
WSJT-X

Check out advance features up to version 3.0.

NEW ADVANCED FEATURES

- Tick box under Rig Data, Read and display Power, and SWR.
- Tick box to halt transmit when SWR is >2.5 .
- Band hopping, allows a station to transmit or receive WSPR signals on multiple bands in a scheduled manner. This helps in gathering propagation data across a wide frequency range.
- User hardware scripts: can also execute custom scripts during band changes to handle additional hardware switching such as antenna relays or filters.
- Spot Reporting: When receiving it can decode WSPR signals and report them to WSPRnet, a global database of signal paths and propagation conditions.

REFRESHER COURSE WITH WSJT-X_IMPROVED PLUS

- Download version 3.0 from Sourceforge.net
- Open the app and go to File and Settings.
- General tab enter your call sign and grid.
- Radio tab enter your radio setup information.
- Audio tab enter your sound card Audio USB Codec.
- New to WSJT-X is Rig Data:
- Check, Read and display PWR, and SWR.
- Check, Halt TX when $SWR > 2.5$. You will want this to save your rig if some goes wrong especially with modes like WSPR.
- There are many new features so you will want to read the manual about the advance features.

IN GENERAL

- There is a lot of great new features in WSJT-X version 3.0.
- I will move on to the main presentation on WSPR.
- Thank you to Mike, KEØQKF, for his contribution to the WSPR project about band hopping.
- I will not cover things like the physics and math behind it all. I will cover just enough to make it usable.
- I highly recommend using Windows Co-Pilot to answer any questions you might have while using WSJT-X or WSPR.

WSPR

Weak Signal Propagation Reporter

Presented by Larry Truesdell AKØZ

Exploring WSPR in Ham Radio



Low-Power Signal Transmission

WSPR uses minimal power to send signals that can travel great distances, ideal for monitoring propagation.



Global Signal Path Analysis

WSPR allows ham operators to analyze how radio waves travel worldwide, revealing propagation patterns.



Automatic Reporting Network

WSPR's network collects and shares data automatically, offering insights into atmospheric conditions and antenna efficiency.

KEY DIFFERENCES BETWEEN WSPR TRANSMITTERS AND RECEIVERS

FEATURE	TRANSMITTER	RECEIVER
Role	Sends encoded signal	Listens and decodes signal
Power	Very low (mW to few W)	Passive, no transmission
Timing	Precise 2-min slots	Synchronized to decode correctly
Modulation	FSK (narrow bandwidth)	DSP decoding
Hardware	Microcontroller, SDR, or PC	SDR, PC, or traditional receiver
Software	WSJT-X, custom firmware	WSJT-X, decoding/reporting tools
Reporting	No automatic reporting	Uploads to WSPRnet

WSPR TRANSMITTERS

- Function: - Transmitters send out low-power signals encoded with information such as callsign, grid locator, and power level.
- Power Output: - Typically very low—often less than 5 watts, and sometimes as low as milliwatts.
- Timing: - Transmissions occur in synchronized 2-minute time slots, usually coordinated via GPS or internet time servers.
- Modulation: - Uses frequency-shift keying (FSK) with very narrow bandwidth (~6 Hz).
- Hardware Requirements: - Can be built using simple microcontrollers (like Arduino or Raspberry Pi), SDRs (Software Defined Radios), or dedicated WSPR transmitters.
- Software: - Software like WSJT-X or custom firmware handles encoding and timing.
- A digital mode used for beacon transmissions.
- Results appear in real time on the internet.

WSPR RECEIVERS

- Function: - Receivers listen for WSPR signals and decode them to extract the transmitted information.
- 2. Sensitivity: - Must be extremely sensitive to detect signals as low as -30 dB SNR in a 2.5 kHz bandwidth.
- 3. Decoding: - Uses DSP (Digital Signal Processing) to decode weak signals buried in noise.
- 4. Reporting: - Automatically uploads decoded data (callsign, location, SNR, frequency, etc.) to online databases like WSPRnet.
- 5. Hardware Requirements: - Can use SDRs, traditional receivers, or even web-based SDRs. Antenna quality and noise floor are critical.
- 6. Software: - WSJT-X is the most common software used for decoding and reporting.

FREQUENCIES

- USB dial (MHz): 0.136, 0.4742, 1.8366, 3.5686, 5.2872, 5.3647, 7.0386, 10.1387, 13.5539, 14.0956, 18.1046, 21.0946, 24.9246, 28.1246, 50.293, 70.091, 144.489, 432.300, 1296.500
- The Beacon signal is 6 Hz wide in a 2.5 kHz bandwidth. There is a 2 minute transmit cycle after which the receiver decodes the signal. The decoded data (SPOT) is then uploaded to WSPRnet.org.

WSPR RETRIEVABLE DATA - 1

1. WSPRnet.org: where most WSPR reception reports are uploaded.

- **Live maps:** showing signal paths between transmitters and receivers.
- **Searchable logs:** by callsign, band , time, and location.
- **CSV exports:** of spot data for offline analysis.
- **Filters:** for band, mode, distance and more.
- -----

2. WSPR Live: An advanced visualization and analysis platform that:

- Uses a Grafana dashboard for real-time data visualization.
- Offers SQL query access to the full WSPRnet dataset.
- Supports Google Earth overlays and bulk data exports.

WSPR RETRIEVABLE DATA - 2

- **3. VK7JJ WSPR Map**

- A popular interactive map that :
- Displays real-time and historical WSPR spots
- Allows filtering by band, callsign and time
- Visualizes propagation paths globally

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4. WSPRnet Viewer (Android App).

- An app that:
- Periodically retrieves and displays WSPR data.
- Shows transmitter/receiver locations on a map
- Allows filtering and notifications for propagation conditions.

3RD PARTY MAPS AND DATA

- WSPR Rocks!
- M0XDK Map
- KB9AMG Monthly Stats
- WA2ZKD Spot Analysis
- DJ2LS WSPR Spot Heat Map
- LU7AA/LU7ABF Maps/Graphs – my favorite

A SPOT OR DATA TO BE SEEN ON WSPRNET.ORG AND OTHER SITES

Field Name	Description
Timestamp (UTC)	Time the signal was received, in Coordinated Universal Time
Callsign	Transmitting station's callsign
Grid Locator	Maidenhead grid square of the transmitting station
Frequency (MHz)	Frequency on which the signal was received
SNR (dB)	Signal-to-noise ratio of the received signal
Drift (Hz)	Frequency drift during the 2-minute transmission
Power (dBm)	Transmitter power level as reported by the sender
Receiver Callsign	Callsign of the receiving station
Receiver Locator	Grid locator of the receiving station
Distance (km)	Calculated distance between transmitter and receiver
Azimuth (Â°)	Direction from receiver to transmitter (bearing in degrees)
Mode	Transmission mode, usually 'WSPR'

WHAT IS WSPR USED FOR?

- The received information will be uploaded to the internet to a data base on WSPRNET.org.
- It can be used for learning about HF propagation. Each HF band has different characteristics. With WSPR you can see what is happening at different times of the day with the aid of band hopping.
- From maps such as what is on WSPRNET.org, you see how far your signal will reach and in which direction. Which is good for testing antennas.
- Comparing antennas with other people.
- Because it is basically automatic it can be use when not in your shack.

BAND HOPPING

- WSJT-X includes a band hopping feature that allows your station to automatically switch between bands at scheduled intervals. This is useful for propagation studies and maximizing reception/transmission across multiple bands.
- WSJT-X uses CAT control to change bands on your radio.
- You can define active bands for different times of day (Sunrise, Day, Sunset, Night).
- The software follows a 2-minute transmission cycle, hopping to a new band every few minutes.
- You can also configure tune-up transmissions to help automatic antenna tuners adjust when switching bands. If you are using default settings for band hopping use the following chart.

- Band hopping cont...
- If the box labeled Tune is checked for a particular band, *WSJT-X* transmits an unmodulated carrier for several seconds just after switching to that band and before the normal Rx or Tx period starts. This feature can be used to activate an automatic antenna tuner (ATU) to tune a multi-band antenna to the newly selected band.
- If a RX box is ticked, then you will only receive spots and upload them to the internet. This is nice if you have your radio on anyway you can spot in the background or while you are away from your radio.
- All other boxes are for beacon and spotting automatically on various bands of your choosing. It is smart enough to note the difference between the times of the day.


WSPR Band Hopping

×

	2190m	630m	160m	80m	40m	30m	20m	17m	15m	12m	10m	6m	4m	2m	70cm	23cm	13cm	3cm
Sunrise grayline	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐
Day	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐
Sunset grayline	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐
Night	☐	☐	☐	☐	☒	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Tune	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Rx only	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Gray time:
60min

Under settings and reporting and logging check, log automatically. Under Mode select WSPR. Set an automatic time sync with an app like NetTime, or Dimension 4. Set AGC to OFF.

- When WSJT-X decodes incoming WSPR signals, it checks if your callsign appears in any of them.
- If it doesn't, it shows "No own call decodes", meaning:
 - You didn't transmit during that cycle, or
 - No one received your transmission and reported it, or
 - You didn't receive any signals that included your callsign as the sender or receiver.
 - Check box, "No own call decodes".
- Why this matters:
- It helps you monitor whether your station is being heard.
- If you're transmitting and consistently see this message, it could indicate:
 - Poor propagation conditions.
 - Low transmit power.
 - Antenna issues.
 - Incorrect configuration (e.g., wrong callsign or grid locator).

What does “Prefer type 1 messages” do?

When this option is enabled:

- WSJT-X will try to use the standard Type 1 message format whenever possible.
- If your callsign and grid locator fit within the constraints of Type 1 (e.g., callsign is 6 characters or fewer, grid is 4 characters), it will use that format.
- If your callsign or grid is too long or non-standard (e.g., a suffix like /QRP or a 6-character grid), WSJT-X may switch to Type 2 or Type 3 messages, which are longer and less efficient.

BP box. When enabled, it applies a band-pass filter to the received audio signal.

This filter helps reduce noise and interference outside the narrow WSPR signal bandwidth (typically around 200 Hz).

It can improve decoding performance by focusing only on the frequency range where WSPR signals are expected.

This feature is especially useful in noisy environments or when operating on crowded bands.

Adjust the PWR slide so that the ALC is just registering. Adjust the RF gain so that you read approximately 70db.

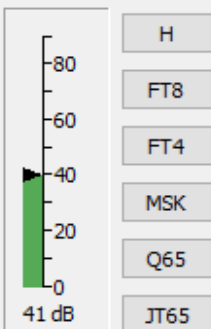
Select the TX next, to transmit on the next receive cycle.

UTC	dB	DT	Freq	Drift	Call	Grid	dBm	mi
1612	-16	-1.6	18.106193	0	K0ANS	DN70	23	704
1612	-15	-1.6	18.106196	0	N4JJS	FM05	23	800
1614	-7	-1.5	21.095997	0	N0IM/B		23	
1614	-0	-1.5	21.096021	0	N5CSC	EL09	37	934
1614	-19	-1.4	21.096040	1	N3CX	FN11	23	755
1614	-21	-1.5	21.096046	0	WB8SCG	FM17	23	828
1614	-24	-1.6	21.096078	0	OZ2JBR	JO65	37	4422
1614	-26	-1.9	21.096083	0	KK2DX	FN45	23	1064
1614	-13	-1.6	21.096092	0	WA3DNM	FM29	37	883
1614	-19	-1.7	21.096104	2	KA5KFK	EL09	37	934
1614	-27	-1.5	21.096113	0	G4LEN	IO81	37	4010
1614	-16	-1.8	21.096122	2	VA6AKA	DO32	23	1251
1614	-6	-1.3	21.096125	0	WA6HEW	EM11	23	760
1614	-25	-1.5	21.096147	2	WB6YRW	CM97	23	1588
1614	-15	-1.6	21.096151	0	KK7NPK	CN87	43	1591
1614	-5	-1.3	21.096160	0	K5NAV	DM55	23	1031
1614	-7	-1.6	21.096164	3	W0BX	DM58	23	946
1614	-16	-1.7	21.096167	0	N4JJS	FM05	23	800
1614	-12	-1.8	21.096168	0	KM4BWW	EM60	23	808
1614	-24	-1.3	21.096179	0	DK8EY	JO31	33	4379
1616	-21	-1.8	24.926135	0	K2UFH	FN21	27	858

160 80 60 40 30 20 17 15 12 10 6 2 70

☒ BP Stop Monitor Erase Decode Enable Tx Halt Tx Tune ☒ Menus

10m 28.124 600



H
FT8
FT4
MSK
Q65
JT65

2025 Oct 25
16:18:26

Tx 1512 Hz ☒ Upload spots
Tx Pct 20 % ☒ Prefer Type 1 messages
☒ Band Hopping ☒ No own call decodes
Schedule ... Tx Next
30 dBm 1 W

Receiving

WSPR

1

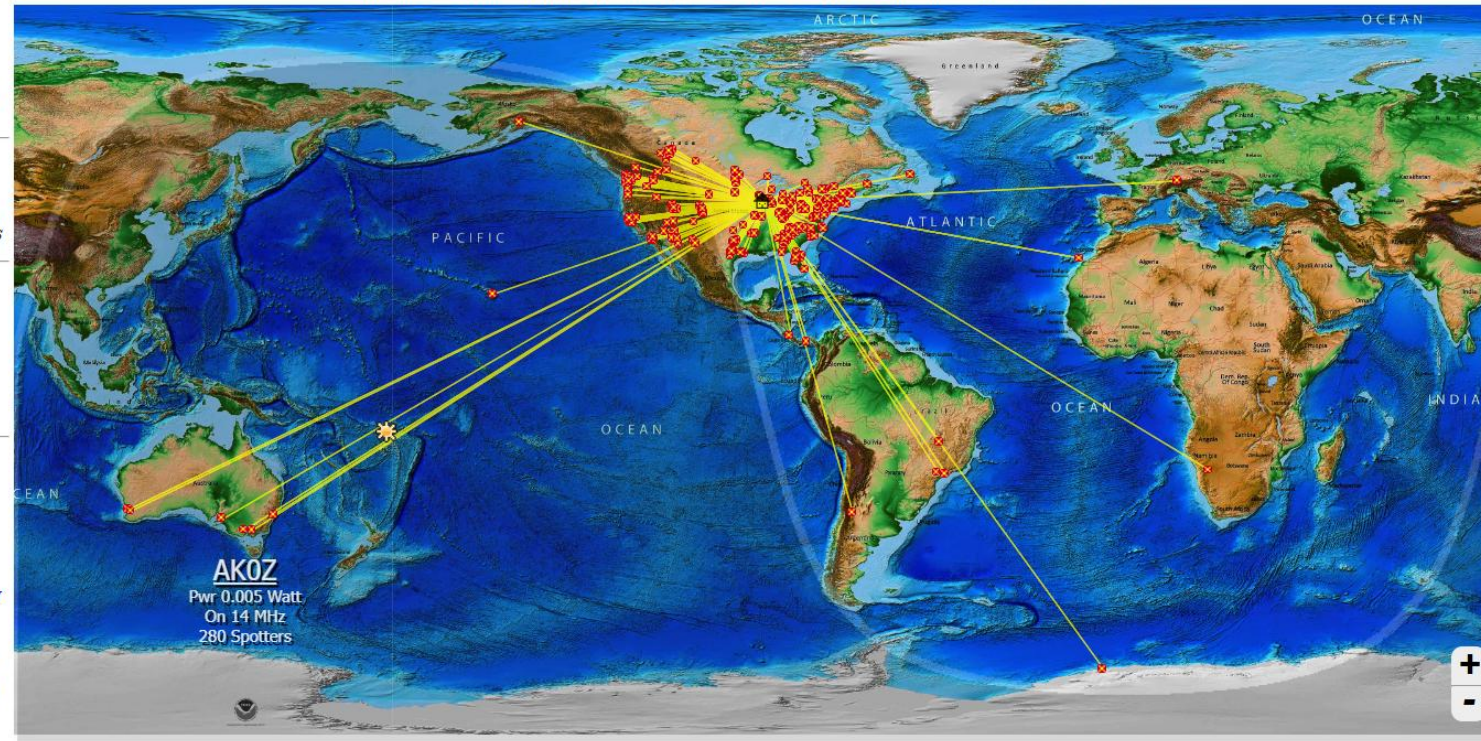
Last Tx: AK0Z EN41 30

Day

26/120



Map shows AK0Z and his 280 spotters on 14 MHz. From Oct-28 20:36z to 23:42z 3h.



Solar-Terrestrial Data

28 Oct 2025 2343 GMT
SF1:122 SN: 91
A: 21 K: 4
X-Ray: 88.9
304A: 130.4 @ SEM
Ptn Flx: 17
Elc Flx: 5490
Aurora: 4/n=1.99
Bz: 10.7 Slw: 464.1

HF Conditions

Band	Day	Night
80m-40m	Poor	Fair
30m-20m	Fair	Fair
17m-15m	Fair	Fair
12m-10m	Fair	Poor

VHF Conditions

Aur Lat 63.9°
Aurora Band Closed
6m EsEU Band Closed
4m EsEU Band Closed
2m EsEU Band Closed
2m EsNA Band Closed
EME Deg Poor
Solar Flare Prb 65%

MUF

MS 0 6 12 18 UTC

Geonag Field ACTIVE
Sig Noise Lvl S3-S4
MUF US Boulder NoRpt

Alternate Site:
<http://lu7aa.com.ar/dx.asp>

Balloons Satellites

Spots courtesy of WSPRnet
App Code by Pedro LU7ABF
Hosting LU7AA AMSAT Arg.

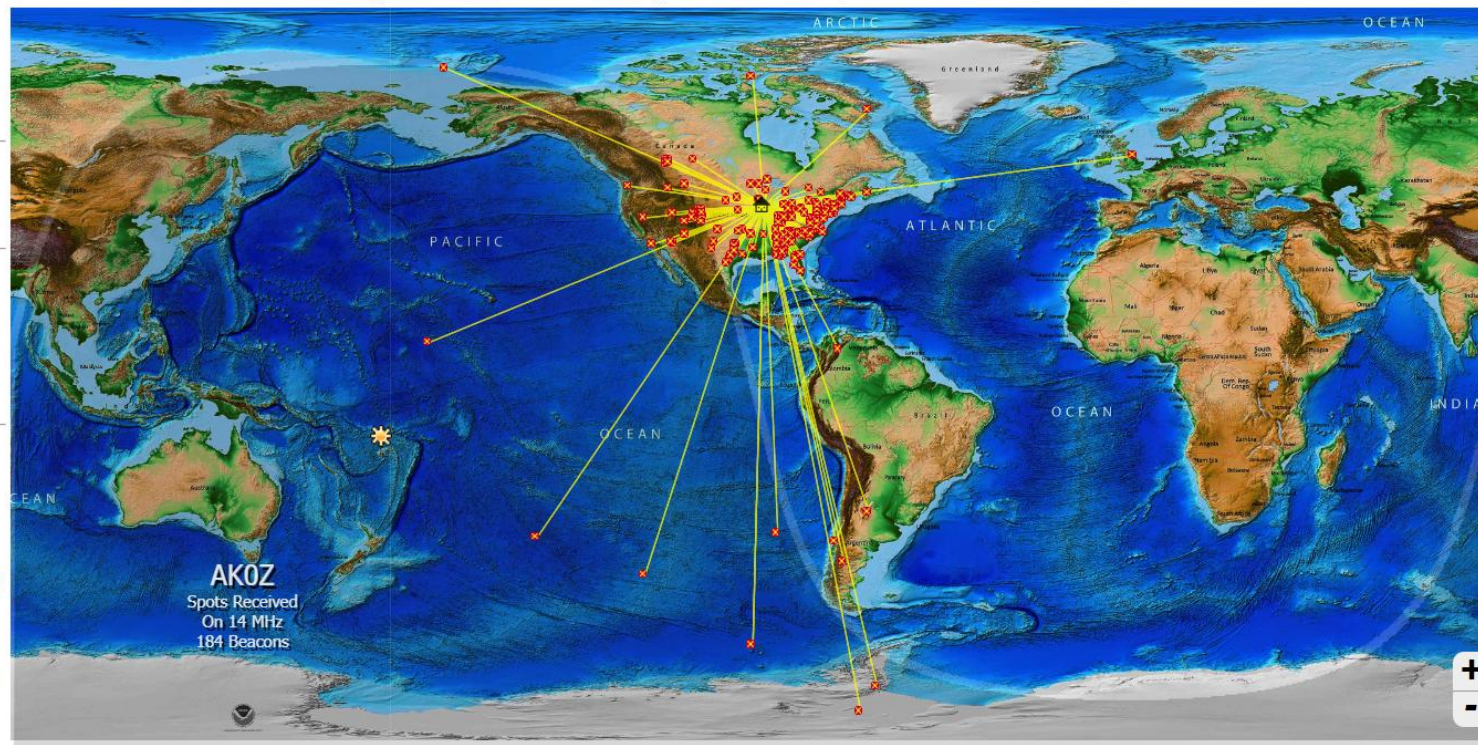
Recent Usage Click

AK0Z	AK0Z	WBSCO	DB3RM
K87GF	K5BLS	VK3MO	
K6GPR	DC6GF	EI4JY	
OV5CFS	K3WRG	VY2PC	
M6JQO	K06RS	DL2WB	
DG2GG	M7OXP	Z86GL	
DL4ZBE	WB0U	BX3AA	
RA0SMS	9D1J	KK7PAG	
QH1JUX	DH3HB	PA3FEX	
WS3W	W3BHC	M7OXP	
RU0LL	ZS1LCD	LUSHBX	
LU1ZG	N8UA	RA0SX	
ZL4CAT	PD8GB	K9PC	
OE5FXC	PY1IFF	KF0RUJ	
K6STS	G8IQI	QH1JUX	
K6CPV			

Timestamp	Call	MHz	SNR	Drift	Grid	Pwr	Reporter	RGrid	km	az	Mode
2025-10-28 23:42	AK0Z	14.097114	-11	0	EN41fp	0.005	VE6PDQ	DO34lr	2142	320	W-2
2025-10-28 23:42	AK0Z	14.097114	-8	0	EN41fp	0.005	K4AGR	EM71gc	1292	153	W-2
2025-10-28 23:42	AK0Z	14.097109	+5	0	EN41fp	0.005	K4IQJ	EM72	1170	148	W-2
2025-10-28 23:42	AK0Z	14.097149	+3	0	EN41fp	0.005	K4KR	EM74	979	142	W-2
2025-10-28 23:42	AK0Z	14.097110	-18	0	EN41fp	0.005	AC7IJ	CN87vu	2500	296	W-2
2025-10-28 23:42	AK0Z	14.097125	-20	0	EN41fp	0.005	W5WTH	EM10bj	1373	206	W-2
2025-10-28 23:42	AK0Z	14.097112	-17	0	EN41fp	0.005	KG7LR	DN30xm	1719	273	W-2
2025-10-28 23:42	AK0Z	14.097130	-15	0	EN41fp	0.005	AJ4AV	EM73tw	1063	141	W-2
2025-10-28 23:42	AK0Z	14.097128	-8	0	EN41fp	0.005	VE6JY	DO33or	2068	318	W-2
2025-10-28 23:42	AK0Z	14.097129	-1	0	EN41fp	0.005	NG5P	EM34vt	762	185	W-2
2025-10-28 23:42	AK0Z	14.097124	-10	0	EN41fp	0.005	KC9VNU	EM80ug	1512	144	W-2
2025-10-28 23:42	AK0Z	14.097112	-12	0	EN41fp	0.005	SWLKCL	FN04	1062	69	W-2
2025-10-28 23:42	AK0Z	14.097120	0	0	EN41fp	0.005	W7STF	FN12qp	1233	80	W-2
2025-10-28 23:42	AK0Z	14.097165	-6	0	EN41fp	0.005	K5SWA	EM12	1129	207	W-2
2025-10-28 23:42	AK0Z	14.097118	-11	0	EN41fp	0.005	KD7HGL	CN87ts	2511	296	W-2
2025-10-28 23:42	AK0Z	14.097116	-2	0	EN41fp	0.005	KR4CSE	EM70de	1377	156	W-2
2025-10-28 23:42	AK0Z	14.097129	-5	0	EN41fp	0.005	KA3LNA	FM29dc	1369	97	W-2
2025-10-28 23:42	AK0Z	14.097113	-22	0	EN41fp	0.005	WW6D	CM88pk	2662	273	W-2
2025-10-28 23:42	AK0Z	14.097081	-5	0	EN41fp	0.005	KI7E	CN87wr	2492	296	W-2
2025-10-28 23:42	AK0Z	14.097109	-6	0	EN41fp	0.005	VE3PRO	EN94hk	882	66	W-2
2025-10-28 23:42	AK0Z	14.097119	-20	0	EN41fp	0.005	SWLVK3	QF22xv	15139	256	W-2
2025-10-28 23:42	AK0Z	14.097113	-10	0	EN41fp	0.005	KC4GO	EL98ip	1717	144	W-2
2025-10-28 23:42	AK0Z	14.097093	-16	0	EN41fp	0.005	K1YZY	FN41xr	1781	83	W-2
2025-10-28 23:42	AK0Z	14.097113	+17	0	EN41fp	0.005	K5XL	EM12kp	1116	208	W-2
2025-10-28 23:42	AK0Z	14.097120	-8	0	EN41fp	0.005	WY1U	FN31nl	1550	84	W-2
2025-10-28 23:42	AK0Z	14.097114	-12	0	EN41fp	0.005	KE4TH	DN40	1637	272	W-2
2025-10-28 23:42	AK0Z	14.097117	-14	0	EN41fp	0.005	KG0D	CN88ka	2569	297	W-2
2025-10-28 23:42	AK0Z	14.097162	-11	0	EN41fp	0.005	WB5PJB	DM79oi	1148	262	W-2
2025-10-28 23:42	AK0Z	14.097148	-6	0	EN41fp	0.005	VF5CRI	DO62rc	1622	321	W-2



Map shows AK0Z and his 184 spotters on 14 MHz. From Oct-28 19:20z to 23:52z 4h.



AK0Z
Spots Received
On 14 MHz
184 Beacons

Timestamp	Call	MHz	SNR	Drift	Grid	Pwr	Reporter	RGrid	km	az	Mode
2025-10-28 23:52	KE0UVP	14.097023	-25	0	DN71eh	10	AK0Z	EN41fp	1173	84	W-2
2025-10-28 23:52	WW0WWV	14.097049	-17	0	DN70mq	1	AK0Z	EN41fp	1127	80	W-2
2025-10-28 23:52	K4RCC	14.097069	-18	0	EM85jl	0.2	AK0Z	EN41fp	1007	317	W-2
2025-10-28 23:52	LU4HH	14.097082	-20	0	FF78	0.02	AK0Z	EN41fp	8577	340	W-2
2025-10-28 23:52	KM4QXW	14.097083	-15	0	EM74qb	0.5	AK0Z	EN41fp	1038	326	W-2
2025-10-28 23:52	KN4USN	14.097095	-9	0	EM45xg	5	AK0Z	EN41fp	721	350	W-2
2025-10-28 23:52	KJ4IHN	14.097100	-10	0	EM63ob	0.2	AK0Z	EN41fp	1042	338	W-2
2025-10-28 23:52	KE7A	14.097111	-30	0	EM12kx	5	AK0Z	EN41fp	1082	25	W-2
2025-10-28 23:52	KD5LBK	14.097129	-23	0	EM13la	0.2	AK0Z	EN41fp	1075	25	W-2
2025-10-28 23:52	KG7LR	14.097140	-10	0	DN30xm	2	AK0Z	EN41fp	1719	79	W-2
2025-10-28 23:52	K7CMI	14.097149	-14	0	DN57	0.5	AK0Z	EN41fp	1526	109	W-2
2025-10-28 23:52	W4SGL	14.097155	-8	-2	EM85ig	0.2	AK0Z	EN41fp	1008	317	W-2
2025-10-28 23:52	AE0GQ	14.097158	-26	0	DM79	0.2	AK0Z	EN41fp	1164	74	W-2
2025-10-28 23:52	KD2UBX	14.097205	-29	0	FN23qc	0.2	AK0Z	EN41fp	1397	269	W-2
2025-10-28 23:50	N5CXX	14.096995	-23	1	EM12	0.2	AK0Z	EN41fp	1129	24	W-2
2025-10-28 23:50	WA6HEW	14.097012	-28	0	EM11	0.2	AK0Z	EN41fp	1232	22	W-2
2025-10-28 23:50	N5YIZ	14.097020	-28	0	EL08	0.2	AK0Z	EN41fp	1614	23	W-2
2025-10-28 23:50	K7ZIN	14.097026	-25	0	DN36	0.2	AK0Z	EN41fp	1793	100	W-2
2025-10-28 23:50	WW0WWV	14.097049	-10	0	DN70mq	1	AK0Z	EN41fp	1127	80	W-2
2025-10-28 23:50	K3FZ	14.097052	-8	0	FN30kx	10	AK0Z	EN41fp	1537	279	W-2
2025-10-28 23:50	N5CSC	14.097084	-12	-1	EL09uj	5	AK0Z	EN41fp	1492	22	W-2
2025-10-28 23:50	VE3LPB	14.097089	-12	0	FN03	0.2	AK0Z	EN41fp	1043	263	W-2
2025-10-28 23:50	N8VIM	14.097097	-5	0	FN42fq	5	AK0Z	EN41fp	1649	273	W-2
2025-10-28 23:50	KJ4IHN	14.097100	-8	0	EM63ob	0.2	AK0Z	EN41fp	1042	338	W-2
2025-10-28 23:50	NM3R	14.097112	-6	0	FN20ki	5	AK0Z	EN41fp	1383	281	W-2
2025-10-28 23:50	WA3ITR	14.097121	-25	0	FN42	2	AK0Z	EN41fp	1691	274	W-2
2025-10-28 23:50	VA6AKA	14.097129	-24	0	DO32cj	0.2	AK0Z	EN41fp	2054	117	W-2
2025-10-28 23:50	N6UA	14.097131	-19	0	DN71	0.2	AK0Z	EN41fp	1122	85	W-2
2025-10-28 23:50	KK7NPK	14.097150	-23	0	CN87na	20	AK0Z	EN41fp	2544	92	W-2

Solar-Terrestrial Data
28 Oct 2025 2343 GMT
SFI: 122 SN: 91
A: 21 K: 4
X-Ray: B8.9
304A: 130.4 @ SEM
Ptn Flx: 17
Elc Flx: 5490
Aurora: 4/n=1.99
Bz: 10.7 SW: 464.1
HF Conditions
Band Day Night
80m-40m Fair Fair
30m-20m Fair Fair
17m-15m Fair Fair
12m-10m Fair Fair
VHF Conditions
Aur Lat 63.9°
Aurora Band Closed
6m EsEU Band Closed
4m EsEU Band Closed
2m EsEU Band Closed
2m EsNA Band Closed
EME Deg Poor
Solar Flare Prb 65%
MUF
MS 0 6 12 18 UTC
Geomag Field ACTIVE
Sig Noise Lvl 93-94
MUF US Boulder NoRpt
http://www.muf.com
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Alternate Site:
http://lu7aa.com.ar/dx.asp

Balloons Satellites
Spots courtesy of WSPRnet
App Code by Pedro LU7ABF
Hosting LU7AA AMSAT Arg.

Recent Usage Click
AK0Z AK0Z W6SCQ DB3RM
KB7GF K5BLS VK3MO
KK6PR DC8GF EI4JY
OV5CF8 K3WRG VY2PC
M6JQQ KQ8RS DL2WB
DG2GG M7OXP Z86GL
DL4ZBE W8DU BX3AA
RA0SMS 9D1J KK7PAG
QH1JUX DH3HE PA3FEX
WS3W IW3BHC M7OXP
RU0LL ZS1LOD LU6HBX
LU1ZG N6UA RA0SX
ZL4CAT PD8GB KP3C
QE5FXC PY1IFF KQ8RUJ
K6STS G6IQ QH1JUX
K6CPU

SUMMARY

- This is a short description as to what happens to a WSPR Beacon and Spot.
- Transmit a Beacon signal with data like call sign, power output, grid locator, date and time stamp, etc. This 2-minute signal is usually 5 to less than 1 watt and only 6 Hz wide within a bandwidth of 2.5kHz. This data is received by another ham's receiver from anywhere around the world. The receiving station sends the data or (Spot) usually automatically to the internet to be uploaded to a site like WSPRnet.org. By going to this site, you can view your spots in the form of a chart and on a map. The chart will show you all the spot information you have sent with the Beacon, and the map will show you where your signal is being received and the location of the receivers. You can use this information to see where your antenna is being heard and determine how well your antenna is working and how well the propagation to certain areas during that time of the day or date.