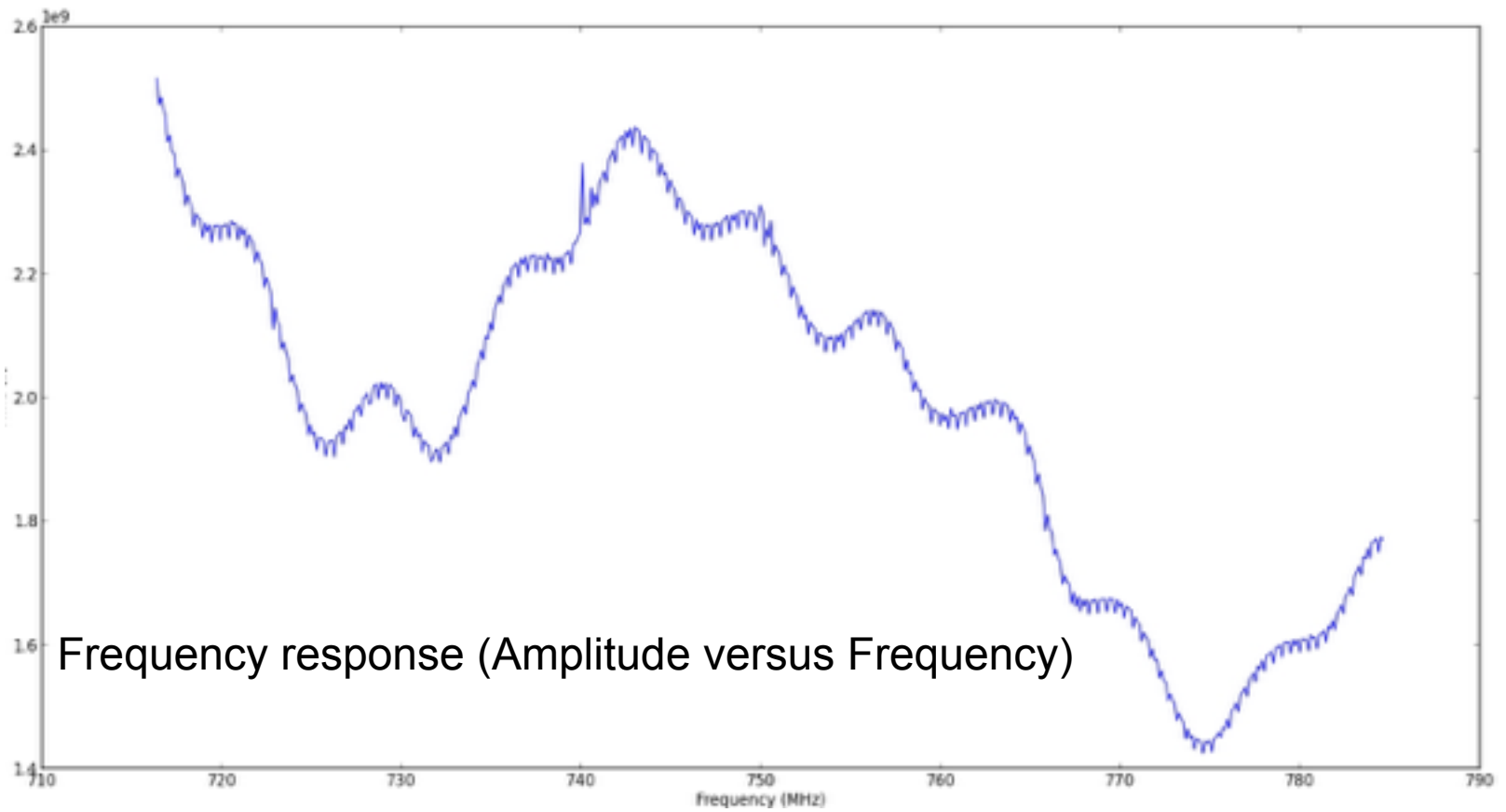


Progress of Tianlai

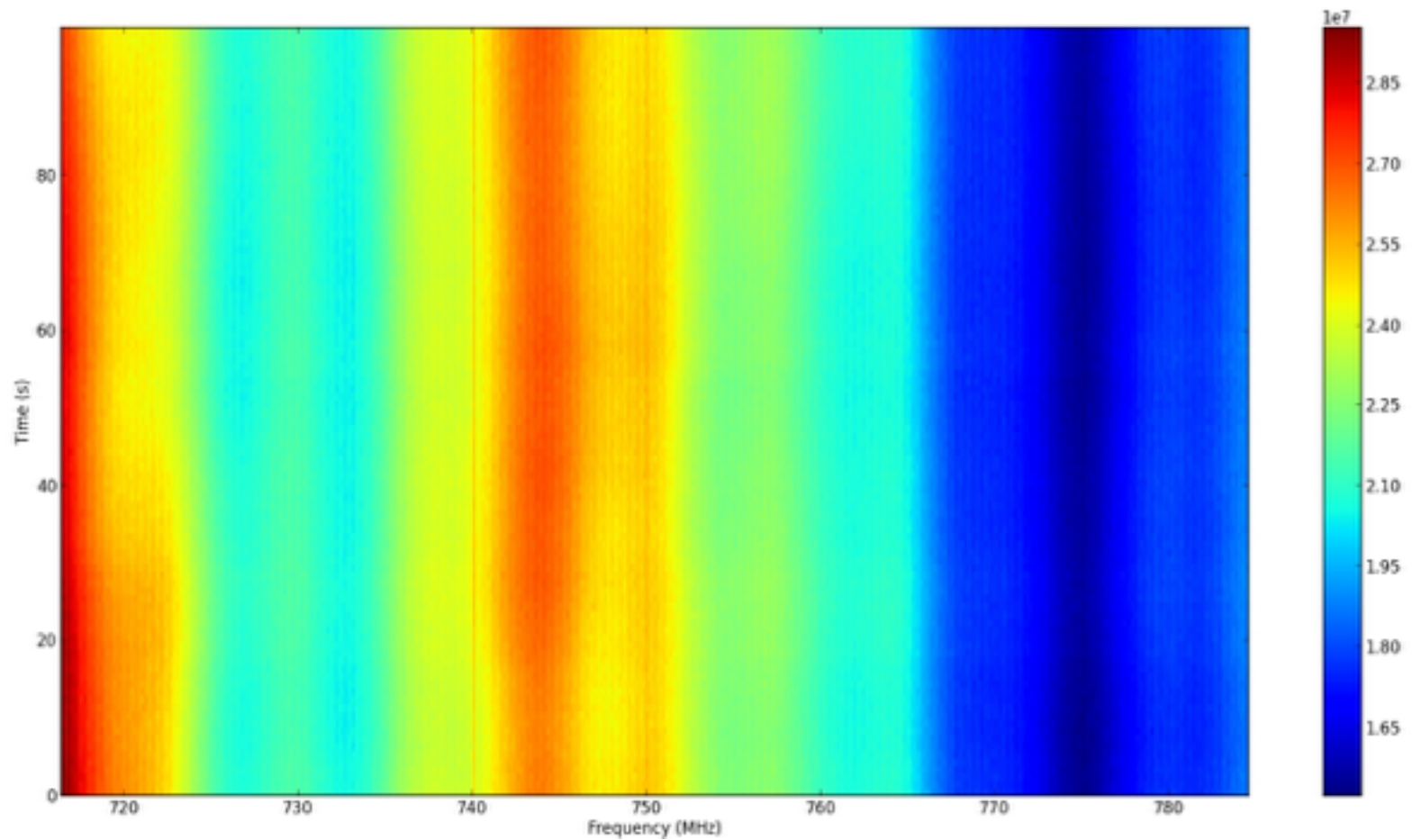
2016.5.19

The problems on 192 correlator

Problem 1: There is a valley every 4 frequency point on frequency response curve

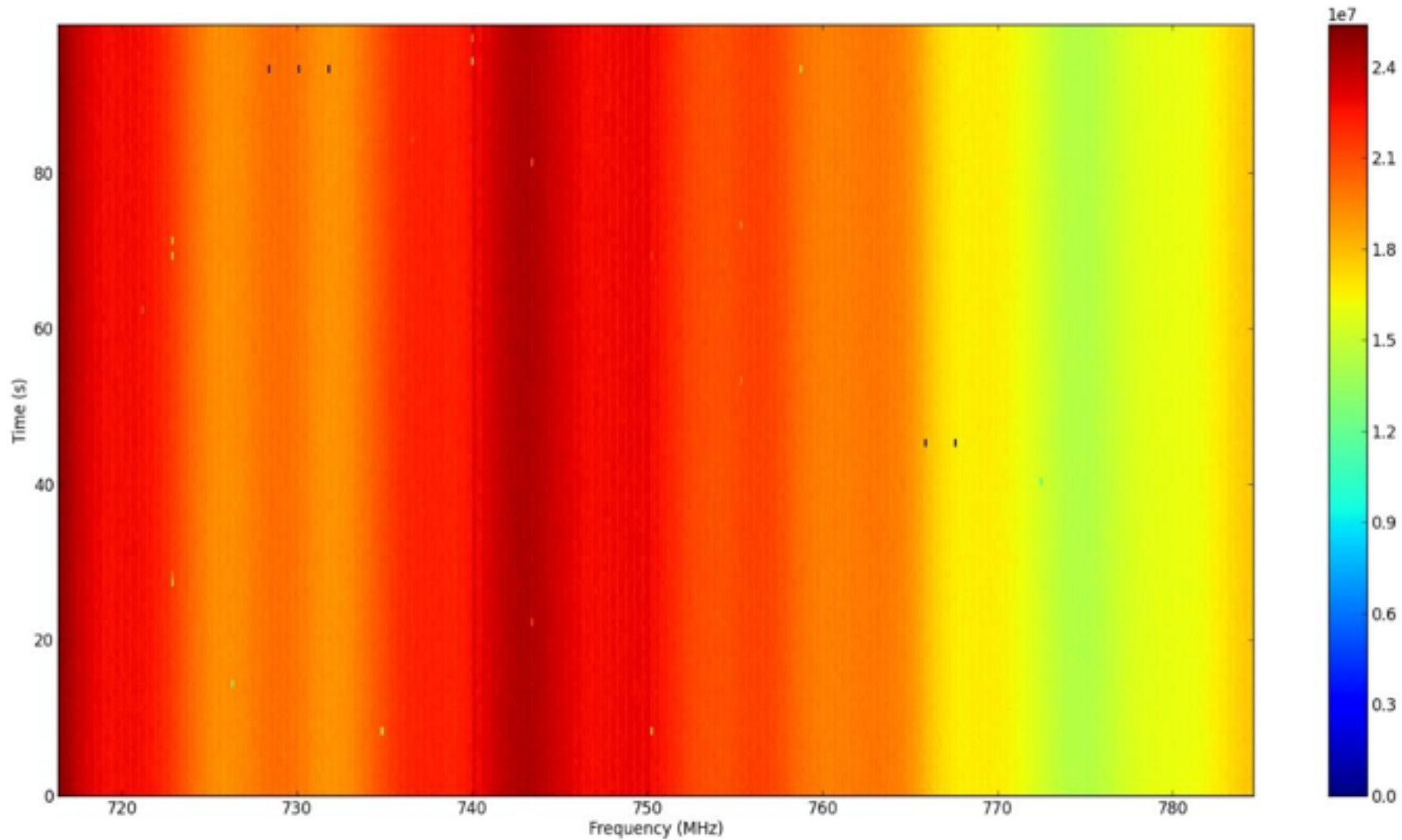


2D Amplitude (time versus frequency)



Problem 2: Low-value valleys randomly appeared in 2D image

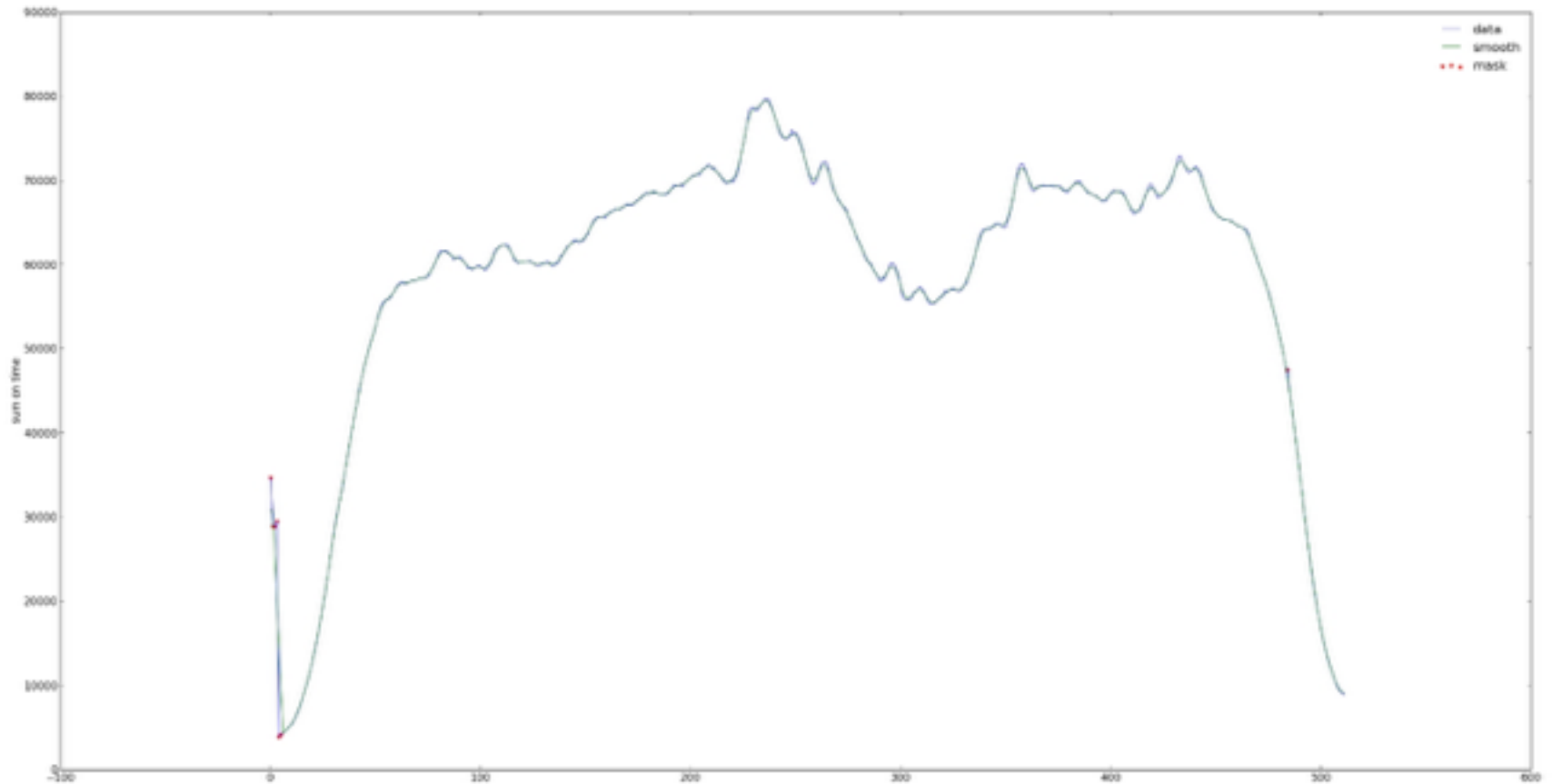
2D Amplitude (Time versus frequency)



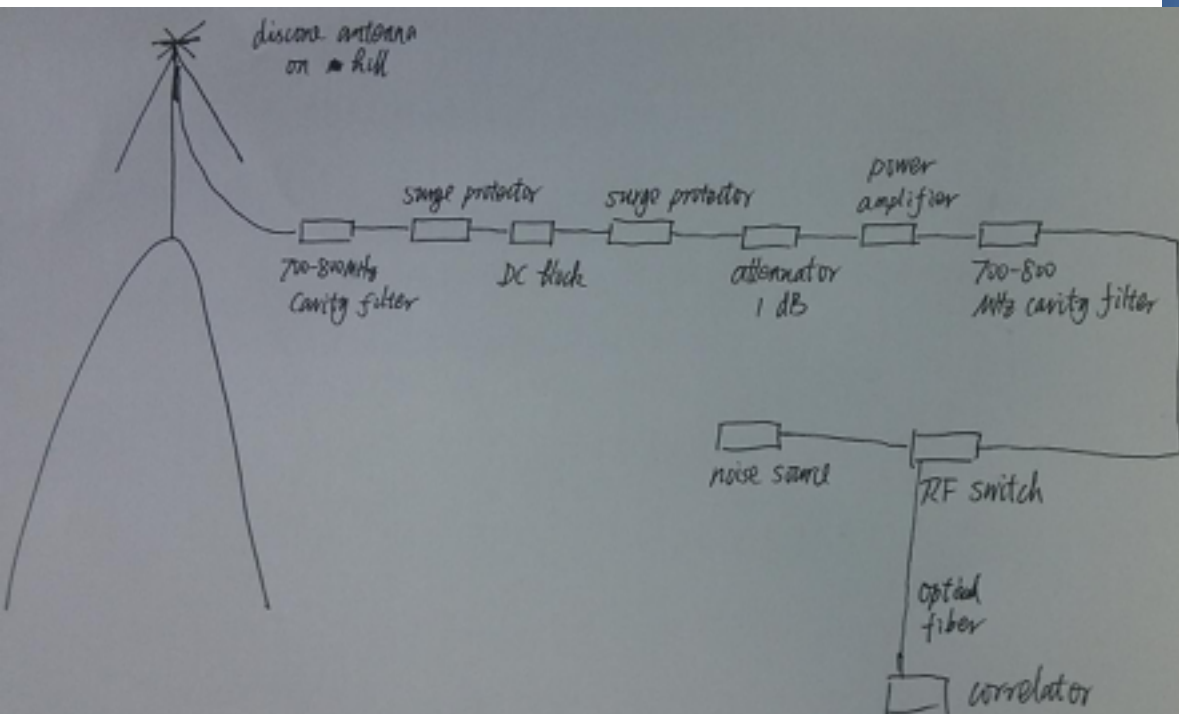
Survey RFI on Site

- We found lots of electronic equipments on antenna site(except for LNA, optical transmitter, DC power supply) have RFI.
Strongest ones: optical to network module/ optical to phone module/ Remote control PDU.....
- Therefore, we shut down all unnecessary equipments when do the observation, then it's extremely RF quite (see figure in next page)
- We will make an power supply system controlled by optical fiber (without RFI) in a month.

Frequency response curve after forty-hour integration (cross correlation of two disk antennae), no obvious RFI

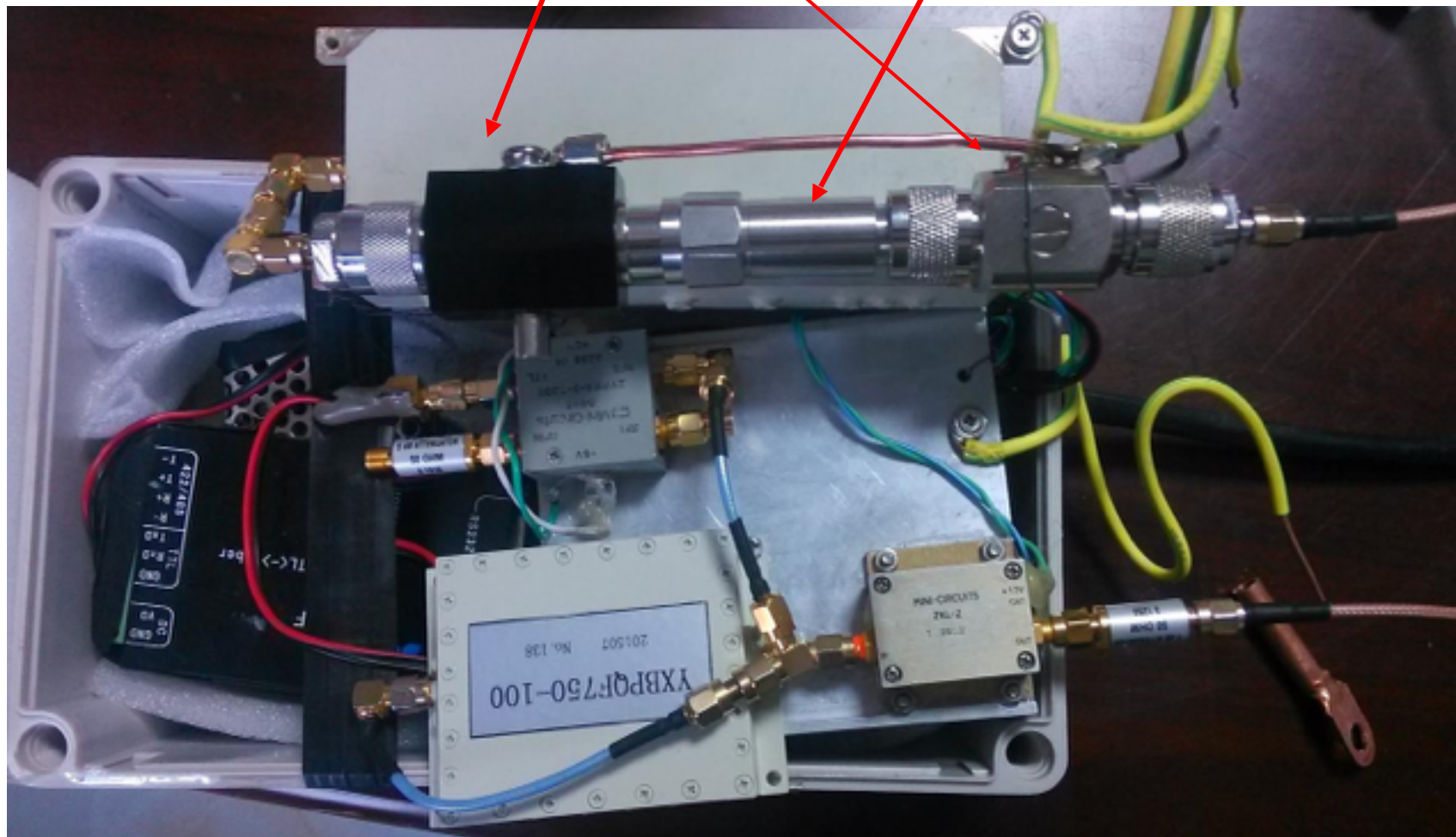


Install lightning surge protector on calibration antenna

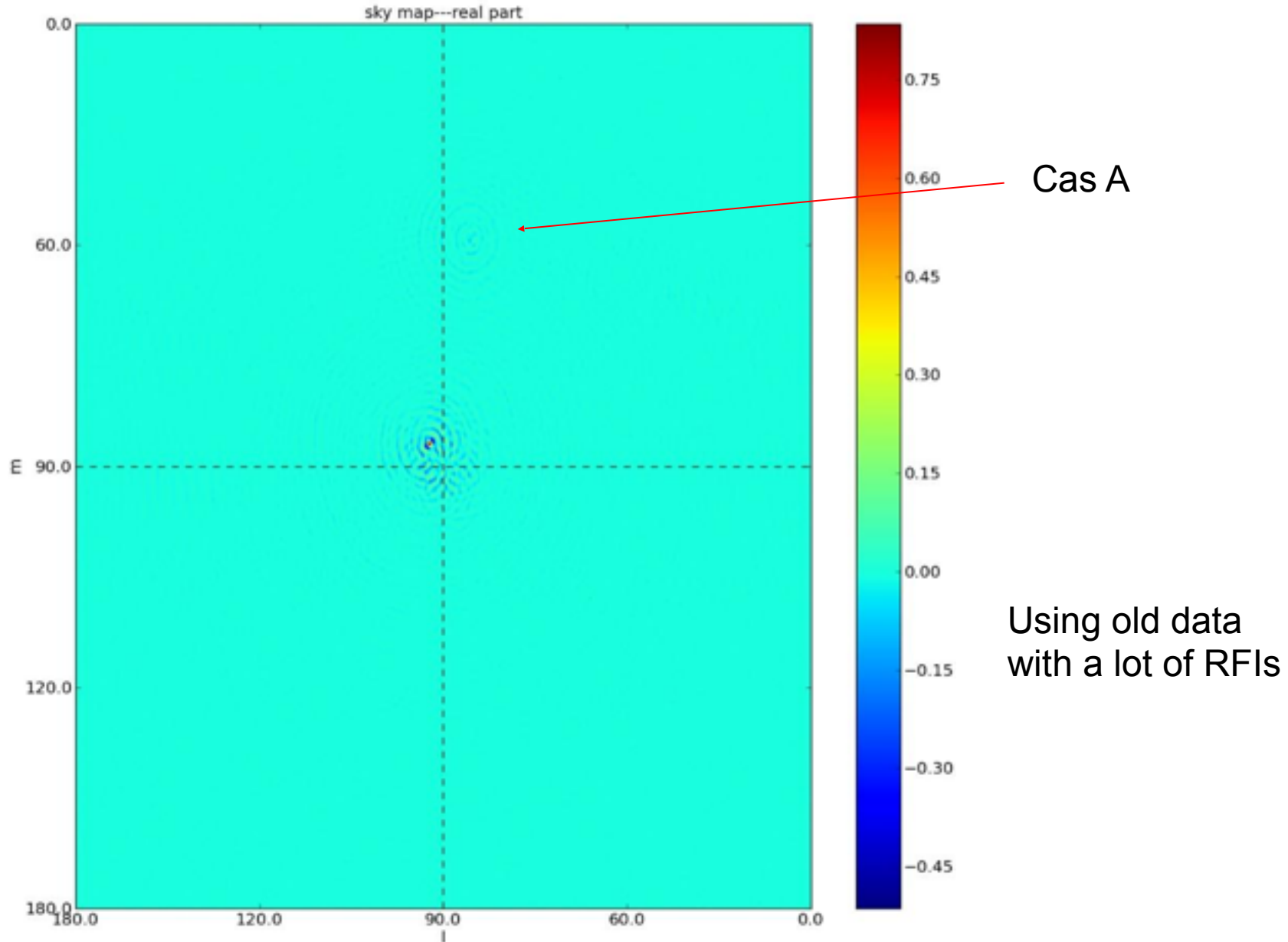


Surge protector

DC block



Imaging of north celestial pole



Other issues

- Measure the position of feed and antenna using total station, find good precision in installation .
- Finish hdf5 storing code for dish array
- Measure the tilt angle of dish antenna
-