

KIC 011026961

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
011026961-01	OBS	No	507.545500	134.567073	209.7	24.119	7.2	5.1	0.97	6609	1.48	1.01

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011026961-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—CENT_FEW_DIFFS

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

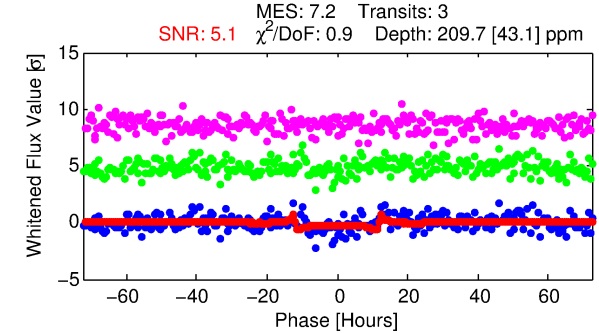
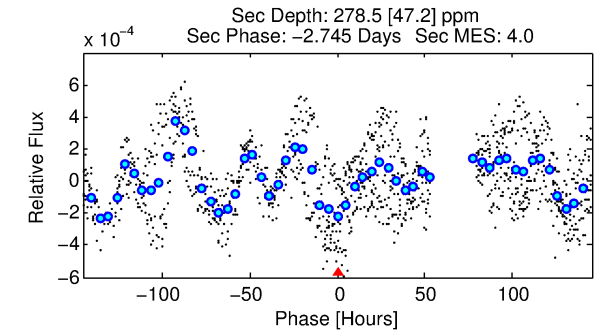
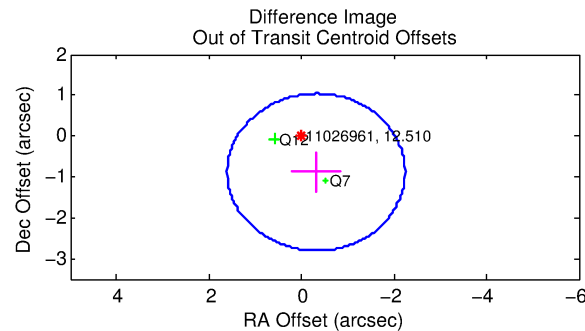
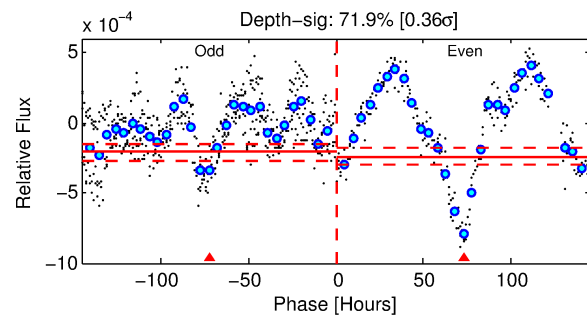
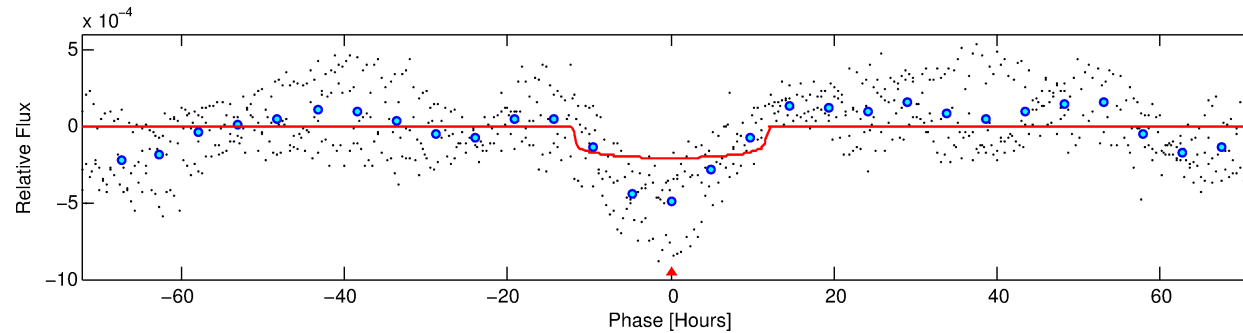
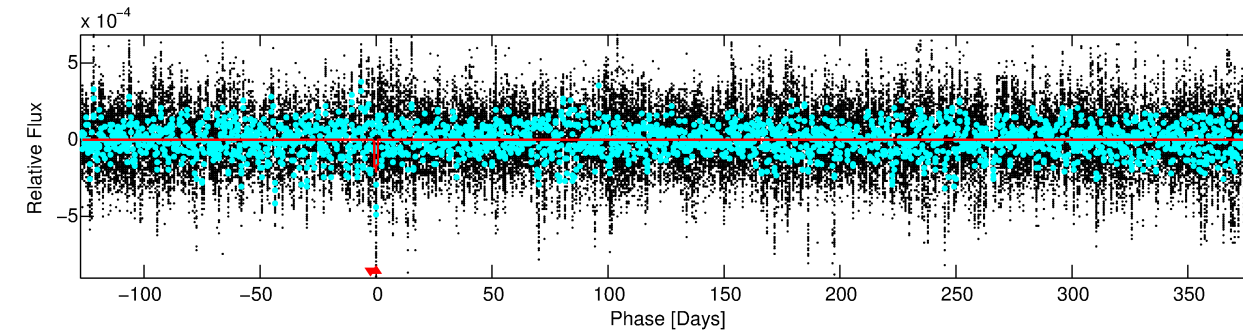
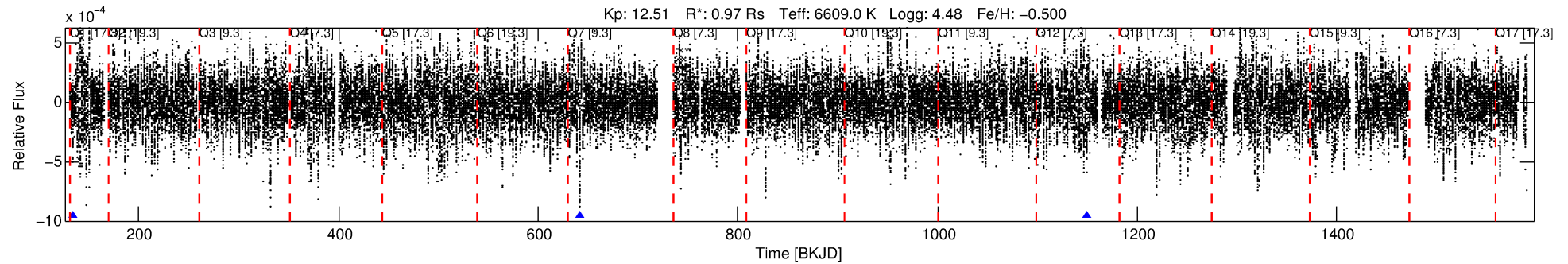
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011026961-01

No Significant Match Found

DV One-Page Summary

KIC: 11026961 Candidate: 1 of 1 Period: 507.545 d



DV Fit Results:

Period = 507.54550 [0.00954] d
Epoch = 134.5671 [0.0135] BKJD
Rp/R* = 0.0139 [0.0026]
a/R* = 133.75 [101.67]
b = 0.58 [0.87]
Seff = 1.01 [0.44]
Teq = 256 [28] K
Rp = 1.47 [0.58] Re
a = 1.2678 [0.3677] AU
Ag = 113276.61 [66252.90] [1.71 σ]
Teffp = 7249 [768] K [9.11 σ]

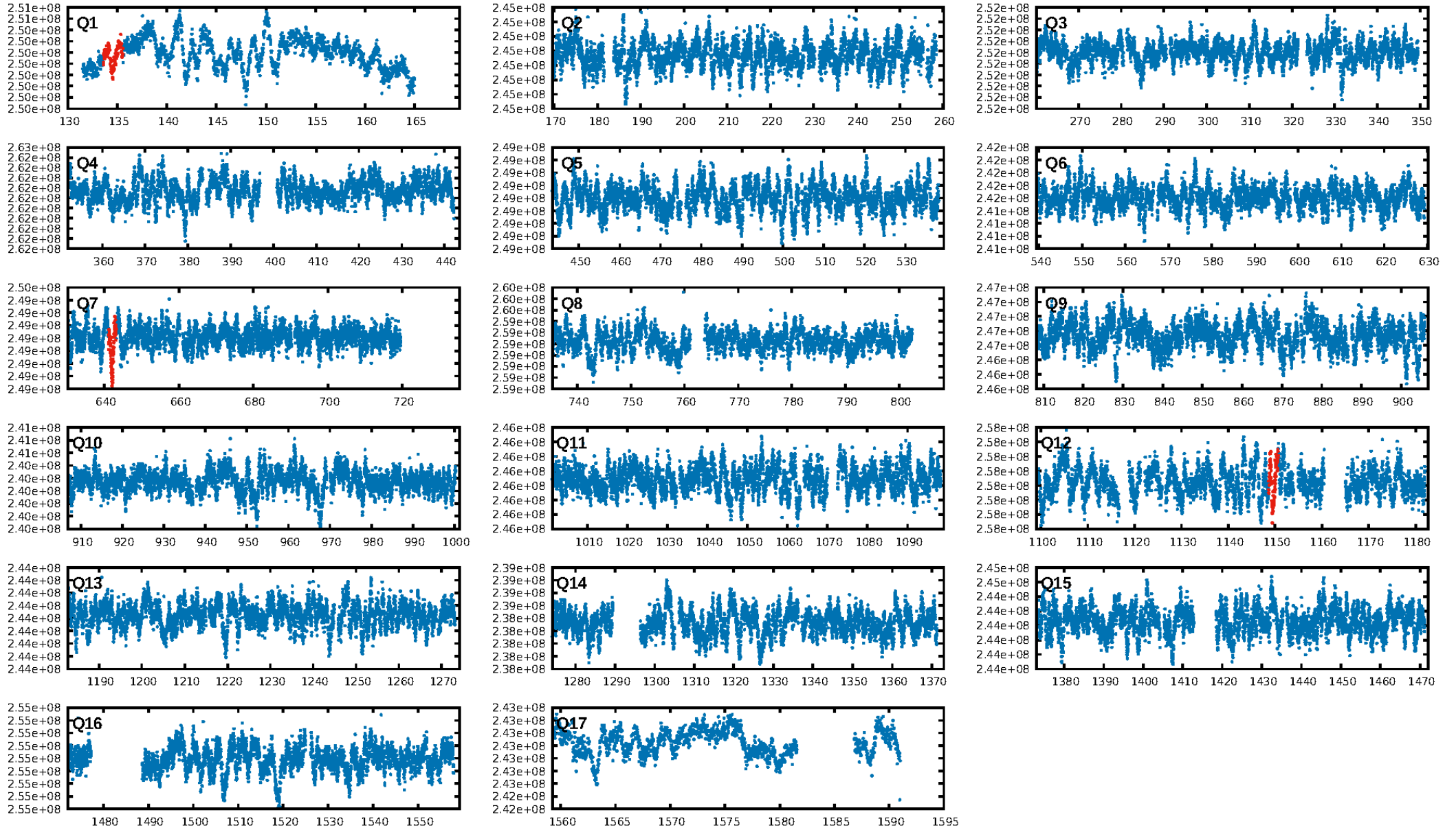
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 68.1%
ModelChiSquareGof-sig: 98.8%
Bootstrap-pfa: 1.32e-10
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: -2.013
Centroid-sig: 1.6%
Centroid-so: 0.655 arcsec [1.19 σ]
OotOffset-rm: 0.940 arcsec [1.47 σ]
OotOffset-st: 0/1/1/0 [2]
KicOffset-rm: 0.897 arcsec [1.99 σ]
KicOffset-st: 0/1/1/0 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [3/3]

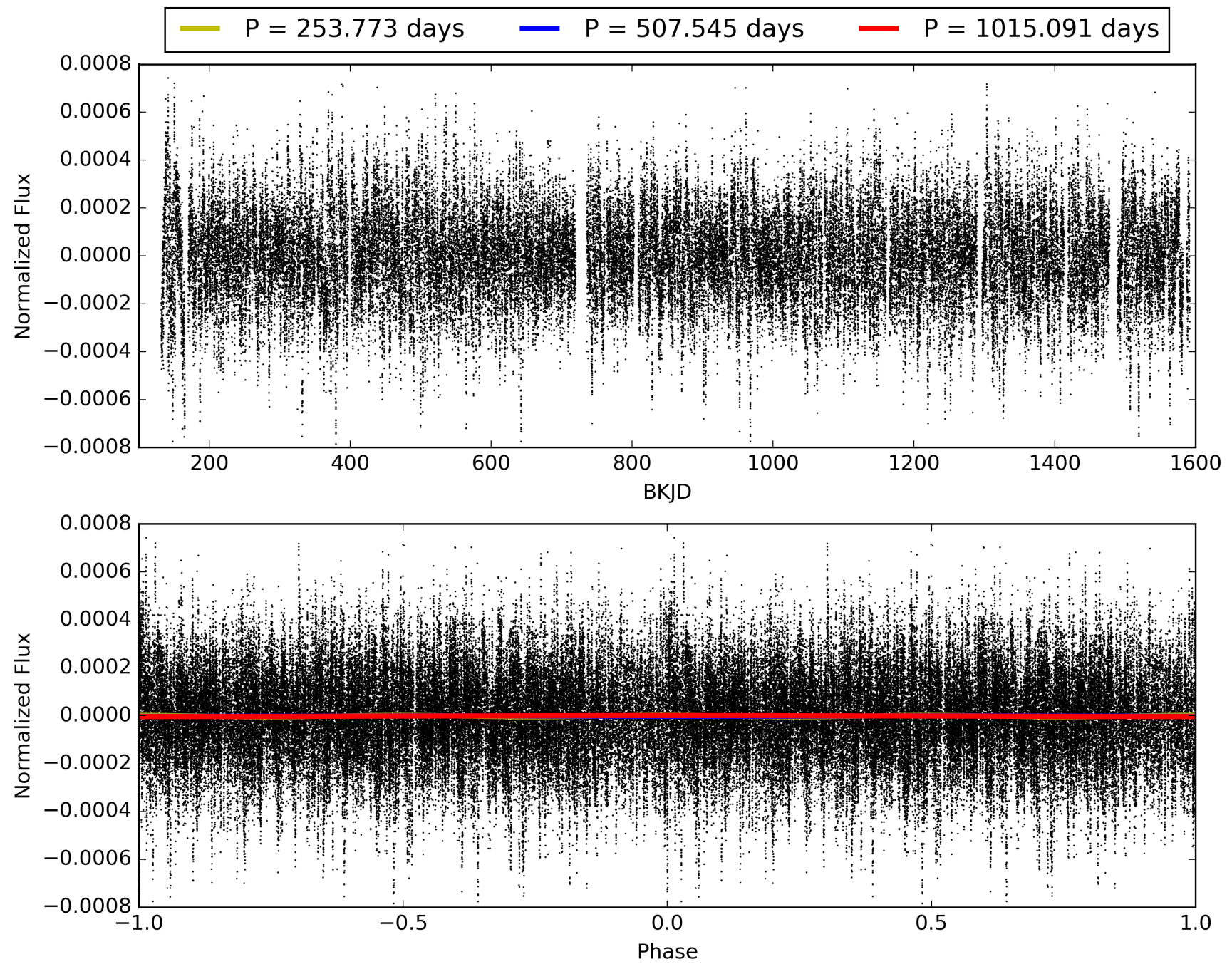
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 22:08:37 Z

This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 011026961-01, PDC Light Curves

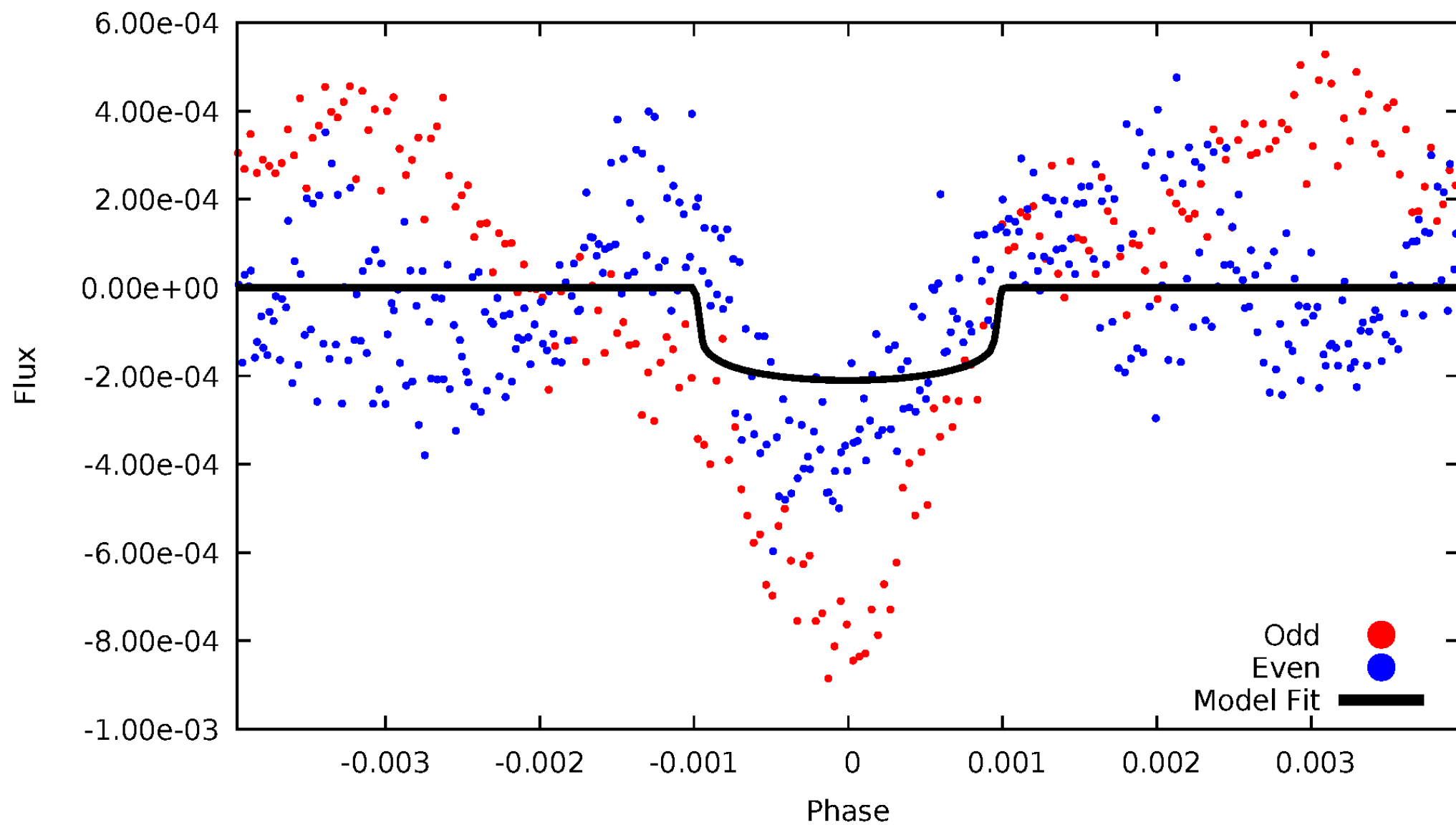


TCE 011026961-01



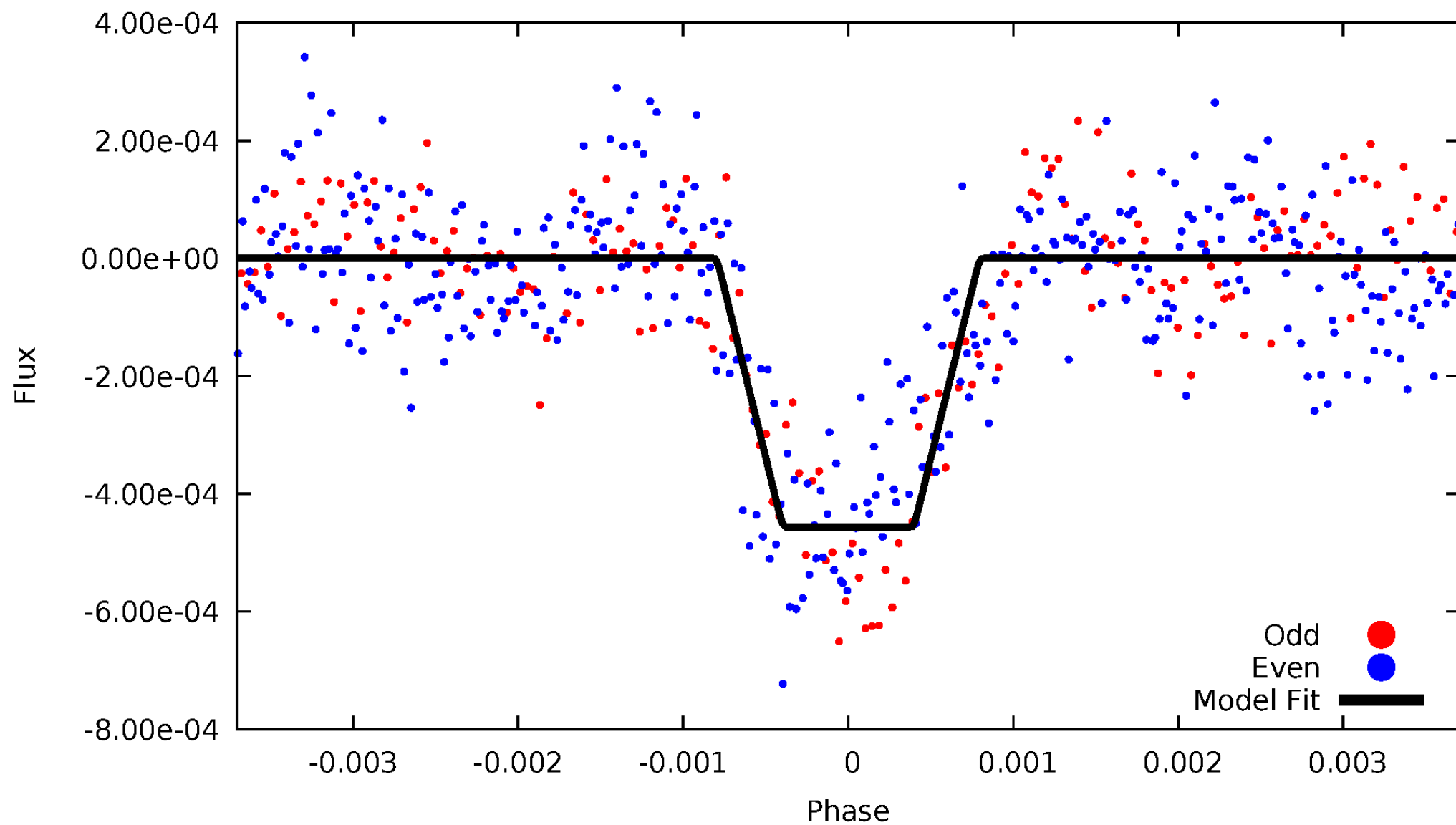
DV Odd/Even

TCE 011026961-01

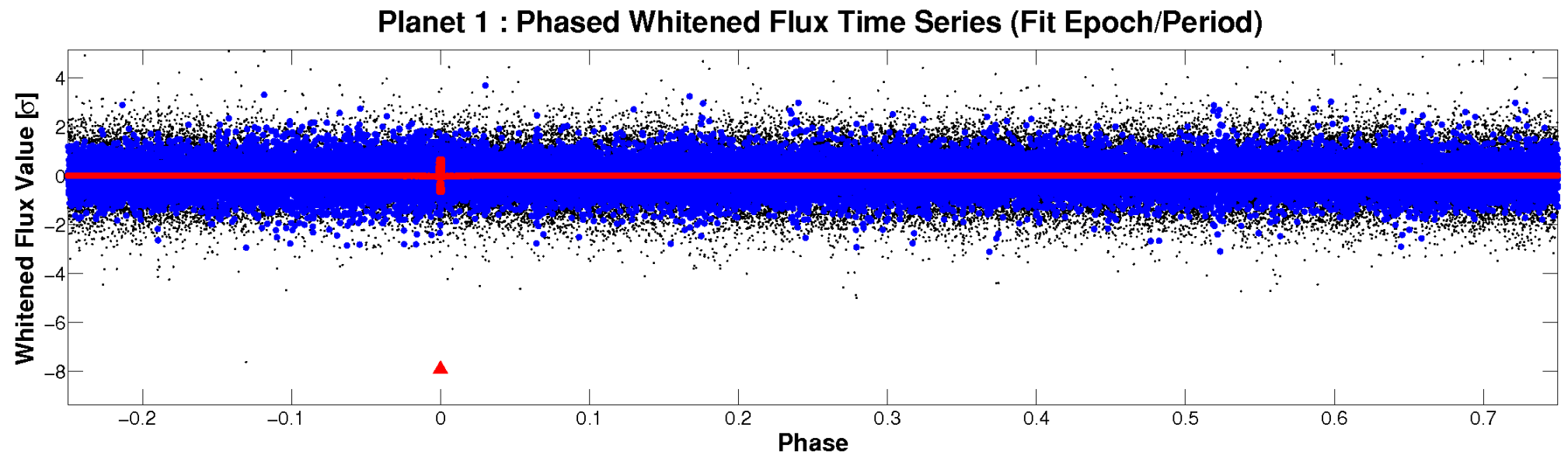
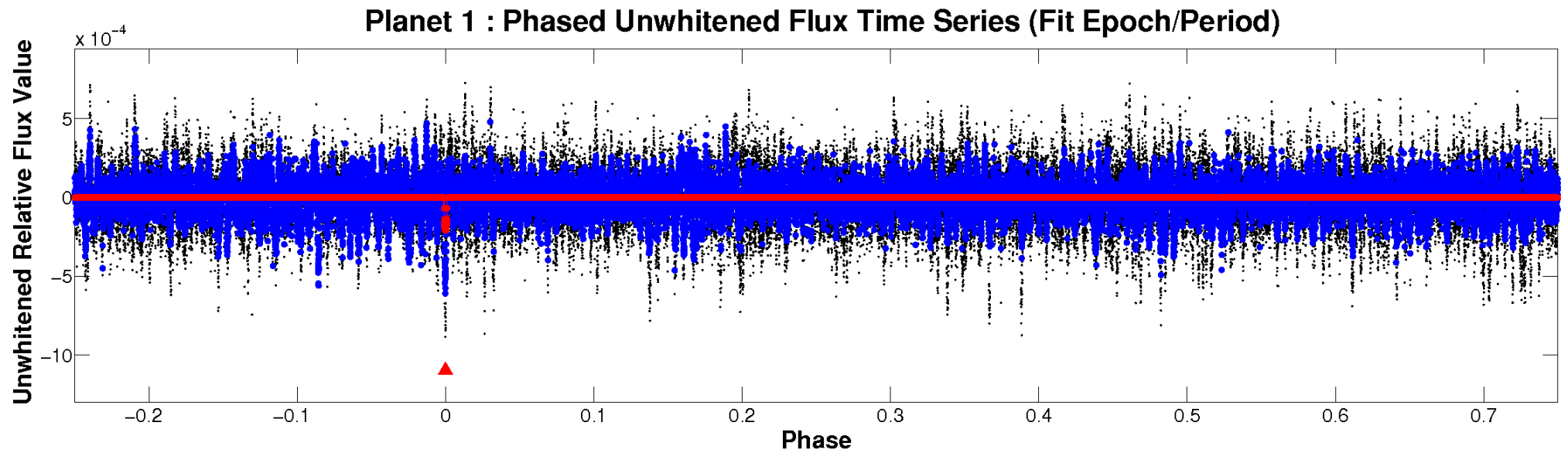


ALT Odd/Even

TCE 011026961-01



Non-Whitened Vs. Whitened Light Curve



PDC Quarter-Phased Transit Curves

TCE 011026961-01 P=507.545500 Days $T_0=134.567073$ (BKJD)



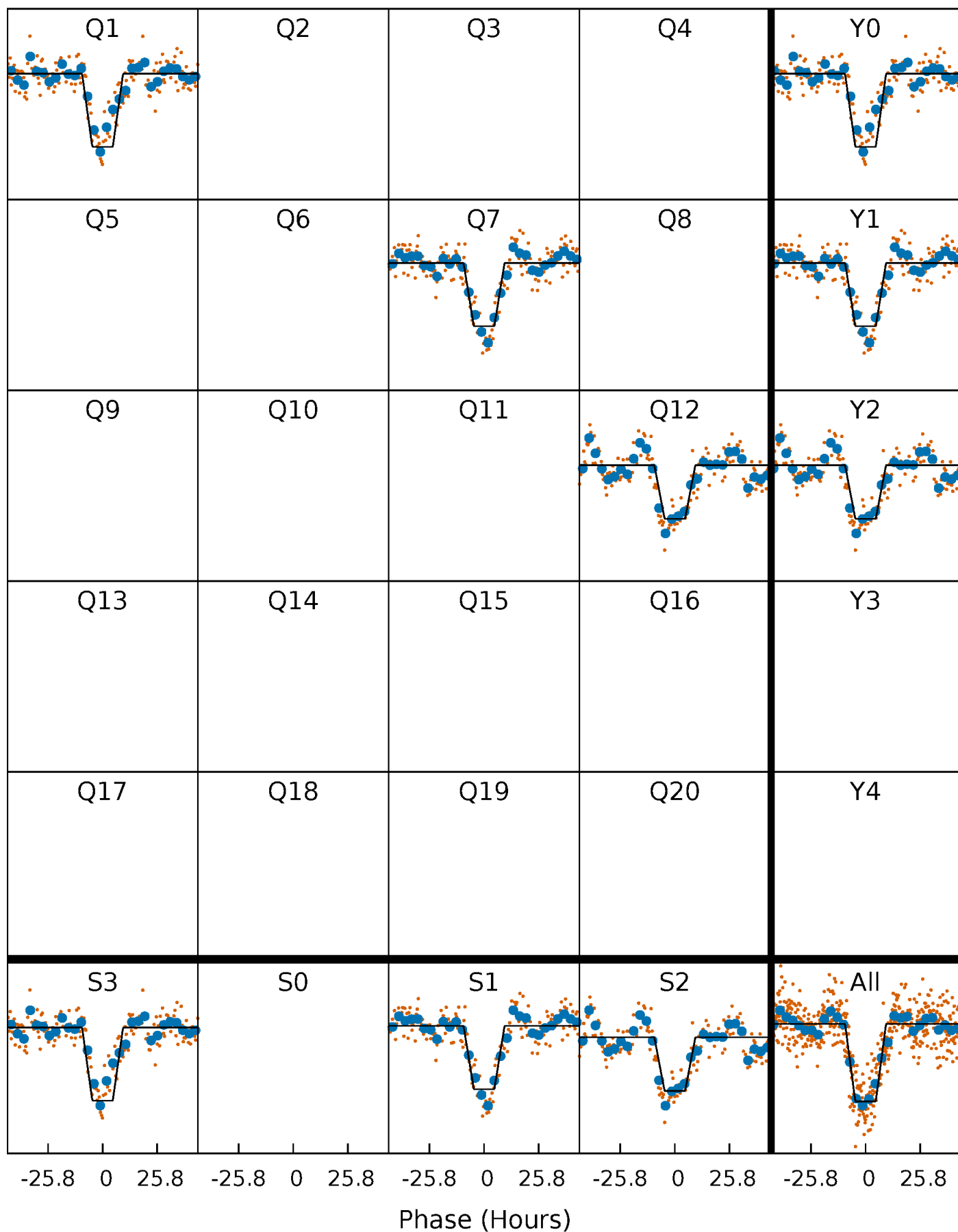
DV Quarter-Phased Transit Curves

TCE 011026961-01 P=507.545500 Days $T_0=134.567073$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

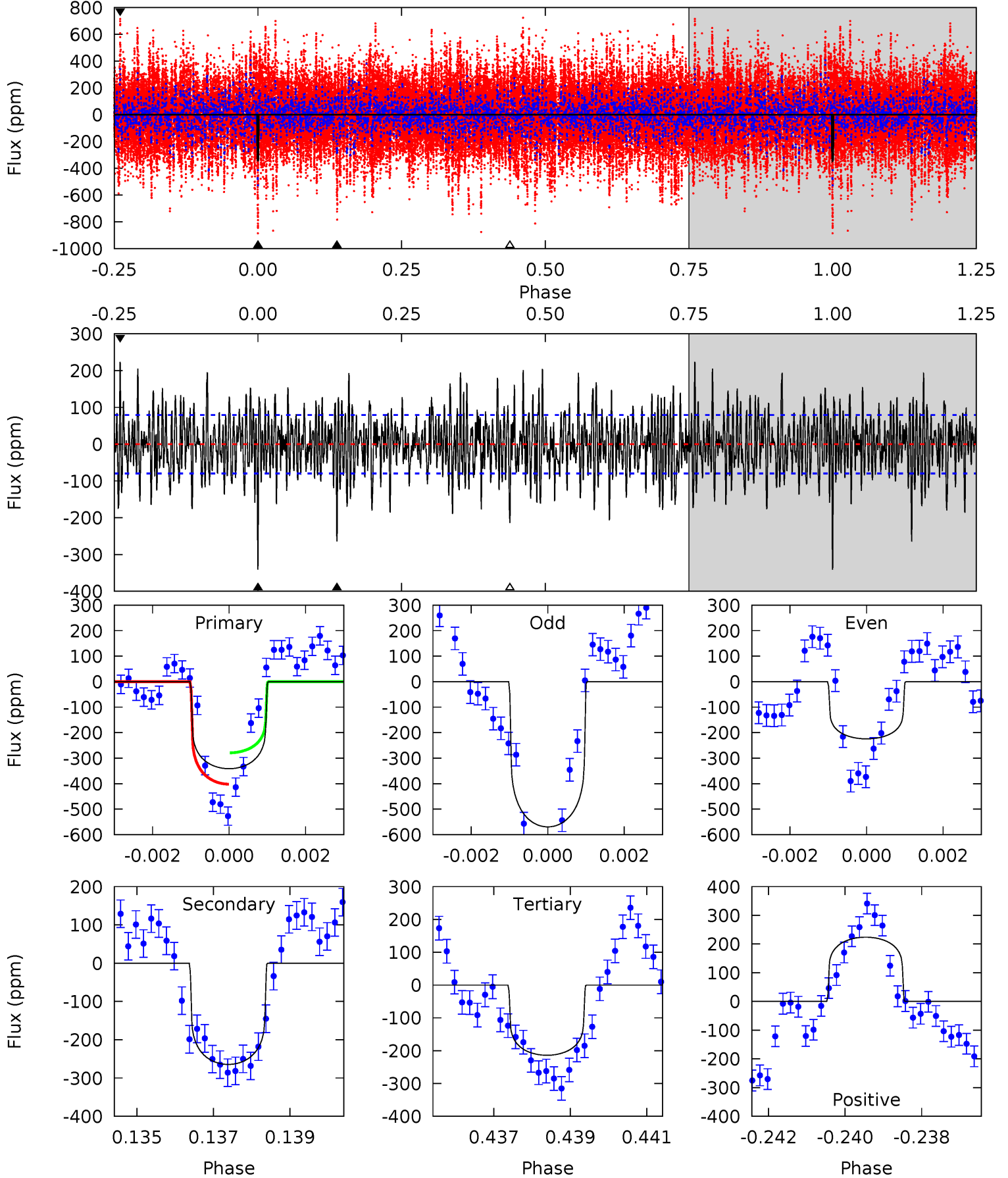
TCE 011026961-01 P=507.535574 Days $T_0=134.539387$ (BKJD)



DV Model-Shift Uniqueness Test

011026961-01, P = 507.545500 Days, E = 134.567073 Days

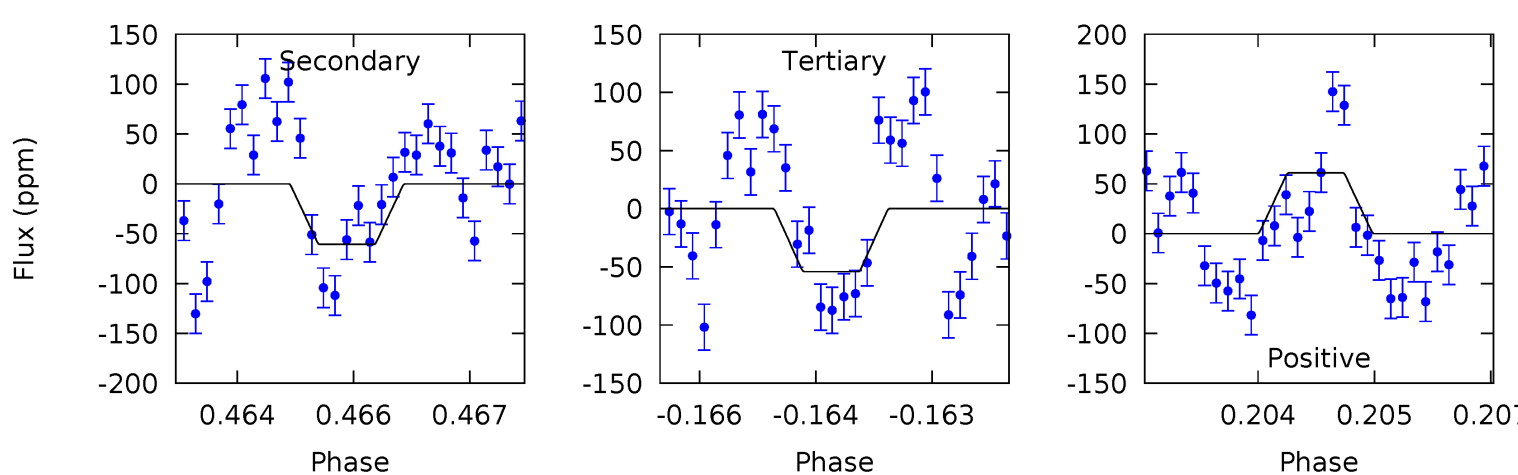
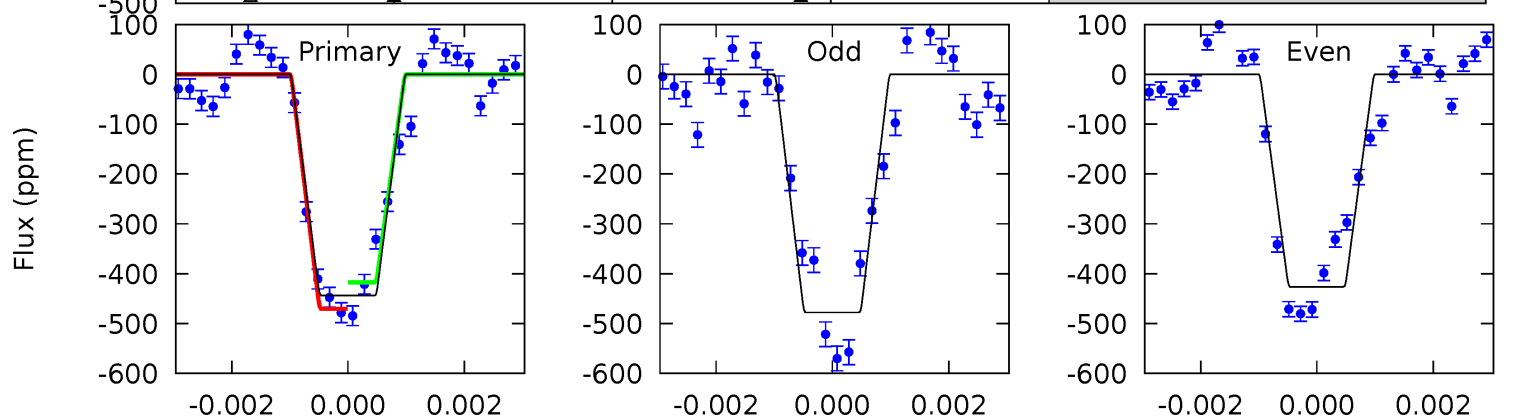
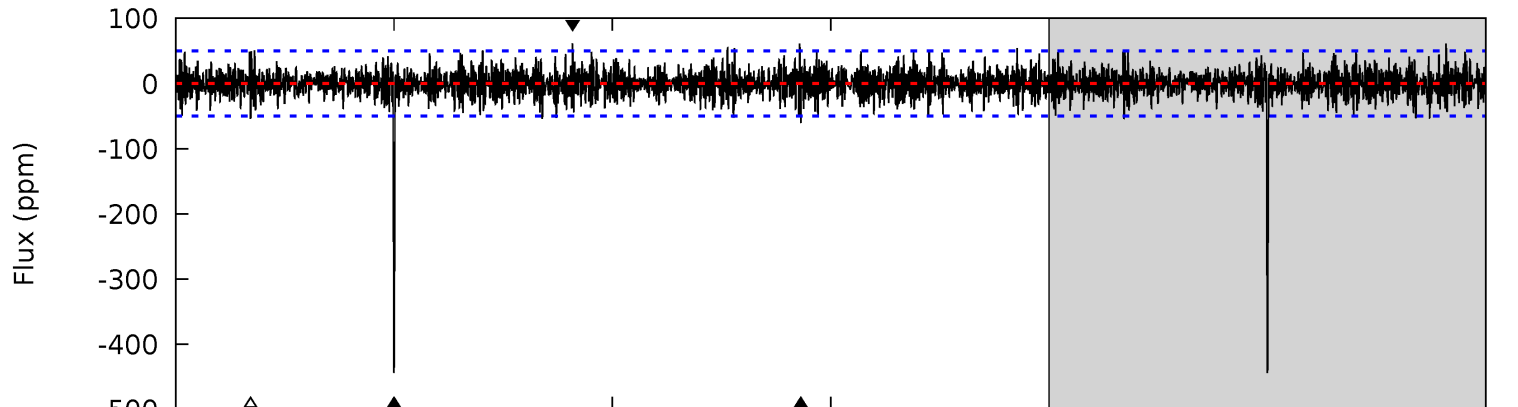
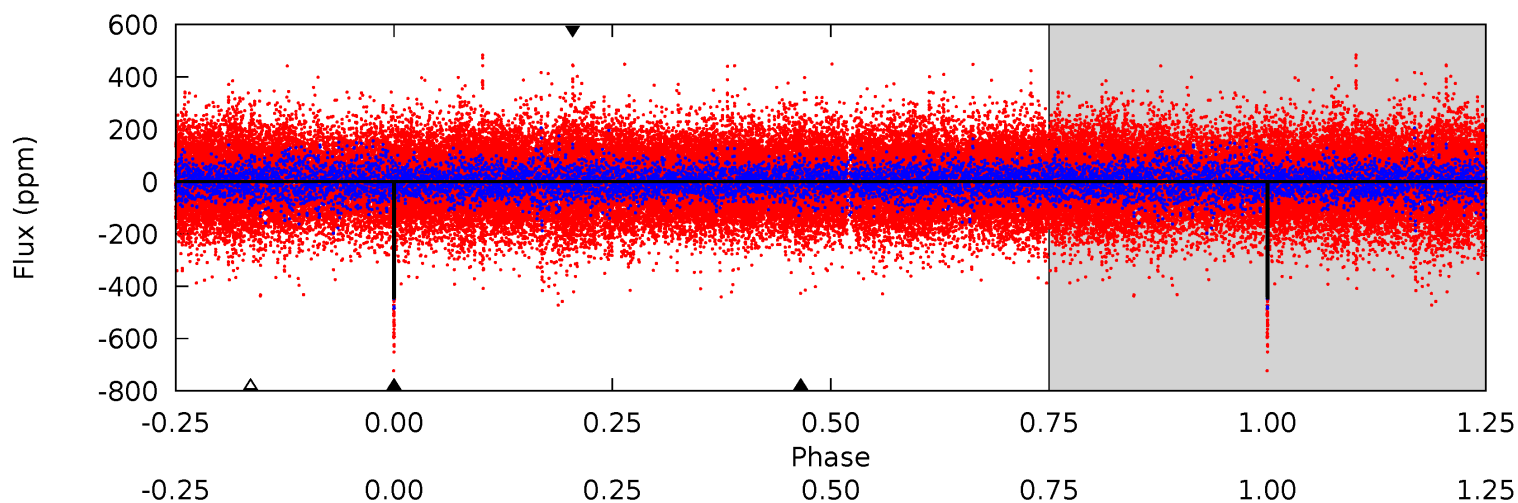
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.9	17.7	14.3	15.0	5.33	3.09	4.62	8.53	7.87	3.38	2.73	11.1	1.29	0.40	4.12



Alt Model-Shift Uniqueness Test

011026961-01, P = 507.535574 Days, E = 134.539387 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
47.7	6.54	5.81	6.56	5.36	3.15	1.82	41.9	41.2	0.72	-0.03	2.62	0.93	0.12	2.84



Stellar Parameters For KIC 011026961

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6609^{+147}_{-196}	$4.484^{+0.040}_{-0.229}$	$-0.500^{+0.300}_{-0.300}$	$0.974^{+0.337}_{-0.084}$	$1.073^{+0.149}_{-0.122}$	$1.638^{+0.275}_{-0.966}$
	+2%/-3%	+1%/-5%	+60%/-60%	+35%/-9%	+14%/-11%	+17%/-59%
Source	PHO1	KIC0	KIC0	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011026961-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-264 ± 15	$1.59^{+0.38}_{-0.31}$	365^{+28}_{-15}	7110^{+998}_{-616}	90810^{+50413}_{-30275}
Alt.	-61 ± 9	$2.42^{+0.47}_{-0.36}$	365^{+28}_{-16}	4220^{+254}_{-219}	9038^{+3641}_{-2723}

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming A=0.3)

A_{obs} = Observed Albedo (Assuming T=0)

If a secondary eclipse is present, the system is likely an EB if $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

DV Centroid Data

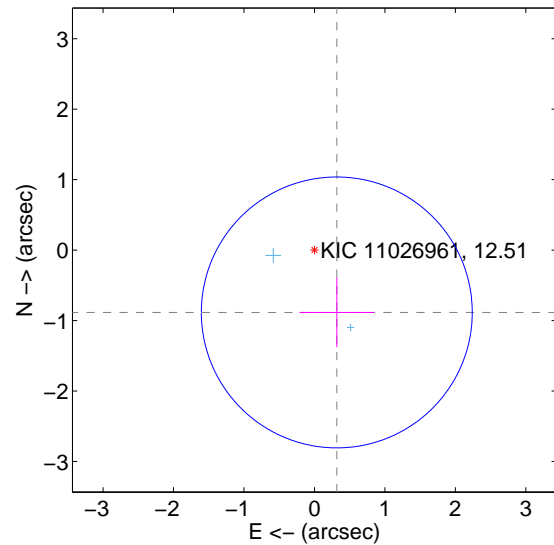
Supplemental centroid analysis for 011026961-01. Kepler magnitude: 12.51. Transit SNR 5.10

There are 2 quarters with good PRF difference image offsets

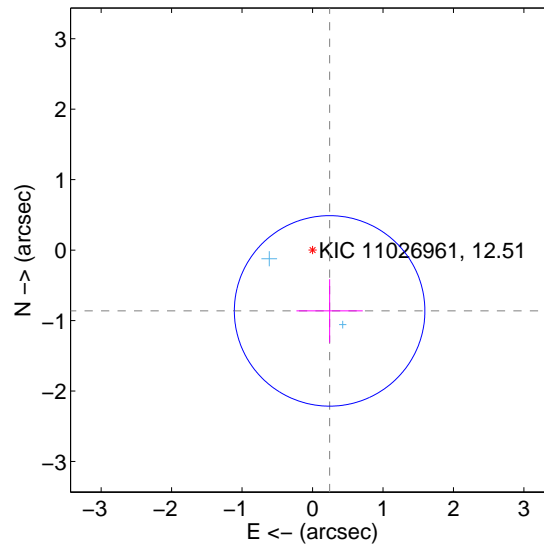
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.940 ± 0.641	1.47	-0.317 ± 0.529	-0.885 ± 0.494
PRF-fit source offset from KIC position	0.897 ± 0.451	1.99	-0.243 ± 0.471	-0.863 ± 0.449
photometric centroid source offset	0.66 ± 0.55	1.19	0.35 ± 0.49	0.55 ± 0.57

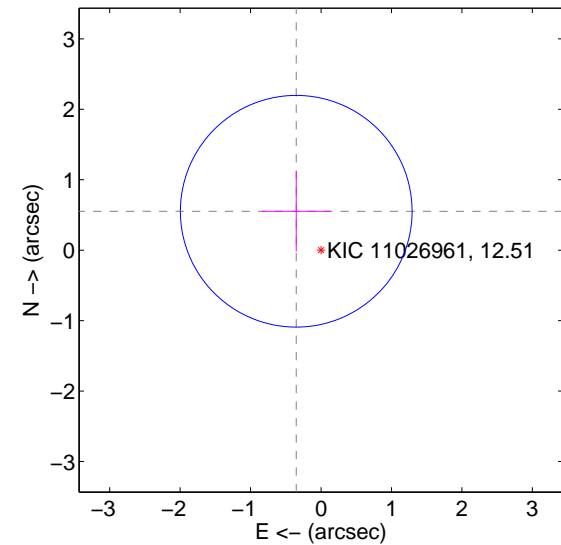
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

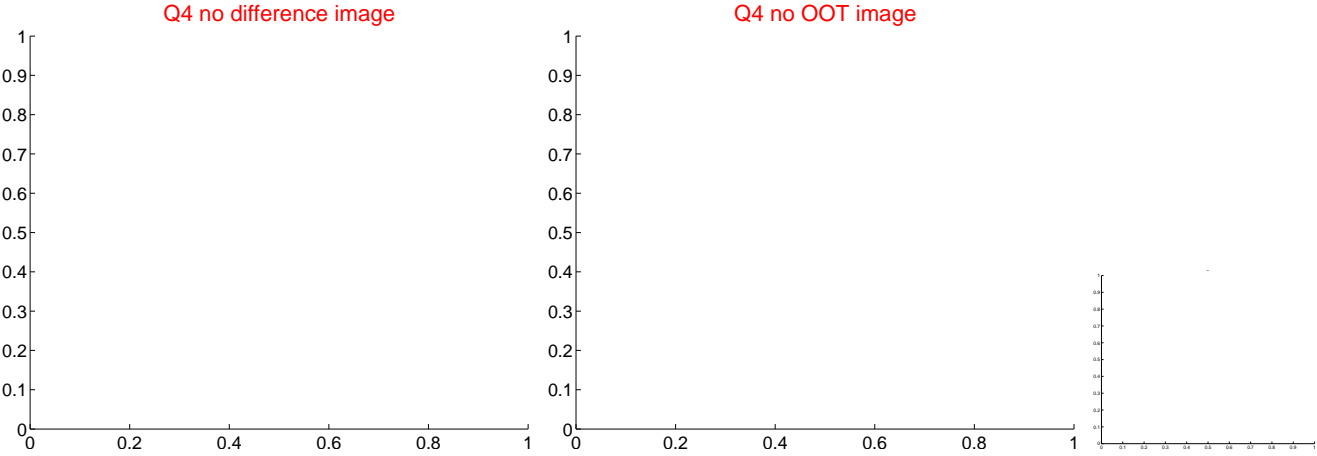
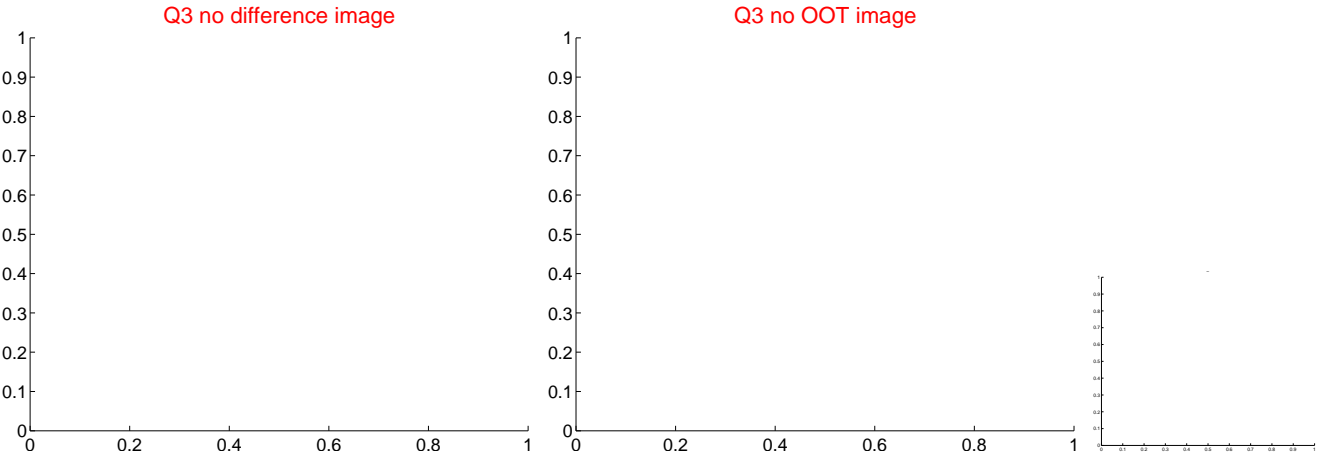
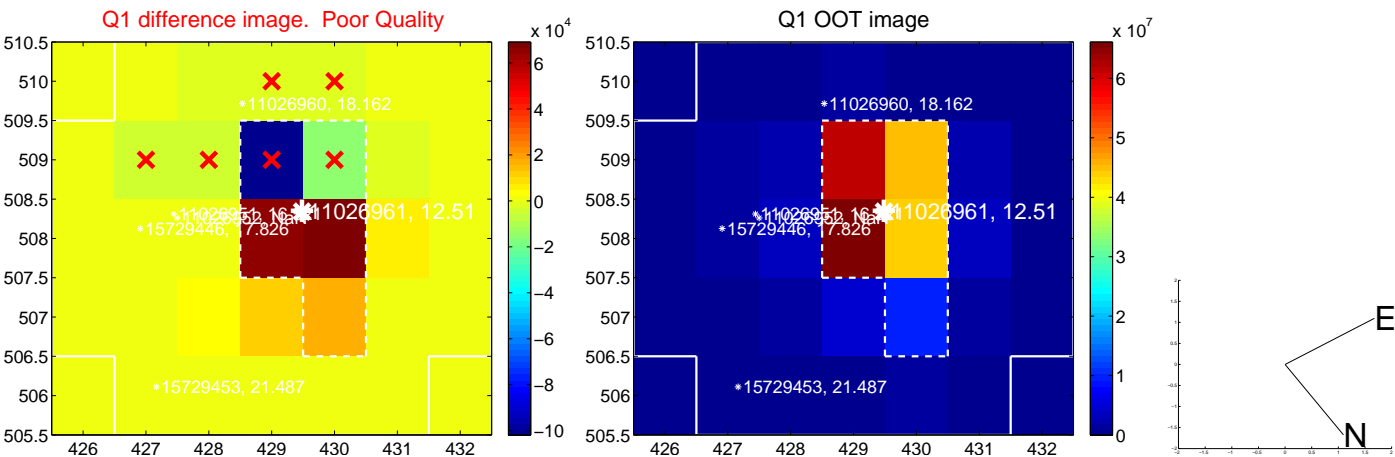


offset from photometric centroids

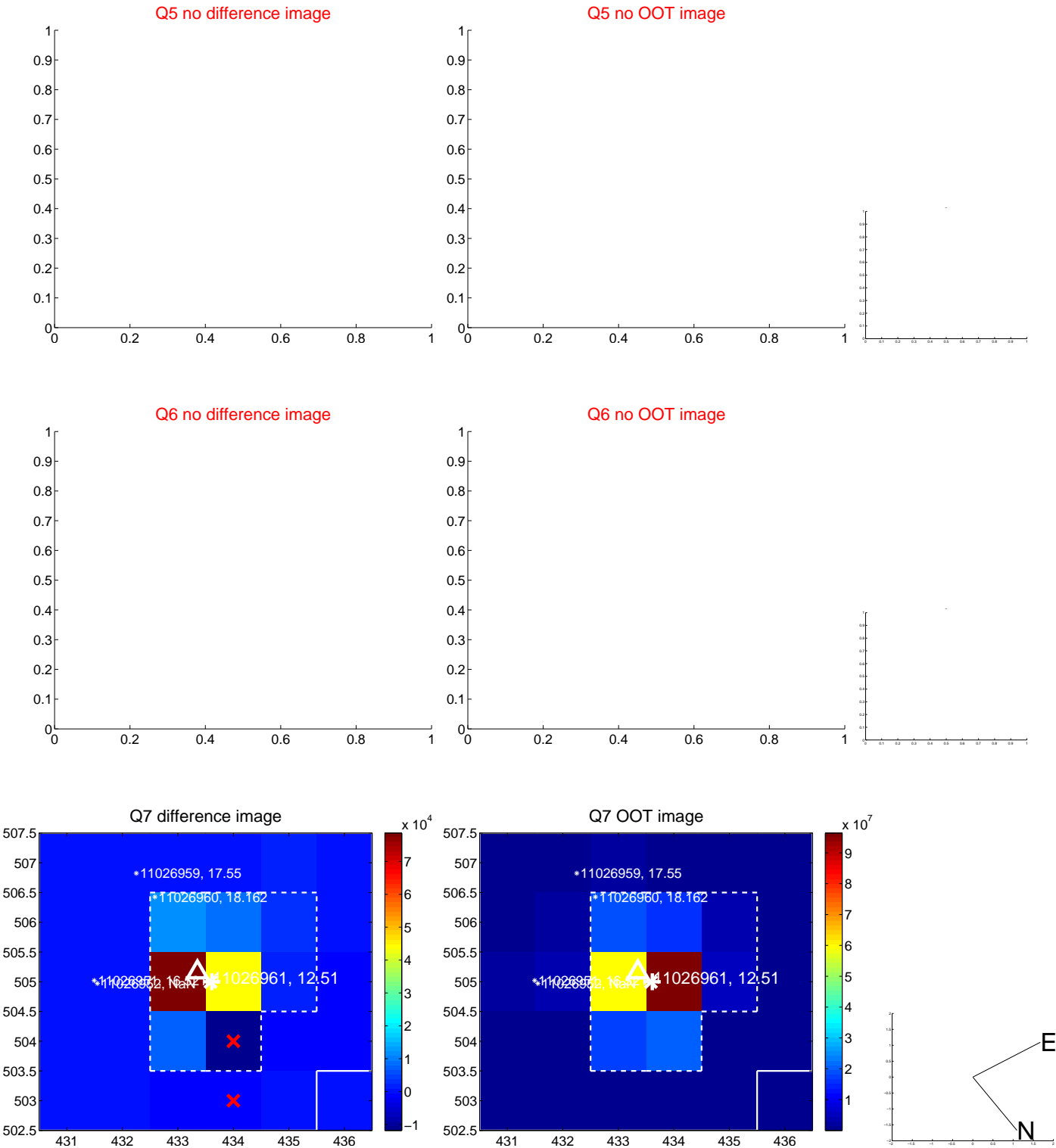


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

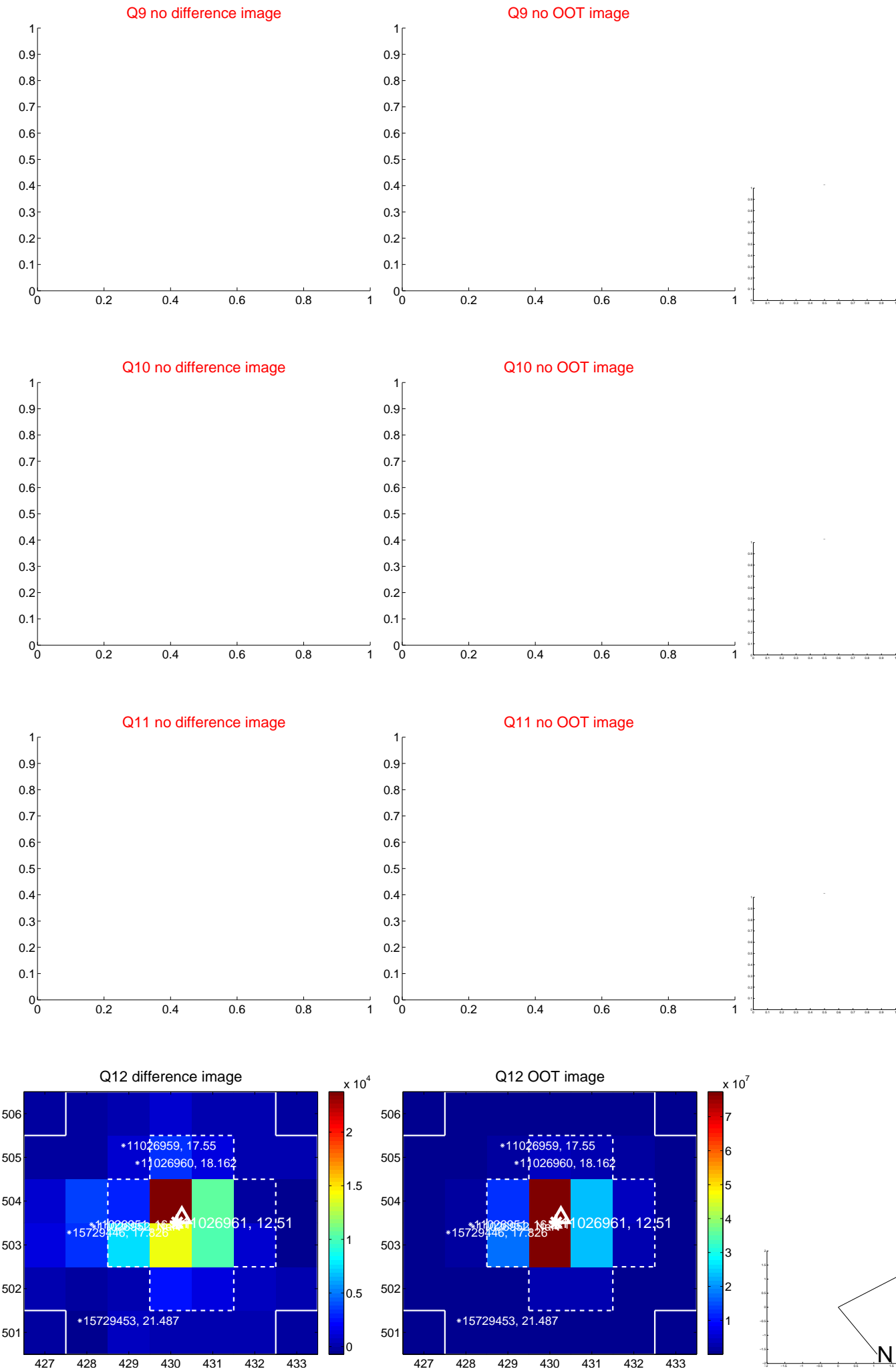
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



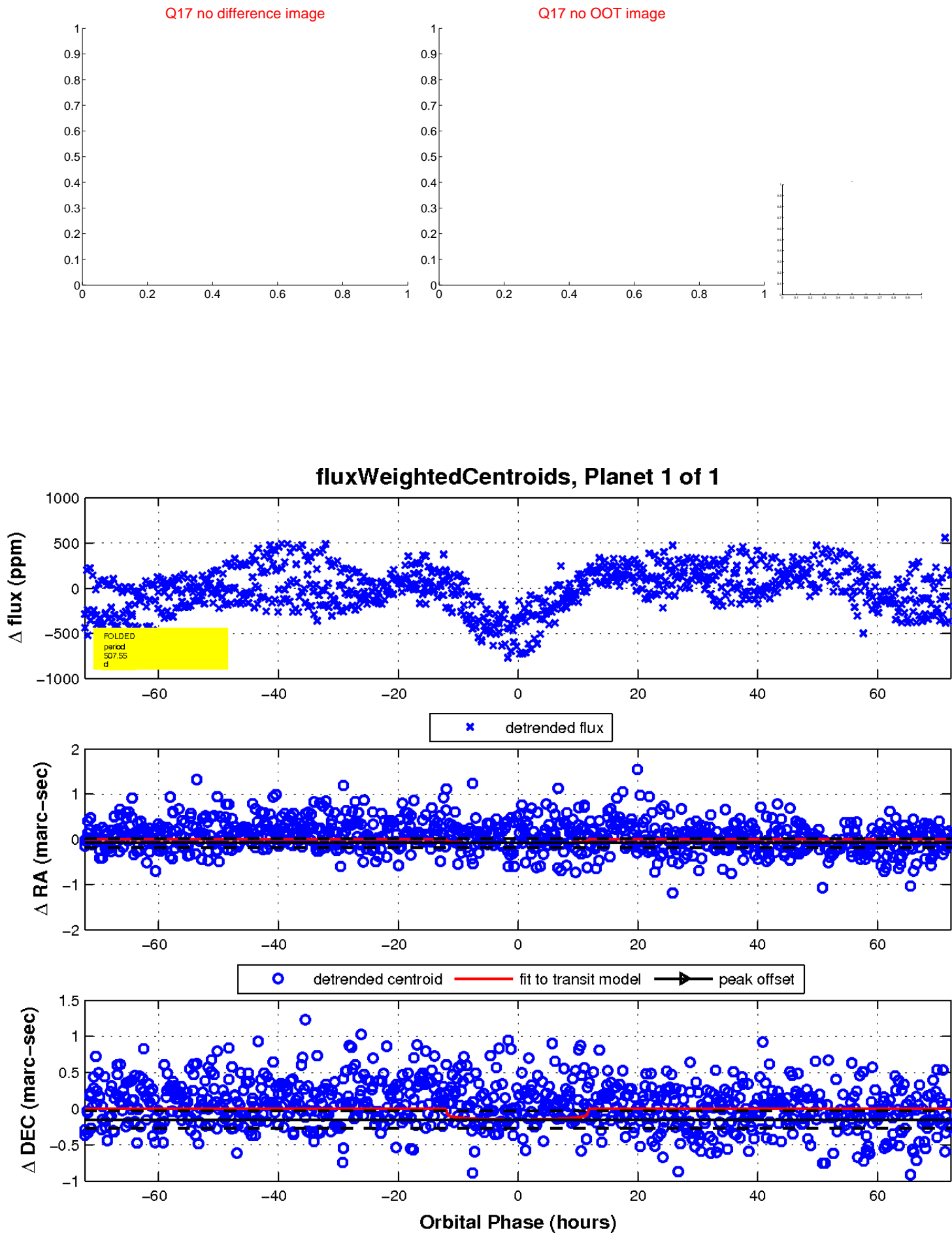
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

