

KIC 006139483

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})
006139483-01	OBS	No	1.013302	131.738277	255.2	3.000	7.4	-1.0	1.09	6541	1.76	4656.88

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006139483-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS

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

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

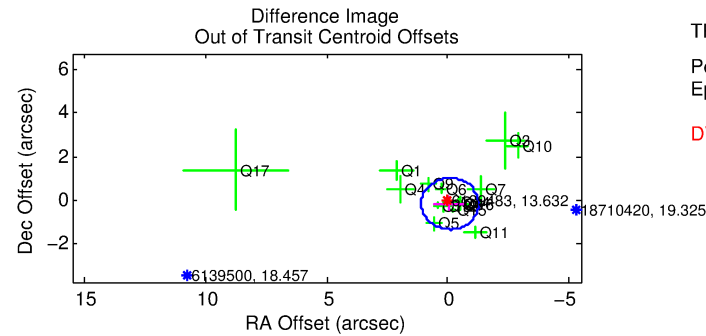
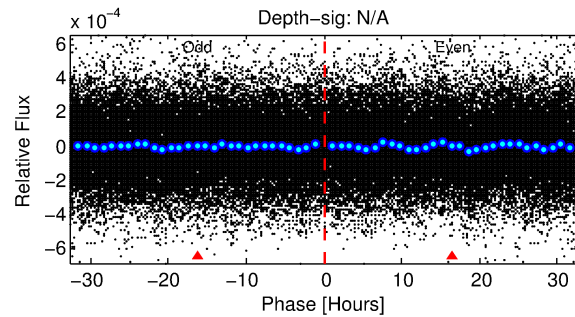
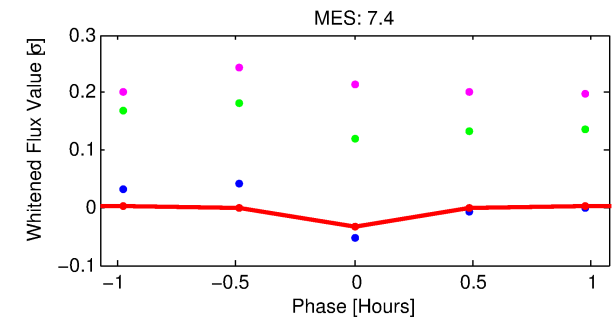
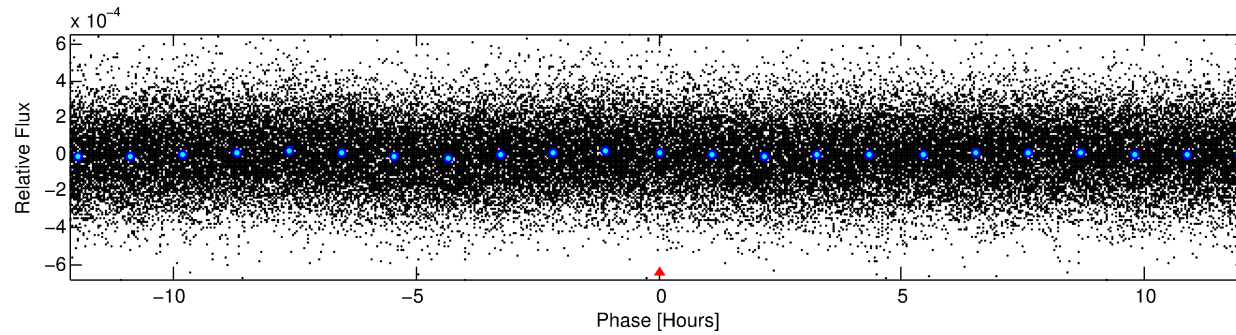
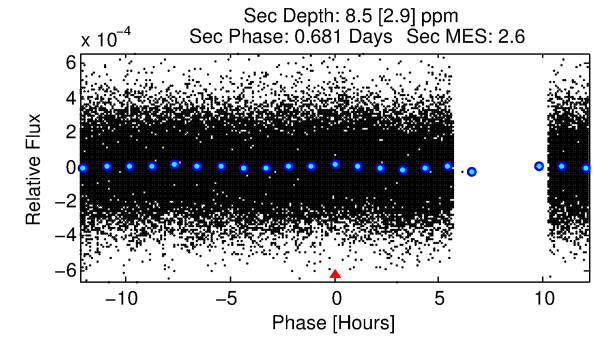
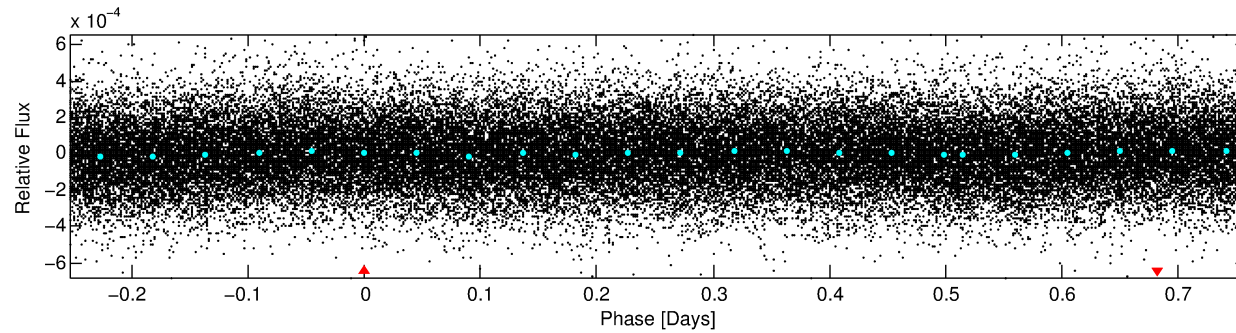
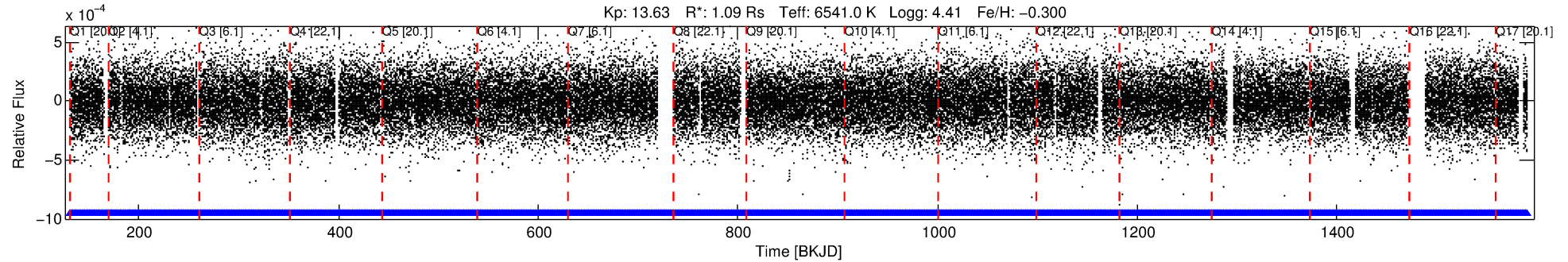
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006139483-01

No Significant Match Found

DV One-Page Summary

KIC: 6139483 Candidate: 1 of 1 Period: 1.013 d



TPS TCE Results:

Period = 1.01330 d
Epoch = 131.7383 BKJD

DV fit results are unavailable

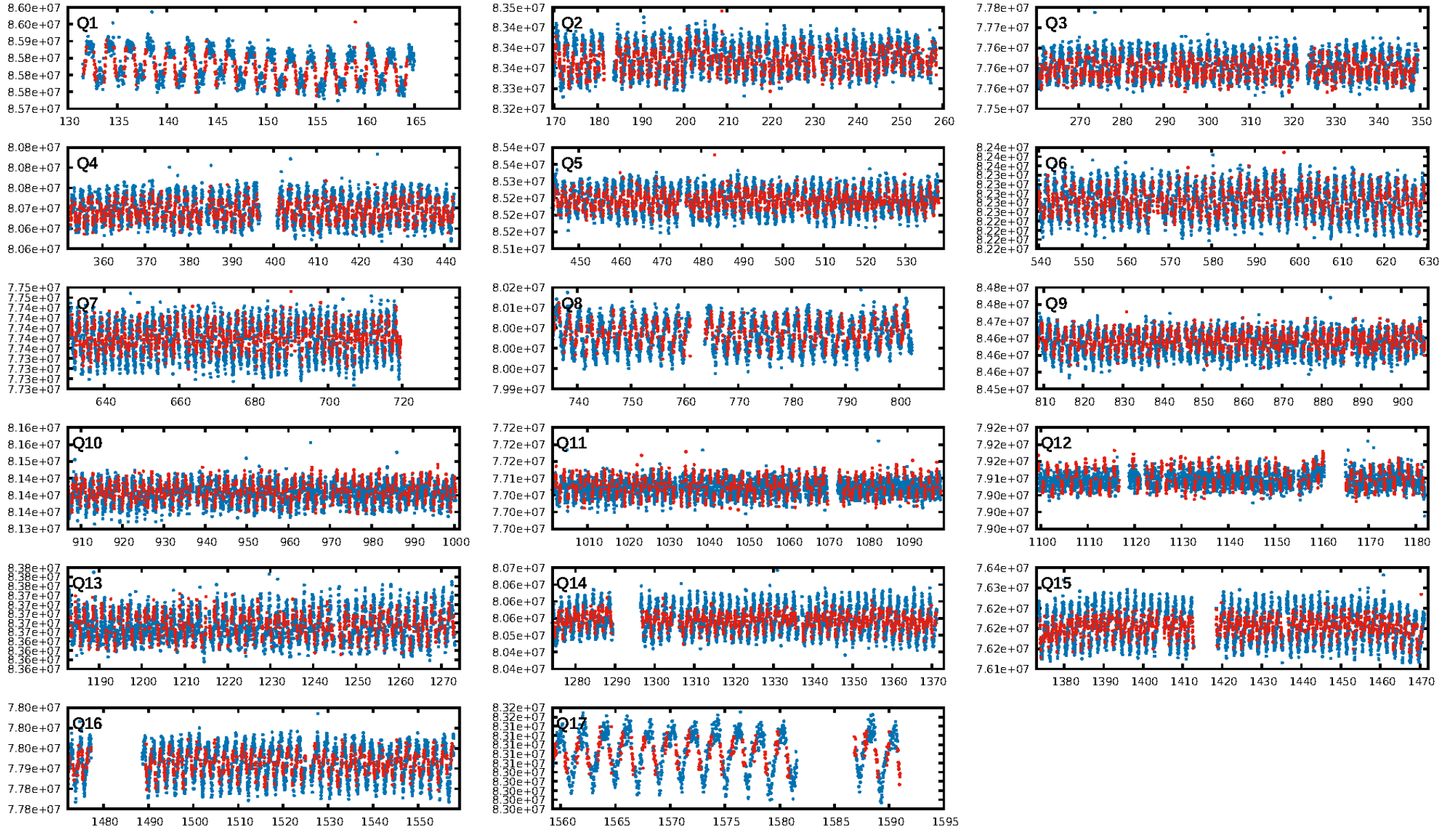
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 8.97e-12
RollingBand-fgt: 1.00 [1267/1267]
GhostDiagnostic-chr: -0.4489
Centroid-sig: 16.5%
Centroid-so: 1.594 arcsec [1.36σ]
OotOffset-rm: 0.179 arcsec [0.45σ]
KicOffset-rm: 0.042 arcsec [0.08σ]
OotOffset-st: 3/4/4/5 [16]
KicOffset-st: 3/4/4/5 [16]
DiffImageQuality-fgm: 0.88 [14/16]
DiffImageOverlap-fno: 1.00 [17/17]

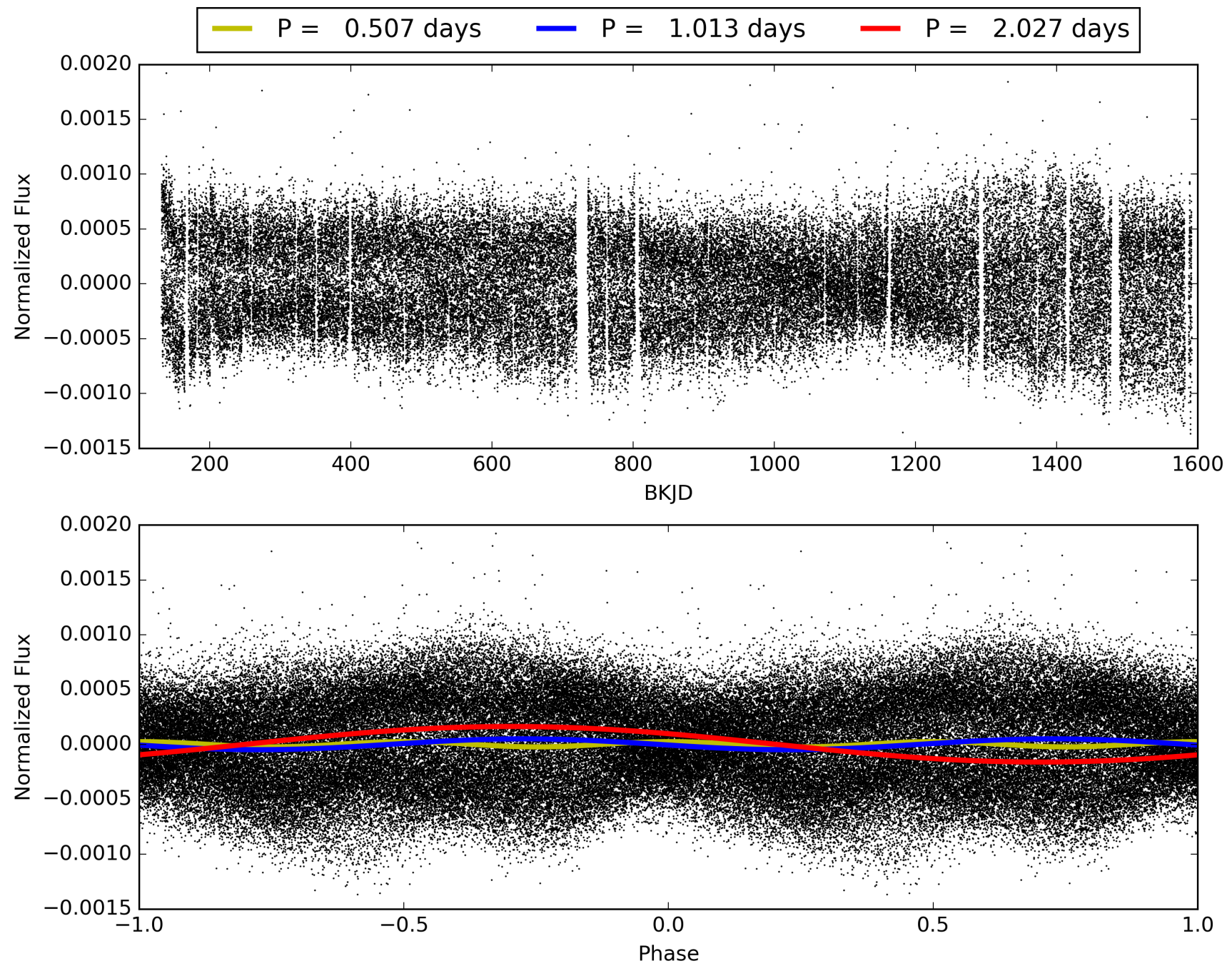
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 14:58:45 Z

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

TCE 006139483-01, PDC Light Curves

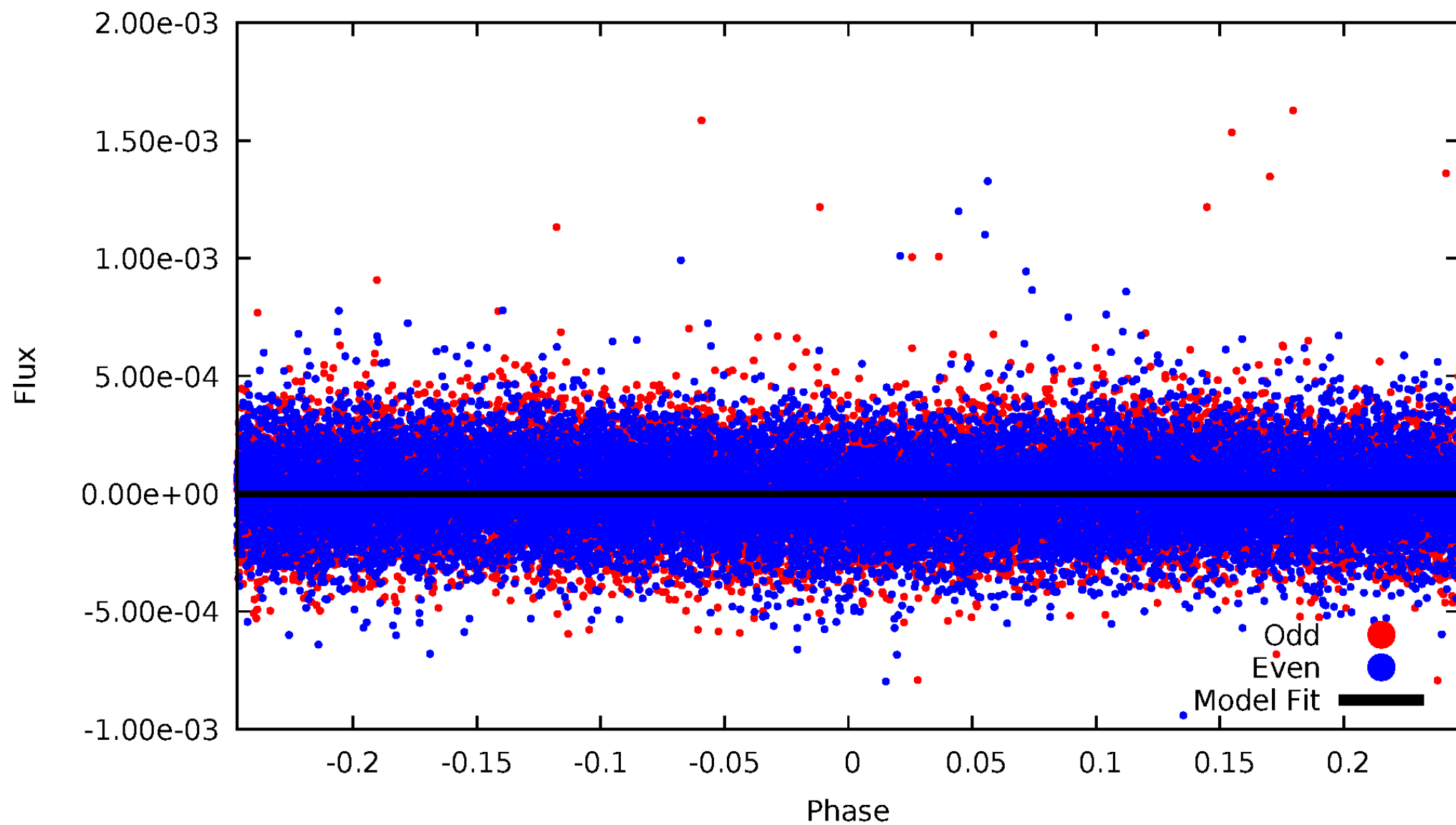


TCE 006139483-01



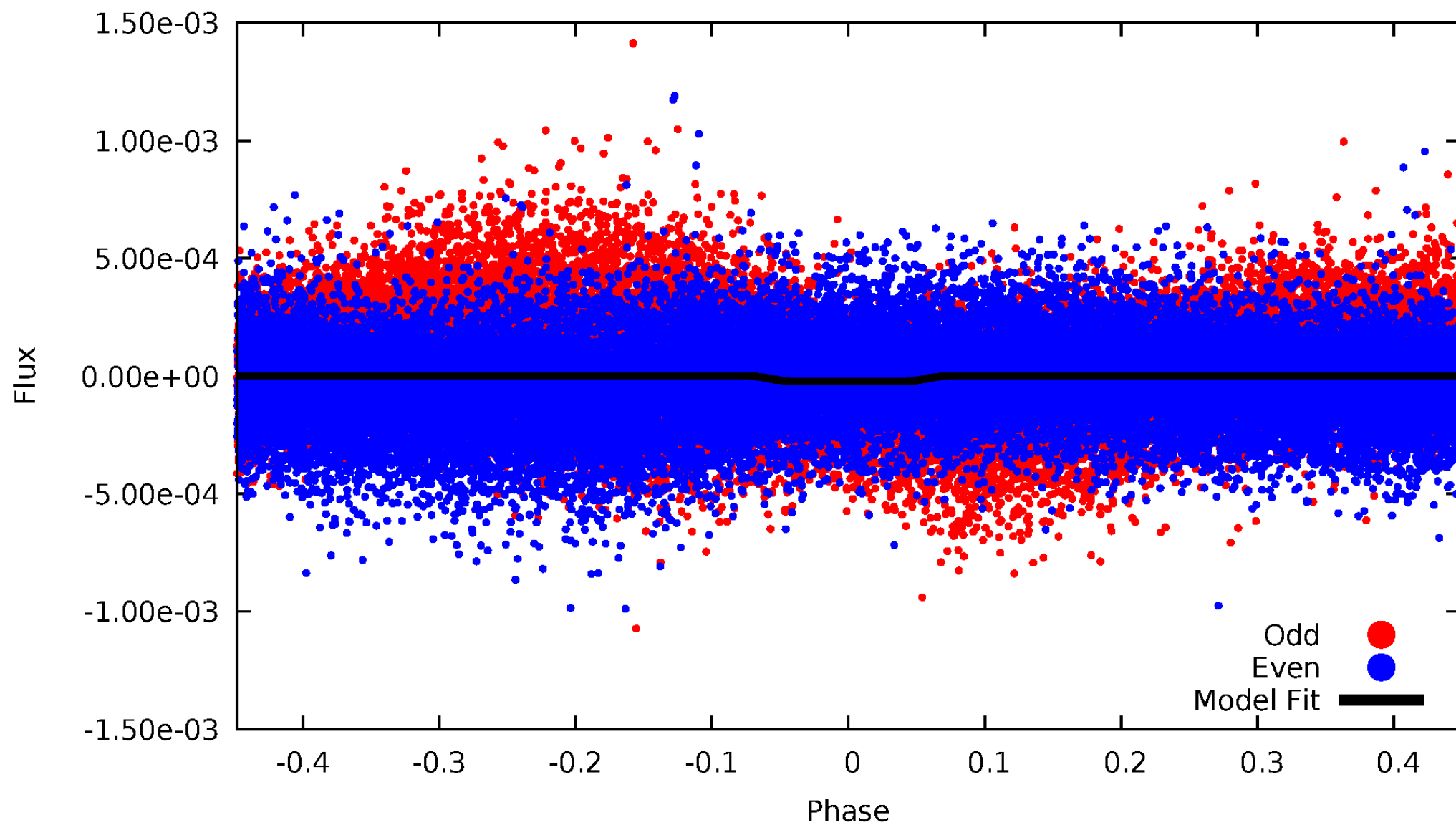
DV Odd/Even

TCE 006139483-01



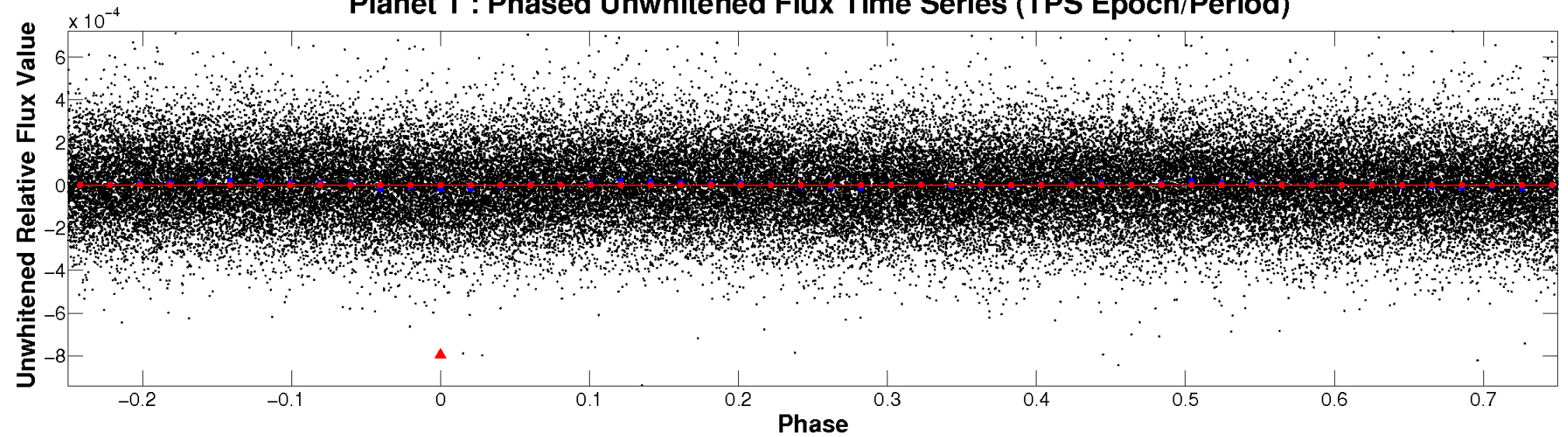
ALT Odd/Even

TCE 006139483-01

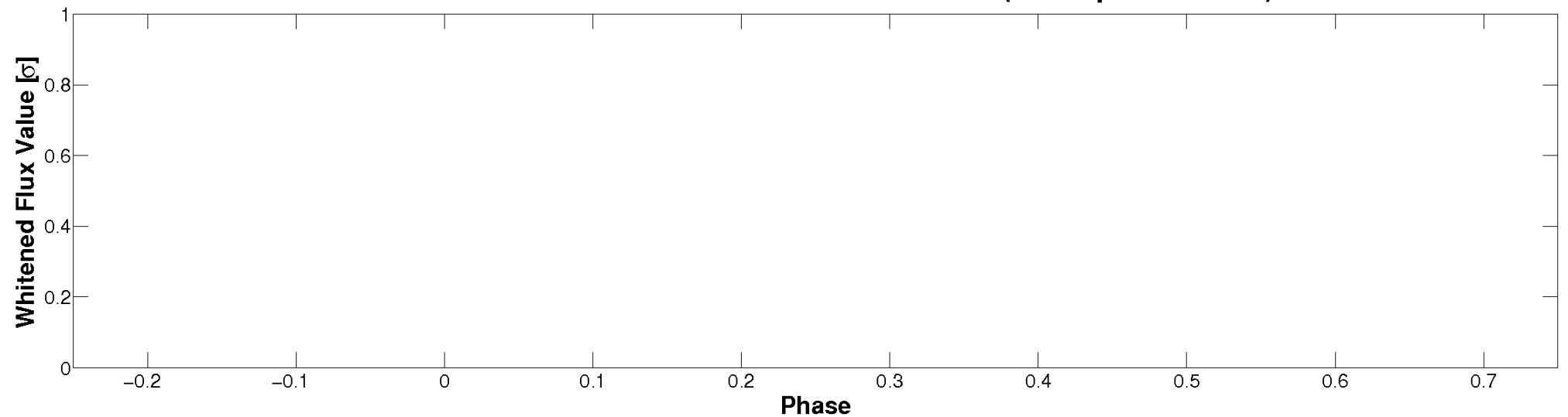


Non-Whitened Vs. Whitened Light Curve

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

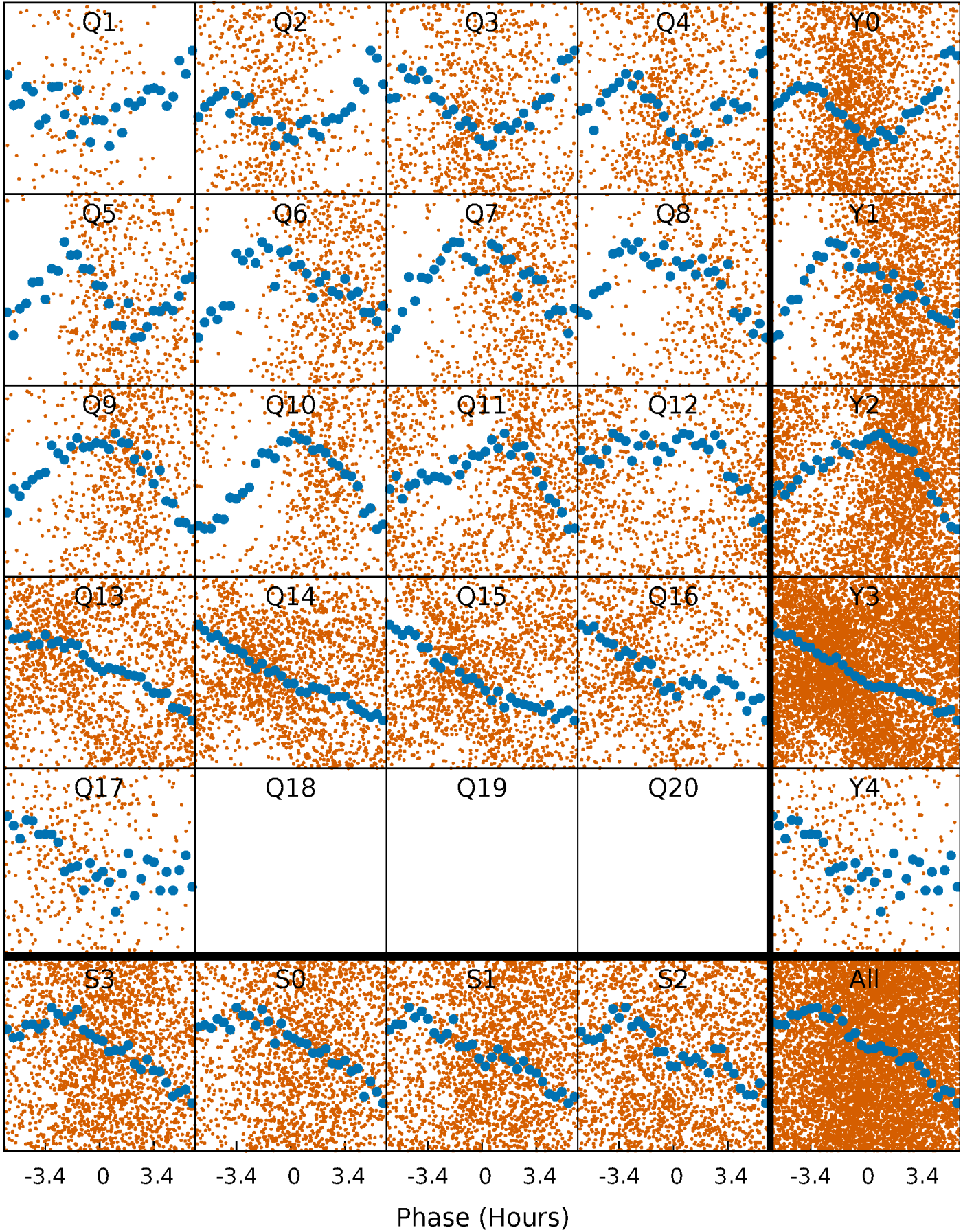


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



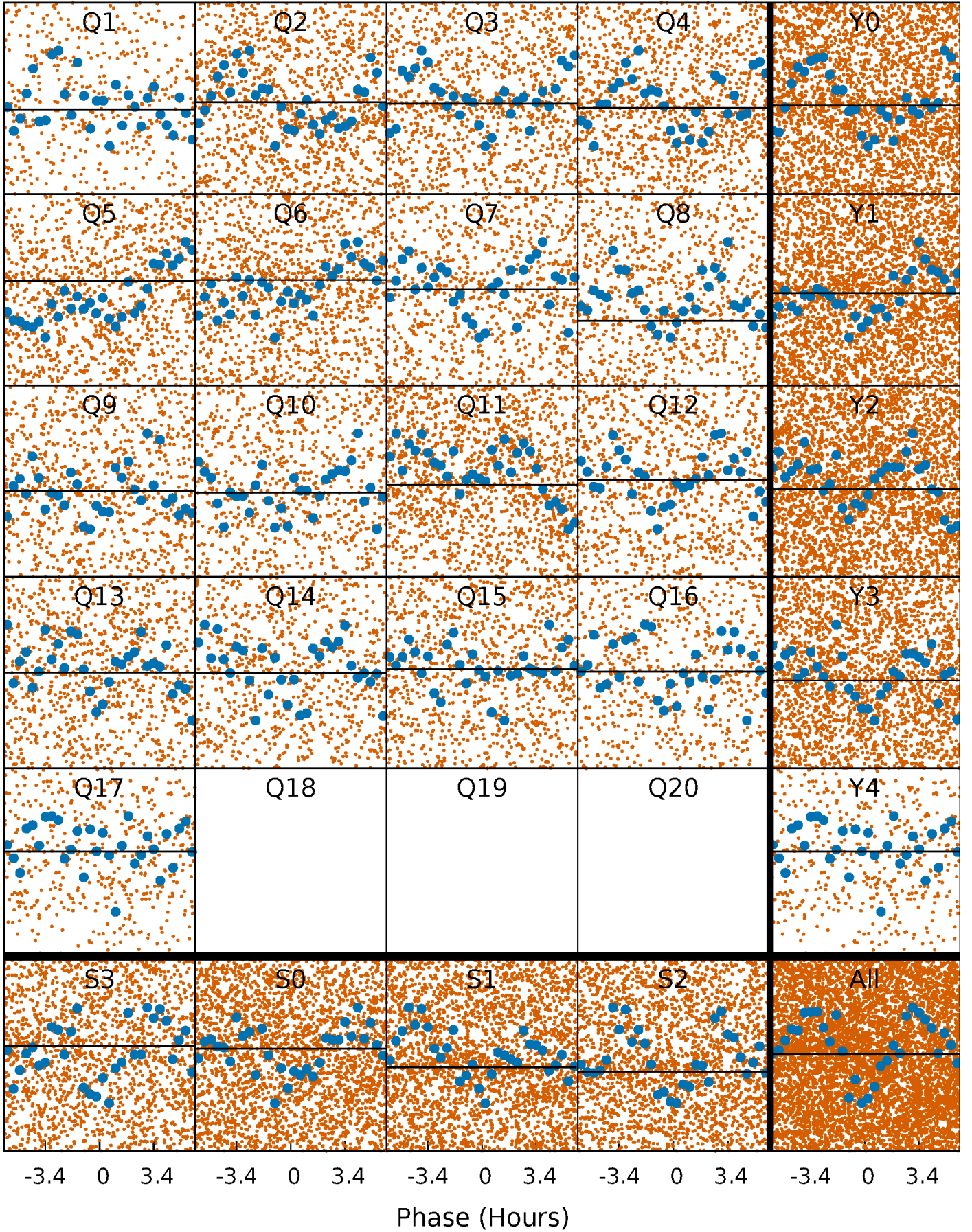
PDC Quarter-Phased Transit Curves

TCE 006139483-01 P= 1.013302 Days $T_0=131.738277$ (BKJD)



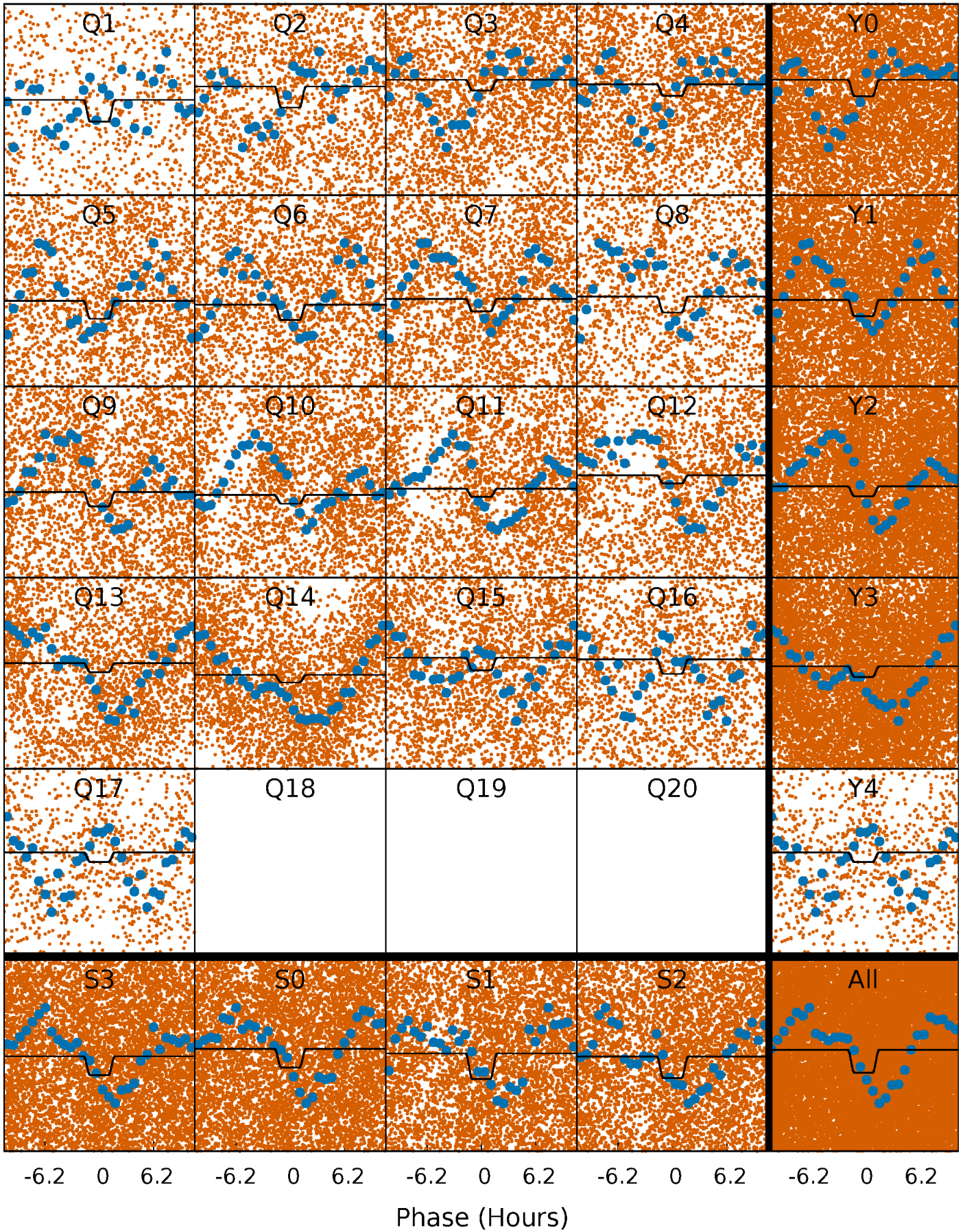
DV Quarter-Phased Transit Curves

TCE 006139483-01 P= 1.013302 Days $T_0=131.738277$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

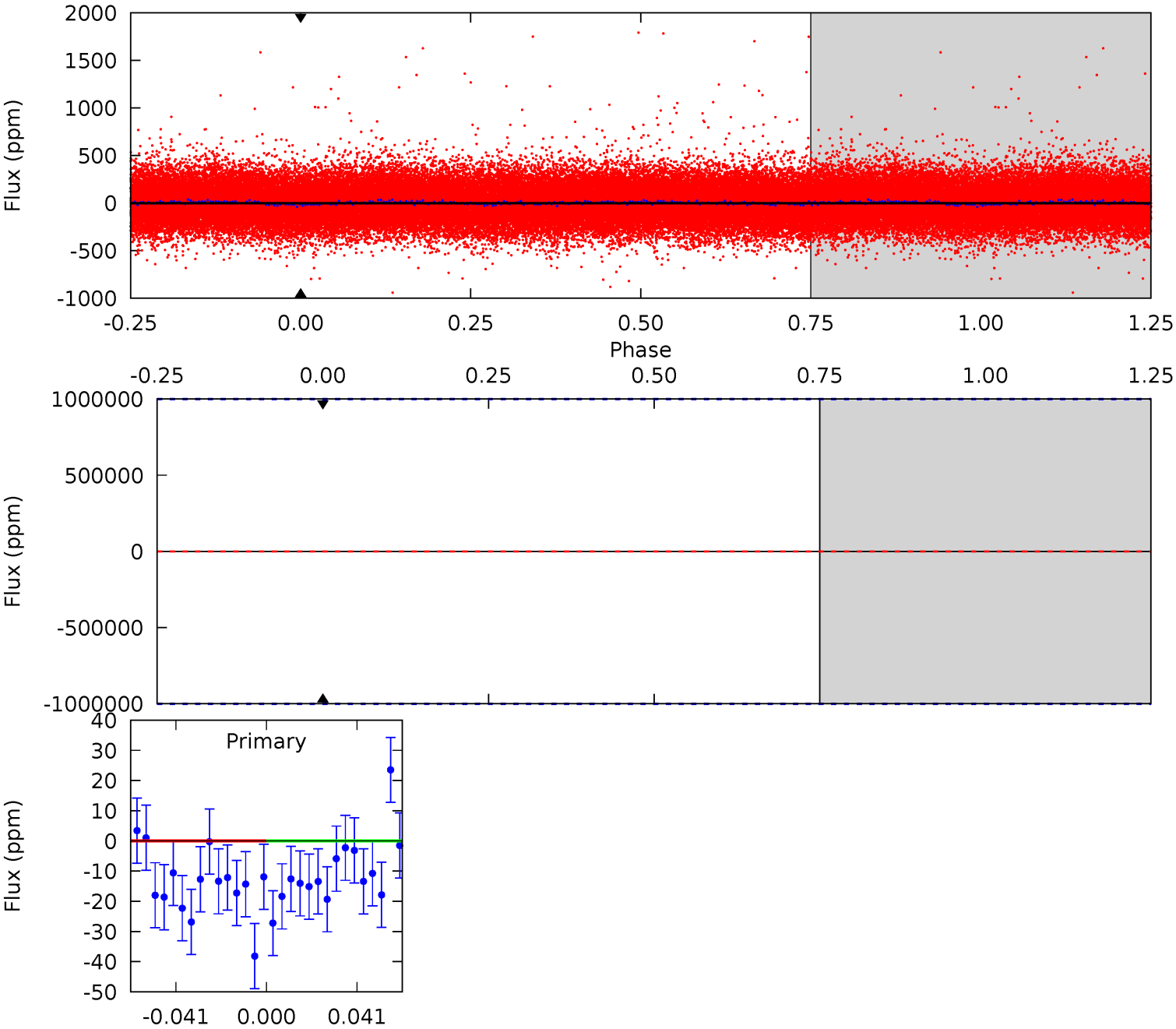
TCE 006139483-01 P= 1.013302 Days $T_0=131.924323$ (BKJD)



DV Model-Shift Uniqueness Test

006139483-01, P = 1.013302 Days, E = 130.724975 Days

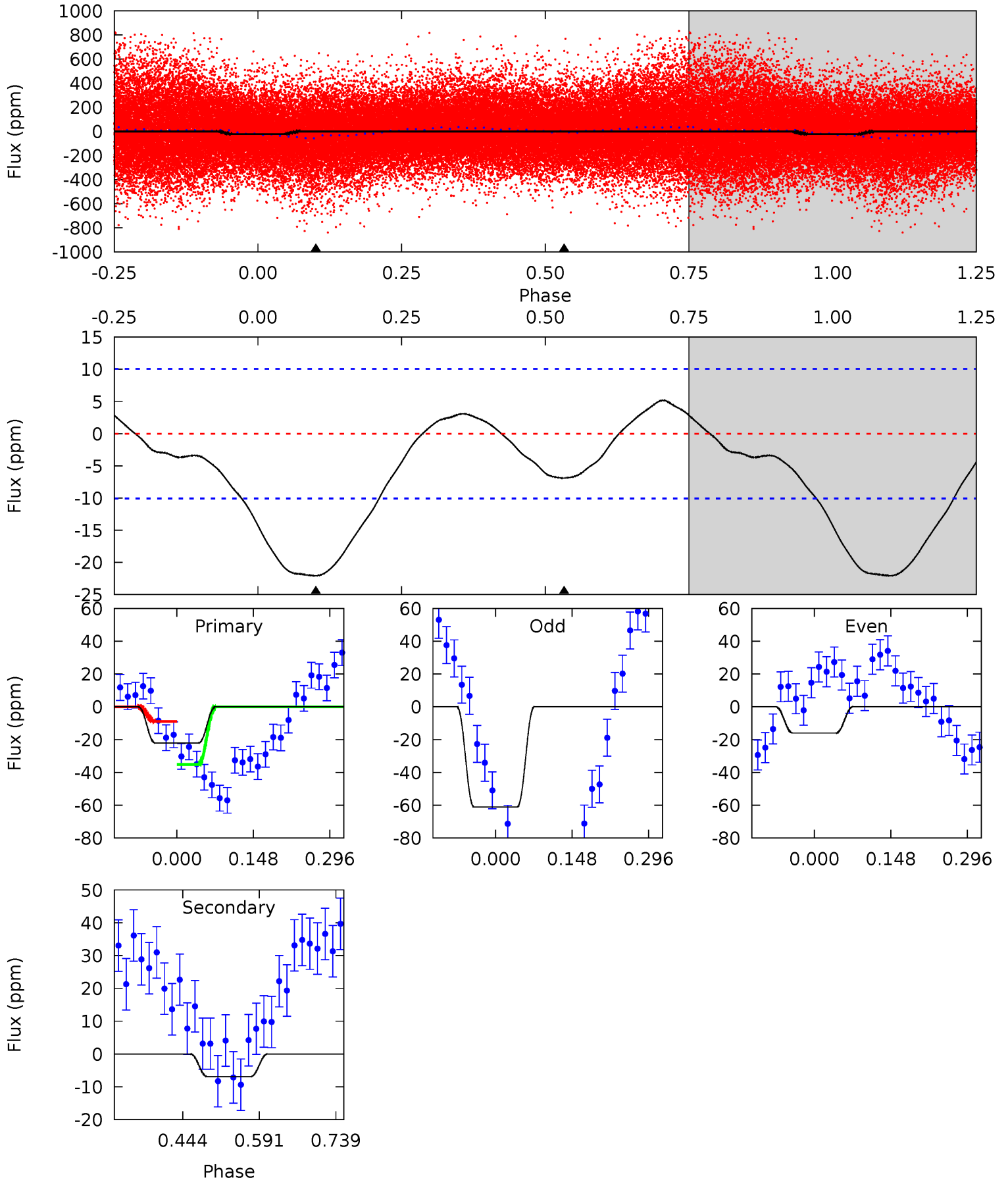
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

006139483-01, P = 1.013302 Days, E = 130.911021 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.83	3.08	0	0	4.48	1.45	1.53	9.83	9.83	3.08	3.08	10.0	1.05	0.19	6.00



Stellar Parameters For KIC 006139483

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6541^{+148}_{-214}	$4.411^{+0.054}_{-0.216}$	$-0.300^{+0.250}_{-0.300}$	$1.095^{+0.357}_{-0.119}$	$1.125^{+0.165}_{-0.135}$	$1.208^{+0.356}_{-0.658}$
	+2%/-3%	+1%/-5%	+83%/-100%	+33%/-11%	+15%/-12%	+30%/-54%
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 006139483-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$9.96^{+9.73}_{-6.90}$	2997^{+242}_{-148}	5542^{+30376}_{-28126}	$7.934^{+685.461}_{-345.805}$
Alt.	-7 ± 2	$8.45^{+9.99}_{-5.92}$	3005^{+209}_{-158}	-3023^{+658}_{-141}	$0.021^{+0.240}_{-0.017}$

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 $A_{obs} \gg 1.0$

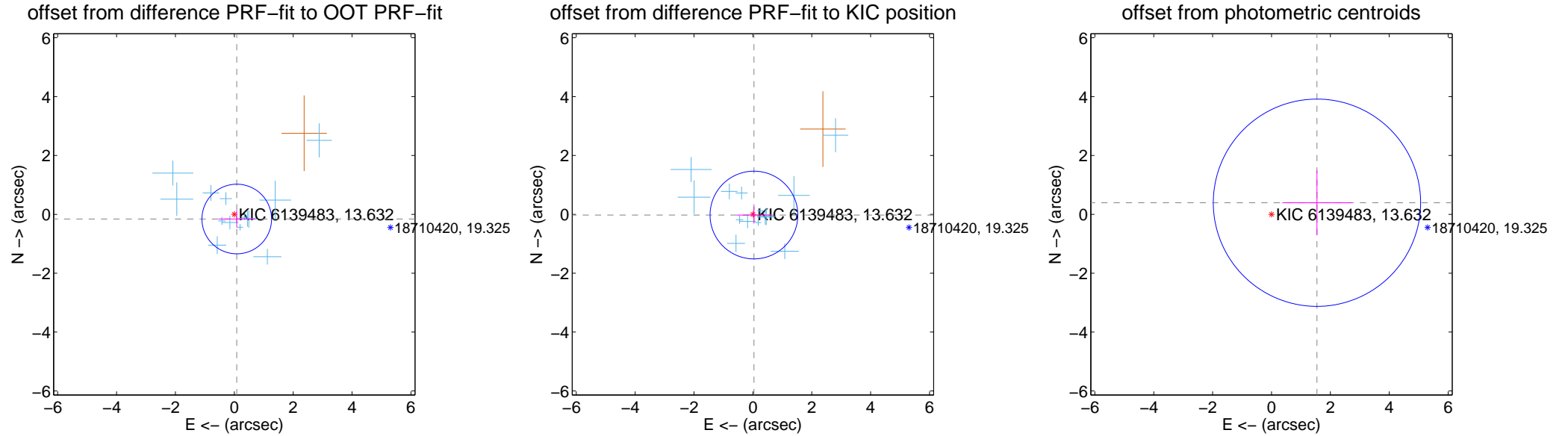
DV Centroid Data

Supplemental centroid analysis for 006139483-01. Kepler magnitude: 13.63. Transit SNR -1.00

There are 14 quarters with good PRF difference image offsets

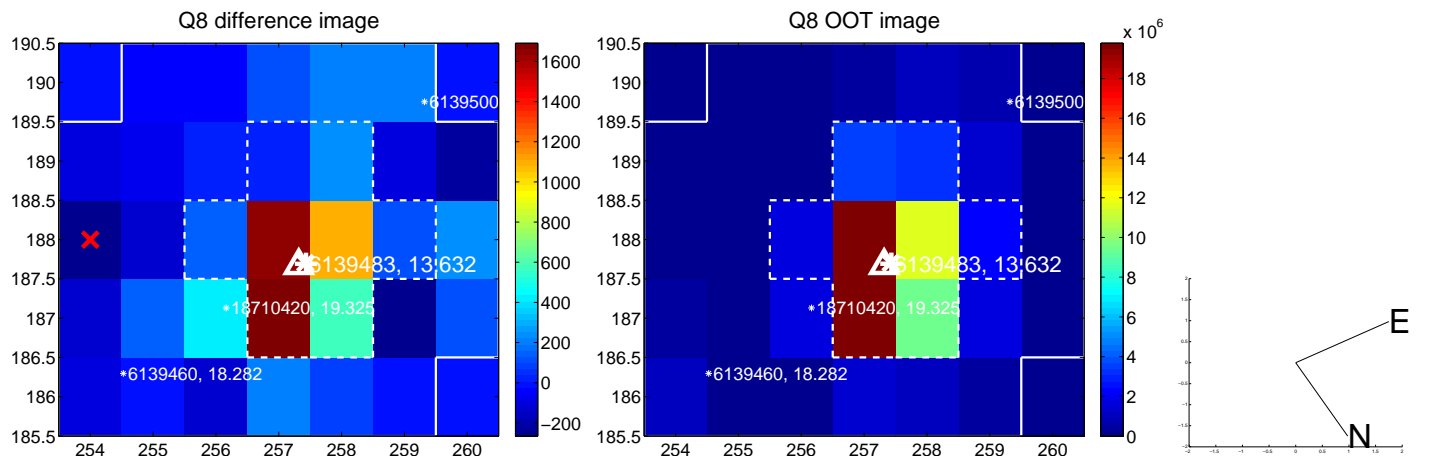
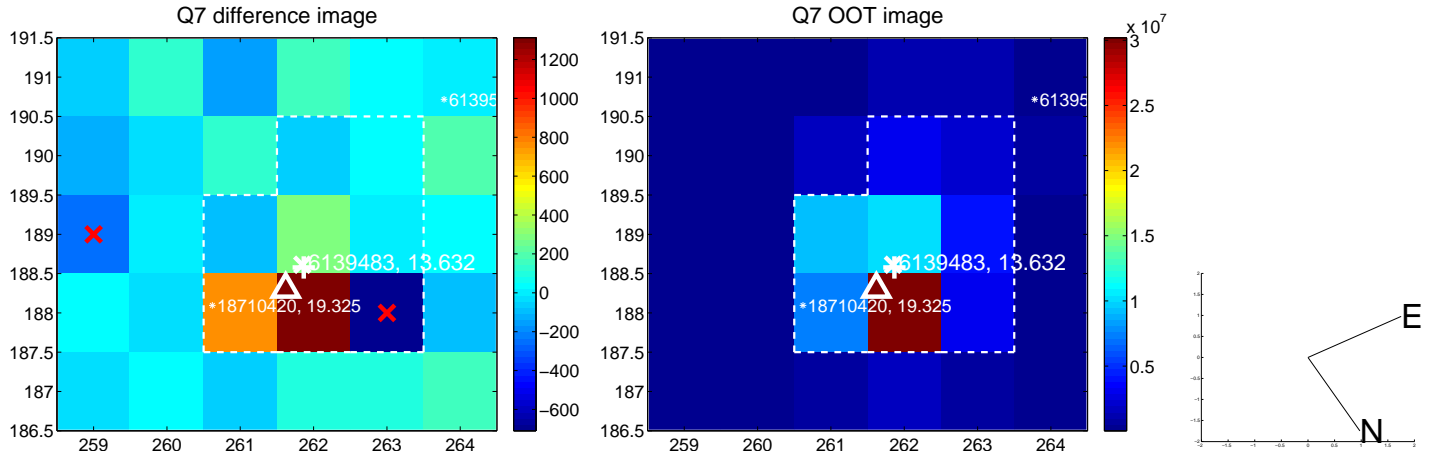
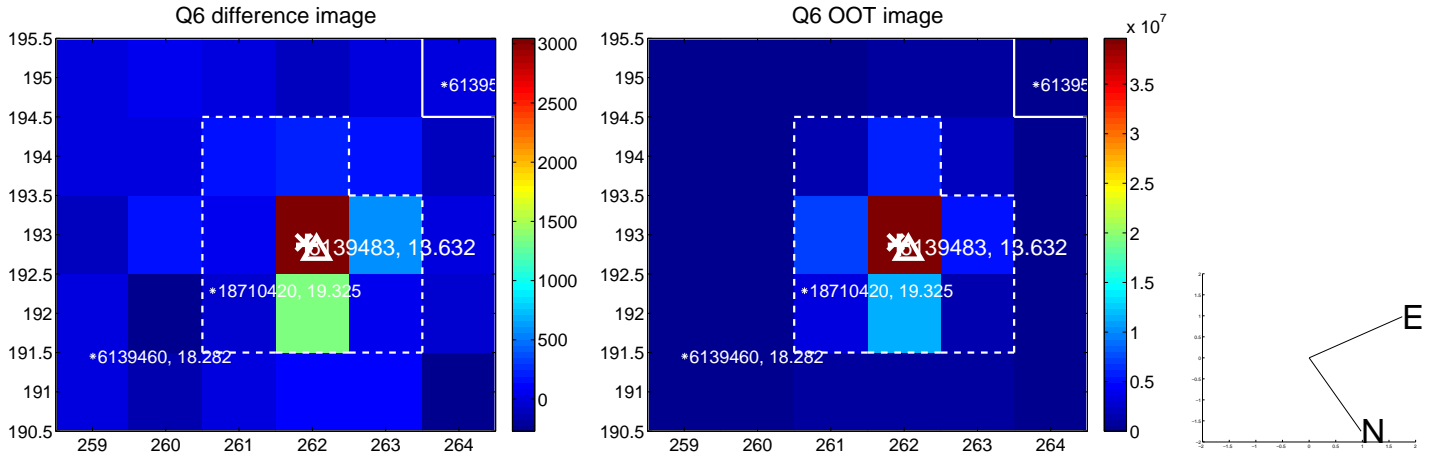
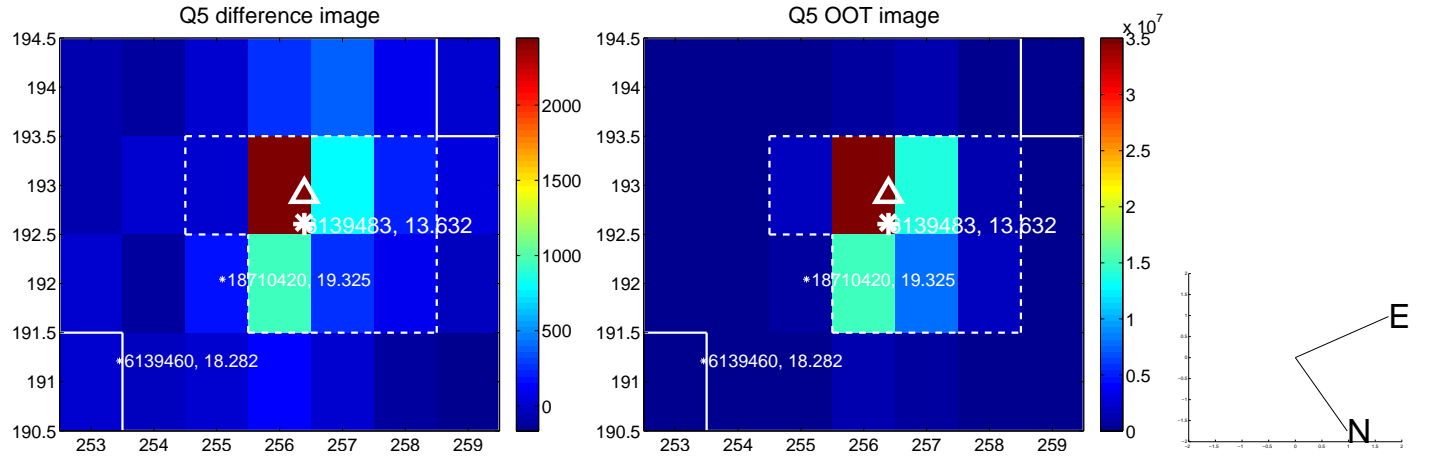
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.179 ± 0.394	0.45	-0.083 ± 0.624	-0.158 ± 0.291
PRF-fit source offset from KIC position	0.042 ± 0.497	0.08	-0.035 ± 0.588	-0.023 ± 0.290
photometric centroid source offset	1.59 ± 1.17	1.36	-1.54 ± 1.18	0.39 ± 1.10

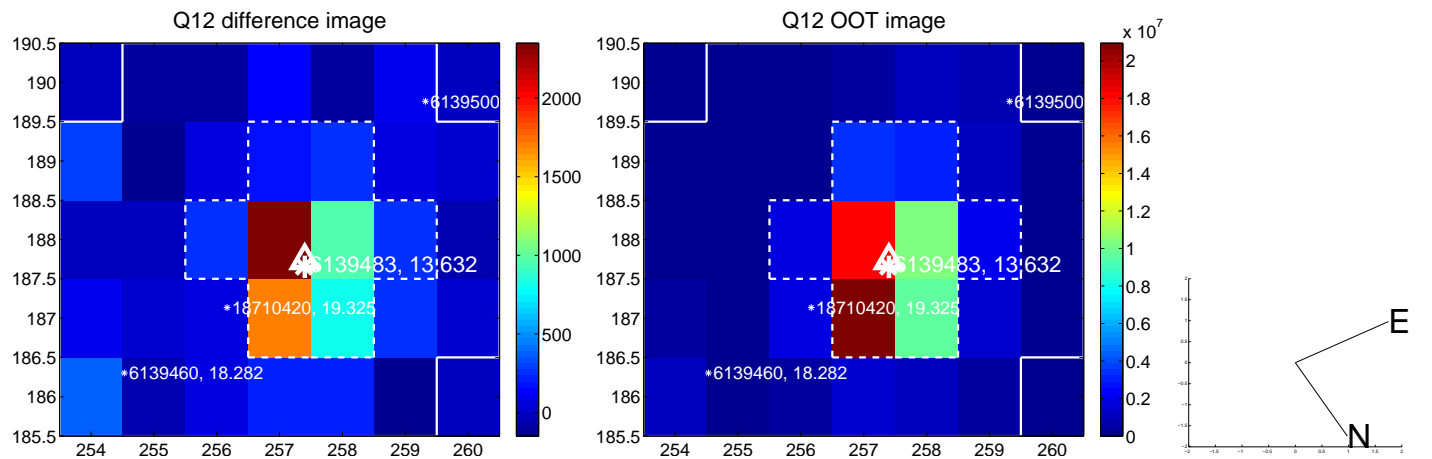
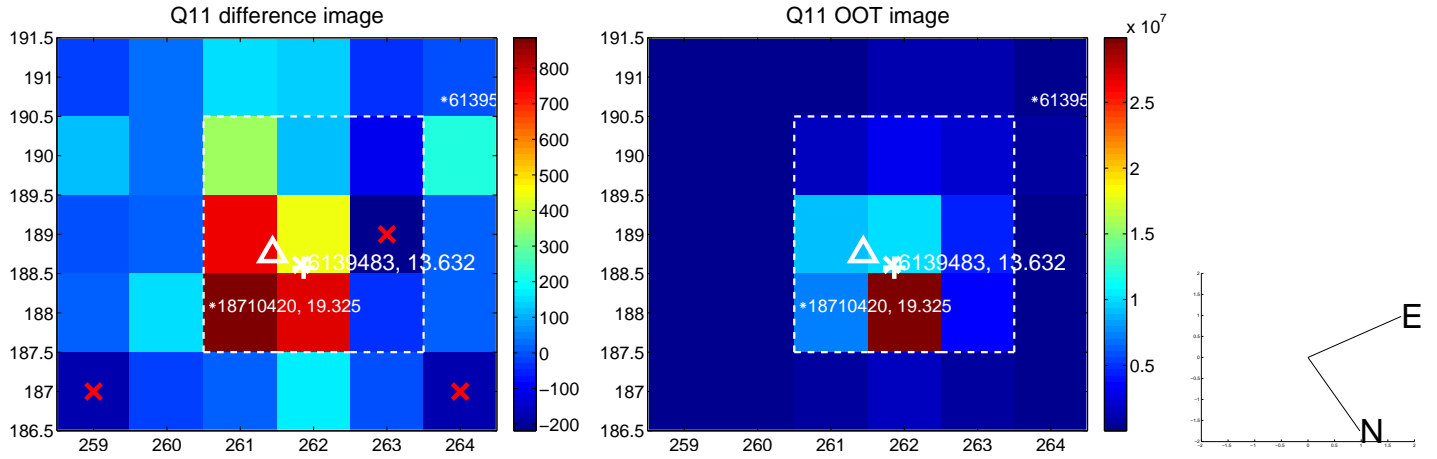
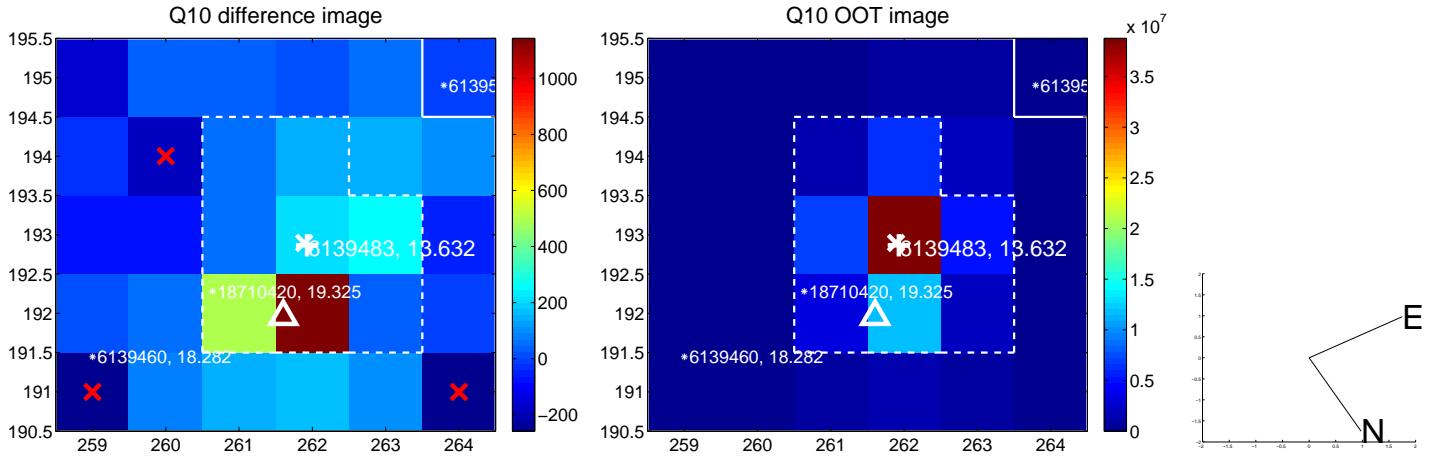
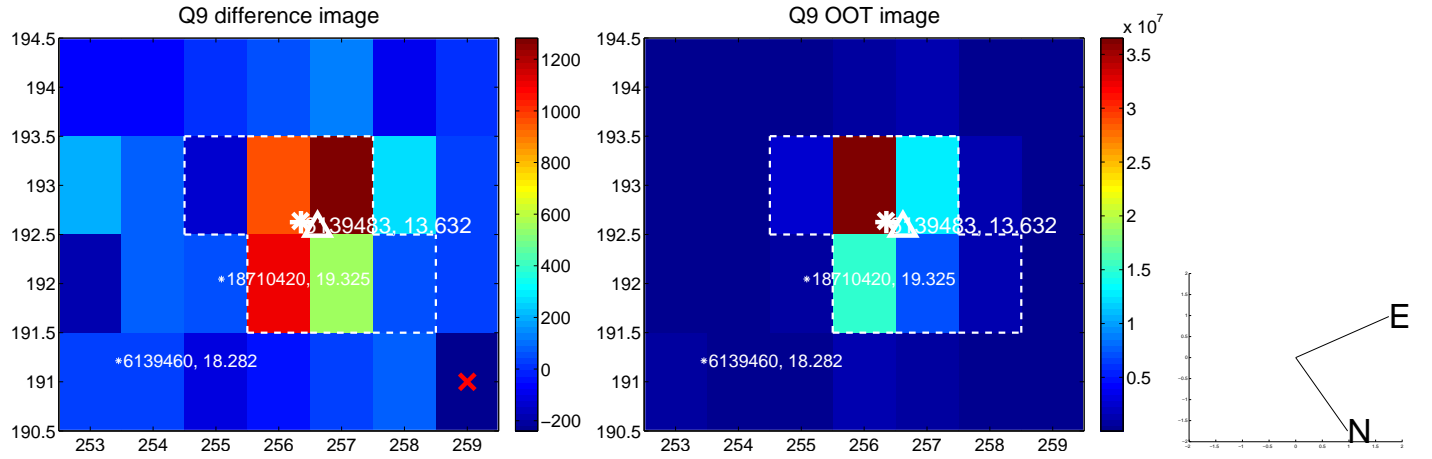


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

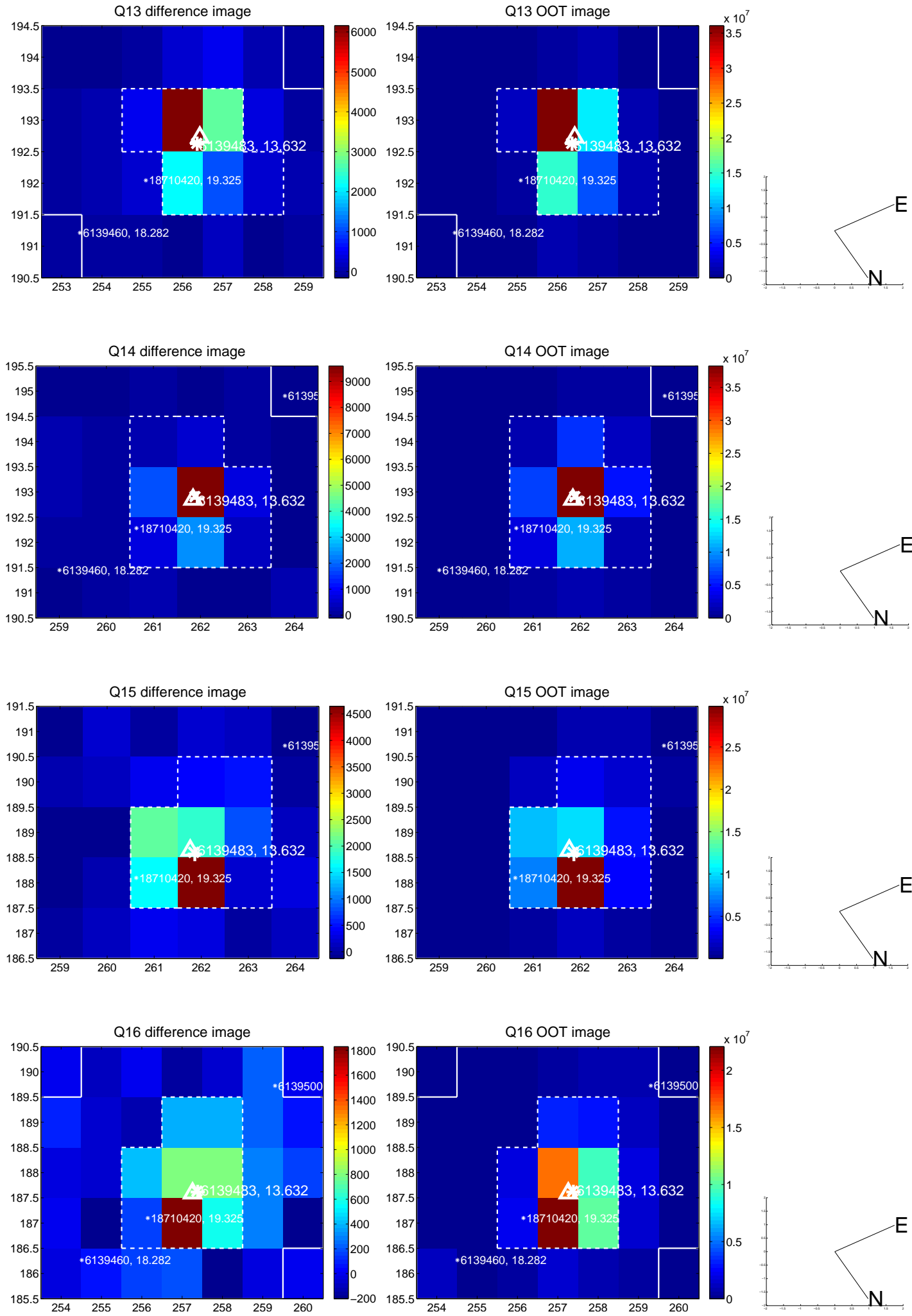
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

