

KIC 007217088

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})
007217088-01	OBS	6849.01	12.544759	139.583315	247.2	1.265	8.8	10.4	1.16	5767	1.83	118.07

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007217088-01	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.

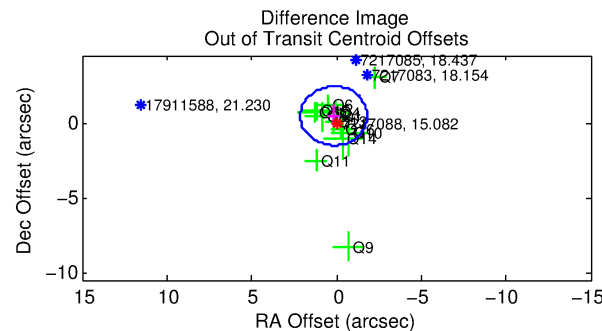
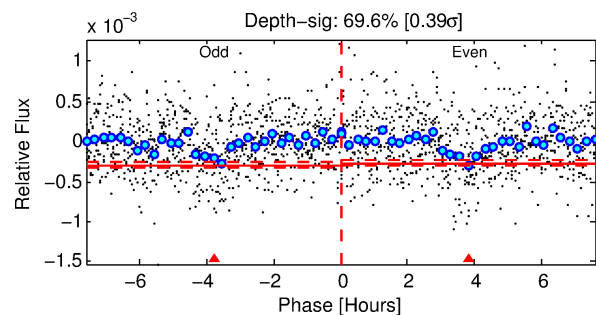
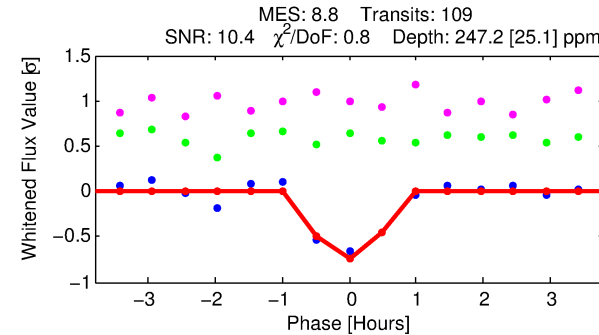
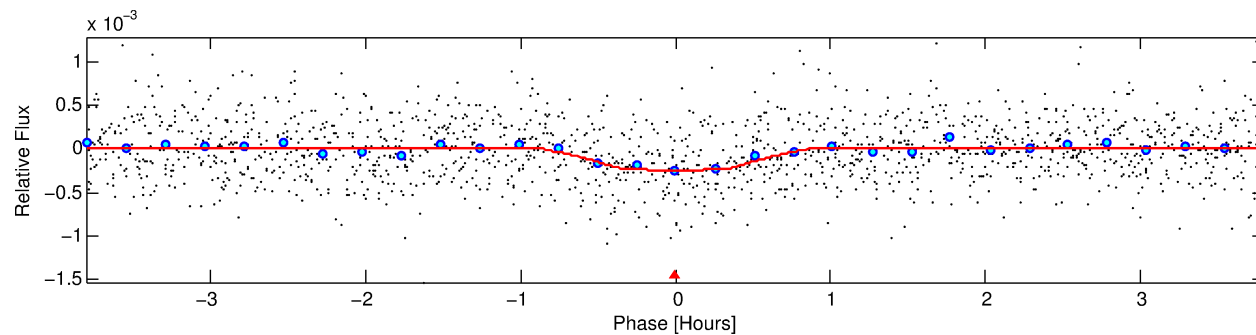
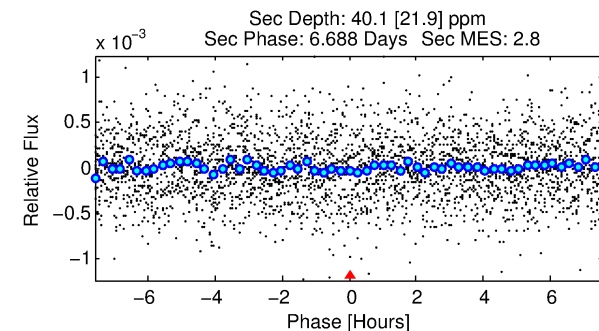
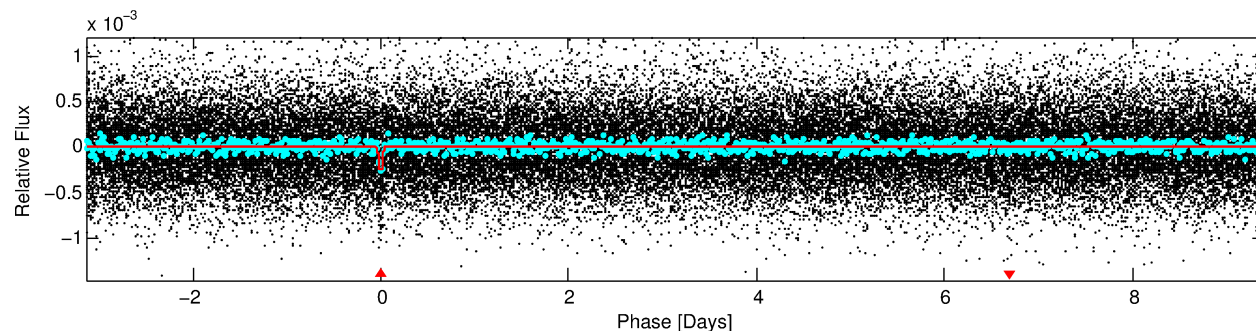
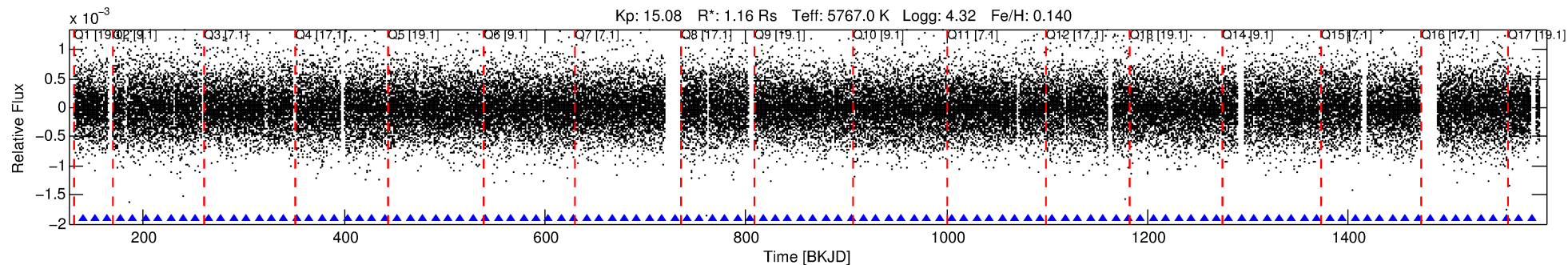
Ephemeris Match Information For 007217088-01

No Significant Match Found

DV One-Page Summary

KIC: 7217088 Candidate: 1 of 1 Period: 12.545 d

KOI: K06849.01 Corr: 0.967



DV Fit Results:

Period = 12.54476 [0.00006] d
Epoch = 139.5833 [0.0036] BKJD
Rp/R* = 0.0145 [0.0174]
a/R* = 73.40 [379.90]
b = 0.30 [15.80]
Seff = 118.07 [26.96]
Teff = 841 [48] K
Rp = 1.83 [2.22] Re
a = 0.1062 [0.0155] AU
Ag = 74.30 [183.87] [0.40σ]
Teffp = 3815 [2352] K [1.26σ]

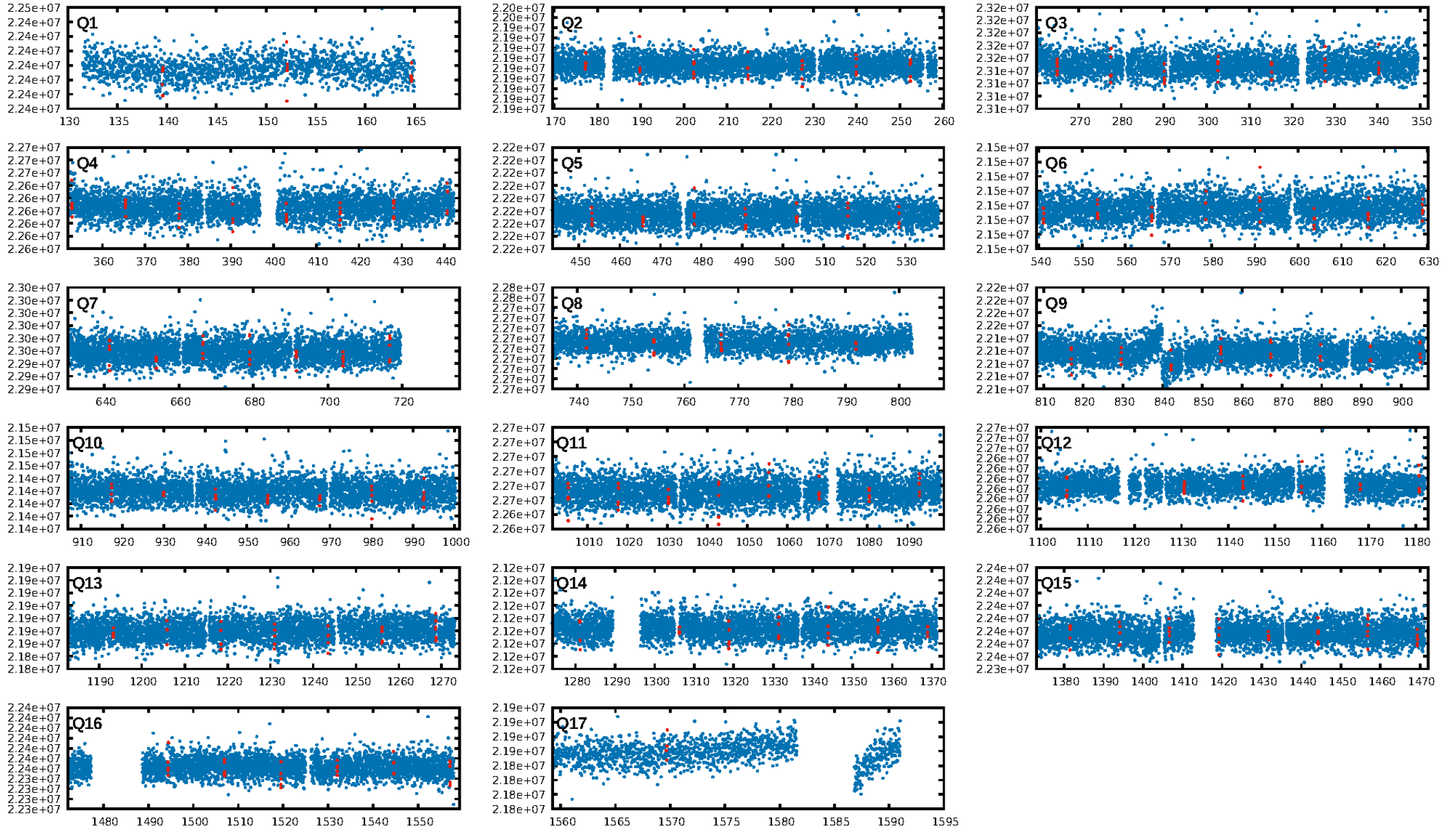
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.71e-18
RollingBand-fgt: 1.00 [105/105]
GhostDiagnostic-chr: 1.811
Centroid-sig: 73.9%
Centroid-so: 0.515 arcsec [0.36σ]
OotOffset-rm: 0.489 arcsec [0.74σ]
KicOffset-rm: 0.406 arcsec [0.56σ]
OotOffset-st: 3/3/3/4 [13]
KicOffset-st: 3/3/3/4 [13]
DiffImageQuality-fgm: 0.62 [8/13]
DiffImageOverlap-fno: 1.00 [17/17]

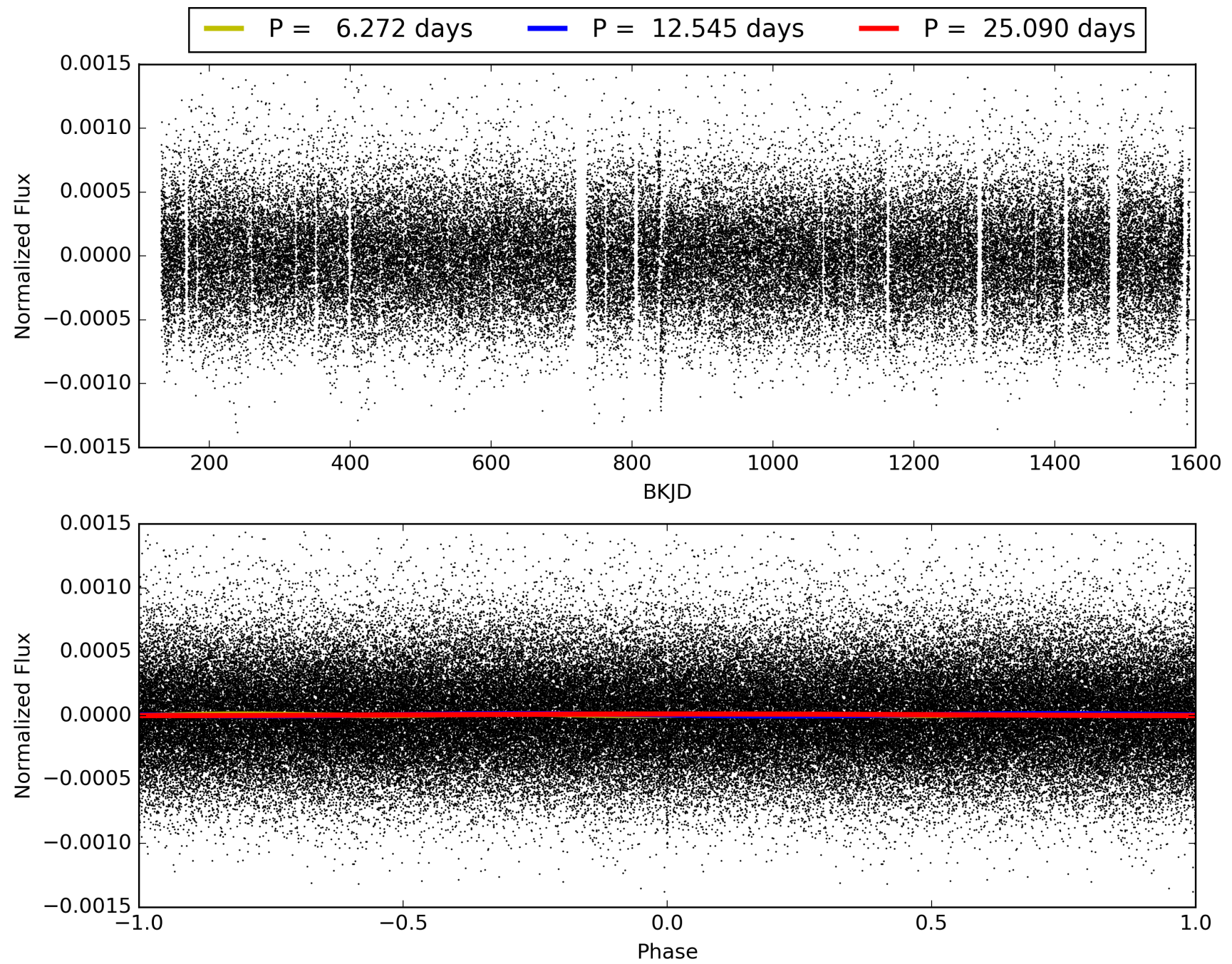
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 13:11:44 Z

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

TCE 007217088-01, PDC Light Curves

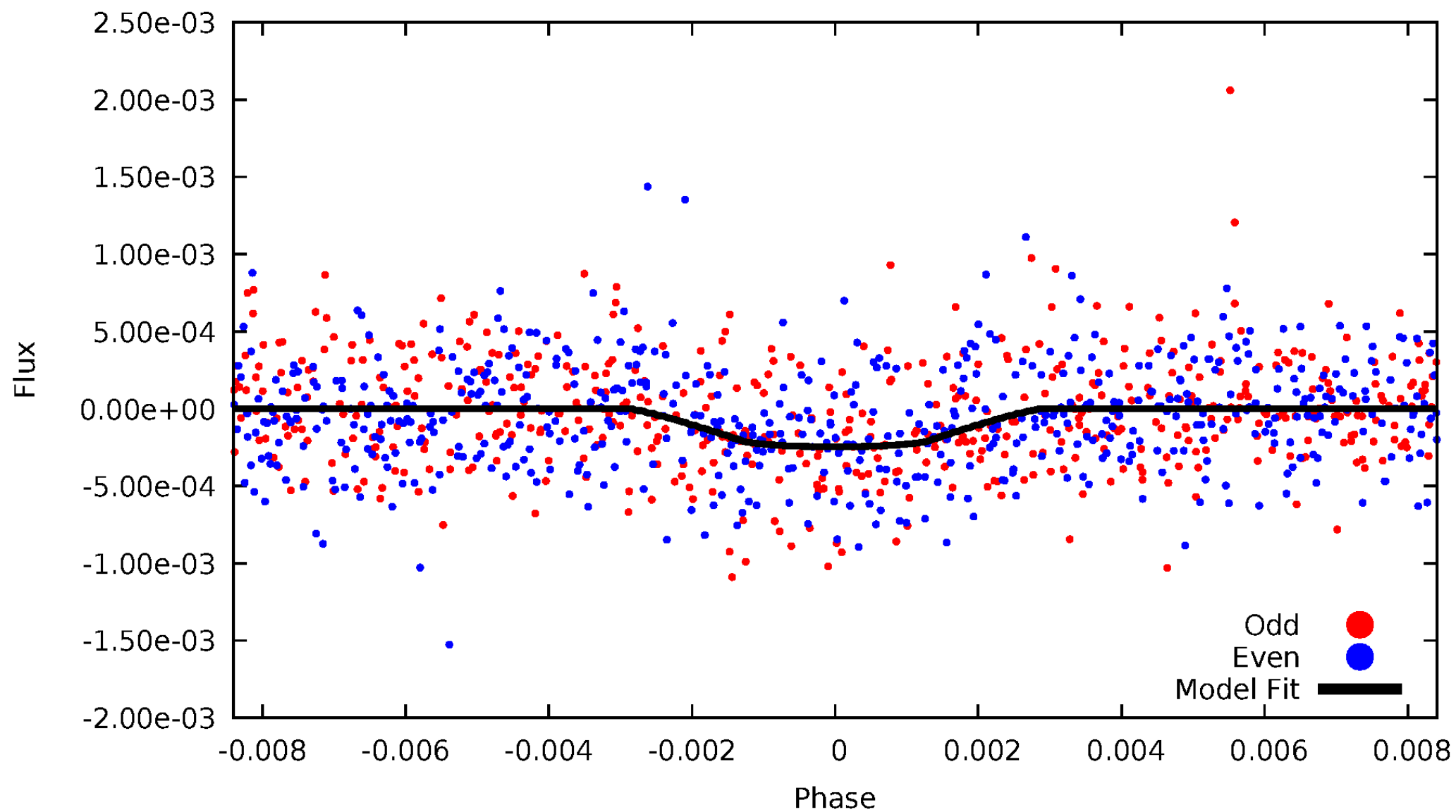


TCE 007217088-01



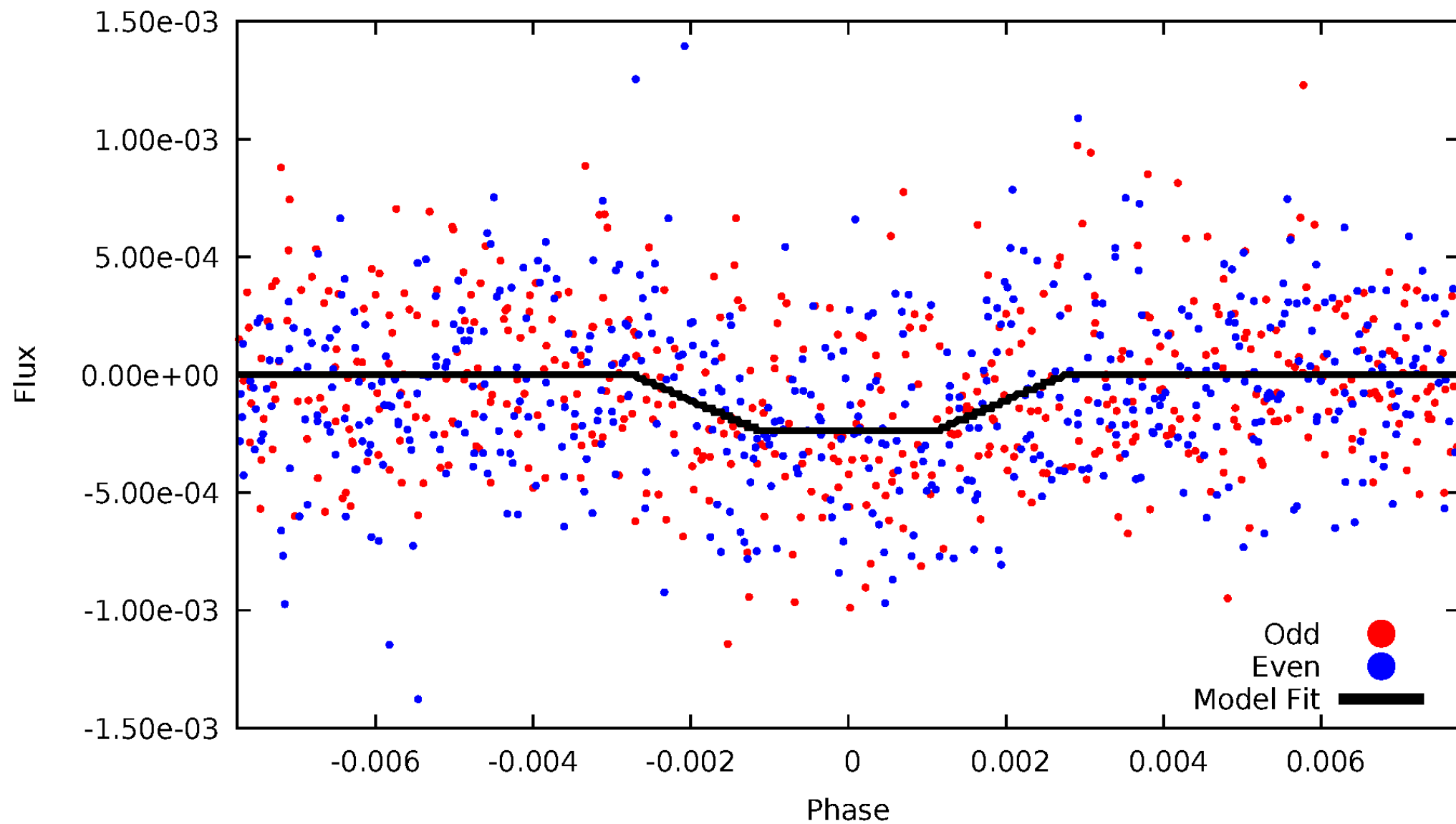
DV Odd/Even

TCE 007217088-01



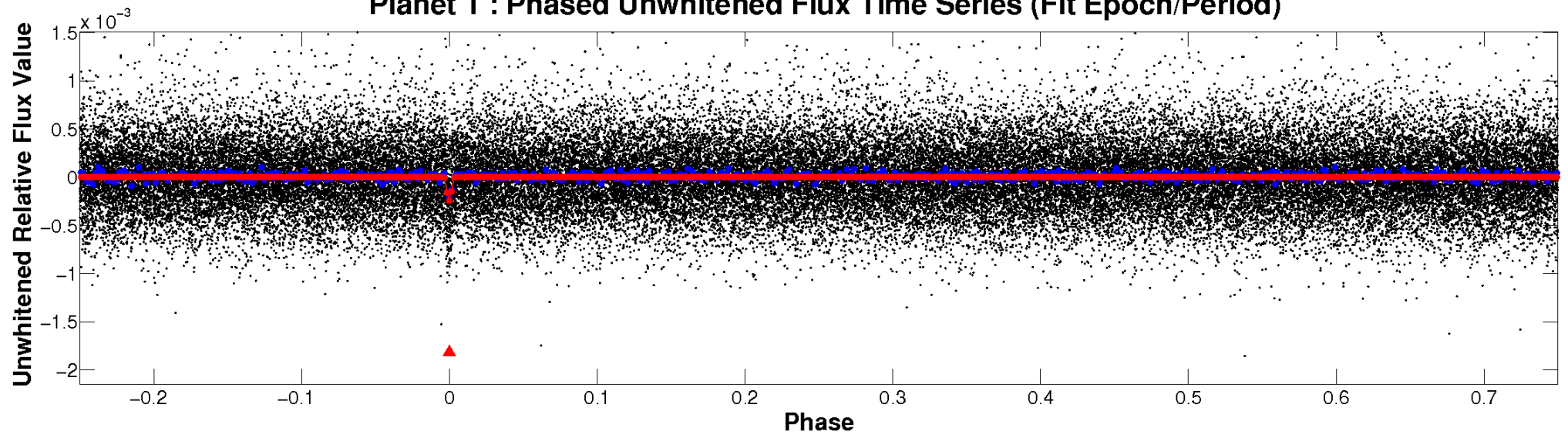
ALT Odd/Even

TCE 007217088-01

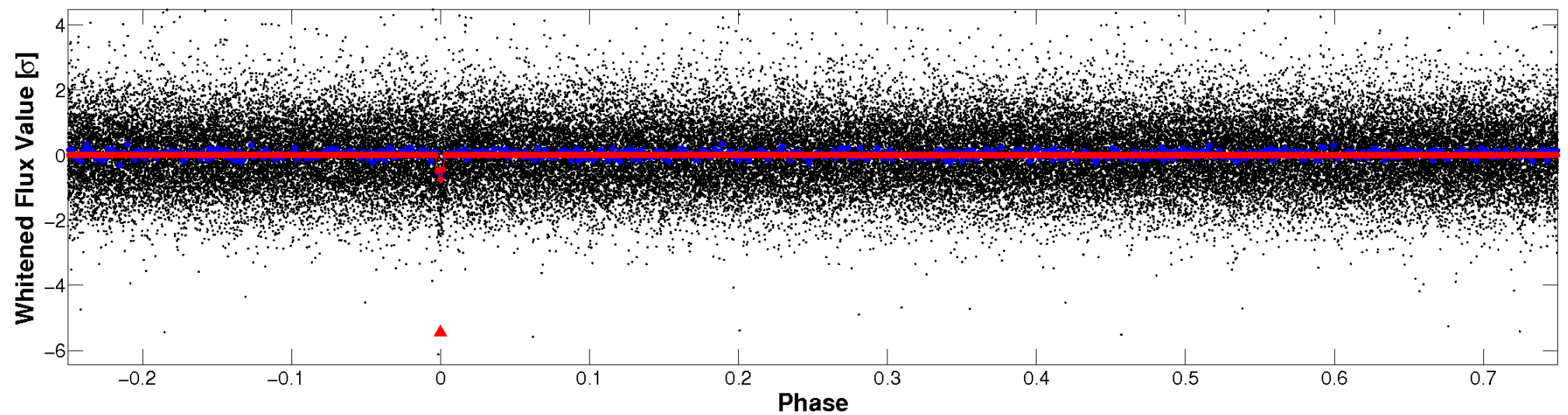


Non-Whitened Vs. Whitened Light Curve

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

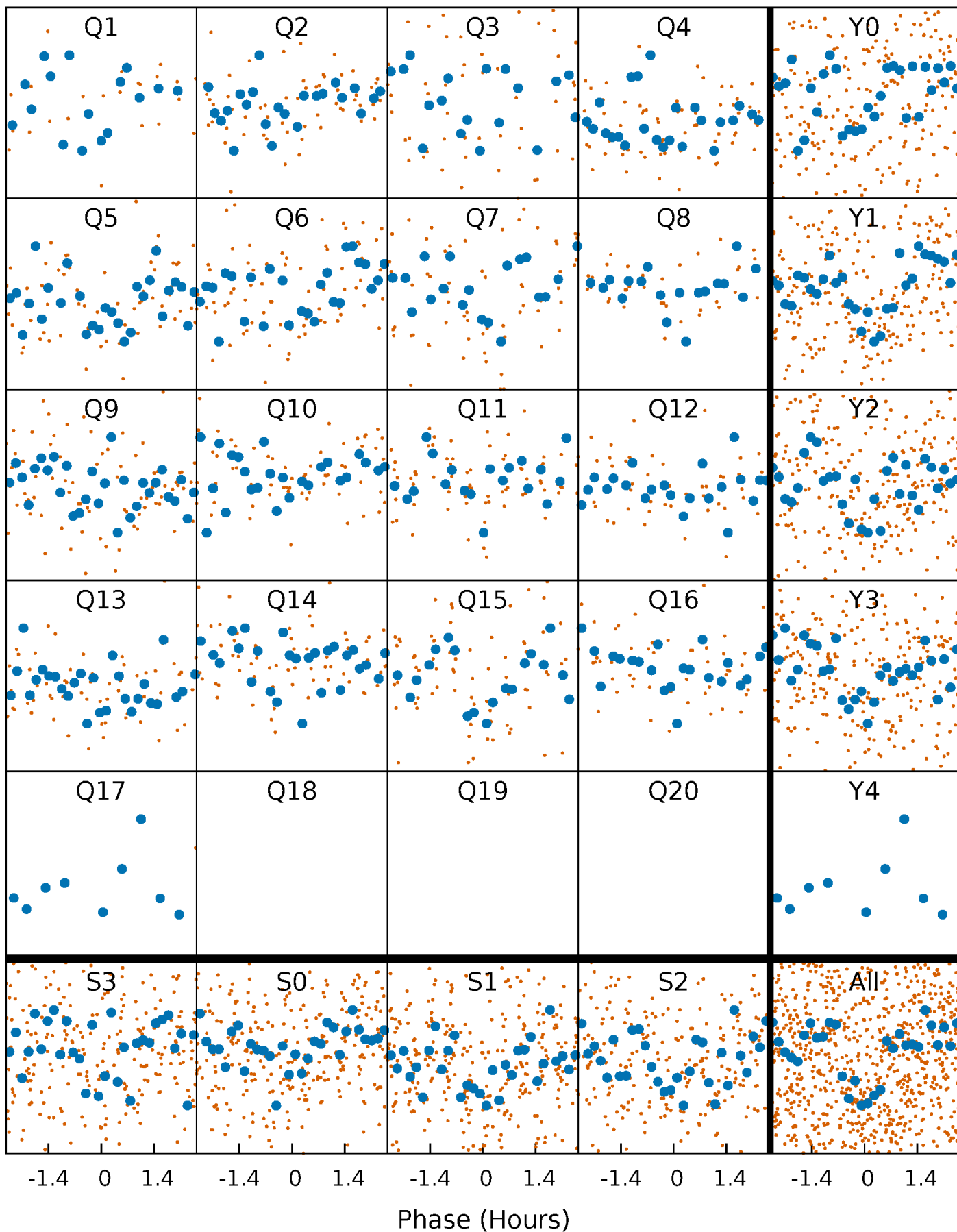


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



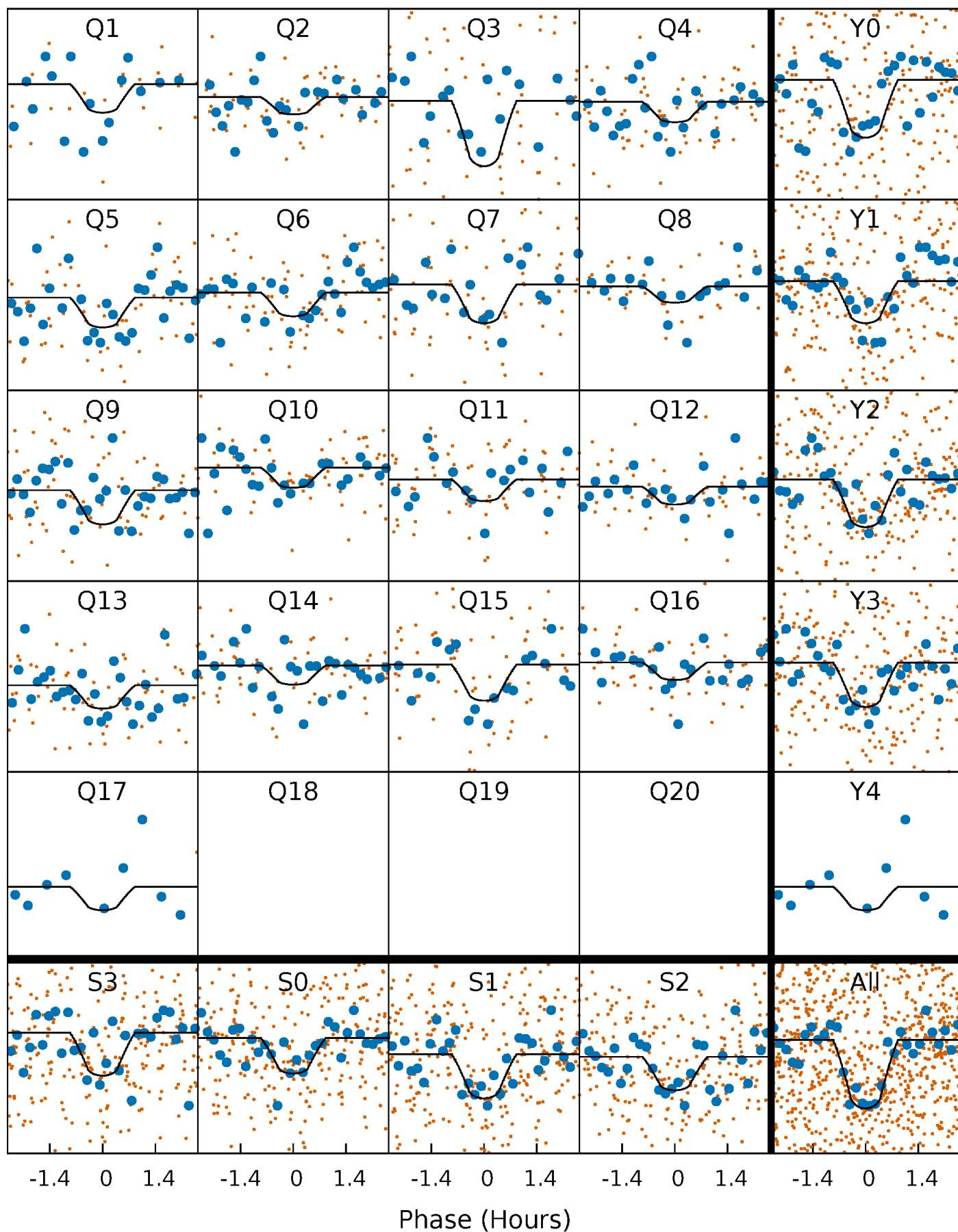
PDC Quarter-Phased Transit Curves

TCE 007217088-01 P= 12.544759 Days $T_0=139.583315$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 007217088-01 P= 12.544759 Days $T_0=139.583315$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

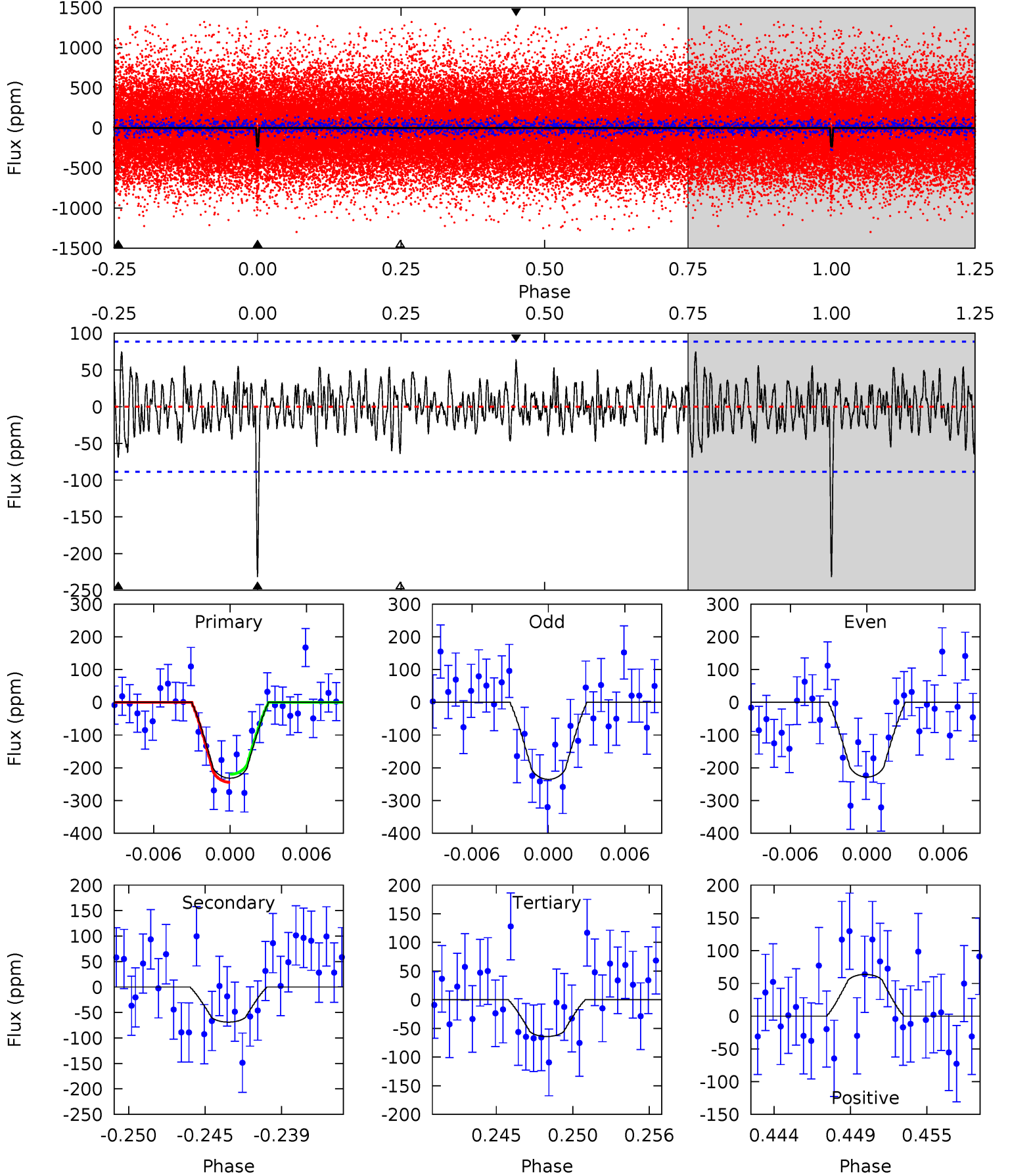
TCE 007217088-01 P= 12.544720 Days $T_0=139.584448$ (BKJD)



DV Model-Shift Uniqueness Test

007217088-01, P = 12.544759 Days, E = 127.038556 Days

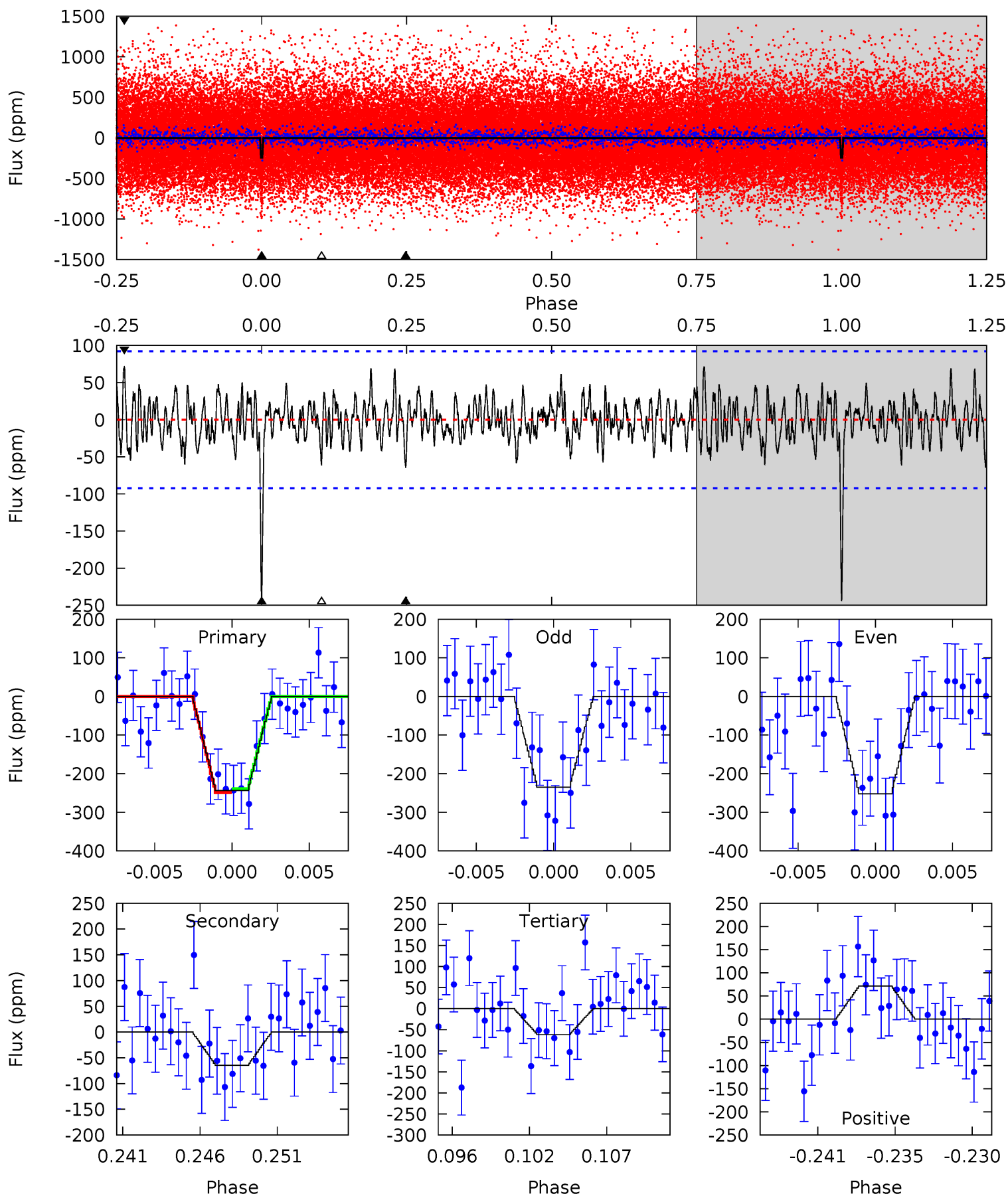
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.4	3.99	3.71	3.69	5.13	2.77	1.30	9.71	9.73	0.28	0.30	0.20	1.06	0.24	0.71



Alt Model-Shift Uniqueness Test

007217088-01, $P = 12.544720$ Days, $E = 127.039728$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.6	3.60	3.43	3.99	5.15	2.79	1.25	10.2	9.60	0.18	-0.39	0.48	0.94	0.23	0.28



Stellar Parameters For KIC 007217088

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5767^{+78}_{-78}	$4.316^{+0.126}_{-0.115}$	$0.140^{+0.150}_{-0.150}$	$1.159^{+0.189}_{-0.155}$	$1.015^{+0.080}_{-0.058}$	$0.917^{+0.463}_{-0.306}$
	+1%/-1%	+3%/-3%	+107%/-107%	+16%/-13%	+8%/-6%	+50%/-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 007217088-01 / KOI 6849.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-69 ± 17	$2.30^{+2.14}_{-1.50}$	1175^{+47}_{-50}	4162^{+2346}_{-863}	82^{+560}_{-62}
Alt.	-65 ± 18	$2.53^{+1.97}_{-1.60}$	1174^{+53}_{-48}	4000^{+2084}_{-751}	64^{+422}_{-46}

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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

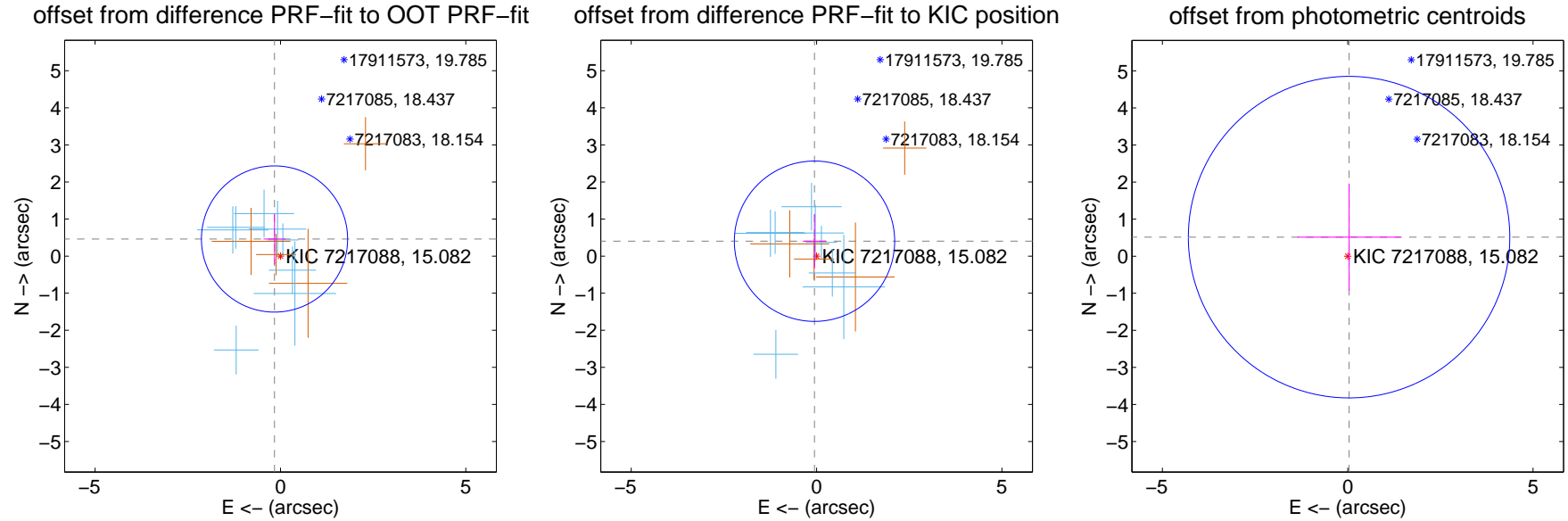
DV Centroid Data

Supplemental centroid analysis for 007217088-01. Kepler magnitude: 15.08. Transit SNR 10.40

There are 8 quarters with good PRF difference image offsets

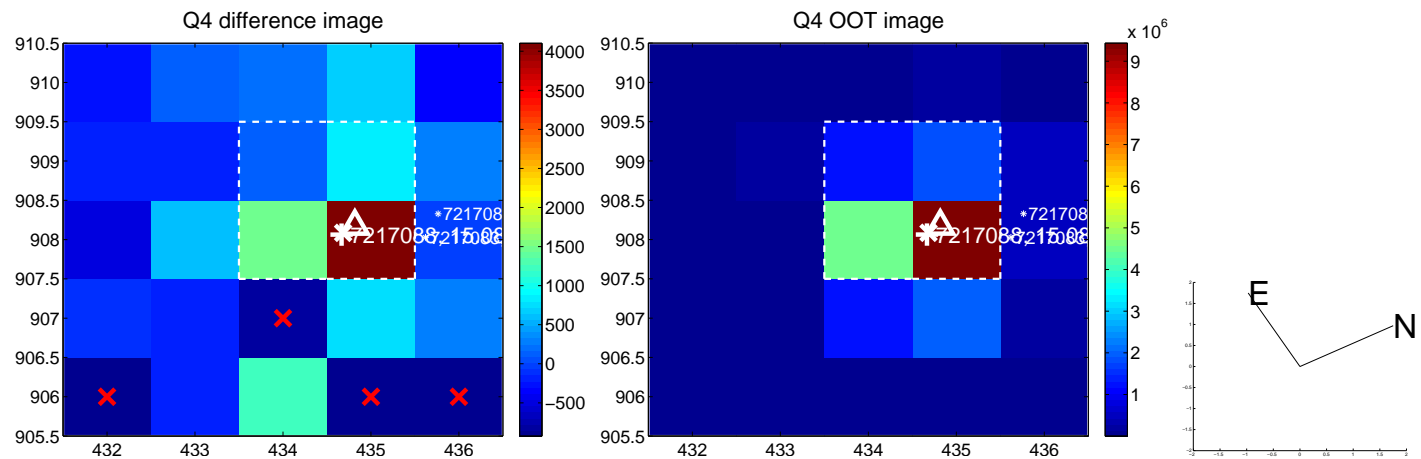
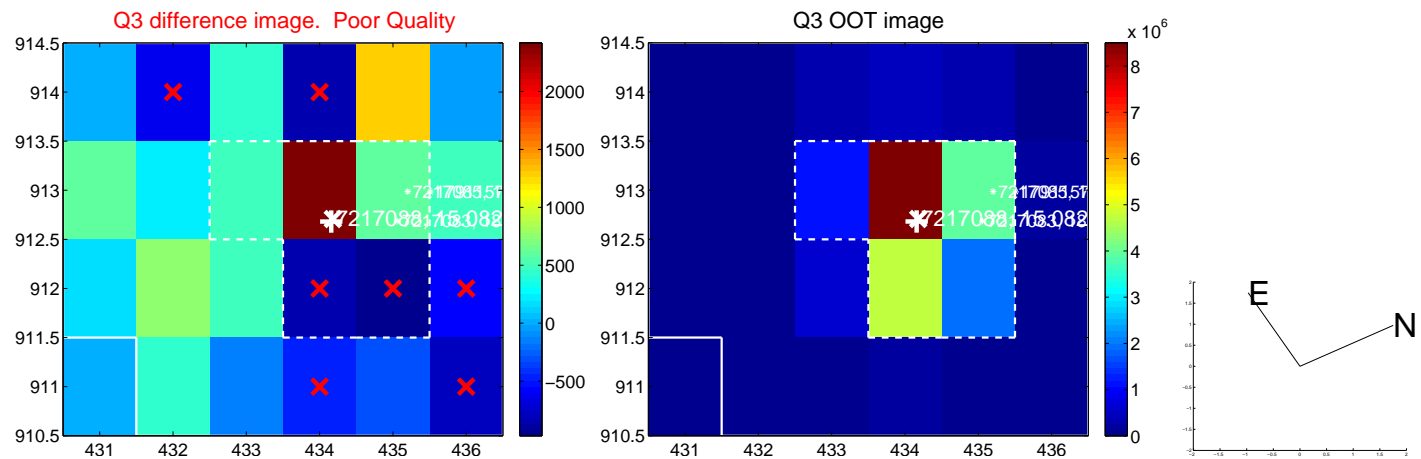
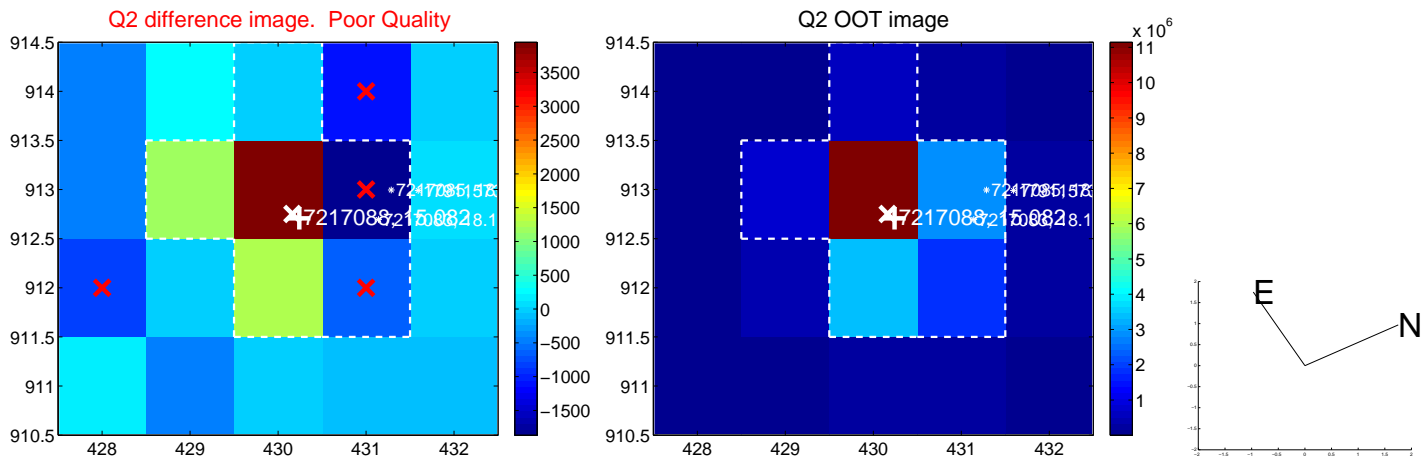
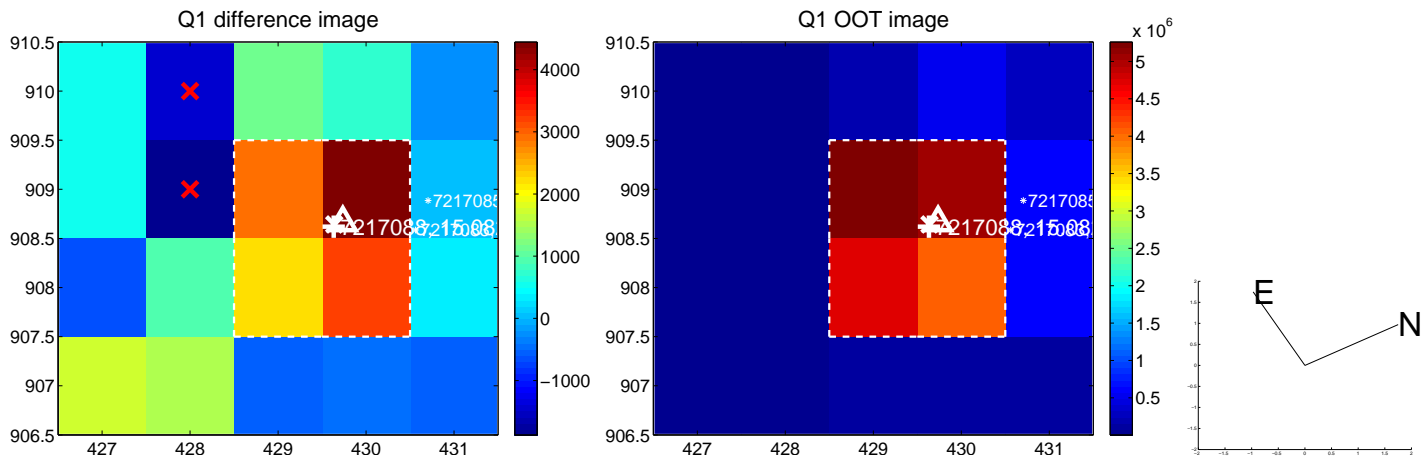
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.489 ± 0.657	0.74	0.160 ± 0.295	0.462 ± 0.686
PRF-fit source offset from KIC position	0.406 ± 0.721	0.56	0.056 ± 0.315	0.402 ± 0.733
photometric centroid source offset	0.52 ± 1.45	0.36	-0.04 ± 1.39	0.51 ± 1.45

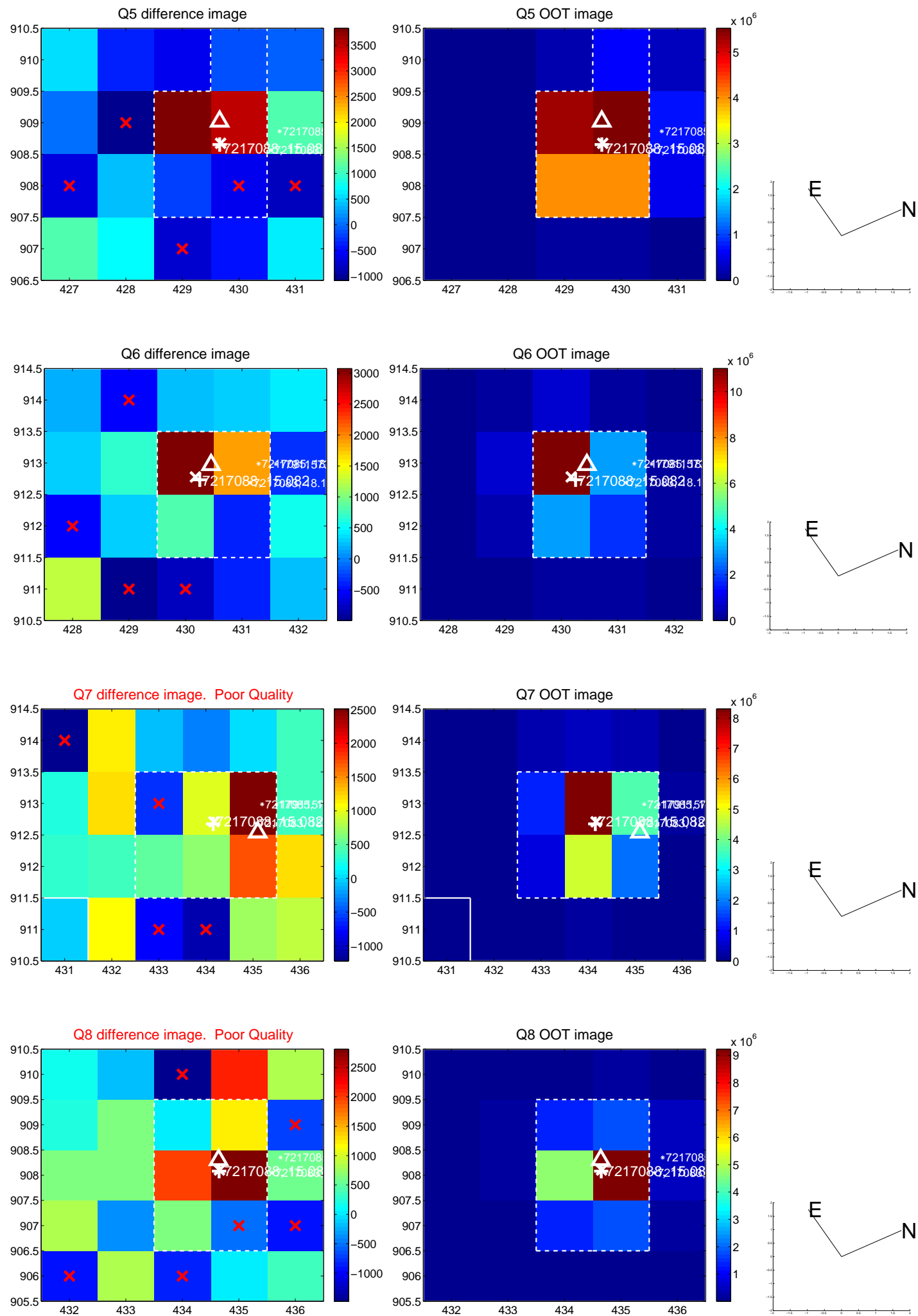


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

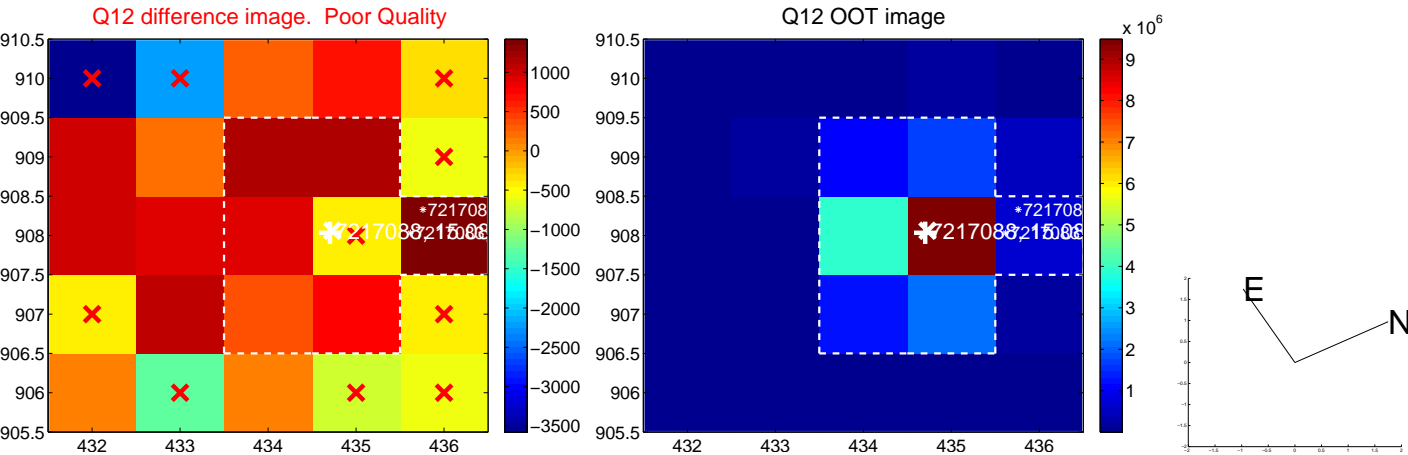
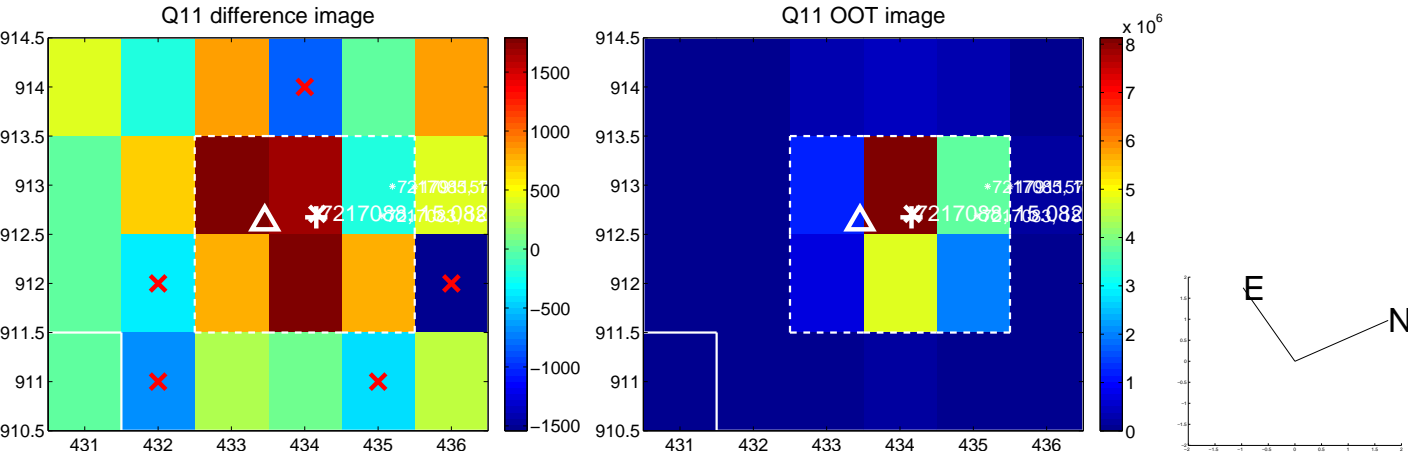
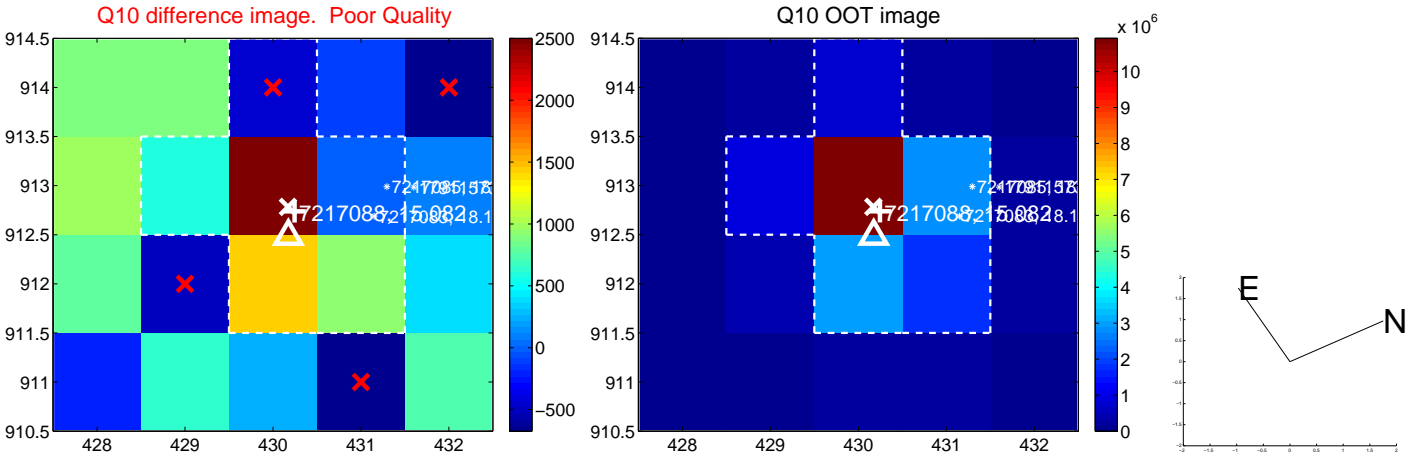
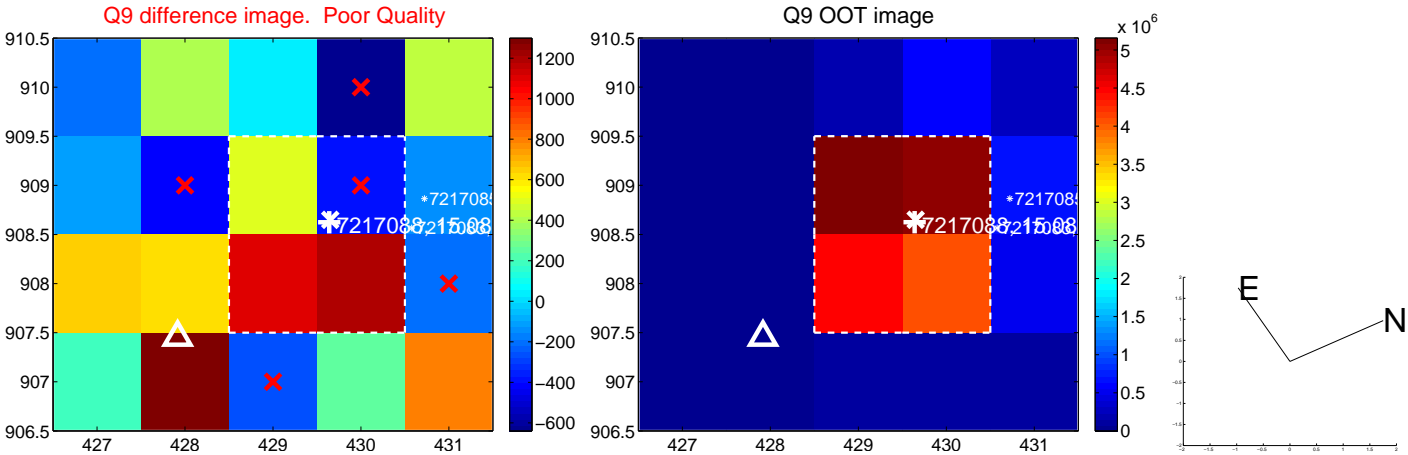
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



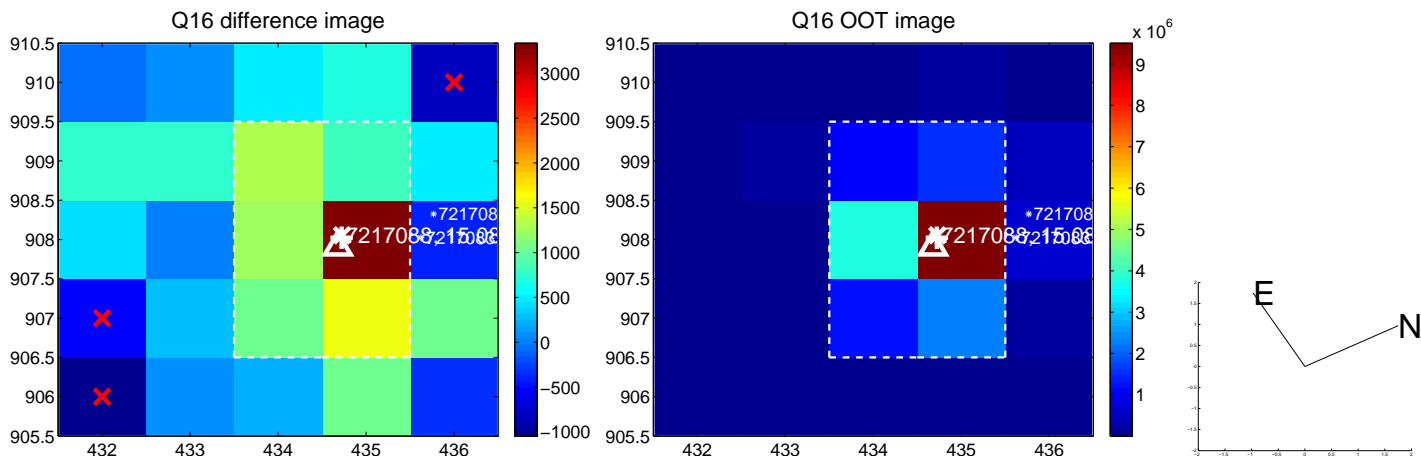
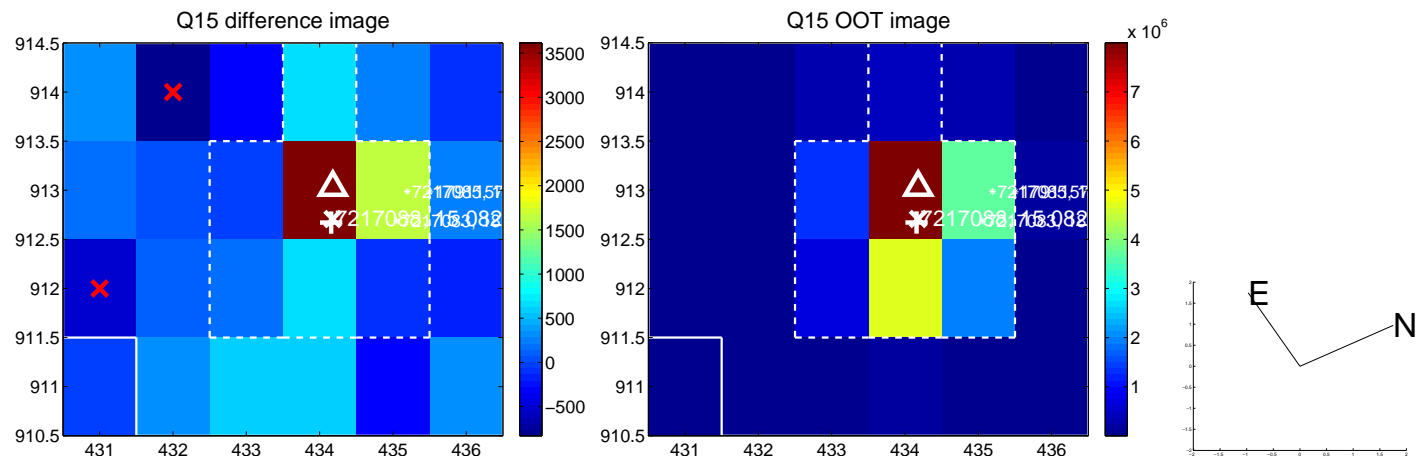
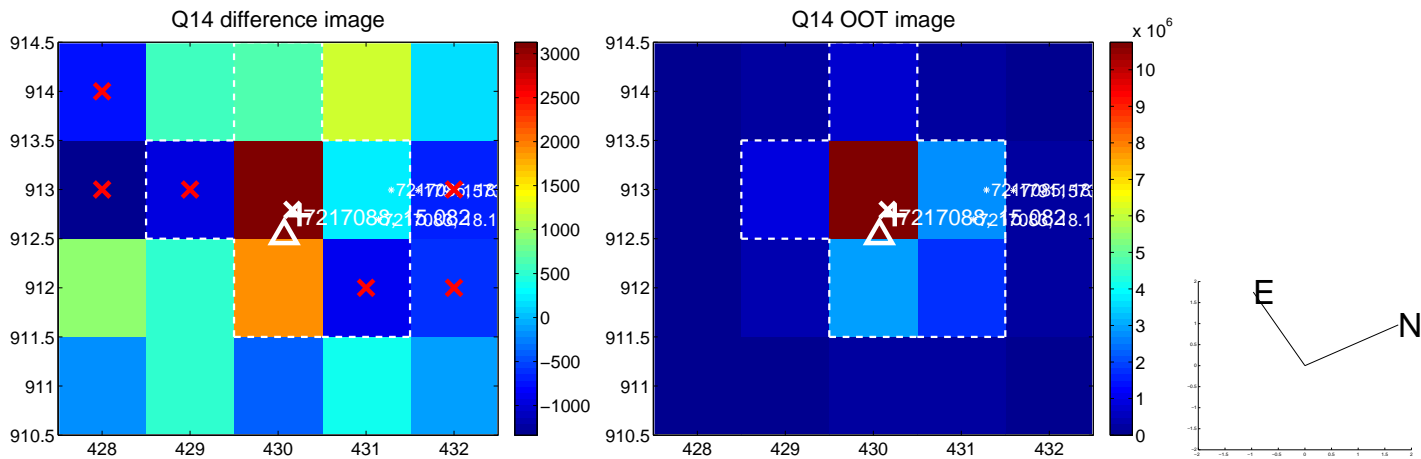
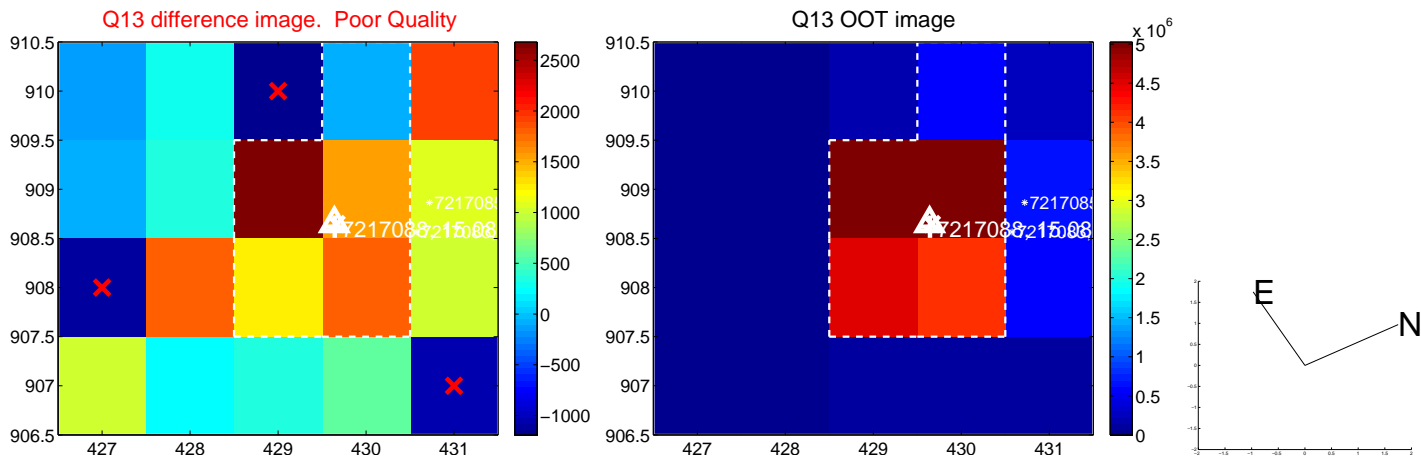
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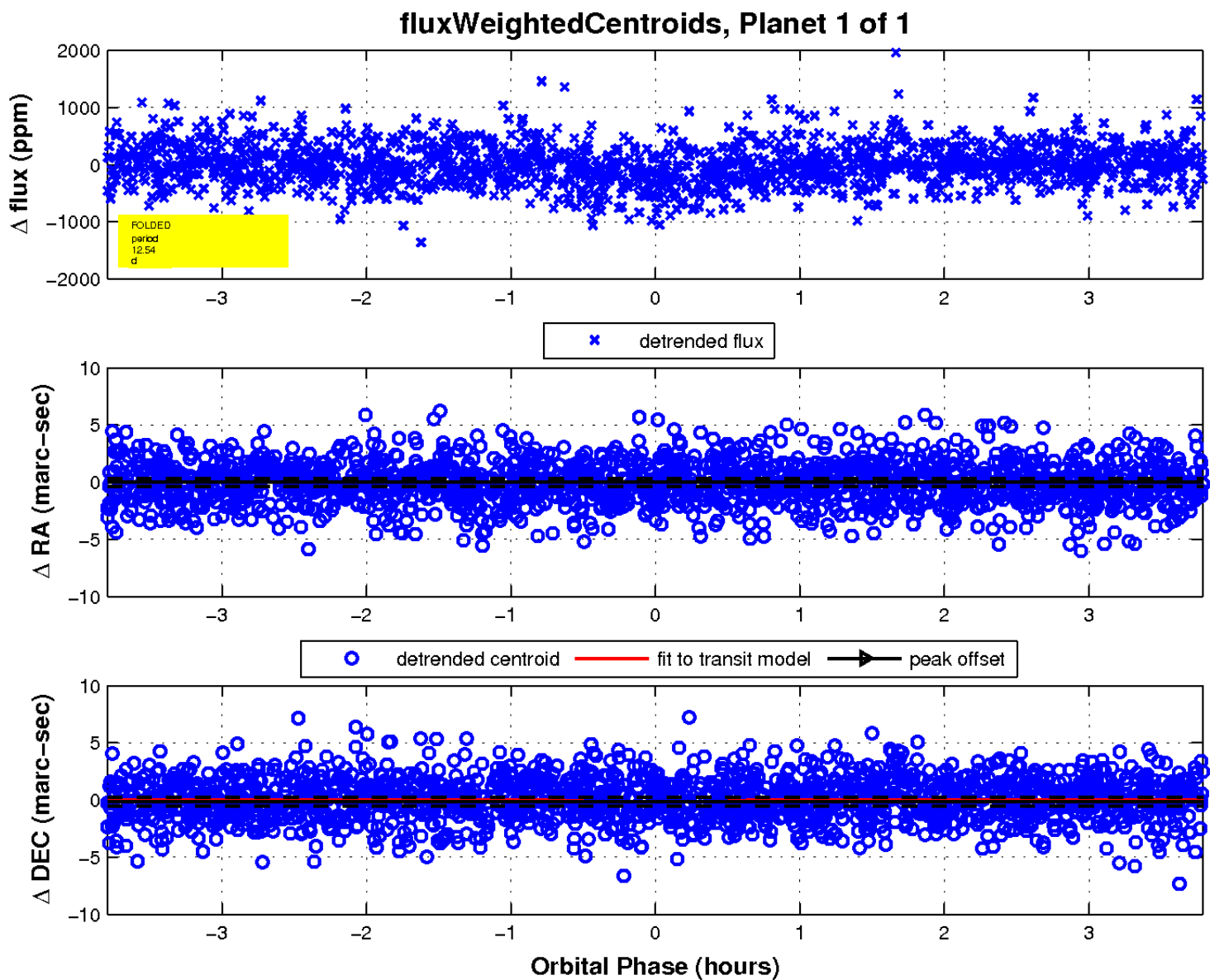
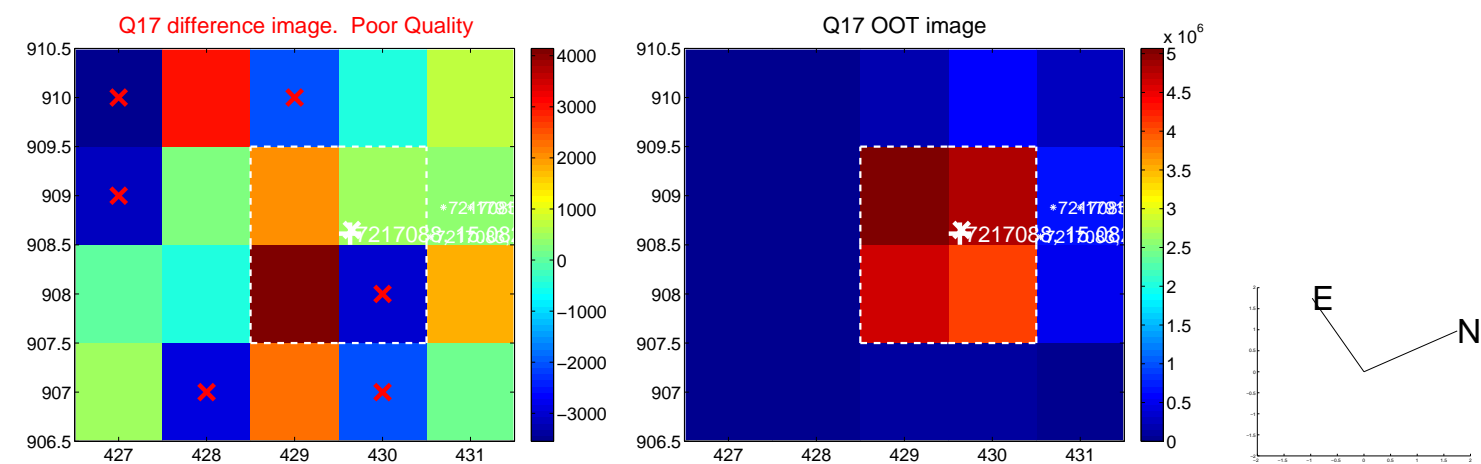
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UKIRT Image

Declination

