TWB Gage Signal File to RSS SPS File Converter

Analysis run date: 09 Jan 2014 16:44:26 Local Analysis complete: 09 Jan 2014 17:50:18 Local

Data Conversion Analysis Report

Observation start time: 30 Dec 2013 10:10:32 UTC Duration of observation: 59.976 real-time seconds

Data directory: R:\Observation Records\AJ4CO Observatory\TWB\Gage\20131230 Io-B\2013-12-30_16_CH01\Folder.00001 Number of digitized input files: 153 First input filename: AS_CH01-001.sig Last input filename: AS_CH01-153.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 μs 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 153 input files, including padding: 292536

> 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

 $\begin{array}{c} \mbox{DC offset per FFT element zero: 10.3147 μW (last FFT sweep of last data file) } \\ \mbox{DC offset applied to FFT before calculating dBm: 100 μW } \\ \mbox{DC offset applied to FFT after calculating dBm: 11 dBm } \\ \mbox{SPS file detector sensitivity: 50 ADC counts per dB } \\ \mbox{DC offset applied to SPS data before export to SPS file: 1000 ADC counts } \end{array}$

SPS output file name: AJ4CO–TWB–20131230101032.sps SPS data file sweep rate: 4882.81 sweeps (FFT spectra) per second SPS file start time: 30 Dec 2013 10:10:32.000 UTC SPS file end time: 30 Dec 2013 10:11:31.911 UTC