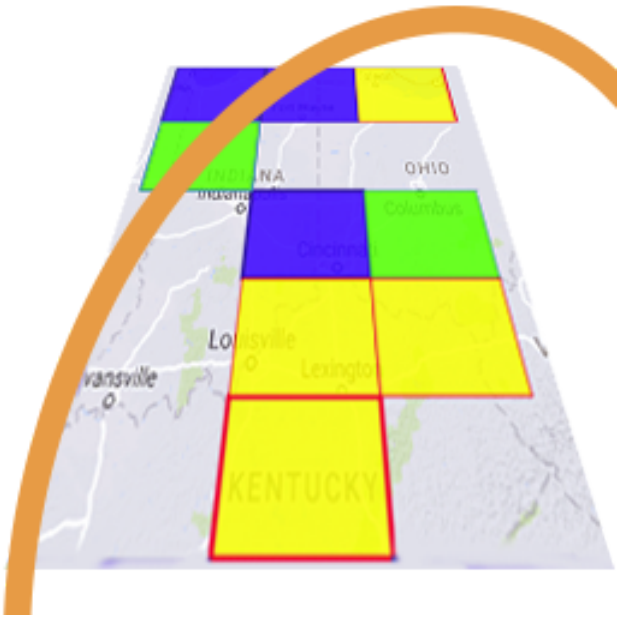


GridTracker2 User Guide

Version 2.261108.4

November 8, 2026

gridtracker.org

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About This Guide

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Log4OM : (Copyright 2011-2014) by Daniele Pistollato

N3FJP Loggers: (Copyright 1997-2024)Written by G. Scott Davis N3FJP

Getting Help

The GridTracker2 team answers questions on our Discord server only:

- **Discord:** join the discussion at discord.gg/gridtracker.
- **GitLab:** report a bug at gitlab.com/gridtracker.org/gridtracker2/-/issues. See Submitting Bug Reports.

When you ask for help, include your GridTracker2 version from Settings → About, your operating system, and a screenshot (**Ctrl+K** copies one to the clipboard).

Other Programs

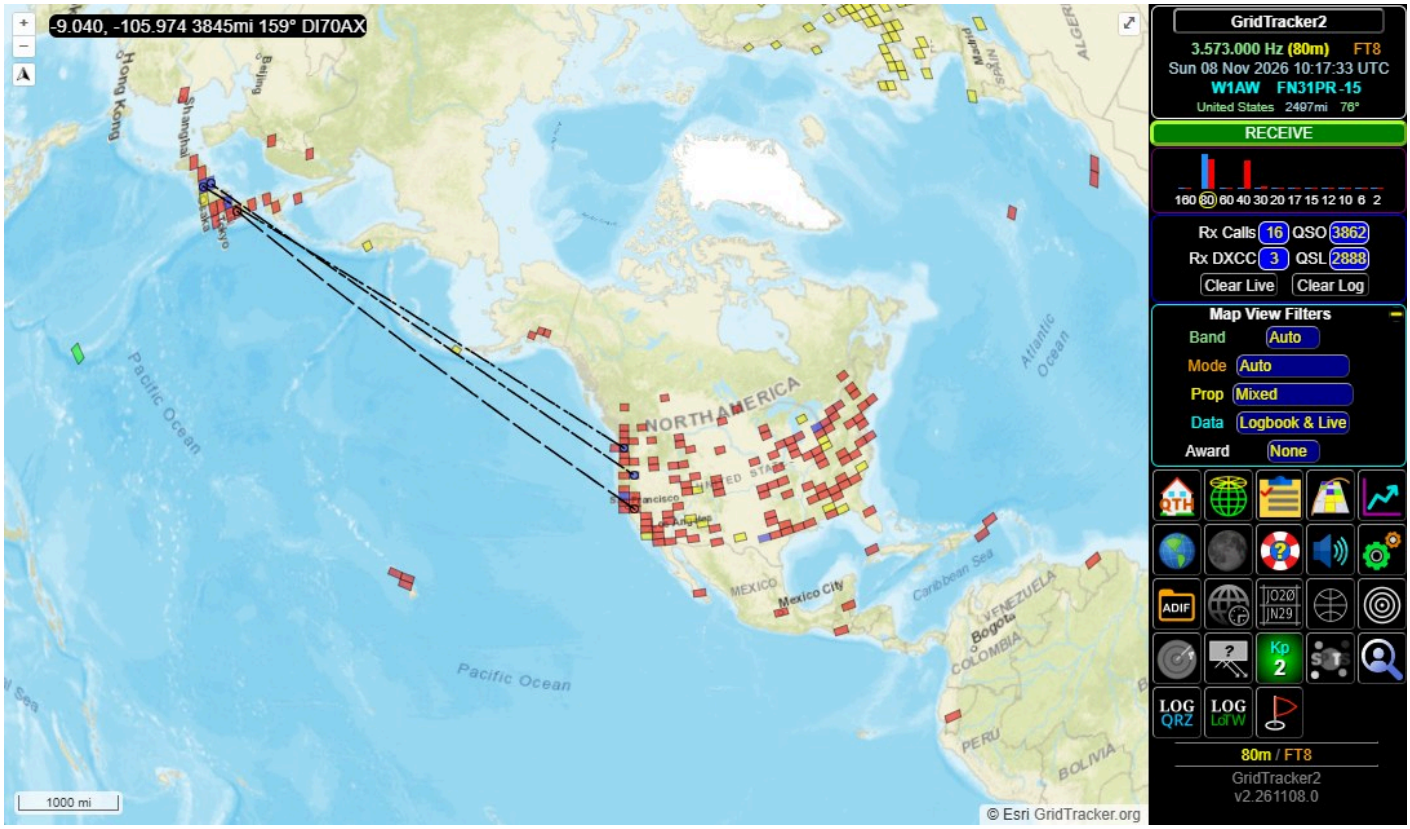
For help with other programs, please use their own support:

Program	Support
WSJT-X	WSJT-X web page, WSJT-X groups.io
JTDX	JTDX contacts
Log4OM	Log4OM web page, Log4OM forum
N3FJP Loggers	N3FJP web page
N1MM Logger+	N1MM web page
DXKeeper	DXKeeper web page, DXLab groups.io
HRD Logbook	Ham Radio Deluxe web page
Cloudlog / Wavelog	Cloudlog, Wavelog

Introduction

What Is GridTracker2?

GridTracker2 is a companion program for amateur radio operators. Its original tag line, back in February 2018, was "GridTracker listens to traffic from WSJT-X and displays it on a map. It will also load ADIF log files." It still does that at heart, but it has grown into a warehouse of amateur radio information in one easy-to-use window: live decodes, DX spots, your logbook, award progress, POTA and SOTA activations, propagation, weather and solar conditions.



Features

- **A live, interactive map** of the stations you are hearing and the grids you have worked, with paths between stations, push pins, two projections and more than 35 base maps. Overlays include the grayline, award progress, time zones, range rings, the Moon, US weather radar, propagation predictions, and where your signal is being heard.
- **The Call Roster:** every station you are decoding in one table, with the ones you want highlighted: new grids, DXCC entities, states, counties, zones, prefixes, parks and summits. Click a callsign to call that station.
- **DX Feeds and the Feed Roster:** DX Cluster and CW Skimmer spots for every band and mode, hunted the same way, and worked with a click through WSJT-X, AC Log or Log4OM.
- **Parks On The Air and Summits On The Air:** activations on the map and in the rosters, with automatic POTA spotting and a SOTA chaser log export.
- **Alerts:** spoken, sound, pop-up and map alerts, and push notifications to your phone.
- **Logging:** new QSOs are sent to your logging program and online logbooks (QRZ.com, LoTW, ClubLog, eQSL, Cloudlog/Wavelog and more), and your logbooks are loaded to show your progress toward awards.

- **Statistics:** your logbook, scores and progress toward DXCC, WAS, WAC, CQ and ITU zones, WPX, US counties and more.
- **Callsign lookups** from Callook, HamQTH, QRZ.com or QRZCQ.com.
- **Offline Mode** for Field Day, POTA, SOTA and mobile operating without internet.
- **Available in 13 languages.**
- **It's free!**

What GridTracker2 Is Not

GridTracker2 is not a logging program. It *displays* QSO data from WSJT-X, JTDX and similar programs, your logging program, online logbooks and ADIF files, and passes new QSOs on to your logs.

> GridTracker2 is under active development with you in mind. Tell us what you'd like to see!

What's New in GridTracker2

This guide was last revised for version 2.261108.4. If you used GridTracker2 before 2025, these are the biggest changes since the previous edition of this guide. Each one is covered in detail in its own chapter.

New Features

- **DX Feeds and the Feed Roster.** GridTracker2 can now receive DX Cluster and CW Skimmer spots. They appear in their own **Feed Roster**, next to the Call Roster in the same window, and on the map as DX Feed spots. The Feed Roster has its own Logbook, Hunting, Wanted, Exceptions, Watchers, Ignores and audio alerts. See The Feed Roster and DX Feeds.
- **SOTA Chasing.** Summits on the Air activators spotted in DX Feeds are shown in a SOTA column, with a SOTA Wanted choice and their own map markers. A QSO logged with a spotted activator gets the summit's reference (SOTA_REF). The Logbook can export your chases as a CSV file for the SOTA database. See Summits On The Air.
- **POTA improvements.** Park information now also comes from DX Feeds spots, the POTA tooltip has a new header, and you can click a park on the map to work the spot. See Parks On The Air.
- **Log4OM connection.** GridTracker2 can connect to Log4OM through its UDP remote control. It shows Log4OM's frequency, band and mode, sends spots to its QSO entry, and can tune your rig through Log4OM. See Log4OM.
- **N3FJP AC Log, expanded.** Connection status lights, "Enable Rig Control" (clicking a spot tunes your rig through AC Log), POTA_REF and SOTA_REF Other fields, and more reliable logging.
- **Colors tab.** Change the color of any band, and of the Gridsquare Colors on the map, from Settings → Colors. Map pins are now drawn in the band colors.
- **Roster Columns tab.** Each roster has a Columns tab where you can show, hide, reorder and recolor every column.
- **New map layers and buttons.** Range Rings, Major Parallels and Meridians, a Tropospheric Inversion VHF prediction layer (with 6 m Es areas), a choice of grayline terminator (Horizon, Civil, Nautical or Astronomical), the US weather radar restored, new base maps, and the option to put the map on the right side of the window.
- **Santa Tracker.** From December 1st a button appears that follows Santa and his reindeer around the world.
- **More languages.** The interface is now available in Chinese (Simplified and Traditional), Dutch, English, French, French (Canada), German, Italian, Japanese, Polish, Portuguese (Brazil and Portugal) and Spanish.
- **More programs supported.** JS8Call-Improved, WS – Digital Mode Suite, MSHV, ADIF UDP broadcasts from programs such as fldigi, HRD Logbook, and improved Cloudlog / Wavelog logging.
- **Multiple instances.** Run more than one copy of GridTracker2 with the `--gt-name=` command-line option, for example one per radio.

Changed

- **Settings regrouped.** Most Settings tabs are now arranged in titled boxes, with dependent options indented under the option they depend on. Several options were renamed:
  - "Merge Award Overlay" is now **Keep Other Layers With Award View**.
  - "'CQ' Highlighting" is now **Outline Directed CQ Areas**.

    - "Clear on CQ" is now **Clear WSJT-X / JTDX On CQ**.
    - The Grids tab is now the **Grids** box in Settings → Map.
- **Station callsign.** Settings → General → Station has a **Callsign** for when no WSJT-X, JTDX, AC Log or Log4OM is connected.
- **Logbook window.** The Logbook is one scrolling list instead of pages, with sticky search boxes and column headers, sort arrows, and County, POTA and SOTA columns.
- **Lookup-derived grids** are marked with a diamond (◇): the location is likely, not certain.
- **Hotkeys.** Animate Active Paths moved to **Ctrl+J** and the Conditions window to **Ctrl+E**. Letter hotkeys now use **Ctrl**, see Appendix C.

Removed

- The **Off-Air Message Service (OAMS)** chat and on-air status sharing were removed. The current online features are described in Settings → Features.
- Automatic highlighting of US 1x1 special-event callsigns was removed. To get it back, add a Watcher with the Callsign Regex `^[KNW][0-9][A-WYZ]$`.

System Requirements

Hardware

Radio	An amateur radio transceiver, with a computer interface for digital modes
Computer	A PC with an Intel or AMD processor (64 or 32 bit), a Mac with an Intel or Apple Silicon processor, or an ARM computer running Linux, such as a Raspberry Pi
Monitor	1024 × 768 or larger. A second or third monitor helps you watch WSJT-X, GridTracker2 and your SDR at once.

Operating Systems

Windows	Windows 10 and 11. A separate build is available for Windows 7 and 8.
macOS	Recent versions of macOS, on Intel or Apple Silicon
Linux, Intel and AMD	Any recent 64-bit distribution with a graphical desktop
Linux, ARM	32- and 64-bit ARM distributions, such as Raspberry Pi OS

We only support operating systems that are still supported by their makers. If GridTracker2 runs on an older system you are welcome to use it, but we can't fix problems that only happen there.

Other Software

GridTracker2 doesn't need any other program to run, but most of its live features come from a decoding program: WSJT-X, JTDX, WS – Digital Mode Suite, MSHV or JS8Call-Improved. DX Feeds, POTA, SOTA and the online logbooks need an internet connection.

Getting Started

Installing GridTracker2

Download the current version from gridtracker.org/downloads. Packages are available for Windows, macOS and Linux.

If you aren't familiar with downloading and installing software, see Appendix A: Installing GridTracker2 for step-by-step instructions for each system.

Once it is installed, GridTracker2 keeps itself up to date: see Updates.

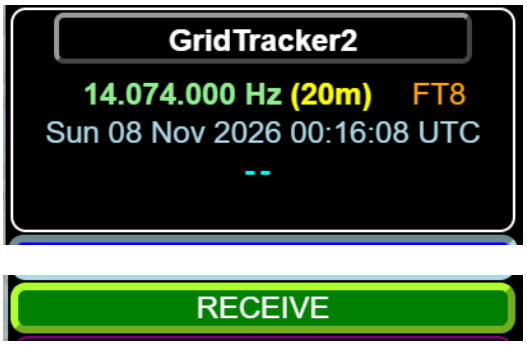
Getting Started

Start GridTracker2 from the Start menu or desktop (Windows), the Applications folder (macOS), or your applications menu or the command line (Linux).

GridTracker2 doesn't need WSJT-X or JTDX to be installed or running, but it finds them if they are. When it can read their settings, it uses your callsign, grid, band, mode and network settings from them. If no decoding program is connected, enter your callsign and grid in Settings → General → Station.

Connecting to WSJT-X or JTDX

When GridTracker2 is receiving from WSJT-X, the top of the side panel shows your frequency, band and mode, and the status bar shows **RECEIVE**.



If the status bar shows "waiting for message", GridTracker2 hasn't heard from WSJT-X yet. It can take up to 15 seconds. If it stays that way:

- WSJT-X may not be running, or may be set up to send somewhere else. See Appendix B.
- Another companion program may be receiving WSJT-X's messages instead. To run several companion programs together, set them all up for multicast (see Using Multicast).
- A firewall may be blocking GridTracker2.

Your First Session

Once decodes are arriving:

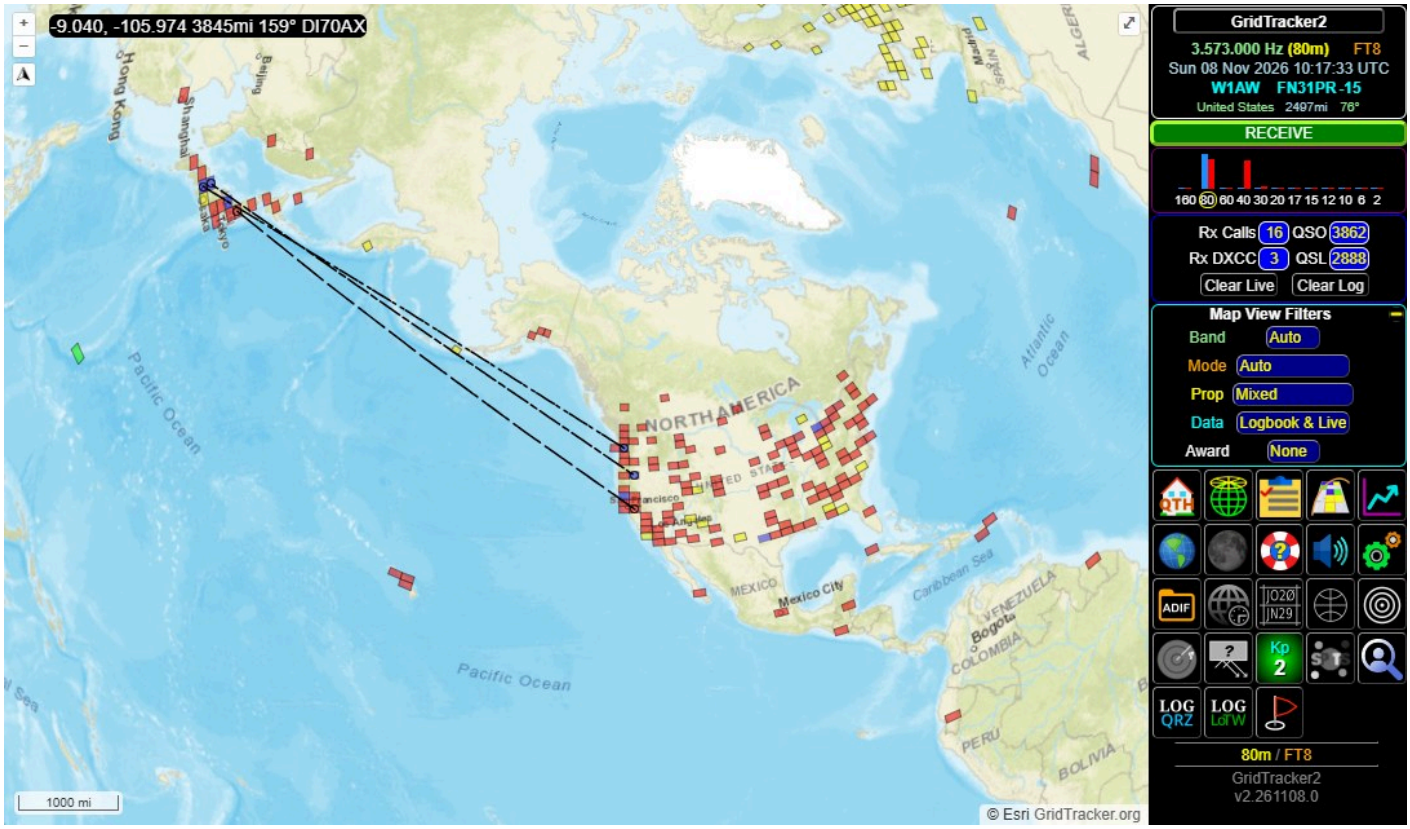
1. **Look at the map.** Grids light up as stations are heard. Your logged QSOs are colored too; see The Map.
2. **Open the Call Roster** (the Call Roster button, or **Ctrl+F**). Tick what you are hunting under **Wanted**, and click a highlighted callsign to call that station. See The Call Roster.
3. **Load your logbook.** In Settings → Logging, add your LoTW, QRZ.com or other logs so GridTracker2 knows what you have already worked and confirmed, and choose where new QSOs are sent.
4. **Set up alerts** so you hear about wanted stations: see Alerts.
5. **Explore the Settings.** Turn on POTA Hunting, DX Feeds or SOTA Chasing in Settings → Features if you enjoy those.

> **Tip**
>
> Hold the mouse over almost any button or setting to see what it does.

The Main Window

The Main Window

GridTracker2's main window has two parts: the **map**, and the **side panel** next to it.



The map shows your QSOs and the stations you are hearing by Maidenhead grid square, along with the paths between stations and any overlays you choose: grayline, award progress, POTA parks, SOTA summits, DX spots, propagation predictions and more.

A standard WSJT-X message carries the sender's grid:

> **CQ N0TTL CN84**
> **N0TTL N2VFL FN20**

GridTracker2 reads the grid from each decode and colors that square on the map as it is heard. When two stations are in a QSO, it draws a path between them.

Your logbook is loaded when GridTracker2 starts: the log files of WSJT-X, JTDX and similar programs, GridTracker2's own backup log, and any other logs you choose in Settings → Logging. The grids you have worked are colored in your QSO color, and the confirmed ones in your QSL color.

The side panel shows what your radio is doing, your QSO and QSL counts, the Map View Filters, and the buttons that open the other windows and turn map layers on and off.

The next chapters describe:

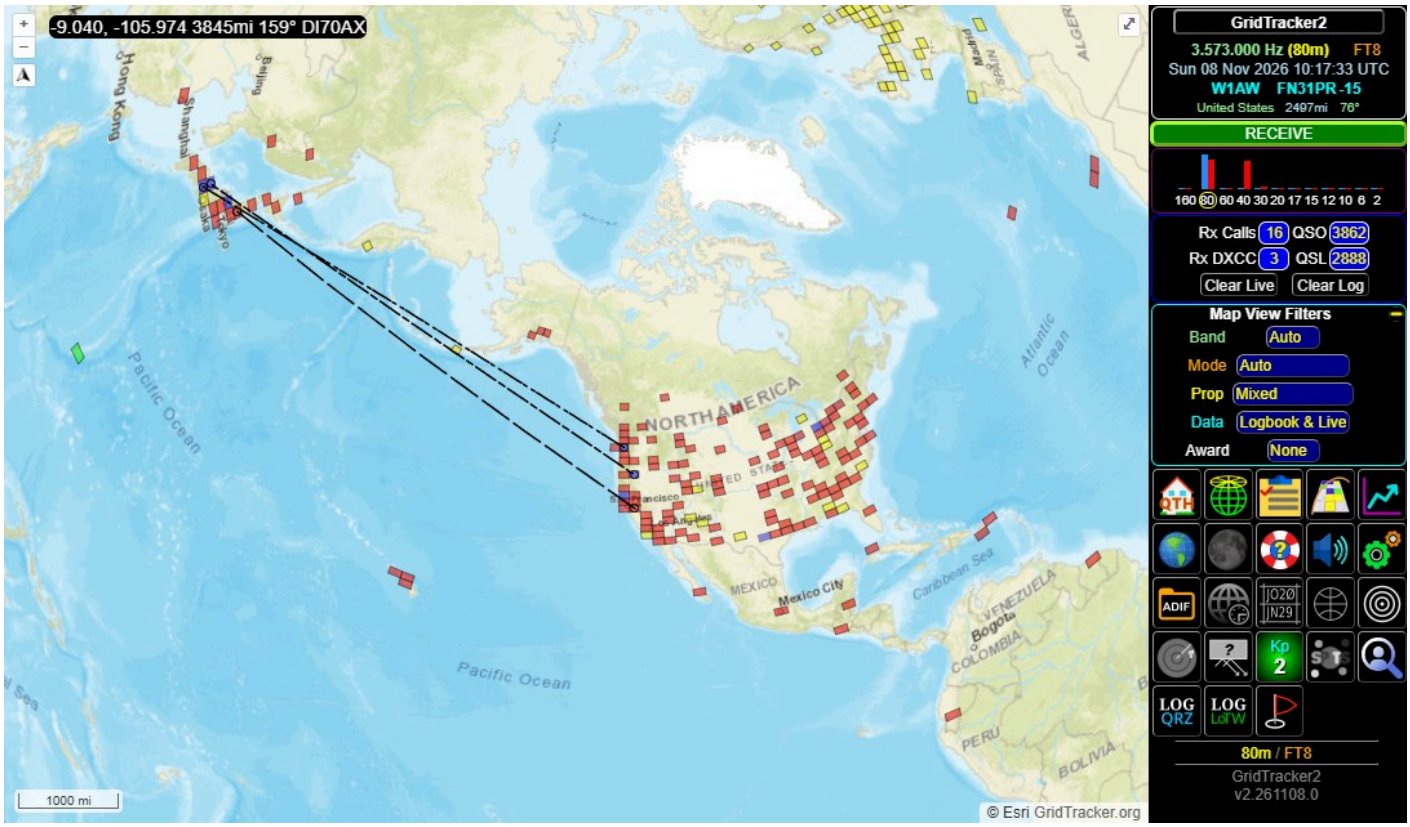
- The Map: grids, paths, pins, projections, overlays, award layers and spot markers.
- The Side Panel: every part of the panel, including each button.
- Settings: every tab of the Settings panel.

Other windows open from the side panel: the Call Roster, Statistics, and the Lookup, Conditions and Band Activity windows. Each window remembers its position and size. Closing one only hides it; the button opens it again.

> **Tip**
> Every window can be zoomed: **Ctrl** with **+** or **–**, or **Ctrl+Alt** with the mouse wheel. **Ctrl+0** resets it.

The Map

The map fills most of the main window. Drag it to move around, and zoom with the mouse wheel or the **+** and **–** buttons in the top left corner. Below them, the compass button turns the map back to north up. The button in the top right corner makes the map full screen (or press **F11**).



Grids

The map is divided into Maidenhead grid squares. A grid is colored when you have worked a station there, or hear one there now. The colors are set in Settings → Colors:

Default color	Name	Meaning
Yellow	QSO	You have worked a station in this grid.
Red	QSL	Your QSO in this grid is confirmed.
Blue	QSX	Stations here are working someone else.
Green	CQ	A station here is calling CQ.
Cyan	CQ DX	A station here is calling CQ DX.
Yellow	QRZ	A station here is calling you.
Orange	QTH	Your own grid.

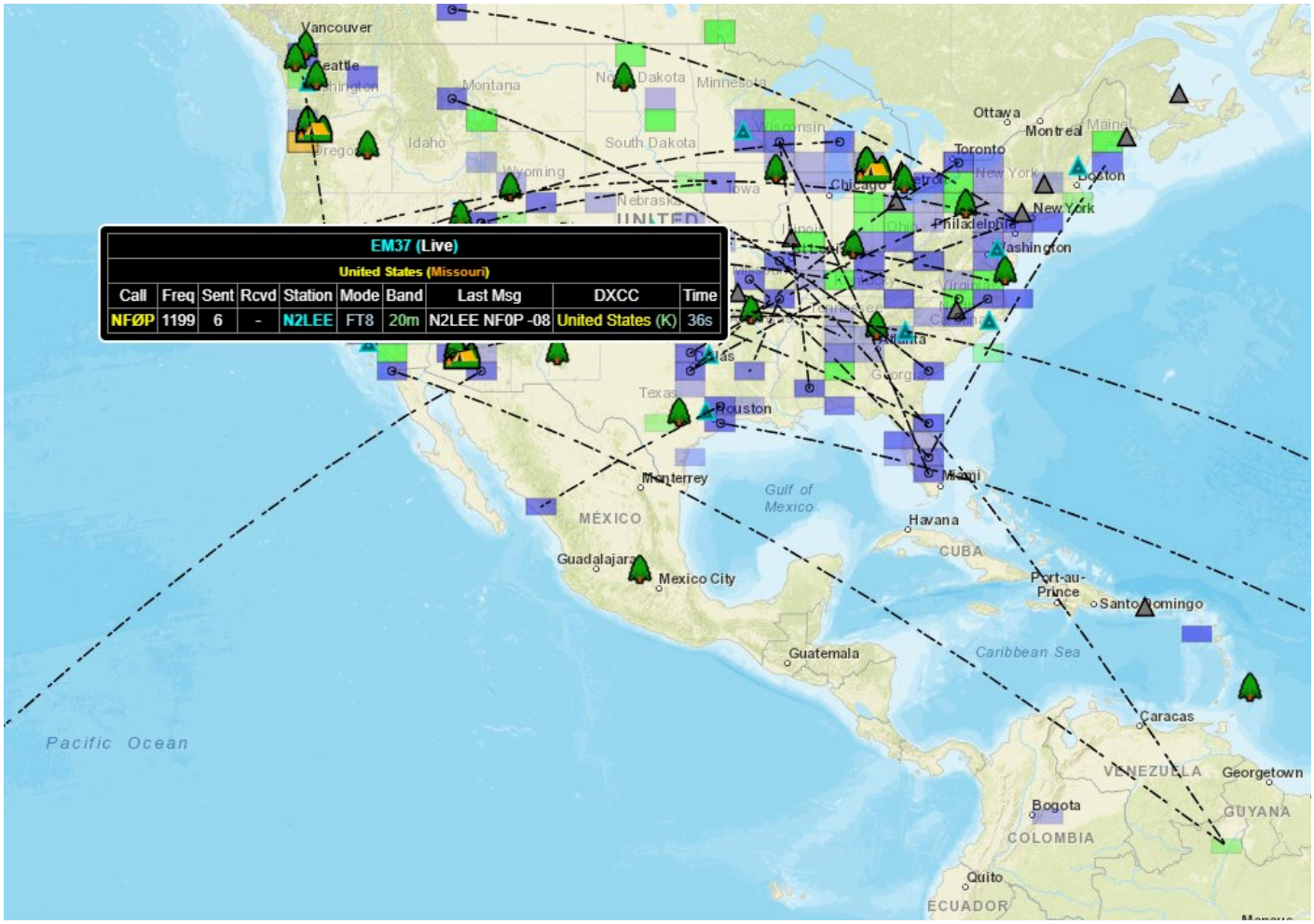
Which grids are colored depends on the Map View Filters: your logbook, live traffic, or both.

With **Split QSL Grids** on (Settings → Map), a grid that is both in your logbook and live is split diagonally: one half shows your logbook status, the other the live traffic. Live grids fade out after they were last heard, at the speed set by **Live Grid Decay**.

> **Note**
>
> In push-pin mode, the **Maidenhead Width** button chooses how precisely pins are placed. With MH6, a station is pinned on its 6-character sub-square when its grid has 6 characters, and on its 4-character square when that's all it sent. With MH4, every station is pinned on its 4-character square, including those that sent 6 characters. No station is hidden in either mode.

Grid details

Hold the mouse over a colored grid to see who is in it: each station's call, frequency, reports, who they are working, mode, band, QSL status, last message, DXCC entity and time. The header names the grid, whether you are seeing Live or Logbook data, and the DXCC entities and states that share it. Click a callsign in the table to look it up.



- **Right-click** a grid to pop its details out into a separate window that stays open. Callsigns there can be clicked to look them up.
- **Shift**+right-click selects the text so you can copy it.
- While no award layer is shown, right-click and hold on an empty part of the map to see that grid's name, its distance and bearing from you, its latitude and longitude, and every DXCC entity and state that shares it.
- With **Auto Mouseover Grids** off (Settings → Map), click and hold a grid to see its details.

Paths

When two stations are in a QSO, a line (a great-circle path) is drawn between their grids. QSX paths are traffic between other stations; QRZ paths involve you. With **Animate** on (Settings → Map, or **Ctrl+J**), the paths move in the direction of the traffic. A station that doesn't send a grid is drawn at the center of its DXCC entity when **Missing Grid DXCC Fallback** is on.

When a station calls a directed CQ (CQ NA, CQ EU, CQ JA…), the area they are calling is outlined, while **Outline Directed CQ Areas** is on.

Lookup-derived grids

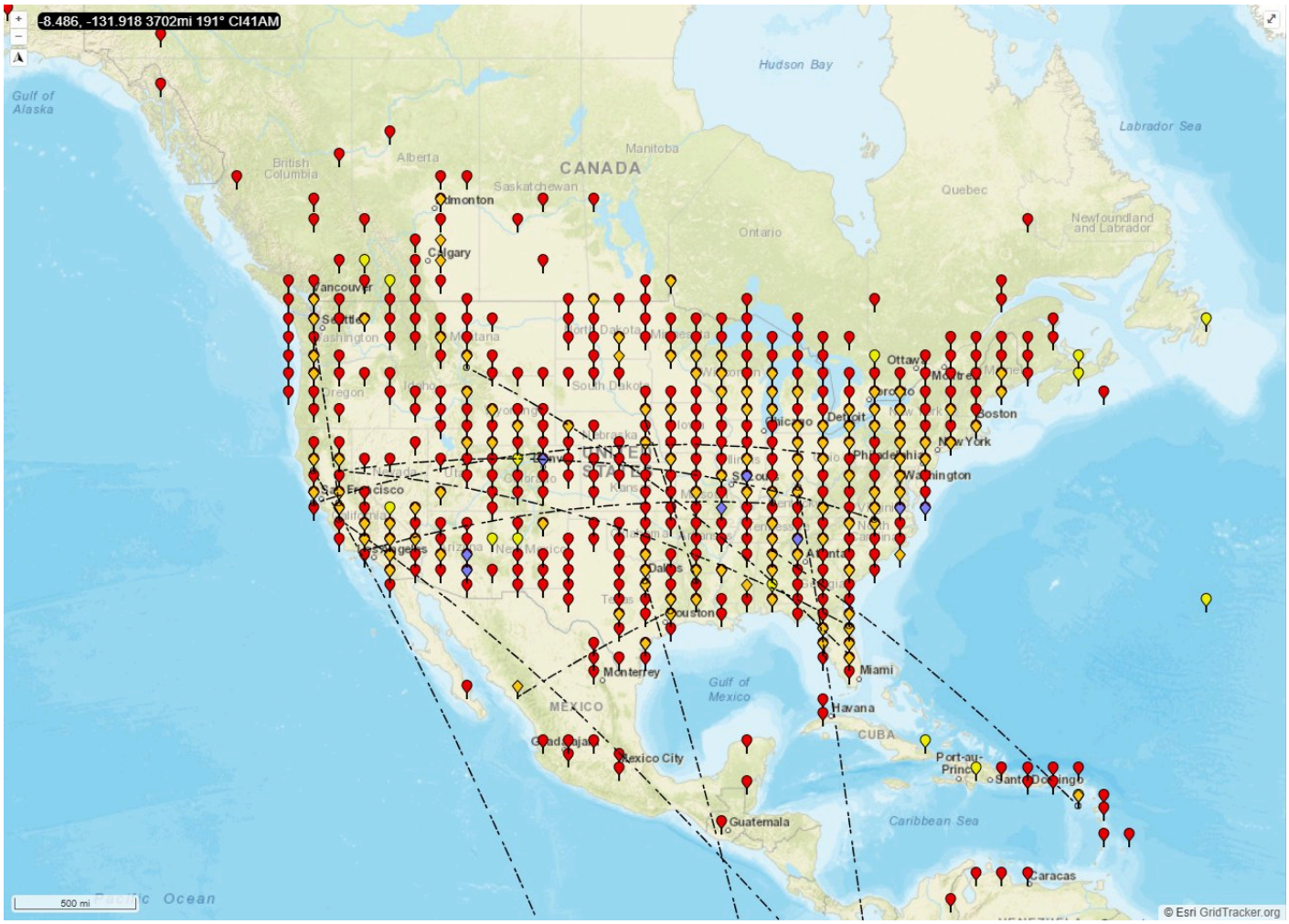
When a station hasn't sent its grid, GridTracker2 may find it another way: from a callsign lookup, the US or Canadian callsign database, PSK-Reporter spots or GridTracker2's own spotting network. A grid found this way is a likely location rather than a certain one, and is marked with a diamond (◇) in the rosters.

Push Pins

Click the **Push-Pin Mode** button (or press **Ctrl+P**) to show a pin for each station instead of colored grids. Pins are drawn in the band colors:

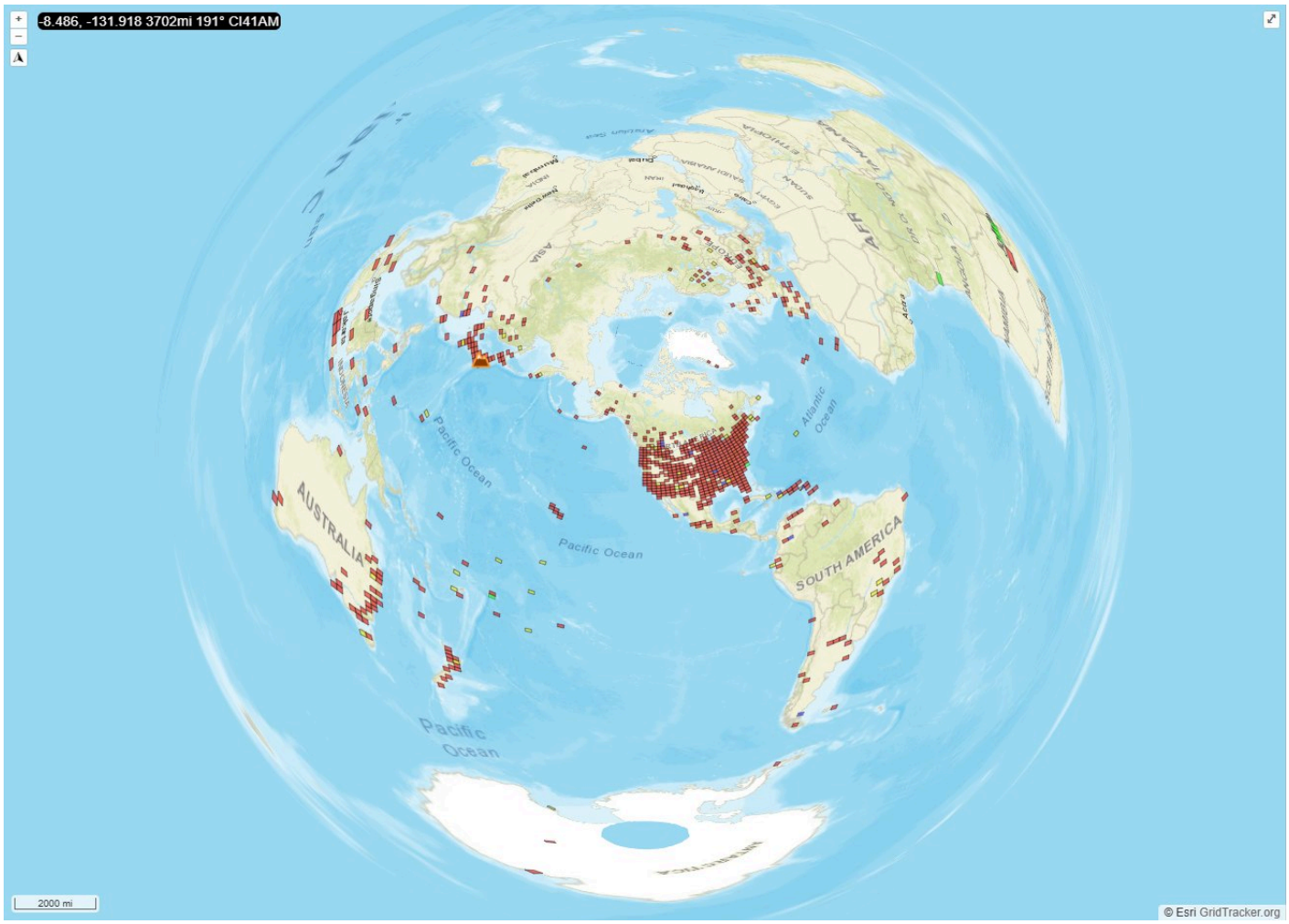
- a plain pin for a station you have worked;
- a pin with a black cap for a confirmed QSO;
- a diamond head for a station you are hearing now.

In MH4 pin mode with Band set to Mixed, logbook pins use the Gridsquare Colors for worked and confirmed. A **Maidenhead Width** button appears in pin mode to switch between 4- and 6-character placement.



Projections

The **Projection** button (or **Ctrl+W**) switches between the flat Mercator map and an azimuthal equidistant (AEQD) map centered on your grid. On the AEQD map, straight lines from the center are great-circle paths, so the direction to any station is its true bearing from you, the way your beam points. Grids farther than about 11,500 miles aren't drawn on it.



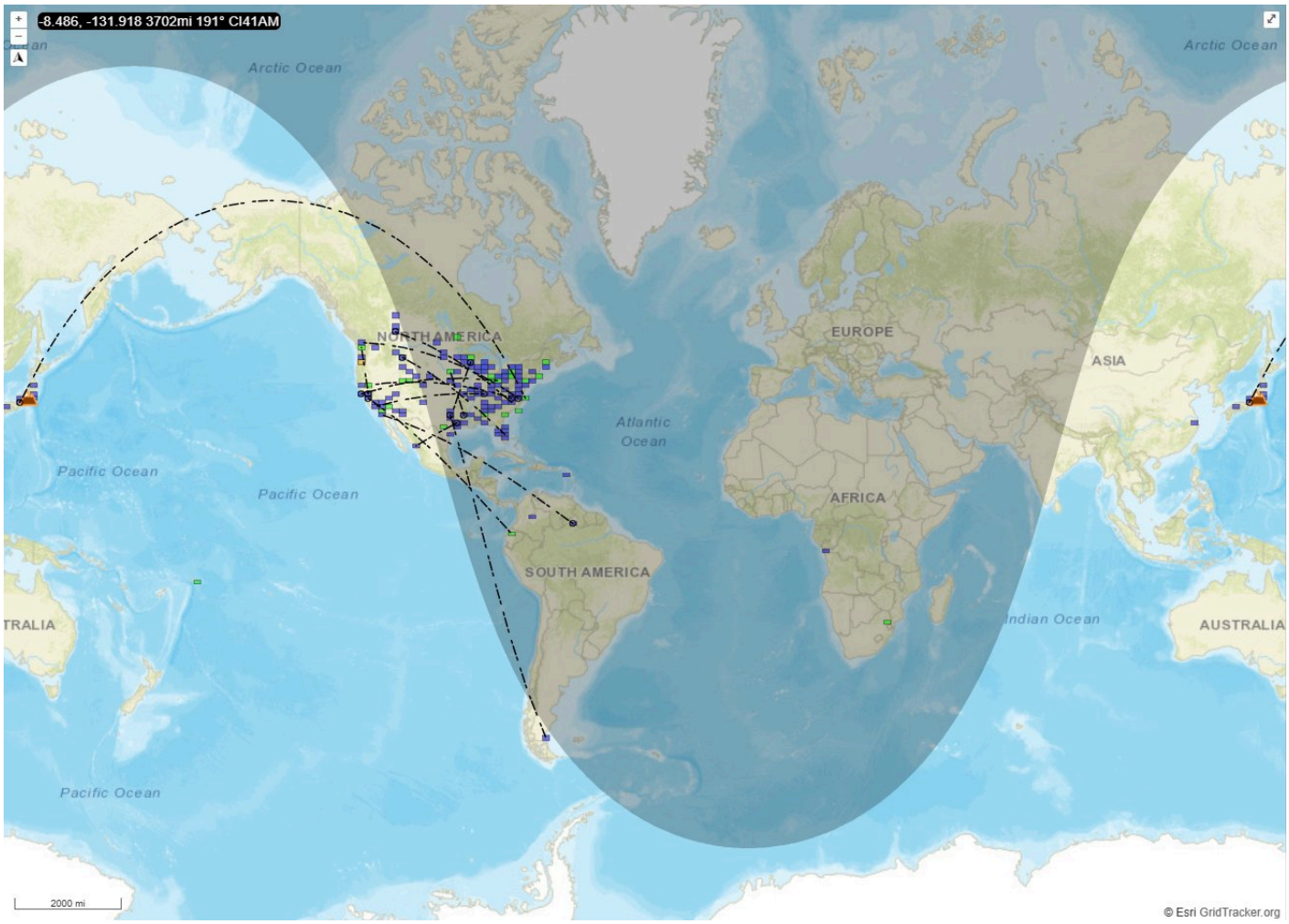
Base Maps

Settings → Map offers more than 35 base maps: street, topographic, satellite, ocean, dark and light maps from Esri, OpenStreetMap, Carto, OpenTopoMap, USGS, NASA and others. Newer additions include Topographical by OpenTopoMap, Topographical, Satellite and Satellite Topo by USGS, and Satellite Firefly by Esri. **Auto Night Map** switches to a second map at night. Offline Mode uses the maps that are built into GridTracker2.

Overlays

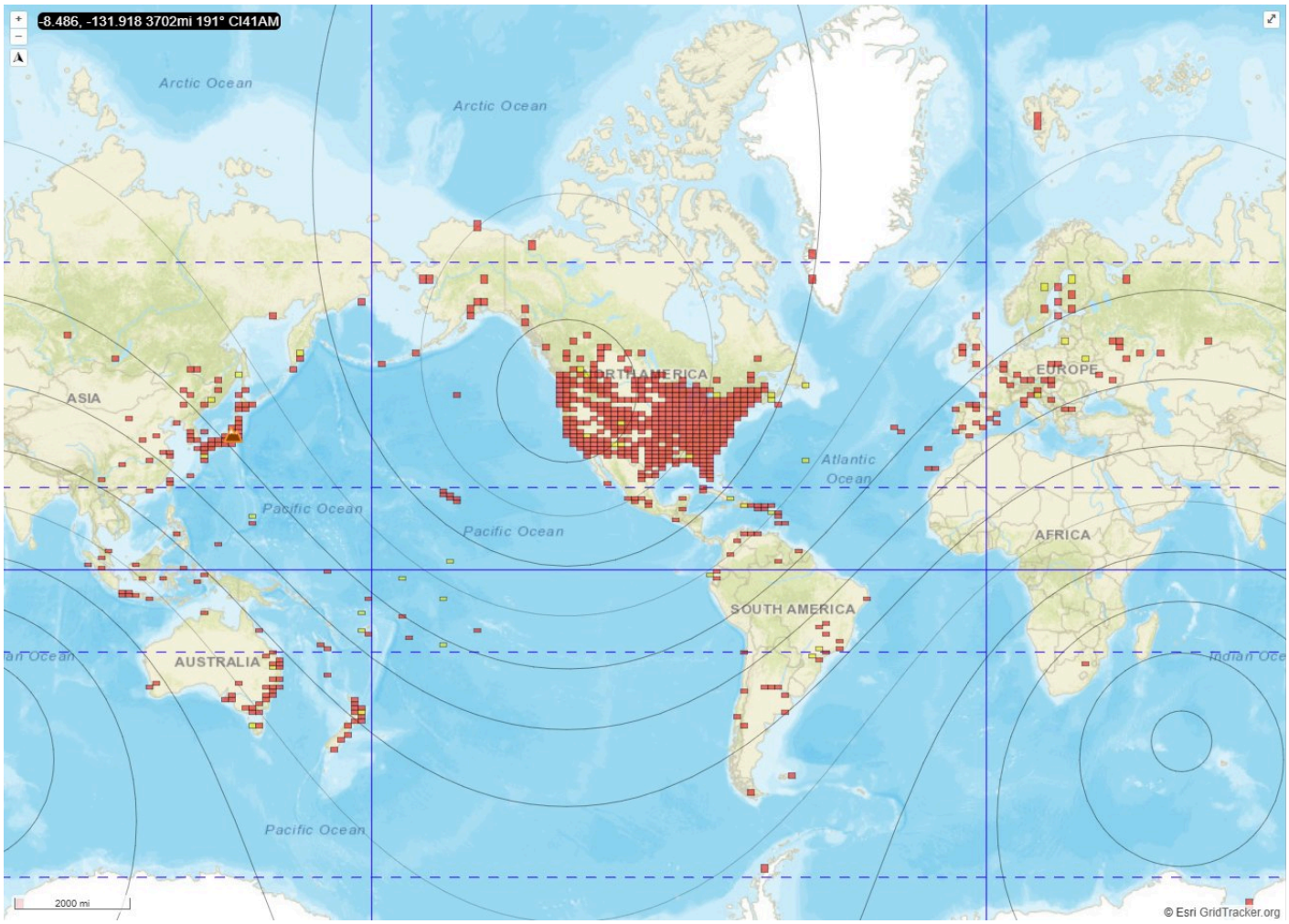
Grayline

The **Grayline** button (or **Ctrl+N**) shades the night side of the Earth. Settings → Map sets how dark it is, and where the terminator (the edge between day and night) is drawn: at the horizon, or at civil, nautical or astronomical twilight.



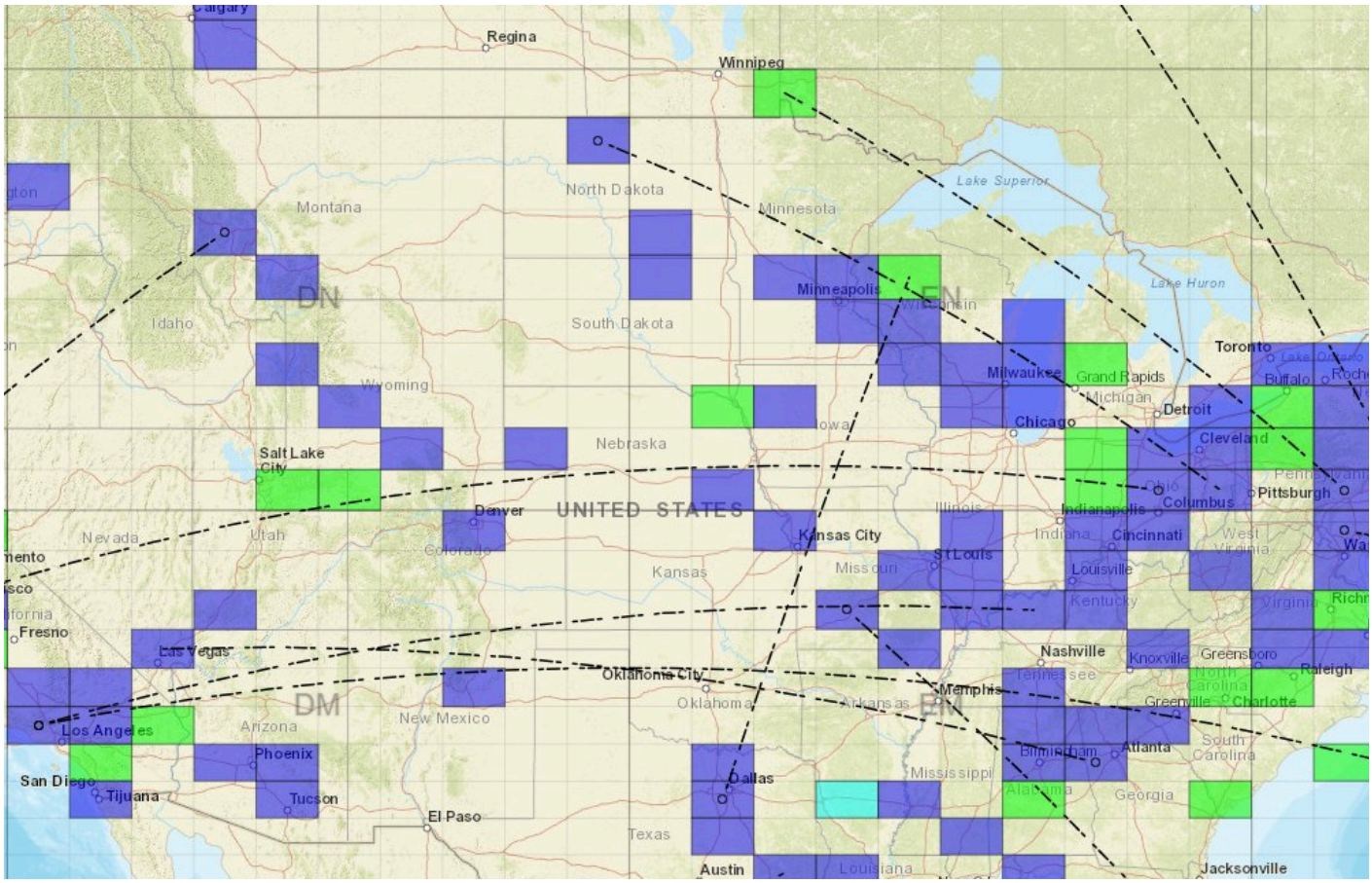
Range Rings, Parallels and Meridians

Range Rings draws circles around your grid at the distance set in Settings → Map. **Major Parallels and Meridians** draws the Equator, the Tropics of Cancer and Capricorn, the Arctic and Antarctic Circles, the prime meridian and the 180° meridian. Both work in either projection, in the colors chosen in Settings → Map.



Maidenhead Grid Lines

All Grid Overlay (or **Ctrl+B**) draws the grid lines and labels them. As you zoom in, the labels change from the two-letter fields (DM) to the four-character squares (DM78). Its opacity is set in Settings → Map.



Time Zones

Time Zones (or **Ctrl+H**) shows the world's time zones. Hold the mouse over a zone to see its name, its offset from UTC and its local date and time.

Moon

Moon (or **Ctrl+D**) shows where the Moon is overhead. Hold the mouse over it to see its azimuth and elevation from your grid: red below the horizon, yellow below 10°, green above.

US Weather Radar

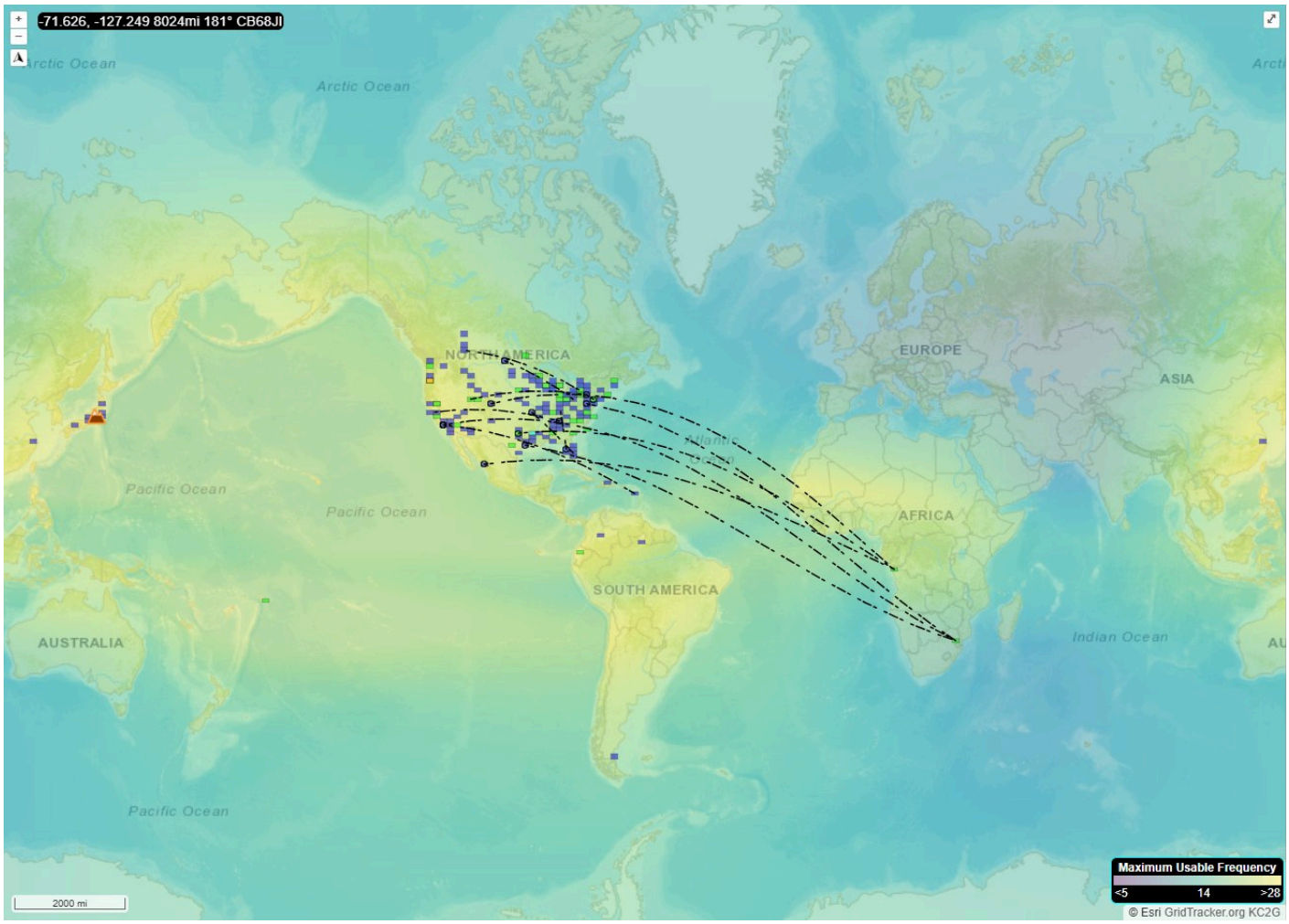
US Radar (or **0**) shows the US weather radar from the National Weather Service, refreshed every 10 minutes.

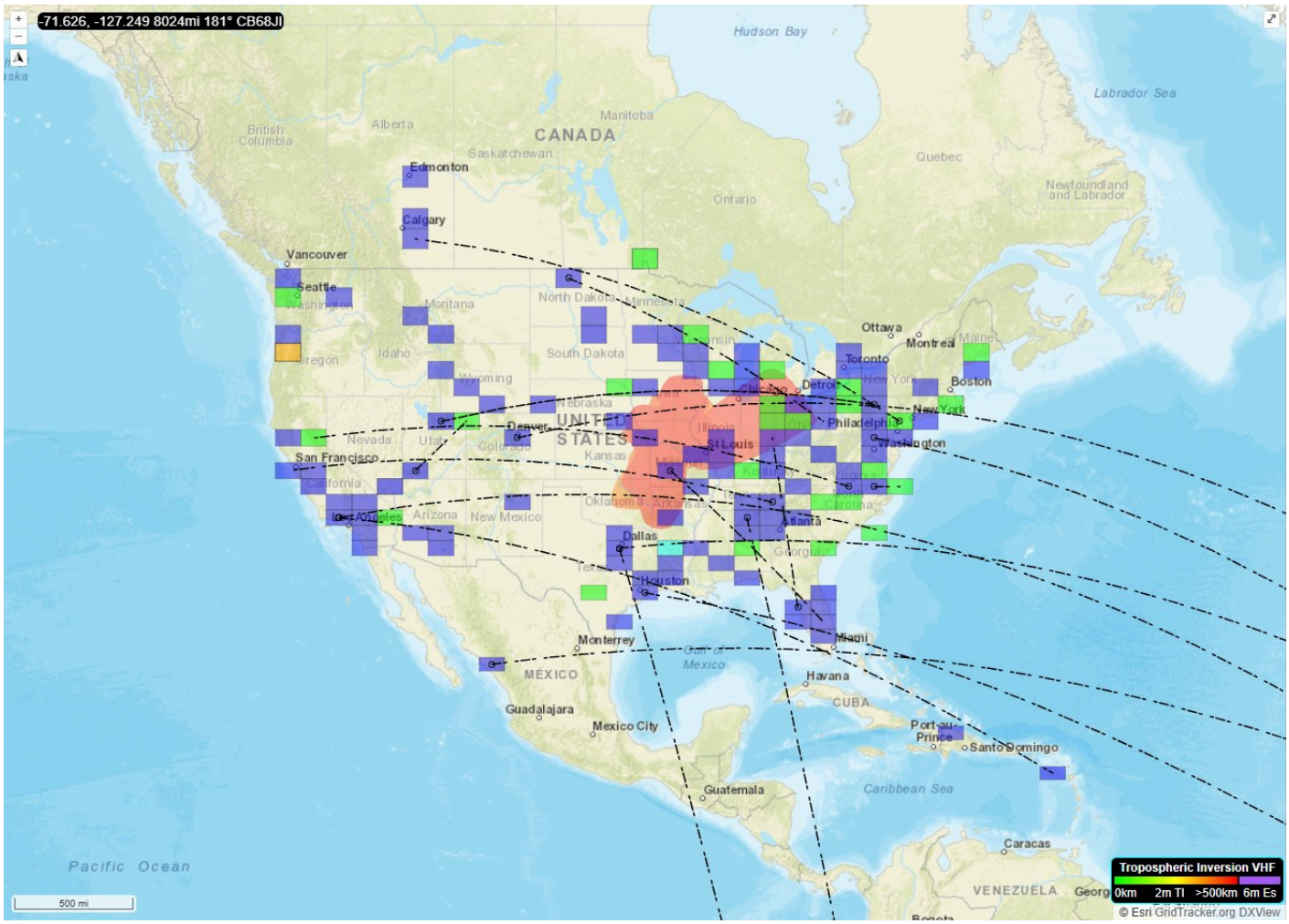
Prediction Layers

The **Prediction Layer** button cycles through propagation prediction maps. Right-click it to choose one directly, and to show or hide its legend in the corner of the map. Settings → Map sets how opaque they are.

- **Maximum Usable Frequency:** the highest frequency that will reflect off the ionosphere, from KC2G.
- **Critical Frequency NVIS:** the critical frequency (foF2) for near-vertical incidence skywave, from KC2G.
- **Es Probability Index:** where sporadic E is likely, from PROPquest. A slider moves the prediction up to 11 hours ahead or back.
- **Probability of Aurora:** from NOAA's Space Weather Prediction Center.

- **Tropospheric Inversion VHF:** where tropospheric ducting may carry VHF and UHF signals, with areas of 6 m sporadic E, from vhf.dxview.org.





RX Spots

The **Spot Reports** button shows where your signal has been heard: **RX Spots** places each station that heard you on the map, and **RX Heatmap** shows the same reports as a heat map. Spots come from PSK-Reporter and from GridTracker2's own spotting network, and need **Spotting** turned on in Settings → Features. Hold the mouse over a spot to see who heard you, how well, and when.

A legend in the corner of the map shows how many spots there are, and **Max Age**, how far back they go. Type hours and minutes into its boxes, or use its slider. Right-click the Spot Reports button to show or hide the legend.

With **Spots Over Grids** on (Settings → Features, or **Ctrl+T**), the spots are drawn over your grids; with it off, they replace them while shown.

Award Layers

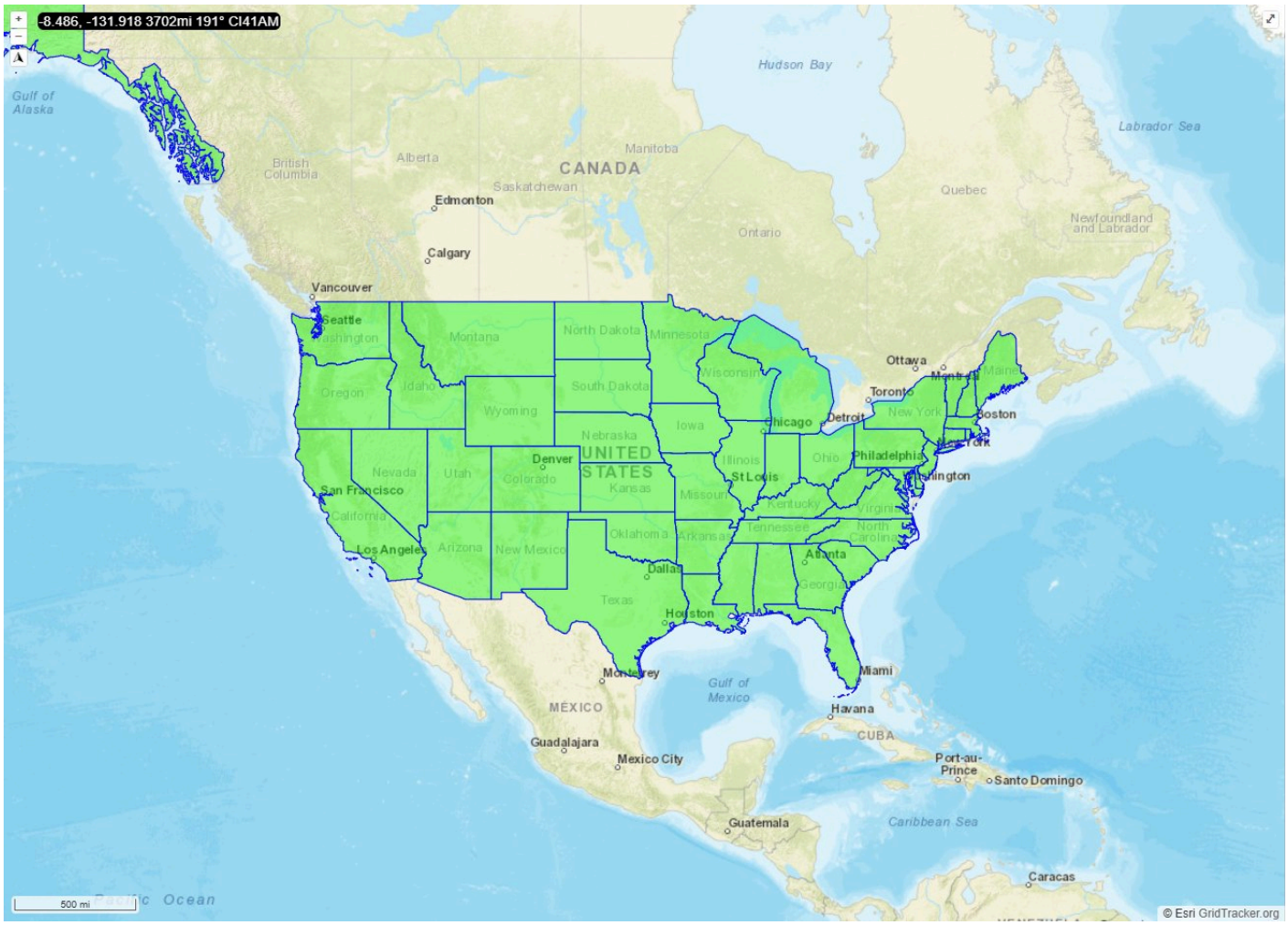
Choose an **Award** in the Map View Filters, or press a number key, to color the map by your progress toward an award: confirmed areas in green, worked but unconfirmed areas in yellow, and areas you still need with a faint red tint.

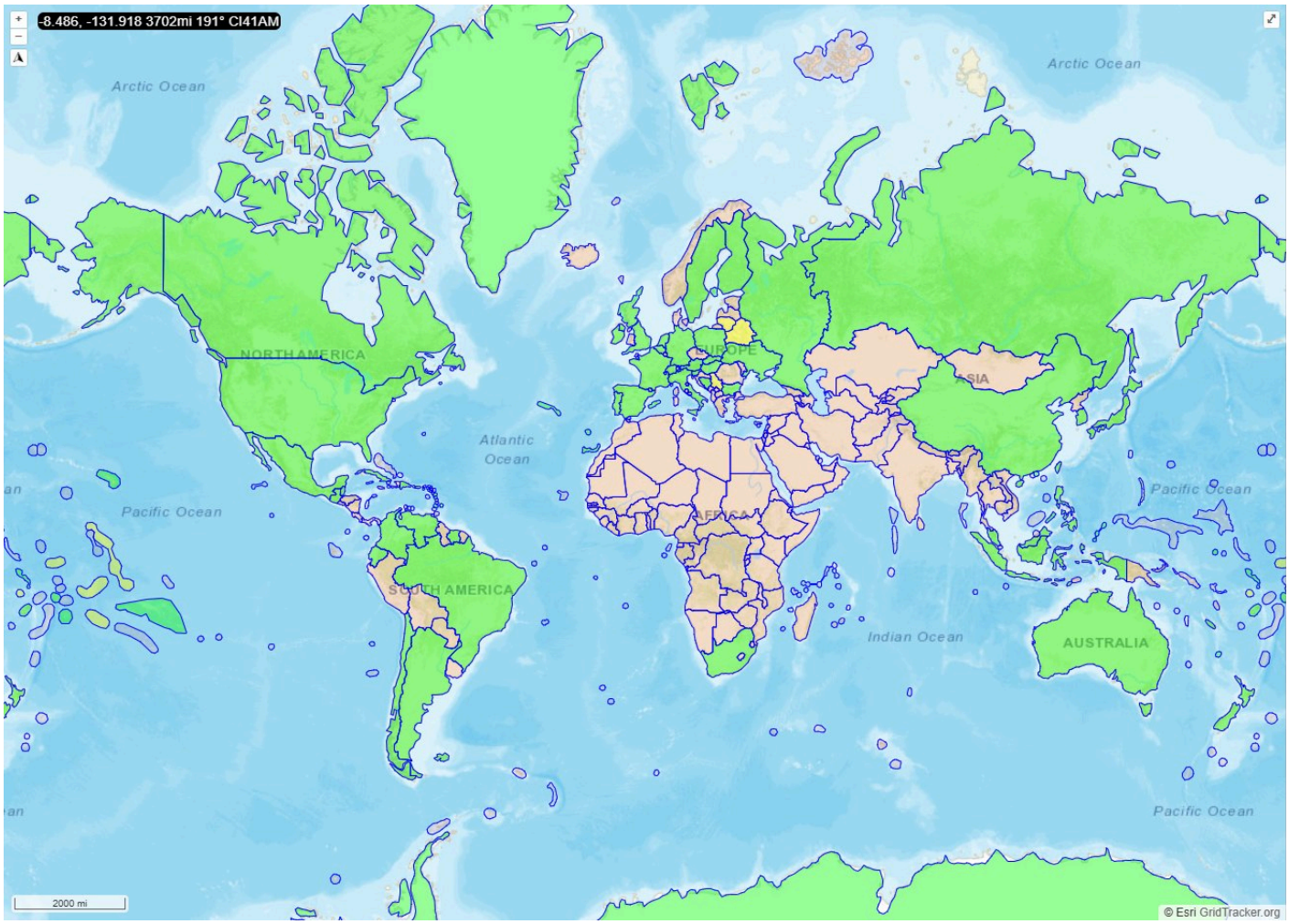
Key	Award layer
1	None (back to the grid map)
2	CQ zones

Key	Award layer
3	ITU zones
4	Worked All Continents (WAC)
5	Worked All States (WAS)
6	DXCC entities
7	US counties (USA-CA)
8	US continental grids (US48)
9	Canadian provinces (WACP)
=	Cycle through them

Hold the mouse over a zone, state, county or entity to see the bands and modes you have worked and confirmed it on, or “Needed”. Like everything else, the award layers follow the Band, Mode and Prop filters: set them to Mixed to see your progress on all bands and modes.

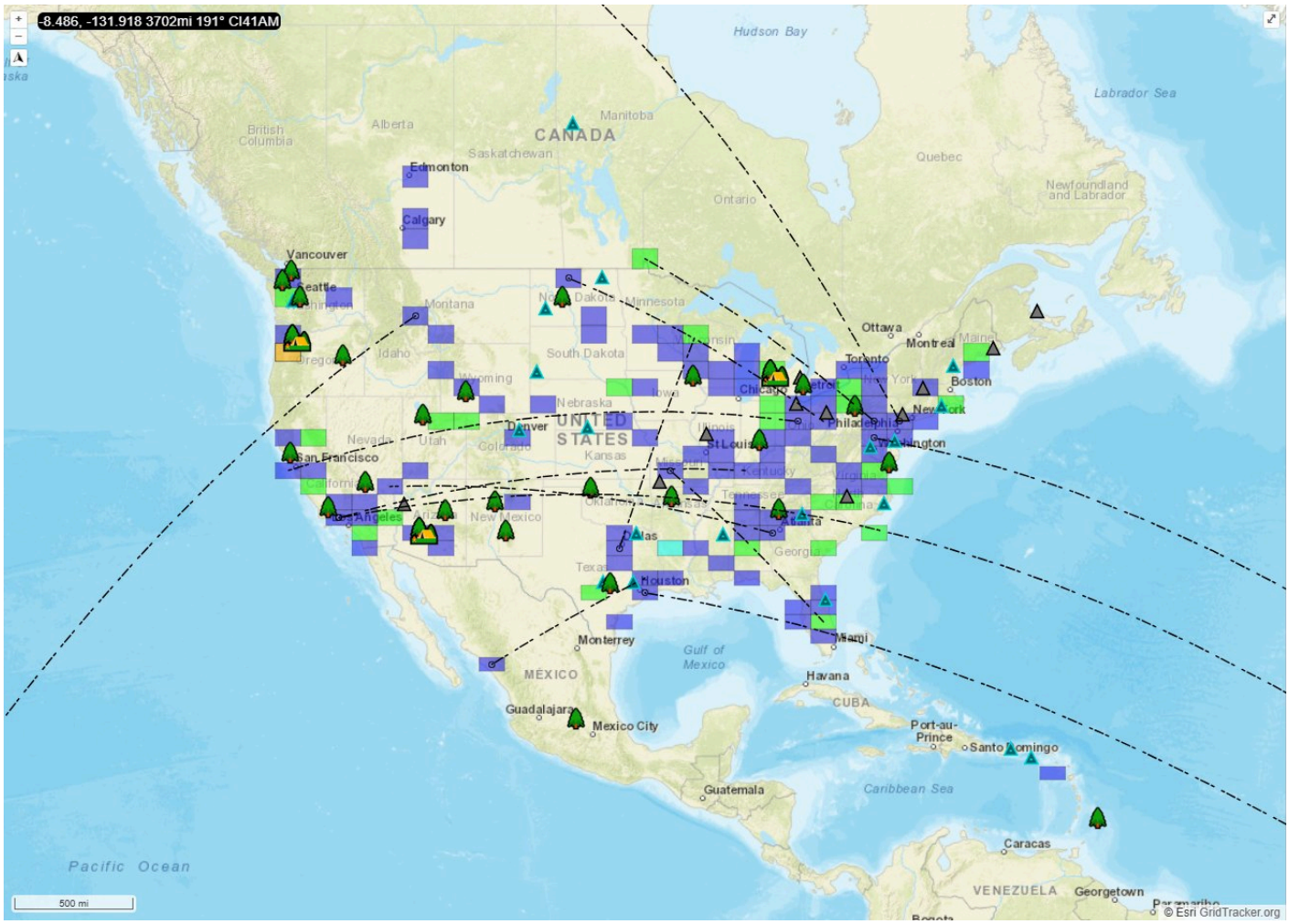
While an award layer is shown, the grids, paths and spots are hidden. Turn on **Keep Other Layers With Award View** in Settings → Map (or press **Ctrl+U**) to keep them.





Spot Markers

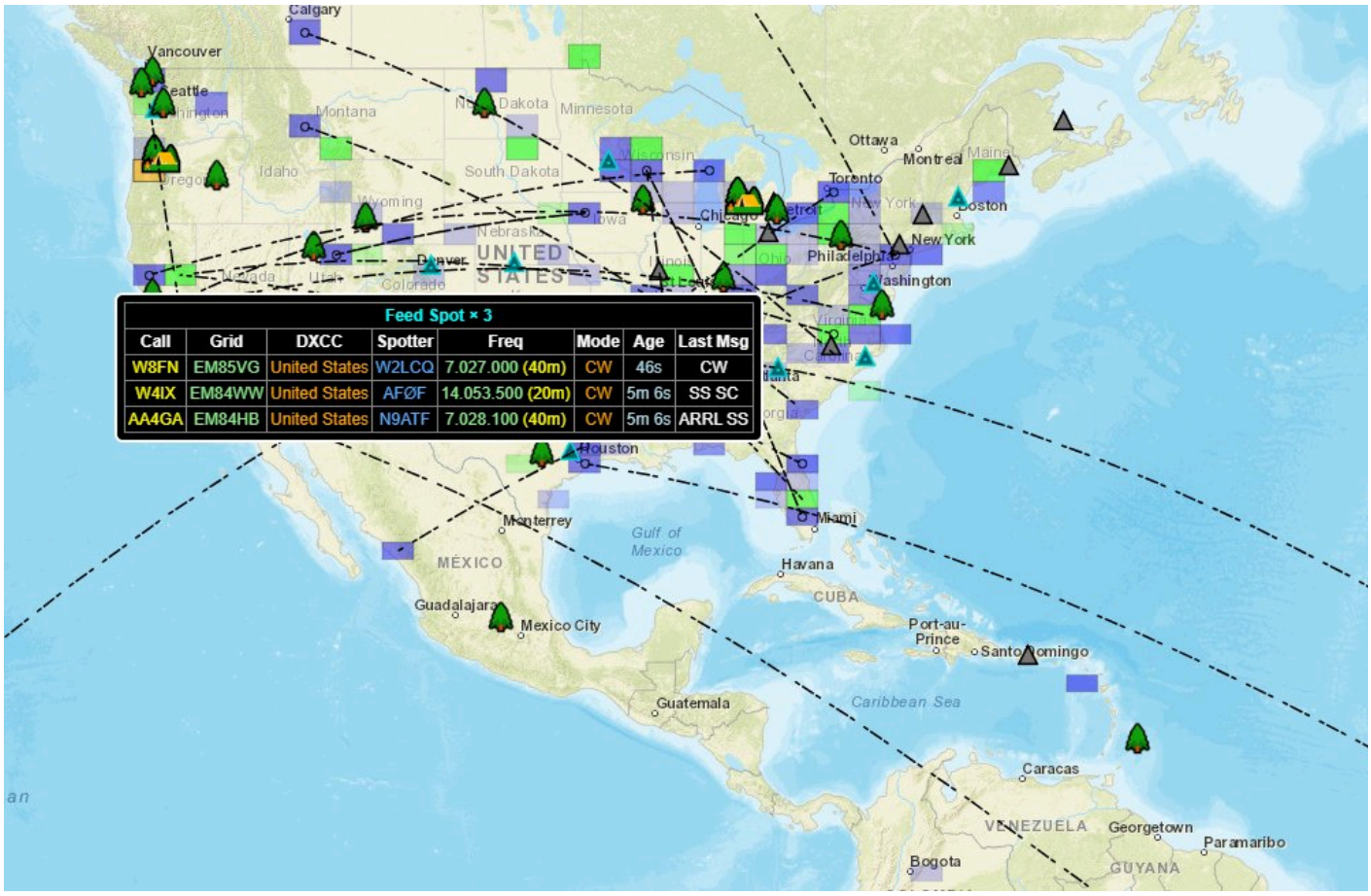
POTA parks, SOTA summits and DX Feeds spots each have their own markers and button. All of them follow the Band and Mode filters, and their tooltips list every spot on that marker.



Each kind of marker has three looks:

DX Feeds		
A radio is on the spot's band and mode	A radio is on the spot's band, in another mode	No radio is on the spot's band
SOTA		
A radio is on the spot's band and mode	A radio is on the spot's band, in another mode	No radio is on the spot's band
POTA		
A radio is on the spot's band and mode, not worked today	Worked today on this band and mode	No radio is on the spot's band and mode

- **Hover** over a marker for its details. Right-click a POTA park to pop the tooltip out into its own window.
- **Click** a marker to work the spot: it goes to a radio already on the spot's band and mode (WSJT-X, JTDX, AC Log or Log4OM); otherwise to a connected AC Log or Log4OM, which can also tune your rig; otherwise to the active WSJT-X or JTDX as Gen Msgs. Where markers are stacked, only the top one is worked.
- A marker for the callsign in a radio's DX Call is **ringed**, so you can find it on the map.
- With **Group Overlapping Spots** on (Settings → Map), markers in the same DXCC entity that would overlap are combined into one, with a compact tooltip ("POTA Spot × 3", "Feed Spot × 2").



See Parks On The Air, Summits On The Air and The Feed Roster and DX Feeds for more.

GridTracker Spotters

The **GridTracker Spotters** button (or **Ctrl+G**) shows a flag for each GridTracker2 user who is spotting, filtered by the Band and Mode filters. Hover over a flag for their call, grid, band, mode, distance and bearing; the call is green if you have a confirmed QSO with them, yellow if worked, and cyan if new on your current band and mode. Click a flag to look the station up.

Map Position

The top left corner shows the latitude, longitude, distance, bearing and 6-character grid under the mouse pointer. Press **Ctrl+X** to hide or show it.

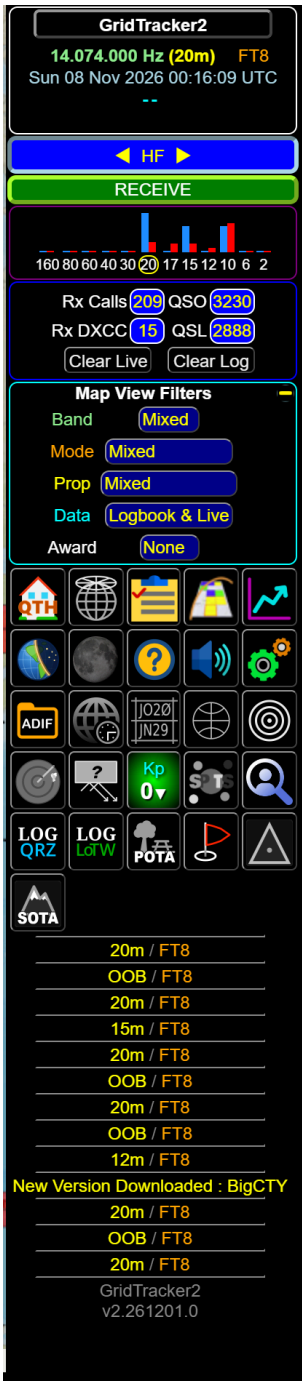
Press **Shift+F5** to **Shift+F10** to remember up to six map views, and **F5** to **F10** to return to them.

Rotator

With **CatRotator / PstRotator** turned on in Settings → Features, **Ctrl**+click anywhere on the map to turn your antenna toward that point.

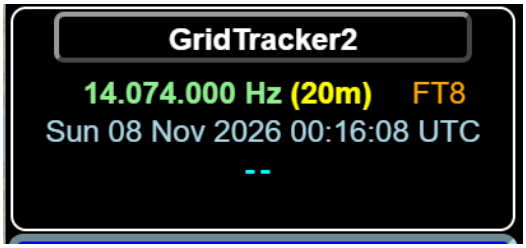
The Side Panel

The side panel runs down the right side of the main window (or the left, with **Map On Right Side** in Settings → General). From top to bottom it has the operating information, the status bar, the band activity graph, the Quick Stats, the Map View Filters, the button panel and the message list.



Click the title "GridTracker2" at the top to hide the panel and give the whole window to the map. Click the ↔ that appears, or press **F12**, to bring it back.

Operating Information



- **Frequency, band and mode:** the frequency and band your active radio program is on, and its mode. Hover over them for a reminder of what they are.
- **Date and time:** click to switch between UTC and your local time.
- **The station you are working:** the callsign you are calling or last called, their grid and their last signal report. The line below gives their DXCC entity, the distance and the bearing (heading) to them.
  - Click the callsign to open the Lookup window for it.
  - Right-click the callsign to open your Logbook filtered to that station (**Shift**+right-click shows only confirmed QSOs).
  - Click their grid to center the map on it.

Several radios



When more than one WSJT-X, JTDX, AC Log or Log4OM is sending to GridTracker2, a selector appears under the operating information. The ◀ and ▶ arrows step through them, and the panel and map follow the one you choose. Each WSJT-X instance appears under its name (WSJT-X started with `--rig-name=HF` shows as "HF").

Status Bar



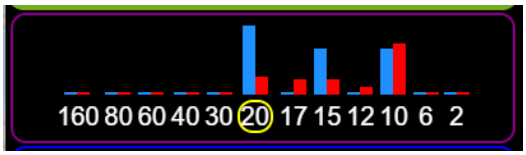
The status bar shows what your active radio program is doing:

Text	Color	Meaning
waiting for message	green	Nothing has been received from WSJT-X or JTDX yet.

Text	Color	Meaning
RECEIVE	green	Receiving.
DECODE	blue	Decoding.
TRANSMIT	red	Transmitting.
CONNECTED	green	AC Log or Log4OM is the active radio.
name CLOSED	purple	The active WSJT-X or JTDX has been closed.
IGNORE	gray	GridTracker2 is ignoring incoming messages.

Click the status bar to stop reading incoming WSJT-X and JTDX messages, for example while you test something; it then shows IGNORE. Click it again to resume.

Band Activity



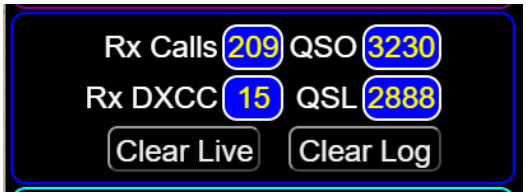
The bar graph shows how busy each band is around your grid in your current mode. Your current band's label is circled.

- **Red bars:** the band activity score from PSK-Reporter, for your grid and mode.
- **Blue bars:** activity seen by GridTracker2's own network (Off-Air Services).

Hold the mouse over a bar to see the numbers behind it: the score, how many stations were spotted, and how many are transmitting and receiving. Right-click the graph to pop it out into its own small window that you can place anywhere on your screen; right-click that window to close it.

The graph needs **Off-Air Services** and **Band Activity** turned on in Settings → Features. **Neighboring Grids** adds the activity of the eight grids around yours.

Quick Stats



- **Rx Calls:** how many callsigns you have heard this session.
- **Rx DXCC:** how many DXCC entities you have heard this session.
- **QSO:** how many QSOs are in your logbook.
- **QSL:** how many of them are confirmed.

Click a number to open the matching list in the Statistics window: Rx Calls and Rx DXCC open the Live tab, QSO opens the Logbook, and QSL opens the Logbook showing confirmed QSOs only.

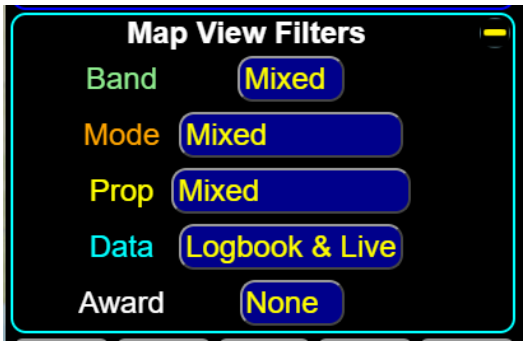
- **Clear Live** clears everything you have heard this session: live grids, paths, callsigns and the Rx Calls and Rx DXCC counts.

- **Clear Log** clears your logbook from GridTracker2's display. It doesn't delete any files. The button then reads **Load Log**; click it to load your logs again. You might clear the log to change which logs are loaded, see Logging Options.

When your Logbook Filters leave out some QSOs, an orange **Log Entries Filtered** line appears here. Click it to open the filters.

> **Tip**
> What counts as a QSO and a QSL depends on which logs you load. WSJT-X's own log only knows that you logged a QSO, not whether the other station confirmed it. To see confirmations, load your LoTW, QRZ.com or ClubLog log, or a log from your logging program, in Settings → Logging.

Map View Filters

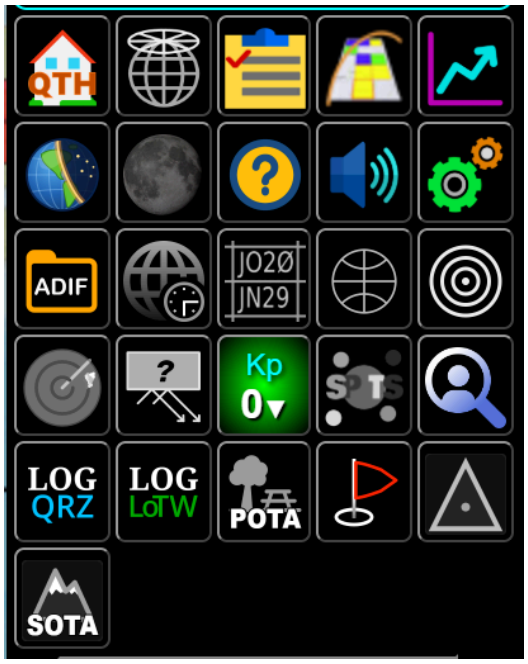


The Map View Filters choose which part of your logbook and live traffic is shown on the map. They also apply to the award layers, the Statistics window, and the POTA, SOTA and DX Feeds markers. Click the **–** in the corner to fold the box away; click its title to open it again.

- **Band: Auto** follows the band your radio program is on. **Mixed** shows all bands. Or pick a single band.
- **Mode: Auto** follows your current mode. **Mixed** shows all modes. **Digital** and **Phone** show those groups. Or pick a single mode.
- **Prop:** the propagation mode recorded in your log (Satellite, EME, Meteor Scatter, Sporadic E and so on), or **Mixed** for all.
- **Data: Live** shows what you are hearing now, **Logbook** shows your QSOs, and **Logbook & Live** shows both. **Ctrl+Q** cycles through them.
- **Award:** shows an award layer: CQ zones, ITU zones, continents (WAC), US states (WAS), DXCC, US counties (USC), US48 grids, or Canadian provinces (WACP). See Award Layers.

> **Tip**
> If QSOs seem to be missing from the map, check these filters first. To see everything you have ever worked, set Band, Mode and Prop to Mixed and Data to Logbook.

The Button Panel



The buttons open windows and turn map layers on and off. A button that is turned off is drawn in gray. Some buttons only appear while the feature they belong to is turned on, so your panel may have fewer or more buttons than shown here.

You can **drag a button** to another place in the panel to rearrange them. **Reset Button Panel** in Settings → General puts them back in their default order.

Buttons that open a window toggle it: click once to open, again to close. **Right-click** one of them to bring its window forward without closing it.

Button	Name	What it does	Hotkey
	Re-center map	Centers the map on your grid, turns it back to north up and resets the zoom.	Ctrl+Z
	Projection	Switches between the flat (Mercator) map and the azimuthal equidistant (AEQD) map centered on your grid. Each keeps its own view.	Ctrl+W
	Call Roster	Opens the Call Roster window.	Ctrl+F
	Push-Pin Mode	Switches between colored grid squares and push pins.	Ctrl+P
	Maidenhead Width	In push-pin mode only: MH6 places pins on the 6-character sub-square when a station sent one (otherwise on its 4-character square), MH4 places every pin on its 4-character square.	
	Statistics	Opens the Statistics window with your logbook and award progress.	Ctrl+I
	Grayline	Shades the night side of the Earth.	Ctrl+N
	Moon	Shows the Moon's position. Hover over it for its azimuth and elevation, useful for EME.	Ctrl+D

Button	Name	What it does	Hotkey
	User Guide	Opens this User Guide in its own window. Type in the search box at its top to find a word (**Enter** for the next match, **Shift+Enter** for the previous one). Its toolbar zooms, prints or saves it, and its ☰ button shows page thumbnails and the contents. **Esc** closes the window.	
	Audio Mute	Mutes or unmutes all of GridTracker2's sounds and spoken alerts.	Ctrl+M
	Settings	Opens the Settings panel.	Ctrl+S
	Load ADIF Log	Opens any ADIF log file and adds it to your logbook. The file is also added to Local File(s) in Settings → Logging, so it loads at every start.	Ctrl+L
	Reload Local ADIF Files	Reloads the local files listed in Settings → Logging. Shown when its **Menu Button** is ticked.	
	Time Zones	Shows the time zones. Hover over a zone to see its name, offset and local time.	Ctrl+H
	All Grid Overlay	Draws and labels the Maidenhead grid lines.	Ctrl+B
	Major Parallels and Meridians	Draws the Equator, the tropics, the polar circles and the prime meridian.	
	Range Rings	Draws distance rings around your grid.	
	US Radar	Shows the US weather radar.	0
	Prediction Layer	Cycles through the propagation prediction layers. Right-click to pick one directly, and to show or hide its legend. See Prediction Layers.	
	Current Conditions	Opens the Conditions window. While GridTracker2 receives the planetary K index, the button shows it, with an arrow for its trend; it pulses during a geomagnetic storm (Kp above 5).	Ctrl+E
	Spot Reports	Cycles between off, **RX Spots** (the stations that heard you, on the map) and **RX Heatmap**. Right-click to pick one directly and to show or hide the spots legend.	Ctrl+O
	Lookup	Opens the Lookup window.	
	PSK 24 Hour Report	Loads the stations that heard you on PSK-Reporter in the last 24 hours.	
	QRZ.com Log	Downloads your QRZ.com logbook.	
	LoTW Log	Downloads your Logbook of The World confirmations.	
	ClubLog Log	Downloads your ClubLog logbook.	
	N3FJP Log	Downloads the log from N3FJP AC Log.	
	Parks On The Air	Shows POTA activations on the map. Shown while **POTA Hunting** is on.	

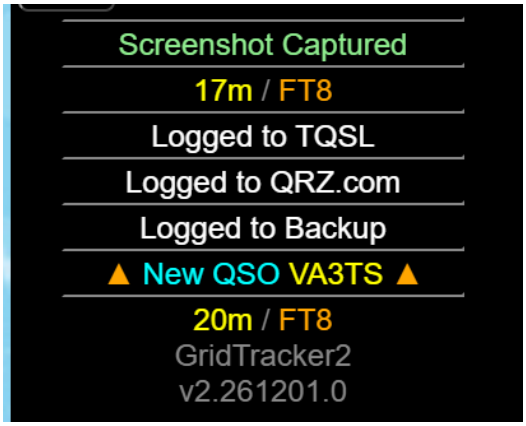
Button	Name	What it does	Hotkey
	GridTracker Spotters	Shows the other GridTracker2 users who are spotting. Hover over the button to see how many are on the map.	Ctrl+G
	DX Feed Spots	Shows DX Cluster and CW Skimmer spots on the map. Shown while **DX Feeds** is on.	
	Summits on the Air	Shows SOTA activators on the map. Shown while **SOTA Chasing** is on.	
	Santa Tracker	Follows Santa and his reindeer around the world. Shown from December 1st to 25th.	

The log download buttons (PSK, QRZ.com, LoTW, ClubLog and N3FJP) appear when you tick their **Menu Button** in Settings → Logging. Online buttons are hidden in Offline Mode.

Santa Tracker

From December 1st the Santa Tracker button appears. Turn the tracker on to see a countdown, at the top of the map, until Santa leaves at midnight on December 24th (your time). Then a box on the map shows where he is, his next stop and how many gifts he has delivered. Click where he is to center the map on him, and hover over a stop to see its DXCC entity and state or province. Shortly before he reaches you, contact with Santa is lost…

Messages



The bottom of the panel lists what has happened, newest first:

- band and mode changes;
- decodes that set off a Custom Alert, with the time and a 🚩 (while **Decode Traffic Waterfall** is on in Settings → Features);
- each new QSO ("▲ New QSO *call* ▲"), and the result of sending it to each of your logs, for example "Logged to QRZ.com", or a failure;
- "Spotted to POTA" when a park QSO was spotted;
- screenshots, Call Roster script changes, callsign database updates and new versions of GridTracker2. When a new version has downloaded, an **Install and Restart** button here installs it and restarts.

Your own callsign is shown in yellow, and the station you are working in cyan.

GridTracker2 Settings

Click the **Settings** button (the gear) in the button panel, or press **Ctrl+S**, to open the Settings panel over the map. Click the red **X** in the top right corner, press **Esc**, or click the gear again to close it.

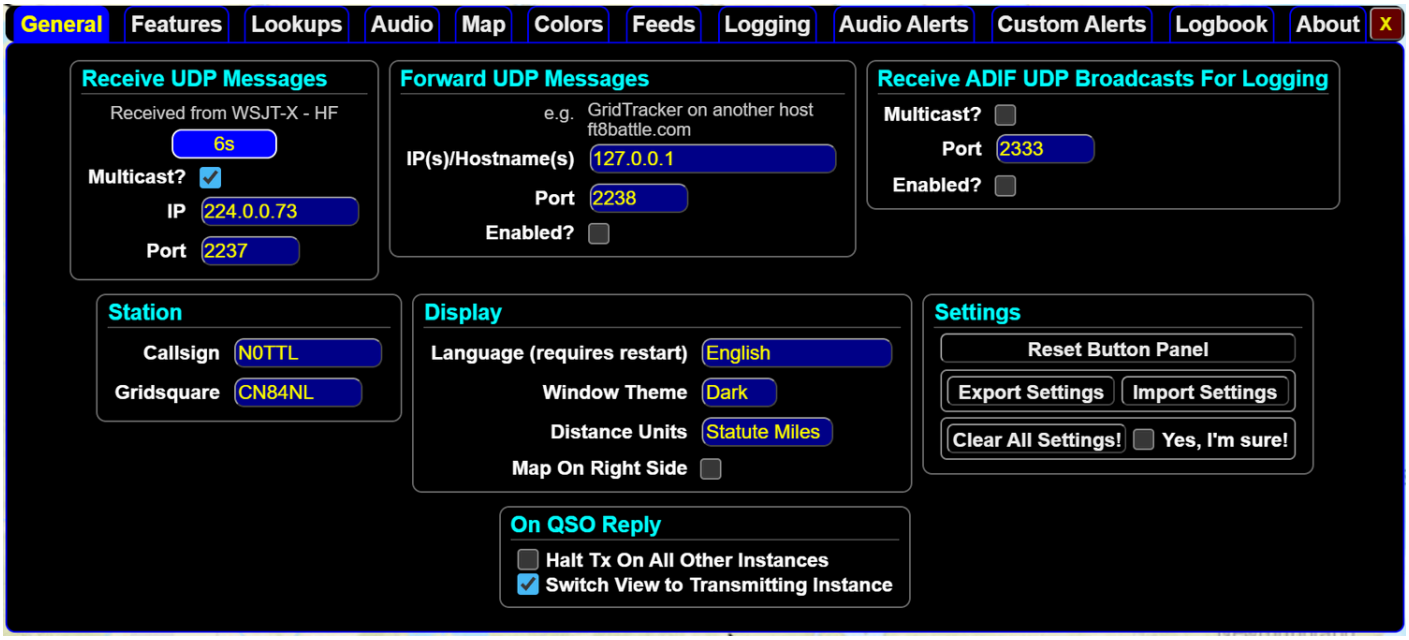
The tabs along the top are **General**, **Features**, **Lookups**, **Audio**, **Map**, **Colors**, **Feeds**, **Logging**, **Audio Alerts**, **Custom Alerts**, **Logbook** and **About**. The **Feeds** tab only appears while DX Feeds is turned on.

Most tabs are divided into titled boxes. An option that depends on another one is indented under it, and is only shown while the option above it is turned on.

> **Tip**
> Hotkeys don't work while the Settings panel is open, so they can't be triggered by accident while you type in a settings field.

> **Note**
> The Call Roster and Feed Roster have their own settings, including the Watcher, Exceptions, Ignores and Columns tabs. They are in the roster window, see The Call Roster.

General Tab



Receive UDP Messages

How GridTracker2 receives messages from WSJT-X, JTDX and similar programs. The line at the top shows how long ago the last message arrived.

- **Multicast?** Turn this on if WSJT-X sends to a multicast address (224.0.0.0 to 239.255.255.255), then enter that address in **IP**. Multicast lets several programs receive the same WSJT-X messages at once.

- **Port:** the UDP port WSJT-X sends to, 2237 by default. The first time GridTracker2 runs it reads the address and port from your WSJT-X or JTDX settings.

See Appendix B for how to set up WSJT-X and JTDX to match.

Forward UDP Messages

GridTracker2 can pass every message it receives on to other programs, for example GridTracker2 on another computer, HamClock, or an online service such as ft8battle.com.

- **IP(s)/Hostname(s):** one or more addresses or hostnames, separated by commas, e.g. `192.168.1.20,ft8battle.com`. A hostname that can't be found (a typo, or no internet) is reported under the field.
- **Port:** the port to send to, 2238 by default. It can't be the same as the receive port.
- **Enabled?** turns forwarding on and off.

Receive ADIF UDP Broadcasts For Logging

Programs such as fldigi can broadcast each logged QSO as an ADIF record over UDP. With **Enabled?** on, GridTracker2 receives them and logs them just like a QSO logged in WSJT-X: they are added to your logbook and sent to the logs you have chosen in the Logging tab. The default port is 2333. Turn on **Multicast?** and enter the **IP** if the program broadcasts to a multicast address.

Station

- **Callsign:** your callsign, used while no WSJT-X, JTDX, AC Log or Log4OM is connected (for example when you only use DX Feeds). A callsign one of those programs reports is always used for that program. While this field is blank it takes the callsign WSJT-X or JTDX gives.
- **Gridsquare:** your home grid. It centers the map and is used for distances and bearings. By default it is the grid from WSJT-X.

Display

- **Language (requires restart):** the language of the interface. Choosing one saves your settings and restarts GridTracker2. See What's New for the list.
- **Window Theme:** Dark, Light or System.
- **Distance Units:** Kilometers, Statute Miles, Nautical Miles or Degrees.
- **Map On Right Side:** puts the map on the right of the window and the panel on the left.

Settings

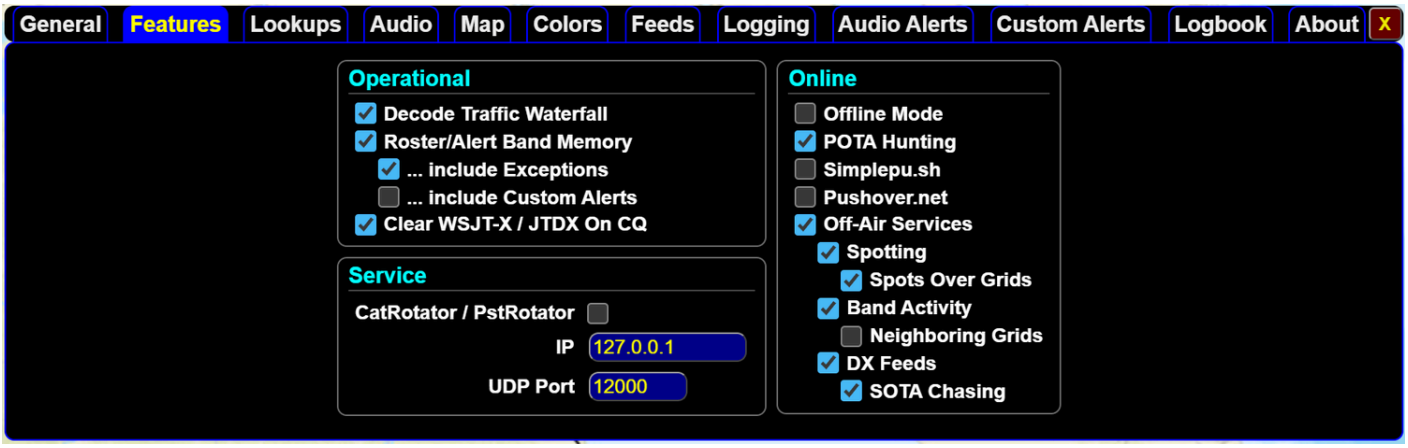
- **Reset Button Panel:** puts the buttons in the button panel back in their default order.
- **Export Settings** saves all your settings to a file (the suggested name is `GridTracker2 Settings.json`). **Import Settings** loads such a file and restarts GridTracker2. Use this as a backup, or to move your settings to another computer. Files from versions older than 2.241005 can't be imported.
- **Clear All Settings!** returns every setting to its default. It only works while **Yes, I'm sure!** is ticked.

On QSO Reply

This box only appears while more than one WSJT-X or JTDX is sending to GridTracker2.

- **Halt Tx On All Other Instances:** when you reply to a station from one instance, transmitting is stopped on the others.
- **Switch View to Transmitting Instance:** the main window follows the instance that is transmitting.

Features Tab



Operational

- **Decode Traffic Waterfall:** lists the decodes that set off a Custom Alert in the message area of the side panel, with a 🚩. Turning it off empties the message list.
- **Roster/Alert Band Memory:** the Call Roster's Logbook, Hunting and Wanted choices and your Audio Alerts are remembered separately for each band and mode. An **M** badge shows next to their headings while this is on. It works while a single WSJT-X or JTDX is running; with several, the same settings are used for all bands and modes.
  - **... include Exceptions** also remembers the Exceptions for each band and mode.
  - **... include Custom Alerts** also remembers the Custom Alerts for each band and mode.
- **Clear WSJT-X / JTDX On CQ:** when you start calling CQ, the DX Call and DX Grid left over from your last QSO are cleared in WSJT-X or JTDX.

Service

- **CatRotator / PstRotator:** turns your antenna rotator toward a station through CatRotator or PstRotator, over UDP. Enter the **IP** and **UDP Port** the rotator program listens on (127.0.0.1 and 12000 by default). An **Aim Rotator** choice is then added to the roster's right-click menu.

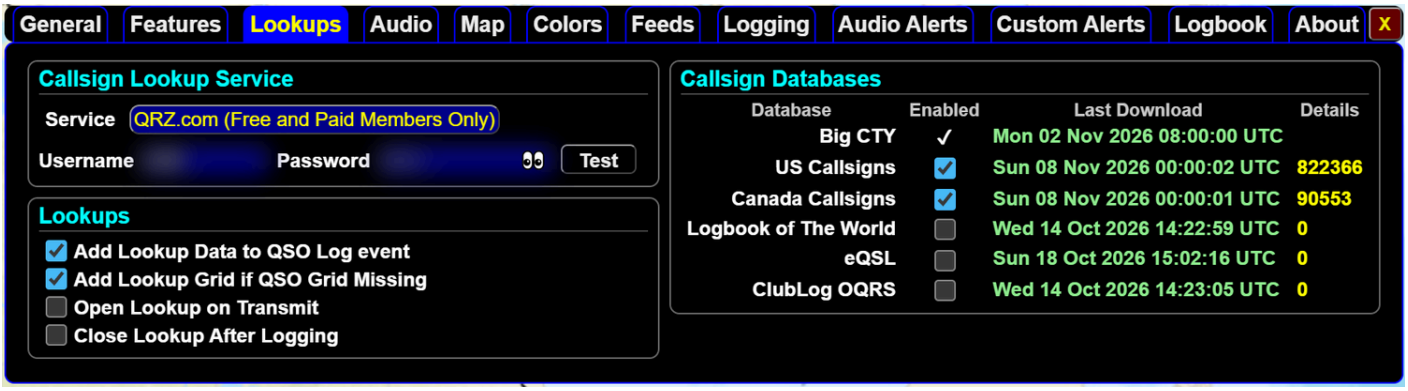
Online

- **Offline Mode:** turns off every online service, for example for Field Day or a POTA activation without internet. The online maps are replaced by the offline maps, and the Conditions, Lookup, POTA and radar buttons and the online logbook buttons are hidden. **Ctrl+Y** also toggles it.

- **POTA Hunting:** shows Parks On The Air activations on the map, and adds the POTA Wanted choice and POTA column to the Call Roster. See Parks On The Air.
- **Simplepu.sh** and **Pushover.net:** send roster alerts to your phone. Each shows its own box when turned on, see Push Notifications.
- **Off-Air Services:** GridTracker2's own online services. While it is off, the GridTracker Spotters, Spot Reports and DX Feed Spots buttons and the band activity graph are hidden. The options under it are:
    - **Spotting:** shows where your signal has been heard (RX spots) on the map.
        - **Spots Over Grids:** shows the spots over your grids instead of in their place.
    - **Band Activity:** the band activity graph in the main panel, from the activity around your grid.
        - **Neighboring Grids:** includes the activity in the grids around yours.
    - **DX Feeds:** DX Cluster and CW Skimmer spots, for the Feed Roster and the map. Turning it on adds the Feeds tab, the Feed Roster and a DX Feed Spots button. See The Feed Roster and DX Feeds.
        - **SOTA Chasing:** Summits on the Air activators from the DX Feeds spots. See Summits On The Air.

> **Note**
> Turning on POTA Hunting or SOTA Chasing also turns on **Load At Startup** and **Log QSO** for the GridTracker2 log in the Logging tab. GridTracker2 needs its own log to know which parks and summits you have already worked.

Lookups Tab



Callsign Lookup Service

The website used for callsign lookups:

- **CALLOOK (US Only):** the default. Free, no login, but US callsigns only.
- **HamQTH:** free, login required.
- **QRZ.com:** free and paid members.
- **QRZCQ.com:** paid members only.

For every service except CALLOOK, enter your **Username** and **Password** and click **Test**.

Lookups

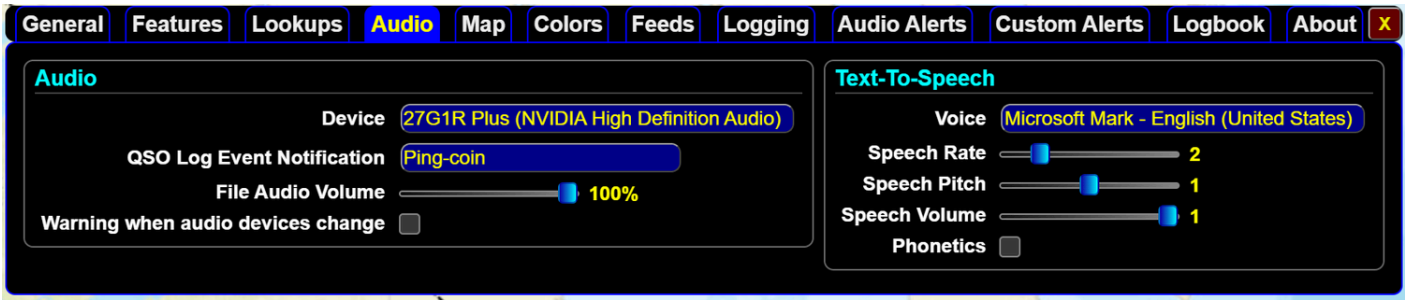
- **Add Lookup Data to QSO Log event:** when you log a QSO, details from the lookup (name, QTH and so on) are added to the QSO GridTracker2 logs.
    - **Add Lookup Grid if QSO Grid Missing:** if the QSO has no grid, the grid from the lookup is used.
- **Open Lookup on Transmit:** opens the Lookup window for the station whenever you start transmitting to it.
- **Close Lookup After Logging:** closes the Lookup window after the QSO is logged.

Callsign Databases

Databases GridTracker2 downloads and keeps up to date. The table shows when each was last downloaded and how many callsigns it holds.

- **Big CTY:** the country (DXCC) prefix list. Always on.
- **US Callsigns:** the FCC license database. Needed for the State and County columns in the rosters.
- **Canada Callsigns:** the Canadian license database, for Canadian provinces.
- **Logbook of The World:** which stations use LoTW, and when they last uploaded. Needed for the LoTW column and the Uses LoTW exception.
- **eQSL:** which stations use eQSL.
- **ClubLog OQRS:** which stations accept QSL requests through ClubLog OQRS.

Audio Tab



Audio

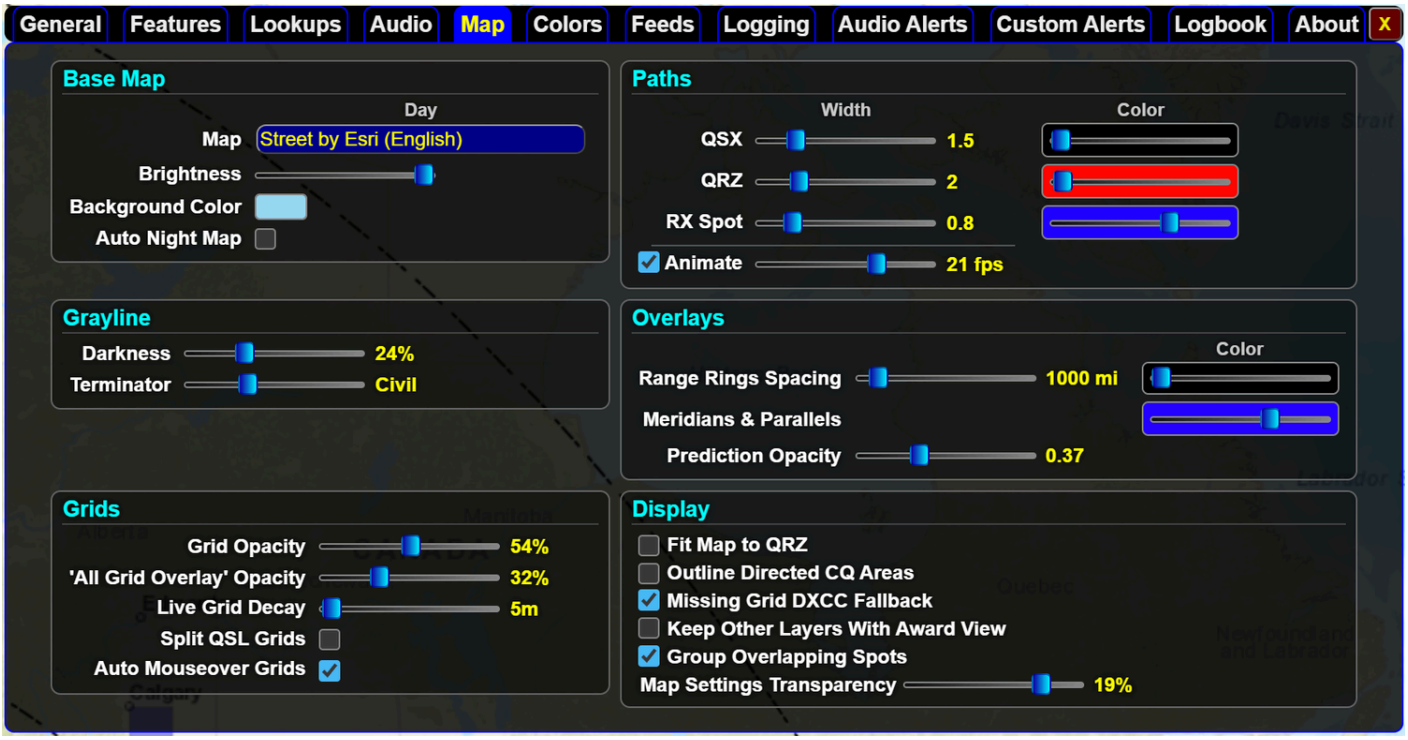
- **Device:** the sound device GridTracker2 plays its alerts on.
- **QSO Log Event Notification:** a sound played whenever a QSO is logged.
- **File Audio Volume:** the volume of sound file alerts.
- **Warning when audio devices change:** warns you when your sound devices have changed, for example when a USB headset is unplugged.

> **Warning**
>
> Don't choose the sound card that connects your computer to your radio. GridTracker2's alerts would be transmitted.

Text-To-Speech

The **Voice**, **Speech Rate**, **Speech Pitch** and **Speech Volume** of spoken alerts. **Phonetics** speaks callsigns and grids phonetically (Kilo Seven…).

Map Tab



Base Map

- **Map:** the map drawn under everything else. There are more than 35 to choose from, including street, topographic, satellite and dark maps. In Offline Mode the offline maps are listed instead. A few maps need an **API Key**; its field appears when you pick one.
- **Brightness:** dims the base map, so the grids stand out.
- **Background Color:** the color shown where the map has no tiles, for example beyond the edge of a projection. It is kept for each map.
- **Auto Night Map:** switches to a second map at night. While it is on, a **Night** column appears with its own map, brightness and path colors.

Paths

The width and color of the lines drawn on the map:

- **QSX:** traffic between two other stations.
- **QRZ:** traffic involving you.
- **RX Spot:** paths to the stations that heard you (shown while Spotting is on). Its color can follow the band colors.
- **Animate:** makes the paths move in the direction of the traffic, at the chosen speed. **Ctrl+J** also toggles it.

Grayline

- **Darkness:** how dark the night side of the map is.
- **Terminator:** where the line between day and night is drawn: Horizon, Civil, Nautical or Astronomical twilight.

Overlays

- **Range Rings Spacing:** the distance between the range rings around your QTH, and their color. Turn the rings on with the Range Rings button.
- **Meridians & Parallels:** the color of the Equator, tropics, polar circles and prime meridian, turned on with their button in the button panel.
- **Prediction Opacity:** how opaque the propagation prediction layers are.

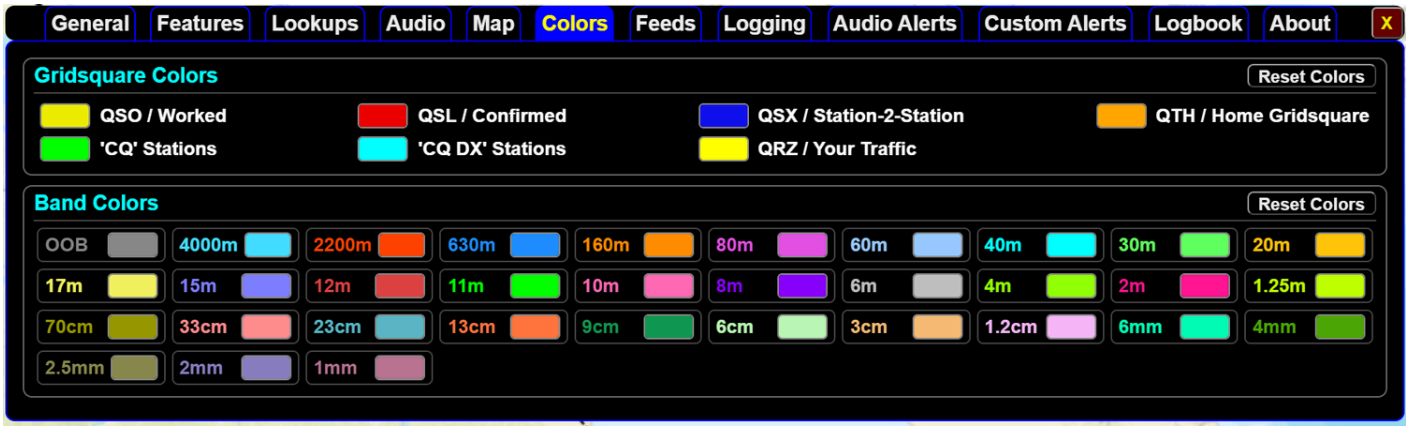
Grids

- **Grid Opacity:** how opaque the colored grids are.
- **'All Grid Overlay' Opacity:** how opaque the Maidenhead grid lines overlay is.
- **Live Grid Decay:** how fast live grids fade out after they were last heard. "No Decay" keeps them until they expire.
- **Split QSL Grids:** a grid you have worked that is also live is split diagonally: one half shows your logbook status, the other half the live traffic.
- **Auto Mouseover Grids:** shows a grid's details when you hold the mouse over it.

Display

- **Fit Map to QRZ:** while you are transmitting, the map zooms to show you and the station you are working, then returns to your previous view.
- **Outline Directed CQ Areas:** when a station calls a directed CQ (CQ NA, CQ EU, CQ JA…), the area they are calling is outlined on the map.
- **Missing Grid DXCC Fallback:** a station that hasn't sent a grid is drawn at the center of its DXCC entity.
- **Keep Other Layers With Award View:** with an Award picked in the Map View Filters, grids, paths and spots stay on the map. **Ctrl+U** toggles it.
- **Group Overlapping Spots:** POTA, SOTA and DX Feeds markers that would overlap are shown as one marker. Hold the mouse over it to see them all.
- **Map Settings Transparency:** how see-through this tab is, so you can watch the map while you change the settings.

Colors Tab



Gridsquare Colors

The colors of the grids on the map, also shown in the map legend:

- **QSO / Worked** and **QSL / Confirmed:** grids in your logbook.
- **QSX / Station-2-Station:** live traffic between other stations.
- **QTH / Home Gridsquare:** your grid.
- **'CQ' Stations** and **'CQ DX' Stations:** stations calling CQ.
- **QRZ / Your Traffic:** stations calling you.

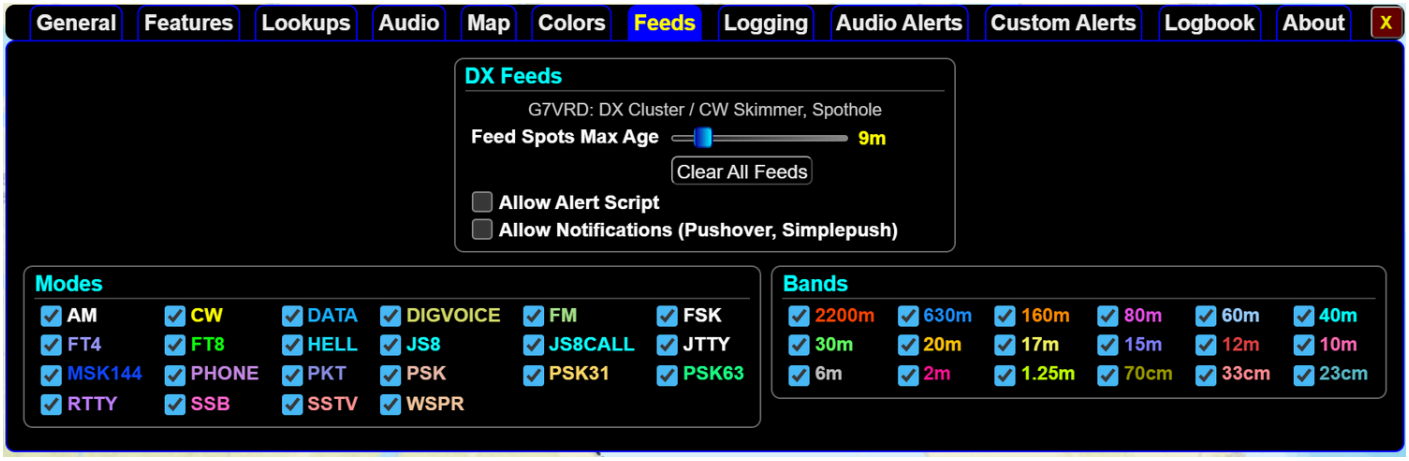
Band Colors

The color of each band. Band colors are used for map spots, pins and paths, in both rosters, in the Statistics window and in the Lookup window.

Each box has a **Reset Colors** button in its title to return to the defaults.

Feeds Tab

This tab appears while **DX Feeds** is turned on in the Features tab.



DX Feeds

- **Feed Spots Max Age:** how long a feed spot stays on the map after it was last spotted, 1 to 60 minutes.
- **Clear All Feeds:** clears all feed spots from the Feed Roster and the map. New spots keep arriving.
- **Allow Alert Script:** lets feed spots run the roster alert script.
- **Allow Notifications (Pushover, Simplepush):** lets feed spots send push notifications.

Modes and Bands

One tick box for each mode seen in feed spots, and for each band. Untick a mode or band to hide its spots in the Feed Roster and on the map.

Logging Tab

GridTracker2 is a log *viewer*, not a logging program. The Logging tab sets where your QSOs come from (which logs are loaded) and where new QSOs are sent. See Logging Options and Functions for how they fit together.



The columns are:

- **Connect:** a live, two-way connection to the program (Log4OM and N3FJP AC Log). A dot next to it shows green while connected, red while not.
- **Menu Button:** adds a button for that log to the button panel, so you can load it whenever you like.
- **Load At Startup:** loads that log when GridTracker2 starts.
- **Log QSO:** sends every new QSO to it.

Logbooks On This Computer

- **App Log(s):** the log files of WSJT-X, JTDX and similar programs. GridTracker2 finds them automatically; use **Add File** to add others, and untick any you don't want loaded.
- **GridTracker2:** GridTracker2's own backup log of the QSOs it logs. **Backup Logs** opens its folder. Keep this on if you use POTA Hunting or SOTA Chasing.
- **Local File(s):** any other ADIF files you want loaded at startup. Click **Add File** (it also ticks **Load At Startup**). Files opened with the **Load ADIF Log** button are added here too.

Logging Programs

Logging programs on this or another computer, each with its **IP** address and **Port**:

- **ADIF UDP / N1MM:** sends each QSO as ADIF over UDP, for N1MM Logger+, HRD Logbook 6.9 and later, and other programs that accept it.
- **Log4OM: Connect** links to Log4OM's remote control. With **Enable Rig Control** on, clicking a spot also tunes your rig through Log4OM. See Log4OM.
- **N3FJP Loggers:** AC Log and the other N3FJP loggers. **QSL By** picks which confirmation counts as a QSL. With **Enable Rig Control** on, clicking a spot tunes your rig through AC Log. See N3FJP AC Log.
- **DXKeeper:** DXLab's logbook.
- **HRD Logbook <= v6.8.x:** older versions of Ham Radio Deluxe's logbook. For version 6.9 and later use ADIF UDP / N1MM.

Online Logbooks

Enter your account details and click **Test** to check them.

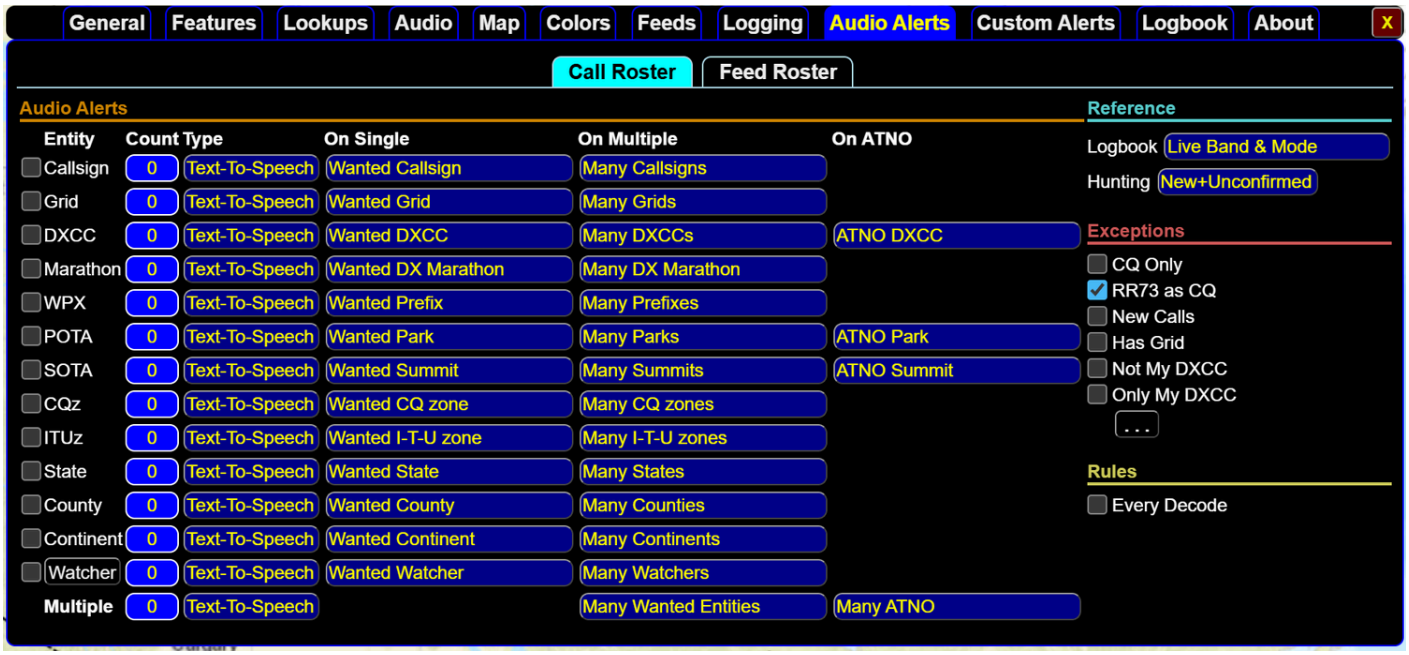
- **QRZ.com:** your logbook **API Key** (a QRZ.com subscription feature).
- **ClubLog:** callsign, password and email.
- **LoTW:** your LoTW website login and password, used to download your confirmations. To upload new QSOs, tick **Log QSO**, then choose the **TQSL Path** (not needed on macOS), your **TQSL Password** if your certificate has one, and the **Station Name** (your TQSL station location). Uploads that fail are queued and retried with the next QSO.
- **eQSL.cc:** user, password, and optionally a **QTH Nickname**.
- **HRDLOG.net:** callsign and upload code.
- **Cloudlog/Wavelog:** the URL of your server, an API key, and the **Station Profile** (click **Test** to load the list).
- **HamCQ.cn:** API key.

PSK-Reporter 24 Hour History

Loads the stations that heard you on PSK-Reporter over the last 24 hours. These are reception reports, not QSOs.

Audio Alerts Tab

Audio Alerts speak or play a sound when a station you want is decoded. The alert ticks are separate from the roster's Wanted ticks, so the roster can highlight more than you are alerted for. The **Reference** and **Exceptions** are shared with the roster: changing them here changes them in the roster window, and the other way around.



While DX Feeds is on, **Call Roster** and **Feed Roster** sub-tabs appear at the top: each roster has its own alerts. In the roster, a 🔔 after a Wanted item means it has an audio alert; click it to open its sub-tab.

Audio Alerts

Tick what you want to be alerted for: **Callsign**, **Grid**, **DXCC**, **Marathon**, **WPX**, **POTA** (with POTA Hunting on), **SOTA** (with SOTA Chasing on), **CQz**, **ITUz**, **State**, **County**, **Continent** and **Watcher**. **Multiple** alerts when a station is wanted for more than one of them.

For each one choose:

- **Type:** Text-To-Speech, or Media File (a sound).
- **On Single:** what is said or played when one station is wanted.
- **On Multiple:** what is said or played when several stations are wanted at once.
- **On ATNO** (DXCC, POTA, SOTA and Multiple): played instead when the station is an All Time New One, an entity, park or summit you have never worked.

Count shows how many stations are alerting right now.

Reference

- **Logbook:** which QSOs count as worked:
  - **Live Band & Mode:** QSOs on the band and mode you are on now.
  - **Live Band, Mix Modes:** QSOs on your current band, in any mode.
  - **Live Band, Digi Modes:** QSOs on your current band in any digital mode.
  - **Mix Band, Live Mode:** QSOs in your current mode, on any band.
  - **Mix Band & Modes:** any QSO.
  - **Mix Band & Digi Modes:** any digital QSO.
  - **Award Tracker:** alerts for the awards you track in the roster's Award Tracker instead.
  - The Feed Roster says "Spots" instead of "Live", and adds Phone and CW choices.

- **Hunting: New** (never worked), **New+Unconfirmed** (never worked, or worked but not confirmed) or **Mixed**.

Exceptions

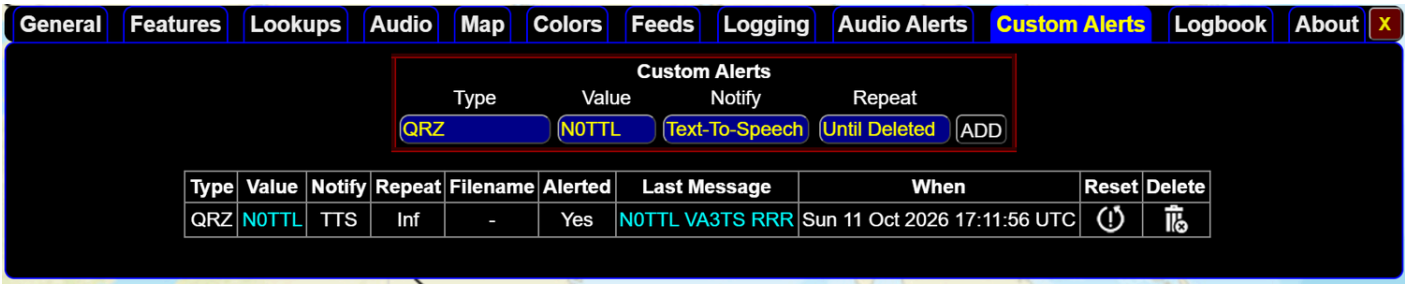
Exceptions narrow down which stations alert: **CQ Only**, **RR73 as CQ** (a station ending a QSO counts as calling CQ), **New Calls**, **Has Grid**, **Not My DXCC** / **Only My DXCC**, **Spotted Me**, **Uses eQSL**, **Uses OQRS**. The Feed Roster adds **Hide Self-Spot**, **Auto Band** and **Auto Mode**. The **...** button opens the roster's Exceptions tab for the rest (signal strength, frequency, LoTW, and so on). See The Call Roster.

Rules

- **Every Decode** (Call Roster only): alerts on every decode of a wanted station, not just the first.

Custom Alerts Tab

Custom Alerts watch for one particular callsign or grid, whatever your roster settings.



To add one, pick:

- **Type:**
  - **QRZ:** your own callsign, when someone calls you.
  - **Callsign (exact)**, **Callsign (partial)** or **Callsign (regex)**.
  - **Gridsquare:** a 4-character grid.
- **Value:** the callsign, part of a callsign, regular expression or grid.
- **Notify: Text-To-Speech**, **Media File**, **Visual Popup** (a small alert window) or **Map Center** (the map moves to the station).
- **Repeat: Until Deleted**, **Until Exit**, **Only Once** or **Never Repeat**.

Then click **ADD**. The list below shows your alerts, when each last went off and the message that set it off, with buttons to reset or delete each one. See Setting Up Audio and Visual Alerts for examples.

Logbook Tab



QSL Location Authority

When the same QSO is in several logs, this picks the one whose location (grid, county and so on) is used: LoTW (the default), QRZ.com, eQSL, Clublog, N3FJP, Other, Last Loaded or None. Click **Apply Changes** to reload your logbooks with the new choice. Your log files aren't changed.

Logbook Filters

Limit the logbook shown on the map, in the rosters and in Statistics:

- **Working Callsign(s):** only QSOs made with these callsigns, separated by commas. Useful if you have operated under several callsigns, or portable (for example `N0TTL/7`). While the field is empty, it shows the callsigns found in your logs.
- **Working Grid(s):** only QSOs made from these grids.
- **Working Date:** only QSOs made after this date and time (UTC), for example the start of a contest or DXpedition.

Tick **Enable?** next to each filter you want to use, then click **Apply Changes**.

About Tab

The About tab shows your GridTracker2 version and the versions of the components it is built on. Include them when you ask for help or report a bug.

When a new version has downloaded, it is announced here with an **Install and Restart** button. If you start GridTracker2 with `--disable-auto-updates`, a new version is announced with a **Download** button instead.

Making GridTracker2 Work For You

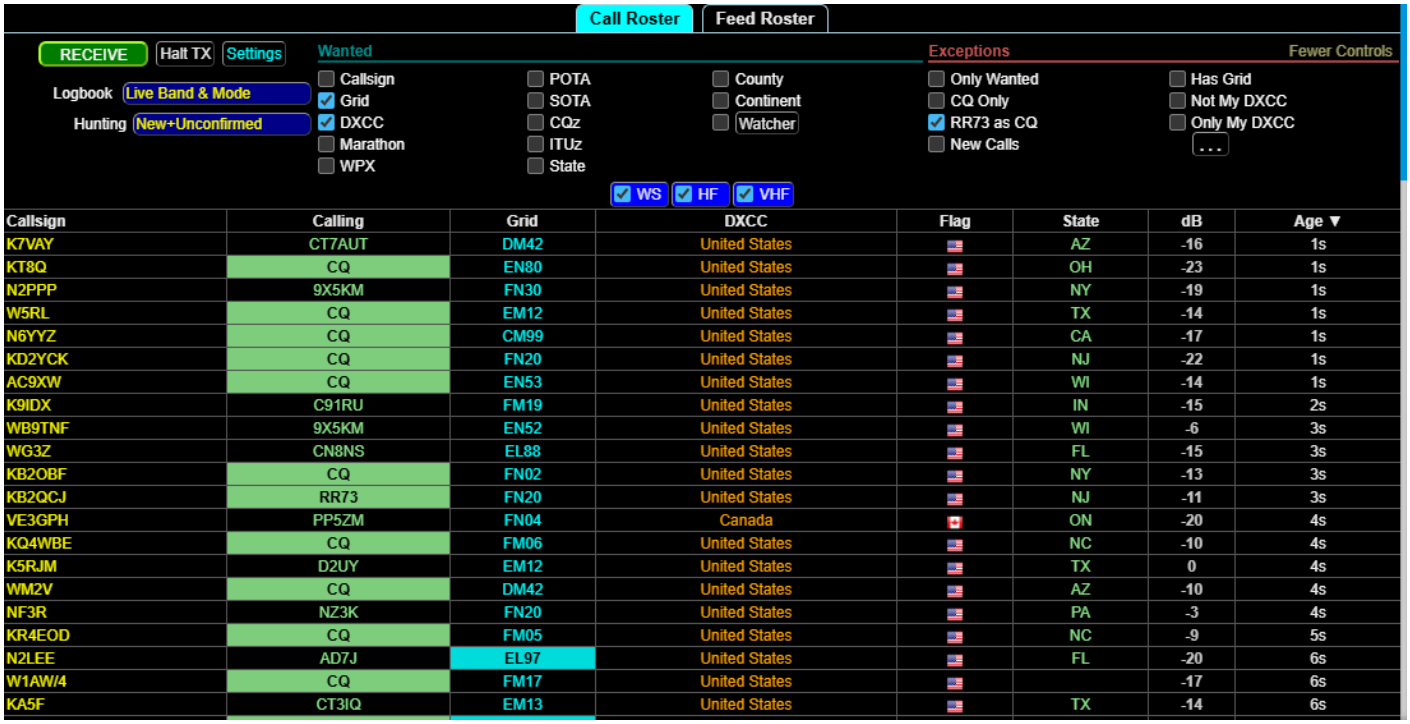
Making GridTracker2 Work For You

This part of the guide covers the tools you will use while operating: the Call Roster and Feed Roster, POTA and SOTA, logging, alerts, the Statistics window and the other windows.

The Call Roster

The Call Roster lists the stations you are decoding in WSJT-X, JTDX and similar programs, one row per station, and highlights the ones you want: a new grid, a new DXCC entity, a state you need, a park, a friend. Click a callsign to call that station.

Open it with the **Call Roster** button in the side panel, or press **Ctrl+F**.



The roster window holds two rosters. While DX Feeds is turned on, **Call Roster** and **Feed Roster** tabs appear at the top. The Call Roster shows your decodes; the Feed Roster shows DX Cluster and CW Skimmer spots. Each roster has its own settings. This chapter covers the Call Roster, and almost everything in it also applies to the Feed Roster.

The window title counts the stations: how many were heard, how many are in the roster after your filters, and how many are wanted, for example “Call Roster: 147 heard • 107 in roster • 16 wanted”. With several WSJT-X or JTDX instances, their names follow.

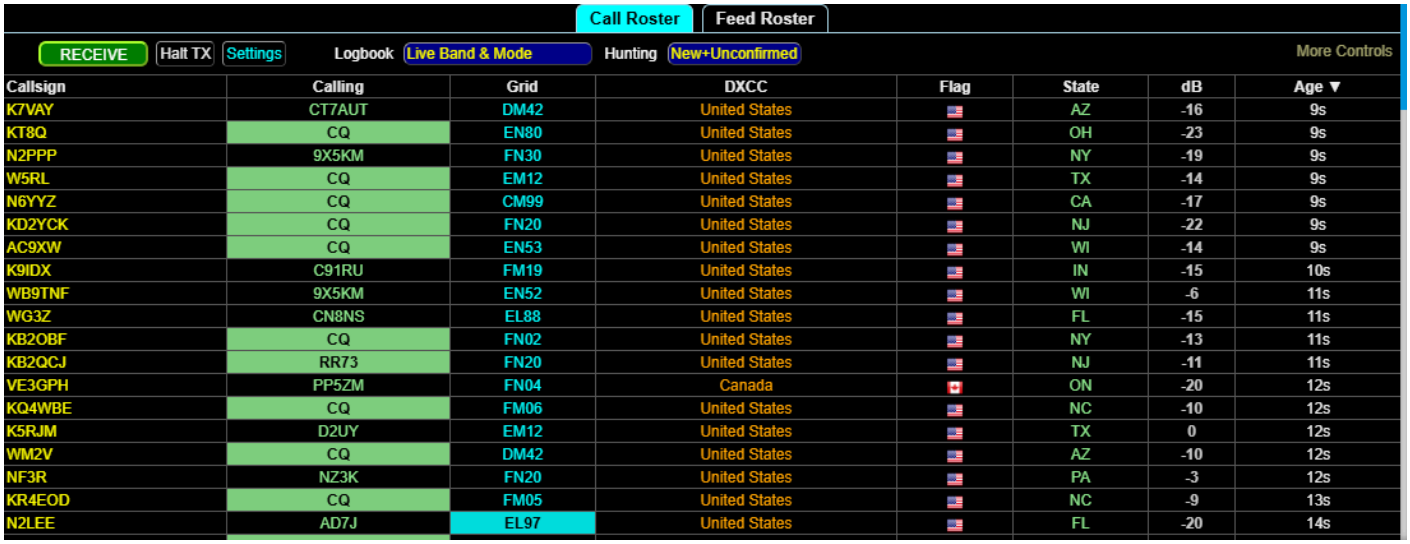
Window Layout

From top to bottom:

- **Status, Halt TX and Settings.** The status box shows RECEIVE, DECODE or TRANSMIT, like the main window. **Halt TX** stops transmitting on every WSJT-X and JTDX instance. **Settings** opens the roster’s settings.
- **Logbook and Hunting**, which decide what counts as worked and what you are looking for.
- **Wanted** and **Exceptions**, the boxes that pick out the stations you want and narrow the list down.
- **Instances:** with more than one WSJT-X or JTDX running, a tick box for each. Untick one to hide its decodes.
- **The roster table.**

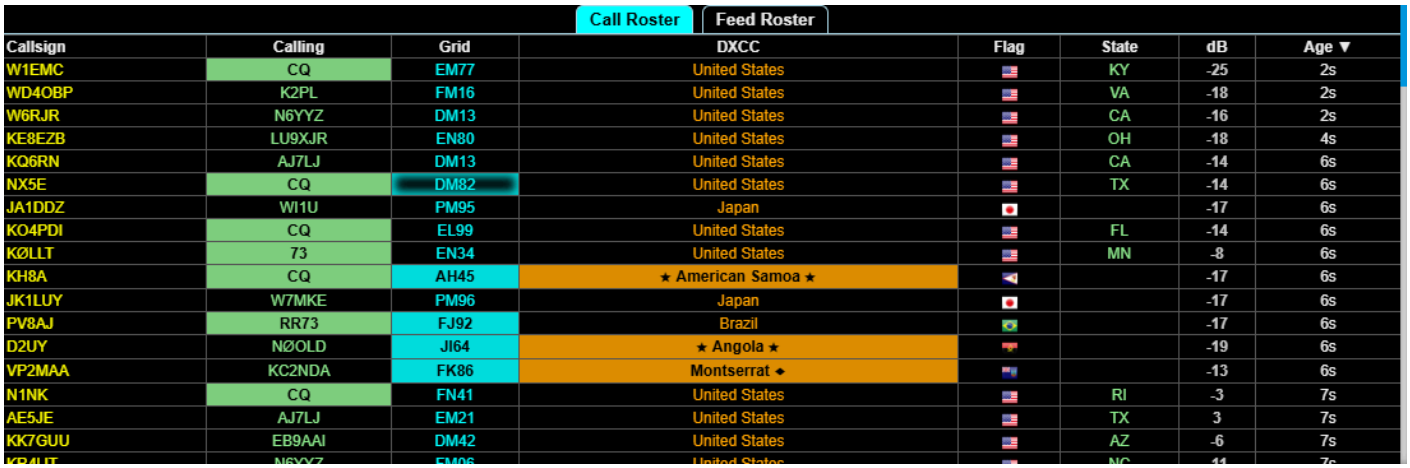
More Controls, Fewer Controls, Hide Controls

Click **Fewer Controls** in the top right corner to shrink the controls to a single line, and **More Controls** to bring them back.



Callsign	Calling	Grid	DXCC	Flag	State	dB	Age ▼
K7VAY	CT7AUT	DM42	United States		AZ	-16	9s
KT8Q	CQ	EN80	United States		OH	-23	9s
N2PPP	9X5KM	FN30	United States		NY	-19	9s
W5RL	CQ	EM12	United States		TX	-14	9s
N6YYZ	CQ	CM99	United States		CA	-17	9s
KD2YCK	CQ	FN20	United States		NJ	-22	9s
AC9XW	CQ	EN53	United States		WI	-14	9s
K9IDX	C91RU	FM19	United States		IN	-15	10s
WB9TNF	9X5KM	EN52	United States		WI	-6	11s
WG3Z	CN8NS	EL88	United States		FL	-15	11s
KB2OBF	CQ	FN02	United States		NY	-13	11s
KB2QCJ	RR73	FN20	United States		NJ	-11	11s
VE3GPH	PP5ZM	FN04	Canada		ON	-20	12s
KQ4WBE	CQ	FM06	United States		NC	-10	12s
K5RJM	D2UY	EM12	United States		TX	0	12s
WM2V	CQ	DM42	United States		AZ	-10	12s
NF3R	NZ3K	FN20	United States		PA	-3	12s
KR4EOD	CQ	FM05	United States		NC	-9	13s
N2LEE	AD7J	EL97	United States		FL	-20	14s

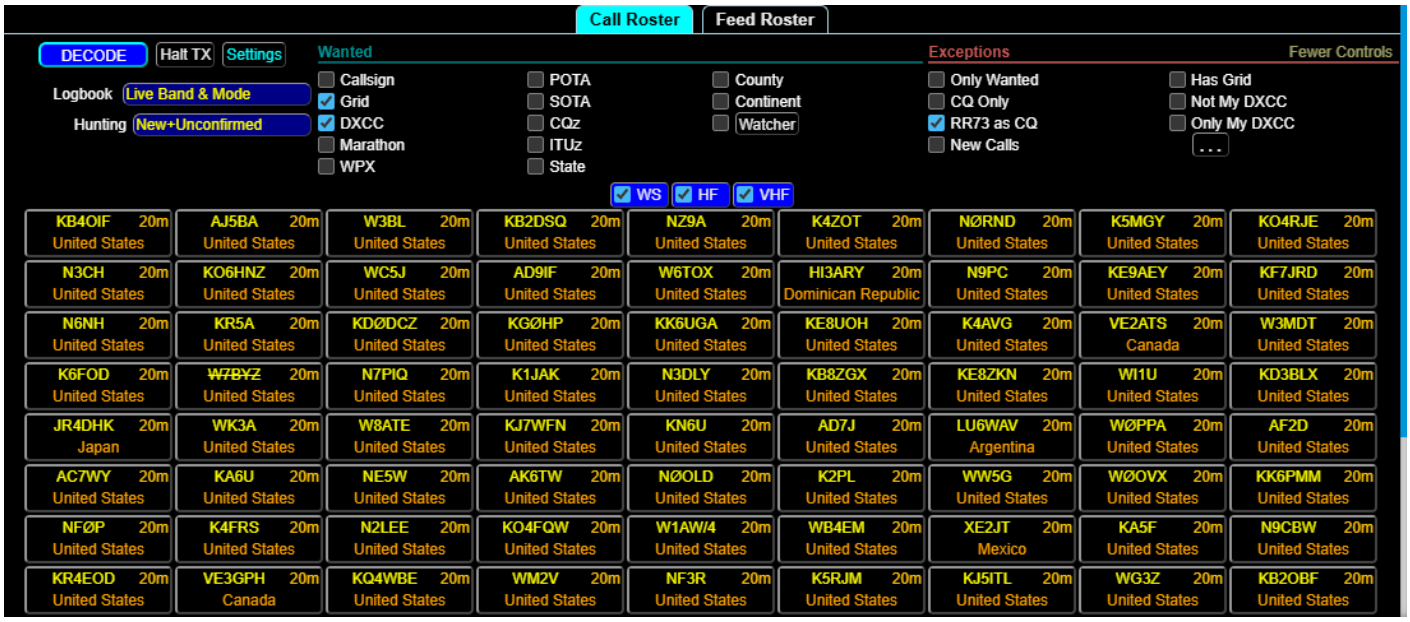
Right-click an empty part of the roster and choose **Hide Controls** to see only the table; right-click and choose **Show Controls** to bring them back.



Callsign	Calling	Grid	DXCC	Flag	State	dB	Age ▼
W1EMC	CQ	EM77	United States		KY	-25	2s
WD4OBP	K2PL	FM16	United States		VA	-18	2s
W6RJR	N6YYZ	DM13	United States		CA	-16	2s
KE8EZB	LU9XJR	EN80	United States		OH	-18	4s
KQ6RN	AJ7LJ	DM13	United States		CA	-14	6s
NX5E	CQ	DM82	United States		TX	-14	6s
JA1DDZ	W1U	PM95	Japan			-17	6s
KO4PDI	CQ	EL99	United States		FL	-14	6s
KØLLT	73	EN34	United States		MN	-8	6s
KH8A	CQ	AH45	★ American Samoa ★			-17	6s
JK1LUY	W7MKE	PM96	Japan			-17	6s
PV8AJ	RR73	FJ92	Brazil			-17	6s
D2UY	NØOLD	JI64	★ Angola ★			-19	6s
VP2MAA	KC2NDA	FK86	Montserrat ◆			-13	6s
N1NK	CQ	FN41	United States		RI	-3	7s
AE5JE	AJ7LJ	EM21	United States		TX	3	7s
KK7GUU	EB9AAI	DM42	United States		AZ	-6	7s

Compact Mode

Compact Mode shows each station as a small tile instead of a table row, which fits many stations into a small window. Turn it on with **Compact Mode** in the roster's Settings → General (the button then reads **Roster Mode**, to go back). **Compact Mode Entity** chooses what each tile shows under the callsign: DXCC, grid, state and so on. Hover over a tile to see its details.



Who Is Calling Whom

- The **Callsign** column is the station transmitting.
- The **Calling** column is who they are calling: "CQ" (with its target, such as "CQ DX" or "CQ POTA"), or another station's callsign.
- The **Grid** column is the grid the transmitting station sent.
- The **Msg** column, if you show it, is the whole decoded message.

For example, the message `G3VMN NZ6L DM03` is listed with NZ6L in the Callsign column, G3VMN in the Calling column and DM03 in the Grid column. It's easy to look for G3VMN in the Callsign column, but he is the one being called.

When a station calls **you**, its Calling cell shows your callsign in glowing yellow on blue, and the station stays in the roster even if your Exceptions would hide it.

Highlighting

The roster colors what you want, in each column's color:

- **Highlighted** (colored background, black text): new, not yet worked.
- **Shaded** (a colored glow around the text): worked but not confirmed. This shows while Hunting is New+Unconfirmed or Mixed.
- **Normal text:** worked and confirmed, or not wanted.
- A callsign that is **struck through** has a confirmed QSO with you.

With Hunting set to **Mixed** and a "Mix Band" Logbook, a lighter background means new on this band but confirmed on another, and a lighter glow means worked on another band.

The **Wanted** column, if you show it, says why each station is wanted ("New Grid", "Worked DXCC", "20m State"), or names the Watcher that matched it. It also shows **Calling** (you are calling them), **Caller** (they are calling you) or **Working** (both).

A callsign outlined in **green** is in your WSJT-X or JTDX DX Call; outlined in **red**, you are also transmitting to it.

Markers

- **DXCC:** ★ on both sides of the name means an All Time New One, an entity you have never worked. After the name, ◆ means you haven't worked it on this band, and ● means you haven't worked it in this mode. Hover over it to see which. These show whatever your Logbook choice.
- **Grid:** ◇ after a grid means the station didn't send it; GridTracker2 found it from a lookup or a SOTA summit, so it is likely but not certain.
- **County:** "+2" after a US county means the station's ZIP code covers 2 more counties. Click the county to do a full lookup.
- **POTA:** a full background means you have never worked that park, a lighter one means you worked it but not today on this band and mode, and a glow only means you already worked it today. "?-????" means the station is calling CQ POTA but its park isn't known yet.
- **SOTA:** two dots before the summit mean you haven't chased a summit in that association yet, one dot that you have chased one there; a dot after it means you haven't chased a summit in that region. The background works like POTA's.
- **LoTW:** ✓ means the station uses Logbook of The World. A yellow "?" means their last upload is older than the Uses LoTW age you set. Hover over it for their last upload date.
- **Callsign:** a small emoji after a callsign marks a GridTracker2 supporter; hover over it for their message.

Logbook and Hunting

Logbook chooses which of your QSOs count as worked:

Choice	Counts QSOs
Live Band & Mode	on the station's band and mode
Live Band, Mix Modes	on the station's band, any mode
Live Band, Digi Modes	on the station's band, any digital mode
Mix Band, Live Mode	in the station's mode, any band
Mix Band & Modes	any QSO
Mix Band & Digi Modes	any digital QSO
Award Tracker	see Award Tracker

Hunting chooses what is wanted:

- **New:** never worked.
- **New+Unconfirmed:** never worked, or worked but not confirmed (shaded).
- **Mixed:** like New+Unconfirmed, and with a "Mix Band" Logbook, also marks what is new on the current band.

Wanted

Tick what you are hunting. Ticking an item also shows its column.

Wanted	A station is wanted when
Callsign	you haven't worked that callsign

Wanted	A station is wanted when
Grid	you haven't worked its grid
DXCC	you haven't worked its DXCC entity
Marathon	its DXCC entity or CQ zone is new for the DX Marathon this calendar year
WPX	you haven't worked its prefix
POTA	you haven't worked that activator at that park on this band and mode today (with POTA Hunting on)
SOTA	you haven't chased that summit today (with SOTA Chasing on)
CQz / ITUz	you haven't worked its CQ or ITU zone
State	you haven't worked its state or province
County	you haven't worked its US county (needs the US Callsigns database)
Continent	you haven't worked its continent
Watcher	it matches one of your Watchers

A 🔔 after an item means you also have an audio alert for it; click the bell to open Settings → Audio Alerts. An **M** after the heading means **Roster/Alert Band Memory** is on: your Wanted choices are remembered separately for each band and mode (while a single WSJT-X or JTDX is running).

> **Note**
>
> Stations calling you are always flagged, so there is no separate Wanted box for them. To be alerted when someone calls you, add a **QRZ** Custom Alert.

Exceptions

Exceptions hide stations from the roster:

- **Only Wanted:** only wanted stations (and stations calling you).
- **CQ Only:** only stations calling CQ, including directed CQs.
- **RR73 as CQ:** a station sending RR73 or 73 counts as calling CQ, since they are finishing a QSO and will usually call CQ next.
- **New Calls:** hides stations you have already worked (by your Logbook choice). An activator at a park or summit you haven't worked today still shows.
- **Has Grid:** only stations that sent a grid.
- **Not My DXCC** / **Only My DXCC:** only stations outside or inside your own DXCC entity, for example for a DX contest or for Field Day.
- **Spotted Me:** only stations that have spotted you (shown while the Spot column is on).
- **Uses eQSL** / **Uses OQRS:** only stations that use those services (shown while their database is on in Settings → Lookups).

The **...** button opens the Exceptions tab with more.

> **Tip**
>
> The old **No**, **Only** and **Regex** text filters have been replaced: use a Watcher (with Regex if you like) together with **Only Wanted** to see only certain stations, and Ignores to hide stations.

Columns

Right-click any column heading to tick which columns to show. **Drag a heading** onto another to move that column; Callsign always stays first. Click a heading to sort by it (▲ ascending, ▼ descending), and click again to reverse. The headings stay at the top while the roster scrolls.

Column	Shows
Callsign	the transmitting station; click to call it
Band, Mode	its band and mode, in their colors (shown automatically when the roster has more than one)
Calling	who it is calling
Rig	which WSJT-X or JTDX instance decoded it
Wanted	why it is wanted
Grid	its grid; click to center the map on it
Msg	the whole message
POTA, SOTA	its park or summit
DXCC	its DXCC entity; click to center the map on it and flash its outline
Flag	its entity's flag
DXM	what is new for the DX Marathon: DXCC, CQz or both
State, County	its US state or Canadian province, and US county
Cont	its continent
dB, DT, Freq	signal report, time offset and audio frequency
Dist, Azim	distance and bearing from you
CQz, ITUz, PX	its zones and prefix
LoTW, eQSL, OQRS	whether it uses those services
Life	how long it has been heard
Spot	how long ago, and how well, this station heard you
Age	how long ago it was last heard
UTC	the time of its last decode (underlined on even cycles)

Right-click an empty area and tick **Realtime** to have Age, Life and Spot count up every second.

Calling a Station

Click a callsign to reply to that station: GridTracker2 tells the WSJT-X or JTDX that decoded it to call them, just like double-clicking the decode there.

- WSJT-X replies to stations calling CQ. If nothing happens when you click a station that isn't calling CQ, untick **CQ only** and tick **Hold Tx Freq** in WSJT-X's main window.
- JTDX replies according to its **Misc** → **Accept UDP Reply Message** setting: CQ only, CQ and 73, or any message. When replying to a station that isn't calling CQ, your transmit audio frequency must differ from theirs.
- JS8Call doesn't support replies.

See Appendix B for the WSJT-X and JTDX settings this needs. With several instances, Settings → General → **On QSO Reply** decides whether the others stop transmitting and whether the main window follows the transmitting one.

Right-Click Menus

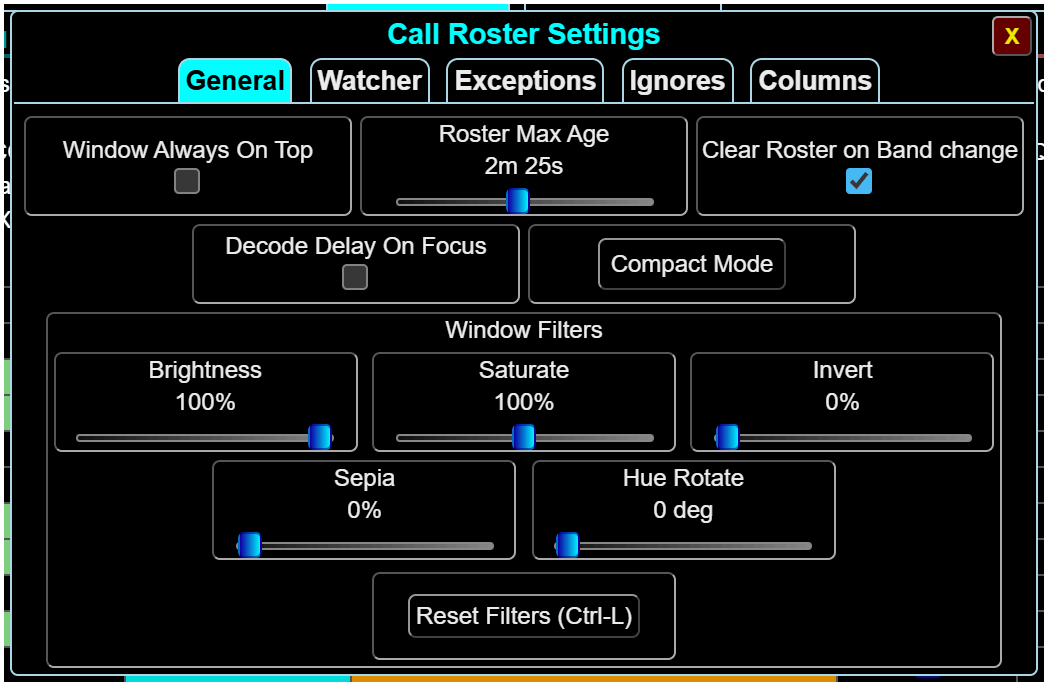
Right-click a cell for options:

- **Callsign:** Lookup, Gen Msgs (fill in WSJT-X's messages without calling), Add Watcher, Copy, Aim Rotator (with CatRotator / PstRotator on), Ignore Call, Edit Ignores.
- **Calling:** Lookup, Gen Msgs, Add Watcher, Copy, Aim Rotator.
- **A directed CQ** in the Calling column ("CQ DX", "CQ POTA"…): Add Watcher, **Ignore CQ from DXCC** (that CQ from this entity) and **Ignore CQ from All**.
- **Msg:** Add Watcher for the whole message.
- **Grid:** Add Watcher, Ignore Grid, Edit Ignores.
- **DXCC, CQz, ITUz:** Ignore DXCC, Ignore CQ Zone or Ignore ITU Zone, and Edit Ignores.
- **A column heading:** the list of columns to show.
- **Anywhere else:** Hide Controls / Show Controls, and Realtime.

Settings

Click **Settings** in the roster (or press **Ctrl+S** there) to open the roster's own settings, titled "Call Roster Settings". Close them with the red **X** or **Esc**. While the Feed Roster tab is shown, the same pane shows the Feed Roster's settings.

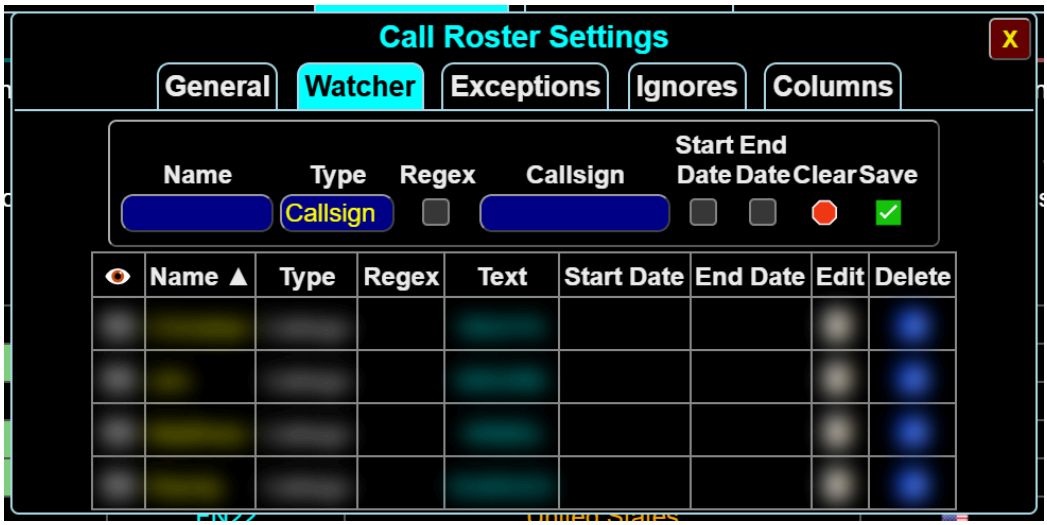
General



- **Window Always On Top:** keeps the roster window above other windows.
- **Roster Max Age:** how long a station stays in the roster after it was last heard, 5 seconds to 5 minutes (up to 1 hour for the Feed Roster).
- **Clear Roster on Band change:** empties the roster when you change band or mode.
- **Decode Delay On Focus:** while the mouse is over the roster, new decodes wait (⏳ shows) so the row you are about to click doesn't move.

- **Compact Mode** and **Compact Mode Entity:** see Compact Mode.
- **Window Filters:** brightness, saturation, invert, sepia and hue of the whole roster window, for example to dim it at night. **Reset Filters** (or **Ctrl+L**) undoes them.

Watcher



A Watcher highlights stations that match what you type, and makes them wanted while **Watcher** is ticked in Wanted. Use them for friends, special event stations, nets or a whole group of callsigns.

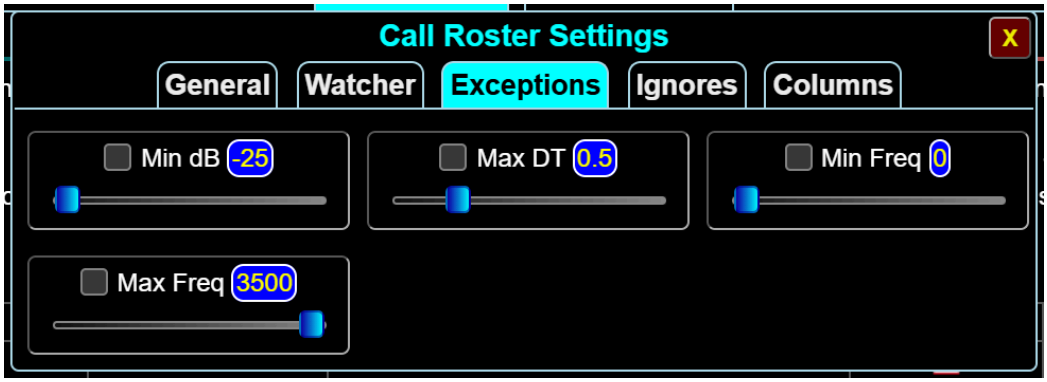
- **Name:** a name for the Watcher. It is shown in the Wanted column when it matches.
- **Type:** what to match: **Callsign** (the transmitting station), **Calling** (the station being called), **Grid** or **Message** (the whole message).
- **Regex:** match a regular expression instead of exact text. Matching ignores upper and lower case.
- **Start Date** and **End Date** (UTC): the Watcher only works between them. **Auto Delete** removes it after its end date.

Click the ✅ to save it. In the list, 👀 turns a Watcher on or off, 📝 edits it and 🚮 deletes it. The matching text is highlighted in white in the roster.

Right-click a callsign, grid or message and choose **Add Watcher** to make one quickly.

> **Tip**
>
> Some useful regular expressions:
>
> - `^[KNW][0-9][A-WYZ]$` matches US 1x1 special event callsigns.
> - `^(W|K|N|A[A-L])[0-9]` matches US callsigns.
> - `POTA|SOTA` as a Message Watcher matches stations calling CQ POTA or CQ SOTA.
>
> regex101.com is a good place to try them out.

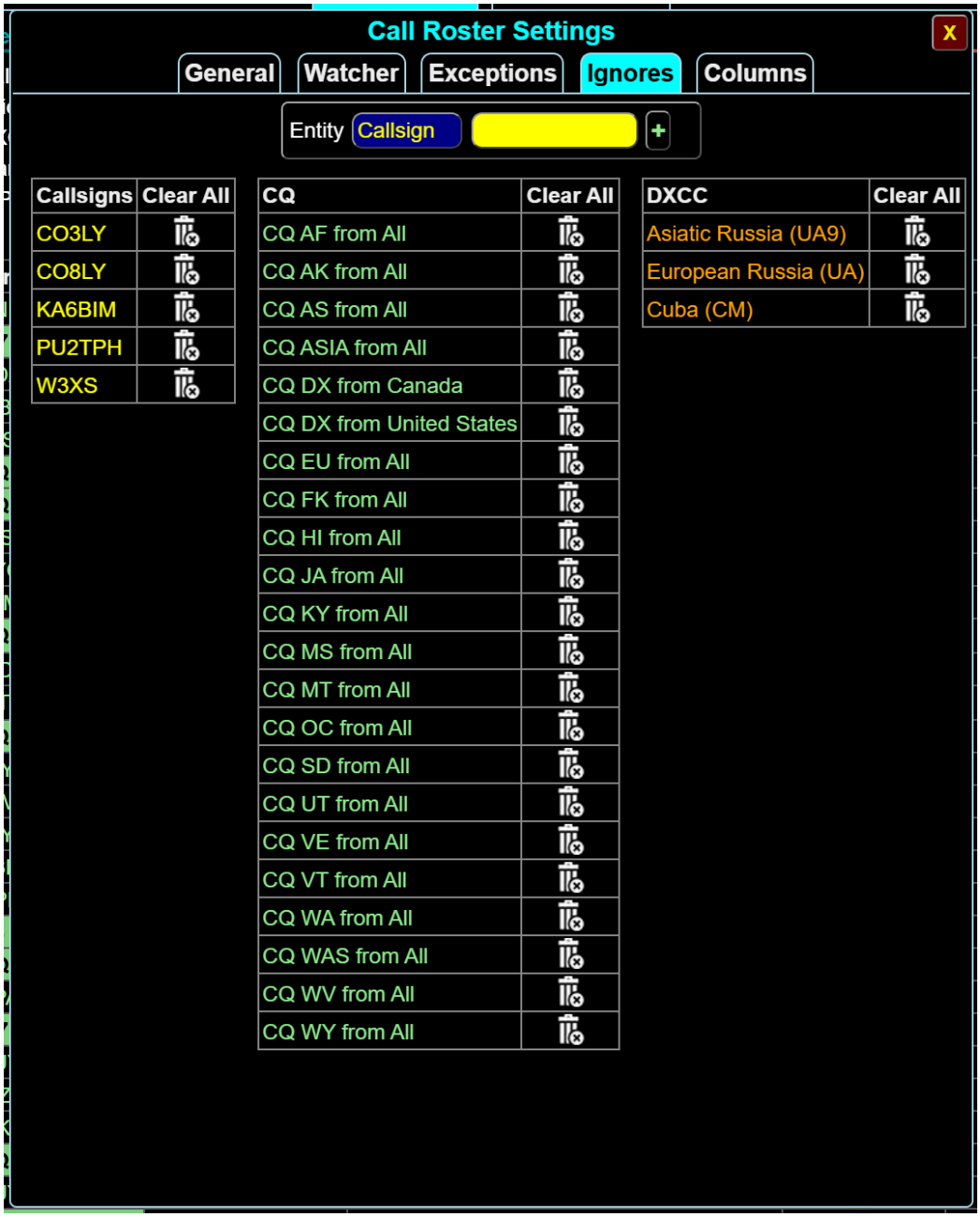
Exceptions Tab



More Exceptions, each with a slider (use the arrow keys for small steps):

- **Min dB:** only stations at least this strong.
- **Max DT:** only stations within this time offset.
- **Min Freq** / **Max Freq:** only stations within this audio frequency range, for example to stay away from the edges of your receive filter.
- **Uses LoTW:** only stations that use LoTW and have uploaded within the chosen number of months (∞ for any time).

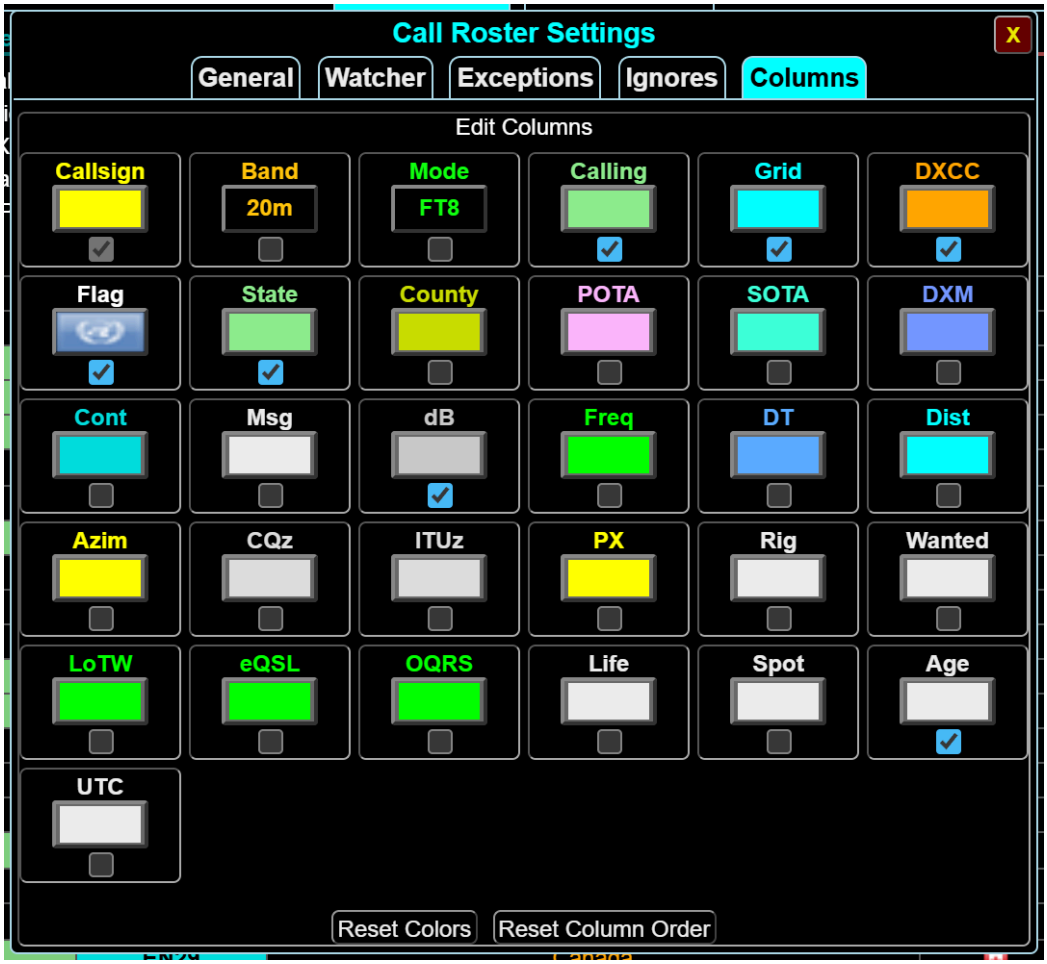
Ignores



Ignored stations are never shown in the roster. Choose the **Entity** to ignore (Callsign, CQ, DXCC, Grid, CQ Zone or ITU Zone), fill it in and click **+**. A **CQ** ignore hides one kind of directed CQ, such as “CQ POTA”, from one DXCC entity or from all.

Each list has a trash can to remove one entry and **Clear All** to empty it. You can also add ignores from the right-click menus, which have **Edit Ignores** to open this tab. A station you are working is still shown, even if it is ignored.

Columns



Every column of the roster, in its current order:

- the color picker under each changes that column's color (the highlight color for wanted entries);
- the tick box shows or hides it;
- drag one onto another to move it.

Reset Colors returns this roster's colors to their defaults, and **Reset Column Order** its columns and order. The Band and Mode colors come from the main window: click Band to open Settings → Colors.

Award Tracker

Choose **Award Tracker** as the Logbook to show only stations that would advance an award you are working toward. Click **Add Awards**, pick a **Sponsor** (ARRL, CQ Magazine, the European ROS Club, the FT8 Digital Mode Club, GridTracker, QRZ.com or Radio Amateurs of Canada), then the award. The list shows each award with an icon for your progress: a trophy when you have every endorsement, a medal when you have reached the award, a tally while you are working on it. Untick **Track** to pause an award, or remove it with its trash can. Hover over a callsign in the roster to see which award it would help.

Audio Alerts

Audio alerts for wanted stations are set in Settings → Audio Alerts. The alert ticks there are separate from the roster's Wanted ticks, so you can highlight more than you are alerted for. The Logbook, Hunting and Exceptions are shared: change them in either place.

Push Notifications

With Pushover or Simplepush set up in Settings → Features, new wanted stations are sent to your phone.

Running a Script on Alerts

GridTracker2 can run a script of your own whenever new wanted stations appear, for example to send them somewhere else or to filter them further.

1. Put a script named `cr-alert.bat` (Windows) or `cr-alert.sh` (macOS and Linux) in the **Call Roster Scripts** folder in GridTracker2's data folder (see Files and Folders). On macOS and Linux make it executable (`chmod 755 cr-alert.sh`) and start it with a shebang line such as `#!/usr/bin/python3`.
2. The next time there is a new wanted station, a **Script Disabled** button appears in the roster controls. Click it so it reads **Script Enabled**. **Shift+–** in the main window also toggles it.

Each time new wanted stations appear, GridTracker2 writes `cr-alert.json` next to the script, with every station in the roster keyed by callsign, then runs the script in that folder. Each station's entry includes, among others, `shouldRosterAlert` (it is wanted), `rosterAlerted` (false the first time it alerts), `dxccName`, `grid`, `band`, `mode`, `state`, `RSTsent`, `distance` and `hunting` (why it is wanted).

This example sends new wanted stations to Pushover:

```
#!/usr/bin/python3
import json
import urllib.parse
import urllib.request

with open("cr-alert.json") as f:
    data = json.load(f)

lines = []
for call, s in data.items():
    if s.get("shouldRosterAlert") and not s.get("rosterAlerted"):
        lines.append(", ".join(str(x) for x in [call, s.get("dxccName"), s.get("RSTsent"),
s.get("grid"), s.get("band"), s.get("state")] if x))

if lines:
    body = urllib.parse.urlencode({"user": "YOUR_USER_KEY", "token": "YOUR_API_TOKEN", "title":
"GridTracker2", "message": "\n".join(lines)}).encode()
    urllib.request.urlopen("https://api.pushover.net/1/messages.json", body)
```

For the Feed Roster, the script only runs with **Allow Alert Script** ticked in Settings → Feeds.

Hotkeys in the Roster Window

Key	Action
Ctrl+S	Open the roster's Settings
Ctrl+W or Ctrl+O	Open the Watcher tab
Ctrl+E	Open the Exceptions tab
Ctrl+I	Open the Ignores tab
Ctrl+L	Reset the Window Filters
Esc	Close the Settings

The Feed Roster and DX Feeds

DX Feeds brings DX Cluster and CW Skimmer spots into GridTracker2, for every band and mode: CW, phone and digital. The spots are shown in their own roster, the **Feed Roster**, and on the map. You can hunt them with the same Wanted, Exceptions and Watchers as the Call Roster, and click a spot to work it with your radio.

Turning It On

In Settings → Features, under **Off-Air Services**, tick **DX Feeds**. This adds:

- the **Call Roster | Feed Roster** tabs at the top of the roster window;
- the **DX Feed Spots** button in the button panel, for the map;
- the **Feeds** tab in Settings;
- **Call Roster | Feed Roster** sub-tabs in Settings → Audio Alerts.

The spots come through GridTracker2's own server from the G7VRD DX Cluster and CW Skimmer feed and Spothole. Beacon spots are left out.

The Feed Roster



The Feed Roster works like the Call Roster, with these differences:

- It has its **own settings**: Logbook, Hunting, Wanted, Exceptions, Watchers, Ignores, columns, colors, sorting, Compact Mode and Roster Max Age (up to 1 hour). One set of settings covers all bands and modes.
- To tell the two apart at a glance, the Feed Roster's tabs, Settings button and settings title are **yellow** where the Call Roster's are cyan, and its callsigns are cyan and grids yellow (the other way around from the Call Roster).

- The Logbook choices say **Spots** instead of Live ("Spots Band & Mode", meaning the spot's band and mode), and add Phone and CW choices: **Spots Band, Phone Modes**, **Spots Band, CW Mode**, **Mix Band & Phone Modes** and **Mix Band & CW Mode**.

Columns

The Feed Roster has some columns of its own:

- **Spotter:** the station that reported the spot. Right-click it for Lookup, Add Watcher, Copy, Ignore Spotter and Edit Ignores.
- **CQ:** ✓ when the spot's comment starts with CQ (except "CQ Contest").
- **Freq:** the spot's frequency in MHz.
- **DX DXCC** and **DX Cont:** the spotted station's entity and continent (the Call Roster's DXCC and Cont columns).
- **DE DXCC** and **DE Cont:** the spotter's entity and continent.
- **Msg:** the spot's comment.

A ▲ before a callsign means one of your radios is on that spot's band and mode, so you can work it straight away.

US stations get the same state and county lookups as decodes. A spot without a grid is placed at the center of its DXCC entity on the map, and its grid stays empty in the roster.

Exceptions

Besides the Call Roster's Exceptions, the Feed Roster has:

- **Hide Self-Spot:** hides spots where the station spotted itself. W1AW-#, W1AW/P and VE/W1AW all count as W1AW.
- **Auto Band:** only spots on a band one of your radios is on (WSJT-X, JTDX, AC Log or Log4OM).
- **Auto Mode:** only spots in a mode one of your radios is on. With both ticked, only spots on a radio's band *and* mode.

With no radio connected, Auto Band and Auto Mode show everything. **Not My DXCC** and **Only My DXCC** apply to the spotted station.

Watchers and Ignores

The Feed Roster has its own Watchers and Ignores, separate from the Call Roster's.

- A **Spotter** Watcher highlights spots from a particular spotter. A plain Spotter Watcher also matches that spotter's skimmers: W3LPL also matches W3LPL-# and W3LPL-2.
- Ignores add **DE DXCC** (drop spots from spotters in that entity), **DE Cont** (drop spots from spotters on that continent) and **Spotter** (drop a spotter that sends false or questionable spots). An ignored spotter's spots also leave the map.

Working a Spot

Click a callsign in the Feed Roster, or a spot marker on the map, and GridTracker2 sends it to the right place:

1. A radio already on the spot's band and mode (WSJT-X, JTDX, AC Log or Log4OM) gets it. WSJT-X and JTDX get the call and grid in their DX Call and DX Grid, without starting to transmit.
2. Otherwise a connected **AC Log** gets it, on any band and mode: its entry tab is cleared and filled with the spot's frequency, band, mode, call and grid. With **Enable Rig Control** on, AC Log also tunes your rig to the spot.
3. Otherwise a connected **Log4OM** gets the call in its QSO entry, and with **Enable Rig Control** on, tunes your rig.
4. Otherwise it goes to the active WSJT-X or JTDX as **Gen Msgs**.

A callsign that is in one of your radios' DX Call is outlined in green. Rows that can't be worked show an arrow pointer; hover over one to see how to work it ("Set a rig to 20m CW to work this station").

See N3FJP AC Log and Log4OM for setting up the connection and rig control.

Logging a POTA or SOTA QSO by Hand

For CW and phone activators when no logging program is connected, click the park in the POTA column or the summit in the SOTA column to log the QSO yourself. This is offered while no AC Log or Log4OM is connected and no WSJT-X or JTDX is on the spot's band and mode; hover over the park or summit to check.

The **Log POTA / SOTA QSO** window opens with the details filled in from the spot: your call, the station worked, the park and summit, the date and time (UTC), frequency, band and mode, and signal reports. Check them, add a comment if you like, and click **Log QSO** (or press **Enter**). The QSO is logged like any other, and a park QSO is spotted to POTA.

DX Feed Spots on the Map

Click the **DX Feed Spots** button to show the spots on the map. The markers show all bands, following only the Map View Filters and the Modes and Bands in Settings → Feeds:

-  green target: a radio is on the spot's band and mode;
-  teal triangle: a radio is on the spot's band, in another mode;
-  gray triangle: no radio is on the spot's band.

Hover over a marker (or right-click it) to see the call, spotter, age, DXCC entity, grid, frequency, mode, distance, bearing, time and comment. Click it to work the spot as described above. See Spot Markers.

Settings → Feeds

The Feeds tab sets how long spots stay on the map, clears all feed data, chooses which **Modes** and **Bands** to receive, and whether feed spots may run the roster alert script or send push notifications.

- Feed spots are kept for an hour after they were last spotted. The map shows them for **Feed Spots Max Age**, and the Feed Roster for its own **Roster Max Age**.
- Feed spots never set off Custom Alerts.

Audio Alerts

With DX Feeds on, Settings → Audio Alerts has **Call Roster** and **Feed Roster** sub-tabs. Each roster has its own alert choices, sounds and speech. The Feed Roster's default spoken alerts say "Feed", for example "Wanted Feed Grid", so you can tell them from Call Roster alerts.

SOTA Chasing

With DX Feeds on, you can also turn on **SOTA Chasing** to follow Summits on the Air activators. See Summits On The Air.

Parks On The Air (POTA)

Parks On the Air® (POTA) is an activity where amateurs operate from parks (Activators) while others (Hunters) contact them. See parksontheair.com for more.

GridTracker2 helps Hunters find parks they haven't worked, and helps Activators find other Activators for Park to Park (P2P) contacts.

Setting Up

In Settings → Features, tick **POTA Hunting** in the Online box. It is on by default in new installations.

Turning it on also turns on **Load At Startup** and **Log QSO** for the **GridTracker2** log in Settings → Logging. GridTracker2 uses its own log to know which parks you have worked, today, on which band and mode, because logging programs record POTA in different ways. Keep both ticked.



How Parks Are Counted

GridTracker2 follows the POTA rules: each activator, park, band and mode is a new contact each UTC day, and the day starts again at midnight UTC.

For example, if you work N0TTL at park US-1234 on FT8 at 2330Z, then he switches to FT4, he is new again on FT4. If he goes back to FT8 at 0001Z, he is new again on FT8, because it is a new UTC day.

Where Park Information Comes From

- The **POTA spots** at pota.app, downloaded every 5 minutes. A newly spotted activation may take up to 5 minutes to appear, and an activator who has gone QRT may stay on the map until the next download.
- **Scheduled activations** posted on pota.app, for activators you decode.
- **DX Feeds** spots, when DX Feeds is on: a park reference in a spot's comment gives that activator's park.

You may hear activators who haven't posted their activation and haven't been spotted. They show "?-????" until their park becomes known.

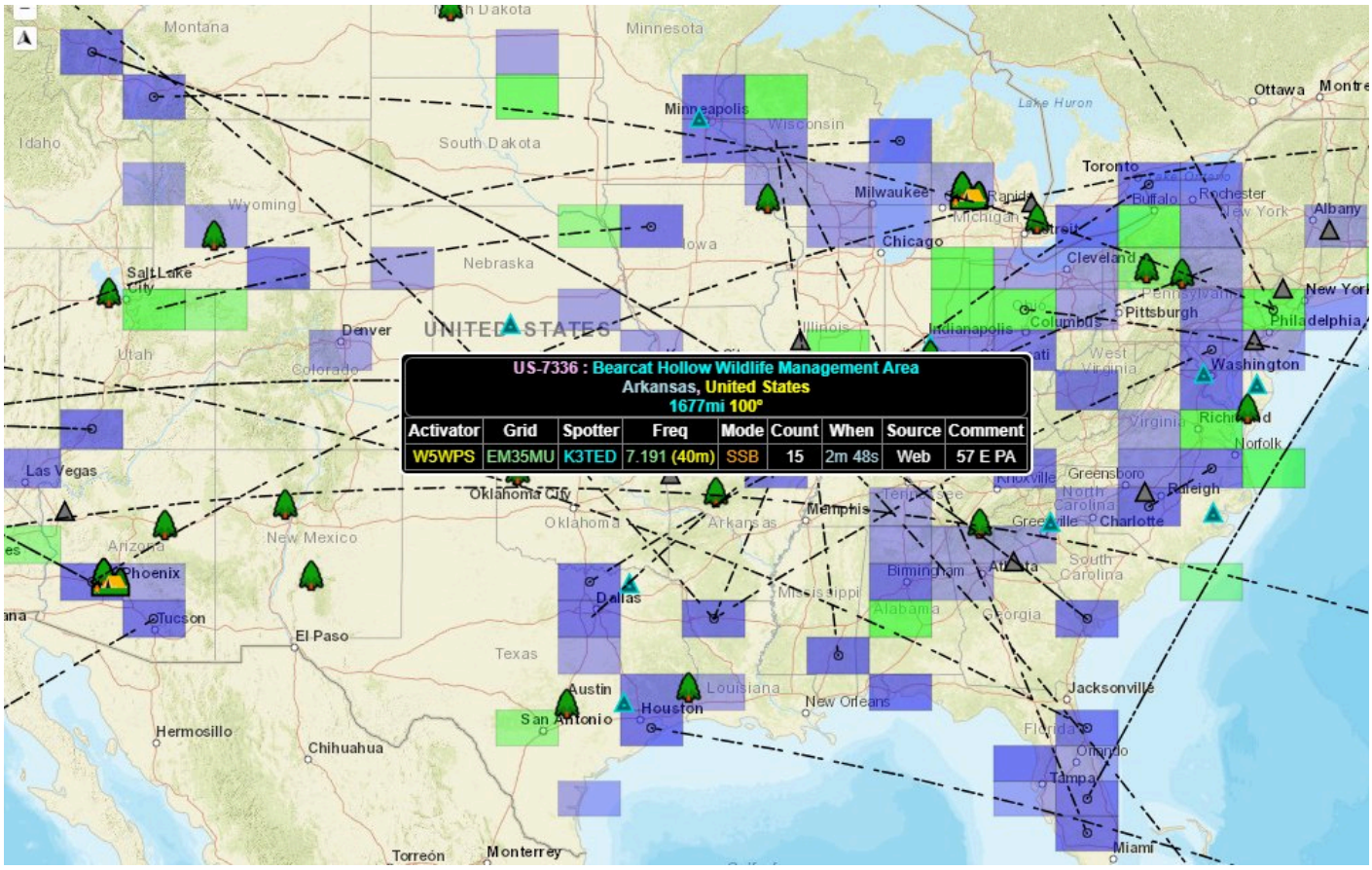
POTA on the Map

The **POTA** button in the button panel shows or hides the parks on the map.

Icon	Meaning
	An activator on your radio's band and mode that you haven't worked today.
	An activator you have worked today on this band and mode. It changes back to the tent if they change band or mode, or a new UTC day starts.
	An activator on a band or mode none of your radios is on.

Like everything on the map, the parks follow the Map View Filters. For example, with Band on Auto and Mode on Mixed while you work 20 m FT8, an activator on 20 m SSB shows as a pine tree.

Hold the mouse over a park to see its reference and name, its location, the distance and bearing from you, and its spots: activator, grid, spotter, frequency, mode, how many times it was spotted, when, where the spot came from, and the comment.



- **Click** a park to work the activator: the spot goes to a radio on its band and mode, or to a connected AC Log or Log4OM (which can tune your rig), or to WSJT-X as Gen Msgs. See Working a Spot.
- **Right-click** a park to pop its tooltip out into its own window. Callsigns there can be clicked to look them up.
- A park whose activator is in your radio's DX Call is ringed.
- Overlapping parks, summits and DX spots in the same DXCC entity are grouped into one marker while **Group Overlapping Spots** is on in Settings → Map.

POTA in the Rosters

In the Call Roster (and the Feed Roster), tick **POTA** under **Wanted**. This also shows the **POTA** column, which you can drag to where you want it.

The park in the POTA column is highlighted:

- with a **full background** when you have never worked that park, an All Time New One (ATNO);
- with a **lighter background** when you have worked the park before, but not today on this band and mode;
- with a **glow only** when you have already worked it today on this band and mode.

A station calling CQ POTA whose park isn't known yet shows "?-????". The park appears as soon as GridTracker2 learns it.

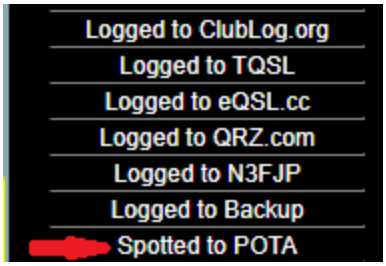
Once you have worked an activator, their further CQs may be hidden, depending on your Exceptions, until the UTC day changes, they change mode or park, or you change band and they are on that band too.

To highlight every station calling CQ POTA, add a **Message** Watcher with the text `CQ POTA` (tick Regex to match it anywhere in the message). See Watchers.

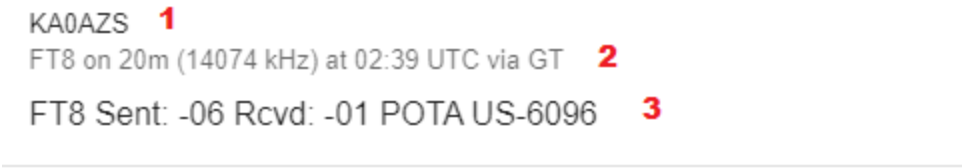
In Settings → Audio Alerts you can choose a sound or spoken alert for wanted parks, and a different one, **On ATNO**, for parks you have never worked.

Spotting to POTA

When you log a QSO with a known activator, GridTracker2 spots them on pota.app for you. The message list shows "Spotted to POTA". This works for QSOs logged from WSJT-X or JTDX, logged in AC Log with a park in an Other field titled `POTA_REF`, and logged by hand from the Feed Roster.



The spot appears on pota.app with your callsign, the spot information, and the comment from the WSJT-X log window.



If the park wasn't known when you logged the QSO ("?-????"), GridTracker2 can't spot it, and that activator's later CQ POTA calls keep showing as wanted.

The Logbook

The Statistics window's Logbook tab has a **POTA** column, with its own search box, whenever your log has POTA QSOs. GridTracker2 reads a park from either `POTA_REF` or `SIG=POTA` with `SIG_INFO` in your ADIF logs, and writes `POTA_REF` when it logs a QSO with a known activator.

Summits On The Air (SOTA)

Summits on the Air (SOTA) is an award program for operating from, and contacting, mountain summits. Activators climb to a summit and operate from it; Chasers contact them. See sota.org.uk for more.

GridTracker2's **SOTA Chasing** finds activators in the DX Feeds spots, shows them in the rosters and on the map, and records the summit with your QSO.

Setting Up

1. In Settings → Features, turn on **Off-Air Services** and **DX Feeds**.
2. Tick **SOTA Chasing**, under DX Feeds.

Like POTA Hunting, this turns on **Load At Startup** and **Log QSO** for the GridTracker2 log in Settings → Logging, so GridTracker2 knows which summits you have chased. A **SOTA** button is added to the button panel.

SOTA in the Rosters

The Feed Roster and the Call Roster both get a **SOTA** Wanted choice and a **SOTA** column (off by default: turn it on in the roster's Settings → Columns, or tick SOTA under Wanted).

- The column shows the summit reference. Hover over it for the summit's name, height and points, and how many summits you have chased in its association and region.
- **Dots** show what a summit is worth to you: two dots before the reference mean you haven't chased any summit in that association yet, one dot that you have chased one there. A dot after it means you haven't chased a summit in that region.
- The highlighting works like POTA's: a full background for a summit you have never chased, lighter for one chased before but not today, a glow only for one chased today.
- **SOTA** under Wanted highlights summits you haven't chased today, using the `SOTA_REF` of the QSOs in your logs.

In the Call Roster, a station you decode that DX Feeds has spotted on a summit gets that summit. The station's grid stays the one it sends; if it sends none, the summit's grid is shown, marked ◇.

In Settings → Audio Alerts → Feed Roster, choose alerts for **Wanted Feed Summit** and **Many Feed Summits**, and **On ATNO** for summits you have never chased.

SOTA on the Map

The **SOTA** button shows or hides summits on the map. Each summit with activators has one marker, a snow-capped double peak:

-  a radio is on the spot's band and mode;
-  a radio is on the spot's band, in another mode;
-  no radio is on the spot's band.

The tooltip has the summit, its location, height and points, then every spot on it, newest first. Your own decodes of the activator are listed as spots from you. Click the summit to work the newest spot. SOTA summits are drawn above POTA parks, which are drawn above DX Feeds spots.

How Activations Are Followed

- A spot on a summit places the activator there: the summit's grid is used for the distance, and for a logged QSO that has no grid.
- A later spot that doesn't name the summit (from a skimmer, say) keeps the summit the activator is on.
- A spot saying **QRT**, or a spot with no frequency, ends that activation: the activator leaves the Feed Roster and the map until spotted again.
- An activator spotted on another summit leaves the old one at once.
- An activator you are still decoding keeps their summit, even after their last spot has aged out.

Logging

A QSO logged with a spotted activator gets the summit's SOTA_REF. This works for QSOs logged from WSJT-X or JTDX, logged in AC Log with an Other field titled SOTA_REF, and logged by hand from the Feed Roster's SOTA column (see Logging a POTA or SOTA QSO by Hand).

Exporting Your Chaser Log

The Statistics window's Logbook tab has a **SOTA** column, and an **Export SOTA Chaser Log...** button whenever your log has SOTA QSOs. It writes your chases as a CSV file for the SOTA database's chaser log upload.

1. Click **Export SOTA Chaser Log...**.
2. Pick the **From** and **To** times. They are in your local time; the file is written in UTC. Each export starts where the last one ended, so you don't upload a QSO twice.
3. Check the QSOs listed. You can edit any field, or leave a QSO out with its ×. Possible duplicates (the same station, summit, day, band and mode) are highlighted. Your changes only affect the file, never your logbook.
4. Click **Export CSV...** and save the file, then upload it on the SOTA database website.

Logging Options

Is GridTracker2 a Logging Program?

No. GridTracker2 *displays* your QSOs; it isn't meant to be the master record of your contacts. It keeps a backup log of the QSOs it sees, and it can send each new QSO to your logging program and online logbooks, but your real log should live in a logging program or online logbook.

All of this is set in Settings → Logging.



Where Your Logbook Comes From

When GridTracker2 starts, it loads every log ticked **Load At Startup**, and combines them into one logbook. That logbook colors the map, decides what is wanted in the rosters, and fills the Statistics window.

- **App Log(s):** the logs of WSJT-X, JTDX and WS – Digital Mode Suite. GridTracker2 finds them by itself in their usual folders, and lists them here. Untick any you don't want loaded, for example when another copy of GridTracker2 uses them. **Add File** adds a log it didn't find.
- **GridTracker2:** GridTracker2's own backup log (see below).
- **Local File(s):** any other ADIF files: an export from your logging program, a contest log, an old logbook. Tick **Load At Startup**, then **Add File**.
- **N3FJP Loggers:** your AC Log logbook. AC Log must be running.
- **QRZ.com**, **ClubLog** and **LoTW:** your online logbooks. LoTW is the usual source of confirmations.

- **PSK-Reporter 24 Hour History:** the stations that heard you in the last 24 hours. These are reception reports, not QSOs; they are shown as live grids.

A log downloaded from a website is kept in GridTracker2's data folder and replaced at each download. Your logs on the websites are never changed.

> **Tip**
> WSJT-X's own log only knows that you logged a QSO, not whether the other station confirmed it. To see your confirmations (QSLs), load your LoTW log, or a log from your logging program that holds your confirmations.

When the same QSO is in several logs, the **QSL Location Authority** in Settings → Logbook decides whose location details are used.

Loading Logs Whenever You Like

Tick **Menu Button** for a log to add a button for it to the button panel. Click the button to load or reload that log at any time, for example after uploading to LoTW.

The **Load ADIF Log** button (or **Ctrl+L**) opens any ADIF file and adds it to your logbook. It is also added to **Local File(s)**, so it loads at every start; untick or remove it there if you only wanted it once.

Clear Log and Load Log

Clear Log in the side panel removes your logbook from GridTracker2: the QSO and QSL counts, the colored grids and the Statistics are cleared. No files are deleted. The button then reads **Load Log**; click it to load your startup logs again.

This is useful when you change which logs are loaded. For example, to see only your LoTW log: untick everything else's Load At Startup, click **Clear Log**, then **Load Log**. **Clear Log** also clears the cached LoTW, QRZ.com and ClubLog logs, so they are downloaded fresh next time.

Where New QSOs Go

When you log a QSO in WSJT-X or JTDX (or a program that broadcasts ADIF, or by hand from the Feed Roster), GridTracker2 adds it to your logbook and sends it to every log ticked **Log QSO**:

- **GridTracker2**, its own backup log;
- logging programs: **ADIF UDP / N1MM**, **Log4OM**, **N3FJP Loggers**, **DXKeeper**, **HRD Logbook**;
- online logbooks: **QRZ.com**, **ClubLog**, **LoTW**, **eQSL.cc**, **HRDLOG.net**, **Cloudlog/Wavelog**, **HamCQ.cn**.

The message list shows the result for each one, for example "Logged to QRZ.com". Use **Test** next to each online logbook to check your login details.

- **LoTW** uploads go through TQSL. Choose the TQSL program (**TQSL Path**, not needed on macOS), your certificate's **TQSL Password** if it has one, and your **Station Name** (the station location in TQSL). An upload that fails, for example while you are offline, is queued and sent with your next QSO.
- With **Add Lookup Data to QSO Log event** on in Settings → Lookups, details from the callsign lookup (name, QTH, grid and so on) are added to the QSO before it is sent.
- QSOs with a known POTA activator or SOTA summit get its `POTA_REF` or `SOTA_REF`.

> **Note**
>
> GridTracker2 receives the QSO from WSJT-X's "Log QSO" window, so WSJT-X must have **Prompt me to log QSO** turned on. See Appendix B.

The GridTracker2 Backup Log

The **GridTracker2** row keeps a backup log of every QSO GridTracker2 logs, in ADIF files in the **Backup Logs** folder in GridTracker2's data folder (one file for each callsign and grid you operate from, such as `GridTracker2_N0TTL_CN84.adif`). Click **Backup Logs** to open the folder. Every file in it is loaded when **Load At Startup** is ticked.

POTA Hunting and SOTA Chasing rely on this log to know which parks and summits you have worked, so turning either on also turns on this row's **Load At Startup** and **Log QSO**.

See Files and Folders for where the data folder is on your computer.

Limiting What Is Shown

- The Map View Filters choose the bands, modes and propagation modes shown on the map and in Statistics.
- The Logbook Filters in Settings → Logbook limit the whole logbook to certain callsigns, grids or dates. When they leave QSOs out, the side panel shows **Log Entries Filtered**.

Alerts

GridTracker2 can tell you when something you want shows up, so you don't have to watch the screen. There are three kinds of alerts:

- **Audio Alerts** speak or play a sound when a roster has a wanted station: a new grid, a new DXCC, a park you need. They follow the roster's Wanted choices.
- **Custom Alerts** watch for one particular callsign, part of a callsign or grid, whatever your roster settings, and can speak, play a sound, pop up a window or move the map.
- **Push notifications** send wanted stations to your phone. See Push Notifications.

The **Audio Mute** button (or **Ctrl+M**) silences all sounds and speech at once. Pop-ups, Map Center and push notifications still go out. If you hear nothing, check it first, then the **Device** in Settings → Audio.

Audio Alerts

Audio Alerts are set in Settings → Audio Alerts. Each roster has its own (Call Roster and Feed Roster sub-tabs).

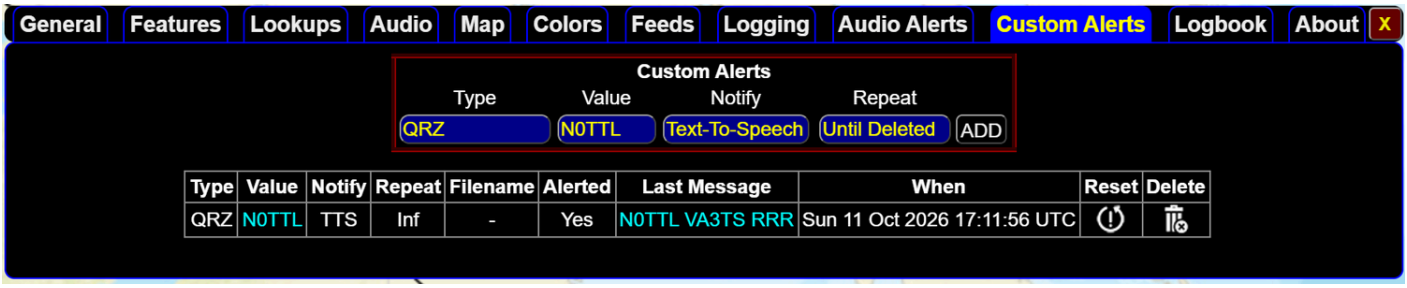
1. Tick what you want to be alerted for: Callsign, Grid, DXCC, State and so on. These ticks are separate from the roster's Wanted box, so the roster can highlight more than you are alerted for.
2. For each one, choose **Text-To-Speech** or **Media File**, and what is said or played **On Single** (one wanted station) and **On Multiple** (several at once).
3. For DXCC, POTA and SOTA, choose something different **On ATNO**, for an entity, park or summit you have never worked, so you know to drop everything.
4. Check the **Reference** (which QSOs count as worked, and what you are hunting) and the **Exceptions**. These are shared with the roster.

A 🔔 next to a Wanted item in the roster means it has an audio alert. Click it to jump to that alert.

> **Tip**
>
> To be alerted only for, say, new DXCC entities, while the roster still highlights grids and states too: tick only DXCC in Settings → Audio Alerts, and Grid, DXCC and State in the roster's Wanted box.

Custom Alerts

Custom Alerts are set in Settings → Custom Alerts. Choose a **Type**, a **Value**, how to **Notify** you and how often to **Repeat**, then click **ADD**.



The alert list shows when each alert last went off and the message that set it off. The decodes that set off an alert are also listed, with a 🚩, in the main window's message list.

Examples

When someone calls you: Type **QRZ** (your callsign is filled in), Notify **Text-To-Speech** or **Media File**, Repeat **Until Deleted**. Useful if you step away from WSJT-X while calling CQ.

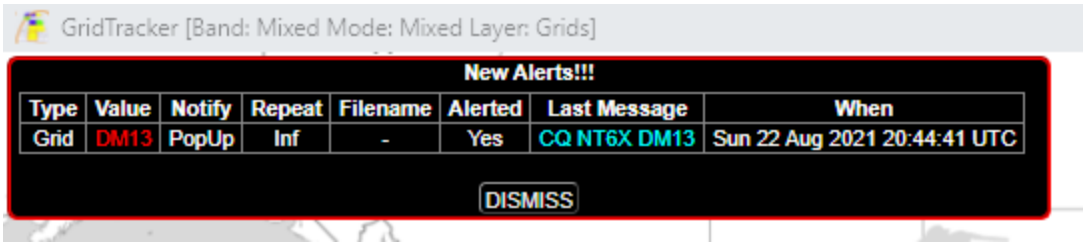
When a friend is on the air: Type **Callsign (exact)**, Value their callsign.

When a particular country appears: Type **Callsign (partial)** and the start of its callsigns, for example `TF` for Iceland. Callsign prefixes can be shared between countries, so check the entity, or use **Callsign (regex)** for an exact pattern such as `^TF[0-9]`.

When a grid you need appears: Type **Gridsquare** and the 4-character grid, for example `FK68`.

How You Are Notified

- **Text-To-Speech** speaks the alert, using the voice set in Settings → Audio.
- **Media File** plays a sound. More than 200 sounds are included, and you can add your own to the **Extra Media** folder (see Files and Folders).
- **Visual Popup** opens a small Alerts window listing the alert and the message that set it off. The alerts in it are cleared when you change band or mode.



- **Map Center** moves the map to the station's grid.

Repeat

- **Until Deleted:** every time it matches, until you delete the alert.
- **Until Exit:** every time it matches, until GridTracker2 is closed.
- **Only Once** and **Never Repeat:** only the first time it matches. The alert stays in the list; click its reset icon to arm it again.

> **Note**
> Custom Alerts check WSJT-X and JTDX decodes (including WSPR), not DX Feeds spots.

Band and Mode Memory

With **Roster/Alert Band Memory** on in Settings → Features, the Call Roster's Wanted choices and the Audio Alerts are remembered separately for each band and mode, so you can, for example, hunt grids on 6 m and DXCC entities on 20 m. **… include Exceptions** and **… include Custom Alerts** extend this to those too. An **M** next to the

headings shows it is on. It works while a single WSJT-X or JTDX is running.

The Statistics Window

Click the **Statistics** button in the side panel (or press **Ctrl+I**) to open the Statistics window: your logbook, your scores, and your progress toward the major awards. Clicking the QSO, QSL, Rx Calls or Rx DXCC count in the side panel opens it at the matching tab.

What the window shows depends on:

1. the logs you load (see Logging Options);
2. the Map View Filters: the award tabs show the band and mode chosen there, named on their “Viewing” line;
3. the Logbook Filters in Settings → Logbook.

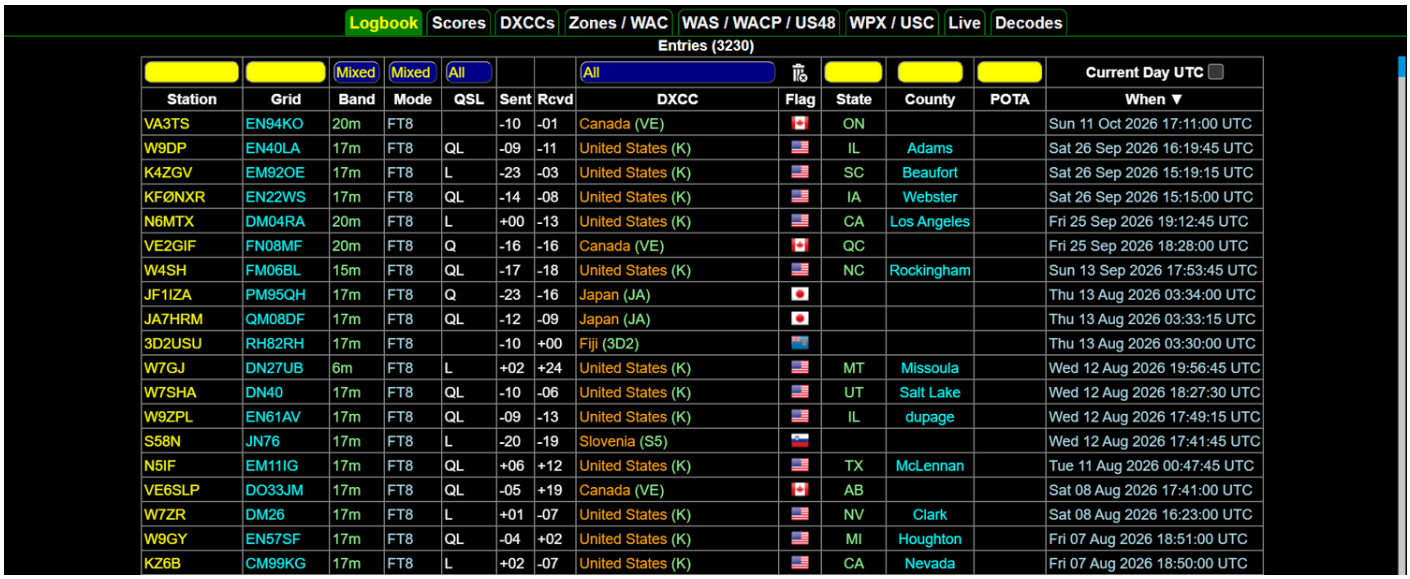
The tabs are **Logbook**, **Scores**, **DXCCs**, **Zones / WAC**, **WAS / WACP / US48**, **WPX / USC**, **Live** and **Decodes**.

Highlighting

The award tabs use the same highlighting as the rosters:

- **normal** colored text: confirmed;
- **shaded** (a glow around the text): worked but not confirmed;
- **highlighted** (black on a colored background): needed.

Logbook



Your whole logbook in one list, newest first. The heading shows how many QSOs are listed. It scrolls smoothly even for very large logs, and the search boxes and column headings stay at the top.

The columns are Station, Grid (VUCC grids follow it), Band, Mode, QSL (the letters say where the confirmation came from; hover for their names), Sent, Rcvd, DXCC, Flag, State, County, POTA, SOTA, When, and LoTW, eQSL and OQRS (while their databases are on in Settings → Lookups). The POTA and SOTA columns appear whenever your log has POTA or SOTA QSOs.

Sorting

Click a column heading to sort by it; an arrow shows the column and direction. Click the same heading again to reverse the order. Sorting by another column keeps the direction. Sent and Rcvd can't be sorted.

Searching and Filtering

The row above the headings filters the list. Filters combine, so you can look for, say, 20 m FT8 QSOs with Japan that aren't confirmed.

- **Station:** callsigns containing what you type (upper or lower case).
- **Grid:** grids starting with what you type: `EM` finds every EM grid, `EM29` that square. VUCC grids are searched too.
- **Band**, **Mode**, **QSL** and **DXCC:** choose from the values in your log. Mode also offers Phone and Digital; QSL offers Yes, No, or a particular source.
- **State**, **County**, **POTA** and **SOTA:** entries containing what you type.
- **Current Day UTC:** only today's QSOs (UTC).

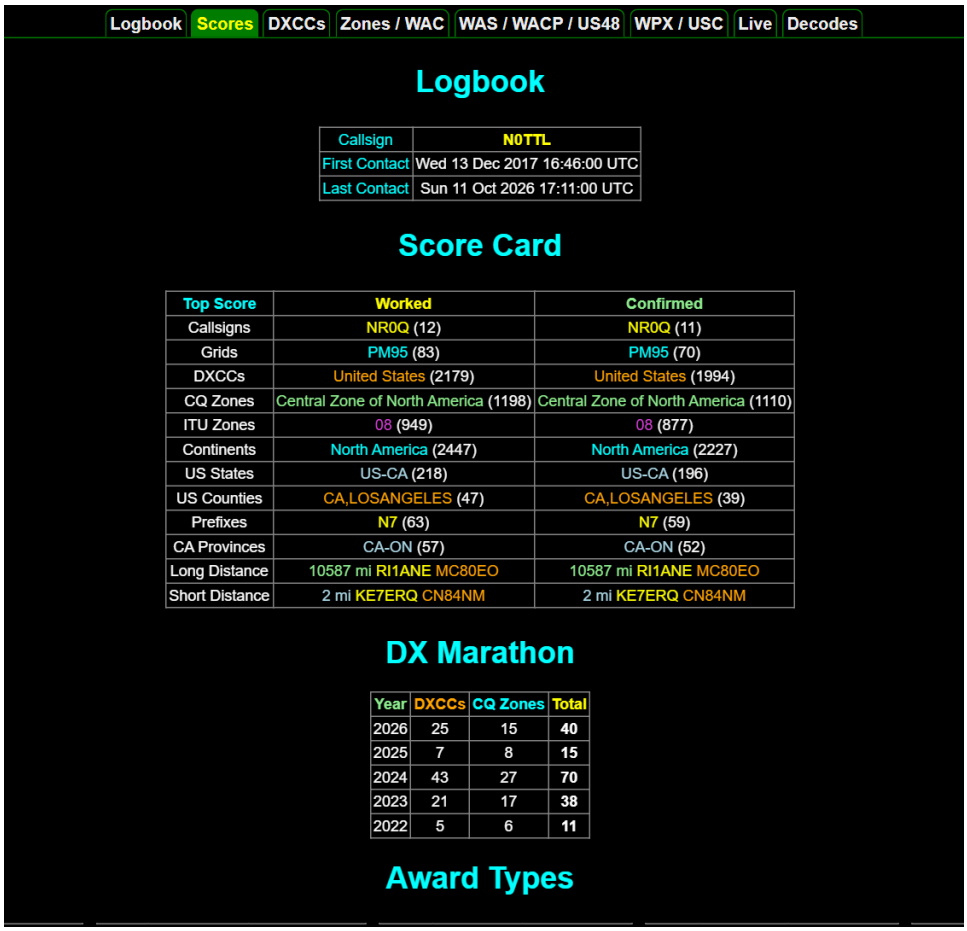
A trash can appears next to each search box while it has text; click it to clear the box.

Click a callsign to look it up. For an unconfirmed QSO with a station that uses ClubLog OQRS, click the ✓ in the OQRS column to request a QSL through ClubLog.

Export SOTA Chaser Log

When your log has SOTA QSOs, an **Export SOTA Chaser Log…** button appears next to the count. See Exporting Your Chaser Log.

Scores



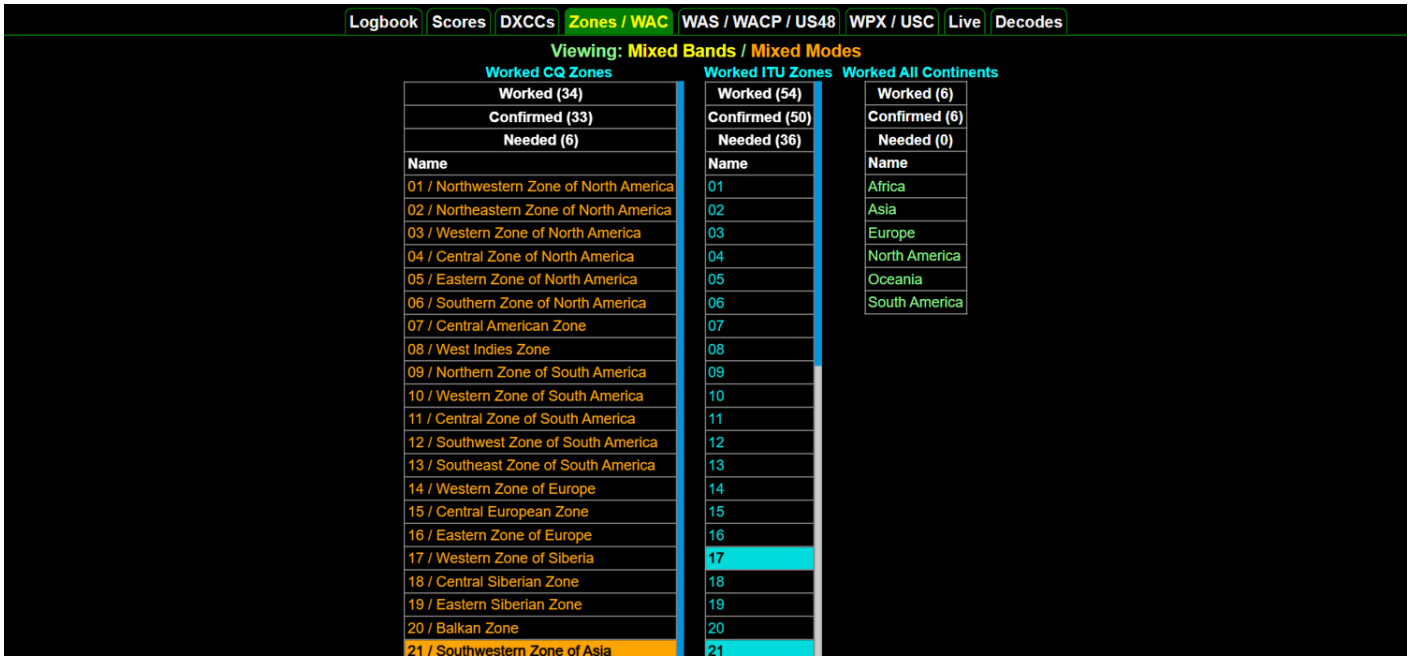
- **Logbook:** the callsigns in your log, and your first and last contacts.
- **Score Card:** your best band and mode, with worked and confirmed counts, for callsigns, grids, DXCC entities, CQ and ITU zones, continents, US states, US counties, prefixes and Canadian provinces, plus your longest and shortest distances.
- **DX Marathon:** the DXCC entities and CQ zones you worked in each of the last five years.
- **Award Types:** worked and confirmed counts for each award, by band, mode and type of mode.
- **Mode Types:** your QSOs by Mixed, Digital, Phone, CW and Other.
- **Distances:** your longest and shortest QSOs by band, mode and type. Click a callsign to look it up.

DXCCs



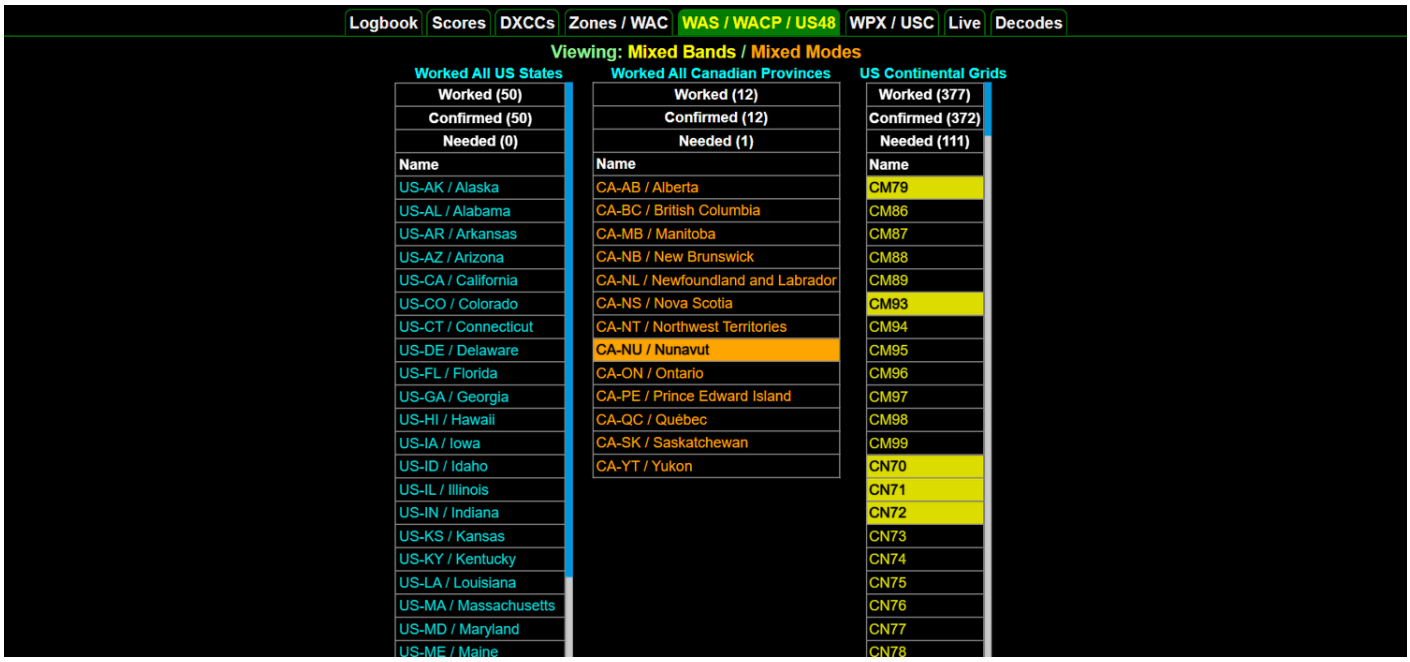
The **Confirmed Band Slots** table counts your confirmed DXCC entities for Mixed, Phone, Digital and CW, and for each band. Below it, three lists: **Worked**, **Confirmed** and **Needed**, with each entity's flag and DXCC number. Click a worked entity to open the Logbook filtered to it.

Zones / WAC



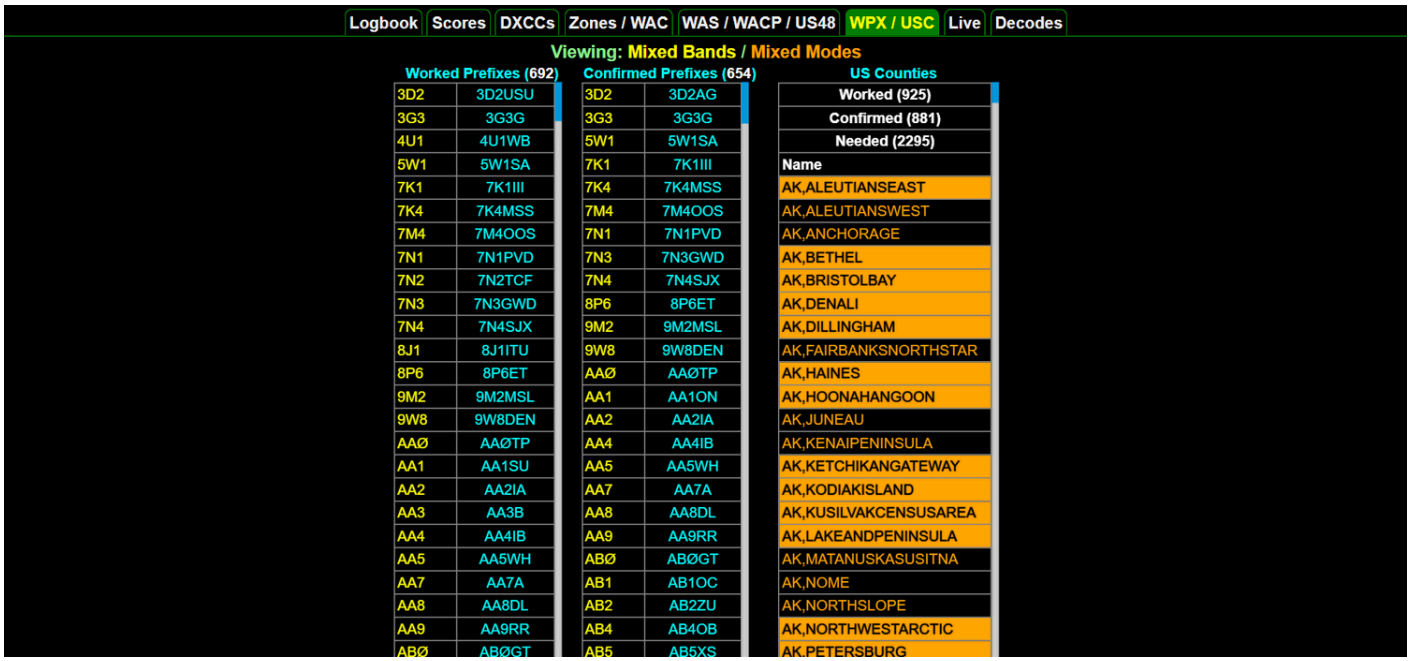
Worked CQ Zones, Worked ITU Zones and Worked All Continents, each with its worked, confirmed and needed counts.

WAS / WACP / US48



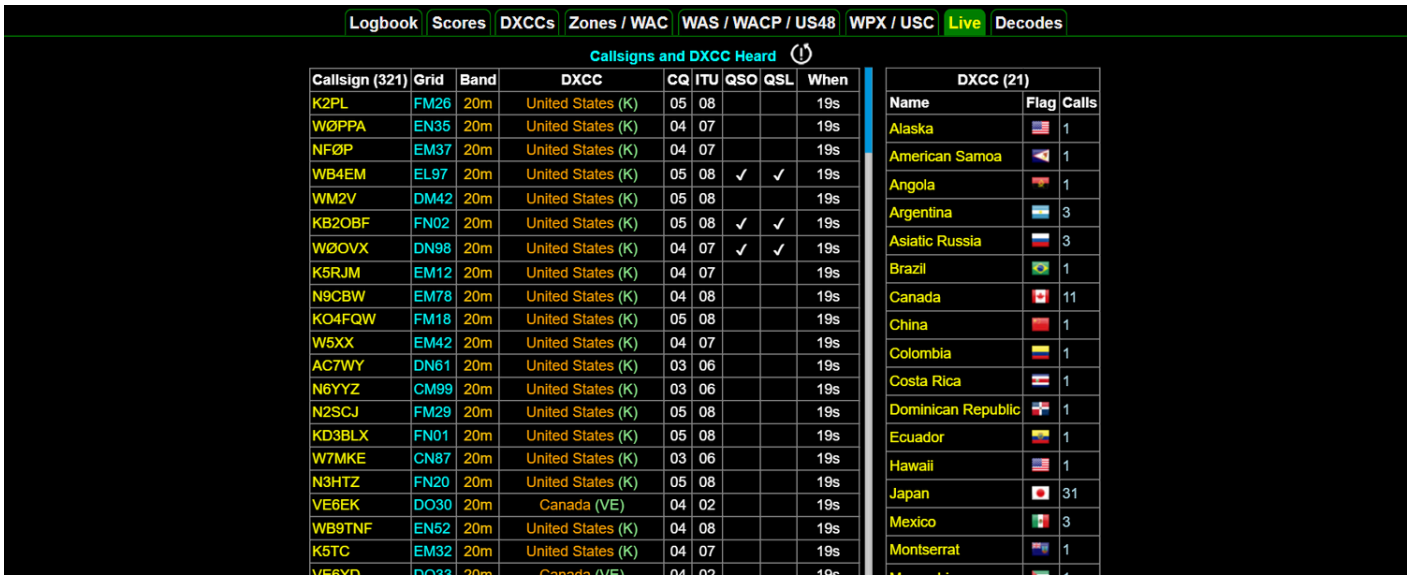
Worked All US States, Worked All Canadian Provinces, and US Continental Grids (the grids of the 48 contiguous states). Click a worked grid to open the Logbook filtered to it.

WPX / USC



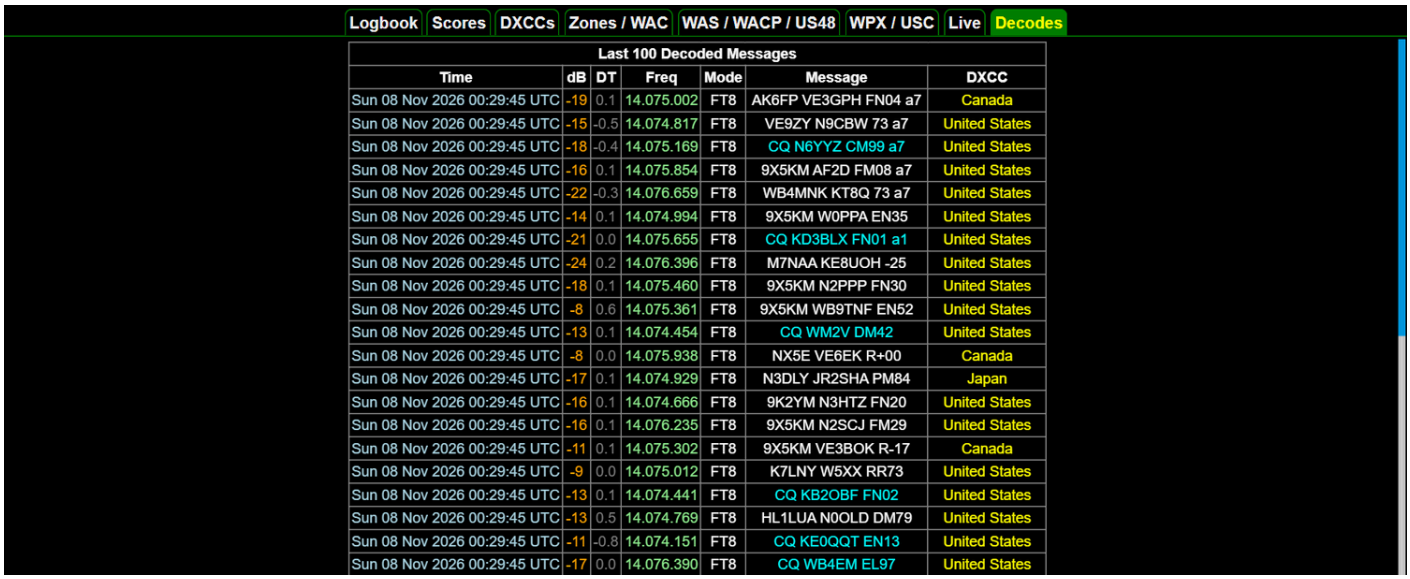
Your worked and confirmed prefixes, each with the callsign that earned it, and your US counties.

Live



Every callsign heard this session, with its grid, band, DXCC entity, zones, whether you have worked (QSO) and confirmed (QSL) it, and when it was heard. A second table counts the callsigns heard from each DXCC entity. **Clear Live** in the side panel starts the list again.

Decodes

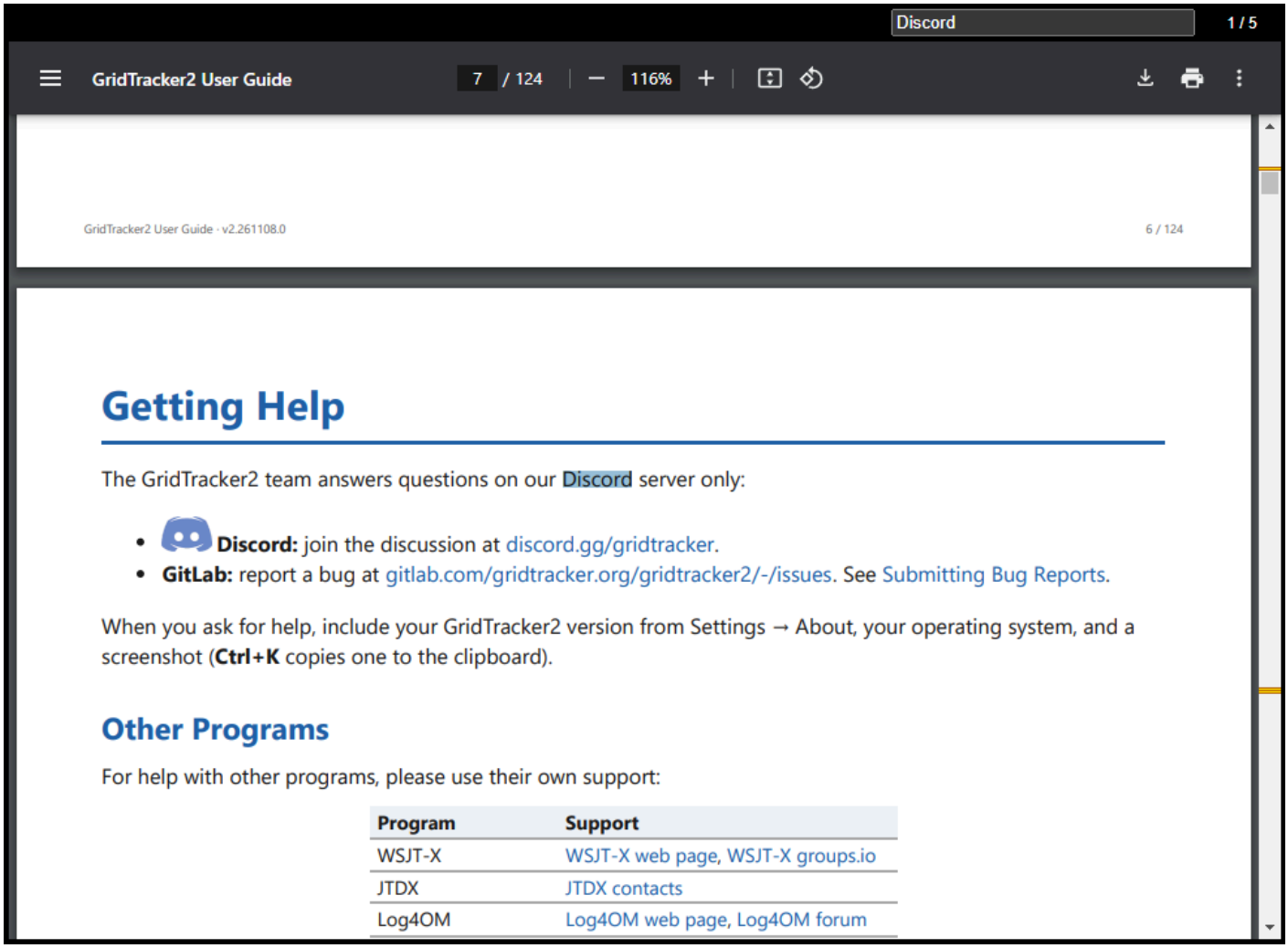


The most recent decoded messages, with their time, signal report, time offset, frequency, mode, message and DXCC entity.

Other Windows

User Guide

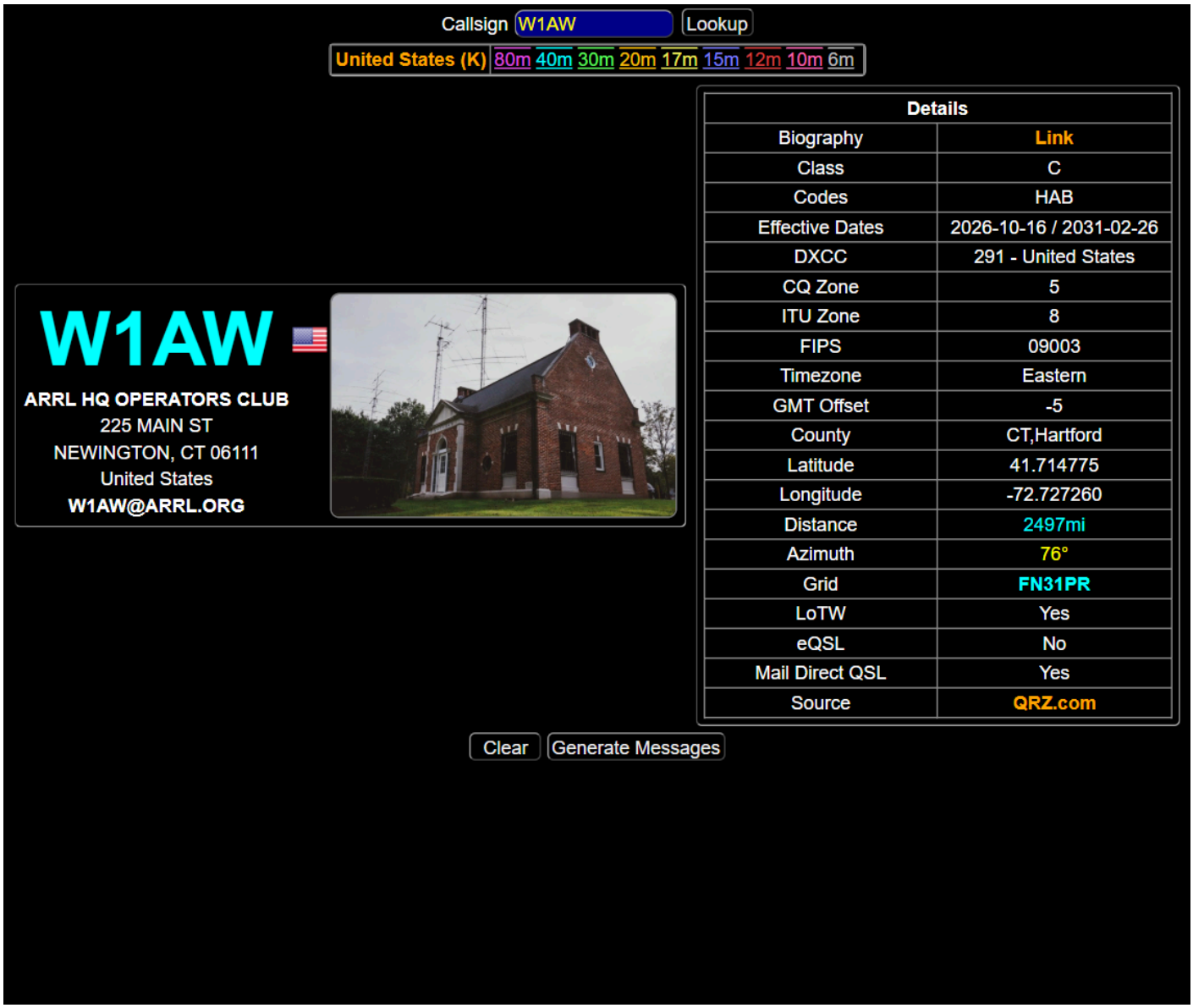
Click the **User Guide** button (the life ring) in the side panel to open this guide in its own window; click it again to close the window, or right-click it to bring the window forward. The window opens where you last left it.



Type in the search box at the top to find a word: matches are highlighted and counted, **Enter** goes to the next one and **Shift+Enter** to the previous one. The toolbar below it shows the page number, zooms, rotates, prints or saves the guide, and its ☰ button shows page thumbnails and the contents. Links to websites open in your web browser. **Esc** closes the window.

Callsign Lookup

Click the **Lookup** button in the side panel to open the Callsign Lookup window. Type a callsign and press **Enter** or click **Lookup**. Clicking a callsign almost anywhere in GridTracker2 (the rosters, the Logbook, the map's tooltips, the station you are working in the side panel) also looks it up.



The lookup service is chosen in Settings → Lookups: Callook (US callsigns only, no login), HamQTH, QRZ.com or QRZCQ.com. What is shown depends on the service:

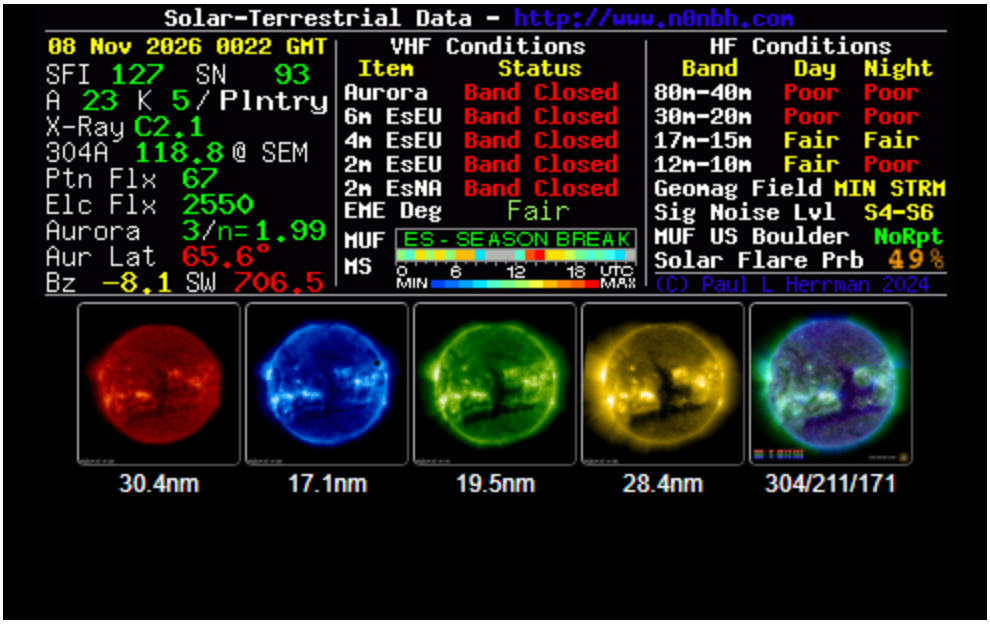
- first, your own log for that call: the bands and modes you have worked and confirmed it on, and your last QSO;
- a card with the station's name, address and photo. Click the card to copy the address;
- a **Details** table: license class, DXCC entity, zones, IOTA, time zone, county, latitude and longitude, the distance and bearing from you, the grid (click to copy it; highlighted when it is new to you), QSL information, and whether the station uses LoTW, eQSL and ClubLog OQRS.

Generate Messages puts the call and grid into WSJT-X or JTDX without calling. **Clear** empties the window.

With **Open Lookup on Transmit** on in Settings → Lookups, the station you start calling is looked up automatically. The Lookup window isn't available in Offline Mode.

Current Conditions

Click the **Current Conditions** button (or press **Ctrl+E**) to see the solar-terrestrial conditions from HamQSL: the solar flux, sunspot number, A and K indices, HF and VHF band conditions, and the latest images of the Sun from SOHO and SDO. The images are refreshed every 30 minutes. Click the HamQSL banner to open their website.



While GridTracker2 receives the planetary K index, the Conditions button itself shows it, colored by its value, with an arrow showing whether it is rising or falling. It pulses during a geomagnetic storm (Kp above 5).

Band Activity

Right-click the band activity graph in the side panel to pop it out into a small window of its own, without a frame, which stays on top of your other windows. Drag it wherever you like, for example next to WSJT-X. Right-click it to close it. See Band Activity.

Pop-Out Details

Right-click a grid, pin, park or spot on the map to pop its details out into a window that stays open while you move the mouse away. Callsigns in it can be clicked to look them up.

Alerts

The Alerts window opens when a Custom Alert set to **Visual Popup** goes off. See Custom Alerts.

Features Only on Hotkeys

A few features have no button, only a hotkey. The full list of hotkeys is in Appendix C.

Hotkey	Feature
F1	Shows the list of hotkeys, with a **Print** button.
Ctrl+K	Takes a screenshot of the main window. It is copied to the clipboard, ready to paste into an email or a support request, and saved as a PNG picture in the **Screenshots** folder in GridTracker2's data folder (see Files and Folders).
Ctrl+X	Hides or shows the latitude, longitude, distance, bearing and 6-character grid under the mouse pointer, in the top left corner of the map.
Shift+F5 to Shift+F10	Remembers the current map view (position and zoom) in one of six memories.
F5 to F10	Returns the map to a remembered view.
Ctrl+T	Switches RX spots between drawn over your grids and drawn instead of them. This is also **Spots Over Grids** in Settings → Features.
Ctrl+U	Keeps grids, paths and spots showing with an award layer. This is also **Keep Other Layers With Award View** in Settings → Map.
Ctrl+Y	Turns Offline Mode on or off. This is also in Settings → Features.

Other Programs

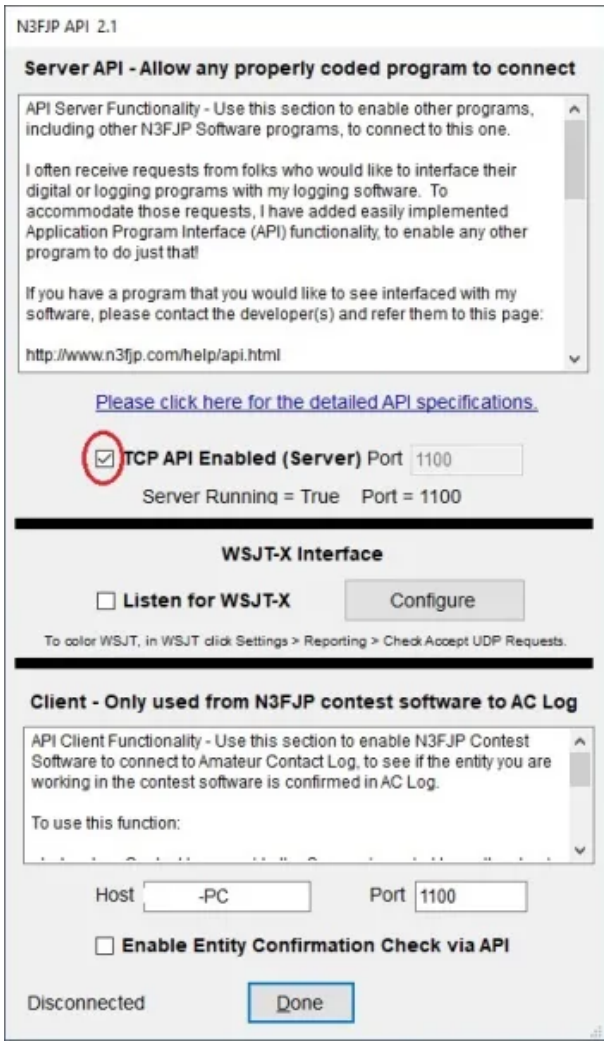
N3FJP AC Log

N3FJP's Amateur Contact Log (AC Log) works with GridTracker2 in two ways:

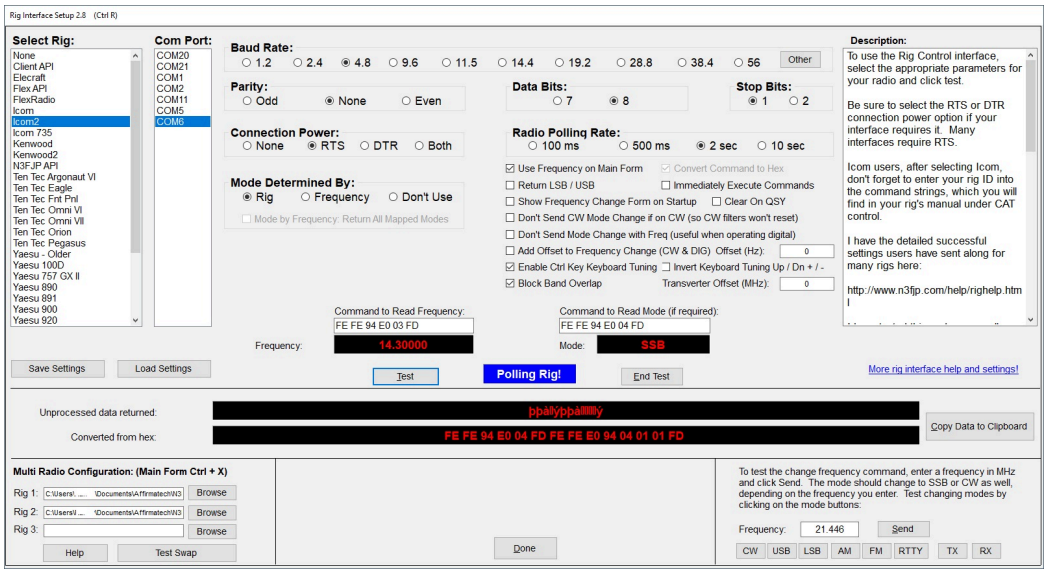
- **Logging:** QSOs from WSJT-X and JTDX are sent to AC Log, and your AC Log logbook can be loaded into GridTracker2.
- **Connected:** GridTracker2 follows AC Log's rig and entry tab, so the map and rosters follow your phone and CW operating too. Clicking a spot fills AC Log's entry tab, and can tune your rig.

AC Log Settings

In AC Log, open **Settings** → **Application Program Interface (API)...** and tick **TCP API Enabled (server)**. Note the **Port** (1100 by default).



For the connected features, set up rig control in AC Log under **Settings** → **Rig Interface**. See the N3FJP website for details.



GridTracker2 Settings

In Settings → Logging, on the **N3FJP Loggers** row of the **Logging Programs** box:

- Enter AC Log's **IP** address (127.0.0.1 when it runs on the same computer) and the **Port** you noted.
- **Log QSO:** sends each QSO logged in WSJT-X or JTDX to AC Log.
- **Load At Startup:** loads your AC Log logbook when GridTracker2 starts. AC Log must already be running.
- **Menu Button:** adds an N3FJP button to the button panel, to reload your AC Log logbook whenever you like.
- **QSL By:** which confirmations in AC Log count as QSLs: Any, Card, eQSL, LoTW, QRZ.com or Clublog. Shown while Load At Startup or Menu Button is ticked.
- **Connect:** links GridTracker2 to AC Log. A dot next to it shows green while connected, red while not.
    - **Enable Rig Control:** clicking a spot tunes your rig through AC Log. Shown while Connect is ticked; needs rig control set up in AC Log.



Logging From WSJT-X

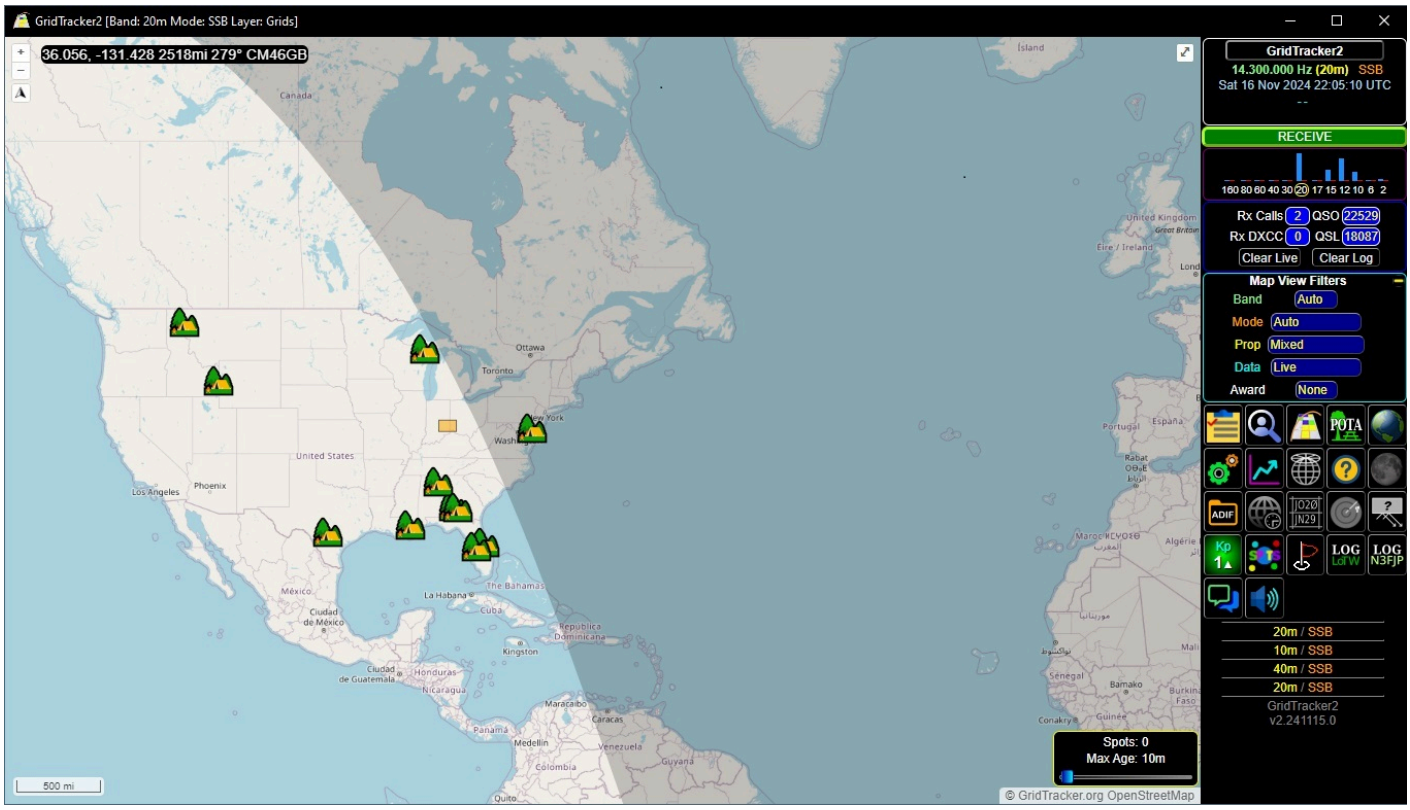
For WSJT-X QSOs to reach AC Log, WSJT-X must send to GridTracker2 (see Appendix B), and **Log QSO** must be ticked on the N3FJP row. Each QSO you log in WSJT-X is then added to AC Log, and "Logged to N3FJP" shows in the message list.

Connected Operation

With **Connect** ticked:

- AC Log becomes one of your radios. Its frequency, band and mode show at the top of the side panel, and the status bar shows **CONNECTED** while AC Log is the active radio. When AC Log has no rig frequency, the band and mode follow its entry tab. With several radios, use the ◀ ▶ selector to choose AC Log.
- The call and grid in AC Log's entry tab show in GridTracker2 as you type, even before you tab out of the call, and clear when you clear the entry tab.
- QSOs you log in AC Log are added to GridTracker2's logbook, even several in quick succession.
- A QSO logged in AC Log with a park in an Other field titled `POTA_REF` is spotted to POTA (with POTA Hunting on).

Set the Map View Filters' Band and Mode to **Auto** so the map follows AC Log.



There is a short delay before frequency and band changes show, depending on the polling rate set in AC Log's Rig Interface settings.

Working Spots Through AC Log

When you click a callsign in the Feed Roster, or a POTA, SOTA or DX Feeds marker on the map, and no radio is already on that spot's band and mode, AC Log gets the spot on any band and mode:

- Its entry tab is cleared and filled with the spot's frequency, band, mode, call and grid.
- With **Enable Rig Control** on, AC Log also tunes your rig to the spot's frequency and mode.
- If you have titled any of AC Log's Other fields `POTA_REF` or `SOTA_REF`, they are filled with the spot's park or summit.

> **Tip**
>
> To have parks and summits filled in automatically, open AC Log's Other field settings and title one field `POTA_REF` and another `SOTA_REF`. GridTracker2 notices the titles when it connects, and when you change them.

Log4OM

Log4OM works with GridTracker2 in two ways:

- **Logging:** QSOs from WSJT-X and JTDX are sent to Log4OM.
- **Connected:** through Log4OM's UDP remote control, GridTracker2 follows Log4OM's rig, sends spots to its QSO entry, and can tune your rig through it.

Logging

In Settings → Logging, on the **Log4OM** row of the **Logging Programs** box, enter Log4OM's **IP** address and **Port** (2236 by default) and tick **Log QSO**. Each QSO is sent as an ADIF record over UDP. In Log4OM, add a UDP inbound connection on the same port to receive them (see Log4OM's documentation of its connection settings).

Connected Operation

Tick **Connect** on the Log4OM row. GridTracker2 talks to Log4OM's UDP remote control on Log4OM's default ports (it sends to port 2241 and listens on 2242). Turn on the remote control in Log4OM if it isn't already. The dot next to Connect shows green while Log4OM answers, red while it doesn't.

While connected:

- Log4OM becomes one of your radios. Its rig frequency, band and mode show at the top of the side panel, and the status bar shows **CONNECTED** while Log4OM is the active radio.
- When Log4OM runs on the same computer, GridTracker2 reads your station callsign and locator from Log4OM's settings.
- Clicking a callsign in the Feed Roster, or a POTA, SOTA or DX Feeds marker on the map, sends the call to Log4OM's QSO entry, unless you have already typed a call there yourself. The side panel shows the call and grid sent.

Rig Control

Tick **Enable Rig Control** (shown while Connect is ticked) to have a spot click also tune your rig, through Log4OM, to the spot's frequency and mode. Log4OM must have your rig connected (CAT).

See Working a Spot for how GridTracker2 chooses where a spot goes when you have several radios and programs.

Push Notifications to Your Phone

GridTracker2 can send new wanted stations from the Call Roster to your phone through Simplepu.sh or Pushover. Feed Roster stations are sent too when **Allow Notifications (Pushover, Simplepush)** is ticked in Settings → Feeds.

GridTracker2 must be running for notifications to be sent. Turn the services on in Settings → Features, in the Online box; each one then shows its own settings box.

Both services can follow a **Use Daily Schedule**: notifications are only sent between the **Start Time** and **End Time** you choose, for example not at night.

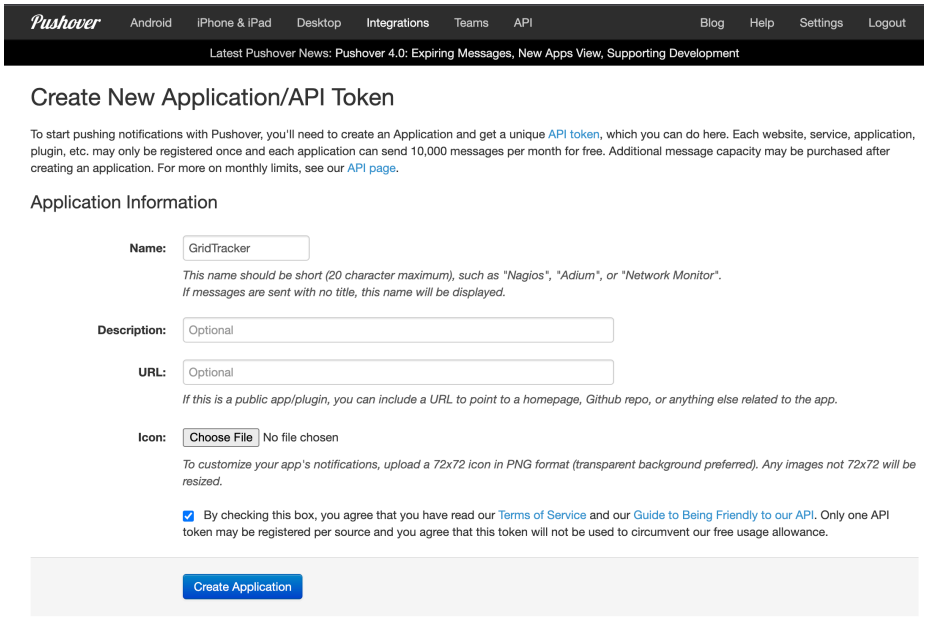
Simplepu.sh

1. Install the Simplepush app on your phone from the App Store or Google Play, and create an **API Token**.
2. In Settings → Features, tick **Simplepu.sh** and enter the token in **API Token**.
3. Tick **Notification Only** if you want plain notifications rather than tasks.
4. Click **Test**. A test message should arrive on your phone.

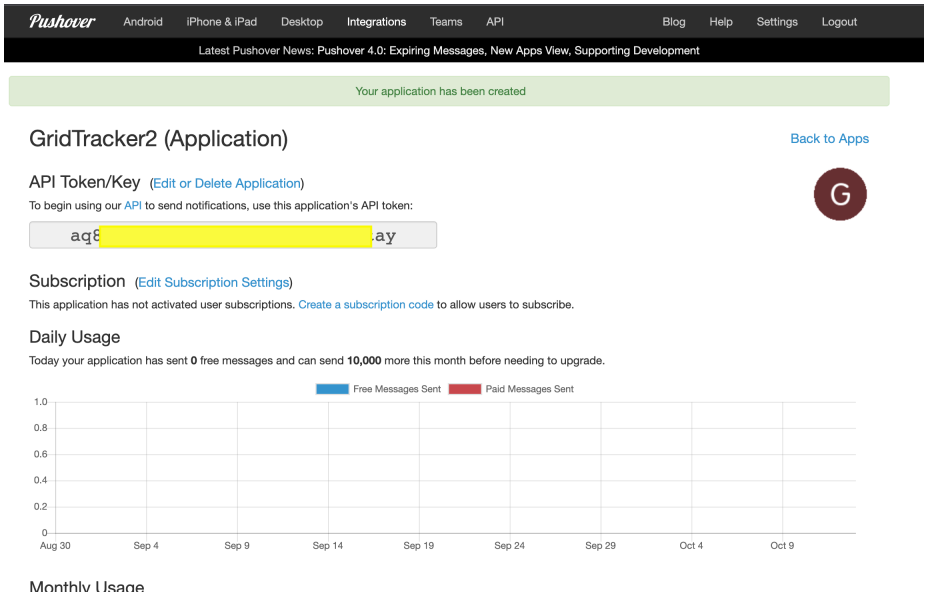
> **Note**
>
> Simplepush moved from Simplepush.io to Simplepu.sh. Keys from the old service no longer work: create a new API Token in the app.

Pushover

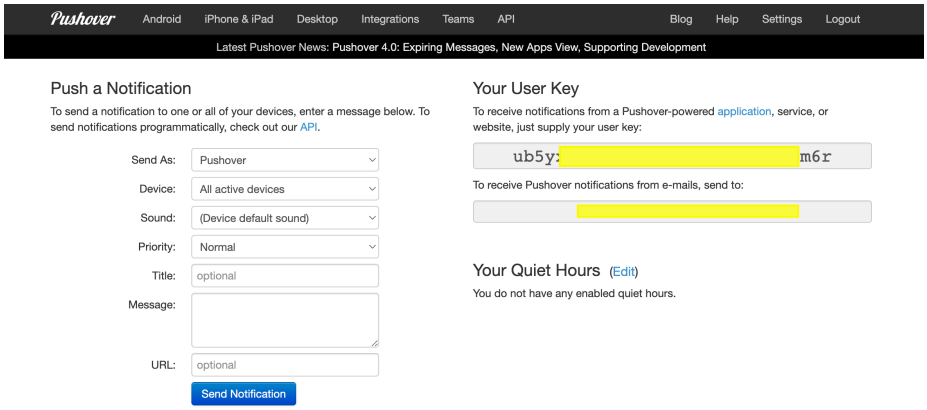
1. Register at pushover.net. Pushover has a 30-day free trial, then a one-time purchase per platform.
2. Install the Pushover app on your phone and log in.
3. On the Pushover website, create an application. Call it GridTracker2, for example.



4. Copy the application's **API Token**.



5. Find your **User Key** on the Pushover home page.



6. In Settings → Features, tick **Pushover.net** and enter the **User Key** and **API Token**.

7. Click **Test**. A test message should arrive on your phone.



Each notification is titled “GT Alert” (or “Feed Alert” from the Feed Roster) and lists each new wanted station: callsign, DXCC entity, signal report, grid, band and state, with why it is wanted.

For more control over what is sent, you can also run your own script on roster alerts: see Running a Script on Alerts.

HamClock

HamClock can listen to WSJT-X and JTDX messages to show the station you are working. GridTracker2 can pass those messages on to HamClock, so HamClock and GridTracker2 can both follow WSJT-X. You need HamClock version 2.51 or later.

GridTracker2

In Settings → General, in the **Forward UDP Messages** box:

1. Add the IP address of the computer running HamClock to **IP(s)/Hostname(s)**. Separate several addresses with commas if you forward to other programs too.
2. Set the **Port** HamClock will listen on, for example 2238.
3. Tick **Enabled?**.

HamClock



In HamClock's setup, enter **WSJT-X** for the "Cluster? Spider host:" and the port you set in GridTracker2 for "port:". Click **Done**.

When you start a QSO, HamClock shows the DX station in its DX window, updates its VOACAP DE-DX prediction, and places the DX station on its map.


KOEG
19:55 03
Fri Sep 11, 2020
VOACAP DE-DX
80 0% 17 57
40 52 15 3
30 61 12 0
20 98 10 0
DX Cluster
DE:
14:55 Sep 11
39N 91W
EM48
DX:
14:55 Sep 11
23N 84W
EL83
1156 @158
KH6RS
VK6RBP
3A2IDV
ZL6B

Other Programs

Decoding Programs

GridTracker2 listens to the WSJT-X UDP messages, so it works with every program that sends them:

- **WSJT-X** and **JTDX**: see Appendix B.
- **WS – Digital Mode Suite** (formerly WSJT-X Improved): set up like WSJT-X. Its logs are found automatically.
- **MSHV**: set up its UDP messages like WSJT-X.
- **JS8Call-Improved**: turn on its WSJT-X UDP server. JS8Call doesn't send its receiving and decoding status or regular heartbeats, and clicking a callsign in the Call Roster can't reply in JS8Call.

You can run several of these at once, for example one WSJT-X per radio. Give each WSJT-X its own name (`wsjtx --rig-name=HF`), and send them all to GridTracker2, using multicast if other programs need the messages too. GridTracker2 shows a radio selector, and the Call Roster can show all their decodes together, with a tick box for each instance.

Logging Programs That Broadcast ADIF

Programs such as **fldigi** can broadcast each logged QSO as an ADIF record over UDP. Turn on **Receive ADIF UDP Broadcasts For Logging** in Settings → General and set the same port in the program. GridTracker2 then adds those QSOs to your logbook and sends them on to your logs, as if WSJT-X had logged them. Old QSOs replayed this way aren't spotted to POTA.

Logging Programs and Online Logbooks

Settings → Logging can send each new QSO to:

- **N1MM Logger+**, **HRD Logbook 6.9 and later**, and other programs that accept ADIF over UDP, through the **ADIF UDP / N1MM** row;
- **Log4OM** (details) and **N3FJP AC Log** (details);
- **DXKeeper**;
- **HRD Logbook 6.8 and earlier**;
- **QRZ.com**, **ClubLog**, **LoTW** (through TQSL), **eQSL.cc**, **HRDLOG.net**, **Cloudlog / Wavelog** and **HamCQ.cn**.

It can load your logbook from QRZ.com, ClubLog, LoTW, N3FJP AC Log and PSK-Reporter. See Logging Options.

Rotators

With **CatRotator / PstRotator** turned on in Settings → Features, GridTracker2 can turn your antenna through PstRotator or CatRotator, over UDP (port 12000 by default). Right-click a callsign in the Call Roster and choose **Aim Rotator**, or **Ctrl**+click a point on the map.

Forwarding to Other Programs

Forward UDP Messages in Settings → General passes every WSJT-X message GridTracker2 receives on to other programs, for example HamClock, another copy of GridTracker2, or an online service such as ft8battle.com. It accepts several addresses or hostnames, separated by commas.

Files, Help and Troubleshooting

Files, Folders and Command-Line Options

The Data Folder

GridTracker2 keeps your settings, backup logs and other files in its data folder:

System	Data folder
Windows	`%APPDATA%\GridTracker2`, that is `C:\Users\<you>\AppData\Roaming\GridTracker2`
macOS	`~/Library/Application Support/GridTracker2`
Linux	`~/.config/GridTracker2`

> **Tip**
>
> On Windows, type `%APPDATA%\GridTracker2` into the File Explorer address bar to open the folder. **Backup Logs** in Settings → Logging opens the backup log folder directly.

Inside it:

- **Backup Logs:** GridTracker2's own backup log, one ADIF file for each callsign and grid you have operated from, such as `GridTracker2_N0TTL_CN84.adif`. See The GridTracker2 Backup Log.
- **Screenshots:** the pictures saved by **Ctrl+K**.
- **Extra Media:** put your own sound files here to use them in alerts. They are listed with the built-in sounds the next time GridTracker2 starts.
- **Call Roster Scripts:** put a `cr-alert.bat` (Windows) or `cr-alert.sh` (macOS and Linux) script here to run it on roster alerts. See Running a Script on Alerts.
- **Ginternal:** GridTracker2's own files: your settings (`app-settings.json`), window positions (`windows.json`), and the downloaded callsign databases and logs. You shouldn't need to touch these; use **Export Settings** in Settings → General to back up your settings.
- **logs:** the error log, `main.log`. On macOS it is in `~/Library/Logs/GridTracker2` instead. Include it when you report a problem.

Uninstalling GridTracker2 leaves the data folder in place, so your settings and backup logs are kept.

Backing Up

Your real log should be in a logging program or online logbook, which have their own backups. To back up GridTracker2 itself:

- **Export Settings** in Settings → General saves all your settings to a file of your choice. **Import Settings** restores them, on this or another computer.
- Copy the **Backup Logs** folder.

Upload failures to LoTW are queued in your system's temporary folder, and sent with your next QSO.

Where Your Logs Are Found

At startup, GridTracker2 looks for the logs of WSJT-X, WS – Digital Mode Suite and JTDX in their usual folders:

System	Searched folder
Windows	`%LOCALAPPDATA%`
macOS	`~/Library/Application Support`
Linux	`~/.local/share`

The logs it finds are listed under **App Log(s)** in Settings → Logging, where you can untick them or add others.

The Program

System	Installed in
Windows	`%LOCALAPPDATA%\Programs\GridTracker2` for a single-user installation (the default), or `C:\Program Files\GridTracker2` for all users
macOS	your **Applications** folder, if you dragged it there
Linux	`/opt/GridTracker2` for the deb, rpm and pacman packages; wherever you put the AppImage or the unpacked tar.gz

Command-Line Options

Option	Effect
`--gt-name=Name`	Runs a separate copy of GridTracker2 with its own settings, logs and windows, in a data folder named `GridTracker2 - Name`.
`--disable-auto-updates`	GridTracker2 still tells you when a new version is available, but doesn't download it until you click **Download**.

On Windows, to start GridTracker2 from a command prompt or batch file and see its messages there, first run `set ELECTRON_NO_ATTACH_CONSOLE=true`.

Running Several Copies

Normally only one copy of GridTracker2 can run: starting a second one just exits. To run several, for example one for each radio, start each with its own name:

```
GridTracker2.exe --gt-name=HF
GridTracker2.exe --gt-name=VHF
```

On Windows, add the option to a copy of the GridTracker2 shortcut (right-click it, choose **Properties**, and add it at the end of **Target**). Each copy has its own data folder and settings: set each one's UDP port to match its WSJT-X, and in Settings → Logging → **App Log(s)**, untick the logs another copy uses.

Updates

GridTracker2 checks for a new version shortly after it starts and then once a day. A new version downloads by itself; the message list then shows **Install and Restart**, which saves your settings, installs the update and restarts GridTracker2. The About tab in Settings shows the same. With `--disable-auto-updates`, the message list shows an **About** button instead: click **Download** in Settings → About first.

FAQ and Troubleshooting

The map doesn't show all my QSOs

You have almost certainly limited what is shown:

- Check the Map View Filters. To see everything, set Band, Mode and Prop to **Mixed**, Data to **Logbook**, and Award to **None**.
- Check Settings → Logbook: are **Working Callsign(s)**, **Working Grid(s)** or **Working Date** enabled? If they leave QSOs out, the side panel shows **Log Entries Filtered**.
- Check Settings → Logging: are all the logs you want ticked **Load At Startup**, including your WSJT-X logs under **App Log(s)**?

The QSO or QSL count looks wrong

The counts depend on which logs you load, and on the Logbook Filters. GridTracker2 combines all your loaded logs, so check Settings → Logging. Remember that WSJT-X's own log has no confirmations: load your LoTW log, or your logging program's log, to see QSLs.

Nothing happens in GridTracker2 when WSJT-X decodes

See Connecting to WSJT-X or JTDX. Check that the status bar isn't showing **IGNORE**: click it to resume reading messages.

Clicking a callsign in the Call Roster doesn't call the station

Check the WSJT-X or JTDX settings in Appendix B, especially **Accept UDP requests**. If it works for stations calling CQ but not for others, untick **CQ only** and tick **Hold Tx Freq** in WSJT-X's main window. JTDX replies according to its **Accept UDP Reply Message** setting. JS8Call can't reply from GridTracker2.

I don't hear any alerts

- Is the **Audio Mute** button on? Press **Ctrl+M** to toggle it.
- Is the right **Device** chosen in Settings → Audio? Don't use your radio's sound card.
- Are the alerts ticked in Settings → Audio Alerts, and do your roster Exceptions let the station through?

My spots turned into colored areas

The spot view is set to **RX Heatmap**. Click the Spot Reports button (or press **Ctrl+O**) to cycle to RX Spots, or right-click the button to choose.

The Feeds tab, Feed Roster or DX Feed Spots button is missing

They only appear while **Off-Air Services** and **DX Feeds** are on in Settings → Features, and Offline Mode is off. The SOTA features also need **SOTA Chasing**.

A park shows "?-????"

The station is calling CQ POTA but hasn't been spotted or scheduled on pota.app yet. The park appears as soon as GridTracker2 learns it. See Parks On The Air.

The hotkeys don't work

Hotkeys only work while the main window is active and the Settings panel is closed, and letter hotkeys need **Ctrl**. See Appendix C.

GridTracker2 doesn't start

- Only one copy can run at a time. If GridTracker2 is already running (check the taskbar), starting it again does nothing. To run more than one copy, see Running Several Copies.
- On Linux, if the window opens but shows no text, run `fc-cache -fv` and start it again. If that doesn't help, try starting it with `--disable-gpu`.

Windows Firewall and antivirus software

GridTracker2 receives WSJT-X's messages over your network, even when both run on the same computer, so firewalls and antivirus programs can block it. Allow GridTracker2 (and WSJT-X) on private and public networks. Check again after an update.

Where are my settings and logs?

See Files, Folders and Command-Line Options.

Submitting Bug Reports

Is It a Bug?

First check whether it is really a bug, or a setting that is easy to overlook while you are chasing that rare DX:

- Read FAQ and Troubleshooting.
- Search our Discord server for earlier discussions.
- Look through the GitLab issues to see whether it has already been reported.
- Make sure you are running the latest version (Settings → About).

It Is a Bug!

Open a new issue on GitLab. The issue form asks for:

```
## Summary
(Summarize the bug concisely)

## Version
(From Settings -> About. Please check the bug still happens in the latest version first.)

## Operating System and Platform
(Be specific, e.g. "Windows 11 24H2", "macOS 15 Sequoia", "Debian Bookworm, kernel 6.11.6".
Linux users, please include the output of: uname -r)

## Steps to reproduce
(How we can make it happen - this is very important)

## What is the current bug behavior?
(What actually happens)

## What is the expected correct behavior?
(What you should see instead)

## Relevant logs and/or screenshots
(Paste logs in code blocks (```), and attach screenshots)

## Possible fixes
(If you can, link to the line of code that might be responsible)
```

Please fill it in as completely as you can. Useful attachments:

- a screenshot: **Ctrl+K** copies the main window to the clipboard and saves it in the Screenshots folder;
- the error log, `main.log`, from the `logs` folder in GridTracker2's data folder (see Files, Folders and Command-Line Options).

Everyone on the development team is notified of new issues, and a note is posted on our Discord server, although it may take a while to reply.

Appendices

Appendix A: Installing GridTracker2

Download GridTracker2 from gridtracker.org/downloads. Choose the package for your system, as described below. When it is installed, continue with Appendix B to connect it to WSJT-X or JTDX.

Windows

1. Download the Windows installer, `GridTracker2-<version>-setup.exe`. One installer works on both 64-bit and 32-bit Windows. (For Windows 7 and 8, download the separate Windows 7 installer.)
2. Double-click the installer in your Downloads folder.

   > **Tip**
   > If Windows refuses to run the installer, right-click it, choose **Properties**, and on the **General** tab tick **Unblock** if it is there. Then run it again.

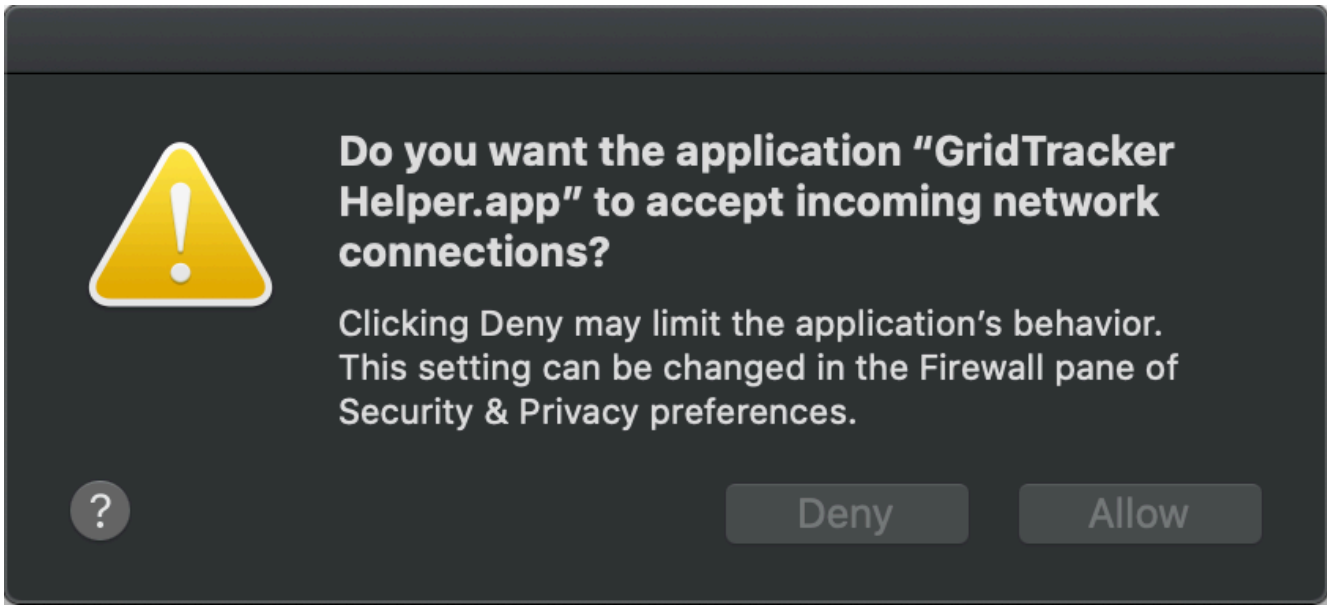
3. Accept the license agreement.
4. Choose whether to install for yourself only (the default, no administrator rights needed) or for everyone on the computer, and where to install it. The defaults are fine for most people.
5. Click **Install**, then **Finish** to start GridTracker2.

The installer adds GridTracker2 to the Start menu and the desktop.

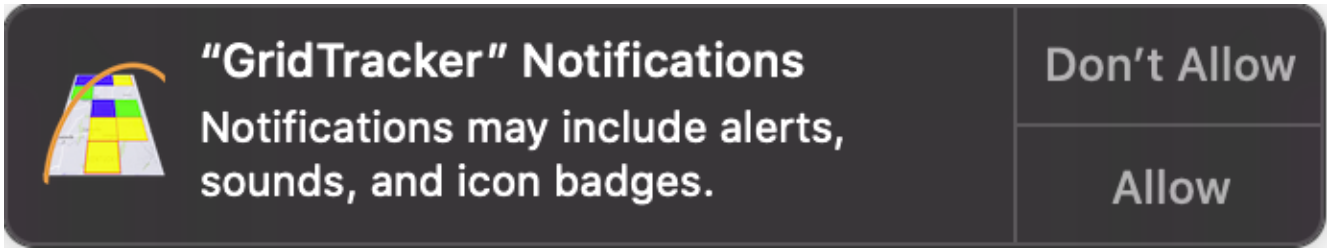
> **Note**
> The first time GridTracker2 runs, Windows Firewall may ask whether to allow it on your network. Allow it on **private** networks at least, so it can receive messages from WSJT-X. After an update, check that the firewall still allows it.

macOS

1. Download the macOS disk image, `GridTracker2-<version>.dmg`. It works on both Intel and Apple Silicon Macs.
2. Open it, and drag **GridTracker2** to your **Applications** folder.
3. Open GridTracker2 from the Applications folder.
4. macOS asks whether GridTracker2 may find devices on your local network. Click **Allow**: GridTracker2 needs this to receive messages from WSJT-X.



5. macOS may also ask whether GridTracker2 may send notifications. That is up to you.



Linux

Packages are available for Intel and AMD (x86_64), 64-bit ARM (arm64 / aarch64) and 32-bit ARM (armv7l). Pick the one for your distribution and architecture; `<version>` and `<arch>` stand for the version and architecture in the file name.

Debian, Ubuntu, Raspberry Pi OS and other Debian-based distributions

```
sudo apt install ./GridTracker2-<version>-<arch>.deb
```

Fedora, Red Hat and other RPM-based distributions

```
sudo dnf install ./GridTracker2-<version>-<arch>.rpm
```

Arch Linux and other pacman-based distributions

```
sudo pacman -U ./GridTracker2-<version>-<arch>.pacman
```

Alpine Linux

```
sudo apk add --allow-untrusted ./GridTracker2-<version>-<arch>.apk
```

Any distribution: AppImage

Make the AppImage executable and run it:

```
chmod +x GridTracker2-<version>-<arch>.AppImage
./GridTracker2-<version>-<arch>.AppImage
```

Any distribution: tar.gz

Unpack the archive anywhere, even on a USB stick, and run `gridtracker2` from the unpacked folder:

```
tar -xf GridTracker2-<version>-<arch>.tar.gz
```

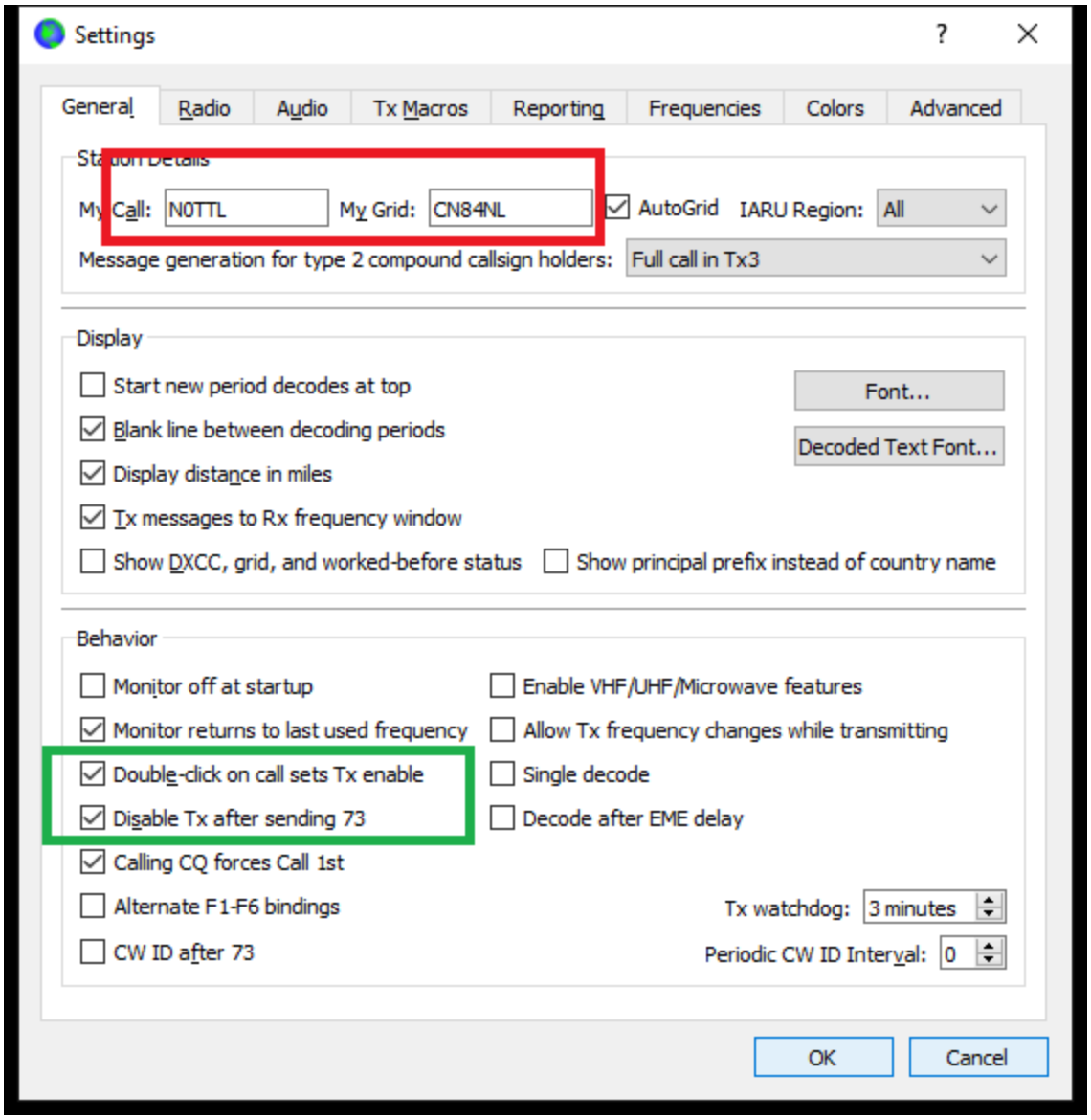
> **Tip**
>
> If GridTracker2 starts on Linux but shows no text at all, the font cache may be out of date. Run `fc-cache -fv`, then start GridTracker2 again.

Appendix B: Configuring WSJT-X and JTDX

WSJT-X

In WSJT-X, open **File** → **Settings**.

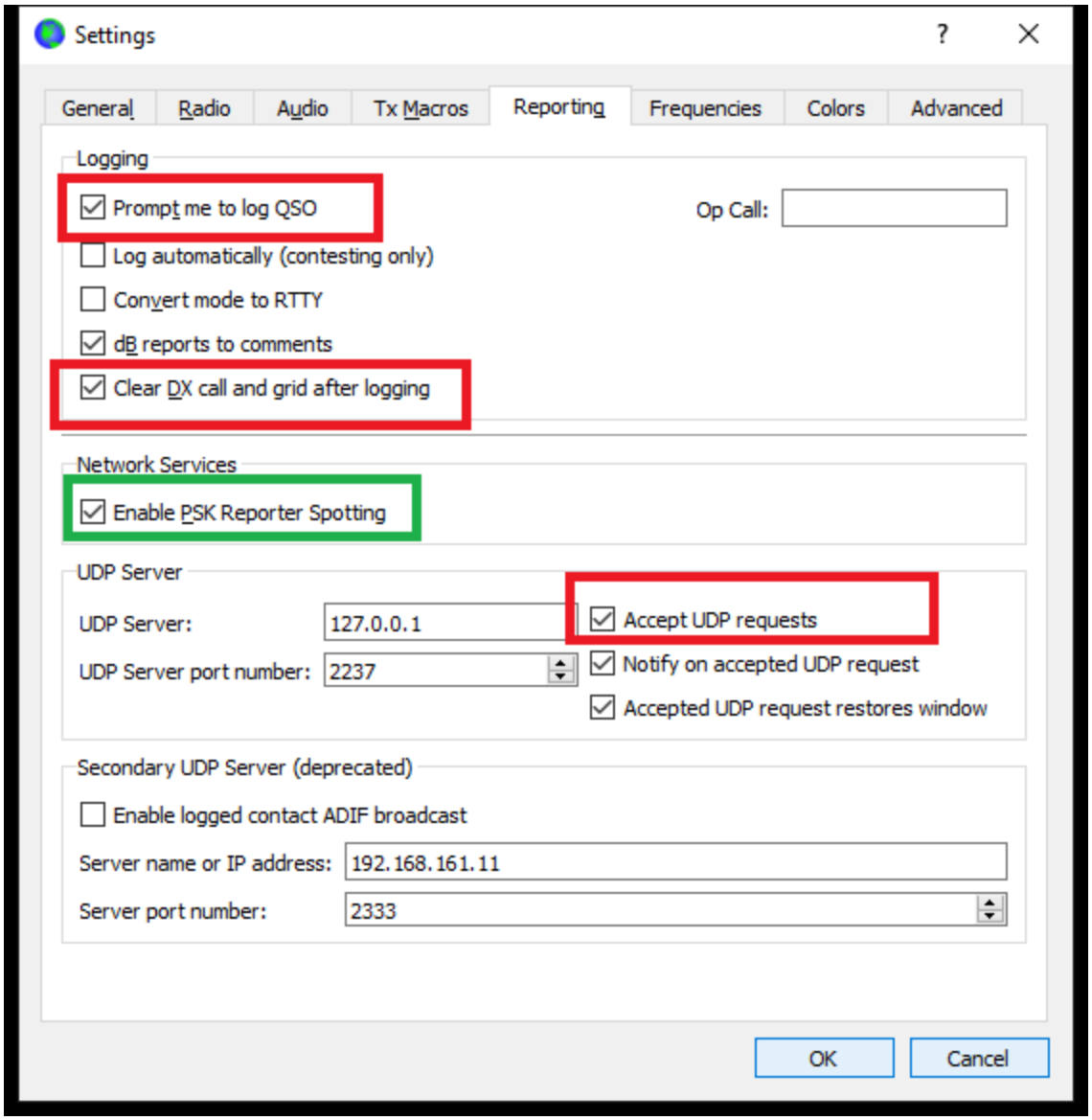
On the **General** tab, enter your callsign and grid. We recommend your 6-character grid (for example CN84NL rather than CN84) for more accurate maps and spot reports. We also recommend **Double-click on call sets Tx enable** and **Disable Tx after sending 73**.



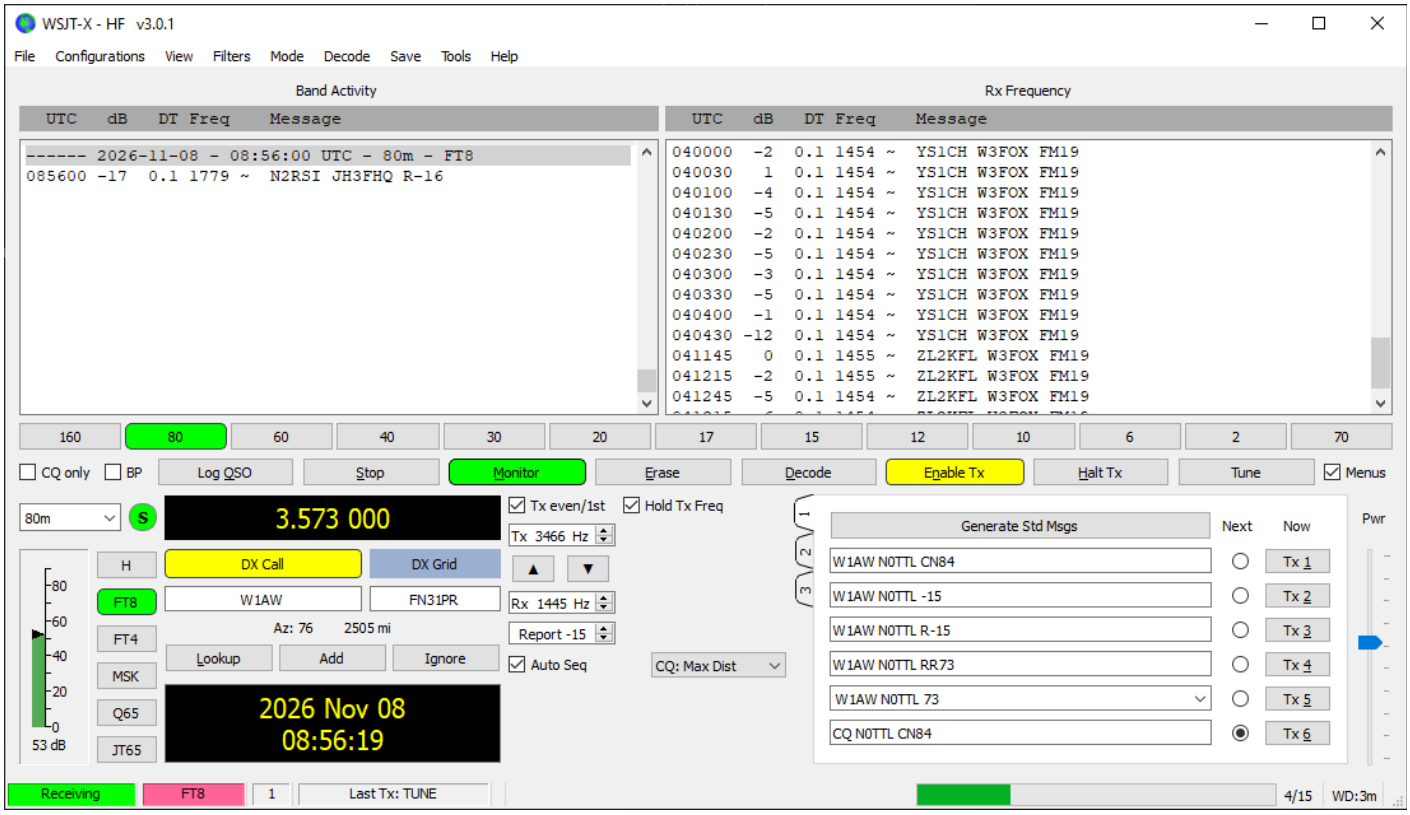
On the **Reporting** tab:

- **Prompt me to log QSO**, **Clear DX call and grid after logging** and **Accept UDP requests** are **required**. Without them GridTracker2 can't log your QSOs or call stations from the Call Roster, and the map behaves strangely.
- Under **UDP Server**, the address and port are where WSJT-X sends its messages: `127.0.0.1` and `2237` by default, when GridTracker2 runs on the same computer.

- We recommend **Enable PSK Reporter Spotting**, so other stations can see where they are being heard, and the band activity graph has more data.



In WSJT-X's main window, untick **CQ only** and tick **Hold Tx Freq** (both are just below the band buttons). If the Call Roster can call stations that are calling CQ but not other stations, these two boxes are usually why.

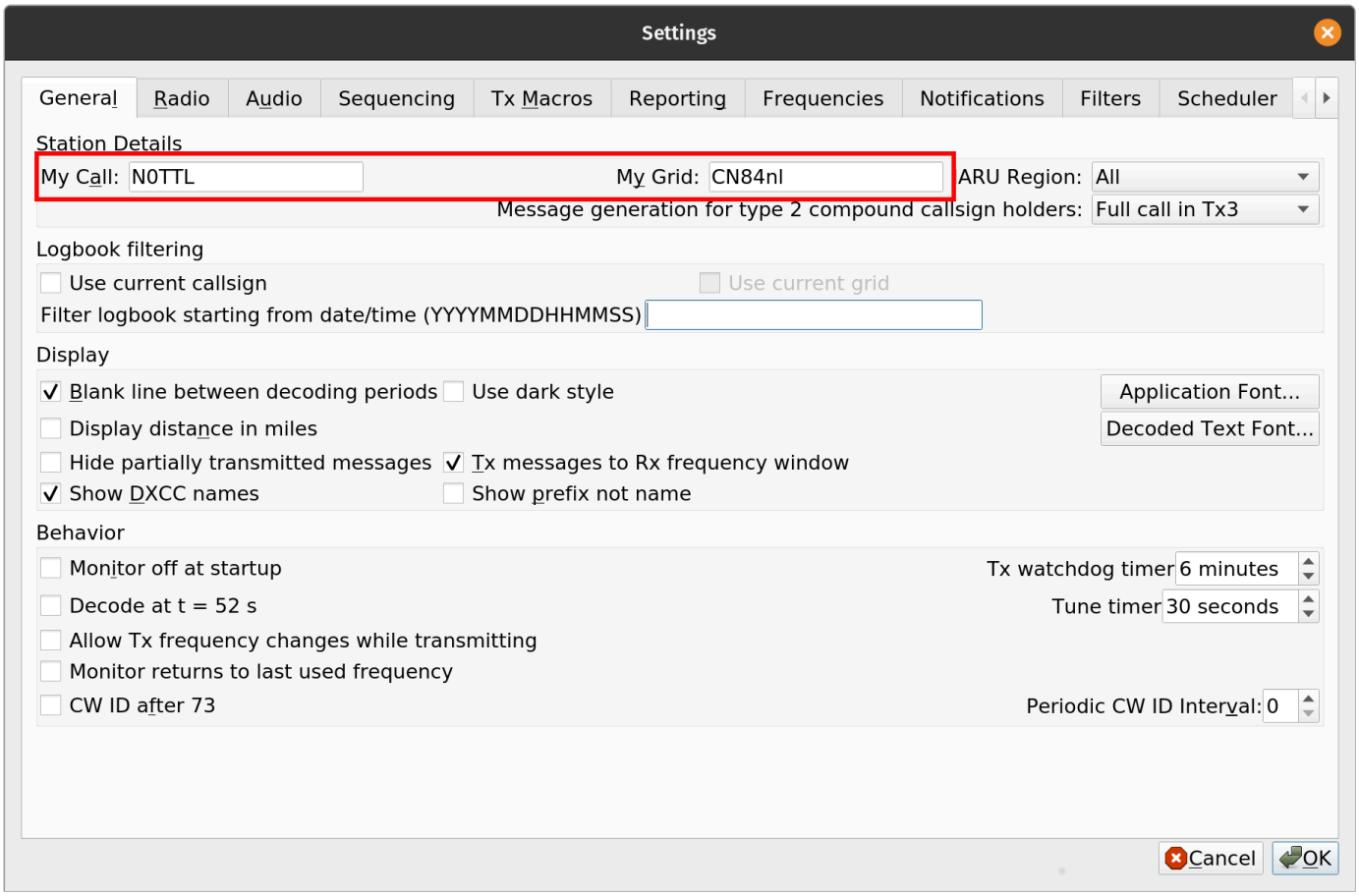


WS – Digital Mode Suite and MSHV are set up the same way.

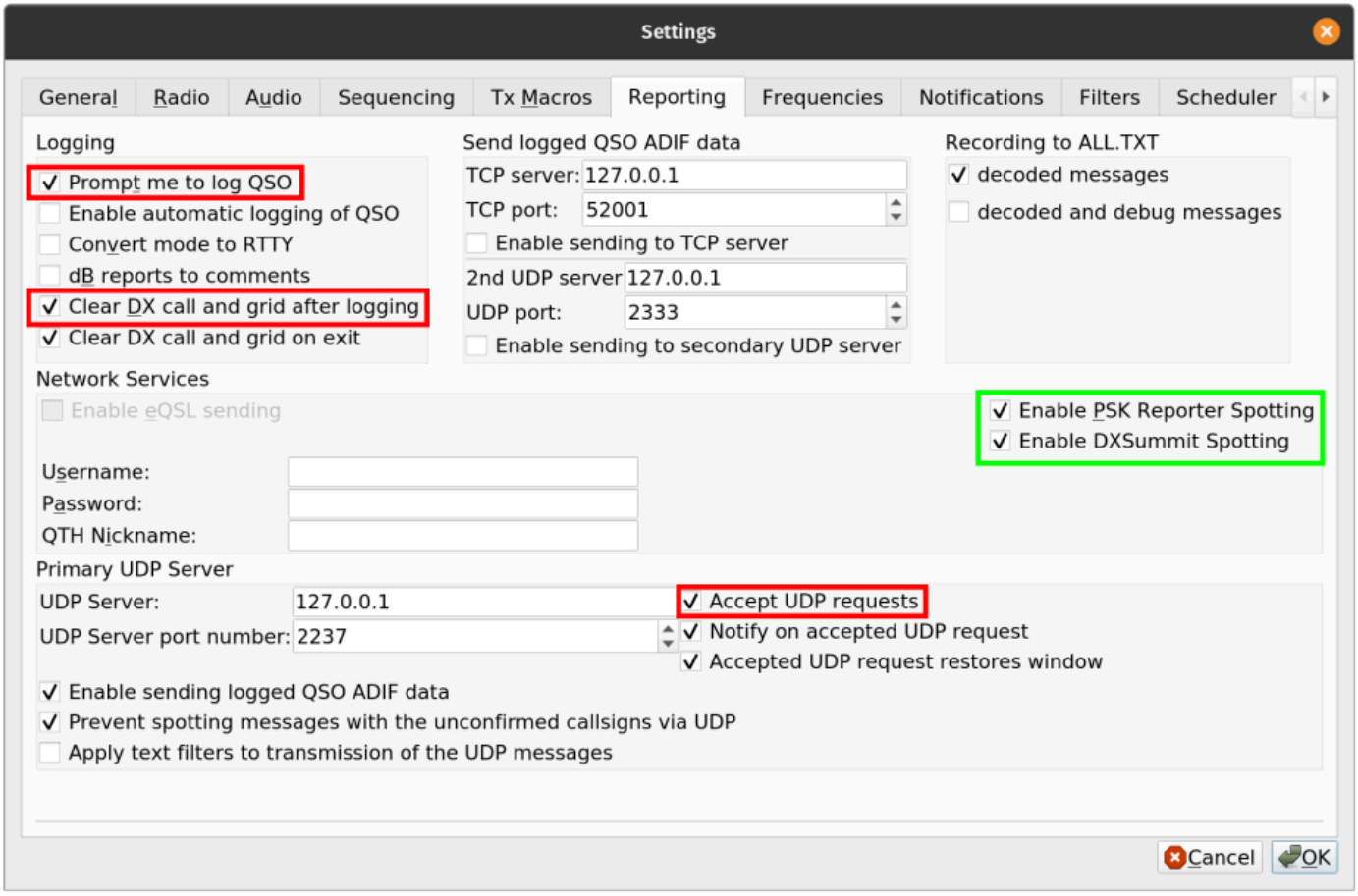
JTDX

In JTDX, open **Settings**.

On the **General** tab, enter your callsign and grid, preferably your 6-character grid.



On the **Reporting** tab, **Prompt me to log QSO**, **Clear DX call and grid after logging** and **Accept UDP requests** are **required**. We recommend **Enable PSK Reporter Spotting**.



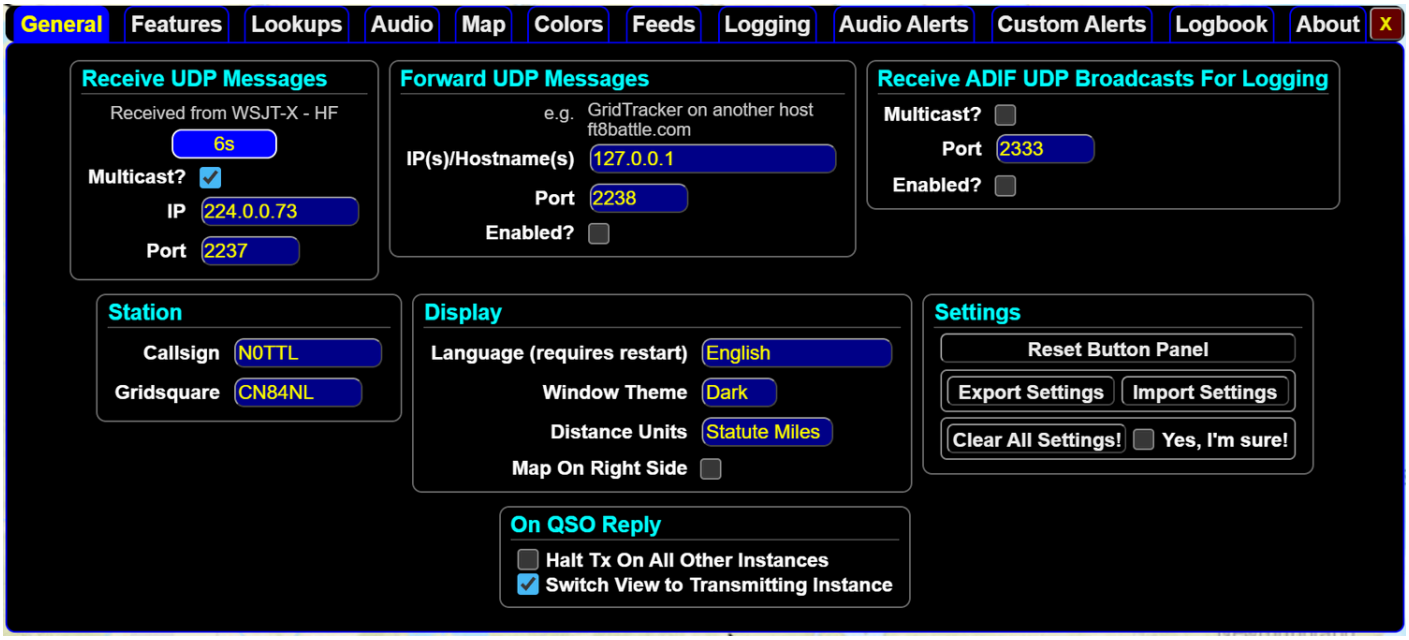
To reply from the Call Roster to stations that aren't calling CQ, set JTDX's **Misc** → **Accept UDP Reply Message** to **CQ and 73** or **any messages**.

GridTracker2

The first time it runs, GridTracker2 reads the address and port from your WSJT-X or JTDX settings, so usually there is nothing to do. When everything is working, the status bar at the top of the side panel shows **RECEIVE** and your frequency and mode appear above it.



If it still shows "waiting for message" after 15 seconds or so, open Settings → General and check the **Receive UDP Messages** box:



- The **Port** must match the port in WSJT-X's UDP Server setting.
- If WSJT-X sends to a multicast address (224.0.0.0 to 239.255.255.255), tick **Multicast?** and enter the same address in **IP**.

Using Multicast

Normally only one program can receive WSJT-X's messages. If you also run other companion programs (a logging program, JTAlert, another copy of GridTracker2), set WSJT-X's UDP Server to a multicast address such as `224.0.0.73`, tick **Multicast?** in every program, and use the same address and port in all of them. Multicast is also the way to run WSJT-X and GridTracker2 on different computers on the same network.

In WSJT-X, also tick the network interfaces to send multicast on (**Outgoing interfaces**), including the loopback interface when GridTracker2 runs on the same computer.

Alternatively, use **Forward UDP Messages** in GridTracker2's General tab to pass the messages on to one more program.

Firewalls and Antivirus Software

If GridTracker2 still doesn't receive anything, a firewall or antivirus program may be blocking it. Allow both WSJT-X and GridTracker2 on your network (private and public networks, if your security software asks). After changing these settings, restart both WSJT-X and GridTracker2. Windows users should check the firewall settings again after GridTracker2 updates.

Appendix C: Hotkeys

Hotkeys let you reach GridTracker2's functions straight from the keyboard. They work while the main window is the active window and the Settings panel is closed. Press **F1** to see the list in GridTracker2; its **Print** button prints it.



Key	Action	Key	Action
0	Toggle US Radar Overlay	F12	Toggle Sidebar Panel
1	Show Grid Map Layer	ctrl + B	Toggle All Grid Overlay
2	Show CQ Zones Award Layer	ctrl + D	Toggle Moon Tracking
3	Show ITU Zones Award Layer	ctrl + E	Open Conditions Windows
4	Show WAC Award Layer	ctrl + F	Open Call Roster Window
5	Show WAS Award Layer	ctrl + G	Toggle GridTracker Users
6	Show DXCC Award Layer	ctrl + H	Toggle Timezone Overlay
7	Show US Counties Award Layer	ctrl + I	Open Statistics Window
8	Show US48 Grids Award Layer	ctrl + J	Toggle Active Path Animation
9	Show CA Provinces Award Layer	ctrl + K	Capture Window to Clipboard
Equal	Cycle Award Layers	ctrl + L	Open ADIF file
F1	Hot Key List (This List)	ctrl + M	Toggle Audio Mute
F5	Map Memory 1	ctrl + N	Toggle Grayline
shift + F5	Save Map Memory 1	ctrl + O	Cycle Spot View
F6	Map Memory 2	ctrl + P	Toggle Grid/PushPin Mode
shift + F6	Save Map Memory 2	ctrl + Q	Cycle Logbook/Live View
F7	Map Memory 3	ctrl + S	Open Settings
shift + F7	Save Map Memory 3	ctrl + T	Toggle RX Spots over Grids
F8	Map Memory 4	ctrl + U	Toggle Award Layer Merge
shift + F8	Save Map Memory 4	ctrl + W	Toggle AEQD Projection
F9	Map Memory 5	ctrl + X	Toggle Map Position Info
shift + F9	Save Map Memory 5	ctrl + Y	Toggle Offline Mode
F10	Map Memory 6	ctrl + Z	Center Map on QTH Grid
shift + F10	Save Map Memory 6	shift + Minus	Toggle Call Roster Scripts
F11	Toggle Fullscreen		

> **Note**
>
> Letter hotkeys use the **Ctrl** key, so that typing in text fields can't set them off. **Ctrl+C** and **Ctrl+V** are left for Copy and Paste. Older versions used plain letters, and some functions have moved: the Call Roster is now **Ctrl+F**, the Conditions window **Ctrl+E**, path animation **Ctrl+J**, time zones **Ctrl+H**, and **9** shows the Canadian provinces layer.

Map Layers

Key	Action
1	Show the grid map (no award layer)
2	CQ zones award layer
3	ITU zones award layer
4	Worked All Continents (WAC) award layer
5	Worked All States (WAS) award layer

Key	Action
6	DXCC award layer
7	US counties award layer
8	US continental grids (US48) award layer
9	Canadian provinces (WACP) award layer
=	Cycle through the award layers
Ctrl+U	Keep grids, paths and spots with an award layer (“Keep Other Layers With Award View”)
0	US weather radar on or off
Ctrl+B	Maidenhead grid lines on or off
Ctrl+D	Moon on or off
Ctrl+H	Time zones on or off
Ctrl+N	Grayline on or off
Ctrl+G	GridTracker Spotters on or off
Ctrl+O	Cycle the spot view: off, RX Spots, RX Heatmap
Ctrl+T	RX spots over the grids, or instead of them

Map View

Key	Action
Ctrl+Q	Cycle the Data filter: Live, Logbook, Logbook & Live
Ctrl+P	Grid squares or push pins
Ctrl+W	Mercator or azimuthal equidistant (AEQD) projection
Ctrl+J	Path animation on or off
Ctrl+Z	Center the map on your grid
Ctrl+X	Hide or show the position under the mouse pointer
Shift+F5 to Shift+F10	Remember the current map view (six memories)
F5 to F10	Return to a remembered map view

Windows

Key	Action
Ctrl+F	Open the Call Roster
Ctrl+I	Open the Statistics window
Ctrl+E	Open the Current Conditions window
Ctrl+S	Open the Settings panel
Esc	Close the Settings panel or the hotkey list
F1	Show the hotkey list
F11	Full screen on or off
F12	Hide or show the side panel

Other

Key	Action
Ctrl+L	Open an ADIF log file

Key	Action
Ctrl+M	Mute or unmute audio
Ctrl+K	Copy the main window to the clipboard, and save it as a picture in the Screenshots folder
Ctrl+Y	Offline Mode on or off
Shift+–	Call Roster alert script on or off

Every Window

Key	Action
Ctrl (or Alt) and + or –	Zoom the window in or out
Ctrl+Alt and the mouse wheel	Zoom the window in or out
Ctrl+0 (or Alt+0)	Reset the window's zoom
Cmd+Q (macOS)	Quit GridTracker2

The roster window has hotkeys of its own; see Hotkeys in the Roster Window.