

KIC 008480250

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})
008480250-01	OBS	No	0.645338	132.138277	1367.6	2.000	9.7	-1.0	0.62	5157	2.27	1578.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008480250-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—CENT_NOFITS—HALO_GHOST

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

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

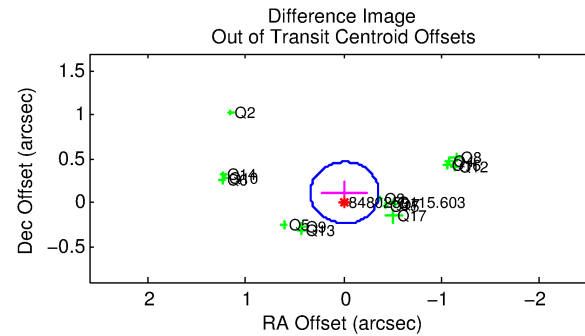
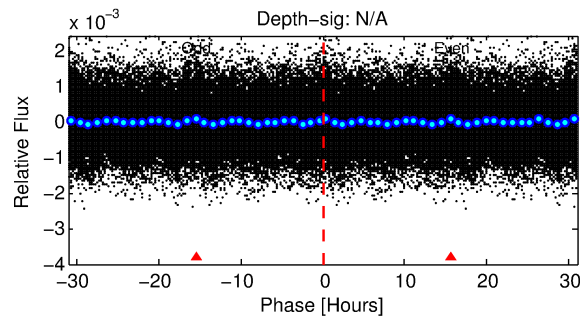
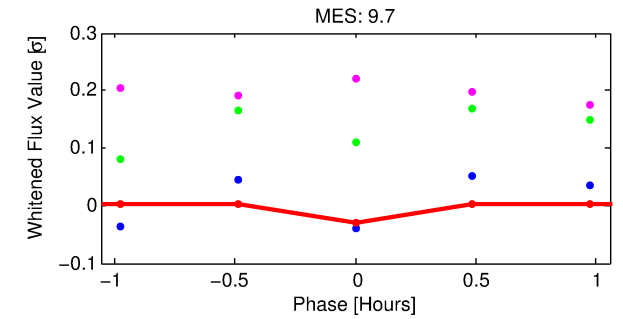
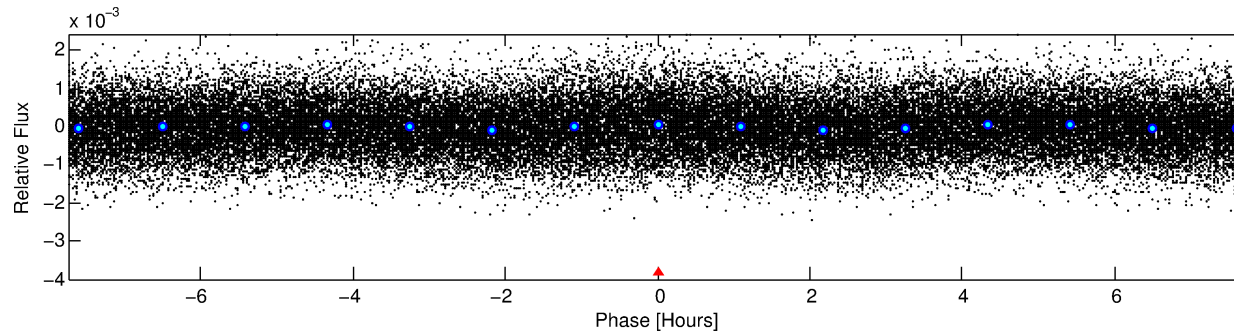
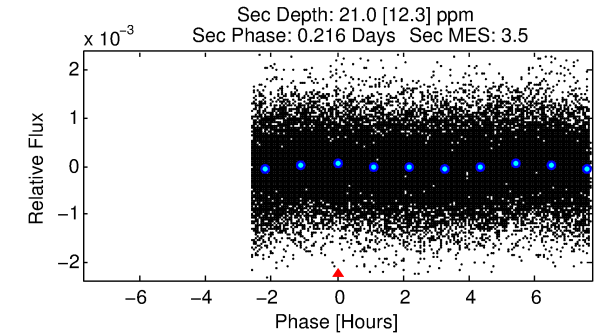
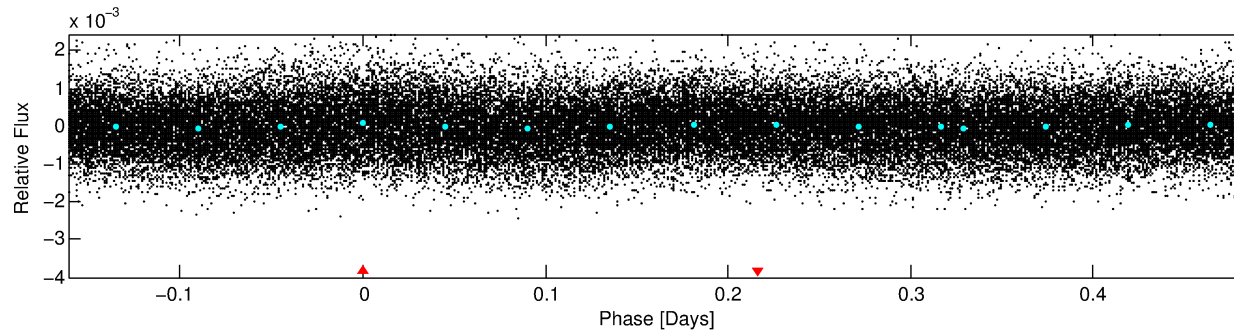
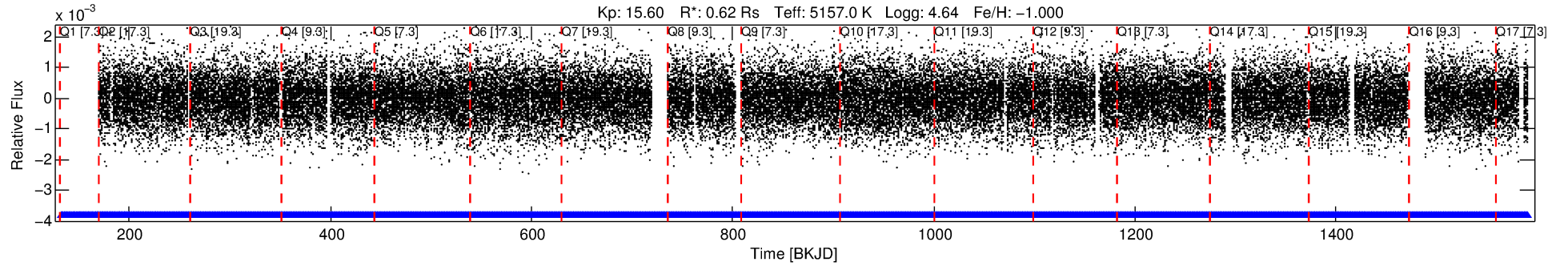
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008480250-01

No Significant Match Found

DV One-Page Summary

KIC: 8480250 Candidate: 1 of 1 Period: 0.645 d



TPS TCE Results:

Period = 0.64534 d
Epoch = 132.1383 BKJD

DV fit results are unavailable

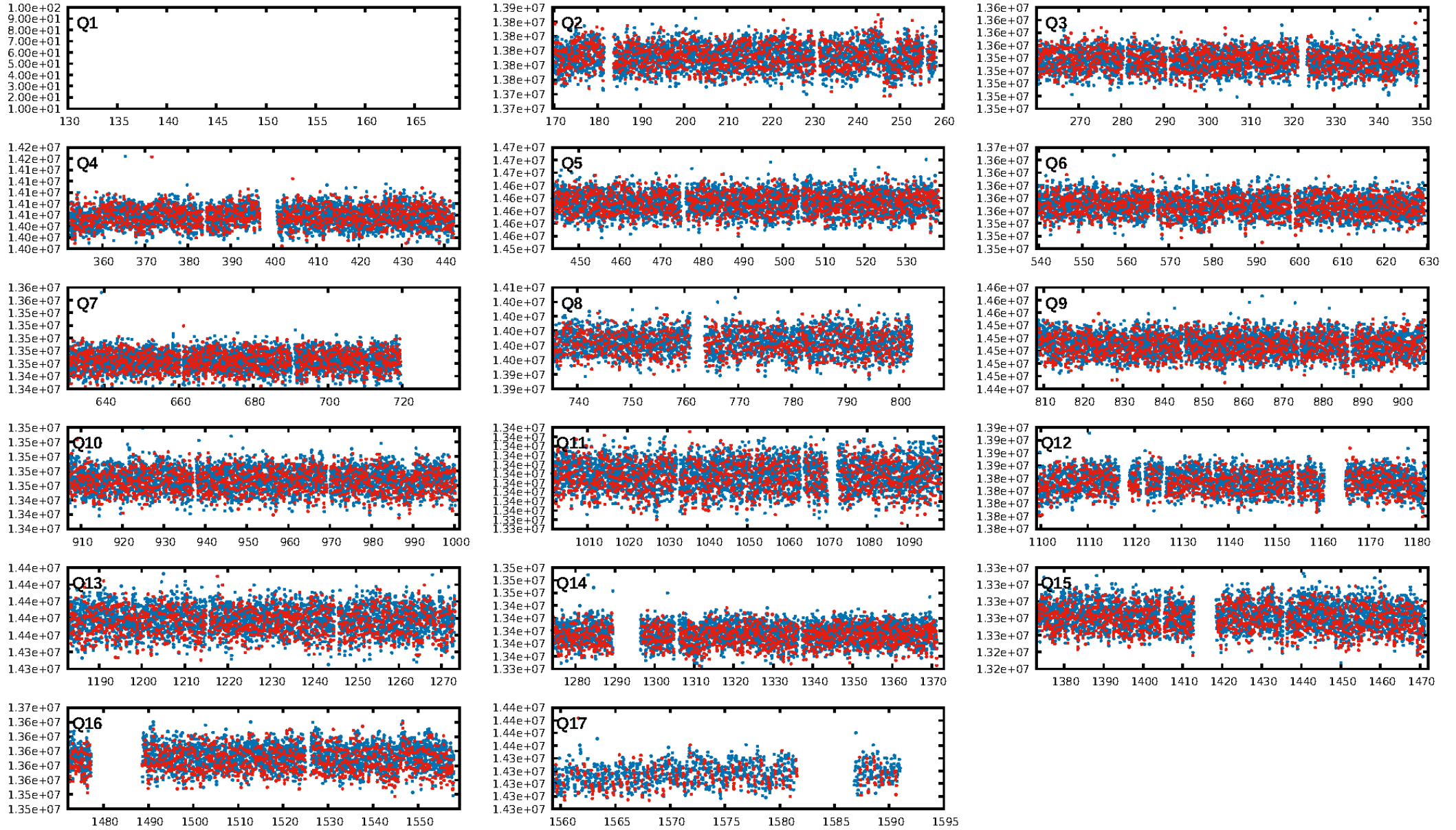
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.49e-19
RollingBand-fgt: 1.00 [1997/1997]
GhostDiagnostic-chr: -0.1919
Centroid-sig: 3.9%
Centroid-so: 0.231 arcsec [6.58σ]
OotOffset-rm: 0.117 arcsec [1.00σ]
KicOffset-rm: 0.242 arcsec [2.24σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 1.00 [16/16]
DiffImageOverlap-fno: 1.00 [16/16]

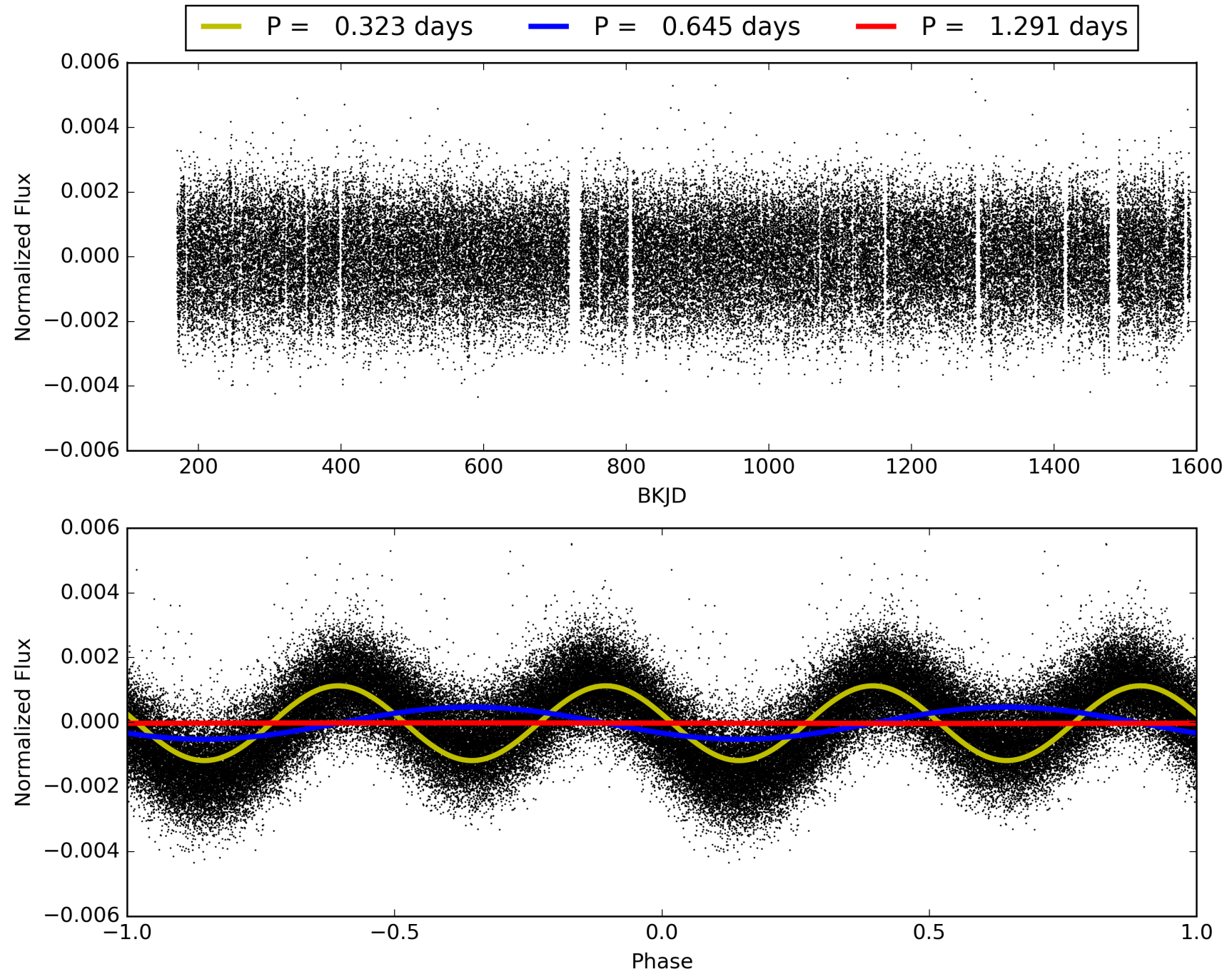
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 03:26:02 Z

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

TCE 008480250-01, PDC Light Curves

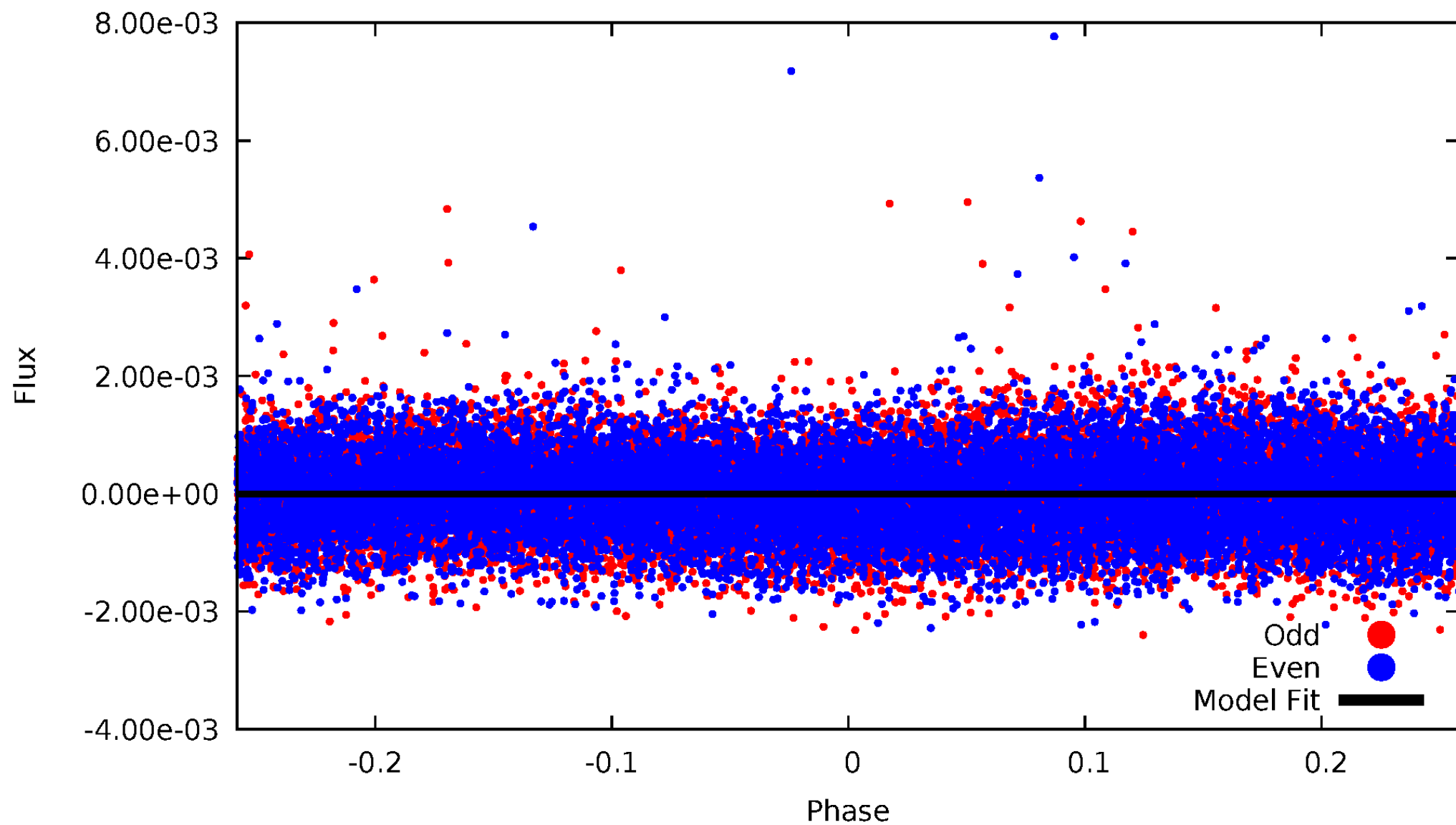


TCE 008480250-01



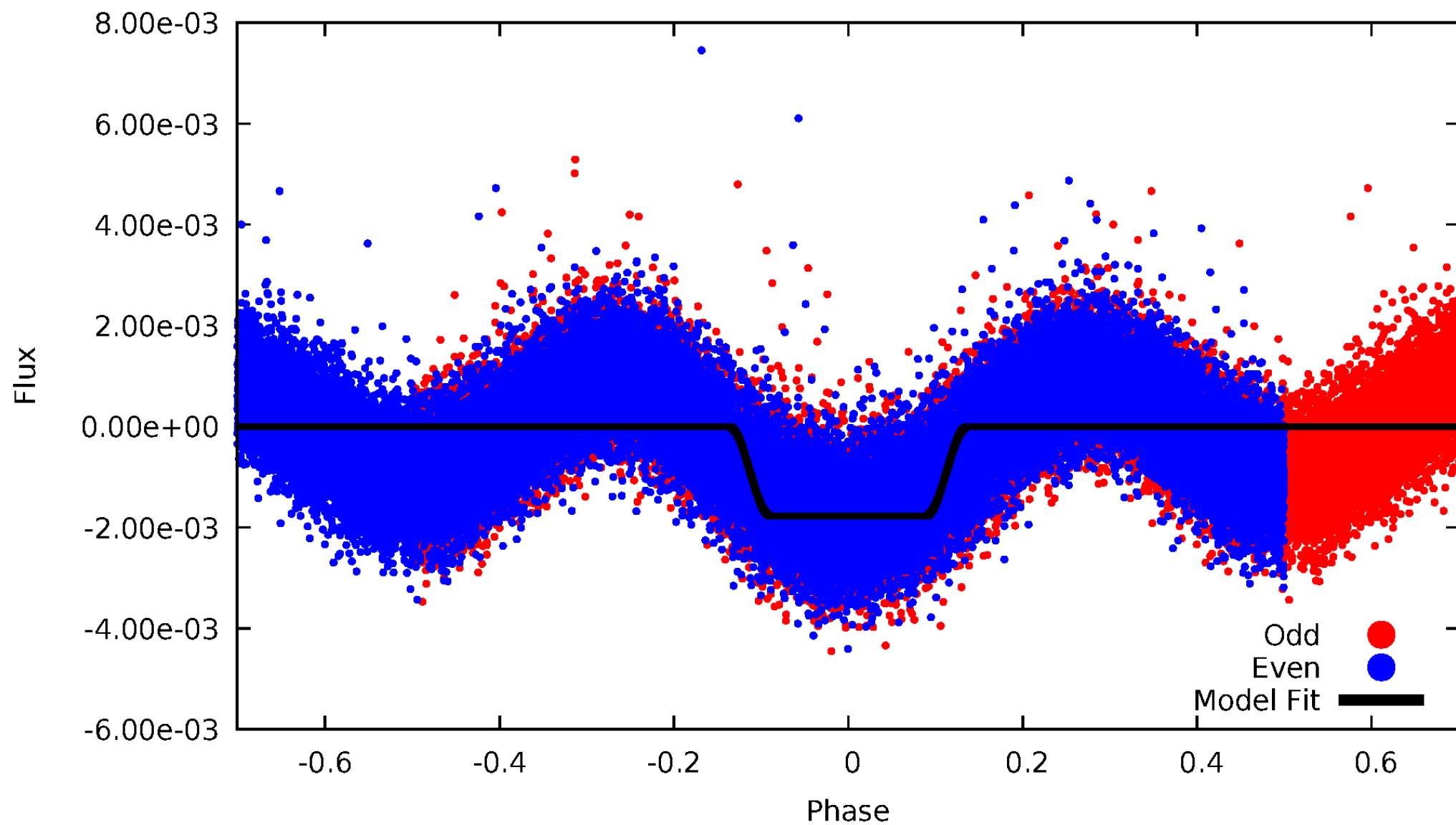
DV Odd/Even

TCE 008480250-01

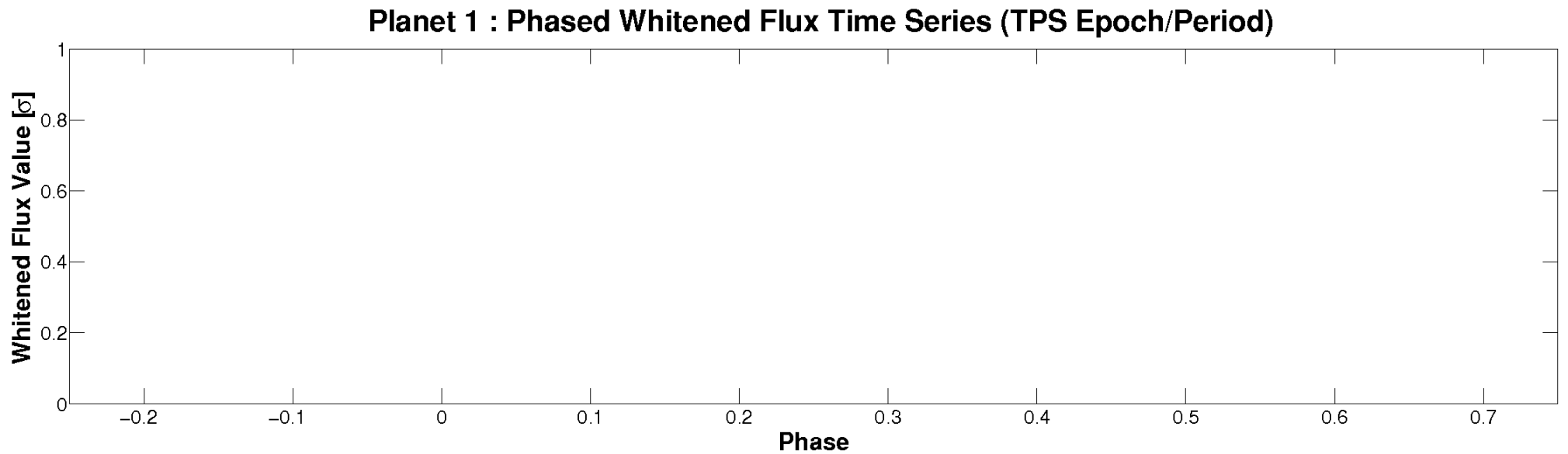
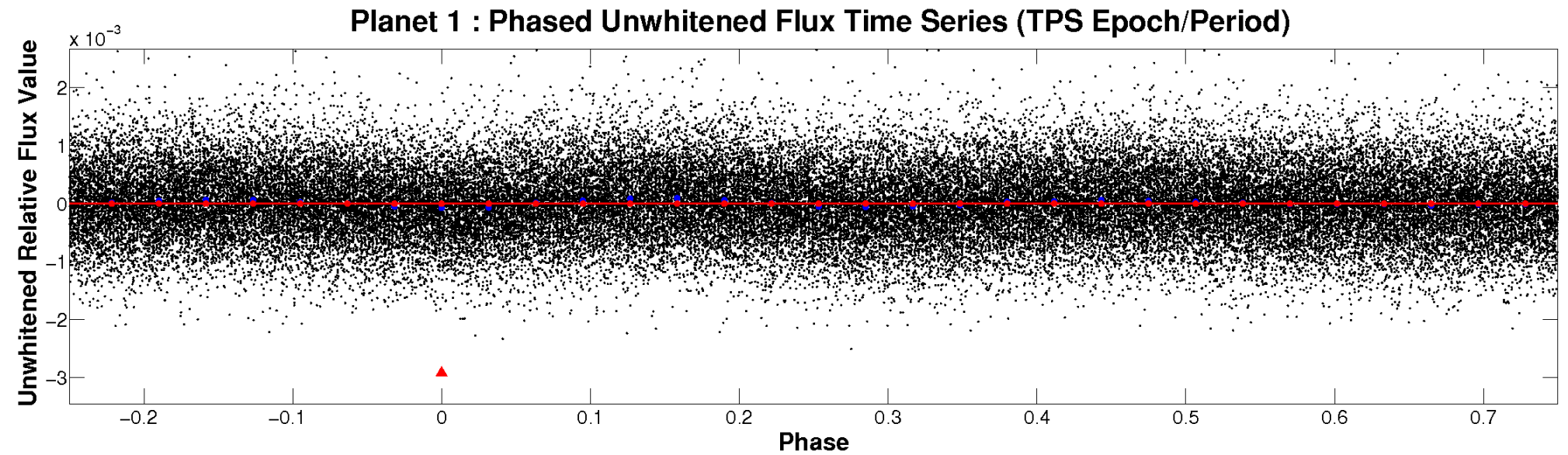


ALT Odd/Even

TCE 008480250-01

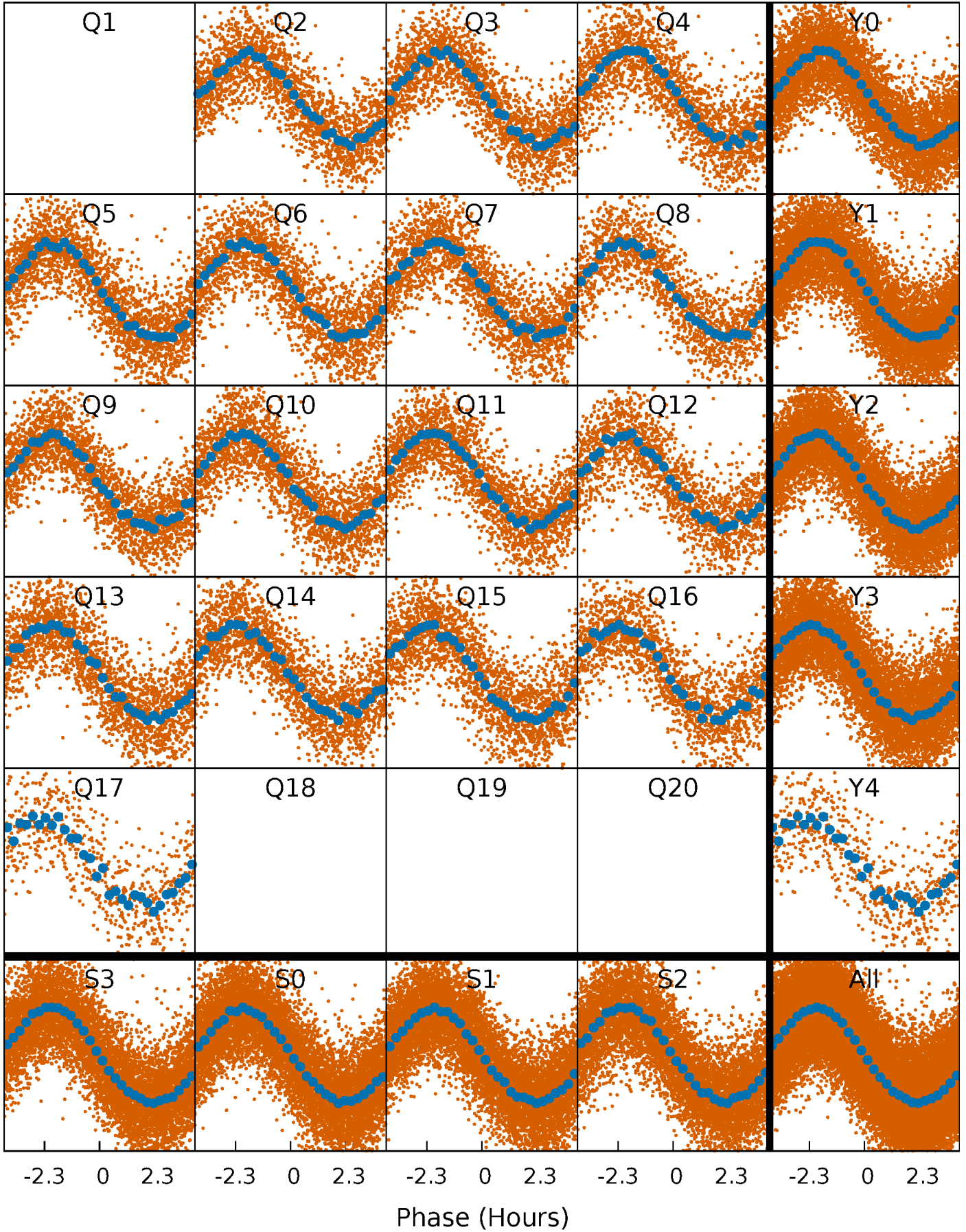


Non-Whitened Vs. Whitened Light Curve



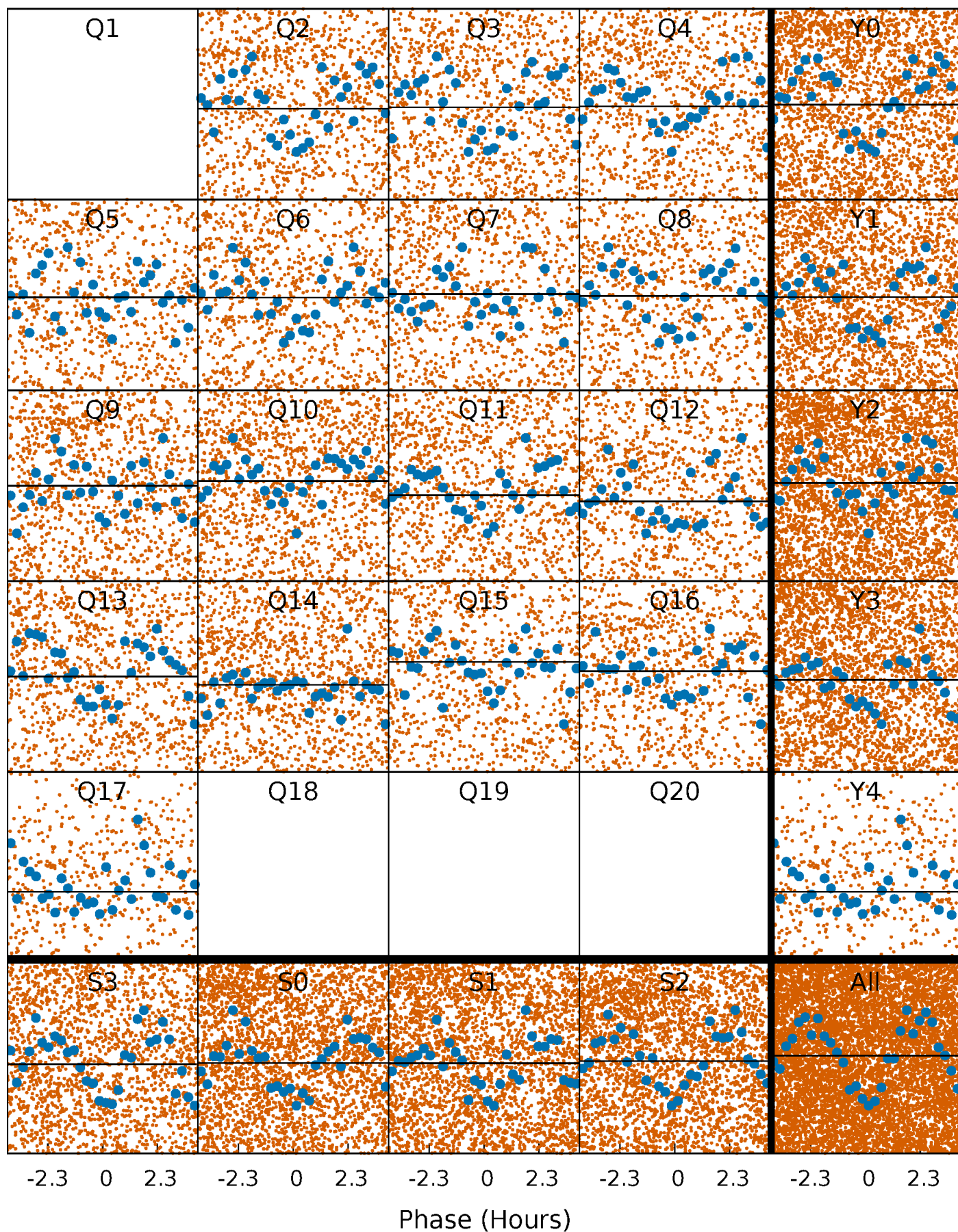
PDC Quarter-Phased Transit Curves

TCE 008480250-01 P= 0.645338 Days $T_0=132.138277$ (BKJD)



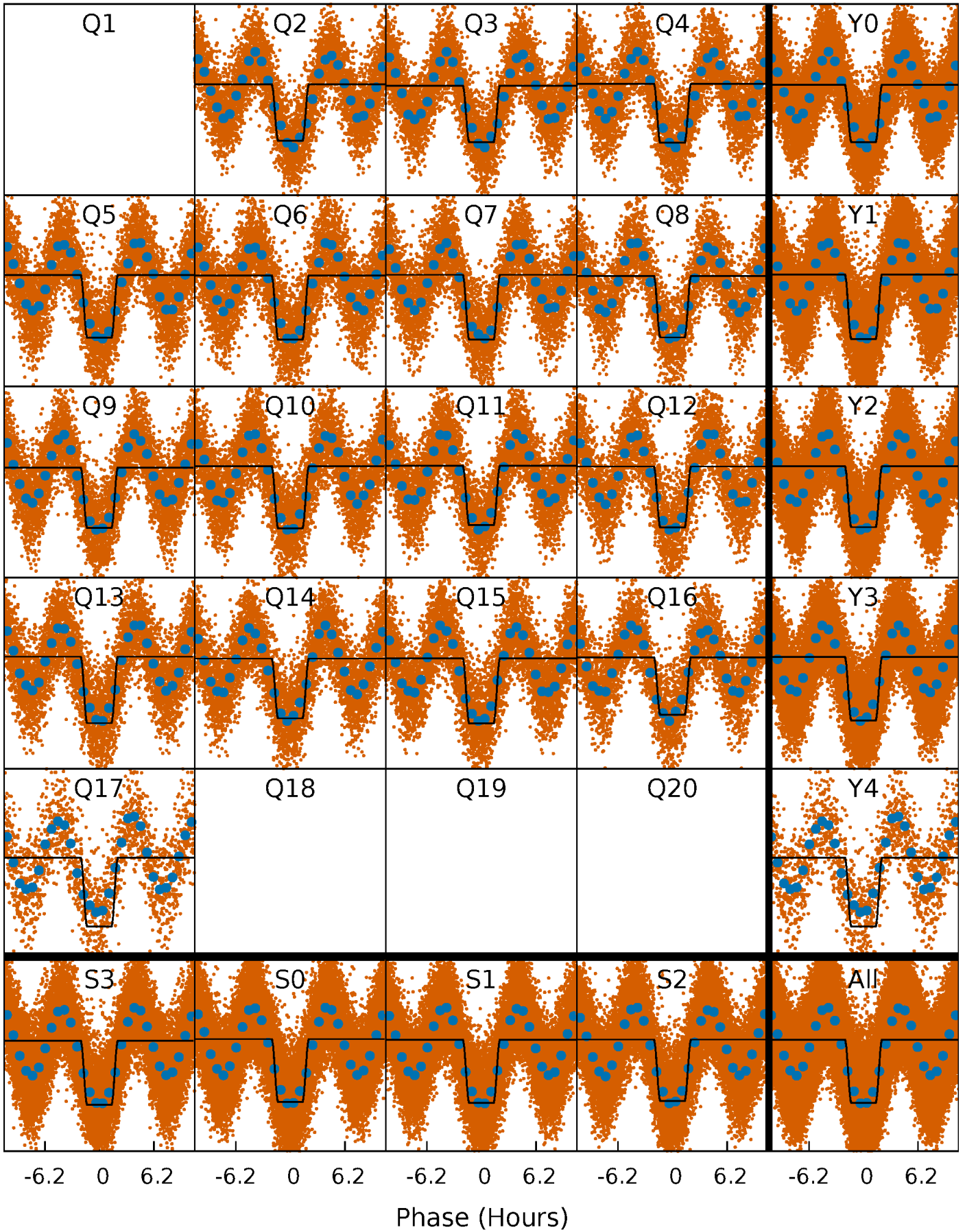
DV Quarter-Phased Transit Curves

TCE 008480250-01 P= 0.645338 Days $T_0=132.138277$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

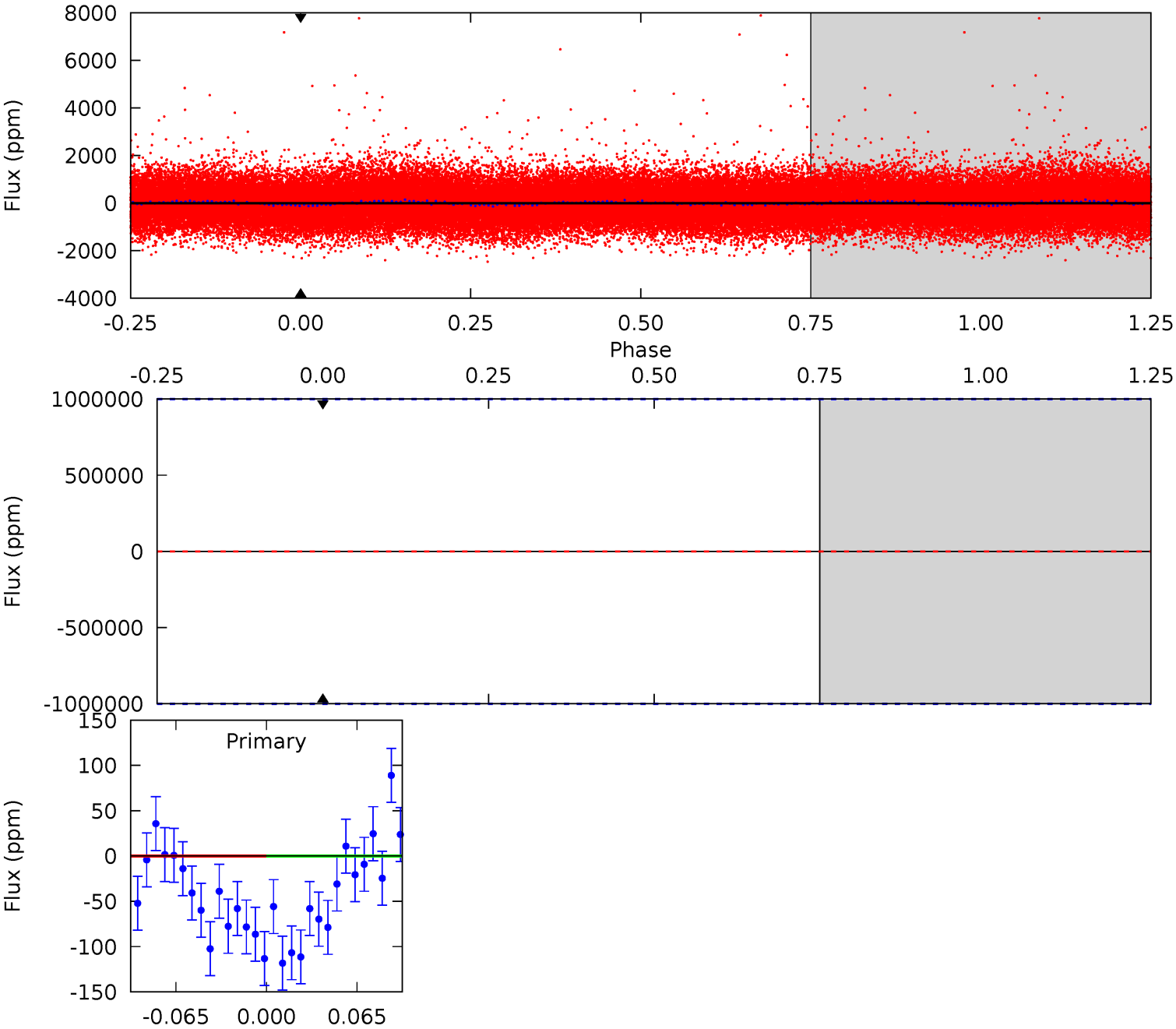
TCE 008480250-01 P= 0.645338 Days $T_0=132.231336$ (BKJD)



DV Model-Shift Uniqueness Test

008480250-01, P = 0.645338 Days, E = 132.138277 Days

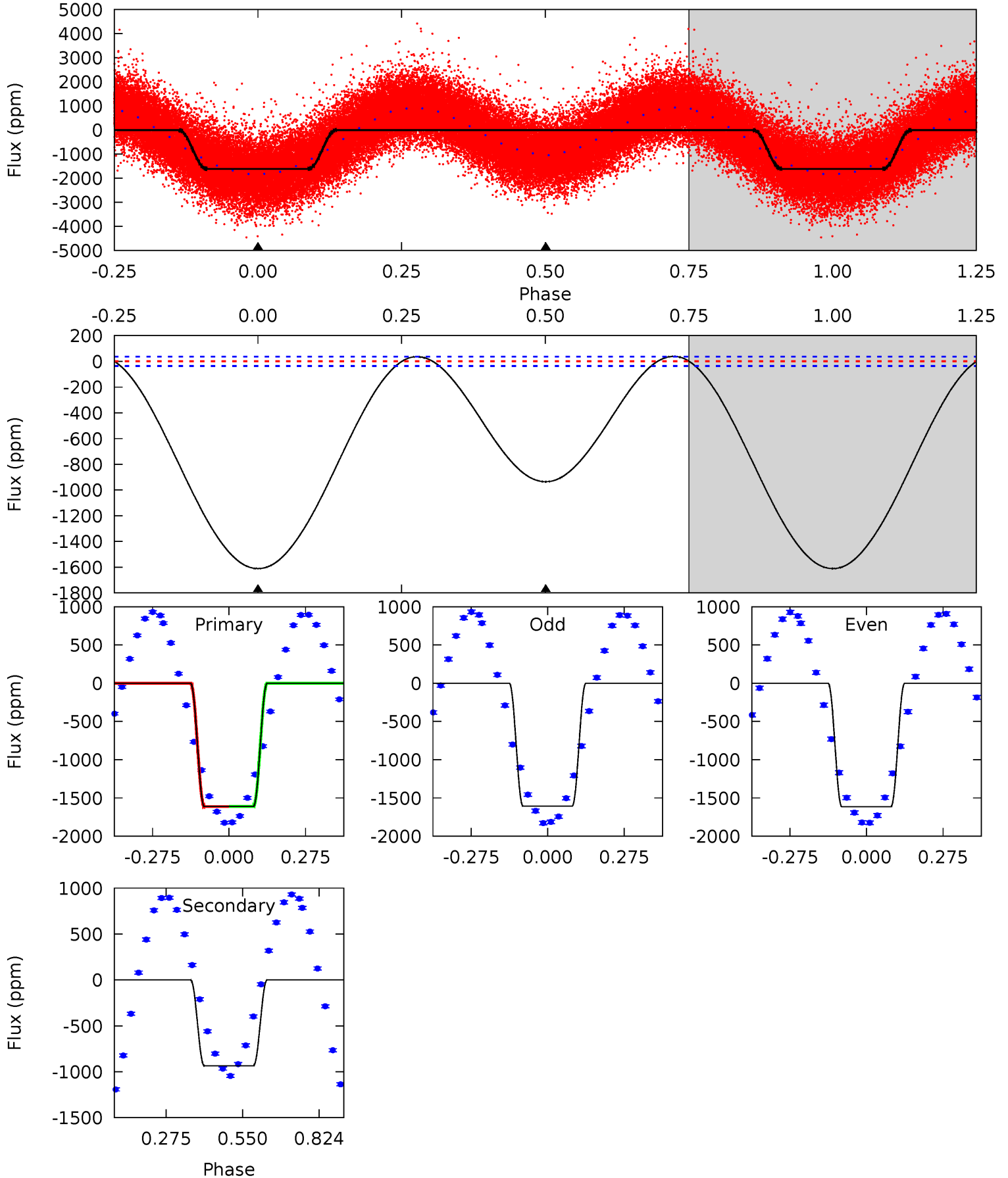
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

008480250-01, P = 0.645338 Days, E = 132.231336 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
193.7	112.5	0	0	4.35	1.09	5.22	193.7	193.7	112.5	112.5	0.50	1.00	0.02	0.26



Stellar Parameters For KIC 008480250

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5157^{+170}_{-154}	$4.641^{+0.060}_{-0.040}$	$-1.000^{+0.300}_{-0.300}$	$0.620^{+0.049}_{-0.044}$	$0.614^{+0.054}_{-0.023}$	$3.621^{+0.820}_{-0.558}$
	+3%/-3%	+1%/-1%	+30%/-30%	+8%/-7%	+9%/-4%	+23%/-15%
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 008480250-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$5.62^{+5.15}_{-3.81}$	2237^{+88}_{-76}	3029^{+13477}_{-15767}	$1.221^{+612.268}_{-376.463}$
Alt.	-936 ± 8	$5.67^{+5.58}_{-3.62}$	2236^{+78}_{-82}	3476^{+1669}_{-819}	$2.483^{+16.475}_{-1.854}$

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

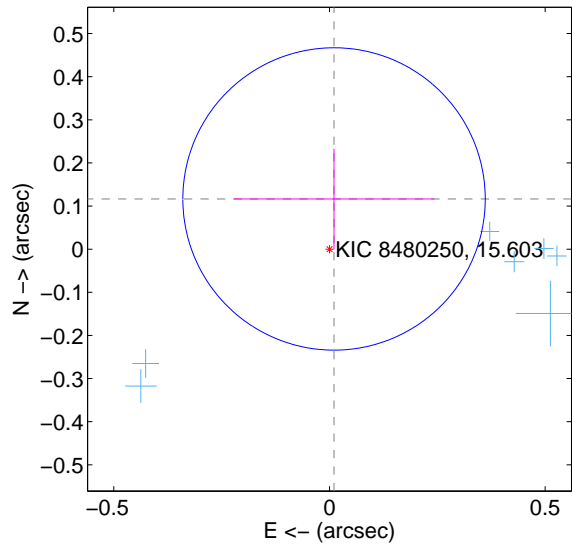
Supplemental centroid analysis for 008480250-01. Kepler magnitude: 15.60. Transit SNR -1.00

There are 16 quarters with good PRF difference image offsets

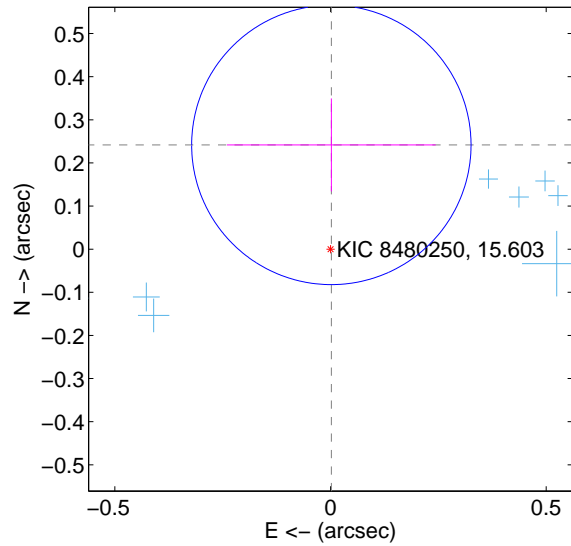
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.117 ± 0.117	1.00	-0.011 ± 0.232	0.116 ± 0.116
PRF-fit source offset from KIC position	0.242 ± 0.108	2.24	-0.002 ± 0.242	0.242 ± 0.108
photometric centroid source offset	0.23 ± 0.04	6.58	0.00 ± 0.03	0.23 ± 0.04

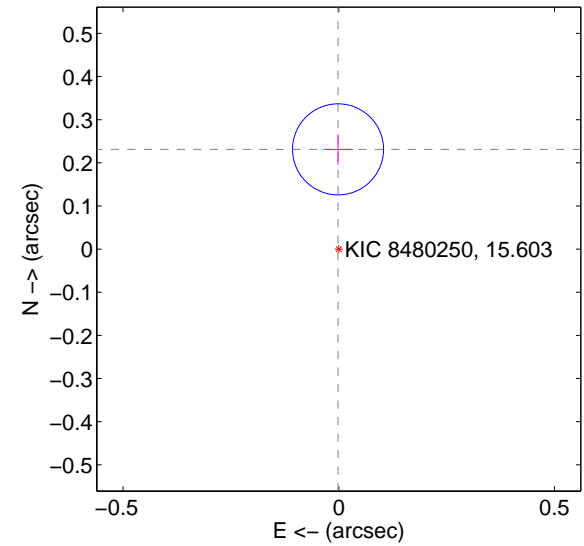
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

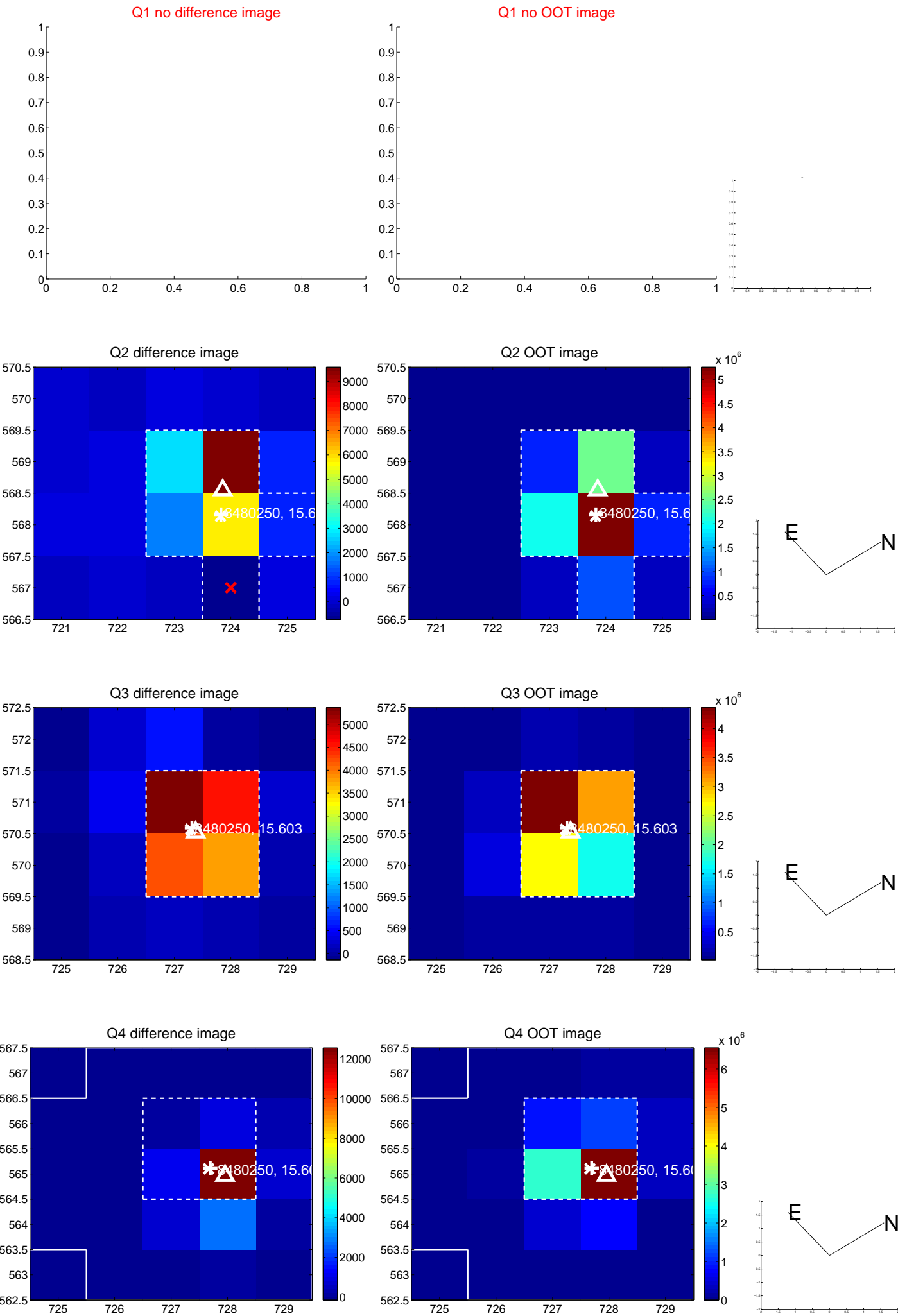


offset from photometric centroids

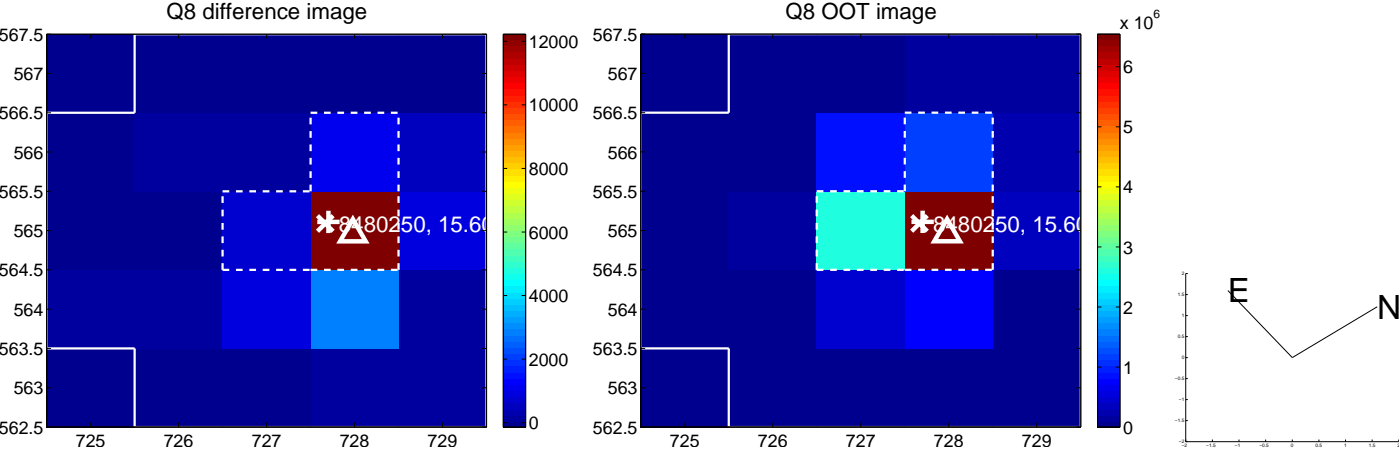
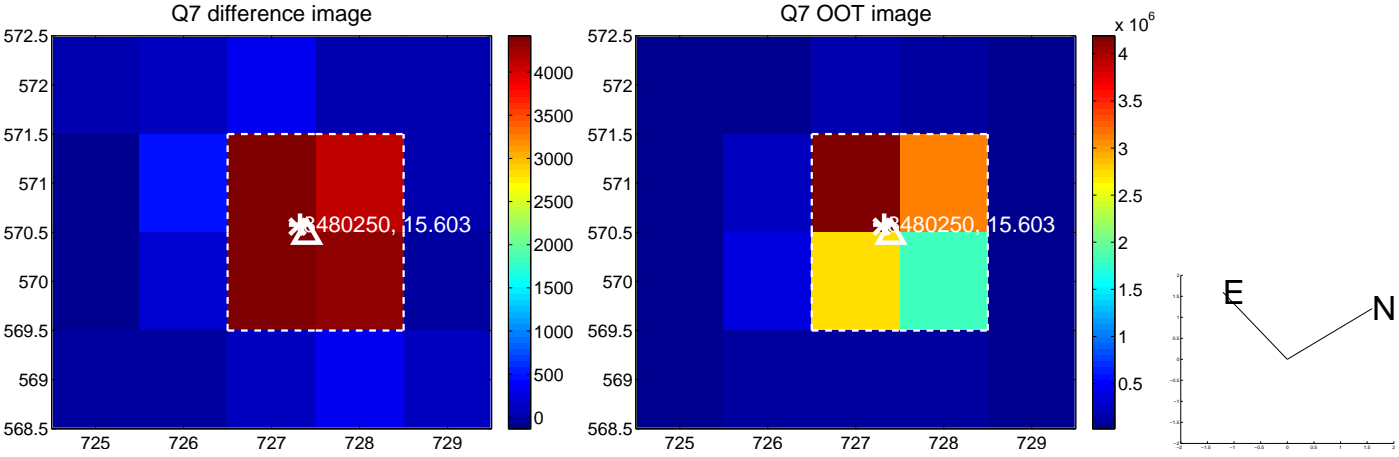
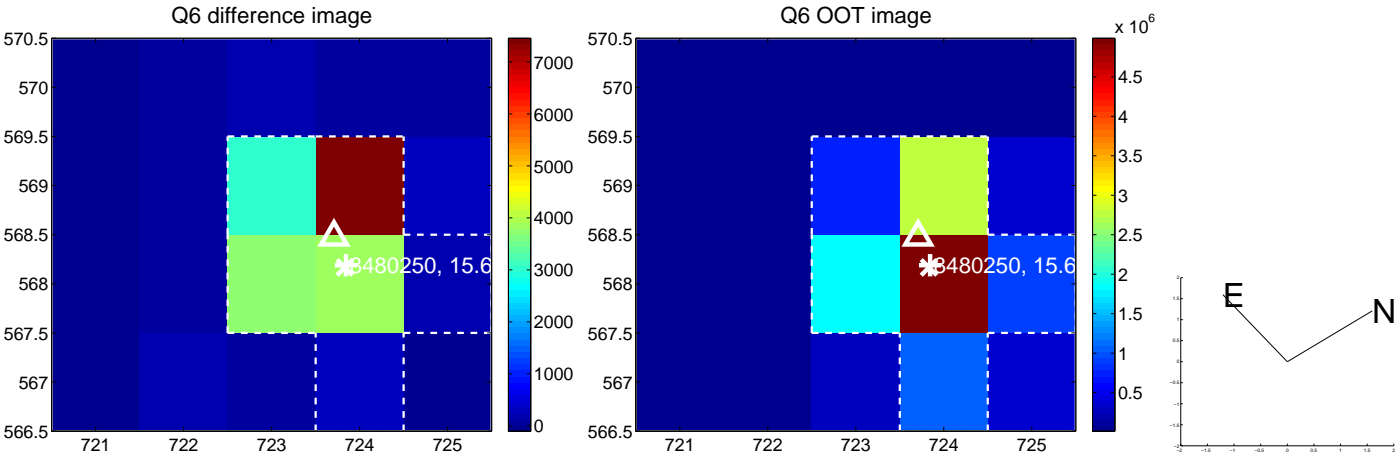
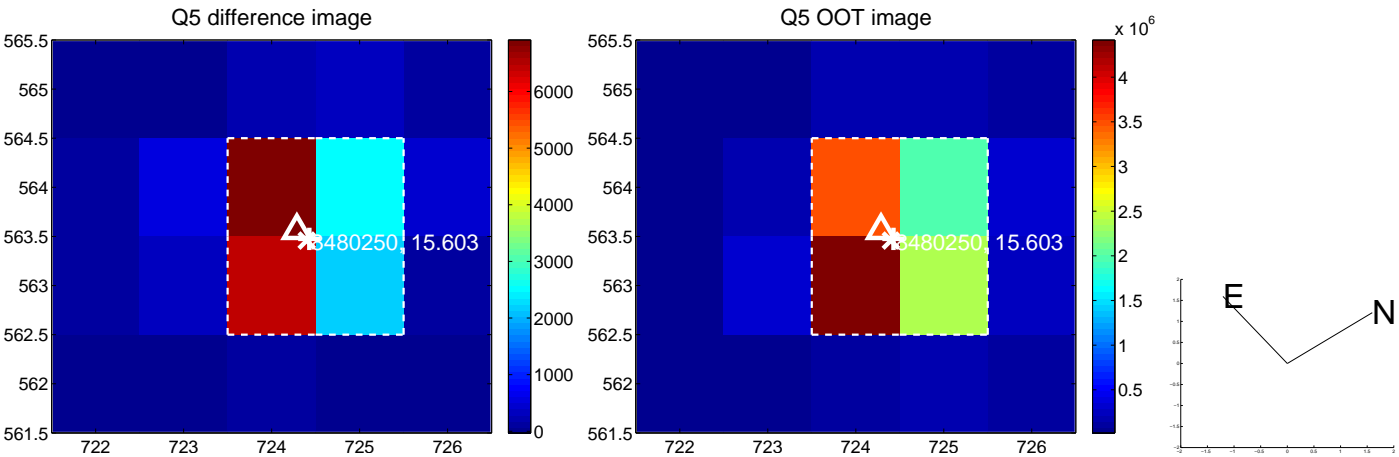


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

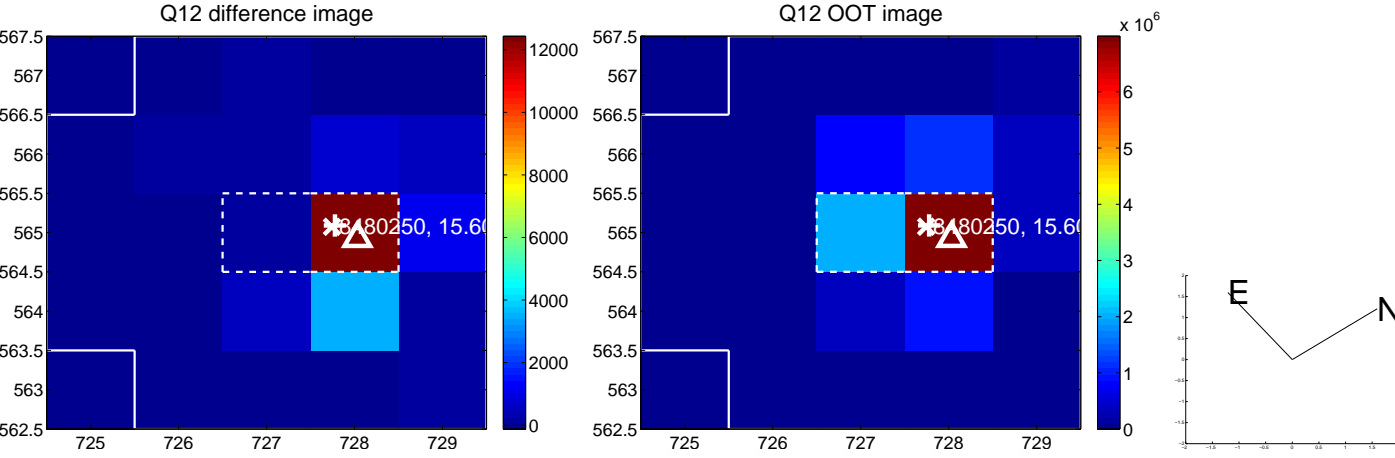
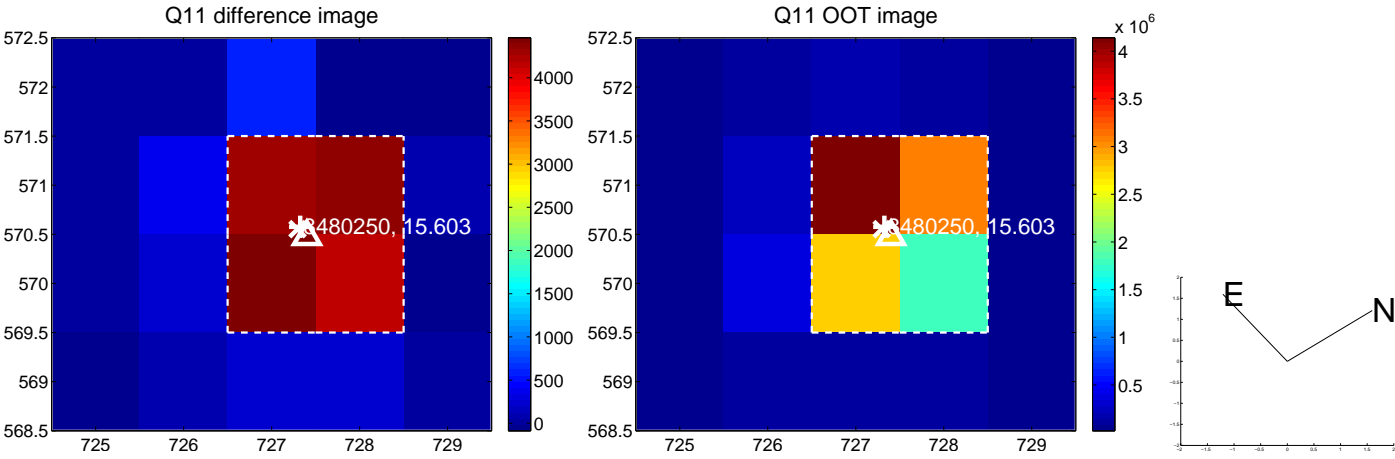
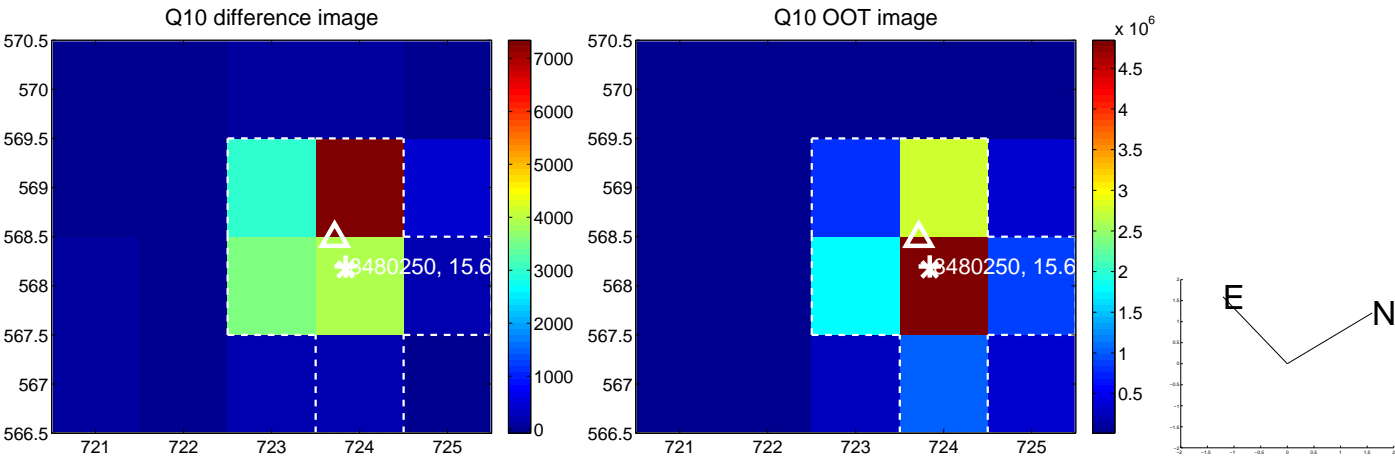
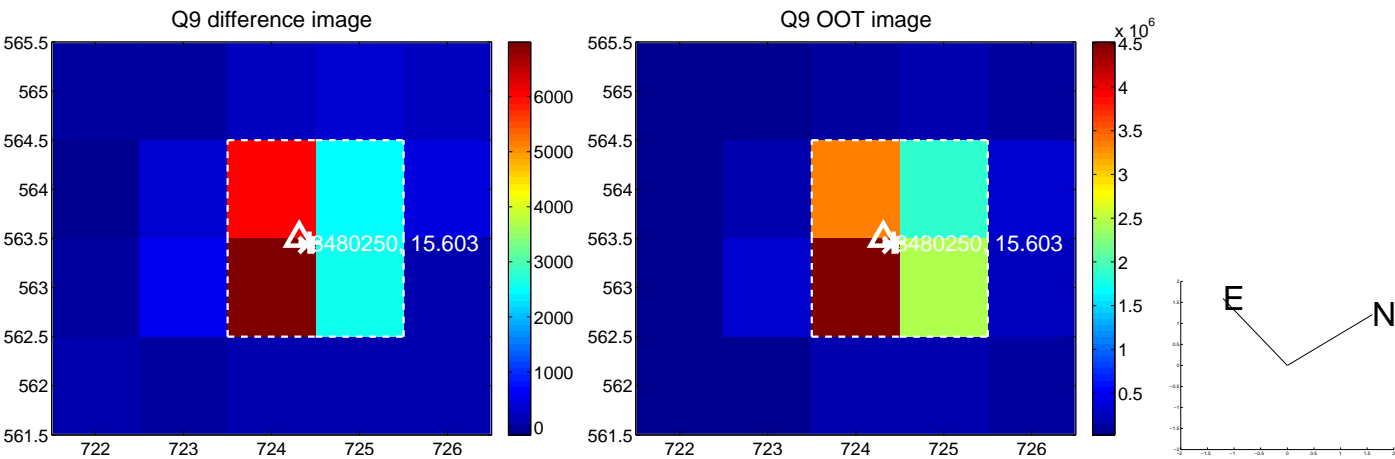
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



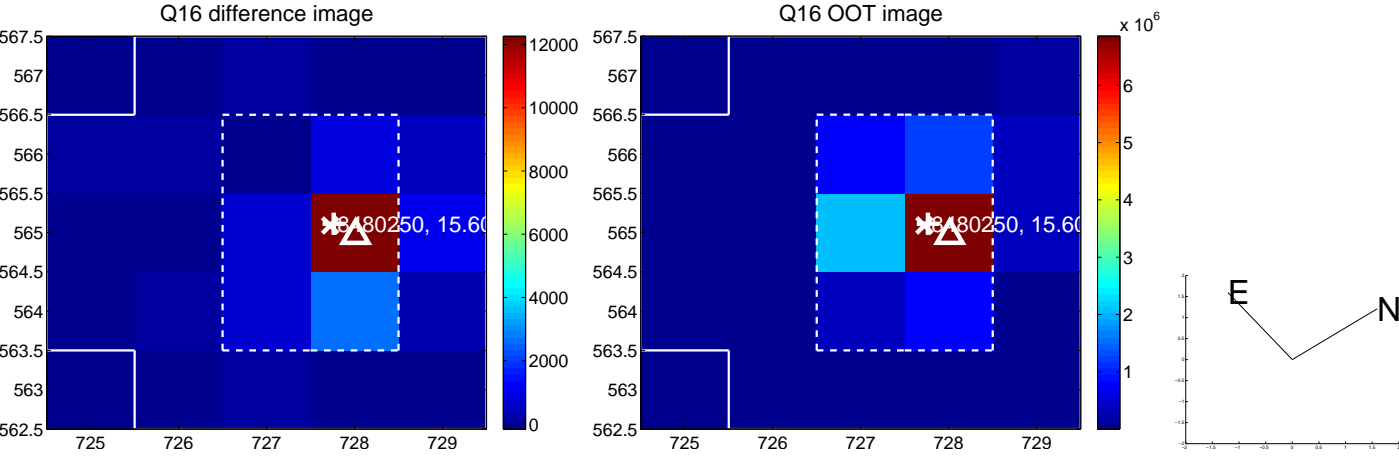
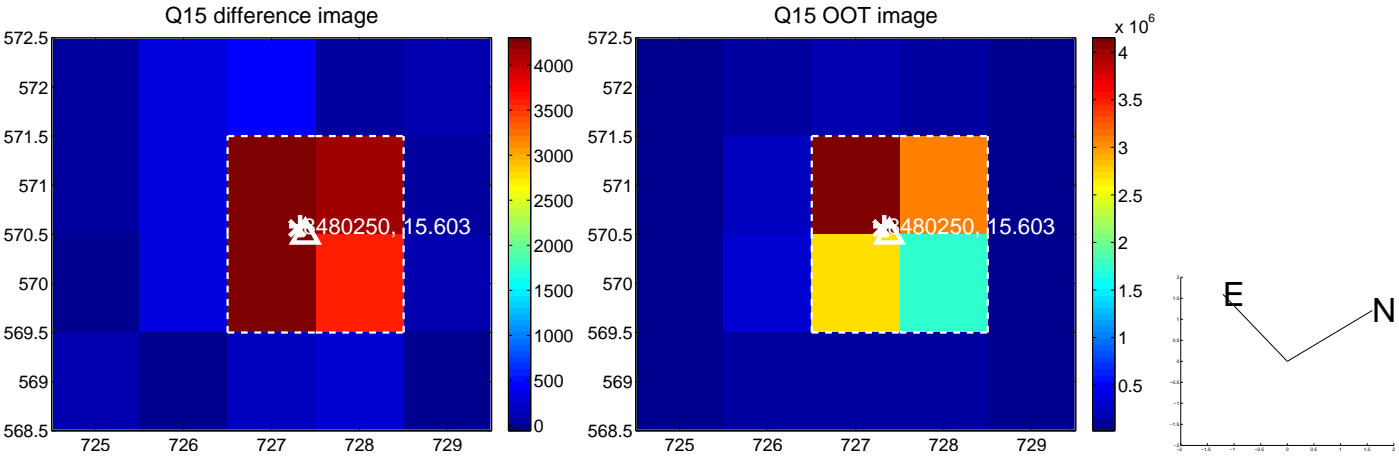
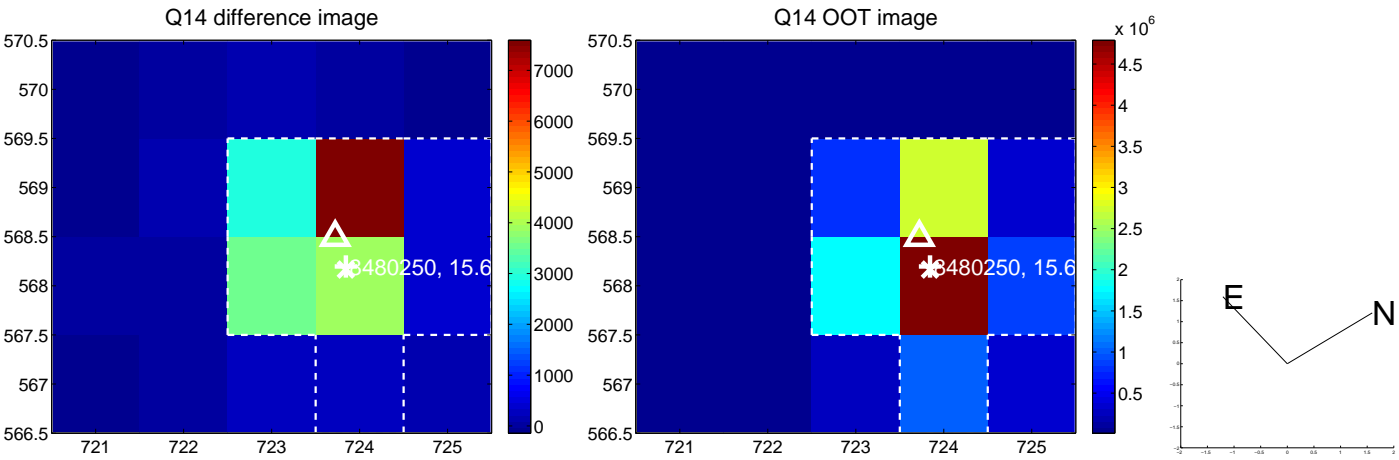
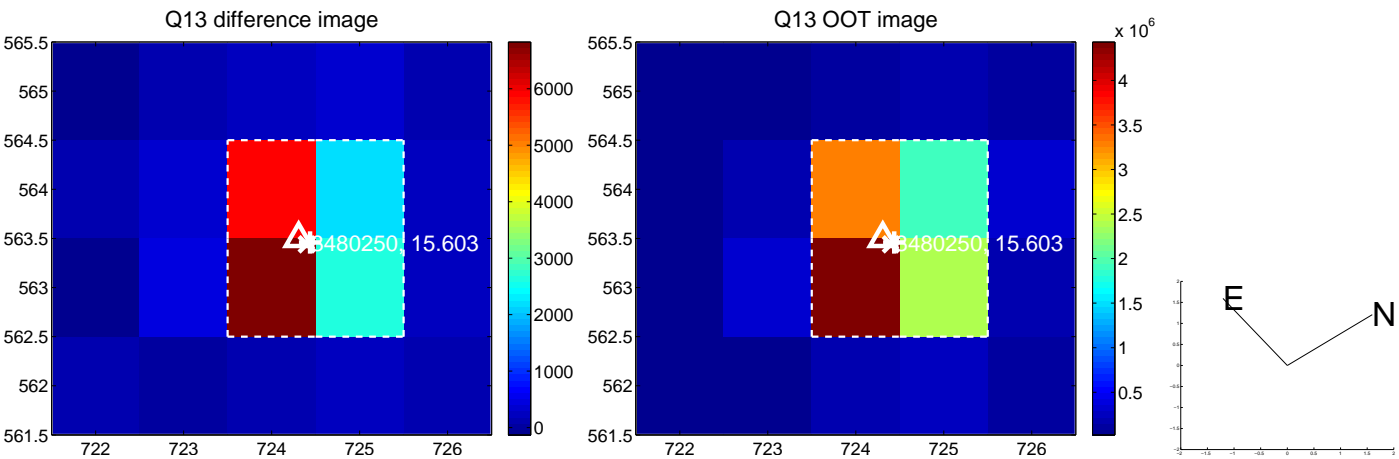
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



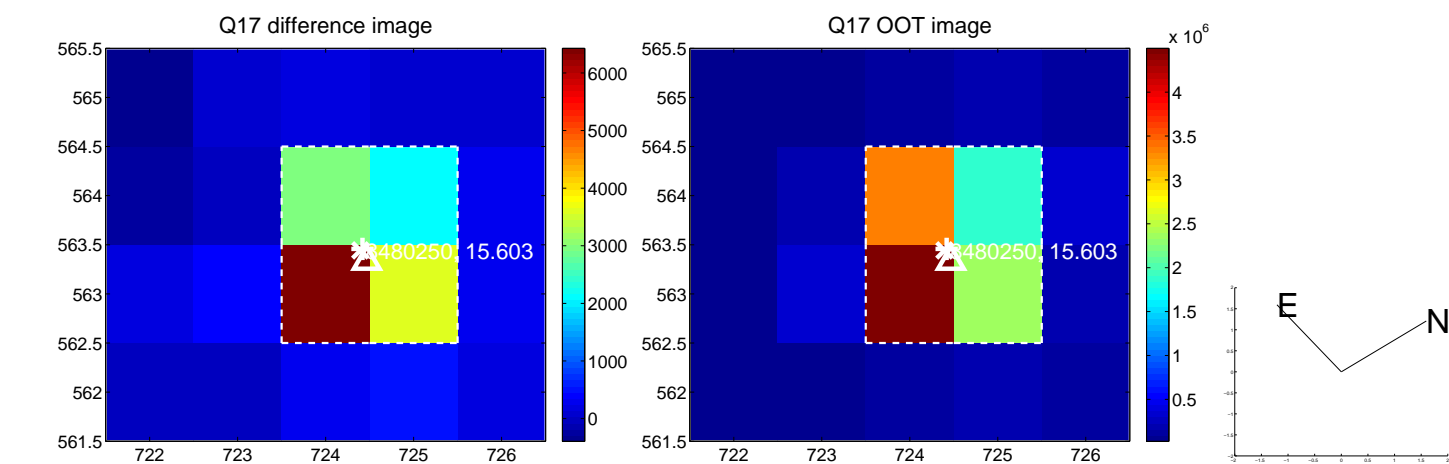
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



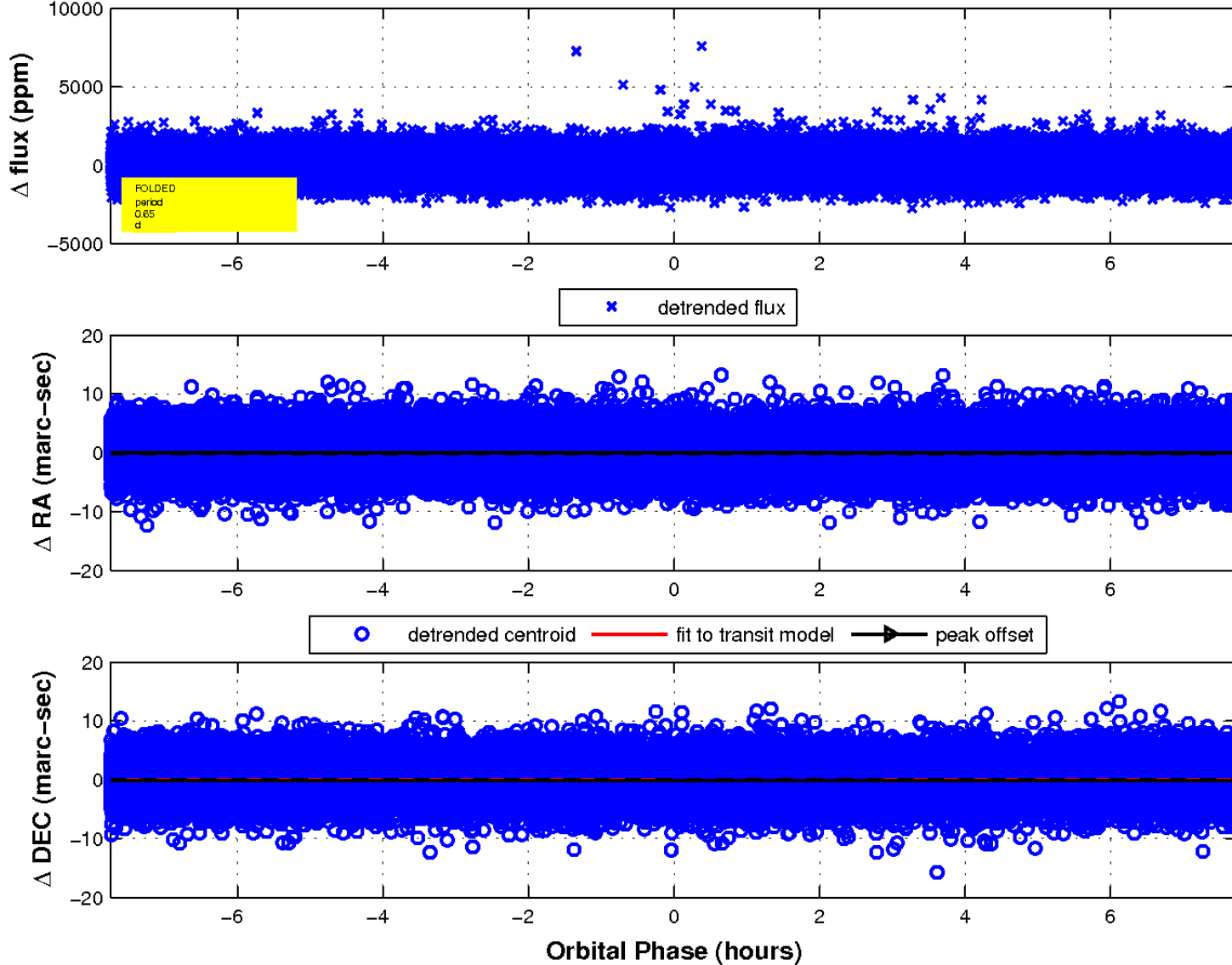
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

