Subject: SDRPlay2RSS update
From: Nathan Towne <nathan56@frontier.com>
Date: 06/22/2016 09:44
To: Dave Typinski <davetyp@typnet.net>
CC: Jim Sky <radiosky@radiosky.com>

Dave,

I've updated the SDRPlay2RSS program and documentation.
I've rationalized how the signal is scaled in processing, as I said I would. The offset and scaling parameters are now decoupled from both the ADC full scale and the RSS full scale (having to do with bit counts), with the result that practical values of these parameters are of order 1. You had earlier talked about relating signal values and these parameters to physical values. At this point physical values and calibrations are outside the scope of the receiver software. Note that one would need to standardize a number of SDRPlay receiver settings to implement a calibration. Something to consider is adding metadata like the BZERO, BSCALE, and BUNIT metadata of FITS to RSS, which would provide minimal infrastructure for calibrations.

I've also added to the status display dropped sample counts, as per Jim's request. It works in both streaming and integrating modes.

It is unlikely I'll implement the PFB in streaming mode, as this mode does not use multiple threads. But I'll add the window function soon.

Nathan