

TIC 468017028

Eclipsing binary candidate dossier - Star Vetter

CLEAN

BLS EPHEMERIS

Period 1.408140 d
Epoch (t0) 1570.3403 BTJD
Duration 0.1700 d
Depth 2.012 % (20,116 ppm)
SNR 70.8

CATALOG CROSS-MATCH (novelty)

VSX	no match
ASAS-SN	no match
Gaia eclipsing-binary table	no match
Gaia variable classification	no match
TESS EB catalog (Prsa+2022)	no match
ExoFOP TOI list	no match

INDEPENDENT CHECKS (f3i gates)

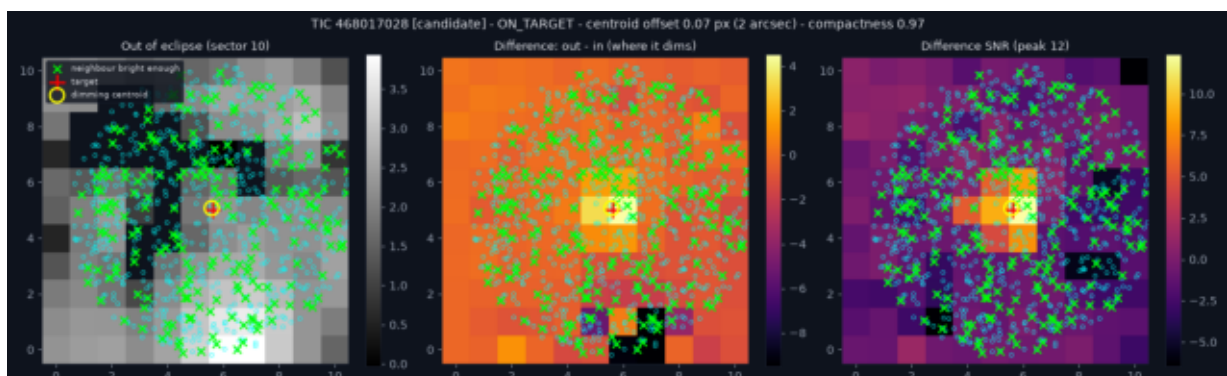
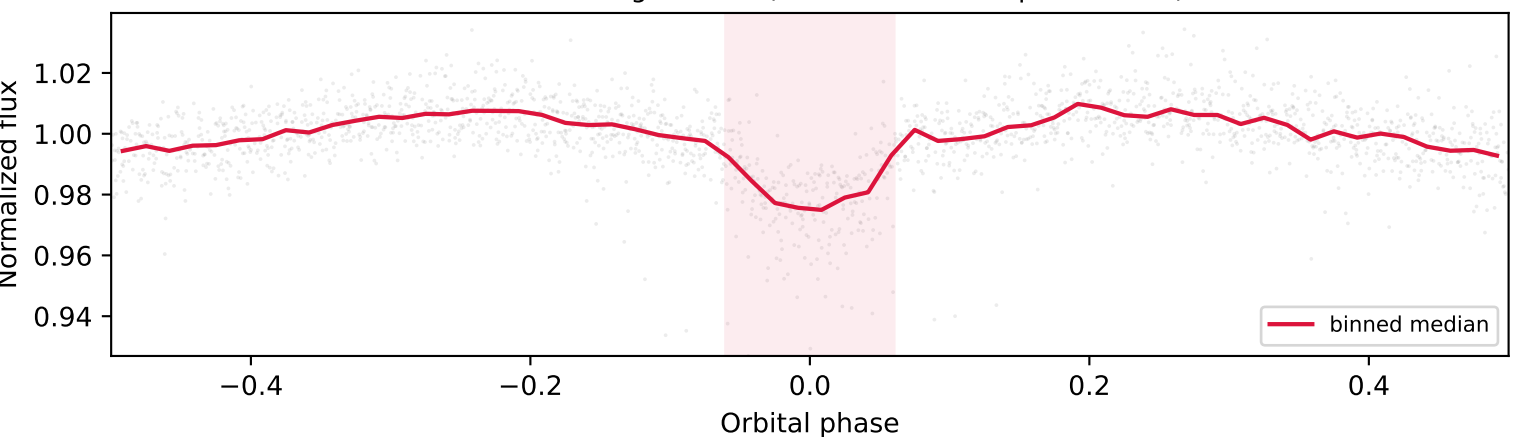
Eclipses observed 35 (gate ≥ 3)
Robust depth ratio 1.03 (gate ≥ 0.50)
Robust depth sigma 33.3 (gate ≥ 7.0)
Odd/even z-score 2.29 (consistent)
Secondary eclipse not detected

Verdict: NOVEL

PIXEL-LEVEL SOURCE CHECK (TESScut difference imaging)

Sector 10 light-curve dip in this sector: 30.0 sigma t0 refined by 0.0050 phase
Difference-image peak SNR 12.40 (gate ≥ 5.0) Compactness 0.97 (gate ≥ 0.50)
Dimming centroid offset 0.07 px (2 arcsec) (gate ≤ 1.0 px, i.e. on the target)
Nearest bright-enough neighbour in cutout: TIC 468017020
0.25 px away, dTmag +3.34 - farther from the dimming than the target

Phase-folded light curve (shaded = BLS eclipse window)



No caveats - clean detection on every check.