

KIC 003756264

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})
003756264-01	OBS	3108.01	7.362689	136.864724	397.5	1.423	14.8	17.4	0.89	5868	1.91	155.97

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003756264-01	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.

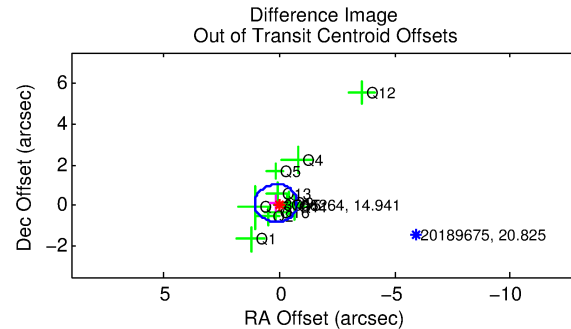
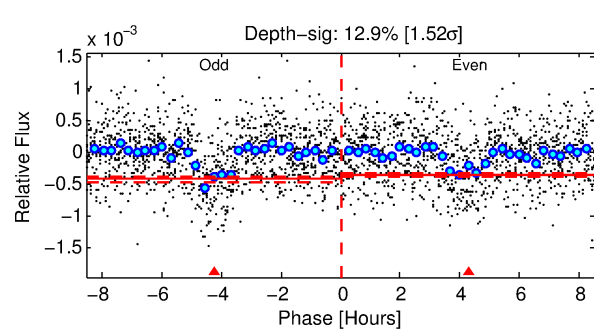
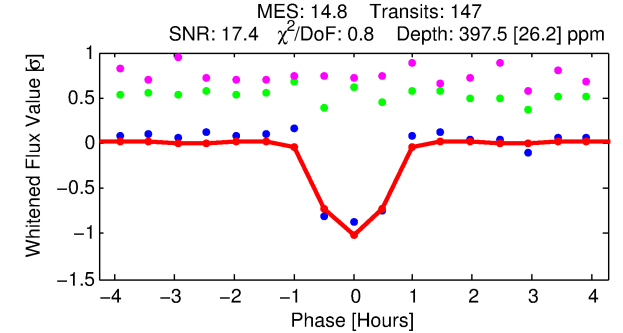
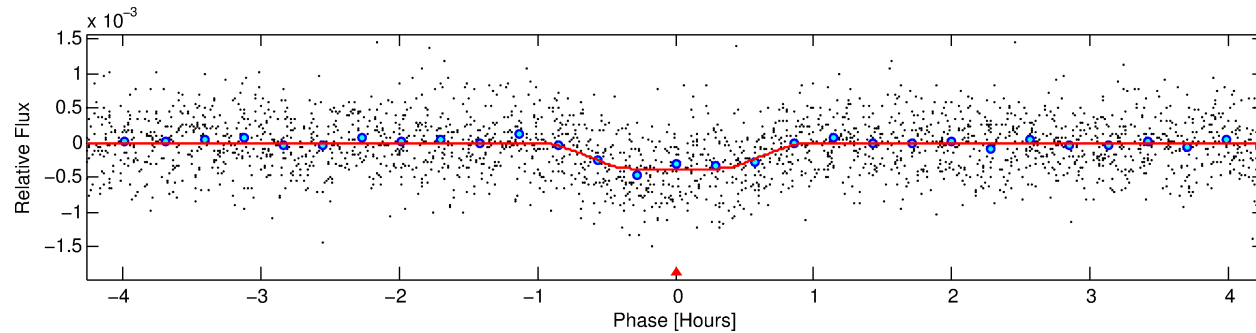
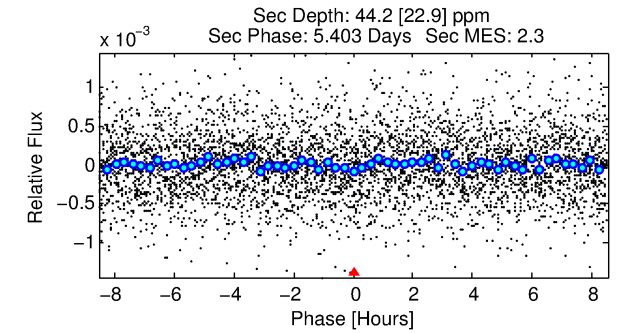
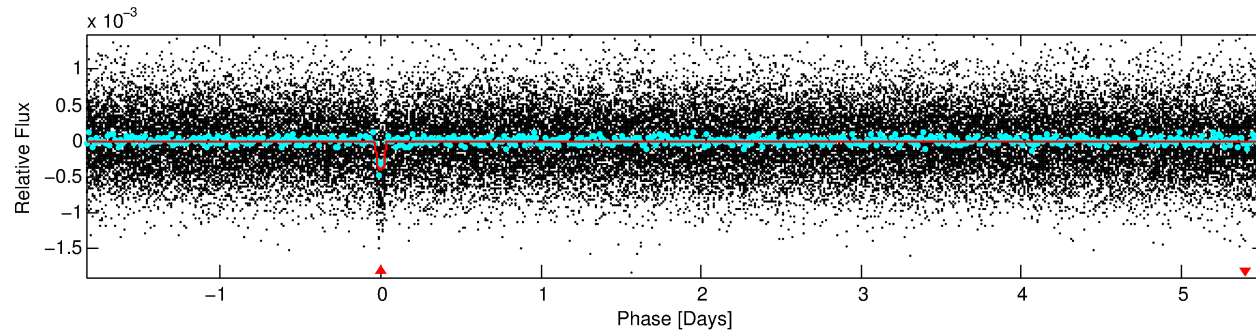
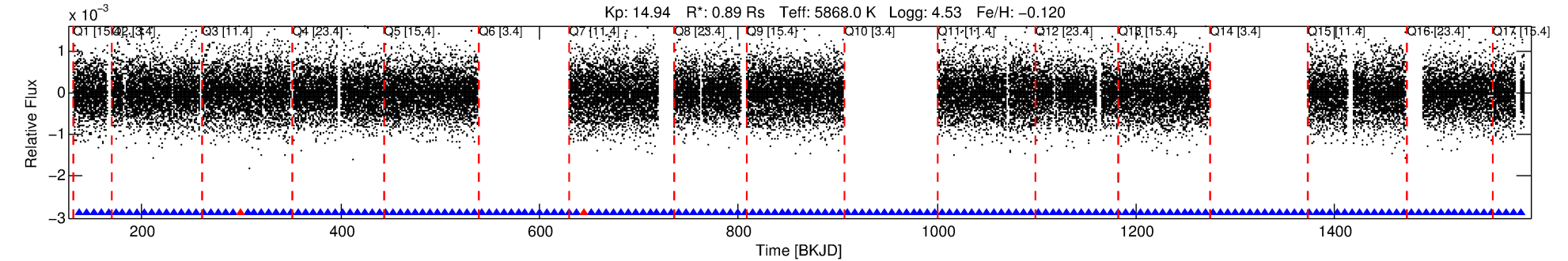
Ephemeris Match Information For 003756264-01

No Significant Match Found

DV One-Page Summary

KIC: 3756264 Candidate: 1 of 1 Period: 7.363 d

KOI: K03108.01 Corr: 0.967



DV Fit Results:

Period = 7.36269 [0.00002] d
Epoch = 136.8647 [0.0020] BKJD
Rp/R* = 0.0196 [0.0105]
a/R* = 29.28 [71.94]
b = 0.70 [1.81]
Seff = 155.97 [53.89]
Teq = 901 [78] K
Rp = 1.91 [1.14] Re
a = 0.0738 [0.0163] AU
Ag = 36.20 [44.70] [0.79σ]
Teffp = 3417 [1023] K [2.45σ]

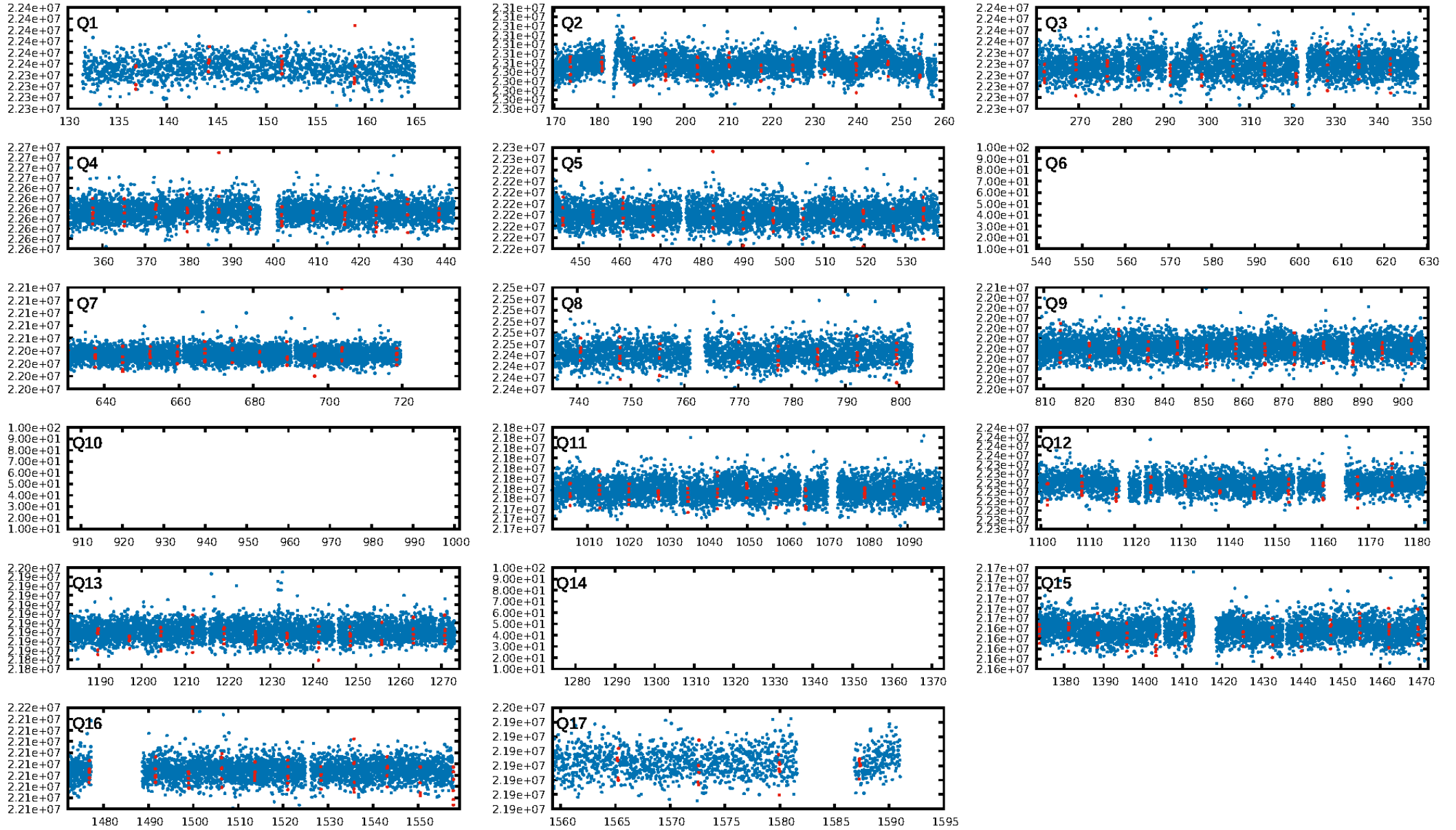
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 100.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 7.47e-49
RollingBand-fgt: 0.99 [137/139]
GhostDiagnostic-chr: 1.191
Centroid-sig: 0.2%
Centroid-so: 1.918 arcsec [2.25σ]
OotOffset-rm: 0.182 arcsec [0.59σ]
KicOffset-rm: 0.237 arcsec [0.87σ]
OotOffset-st: 1/2/3/5 [11]
KicOffset-st: 1/2/3/5 [11]
DiffImageQuality-fgm: 0.64 [7/11]
DiffImageOverlap-fno: 1.00 [14/14]

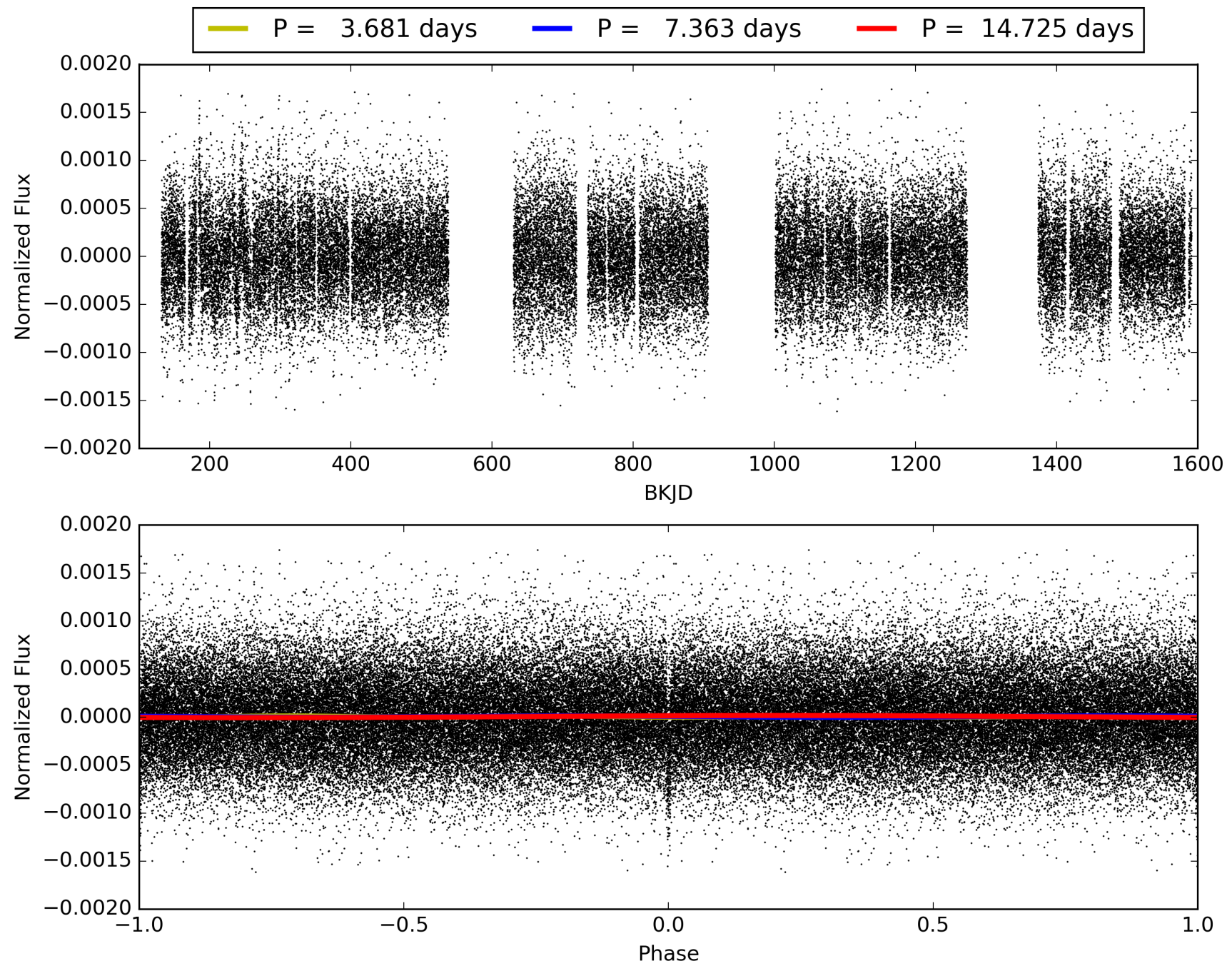
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 11:44:20 Z

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

TCE 003756264-01, PDC Light Curves

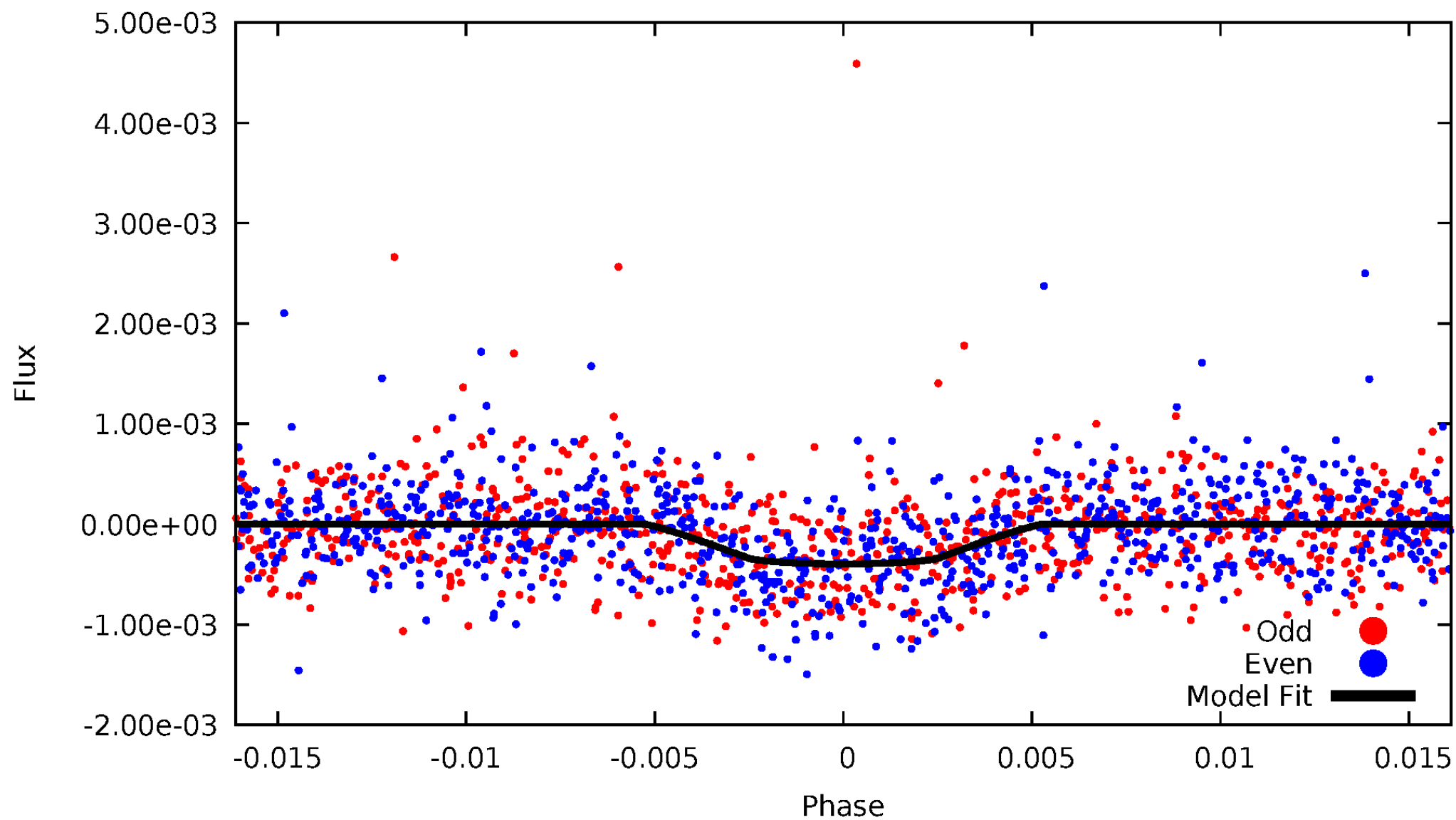


TCE 003756264-01



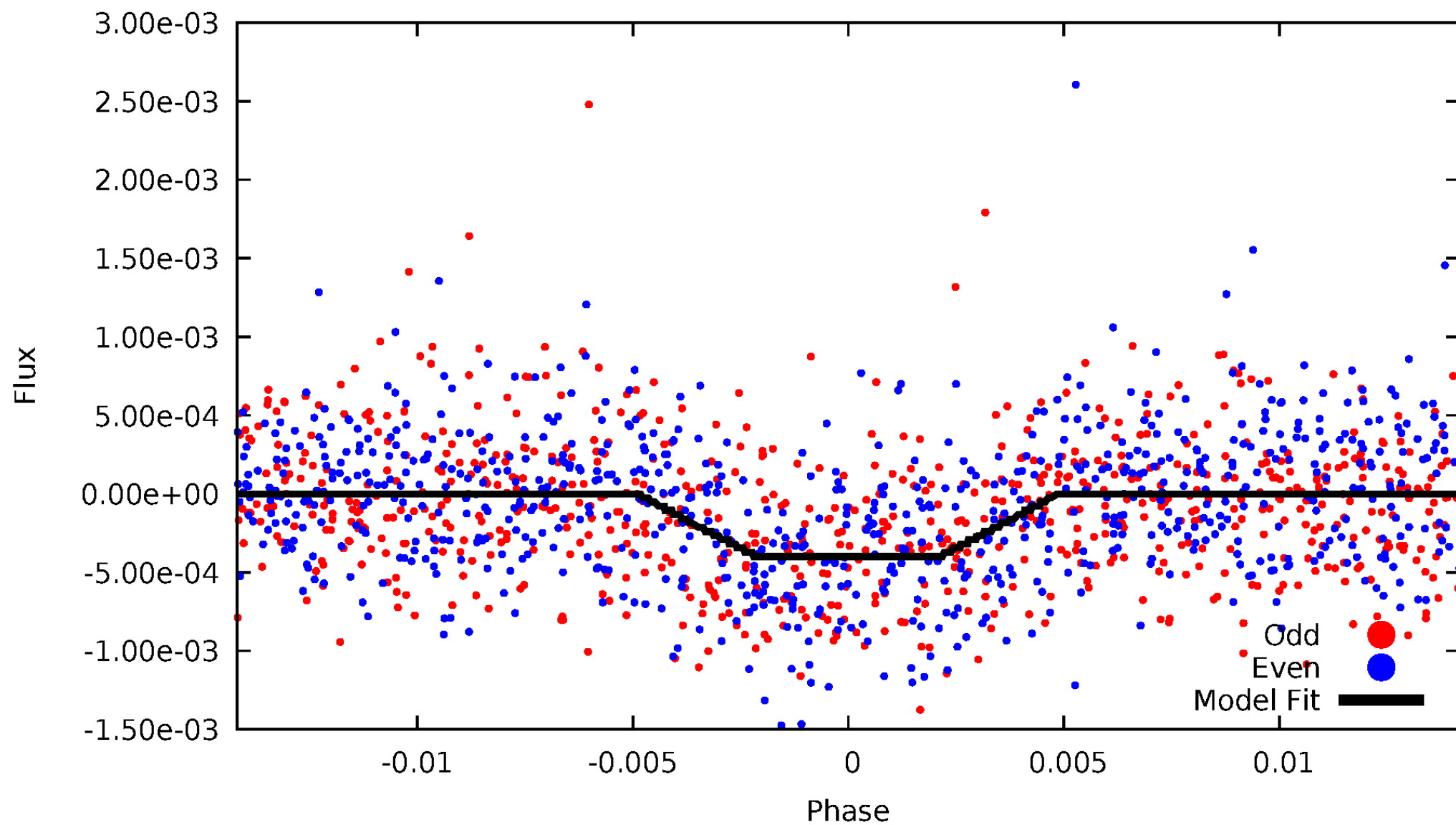
DV Odd/Even

TCE 003756264-01



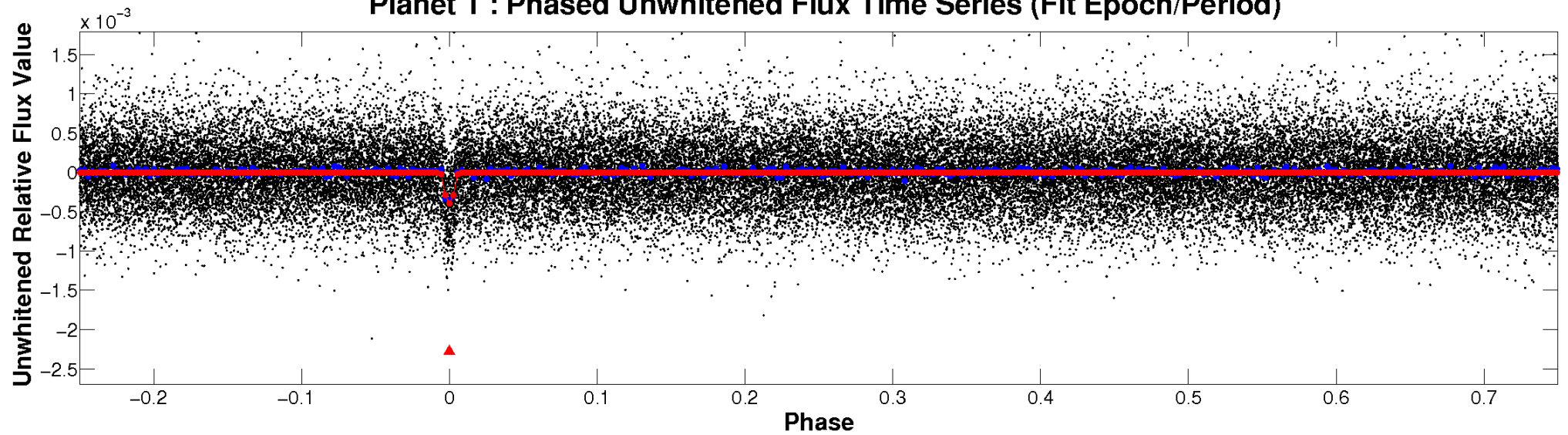
ALT Odd/Even

TCE 003756264-01

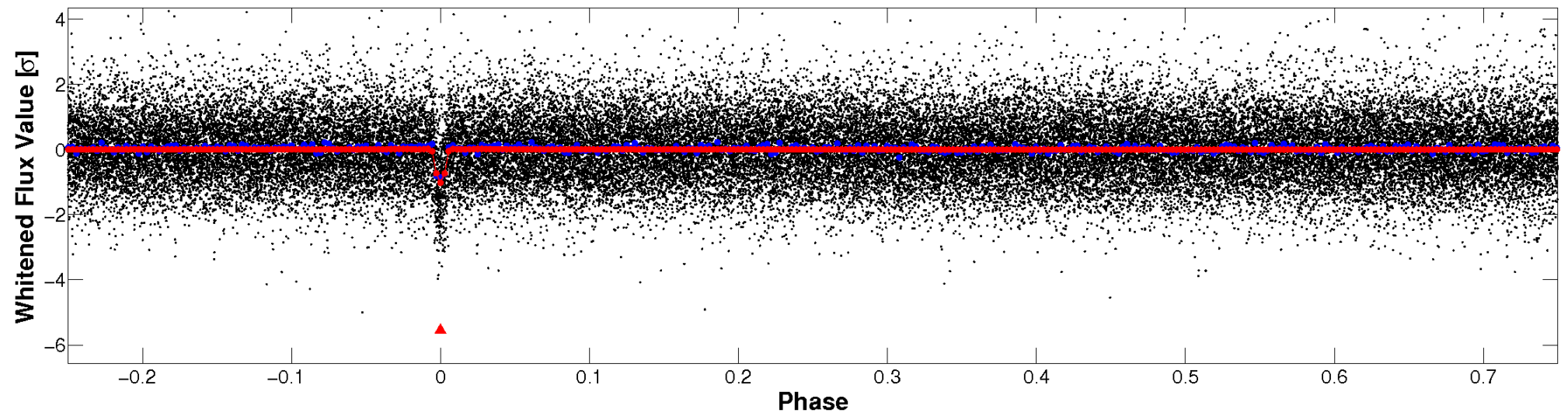


Non-Whitened Vs. Whitened Light Curve

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

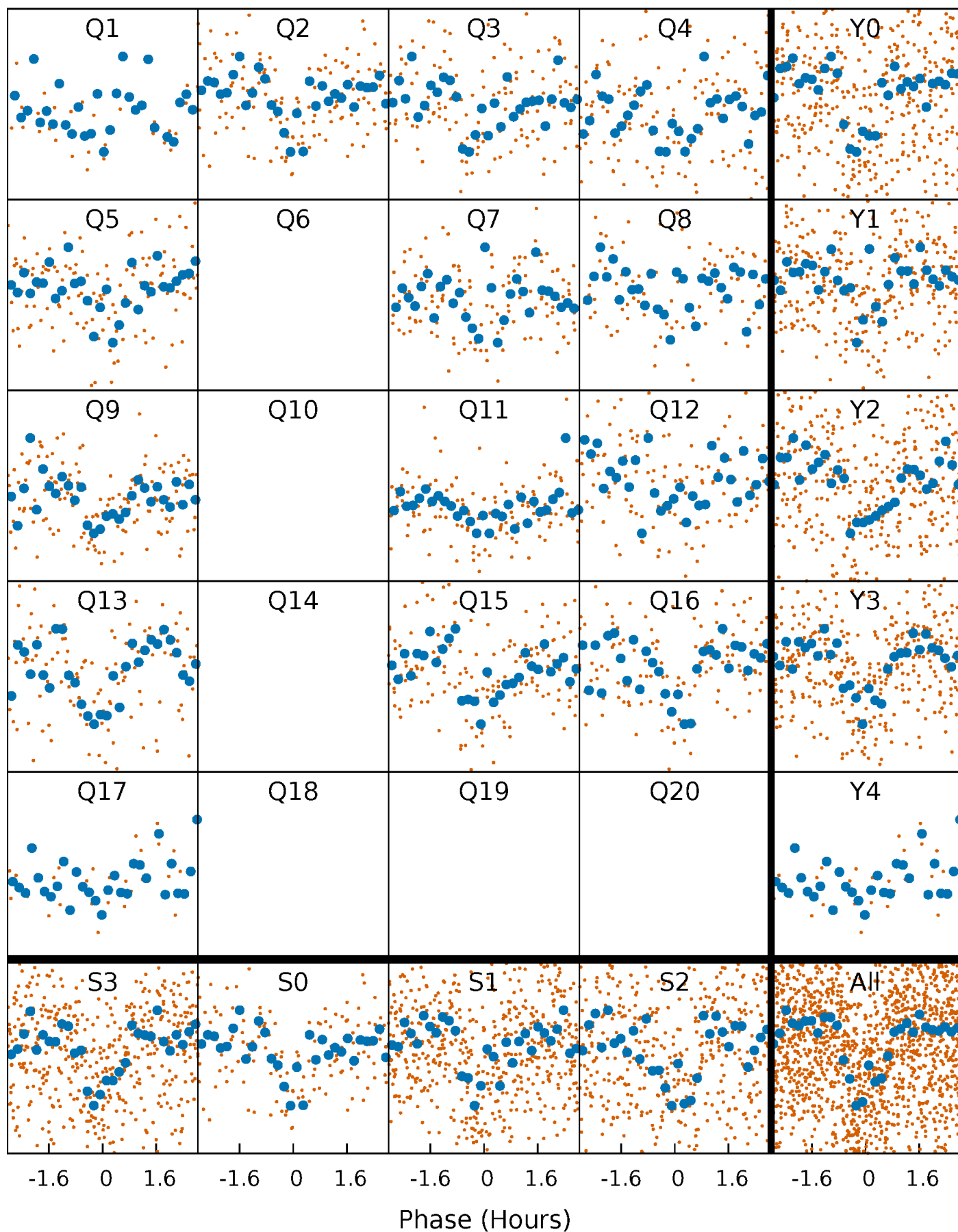


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



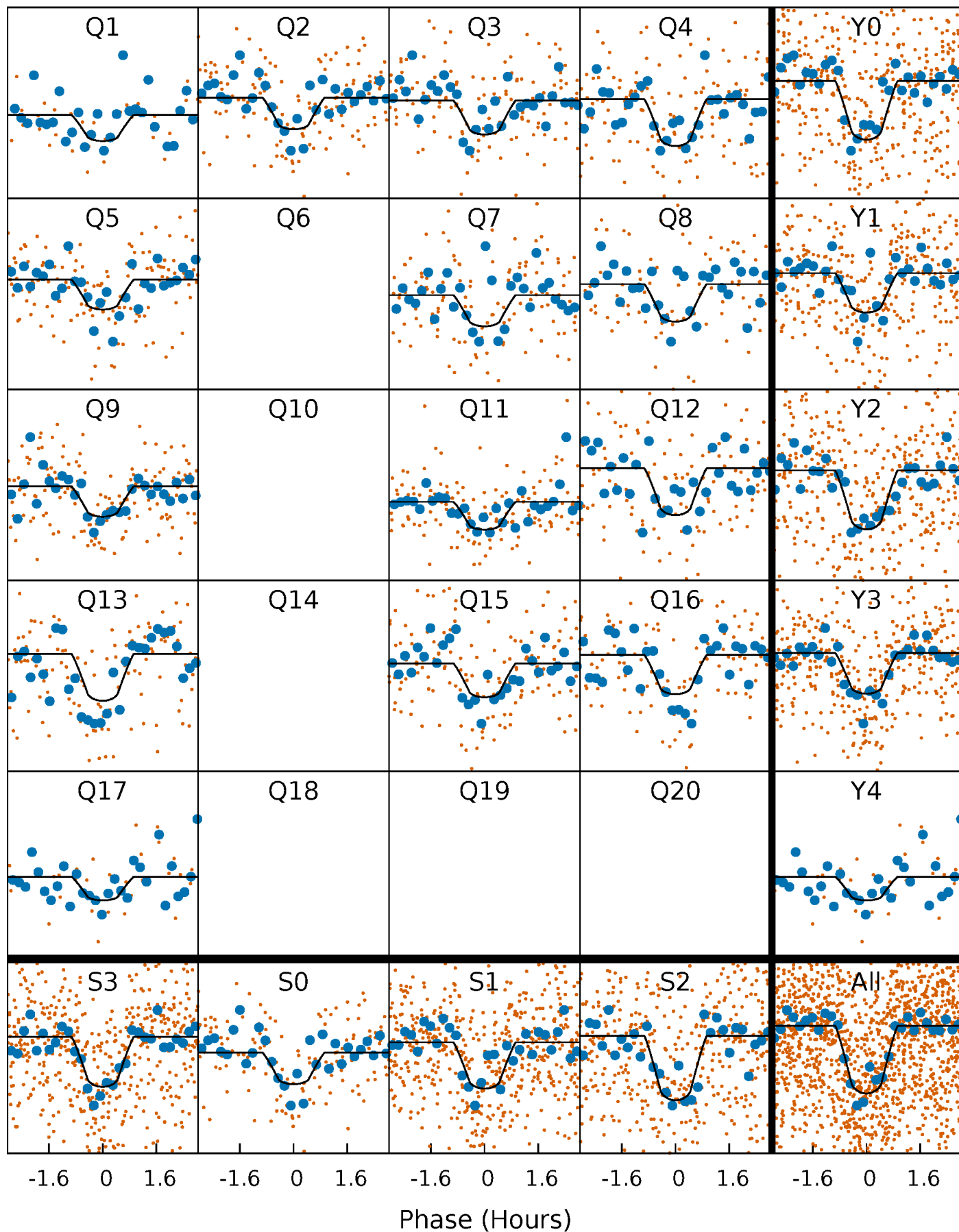
PDC Quarter-Phased Transit Curves

TCE 003756264-01 P= 7.362689 Days $T_0=136.864724$ (BKJD)



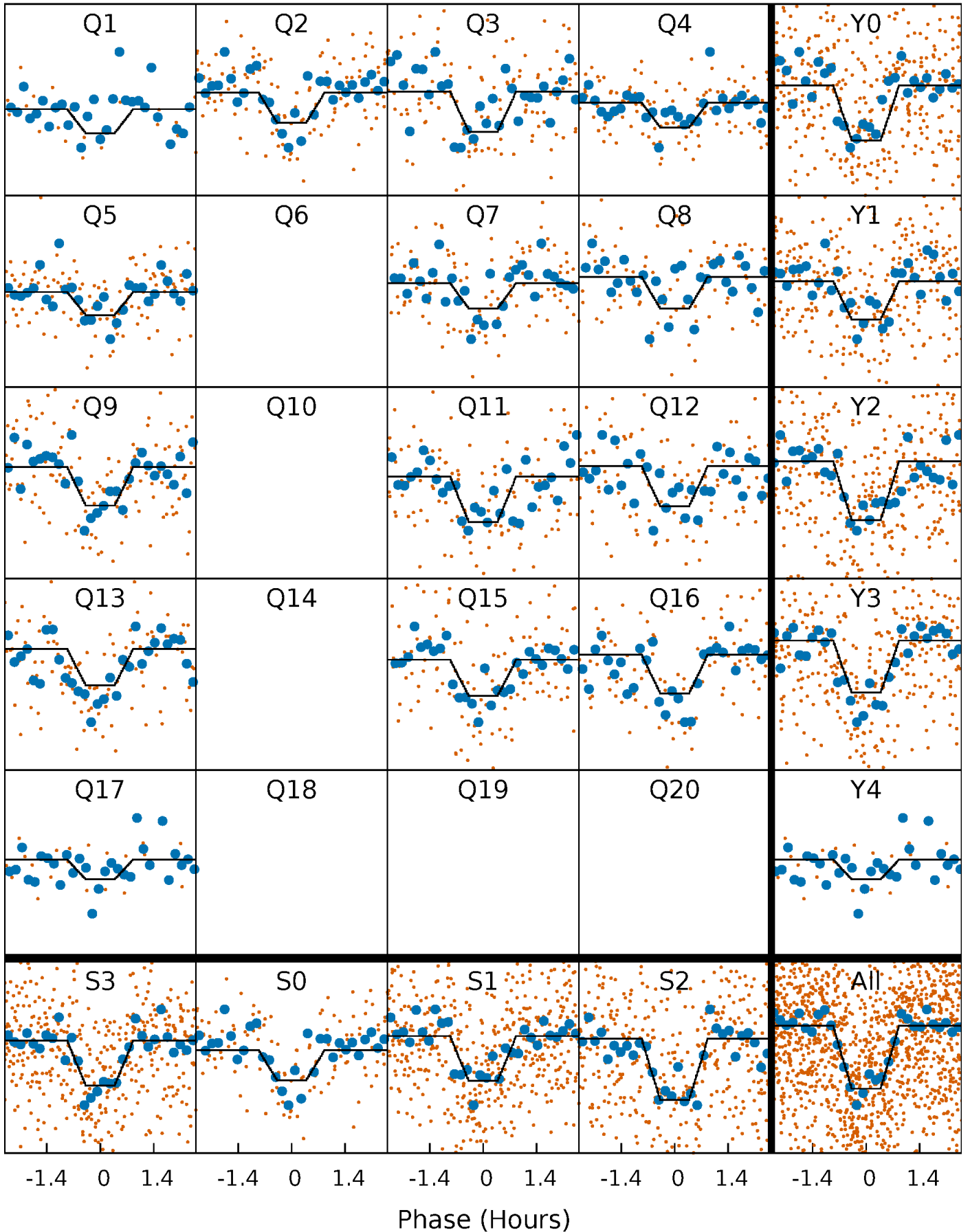
DV Quarter-Phased Transit Curves

TCE 003756264-01 P= 7.362689 Days $T_0=136.864724$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

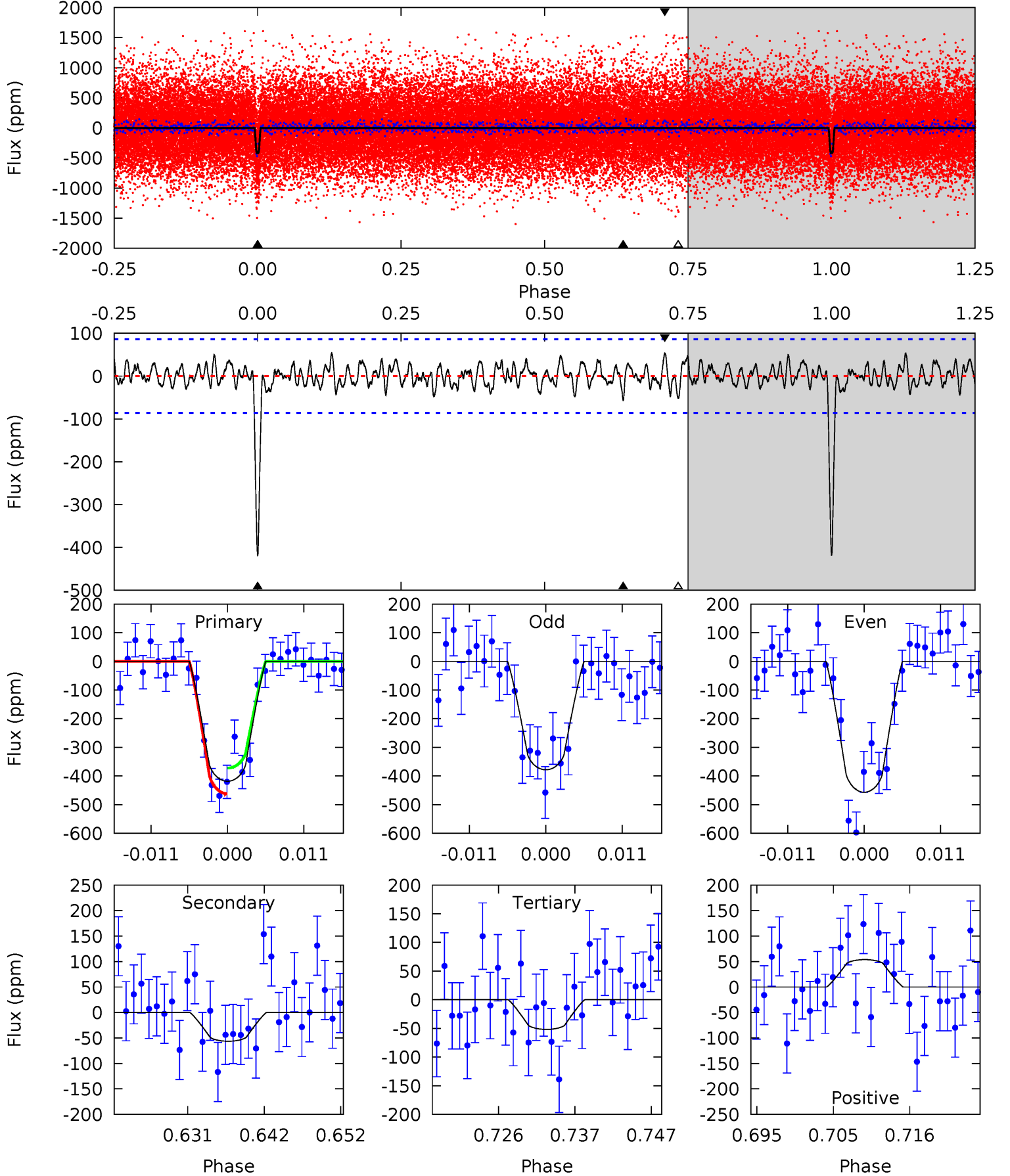
TCE 003756264-01 P= 7.362693 Days $T_0=136.864942$ (BKJD)



DV Model-Shift Uniqueness Test

003756264-01, P = 7.362689 Days, E = 129.502035 Days

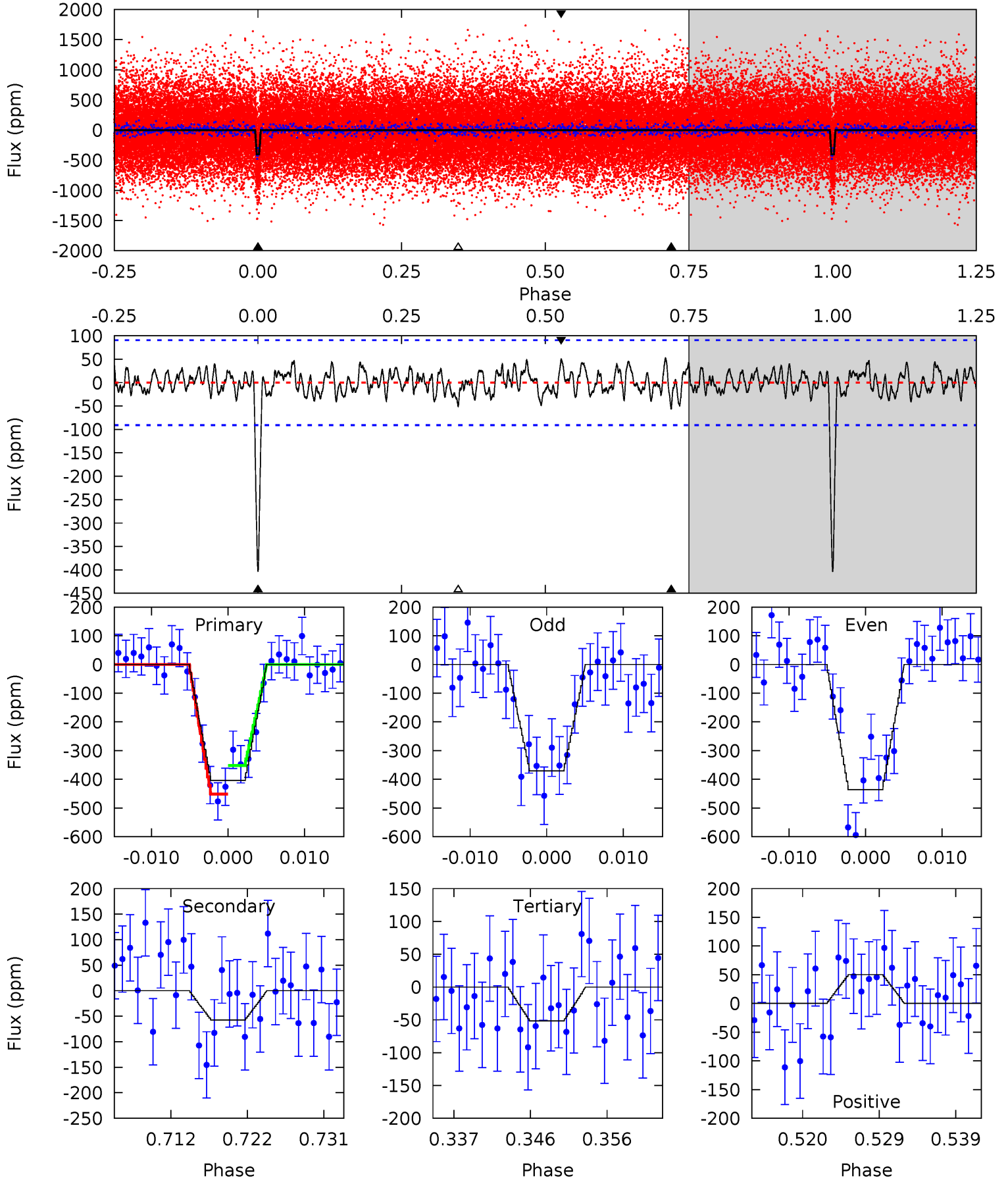
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.4	3.28	3.01	3.13	5.02	2.56	1.18	21.3	21.2	0.27	0.15	2.29	0.93	0.11	2.62



Alt Model-Shift Uniqueness Test

003756264-01, P = 7.362693 Days, E = 129.502249 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.4	3.17	2.86	2.79	5.03	2.59	1.13	19.5	19.6	0.31	0.39	1.83	0.97	0.12	2.76



Stellar Parameters For KIC 003756264

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5868^{+140}_{-175}	$4.530^{+0.042}_{-0.179}$	$-0.120^{+0.300}_{-0.300}$	$0.894^{+0.231}_{-0.077}$	$0.987^{+0.104}_{-0.116}$	$1.946^{+0.441}_{-0.938}$
	+2%/-3%	+1%/-4%	+250%/-250%	+26%/-9%	+11%/-12%	+23%/-48%
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 003756264-01 / KOI 3108.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-56 ± 17	$2.00^{+1.07}_{-1.01}$	1285^{+75}_{-55}	3920^{+1178}_{-559}	40^{+112}_{-24}
Alt.	-57 ± 18	$2.07^{+1.13}_{-0.99}$	1287^{+67}_{-57}	3893^{+1162}_{-551}	39^{+104}_{-23}

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 $A_{obs} \gg 1.0$

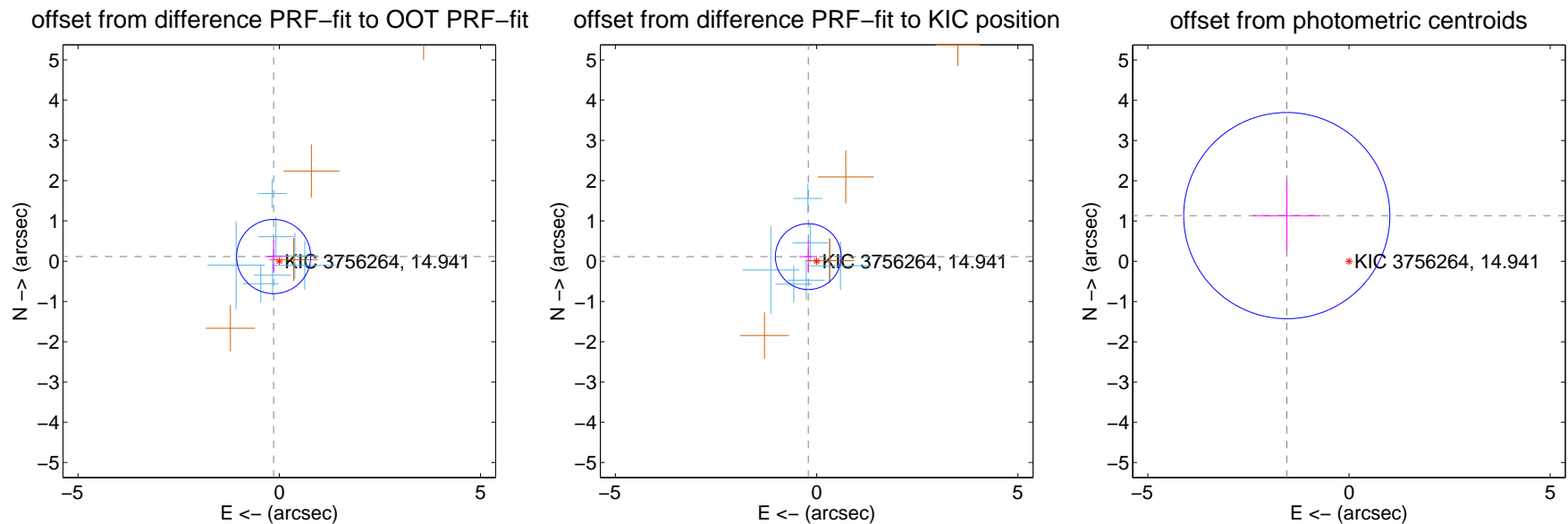
DV Centroid Data

Supplemental centroid analysis for 003756264-01. Kepler magnitude: 14.94. Transit SNR 17.37

There are 7 quarters with good PRF difference image offsets

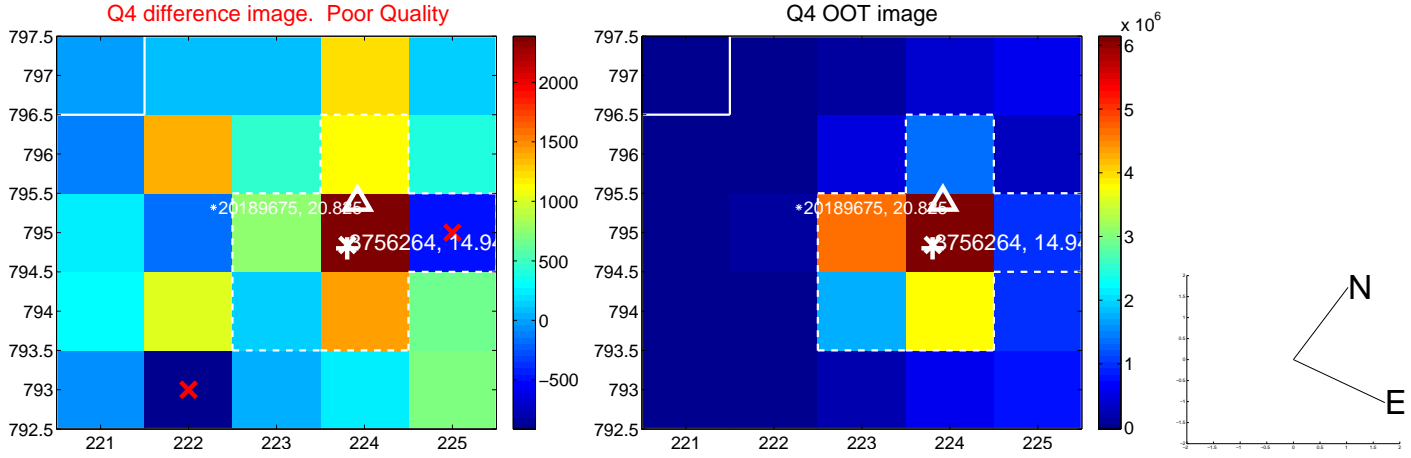
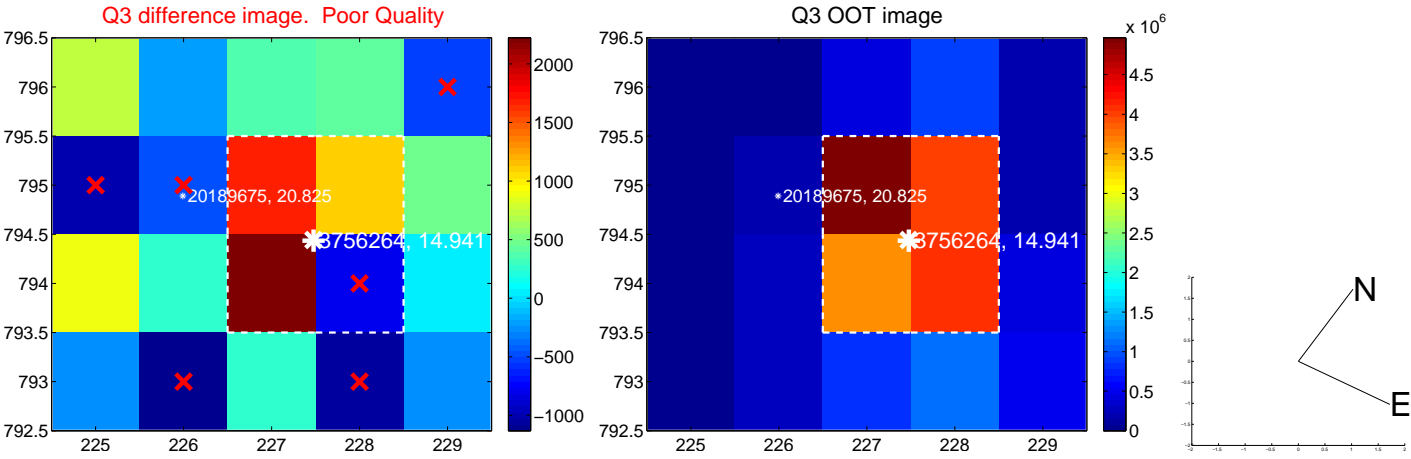
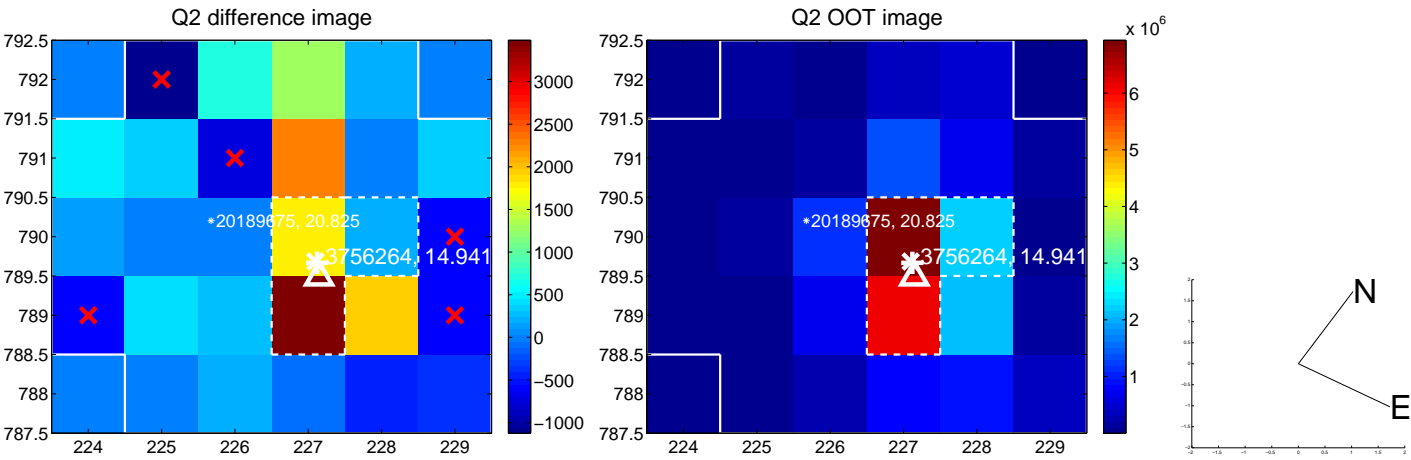
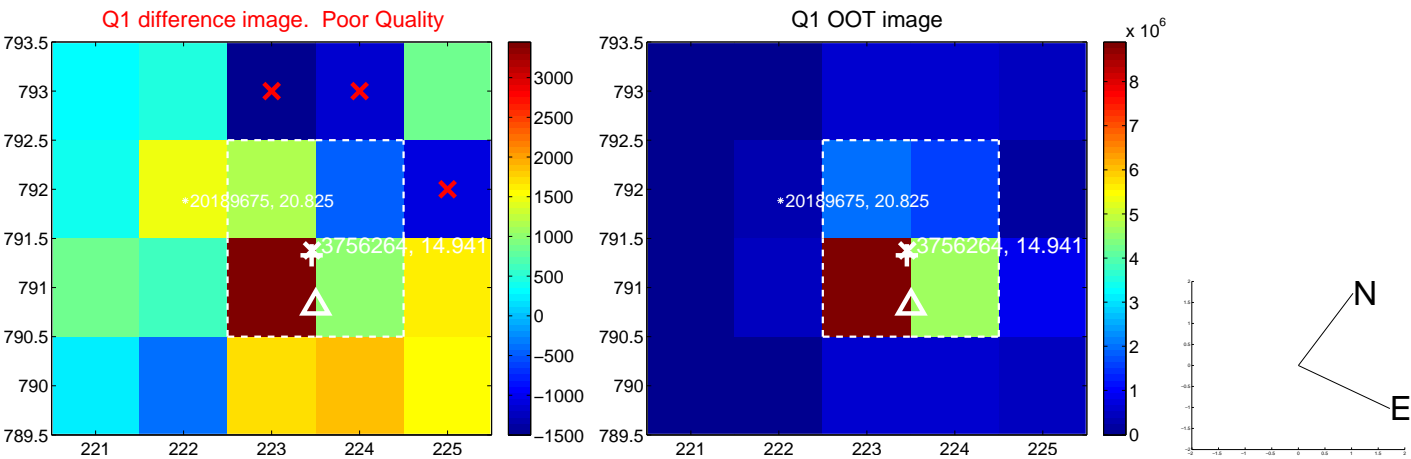
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.182 ± 0.307	0.59	0.140 ± 0.216	0.116 ± 0.405
PRF-fit source offset from KIC position	0.237 ± 0.272	0.87	0.208 ± 0.220	0.114 ± 0.401
photometric centroid source offset	1.92 ± 0.85	2.25	1.55 ± 0.85	1.13 ± 0.86

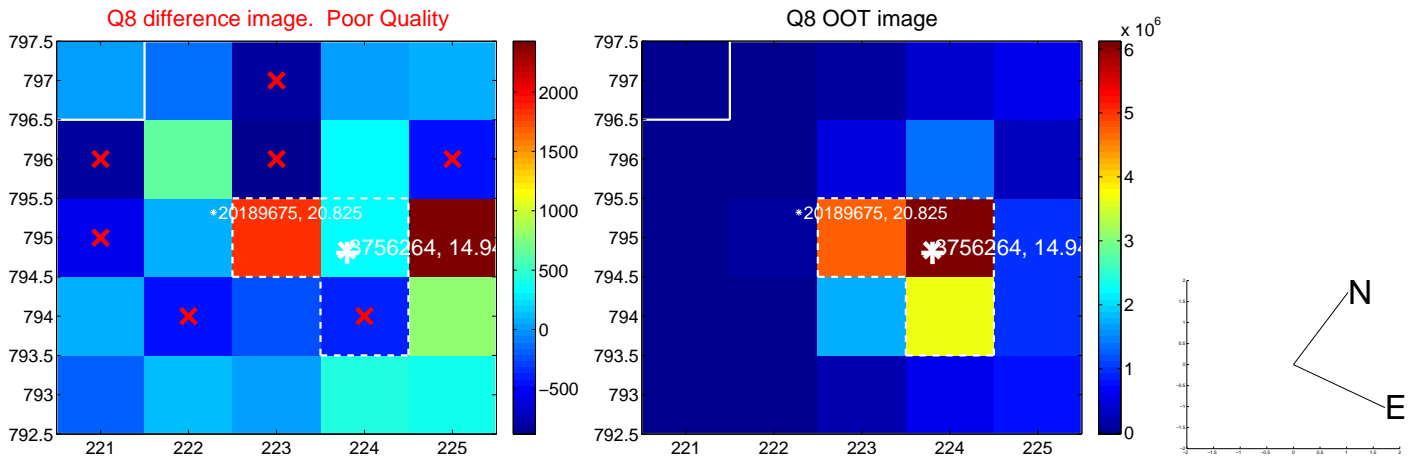
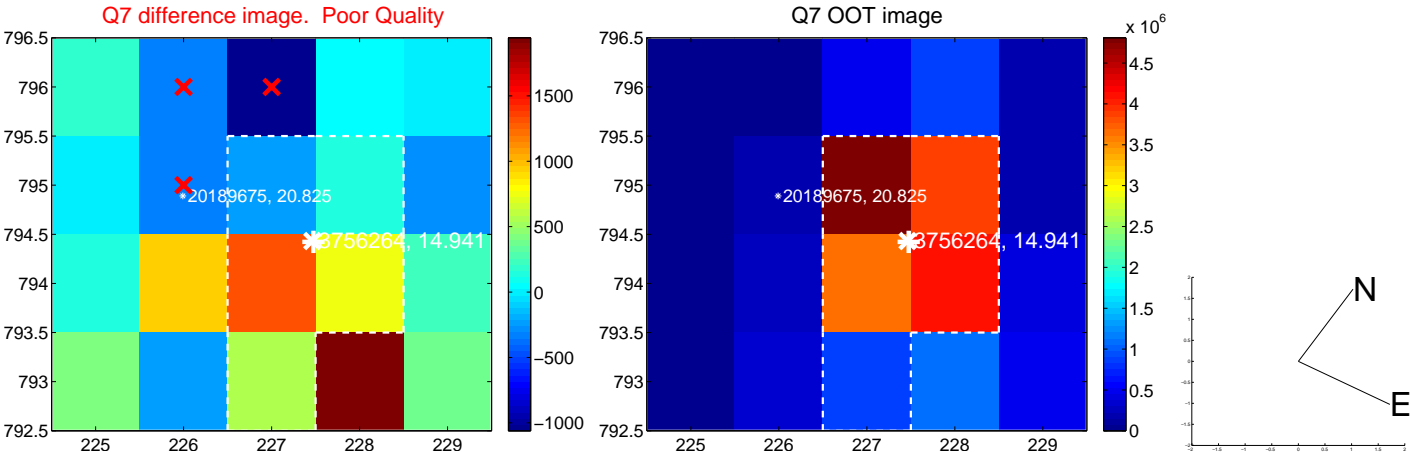
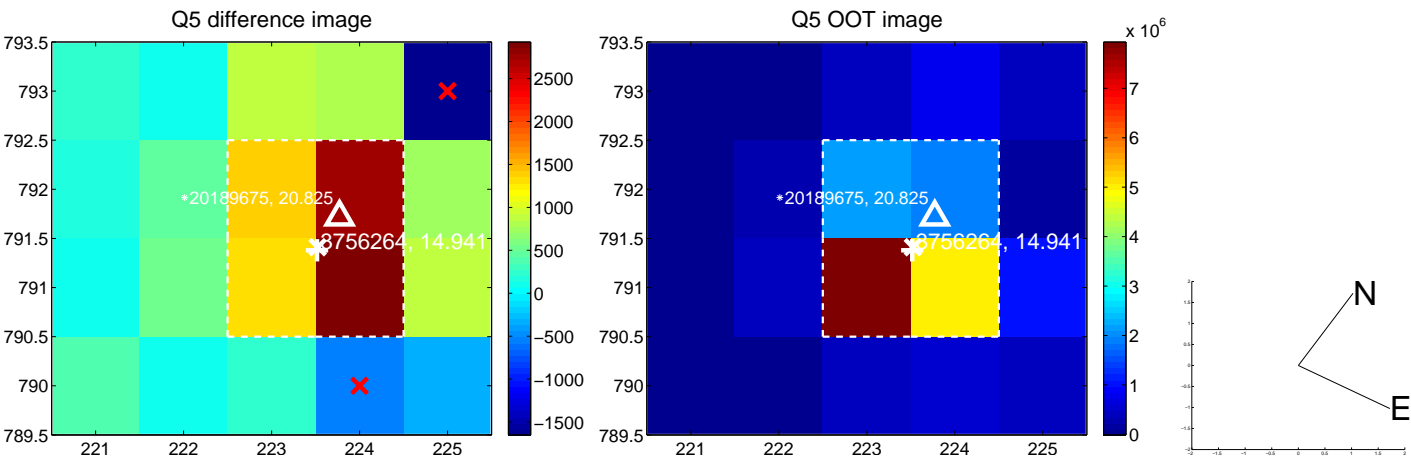


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

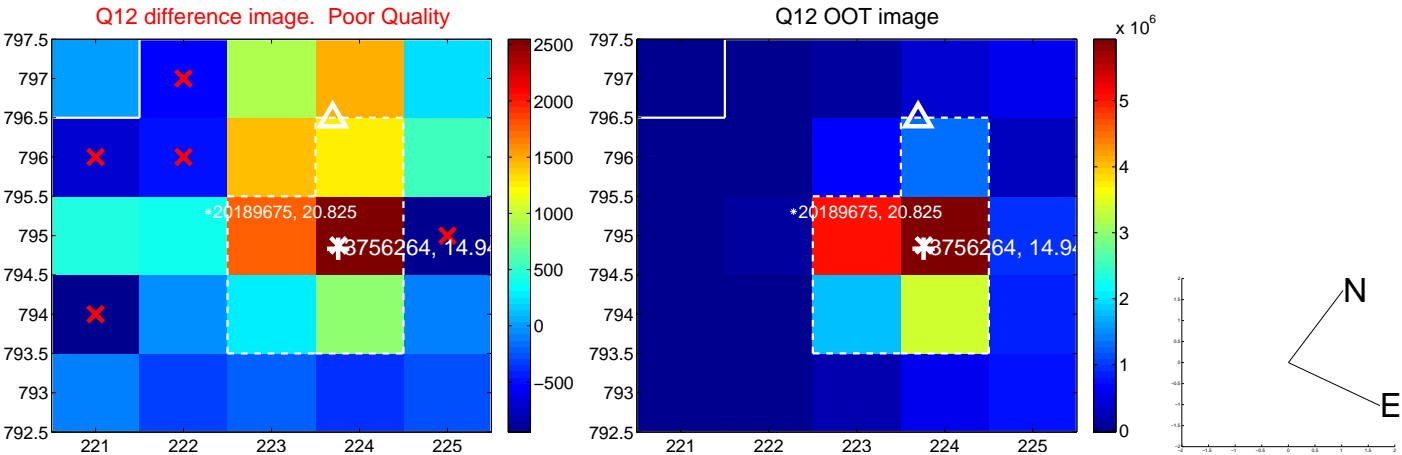
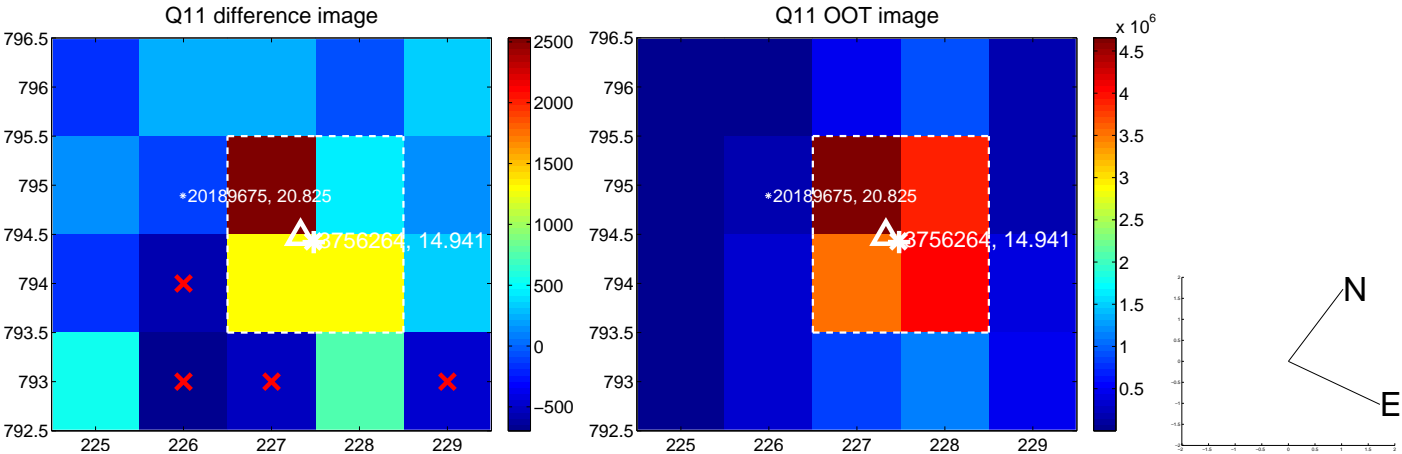
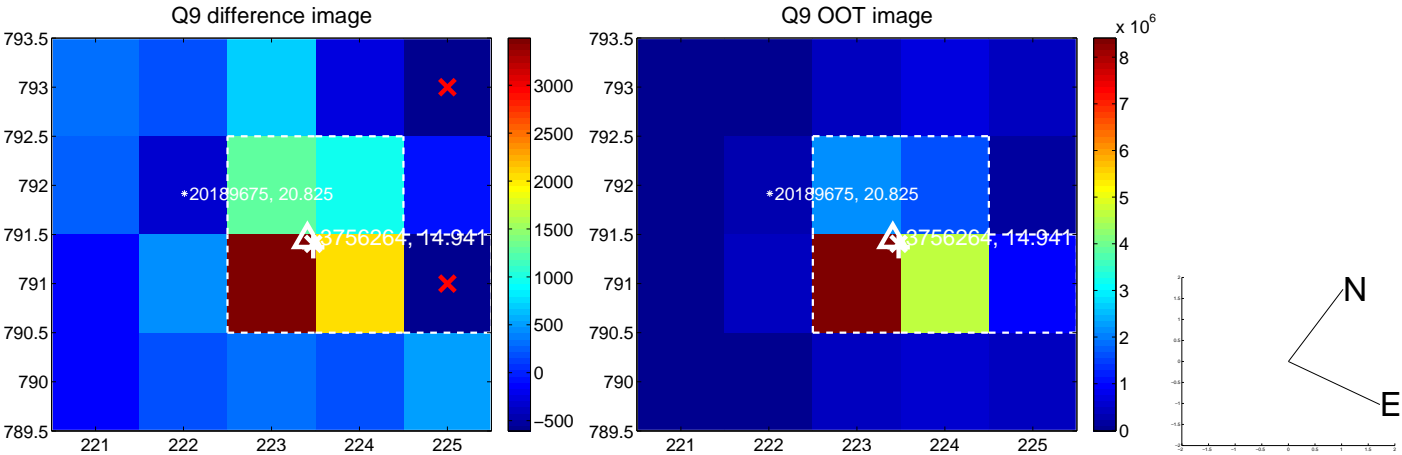
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



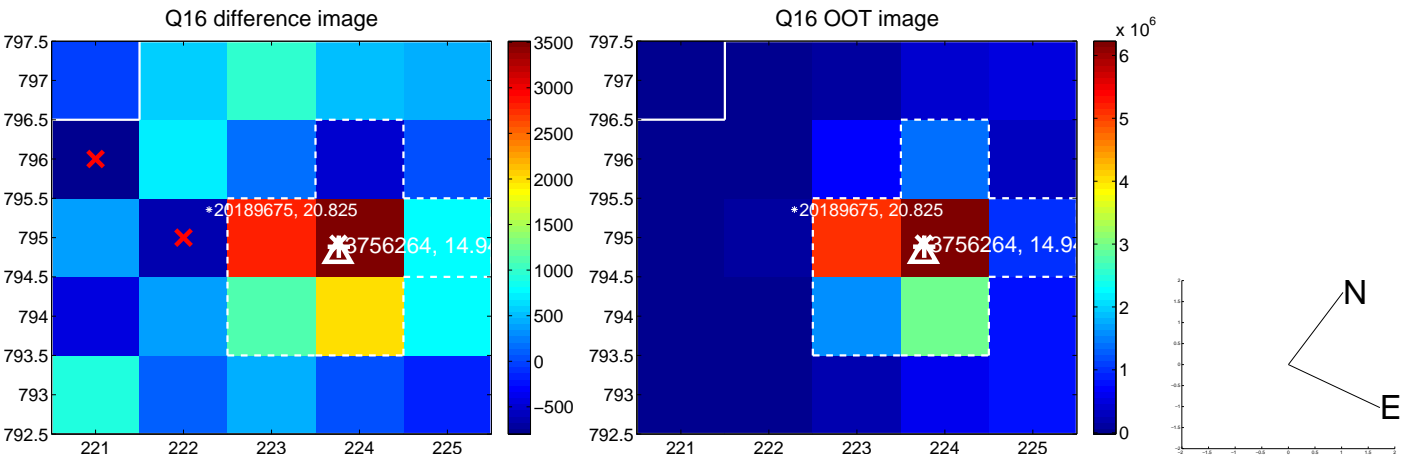
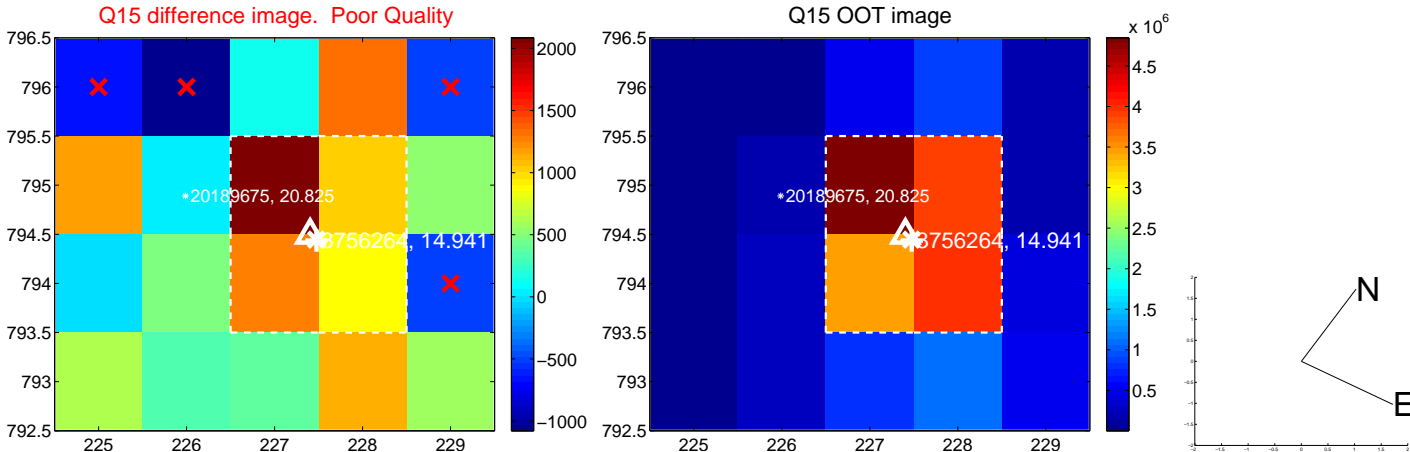
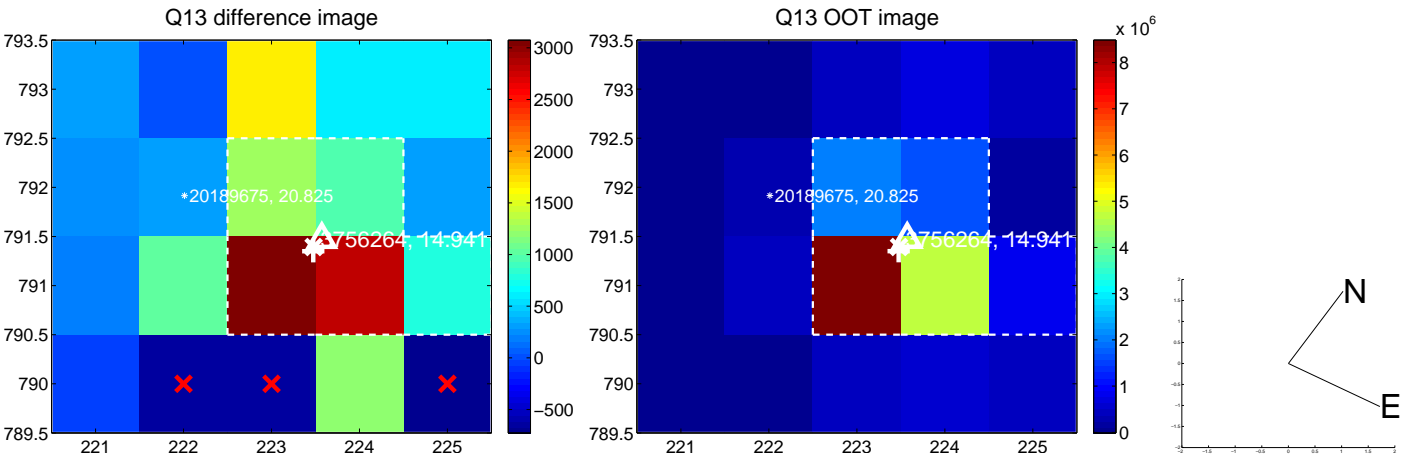
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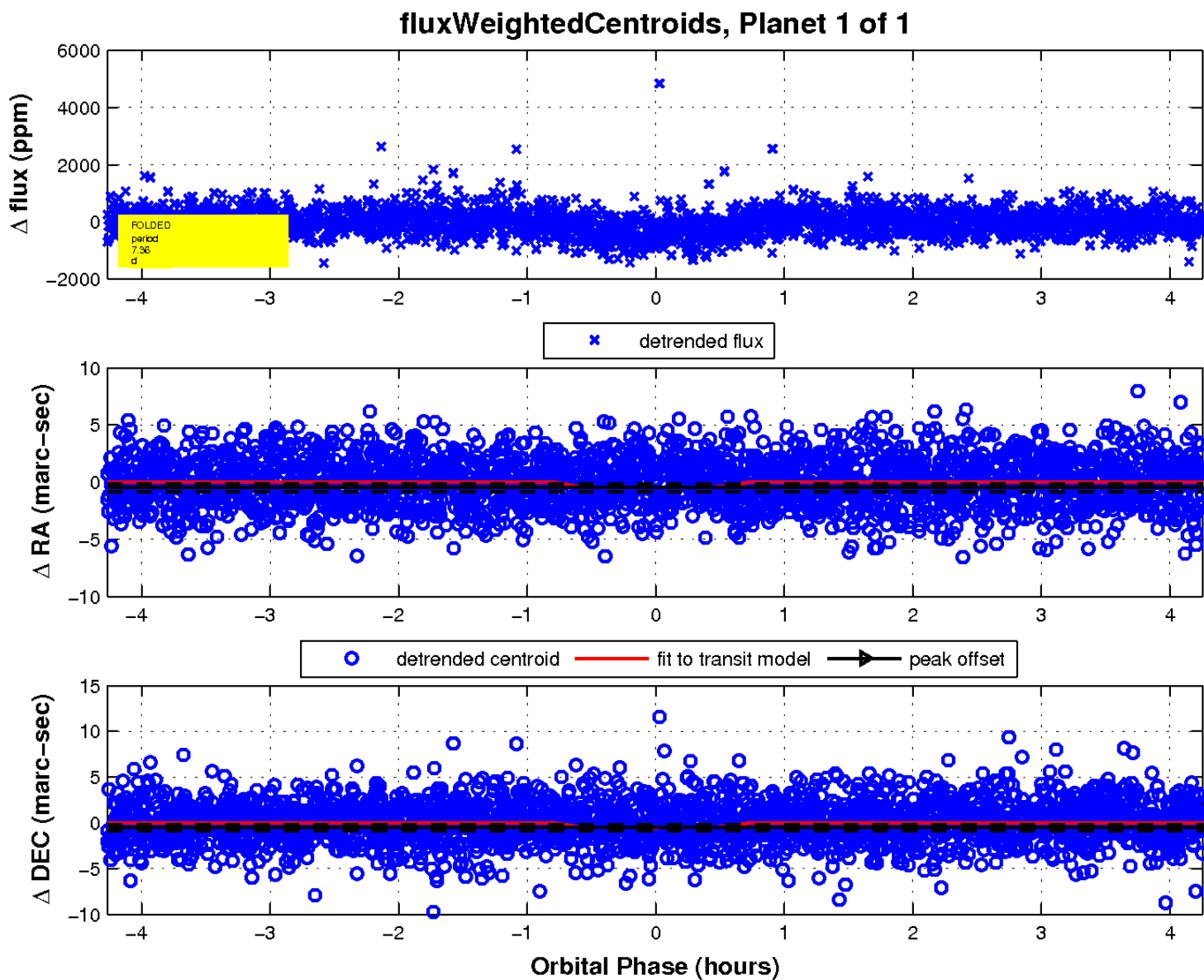
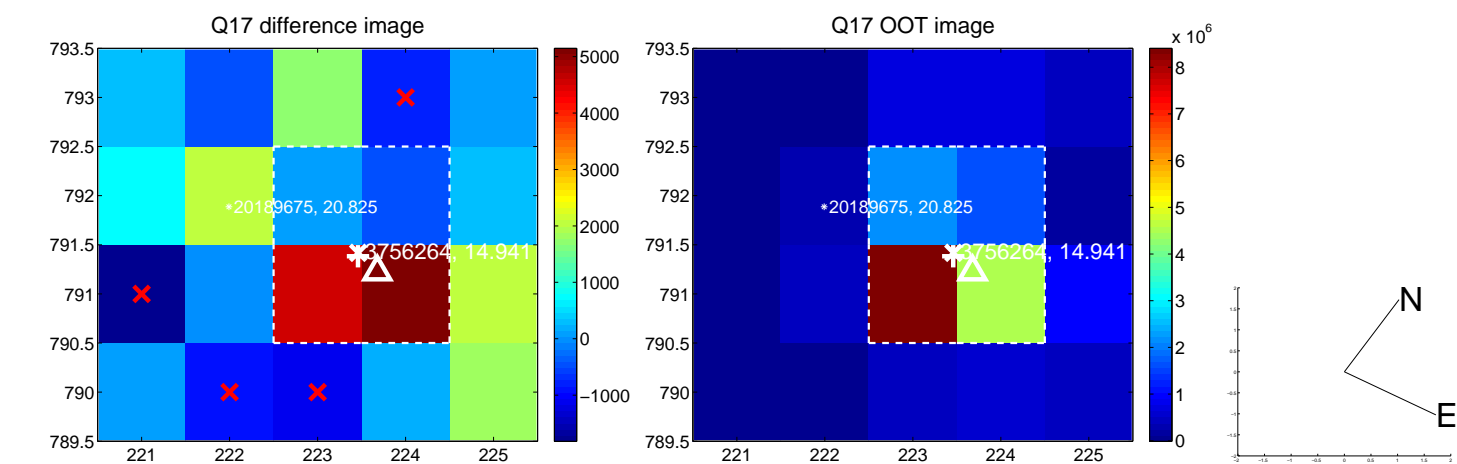
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

