

KIC 010548350

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})
010548350-01	OBS	No	0.969003	131.634707	0.0	5.568	7.4	0.0	0.94	6079	0.01	2938.17

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010548350-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV

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

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

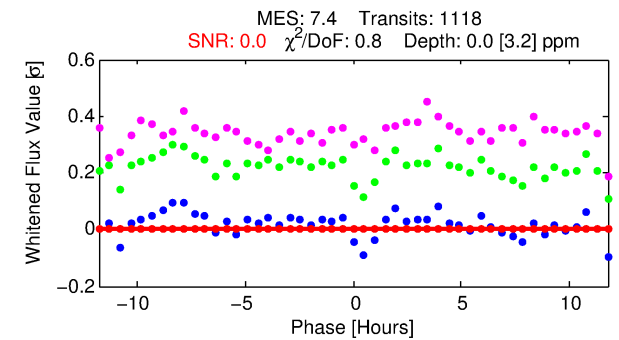
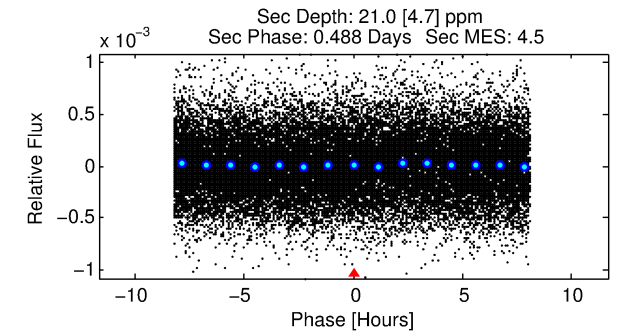
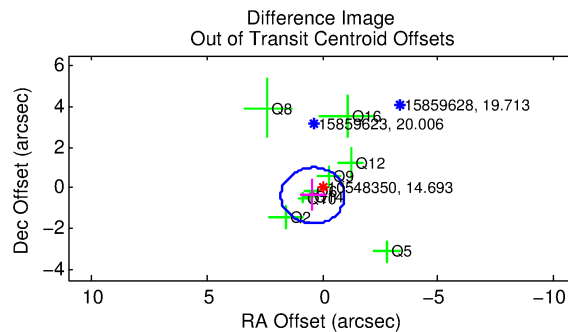
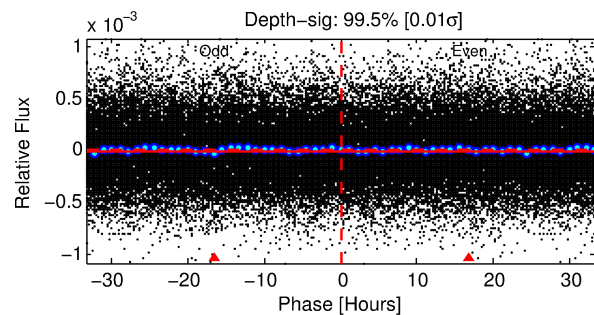
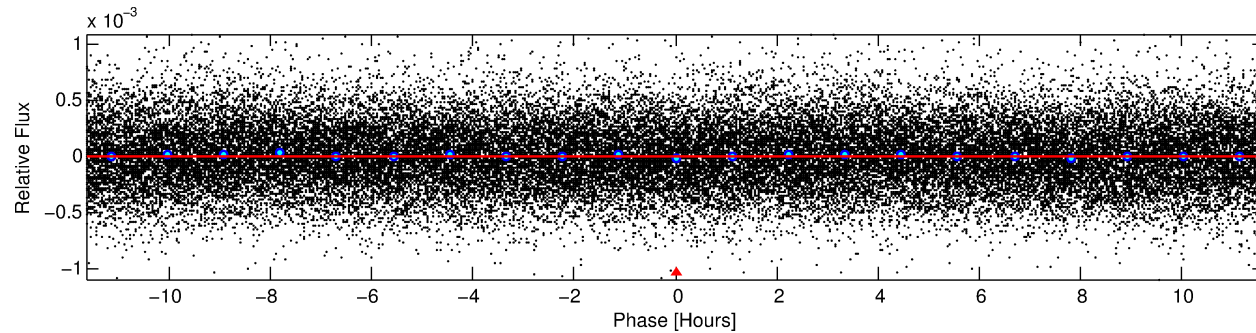
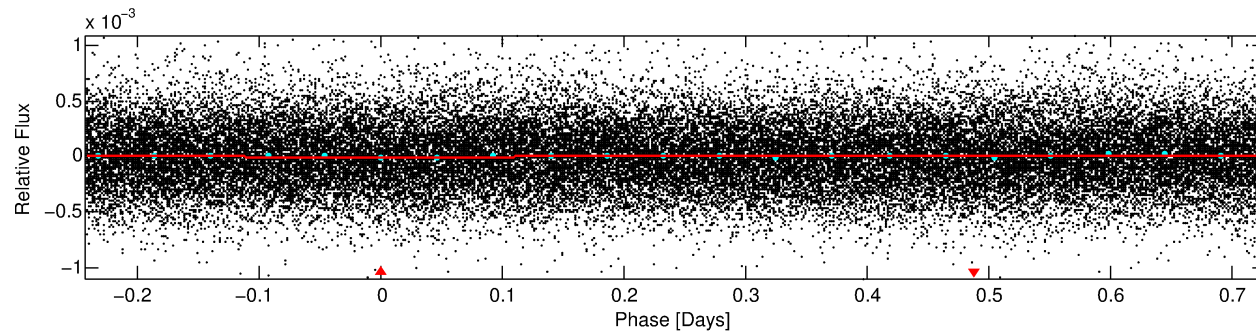
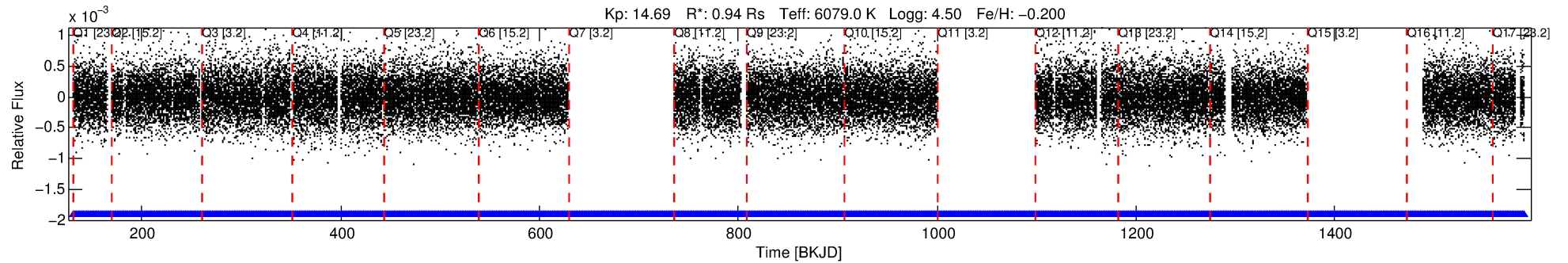
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010548350-01

No Significant Match Found

DV One-Page Summary

KIC: 10548350 Candidate: 1 of 1 Period: 0.969 d



DV Fit Results:

Period = 0.96900 [0.02092] d
Epoch = 131.6347 [8.5809] BKJD
Rp/R* = 0.0001 [0.0106]
a/R* = 1.30 [30.11]
b = 0.64 [55.11]
Seff = 2938.17 [1202.29]
Teff = 1877 [192] K
Rp = 0.01 [1.09] Re
a = 0.0193 [0.0052] AU
Ag = 20009.64 [2976545.16] [0.01 σ]
Teffp = 34522 [1283929] K [0.03 σ]

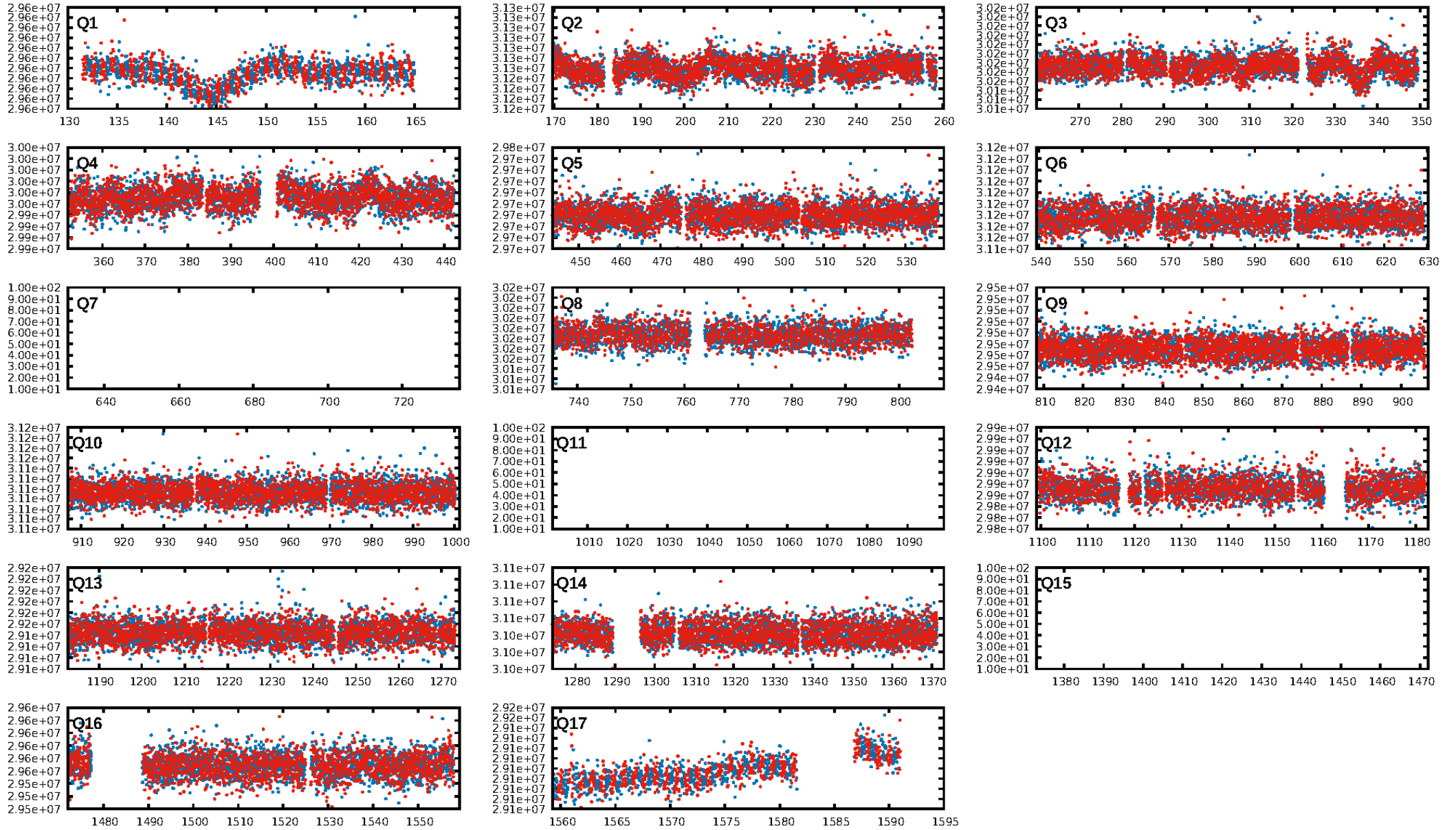
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.18e-09
RollingBand-fgt: 1.00 [1055/1055]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.559 arcsec [1.22 σ]
KicOffset-rm: 0.745 arcsec [1.25 σ]
OotOffset-st: 4/0/3/2 [9]
KicOffset-st: 4/0/3/2 [9]
DiffImageQuality-fgm: 0.56 [5/9]
DiffImageOverlap-fno: 1.00 [14/14]

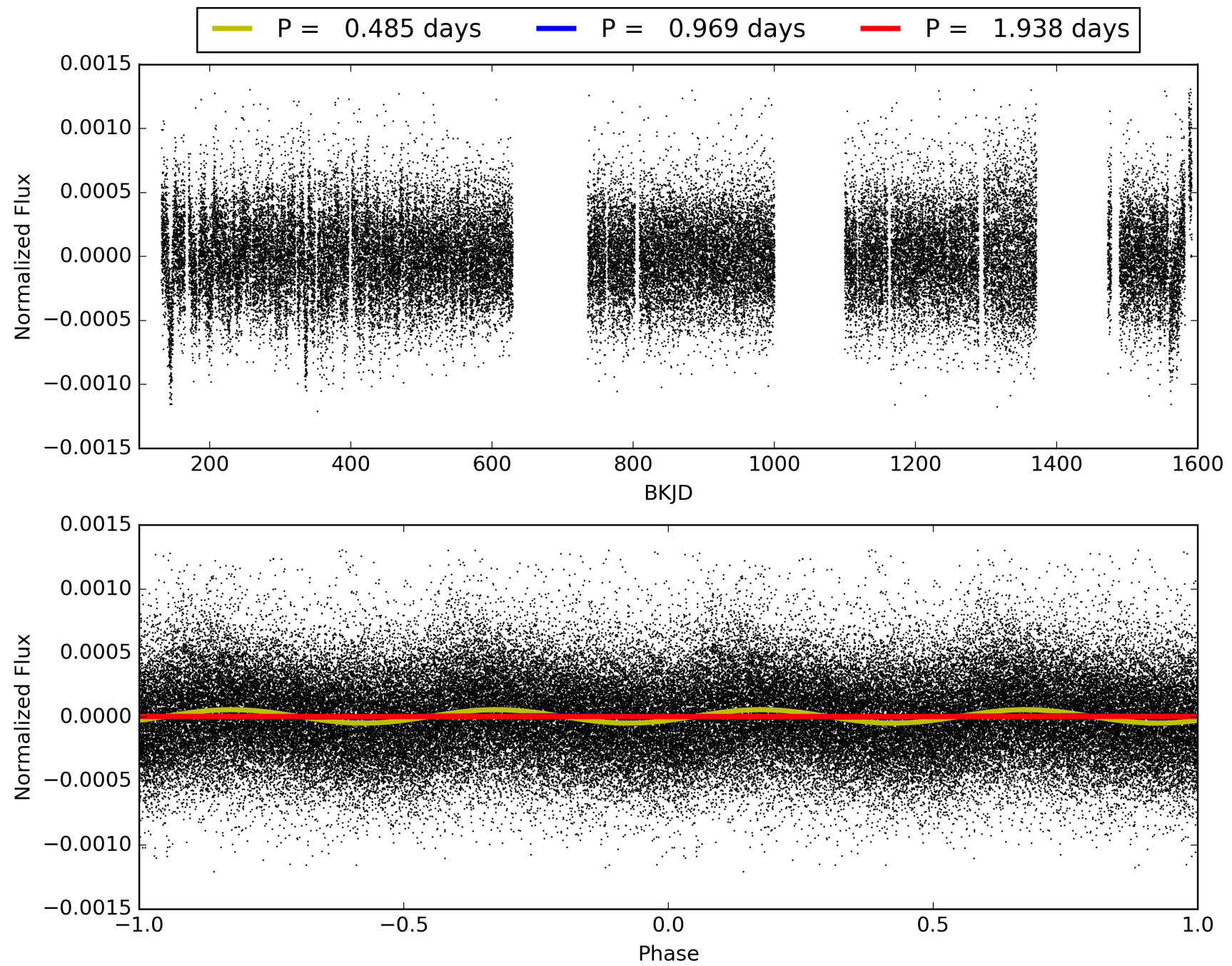
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 22:50:20 Z

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

TCE 010548350-01, PDC Light Curves

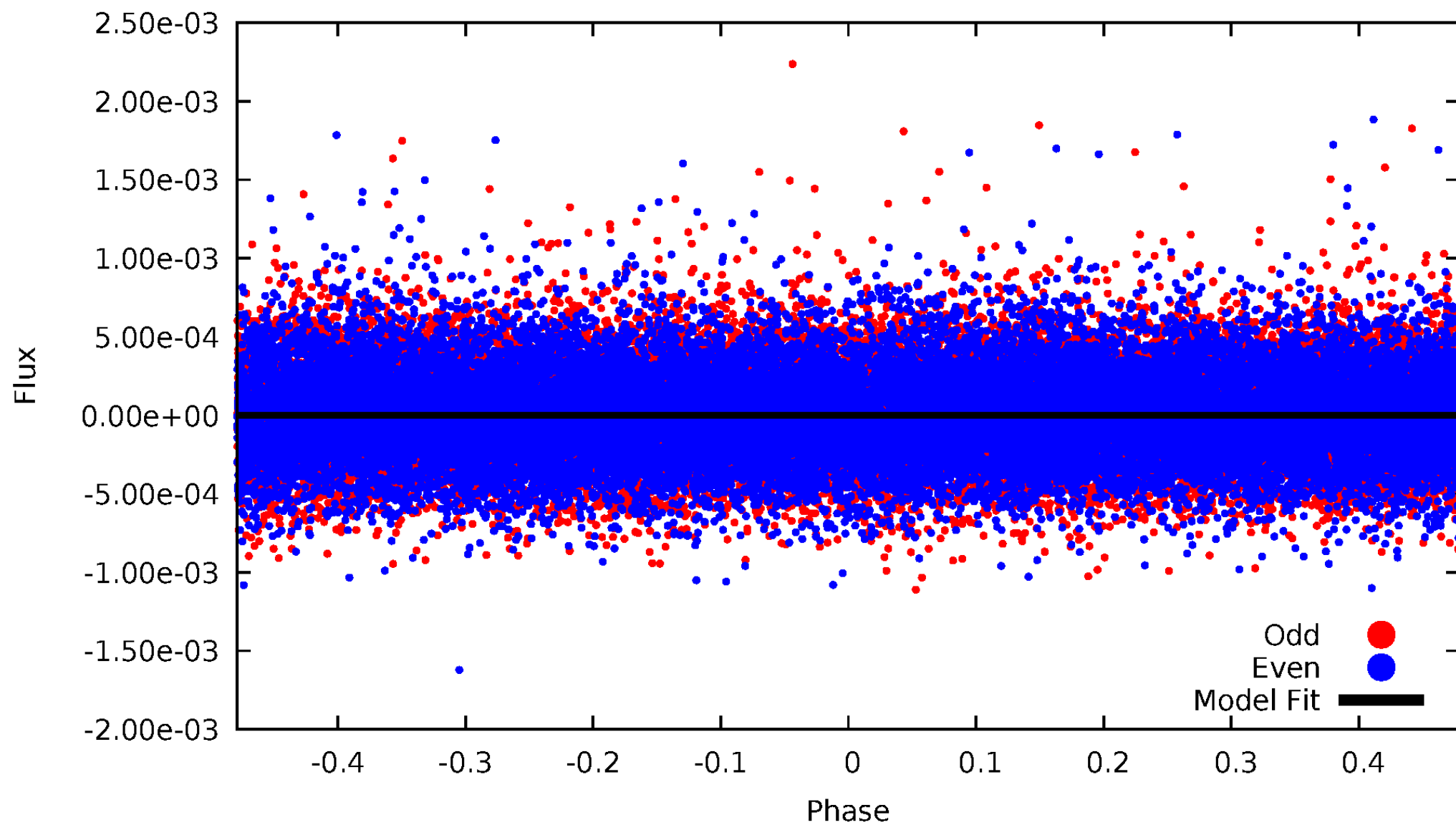


TCE 010548350-01



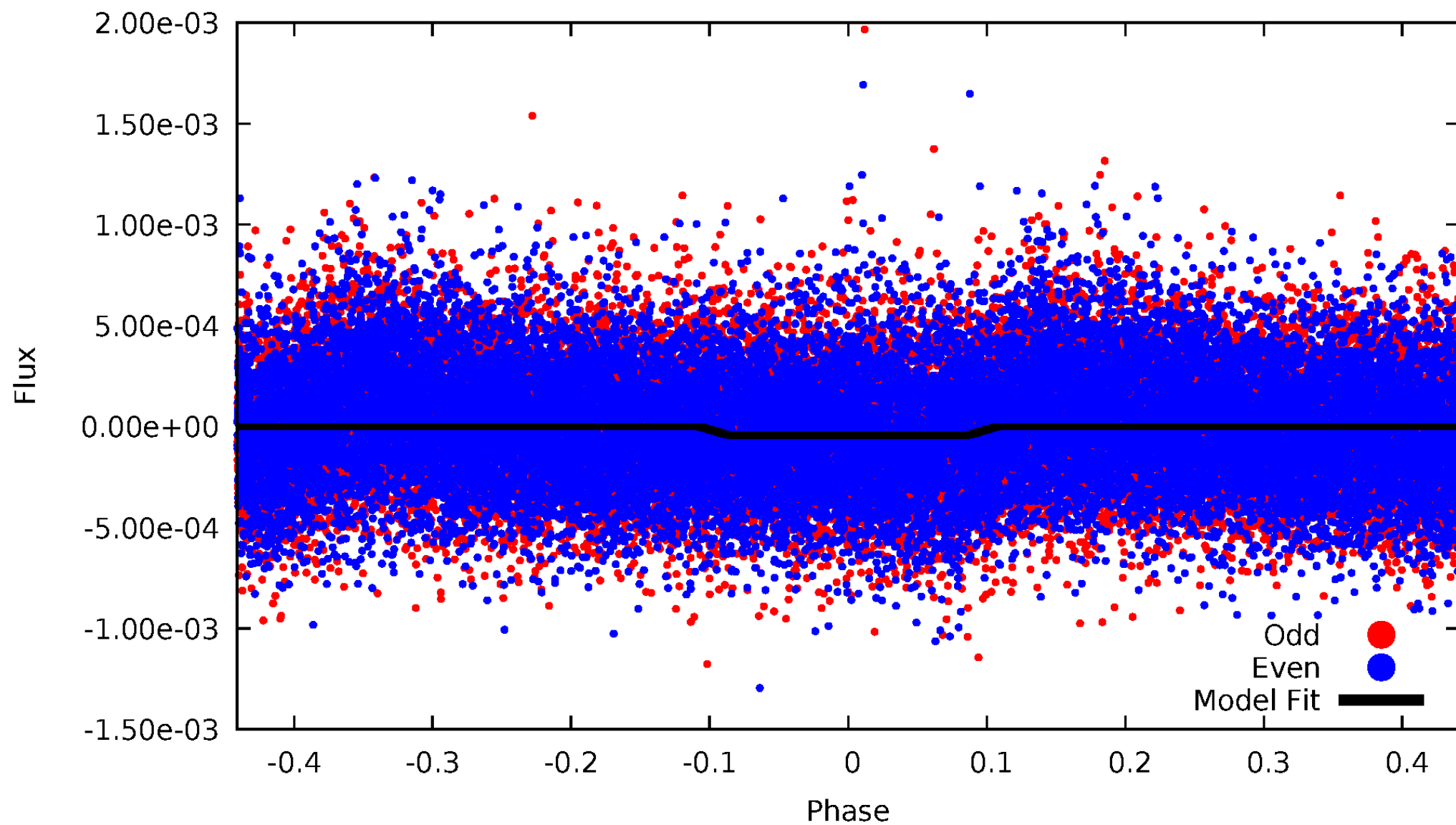
DV Odd/Even

TCE 010548350-01



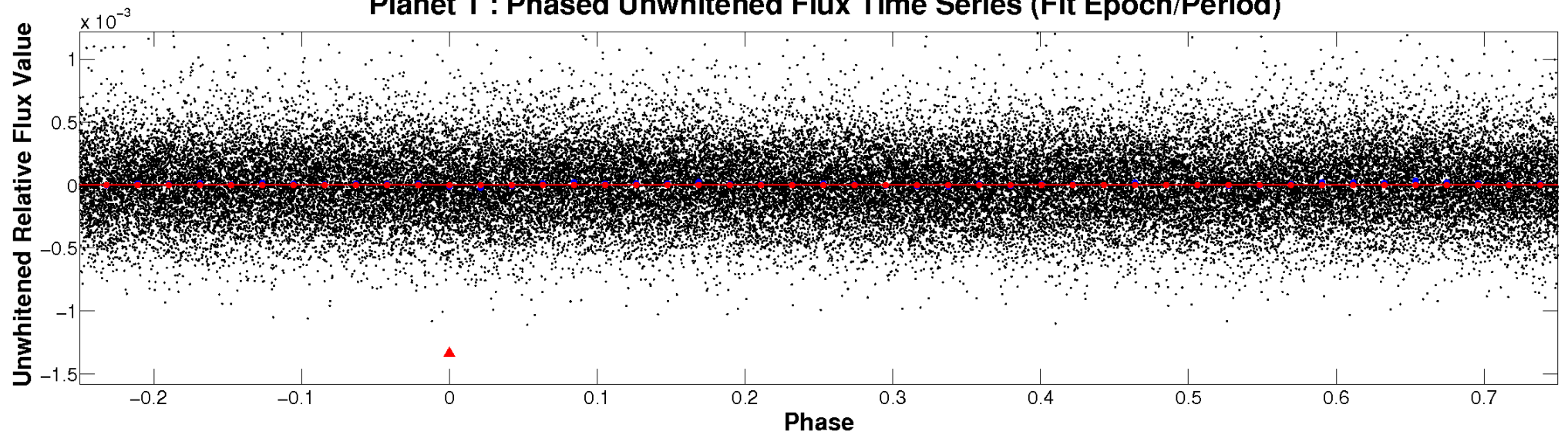
ALT Odd/Even

TCE 010548350-01

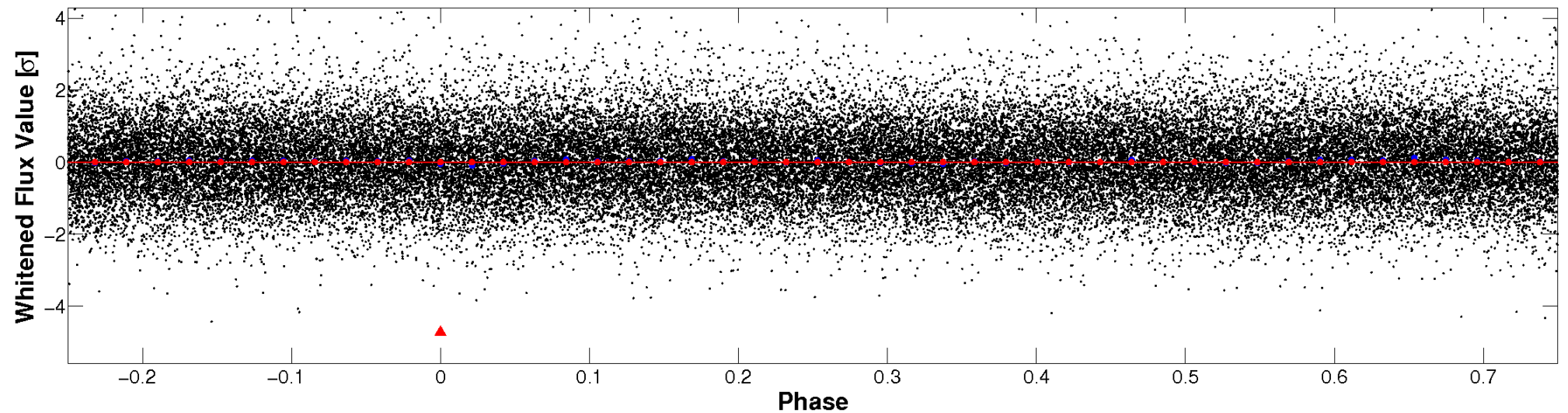


Non-Whitened Vs. Whitened Light Curve

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

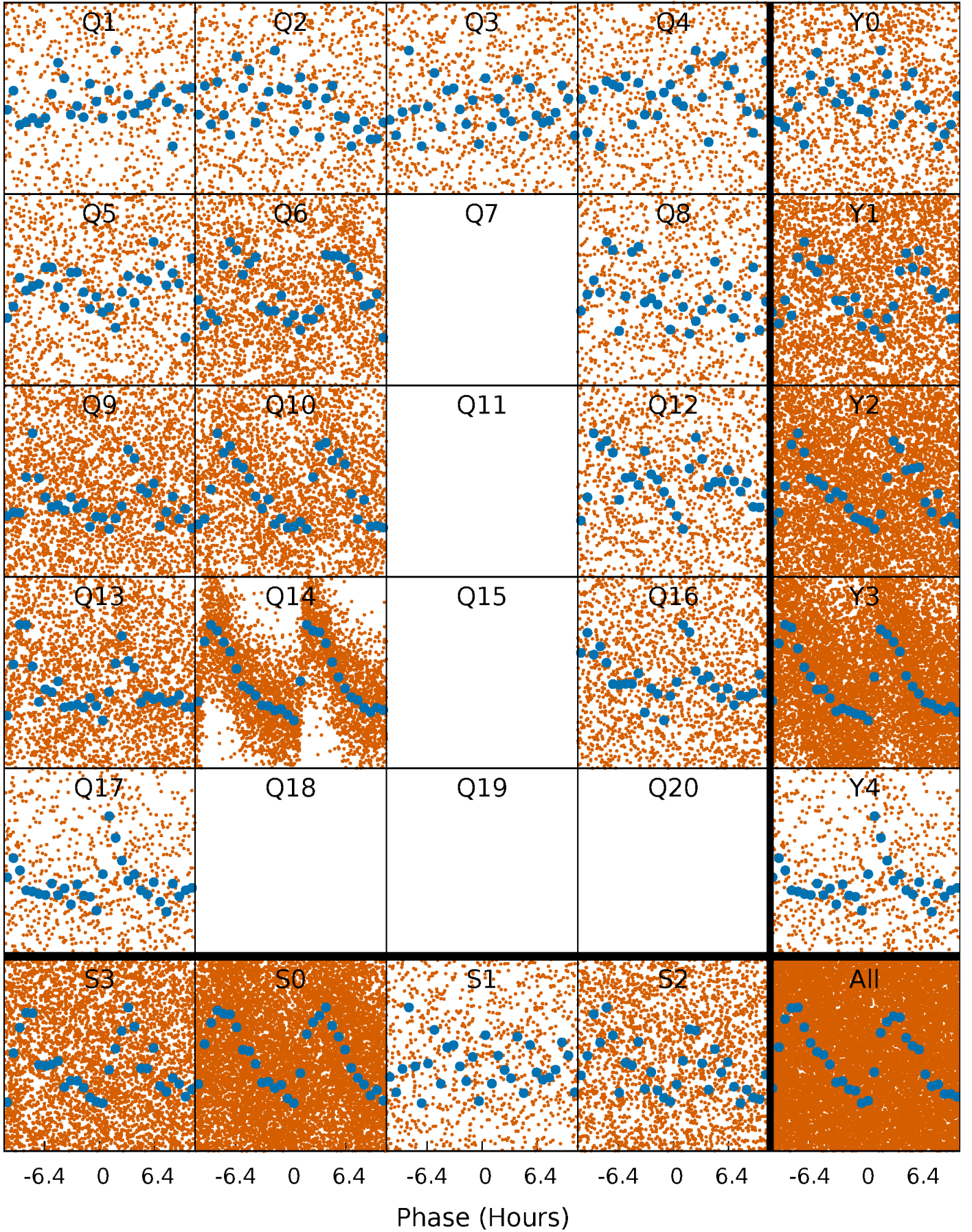


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



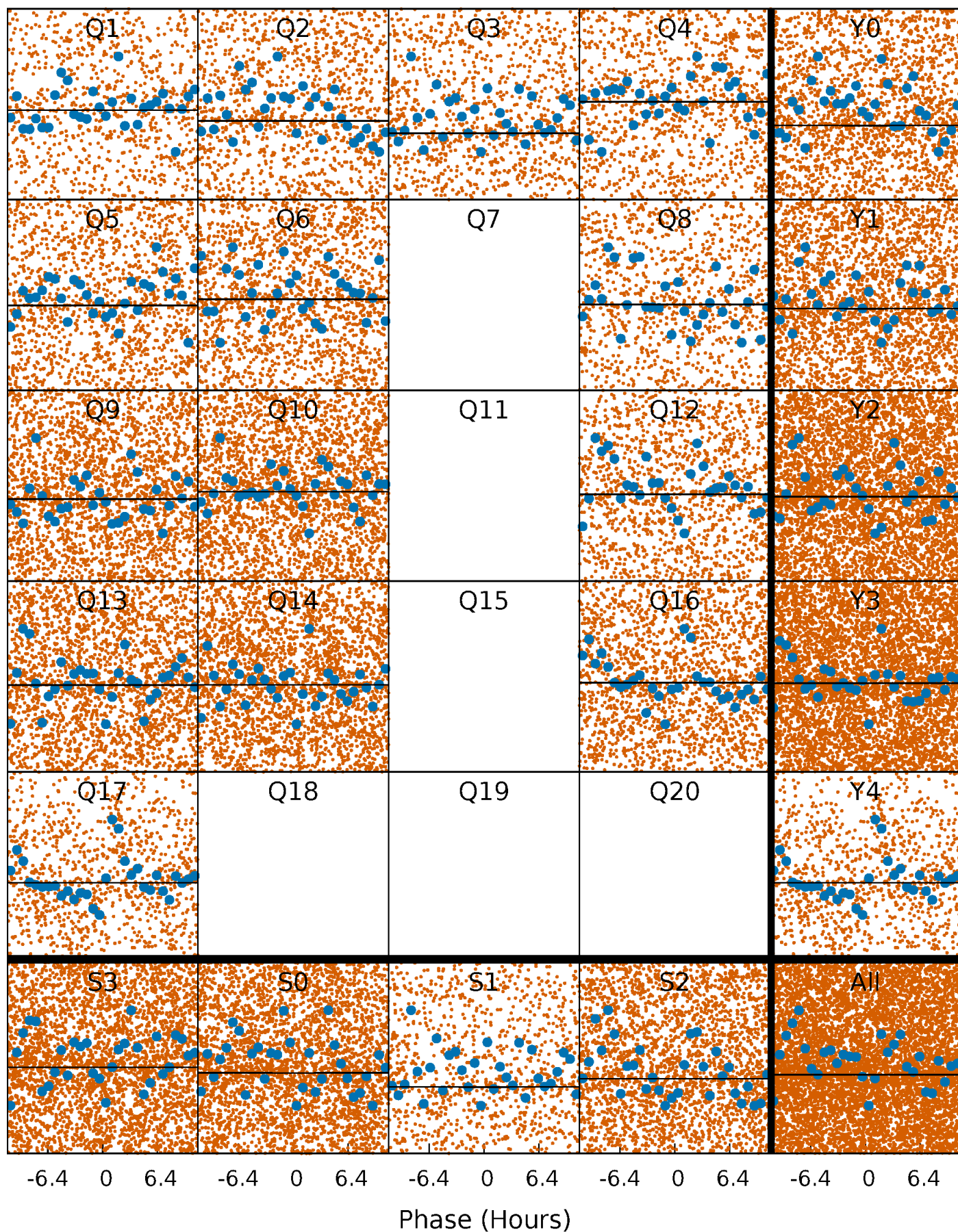
PDC Quarter-Phased Transit Curves

TCE 010548350-01 P= 0.969003 Days $T_0=131.634707$ (BKJD)



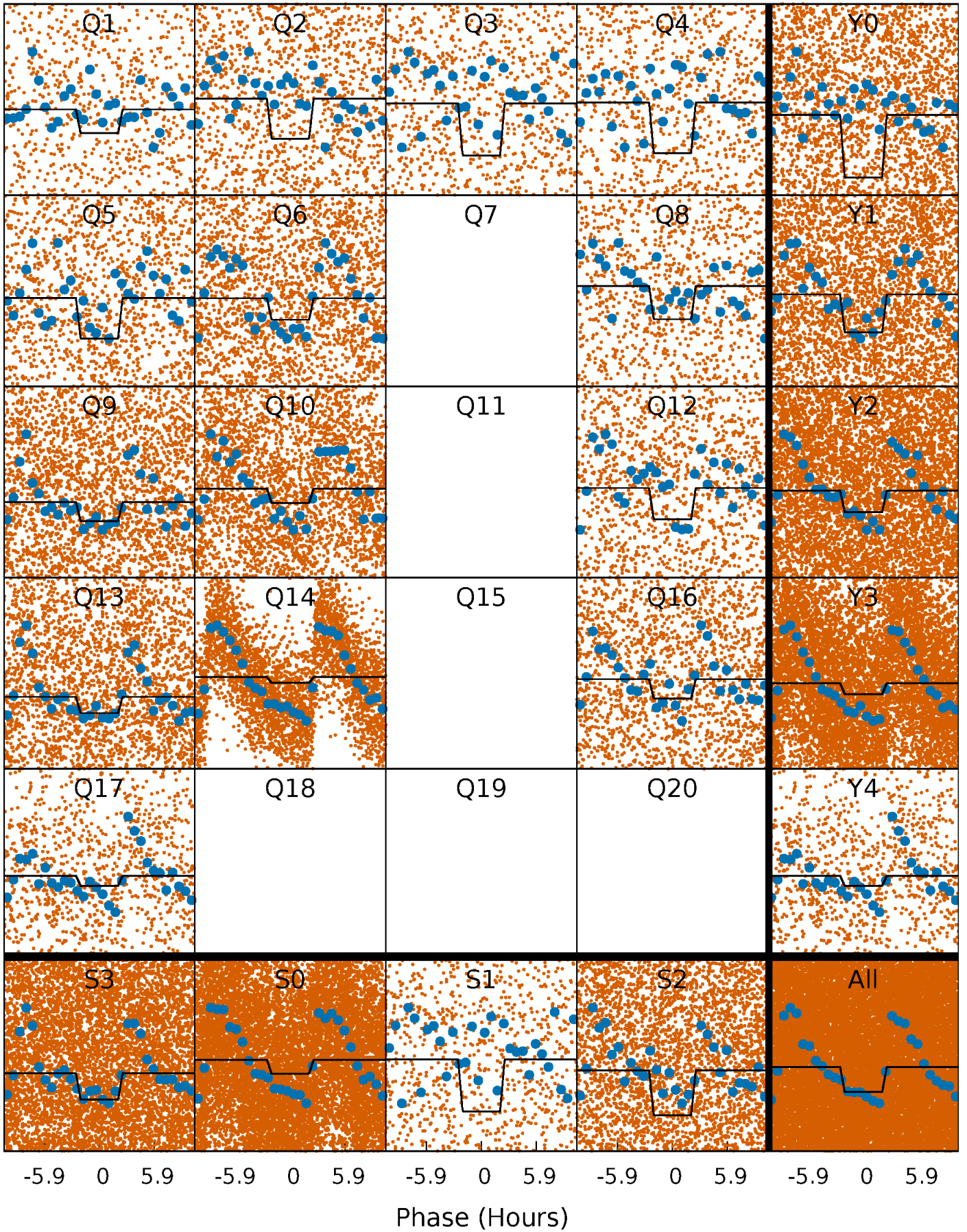
DV Quarter-Phased Transit Curves

TCE 010548350-01 P= 0.969003 Days $T_0=131.634707$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

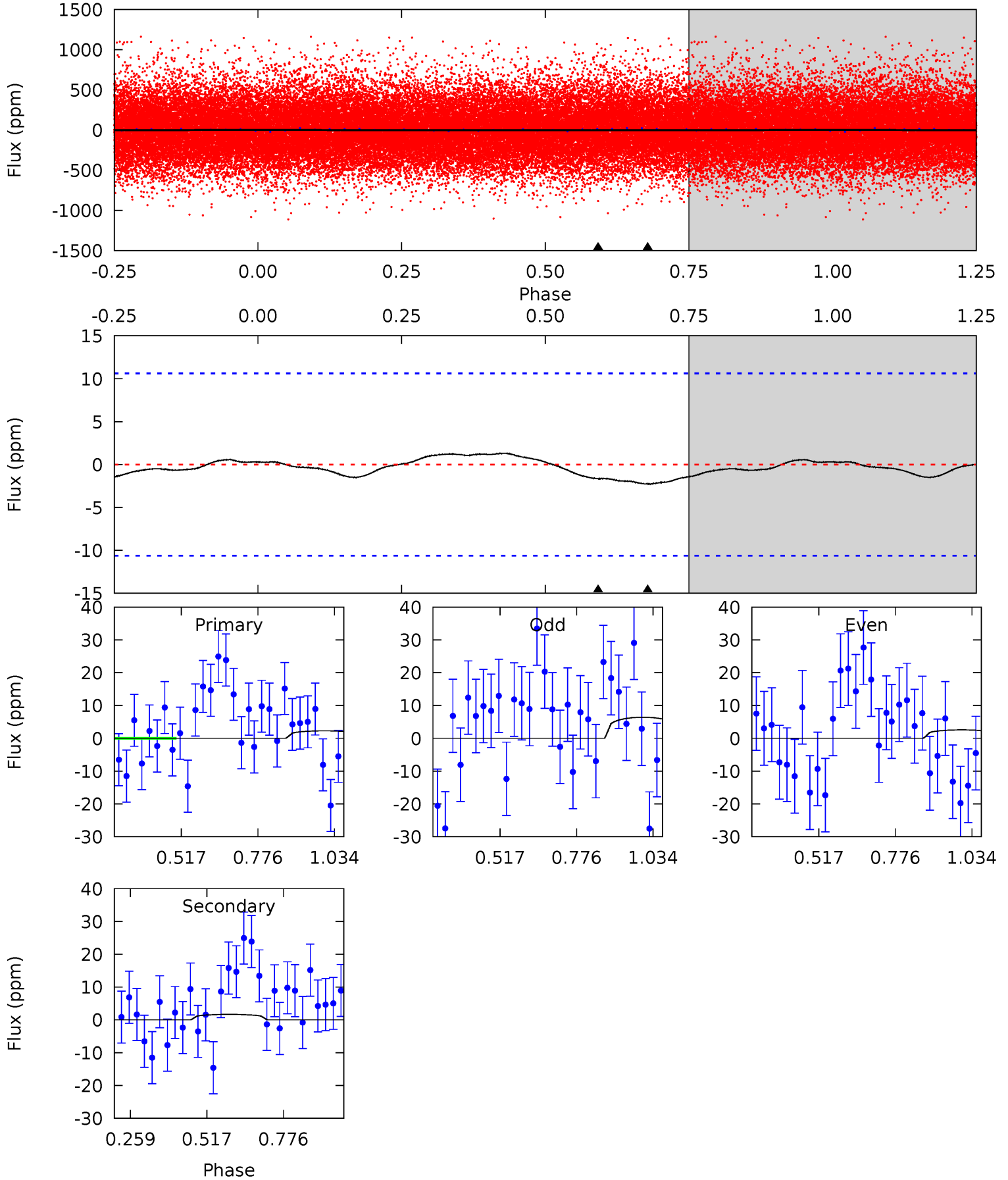
TCE 010548350-01 P= 0.968873 Days $T_0=131.740319$ (BKJD)



DV Model-Shift Uniqueness Test

010548350-01, P = 0.969003 Days, E = 130.665704 Days

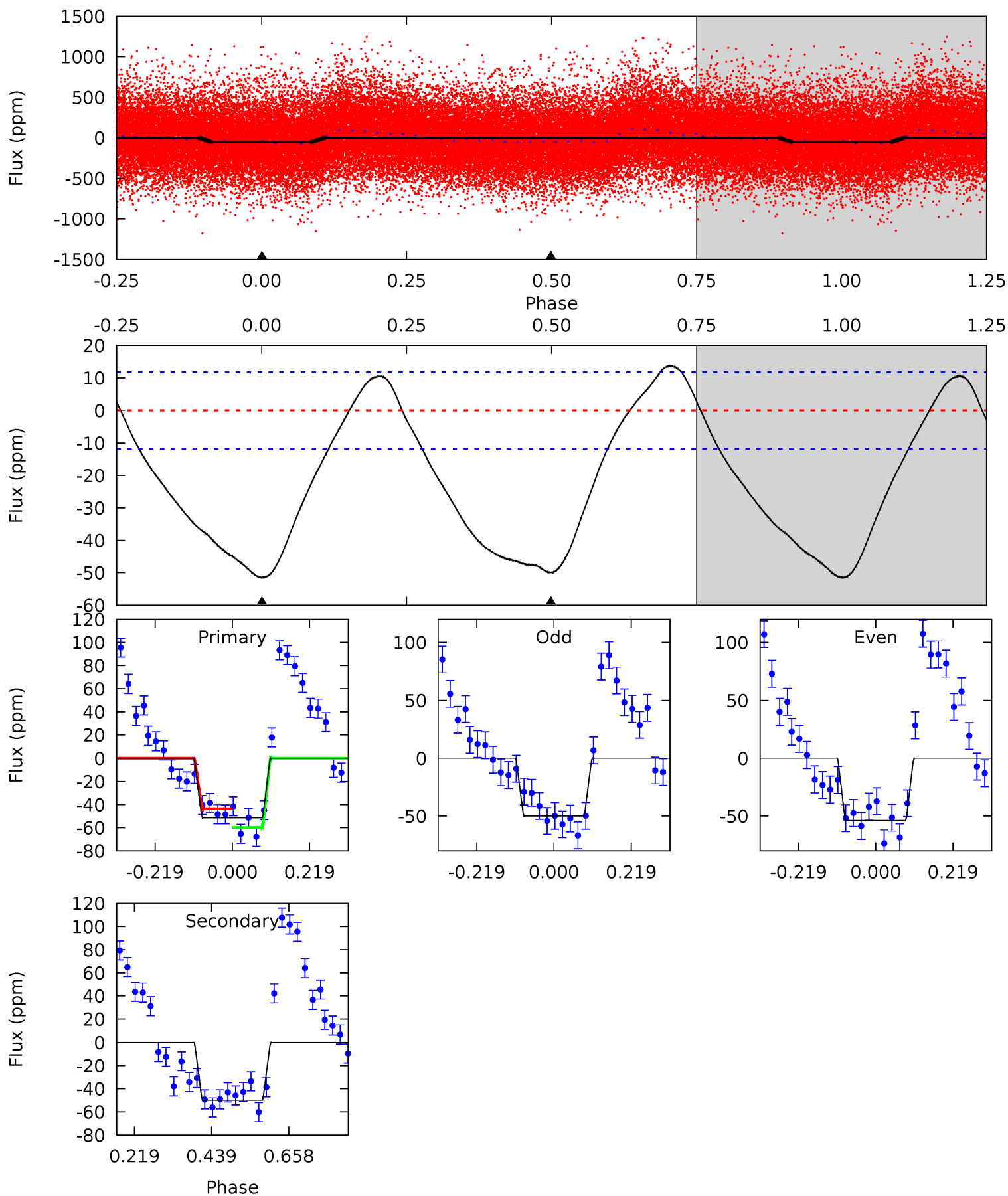
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.93	0.68	0	0	4.36	1.13	0.30	0.93	0.93	0.68	0.68	0.79	0.88	0.37	0.79



Alt Model-Shift Uniqueness Test

010548350-01, P = 0.968873 Days, E = 130.771446 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.2	18.7	0	0	4.40	1.23	2.59	19.2	19.2	18.7	18.7	0.73	1.22	0.21	3.08



Stellar Parameters For KIC 010548350

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6079^{+181}_{-199}	$4.495^{+0.052}_{-0.208}$	$-0.200^{+0.300}_{-0.300}$	$0.945^{+0.309}_{-0.097}$	$1.019^{+0.140}_{-0.140}$	$1.702^{+0.461}_{-0.908}$
	+3%/-3%	+1%/-5%	+150%/-150%	+33%/-10%	+14%/-14%	+27%/-53%
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 010548350-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-2 ± 2	$0.83^{+0.82}_{-0.61}$	2684^{+194}_{-137}	-1952^{+6418}_{-1221}	$0.289^{+4.183}_{-0.494}$
Alt.	-50 ± 3	$1.10^{+1.02}_{-0.75}$	2684^{+196}_{-132}	5090^{+4616}_{-1184}	$7.914^{+79.944}_{-5.671}$

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

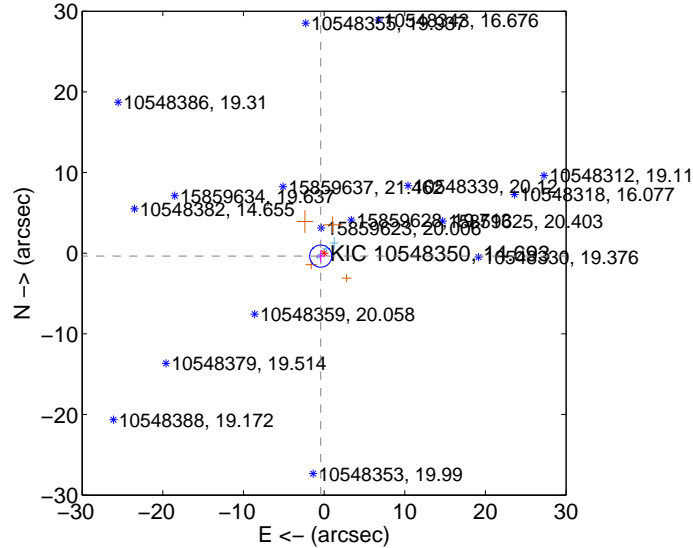
Supplemental centroid analysis for 010548350-01. Kepler magnitude: 14.69. Transit SNR 0.01

There are 5 quarters with good PRF difference image offsets

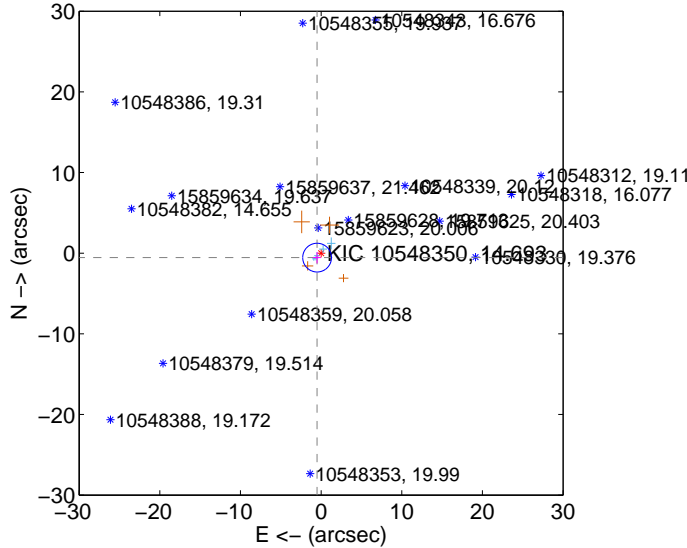
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.559 ± 0.457	1.22	0.420 ± 0.528	-0.369 ± 0.730
PRF-fit source offset from KIC position	0.745 ± 0.594	1.25	0.499 ± 0.496	-0.553 ± 0.705
photometric centroid source offset	—	—	—	—

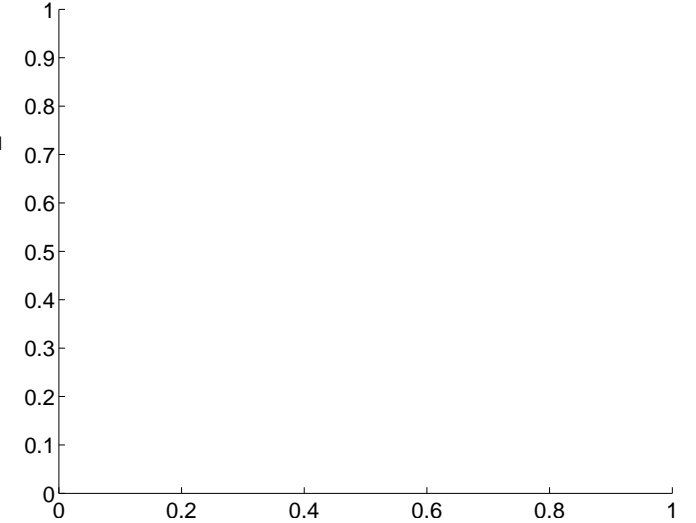
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

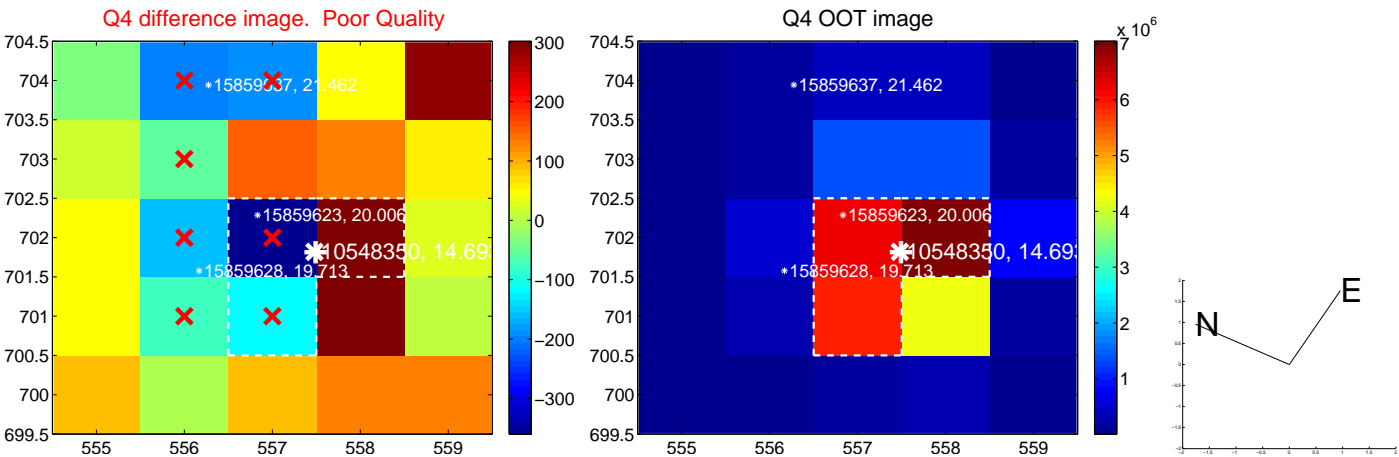
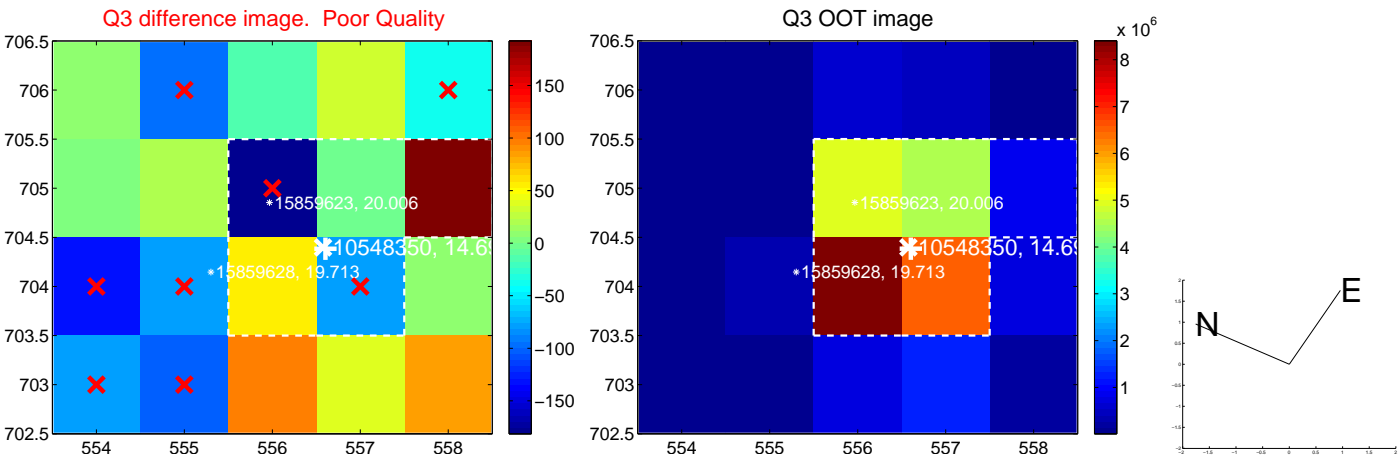
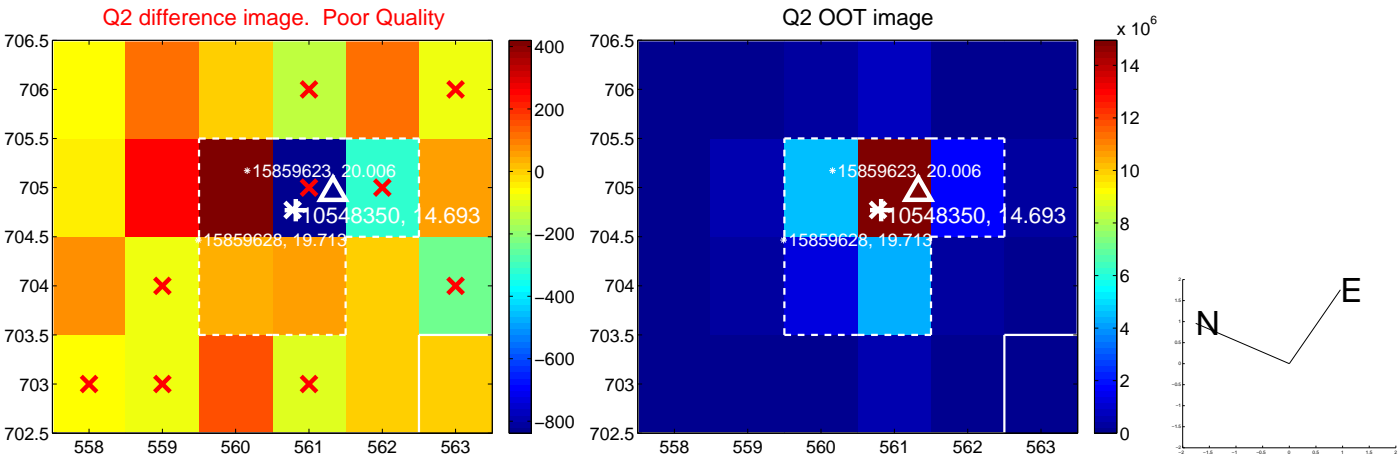
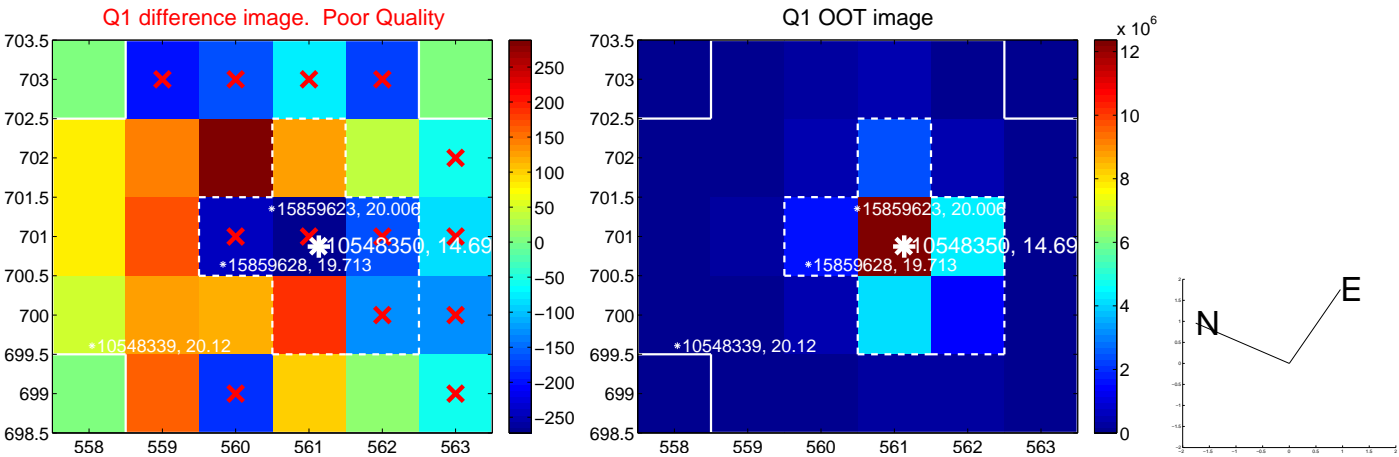


There are no photometric centroids

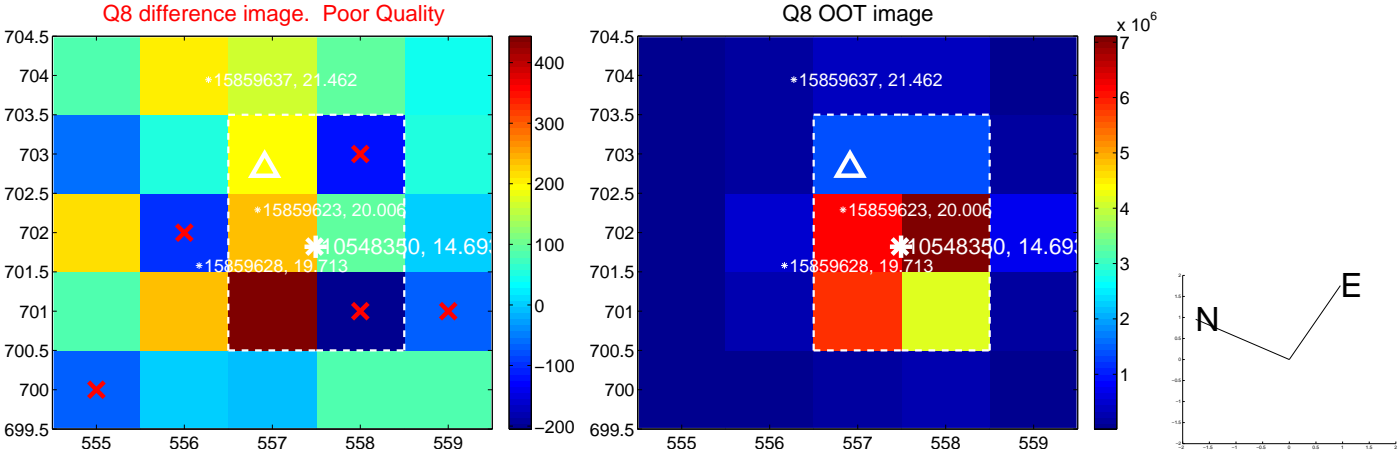
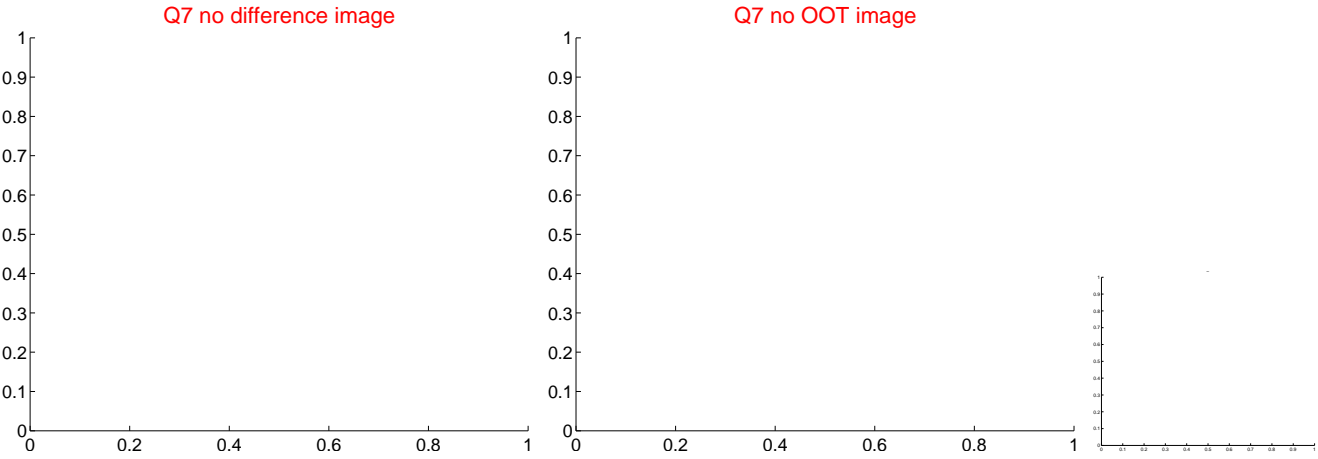
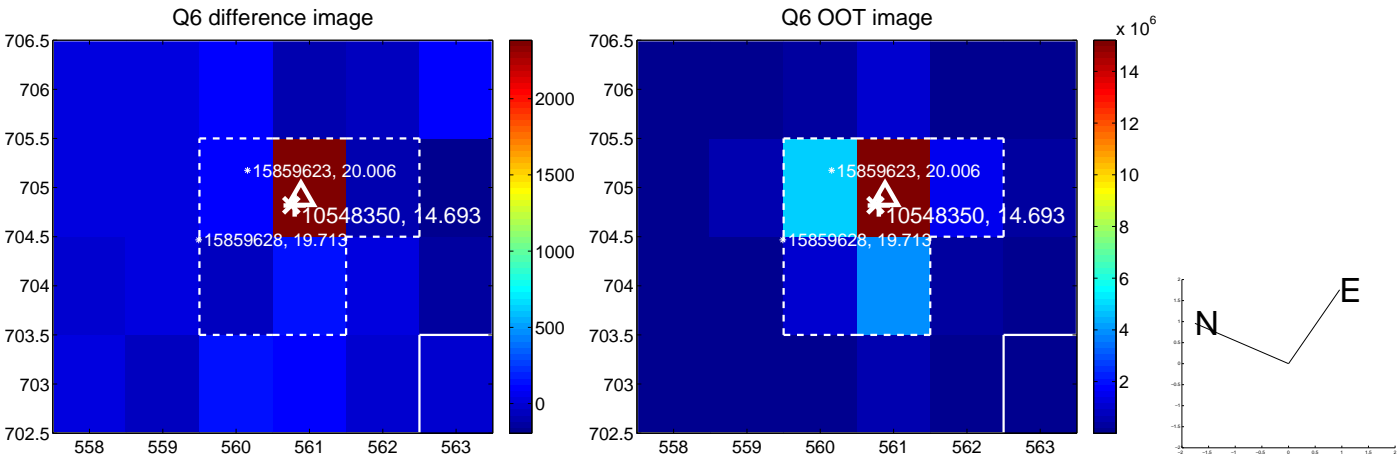
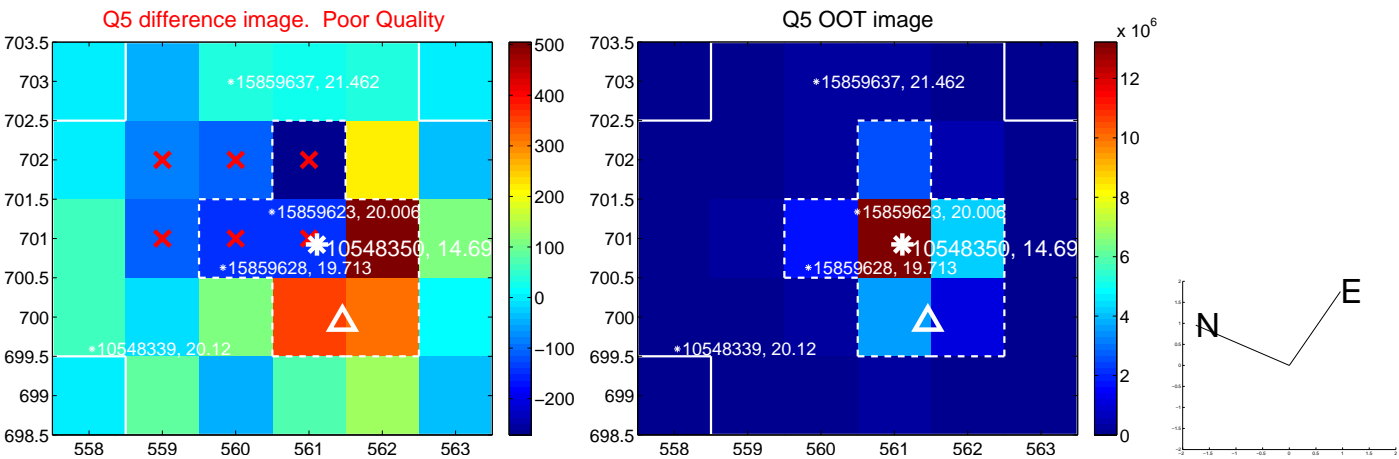


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

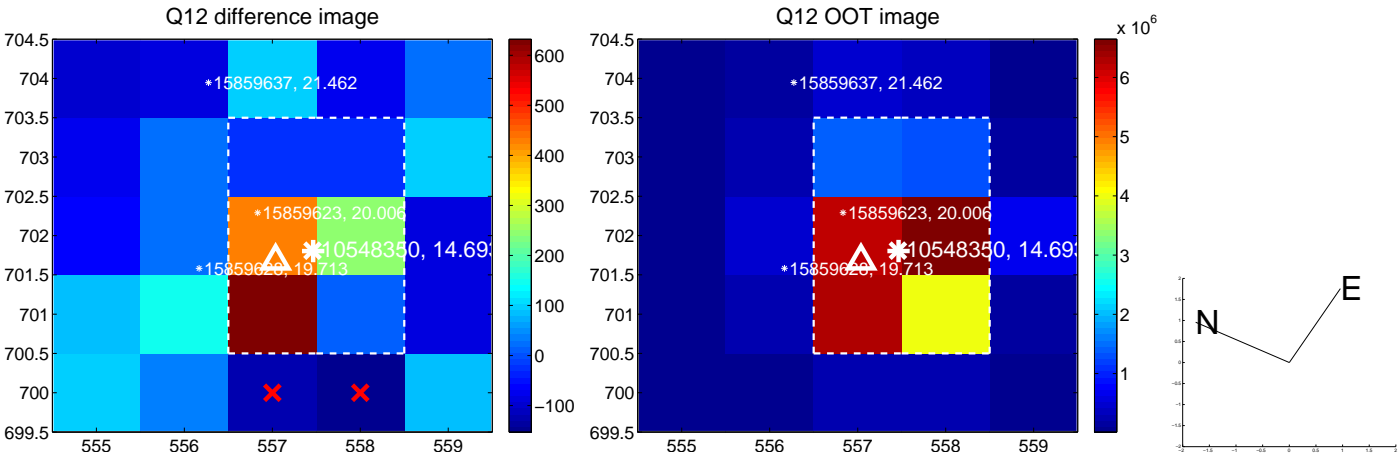
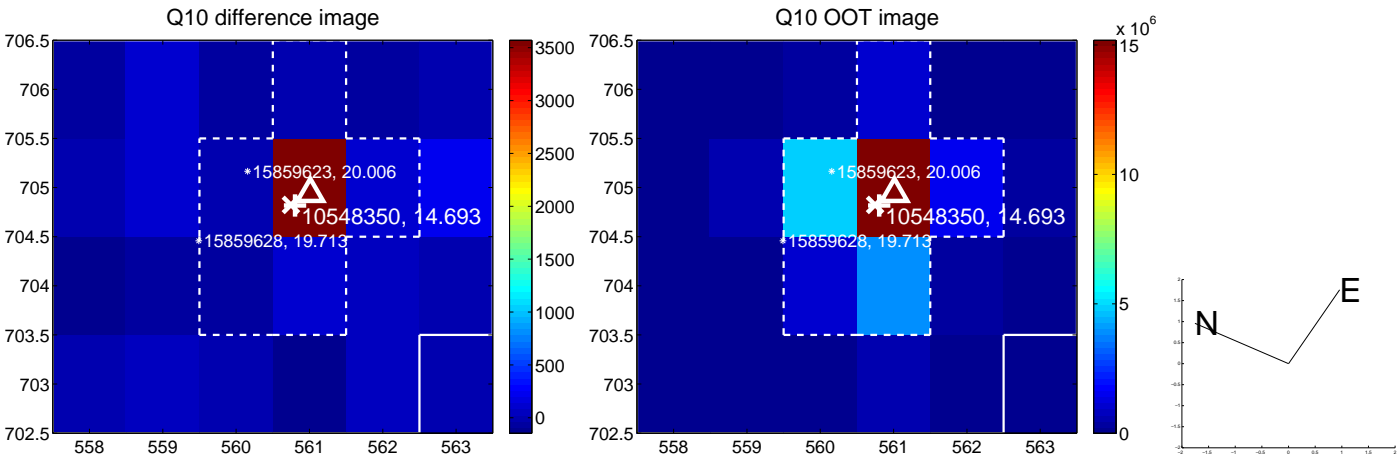
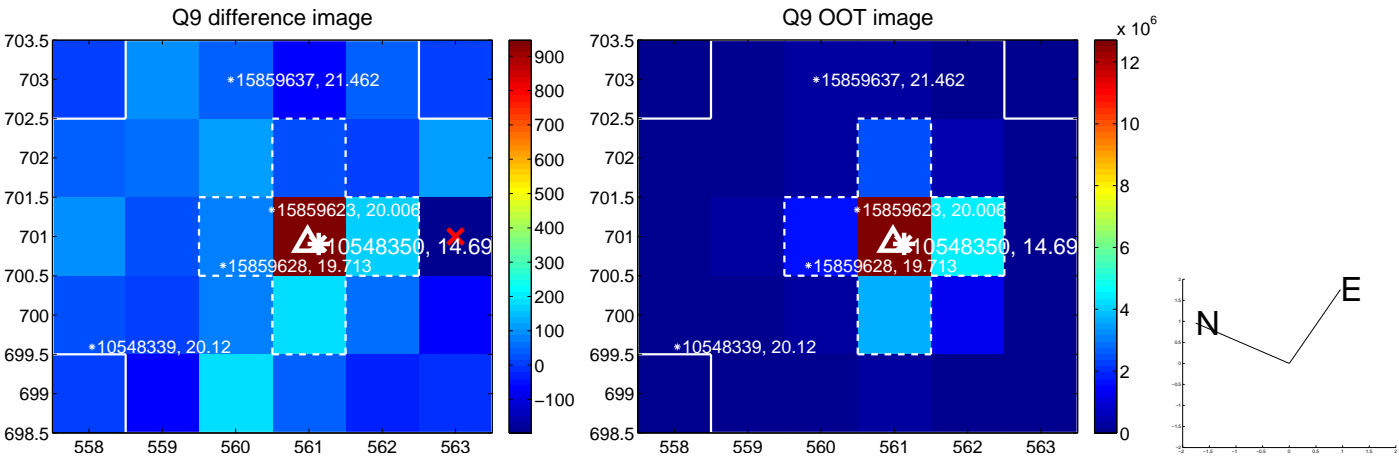
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



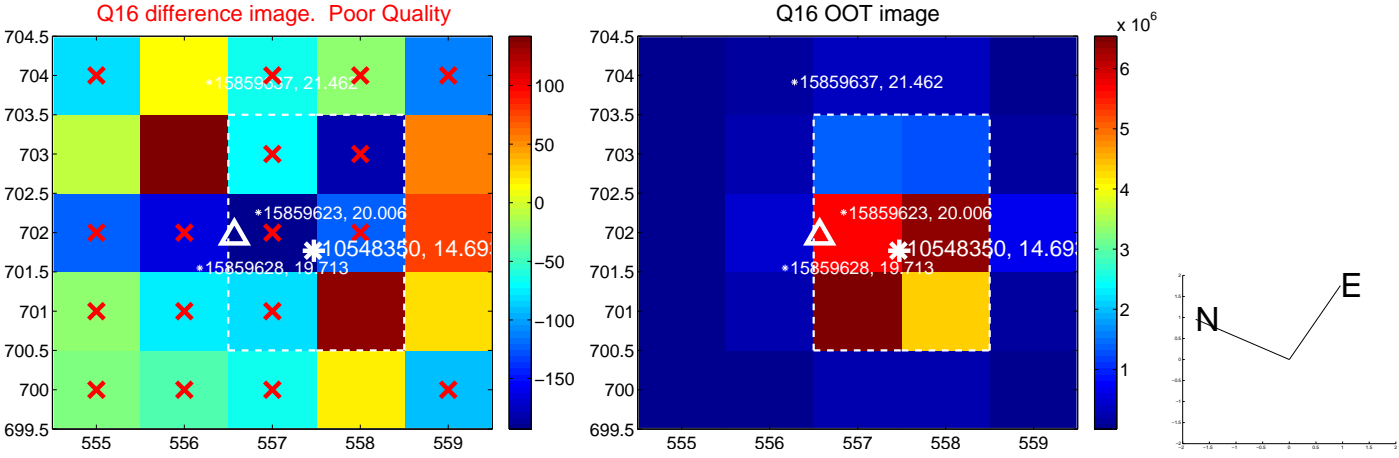
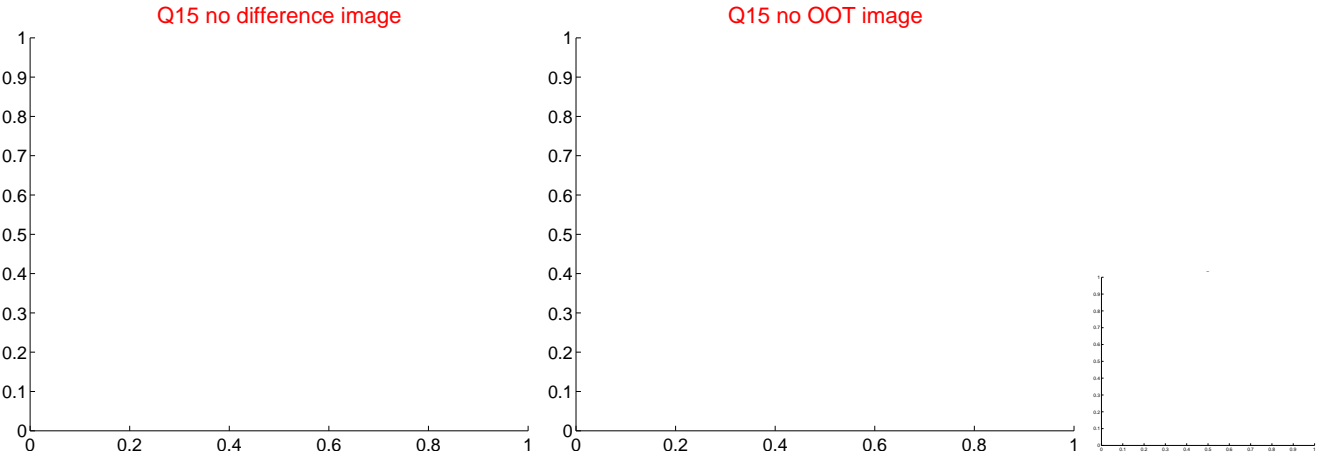
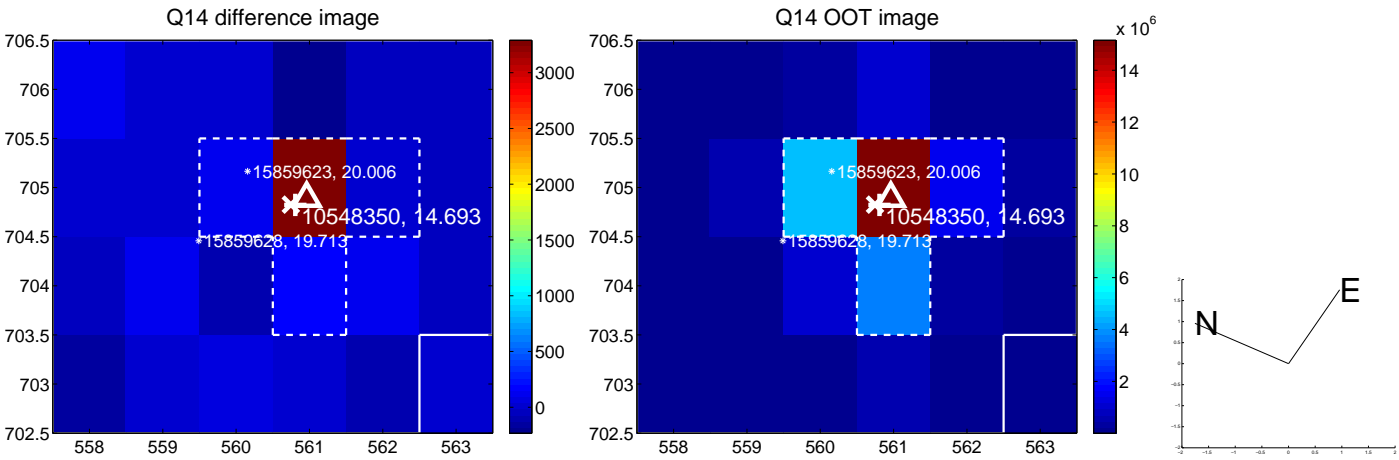
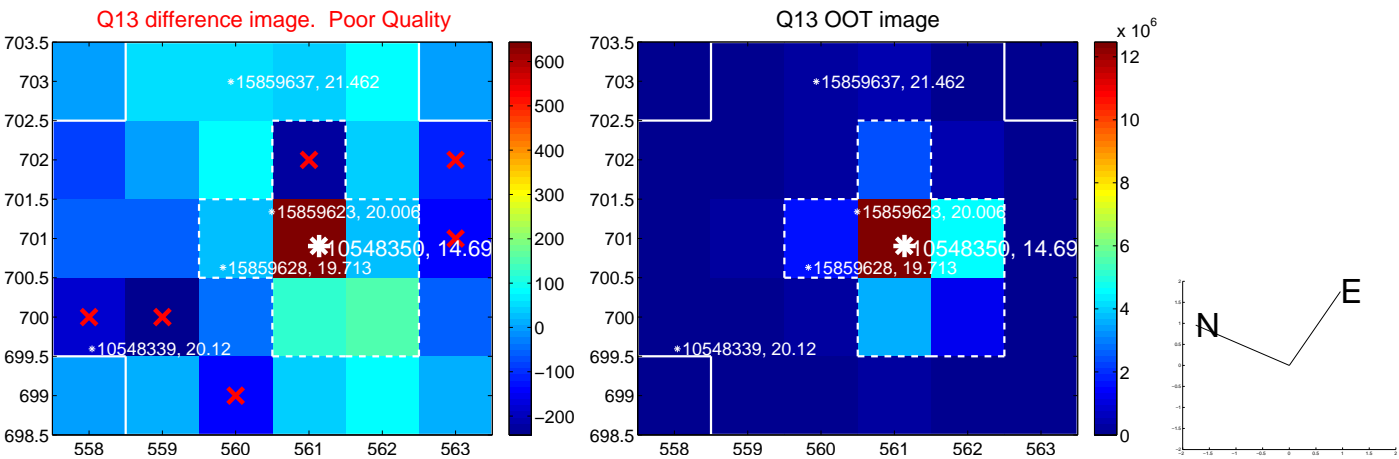
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



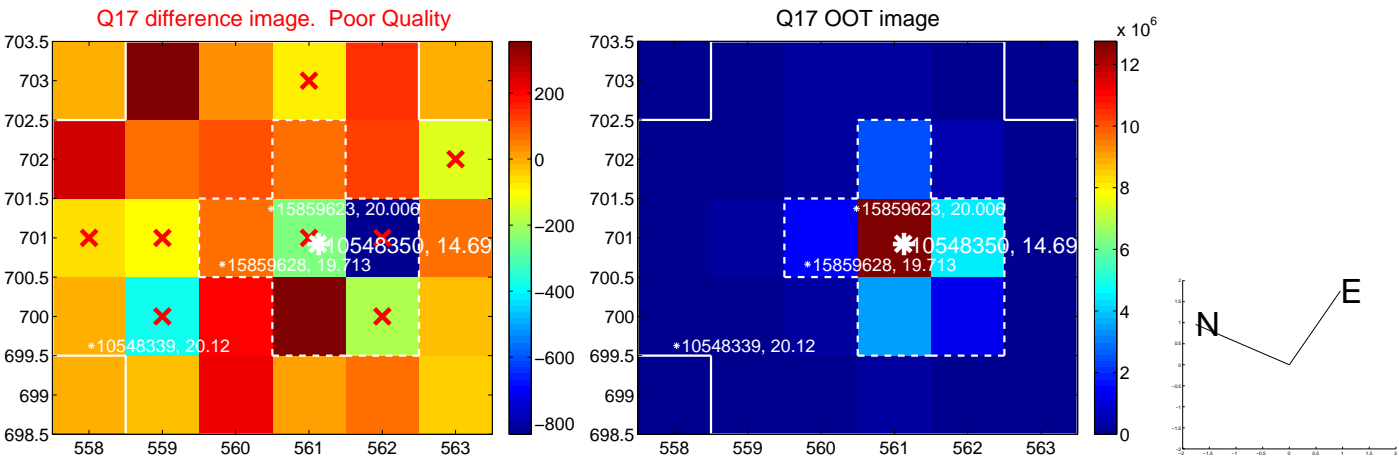
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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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

