



On going improvements of the pipe-line

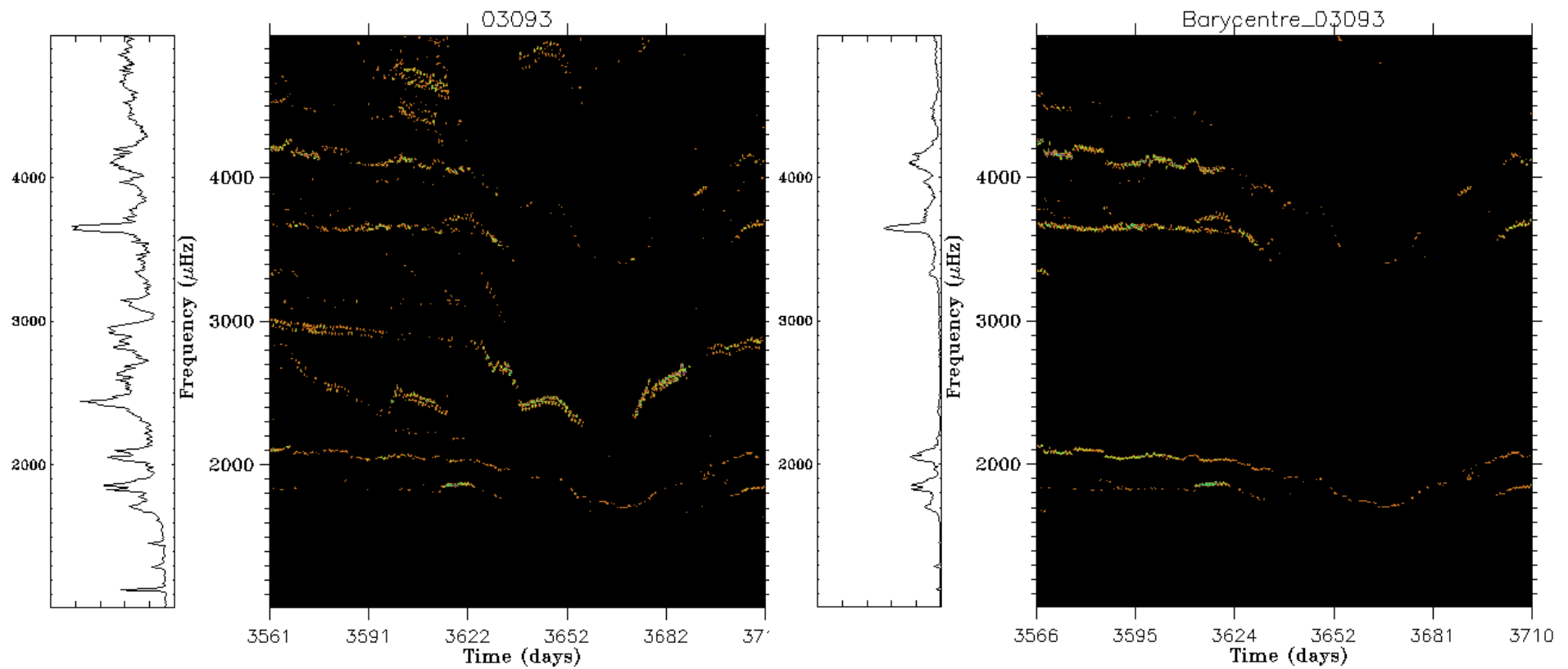
S.Chaintreuil, A.Deru, A.Ferrigno, F.Fialho

Effects not corrected yet



- Seismo
 - “Residuals of background”
 - Temporal peaks observed in all background windows
 - Residuals observed in some star lightcurves
 - The study has been delayed
 - Residuals of jitter
 - Cf presentation F.Fialho-A.Deru
- Exo
 - Difference between the mean level of BG MED32 and BG MED512
 - Cf presentation A.Ferrigno

Residuals of jitter

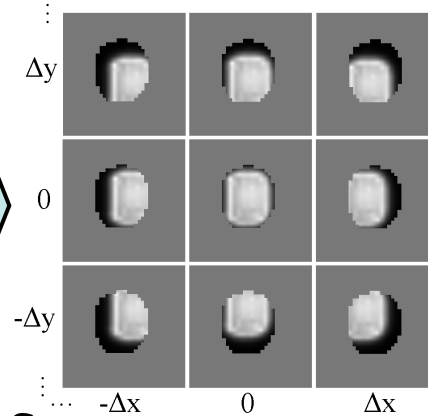
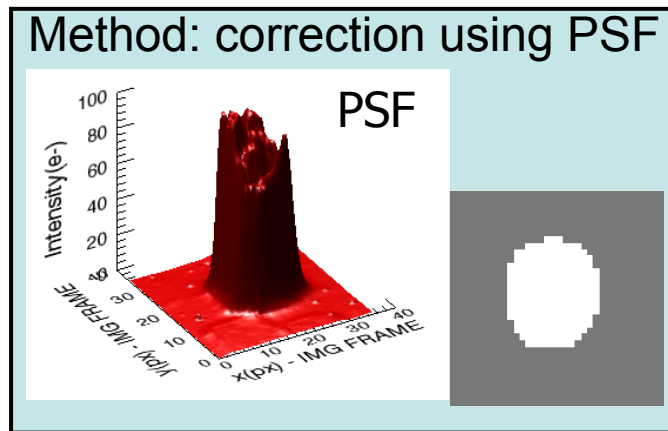


Jitter photometric correction method

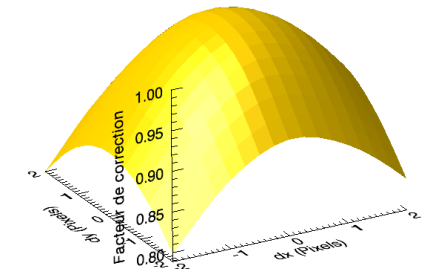


$$F_{c_i} = K(\Delta x_i, \Delta y_i) \cdot F_{m_i}$$

Corrected Flux Factor of correction Jitter On-orbit Measured Flux



Correction Surface



On-orbit Barycentres
SEISMO

$(x_i, y_i)_{SEISMO}$
SC49 - January 24th, 2014

LoS
 $\begin{bmatrix} \varphi \\ \theta \\ \psi \end{bmatrix}$

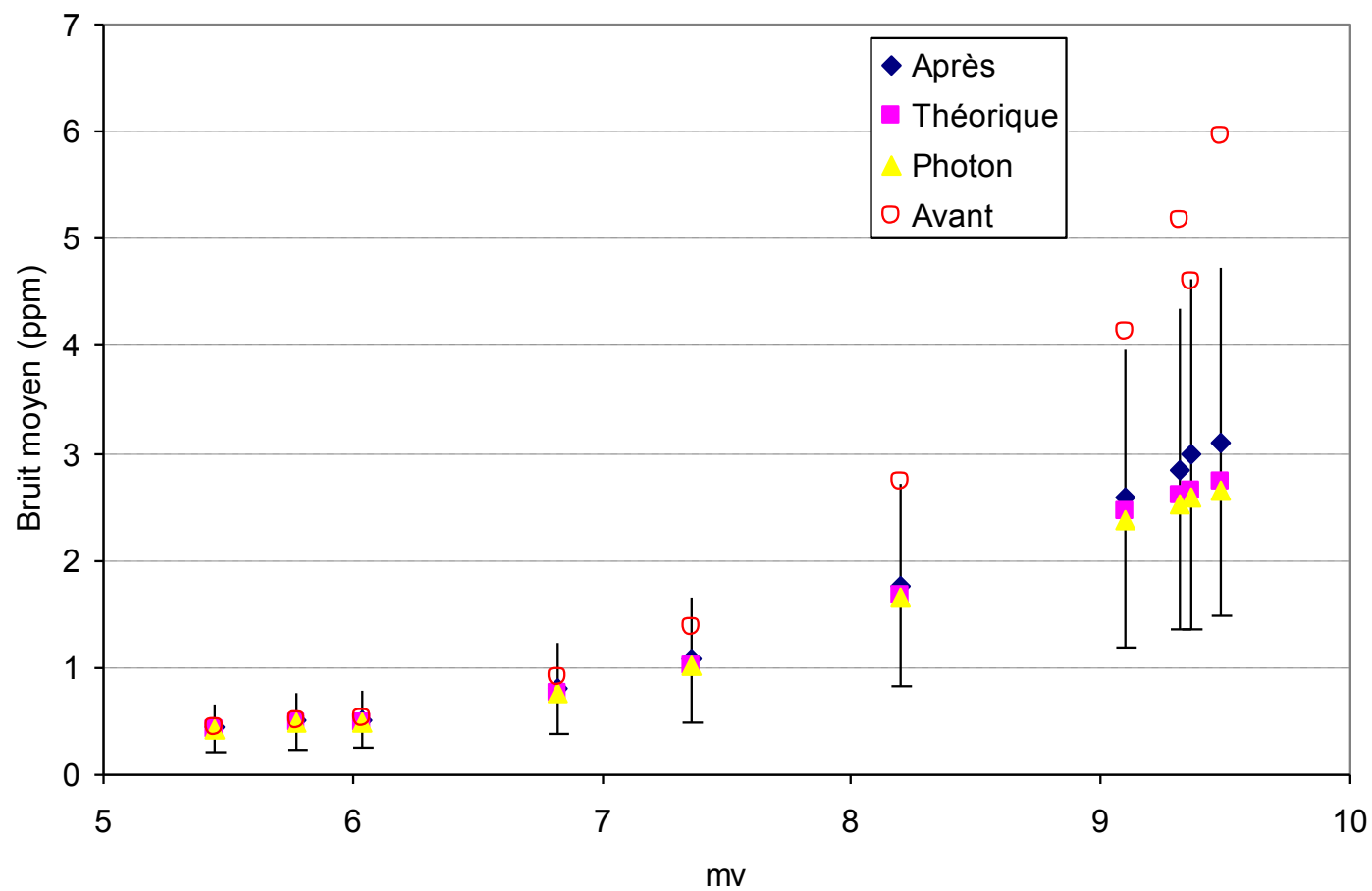
Jitter EXO

$(\Delta x_i, \Delta y_i)_{EXO}$

Jitter SEISMO

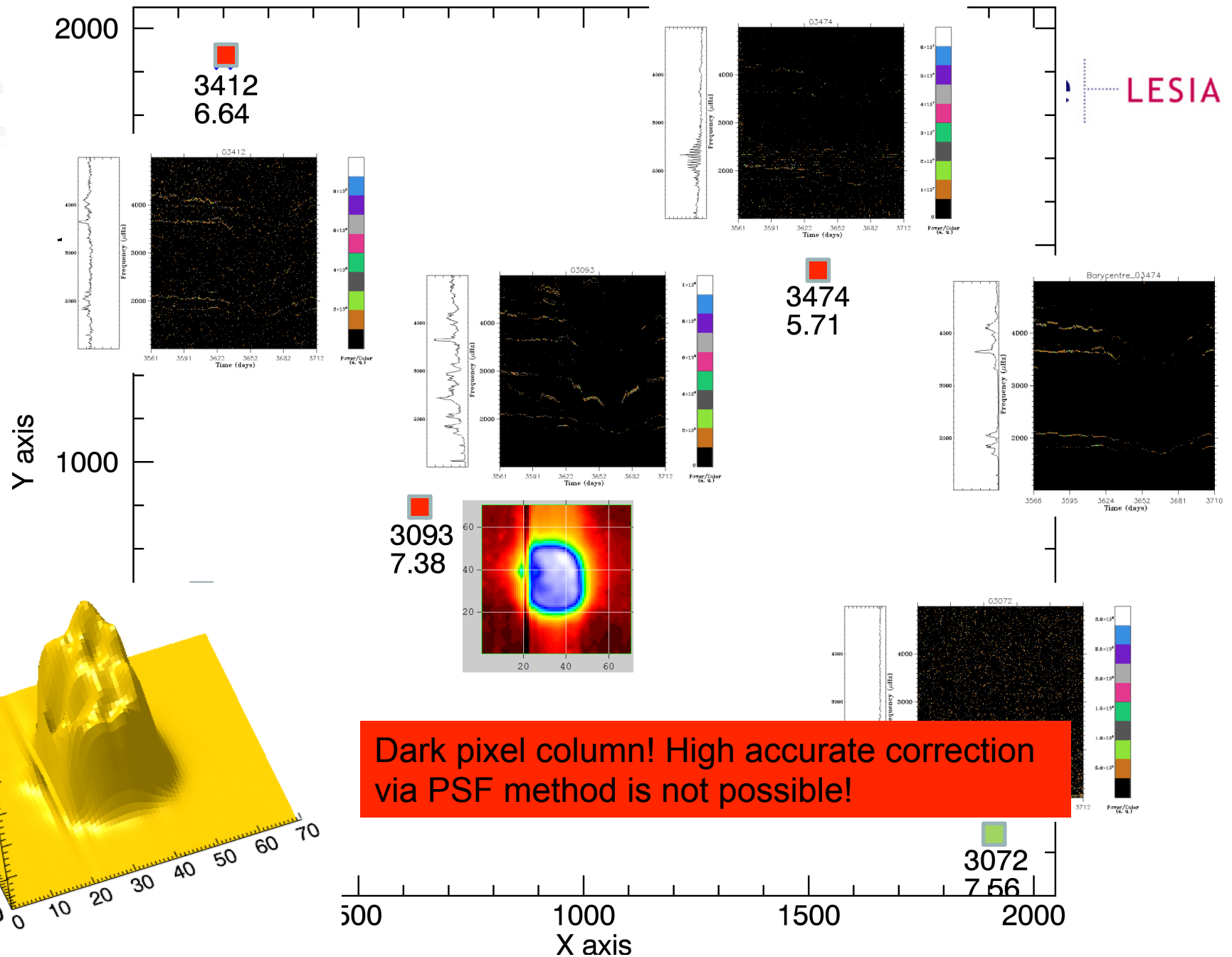
$(\Delta x_i, \Delta y_i)_{SEISMO}$

Jitter correction performance for IRa01



LRa03

LRa03 Position of stars



LRc07



Y axis

2000

1500

1000

500

0

X axis

LRc07

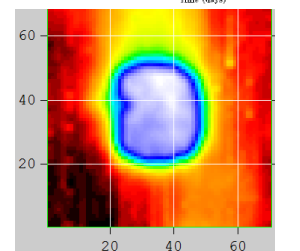
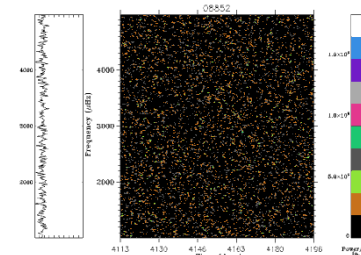
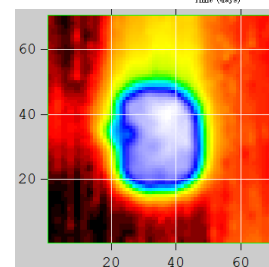
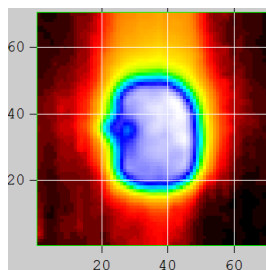
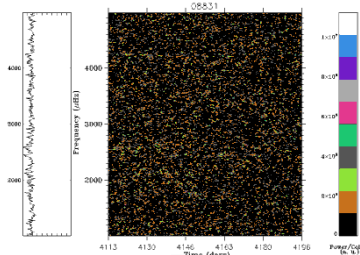
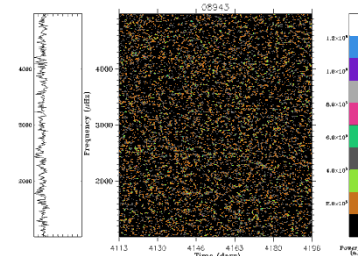
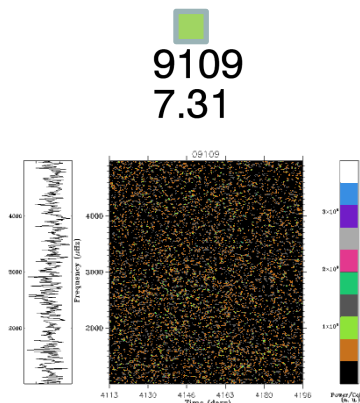
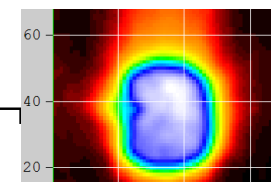
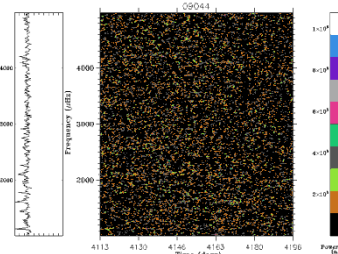
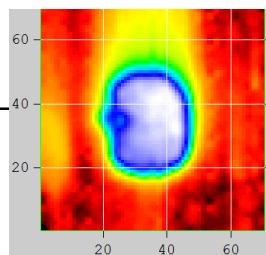
9044
8.67

9109
7.31

8943
8.31

8831
5.72

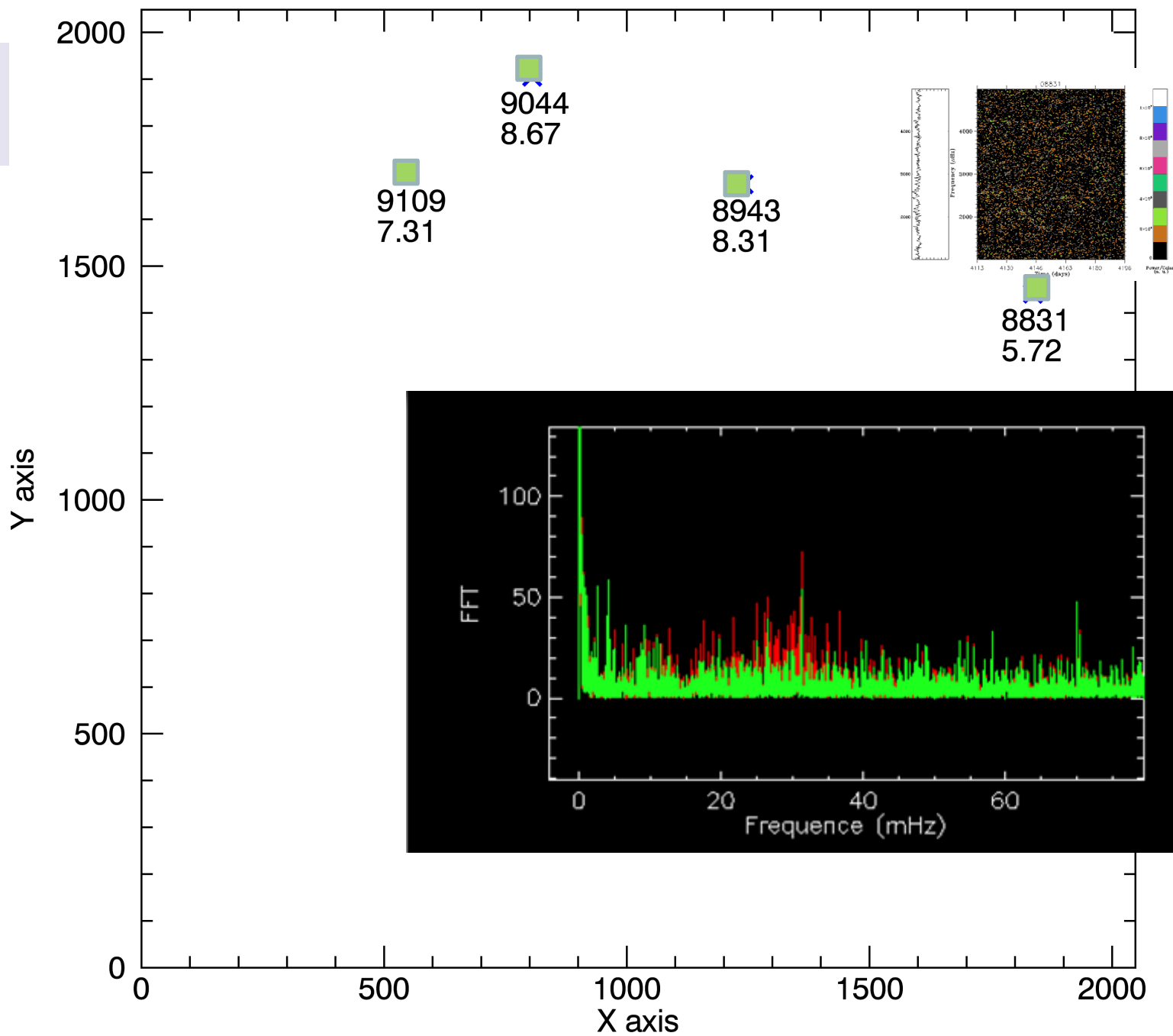
8852
8.19



LRc07

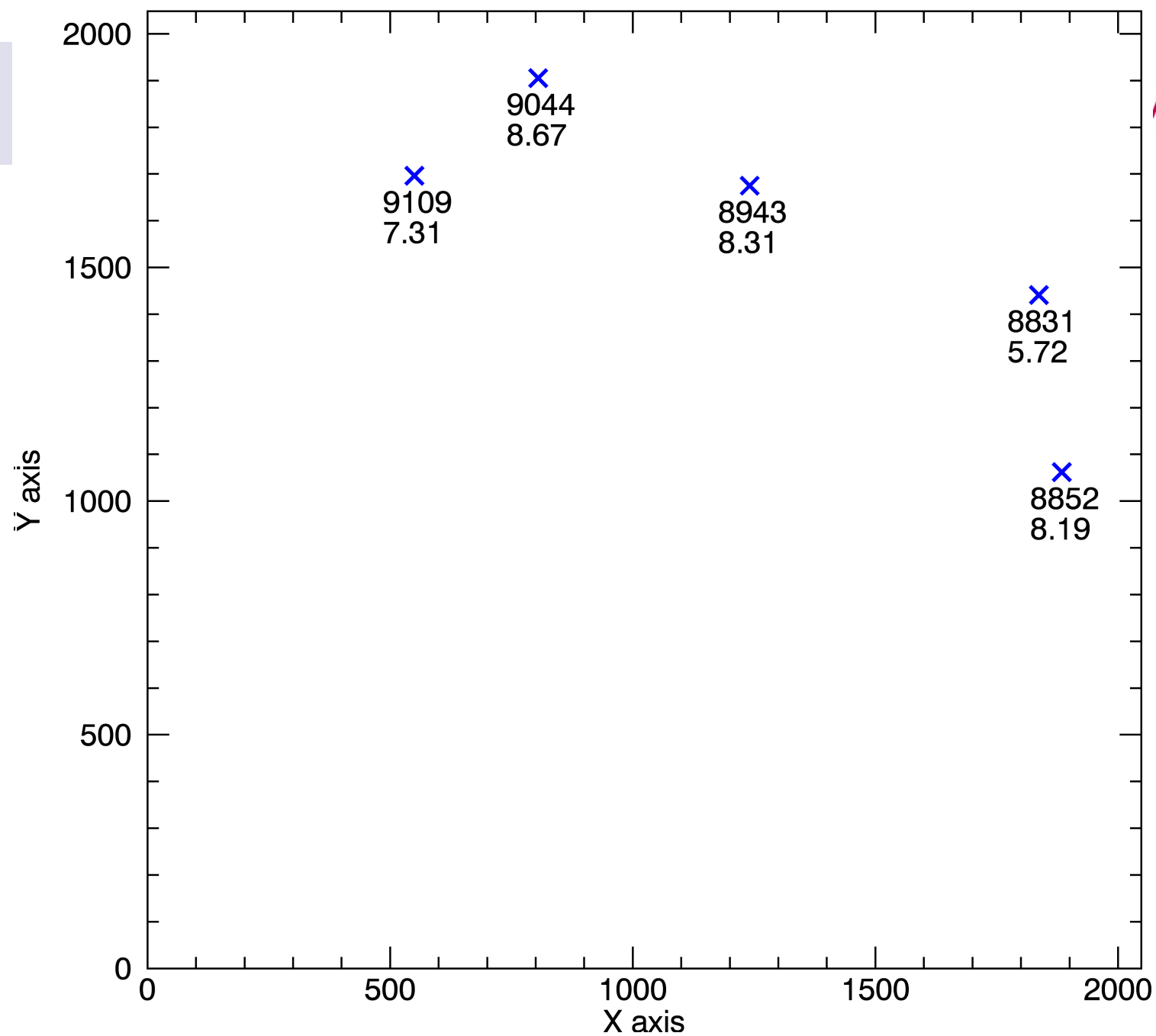


LRc07 Position of stars





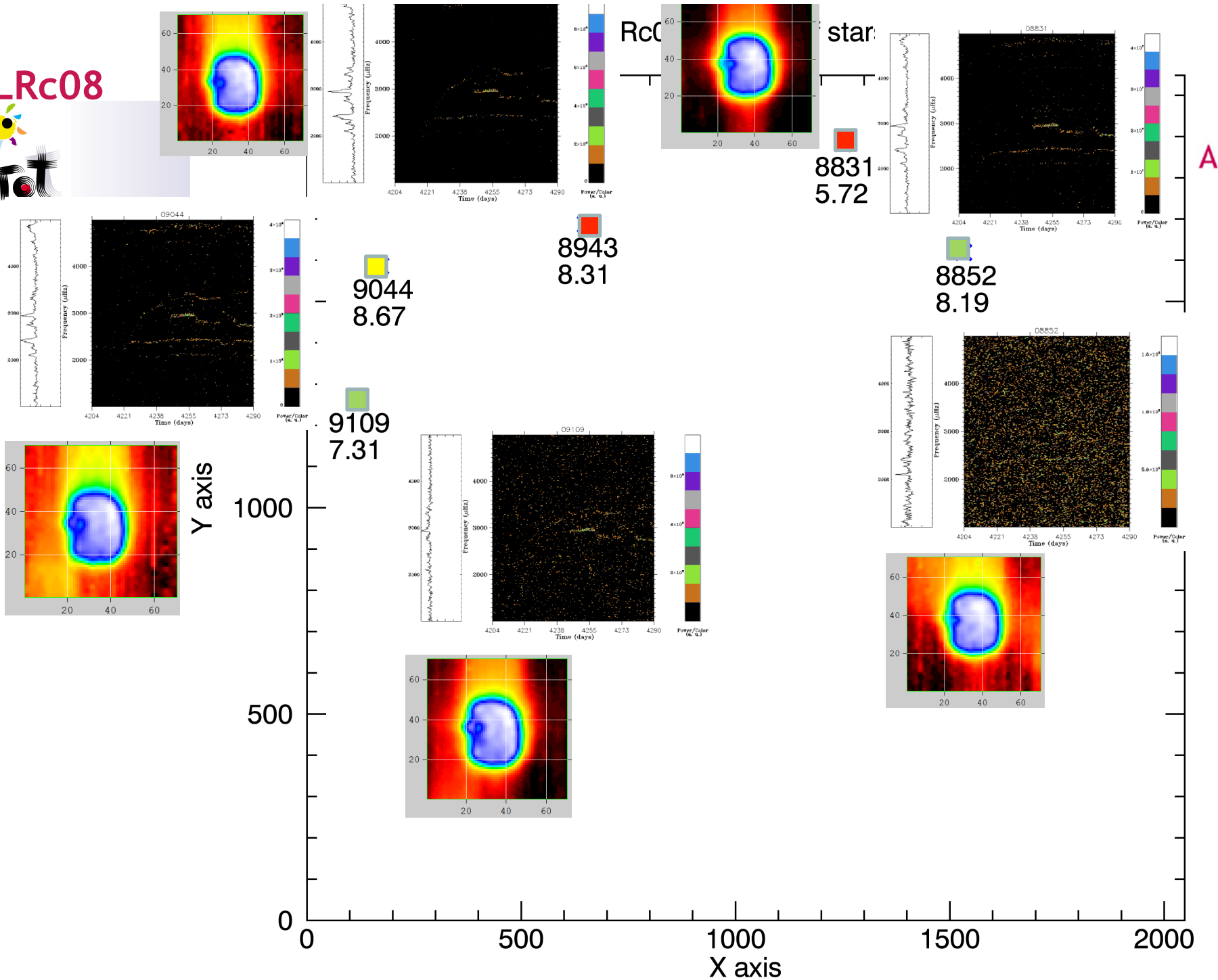
LRc07 Position of stars

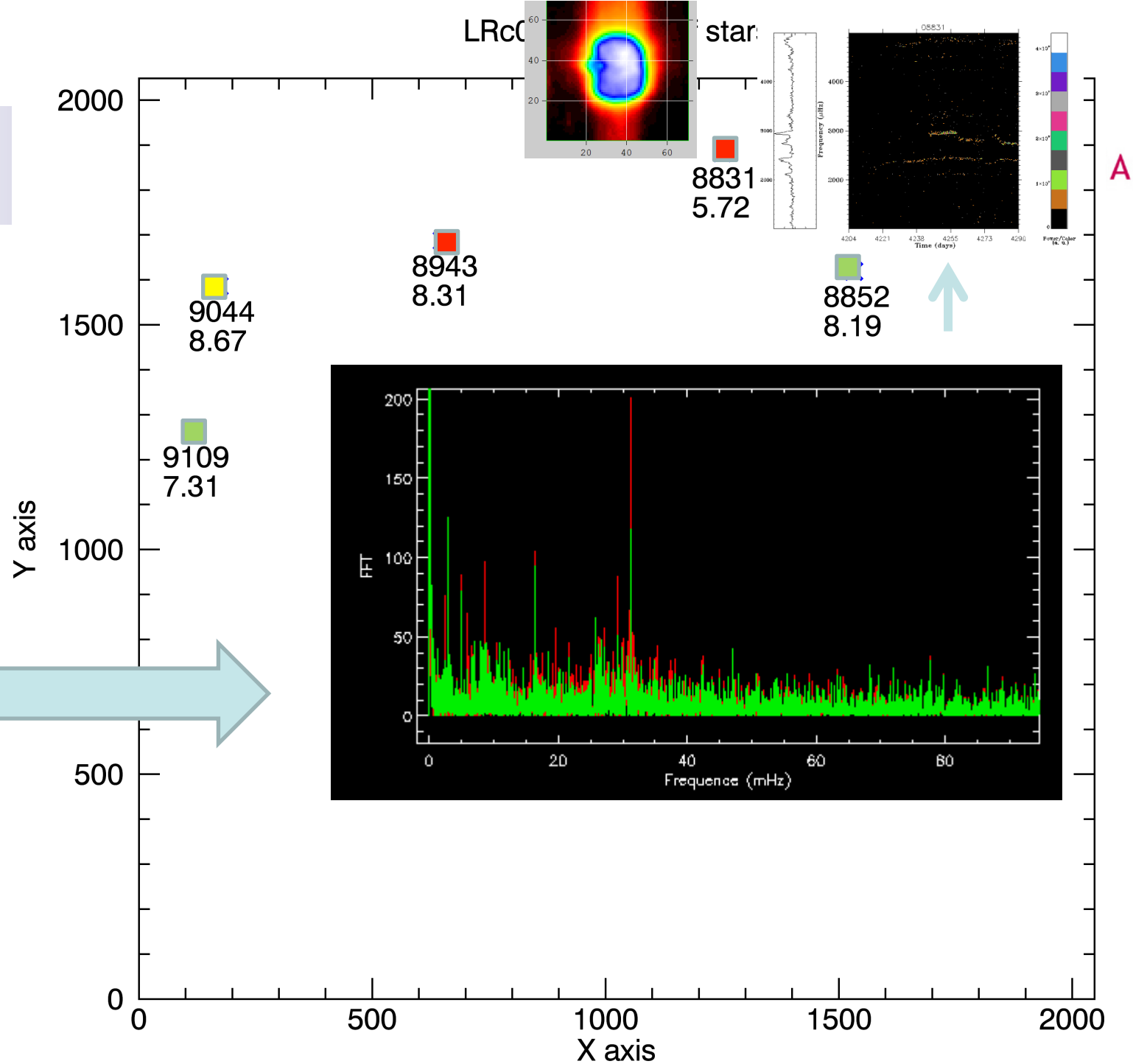


A



LRC08





Conclusions



- On-ground Line of Sight calculation is under suspicion.
- Some tests are going to be done to verify jitter photometric corrections on bright stars providing important hints about the source of the problem.