

## Febr. 2012: ZK2C – Niue is. DXpedition by another German Group.

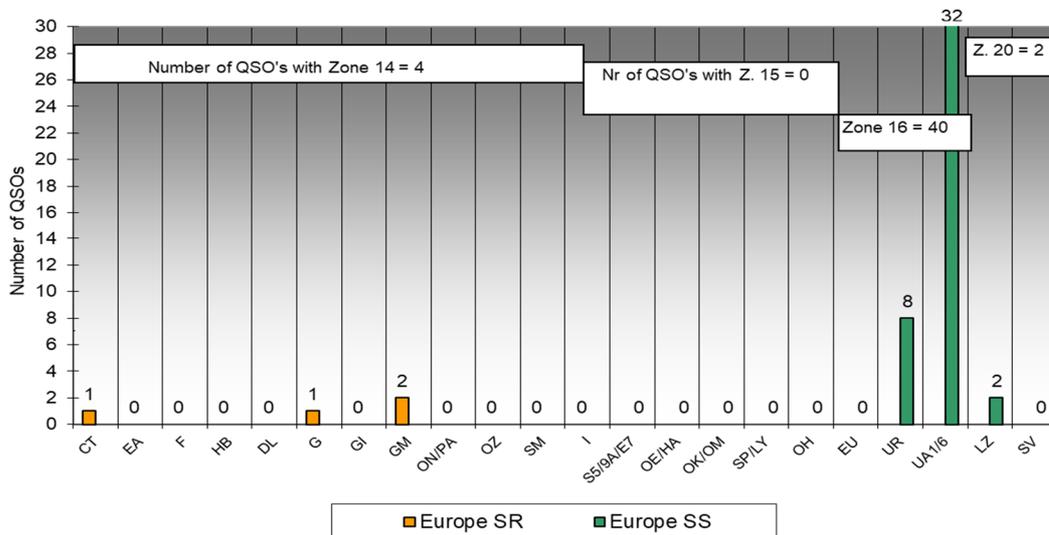
*by Pierluigi “Luis” Mansutti, IV3PRK*

This was a South Pacific DXpedition by DL7JAN and other eight German operators from 3 to 17 February 2012 on Namakulu, Niue is., (loc. AH50) - 19.04 S 169.50 W. They did their best, looking always at the right time for Europe but, as their website says: just a “dit” in the Pacific....

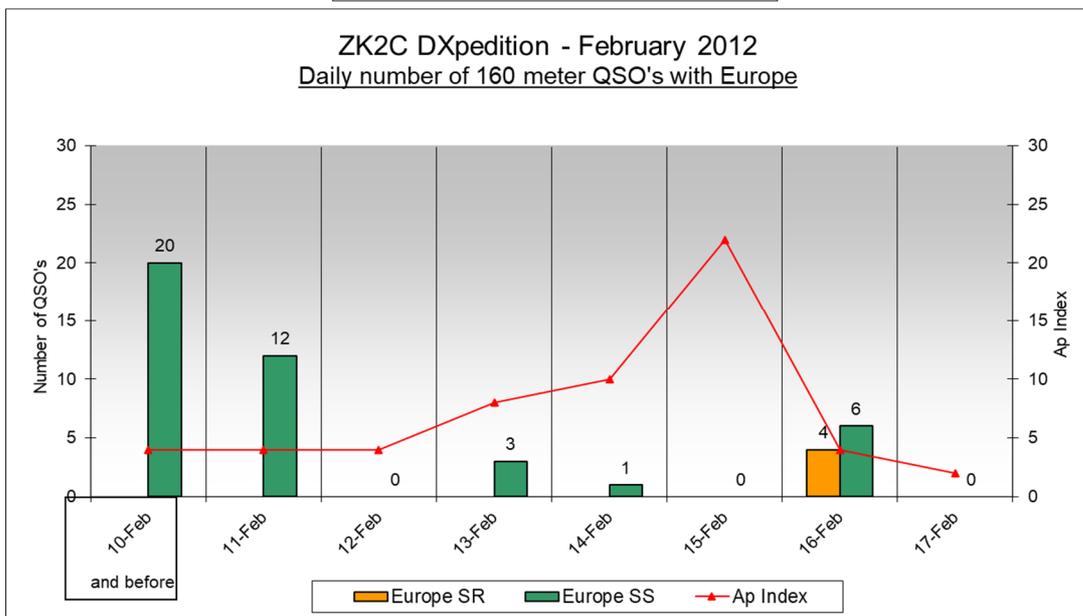
Actually, an extremely difficult path - 17.000 km at 6 degrees, straight across North Pole - and hopeless for Central Europe under current propagation conditions. It could had been a chance between 16.30z (our sunset) and 17.10z (sunrise in Niue is.) and, as a matter of fact, we heard every evening many Europeans calling and calling... and imaging QSO's, but no one got on the log except LZ2CJ and LZ2WO and the most eastern Ukrainians and Russians. I wonder if all these stations were actually hearing well, and thus ZK2C had always receiving problems, or were they using some “new SDR techniques” ... or just cluster spots blind callers?

In two weeks, they made 48k QSOs, 658 of them on 160 meters, but only 46 with Europe. From Club Log, I found all the European callsigns worked and made the following graphs:

**ZK2C DXpedition - February 2012**  
160 meter QSO's with Europe: Total Nr. 46



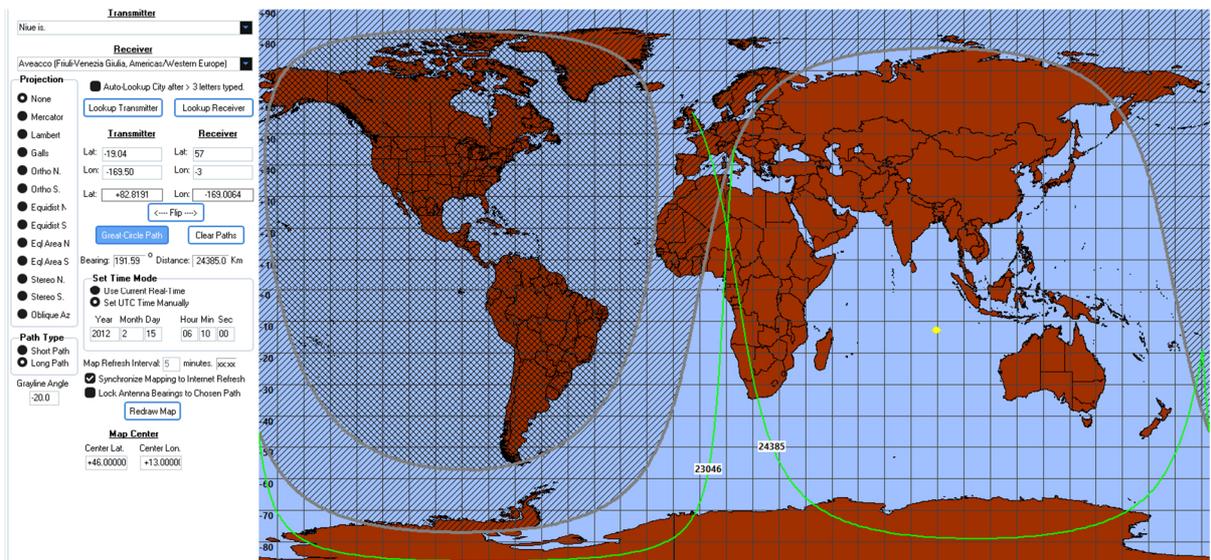
**ZK2C DXpedition - February 2012**  
Daily number of 160 meter QSO's with Europe



Only one morning there was an opening to Europe: congratulations to CT1EEB, G3PQA, GM3YTS and GM0GAV who I supposed worked them thanks to a more feasible north-west path. But John, G3PQA, wrote me that «... signals were from the southwest again. This seems to be similar to the path for USA stations to Ross 9M2AX – i.e. very rarely on the short path over pole, most openings are skewed far south, particularly at this time of sunspot cycle. Occasionally we get propagation to ZL from that direction also... So that was ALONG the Terminator, a rare case of Gray Line propagation! »

|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| IP54 | IP64 | IP74 | IP84 | IP94 | JP04 | JP14 | JP24 | JP34 | JP44 | JP54 | JP64 | JP74 | JP84 | JP94 | KP04 | KP14 | KP24 | KP34 | KP44 | KP54 | KP64 | KP74 | KP84 | KP94 | LP04 | LP14 | LP24 | LP34 |
| IP53 | IP63 | IP73 | IP83 | IP93 | JP03 | JP13 | JP23 | JP33 | JP43 | JP53 | JP63 | JP73 | JP83 | JP93 | KP03 | KP13 | KP23 | KP33 | KP43 | KP53 | KP63 | KP73 | KP83 | KP93 | LP03 | LP13 | LP23 | LP33 |
| IP52 | IP62 | IP72 | IP82 | IP92 | JP02 | JP12 | JP22 | JP32 | JP42 | JP52 | JP62 | JP72 | JP82 | JP92 | KP02 | KP12 | KP22 | KP32 | KP42 | KP52 | KP62 | KP72 | KP82 | KP92 | LP02 | LP12 | LP22 | LP32 |
| IP51 | IP61 | IP71 | IP81 | IP91 | JP01 | JP11 | JP21 | JP31 | JP41 | JP51 | JP61 | JP71 | JP81 | JP91 | KP01 | KP11 | KP21 | KP31 | KP41 | KP51 | KP61 | KP71 | KP81 | KP91 | LP01 | LP11 | LP21 | LP31 |
| IP50 | IP60 | IP70 | IP80 | IP90 | JP00 | JP10 | JP20 | JP30 | JP40 | JP50 | JP60 | JP70 | JP80 | JP90 | KP00 | KP10 | KP20 | KP30 | KP40 | KP50 | KP60 | KP70 | KP80 | KP90 | LP00 | LP10 | LP20 | LP30 |
| IO59 | IO69 | IO79 | IO89 | IO99 | JO09 | JO19 | JO29 | JO39 | JO49 | JO59 | JO69 | JO79 | JO89 | JO99 | KO09 | KO19 | KO29 | KO39 | KO49 | KO59 | KO69 | KO79 | KO89 | KO99 | LO09 | LO19 | LO29 | LO39 |
| IO58 | IO68 | IO78 | IO88 | IO98 | JO08 | JO18 | JO28 | JO38 | JO48 | JO58 | JO68 | JO78 | JO88 | JO98 | KO08 | KO18 | KO28 | KO38 | KO48 | KO58 | KO68 | KO78 | KO88 | KO98 | LO08 | LO18 | LO28 | LO38 |
| IO57 | IO67 | IO77 | IO87 | IO97 | JO07 | JO17 | JO27 | JO37 | JO47 | JO57 | JO67 | JO77 | JO87 | JO97 | KO07 | KO17 | KO27 | KO37 | KO47 | KO57 | KO67 | KO77 | KO87 | KO97 | LO07 | LO17 | LO27 | LO37 |
| IO56 | IO66 | IO76 | IO86 | IO96 | JO06 | JO16 | JO26 | JO36 | JO46 | JO56 | JO66 | JO76 | JO86 | JO96 | KO06 | KO16 | KO26 | KO36 | KO46 | KO56 | KO66 | KO76 | KO86 | KO96 | LO06 | LO16 | LO26 | LO36 |
| IO55 | IO65 | IO75 | IO85 | IO95 | JO05 | JO15 | JO25 | JO35 | JO45 | JO55 | JO65 | JO75 | JO85 | JO95 | KO05 | KO15 | KO25 | KO35 | KO45 | KO55 | KO65 | KO75 | KO85 | KO95 | LO05 | LO15 | LO25 | LO35 |
| IO54 | IO64 | IO74 | IO84 | IO94 | JO04 | JO14 | JO24 | JO34 | JO44 | JO54 | JO64 | JO74 | JO84 | JO94 | KO04 | KO14 | KO24 | KO34 | KO44 | KO54 | KO64 | KO74 | KO84 | KO94 | LO04 | LO14 | LO24 | LO34 |
| IO53 | IO63 | IO73 | IO83 | IO93 | JO03 | JO13 | JO23 | JO33 | JO43 | JO53 | JO63 | JO73 | JO83 | JO93 | KO03 | KO13 | KO23 | KO33 | KO43 | KO53 | KO63 | KO73 | KO83 | KO93 | LO03 | LO13 | LO23 | LO33 |
| IO52 | IO62 | IO72 | IO82 | IO92 | JO02 | JO12 | JO22 | JO32 | JO42 | JO52 | JO62 | JO72 | JO82 | JO92 | KO02 | KO12 | KO22 | KO32 | KO42 | KO52 | KO62 | KO72 | KO82 | KO92 | LO02 | LO12 | LO22 | LO32 |
| IO51 | IO61 | IO71 | IO81 | IO91 | JO01 | JO11 | JO21 | JO31 | JO41 | JO51 | JO61 | JO71 | JO81 | JO91 | KO01 | KO11 | KO21 | KO31 | KO41 | KO51 | KO61 | KO71 | KO81 | KO91 | LO01 | LO11 | LO21 | LO31 |
| IO50 | IO60 | IO70 | IO80 | IO90 | JO00 | JO10 | JO20 | JO30 | JO40 | JO50 | JO60 | JO70 | JO80 | JO90 | KO00 | KO10 | KO20 | KO30 | KO40 | KO50 | KO60 | KO70 | KO80 | KO90 | LO00 | LO10 | LO20 | LO30 |
| IN59 | IN69 | IN79 | IN89 | IN99 | JN09 | JN19 | JN29 | JN39 | JN49 | JN59 | JN69 | JN79 | JN89 | JN99 | KN09 | KN19 | KN29 | KN39 | KN49 | KN59 | KN69 | KN79 | KN89 | KN99 | LN09 | LN19 | LN29 | LN39 |
| IN58 | IN68 | IN78 | IN88 | IN98 | JN08 | JN18 | JN28 | JN38 | JN48 | JN58 | JN68 | JN78 | JN88 | JN98 | KN08 | KN18 | KN28 | KN38 | KN48 | KN58 | KN68 | KN78 | KN88 | KN98 | LN08 | LN18 | LN28 | LN38 |
| IN57 | IN67 | IN77 | IN87 | IN97 | JN07 | JN17 | JN27 | JN37 | JN47 | JN57 | JN67 | JN77 | JN87 | JN97 | KN07 | KN17 | KN27 | KN37 | KN47 | KN57 | KN67 | KN77 | KN87 | KN97 | LN07 | LN17 | LN27 | LN37 |
| IN56 | IN66 | IN76 | IN86 | IN96 | JN06 | JN16 | JN26 | JN36 | JN46 | JN56 | JN66 | JN76 | JN86 | JN96 | KN06 | KN16 | KN26 | KN36 | KN46 | KN56 | KN66 | KN76 | KN86 | KN96 | LN06 | LN16 | LN26 | LN36 |
| IN55 | IN65 | IN75 | IN85 | IN95 | JN05 | JN15 | JN25 | JN35 | JN45 | JN55 | JN65 | JN75 | JN85 | JN95 | KN05 | KN15 | KN25 | KN35 | KN45 | KN55 | KN65 | KN75 | KN85 | KN95 | LN05 | LN15 | LN25 | LN35 |
| IN54 | IN64 | IN74 | IN84 | IN94 | JN04 | JN14 | JN24 | JN34 | JN44 | JN54 | JN64 | JN74 | JN84 | JN94 | KN04 | KN14 | KN24 | KN34 | KN44 | KN54 | KN64 | KN74 | KN84 | KN94 | LN04 | LN14 | LN24 | LN34 |
| IN53 | IN63 | IN73 | IN83 | IN93 | JN03 | JN13 | JN23 | JN33 | JN43 | JN53 | JN63 | JN73 | JN83 | JN93 | KN03 | KN13 | KN23 | KN33 | KN43 | KN53 | KN63 | KN73 | KN83 | KN93 | LN03 | LN13 | LN23 | LN33 |
| IN52 | IN62 | IN72 | IN82 | IN92 | JN02 | JN12 | JN22 | JN32 | JN42 | JN52 | JN62 | JN72 | JN82 | JN92 | KN02 | KN12 | KN22 | KN32 | KN42 | KN52 | KN62 | KN72 | KN82 | KN92 | LN02 | LN12 | LN22 | LN32 |
| IN51 | IN61 | IN71 | IN81 | IN91 | JN01 | JN11 | JN21 | JN31 | JN41 | JN51 | JN61 | JN71 | JN81 | JN91 | KN01 | KN11 | KN21 | KN31 | KN41 | KN51 | KN61 | KN71 | KN81 | KN91 | LN01 | LN11 | LN21 | LN31 |
| IN50 | IN60 | IN70 | IN80 | IN90 | JN00 | JN10 | JN20 | JN30 | JN40 | JN50 | JN60 | JN70 | JN80 | JN90 | KN00 | KN10 | KN20 | KN30 | KN40 | KN50 | KN60 | KN70 | KN80 | KN90 | LN00 | LN10 | LN20 | LN30 |
| IM59 | IM69 | IM79 | IM89 | IM99 | JM09 | JM19 | JM29 | JM39 | JM49 | JM59 | JM69 | JM79 | JM89 | JM99 | KM09 | KM19 | KM29 | KM39 | KM49 | KM59 | KM69 | KM79 | KM89 | KM99 | LM09 | LM19 | LM29 | LM39 |
| IM58 | IM68 | IM78 | IM88 | IM98 | JM08 | JM18 | JM28 | JM38 | JM48 | JM58 | JM68 | JM78 | JM88 | JM98 | KM08 | KM18 | KM28 | KM38 | KM48 | KM58 | KM68 | KM78 | KM88 | KM98 | LM08 | LM18 | LM28 | LM38 |
| IM57 | IM67 | IM77 | IM87 | IM97 | JM07 | JM17 | JM27 | JM37 | JM47 | JM57 | JM67 | JM77 | JM87 | JM97 | KM07 | KM17 | KM27 | KM37 | KM47 | KM57 | KM67 | KM77 | KM87 | KM97 | LM07 | LM17 | LM27 | LM37 |
| IM56 | IM66 | IM76 | IM86 | IM96 | JM06 | JM16 | JM26 | JM36 | JM46 | JM56 | JM66 | JM76 | JM86 | JM96 | KM06 | KM16 | KM26 | KM36 | KM46 | KM56 | KM66 | KM76 | KM86 | KM96 | LM06 | LM16 | LM26 | LM36 |
| IM55 | IM65 | IM75 | IM85 | IM95 | JM05 | JM15 | JM25 | JM35 | JM45 | JM55 | JM65 | JM75 | JM85 | JM95 | KM05 | KM15 | KM25 | KM35 | KM45 | KM55 | KM65 | KM75 | KM85 | KM95 | LM05 | LM15 | LM25 | LM35 |
| IM54 | IM64 | IM74 | IM84 | IM94 | JM04 | JM14 | JM24 | JM34 | JM44 | JM54 | JM64 | JM74 | JM84 | JM94 | KM04 | KM14 | KM24 | KM34 | KM44 | KM54 | KM64 | KM74 | KM84 | KM94 | LM04 | LM14 | LM24 | LM34 |

I must fully agree with John: Great Circle - long path - from my QTH at 06.10 (my sunrise) would be 23.000 km to the SSW direction, but outside of the terminator, with high absorptions. The Great Circle – long path – from Great Britain to ZK2 is 24.400 km but headed to the SSE direction and - at that time - it would be even worse, fully in sunlight. Thus, the preferred route must be – even if longer than the Great Circle – via South- Southwest along the Gray Line.



In any case, not only a challenge... but an almost impossible path for Central Europe!