

KIC 009635520

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})
009635520-01	OBS	7205.01	2.353733	133.186546	406.2	3.500	13.1	-1.0	1.43	5445	2.81	1314.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009635520-01	OBS	PC	0.78	0	0	0	0	CENT_NOFITS

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.

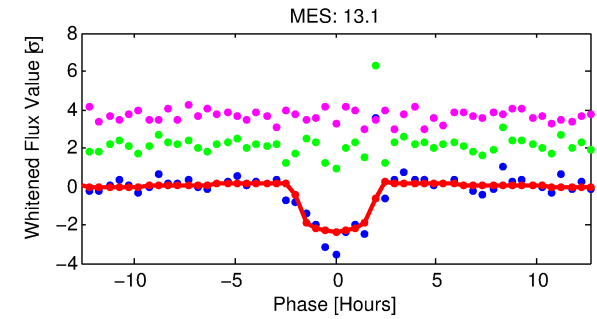
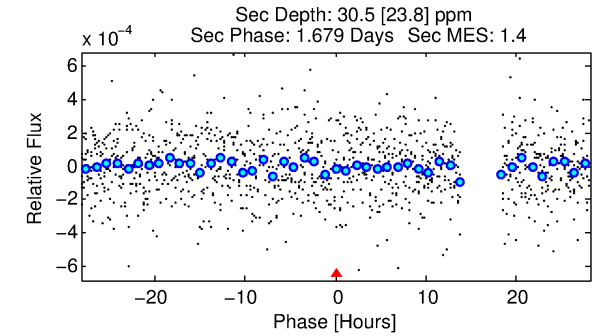
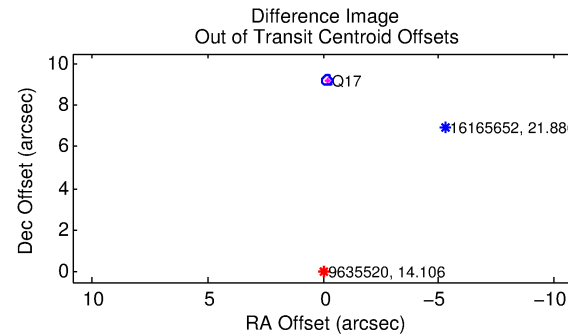
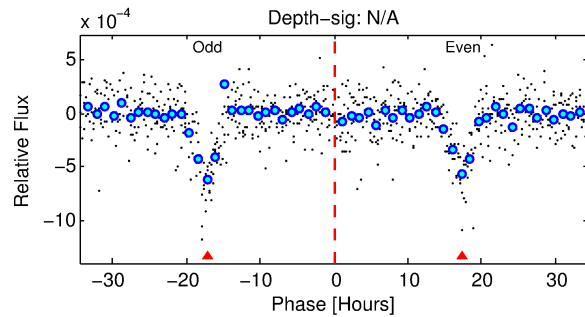
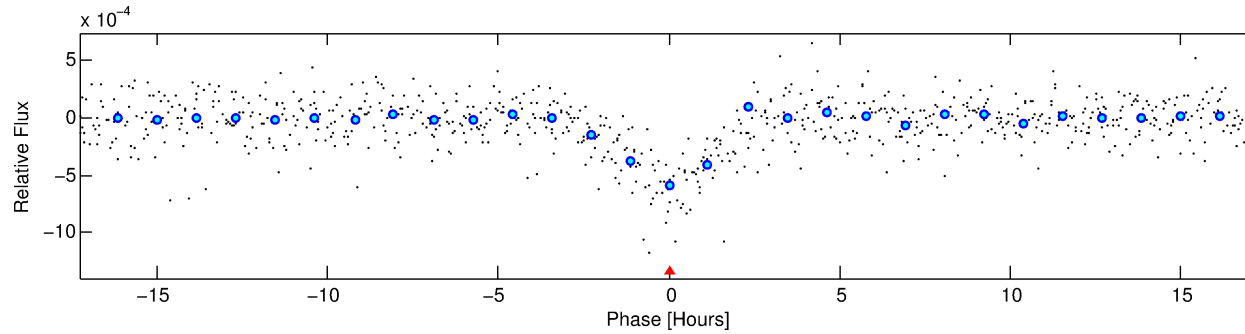
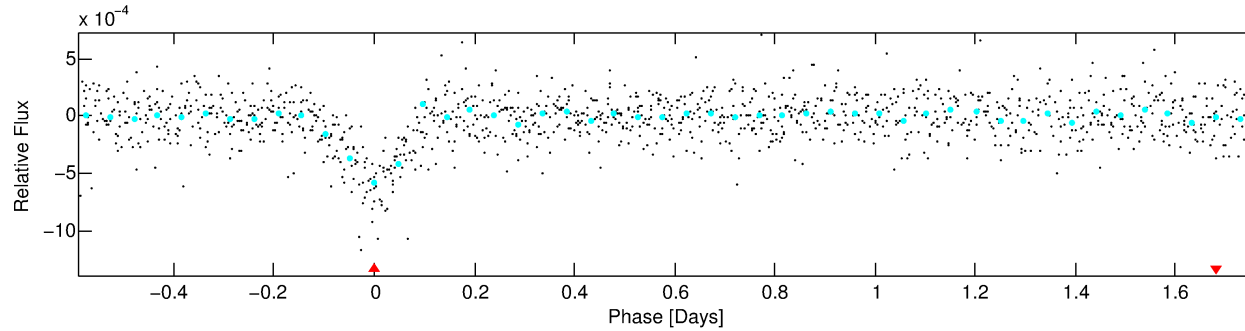
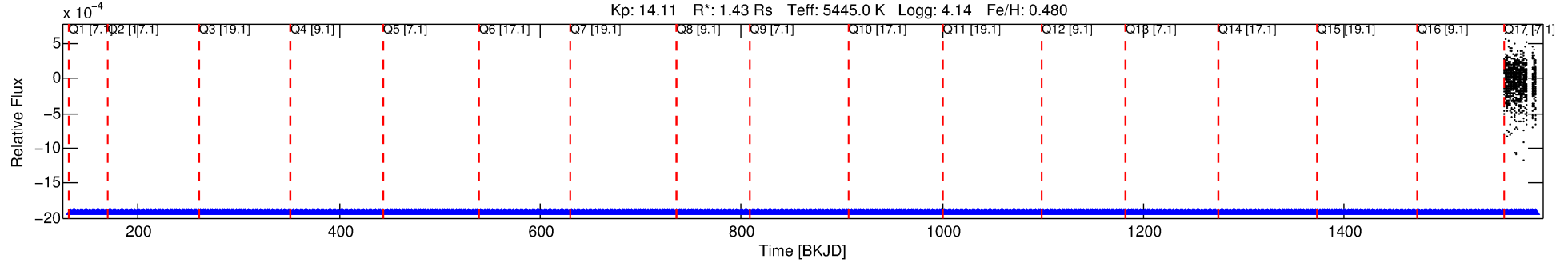
Ephemeris Match Information For 009635520-01

No Significant Match Found

DV One-Page Summary

KIC: 9635520 Candidate: 1 of 1 Period: 2.354 d
KOI: K07205 Corr: No Ephemeris Match

Kp: 14.11 R*: 1.43 Rs Teff: 5445.0 K Logg: 4.14 Fe/H: 0.480



TPS TCE Results:

Period = 2.35373 d
Epoch = 133.1865 BKJD

DV fit results are unavailable

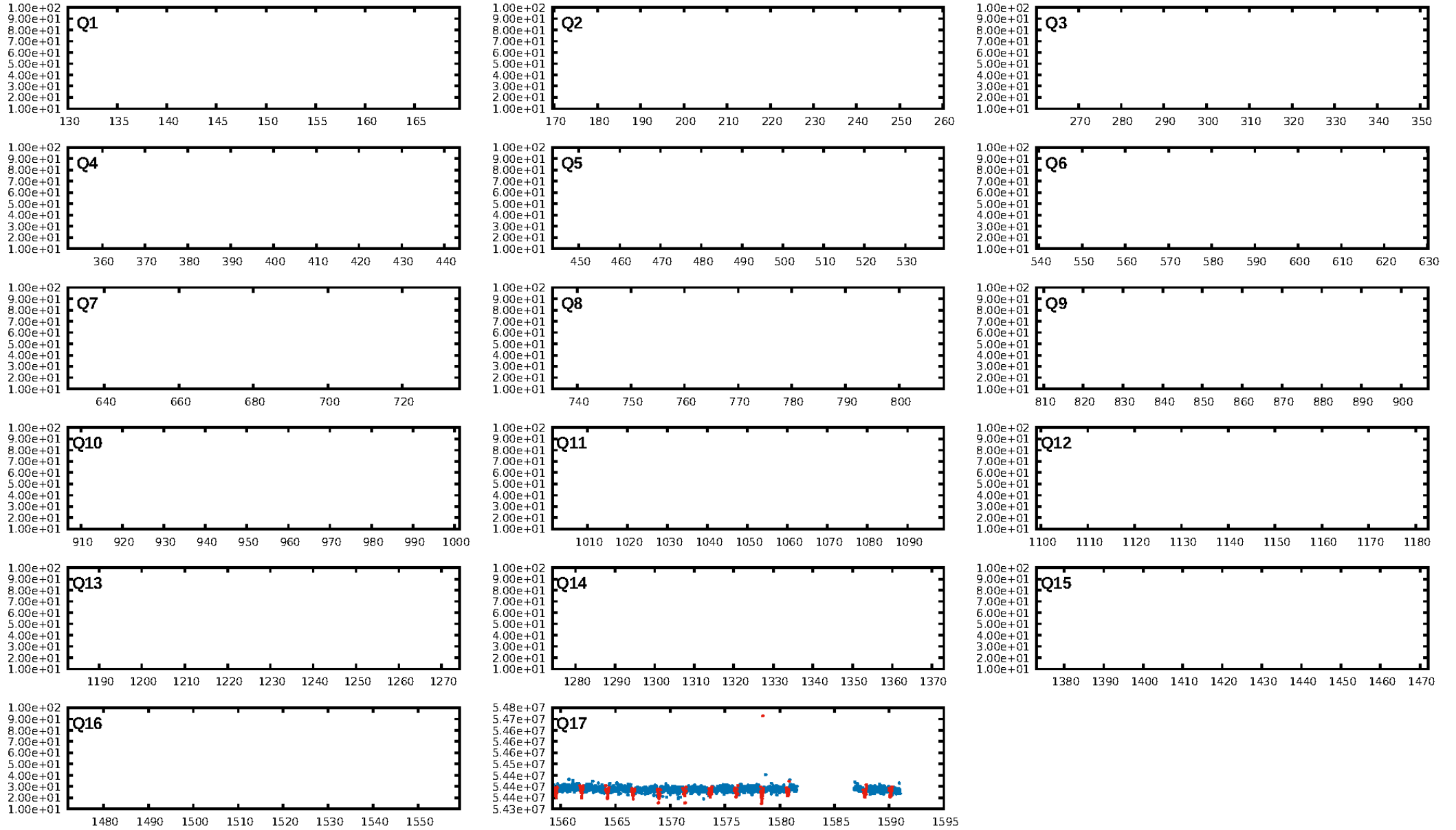
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGoF-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: N/A
GhostDiagnostic-chr: -0.2666
Centroid-sig: 0.0%
Centroid-so: 11.560 arcsec [23.18σ]
OotOffset-rm: 9.214 arcsec [116.58σ]
KicOffset-rm: 9.331 arcsec [118.05σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [1/1]

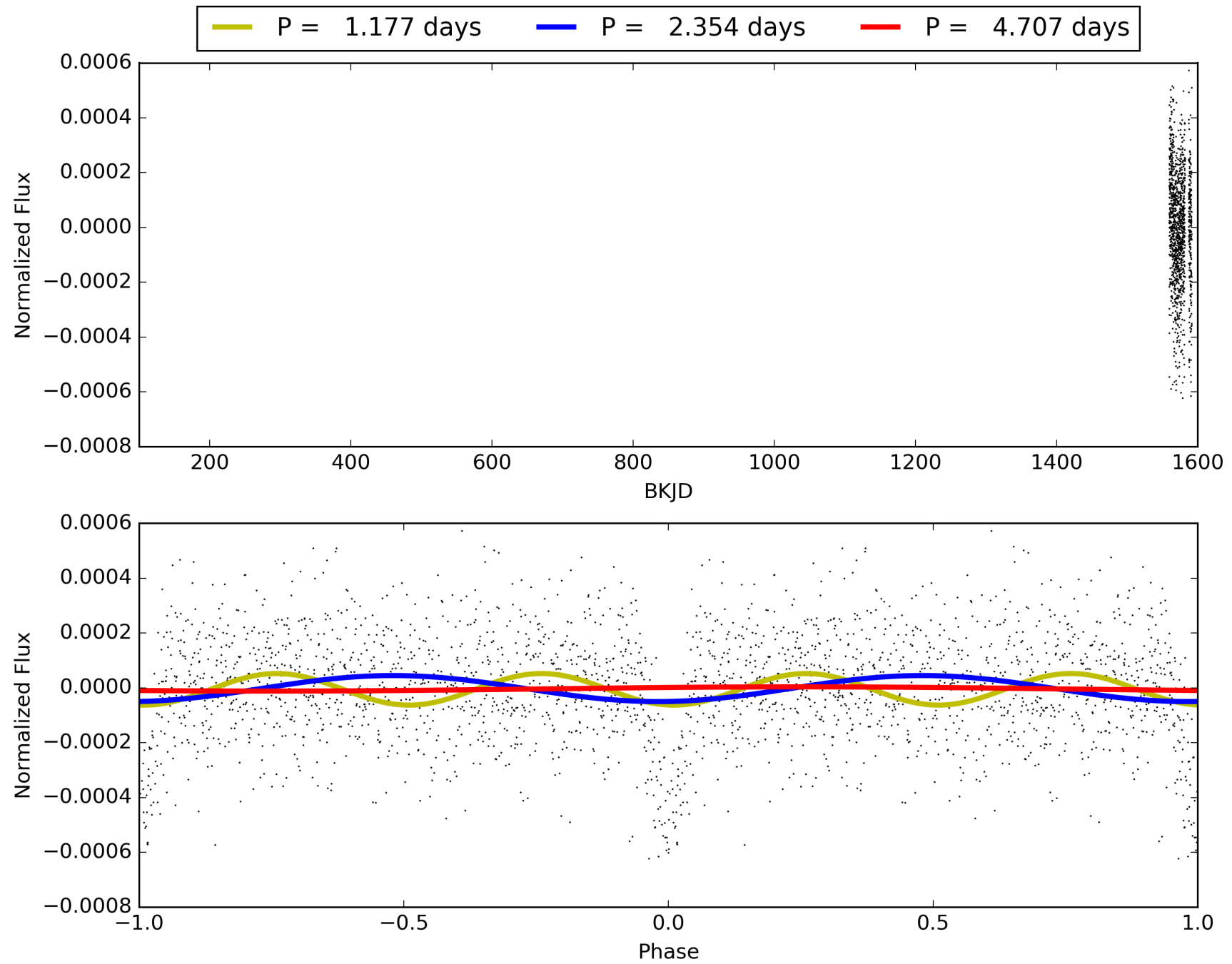
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 04:47:58 Z

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

TCE 009635520-01, PDC Light Curves

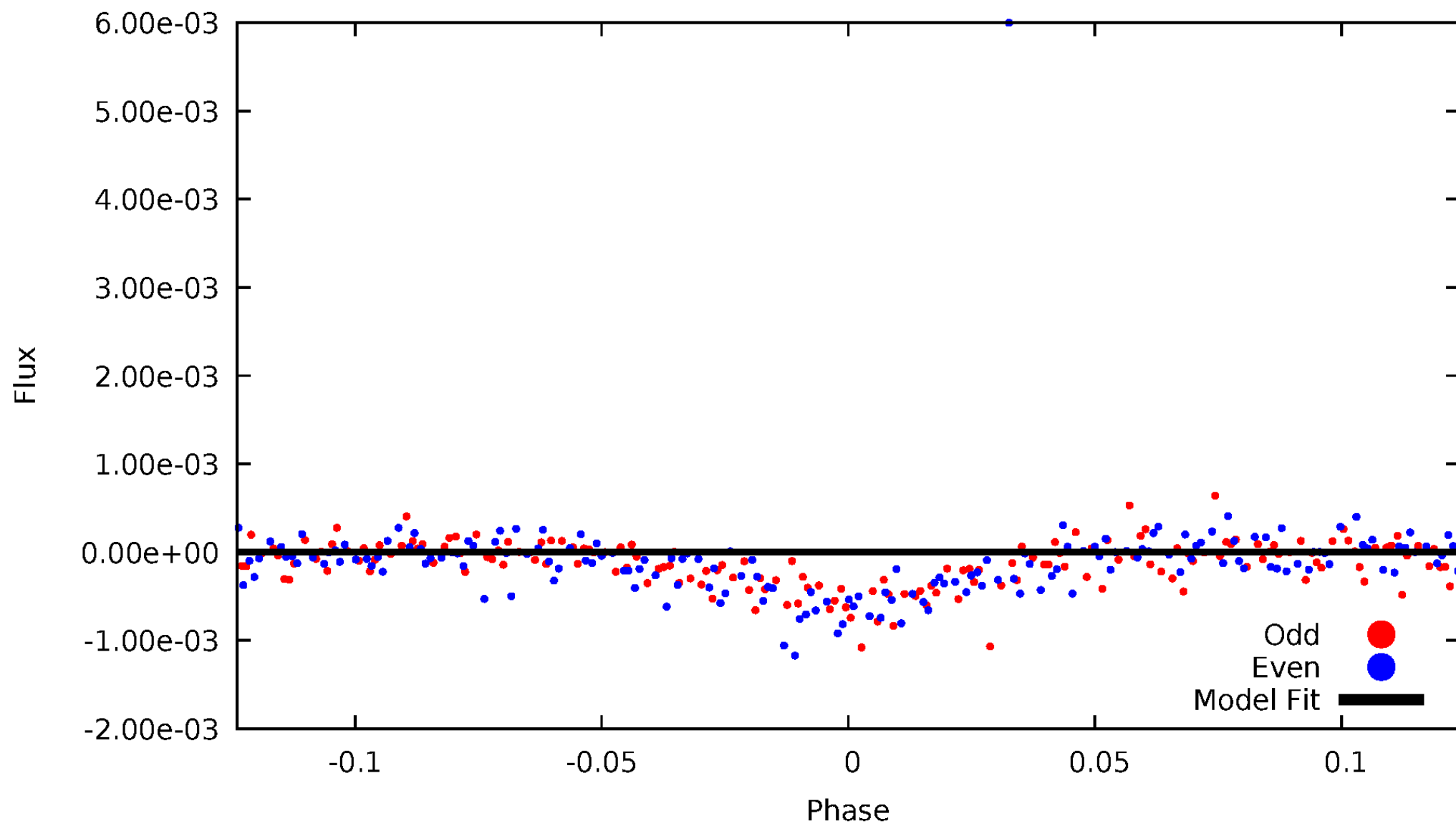


TCE 009635520-01



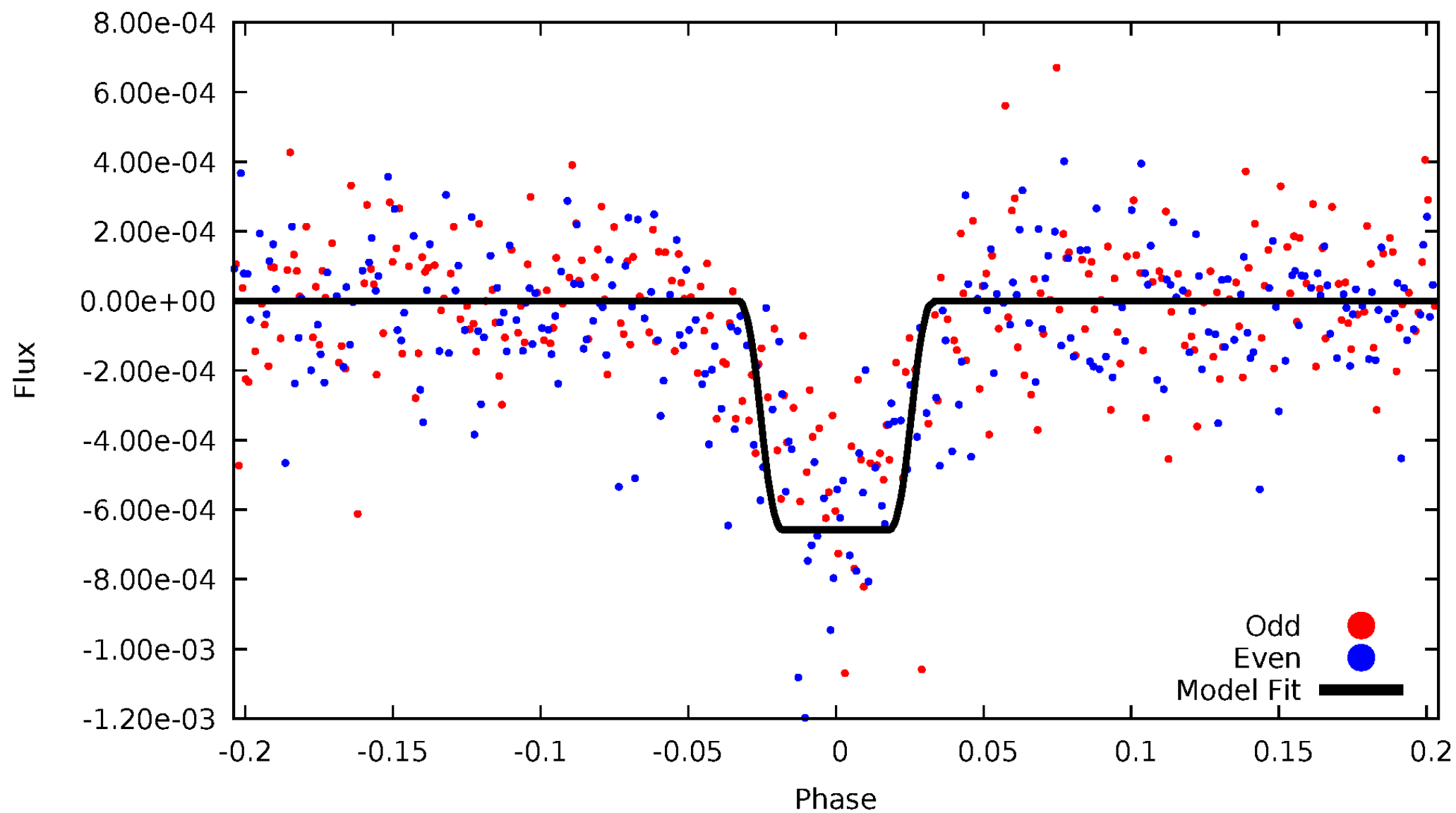
DV Odd/Even

TCE 009635520-01

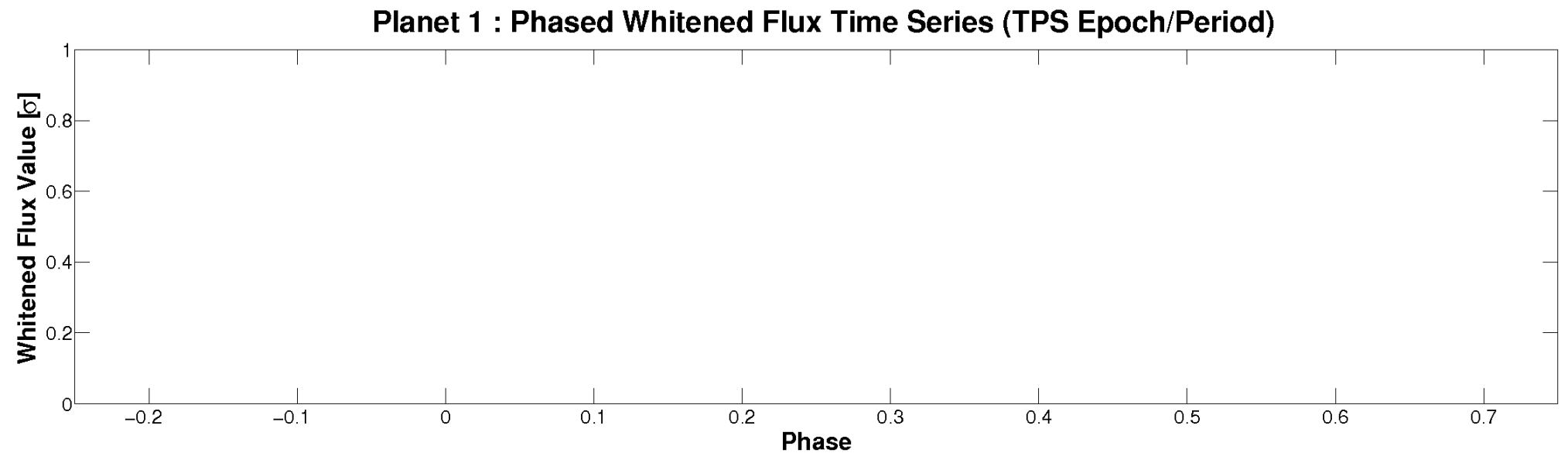
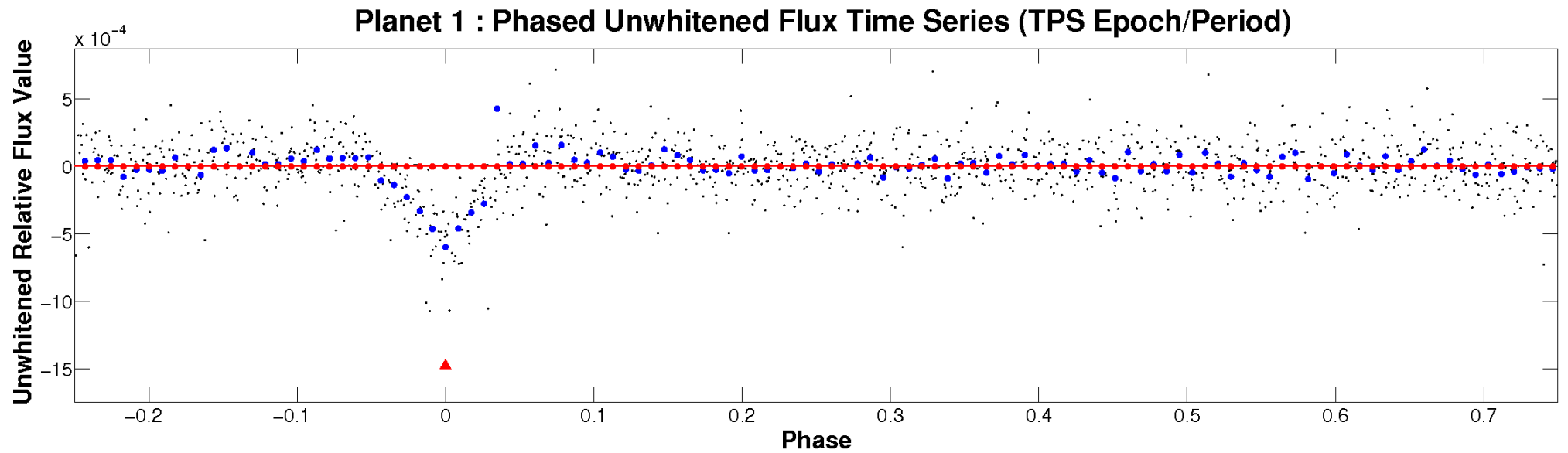


ALT Odd/Even

TCE 009635520-01

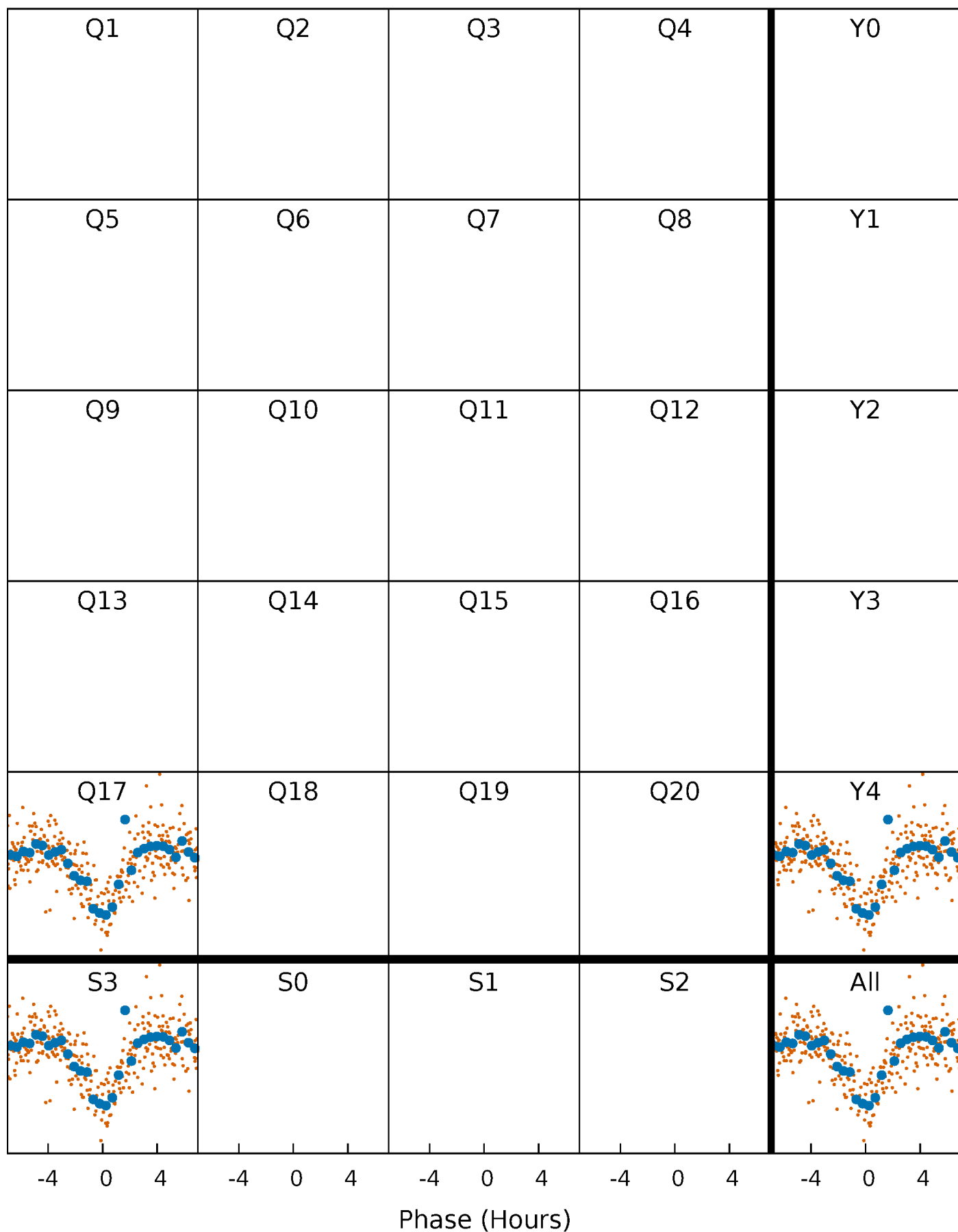


Non-Whitened Vs. Whitened Light Curve



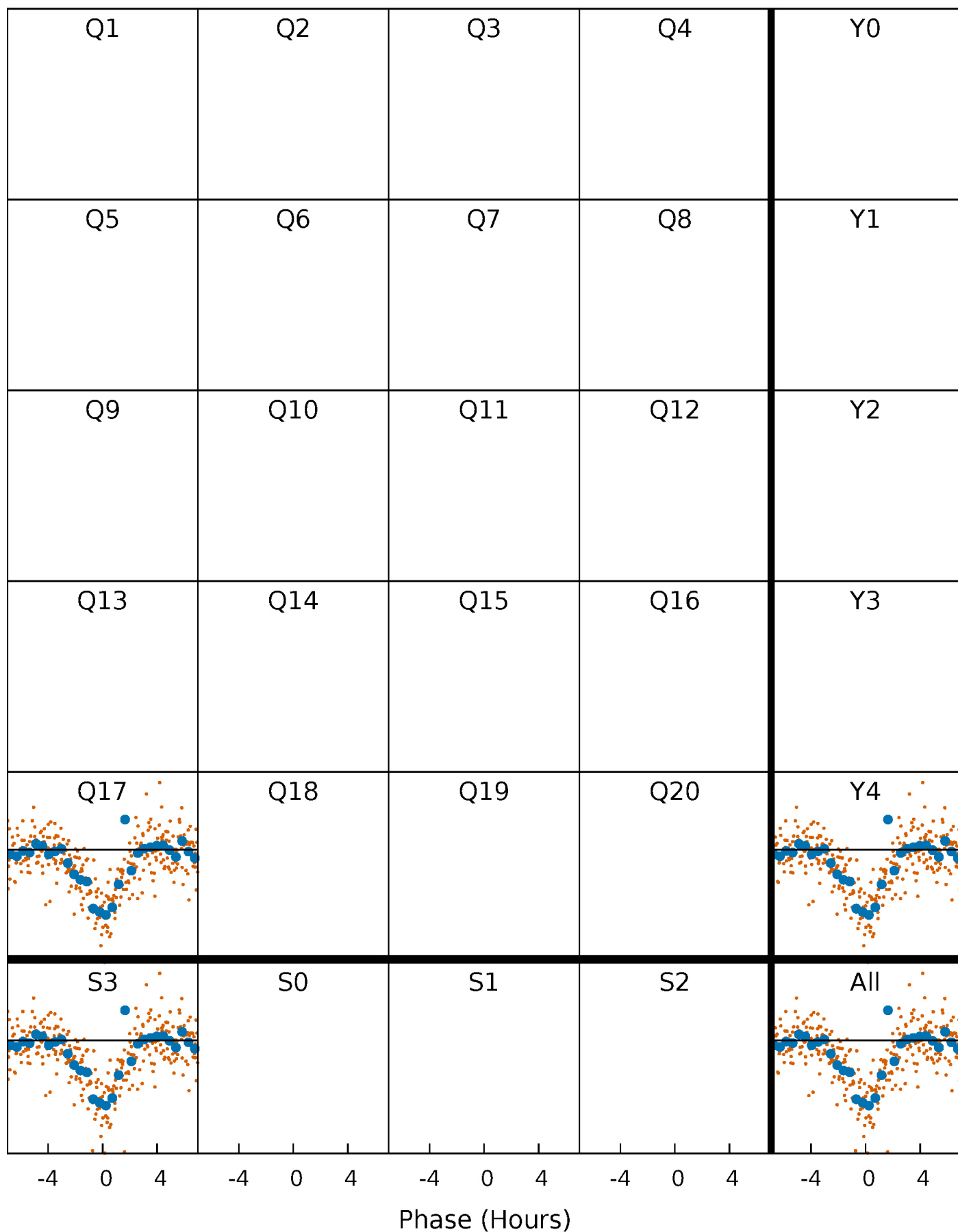
PDC Quarter-Phased Transit Curves

TCE 009635520-01 P= 2.353733 Days $T_0=133.186546$ (BKJD)



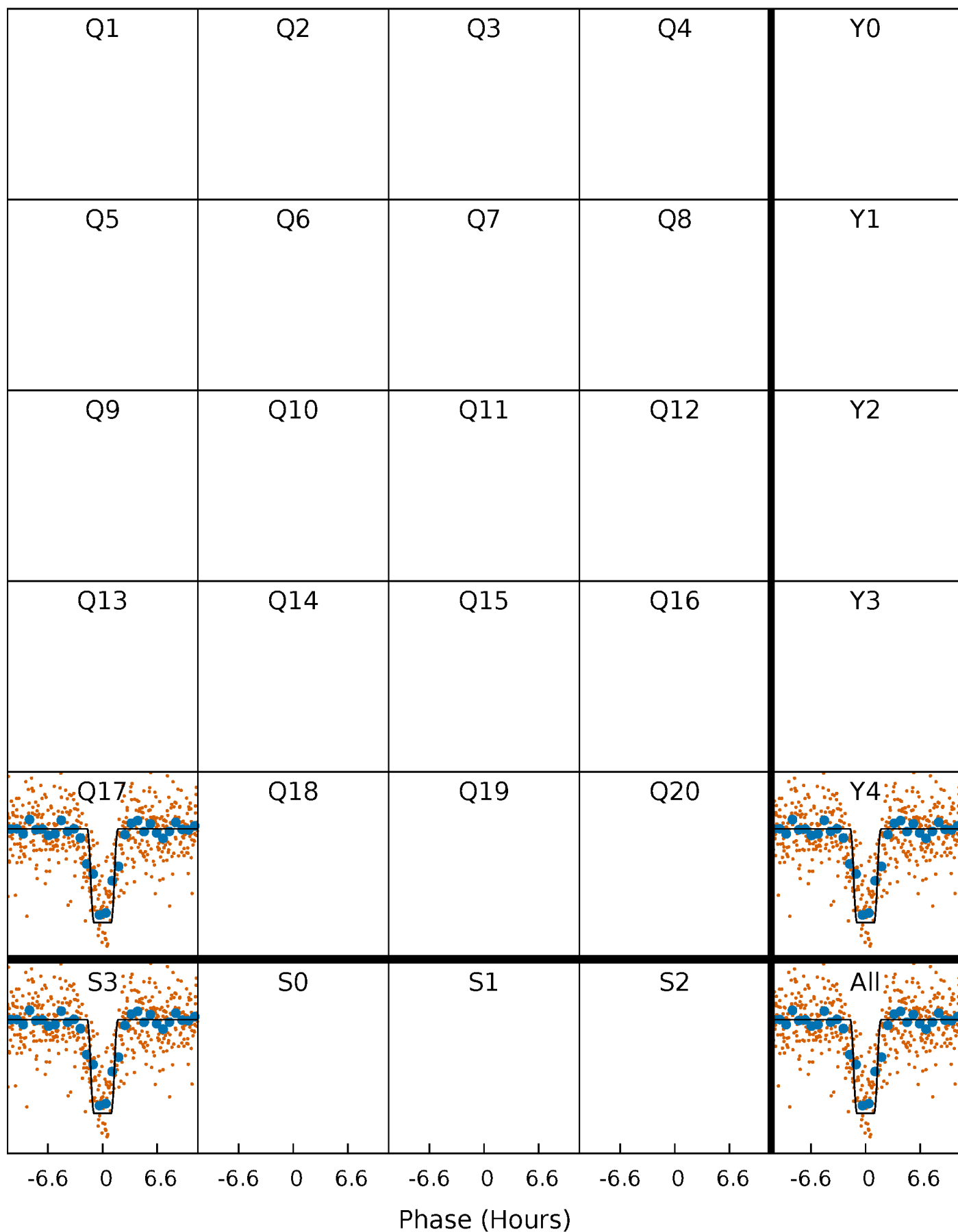
DV Quarter-Phased Transit Curves

TCE 009635520-01 P= 2.353733 Days $T_0=133.186546$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

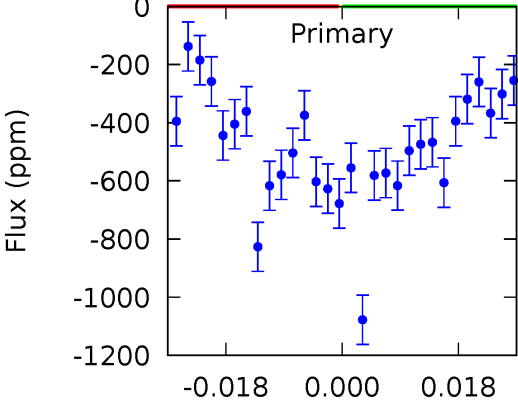
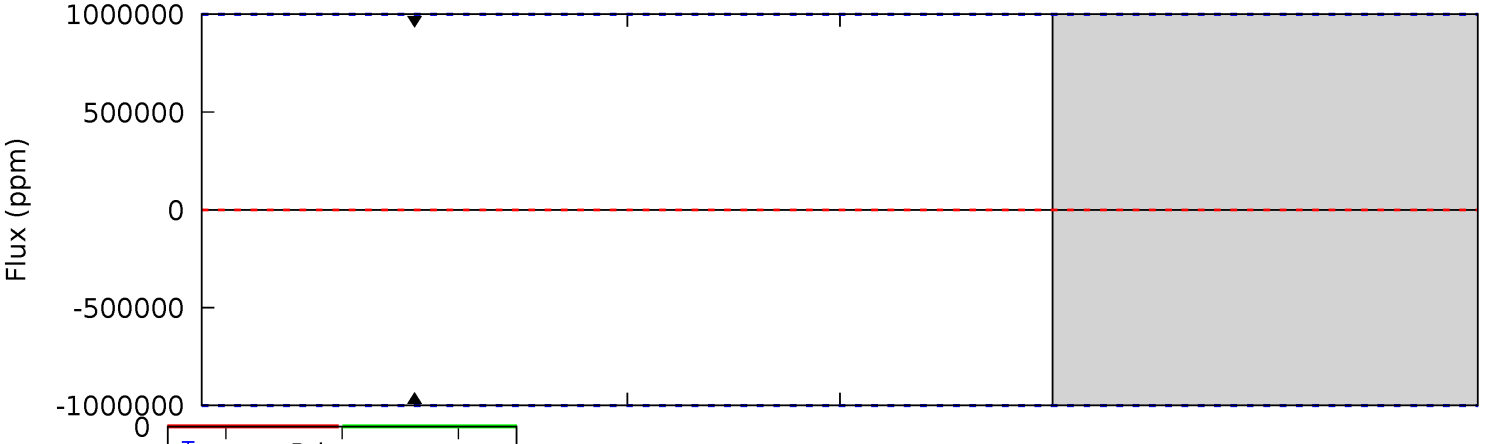
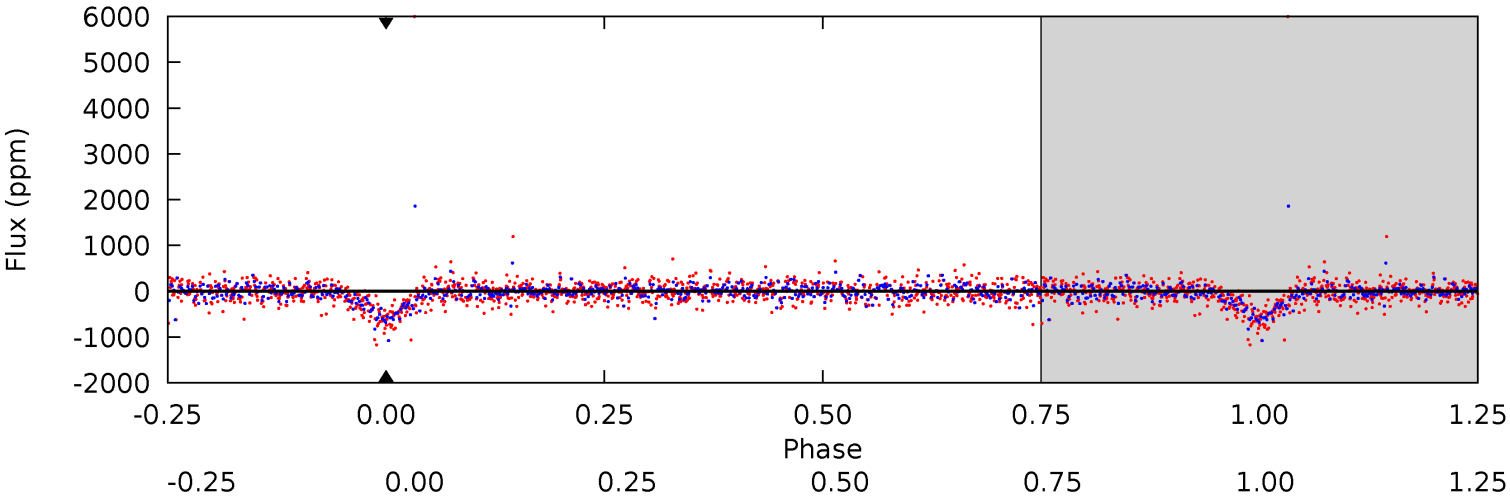
TCE 009635520-01 P= 2.353733 Days $T_0=133.185846$ (BKJD)



DV Model-Shift Uniqueness Test

009635520-01, P = 2.353733 Days, E = 133.186546 Days

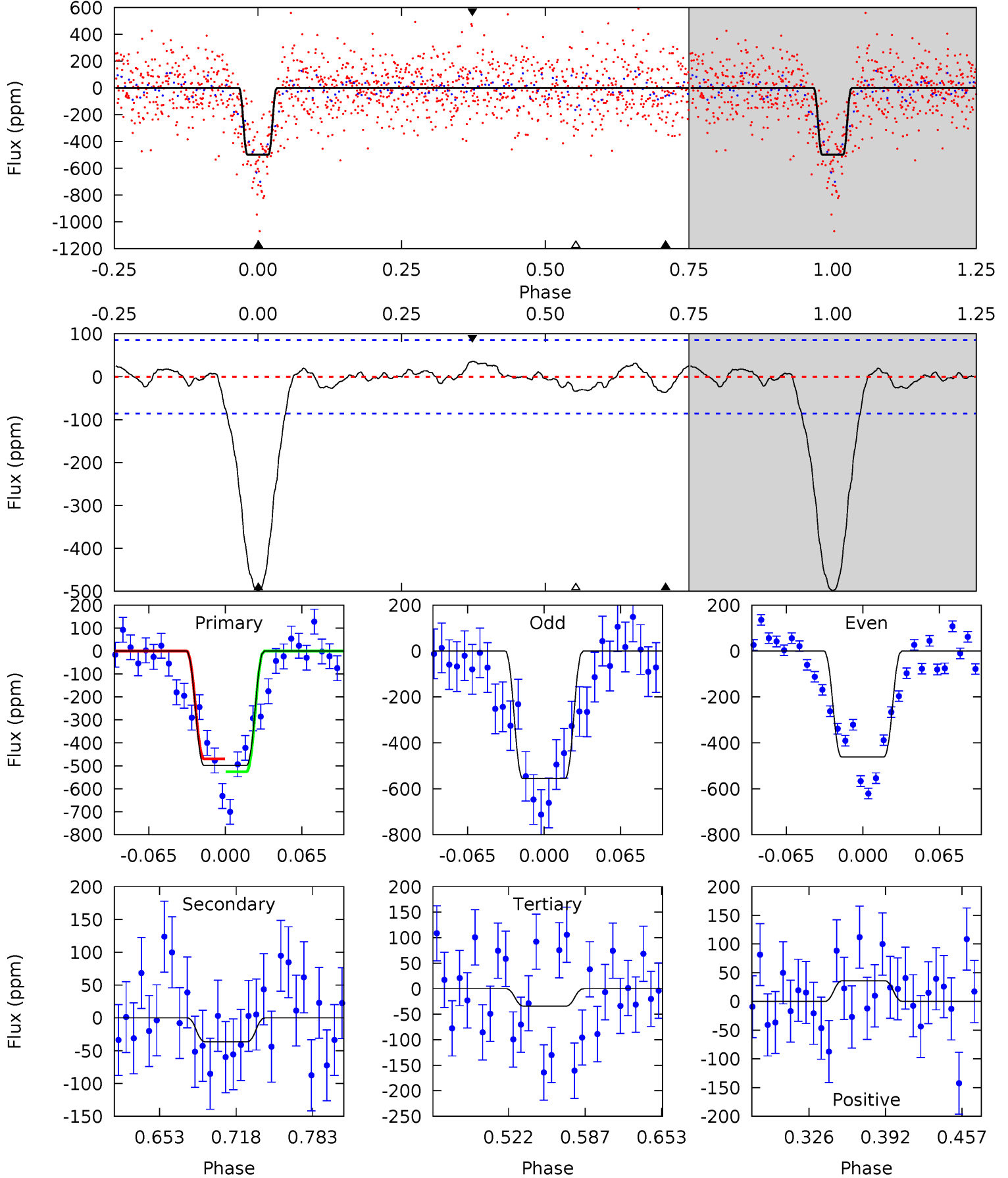
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

009635520-01, P = 2.353733 Days, E = 133.185846 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.0	1.97	1.85	1.96	4.65	1.84	0.82	25.2	25.1	0.12	0.02	2.58	1.04	0.07	1.52



Stellar Parameters For KIC 009635520

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5445^{+109}_{-87}	$4.140^{+0.322}_{-0.138}$	$0.480^{+0.050}_{-0.250}$	$1.426^{+0.312}_{-0.469}$	$1.024^{+0.074}_{-0.090}$	$0.497^{+1.049}_{-0.190}$
	+2%/-2%	+8%/-3%	+10%/-52%	+22%/-33%	+7%/-9%	+211%/-38%
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 009635520-01 / KOI 7205.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$10.80^{+11.83}_{-7.80}$	2118^{+133}_{-189}	5411^{+16596}_{-21286}	30^{+1395}_{-820}
Alt.	-36 ± 18	$11.20^{+12.31}_{-7.64}$	2124^{+131}_{-209}	-2268^{+5404}_{-270}	$0.174^{+1.745}_{-0.136}$

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 $A_{obs} \gg 1.0$

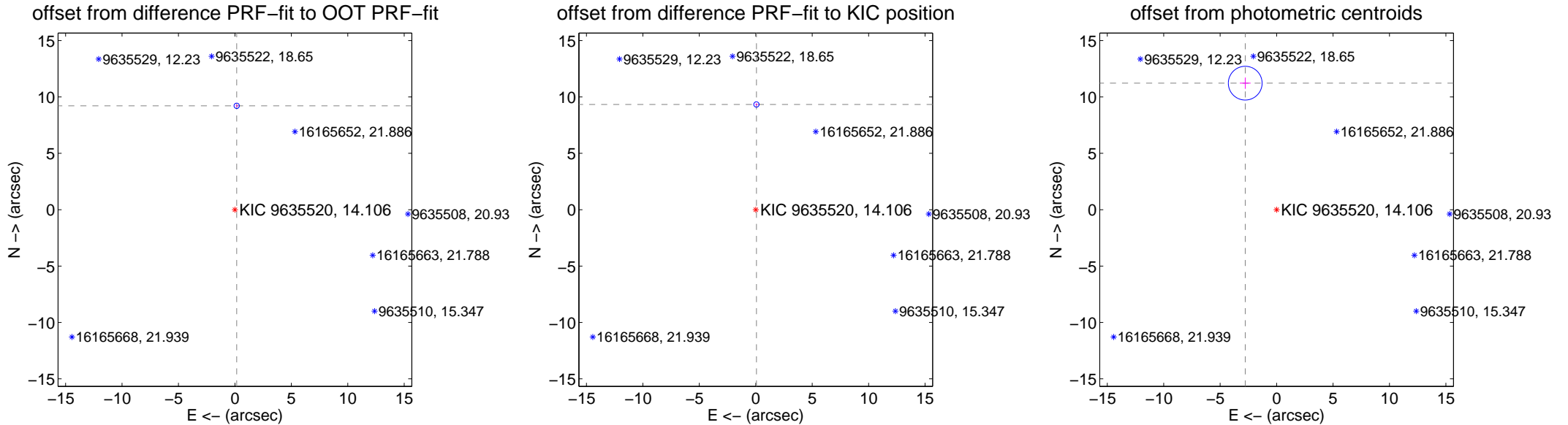
DV Centroid Data

Supplemental centroid analysis for 009635520-01. Kepler magnitude: 14.11. Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	9.214 \pm 0.079	116.58	-0.156 \pm 0.084	9.213 \pm 0.079
PRF-fit source offset from KIC position	9.331 \pm 0.079	118.05	-0.060 \pm 0.084	9.331 \pm 0.079
photometric centroid source offset	11.56 \pm 0.50	23.18	2.78 \pm 0.48	11.22 \pm 0.50



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.



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



UKIRT Image

Declination

