

## ERRATUM: “PHYSICAL PROPERTIES OF THE 0.94 DAY PERIOD TRANSITING PLANETARY SYSTEM WASP-18” (2009, *ApJ*, 707, 167)

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The published version of this article presented high-precision observations of the transiting extrasolar planetary system WASP-18, which is of particular interest because accurate transit timings over a number of years may provide empirical constraints on the tidal quality factor of the host stars of gas giant planets. We have since discovered that the times recorded in the FITS headers of our observations were offset from the true values. This information was used to generate the timestamps in the photometric observations presented and analyzed in the published article, which are therefore also offset by an unknown amount.

The problem has been traced back to a software “bug” (or “feature”) which meant that the computer clock used in the generation of the FITS headers was only synchronized to an atomic clock when the computer was booted. WASP-18 was observed at the end of the season, when the computer had been running continuously for several months, and so was strongly affected by this problem. The timestamps in the light curve of WASP-18 are uniformly shifted to roughly 85 s later than the true values, calculated by comparison to the orbital ephemeris given by Hellier et al. (2009). A more precise value of the shift will be calculable in the future when an improved orbital ephemeris becomes available.

The measured physical properties of the WASP-18 system in the published article are not affected by this problem, as they depend only on the relative values of the timestamps. However, the orbital ephemeris is significantly affected and should not be used in future analyses. For the purposes of planning further observations, we recommend that the orbital ephemeris given by Hellier et al. (2009) should be used.

## REFERENCES

Hellier, C., et al. 2009, *Nature*, 460, 1098