GATITO

José Nicolás González Pérez
Hamburger Sternwarte

What is GATITO?

What is GATITO?

What is GATITO?

What is GATITO?

What is GATITO?

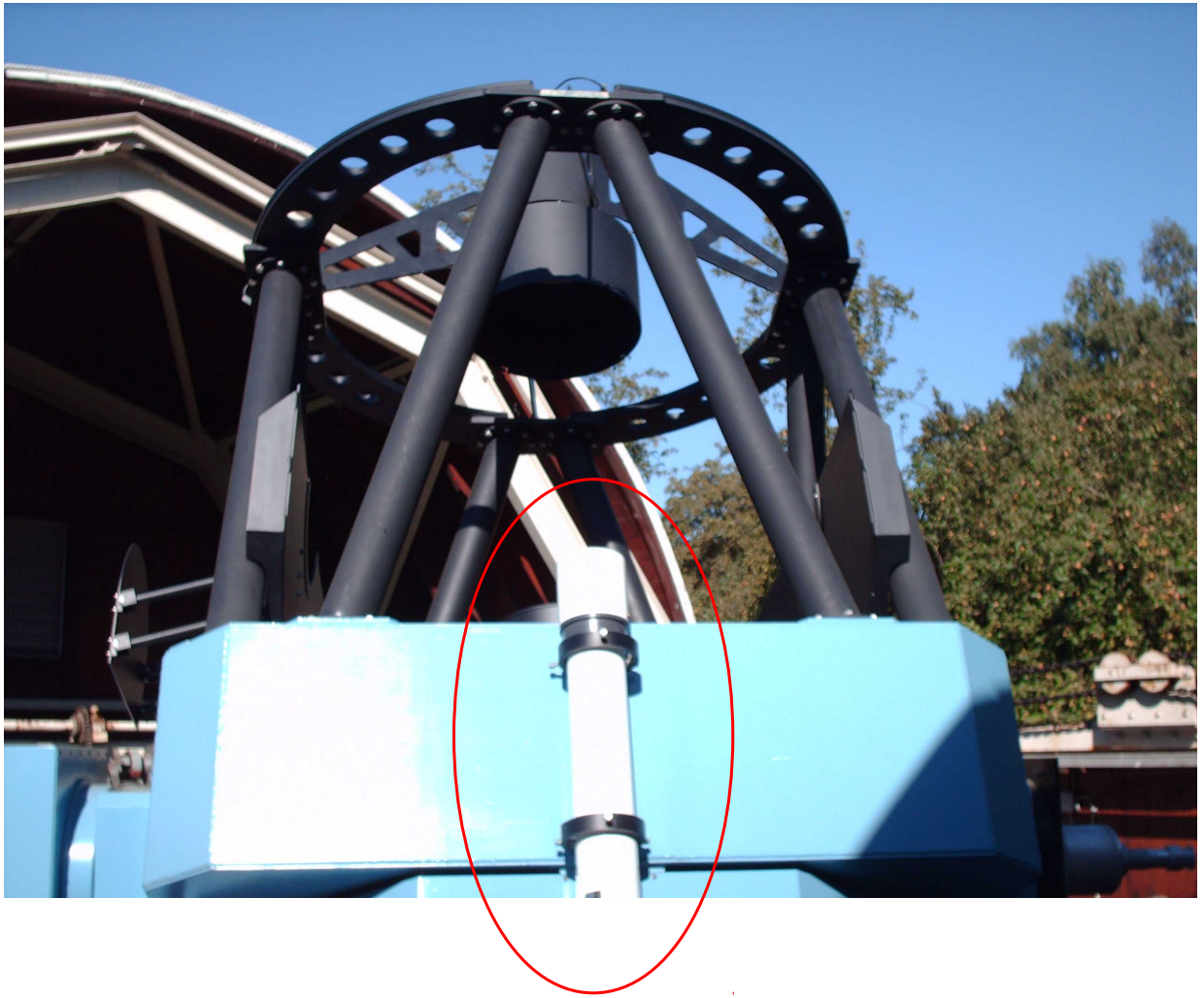
A photometric CALIBRATOR for TIGRE

- Photometric calibration: not possible now:
  - spend time in photometric stars
  - “aperture” (3”) too small
  - not photometric nights
- Unique feature
- Differential photometry with a small telescope and large FOV

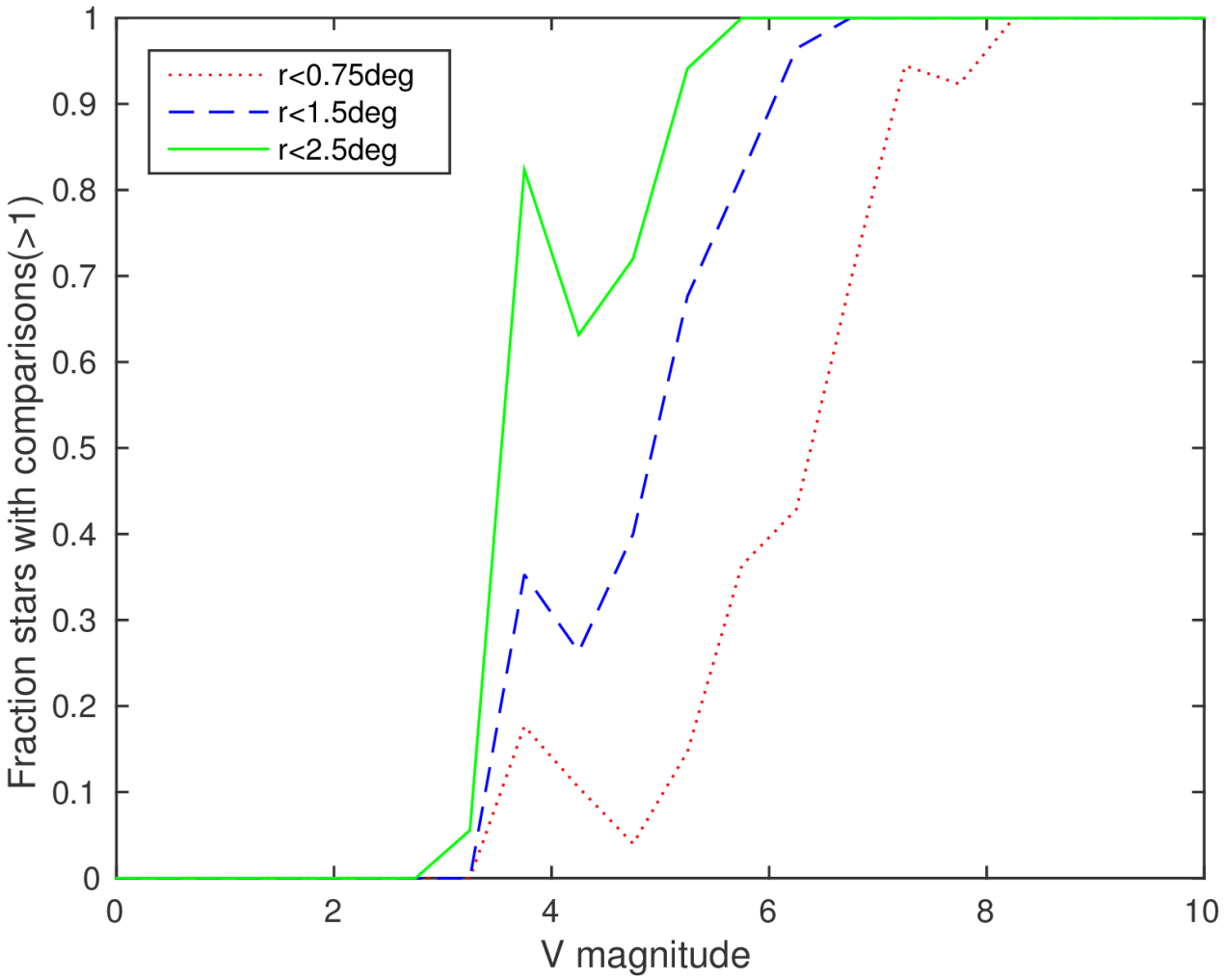
Requirements

- Will not be an independent instrument!
- Telescope not very large and not very small
- Large FOV
- Large detector
- Derotator + Focuser + Filter wheel
- Large backfocus distance
- Telescope cover
- Linux

Where?

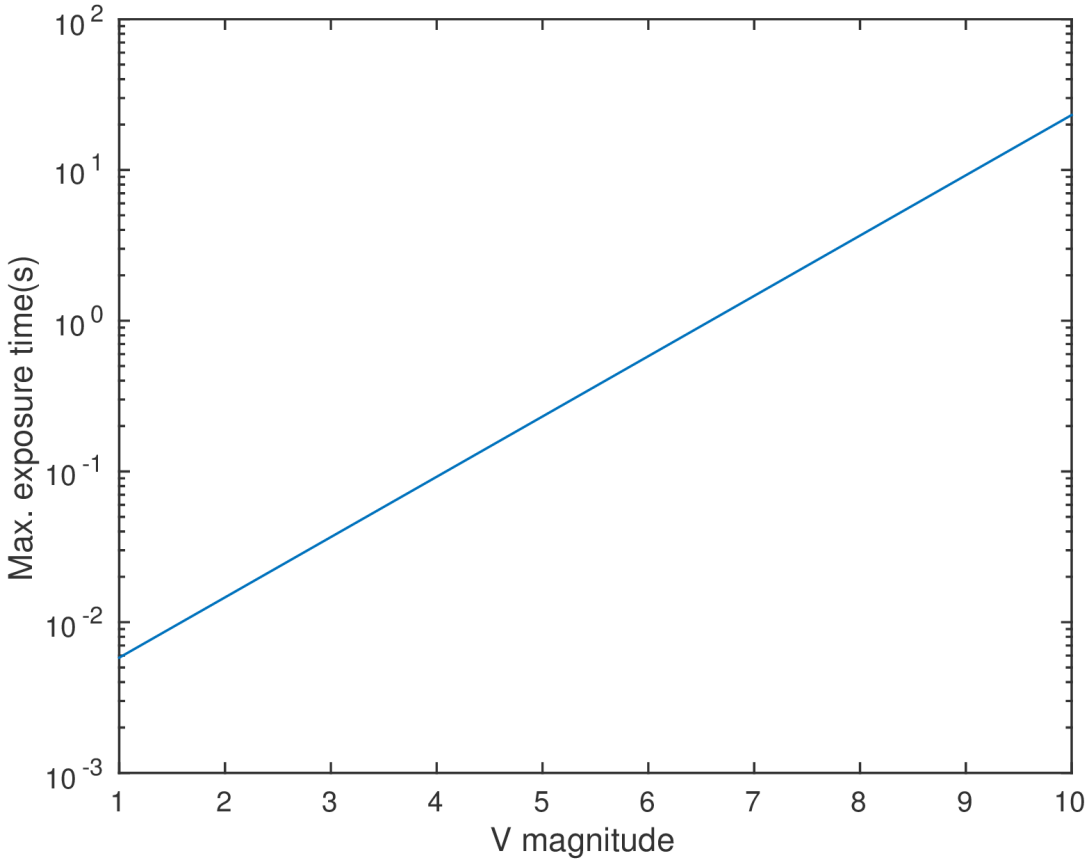


Field of view



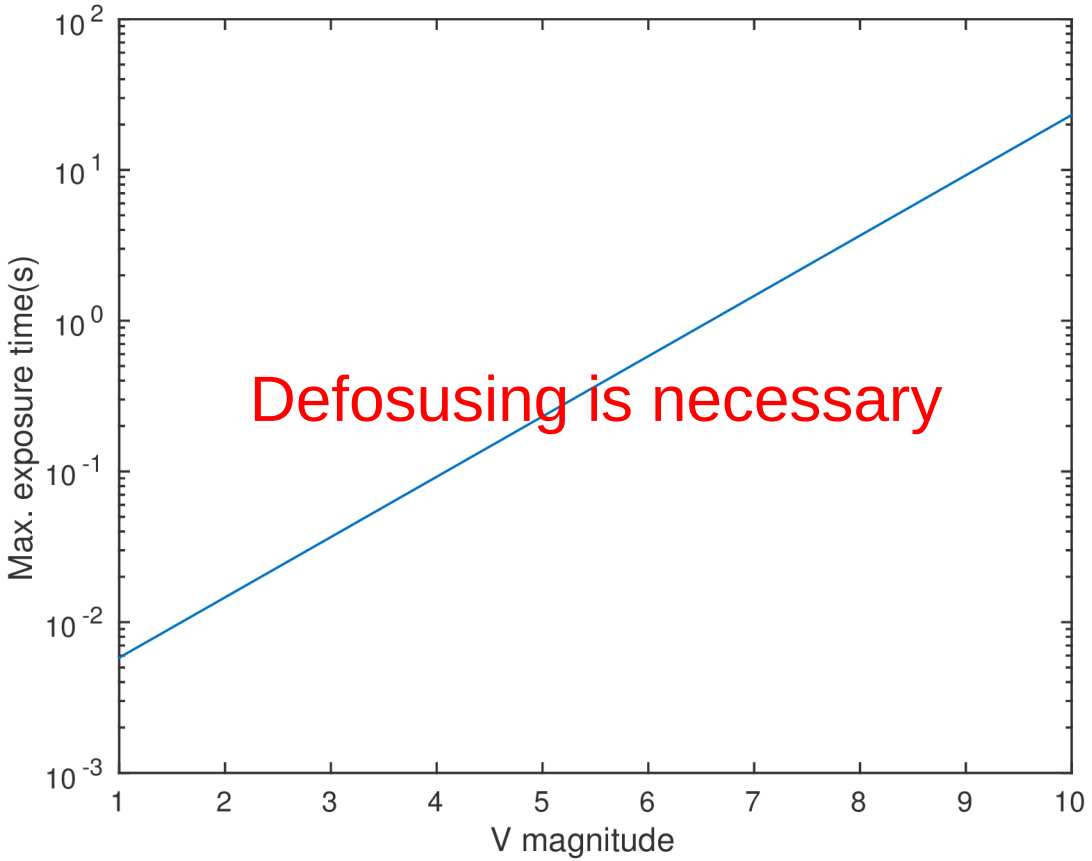
Saturation

For a Ø15cm telescope



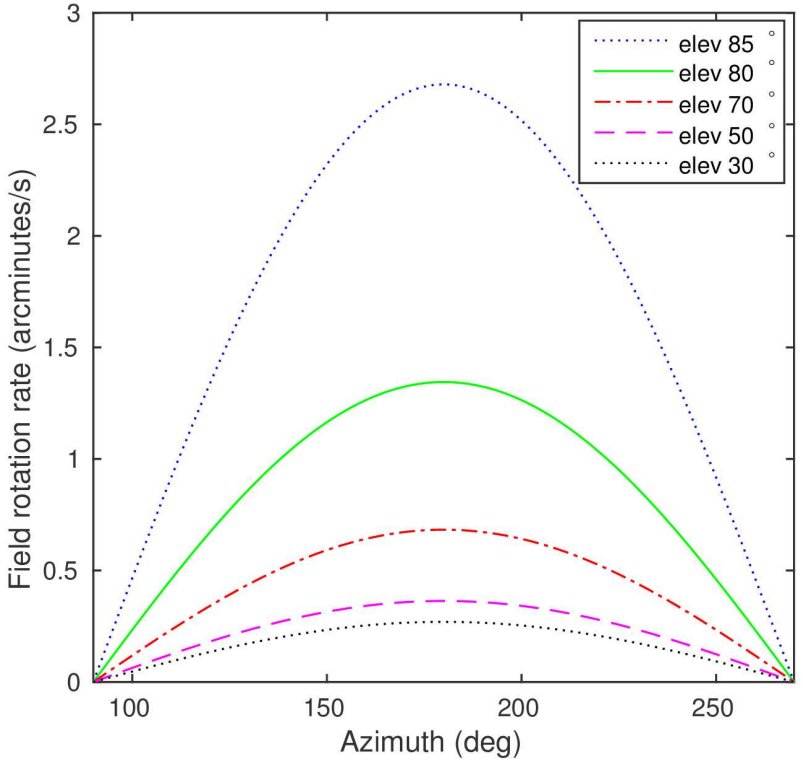
Saturation

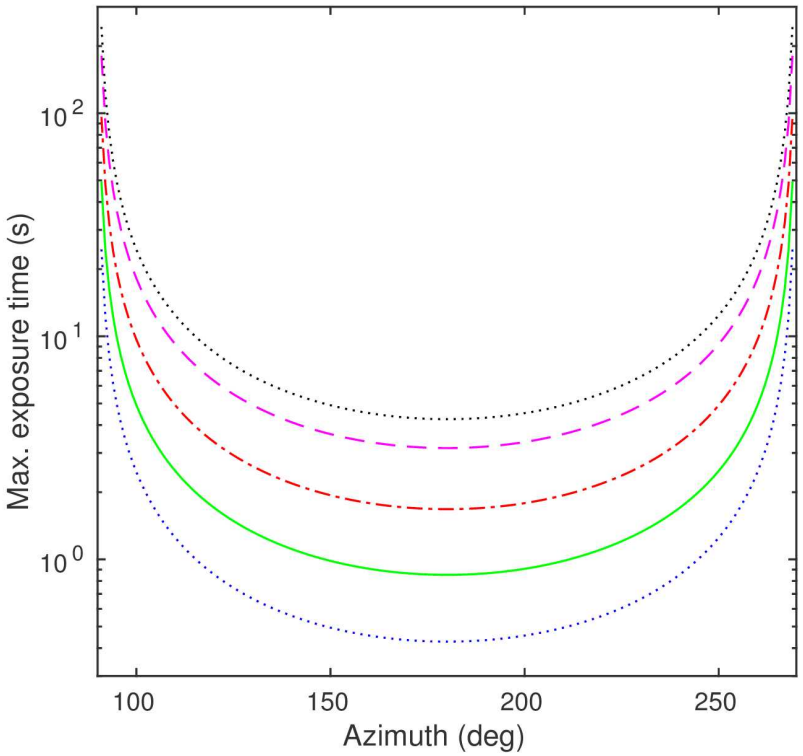
For a Ø15cm telescope



Field rotation

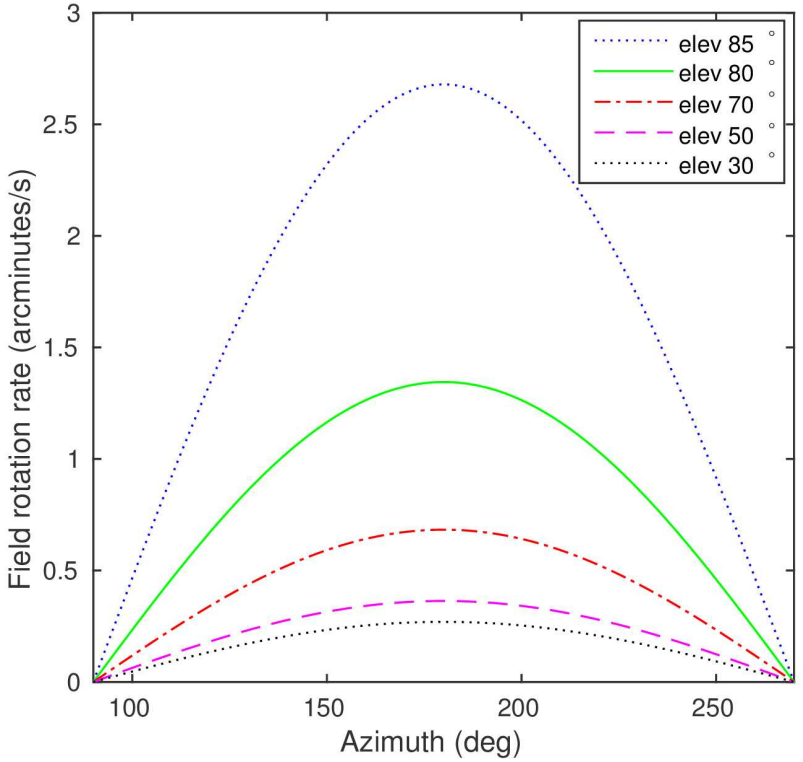
Dη/dt (rad/h) = -0.262 cos(lat)*cos(az)*sin(elev)

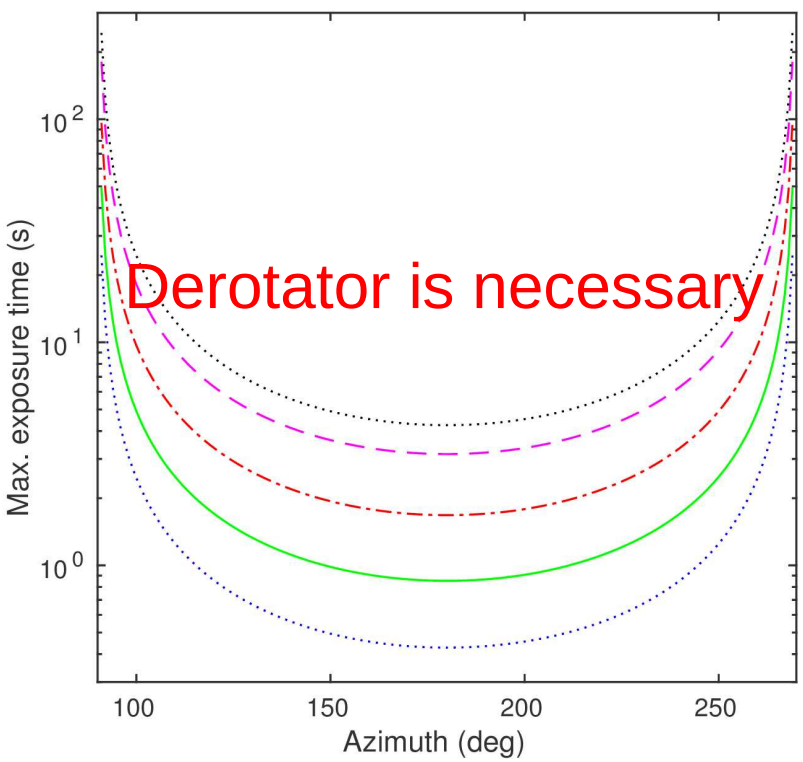




Field rotation

$$D\eta/dt\ (rad/h) = -0.262\ \cos(lat)*\cos(az)*\sin(elev)$$





Proposed system

- Small telescope with Ø15cm or photografic objective(?)
- CCD 36x36mm chip size (4Kx4K)
- Derotator/Focuser combi
- Filter wheel from CCD
- Filters Johnson B(V)R or SDSS gri