



tabcalc

January 12, 2017

Abstract

Perform arbitrary math with columns in a table. Part of the dscalc package.

1 Instruments/Modes

| Instrument | Mode |
|------------|------|
| n/a | n/a |

2 Use

| | |
|----------------------|--------|
| pipeline processing | no (?) |
| interactive analysis | yes |

3 Description

tabcalc performs arbitrary calculations on table columns.

tabcalc makes use of **selectlib** to perform arbitrary math on table columns. Any operation supported by **selectlib** is allowed. The name and type of the result column can be specified on the command line. If the result column exists, it will be overwritten.

3.1 Examples

- `tabcalc --tables=set.ds:table --expression="time + 43" --column=time43`
Create the column `time43` by adding row by row 43 to the values read from the column `time` in the table `table` in the dataset `set.ds`.
- `tabcalc --tables=set.ds:table --expression="time + 43" --column=time43 --columnunit=s --columnlabel="corrected time"`
As above, but now the unit and comment fields of the result column `time43` are set.



4 Parameters

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

| Parameter | Mand | Type | Default | Constraints |
|-----------|------|------|---------|-------------|
|-----------|------|------|---------|-------------|

| | | | | |
|---------------|-----|---|--|--|
| tables | yes | T | | |
|---------------|-----|---|--|--|

List of tables to operate on (fully qualified names).

| | | | | |
|-------------------|----|---|------|--|
| expression | no | s | TRUE | |
|-------------------|----|---|------|--|

An arbitrary math expression involving any number of columns present in the table.

| | | | | |
|-------------------|----|---|--------|--|
| columntype | no | s | real64 | int8 int16 uint16 int32 uint32 real32 real64 |
|-------------------|----|---|--------|--|

Type of the result column.

| | | | | |
|---------------|----|---|--------|--|
| column | no | s | RESULT | |
|---------------|----|---|--------|--|

Name of the column holding the result. It may be an existing column.

| | | | | |
|-------------------|----|---|------|--|
| columnunit | no | s | unit | |
|-------------------|----|---|------|--|

Unit of the result column.

| | | | | |
|--------------------|----|---|-------|--|
| columnlabel | no | s | label | |
|--------------------|----|---|-------|--|

Label of the result column.

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.

6 Input Files

1. Any data set that can be read by the **dal**.



7 Output Files

1. The input data set, modified as required.

8 Algorithm

```
read expression
foreach table
  open table
  call selectlib with table and expression
  close table
end foreach
```

9 Comments

10 Future developments

References