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RTL-SDR (RTL2832U) and software defined radio news and projects. Also featuring Airspy, HackRF, FCD, SDRplay and more.

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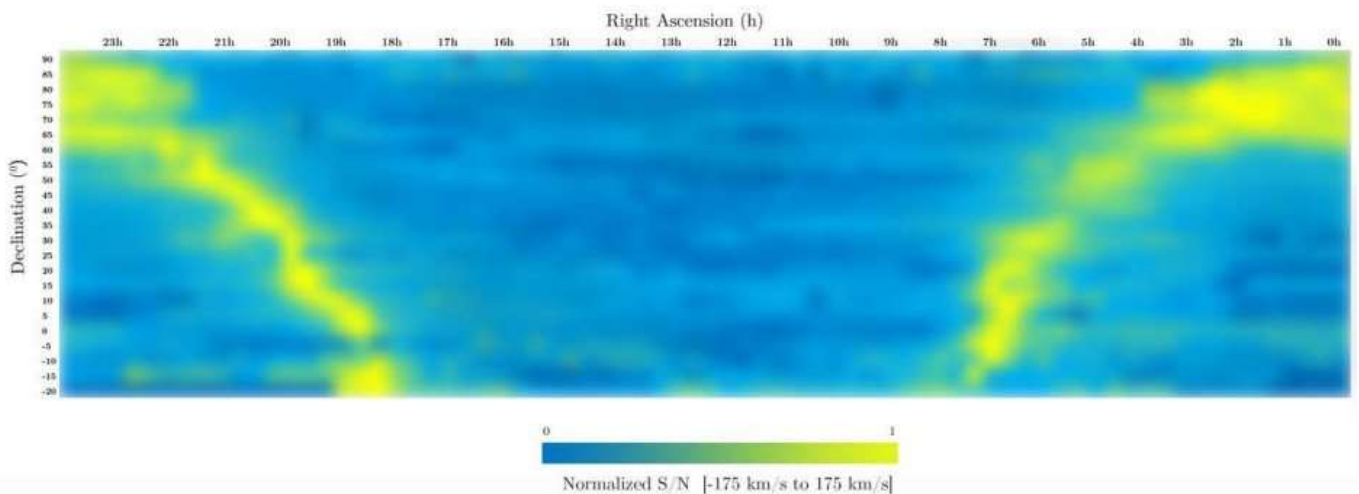
December 2, 2020

Job's Radio Telescope: Hydrogen Line Northern Sky Survey with RTL-SDR

We've posted about Job Geheinau's RTL-SDR radio telescope a few times in the past [1] [2] [3], and every time his results improve. This time is no exception as he's created his highest resolution radio image of the Milky Way to date. We have uploaded his [PDF file explaining the project here](#).

Job used the same hardware as his previous measurements, a 1.5 meter dish, with 2x LNA's, a band pass filter and an RTL-SDR. Over 72 days he used the drift scan technique to collect data in 5 degree increments. The result is a map of our Milky Way galaxy at the neutral Hydrogen frequency of 1420.405 MHz.

JRT - Job's 1.5 meter Radio Telescope - Northern Sky HI (Neutral Hydrogen) Survey
derived from 1656 spectra 5 minutes each.



Job Geheinau, The Netherlands - October/November 2020

JRT - Northern sky Hydrogen Line Survey with RTL-SDR

This image is quite comparable to an image shown in a [previous post](#) which was created by Marcus Leech from CCERA who used a 1.8m dish and Airsty.

If you're interested in exploring our Galaxy with an RTL-SDR via Hydrogen Line reception, we have a [simple tutorial available here](#). The ideas presented in the tutorial could be adapted to create an image similar to the above, although with lower resolution.

Related Posts:

1. [A Hydrogen Line Radio Telescope made from a Homemade Helical Antenna and RTL-SDR](#)
2. [A Hydrogen Line Telescope Made from Cereal Boxes and an RTL-SDR](#)
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Written by [admin](#) Posted in [Antennas](#), [Applications](#), [Radio Astronomy](#), [RTL-SDR](#) Tagged with [hydrogen line](#), [radio astronomy](#), [rtl-sdr](#), [rtl2832](#), [rtl2832u](#)

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1.

[December 2, 2020 - 8:50 am](#) [Gamma-based Researchers](#)

Another blog that deals with similar topics is <http://physicsopenlab.org>

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Jun 23, 04:06

Arib on [RTL-SDR Blog V.3. Dongles User Guide](#): "Hi I have the V3 version of rtl sdr and I want to power a LNA specifically a nooelec sawbird+..."

Jun 20, 21:46

Jay Bree on [Photos of the MSi.SDR Dongle: A New SDRplay RSP1 Clone](#): "I can't see how anyone can make anything with 30% fallout. That's beyond terrible since about 1981."

Jun 20, 12:53

[Wong Lee](#) on [Photos of the MSi.SDR Dongle: A New SDRplay RSP1 Clone](#): "Sometimes the hard work and self-innovation in an exiting domain acts like acid on the skin. 😊"

Jun 20, 05:27

[Jeff Burris](#) on [RTL-SDR Tutorial: Receiving NOAA Weather Satellite Images](#): "Thanks so much. Everything is updating now, between pouring through settings once again and also a server appeared to be..."

Jun 18, 20:20

Anonymous on [RTL-SDR Tutorial: Receiving NOAA Weather Satellite Images](#): "You may have trouble when updating the keplers since some of the satellites have stopped operating. As of 2022 turning..."

Jun 18, 03:40

Lester Hinton on [RTL-SDR Tutorial: Cheap ADS-B Aircraft RADAR](#): "Can you also hear the airplanes I hear nothing. It is not muted."

Jun 17, 18:18

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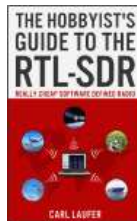
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What is RTL-SDR

The RTL-SDR is an ultra cheap software defined radio based on DVB-T TV tuners with RTL2832U chips. The RTL-SDR can be used as a wide band radio scanner. It may interest ham radio enthusiasts, hardware hackers, tinkerers and anyone interested in RF.

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