

KIC 007761918

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})
007761918-01	OBS	1808.01	89.193464	217.824387	888.4	4.403	66.2	65.6	1.29	6071	4.46	12.85

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007761918-01	OBS	PC	0.97	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.

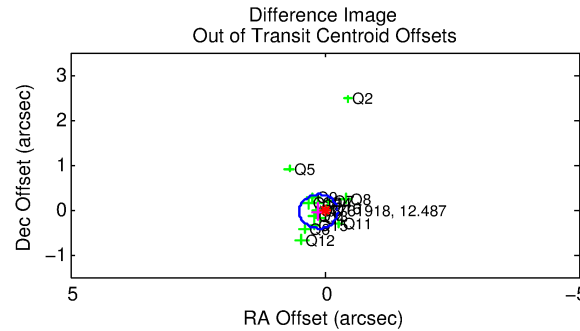
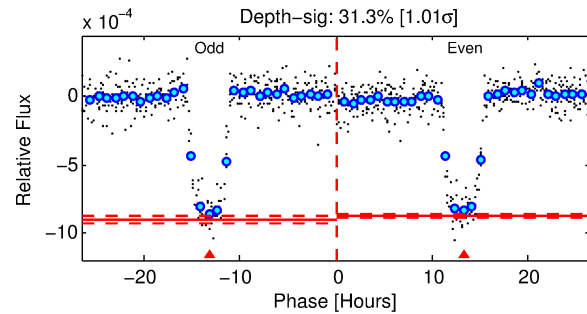
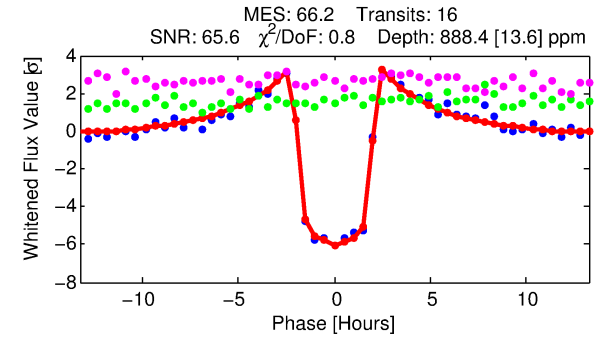
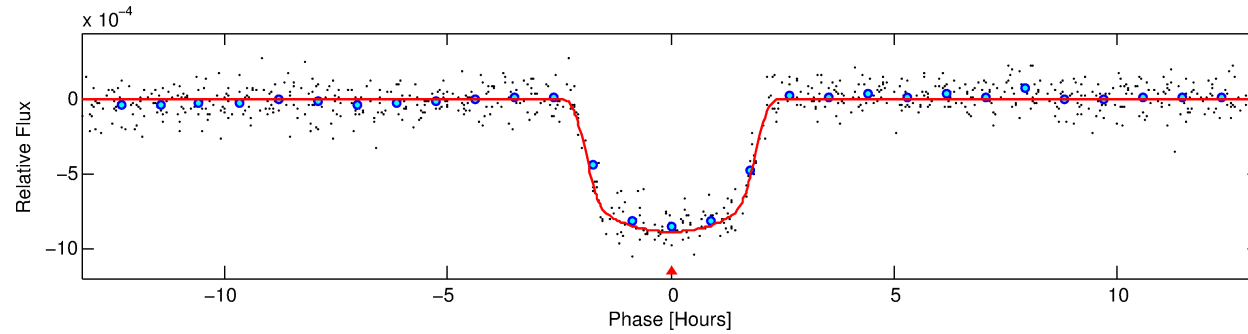
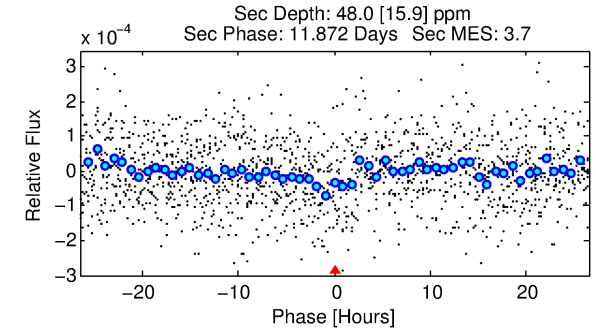
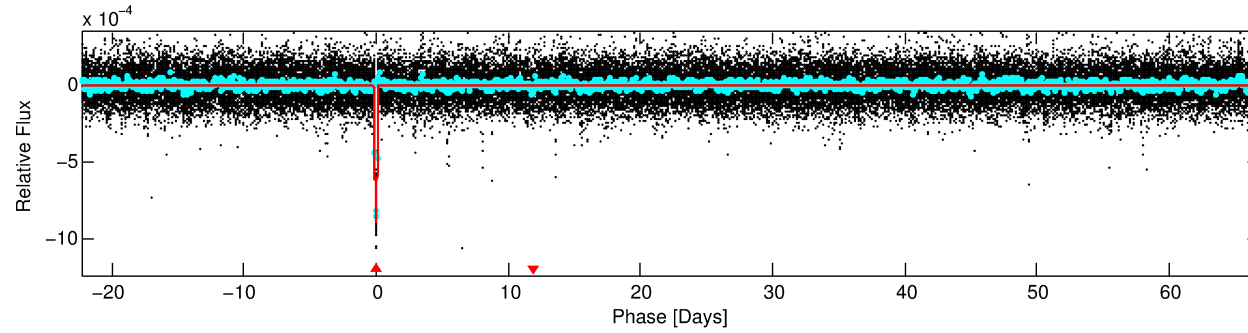
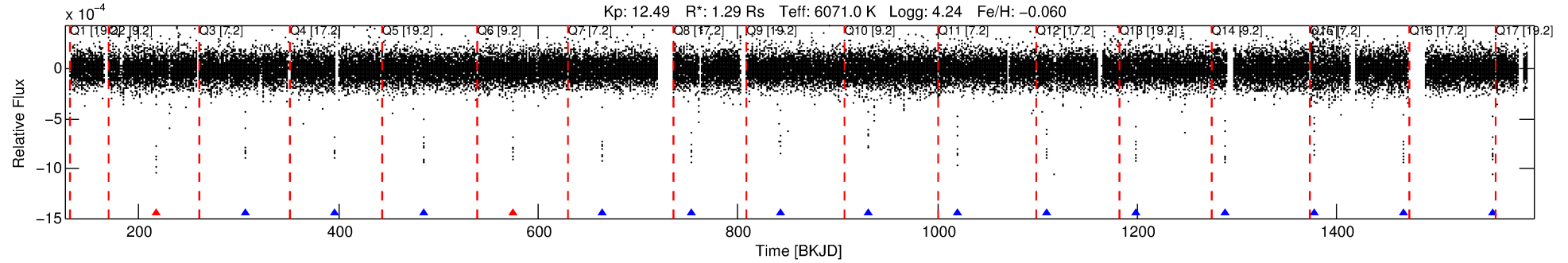
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007761918-01

No Significant Match Found

DV One-Page Summary

KIC: 7761918 Candidate: 1 of 1 Period: 89.193 d
KOI: K01808.01 Corr: 0.955



DV Fit Results:

Period = 89.19346 [0.00011] d
Epoch = 217.8244 [0.0010] BKJD
Rp/R* = 0.0316 [0.0006]
a/R* = 84.25 [7.14]
b = 0.88 [0.02]
Seff = 12.85 [3.41]
Teq = 483 [32] K
Rp = 4.47 [0.80] Re
a = 0.3985 [0.0646] AU
Ag = 210.39 [87.60] [2.39σ]
Teffp = 2843 [245] K [9.56σ]

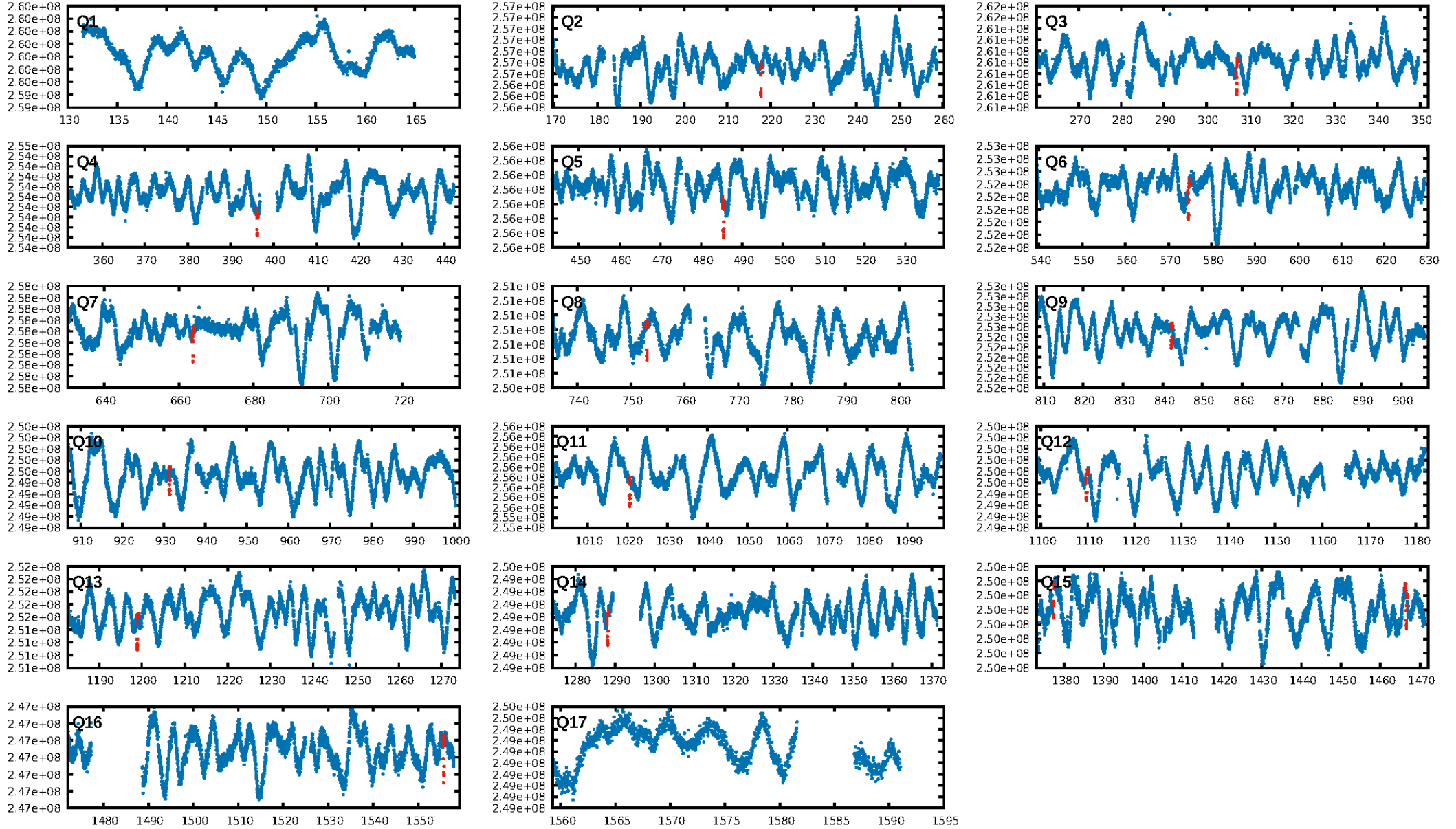
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 90.5%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 0.88 [14/16]
GhostDiagnostic-chr: 3.608
Centroid-sig: 0.0%
Centroid-so: 0.383 arcsec [2.95σ]
OotOffset-rm: 0.128 arcsec [1.01σ]
KicOffset-rm: 0.254 arcsec [1.54σ]
OotOffset-st: 4/4/4/3 [15]
KicOffset-st: 4/4/4/3 [15]
DiffImageQuality-fgm: 1.00 [15/15]
DiffImageOverlap-fno: 1.00 [15/15]

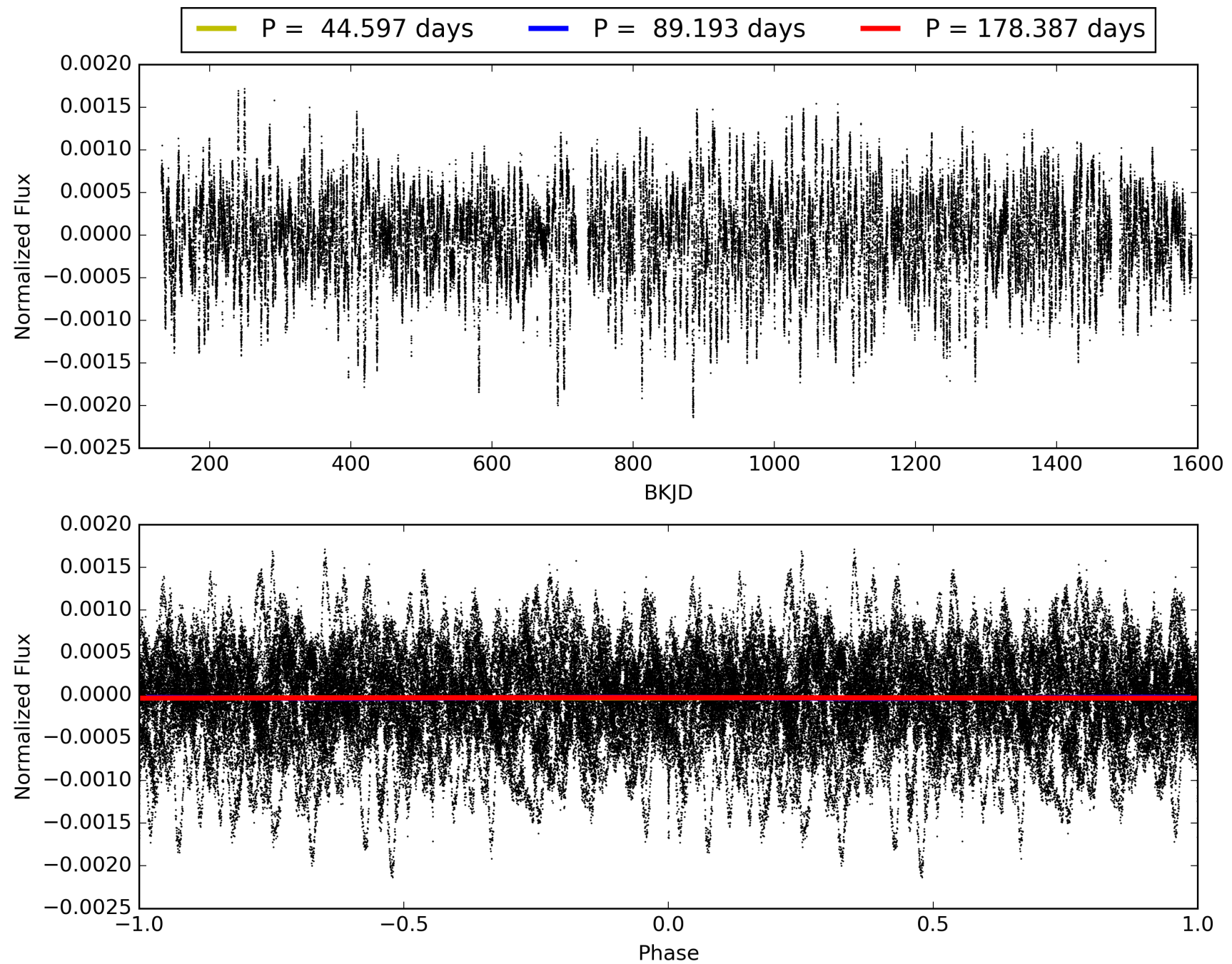
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 00:56:05 Z

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

TCE 007761918-01, PDC Light Curves

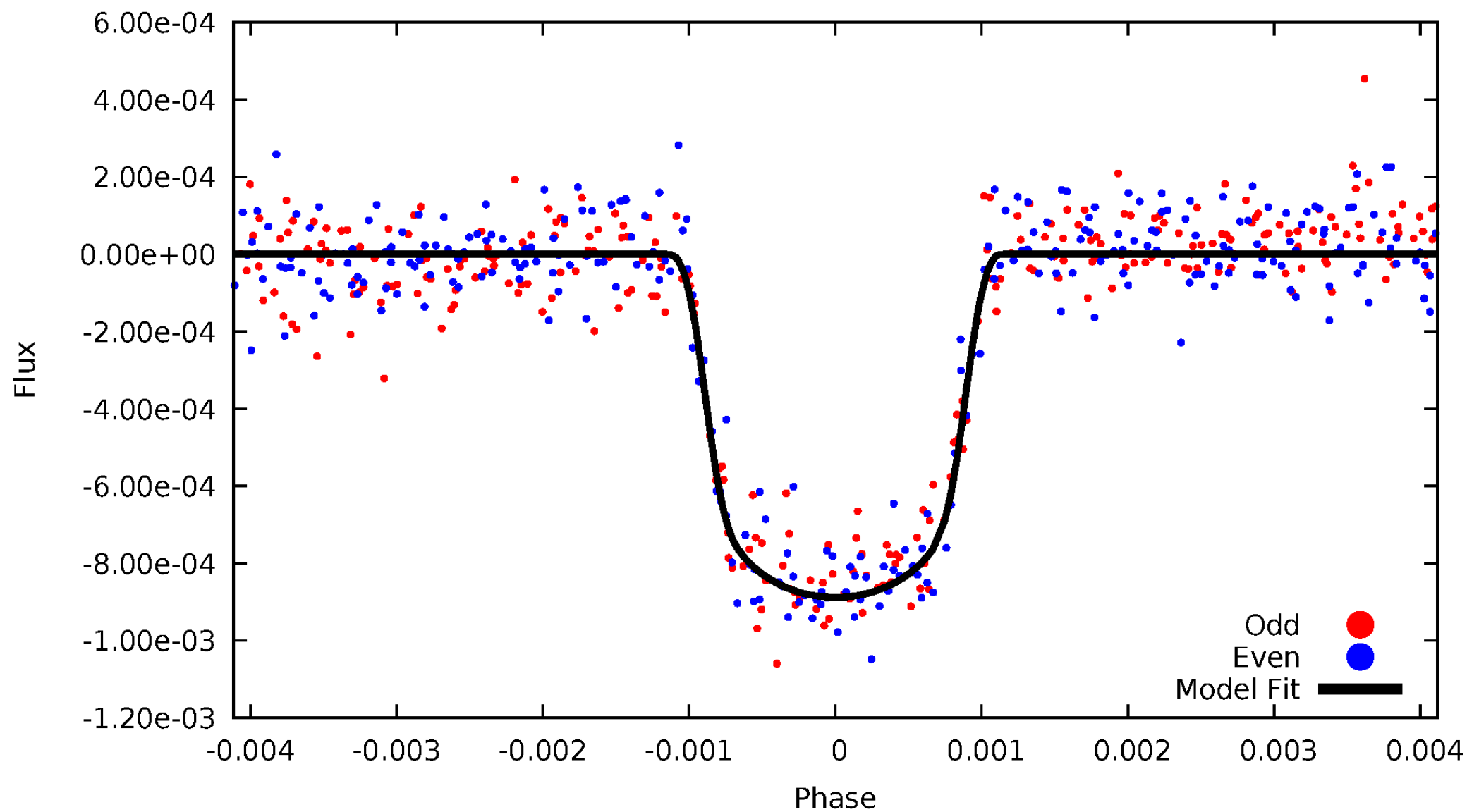


TCE 007761918-01



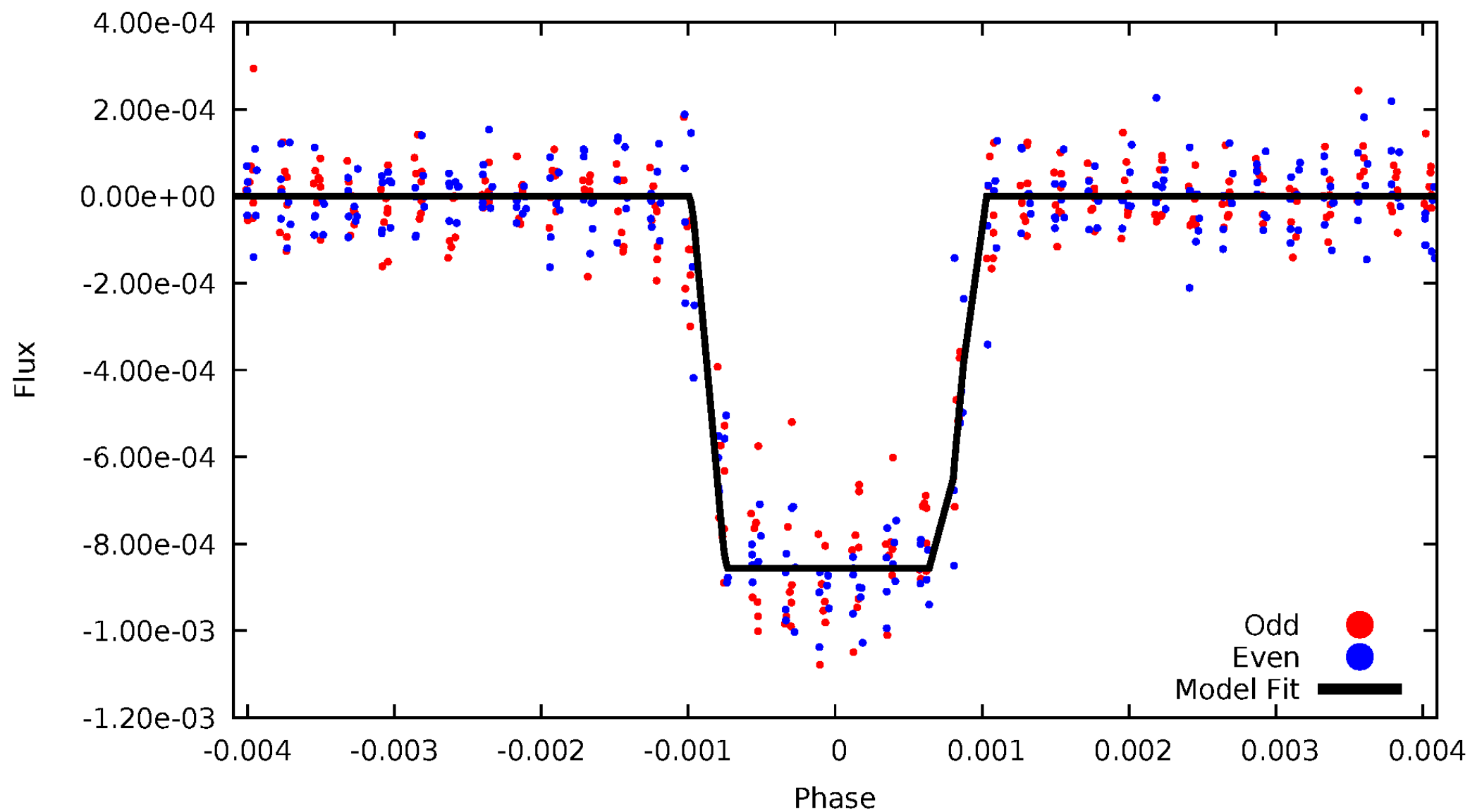
DV Odd/Even

TCE 007761918-01

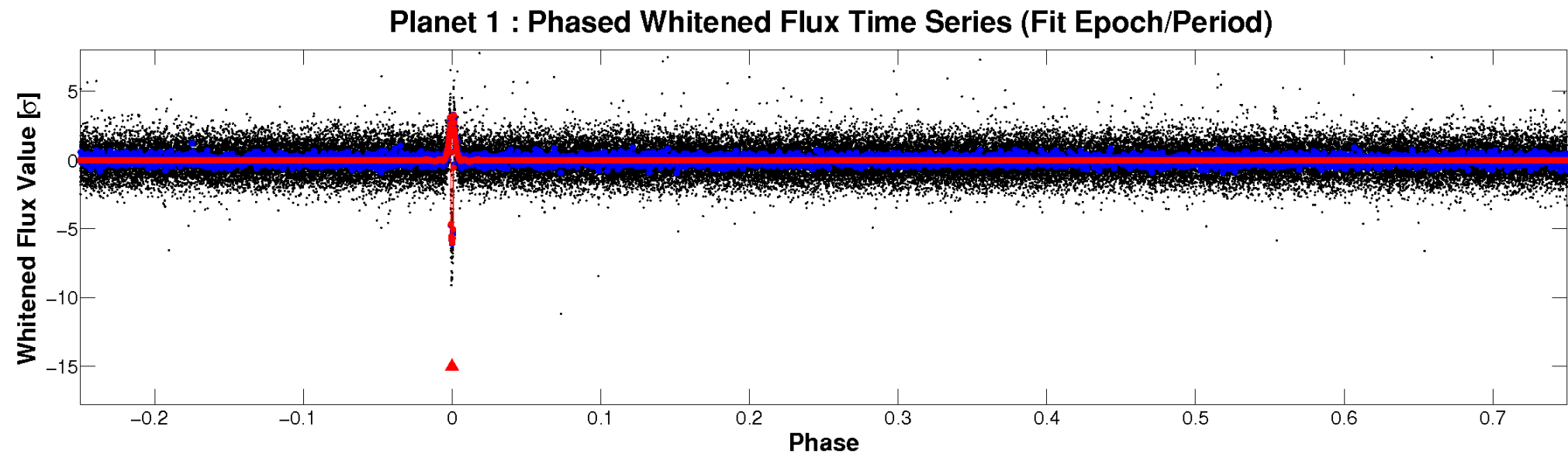
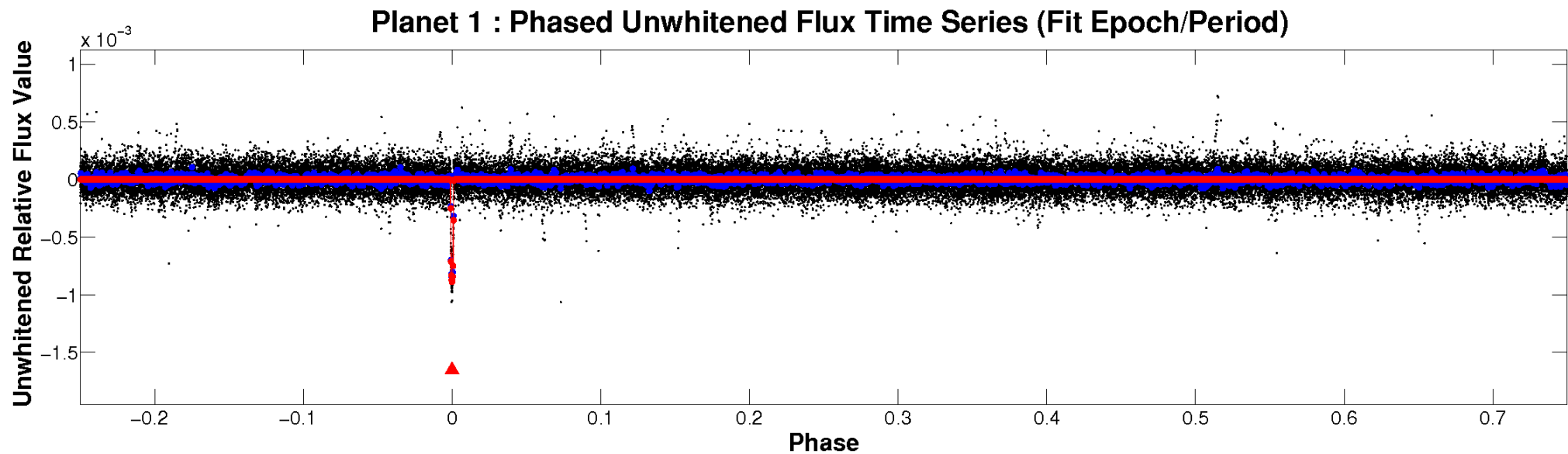


ALT Odd/Even

TCE 007761918-01

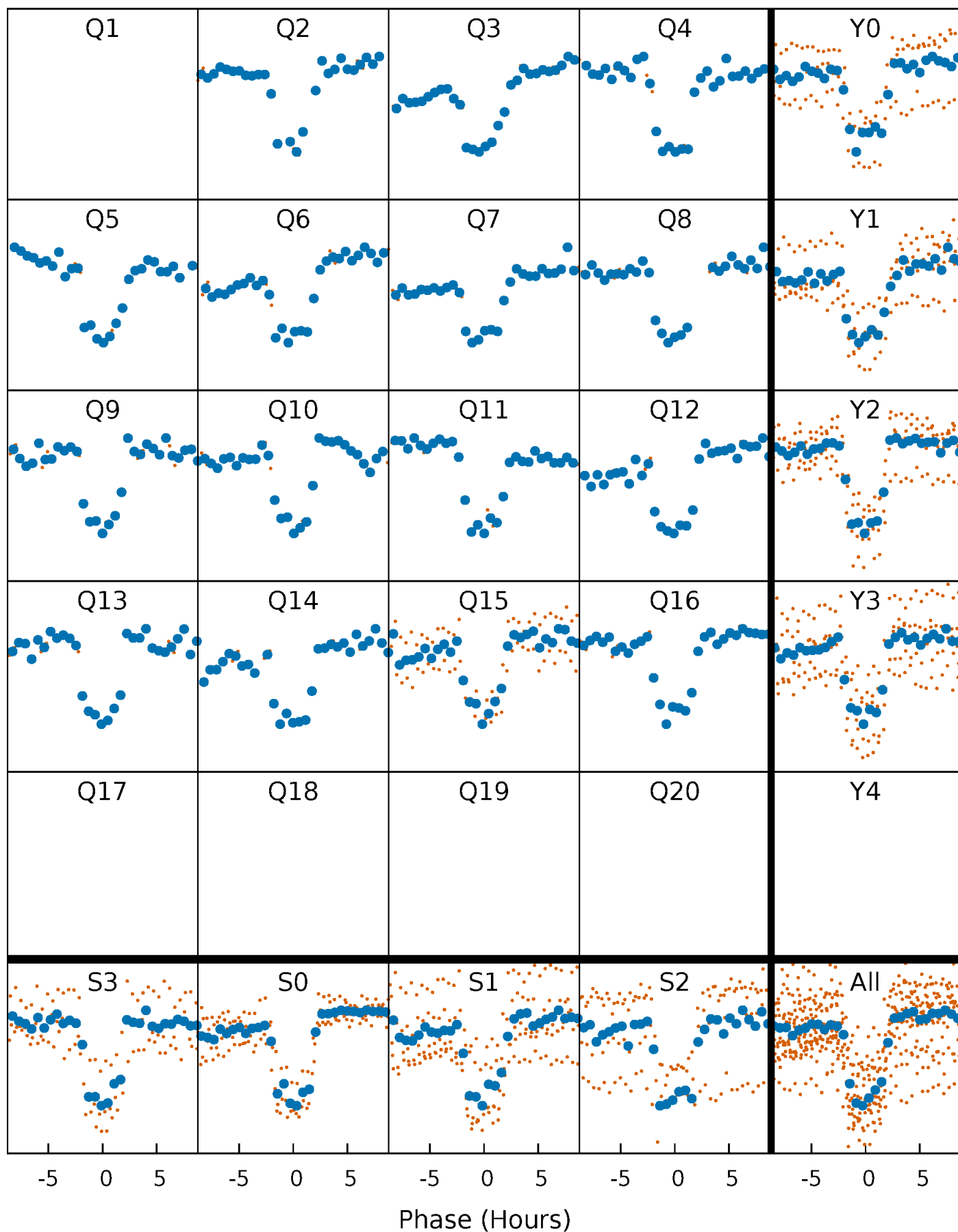


Non-Whitened Vs. Whitened Light Curve



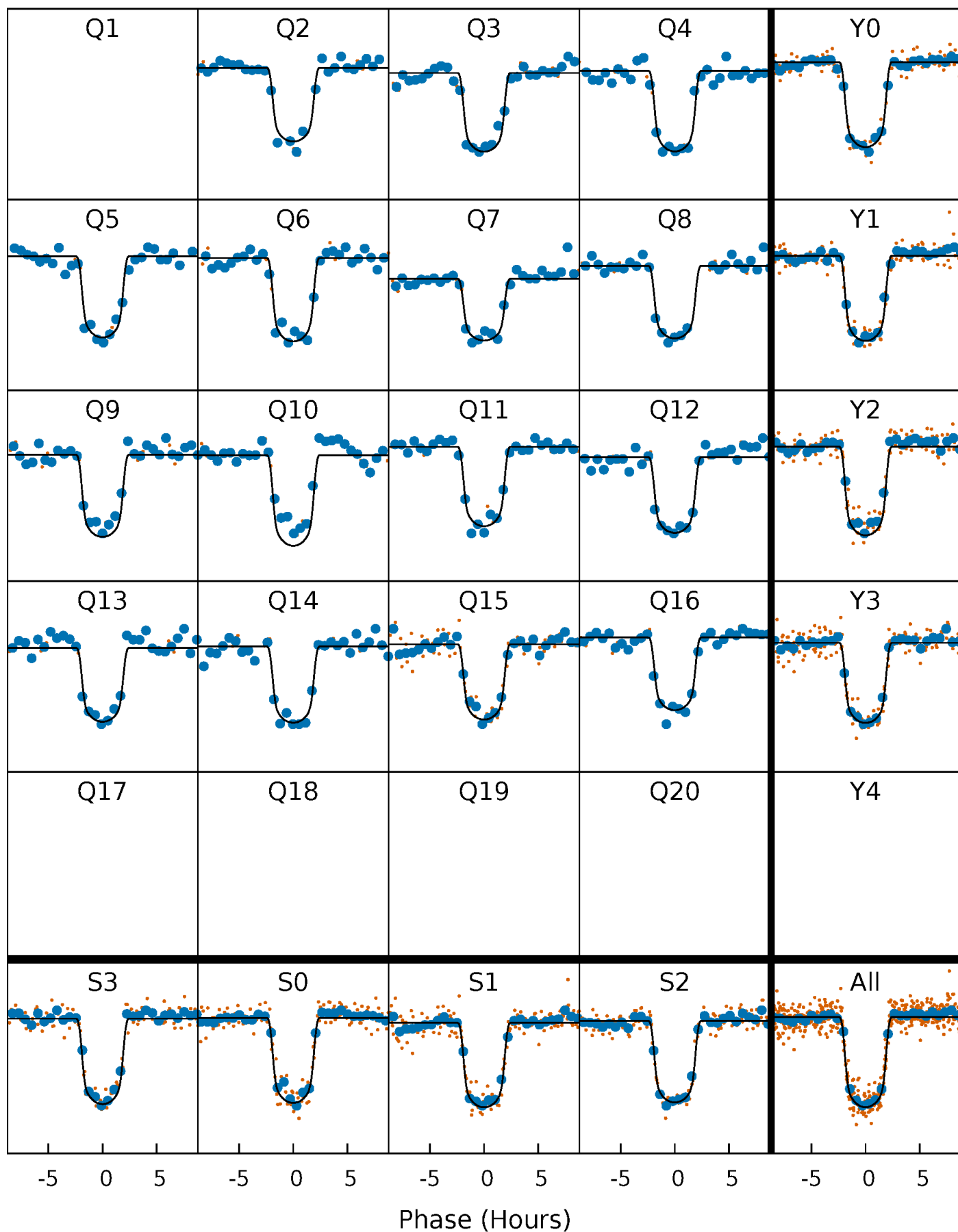
PDC Quarter-Phased Transit Curves

TCE 007761918-01 P= 89.193464 Days $T_0=217.824387$ (BKJD)



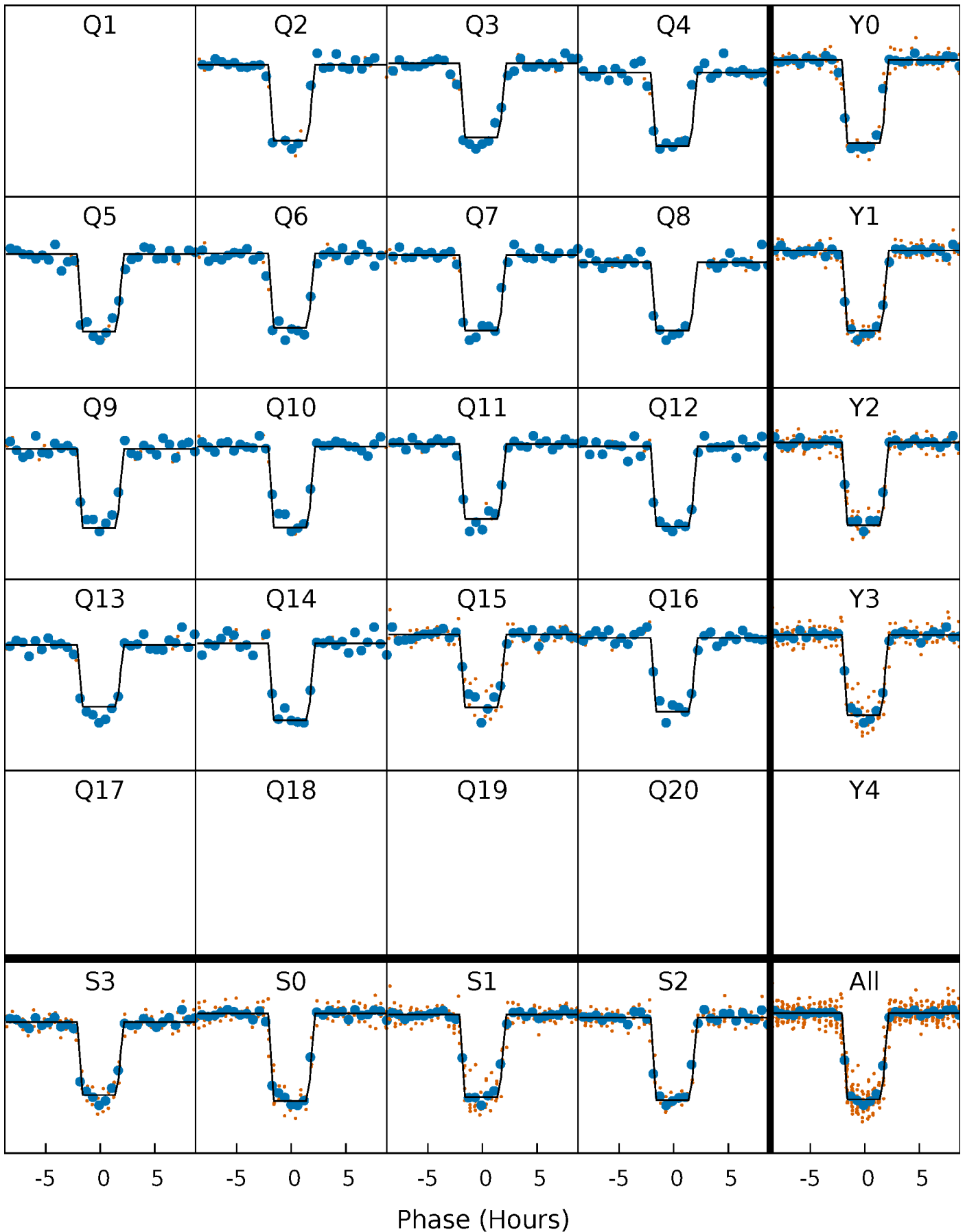
DV Quarter-Phased Transit Curves

TCE 007761918-01 P= 89.193464 Days $T_0=217.824387$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

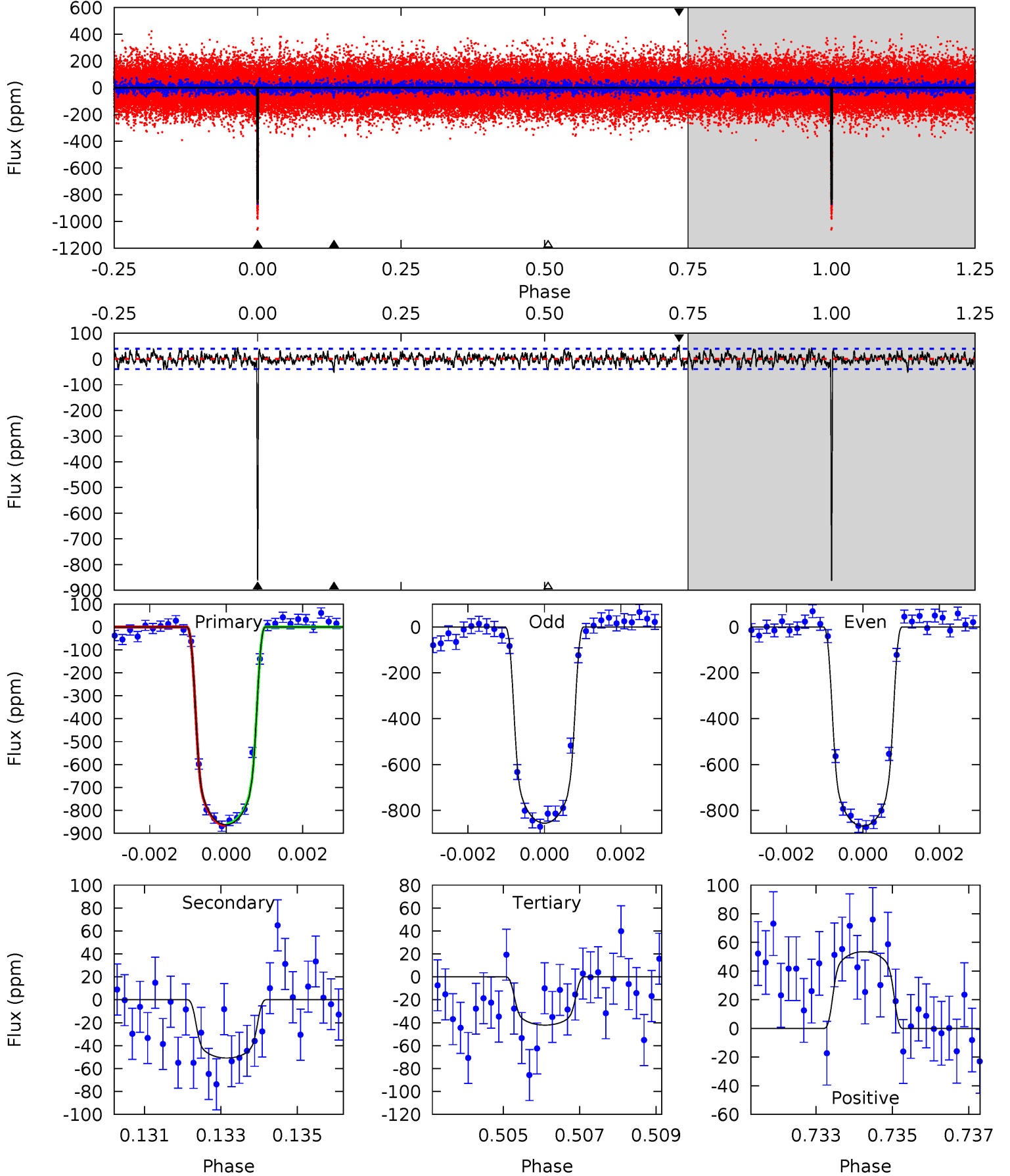
TCE 007761918-01 P= 89.192769 Days $T_0=217.829684$ (BKJD)



DV Model-Shift Uniqueness Test

007761918-01, P = 89.193464 Days, E = 128.630923 Days

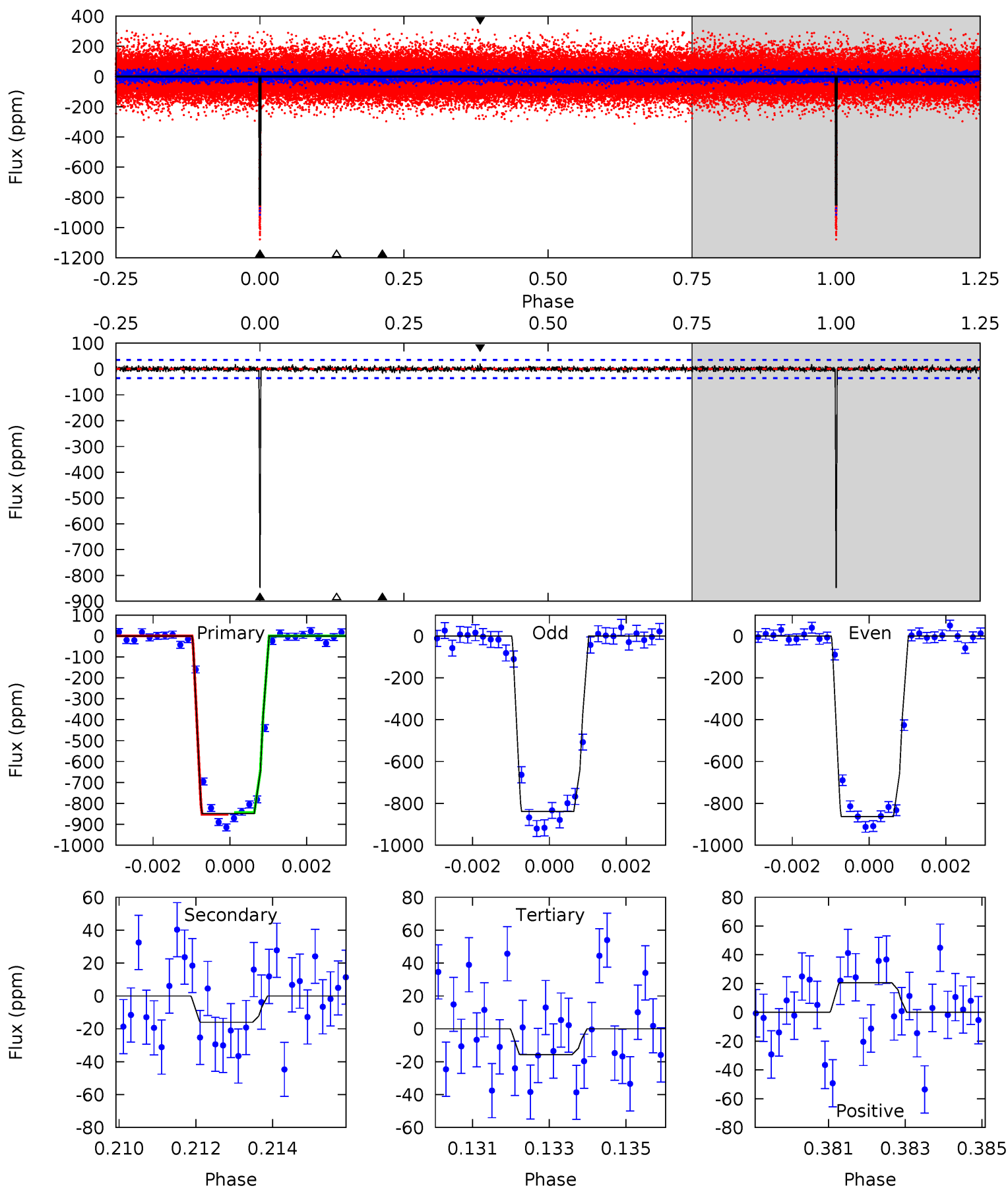
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
115.4	6.80	5.63	7.16	5.31	3.06	1.91	109.7	108.2	1.17	-0.36	0.88	0.98	0.06	0.54



Alt Model-Shift Uniqueness Test

007761918-01, $P = 89.192769$ Days, $E = 128.636915$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
128.2	2.42	2.37	3.12	5.33	3.09	0.65	125.8	125.1	0.04	-0.70	1.89	0.99	0.02	0.63



Stellar Parameters For KIC 007761918

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6071^{+134}_{-134}	$4.239^{+0.143}_{-0.117}$	$-0.060^{+0.150}_{-0.150}$	$1.295^{+0.232}_{-0.211}$	$1.061^{+0.109}_{-0.073}$	$0.689^{+0.463}_{-0.238}$
	+2%/-2%	+3%/-3%	+250%/-250%	+18%/-16%	+10%/-7%	+67%/-35%
Source	SPE59	SPE59	SPE59	DSEP		

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

Secondary Eclipse Parameters for KIC 007761918-01 / KOI 1808.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-51 ± 7	$4.47^{+0.47}_{-0.40}$	674^{+35}_{-34}	3403^{+98}_{-95}	223^{+57}_{-50}
Alt.	-16 ± 7	$4.14^{+0.43}_{-0.39}$	672^{+35}_{-33}	2943^{+148}_{-190}	82^{+38}_{-33}

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 $A_{obs} \gg 1.0$

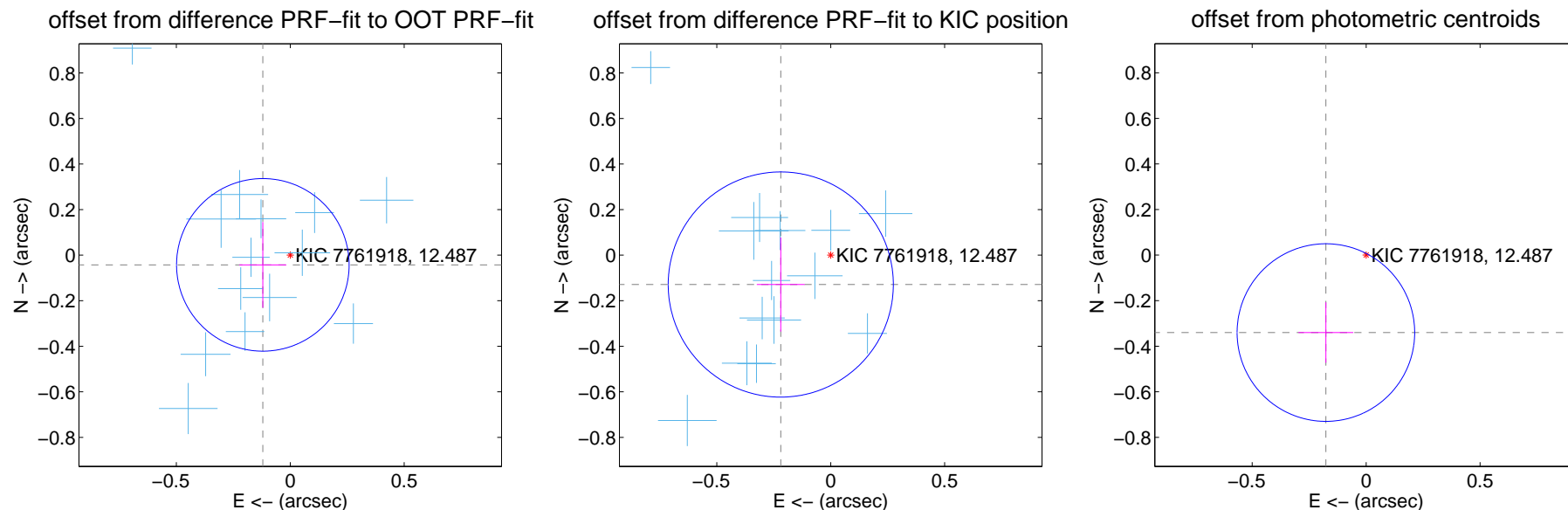
DV Centroid Data

Supplemental centroid analysis for 007761918-01. Kepler magnitude: 12.49. Transit SNR 65.58

There are 15 quarters with good PRF difference image offsets

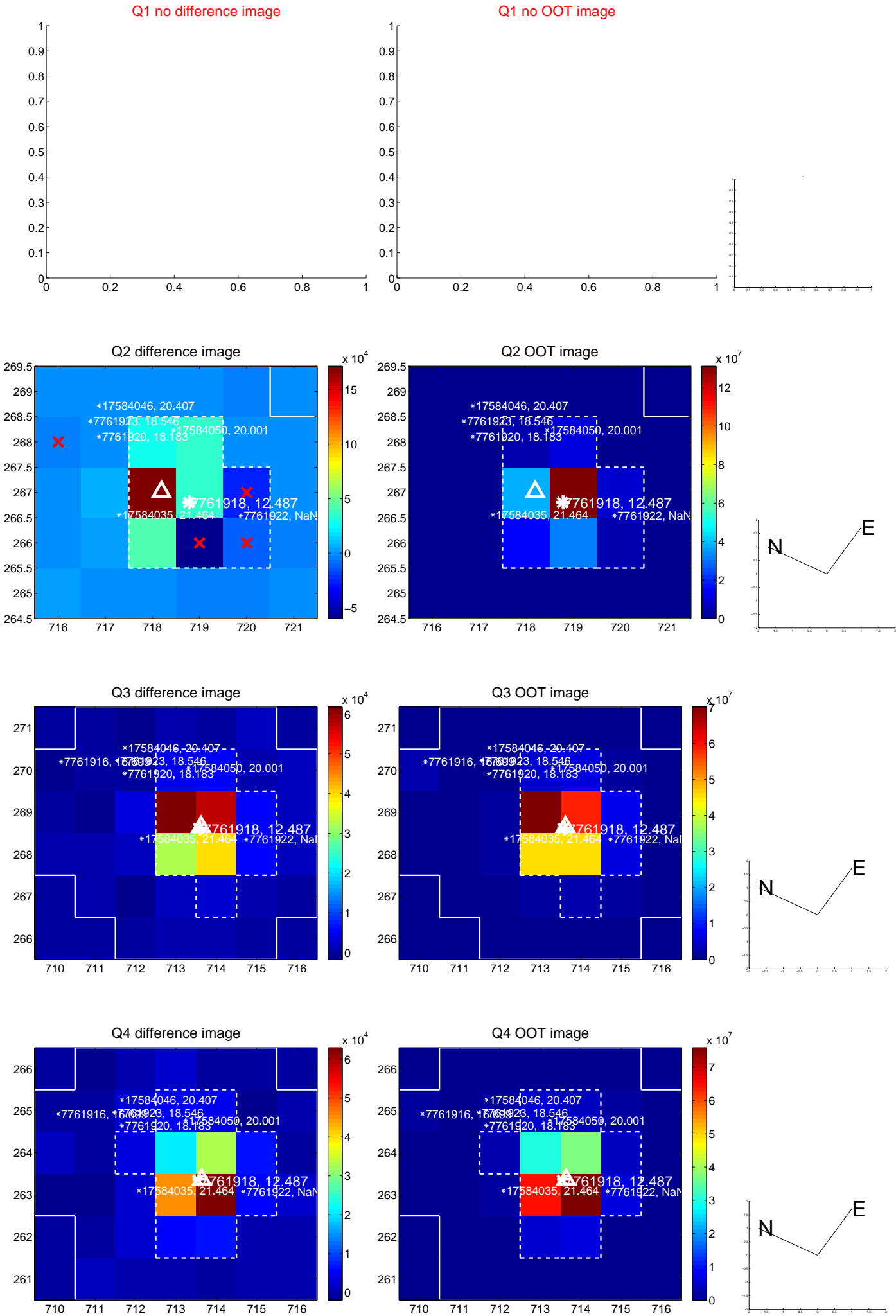
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.128 ± 0.126	1.01	0.120 ± 0.103	-0.043 ± 0.188
PRF-fit source offset from KIC position	0.254 ± 0.165	1.54	0.219 ± 0.105	-0.129 ± 0.207
photometric centroid source offset	0.38 ± 0.13	2.95	0.18 ± 0.12	-0.34 ± 0.13

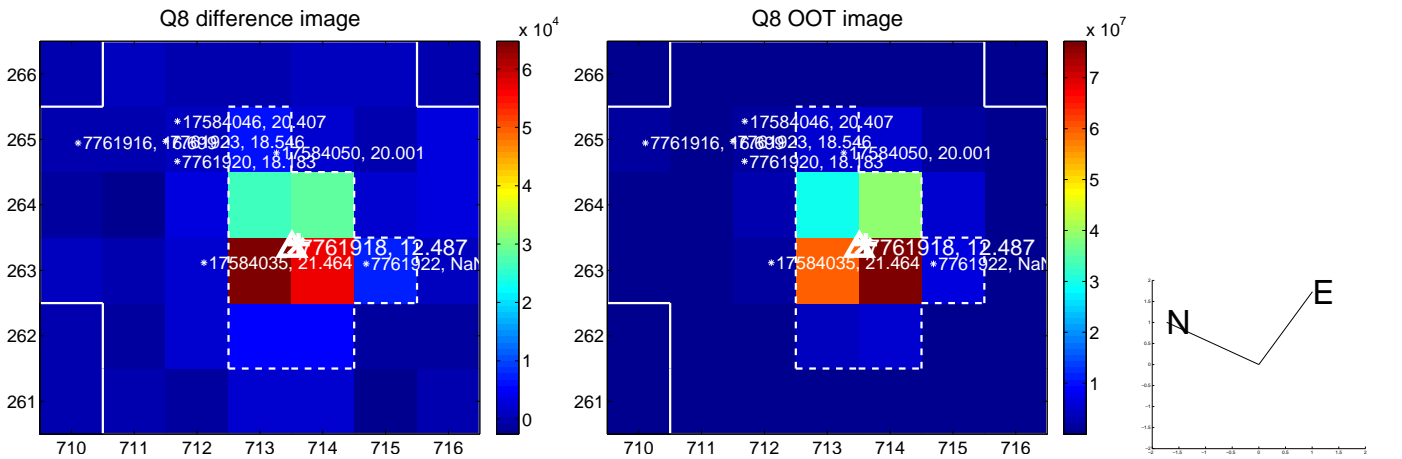
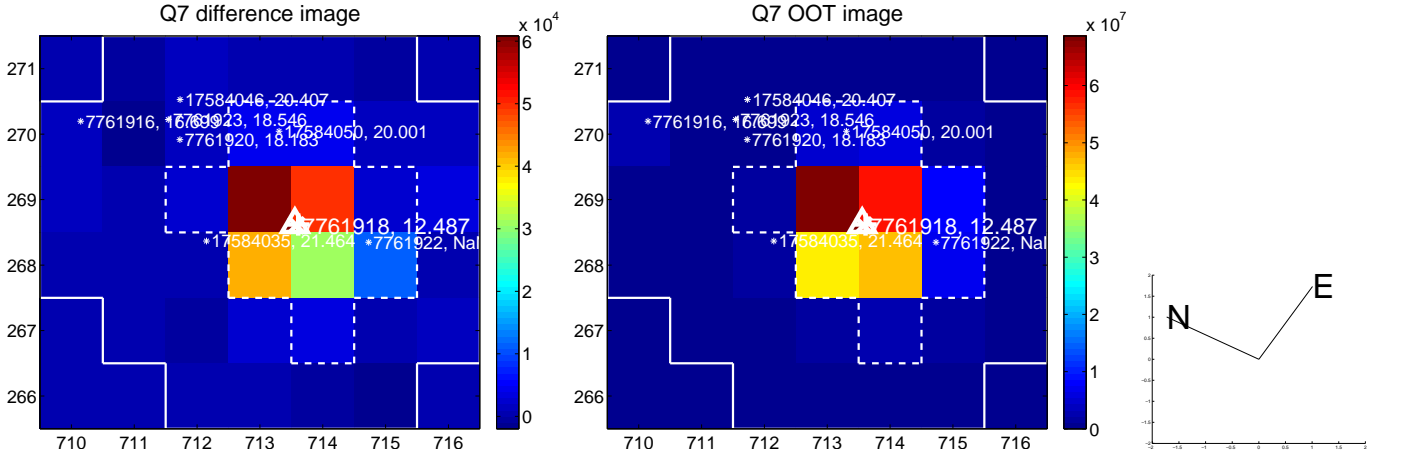
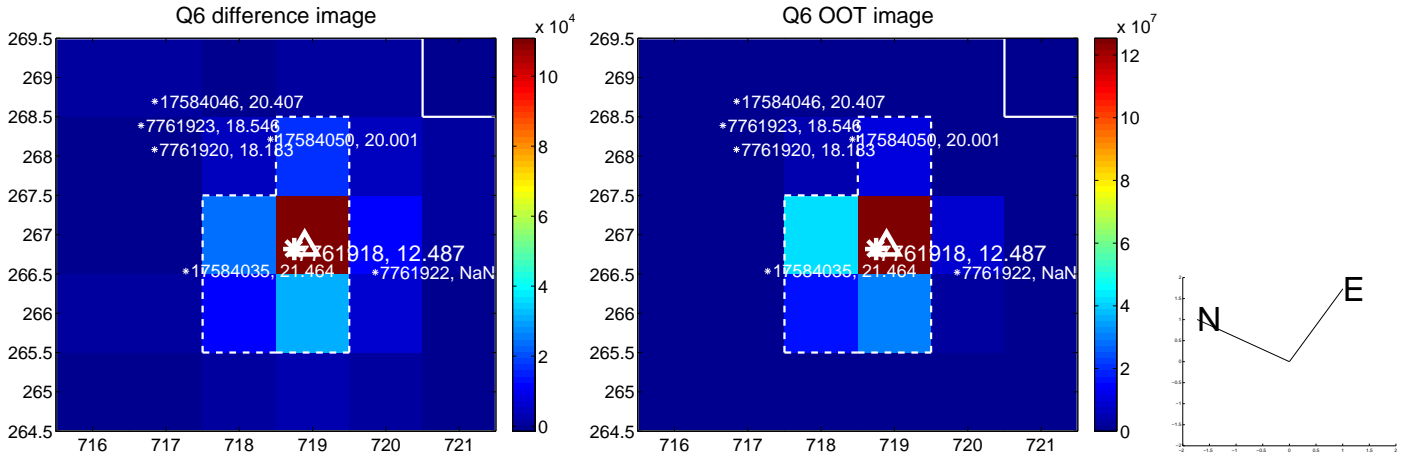
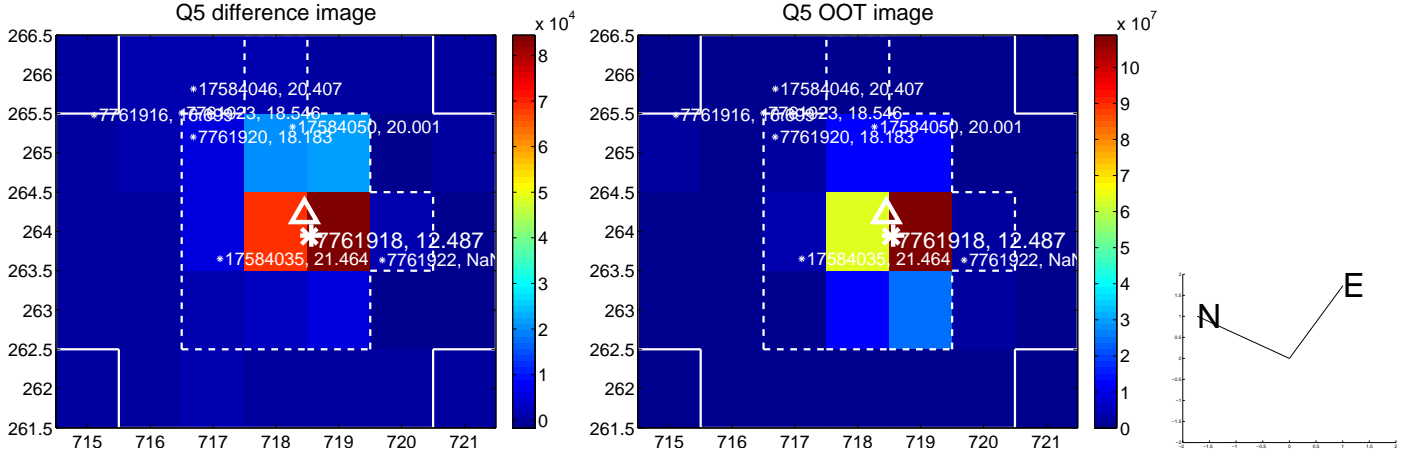


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

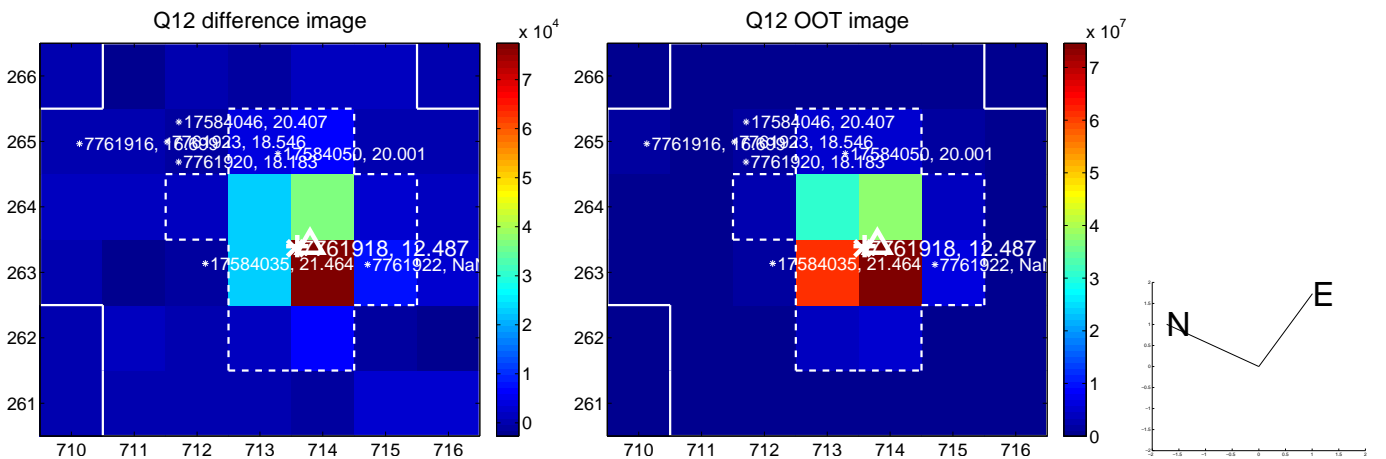
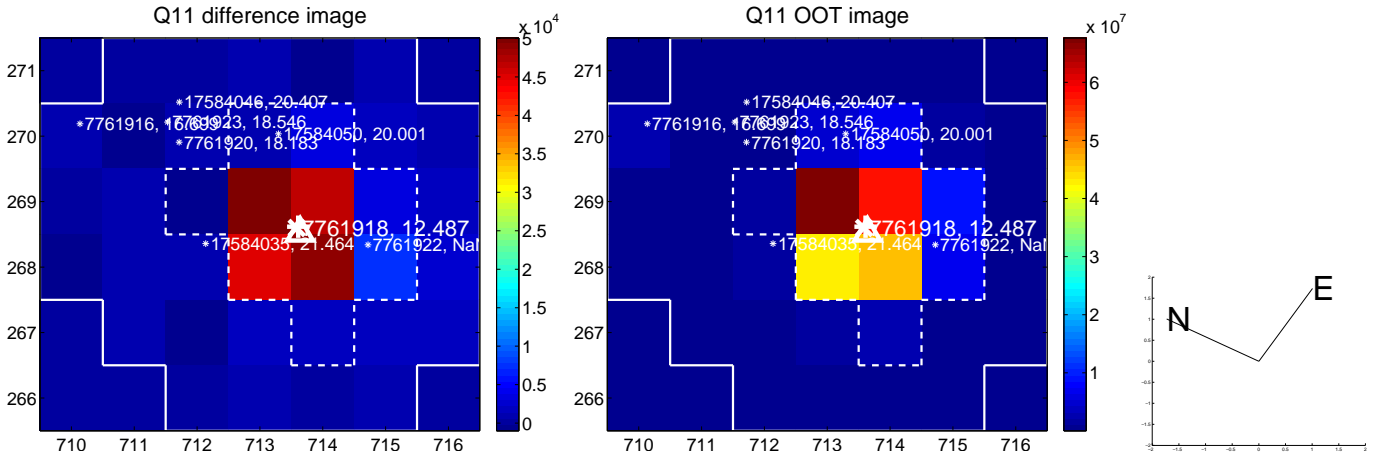
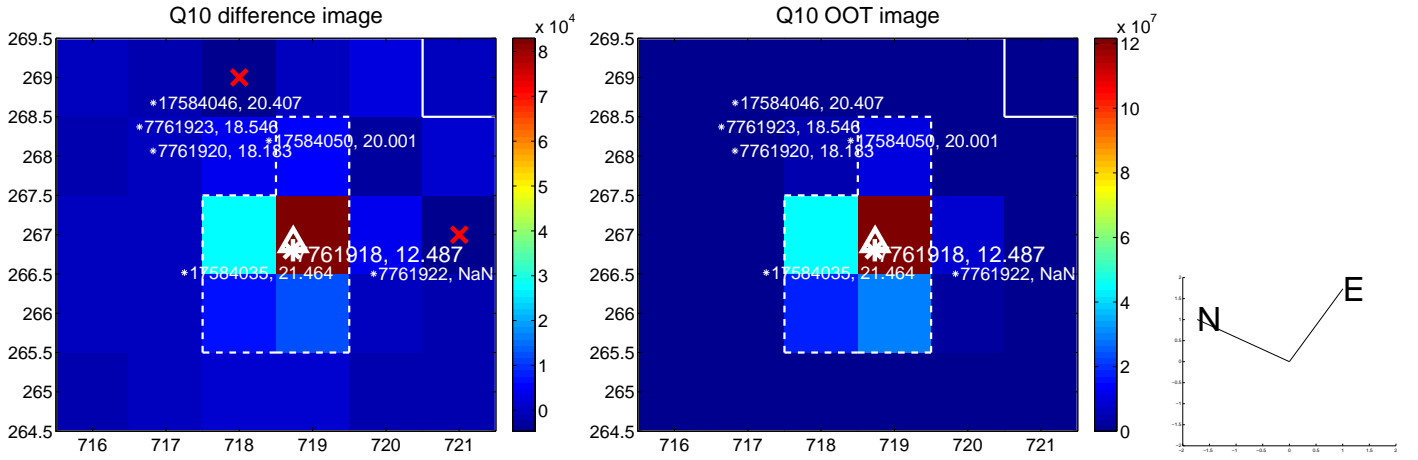
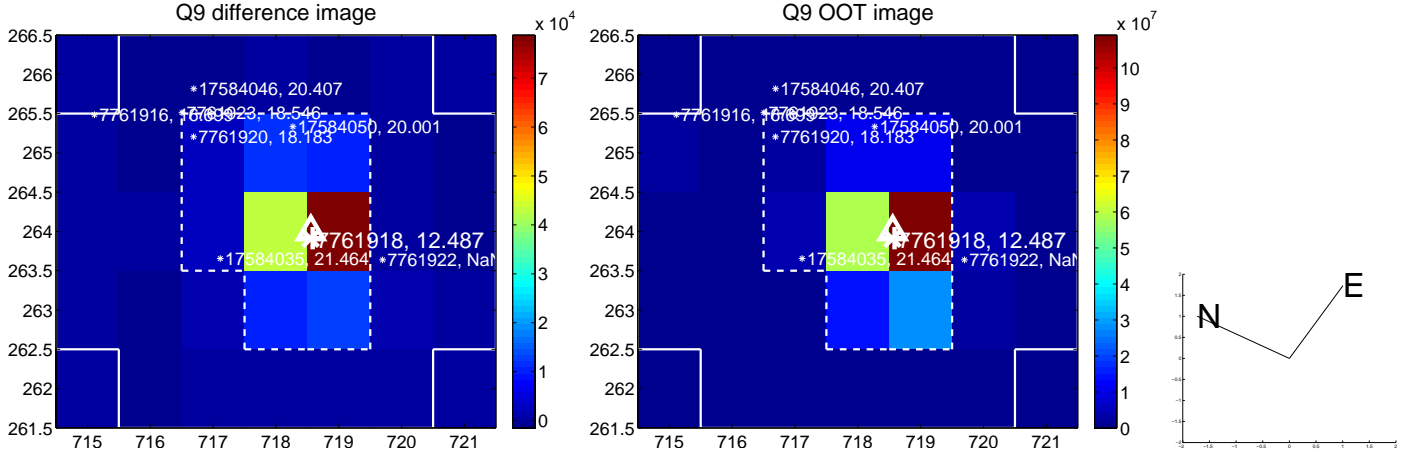
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



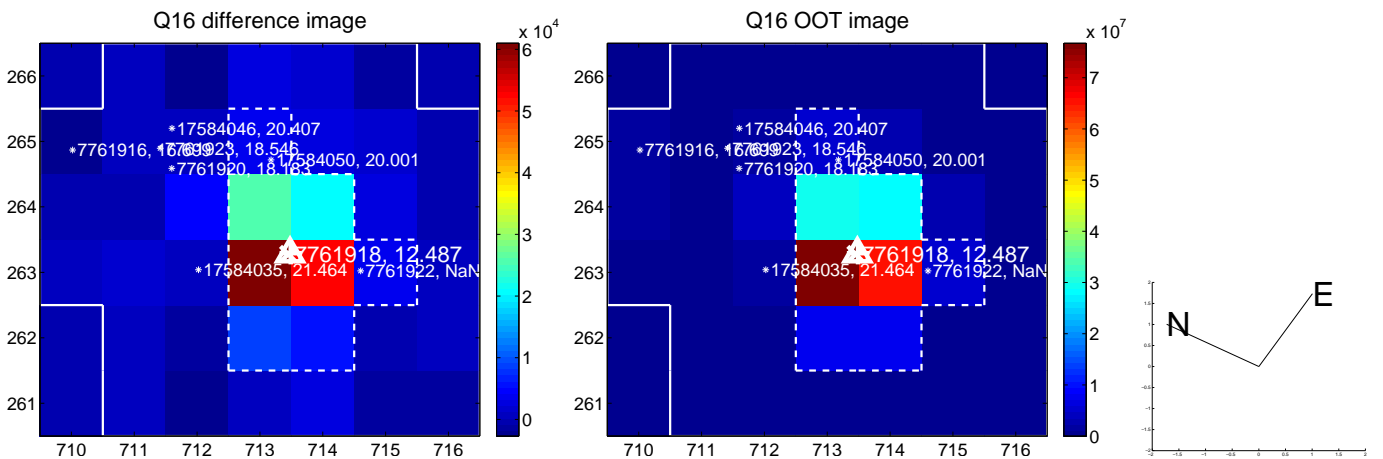
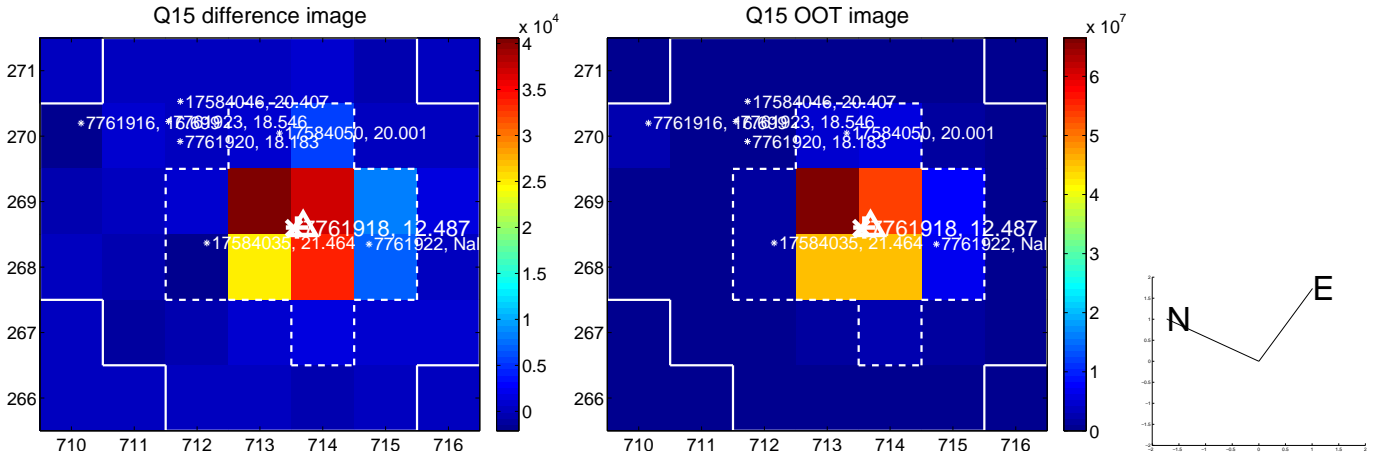
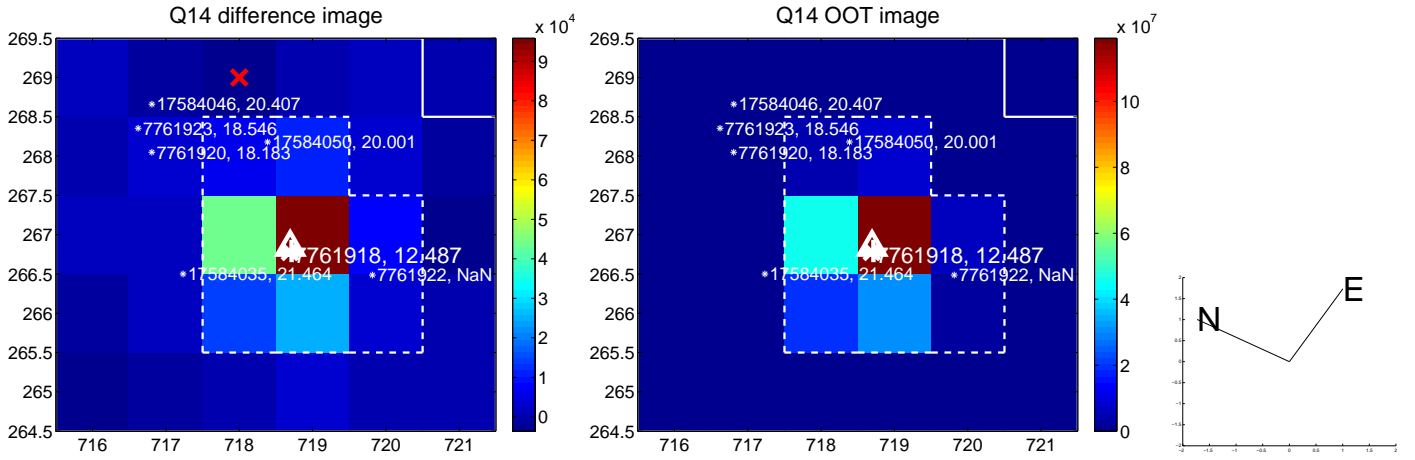
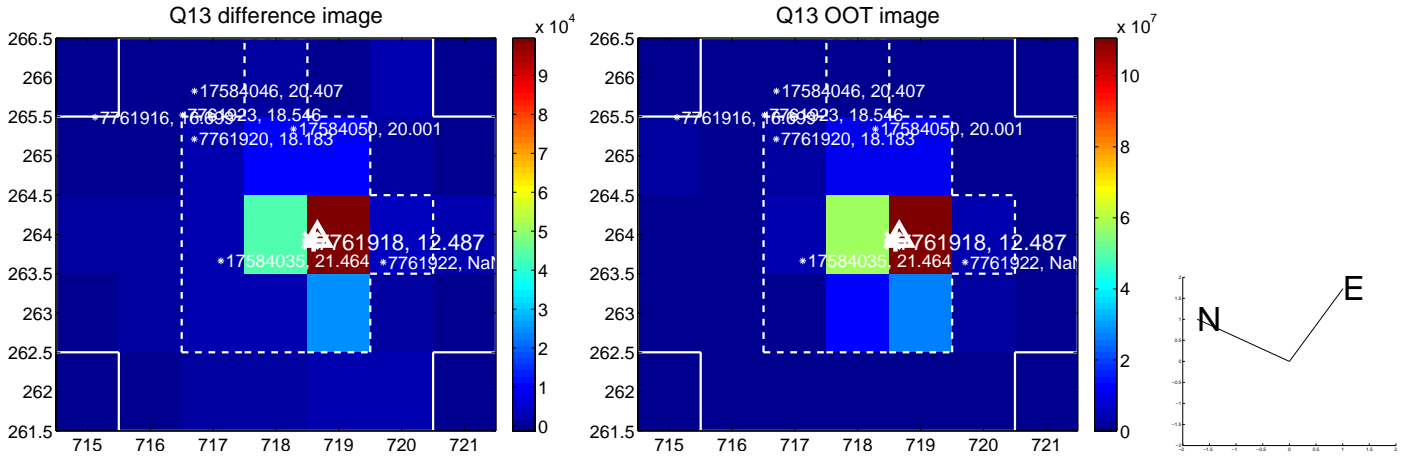
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



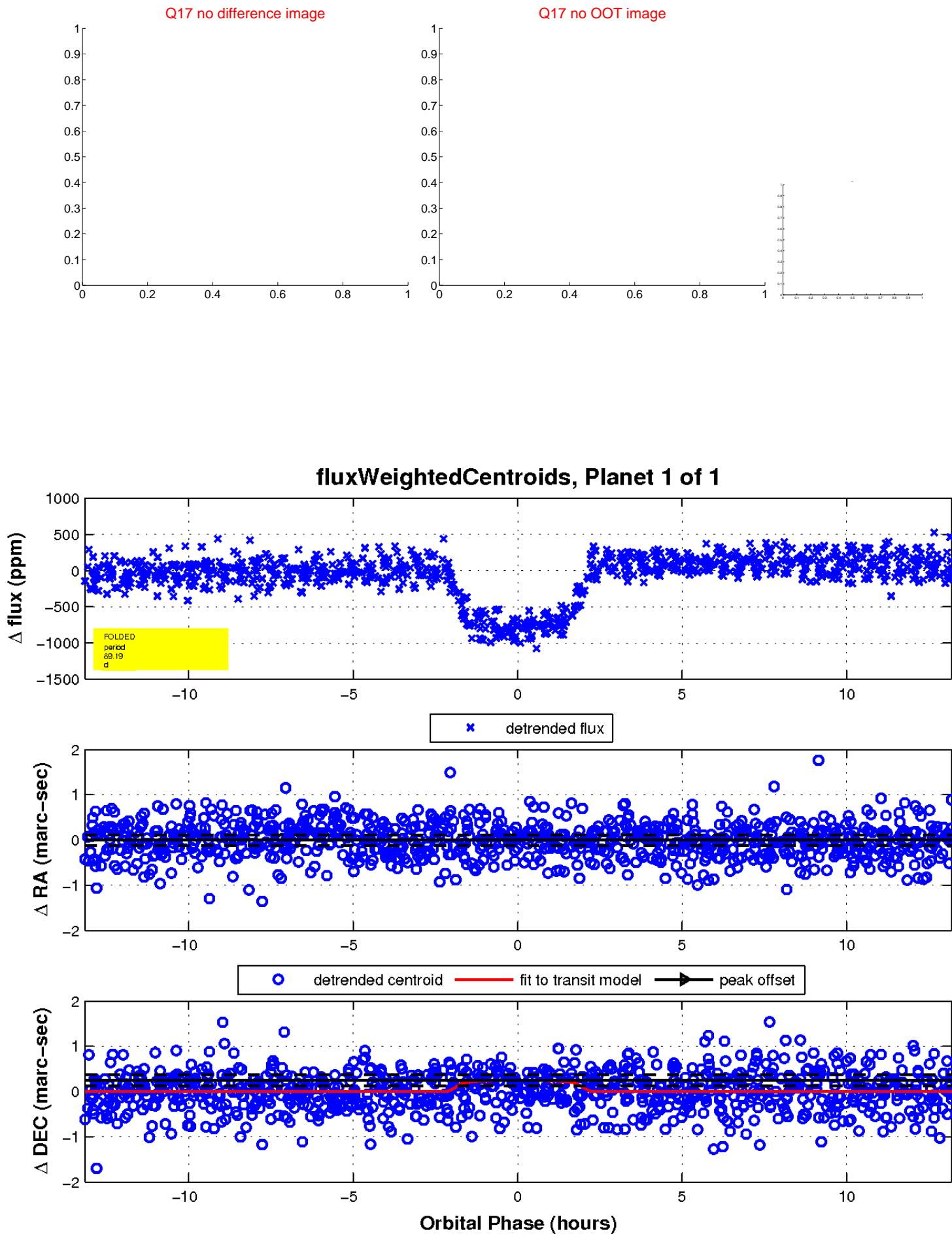
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UKIRT Image

Declination

