



NOAA ARL Monthly Activity Report



July 2000

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Details of items identified in the Table of Contents and previous Monthly Activities Reports can be found at <http://www.arl.noaa.gov/pubs/monthly/>.

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Highlights

1. *NOAA Awards*. Congratulations to the following ARL staff members:

NOAA Gold Medal - Tilden Meyers (Oak Ridge) “for contributions to the field of air-surface exchange studies by significantly improving both measurements and predictions.”

NOAA Bronze Medal - John Augustine (Boulder) “for contribution in the field of Climate and Weather Forecasting Observing Systems.”

NOAA Bronze Medal - Timothy Crawford, Jerry Crescenti, and Jeff French (Idaho Falls) “for design and application of a novel airborne instrument system to advance scientific knowledge of air-sea exchange.”

NOAA Bronze Medal - Frank Aikman, Thomas Gross, John Kelley, Jeff McQueen (Silver Spring), and Laurence Breaker “for advancing the production and delivery of nowcasts and short-term forecasts of coastal atmospheric and oceanographic information for the Chesapeake.”

2. *Western Range Fires.* The first major wildfire outbreak of the summer took place at INEEL on 26-29 July. Two fires were started by lightning on 26 July, and the INEEL Emergency Operations Center (EOC) was activated that evening. Both fires appeared to be under control by early the next morning, but one of them flared up again on the afternoon of the 27th, when the winds picked up to about 10 m/s. The winds also transported a third fire, which had started on adjacent Bureau of Land Management land, to the southern boundary of INEEL. These fires were not fully contained until the 29th. FRD provided meteorological support in the EOC throughout the event. The fires also passed by two of the towers in the INEEL Mesonet. The plot below shows the 5-minute-average temperature at 2 m AGL during the period the fires passed the LOS and TRA towers. Both towers appear to have survived without damage.

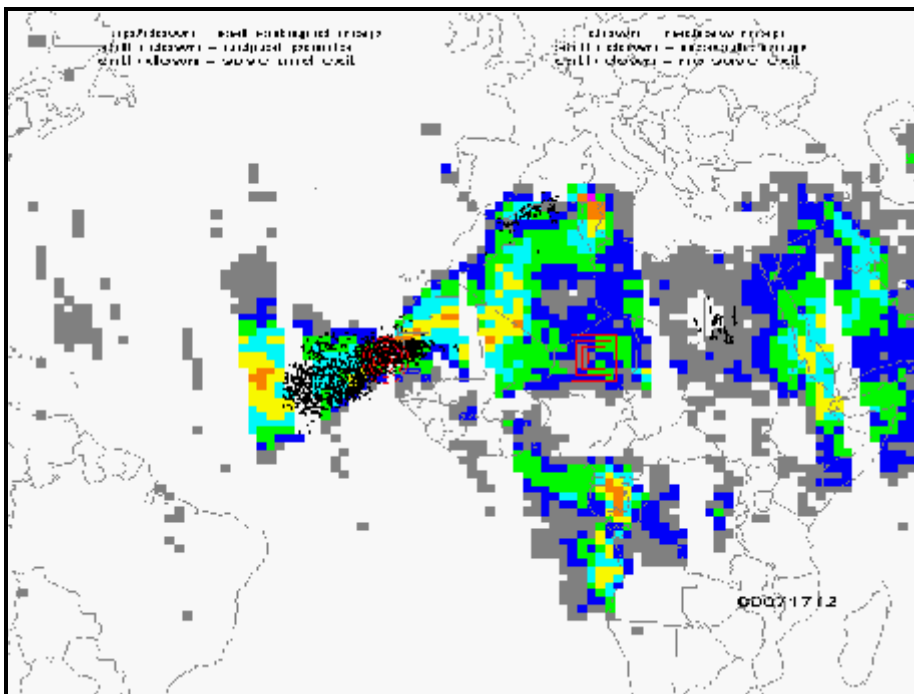
Work is continuing on developing a wildfire modeling capability at FRD. The State of Idaho has developed a land-use map of the state with about 30 m resolution. A digital copy of this map has been obtained for possible use in developing a fuel map of INEEL. A programming library called fireLib, developed with support from the U.S. Forest Service, has also been obtained. This is a toolkit written in C that computes various parameters associated with surface fires. This toolkit could be useful in creating a fire model that relies on observations from the INEEL Mesonet for meteorological input. (richard.eckman@noaa.gov, Jeff French, Neil Hukari, Brad Reese)

3. *Mercury in the Arctic.* Mercury concentrations in snow and meltwater samples collected during June at Barrow, Alaska have been determined. Unmelted snow had 90-100 ng/l from atmospheric deposition, while pooled melt water had 27 ng/l. Partially melted snow had 6-16 ng/l, but roughly 95% of this was bioavailable, being in a chemical form readily passed through cell membranes. This is comparable to the 8-9 ng/l of mercury that was bioavailable in surface snow during May before snow melt. Nonbioavailable mercury appears to be preferentially released from the snow surface during melt. The bioavailable fraction of the total mercury in the melt water was not determined.

Our measurements during 2000 suggest an annual cycle where bioavailable mercury in the snowpack increases from undetectable concentrations in January to roughly 10 ng/l just prior to the start of melt. The bioavailable portion then remains in the melting snow while the nonbioavailable portion is evaded. The final disposition of this bioavailable mercury after the completion of snow melt remains unknown. The analysis of the snow samples was conducted by George Southworth at Oak Ridge National Lab and Karen Scott at the University of Manitoba. (brooks@atdd.noaa.gov, Meyers, Lindberg-ORNL)

Silver Spring

4. Dust Storm Project. For the last year, ARL has been working on developing a model for forecasting dust storms. The product was delivered this month – an operational version of the model which can be run through a graphical user interface (GUI). The GUI contains several features and programs to simplify the operational configuration—such as a special editing menu for the model’s configuration file; automated linkages to the NASA TOMS site to retrieve the most recent TOMS aerosol index image; and an interactive program to permit adjustment of the model plume to match the TOMS image. The particle-end-point position viewer may be used to adjust the model calculated plume positions to improve the match with the satellite observations. In an operational environment this procedure would be used to adjust the archive portion of the calculation before proceeding with the forecast. (roland.draxler@noaa.gov)



An overlay of HYSPLIT model output (the black dots) and TOMS imagery, for a Saharan dust storm.

5. Houston Ozone Forecasts. The Hysplit4/CV4 ozone model was configured for a special simulation to cover the south-central U.S. using 15 km resolution RAMS forecast fields and an emissions and concentration grid resolution of 35 km. The meteorological forecast is run on the NOS computer system, the ozone forecast on ARL’s clustered workstations, and the outputs are made available on a special web site: www.arl.noaa.gov/ready/ozone2.html. (roland.draxler; jeff.mcqueen; glenn.rolph@noaa.gov)

6. Modeling Ozone and Particulate Pollution Episodes for Vermont and New Hampshire. High resolution meteorological and air quality simulations for the VT-NH are being generated to help assess local air quality and ecosystem health. A 3-km nested grid was chosen to resolve the flow fields resulting from the complex topography over VT and NH and the Lake Champlain induced channeling flows. A 48-hr simulation period can be run in about 15 computer hours using this system. Currently, six weeks from the Summer, 1999 have been completed. This work was initiated as a collaboration among VT, NH, and ARL scientists. Following the withdrawal of NH from the consortium last year, the work has continued with only ARL and VT involvement. (jeff.mcqueen@noaa.gov)

7. NOAA Incident Response Plan. Coordination between OAR, it's Laboratories, and the newly formed NOAA Incident Response Team has been ongoing since early June. NOAA management would like to have a few "around-the-clock" points of contacts within every Line Office (LO) in case of an emergency in which NOAA may be of assistance. An initial team, with representatives from each NOAA LO, has been meeting since early June to draft a NOAA Incident Response Plan. The draft plan is currently being circulated among the LO's for comment and emergency points of contact are being sought. (glenn.rolph@noaa.gov)

8. Volcanic Emissions and Stratospheric Temperatures. Work is in progress to analyze model simulations of the temperature effects of the Mount Pinatubo eruption in the stratosphere and troposphere and to compare them to the effects observed in radiosonde data. We have output from the GFDL SKIHI model provided by Alan Robock of Rutgers University. Preliminary results suggest that the model's response to the volcanic aerosol forcing is weaker than observed. (melissa.free@noaa.gov)

9. Reconciling Observations of Global Temperature Change. Last January the National Research Council (NRC) Panel on Reconciling Observations of Global Temperature Change issued a report on surface, radiosonde and satellite temperature observations and their trends. The report outlined various advantages and problems with each data set. In response, Greg Withee, Assistant Administrator for NOAA/NESDIS, requested specific recommendations from the NRC on how these observations could be improved for climate studies. During June, a subpanel (John Christy, Dian Gaffen, Roy Spencer, and Frank Wentz) met to hear technical presentations, and in July a letter report entitled "Improving Atmospheric Temperature Monitoring Capabilities" was drafted. Following review by the full panel and outside experts, the report should be completed this summer. (dian.gaffen@noaa.gov)

10. Women in Meteorology. The Hydrometeorological Office of Panama is preparing a calendar for 2001, a page of which will be devoted to the participation of women in meteorology. In response to a request from Panama, information on the U.S. and international participation of women in meteorology was sent to the calendar organizers. (dian.gaffen@noaa.gov)

Boulder

11. SURFRAD. Instruments at Bondville (IL) were exchanged during the last week in June, and those at State College (PA) were exchanged during the week of July 10, 2000. The old Eppley solar trackers were replaced with new SCI-TEC models, completing those replacements at all of the SURFRAD stations. The SURFRAD siting team surveyed the Canaan Valley site in West Virginia, where a new SURFRAD station is soon to be installed. SURFRAD data will soon be entered into the Baseline Surface Radiation Network (BSRN) system. (John Augustine, 303 497 6415)

12. UV-Impacts Network. Amy Stevermer participated in a workshop on Ozone Depletion, UV Radiation, and Health Risk held July 29-August 2, 2000, in Steamboat Springs, CO. She was invited to present some of SRRB's work related to UV monitoring and effects. The workshop was organized by Melanie Wetzel, associate research professor at Desert Research Institute, and Rebecca Steffens Jenrow, director of research at the Science and Public Policy Institute. The goal of the workshop was to foster connections with two- and four-year colleges to establish a UV-Impacts Network. This network will help entrain faculty and students in efforts to assess UV exposure, atmospheric trends, and related health impacts. (Amy Stevermer, 303 497 6417 and Betsy Weatherhead, 303 497 6653)

13. Heavy Research Aircraft Meeting. The first of several planned workshops addressing issues relative to the future of NOAA's heavy aircraft programs took place July 18 and 19 at the Skaggs Building in Boulder. The Office of Marine and Aviation Operations (OMAO) sponsored gathering was attended by users of the NOAA heavy aircraft, namely the WP-3Ds and the G-4, and by AOC engineering, maintenance, and operations staff. OMAO Director, RADM Evelyn J. Fields, challenged those present to define those criteria that determine long-term future needs in heavy aircraft support for NOAA's airborne research and operational missions, while providing guidance toward FY 2003 funding requirements.

Three areas were identified for which requirements and issues were a distinguishing feature: Operations, Meteorology and Air Physics, and Air Chemistry. Breakout sessions then focused on present and prospective platforms, instrumentation (re: scientific and flight operations), and project/program requirements of the next decade.

A spokesperson for each breakout group presented a synopsis of the previous day's discussion. During the next few weeks, the OMAO will develop a draft document summarizing the consensus of the workshop; the draft will then be distributed for comments and suggestions. The finished document will provide direction for the OMAO and serve to complement and support requests for funding for upcoming fiscal years. (Dennis Wellman, 303 497 6266)

Oak Ridge

14. VTMX Program. Nighttime conditions over a representative populated valley in the western U.S. are the focus of this multi-laboratory investigation of atmospheric transport and mixing to be conducted in Salt Lake City in October 2000. The ATDD effort will measure the budget of turbulent kinetic energy using a coordinated array of microbarographs on the ground, sonic anemometers on towers, and an airborne BAT probe (furnished by ARL Idaho Falls). A site has been selected in open flat terrain in the west center of the valley, where we can fly at or below the level of the towers. Clearance is being sought to install three towers, 10 m, 20 m, and 30 m at this location. (dobosy@atdd.noaa.gov)

15. Canaan Valley. AIRMoN-wet and basic meteorological measurements have now been in operation for more than two months at the Canaan Valley Air Quality Research and Monitoring site (N 39.0634, W 79.4210). The AIRMoN-dry component, enhanced by measurements of surface energy balance, is in development. A field survey by staff from ARL's Surface Radiation Research Branch (see item above) helped establish the appropriate configuration of a SURFRAD station at this site. Recently-acquired computer hardware will allow data to be posted from the field to a web site, currently under development. (vogel@atdd.noaa.gov)

16. East Tennessee Ozone Study. Additional ozone analyzers were established at Lenoir City and Bluebird Ridge (Norris-Clinton). Upgrades to ozone housing/fan units continue at several sites. The Mooresburg Fire Tower on Clinch Mountain (Mooresburg, TN) was investigated. Plans were made to move the Chuck Swan Fire Tower meteorological site to Mooresburg and add an ozone analyzer. The former EPA air quality monitoring site at White Top Mountain, VA has been transferred to ATDD, and was reestablished with meteorological and ozone monitoring in late July. Also, an investigation of Davy Crockett Birthplace State Park near Greeneville, TN was conducted. Plans are being made to establish a meteorological/ozone site there in cooperation with the State of Tennessee. Routine maintenance of all sites continued. (birdwell@atdd.noaa.gov, Randy White, Bellis)

17. NSF Multi-User Environmental Research Aircraft. Several Sky Arrow aircraft data files from the San Diego State University ATLAS field study in Alaska are being analyzed at ATDD. Data processing assistance has been given to the researchers in the field, including generating processed output data files computing fluxes of CO₂/H₂O. (brooks@atdd.noaa.gov, Ed Dumas)

18. SURFRAD and ISIS. The standard operations of the ISIS Network continued. The regular processing of July ISIS Level 1 and Level 2 data is complete. Fifteen minute and hourly averaged data, flagged by QA/QC procedure have been transmitted to NCDC and placed on the Internet. Regular processing of the SURFRAD data to match the GEWEX time records of energy balance systems installed in Ft. Peck, Montana and Bondville, Illinois continued. These data are also provided on the Internet. (matt@atdd.noaa.gov)

Research Triangle Park

19. Air-Surface Exchange Models. The Sixth International Conference on Air-Surface Exchange of Gases and Particles was held during July in Edinburgh, Scotland. Five ASMD scientists presented papers on various modeling aspects of air-surface exchange. In addition to the presentations, several areas of cooperative research were identified during discussions with other meeting participants. For example, there is potential for incorporating into our NOAA Multilayer Model (MLM), the algorithms from the Centre for Ecology and Hydrology (Scotland) dealing with the chemistry of water on a leaf surface. There are also plans for follow-up discussions with scientists from the Atmospheric Environment Service (Canada) concerning their methods of using mesoscale model output with their deposition model. (Donna Schwede, 919 541 3255)

20. Plume-in-Grid Photochemical Modeling of Major Point Source Emissions. The plume-in-grid (PinG) approach realistically treats the dynamic and chemical processes of point source pollutant plumes in the Models-3 Community Multiscale Air Quality (CMAQ) modeling system. The PinG algorithm has been fully coupled with the CMAQ Eulerian air quality grid model and an updated PinG code, capable of running on scalar, vector or parallel computing platforms, has been included with the June 2000 public release of the Models-3 CMAQ science codes. The PinG algorithms simulate the relevant physical and photochemical processes impacting individual pollutant plumes emanating from major elevated point sources during a subgrid scale period. The PinG module is executed simultaneously with the CMAQ grid model and an important feedback of pollutant species occurs when the horizontal dimension of a plume segment reaches the model grid cell size. The PinG Lagrangian plume algorithm has been applied to a group of major point sources exhibiting a wide range of NO_x emission rates for a selected episode from the summer 1995 Southern Oxidant Study (SOS) in the Nashville region. Results were recently presented in the regional photochemical modeling session of the annual Air & Waste Management Association conference. The evolution of modeled plume ozone and NO_x concentrations was in good qualitative agreement with observed plume data collected by various airborne platforms. The evolution of ozone and the rates of NO_x oxidation in modeled plumes were strongly related to the NO_x emission rates which were also found in plume measurements. A quantitative evaluation of the PinG results is underway against data collected during airborne traverses by the NOAA WP-3, DOE G-1, and the TVA helicopter through power plant plumes. (Jim Godowitch, 919 541 4802)

21. Nationwide Analysis for Ozone and Particulate Matter. Air quality modeling analysis was conducted to assess ozone and secondary particulate (PM) concentrations across the continental United States. This

effort represented the first time a nationwide analysis was conducted for both ozone and particulate matter, thereby providing an integrated assessment of the effects of controls on these two pollutants. Additionally, applications for the West marked the first time for regional, multiscale ozone modeling for this portion of the United States.

The modeling for particulate matter included simulations of the Regulatory Modeling System for Aerosols and Deposition (REMSAD) for an entire year of meteorological data and pollutant emissions for a domain covering the entire United States. Annual simulations with REMSAD were made for 1996, and for projections of emissions to 2030, both with and without reductions. For ozone the variable grid version of the Urban Airshed Model (UAM-V) was applied to two regional domains, each with multiple spatial nests, covering the eastern and western United States. This effort included the generation of meteorological data bases using MM-5 at 36 km and 12 km resolution for July 1996, a month which encompassed several episodes of high ozone concentrations. Three emissions scenarios were modeled for July 1996. Modeling for ozone levels in the East involved an analysis of ambient measurements from the summer of 1995 to select short-term episodes representative of high concentrations in cities within in this region. In total, 29 days during the summer of 1995 were modeled for each of five emissions scenarios. (Pat Dolwick, 919 541 5346)

Idaho Falls

22. *Refractive Turbulence Research.* Our Refractive Turbulence research supports the Air Force's need to understand anomalous atmospheric effects of refractive gradients. Previous efforts deployed three BAT probes on the Egrett research aircraft to measure turbulence at 50,000 ft. These efforts demonstrated the need for higher temperature resolution and frequency response in low turbulence often encountered. This month, we report on our efforts to develop and test two new high accuracy temperature sensors. These new sensors will fly in the Refractive Turbulence Study 2000 (RTS00) starting August 1.

For the RTS00 instrument test platform, LongEZ N3R was modified for high-altitude operation and to carry the new instrumentation. The high-altitude modifications follow those of LongEZ (N57JP) which holds the C-1.a weight class altitude record at 35,000 ft. Even without modifications, LongEZ's are noted for their range, speed and altitude performance. But to operate at 25,000 ft while carrying the instrumentation weight and associated drag of the external probes, both engine and airframe modifications were required. Installation of the new temperature probes required modification of the BAT Probe/LongEZ configuration.

Dr. Haman's (University of Warsaw) UFT probe uses an exposed 2.5 um cold wire that responds to 1 KHz temperature fluctuations. Because of its very small diameter (8 times smaller than a human hair), the sensor is easy damaged and requires protection that is removed in flight. Even so, damage is still likely. FRD's FUST probe uses a 25 um thermocouple and can resolve 0.005 C temperature fluctuations at 100 Hz. The FUST sensing element is robust, alleviates noise due to wire strain and its housing is designed to be speed and flow angle independent. Comparisons between the probes under various conditions a high altitudes will shed light on the necessity for both high resolution and high frequency measurements. (tim.crawford@noaa.gov, Jeff French, Randy Johnson, Owen Cote and Kris Haman)

23. *VTMX/CBNP 2000.* The pace of preparations for VTMX/CBNP 2000 study (see item above) is hitting a near-fever pitch. With the field deployment to Salt Lake City scheduled to be complete by 30 September, work is proceeding along several fronts. The design and prototype construction of a CATS manifold to interface with the FRD Whole Air Bag Sampler has been completed. This manifold will permit the

simultaneous collection of both perfluorocarbon and SF₆ tracer gases. Forty of FRD's samplers will be modified to accommodate the CATS manifold. Full-scale construction has begun on the CATS manifolds.

All 130 of FRD's Whole Air Bag Samplers will be deployed during the field study. On close inspection of the samplers, it was discovered that the 12-year old cases were in serious need of replacement. As a result, new containers were constructed from existing materials and the sampling pumps and electronics are currently being removed from the old containers for installation in the new containers. New sample inlet tubing and bungy cords are also being installed on the new containers. Once the transfer process has been completed, the electronics and pumps will be subjected to a series of tests to assure proper operation prior to field deployment. Cleaning of the Whole Air Bag Sampler cartridges has also begun.

All 4 of FRD's SF₆ gas chromatographs, which are used for the analysis of SF₆ samples collected by the Whole Air Bag Samplers, have been brought back to life from a cold shut-down status. Three have received a clean bill of health, while the fourth GC awaits a new sample valve.

Work is nearing completion on the new and improved FRD mobile SF₆ analyzers. The analyzers have now been redesigned and built to be installed in a vehicle as small as a compact car. It is also possible to install them on 4-wheelers for detection of SF₆ in very rugged terrain. The big and bulky nitrogen and hydrogen tanks have been replaced with small and lightweight tanks. These are also much safer to handle and transport. The calibration system has been completely revamped to allow multiple calibration points of identical concentrations of SF₆. With the termination of GPS selective availability, smaller and cheaper GPS systems with the same accuracy and resolution of the old and bulky DGPS systems have been included in the design.

Preparations will begin this month to support three other VTMX/CBNP tasks. These tasks are: 1) SF₆ line and point source releases, 2) deployment and operation of 2 3-D sonic anemometers, and 3) deployment and operation of a radar profiler, sodar, and RASS system. (kirk.clawson@noaa.gov and staff)

24. Central California Ozone Study (CCOS). Data acquisition continues by the nine towers deployed for the Central California Ozone Study (CCOS). Quality control screening efforts have shown that these tower systems are working exceptionally well. One interesting note, however, was that the Campbell Scientific CR-10 data logger used for the Piedras Blancas Lighthouse (PBL) meteorology tower was accidentally reprogrammed by the Desert Research Institute (DRI). Two phone lines were installed at PBL prior to the start of the study. One line was assigned to FRD for the meteorology tower while the other was assigned to DRI for their air quality sensors. By coincidence, DRI is also using Campbell Scientific CR-10 data loggers. A DRI scientist mistakenly dialed the wrong phone number and downloaded their program into the FRD data logger. As a result, erroneous data was being logged by the PBL tower. This problem was flagged within 24 hours and the CR-10 was properly reprogrammed. Because this little mishap, all nine CCOS data loggers have been password-protected to prevent this from occurring again. Meanwhile, the problems that have plagued the radar and sodar systems seem to have been minimized by the installation of a 25,000 BTU air conditioner. (jerry.crescenti@noaa.gov, Randy Johnson, Neil Hukari, Shane Beard, and Tom Strong)

25. INEEL Mesoscale Modeling. MM5 forecasts for southeast Idaho are being run on a nearly daily basis at FRD. The focus is now shifting towards some validation work using observations from the INEEL Mesonet. The model still appears to be underestimating the peak afternoon wind speeds on many days, which is partly related to the problems with soil-moisture initialization discussed in the June activity report. One

interesting event took place on 27 July when the wildfires at INEEL flared back up. The MM5 simulation on that day forecast a local area of stronger surface winds (about 10 m/s) right over INEEL. This was quite similar to the observed winds on that day. The official forecasts did not pick up on these localized stronger winds. The model also seems to have some skill in predicting precipitation over the nearby mountains. On 18 July, for example, the model forecast on the 3 km grid had convective storms developing during the afternoon over the mountains to the north and west of Idaho Falls. The outflows from these storms spread across the valley in the model, and were associated with northerly and northwesterly winds up to about 17 m/s. The actual sequence of events on that afternoon was quite similar to the simulation: satellite pictures clearly showed thunderstorm outflow boundaries moving out of the mountains and across the Snake River Plain. Strong northwesterly wind gusts were observed in Idaho Falls as the outflow passed. (richard.eckman@noaa.gov)

26. 11th Symposium on Meteorological Observations and Instrumentation. A tentative program has been constructed for the upcoming 11th Symposium on Meteorological Observations and Instrumentation (SMOI). A total of 112 abstracts have been submitted to the SMOI. Listed below are the session titles, number of papers in each session, the day and time as well as the session chairperson:

| Ses- sion | Title | Papers | Day | Time | Chair |
|--------------|---|--------|-----|---------------------|------------------------|
| 1 | Calibration Methods, Quality Assurance and Quality Control Techniques | 8 | MON | 8:00 am - 10:00 am | Robert A. Baxter |
| 2 | Sonic Anemometers and Extreme Wind Measurements | 6 | MON | 10:30 am - 12:00 pm | Christopher A. Billoft |
| 3 | Surface Energy Fluxes | 6 | MON | 1:30 pm - 3:00 pm | Scott J. Richardson |
| 4 | Radiosondes and Rawinsondes | 8 | MON | 3:30 pm - 5:30 pm | Daniel E. Wolfe |
| 5 | Aircraft Platforms and Airborne Measurements | 14 | TUE | 8:00 am - 12:00 pm | Timothy L. Crawford |
| | Remote Sensing Lecture - Robert Cess, SUNY - Stony Brook | 4 | TUE | 2:45 pm - 3:30 pm | Gennaro H. Crescenti |
| 6 | Meteorological Measurements in Harsh Environments | 6 | TUE | 4:00 pm - 5:30 pm | Steven A. Cohn |
| P1 | Grand Poster Night | 22 | TUE | 7:00 pm - 9:00 pm | Gennaro H. Crescenti |
| 7 | Quality Assurance and Quality Control for Meteorological Networks | 6 | WED | 1:30 pm - 3:00 pm | Scott J. Richardson |
| 8 | Rainfall, Water Vapor and Precipitable Water | 6 | WED | 3:30 pm - 5:00 pm | Donald E. Lehrman |
| 9 | Radar Wind Profilers | 8 | THU | 8:00 am - 10:00 am | Allen B. White |
| 10 | Satellite Measurements of Earth's Surface | 6 | THU | 10:30 am - 12:00 pm | Matthew J. Parker |
| 11 | Clouds and Visibility | 6 | THU | 1:30 pm - 3:00 pm | Matthew J. Parker |
| 12 | Solar Radiation | 6 | THU | 3:30 pm - 5:00 pm | John J. DeLuisi |

Twelve papers have been submitted by ARL authors. (jerry.crescenti@noaa.gov)

27. Robert Leviton Award. The AMS Measurements Committee, chaired by Jerry Crescenti, recently provided a critical review of four Journal of Atmospheric and Oceanic Technology papers written by students. The titles and authors of these papers are: *An electrodynamic levitation system for studying individual cloud particles under upper-tropospheric conditions* by R. A. Shaw, D. Lamb and A. M. Moyle; *High-resolution daytime cloud observations for northwestern Mexico from GOES-7 satellite observations* by J. Garatuza-Payan, R. T. Pinker and W. J. Shuttleworth; *Estimating the uncertainty in passive-microwave rain retrievals* by D. Coppens, Z. S. Haddad, and E. Im; and *Sidelobe contamination in bistatic radars* by R. de Elía and I. Zawadzki. The committee has made a recommendation to the AMS Awards Committee to bestow the Robert Leviton Award to one of these students. Unfortunately, the name of the winner can not be disclosed at this time until the AMS Awards Committee has formally approved of the Measurement Committee's recommendation. Last year the Robert Leviton Award was presented to Alison Grimsdell for her paper entitled *Convective boundary layer height measurement with wind profilers and comparison to cloud base*. (jerry.crescenti@noaa.gov)