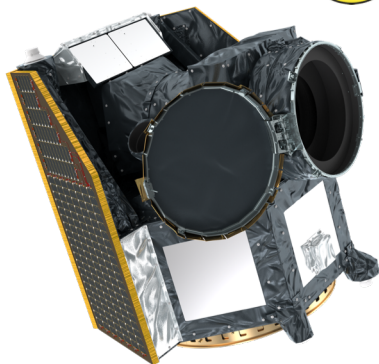




CHEOPS measured photometric performance



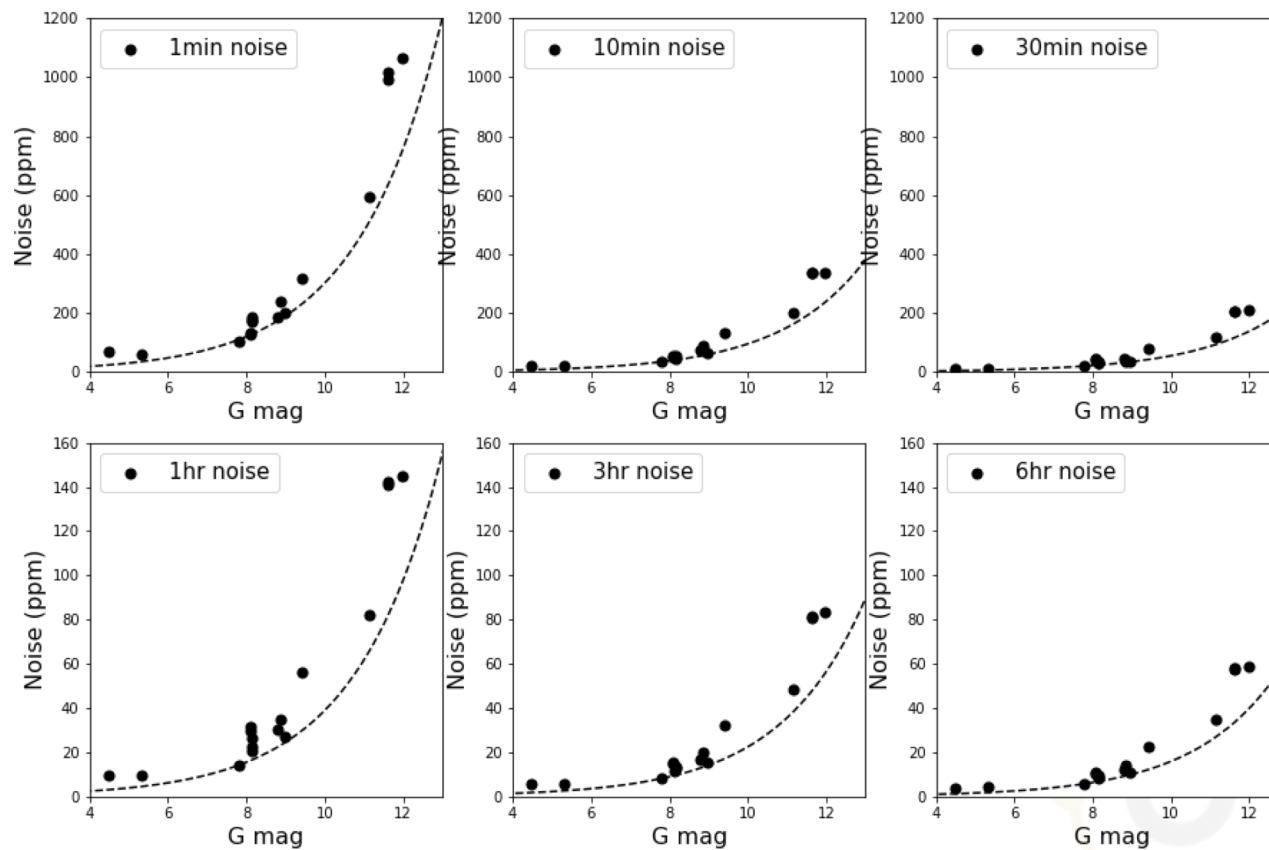
CHEOPS measured photometric performance

Measurements vs ETC

- ❖ Overall, the ETC has proven to be a good predictor for the expected performance. However, we have observed the following trend:
 - For bright stars, the ETC is usually slightly “pessimistic”. The origin of this discrepancy is under study, but it is likely that the noise allocated to cosmic rays in the ETC is overestimated for the bright stars.
 - For stars in the middle of the nominal magnitude range ($G \sim 9$), the ETC provides estimations very close to the measured values.
 - For faint stars we note that the ETC slightly underestimates the noise for short timescales (less than 3 hours). We suspect that the background stars contamination (not included in the ETC) might be responsible for this.

Measured photometric precision as a function of the stellar Gaia magnitude and integration time.

The dashed curve represents the photon noise. Results obtained with `pycheops` for lightcurves extracted using the default photometric aperture of $r = 25$ px.



✦ <https://github.com/pmaxted/pycheops>

Idem previous slide for longer timescales.

