

TIC 468010975

Eclipsing binary candidate dossier - Star Vetter

CLEAN

BLS EPHEMERIS

Period 10.126035 d
Epoch (t0) 1570.0952 BTJD
Duration 0.1200 d
Depth 6.302 % (63,020 ppm)
SNR 112.1

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)

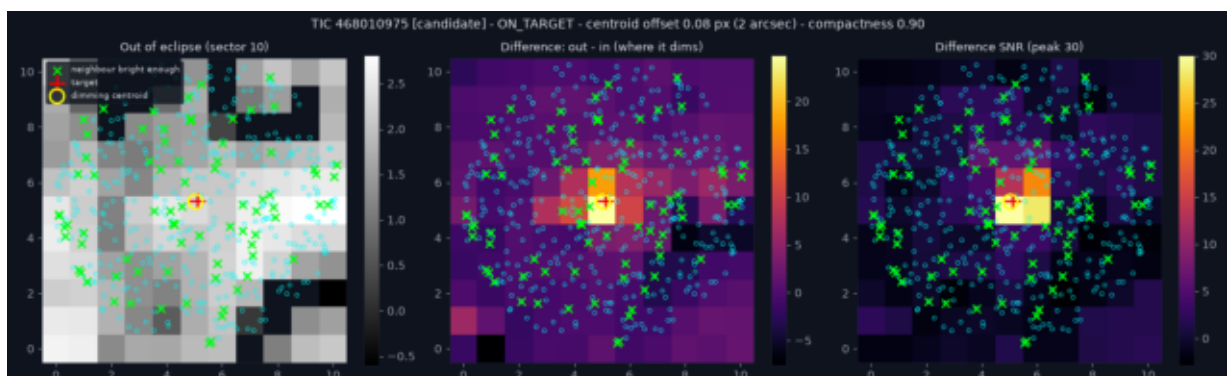
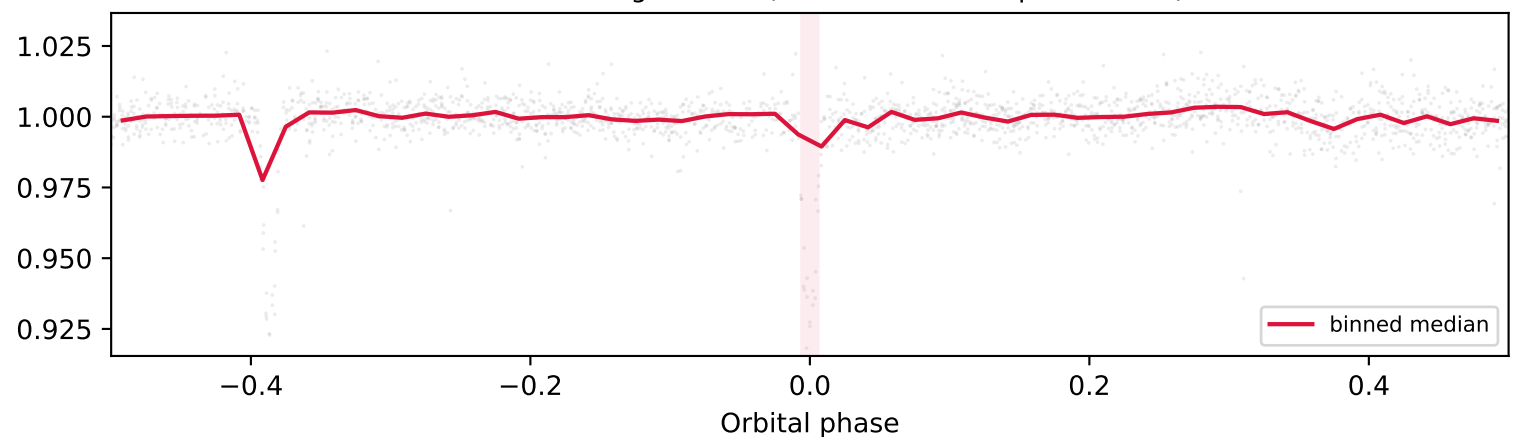
Eclipses observed 3 (gate ≥ 3)
Robust depth ratio 1.01 (gate ≥ 0.50)
Robust depth sigma 41.3 (gate ≥ 7.0)
Odd/even z-score 0.18 (consistent)
Secondary eclipse detected, phase -0.39, 9.7 sigma

Verdict: NOVEL

PIXEL-LEVEL SOURCE CHECK (TESScut difference imaging)

Sector 10 light-curve dip in this sector: 22.5 sigma t0 refined by -0.3850 phase
Difference-image peak SNR 30.05 (gate ≥ 5.0) Compactness 0.90 (gate ≥ 0.50)
Dimming centroid offset 0.08 px (2 arcsec) (gate ≤ 1.0 px, i.e. on the target)
Nearest bright-enough neighbour in cutout: TIC 468010965
0.53 px away, dTmag +2.16 - farther from the dimming than the target

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



No caveats - clean detection on every check.