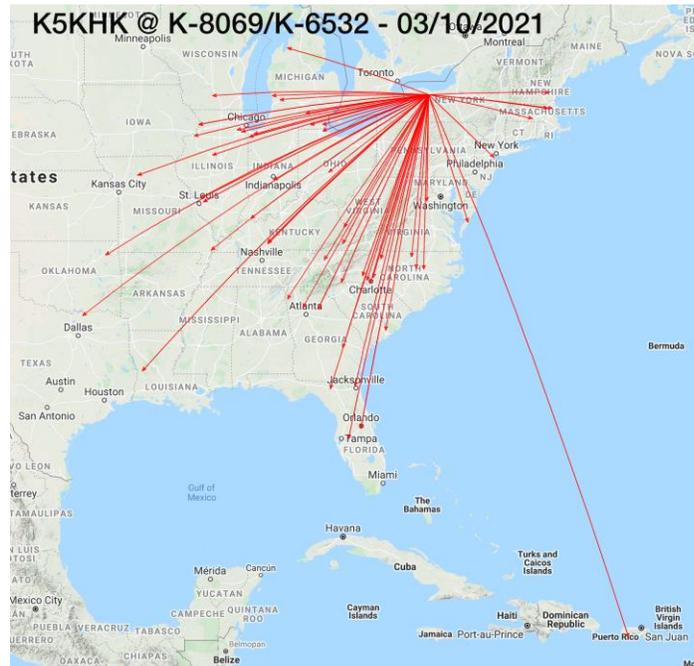


Create QSO Maps

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Have you seen maps that show where QSOs originated from? Here is an example from a recent POTA activation I did:



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This is an interesting way to get an idea about propagation, and directionality of an antenna. It also shows the skip zone. So how does one create such a map without having to place the arrows manually?

I create these QSO maps using the [qsomap.org](#) service. Let me show you how you can also create such maps. Qsomap.org does many different things, and it's worth spending some time exploring the different type of maps you can create, but for now, we are interested in one specific map type, the "Polymap".

The first step is to create an account. Keep in mind that you get to use this service for free, but it costs money to make the web site and the software available, and to pay for internet bandwidth, **so please consider donating a few bucks with PayPal**. After the account is created, you are ready to upload your QSOs. This is done with an ADIF (Amateur Data Interchange Format) file can be uploaded. These files can be created with your logging software. If you are not yet logging electronically, an easy way to enter QSO data and export to ADIF is the "Fast Log Entry" software (<https://www.df3cb.com/fle/>).

We are interested in a map with lines, going from the operating location (which in my case is usually a POTA activation) to the locations we had contacts with. This is done using the "Polymap" feature.

Qsomap.org keeps all uploaded QSOs unless you deliberately delete the QSOs associated with your account. This is for when you just want to add all your QSOs on one map, and with every upload you end up with more arrows, but for a map for e.g. a POTA activation, or the QSOs you had during a contest, we want to delete all QSOs that may already be in our account from a previous upload.

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The screenshot displays the Qsomap.org website. At the top left is the logo "QSOMAP ORG" with a globe icon. A navigation bar includes links for Home, Account, File, Maps, Tools, Donors, FAQs, LAT/LON Lookup, and Privacy. A "Start Download Now" button is visible in the top right corner. The main content area features a "Select Language" dropdown, "Site Updates" with several "New Feature" announcements, and a map of Europe. The map is titled "This website is supported for your generous support" and shows numerous call sign markers (e.g., K0DWUQ, KP2XX, VE9VIC, W0EJ, K8MH, K5KLM, ETR, N9E, W0RLF, W0ZUE, KUT, N9BUB, W4BKR, W5XJ, AD4WX, JMGW, W0NSJJH, K4T1N1ADM, KG5LRP, KK1TLY) plotted across the continent. A "File" menu is open, listing options: "Upload single ADIF file", "Upload multiple ADIF files", "Import and process ADIF file from LOTW", "Download Google Earth KML file", "Download high rez .png image (300 most recent QSOs)", and "Export Columns".

The upload function is accessed via "File>Upload single ADIF file". Before we upload a file, we select to delete the existing QSO information:

QSOmap.org

Home Account File Maps Tools Donors FAQs LAT/LON Lookup Privacy Policy DX News Help

Select Language

Upload ADIF file from your log book

New Upload Process

1. Do not use the underscore "_" character in your .adi filename! That character has a special purpose in my ADIF processing.
2. Limit the number of QSOs in your ADIF file to no more than about 400 QSOs per upload. If you go over, you may not receive an e-mail which means that your upload timed out and only a portion of your file was processed. I use W3JZ's (Now a Silent Key) [ADIF File Splitter](#) on large ADIF files to create multiple files of 400 QSOs. Note: Use the Options menu to UNCHECK Syntax checking or FT8 mode will be rejected. I then use the multiple ADIF upload.
3. ADIF files are processed in the background. You will receive an email when the process finishes and will contain the processed and not processed QSOs.
4. **Important:** To add additional QSOs to your map, just upload the new QSOs. If you want to re-upload QSOs already uploaded, **DELETE** ALL your QSOs first.

Note: The lat/long for each call sign is calculated using the ADIF gridsquare. If the ADIF gridsquare is missing, the lat/long from QRZ will be used. I use the "country" from your ADIF file unless it is missing — then I use the QRZ country.

Please choose an ADIF file: so file selected

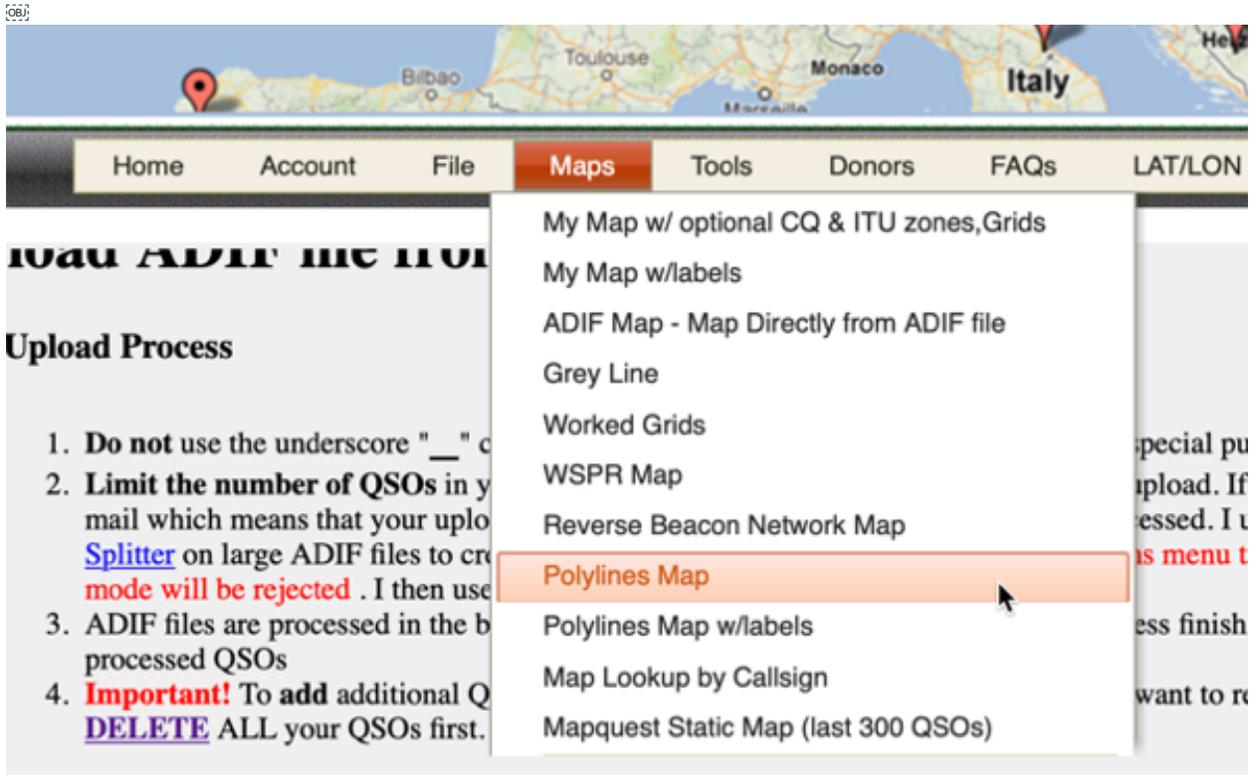
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Files currently in the Upload Queue

No files currently in the Upload Queue

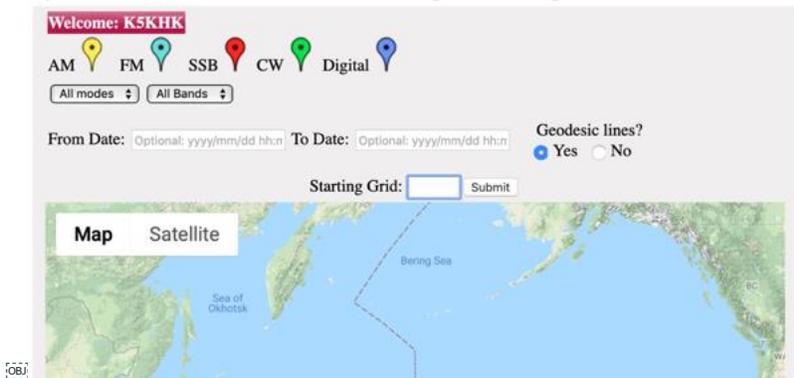
After confirming that we actually want to delete the list of QSOs, we need to select the upload function again. This time, we can pick the ADIF file and select to upload. Only the .adi file extension works, so if your logger exports .adif files, you need to rename them first. The logging program I use on my Mac uses the four-letter extension.

After the upload finishes, the map data is not yet available. Depending on the load on the qsomap.org server, it may take a while until the confirmation email arrives. When you try to display the map before the email arrives, you may get no QSOs on the map, or just a partial map. You can check the queue by going to the upload function again. Assuming the map data is available, the next step is to display the map by selecting Maps>Polylines Map (or Polylines Map w/labels if you want to see the callsigns at the end of the arrows). Qsomap.org will use the grid data from the ADIF file if you've saved that with your QSO records, and if that does not exist, the location provided by QRZ.com for a given call sign to place the arrow on the map. Our location needs to be specified on the page that opens when we select to create the map.



The lat/long for each call sign is calculated using the ADIF gridsquare. If the ADIF gridsquare is missing "country" from your ADIF file unless it is missing, then I use the QRPZ country.

Enter the location from where you operated as a six character grid square. If you don't know the grid square, you can look it up for example on this site: <https://dxcluster.ha8tk5.hu/hamgeocoding/>



After that, it's just a matter of potentially moving the map around so that the arrows are visible, and to zoom in so that the part of the map we are interested in is as big as possible, so that when we take a screenshot, we get the best possible resolution. I usually load the screenshot into Photoshop and apply a label with the park reference and the activation date in the upper left corner – just like in the first image in this article. Give it a try, it makes impressive maps.