

KIC 011670125

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})
011670125-01	OBS	2355.01	1.217003	132.029681	460.6	1.360	23.3	27.3	0.76	4859	2.00	707.01

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011670125-01	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.

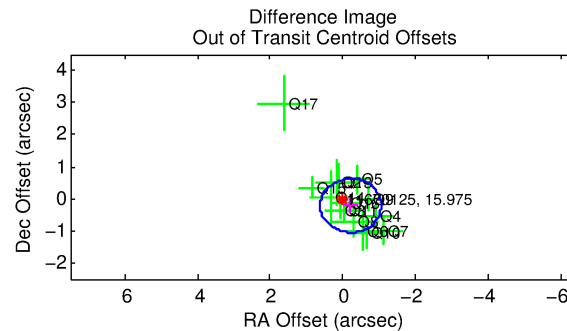
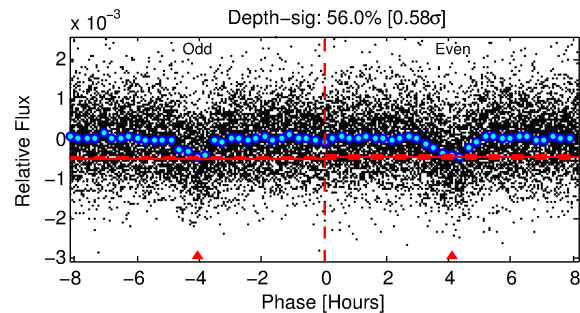
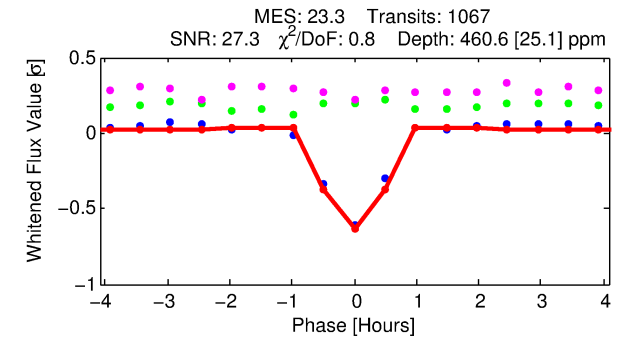
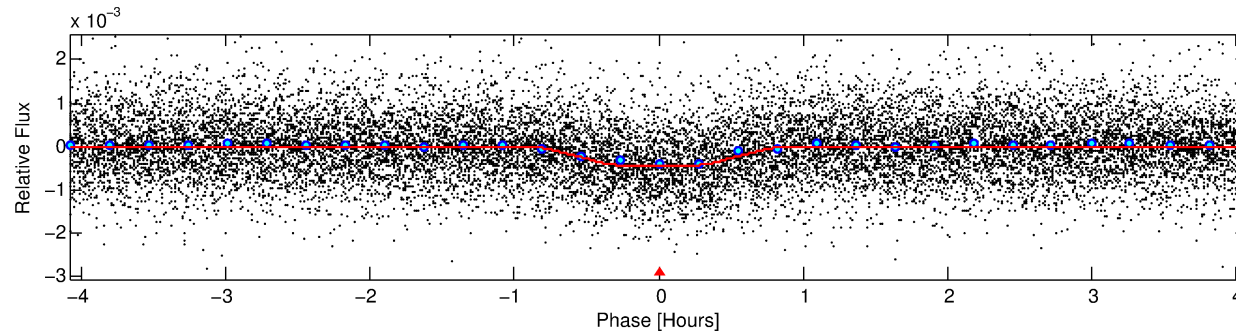
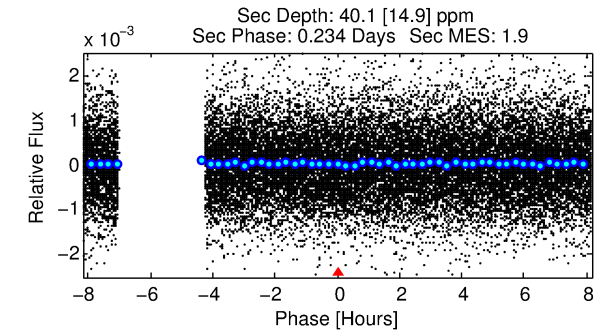
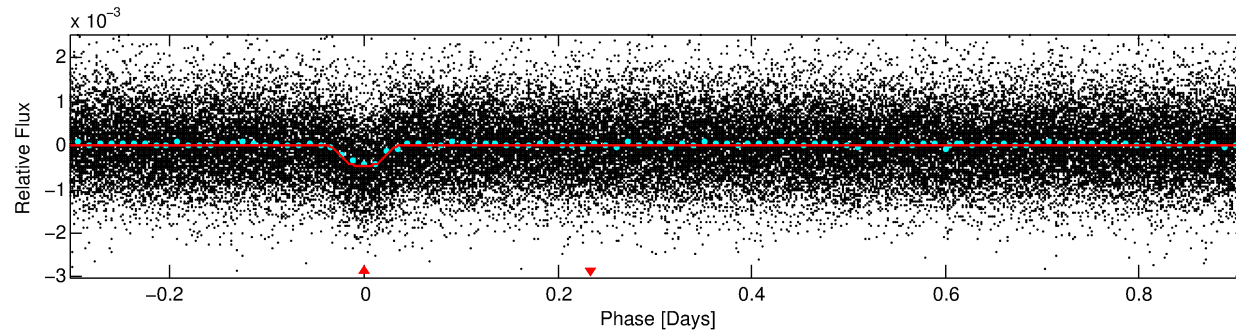
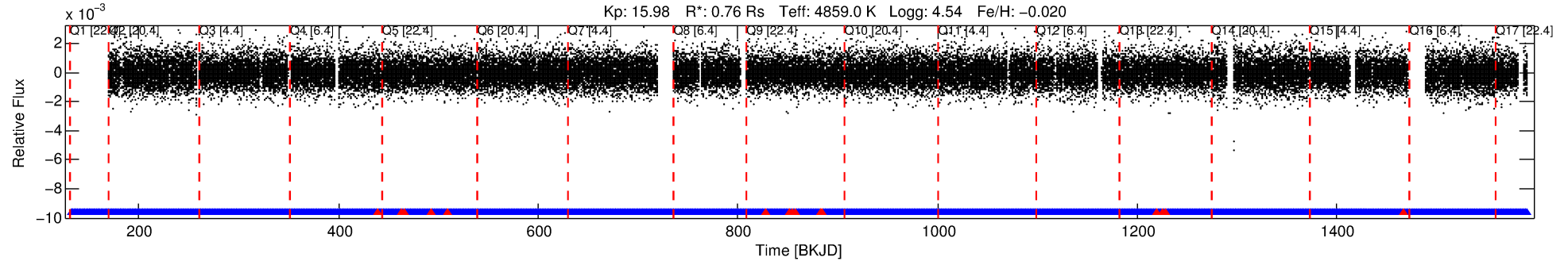
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011670125-01

No Significant Match Found

DV One-Page Summary

KIC: 11670125 Candidate: 1 of 1 Period: 1.217 d
KOI: K02355.01 Corr: 0.967



DV Fit Results:

Period = 1.21700 [0.00000] d
Epoch = 132.0297 [0.0007] BKJD
Rp/R* = 0.0242 [0.0077]
a/R* = 3.47 [3.78]
b = 0.90 [0.26]
Seff = 707.01 [123.44]
Teq = 1315 [57] K
Rp = 2.00 [0.66] Re
a = 0.0201 [0.0017] AU
Ag = 2.23 [1.66] [0.74σ]
Teffp = 2484 [461] K [2.51σ]

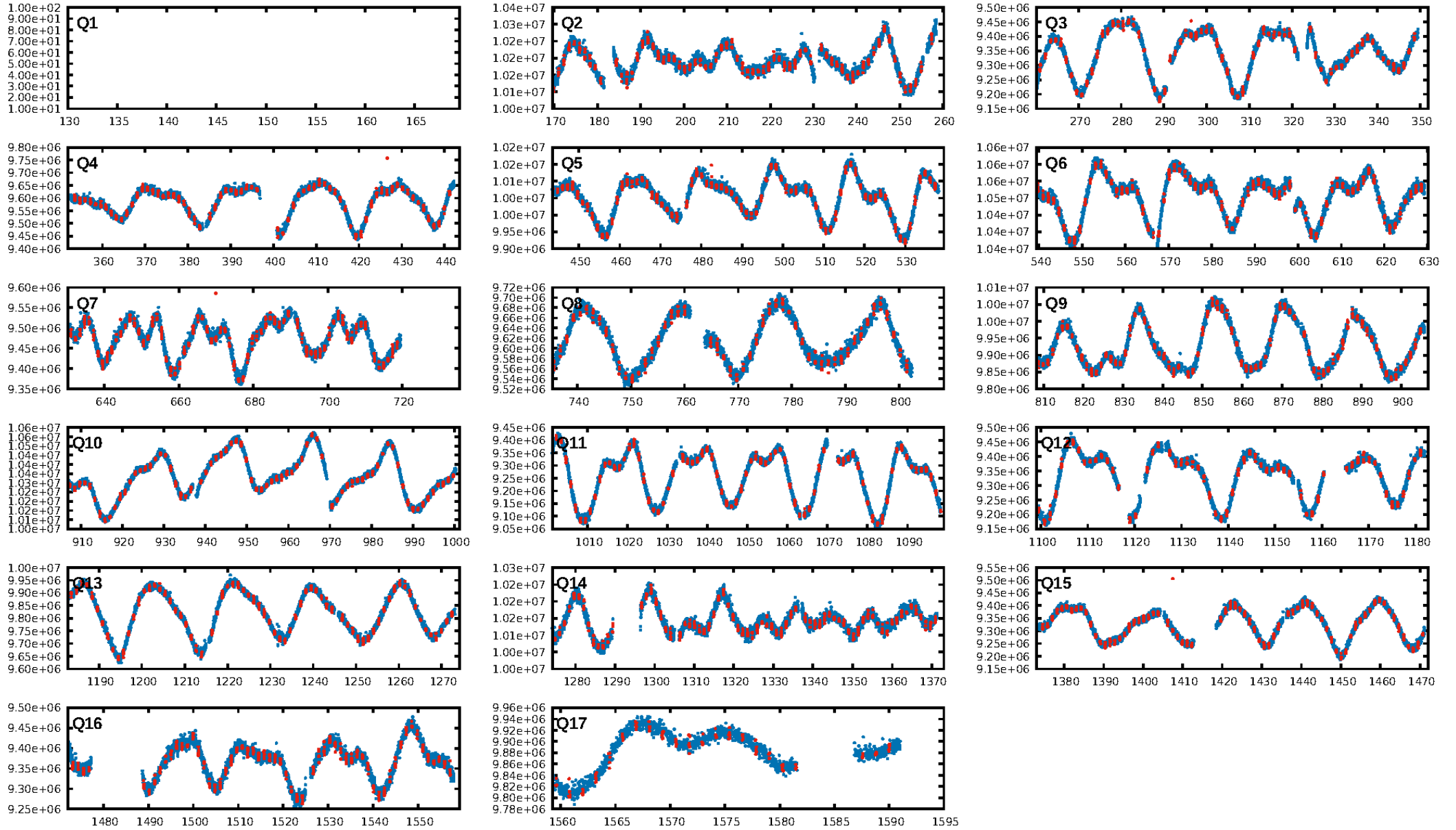
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.57e-116
RollingBand-fgt: 0.99 [1030/1045]
GhostDiagnostic-chr: 5.43
Centroid-sig: 15.4%
Centroid-so: 0.734 arcsec [1.63σ]
OotOffset-rm: 0.302 arcsec [1.08σ]
OotOffset-st: 4/4/3/4 [15]
KicOffset-rm: 0.258 arcsec [0.93σ]
KicOffset-st: 4/4/3/4 [15]
DiffImageQuality-fgm: 0.93 [14/15]
DiffImageOverlap-fno: 1.00 [16/16]

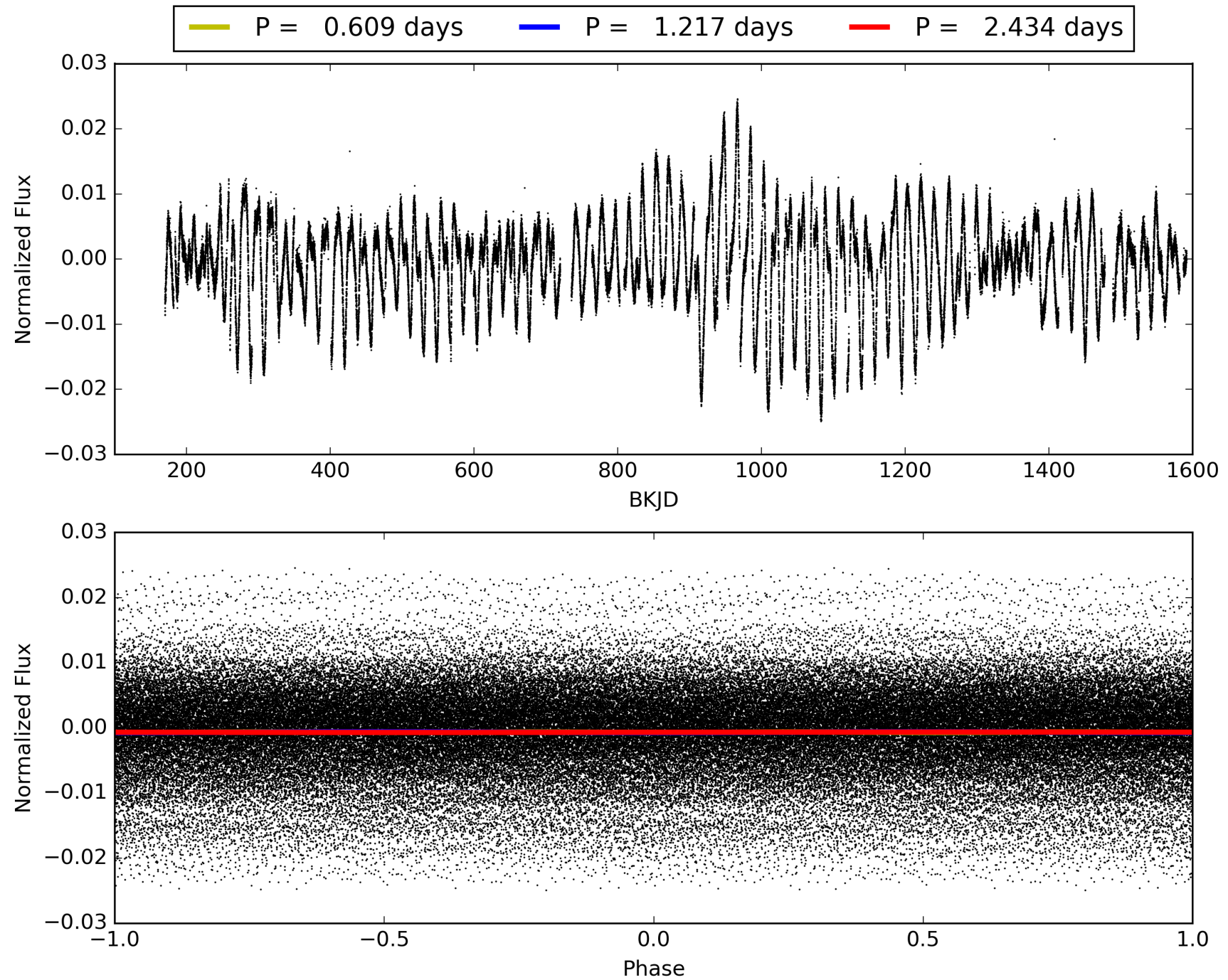
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 02:33:18 Z

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

TCE 011670125-01, PDC Light Curves

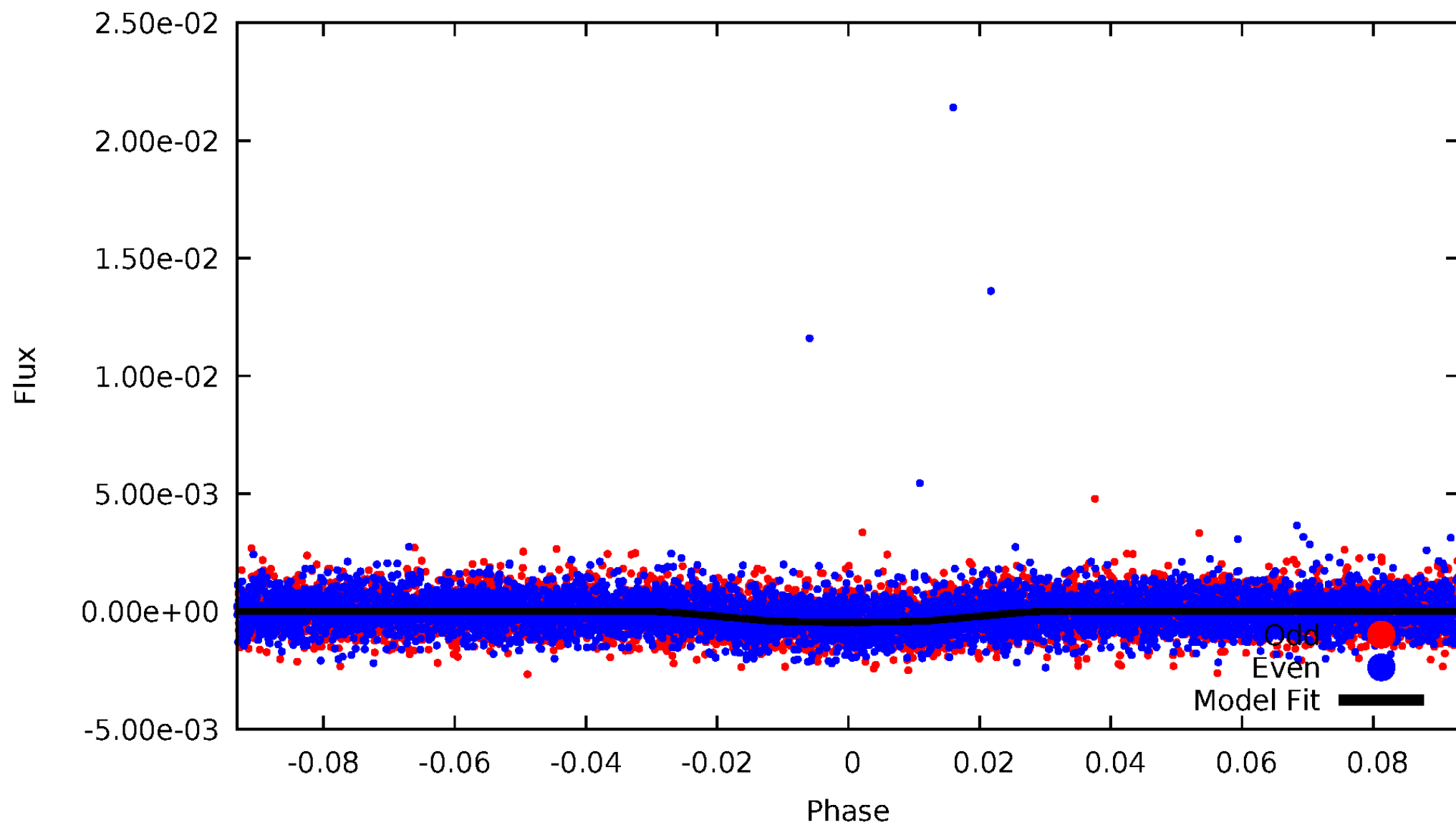


TCE 011670125-01



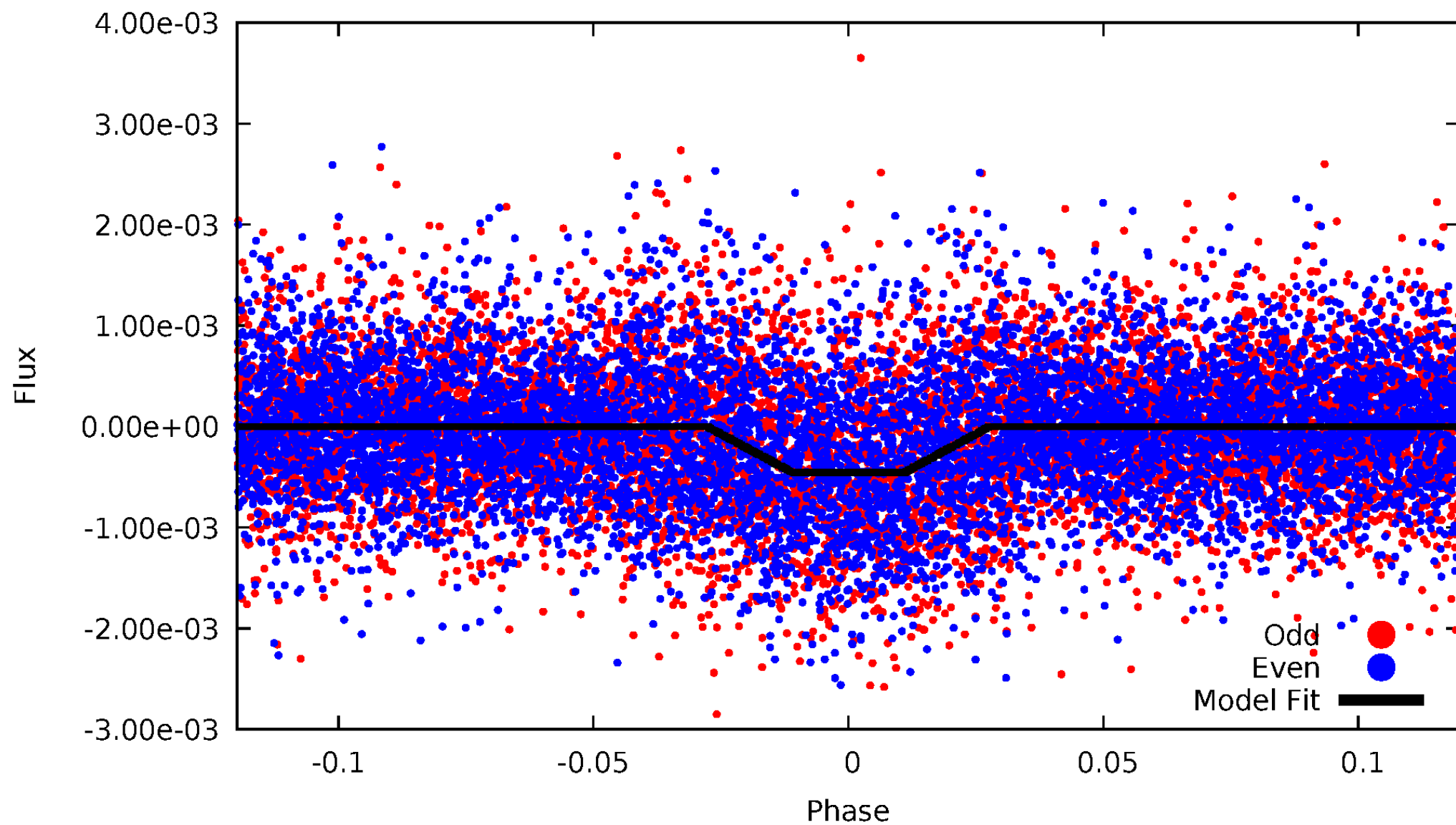
DV Odd/Even

TCE 011670125-01



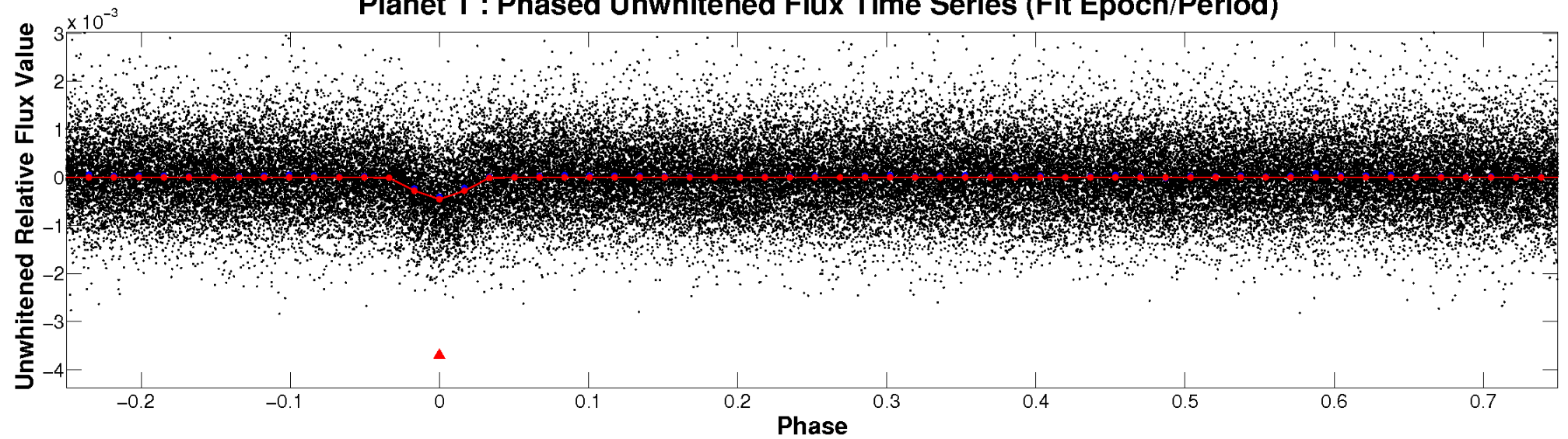
ALT Odd/Even

TCE 011670125-01

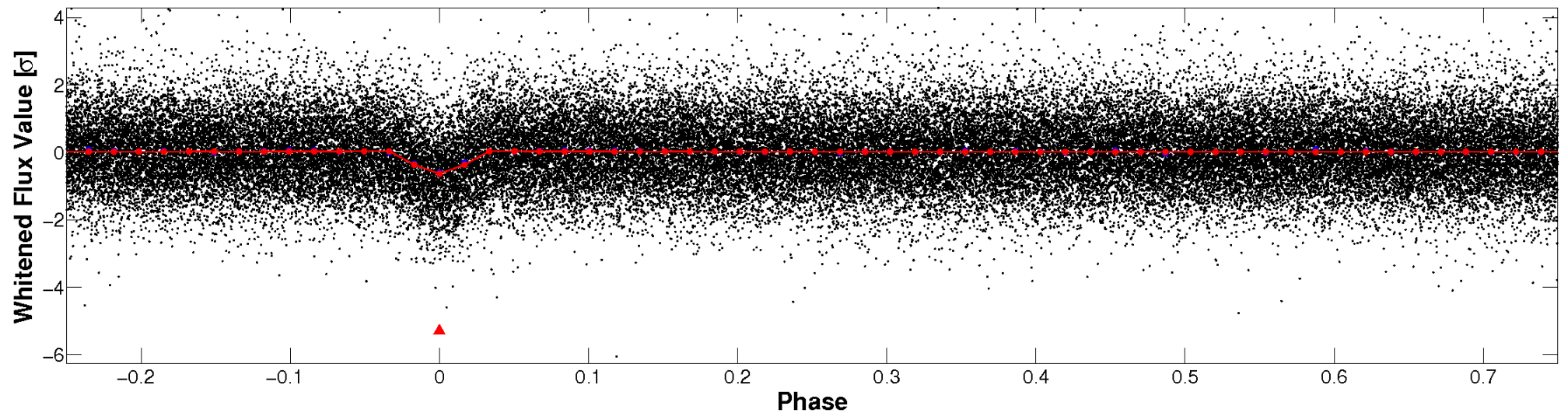


Non-Whitened Vs. Whitened Light Curve

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

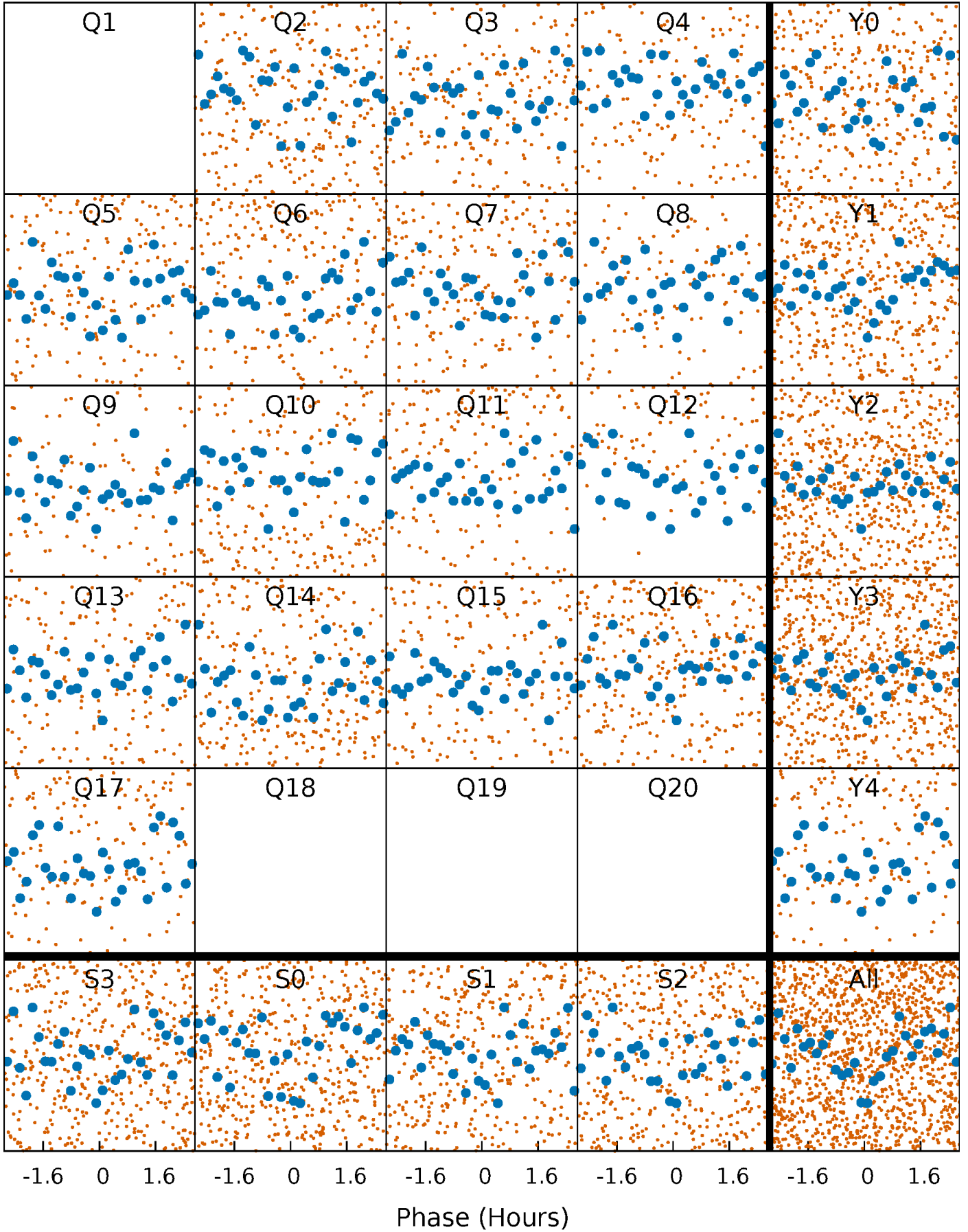


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



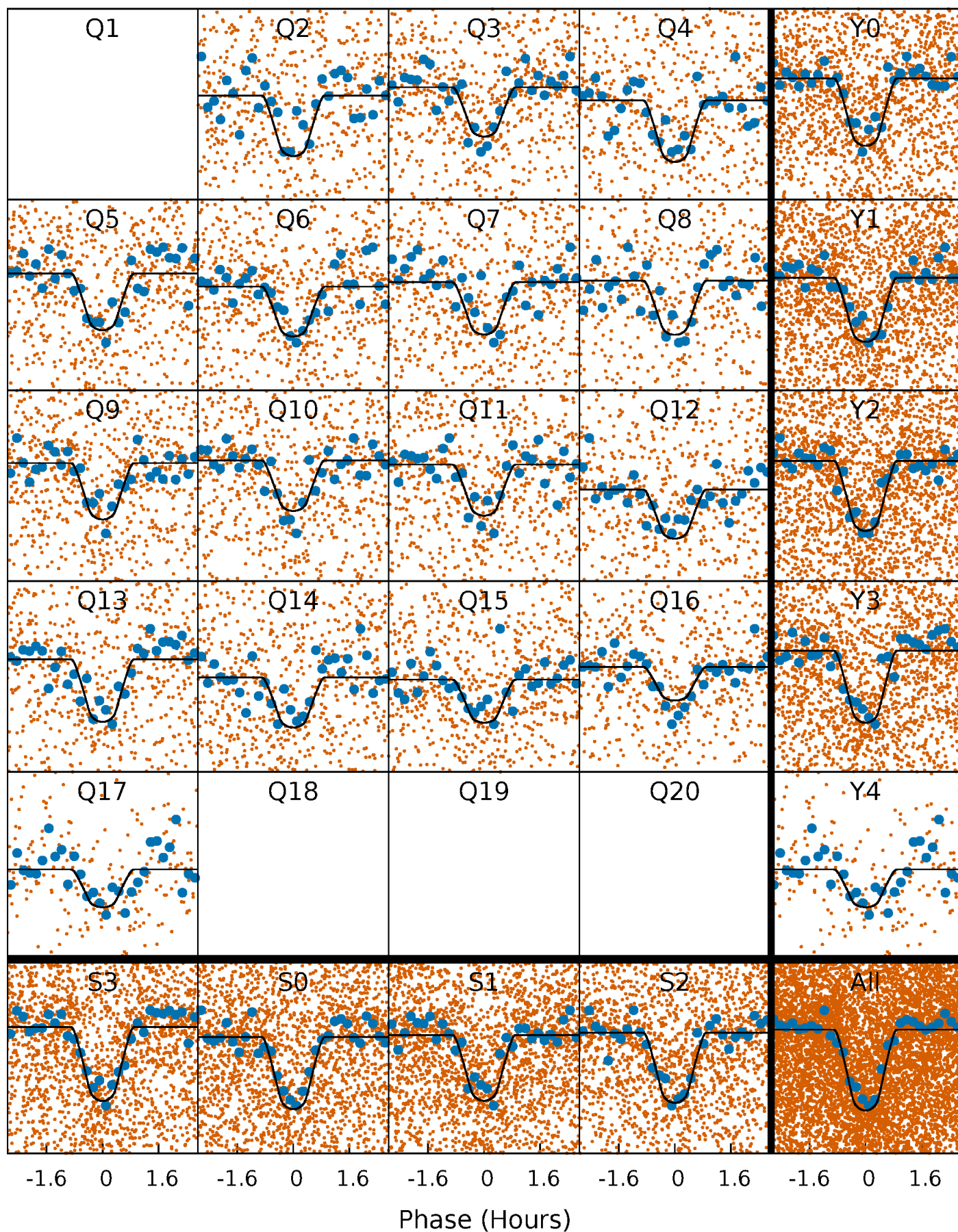
PDC Quarter-Phased Transit Curves

TCE 011670125-01 P= 1.217003 Days $T_0=132.029681$ (BKJD)



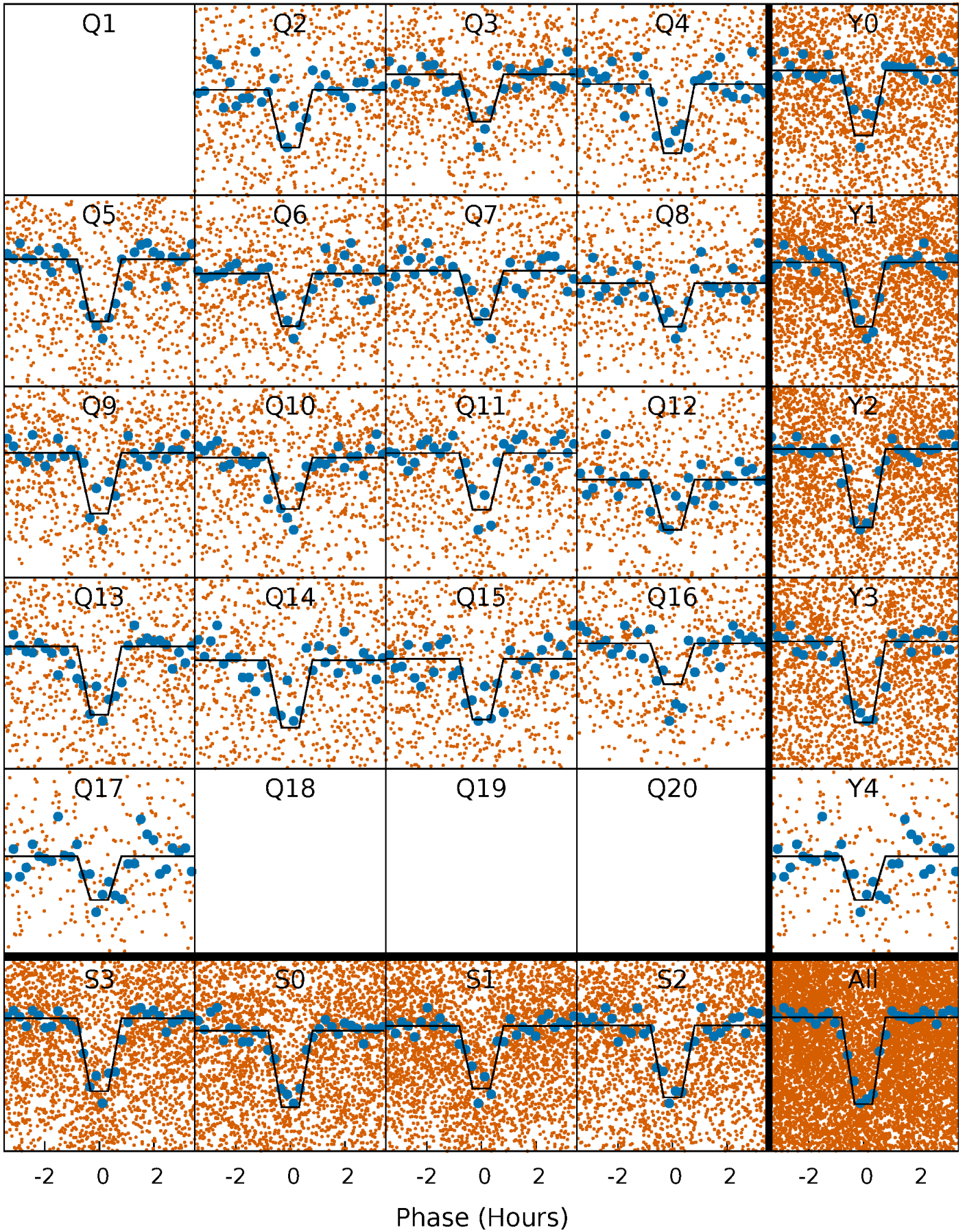
DV Quarter-Phased Transit Curves

TCE 011670125-01 P= 1.217003 Days $T_0=132.029681$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

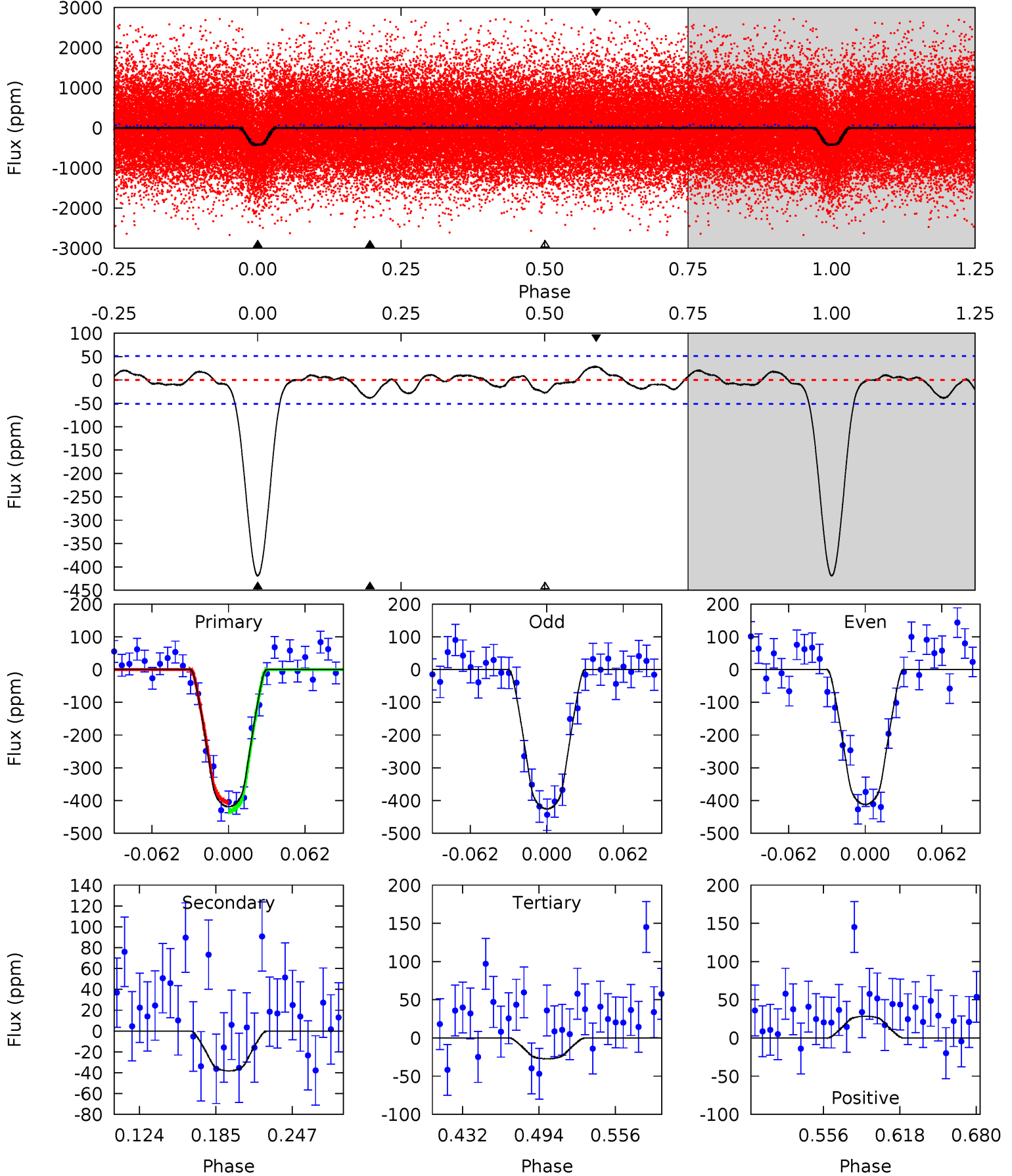
TCE 011670125-01 P= 1.217001 Days $T_0=132.030817$ (BKJD)



DV Model-Shift Uniqueness Test

011670125-01, P = 1.217003 Days, E = 132.029681 Days

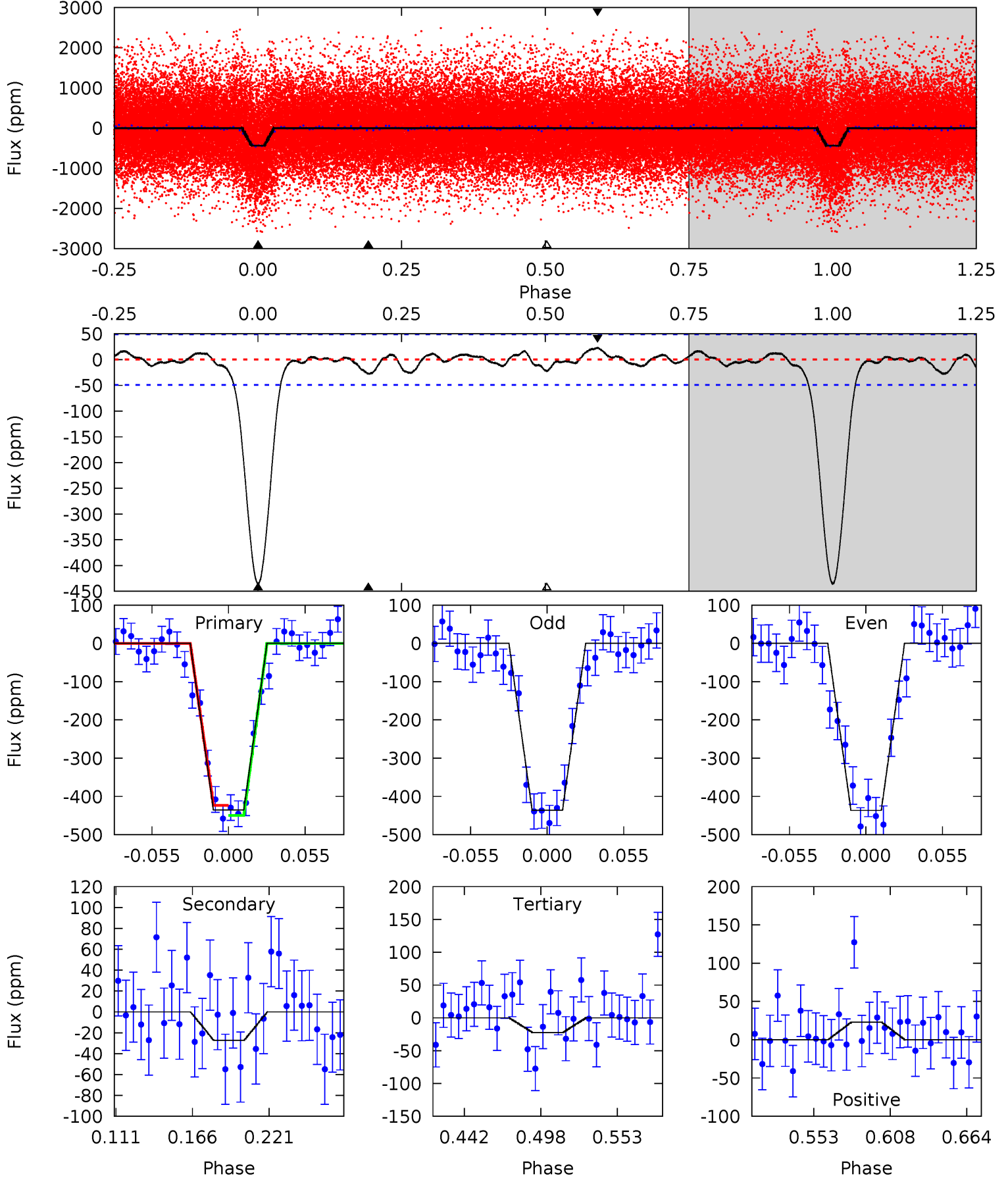
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
38.1	3.48	2.48	2.59	4.66	1.87	1.14	35.6	35.5	1.00	0.90	0.61	0.90	0.06	1.28



Alt Model-Shift Uniqueness Test

011670125-01, P = 1.217001 Days, E = 132.030817 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
41.5	2.60	2.13	2.18	4.69	1.92	0.91	39.4	39.3	0.47	0.42	0.01	0.95	0.05	1.26



Stellar Parameters For KIC 011670125

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4859^{+145}_{-145}	$4.545^{+0.072}_{-0.039}$	$-0.020^{+0.300}_{-0.300}$	$0.757^{+0.053}_{-0.072}$	$0.734^{+0.082}_{-0.054}$	$2.381^{+0.691}_{-0.346}$
	+3%/-3%	+2%/-1%	+1500%/-1500%	+7%/-10%	+11%/-7%	+29%/-15%
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 011670125-01 / KOI 2355.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-38 ± 11	$1.98^{+0.64}_{-0.58}$	1830^{+67}_{-66}	2970^{+403}_{-289}	$2.089^{+2.524}_{-0.956}$
Alt.	-27 ± 10	$1.73^{+0.63}_{-0.62}$	1830^{+68}_{-67}	2949^{+495}_{-401}	$2.002^{+3.189}_{-1.146}$

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

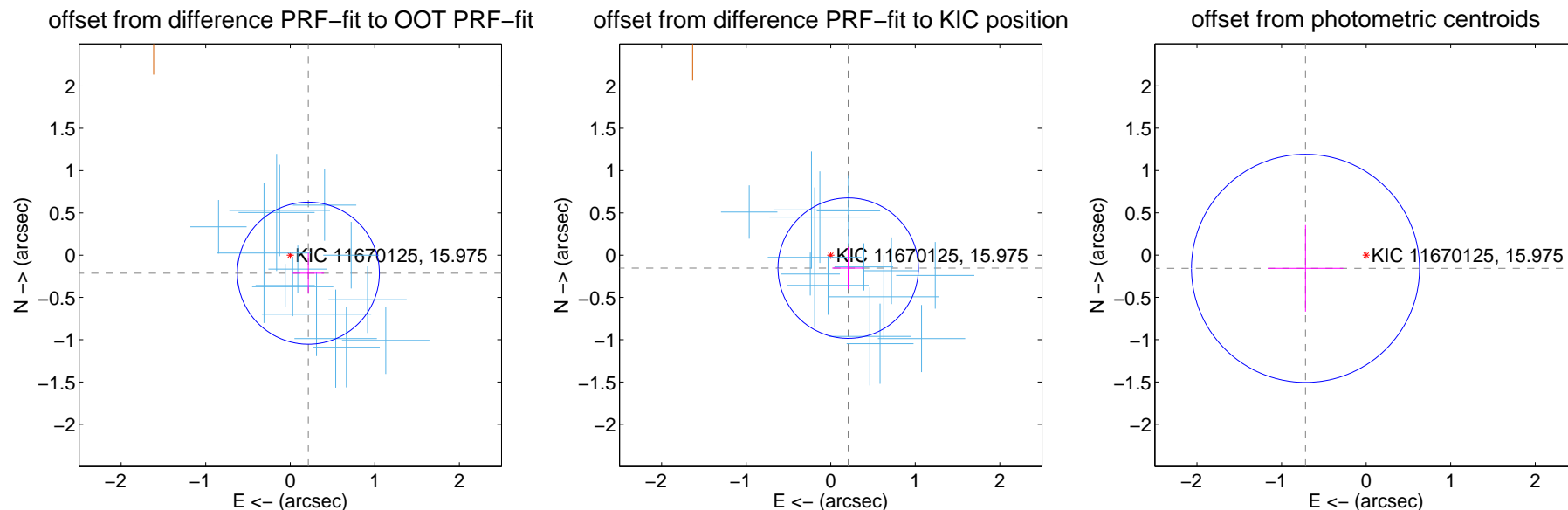
DV Centroid Data

Supplemental centroid analysis for 011670125-01. Kepler magnitude: 15.97. Transit SNR 27.35

There are 14 quarters with good PRF difference image offsets

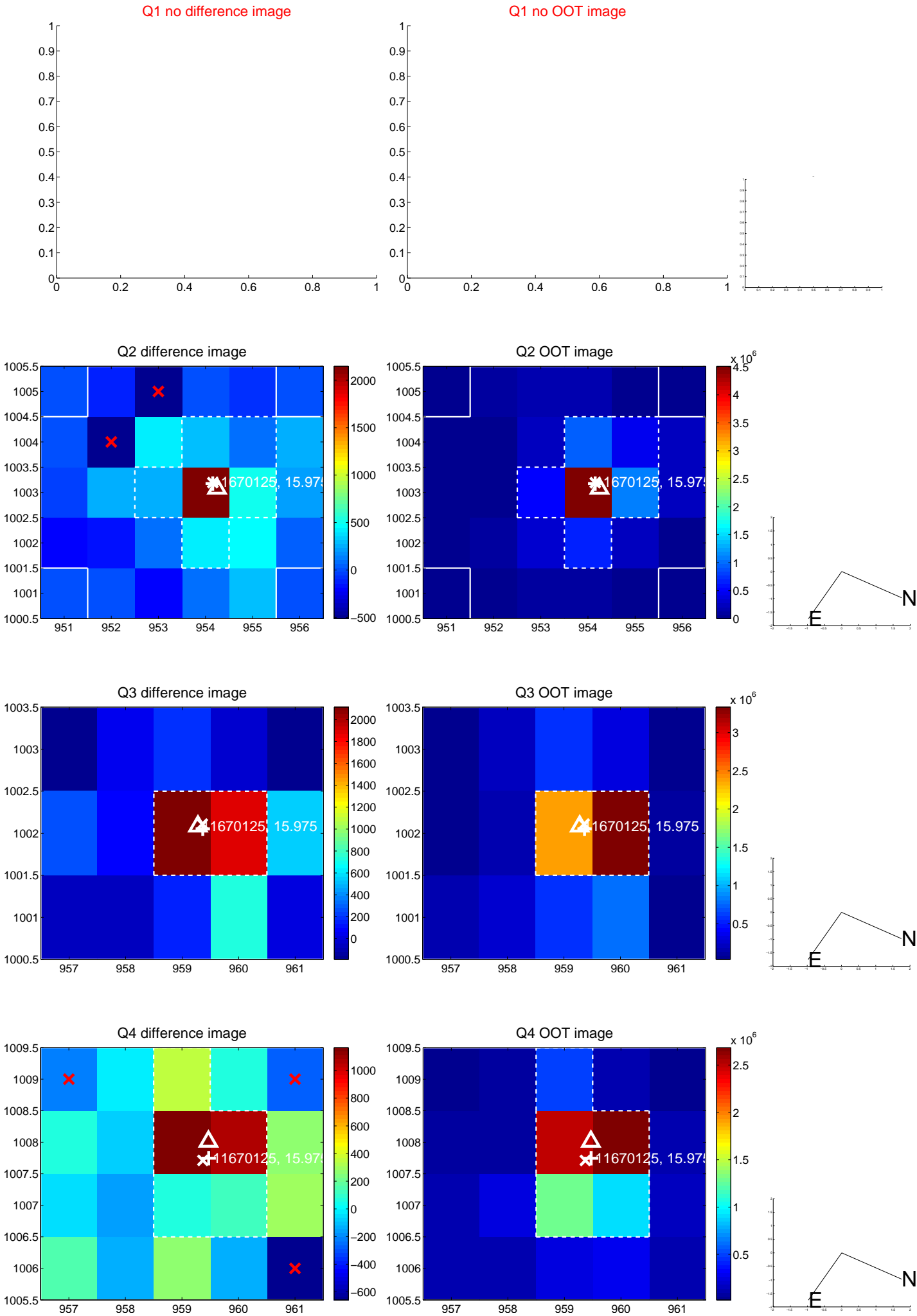
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.302 ± 0.280	1.08	-0.214 ± 0.185	-0.213 ± 0.241
PRF-fit source offset from KIC position	0.258 ± 0.277	0.93	-0.207 ± 0.188	-0.154 ± 0.245
photometric centroid source offset	0.73 ± 0.45	1.63	0.72 ± 0.45	-0.16 ± 0.51

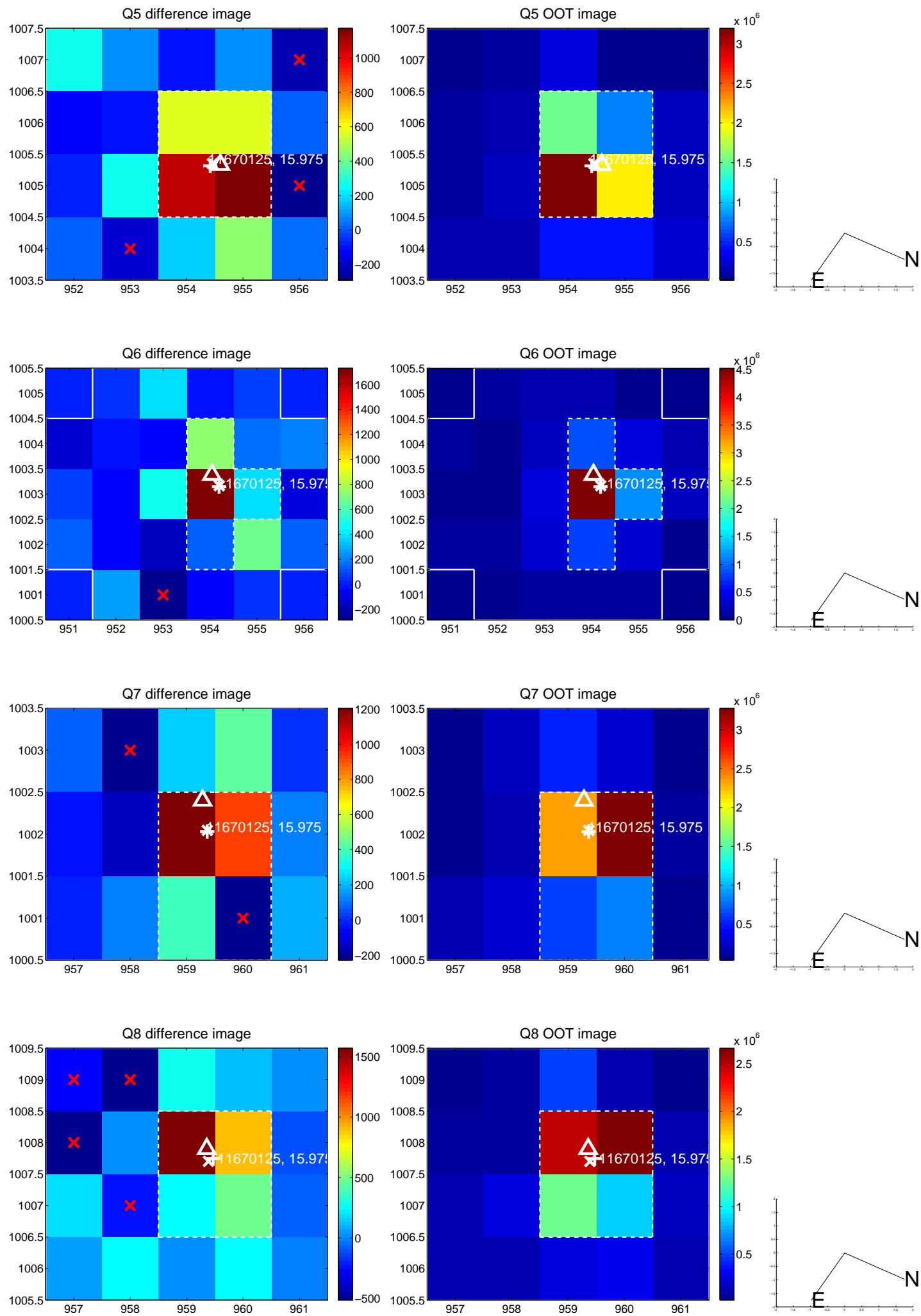


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

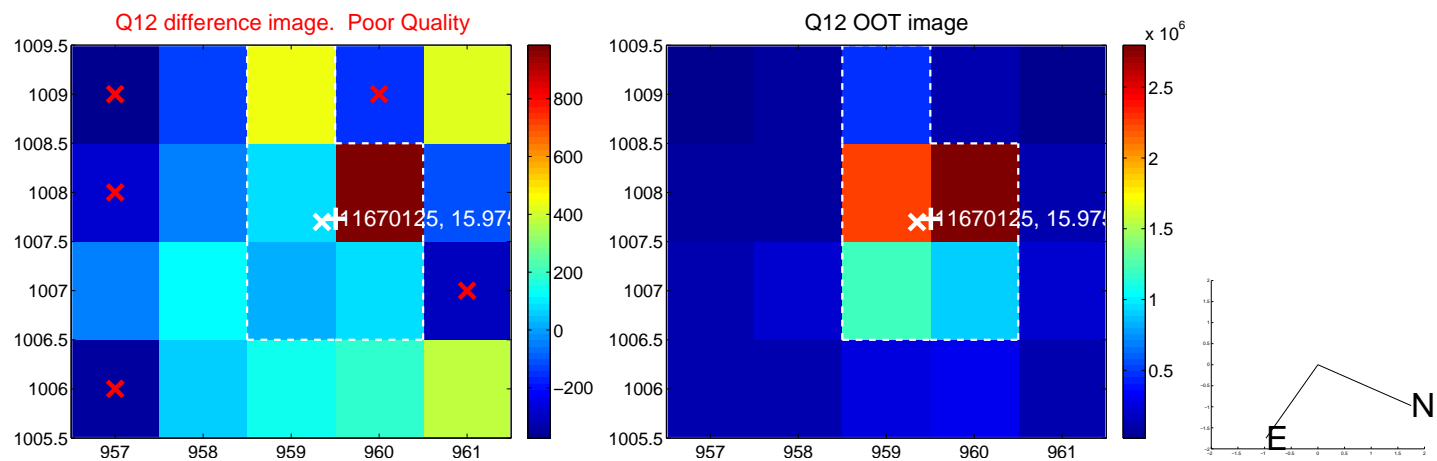
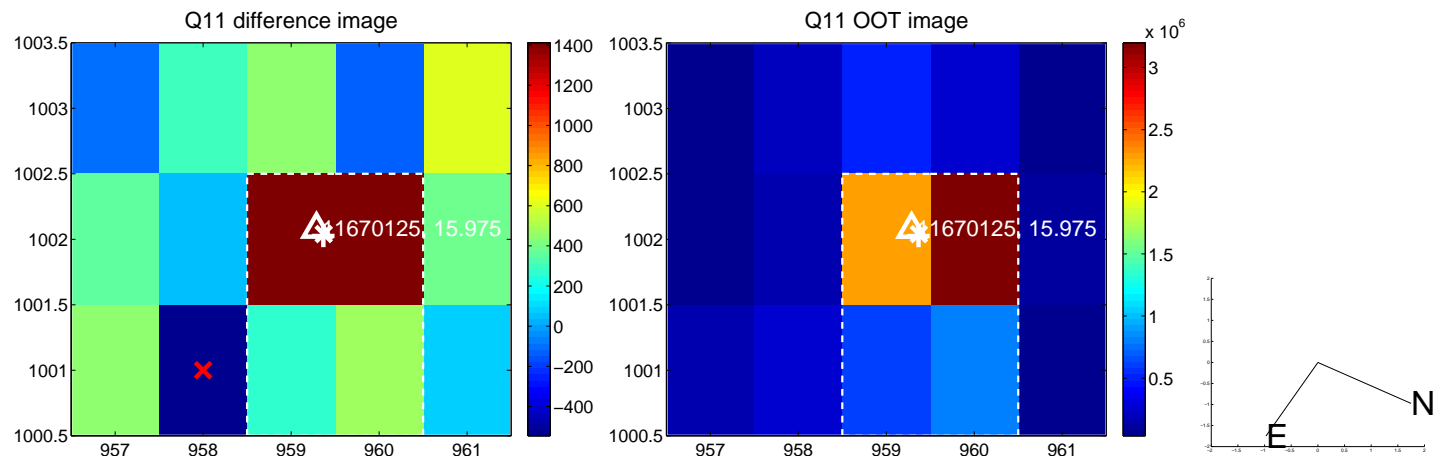
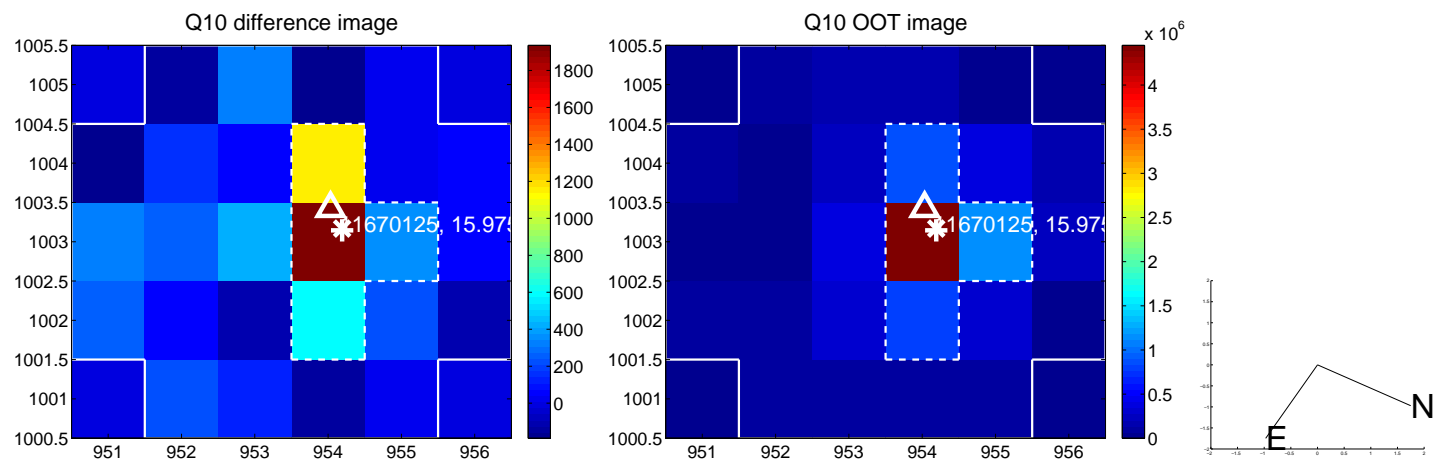
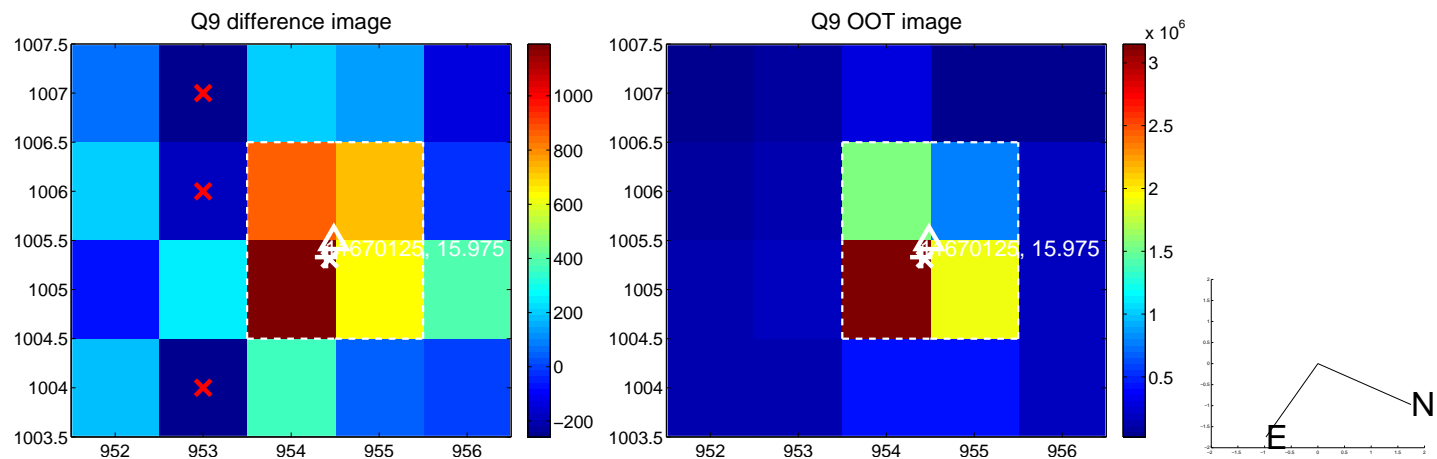
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



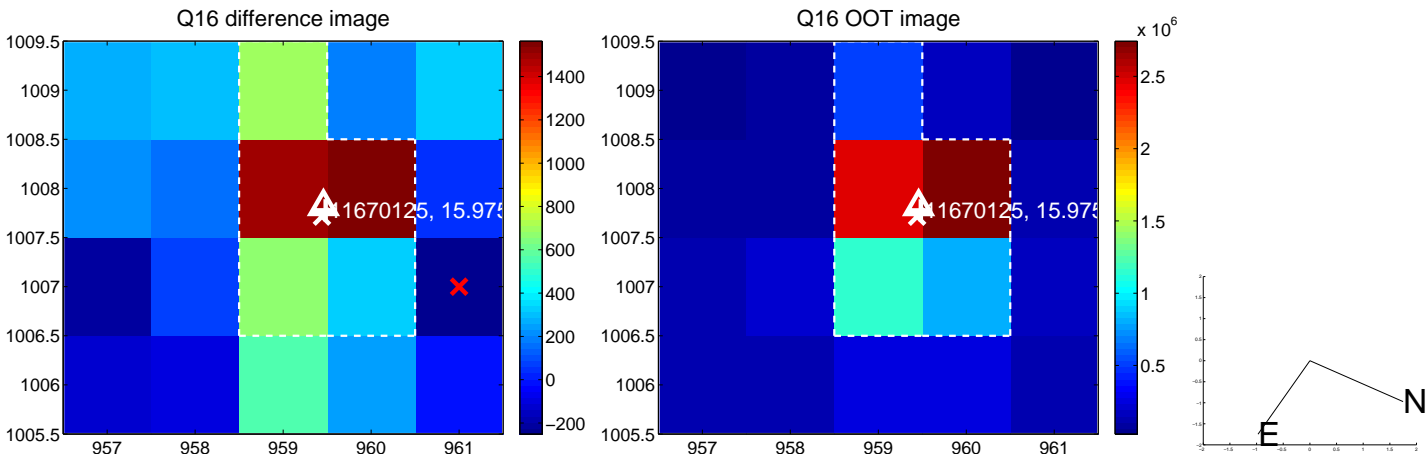
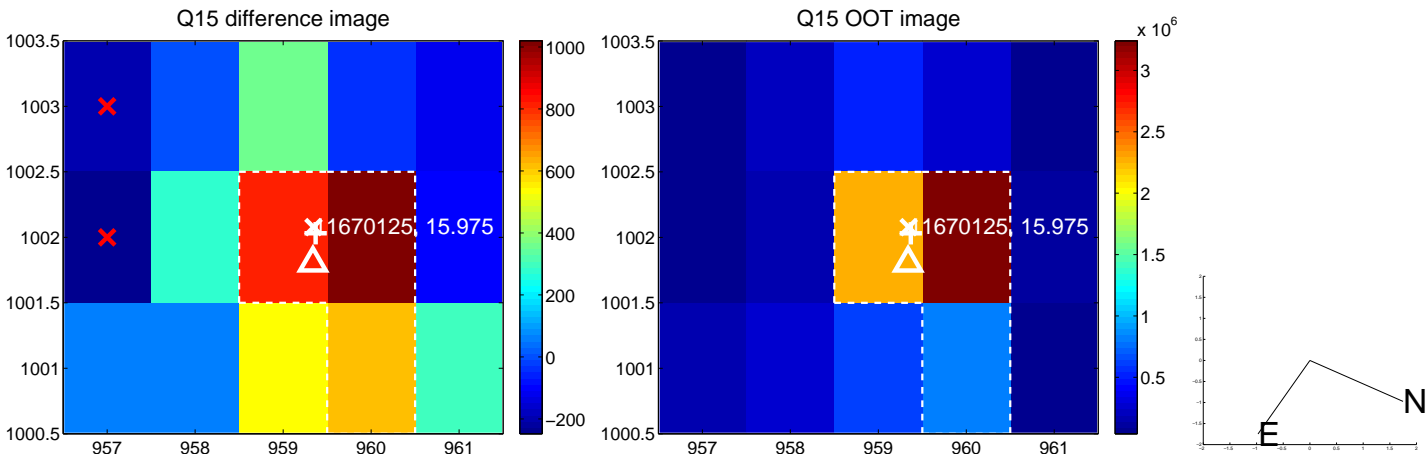
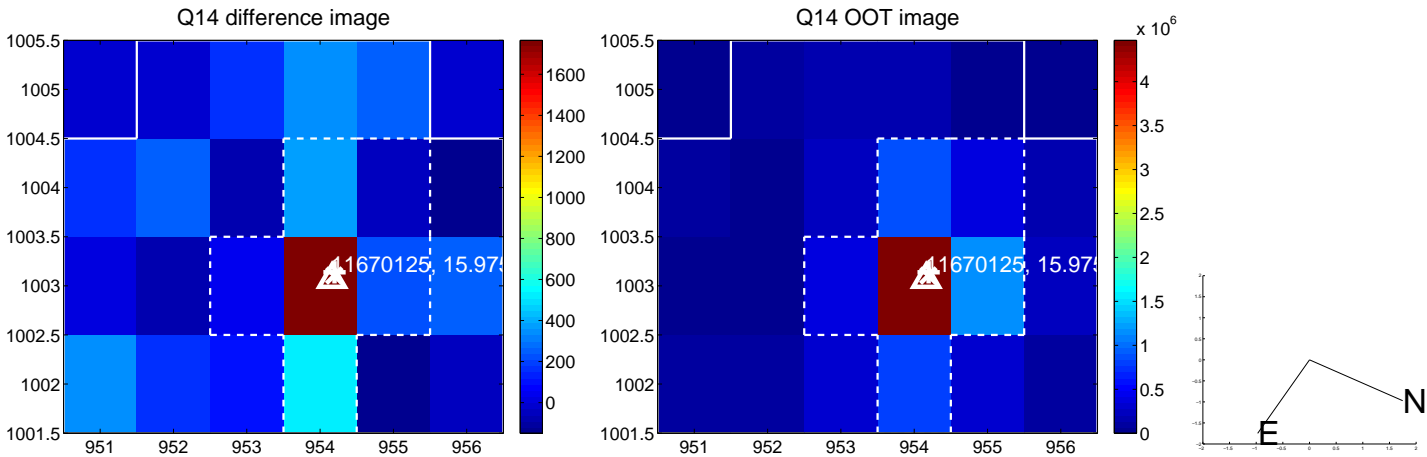
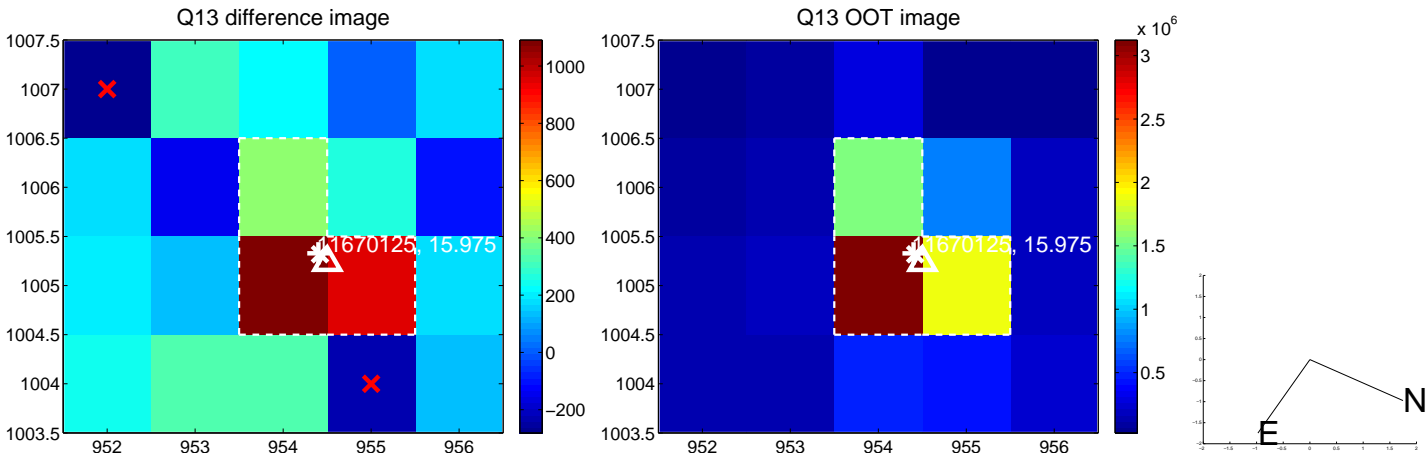
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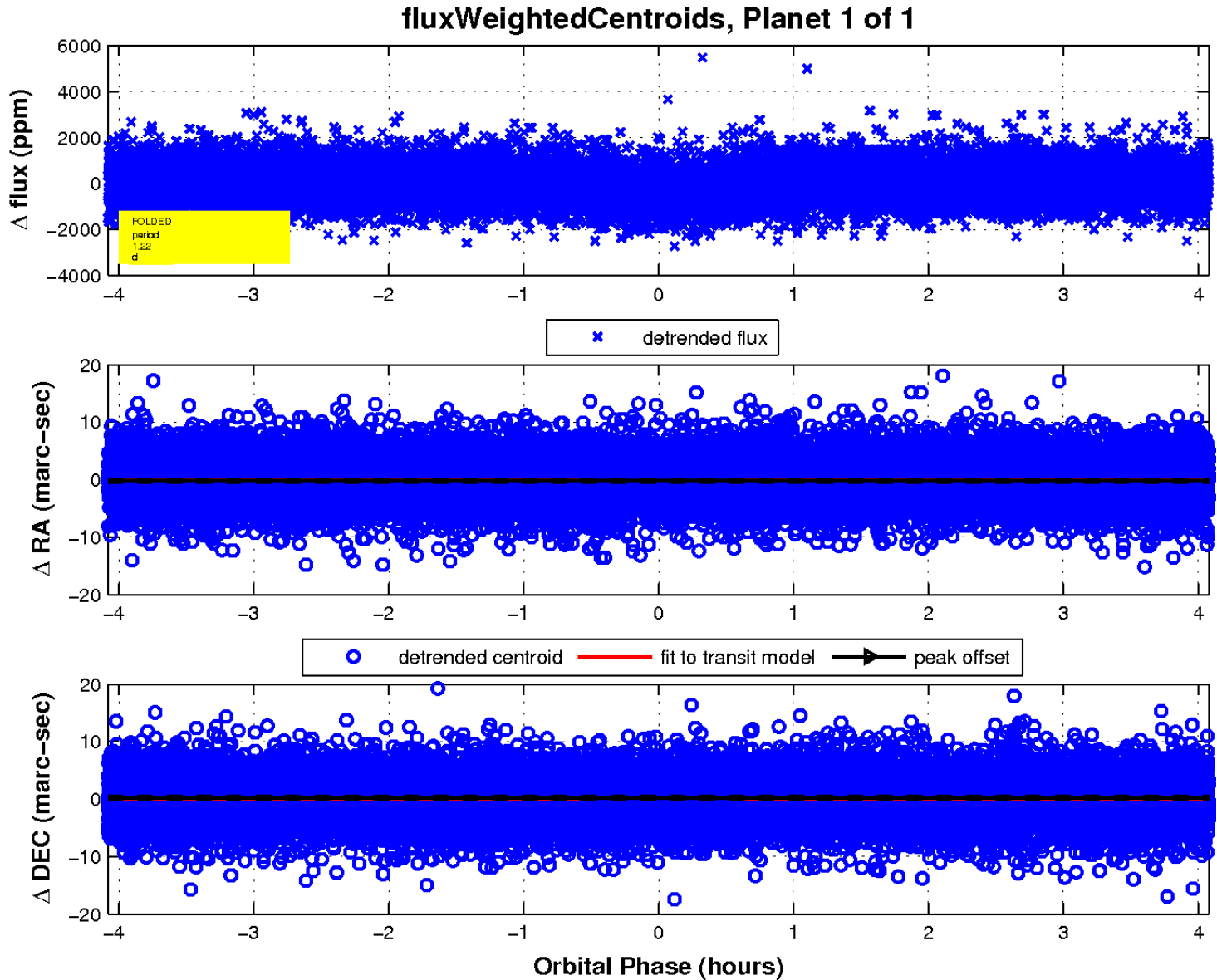
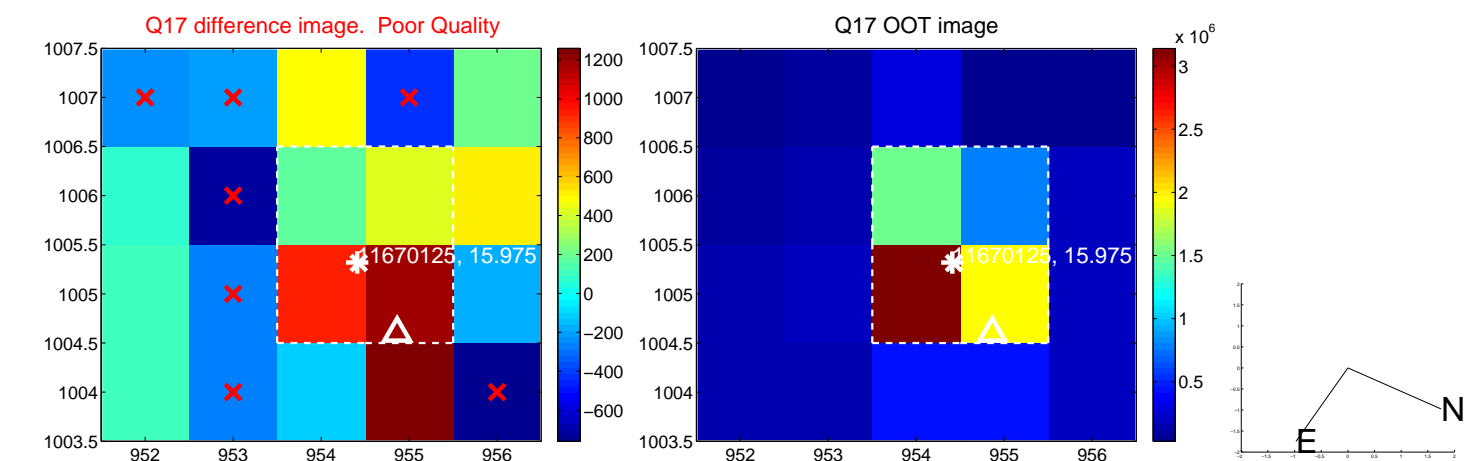
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UKIRT Image

Declination

