

KIC 005284262

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})
005284262-01	OBS	No	17.963231	137.191601	596.4	52.302	23.7	43.5	2.04	6597	9.58	293.73

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005284262-01	OBS	FP	0.00	1	0	0	0	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.

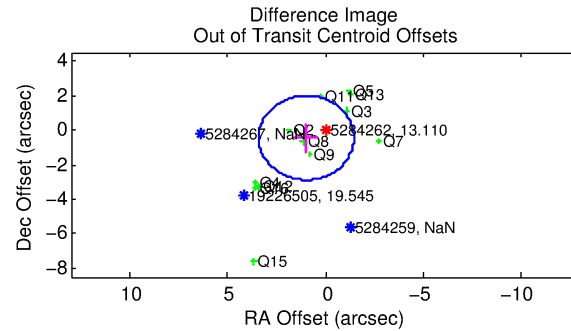
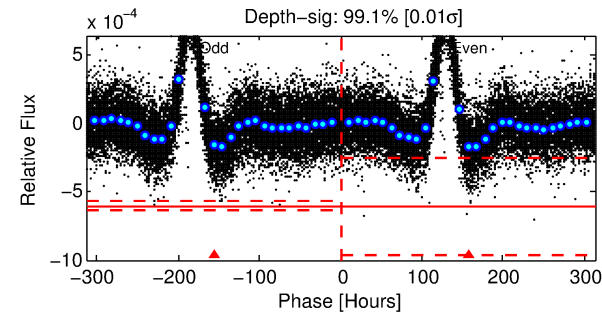
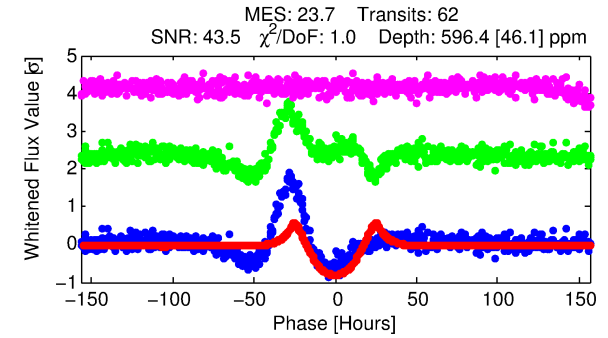
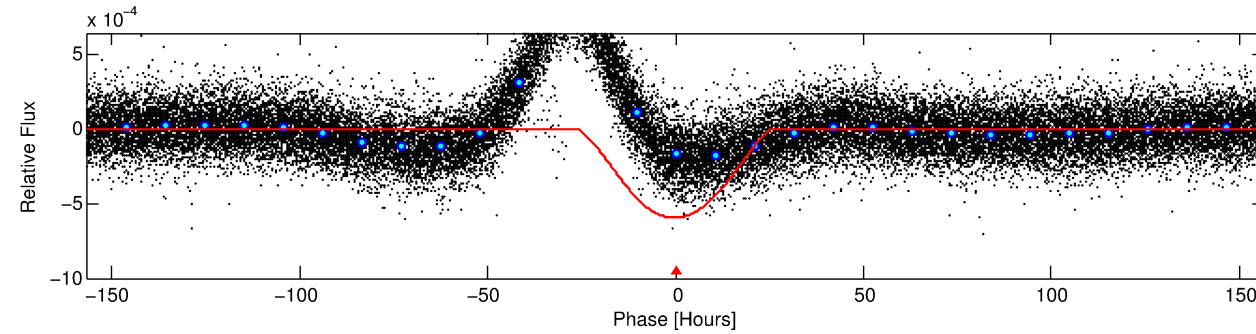
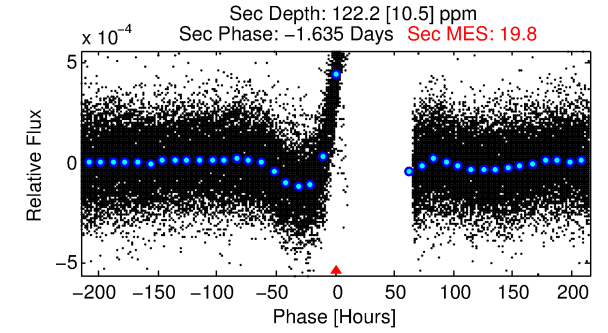
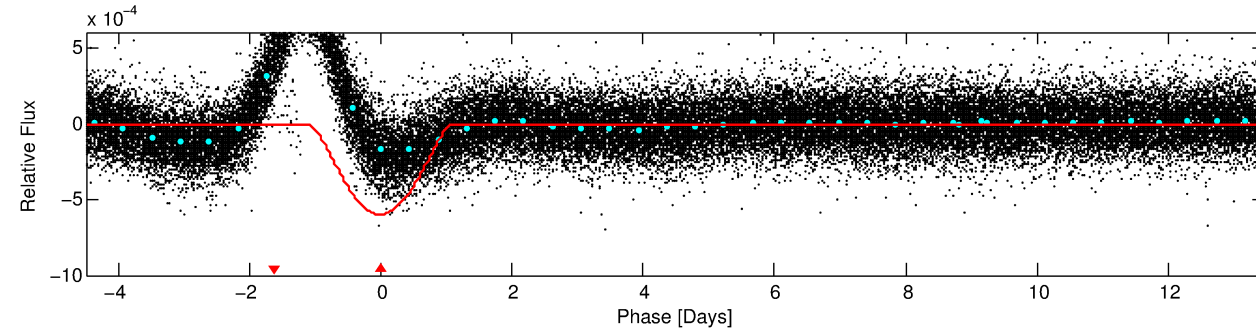
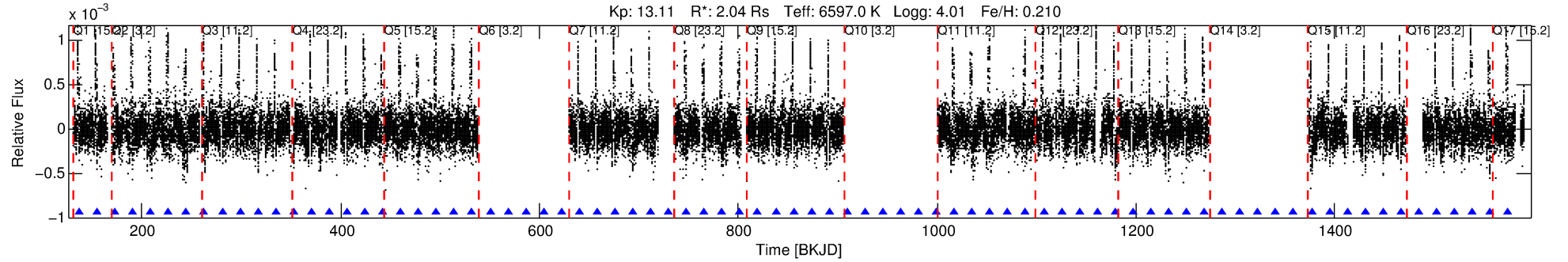
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005284262-01

No Significant Match Found

DV One-Page Summary

KIC: 5284262 Candidate: 1 of 1 Period: 17.963 d



DV Fit Results:

Period = 17.96323 [0.00034] d
Epoch = 137.1916 [0.0151] BKJD
Rp/R* = 0.0430 [0.0108]
a/R* = 1.28 [0.02]
b = 1.00 [0.01]
Seff = 293.73 [112.37]
Teff = 1056 [101] K
Rp = 9.58 [3.49] Re
a = 0.1553 [0.0365] AU
Ag = 17.66 [11.01] [1.51σ]
Teffp = 3346 [441] K [5.07σ]

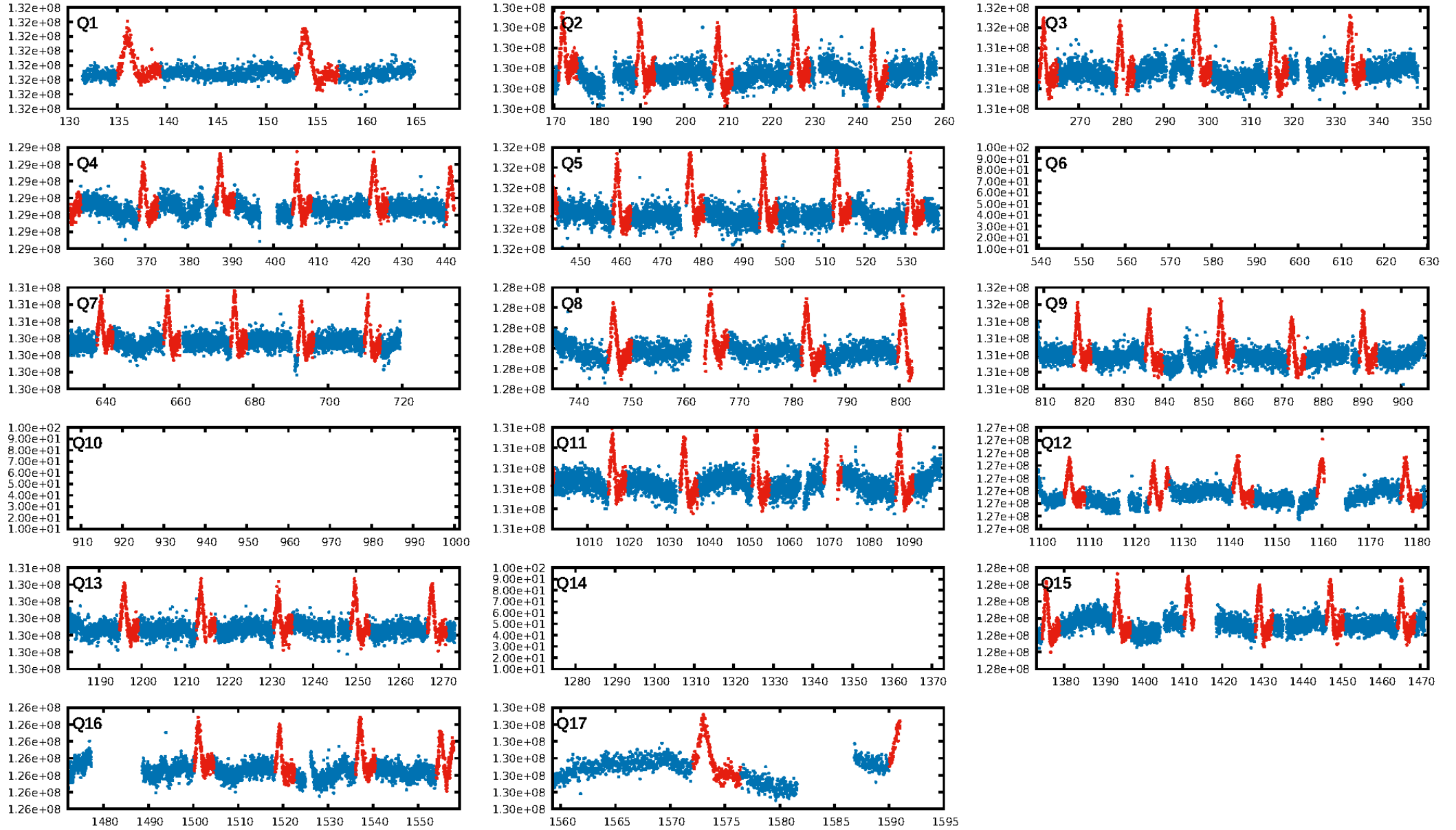
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 59.5%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.80e-105
RollingBand-fgt: 1.00 [59/59]
GhostDiagnostic-chr: 1.446
Centroid-sig: 21.4%
Centroid-so: 0.333 arcsec [4.78σ]
OotOffset-rm: 1.085 arcsec [1.34σ]
KicOffset-rm: 1.116 arcsec [1.29σ]
OotOffset-st: 1/4/4/3 [12]
KicOffset-st: 1/4/4/3 [12]
DiffImageQuality-fgm: 0.75 [9/12]
DiffImageOverlap-fno: 1.00 [14/14]

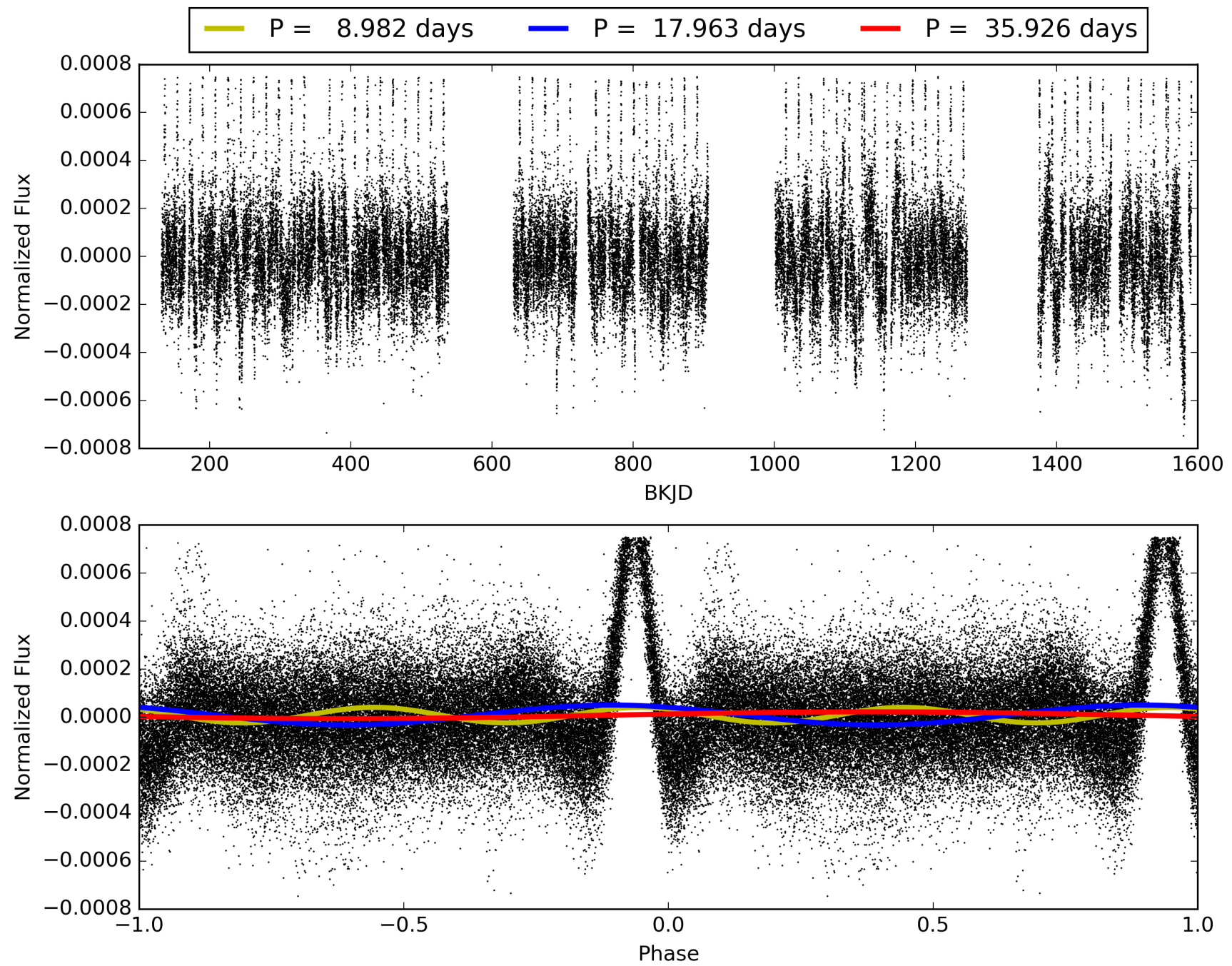
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:14:48 Z

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

TCE 005284262-01, PDC Light Curves

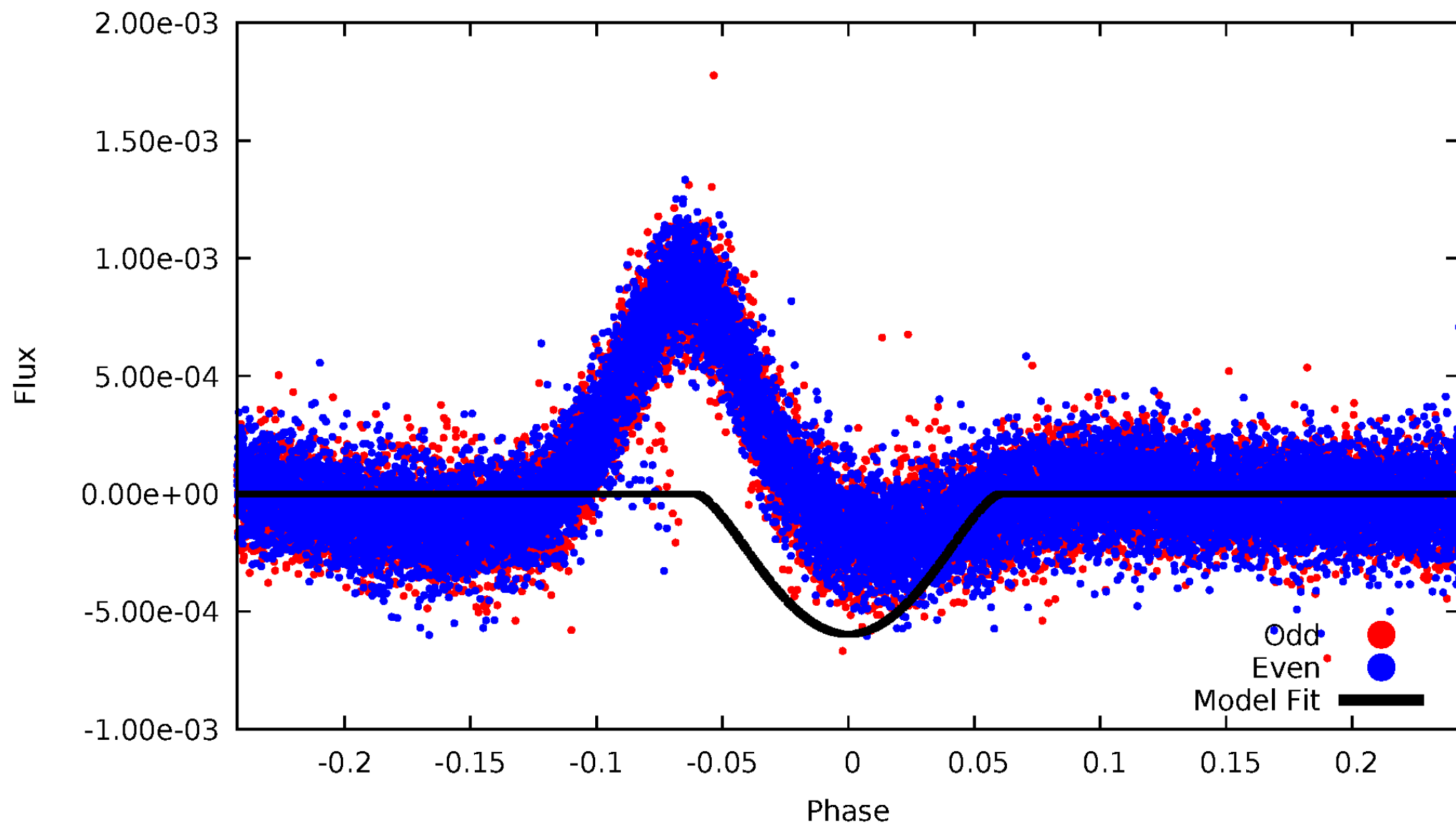


TCE 005284262-01



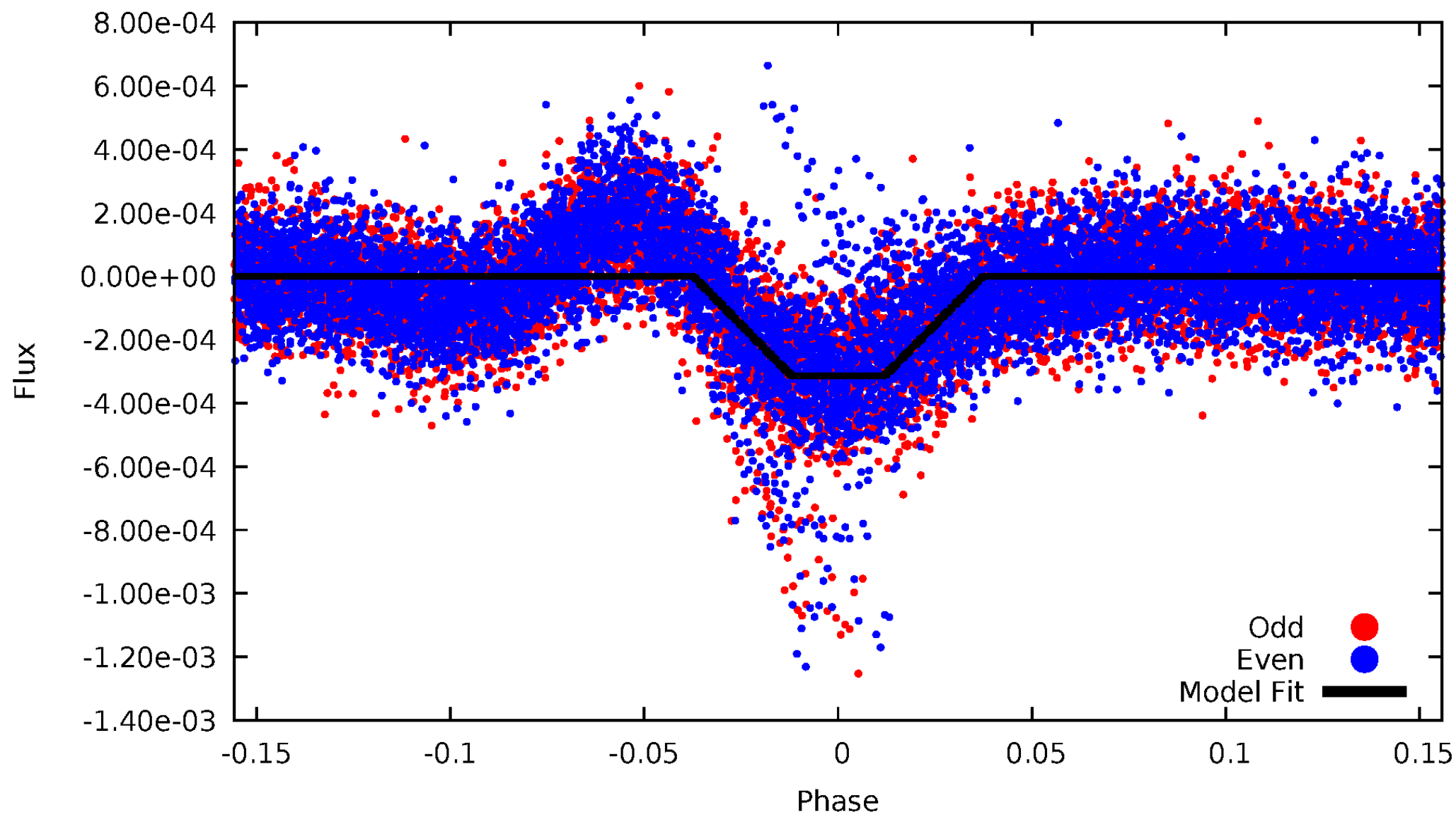
DV Odd/Even

TCE 005284262-01

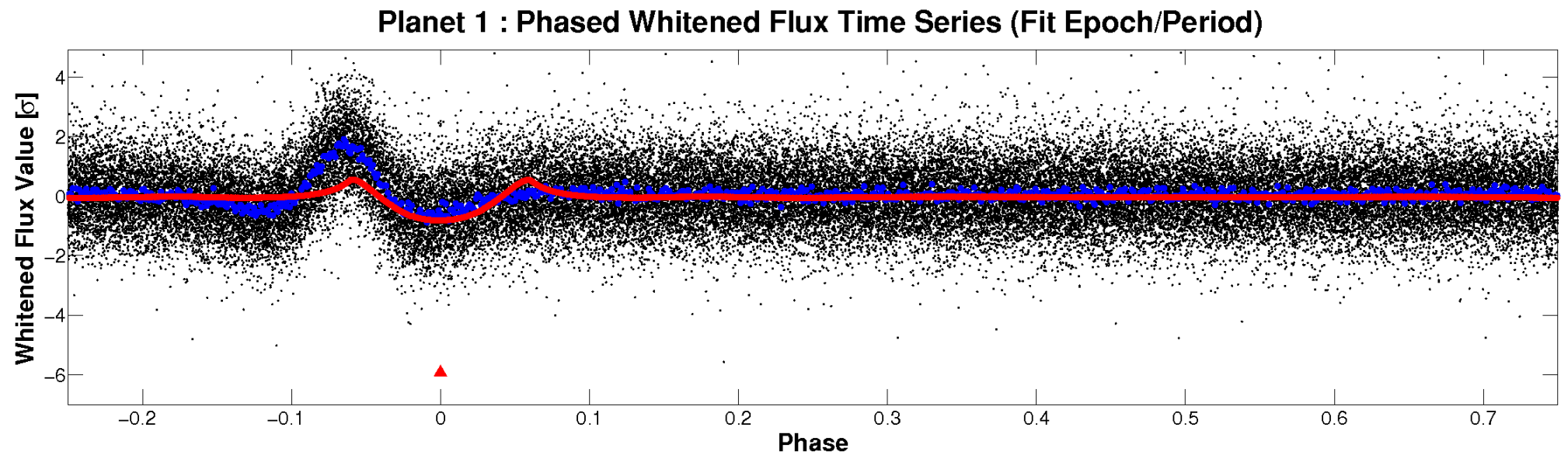
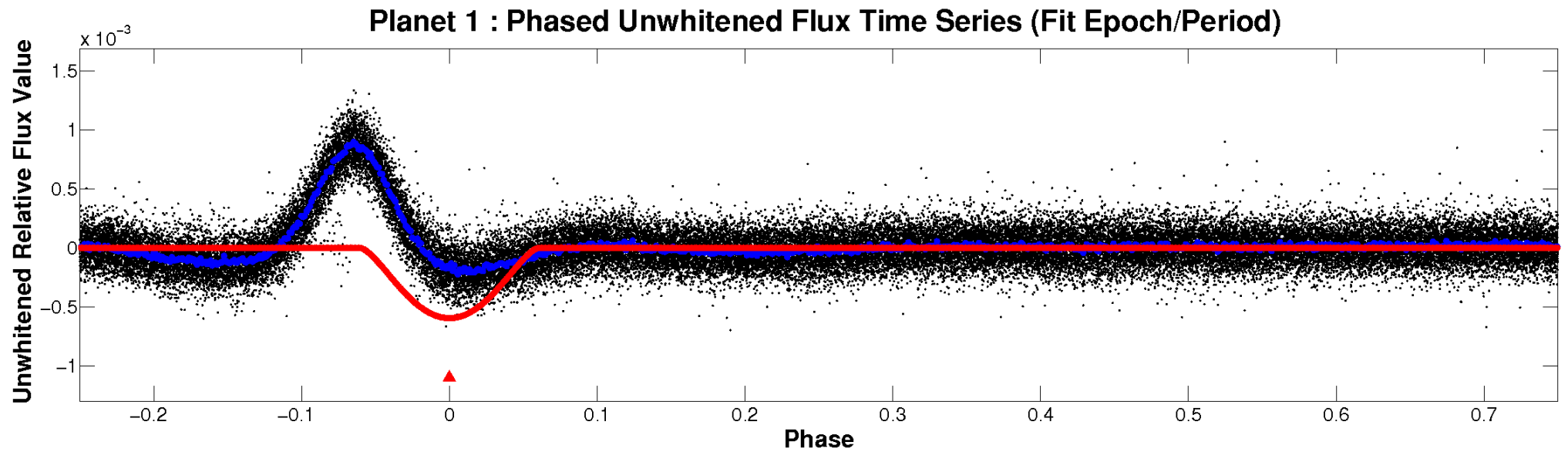


ALT Odd/Even

TCE 005284262-01

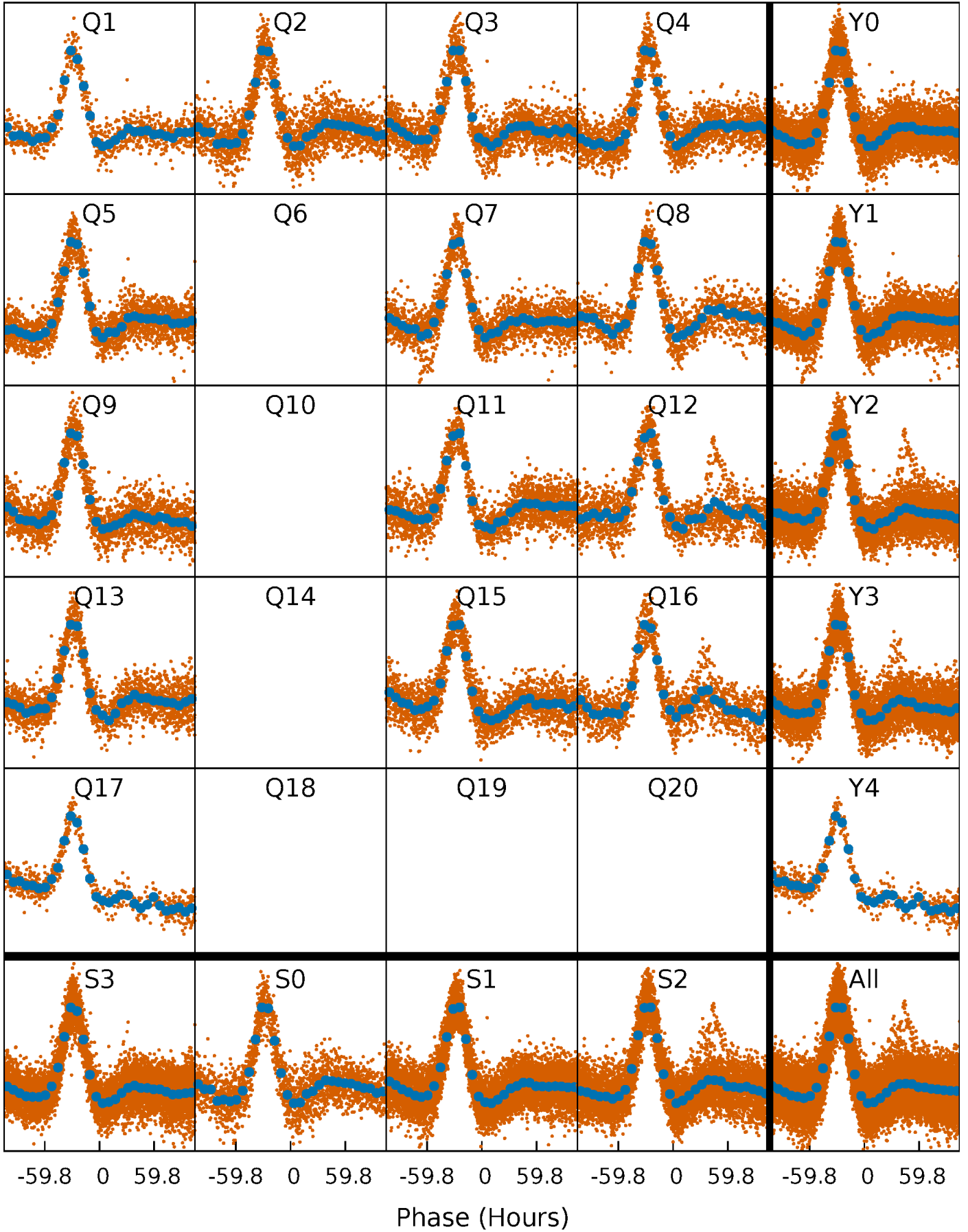


Non-Whitened Vs. Whitened Light Curve



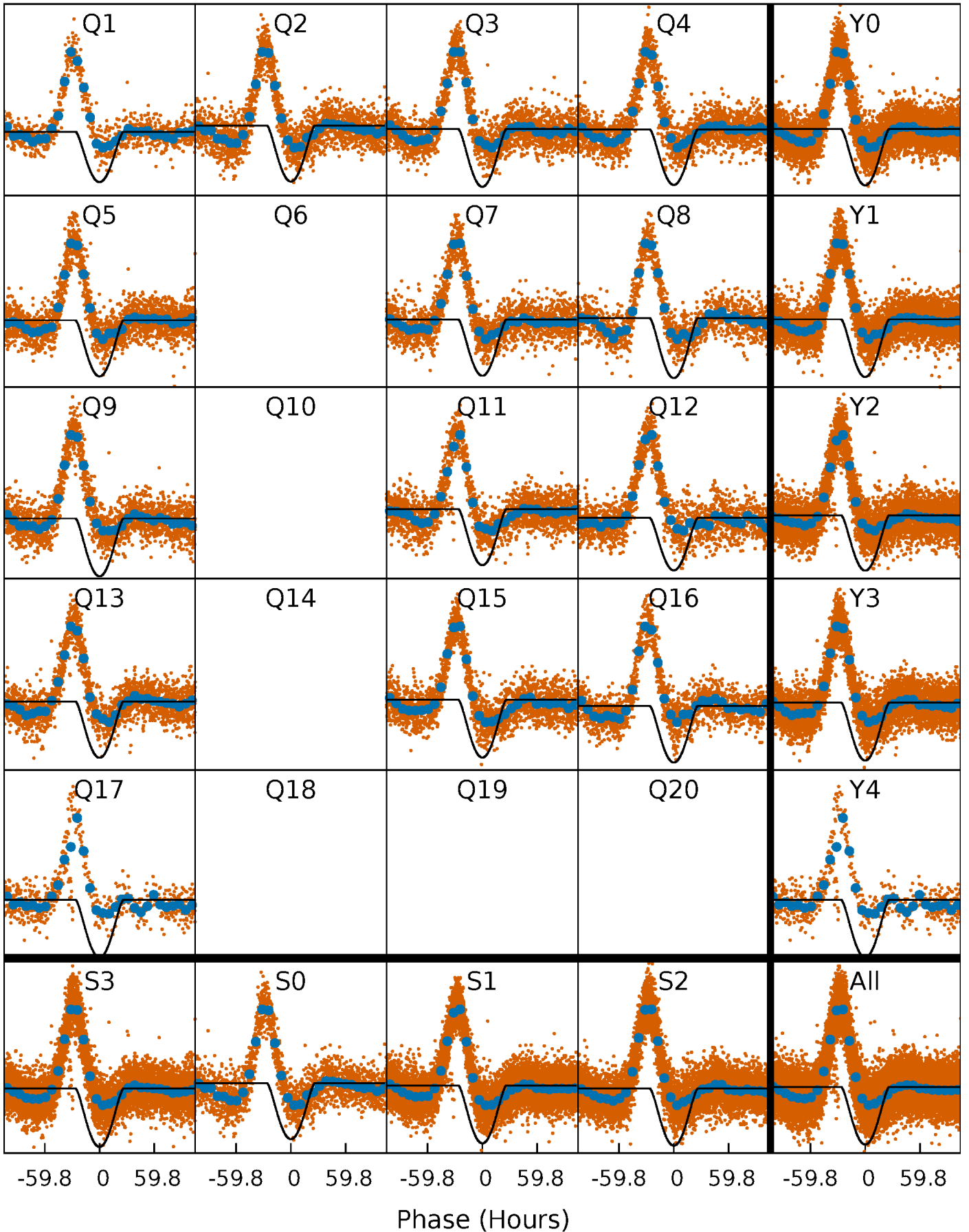
PDC Quarter-Phased Transit Curves

TCE 005284262-01 P= 17.963231 Days $T_0=137.191601$ (BKJD)



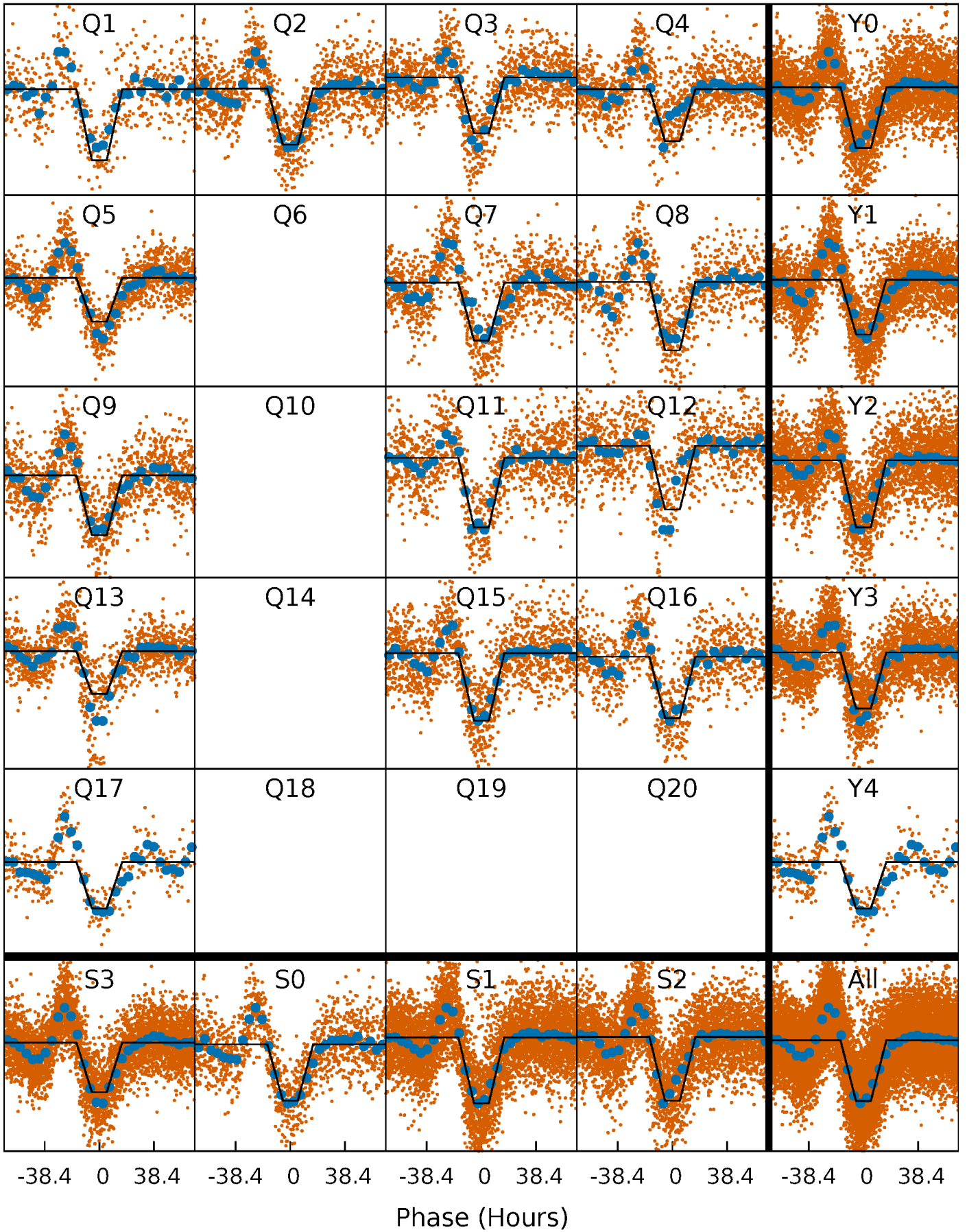
DV Quarter-Phased Transit Curves

TCE 005284262-01 P= 17.963231 Days $T_0=137.191601$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

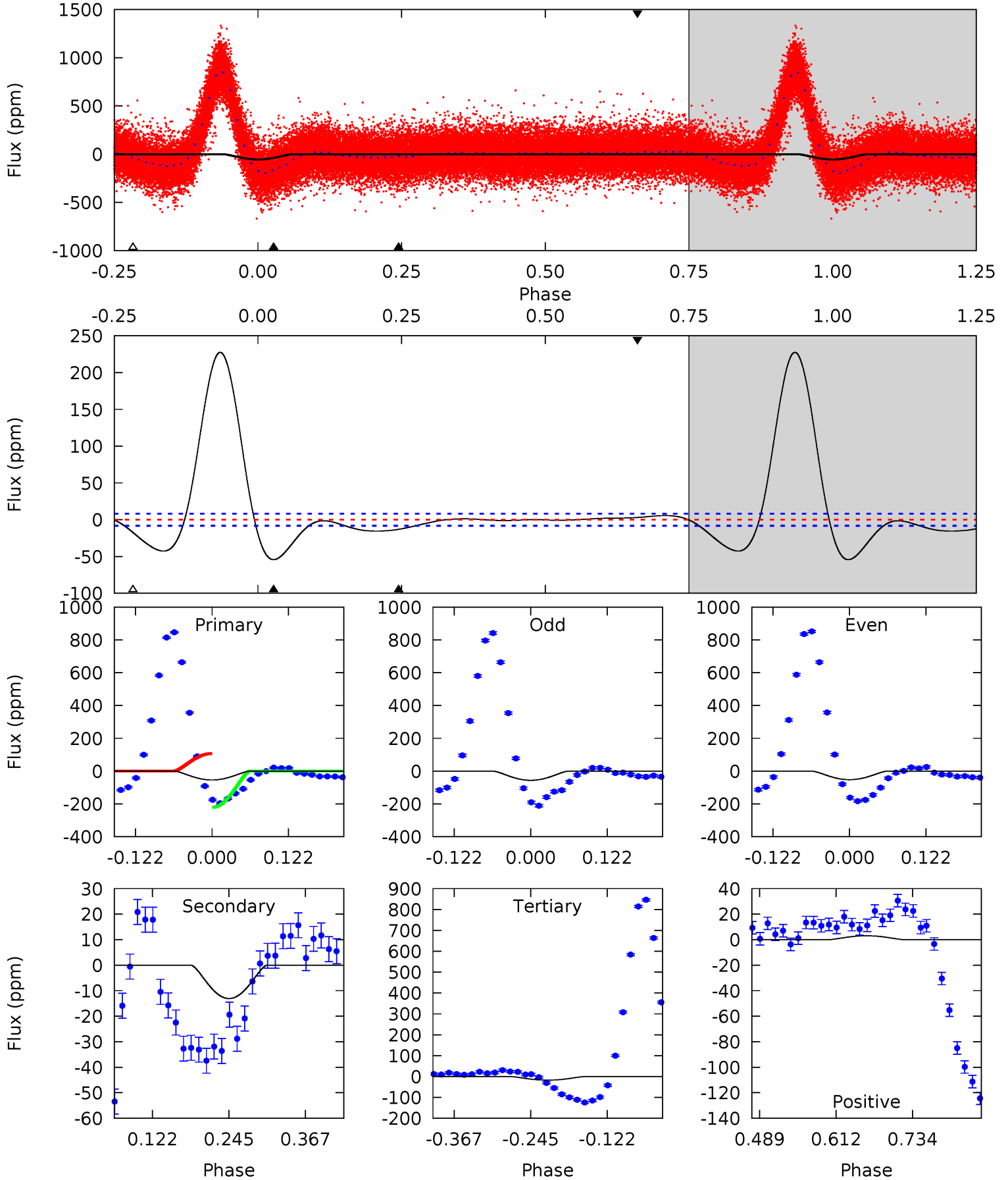
TCE 005284262-01 P= 17.962200 Days $T_0=136.991356$ (BKJD)



DV Model-Shift Uniqueness Test

005284262-01, P = 17.963231 Days, E = 119.228370 Days

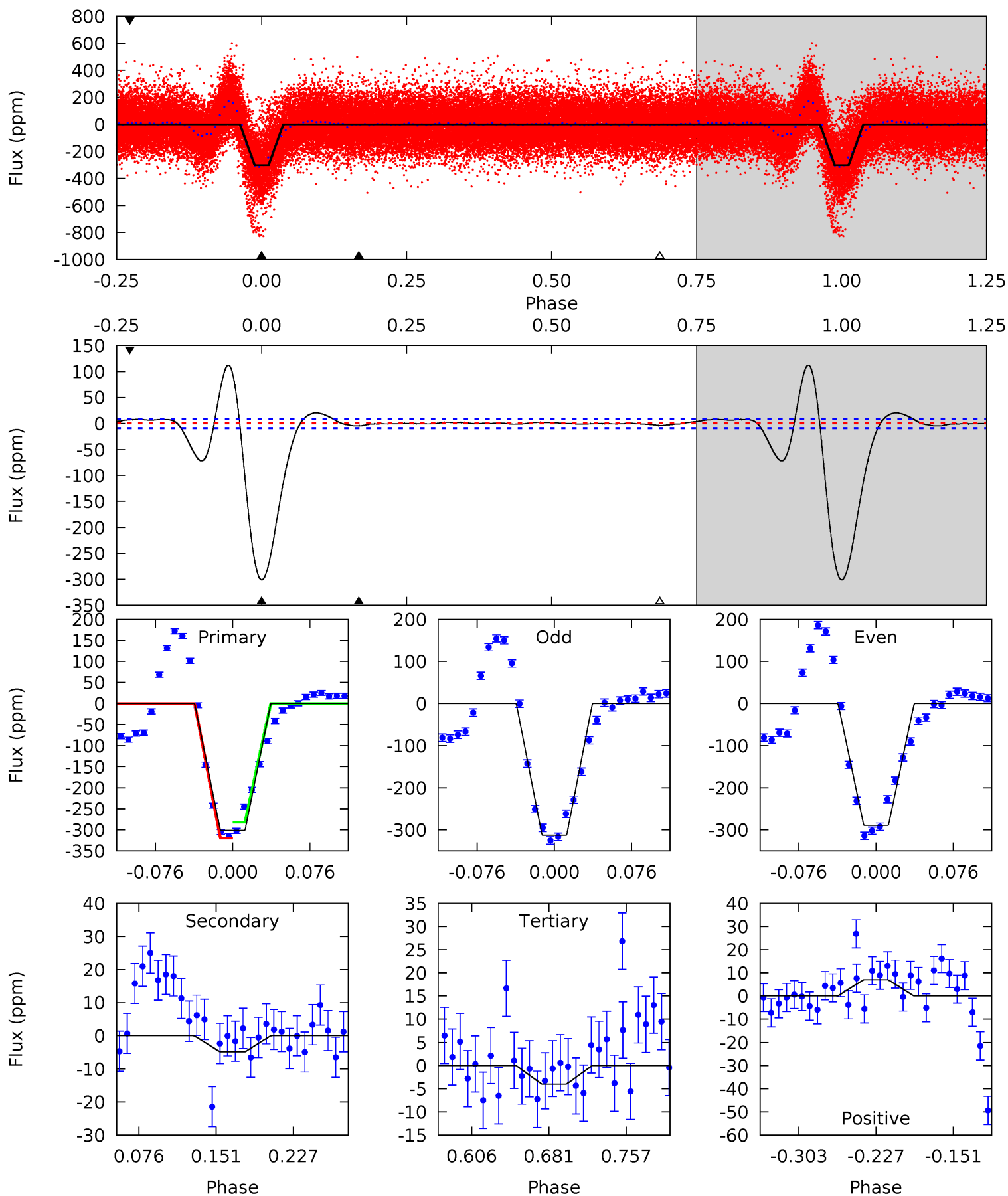
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.9	7.20	9.56	1.68	4.52	1.55	13.3	20.3	28.2	-2.36	5.52	1.07	0.36	0.81	34.0



Alt Model-Shift Uniqueness Test

005284262-01, P = 17.962200 Days, E = 119.029156 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
156.7	2.54	2.10	3.64	4.62	1.78	7.88	154.6	153.0	0.45	-1.10	6.03	1.10	0.27	9.83



Stellar Parameters For KIC 005284262

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6597^{+159}_{-218}	$4.007^{+0.204}_{-0.136}$	$0.210^{+0.200}_{-0.300}$	$2.043^{+0.440}_{-0.538}$	$1.546^{+0.163}_{-0.244}$	$0.255^{+0.303}_{-0.105}$
	+2%/-3%	+5%/-3%	+95%/-143%	+22%/-26%	+11%/-16%	+119%/-41%
Source	PHO1	FLK73	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 005284262-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-13 ± 2	$9.26^{+2.77}_{-2.45}$	1459^{+97}_{-103}	2629^{+243}_{-182}	$2.025^{+1.625}_{-0.859}$
Alt.	-5 ± 2	$4.17^{+2.18}_{-2.29}$	1466^{+95}_{-106}	2885^{+822}_{-404}	$3.563^{+14.502}_{-2.254}$

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 $A_{\text{obs}} \gg 1.0$

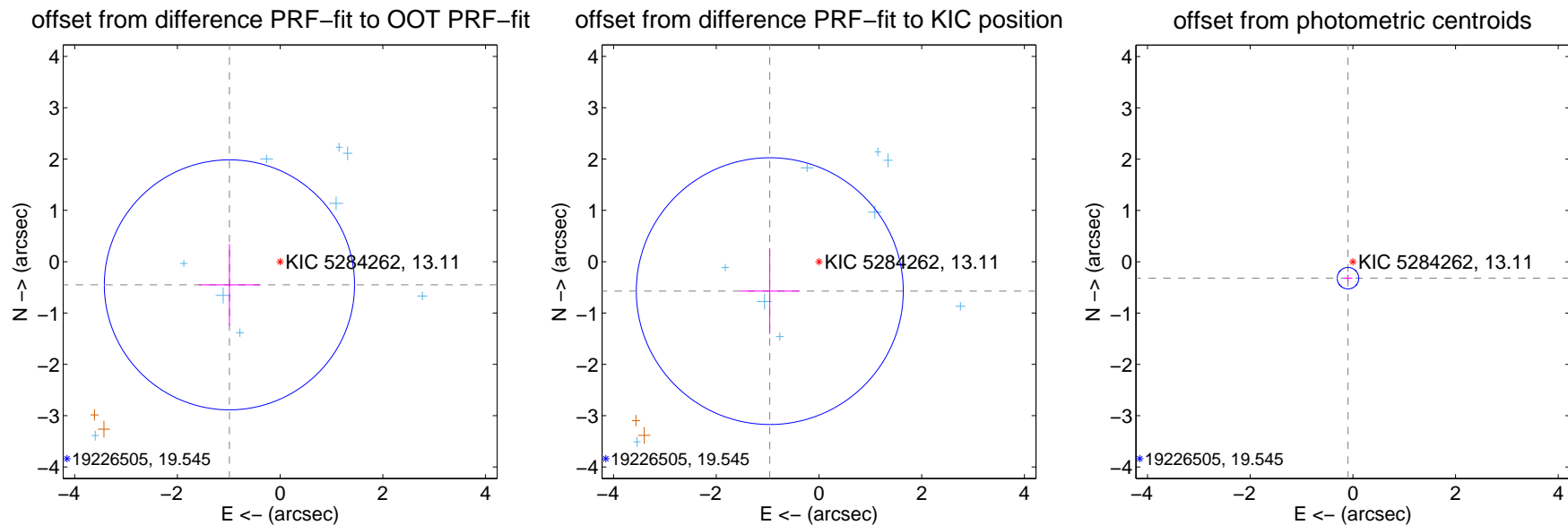
DV Centroid Data

Supplemental centroid analysis for 005284262-01. Kepler magnitude: 13.11. Transit SNR 43.53

There are 9 quarters with good PRF difference image offsets

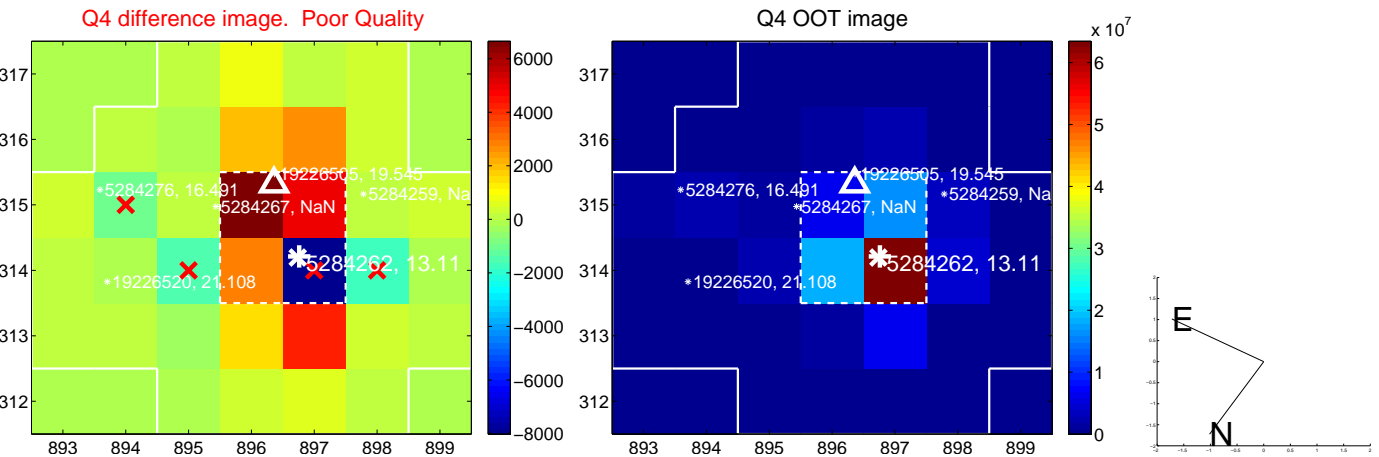
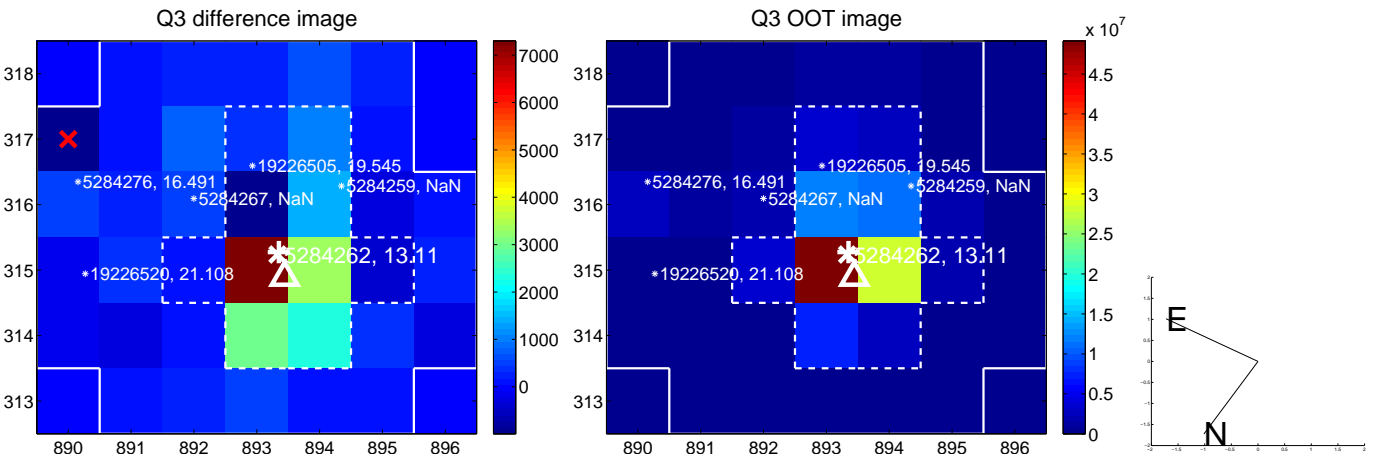
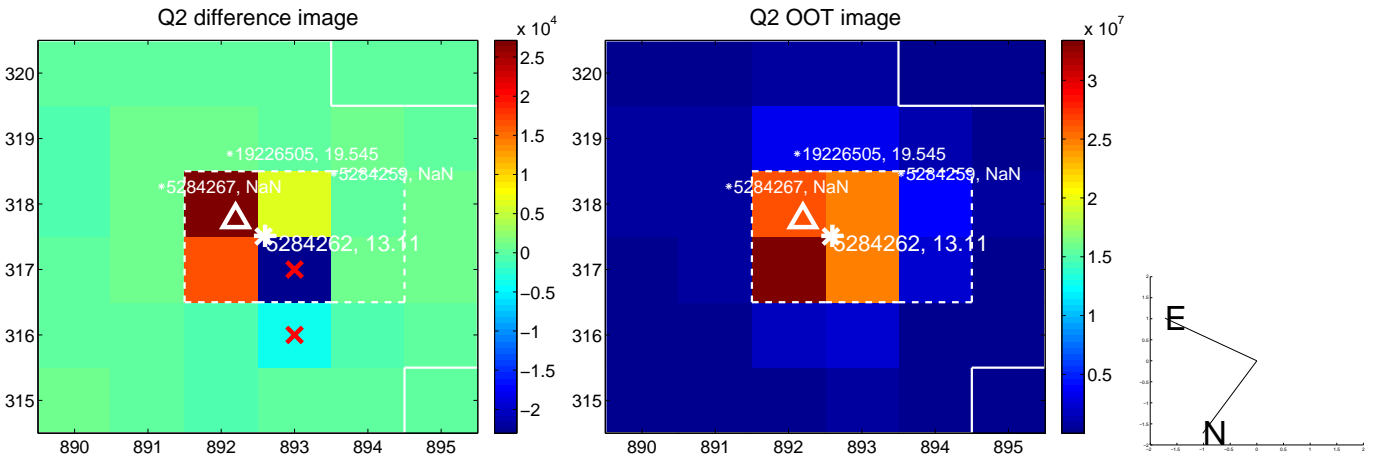
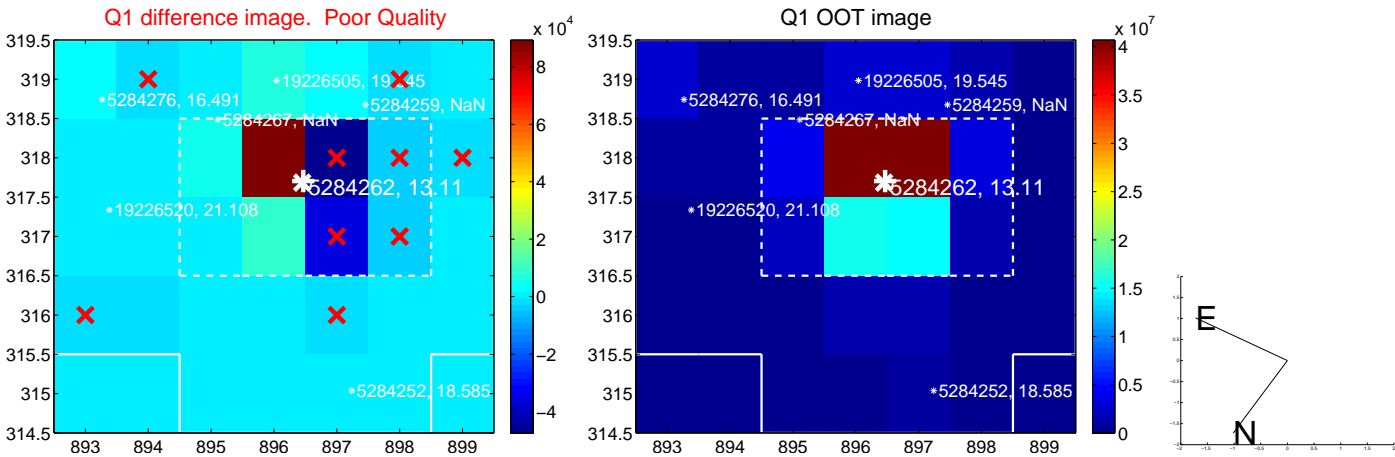
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.085 ± 0.812	1.34	0.986 ± 0.596	-0.451 ± 0.793
PRF-fit source offset from KIC position	1.116 ± 0.866	1.29	0.958 ± 0.579	-0.574 ± 0.836
photometric centroid source offset	0.33 ± 0.07	4.78	0.09 ± 0.08	-0.32 ± 0.07

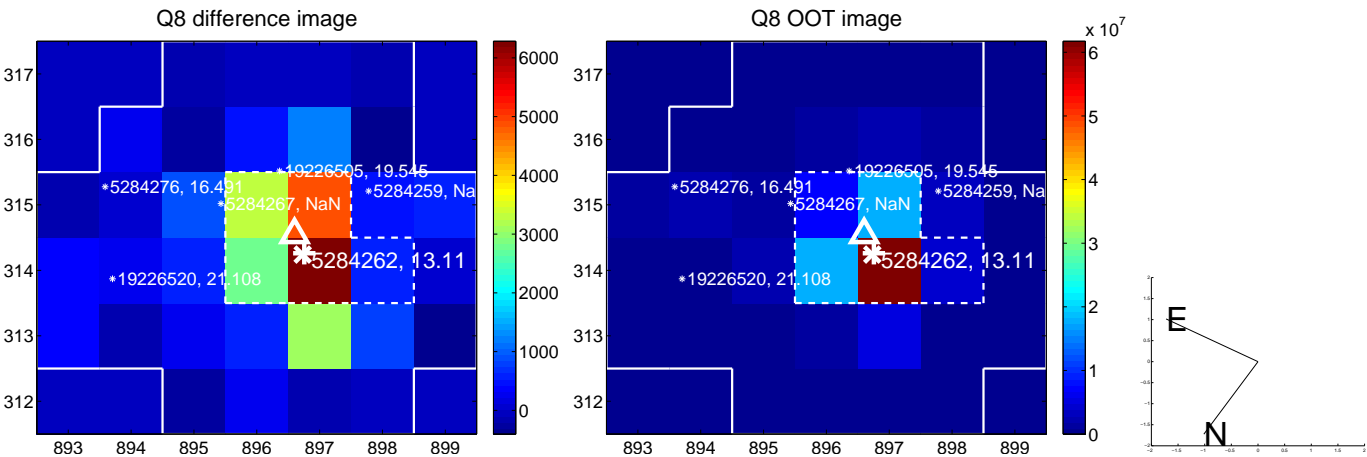
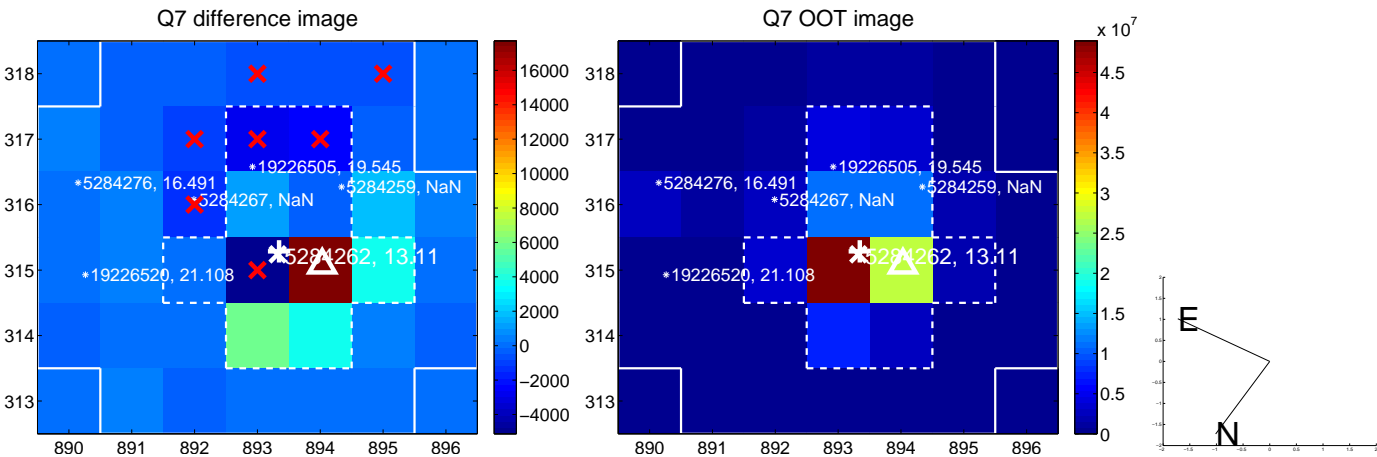
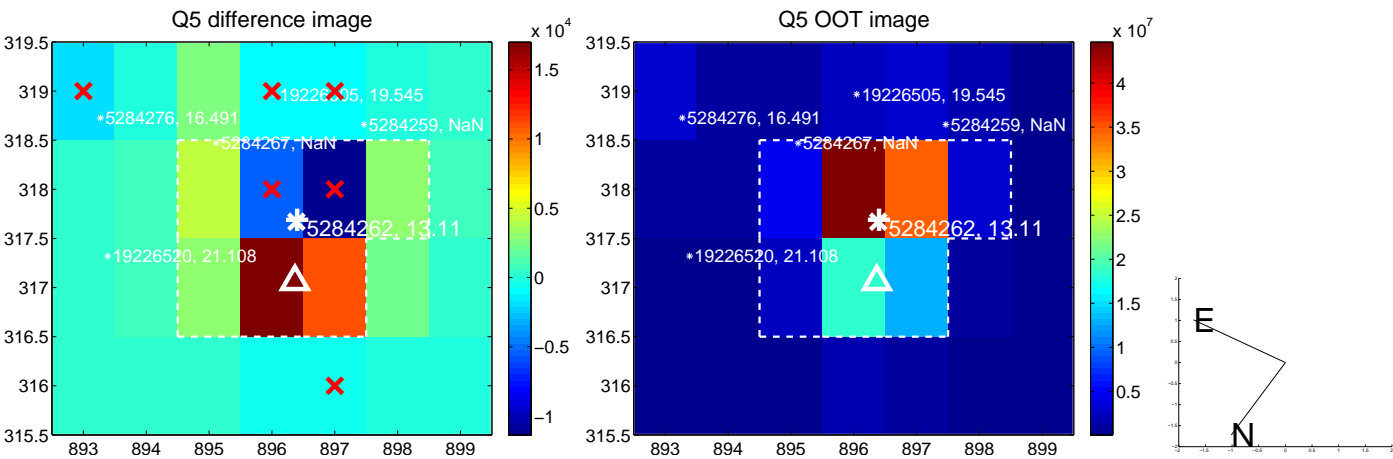


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

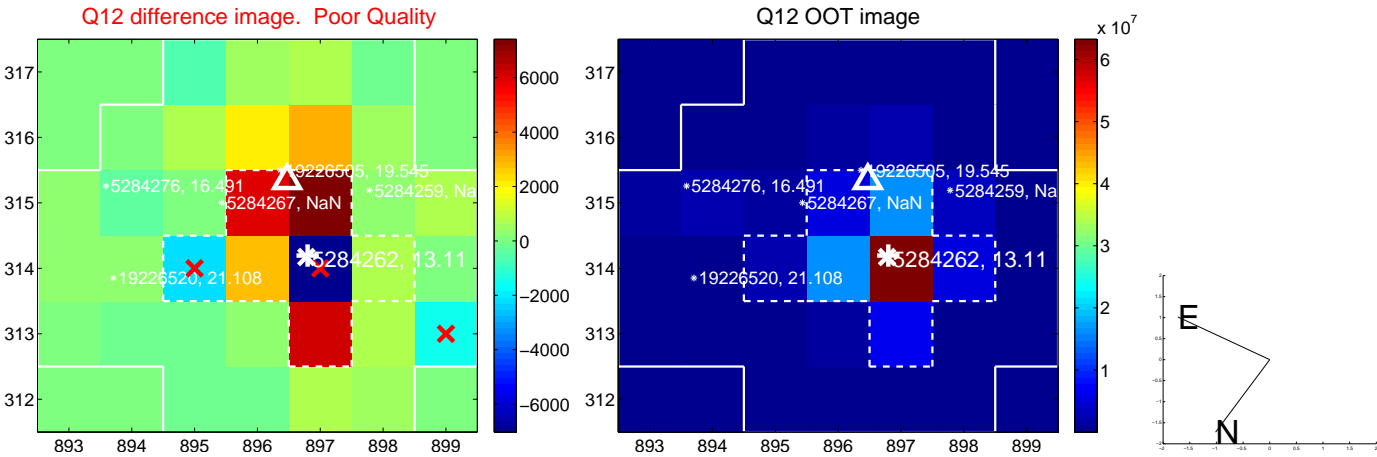
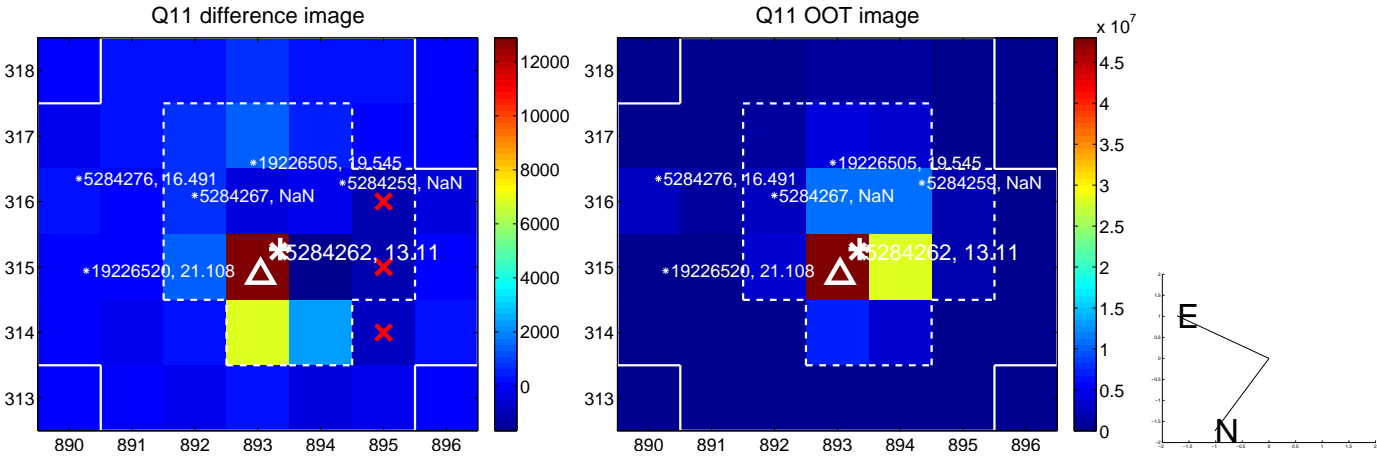
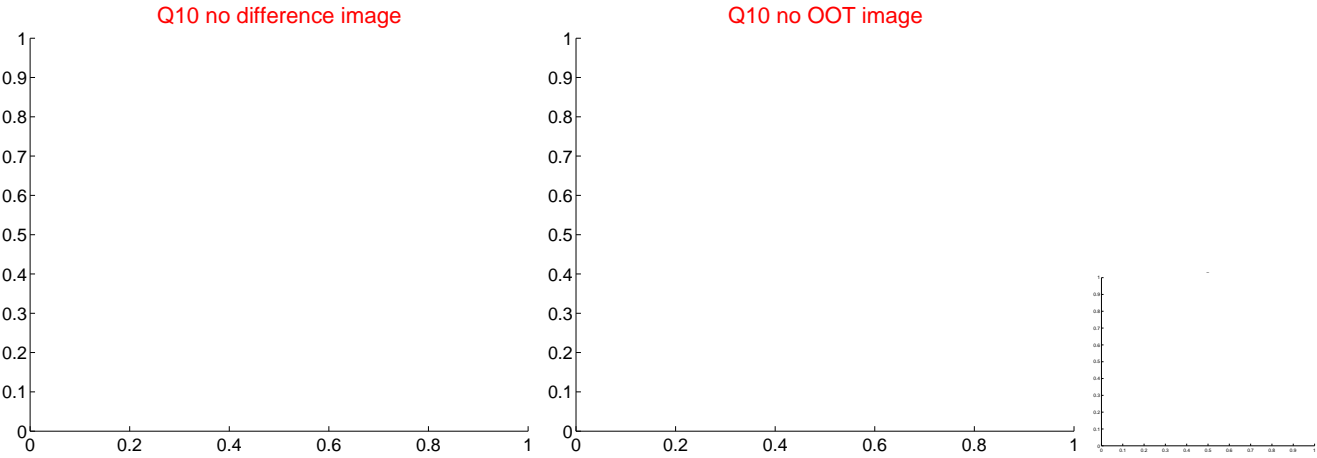
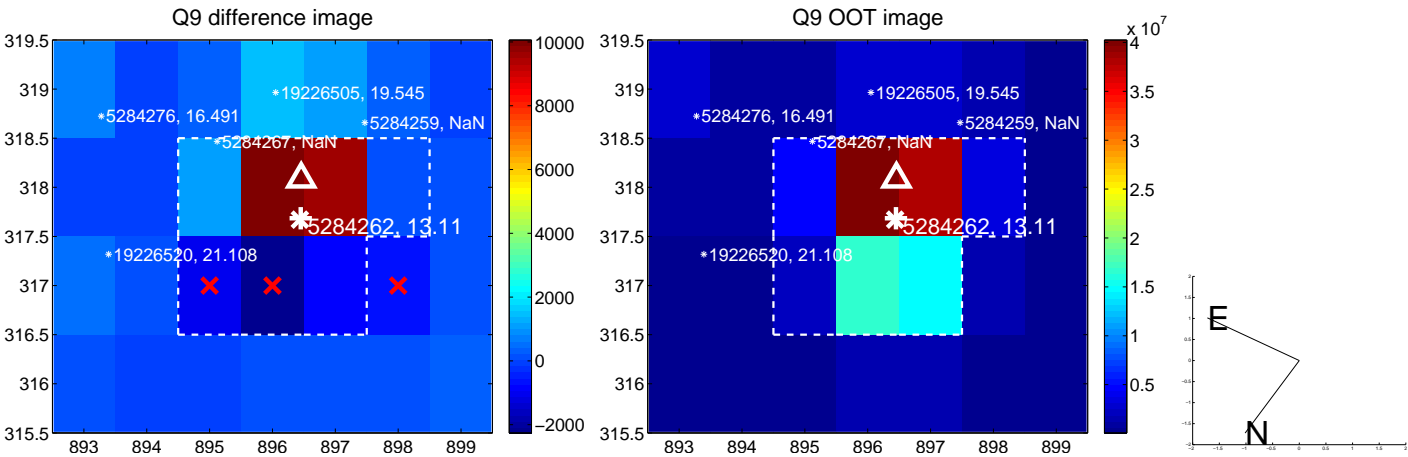
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



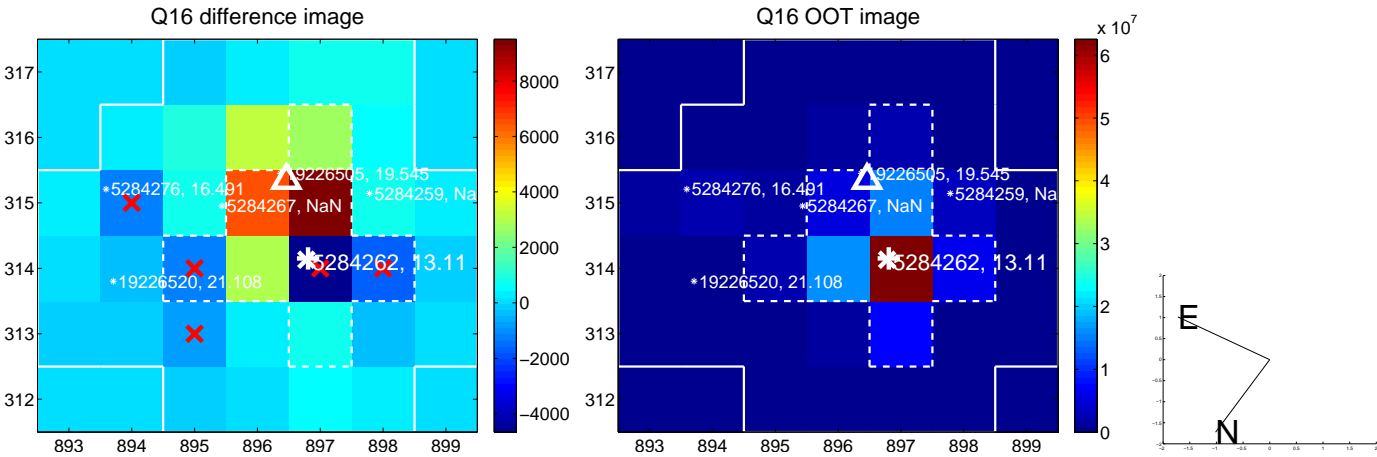
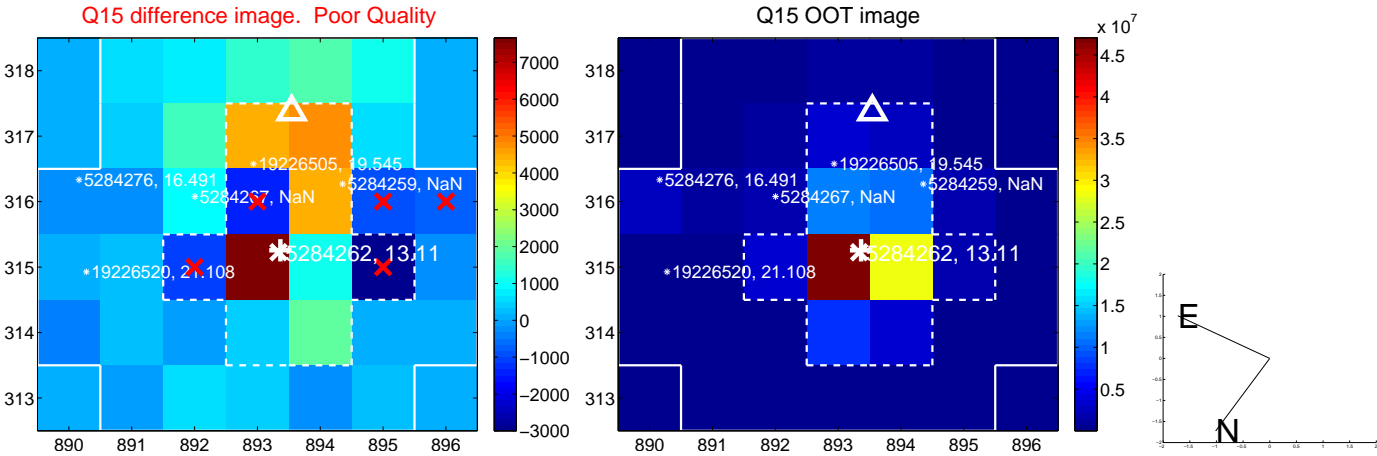
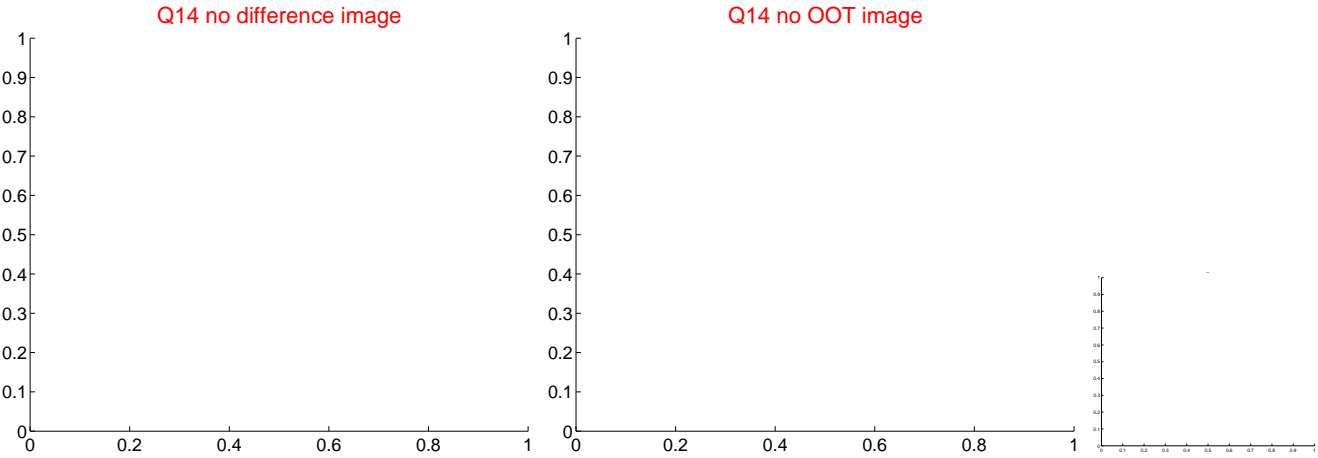
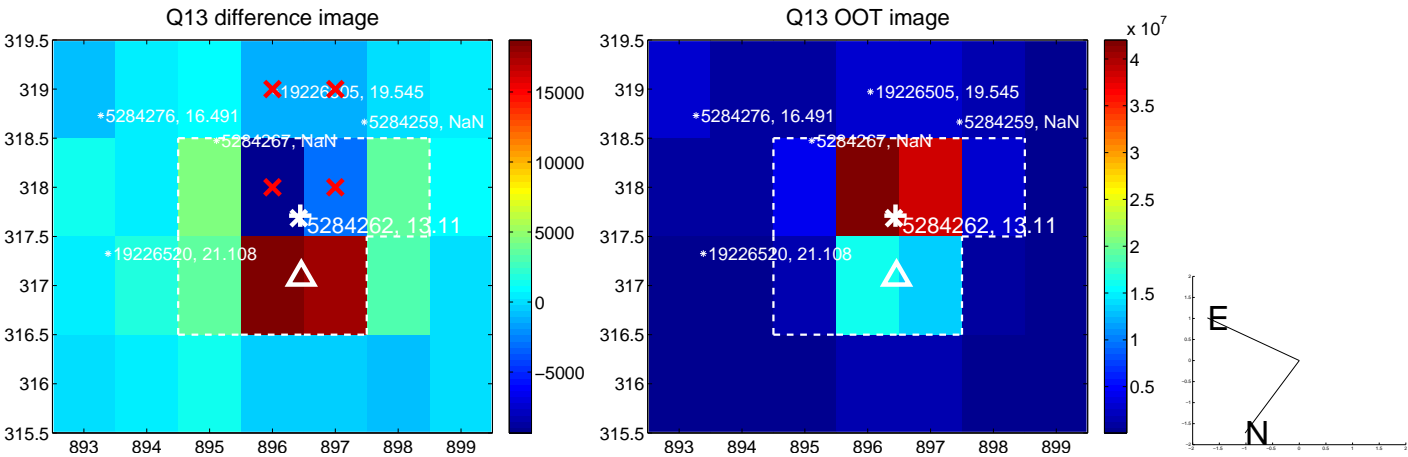
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



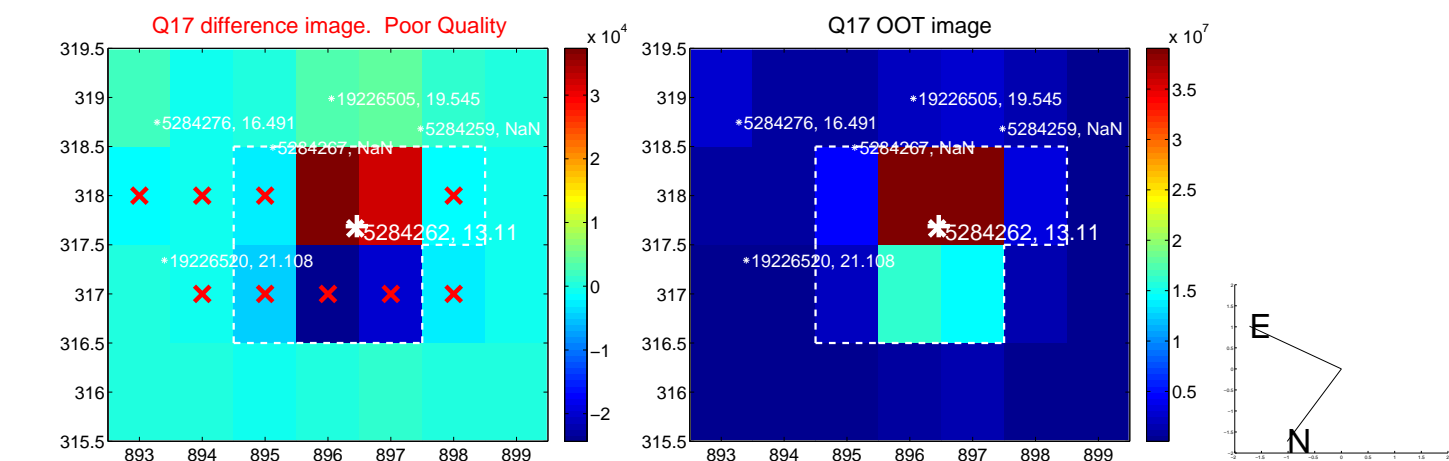
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



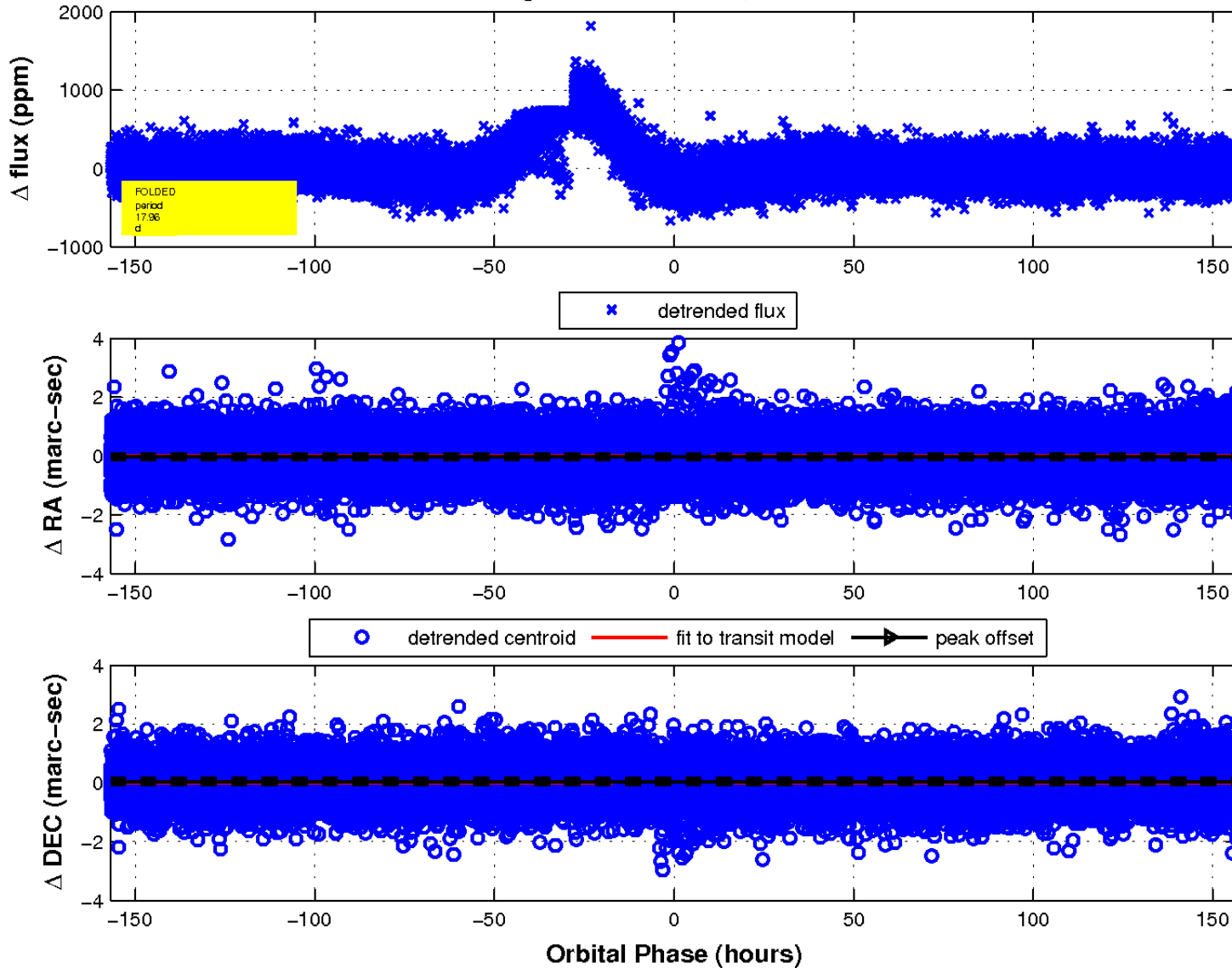
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

