12/5/2015

* 'Object' — RA_1, RA_2, RA_3, RA_4
  - Calculate Median $\overline{RA} = MED(RA_i)$
  Residuals. $\Delta RA_i = \overline{RA} - RA_i$

Index.
{ i - year
k - galaxy

* for all galaxies $\Delta RA_i^{\,k}$
* for all galaxies for every year. $\Delta\overline{RA}_i = MED(\Delta RA_i)$
* final/updated RA - for all galaxies

$$RA_{New\,i}^{\,k} = RA_i^{\,k} - \Delta\overline{RA}_i$$

$$\overline{RA}_{New}^{\,k} = MED(RA_{New\,i}^{\,k})$$

AIM

for (x,y) map to (RA, DEC)

↓

Galaxy Data.

RA

SDSS

PS

POSS

time (years)

for → proper motion of star → RA DEC v/s time of star

Image 1 → (RA_1, DEC_1)

Image 2 → (RA_2, DEC_2)

y

(x_1, y_1) star.

(x_2, y_2) star

x

Galaxies don't move they are far away almost fixed.

so you can use galaxies as references.

Galaxy data / diff years / diff surveys — have offsets wrt each other. — we have to bring them all together.

Pan starrs — data for 4 years ⇒ 4 datapoints for each object.

⇓ reduce to

1 datapoint for each object