

KIC 007667560

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})
007667560-01	OBS	No	0.647545	132.244211	0.0	5.003	9.0	0.0	2.17	8675	0.02	68599.09

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007667560-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED

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

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

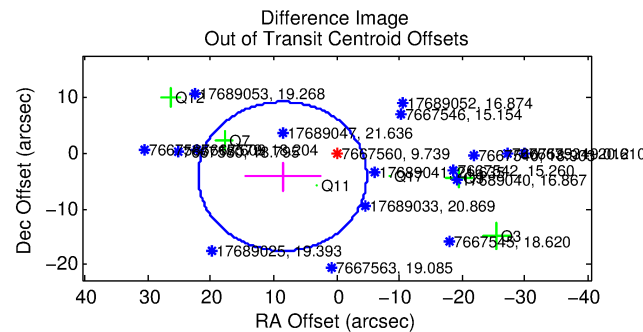
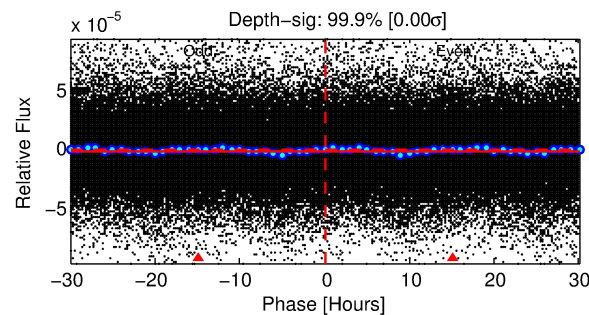
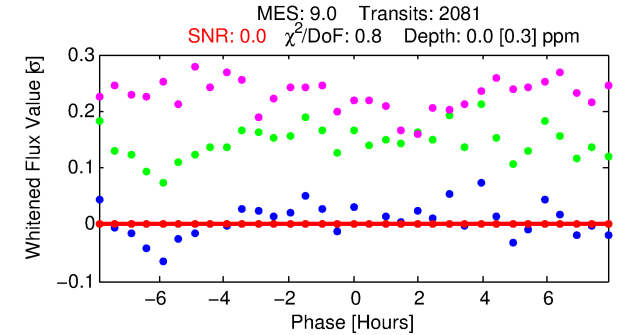
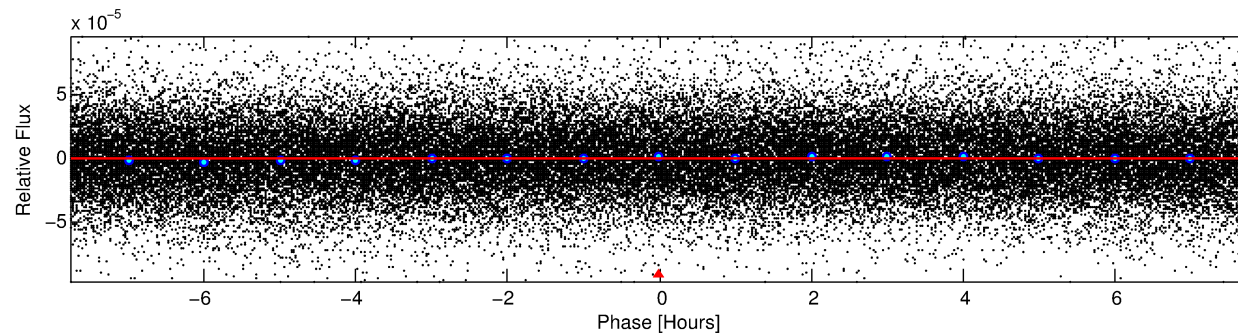
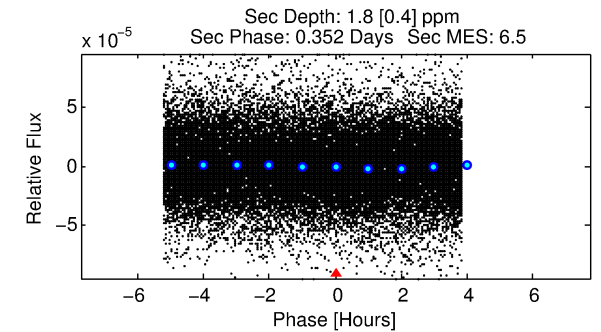
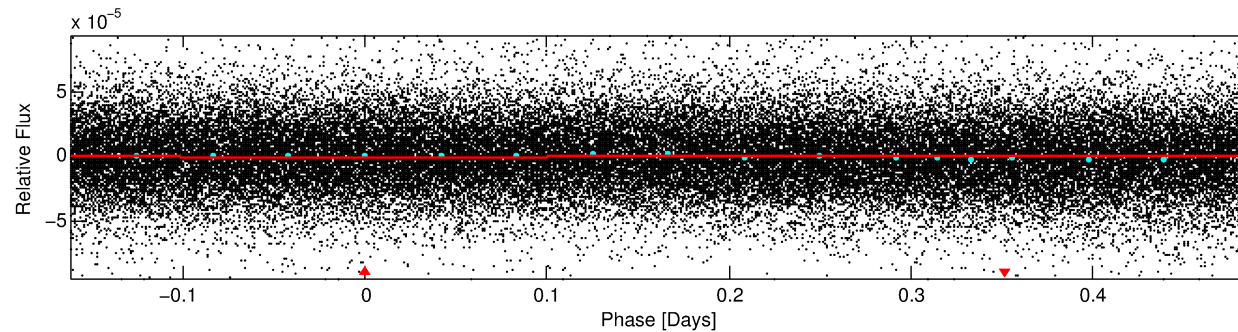
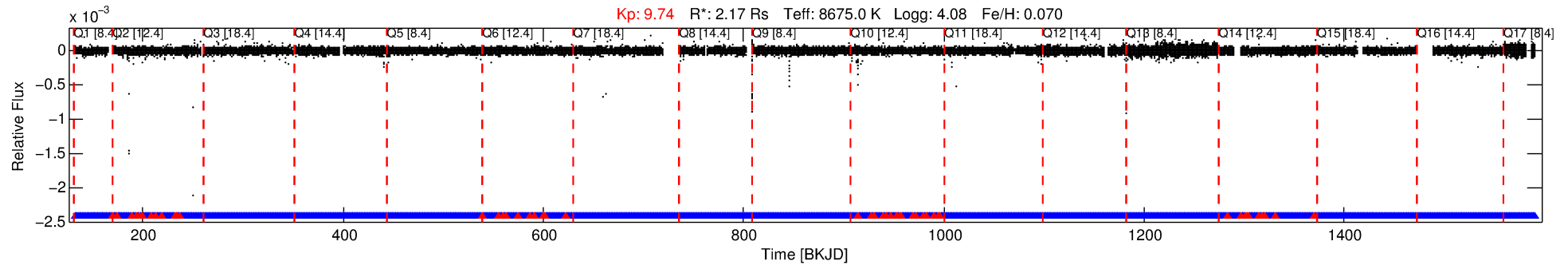
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007667560-01

No Significant Match Found

DV One-Page Summary

KIC: 7667560 Candidate: 1 of 1 Period: 0.648 d



DV Fit Results:

Period = 0.64755 [0.00409] d
Epoch = 132.2442 [1.3641] BKJD
Rp/R* = 0.0001 [0.0018]
a/R* = 1.10 [2.24]
b = 0.69 [9.98]
Seff = 68599.09 [24817.23]
Teq = 4127 [373] K
Rp = 0.02 [0.43] Re
a = 0.0186 [0.0041] AU
Ag = 879.09 [37943.77] [0.02σ]
Teffp = 34742 [374922] K [0.08σ]

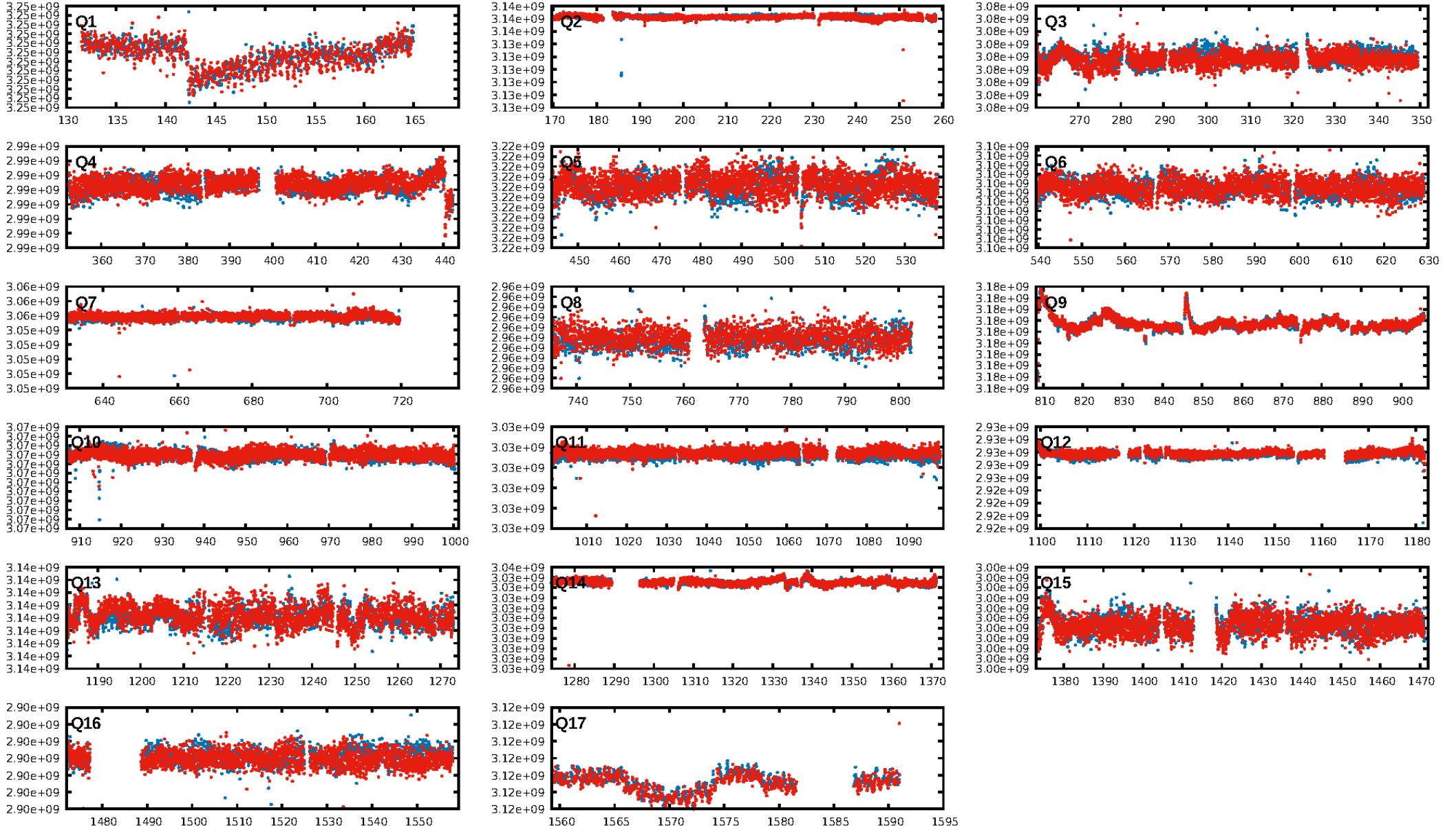
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.97 [1935/1988]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 9.506 arcsec [2.13σ]
KicOffset-rm: 9.856 arcsec [2.20σ]
OotOffset-st: 0/3/1/2 [6]
KicOffset-st: 0/3/1/2 [6]
DiffImageQuality-fgm: 0.17 [1/6]
DiffImageOverlap-fno: 1.00 [17/17]

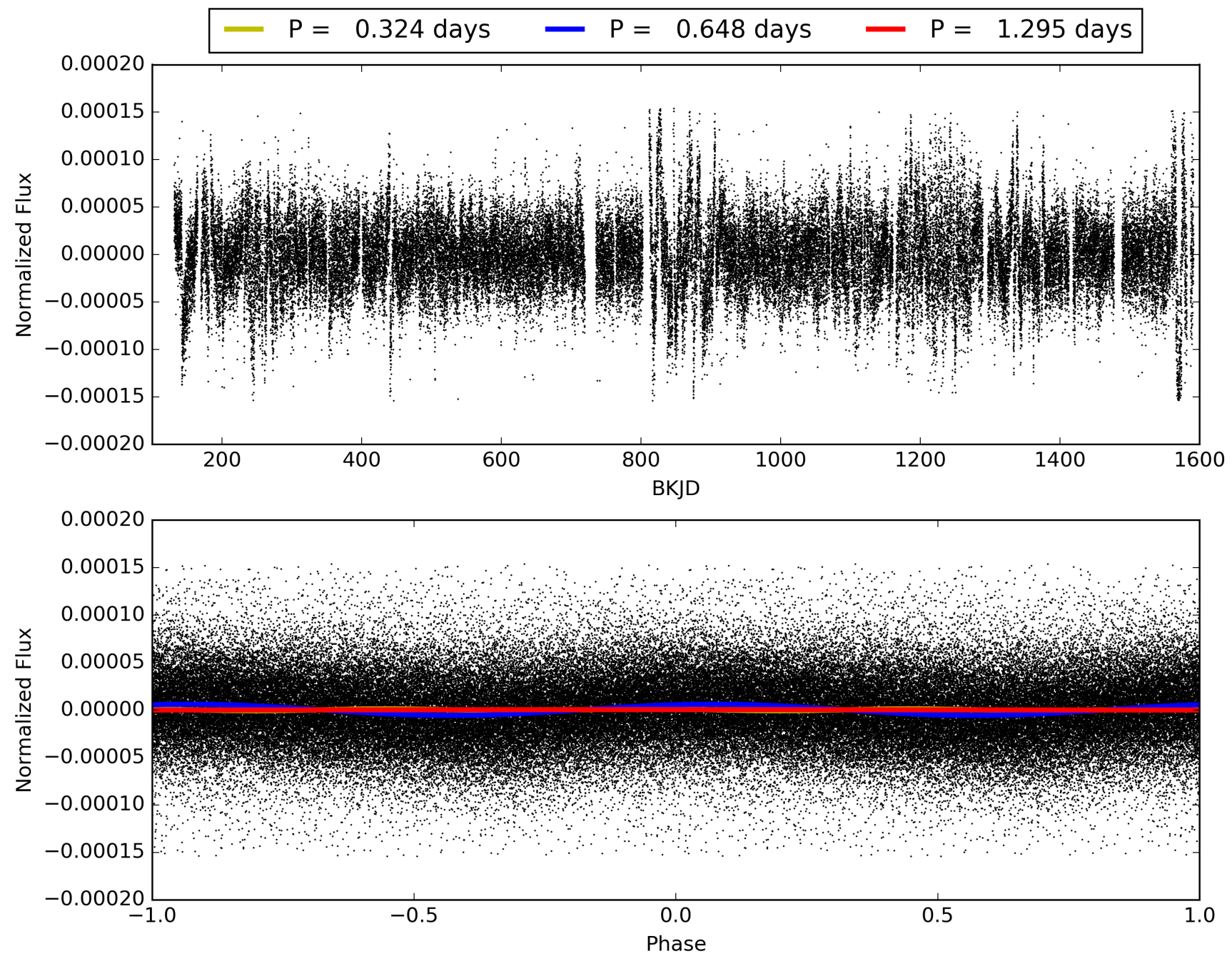
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 03:51:00 Z

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

TCE 007667560-01, PDC Light Curves

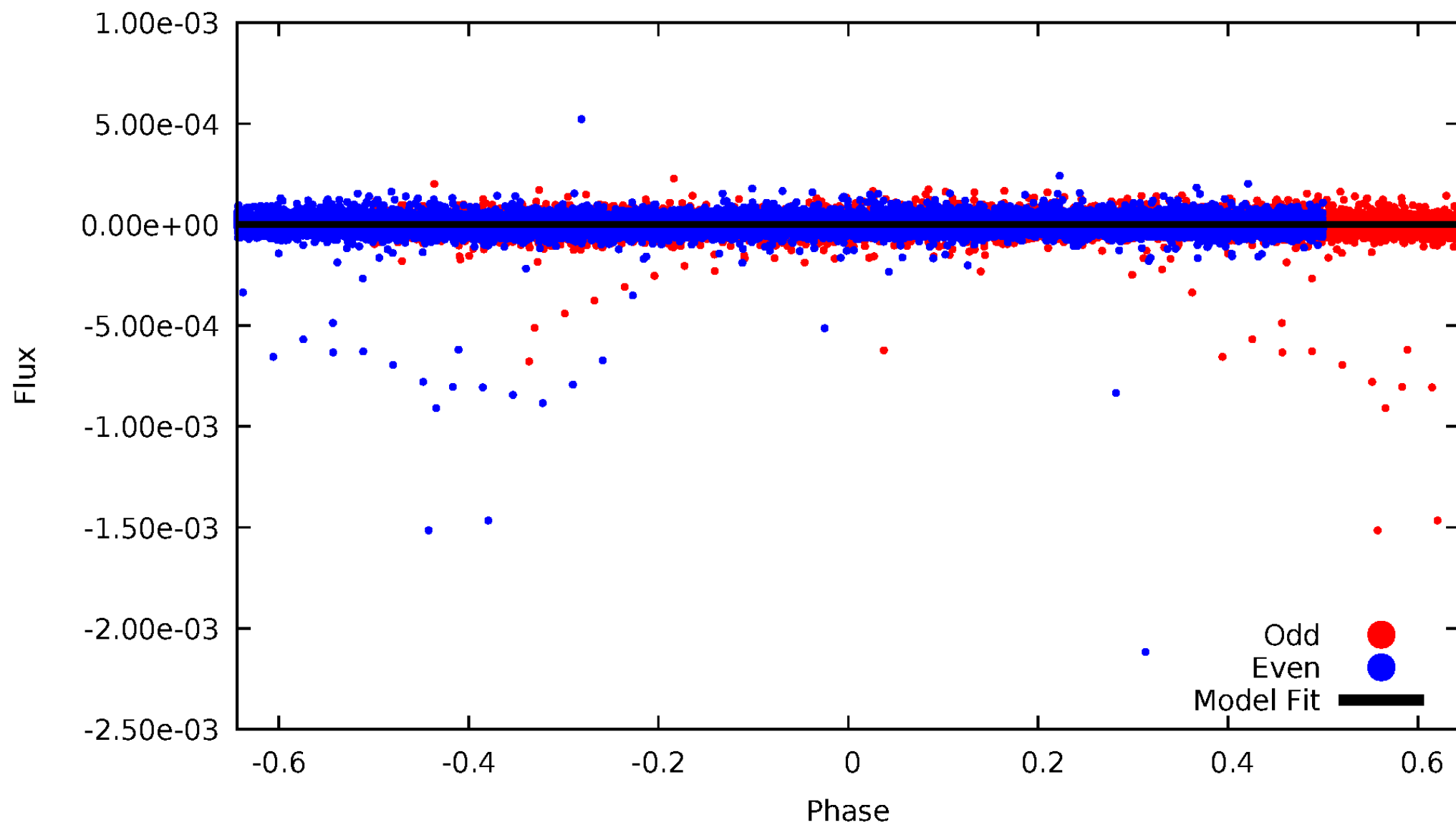


TCE 007667560-01



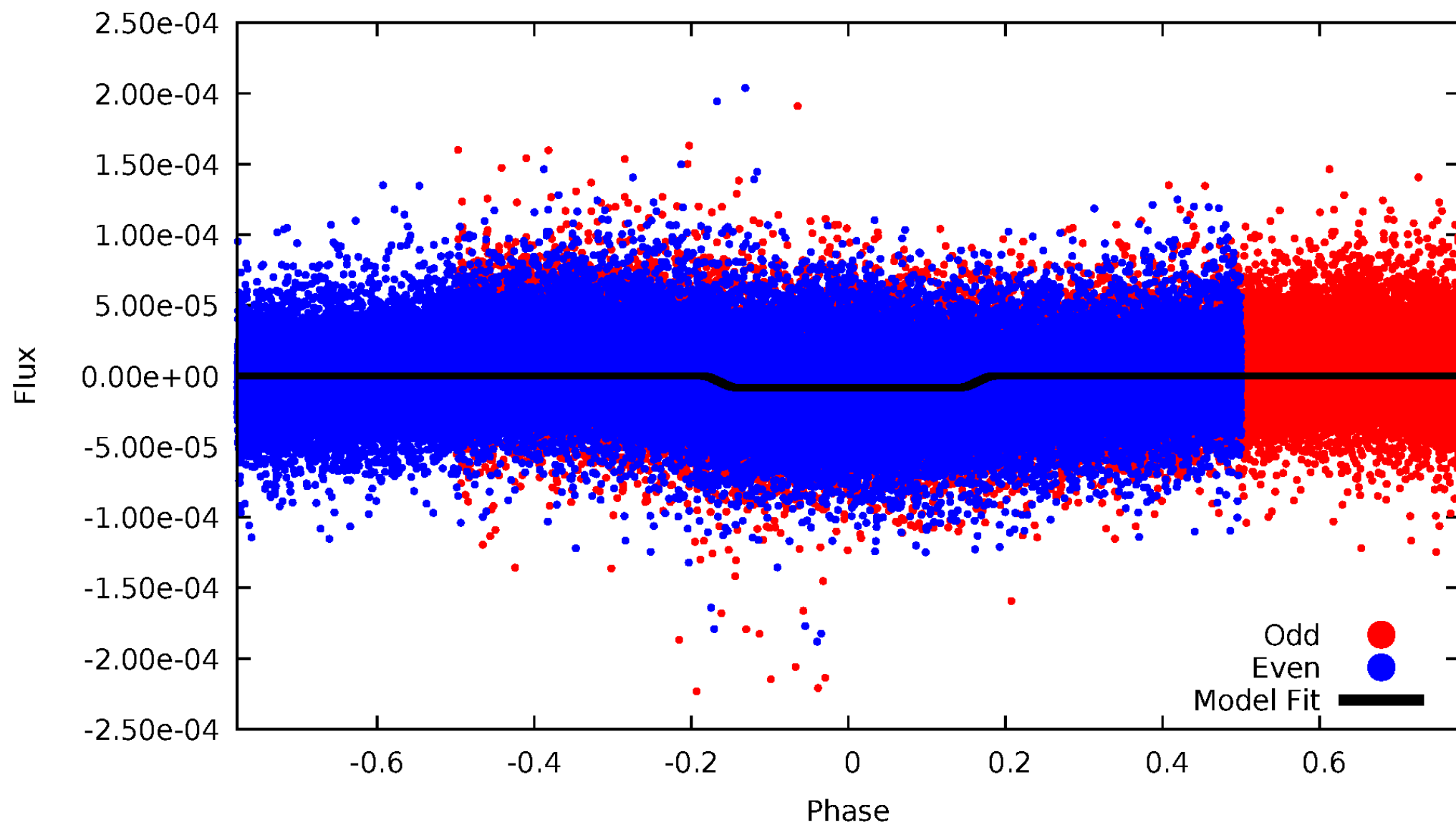
DV Odd/Even

TCE 007667560-01

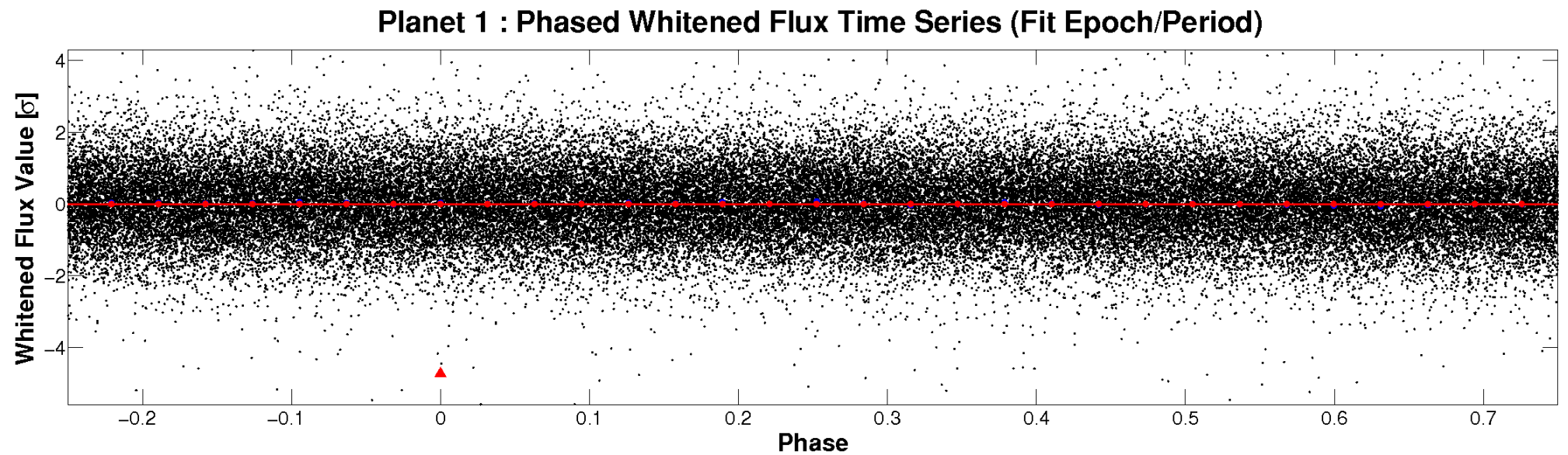
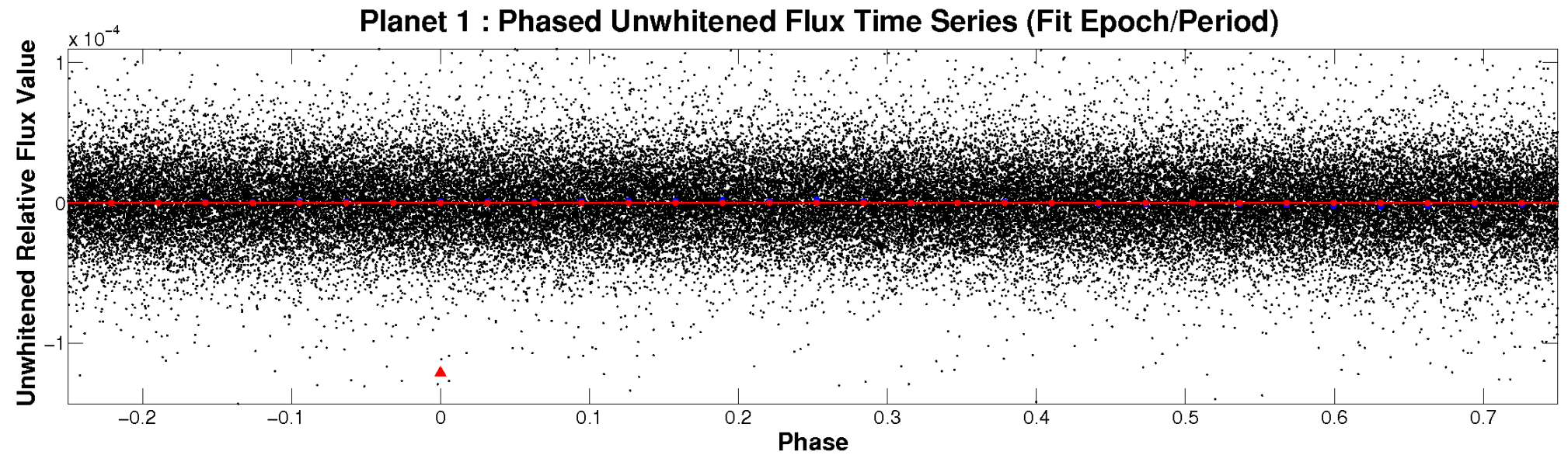


ALT Odd/Even

TCE 007667560-01

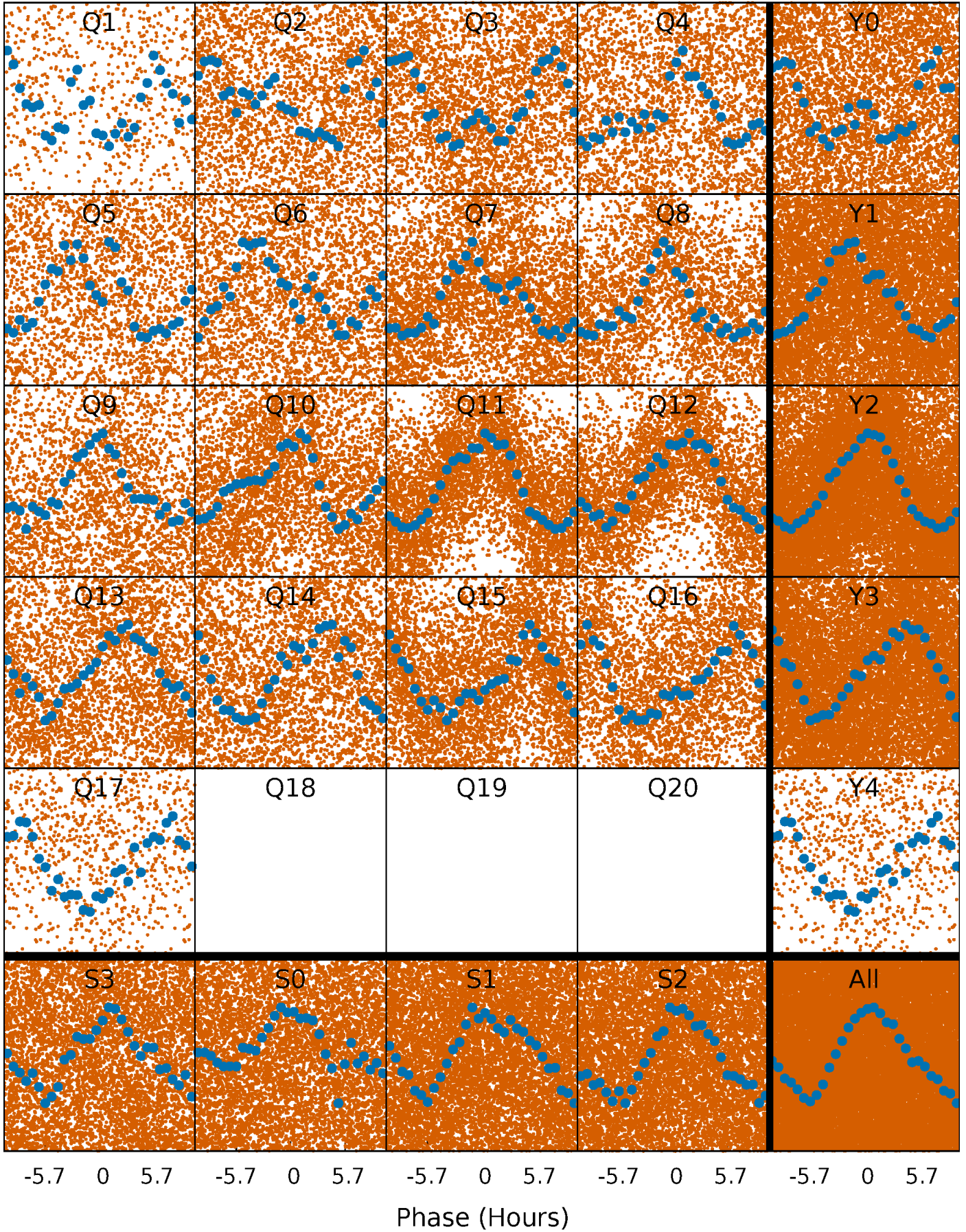


Non-Whitened Vs. Whitened Light Curve



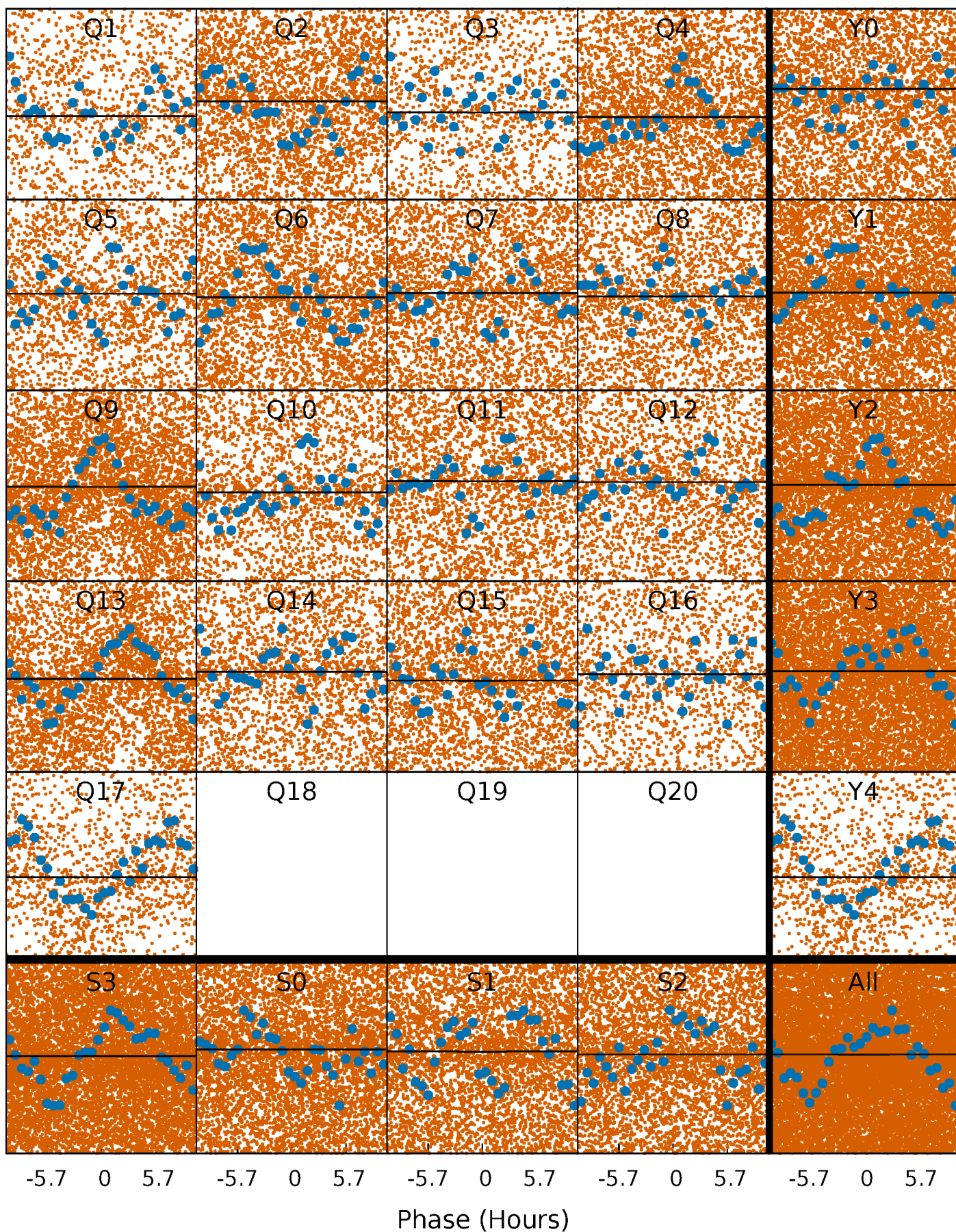
PDC Quarter-Phased Transit Curves

TCE 007667560-01 P= 0.647545 Days $T_0=132.244211$ (BKJD)



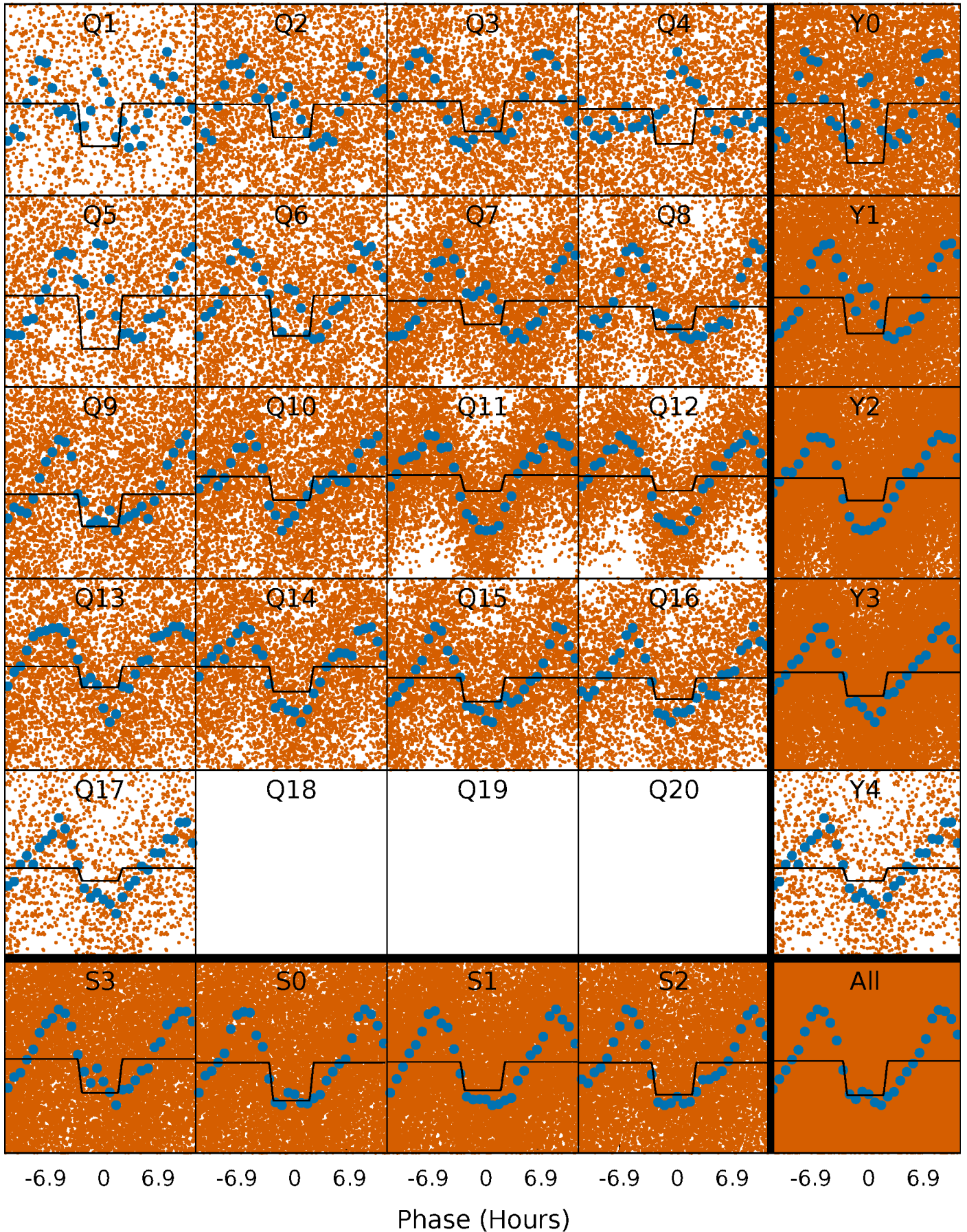
DV Quarter-Phased Transit Curves

TCE 007667560-01 P= 0.647545 Days $T_0=132.244211$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

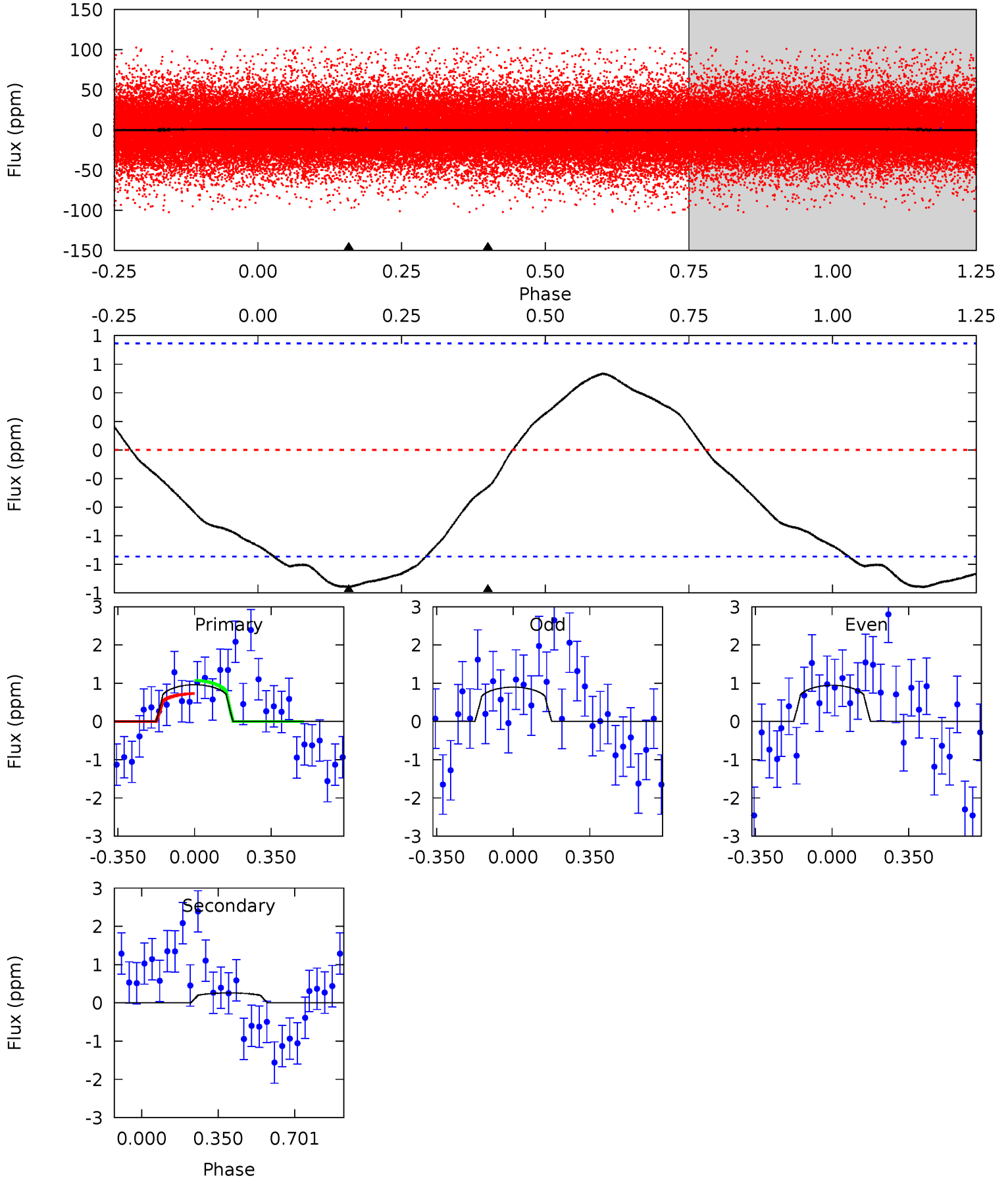
TCE 007667560-01 P= 0.647825 Days $T_0=132.144934$ (BKJD)



DV Model-Shift Uniqueness Test

007667560-01, P = 0.647545 Days, E = 130.949121 Days

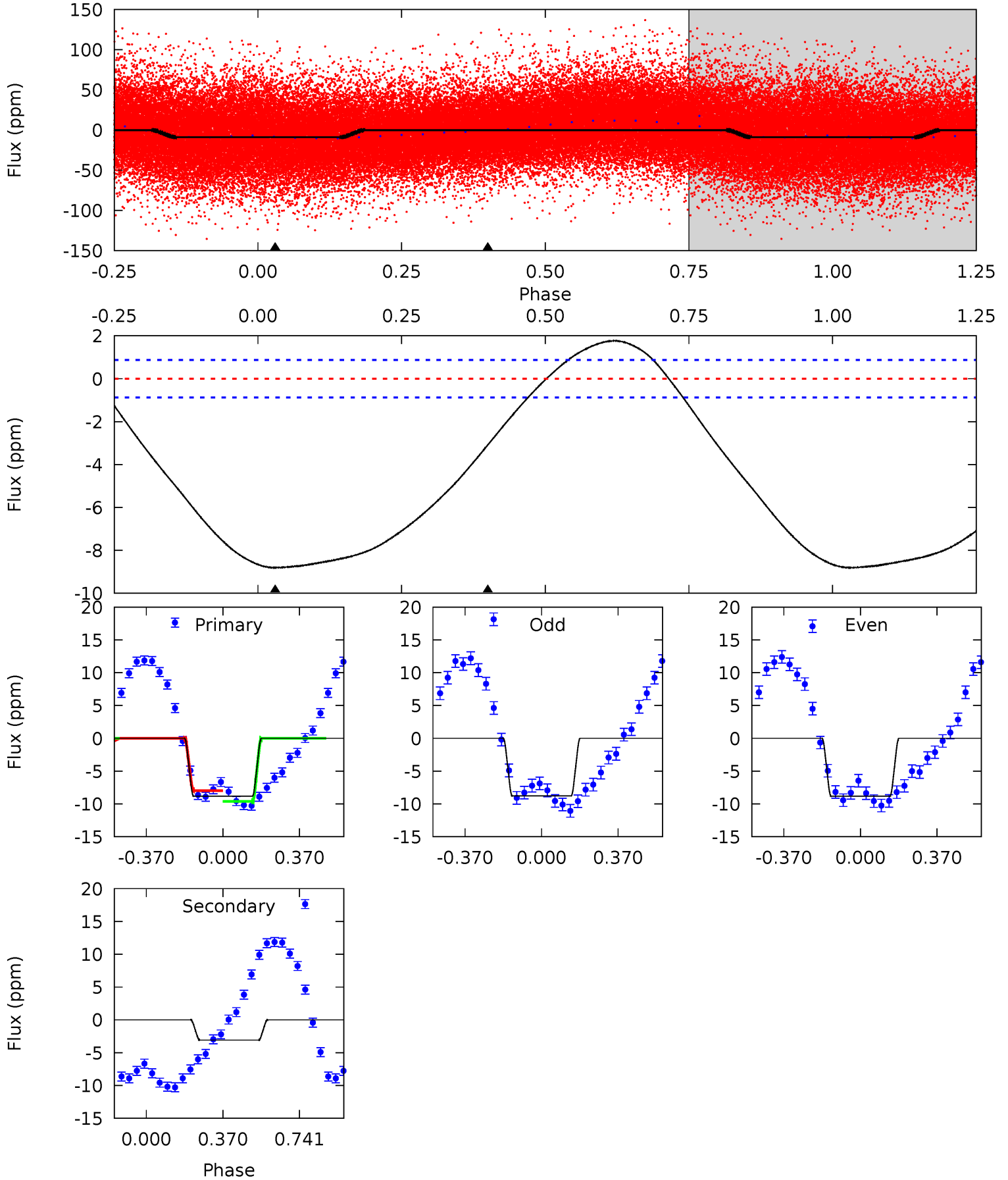
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.53	1.49	0	0	4.29	0.93	0.83	5.53	5.53	1.49	1.49	0.14	1.33	0.36	1.02



Alt Model-Shift Uniqueness Test

007667560-01, P = 0.647825 Days, E = 131.497109 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
43.1	15.1	0	0	4.28	0.90	4.69	43.1	43.1	15.1	15.1	0.11	1.12	0.17	4.28



Stellar Parameters For KIC 007667560

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8675^{+238}_{-408}	$4.080^{+0.165}_{-0.135}$	$0.070^{+0.250}_{-0.600}$	$2.168^{+0.470}_{-0.575}$	$2.057^{+0.329}_{-0.493}$	$0.284^{+0.276}_{-0.112}$
	+3%/-5%	+4%/-3%	+357%/-857%	+22%/-27%	+16%/-24%	+97%/-39%
Source	KIC0	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 007667560-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-0 ± 0	$0.29^{+0.32}_{-0.20}$	5700^{+383}_{-389}	4252^{+6399}_{-8647}	$0.490^{+6.457}_{-0.411}$
Alt.	-3 ± 0	$0.69^{+0.45}_{-0.39}$	5712^{+389}_{-388}	5871^{+4577}_{-1766}	$1.266^{+4.992}_{-0.801}$

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 $A_{obs} \gg 1.0$

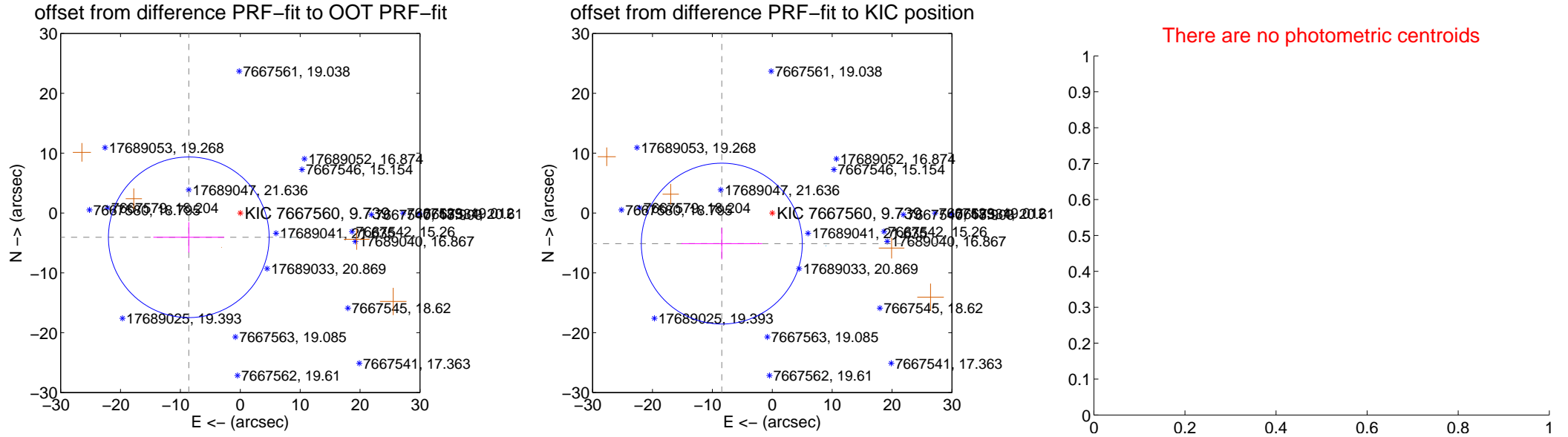
DV Centroid Data

Supplemental centroid analysis for 007667560-01. **Kepler magnitude: 9.74.** Transit SNR 0.03

There are 1 quarters with good PRF difference image offsets

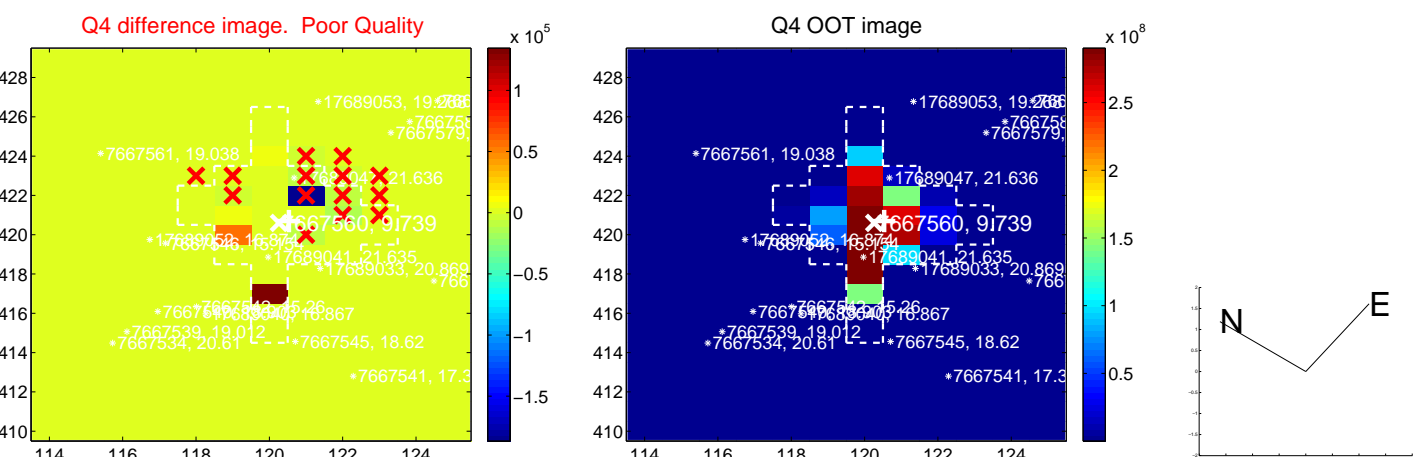
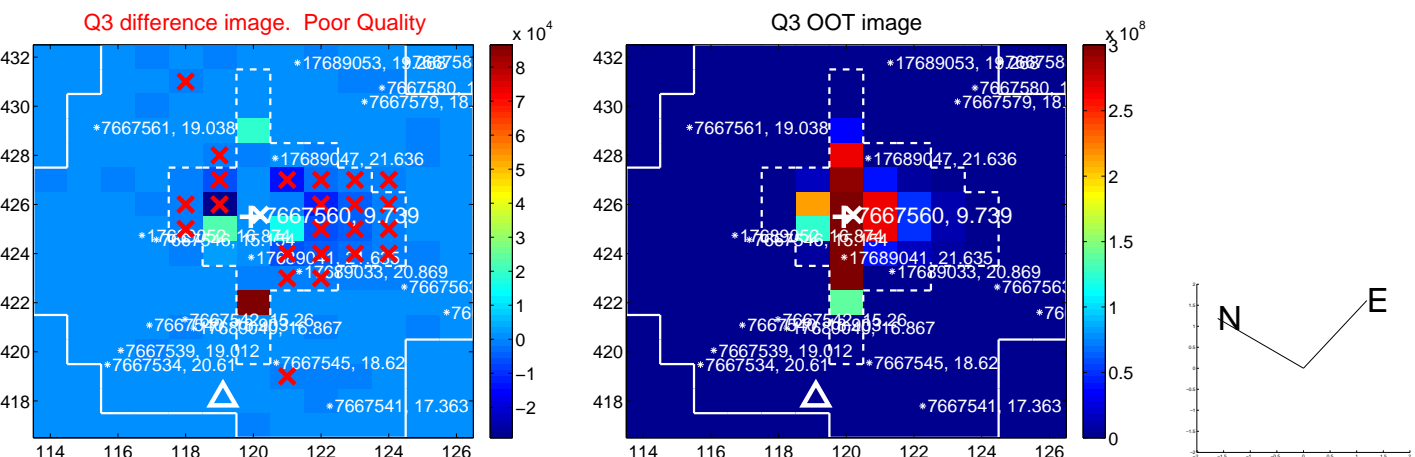
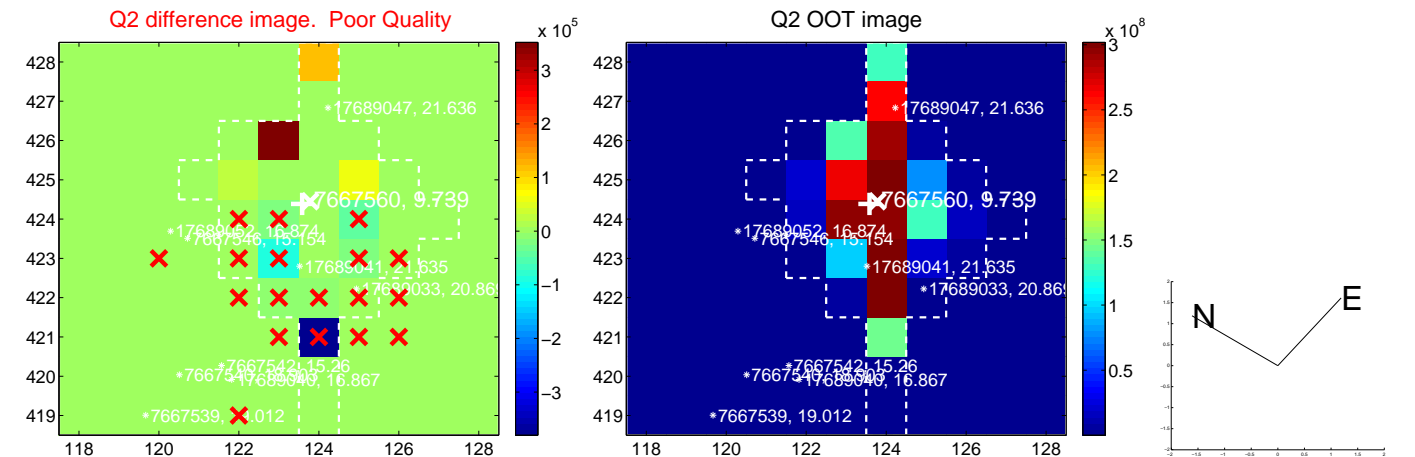
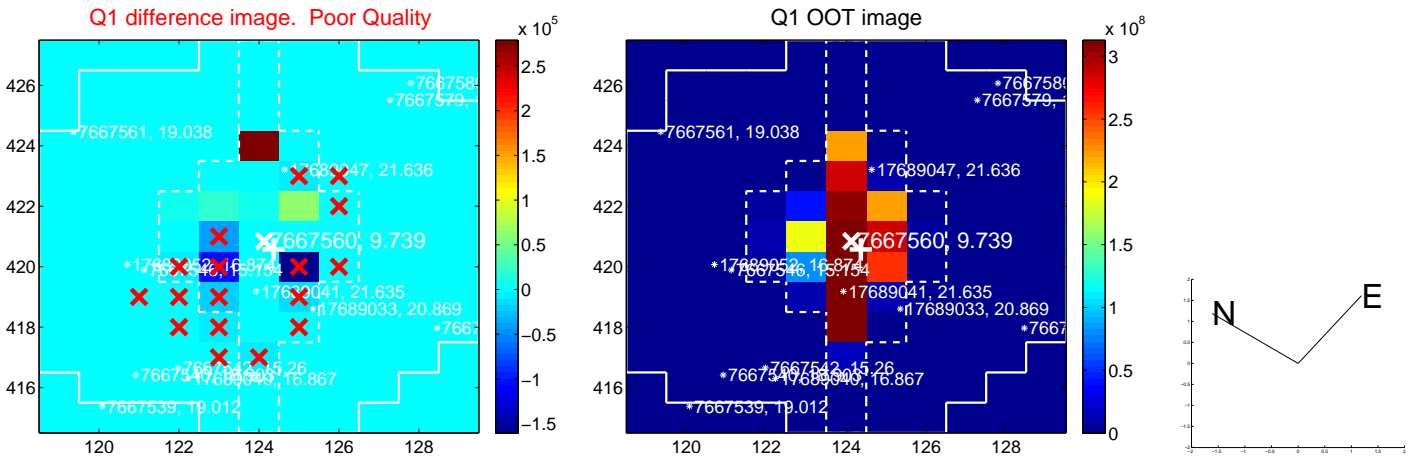
The direct PRF centroid is offset from the target star catalog position by about 1.51 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	9.506 ± 4.473	2.13	8.597 ± 5.918	-4.057 ± 2.533
PRF-fit source offset from KIC position	9.856 ± 4.479	2.20	8.426 ± 6.742	-5.114 ± 2.627
photometric centroid source offset	—	—	—	—

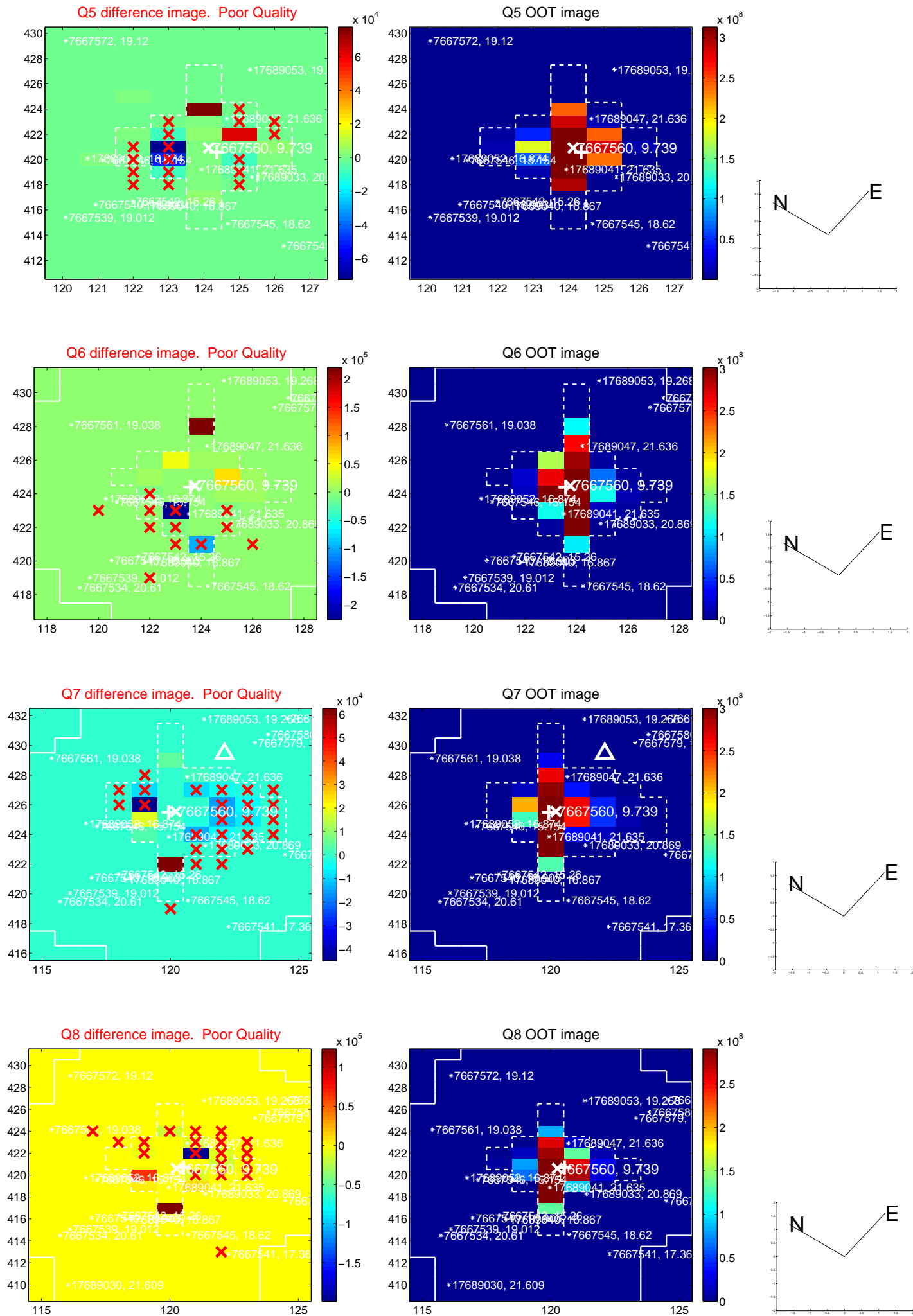


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

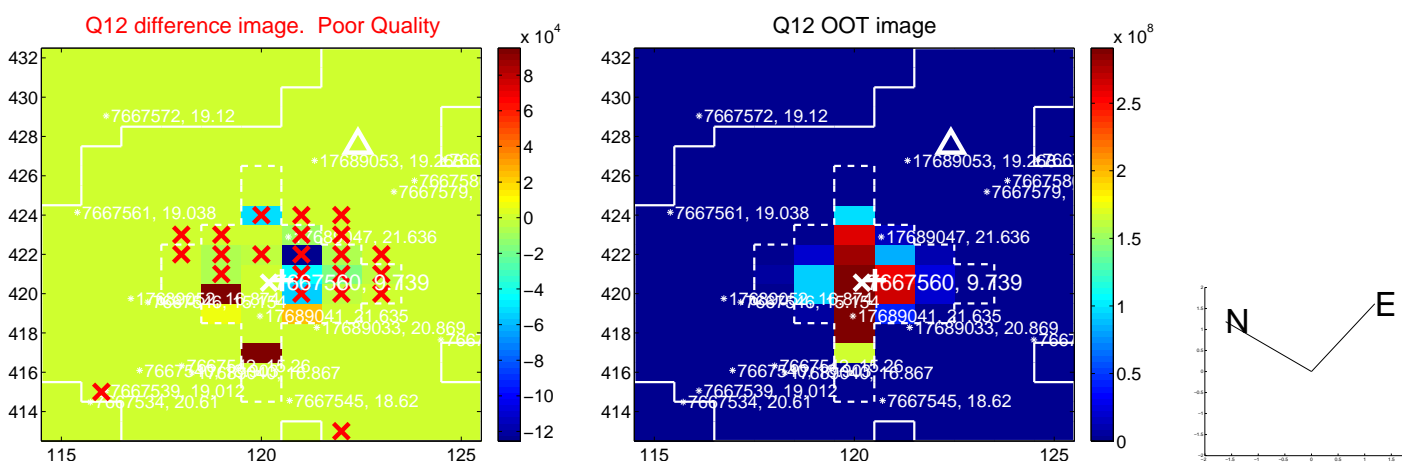
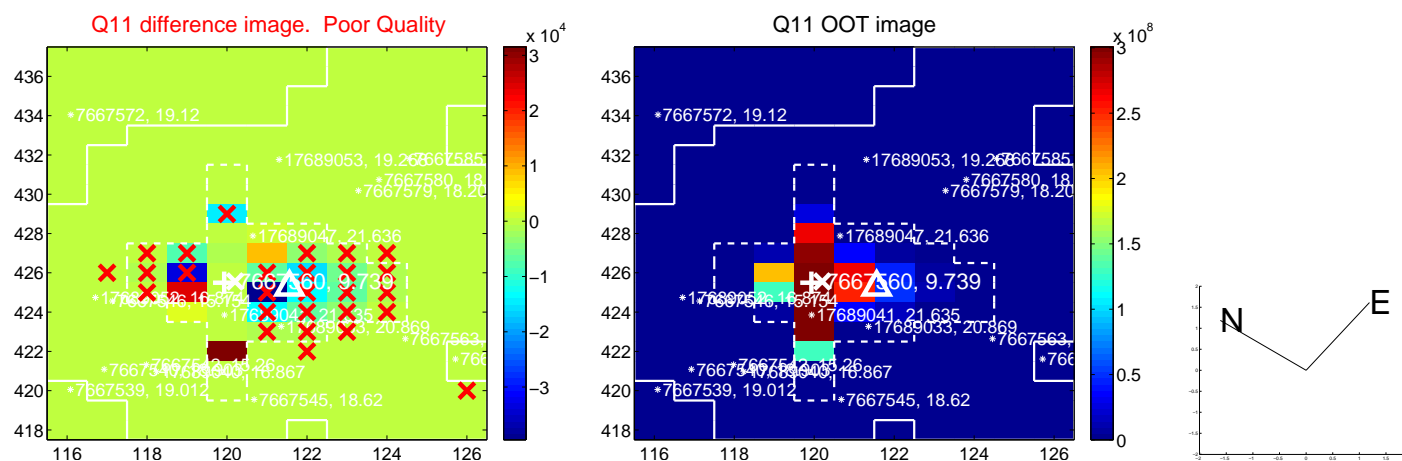
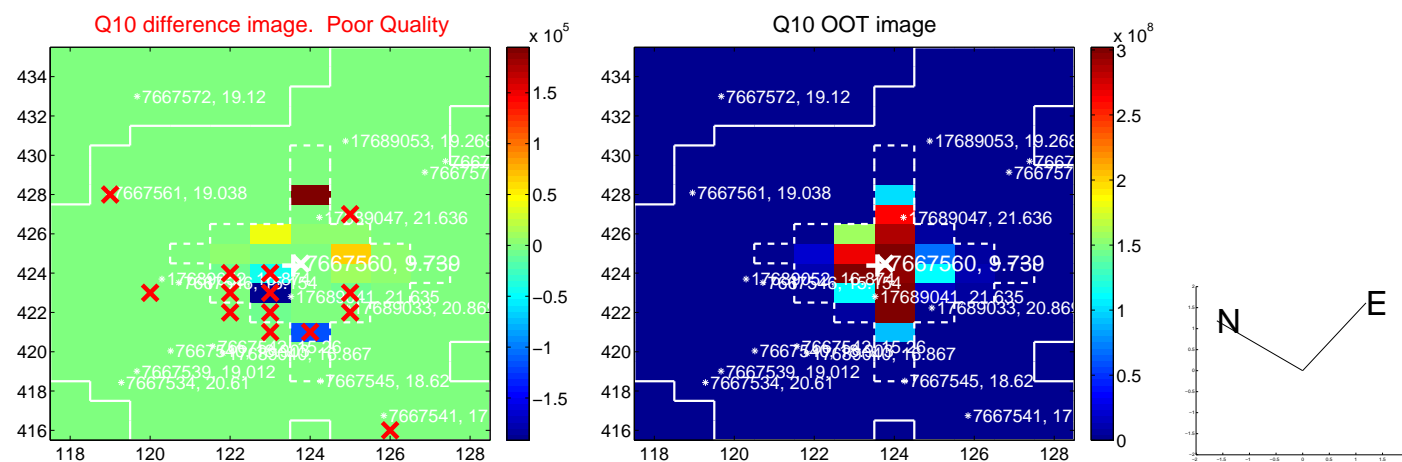
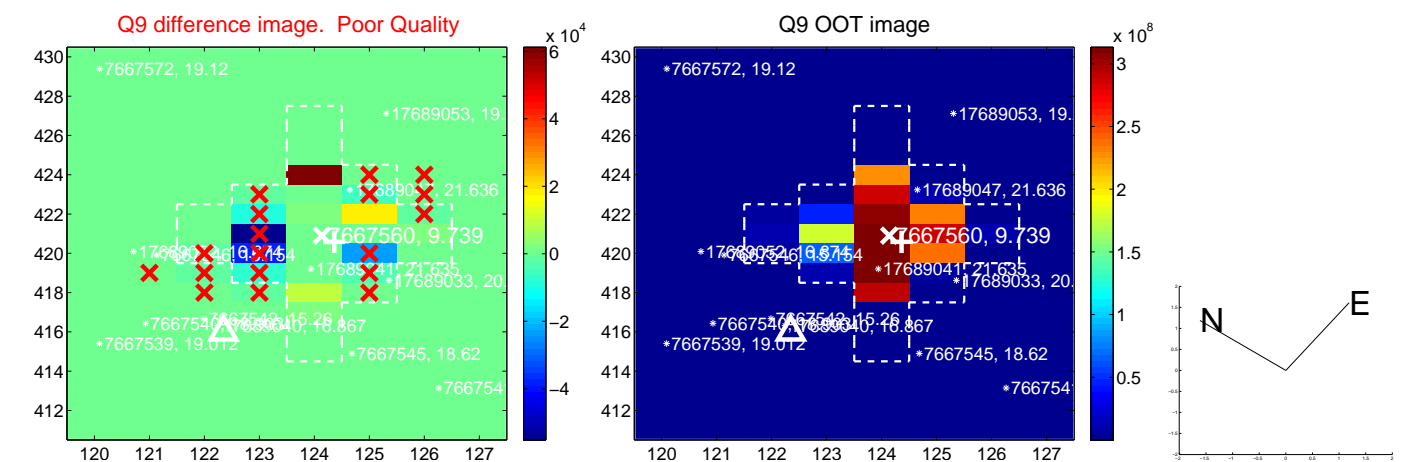
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



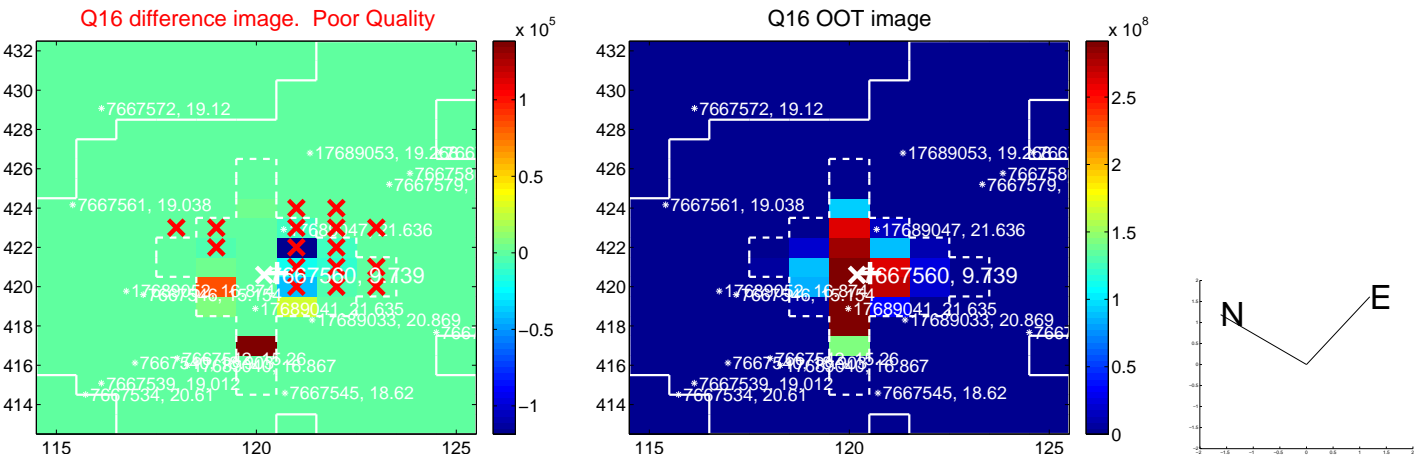
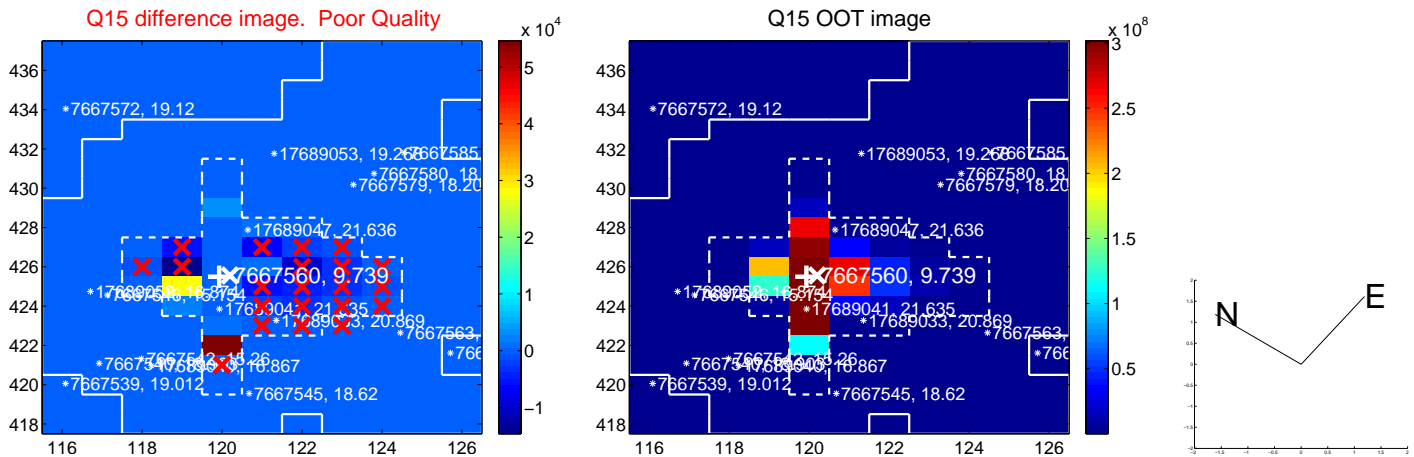
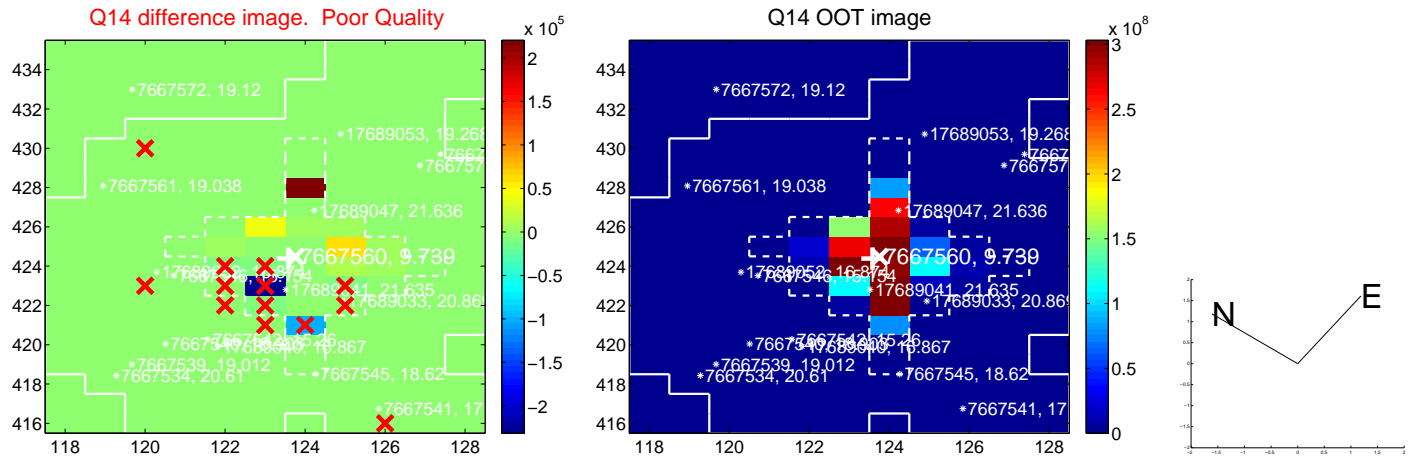
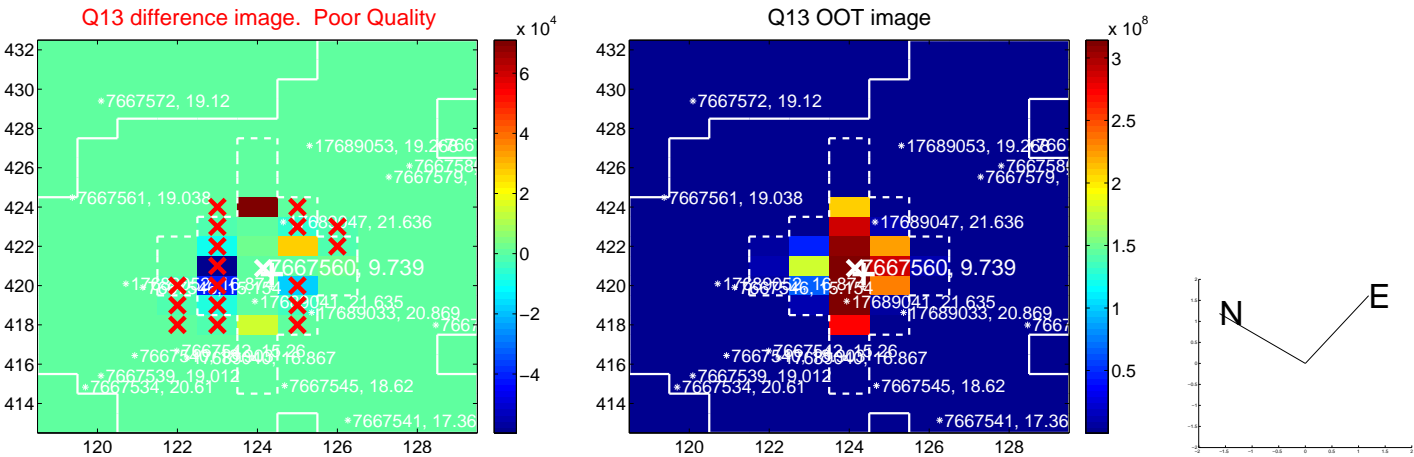
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



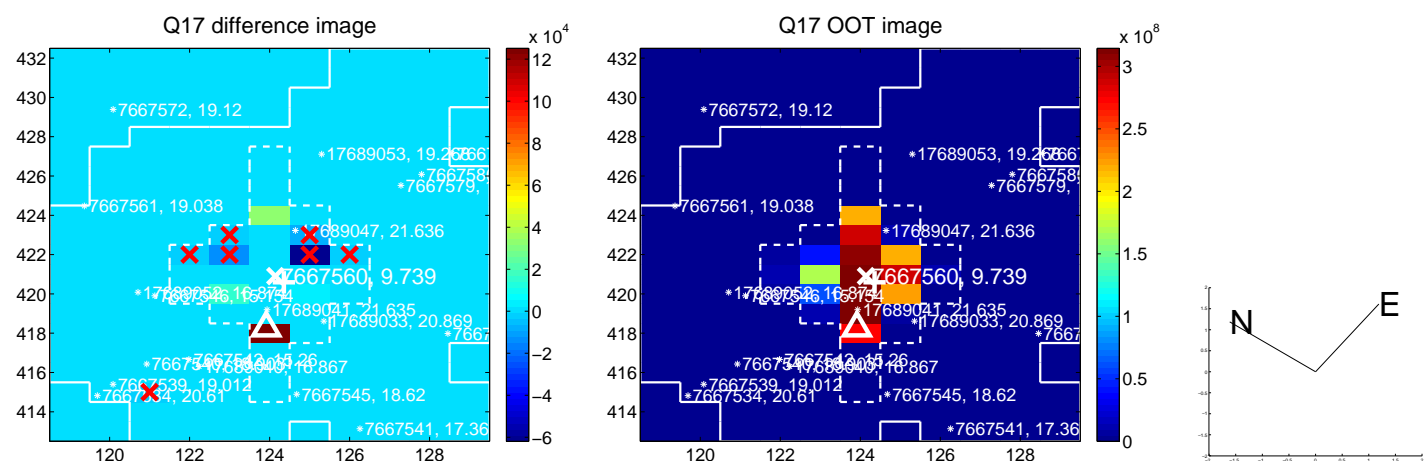
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



folded centroid time series figure for this object.



UKIRT Image

Declination

