# gtimerge

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**Abstract**

Merge multiple Good-Time-Interval tables into one

## 1 Instruments/Modes

| Instrument | Mode |
|---|---|
| all | not applicable |

## 2 Use

| | |
|---|---|
| pipeline processing | yes |
| interactive analysis | yes |

## 3 Description

**gtimerge** merges multiple Good-Time-Interval tables into a single one using either of two modes:

- `mergemode=AND`

```
+-----------------+              GTI 1
            +--------------+     GTI 2
        ||
            +----+               combined
```

- `mergemode=OR`

```
+-----------------+              GTI 1
            +--------------+     GTI 2
        ||
+--------------------------+     combined
```

# 4 Parameters

This section documents the parameters recognized by this task (if any).

| Parameter | Mand | Type | Default | Constraints |
|---|---|---|---|---|
| **tables** | yes | list of table specifiers | none | length must be greater or equal to one; each specified table must exist |

This is the list of input GTI tables to be merged.

| | | | | |
|---|---|---|---|---|
| **withgtitable** | no | boolean | false | true\|false |

Boolean parameter controlling whether or not the name of the resulting output table is to be explicitly given in parameter `gtitable`. In the latter case the resulting single GTI table will replace the first input table of `tables`.

| | | | | |
|---|---|---|---|---|
| **gtitable** | no | table specifier | gti.ds:STDGTI | none |

The name of the resulting output GTI table - can be the name of an already existing table (which will get overwritten) or the name of a new one in an existing or new data set.

| | | | | |
|---|---|---|---|---|
| **mergemode** | no | string | OR | OR\|AND |

Parameter determining the merge mode (see above).

| | | | | |
|---|---|---|---|---|
| **plotmergeresult** | no | boolean | false | true\|false |

If set to true the individual input GTIs together with the resulting GTI from the merging process will be visualized with task **dsplot**.

# 5 Errors

This section documents warnings and errors generated by this task (if any). Note that warnings and errors can also be generated in the SAS infrastructure libraries, in which case they would not be documented here. Refer to the index of all errors and warnings available in the HTML version of the SAS documentation.

**NoGtiTables** *(error)*
List of input GTI tables is empty.

**EmptyGtiTable** *(warning)*
The output GTI table is empty because one of the input tables in `mergemode`=AND was empty or all input tables were empty and the `mergemode` was OR; event list filtering with an empty GTI table will loose all events.
*corrective action:* none

# 6 Input Files

1. one or more containing OGIP-compliant GTI tables

# 7 Output Files

1. Zero or one; in the latter case it contains the merged GTI table

# 8 Algorithm

Obvious

# 9 Comments

The functionality of **gtimerge** is similar to that of the FTOOLS task `mgtime`.

# References