

KIC 003236705

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})
003236705-01	OBS	3343.01	83.266375	194.239490	658.3	2.898	11.2	12.5	1.18	5538	3.24	8.80

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003236705-01	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.

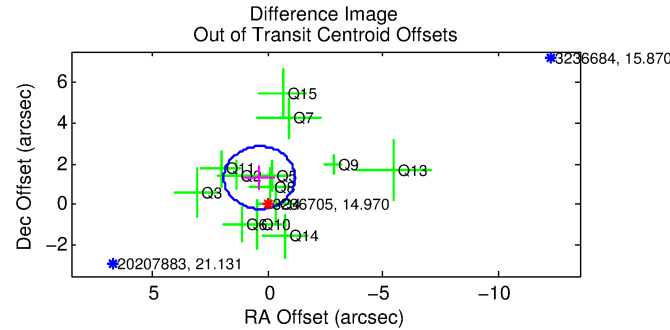
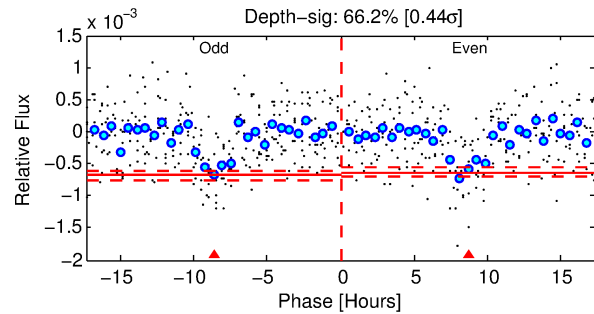
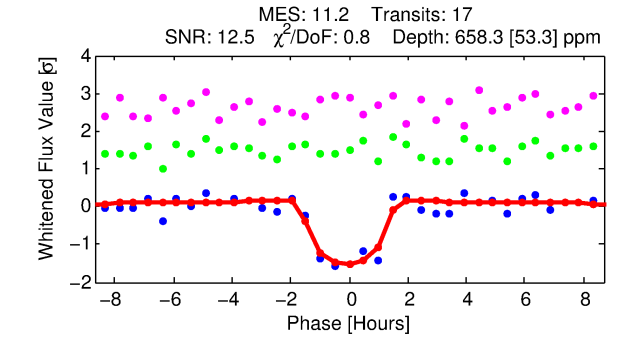
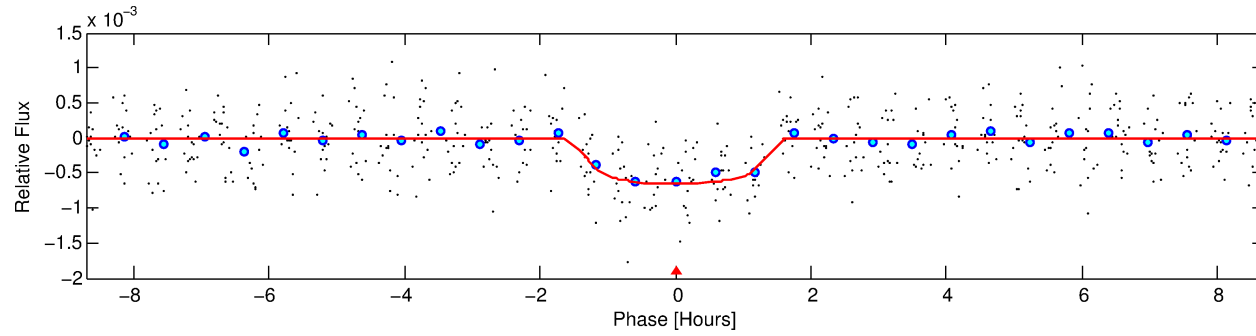
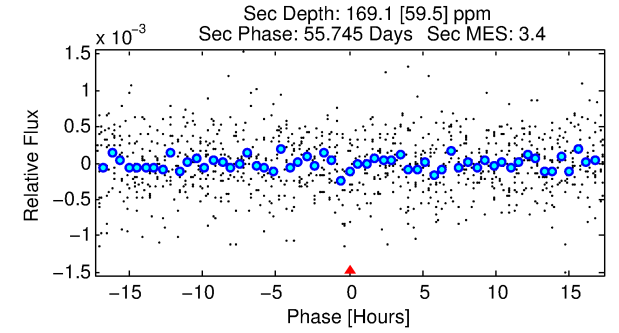
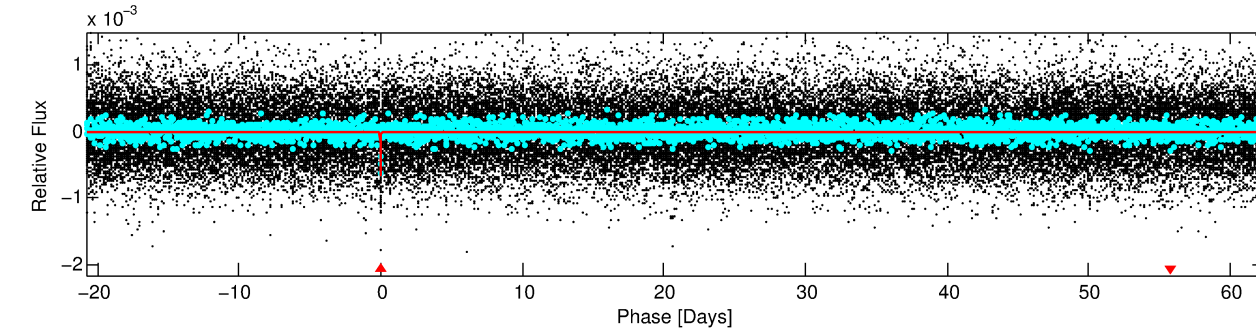
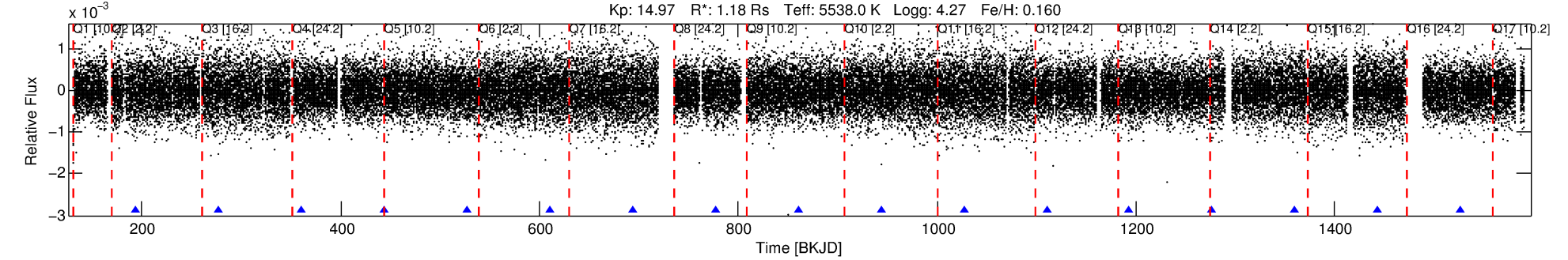
Ephemeris Match Information For 003236705-01

No Significant Match Found

DV One-Page Summary

KIC: 3236705 Candidate: 1 of 1 Period: 83.266 d

KOI: K03343.01 Corr: 0.994



DV Fit Results:

Period = 83.26638 [0.00053] d
Epoch = 194.2395 [0.0052] BKJD
Rp/R* = 0.0252 [0.0252]
a/R* = 162.66 [646.71]
b = 0.71 [2.85]
Seff = 8.80 [2.52]
Teq = 439 [31] K
Rp = 3.24 [3.28] Re
a = 0.3653 [0.0618] AU
Ag = 1180.13 [2416.01] [0.49 σ]
Teffp = 3979 [2018] K [1.75 σ]

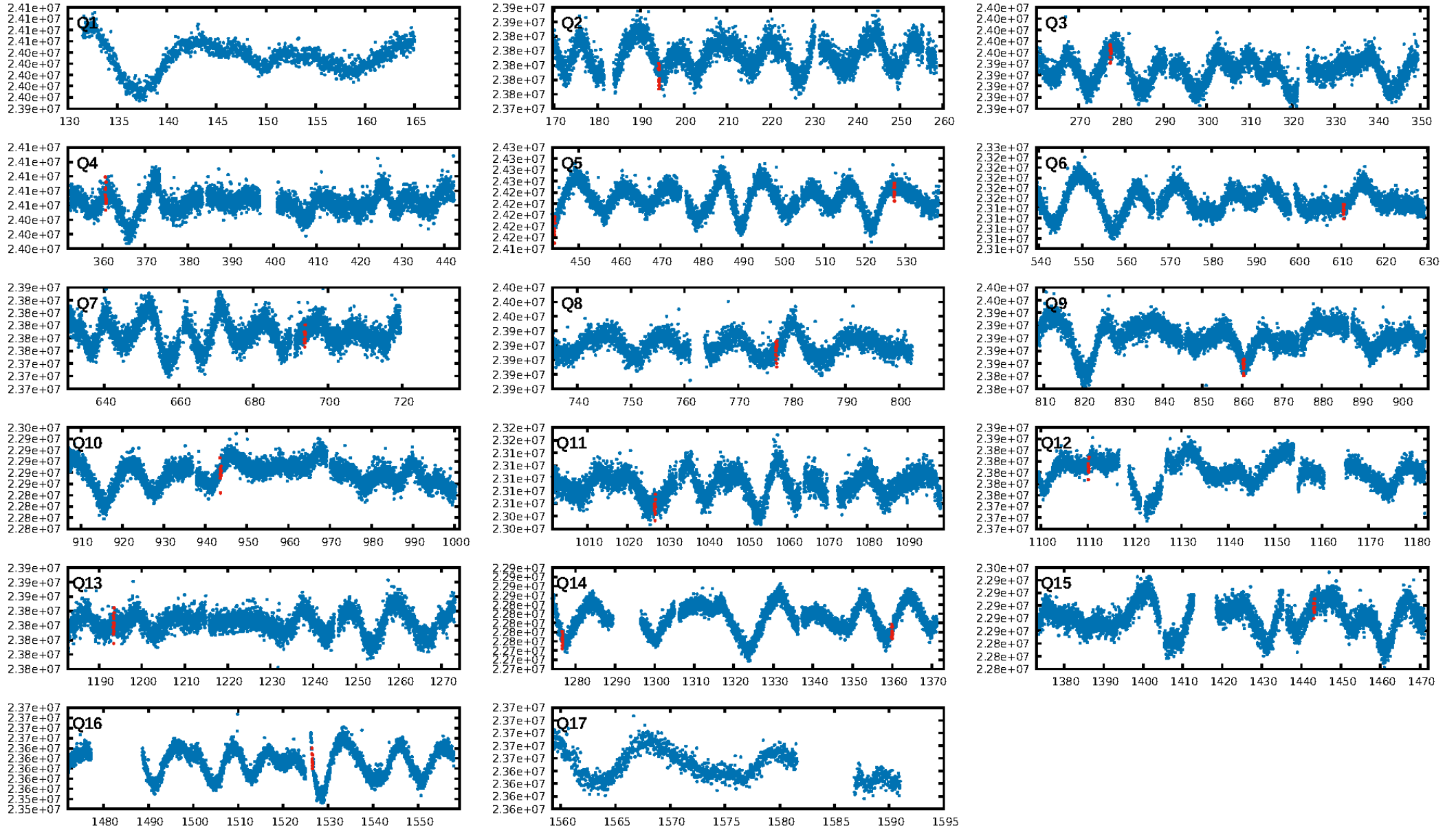
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 88.3%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 7.53e-28
RollingBand-fgt: 1.00 [17/17]
GhostDiagnostic-chr: -11.2
Centroid-sig: 99.9%
Centroid-so: 0.331 arcsec [0.31 σ]
OotOffset-rm: 1.361 arcsec [2.67 σ]
KicOffset-rm: 1.260 arcsec [2.42 σ]
OotOffset-st: 4/4/2/3 [13]
KicOffset-st: 4/4/2/3 [13]
DiffImageQuality-fgm: 0.38 [5/13]
DiffImageOverlap-fno: 1.00 [13/13]

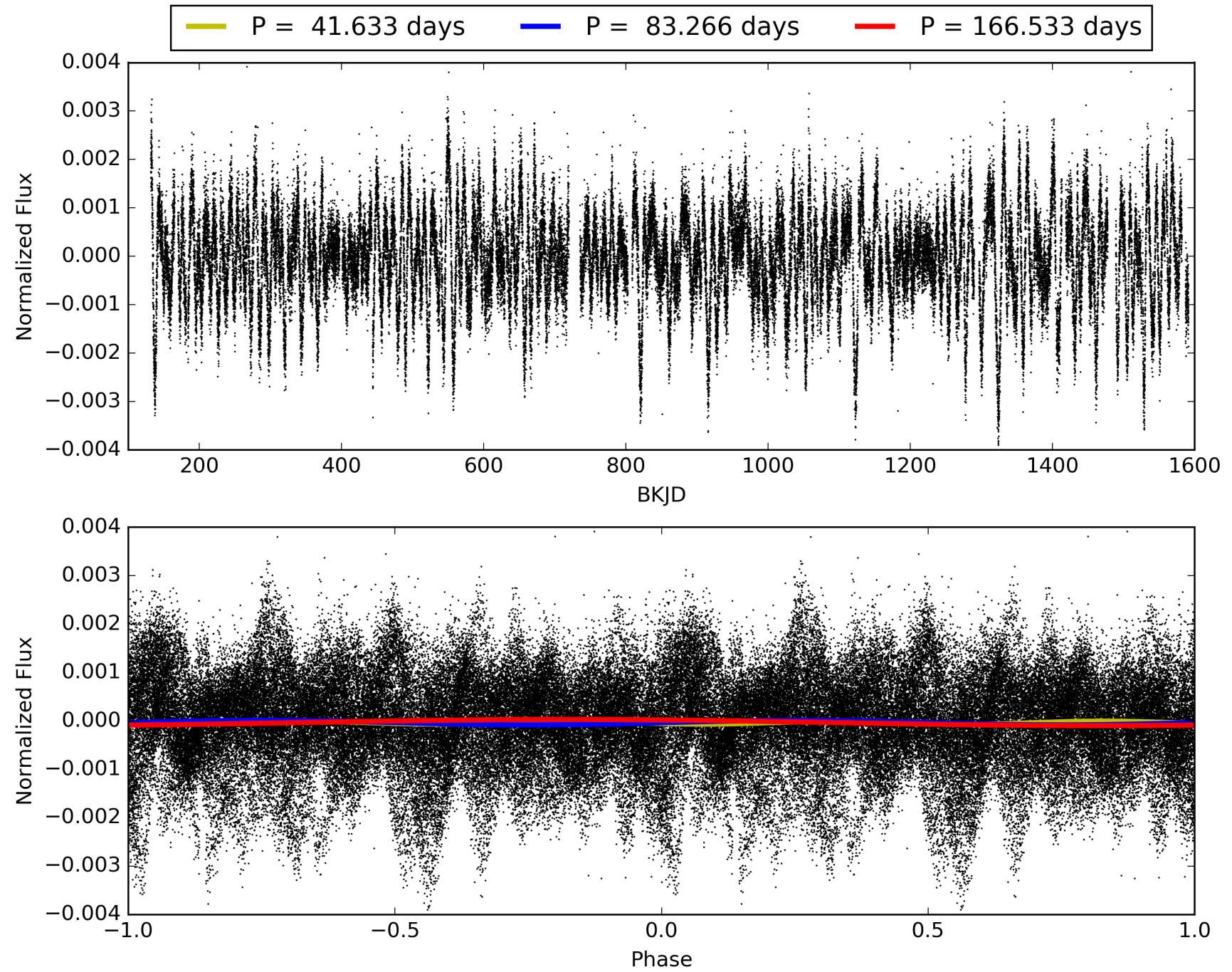
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 18:58:14 Z

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

TCE 003236705-01, PDC Light Curves

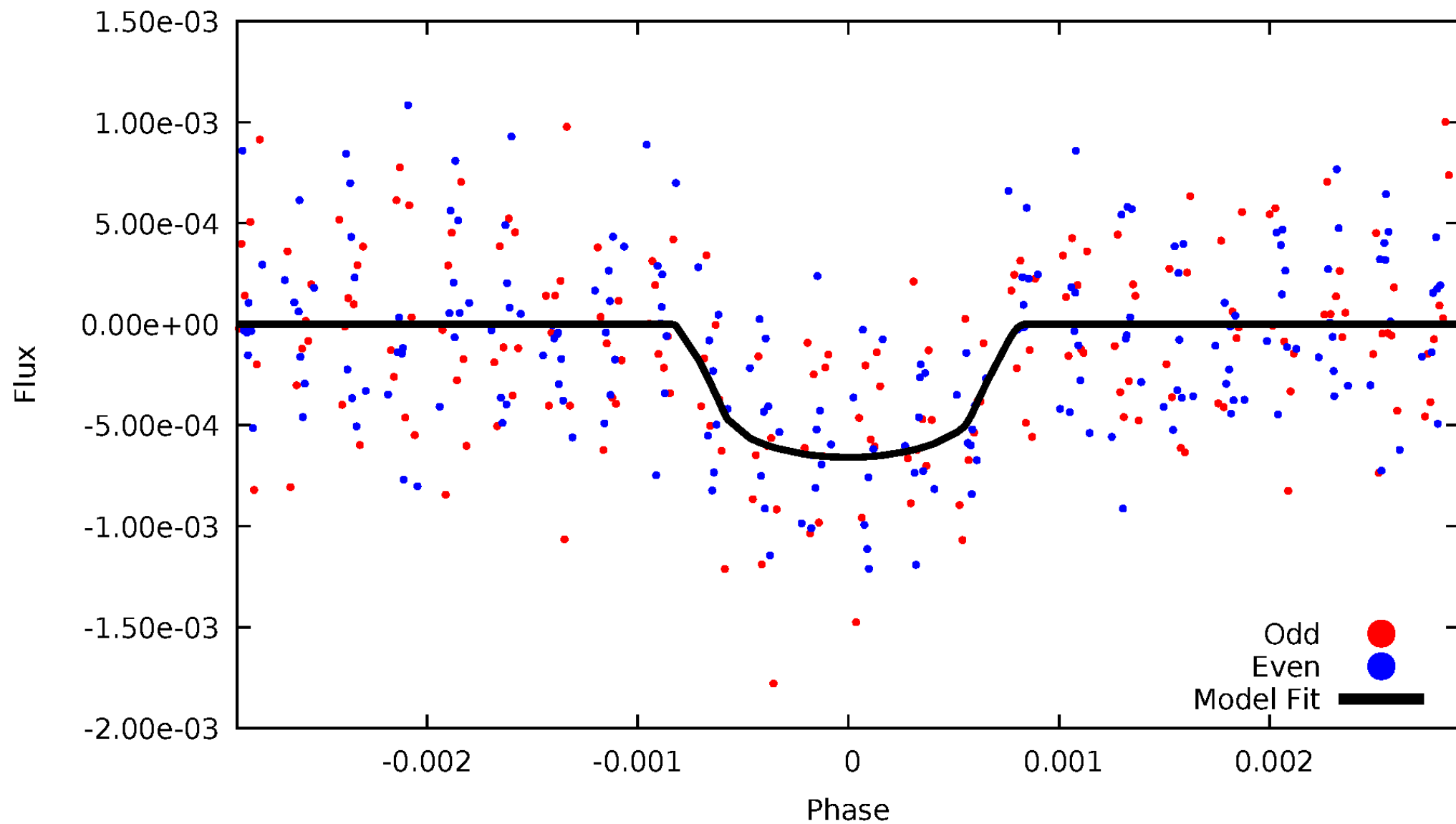


TCE 003236705-01



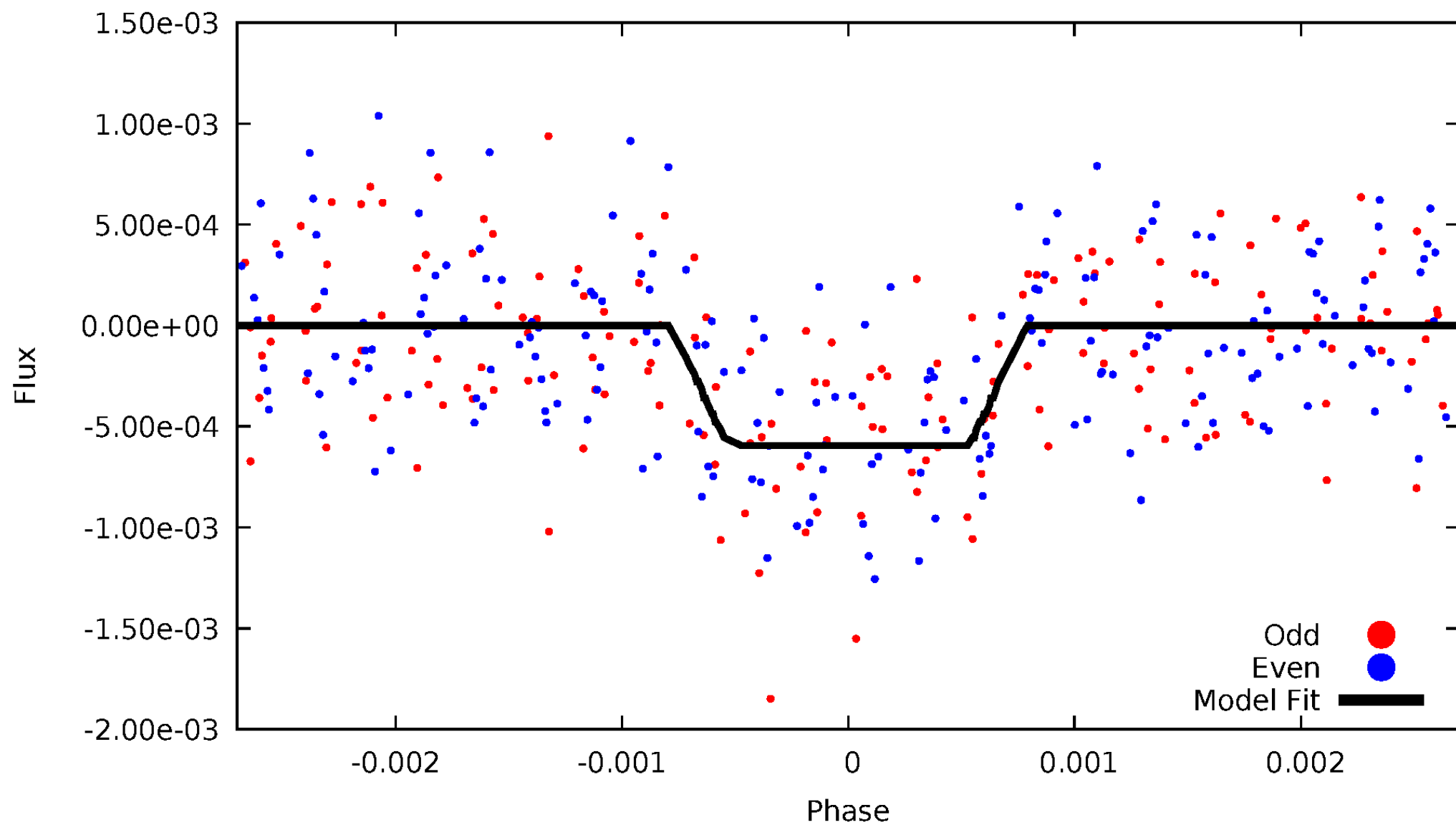
DV Odd/Even

TCE 003236705-01



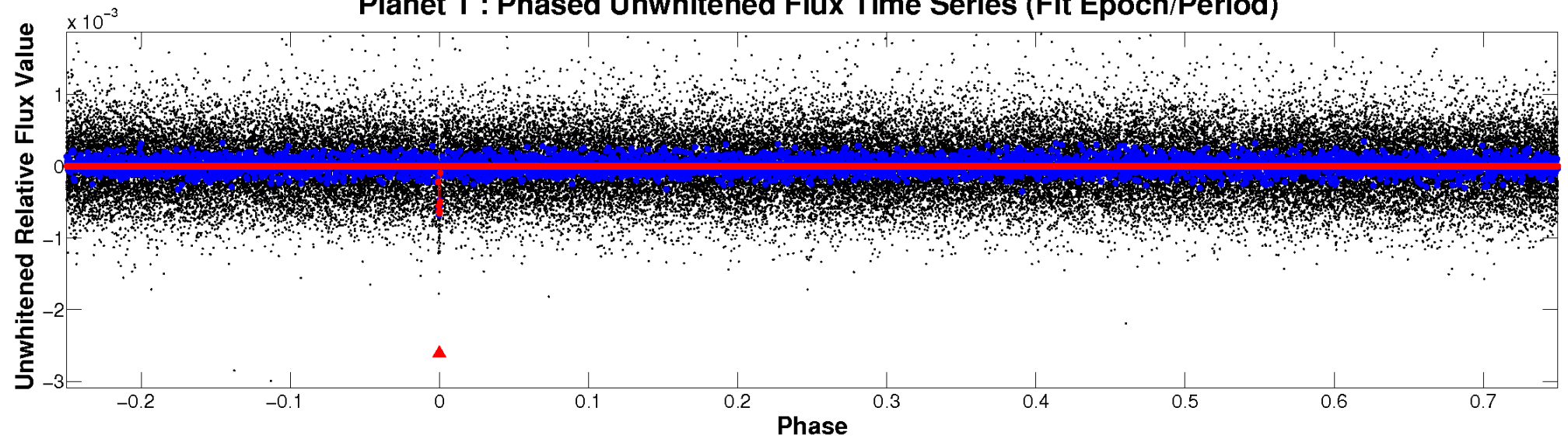
ALT Odd/Even

TCE 003236705-01

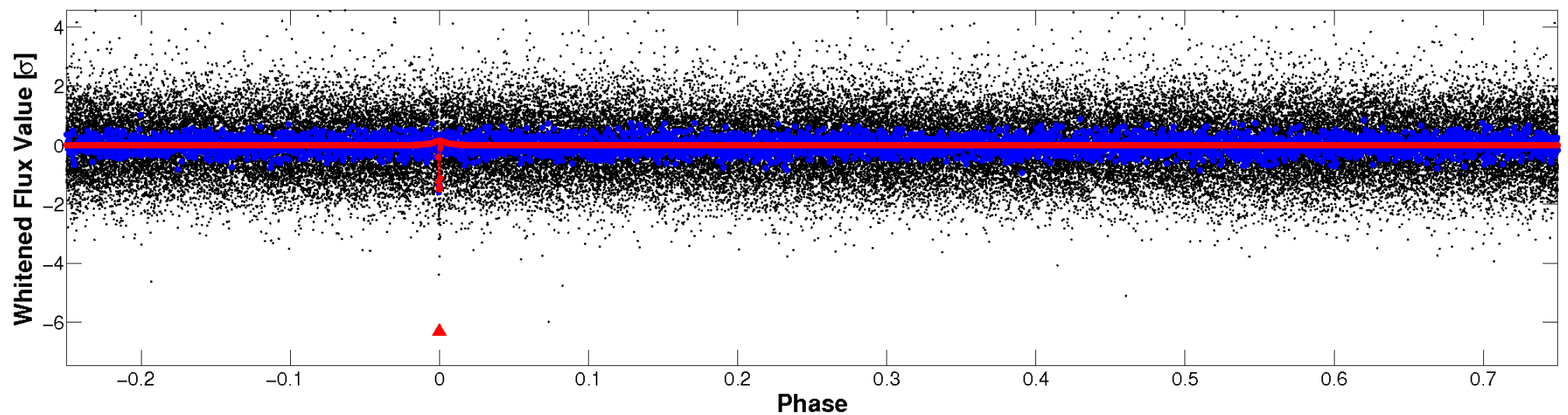


Non-Whitened Vs. Whitened Light Curve

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

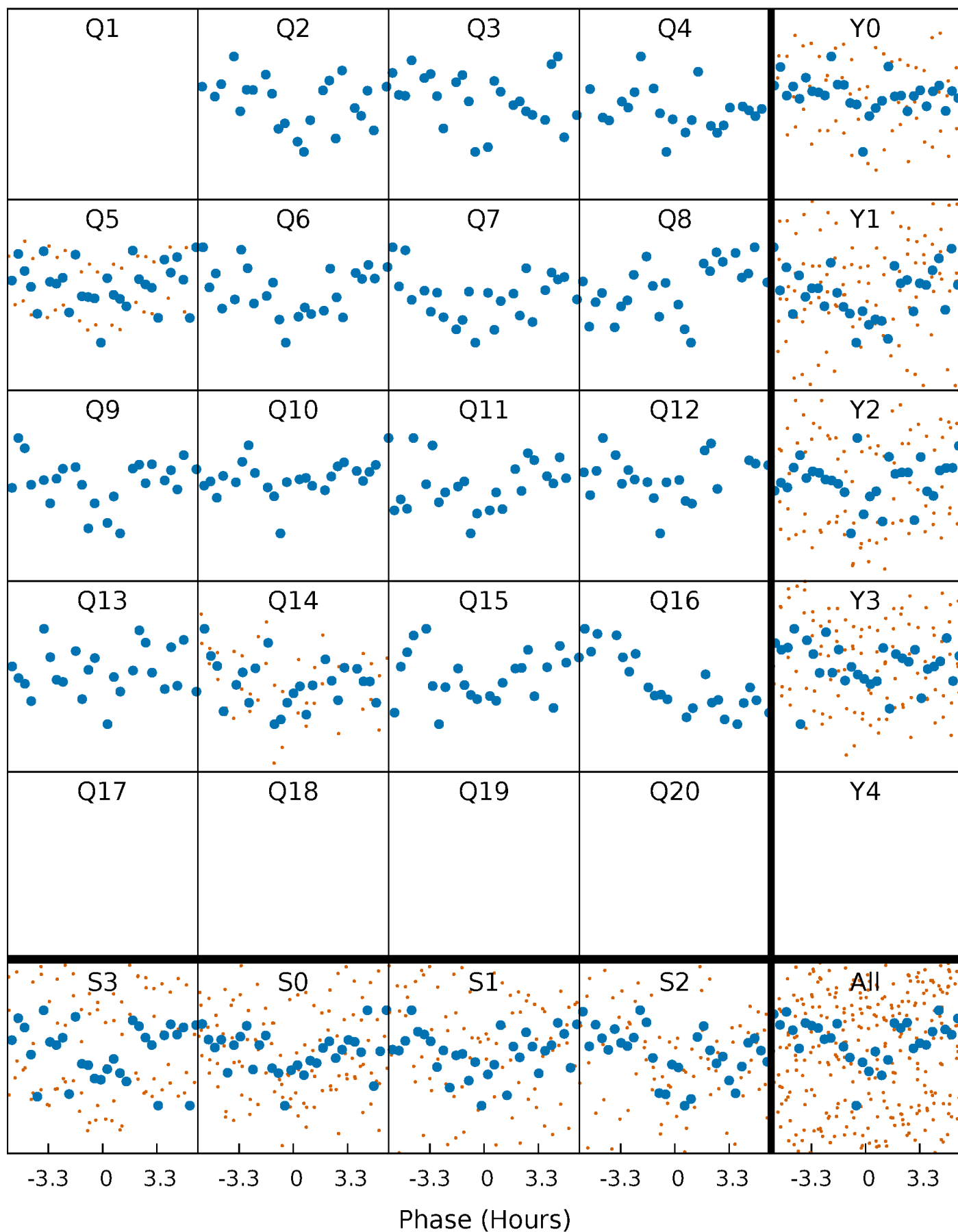


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



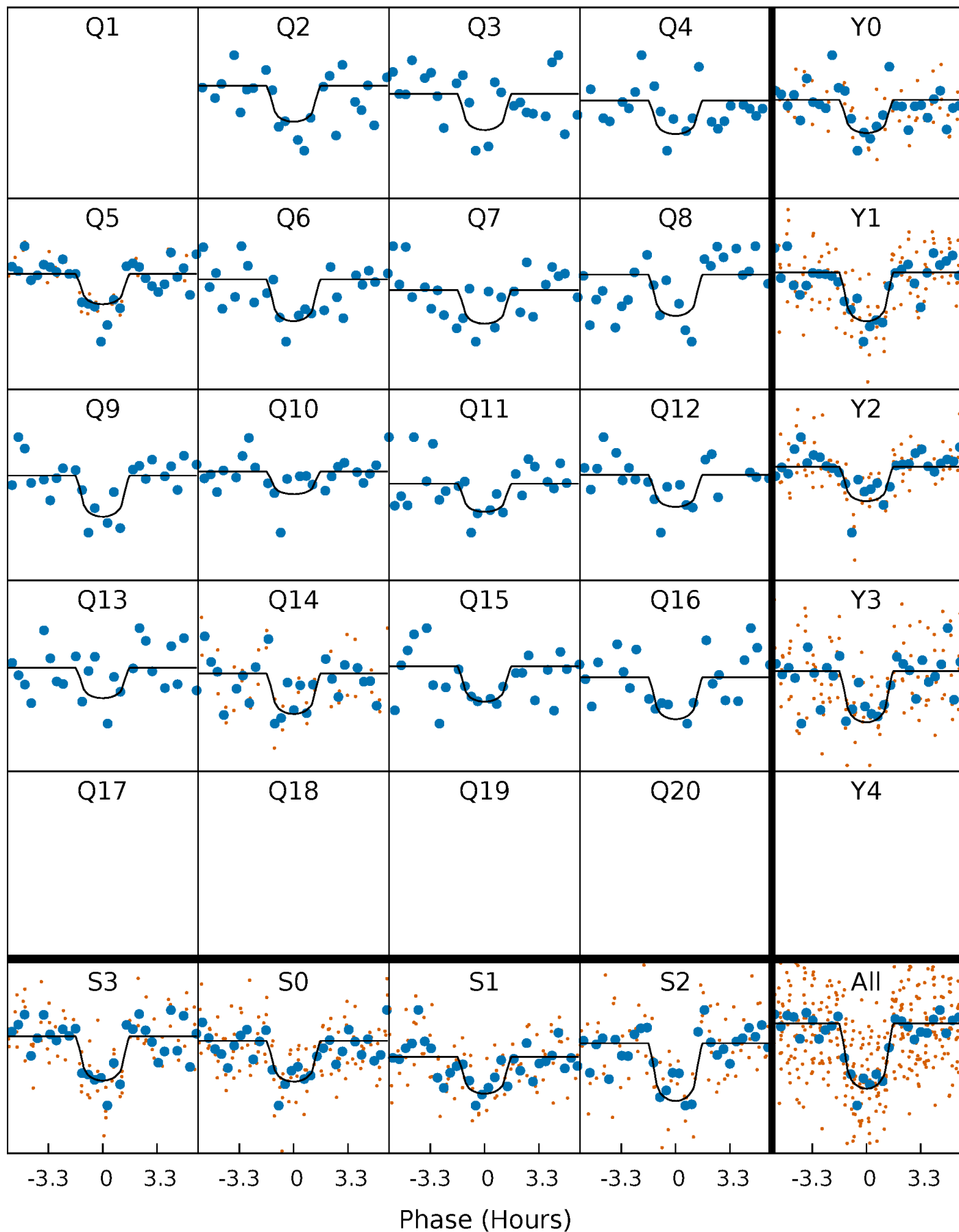
PDC Quarter-Phased Transit Curves

TCE 003236705-01 P= 83.266375 Days $T_0=194.239490$ (BKJD)



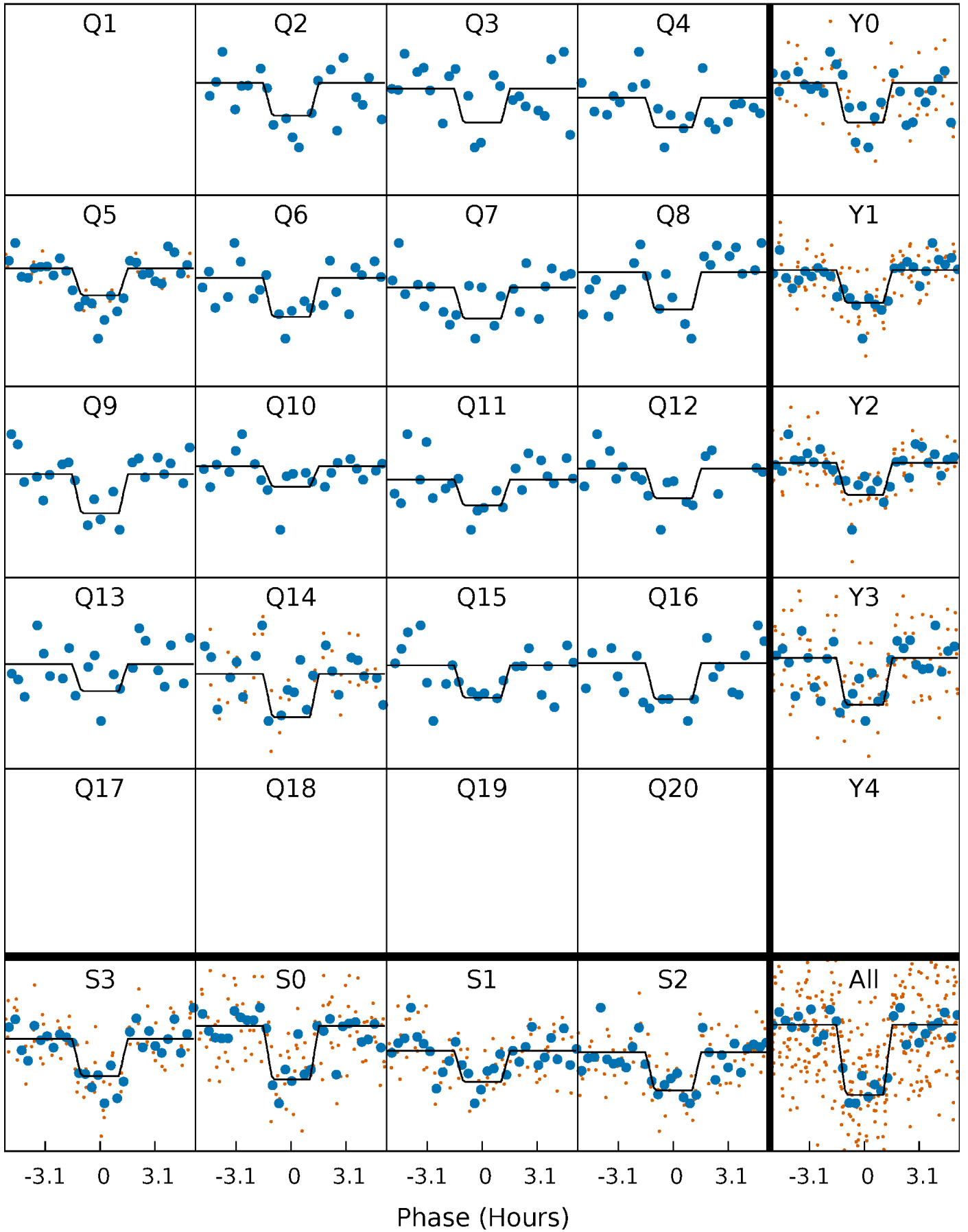
DV Quarter-Phased Transit Curves

TCE 003236705-01 P= 83.266375 Days $T_0=194.239490$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

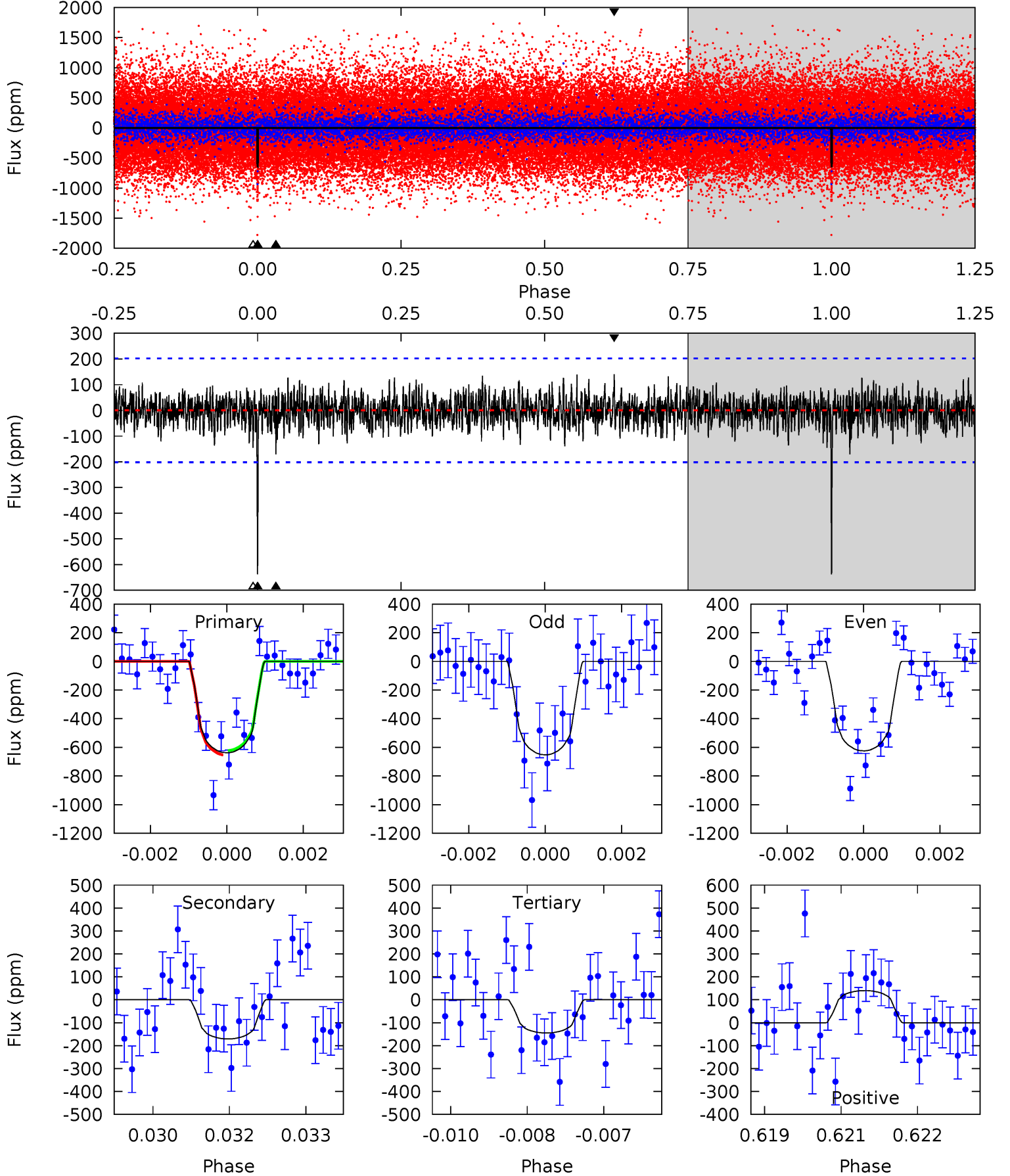
TCE 003236705-01 P= 83.266176 Days $T_0=194.240309$ (BKJD)



DV Model-Shift Uniqueness Test

003236705-01, $P = 83.266375$ Days, $E = 110.973115$ Days

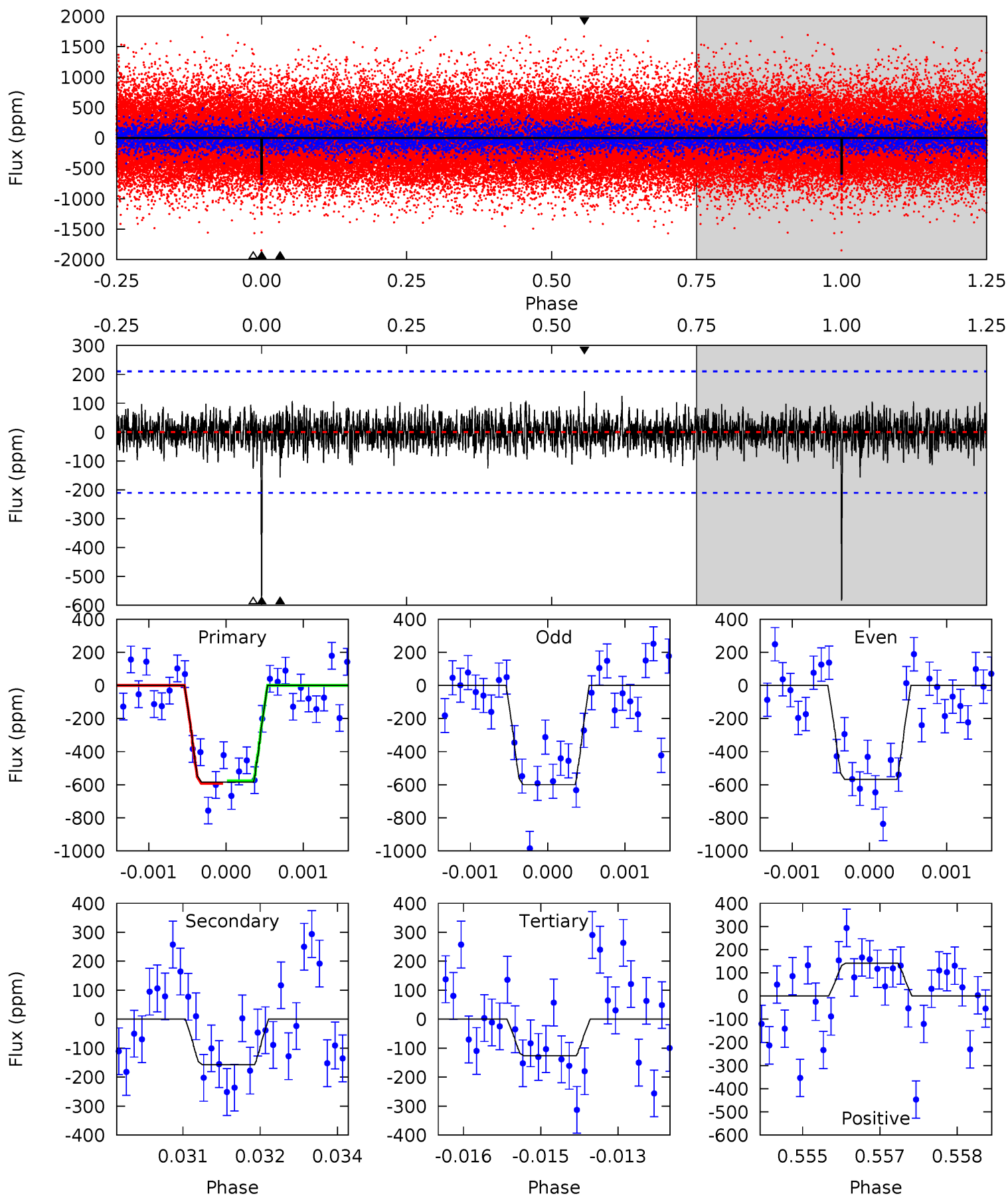
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.9	4.53	3.84	3.72	5.36	3.14	1.17	13.1	13.2	0.69	0.82	0.37	0.99	0.18	0.41



Alt Model-Shift Uniqueness Test

003236705-01, P = 83.266176 Days, E = 110.974133 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.9	4.01	3.23	3.62	5.38	3.18	0.96	11.7	11.3	0.78	0.40	0.40	1.04	0.20	0.21



Stellar Parameters For KIC 003236705

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5538^{+83}_{-74}	$4.266^{+0.168}_{-0.112}$	$0.160^{+0.150}_{-0.150}$	$1.180^{+0.175}_{-0.194}$	$0.937^{+0.067}_{-0.045}$	$0.803^{+0.661}_{-0.267}$
	+1%/-1%	+4%/-3%	+94%/-94%	+15%/-16%	+7%/-5%	+82%/-33%
Source	SPE90	SPE90	SPE90	DSEP		

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

Secondary Eclipse Parameters for KIC 003236705-01 / KOI 3343.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-171 ± 38	$3.97^{+2.97}_{-2.60}$	613^{+30}_{-34}	3930^{+2220}_{-667}	806^{+5872}_{-549}
Alt.	-157 ± 39	$3.71^{+3.34}_{-2.27}$	613^{+29}_{-31}	3948^{+1725}_{-717}	842^{+4571}_{-606}

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 $A_{obs} \gg 1.0$

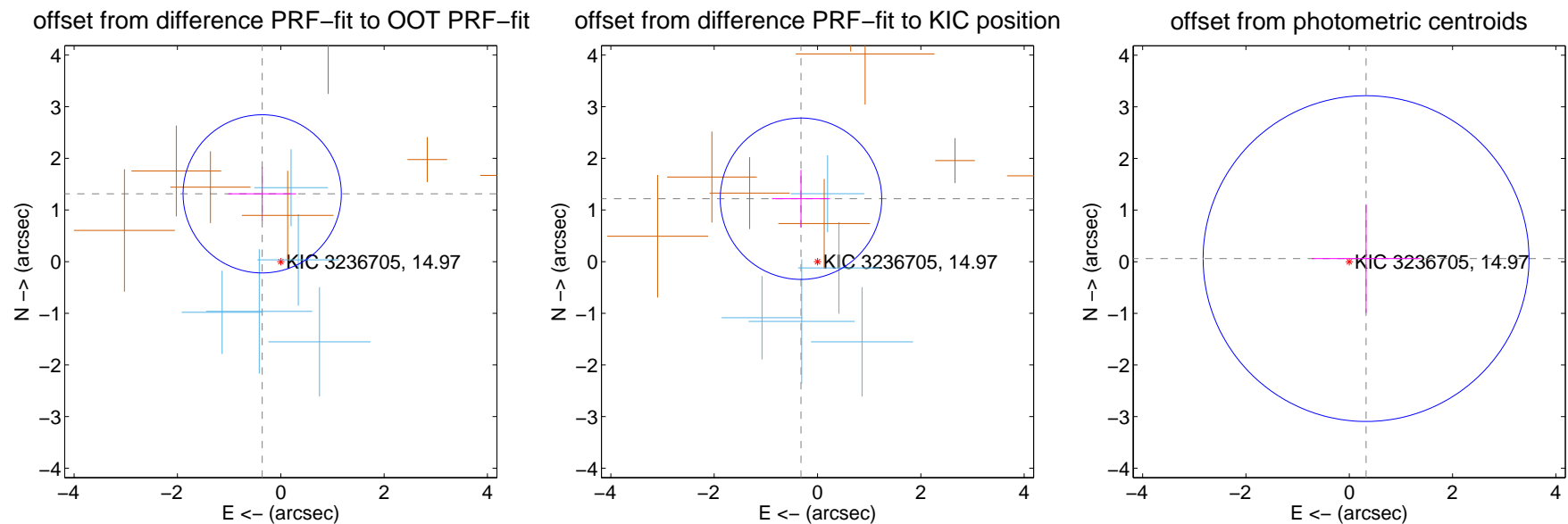
DV Centroid Data

Supplemental centroid analysis for 003236705-01. Kepler magnitude: 14.97. Transit SNR 12.48

There are 5 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

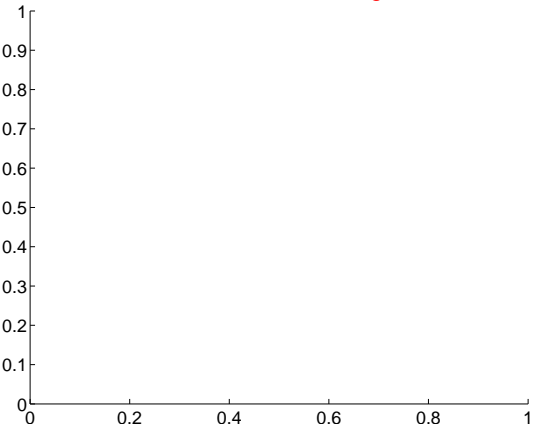
	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.361 ± 0.510	2.67	0.360 ± 0.657	1.313 ± 0.522
PRF-fit source offset from KIC position	1.260 ± 0.521	2.42	0.320 ± 0.559	1.218 ± 0.557
photometric centroid source offset	0.33 ± 1.05	0.31	-0.33 ± 1.05	0.06 ± 1.05



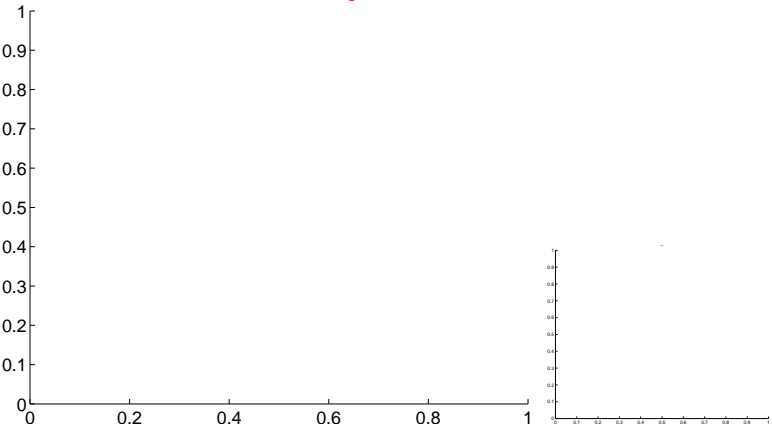
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

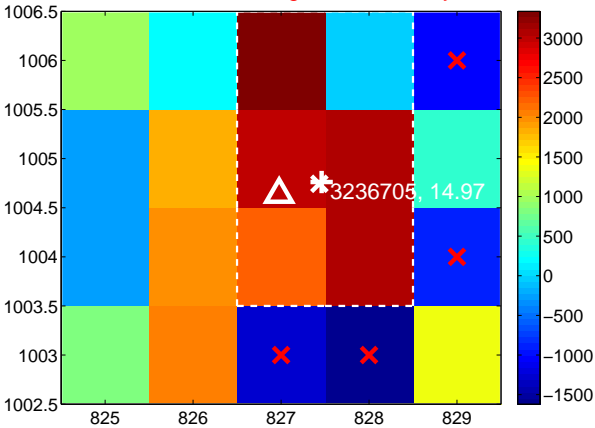
Q1 no difference image



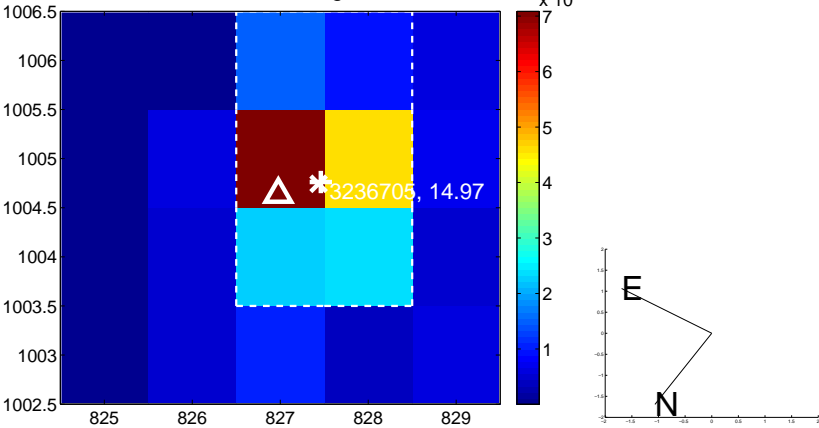
Q1 no OOT image



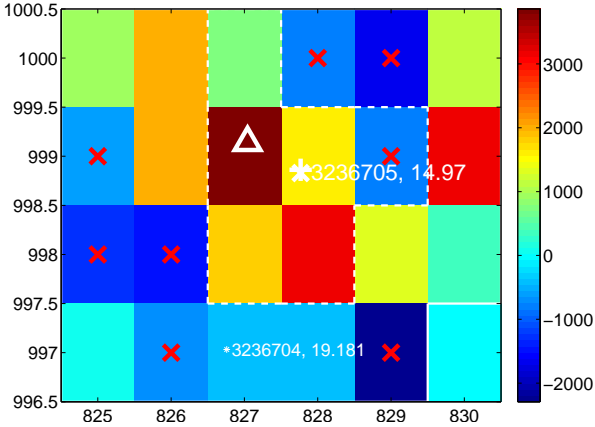
Q2 difference image. Poor Quality



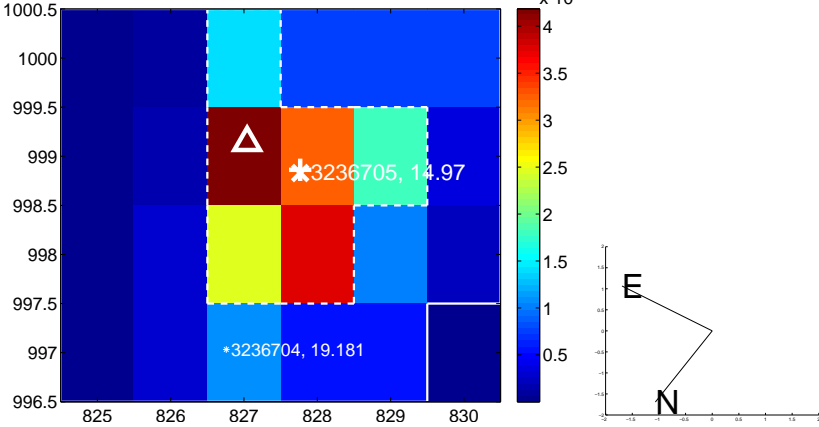
Q2 OOT image



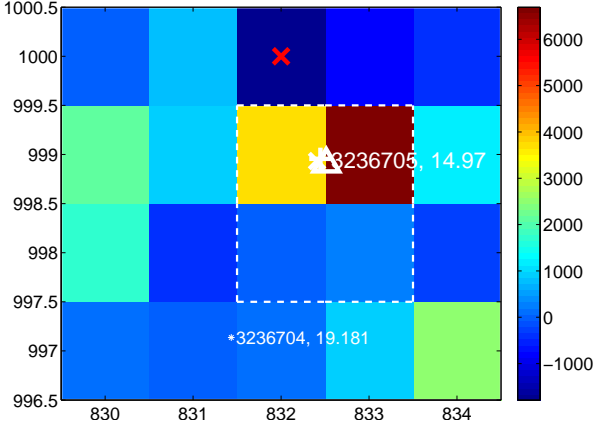
Q3 difference image. Poor Quality



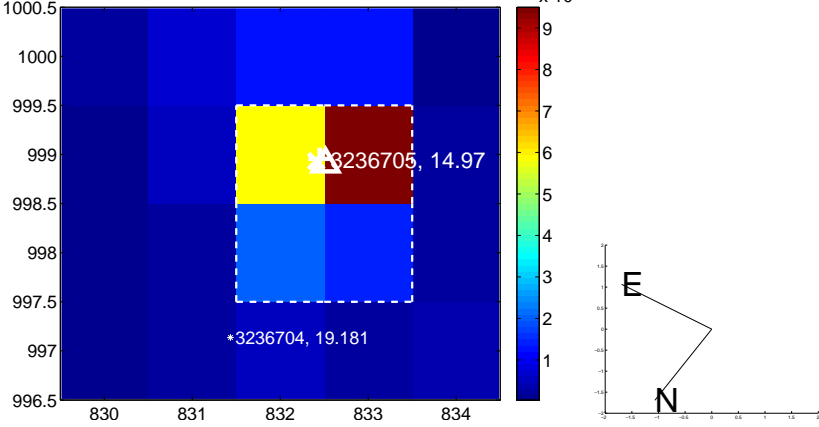
Q3 OOT image



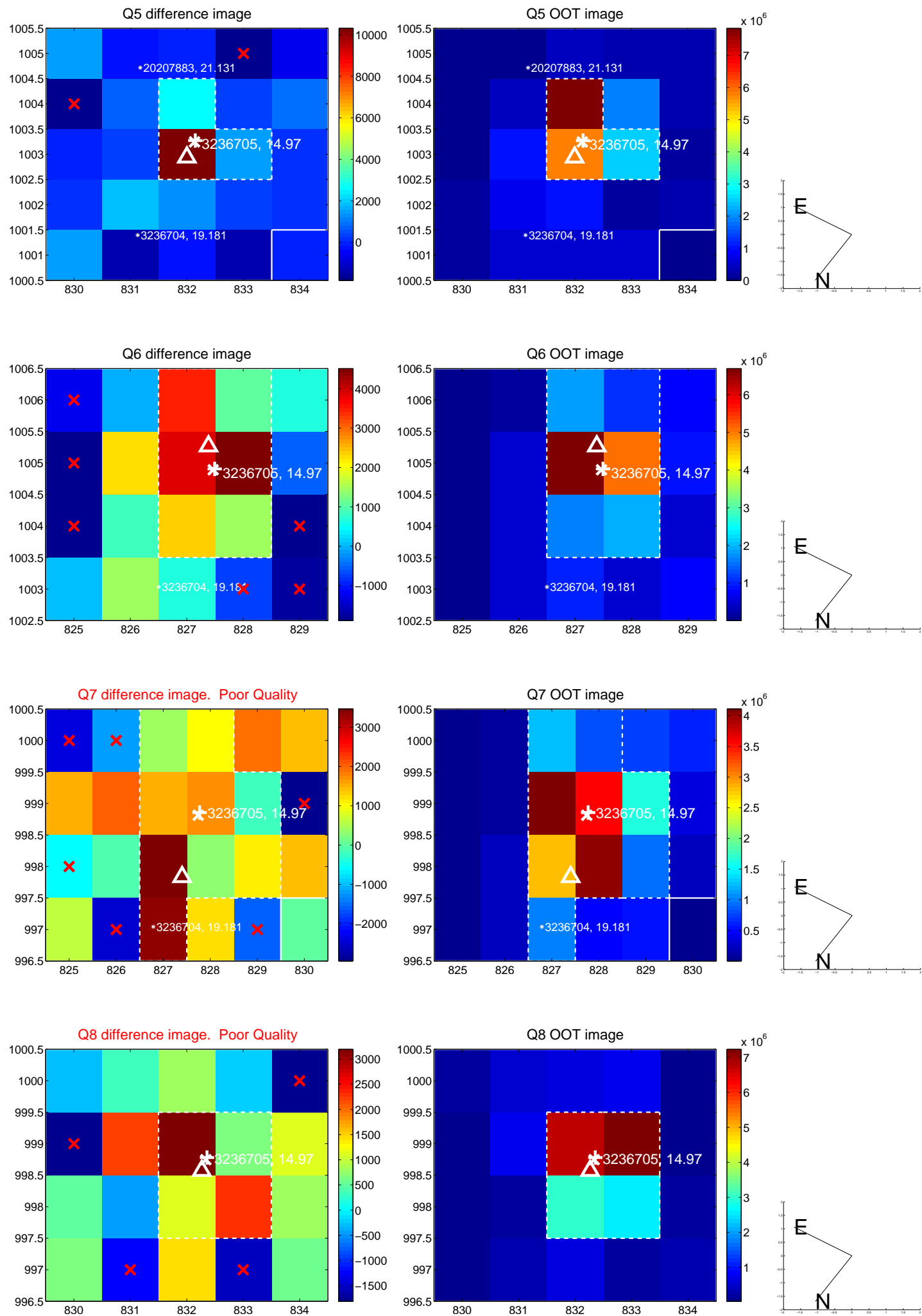
Q4 difference image



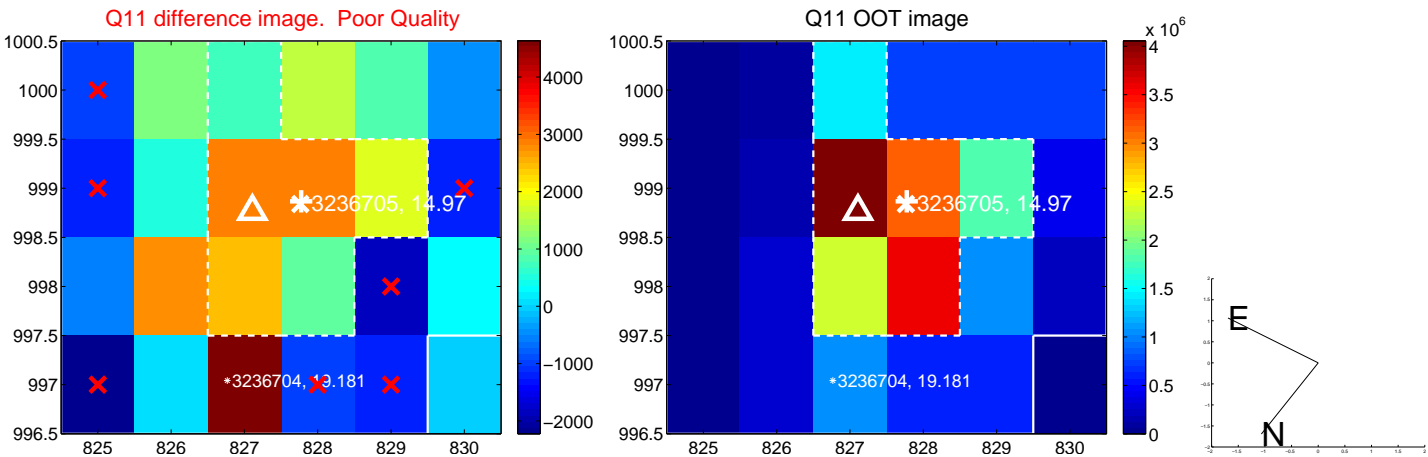
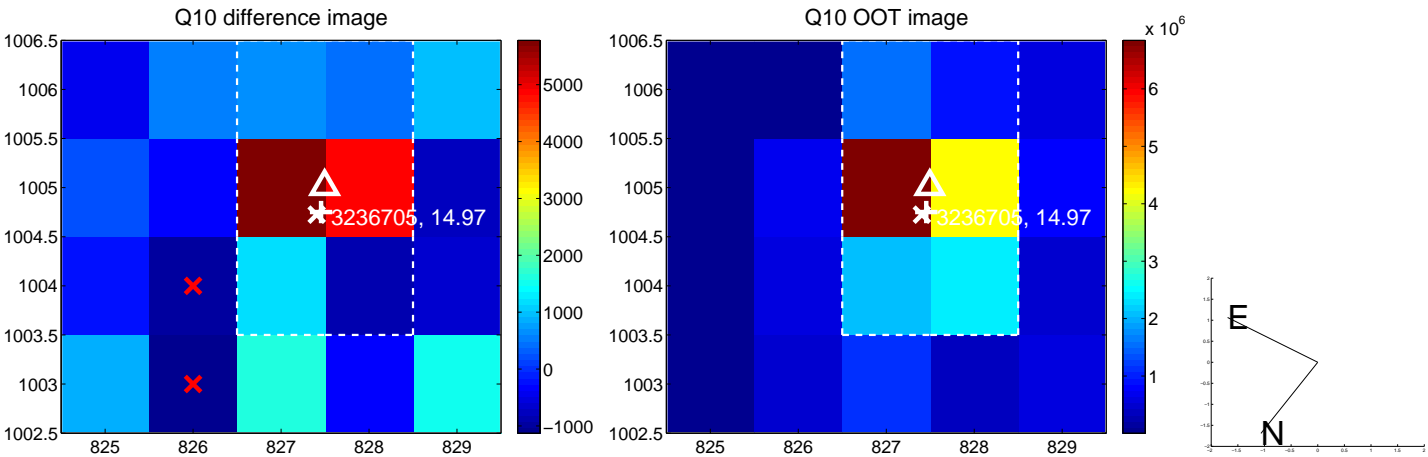
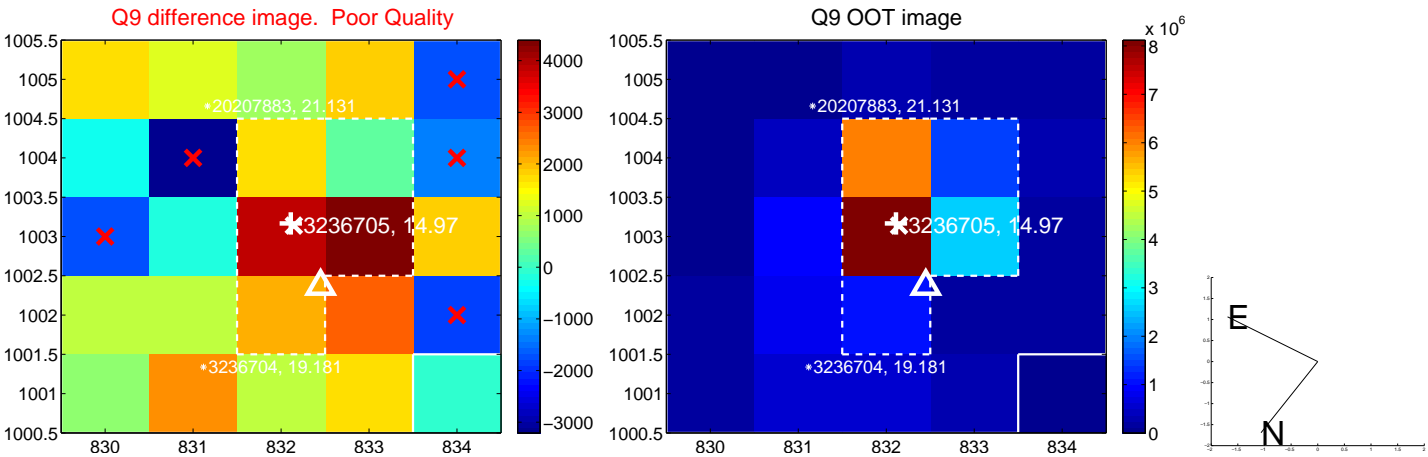
Q4 OOT image



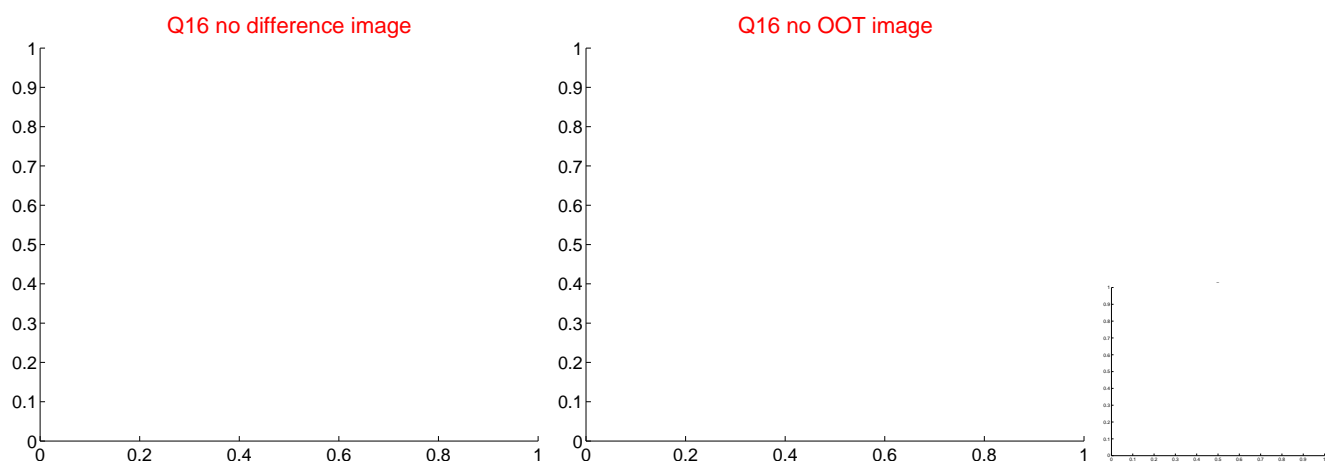
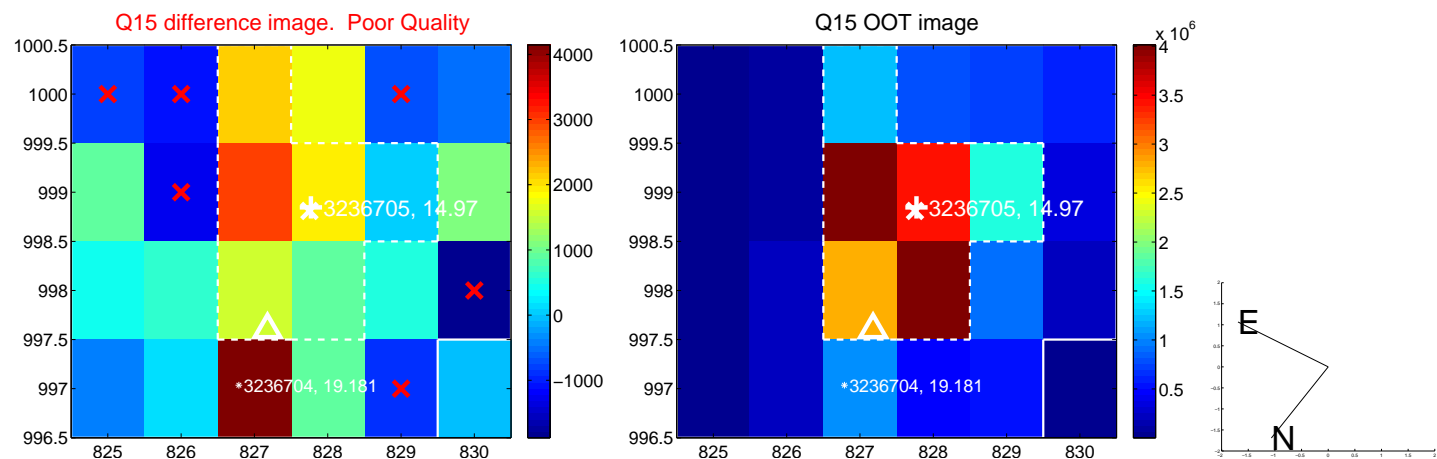
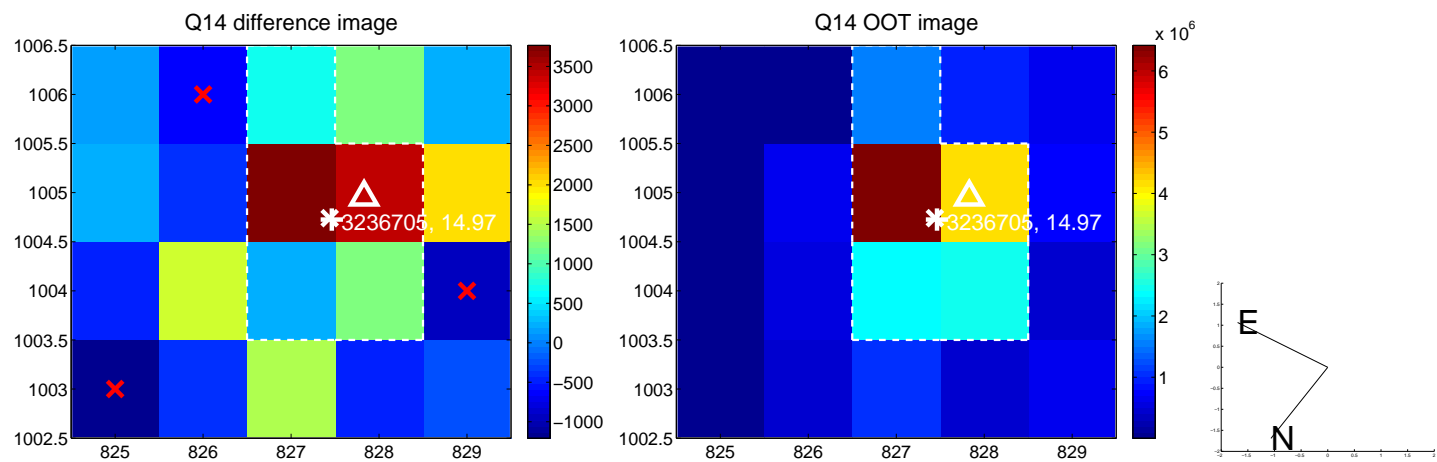
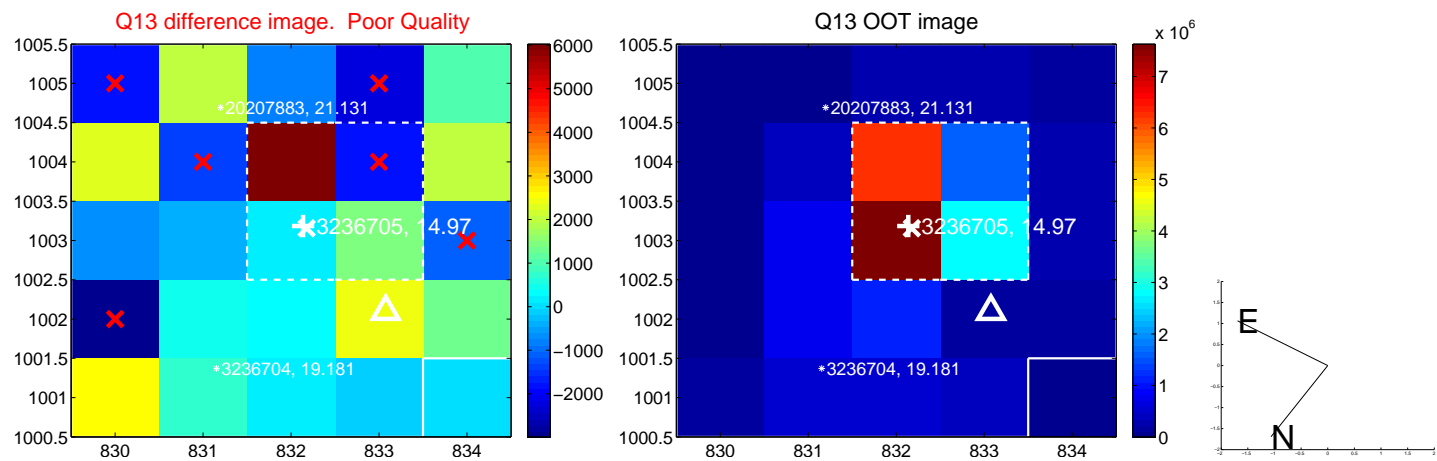
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



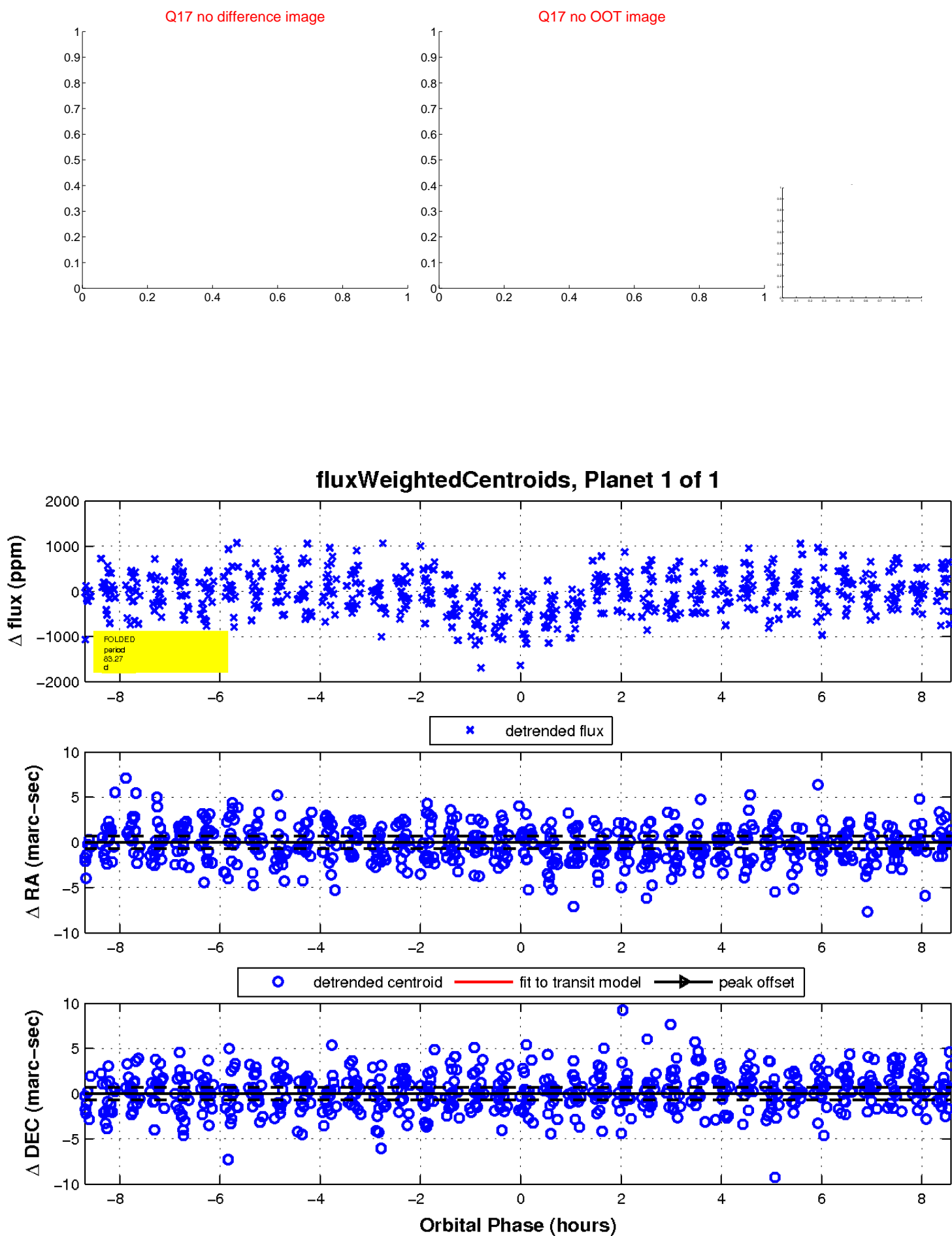
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UKIRT Image

Declination

