

# PS1 ForcedGalaxyShape table fields

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

**Description:** Contains the extended source galaxy shape parameters. All filters are matched into a single row. The positions, magnitudes, fluxes, and Sersic indices are inherited from their parent measurement in the StackModelFit tables, and are reproduced here for convenience. The major and minor axes and orientation are recalculated on a warp-by-warp basis from the best fit given these inherited properties. **References:** Sersic, J. L. 1963, Boletin de la Asociacion Argentina de Astronomia La Plata Argentina, 6, 41.

Name	Unit	Data Type	Size	Default Value	Description
objID	dimensionless	BIGINT	8	NA	Unique object identifier.
uniquePspFGid	dimensionless	BIGINT	8	NA	Unique internal PSPS forced galaxy identifier.
ippObjID	dimensionless	BIGINT	8	NA	IPP internal object identifier.
surveyID	dimensionless	TINYINT	1	NA	Survey identifier. Details in the Survey table.
randomForcedGalID	dimensionless	FLOAT	8	NA	Random value drawn from the interval between zero and one.
galModelType	dimensionless	TINYINT	1	-999	Galaxy model identifier.
nFilter	dimensionless	TINYINT	1	-999	Number of filters with valid model measurements.
gippDetectID	dimensionless	BIGINT	8	NA	IPP internal detection identifier.
gstackImageID	dimensionless	BIGINT	8	NA	Unique stack identifier for the g filter stack that was the original detection source.
gGalMajor	arcsec	REAL	4	-999	Galaxy major axis for g filter measurement.
gGalMajorErr	arcsec	REAL	4	-999	Error in galaxy major axis for g filter measurement.
gGalMinor	arcsec	REAL	4	-999	Galaxy minor axis for g filter measurement.
gGalMinorErr	arcsec	REAL	4	-999	Error in galaxy minor axis for g filter measurement.
gGalMag	AB magnitudes	REAL	4	-999	Galaxy fit magnitude for g filter measurement.
gGalMagErr	AB magnitudes	REAL	4	-999	Error in galaxy fit magnitude for g filter measurement.
gGalPhi	degrees	REAL	4	-999	Major axis position angle of the model fit for the g filter measurement.
gGalIndex	dimensionless	REAL	4	-999	Sersic index of the model fit for the g filter measurement.
gGalFlags	dimensionless	SMALLINT	2	-999	Analysis flags for the galaxy model chi-square fit (g filter measurement, values defined in ForcedGalaxyShapeFlags).
gGalChisq	dimensionless	REAL	4	-999	Reduced chi squared value for g filter measurement.
rippDetectID	dimensionless	BIGINT	8	NA	IPP internal detection identifier.
rstackImageID	dimensionless	BIGINT	8	NA	Unique stack identifier for the r filter stack that was the original detection source.
rGalMajor	arcsec	REAL	4	-999	Galaxy major axis for r filter measurement.
rGalMajorErr	arcsec	REAL	4	-999	Error in galaxy major axis for r filter measurement.
rGalMinor	arcsec	REAL	4	-999	Galaxy minor axis for r filter measurement.
rGalMinorErr	arcsec	REAL	4	-999	Error in galaxy minor axis for r filter measurement.
rGalMag	AB magnitudes	REAL	4	-999	Galaxy fit magnitude for r filter measurement.
rGalMagErr	AB magnitudes	REAL	4	-999	Error in galaxy fit magnitude for r filter measurement.

<b>rGalPhi</b>	degrees	REAL	4	-999	Major axis position angle of the model fit for the r filter measurement.
<b>rGalIndex</b>	dimensionless	REAL	4	-999	Sersic index of the model fit for the r filter measurement.
<b>rGalFlags</b>	dimensionless	SMALLINT	2	-999	Analysis flags for the galaxy model chi-square fit (r filter measurement, values defined in ForcedGalaxyShapeFlags).
<b>rGalChisq</b>	dimensionless	REAL	4	-999	Reduced chi squared value for r filter measurement.
<b>iippDetectID</b>	dimensionless	BIGINT	8	NA	IPP internal detection identifier.
<b>istackImageID</b>	dimensionless	BIGINT	8	NA	Unique stack identifier for the i filter stack that was the original detection source.
<b>iGalMajor</b>	arcsec	REAL	4	-999	Galaxy major axis for i filter measurement.
<b>iGalMajorErr</b>	arcsec	REAL	4	-999	Error in galaxy major axis for i filter measurement.
<b>iGalMinor</b>	arcsec	REAL	4	-999	Galaxy minor axis for i filter measurement.
<b>iGalMinorErr</b>	arcsec	REAL	4	-999	Error in galaxy minor axis for i filter measurement.
<b>iGalMag</b>	AB magnitudes	REAL	4	-999	Galaxy fit magnitude for i filter measurement.
<b>iGalMagErr</b>	AB magnitudes	REAL	4	-999	Error in galaxy fit magnitude for i filter measurement.
<b>iGalPhi</b>	degrees	REAL	4	-999	Major axis position angle of the model fit for the i filter measurement.
<b>iGalIndex</b>	dimensionless	REAL	4	-999	Sersic index of the model fit for the i filter measurement.
<b>iGalFlags</b>	dimensionless	SMALLINT	2	-999	Analysis flags for the galaxy model chi-square fit (i filter measurement, values defined in ForcedGalaxyShapeFlags).
<b>iGalChisq</b>	dimensionless	REAL	4	-999	Reduced chi squared value for i filter measurement.
<b>zippDetectID</b>	dimensionless	BIGINT	8	NA	IPP internal detection identifier.
<b>zstackImageID</b>	dimensionless	BIGINT	8	NA	Unique stack identifier for the z filter stack that was the original detection source.
<b>zGalMajor</b>	arcsec	REAL	4	-999	Galaxy major axis for z filter measurement.
<b>zGalMajorErr</b>	arcsec	REAL	4	-999	Error in galaxy major axis for z filter measurement.
<b>zGalMinor</b>	arcsec	REAL	4	-999	Galaxy minor axis for z filter measurement.
<b>zGalMinorErr</b>	arcsec	REAL	4	-999	Error in galaxy minor axis for z filter measurement.
<b>zGalMag</b>	AB magnitudes	REAL	4	-999	Galaxy fit magnitude for z filter measurement.
<b>zGalMagErr</b>	AB magnitudes	REAL	4	-999	Error in galaxy fit magnitude for z filter measurement.
<b>zGalPhi</b>	degrees	REAL	4	-999	Major axis position angle of the model fit for the z filter measurement.
<b>zGalIndex</b>	dimensionless	REAL	4	-999	Sersic index of the model fit for the z filter measurement.
<b>zGalFlags</b>	dimensionless	SMALLINT	2	-999	Analysis flags for the galaxy model chi-square fit (z filter measurement, values defined in ForcedGalaxyShapeFlags).
<b>zGalChisq</b>	dimensionless	REAL	4	-999	Reduced chi squared value for z filter measurement.
<b>yippDetectID</b>	dimensionless	BIGINT	8	NA	IPP internal detection identifier.
<b>ystackImageID</b>	dimensionless	BIGINT	8	NA	Unique stack identifier for the z filter stack that was the original detection source.
<b>yGalMajor</b>	arcsec	REAL	4	-999	Galaxy major axis for y filter measurement.
<b>yGalMajorErr</b>	arcsec	REAL	4	-999	Error in galaxy major axis for y filter measurement.
<b>yGalMinor</b>	arcsec	REAL	4	-999	Galaxy minor axis for y filter measurement.
<b>yGalMinorErr</b>	arcsec	REAL	4	-999	Error in galaxy minor axis for y filter measurement.
<b>yGalMag</b>	AB magnitudes	REAL	4	-999	Galaxy fit magnitude for y filter measurement.

<b>yGalMagErr</b>	AB magnitudes	REAL	4	-999	Error in galaxy fit magnitude for y filter measurement.
<b>yGalPhi</b>	degrees	REAL	4	-999	Major axis position angle of the model fit for the y filter measurement.
<b>yGalIndex</b>	dimensionless	REAL	4	-999	Sersic index of the model fit for the y filter measurement.
<b>yGalFlags</b>	dimensionless	SMALLINT	2	-999	Analysis flags for the galaxy model chi-square fit (y filter measurement, values defined in ForcedGalaxyShapeFlags).
<b>yGalChisq</b>	dimensionless	REAL	4	-999	Reduced chi squared value for y filter measurement.