

# PS1 ForcedWarpLensing table fields

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

**Description:** Contains the Kaiser et al. (1995) lensing parameters measured from the forced photometry of objects detected in stacked images on the individual single epoch data. References: Kaiser, N., Squires, G., and Broadhurst, T. 1995, ApJ, 449, 460.

Name	Unit	Data Type	Size	Default Value	Description
objID	dimensionless	BIGINT	8	NA	Unique object identifier.
uniquePs_psFWid	dimensionless	BIGINT	8	NA	Unique internal PSPS forced warp identifier.
detectID	dimensionless	BIGINT	8	NA	Unique detection identifier.
ippObjID	dimensionless	BIGINT	8	NA	IPP internal object identifier.
ippDetectID	dimensionless	BIGINT	8	NA	IPP internal detection identifier.
filterID	dimensionless	TINYINT	1	NA	Filter identifier. Details in the Filter table.
surveyID	dimensionless	TINYINT	1	NA	Survey identifier. Details in the Survey table.
forcedWarpID	dimensionless	BIGINT	8	NA	Unique forced warp identifier.
randomWarpID	dimensionless	FLOAT	8	NA	Random value drawn from the interval between zero and one.
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.
dvoRegionID	dimensionless	INT	4	-1	Internal DVO 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.
lensObjSmearX11	arcsec ^-2	REAL	4	-999	Kaiser et al. (1995) equation (A11) smear polarizability X11 term from forced photometry.
lensObjSmearX12	arcsec ^-2	REAL	4	-999	Kaiser et al. (1995) equation (A11) smear polarizability X12 term from forced photometry.
lensObjSmearX22	arcsec ^-2	REAL	4	-999	Kaiser et al. (1995) equation (A11) smear polarizability X22 term from forced photometry.
lensObjSmearE1	arcsec ^-2	REAL	4	-999	Kaiser et al. (1995) equation (A12) smear polarizability e1 term from forced photometry.
lensObjSmearE2	arcsec ^-2	REAL	4	-999	Kaiser et al. (1995) equation (A12) smear polarizability e2 term from forced photometry.
lensObjShearX11	dimensionless	REAL	4	-999	Kaiser et al. (1995) equation (B11) shear polarizability X11 term from forced photometry.
lensObjShearX12	dimensionless	REAL	4	-999	Kaiser et al. (1995) equation (B11) shear polarizability X12 term from forced photometry.
lensObjShearX22	dimensionless	REAL	4	-999	Kaiser et al. (1995) equation (B11) shear polarizability X22 term from forced photometry.
lensObjShearE1	dimensionless	REAL	4	-999	Kaiser et al. (1995) equation (B12) shear polarizability e1 term from forced photometry.
lensObjShearE2	dimensionless	REAL	4	-999	Kaiser et al. (1995) equation (B12) shear polarizability e2 term from forced photometry.

<b>lensPSFS mearX11</b>	arcsec $\wedge_2$	REAL	4	-999	Kaiser et al. (1995) equation (A11) smear polarizability X11 term from PSF model for forced photometry.
<b>lensPSFS mearX12</b>	arcsec $\wedge_2$	REAL	4	-999	Kaiser et al. (1995) equation (A11) smear polarizability X12 term from PSF model for forced photometry.
<b>lensPSFS mearX22</b>	arcsec $\wedge_2$	REAL	4	-999	Kaiser et al. (1995) equation (A11) smear polarizability X22 term from PSF model for forced photometry.
<b>lensPSFS mearE1</b>	arcsec $\wedge_2$	REAL	4	-999	Kaiser et al. (1995) equation (A12) smear polarizability e1 term from PSF model for forced photometry.
<b>lensPSFS mearE2</b>	arcsec $\wedge_2$	REAL	4	-999	Kaiser et al. (1995) equation (A12) smear polarizability e2 term from PSF model for forced photometry.
<b>lensPSFS hearX11</b>	dimens ionless	REAL	4	-999	Kaiser et al. (1995) equation (B11) shear polarizability X11 term from PSF model for forced photometry.
<b>lensPSFS hearX12</b>	dimens ionless	REAL	4	-999	Kaiser et al. (1995) equation (B11) shear polarizability X12 term from PSF model for forced photometry.
<b>lensPSFS hearX22</b>	dimens ionless	REAL	4	-999	Kaiser et al. (1995) equation (B11) shear polarizability X22 term from PSF model for forced photometry.
<b>lensPSFS hearE1</b>	dimens ionless	REAL	4	-999	Kaiser et al. (1995) equation (B12) shear polarizability e1 term from PSF model for forced photometry.
<b>lensPSFS hearE2</b>	dimens ionless	REAL	4	-999	Kaiser et al. (1995) equation (B12) shear polarizability e2 term from PSF model for forced photometry.
<b>psfE1</b>	dimens ionless	REAL	4	-999	Kaiser et al. (1995) polarization parameter $e1 = (M_{xx} - M_{yy}) / (M_{xx} + M_{yy})$ from forced photometry.
<b>psfE2</b>	dimens ionless	REAL	4	-999	Kaiser et al. (1995) polarization parameter $e2 = (2 M_{xy}) / (M_{xx} + M_{yy})$ from forced photometry.