Gain, Phase, Correlated Noise

Qizhi Huang

2 Oct. 2015

Observation data

- There are 3 target in the PAON4 observation, they are Cassiopeia A, Cygnus A, Crab nebula.
- Data I used here are:

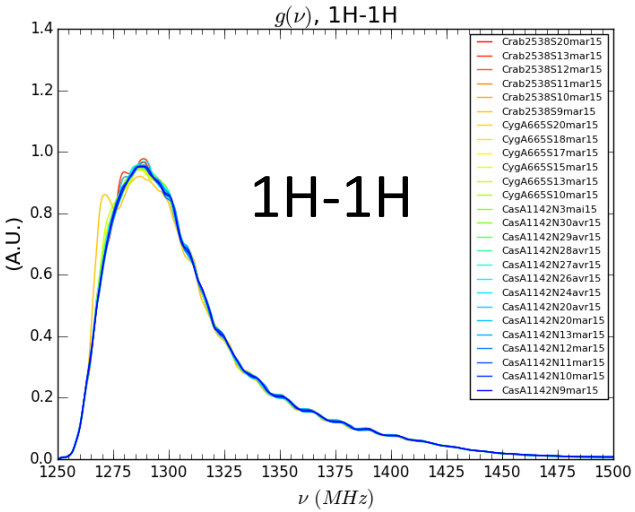
CasA1142N9mar15, CasA1142N10mar15, CasA1142N11mar15, CasA1142N12mar15, CasA1142N20avr15, CasA1142N24avr15, CasA1142N26avr15, CasA1142N28avr15, CasA1142N29avr15, CasA1142N30avr15, CasA1142N3mai15,

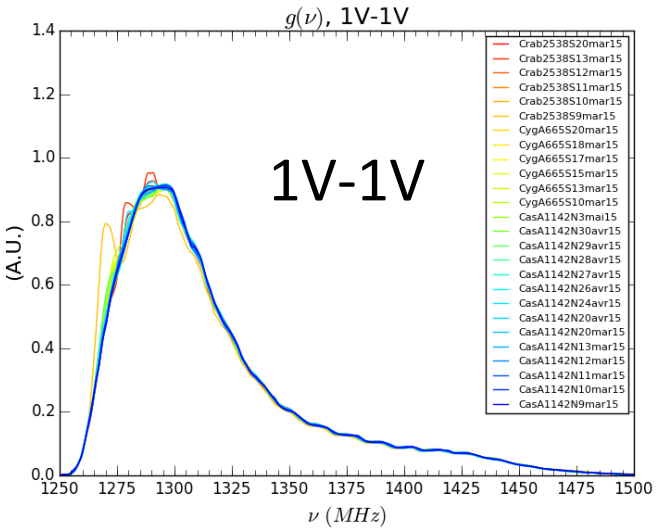
CygA665S10mar15, CygA665S15mar15, CygA665S17mar15, CygA665S18mar15,

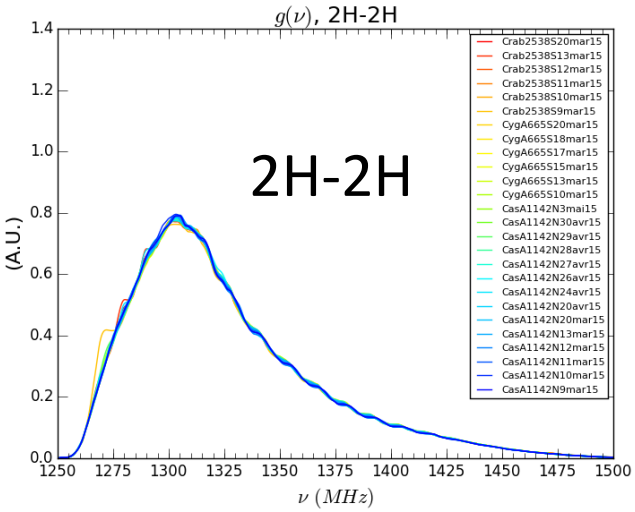
Crab2538S9mar15, Crab2538S10mar15, Crab2538S11mar15, Crab2538S12mar15, Crab2538S13mar15, Crab2538S20mar15

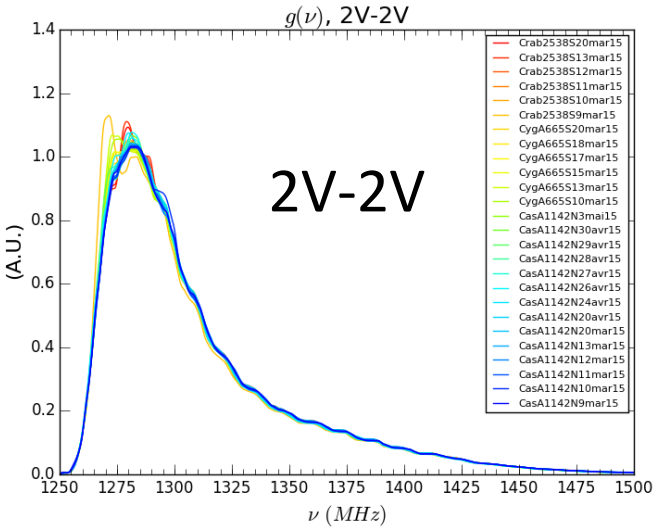
Stability of the gain $g(\nu)$

$$\Delta\nu = \frac{250\,MHz}{512} = 0.488\,MHz$$









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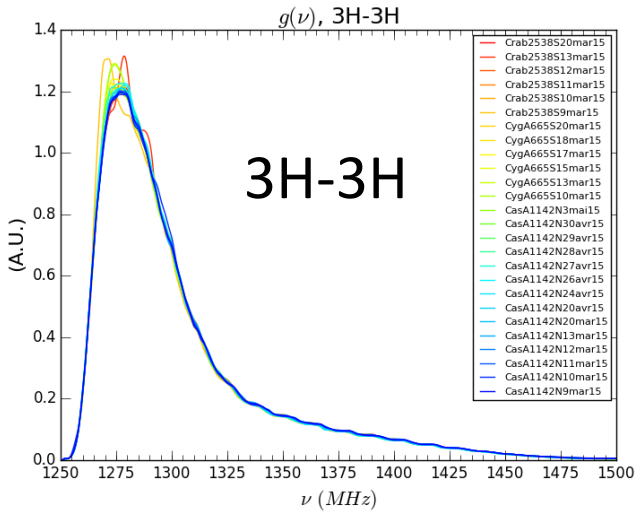
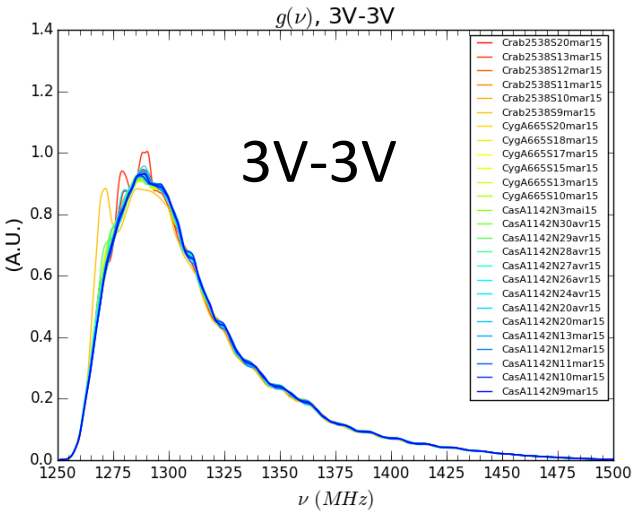
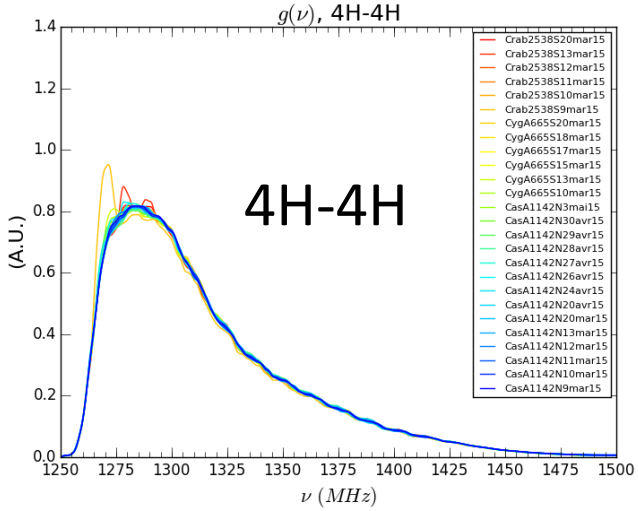
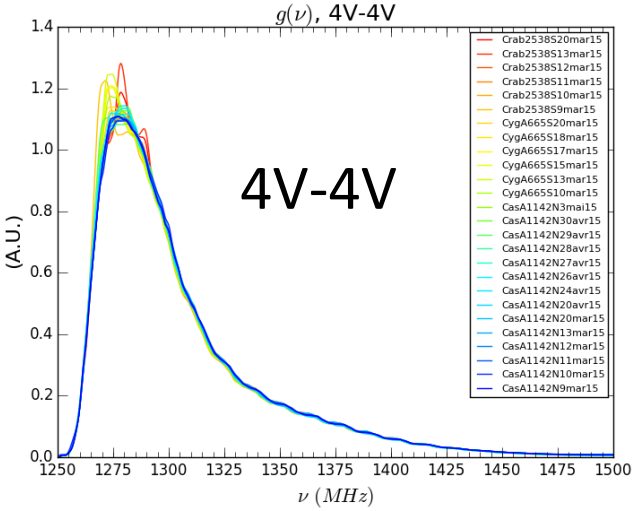


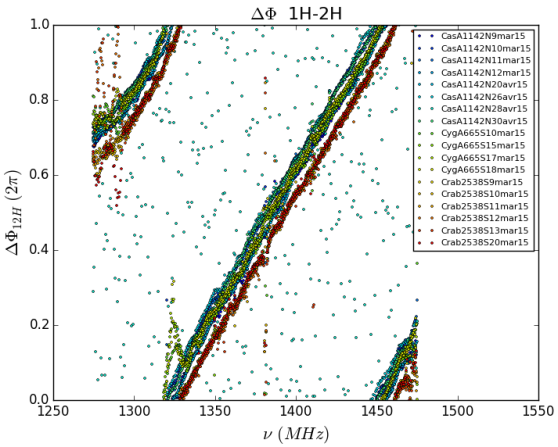




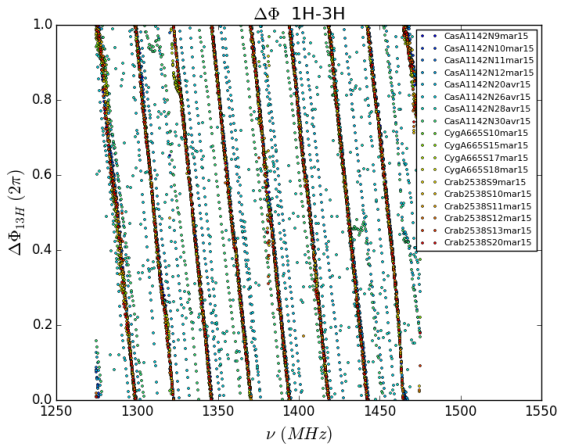


Stability of the phase (H)

1H-2H



1H-3H



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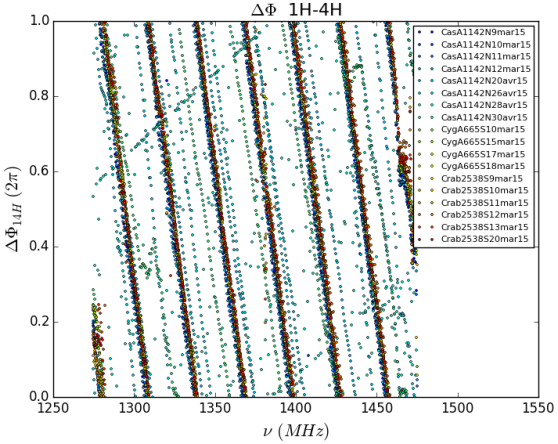
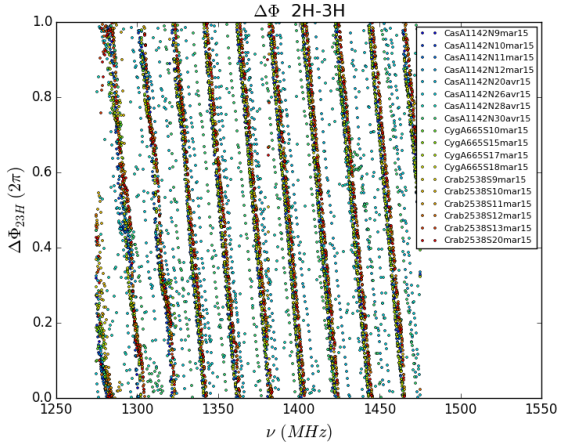
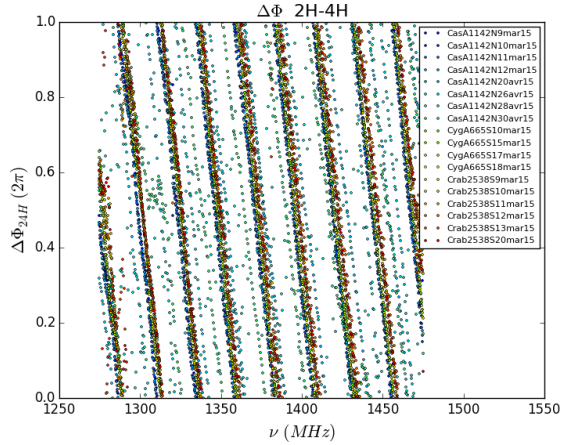


1H-4H



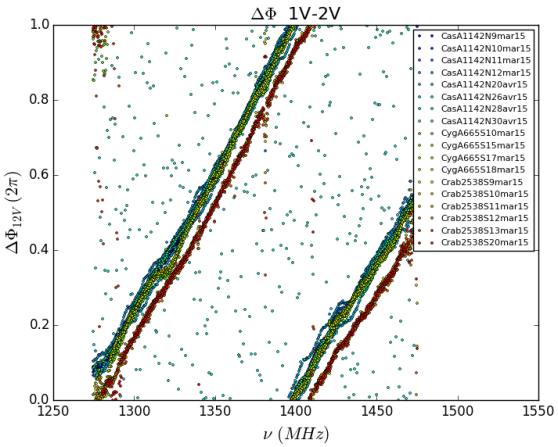
2H-3H



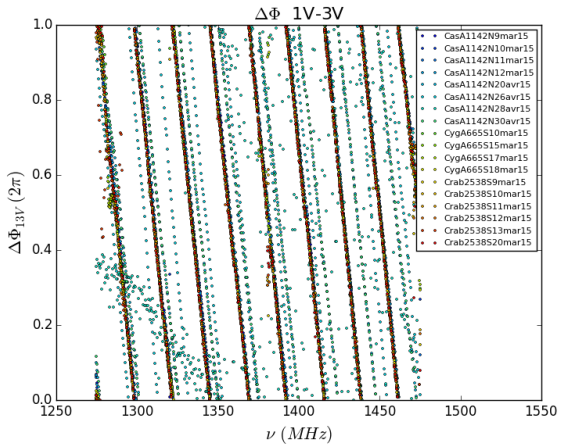
2H-4H

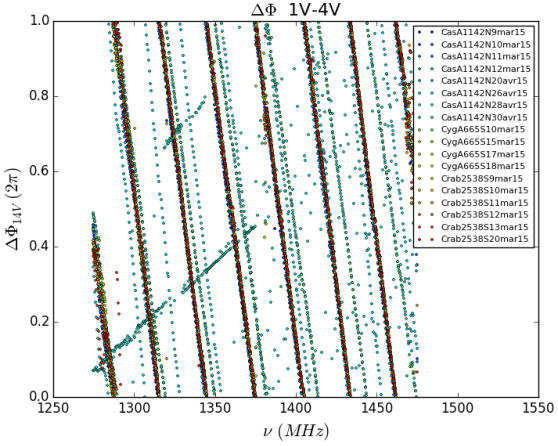
Stability of the phase (V)

1V-2V

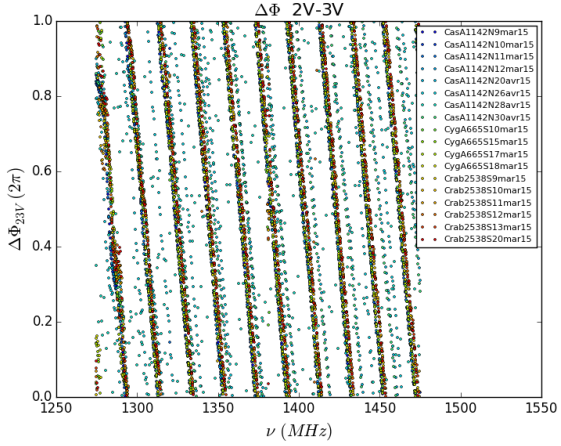


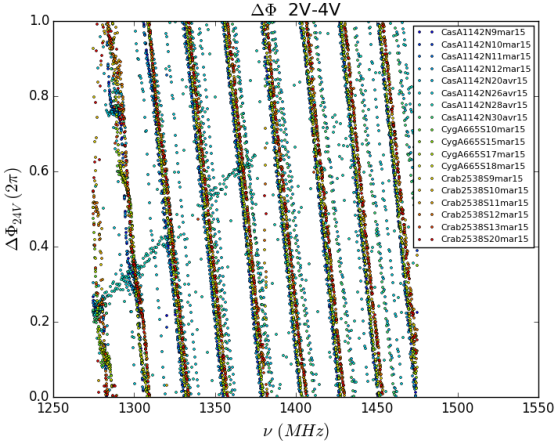
1V-3V





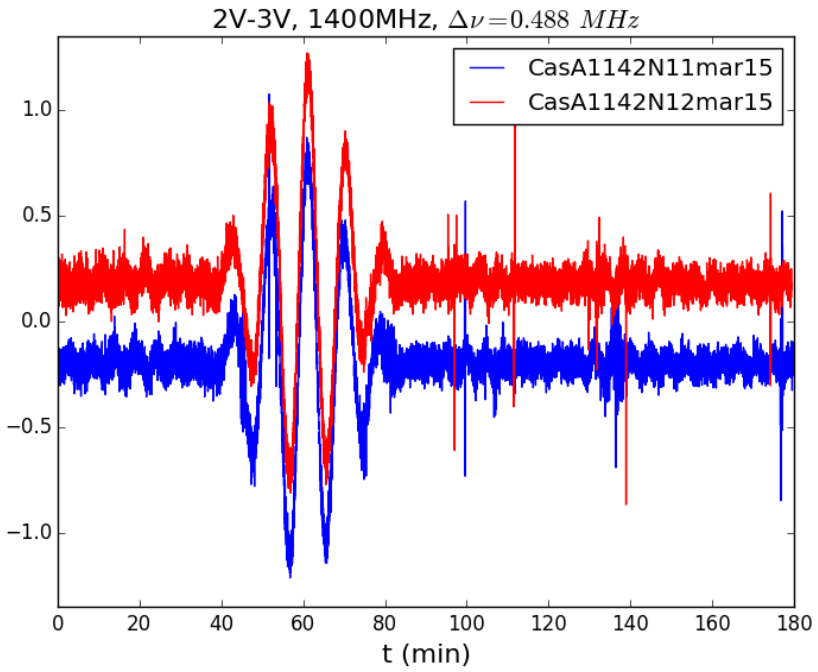
2V-3V

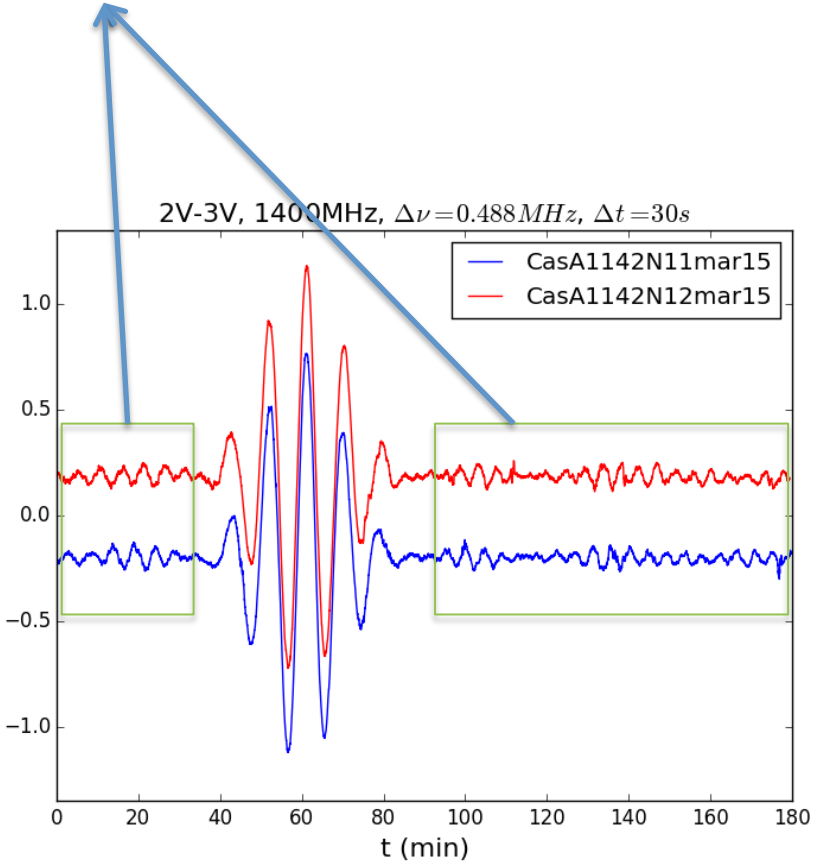




2V-4V

Correlated Noise





The end

Thanks