The CSU-CHILL Radar Facility and its Educational Opportunities

Pat Kennedy

Dual-polarization S-Band system funded by the NSF, operated by CSU and based at Greeley, CO.

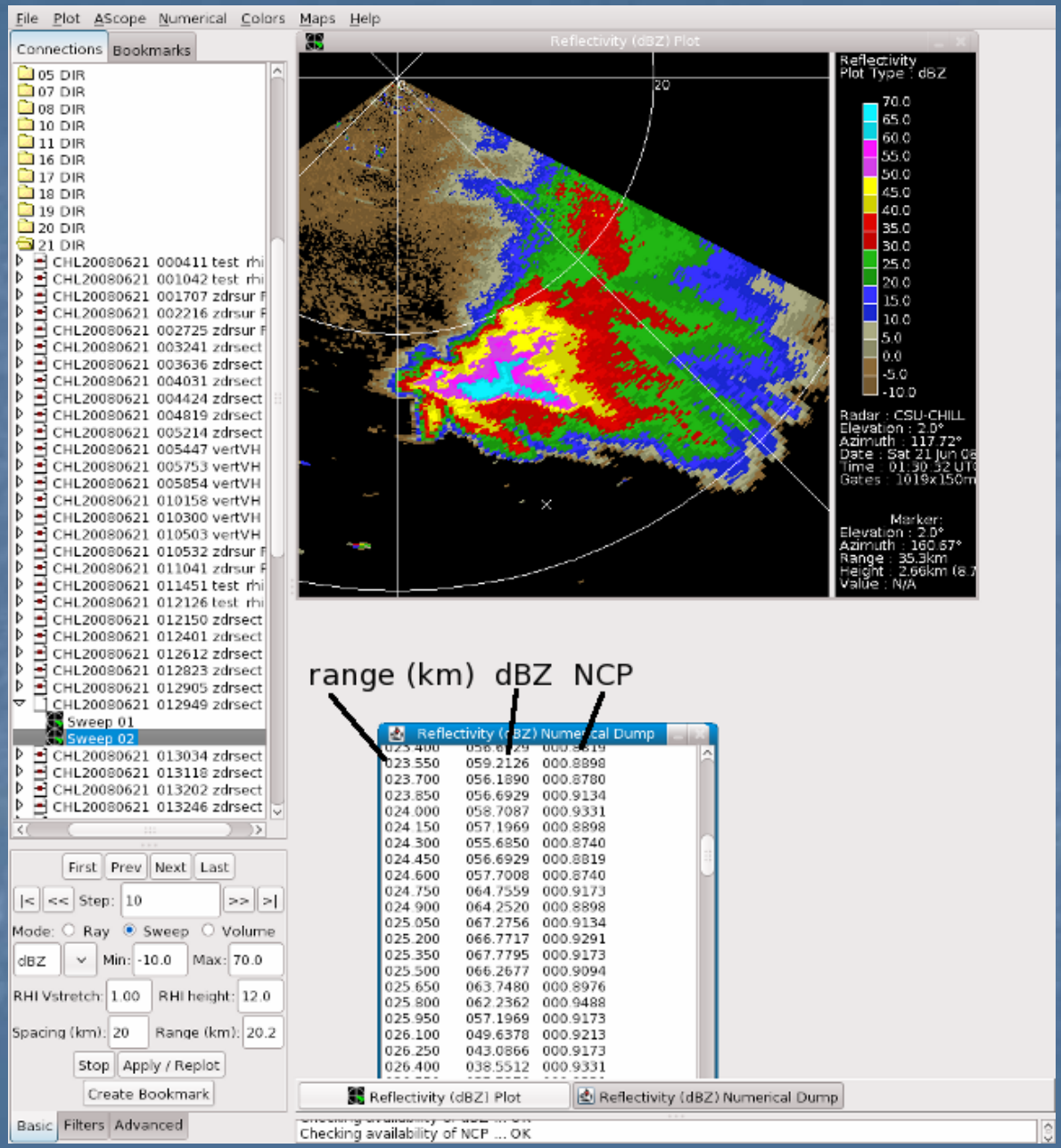
Air-supported radome and dual transmitter electronics trailer are shown here.

Operations trailer

Offset feed antenna installed in spring 2008. Design provides improved cross-pol isolation and reduced sidelobe levels. Main reflector diameter is 8.5 m; 3 dB beam width is 1.0 degrees.

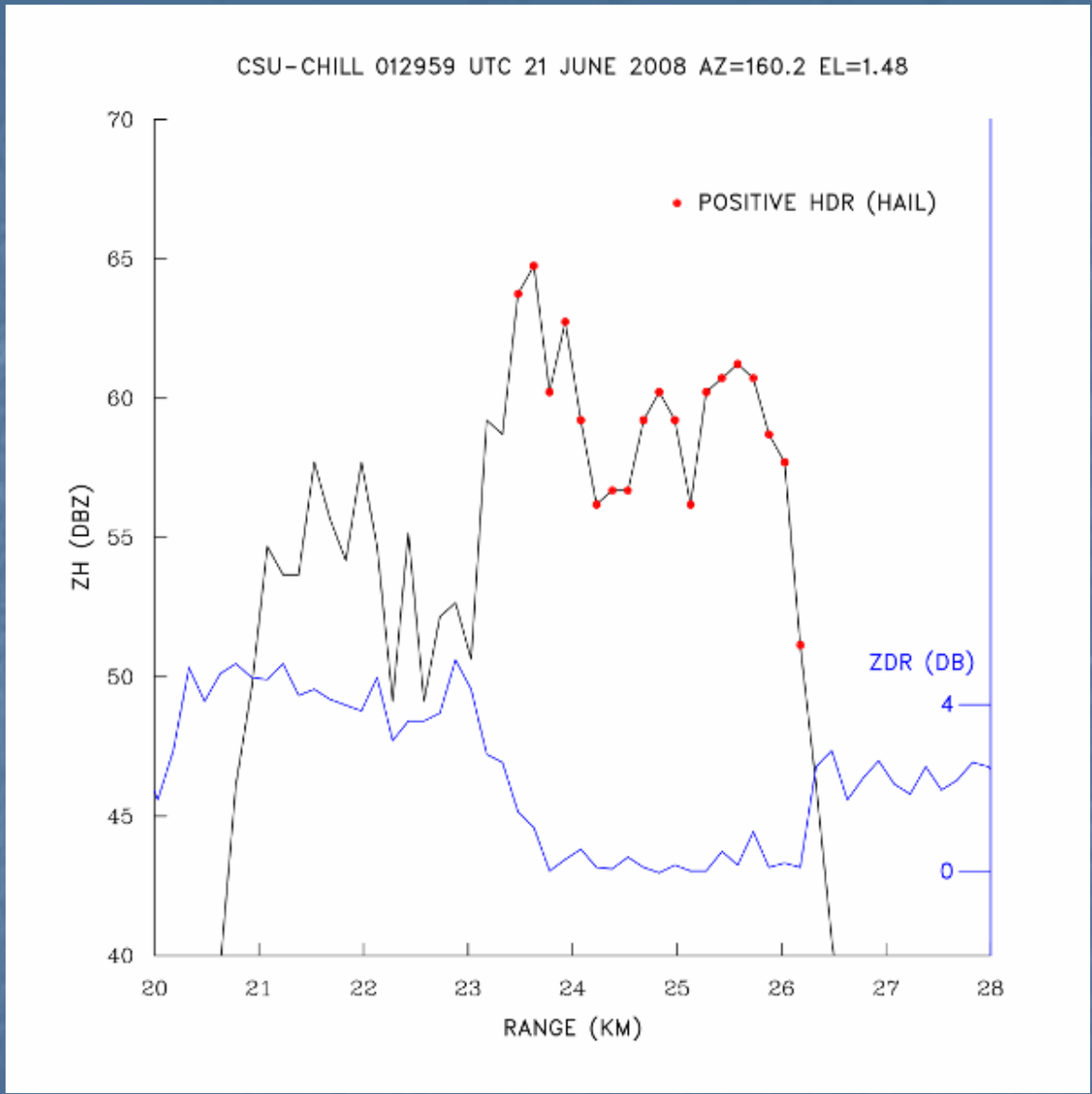
Switch to web cameras and VCHILL

ASCII gate data from a single ray

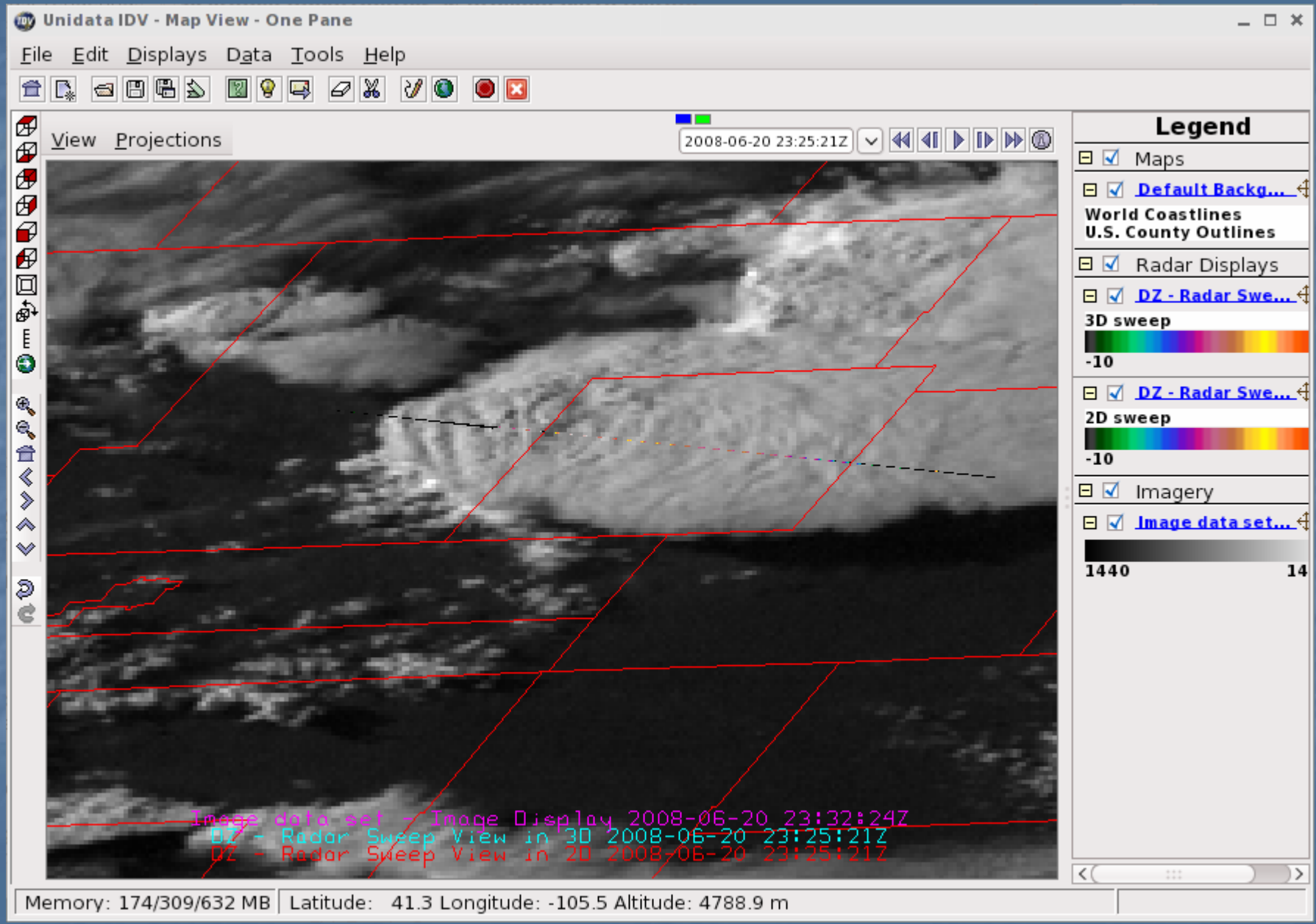


Basic radar data interaction for students:

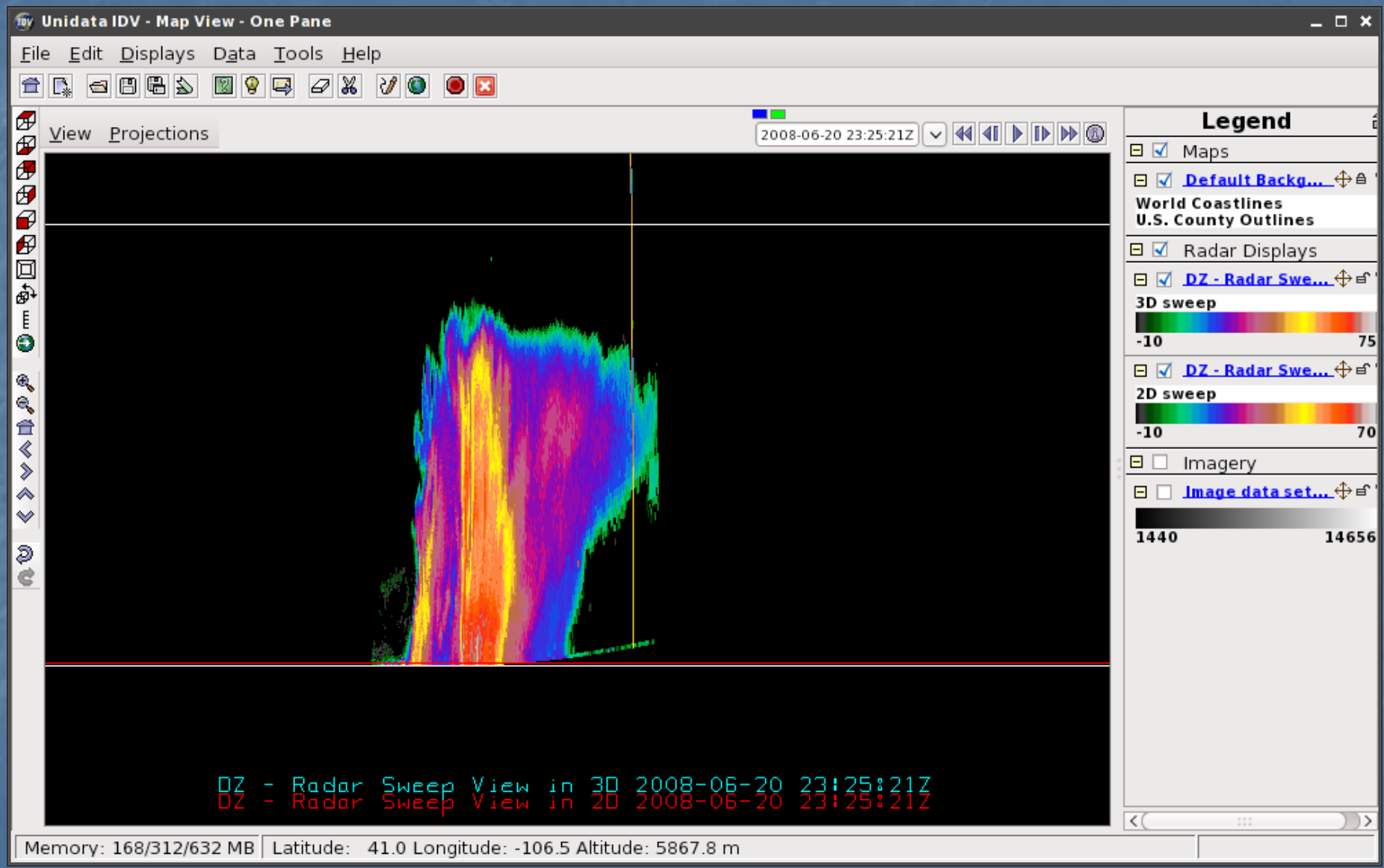
Simple line graph and HDR calculation from 53 ASCII gate data values.



GOES visible data in IDV: 2332:24 UTC 20 June 2008



CSU-CHILL RHI scan reflectivity data in IDV: 2325:21 UTC 20 June 2008



Summary

- CSU-CHILL is accessible beyond the traditional field experiment mode.
- Internet / VCHILL capabilities can bring the radar into the classroom.
- Facility has expanding inventory of archive data, featured articles, etc.
- Please see chill.colostate.edu web site.