



Current status of TIGRE:

Technical and observational review of the last
years

José Nicolás González Pérez
Hamburger Sternwarte



Outline

- Service mission April 2019
- Performance of TIGRE



Service mission: April 2019

- New Spectrograph computer + driver
- Remote control of the Air conditioning
- Many devices (including electronic cabinet) is remote switchable
- Substitution of the heating of mirror cell
- Installation new GPS Antenna →
- Substitution guiding camera →
- Substitution of the Profibus card →
- Mirror washing →

GPS

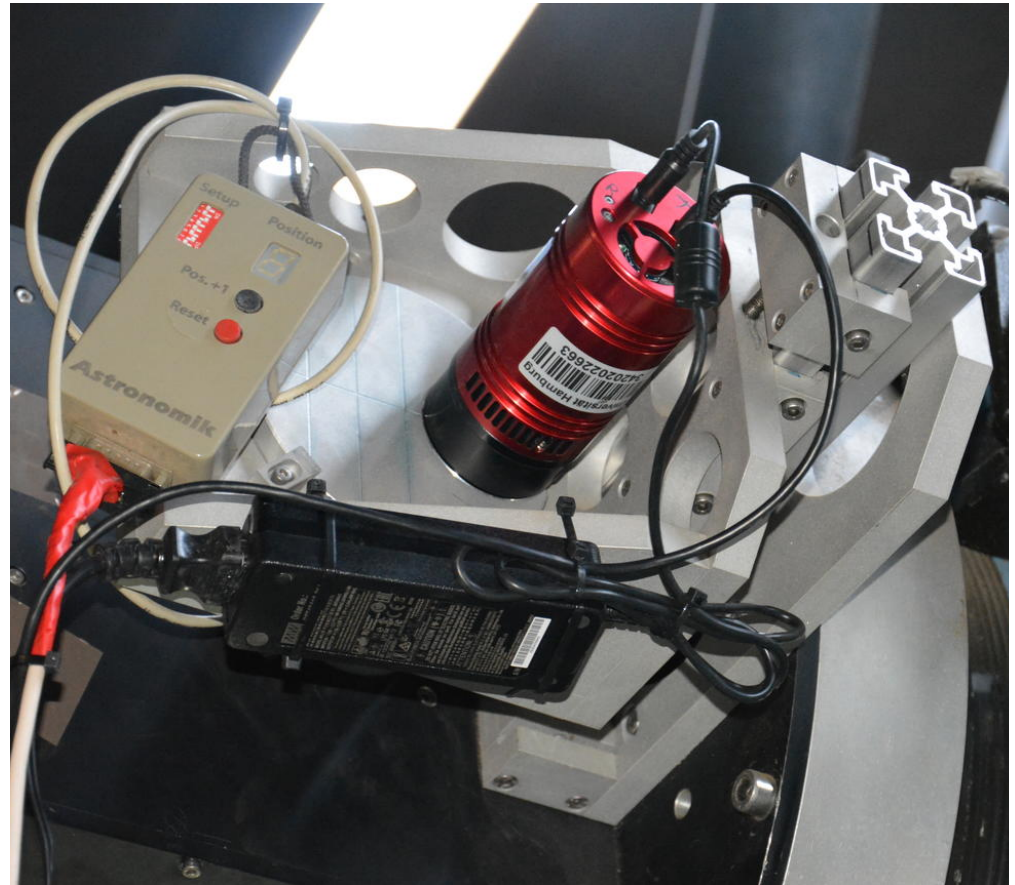


- Failed in November 2018
- GPS used to know the time
- Problem was located in the Antenna or Cable
- Installed provisionally in December
- Final installation in April on the mast



Tigre___New guiding camera

- Old ST7 did not cool properly
- New Atik 420m
- Smaller pixel size:
0.09 "/pix
- Slightly larger FOV:
2.5'x1.9'
- Between April and August error in the identification of some stars



Tigre Substitution of profibus card

- Communication between encoder and computer
- Failed intermittently
- Substituted by a backup card
- Error probably due to optocoupler

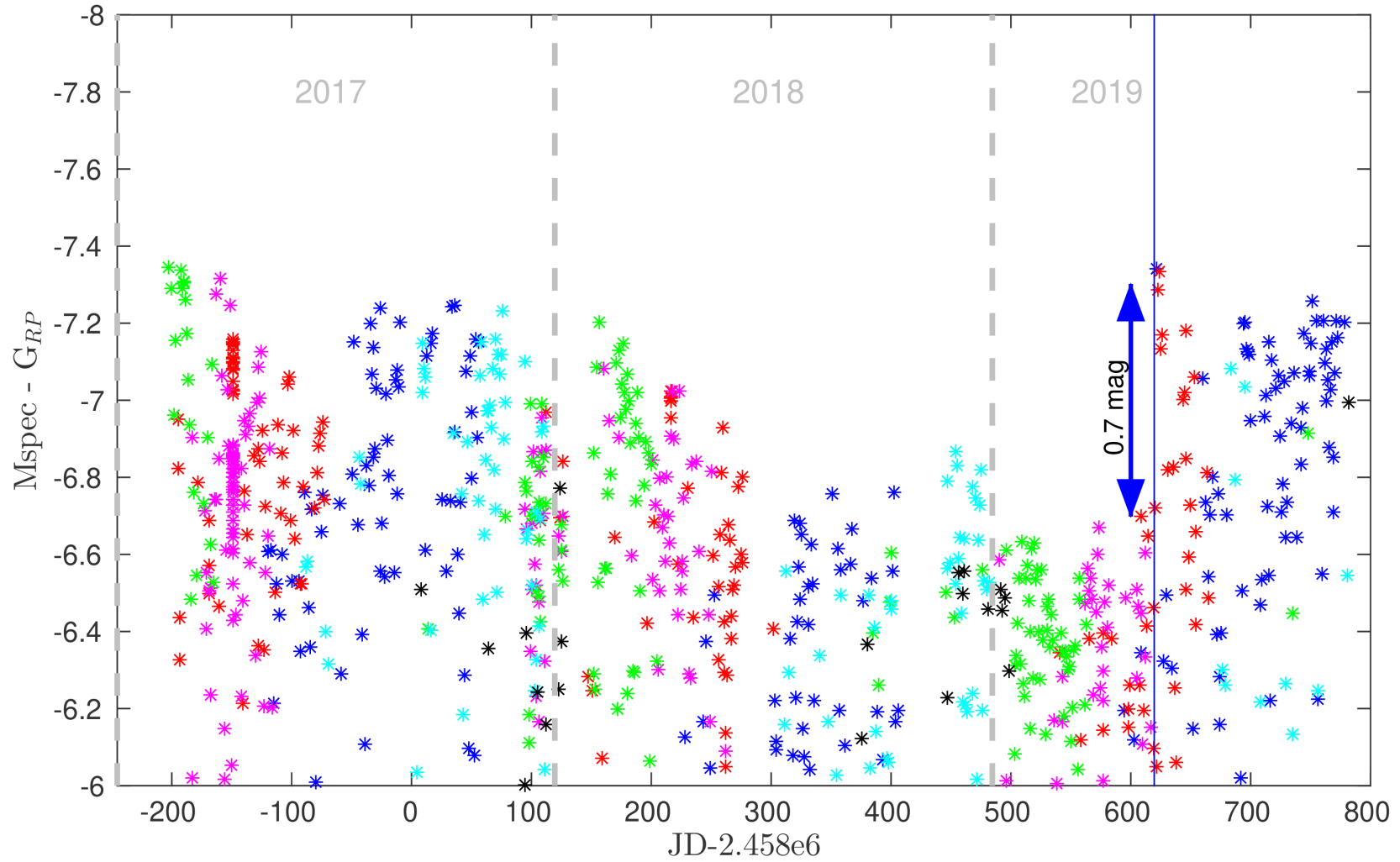


Mirror washing

- New mirror cell allows new method
- More water
- Reduced risk
- Much faster



Mirror washing



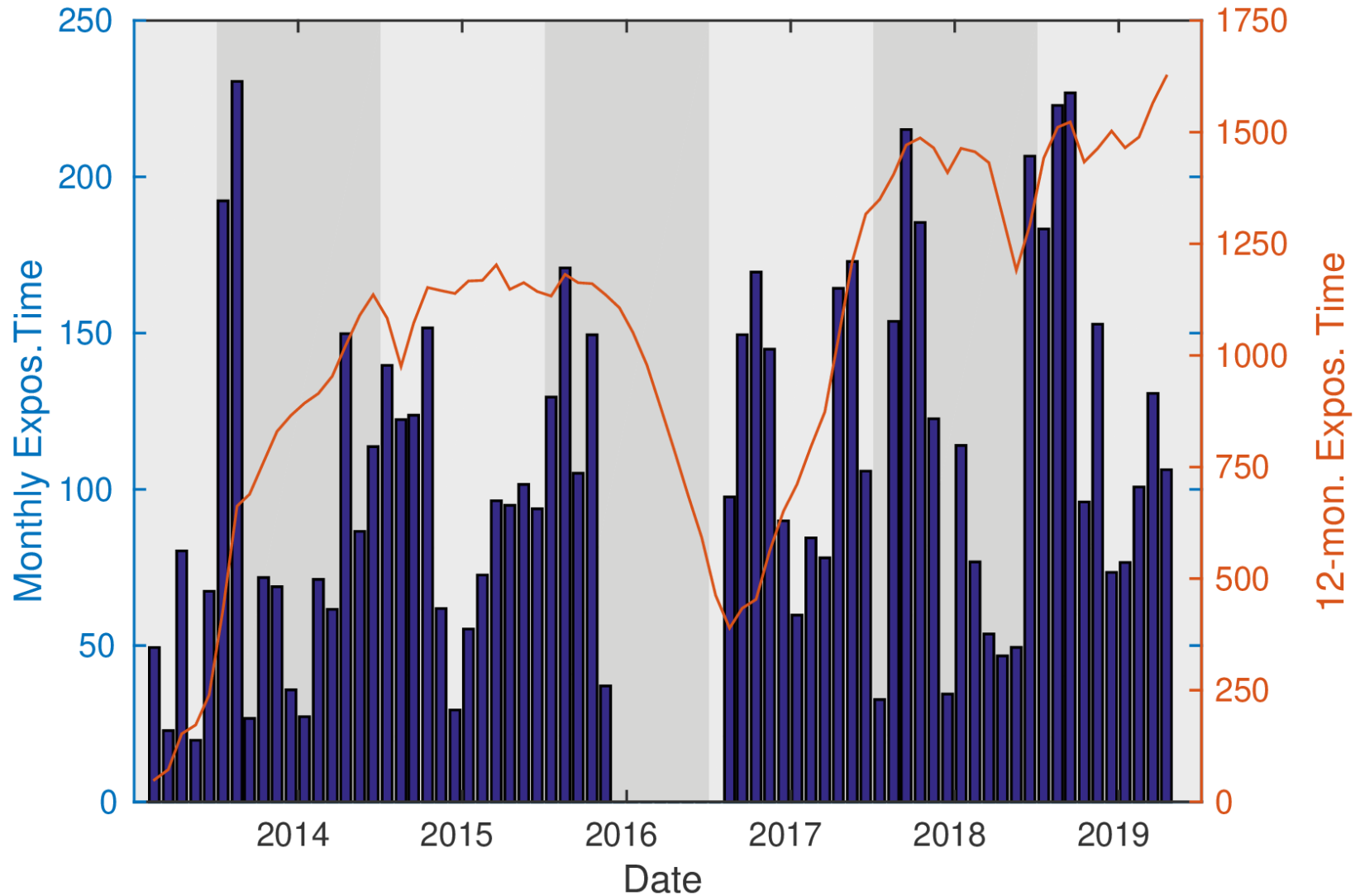


Problems

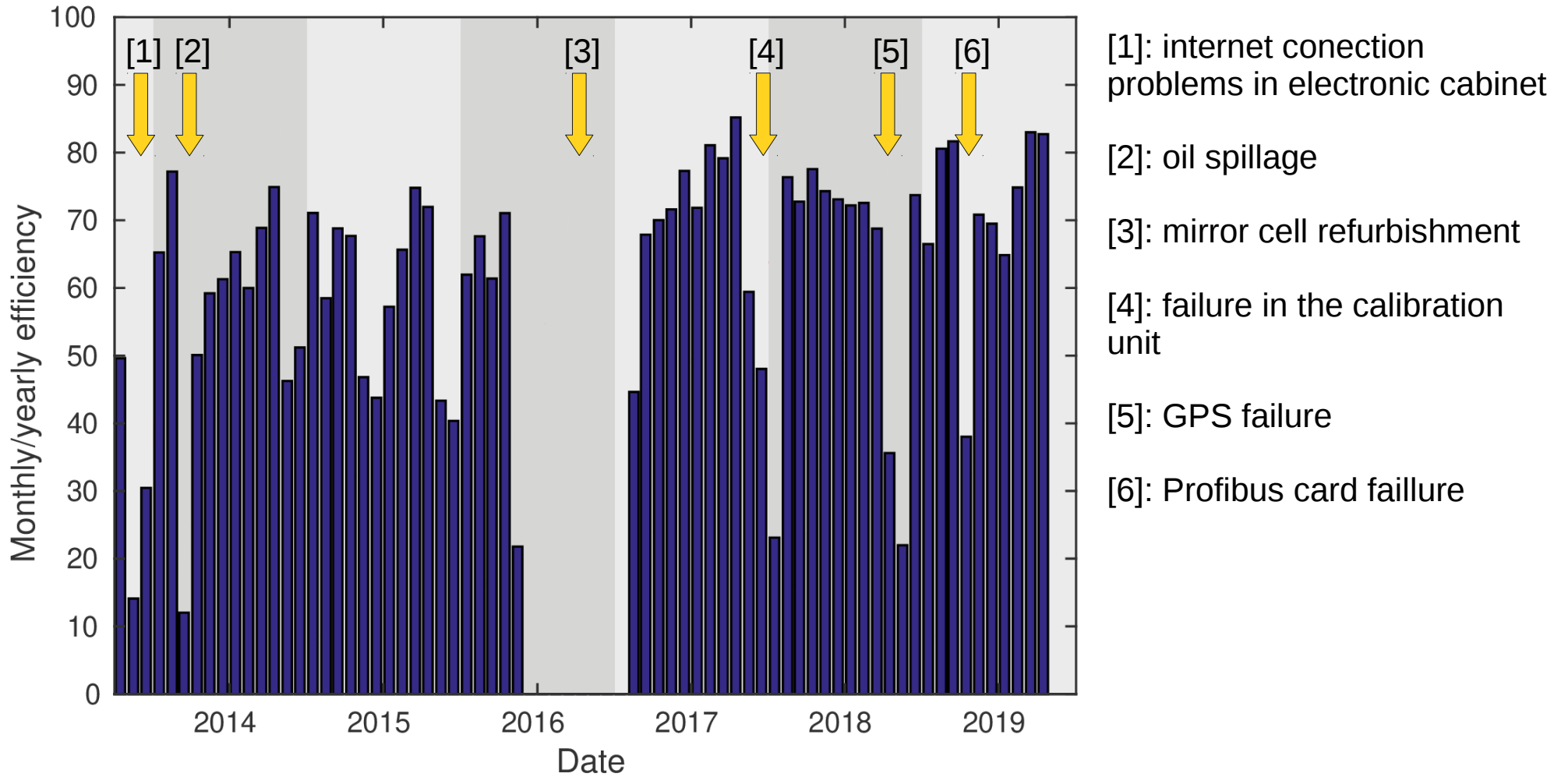
- Diesel generator does not work (battery)
- Dome belts are again deteriorated
- Skymon does not work
- One of the two AC devices does not work



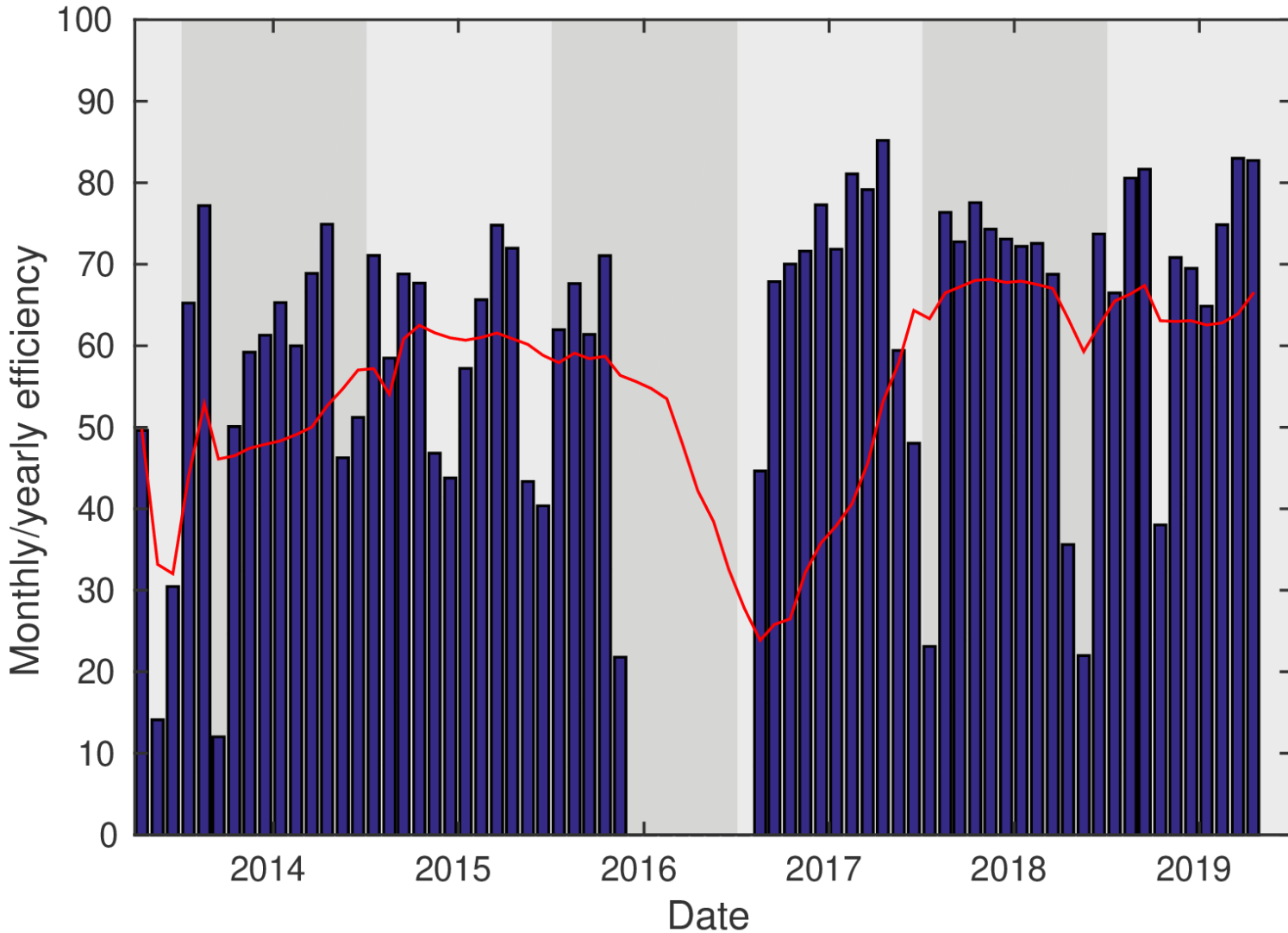
Total exposure time



Tigre Observational efficiency



Tigre Observational efficiency

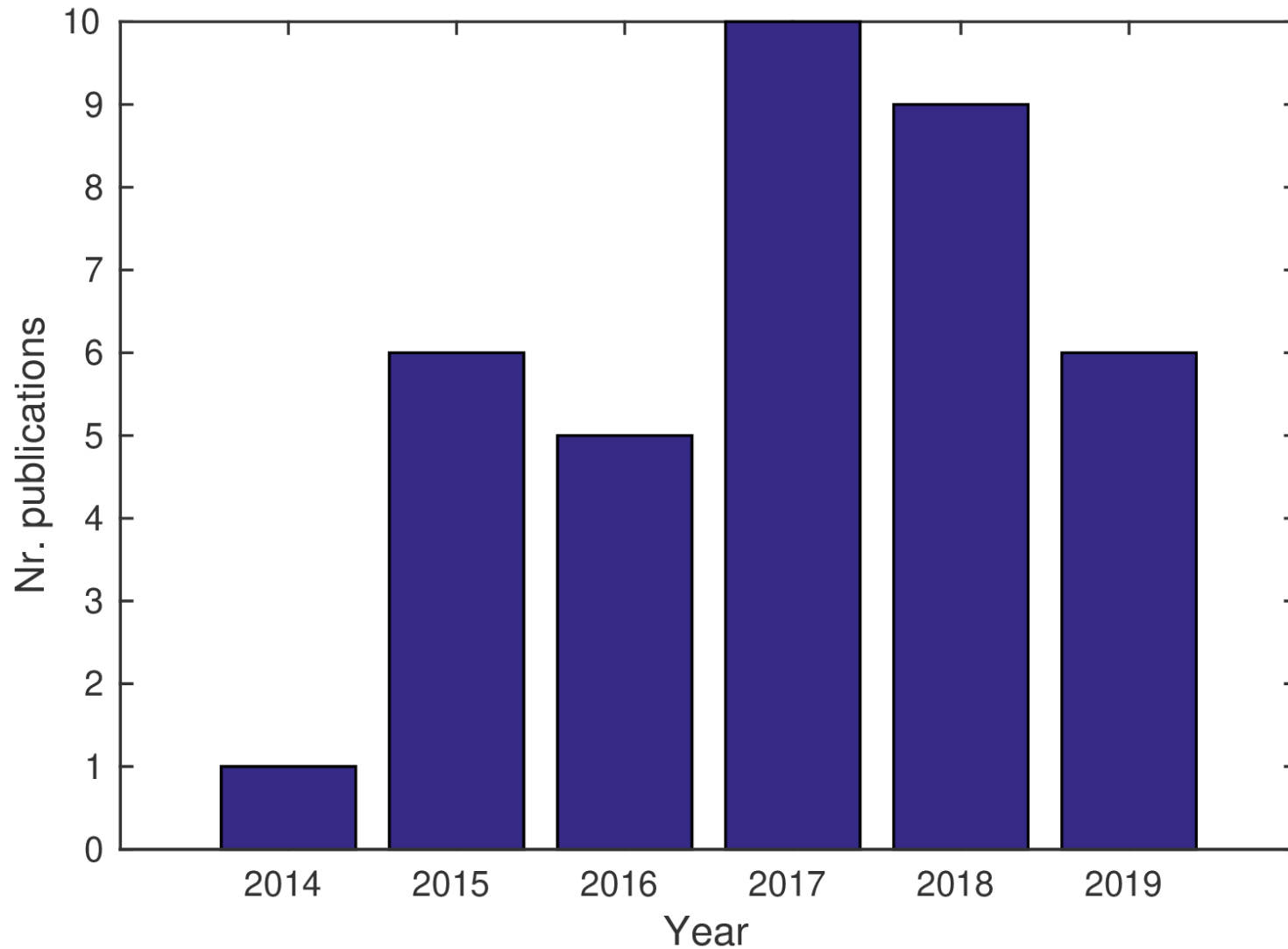




Time statistics

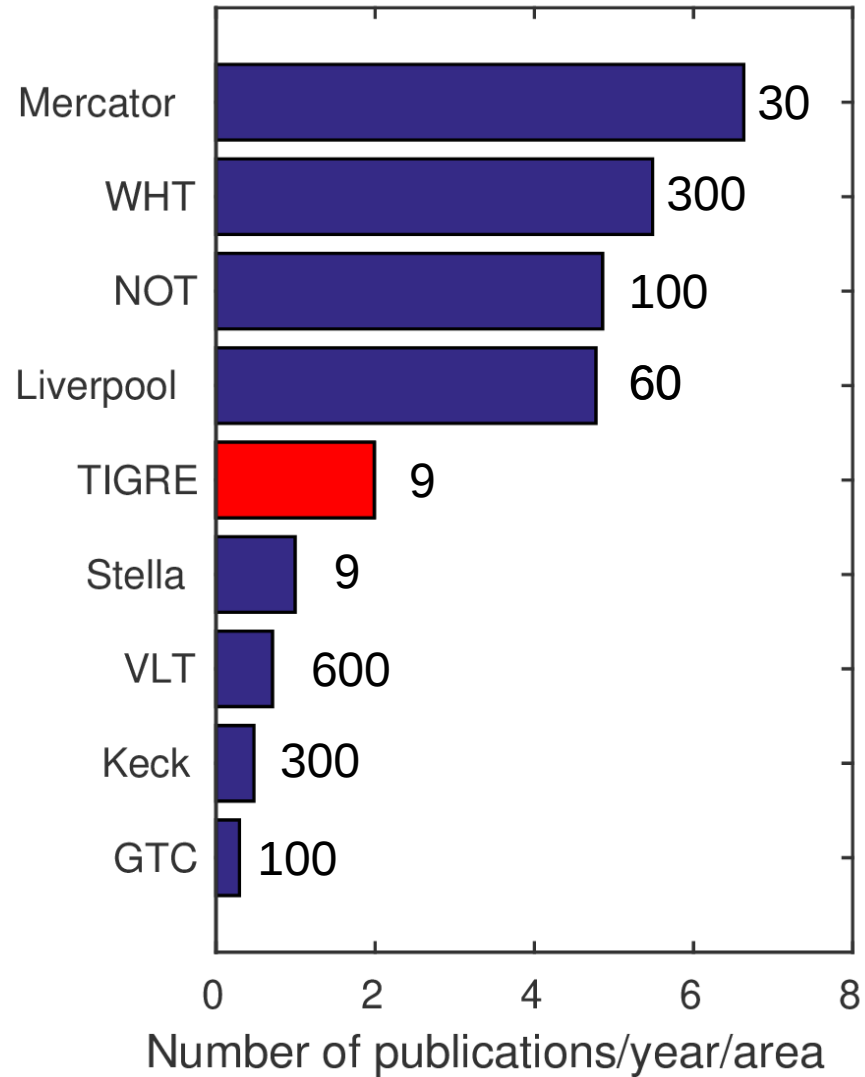
	Dates	Total Sci. Time (h)	% HH	% Gto	% Liège
AO0	Aug 13-Jul 14	892.84	70.0	18.1	11.9
AO1	Aug 14-Jul 15	1166.64	73.0	17.0	10.0
AO2	Aug 15-May 16	1051.22	74.7	15.6	9.7
AO3	Feb 17-Jan 18	1349.35	68.0	15.3	16.7
AO4	Feb 18-Jan 19	1441.93	75.4	15.9	8.7
AO5	Feb 19-present	1217.97	78.3	13.9	8.1

Tigre__Number of publications





Publications





END