

KIC 011145408

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})
011145408-01	OBS	No	4.820582	134.580752	10.2	16.015	7.5	3.5	1.53	6735	0.52	1147.91

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011145408-01	OBS	FP	0.00	1	0	0	0	LPP_DV

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

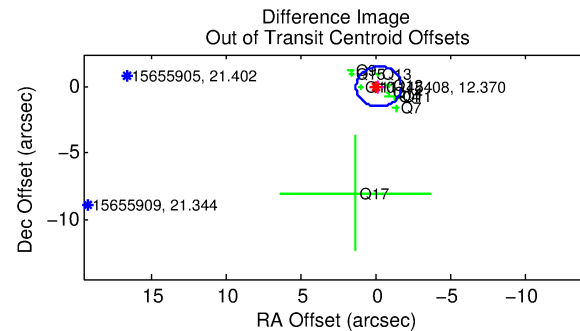
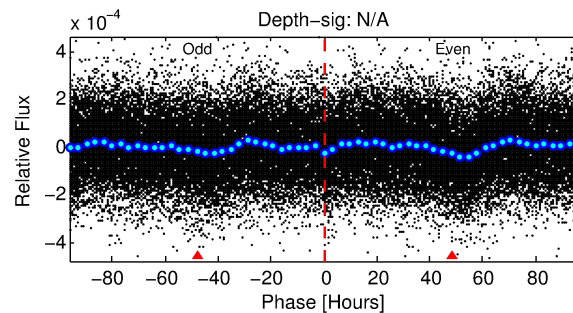
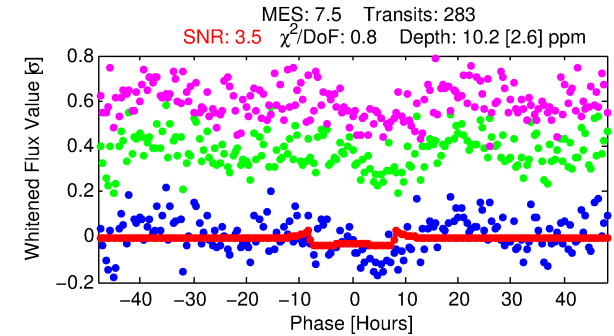
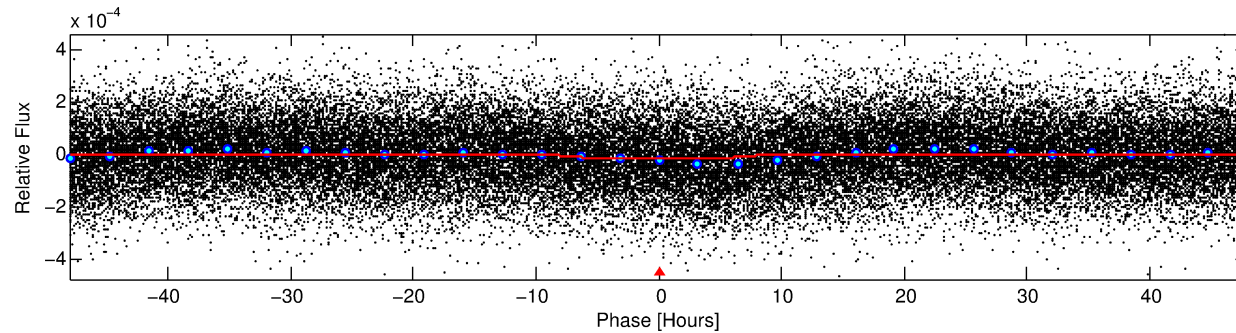
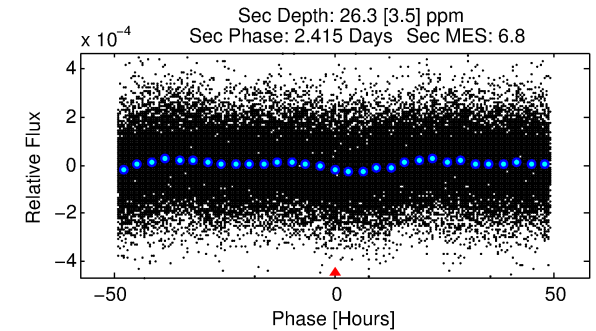
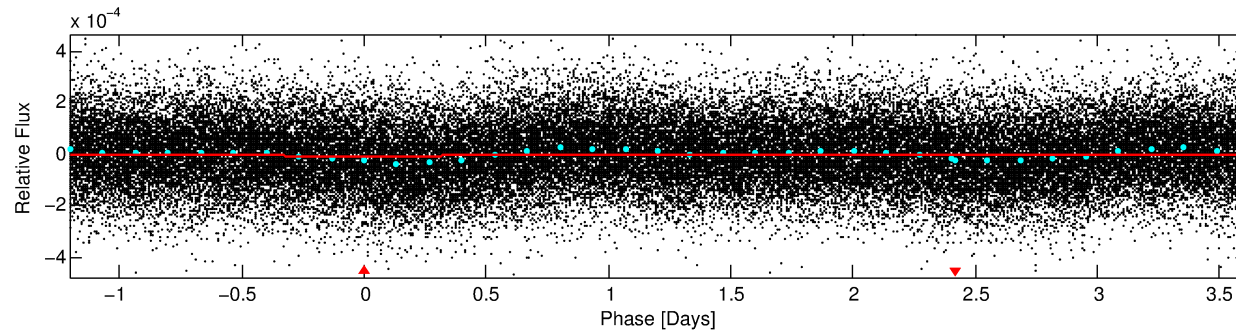
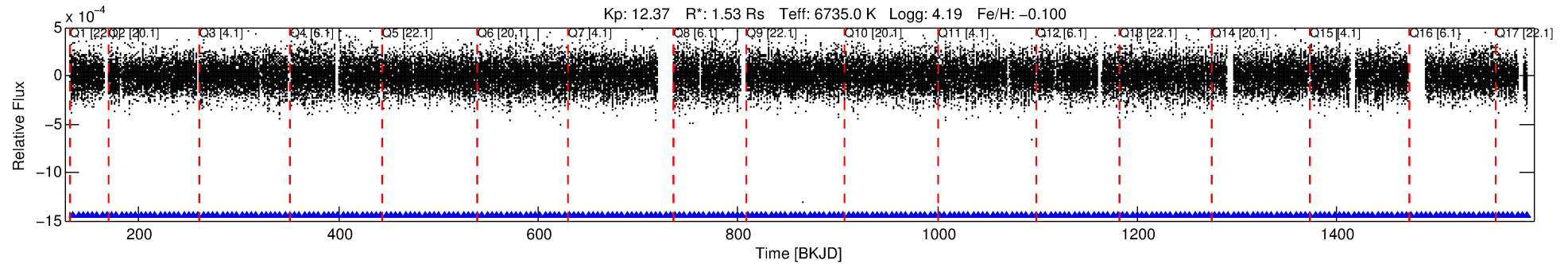
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011145408-01

No Significant Match Found

DV One-Page Summary

KIC: 11145408 Candidate: 1 of 1 Period: 4.821 d



DV Fit Results:

Period = 4.82058 [0.00013] d
Epoch = 134.5808 [0.0183] BKJD
Rp/R* = 0.0031 [0.0011]
a/R* = 1.91 [2.59]
b = 0.66 [1.61]
Seff = 1147.91 [261.61]
Teq = 1484 [85] K
Rp = 0.52 [0.20] Re
a = 0.0613 [0.0092] AU
Ag = 201.49 [150.15] [1.34σ]
Teffp = 8646 [1544] K [4.63σ]

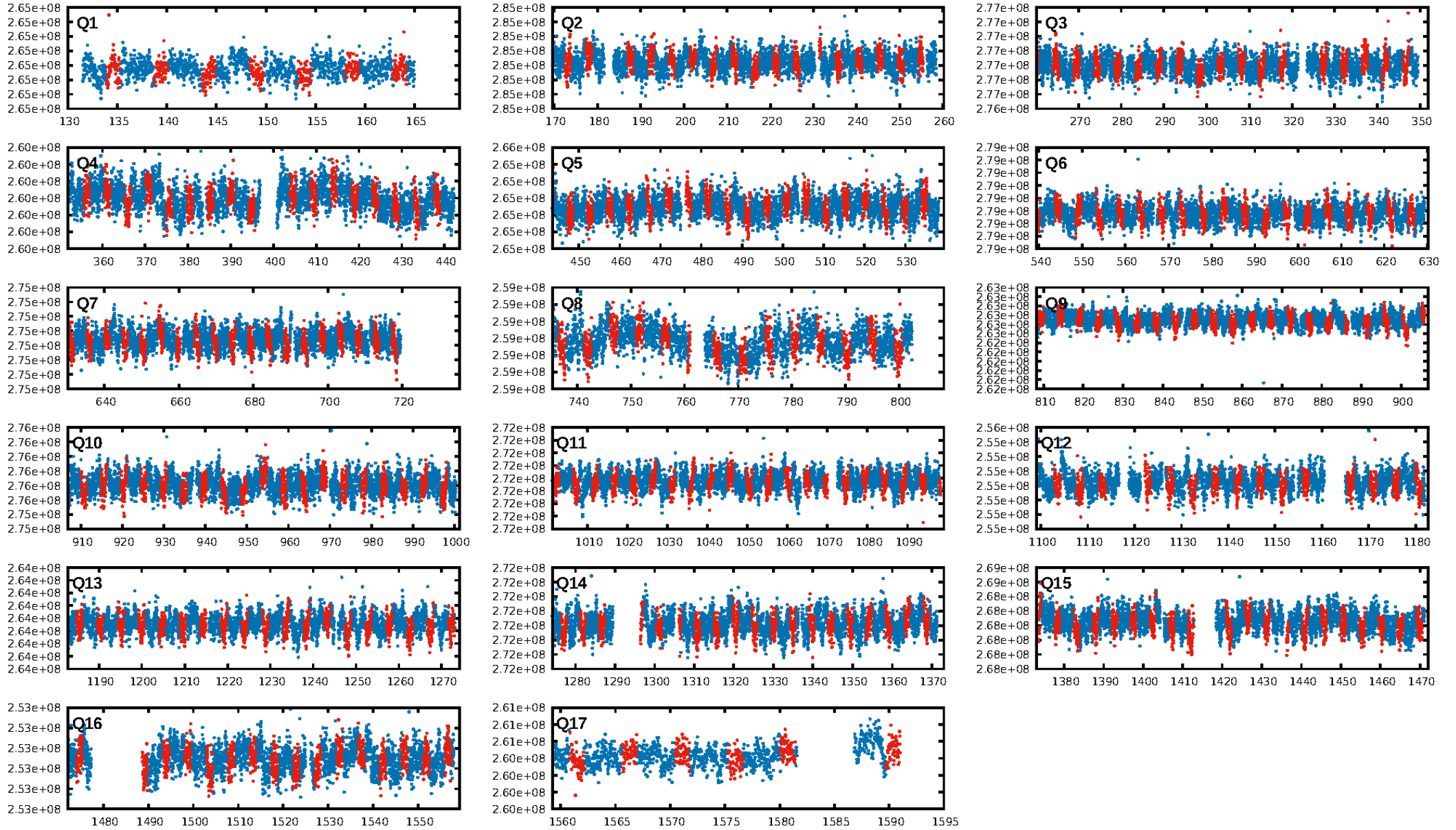
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.10e-08
RollingBand-fgt: 1.00 [270/270]
GhostDiagnostic-chr: 3.289
Centroid-sig: 10.8%
Centroid-so: 1.917 arcsec [1.38σ]
OotOffset-rm: 0.247 arcsec [0.49σ]
KicOffset-rm: 0.243 arcsec [0.45σ]
OotOffset-st: 2/3/2/3 [10]
KicOffset-st: 2/3/2/3 [10]
DiffImageQuality-fgm: 0.90 [9/10]
DiffImageOverlap-fno: 1.00 [17/17]

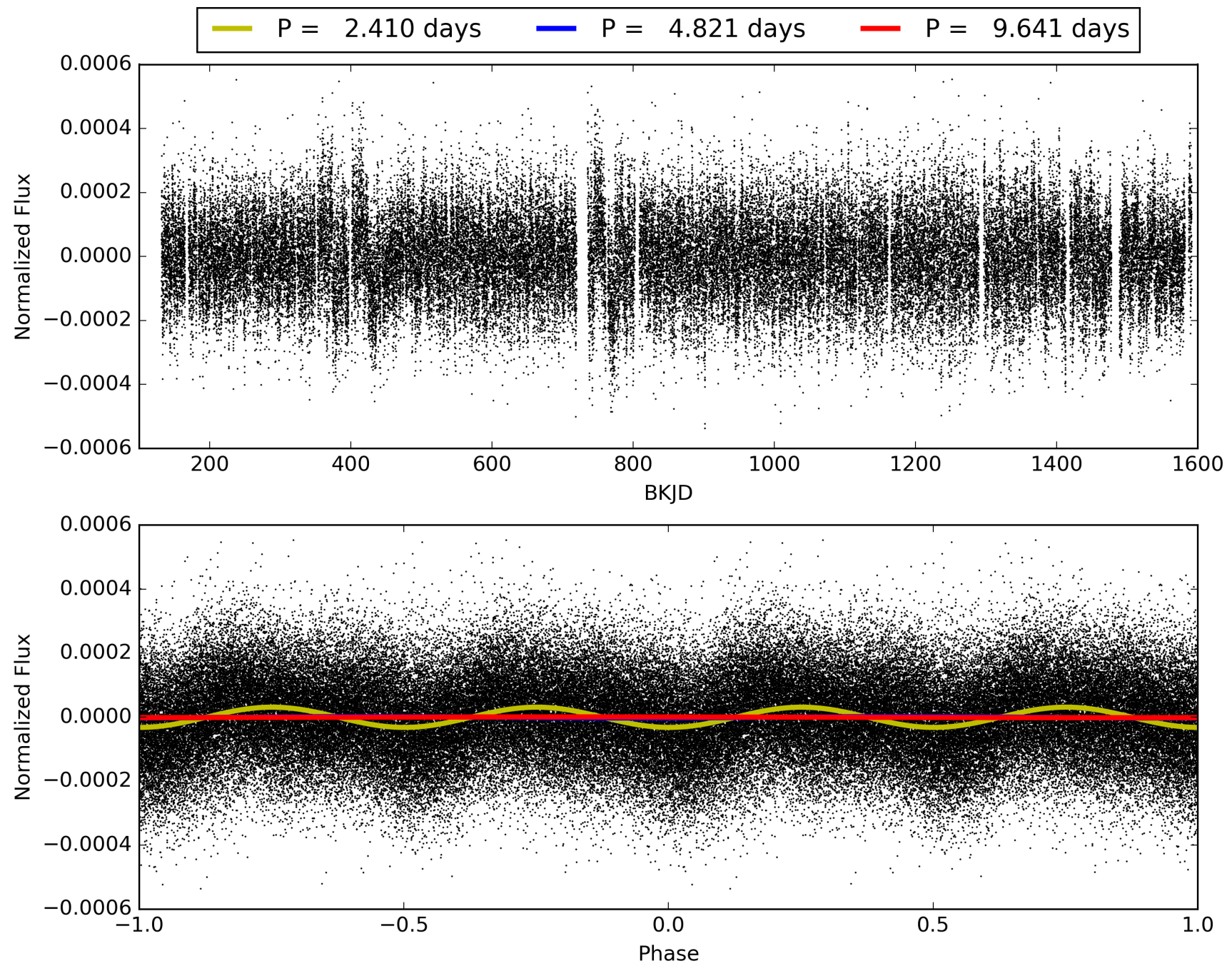
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 21:05:48 Z

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

TCE 011145408-01, PDC Light Curves

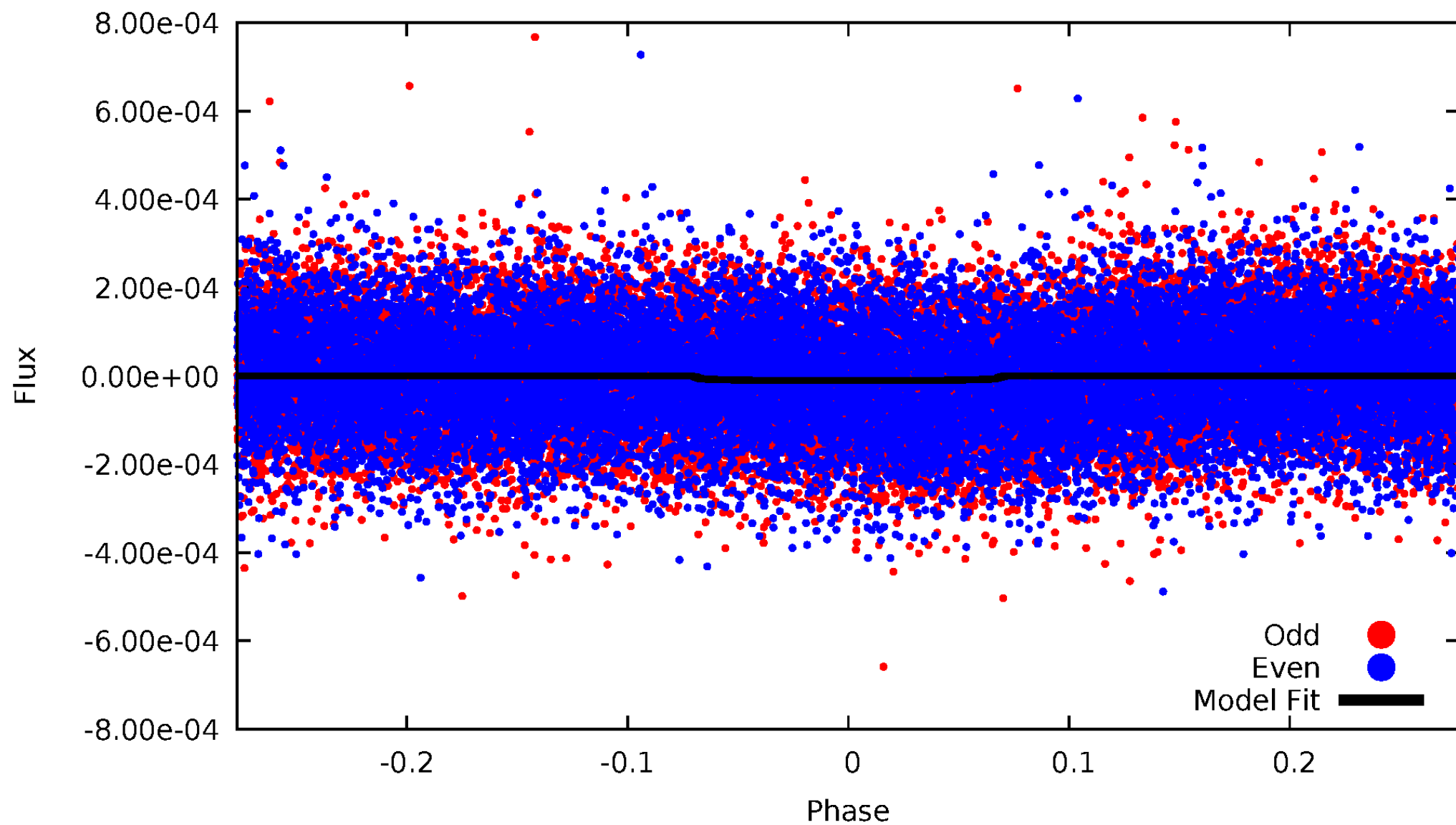


TCE 011145408-01



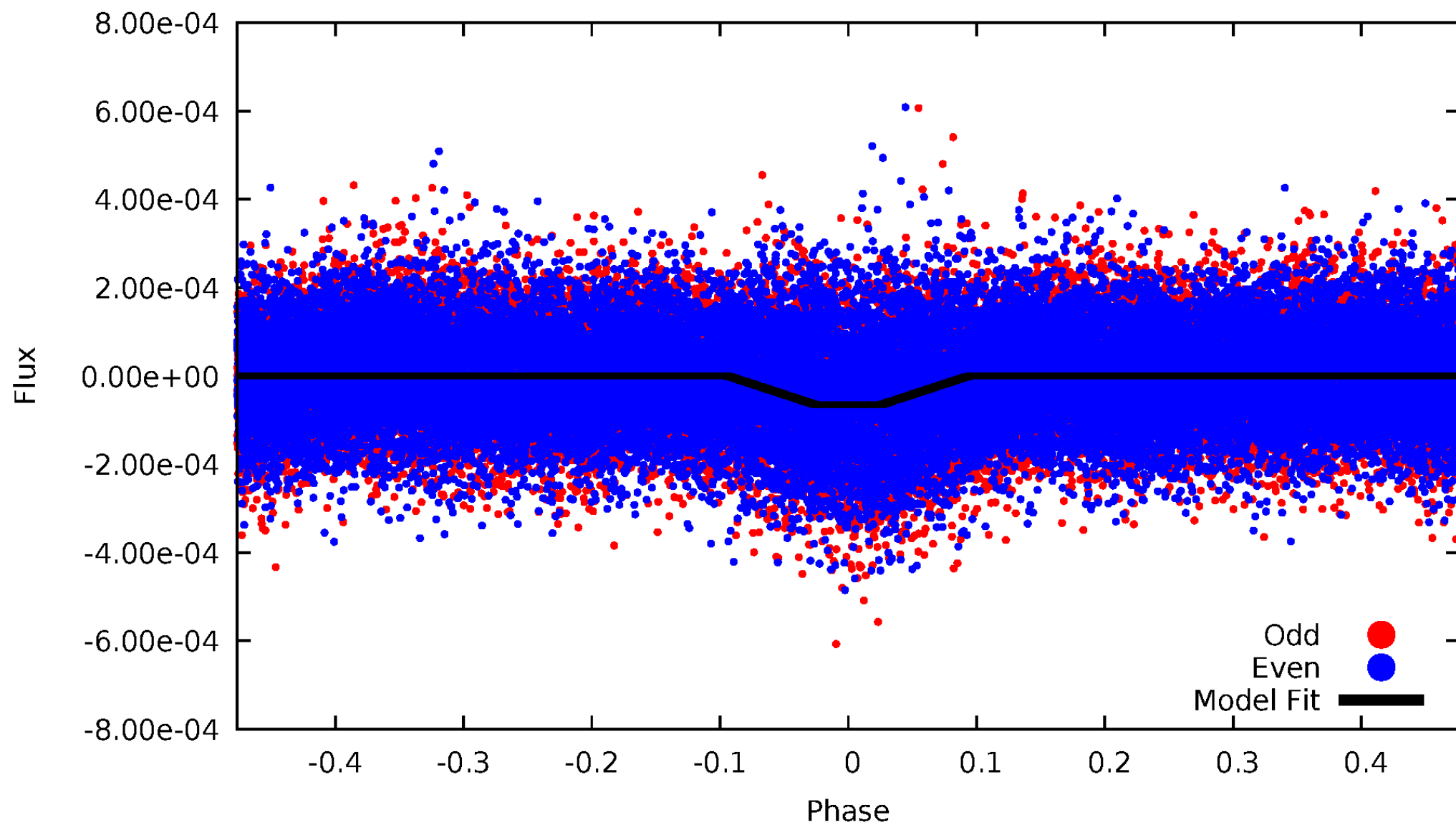
DV Odd/Even

TCE 011145408-01



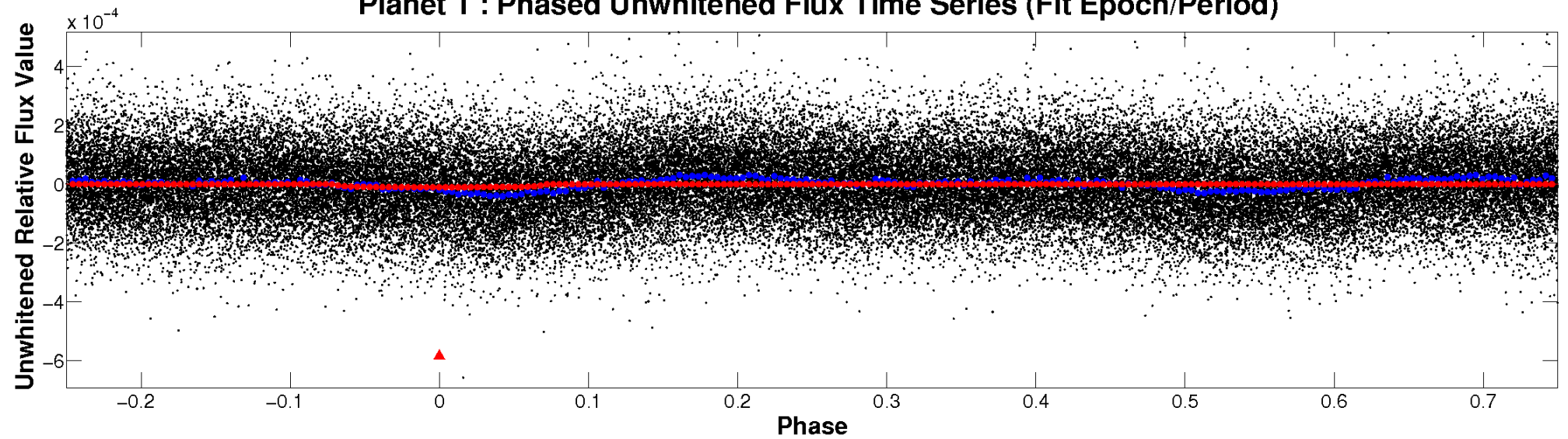
ALT Odd/Even

TCE 011145408-01

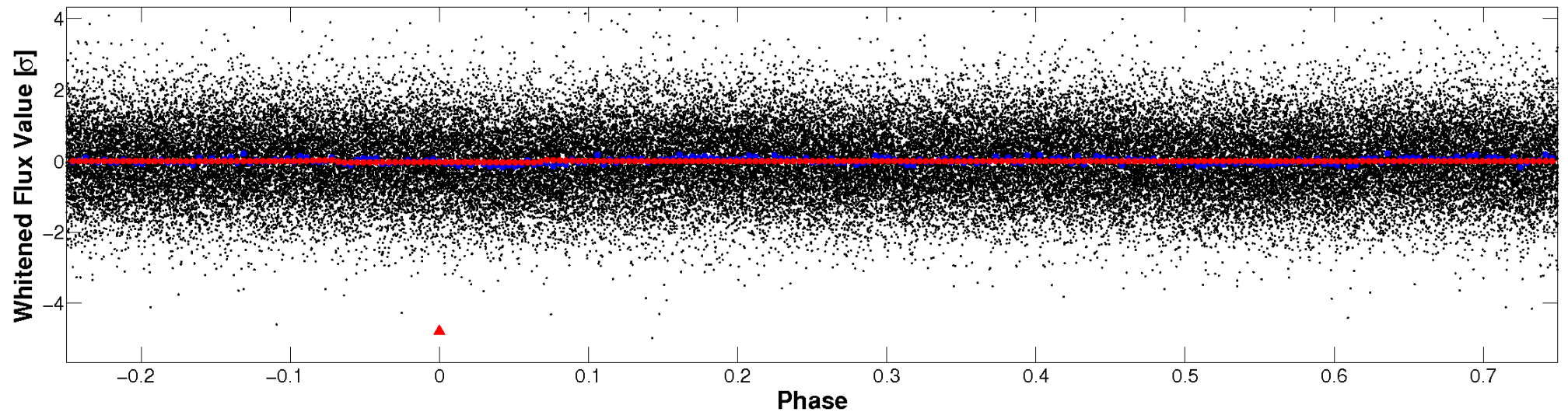


Non-Whitened Vs. Whitened Light Curve

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

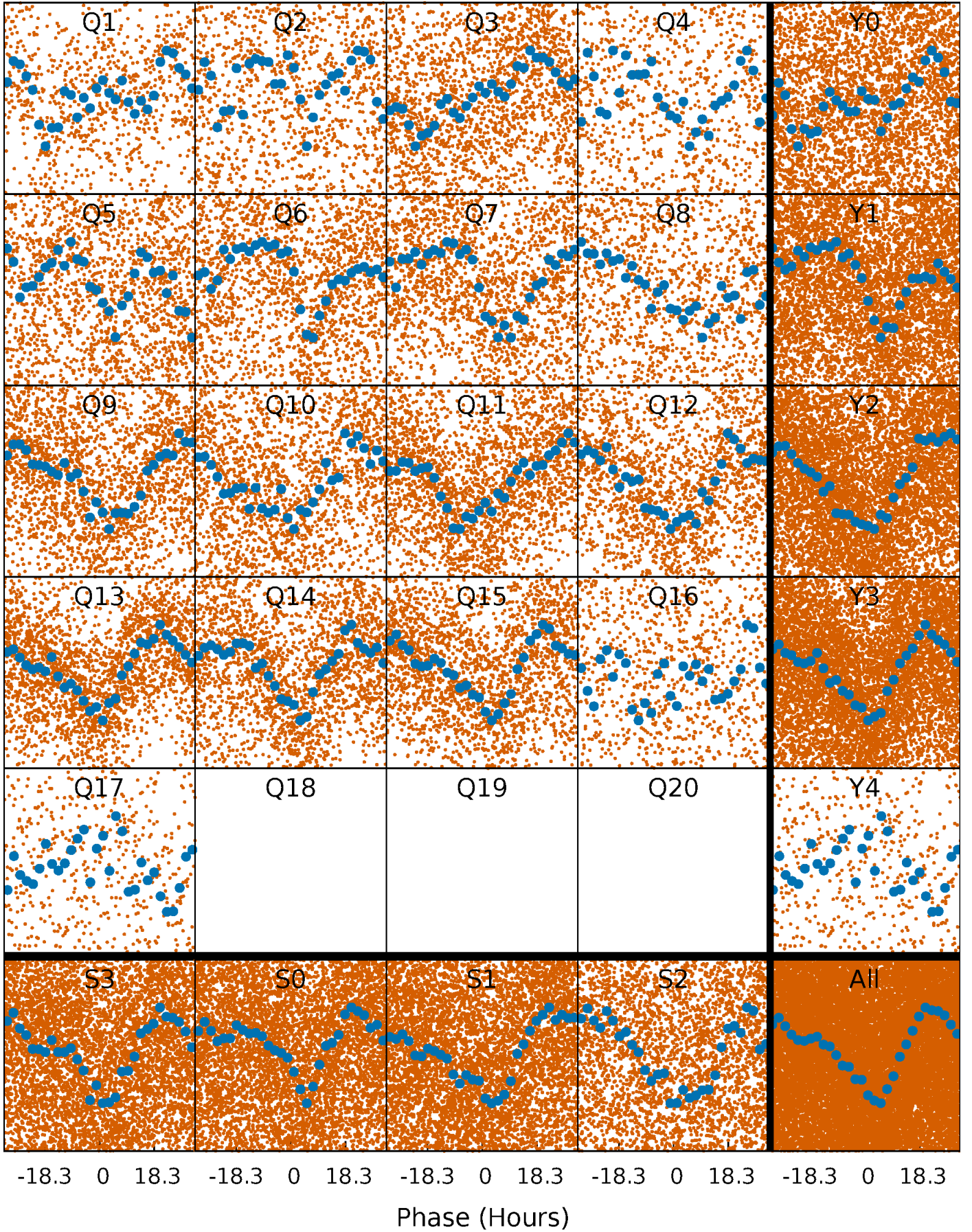


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



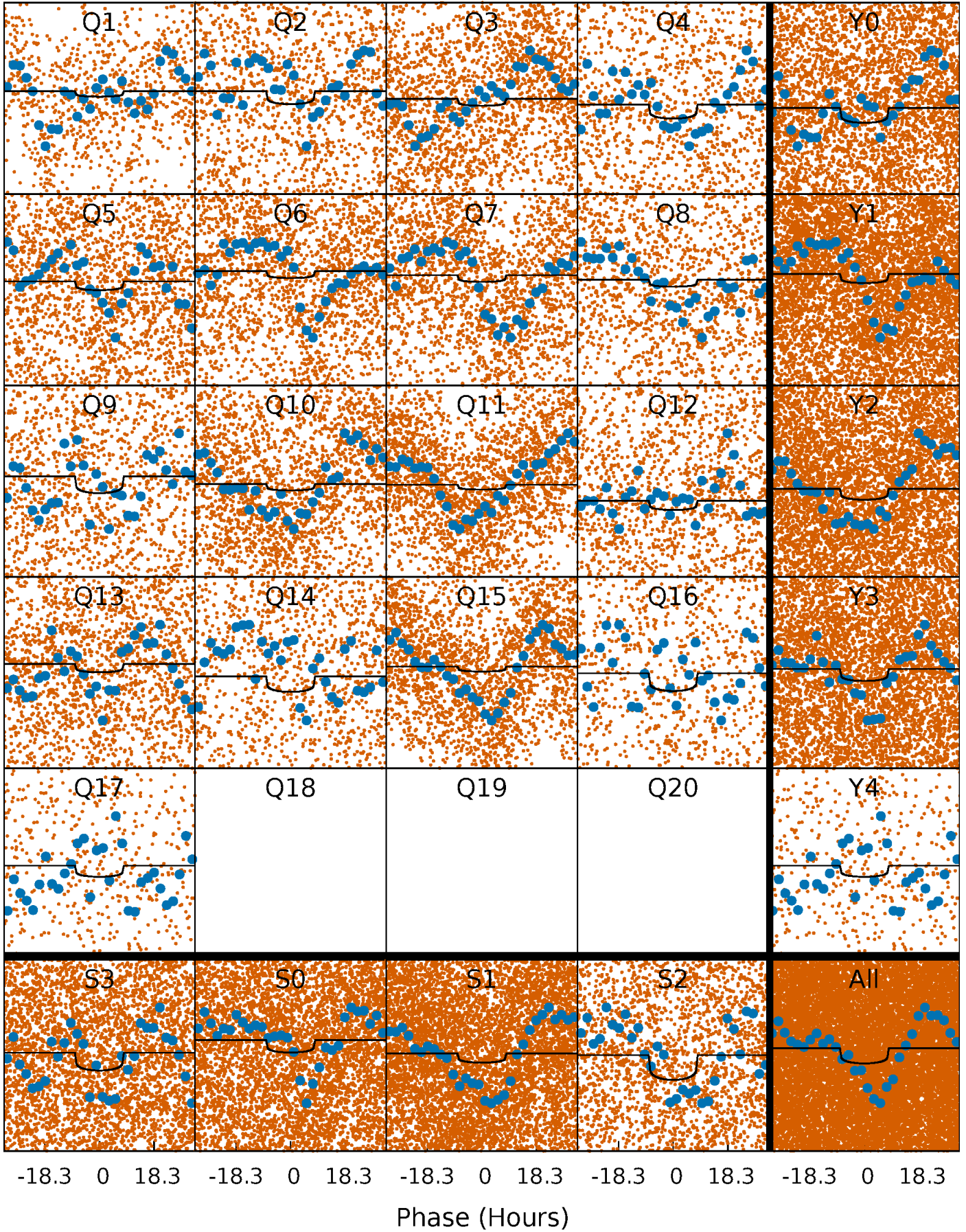
PDC Quarter-Phased Transit Curves

TCE 011145408-01 P= 4.820582 Days $T_0=134.580752$ (BKJD)



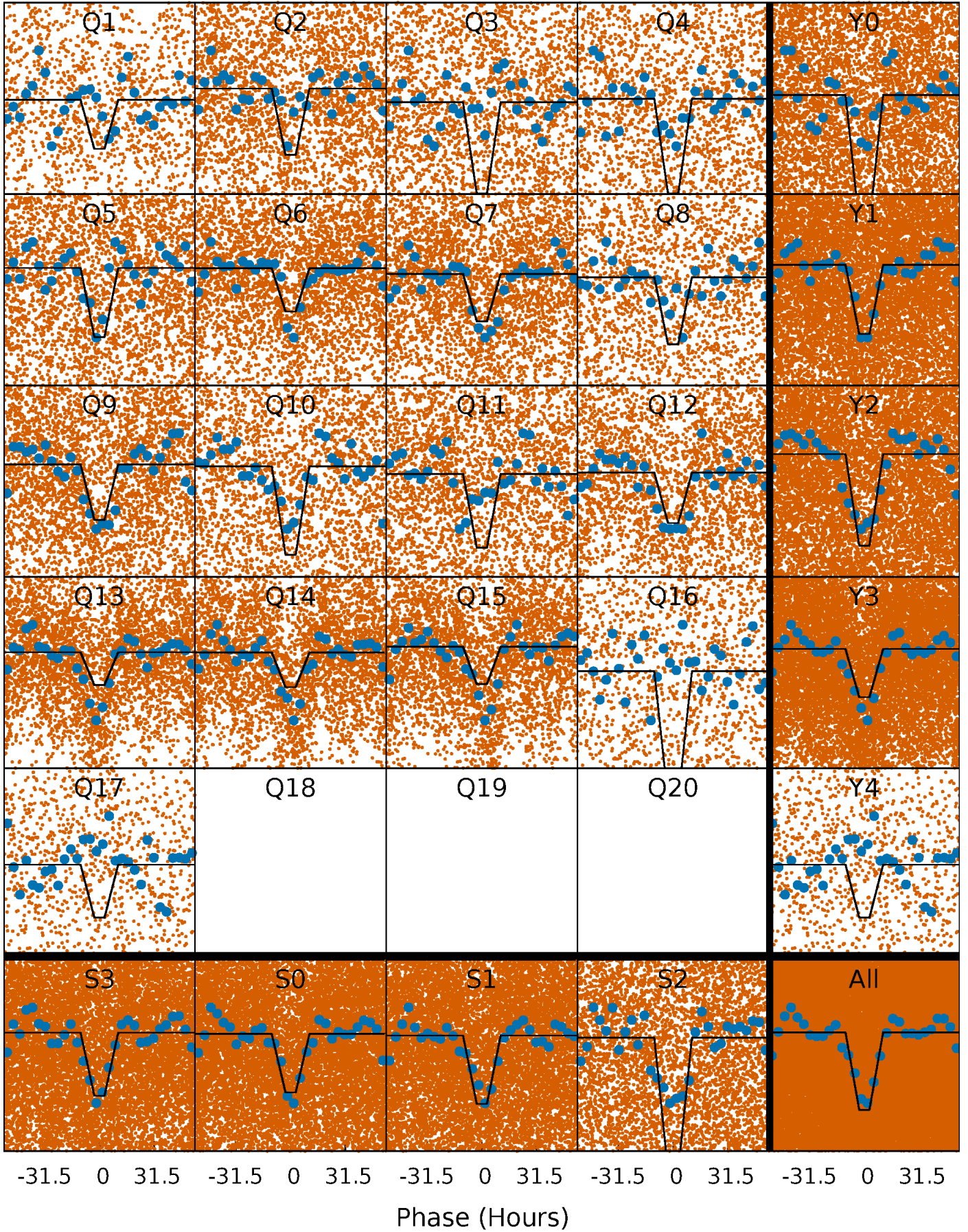
DV Quarter-Phased Transit Curves

TCE 011145408-01 P= 4.820582 Days $T_0=134.580752$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

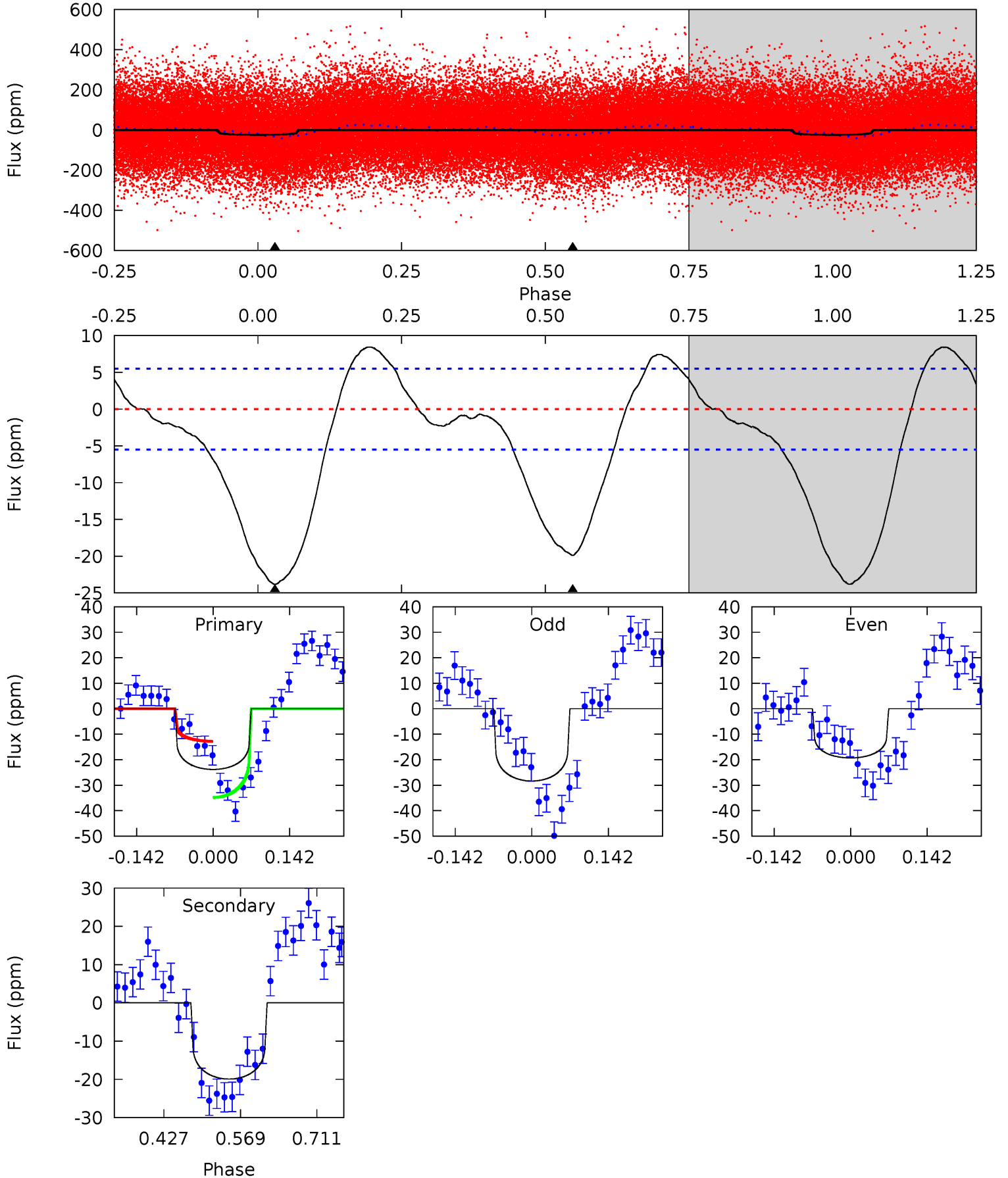
TCE 011145408-01 P= 4.819524 Days $T_0=134.914107$ (BKJD)



DV Model-Shift Uniqueness Test

011145408-01, P = 4.820582 Days, E = 129.760170 Days

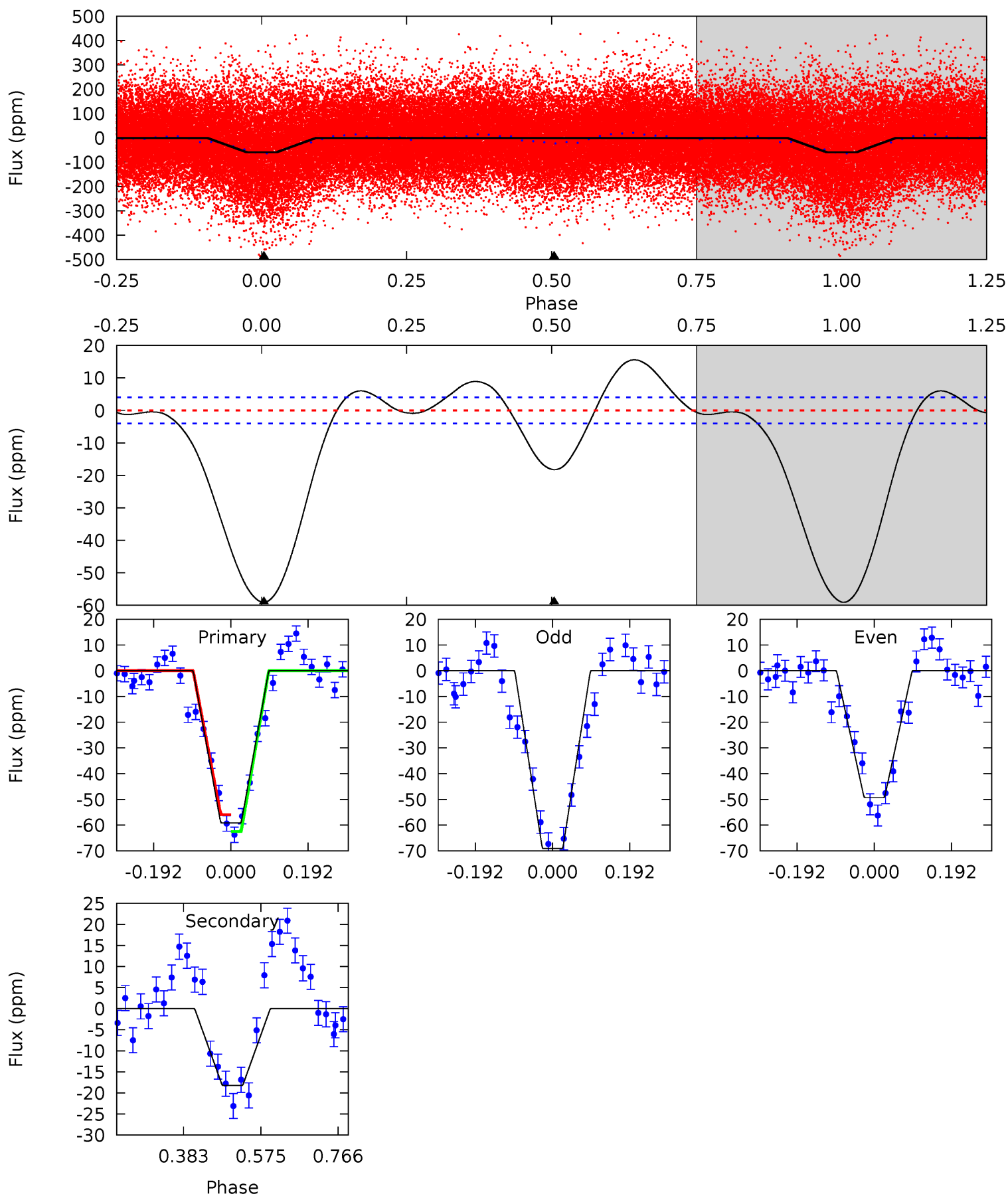
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.4	16.2	0	0	4.49	1.47	3.11	19.4	19.4	16.2	16.2	3.70	0.94	0.26	8.96



Alt Model-Shift Uniqueness Test

011145408-01, P = 4.819524 Days, E = 130.094583 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
64.9	20.0	0	0	4.43	1.31	2.43	64.9	64.9	20.0	20.0	10.9	1.01	0.21	3.59



Stellar Parameters For KIC 011145408

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6735^{+70}_{-101}	$4.190^{+0.088}_{-0.121}$	$-0.100^{+0.150}_{-0.150}$	$1.530^{+0.270}_{-0.197}$	$1.328^{+0.092}_{-0.101}$	$0.522^{+0.230}_{-0.188}$
	+1%/-1%	+2%/-3%	+150%/-150%	+18%/-13%	+7%/-8%	+44%/-36%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 011145408-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-20 ± 1	$0.53^{+0.19}_{-0.20}$	2085^{+84}_{-81}	8212^{+3076}_{-1321}	145^{+217}_{-68}
Alt.	-18 ± 1	$1.36^{+0.24}_{-0.20}$	2078^{+88}_{-74}	4934^{+341}_{-242}	20^{+8}_{-5}

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 $A_{\text{obs}} \gg 1.0$

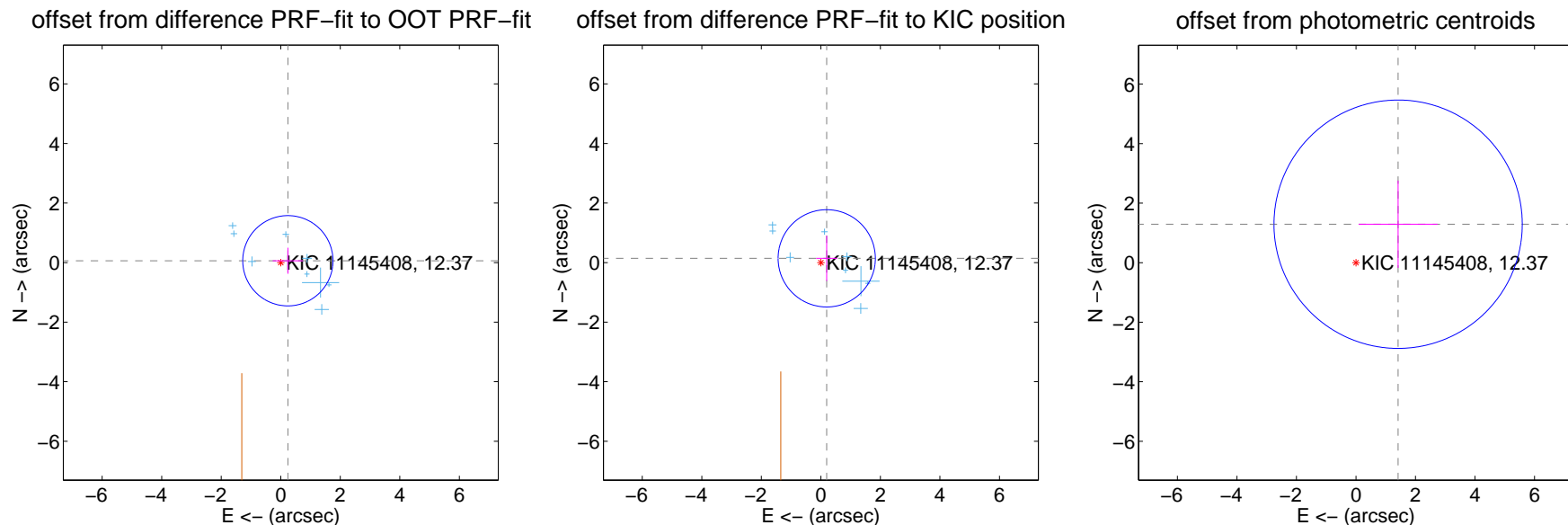
DV Centroid Data

Supplemental centroid analysis for 011145408-01. Kepler magnitude: 12.37. Transit SNR 3.54

There are 9 quarters with good PRF difference image offsets

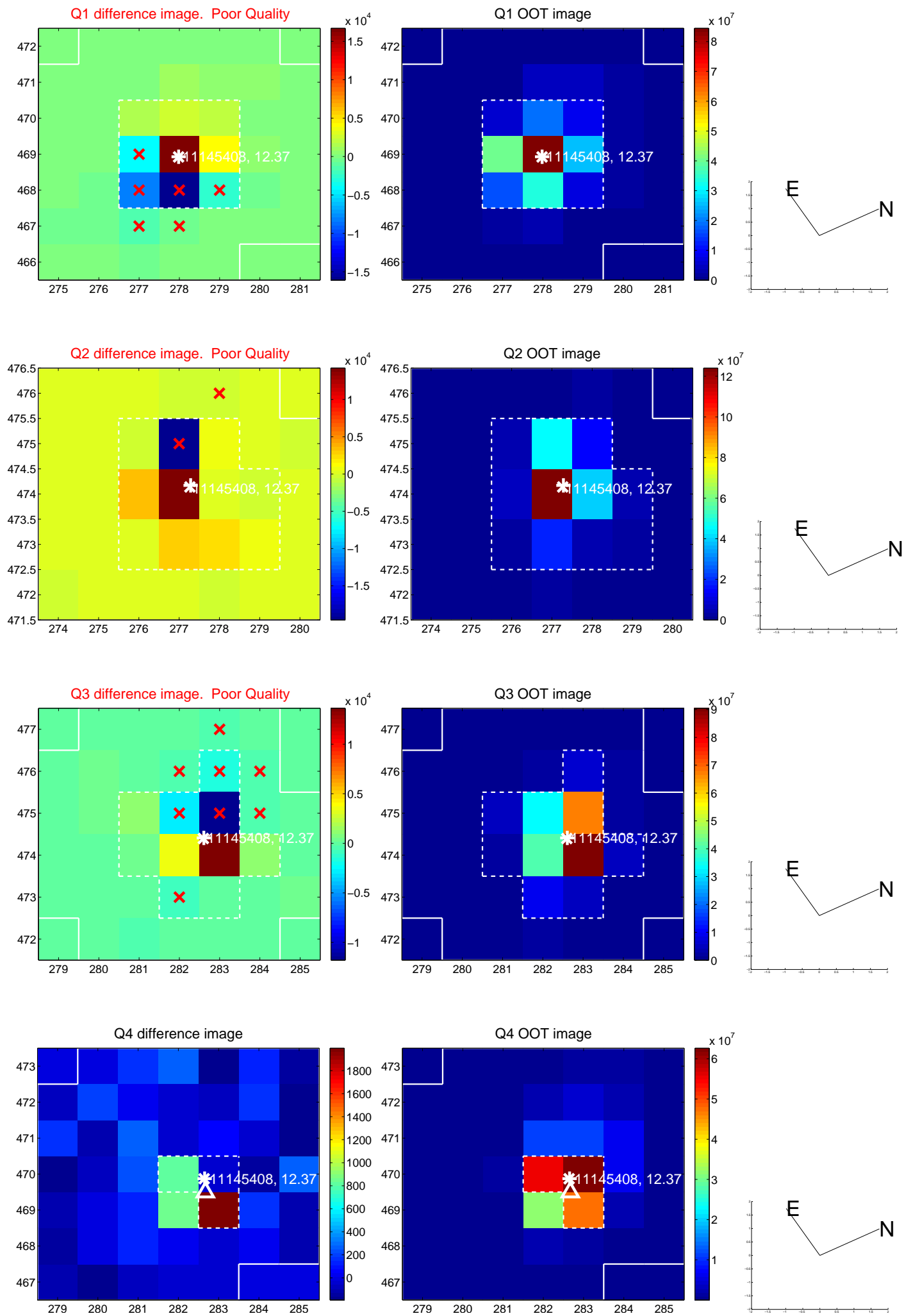
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.247 ± 0.505	0.49	-0.239 ± 0.510	0.062 ± 0.437
PRF-fit source offset from KIC position	0.243 ± 0.545	0.45	-0.197 ± 0.356	0.143 ± 0.759
photometric centroid source offset	1.92 ± 1.39	1.38	-1.42 ± 1.32	1.29 ± 1.47

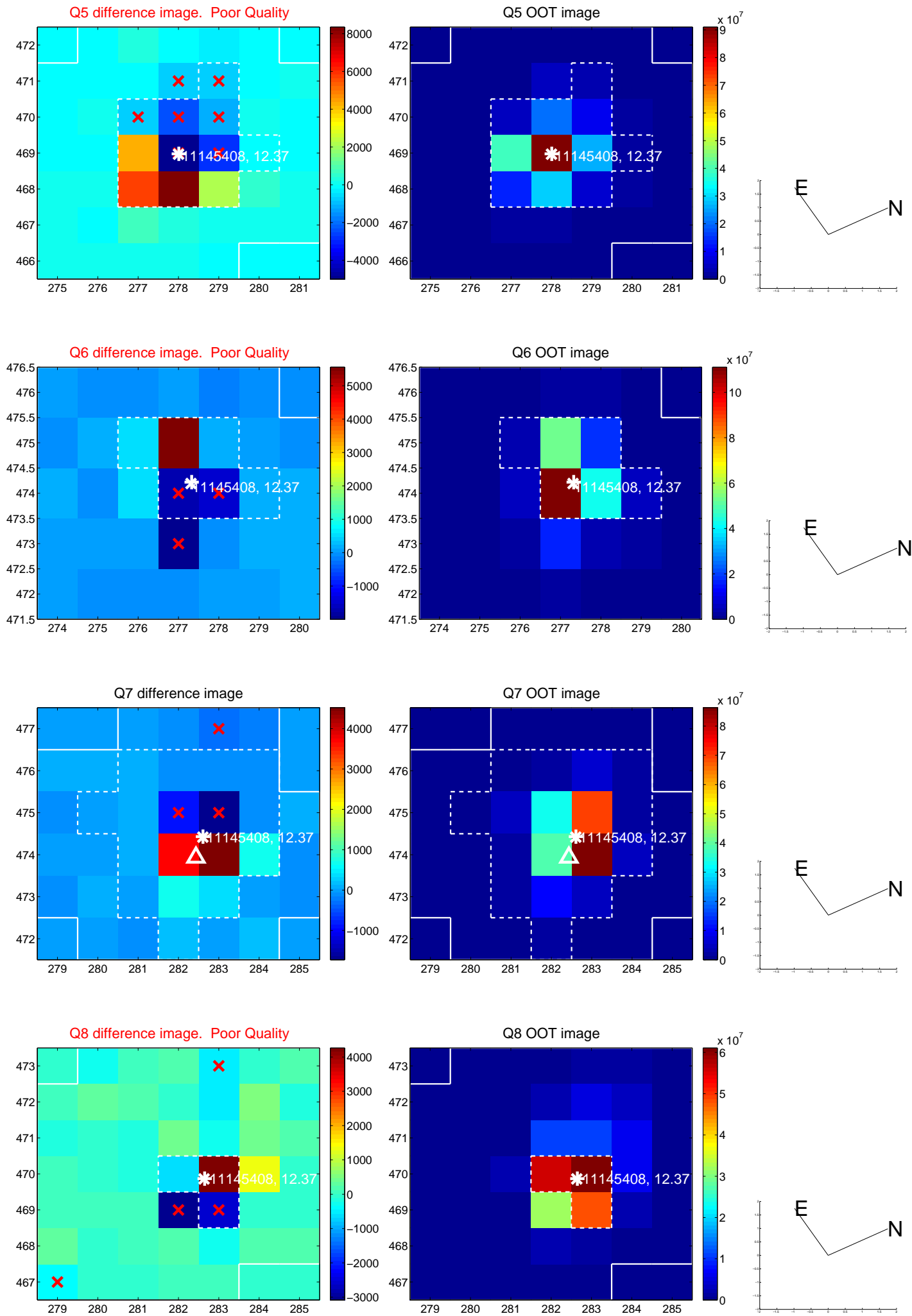


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

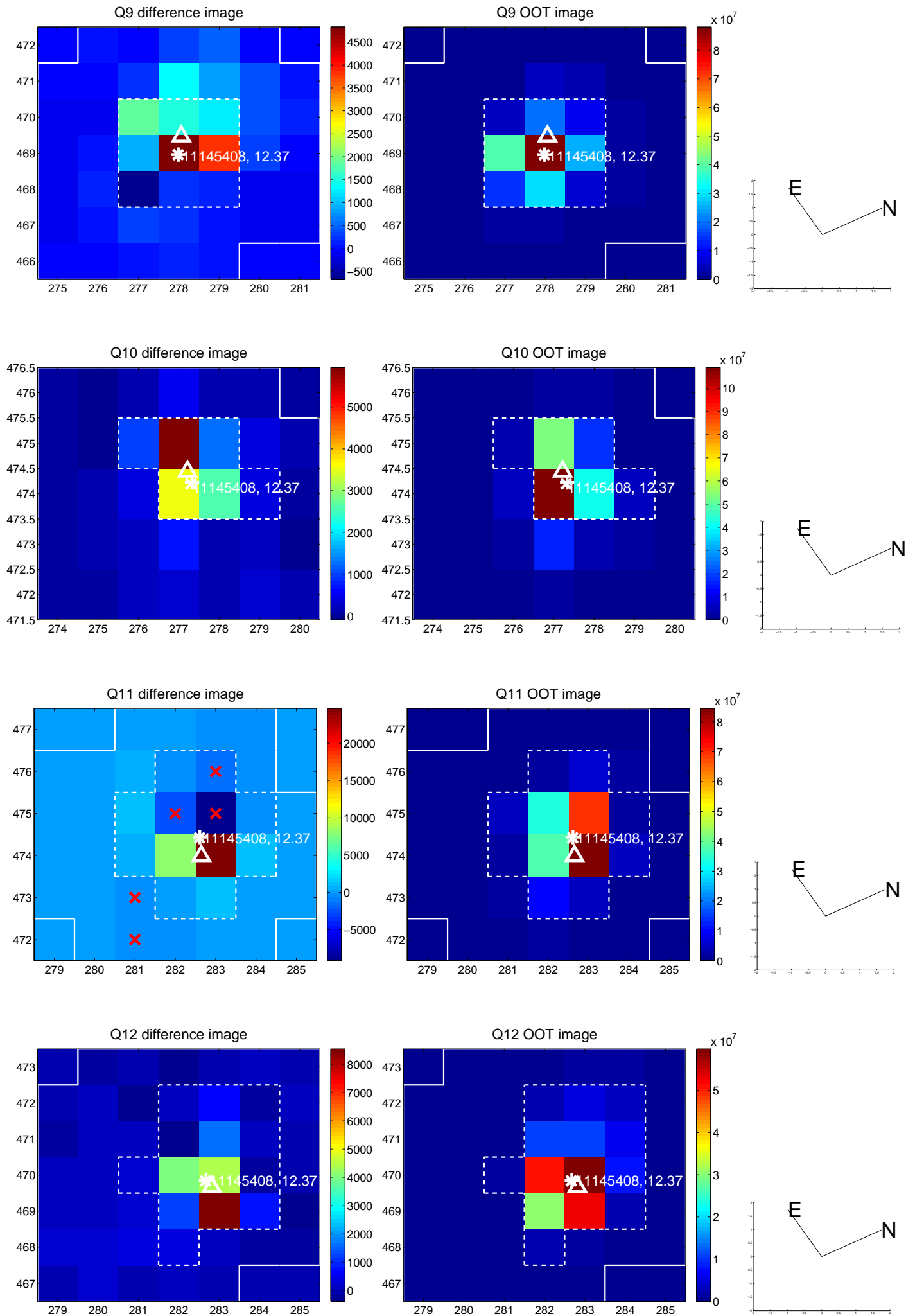
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



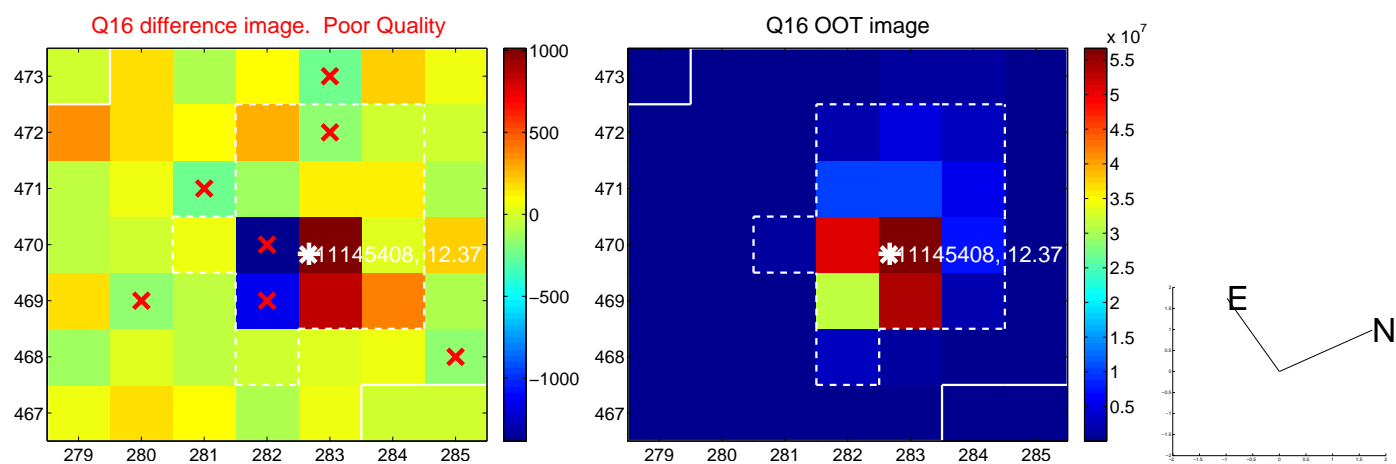
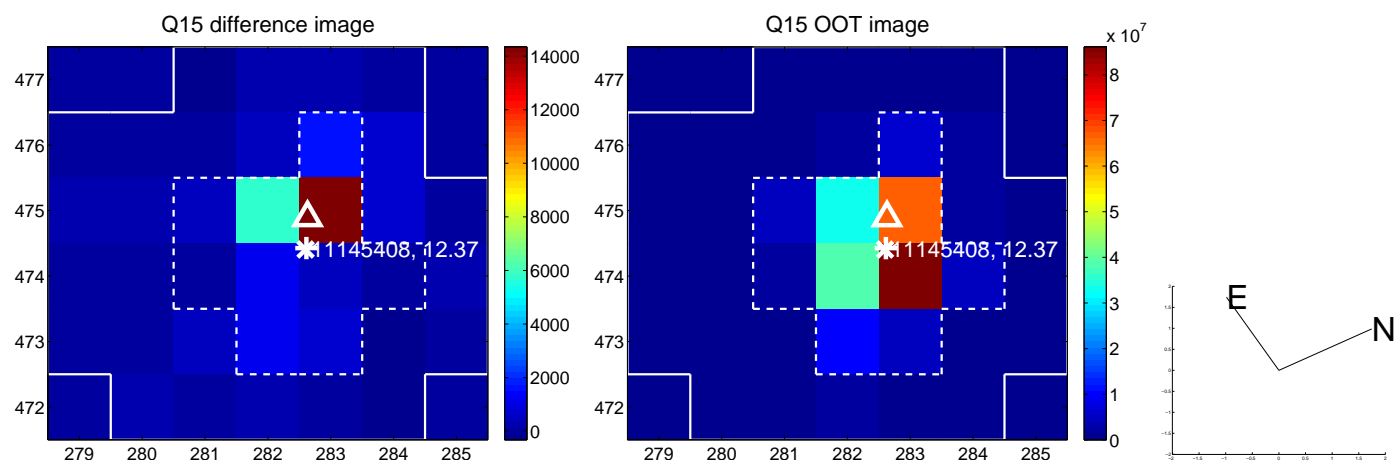
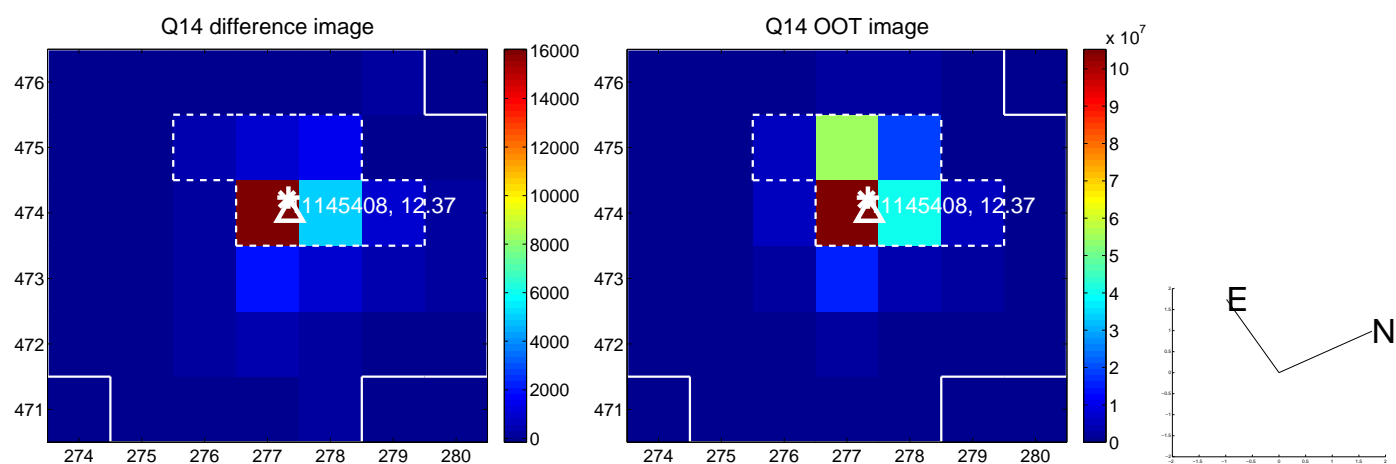
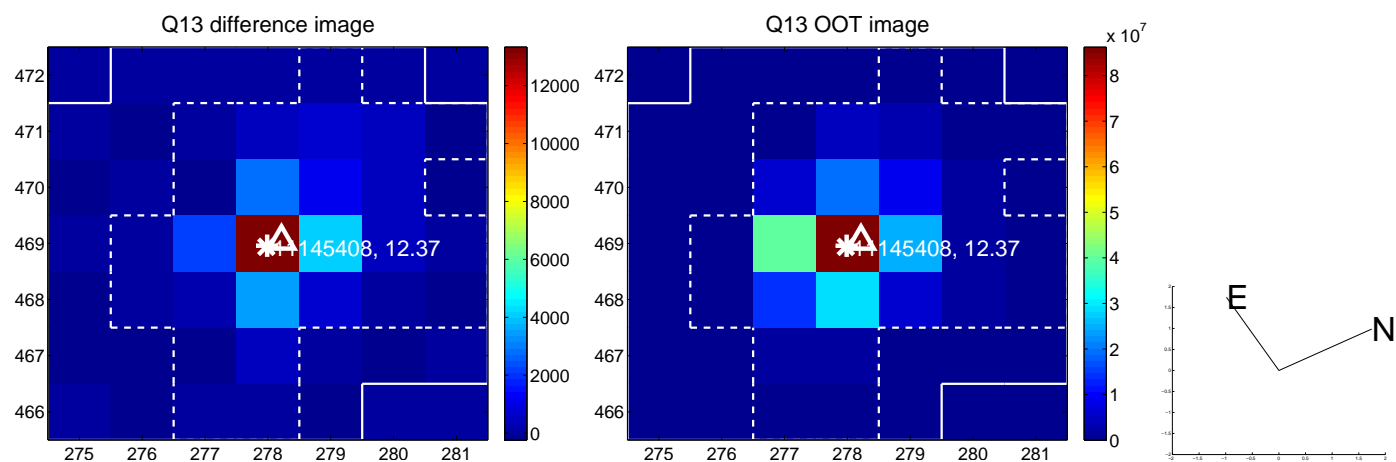
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



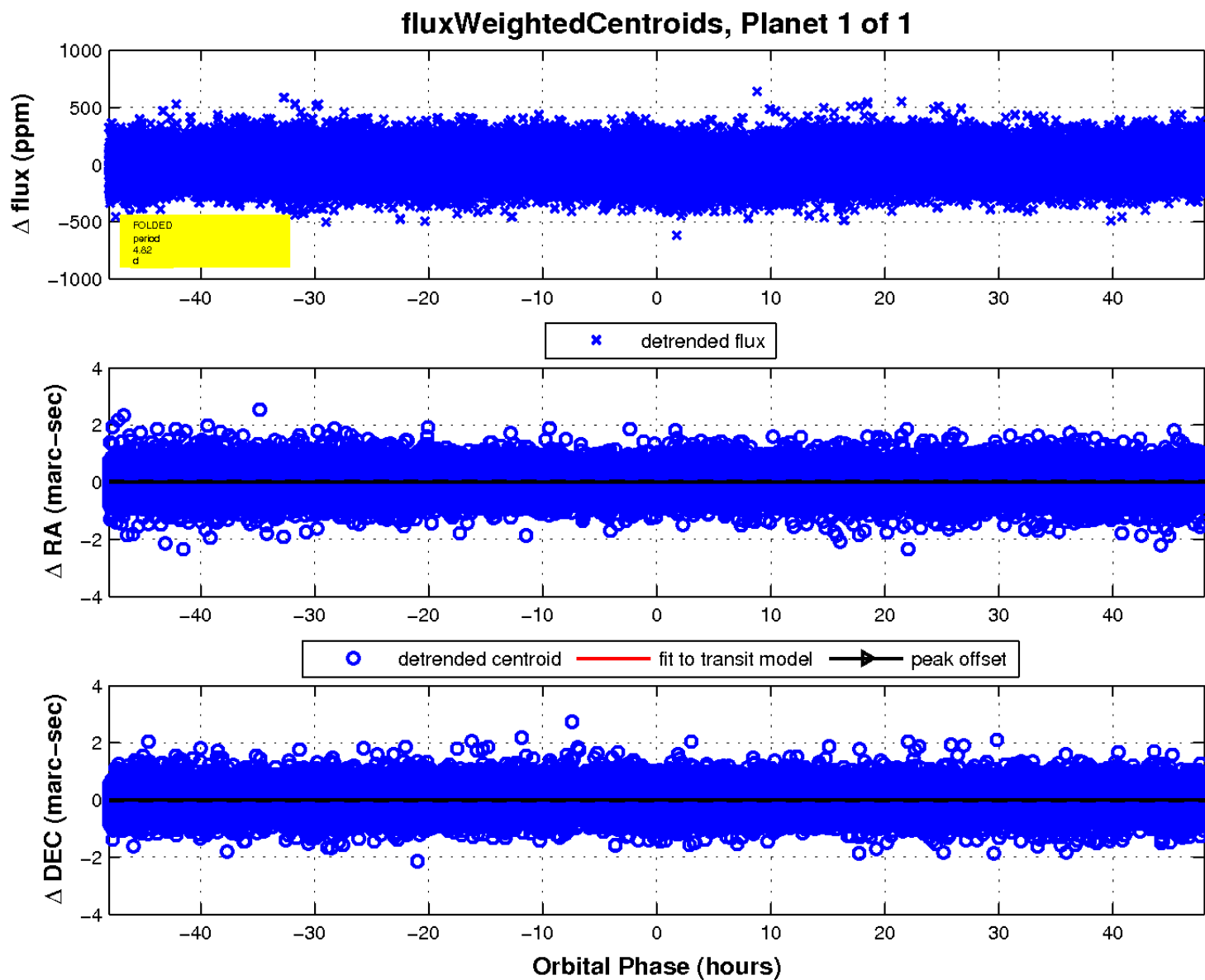
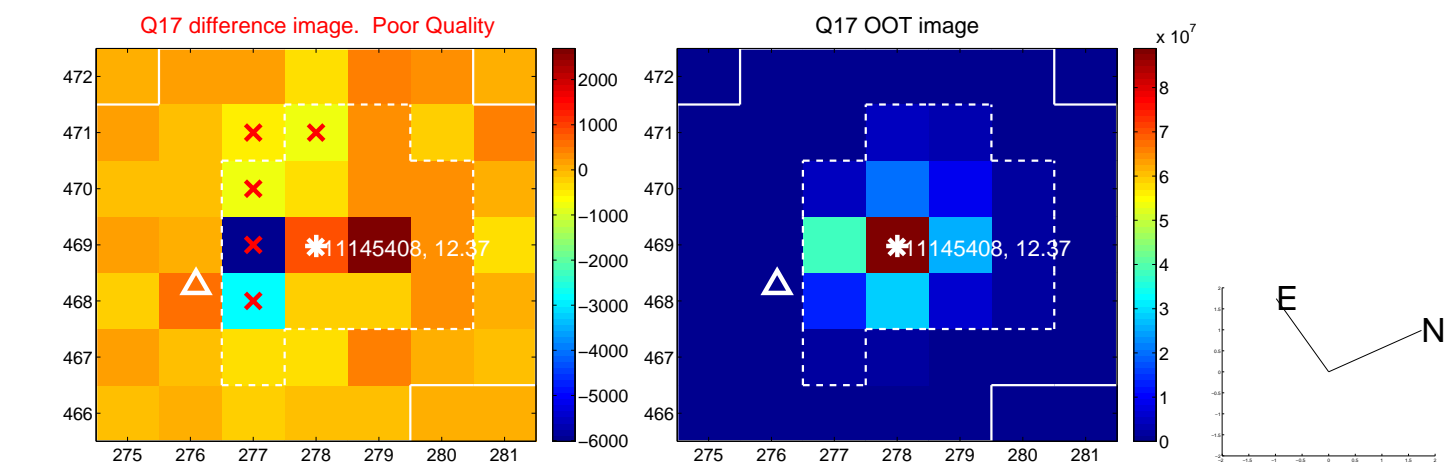
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

