

KIC 006529483

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})
006529483-01	OBS	No	0.601511	131.738660	33.3	1.758	7.7	12.4	0.72	5290	0.50	2317.40

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006529483-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_RESOLVED_OFFSET

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

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

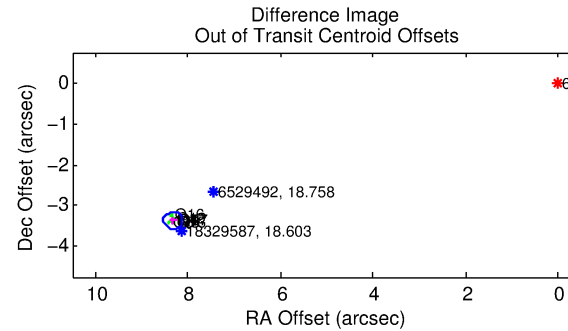
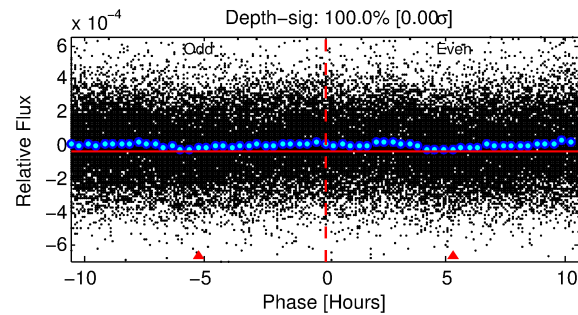
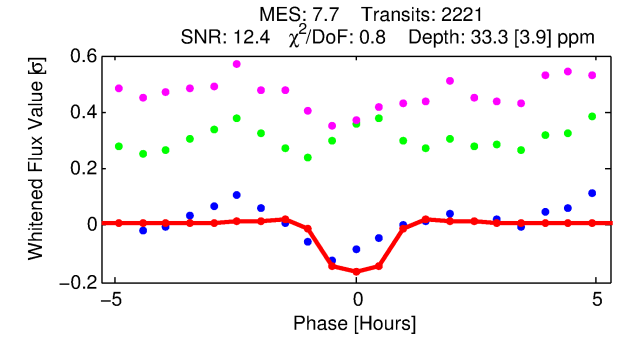
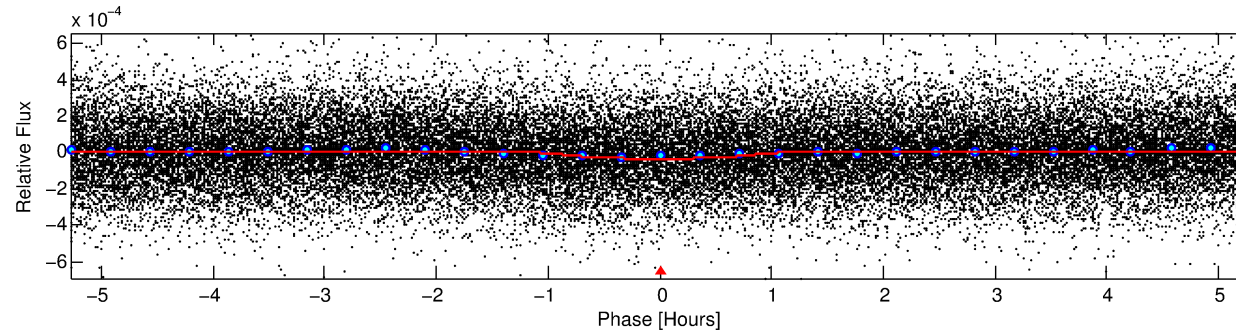
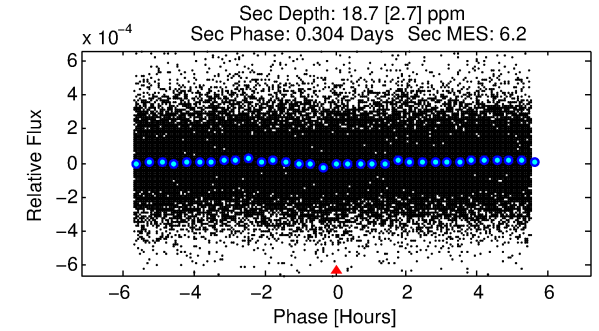
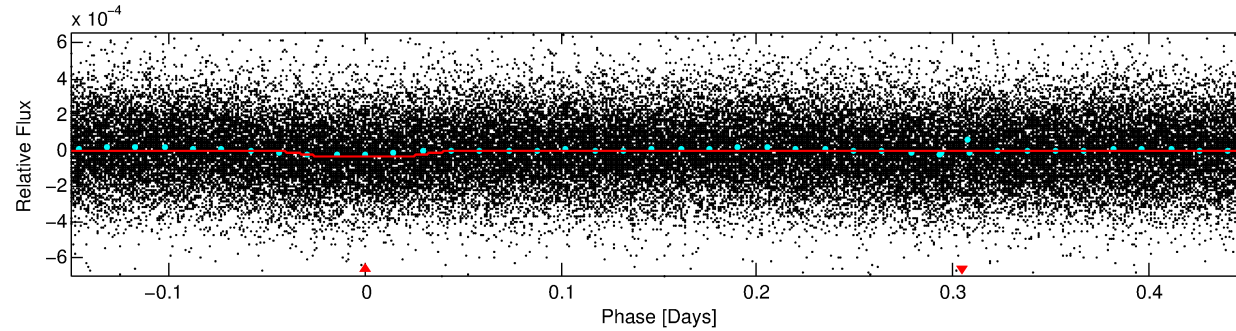
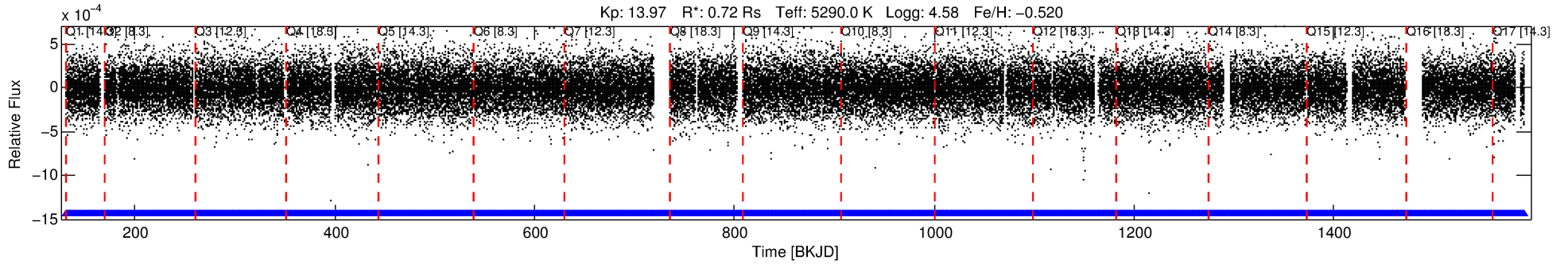
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006529483-01

No Significant Match Found

DV One-Page Summary

KIC: 6529483 Candidate: 1 of 1 Period: 0.602 d



DV Fit Results:

Period = 0.60151 [0.00001] d
Epoch = 131.7387 [0.0019] BKJD
Rp/R* = 0.0063 [0.0032]
a/R* = 1.50 [1.90]
b = 0.90 [0.49]
Seff = 2317.40 [386.03]
Teq = 1769 [74] K
Rp = 0.50 [0.26] Re
a = 0.0125 [0.0012] AU
Ag = 6.49 [6.64] [0.83σ]
Teff = 4365 [1114] K [2.32σ]

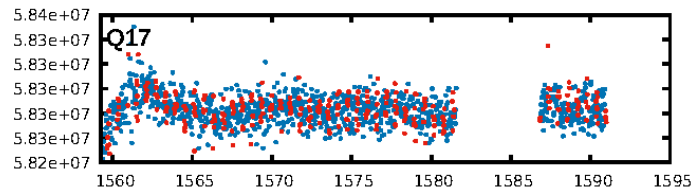
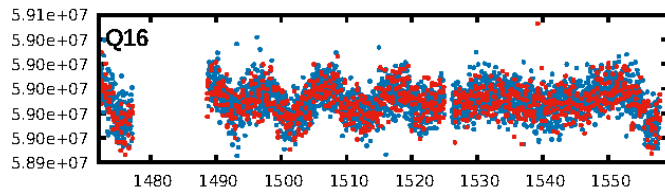
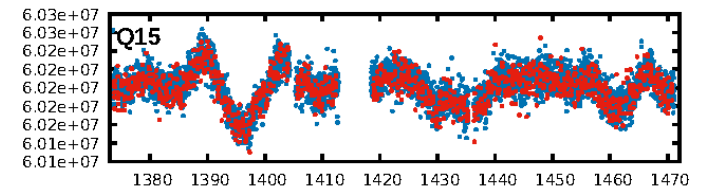
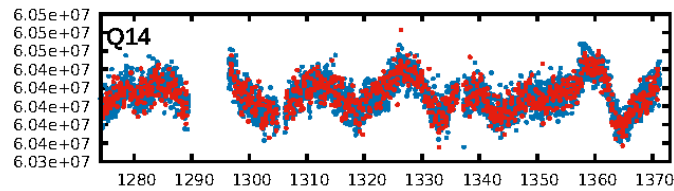
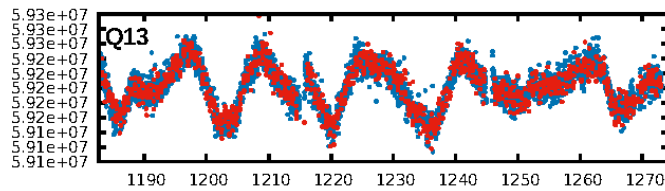
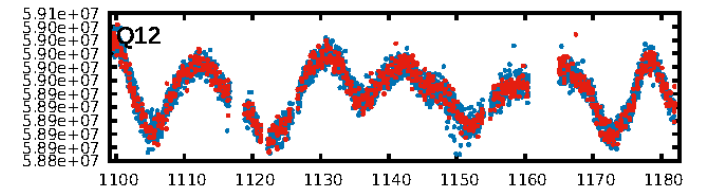
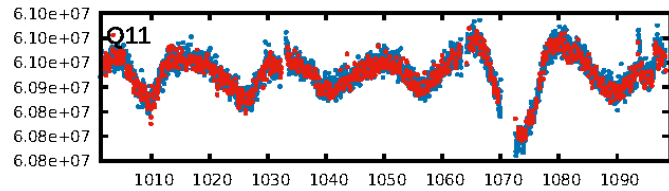
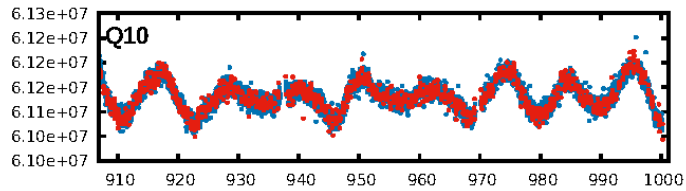
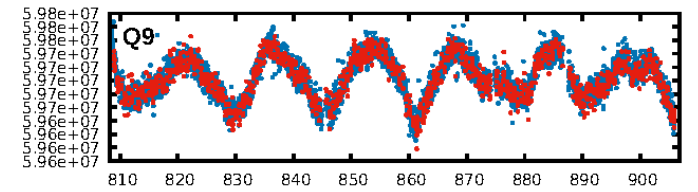
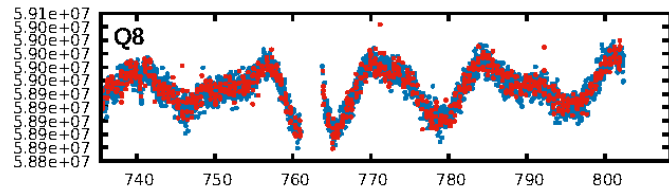
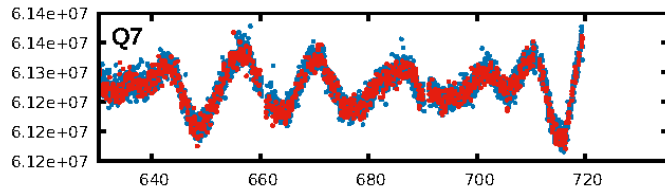
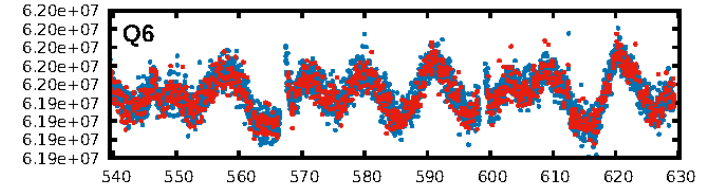
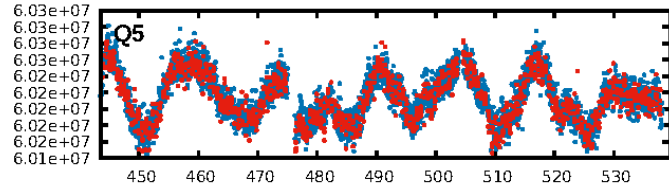
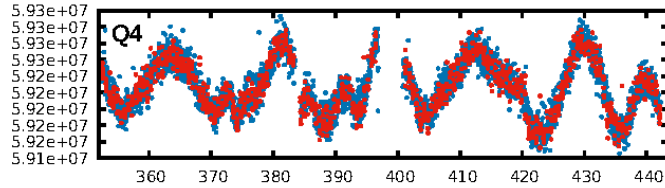
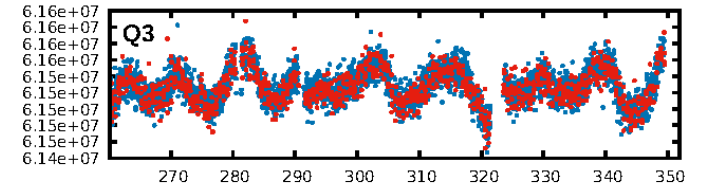
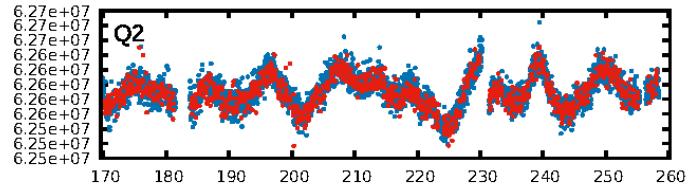
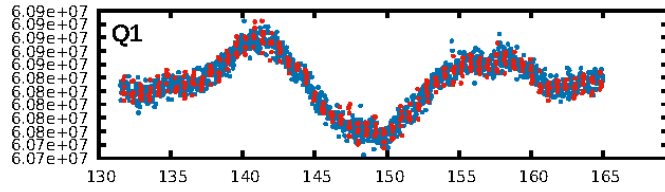
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGoF-sig: N/A
Bootstrap-pfa: 4.91e-13
RollingBand-fgt: 1.00 [2120/2120]
GhostDiagnostic-chr: 1.008
Centroid-sig: 25.9%
Centroid-so: 0.840 arcsec [1.01σ]
OotOffset-rm: 8.982 arcsec [131.89σ]
KicOffset-rm: 8.918 arcsec [130.18σ]
OotOffset-st: 0/1/4/4 [9]
KicOffset-st: 0/1/4/4 [9]
DiffImageQuality-fgm: 1.00 [9/9]
DiffImageOverlap-fno: 1.00 [17/17]

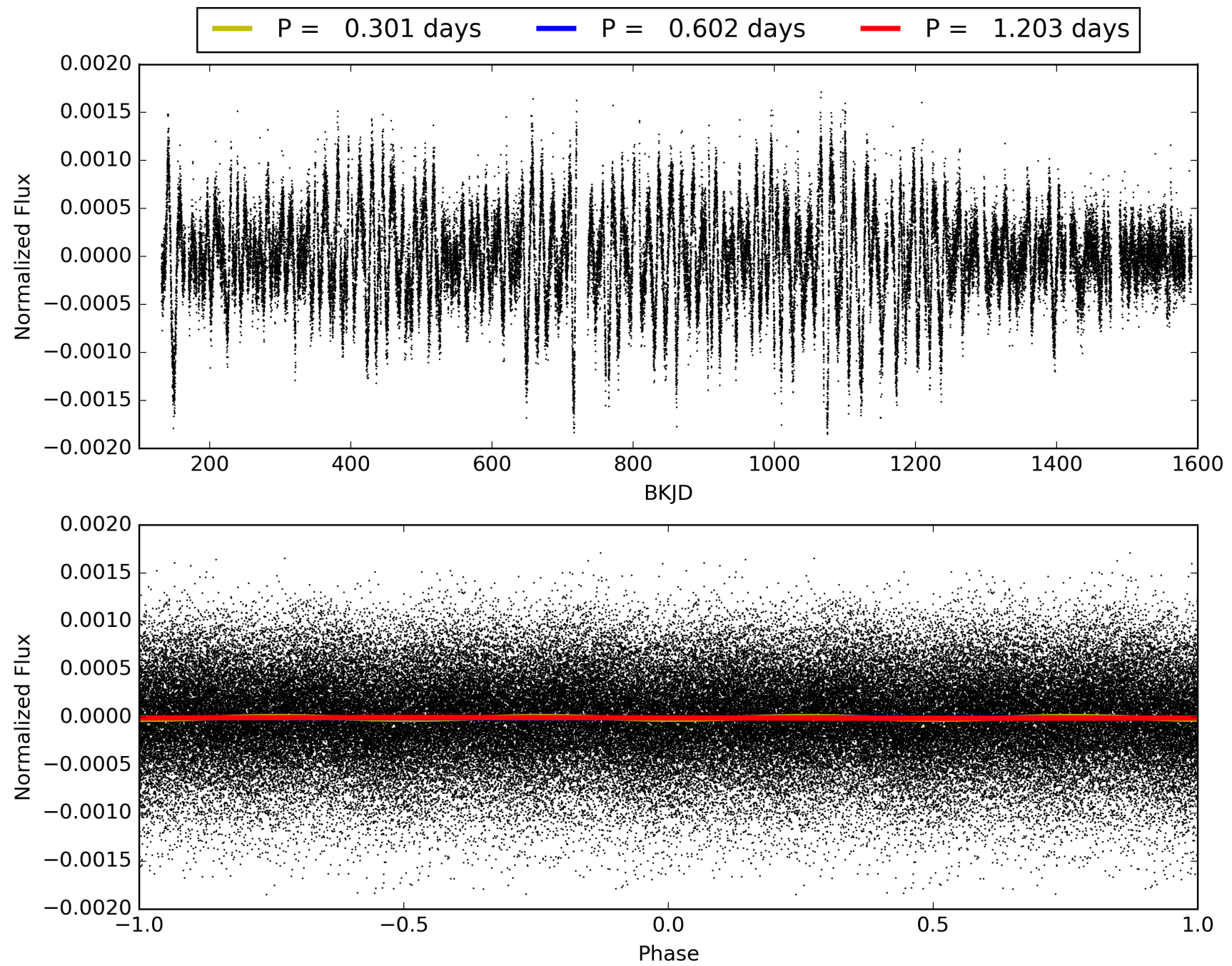
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 22:35:18 Z

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

TCE 006529483-01, PDC Light Curves

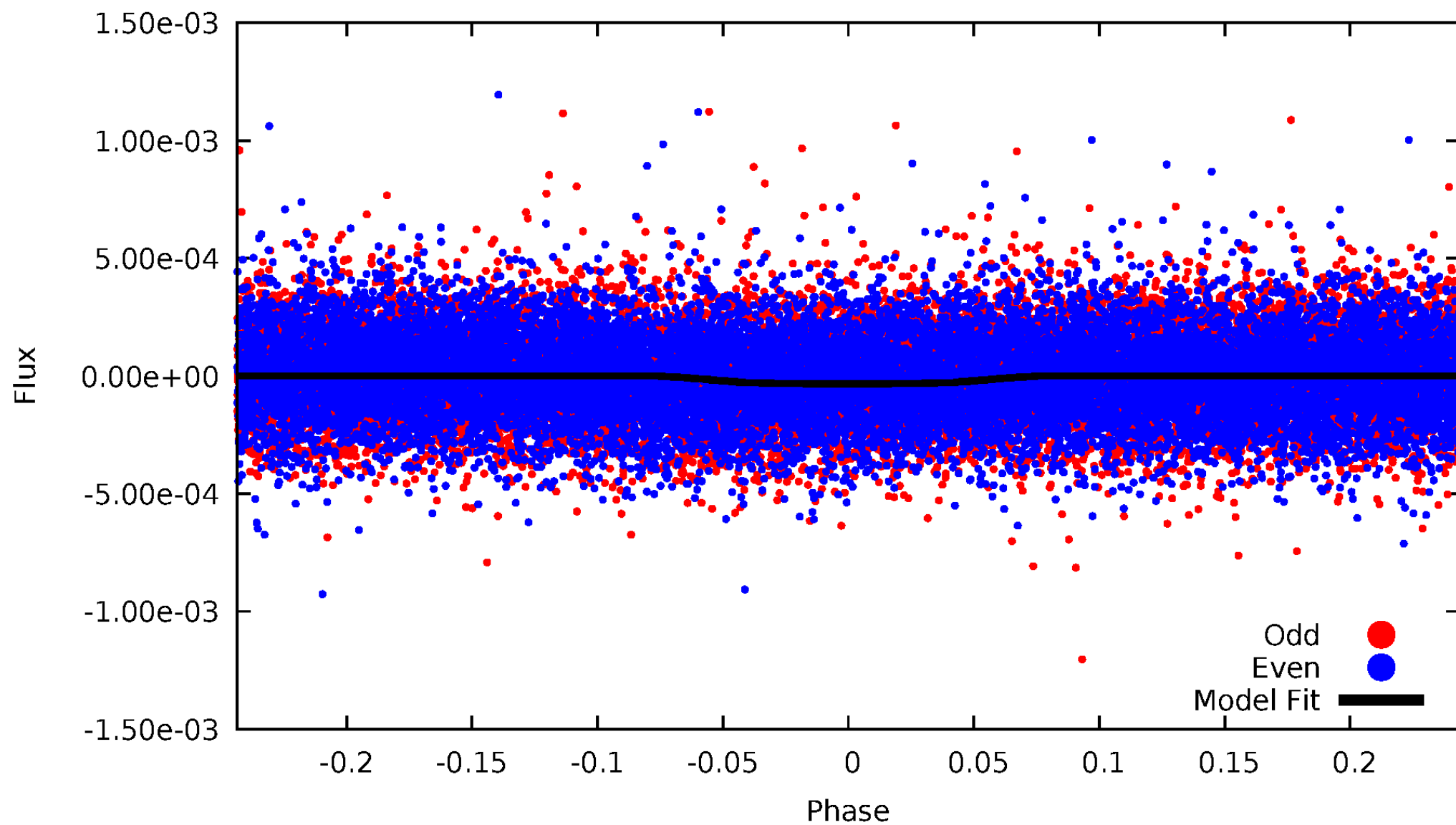


TCE 006529483-01



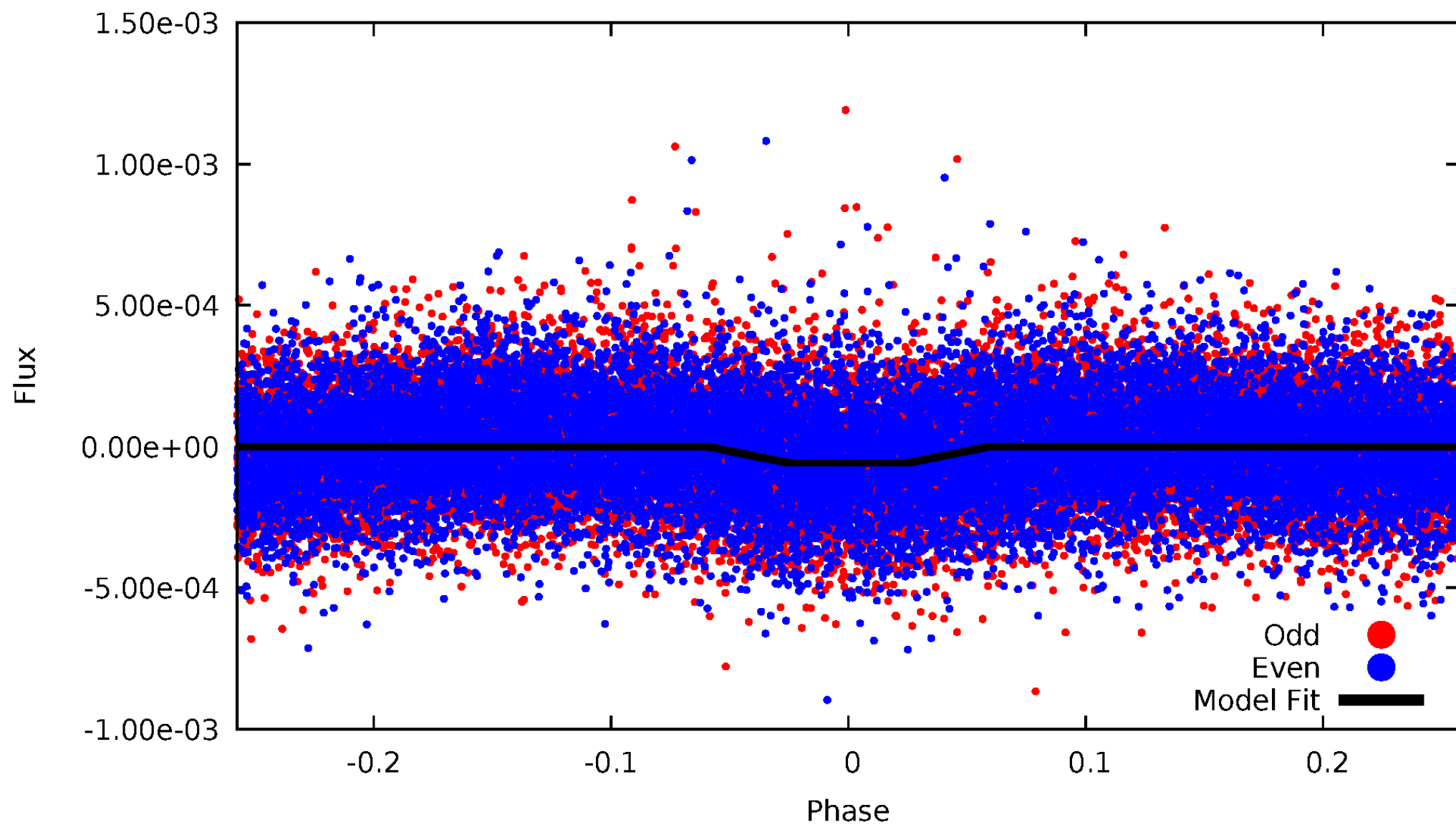
DV Odd/Even

TCE 006529483-01



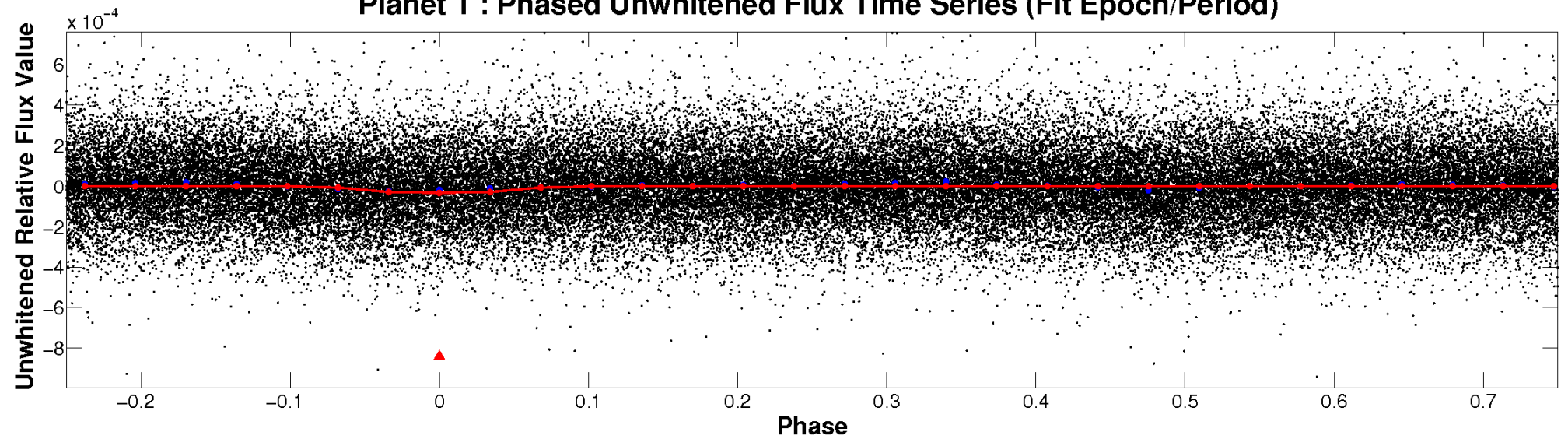
ALT Odd/Even

TCE 006529483-01

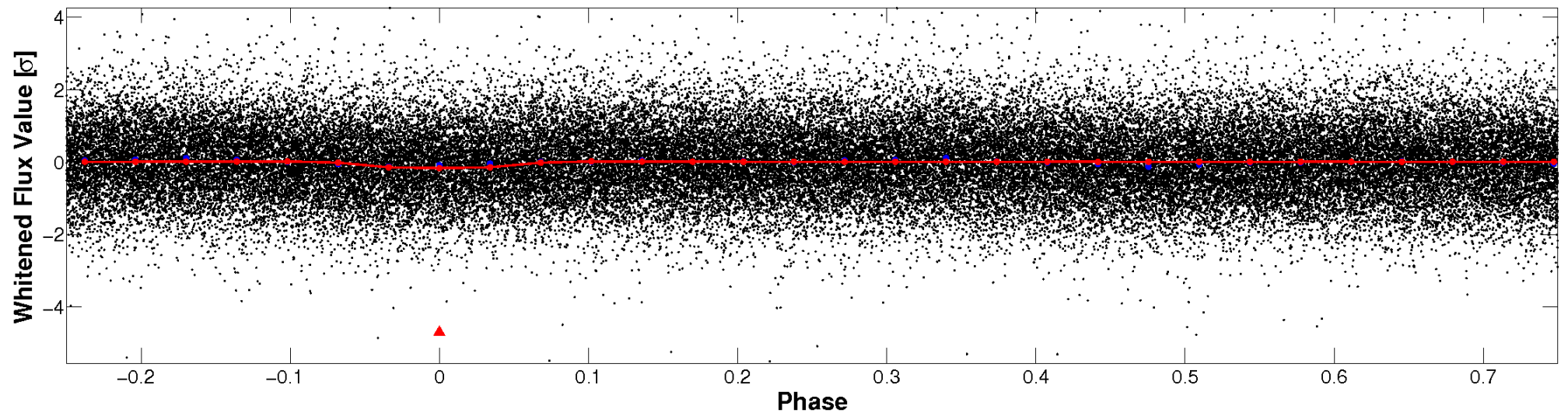


Non-Whitened Vs. Whitened Light Curve

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

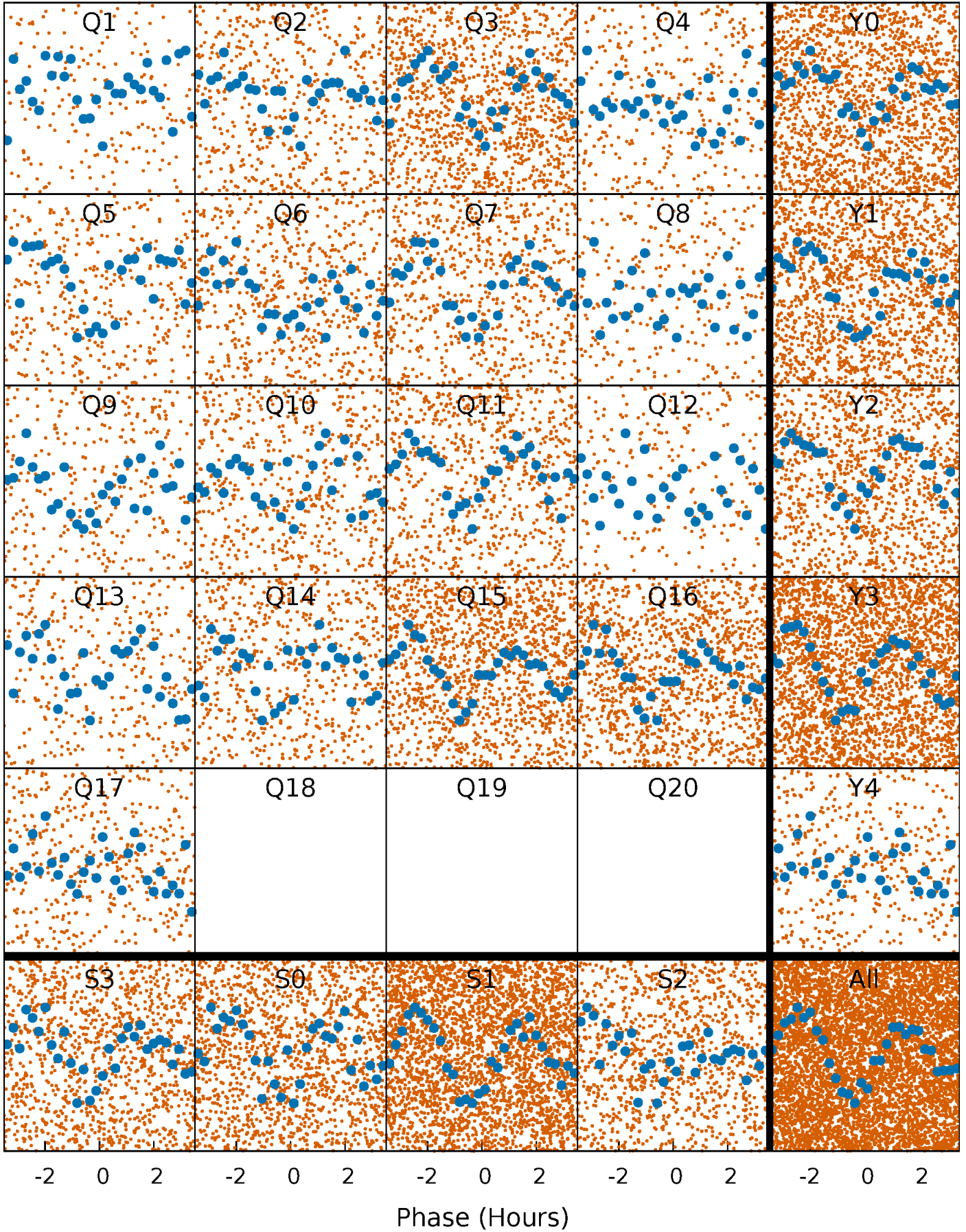


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



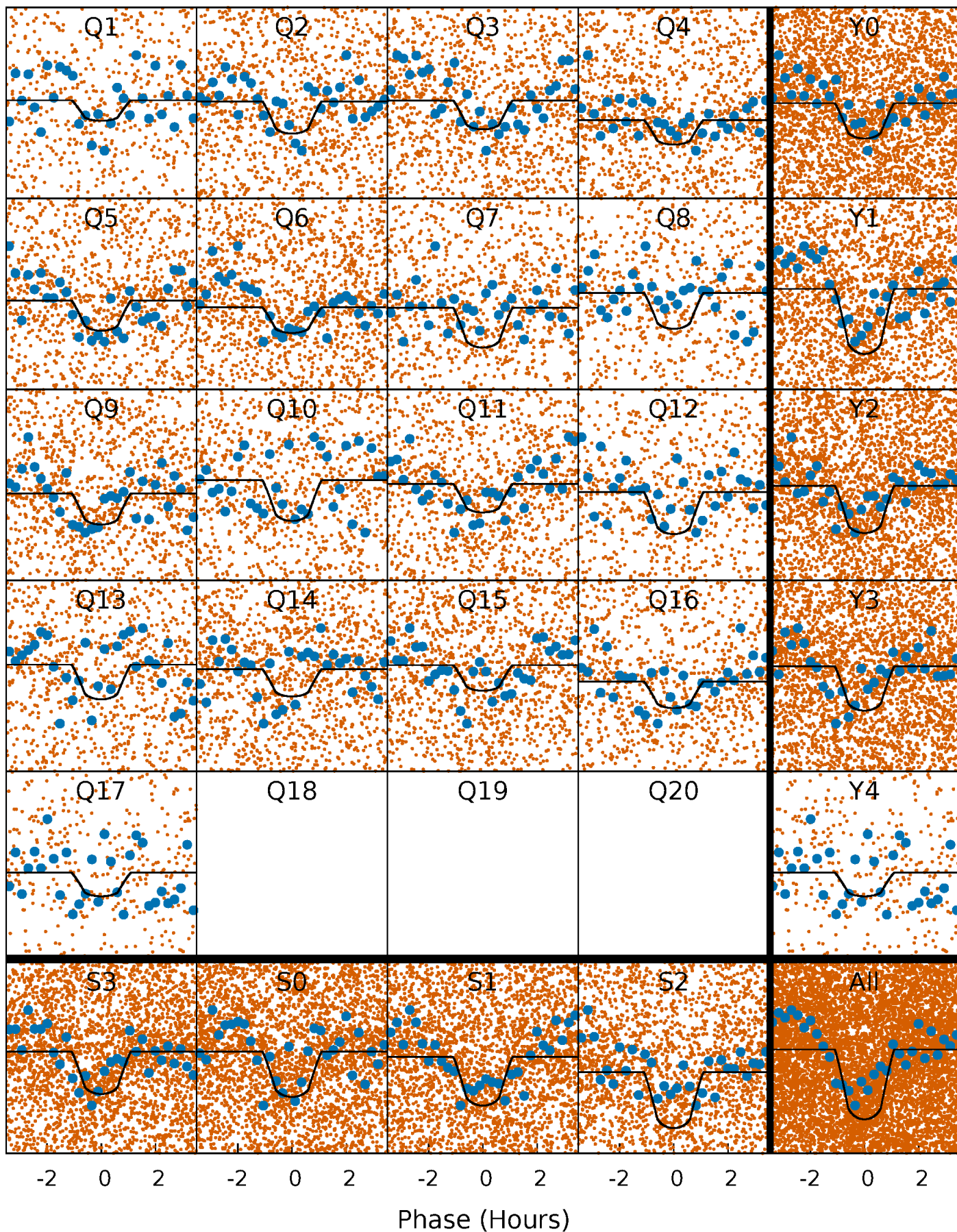
PDC Quarter-Phased Transit Curves

TCE 006529483-01 P= 0.601511 Days $T_0=131.738660$ (BKJD)



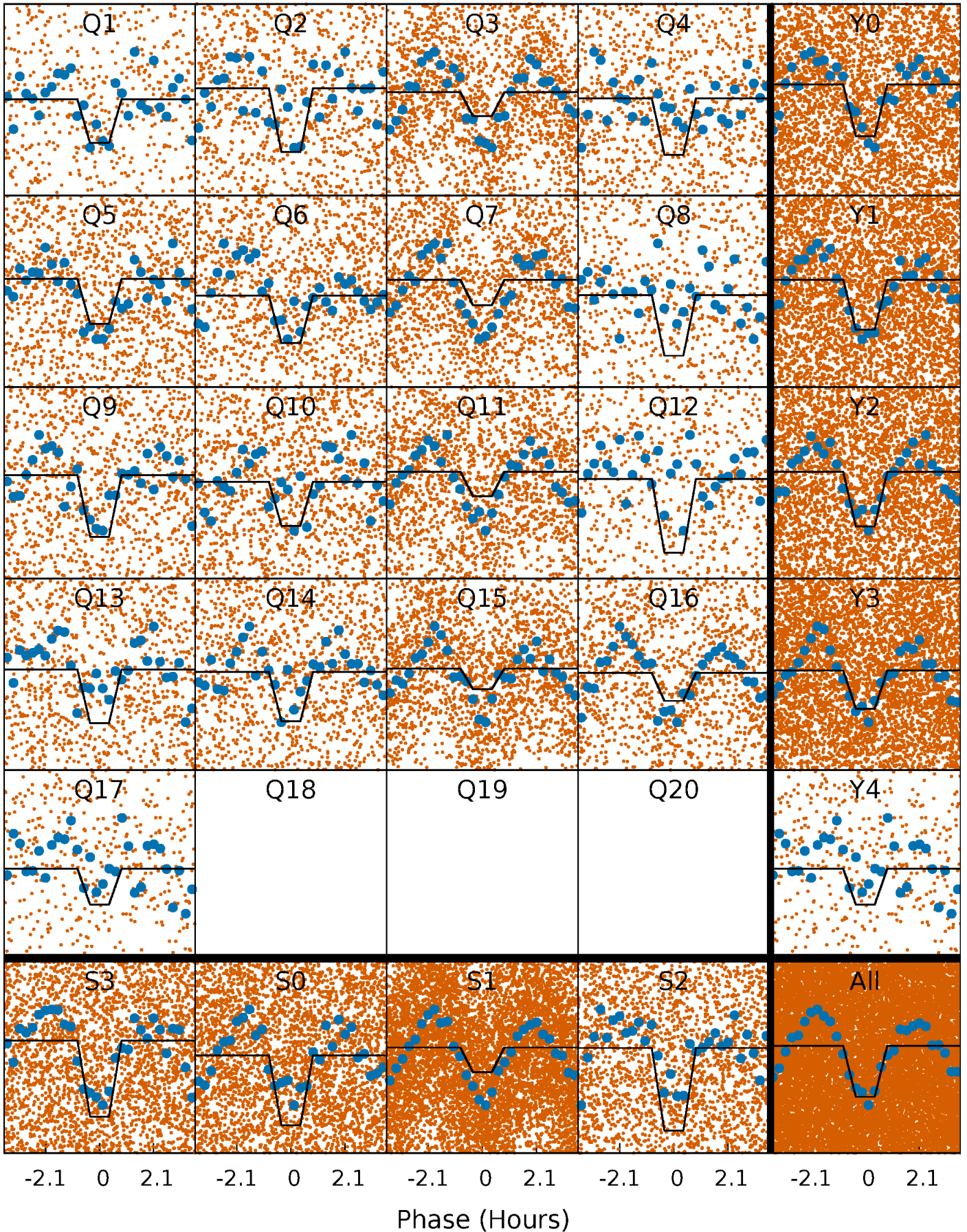
DV Quarter-Phased Transit Curves

TCE 006529483-01 P= 0.601511 Days $T_0=131.738660$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

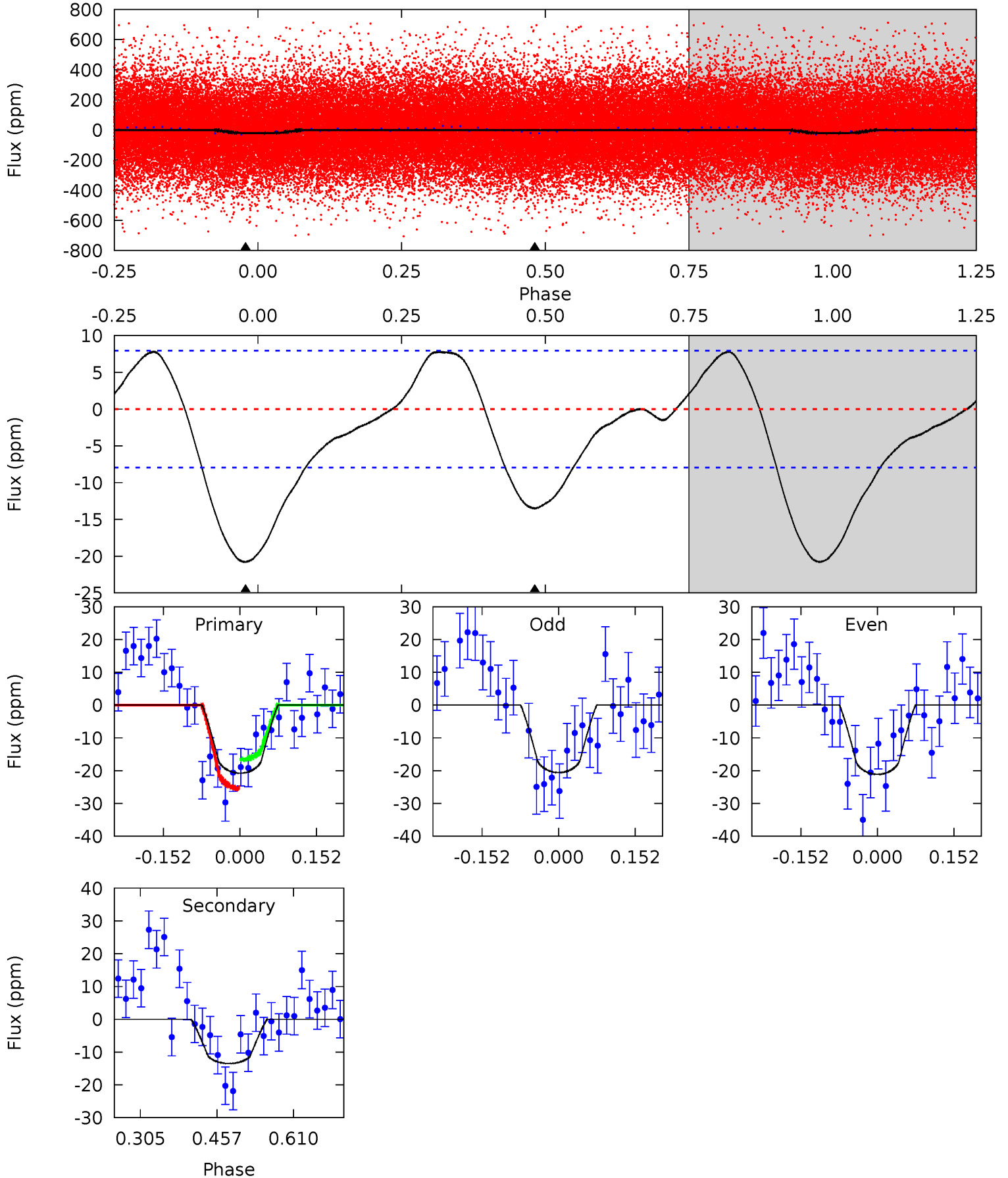
TCE 006529483-01 P= 0.601498 Days $T_0=131.737043$ (BKJD)



DV Model-Shift Uniqueness Test

006529483-01, P = 0.601511 Days, E = 131.137149 Days

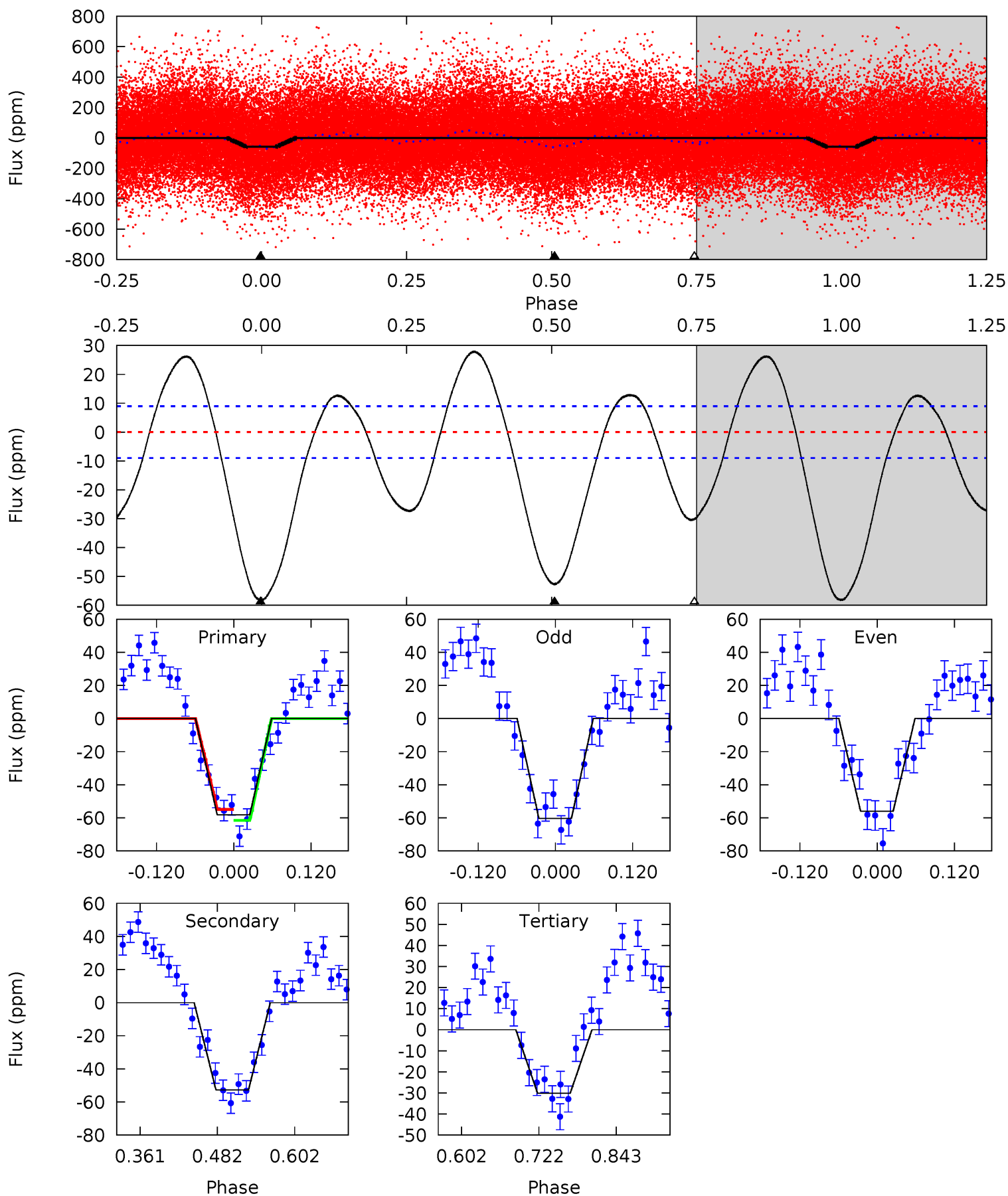
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.7	7.60	0	0	4.48	1.43	2.07	11.7	11.7	7.60	7.60	0.16	0.91	0.27	2.51



Alt Model-Shift Uniqueness Test

006529483-01, P = 0.601498 Days, E = 131.135545 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.3	26.5	15.2	0	4.53	1.55	9.32	14.1	29.3	11.3	26.5	1.09	1.05	0.32	1.65



Stellar Parameters For KIC 006529483

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5290^{+142}_{-142}	$4.581^{+0.065}_{-0.065}$	$-0.520^{+0.300}_{-0.300}$	$0.716^{+0.085}_{-0.069}$	$0.711^{+0.086}_{-0.046}$	$2.732^{+0.707}_{-0.618}$
	+3%/-3%	+1%/-1%	+58%/-58%	+12%/-10%	+12%/-6%	+26%/-23%
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 006529483-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-13 ± 2	$0.48^{+0.26}_{-0.22}$	2474^{+92}_{-84}	4242^{+1301}_{-659}	$4.964^{+11.987}_{-2.864}$
Alt.	-53 ± 2	$0.59^{+0.27}_{-0.25}$	2471^{+99}_{-90}	5193^{+1549}_{-777}	13^{+25}_{-7}

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

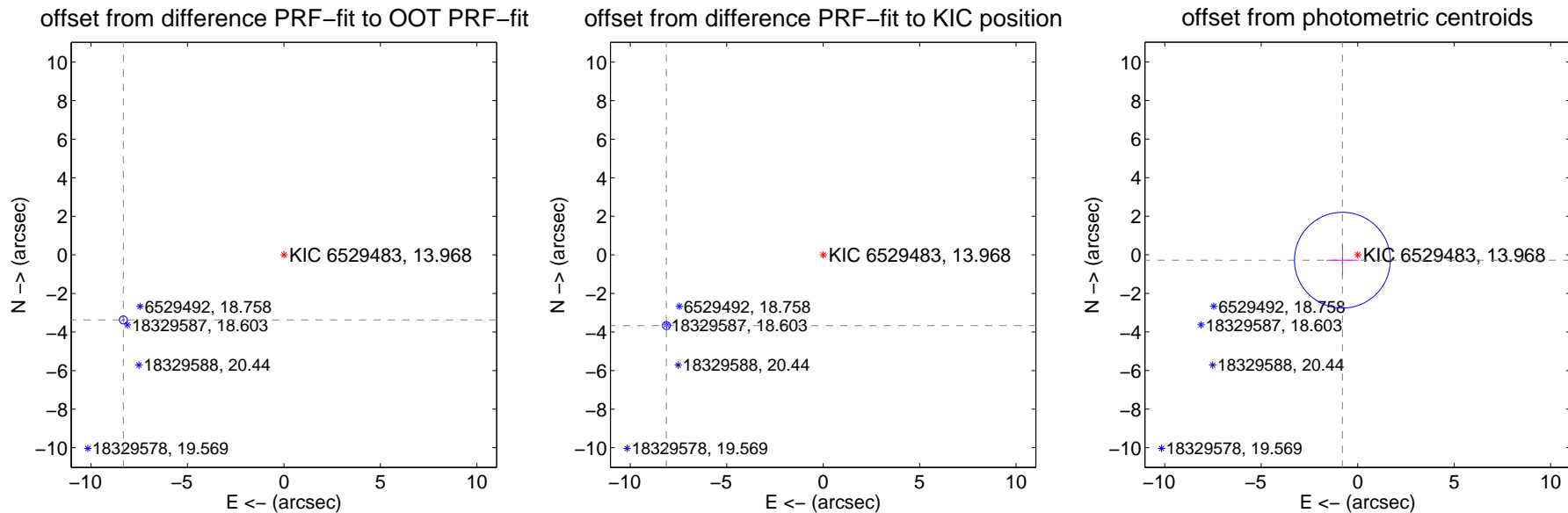
DV Centroid Data

Supplemental centroid analysis for 006529483-01. Kepler magnitude: 13.97. Transit SNR 12.41

There are 9 quarters with good PRF difference image offsets

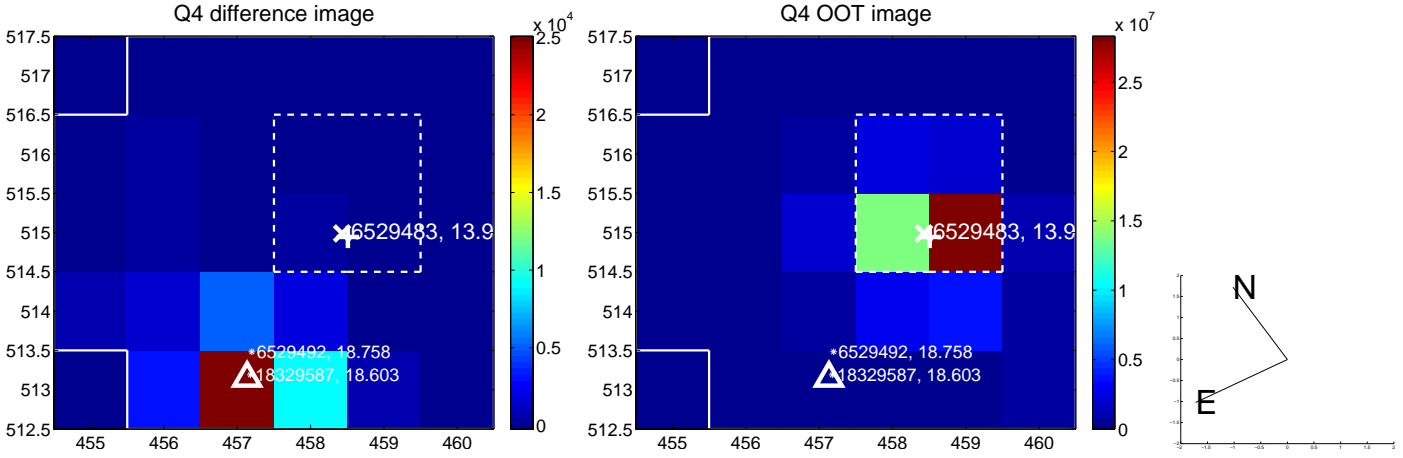
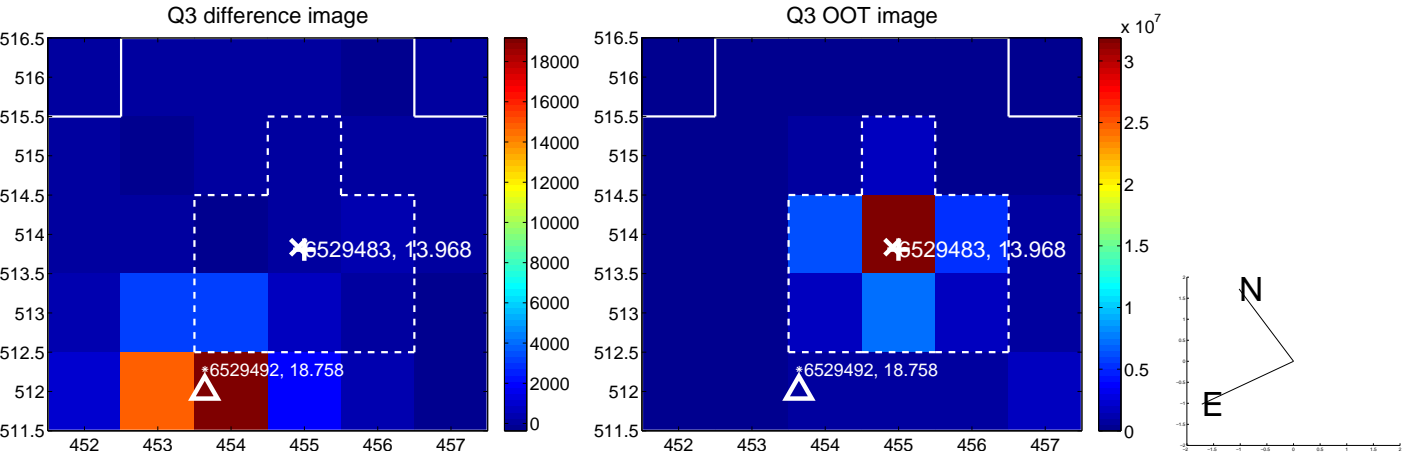
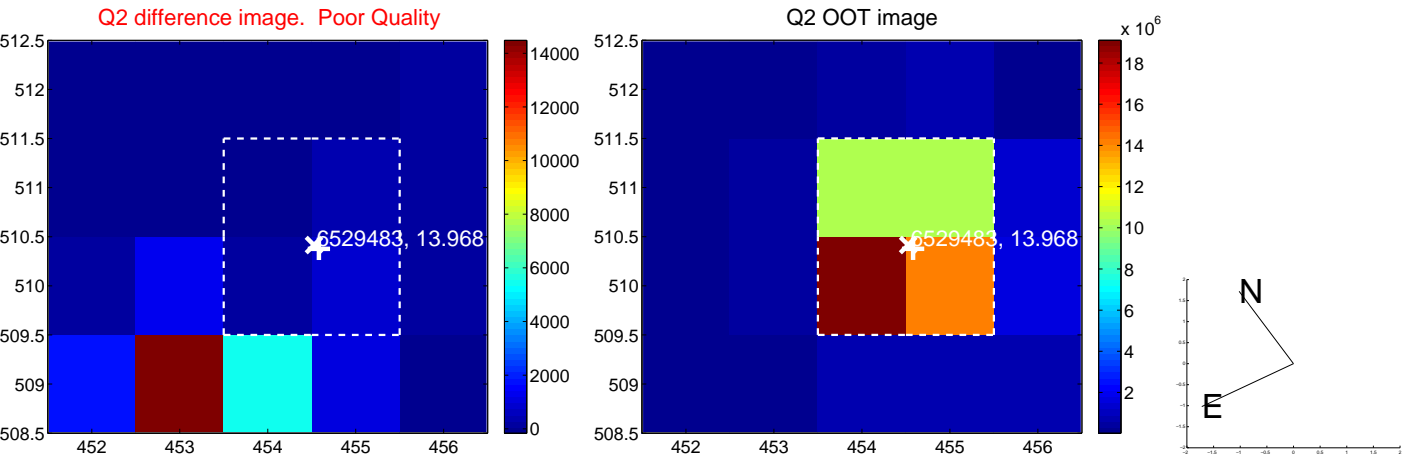
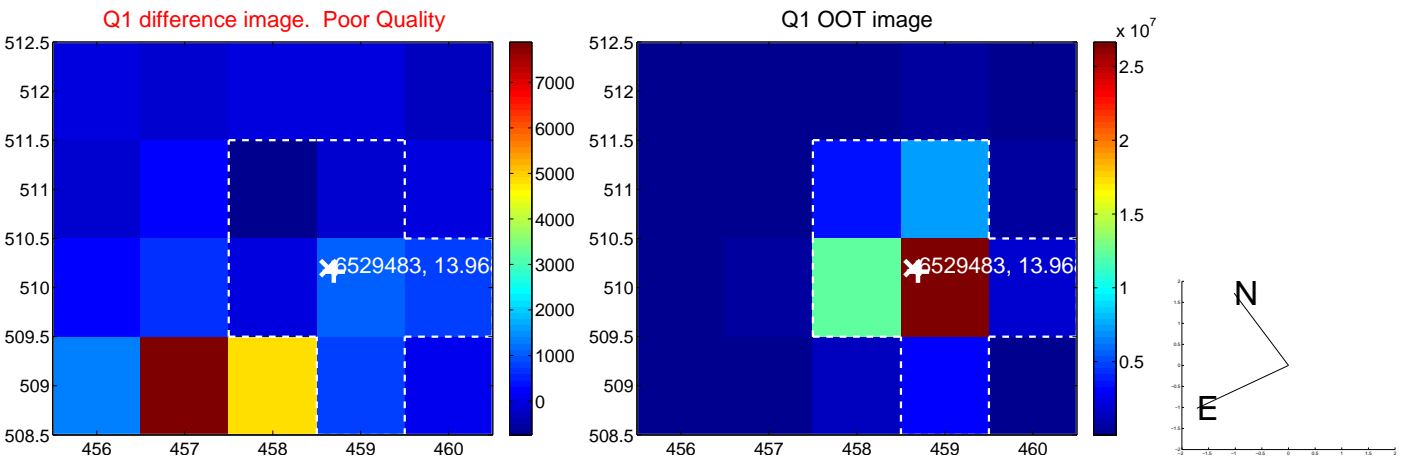
The direct PRF centroid is offset from the target star catalog position by about 0.41 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.982 ± 0.068	131.89	8.325 ± 0.068	-3.373 ± 0.069
PRF-fit source offset from KIC position	8.918 ± 0.069	130.18	8.129 ± 0.068	-3.668 ± 0.068
photometric centroid source offset	0.84 ± 0.83	1.01	0.79 ± 0.83	-0.28 ± 0.79

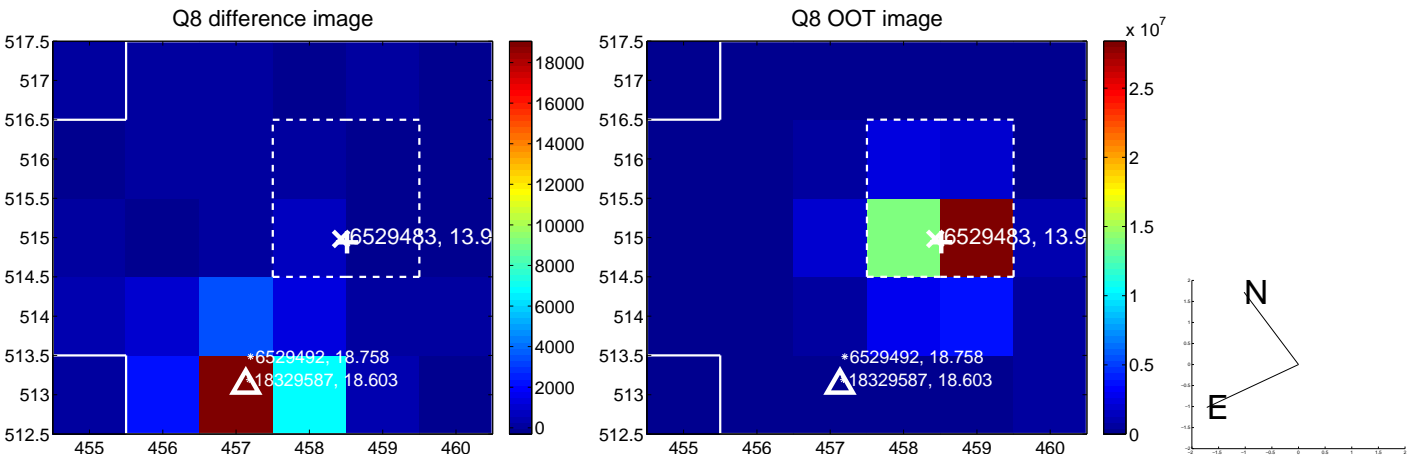
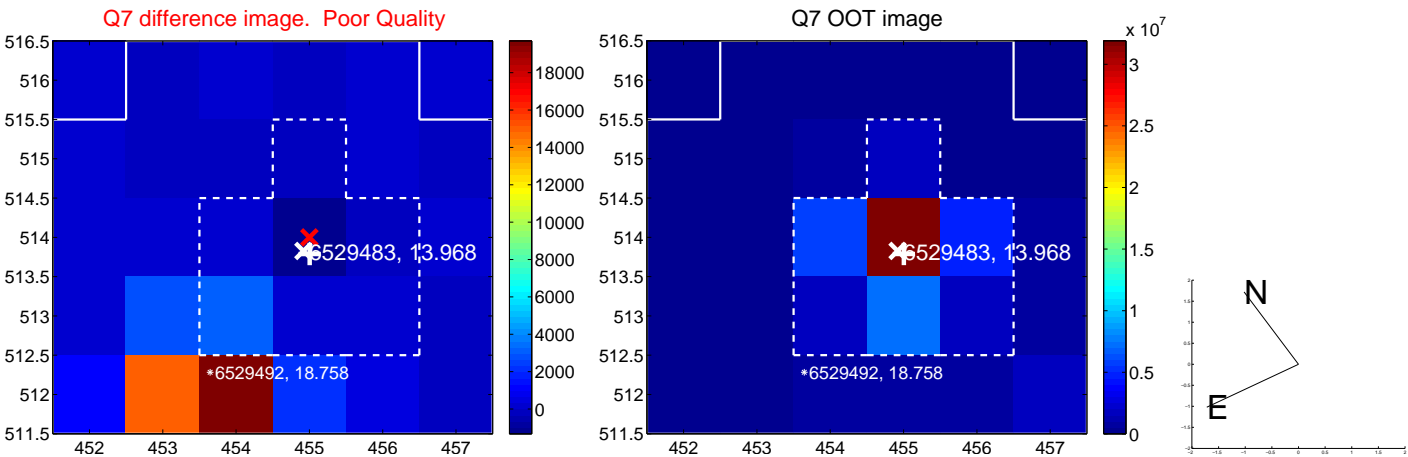
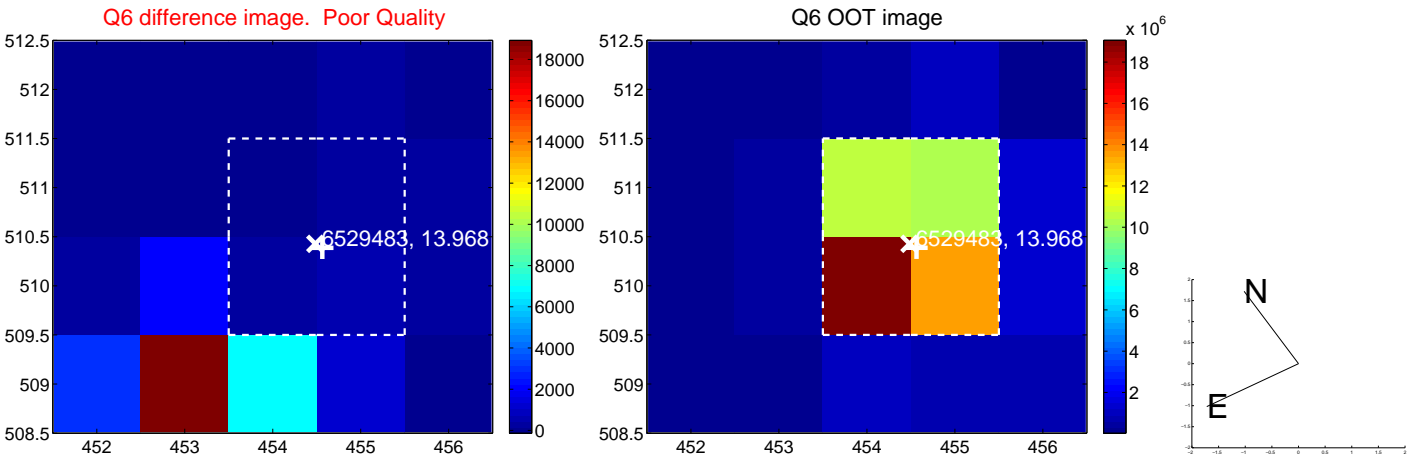
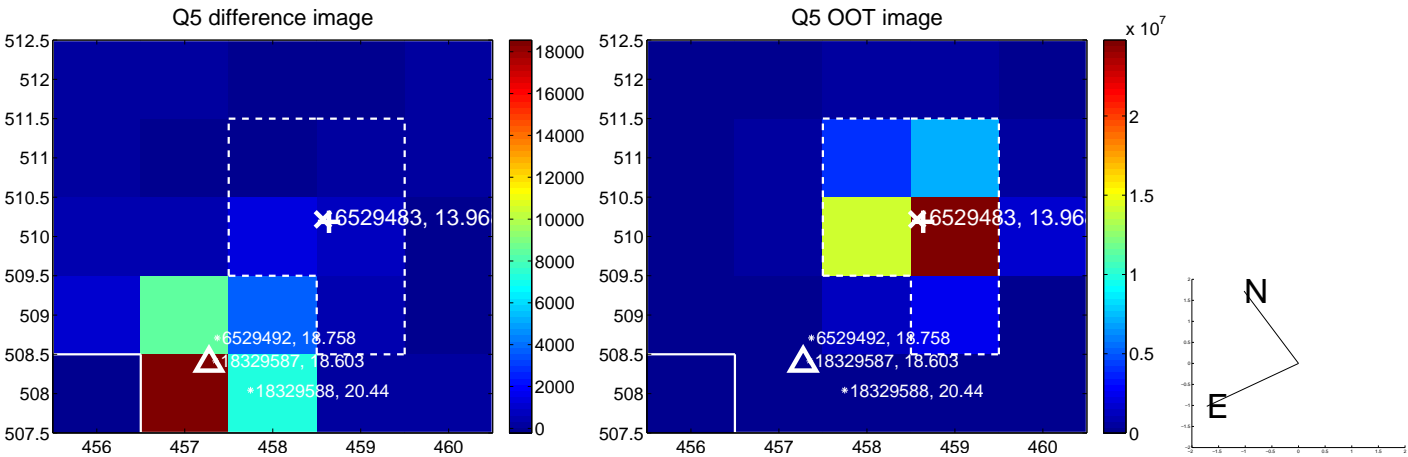


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

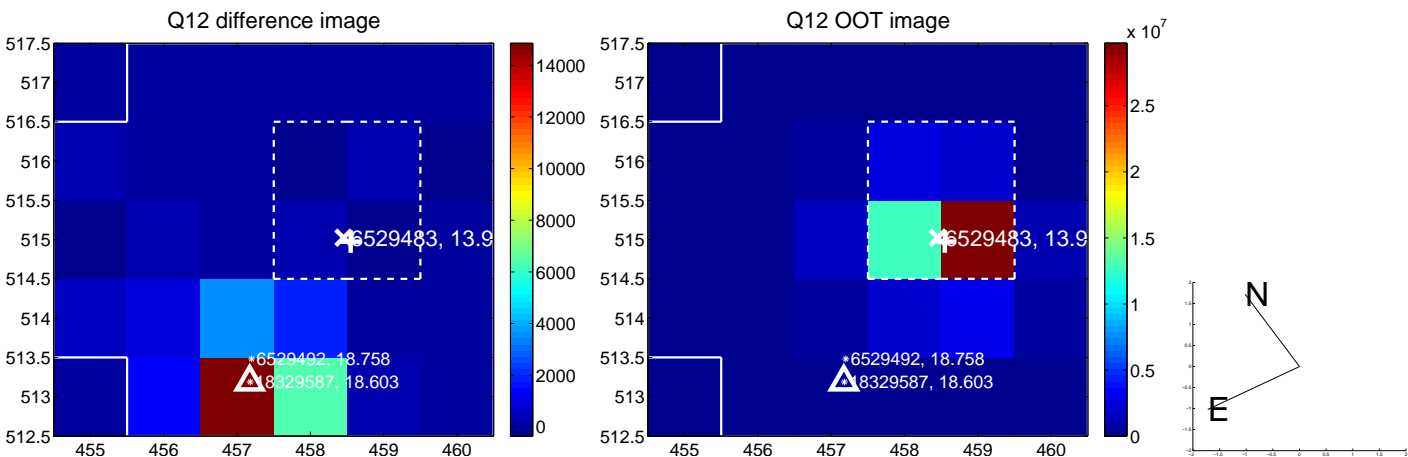
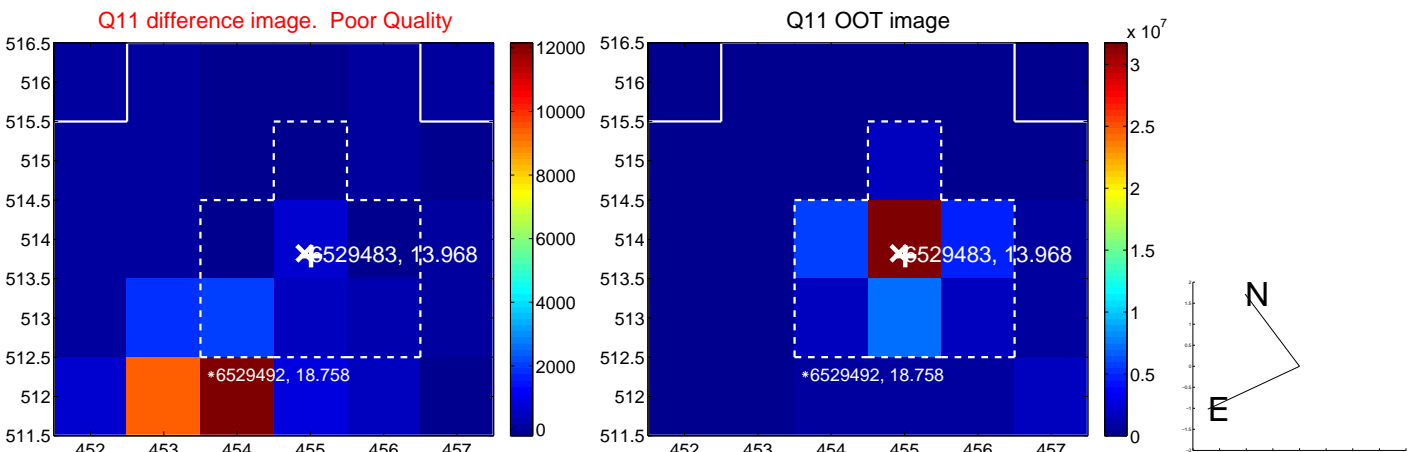
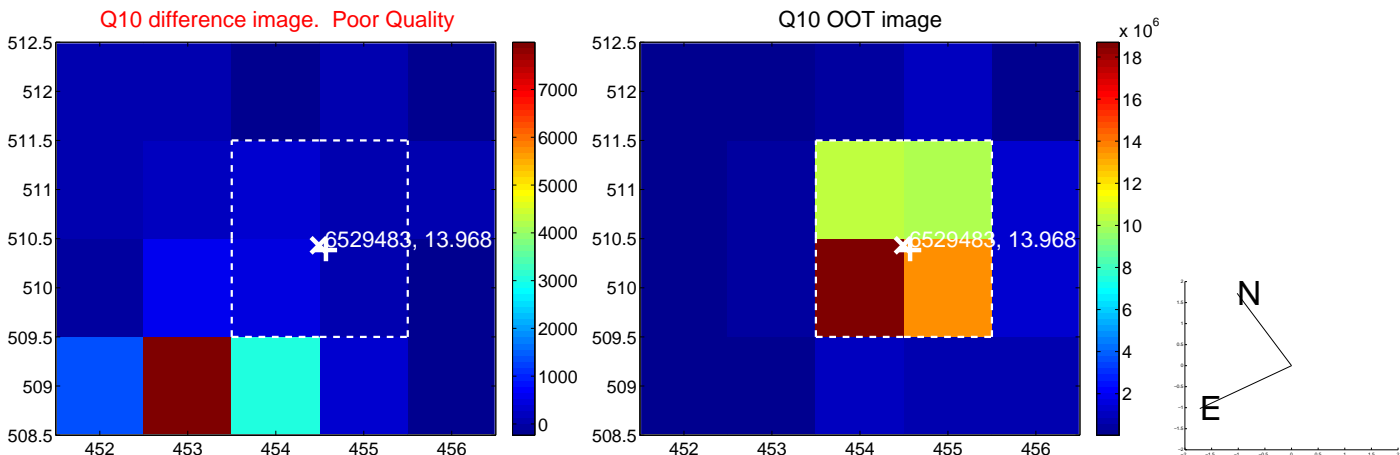
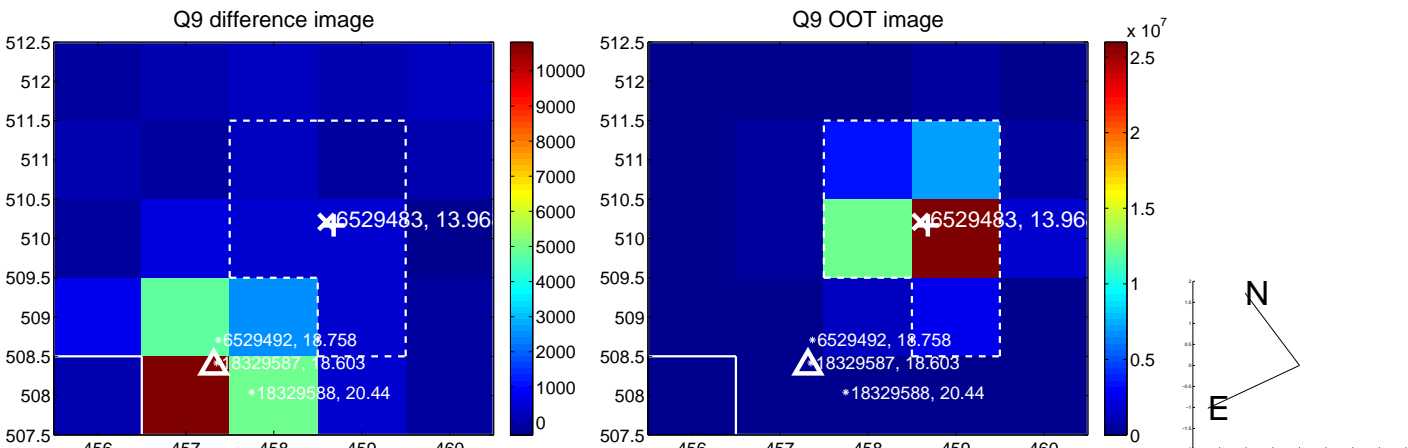
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



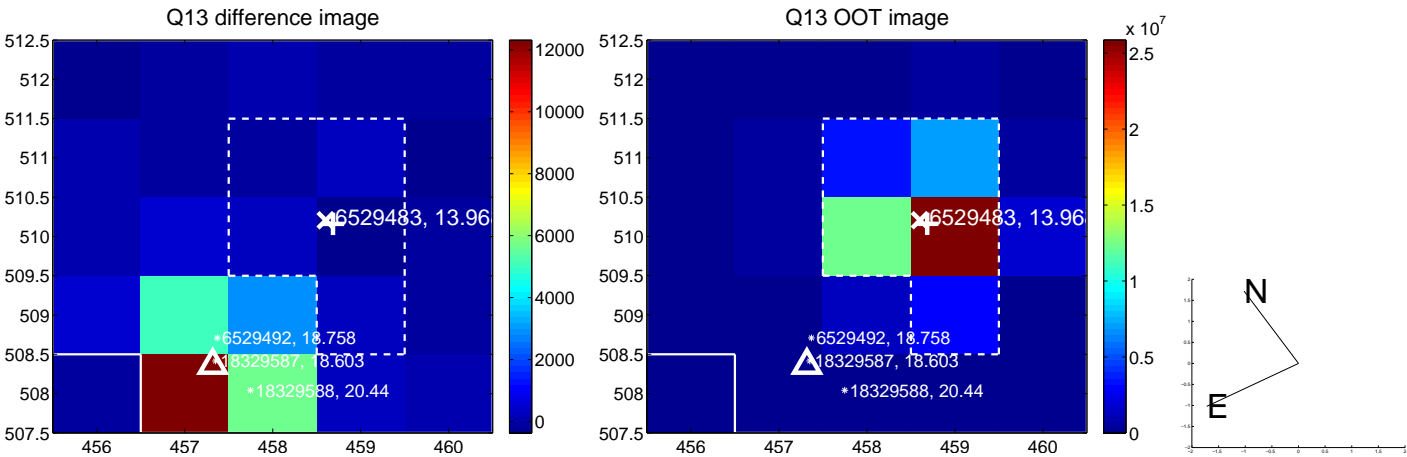
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

