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Role of NRO 45m telescope in future VLBI

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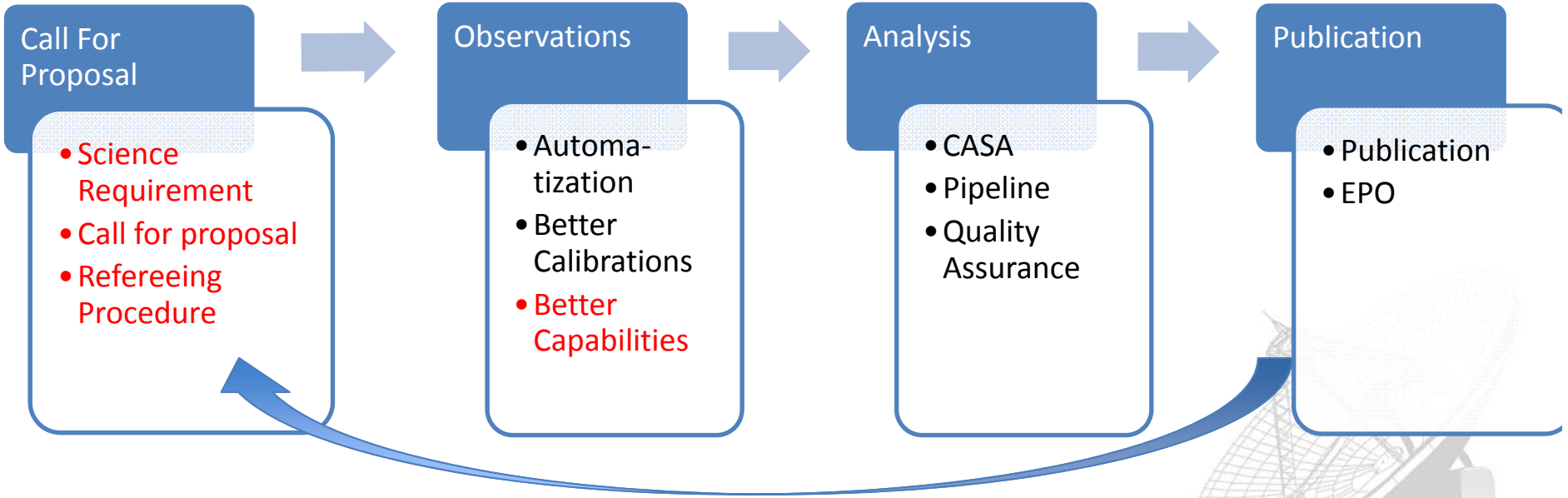
NRO 45m telescope
（Open Use > 2000 hr/yr）

Radio Polarimeters
（data acquisition > 95 %）

NRO Operation

- Observations Cycle



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Concept of NRO Future Operation

- **Be Scientifically Competitive**
  - Collecting Area, Sensitivity, Capability, Operation Cost
  - Best in 3 mm mapping in the next few years
- **Simplify routine operations**
- **Develop new instrument with outsourcing**

＝＞Call for instrumental proposal (Review, Rank, Support (infrastructure and interface info)) Proposers commission instrument.

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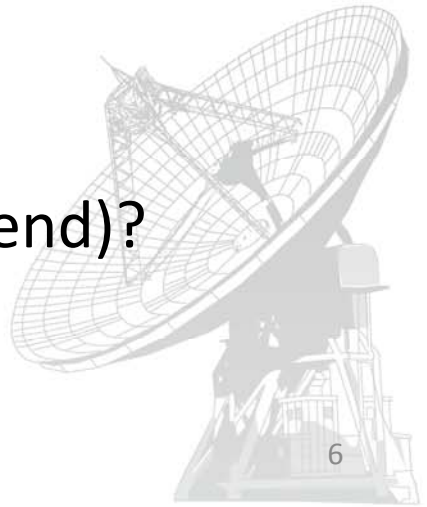
Improvement of Operation

- Helpdesk, Web submission
- Better Efficiency (FOREST, Surface, Optics)
- Remote Observations, Toward CASA, Pipeline, Automatic Observations, Quality Assurance
- Large Open-use Program, ToO, DDT

Current and Future Role of NRO in VLBI Observations

- **NRO 45m Current Status – mostly manual**
  - < 100 hr /yr for VERA open-use
  - VERA team commissions the system
  - Not trivial to conduct monitoring projects
  - Not significant contribution at VERA frequencies
- **NRO 45m Issues in future VLBI Observations**
  - Increase VLBI time if scientifically strong
  - Simplify VLBI operation
  - Do remote observations from Mizusawa?
  - Implement new VLBI instrument (Rx, Backend)?
  - Identify single point failures (H masar etc.)



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Scientifically Strong Proposals are welcome if not much load is expected on NRO.