

## Using the Dwingeloo Web SDR for meteor radar

The Dwingeloo radio telescope in the Netherlands has several software defined radio receivers that are dedicated to meteor radar, these can be accessed using a web browser that is capable of rendering HTML 5 such as Google Chrome, Firefox, Safari or Microsoft Edge (Windows 10).

Either search for “Dwingeloo Web SDR” or type <http://websdr.camras.nl:8901/> into the address bar.

Once the page has loaded you should be able to hear the white noise from the receiver. However Chrome requires the audio from specific websites to be enabled - <http://www.websdr.org/faq.html>.

Once the page has loaded. scroll down to the box below the blue waterfall display and then select the Graves button and enter the frequency of 143049 as shown:

**Frequency:**  kHz

Band:  70cm EME  2m  Graves  6m

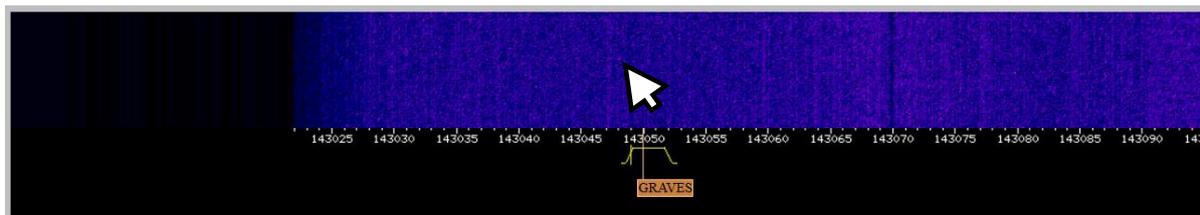
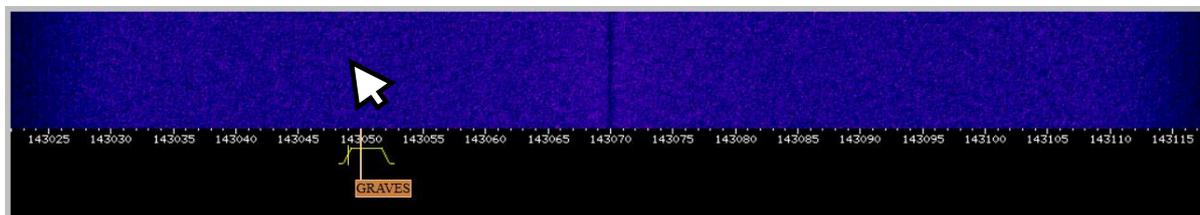
Or tune by clicking/dragging/scrollwheel on the frequency scale.

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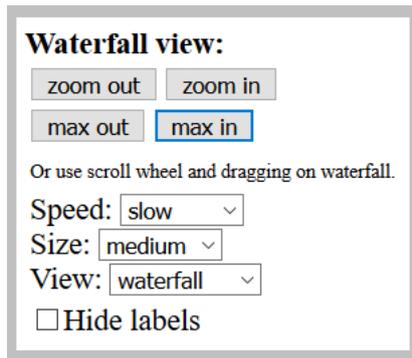
**Memories:**

(new)

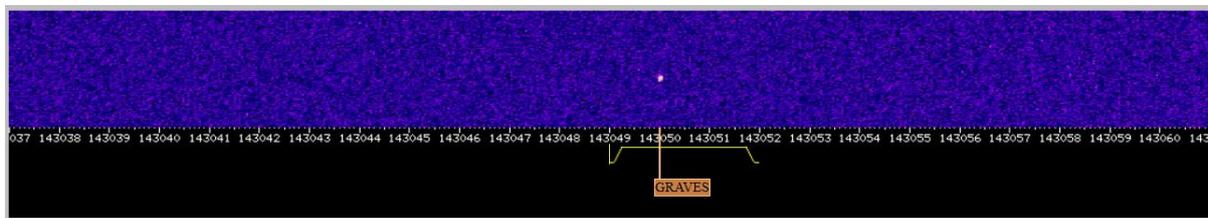
You can zoom in to active portion of the display by first positioning the mouse over the blue waterfall display and then dragging the Graves frequency to the centre of the waterfall as shown.



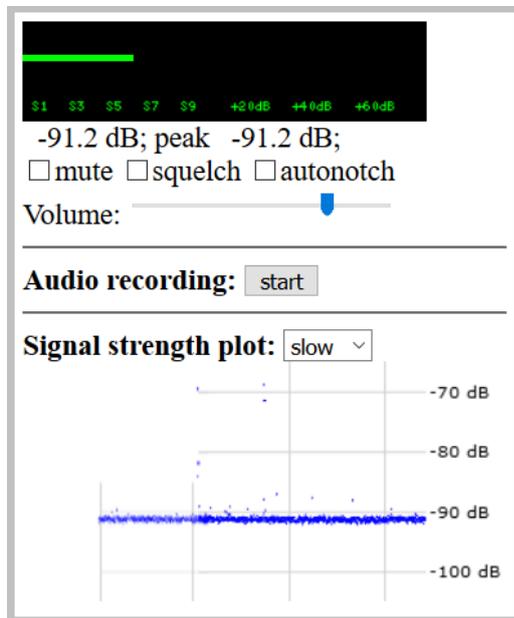
When using the zoom panel click “max in” and then centre the display by dragging as before.



This display cannot be zoomed in any finer than this, however it is still possible to identify individual meteor reflections, you may also see a continuous line which is due to aircraft reflections.



The signal strength dialogue can be used to produce a rudimentary strip chart which shows the background of approximately -90dBm from the thermal noise of the receiver and an increase in signal when an aircraft or meteor echo is received.



It is possible using software such as Virtual Audio Cable (<https://vac.muzychenko.net/en/>) to redirect the audio signal from one application to another such as Spectrum Lab which can then be used to provide a finer frequency analysis – this will be presented in a separate document.

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19/04/2020