

# PS1 DiffDetObject table fields

The starting point for the PS1 data archive is at [Pan-STARRS1 data archive home page](#).

**Description:** Contains the positional information for difference detection objects in a number of coordinate systems. The objects associate difference detections within a one arcsecond radius. The number of detections in each filter from is listed, along with maximum coverage fractions. **References:** Szalay, A. S., Gray, J., Fekete, G., et al. 2007, arXiv:cs/0701164.

Name	Unit	Data Type	Size	Default Value	Description
diffObjName	dimensionless	VARCHAR (32)	32	NA	IAU name for this object.
diffObjPSOName	dimensionless	VARCHAR (32)	32	NA	Alternate Pan-STARRS name for this object.
diffObjAltName1	dimensionless	VARCHAR (32)	32		Alternate name for this object.
diffObjAltName2	dimensionless	VARCHAR (32)	32		Alternate name for this object.
diffObjAltName3	dimensionless	VARCHAR (32)	32		Alternate name for this object.
diffObjPopularName	dimensionless	VARCHAR (140)	140		Well known 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.
htmlID	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 mean.
dec	degrees	FLOAT	8	-999	Declination mean.
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.

<b>gQfPerfect</b>	dimensionless	REAL	4	-999	Maximum PSF weighted fraction of pixels totally unmasked from g filter detections.
<b>rQfPerfect</b>	dimensionless	REAL	4	-999	Maximum PSF weighted fraction of pixels totally unmasked from r filter detections.
<b>iQfPerfect</b>	dimensionless	REAL	4	-999	Maximum PSF weighted fraction of pixels totally unmasked from i filter detections.
<b>zQfPerfect</b>	dimensionless	REAL	4	-999	Maximum PSF weighted fraction of pixels totally unmasked from z filter detections.
<b>yQfPerfect</b>	dimensionless	REAL	4	-999	Maximum PSF weighted fraction of pixels totally unmasked from y filter detections.
<b>processingVersion</b>	dimensionless	TINYINT	1	NA	Data release version.
<b>nDetections</b>	dimensionless	SMALLINT	2	-999	Number of difference detections in all filters.
<b>ng</b>	dimensionless	SMALLINT	2	-999	Number of difference detections in g filter.
<b>nr</b>	dimensionless	SMALLINT	2	-999	Number of difference detections in r filter.
<b>ni</b>	dimensionless	SMALLINT	2	-999	Number of difference detections in i filter.
<b>nz</b>	dimensionless	SMALLINT	2	-999	Number of difference detections in z filter.
<b>ny</b>	dimensionless	SMALLINT	2	-999	Number of difference detections in y filter.