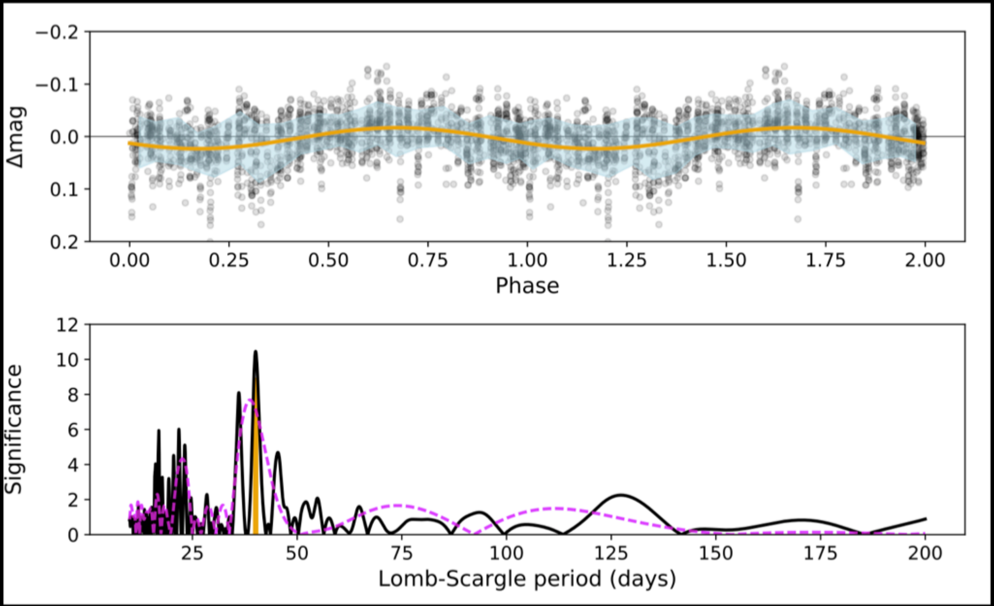
Long-period rotation measurements for K2/TESS follow-up.



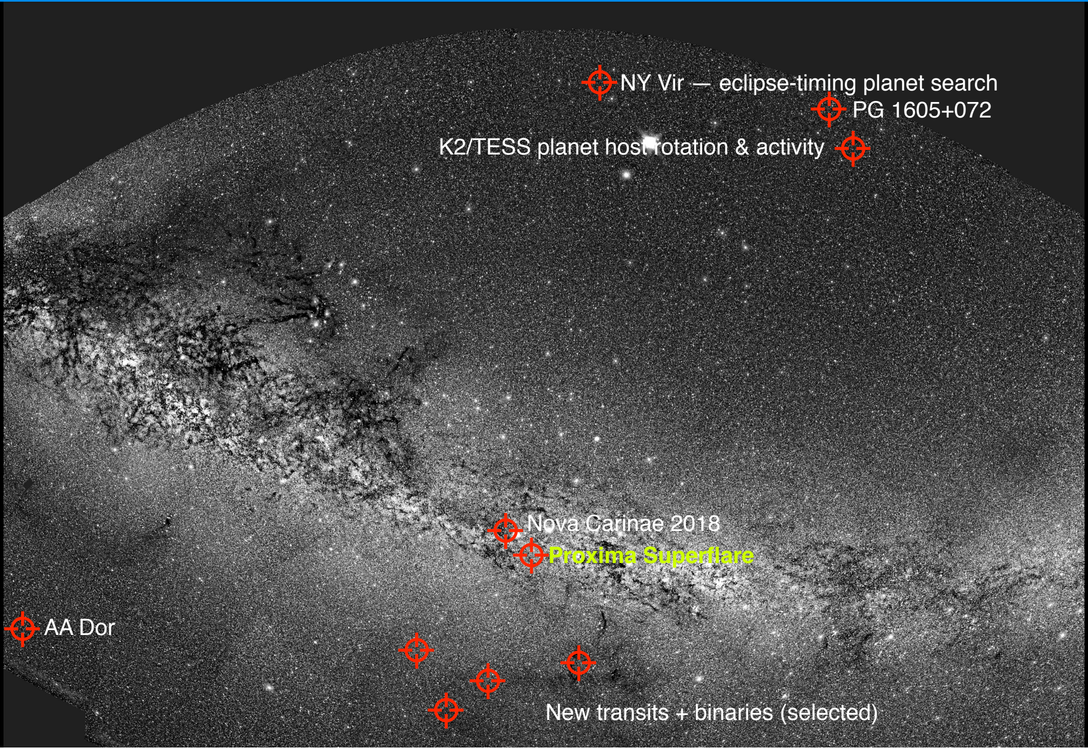
Long-timescale rotation period measurement for a K2 planet (Kosiarek et al., 2018)

Long-term, high-cadence observations of *all* TESS targets.

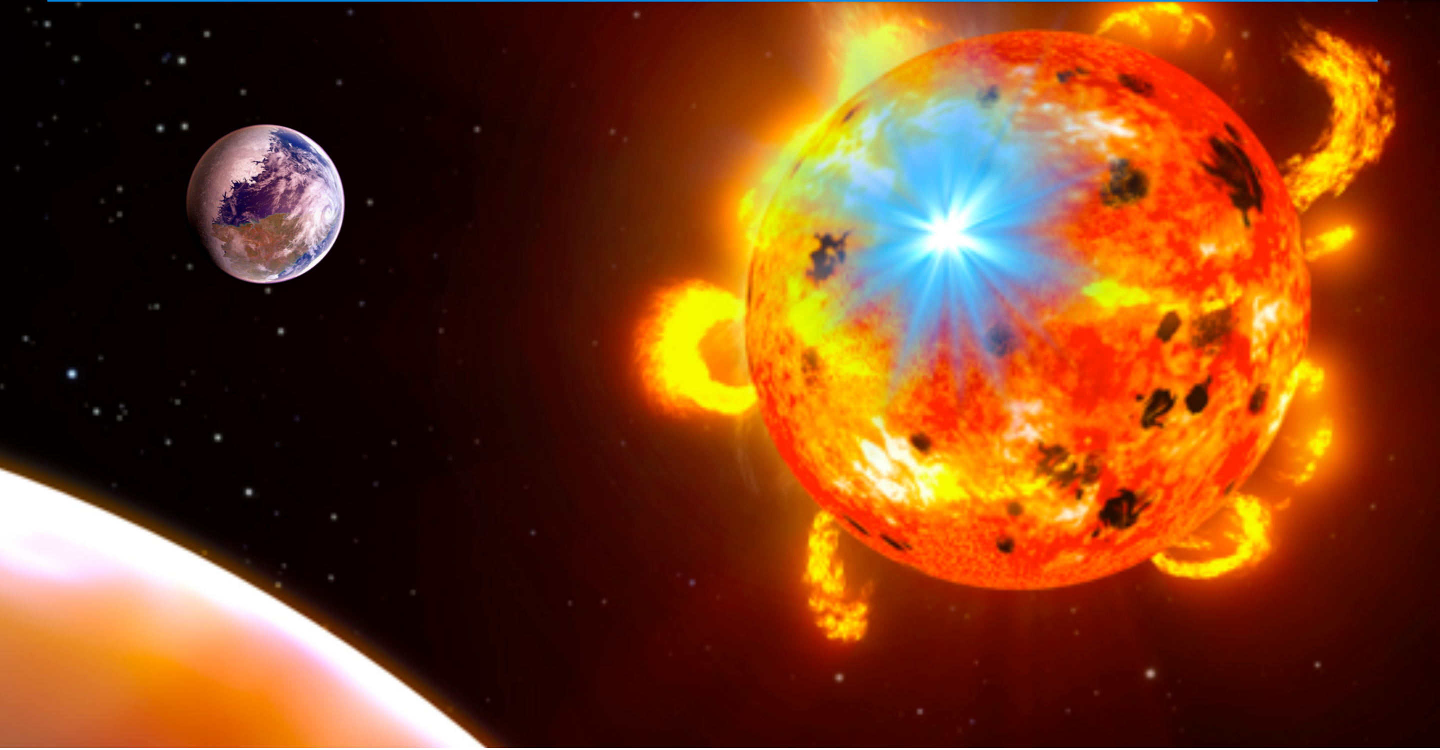
	EVRYSCOPE	TESS
Aperture	**61mm**	**105mm**
Precision @ 10th-mag	5 mmag / hr	0.2 mmag / hr
Precision @ 16th-mag	3% / hr	1% / hr
Pixel sampling	**13”/pix**	**21”/pix**
FOV	**8000 sq. deg.**	**2300 sq. deg.**
Survey length	**5+ years**	**27 days** (most of sky)
Cadence	2 mins	15-30 mins (much faster for selected targets)
Filter	Blue	Red

Evryscope is monitoring TESS fields in the blue @ 2 min cadence, for years.
(including while TESS is observing)

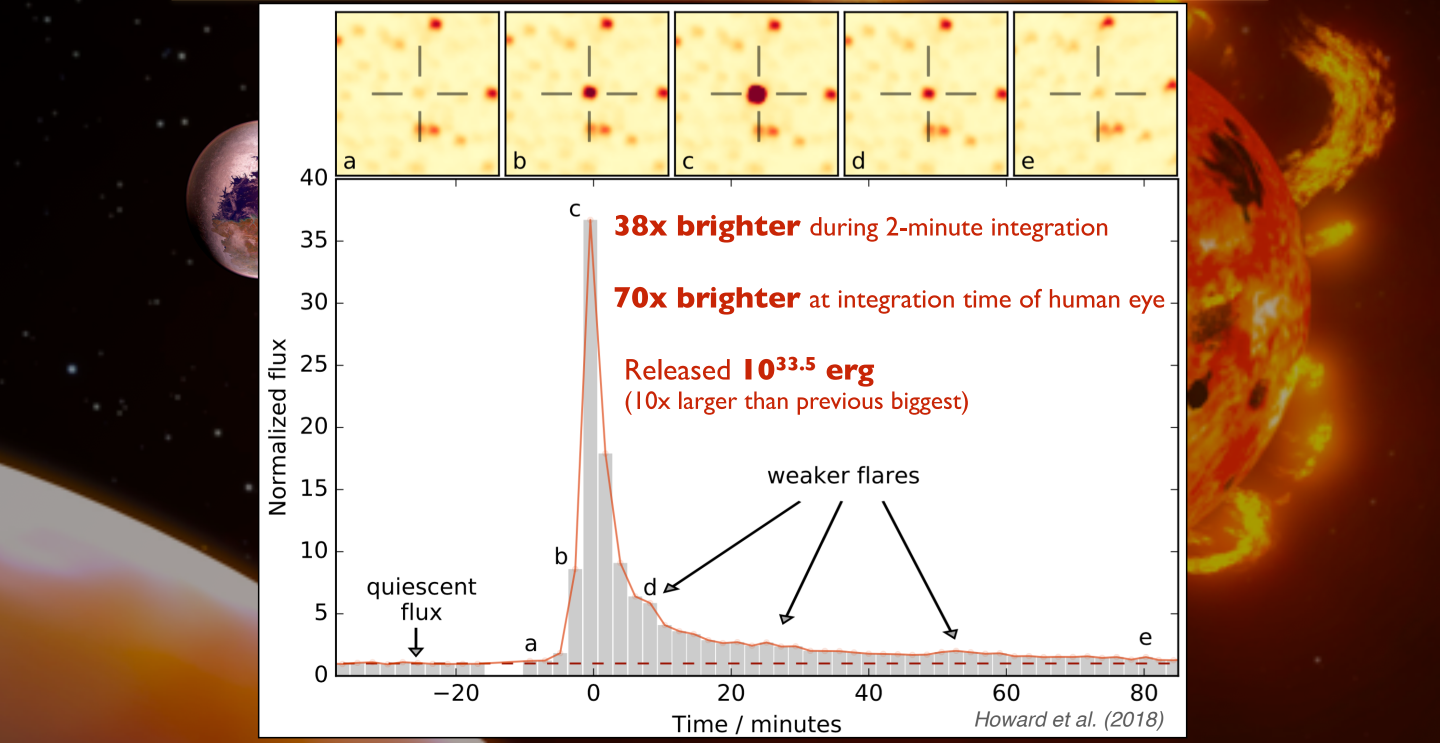
A **Quick Tour** through Evryscope data.



Proxima Centauri b - Do superflares destroy its atmosphere?

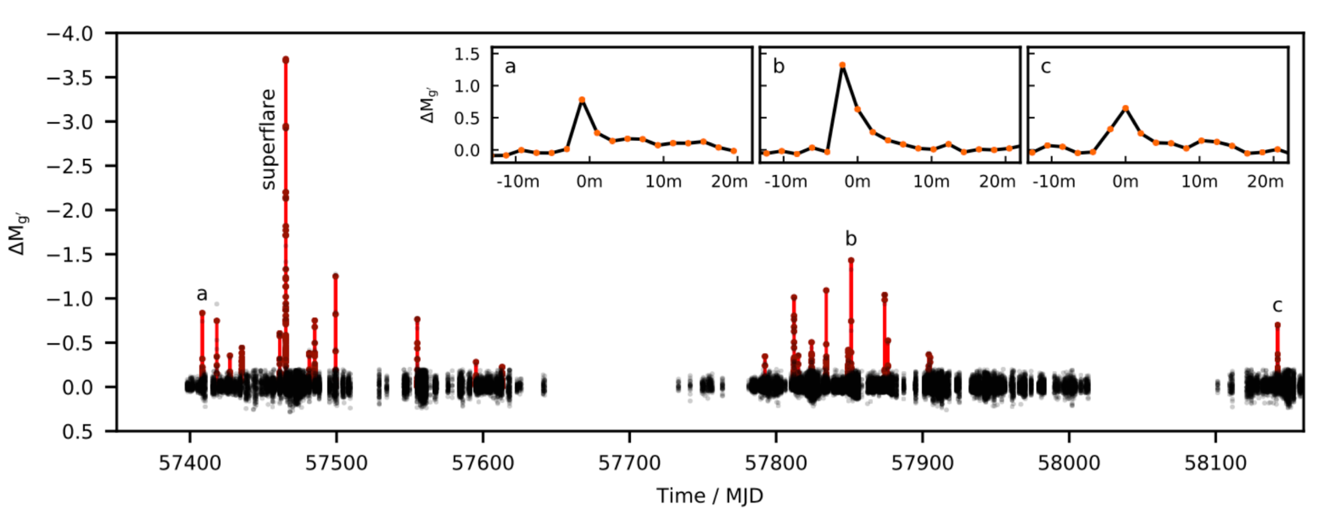


Evryscope detected a nearly *naked-eye* flare from Proxima Centauri in 2016.



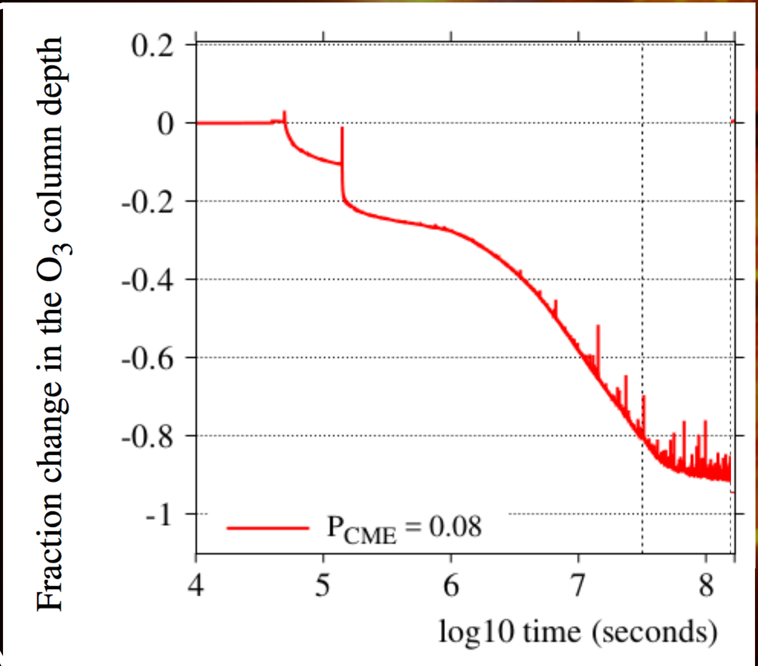
2 years of monitoring revealed 24 *large* flares, some as high as $10^{33.5}$ erg.

Observed for 1344 hr, spanning Jan 2016 to March 2018.
Detected 24 large flares, ranging from $10^{30.6}$ to $10^{33.5}$ erg.



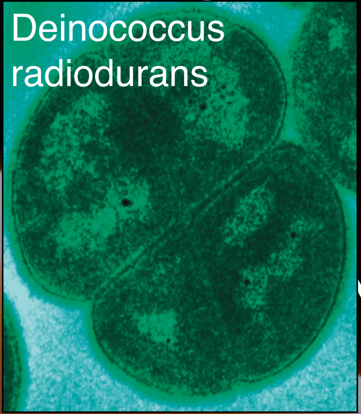
Howard et al. (2018)

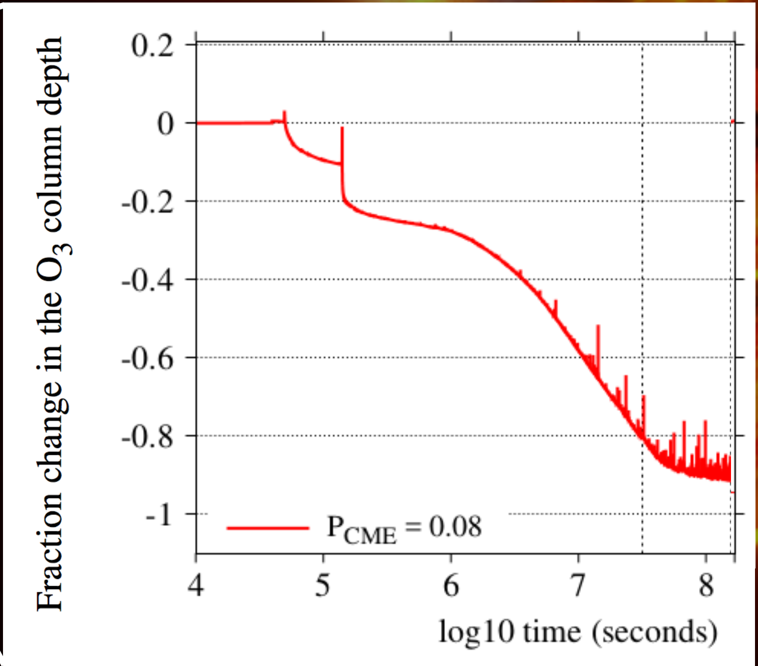
Flares deplete Proxima Centauri b's ozone layer by 90% within *five* years.



Howard et al. (2018)

Flares deplete Proxima Centauri b's ozone layer by 90% within *five* years.





Howard et al. (2018)

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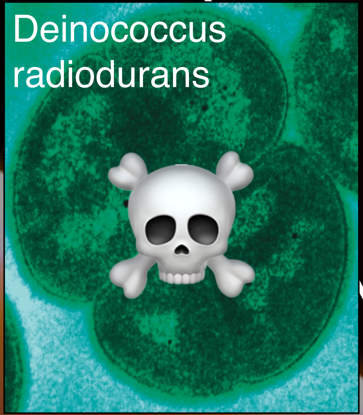
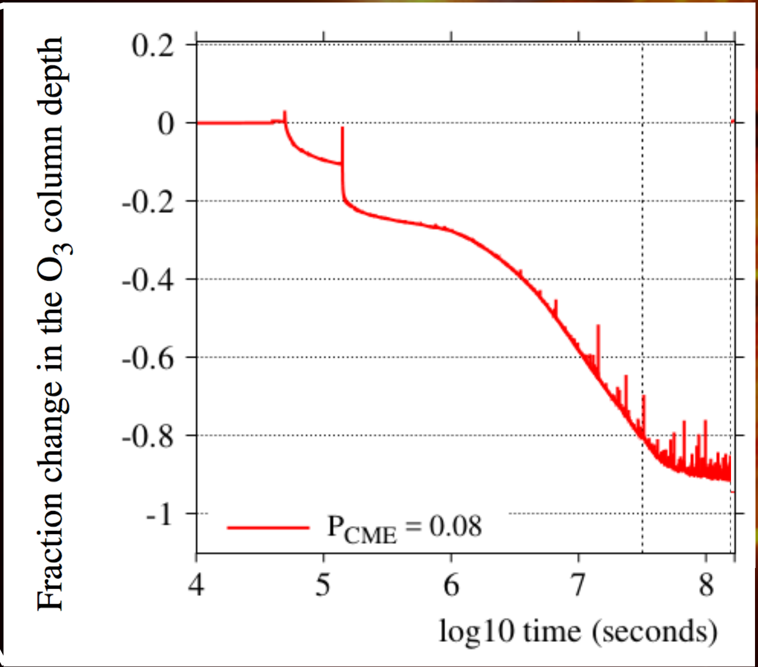
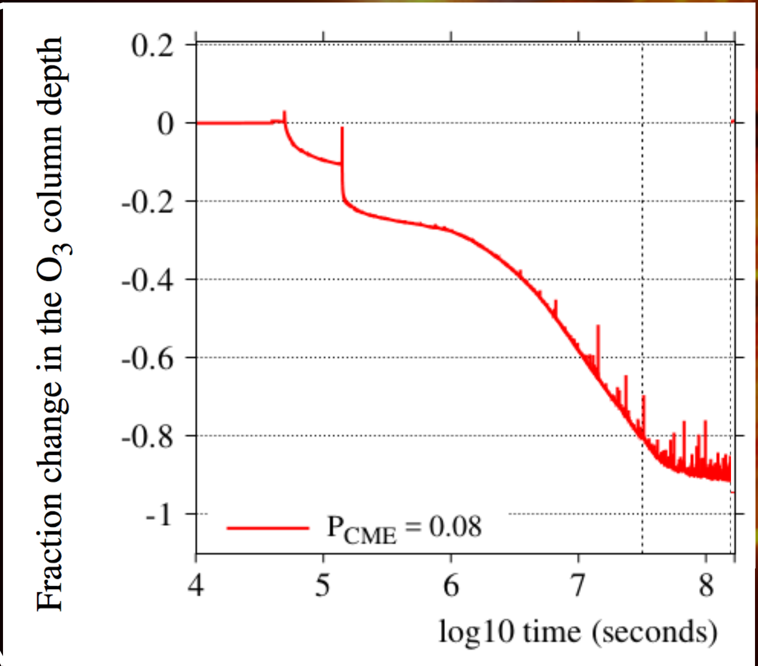




Howard et al. (2018)

Flares deplete Proxima Centauri b's ozone layer by 90% within *five* years.



Howard et al. (2018)