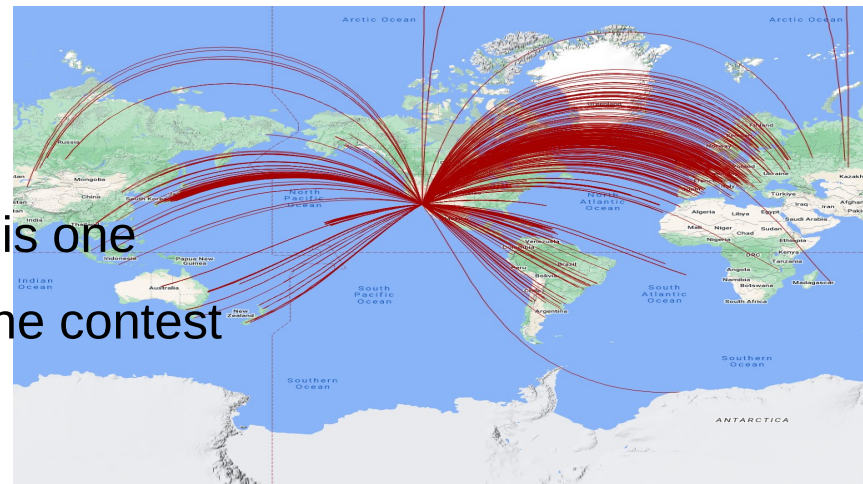




# Week 5 - Session 10

CW Academy

- Go over h/w and on air activities
- This weekend is the ARRL International DX CW
  - “International” → We only work stations outside of the U.S.
  - We send 5NN + STATE/PROVINCE
  - DX sends 5NN + Power
  - The best strategy for “little pistols” is S&P for this one
  - Look for plenty of DX activity before and after the contest
  - Can you get DXCC in one weekend?
- DX Cluster and Reverse Beacon Network
- Drill: Sentences





The screenshot displays the pyKeyer software interface, which is used for automated radio keying. The top section features a waterfall display showing frequency bands from 7017 to 7026 MHz, with various call signs like RT4H, WPCF, NY3A, KYSS, AA2IL, VE3MX, HAQNL, K3MB, K3RBO, W2RGS, SM3MO, SM3SM, N33TT, K1DOW, A33K, N3PZ, and N4000 visible. Below the waterfall, the main control panel includes fields for Call (nf8m), Name (FRANK), Exchange (1634), and Super Check Partial (NF8M EF8M NJ8M). The interface also shows a list of macros, a QSO log, and a band map. The bottom section contains various control panels for IF bandwidth, IF gain, RXO, TX power, mic gain, monitor, and a world clock. The world clock shows the time 03:44:28 and a map of the world. The bottom status bar indicates the date and time: Wed Feb 14, 2024.



# DX Cluster

CW Academy

- The DX Cluster refers to websites that list DX stations that other ops have “spotted”
  - Rare and not so rare DX
  - Running stations in a domestic contest
  - dxwatch.com and dxheat.com are my “go to” sites but there are many others
- Reverse Beacon Network (RBN)
  - Automated systems that do this for CW and RTTY (Next Slide)
- The use of these tools, even once, puts you in the “assisted” category in a contest
  - S&P: Quickly identify un-worked stations and “multipliers”
  - RUNNING: Quickly identify open frequencies
- These tools have altered the landscape for chasing DX
  - No longer have to endlessly “spin the big knob” to find DX
  - Generates instant pile-ups



# DXHeat.com

## Ops Manually Enter “Spots”

CW Academy

Filters

All

None

Sources

W3LPL

DXCC

VALID

OTHER

Modes

CW

PHONE

DIGI

Bands

SHF

UHF

VHF

4m

DX de	Freq	DX	Tags	Comments	UTC	Date
W7BOB	28 180,8	EA7KRB	🟢@		17:53	18/10/23
KA3JAW	29 600,0	S01AS		FN20JQ<ES> Heard 3x3 4x4	17:53	18/10/23
KI5MFF	28 495,0	KC5OUR	🟡@	Valencia Mid School Students calling	17:52	18/10/23
N4WMB	28 565,0	CS8ABG	🔴@		17:52	18/10/23
LU6YR	28 074,0	DL1RAE	🟢@	FT8 db-17 From FF51 1965 Hz TNX QS	17:51	18/10/23
W7BOB	28 180,8	EA7L	🟢@		17:51	18/10/23
NU4N	14 286,0	N2PQJ	🟢@	POTA 2147 NY	17:51	18/10/23
W5AP	21 315,0	W8EDU	🟢@	name Adam	17:51	18/10/23
WU5E	28 455,0	LA5XO			17:50	18/10/23
N5BIG	28 580,0	J88IH	🟢@		17:50	18/10/23
W0KAL	14 327,0	K4DSX	🟢@		17:49	18/10/23
PU9FDO	28 565,0	CS8ABG	🔴@	59 CQ DX	17:49	18/10/23
LU6YR	28 074,0	R2BY		FT8 db-14 From FF51 1965 Hz TNX QS	17:49	18/10/23
W2TAD	28 074,0	W1AW/0	🟢@	FT8 - Nebraska	17:48	18/10/23
KE8RRG	28 387,0	F5NBX	🟢@		17:47	18/10/23
KI6WJ	28 076,8	KL7HFI	🔴@		17:46	18/10/23
KG8V	21 270,0	PA3DRK	🟢@	USB EN82hn -> JO21ol	17:46	18/10/23
W3LPL	28 022,0	3B8HL		Heard in NC	17:46	18/10/23
NC1M	21 289,0	S51CK			17:45	18/10/23
KI6WJ	28 076,7	EA1A	🟢@		17:44	18/10/23
PY2RT	28 075,7	DG7LBB	🟡@	FT8 Sent: -15 Rcvd: -24	17:44	18/10/23
W8FJ	24 891,9	9J2REK	🟢@		17:43	18/10/23
VE2JM	24 960,0	HB0WR	🟢@		17:42	18/10/23
WP4U	50 313,0	NP2X	🟢@	cqing	17:39	18/10/23
KA3JAW	29 600,0	EA1BXX	🟡@	FN20JQ<ES>IN70DW Corrected Cal	17:39	18/10/23
W2FTJ	28 573,0	IZ0WEI	🟢@	CDM I*	17:38	18/10/23

Realtime World Clock

17:53:39 UTC

Wednesday, 18. of October 2023

Search

CALLSIGN

Search

Default Wildcard

Submit

Submit a DX Spot

(Login required)

Propagation

SFI

137

K

0

Solar Activity SFI: 137

Magnetic Activity K: 0 A: 2

Band Activity

Your Continent is N. America

EU NA SA AS AF OC

6

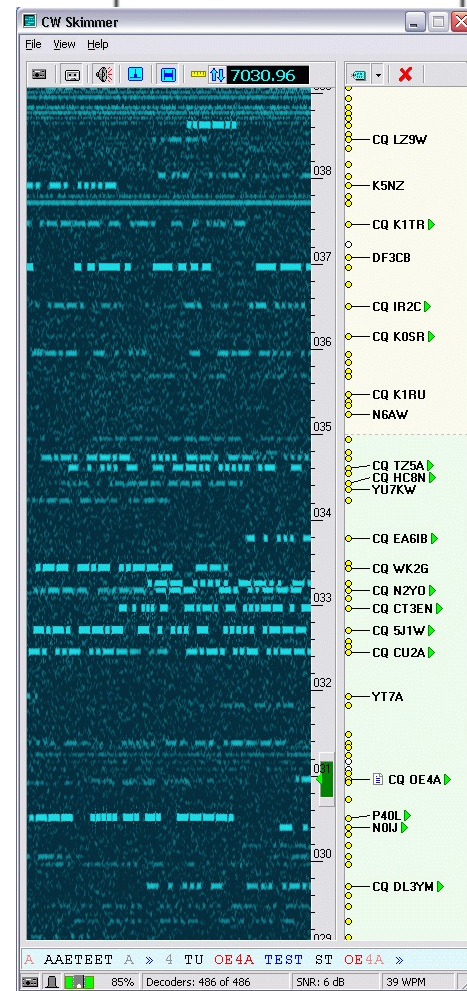
10



# Reverse Beacon Network (RBN)

CW Academy

- A world-wide system of SDRs monitoring one or more bands and using automatic decoders
  - CW and RTTY “Skimmers”
- You can view data “live” or download and analyze historical data off-line
  - This is an excellent tool for assessing your station’s performance
  - Send CQ <YOUR\_CALL> or TEST <YOUR\_CALL> a few times to get spotted
- reversebeacon.net – can also get raw RBN spots in real-time
  - PSK Reporter does something similar for FT4/8 signals → Almost everyone is a spotter/monitor!
- Competitive Contest Loggers have the ability to import spots from a cluster node
  - From cluster or RBN or both
  - Can usually “filter” the spots you actually see



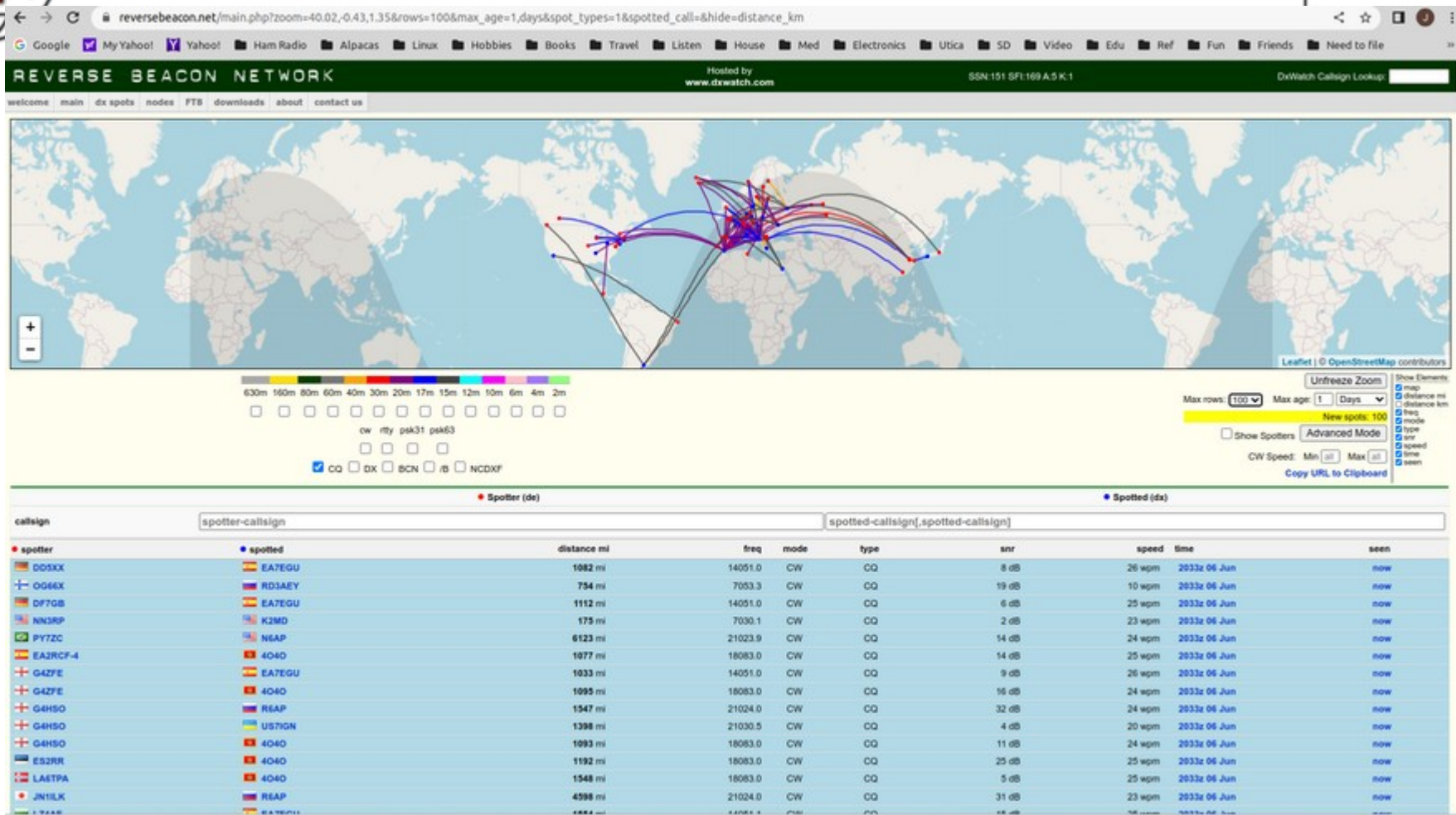




# Reverse Beacon Network (RBN)

Spots Automagically Generated by Skimmers

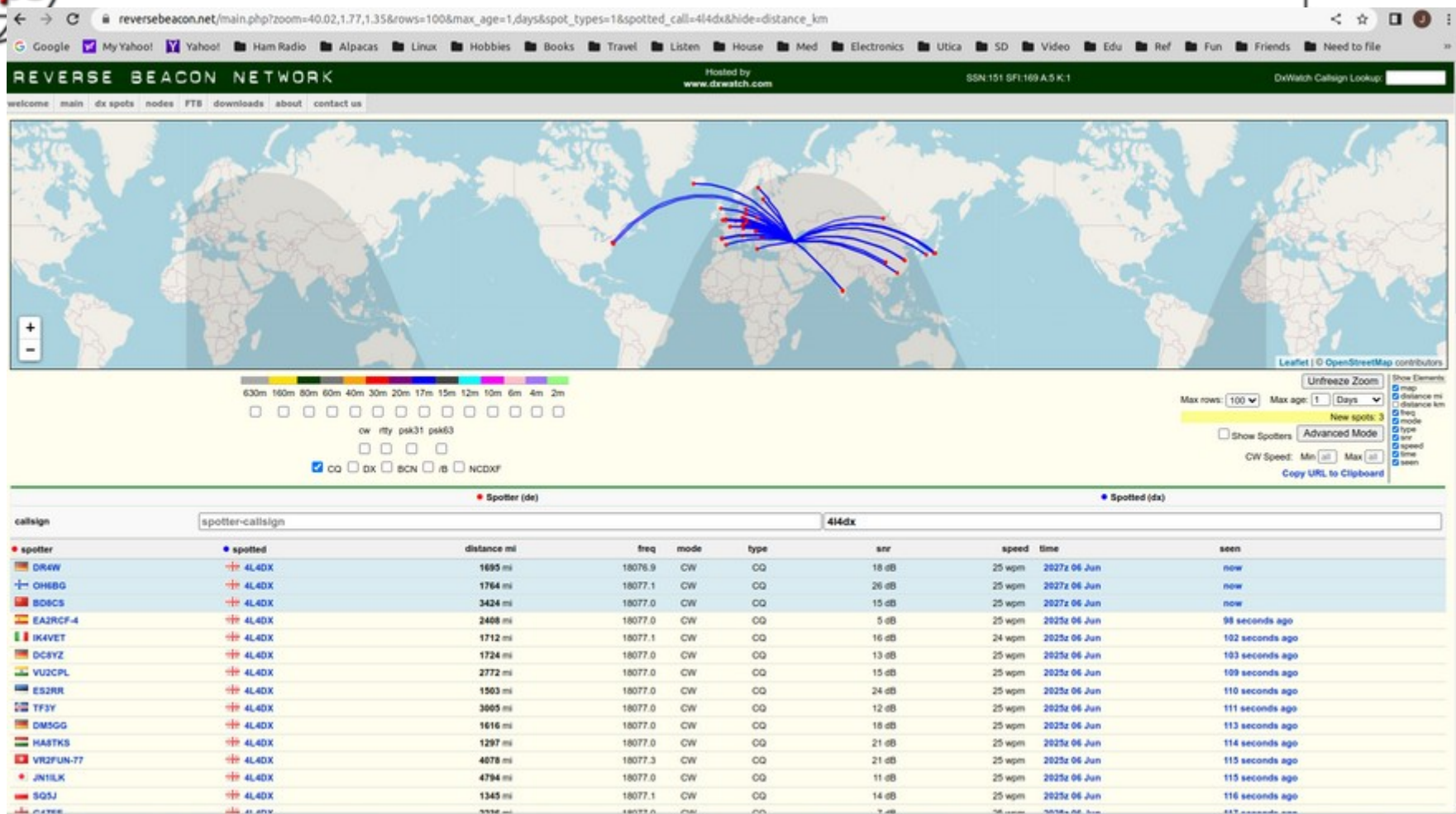
CW Academy





# RBN Real-Time Filters

CW Academy







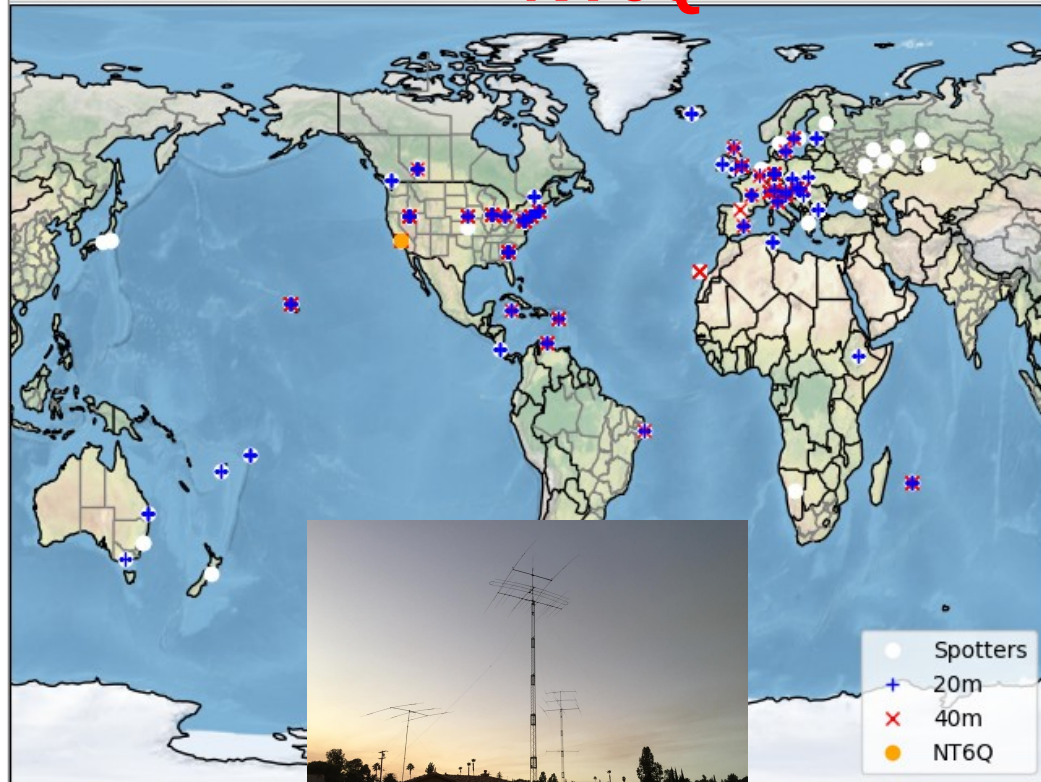
# Big Gun vs Little Pistol

CWT 0300-0400 July 28, 2022

CW Academy

RBN Analysis for NT6Q from 20220728.csv

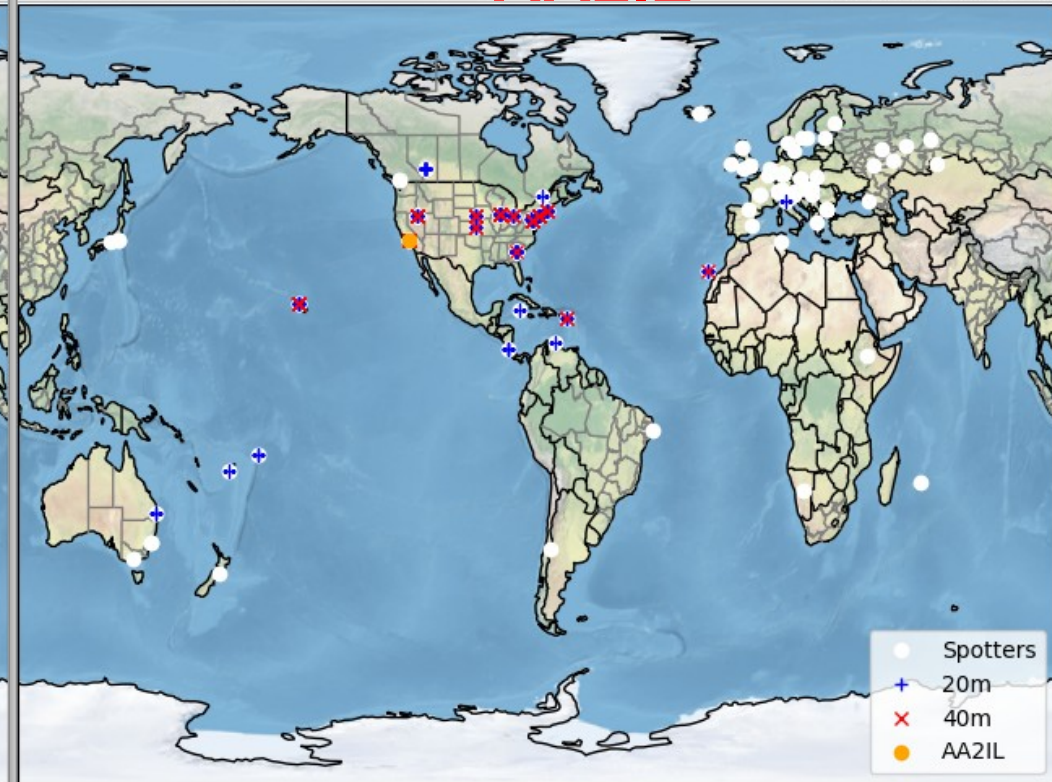
**NT6Q**



RBN Analysis for AA2IL from 20220728.csv

**AA2IL**

5.625, 70.5 (70.500000°N, 69.375000°W)  
[0.808, 0.824, 0.847, 1]

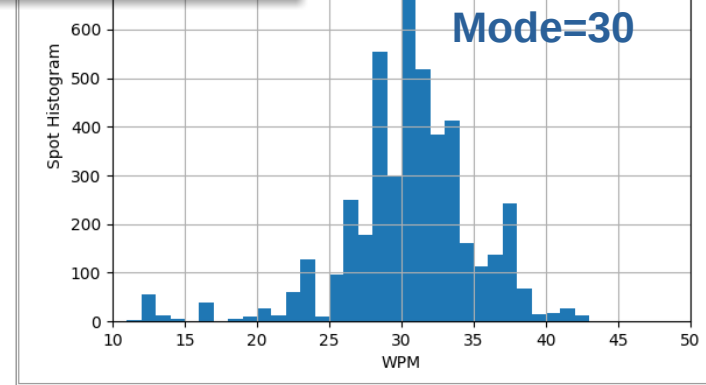
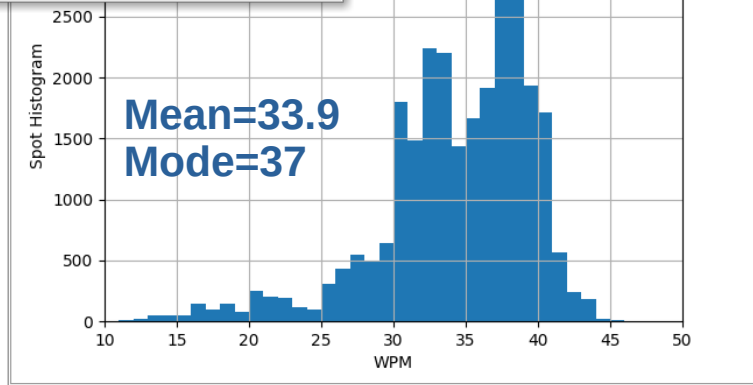
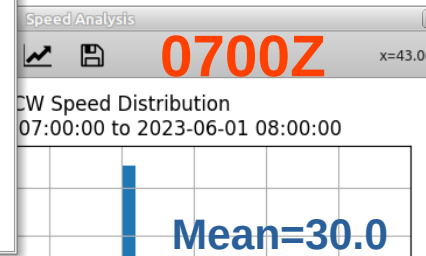
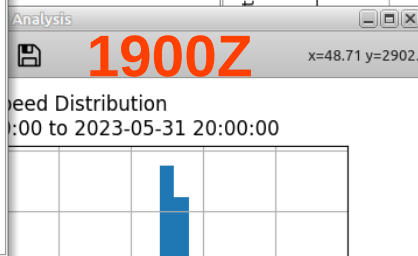
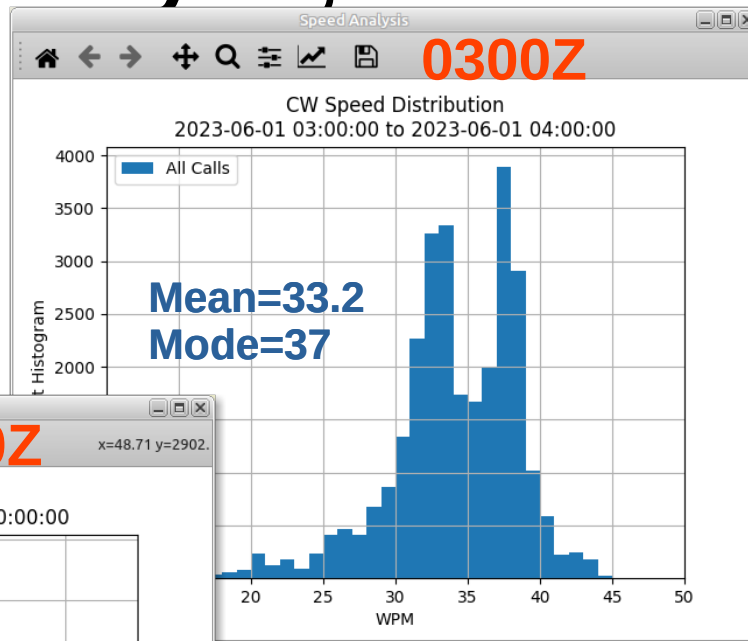
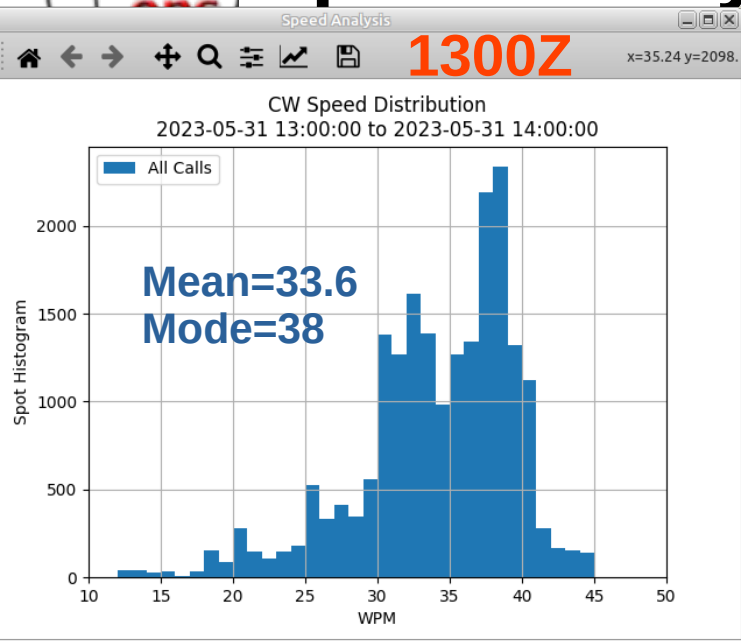






# Speed Analysis – May 31, 2023 CWTs

CW Academy





# PSK Reporter – Stations Who Heard Me on 6m During the June 2022 VHF Contest

CW Academy

