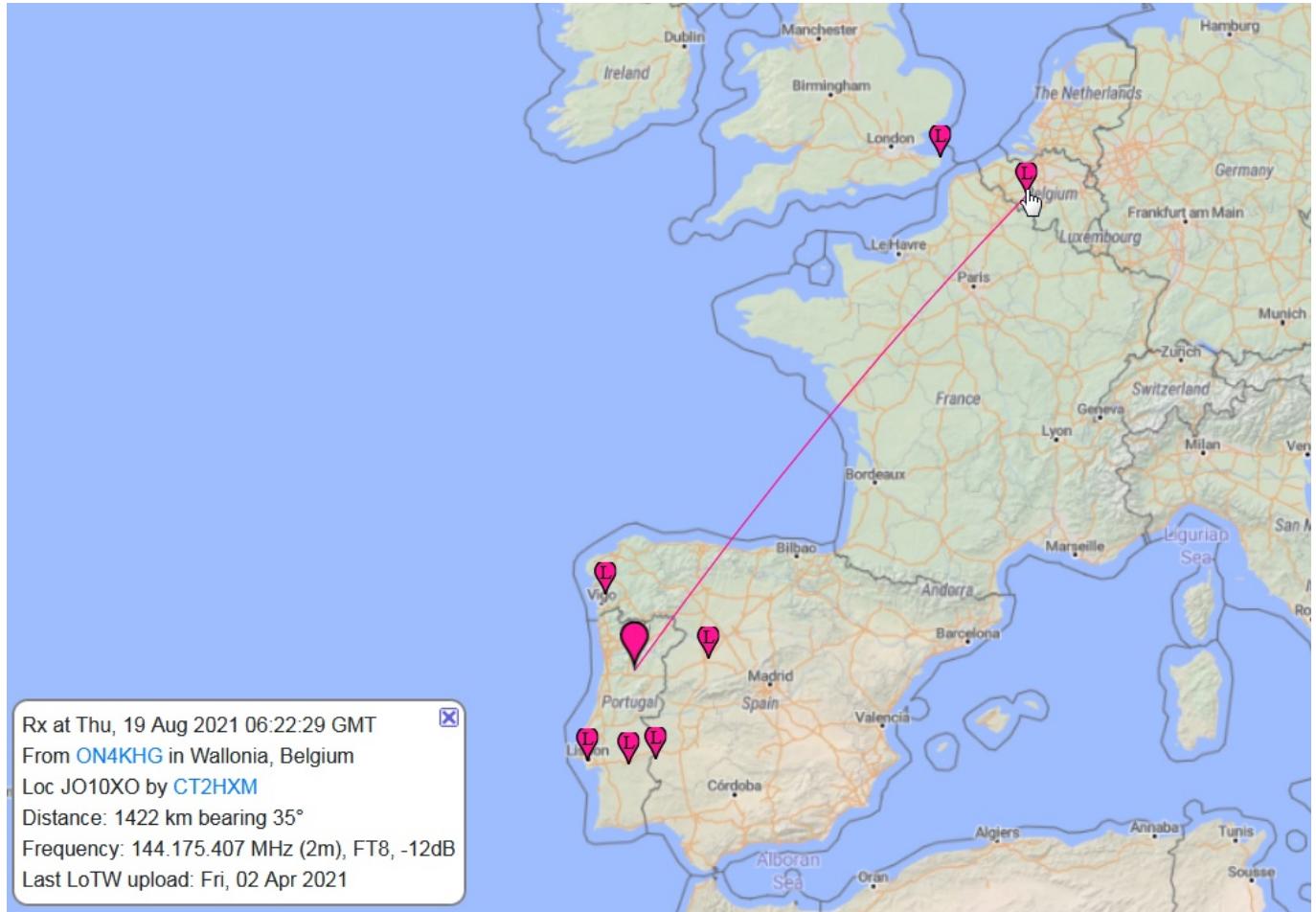
Tropo but I assume it was more MS than Tropo. See the map below.

- 07:27 UTC : I make QSO with EB1B in IN73DM (-08 dB / -08 dB)
- 09:42 UTC : I make QSO with EB1FNS in IN73DM (-08 dB / -01 dB)
- 10:56 UTC : incomplete QSO with CT3KN in IN12MT (2614 km)
- 11:40 UTC EB1FNS sees my signal +15 dB. So, the duct seems to be stronger now, provided the antenna at the EB1FNS' side was heading the same QTF (to me ?) at 09:42 too.

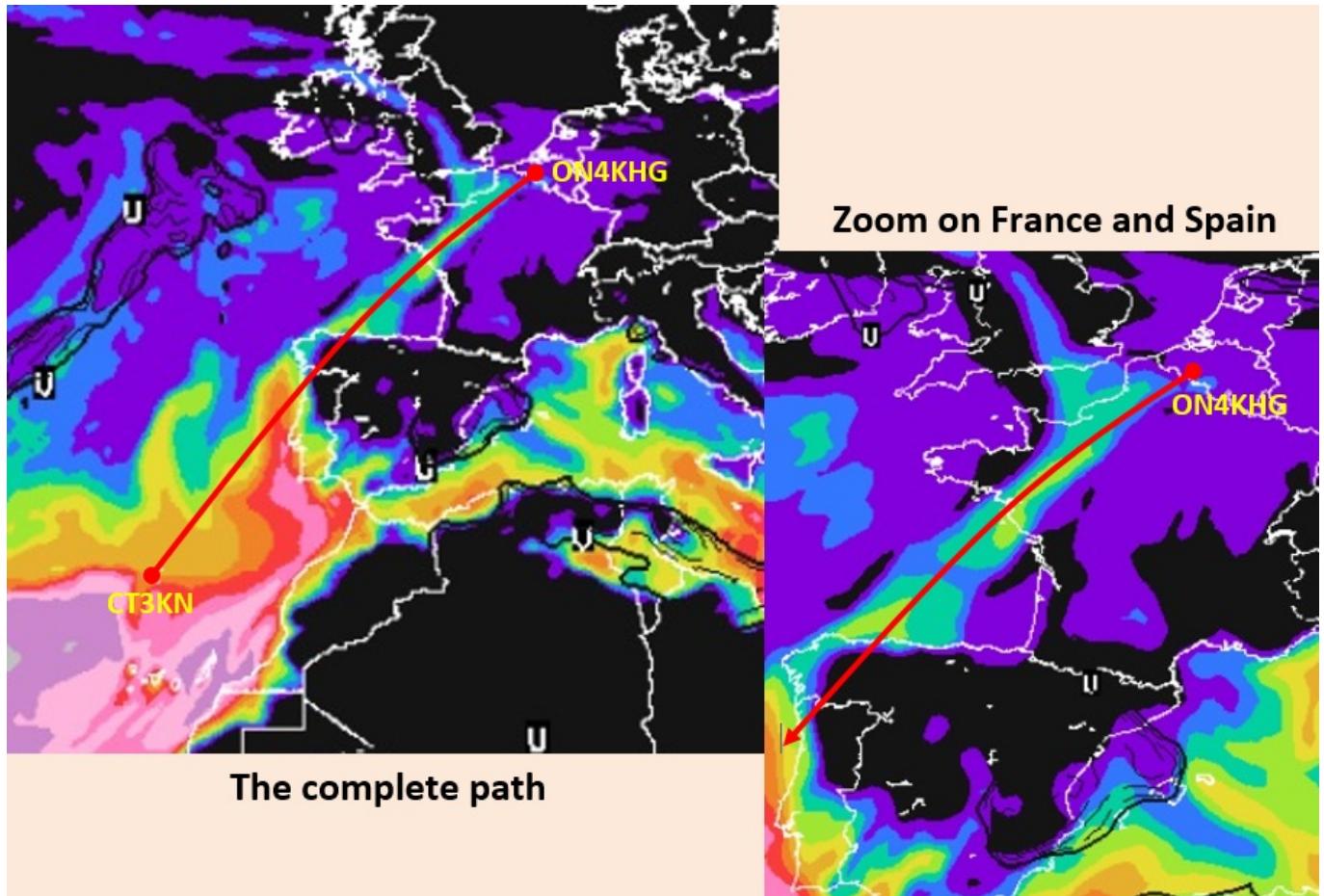
This is the complete path :



CT2HXM, Thierry sees "local" stations and my signal at 06:22 UTC. GØMBL (J001) is seen at 07:23 UTC. Surprisingly, no stations in between or around GØMBL and I. However, I checked PSK Reporter and there were not many F stations QRV on the path between 06:10 and 06:40 UTC (F0FWC and F0GFI, both in J010. F4KKV in IN98. F4ELJ in IN78). At 07:27 UTC, about when CT2HXM sees GØMBL, I have worked EB1B but CT2HXM doesn't see me then. So, the spot of 06:22 is probably MS, unless CT2HXM has turned his antenna between 07:23 and 07:27. Or, since I was in QSO with EB1B, not CQing, PSK reporter didn't report my signal around 07:23-27 UTC at CT2HXM' side ?



Looking at Hepbrun's Tropo maps, the duct was clearly visible. It seems it peaked (for my location) between 09:00 and 12:00 UTC. The map below shows the Tropo forecast at 09:00 UTC on August 19th :



This was a very thrilling experience, even though we couldn't complete a 2 ways QSO !

In such nice tropo conditions, working Ricardo (CT3KN) should be easy in Meteor-Scatter (actually "Tropo-enhanced MS"). Hopefully, as from IM12MT, Ricardo is located on the North side of Madeira, while Funchal (the capital city), is located on the South side, obstructed to Europe by mountains. I'm looking forward to try in MS with Ricardo, if not trying again and succeeding in Tropo !