

Columbus GLACIER-3 Quantify and Qualify

Description	
Sensor	SAMS 121f08 1000.0 sa/sec, 400.0 Hz
Location	COL1A1, ER3, Seat Track near D1
Plot Type	RMS vs. Time (73 < f < 80 Hz)

Steady State Median Values

<u>Condition</u>	<u>RMS (ug)</u>
off	52.5
on	135.8

Notes:

- This plot of RMS acceleration versus time shows a temporal zoom-in tight around the span of the humidity duty cycle starting at about GMT 03-Mar-2014,14:41:42, along with a spectral zoom-in between 73 and 80 Hz.
- The on/off signature seen here corresponds to what looks like red stitching on the previous spectrogram zoom-in plot between 75 and 80 Hz on spectrogram.
- We see from the square wave nature of this RMS plot the regulation that this equipment provides, presumably preparing for some specific sample storage.
- There are time-axis shows ticks at every tenth cycle, starting at 14:41:42 and like clockwork, ten cycles last 40 minutes between successive ticks, so there was a cycle every 4 minutes.
- At steady state, there is a difference of about 83 ugRMS for this frequency band.

Regime:	Vibratory
Category:	Equipment
Source:	Columbus GLACIER-3

