

The Colorado State Sodium Lidar Facility Announces Visiting Research Scientists-in-Residence Program

The Colorado State University (CSU) Sodium lidar facility started regular observation in May 1991. The lidar system was upgraded from a one-beam to a two-beam system and the associated Faraday filters were improved to be robust enough for long-period observation under sunlit conditions. The result is that our lidar system is capable of simultaneous measurements of mesopause region temperature and horizontal winds, over full diurnal-cycles, weather permitting.

Since May 2002, regular observations of mesopause region temperature, zonal and meridional winds have been carried out. While an observer is always on site to monitor the performance during operation, the system is now trouble-free and operates routinely, leading to the record of 9-day continuous observation, terminated only by weather.

In addition to the in-house research programs, serving the CEDAR community has also been complementary goal for the CSU facility. Up until this point, we have achieved this by depositing our lidar data in the CEDAR database in a timely fashion. Since the lidar system is now relatively trouble free, we would like to further serve the community by inviting visiting research scientists or students to come to our facility. The ideal visiting research scientist would be either an advanced graduate student or a young scientist, who is already funded by a research program, wishing to learn and take part in resonance wind/temperature lidar data acquisition as well as to use CSU lidar data for his or her research objectives.

At this point, we are able to accommodate one or two visitors, starting as soon as summer 2004. The period of visiting engagement is nominally one year, and in special cases, could be as short as six months. During his or her residence at CSU, the visiting research scientist or student will learn about the lidar and be trained by the CSU lidar personnel for data acquisition. They would also be benefited by the use of CSU lidar data for the fulfillment of science objective mutually defined by the visitor (or his or her supervisor) and the CSU lidar facility.

If a successful visiting research scientist or student requires funding, we will work to help them secure it. An interested researcher should contact Professor Joe She by brief email: joeshe@lamar.colostate.edu or by calling (970) 491-6261.

To learn more about the LIDAR program please visit our website at: <http://lamar.colostate.edu/~lidar/>.