

KIC 010319734

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})
010319734-01	OBS	No	3.361786	134.364216	49.3	15.262	7.6	6.7	0.94	5959	0.74	545.65

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010319734-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_KIC_POS

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

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

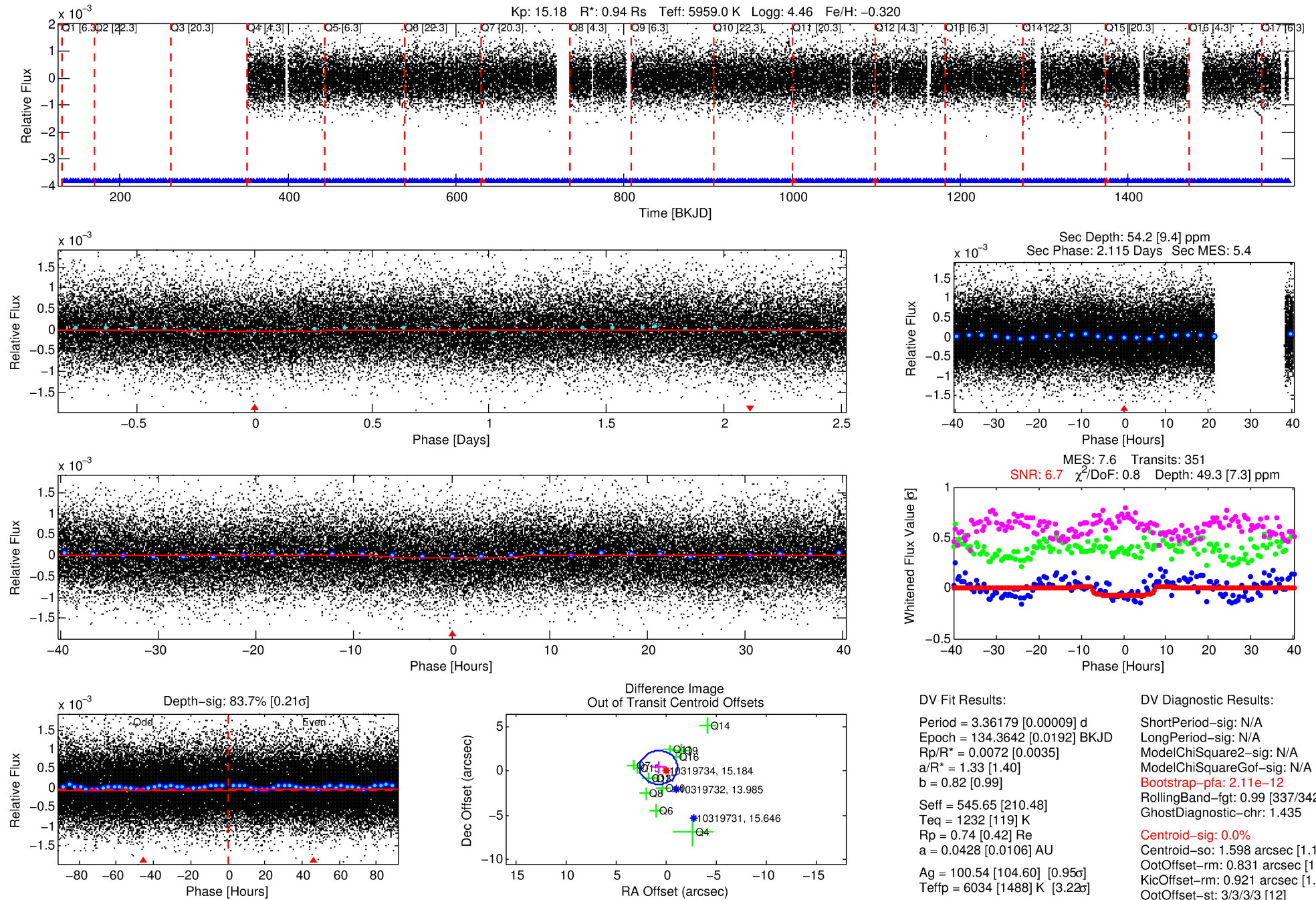
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010319734-01

No Significant Match Found

DV One-Page Summary

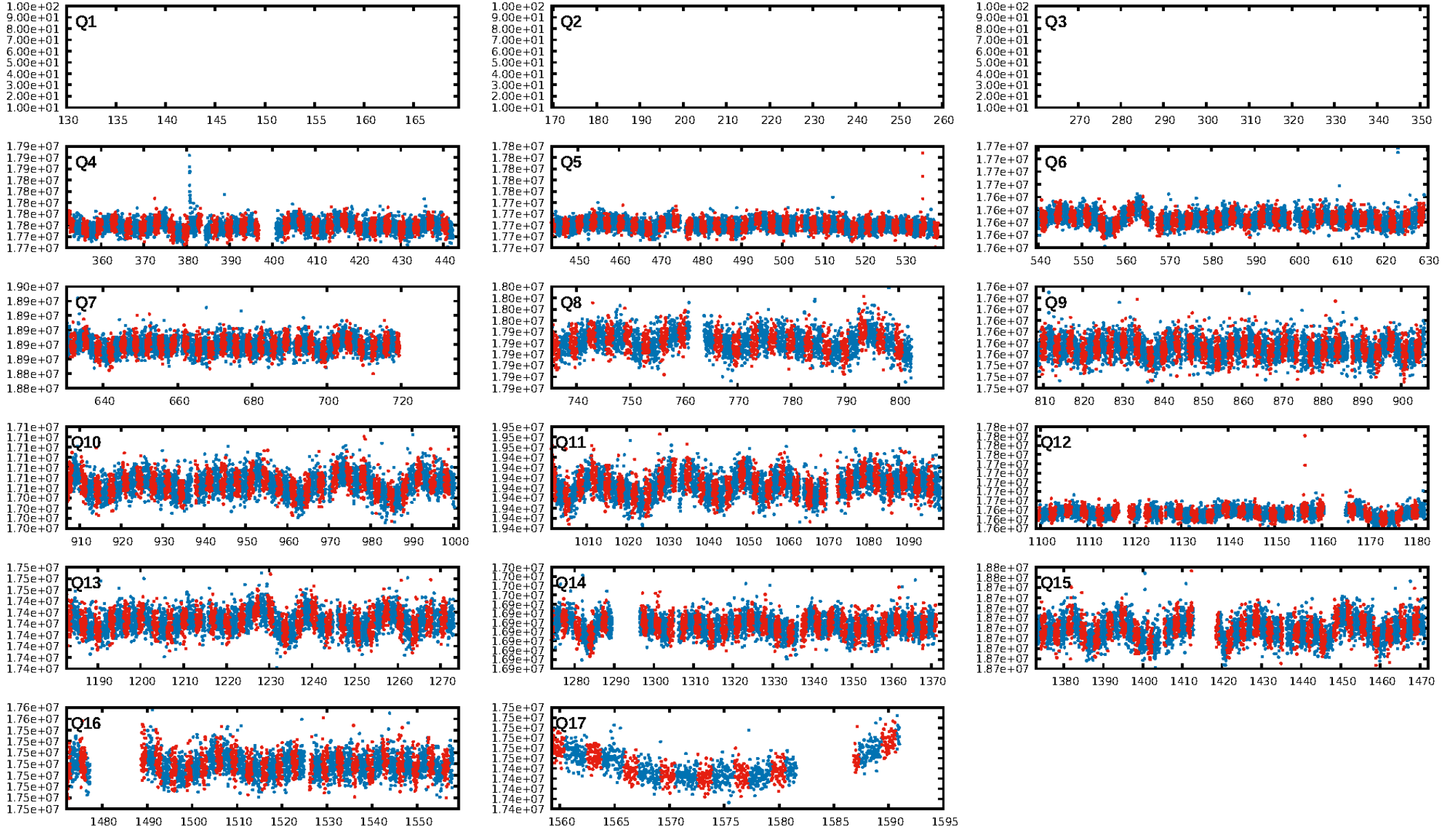
KIC: 10319734 Candidate: 1 of 1 Period: 3.362 d



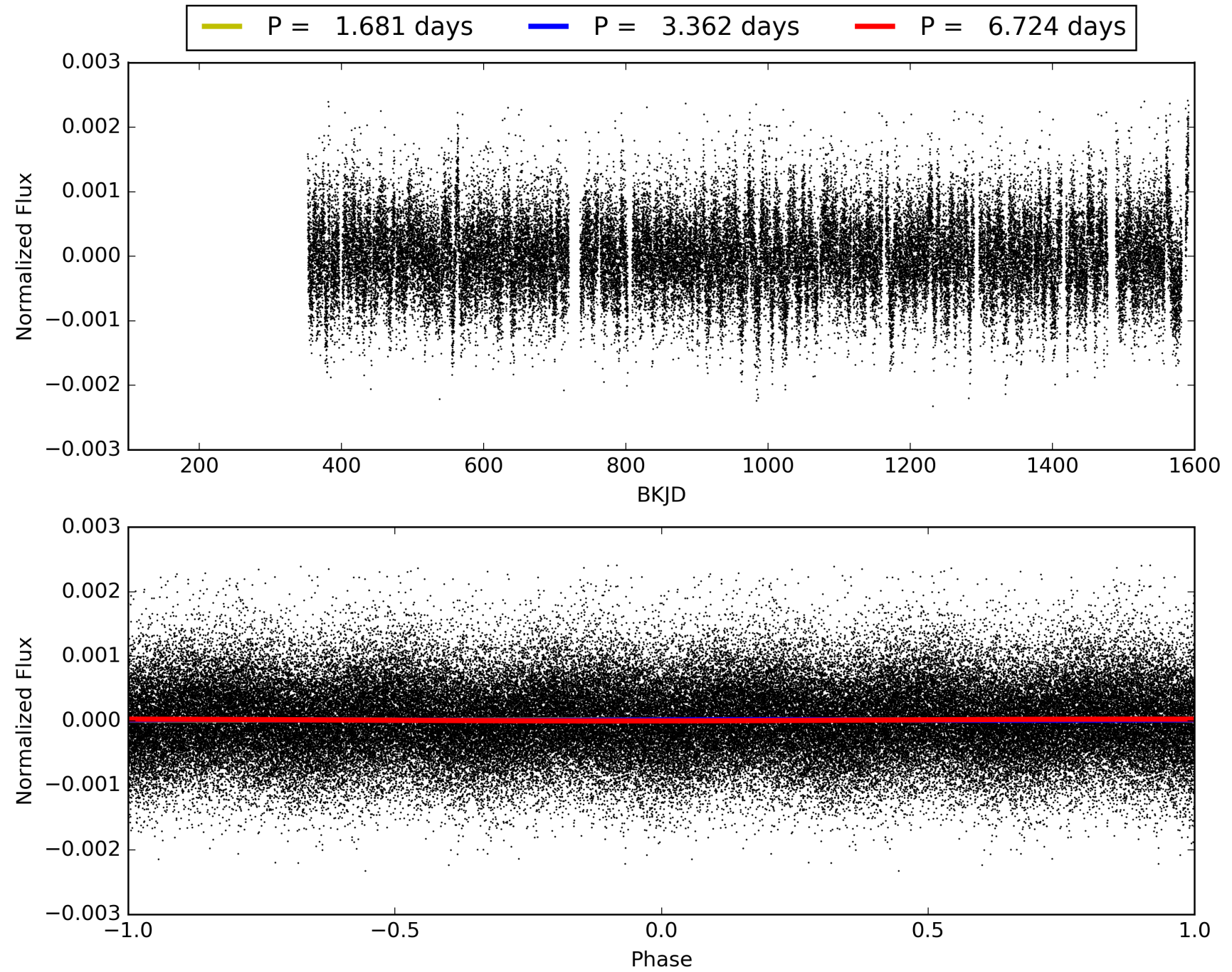
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 18:06:05 Z

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

TCE 010319734-01, PDC Light Curves

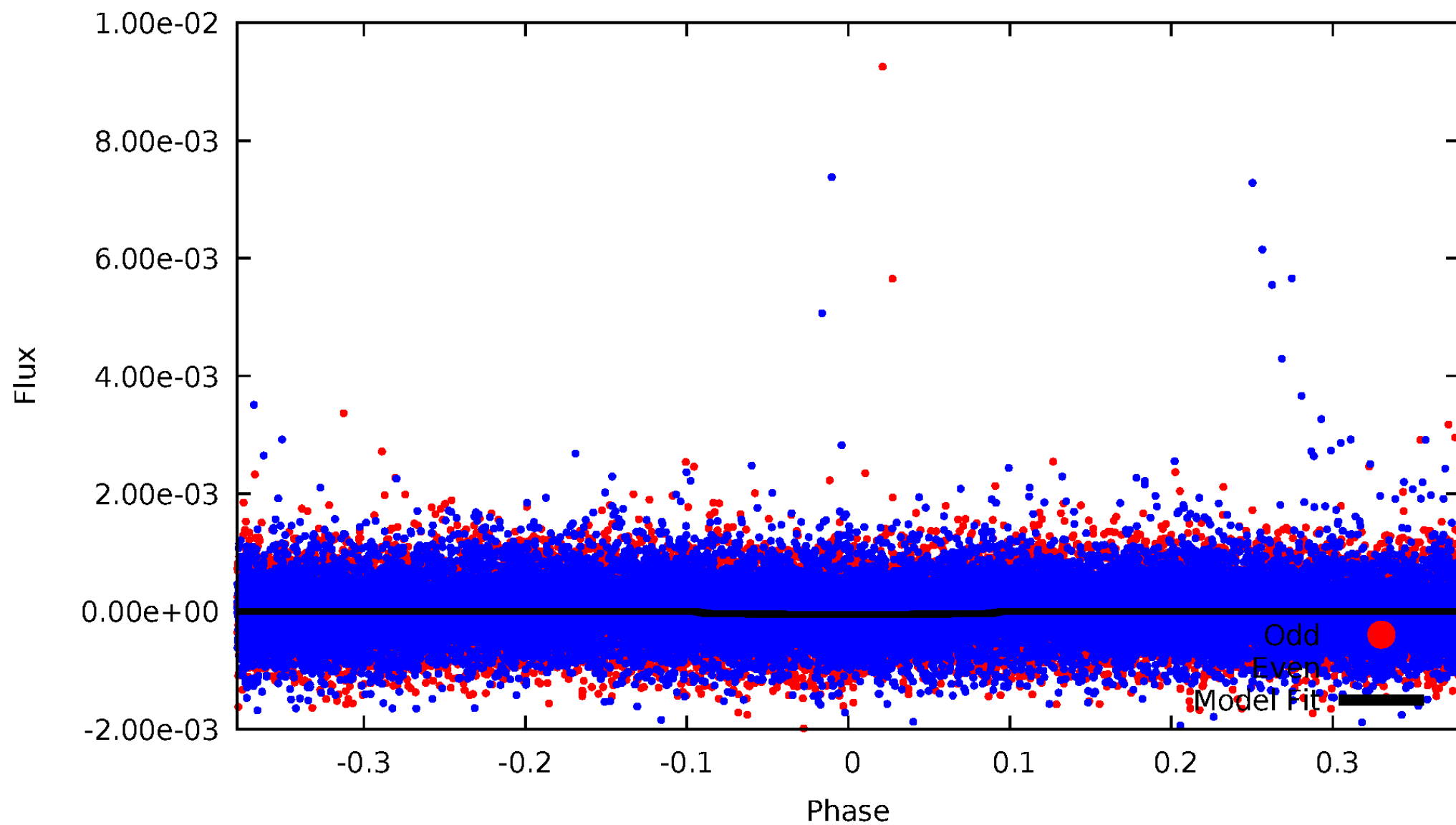


TCE 010319734-01



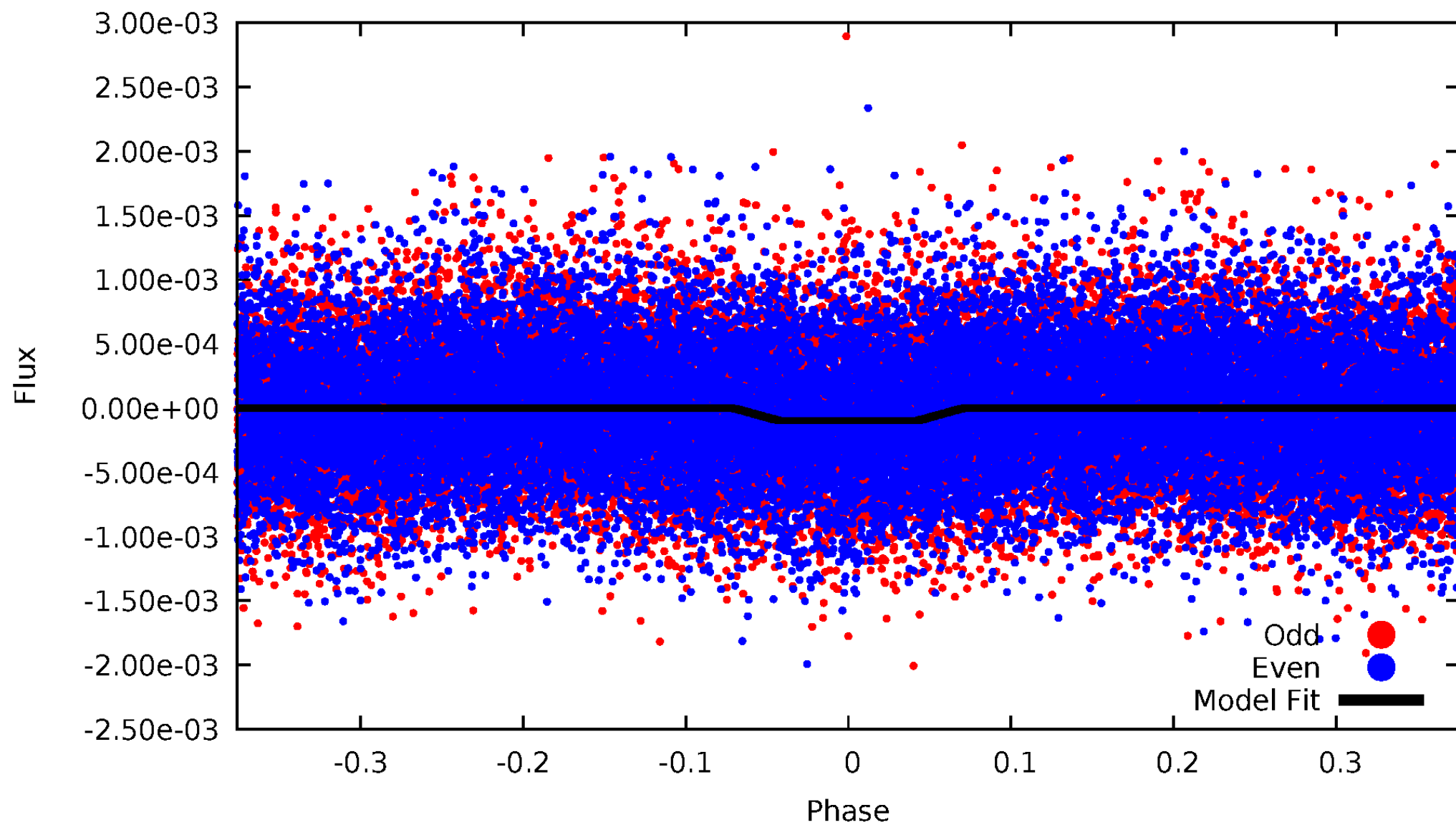
DV Odd/Even

TCE 010319734-01

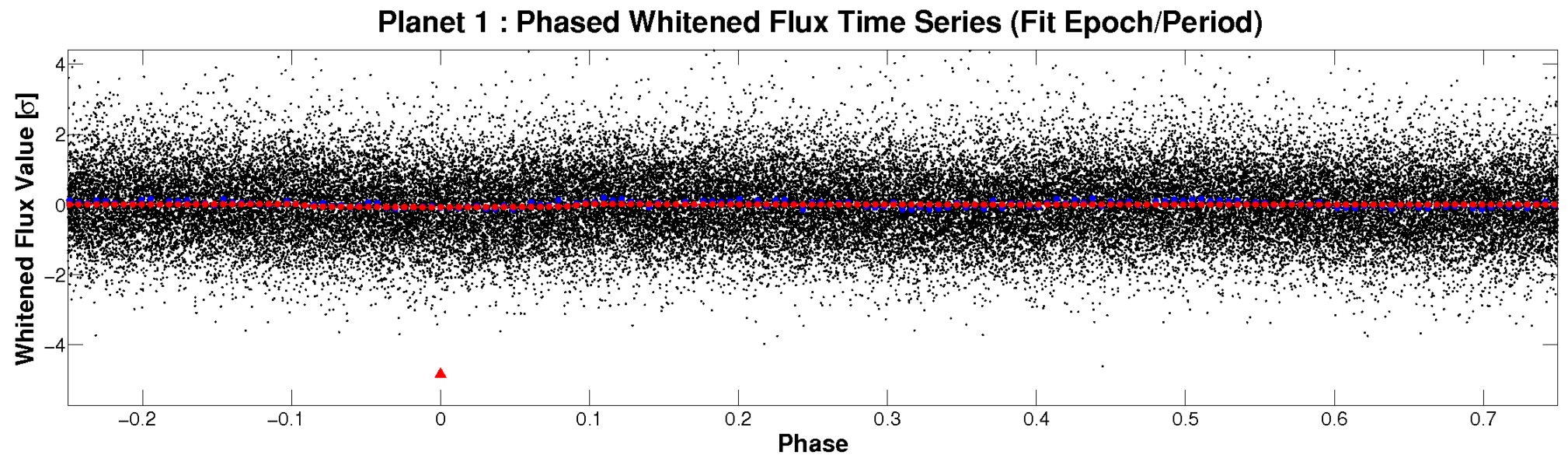
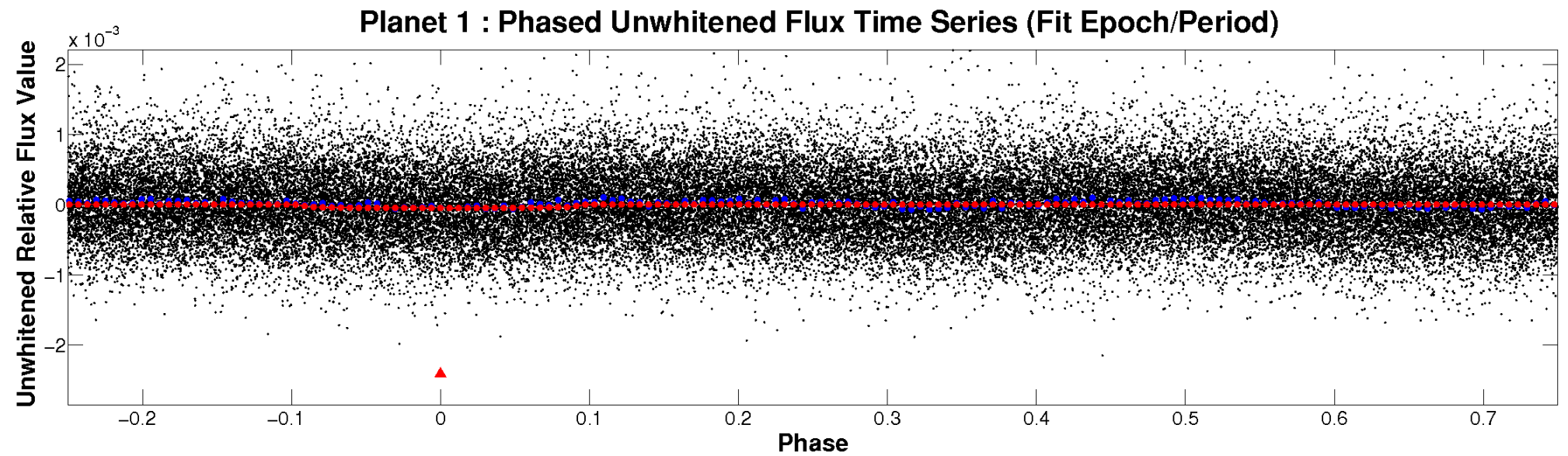


ALT Odd/Even

TCE 010319734-01

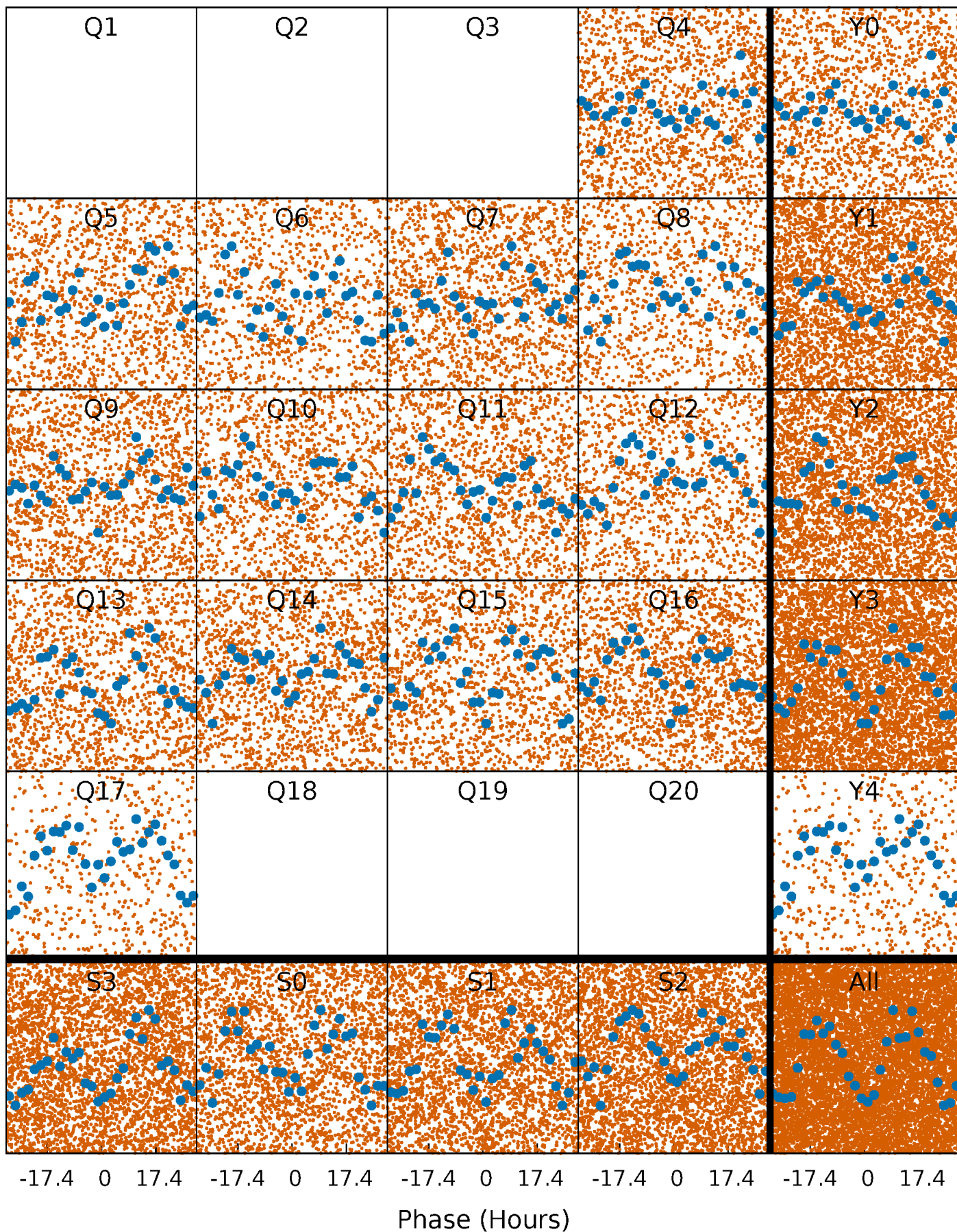


Non-Whitened Vs. Whitened Light Curve



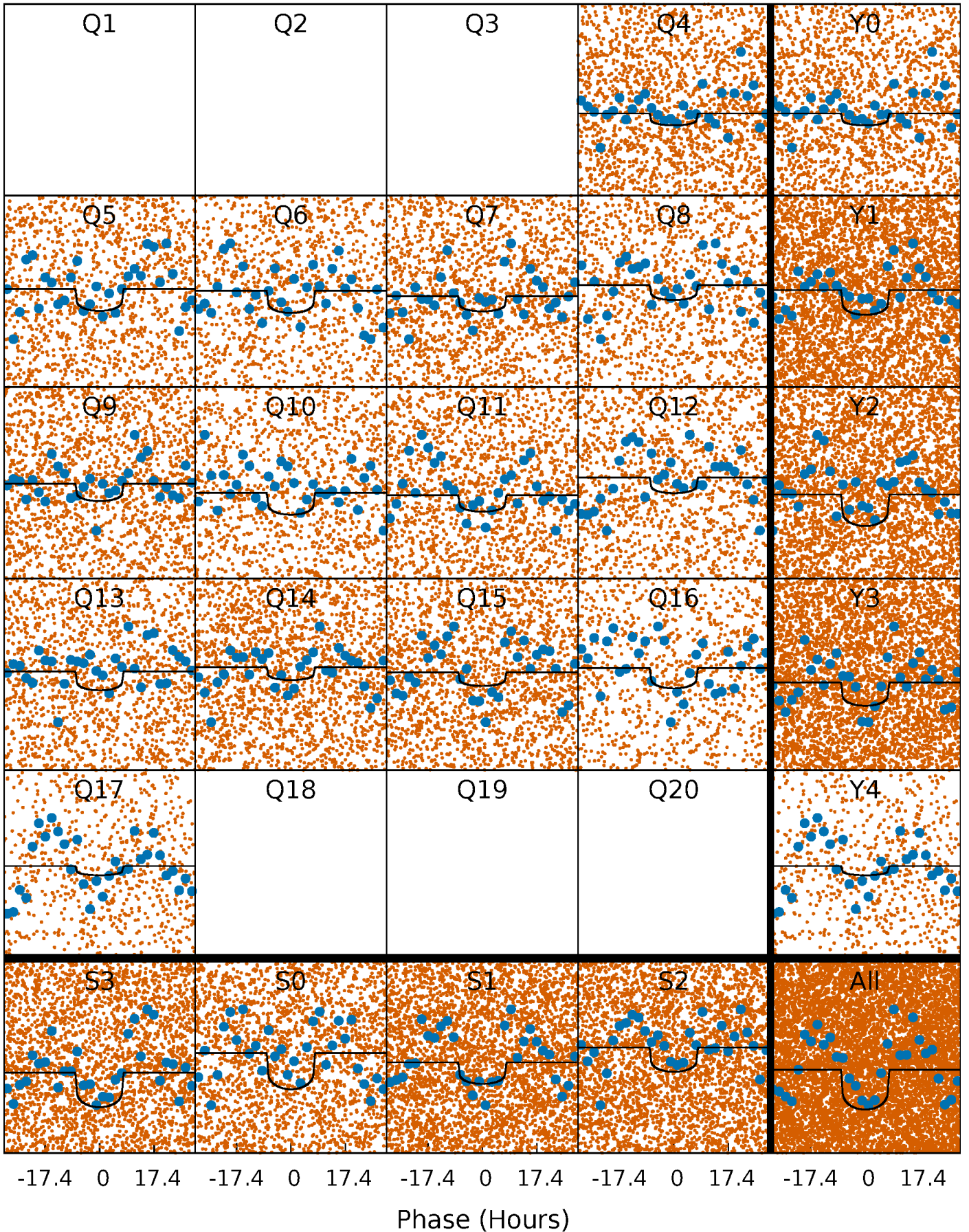
PDC Quarter-Phased Transit Curves

TCE 010319734-01 P= 3.361786 Days $T_0=134.364216$ (BKJD)



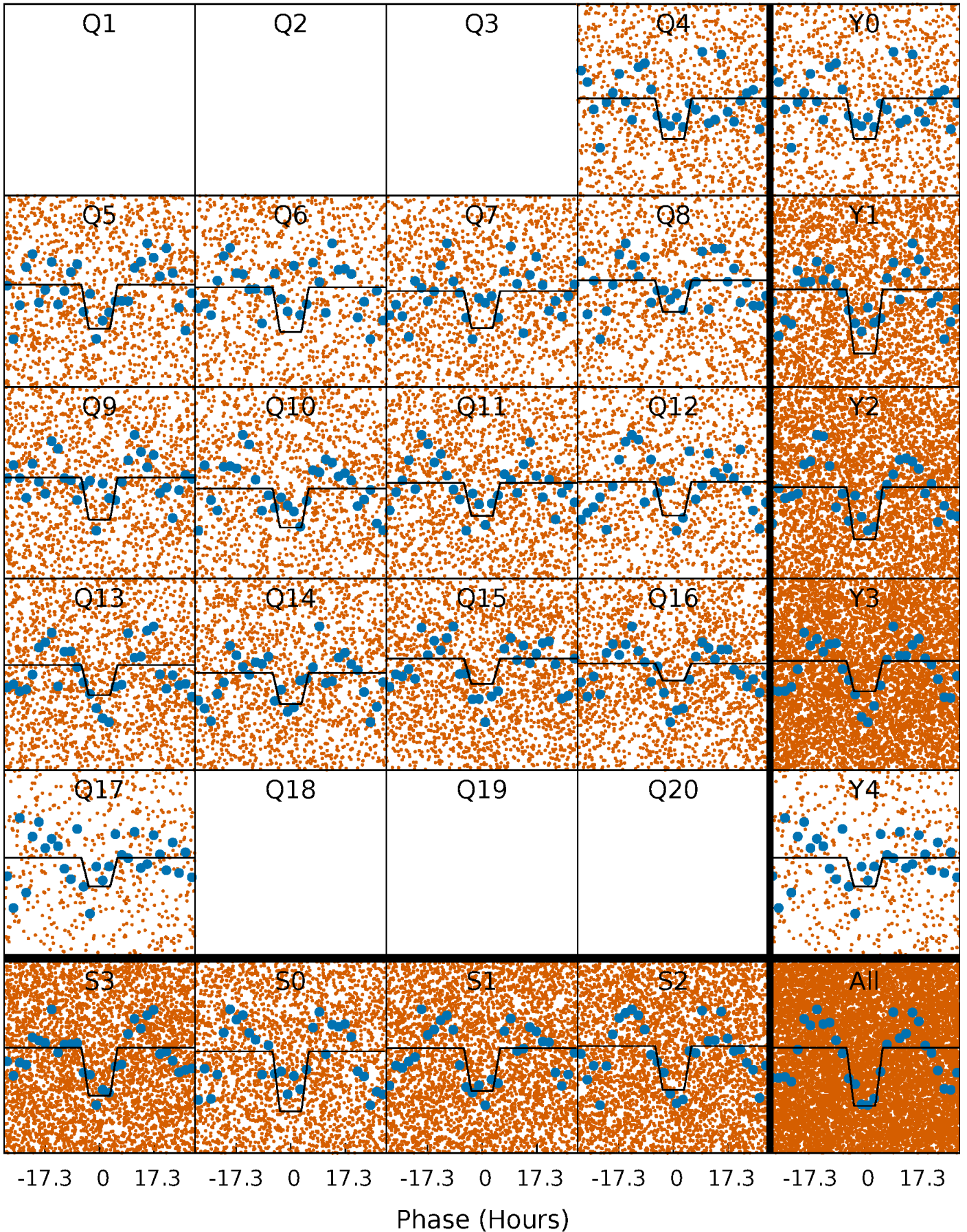
DV Quarter-Phased Transit Curves

TCE 010319734-01 P= 3.361786 Days $T_0=134.364216$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

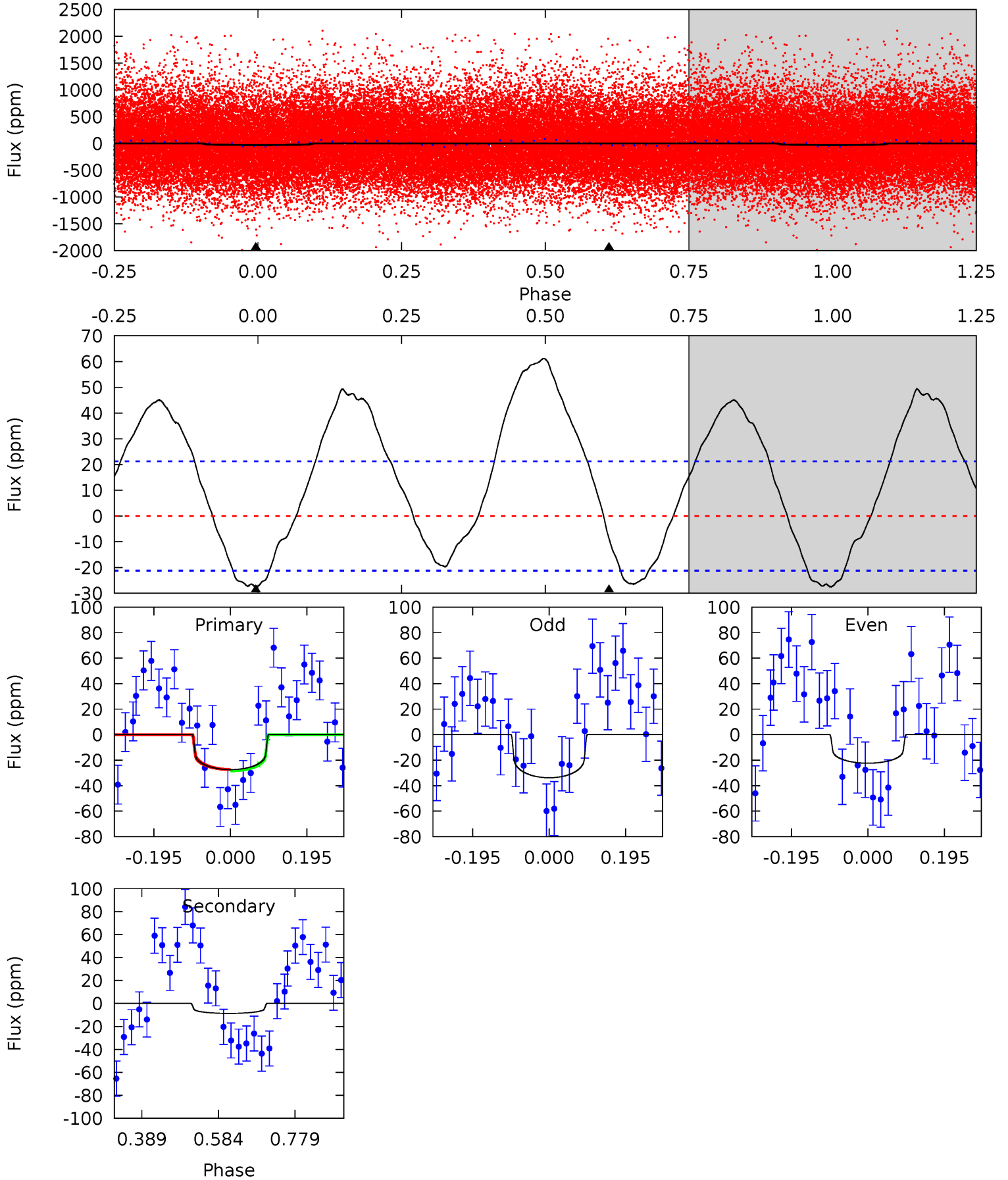
TCE 010319734-01 P= 3.361827 Days $T_0=134.349703$ (BKJD)



DV Model-Shift Uniqueness Test

010319734-01, P = 3.361786 Days, E = 134.364216 Days

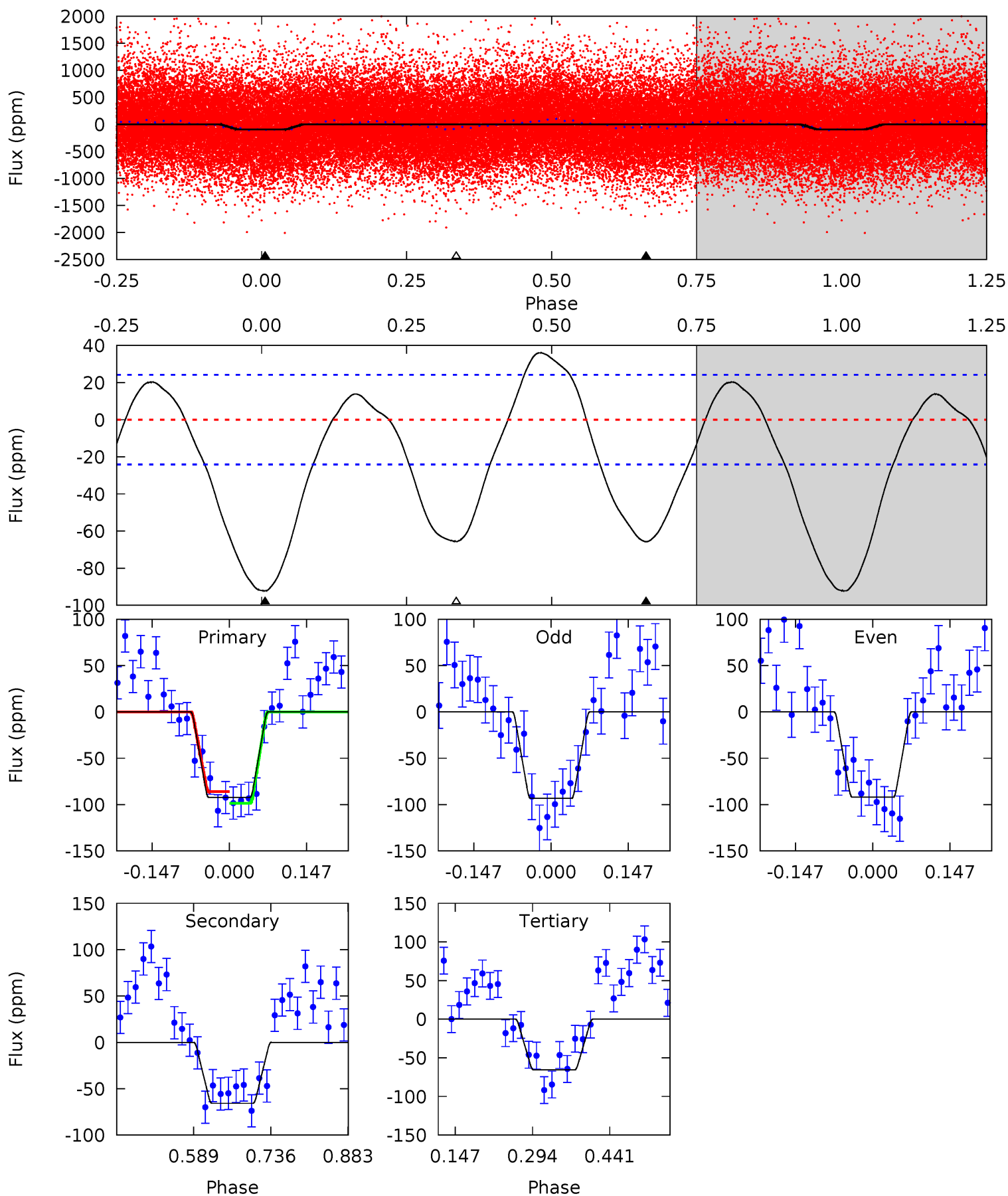
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.71	1.80	0	0	4.42	1.30	3.64	5.71	5.71	1.80	1.80	1.19	0.90	0.69	0.11



Alt Model-Shift Uniqueness Test

010319734-01, P = 3.361827 Days, E = 134.349703 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.1	12.2	12.2	0	4.48	1.45	6.16	4.95	17.1	0.02	12.2	0.11	1.00	0.28	1.16



Stellar Parameters For KIC 010319734

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5959^{+188}_{-209}	$4.457^{+0.084}_{-0.196}$	$-0.320^{+0.300}_{-0.300}$	$0.940^{+0.277}_{-0.119}$	$0.923^{+0.119}_{-0.108}$	$1.565^{+0.658}_{-0.785}$
	+3%/-4%	+2%/-4%	+94%/-94%	+29%/-13%	+13%/-12%	+42%/-50%
Source	KIC0	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 010319734-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-9 ± 5	$0.75^{+0.39}_{-0.34}$	1742^{+128}_{-93}	4075^{+1130}_{-728}	15^{+36}_{-10}
Alt.	-66 ± 5	$1.06^{+0.39}_{-0.37}$	1751^{+131}_{-99}	5392^{+1304}_{-688}	57^{+78}_{-27}

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 $A_{\text{obs}} \gg 1.0$

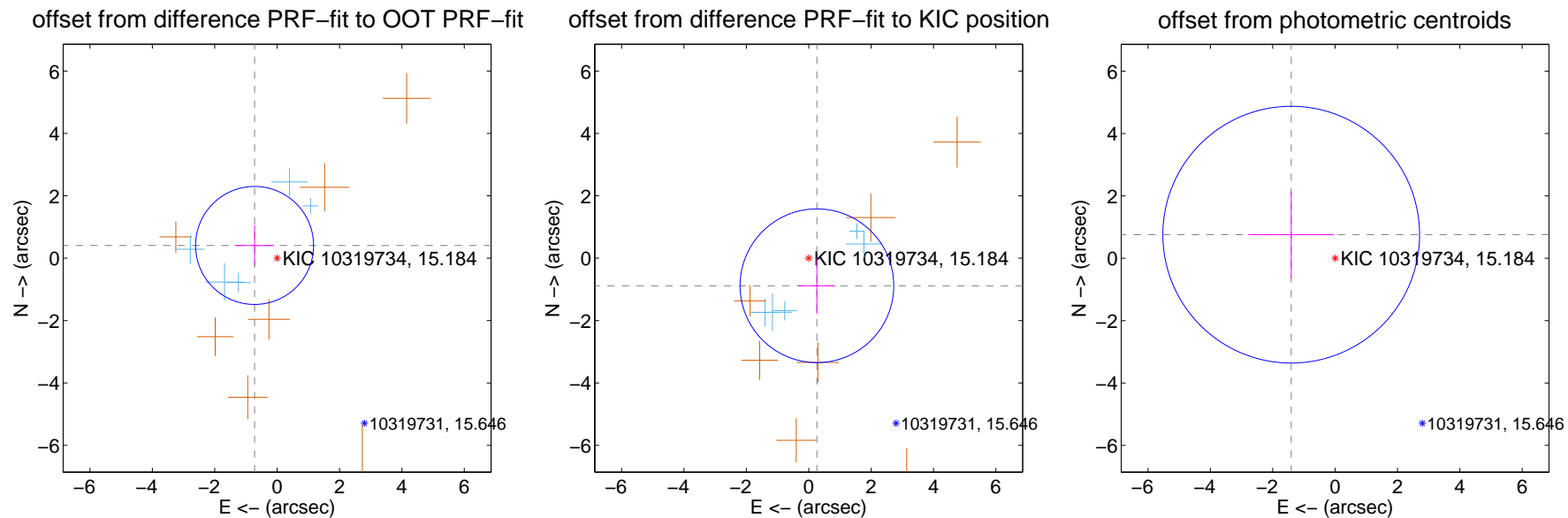
DV Centroid Data

Supplemental centroid analysis for 010319734-01. Kepler magnitude: 15.18. Transit SNR 6.65

There are 5 quarters with good PRF difference image offsets

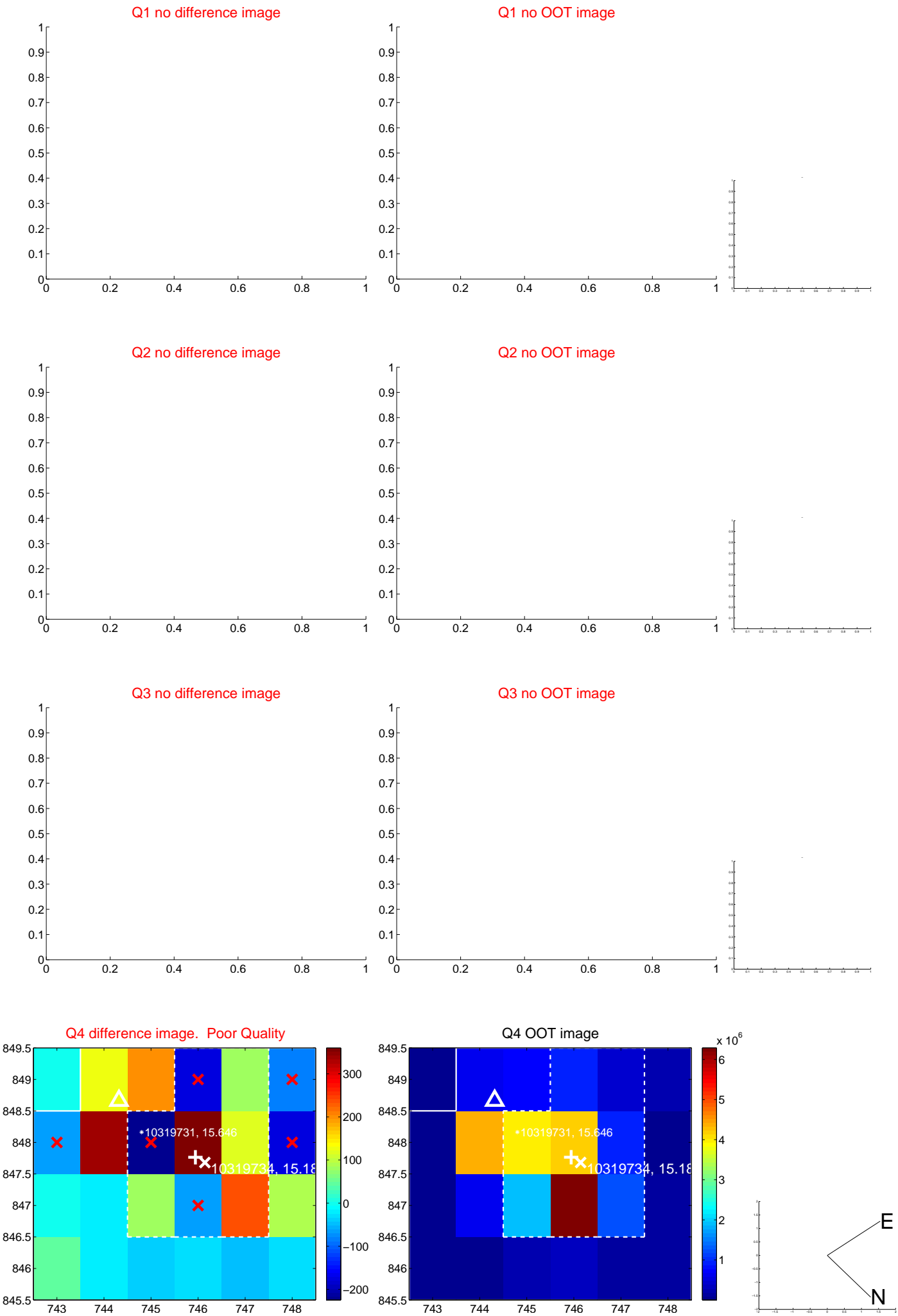
The direct PRF centroid is offset from the target star catalog position by about 1.02 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.831 ± 0.631	1.32	0.723 ± 0.625	0.409 ± 0.647
PRF-fit source offset from KIC position	0.921 ± 0.821	1.12	-0.262 ± 0.596	-0.883 ± 0.902
photometric centroid source offset	1.60 ± 1.37	1.16	1.41 ± 1.37	0.76 ± 1.38

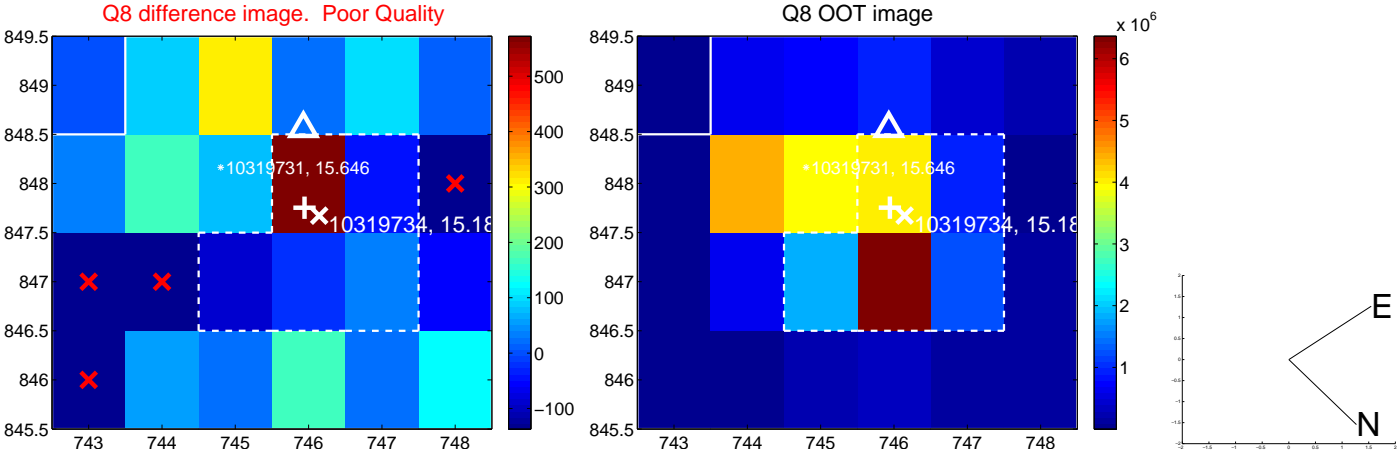
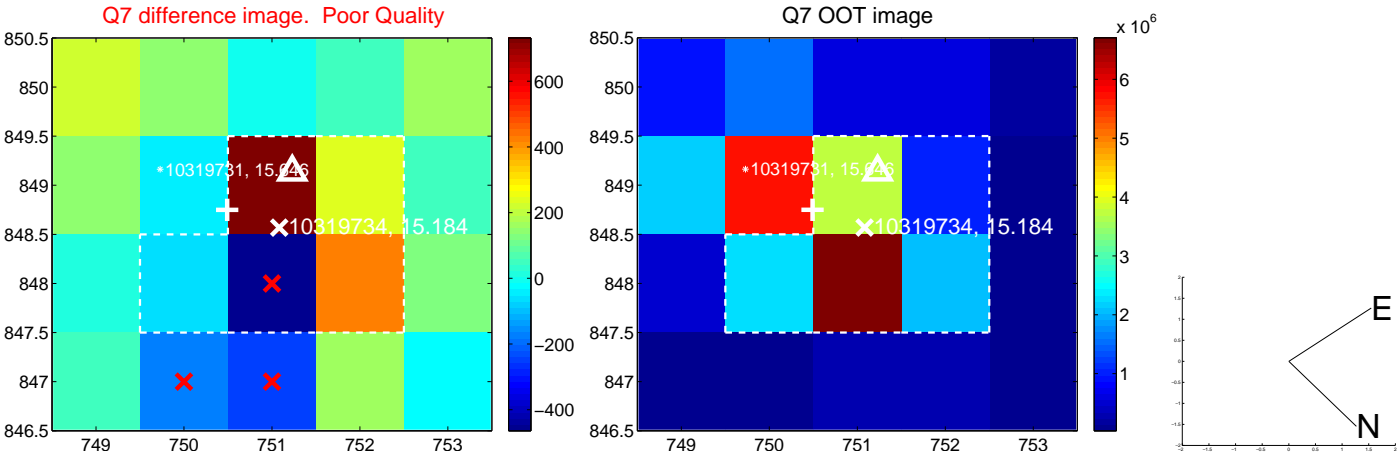
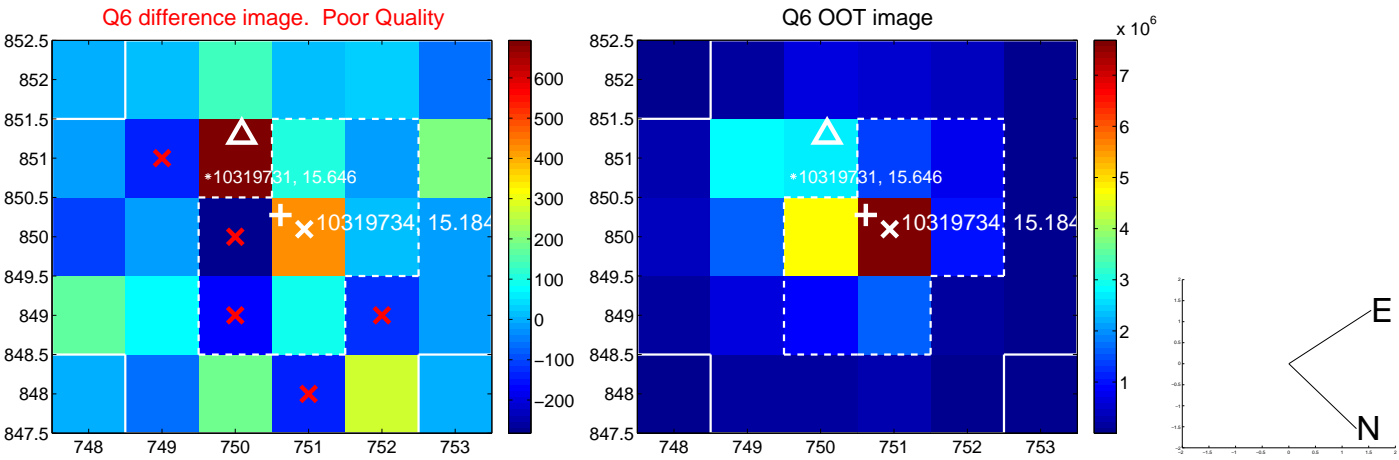
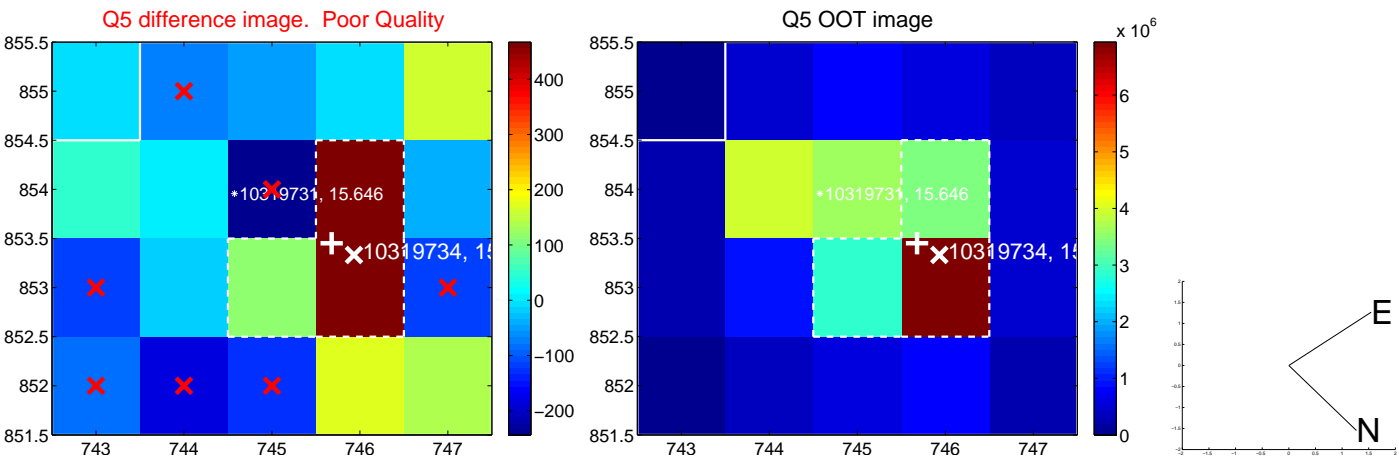


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

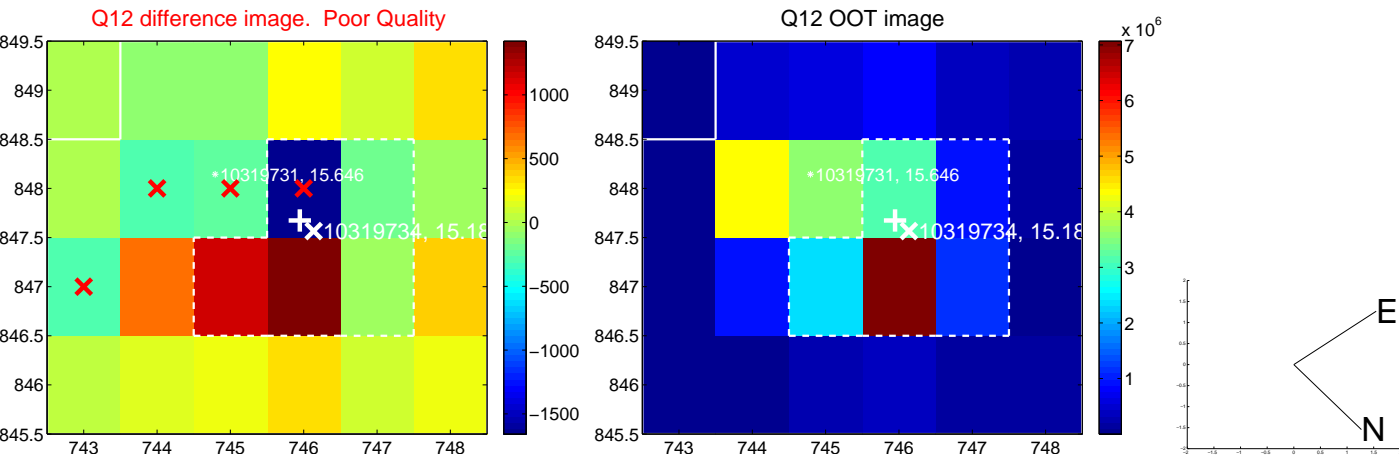
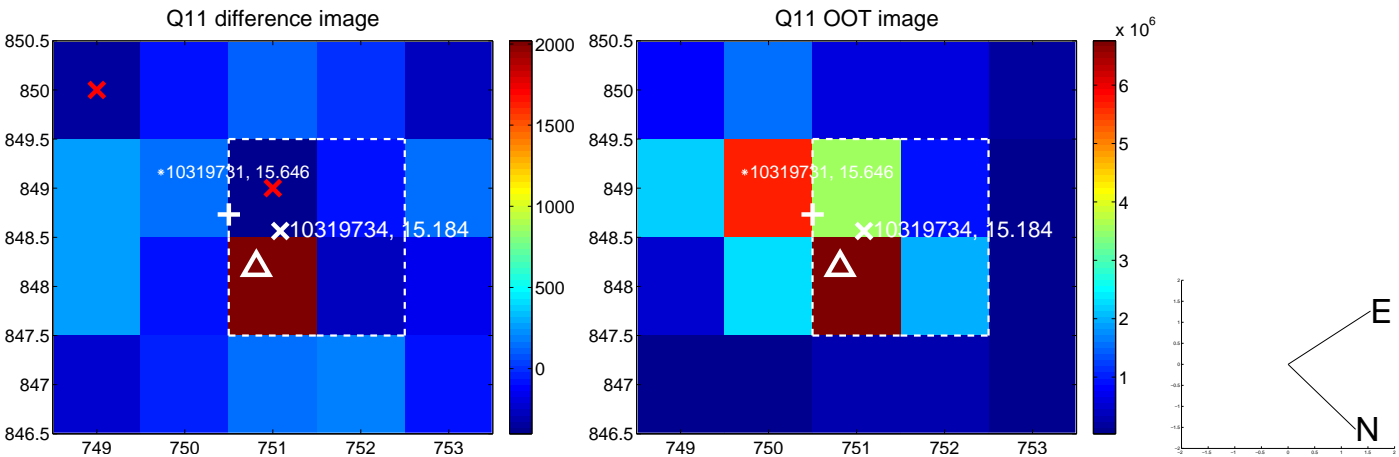
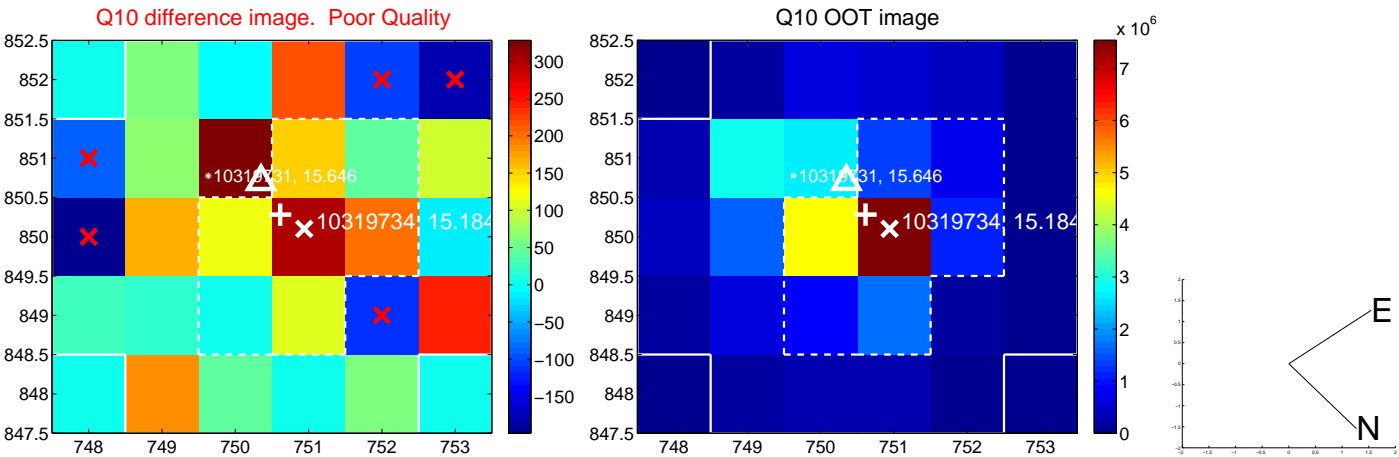
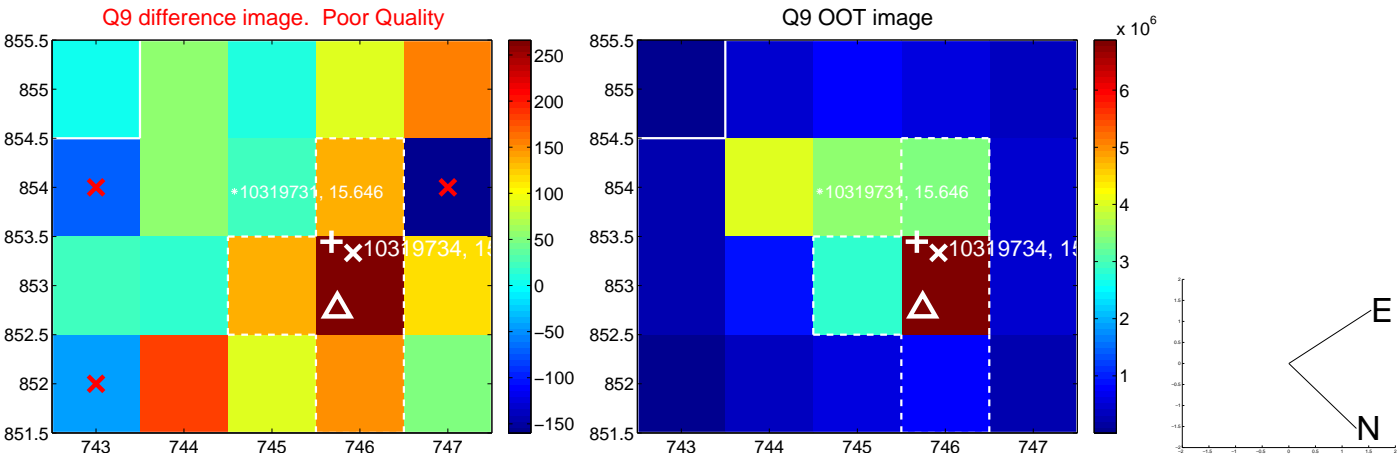
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



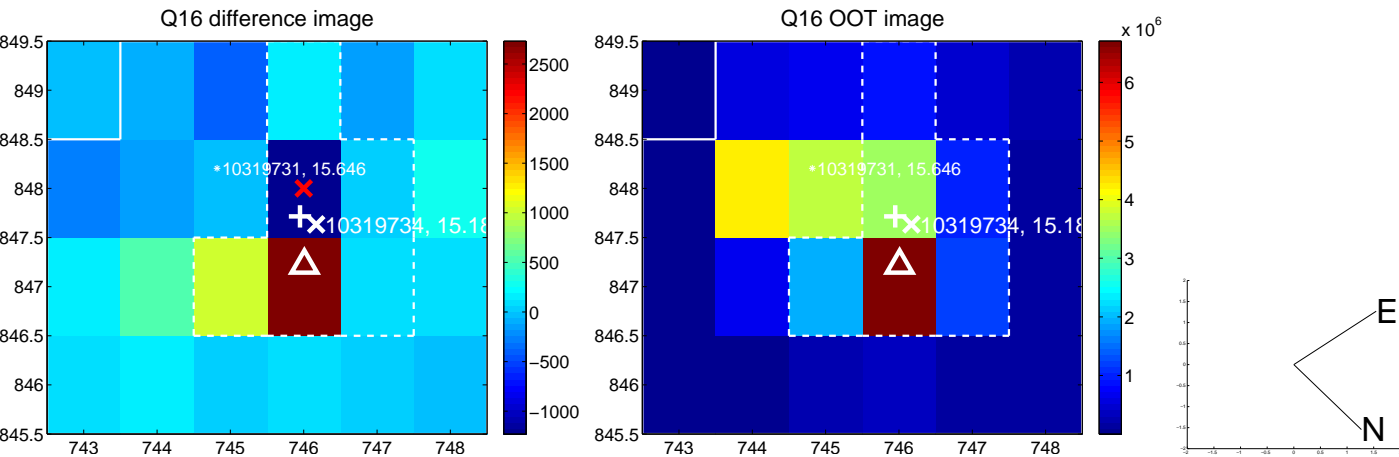
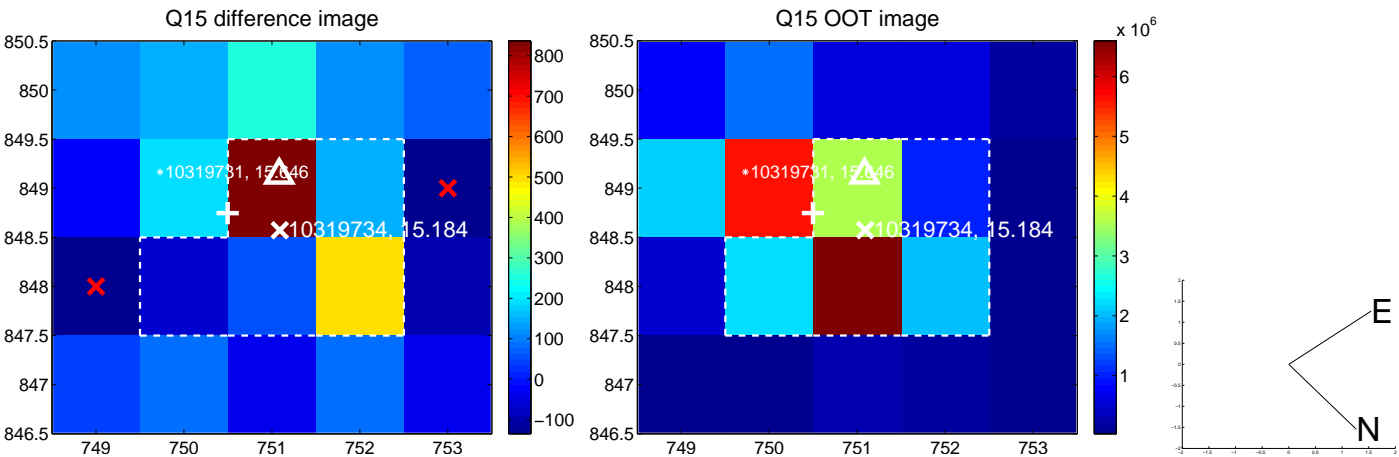
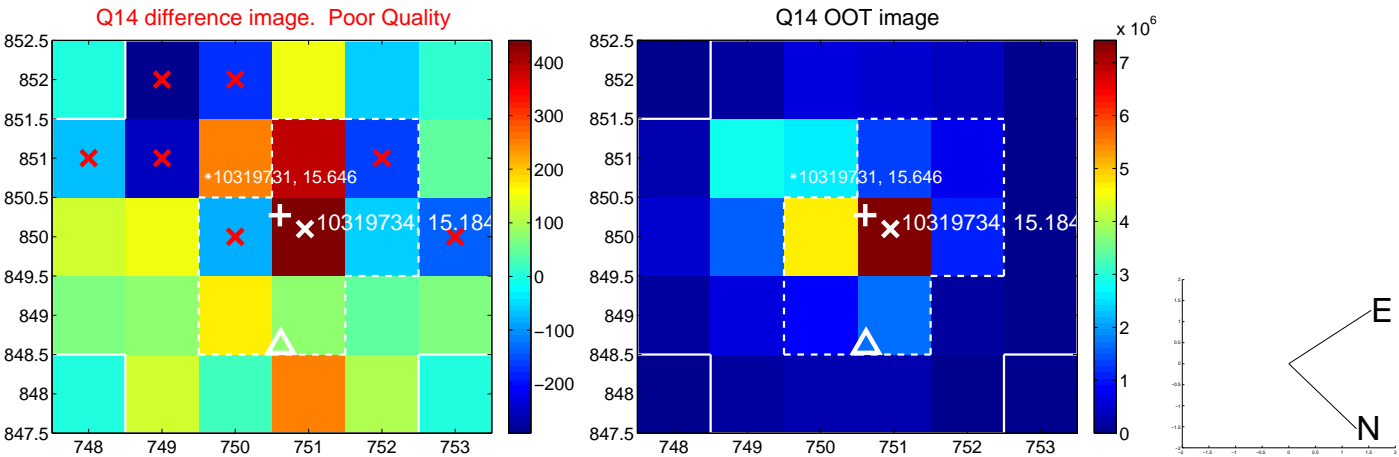
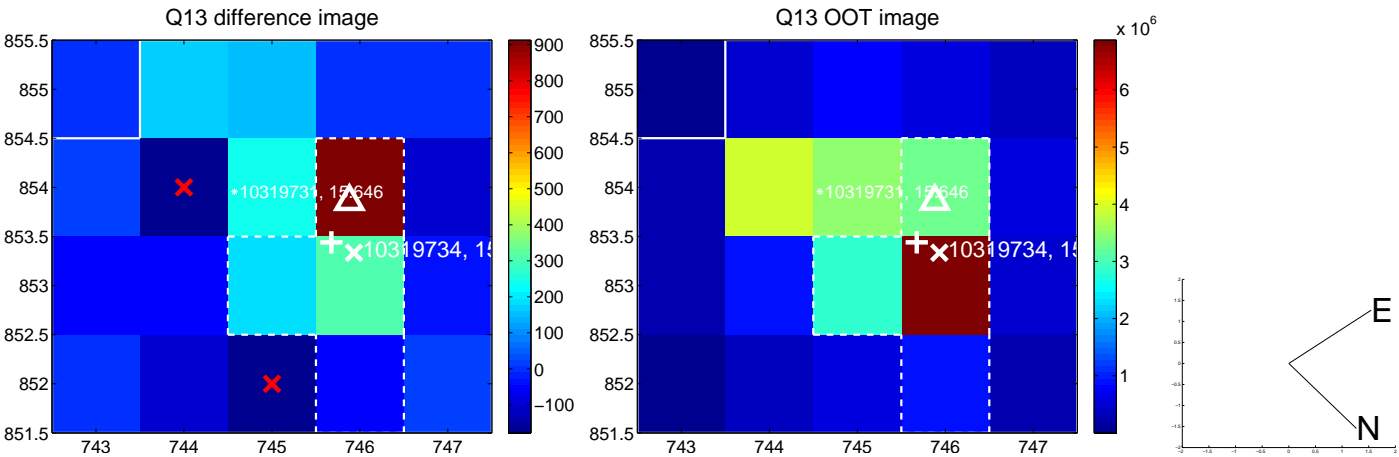
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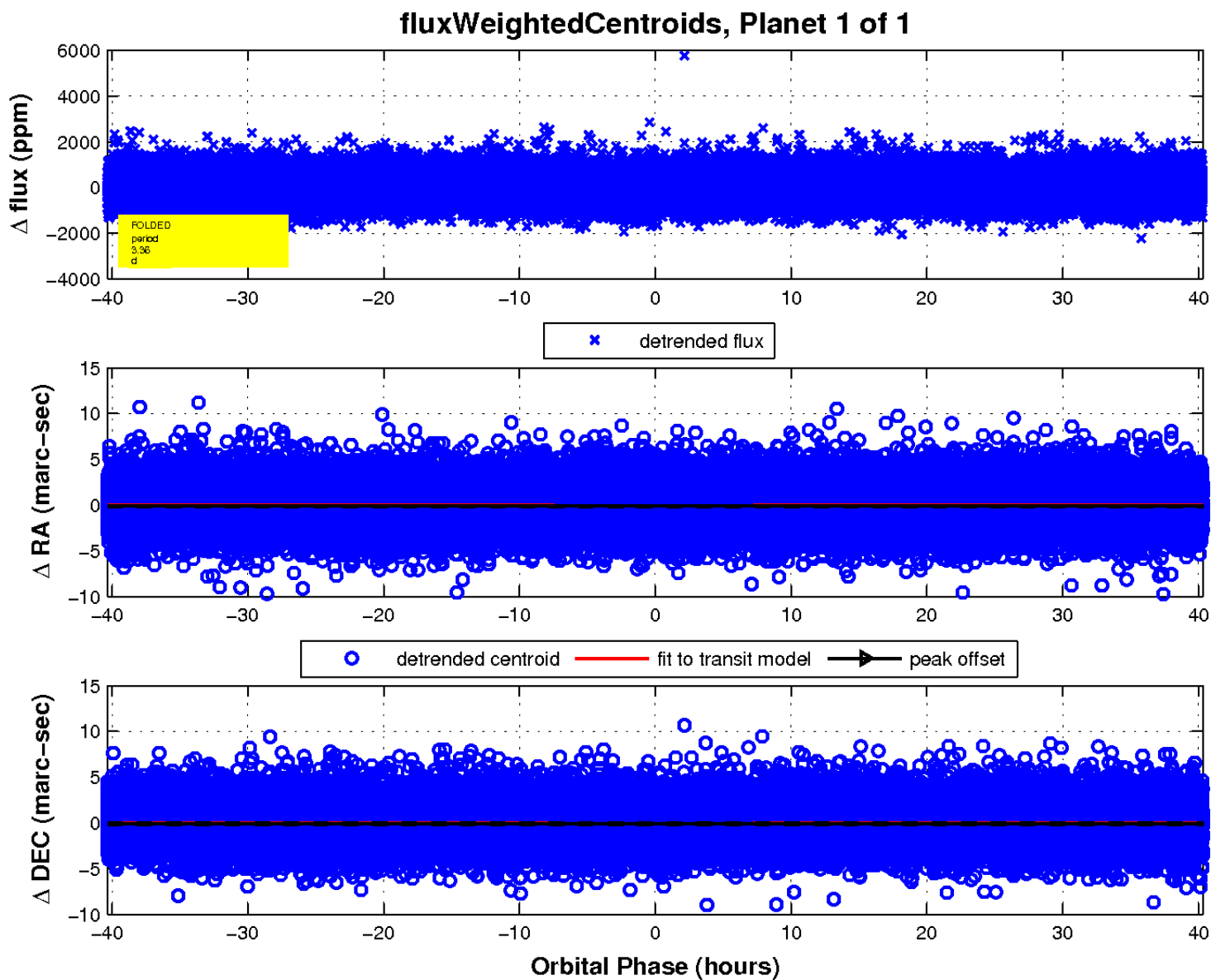
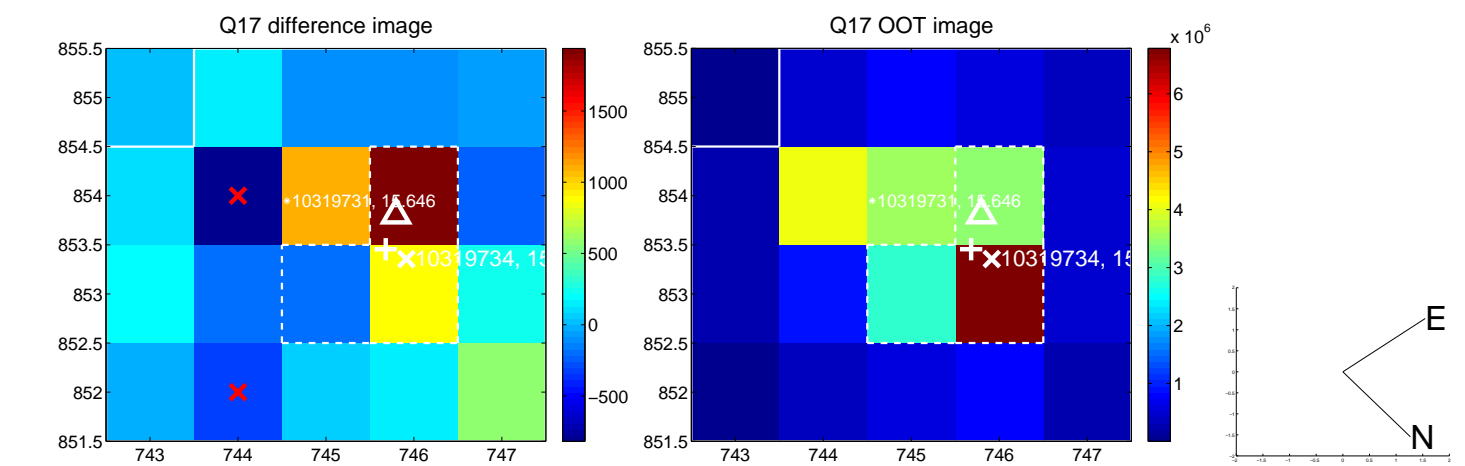
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UKIRT Image

Declination

