

KIC 003440840

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})
003440840-01	OBS	No	0.566535	131.682788	12.2	4.332	11.0	6.7	4.01	6894	1.51	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003440840-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—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.

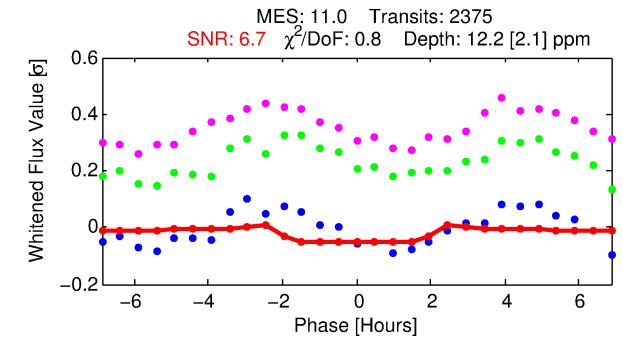
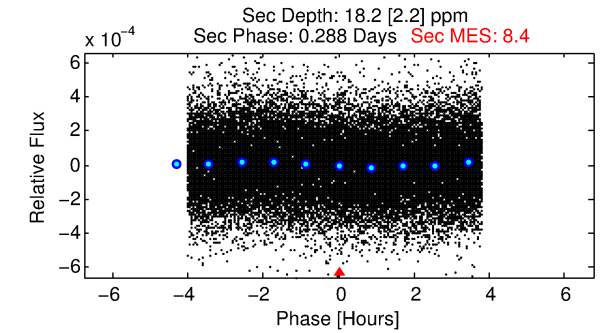
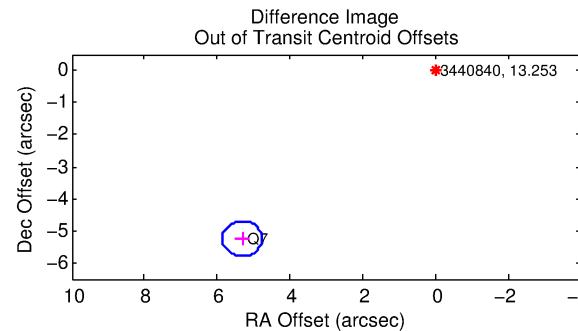
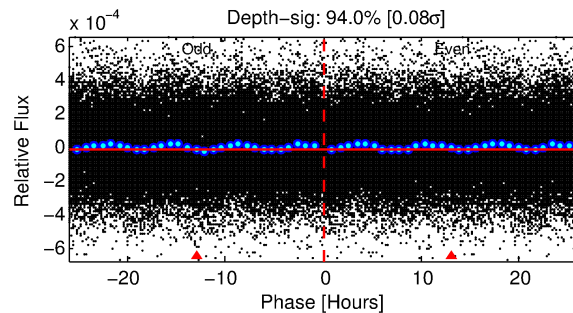
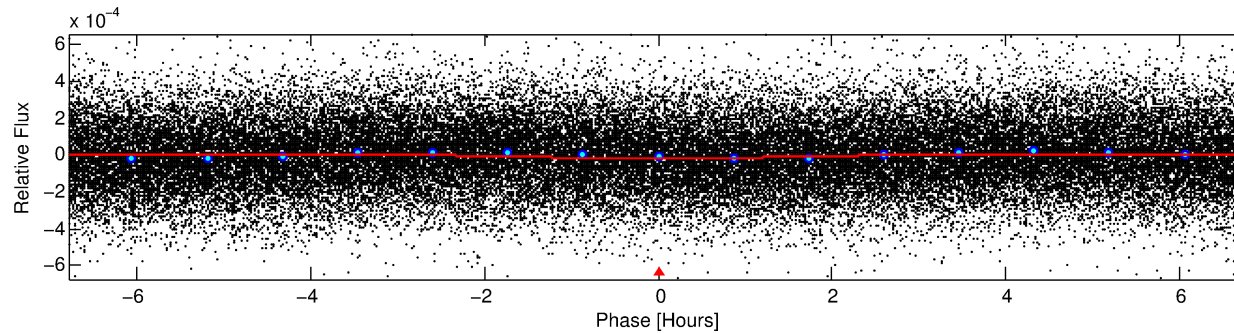
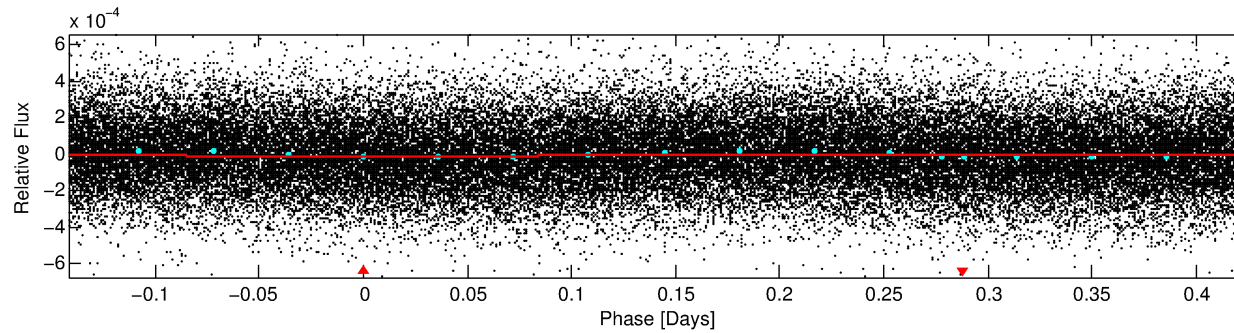
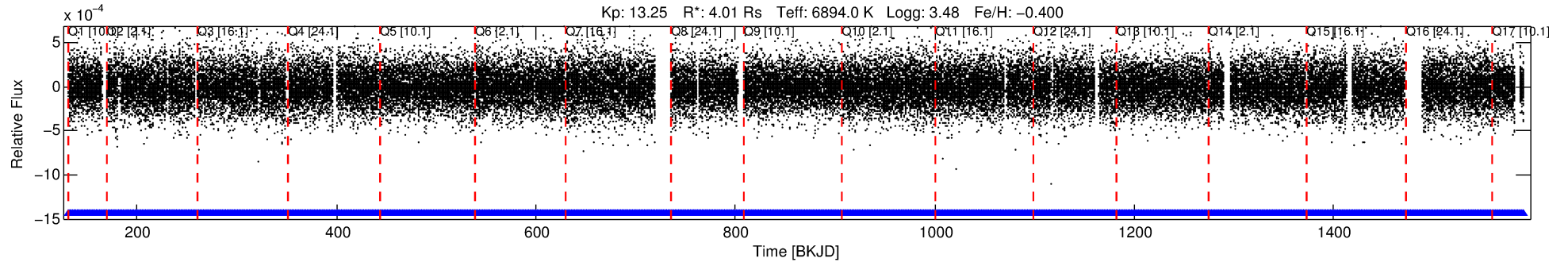
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003440840-01

No Significant Match Found

DV One-Page Summary

KIC: 3440840 Candidate: 1 of 1 Period: 0.567 d



DV Fit Results:

Period = 0.56654 [0.00002] d
Epoch = 131.6828 [0.0053] BKJD
Rp/R* = 0.0034 [0.0025]
a/R* = 1.10 [0.84]
b = 0.71 [3.03]
Seff = N/A
Teq = N/A
Rp = 1.51 [1.28] Re
a = N/A
Ag = N/A
Teffp = N/A

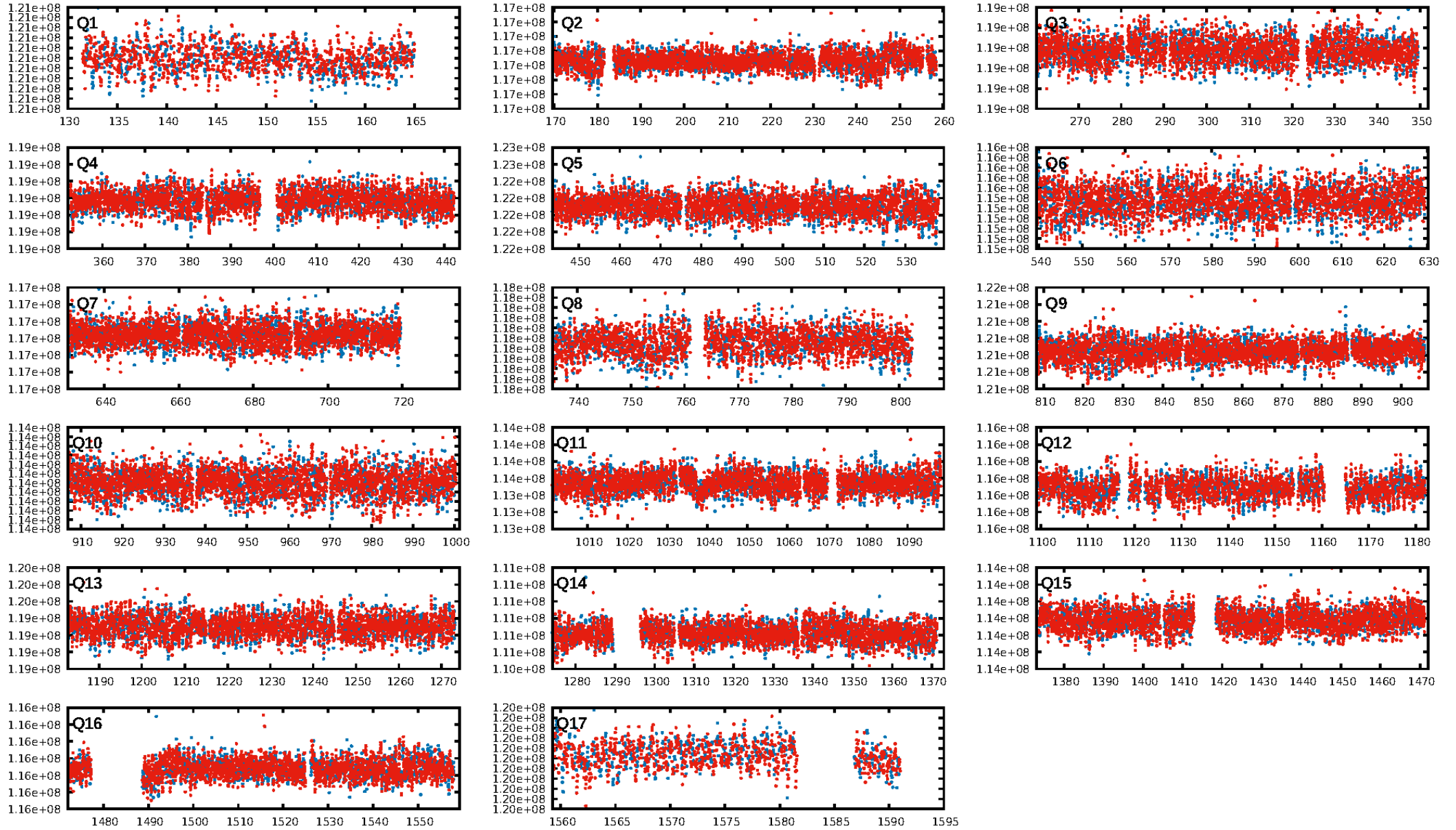
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.46e-16
RollingBand-fgt: 1.00 [2268/2268]
GhostDiagnostic-chr: -0.3375
Centroid-sig: 0.0%
Centroid-so: 3.293 arcsec [2.76 σ]
OotOffset-rm: 7.464 arcsec [40.92 σ]
KicOffset-rm: 7.451 arcsec [40.84 σ]
OotOffset-st: 0/1/0/0 [1]
KicOffset-st: 0/1/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [17/17]

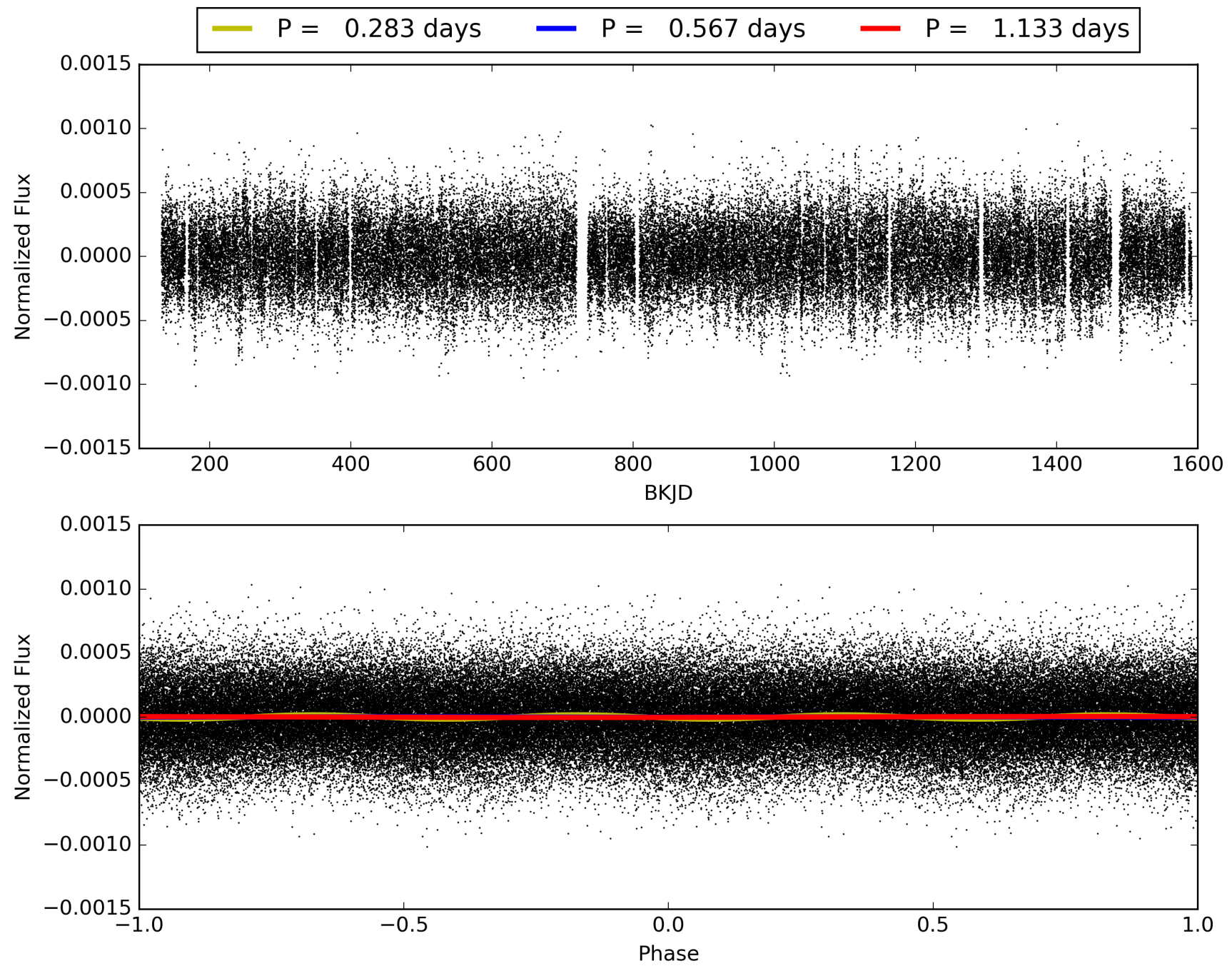
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 01:46:36 Z

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

TCE 003440840-01, PDC Light Curves

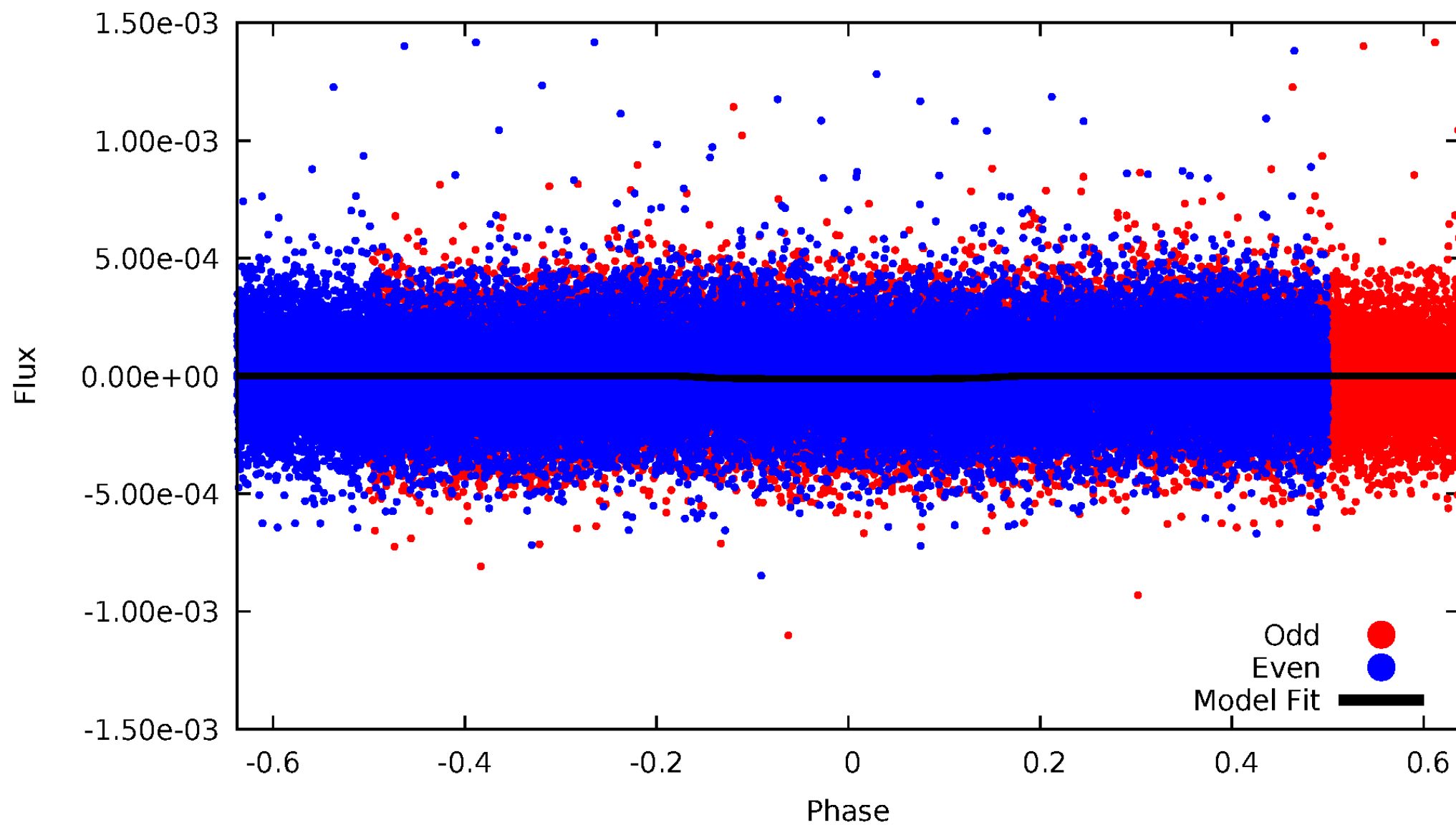


TCE 003440840-01



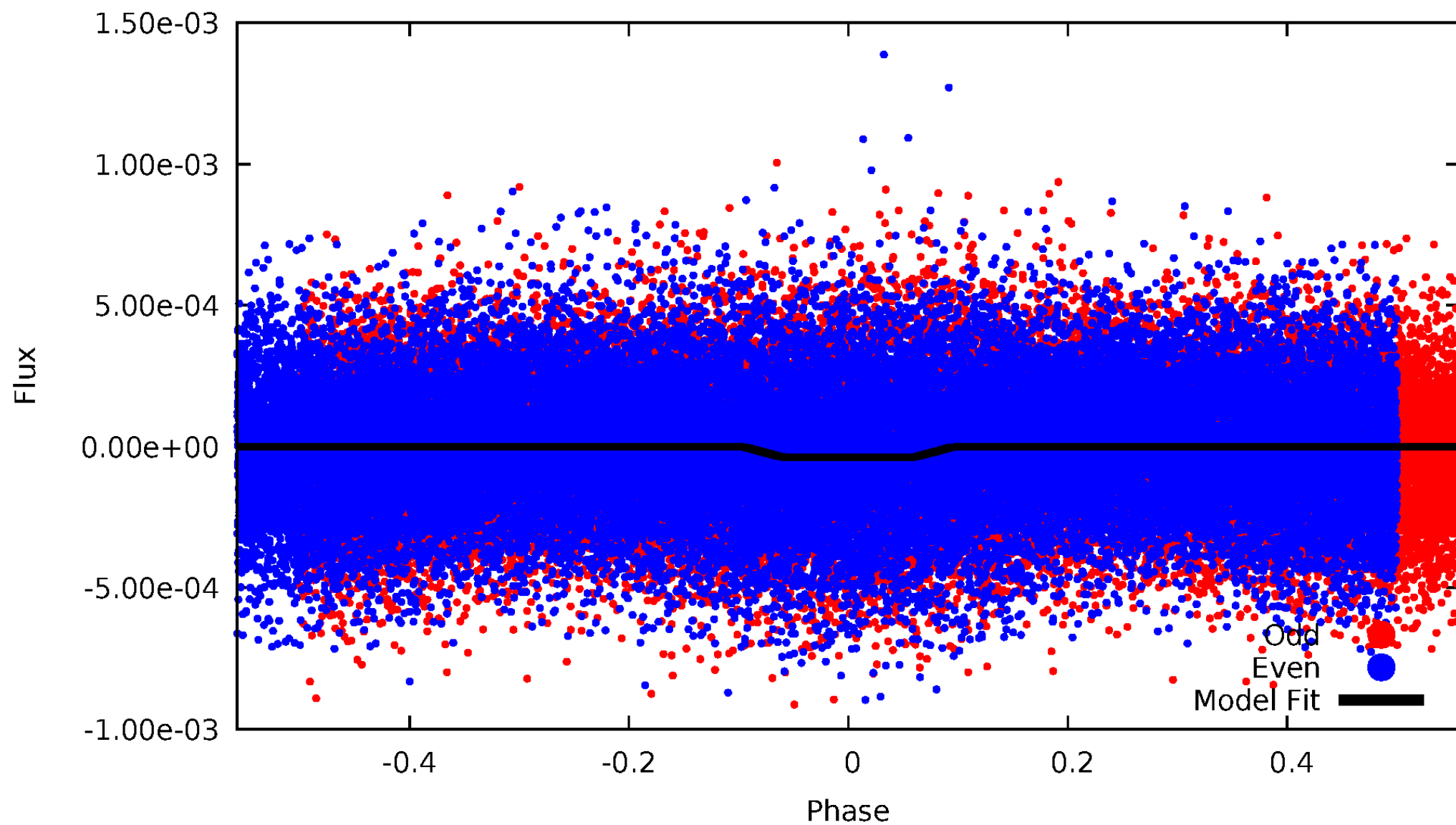
DV Odd/Even

TCE 003440840-01

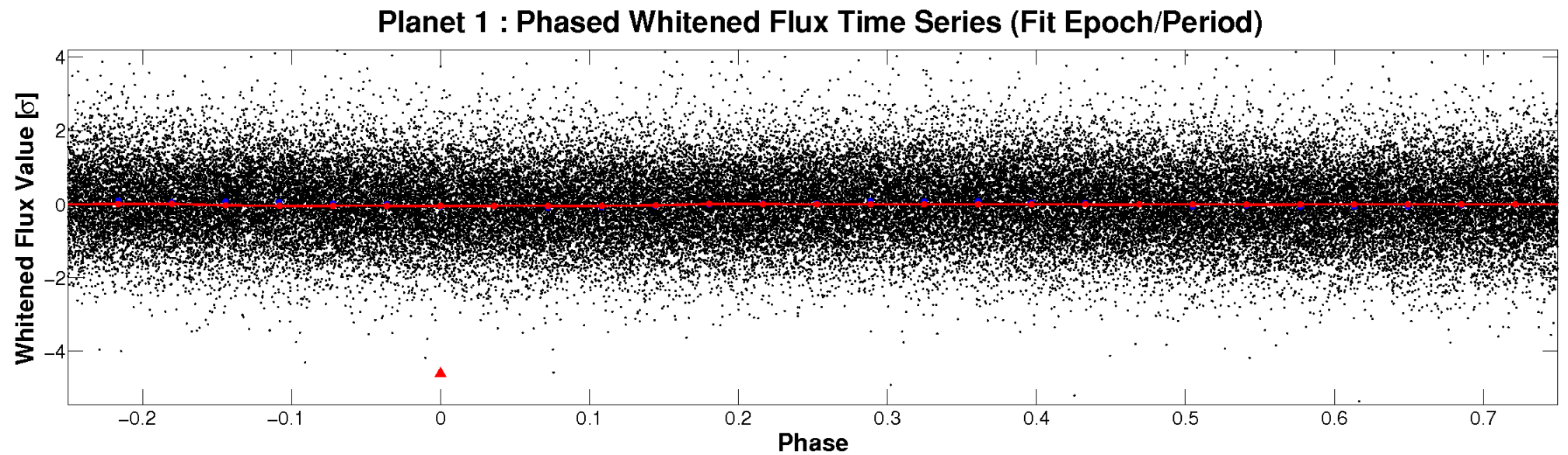
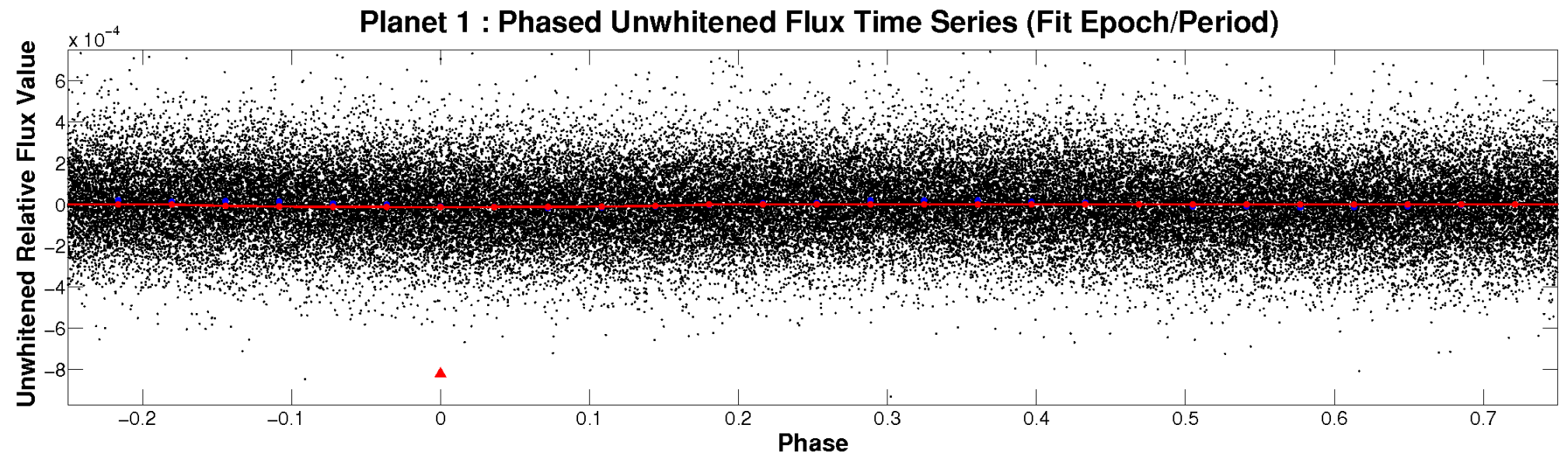


ALT Odd/Even

TCE 003440840-01

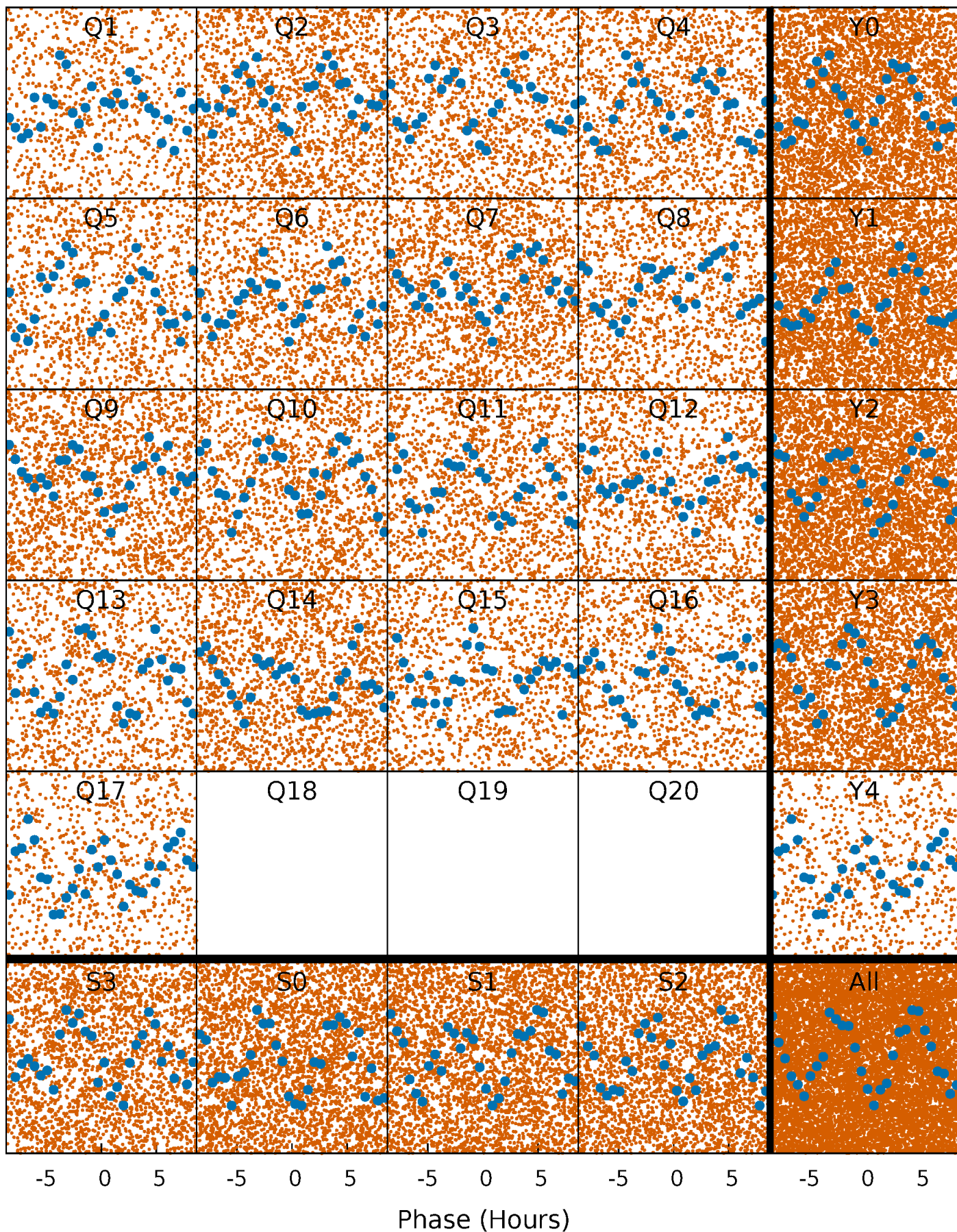


Non-Whitened Vs. Whitened Light Curve



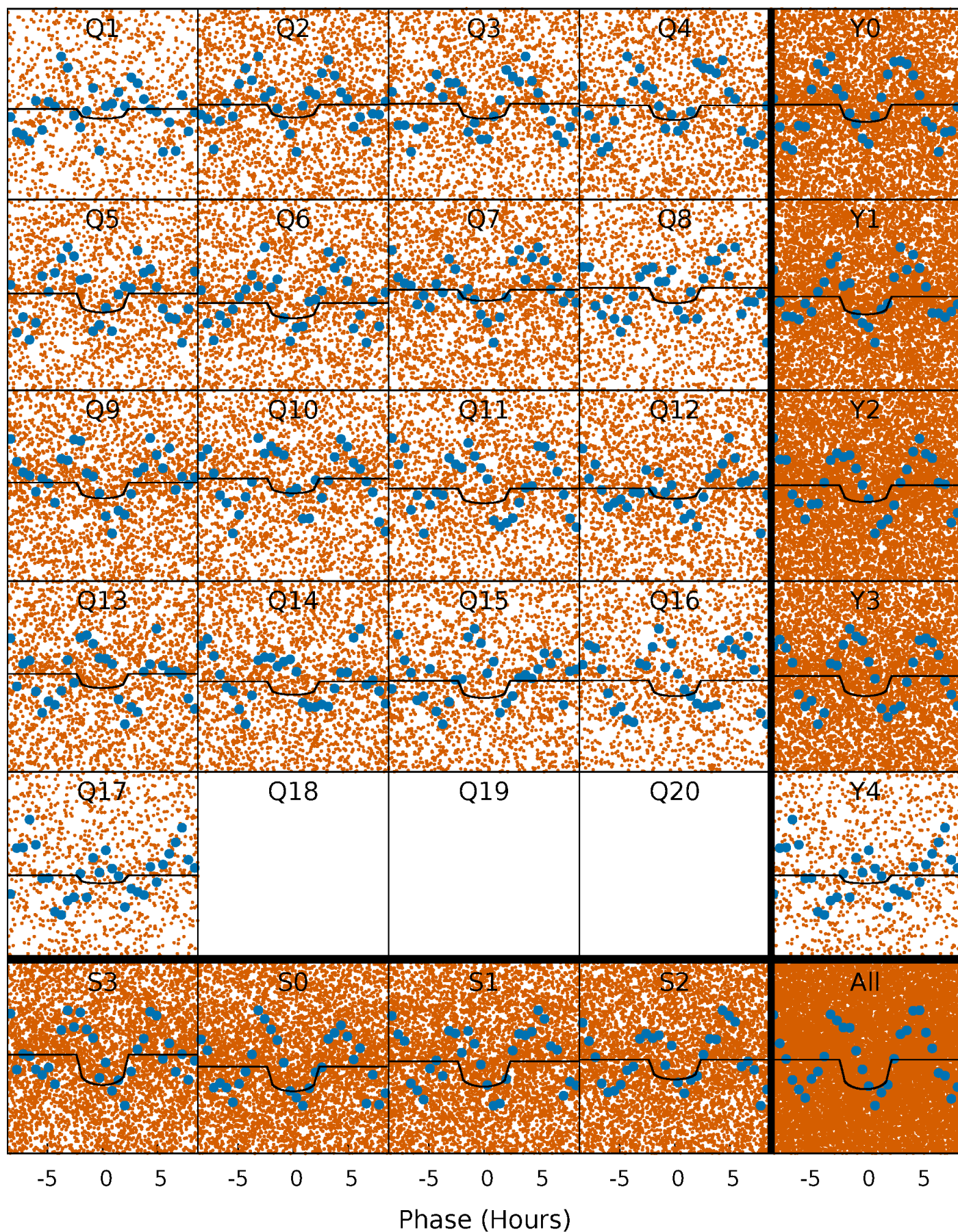
PDC Quarter-Phased Transit Curves

TCE 003440840-01 P= 0.566535 Days $T_0=131.682788$ (BKJD)



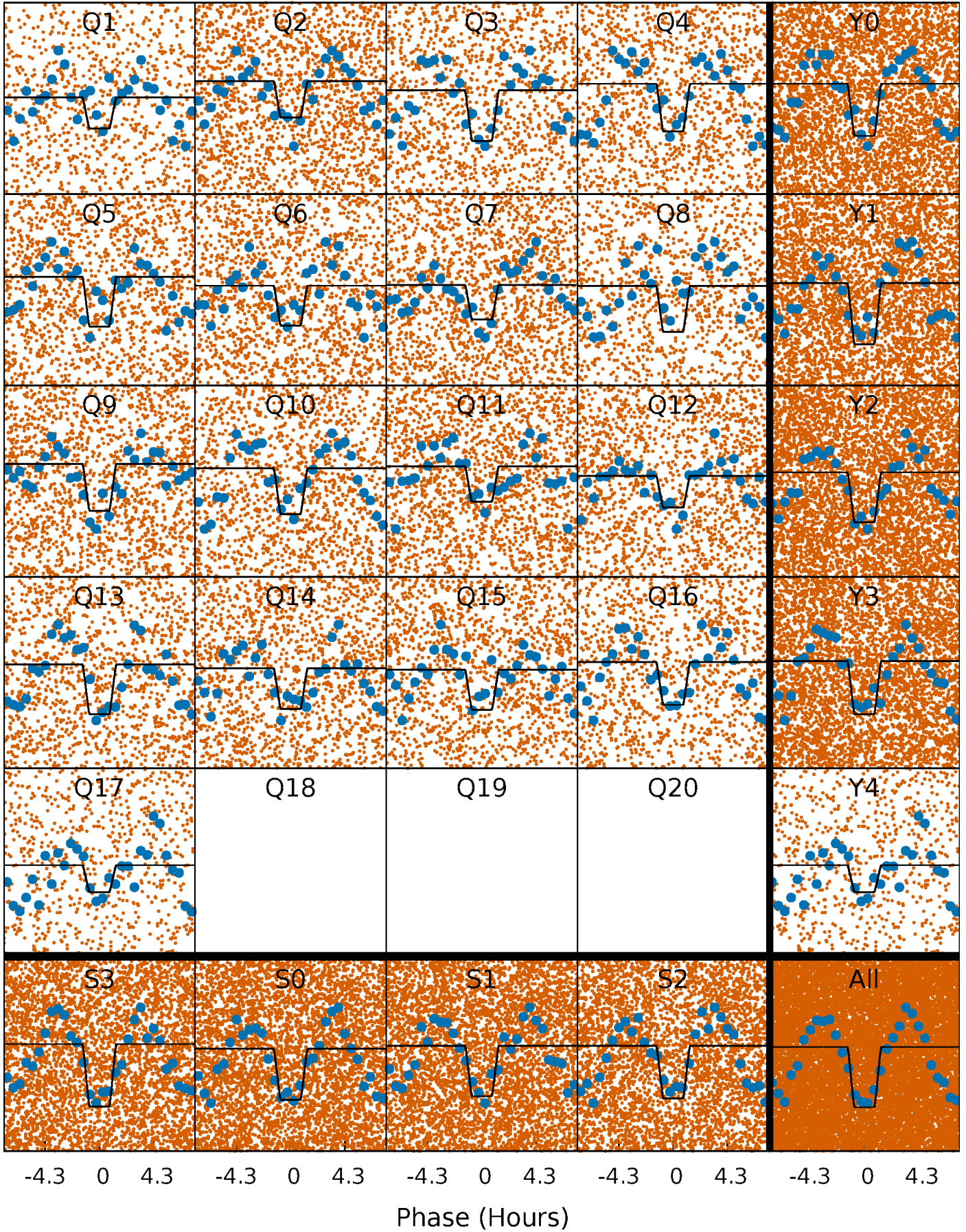
DV Quarter-Phased Transit Curves

TCE 003440840-01 P= 0.566535 Days $T_0=131.682788$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

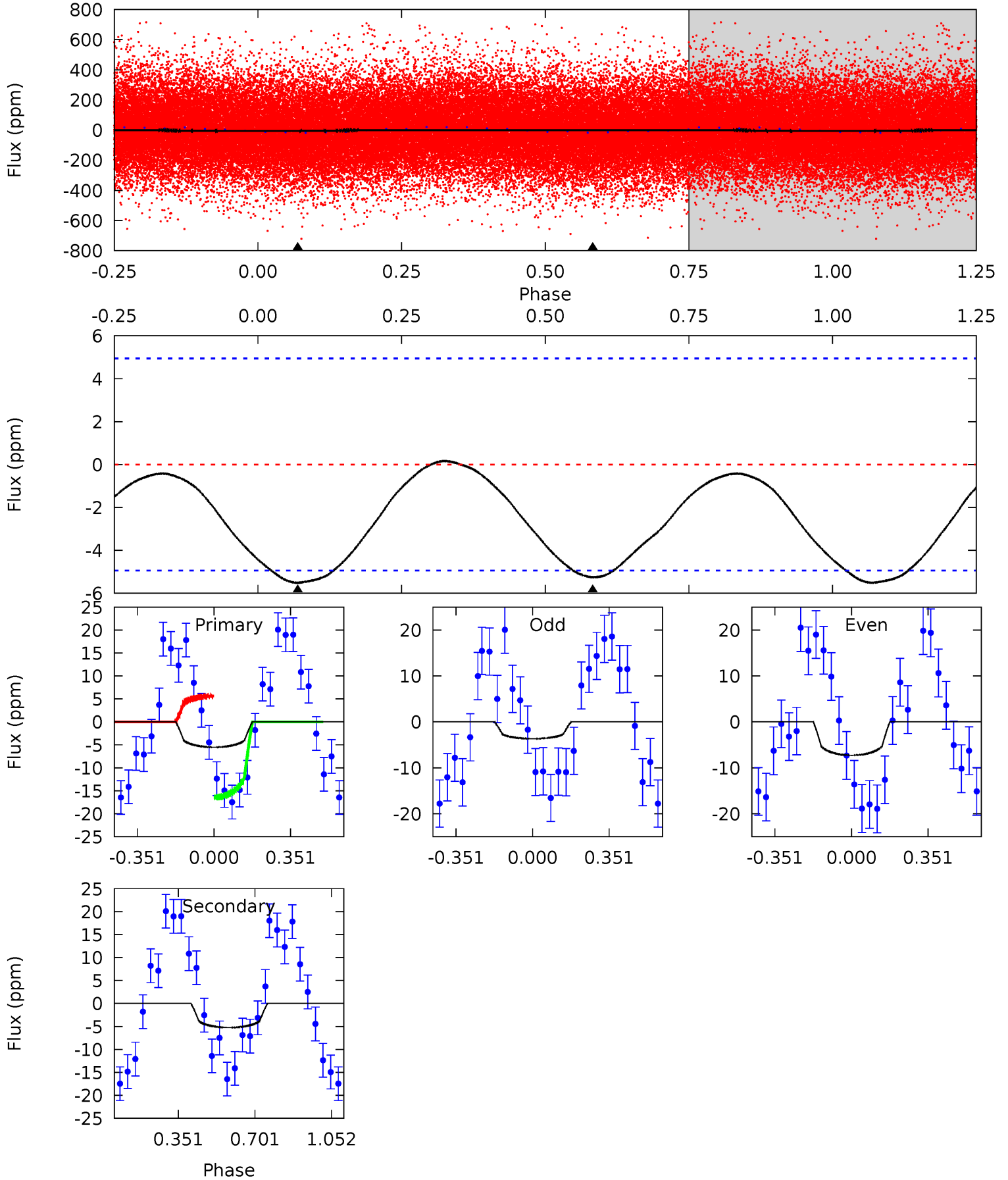
TCE 003440840-01 P= 0.566581 Days $T_0=131.669442$ (BKJD)



DV Model-Shift Uniqueness Test

003440840-01, P = 0.566535 Days, E = 131.116253 Days

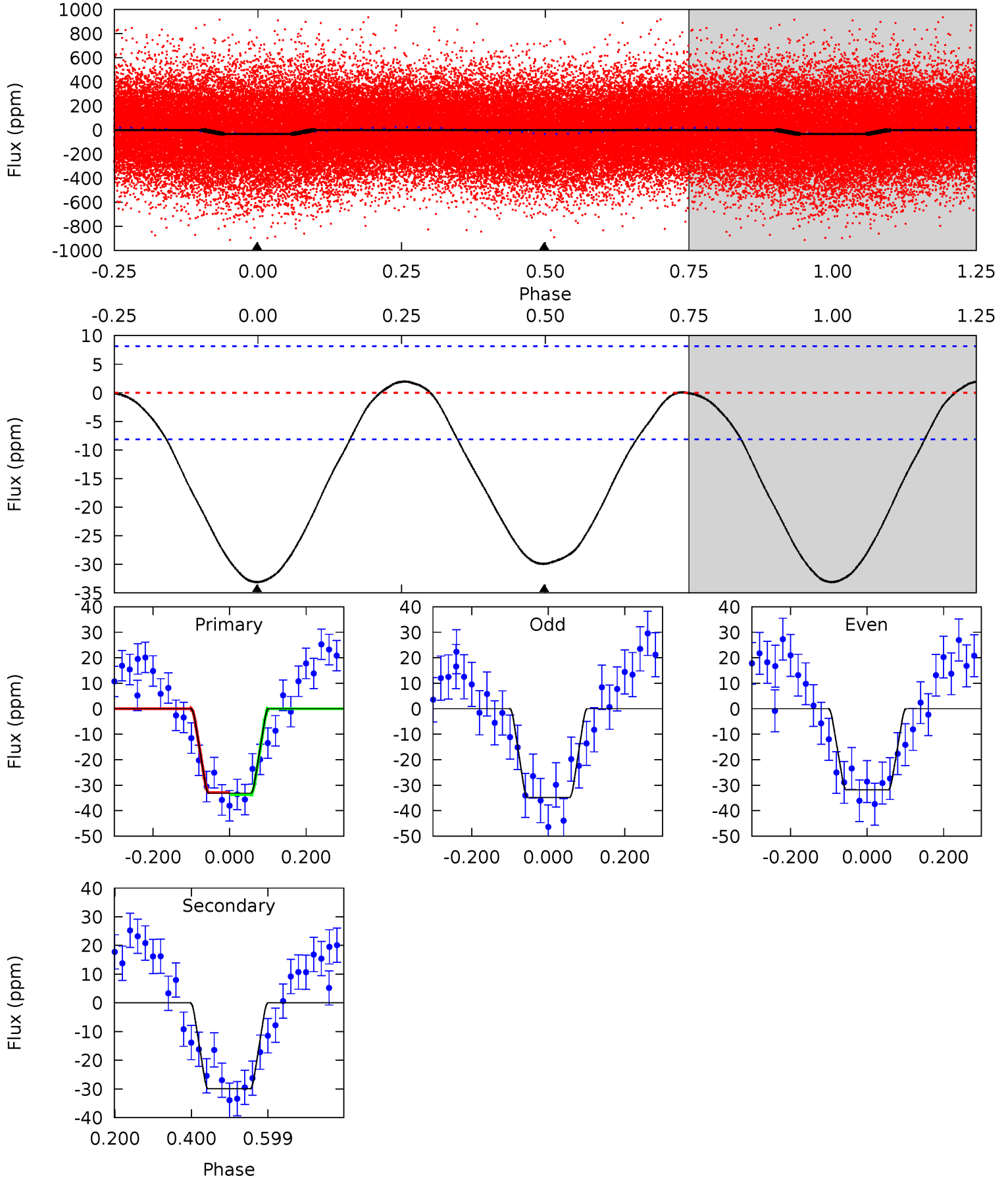
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.79	4.57	0	0	4.29	0.93	0.23	4.79	4.79	4.57	4.57	1.56	1.41	0.03	4.68



Alt Model-Shift Uniqueness Test

003440840-01, P = 0.566581 Days, E = 131.102861 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.0	16.2	0	0	4.42	1.28	0.67	18.0	18.0	16.2	16.2	0.81	1.02	0.06	0.21



Stellar Parameters For KIC 003440840

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6894^{+193}_{-241}	$3.483^{+0.376}_{-0.094}$	$-0.400^{+0.350}_{-0.250}$	$4.015^{+0.425}_{-1.702}$	$1.788^{+0.140}_{-0.420}$	$0.039^{+0.124}_{-0.012}$
	+3%/-3%	+11%/-3%	+87%/-62%	+11%/-42%	+8%/-23%	+318%/-31%
Source	PHO1	FLK73	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 003440840-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-5 ± 1	$1.47^{+1.11}_{-0.87}$	6569^{+377}_{-628}	3608^{+4703}_{-8530}	$0.342^{+1.811}_{-0.230}$
Alt.	-30 ± 2	$2.53^{+1.21}_{-1.10}$	6562^{+372}_{-707}	5510^{+2616}_{-2438}	$0.687^{+1.346}_{-0.376}$

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

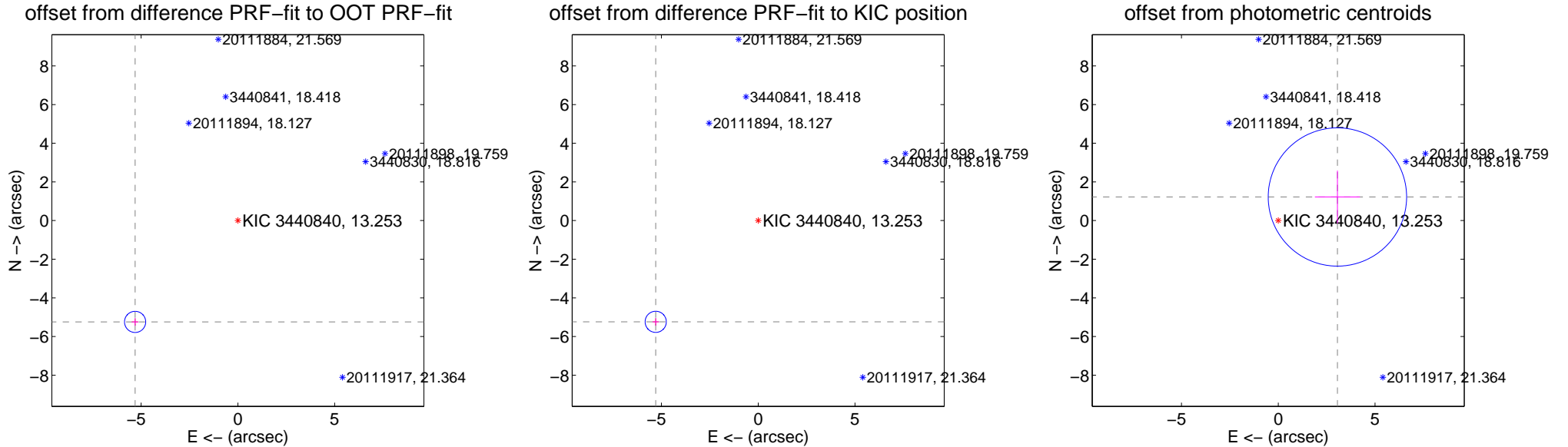
DV Centroid Data

Supplemental centroid analysis for 003440840-01. Kepler magnitude: 13.25. Transit SNR 6.74

There are 0 quarters with good PRF difference image offsets

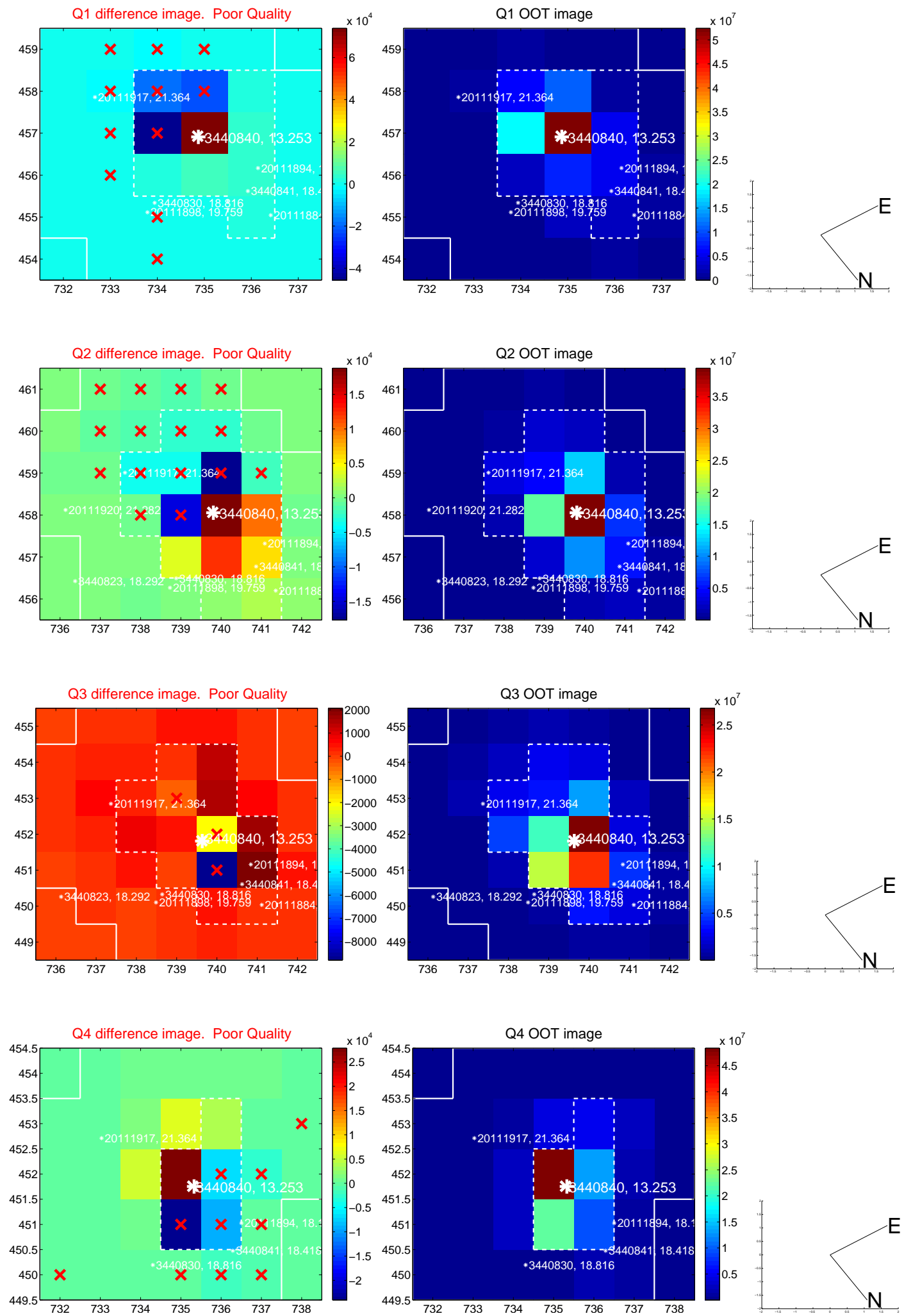
The direct PRF centroid is offset from the target star catalog position by about 0.02 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	7.464 ± 0.182	40.92	5.313 ± 0.170	-5.242 ± 0.195
PRF-fit source offset from KIC position	7.451 ± 0.182	40.84	5.298 ± 0.170	-5.239 ± 0.195
photometric centroid source offset	3.29 ± 1.19	2.76	-3.06 ± 1.16	1.22 ± 1.36

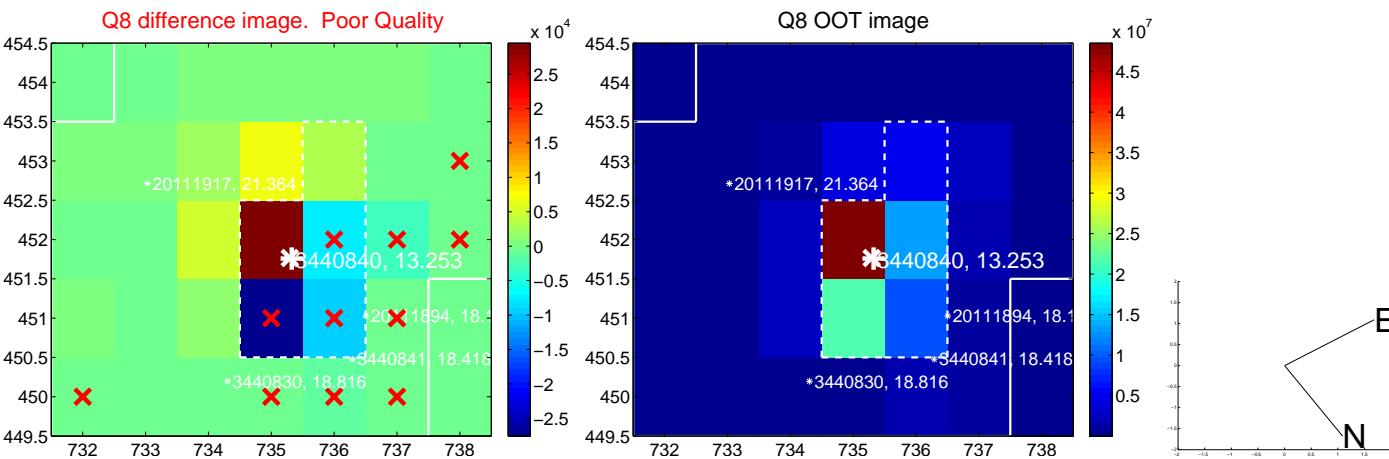
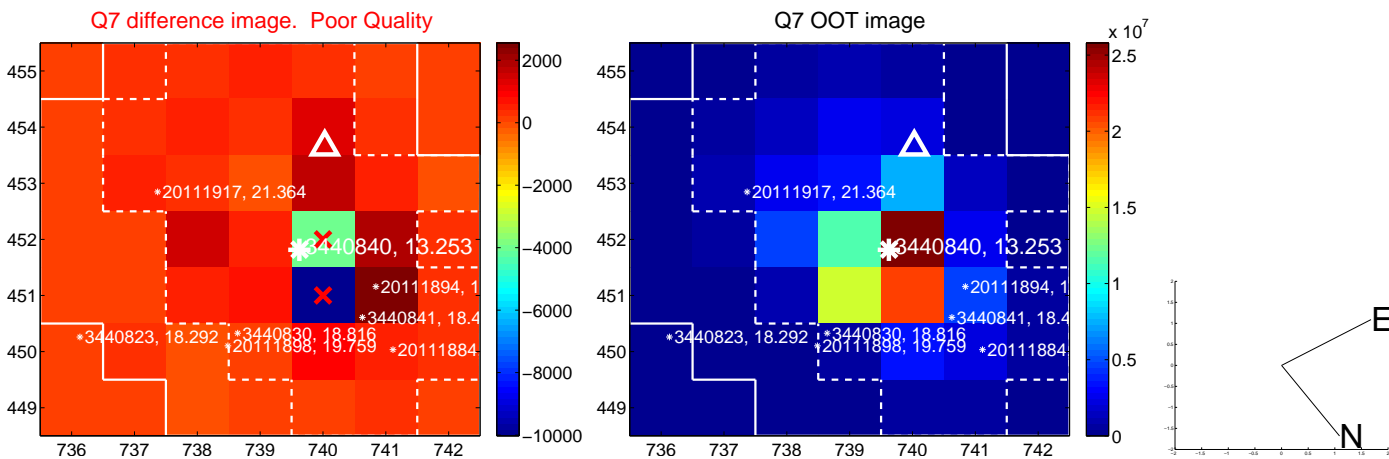
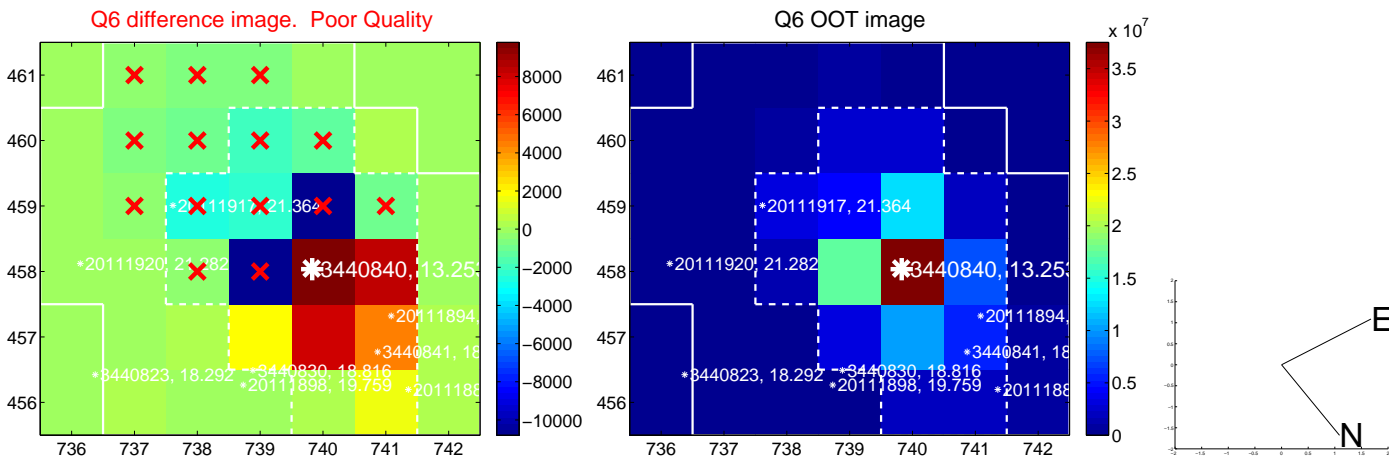
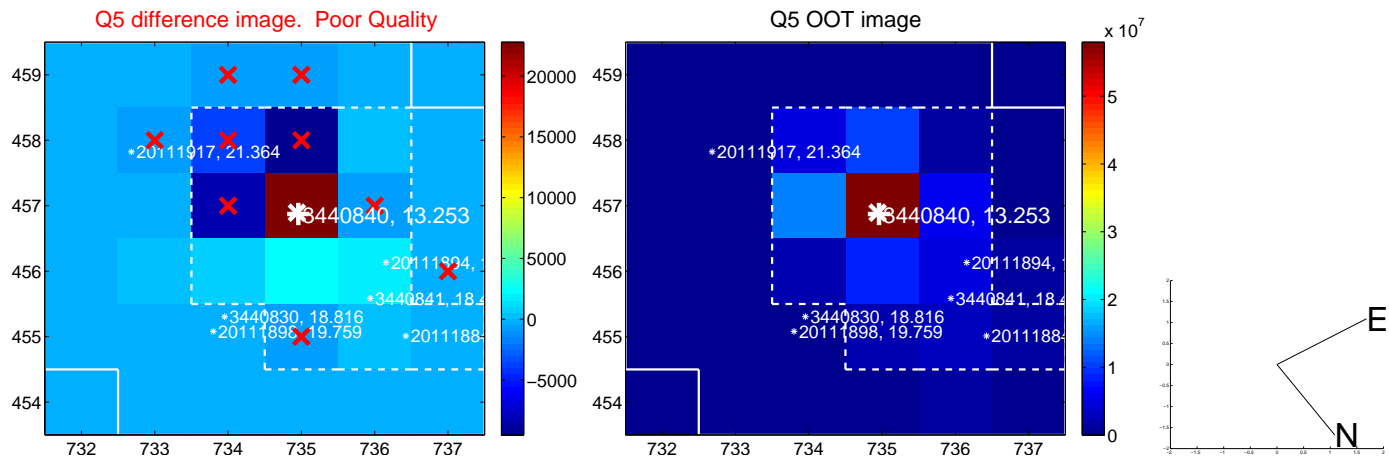


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

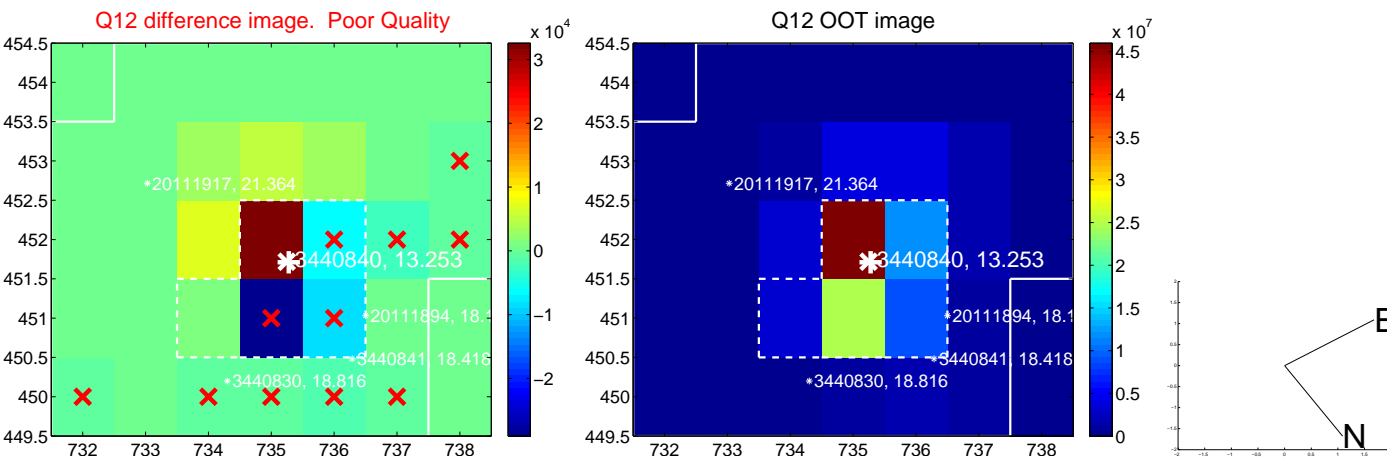
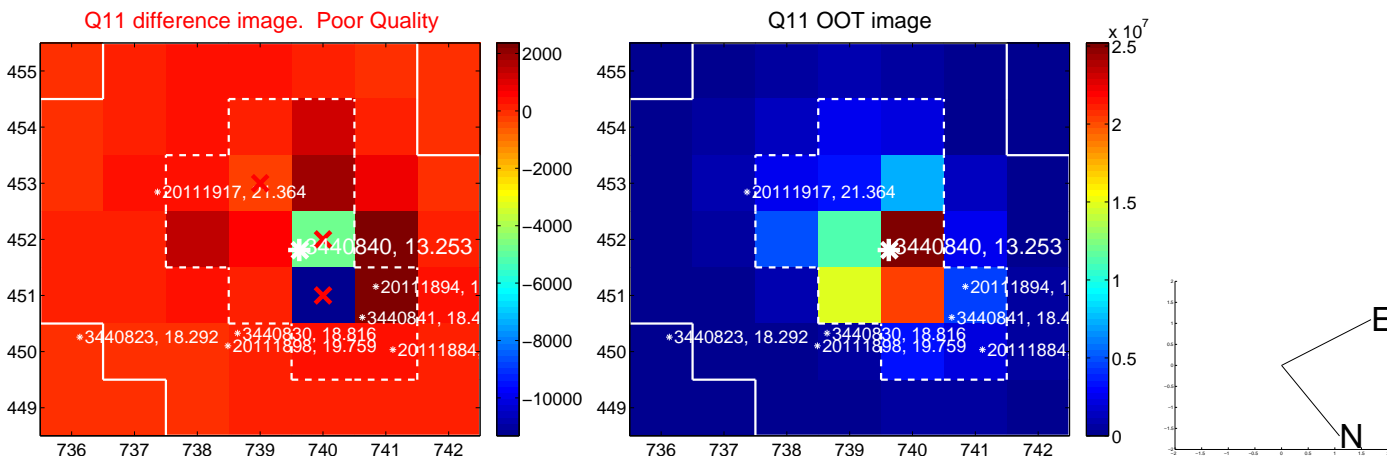
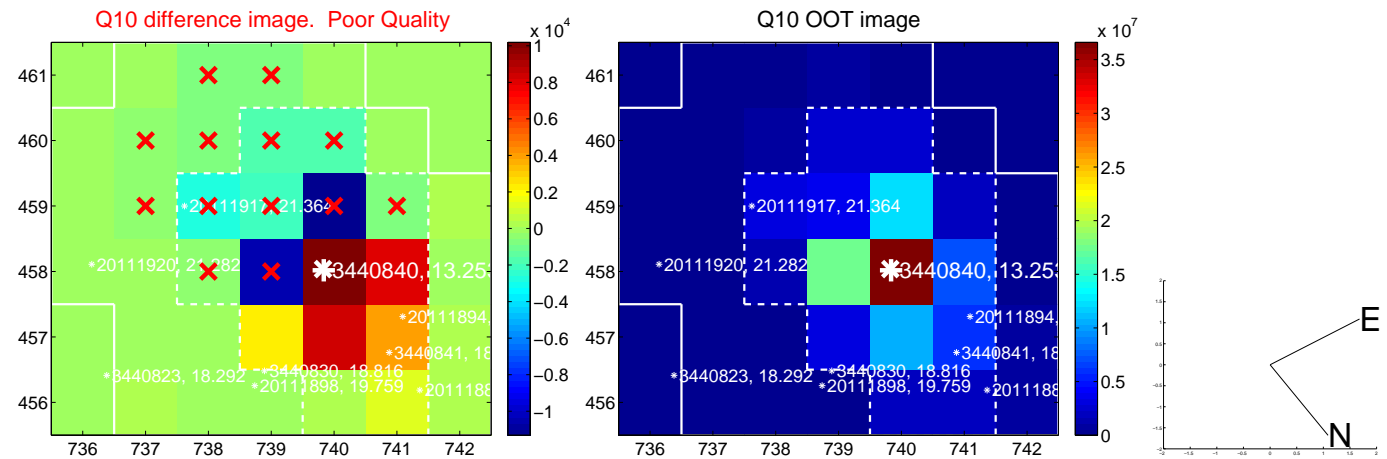
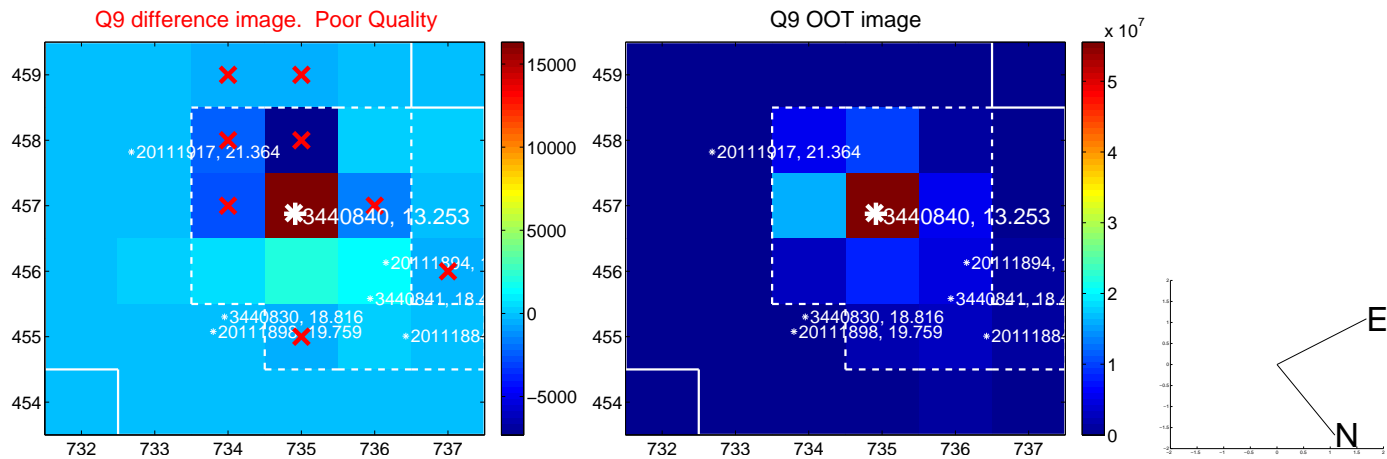
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



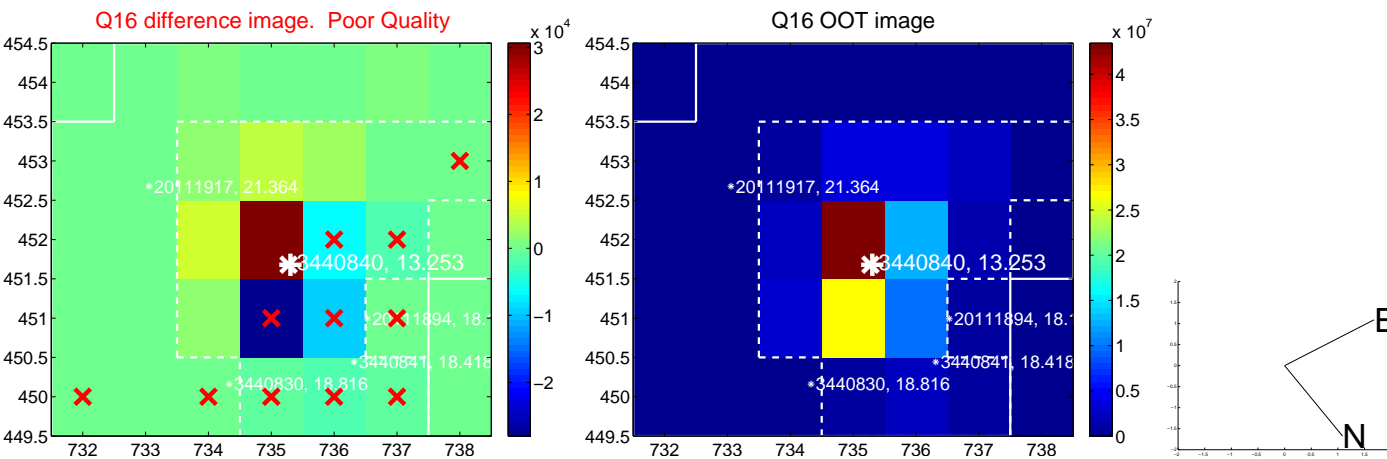
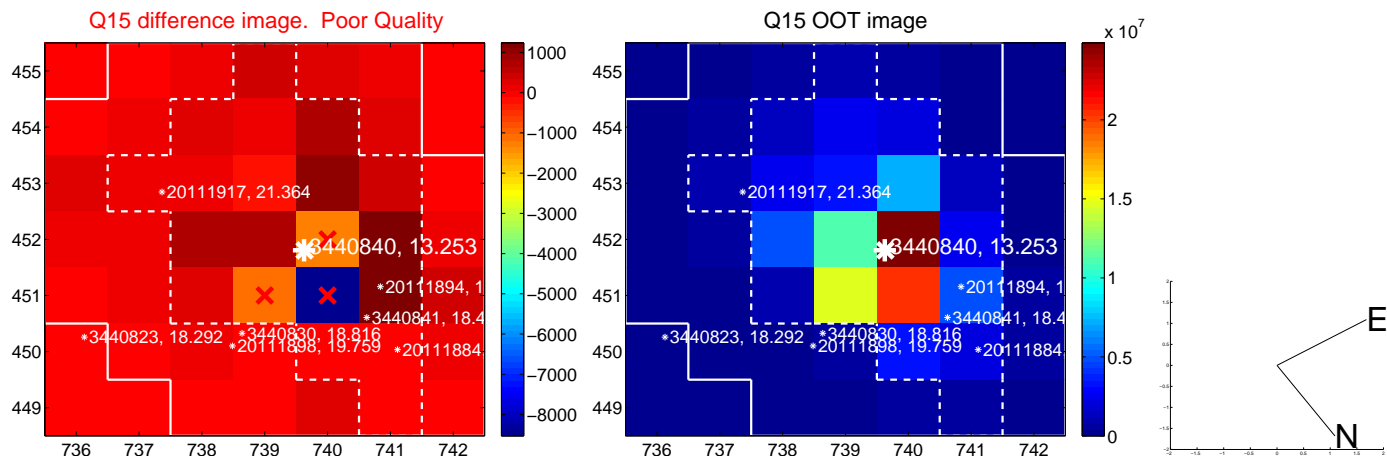
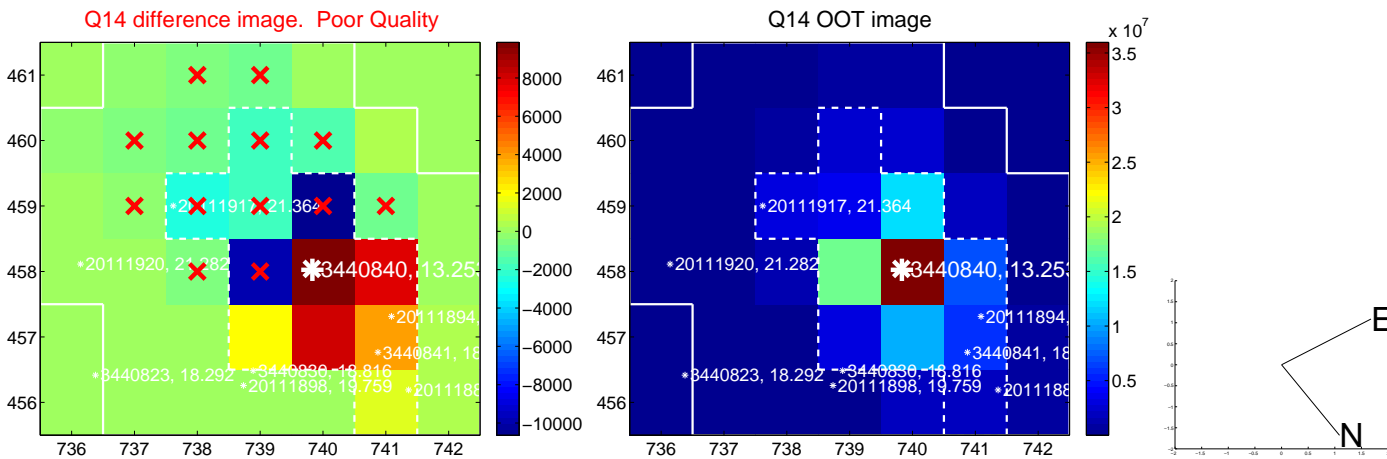
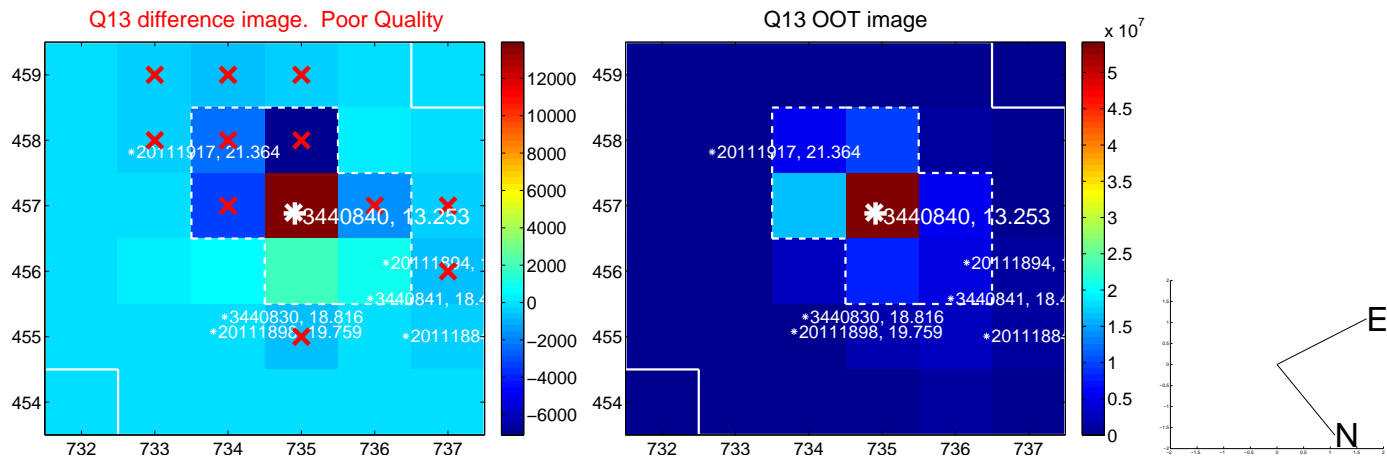
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



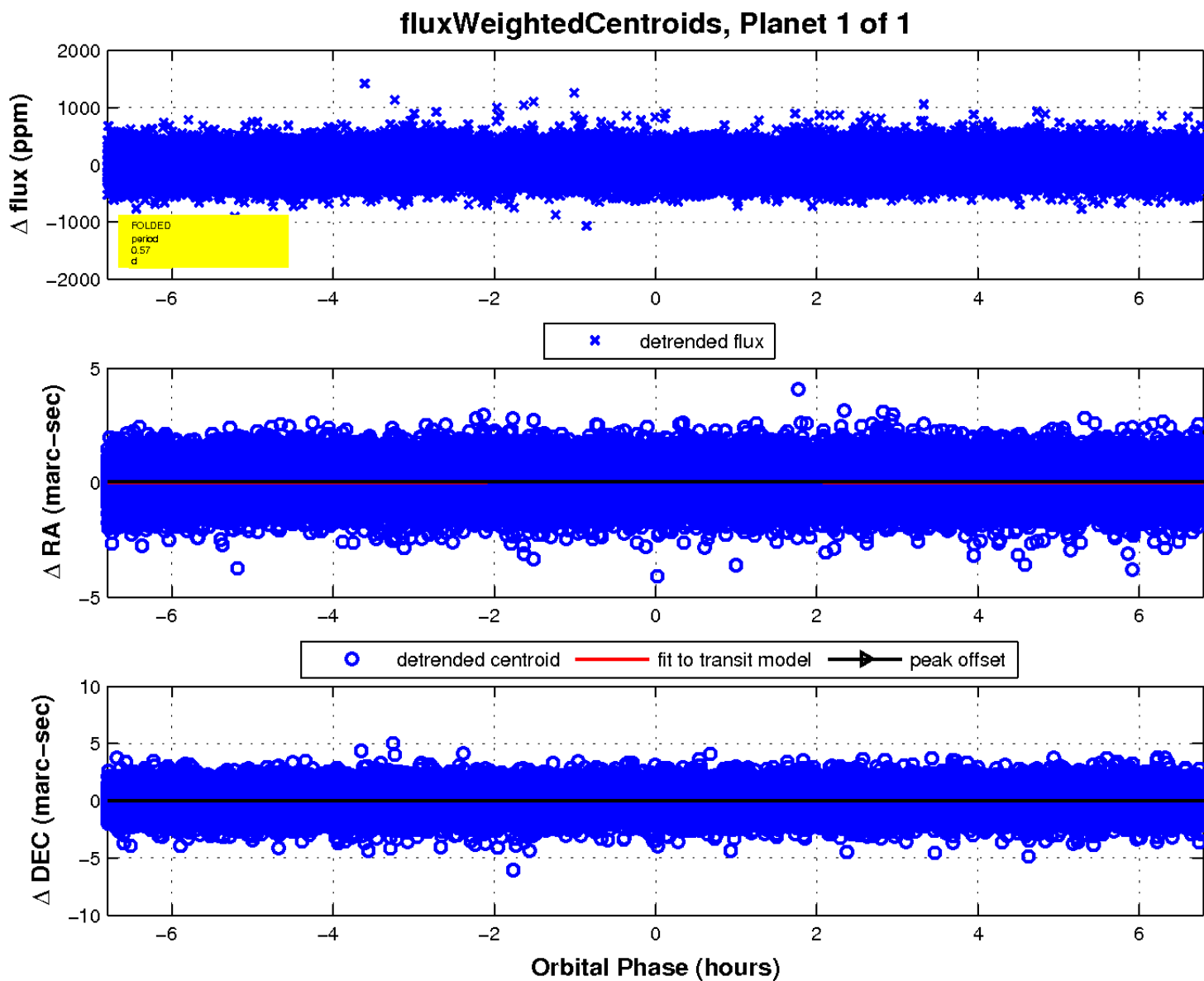
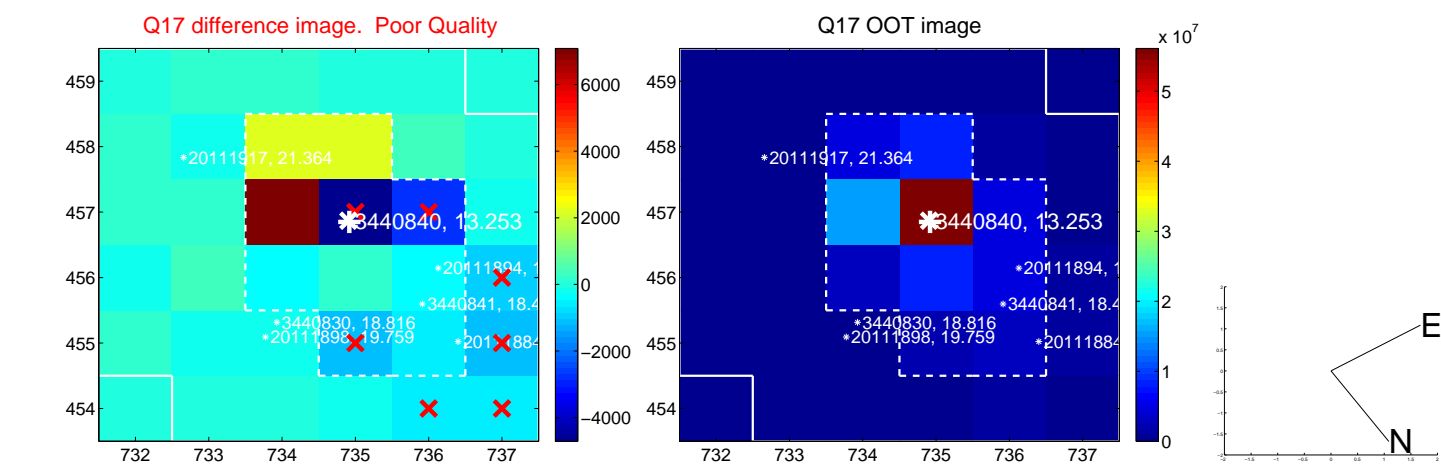
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UKIRT Image

