

StackMeta

Description: Contains the metadata describing the stacked image produced from the combination of a set of single epoch exposures. The nature of the stack is given by the StackTypeID. The astrometric and photometric calibration of the stacked image are listed.

Name	Unit	Data Type	Size	Default Value	Description
stackImageID	dimensionless	BIGINT	8	NA	Unique stack identifier.
batchID	dimensionless	BIGINT	8	NA	Internal database batch identifier.
surveyID	dimensionless	TINYINT	1	NA	Survey identifier. Details in the Survey table.
filterID	dimensionless	TINYINT	1	NA	Filter identifier. Details in the Filter table.
stackTypeID	dimensionless	TINYINT	1	0	Stack type identifier. Details in the StackType table.
tessID	dimensionless	TINYINT	1	0	Tessellation identifier. Details in the TessellationType table.
projectionID	dimensionless	SMALLINT	2	-1	Projection cell identifier.
skyCellID	dimensionless	TINYINT	1	255	Skycell region identifier.
photoCalID	dimensionless	INT	4	NA	Photometric calibration identifier. Details in the PhotoCal table.
analysisVer	dimensionless	VARCHAR (100)	100		IPP software analysis release version.
md5sum	dimensionless	VARCHAR (100)	100		IPP MD5 Checksum.
expTime	seconds	REAL	4	-999	Exposure time of the stack. Necessary for converting listed fluxes and magnitudes back to measured ADU counts.
nP2Images	dimensionless	SMALLINT	2	-999	Number of input exposures/frames contributing to this stack.
detectionThreshold	magnitudes	REAL	4	-999	Reference magnitude for detection efficiency calculation.
astroScat	dimensionless	REAL	4	-999	Measurement of the calibration (not astrometric error) defined to be the sum in quadrature of the standard deviations in the X and Y directions.
photoScat	dimensionless	REAL	4	-999	Photometric scatter relative to reference catalog.
nAstroRef	dimensionless	INT	4	-999	Number of astrometric reference sources.
nPhotoRef	dimensionless	INT	4	-999	Number of photometric reference sources.
recalAstroScatX	arcsec	REAL	4	-999	Measurement of the re-calibration (not astrometric error) in the X direction.
recalAstroScatY	arcsec	REAL	4	-999	Measurement of the re-calibration (not astrometric error) in the Y direction.
recalNAstroStars	dimensionless	INT	4	-999	Number of astrometric reference sources used in recalibration.
recalphotoScat	magnitudes	REAL	4	-999	Photometric scatter relative to reference catalog.
recalNPhotoStars	dimensionless	INT	4	-999	Number of astrometric reference sources used in recalibration.
psfModelID	dimensionless	INT	4	-999	PSF model identifier.
psfFWHM	arcsec	REAL	4	-999	Mean PSF full width at half maximum at image center.
psfWidMajor	arcsec	REAL	4	-999	PSF major axis FWHM at image center.
psfWidMinor	arcsec	REAL	4	-999	PSF minor axis FWHM at image center.

psfTheta	degrees	REAL	4	-999	PSF major axis orientation at image center.
photoZero	magnitudes	REAL	4	-999	Locally derived photometric zero point for this stack.
ctype1	dimensionless	VARCHAR (100)	100		Name of astrometric projection in right ascension.
ctype2	dimensionless	VARCHAR (100)	100		Name of astrometric projection in declination.
crval1	degrees	FLOAT	8	-999	Right ascension corresponding to reference pixel.
crval2	degrees	FLOAT	8	-999	Declination corresponding to reference pixel.
crpix1	sky pixels	FLOAT	8	-999	Reference pixel for right ascension.
crpix2	sky pixels	FLOAT	8	-999	Reference pixel for declination.
cdelt1	degrees/pixel	FLOAT	8	-999	Pixel scale in right ascension.
cdelt2	degrees/pixel	FLOAT	8	-999	Pixel scale in declination.
pc001001	dimensionless	FLOAT	8	-999	Linear transformation matrix element between image pixel x and right ascension.
pc001002	dimensionless	FLOAT	8	-999	Linear transformation matrix element between image pixel y and right ascension.
pc002001	dimensionless	FLOAT	8	-999	Linear transformation matrix element between image pixel x and declination.
pc002002	dimensionless	FLOAT	8	-999	Linear transformation matrix element between image pixel y and declination.
processingVersion	dimensionless	TINYINT	1	NA	Data release version.