TWB Gage Signal File to RSS SPS File Converter

Analysis run date: 09 Dec 2013 12:51:44 Local Analysis complete: 09 Dec 2013 12:53:54 Local

Data Conversion Analysis Report

Observation start time: 09 Dec 2013 17:04:10 UTC Duration of observation: 1.96 real-time seconds

Data directory: R:\Observation Records\AJ4CO Observatory\TWB\Gage\20131209 Test\2013–12–09 Test 4 – DPS side B 60 kHz IF HP 461 at 40 dB down input_CH01\Folder.00001 Number of digitized input files: 5

First input filename: AS_CH01–1.sig Last input filename: AS_CH01–5.sig

Digitized burst file size: 2096961 samples per file Digitized burst file sample rate: 10 MHz Digitized burst file duration: 209.696 ms Digitized burst cycle time: 392 ms Dead time between data bursts: 182.304 ms Digitization coverage: 53.4939 percent

FFT bins: 2048 FFT sweep time: 204.8 μ s FFT sweeps per digitized data burst: 1023 Dead FFT sweeps between each digitized data burst: 889 FFT sweeps per digitized data burst including dead time padding: 1912 Total FFT sweeps for 5 input files, including padding: 9560

> FFT BW: 5 MHz FFT RBW: 4.88281 kHz FFT Windowing: None (uniform window) FFT display low frequency: 2.8 MHz (FFT bin ± 574) FFT display high frequency: 4.8 MHz (FFT bin ± 984) Total FFT bins exported to SPS file: 411

 $\begin{array}{c} \mbox{DC offset per FFT element zero: 12.5643 μW$ (last FFT sweep of last data file) \\ \mbox{DC offset applied to FFT before calculating dBm: 100 μW$ \\ \mbox{DC offset applied to FFT after calculating dBm: 11 dBm$ \\ \mbox{SPS file detector sensitivity: 50 ADC counts per dB} \\ \mbox{DC offset applied to SPS data before export to SPS file: 1000 ADC counts} \end{array}$

SPS output file name: AJ4CO–TWB–20131209170410.sps SPS data file sweep rate: 4882.81 sweeps (FFT spectra) per second SPS file start time: 09 Dec 2013 17:04:10.000 UTC SPS file end time: 09 Dec 2013 17:04:11.957 UTC