

# PS1 MeanObject table fields

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

**Description:** Contains the mean photometric information for objects based on the single epoch data, calculated as described in Magnier et al (2013). To be included in this table, an object must be bright enough to have been detected at least once in an individual exposure. PSF, Kron (1980), and aperture magnitudes and statistics are listed for all filters. References: Kron, R. G. 1980, ApJS, 43, 305; Magnier, E. A., Schlafly, E., Finkbeiner, D., et al. 2013, ApJS, 205, 20.

| Name            | Unit          | Data Type | Size | Default Value | Description   |
|-----------------|---------------|-----------|------|---------------|---|
| objID           | dimensionless | BIGINT    | 8    | NA            | Unique object identifier.   |
| uniquePspsoBid  | dimensionless | BIGINT    | 8    | NA            | Unique internal PSPS object identifier.   |
| gQfPerfect      | dimensionless | REAL      | 4    | -999          | Maximum PSF weighted fraction of pixels totally unmasked from g filter detections.                                      |
| gMeanPSFMag     | AB magnitudes | REAL      | 4    | -999          | Mean PSF magnitude from g filter detections.  |
| gMeanPSFMagErr  | AB magnitudes | REAL      | 4    | -999          | Error in mean PSF magnitude from g filter detections.   |
| gMeanPSFMagStd  | AB magnitudes | REAL      | 4    | -999          | Standard deviation of PSF magnitudes from g filter detections.  |
| gMeanPSFMagNpt  | dimensionless | SMALLINT  | 2    | -999          | Number of measurements included in mean PSF magnitude from g filter detections.   |
| gMeanPSFMagMin  | AB magnitudes | REAL      | 4    | -999          | Minimum PSF magnitude from g filter detections.   |
| gMeanPSFMagMax  | AB magnitudes | REAL      | 4    | -999          | Maximum PSF magnitude from g filter detections.   |
| gMeanKronMag    | AB magnitudes | REAL      | 4    | -999          | Mean Kron (1980) magnitude from g filter detections.  |
| gMeanKronMagErr | AB magnitudes | REAL      | 4    | -999          | Error in mean Kron (1980) magnitude from g filter detections.   |
| gMeanKronMagStd | AB magnitudes | REAL      | 4    | -999          | Standard deviation of Kron (1980) magnitudes from g filter detections.  |
| gMeanKronMagNpt | dimensionless | SMALLINT  | 2    | -999          | Number of measurements included in mean Kron (1980) magnitude from g filter detections.                                 |
| gMeanApMag      | AB magnitudes | REAL      | 4    | -999          | Mean aperture magnitude from g filter detections.   |
| gMeanApMagErr   | AB magnitudes | REAL      | 4    | -999          | Error in mean aperture magnitude from g filter detections.  |
| gMeanApMagStd   | AB magnitudes | REAL      | 4    | -999          | Standard deviation of aperture magnitudes from g filter detections.   |
| gMeanApMagNpt   | dimensionless | SMALLINT  | 2    | -999          | Number of measurements included in mean aperture magnitude from g filter detections.                                    |
| gFlags          | dimensionless | INT       | 4    | 0             | Information flag bitmask for mean object from g filter detections. Values listed in <a href="#">ObjectFilterFlags</a> . |
| rQfPerfect      | dimensionless | REAL      | 4    | -999          | Maximum PSF weighted fraction of pixels totally unmasked from r filter detections.                                      |
| rMeanPSFMag     | AB magnitudes | REAL      | 4    | -999          | Mean PSF magnitude from r filter detections.  |
| rMeanPSFMagErr  | AB magnitudes | REAL      | 4    | -999          | Error in mean PSF magnitude from r filter detections.   |
| rMeanPSFMagStd  | AB magnitudes | REAL      | 4    | -999          | Standard deviation of PSF magnitudes from r filter detections.  |
| rMeanPSFMagNpt  | dimensionless | SMALLINT  | 2    | -999          | Number of measurements included in mean PSF magnitude from r filter detections.   |
| rMeanPSFMagMin  | AB magnitudes | REAL      | 4    | -999          | Minimum PSF magnitude from r filter detections.   |
| rMeanPSFMagMax  | AB magnitudes | REAL      | 4    | -999          | Maximum PSF magnitude from r filter detections.   |
| rMeanKronMag    | AB magnitudes | REAL      | 4    | -999          | Mean Kron (1980) magnitude from r filter detections.  |

|                        |               |          |   |      |   |
|------------------------|---------------|----------|---|------|---|
| <b>rMeanKronMagErr</b> | AB magnitudes | REAL     | 4 | -999 | Error in mean Kron (1980) magnitude from r filter detections.   |
| <b>rMeanKronMagStd</b> | AB magnitudes | REAL     | 4 | -999 | Standard deviation of Kron (1980) magnitudes from r filter detections.  |
| <b>rMeanKronMagNpt</b> | dimensionless | SMALLINT | 2 | -999 | Number of measurements included in mean Kron (1980) magnitude from r filter detections.                                 |
| <b>rMeanApMag</b>      | AB magnitudes | REAL     | 4 | -999 | Mean aperture magnitude from r filter detections.   |
| <b>rMeanApMagErr</b>   | AB magnitudes | REAL     | 4 | -999 | Error in mean aperture magnitude from r filter detections.  |
| <b>rMeanApMagStd</b>   | AB magnitudes | REAL     | 4 | -999 | Standard deviation of aperture magnitudes from r filter detections.   |
| <b>rMeanApMagNpt</b>   | dimensionless | SMALLINT | 2 | -999 | Number of measurements included in mean aperture magnitude from r filter detections.                                    |
| <b>rFlags</b>          | dimensionless | INT      | 4 | 0    | Information flag bitmask for mean object from r filter detections. Values listed in <a href="#">ObjectFilterFlags</a> . |
| <b>iQfPerfect</b>      | dimensionless | REAL     | 4 | -999 | Maximum PSF weighted fraction of pixels totally unmasked from i filter detections.                                      |
| <b>iMeanPSFMag</b>     | AB magnitudes | REAL     | 4 | -999 | Mean PSF magnitude from i filter detections.  |
| <b>iMeanPSFMagErr</b>  | AB magnitudes | REAL     | 4 | -999 | Error in mean PSF magnitude from i filter detections.   |
| <b>iMeanPSFMagStd</b>  | AB magnitudes | REAL     | 4 | -999 | Standard deviation of PSF magnitudes from i filter detections.  |
| <b>iMeanPSFMagNpt</b>  | dimensionless | SMALLINT | 2 | -999 | Number of measurements included in mean PSF magnitude from i filter detections.   |
| <b>iMeanPSFMagMin</b>  | AB magnitudes | REAL     | 4 | -999 | Minimum PSF magnitude from i filter detections.   |
| <b>iMeanPSFMagMax</b>  | AB magnitudes | REAL     | 4 | -999 | Maximum PSF magnitude from i filter detections.   |
| <b>iMeanKronMag</b>    | AB magnitudes | REAL     | 4 | -999 | Mean Kron (1980) magnitude from i filter detections.  |
| <b>iMeanKronMagErr</b> | AB magnitudes | REAL     | 4 | -999 | Error in mean Kron (1980) magnitude from i filter detections.   |
| <b>iMeanKronMagStd</b> | AB magnitudes | REAL     | 4 | -999 | Standard deviation of Kron (1980) magnitudes from i filter detections.  |
| <b>iMeanKronMagNpt</b> | dimensionless | SMALLINT | 2 | -999 | Number of measurements included in mean Kron (1980) magnitude from i filter detections.                                 |
| <b>iMeanApMag</b>      | AB magnitudes | REAL     | 4 | -999 | Mean aperture magnitude from i filter detections.   |
| <b>iMeanApMagErr</b>   | AB magnitudes | REAL     | 4 | -999 | Error in mean aperture magnitude from i filter detections.  |
| <b>iMeanApMagStd</b>   | AB magnitudes | REAL     | 4 | -999 | Standard deviation of aperture magnitudes from i filter detections.   |
| <b>iMeanApMagNpt</b>   | dimensionless | SMALLINT | 2 | -999 | Number of measurements included in mean aperture magnitude from i filter detections.                                    |
| <b>iFlags</b>          | dimensionless | INT      | 4 | 0    | Information flag bitmask for mean object from i filter detections. Values listed in <a href="#">ObjectFilterFlags</a> . |
| <b>zQfPerfect</b>      | dimensionless | REAL     | 4 | -999 | Maximum PSF weighted fraction of pixels totally unmasked from z filter detections.                                      |
| <b>zMeanPSFMag</b>     | AB magnitudes | REAL     | 4 | -999 | Mean PSF magnitude from z filter detections.  |
| <b>zMeanPSFMagErr</b>  | AB magnitudes | REAL     | 4 | -999 | Error in mean PSF magnitude from z filter detections.   |
| <b>zMeanPSFMagStd</b>  | AB magnitudes | REAL     | 4 | -999 | Standard deviation of PSF magnitudes from z filter detections.  |
| <b>zMeanPSFMagNpt</b>  | dimensionless | SMALLINT | 2 | -999 | Number of measurements included in mean PSF magnitude from z filter detections.   |
| <b>zMeanPSFMagMin</b>  | AB magnitudes | REAL     | 4 | -999 | Minimum PSF magnitude from z filter detections.   |
| <b>zMeanPSFMagMax</b>  | AB magnitudes | REAL     | 4 | -999 | Maximum PSF magnitude from z filter detections.   |
| <b>zMeanKronMag</b>    | AB magnitudes | REAL     | 4 | -999 | Mean Kron (1980) magnitude from z filter detections.  |

|                        |               |          |   |      |   |
|------------------------|---------------|----------|---|------|---|
| <b>zMeanKronMagErr</b> | AB magnitudes | REAL     | 4 | -999 | Error in mean Kron (1980) magnitude from z filter detections.   |
| <b>zMeanKronMagStd</b> | AB magnitudes | REAL     | 4 | -999 | Standard deviation of Kron (1980) magnitudes from z filter detections.  |
| <b>zMeanKronMagNpt</b> | dimensionless | SMALLINT | 2 | -999 | Number of measurements included in mean Kron (1980) magnitude from z filter detections.                                 |
| <b>zMeanApMag</b>      | AB magnitudes | REAL     | 4 | -999 | Mean aperture magnitude from z filter detections.   |
| <b>zMeanApMagErr</b>   | AB magnitudes | REAL     | 4 | -999 | Error in mean aperture magnitude from z filter detections.  |
| <b>zMeanApMagStd</b>   | AB magnitudes | REAL     | 4 | -999 | Standard deviation of aperture magnitudes from z filter detections.   |
| <b>zMeanApMagNpt</b>   | dimensionless | SMALLINT | 2 | -999 | Number of measurements included in mean aperture magnitude from z filter detections.                                    |
| <b>zFlags</b>          | dimensionless | INT      | 4 | 0    | Information flag bitmask for mean object from z filter detections. Values listed in <a href="#">ObjectFilterFlags</a> . |
| <b>yQfPerfect</b>      | dimensionless | REAL     | 4 | -999 | Maximum PSF weighted fraction of pixels totally unmasked from y filter detections.                                      |
| <b>yMeanPSFMag</b>     | AB magnitudes | REAL     | 4 | -999 | Mean PSF magnitude from y filter detections.  |
| <b>yMeanPSFMagErr</b>  | AB magnitudes | REAL     | 4 | -999 | Error in mean PSF magnitude from y filter detections.   |
| <b>yMeanPSFMagStd</b>  | AB magnitudes | REAL     | 4 | -999 | Standard deviation of PSF magnitudes from y filter detections.  |
| <b>yMeanPSFMagNpt</b>  | dimensionless | SMALLINT | 2 | -999 | Number of measurements included in mean PSF magnitude from y filter detections.   |
| <b>yMeanPSFMagMin</b>  | AB magnitudes | REAL     | 4 | -999 | Minimum PSF magnitude from y filter detections.   |
| <b>yMeanPSFMagMax</b>  | AB magnitudes | REAL     | 4 | -999 | Maximum PSF magnitude from y filter detections.   |
| <b>yMeanKronMag</b>    | AB magnitudes | REAL     | 4 | -999 | Mean Kron (1980) magnitude from y filter detections.  |
| <b>yMeanKronMagErr</b> | AB magnitudes | REAL     | 4 | -999 | Error in mean Kron (1980) magnitude from y filter detections.   |
| <b>yMeanKronMagStd</b> | AB magnitudes | REAL     | 4 | -999 | Standard deviation of Kron (1980) magnitudes from y filter detections.  |
| <b>yMeanKronMagNpt</b> | dimensionless | SMALLINT | 2 | -999 | Number of measurements included in mean Kron (1980) magnitude from y filter detections.                                 |
| <b>yMeanApMag</b>      | AB magnitudes | REAL     | 4 | -999 | Mean aperture magnitude from y filter detections.   |
| <b>yMeanApMagErr</b>   | AB magnitudes | REAL     | 4 | -999 | Error in mean aperture magnitude from y filter detections.  |
| <b>yMeanApMagStd</b>   | AB magnitudes | REAL     | 4 | -999 | Standard deviation of aperture magnitudes from y filter detections.   |
| <b>yMeanApMagNpt</b>   | dimensionless | SMALLINT | 2 | -999 | Number of measurements included in mean aperture magnitude from y filter detections.                                    |
| <b>yFlags</b>          | dimensionless | INT      | 4 | 0    | Information flag bitmask for mean object from y filter detections. Values listed in <a href="#">ObjectFilterFlags</a> . |