

KIC 005560399

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})
005560399-01	OBS	No	0.788177	131.775091	34.2	1.111	7.8	9.6	1.08	5956	0.75	4530.69

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005560399-01	OBS	FP	0.00	1	0	1	0	MOD_NONUNIQ_DV—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.

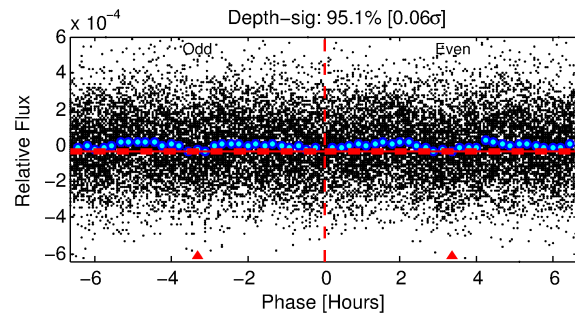
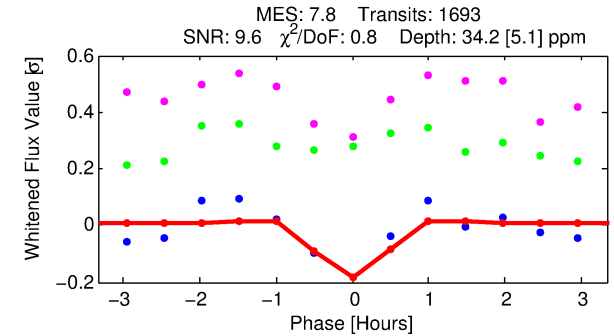
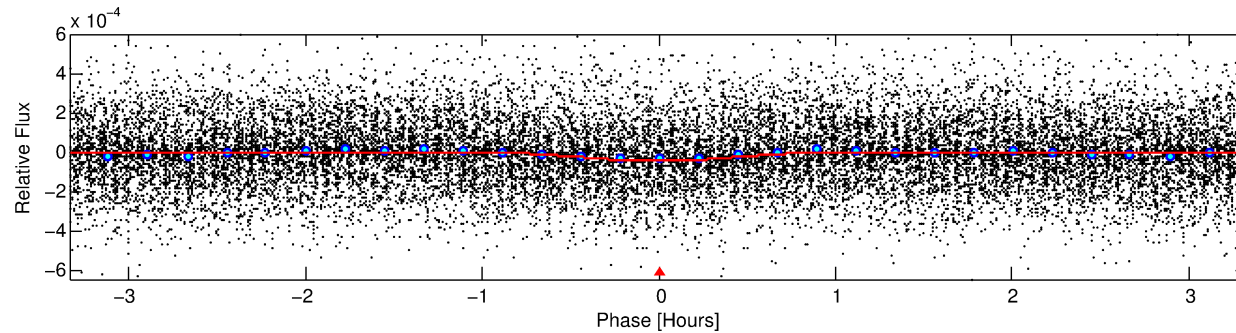
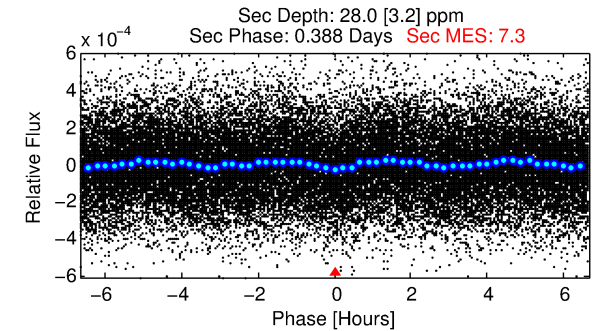
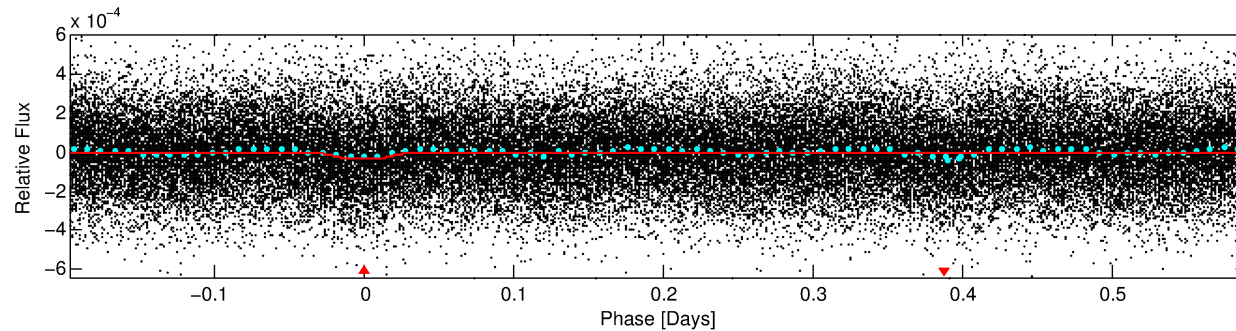
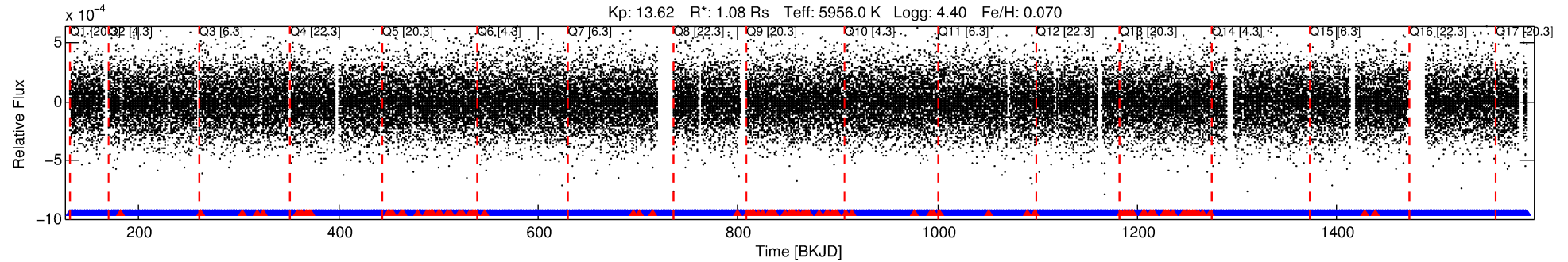
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005560399-01

No Significant Match Found

DV One-Page Summary

KIC: 5560399 Candidate: 1 of 1 Period: 0.788 d



DV Fit Results:

Period = 0.78818 [0.00001] d
Epoch = 131.7751 [0.0018] BKJD
Rp/R* = 0.0064 [0.0019]
a/R* = 2.60 [3.25]
b = 0.90 [0.31]
Seff = 4530.69 [1782.78]
Teff = 2092 [206] K
Rp = 0.75 [0.32] Re
a = 0.0170 [0.0043] AU
Ag = 7.89 [5.66] [1.22σ]
Teffp = 5421 [854] K [3.79σ]

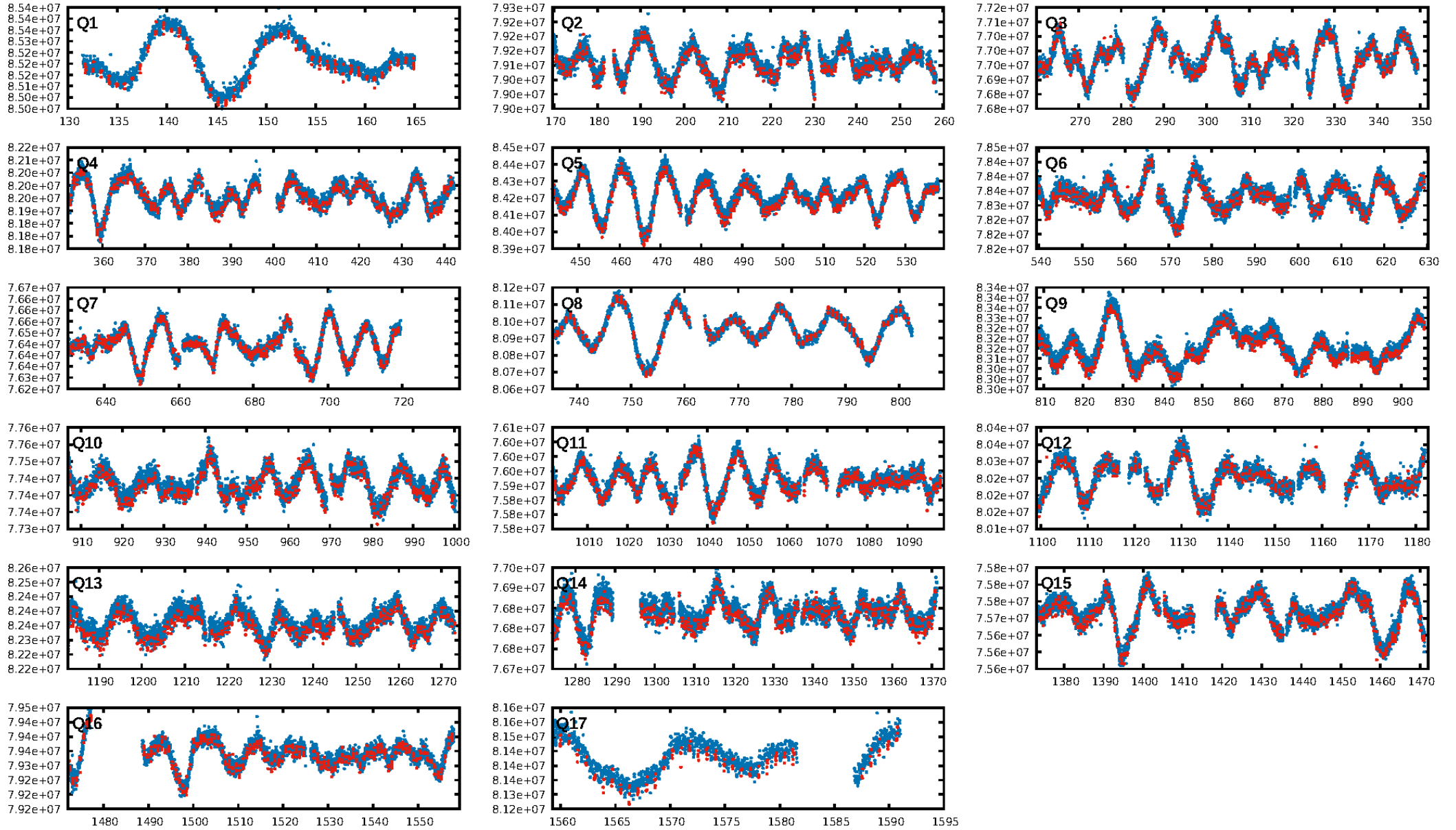
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.07e-14
RollingBand-fgt: 0.93 [1505/1617]
GhostDiagnostic-chr: -2.794
Centroid-sig: 0.0%
Centroid-so: 8.593 arcsec [4.55σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [17/17]

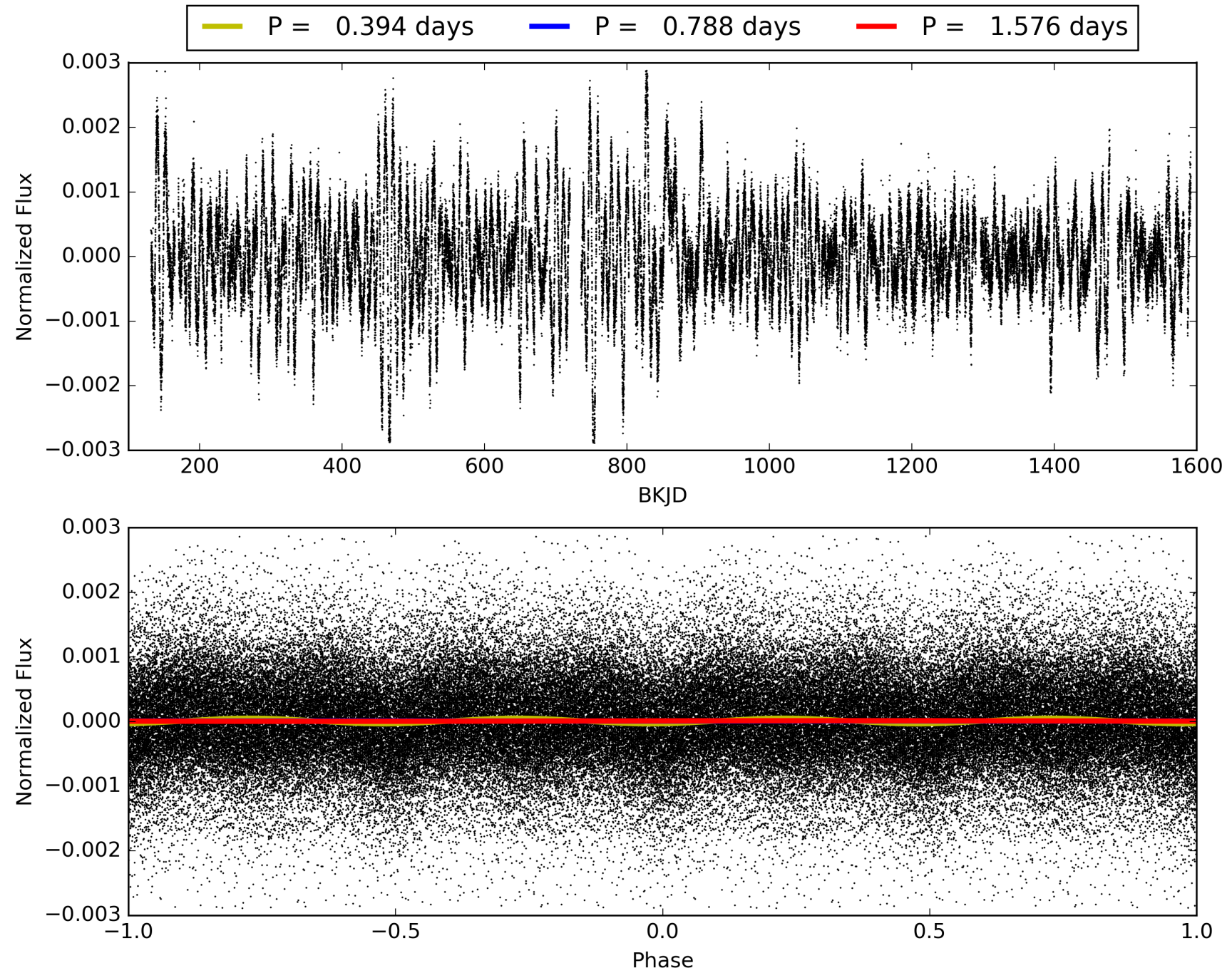
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 15:13:31 Z

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

TCE 005560399-01, PDC Light Curves

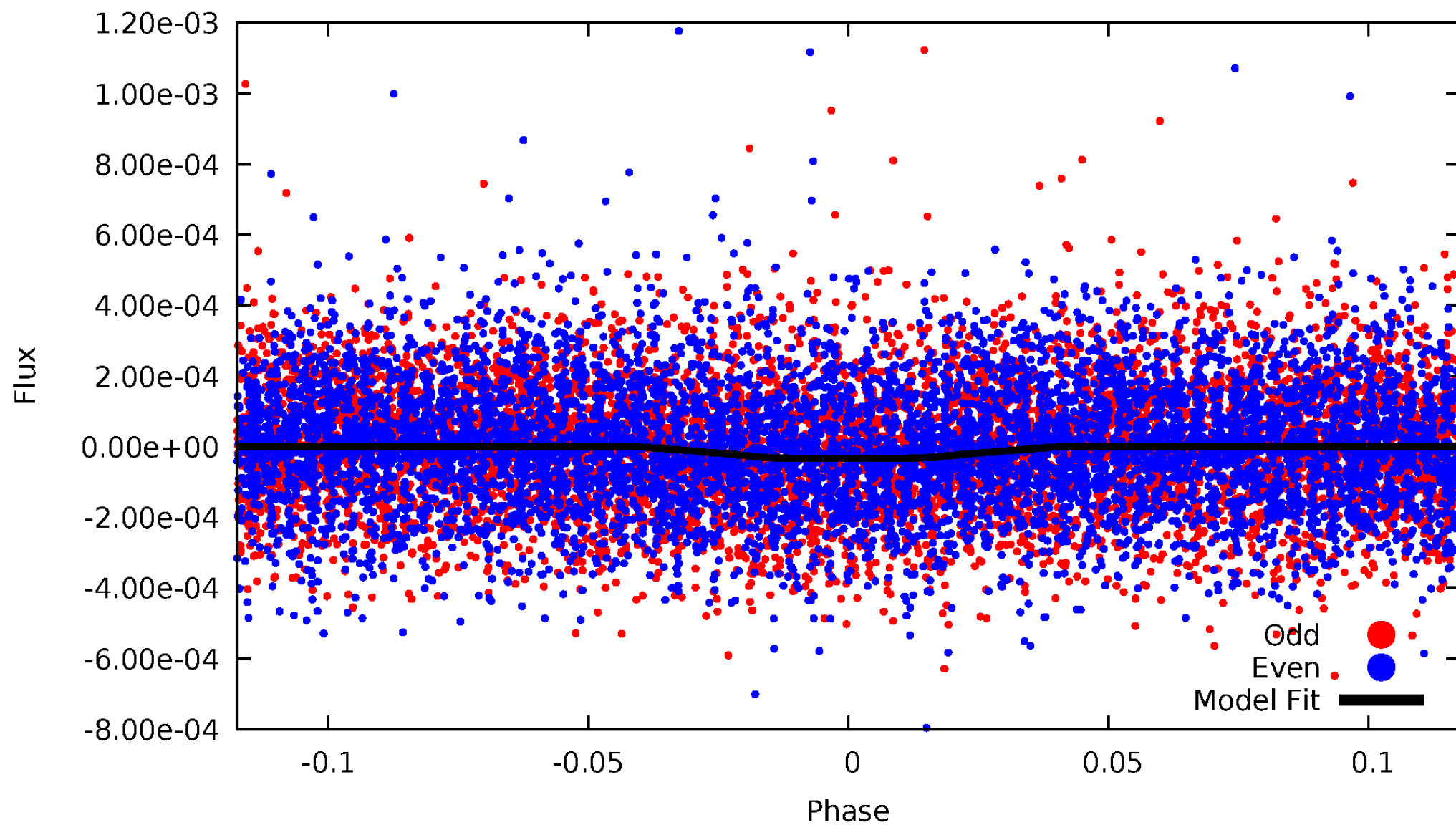


TCE 005560399-01



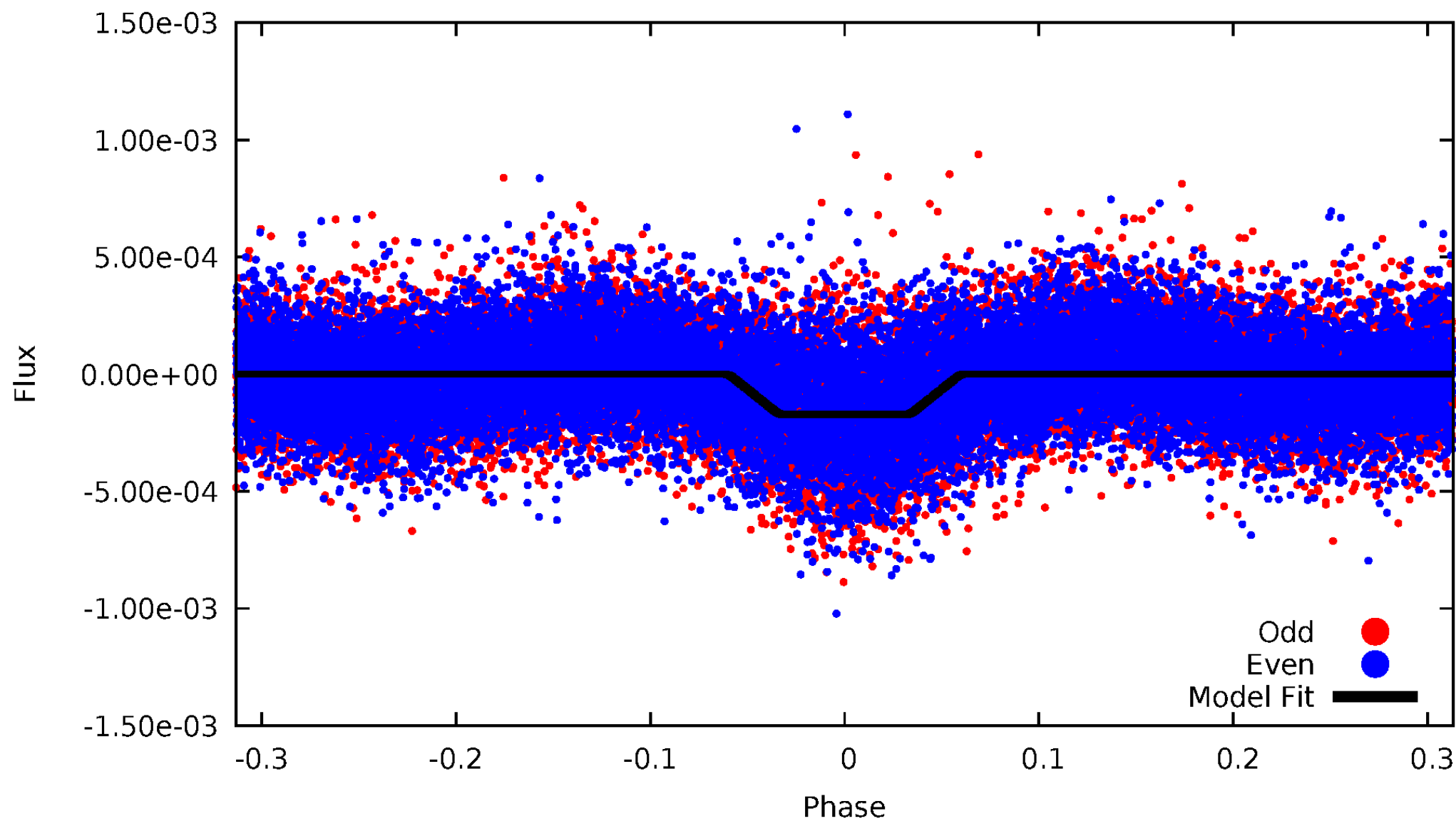
DV Odd/Even

TCE 005560399-01



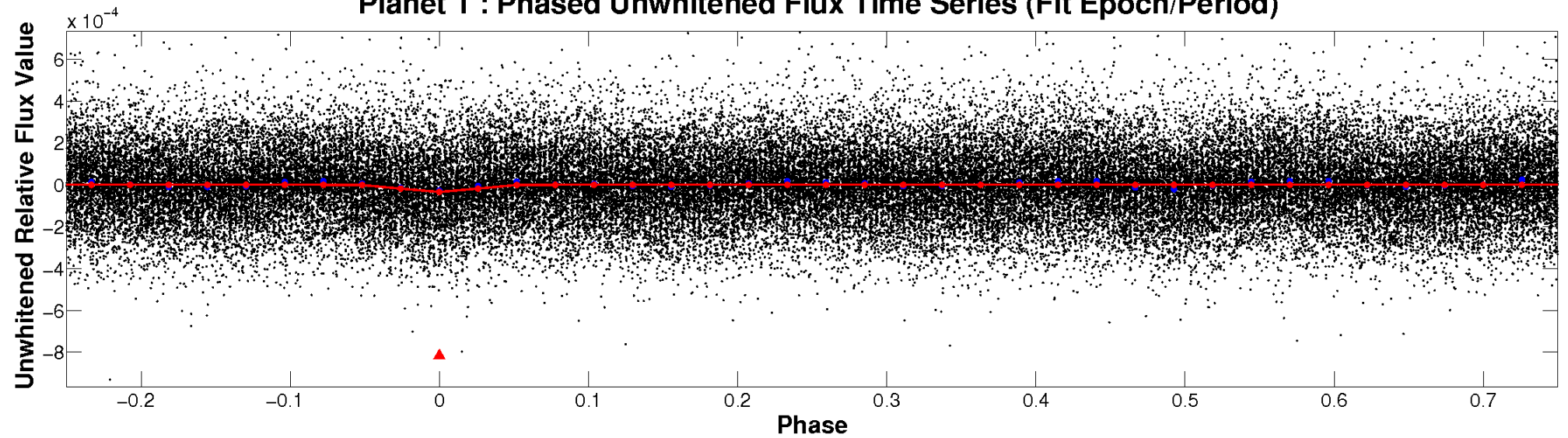
ALT Odd/Even

TCE 005560399-01

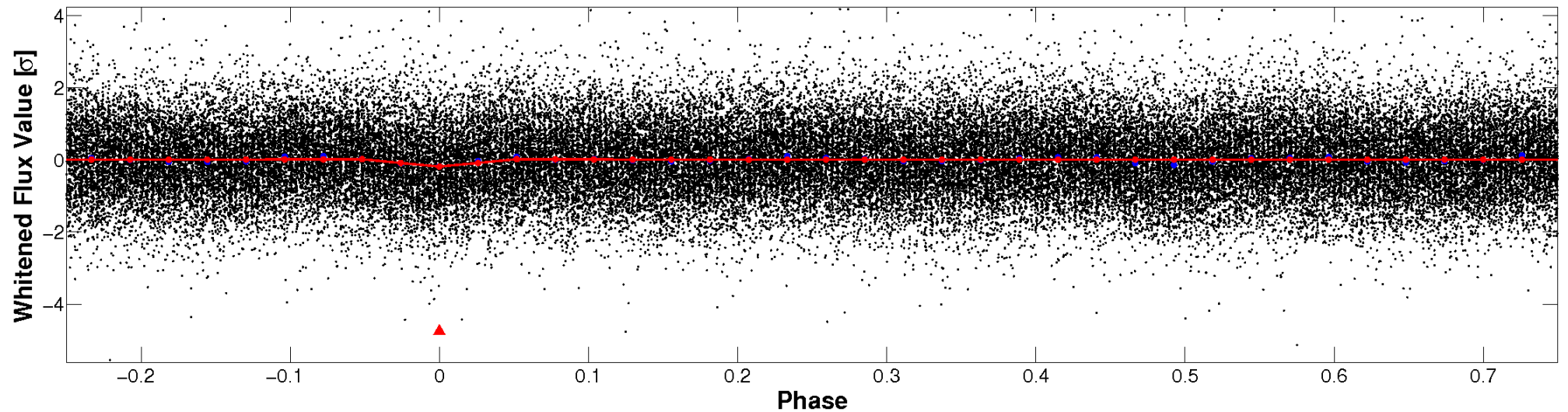


Non-Whitened Vs. Whitened Light Curve

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

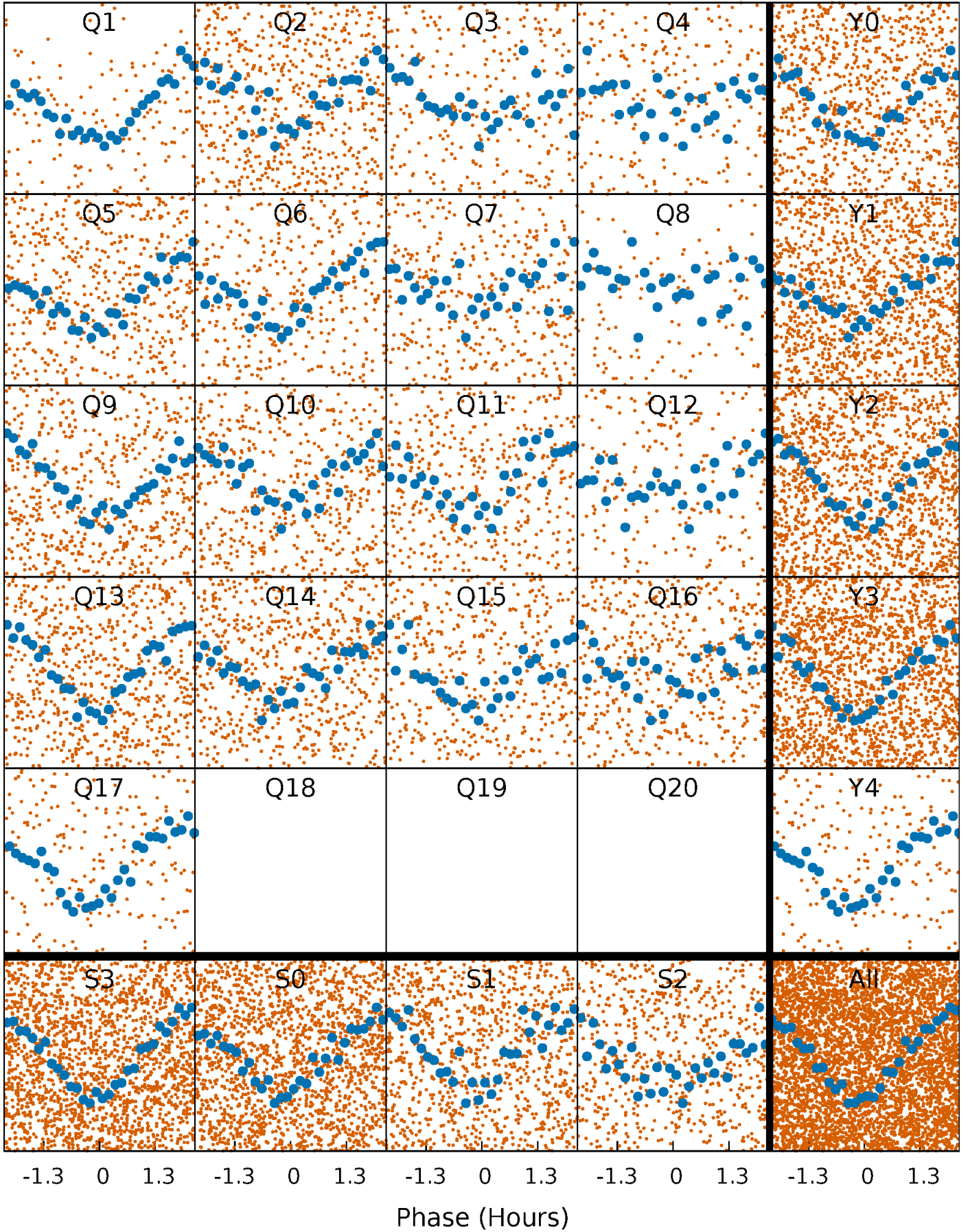


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



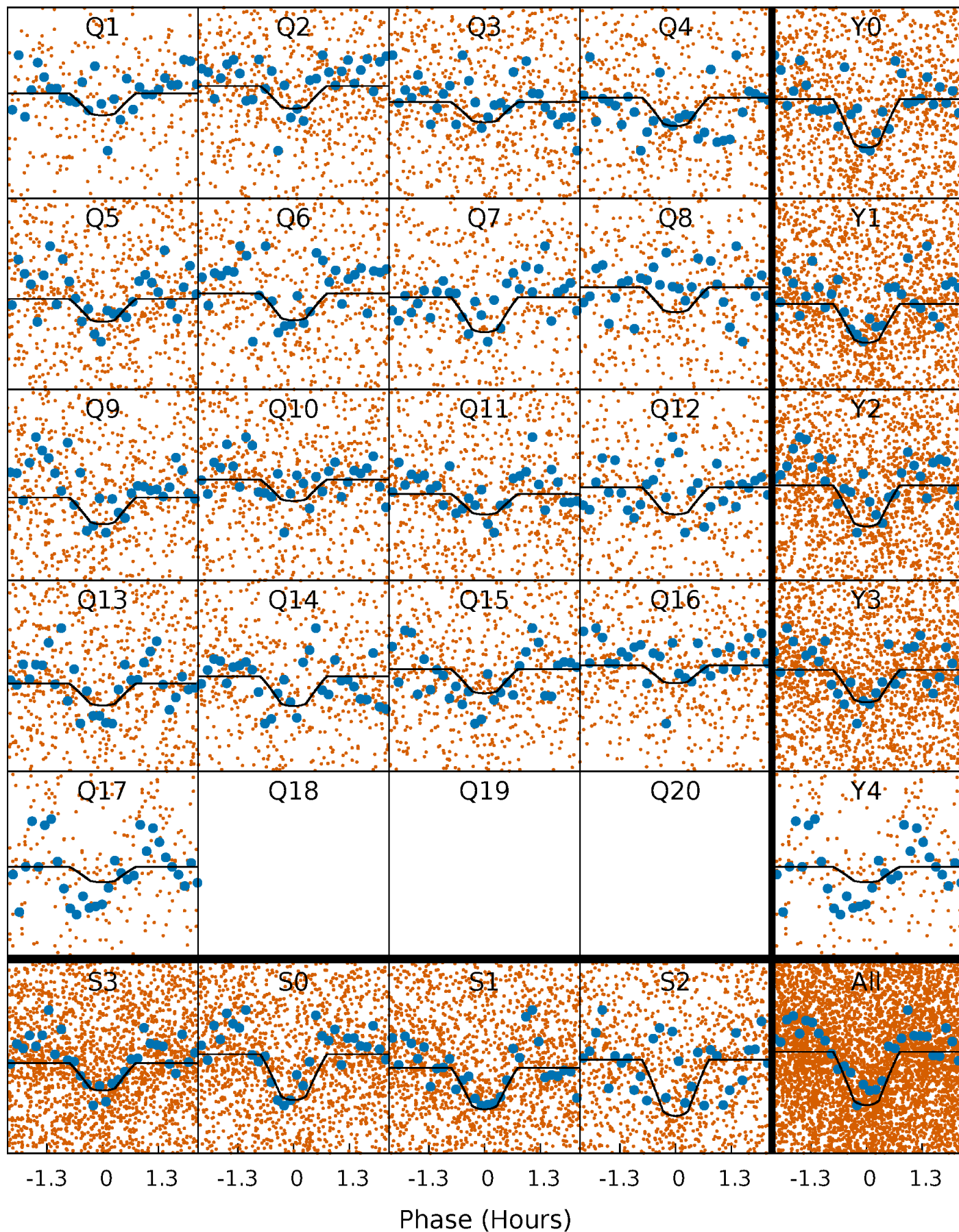
PDC Quarter-Phased Transit Curves

TCE 005560399-01 P= 0.788177 Days $T_0=131.775091$ (BKJD)



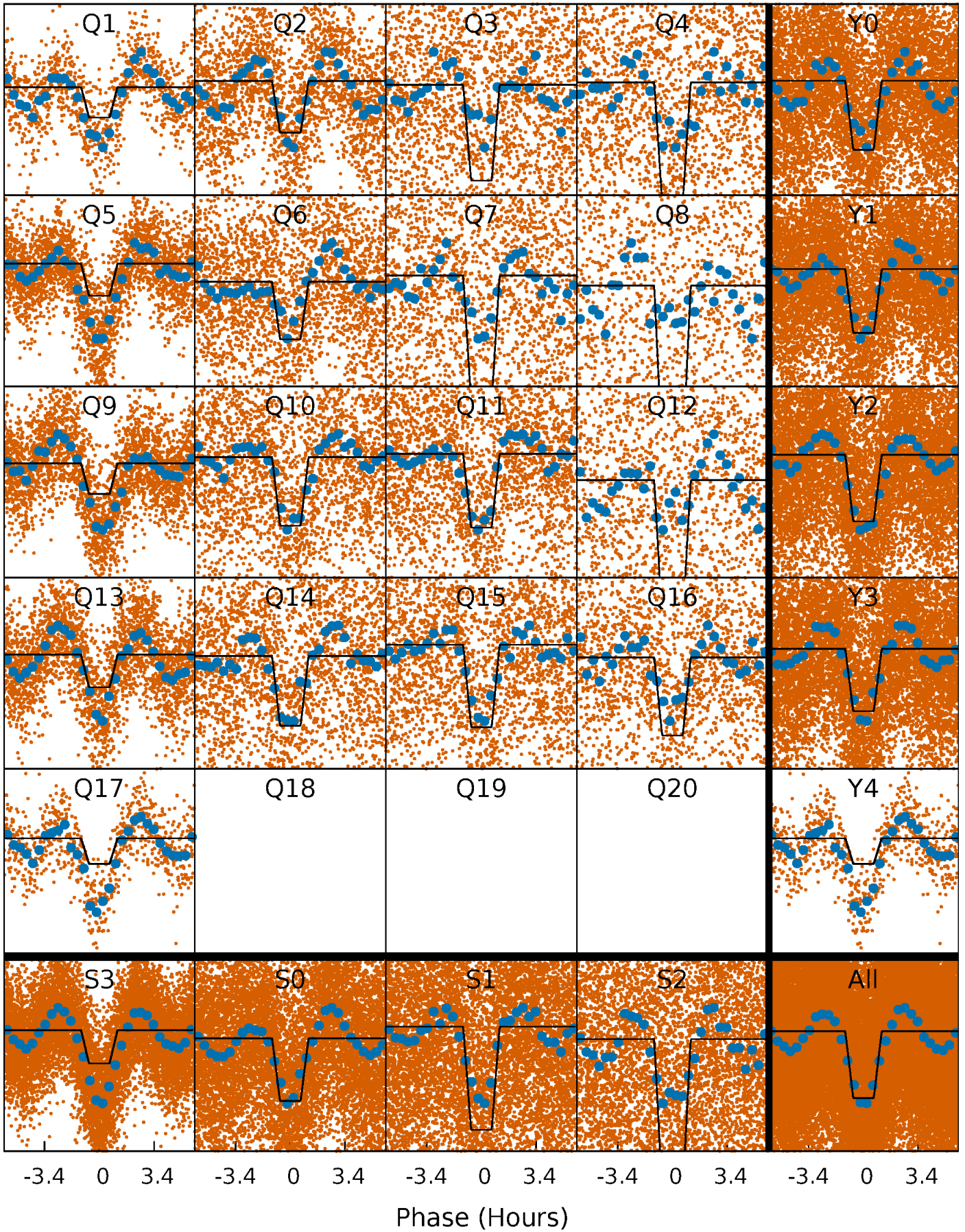
DV Quarter-Phased Transit Curves

TCE 005560399-01 P= 0.788177 Days $T_0=131.775091$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

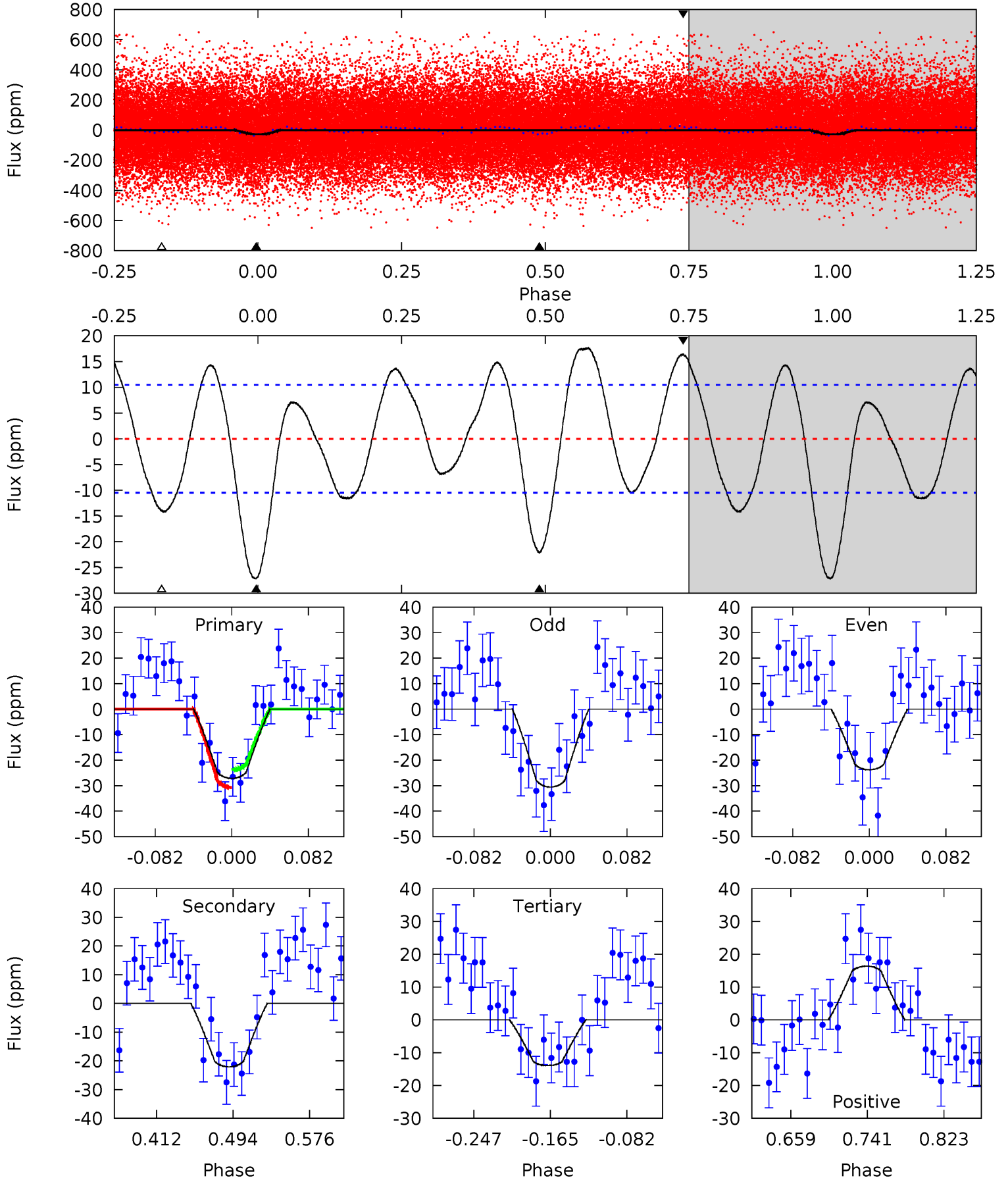
TCE 005560399-01 P= 0.788176 Days $T_0=131.769713$ (BKJD)



DV Model-Shift Uniqueness Test

005560399-01, P = 0.788177 Days, E = 130.986914 Days

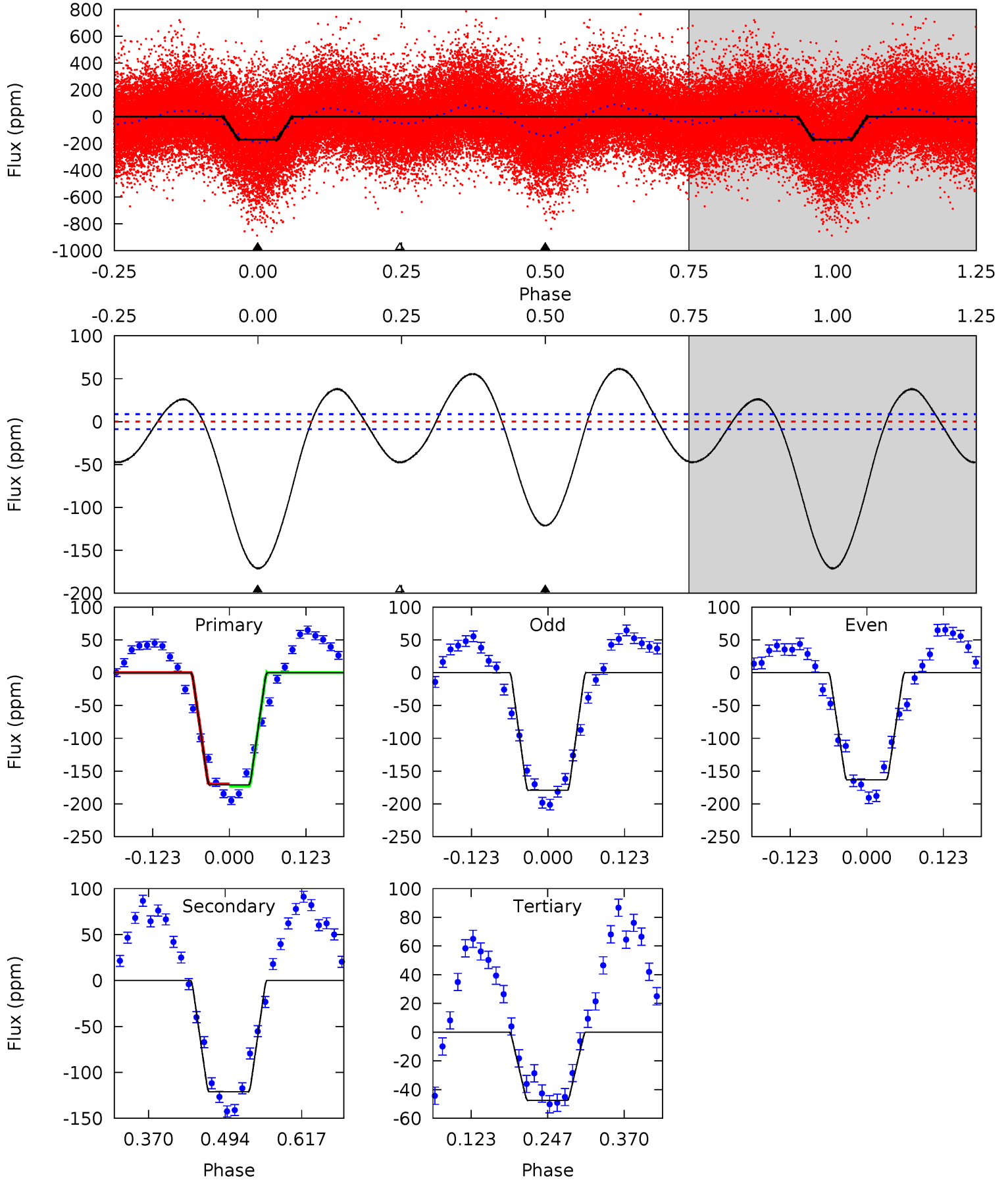
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.9	9.70	6.13	7.19	4.61	1.74	3.94	5.80	4.73	3.58	2.51	1.49	0.84	0.39	1.55



Alt Model-Shift Uniqueness Test

005560399-01, P = 0.788176 Days, E = 130.981537 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
88.6	62.8	24.6	0	4.52	1.54	17.9	64.0	88.6	38.1	62.8	4.17	1.05	0.26	0.96



Stellar Parameters For KIC 005560399

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5956^{+164}_{-205}	$4.397^{+0.087}_{-0.203}$	$0.070^{+0.250}_{-0.300}$	$1.080^{+0.319}_{-0.160}$	$1.060^{+0.138}_{-0.124}$	$1.185^{+0.449}_{-0.628}$
	+3%/-3%	+2%/-5%	+357%/-429%	+30%/-15%	+13%/-12%	+38%/-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 005560399-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-22 ± 2	$0.78^{+0.26}_{-0.25}$	2971^{+210}_{-166}	5136^{+975}_{-607}	$5.826^{+6.750}_{-2.654}$
Alt.	-121 ± 2	$1.59^{+0.36}_{-0.29}$	2963^{+238}_{-158}	5419^{+462}_{-347}	$7.532^{+3.484}_{-2.457}$

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

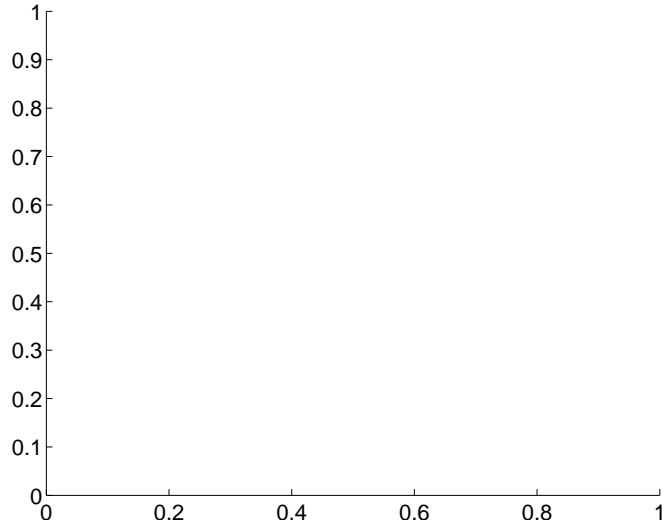
Supplemental centroid analysis for 005560399-01. Kepler magnitude: 13.62. Transit SNR 9.56

There are 0 quarters with good PRF difference image offsets

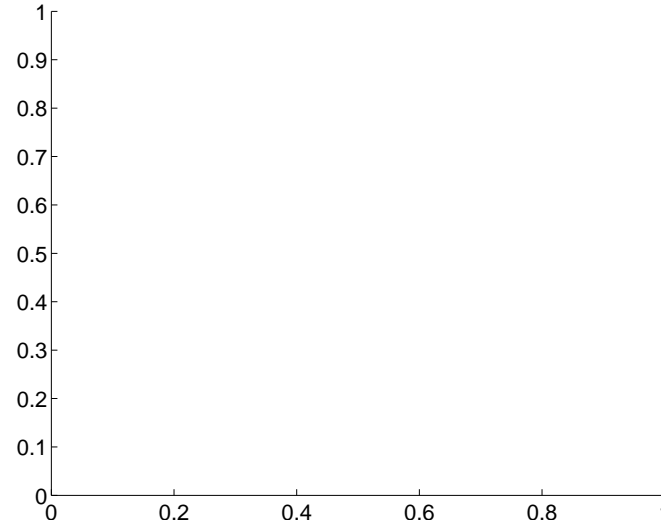
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	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	8.59 ± 1.89	4.55	6.62 ± 2.00	5.48 ± 1.72

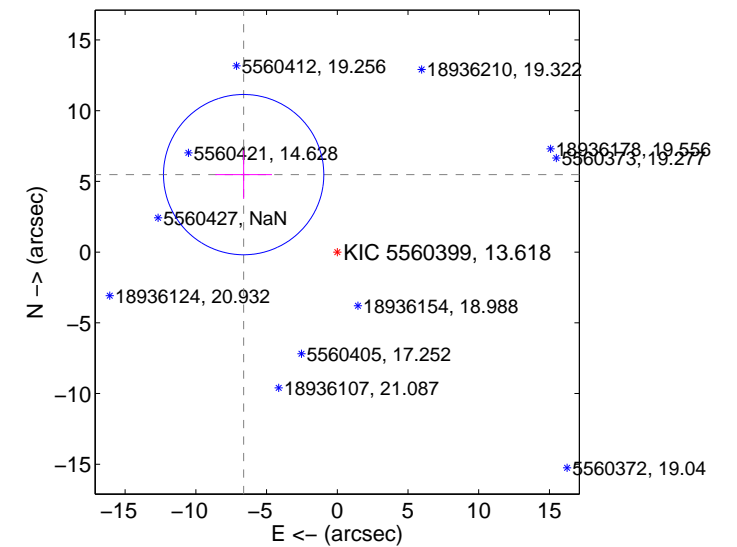
There is no PRF-fit offset from OOT-fit



There is no PRF-fit offset from KIC

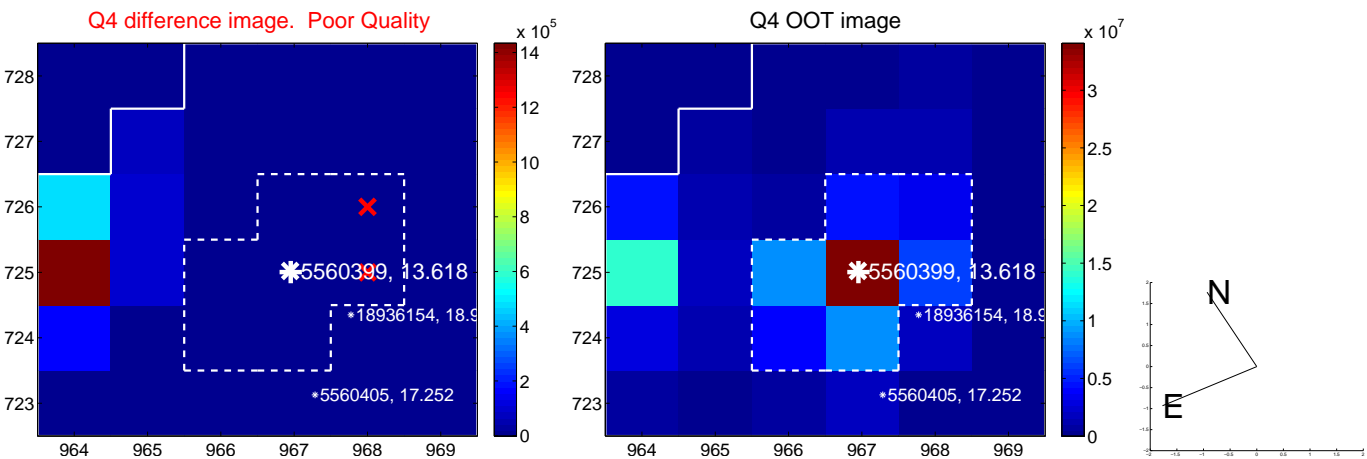
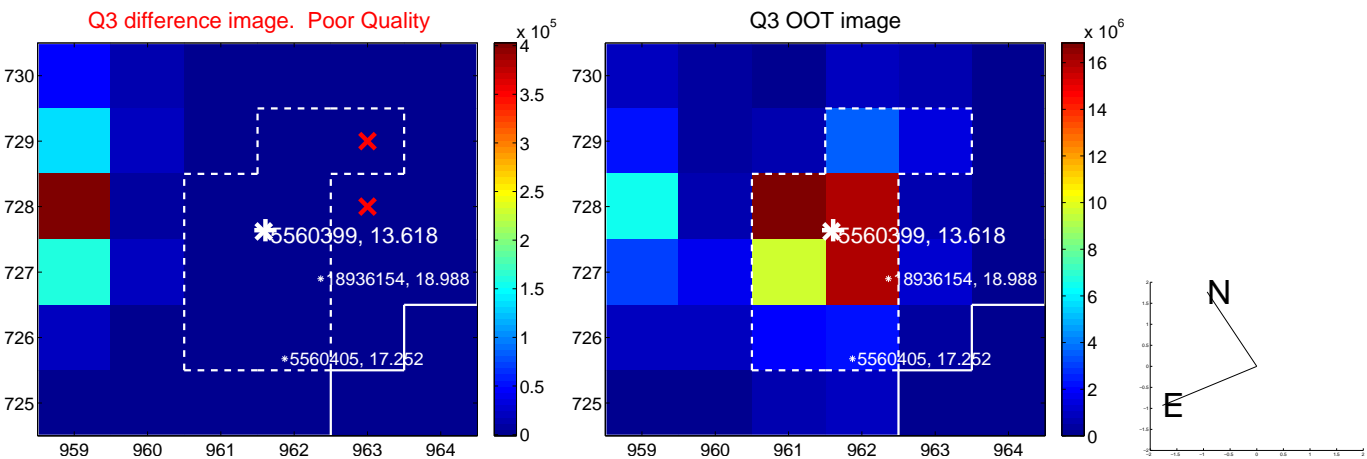
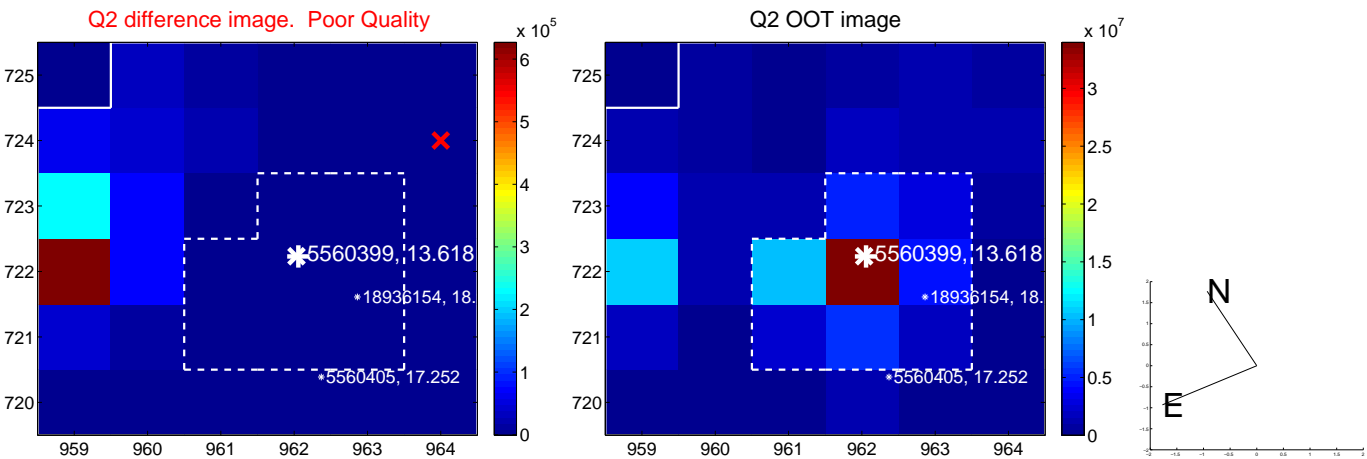
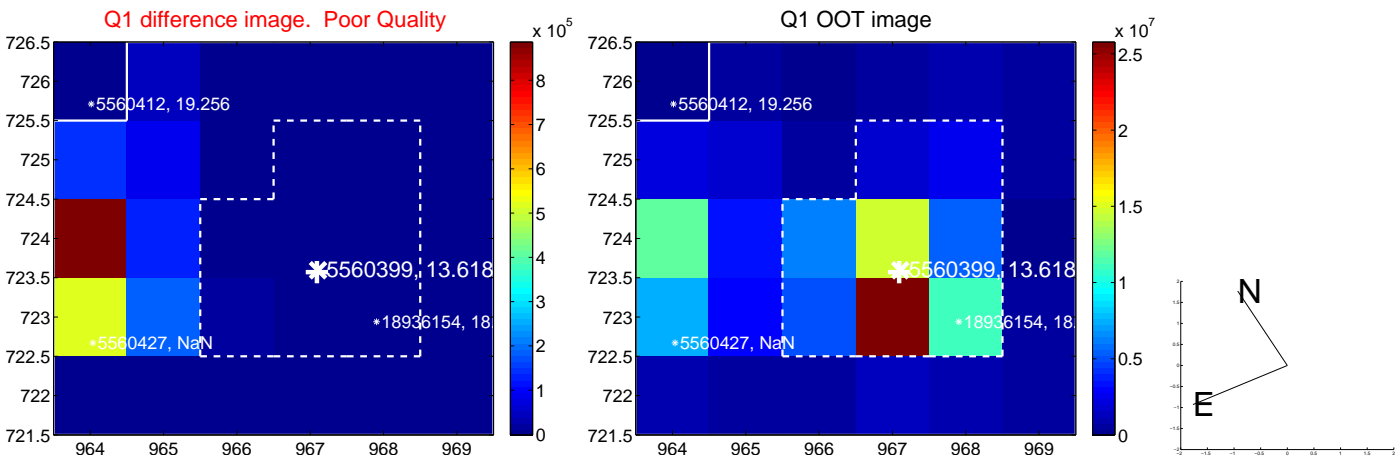


offset from photometric centroids

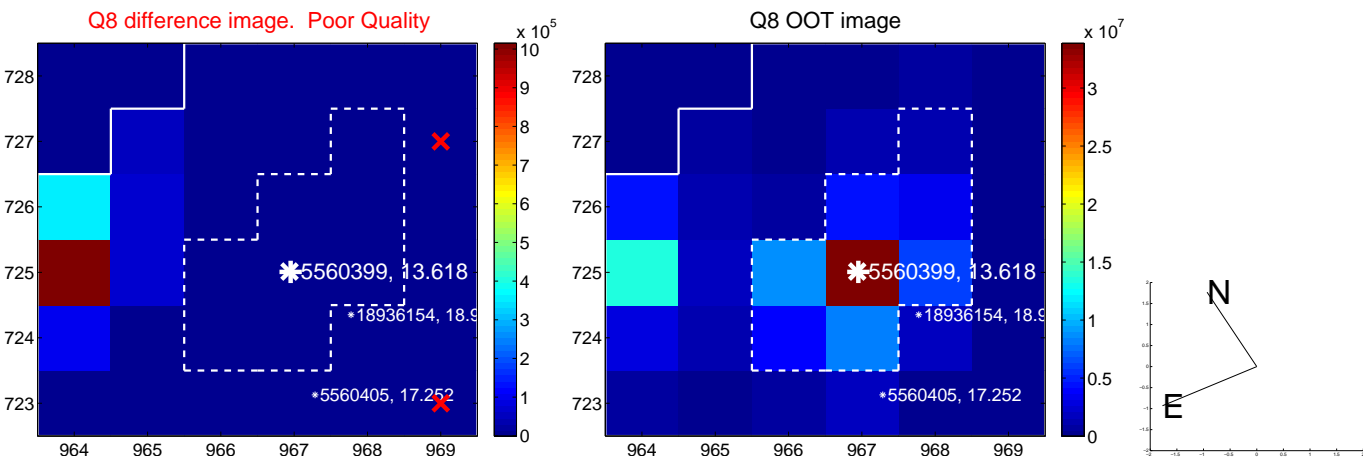
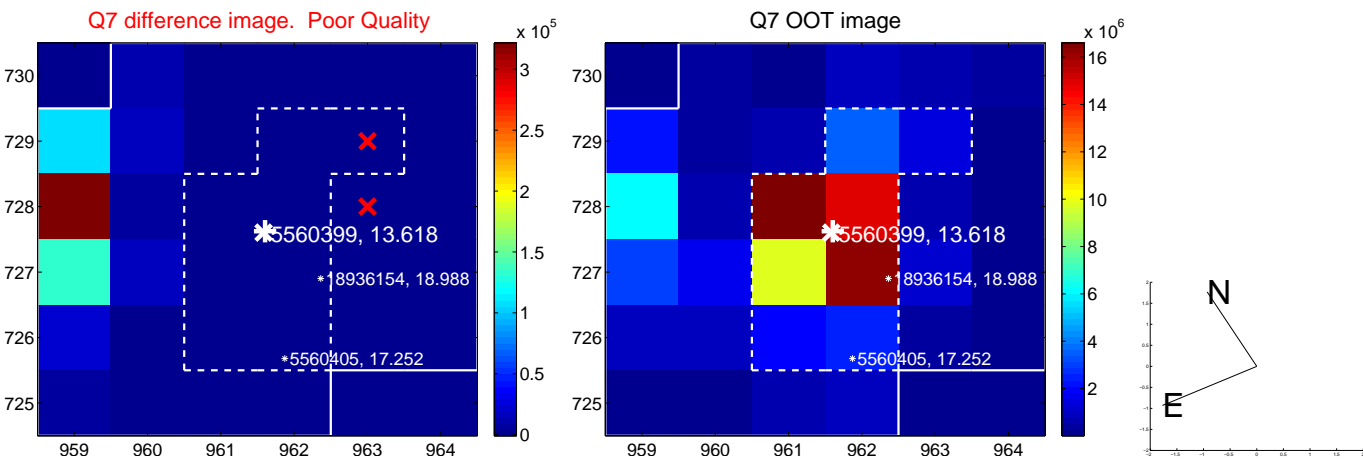
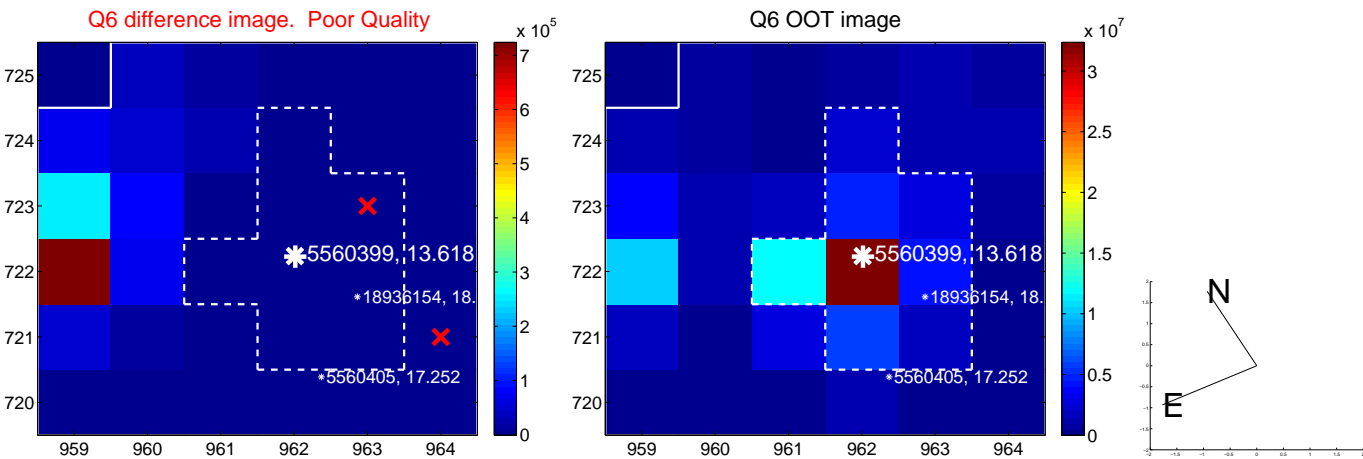
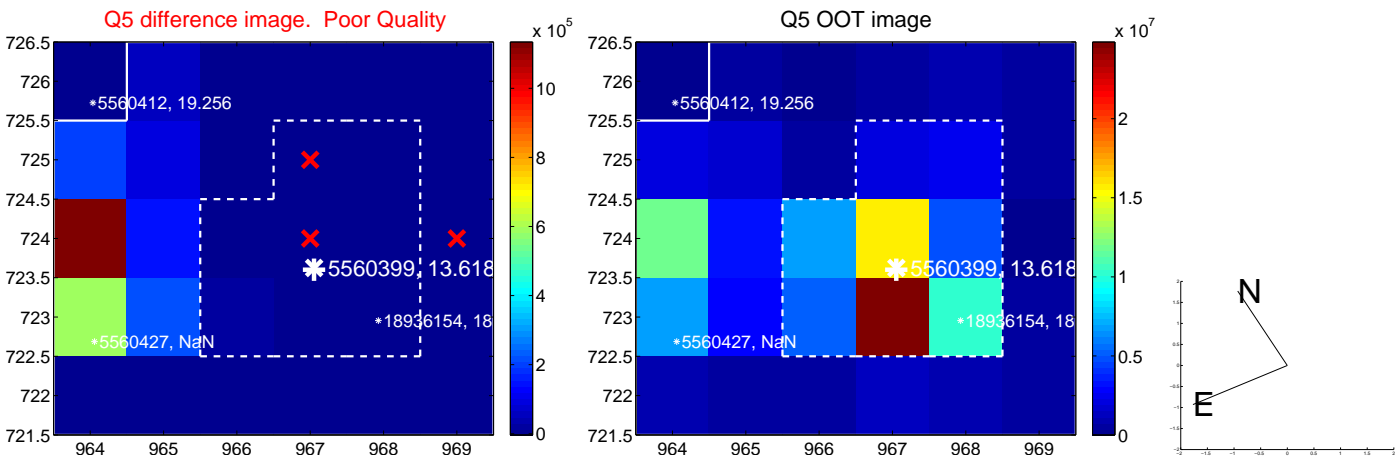


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

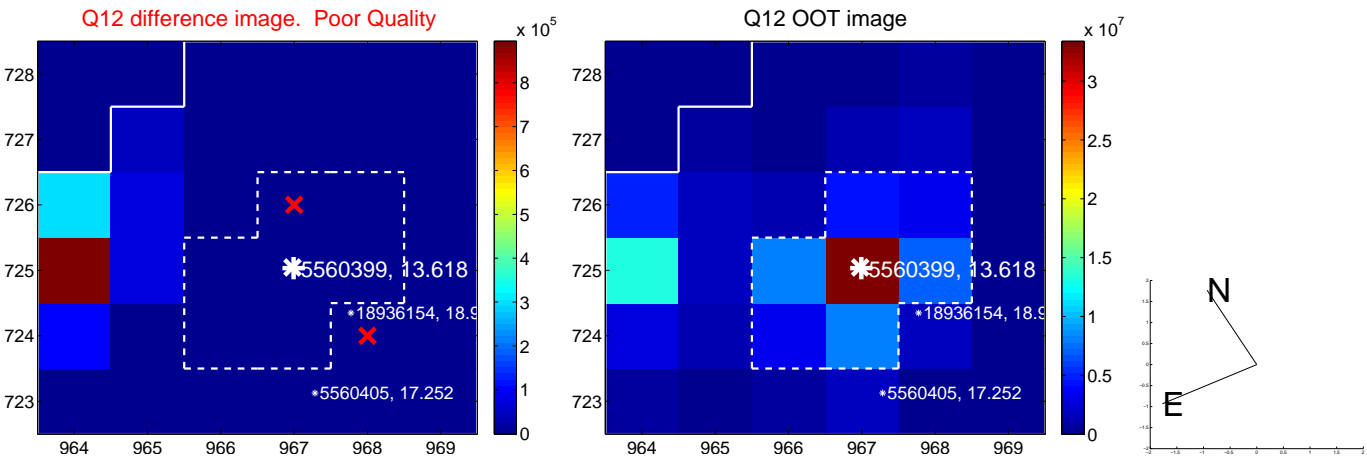
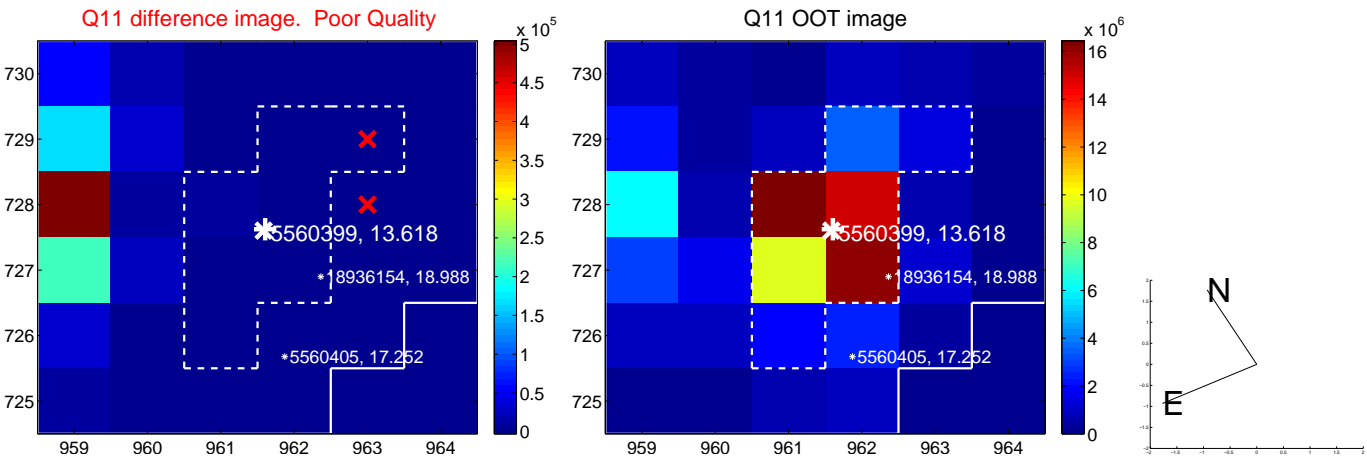
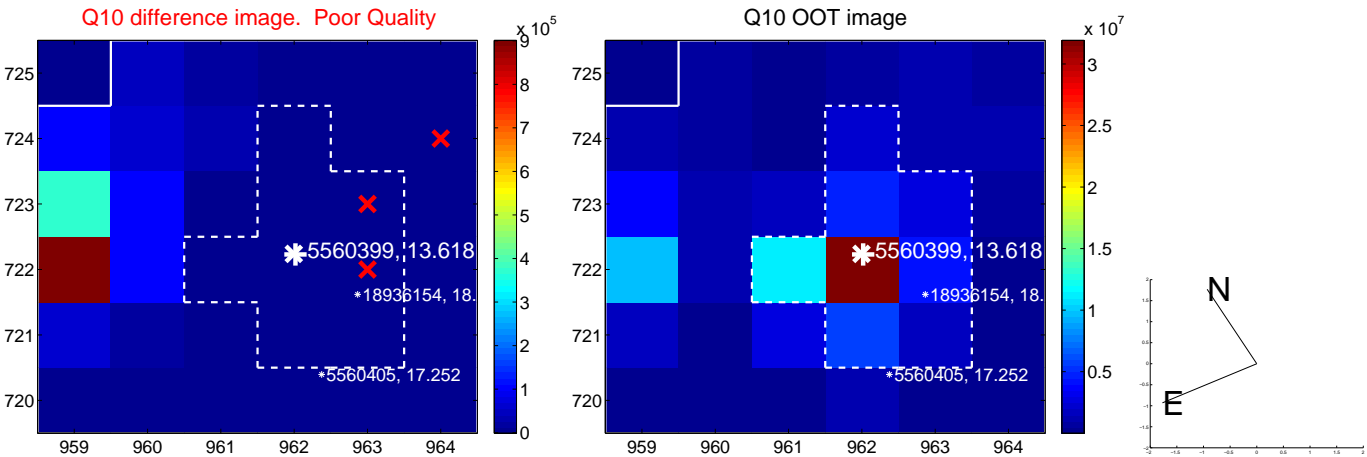
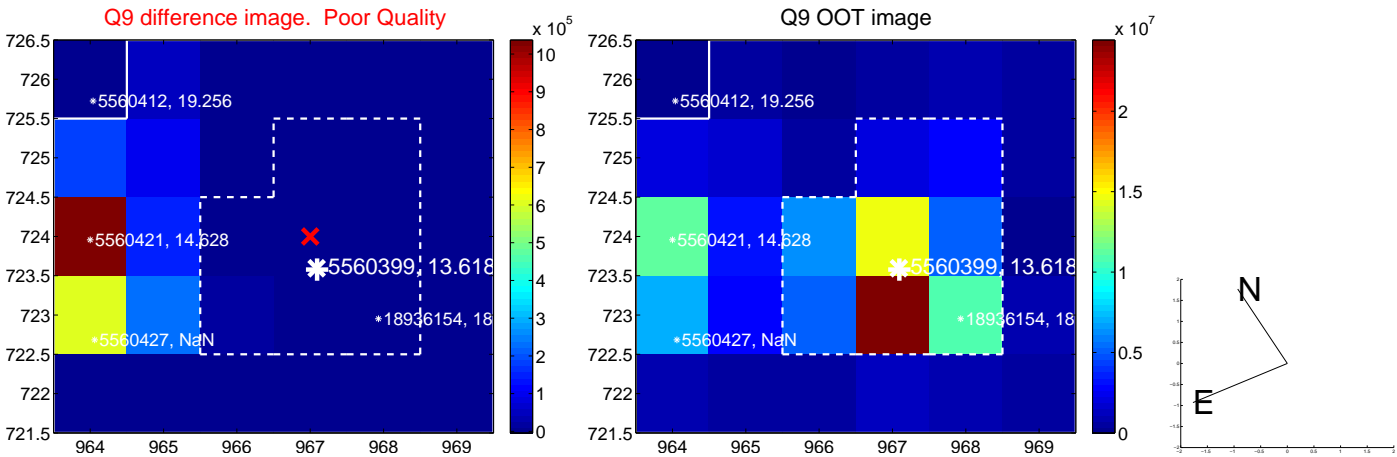
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



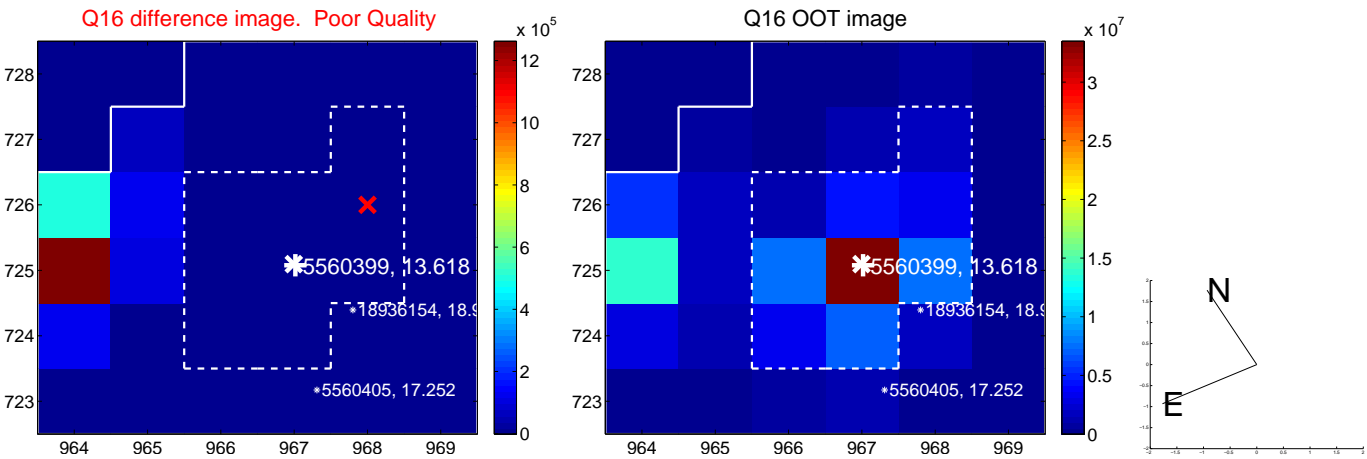
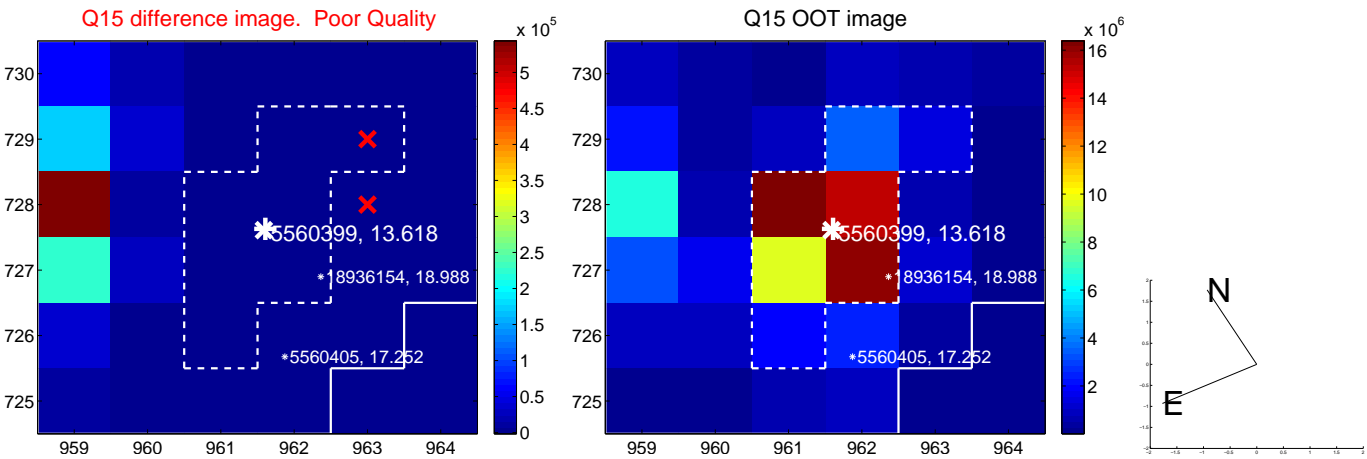
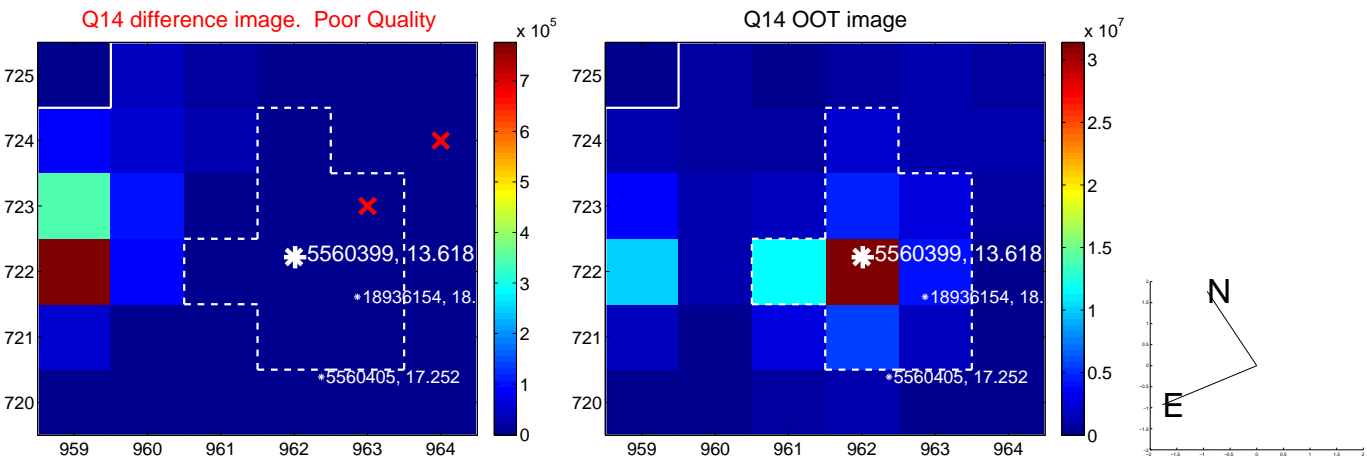
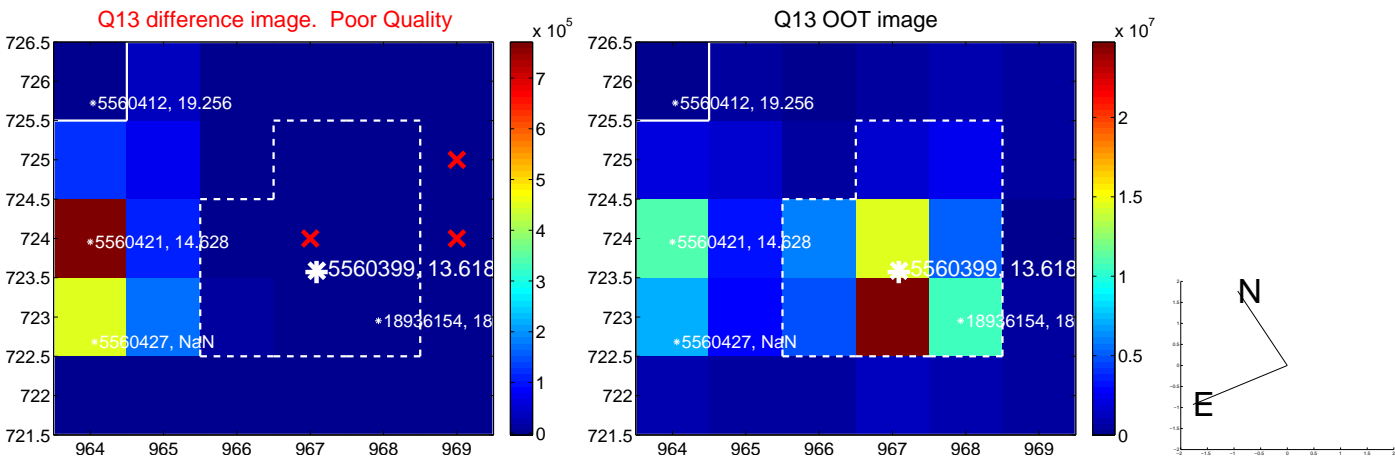
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



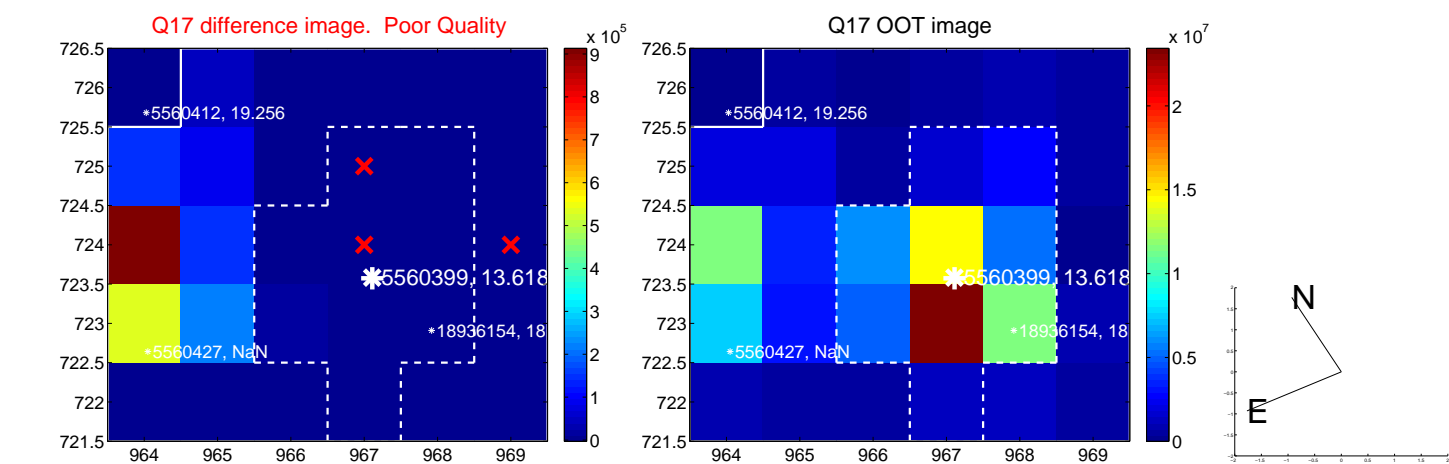
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



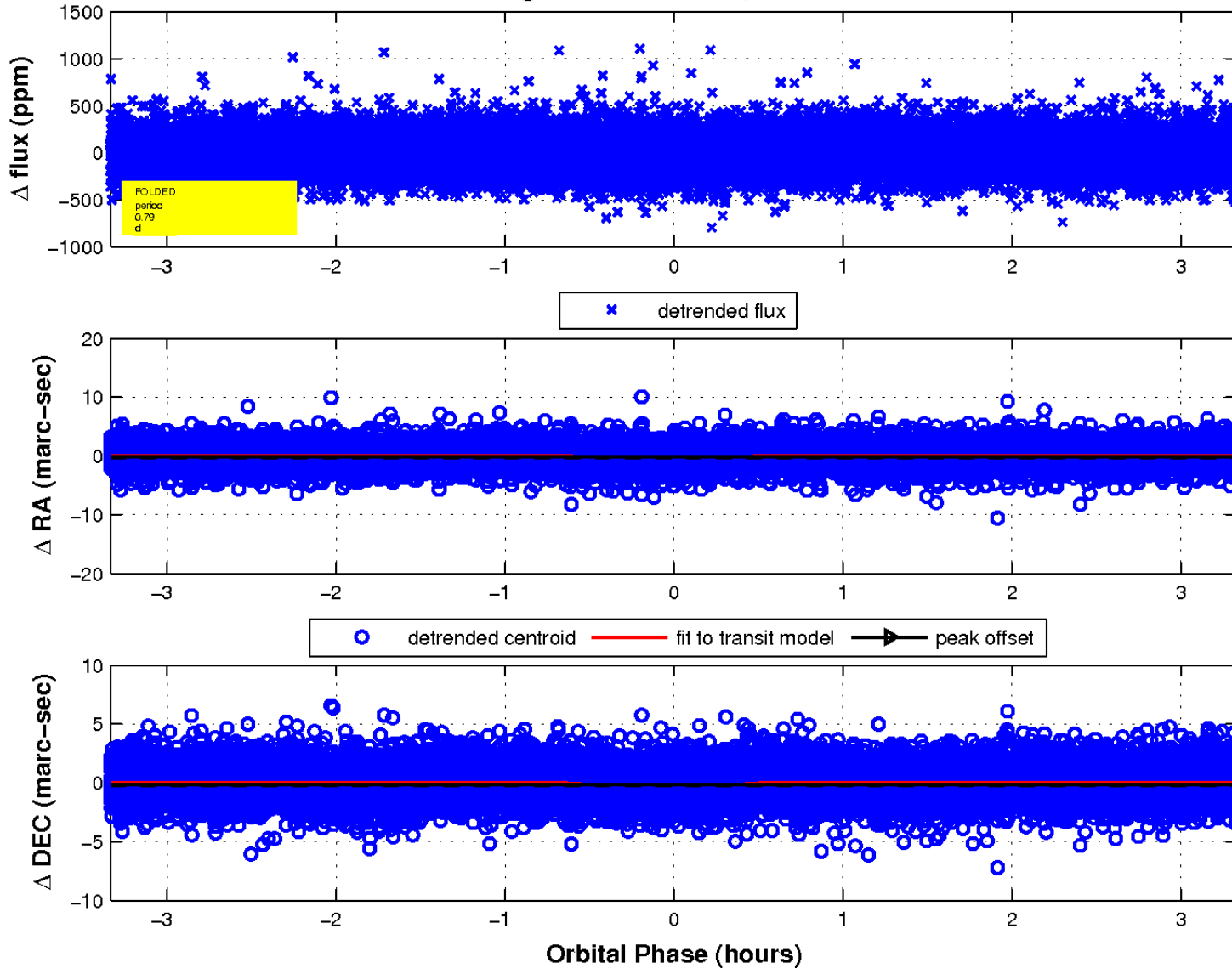
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

