

Intro to WSJT-X and more!

By: Wyatt Dirks

What's going to be covered.

- Getting WSJT-X setup
- WSJT-X Modes
- Operating resources
- K0D Trip
- January VHF contest Rove

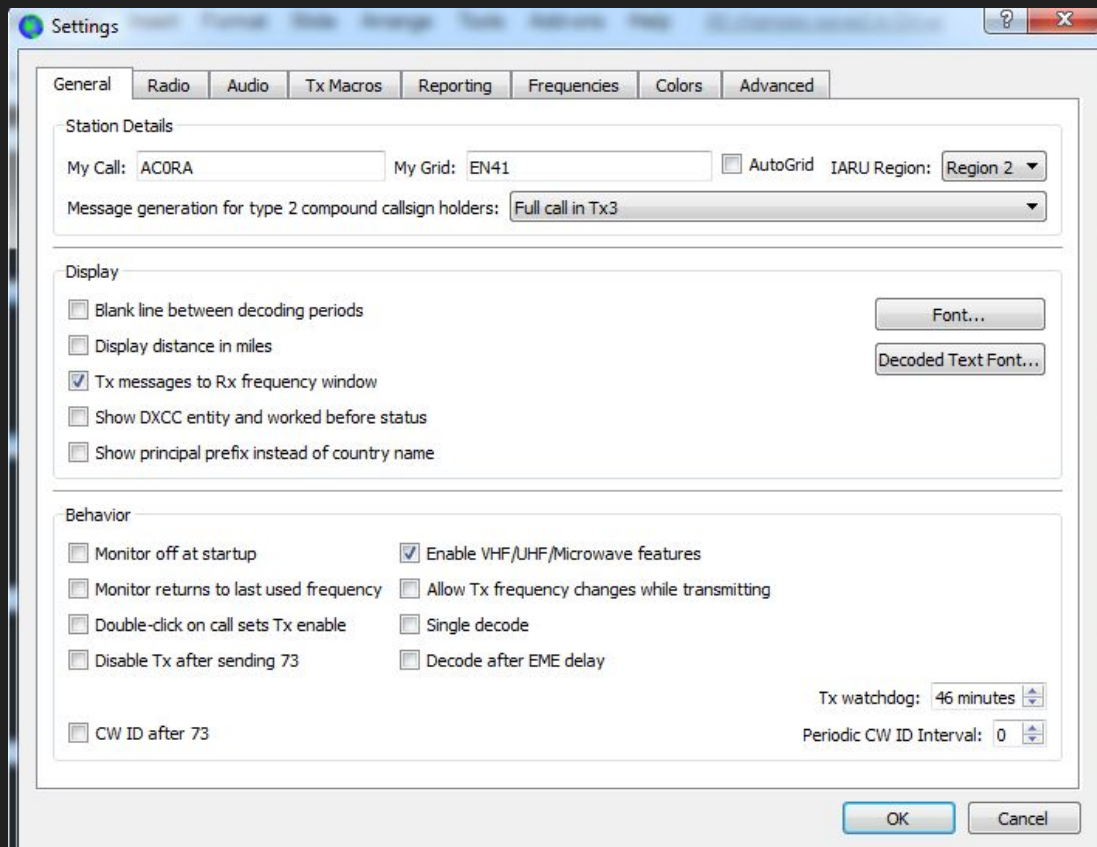
Required hardware for WSJT-X

- Radio
 - Any radio will work
- PC
 - Need 1.5ghz processor and 200mb of free memory
 - Accurate time
- Sound interface
 - Plug and play (Signalink, Rigblaster)
 - Newer Radio with built in sound card (IC-7300, FT-991)
 - Custom Interface

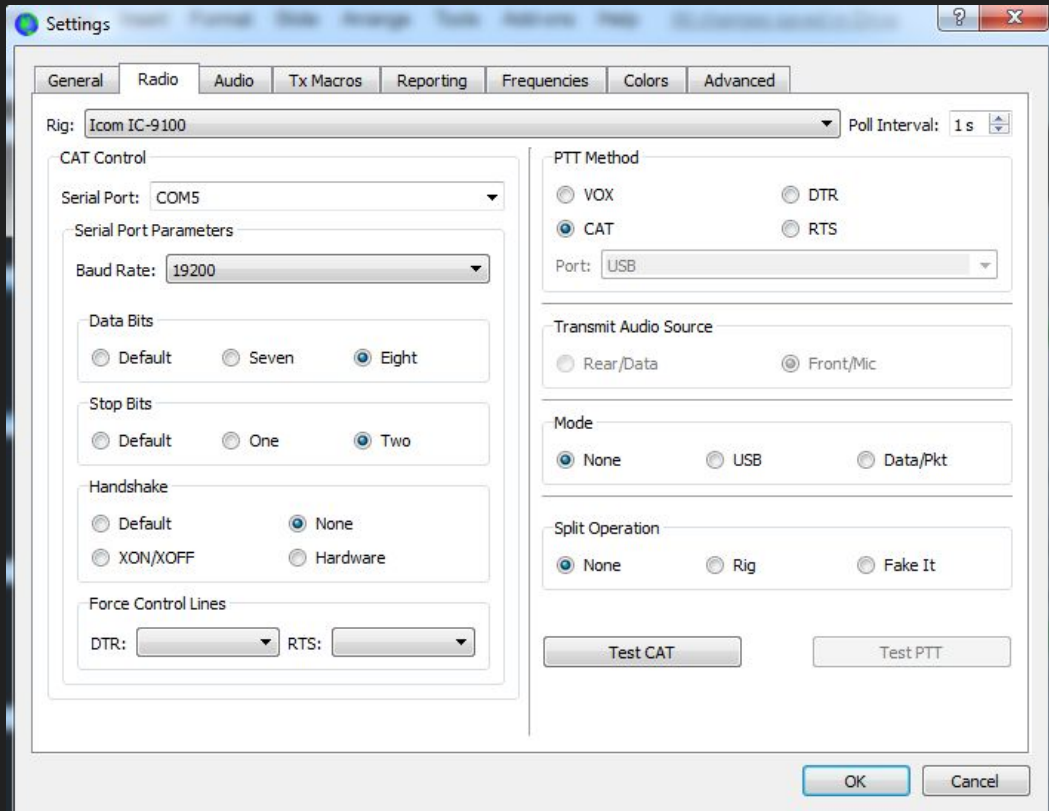
Time synchronization

- Time sync software
 - Dimension 4
 - BktTimeSync
- Time from GPS
 - GlobalSat BU-353-S4 USB GPS Receiver
 - NMEATime2

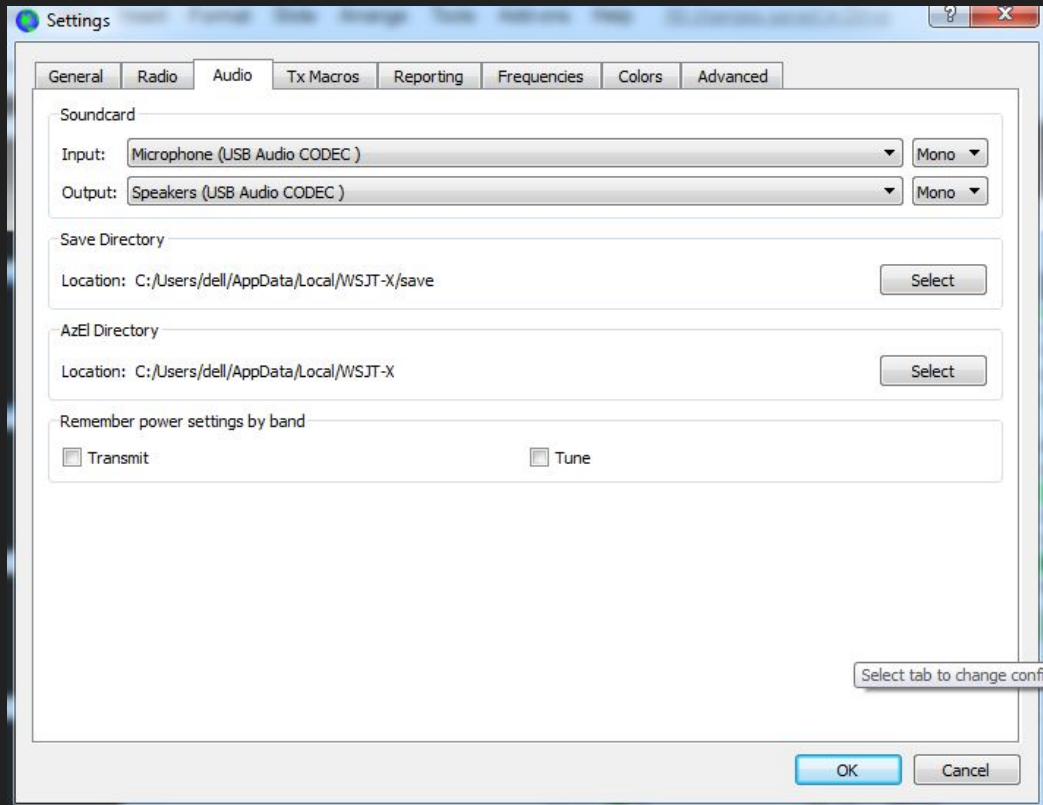
Setting up WSJT-X



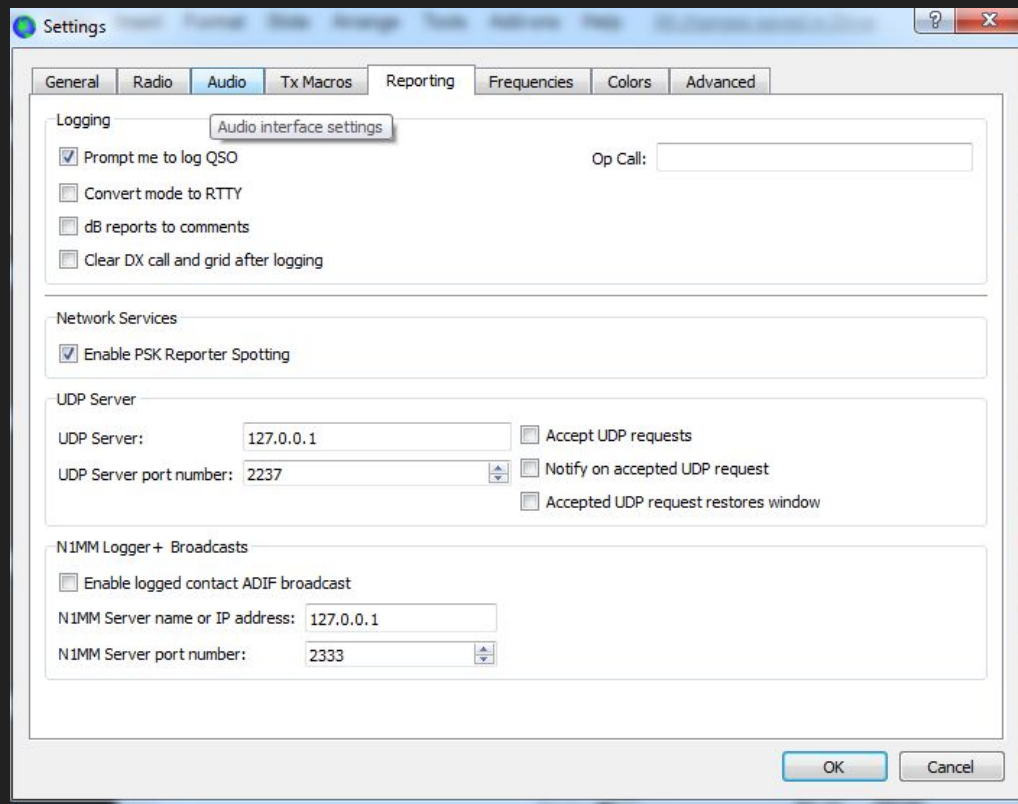
Setting up WSJT-X



Setting up WSJT-X

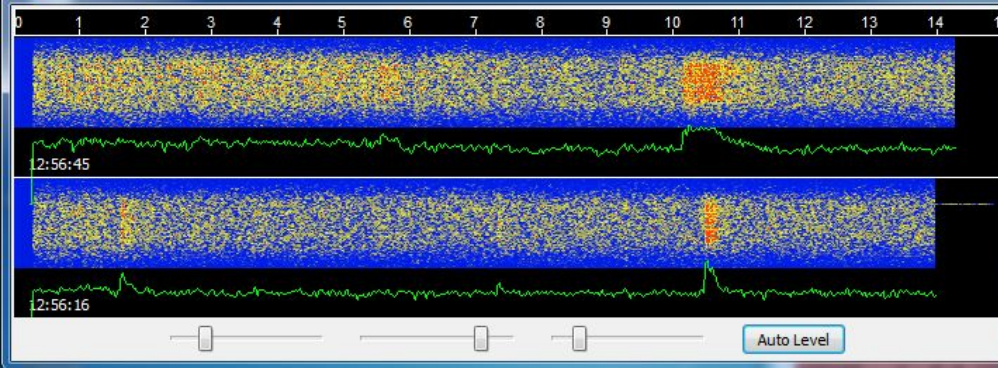


Setting up WSJT-X



WSJT-X Modes

- JT65
 - 1 minute sequence
 - EME, tropo
- MSK144
 - 15 second sequence
 - Meteor Scatter
- FT8
 - 15 second sequence
 - Weak band openings, Tropo?

MiniTool
Partition ...

WSJT-X

PJClient
V1.7.26

Band Activity

Message	UTC	dB	T	Freq	Message
& CQ NG4C FM16	125200	Tx	1500	& CQ AC0RA EN41	
& CQ NG4C FM16	125230	Tx	1500	& CQ AC0RA EN41	
& AC0RA WB4JWM EM83	125300	Tx	1500	& WB4JWM AC0RA +02	
125245 -2 11.5 1484 & CQ NG4C FM16	125330	Tx	1500	& WB4JWM AC0RA +03	
125315 2 12.1 1525 & AC0RA WB4JWM EM83	125400	Tx	1500	& WB4JWM AC0RA +03	
125315 3 12.1 1520 & AC0RA WB4JWM EM83	125430	Tx	1500	& WB4JWM AC0RA +03	
125545 -3 12.4 1523 & AC0RA WB4JWM R+04	125500	Tx	1500	& WB4JWM AC0RA +03	
125615 2 1.7 1524 & AC0RA WB4JWM R+04	125530	Tx	1500	& WB4JWM AC0RA +03	
125615 6 10.6 1527 & AC0RA WB4JWM R+04	125600	Tx	1500	& WB4JWM AC0RA RRR	
125645 -2 5.6 1524 & AC0RA WB4JWM R+04	125630	Tx	1500	& WB4JWM AC0RA RRR	
125645 4 10.3 1523 & AC0RA WB4JWM R+04	125700	Tx	1500	& WB4JWM AC0RA RRR	

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

6m ☒ 50.260 000 ☒ Tx even/1st

Rx 1500 Hz
F Tol 200
Report 4
T/R 15 s
Tx CQ 260 ☐

☐ Sh ☒ Auto Seq
☐ SWL ☐ NA VHF Contest

DX Call: WB4JWM DX Grid: EM83
Az: 139 A: 151 El: 7 1134 km
Lookup Add

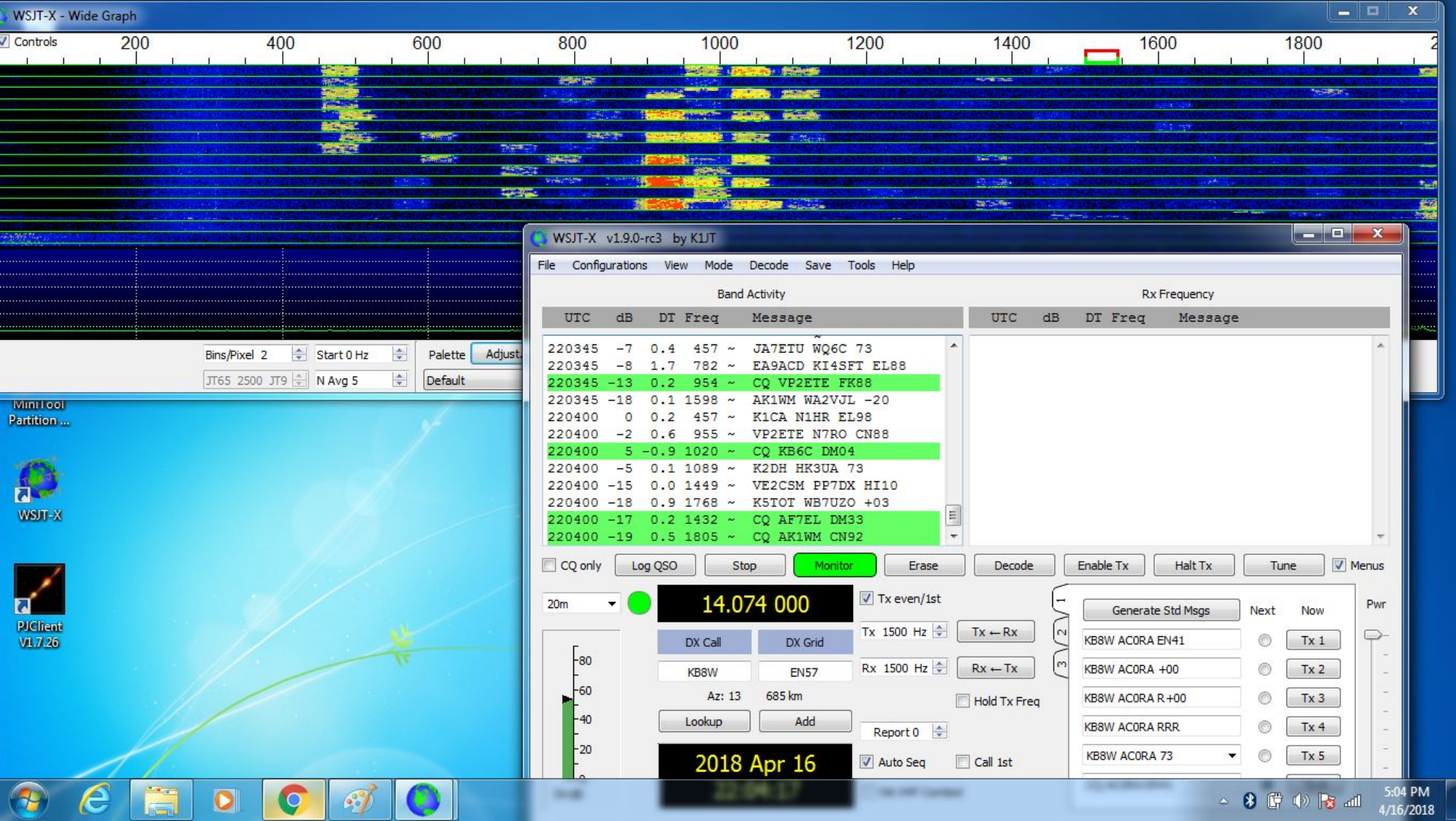
2018 Apr 13
12:57:02

Tx: WB4JWM AC0RA RRR MSK144 Last Tx: WB4JWM AC0RA RRR

Generate Std Msgs Next Now Pwr

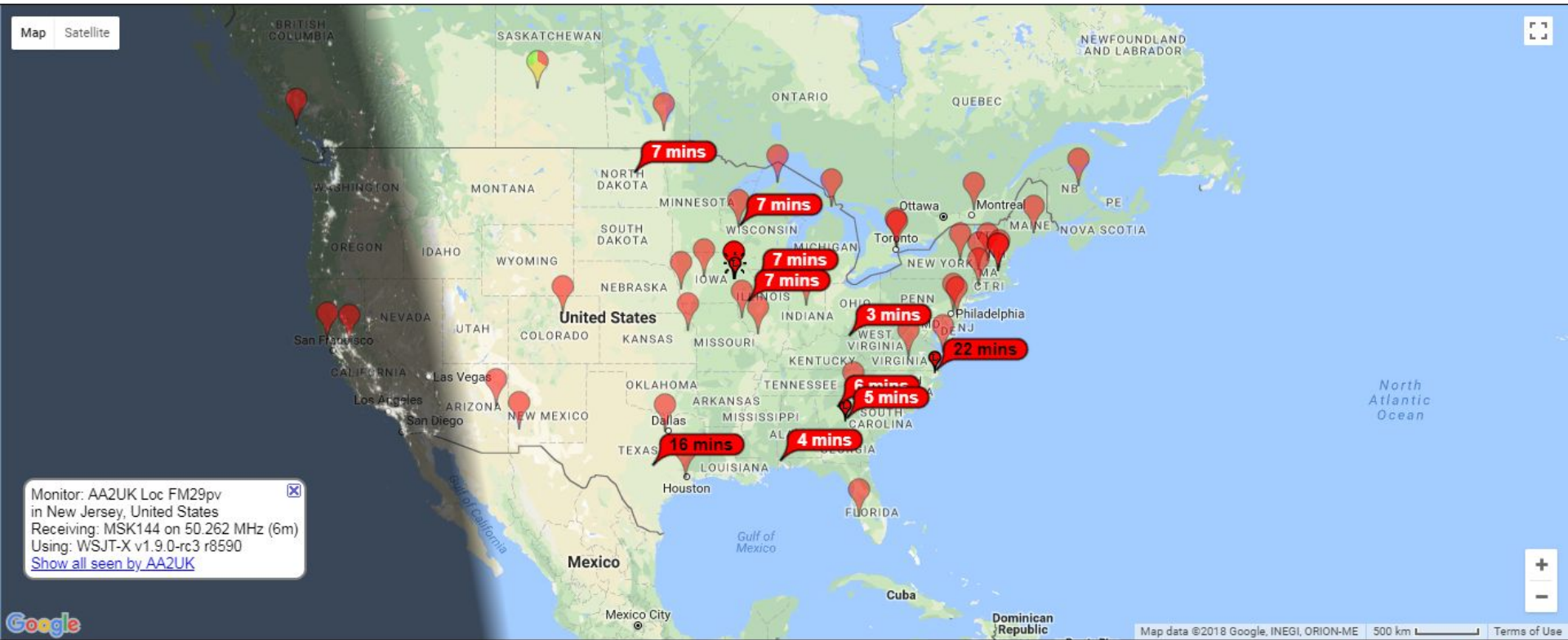
Message	Next	Now
WB4JWM AC0RA EN41	<input type="radio"/>	<input type="radio"/> Tx 1
WB4JWM AC0RA +04	<input type="radio"/>	<input type="radio"/> Tx 2
WB4JWM AC0RA R+04	<input type="radio"/>	<input type="radio"/> Tx 3
WB4JWM AC0RA RRR	<input checked="" type="radio"/>	<input type="radio"/> Tx 4
WB4JWM AC0RA 73	<input type="radio"/>	<input type="radio"/> Tx 5
CQ AC0RA EN41	<input type="radio"/>	<input type="radio"/> Tx 6

2/15 WD:45m



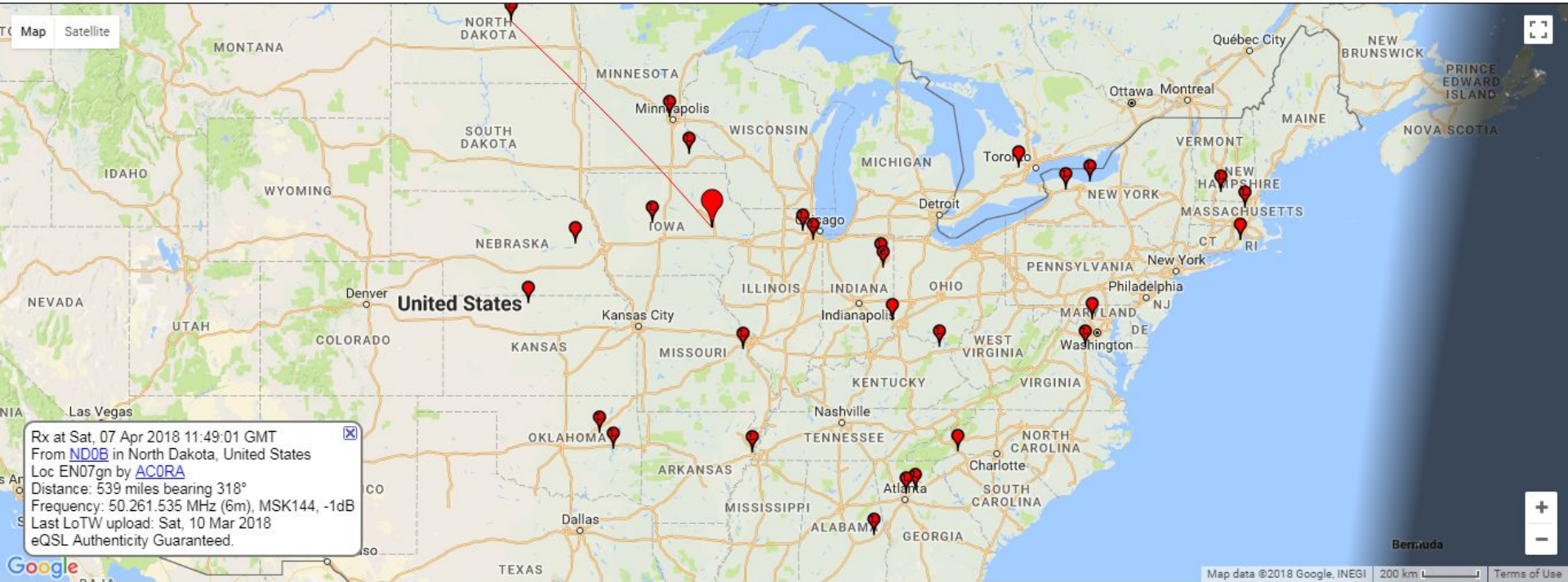
On , show , sent/rcvd by , the callsign using , over the last [Display options](#) [Permalink](#)

Monitoring AC0RA (last heard 3 mins ago). Automatic refresh in 5 minutes. Small markers are the 2 transmitters ([show logbook](#)) heard at AC0RA (2 reports, 1 countries last 24 hours; 167 reports, [1 countries](#) last week). There are [102 active monitors](#) on 6m. [Show all on all bands](#). [Legend](#)



On show sent/rcvd by using over the last [Display options](#) [Permalink](#)

Monitoring AC0RA (last heard 12 hrs ago). Automatic refresh in 5 minutes. Small markers are the 28 transmitters ([show logbook](#)) heard at AC0RA (49 reports, 2 countries last 24 hours; 49 reports, [2 countries](#) last week). There are [52 active monitors](#) on 6m. [Show all on all bands](#). [Legend](#)



[System statistics](#). Comments, problems etc to [Philip Gladstone](#). [Online discussion](#) of problems/issues. Reception records: 3,159,978,562

[Map data](#) ©2018 Google, INEGI | 200 km | [Terms of Use](#)

Ping Jockey

PJClient Version 1.7.26.0

Options View Refresh... Web Links Help Ping Central

16Apr 21:26 **K7KQA James WA DN06ll** => I had called for 10 or so minutes as well.. I guess just poor cndx today.

16Apr 21:34 **K9VSW/DESERT Mike NM DM76el** => 212600 17 12.8 1491 & K9VSW WA60SX CM98 Best Tom thanks

16Apr 21:36 **N5JEH Ed NM DM65rd** => 213330 13 8.3 1485 & K9VSW WA60SX R+02 3 14 -0.8

16Apr 21:37 **K9VSW/DESERT Mike NM DM76el** => GA Ed

16Apr 21:37 **K9VSW/DESERT Mike NM DM76el** => ~ CQ 1st ~ 260 ~

16Apr 21:43 **K9VSW/DESERT Mike NM DM76el** => ~ CQ 2nd ~ 260 ~

16Apr 21:47 **K9VSW/DESERT Mike NM DM76el** => ~ Clear ~ 260 ~ CQ stopped

16Apr 21:54 **WA6LIE Scott CA CM96eq** => 214845 3 7.8 1500 & CQ N5JEH DM65

16Apr 21:55 **WA6LIE Scott CA CM96eq** => 212845 -2 6.8 1496 & CQ K9VSW DM76

16Apr 22:05 **K9VSW/DESERT Mike NM DM76el** => WA6LIE Scott, Thanks

16Apr 22:05 **W8PEN/6/2/LP Don OH EN80si** => CQ 144.150 2nd, sh/cm on, 30 sec, 265 degrees

16Apr 22:05 **K9VSW/DESERT Mike NM DM76el** => ~ CQ 2nd ~ 260 ~

16Apr 22:10 **K9VSW/DESERT Mike NM DM76el** => ~ Clear ~ 260 ~ CQ stopped

16Apr 22:11 **K9VSW/DESERT Mike NM DM76el** => W8PEN Don, Listening your way for the heck of it

16Apr 22:11 **K9VSW/DESERT Mike NM DM76el** => cq 260

16Apr 22:12 **K9VSW/DESERT Mike NM DM76el** => clear

16Apr 22:12 **W8PEN/6/2/LP Don OH EN80si** => K9VSW Mike, I figured you were the only one around so I am headed right a you. Not much chance, but been a boring day today.

16Apr 22:13 **K9VSW/DESERT Mike NM DM76el** => W8PEN Don, QSL...Had a few contacts today on 6...Was hoping FT8 would open up

16Apr 22:14 **K9VSW/DESERT Mike NM DM76el** => Calling you 1st same settings

16Apr 22:15 **W8PEN/6/2/LP Don OH EN80si** => I have been doing non radio things today. Yuck. Switched to calling you to save a step if we get lucky. pen 2nd, 30 sec. the worx.

Callsign	Name	Grid
AI1K	Jack	DM34rs
K7KQA	James	DN06ll
K9VSW	Mike	DM76el
N5JEH	Ed	DM65rd
W8PEN	Don	EN80si
WA6LIE	Scott	CM96...

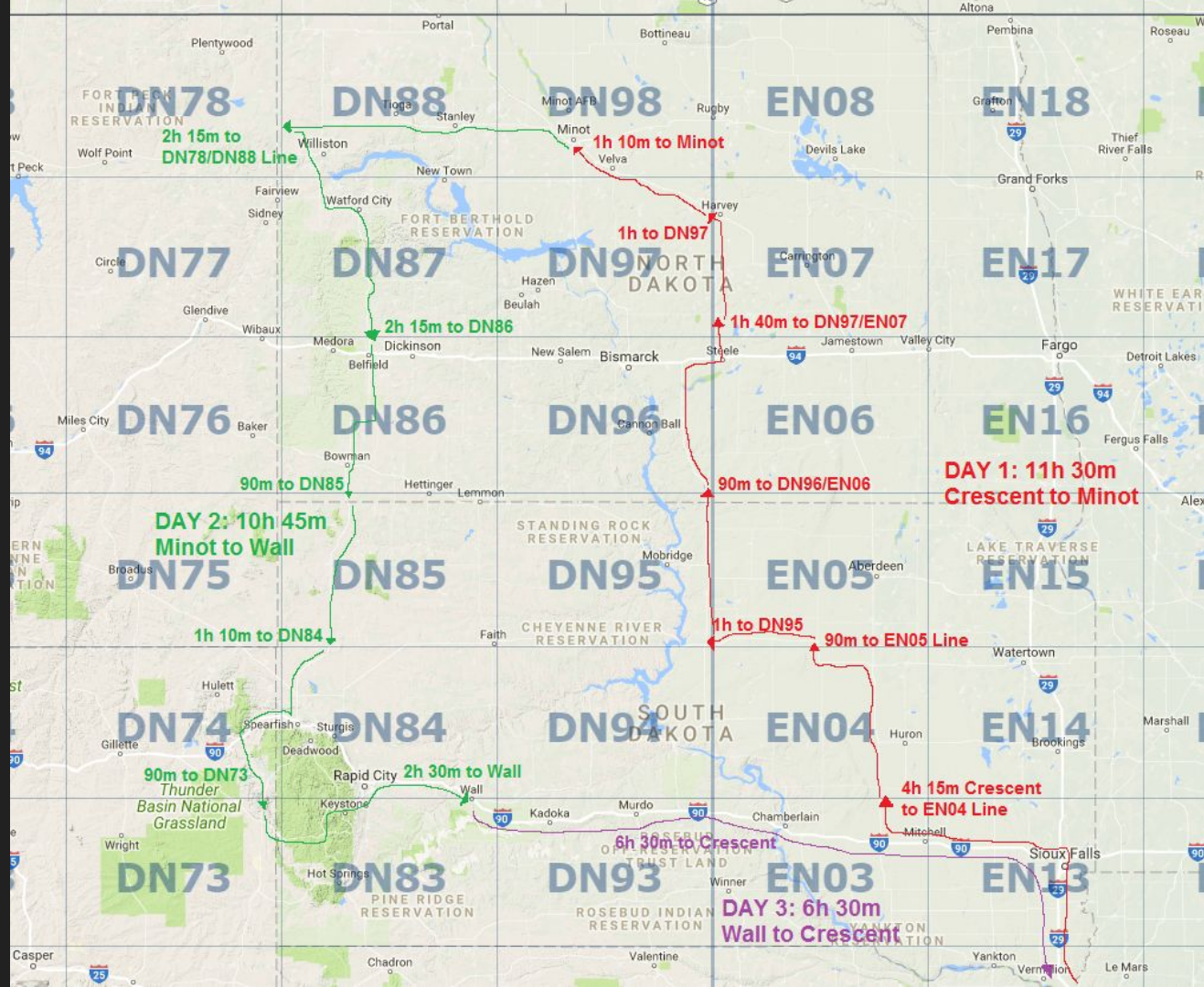
Freq CQ Station

QSO Timer 00:00:00 Reset Start Stop QRG QSX QRV CQ 1st CQ 2nd Clear CQ Run 1st Run 2nd

Last Update: 22:15:56 UTC

K0D Rare Grid trip into the Dakotas

- Goals
 - Activate Kg5cci last needed grids to finish 487 CONUS grids on Satellites
 - Operate 6m along the way on MSK144
 - 1800 miles route over three days



Rover Setup

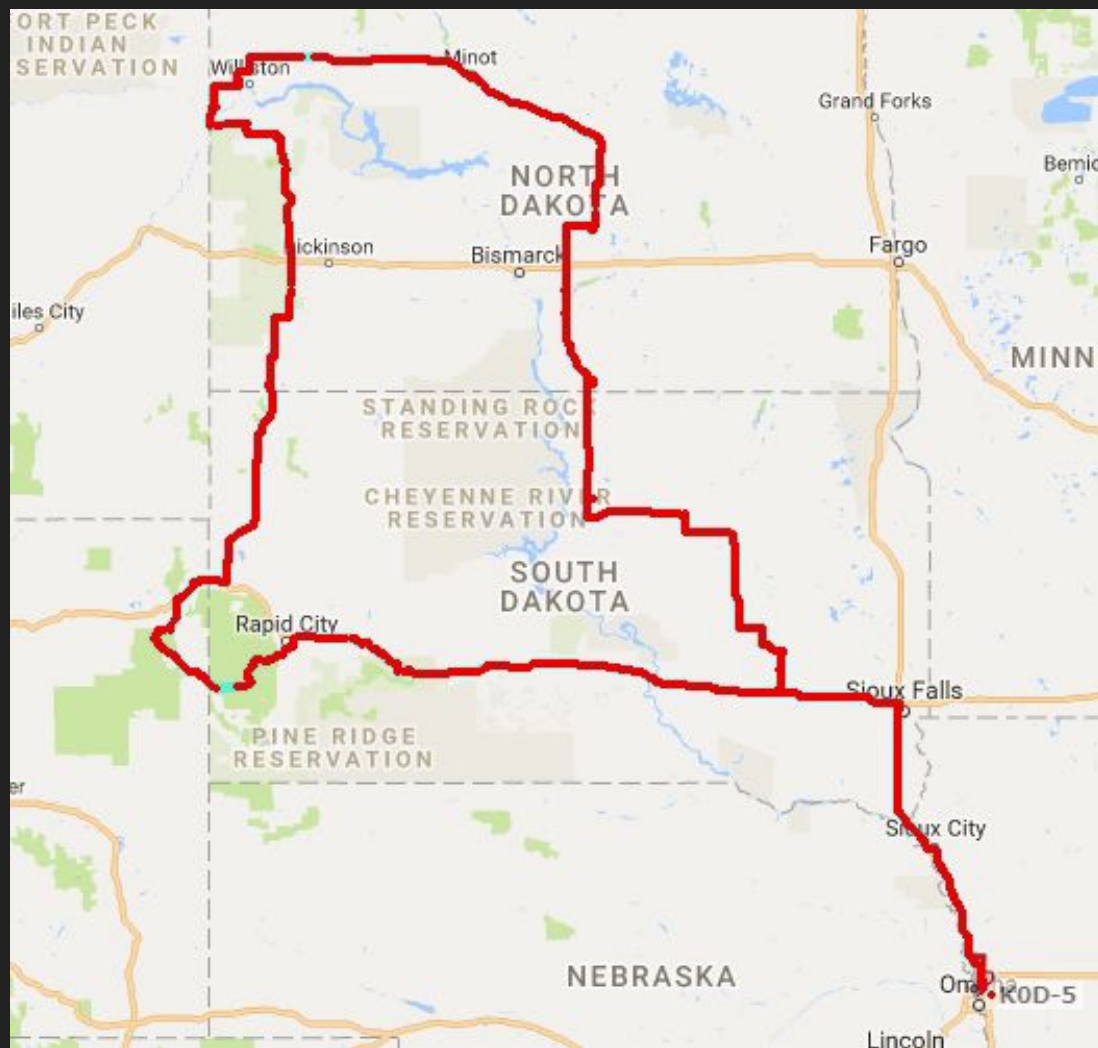
- 6m Station
 - IC-7300 100w on 6m
 - 6M3ss 3 element yagi
 - 35ft of lmr400uf
 - Antenna at 10ft nested and up to 25ft when stopped
 - Yaesu G1000 for rotation
- Satellite Station
 - IC-910
 - Arrow antenna



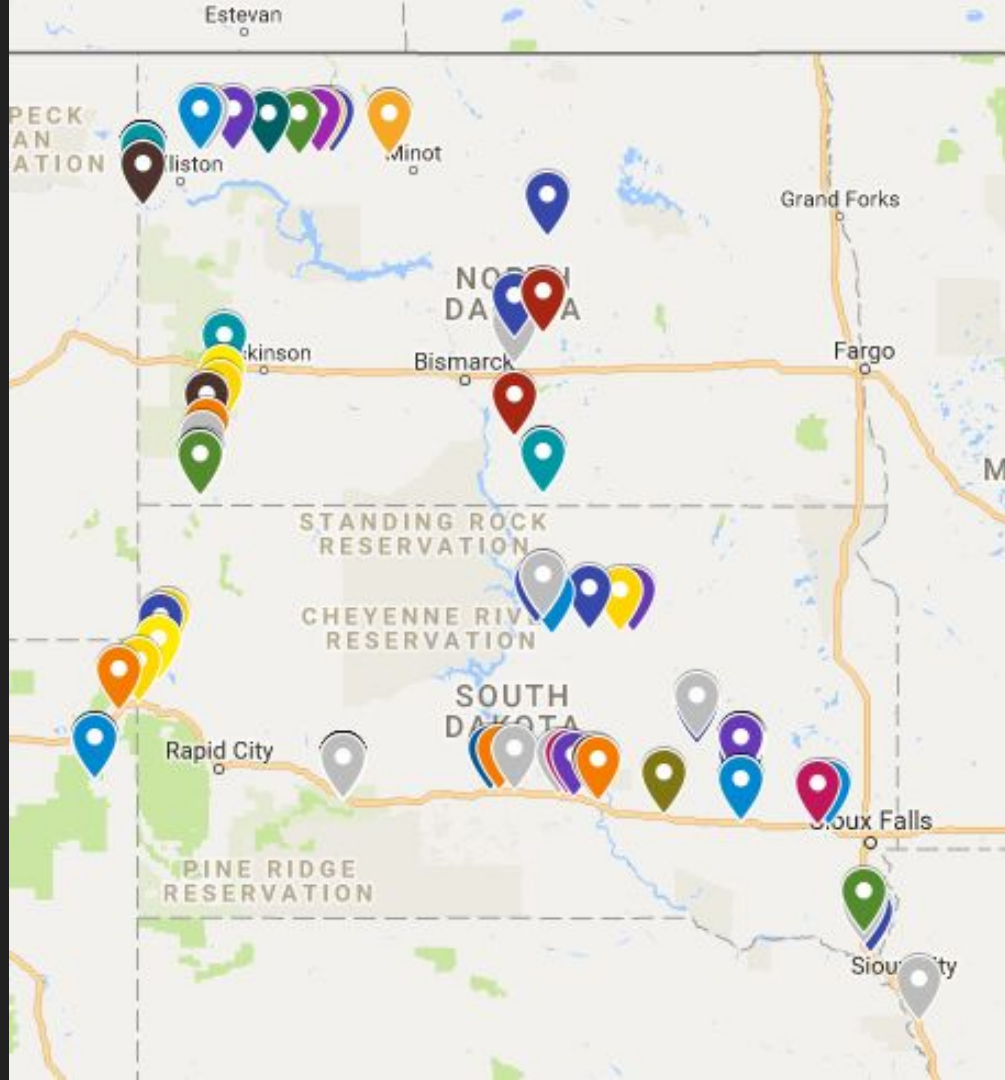




APRS Track



6M qso plot



K0D 6m qso stats

- 24 Grids activated
- 37 unique calls worked
- 108 qsos made
- 2581 msk144 sequences sent
- 2188 msk144 pings decoded
- Longest qso W8BYA
 - EN70 to DN78/88 1691.7 KM (1051.2 Miles)

K0D Satellite qso stats

- 14 passes worked
- 19 grids activated
- 66 unique calls worked
- 184 qsos worked

ARRL January contest Rove

- Plan/Goals
 - Activate 6 rare grids in NE on 6m
 - DN90/91/92 EN00/01/02
 - Use same 6m setup as K0D except in KC0SKM truck
 - KC0SKM attempt some 10ghz fun with W0LGQ
 - Further understand operating Digi Modes as rover in contest



MSK144 as Rover

Enable Tx Halt Tx Tune ☒ Mer

	Generate Std Msgs	Next	Now
1			
2	KB8W AC0RA EN41	<input type="radio"/>	Tx 1
3	KB8W AC0RA EN41	<input type="radio"/>	Tx 2
	KB8W AC0RA R EN41	<input type="radio"/>	Tx 3
	KB8W AC0RA RRR	<input type="radio"/>	Tx 4
	KB8W AC0RA 73	<input type="radio"/>	Tx 5
	CQ AC0RA EN41	<input checked="" type="radio"/>	Tx 6

e Enable Tx Halt Tx Tune ☒ Mer

	Generate Std Msgs	Next	Now
1			
2	KB8W AC0RA EN41	<input type="radio"/>	Tx 1
3	KB8W AC0RA EN41	<input type="radio"/>	Tx 2
	DE AC0RA/R R EN41	<input type="radio"/>	Tx 3
	DE AC0RA/R RRR	<input type="radio"/>	Tx 4
	DE AC0RA/R 73	<input type="radio"/>	Tx 5
	CQ AC0RA/R EN41	<input checked="" type="radio"/>	Tx 6

o Seq
ontest

Contest Results

- 1 10ghz qso with W0lgq
- 2 fm qsos on 2m
- 2 ft8 qsos on 6m
- 2 ssb qsos on 6m
- 6 msk144 on 6m via tropo
- 65 msk144 qsos on Scatter
- 78 qsos total 37 mults for score of 3145



Questions?