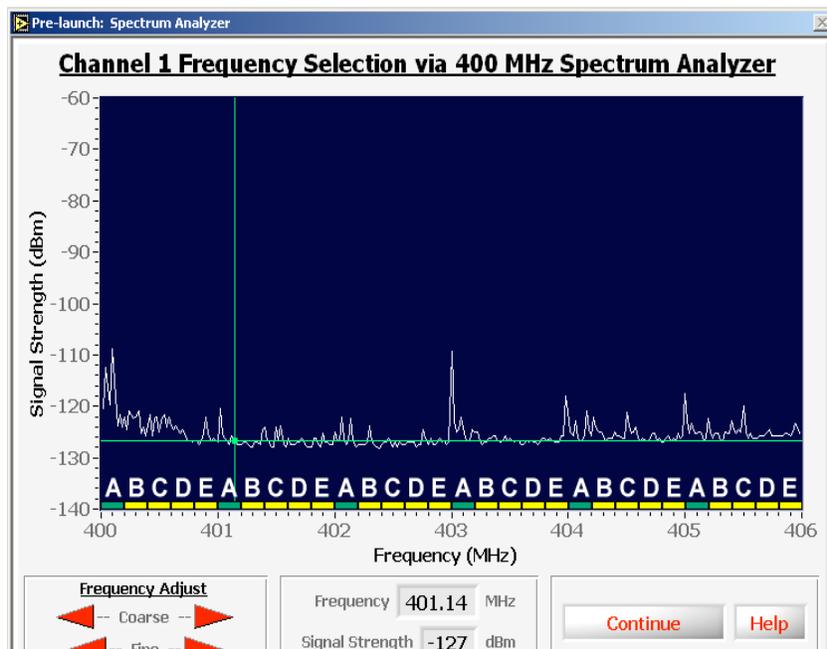


## PREDICT/GRIP/IFEX Sounding System Frequency Assignments

This summer, alongside the typical tropical cyclone reconnaissance activities there will be 3 adjunct research projects. PREDICT is a NSF-sponsored research program using the NSF/NCAR Gulfstream V. NASA/GRIP will fly the DC-8 and the GlobalHawk, and NOAA/HRD will use the AOC fleet during IFEX-2010. The NCAR GV will be based in St Croix, USVI from 15 Aug- 30 Sept. The NASA DC-8 will operate from Fort Lauderdale, FL from approximately 15 Aug to 25 Sept 2010. The GlobalHawk will be based out of Dryden Field, California and can be in flight for 30 hrs. The areas of operations is shown on the map at the end of this document. Because summer 2010 tropical cyclone flight operations may require simultaneous dropsondes from the various airborne platforms, it is necessary to assign frequency blocks to minimize signal interference in the 400 MHz band.

NCAR-designed sounding systems software offer a common user interface for the selection of dropsonde frequencies by the operator. The proposed scheme divides the 400 MHz frequency band into five Blocks, labeled A, B, C, D and E. For PREDICT/GRIP/IFEX, each NCAR sounding platform will have assigned frequency block. A frequency Block consists of six 200 KHz frequency segments spaced evenly across the band. In the example shown below, a platform has been assigned to frequency Block "A" which is highlighted by the green segment markers at the base of spectrum display. Segments not assigned to this platform are shown in yellow. When an airborne platform has four soundings operating simultaneously, four of the six green segments will be in use.



Frequency Block A example.

## Summer 2010 Proposed Sounding System Frequency Assignments.

Frequency assignment / type of sonde	Platform
Block <b>A</b> : RD93/94 dropsonde	USAF WC-130J (TEAL)
Block <b>B</b> : RD94 dropsonde	NOAA WP-3D (N42RF/43RF)
Block <b>C</b> : RD94 dropsonde	NCAR Gulfstream V (N677F) NASA DC-8 (817)
Block <b>D</b> : RD93 dropsonde	NOAA Gulfstream IV-SP (N49RF)
Block <b>E</b> : GH dropsonde	NASA/NOAA GlobalHawk

## PREDICT/GRIP/IFEX Domains

