GSAS v3.4.1 Release Notes

Introduction

GSAS 3.4.1 is a very-minor release which will not terminate upon the detection of backwards time. The new algorithm prints a warning, deletes the bad record, and continues processing. This functionality is build into all the PGEs. This change was necessary because there are several (previously unknown) ways in which a backwards time can occur.

Release Information

The ClearCase label for this release is RELEASE_3.4.1.

The release date is April 09, 2003.

All major PGE version numbers have been updated to "V3.4.1 April 2003."

This should be verified during operation by checking the version information in the appropriate ANC06 files.

SMDS Impact

The distribution tarfile is on glasdev.wff.nasa.gov at the following location:

```
/glasdev1/v3/dist/gsas_V3.4.1.tar.Z.
```

A new version of the ANC07_00 data file is required:

Those processing jobs which failed wih backwards time errors should be reprocessed with this new software.

All libraries and binaries should be recompiled using the top-level Makefile. **IMPORTANT: due to internal changes in the makefiles, SDMS MUST use the command "make runtime" to ensure the software is made without debug flags.**

The process for making the libraries and binaries is as follows (**NOTE: SDMS ONLY!!**)

```
cd /install_dir/gsas_v3.4.1
make runtime
make install
```

Note the developers should not use the above procedure. This procedure is for SDMS only!

Product Changes

No product sizes or content were changed.

The latest product formats/descriptions will be available at http://glas.wff.nasa.gov/v34_products/.

Detailed Change Notes

CR0000318 : Investigate backwards time problems

The investigation found at least two different problems: the first being a duplication of the firecmd/fireack times in two successive APID19 packets; the second being a 1second slip in GPS time when GLAS was not earth-pointing.

In light of this, we decided to flag backwards time and delete the affected record. We should watch the ANC06 files and investigate strange occurrences. .

Changed files

```
/glas/vob/Makefile
/glas/vob/data/anc07_001_01_0000.dat
/glas/vob/src/glas_alt/GLAS_Alt.f90
/glas/vob/src/glas_alt/WriteElev_mod.f90
/glas/vob/src/glas_alt/WriteWF_mod.f90
/glas/vob/src/glas_atm/GLAS_Atm.f90
/glas/vob/src/glas_atm/WriteAtm_mod.f90
/glas/vob/src/glas_l1a/GLAS_L1A.f90
/glas/vob/src/glas_l1a/WriteL1A_mod.f90
```