# NOAA Effort

- NOAA observational assets
  - Ship
  - Aircraft
  - Island-based systems

- NOAA/OAR modeling research
  - Stratocumulus - Shallow convection
  - Data assimilation
  - Stochastic parameterization
  - Air-sea interaction

- NOAA/EMC
  - Collaborate on advances in operational models

# Suggested NOAA Observational Assets*

Ship-based observations			
Ship Class	**System**	**Group**	**PI**
II (180 – 200 ft)	Air-sea flux	PSD	Blomquist
II	Sondes	PSD	Cox, Hartten
II	Ocean mixing	University Wash	Thomson/Thompson
I (250 280 ft)	Cloud Obs	PSD	Fairall/De Szoeke
I	Doppler Lidar	CSD	Brewer
I	Aerosols	PMEL	Quinn
I	C-band radar	CSU	Rutledge
I	UAS	PMEL	Quinn
I	Flux buoys	WHOI	Edson/Clayson

Aircraft-based observations			
Aircraft	**System**	**Group**	**PI**
P-3	TDR	AOML/PSD	C. Williams
P-3	AXBT	NRL	Chen/Shinoda
P-3	Cloud microphysics	PSD	Fairall
P-3	Drop Buoy	PSD	De Boer
P-3	Wband cloud radar	PSD	Fairall
P-3	WSRA wave spectra	PSD	Walsh
G-4	Dropsonde	AOML/PSD	Bariteau/Barsugli
G-4	TDR	CSD	C. Williams

*NOAA process for requesting aircraft and ships. Have made requests
for Ronald H. Brown, G-4, and P-3
Groups and PI's are strawmen

# NOAA Ship Ronald H. Brown

SST VOCALS 2008
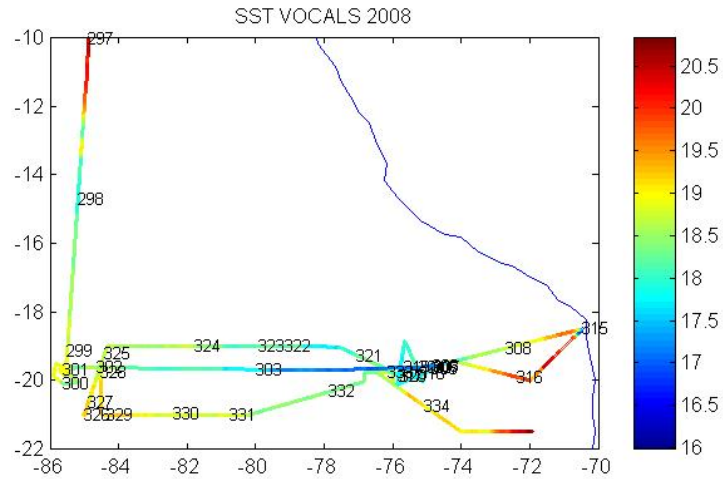
For this study, the Brown fielded one of the most comprehensive sets of observing systems ever assembled on a research vessel. The ship is festooned with 6 seatainer laboratories and all manner of instruments including five meteorological radars, a Doppler Lidar, four different ocean profiling systems, and a variety of chemical, aerosol, and biological measurements (Fig. 1). Some 40 scientists from have participated in two deployment legs. The science party includes representatives from three NOAA labs, 13 Universities, and three research laboratories in Chile and Peru.
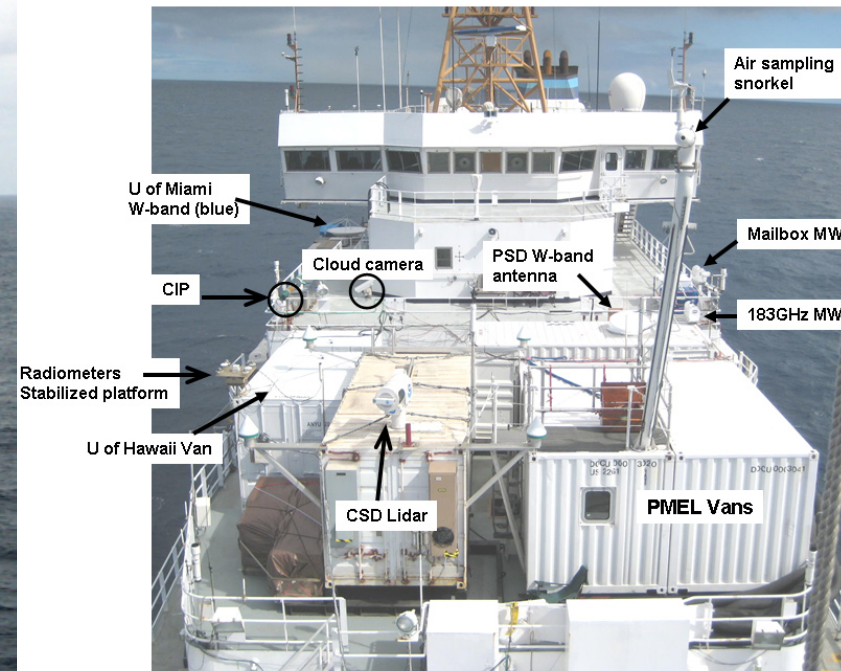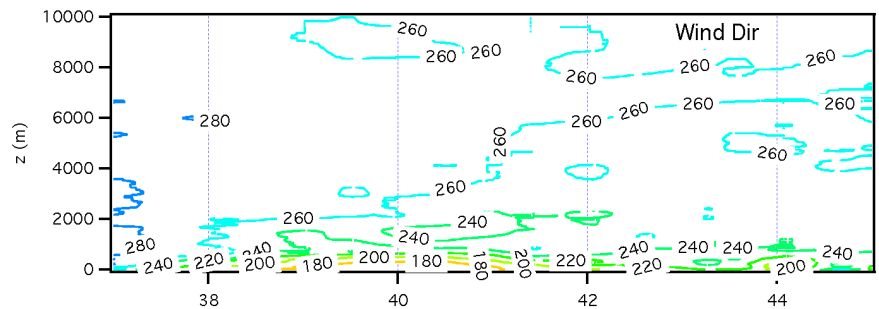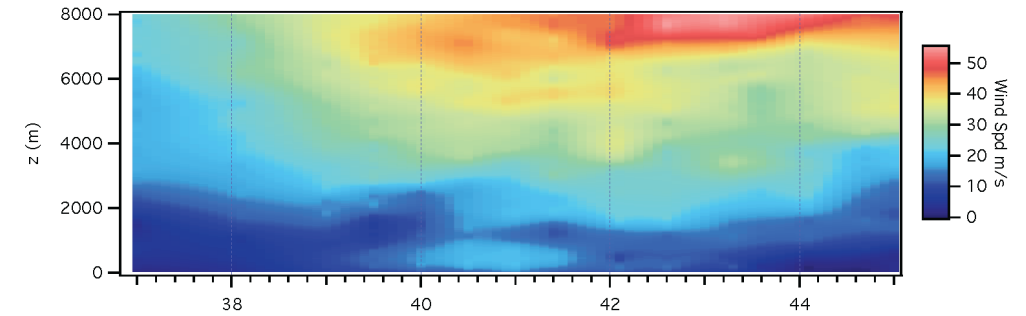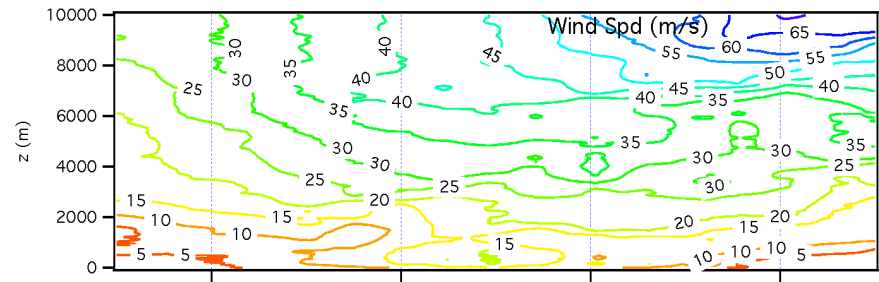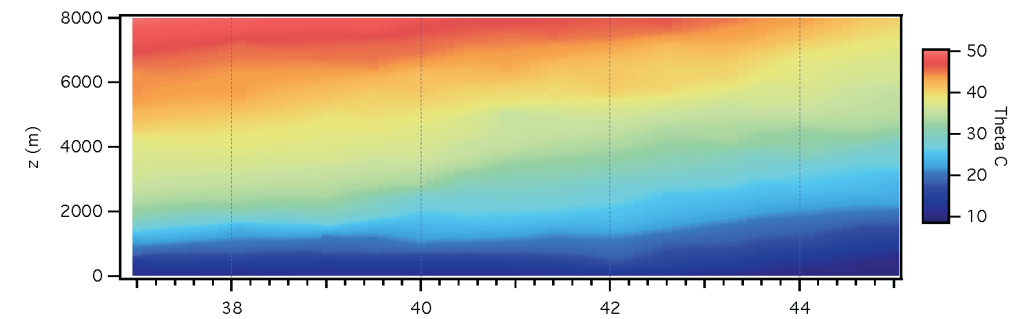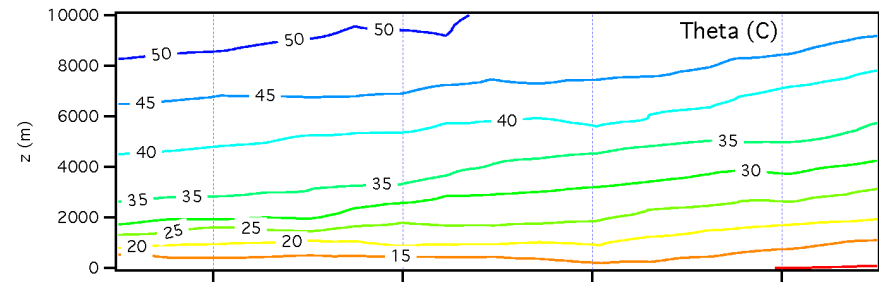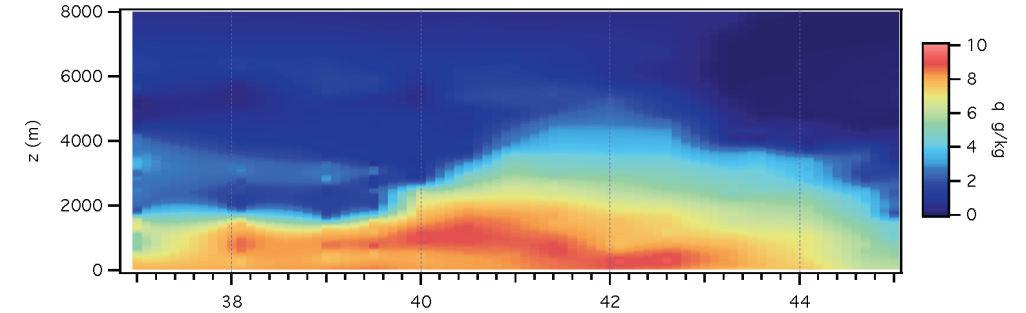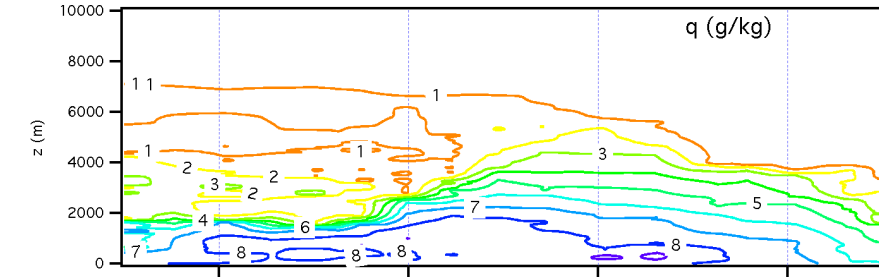
G4 Dropsonde Flight

8 hr flight, 60 degrees total
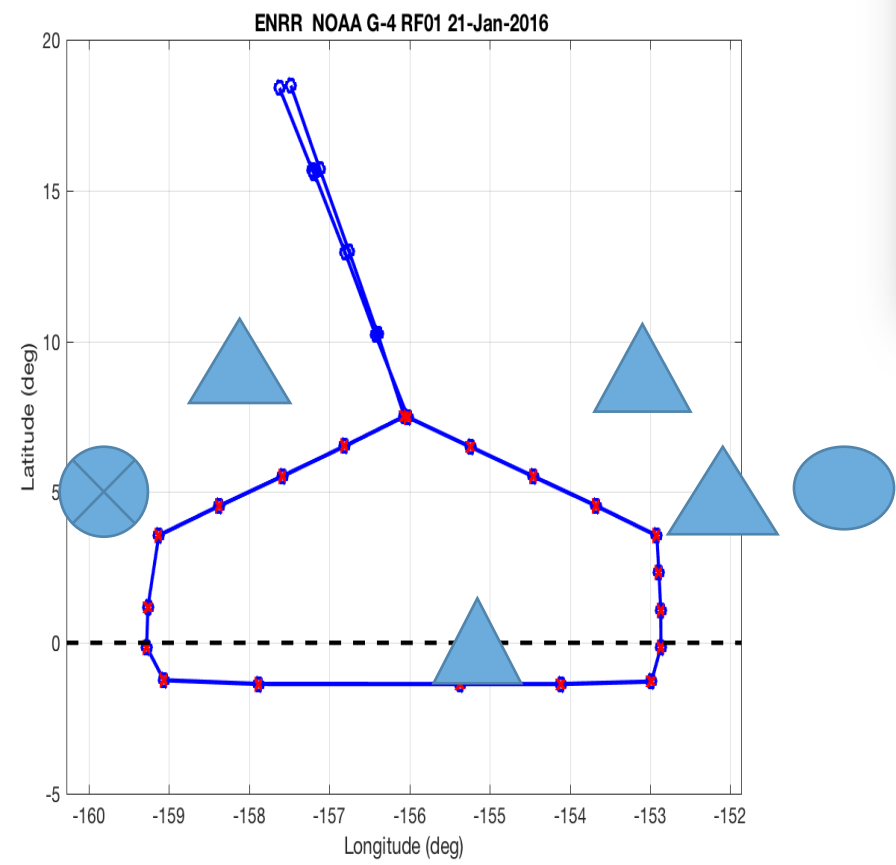
February 12 Line of 15 sondes
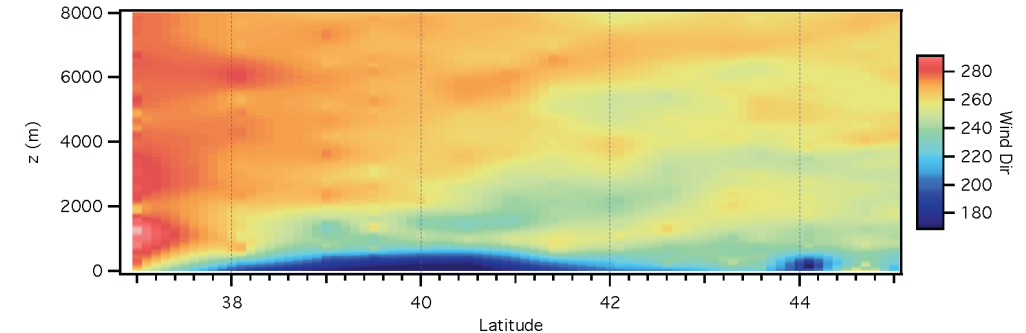
NOAA P-3

- Cloud Physics probes
- Tail Doppler Radar
- SFMR – 10m wind speed, rainrate
- WSRA – Wave properties, Mean square slope, rain rate
- Aircraft data system (navigation, T, q, U, etc)
- Dropsondes
- AXBT, AXBuoy
- PSD Wband radar