

KIC 003954136

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})
003954136-01	OBS	No	1.289291	131.592728	233.6	4.500	8.8	-1.0	1.20	6564	1.84	4018.57

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003954136-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_NOFITS

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

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

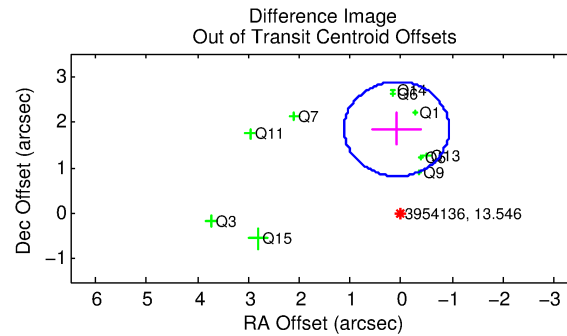
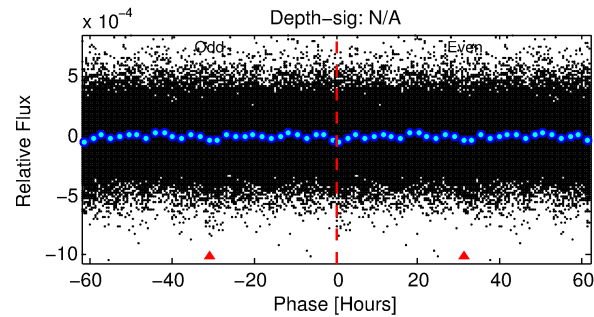
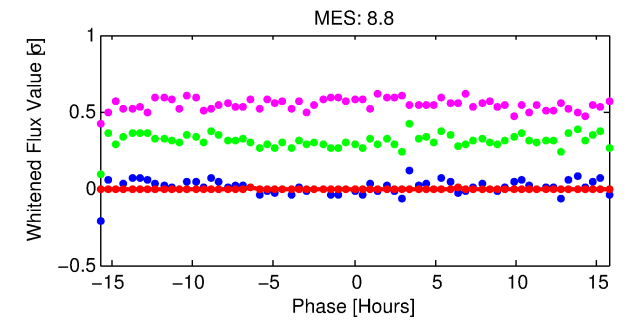
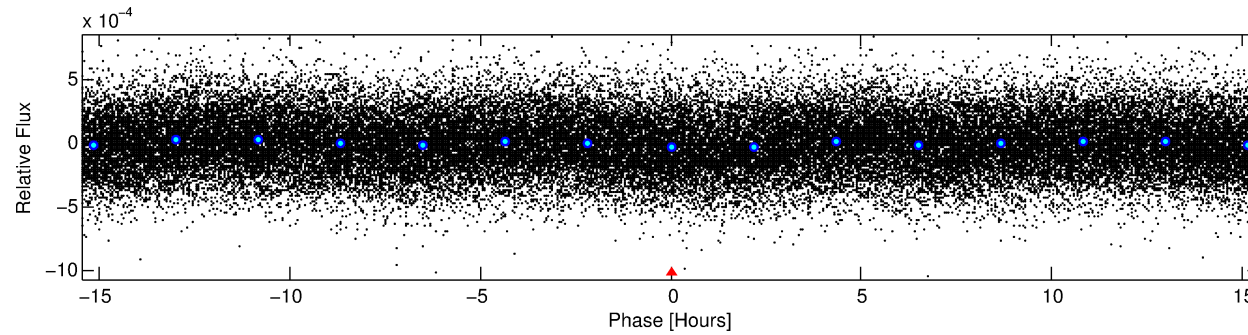
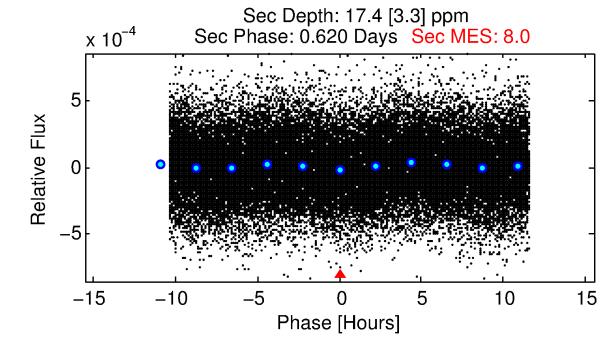
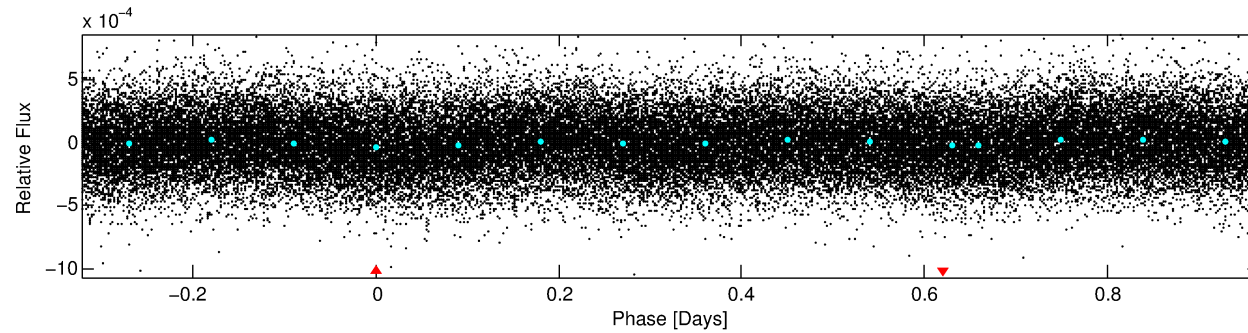
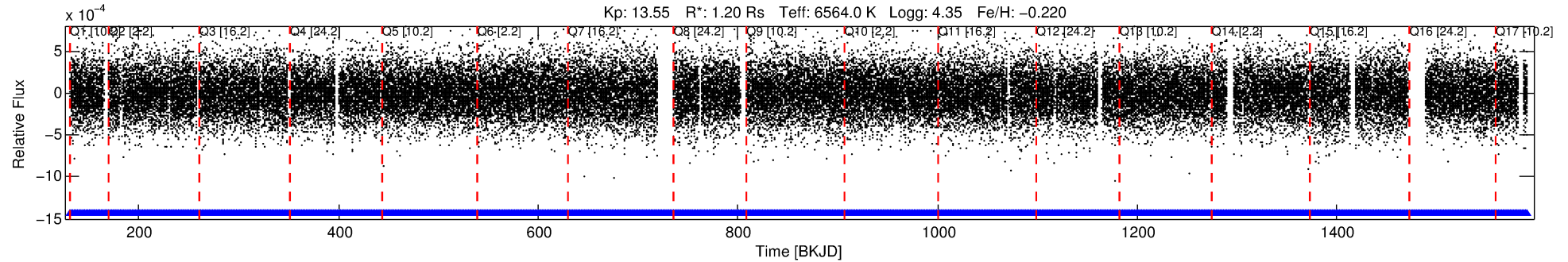
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003954136-01

No Significant Match Found

DV One-Page Summary

KIC: 3954136 Candidate: 1 of 1 Period: 1.289 d



TPS TCE Results:

Period = 1.28929 d
Epoch = 131.5927 BKJD

DV fit results are unavailable

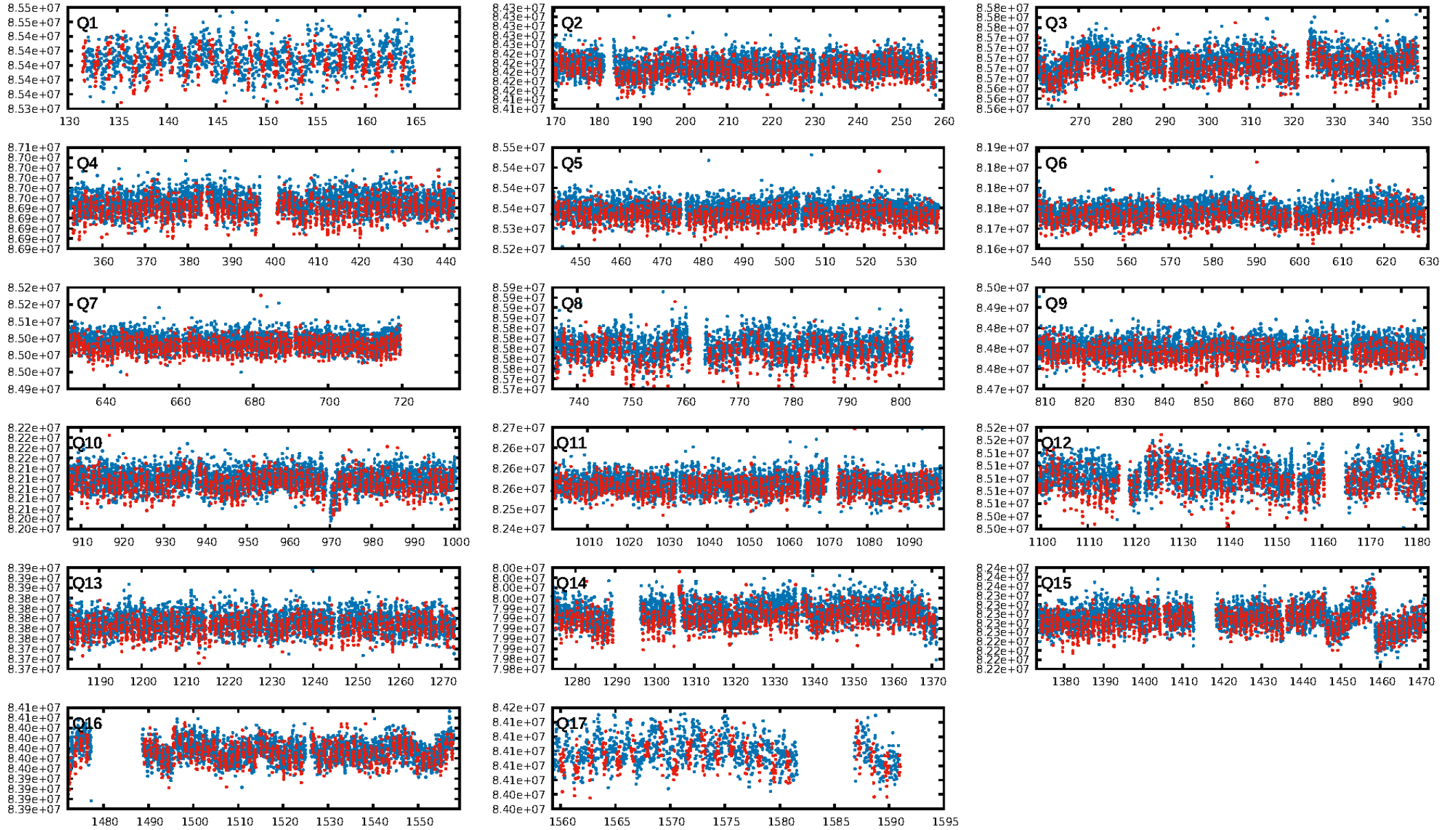
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.11e-14
RollingBand-fgt: 1.00 [1005/1005]
GhostDiagnostic-chr: 0.5356
Centroid-sig: 0.0%
Centroid-so: 0.243 arcsec [2.39 σ]
OotOffset-rm: 1.851 arcsec [5.37 σ]
KicOffset-rm: 1.771 arcsec [6.18 σ]
OotOffset-st: 2/4/0/4 [10]
KicOffset-st: 2/4/0/4 [10]
DiffImageQuality-fgm: 0.60 [6/10]
DiffImageOverlap-fno: 1.00 [17/17]

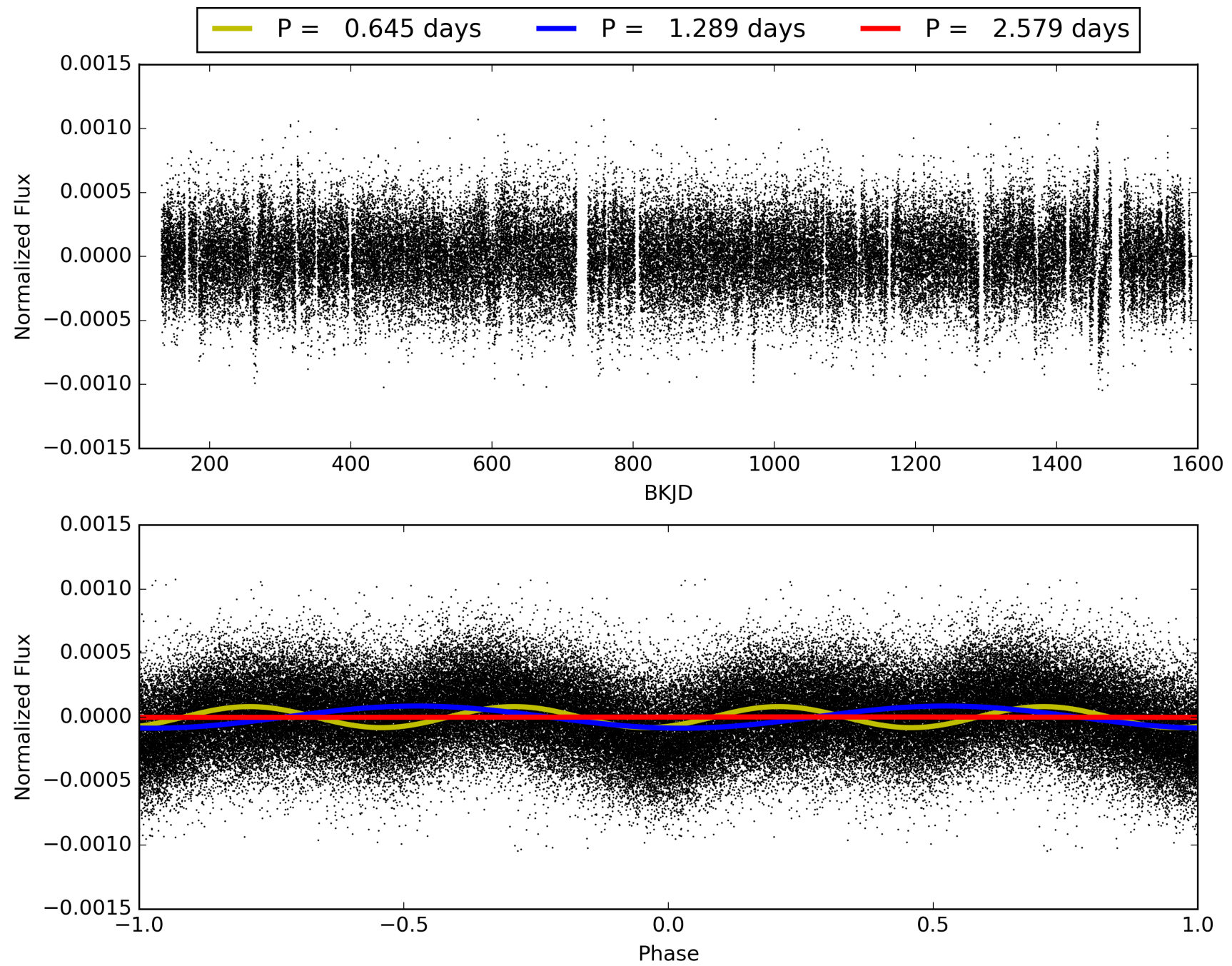
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 00:42:59 Z

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

TCE 003954136-01, PDC Light Curves

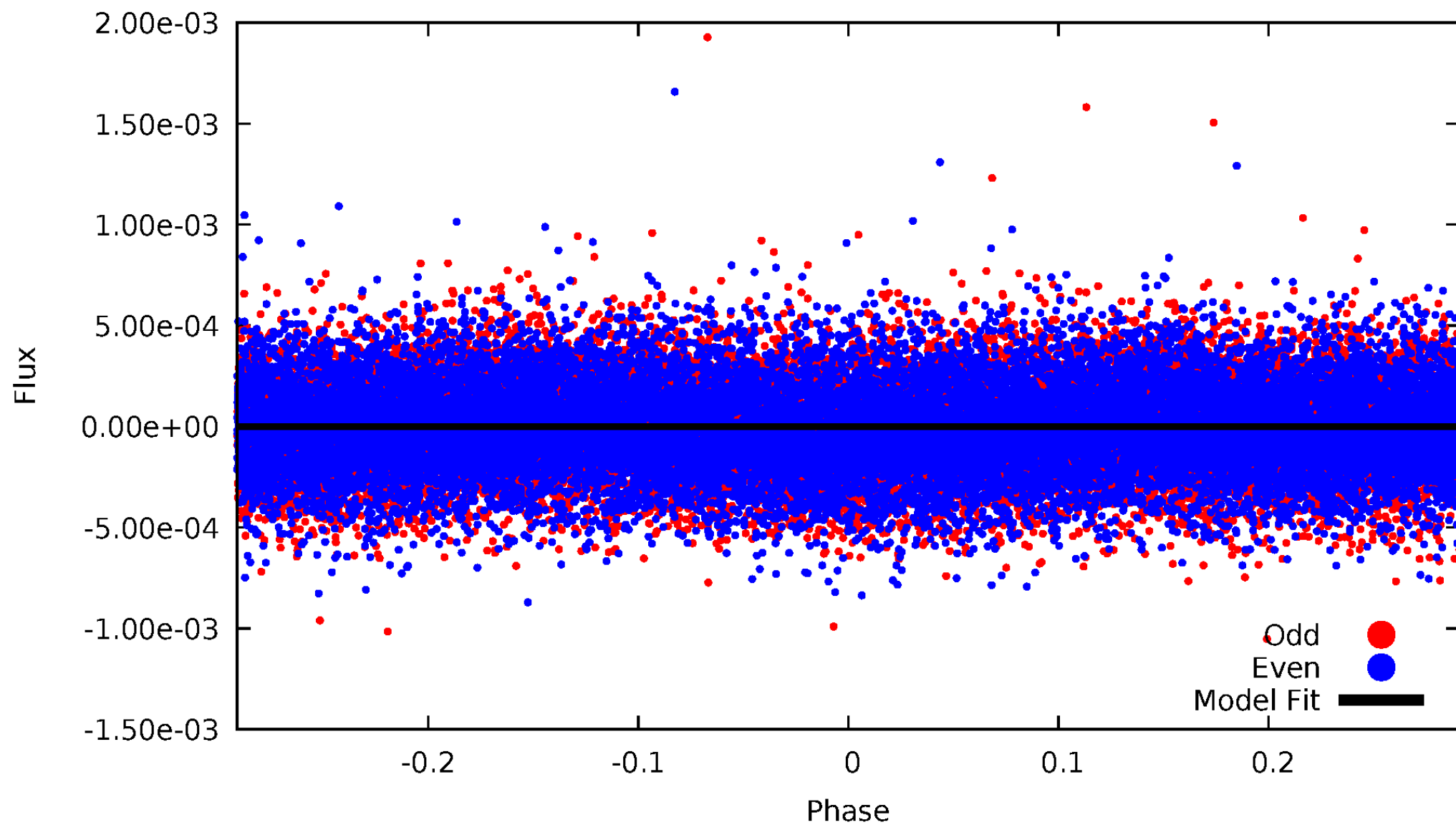


TCE 003954136-01



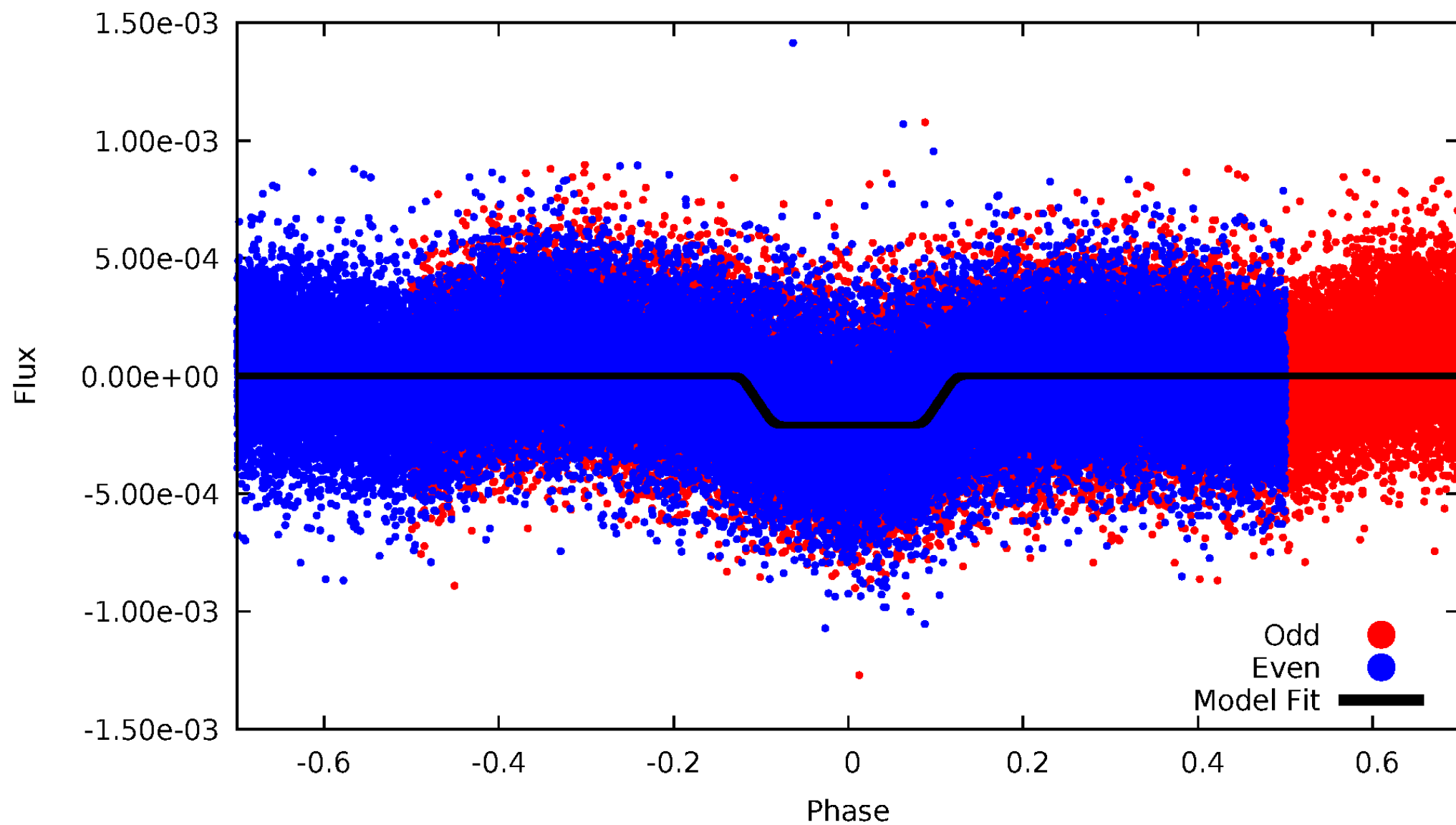
DV Odd/Even

TCE 003954136-01

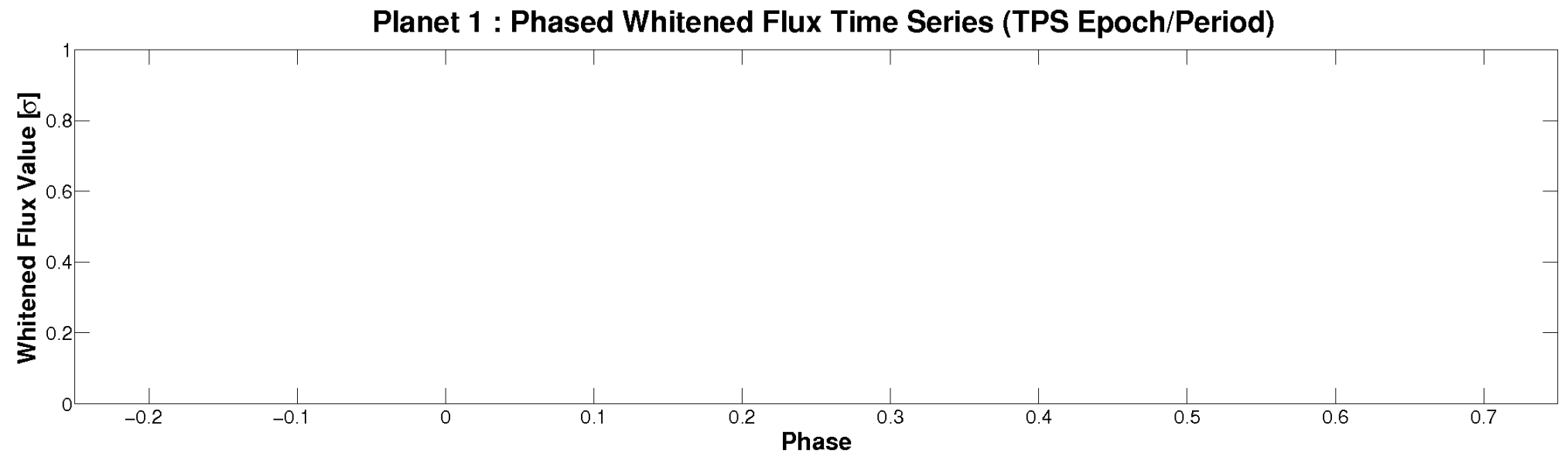
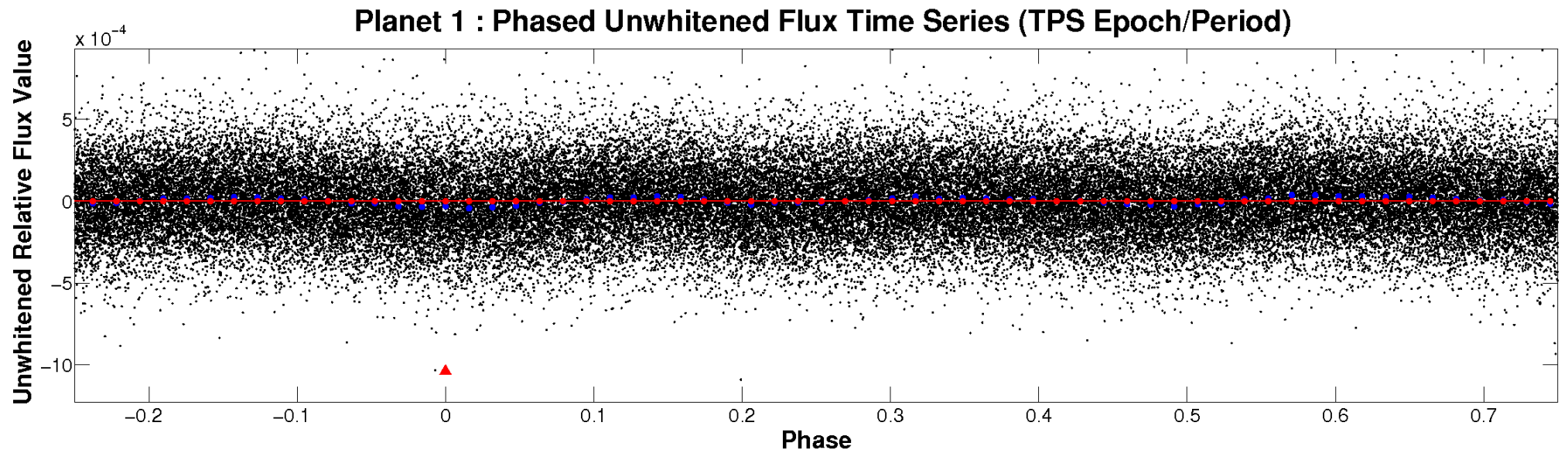


ALT Odd/Even

TCE 003954136-01

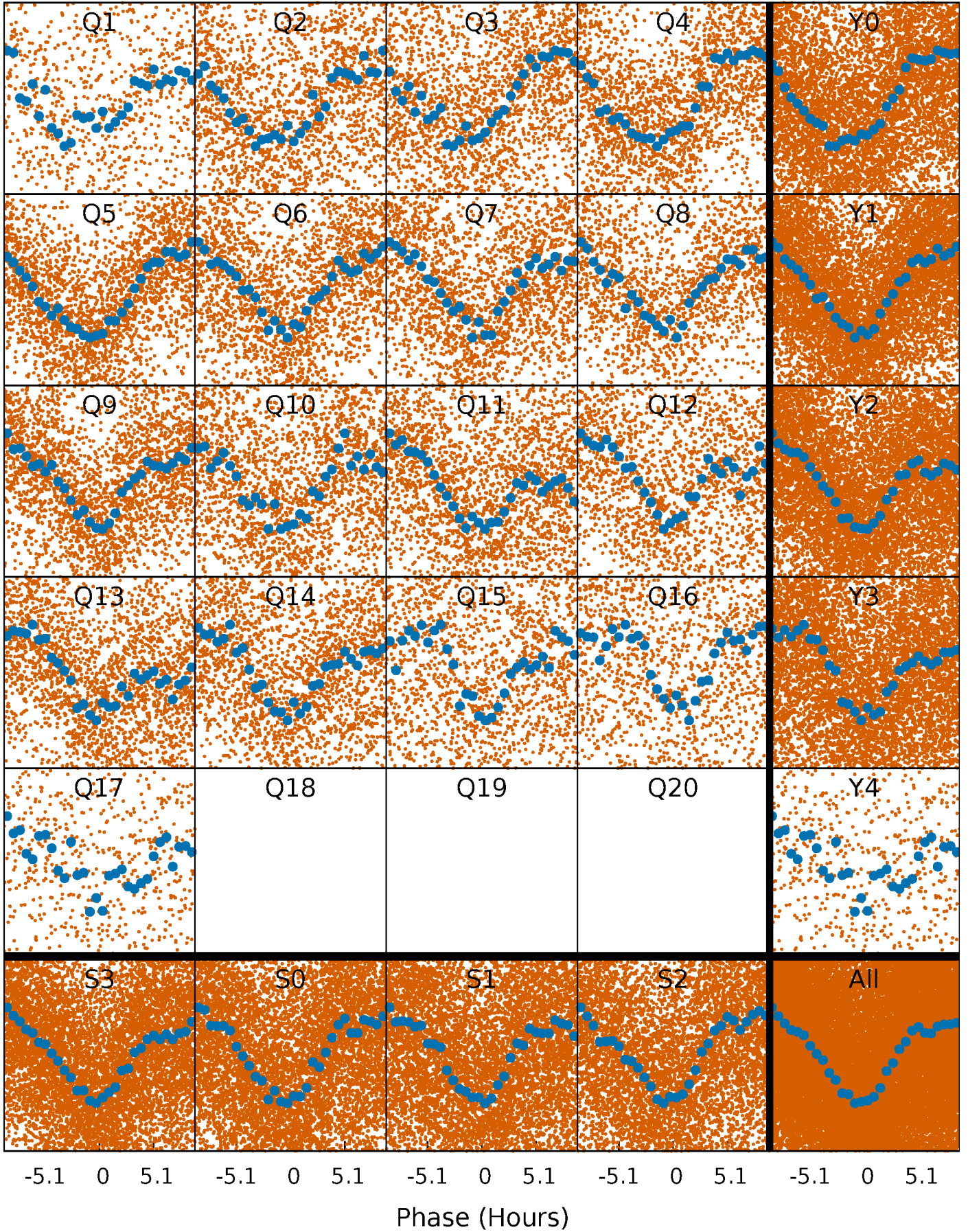


Non-Whitened Vs. Whitened Light Curve



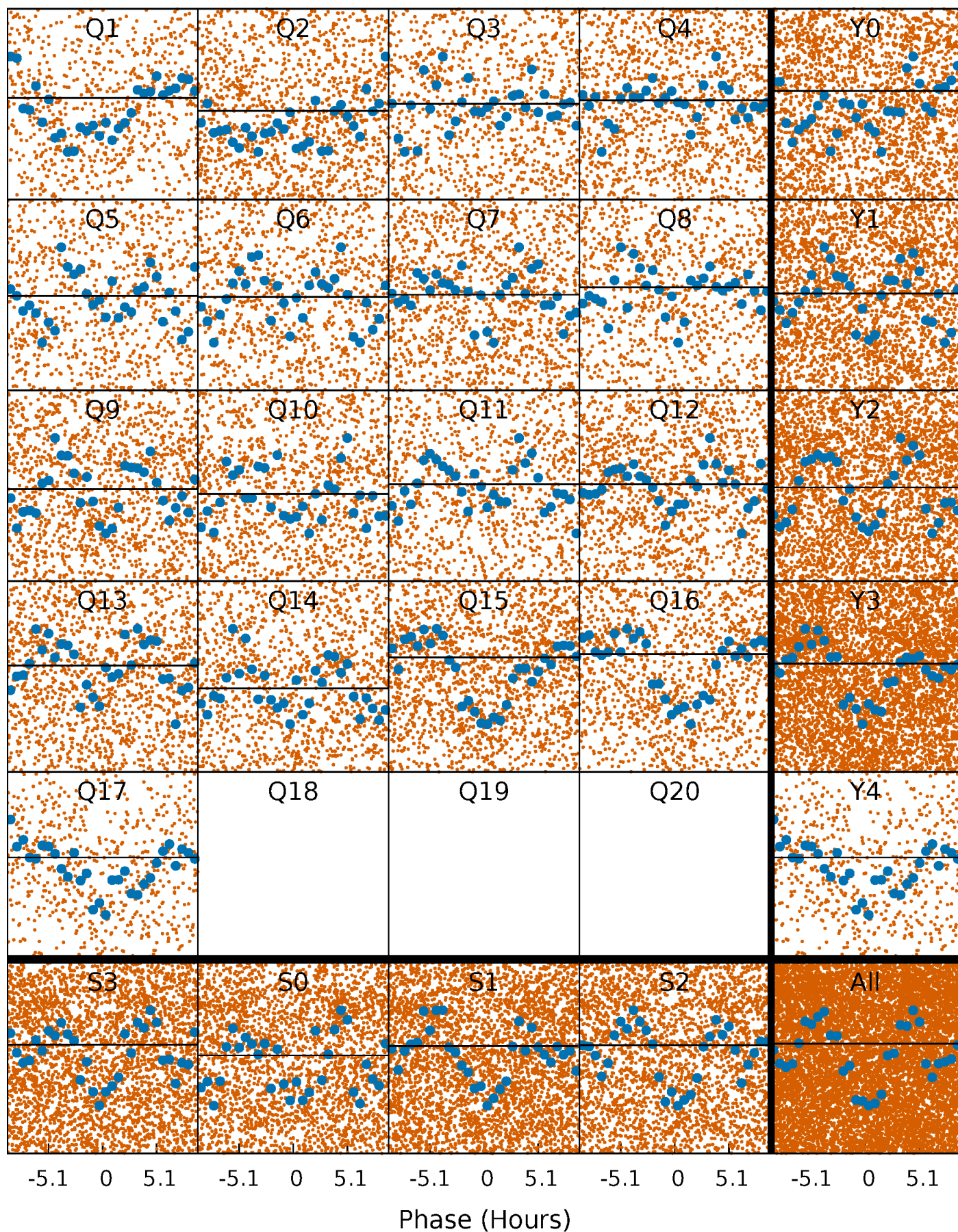
PDC Quarter-Phased Transit Curves

TCE 003954136-01 P= 1.289291 Days $T_0=131.592728$ (BKJD)



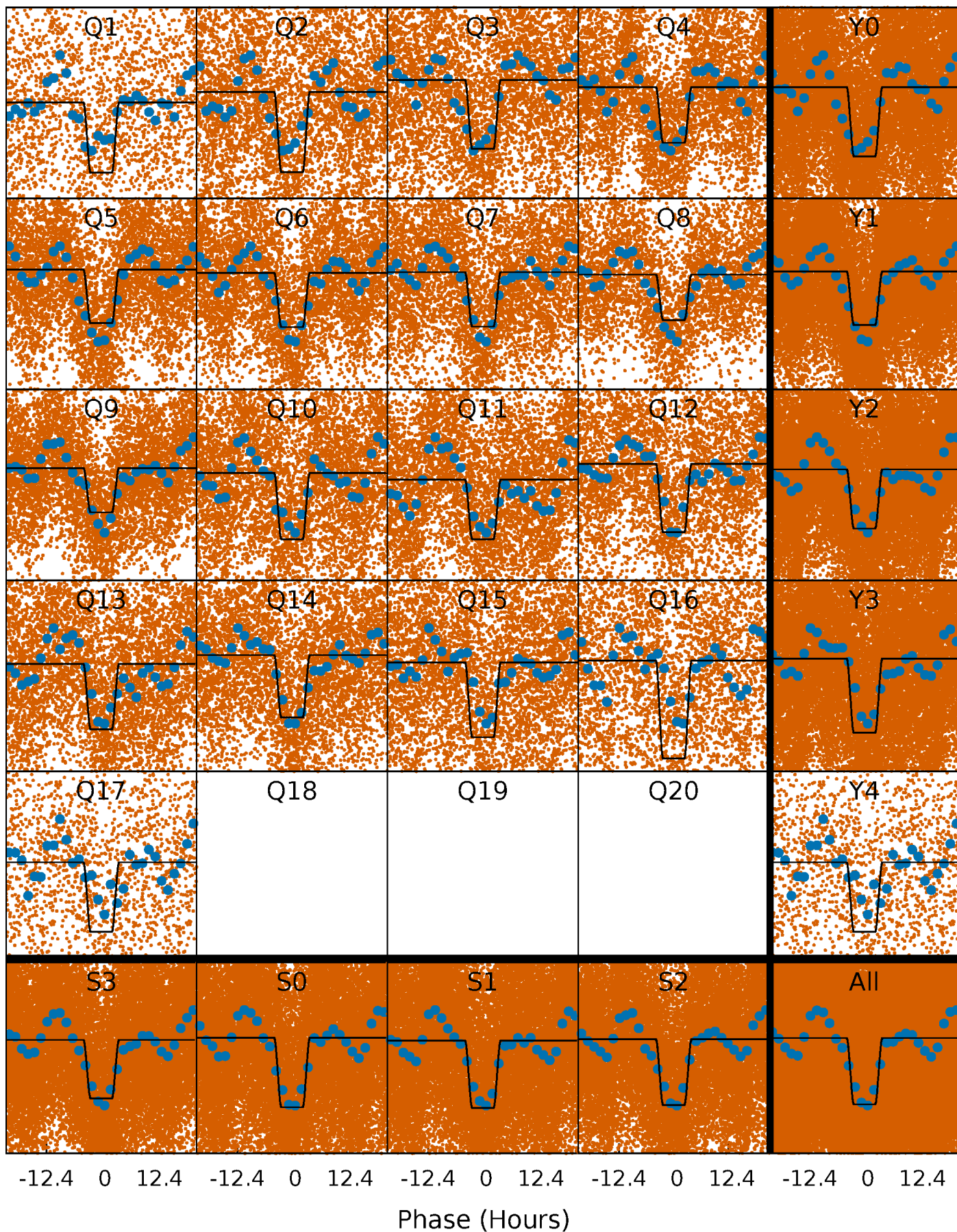
DV Quarter-Phased Transit Curves

TCE 003954136-01 P= 1.289291 Days $T_0=131.592728$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

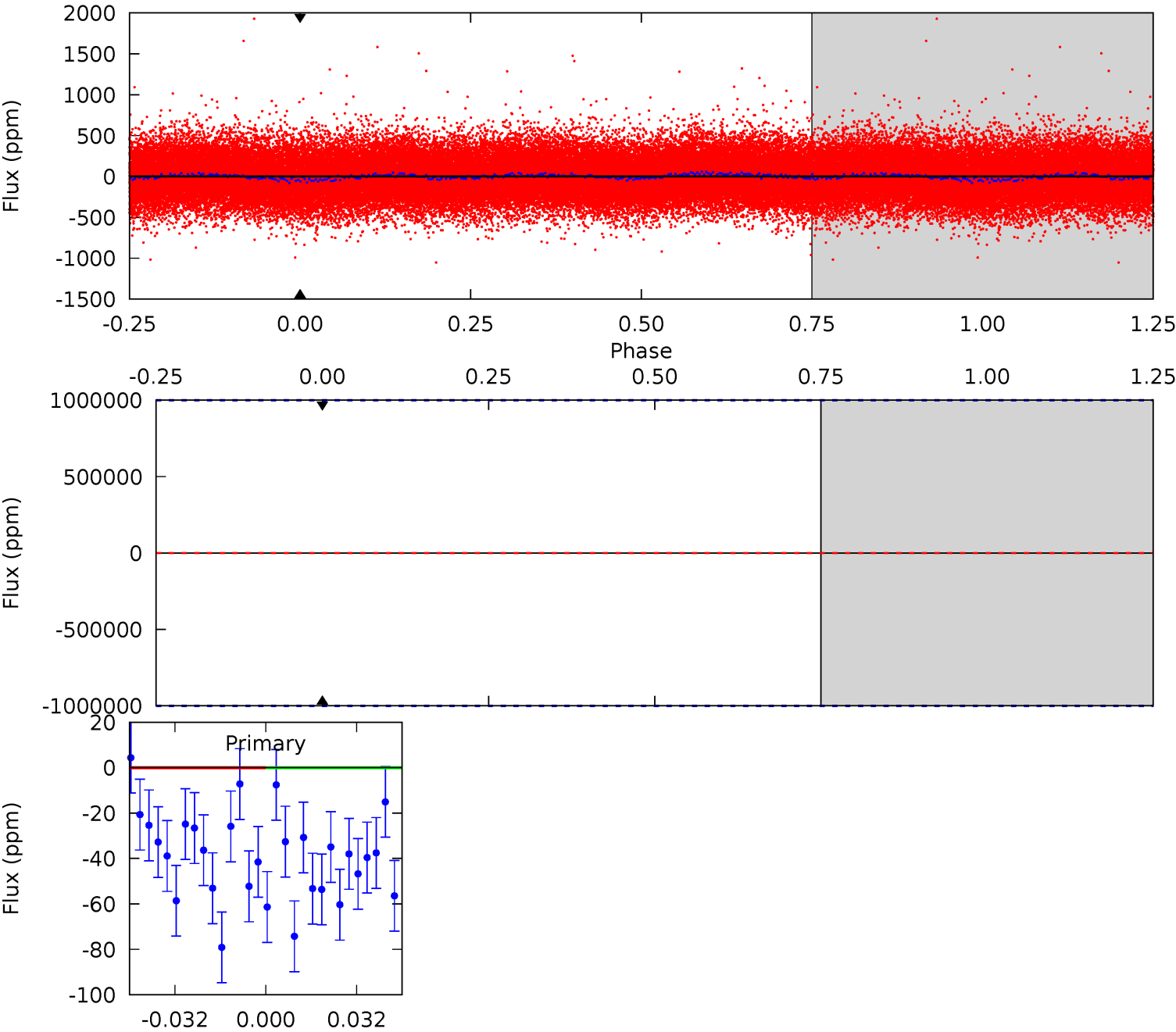
TCE 003954136-01 P= 1.289291 Days $T_0=131.567733$ (BKJD)



DV Model-Shift Uniqueness Test

003954136-01, P = 1.289291 Days, E = 130.303437 Days

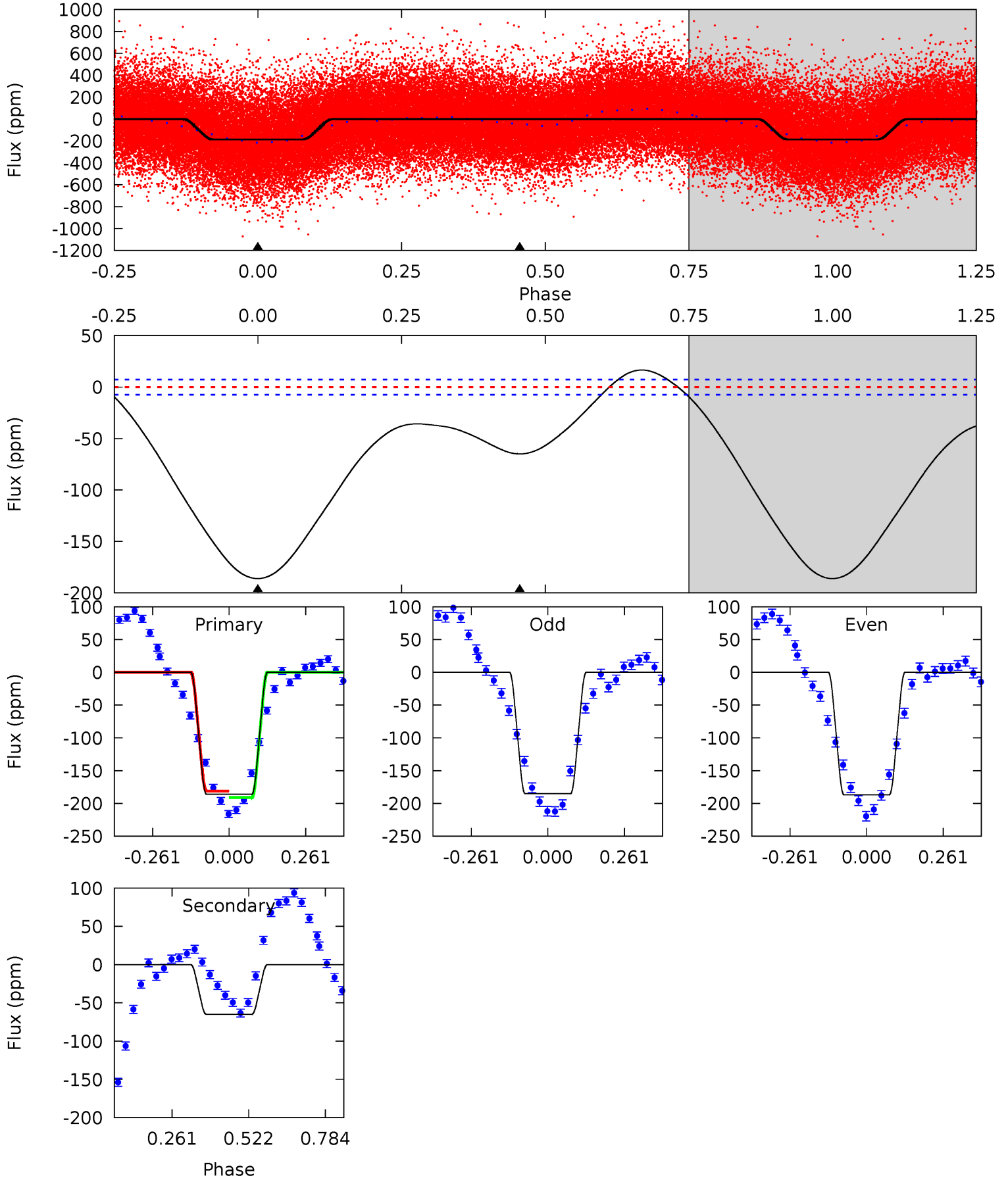
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

003954136-01, P = 1.289291 Days, E = 130.278442 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
109.7	38.3	0	0	4.36	1.12	9.28	109.7	109.7	38.3	38.3	0.47	1.01	0.08	2.80



Stellar Parameters For KIC 003954136

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6564^{+149}_{-215}	$4.346^{+0.084}_{-0.196}$	$-0.220^{+0.250}_{-0.300}$	$1.198^{+0.399}_{-0.160}$	$1.166^{+0.180}_{-0.164}$	$0.956^{+0.358}_{-0.502}$
	+2%/-3%	+2%/-5%	+114%/-136%	+33%/-13%	+15%/-14%	+37%/-52%
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 003954136-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$10.07^{+10.47}_{-6.94}$	2863^{+216}_{-143}	-3237^{+33391}_{-23077}	$-0.266^{+597.609}_{-521.083}$
Alt.	-65 ± 2	$9.24^{+10.99}_{-6.20}$	2859^{+218}_{-146}	-2389^{+6500}_{-559}	$0.249^{+2.142}_{-0.197}$

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 $A_{obs} \gg 1.0$

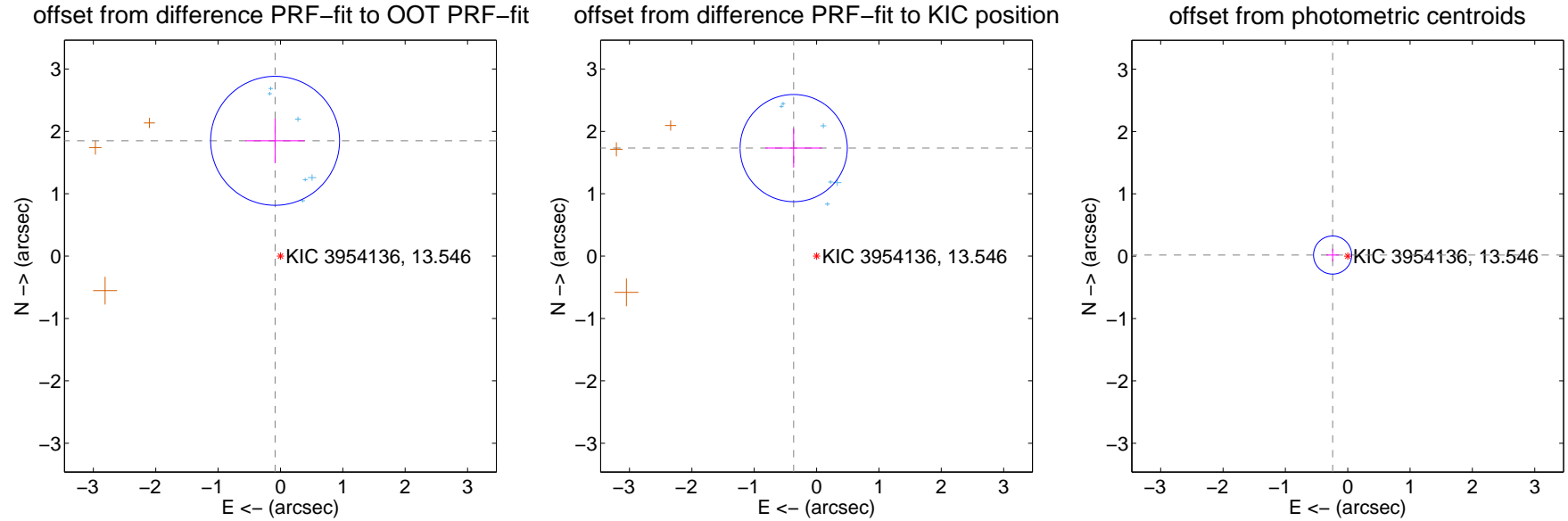
DV Centroid Data

Supplemental centroid analysis for 003954136-01. Kepler magnitude: 13.55. Transit SNR -1.00

There are 6 quarters with good PRF difference image offsets

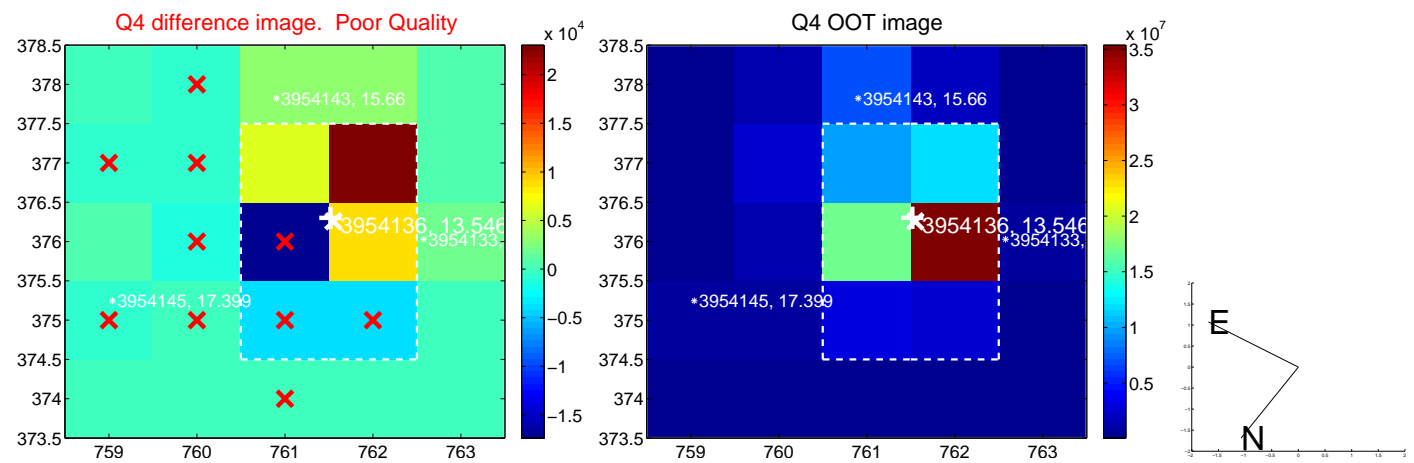
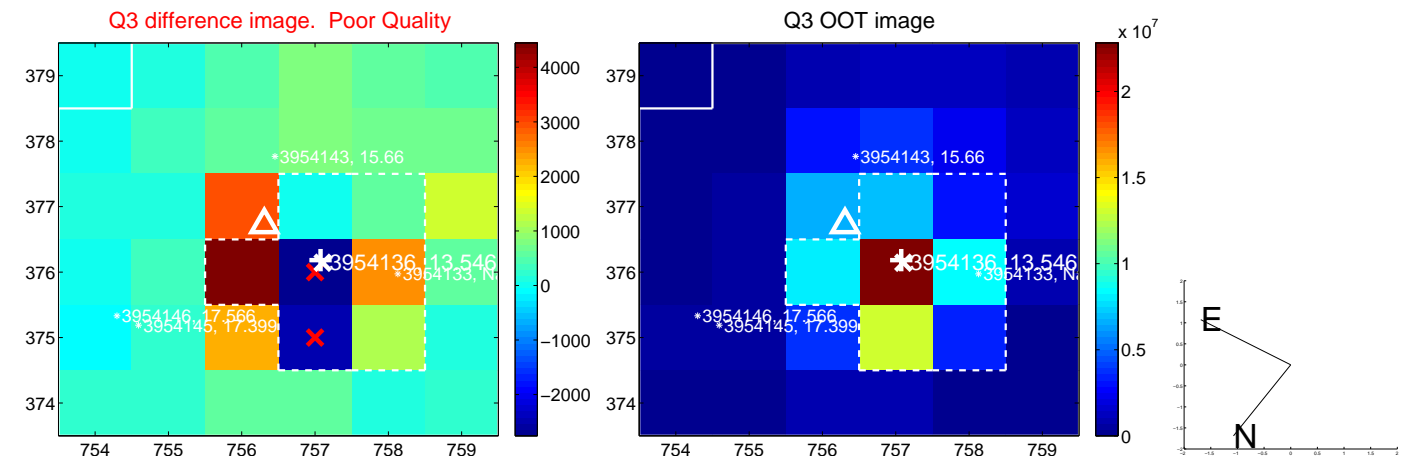
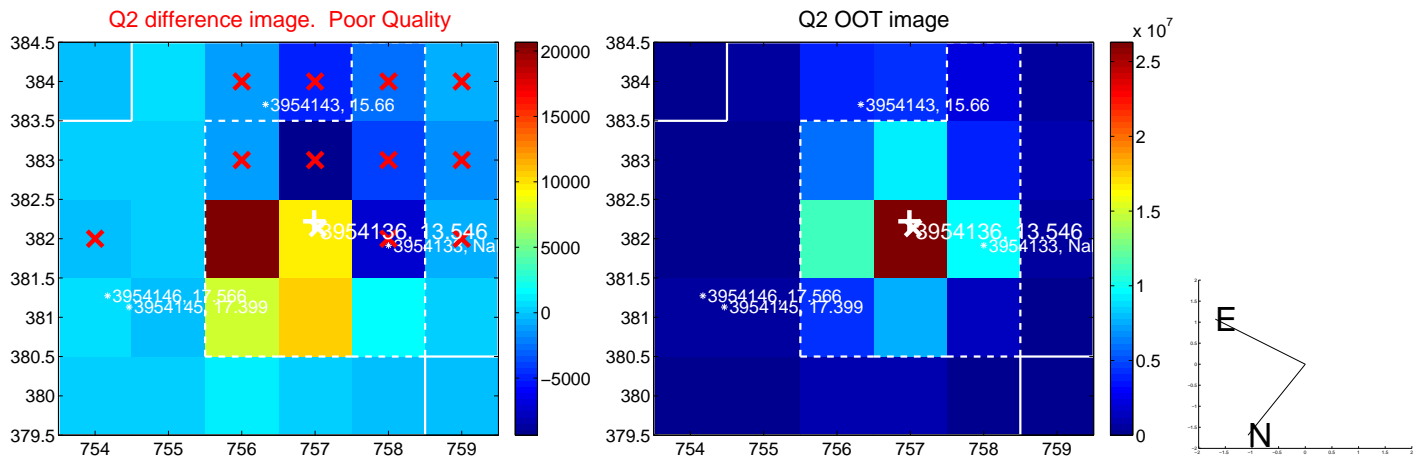
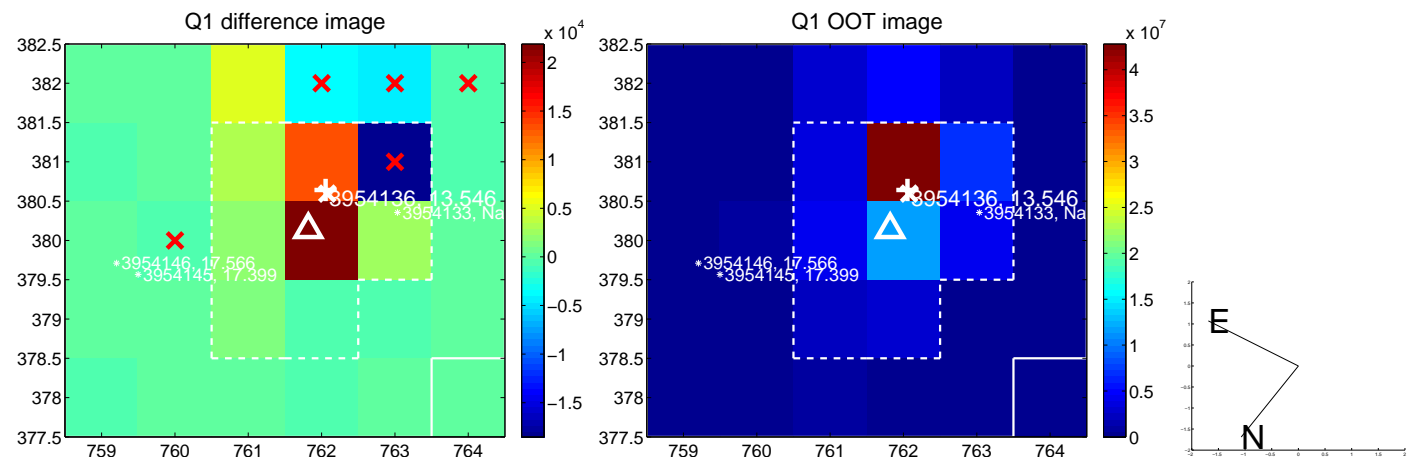
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.851 ± 0.345	5.37	0.086 ± 0.476	1.849 ± 0.355
PRF-fit source offset from KIC position	1.771 ± 0.286	6.18	0.367 ± 0.453	1.732 ± 0.311
photometric centroid source offset	0.24 ± 0.10	2.39	0.24 ± 0.10	0.02 ± 0.10

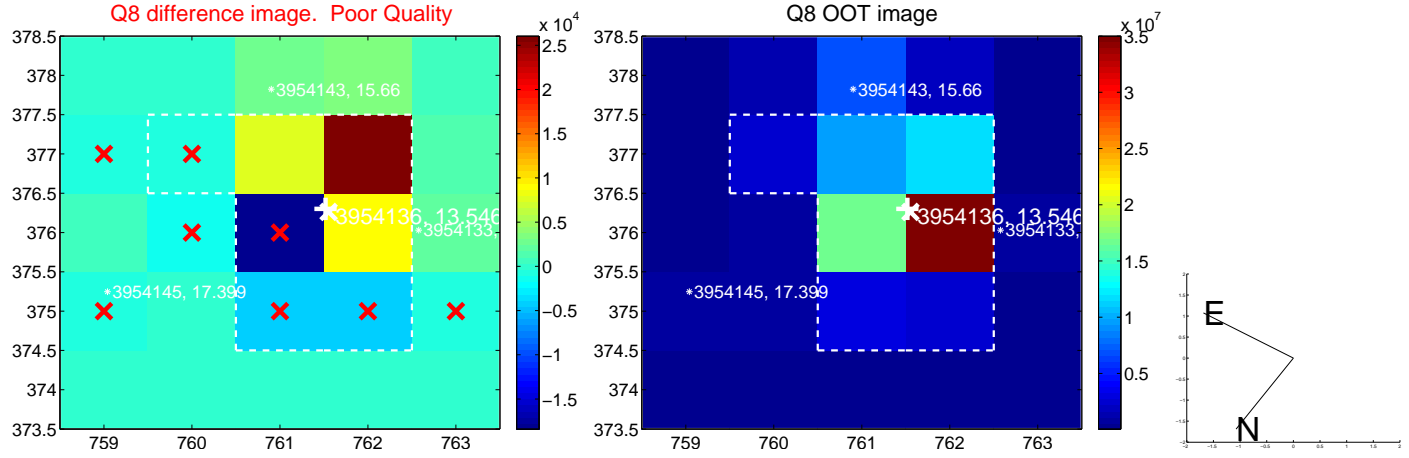
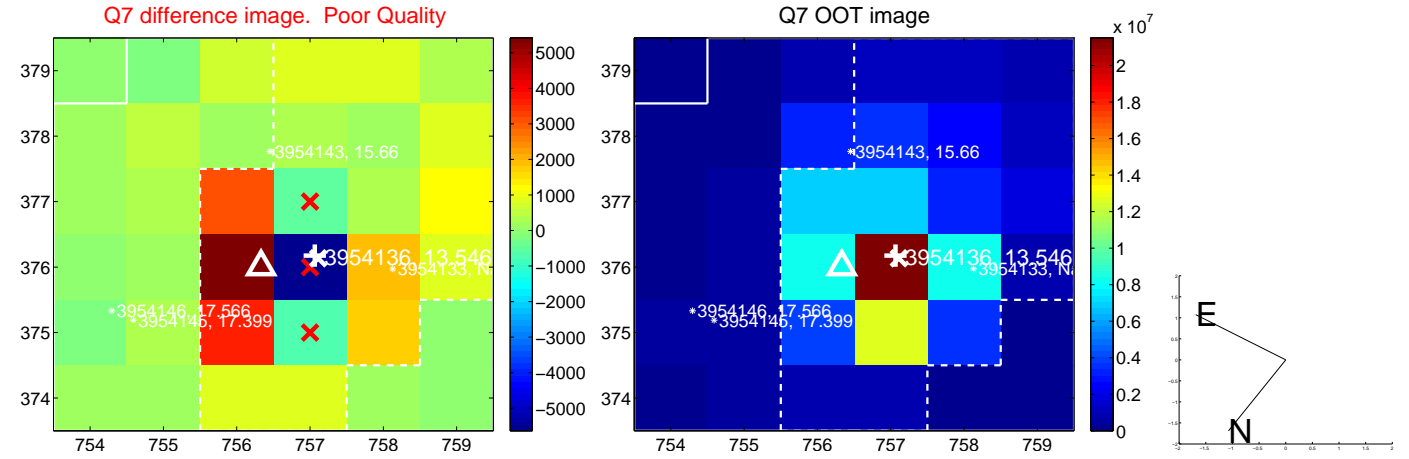
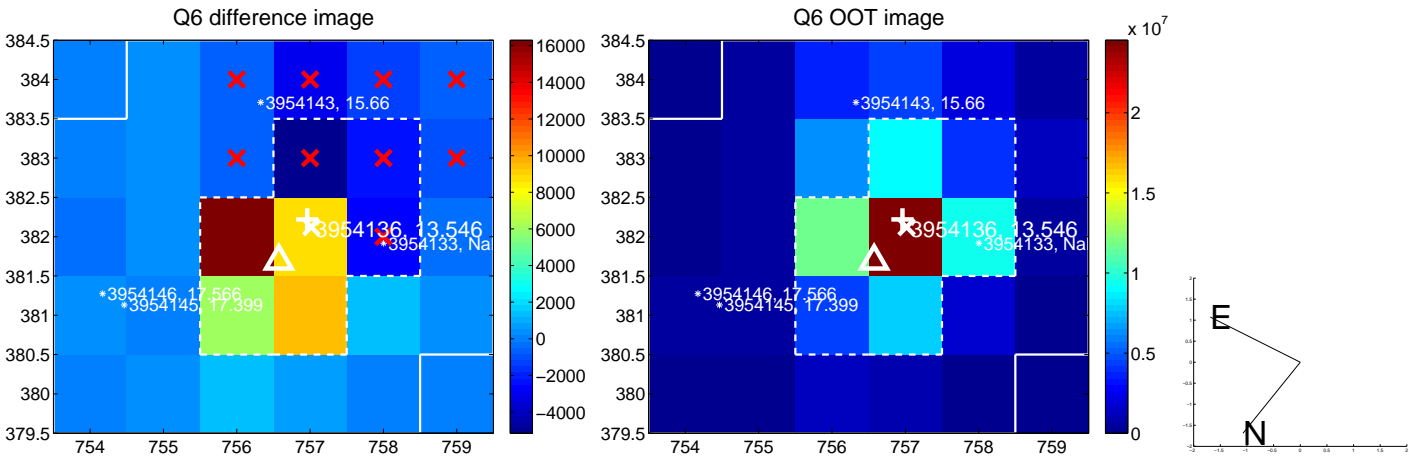
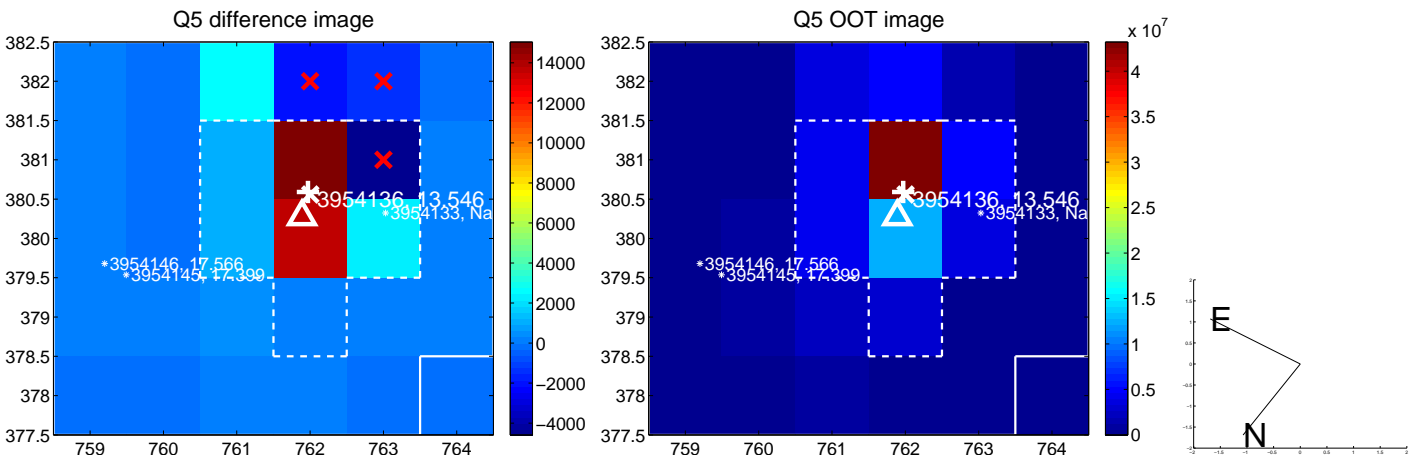


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

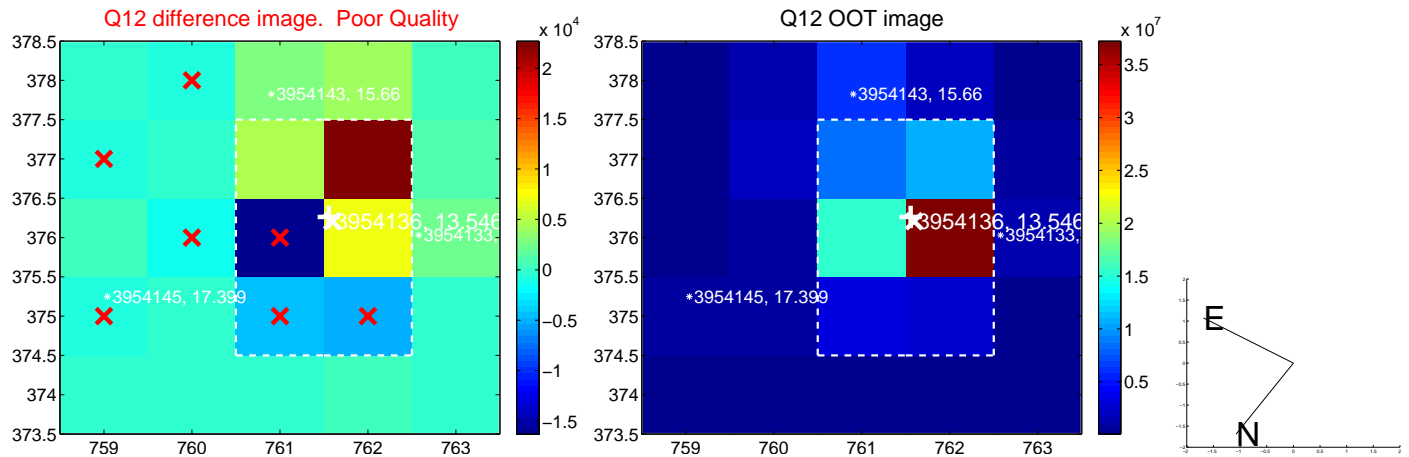
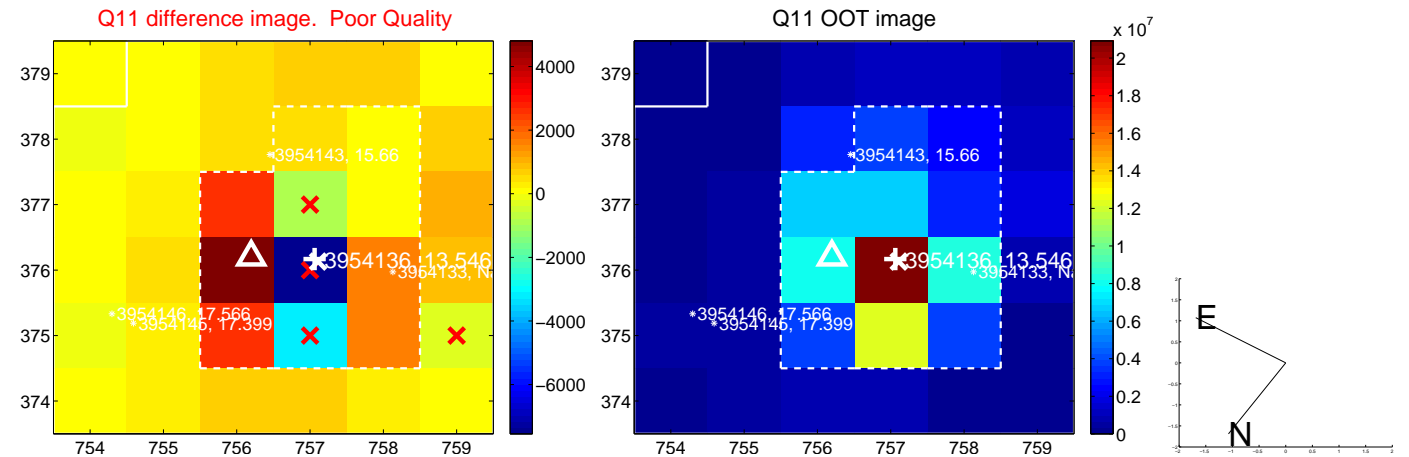
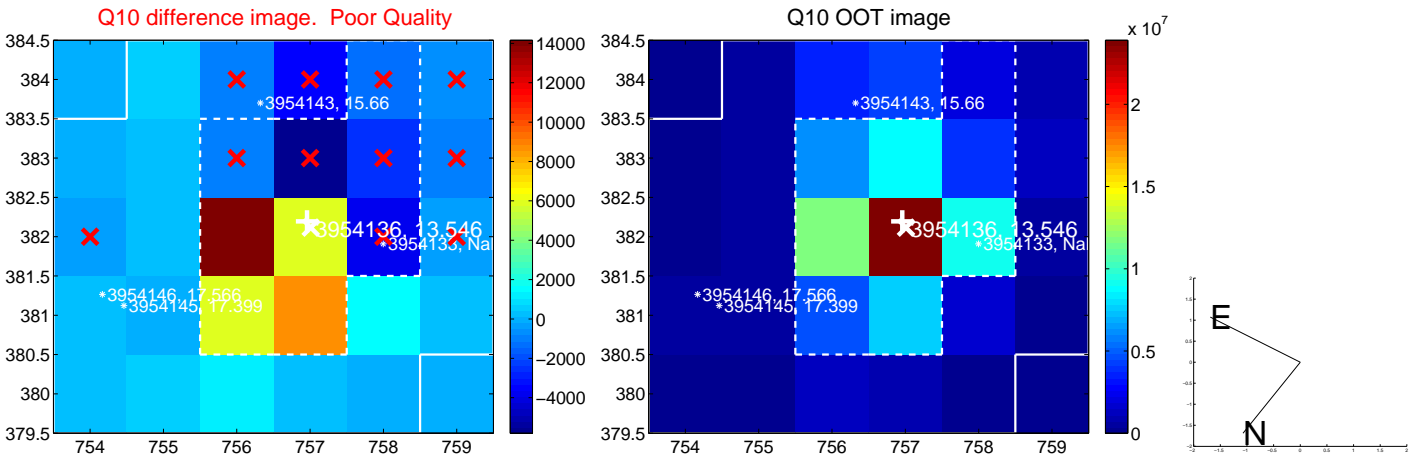
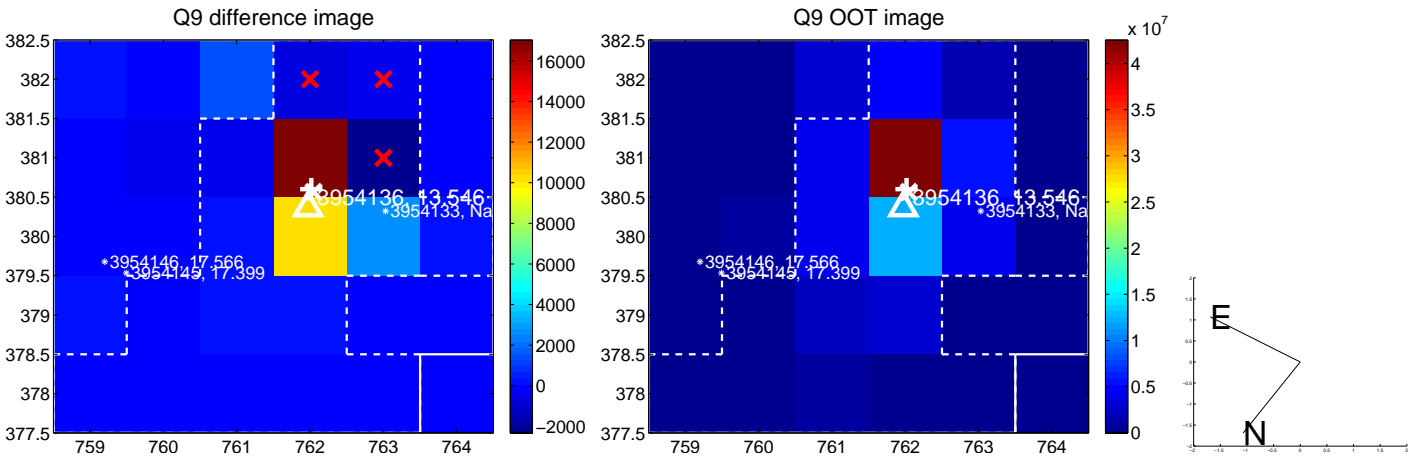
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



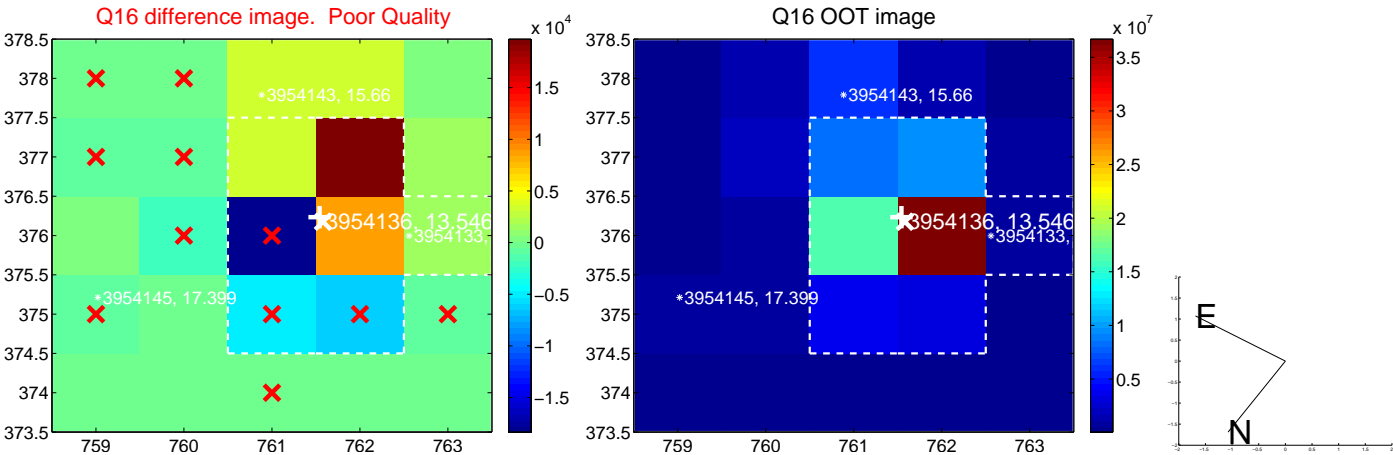
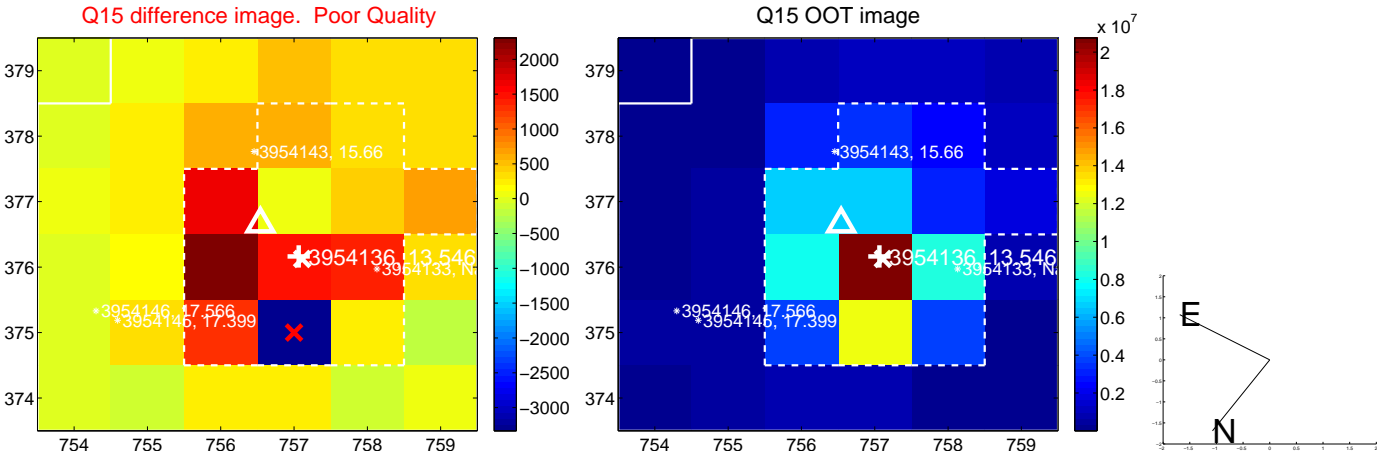
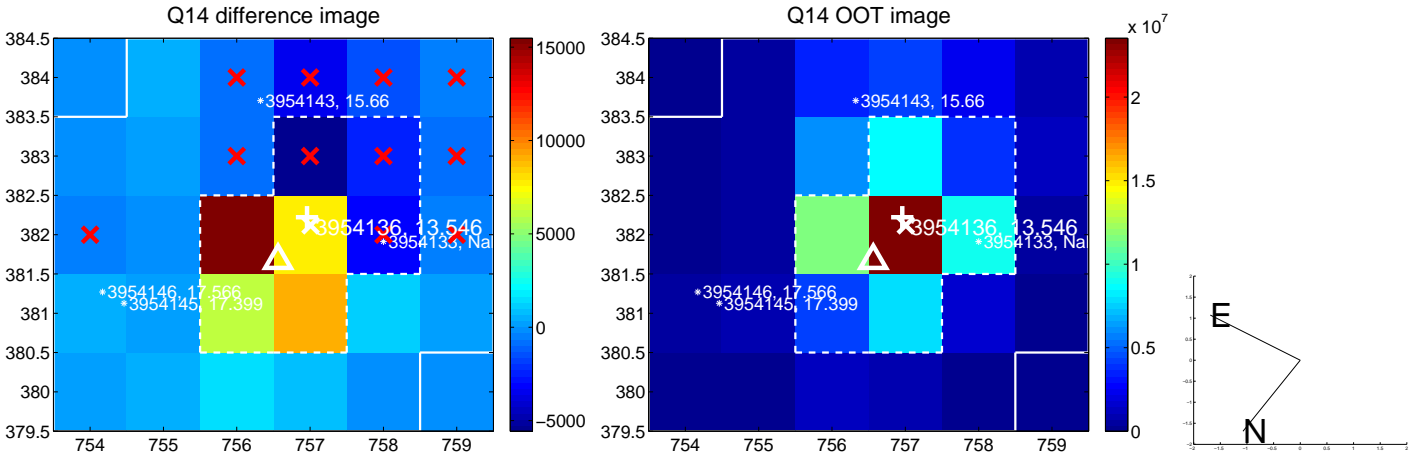
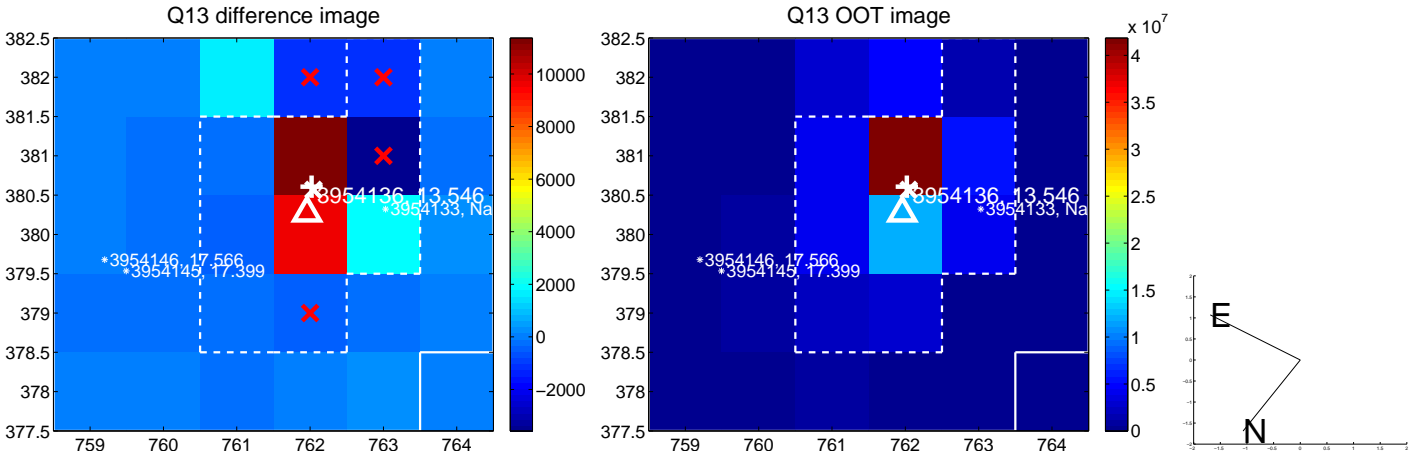
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



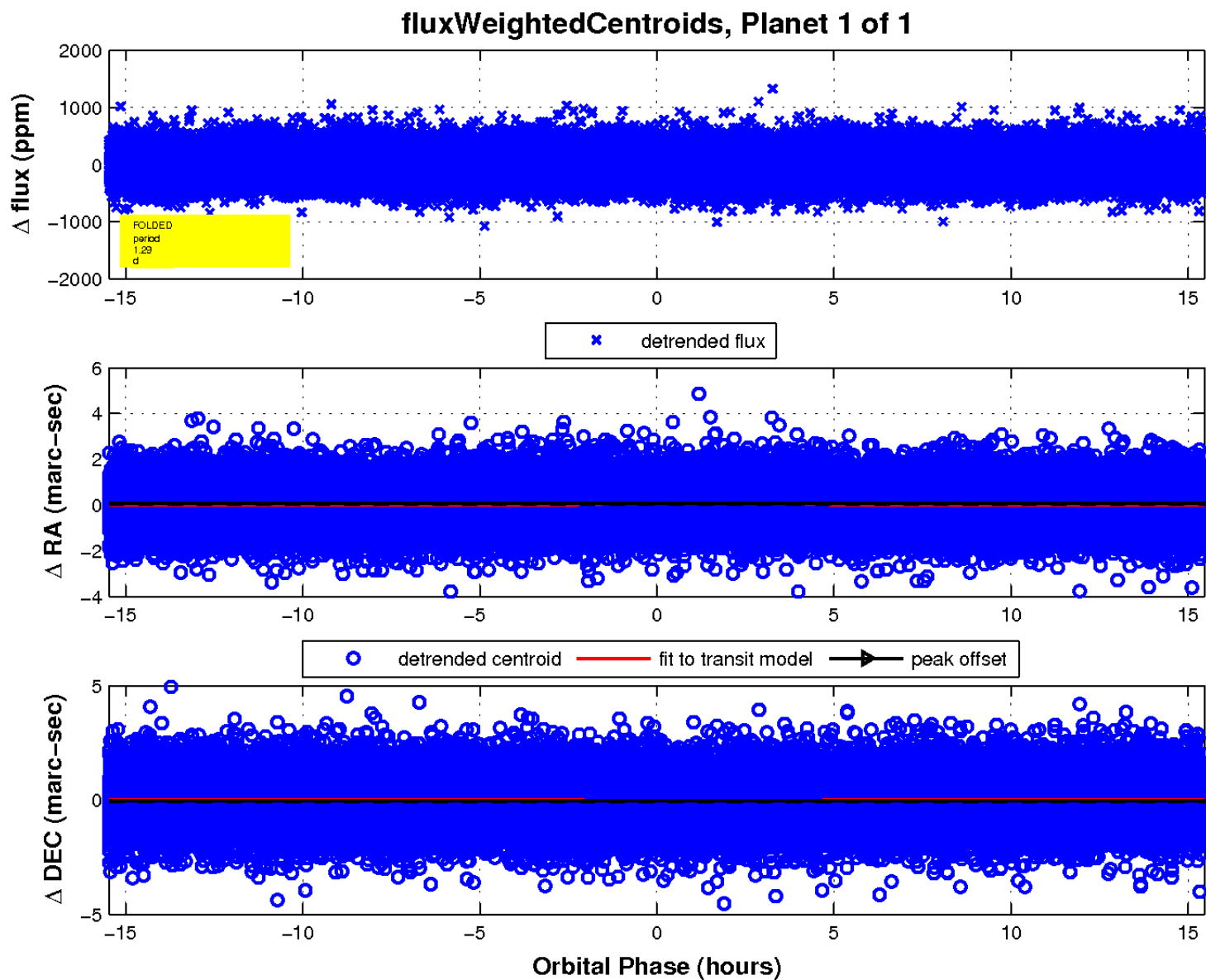
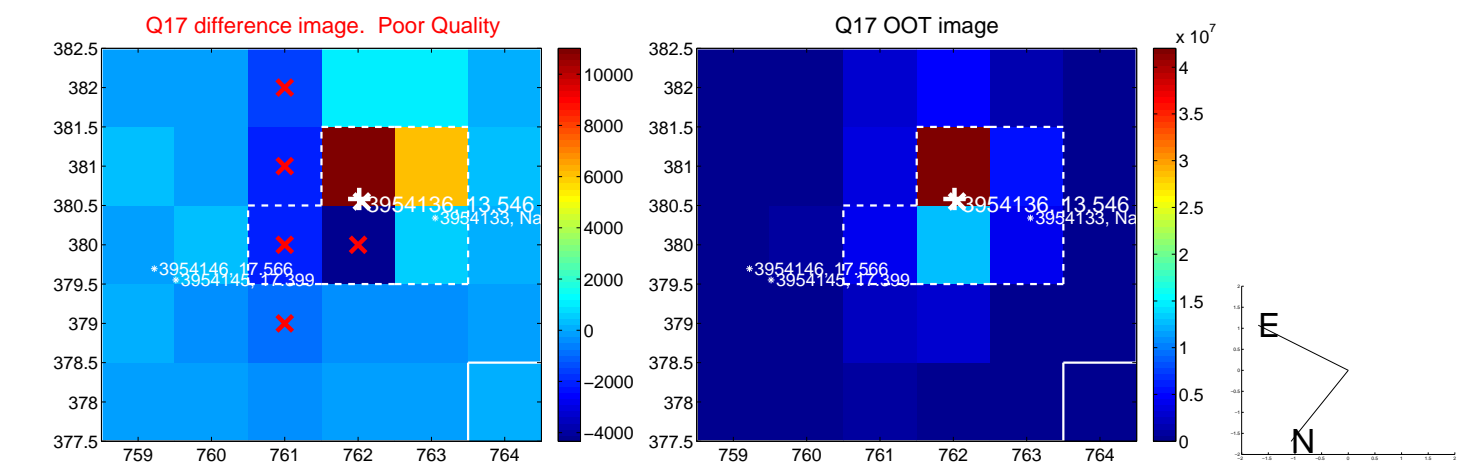
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

