IRIS 8.10.1 Release Notes (19 Jan 2006)

These notes cover changes made in IRIS since release 8.10 of 11 December 2005. If you are upgrading from an earlier release, please read those notes also.

Installation Changes

1. Starting with release 8.10.1 the release media includes Tomcat 5.0. The **install** program is enhanced to include a button to install this. All existing IRIS/Web customers should upgrade to RHEL 3.0 or 4.0 and the new tomcat. Be sure to follow the new instructions in Appendix F of the Software Installation Manual. You need to install the Tomcat 5.0 first before installing the IRIS/Web.

Data Format Changes

1. To better support calibration using the sun, the following numbers were added to the task_calib_info and product_end structures:

   - I0 value at calibration in dBm.
   - Noise level at calibration in dBm.
   - Radar constant in dB.
   - Receiver bandwidth in kHz (RVP8 only).

   See the *IRIS Programmer's Manual* for format details. The current noise level has been recorded for many years.

Documentation Changes

1. The chapter documenting the **rtdisp** utility was moved from the *IRIS Radar Manual* to the *IRIS/RDA Utilities Manual* because **rtdisp** is supplied with both IRIS and RDA.
2. There is a new chapter in the *IRIS/RDA Utilities Manual* covering the new **suncal** utility.

Bug Repairs

1. In **BufrToIris** added support for incoming data present indicators in site lists.
2. The XSECT product was widening individual range bins which were surrounded by thresholded data by half a radial in azimuth.
3. The IRIS product configuration menu for the RAIN1 product did not allow you to select SRI input products which were not generated on the local system.
4. With all the new support for elliptical earth projections introduced in 8.10, the cursor tool in the web look window was broken. This is now fixed.

5. **Productx** was enhanced to take line width and to display a summary of data from all Cartesian products. This is printed in file units for 8-bit data only.

6. The **UfToIris** pipe now has a sweep offset feature. This allows you to input data with an initial sweep of 0 or negative.

7. *RHEL4 Platforms only:* There were bugs introduced in the OS sleep timer functions. We have made changes to make this more consistent across platforms.

8. Fixed a bug in the IRIS Ingest process. If the process crashed it was not correctly unmapping and removing all shared memory. This would usually cause the automatically restarted process to get a memory error on the next task. In the interest of fault recovery, we also changed Ingest to continue trying to run the task which just crashed.

9. The DWELL product was changed to indicate area-not-scanned for an area in which any of the inputs had missing data. Previously it would so indicate only where all inputs were missing.

New Features

1. Announcing the new **suncal** utility. This program will perform a PPI sector scan about the expected sun's position. It will make a special BEAM product from this data, then process the BEAM product to compute the antenna positioning errors and peak power. Please read about this in the *IRIS/RDA Utilities Manual*.

2. The Cross Section Tool in the Quick Look Window has a neat new feature. If you click on the middle of the cross section line, it will allow you to shift the line keeping the same orientation and length.

3. Another neat new feature of the Cross Section Tool is that if you also bring up the Cursor Tool, it will now correctly display data and position information from the cross section window.

4. The **UfToIris** pipe program is enhanced to allow adding an offset to the UF sweep numbers. For example, if your UF data starts with sweep number 0, you can now add one to all sweeps. See the UfToIris.conf file example in the config_templates directory for details.