# 3CSurvey

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Sterrewacht Leiden - ASTRON

## Aim:

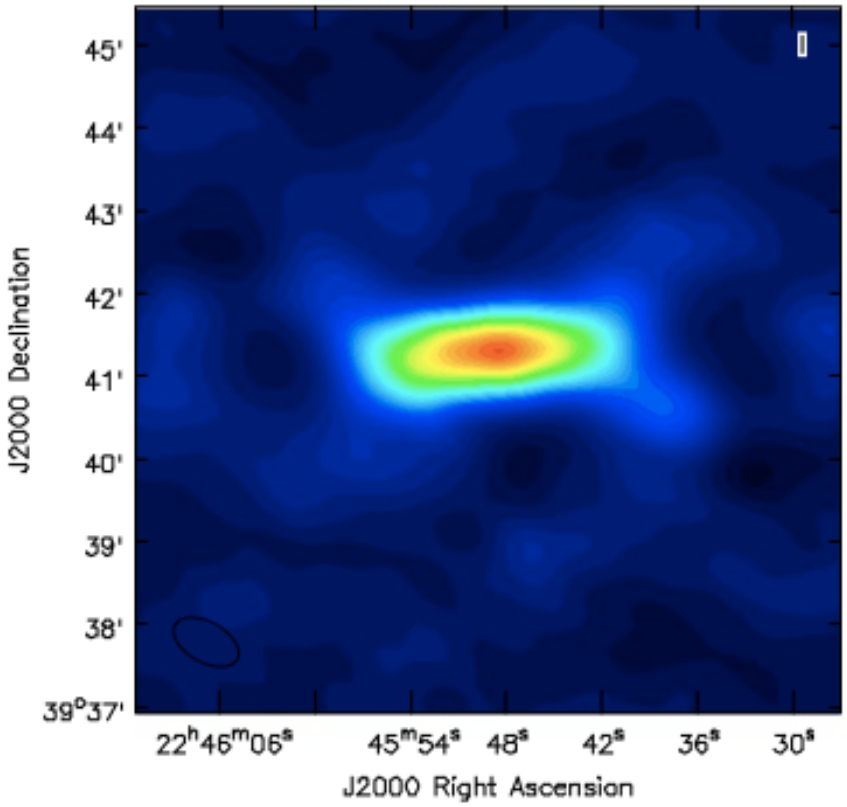
Do a complete survey of the 3C catalogue:
- (at least) two different frequencies
- 6 hours observation time per source
- complete ~480 sources in 24 hours

## Procedure:

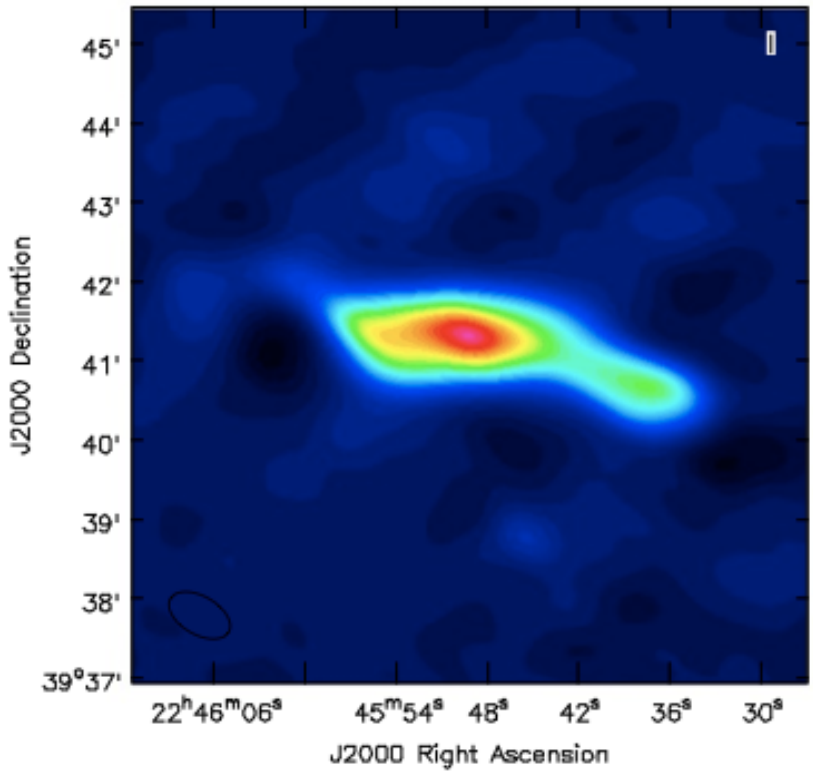
- demix data (some pretty close to Cas A)
- use NDPPP to flag on demixed data
- use autocal script to automate self calibration (need 25+ major cycles!)

## Examples:

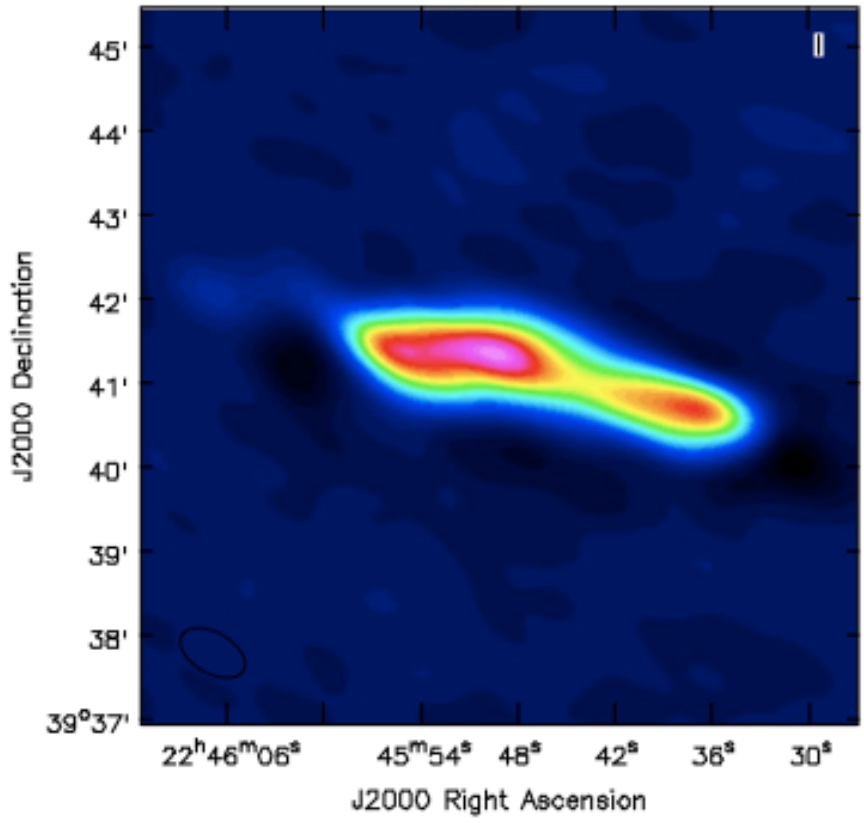
**3C452 - showing different selfcal stages**



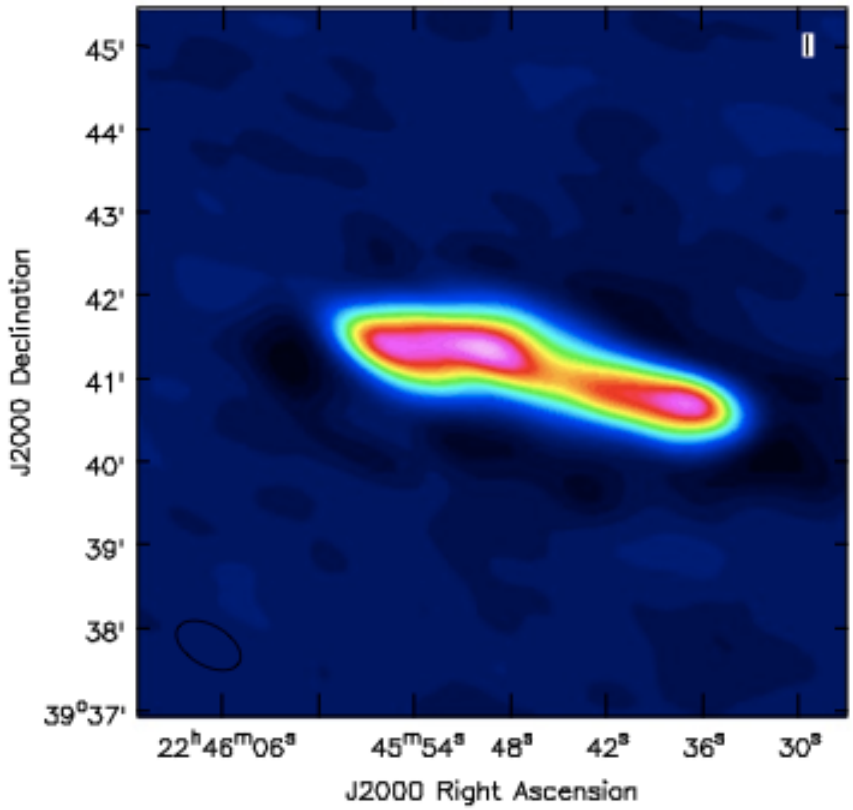

1x selfcal



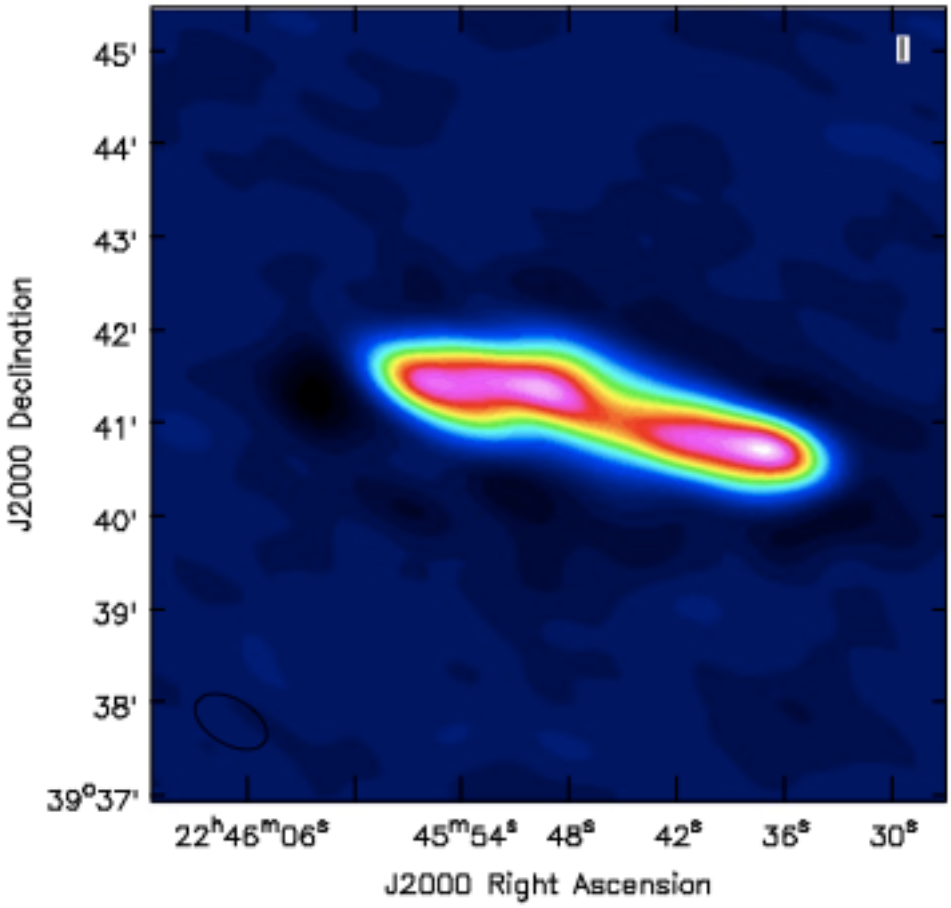

5x selfcal




11x selfcal

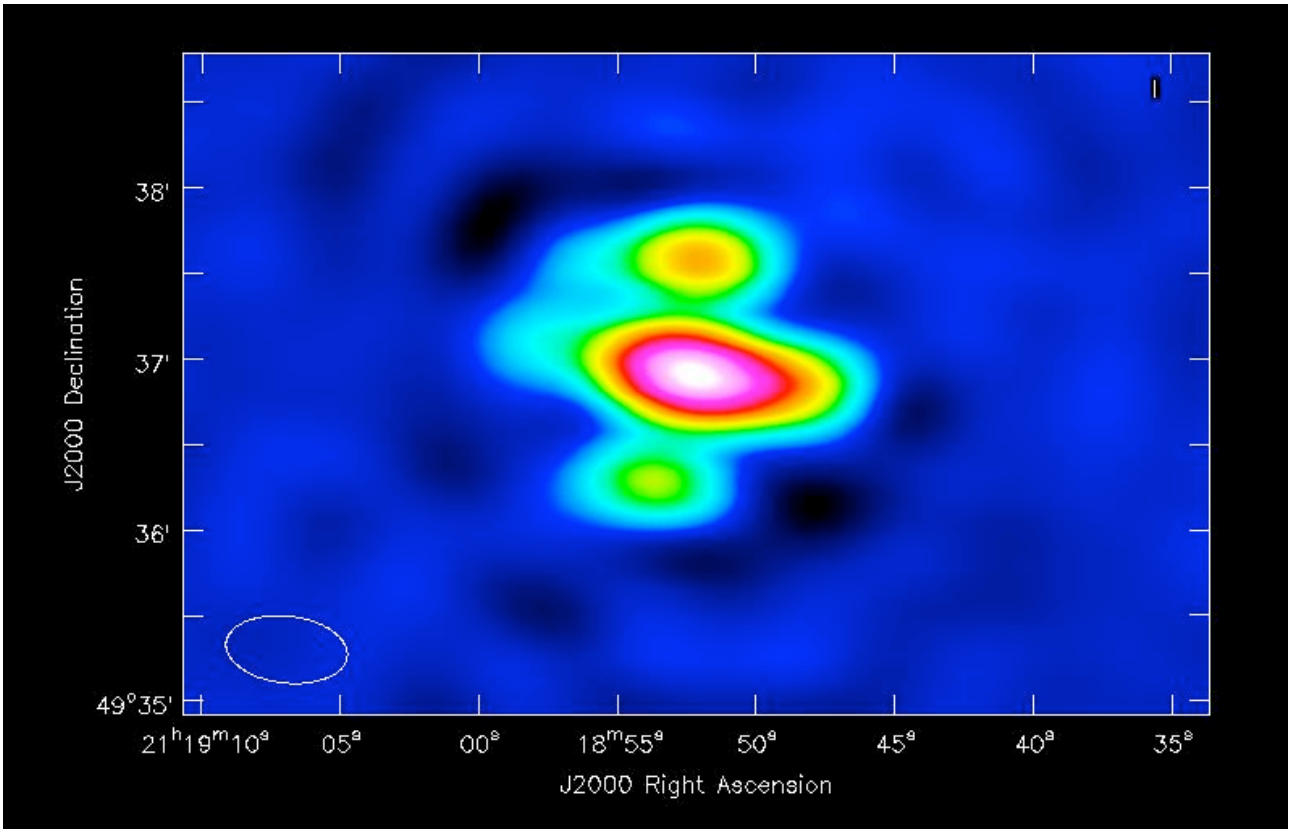



15x selfcal

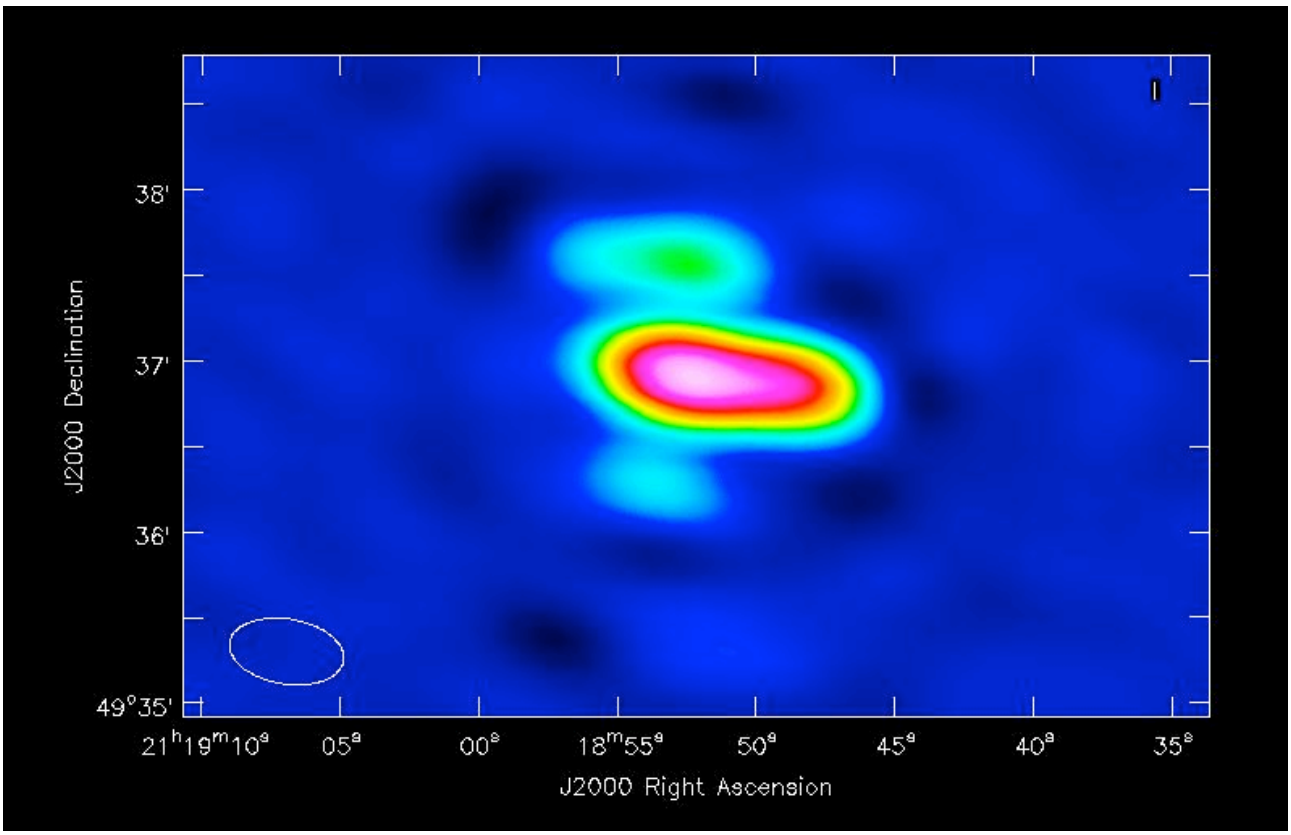



20x selfcal

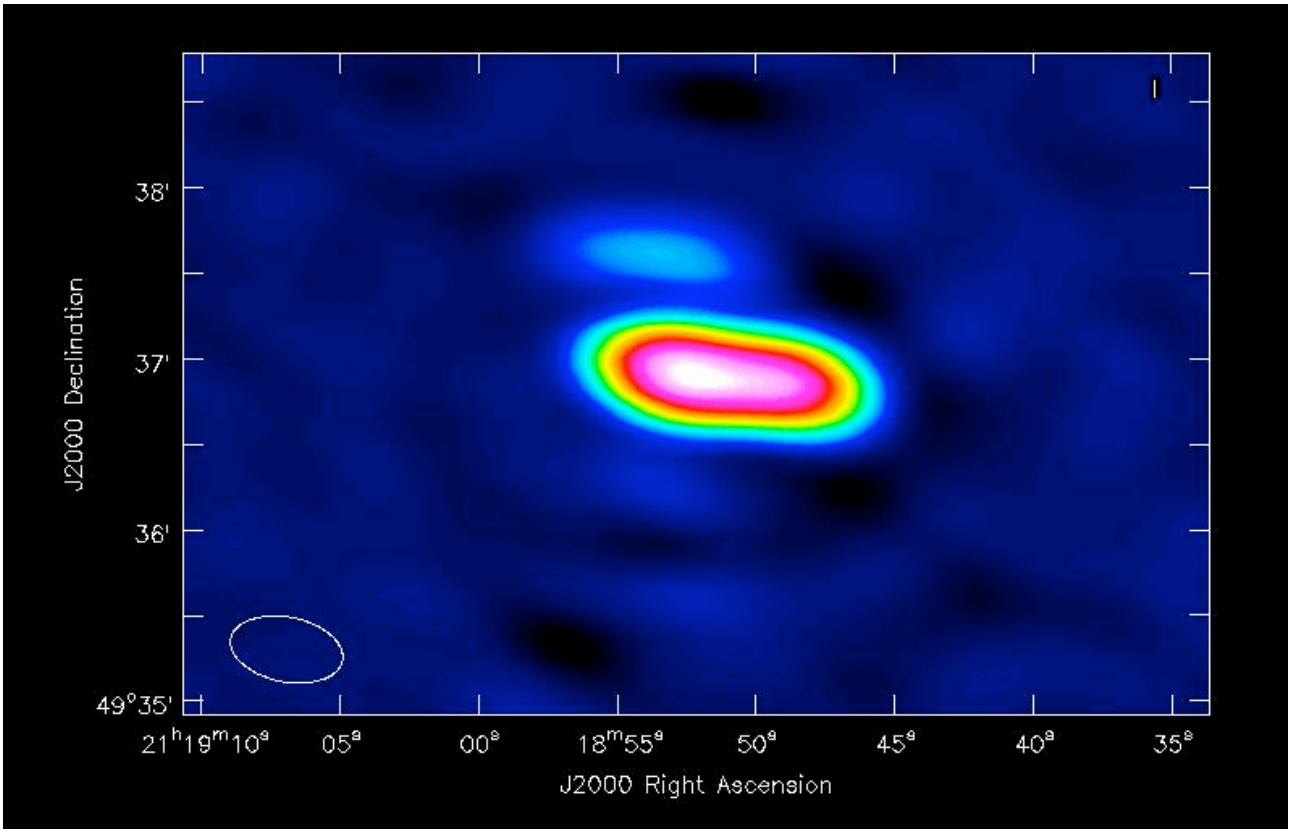
**3C431 - showing different selfcal stages**



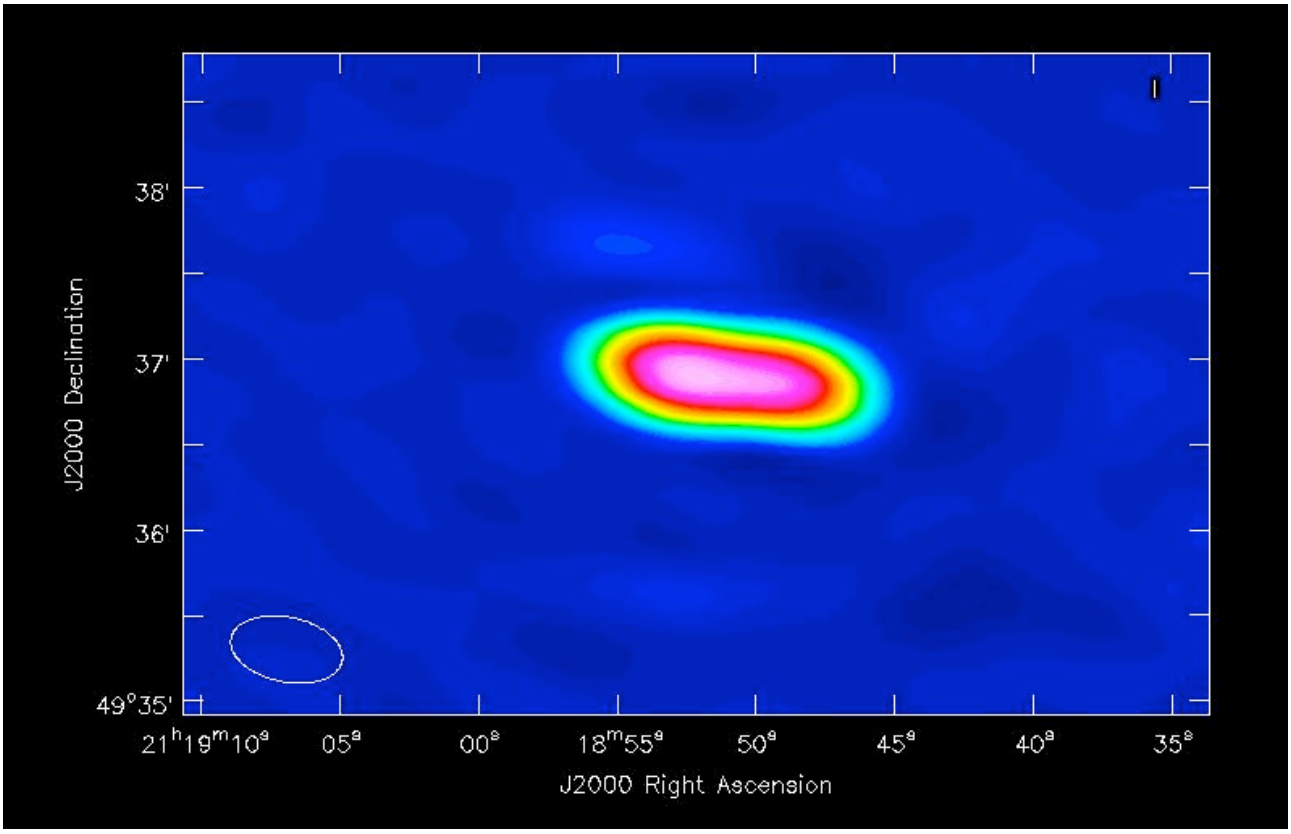

1x selfcal



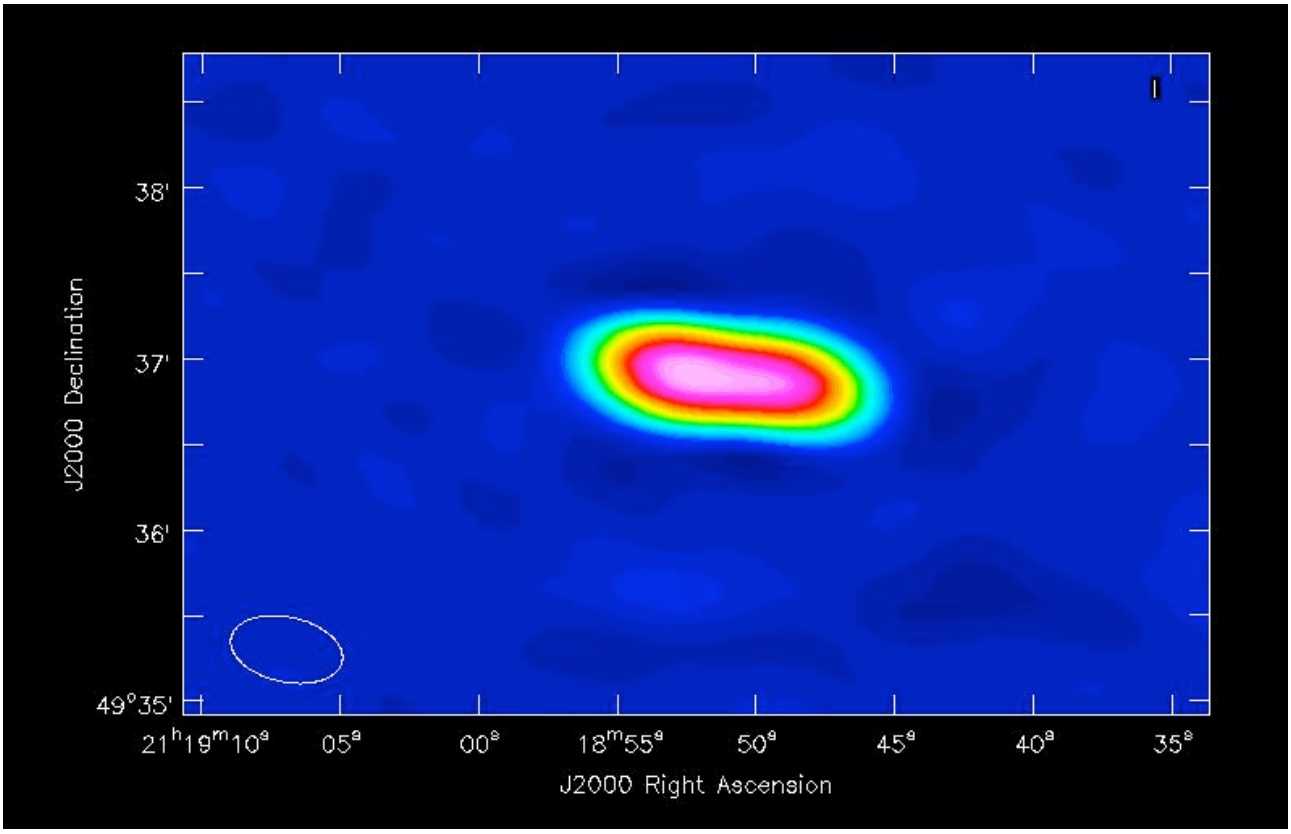

5x selfcal




10x selfcal



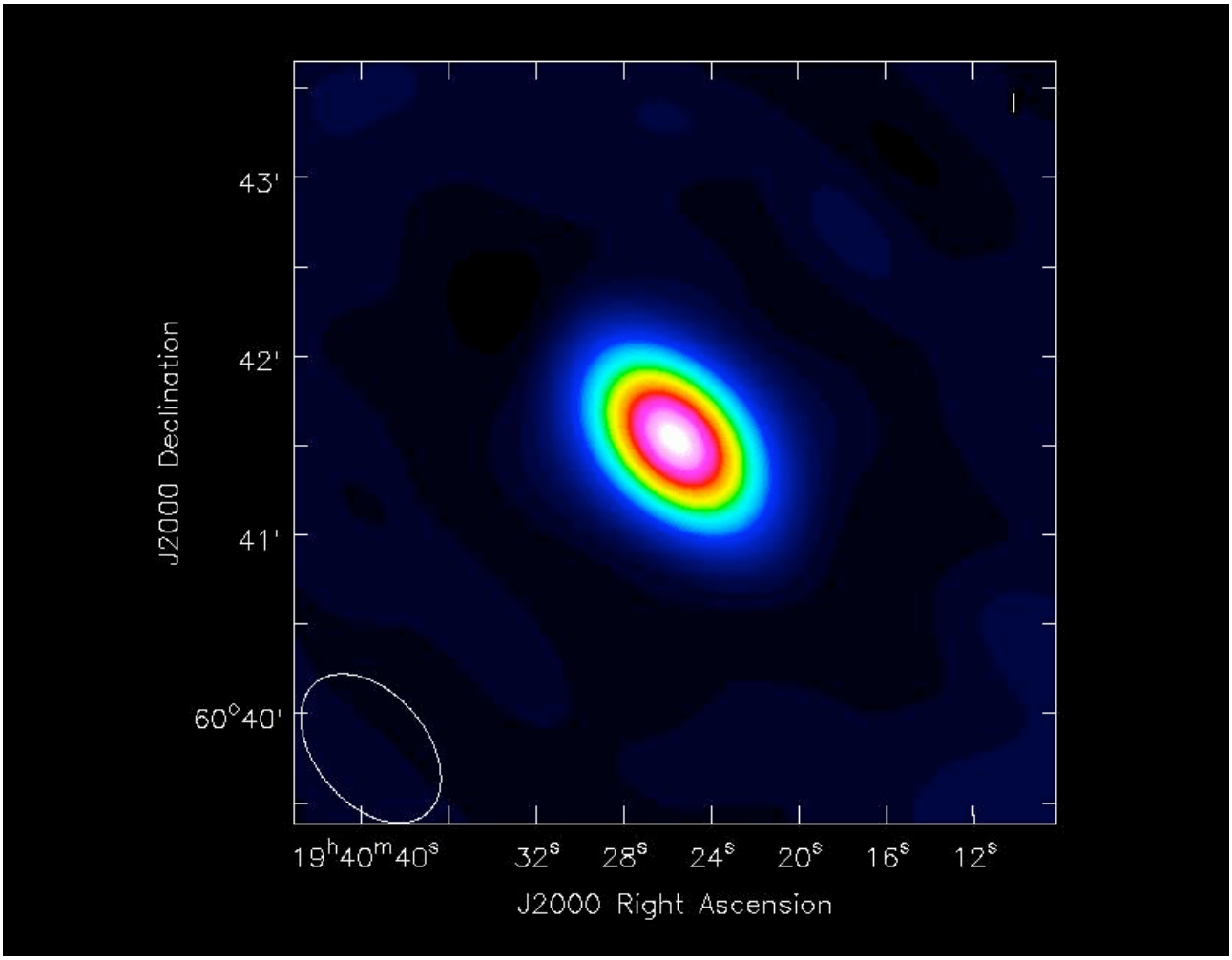

15x selfcal


38'
37'
36'
49°35'
J2000 Declination
21h19m10s
05s
00s
18m55s
50s
45s
40s
35s
J2000 Right Ascension

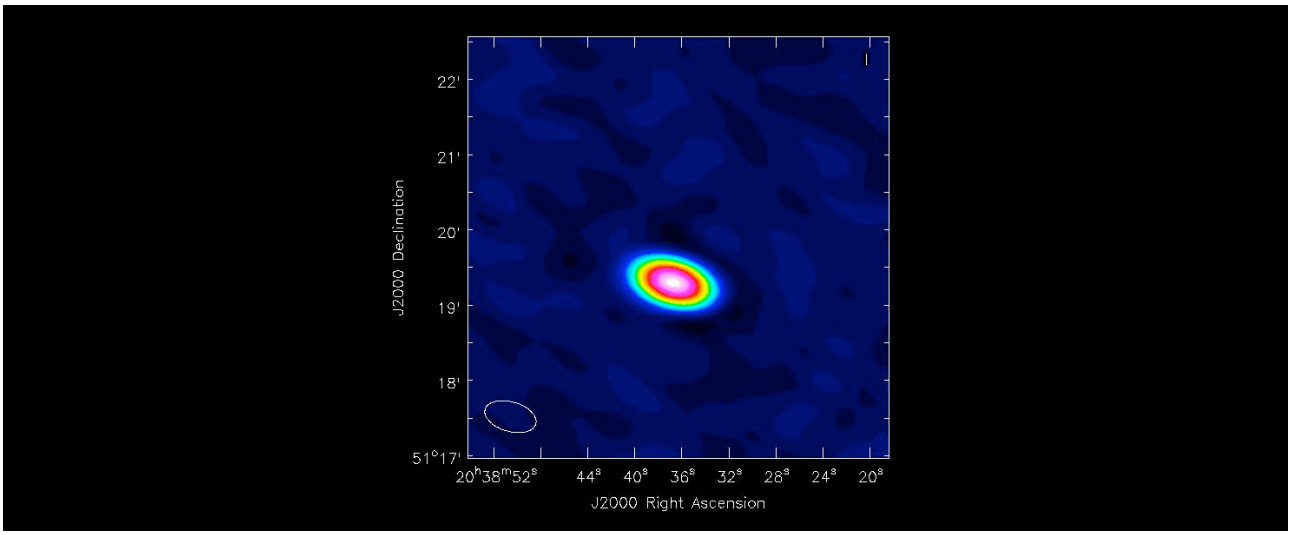
19x selfcal

# Other 3C Sources

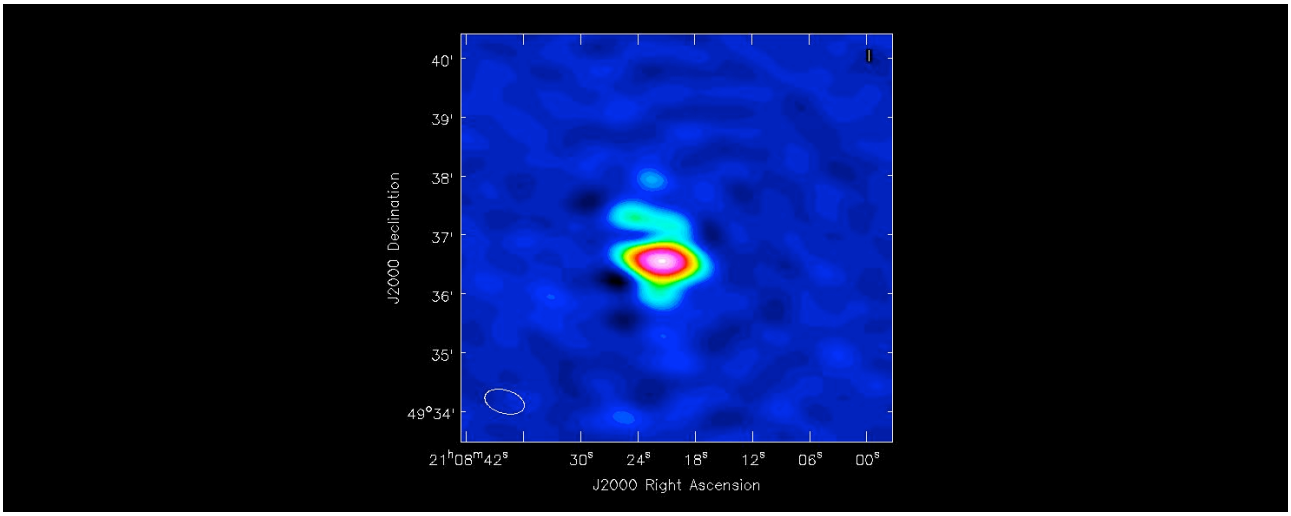
### 3C401 - 25x selfcal



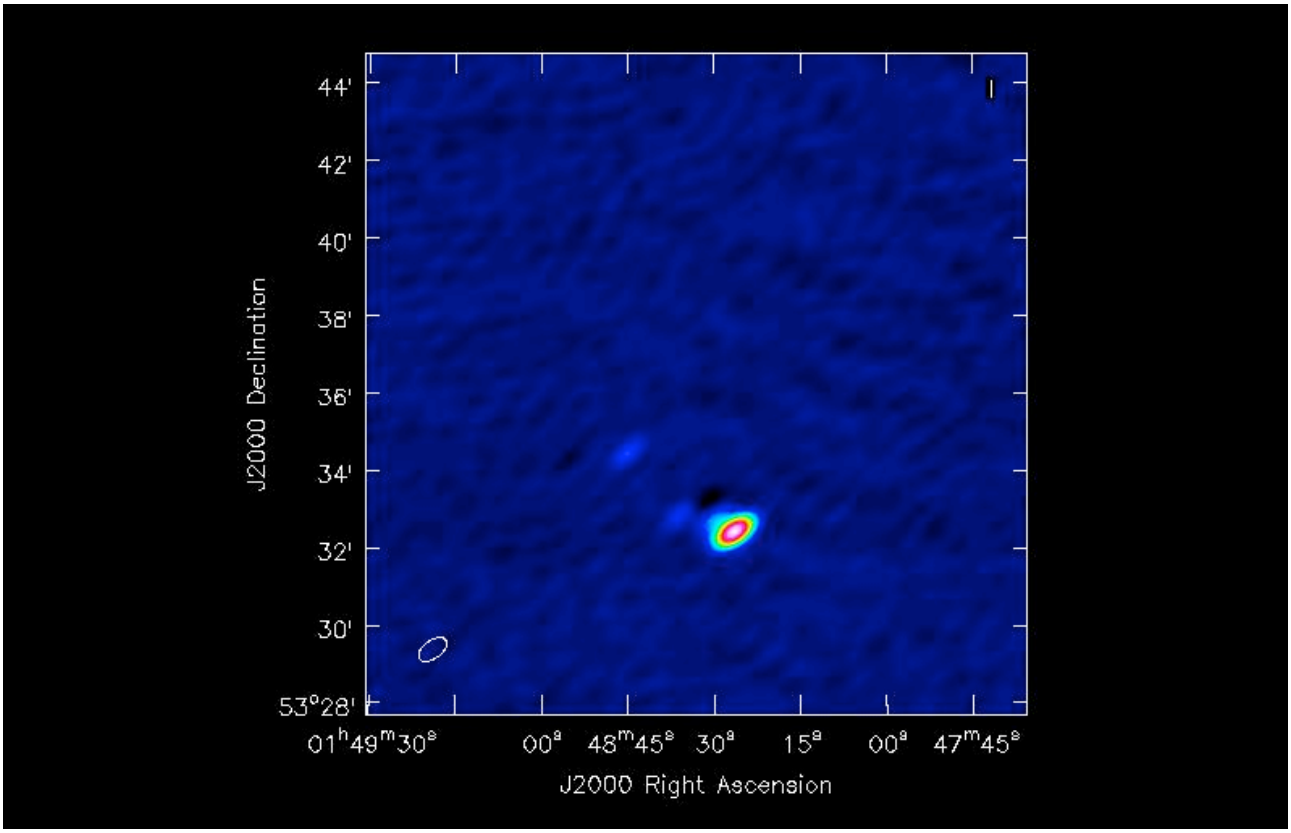

### 3C418 - 25 selfcal



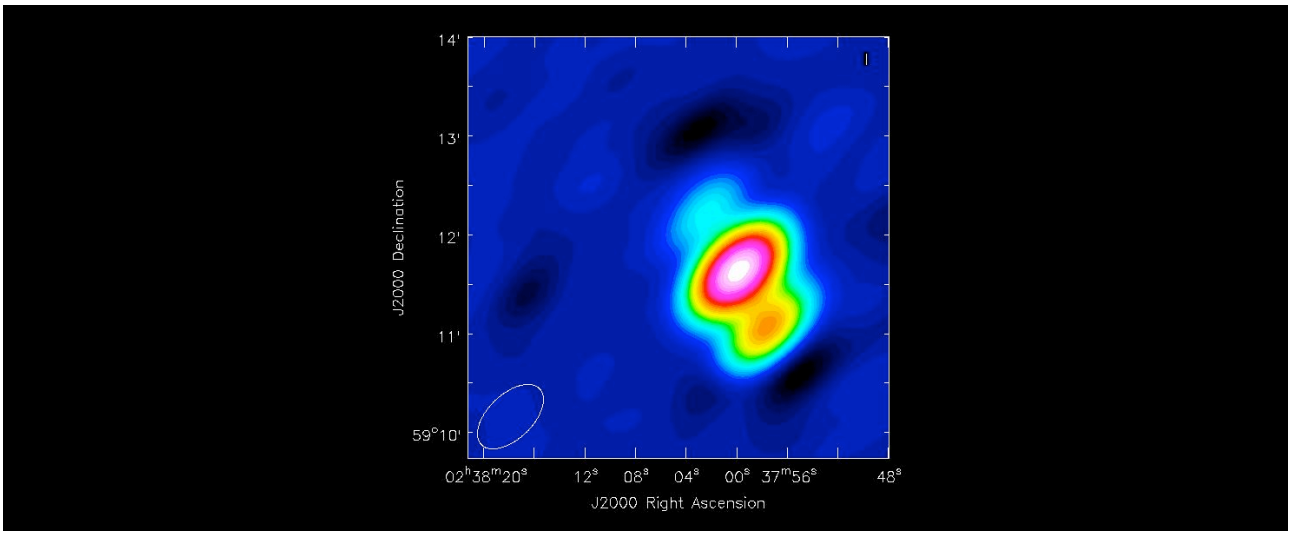
## 3C428 - 25x selfcal




## 3C52 - 20x selfcal

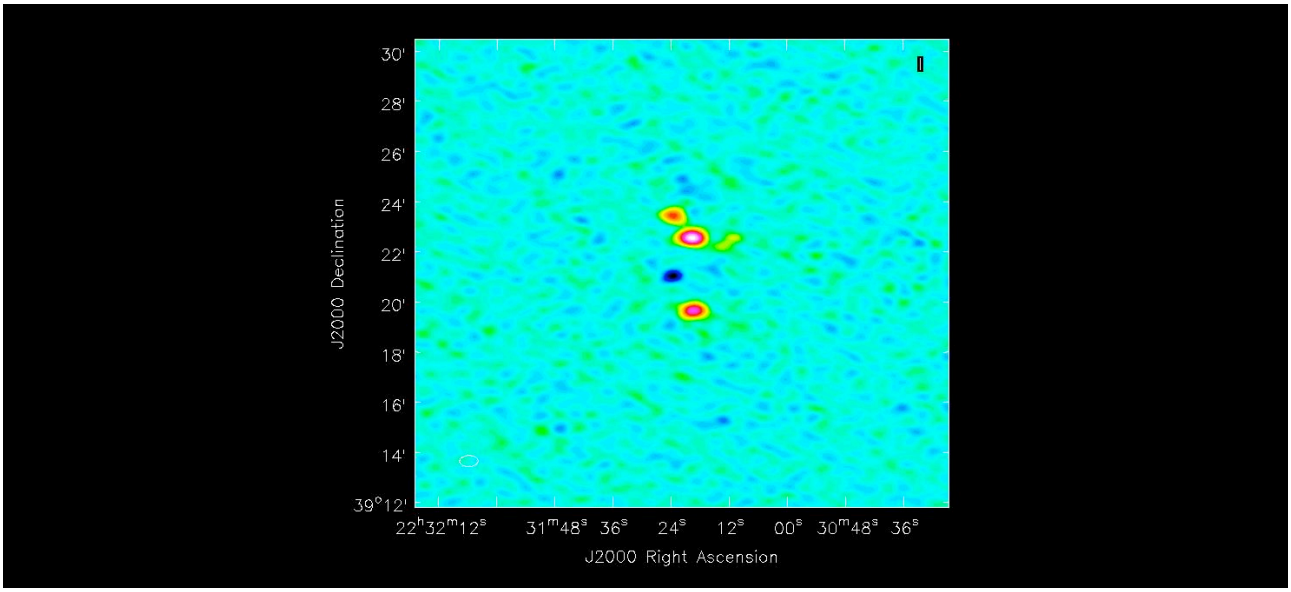


**3C69 - 25x selfcal**




Note: probably needs more loops to converge to double lobe

**3C449 - 20 selfcal**




Note: Cas A at 21.3 degrees

# Sources closer than 20 degrees to Cas A did not converge

**3C58**
**3C35**