

KIC 006147851

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})
006147851-01	OBS	7766.01	3.060228	132.765004	53.7	2.887	9.1	9.1	1.01	5878	0.89	644.20

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006147851-01	OBS	FP	0.00	0	0	1	0	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.

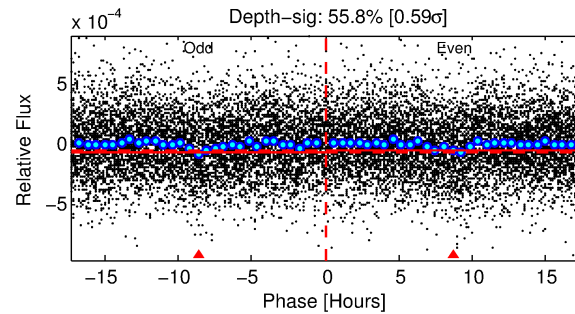
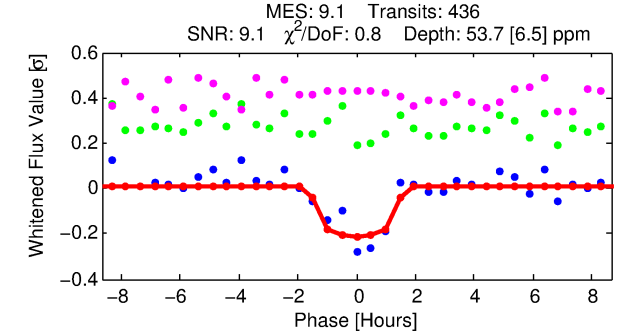
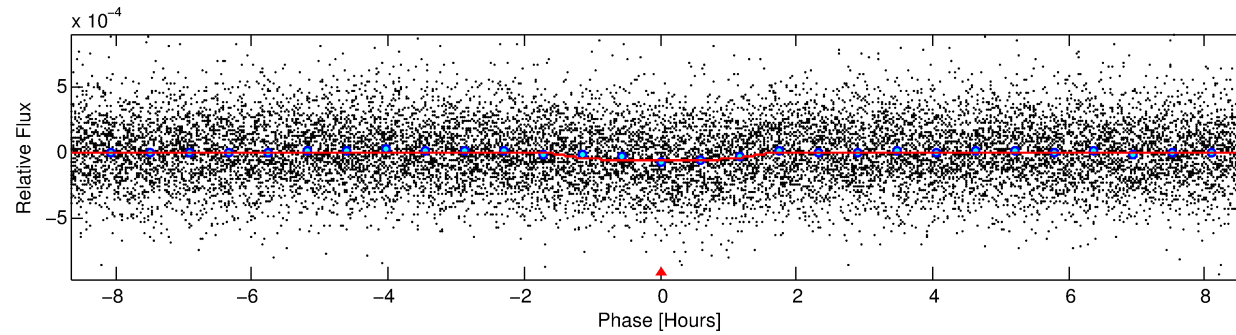
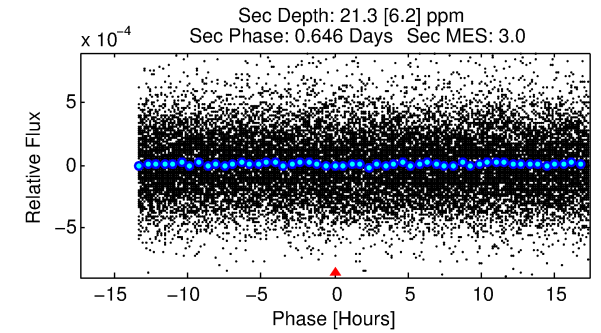
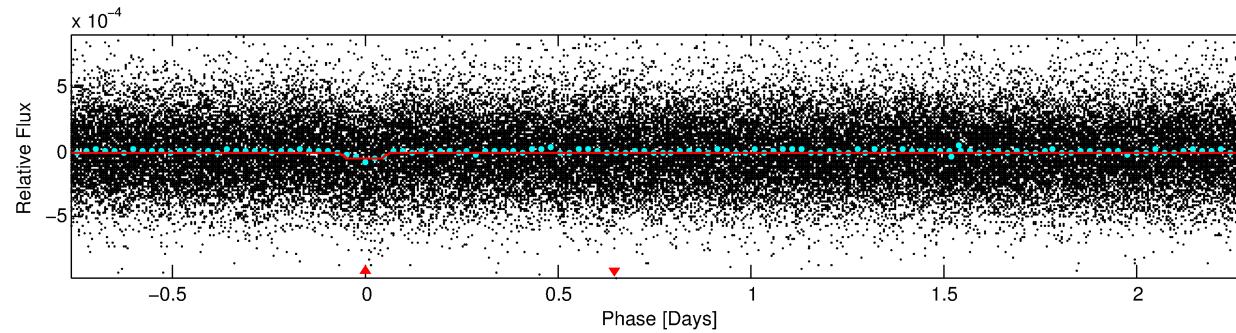
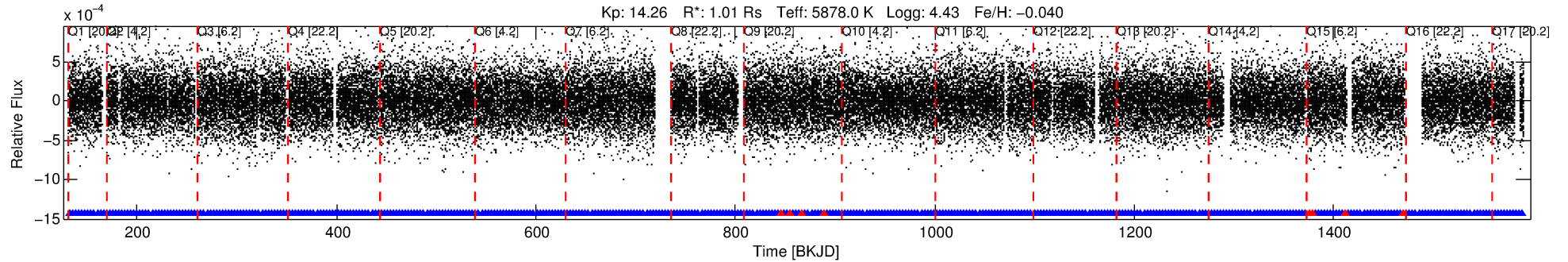
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006147851-01

No Significant Match Found

DV One-Page Summary

KIC: 6147851 Candidate: 1 of 1 Period: 3.060 d



DV Fit Results:

Period = 3.06023 [0.00002] d
Epoch = 132.7650 [0.0049] BKJD
Rp/R* = 0.0080 [0.0049]
a/R* = 3.64 [10.39]
b = 0.91 [0.60]
Seff = 644.20 [248.12]
Teq = 1285 [124] K
Rp = 0.89 [0.60] Re
a = 0.0412 [0.0102] AU
Ag = 25.31 [33.15] [0.73σ]
Teffp = 4455 [1407] K [2.24σ]

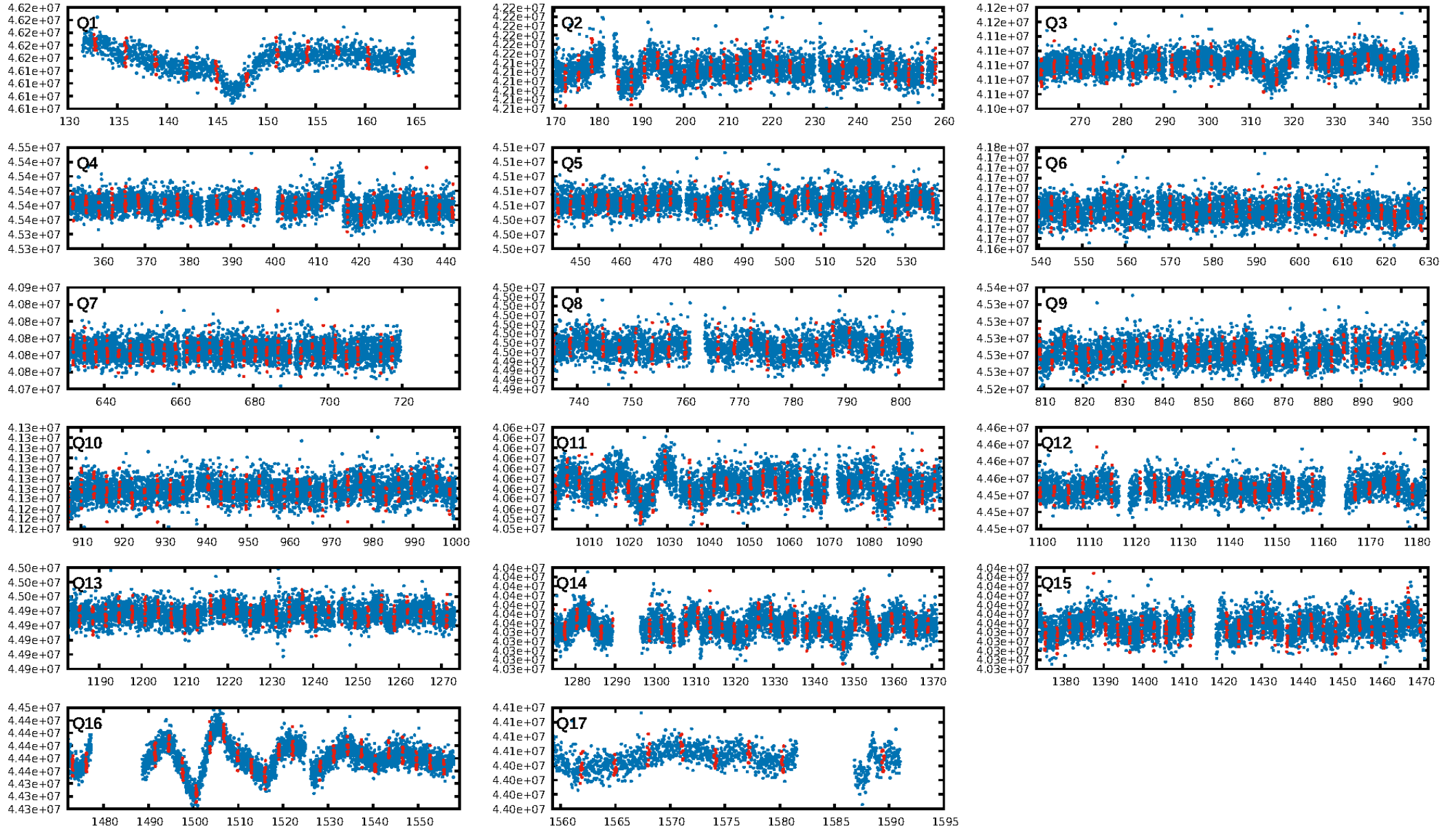
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.48e-20
RollingBand-fgt: 0.98 [409/417]
GhostDiagnostic-chr: -0.4394
Centroid-sig: 0.0%
Centroid-so: 81.739 arcsec [45.43σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [17/17]

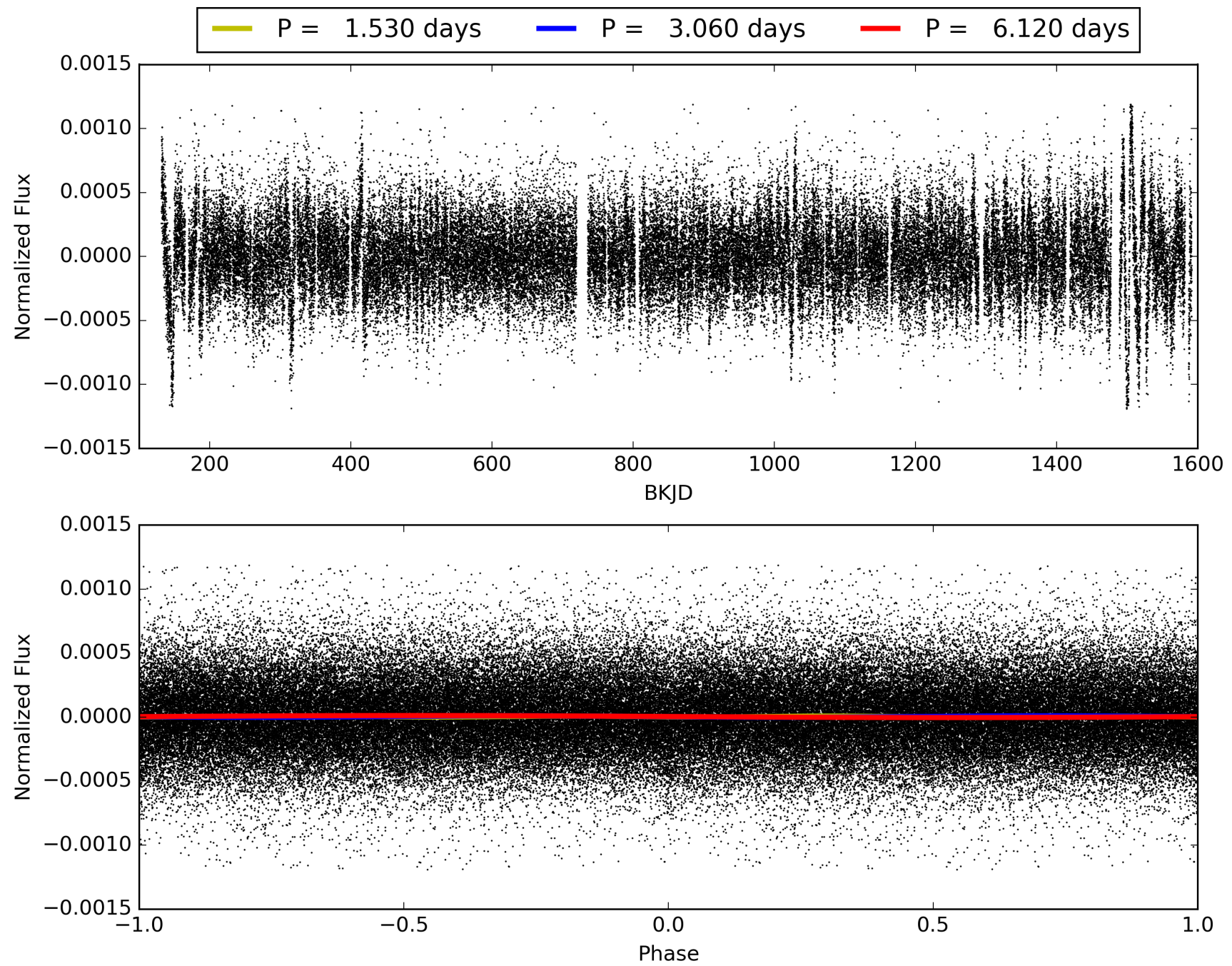
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 20:28:23 Z

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

TCE 006147851-01, PDC Light Curves

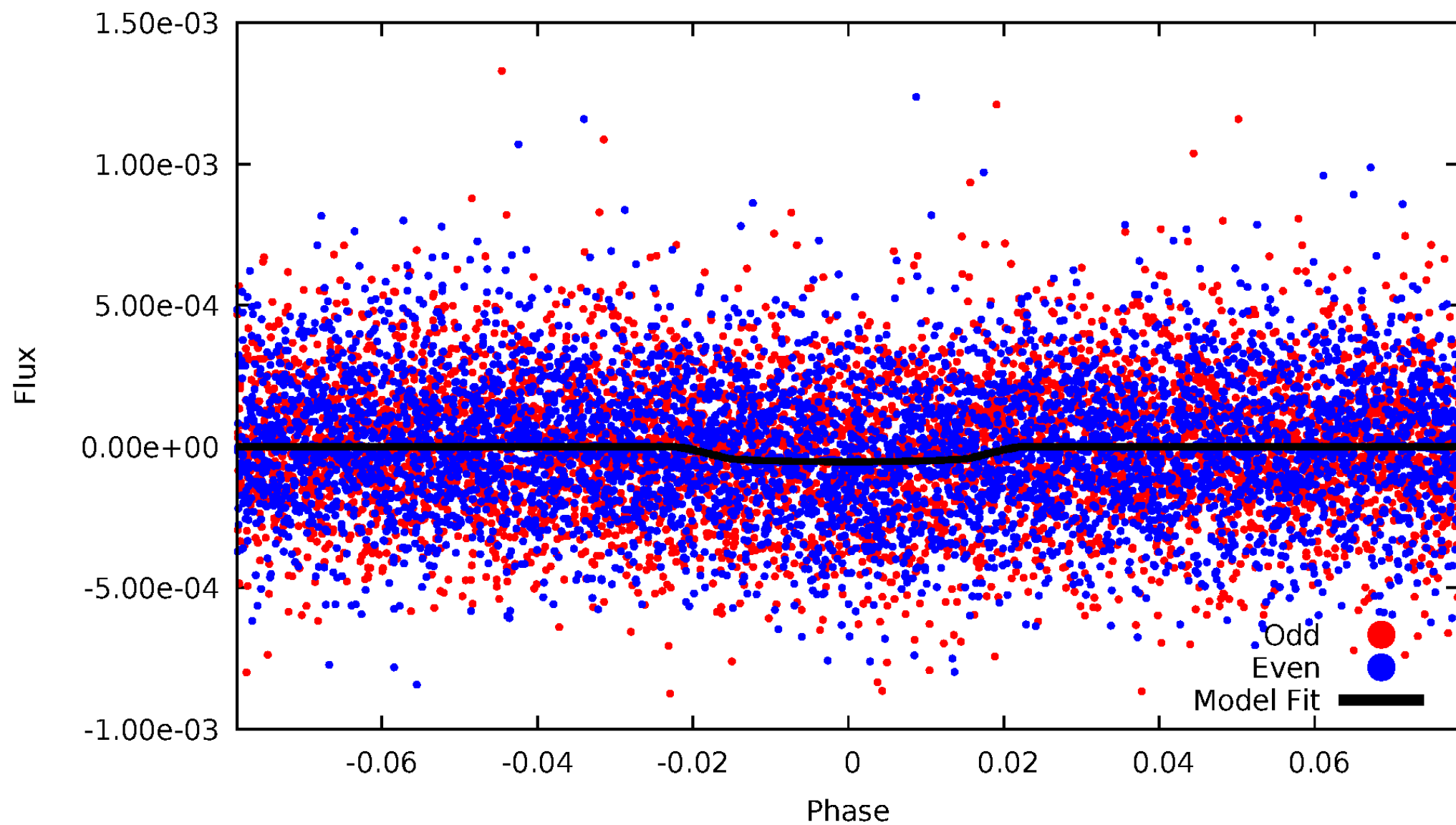


TCE 006147851-01



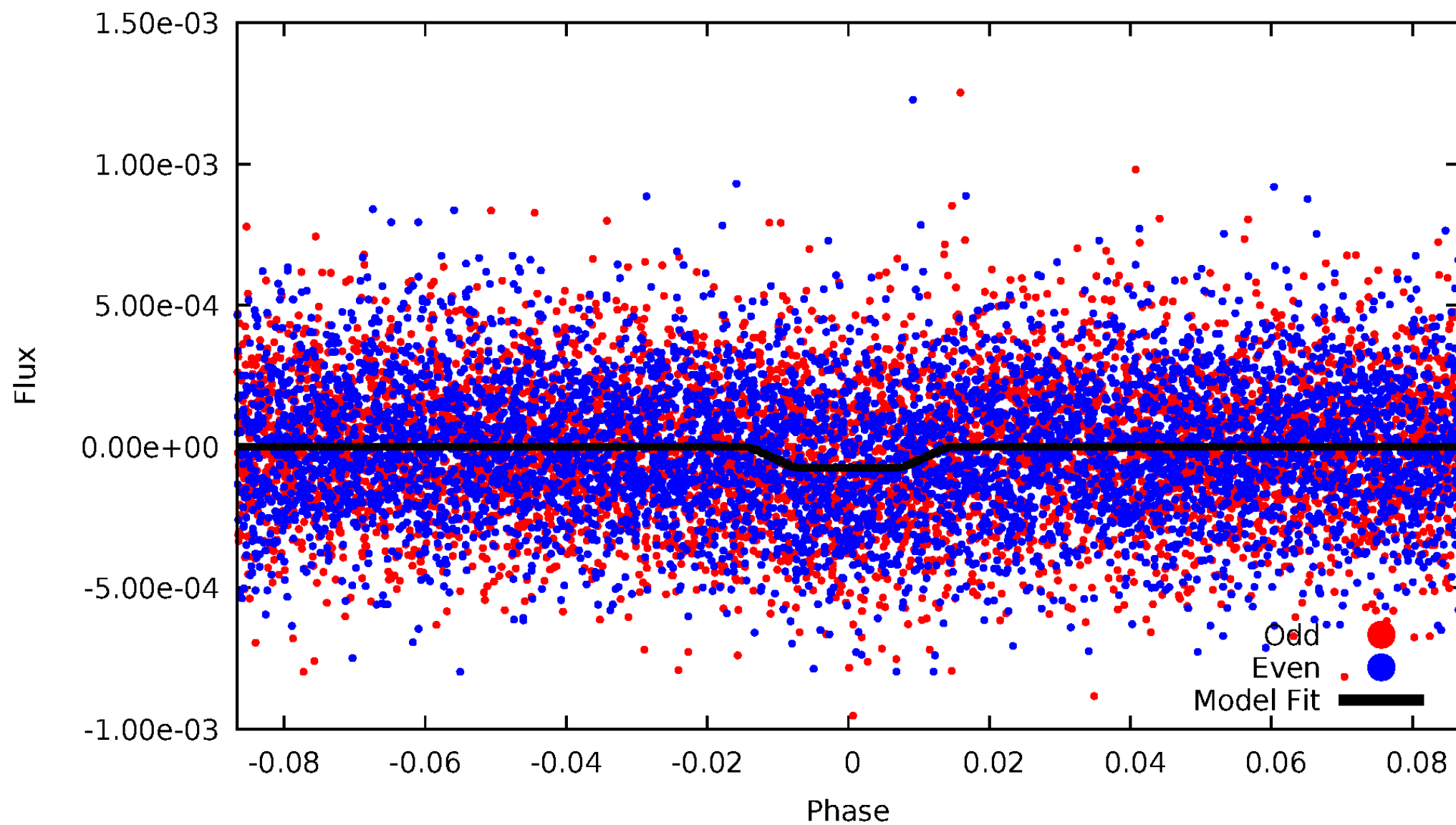
DV Odd/Even

TCE 006147851-01

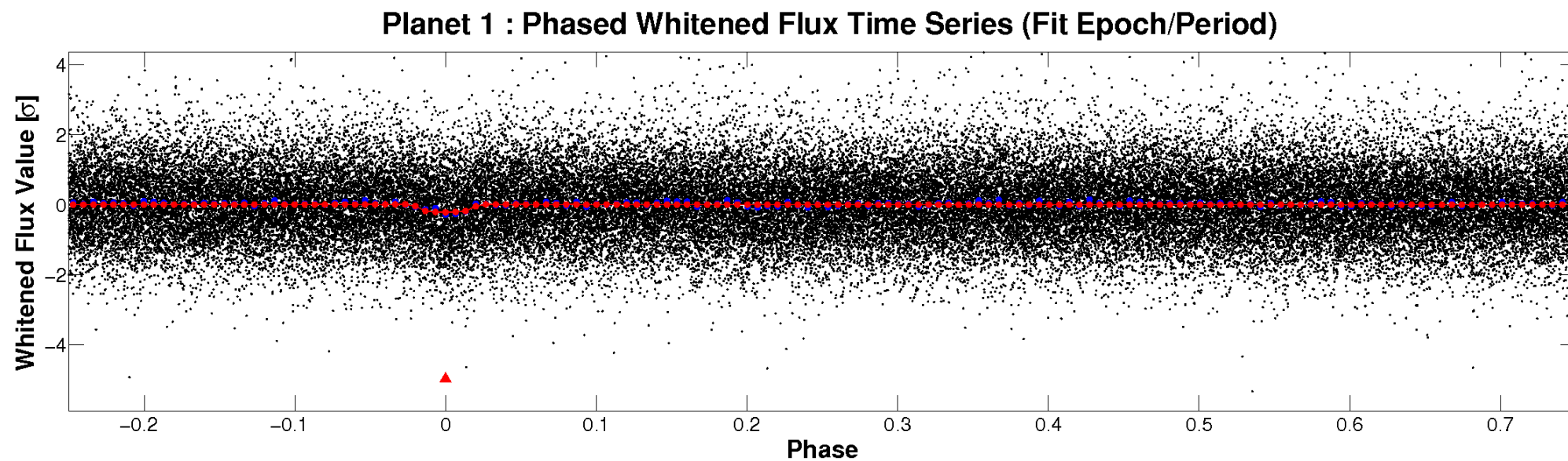
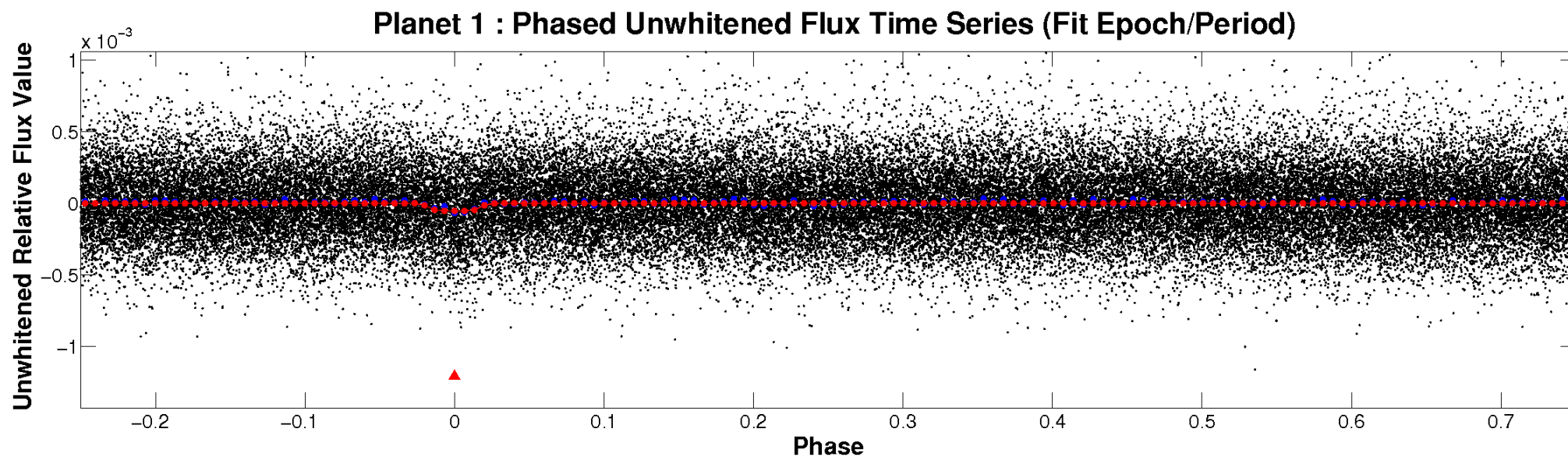


ALT Odd/Even

TCE 006147851-01

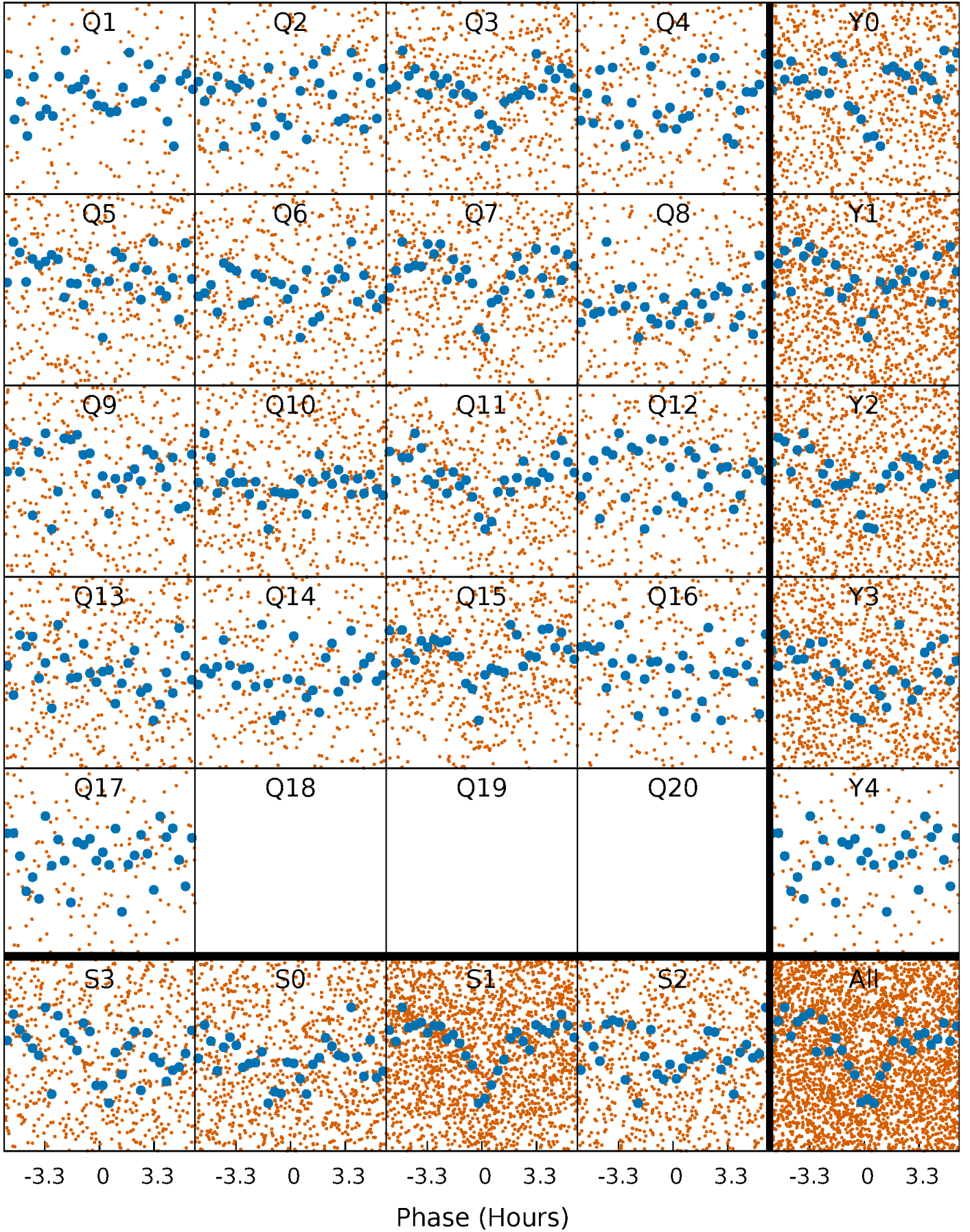


Non-Whitened Vs. Whitened Light Curve



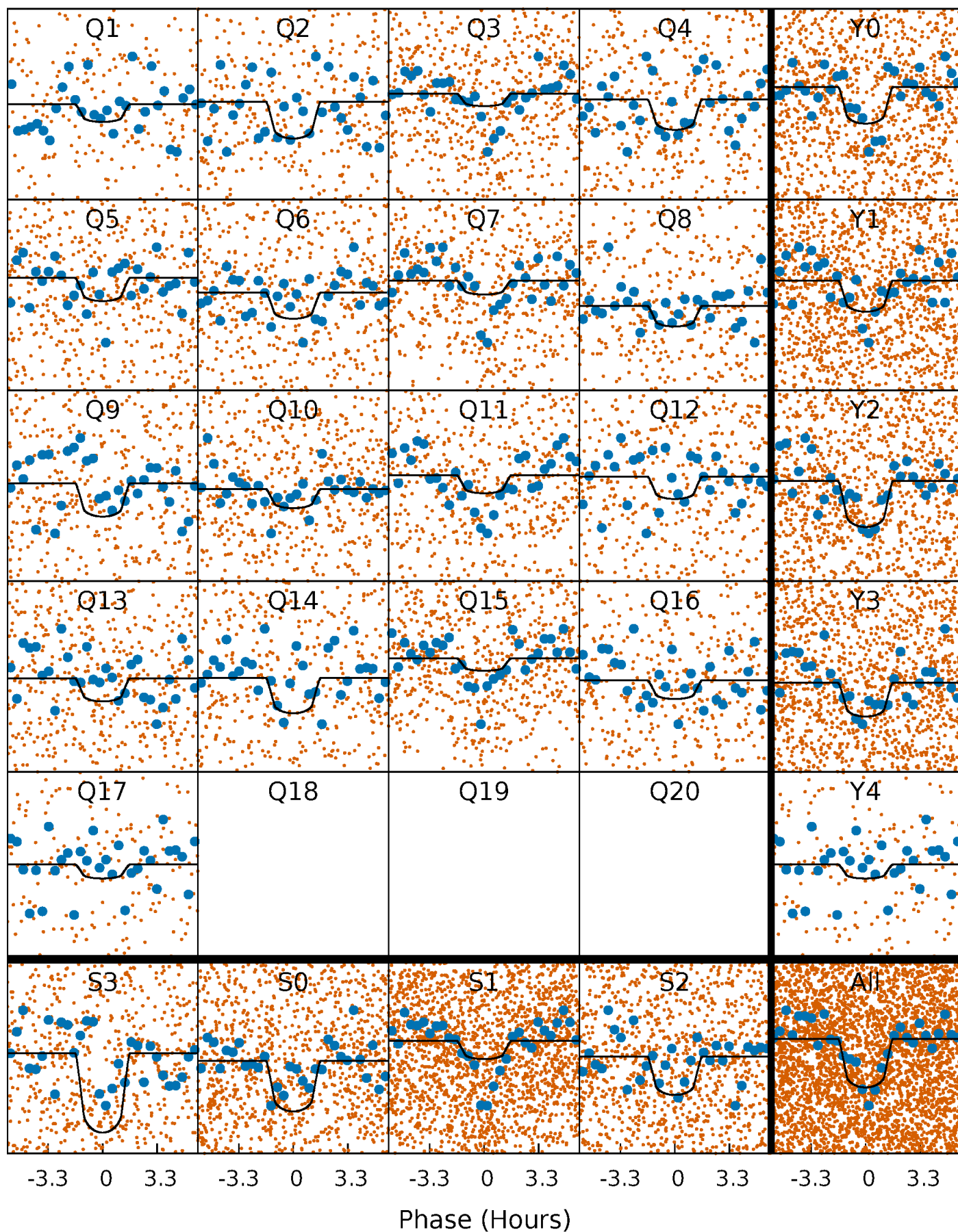
PDC Quarter-Phased Transit Curves

TCE 006147851-01 P= 3.060228 Days $T_0=132.765004$ (BKJD)



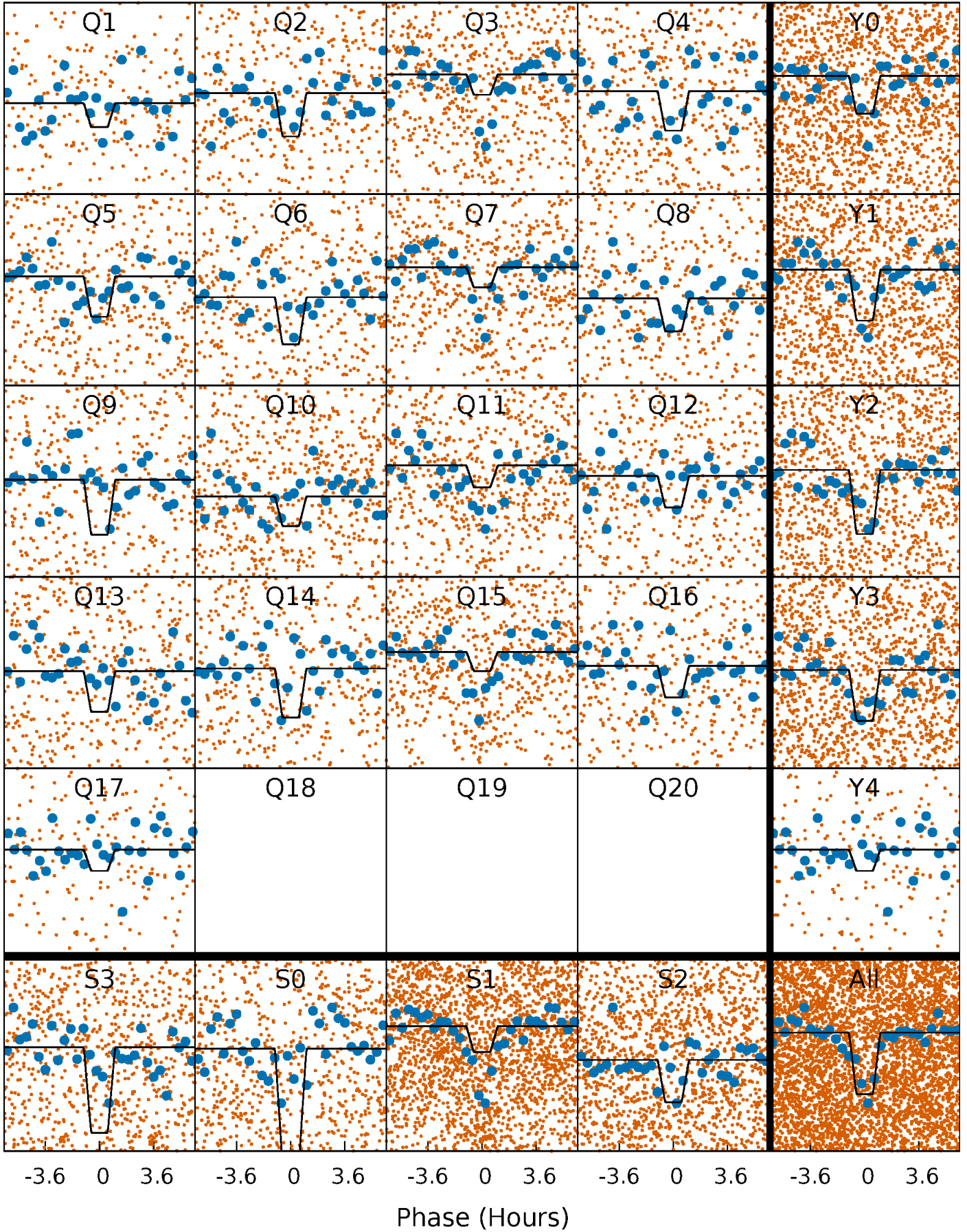
DV Quarter-Phased Transit Curves

TCE 006147851-01 P= 3.060228 Days $T_0=132.765004$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

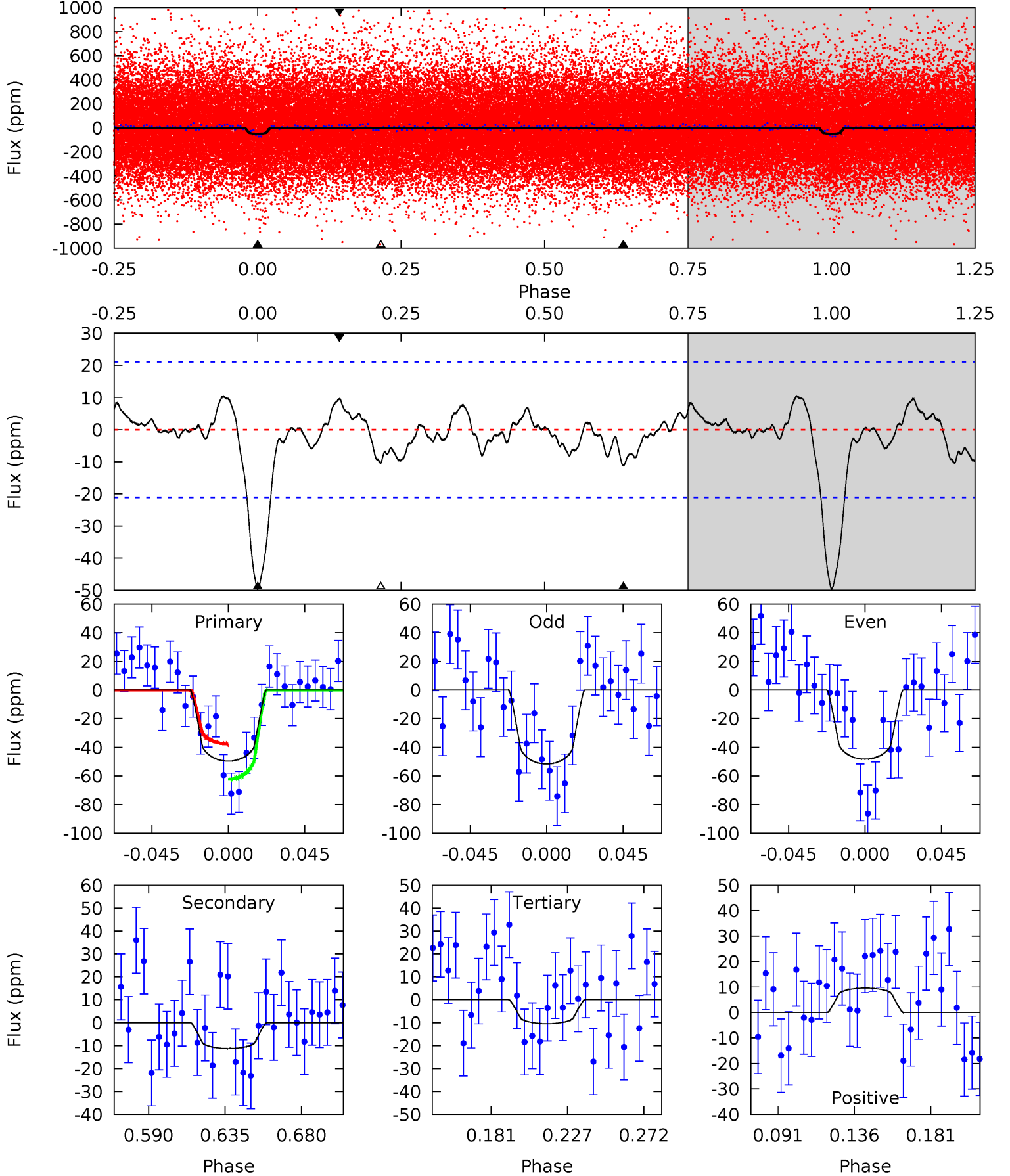
TCE 006147851-01 P= 3.060193 Days $T_0=132.778290$ (BKJD)



DV Model-Shift Uniqueness Test

006147851-01, P = 3.060228 Days, E = 129.704776 Days

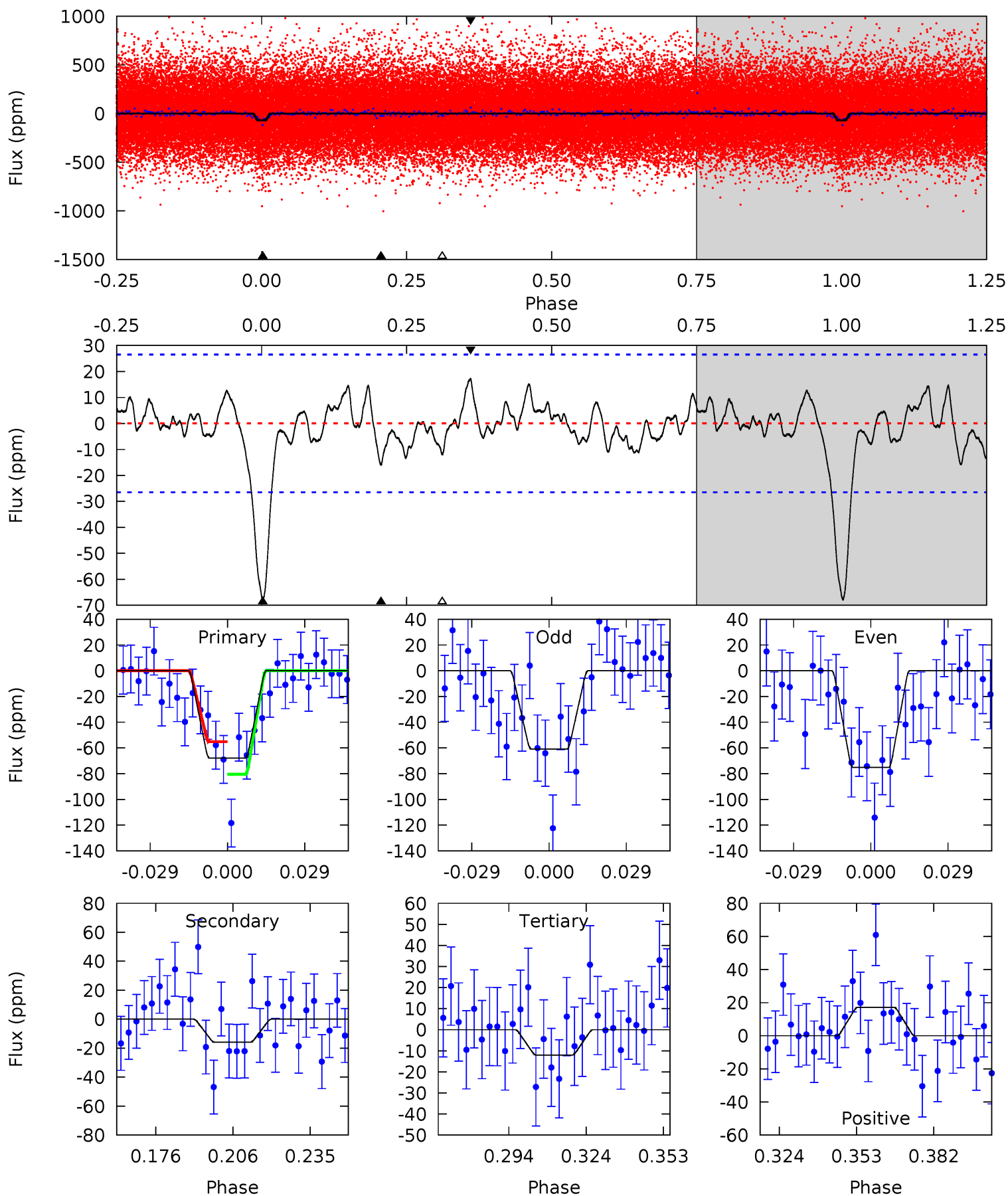
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.1	2.52	2.33	2.14	4.73	2.00	0.99	8.77	8.96	0.19	0.38	0.38	1.05	0.17	2.76



Alt Model-Shift Uniqueness Test

006147851-01, P = 3.060193 Days, E = 129.718097 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.3	2.88	2.19	3.12	4.82	2.18	1.09	10.1	9.20	0.70	-0.24	1.29	1.03	0.20	2.29



Stellar Parameters For KIC 006147851

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5878^{+158}_{-176}	$4.426^{+0.087}_{-0.203}$	$-0.040^{+0.250}_{-0.300}$	$1.010^{+0.291}_{-0.125}$	$0.993^{+0.127}_{-0.115}$	$1.355^{+0.494}_{-0.700}$
	+3%/-3%	+2%/-5%	+625%/-750%	+29%/-12%	+13%/-12%	+36%/-52%
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 006147851-01 / KOI 7766.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-11 ± 4	$0.93^{+0.58}_{-0.48}$	1817^{+126}_{-91}	3987^{+1511}_{-659}	11^{+43}_{-7}
Alt.	-16 ± 6	$1.01^{+0.60}_{-0.53}$	1820^{+132}_{-89}	4174^{+1371}_{-642}	14^{+43}_{-8}

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 006147851-01. Kepler magnitude: 14.26. Transit SNR 9.09

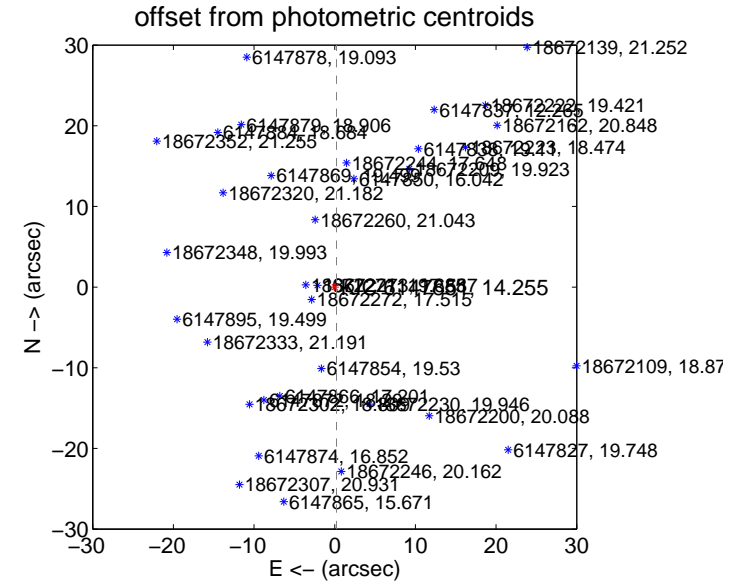
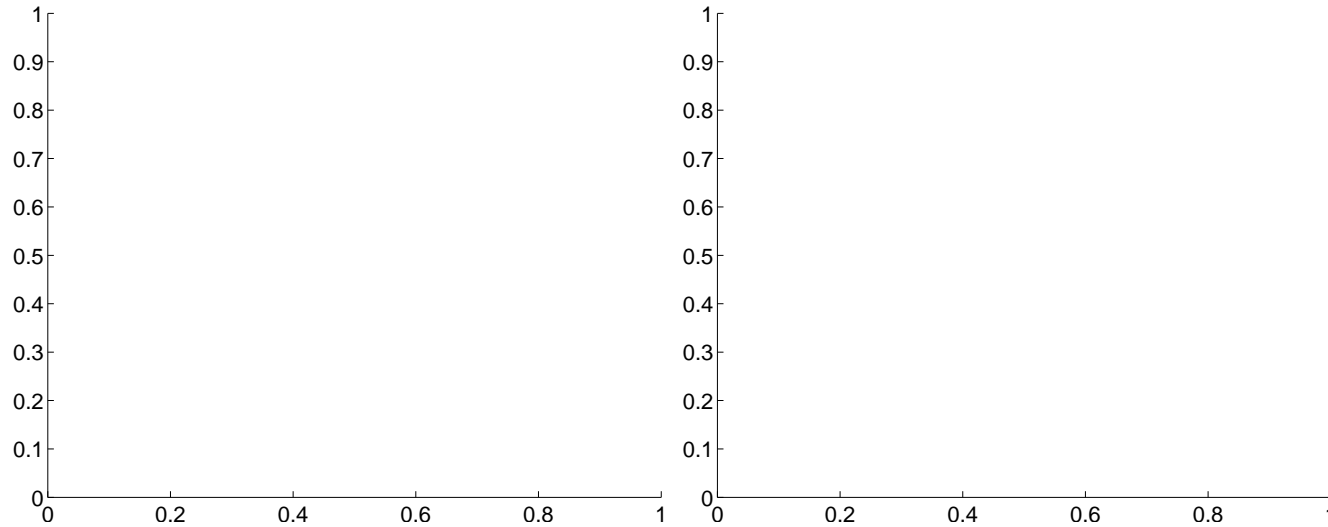
There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	81.74 ± 1.80	45.43	-0.22 ± 1.63	81.74 ± 1.80

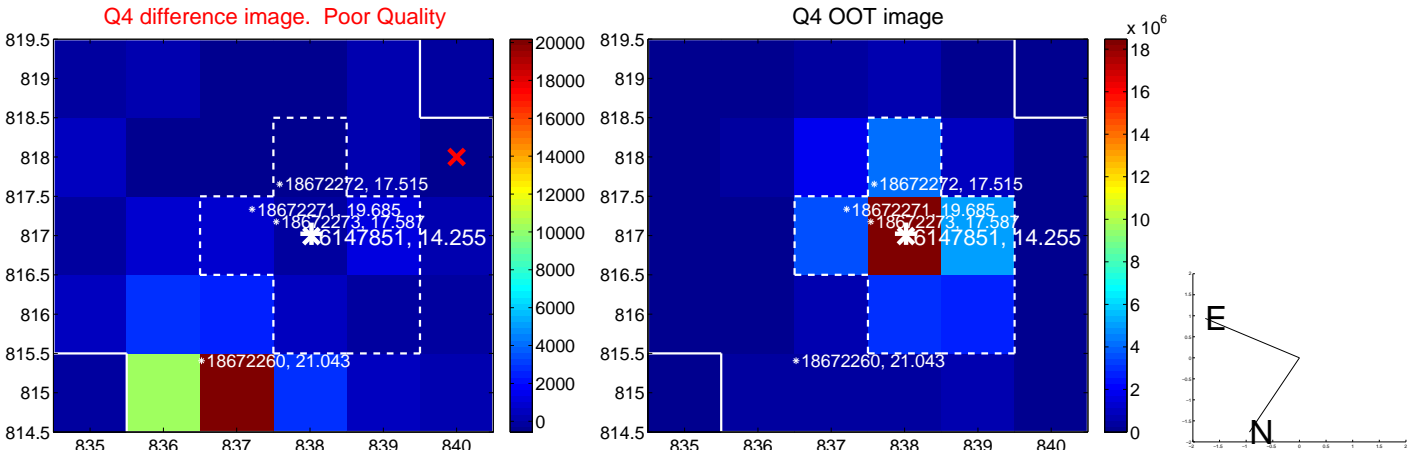
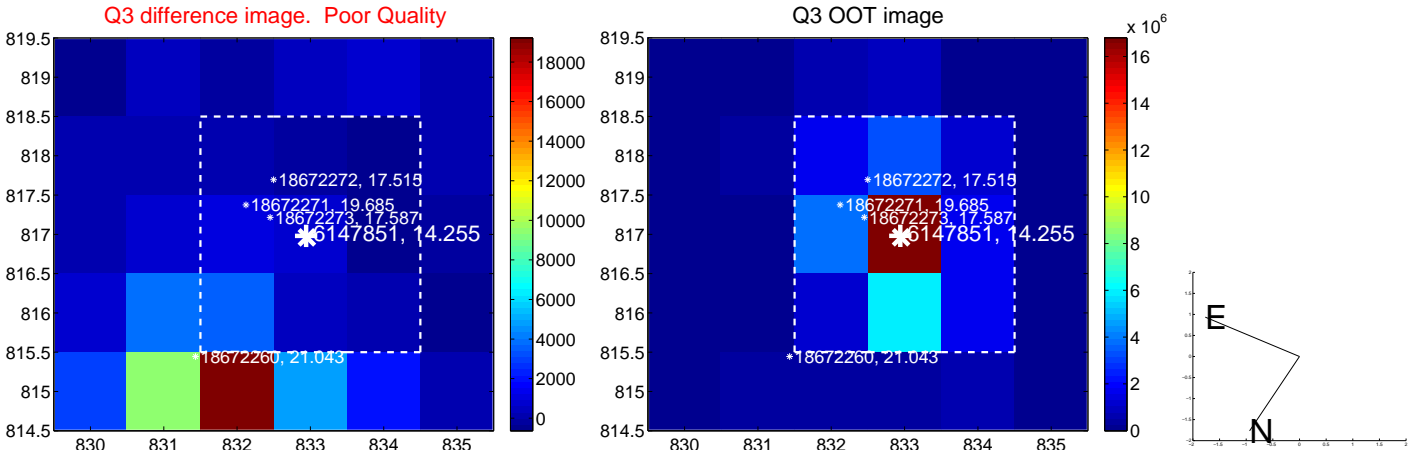
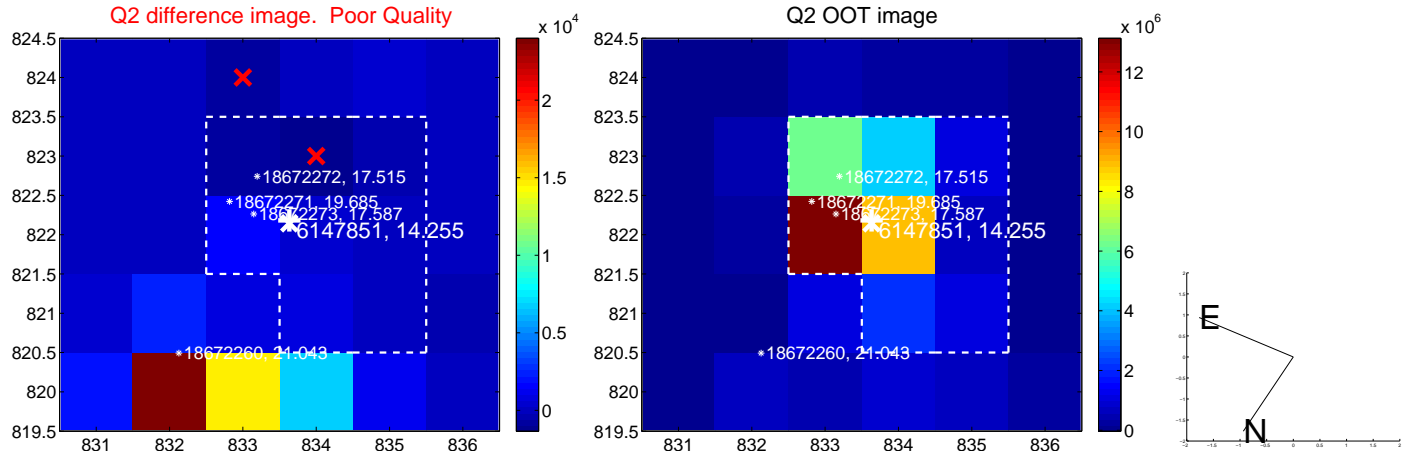
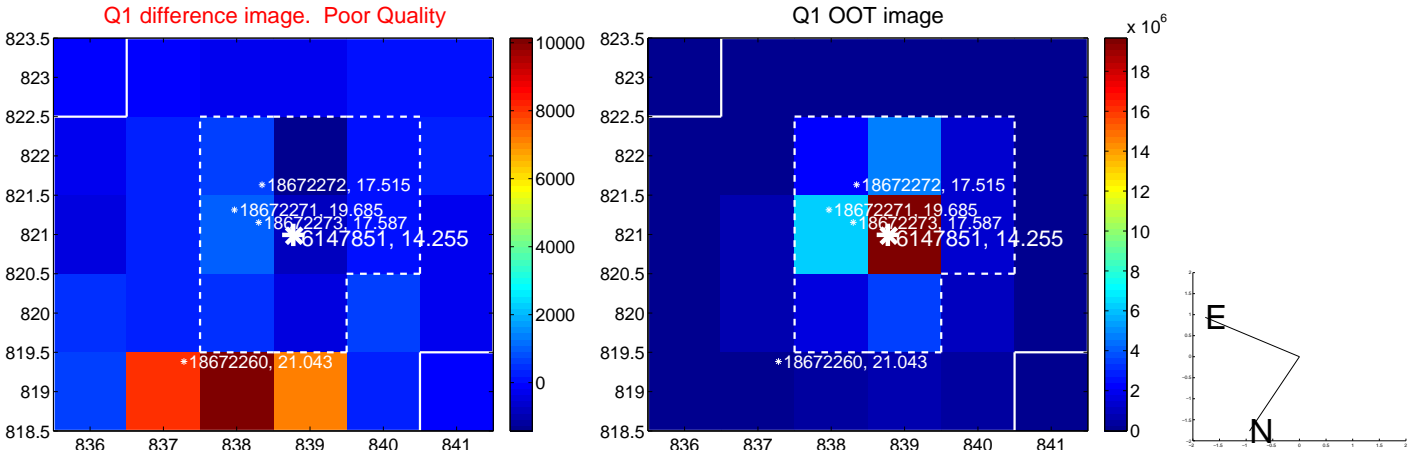
There is no PRF-fit offset from OOT-fit

There is no PRF-fit offset from KIC

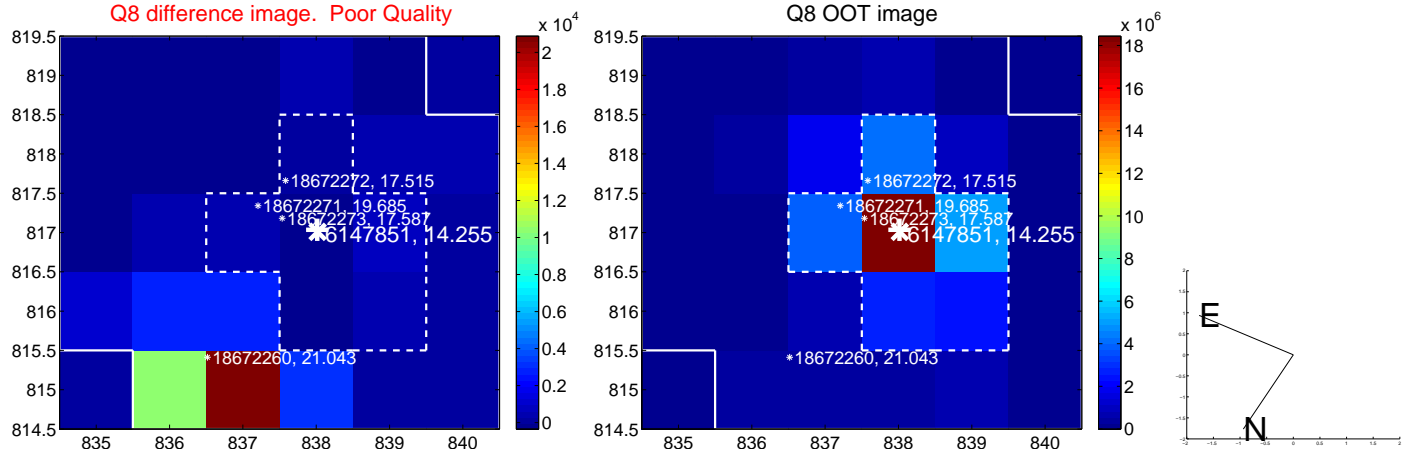
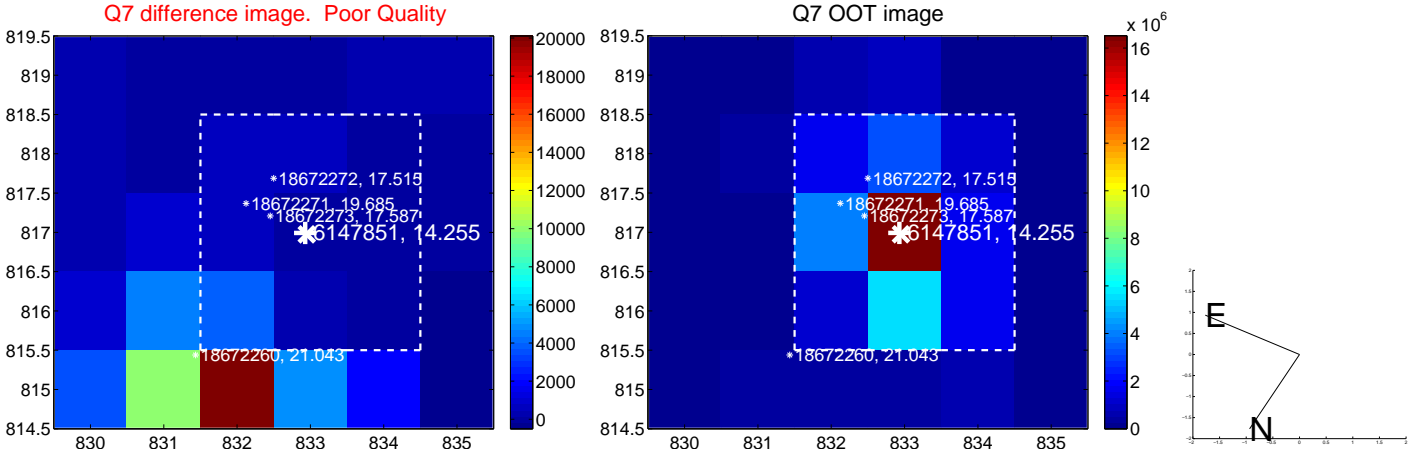
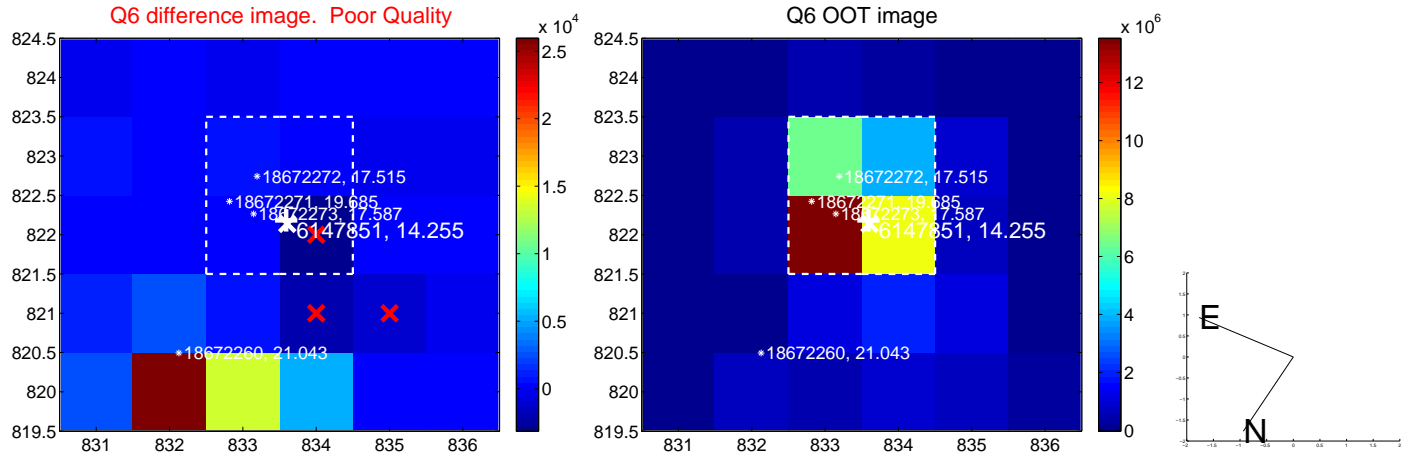
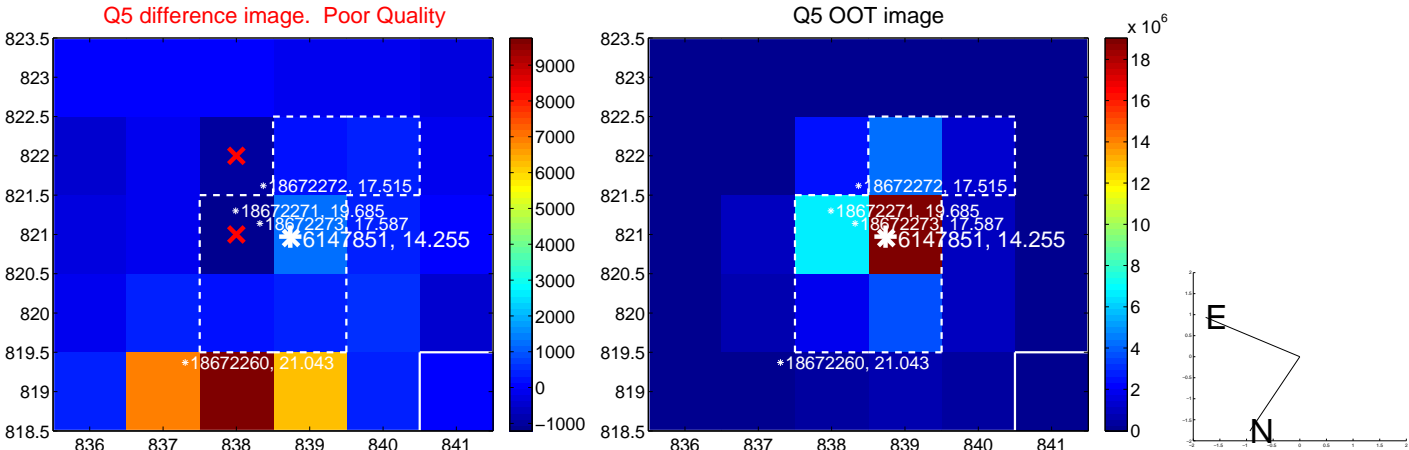


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

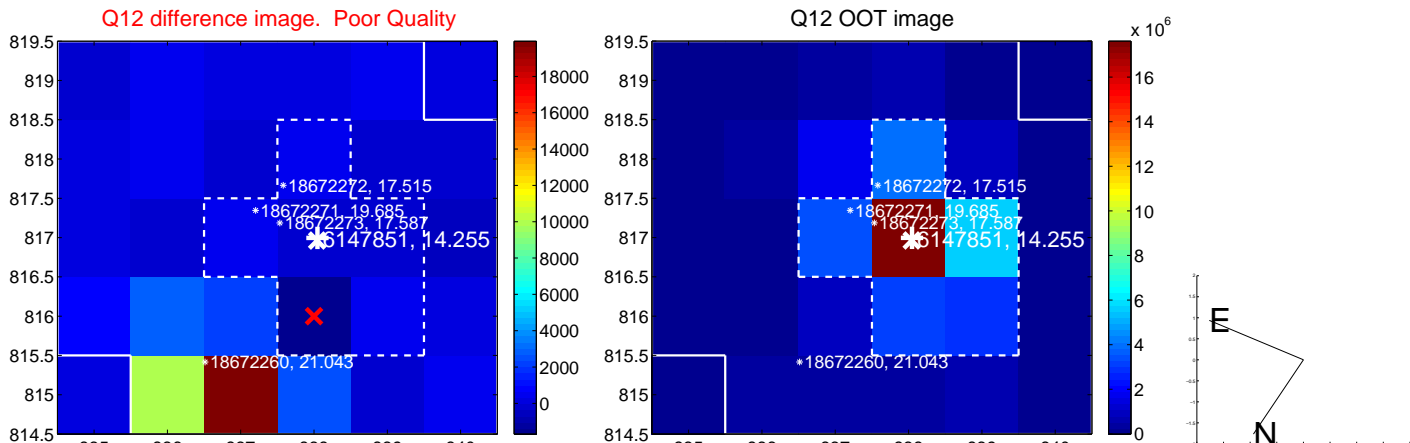
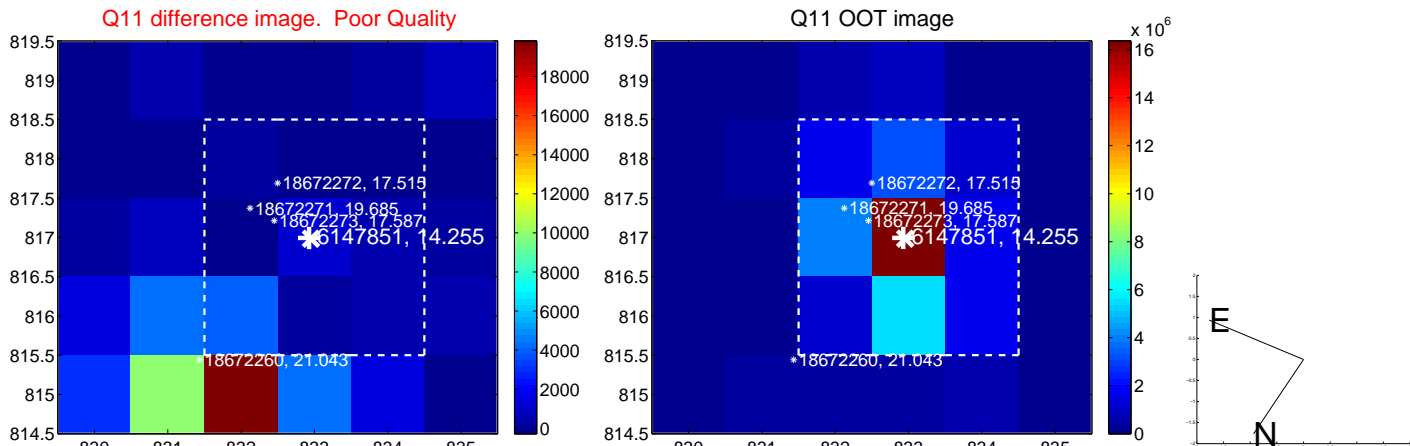
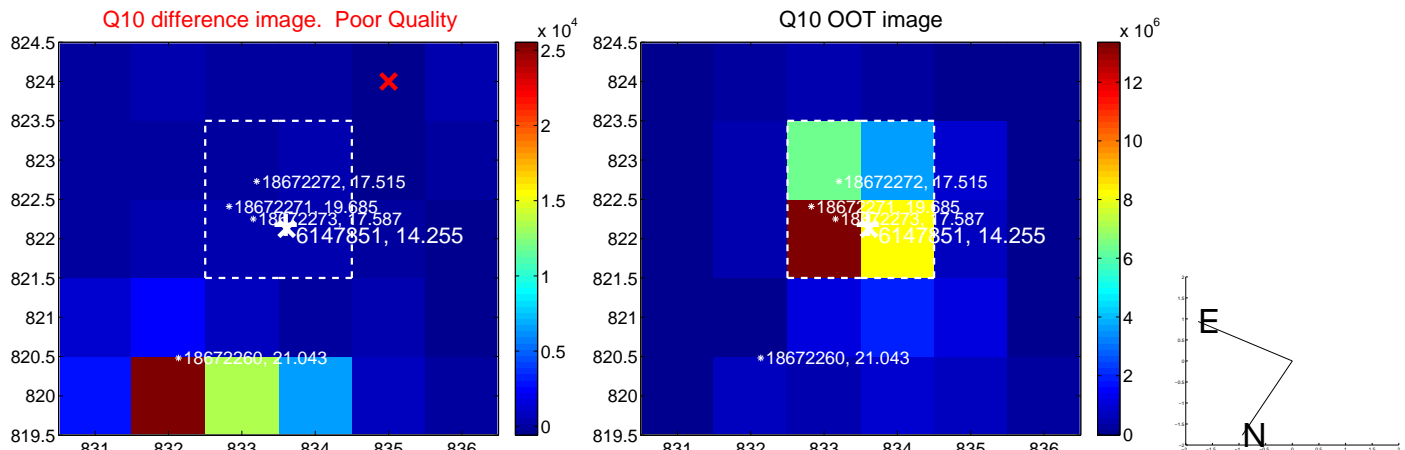
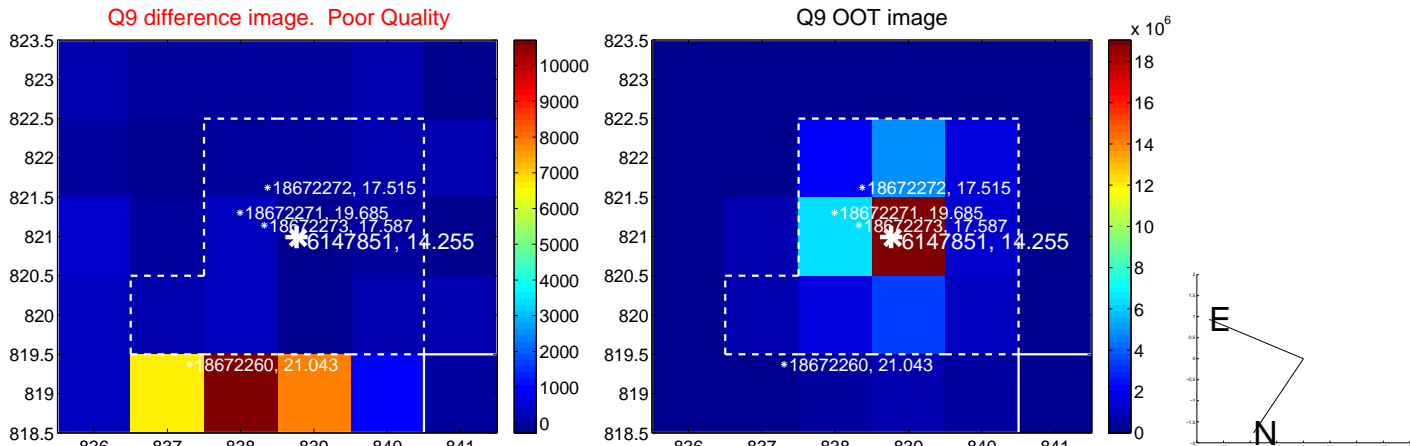
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



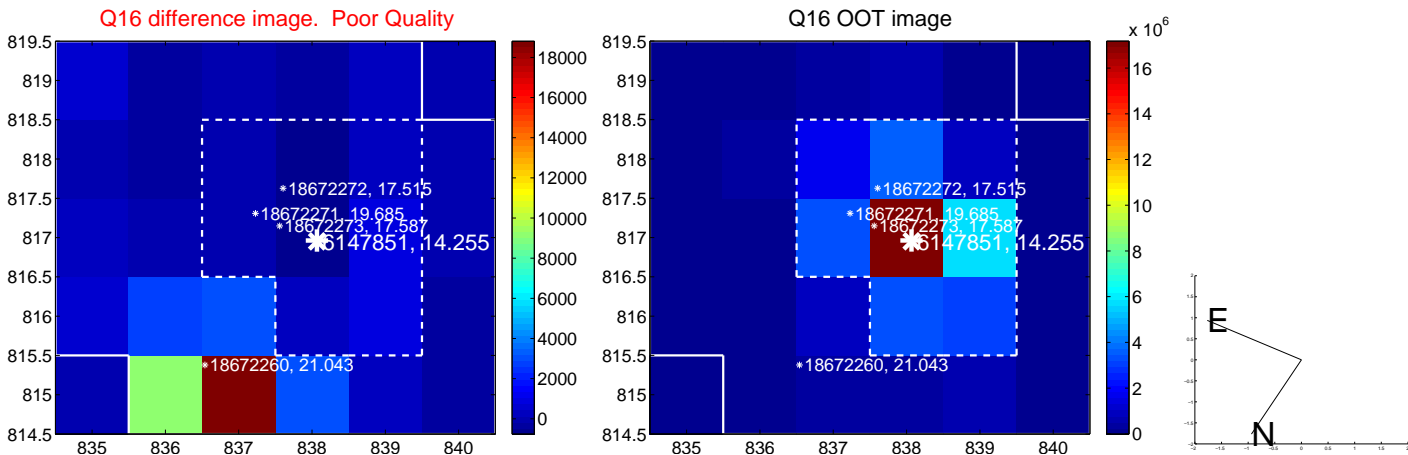
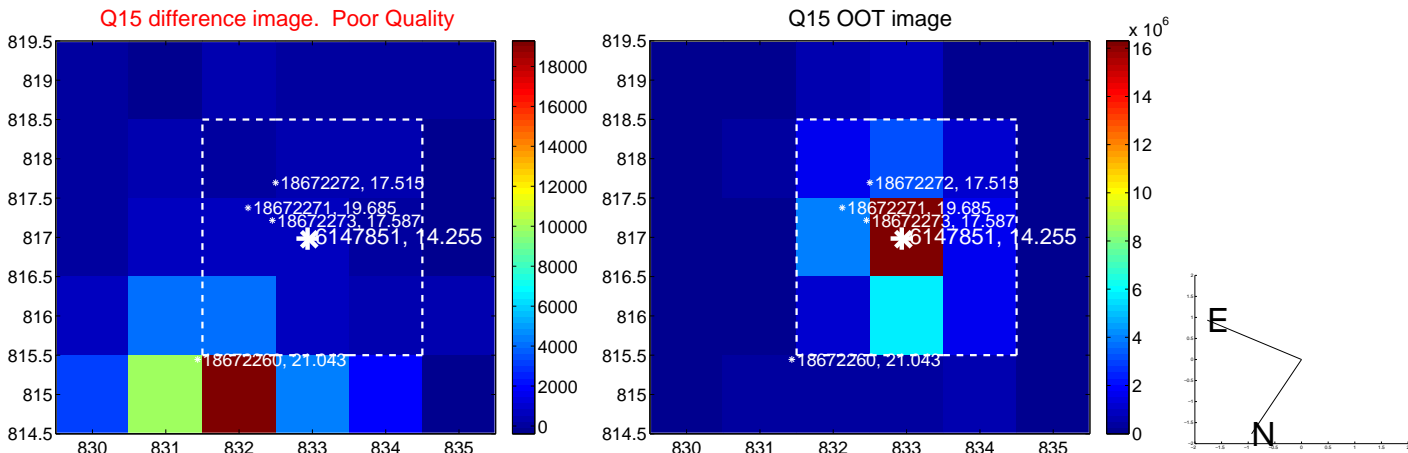
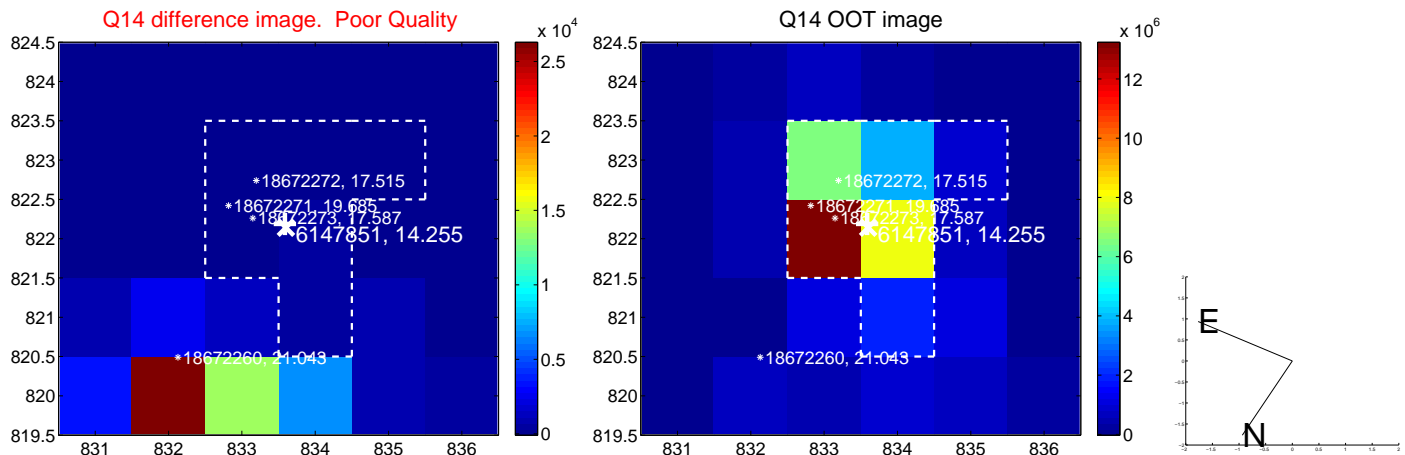
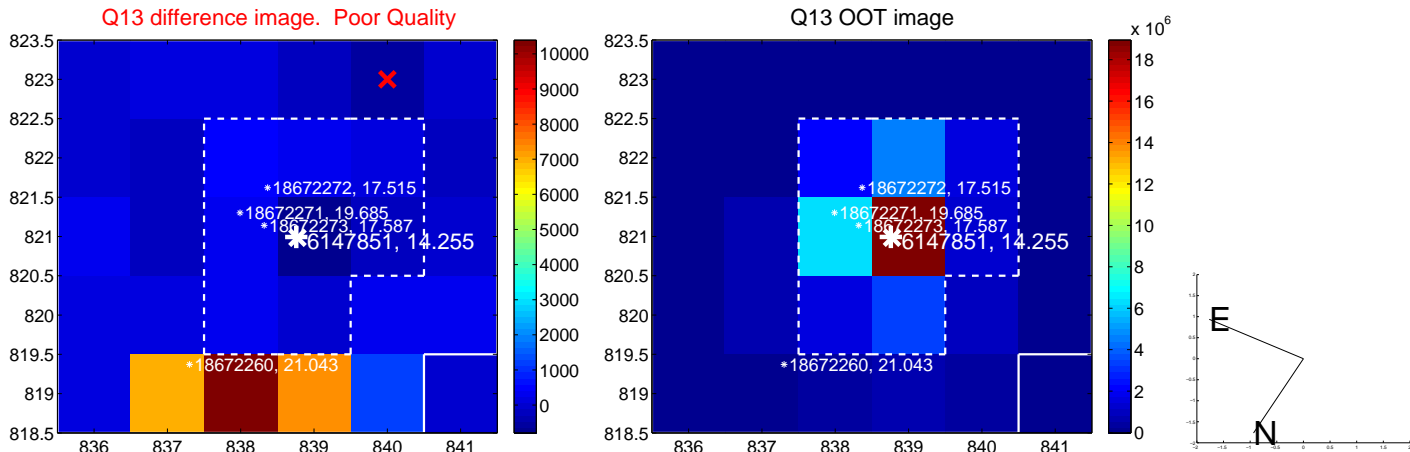
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



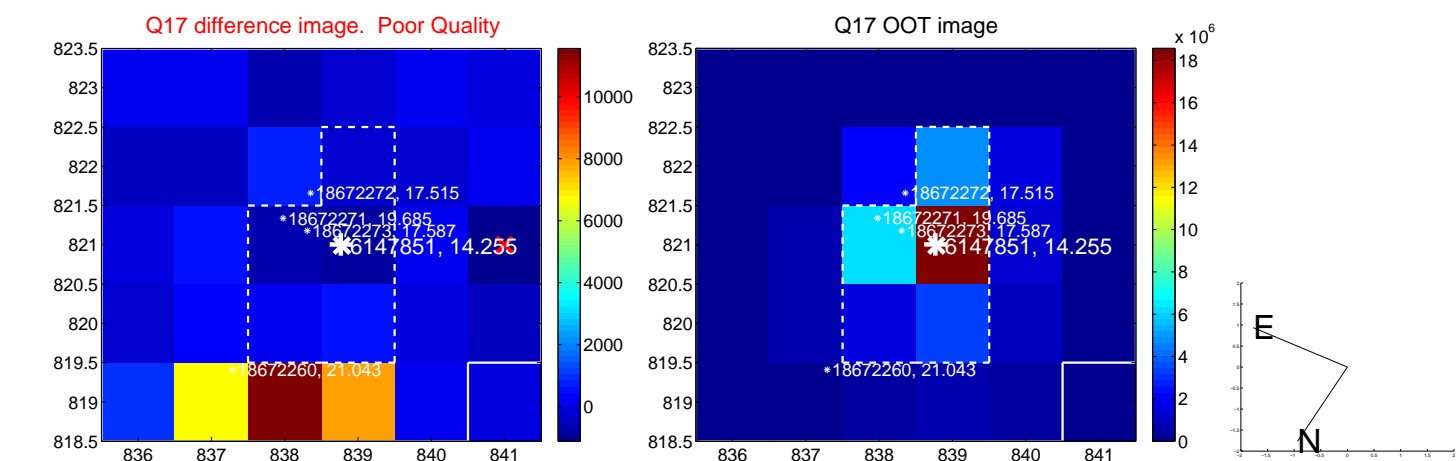
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



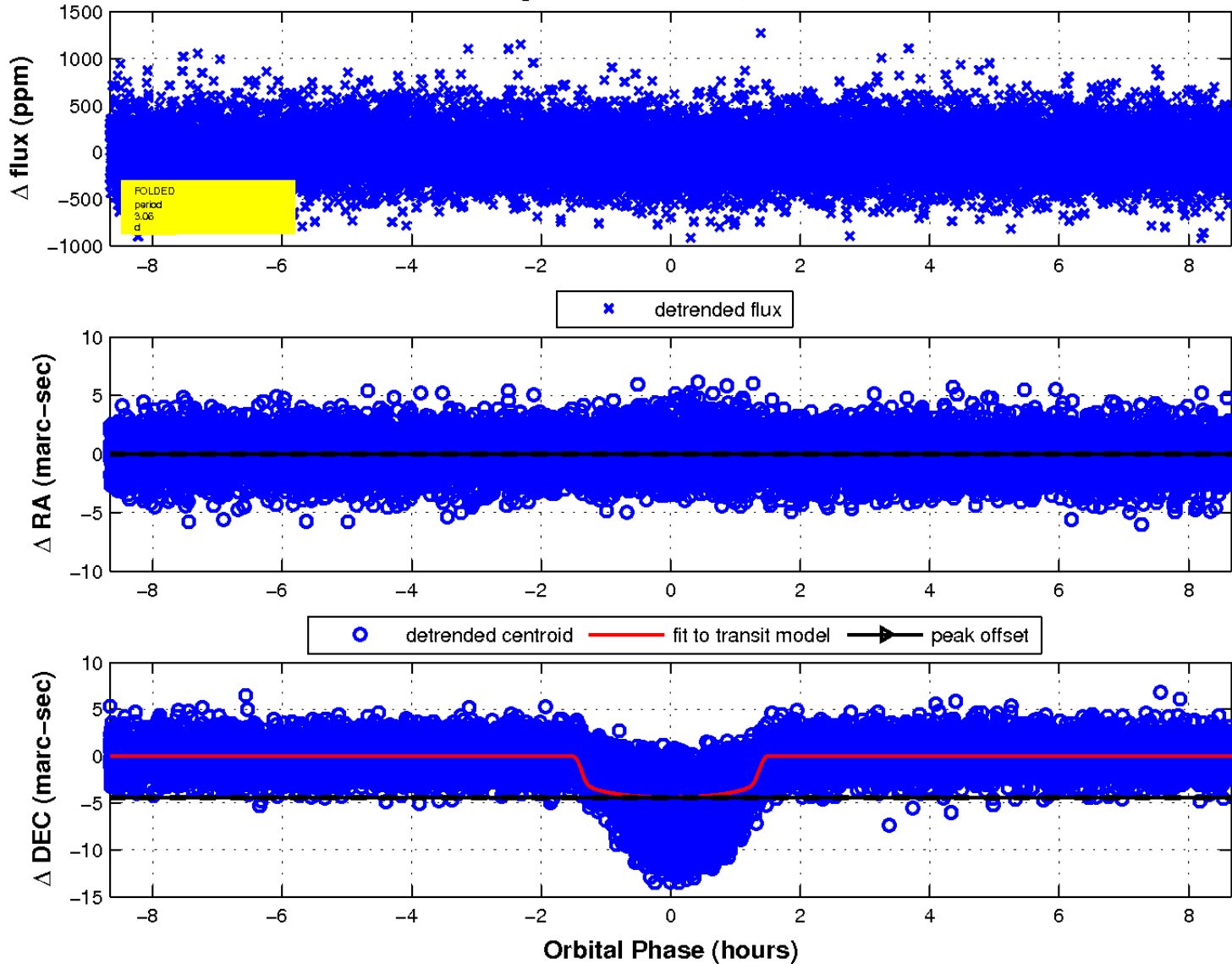
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

