PS1 DiffDetObjectView table fields

The starting point for the PS1 data archive is at Pan-STARRS1 data archive home page.

This page describes a "View", which is a database table created by joining other tables.

Description: -- DiffDetObject join DiffDetection joined by diffobjID column.

Name	Unit	Data Type	Size	Default Value	Description
diffObjName	dimensionless	VARCHAR(32)	32	NA	IAU name for this object.
diffObjAltName1	dimensionless	VARCHAR(32)	32		Alternname name for this object.
diffObjAltName2	dimensionless	VARCHAR(32)	32		Alternname name for this object.
diffObjAltName3	dimensionless	VARCHAR(32)	32		Alternname name for this object.
diffObjID	dimensionless	BIGINT	8	NA	Unique difference object identifier.
uniquePspsDOid	dimensionless	BIGINT	8	NA	Unique internal PSPS difference object identifier.
ippObjID	dimensionless	BIGINT	8	NA	IPP internal object identifier.
surveyID	dimensionless	TINYINT	1	NA	Survey identifier. Details in the Survey table.
htmID	dimensionless	BIGINT	8	NA	Hierarchical triangular mesh (Szalay 2007) index.
zoneID	dimensionless	INT	4	NA	Local zone index, found by dividing the sky into bands of declination 1/2 arcminute in height: zoneID = floor ((90 + declination)/0.0083333).
randomDiffObjID	dimensionless	FLOAT	8	NA	Random value drawn from the interval between zero and one.
batchID	dimensionless	BIGINT	8	NA	Internal database batch identifier.
dvoRegionID	dimensionless	INT	4	-1	Internal DVO region identifier.
objInfoFlag	dimensionless	INT	4	0	Information flag bitmask indicating details of the photometry. Values listed in ObjectInfoFlags.
qualityFlag	dimensionless	TINYINT	1	0	Subset of objInfoFlag denoting whether this object is real or a likely false positive. Values listed in ObjectQualityFlags.
ra	degrees	FLOAT	8	-999	Right ascension.
dec					
cx	dimensionless	FLOAT	8	NA	Cartesian x on a unit sphere.
cy	dimensionless	FLOAT	8	NA	Cartesian y on a unit sphere.
cz	dimensionless	FLOAT	8	NA	Cartesian z on a unit sphere.
lambda	degrees	FLOAT	8	-999	Ecliptic longitude.
beta	degrees	FLOAT	8	-999	Ecliptic latitude.
l	degrees	FLOAT	8	-999	Galactic longitude.
b	degrees	FLOAT	8	-999	Galactic latitude.
gQfPerfect	dimensionless	REAL	4	-999	Maximum PSF weighted fraction of pixels totally unmasked from g filter detections.
rQfPerfect	dimensionless	REAL	4	-999	Maximum PSF weighted fraction of pixels totally unmasked from r filter detections.
iQfPerfect	dimensionless	REAL	4	-999	Maximum PSF weighted fraction of pixels totally unmasked from i filter detections.

zQfPerfect	dimensionless	REAL	4	-999	Maximum PSF weighted fraction of pixels totally unmasked from z filter detections.
yQfPerfect	dimensionless	REAL	4	-999	Maximum PSF weighted fraction of pixels totally unmasked from y filter detections.
processingVersion	dimensionless	TINYINT	1	NA	Data release version.
nDetections	dimensionless	SMALLINT	2	-999	Number of difference detections in all filters.
ng	dimensionless	SMALLINT	2	-999	Number of difference detections in g filter.
nr	dimensionless	SMALLINT	2	-999	Number of difference detections in r filter.
ni	dimensionless	SMALLINT	2	-999	Number of difference detections in i filter.
nz	dimensionless	SMALLINT	2	-999	Number of difference detections in z filter.
ny	dimensionless	SMALLINT	2	-999	Number of difference detections in y filter.
fromPosImage	dimensionless	TINYINT	1	NA	Detection is from positive image (if 1) or negative image (if 0).
filterID	dimensionless	TINYINT	1	NA	Filter identifier. Details in the Filter 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.
obsTime	days	FLOAT	8	-999	Modified Julian Date at the midpoint of the observation. Note these are international atomic time rather than UTC, so if you want UTC times you will need to add 34 or 35 seconds to correct for leap seconds.
xPos	sky pixels	REAL	4	-999	PSF x center location.
yPos	sky pixels	REAL	4	-999	PSF y center location.
xPosErr	sky pixels	REAL	4	-999	Error in PSF x center location.
yPosErr	sky pixels	REAL	4	-999	Error in PSF y center location.
pltScale	arcsec /pixel	REAL	4	-999	Local plate scale at this location.
posAngle	degrees	REAL	4	-999	Position angle (sky-to-chip) at this location.
raErr	arcsec	REAL	4	-999	Right ascension error.
decErr	arcsec	REAL	4	-999	Declination error.
zp	magnitudes	REAL	4	0	Photometric zeropoint. Necessary for converting listed fluxes and magnitudes back to measured ADU counts.
telluricExt	magnitudes	REAL	4	NA	Estimated Telluric extinction due to non-photometric observing conditions. Necessary for converting listed fluxes and magnitudes back to measured ADU counts.
expTime	seconds	REAL	4	-999	Exposure time of the positive single-epoch image. Necessary for converting listed fluxes and magnitudes back to measured ADU counts.
airMass	dimensionless	REAL	4	0	Airmass at midpoint of the exposure. Necessary for converting listed fluxes and magnitudes back to measured ADU counts.
DpsfFlux	Janskys	REAL	4	-999	Flux from PSF fit.
DpsfFluxErr	Janskys	REAL	4	-999	Error in PSF flux.
xPosChip	raw pixels	REAL	4	-999	PSF x position in original chip pixels.
yPosChip	raw pixels	REAL	4	-999	PSF y position in original chip pixels.
ccdID	dimensionsless	SMALLINT	2	-999	OTA identifier of original chip (see ImageMeta).

DpsfMajorFWHM	arcsec	REAL	4	-999	PSF major axis FWHM.
DpsfMinorFWHM	arcsec	REAL	4	-999	PSF minor axis FWHM.
DpsfTheta	degrees	REAL	4	-999	PSF major axis orientation.
DpsfCore	dimensionless	REAL	4	-999	PSF core parameter k, where F = F0 / (1 + k r^2 + r^3.33).
DpsfQf	dimensionless	REAL	4	-999	PSF coverage factor.
DpsfQfPerfect	dimensionless	REAL	4	-999	PSF-weighted fraction of pixels totally unmasked.
DpsfChiSq	dimensionless	REAL	4	-999	Reduced chi squared value of the PSF model fit.
DpsfLikelihood	dimensionless	REAL	4	-999	Likelihood that this detection is best fit by a PSF.
DmomentXX	arcsec^2	REAL	4	-999	Second moment M_xx.
DmomentXY	arcsec^2	REAL	4	-999	Second moment M_xy.
DmomentYY	arcsec^2	REAL	4	-999	Second moment M_yy.
DmomentR1	arcsec	REAL	4	-999	First radial moment.
DmomentRH	arcsec^0.5	REAL	4	-999	Half radial moment (r^0.5 weighting).
DapFlux	Janskys	REAL	4	-999	Aperture flux.
DapFluxErr	Janskys	REAL	4	-999	Error in aperture flux.
DapFillF	dimensionless	REAL	4	-999	Aperture fill factor.
DkronFlux	Janskys	REAL	4	-999	Kron (1980) flux.
DkronFluxErr	Janskys	REAL	4	-999	Error in Kron (1980) flux.
DkronRad	arcsec	REAL	4	-999	Kron (1980) radius.
diffNPos	sky pixels	INT	4	-999	Number of difference pixels within the aperture that are positive.
diffFPosRatio	dimensionless	REAL	4	-999	Ratio of the sum of positive flux pixel values to the sum of the absolute value of all unmasked pixel within the aperture.
diffNPosRatio	dimensionless	REAL	4	-999	Ratio of the number of positive flux pixels to the number of unmasked pixels within the aperture.
diffNPosMask	dimensionless	REAL	4	-999	Ratio of the number of positive flux pixels to the number of positive or masked pixels within the aperture.
diffNPosAll	dimensionless	REAL	4	-999	Ratio of the number of positive flux pixels to the total number of all pixels within the aperture.
diffPosDist	sky pixels	REAL	4	-999	Distance to matching source in positive image.
diffNegDist	sky pixels	REAL	4	-999	Distance to matching source in negative image.
diffPosSN	dimensionless	REAL	4	-999	Signal to noise of matching source in positive image.
diffNegSN	dimensionless	REAL	4	-999	Signal to noise of matching source in negative image.
Dsky	Janskys /arcsec^2	REAL	4	-999	Background sky level.
DskyErr	Janskys /arcsec^2	REAL	4	-999	Error in background sky level.
DinfoFlag	dimensionless	BIGINT	8	0	Information flag bitmask indicating details of the photometry. Values listed in DetectionFlags.

DinfoFlag2	dimensionless	INT	4	0	Information flag bitmask indicating details of the photometry. Values listed in DetectionFlags2.
DinfoFlag3	dimensionless	INT	4	0	Information flag bitmask indicating details of the photometry. Values listed in DetectionFlags3.