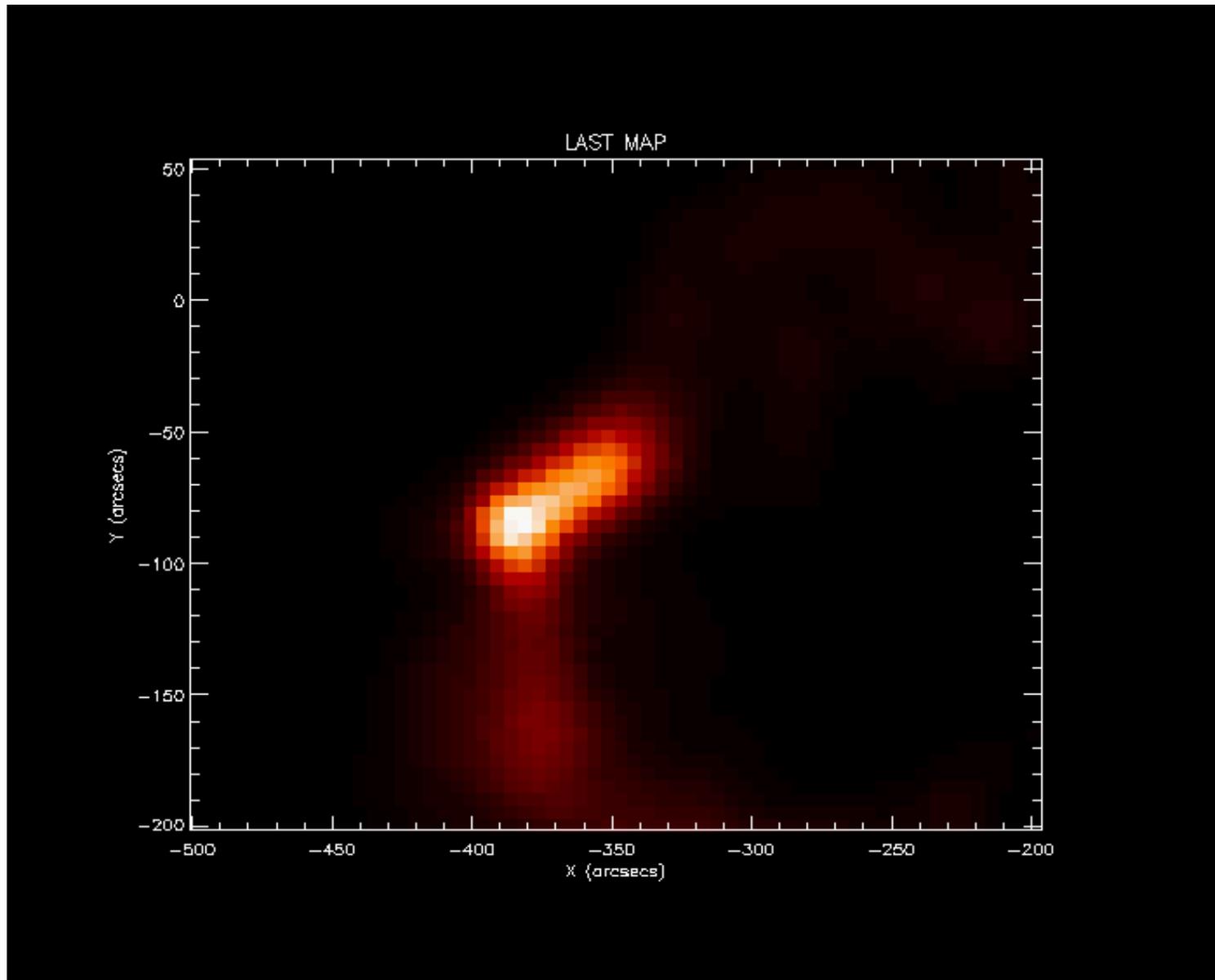


SC Ondrejov – 2013/05

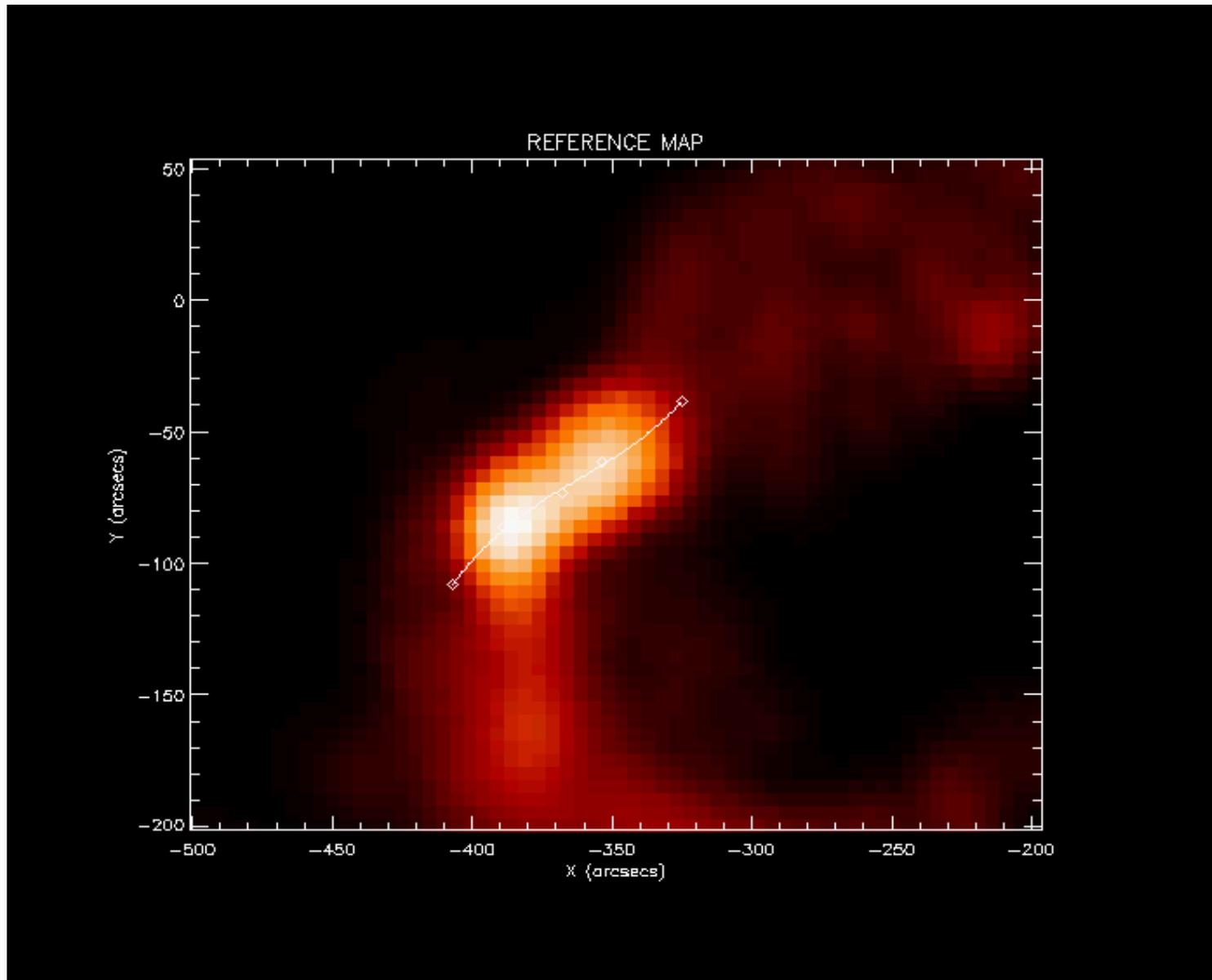
2D LOOP LIGHTCURVES -
Hinode/XRT, NoRH data

(CoMP-S@LSO lecture)

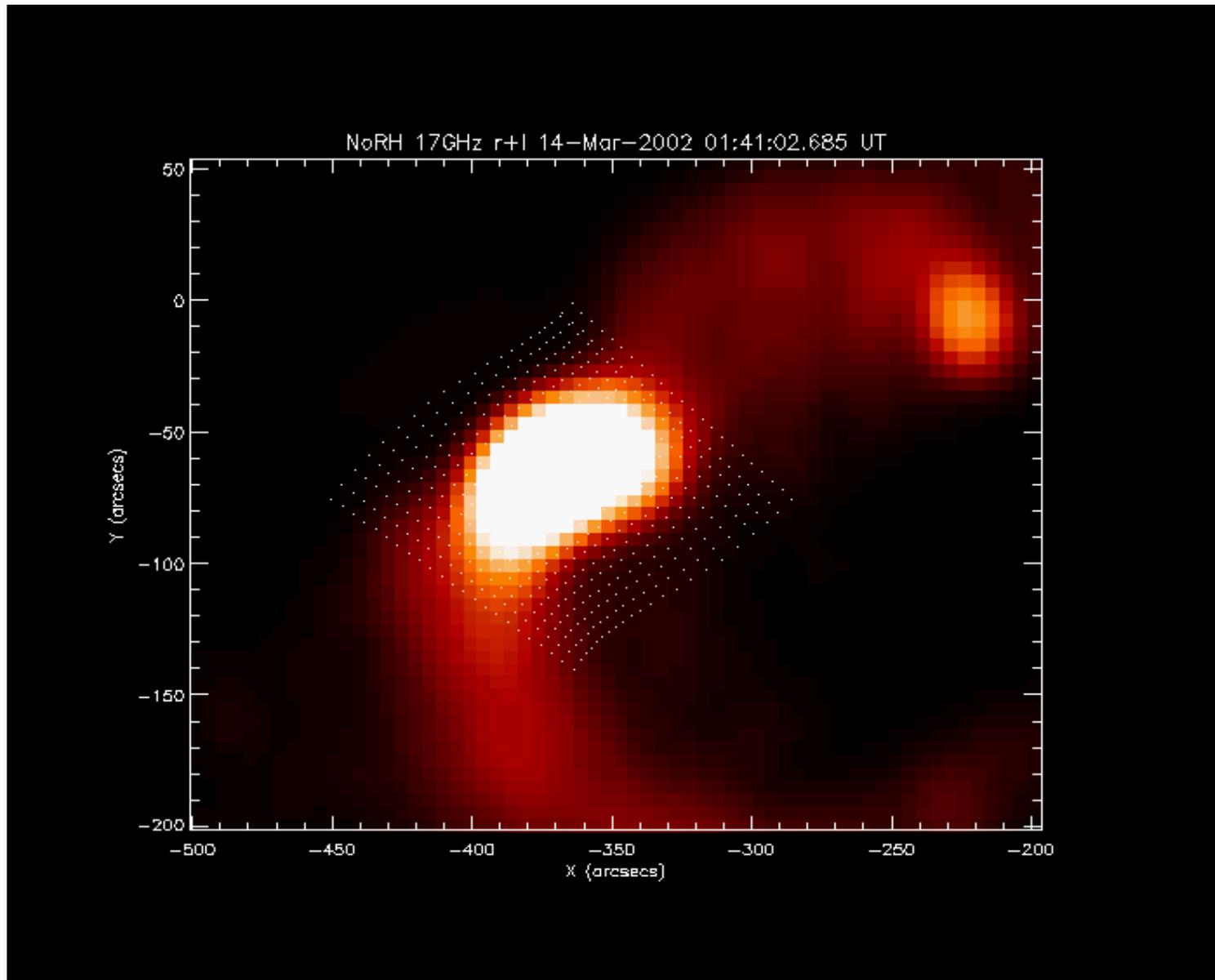
NoRH 17GHz 14/03/2002 data



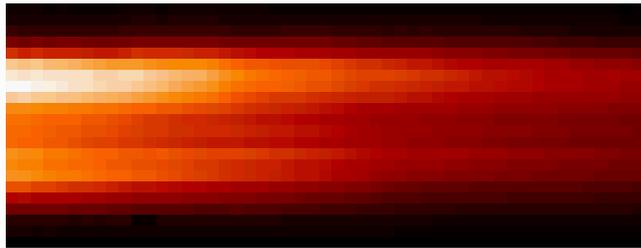
NoRH 17GHz 14/03/2002 data



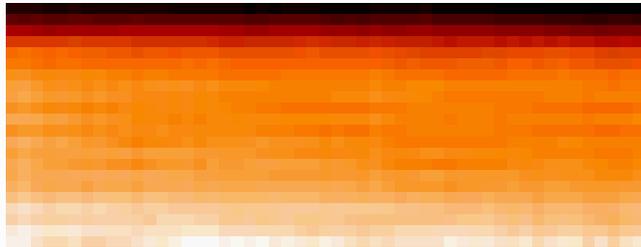
NoRH 17GHz 14/03/2002 data



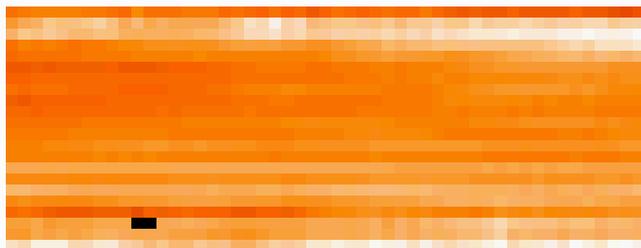
NoRH 17GHz 14/03/2002 data



Emission



Position



Width

time

Time – 51 samples

Loop length – 22 samples

NoRH 17GHz 14/03/2002 data

1/ @basics_norh.pro - set of environmental variables

2 .r read_data_norh.pro - reading data from FITS files and storing their MAPS for a new FoV directory

3/ .r maps_loop_lc_2d_length_time_v1.pro - calculation of total emission, perpendicular position and width of the loop along its length specified interactively

output variables: lt=length_and_time, pt=perpendicular_and_time

- loop_2d_lt_emission, loop_2d_pt_position, loop_2d_pt_width -

the total emission, perpendicular position, width of the loop (n_dots_along_loop)

plot,loop_cuts_points_positions(*,*,0), loop_cuts_points_positions(*,*,1),psym=3

- loop_cuts_points_positions - positions of dots in the images (n_dots_along_loop,n_loops_perpendicular,2)

plane 0 - X positions, plane 1 - Y positions

- loop_points_positions - positions of dots along the loop,

plot,loop_points_positions(*,0),loop_points_positions(*,1),psym=3

- loop_length_points_distances - distances of these points

plot,loop_length_points_distances

- loop_length_points_distance_mean - mean points distance

print,loop_length_points_distance_mean

- loop_length_points_distance_sigma - 1sigma from this mean

print,loop_length_points_distance_sigma

NoRH 17GHz 14/03/2002 data

3/ .r maps_loop_lc_2d_length_time_v1.pro - calculation of total emission, perpendicular position and width of the loop along its length specified interactively

- loop_3d_lp (n_dots_along_loop,n_loops_perpendicular,n_images) - original data of the loop surrounding intensities
- loop_3d_lp_unbiased - the same but with the bias removed
- loop_3d_lp_bias - the same but the bias only

```
for i=0,50 do begin tvscl,rebin(loop_3d_lp(*,*,i),220,230)
```

```
for i=0,50 do begin tvscl,rebin(loop_3d_lp_unbiased(*,*,i),220,230)
```