

KIC 008635544

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})
008635544-01	OBS	No	301.493071	386.503360	513.1	6.198	7.2	6.1	0.93	6253	2.29	1.52

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008635544-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—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.

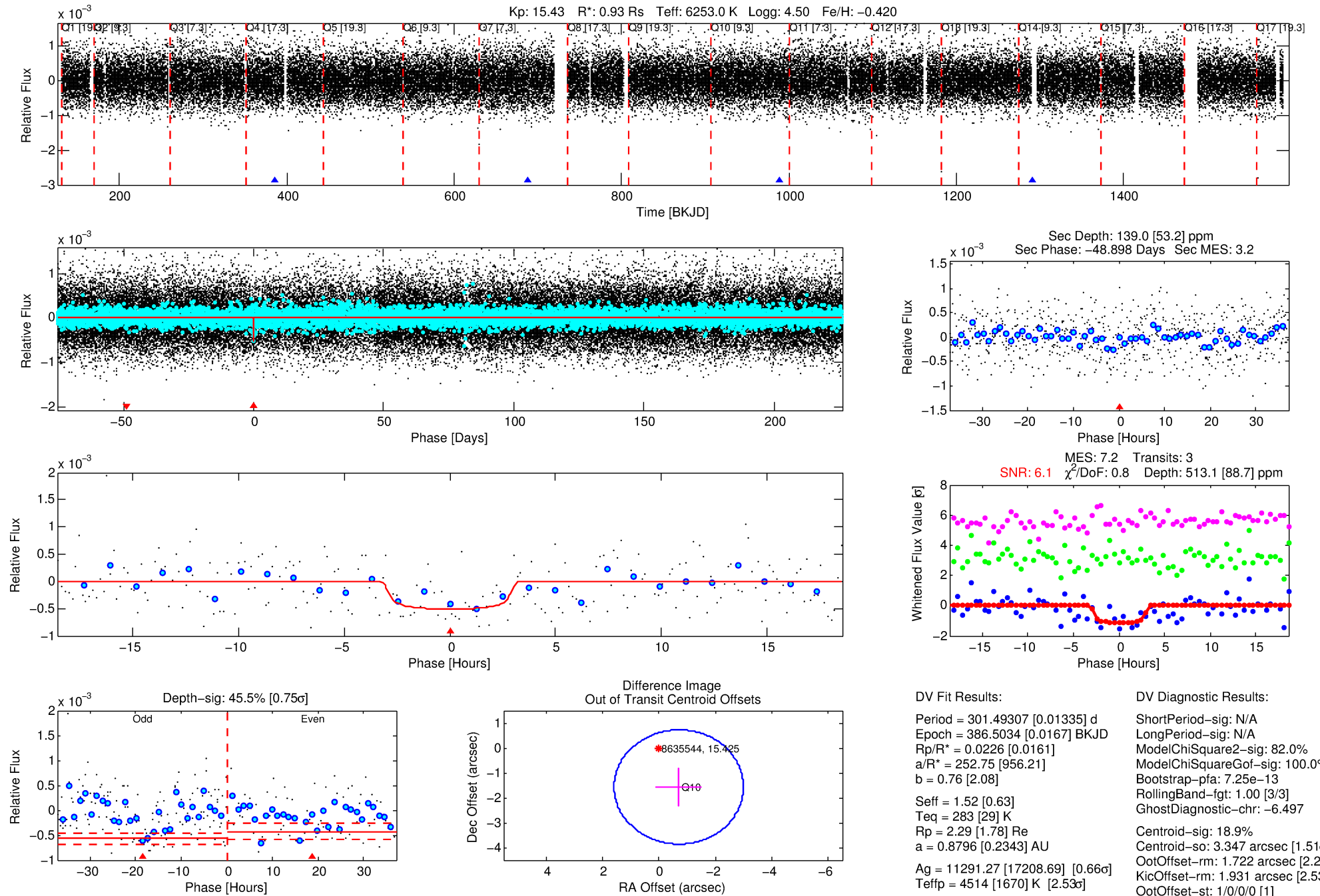
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008635544-01

No Significant Match Found

DV One-Page Summary

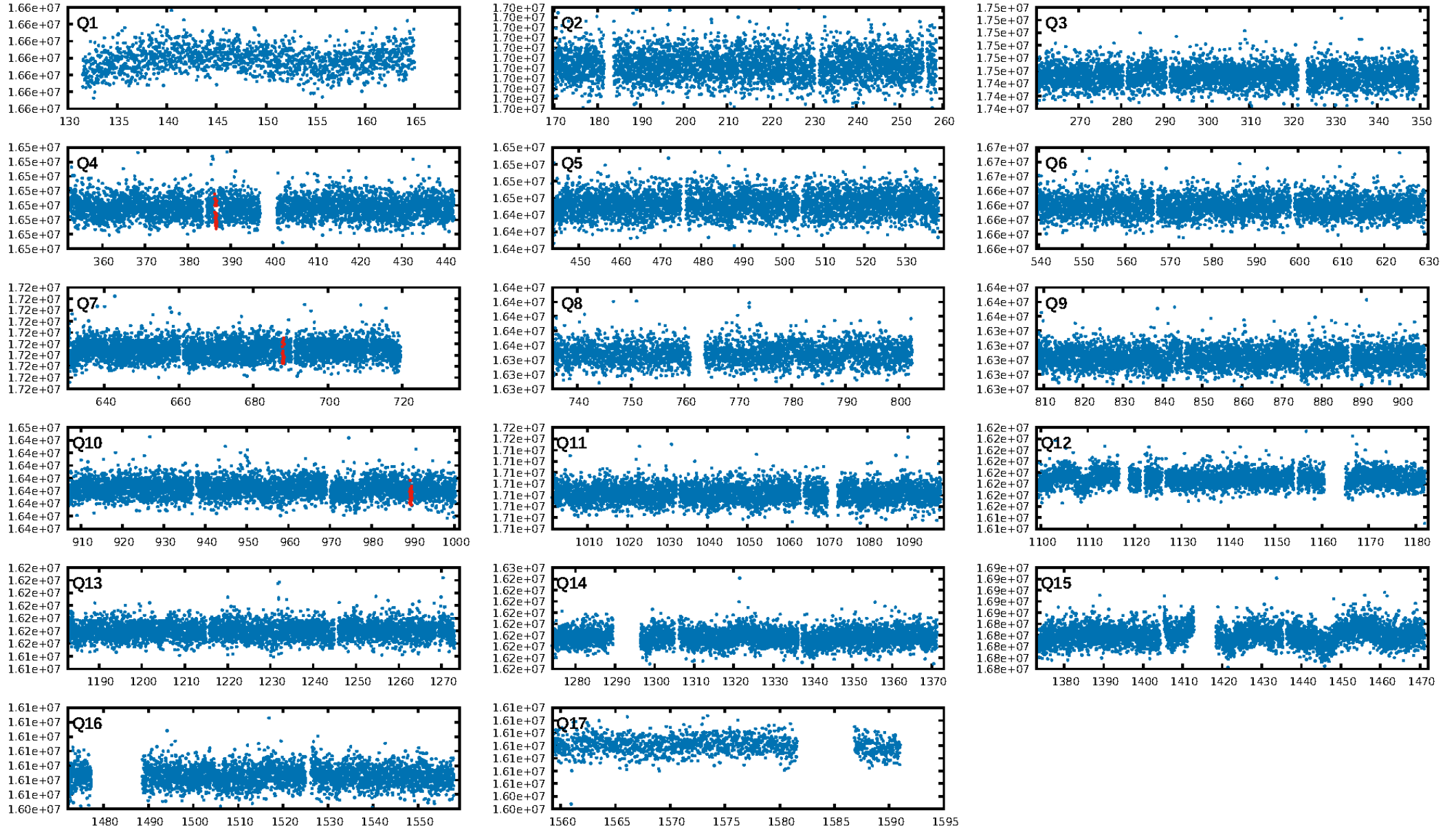
KIC: 8635544 Candidate: 1 of 1 Period: 301.493 d



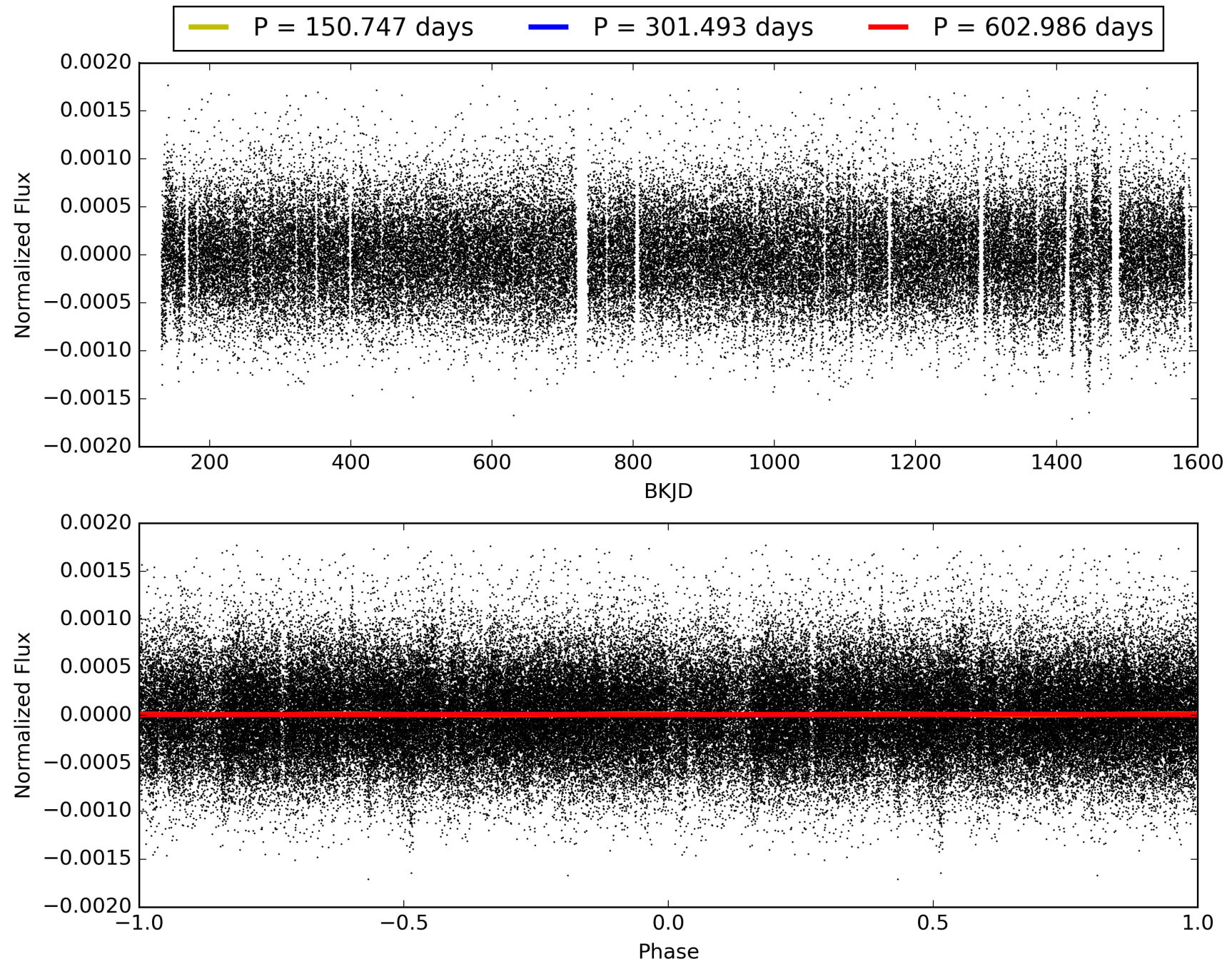
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 12:38:24 Z

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

TCE 008635544-01, PDC Light Curves

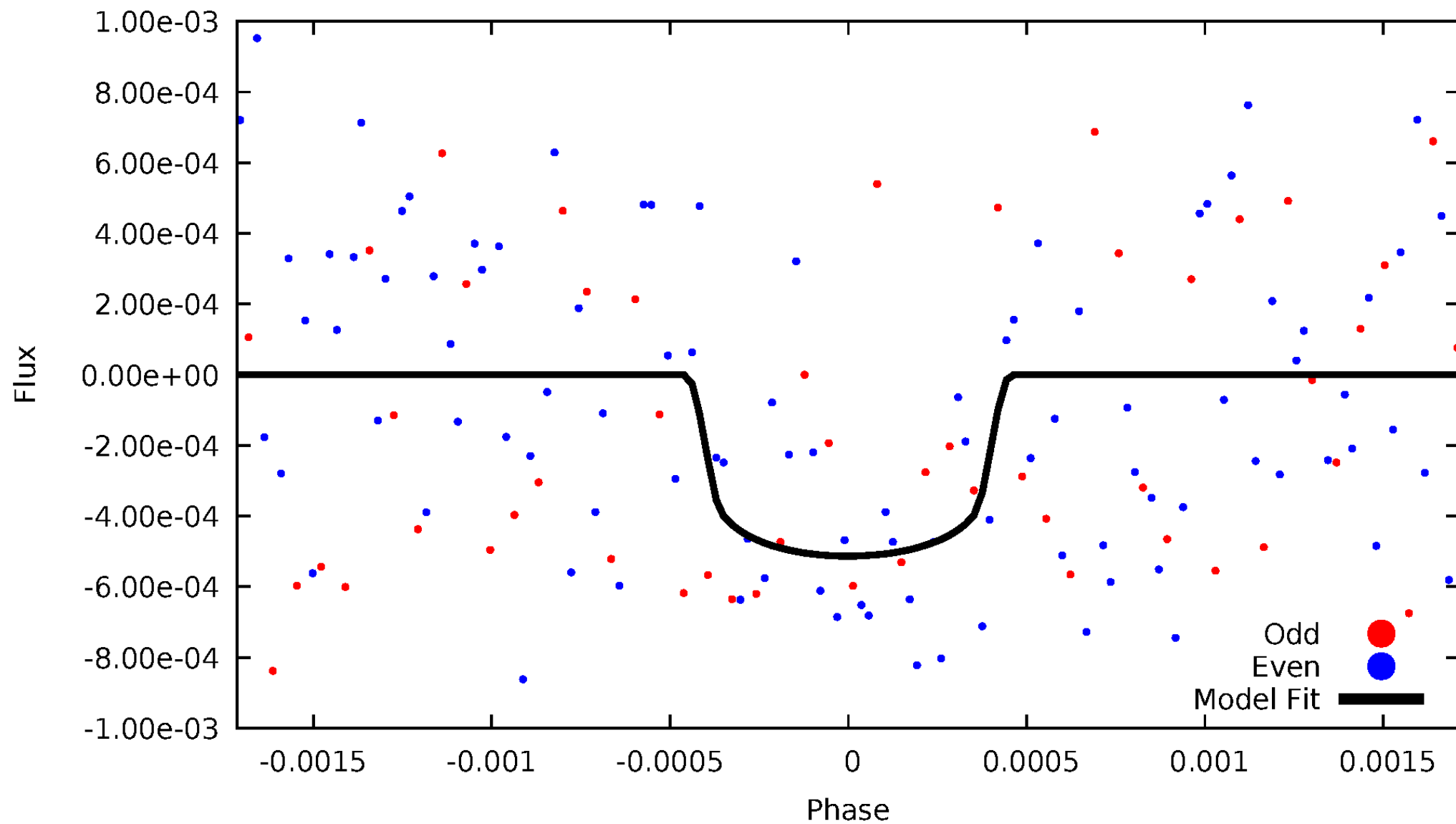


TCE 008635544-01



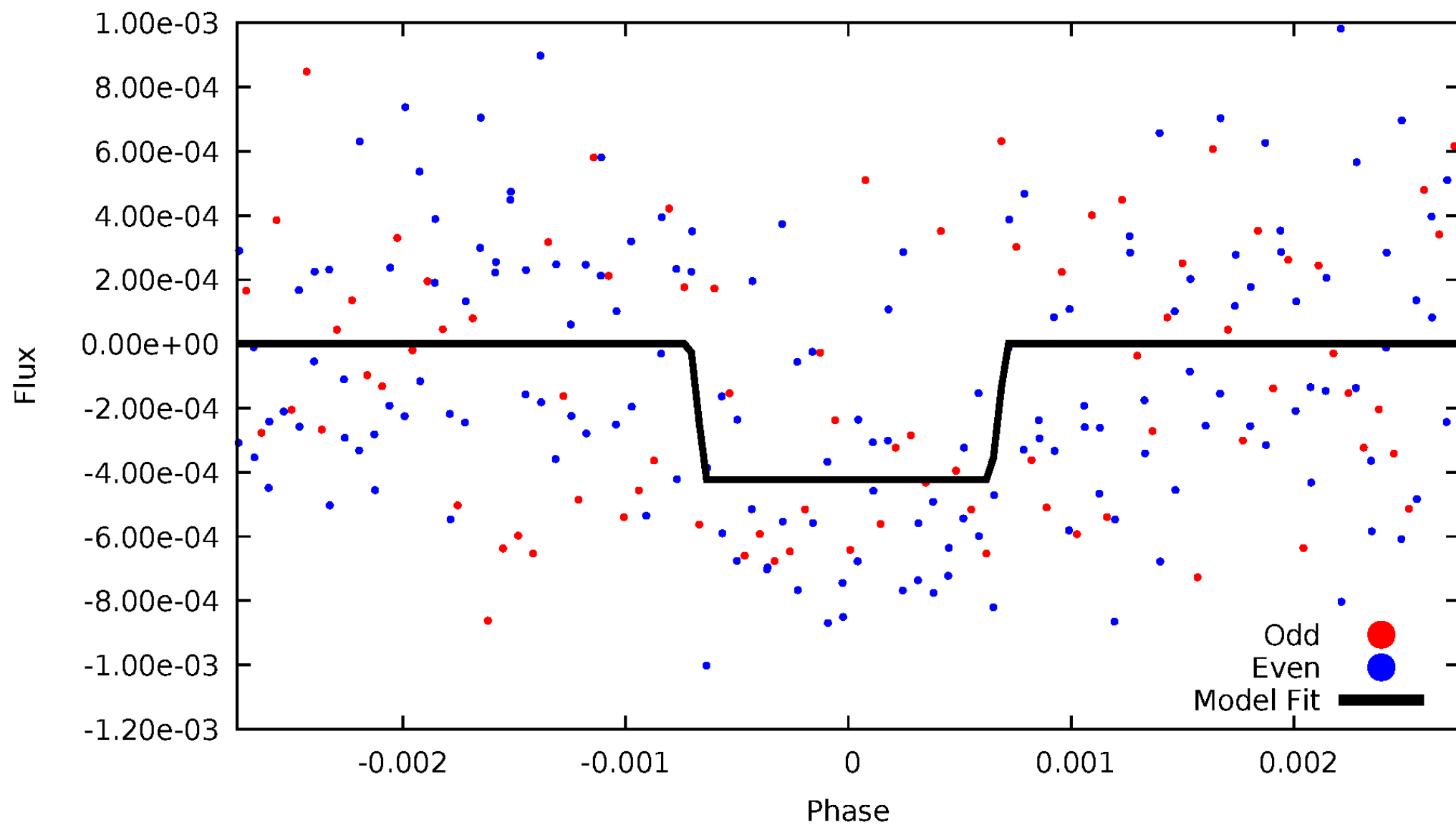
DV Odd/Even

TCE 008635544-01



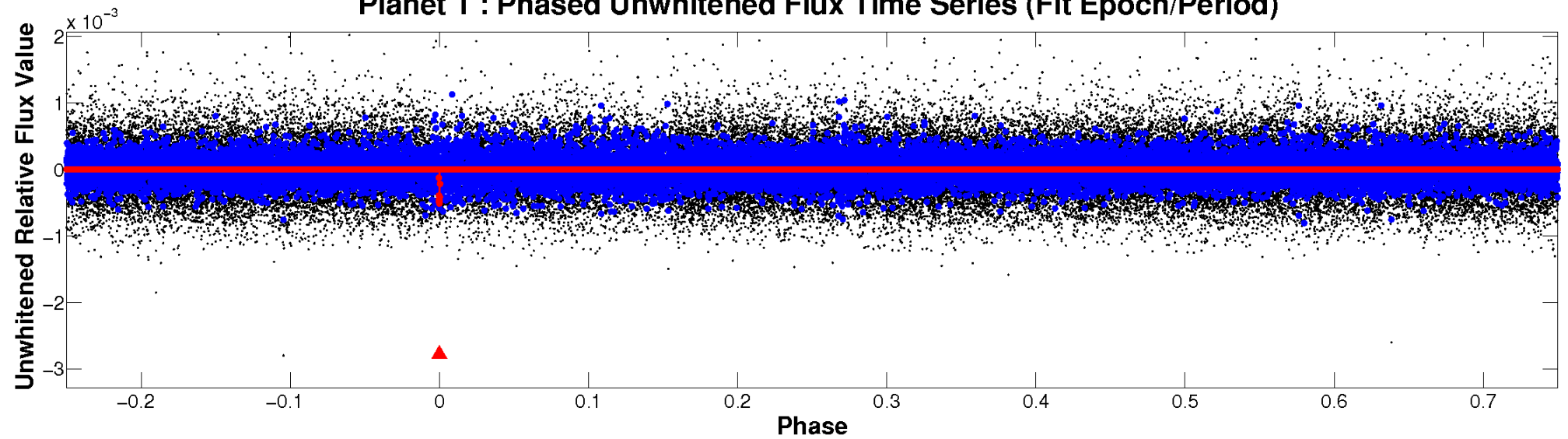
ALT Odd/Even

TCE 008635544-01

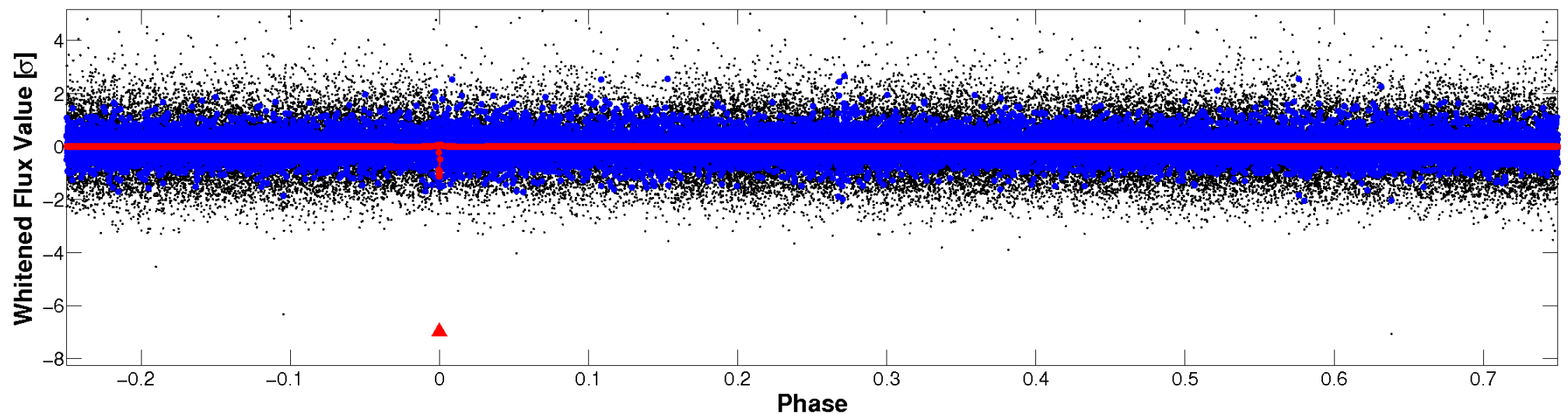


Non-Whitened Vs. Whitened Light Curve

Planet 1 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)



Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 008635544-01 P=301.493071 Days $T_0=386.503360$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 008635544-01 P=301.493071 Days $T_0=386.503360$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

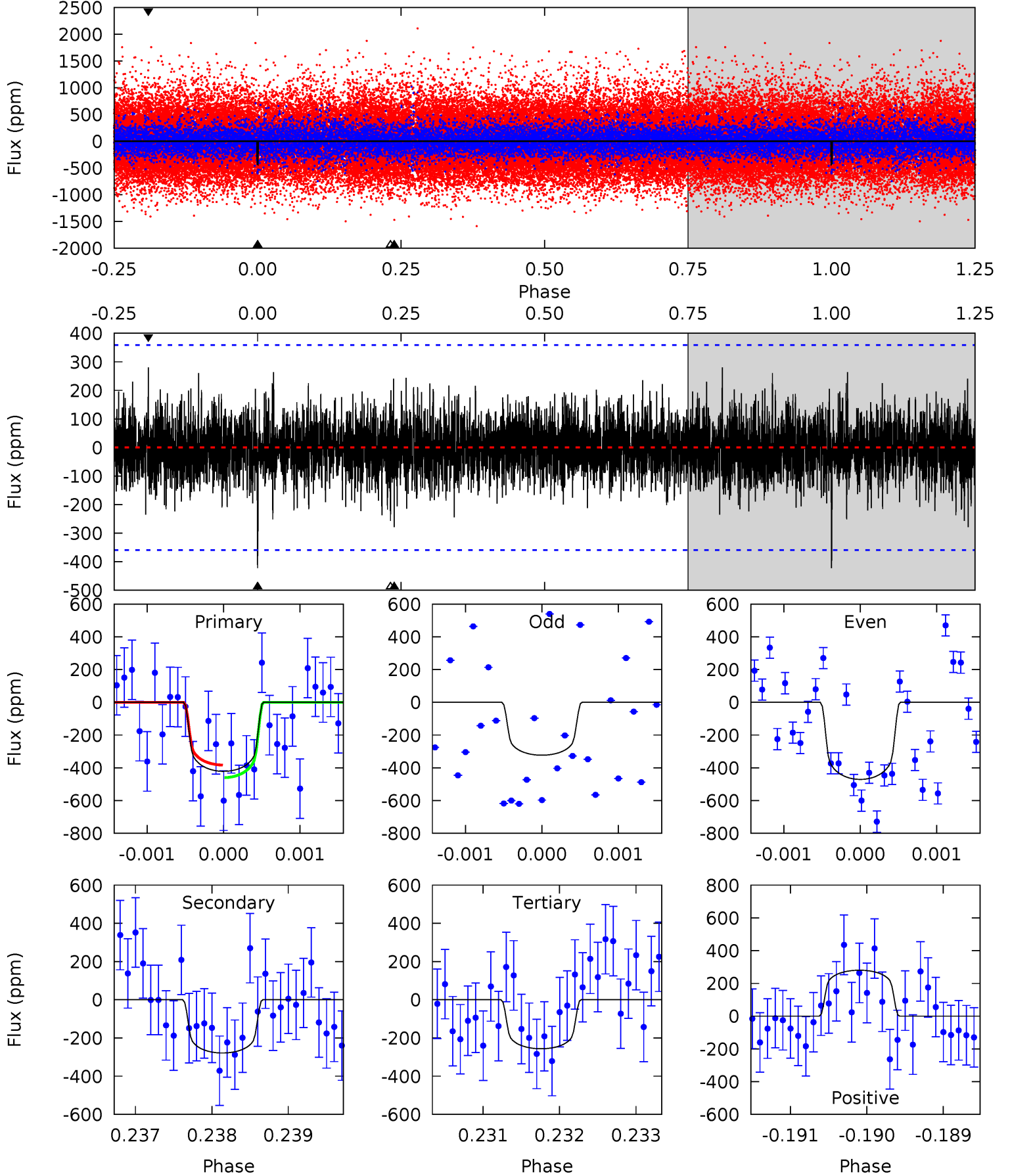
TCE 008635544-01 P=301.408632 Days $T_0=386.588995$ (BKJD)



DV Model-Shift Uniqueness Test

008635544-01, P = 301.493071 Days, E = 85.010289 Days

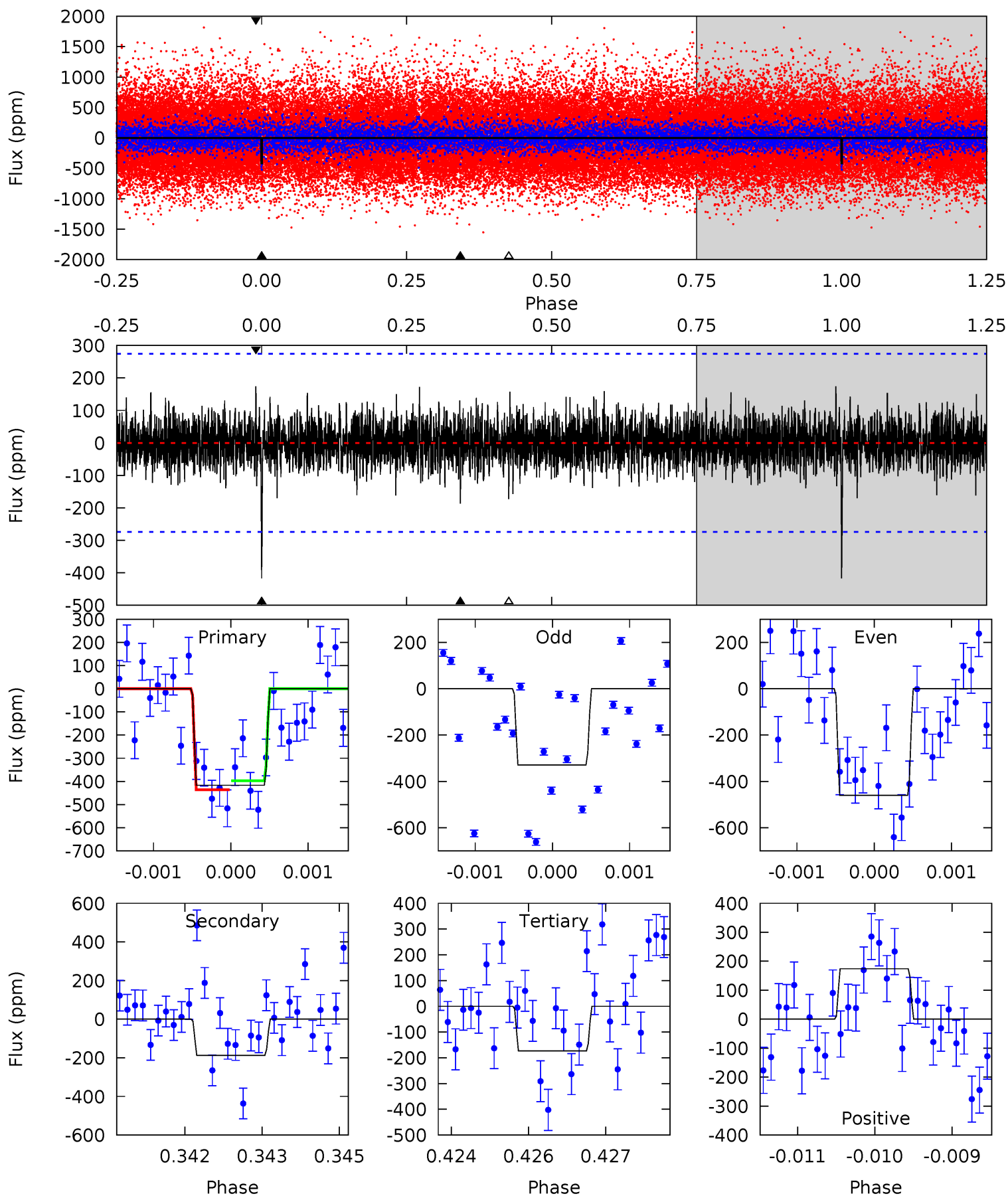
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.43	4.25	3.91	4.28	5.47	3.33	1.10	2.52	2.15	0.34	-0.03	1.08	0.96	0.40	0.59



Alt Model-Shift Uniqueness Test

008635544-01, P = 301.408632 Days, E = 85.180363 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.19	3.67	3.40	3.42	5.39	3.19	0.90	4.79	4.77	0.28	0.26	1.22	0.93	0.29	0.38



Stellar Parameters For KIC 008635544

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6253^{+176}_{-220}	$4.503^{+0.054}_{-0.216}$	$-0.420^{+0.300}_{-0.300}$	$0.927^{+0.290}_{-0.097}$	$0.997^{+0.133}_{-0.133}$	$1.764^{+0.391}_{-0.978}$
	+3%/-4%	+1%/-5%	+71%/-71%	+31%/-10%	+13%/-13%	+22%/-55%
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 008635544-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-279 ± 66	$2.54^{+1.53}_{-1.36}$	403^{+30}_{-20}	5238^{+2472}_{-975}	17607^{+65620}_{-11069}
Alt.	-187 ± 51	$2.40^{+1.60}_{-1.35}$	405^{+29}_{-21}	4957^{+2603}_{-919}	13599^{+57620}_{-8964}

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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

DV Centroid Data

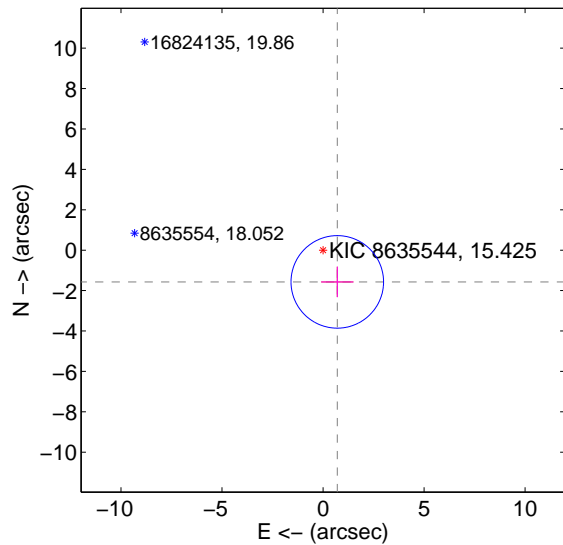
Supplemental centroid analysis for 008635544-01. Kepler magnitude: 15.43. Transit SNR 6.07

There are 0 quarters with good PRF difference image offsets

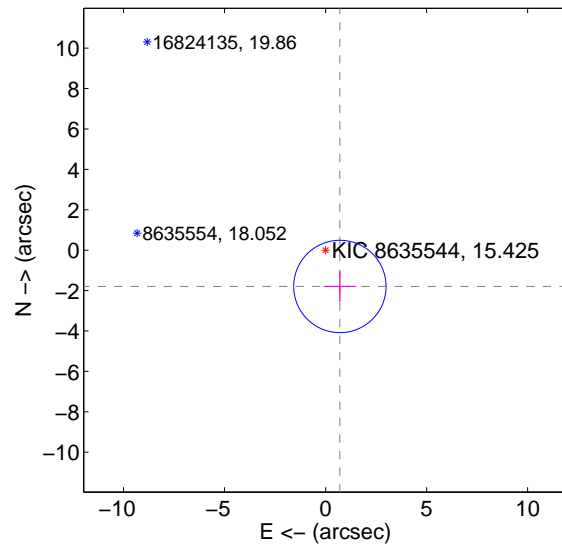
The direct PRF centroid is offset from the target star catalog position by about 0.23 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.722 ± 0.764	2.25	-0.705 ± 0.800	-1.570 ± 0.756
PRF-fit source offset from KIC position	1.931 ± 0.762	2.53	-0.708 ± 0.800	-1.796 ± 0.756
photometric centroid source offset	3.35 ± 2.21	1.51	3.18 ± 2.20	1.05 ± 2.32

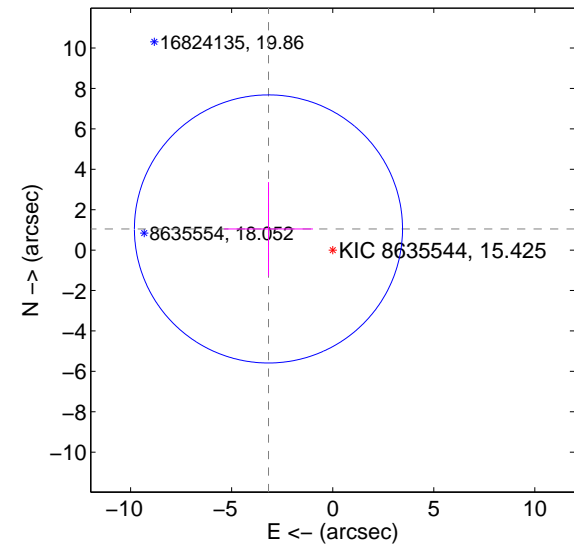
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

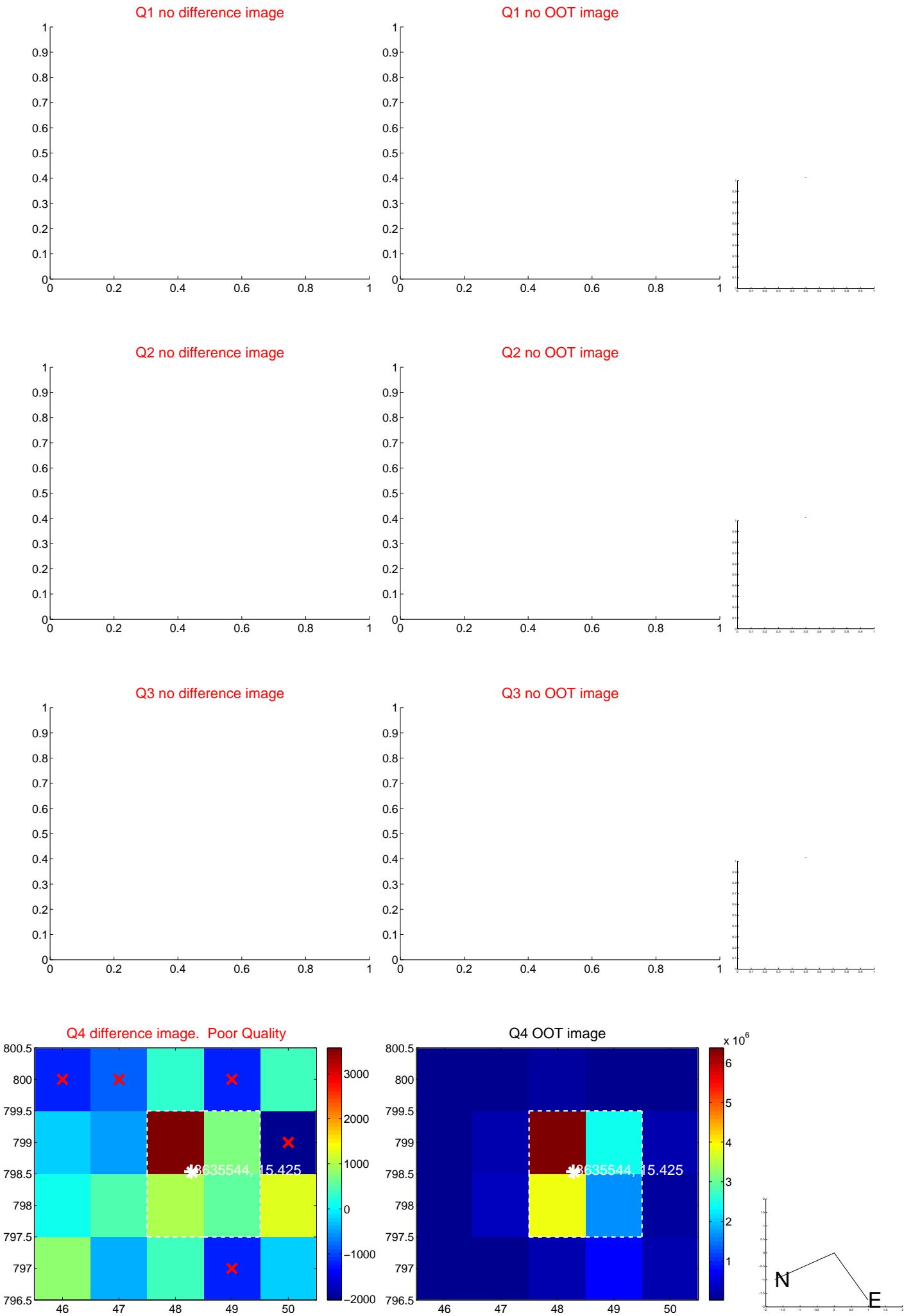


offset from photometric centroids

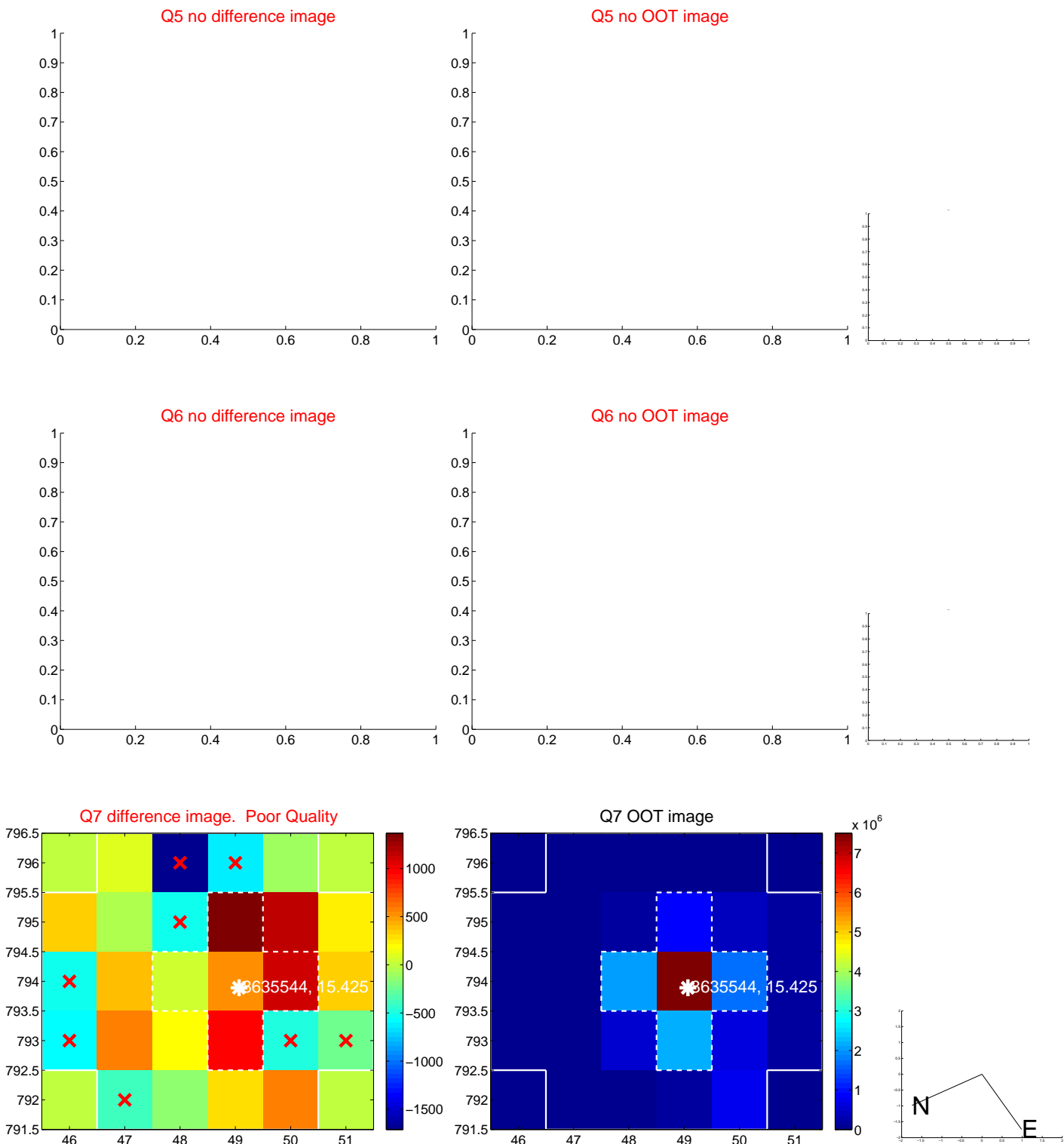


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . 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.

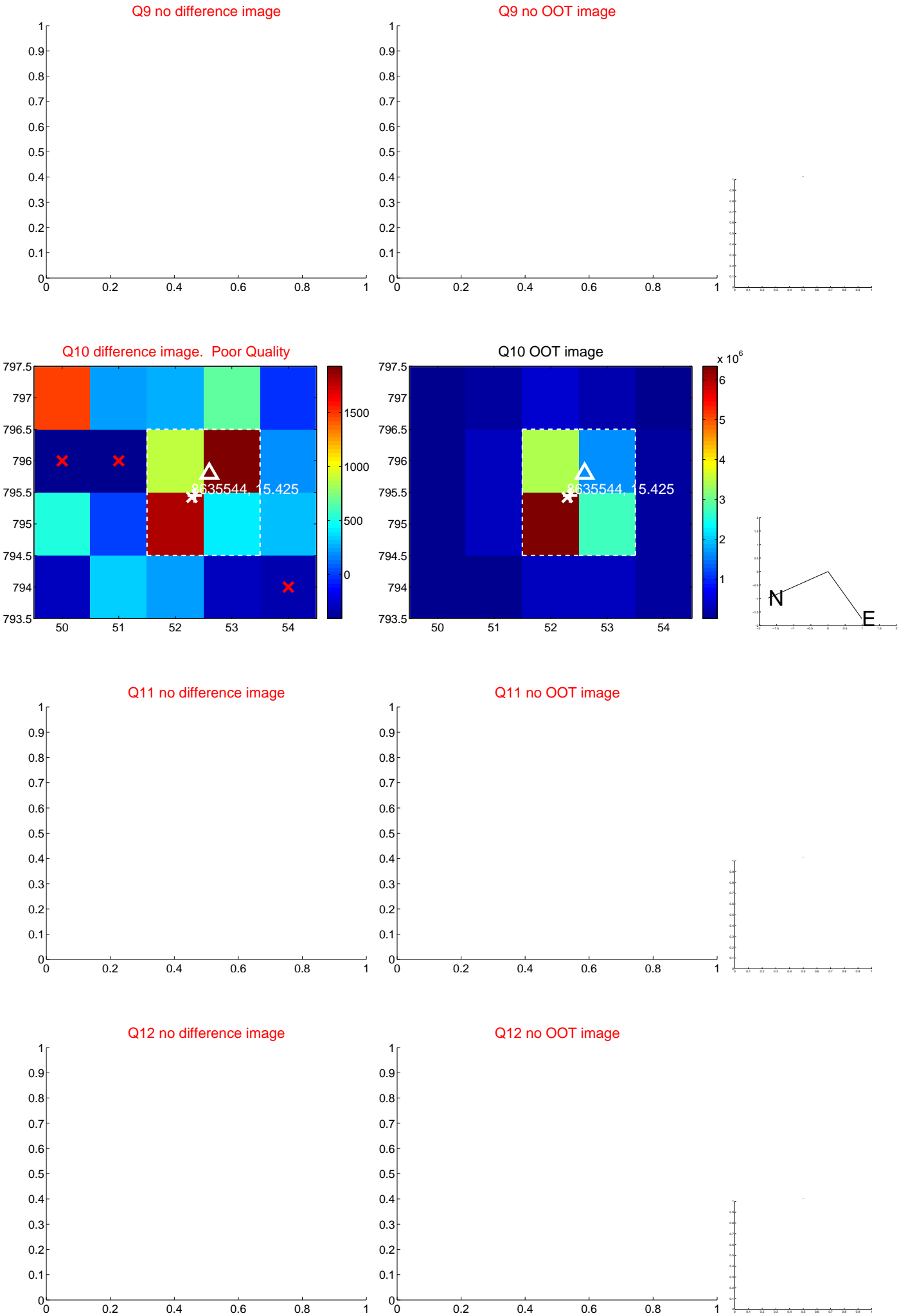
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



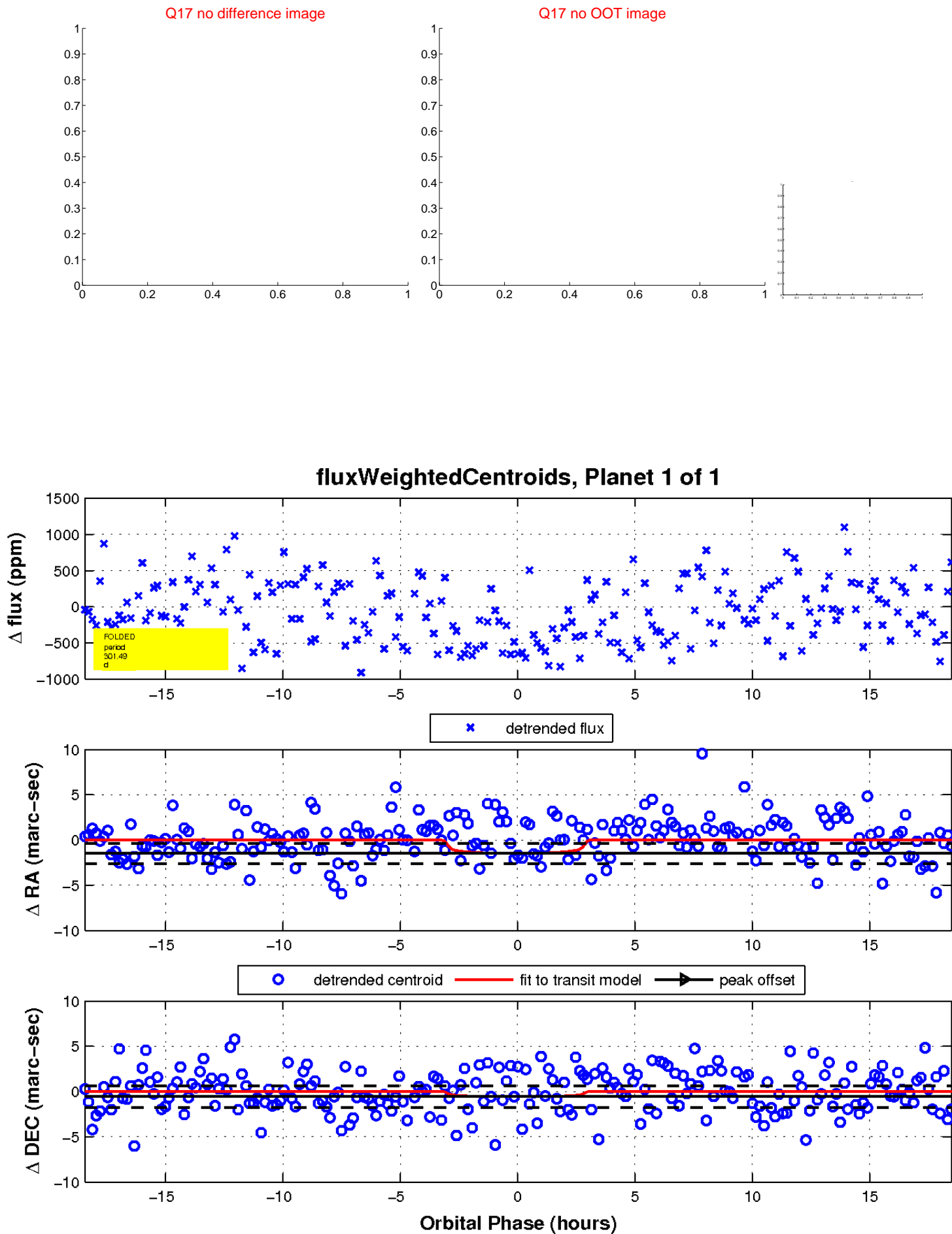
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



UKIRT Image

Declination

