Connect to the Radio JOVE Receiver at HAARP, Gakona, Alaska
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This article briefly describes how to connect to the Radio JOVE receiver that was installed on 7 August 2019 at the **High Frequency Active Auroral Research Program** (HAARP) facility near Gakona, Alaska. The receiver is a narrowband, analog, direct conversion receiver that uses a PC soundcard and Radio SkyPipe II software for detecting and logging solar and Jupiter radio emissions at approximately 20.1 MHz. The receiver is described at https://radiojove.gsfc.nasa.gov/telescope/rcvr_manual.pdf .

The Radio JOVE receiver is connected to a narrowband dual dipole HF antenna, which is described at https://radiojove.gsfc.nasa.gov/telescope/ant_manual.pdf . The antenna elements are oriented east-west and have 20 ft height with a 135° phasing cable. This results in a main lobe elevation angle of about 33 degrees and 9.5 dB gain to the south. The configuration is a compromise and has a significant backlobe.

Begin by downloading and installing the free Radio SkyPipe II windows application software available at http://radiosky.com/skypipeishere.html . A complete guide for installing and using Radio SkyPipe II is available at http://www.radiosky.com/skypipehelp/skypipehelpindex.html .

Open the Radio SkyPipe II application. When run the first time, a window will pop-up reminding the user to fill-in the Identity information. Use the Help webpage noted above.

Click on the Mode menu and select Client. A list of Radio SkyPipe II servers will appear near the bottom of the window (right). Scroll through the list to find *HAARP Radio JOVE...* and select it.

Next, click the *Connect* button near the upper-left corner of the window.
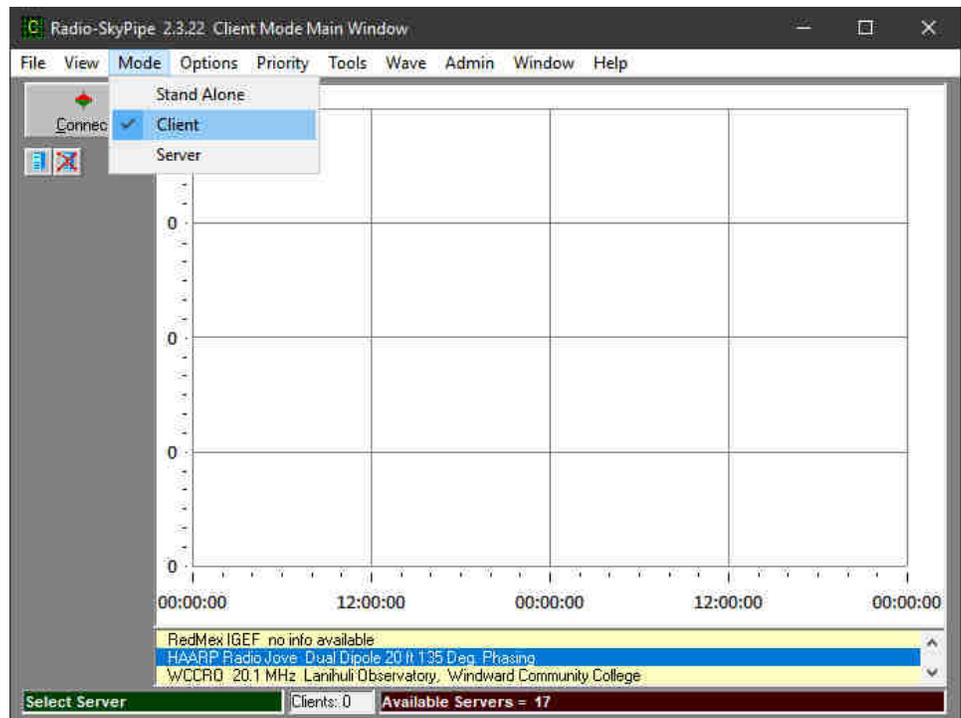
When a successful connection has been established with the Radio SkyPipe II server at HAARP, the button will change to *Disconnect* and a trace will start to move from left-to-right across the chart. A label will be placed at the top that shows *Client Connection* to the HAARP server (right).

To adjust the chart vertical scale, use the vertical expand and contract buttons on the left toolbar.
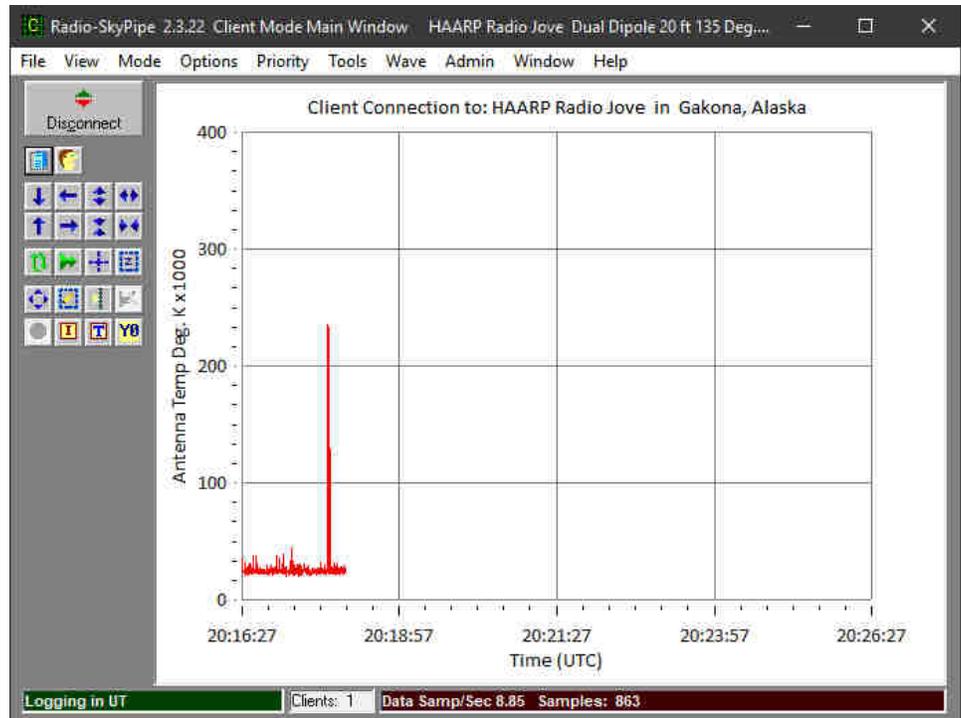
To disconnect, click on the *Disconnect* button. The chart may be manipulated using the controls on the left toolbar. The server list may be refreshed by clicking on the button directly below the *Connect/Disconnect* button.

All aspects of the software operation and chart display may be adjusted using the Options menu (below). Refer to the Help webpage for a description of each tab.

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