

KIC 004263529

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})
004263529-01	OBS	3358.01	10.104036	132.893473	1247.7	0.801	47.4	63.1	0.83	5530	3.19	75.54

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004263529-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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 004263529-01

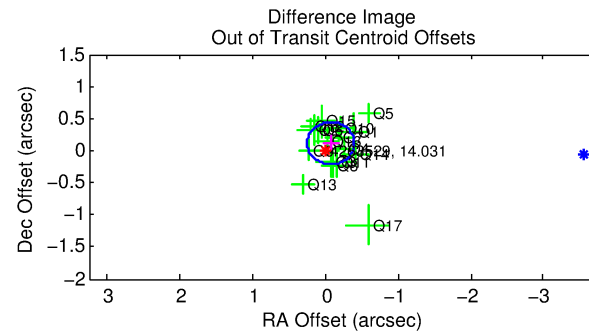
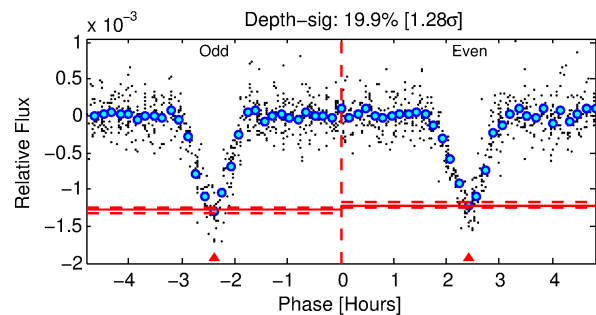
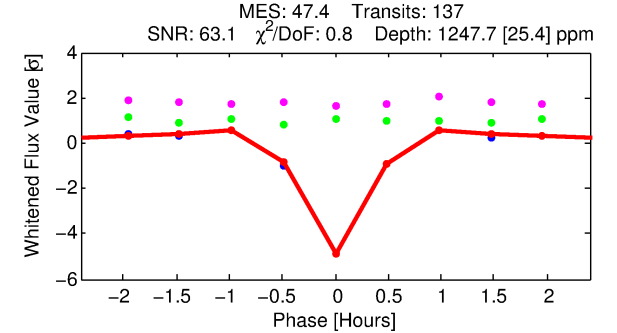
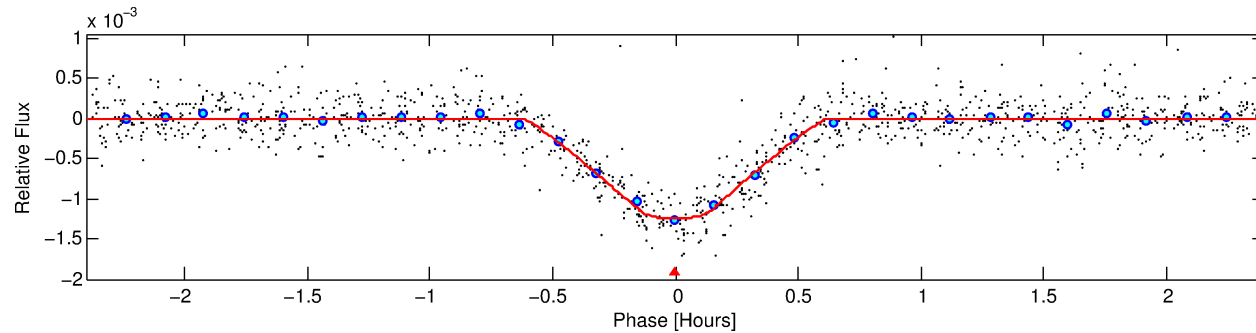
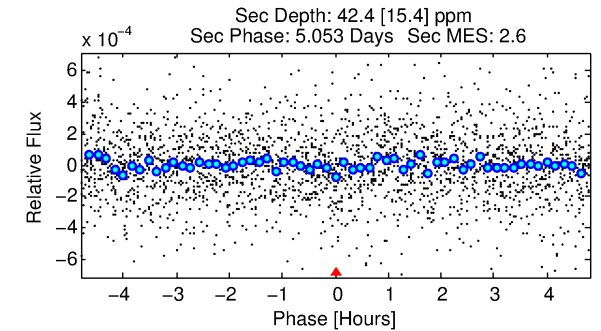
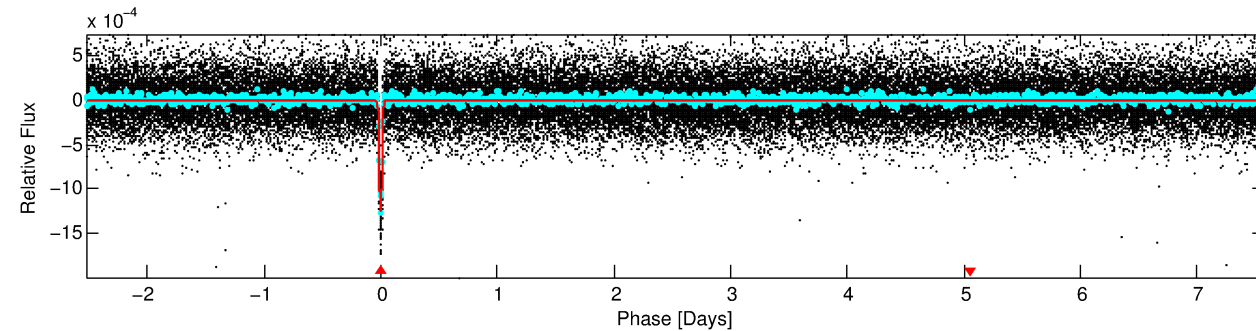
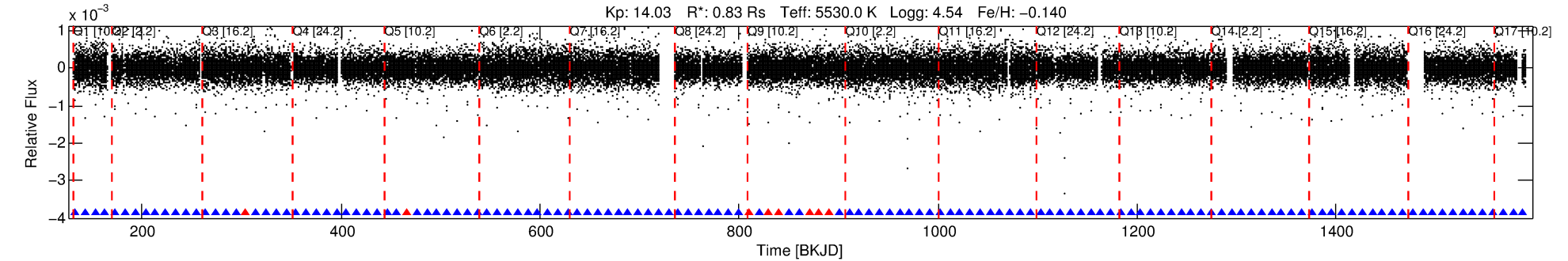
No Significant Match Found

DV One-Page Summary

KIC: 4263529 Candidate: 1 of 1 Period: 10.104 d

KOI: K03358.01 Corr: 0.951

Kp: 14.03 R*: 0.83 Rs Teff: 5530.0 K Logg: 4.54 Fe/H: -0.140



DV Fit Results:

Period = 10.10404 [0.00001] d
Epoch = 132.8935 [0.0004] BKJD
Rp/R* = 0.0351 [0.0038]
a/R* = 73.89 [32.24]
b = 0.69 [0.33]
Seff = 75.54 [22.30]
Teff = 752 [55] K
Rp = 3.19 [0.80] Re
a = 0.0875 [0.0165] AU
Ag = 17.58 [8.87] [1.87σ]
Teffp = 2380 [260] K [6.13σ]

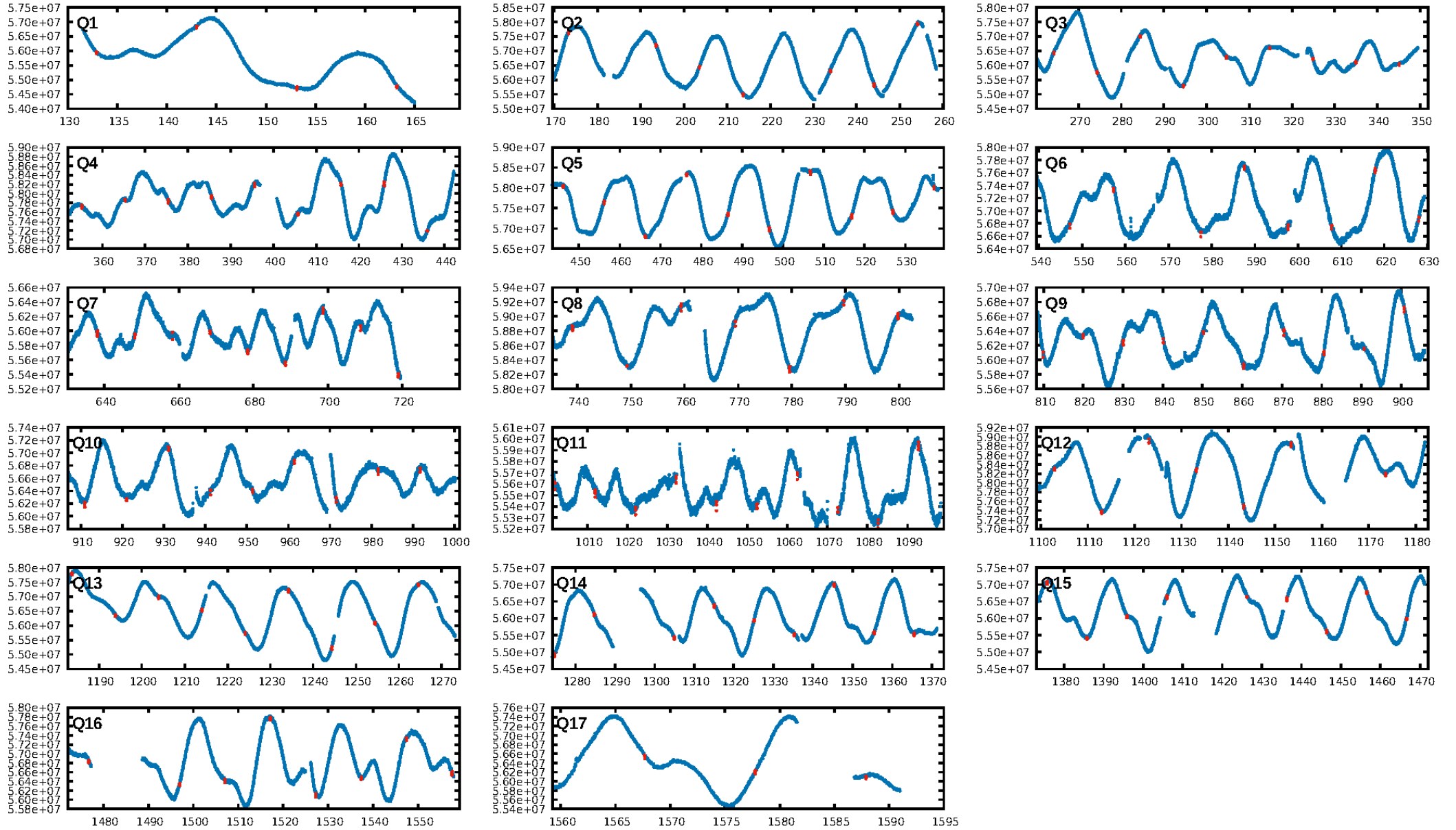
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.5%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 0.94 [122/130]
GhostDiagnostic-chr: 1.798
Centroid-sig: 88.2%
Centroid-so: 0.098 arcsec [0.47σ]
OotOffset-rm: 0.137 arcsec [1.26σ]
KicOffset-rm: 0.184 arcsec [1.86σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

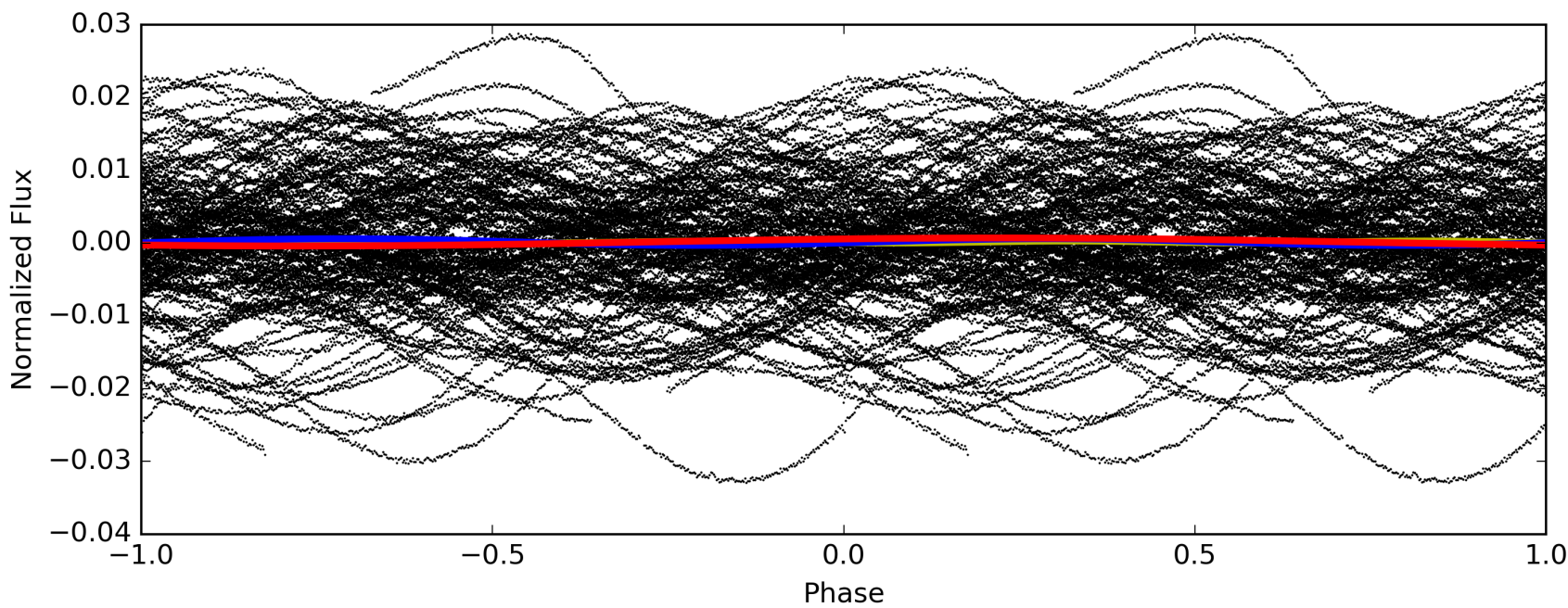
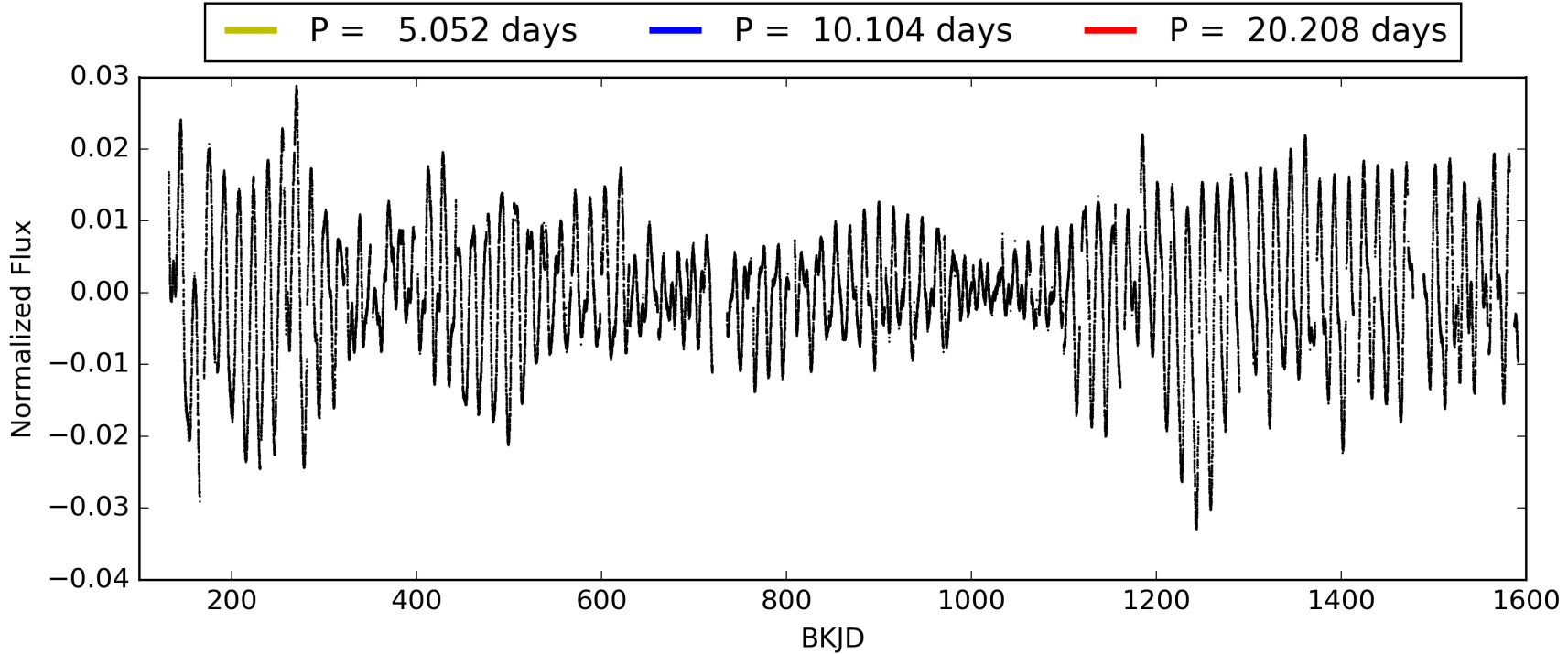
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 21:10:17 Z

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

TCE 004263529-01, PDC Light Curves

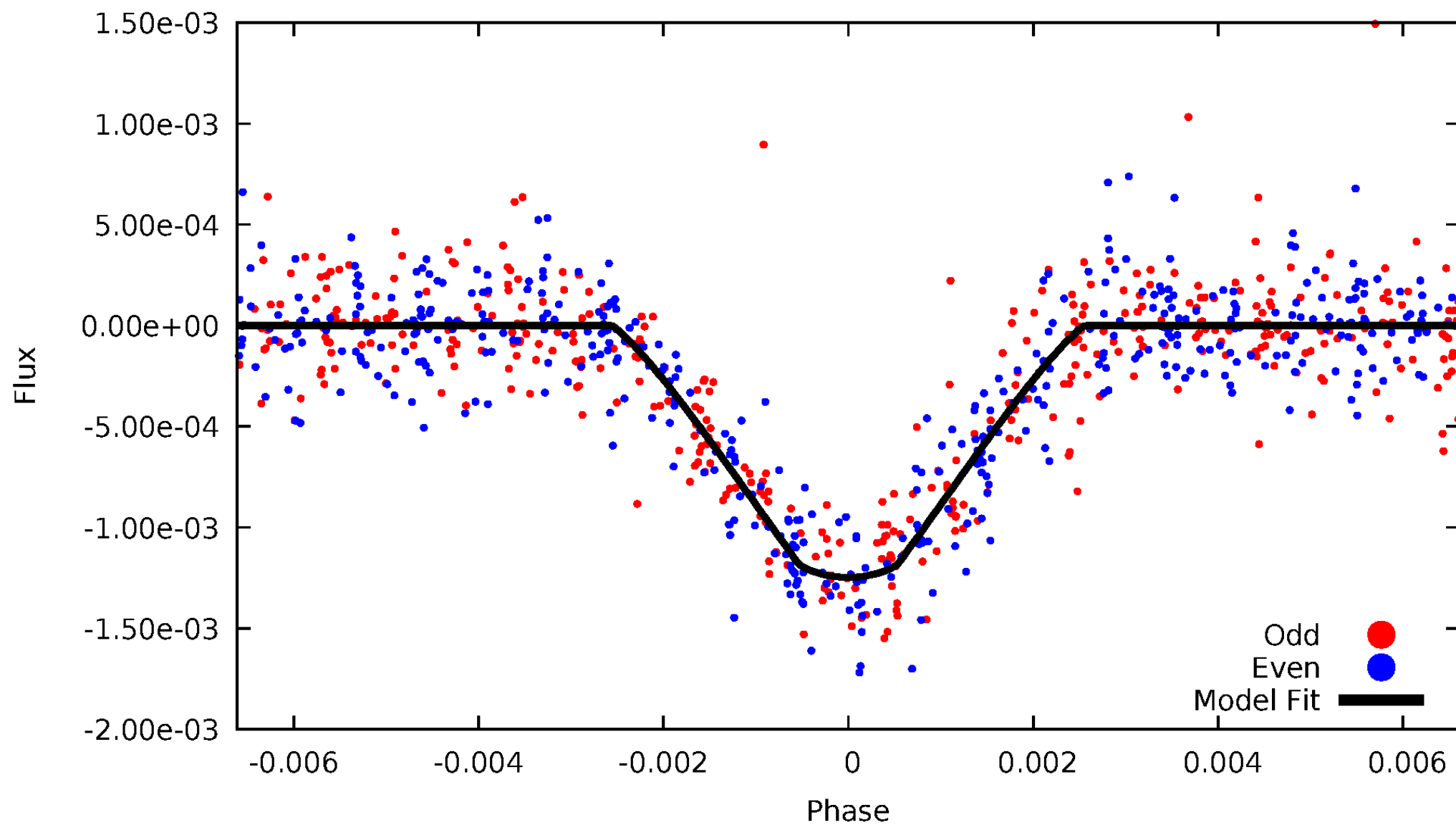


TCE 004263529-01



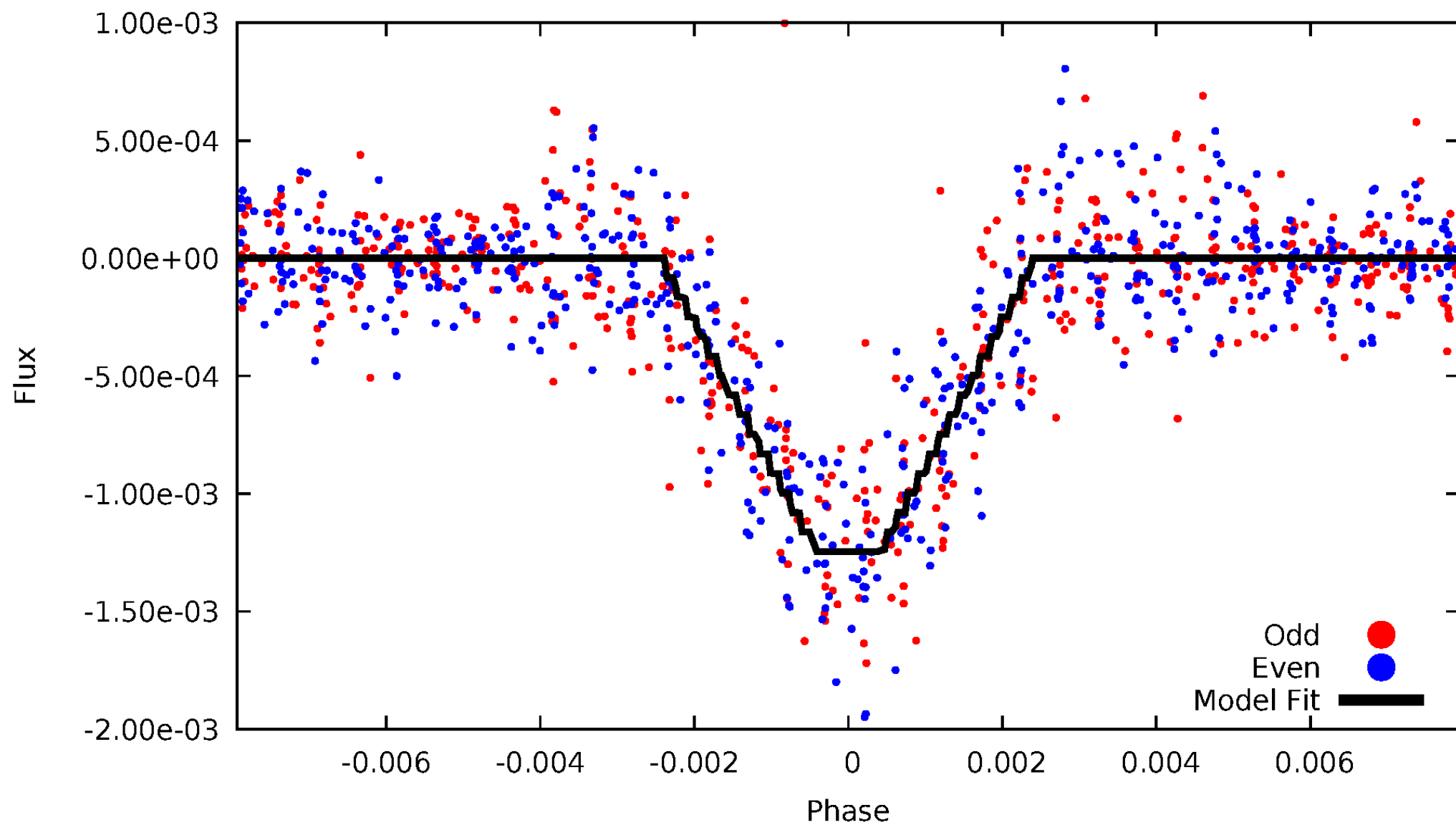
DV Odd/Even

TCE 004263529-01



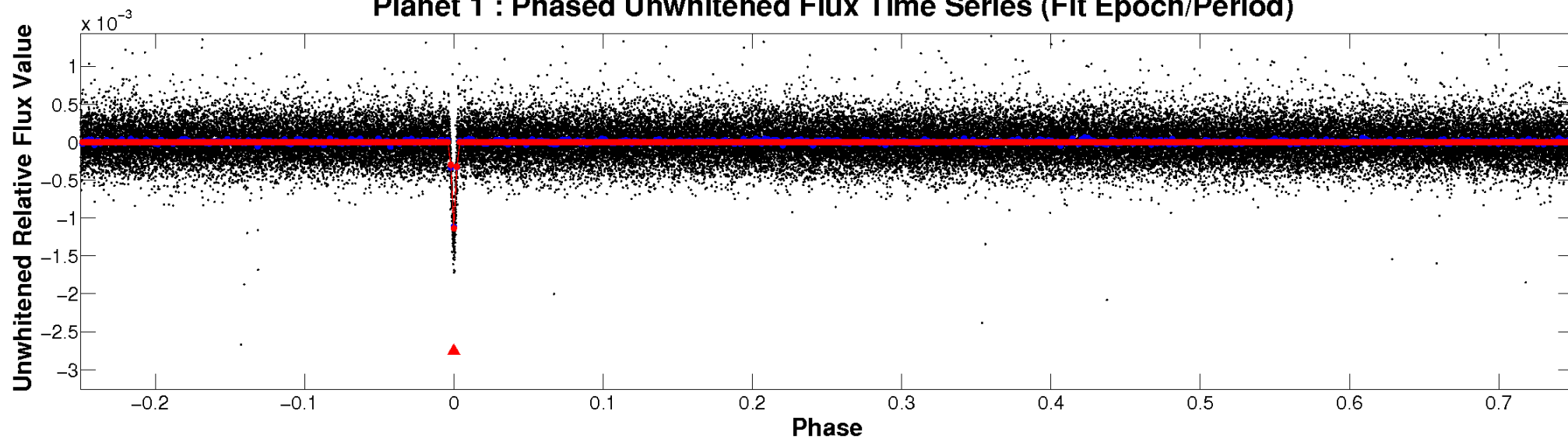
ALT Odd/Even

TCE 004263529-01

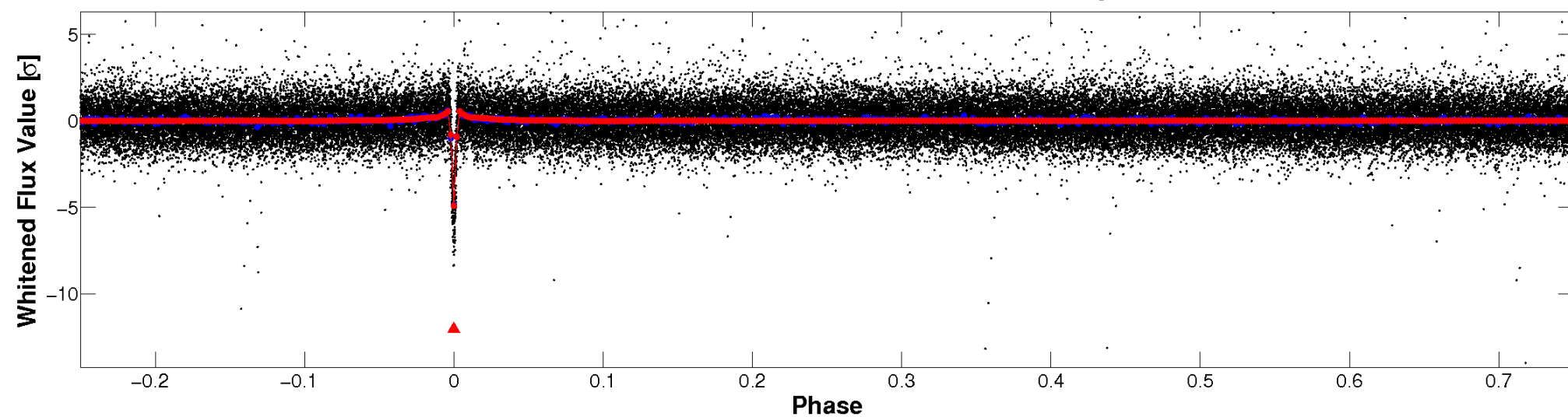


Non-Whitened Vs. Whitened Light Curve

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

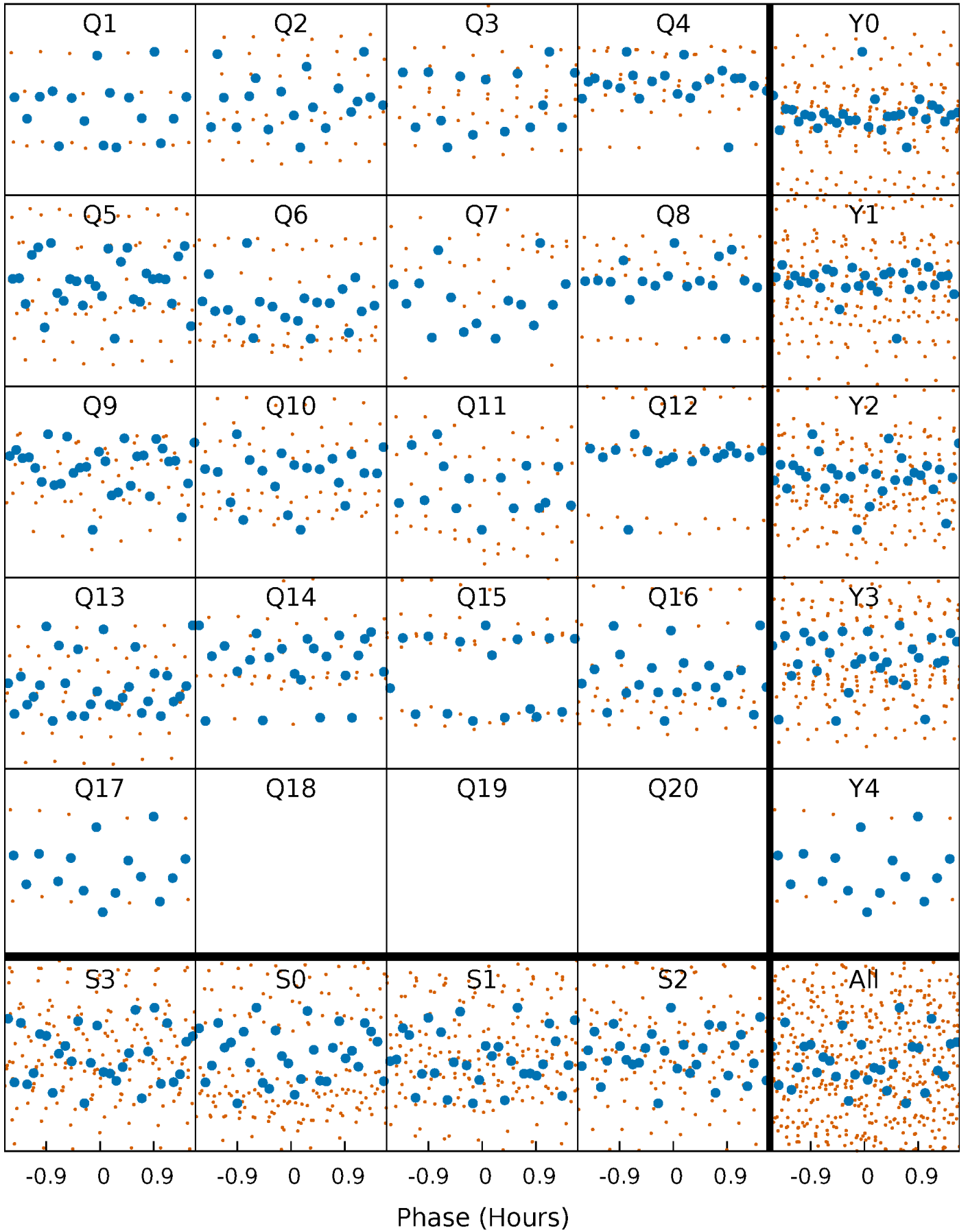


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



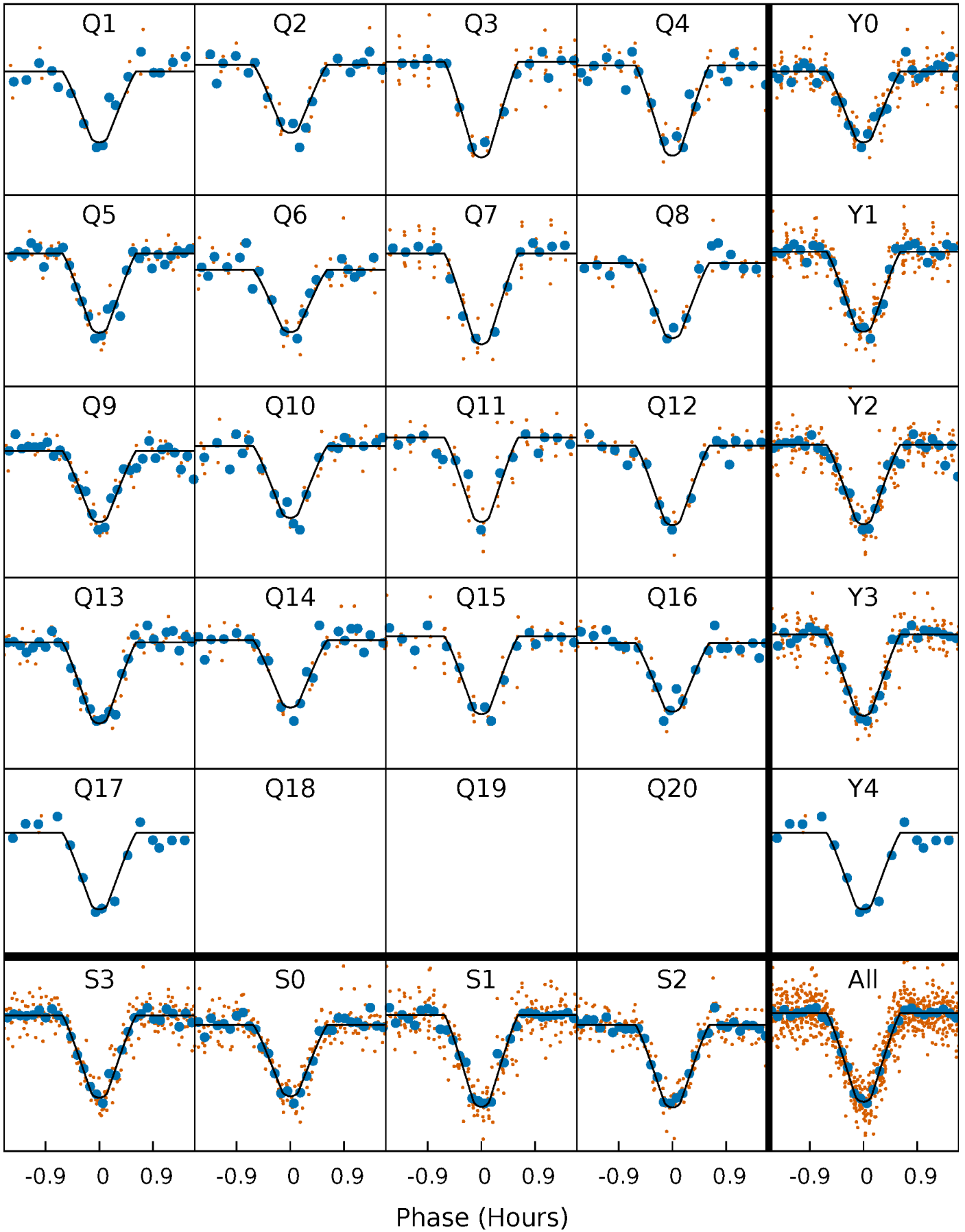
PDC Quarter-Phased Transit Curves

TCE 004263529-01 P= 10.104036 Days $T_0=132.893473$ (BKJD)



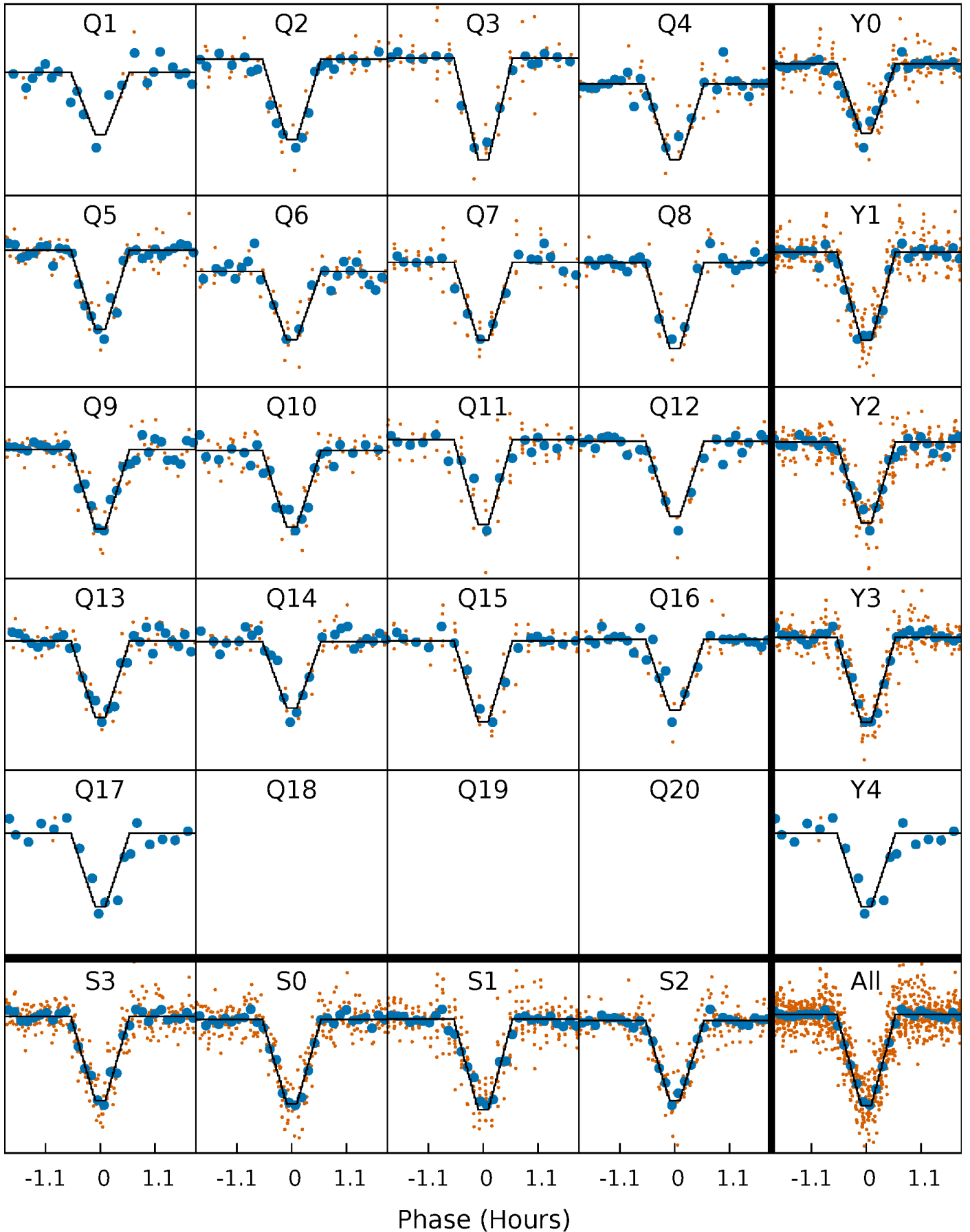
DV Quarter-Phased Transit Curves

TCE 004263529-01 P= 10.104036 Days $T_0=132.893473$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

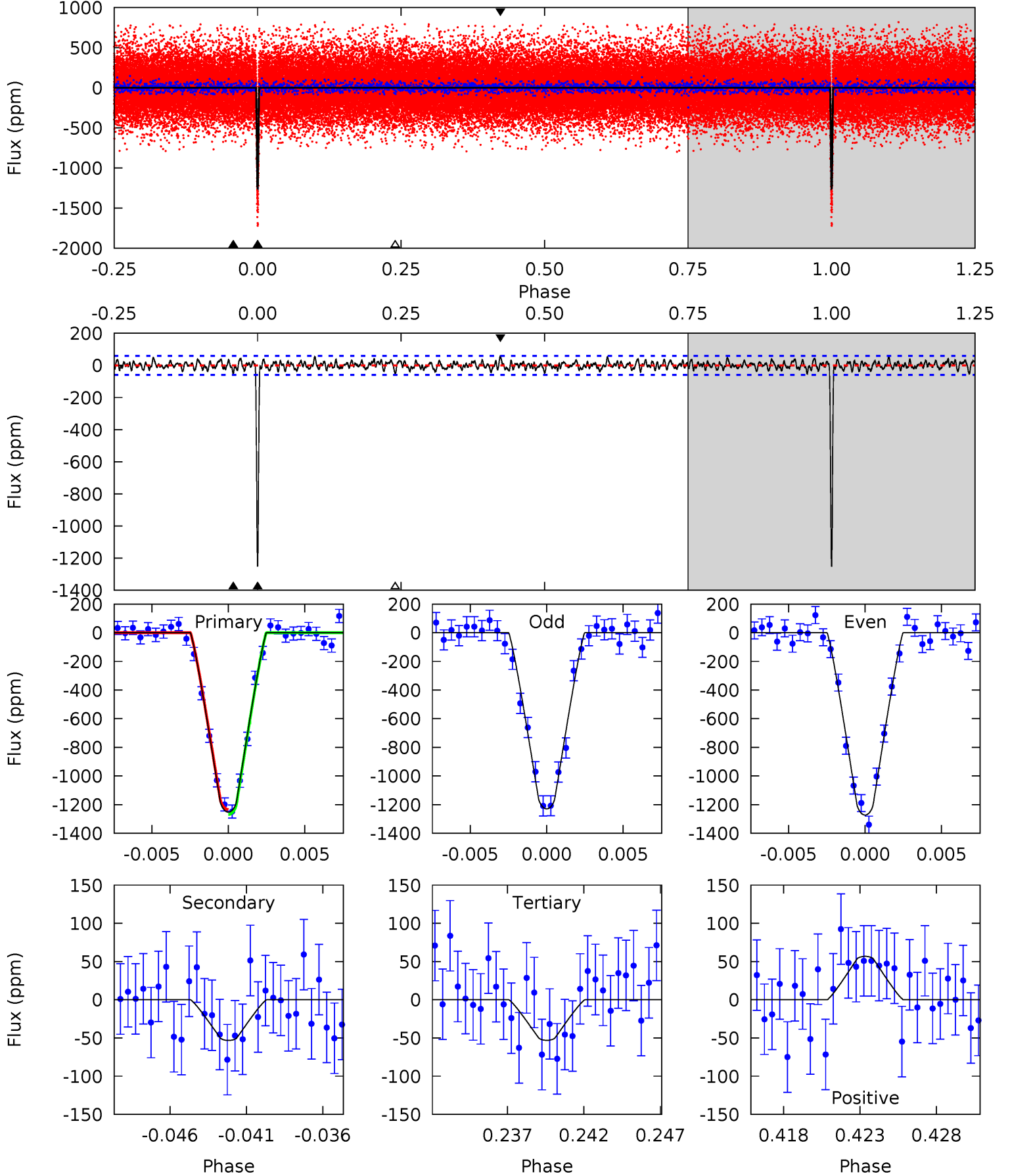
TCE 004263529-01 P= 10.104002 Days $T_0=132.895744$ (BKJD)



DV Model-Shift Uniqueness Test

004263529-01, $P = 10.104036$ Days, $E = 122.789437$ Days

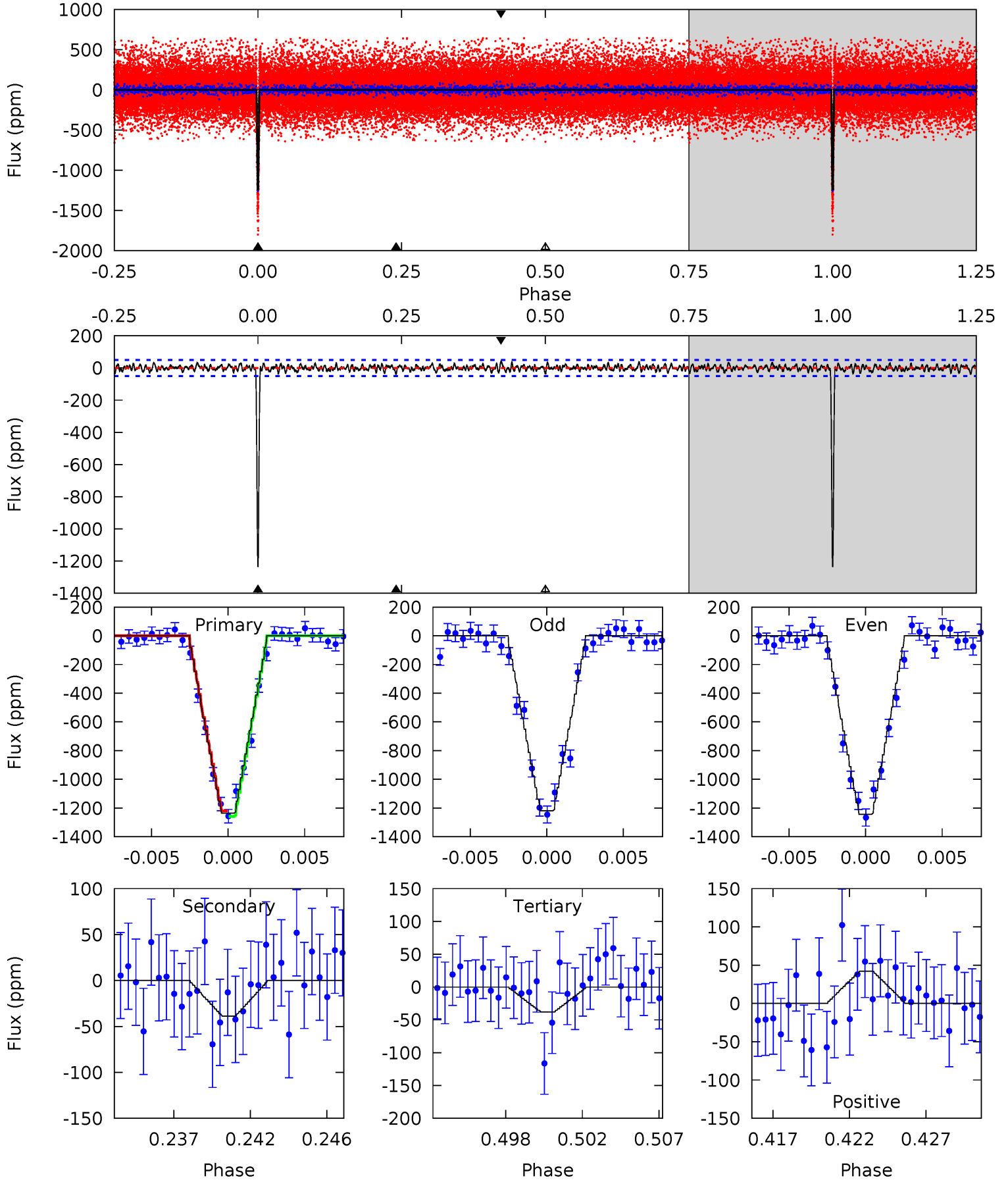
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
108.8	4.62	4.61	4.93	5.15	2.80	1.55	104.1	103.8	0.01	-0.31	1.89	0.99	0.04	1.51



Alt Model-Shift Uniqueness Test

004263529-01, P = 10.104002 Days, E = 122.791742 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
129.0	4.04	3.97	4.39	5.17	2.82	1.33	125.0	124.6	0.07	-0.35	1.26	0.98	0.03	1.97



Stellar Parameters For KIC 004263529

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5530^{+149}_{-149}	$4.541^{+0.050}_{-0.150}$	$-0.140^{+0.300}_{-0.300}$	$0.831^{+0.187}_{-0.080}$	$0.876^{+0.092}_{-0.092}$	$2.151^{+0.546}_{-0.880}$
	+3%/-3%	+1%/-3%	+214%/-214%	+23%/-10%	+11%/-11%	+25%/-41%
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 004263529-01 / KOI 3358.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-53 ± 12	$3.29^{+0.47}_{-0.39}$	1065^{+60}_{-43}	3116^{+166}_{-156}	20^{+9}_{-6}
Alt.	-39 ± 10	$3.31^{+0.45}_{-0.42}$	1068^{+60}_{-44}	2986^{+138}_{-159}	15^{+6}_{-5}

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

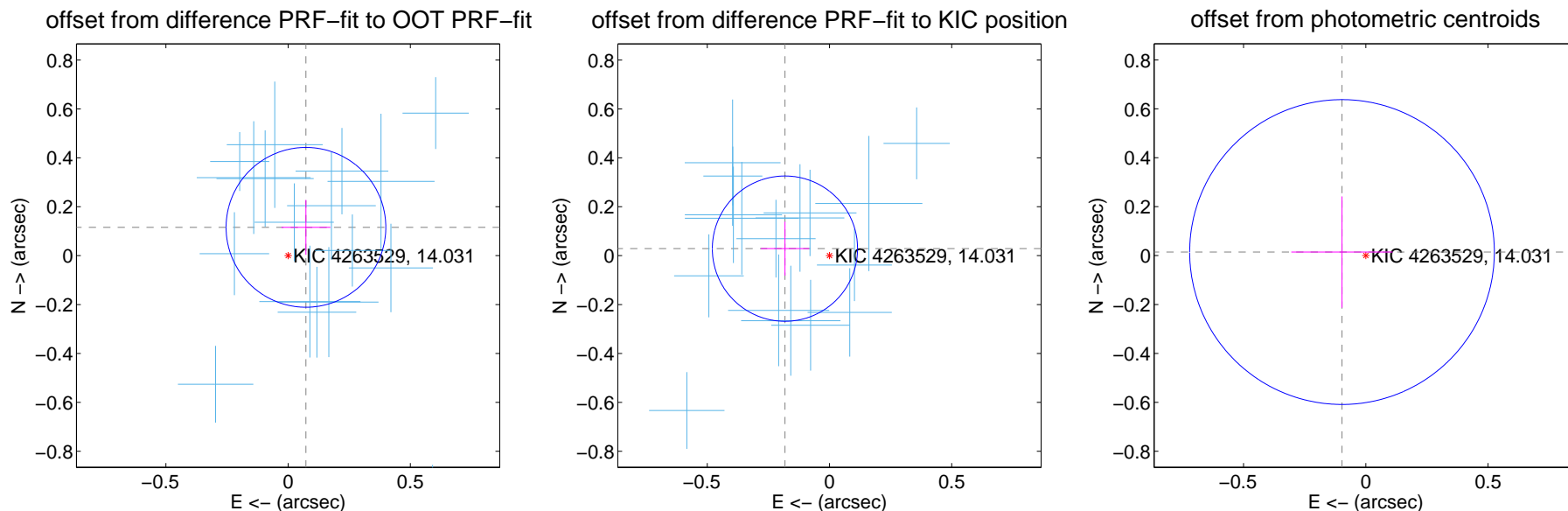
DV Centroid Data

Supplemental centroid analysis for 004263529-01. Kepler magnitude: 14.03. Transit SNR 63.12

There are 17 quarters with good PRF difference image offsets

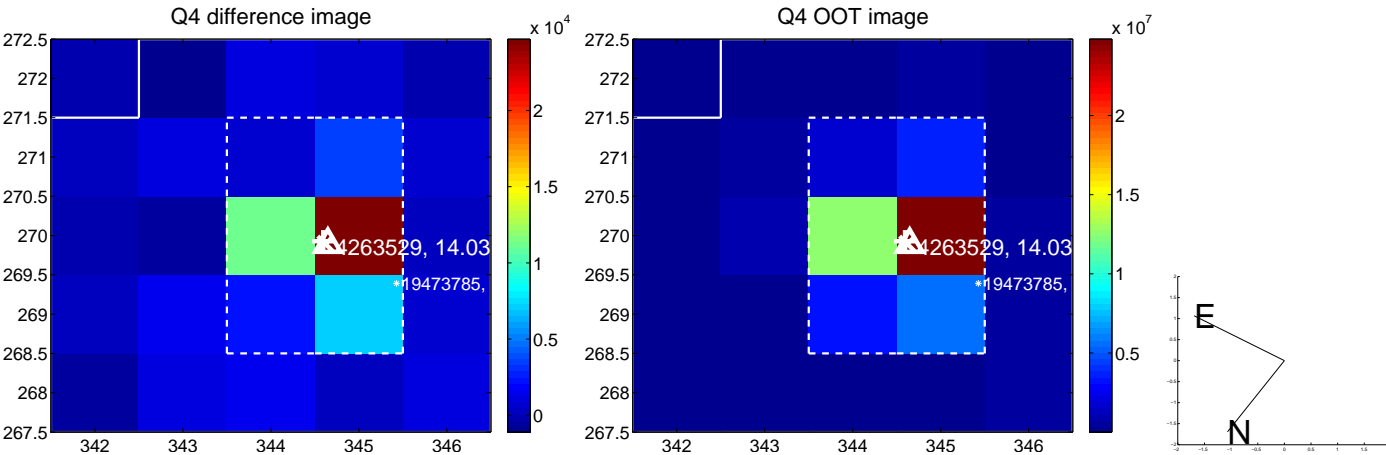
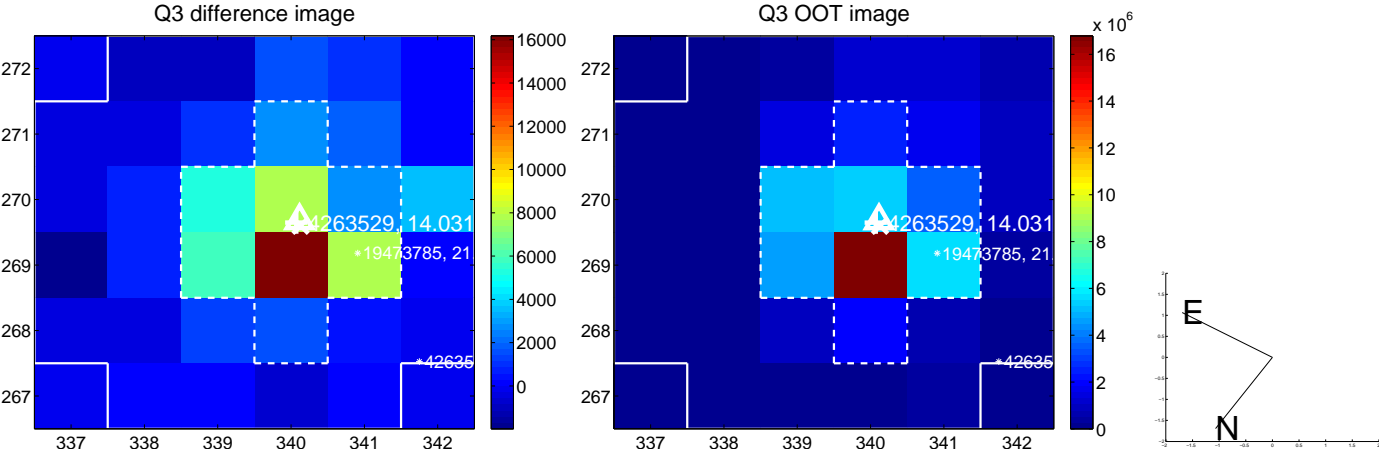
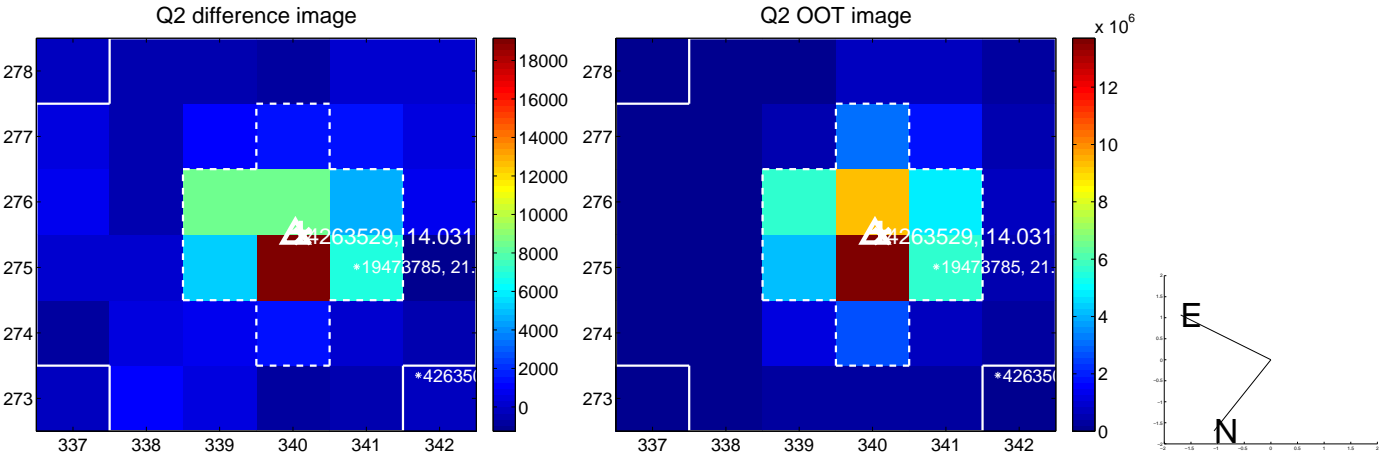
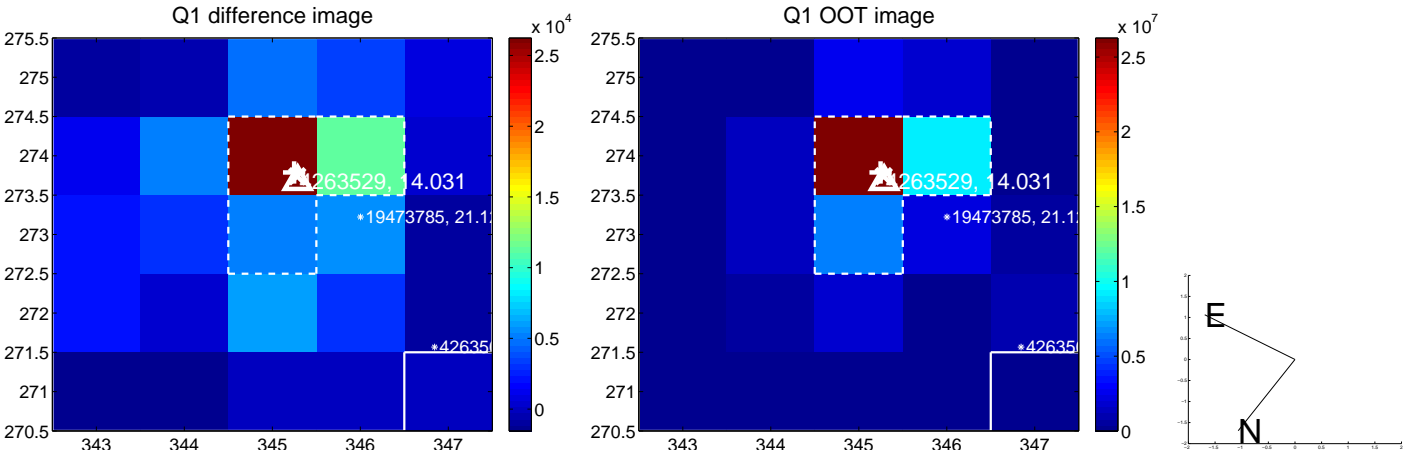
The direct PRF centroid is offset from the target star catalog position by about 0.31 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.137 ± 0.109	1.26	-0.073 ± 0.100	0.116 ± 0.112
PRF-fit source offset from KIC position	0.184 ± 0.099	1.86	0.182 ± 0.099	0.029 ± 0.110
photometric centroid source offset	0.10 ± 0.21	0.47	0.10 ± 0.21	0.01 ± 0.23

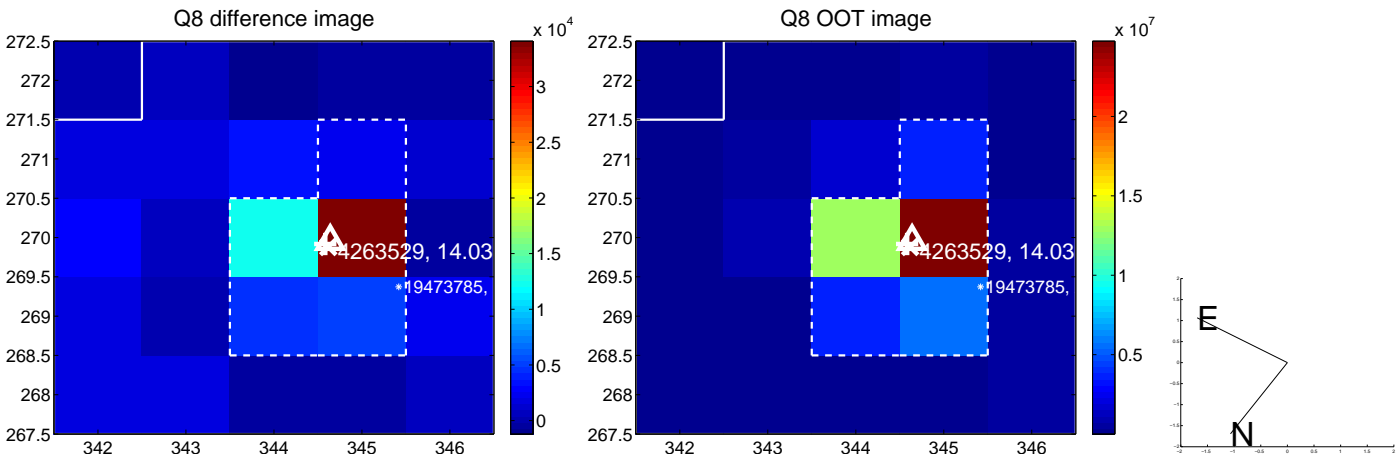
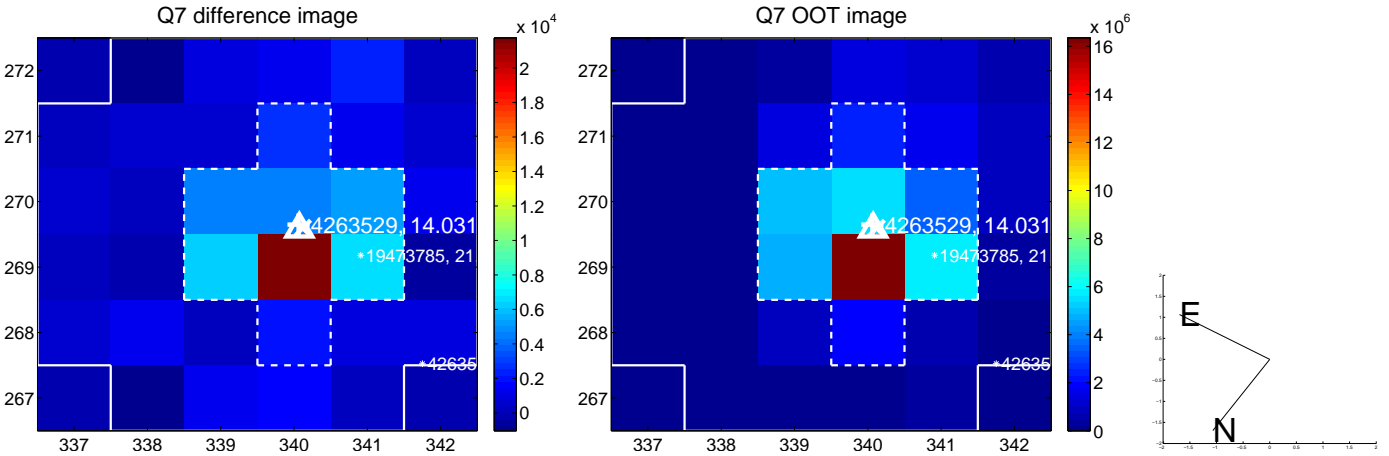
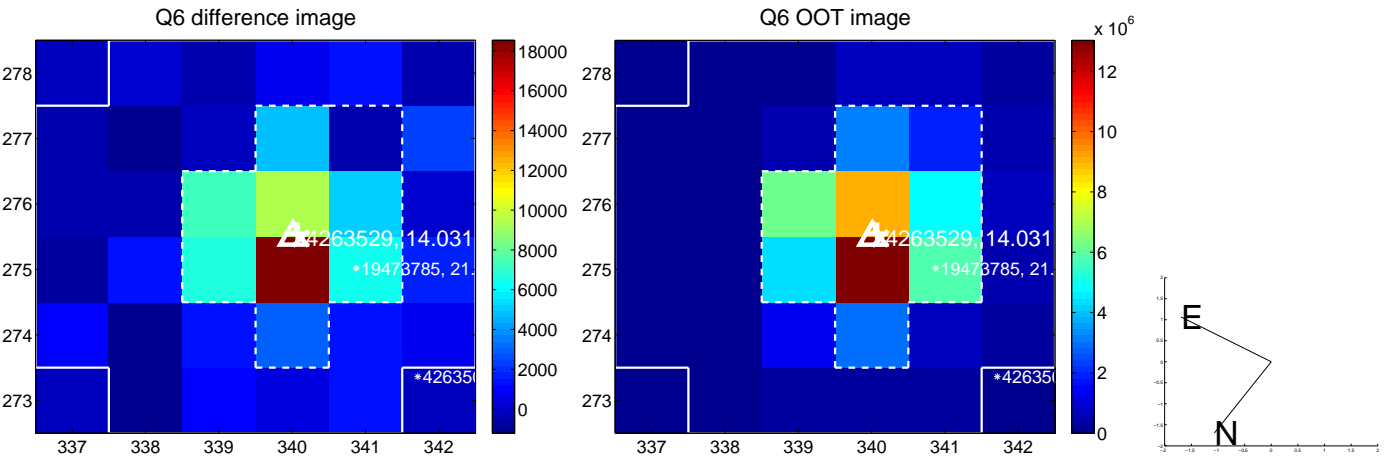
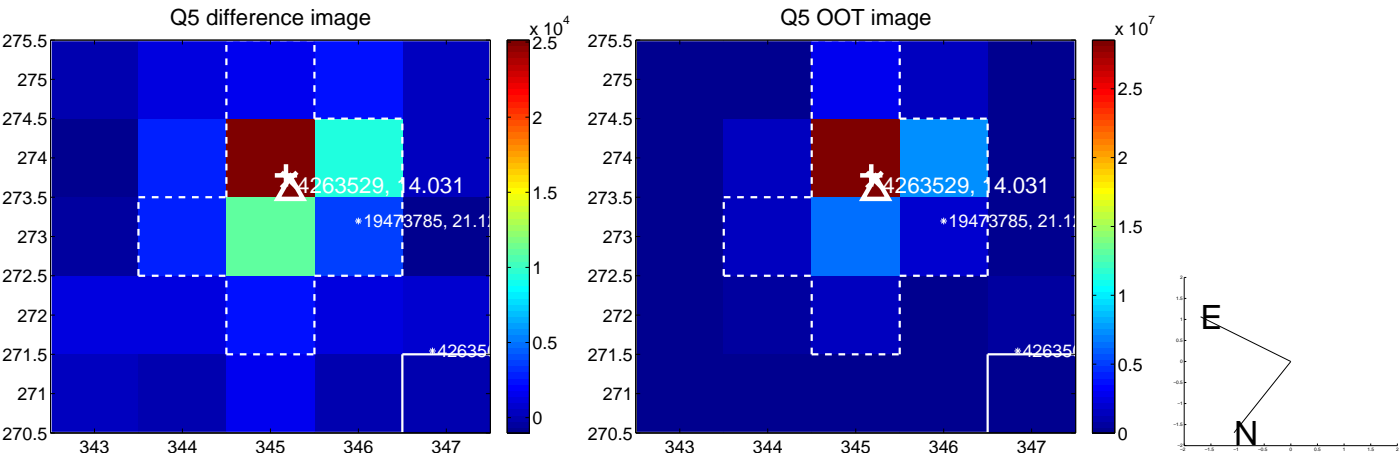


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

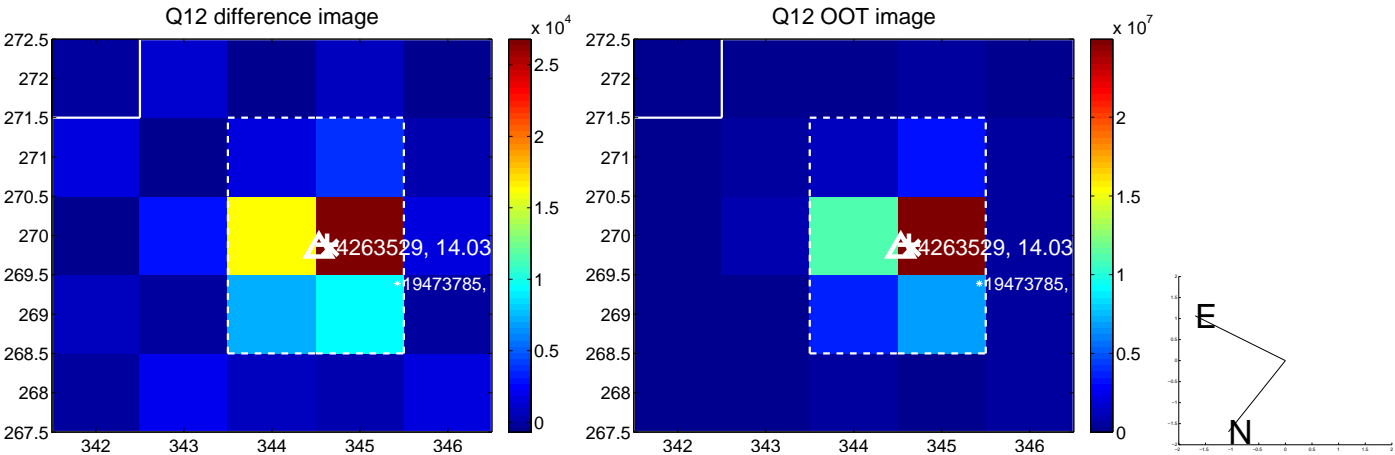
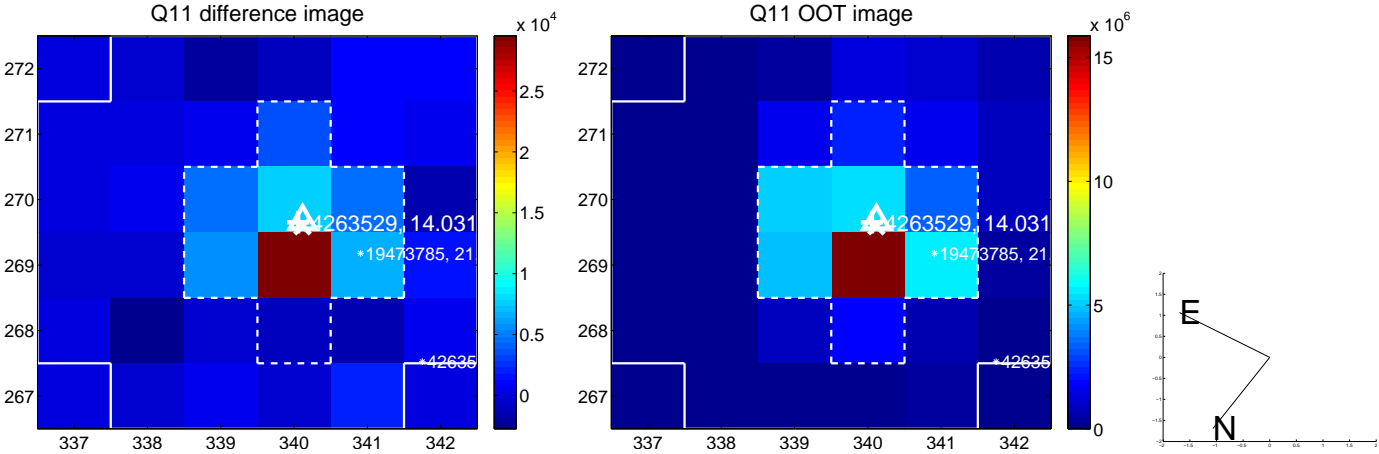
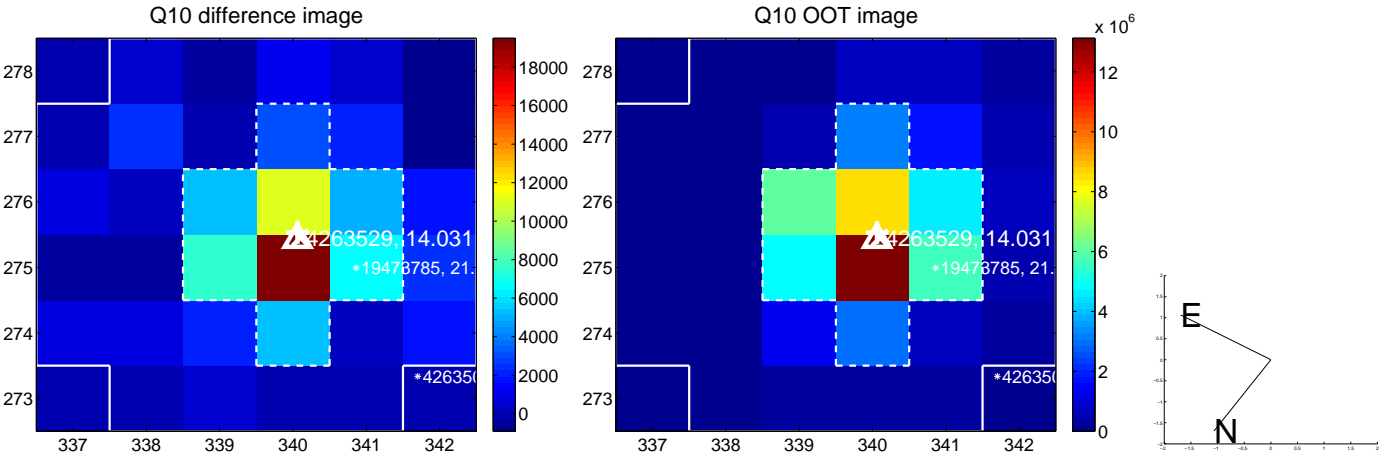
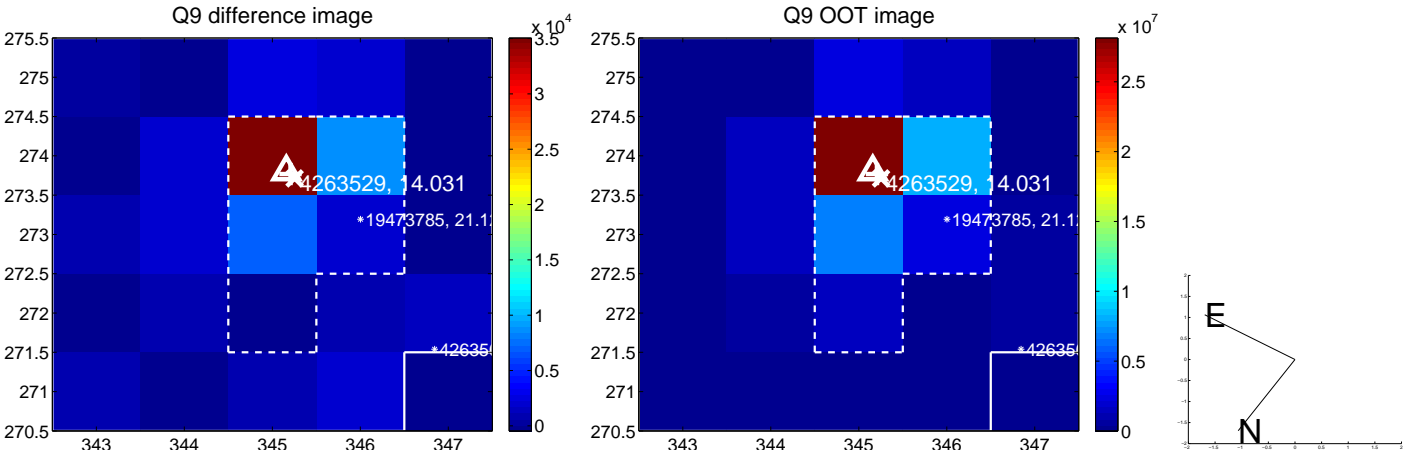
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



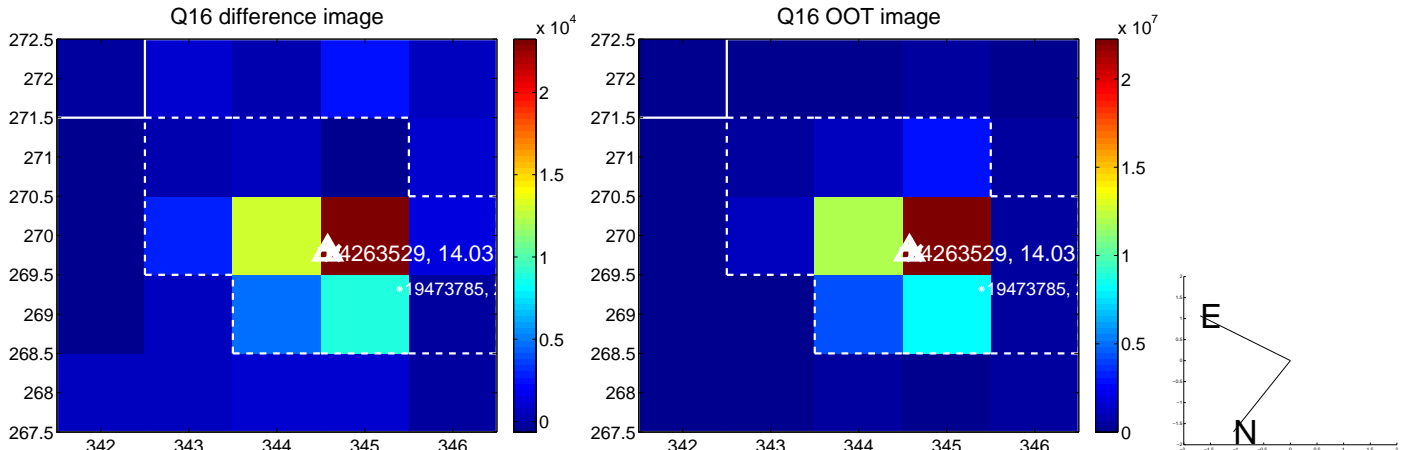
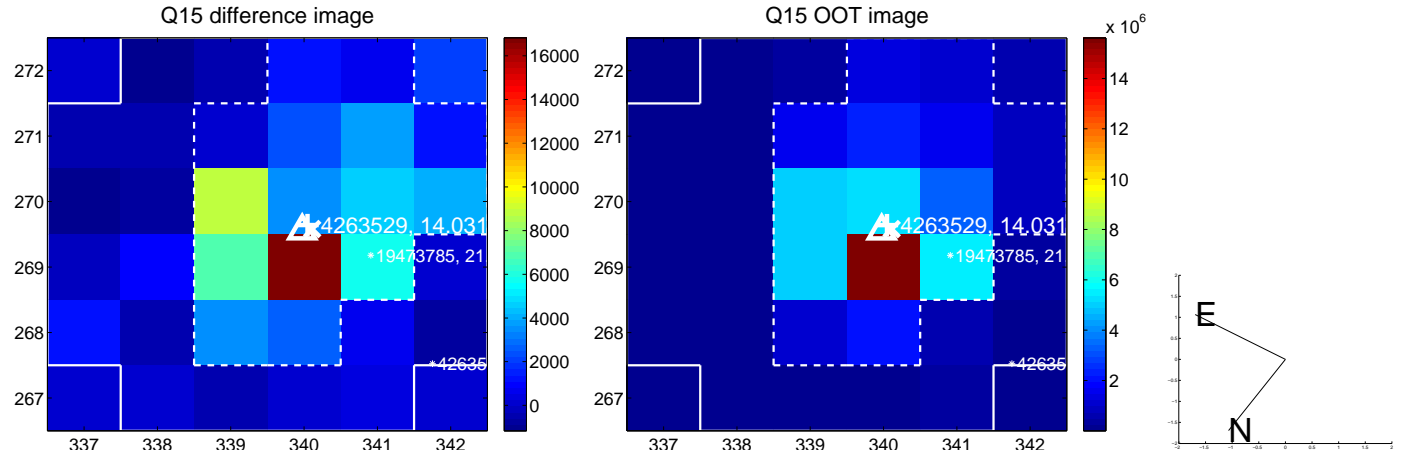
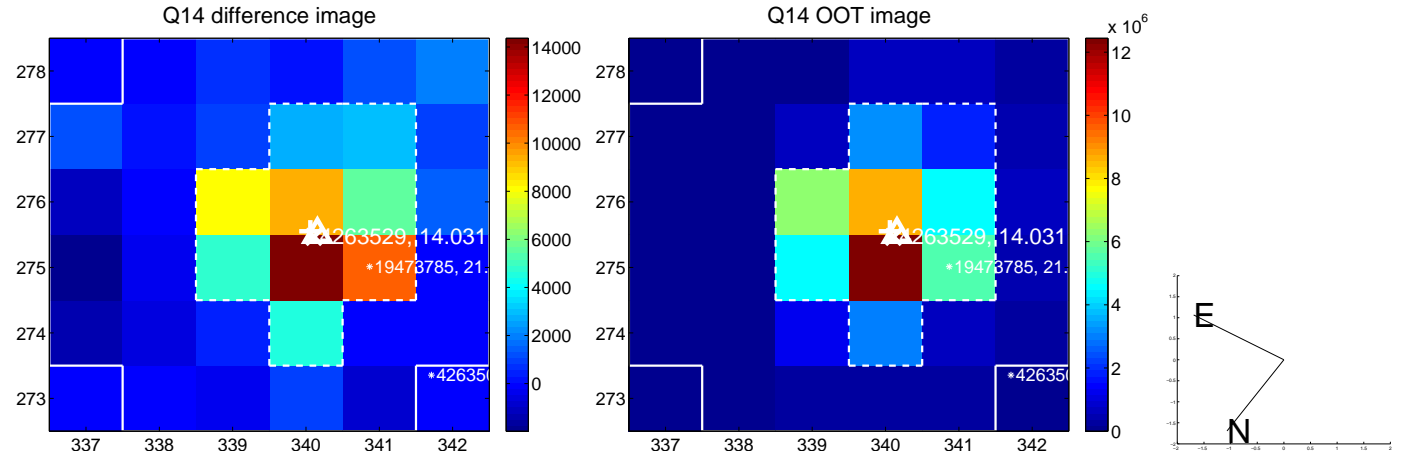
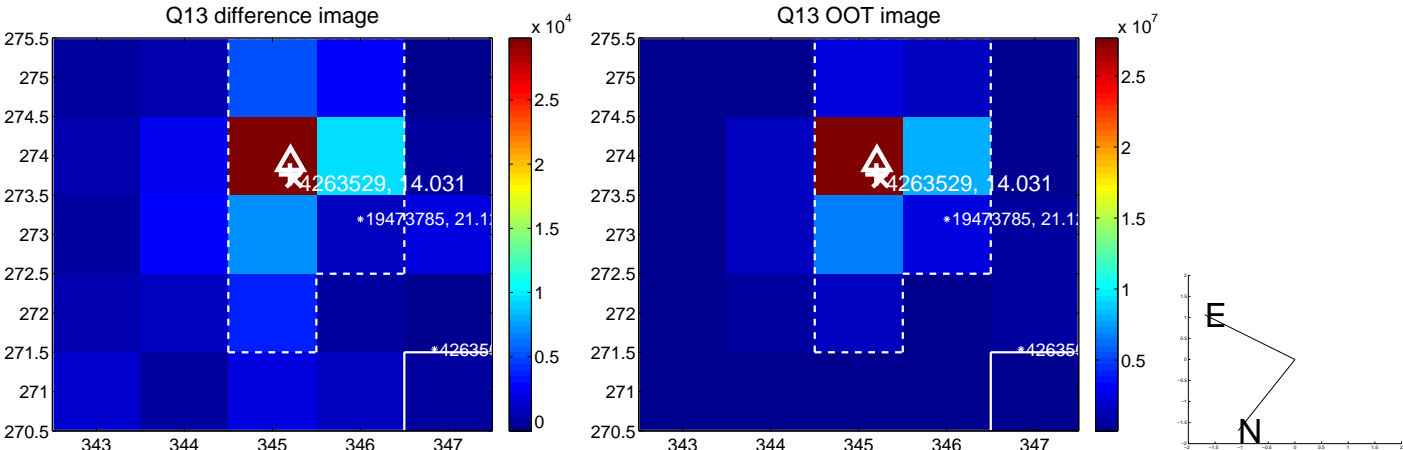
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



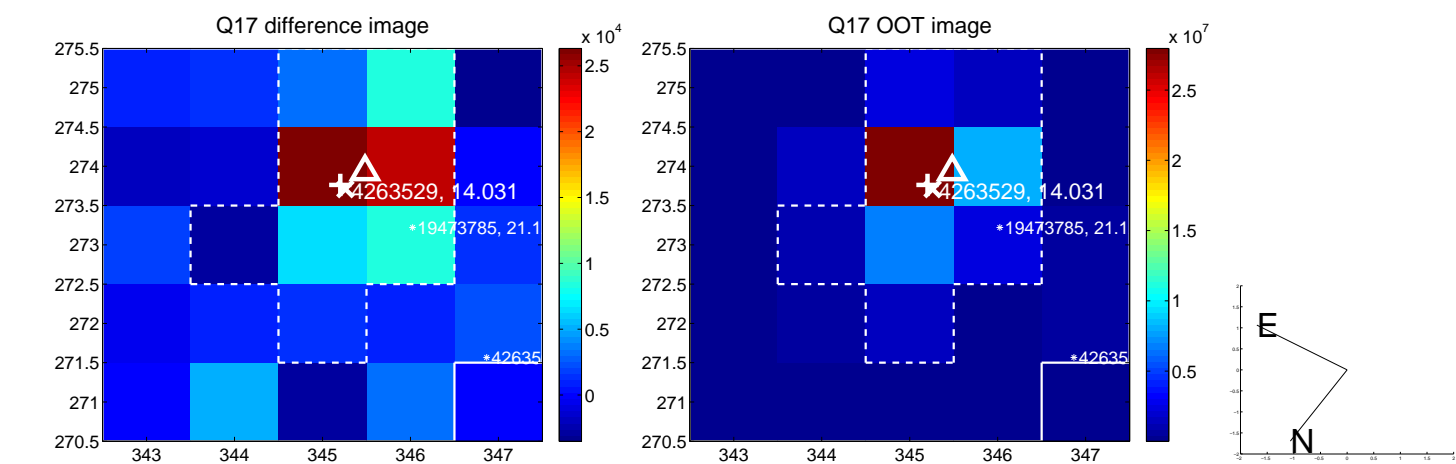
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



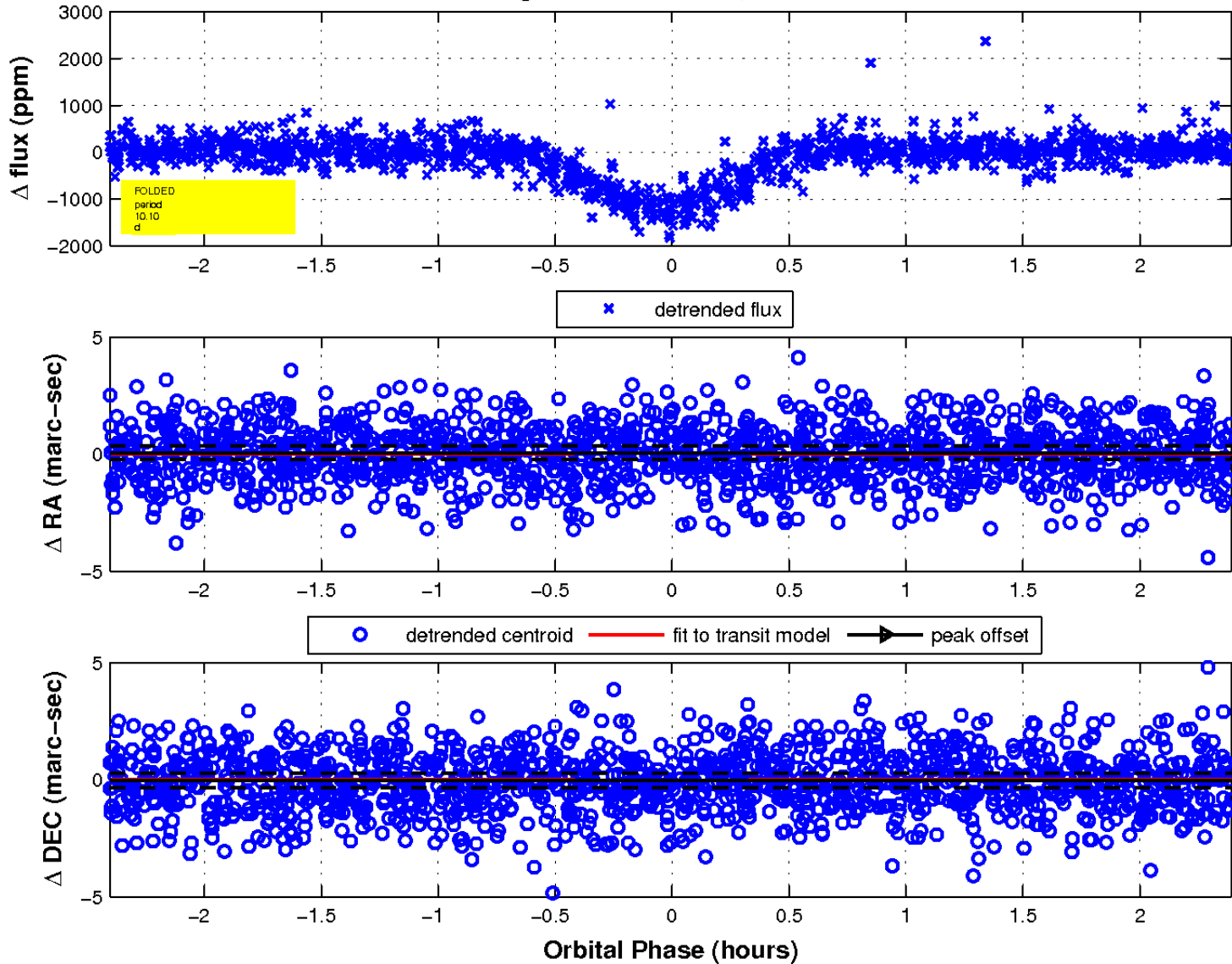
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

