

KIC 007288444

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})
007288444-01	OBS	3482.01	15.331732	142.523724	168.4	5.448	11.5	11.5	1.28	5726	1.91	107.67

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007288444-01	OBS	PC	0.72	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.

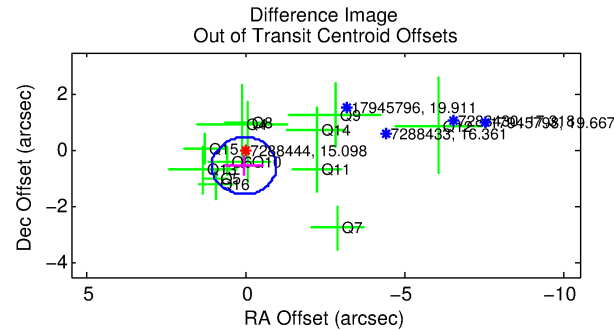
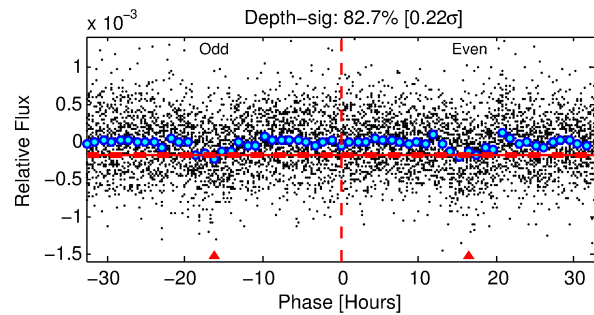
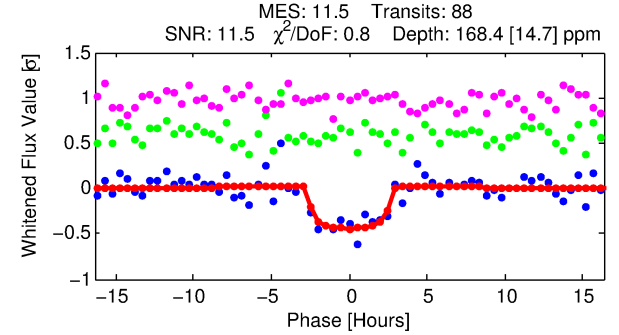
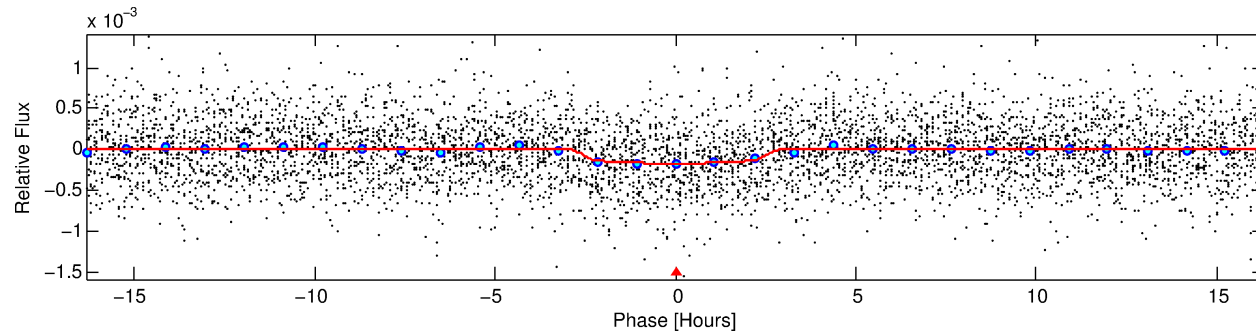
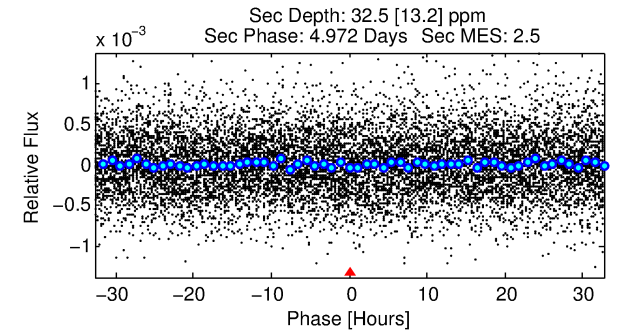
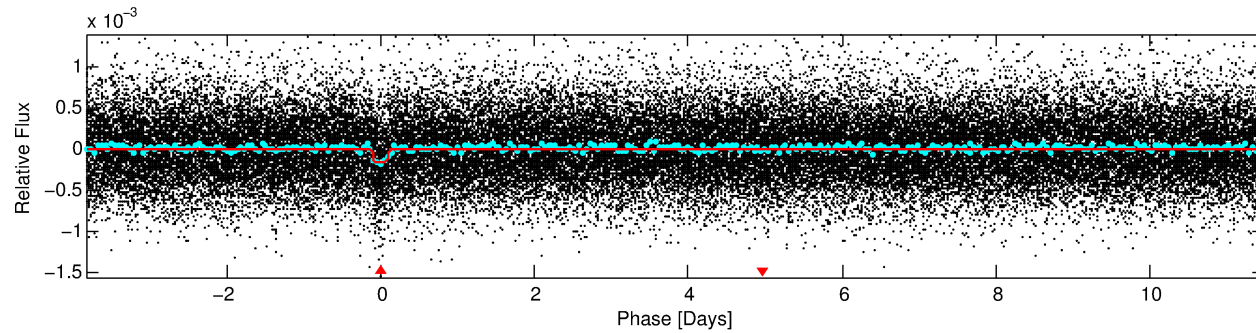
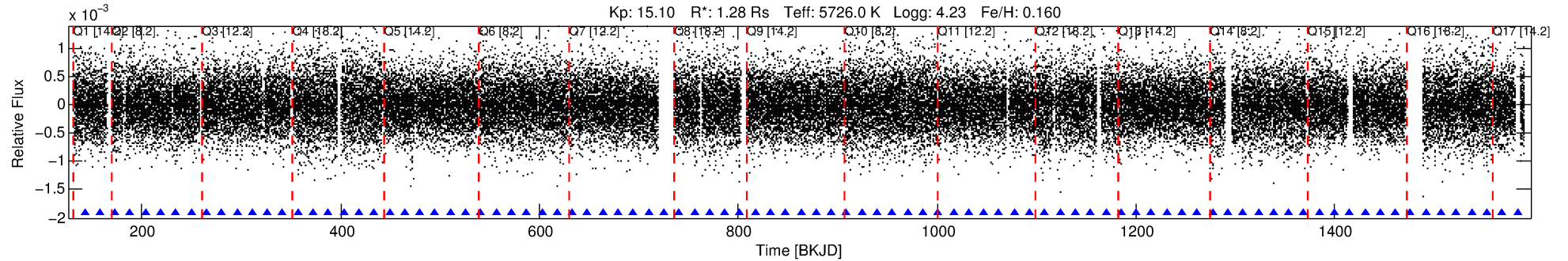
Ephemeris Match Information For 007288444-01

No Significant Match Found

DV One-Page Summary

KIC: 7288444 Candidate: 1 of 1 Period: 15.332 d

KOI: K03482.01 Corr: 0.981



DV Fit Results:

Period = 15.33173 [0.00018] d
Epoch = 142.5237 [0.0094] BKJD
Rp/R* = 0.0136 [0.0070]
a/R* = 11.88 [27.49]
b = 0.85 [0.77]
Seff = 107.67 [30.54]
Teff = 821 [58] K
Rp = 1.91 [1.05] Re
a = 0.1215 [0.0212] AU
Ag = 72.52 [82.91] [0.86σ]
Teffp = 3706 [1029] K [2.80σ]

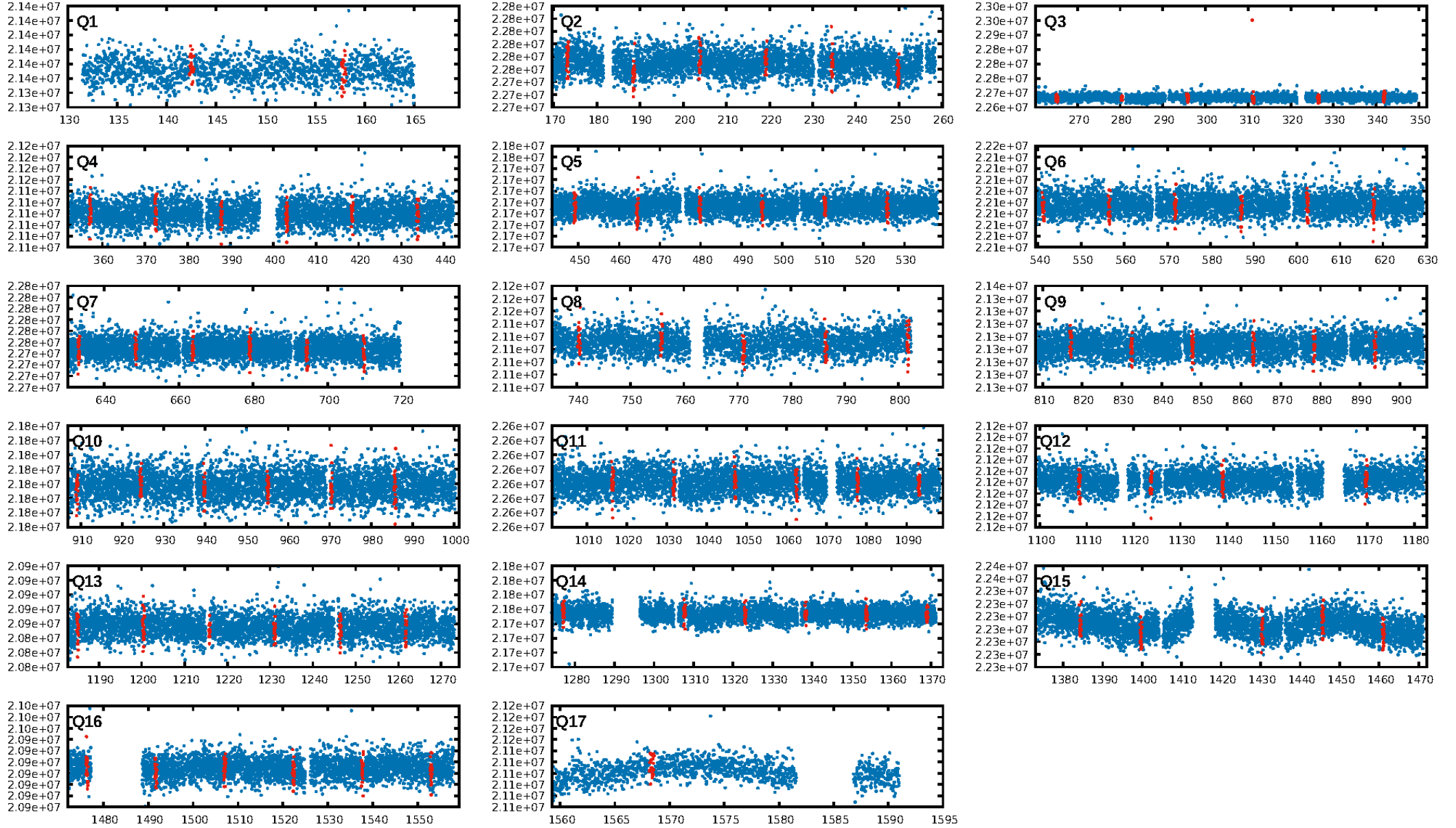
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 95.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 4.45e-30
RollingBand-fgt: 1.00 [85/85]
GhostDiagnostic-chr: 2.437
Centroid-sig: 26.1%
Centroid-so: 1.121 arcsec [0.99σ]
OotOffset-rm: 0.547 arcsec [1.61σ]
KicOffset-rm: 0.658 arcsec [2.05σ]
OotOffset-st: 3/3/4/3 [13]
KicOffset-st: 3/3/4/3 [13]
DiffImageQuality-fgm: 0.46 [6/13]
DiffImageOverlap-fno: 1.00 [17/17]

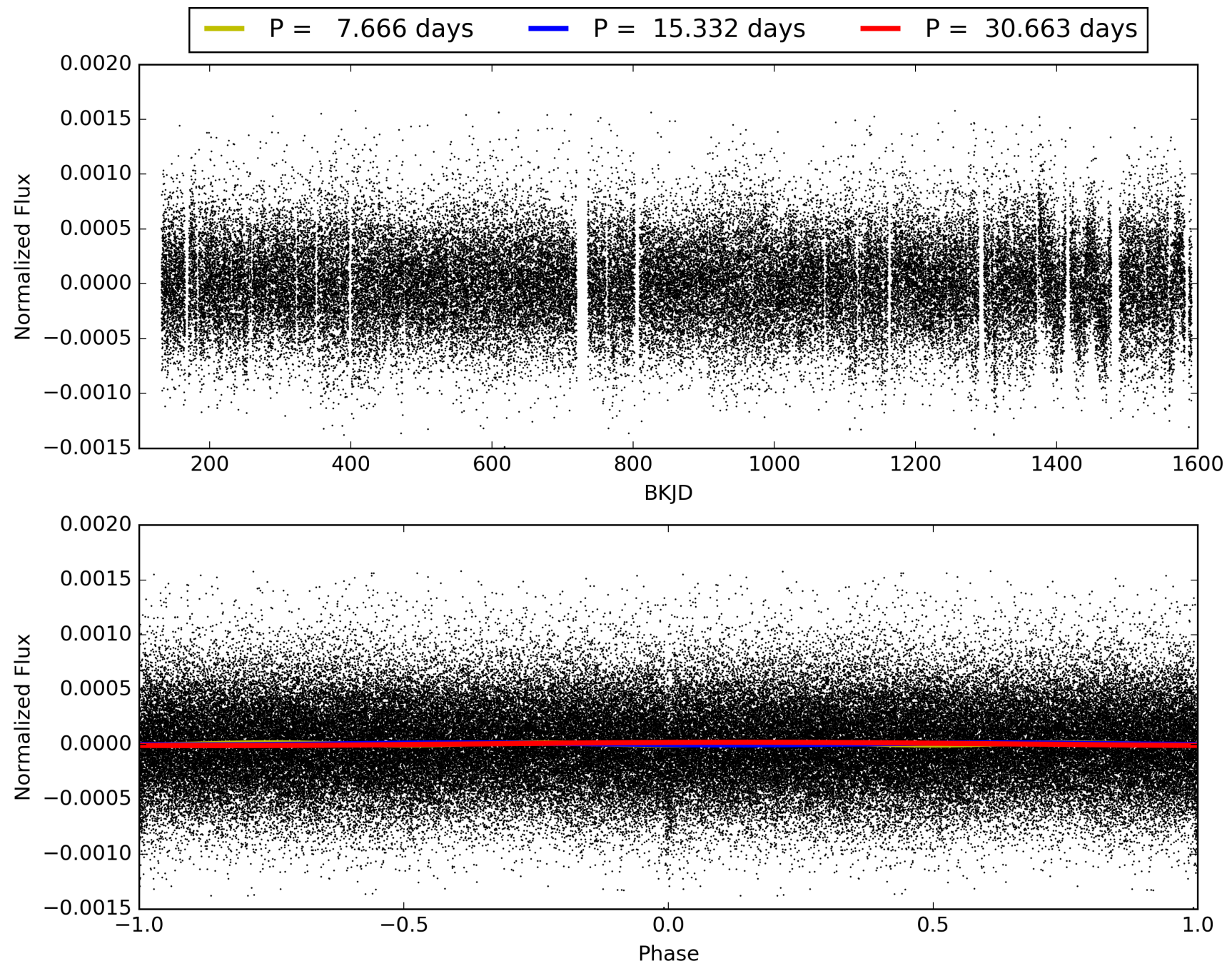
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 03:55:21 Z

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

TCE 007288444-01, PDC Light Curves

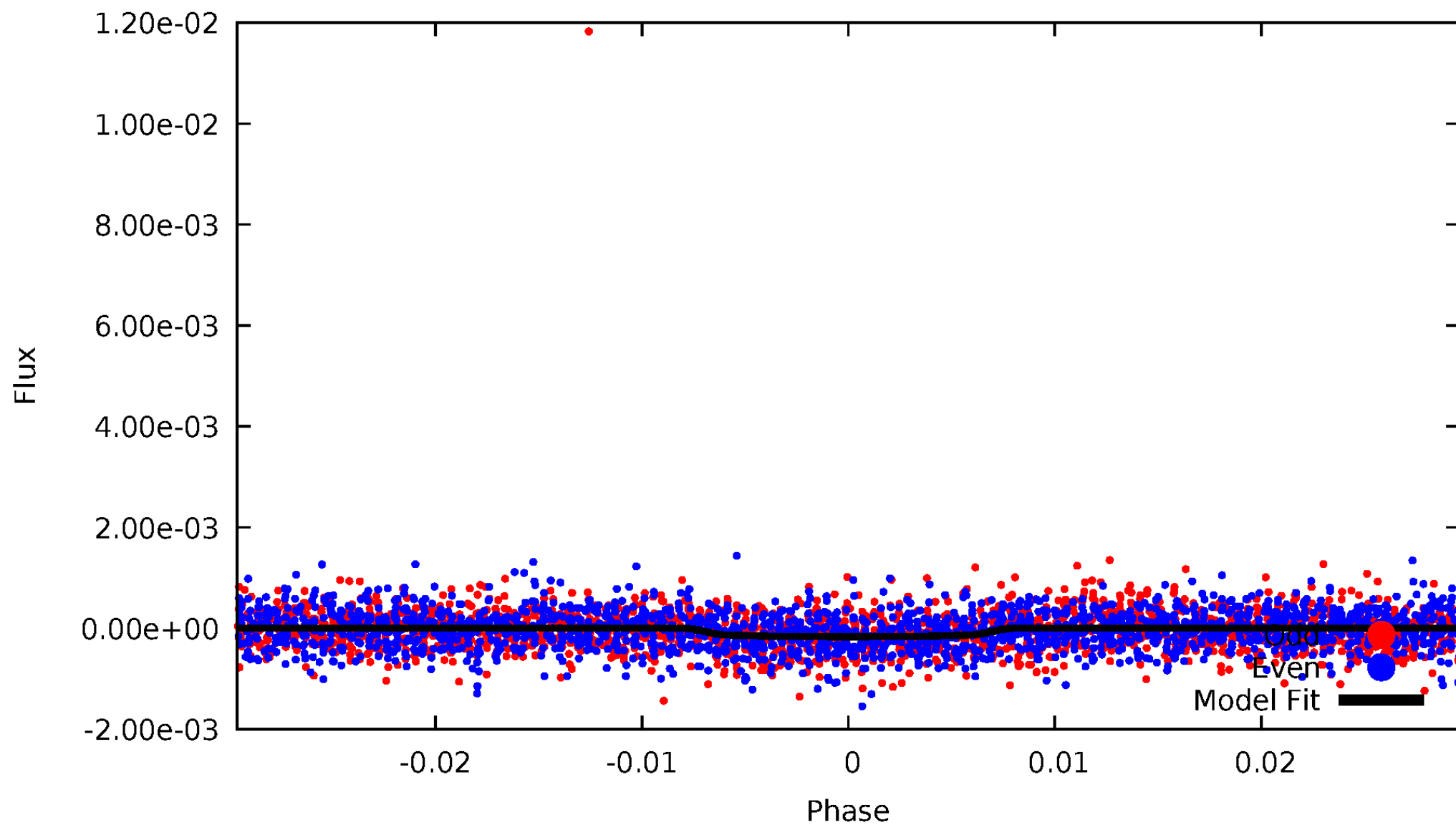


TCE 007288444-01



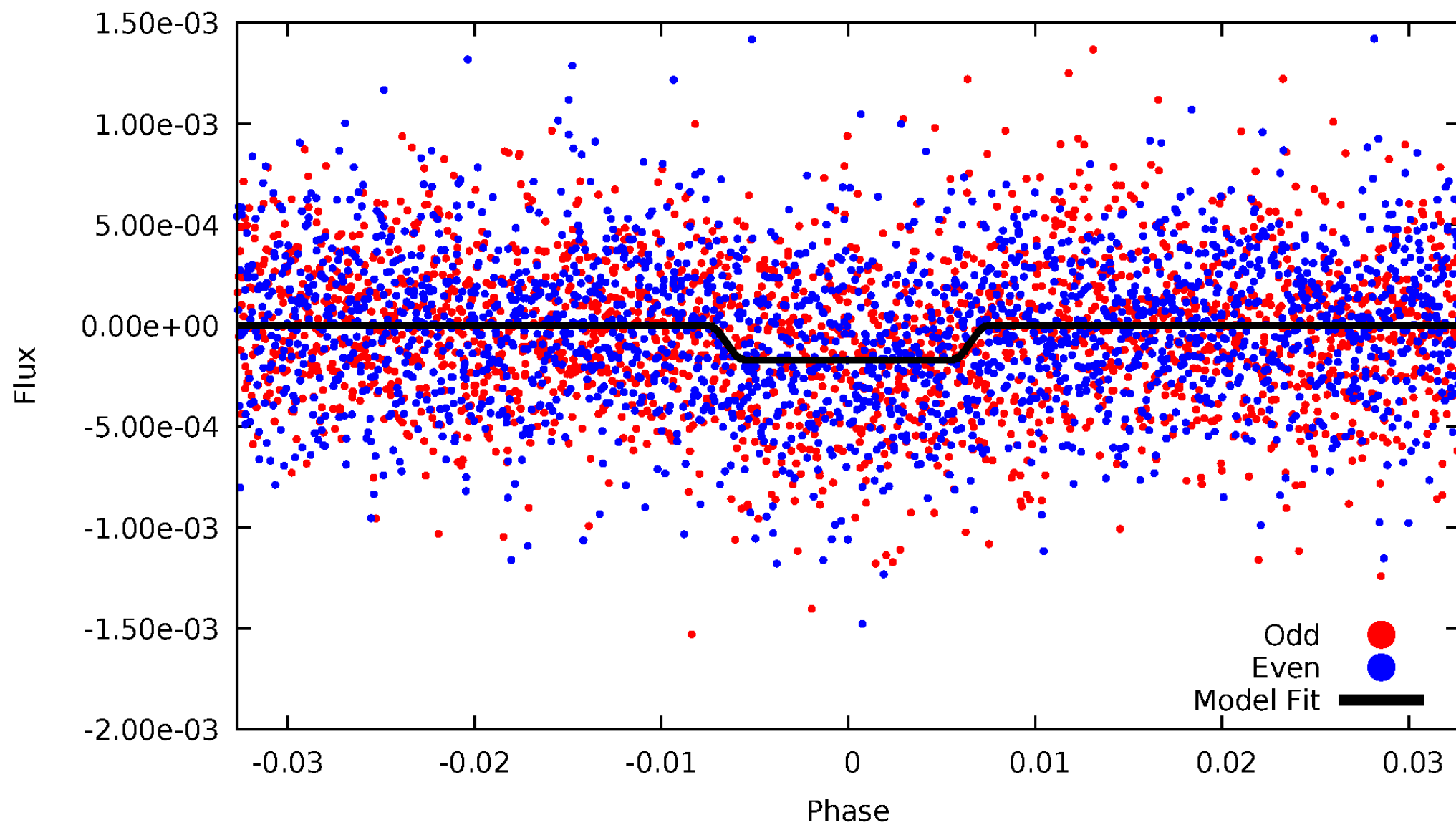
DV Odd/Even

TCE 007288444-01

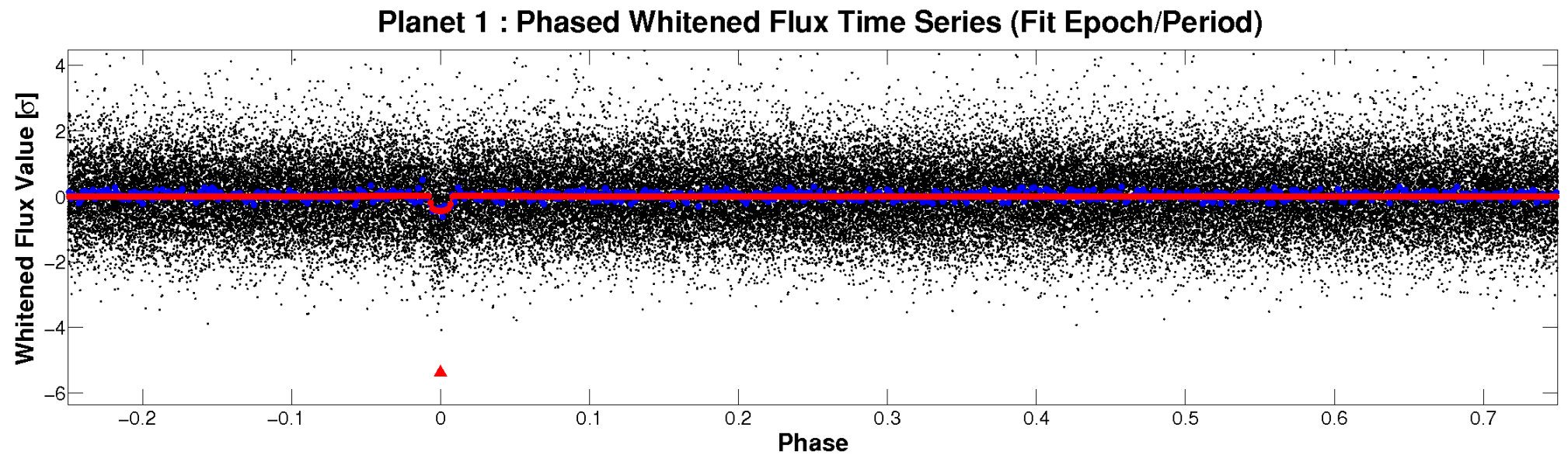
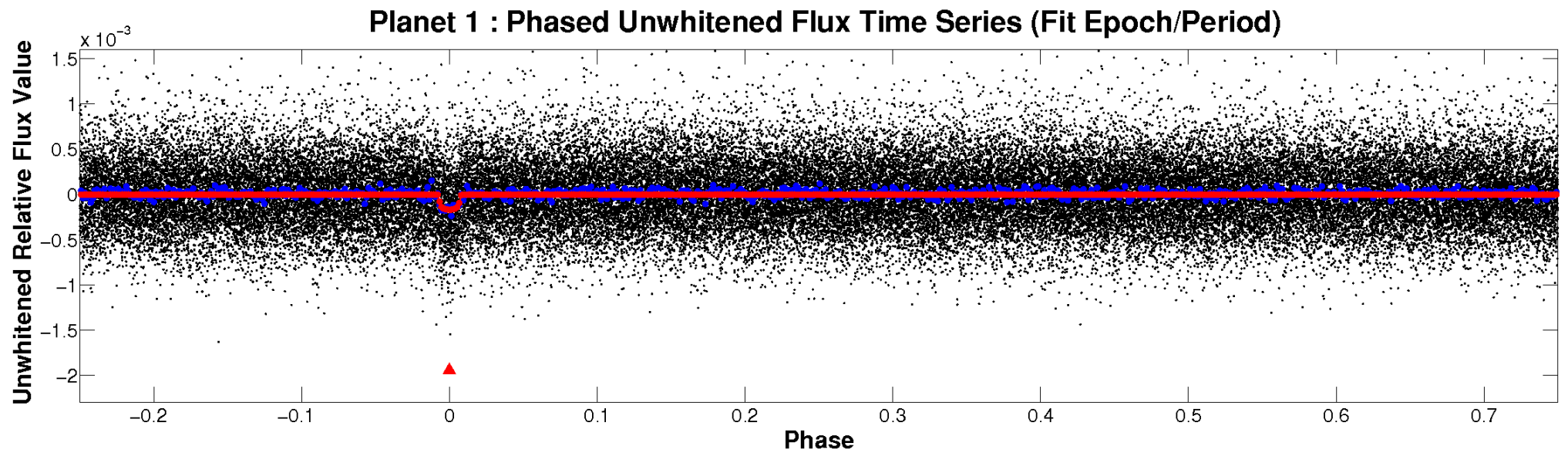


ALT Odd/Even

TCE 007288444-01

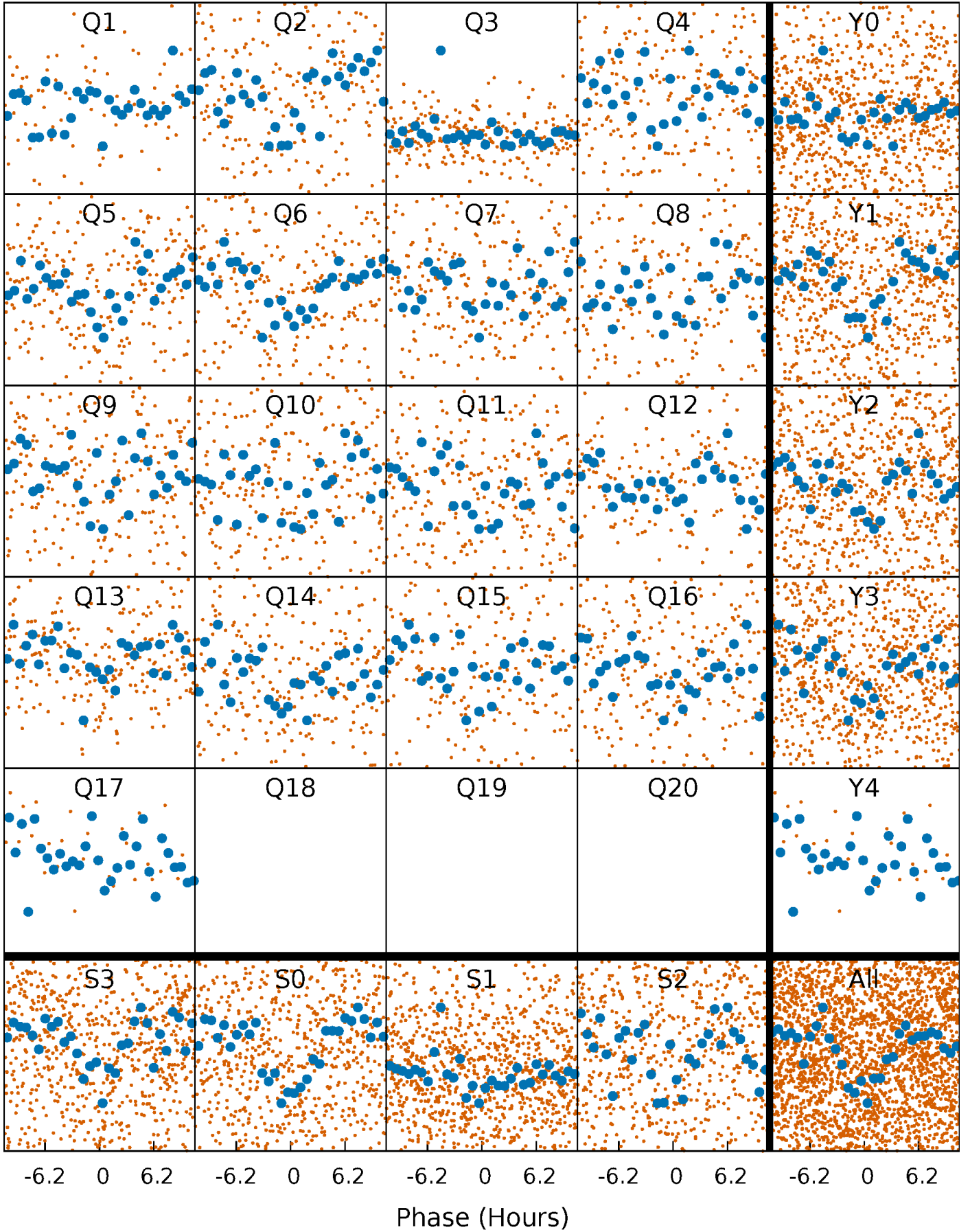


Non-Whitened Vs. Whitened Light Curve



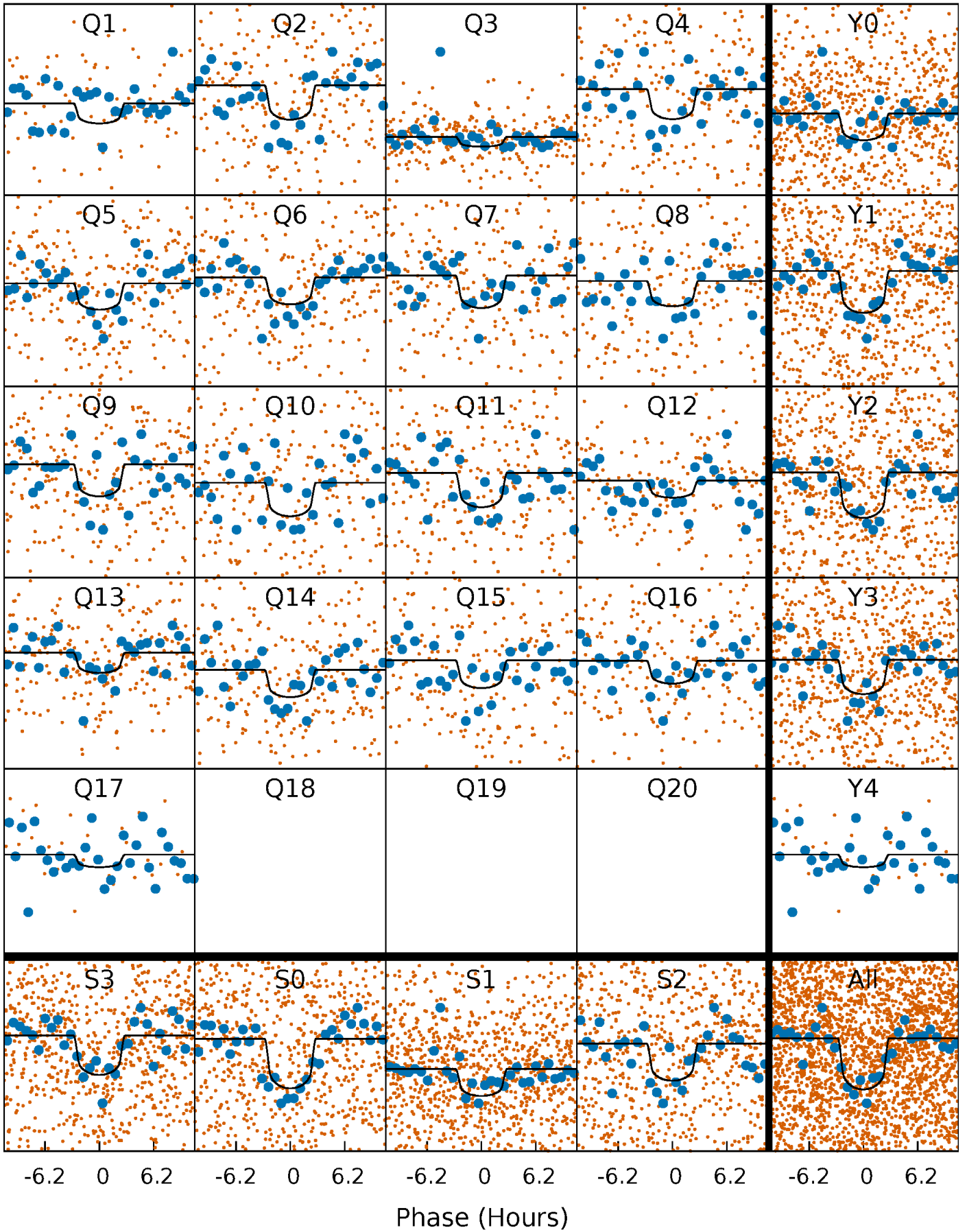
PDC Quarter-Phased Transit Curves

TCE 007288444-01 P= 15.331732 Days $T_0=142.523724$ (BKJD)



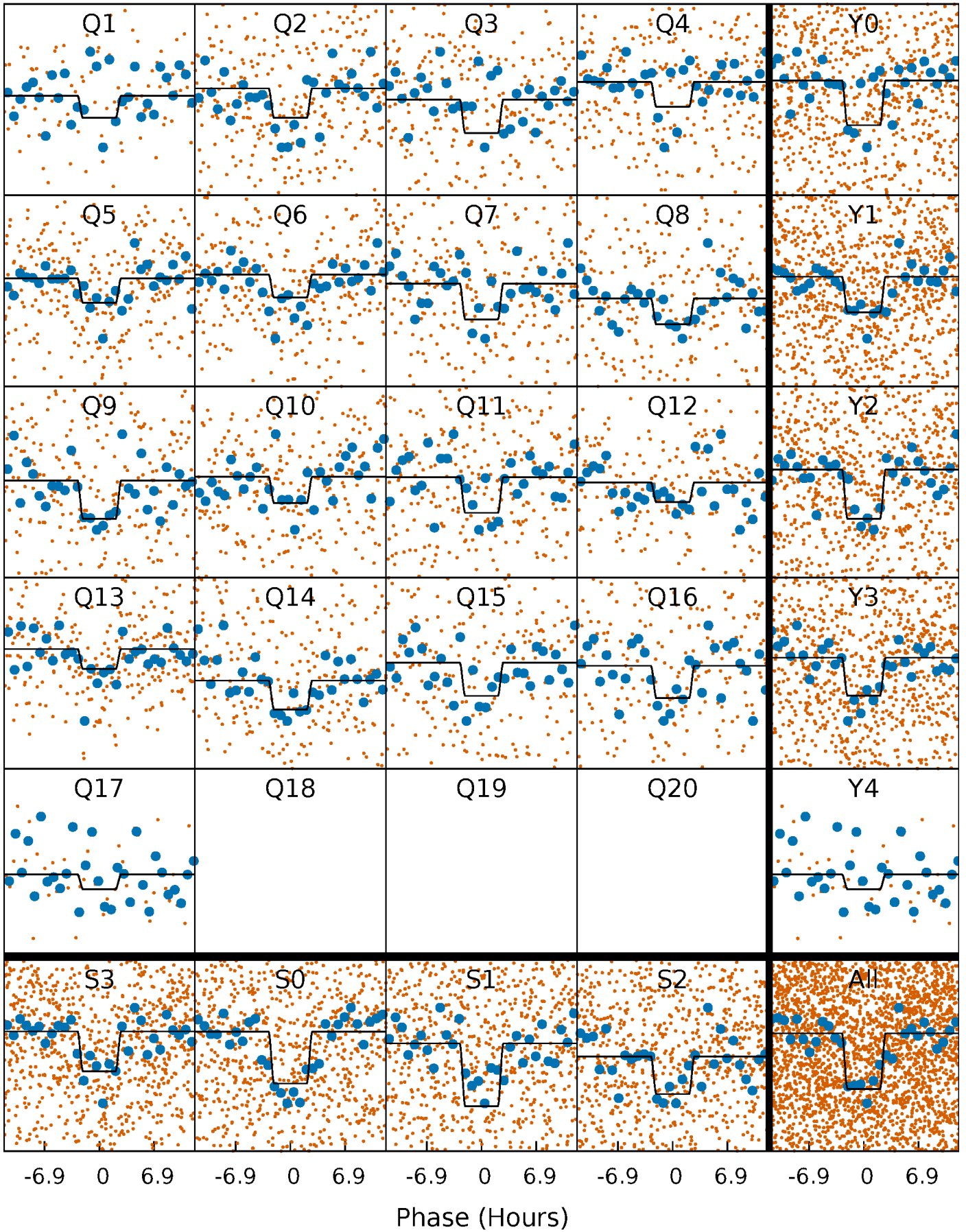
DV Quarter-Phased Transit Curves

TCE 007288444-01 P= 15.331732 Days $T_0=142.523724$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

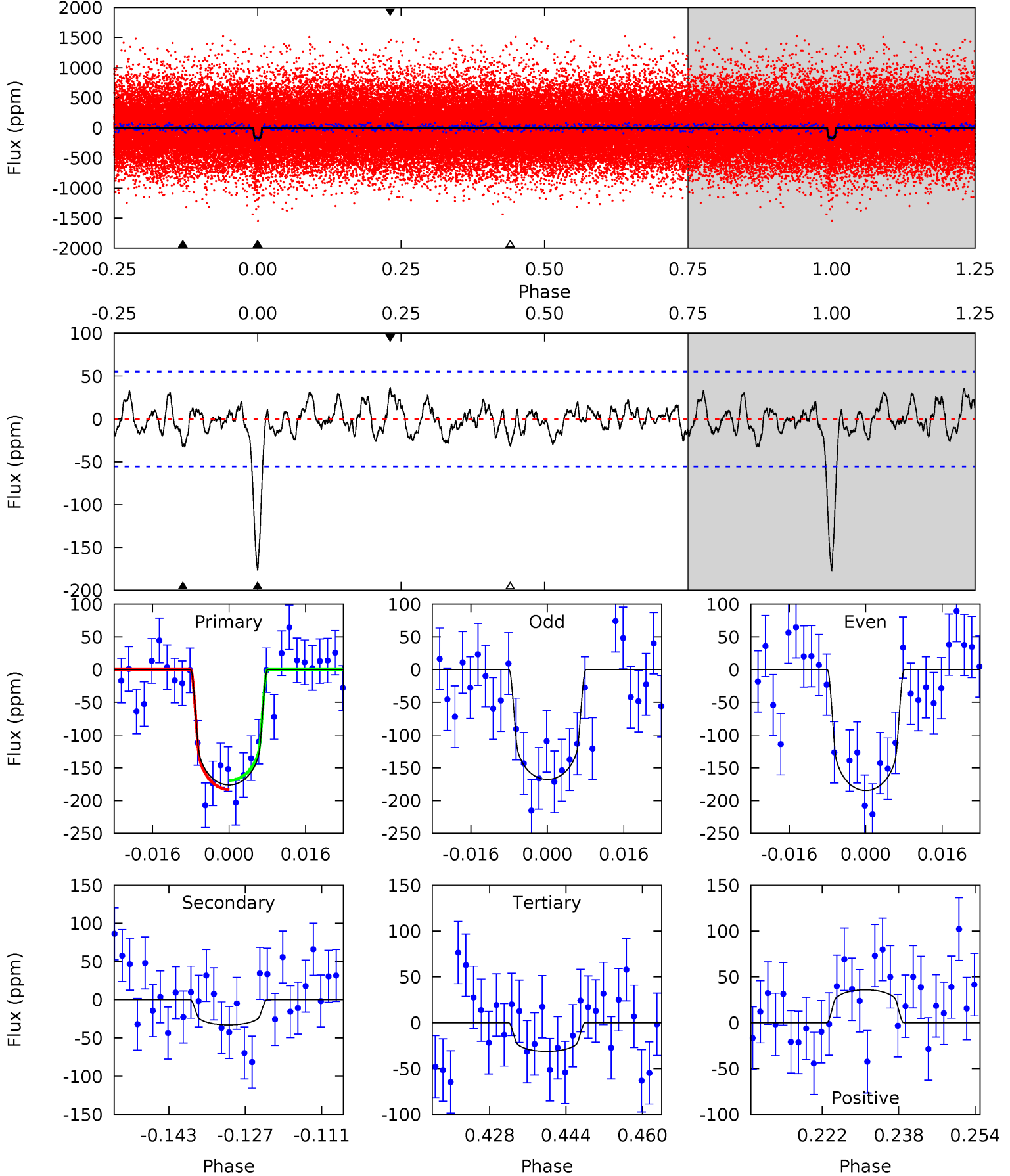
TCE 007288444-01 P= 15.331953 Days $T_0=142.508252$ (BKJD)



DV Model-Shift Uniqueness Test

007288444-01, P = 15.331732 Days, E = 127.191992 Days

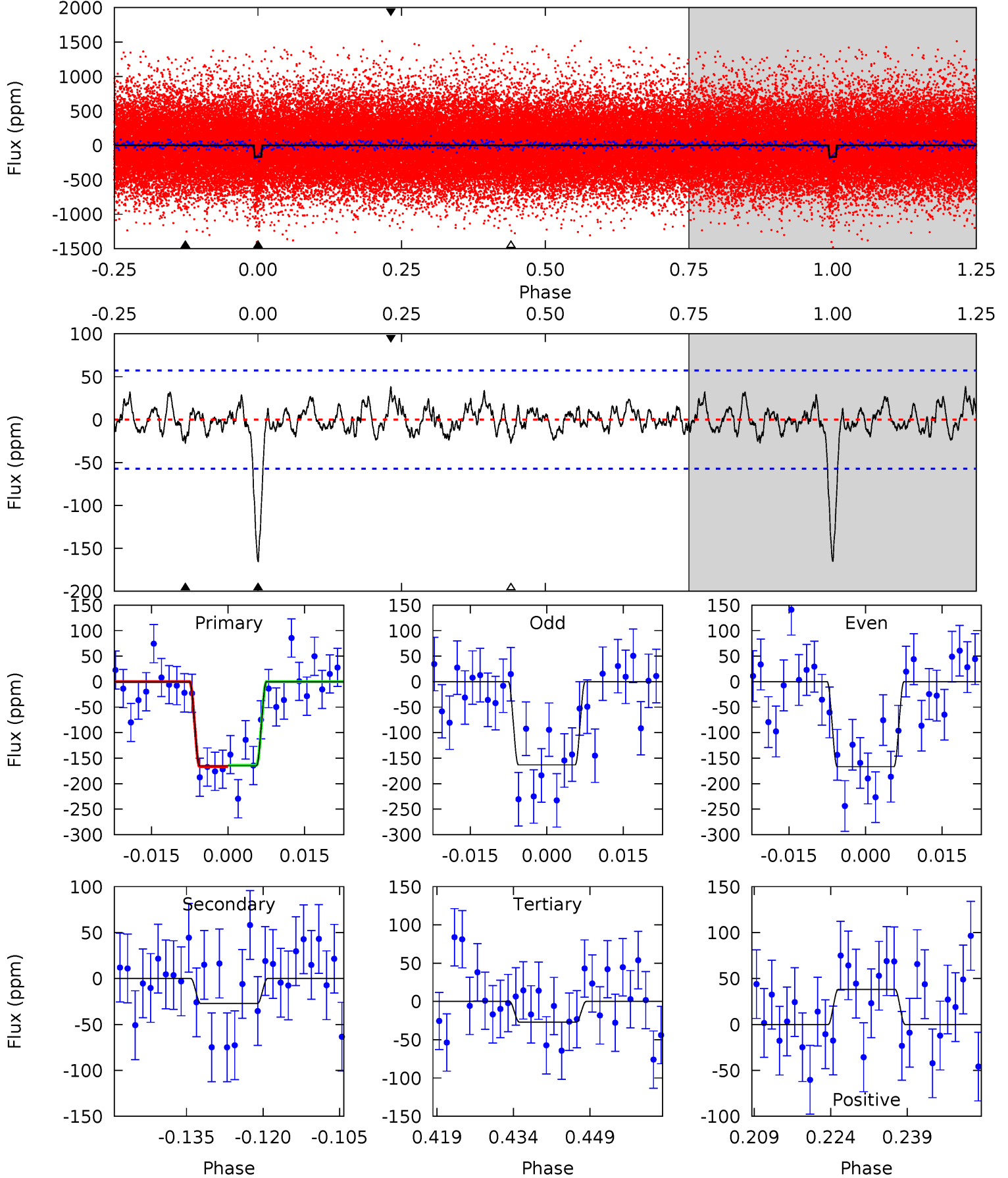
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.7	2.92	2.79	3.19	4.94	2.41	1.17	12.9	12.5	0.14	-0.27	0.75	0.93	0.17	0.62



Alt Model-Shift Uniqueness Test

007288444-01, P = 15.331953 Days, E = 127.176299 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.3	2.35	2.34	3.29	4.95	2.43	1.02	11.9	11.0	0.01	-0.95	0.15	1.02	0.19	0.12



Stellar Parameters For KIC 007288444

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5726^{+86}_{-78}	$4.228^{+0.162}_{-0.108}$	$0.160^{+0.150}_{-0.150}$	$1.285^{+0.215}_{-0.236}$	$1.018^{+0.081}_{-0.065}$	$0.676^{+0.541}_{-0.221}$
	+2%/-1%	+4%/-3%	+94%/-94%	+17%/-18%	+8%/-6%	+80%/-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 007288444-01 / KOI 3482.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-33 ± 11	$1.86^{+1.15}_{-0.89}$	1143^{+52}_{-57}	4011^{+1208}_{-593}	74^{+221}_{-46}
Alt.	-27 ± 12	$1.89^{+0.95}_{-0.98}$	1146^{+52}_{-59}	3922^{+1116}_{-619}	66^{+185}_{-43}

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

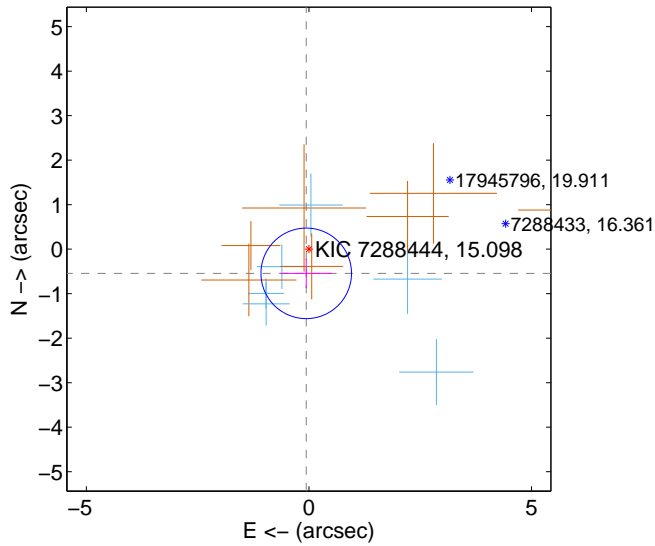
Supplemental centroid analysis for 007288444-01. Kepler magnitude: 15.10. Transit SNR 11.55

There are 6 quarters with good PRF difference image offsets

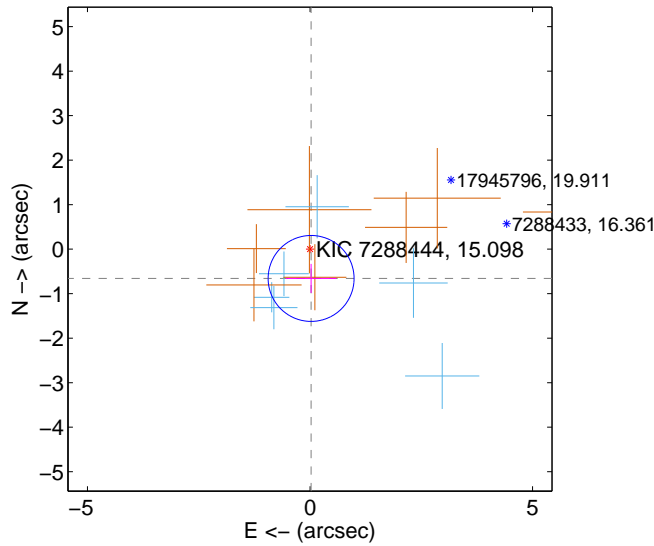
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.547 ± 0.339	1.61	0.061 ± 0.582	-0.543 ± 0.327
PRF-fit source offset from KIC position	0.658 ± 0.322	2.05	-0.025 ± 0.566	-0.658 ± 0.326
photometric centroid source offset	1.12 ± 1.14	0.99	0.98 ± 1.14	0.55 ± 1.14

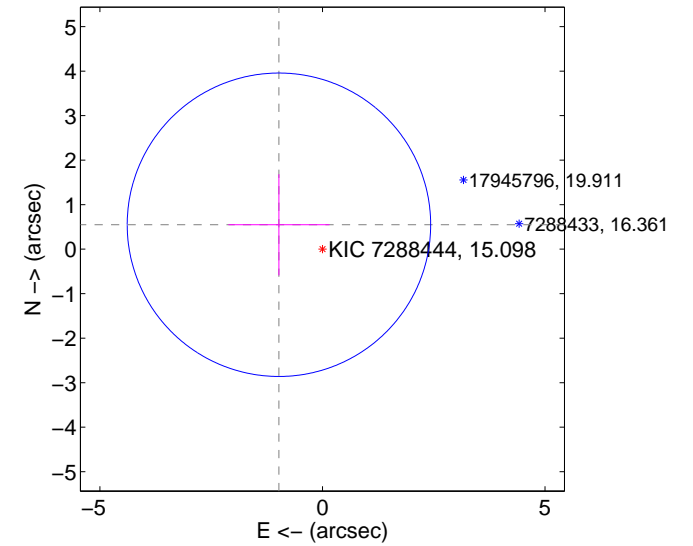
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

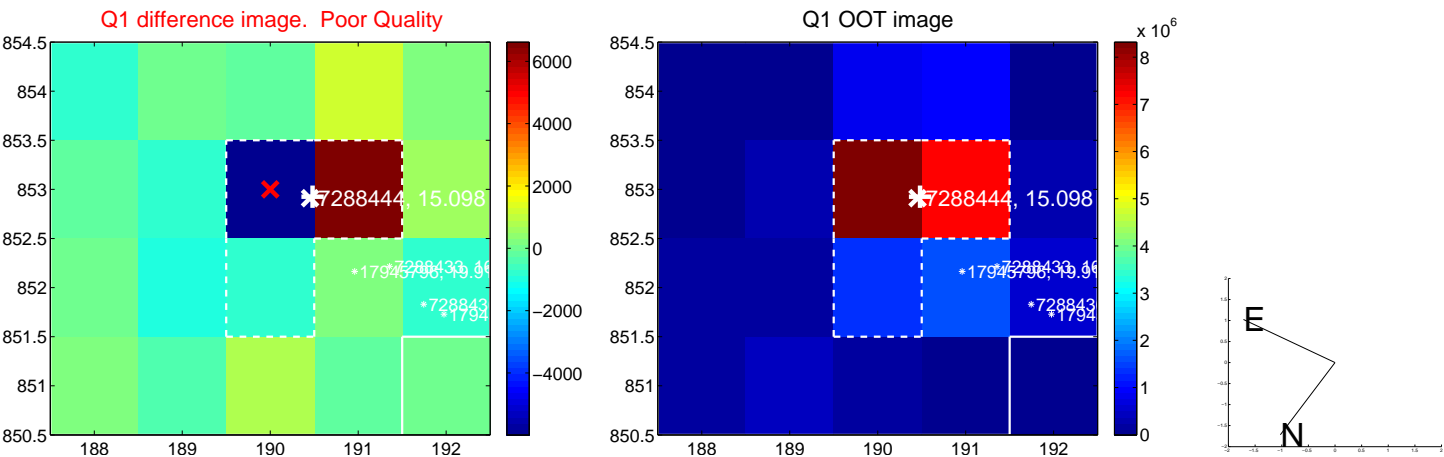


offset from photometric centroids

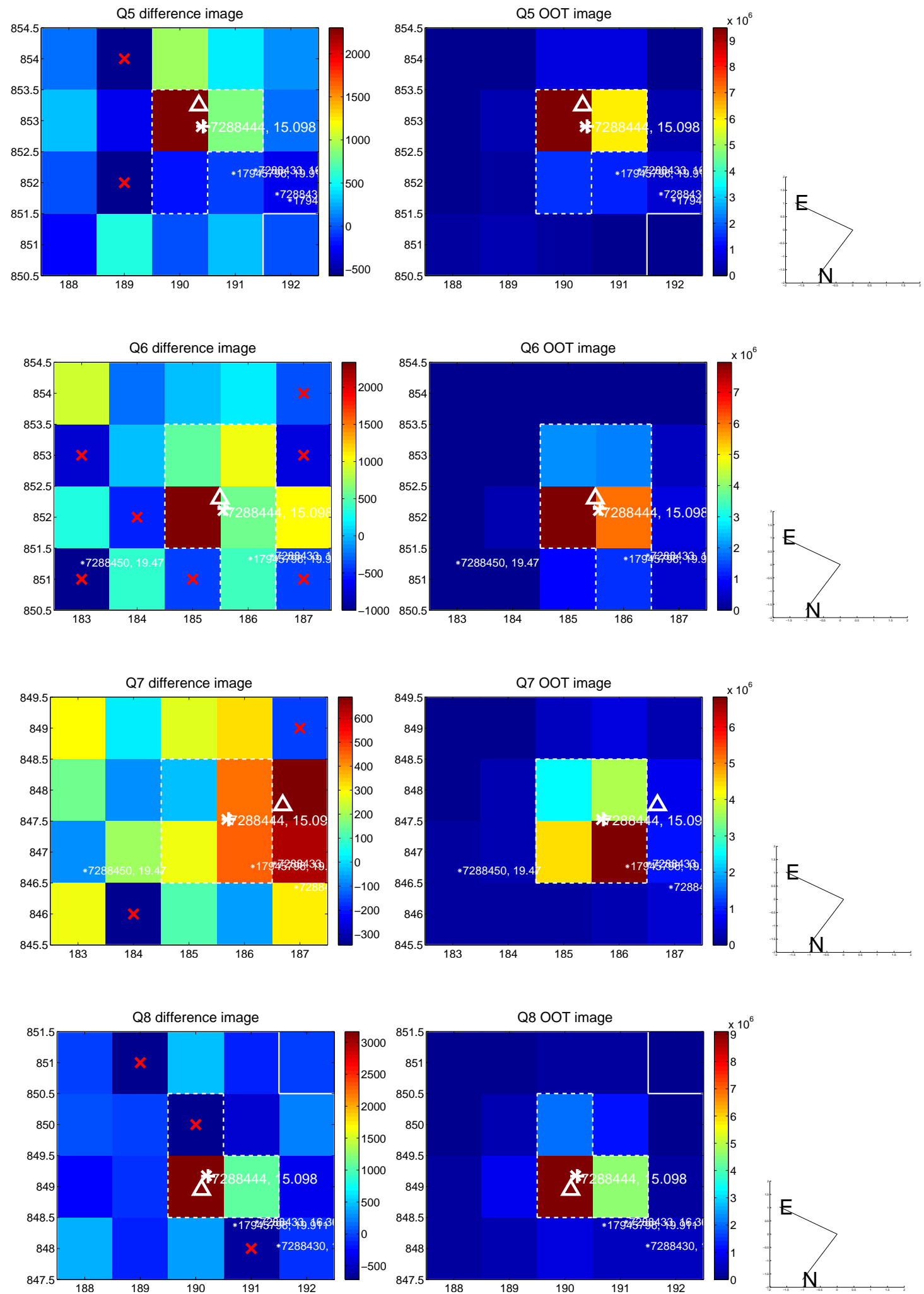


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

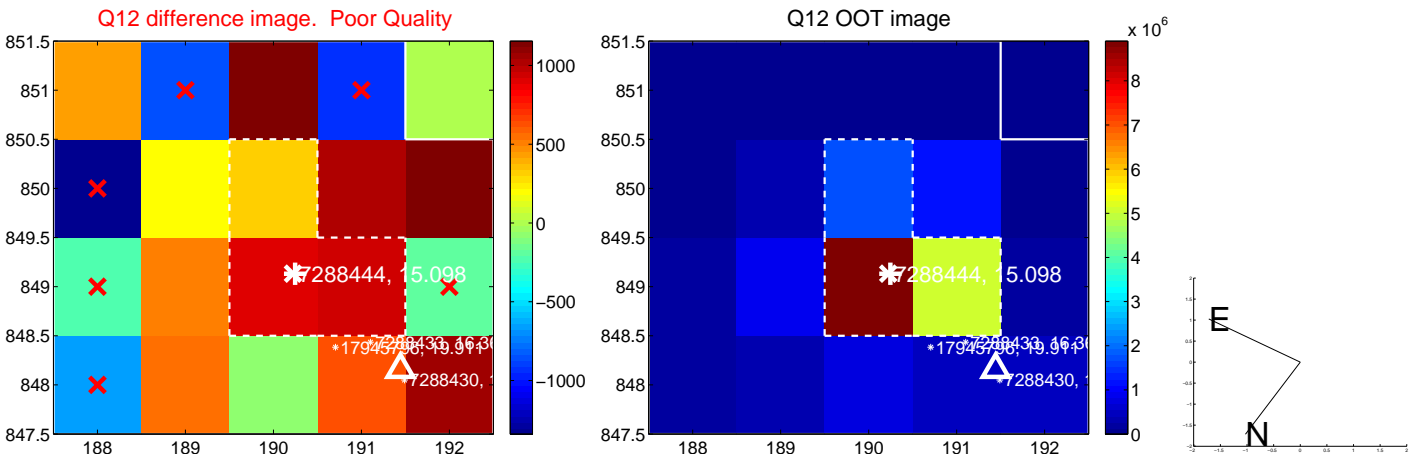
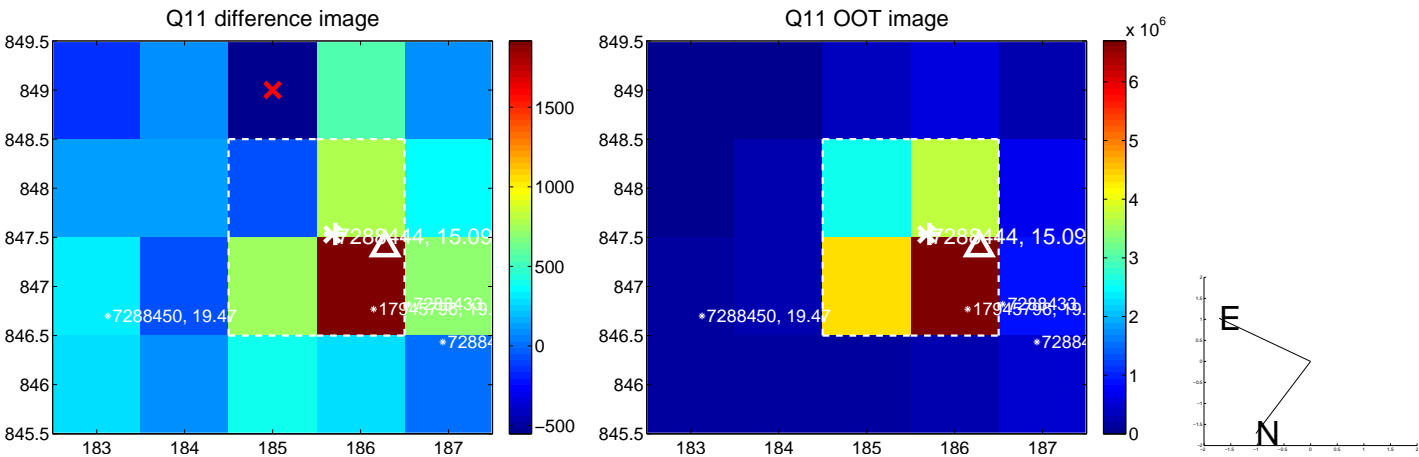
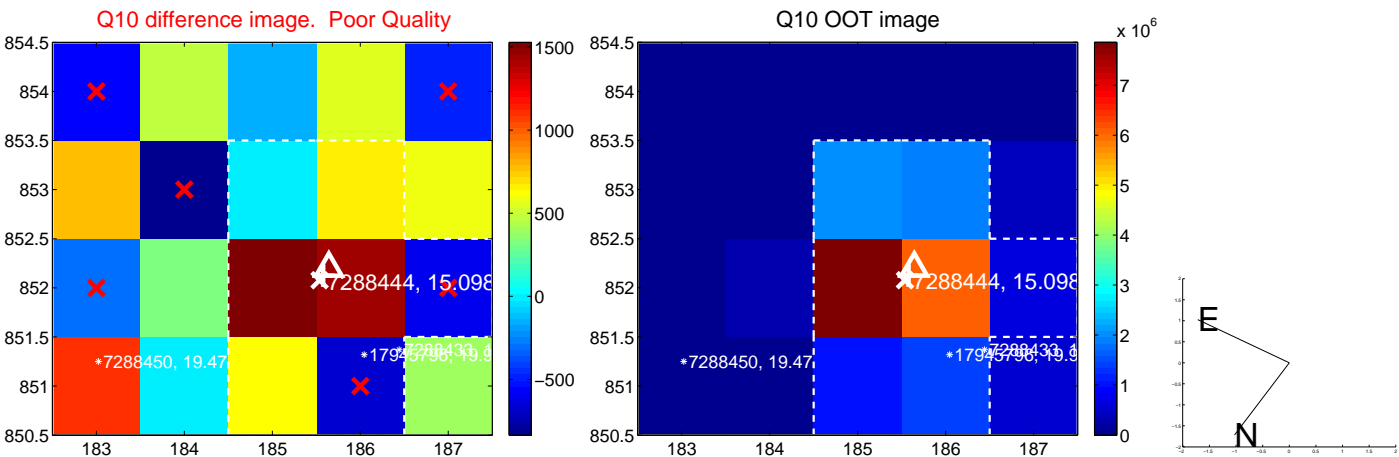
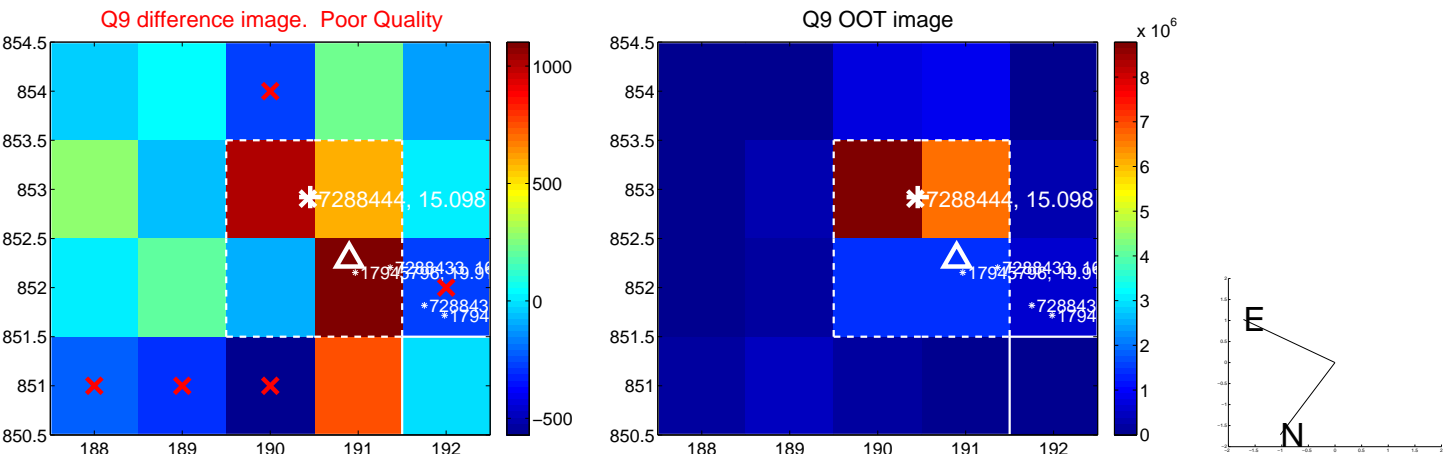
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



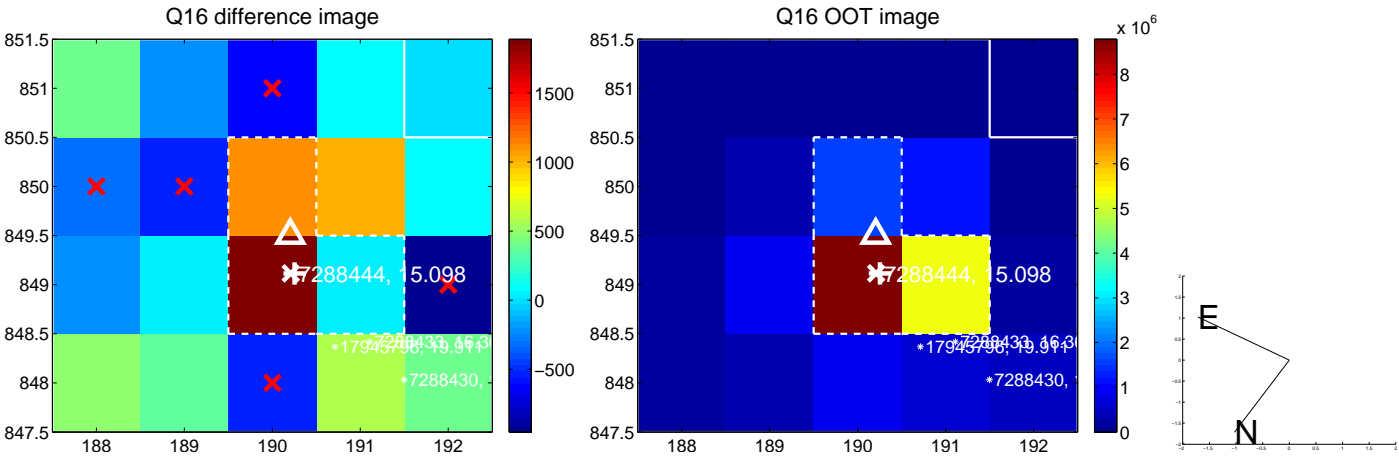
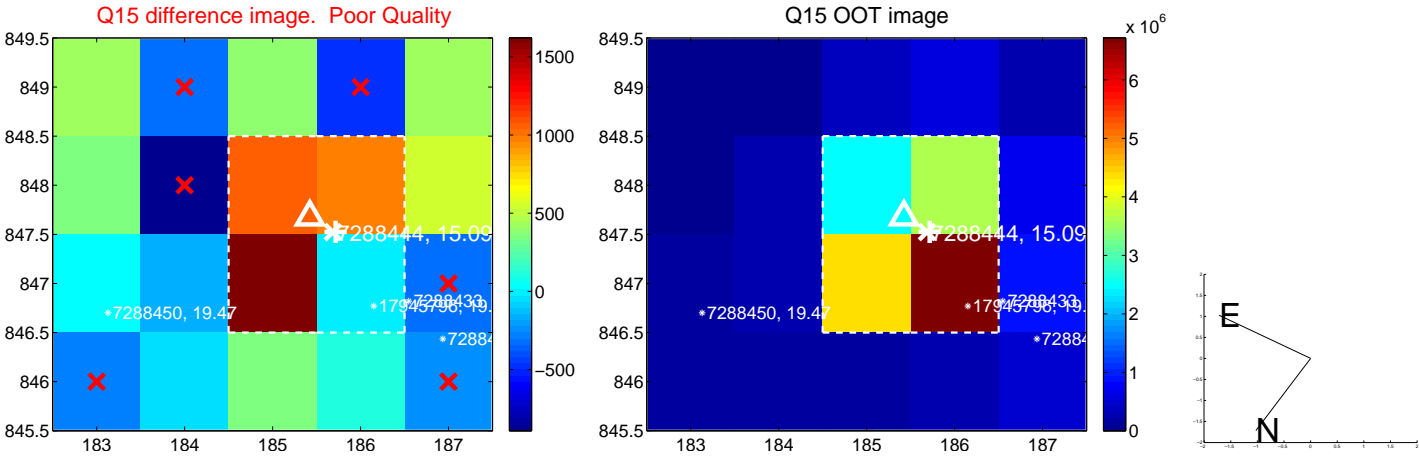
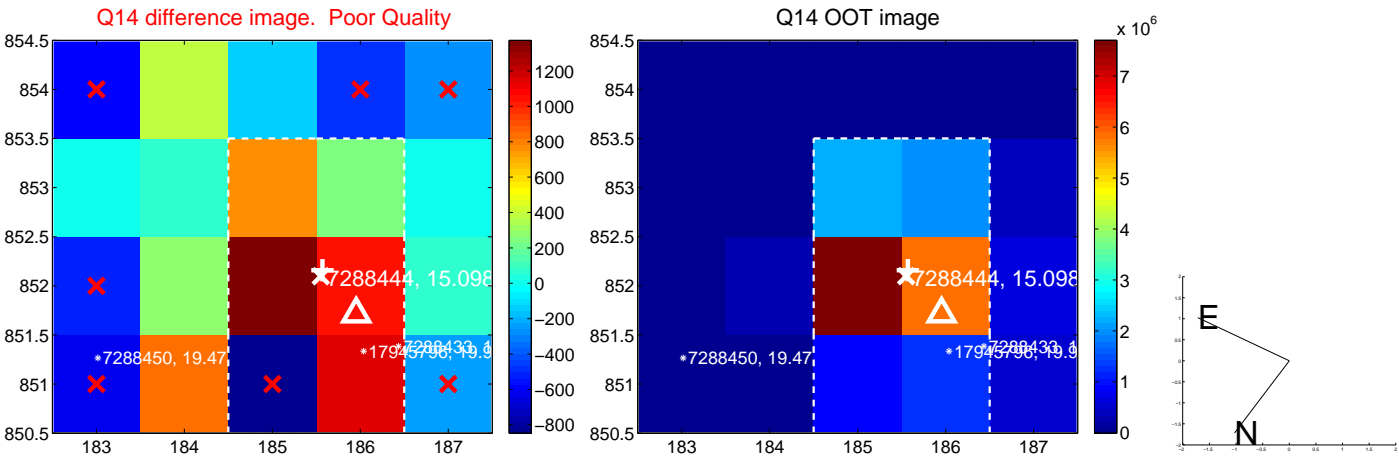
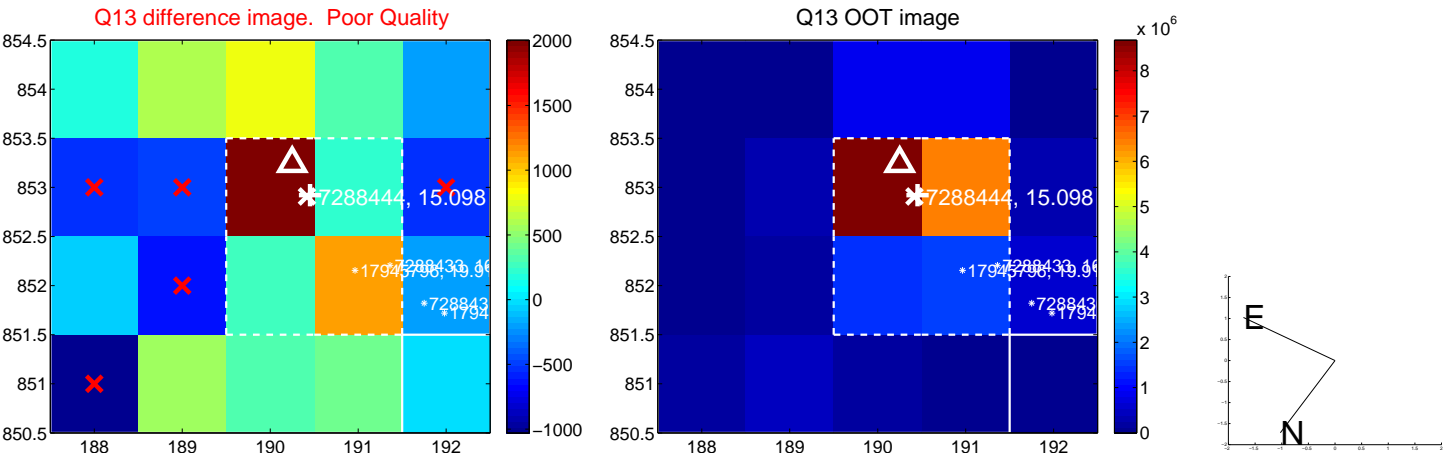
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



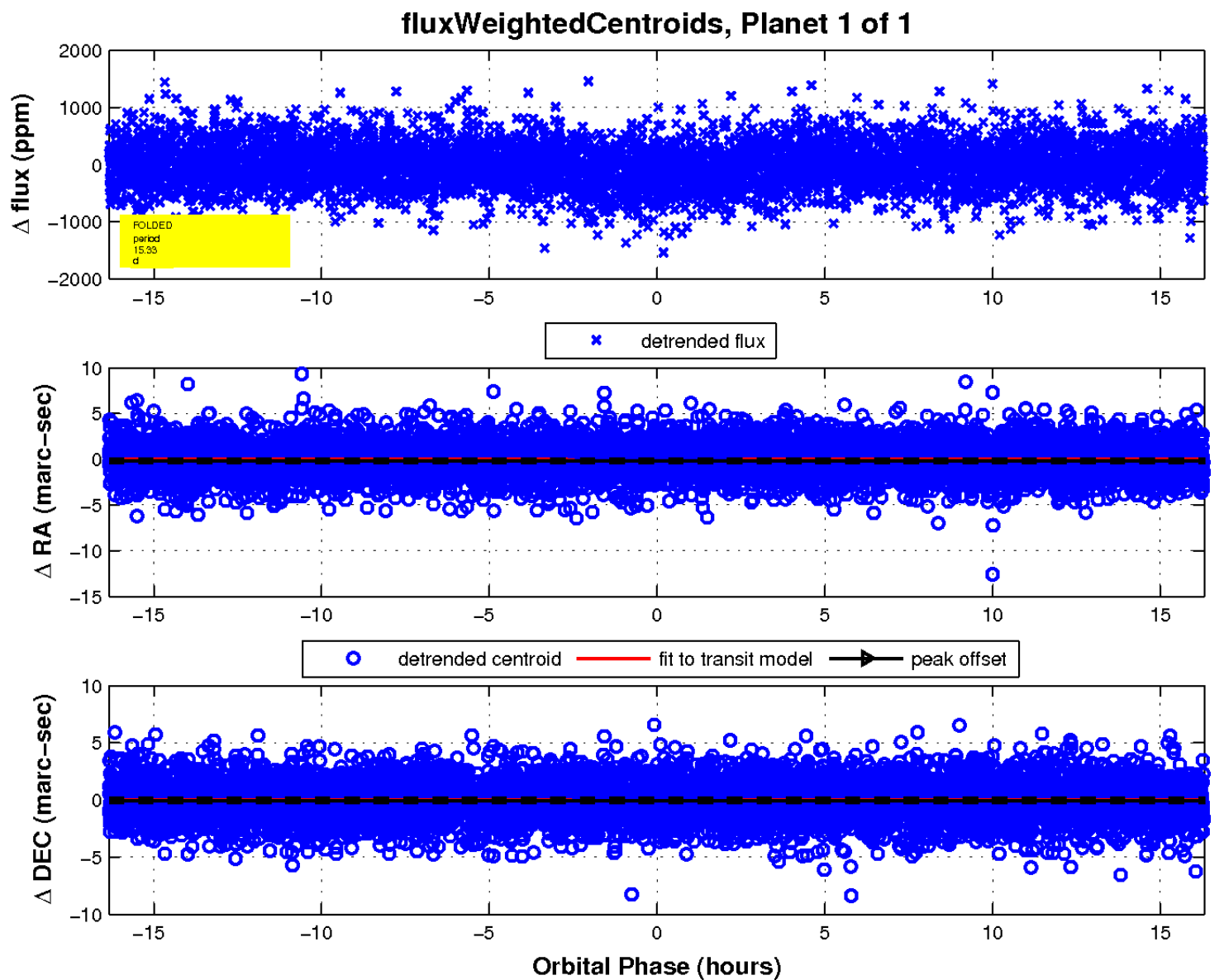
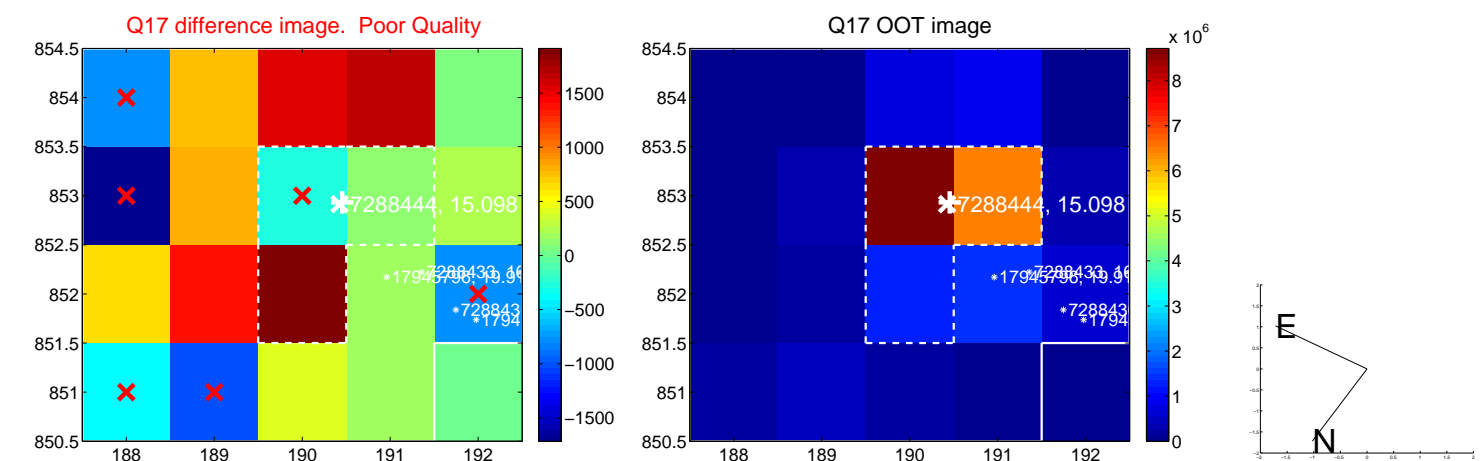
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UKIRT Image

Declination

