

KIC 009569711

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})
009569711-01	OBS	3232.01	6.059225	133.671956	146.3	1.375	25.3	28.9	0.96	5734	1.39	214.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009569711-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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

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

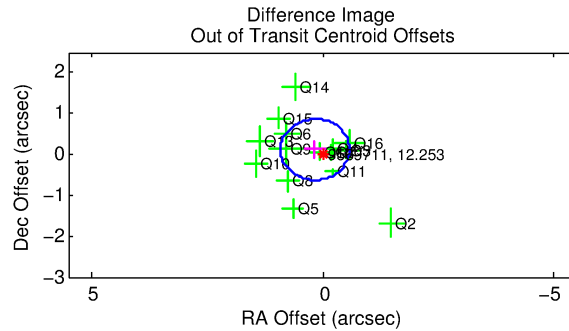
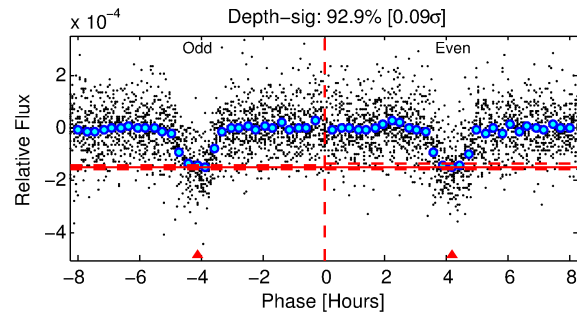
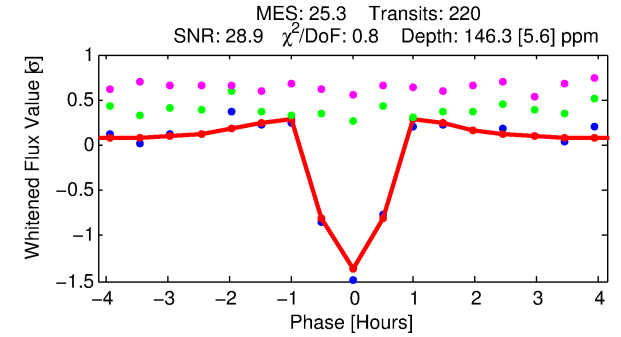
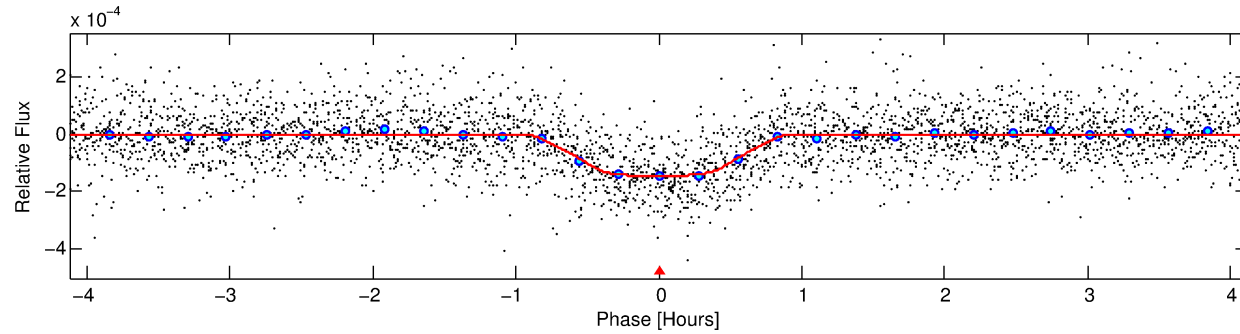
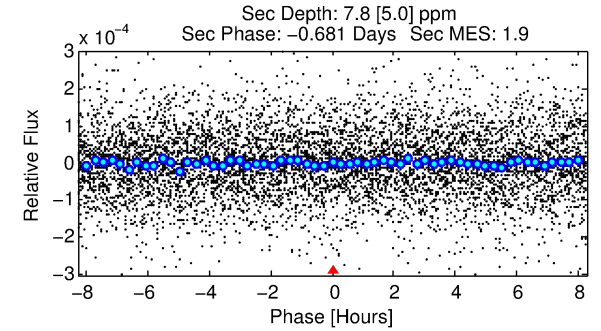
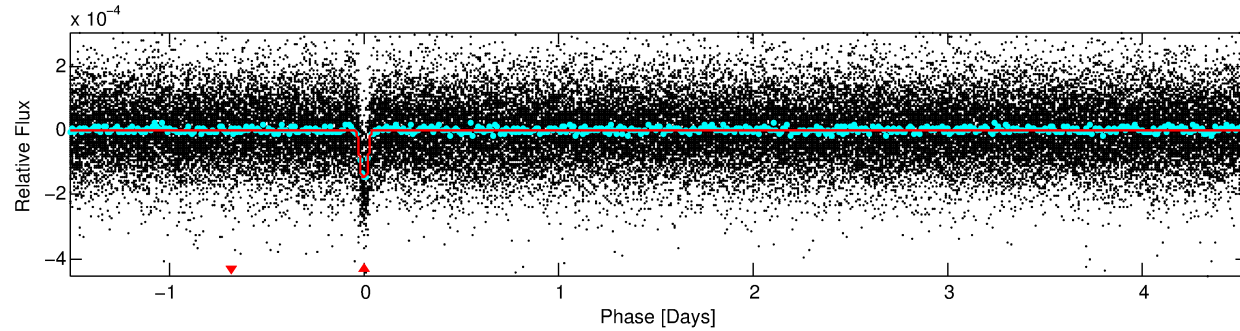
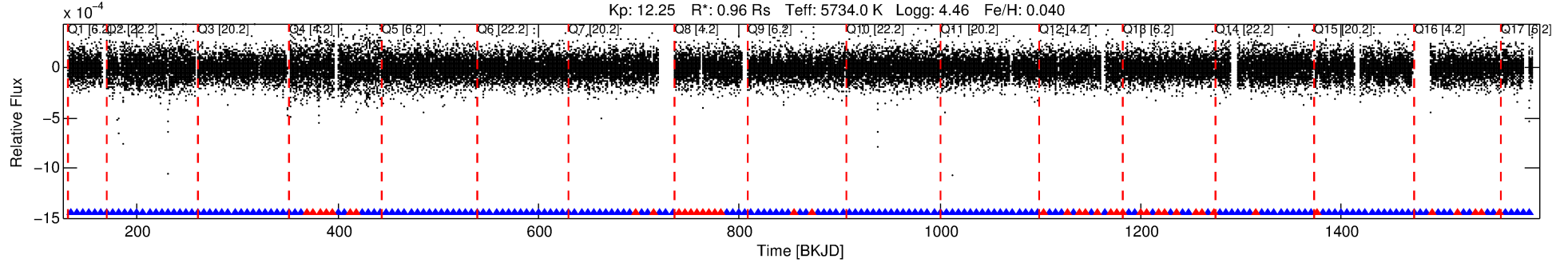
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009569711-01

No Significant Match Found

DV One-Page Summary

KIC: 9569711 Candidate: 1 of 1 Period: 6.059 d
KOI: K03232.01 Corr: 0.960



DV Fit Results:

Period = 6.05922 [0.00001] d
Epoch = 133.6720 [0.0009] BKJD
Rp/R* = 0.0133 [0.0027]
a/R* = 15.70 [14.80]
b = 0.90 [0.20]
Seff = 214.92 [47.49]
Teq = 976 [54] K
Rp = 1.39 [0.34] Re
a = 0.0646 [0.0085] AU
Ag = 9.22 [7.26] [1.13σ]
Teffp = 2630 [503] K [3.27σ]

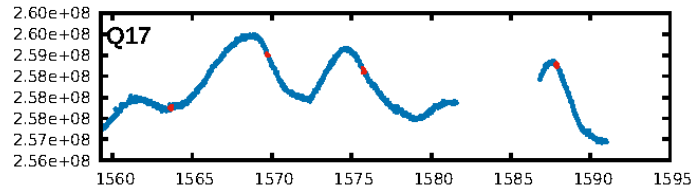
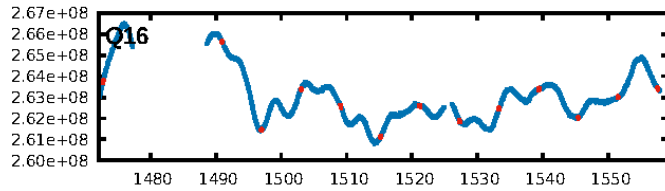
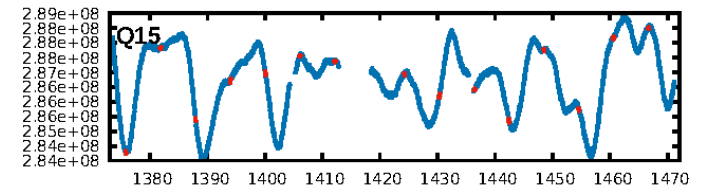
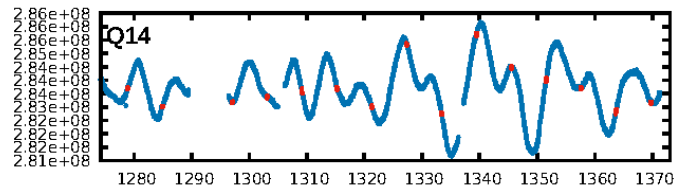
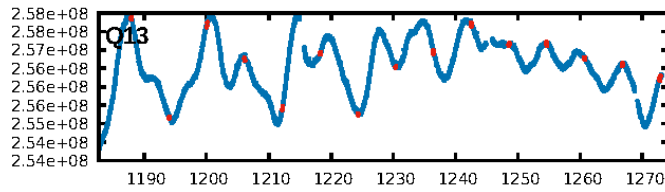
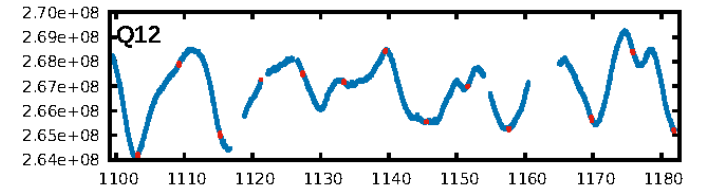
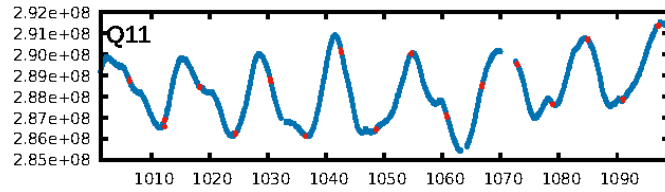
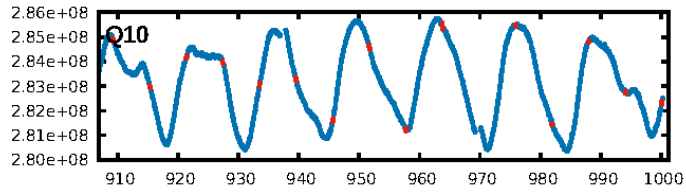
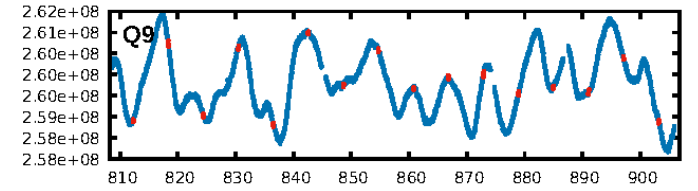
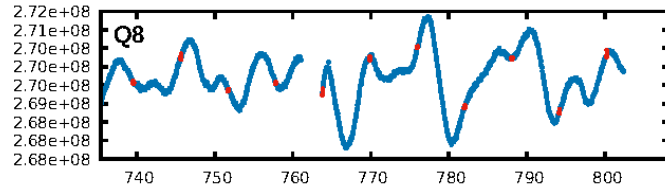
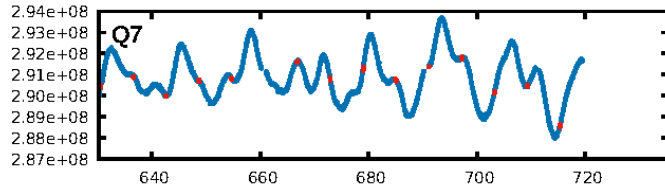
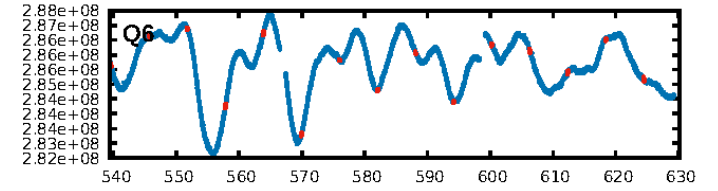
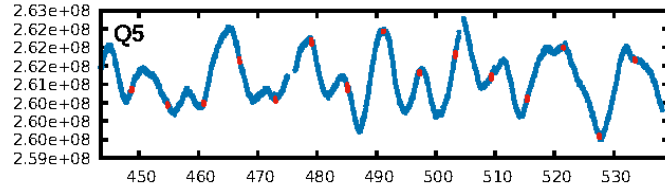
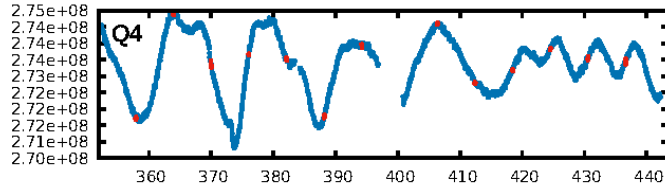
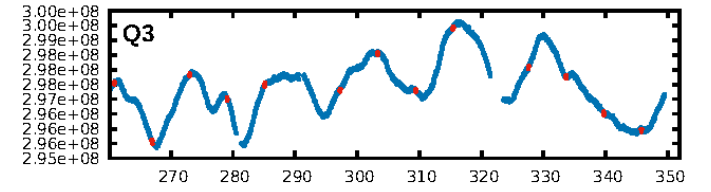
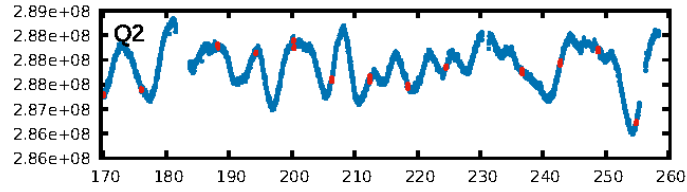
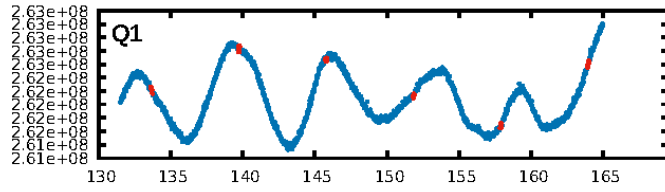
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGoF-sig: N/A
Bootstrap-pfa: 3.73e-132
RollingBand-fgt: 0.80 [168/210]
GhostDiagnostic-chr: 1.483
Centroid-sig: 29.6%
Centroid-so: 0.393 arcsec [1.02σ]
OotOffset-rm: 0.206 arcsec [0.83σ]
KicOffset-rm: 0.136 arcsec [0.68σ]
OotOffset-st: 4/4/4/3 [15]
KicOffset-st: 4/4/4/3 [15]
DiffImageQuality-fgm: 1.00 [15/15]
DiffImageOverlap-fno: 1.00 [17/17]

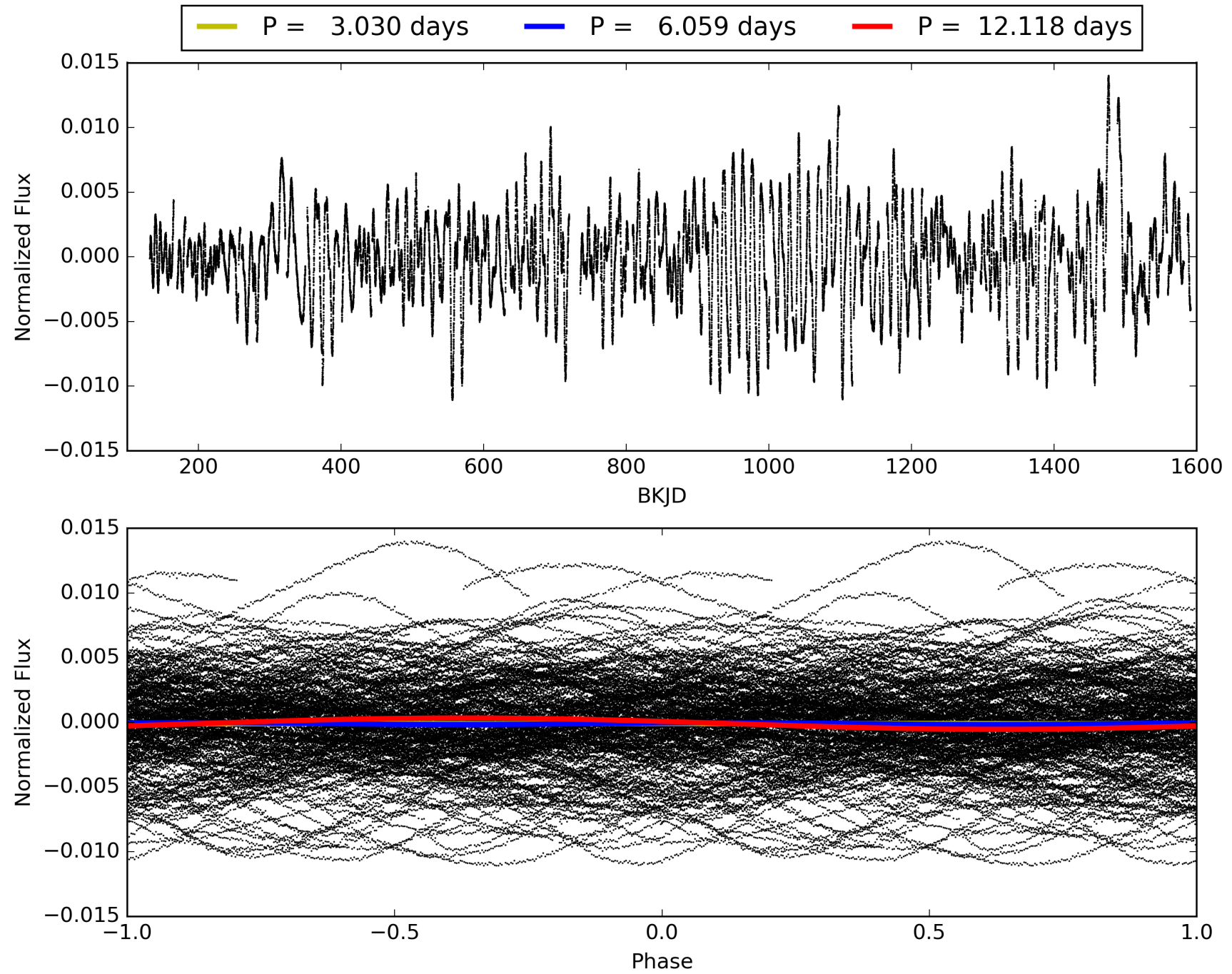
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 23:45:32 Z

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

TCE 009569711-01, PDC Light Curves

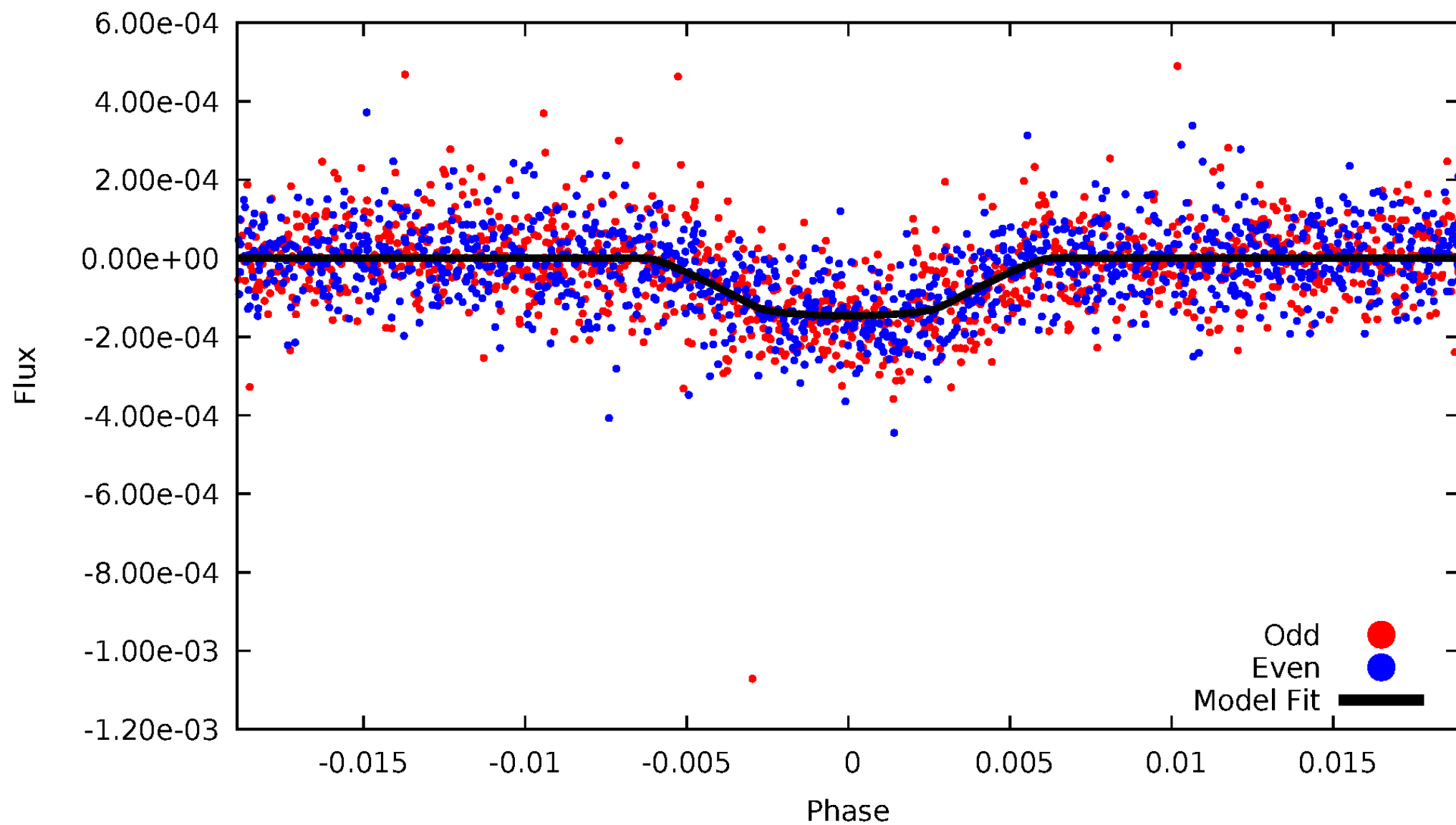


TCE 009569711-01



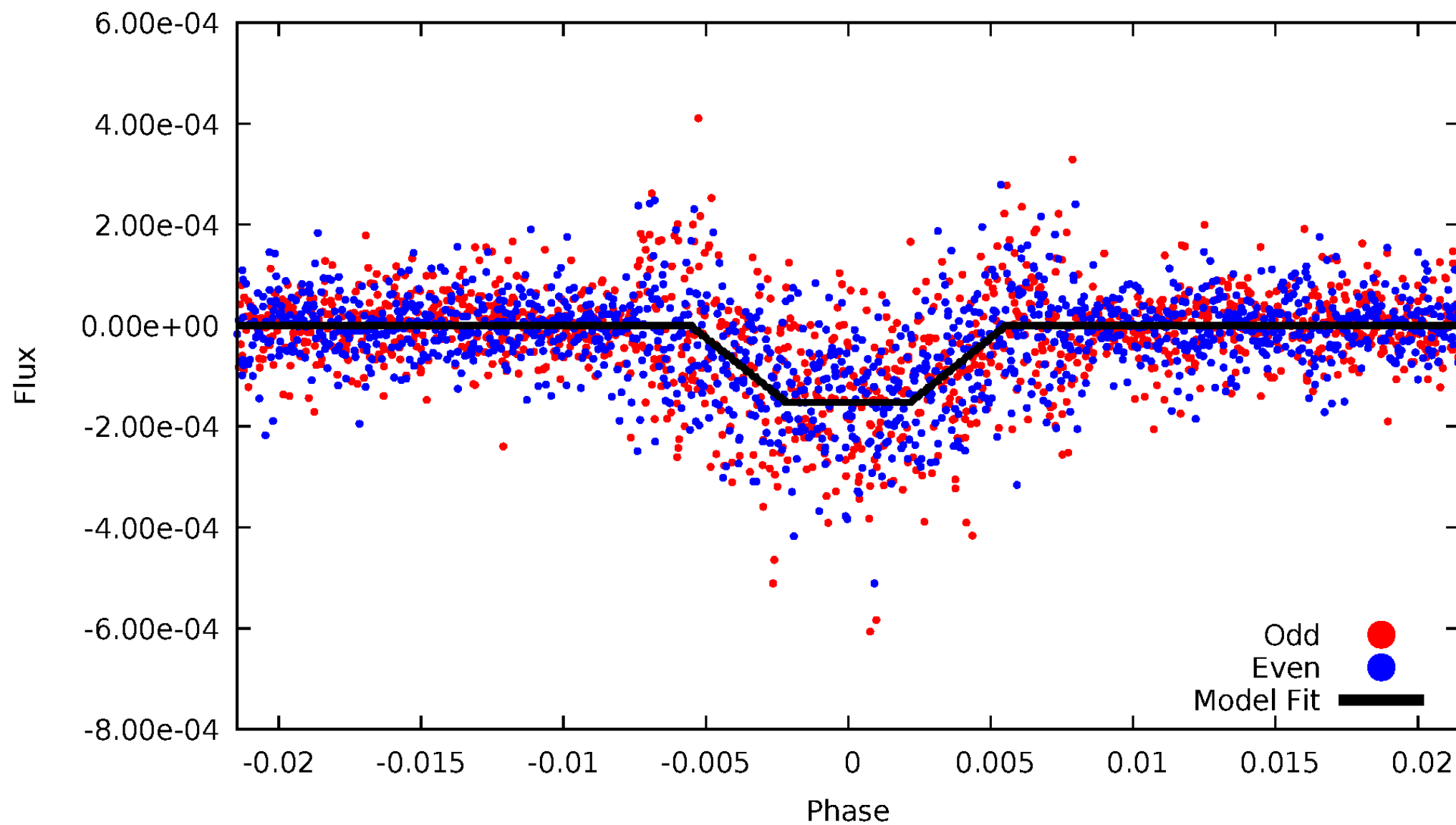
DV Odd/Even

TCE 009569711-01



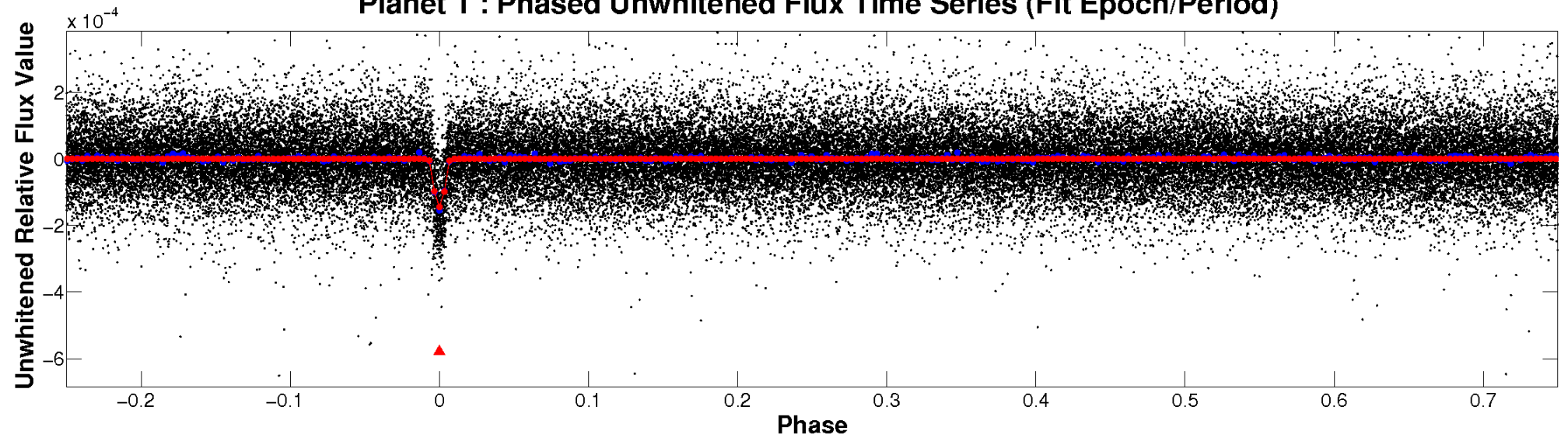
ALT Odd/Even

TCE 009569711-01

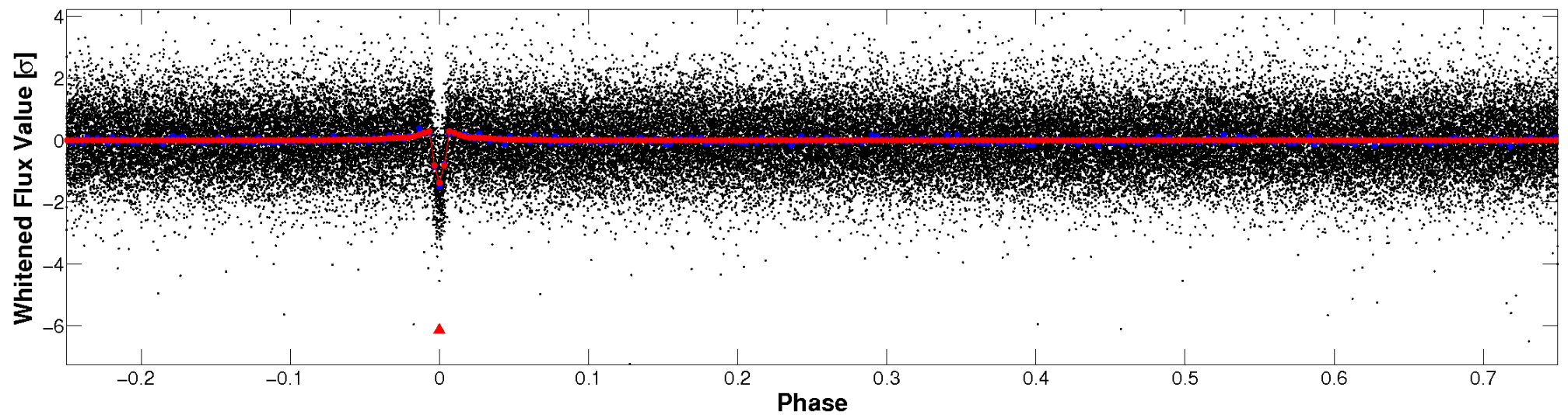


Non-Whitened Vs. Whitened Light Curve

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

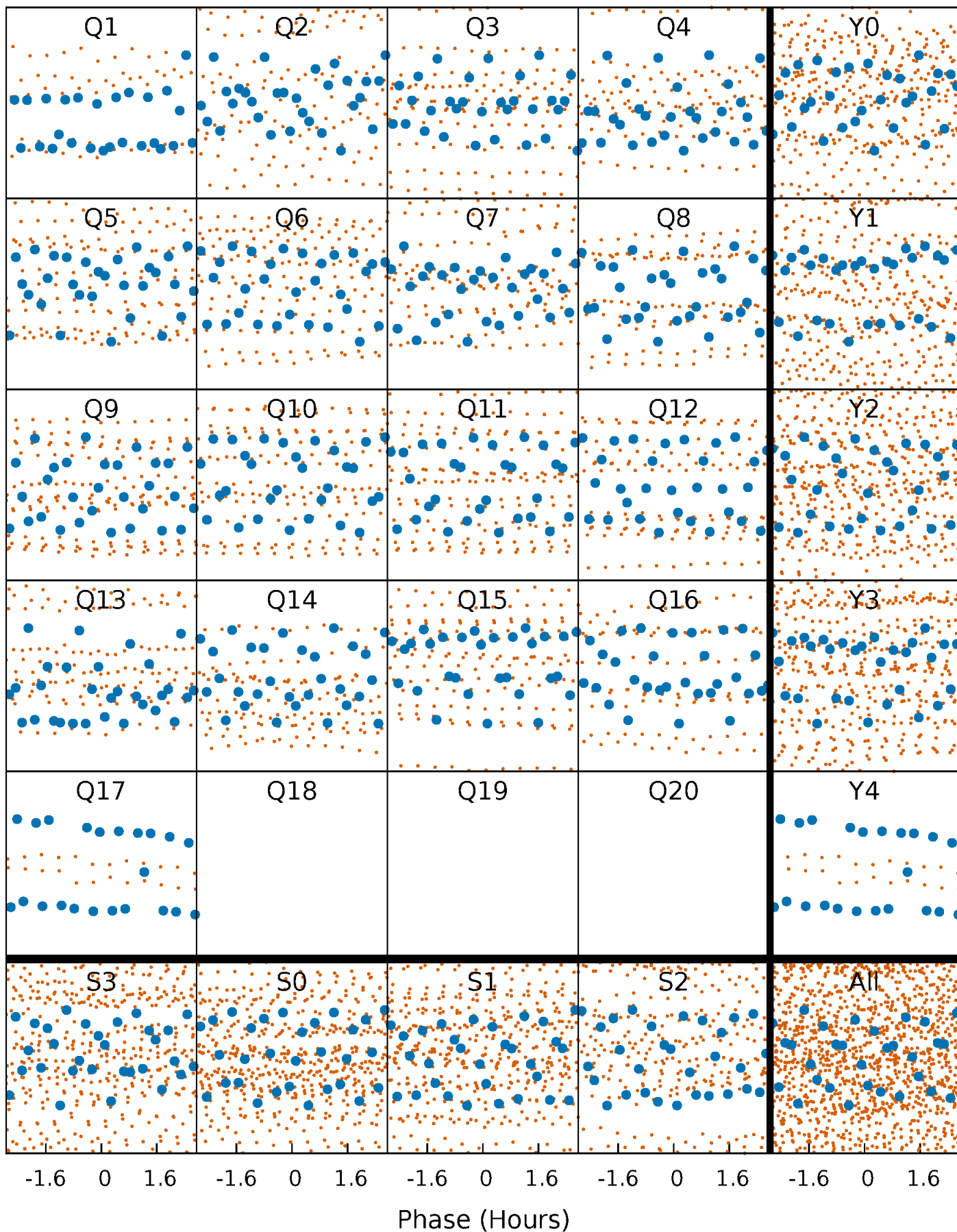


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



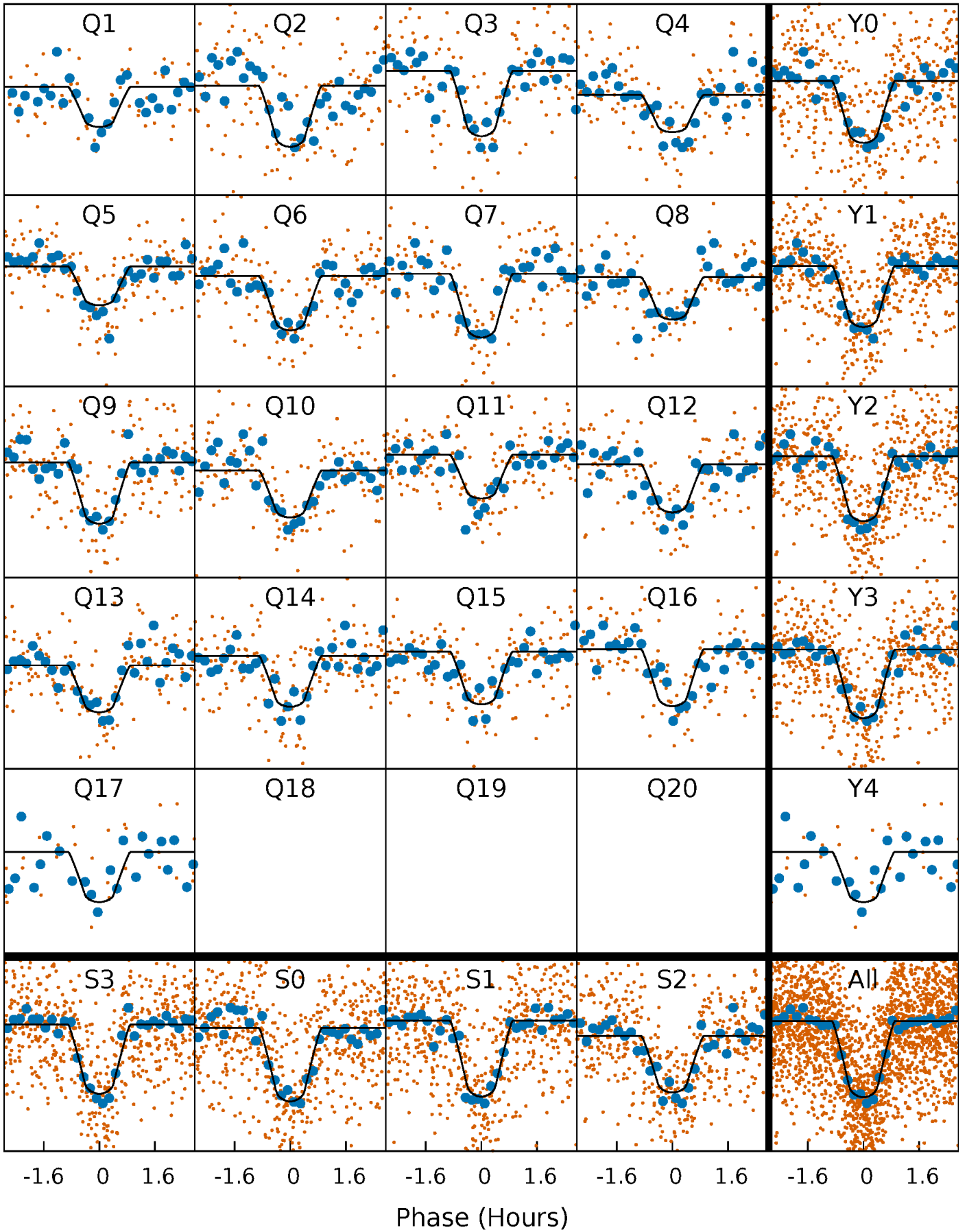
PDC Quarter-Phased Transit Curves

TCE 009569711-01 P= 6.059225 Days $T_0=133.671956$ (BKJD)



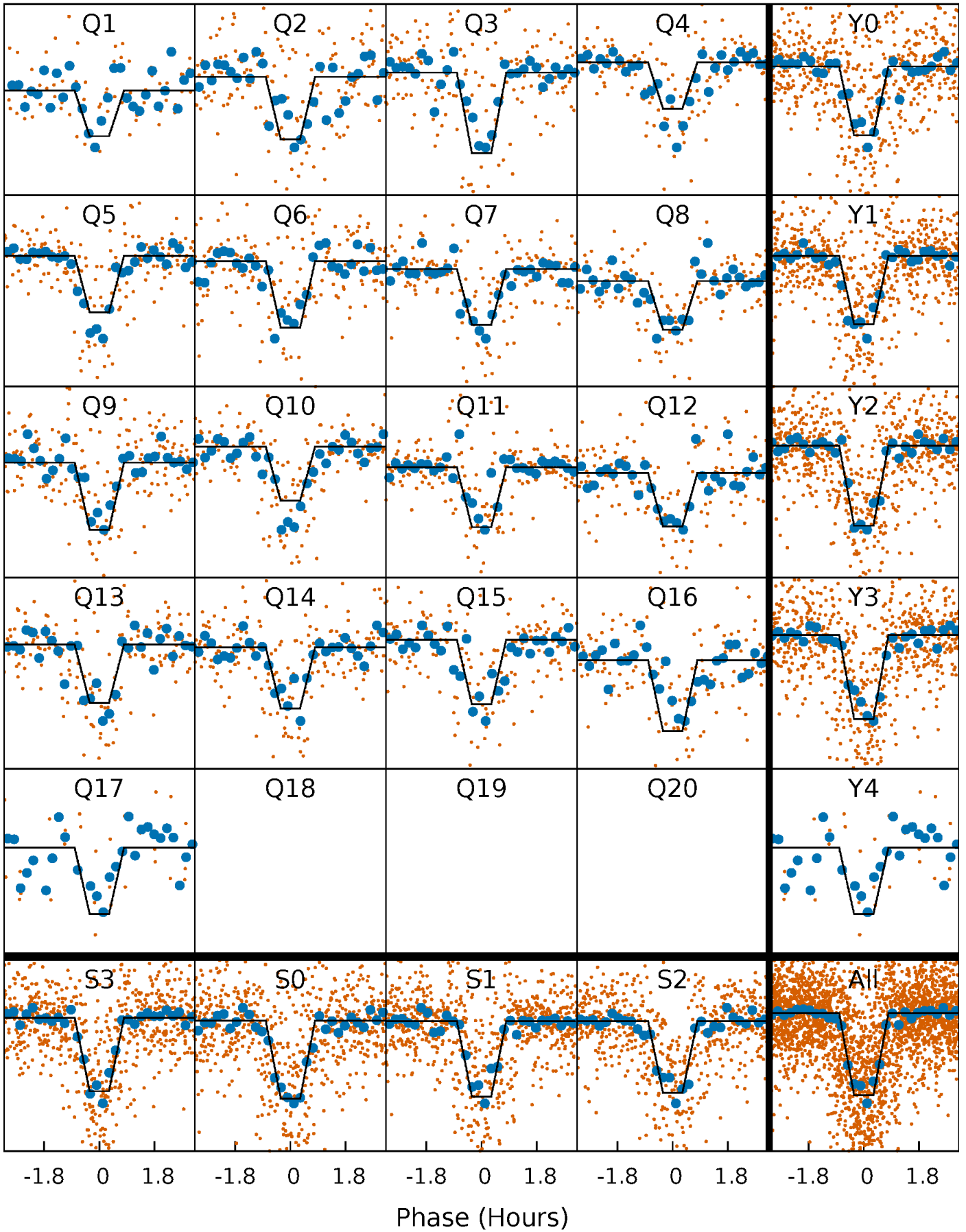
DV Quarter-Phased Transit Curves

TCE 009569711-01 P= 6.059225 Days $T_0=133.671956$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

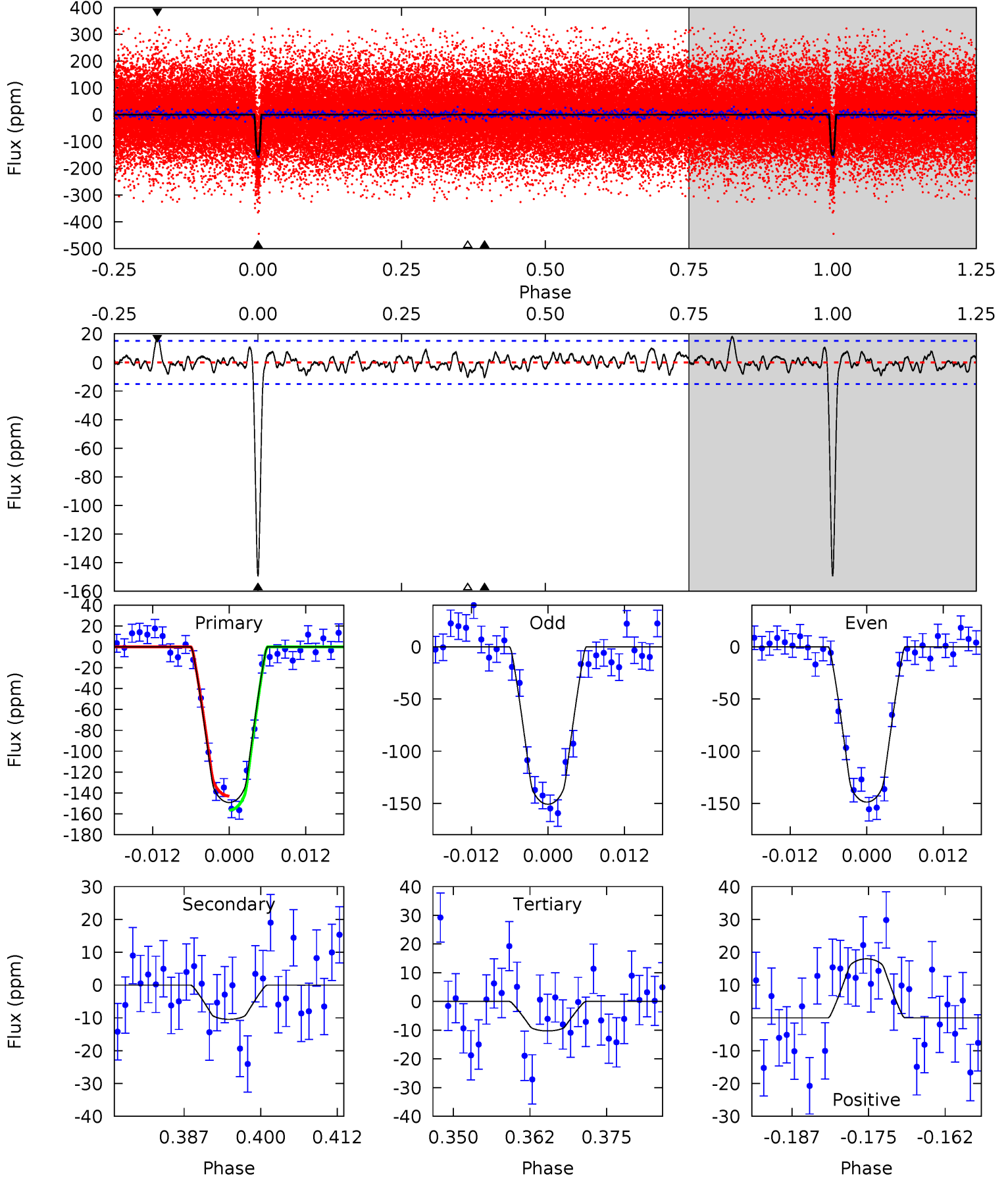
TCE 009569711-01 P= 6.059186 Days $T_0=133.677289$ (BKJD)



DV Model-Shift Uniqueness Test

009569711-01, P = 6.059225 Days, E = 127.612731 Days

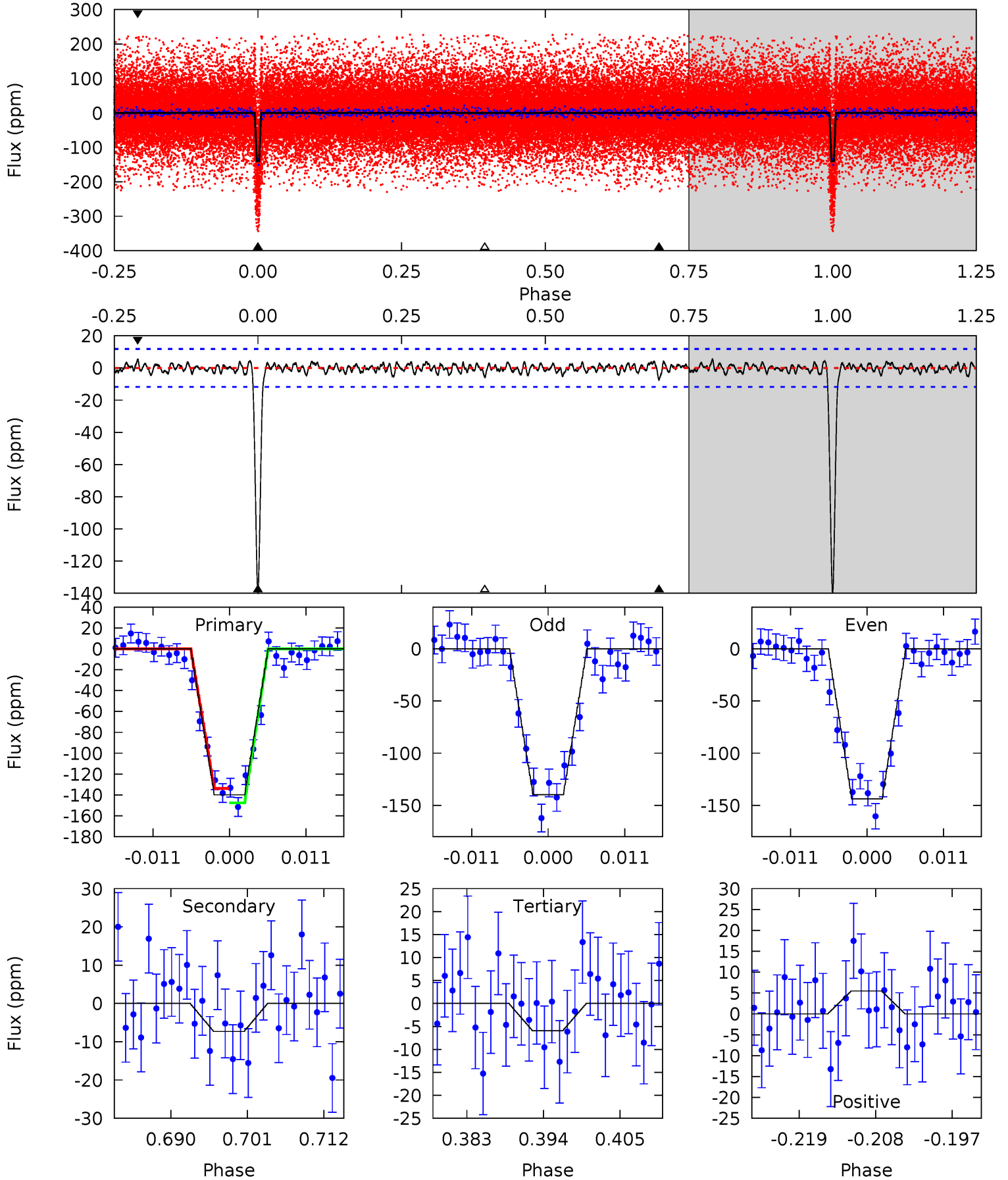
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
49.3	3.45	3.39	5.94	4.98	2.50	1.35	45.9	43.4	0.06	-2.49	0.34	0.98	0.11	2.23



Alt Model-Shift Uniqueness Test

009569711-01, P = 6.059186 Days, E = 127.618103 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
59.5	3.12	2.52	2.33	5.01	2.54	0.83	57.0	57.2	0.60	0.78	0.85	1.09	0.04	2.92



Stellar Parameters For KIC 009569711

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5734^{+104}_{-115}	$4.462^{+0.051}_{-0.119}$	$0.040^{+0.150}_{-0.150}$	$0.962^{+0.137}_{-0.074}$	$0.977^{+0.062}_{-0.068}$	$1.547^{+0.359}_{-0.497}$
	+2%/-2%	+1%/-3%	+375%/-375%	+14%/-8%	+6%/-7%	+23%/-32%
Source	SPE59	SPE59	SPE59	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 009569711-01 / KOI 3232.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-10 ± 3	$1.42^{+0.30}_{-0.28}$	1375^{+56}_{-42}	3338^{+276}_{-258}	12^{+8}_{-5}
Alt.	-7 ± 2	$1.33^{+0.32}_{-0.30}$	1375^{+56}_{-43}	3223^{+320}_{-260}	$9.290^{+7.194}_{-4.000}$

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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

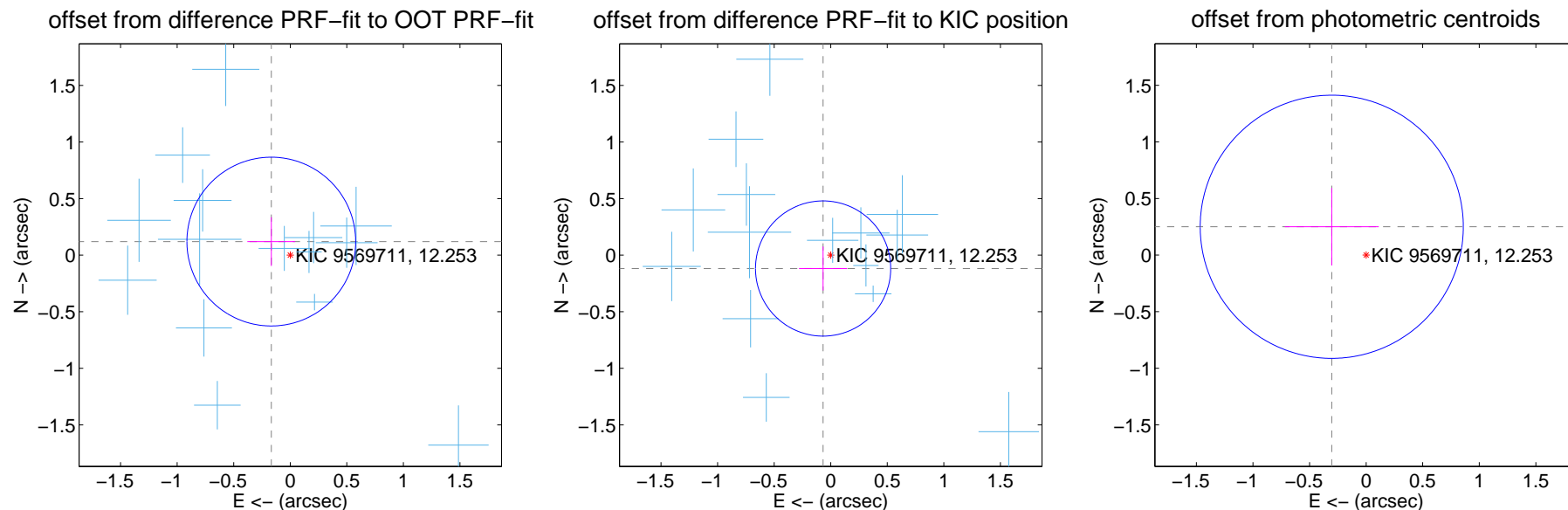
DV Centroid Data

Supplemental centroid analysis for 009569711-01. Kepler magnitude: 12.25. Transit SNR 28.94

There are 15 quarters with good PRF difference image offsets

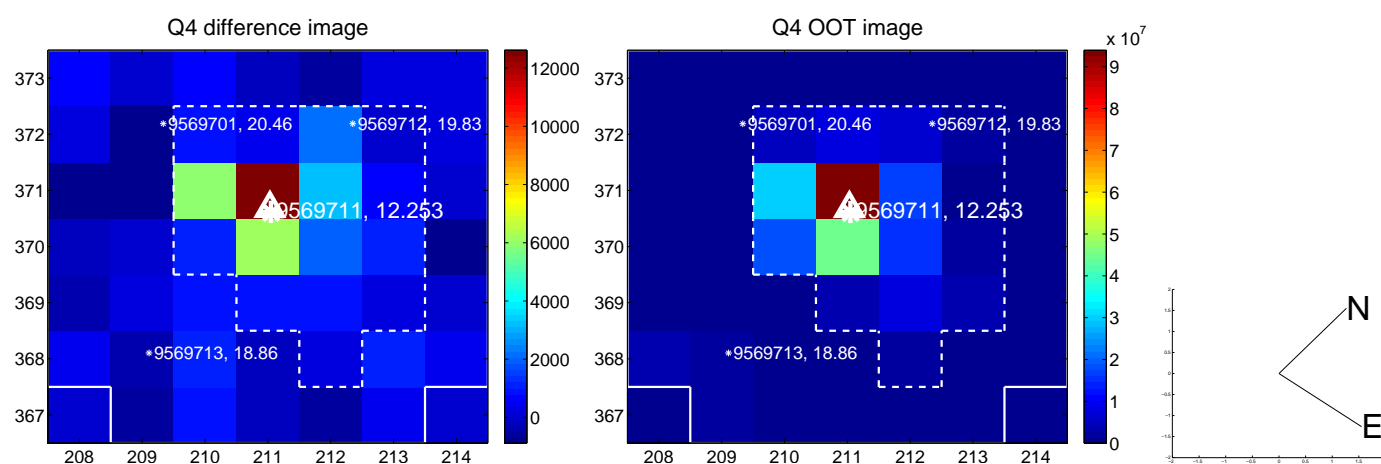
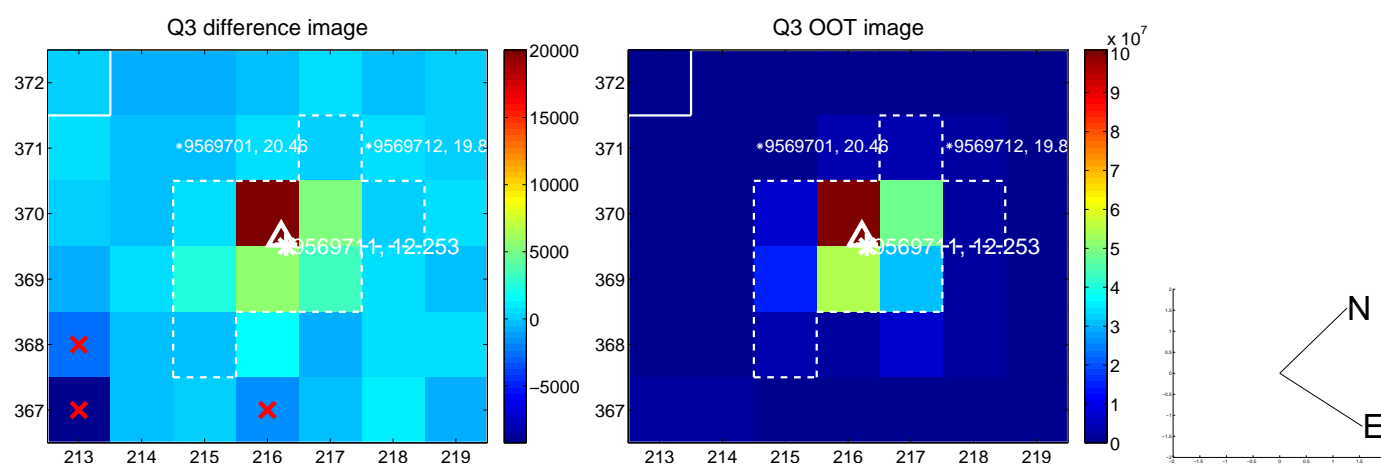
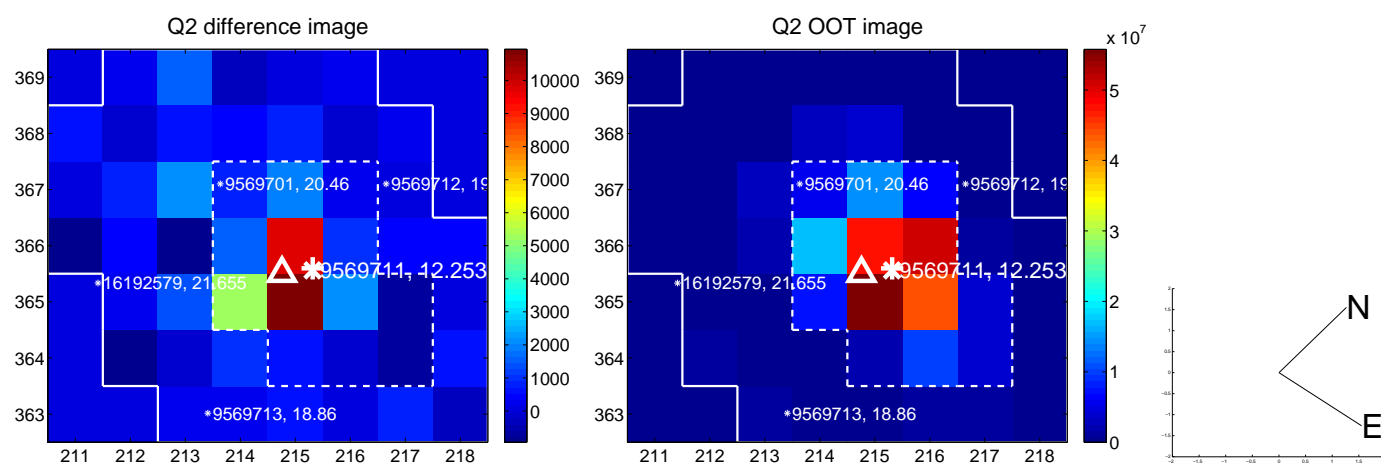
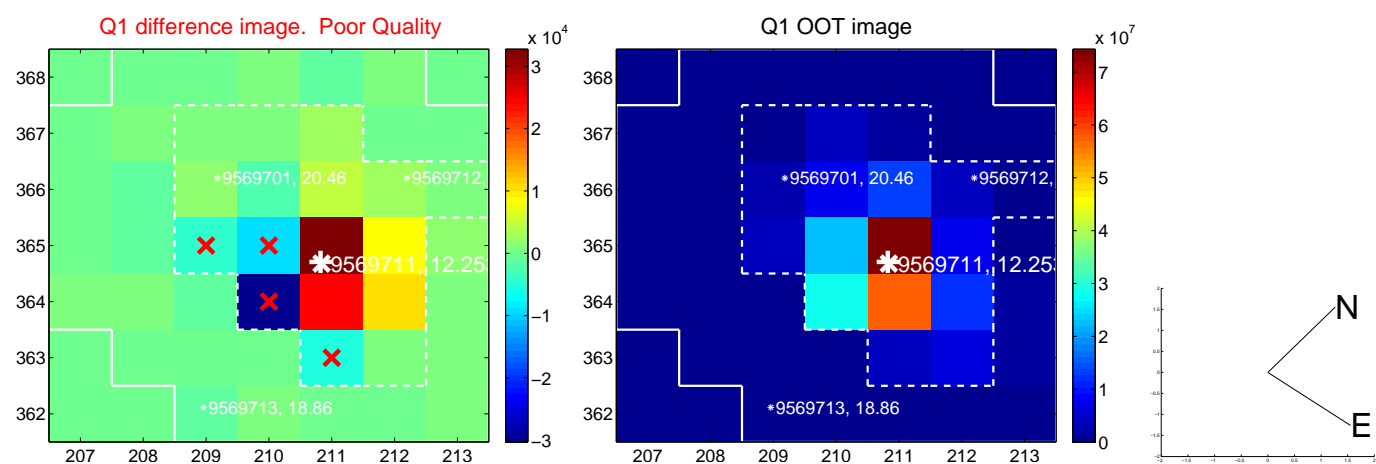
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.206 ± 0.249	0.83	0.168 ± 0.212	0.120 ± 0.216
PRF-fit source offset from KIC position	0.136 ± 0.199	0.68	0.067 ± 0.213	-0.118 ± 0.194
photometric centroid source offset	0.39 ± 0.39	1.02	0.30 ± 0.42	0.25 ± 0.34

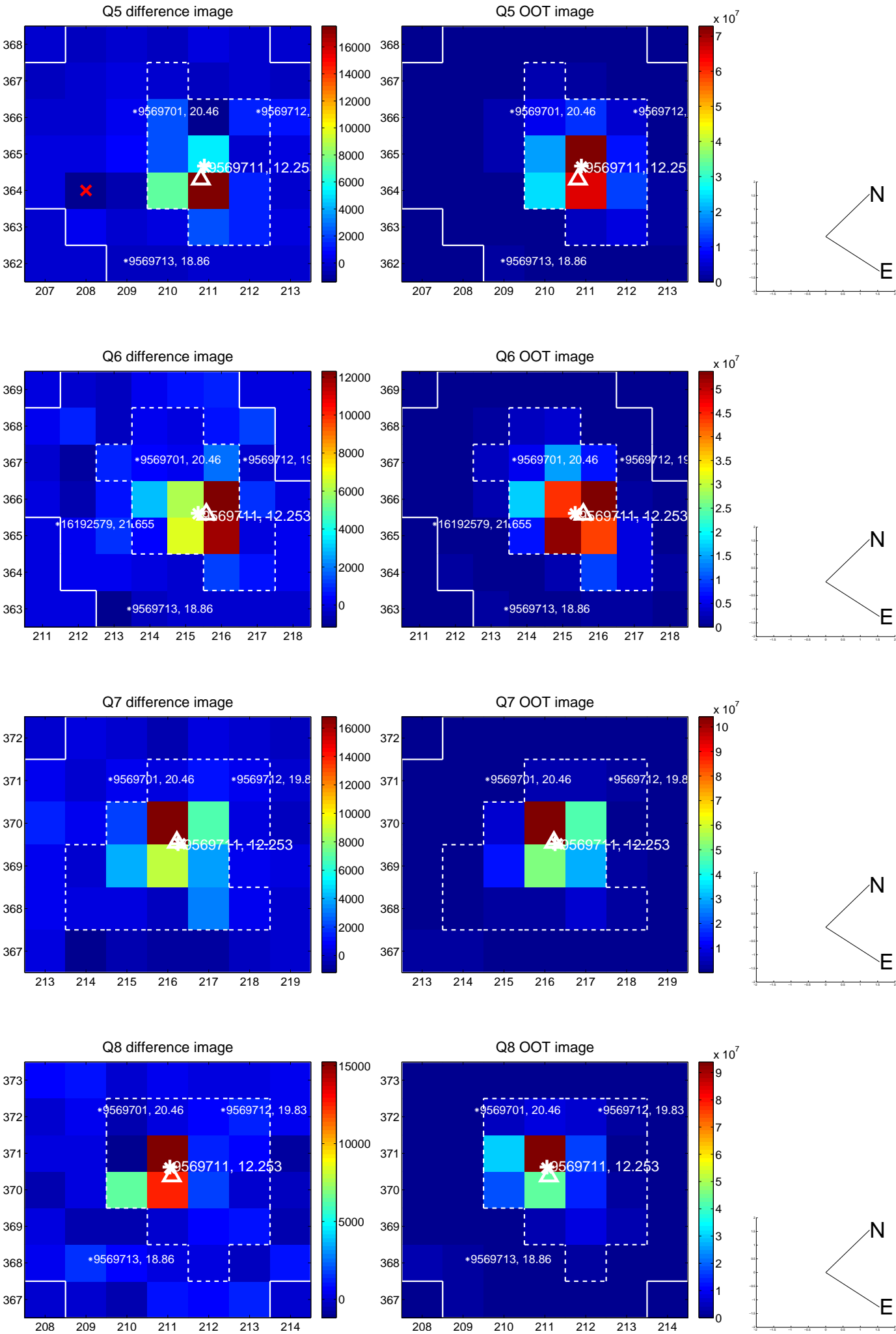


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

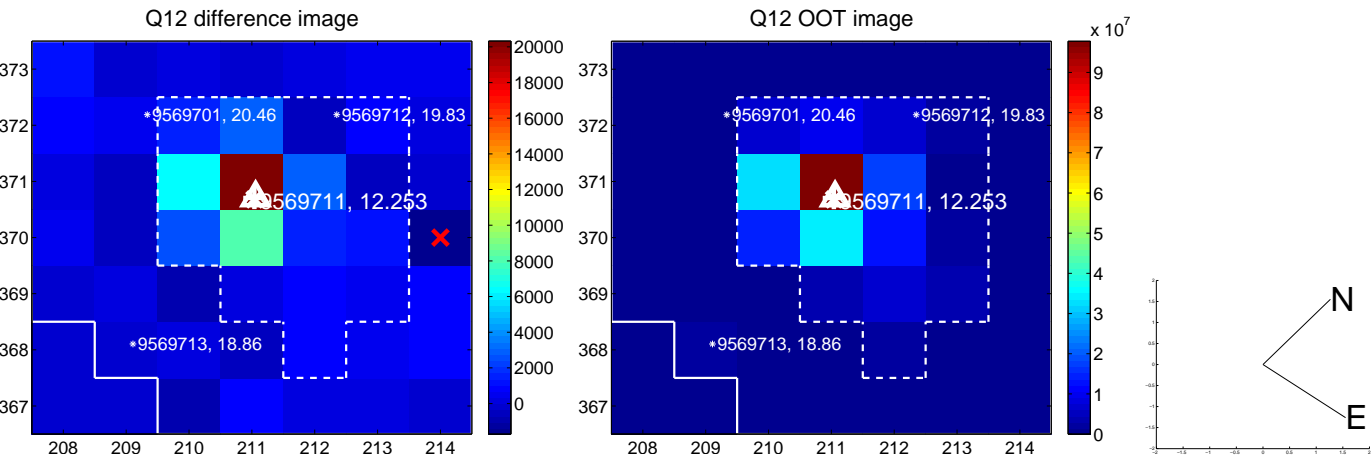
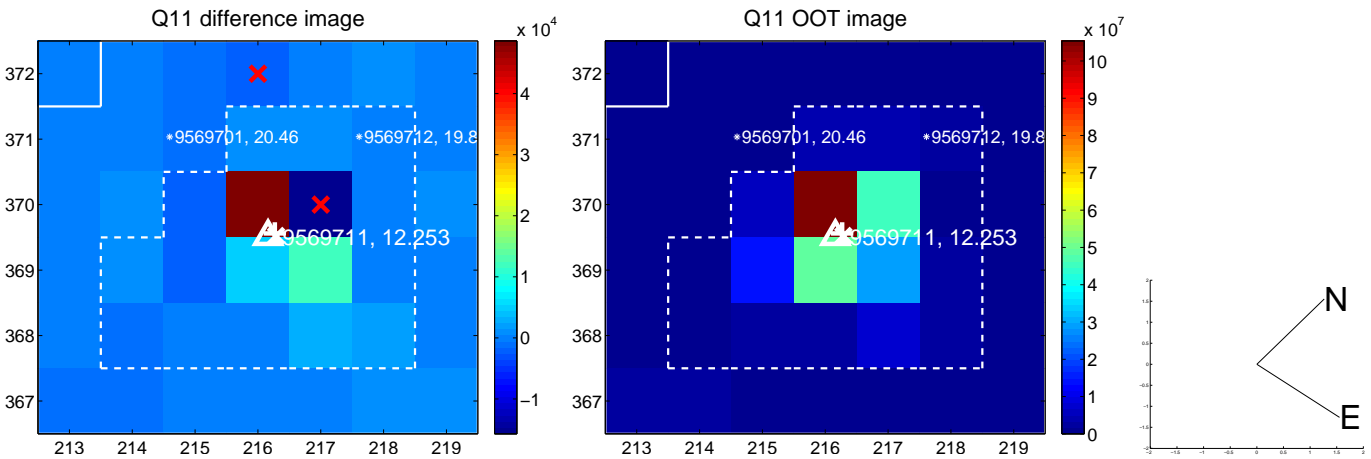
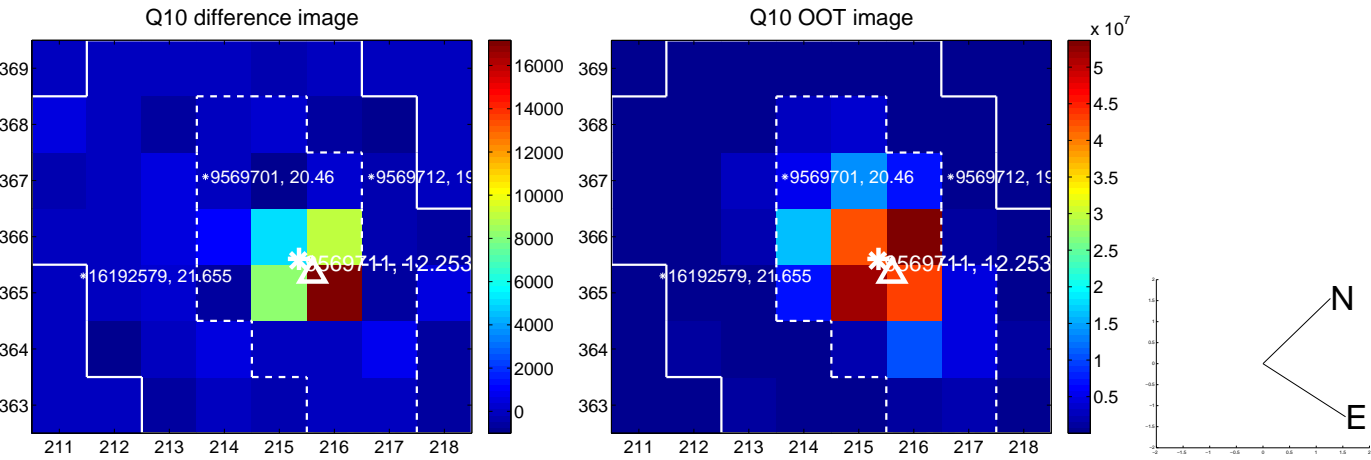
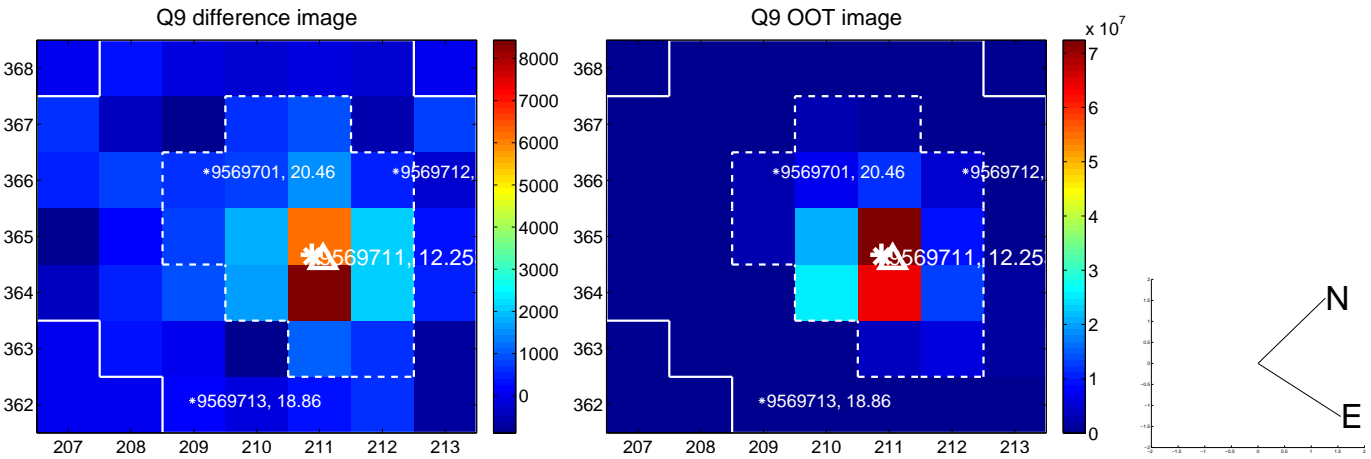
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



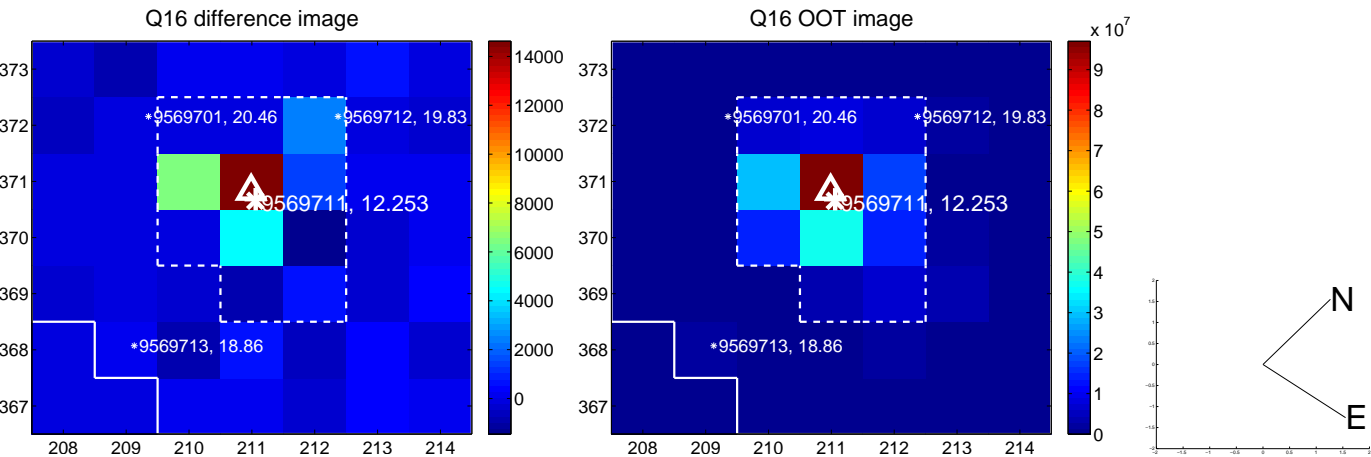
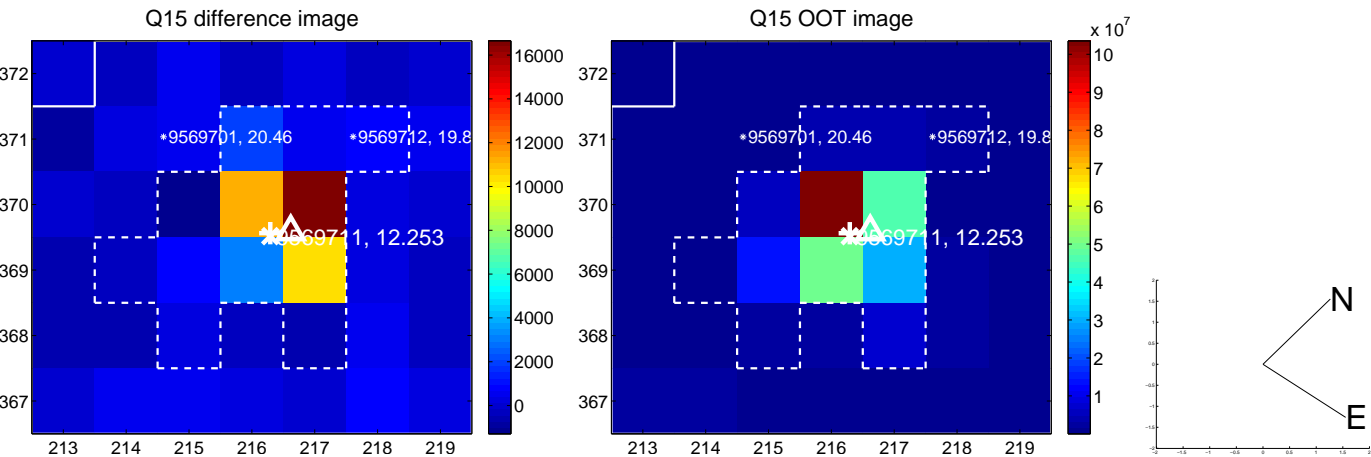
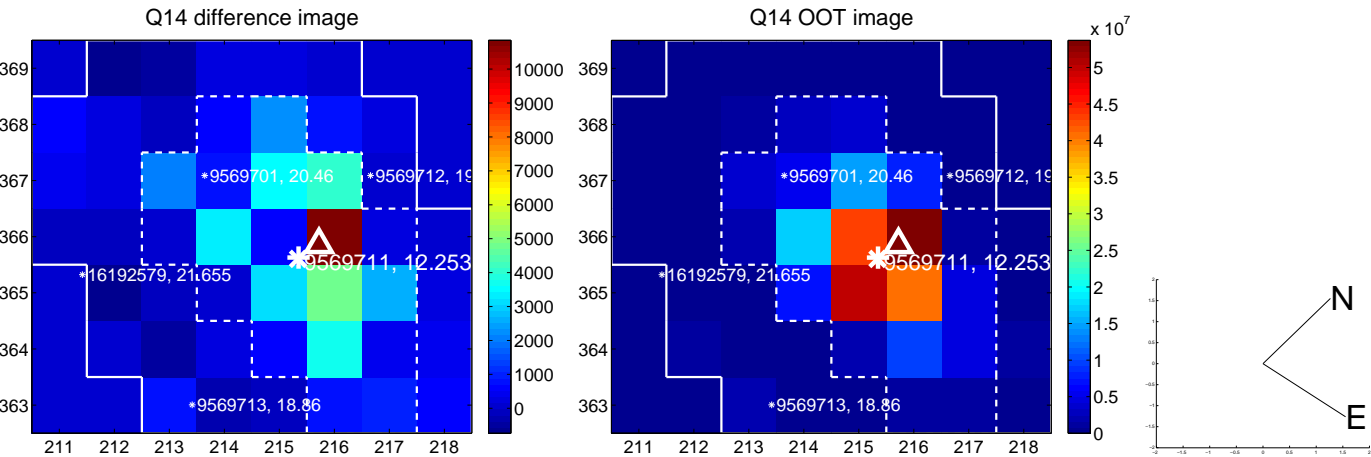
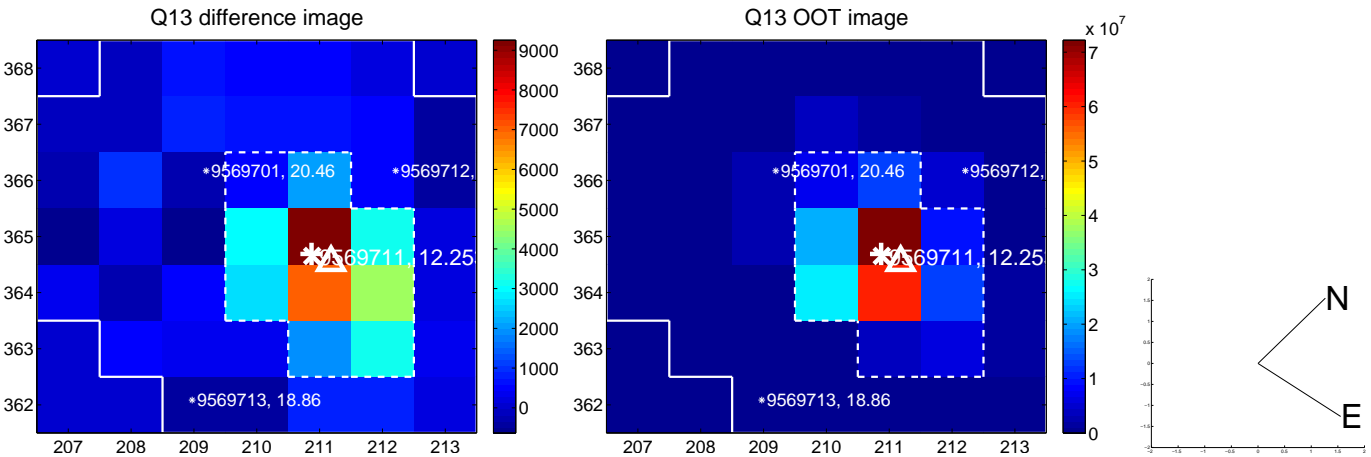
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



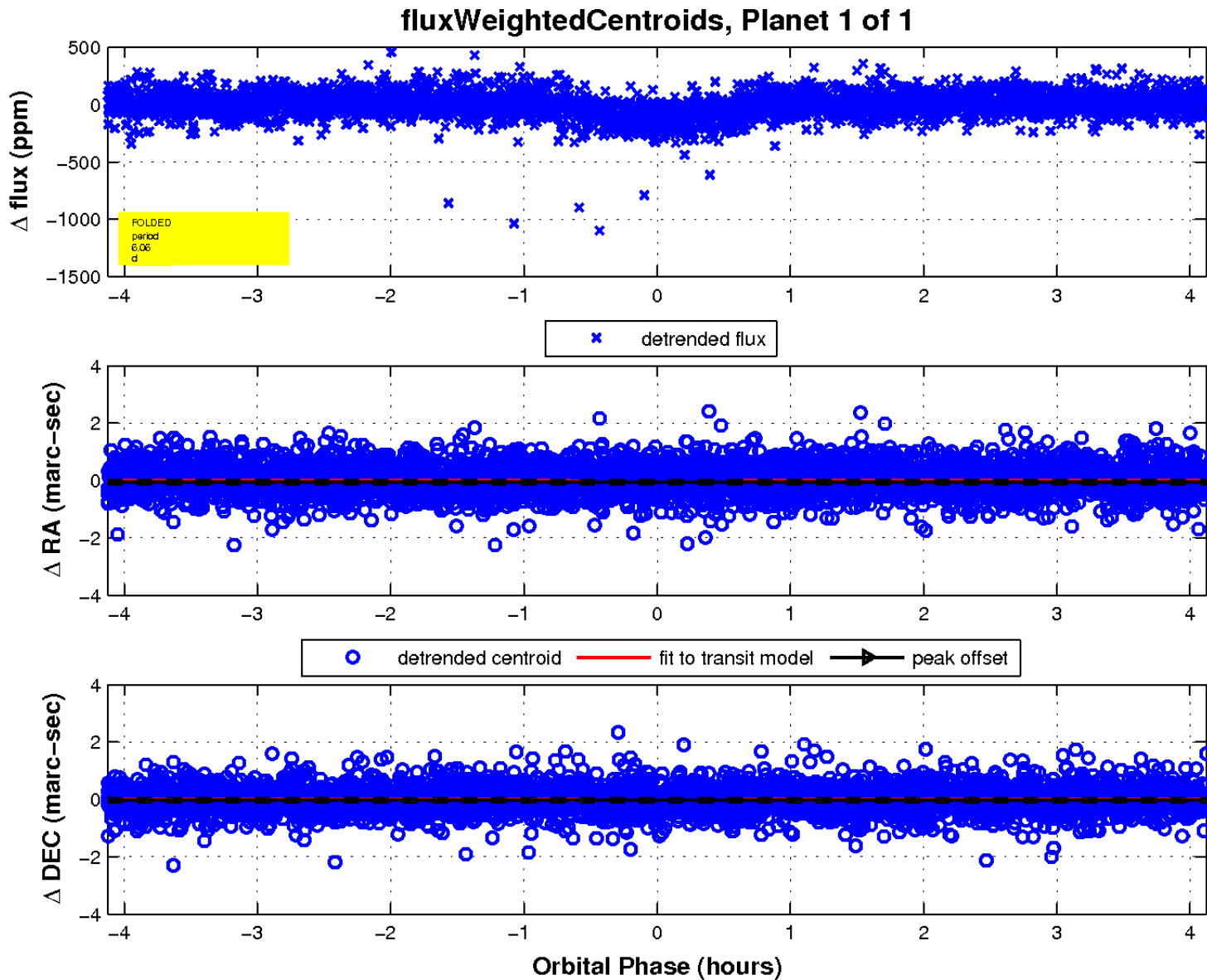
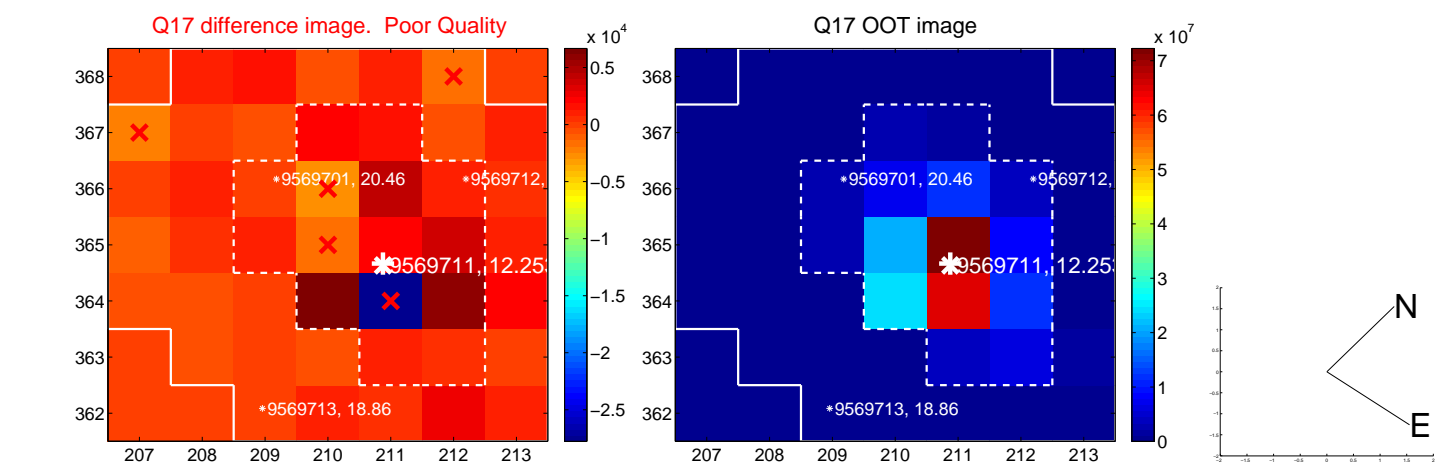
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

