Efficiency of TIGRE

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- Optical efficiency
  - Telescope
  - Rest: fiber, spectrograph
- Operational efficiency
- Scientific efficiency

Optical efficiency: telescope

- Mirrors reflectivity
- Pellicle beam splitter
- $\Delta m = m_{guiding} - V = a*X + b*BV + c$

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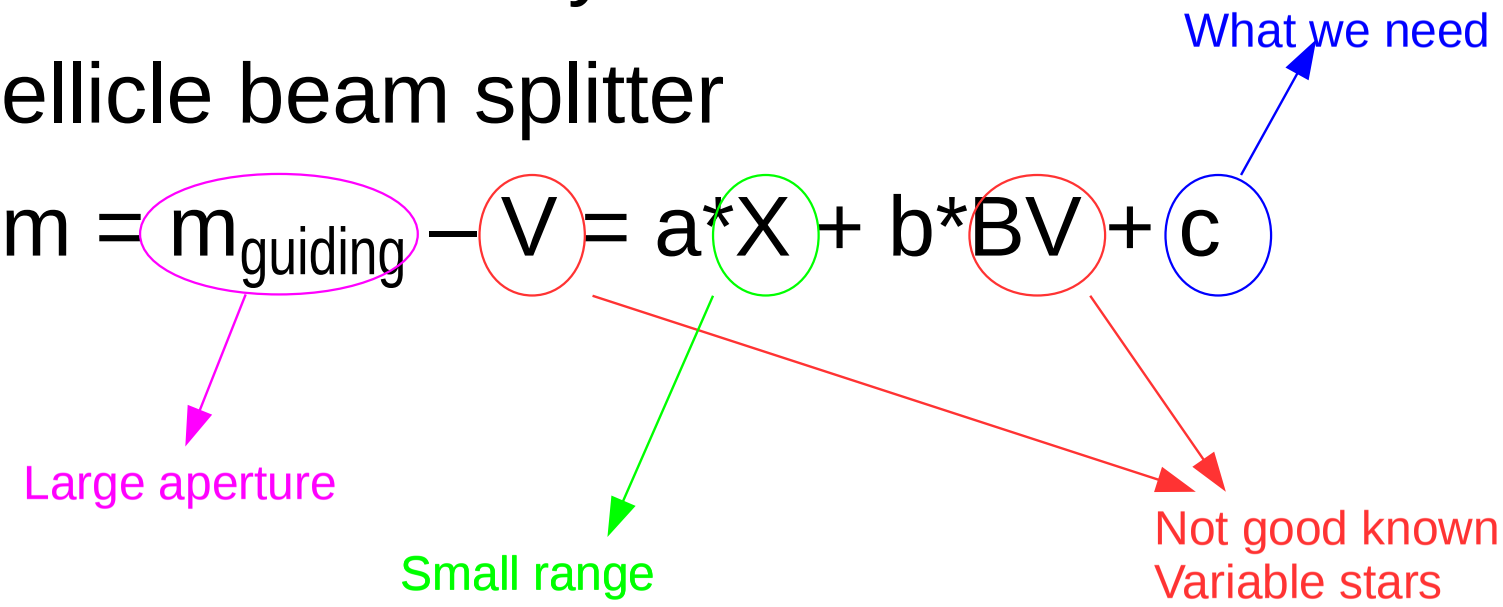
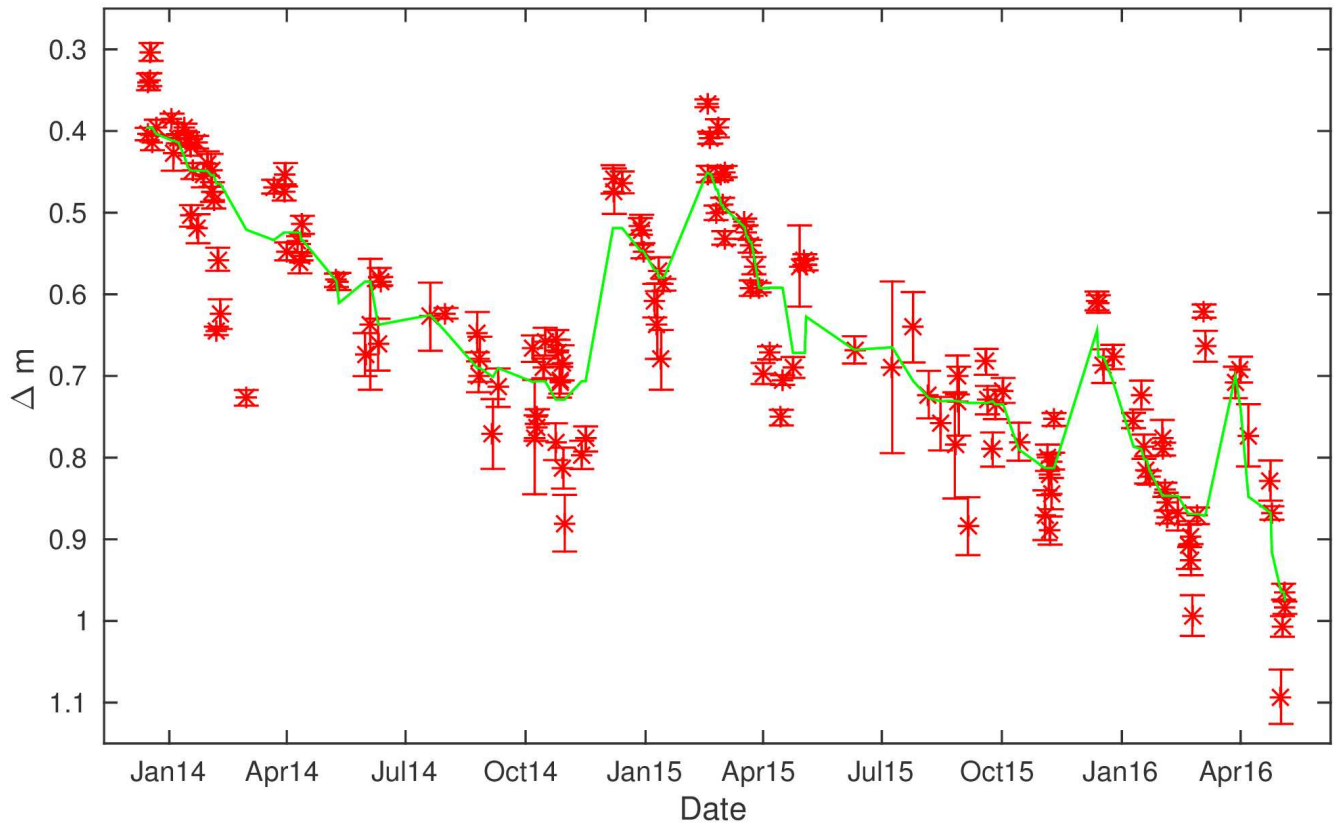


Optical efficiency:telescope



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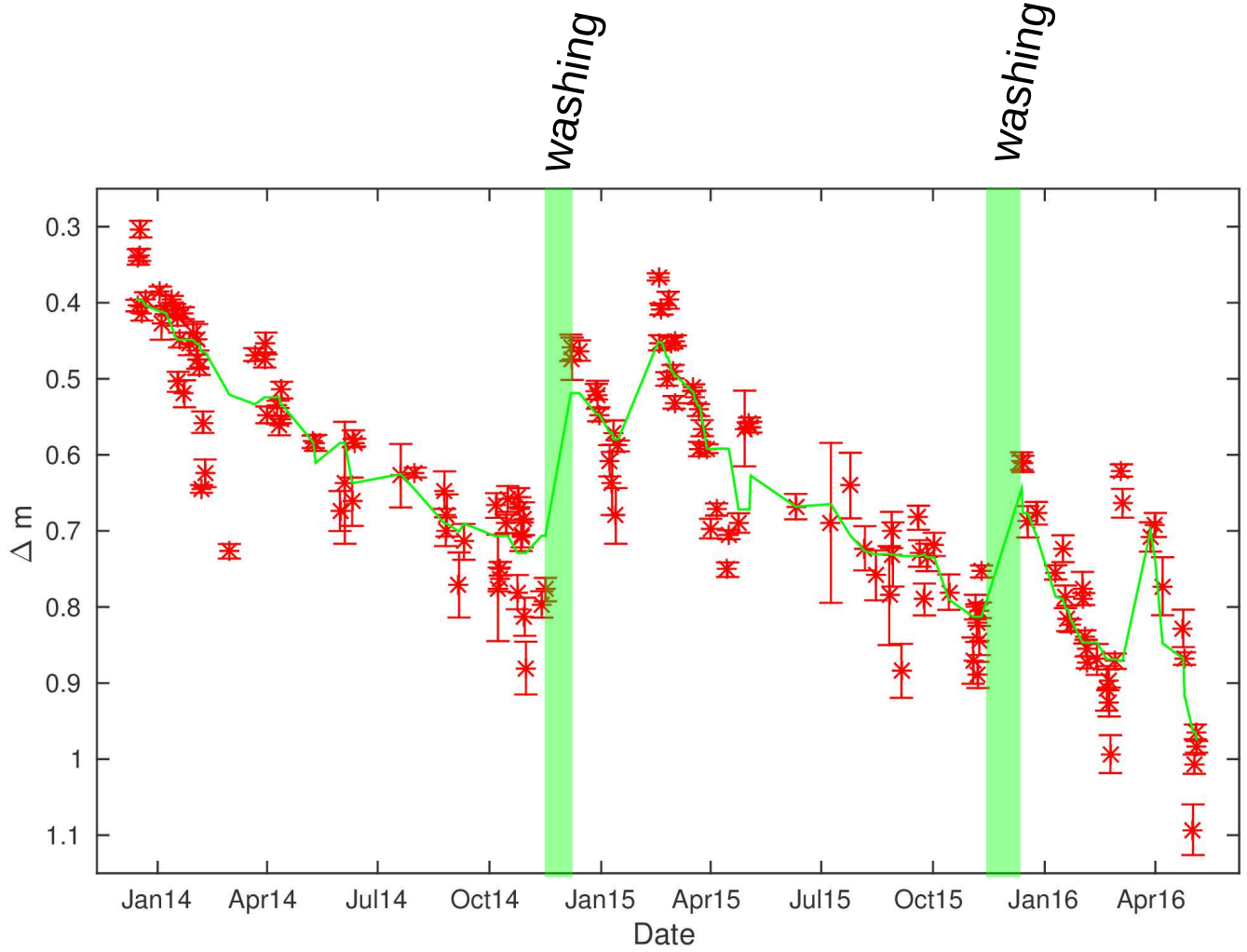
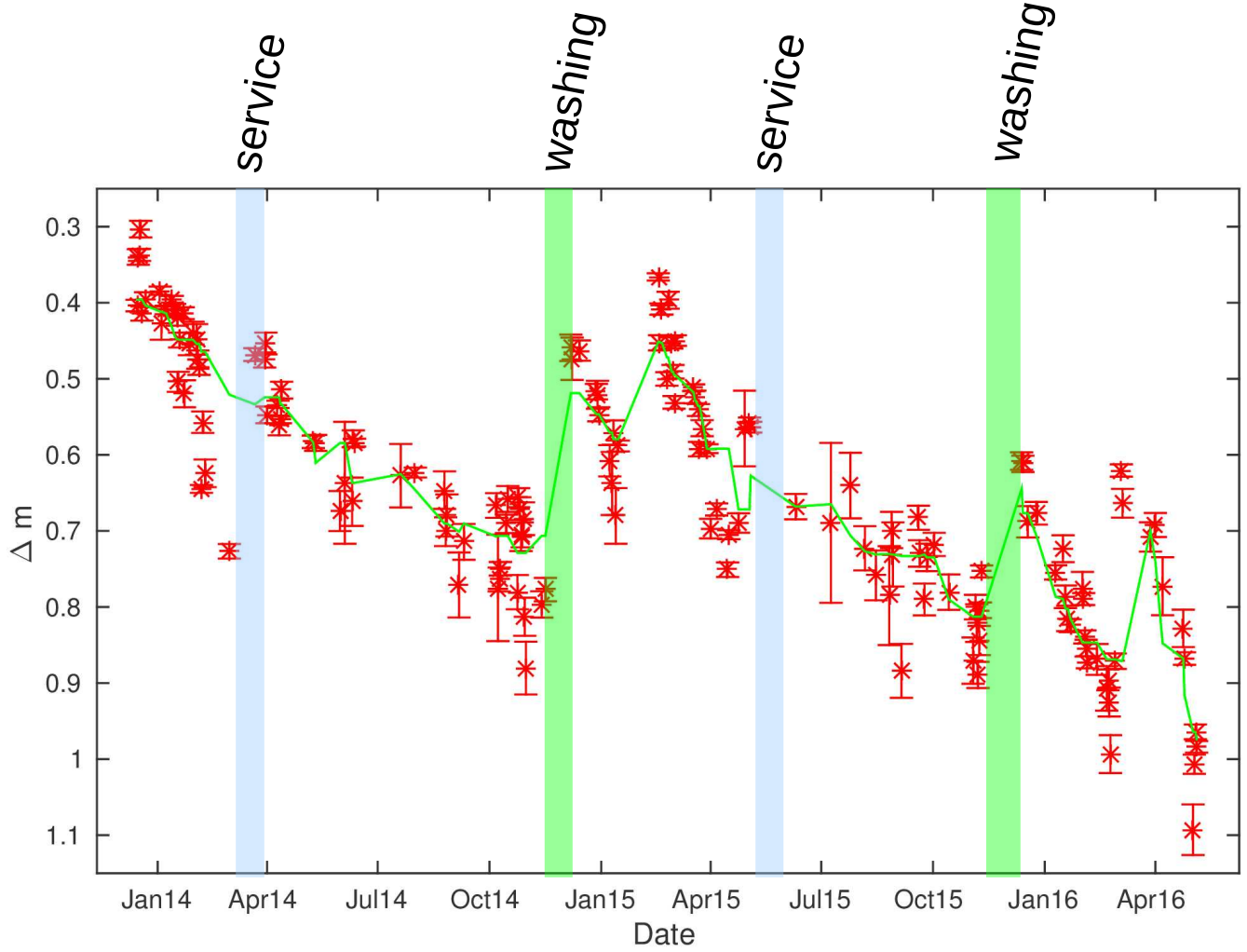


Optical efficiency:telescope



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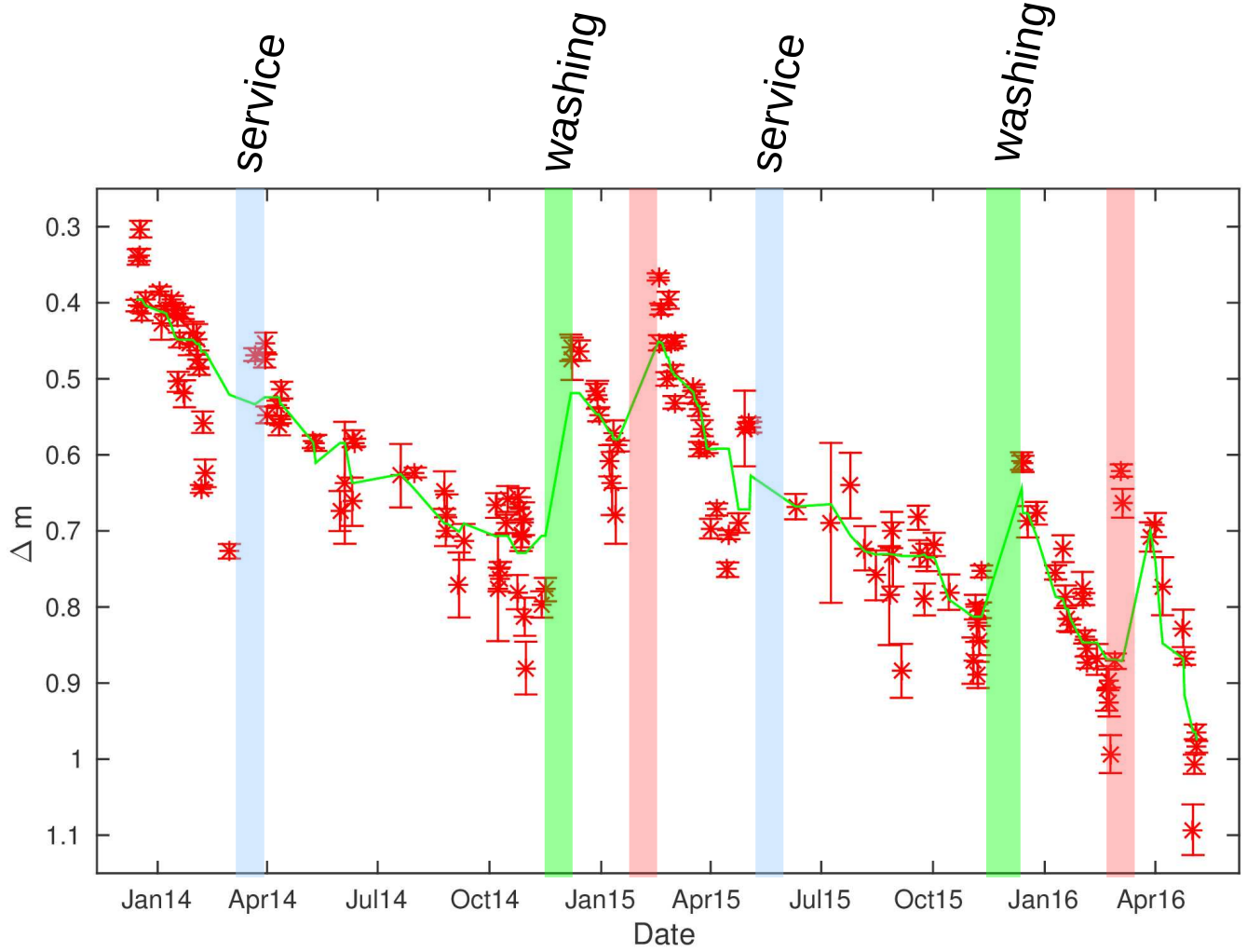
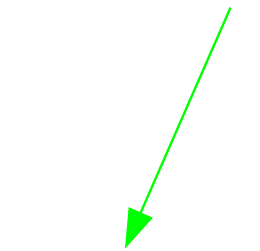


Optical efficiency: adapt+spect.

- Pellicle beam splitter
- Optical fiber
- Spectrograph
- $\Delta m_s = m_{spec} - m_{guiding} = d + e*BV$



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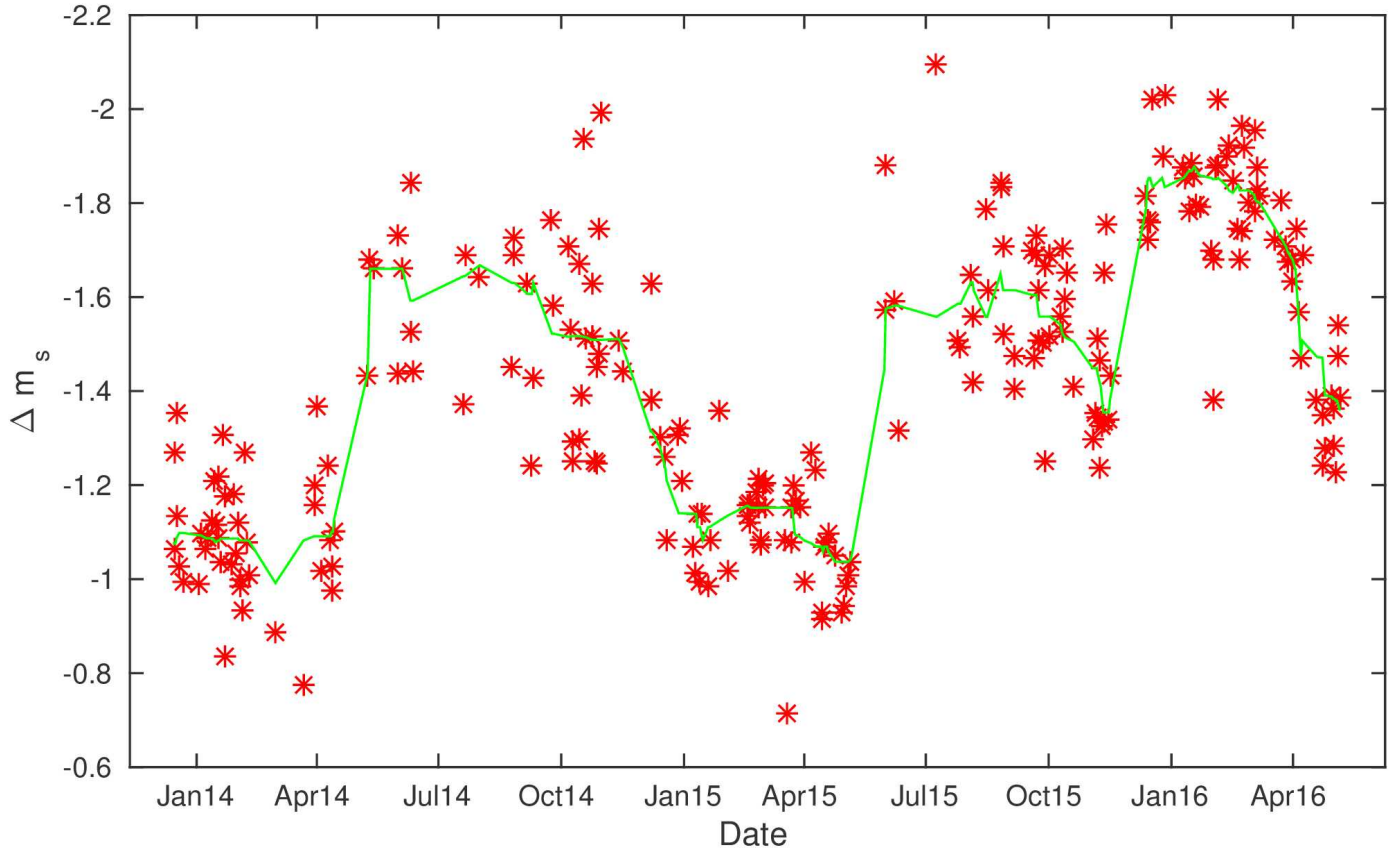
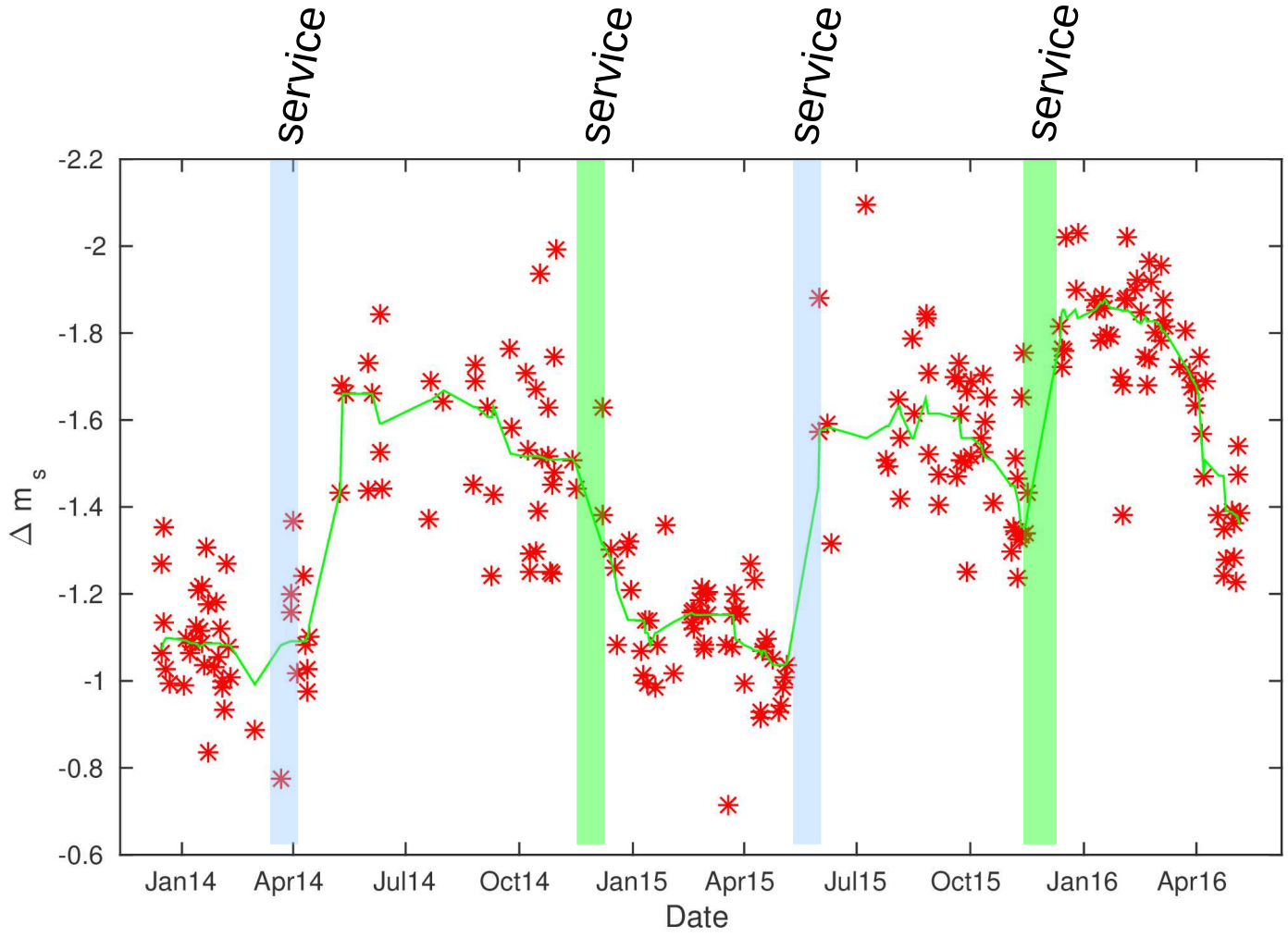


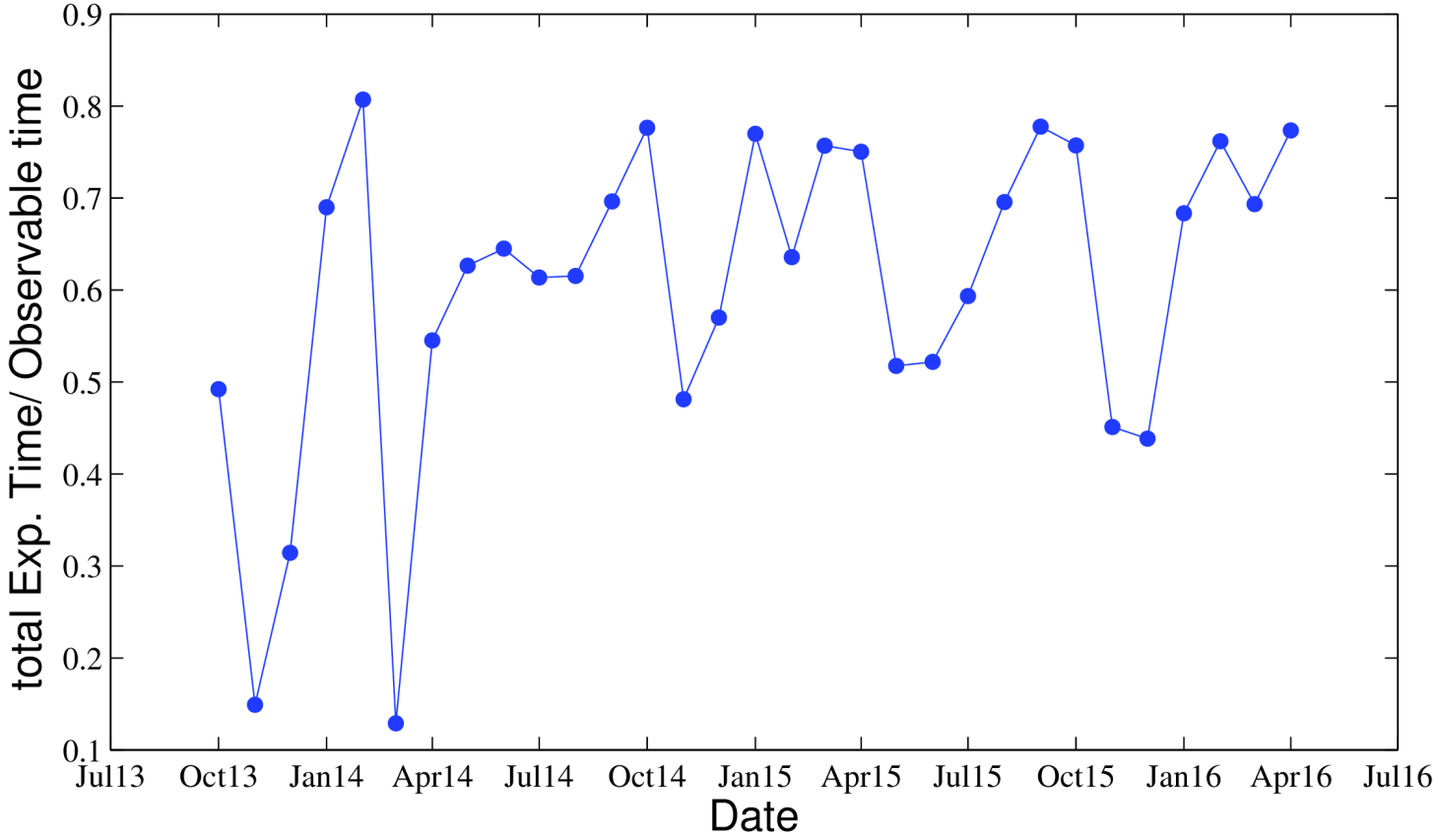
Optical efficiency: adapt+spect.



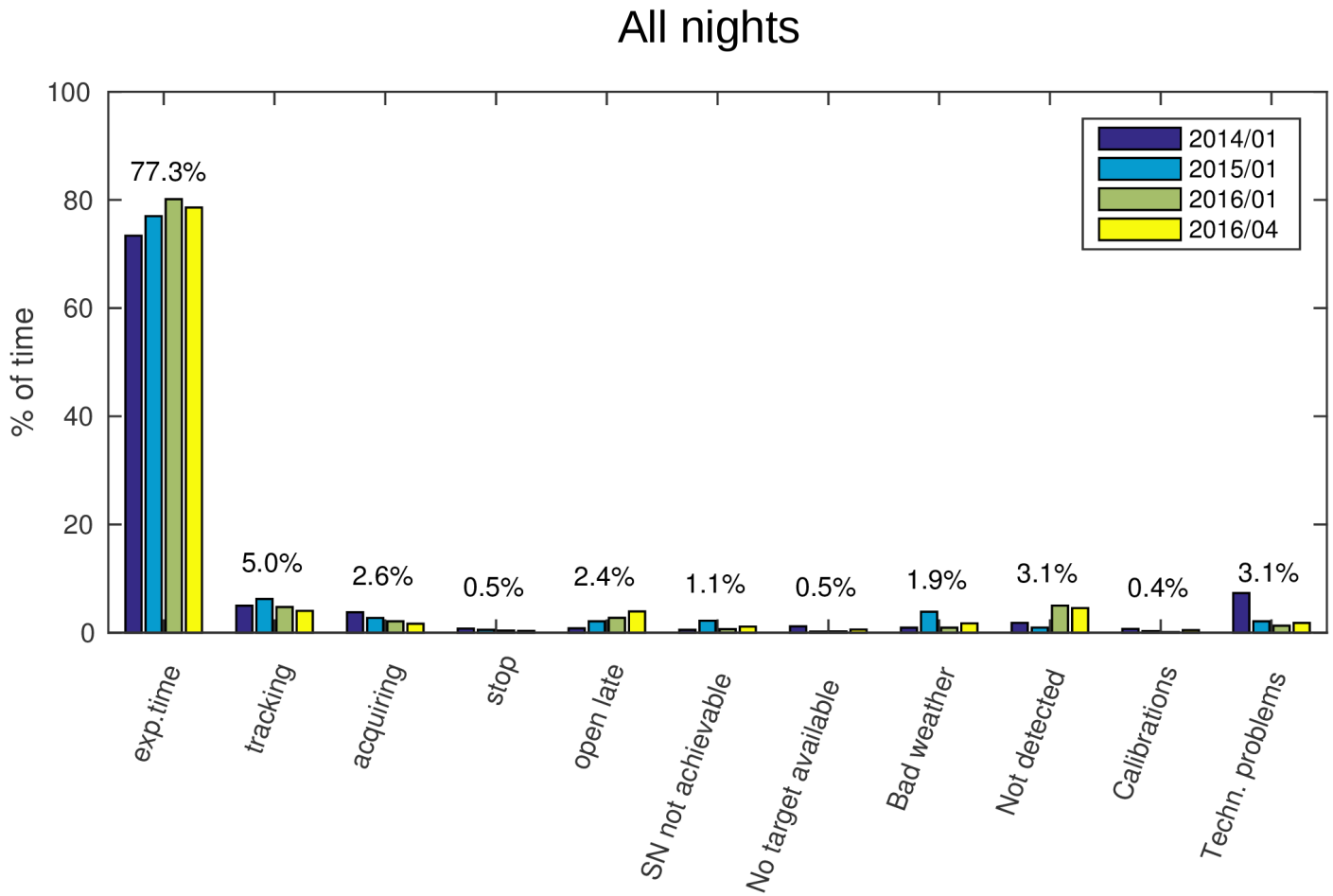
Optical efficiency: conclusion

- Washing is effective
- Reflectivity loss larger in Winter
  → Ofter and more systematic cleaning with CO2
- Log when cleaning is done
- Direct reflectivity measurements?

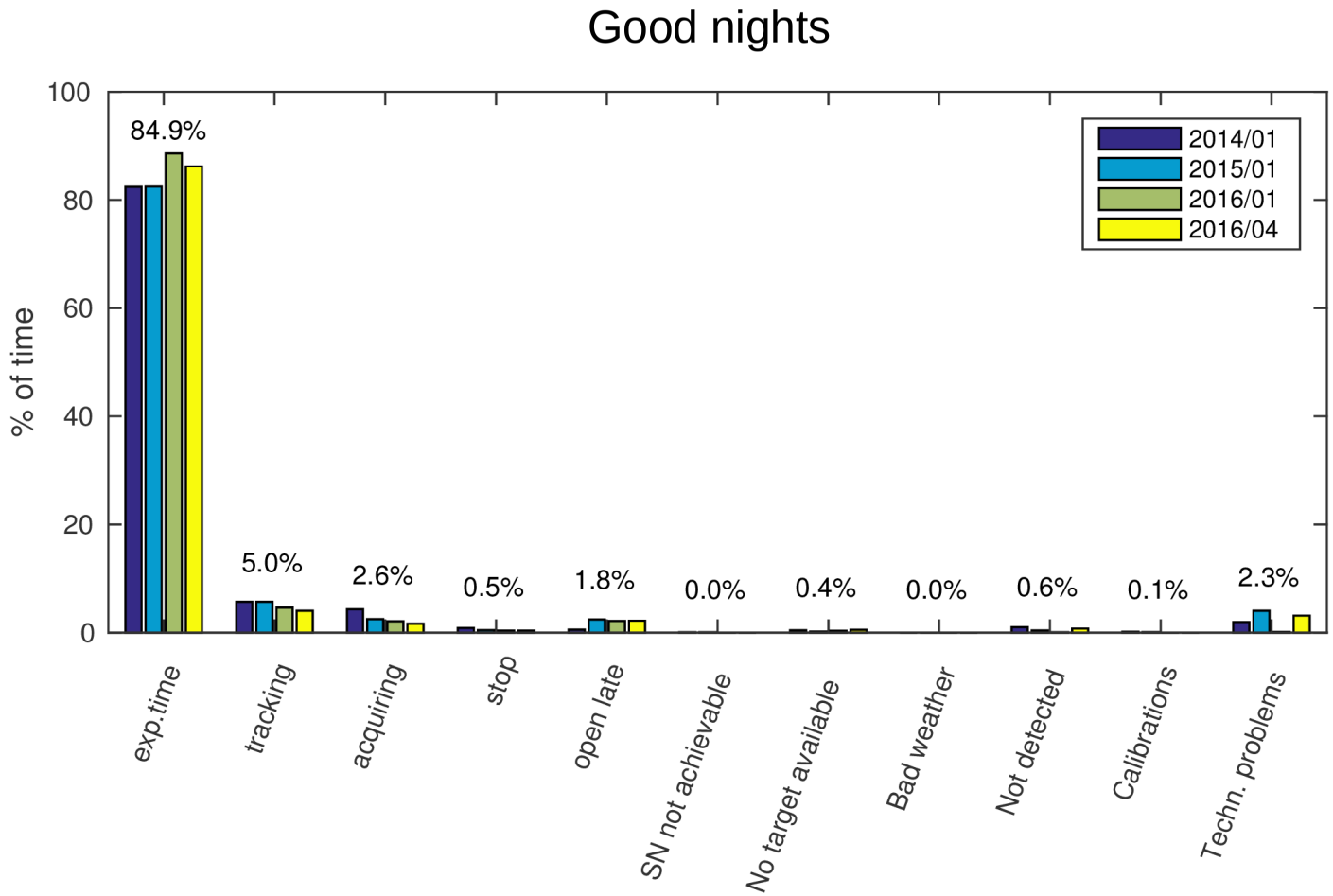
Operational efficiency



Operational efficiency



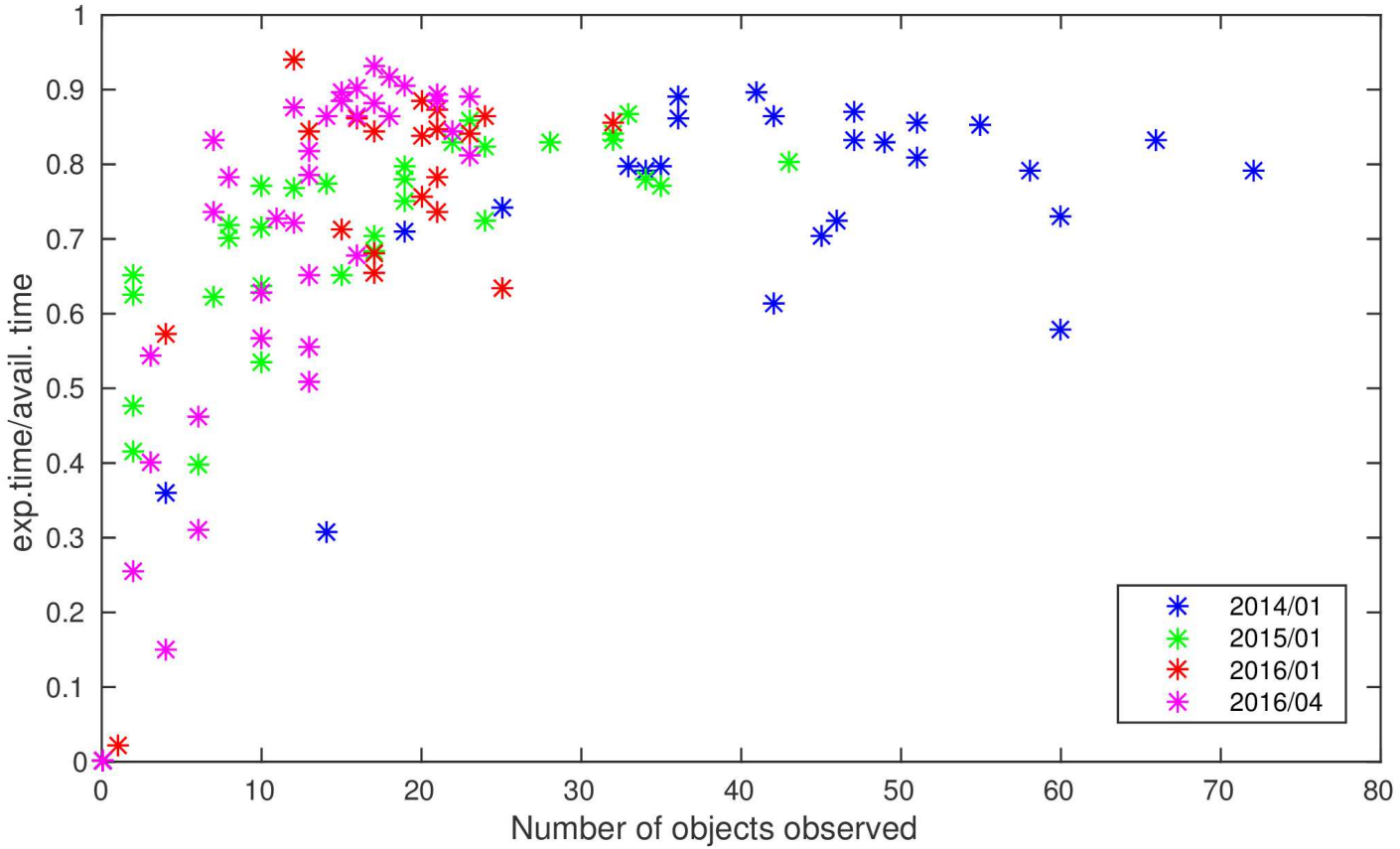
Operational efficiency



Operational efficiency

- Time tracking ~46s → 82s after 2014
- Time acquiring ~32s: it may be reduced
- Scheduler: reduce “S/N not achievable” and maybe “Not detected”

Operational efficiency



Scientific efficiency

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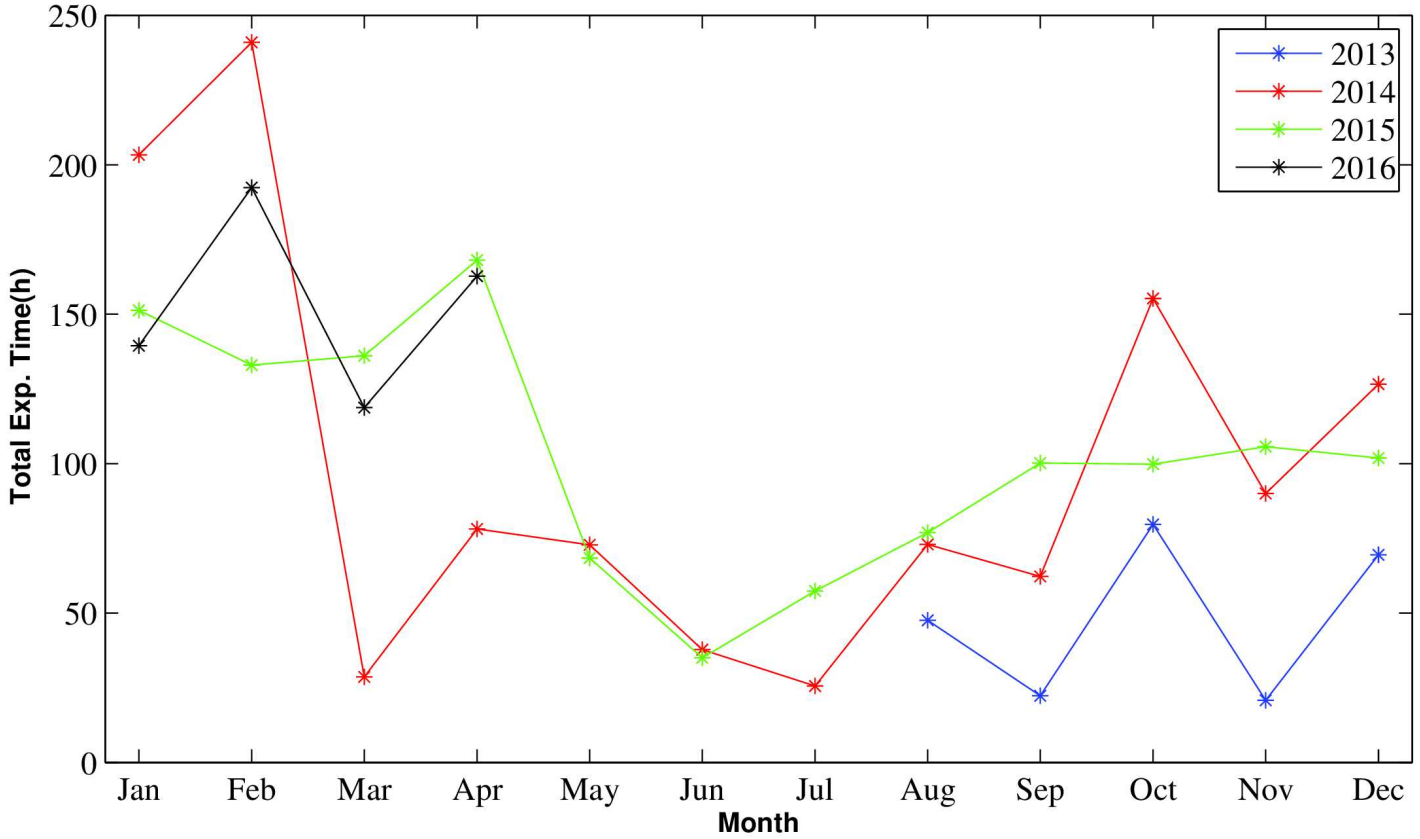
- Questions...
- Are the data good?
- When not, why?
- How can we improve the data?
- What about the scheduling? Have you any suggestion?

Proposals

- AO0 2013/14
  - 39 proposals, 5971 observations
  - 12 proposals (with 4921 observations) in publications
- AO1 2014/15
  - 38 proposals, 3951 observations
  - 6 proposals with 2719 observations) in publications

Total exposure time



Distribution

	AO0		AO1		AO2	
Total exp. time	942.1h		1241.7h		1139.5h	
Hamburg	638.2h	70.3%	837.7h	72.7%	785.2h	74.7%
Guanajuato	162.7h	17.9%	197.9h	17.2%	163.8h	15.6%
Liège	106.5h	11.7%	116.6h	10.1%	102.2h	9.7%
Calibrations	45.2h		89.6h		88.3h