

KIC 011456256

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})
011456256-01	OBS	5901.01	61.613323	133.850734	77.8	15.182	8.9	10.1	1.39	6533	1.53	30.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011456256-01	OBS	PC	0.93	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.

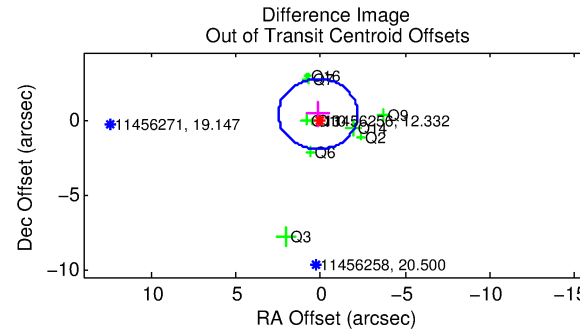
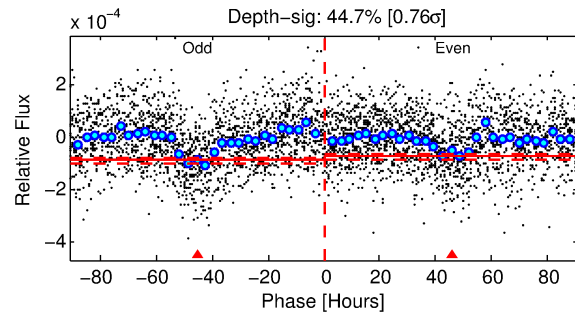
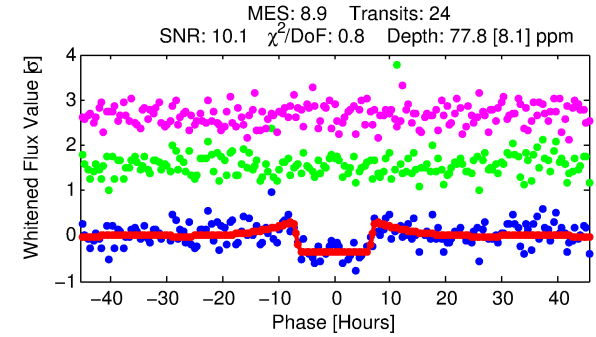
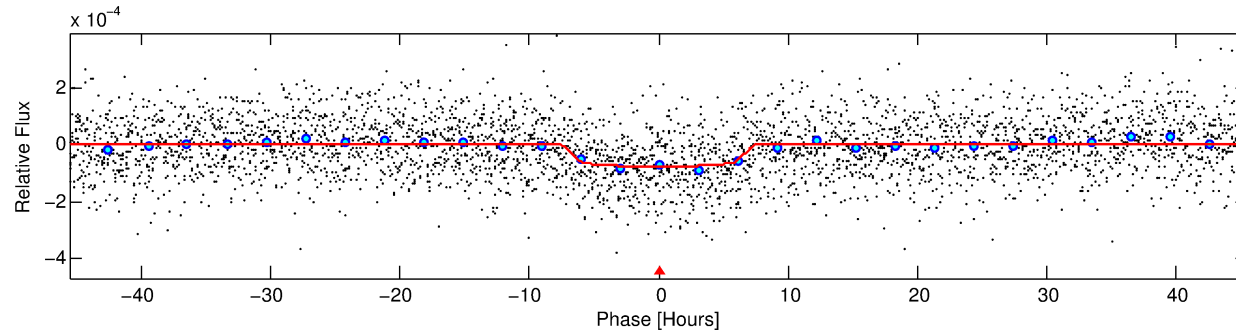
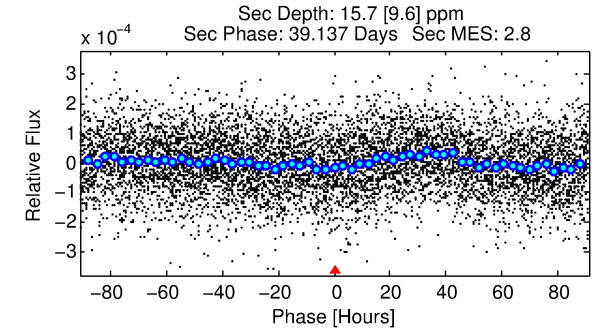
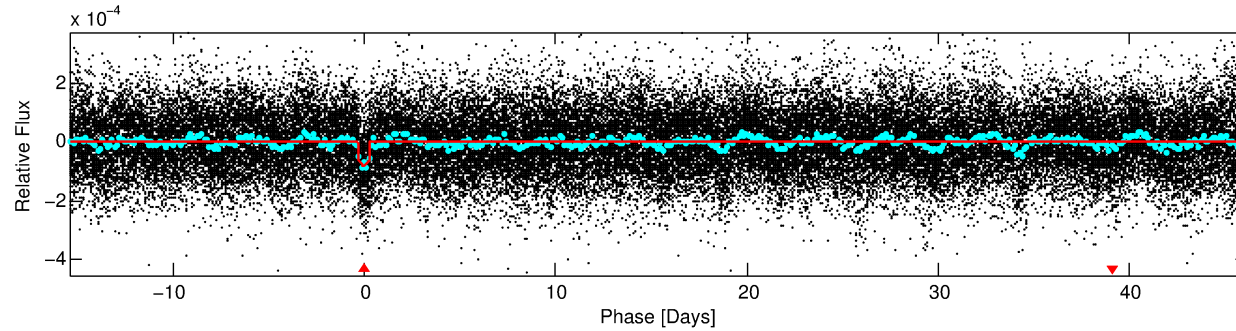
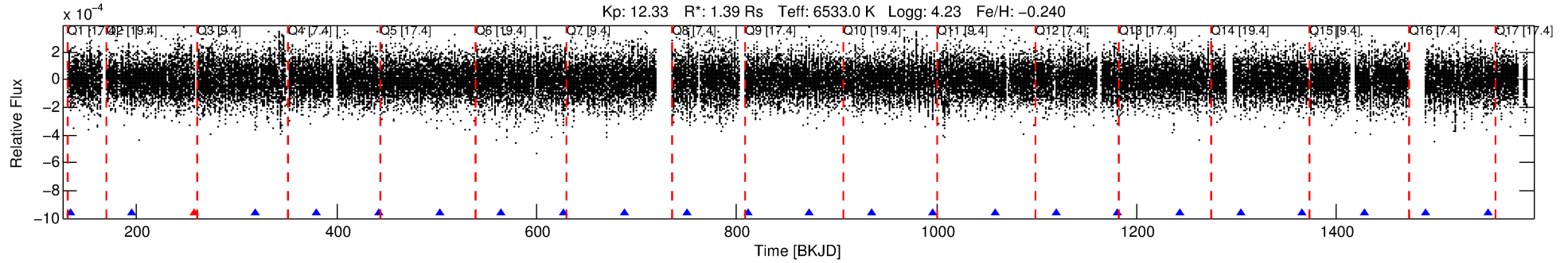
Ephemeris Match Information For 011456256-01

No Significant Match Found

DV One-Page Summary

KIC: 11456256 Candidate: 1 of 1 Period: 61.613 d

KOI: K05901.01 Corr: 0.960



DV Fit Results:

Period = 61.61332 [0.00118] d
Epoch = 133.8507 [0.0161] BKJD
Rp/R* = 0.0101 [0.0007]
a/R* = 9.98 [2.35]
b = 0.96 [0.02]
Seff = 30.08 [8.21]
Teff = 597 [41] K
Rp = 1.53 [0.33] Re
a = 0.3228 [0.0558] AU
Ag = 386.57 [259.98] [1.48σ]
Teffp = 4094 [649] K [5.37σ]

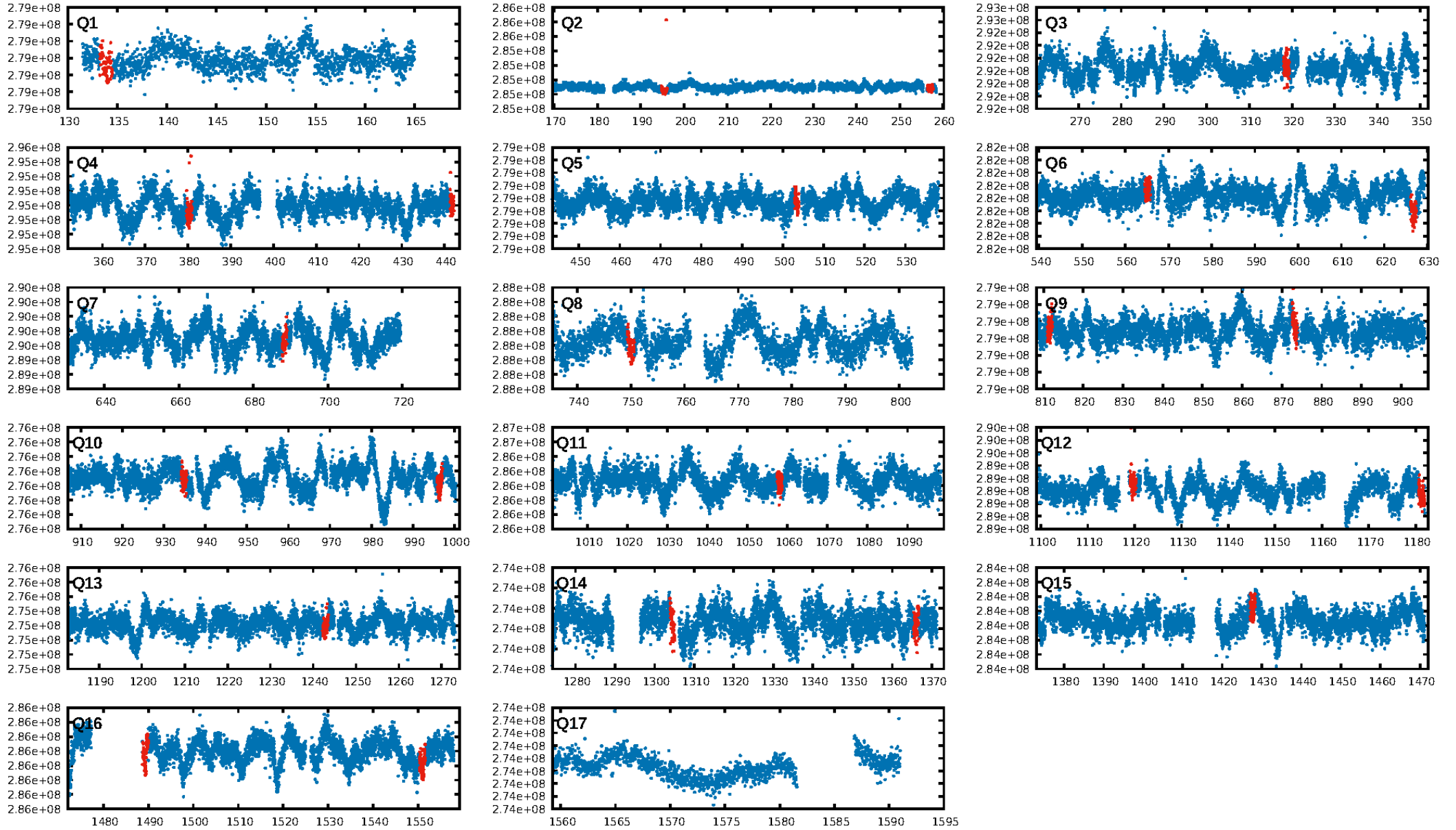
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 65.6%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.49e-17
RollingBand-fgt: 0.96 [22/23]
GhostDiagnostic-chr: -16.58
Centroid-sig: 3.6%
Centroid-so: 1.096 arcsec [1.94σ]
OotOffset-rm: 0.408 arcsec [0.52σ]
KicOffset-rm: 0.485 arcsec [0.55σ]
OotOffset-st: 4/2/1/2 [9]
KicOffset-st: 4/2/1/2 [9]
DiffImageQuality-fgm: 0.56 [5/9]
DiffImageOverlap-fno: 1.00 [14/14]

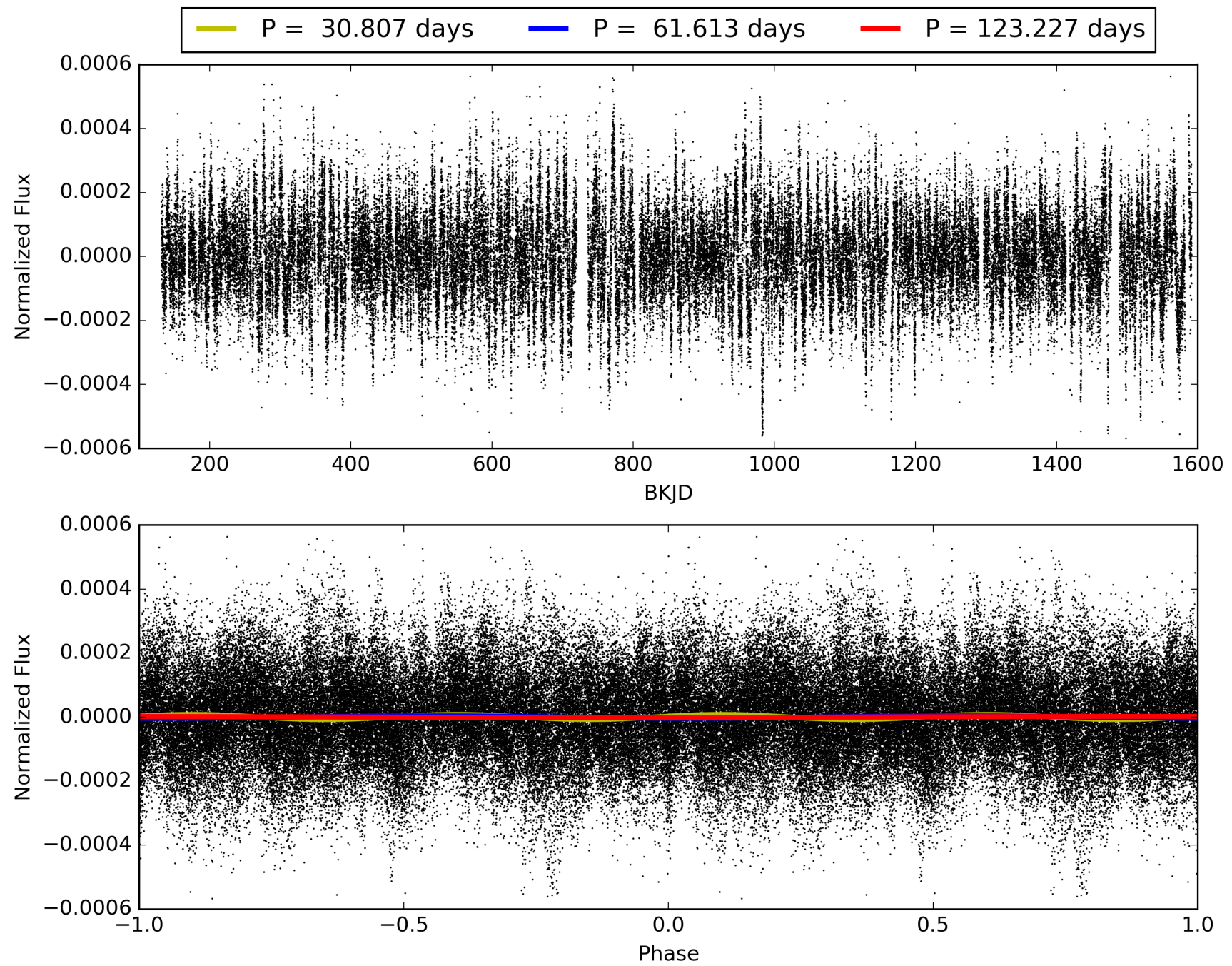
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:22:23 Z

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

TCE 011456256-01, PDC Light Curves

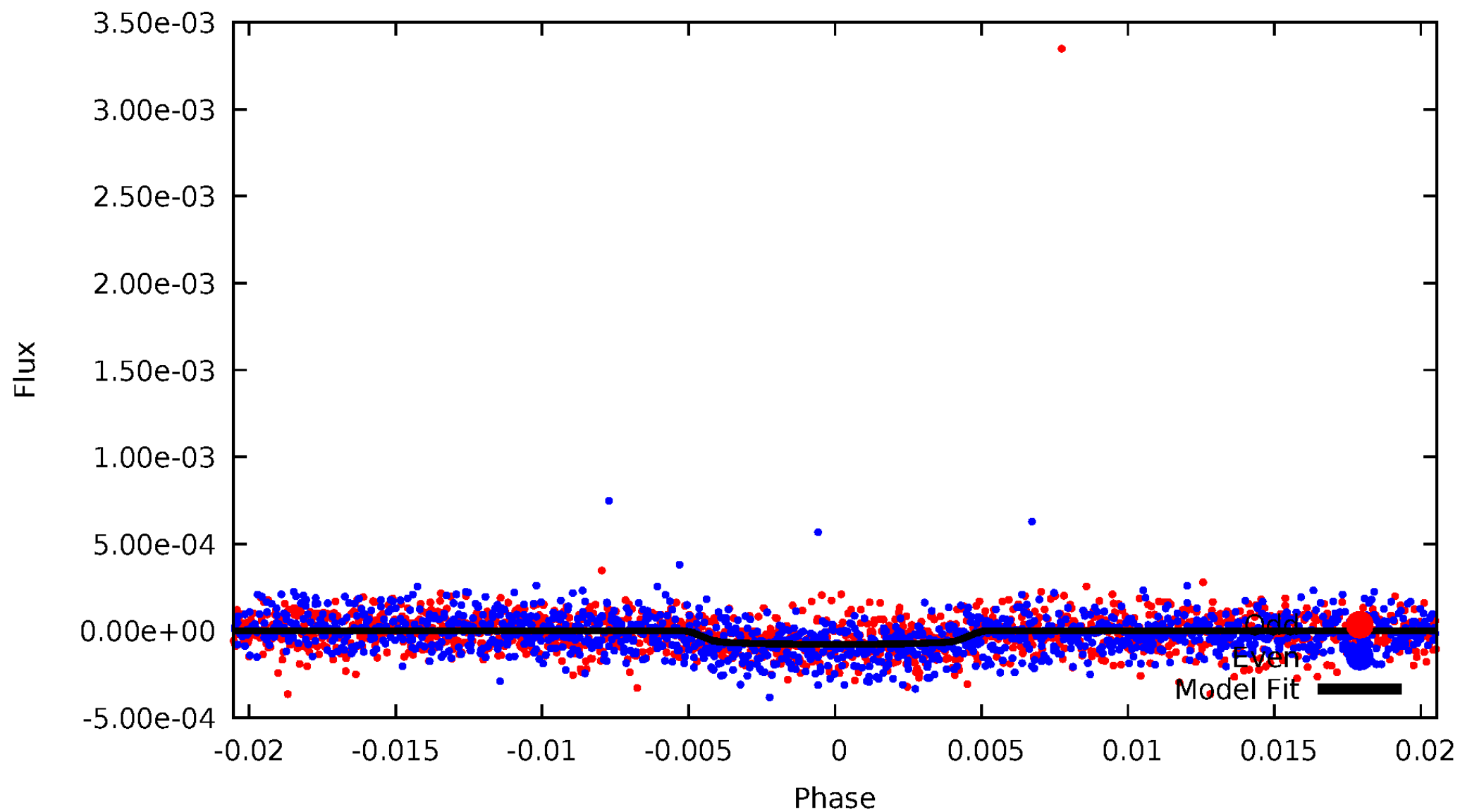


TCE 011456256-01



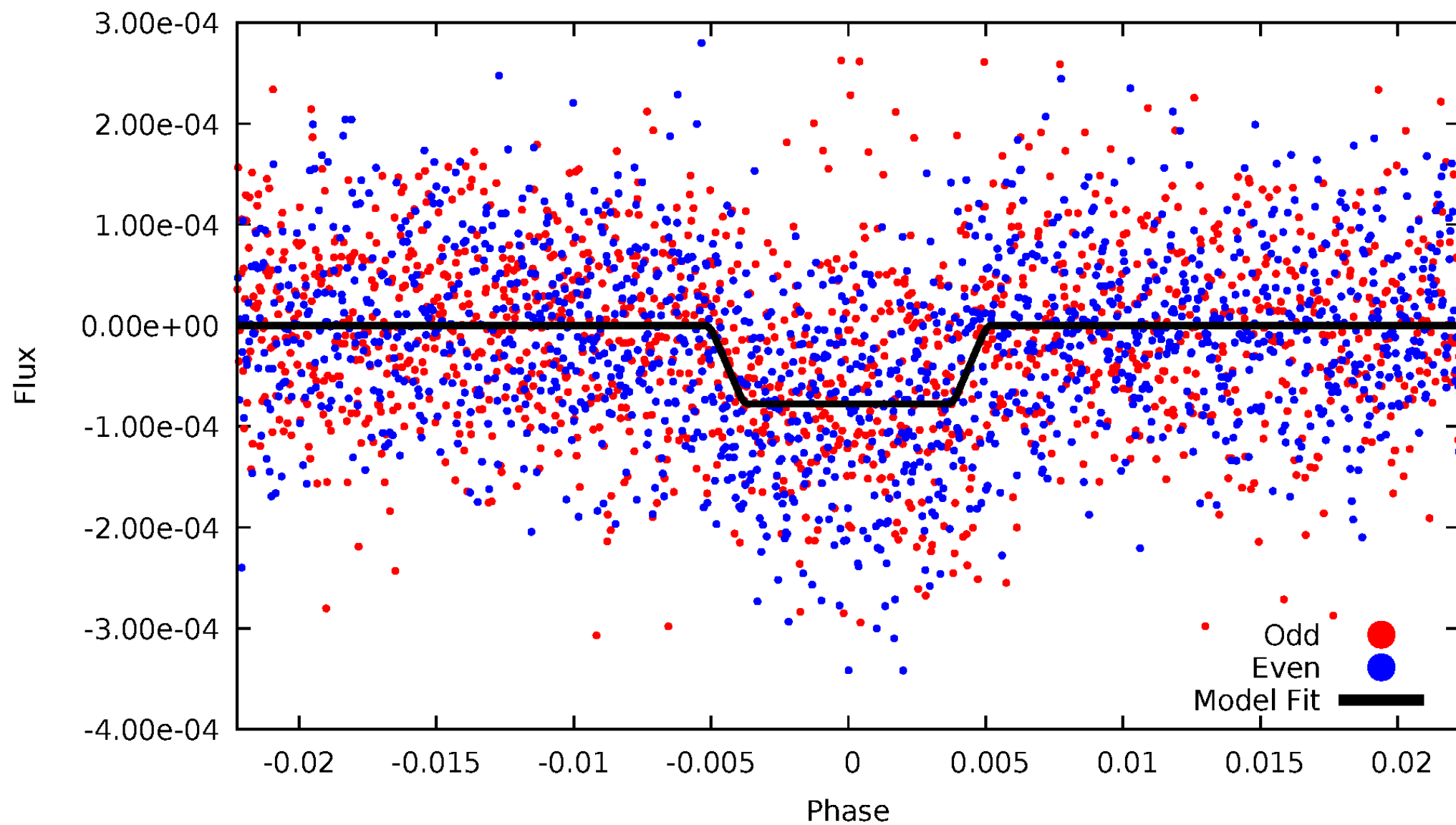
DV Odd/Even

TCE 011456256-01

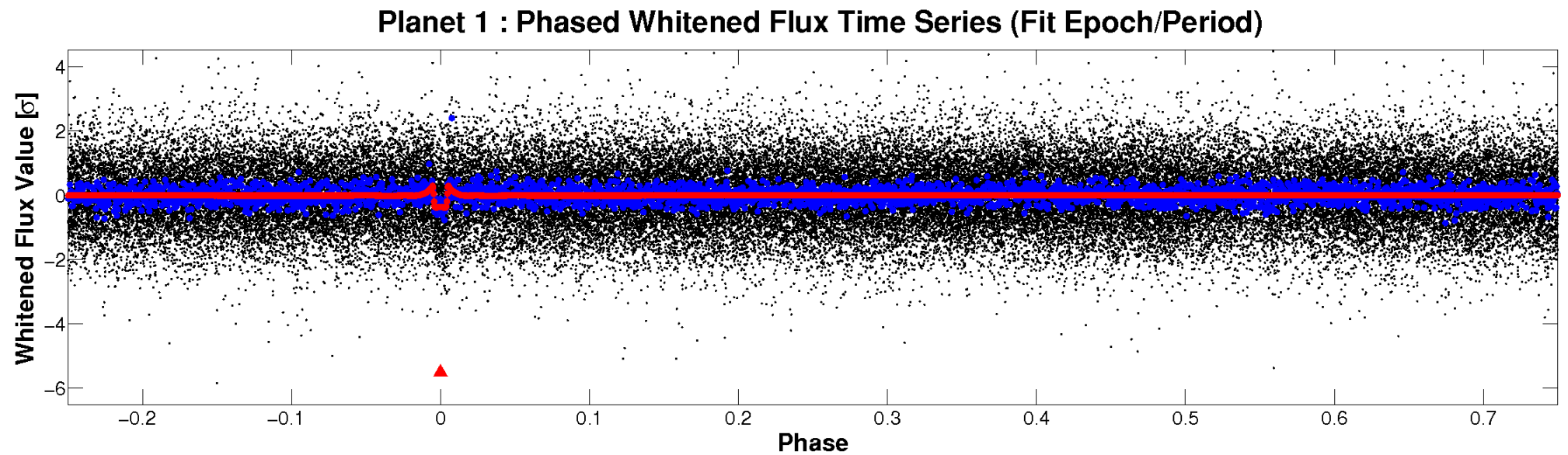
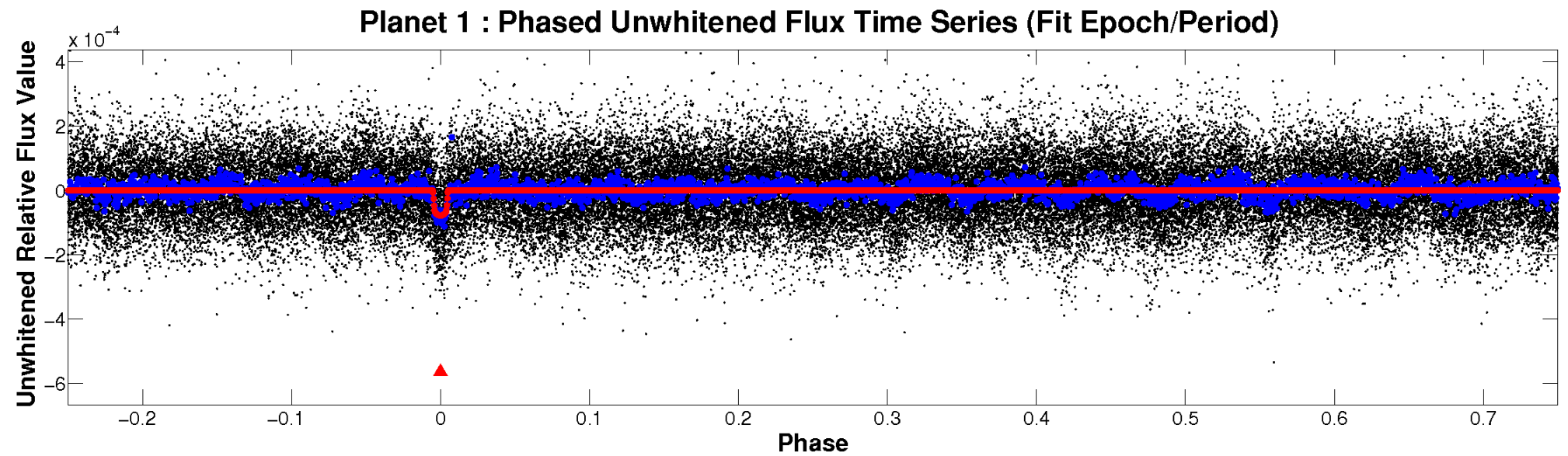


ALT Odd/Even

TCE 011456256-01

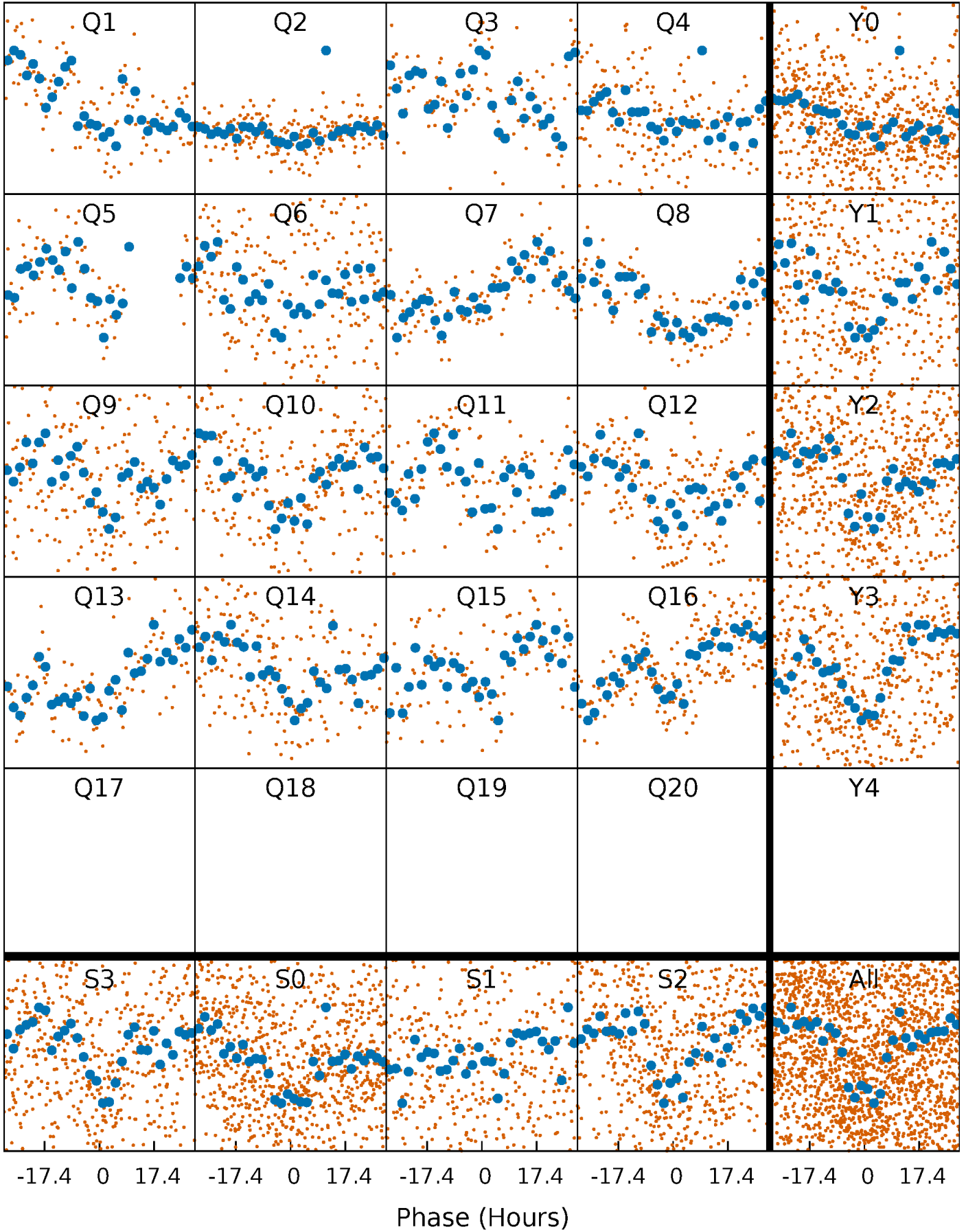


Non-Whitened Vs. Whitened Light Curve



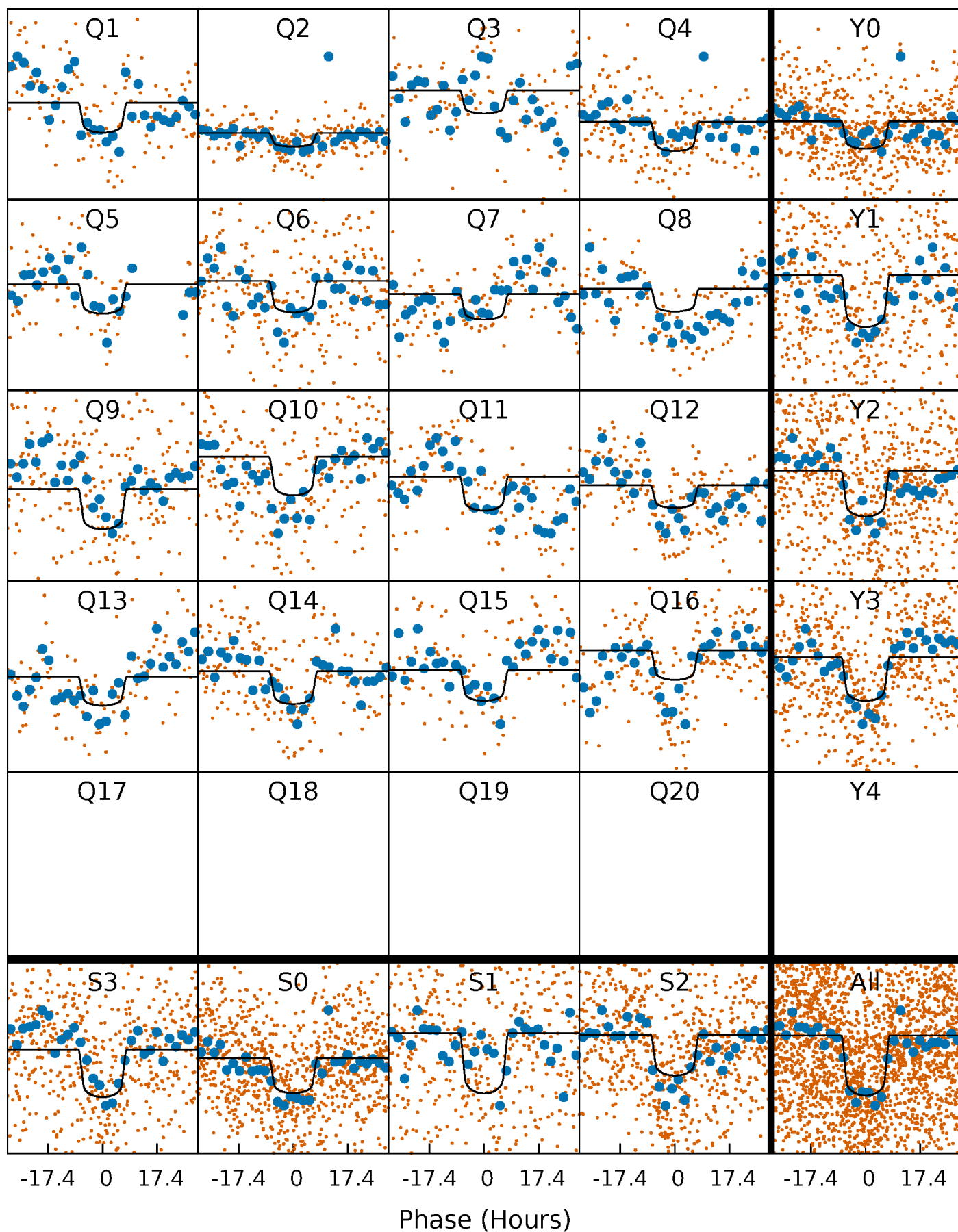
PDC Quarter-Phased Transit Curves

TCE 011456256-01 P= 61.613323 Days $T_0=133.850734$ (BKJD)



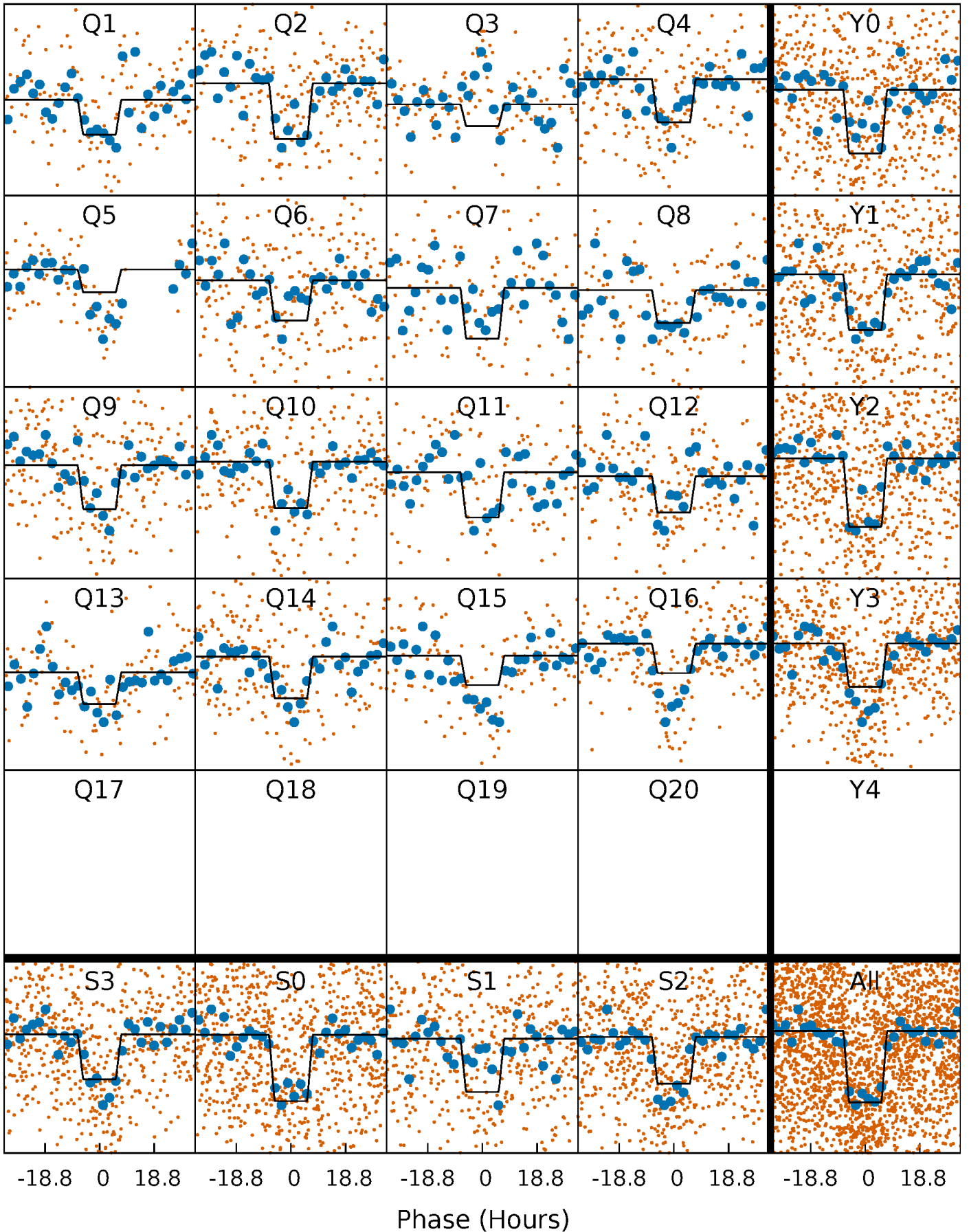
DV Quarter-Phased Transit Curves

TCE 011456256-01 P= 61.613323 Days $T_0=133.850734$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

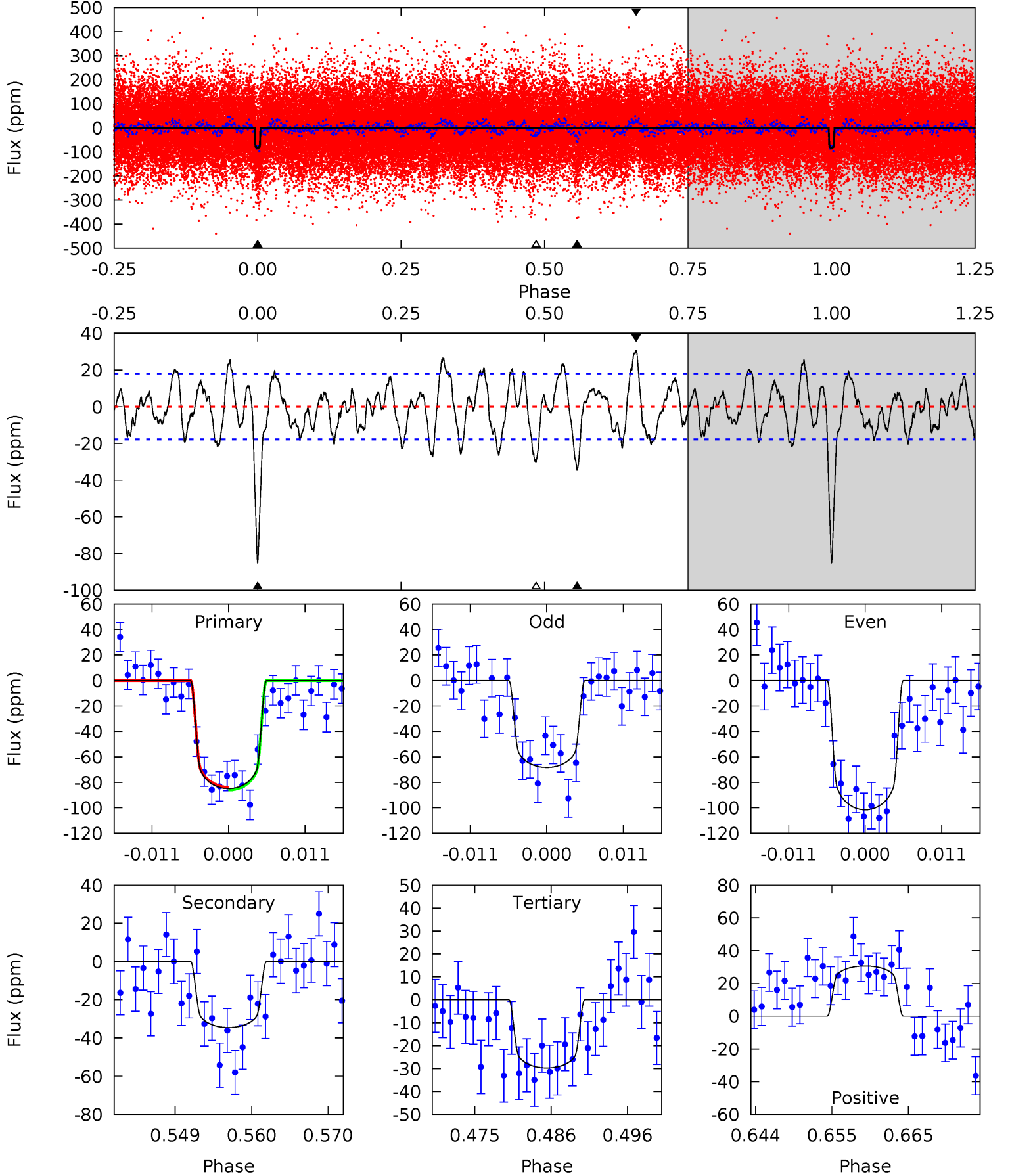
TCE 011456256-01 P= 61.614947 Days $T_0=133.833933$ (BKJD)



DV Model-Shift Uniqueness Test

011456256-01, P = 61.613323 Days, E = 72.237411 Days

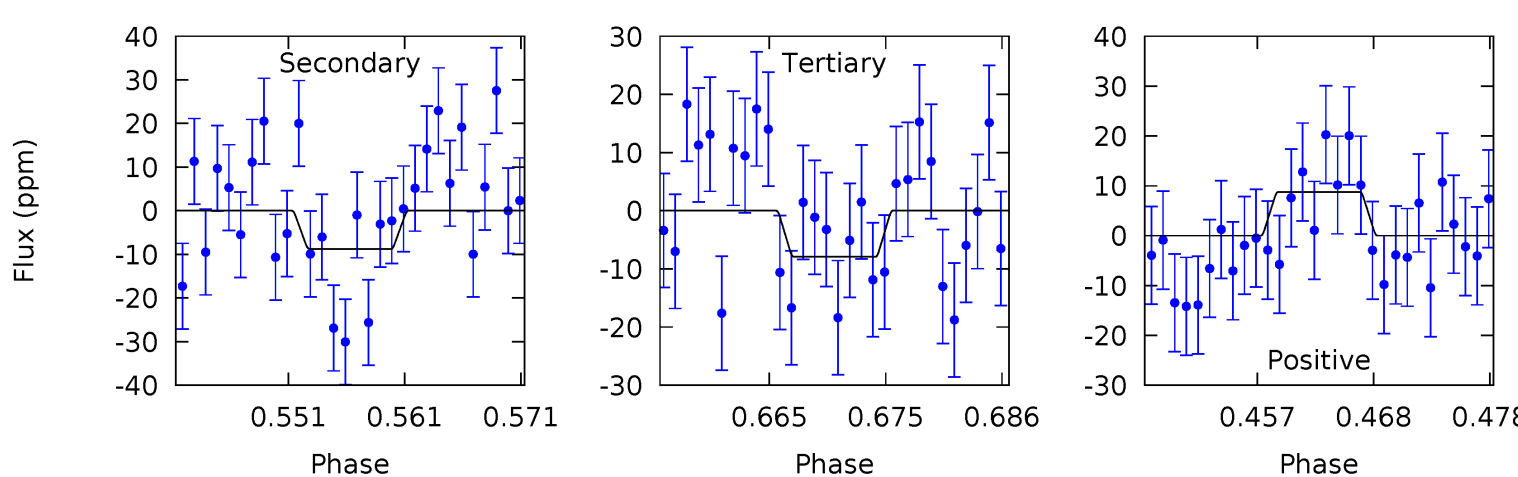
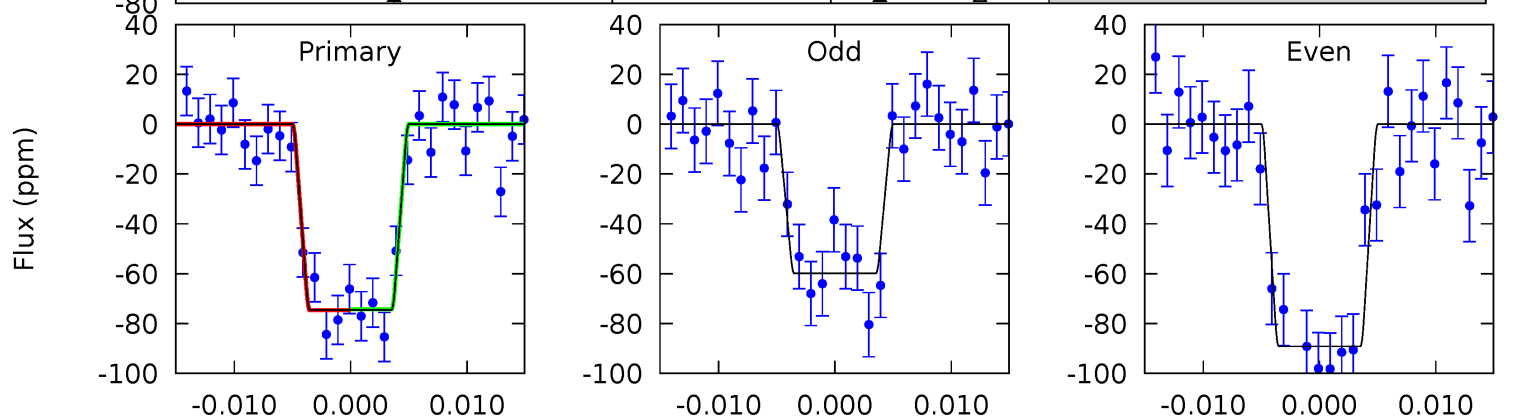
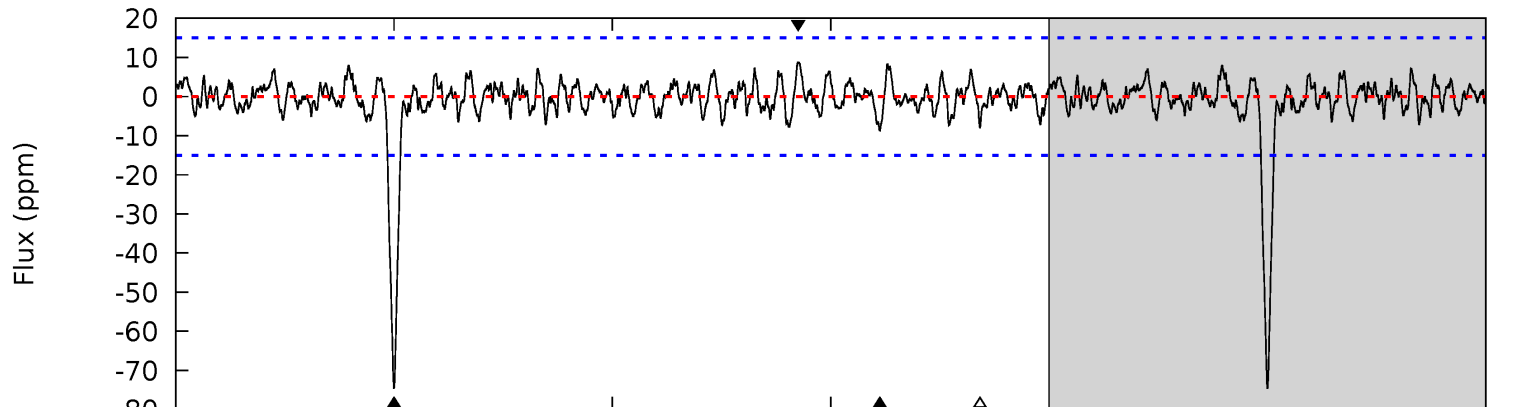
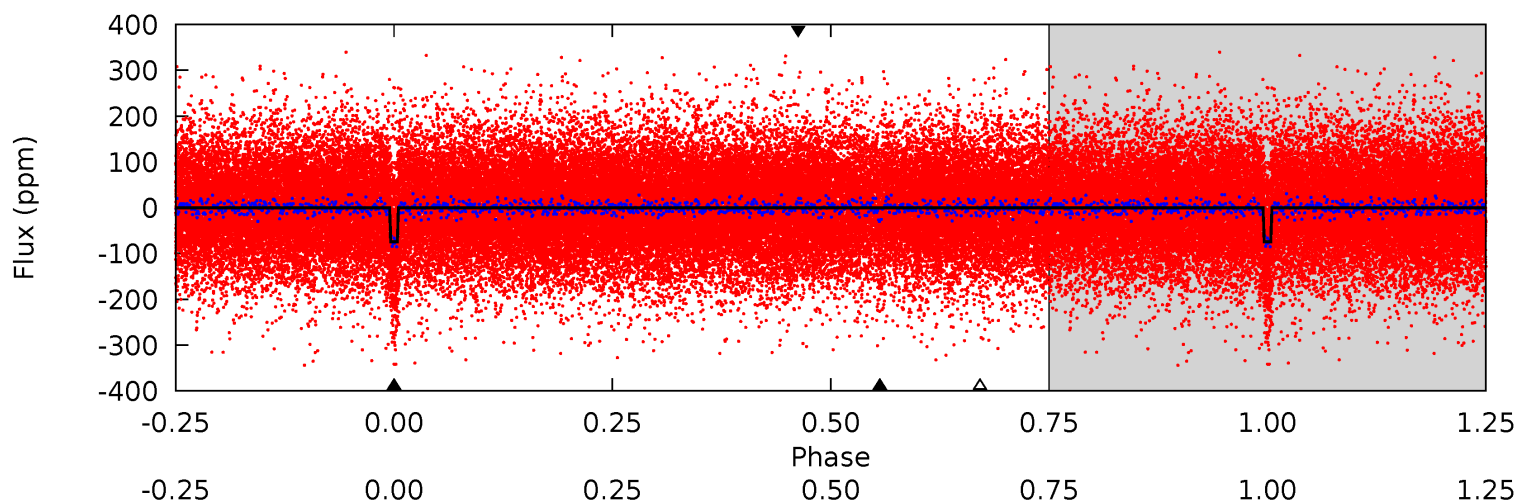
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.0	9.75	8.40	8.64	5.02	2.56	3.41	15.6	15.3	1.35	1.11	4.69	1.13	0.26	0.30



Alt Model-Shift Uniqueness Test

011456256-01, P = 61.614947 Days, E = 72.218986 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.9	2.93	2.65	2.93	5.02	2.56	1.02	22.2	22.0	0.28	-0.01	4.88	0.98	0.11	0.06



Stellar Parameters For KIC 011456256

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6533^{+149}_{-182}	$4.227^{+0.135}_{-0.135}$	$-0.240^{+0.250}_{-0.300}$	$1.386^{+0.288}_{-0.235}$	$1.184^{+0.161}_{-0.161}$	$0.626^{+0.406}_{-0.245}$
	+2%/-3%	+3%/-3%	+104%/-125%	+21%/-17%	+14%/-14%	+65%/-39%
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 011456256-01 / KOI 5901.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-35 ± 4	$1.52^{+0.22}_{-0.20}$	833^{+47}_{-43}	5055^{+207}_{-218}	842^{+277}_{-193}
Alt.	-9 ± 3	$1.33^{+0.19}_{-0.17}$	831^{+49}_{-47}	4063^{+270}_{-296}	281^{+128}_{-108}

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 $A_{obs} \gg 1.0$

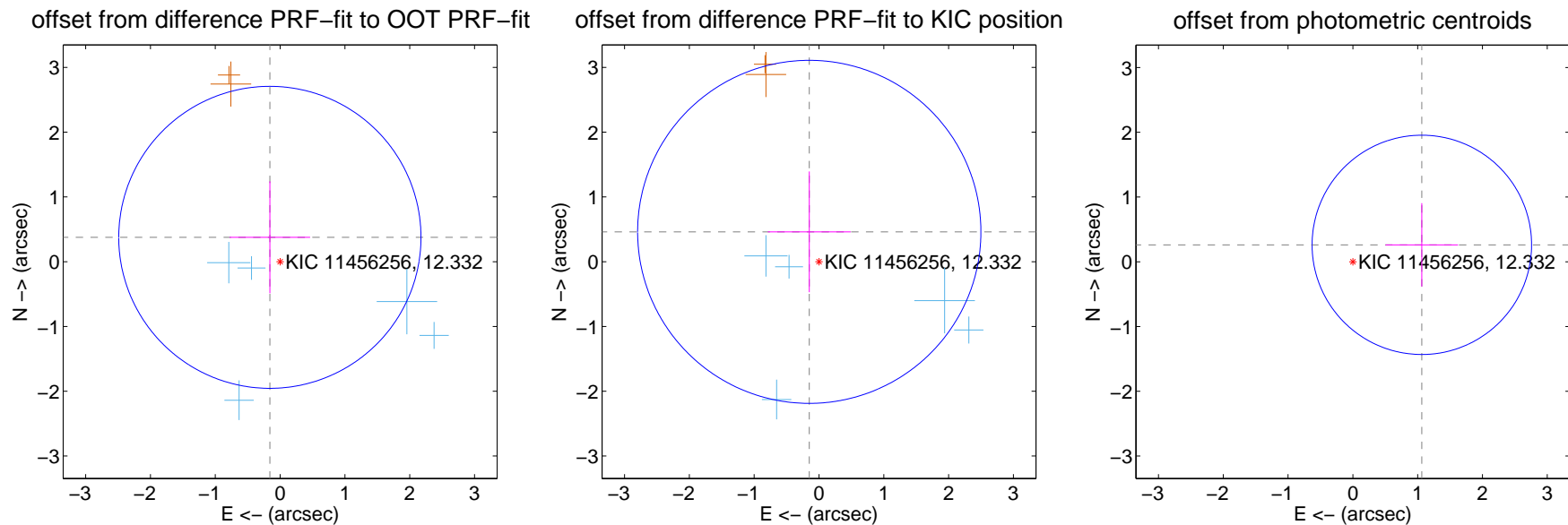
DV Centroid Data

Supplemental centroid analysis for 011456256-01. Kepler magnitude: 12.33. Transit SNR 10.11

There are 5 quarters with good PRF difference image offsets

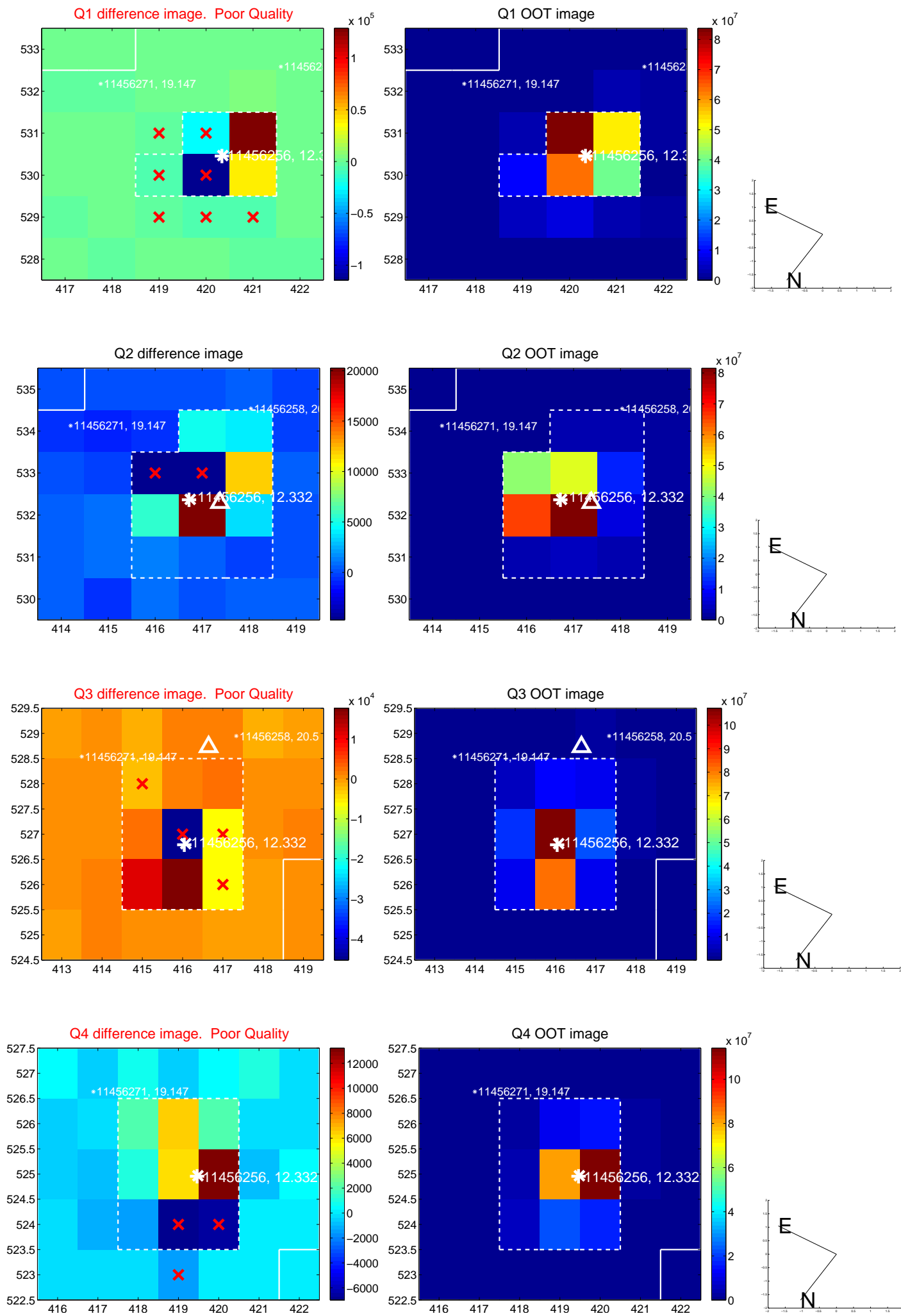
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.408 ± 0.777	0.52	0.158 ± 0.622	0.376 ± 0.865
PRF-fit source offset from KIC position	0.485 ± 0.883	0.55	0.150 ± 0.640	0.461 ± 0.933
photometric centroid source offset	1.10 ± 0.56	1.94	-1.06 ± 0.56	0.26 ± 0.64

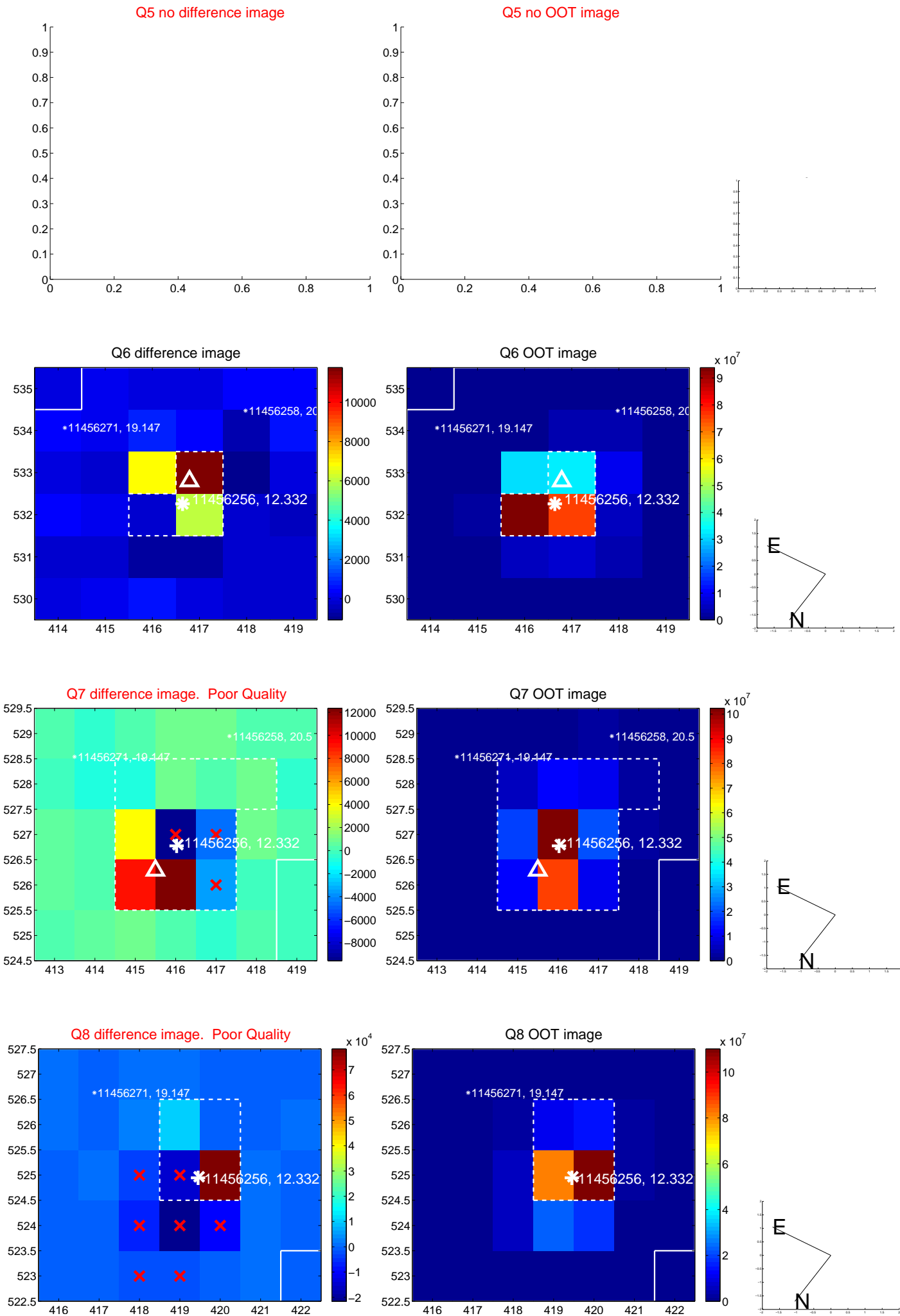


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

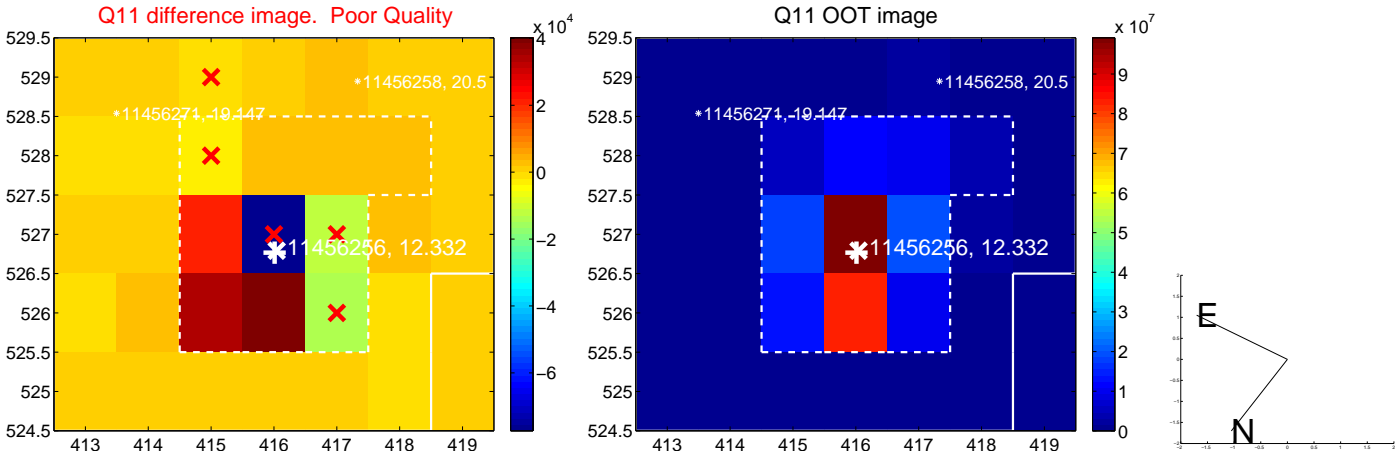
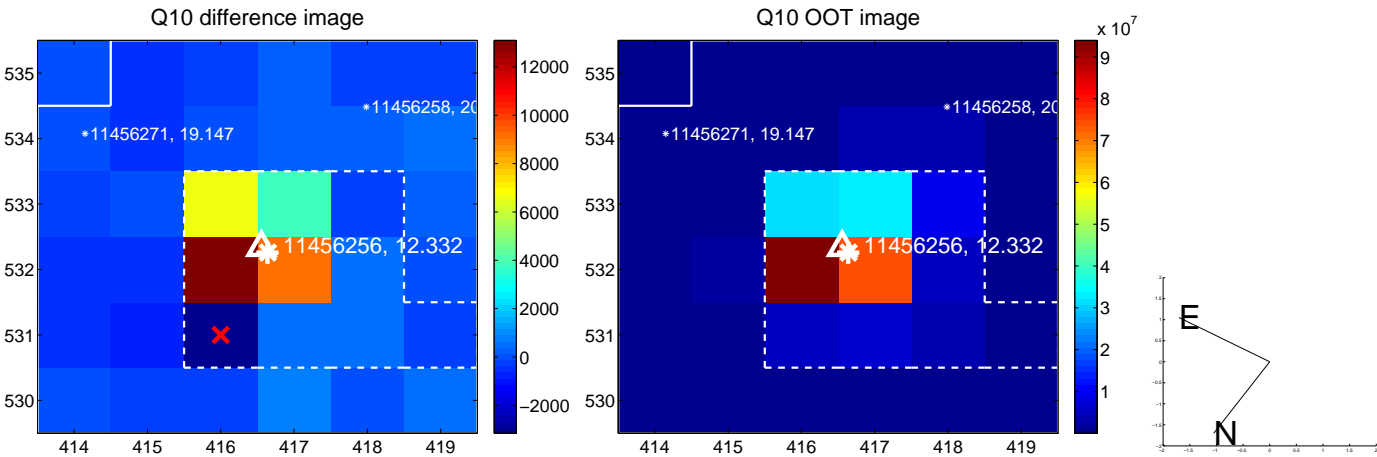
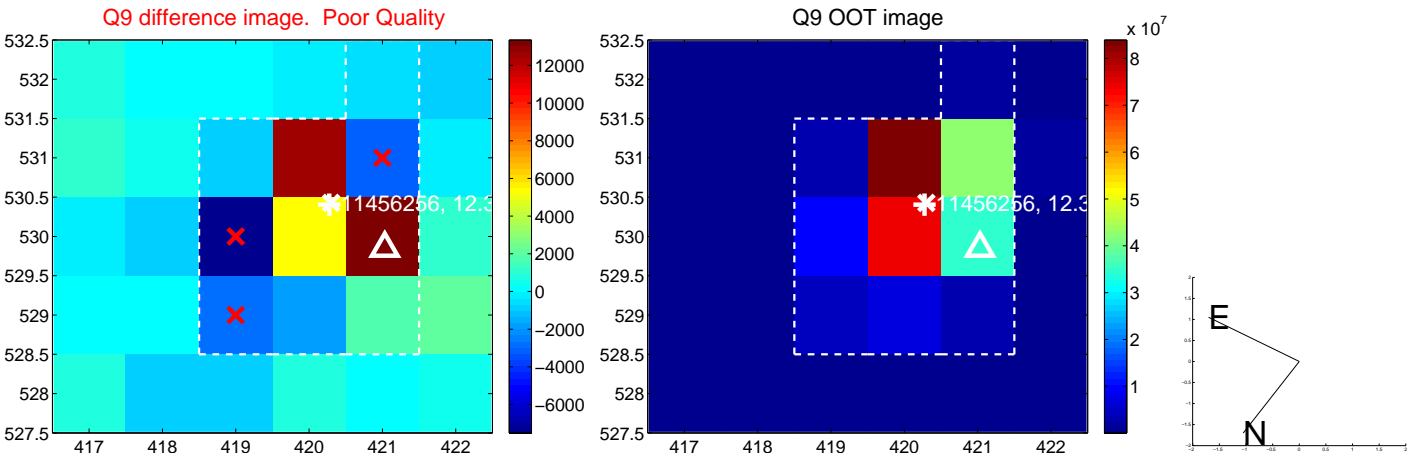
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



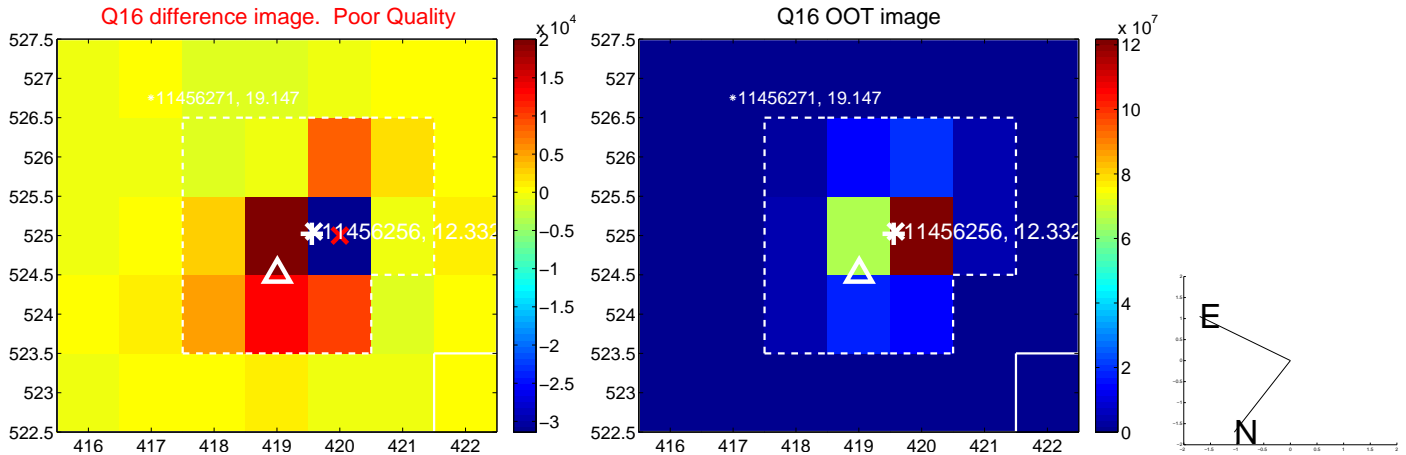
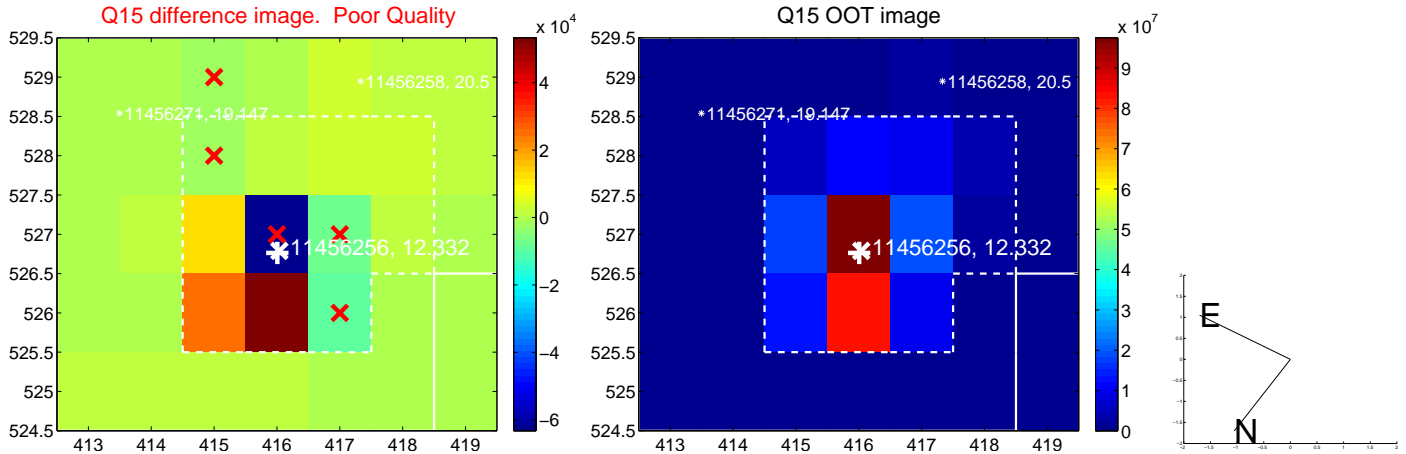
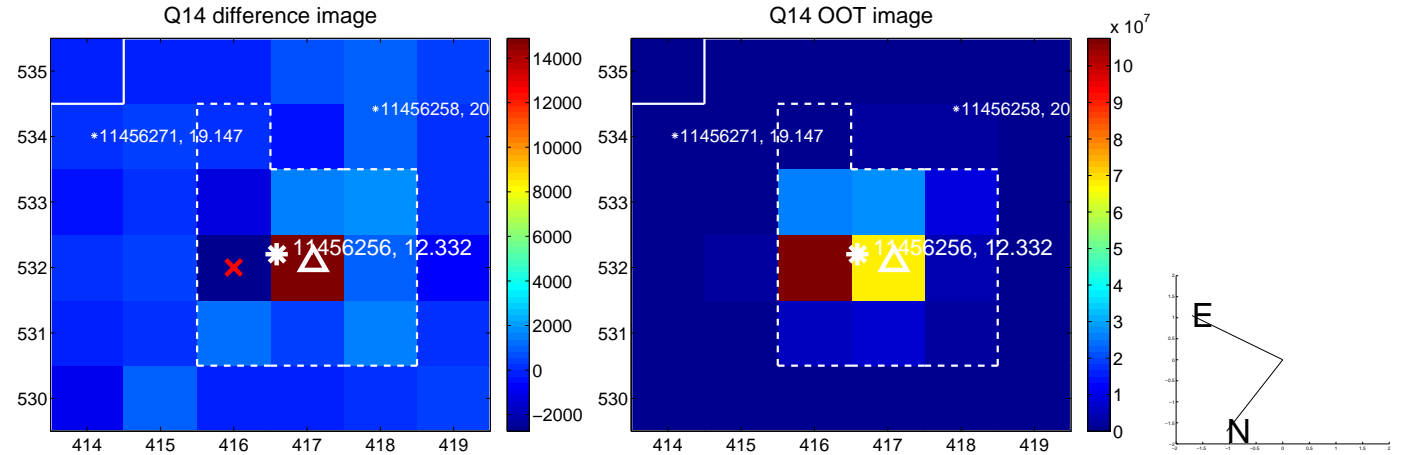
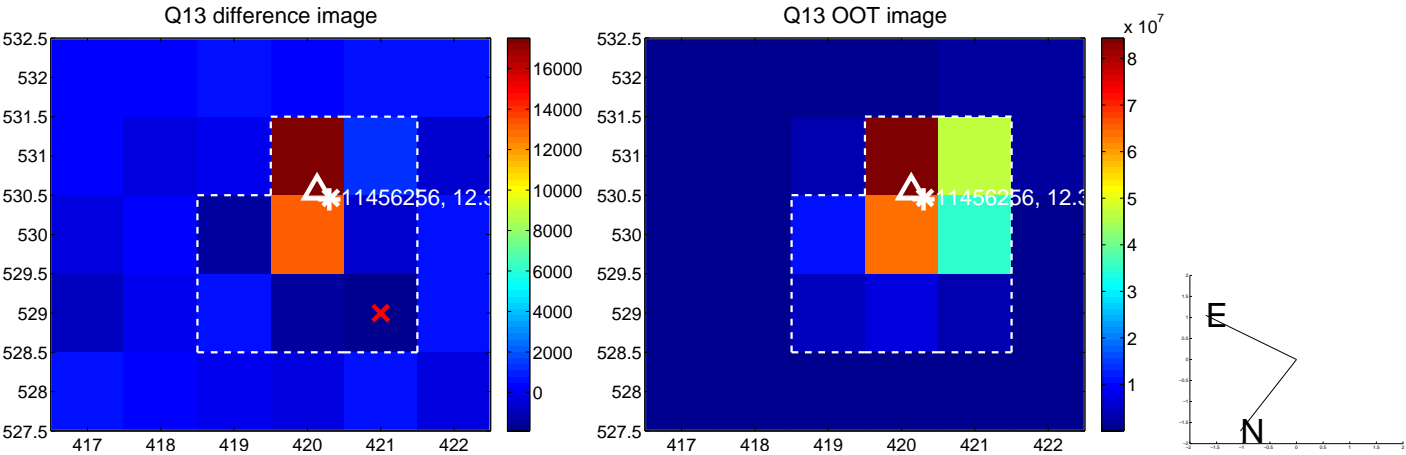
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



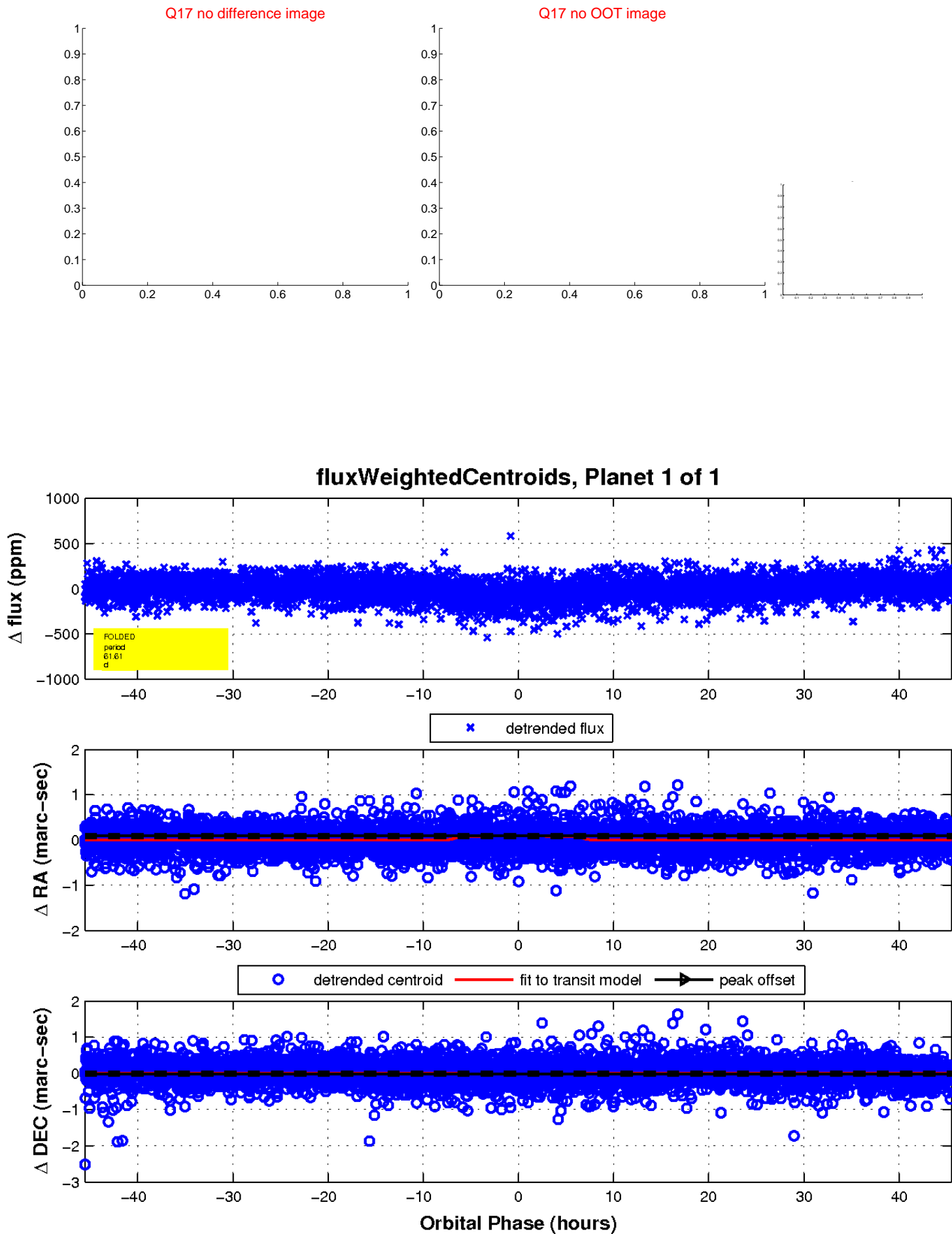
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

