

# CU8 <> 0N Tropo path on 144 MHz

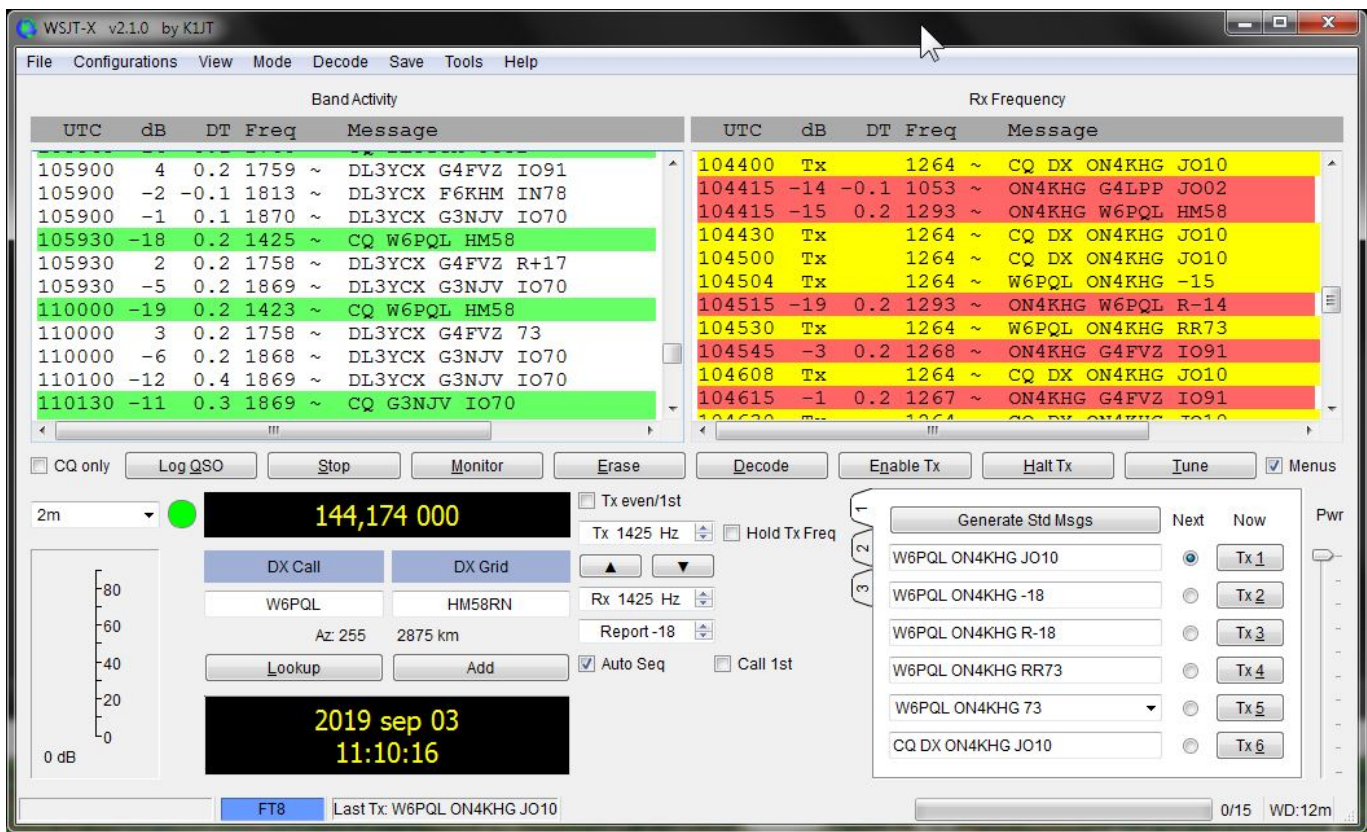
On Tuesday September 3rd, 2019, I have been lucky enough to work **CT8/W6PQL on 144 MHz in FT8 (QRB 2875 km) in Tropo**. James is active in August/September 2019 from his holiday house on Pico Island (HM58RN) in the Azores archipelago.



From HM58, James was so far active mostly in EME with 2x10el Xpol and 1kW. I worked James already last year and one week ago in EME. I wasn't aware James was also active in Tropo. So, when I saw the spot of F8DBF (IN78) highlighting a QSO with CT8/W6PQL, I turned my antennas towards Azores, tuned my transceiver on 144.174 MHz and started calling "CQ DX ON4KHG J010" in FT8, without too much hope...

After a few sequences, and despite some non-DX stations were calling me (a real problem in FT8 sometimes...), I couldn't believe my eyes, CT8/W6PQL was calling me ! Actually, "W6PQL" was calling. Indeed, James is used to EME JT65 operation and in JT65, a callsign like "CT8/W6PQL" isn't supported (I think). In FT8, "CT8/W6PQL"

is well supported but then the QRA locator isn't sent (exchanging the QRA locator isn't mandatory for a valid QSO according to the IARU however). Since the callsign was truncated, a few ones (against digital modes) will probably claim the QSO wasn't valid (or just not valid at all because being in FT8 ;o). Well, it is just a matter of software "misuse" (if the callsign of James would have been CT8XYZ, there wouldn't be any discussion) and most important, the propagation path was open, allowing distant stations to exchange a minimum set of information for a valid QSO. So, from my own perspective there is no question the QSO is complete or not,... it is ! After our QSO, I saw James calling again, as can be seen on the screenshot below seen from my station :



James sent me the screenshot of our QSO from his station :

WSJT-X v2.1.0 by K1JT

File Configurations View Mode Decode Save Tools Help

Band Activity					Rx Frequency				
UTC	dB	DT	Freq	Message	UTC	dB	DT	Freq	Message
-----				2m	104330	-16	0.4	1075	~ CQ DX ON4KHG JO10
104330	-16	0.4	1075	~ CQ DX ON4KHG JO10	104346	Tx	1100	~ ON4KHG W6PQL HM58	
-----				2m	104400	-13	0.5	1077	~ CQ DX ON4KHG JO10
104400	-13	0.5	1077	~ CQ DX ON4KHG JO10	104415	Tx	1100	~ ON4KHG W6PQL HM58	
-----				2m	104430	-12	0.4	1077	~ CQ DX ON4KHG JO10
104430	-12	0.4	1077	~ CQ DX ON4KHG JO10	104445	Tx	1100	~ ON4KHG W6PQL HM58	
-----				2m	104500	-14	0.5	1077	~ W6PQL ON4KHG -15
104500	-14	0.5	1077	~ W6PQL ON4KHG -15	104515	Tx	1100	~ ON4KHG W6PQL R-14	
-----				2m	104530	-20	0.4	1078	~ W6PQL ON4KHG RR73
104530	-20	0.4	1078	~ W6PQL ON4KHG RR73	104545	Tx	1100	~ ON4KHG W6PQL 73	

CQ only   Log QSO   Stop   **Monitor**   Erase   Decode   Enable Tx   Halt Tx   Tune    Menus

2m   **S**   **144.174 000**   Tx 1100 Hz    Hold Tx Freq   Rx 1078 Hz   Report -20    Auto Seq    Call 1st

DX Call   DX Grid   Lookup   Add

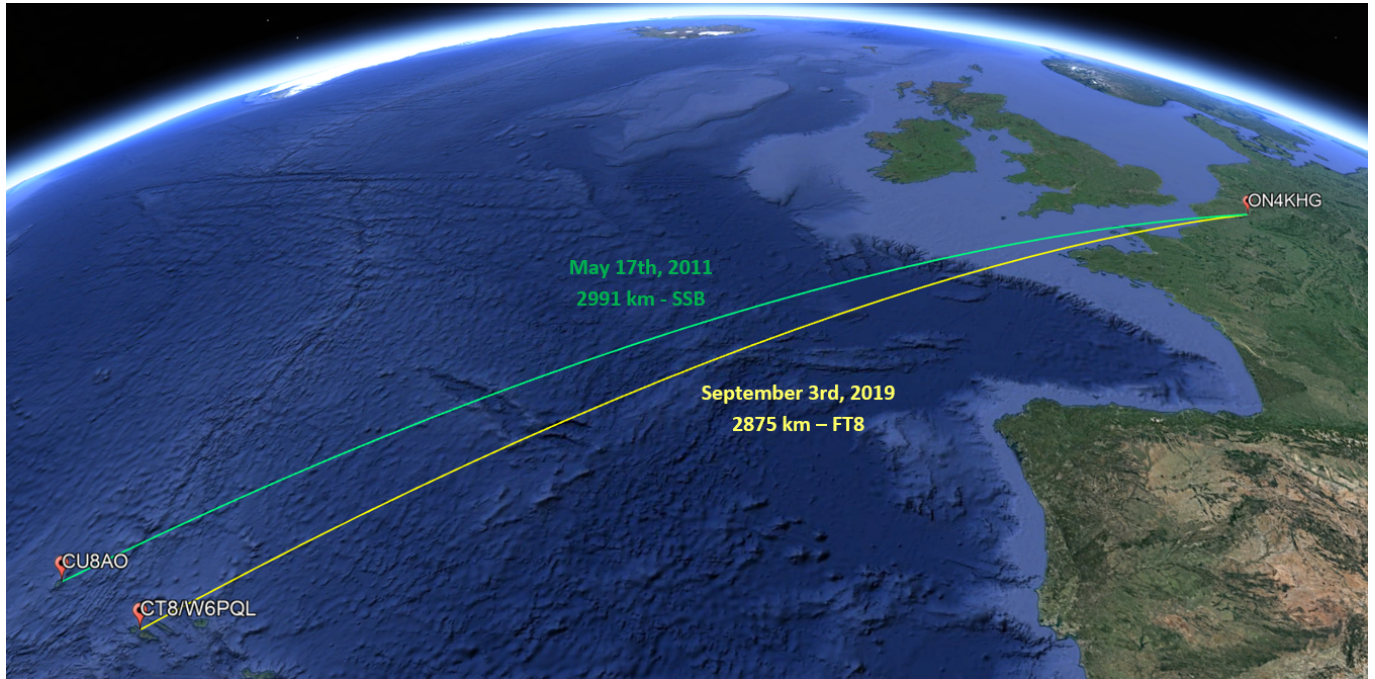
2019 Sep 03  
10:46:12

Generate Std Msgs   Next   Now   Pwr

ON4KHG W6PQL 73   Tx 1  
 CQ W6PQL HM58   Tx 2  
 Tx 3  
 Tx 4  
 Tx 5  
 Tx 6

Receiving   fdmduo-Azores VHF   FT8   Last Tx: ON4KHG W6PQL 73   12/15   WD:6m

The strongest James received me was -12dB (in a 2500 Hz BW) and me -15dB from him. This shouldn't have been strong enough to sustain a CW QSO. This is the second time I work Azores on 144 MHz in Tropo.

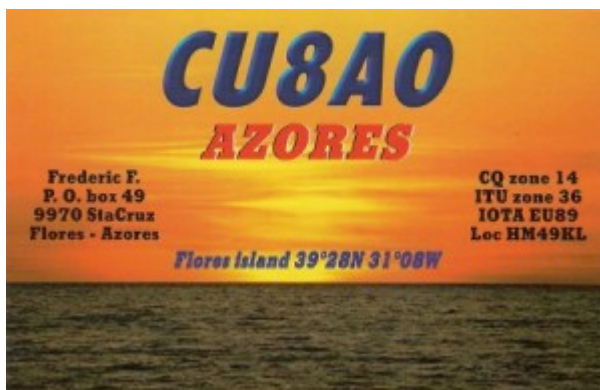


The first time was on May 17<sup>th</sup>, 2011, when I worked Fred, CU8AO (HM49KL) in SSB over a 2991 km path. The CU8DUB beacon was then audible here quite strong for hours :

[http://on4khg.be/wordpress/wp-content/uploads/2019/09/CU8DUB-B\\_NB-Tropo-17052011.mp3](http://on4khg.be/wordpress/wp-content/uploads/2019/09/CU8DUB-B_NB-Tropo-17052011.mp3)

CU8AO calling DX on May 17<sup>th</sup>, 2011 :

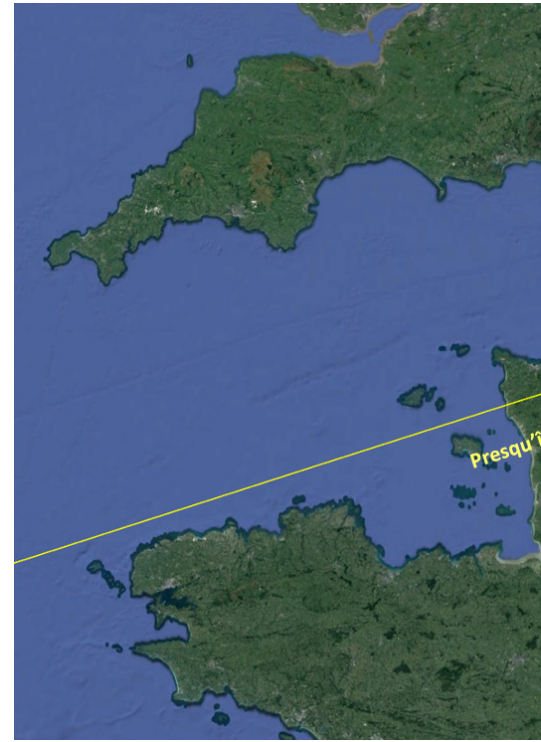
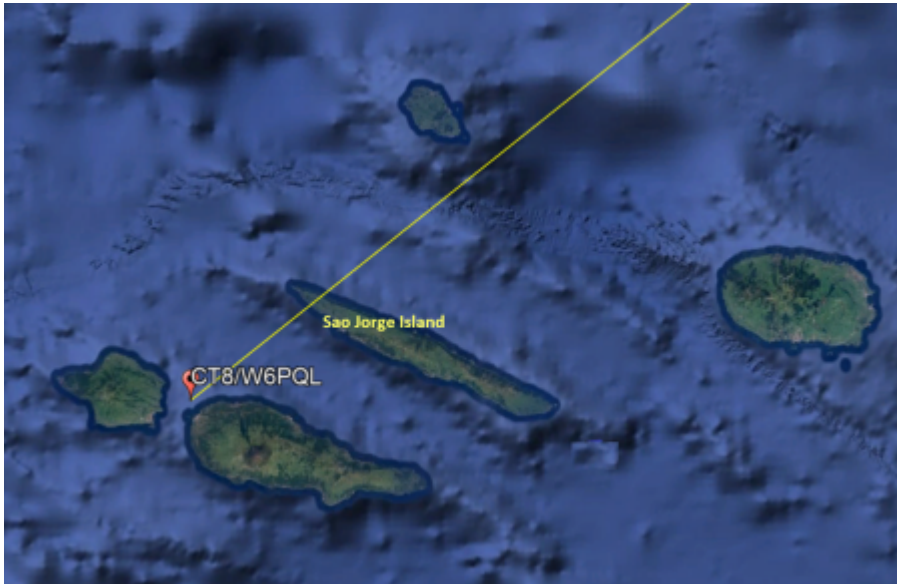
<http://on4khg.be/wordpress/wp-content/uploads/2019/09/CU8AO-ON4KHG-16052011-144MHz.mp3>



Frank, PA4EME, heard CU8DUB too over 3150 km. One year before, on September 14<sup>th</sup>,

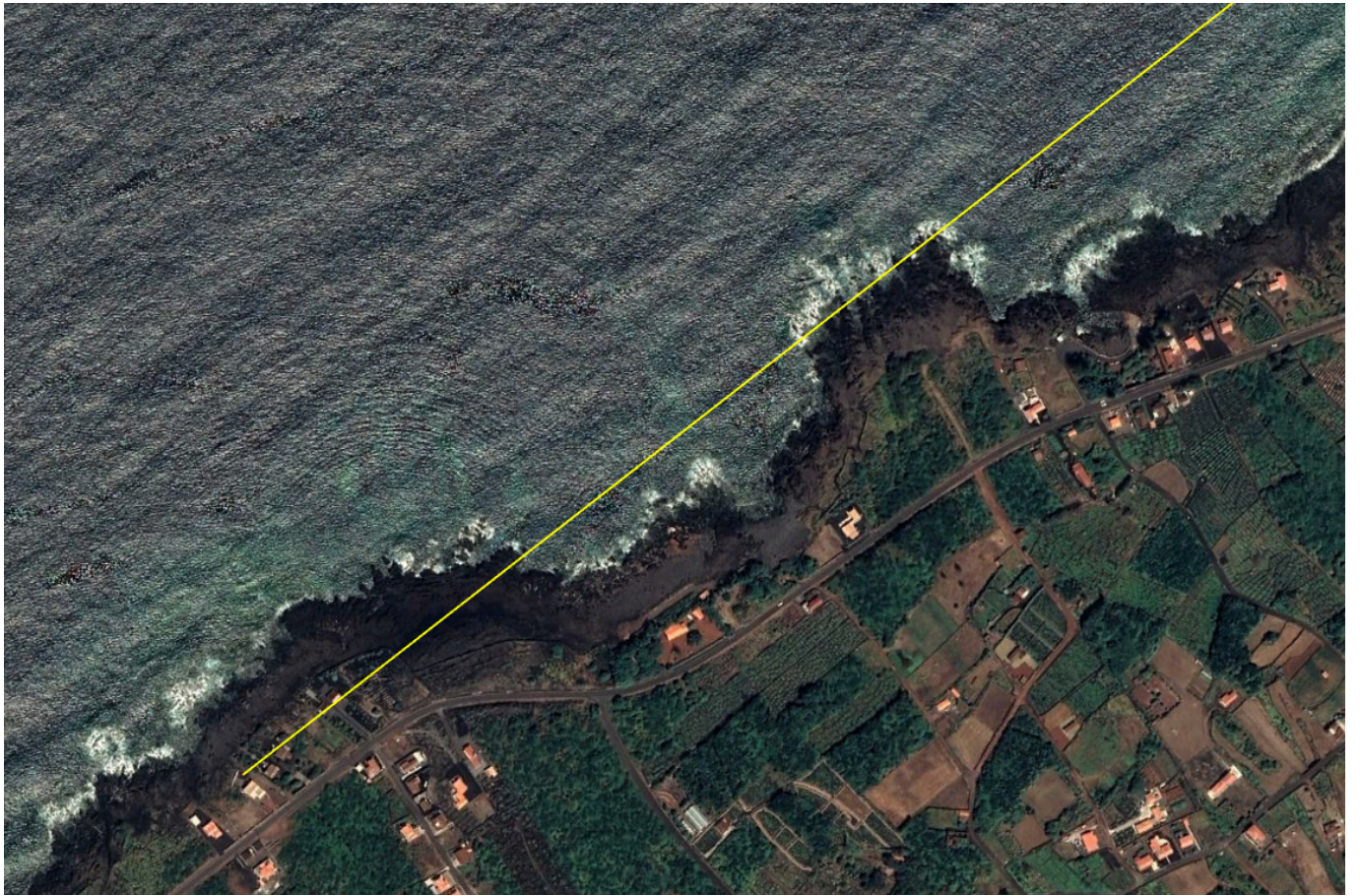
2010, the same beacon was heard 529 in Belgium by Michel, ON4P00, and CU8A0 made several QSO's with UK and French stations on the Atlantic coast, but none with Belgium.

For my 2 QSO's with Azores, the path wasn't totally over the sea. To the QTF of Azores, I'm living 180 km inland. For the QSO with CT8/W6PQL, the path was even more further interrupted by lands at two occasions, the French "presqu'île du Cotentin" (Normandy) and at James' side the Sao Jorge Island.



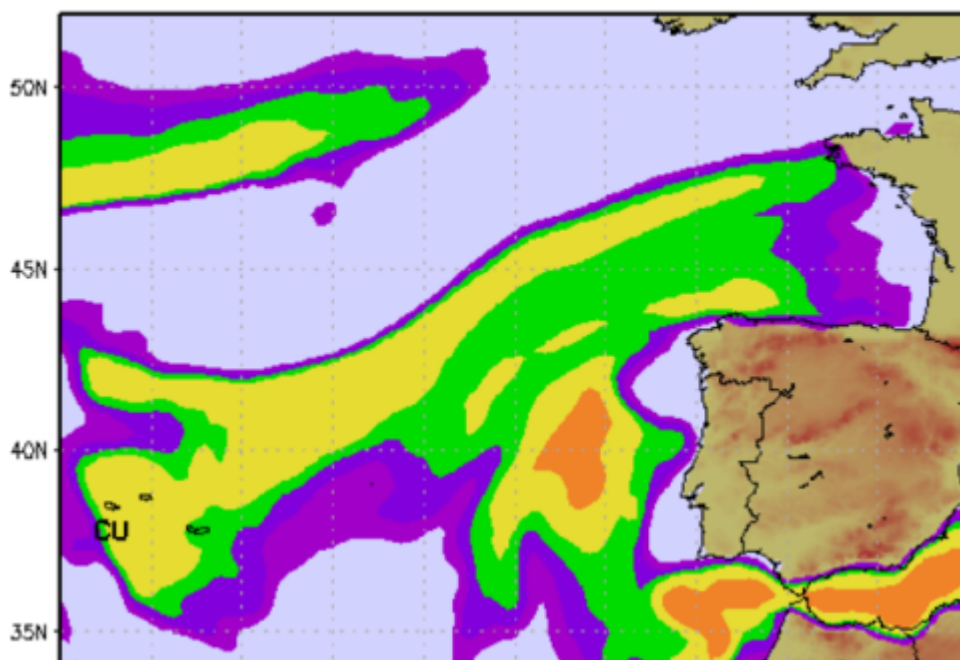
Right after the QSO with James, CT8/W6PQL, I listened to the French beacon F5ZSF in Brittany (IN88) on 144.409. It wasn't stronger than usual, just about normal (539 or so).

Path to ON from James'house in CT8 :



The F5LEN tropo forecast indicated a strong tropo enhancement between Azores and Brittany, but not extending any further. This forecast turned out to be quite reliable however !

Tue 03 SEP 2019 - 12Z



So, beside the now famous UK/EI <> EA8/D4 path, the CU8 <> F/UK/0N path deserves attention though the CU8DUB beacon isn't active anymore unfortunately.