

KIC 011905562

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})
011905562-01	OBS	No	0.856731	132.044421	11.5	3.292	9.0	5.8	1.59	6215	0.69	8943.24

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011905562-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—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.

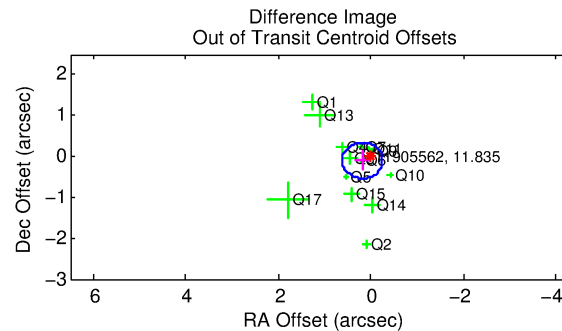
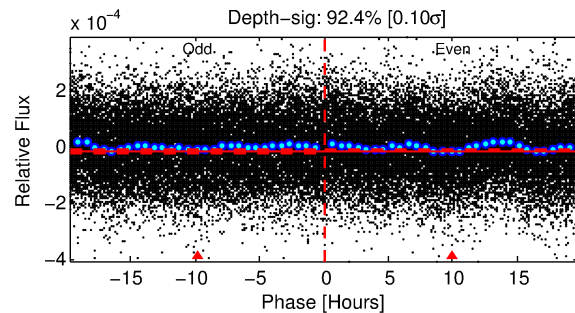
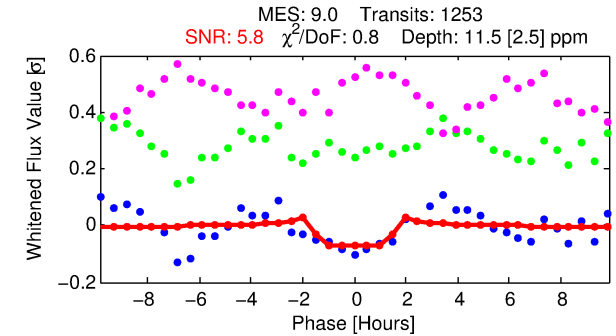
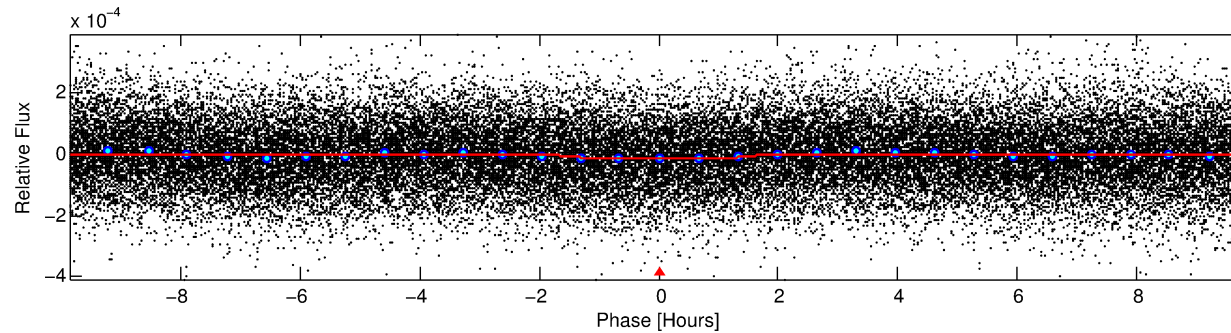
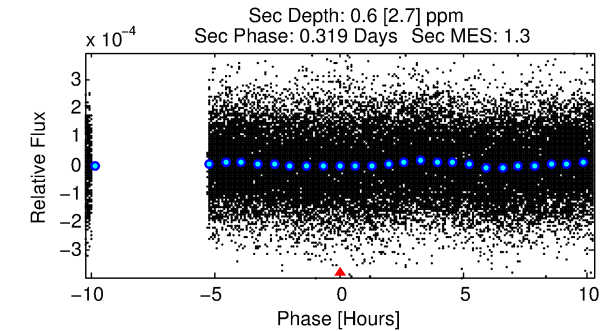
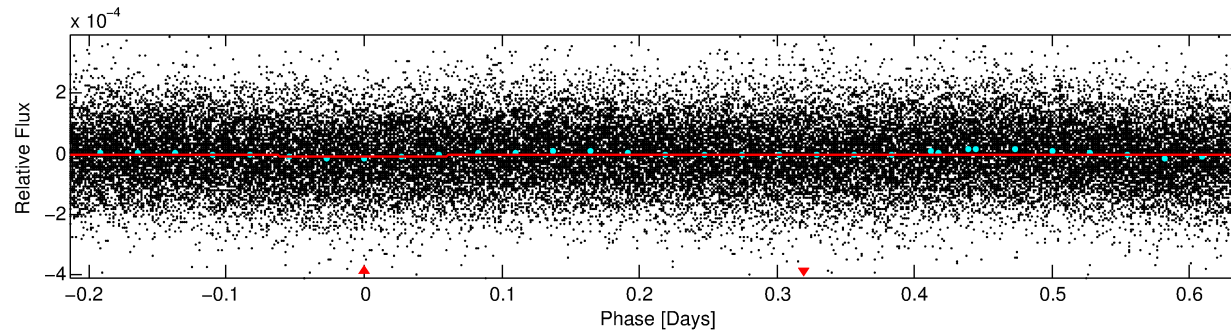
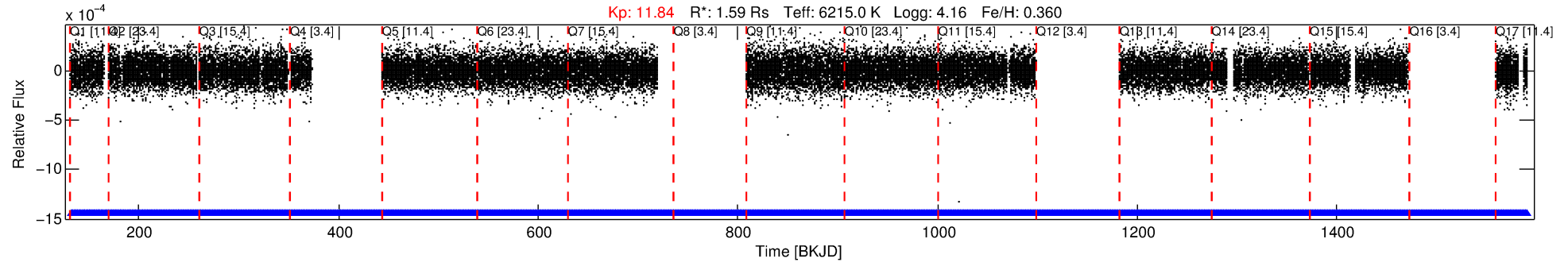
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011905562-01

No Significant Match Found

DV One-Page Summary

KIC: 11905562 Candidate: 1 of 1 Period: 0.857 d



DV Fit Results:

Period = 0.85673 [0.00002] d
Epoch = 132.0444 [0.0045] BKJD
Rp/R* = 0.0040 [0.0017]
a/R* = 1.13 [0.58]
b = 0.96 [0.18]
Seff = 8943.24 [3451.53]
Teq = 2480 [239] K
Rp = 0.69 [0.37] Re
a = 0.0195 [0.0049] AU
Ag = 0.24 [1.20] [-0.63σ]
Teffp = 2694 [3311] K [0.06σ]

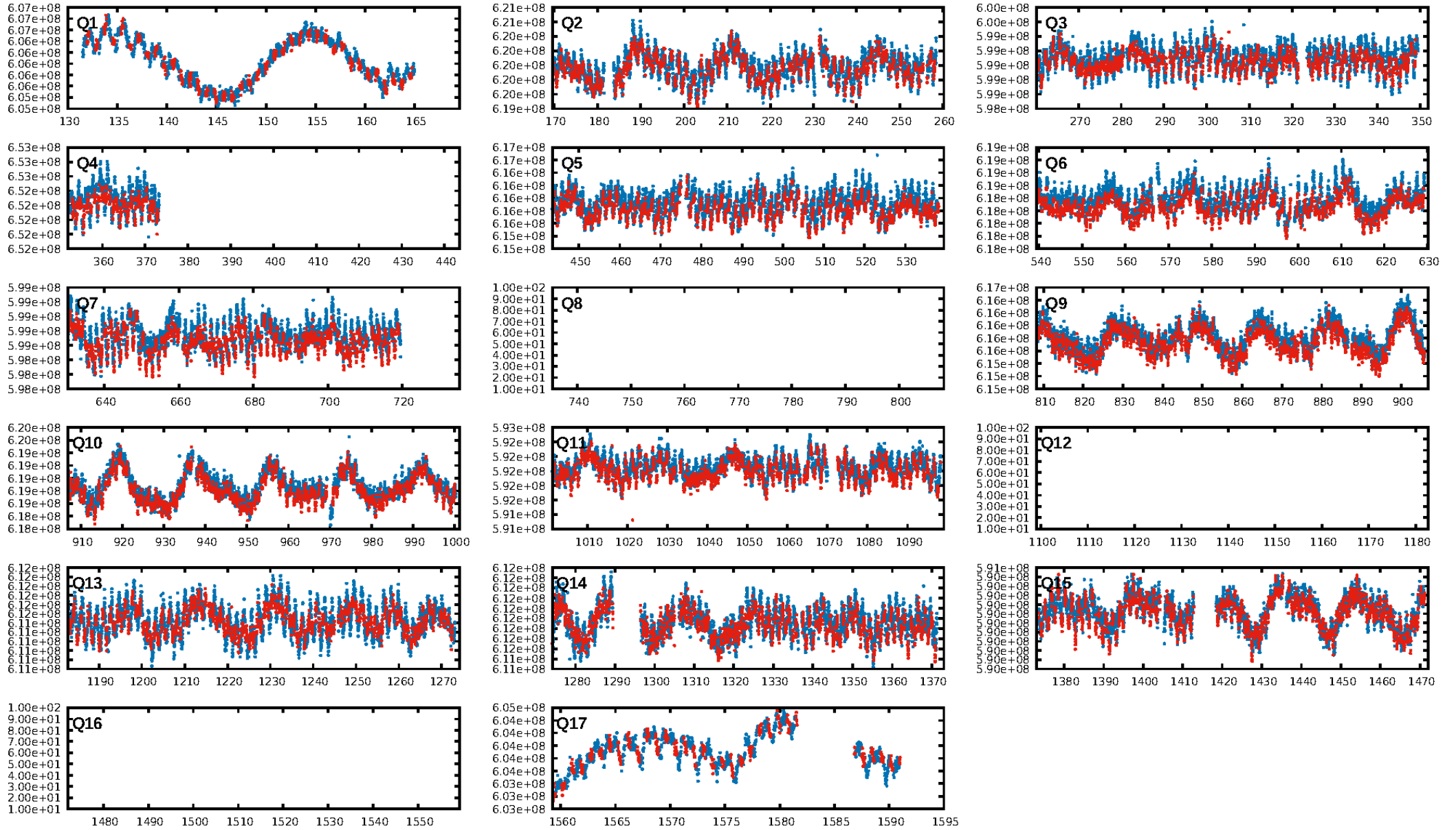
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.25e-13
RollingBand-fgt: 1.00 [1157/1157]
GhostDiagnostic-chr: 0.4899
Centroid-sig: 20.4%
Centroid-so: 1.102 arcsec [1.13σ]
OotOffset-rm: 0.214 arcsec [1.46σ]
KicOffset-rm: 0.197 arcsec [1.09σ]
OotOffset-st: 4/4/1/5 [14]
KicOffset-st: 4/4/1/5 [14]
DiffImageQuality-fgm: 1.00 [14/14]
DiffImageOverlap-fno: 1.00 [14/14]

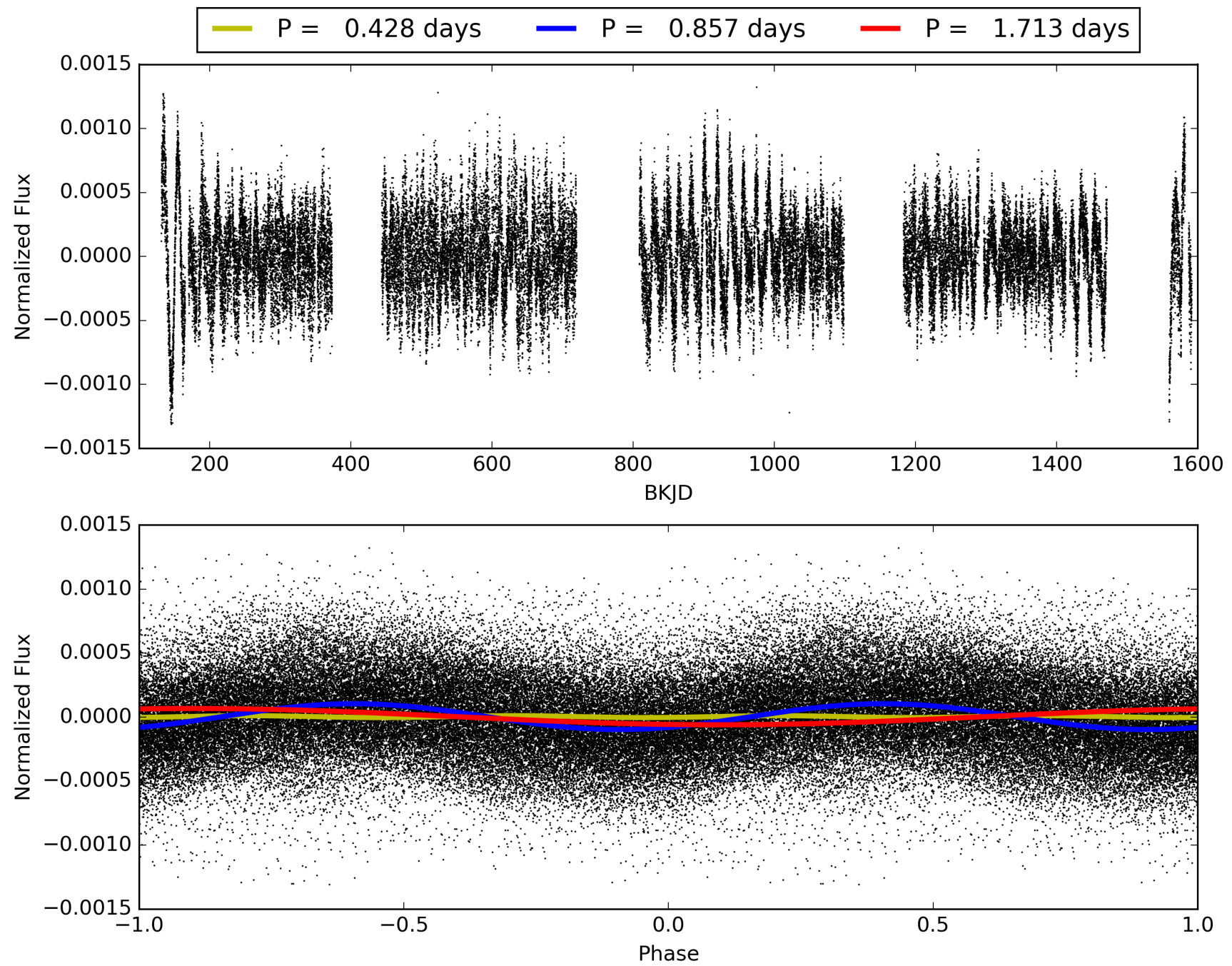
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 05:55:08 Z

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

TCE 011905562-01, PDC Light Curves

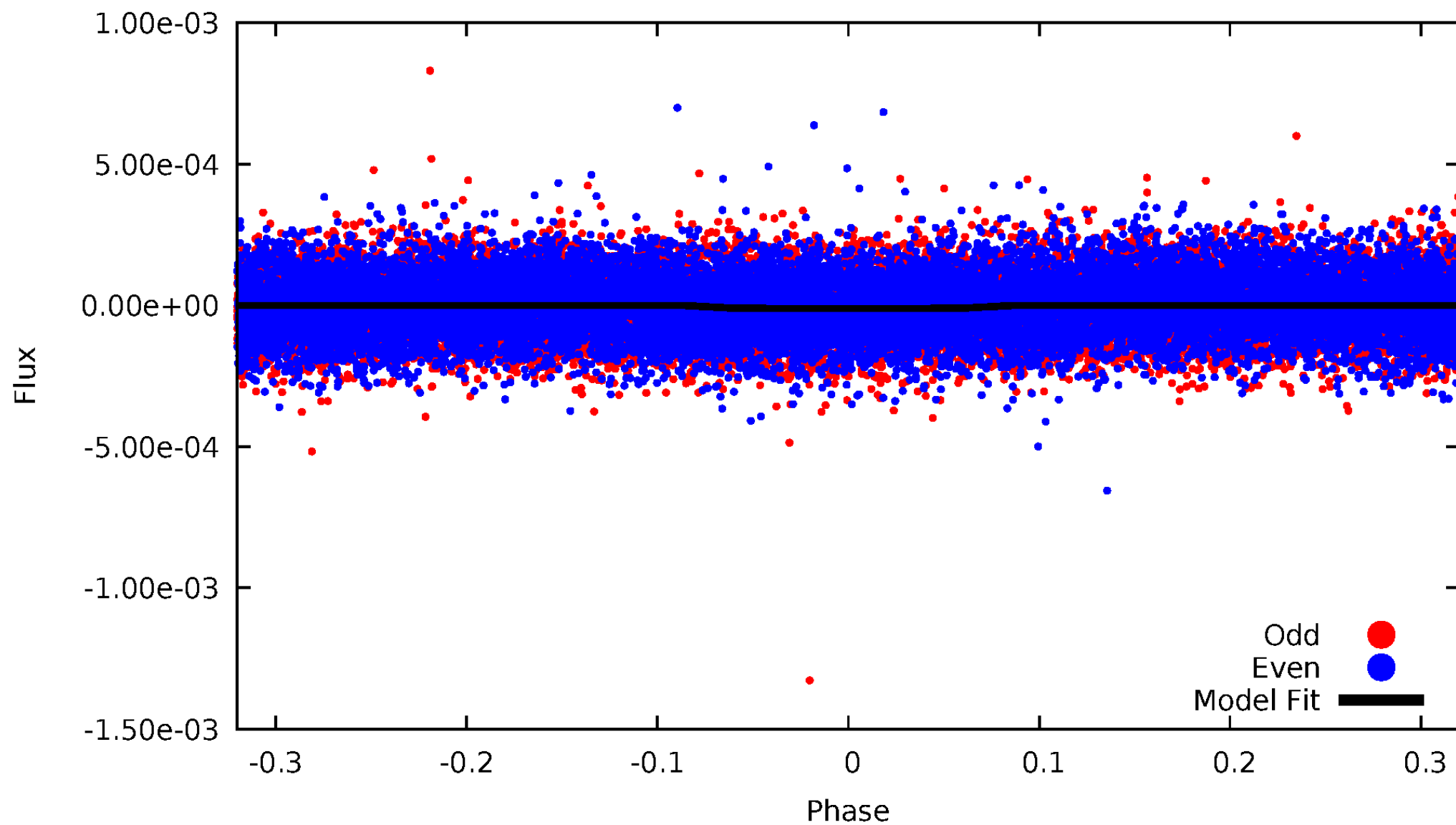


TCE 011905562-01



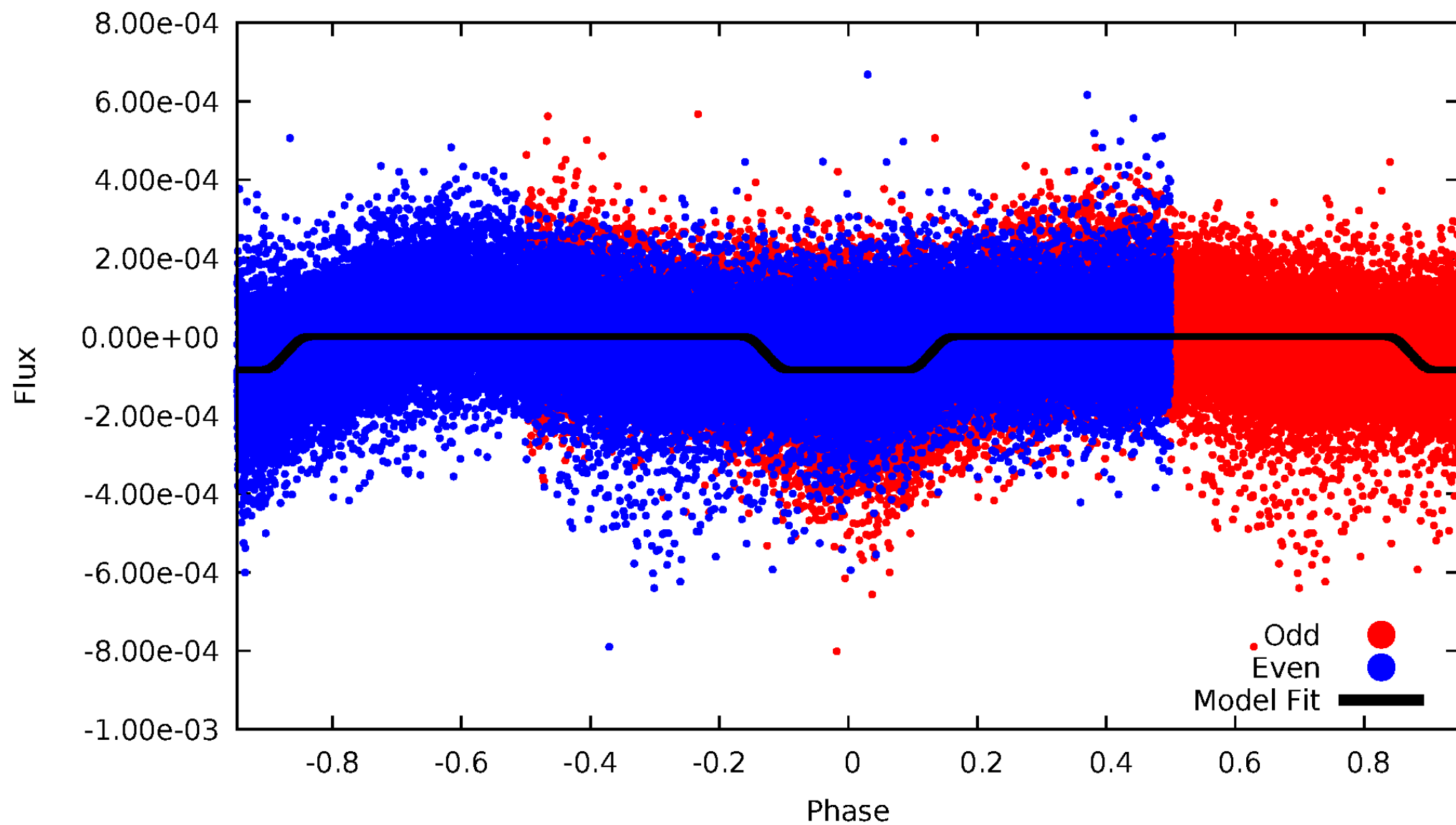
DV Odd/Even

TCE 011905562-01



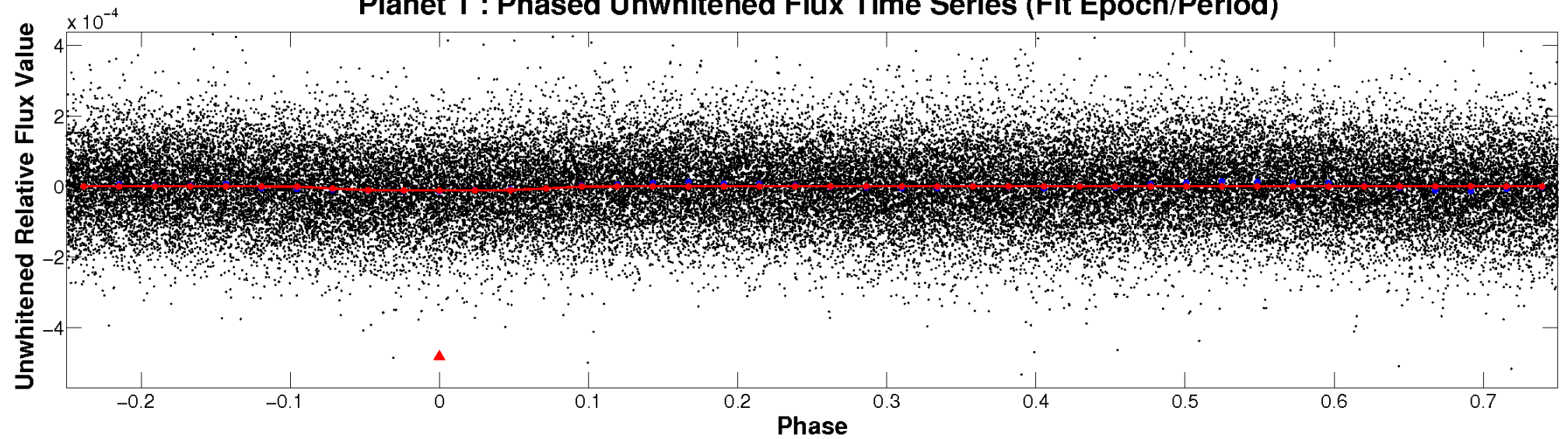
ALT Odd/Even

TCE 011905562-01

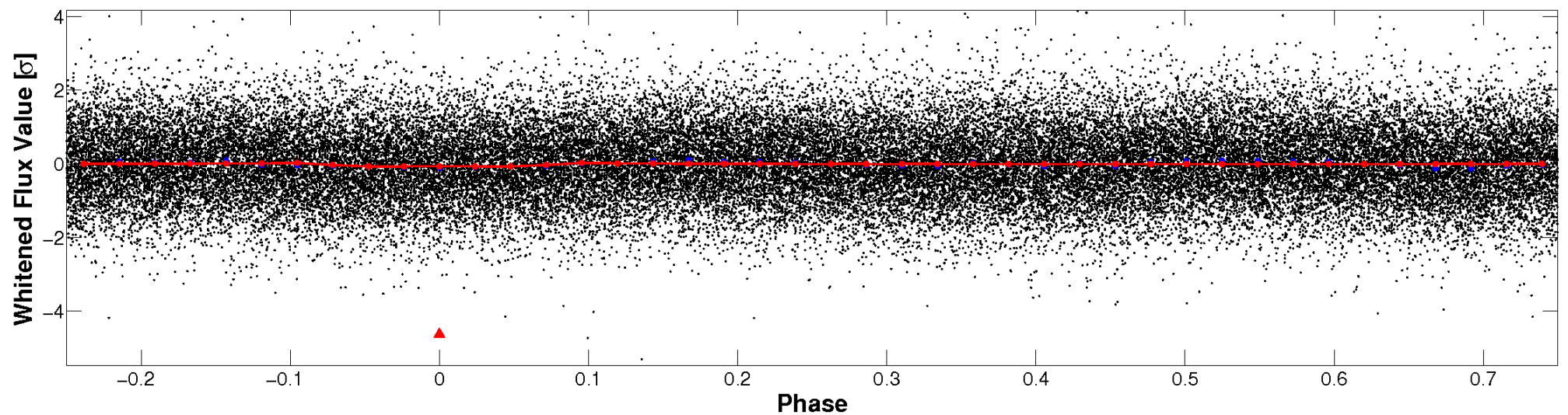


Non-Whitened Vs. Whitened Light Curve

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

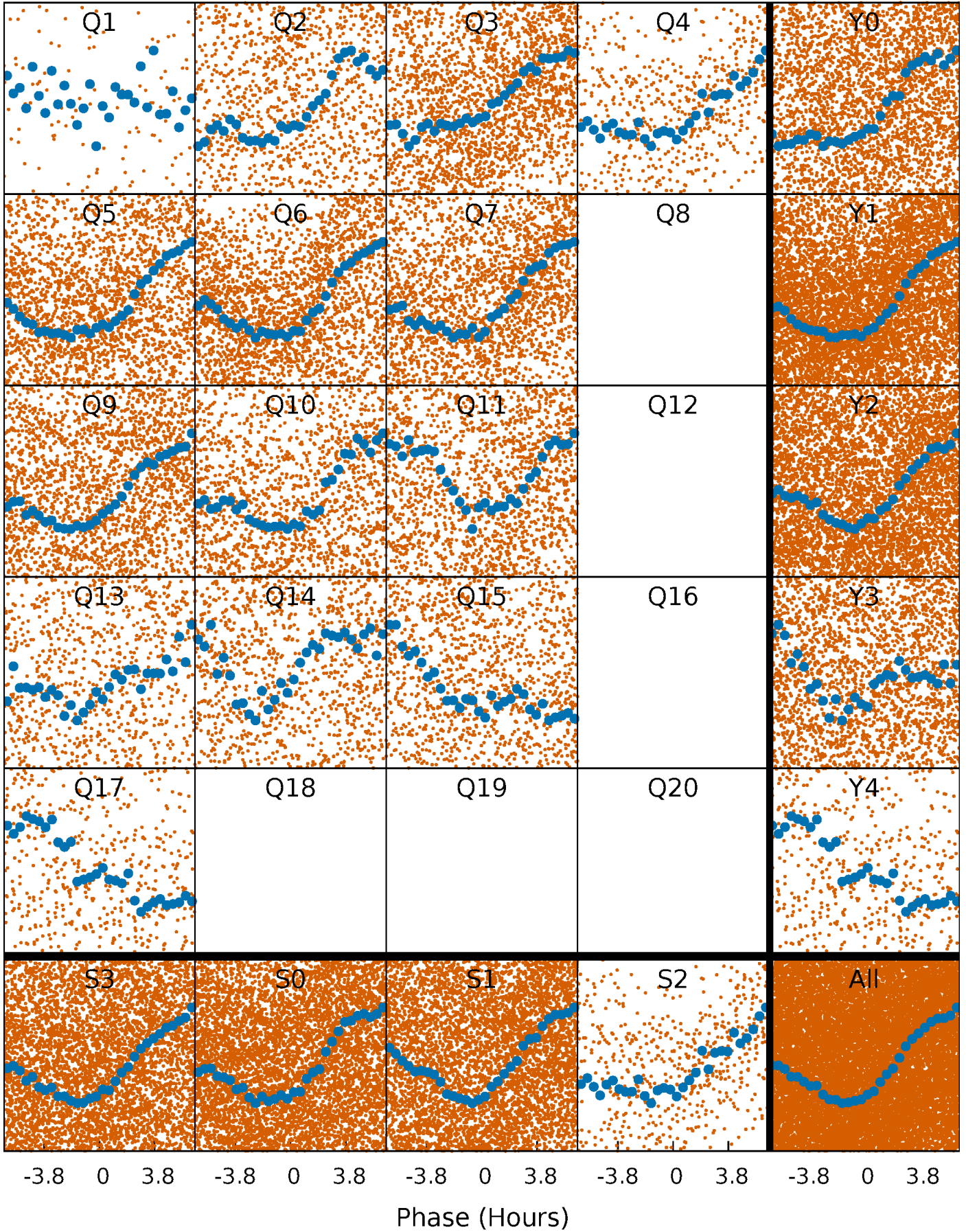


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



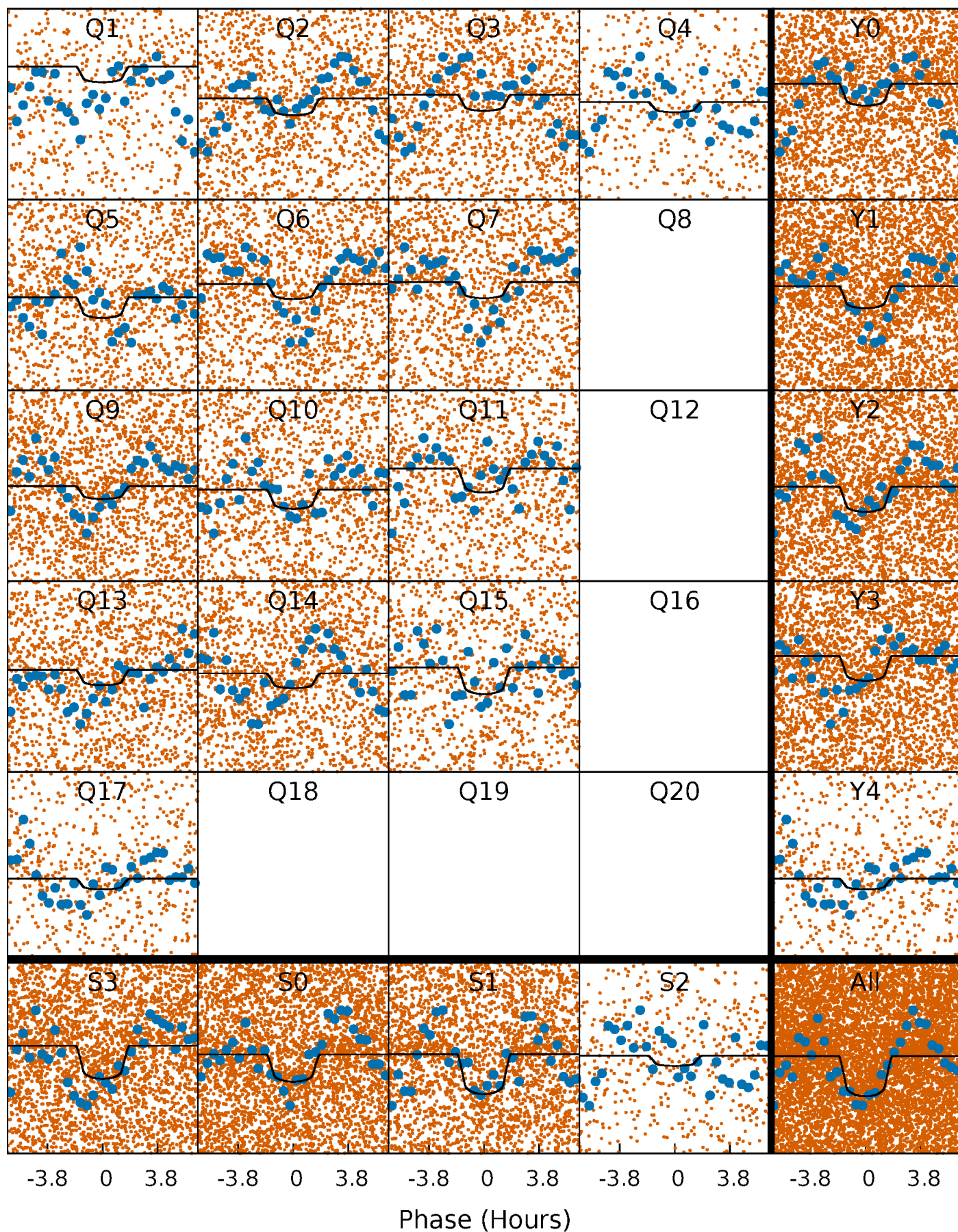
PDC Quarter-Phased Transit Curves

TCE 011905562-01 P= 0.856731 Days $T_0=132.044421$ (BKJD)



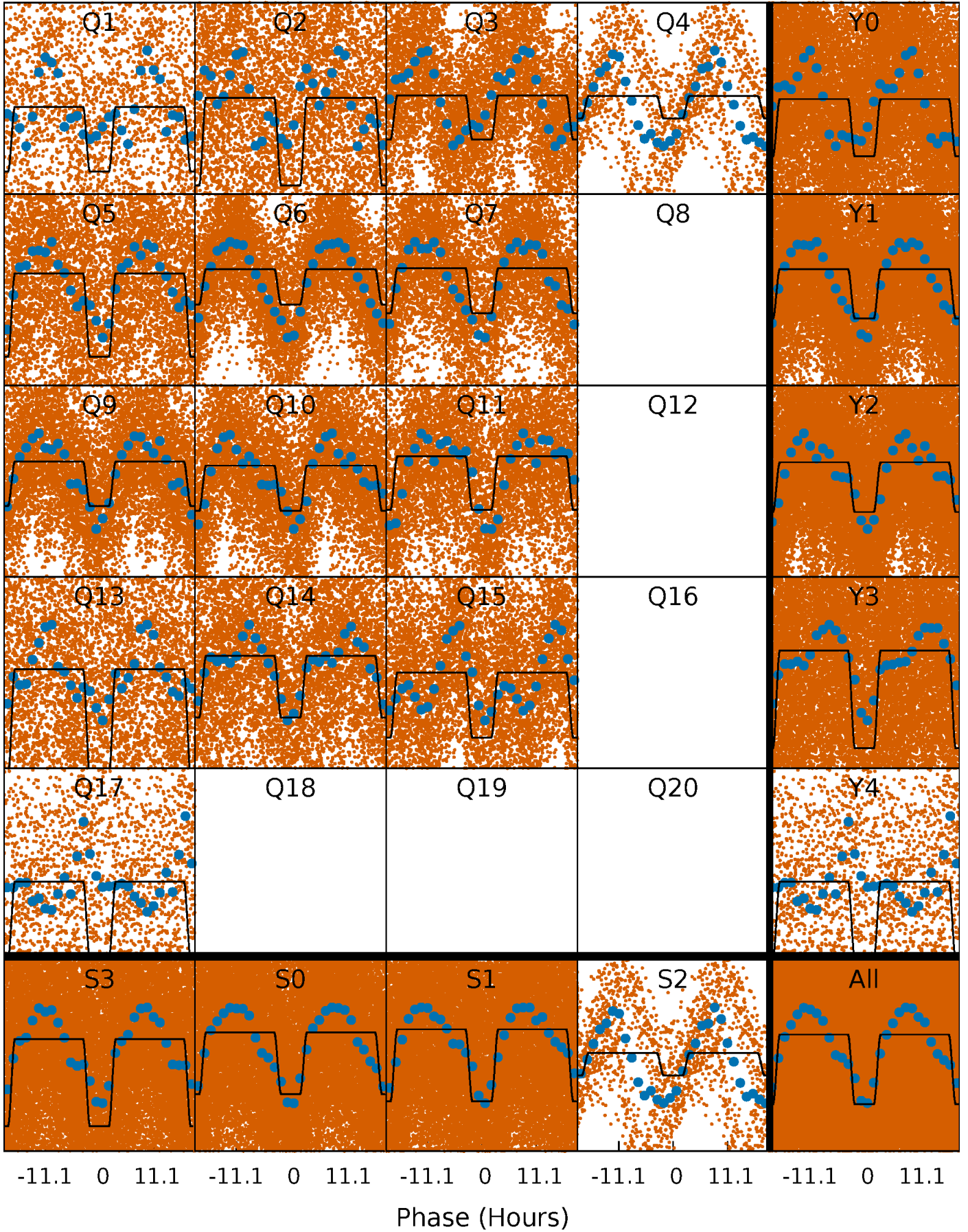
DV Quarter-Phased Transit Curves

TCE 011905562-01 P= 0.856731 Days $T_0=132.044421$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

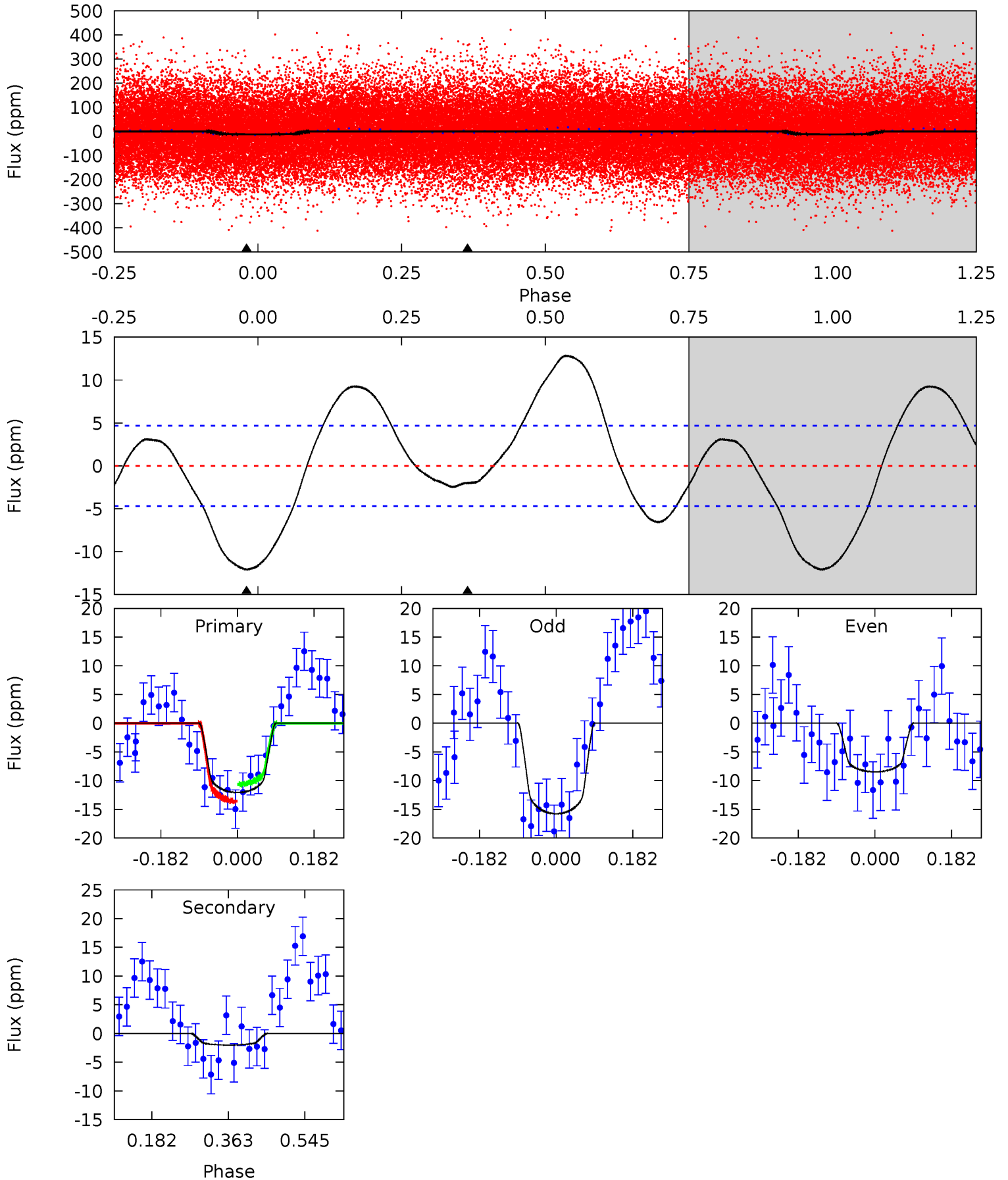
TCE 011905562-01 P= 0.856644 Days $T_0=132.080990$ (BKJD)



DV Model-Shift Uniqueness Test

011905562-01, P = 0.856731 Days, E = 131.187690 Days

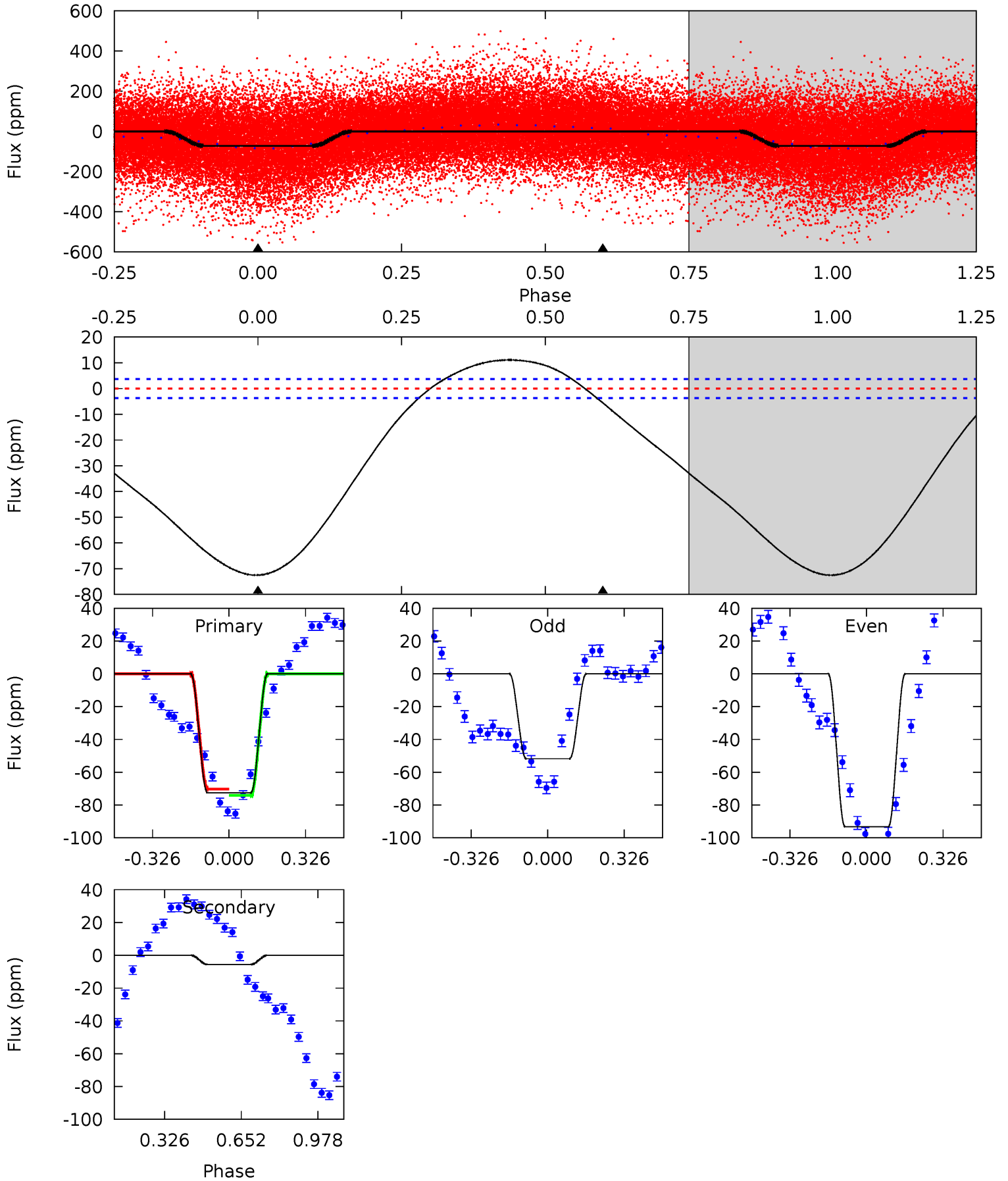
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.5	1.91	0	0	4.44	1.34	5.95	11.5	11.5	1.91	1.91	3.44	1.09	0.51	1.40



Alt Model-Shift Uniqueness Test

011905562-01, P = 0.856644 Days, E = 131.224346 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
84.8	6.47	0	0	4.31	0.98	5.84	84.8	84.8	6.47	6.47	24.1	1.10	0.13	2.32



Stellar Parameters For KIC 011905562

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6215^{+177}_{-243}	$4.161^{+0.185}_{-0.185}$	$0.360^{+0.100}_{-0.350}$	$1.592^{+0.500}_{-0.409}$	$1.341^{+0.176}_{-0.215}$	$0.468^{+0.478}_{-0.234}$
	+3%/-4%	+4%/-4%	+28%/-97%	+31%/-26%	+13%/-16%	+102%/-50%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 011905562-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-2 ± 1	$0.70^{+0.32}_{-0.31}$	3459^{+262}_{-243}	3689^{+1266}_{-6000}	$0.841^{+2.134}_{-0.558}$
Alt.	-6 ± 1	$1.58^{+0.42}_{-0.37}$	3470^{+267}_{-249}	3026^{+514}_{-5411}	$0.455^{+0.318}_{-0.175}$

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

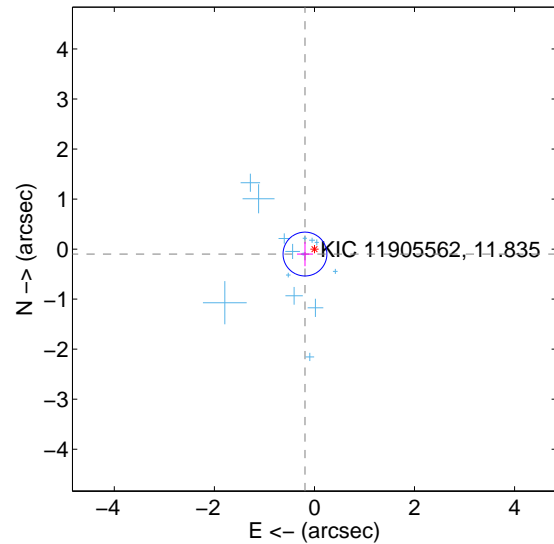
Supplemental centroid analysis for 011905562-01. **Kepler magnitude: 11.84.** Transit SNR 5.84

There are 14 quarters with good PRF difference image offsets

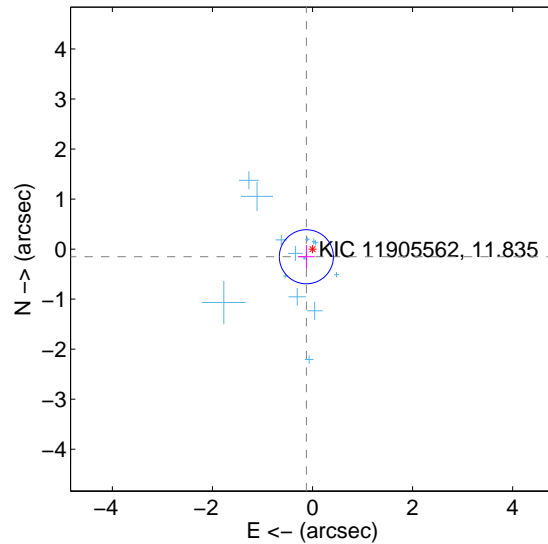
The direct PRF centroid is offset from the target star catalog position by about 0.02 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.214 ± 0.146	1.46	0.189 ± 0.160	-0.099 ± 0.243
PRF-fit source offset from KIC position	0.197 ± 0.180	1.09	0.123 ± 0.169	-0.153 ± 0.234
photometric centroid source offset	1.10 ± 0.98	1.13	0.17 ± 0.95	-1.09 ± 0.98

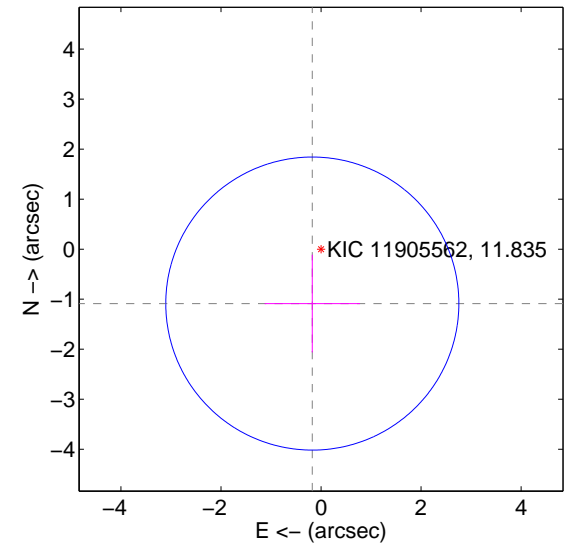
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

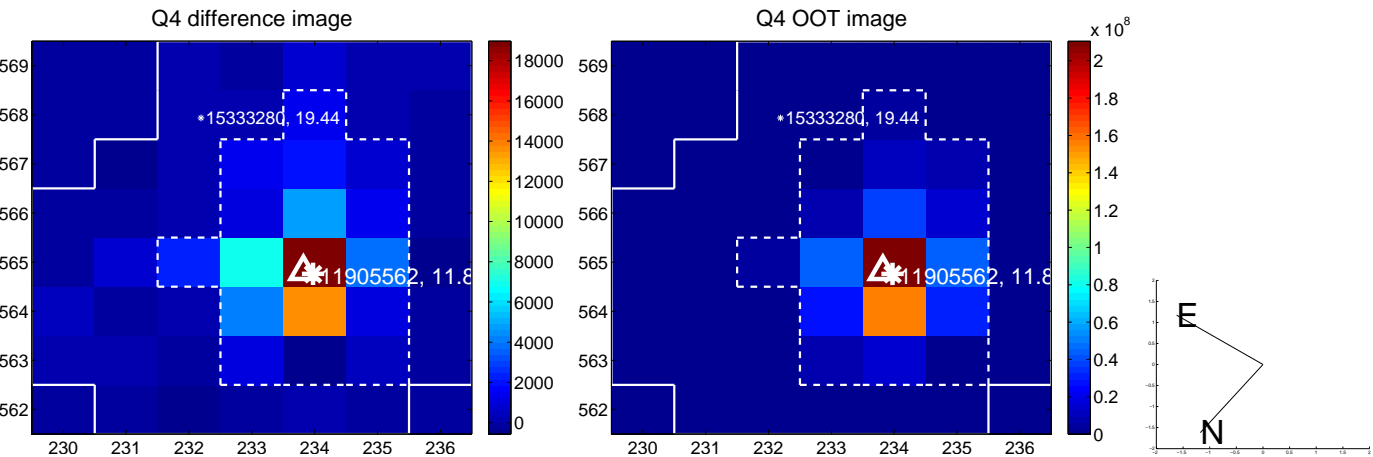
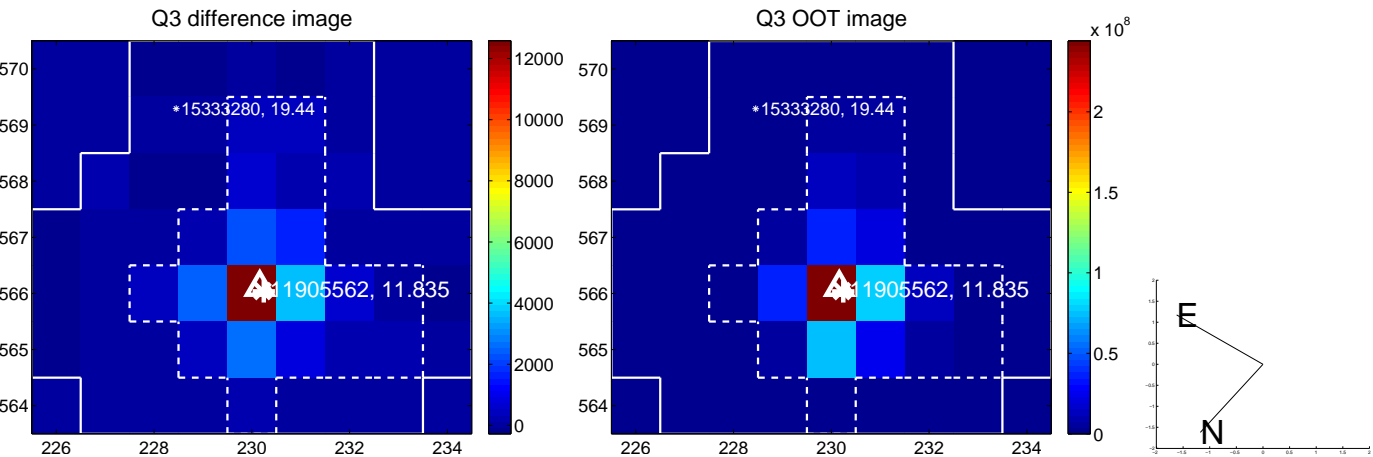
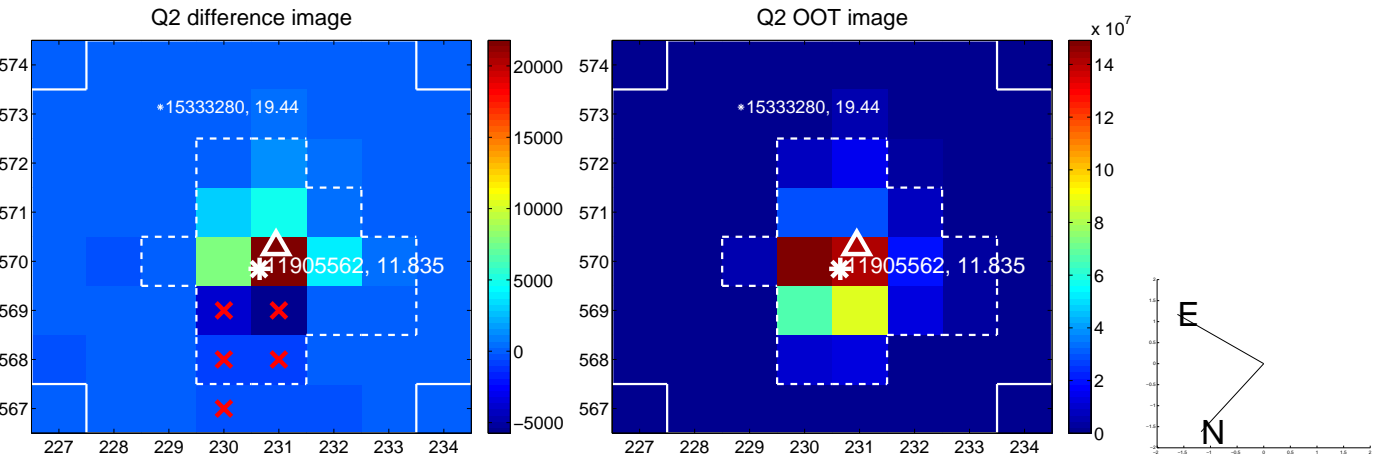
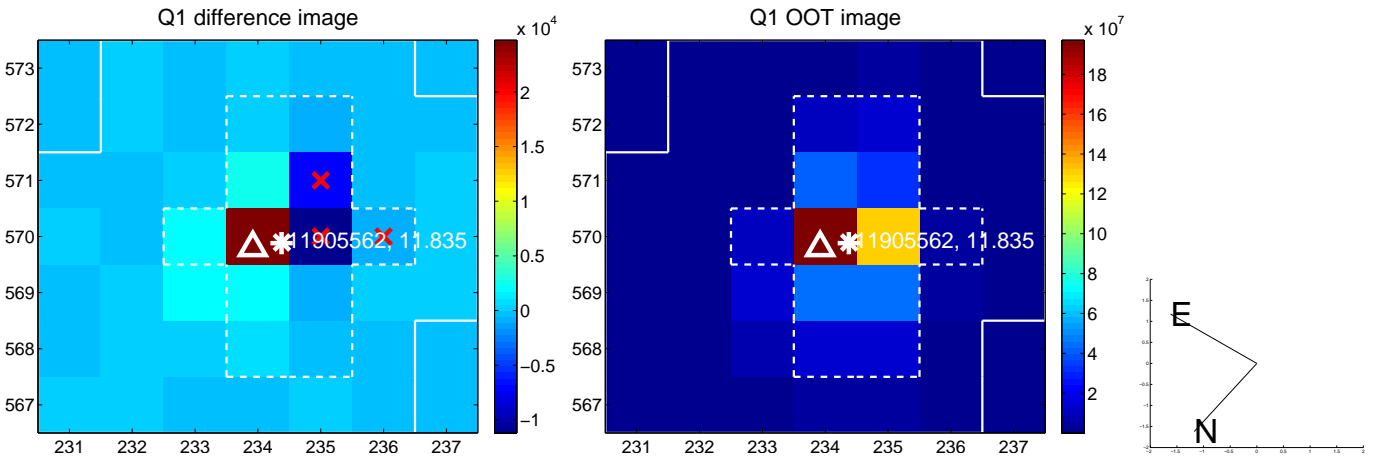


offset from photometric centroids

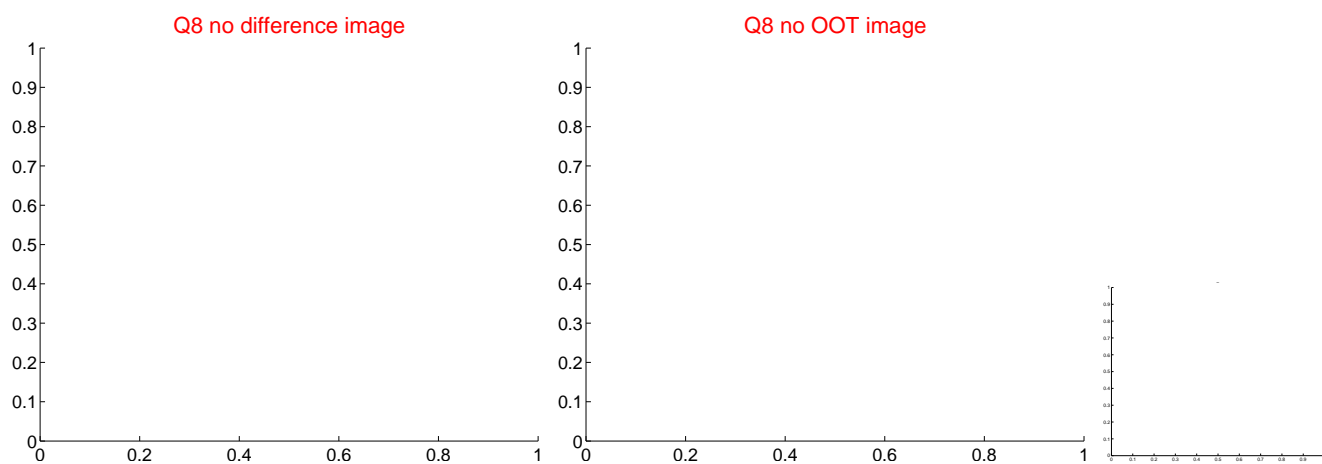
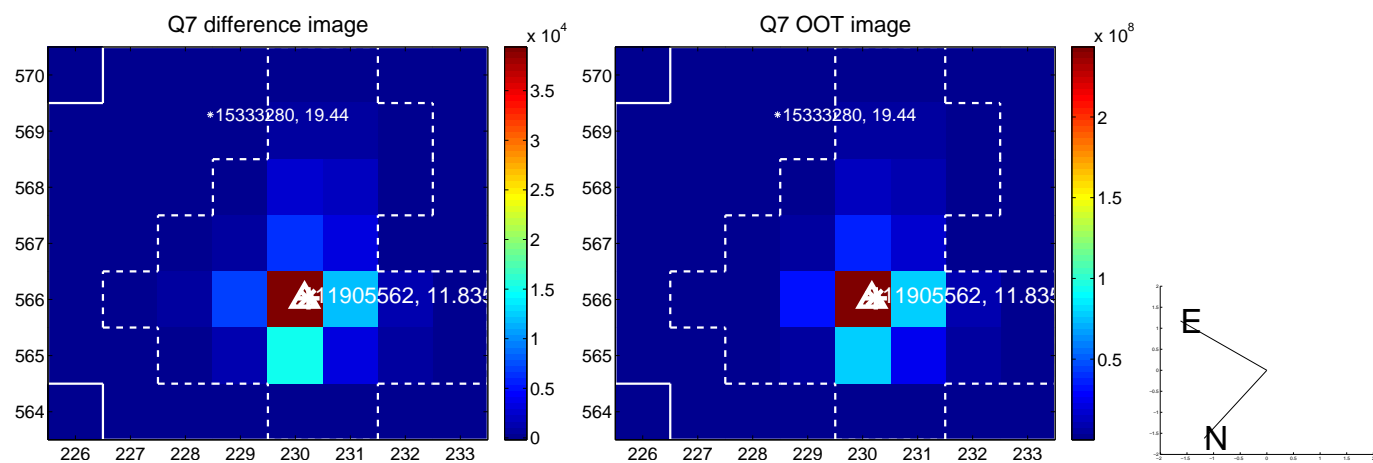
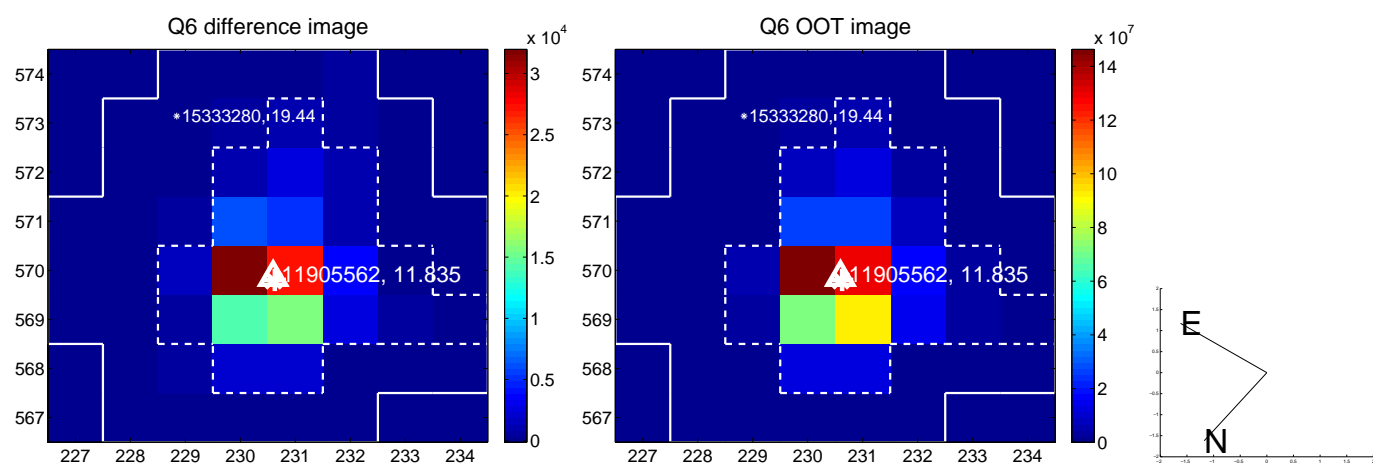
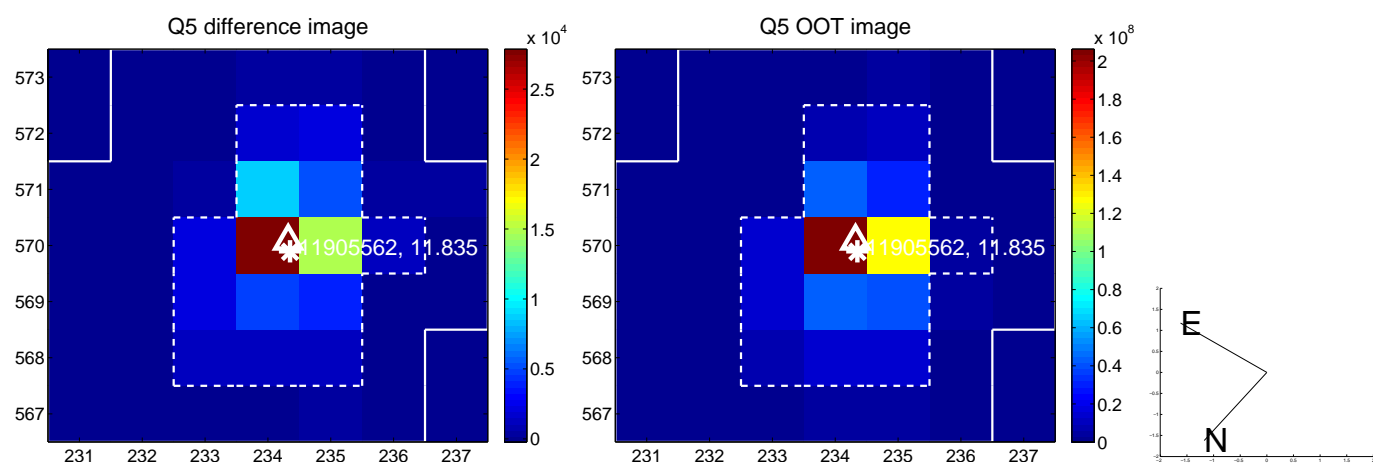


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

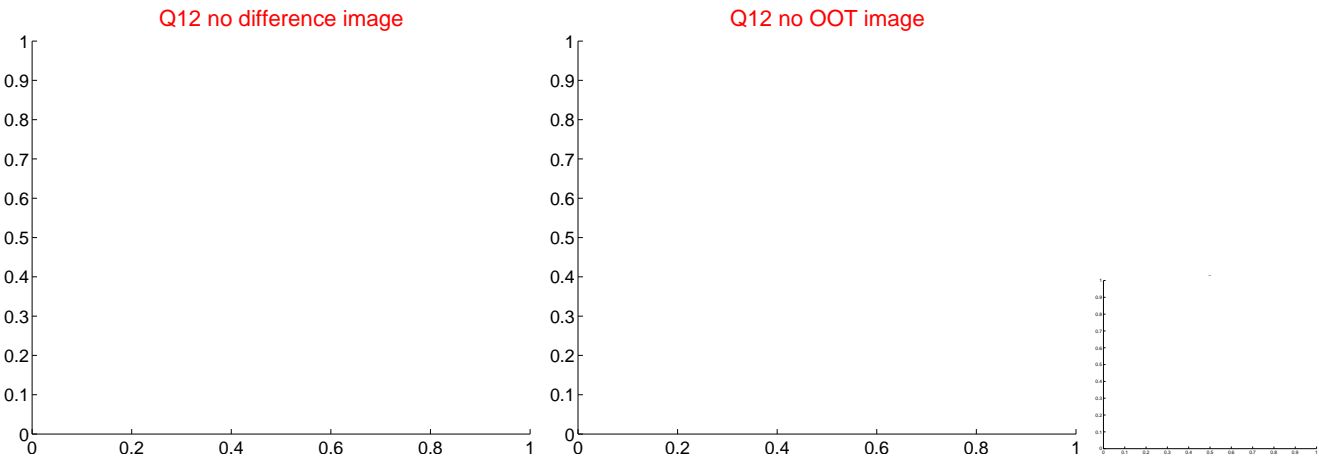
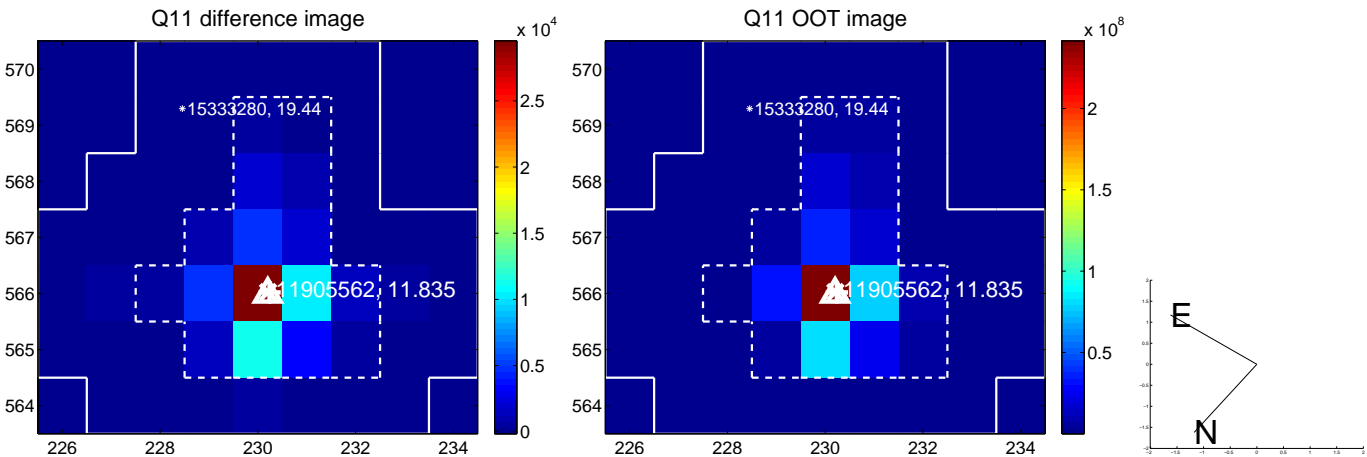
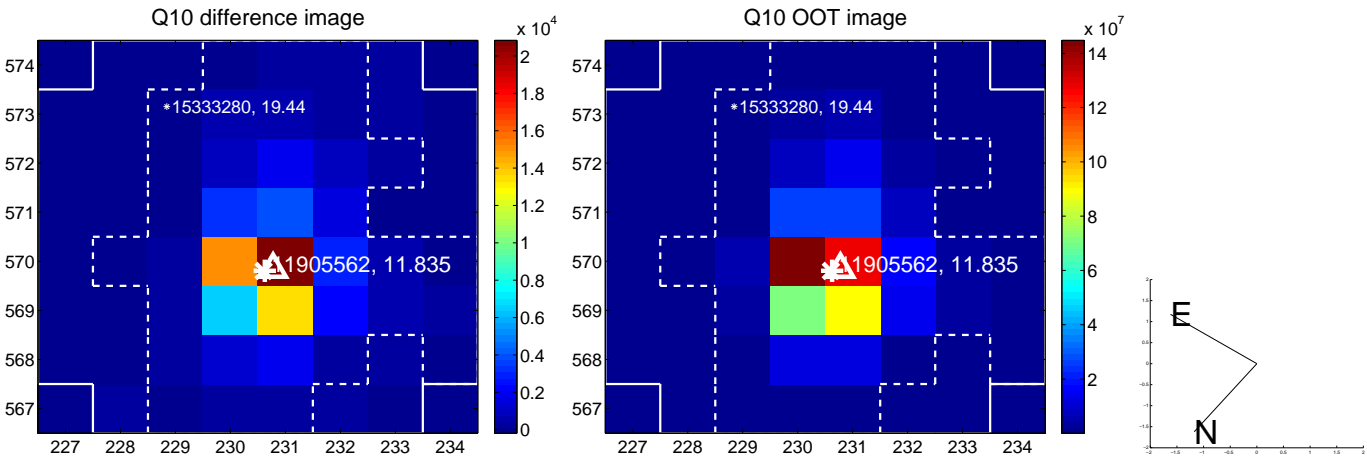
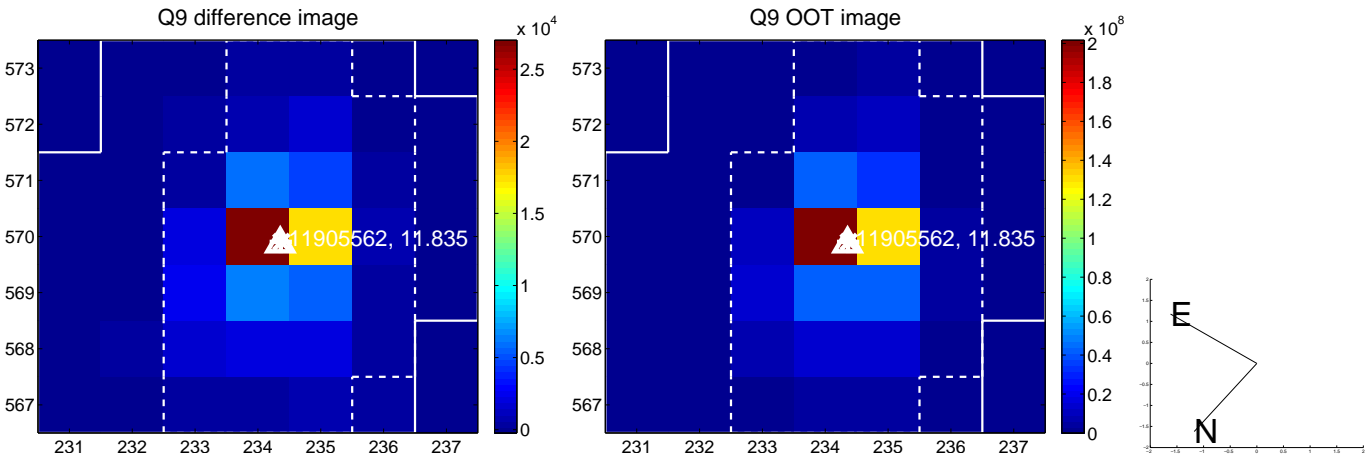
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



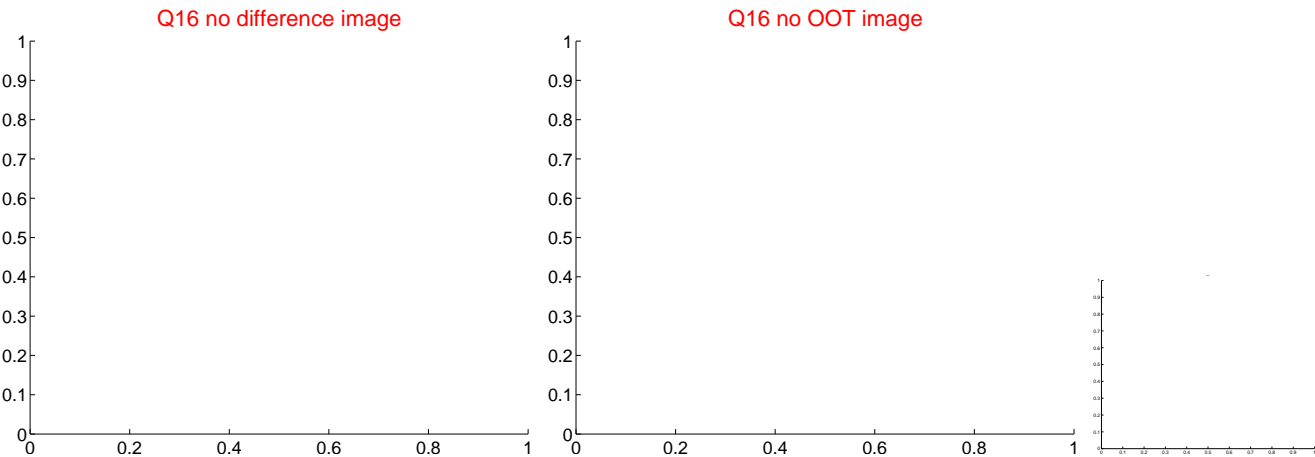
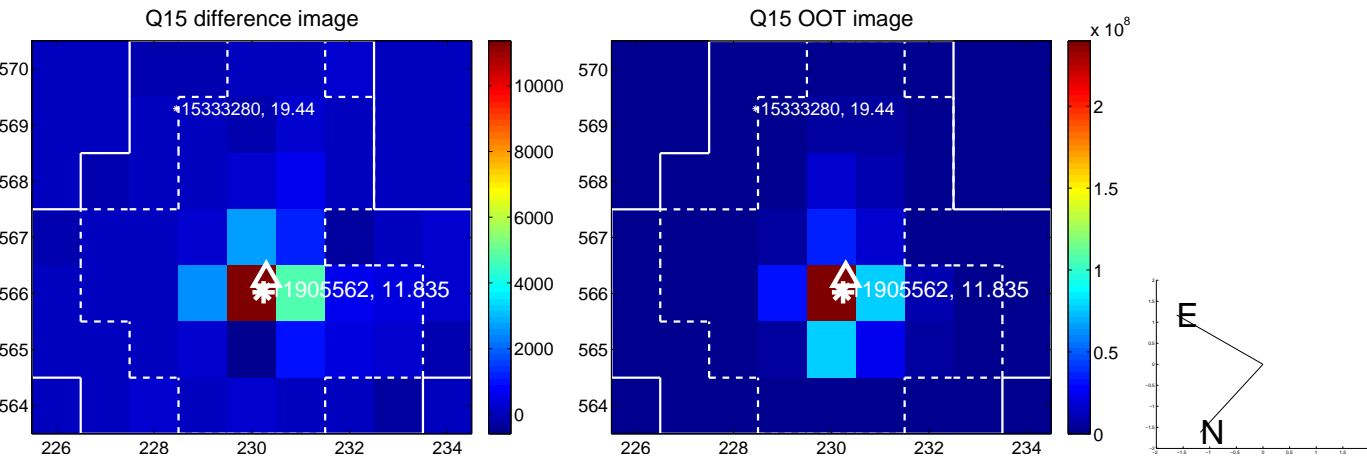
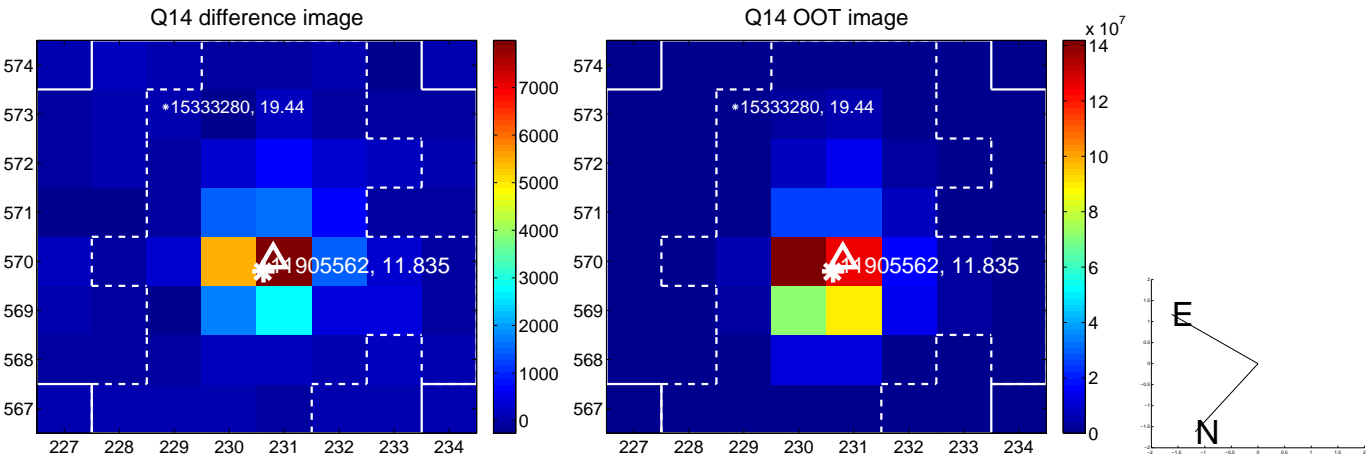
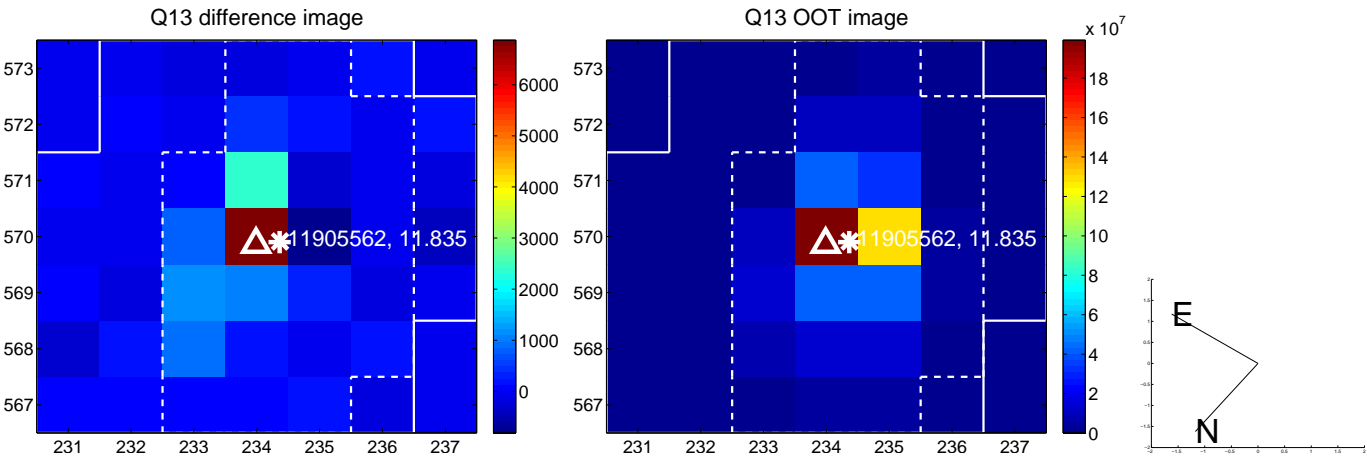
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



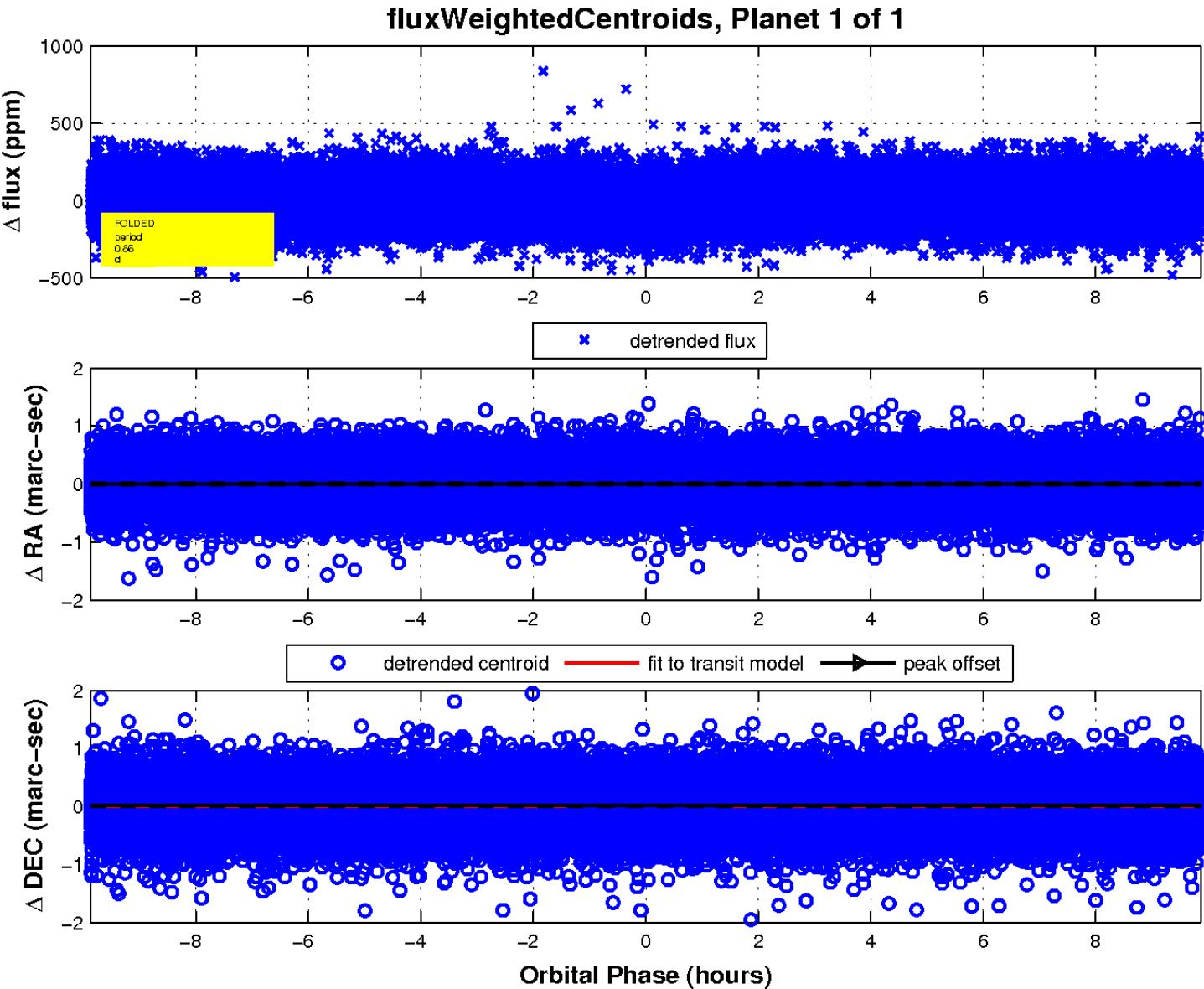
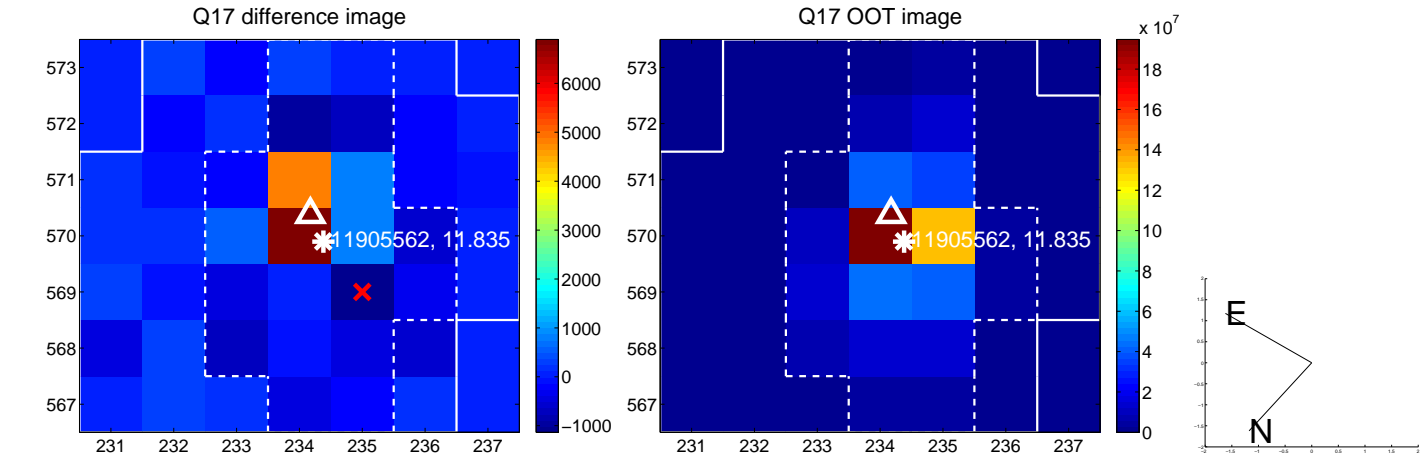
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

