

KIC 005956051

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})
005956051-01	OBS	No	0.892728	131.839119	919.1	1.500	9.0	-1.0	0.53	4802	1.60	616.75

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005956051-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS

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

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

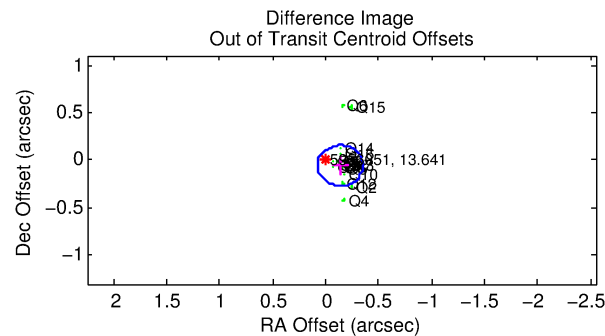
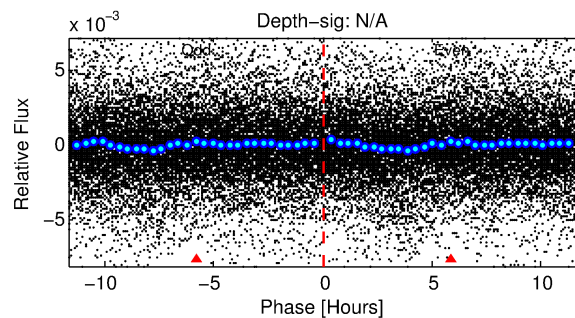
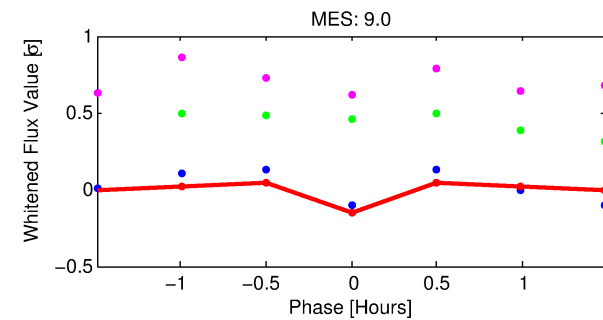
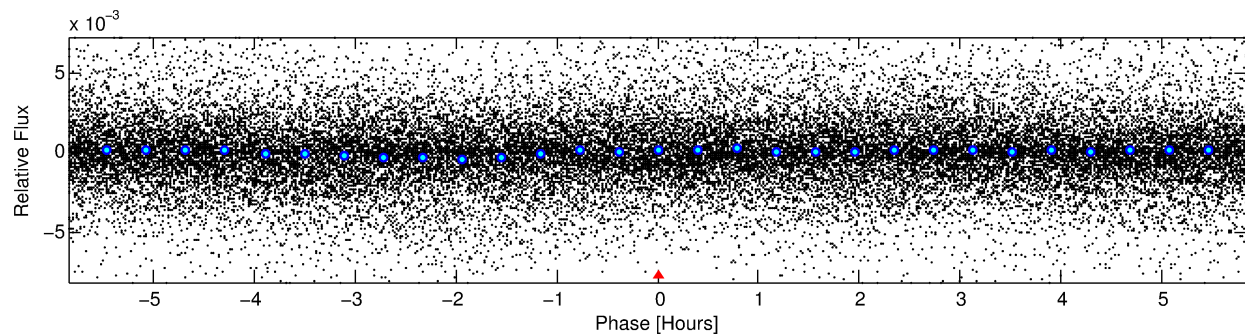
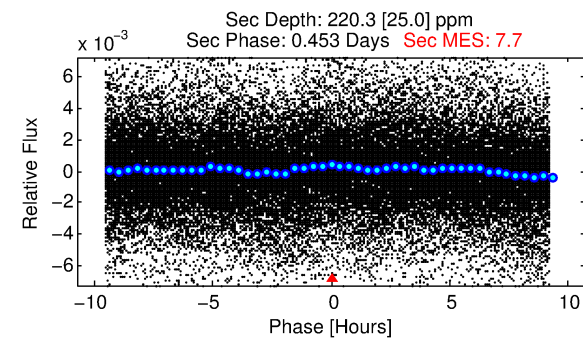
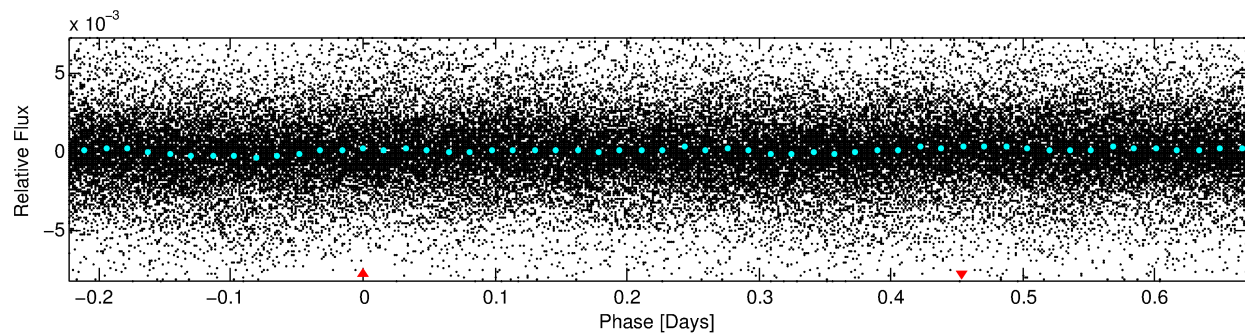
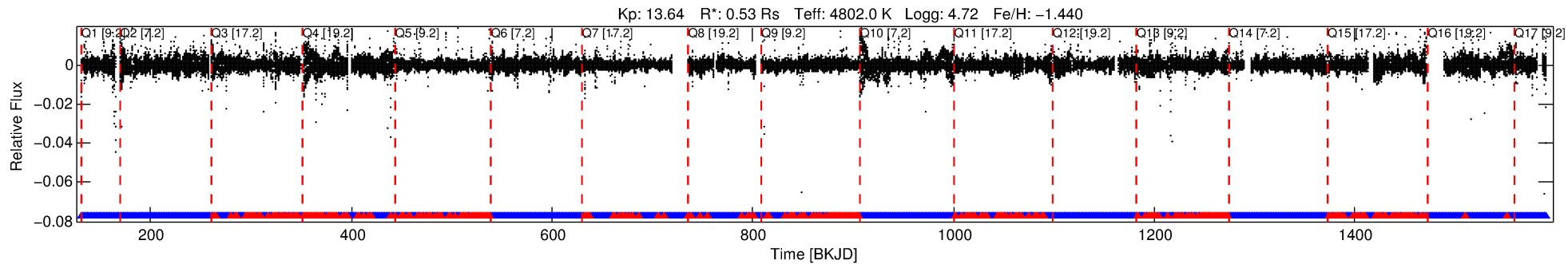
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005956051-01

No Significant Match Found

DV One-Page Summary

KIC: 5956051 Candidate: 1 of 1 Period: 0.893 d



TPS TCE Results:

Period = 0.89273 d
Epoch = 131.8391 BKJD

DV fit results are unavailable

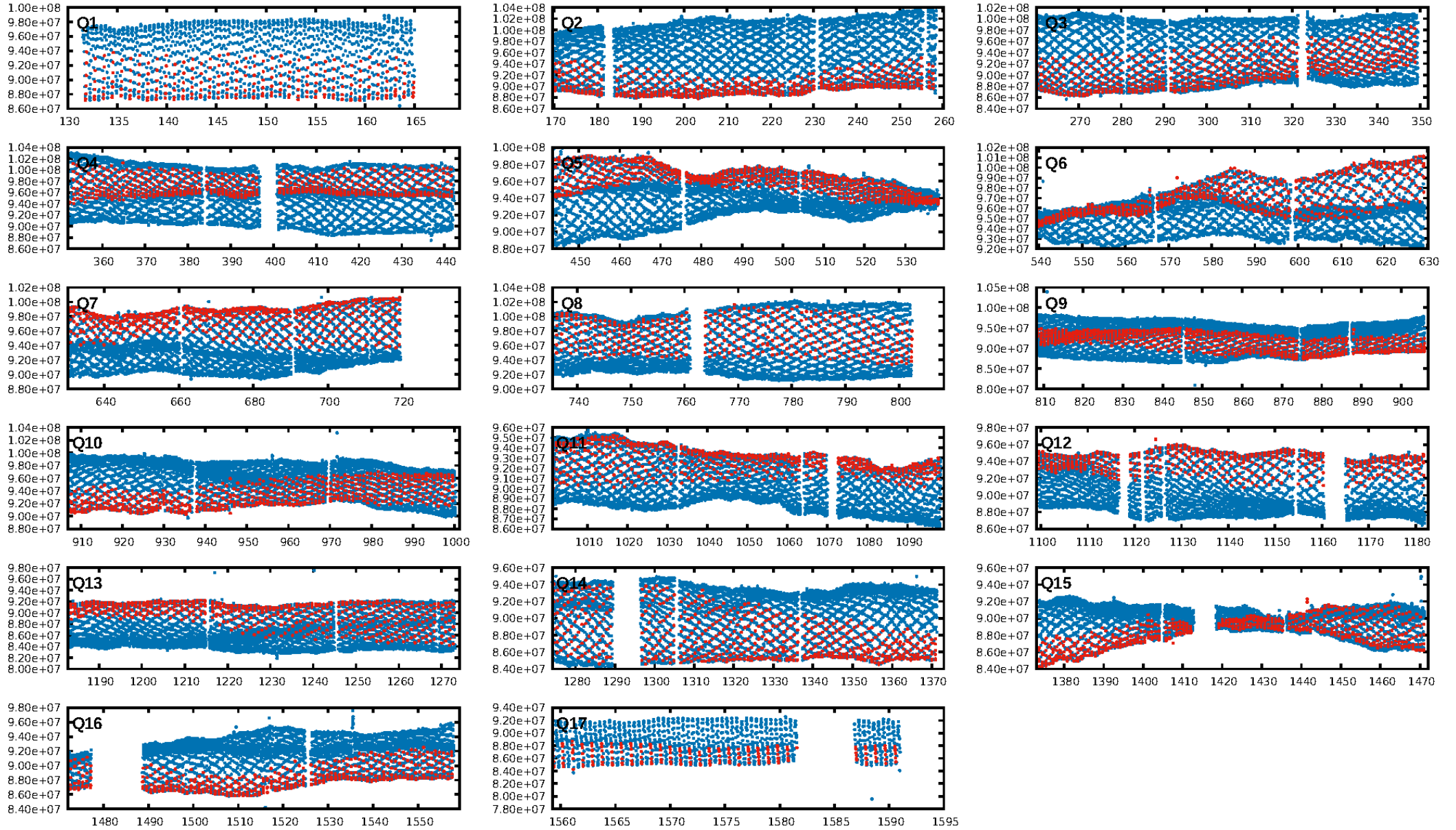
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.49e-16
RollingBand-fgt: 0.76 [1091/1431]
GhostDiagnostic-chr: 1.712
Centroid-sig: 17.0%
Centroid-so: 0.184 arcsec [3.25σ]
OotOffset-rm: 0.148 arcsec [2.08σ]
KicOffset-rm: 0.048 arcsec [0.62σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.41 [7/17]
DiffImageOverlap-fno: 1.00 [17/17]

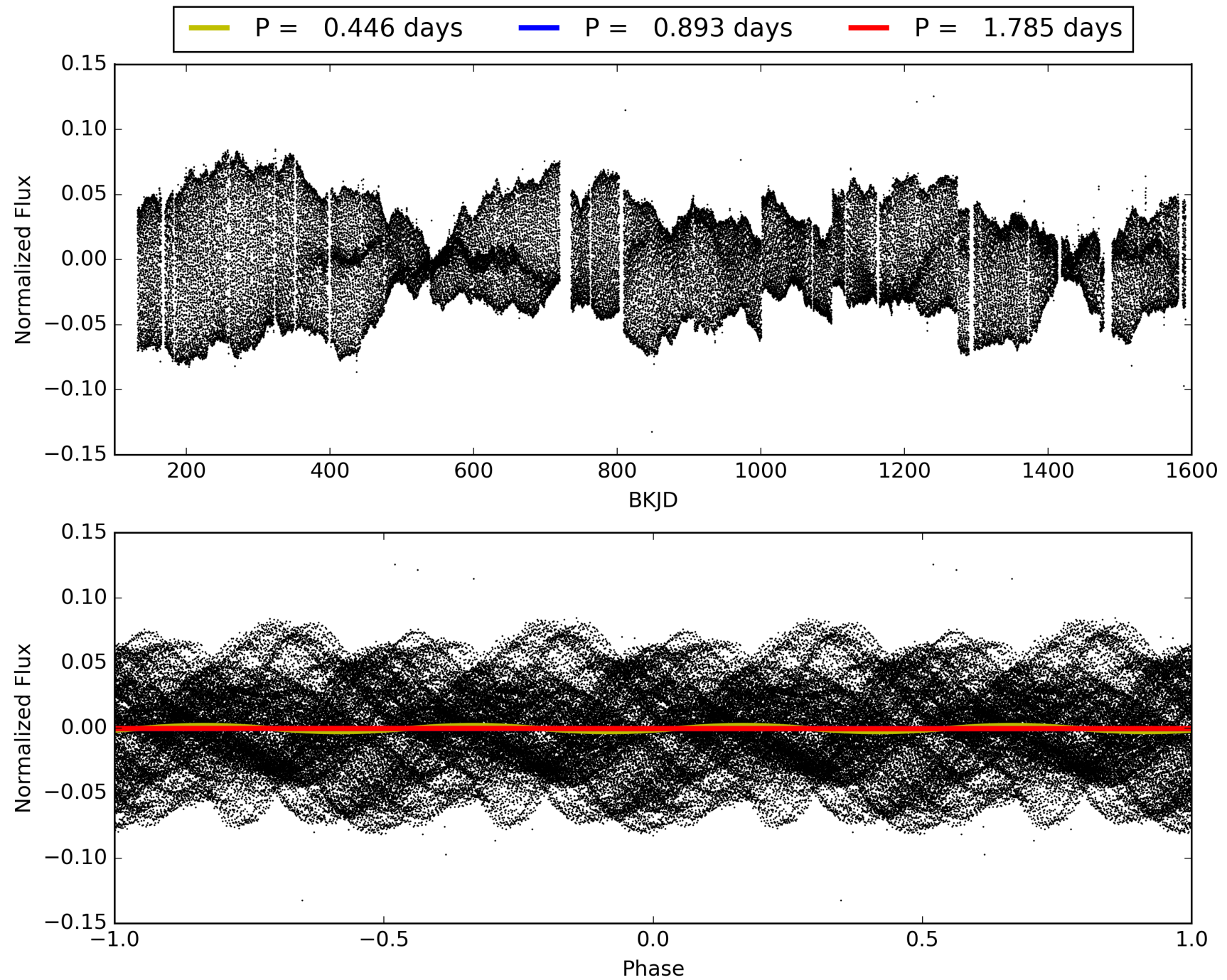
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 12:00:09 Z

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

TCE 005956051-01, PDC Light Curves

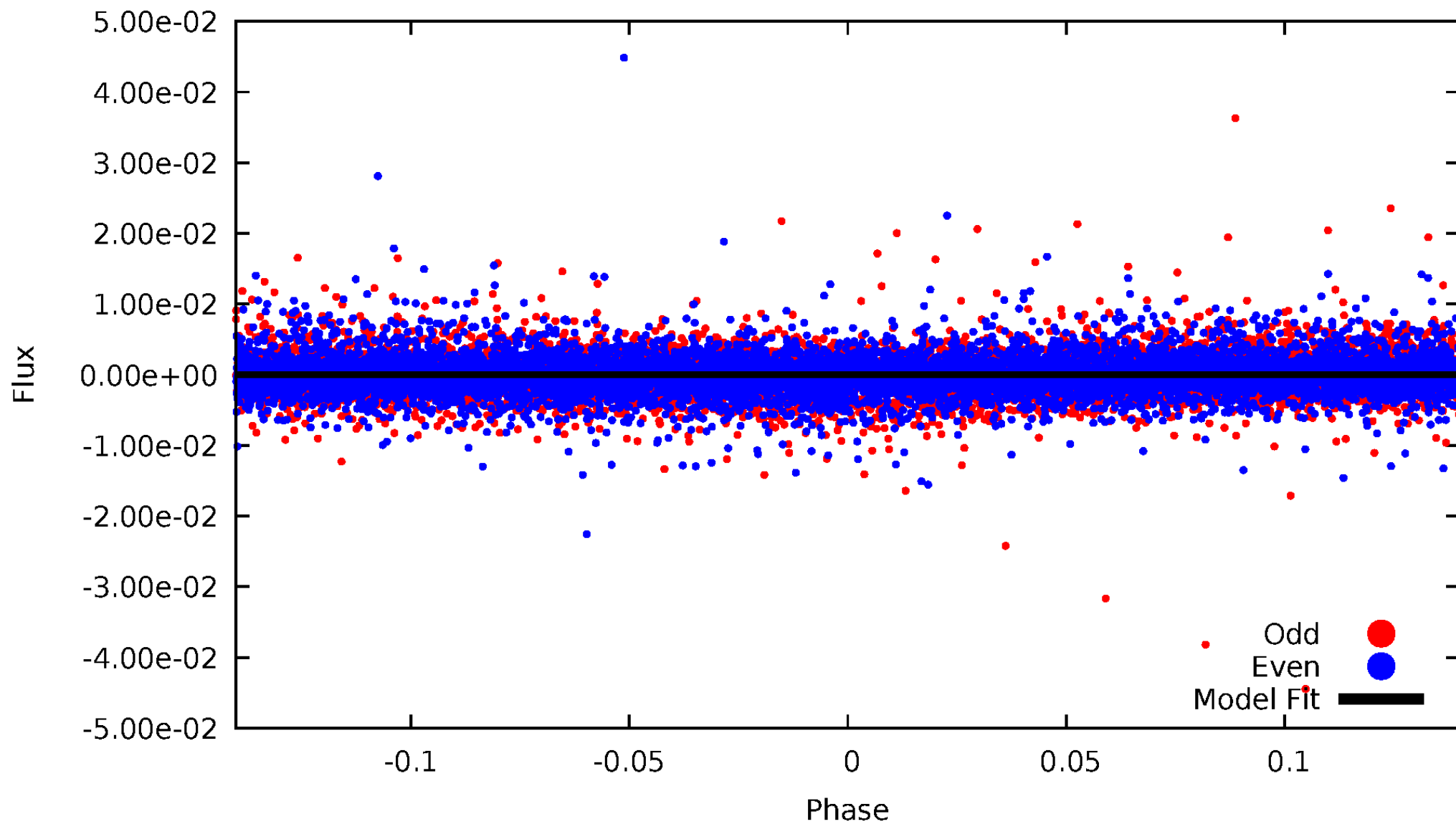


TCE 005956051-01



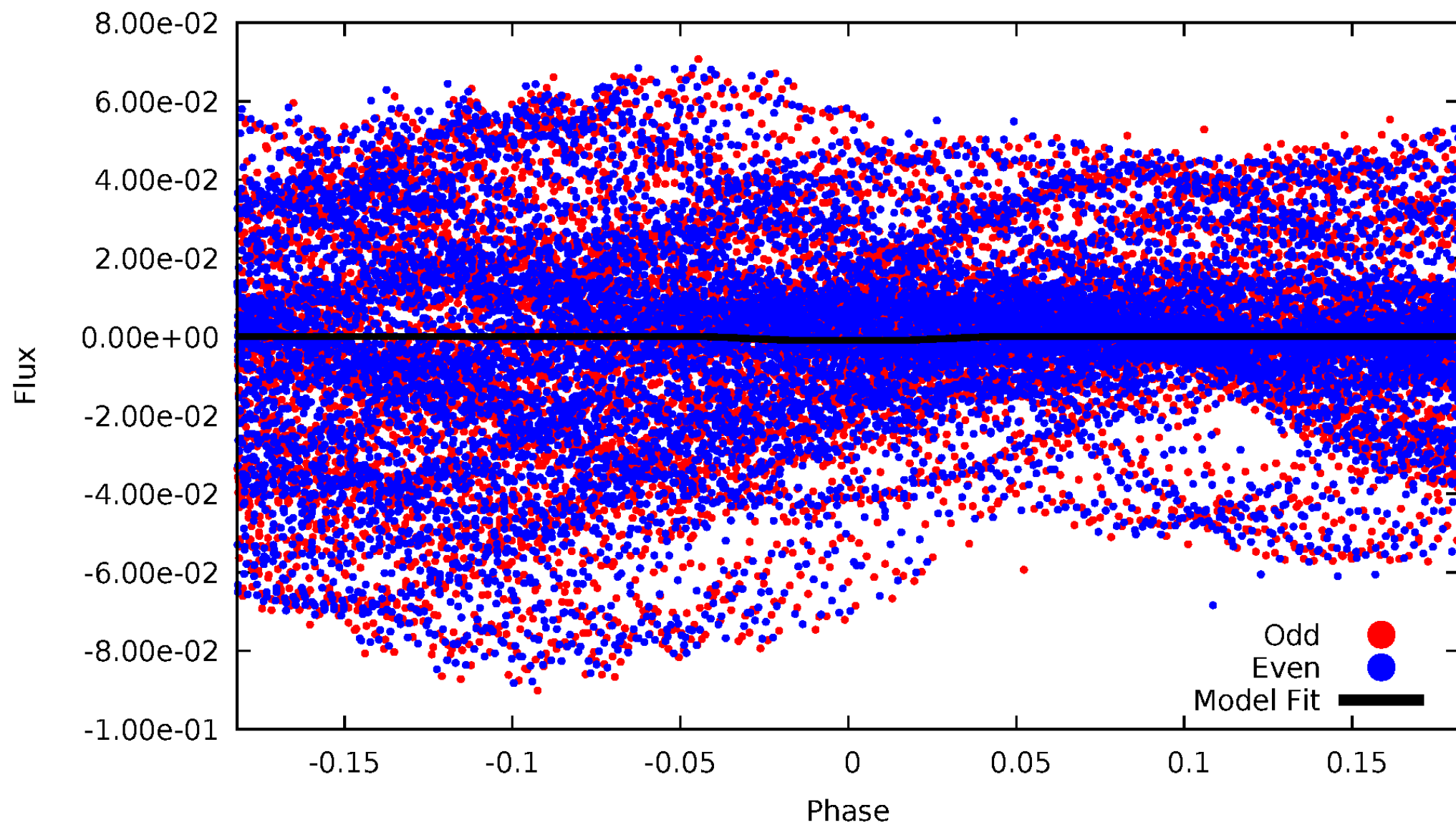
DV Odd/Even

TCE 005956051-01

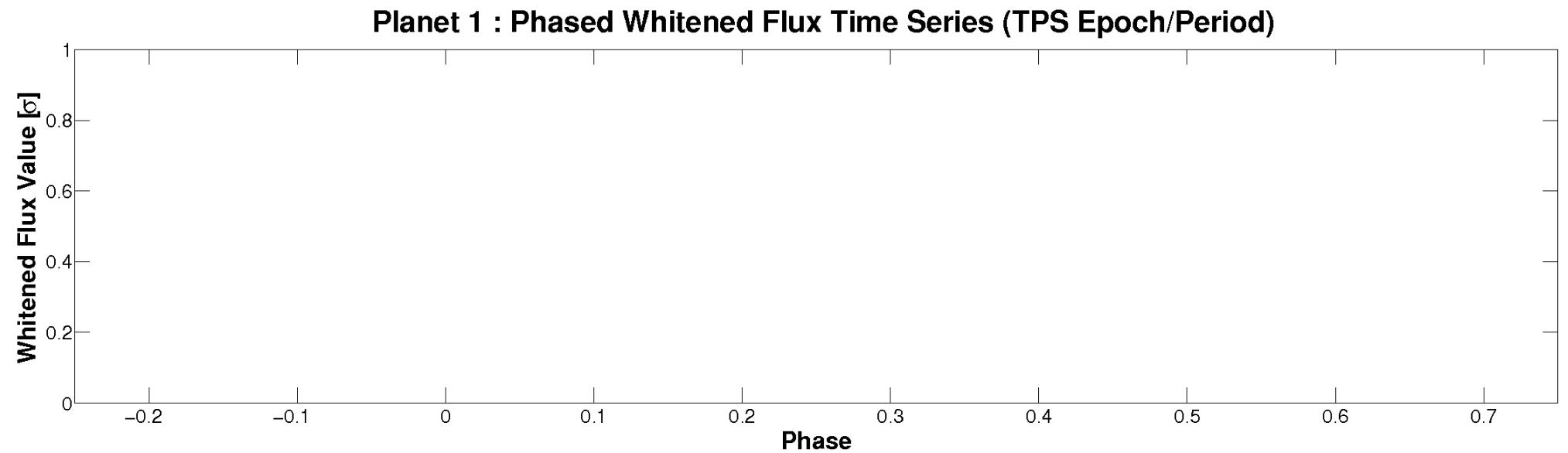
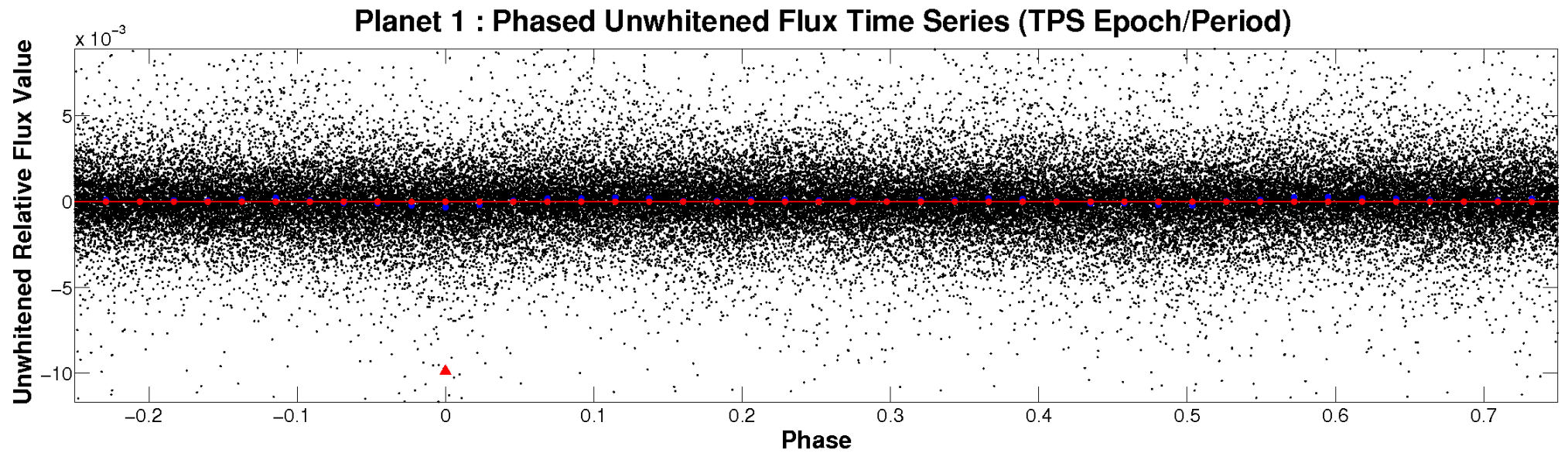


ALT Odd/Even

TCE 005956051-01

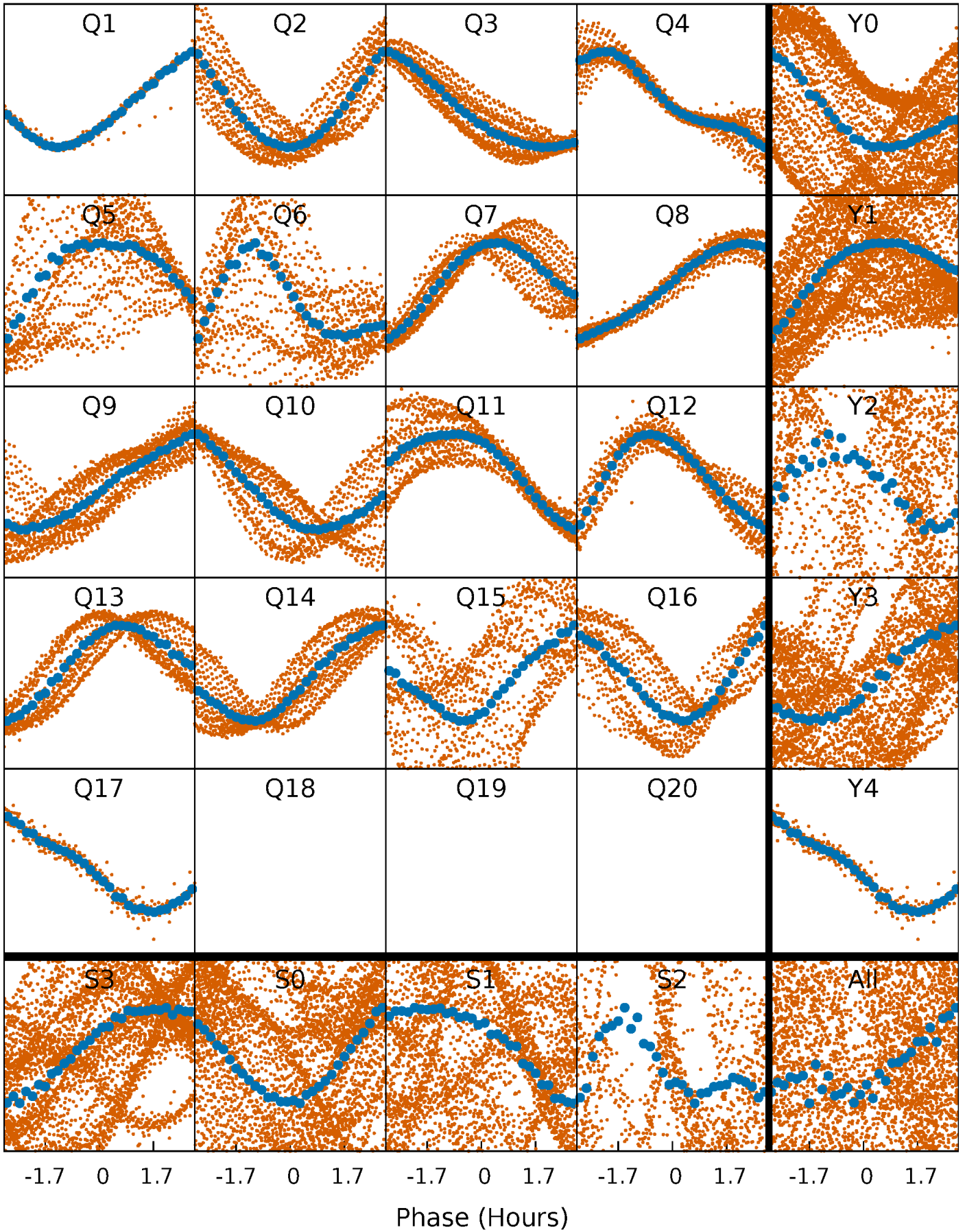


Non-Whitened Vs. Whitened Light Curve



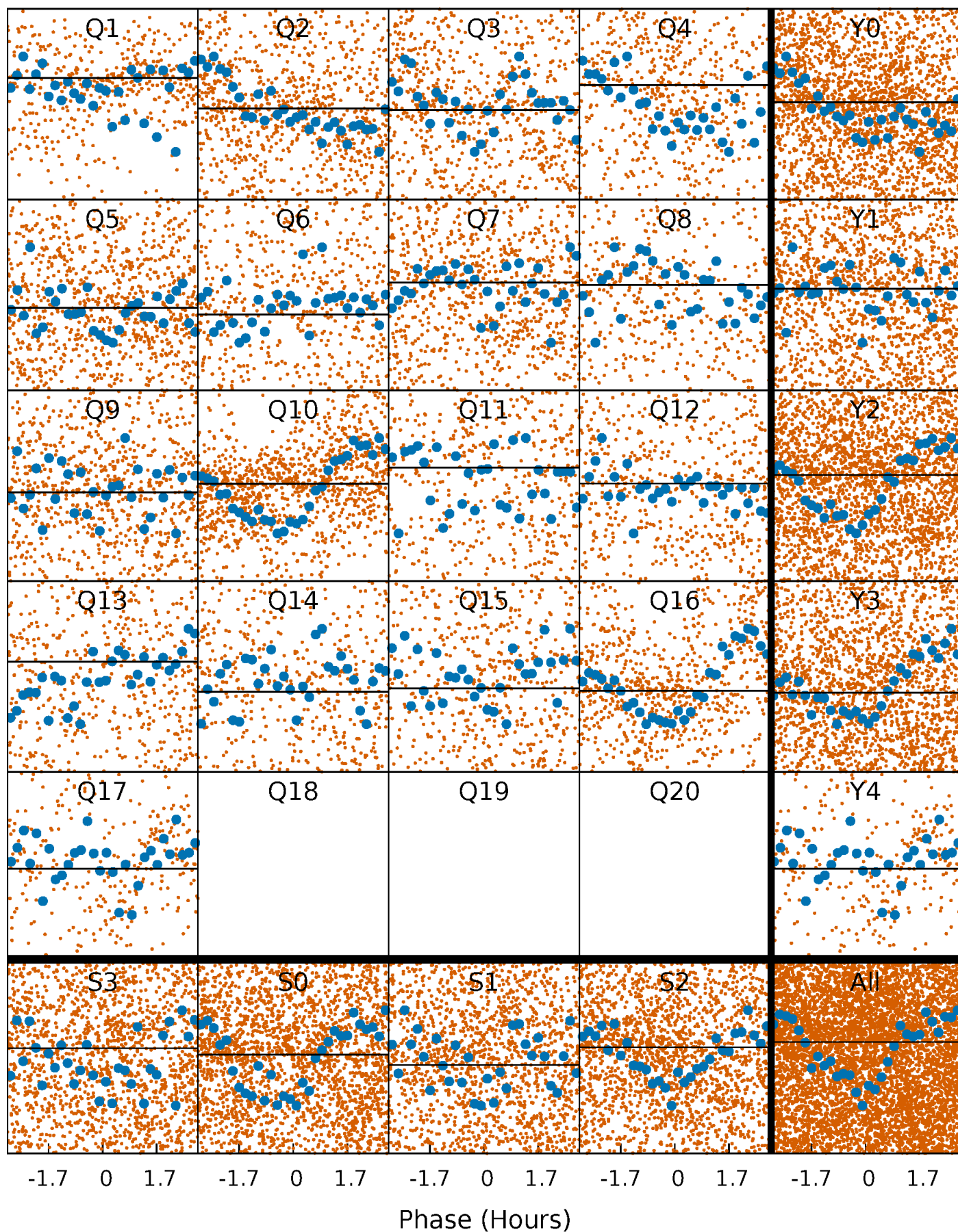
PDC Quarter-Phased Transit Curves

TCE 005956051-01 P= 0.892728 Days $T_0=131.839119$ (BKJD)



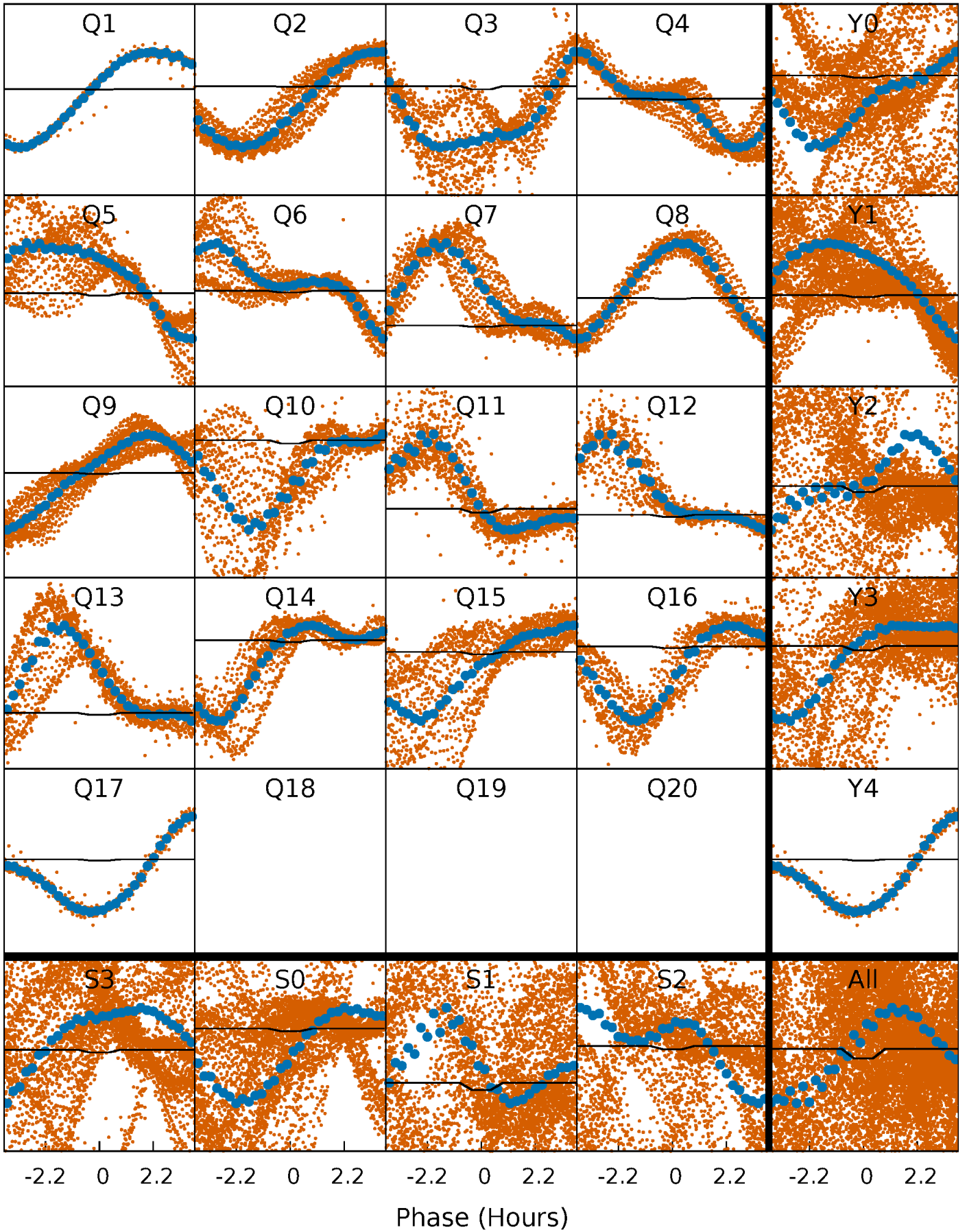
DV Quarter-Phased Transit Curves

TCE 005956051-01 P= 0.892728 Days $T_0=131.839119$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

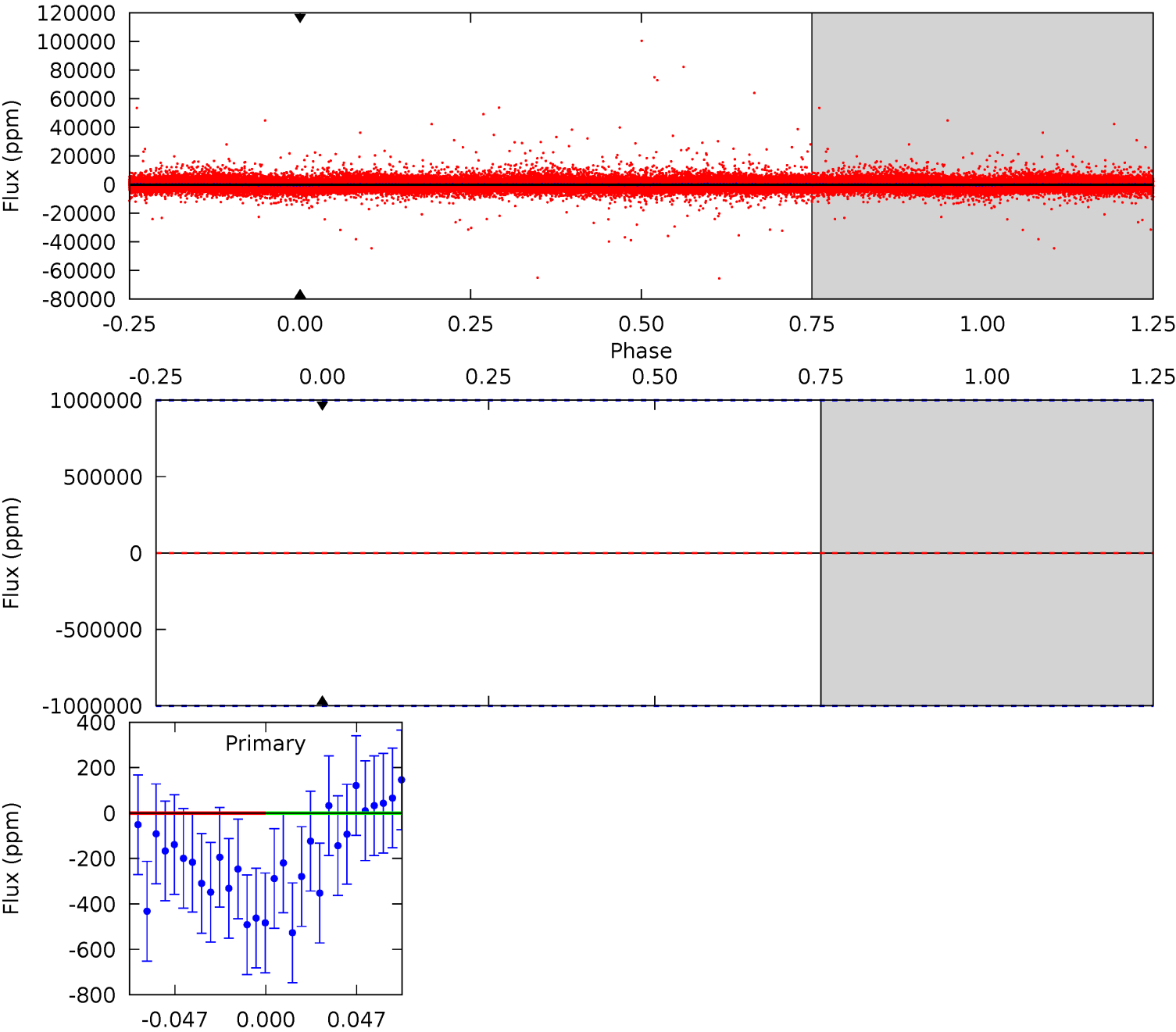
TCE 005956051-01 P= 0.892728 Days $T_0=131.921191$ (BKJD)



DV Model-Shift Uniqueness Test

005956051-01, P = 0.892728 Days, E = 130.946391 Days

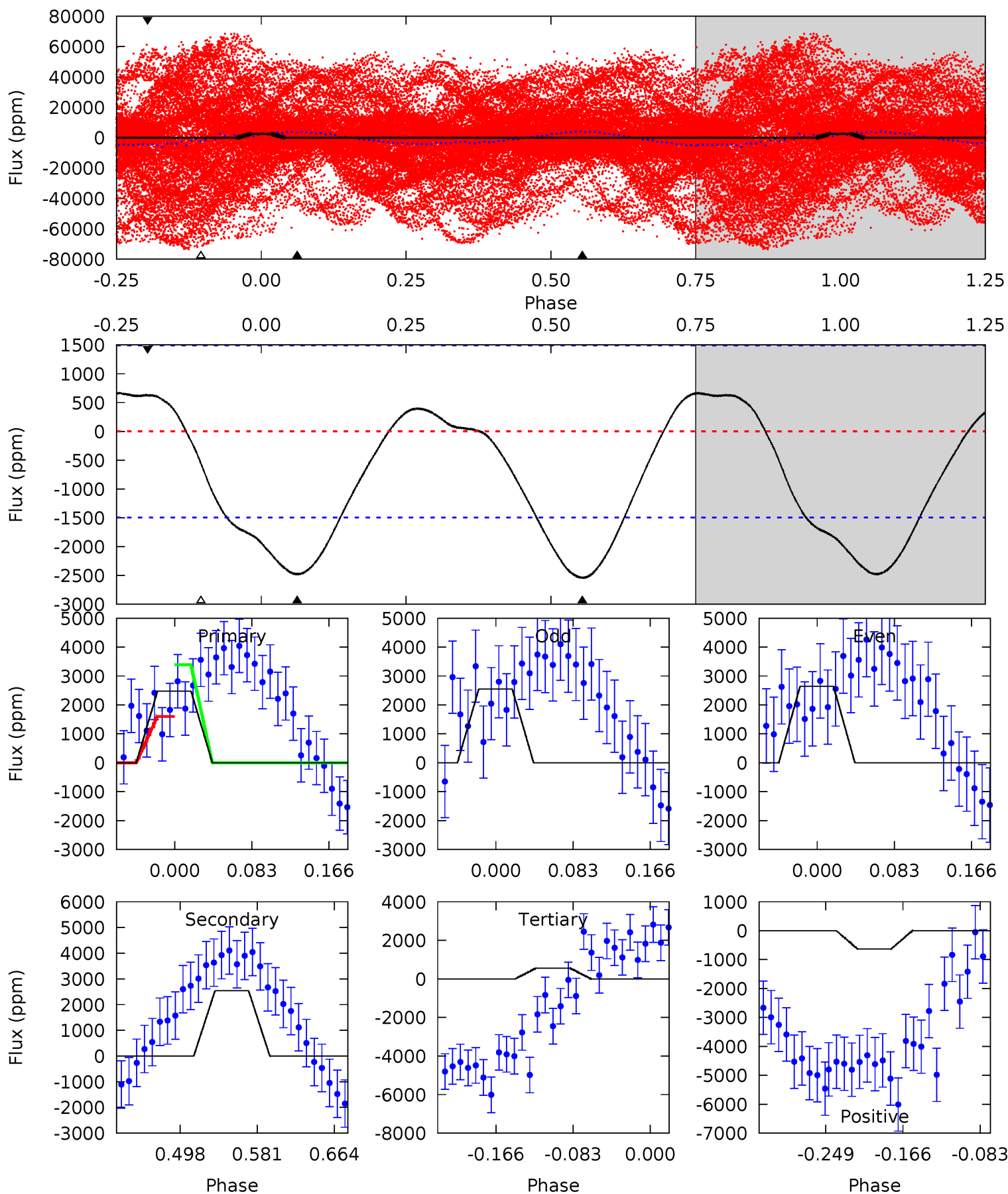
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005956051-01, P = 0.892728 Days, E = 131.028463 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.64	7.83	1.74	1.95	4.60	1.73	2.11	5.90	5.69	6.10	5.88	0.14	0.53	0.21	2.75



Stellar Parameters For KIC 005956051

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4802^{+143}_{-157}	$4.720^{+0.049}_{-0.024}$	$-1.440^{+0.300}_{-0.300}$	$0.533^{+0.026}_{-0.034}$	$0.543^{+0.033}_{-0.022}$	$5.054^{+0.982}_{-0.488}$
	+3%/-3%	+1%/-1%	+21%/-21%	+5%/-6%	+6%/-4%	+19%/-10%
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 005956051-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$4.58^{+4.88}_{-3.13}$	1767^{+61}_{-59}	-3905^{+17343}_{-8420}	$-11.237^{+1144.042}_{-969.288}$
Alt.	-2541 ± 324	$4.48^{+4.51}_{-3.22}$	1770^{+56}_{-64}	4011^{+3083}_{-817}	15^{+172}_{-12}

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 $A_{obs} \gg 1.0$

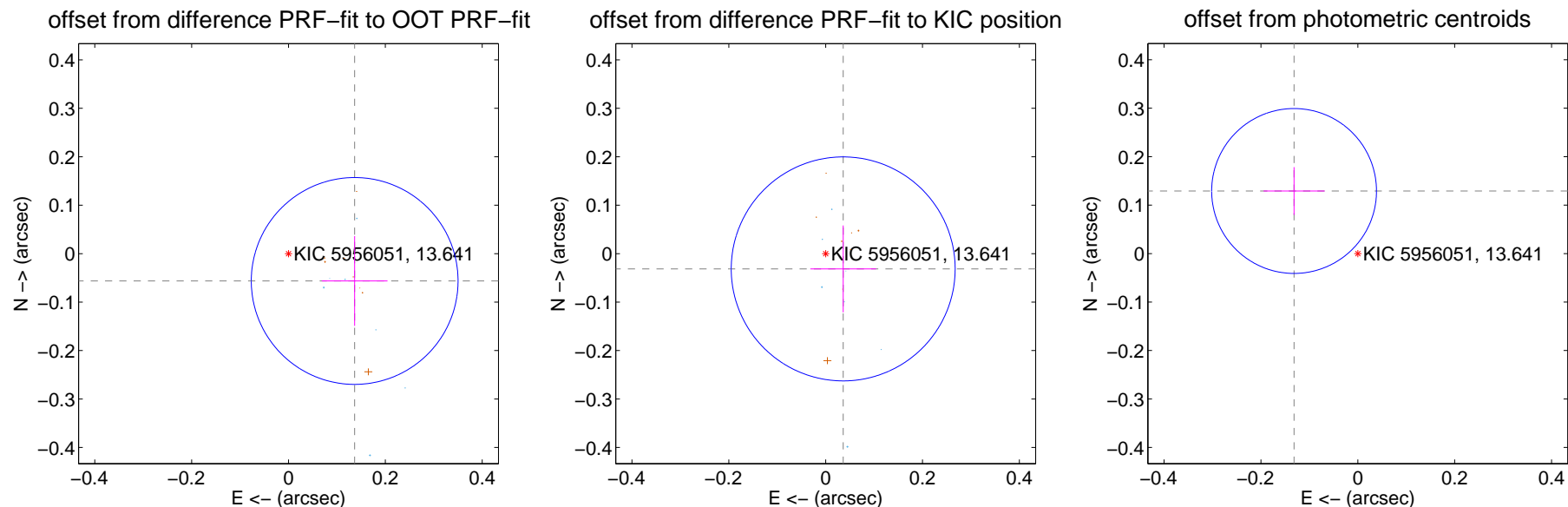
DV Centroid Data

Supplemental centroid analysis for 005956051-01. Kepler magnitude: 13.64. Transit SNR -1.00

There are 7 quarters with good PRF difference image offsets

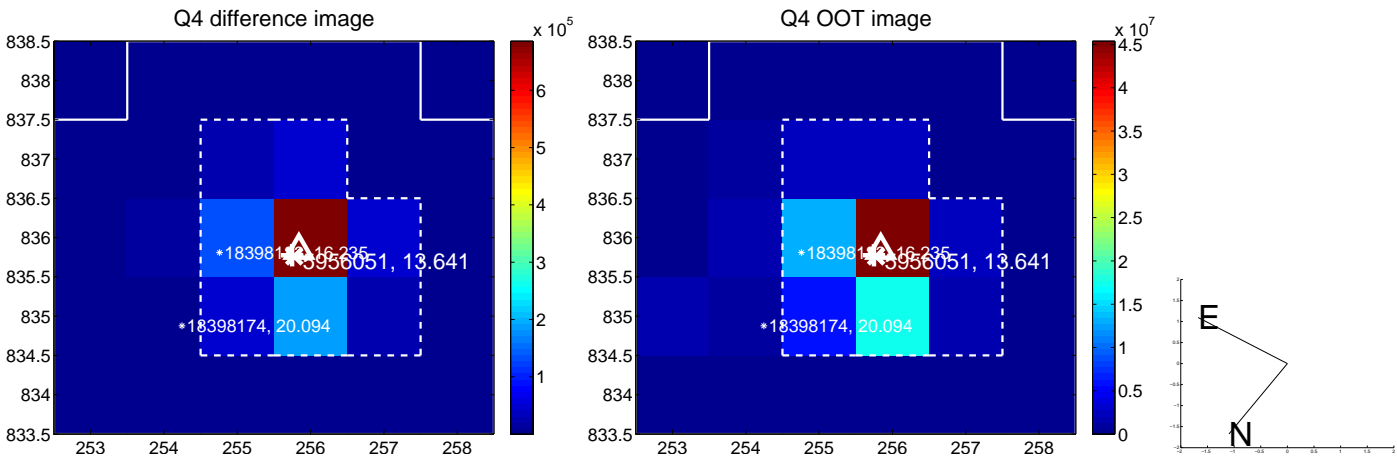
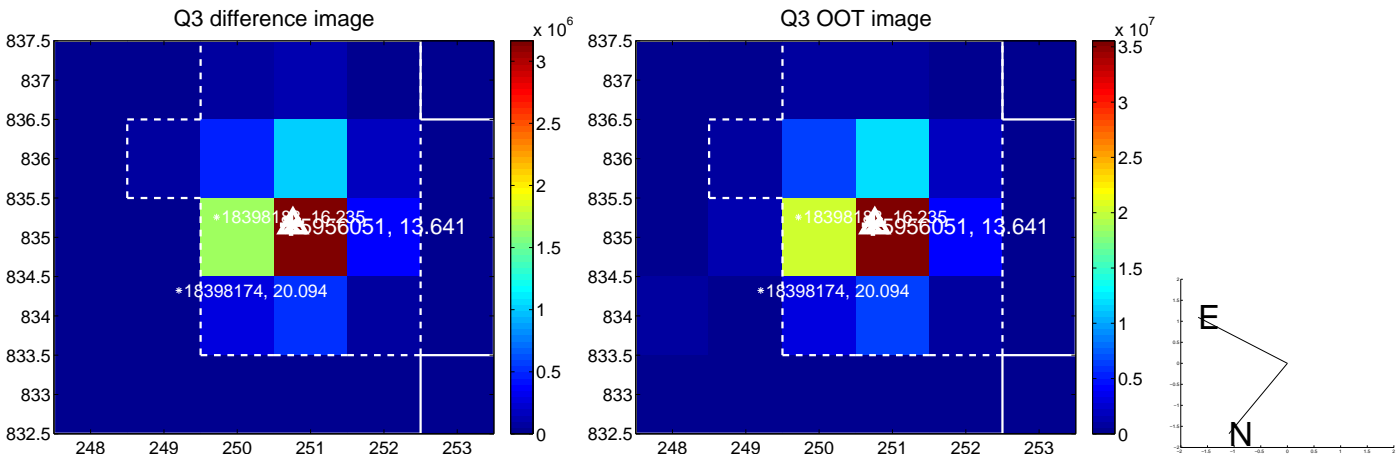
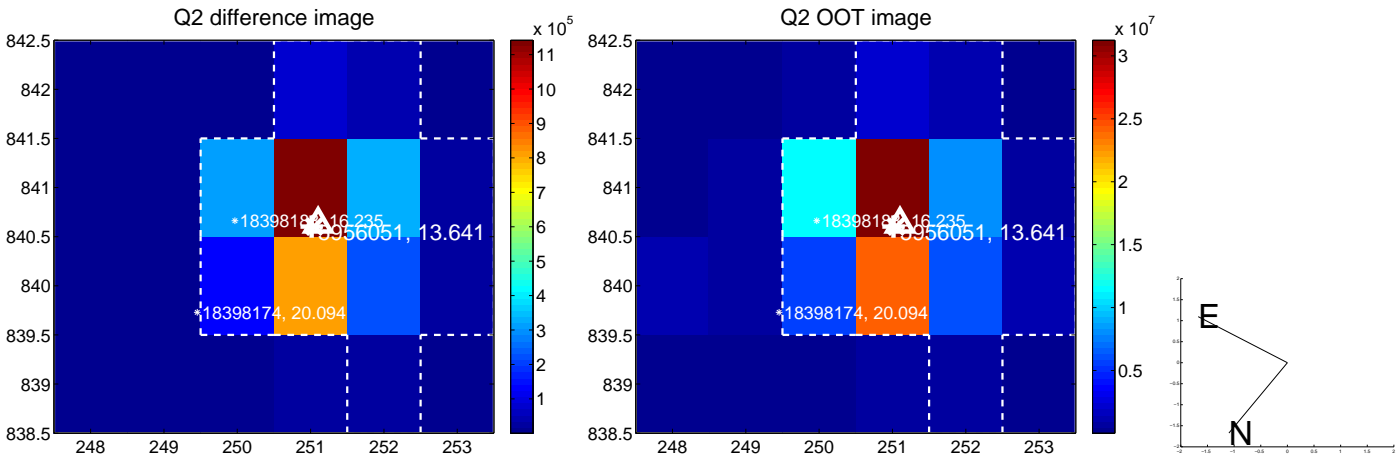
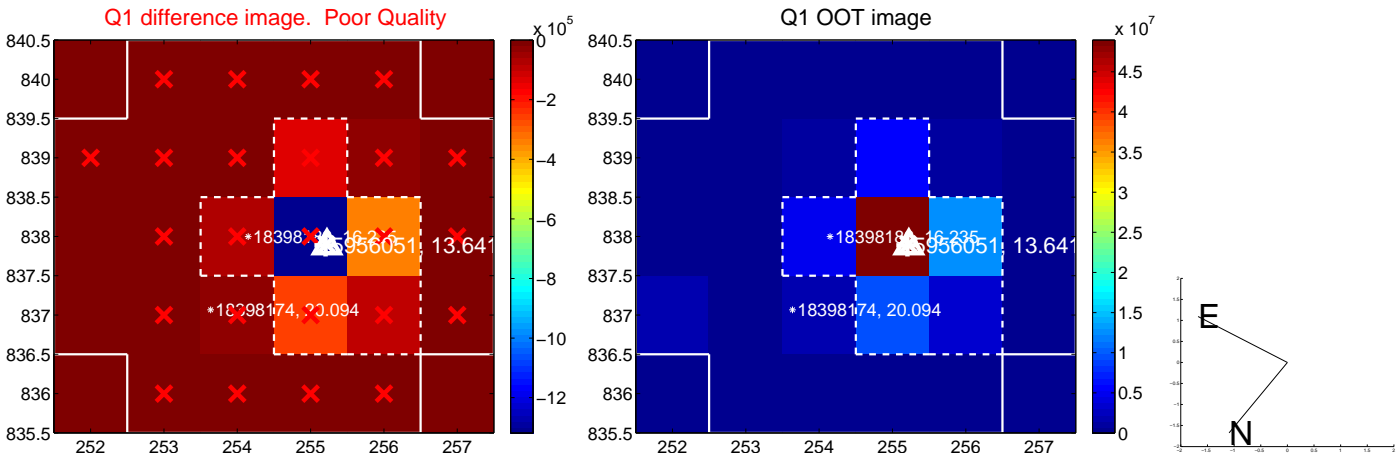
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.148 ± 0.071	2.08	-0.137 ± 0.068	-0.056 ± 0.093
PRF-fit source offset from KIC position	0.048 ± 0.077	0.62	-0.036 ± 0.068	-0.031 ± 0.090
photometric centroid source offset	0.18 ± 0.06	3.25	0.13 ± 0.06	0.13 ± 0.05

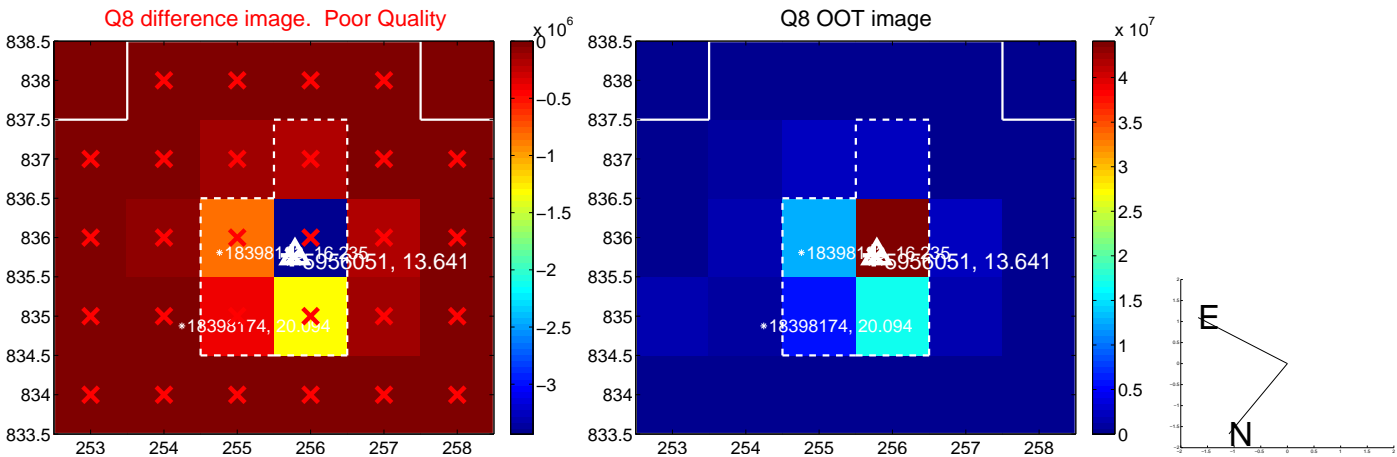
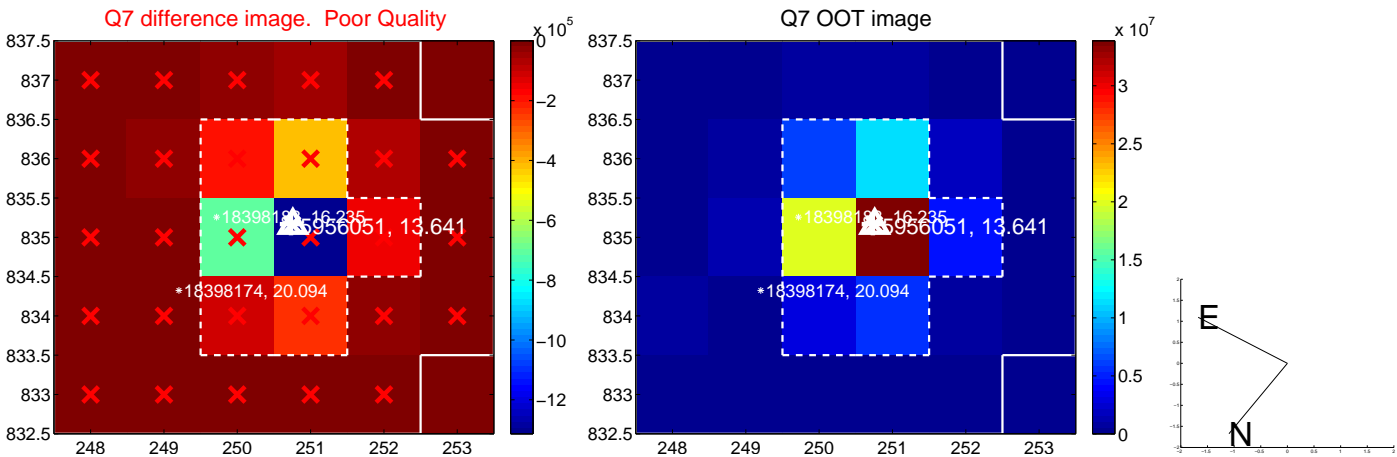
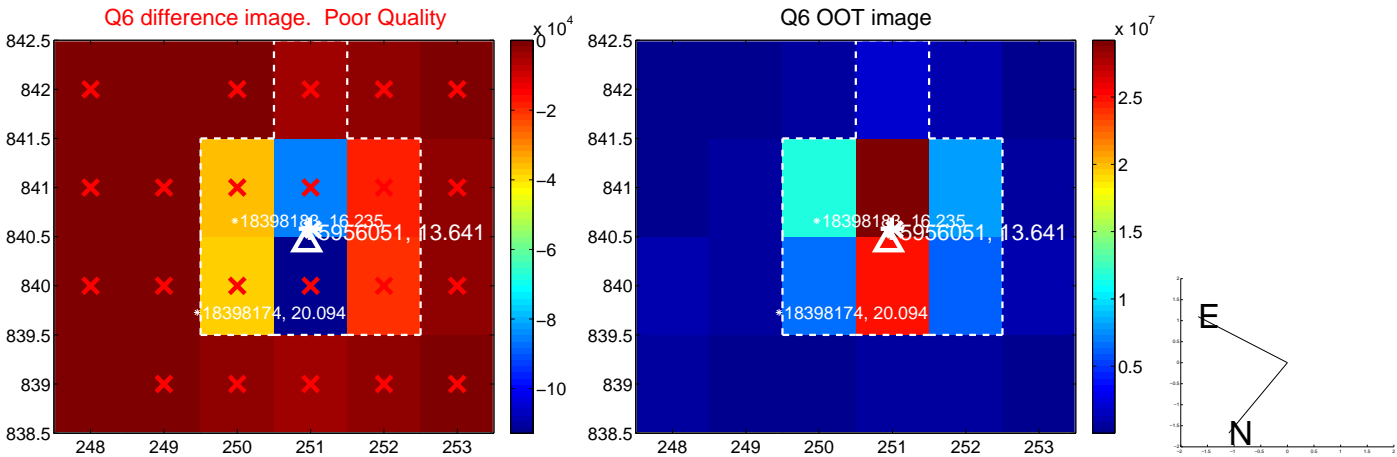
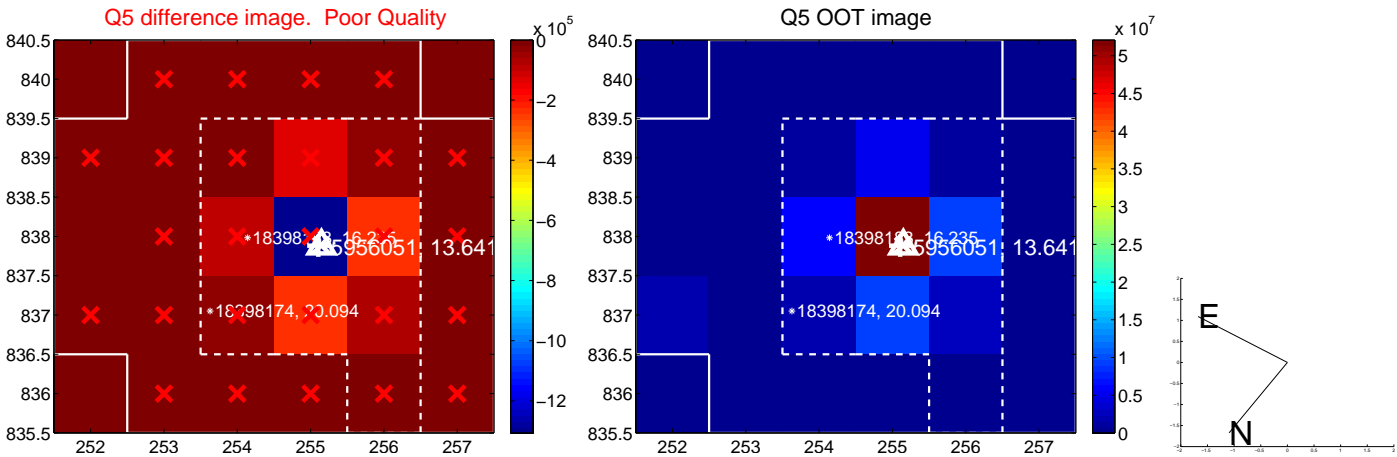


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

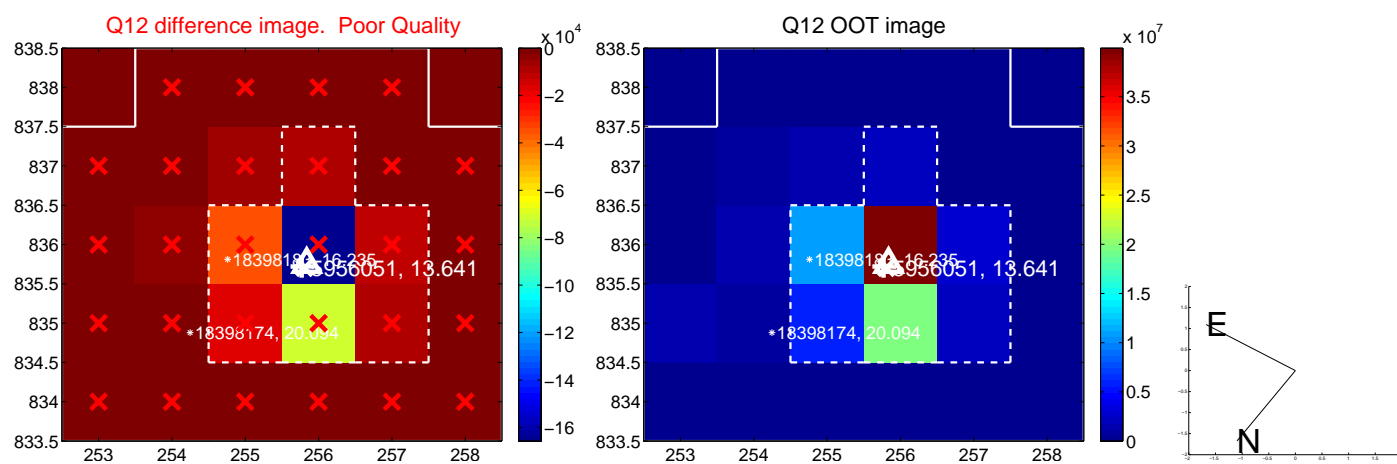
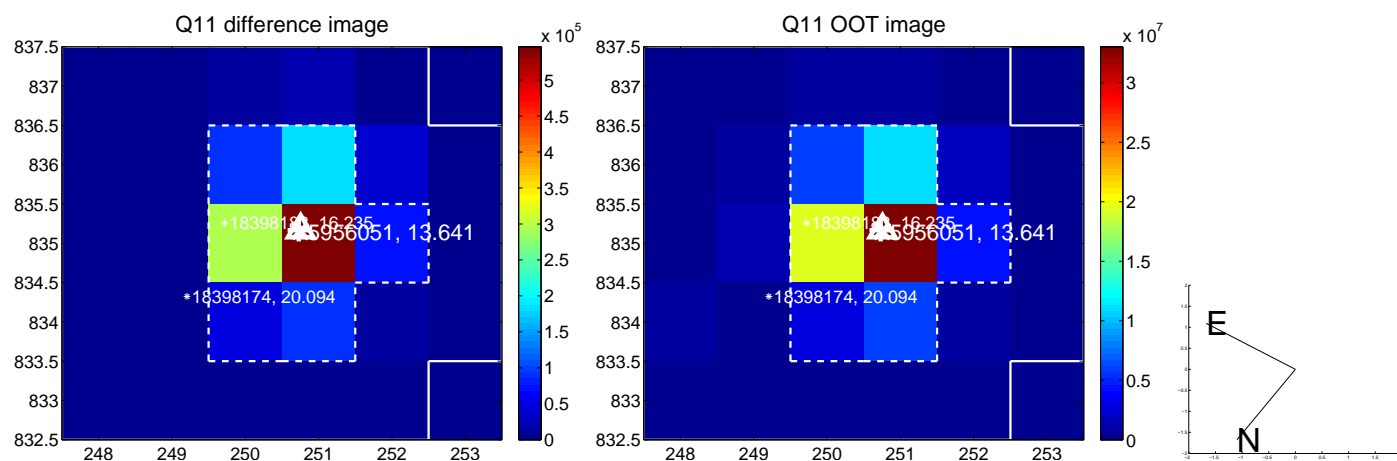
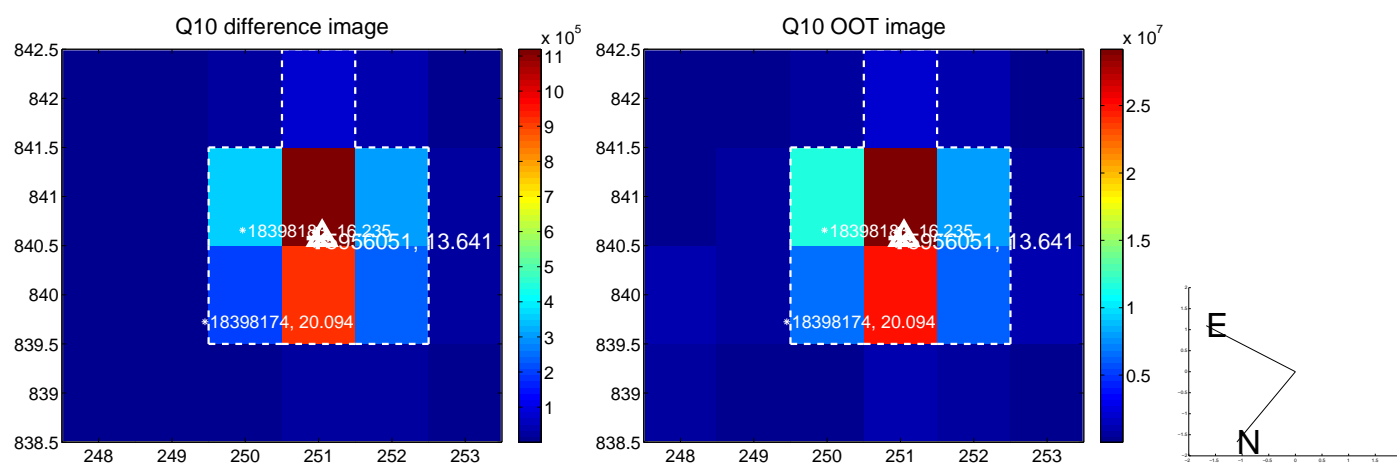
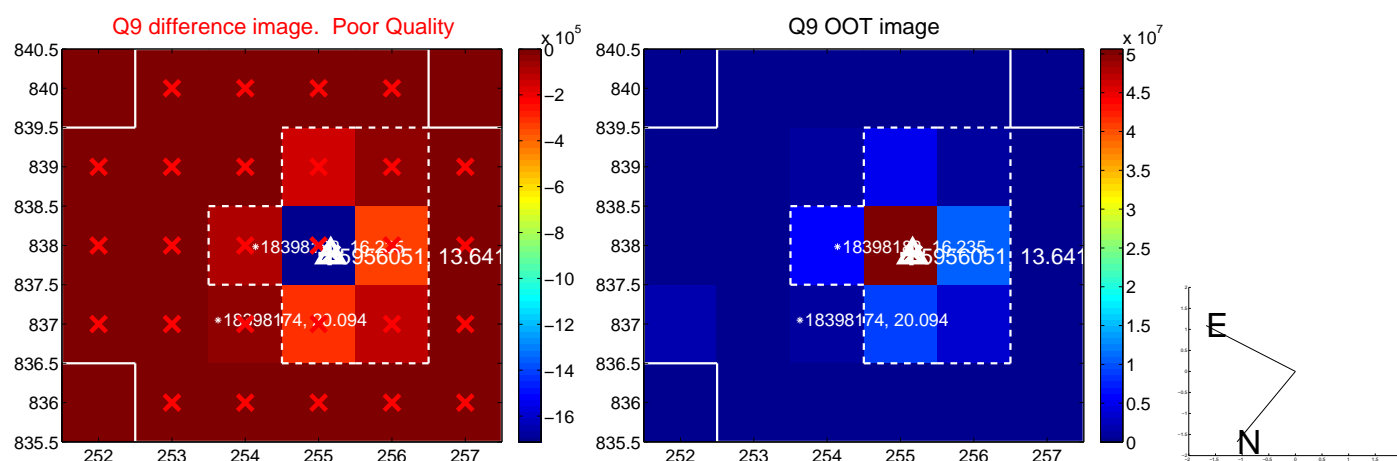
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



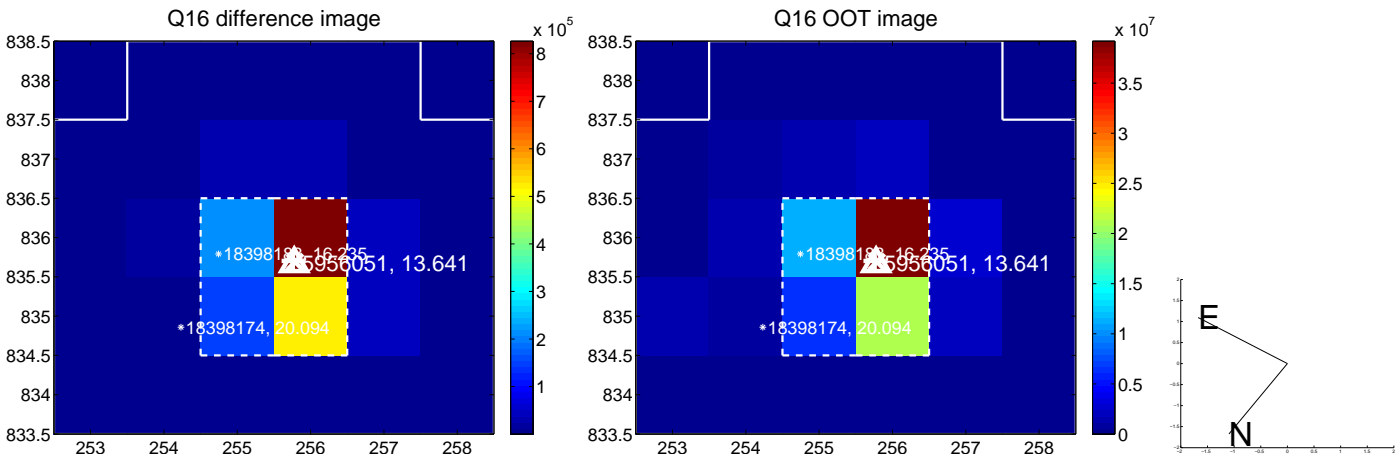
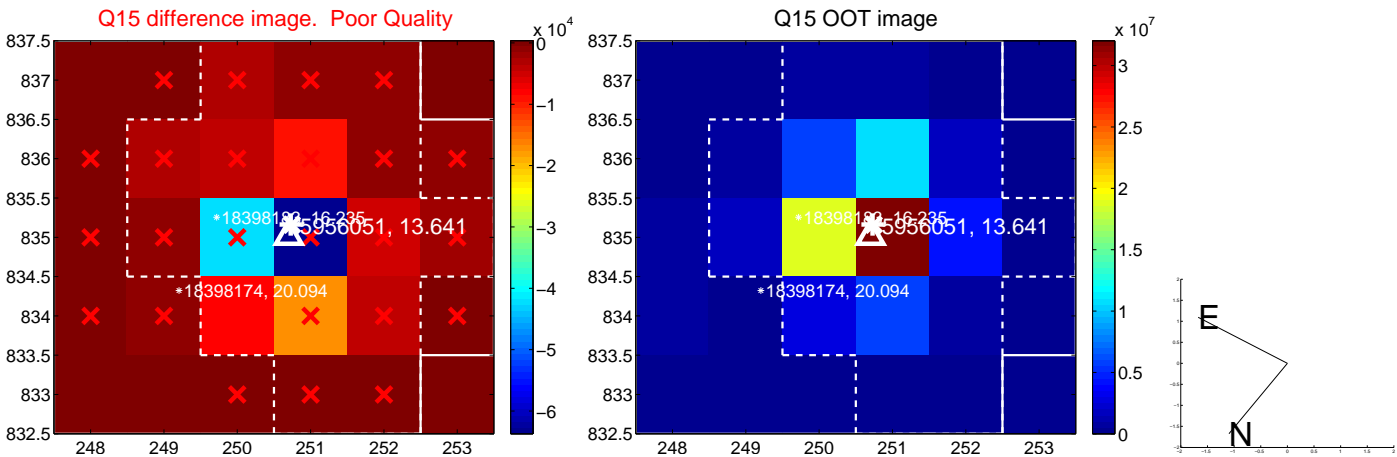
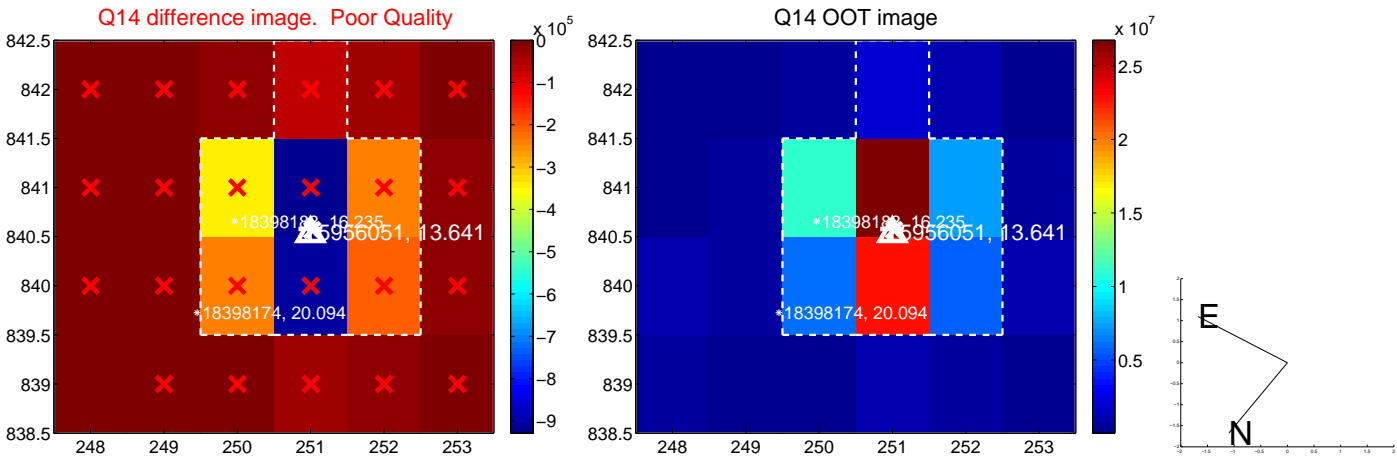
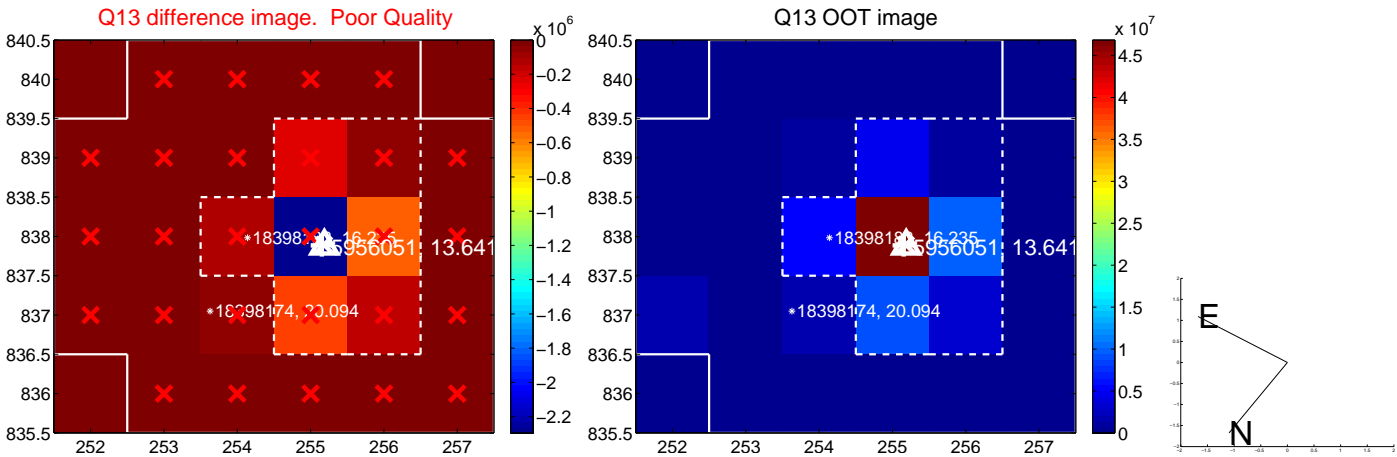
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



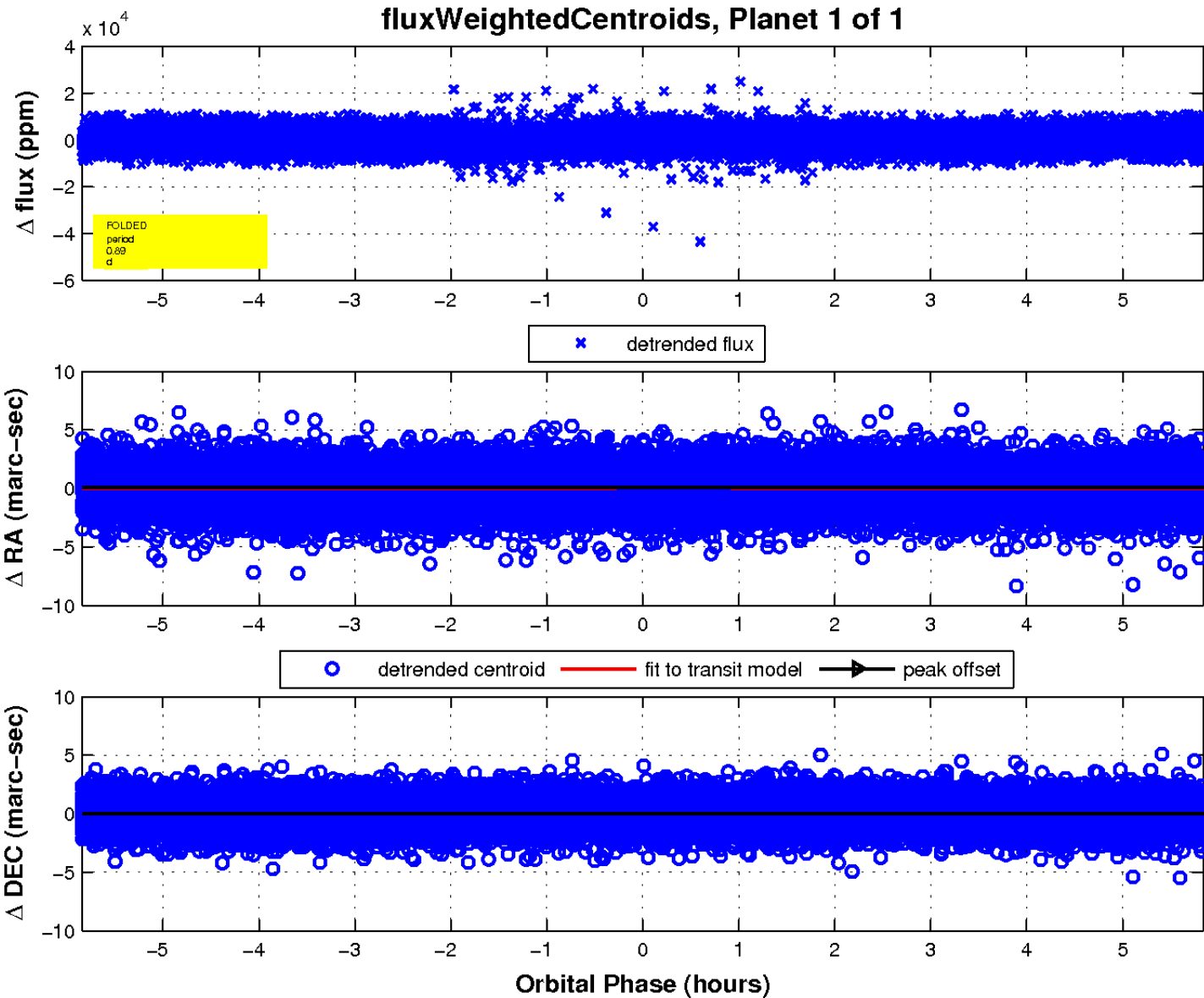
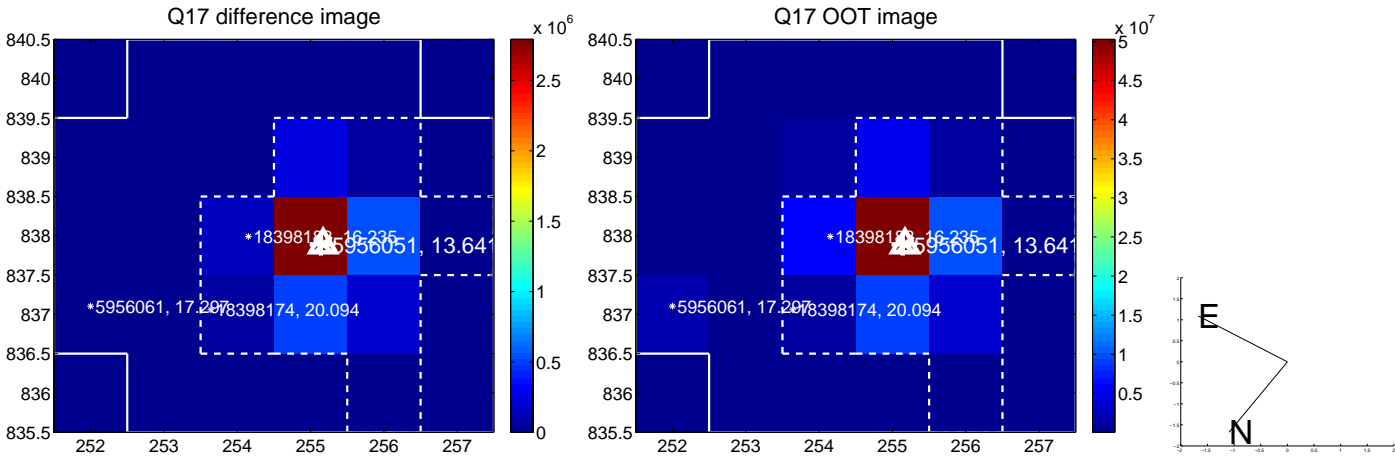
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

