

KIC 011297236

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})
011297236-01	OBS	1857.01	88.644035	145.470588	624.5	7.850	38.4	38.2	0.93	5661	2.58	5.52

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011297236-01	OBS	PC	0.86	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.

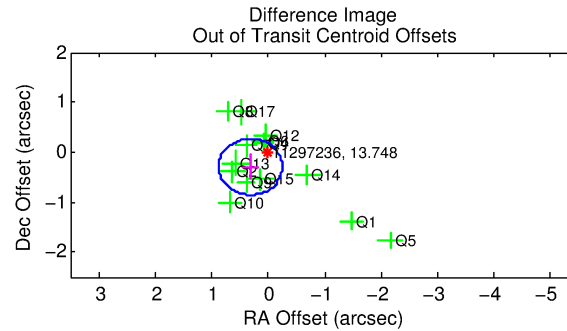
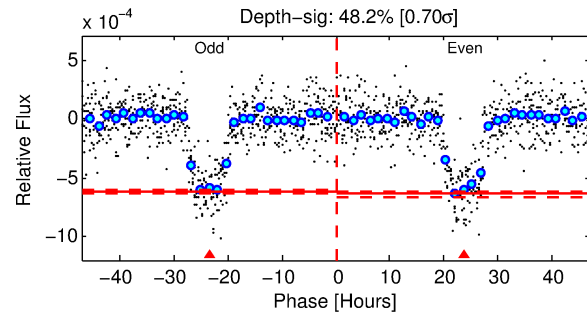
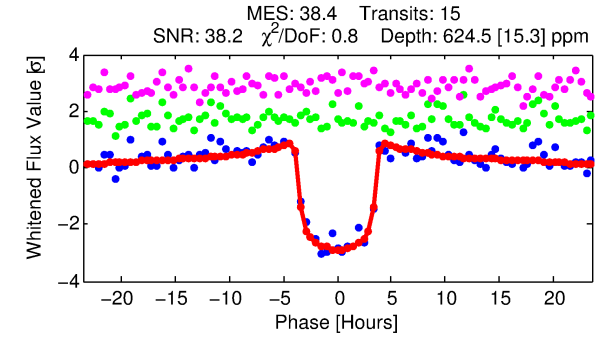
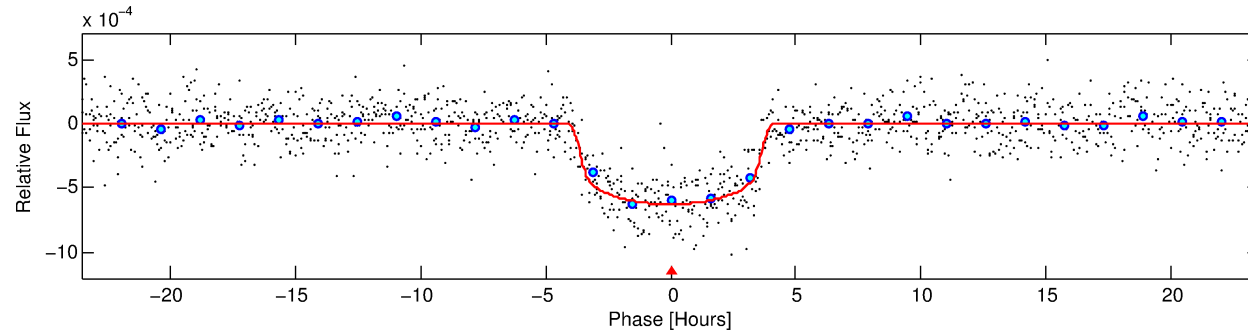
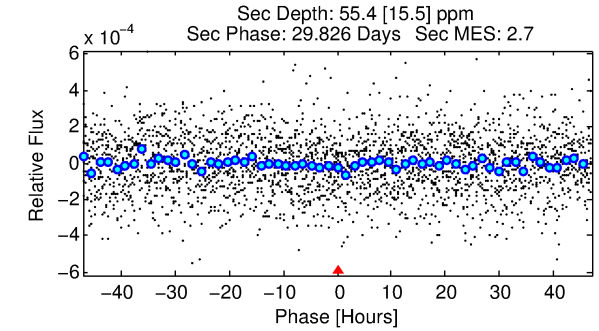
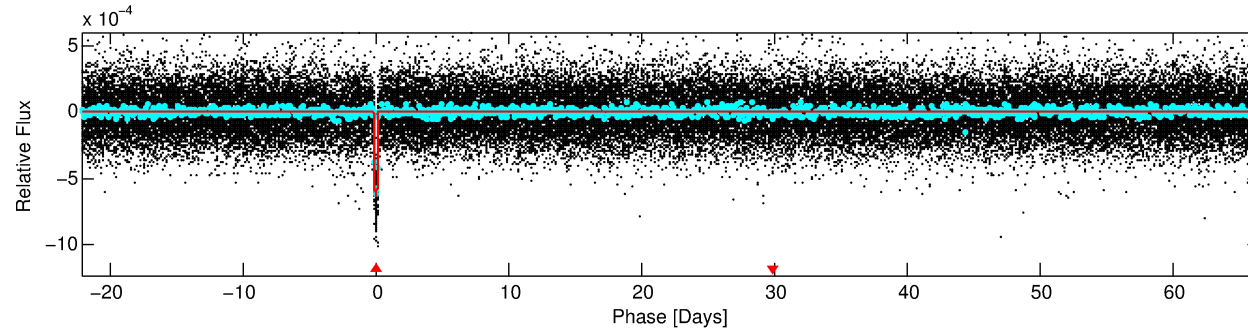
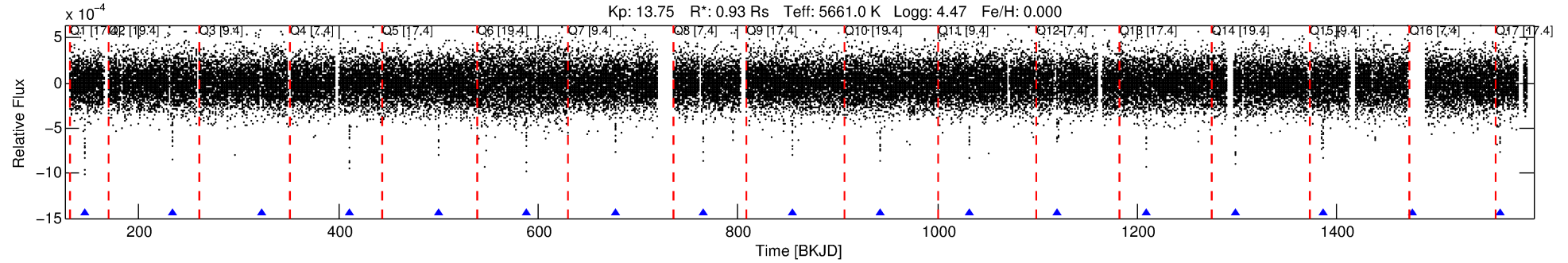
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011297236-01

No Significant Match Found

DV One-Page Summary

KIC: 11297236 Candidate: 1 of 1 Period: 88.644 d
KOI: K01857.01 Corr: 0.992



DV Fit Results:

Period = 88.64404 [0.00033] d
Epoch = 145.4706 [0.0031] BKJD
Rp/R* = 0.0253 [0.0017]
a/R* = 56.25 [15.88]
b = 0.79 [0.14]
Seff = 5.52 [1.15]
Teff = 391 [20] K
Rp = 2.58 [0.38] Re
a = 0.3814 [0.0471] AU
Ag = 664.23 [243.42] [2.72σ]
Teffp = 3068 [246] K [10.83σ]

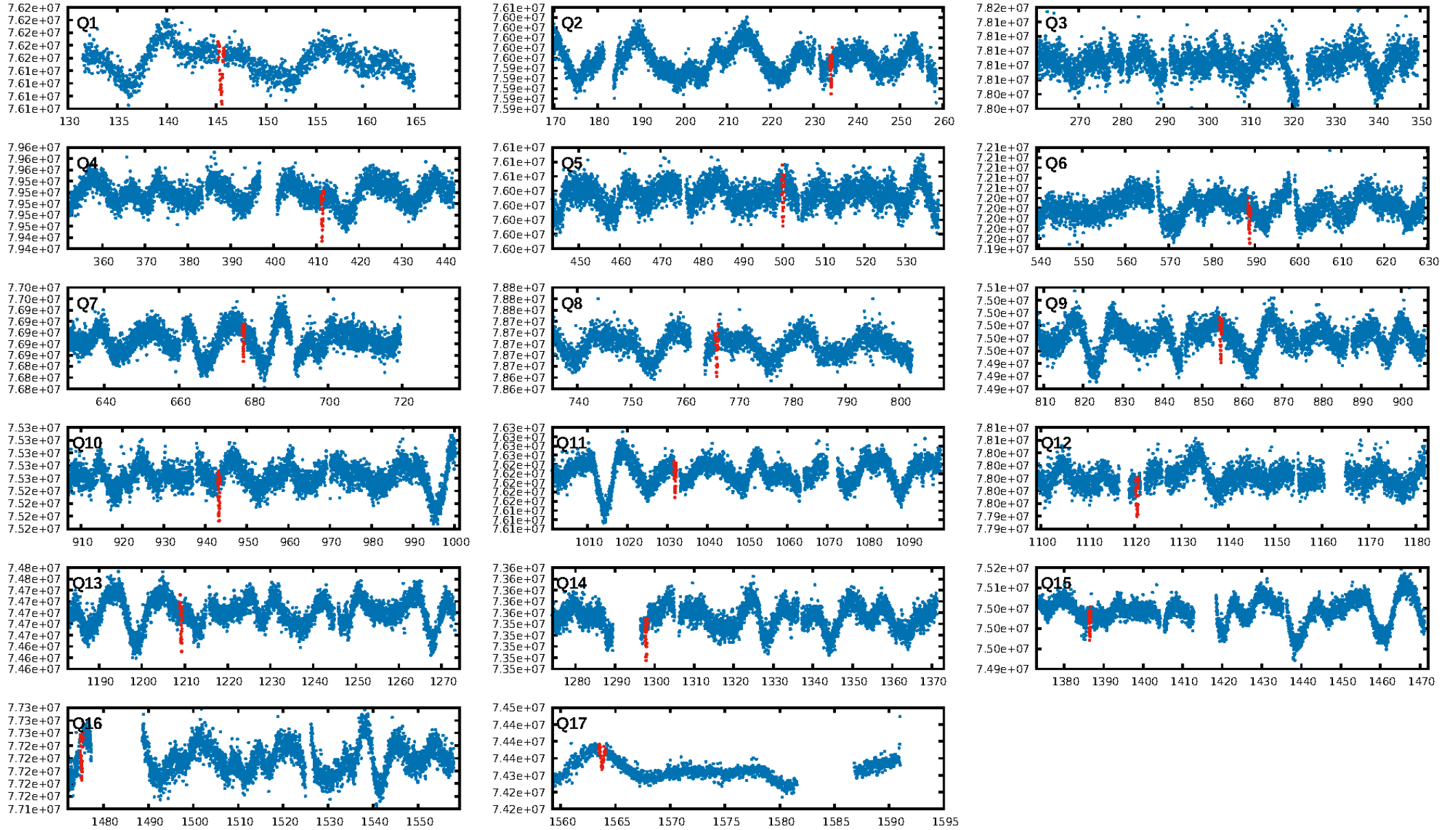
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 85.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.44e-223
RollingBand-fgt: 1.00 [13/13]
GhostDiagnostic-chr: 3.629
Centroid-sig: 5.9%
Centroid-so: 0.368 arcsec [1.50σ]
OotOffset-rm: 0.430 arcsec [2.29σ]
KicOffset-rm: 0.500 arcsec [2.90σ]
OotOffset-st: 4/2/3/5 [14]
KicOffset-st: 4/2/3/5 [14]
DiffImageQuality-fgm: 1.00 [14/14]
DiffImageOverlap-fno: 1.00 [14/14]

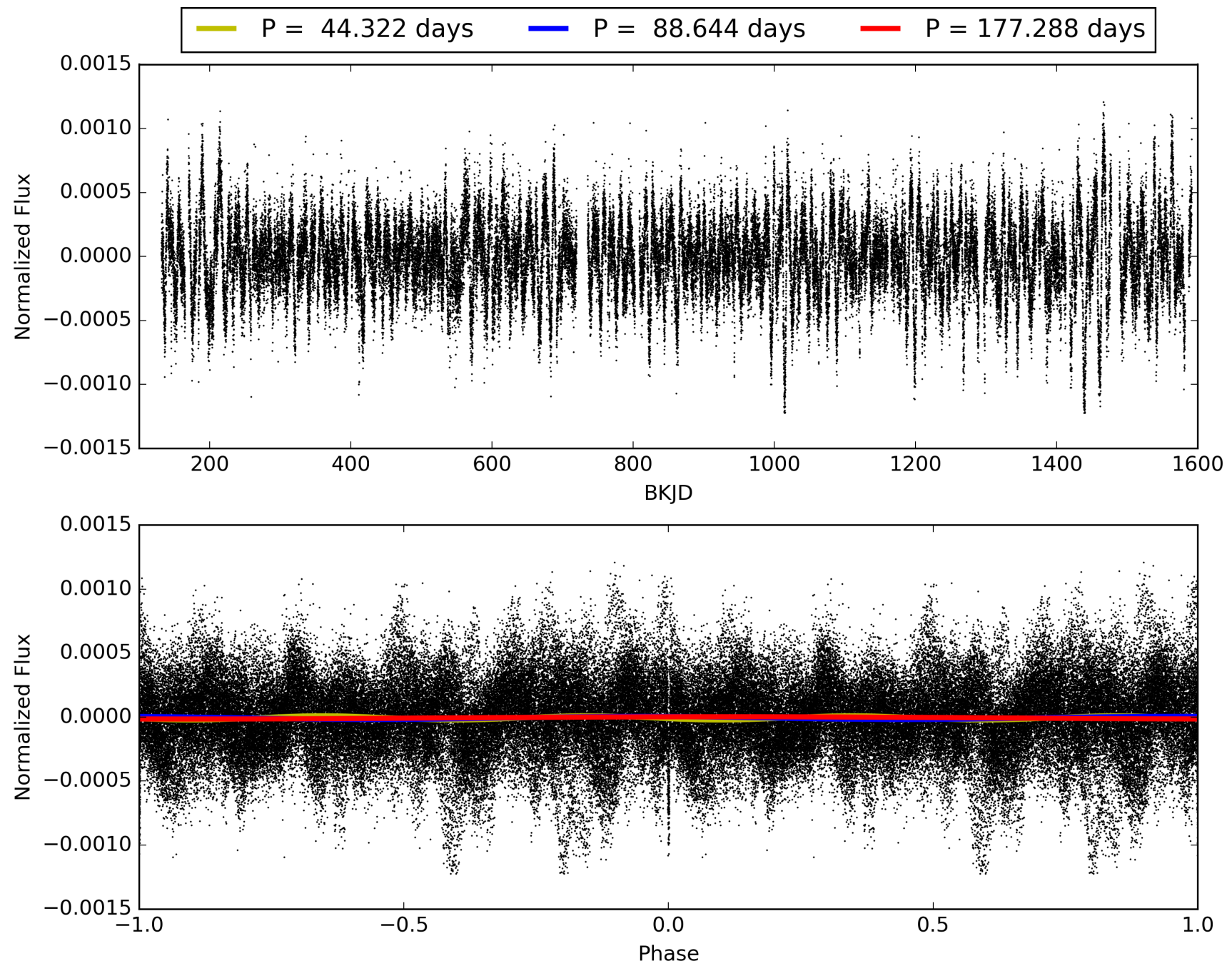
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:43:17 Z

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

TCE 011297236-01, PDC Light Curves

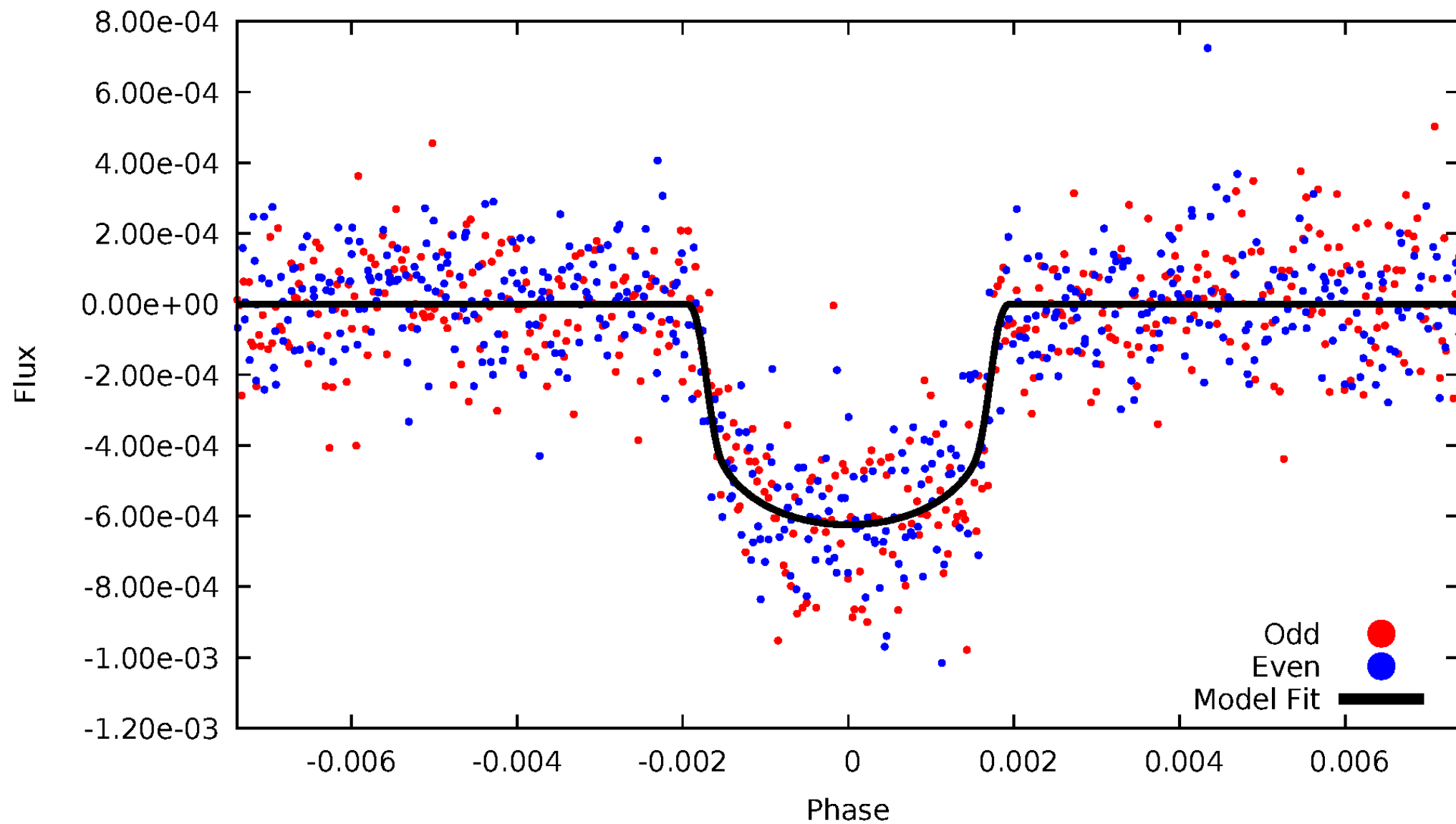


TCE 011297236-01



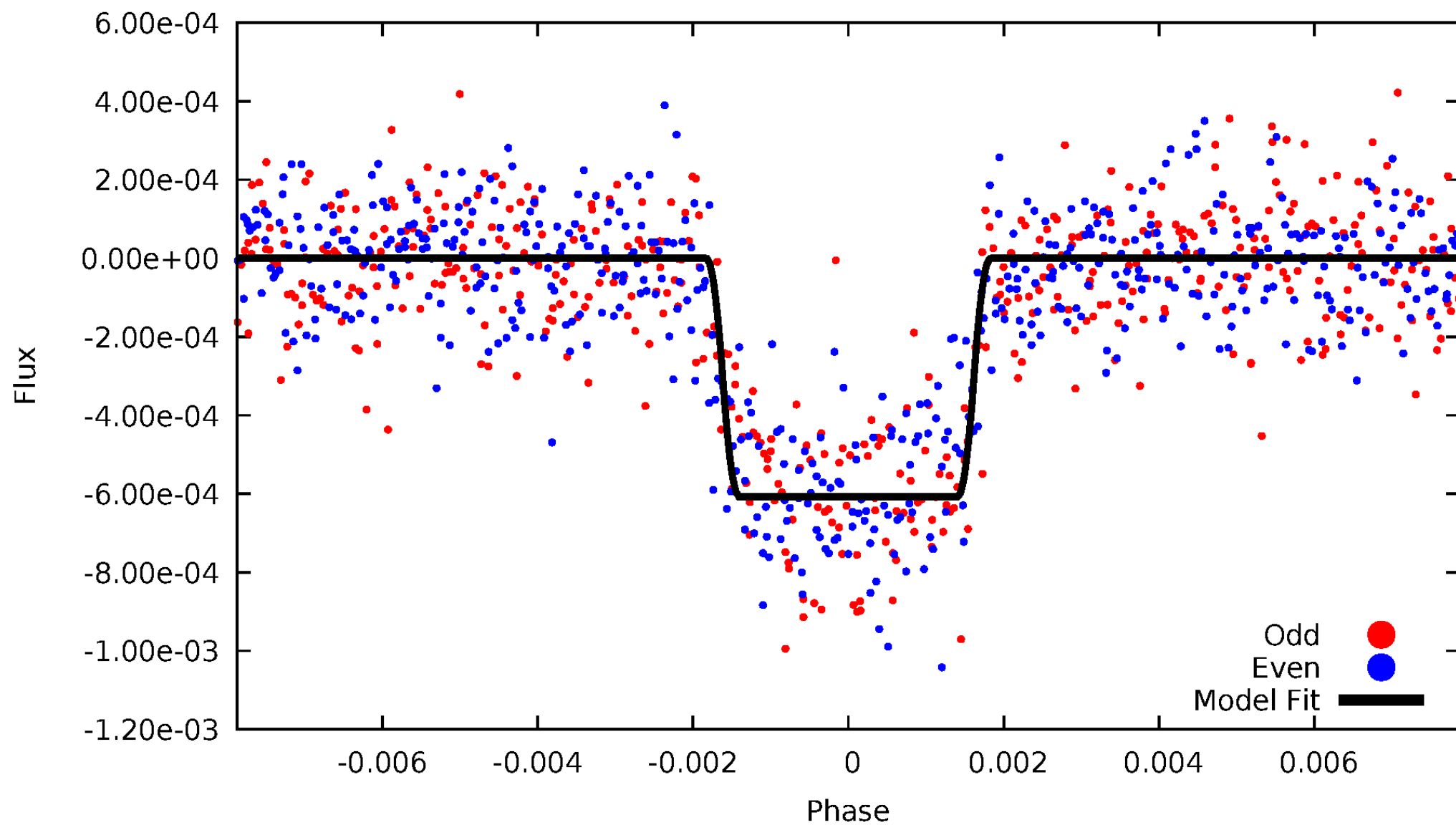
DV Odd/Even

TCE 011297236-01



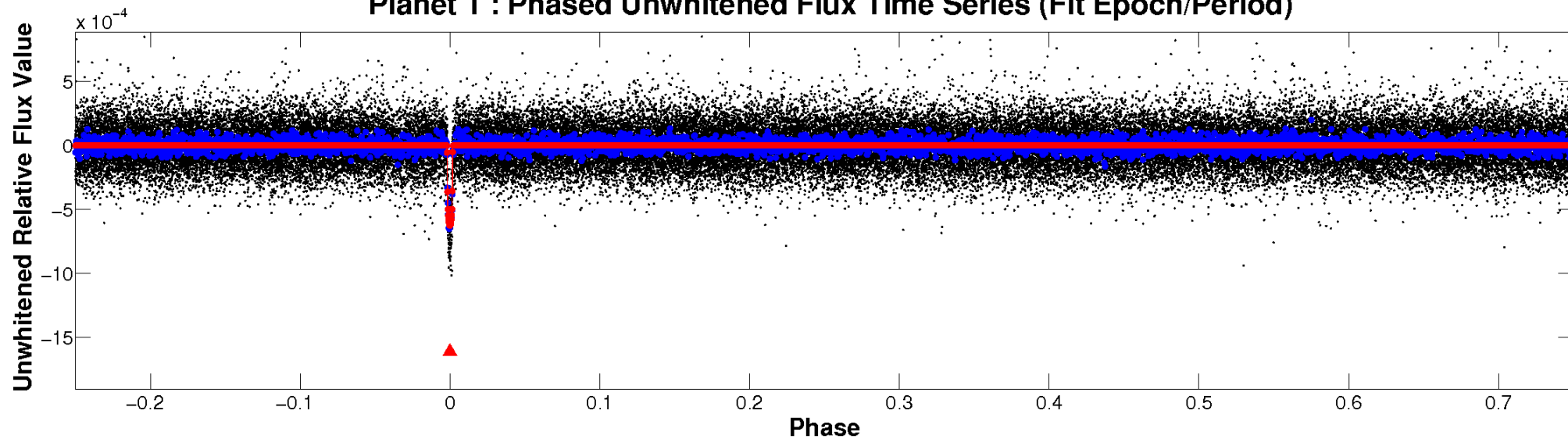
ALT Odd/Even

TCE 011297236-01

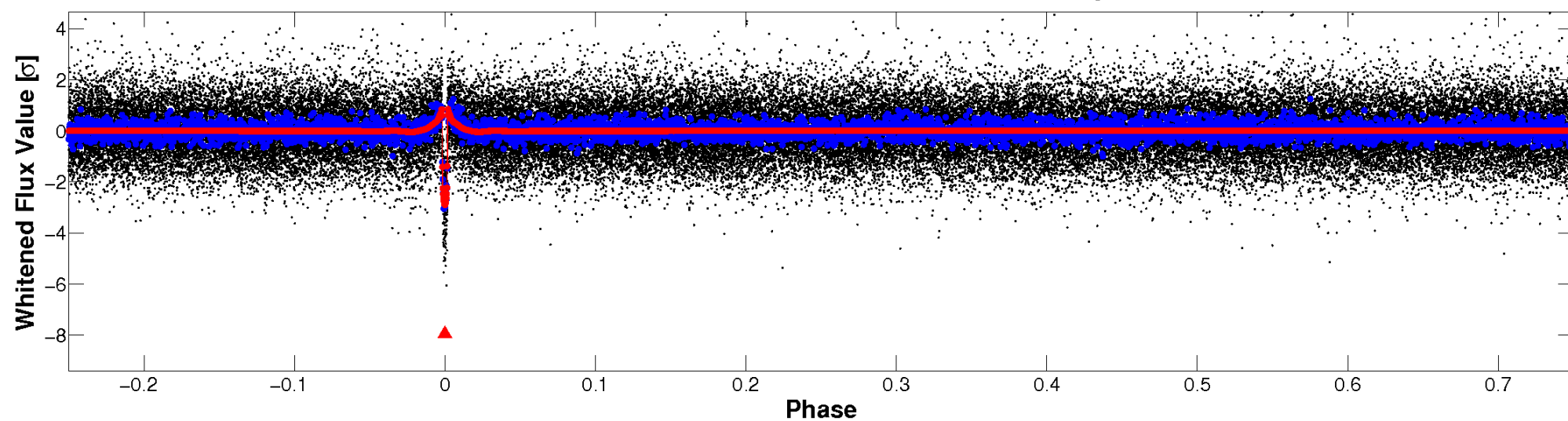


Non-Whitened Vs. Whitened Light Curve

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

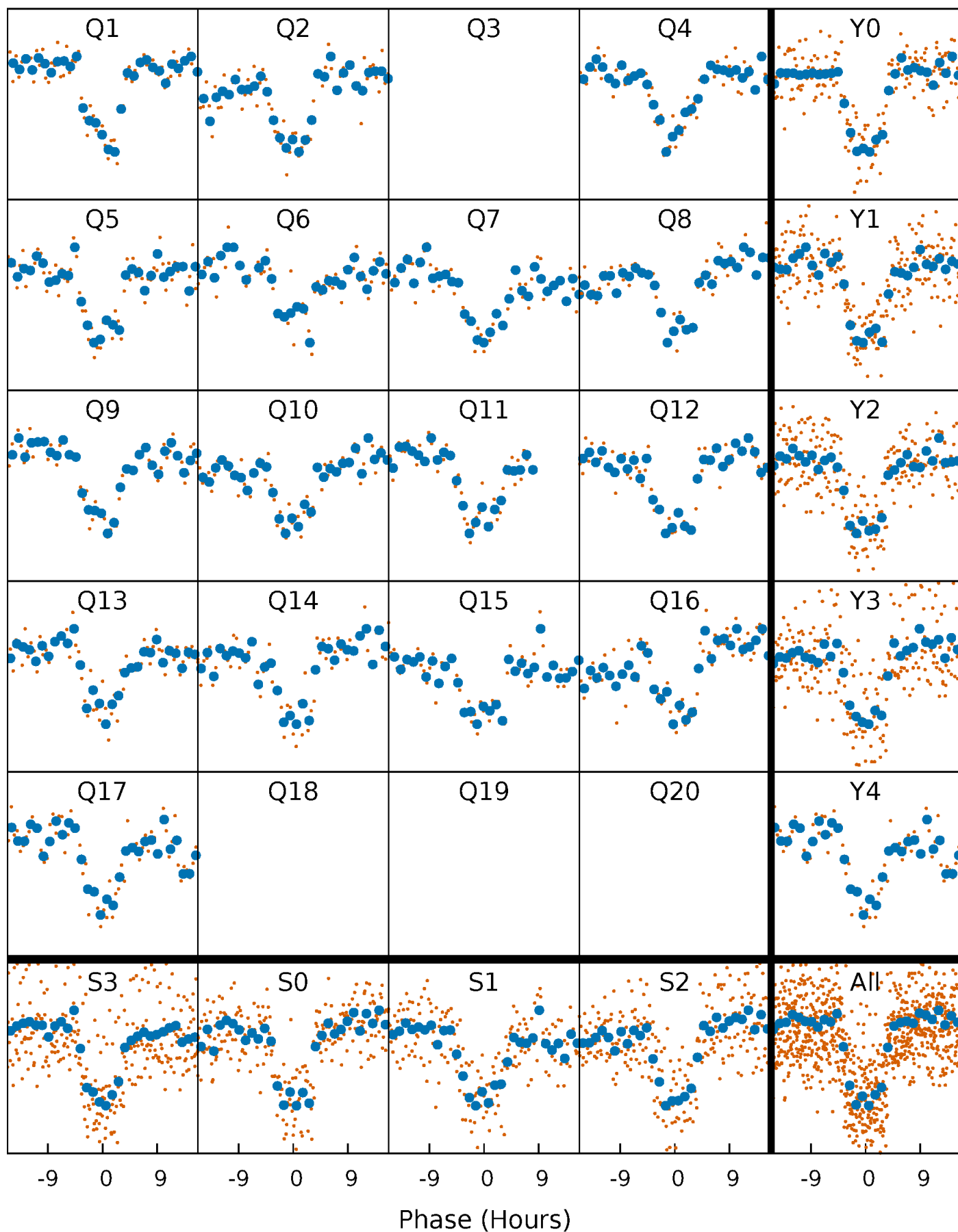


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



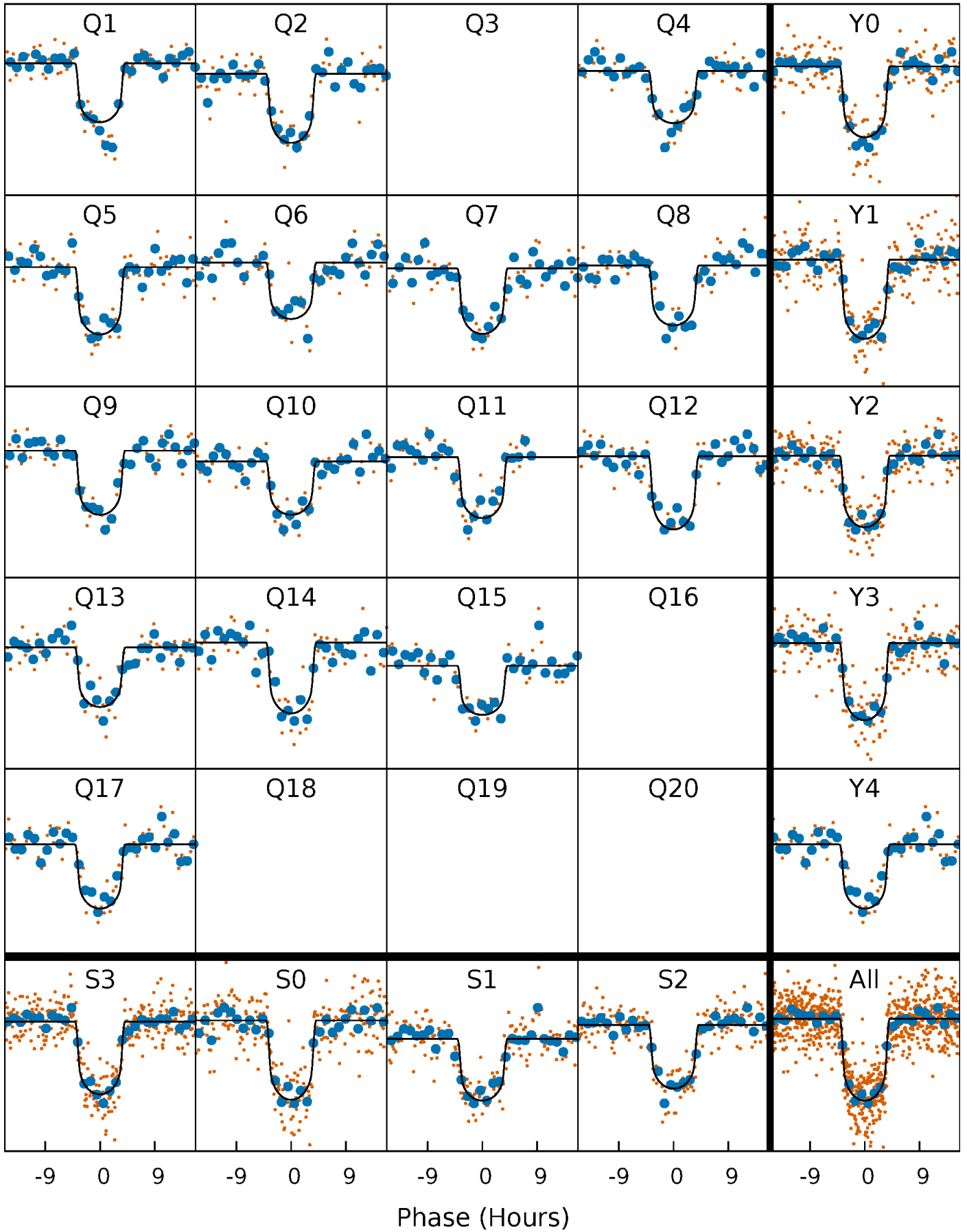
PDC Quarter-Phased Transit Curves

TCE 011297236-01 P= 88.644035 Days $T_0=145.470587$ (BKJD)



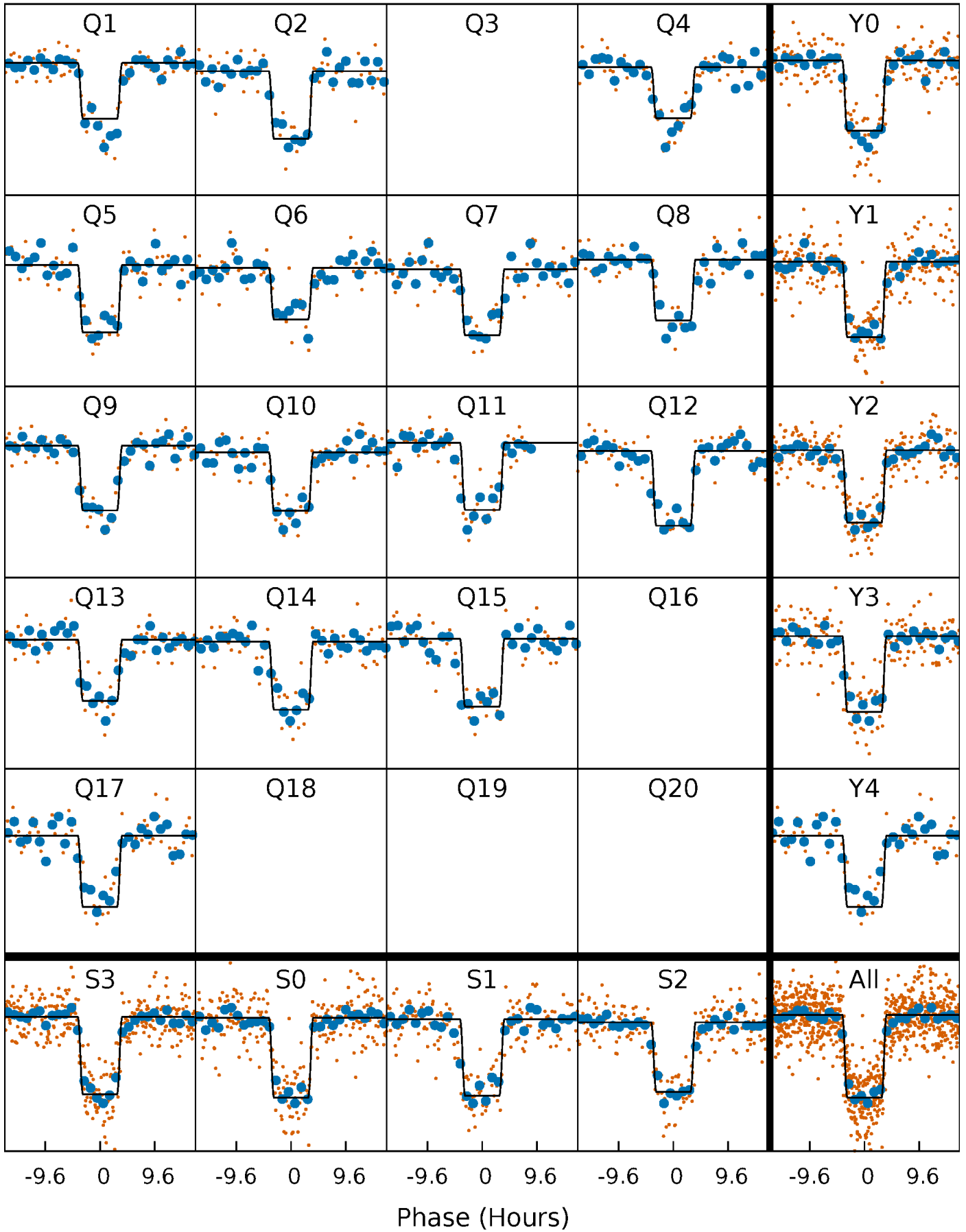
DV Quarter-Phased Transit Curves

TCE 011297236-01 P= 88.644035 Days $T_0=145.470587$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

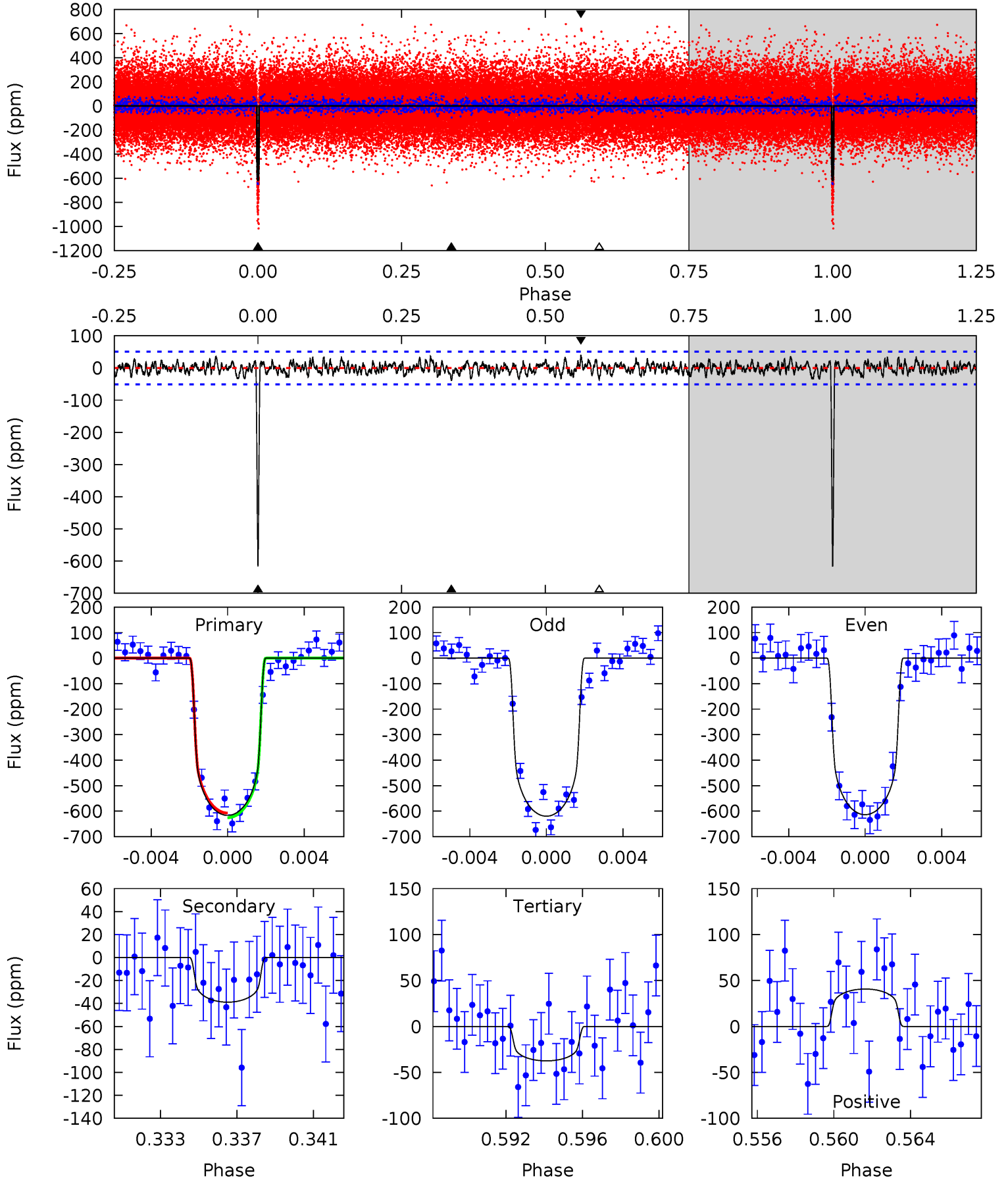
TCE 011297236-01 P= 88.645065 Days $T_0=145.463880$ (BKJD)



DV Model-Shift Uniqueness Test

011297236-01, P = 88.644035 Days, E = 56.826552 Days

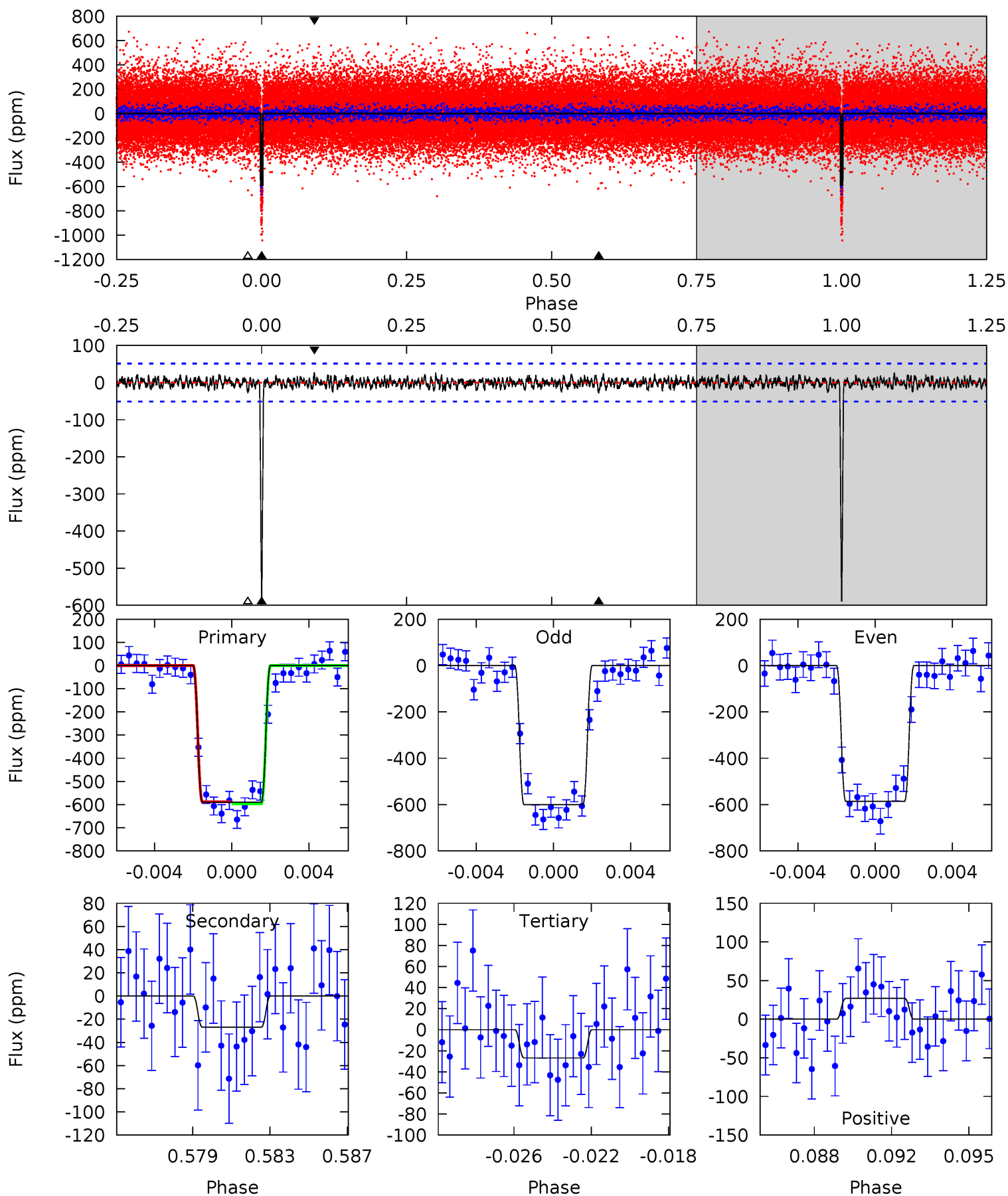
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
62.8	3.96	3.82	4.15	5.20	2.88	1.33	59.0	58.7	0.14	-0.19	0.30	1.02	0.06	0.93



Alt Model-Shift Uniqueness Test

011297236-01, P = 88.645065 Days, E = 56.818815 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
60.1	2.74	2.73	2.74	5.22	2.91	0.89	57.4	57.4	0.01	-0.00	0.73	1.02	0.04	0.48



Stellar Parameters For KIC 011297236

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5661^{+101}_{-112}	$4.471^{+0.056}_{-0.112}$	$0.000^{+0.150}_{-0.150}$	$0.934^{+0.124}_{-0.072}$	$0.941^{+0.057}_{-0.063}$	$1.628^{+0.381}_{-0.527}$
	+2%/-2%	+1%/-3%	+inf%/-inf%	+13%/-8%	+6%/-7%	+23%/-32%
Source	SPE57	SPE57	SPE57	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011297236-01 / KOI 1857.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-39 ± 10	$2.61^{+0.28}_{-0.23}$	550^{+21}_{-18}	3352^{+143}_{-154}	461^{+145}_{-130}
Alt.	-27 ± 10	$2.55^{+0.25}_{-0.23}$	549^{+20}_{-16}	3177^{+167}_{-202}	326^{+136}_{-123}

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 $A_{obs} \gg 1.0$

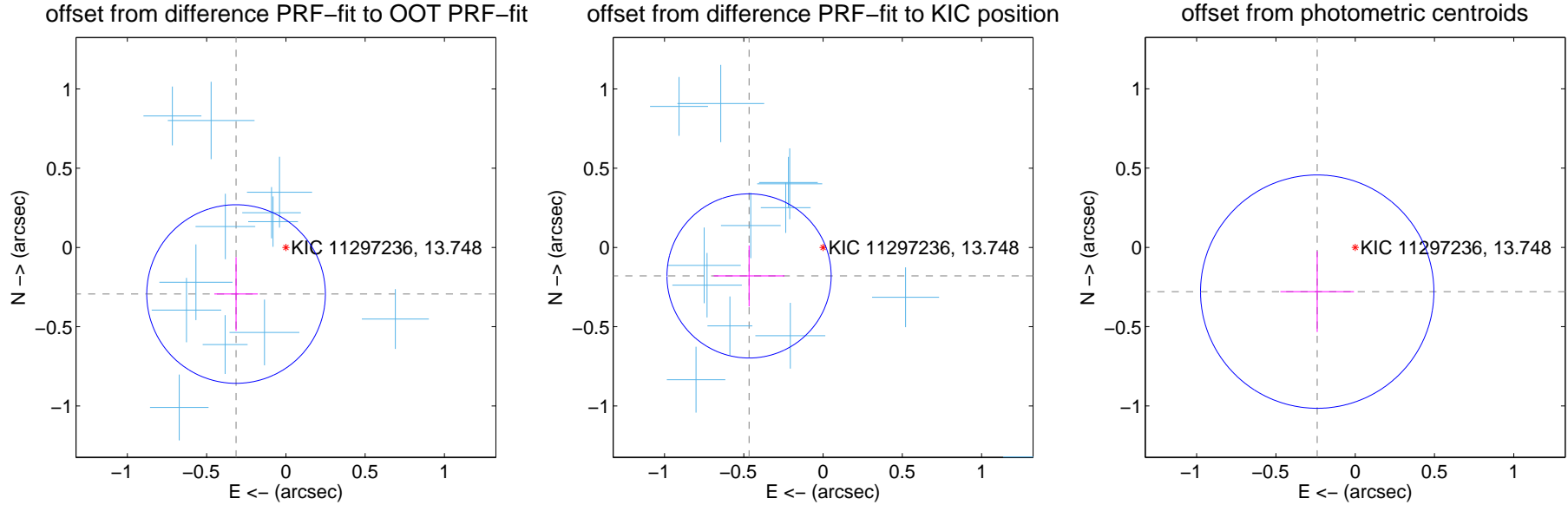
DV Centroid Data

Supplemental centroid analysis for 011297236-01. Kepler magnitude: 13.75. Transit SNR 38.22

There are 14 quarters with good PRF difference image offsets

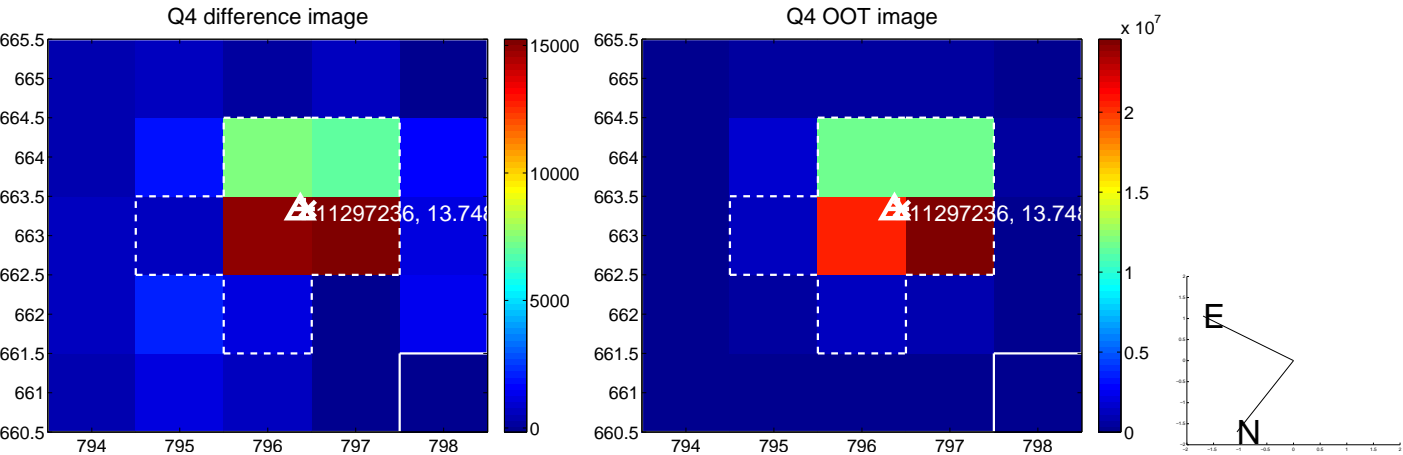
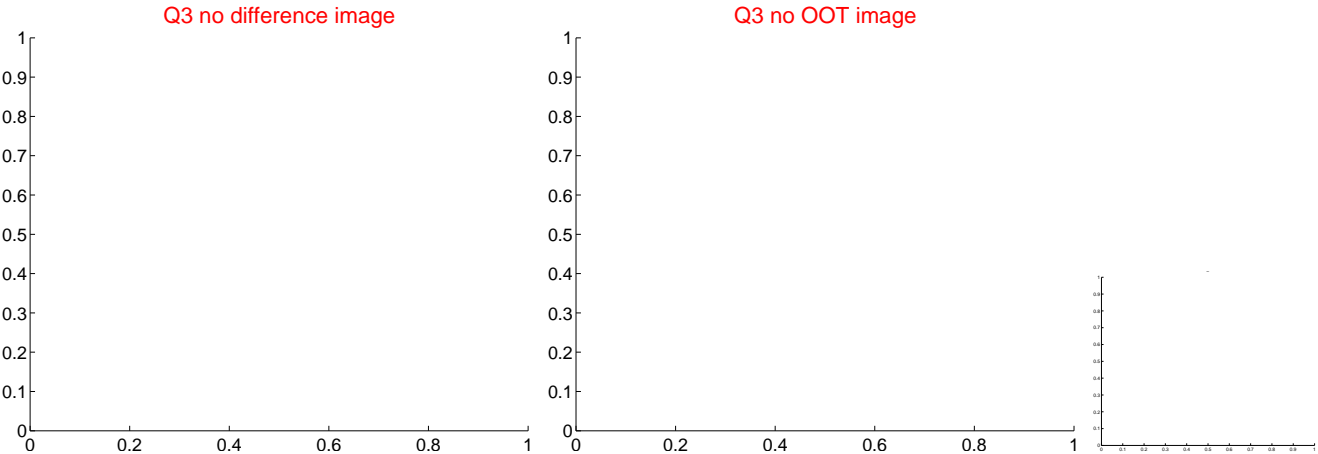
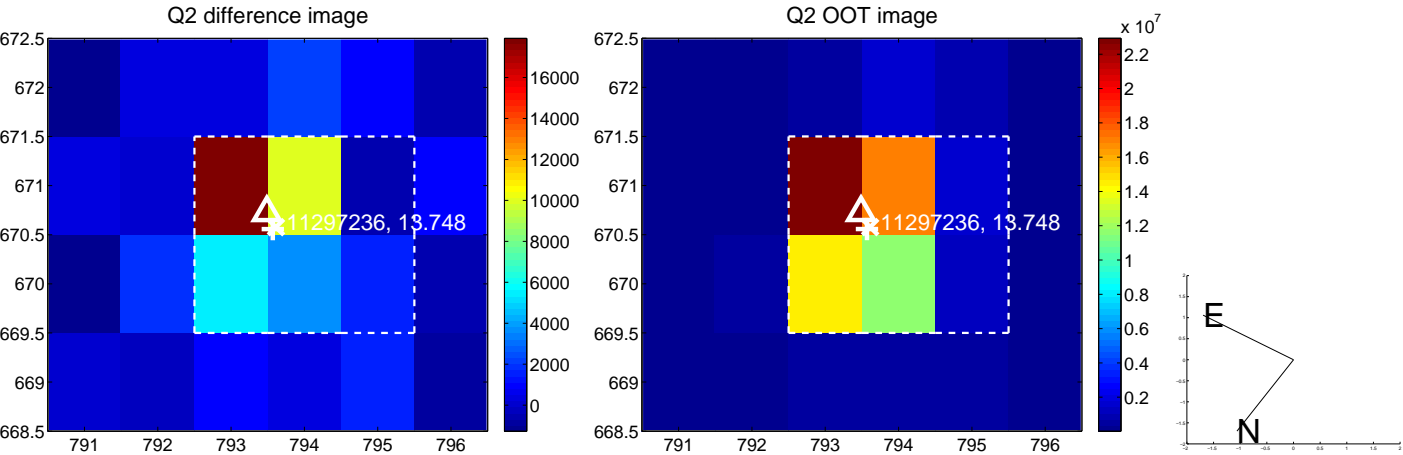
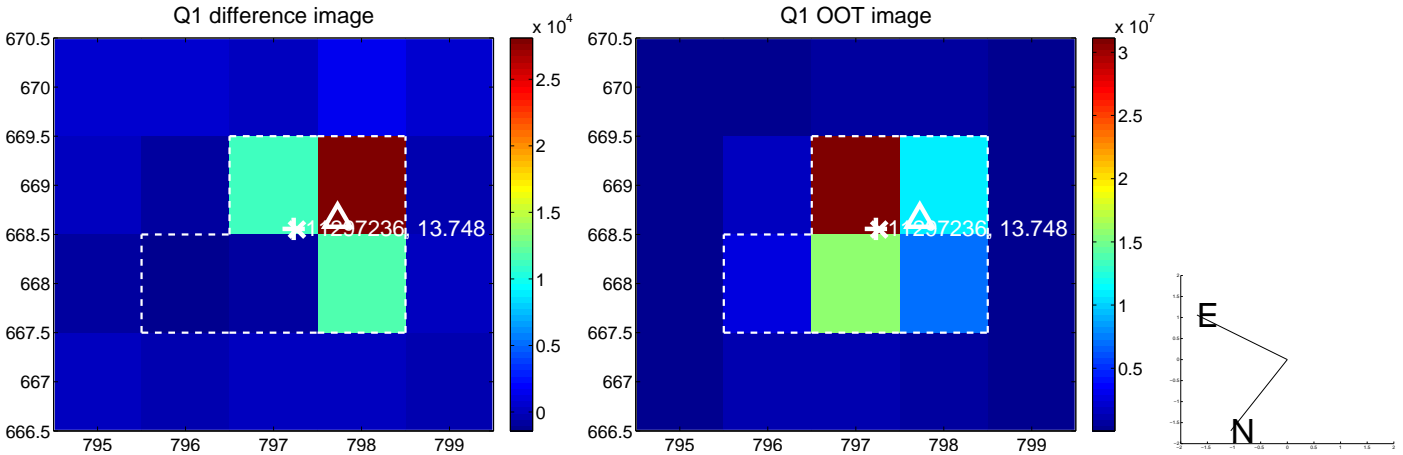
The direct PRF centroid is offset from the target star catalog position by about 0.20 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.430 ± 0.188	2.29	0.314 ± 0.137	-0.294 ± 0.232
PRF-fit source offset from KIC position	0.500 ± 0.173	2.90	0.467 ± 0.223	-0.180 ± 0.192
photometric centroid source offset	0.37 ± 0.25	1.50	0.24 ± 0.23	-0.28 ± 0.25

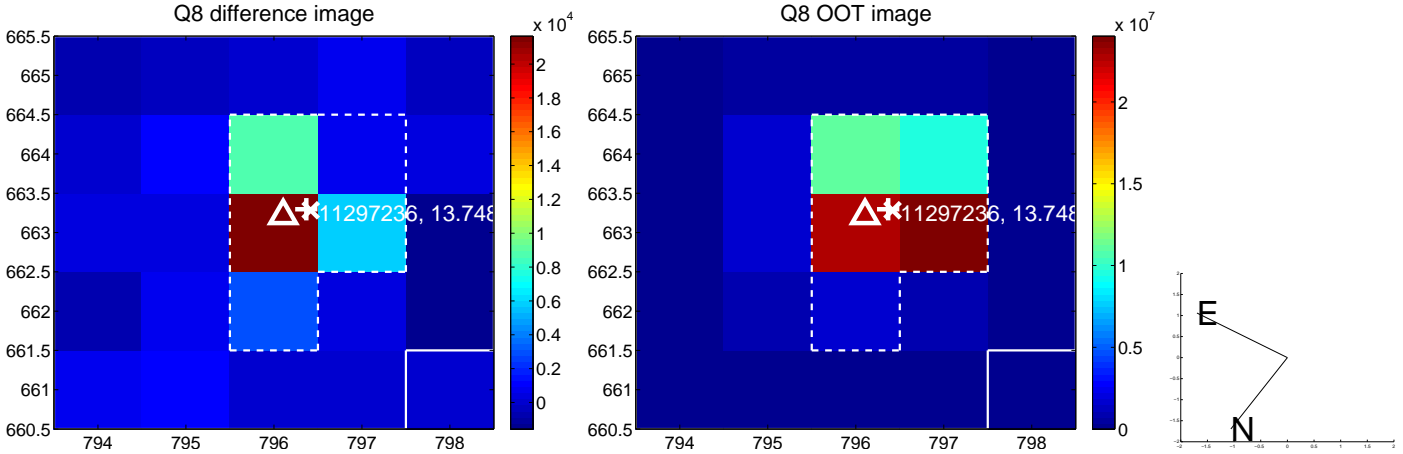
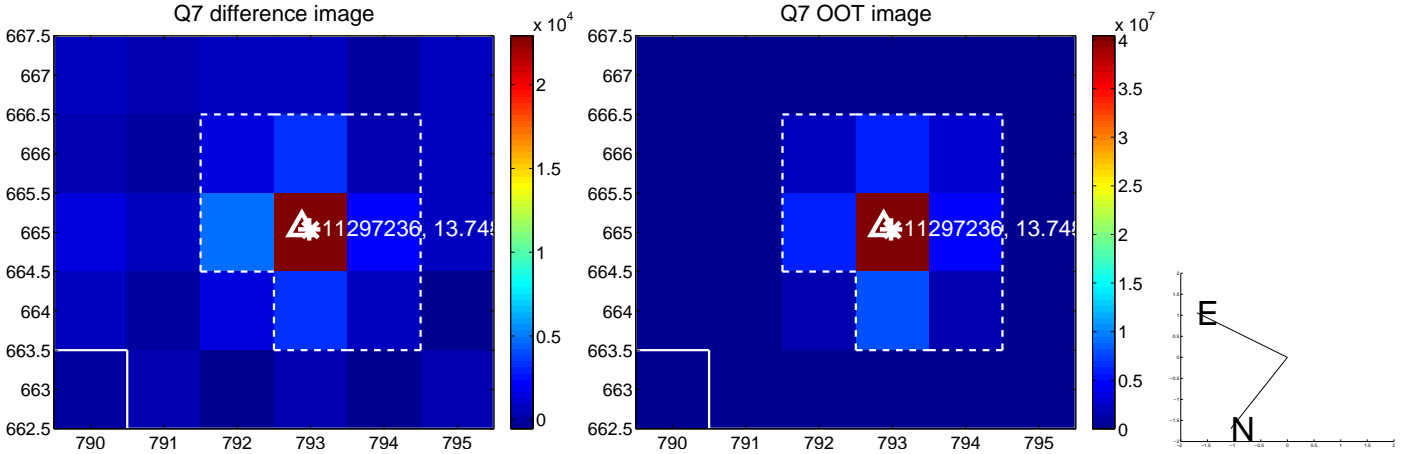
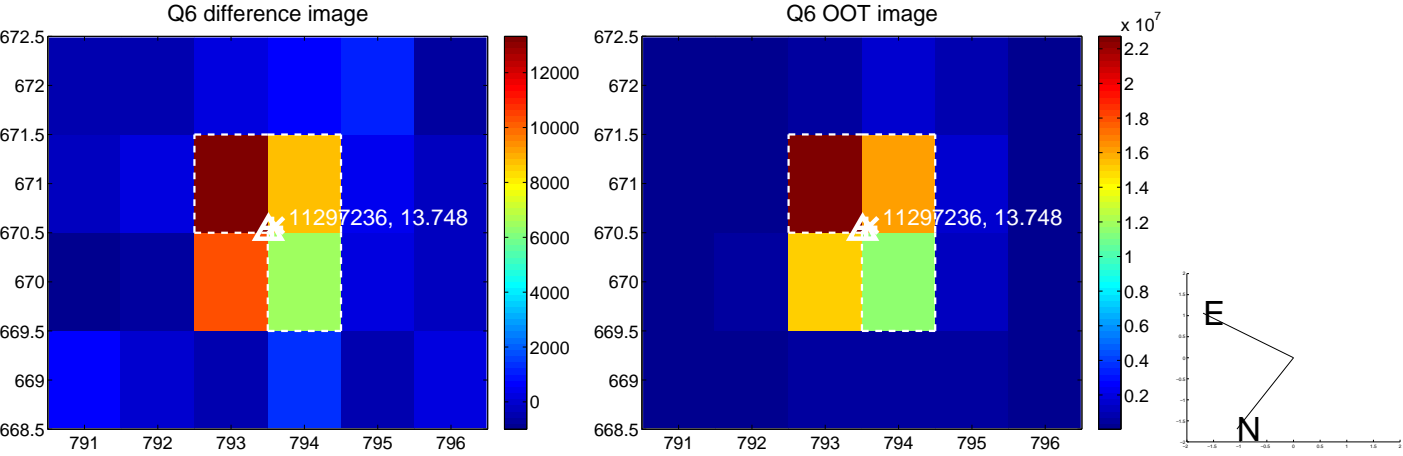
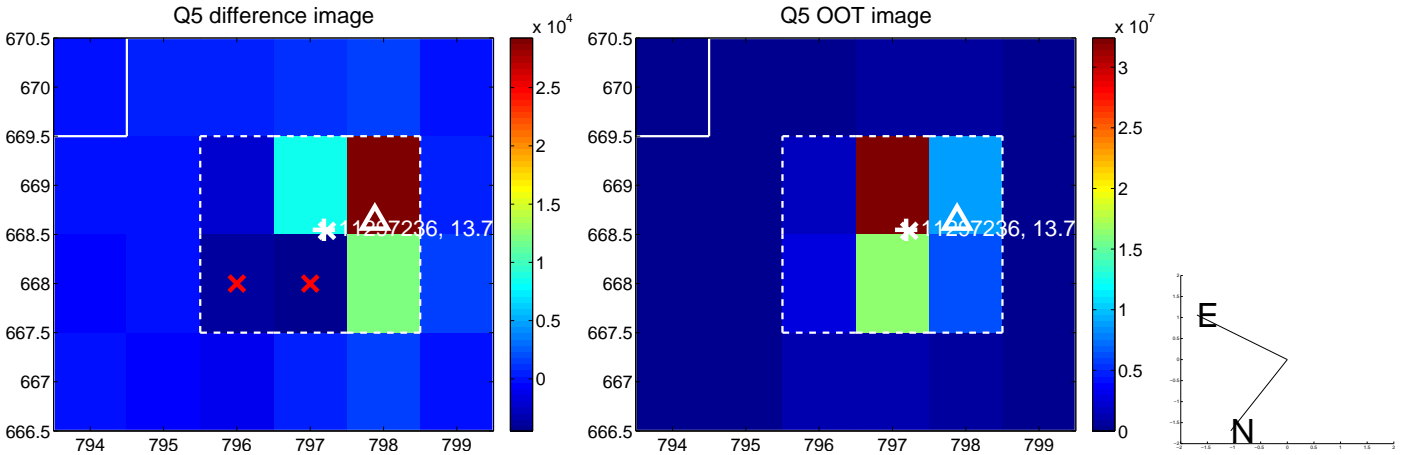


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

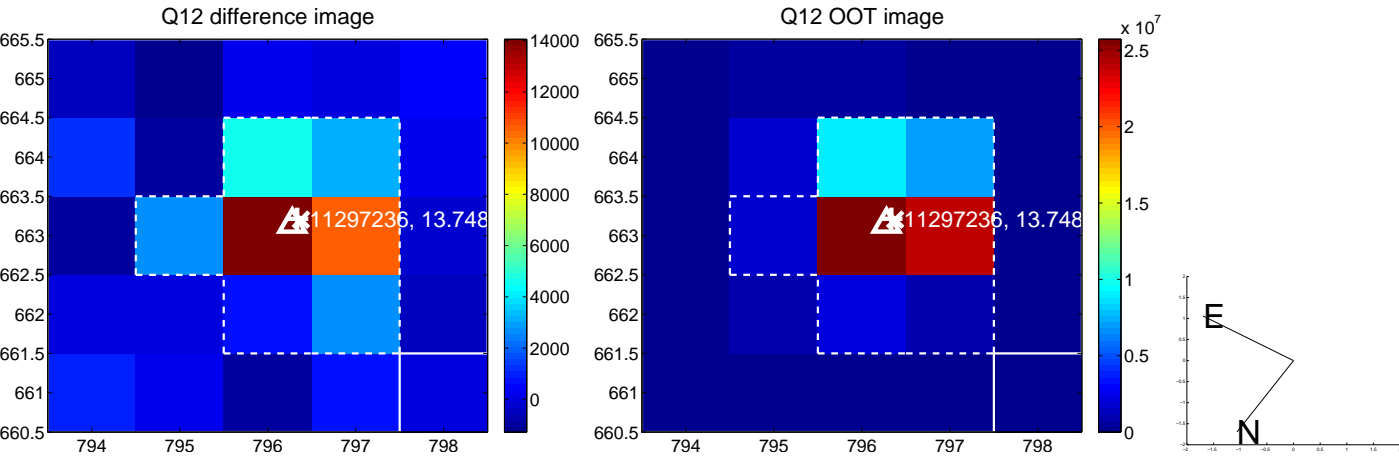
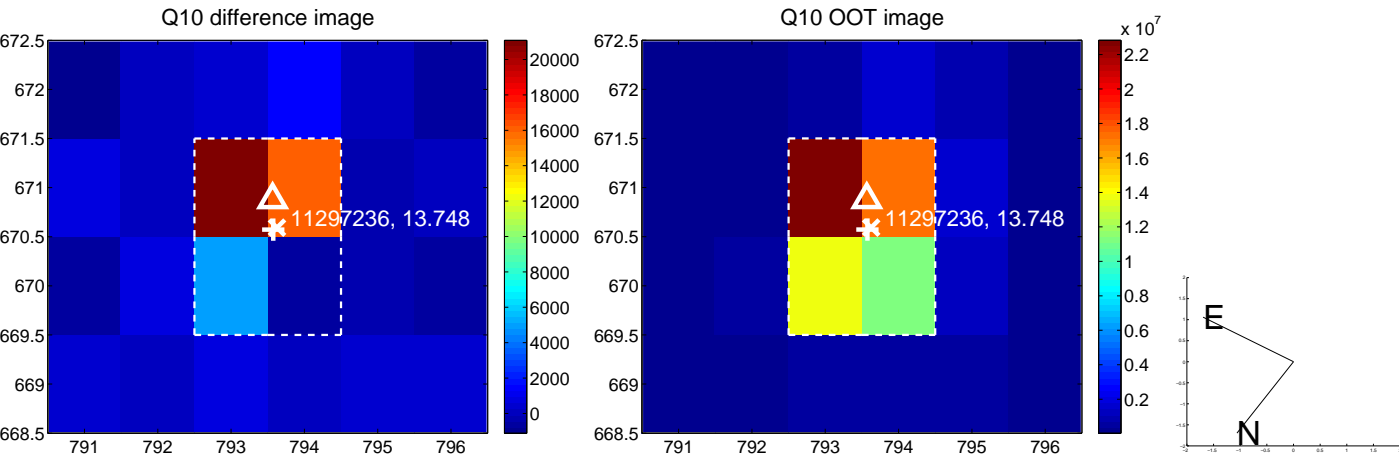
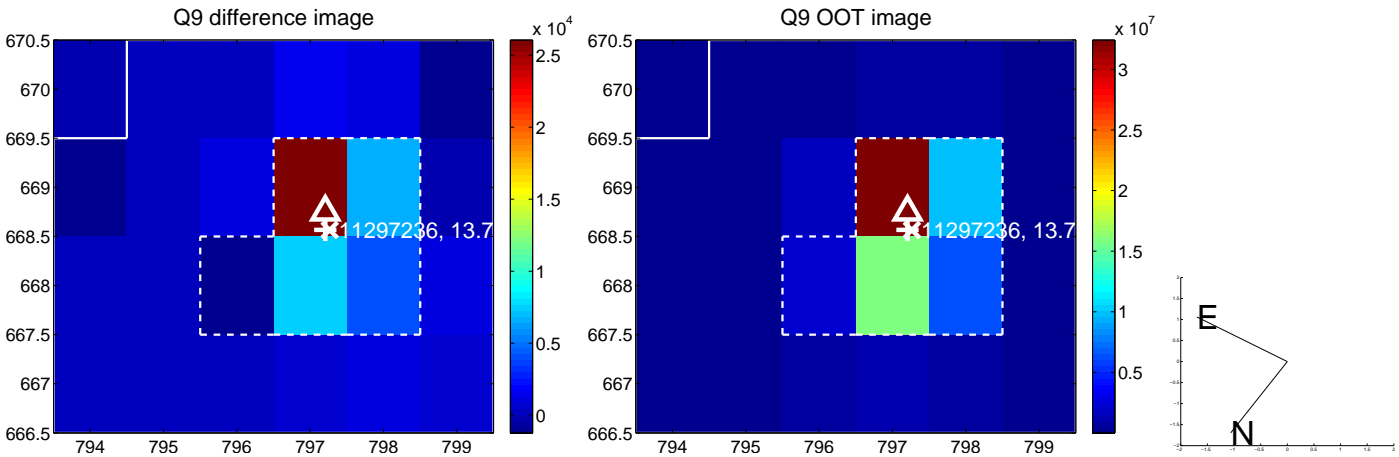
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



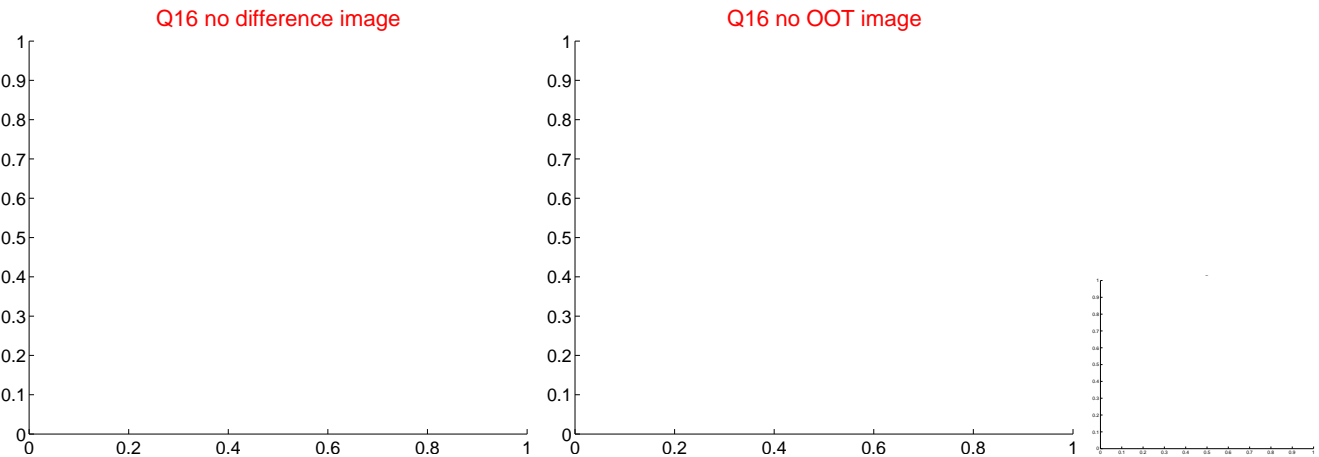
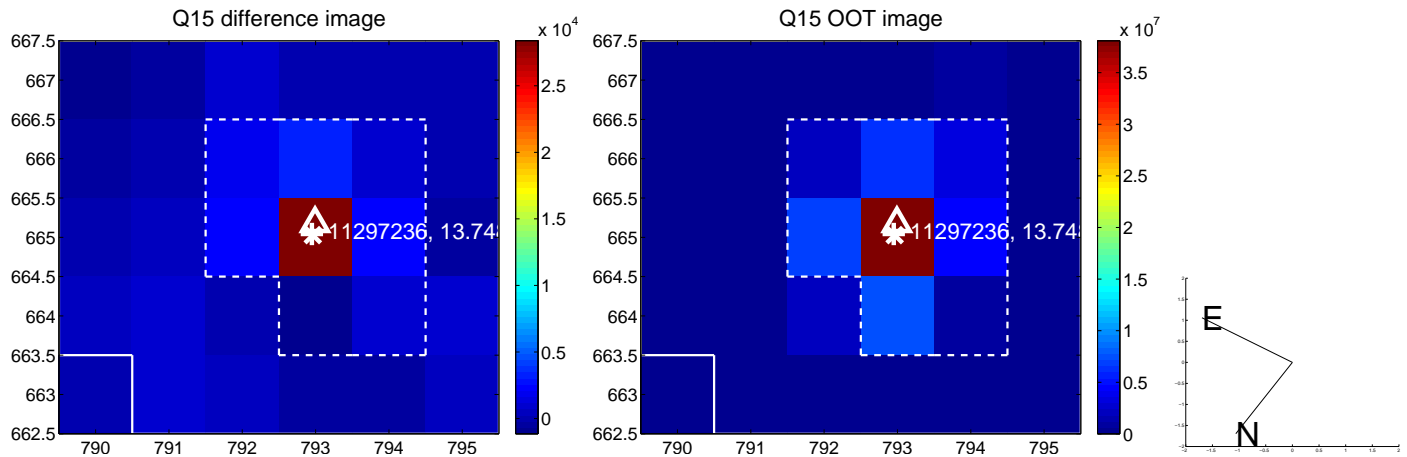
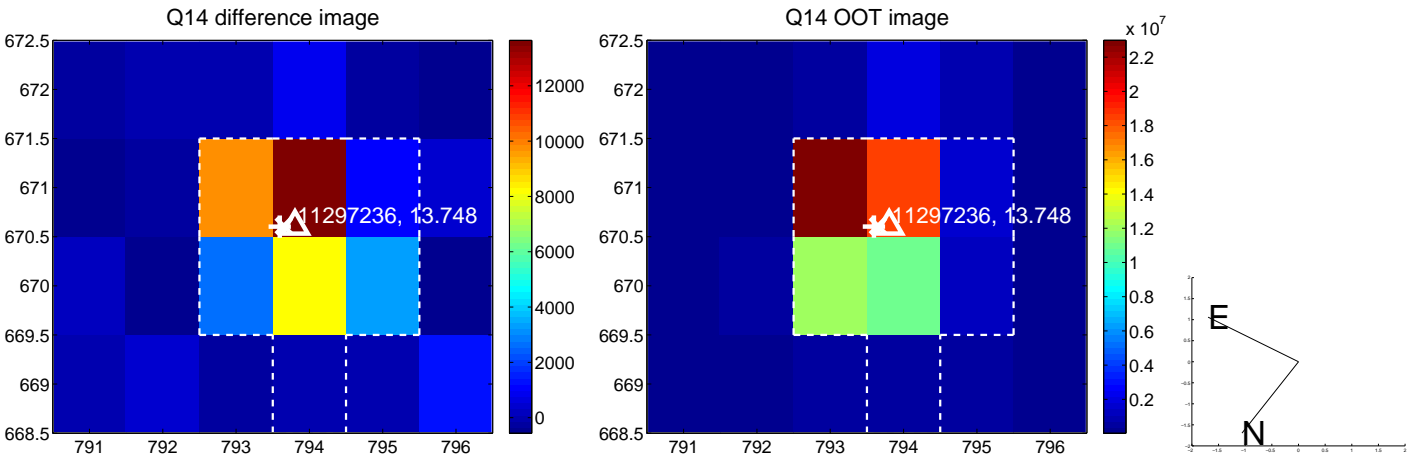
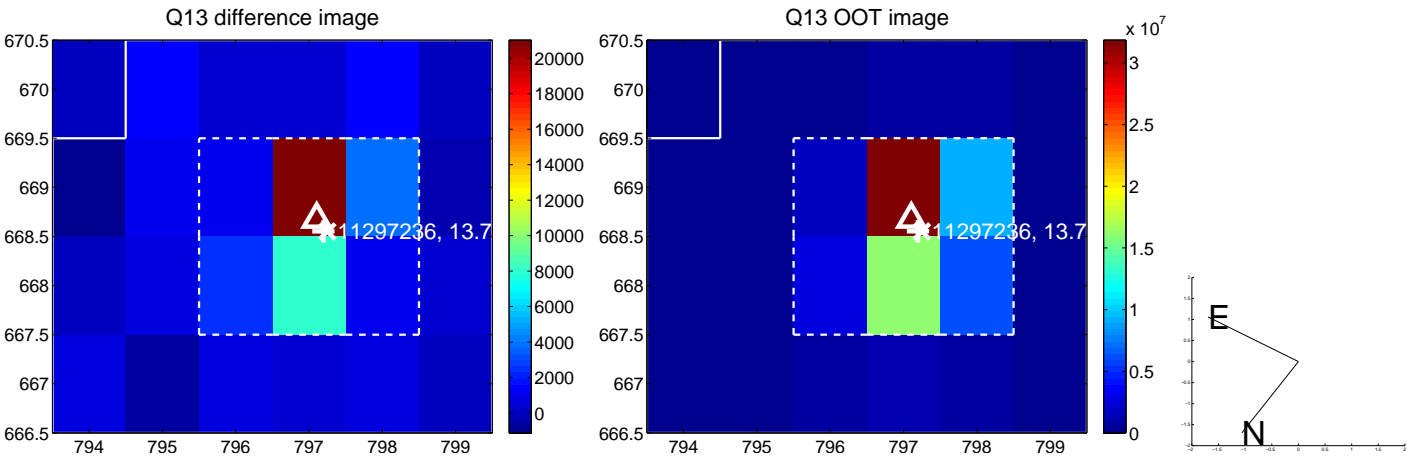
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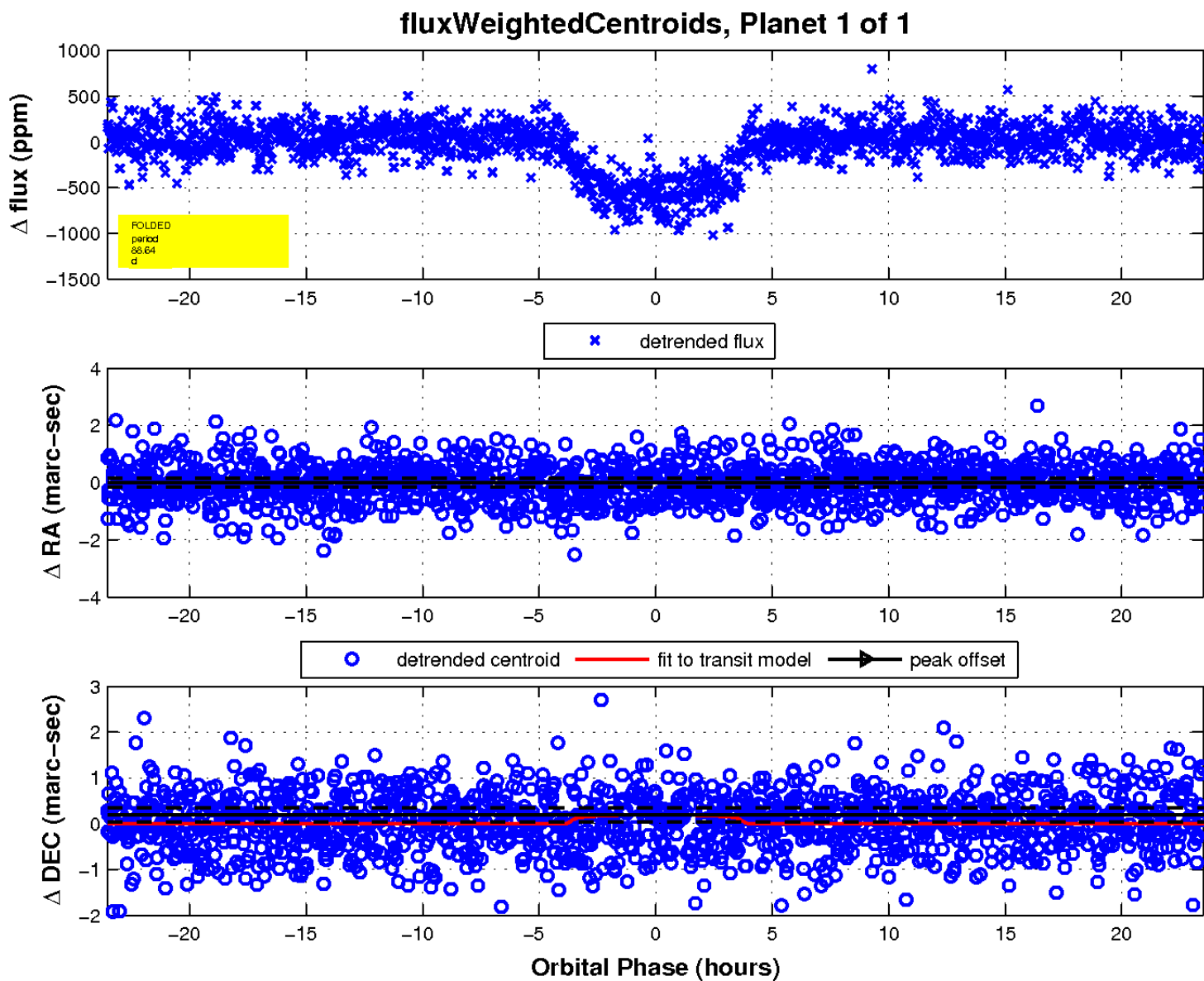
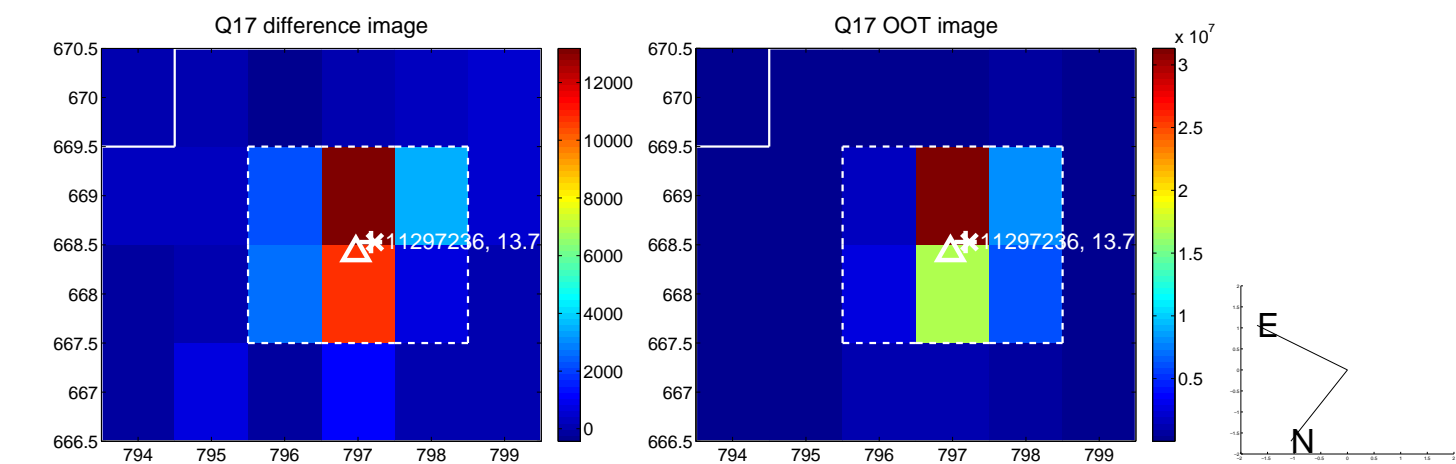
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

