RSS 2.6.0

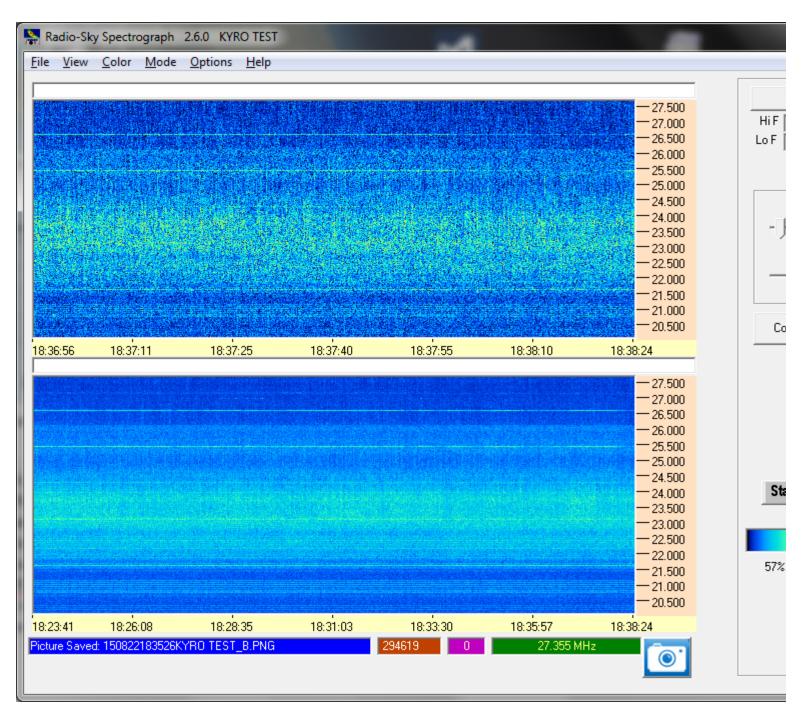
Subject: RSS 2.6.0 From: Jim Sky <radiosky@radiosky.com> Date: 08/22/2015 14:04 To: Richard Flagg <rf@hawaii.rr.com>, Wes Greenman <jupgazer@windstream.net>, Francisco Reyes <reyes@astro.ufl.edu>, Baptiste Cecconi <baptiste.cecconi@obspm.fr>, "Whitham D. Reeve" <whit@reeve.com>, Dave Typinski <davetyp@typnet.net>, Jim Brown <starmanjb@gmail.com>, Andrew Mount <capeorion@gmail.com>, Jim Thieman <james.r.thieman@nasa.gov>, Chuck Higgins <chiggins@mtsu.edu>, "Fung, Shing F. (GSFC-6730)" <shing.f.fung@nasa.gov>, Thomas Ashcraft <ashcraft@heliotown.com>

Hi Suggerettes,

I have uploaded a new version of RSS that we should currently think of as a Beta. This version has enough changes in it that I made the jump from 2.5.x to 2.6.0. I would appreciate any feedback you can give.

http://radiosky.com/spec/Spectrograph_Update_2_6_0.exe

- Support for the new dual polarization switch. This requires the hardware upgrade from Dick to be useful.
- Dual polarization required cloning the Offset and Color Gain controls. These now appear in separate boxes in the control area, no more right clicking the label to switch between targets. Right clicking the sliders still is necessary to get the text box for manual entry. The new controls also apply to Dave T's DPS receiver.
- When using the dual controls you have the option to Link them so that color gain and offsets for both channels are identical and determined by a single set of sliders.
- Normalization button is gone. You can still normalize by going to Colors / Normalize or by right clicking on the chart and selecting the option.
- There is a new Radio option called RTL Wide Spectrum (RTLW). This uses a external program (included in the RSS update) written by Raydel CM2ESP. Assuming you have successfully installed the Zadig drivers the way you do for SDR#, you don't have to install anything else. Just hook up your RTL dongle receiver and go. You do NOT run RTL Bridge to use RTLW. There are some options that you will need to configure for RTLW and these are accessed by clicking the prominent button. Configurations only affect things when Start is pressed.



Notice that Raydel has eliminated the problem of banding caused by sensitivity drop off at the edges of the the stacked spectrums. This is a huge improvement. Three spans are offered 7.68, 15.36, and 30.72 MHz! You need to select the lower frequency and the Spectrum Width to get the range you want. Two channel options are available. The detection method is something that we need to look at to better understand. Right now I am just using the option that he calls Voltage because the Power option has much less sensitivity. There is a Post FFT Gain multiplier that can be experimented with. The Tuner Gain should probably be run at the lowest level that produces an acceptable result to prevent flaring of the spectra when a strong signal is present. After pressing Start, there is a 5 second delay while Raydel's program fires up and connects to the dongle.

Note that some of the receiver names under Options/ Receiver have changed for clarity.

Aloha, Jim S --Jim Sky http://radiosky.com