



Argonne
NATIONAL
LABORATORY

... for a brighter future

Status of The Radar Wind Profiler: Digital Upgrades

Richard L. Coulter

Environmental Science Division (EVS)



U.S. Department
of Energy



A U.S. Department of Energy laboratory
managed by The University of Chicago

Radar Wind Profiler

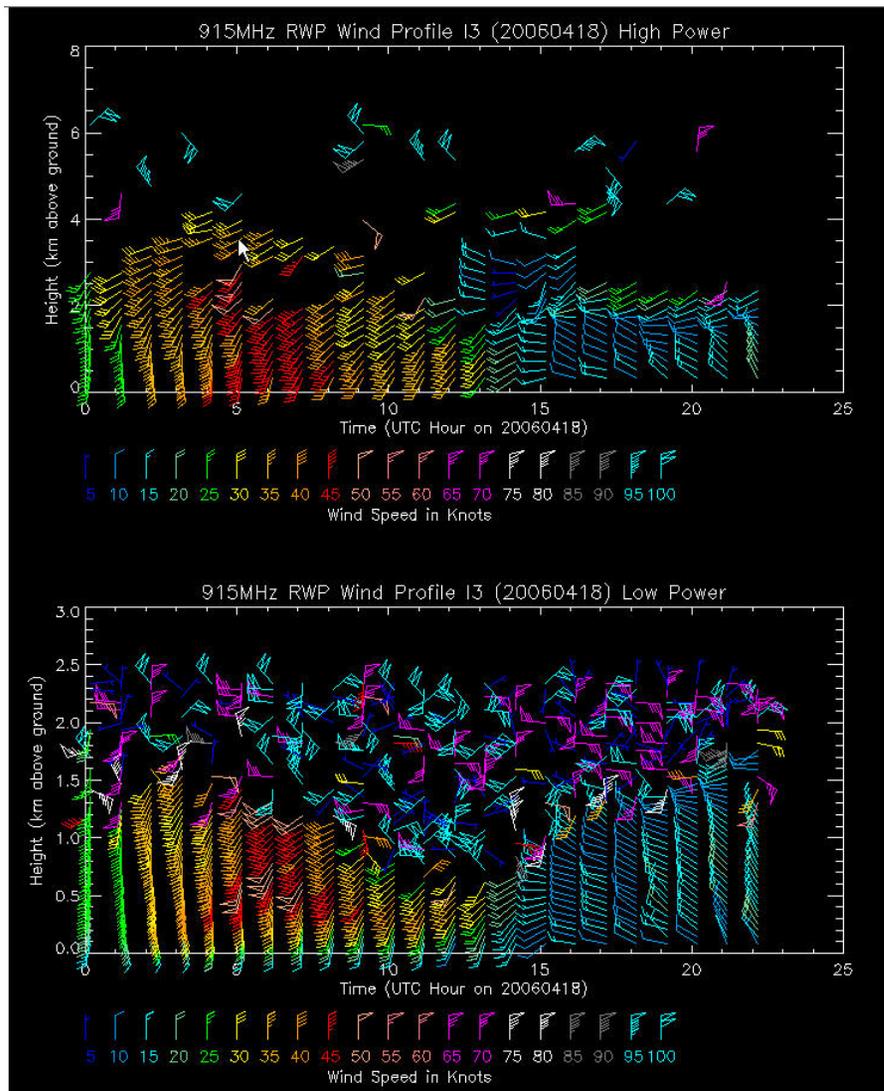
- Digital Upgrades installed at SGP Central Facility and Meeker (26, 27 September, 2006)
- Replaces old Interface and Receiver
- Replaces previous computer with new, 'humongous' beast
- Replaces previous dsp board
- Upgrades Operating System to LAPXM v 2.3.1.0

- Upgrade remaining facilities this year (NSA in the works...)

Added/New Capabilities

- Peak Picking Routine: Evaluates multiple peaks in the spectral data
- Wavelet Transform: Enhances bird detection and stationary echoes
- Coincidence of Tilted and Vertical range gates
- Sample data in the time domain
- Provide spectral data hourly
- Eliminate/reduce 60 Hz noise (??)

Before (06/04/18)



After (06/10/21)

