P310 - Add Velocity Columns to FT2 Files

status: **InProgress**

last update: 28 June 2019

This page is a record of the configuration and execution of the P310 reprocessing project, generation FT2 files.

> ⚠ STGEN-165 - Jira project doesn't exist or you don't have permission to view it.

See also: Adding velocity columns to FT2 Files for some discussion

Pipeline tasks

- P310-FT2 - Create FT2 files with velocity columns
- flagFT2-P310 - Flag BTIs in newly created FT2 files

Datafile names, versions and locations

Data file version numbers for this reprocessing will begin with v310.

XROOT location and file naming

Location template:

```
/glast/Data/Flight/Reprocess/<reprocessName>/<dataType>
```

Locations for P3130:

```
/glast/Data/Flight/Reprocess/P310/FT2

/glast/Data/Flight/Reprocess/P310/FT2SECONDS
```

File naming:

Data Type	aka	Send to FSSC	Naming template
FT2	LS-005	Yes	gll_pt_p310_*r<run#>*_<version>.fit
FT2SECONDS	LS-020	Yes	gll_pt1s_p310_*r<run#>*_<version>.fit

Note: 'procVer' is a field added to the file name (and the keyword "PROC_VER" in the primary header) added to the FFD 5/12/2010. Ref: http://fermi.gsfc.nasa.gov/ssc/dev/current_documents/Science_DP_FFD_RevA.pdf

Example:

```
root://glast-rdr.slac.stanford.edu//glast/Data/Flight/Reprocess/P310/dev/5.8/ft2Seconds
/gll_pt_p310_r0580742275_v311.fit
```

DataCatalog location and naming

Logical directory and group template:

```
Data/Flight/Reprocess/<reprocessName>:<dataType>
```

Note that the <dataType> field (following the colon) is a DataCatalog 'group' name, and file names are of the form r<run#>.

Naming examples:

```
/Data/Flight/Reprocess/P310 Group FT2
```

Data Sample

The currently defined data sample (as of) for P305 reprocessing includes:

First run	239557414 (MET), 2008-08-04 15:43:34 (UTC)
Last run	604845703 (MET), 2020-03-02 13:53:51 (UTC)
Backfill	TBD

Bookkeeping (Update this once the tasks are in PROD)

1. (This page): Define ingredients of reprocessing (processing code/configuration changes)
2. Processing History database: http://glast-ground.slac.stanford.edu/HistoryProcessing/HProcessingRuns.jsp?processingname=P305 (TBD)
    a. List of all reprocessings
    b. List of all data runs reprocessed
    c. Pointers to all input data files (-> dataCatalog)
    d. Pointers to associated task processes (-> Pipeline II status)
3. Data Catalog database: http://glast-ground.slac.stanford.edu/DataCatalog/folder.jsp
    a. Lists of and pointers to all output data files
    b. Meta data associated with each output data product

P310-FITS, flagFT2-P310

This task generates all desired FITS data products.

Configuration (To Be Updated)

Task Location	/afs/slac.stanford.edu/g/glast/ground/PipelineConfig/Level1/5.8/
Task Status	started
Input Data	?
spacecraft data	?
Input Run List	ftp://ftp-glast.slac.stanford.edu/glast.u38/Reprocess-tasks/P310-FT2/RunsList_239557414_604845703.txt
ScienceTools	09-35-02 (1/26/2015)
GlastRelease	
IGRF	
Diffuse Response	N/A
IRFs	N/A
Output Data Products	FT1, LS1, EXTENDEDFT1, EXTENDEDLS1