# Plan for COSAT (CS99) data gathering and data distribution.

(Version 4 - 990730)

## A. Non-UW data sources.

While most of the data of interest will be archived at various places, real-time capture of the main products is needed for quick-look use. Larry Oolman will set up a procedure for recording these data in Laramie.

The following items constitute the base set:

- 1. GOES 1km VIS, .....
- 2. AVHRR ????
- 'Low cloud' images. These are two-wavelength IR images at night and VIS images during the day. The source is: <u>http://www.nrlmry.navy.mil/sat-bin/lowcloud.cgi</u>, selecting the Oregon area. Full 24 h coverage for the entire period is desirable.
- COAMPS model output <u>http://www.nrlmry.navy.mil/nrl-bin/COSAT/cosat.cgi.</u> Model runs are made each morning and are expected to be available by 8 am PDT. Fields of main interest are: Nest 3; 0 h – 500 m winds, 500 m temp and RH, cloud base and cloud top.
- ORST model runs <u>http://ca.engr.orst.edu/~barboup/Coast1.html</u>. Fields of interest are 'vertically integrated liquid water' at 00Z and 12Z.
- 6. DRI analyses: ????
- Newport, OR profiler <u>http://www7.etl.noaa.gov/</u>RTdata/radar/images/npt /npt\*\_ras.gif. Save image once a day.
- Newport, OR surface site -<u>http://www7.etl.noaa.gov/</u>RTdata/surfmet/images/npt/npt\*\_met.gif. Save once a day.
- 9. Sea-surface temperature -

Additional sites of interest:

- 10. TAMS model visualization http://wizard.nrlmry.navy.mil:7676/DaFWA.
- 11. ORST sea surface data http://www.oce.orst.edu/marine\_obs.shtml.

#### B. UW hard-copy quick-look on-site.

- 1. Listing of major parameters from in-situ probes at 6-s intervals.
- 2. Flight notes, photos and video
- 3. Total flight summaries of key state parameters.
- 4. Flight track and radar beam maps.
- 5. B&W images of uncalibrated radar reflectivity.

## C. UW quick-look output on web.

This material will be placed on the WCR web page under Project CS99. Data will be generated at the field site and prepared in a format ready to be posted.

- 1. Project page with calendar.
- Daily flight track in COAMPS coordinates, and time-altitude plot. Date and time to be given as 14 digit number YYYYMMDDHHMMSS - this date format will be added to the processed K/A data. Coordinates are lat. and lon. in decimal degrees, altitude in meters.
- 3. Radar beam map in same format as flight track.
- 4. Sample photo and sample radar image.
- 5. Flight notes.
- 6. Sounding in terms of T, thetav, RH.
- 7. Vertical profiles of mean and range of *LWC*, *N*, *r*<sub>eff</sub>, **drizzle rate**, **winds**. Integrated *LWP* inserted on *LWC* plot. Calculated optical depth? Radiation parameters?
- 8. Vertical plane projections of *T*, *LWC*. Orientation of plane defined by wind at mid-cloud level.

## D. UW first-look data distribution.

These data will be placed on the anonymous ftp site on 'screamer'.

No radar data will be included in the first-look set.

KingAir data will be given at 15-second intervals.

- 1. Coordinates: lat & lon in decimal degrees.
- 2. Time (14 digits)..
- 3. alt in meters, T, thetav, RH, LWC, N, r<sub>eff</sub>, drizzle rate, winds.

## E. UW archived data.

All archived data will be on 8 mm Exabyte tapes in netCDF files.

- 1. KingAir data at 1 Hz and at 25 Hz.
- 2. Calibrated radar reflectivity and radial velocity.
- 3. AVAD analyses for selected flight segments.