DiffMeta

Description: Contains metadata related to a difference image constructed by subtracting a stacked image from a single epoch image, or in the case of the MD Survey from a nightly stack (stack made from all exposures in a single filter in a single night). The astrometric calibration of the reference stack is listed.

Name	Unit	Data Type	Size	Default Value	Description
diffImageID	dimensionless	BIGINT	8	NA	Unique difference 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.
diffTypeID	dimensionless	TINYINT	1	0	Difference type identifier. Details in the DiffType table.
frameID	dimensionless	INT	4	NA	Frame/exposure identifier for the postitive image in warp-stack difference images; not populated for stack-stack differences.
posImageID	dimensionless	BIGINT	8	NA	Image identifier for the positive image. For warp-stack difference images, this corresponds to the ForcedWarpToImage.forcedWarpID entry. For stack-stack difference images, this corresponds to StackMeta. stackImageID.
negImageID	dimensionless	BIGINT	8	NA	Image identifier for the negative image. For warp-stack difference images, this corresponds to the StackMeta. stackImageID entry.
ippDiffID	dimensionless	BIGINT	8	NA	IPP diffRun identifier.
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.
detectionThreshold	magnitudes	REAL	4	-999	Reference magnitude for detection efficiency calculation.
expTime	seconds	REAL	4	-999	Exposure time of positive image. Necessary for converting listed fluxes and magnitudes back to measured ADU counts.
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.
kernel	dimensionless	VARCHAR(100)	100		Subtraction kernel.
mode	dimensionless	TINYINT	1	0	Subtraction mode for which input to convolve.
numStamps	dimensionless	INT	4	-999	Number of stamps.
stampDevMean	dimensionless	REAL	4	-999	Mean stamp deviation.

stampDevRMS	dimensionless	REAL	4	-999	RMS stamp deviation.
normalization	dimensionless	REAL	4	-999	Normalization.
convolveMax	dimensionless	REAL	4	-999	Maxiumum convolution fraction.
deconvolveMax	dimensionless	REAL	4	-999	Maximum deconvolution fraction.
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.