# ctools - Change request #1846

# Use ctobservation base class for all tools that hold an observation container

08/22/2016 07:56 AM - Knödlseder Jürgen

Status:	Closed	Start date:	08/22/2016
Priority:	Normal	Due date:	
Assigned To:	Mayer Michael	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:	1.2.0		
Description			
Follow-up action on #1828.			

### History

#### #1 - 08/23/2016 09:37 AM - Mayer Michael

Is there in fact a ctool that doesn't hold an observation container? If there is none, we might even think about moving the ctobservation functionality up to the ctool base class. But maybe we will have ctools without observation container in the future?

There are some cscripts that don't work with observation containers though. Do we expose the ctobservation base class to Python?

#### #2 - 08/27/2016 10:55 PM - Knödlseder Jürgen

Yes, there is: ctmapcube.

### #3 - 08/30/2016 11:15 AM - Mayer Michael

Yes, there is: ctmapcube.

## Ok, so we don't move the functionality upwards smile.png

I wanted to start making the changes and stumbled upon the ctools for stacked responses. I think ctexpcube, ctpsfcube and ctedispcube should inherit from ctobservation and return the original observation container in the obs()-function. I am still not sure how to handle ctbkgcube since it changes the model container of the observation. I think it should return also the original observation (including original model) instead of the unbinned observation container with a model for stacked analysis right?

## #4 - 08/30/2016 04:14 PM - Mayer Michael

- Status changed from New to Pull request
- Assigned To set to Mayer Michael
- % Done changed from 0 to 100

I have modified the code such that all ctools that hold an observation container are now inheriting from ctobservation base class. For ctobssim, I hope my changes didnt break anything: before we had a protected member mutable GObservation&. Now since we inherit from ctobservation, this member is not mutable anymore (since we use the one from the base class). All unit tests run smoothly though, so I believe it is ok like that?

Changes are on branch 1846-use-ctobservation-base-class.

# #5 - 09/26/2016 10:01 AM - Knödlseder Jürgen

- Status changed from Pull request to Closed

Merged into devel.