

Proposed Parameter Name Changes

Proposed Parameter Name Changes

These proposed changes to the names of some of the parameters for the Science Tools were compiled by Dave Davis. The topic was discussed in a general way at the [GSSC-LAT Science Tools Meeting at SLAC, April 2007](#). Dave's motivation is to make the parameter names consistent among the tools - a specific request of the GLAST Users Committee - and to the extent reasonable also consistent with the conventions (sometimes fairly specific) for parameter names in tools for other missions that HEASARC supports. We expect to stay consistent with this new scheme for any new tools, and do not anticipate renaming parameters again.

The tables below are by tool name. For each tool, each parameter is listed, **except for the standard hidden parameters chatter, clobber, debug, gui, and mode, which will not be changed**. For meanings of the parameters, please see the SciTools Reference pages in the [Science Tools section of the User Workbook](#). Note that the proposed changes will not change the functionality of the tools.

Please add comments in the Comments column.

gtlikelihood

Current Name	Proposed Name	Comments
rspfunc	irfs	
use_energy_dispersion	edisp	
exposure_cube_file	expcube	livetimecube (or ltcube) would be less ambiguous
source_model_file	srcmdl	srcmodel is short enough. Or insrcmodel srcmodel is fine
source_model_output_file	sfile	Not clear. I suggest outsrcmodel
flux_style_model_file	fluxmdl	fluxmodel, or outfluxmodel
check_fit		
statistic		
optimizer		
fit_tolerance	ftol	
find_Ts_mins	Tsmin	Not clear, and better not have uppercase. I suggest tsreopt
write_output_files	save	
query_for_refit	refit	Does not make sense in scripts anyway
evfile		
evtable		
scfile		
sctable		
exposure_map_file	expmap	
plot		
counts_map_file	cmap	I prefer cntmap, or cntcube
binned_exposure_map	bexpmap	
apply_psf_corrections	psfcorr	

gtdiffresp

Current Name	Proposed Name	Comments
evfile		
evtable		
scfile		
sctable		
source_model_file	srcmdl	

rspfunc	irfs	
use_energy_dispersion	edisp	

gtbackfile

Current Name	Proposed Name	Comments
pha_file	phafile	
outfile		
scfile		
sctable		
source_model_file	srcmdl	
exposure_cube_file	expcube	
exposure_map_file	expmap	
rspfunc	irfs	

gtfindsrc

Current Name	Proposed Name	Comments
evfile		
evtable		
scfile		
sctable		
outfile		
rspfunc		
exposure_cube_file	expcube	
exposure_map_file	expmap	
source_model_file	srcmdl	
target_source	tgsrc	target is simpler
use_lb	coordsys	should match gtbin
lon0	ra	
lat0	dec	
optimizer		
fit_tolerance	ftol	
reoptimize	iterate	Not clear. reoptimize is fine, reopt is also OK. reopt is fine.
amoeba_tolerance	atol	

gtlivetimecube

Current Name	Proposed Name	Comments
evfile		
evtable		
scfile		
sctable		
outfile		livetimecube (or ltcube) as in gtlikelihood outfile makes it clear that this is the output for the tool

cos_theta_step	dcostheta	should this be same as gtrspgen's tbinz?
pixel_size	binsz	binsize is short enough binsz was picked to match the imaging tools in the FTOOLS

gtmodelmap

Current Name	Proposed Name	Comments
srcmaps		
source_model_file	srcmdl	
outfile		
rspfunc	irfs	
expcube		
binned_exposure_map	expmap	bexpmap
perform_convolution	convl	convol is short enough

gtobssim

Current Name	Proposed Name	Comments
xml_source_file	infile	
source_list	srclist	
scfile		
sctable		
outfile_prefix	evroot	
evtable		
simulation_time	simtime	
livetime		
start_time	tstart	
use_as_numevents	nevents	
max_simulation_time	maxtime	
start_date	startdate	
srcid_offset	dsrcid	
use_acceptance_cone	use_ac	
ra		
dec		
radius		
emin		
emax		
apply_edisp	edisp	
rspfunc	irfs	
max_numrows	nrows	
random_seed	seed	

gtorbsim

Current Name	Proposed Name	Comments
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outfile		
sctable		
pointing_strategy	obsmode	
rocking_angle	rangle	
simulation_time	stime	
livetime_frac	ltfrac	
start_time	tstart	
max_numrows	nrows	

gtpsf

Current Name	Proposed Name	Comments
exposure_cube_file	expcube	
outfile		
outtable		
rspfunc	irfs	
ra		
dec		
emin		
emax		
numenergies	nenergies	
thetamax		
numthetas	ntheta	

gtsrcmaps

Current Name	Proposed Name	Comments
scfile		
sctable		
exposure_cube_file	expcube	
counts_map_file	expmap	cntmap or cntcube, as in gtlikelihood
source_model_file	srcmdl	
binned_exposure_map	bexpmap	
outfile		
rspfunc	irfs	
perform_convolution	convl	
compute_point_sources	ptsrc	
apply_psf_corrections	psfcorr	
pixel_size	binsz	

gttsmap

Current Name	Proposed Name	Comments
evfile		
evtable		

scfile		
sctable		
exposure_map_file	expmap	
exposure_cube_file	expcube	
source_model_file	srcmdl	
outfile		
rspfunc	irfs	
optimizer		
fit_tolerance	ftol	
ra_min		
dec_min		
nra		
dec_min		
dec_max		
ndec		
use_lb	coordsys	should match gtbin
pixel_size	binsz	

gtrspgen

Current Name	Proposed Name	Comments
respalg		
specfile		
scfile		
outfile		
resptype	irfs	
sctable		
resptpl		
time		
thetacut		
thetabinsize	tbinsz	should this be same as gtlivetimecube's dcostheta?
energybinalg	ebinalg	
energyfield	efield	
emin		
emax		
enumbins		
deltaenergy	denergy	
energybinfile	ebinfile	

gtbin

Current Name	Proposed Name	Comments
pixscale	binsz	
evfile		
scfile		

outfile		Hard to make more specific, could be a light curve, or a map, or a cube (<i>SD</i>)
algorithm		
energybinalg	ebinalg	
emin		
emax		
enumbins		
deltaenergy	idenergy	
energybinfile	ebinfile	
timebinalg		
tstart		
tstop		
deltatime		
timebinfile	tbinfile	
snratio		
lcemin		
lcemax		
numxpix	nxpix	
numypix	nypix	
pixscale		
coordsys		
xref		
yref		
axisrot		
rafield		
decfield		
proj		
evtable		
sctable		
energyfield	efield	
timefield		