



SOAR and Brazilian Astronomy

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Why did Brazil become a SOAR partner ?

- ❑ Start of operations of OPD in 1980 marks a decisive turning point in Brazilian astronomy
 - o For the first time, Brazil had a large observing facility
 - o Together with the new telescopes, these new observatories provided a significant increase in observing time
- ❑ Consequently, the quality of the observing time increased
 - o Quality: access to new sites than elsewhere
 - o Quantity: new telescopes





Why did Brazil become a SOAR partner ?

 Solution





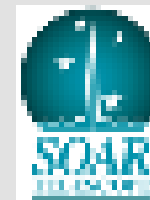
Initial aspirations of Brazil with respect to SOAR

- ☐ gain a significant amount of observing time
- ☐ at a world-class telescope
- ☐ to be used for multi-purpose fore-front research in observational optical astronomy
- ☐ foster the development of technological capabilities within Brazil
- ☐ construct competitive astronomical instrumentation satisfying the demands of the users

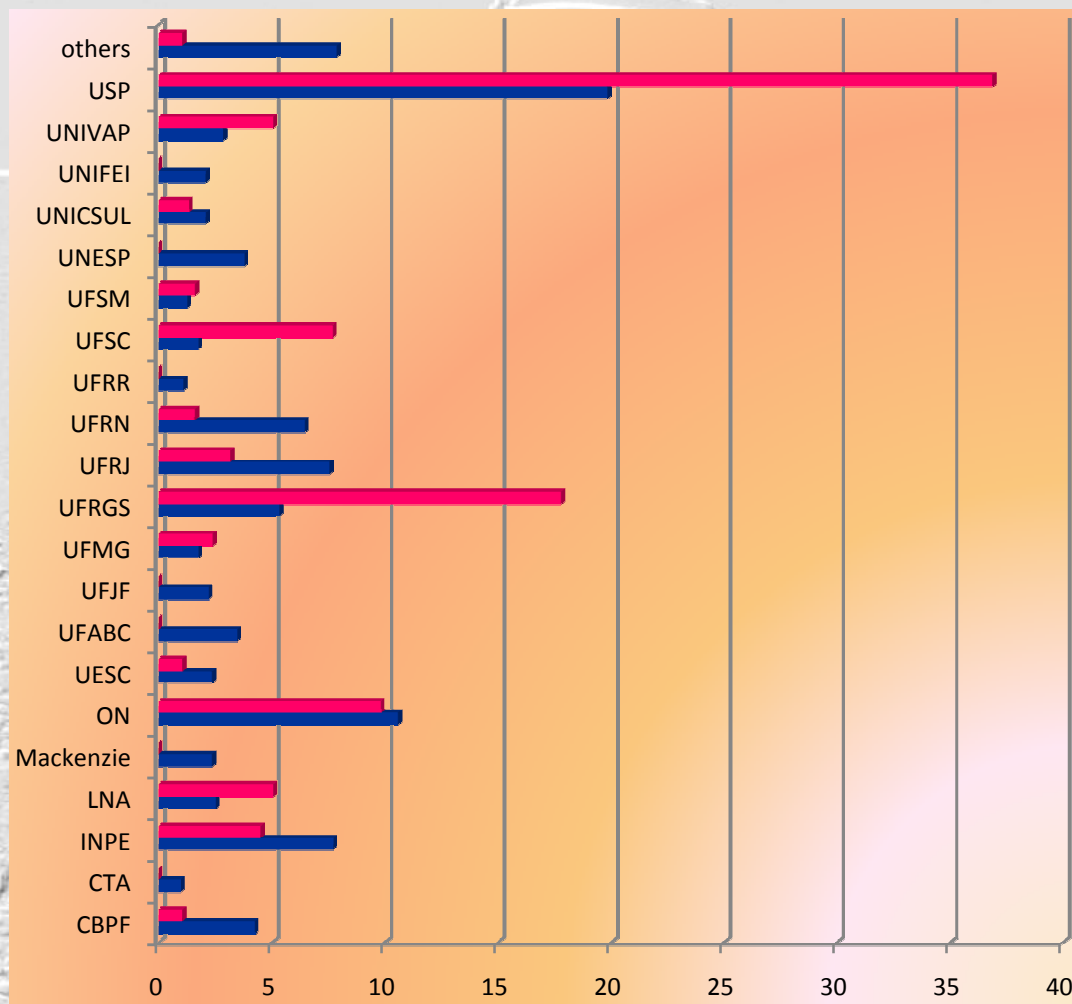
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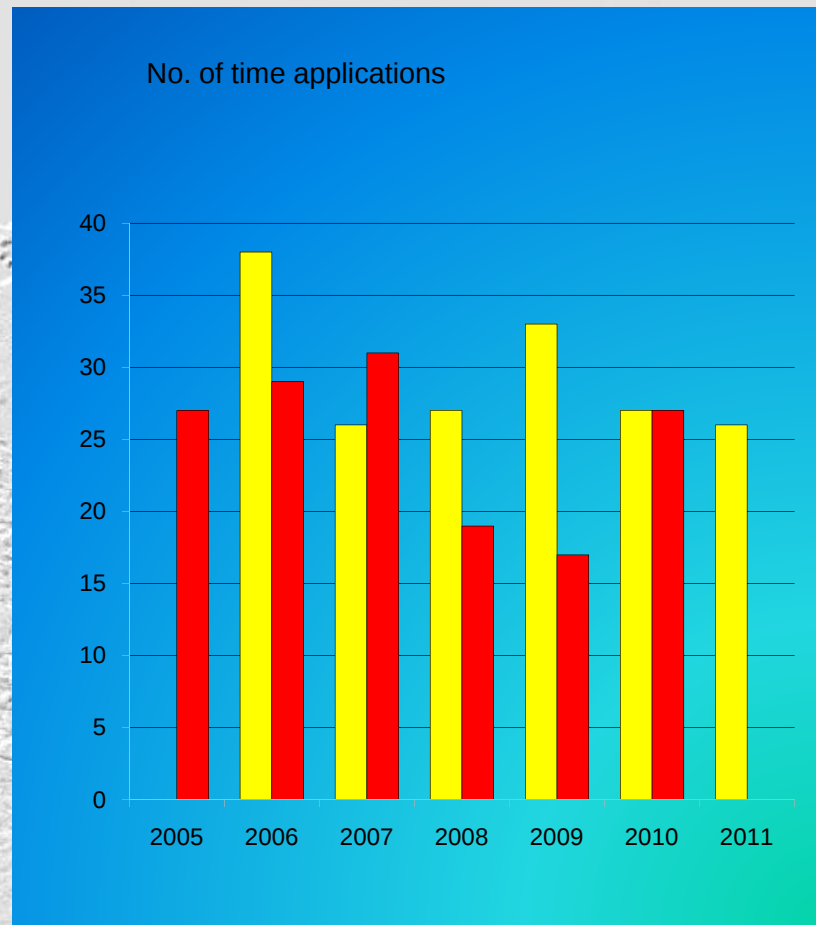
Who uses SOAR in Brazil ?



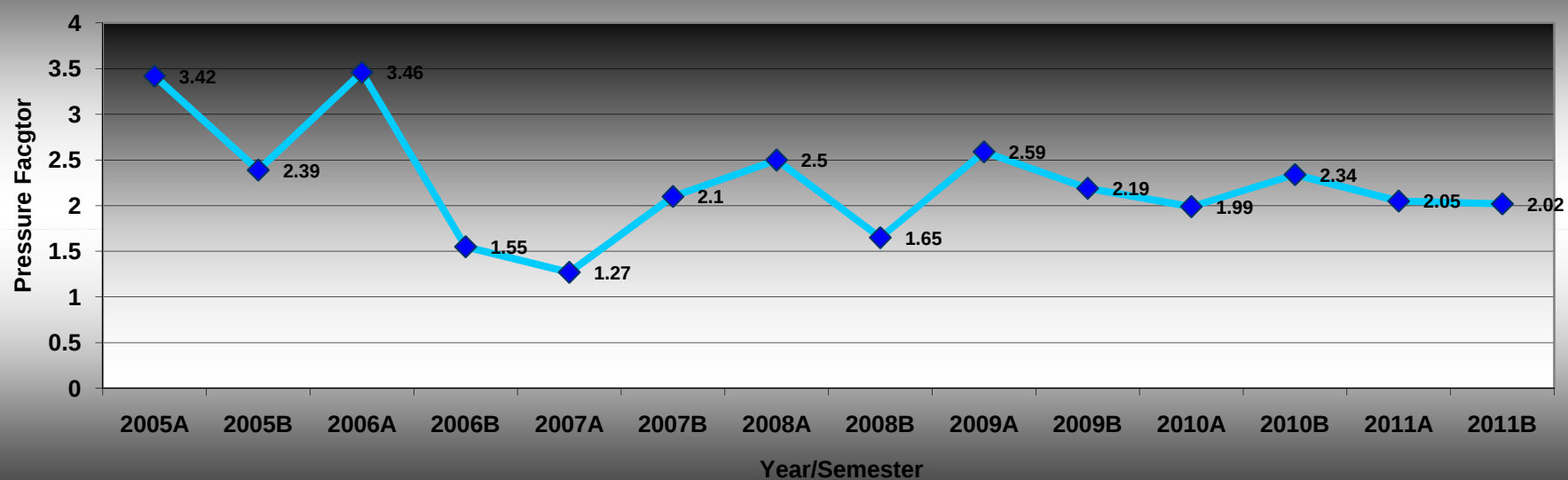
Percentage of astronomers per institution $\leftrightarrow$
Percentage of time applications per institution



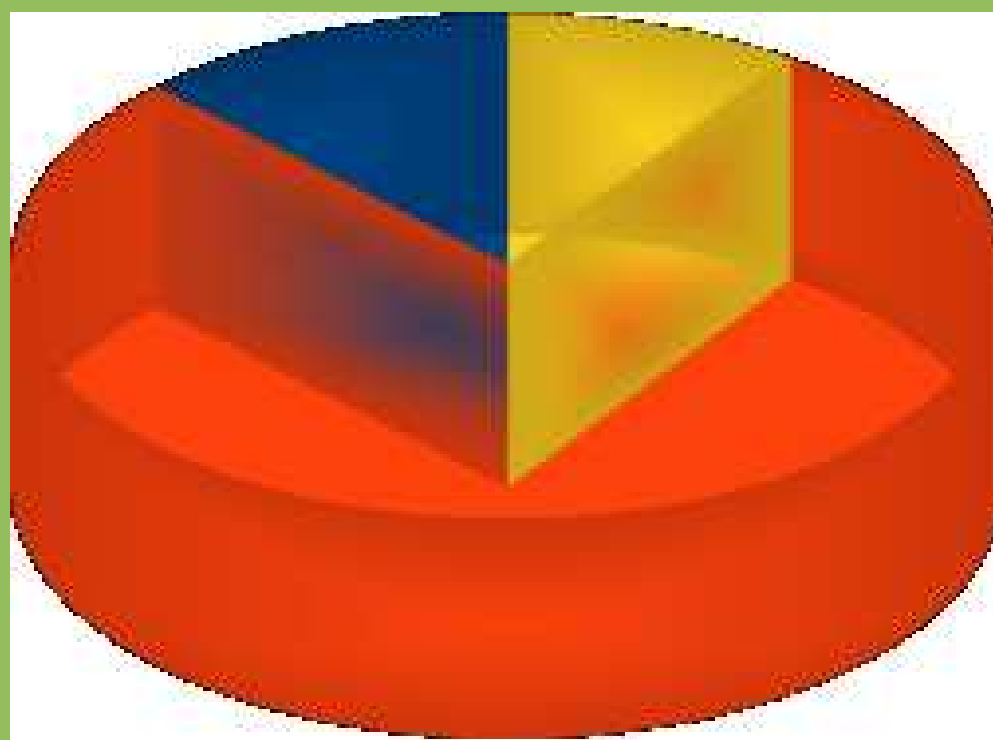
What is the magnitude of the demand for SOAR ?



Evolution of the pressure factor on SOAR



Distribution of observing modes



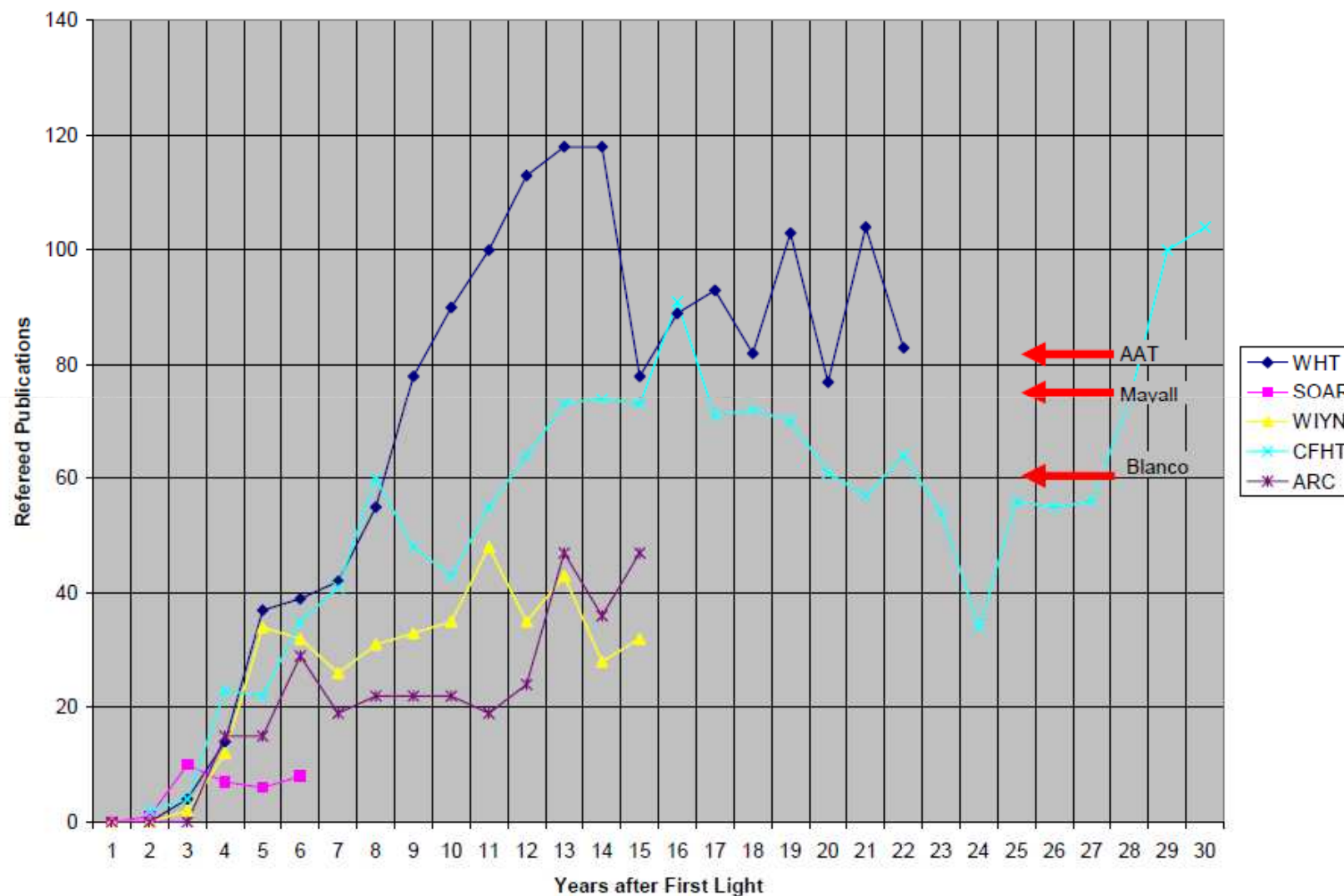
■ remote
■ queue
■ classical



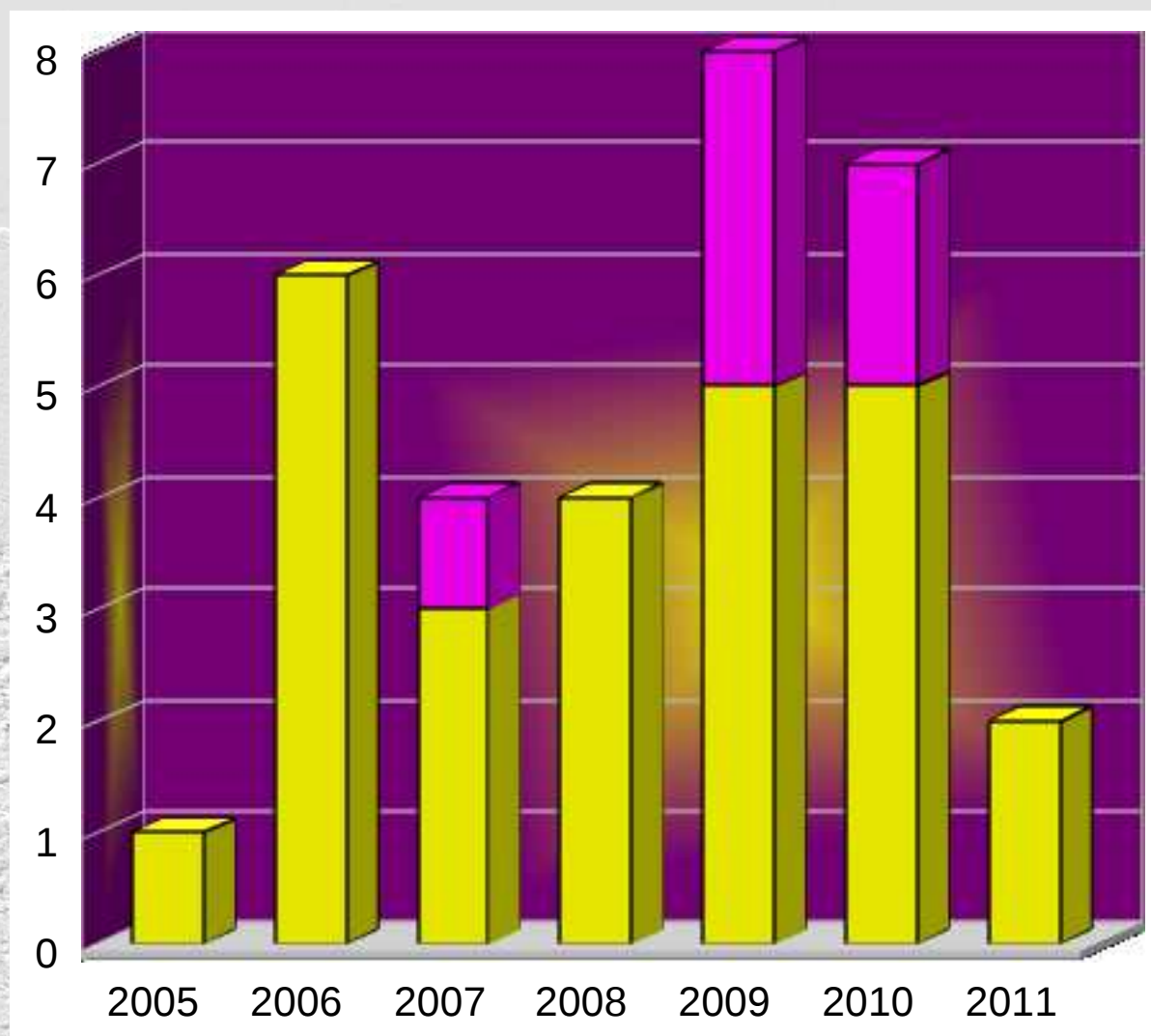
User satisfaction

- Main conclusions from feedback received from Brazilian SOAR users:
 - Users are moderately satisfied with the performance of SOAR, but there are issues
 - Room for improvement exists
 - SOAR is addressing the issues
- Nevertheless, the initial problems of SOAR might have frustrated part of the potential users:
 - Late start of normal science operations
 - Late arrival of a significant part of the first generation instruments
 - Initial problems with some of the first generation instruments

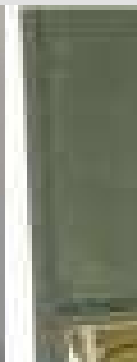
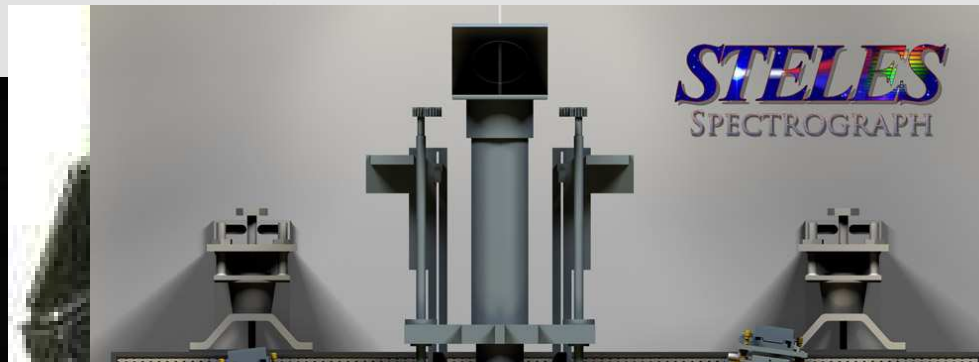
Comparison of publication rates of 4m-class telescopes



Brazilian SOAR publications: refereed journals + thesis



Brazil



First SOAR Science Symposium, Maresias

2011, May 18

The future of SOAR from the Brazilian perspective

The Brazilian astronomical community is fully committed to the future of SOAR.

This is clearly reflected in the **Recommendations** of the recent **National Plan for Astronomy, Space Science and Technology**:

Maintain the existing observatory, increase its efficiency, provide (in particular, human resources) to improve the quality and

Plano Nacional de Astronomia



Proposta

Comissão Especial de Astronomia

Outubro de 2010



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SOAR in the age of Brazilian ESO membership

or

Is Brazilian ESO membership a thread to the continued commitment of Brazil to SOAR?

Can SOAR compete with this telescope?

NO



Can SOAR compete with this telescope?

NO



Does SOAR have to compete with these telescopes?

NO !



SOAR in the age of Brazilian ESO membership

or

Is Brazilian ESO membership a thread to the continued commitment of Brazil to SOAR?

Can SOAR compete with this telescope?



The ESO 3.6-m telescope is dedicated to extra-solar planet search (using HARPS)

→ Not in competition with SOAR

Can SOAR compete with this telescope?



The NNT has optical characteristics complementary to SOAR; instrumentation partly overlaps

→ Modest competition with SOAR



