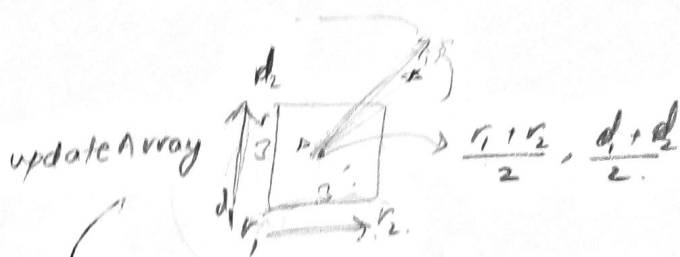


obj\_id ra dec ra\_err dec\_err nObs n1d sg-g sg-r sg-i

test.txt (1)  
18/5/2015

ra —  $R_{new}^k$   
dec —  $D_{new}^k$



if RA

$$\text{Search Radius} = \frac{r_1 + r_2}{2} + 10'$$

$$\text{for } (\Delta r (= r_* - r_b) \leq 10')$$

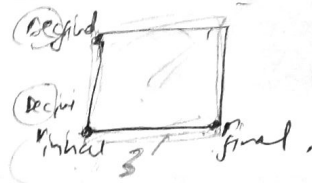
so you calculate  
actual "spherical coord distance"  
and then convert it to  
deg/minutes/sec.  
and check if less than 10'.

— this method not valid for Dec ~ 90°

for Dec ~ 0  
 $\Delta RA$  is actual dist.

for Dec ~ 90  
 $\Delta RA$  can be large, for galaxies  
not actually far away.

- pick a RA/DEC value.
- build → RA initial, DEC initial.
- take a 3' pixel/box



RA initial, DEC initial — 3' → RA final, DEC final

Collect all galaxies within this pixel in array.

↳ calculate — to build this pixel — need to calculate distances?

↳ skip making a pixel right now. ← Pixelation methods later!

RESTART.

① → take a center: RA, DEC value — (do a simple  $RA_1 - RA_2$ )

↳ make a pixel around it

↳ obtain the galaxies within it — store in another array.  
"the update array."

② → from the center, calculate distance corresponding to search radius = 10'  
collect all galaxies lying within this — in "search array".