

KIC 011404033

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})
011404033-01	OBS	No	1.047041	132.070219	1.8	9.164	8.2	1.4	2.00	6569	0.29	12961.95

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011404033-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—CENT_FEW_DIFFS

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

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

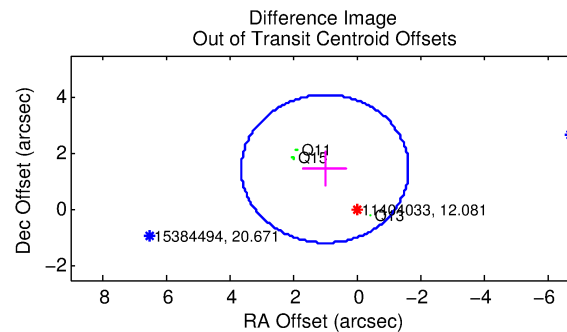
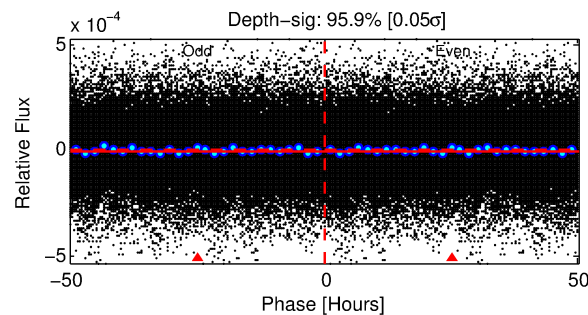
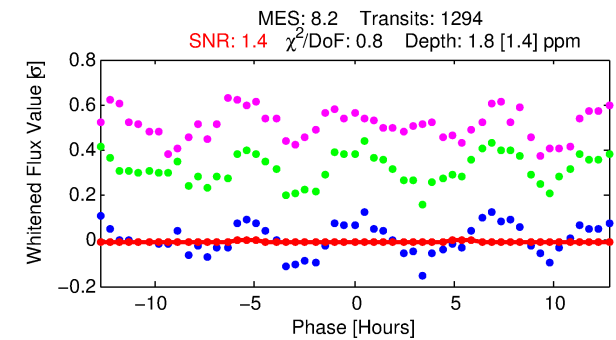
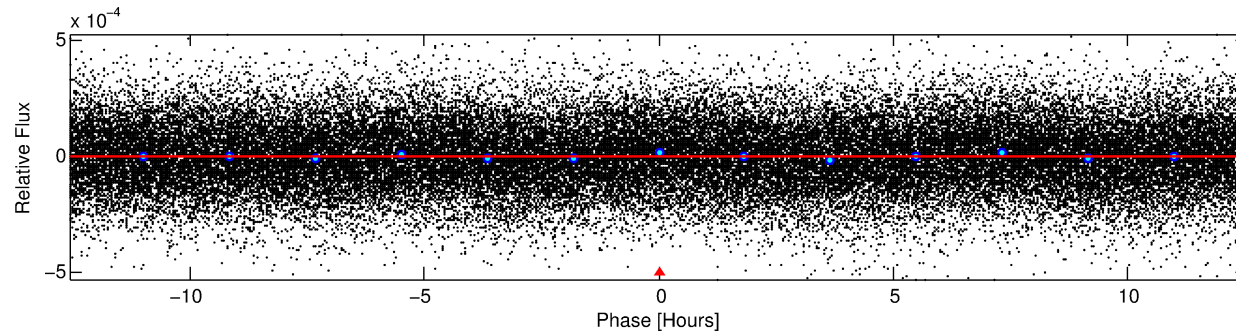
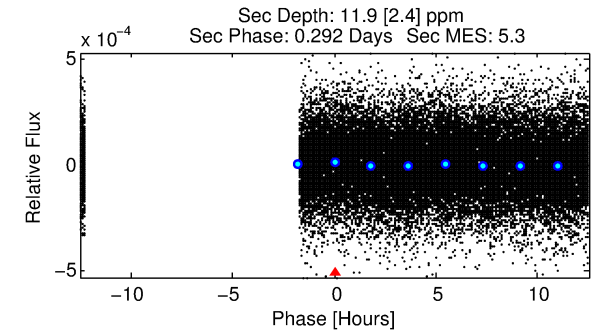
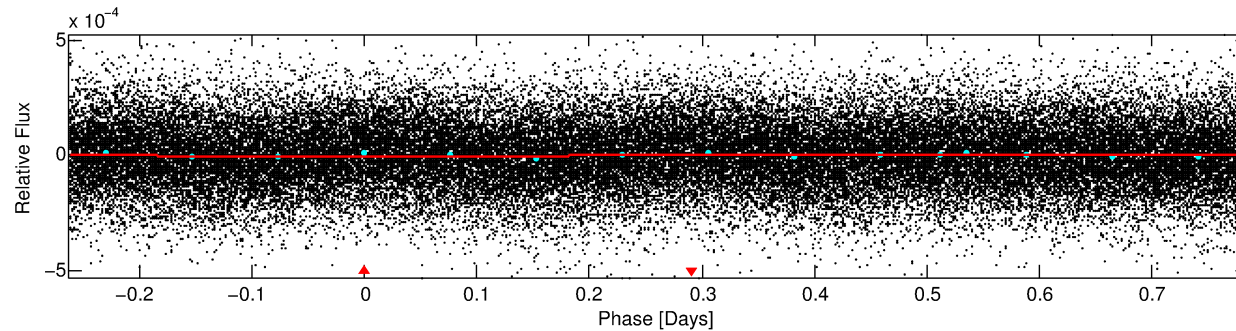
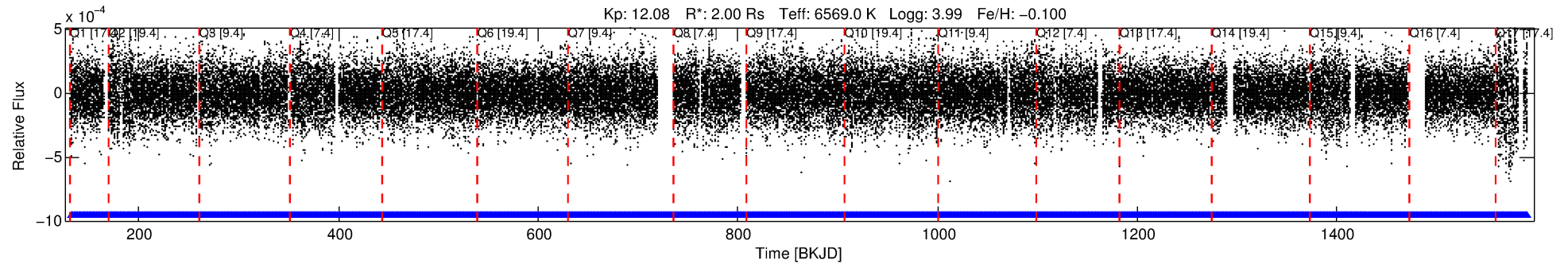
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011404033-01

No Significant Match Found

DV One-Page Summary

KIC: 11404033 Candidate: 1 of 1 Period: 1.047 d



DV Fit Results:

Period = 1.04704 [0.00015] d
Epoch = 132.0702 [0.0400] BKJD
Rp/R* = 0.0013 [0.0047]
a/R* = 1.04 [1.70]
b = 0.77 [11.04]
Seff = 12961.95 [7077.13]
Teff = 2721 [371] K
Rp = 0.29 [1.02] Re
a = 0.0227 [0.0076] AU
Ag = 40.04 [282.78] [0.14σ]
Teffp = 10582 [18633] K [0.42σ]

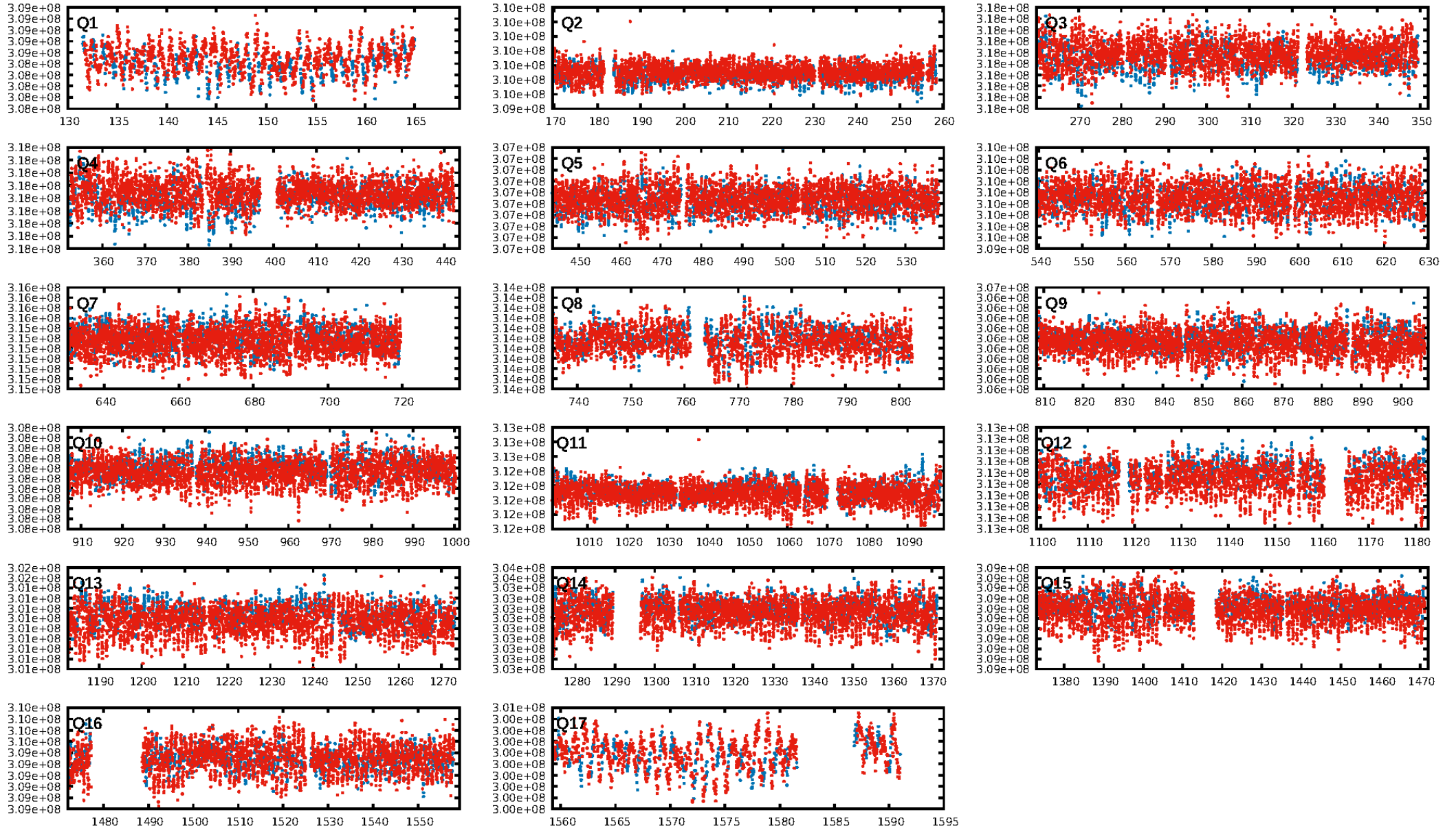
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1236/1236]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 1.759 arcsec [2.00σ]
KicOffset-rm: 1.697 arcsec [1.97σ]
OotOffset-st: 0/2/0/1 [3]
KicOffset-st: 0/2/0/1 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 1.00 [17/17]

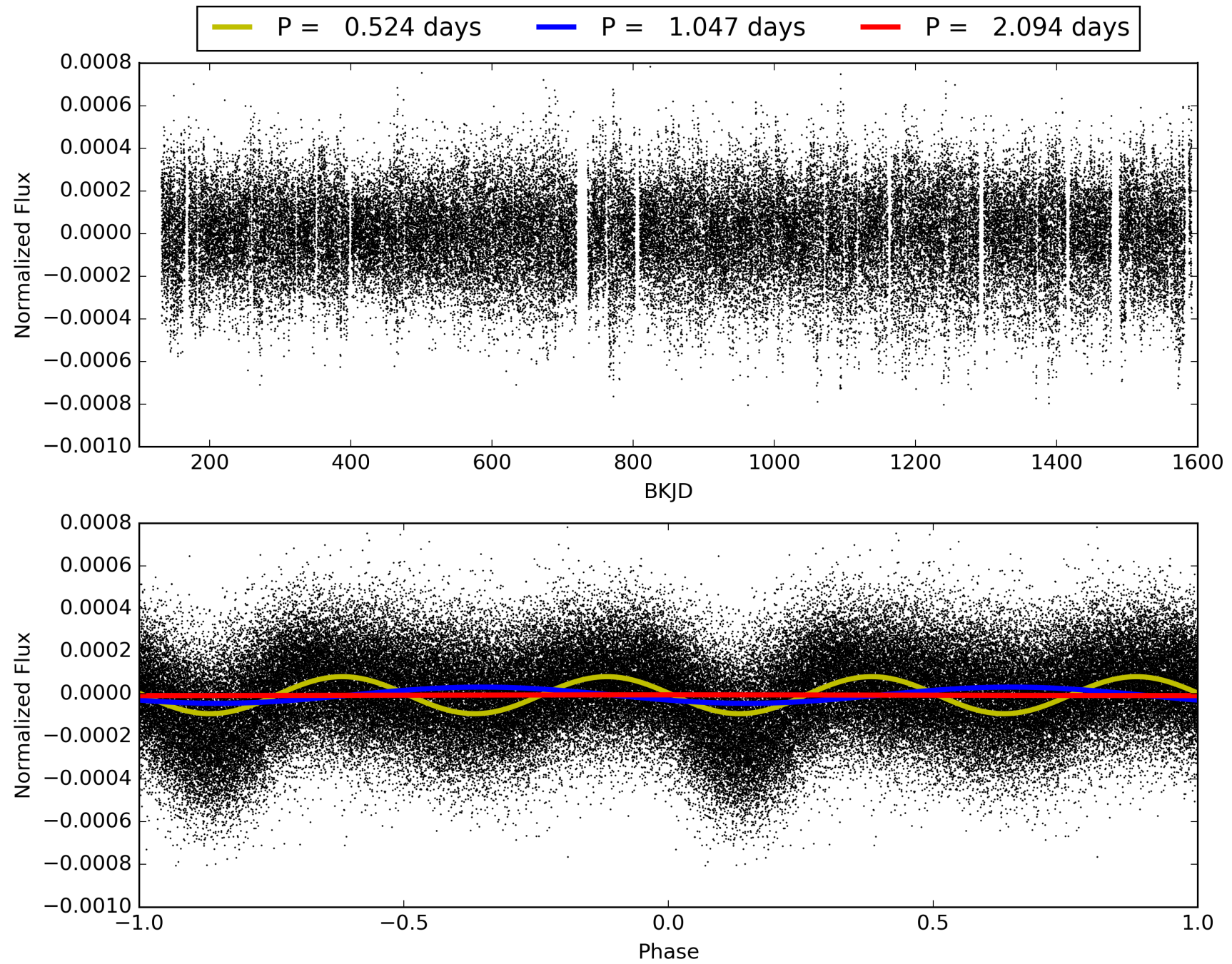
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 21:24:56 Z

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

TCE 011404033-01, PDC Light Curves

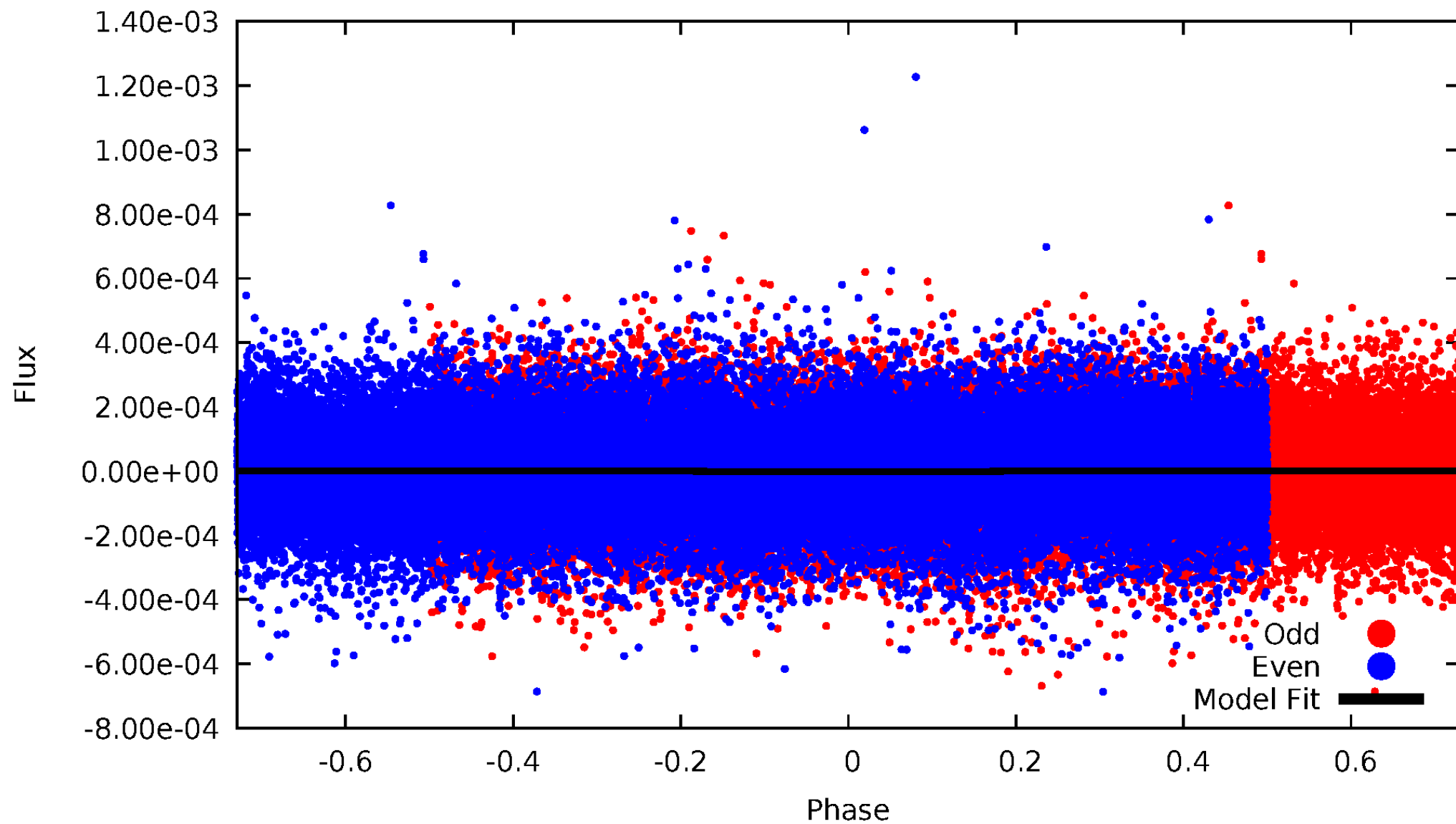


TCE 011404033-01



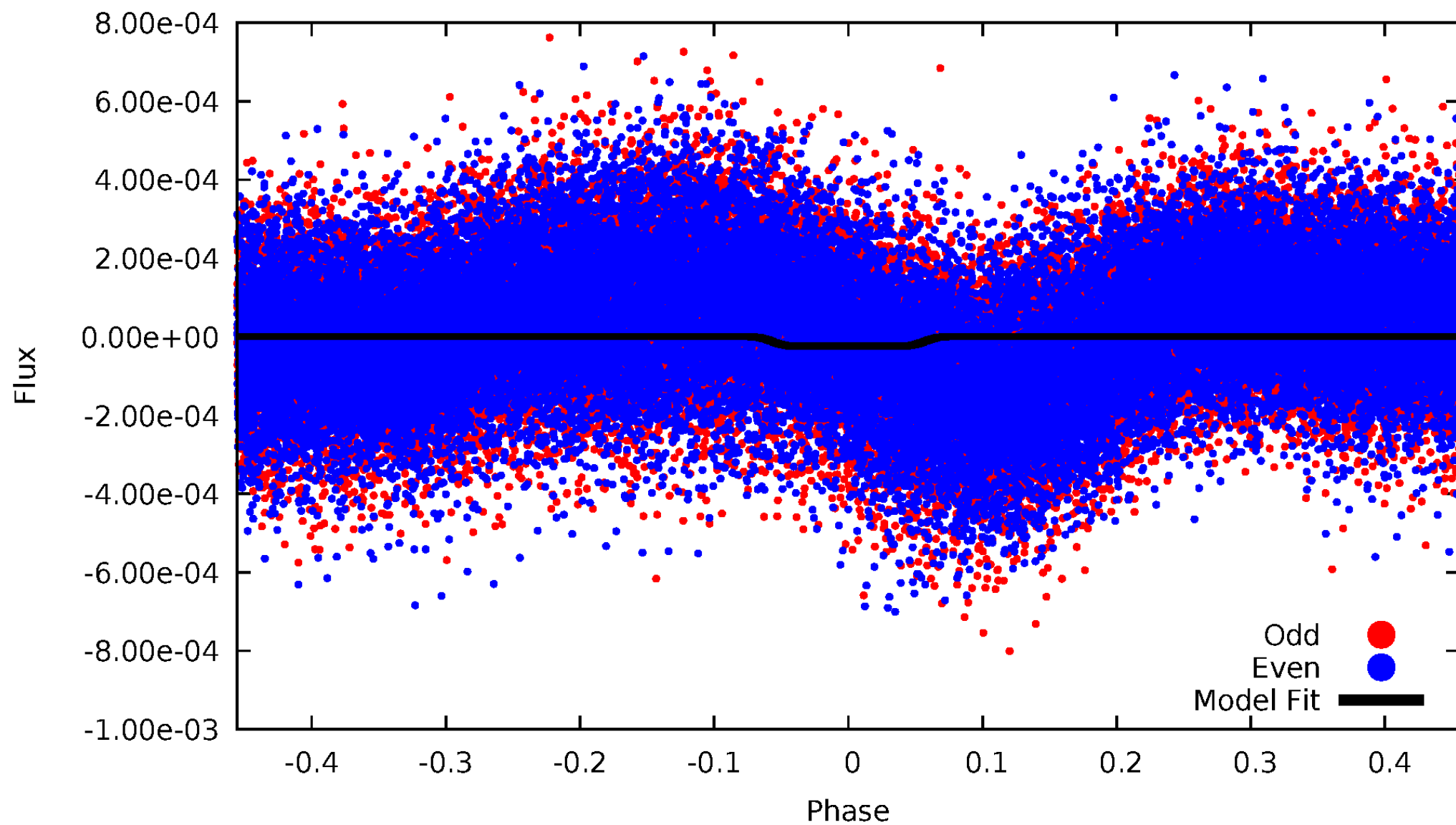
DV Odd/Even

TCE 011404033-01

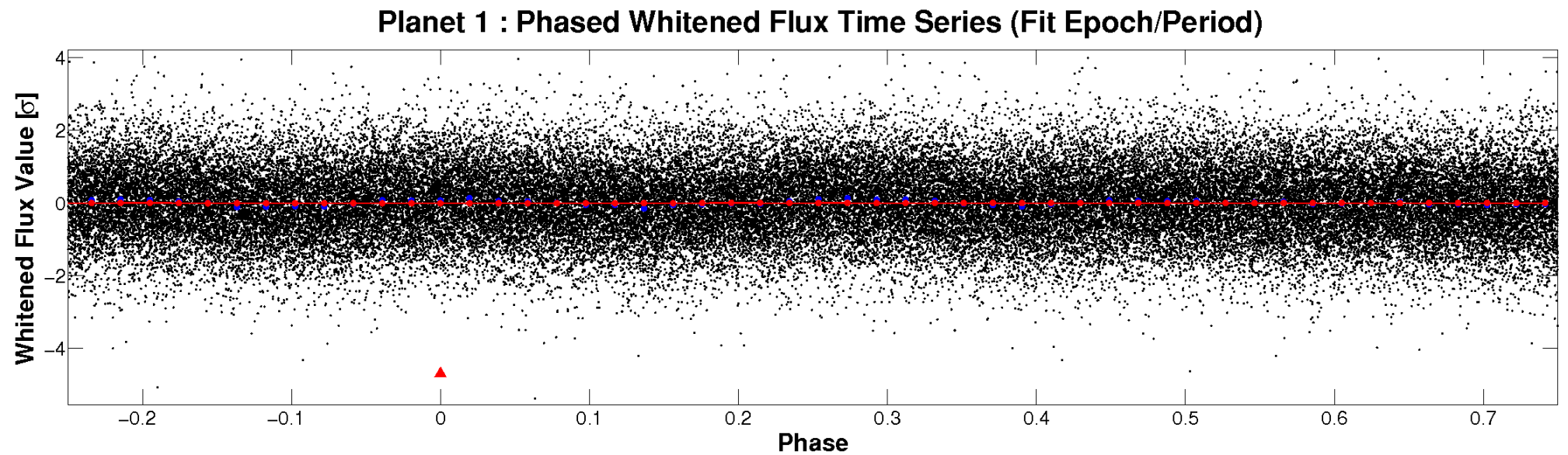
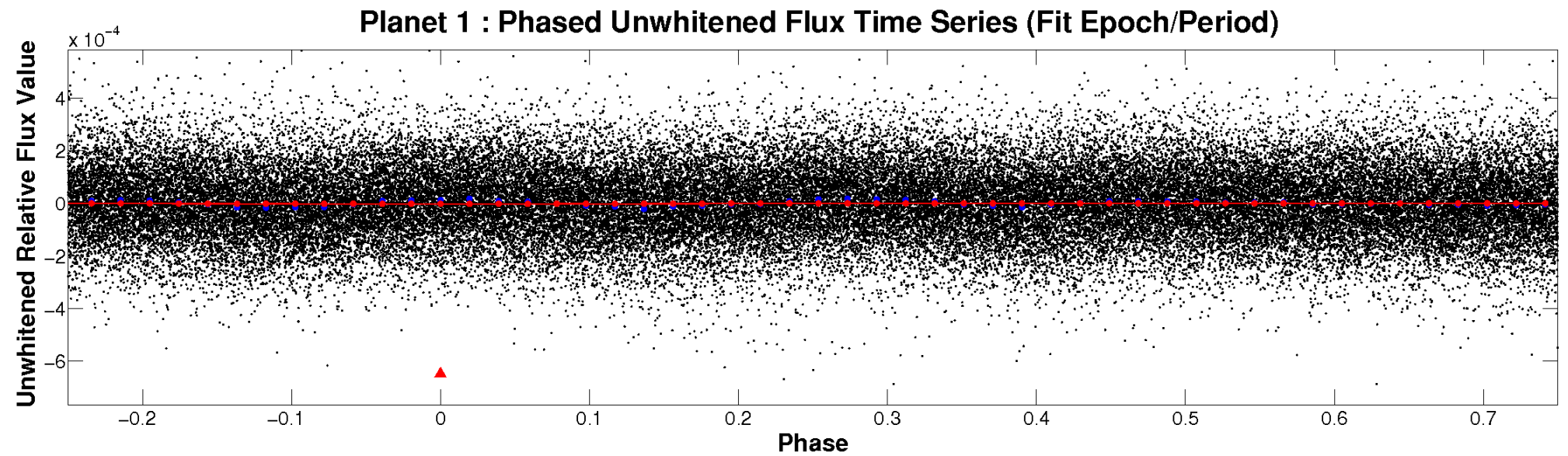


ALT Odd/Even

TCE 011404033-01

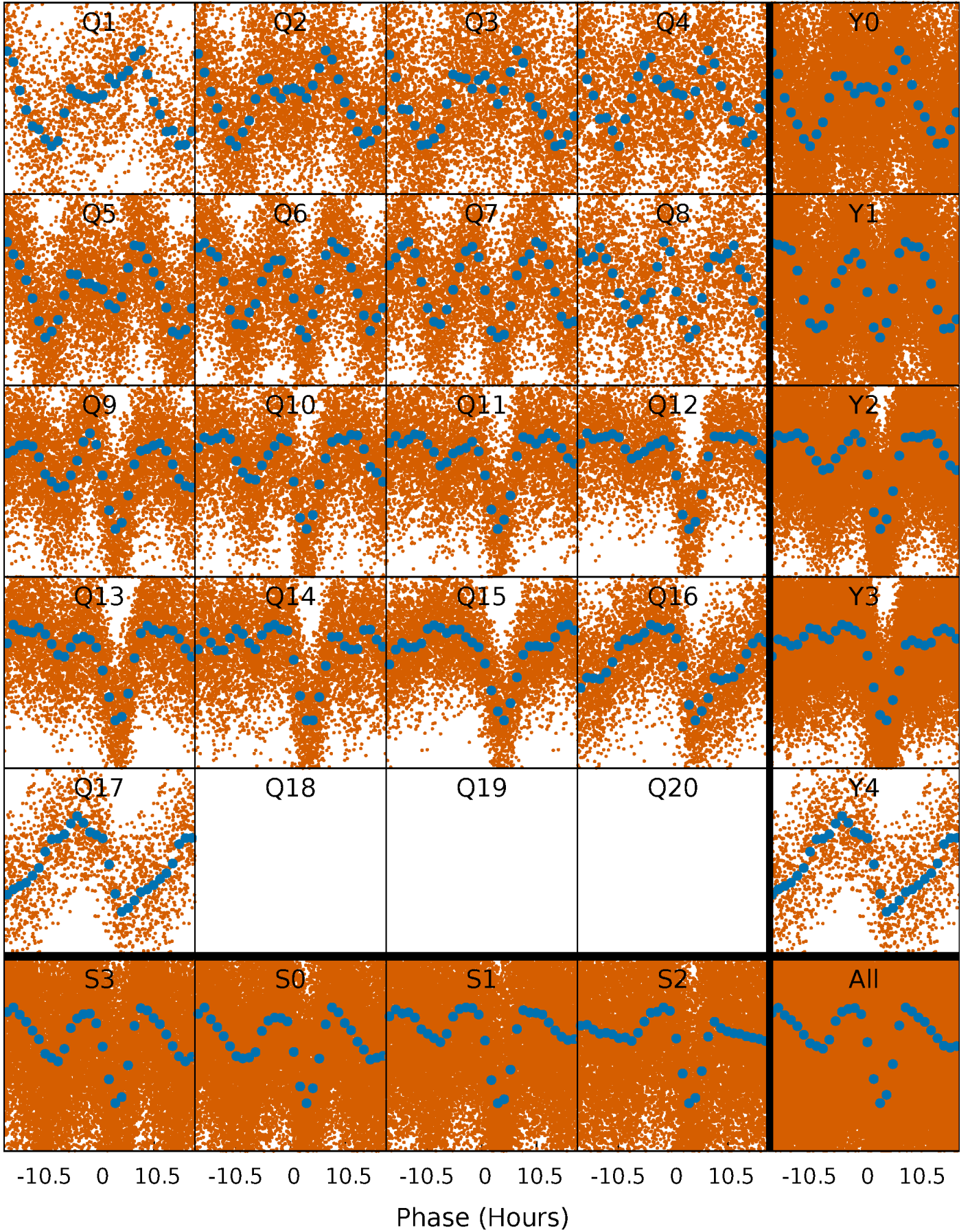


Non-Whitened Vs. Whitened Light Curve



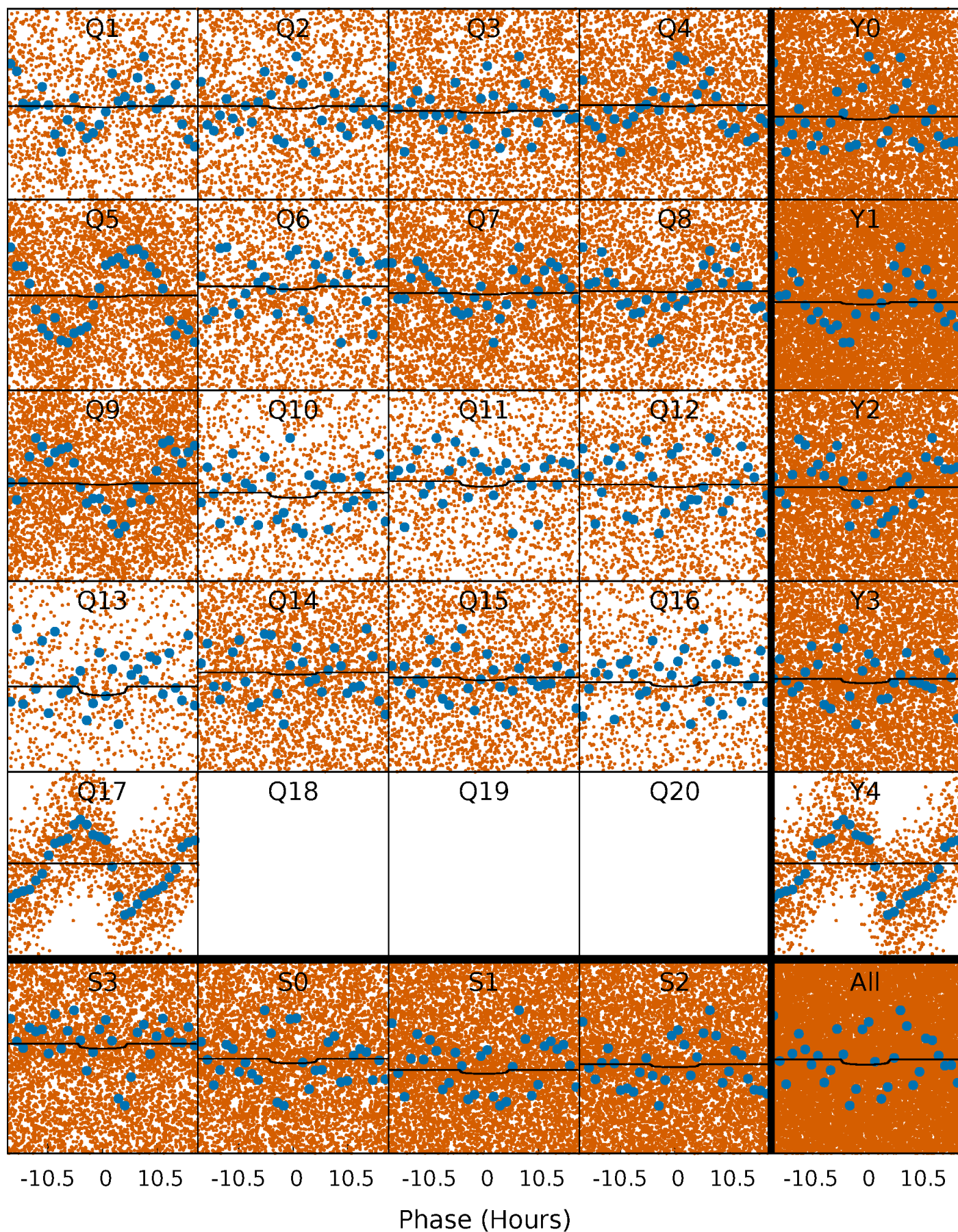
PDC Quarter-Phased Transit Curves

TCE 011404033-01 P= 1.047041 Days $T_0=132.070219$ (BKJD)



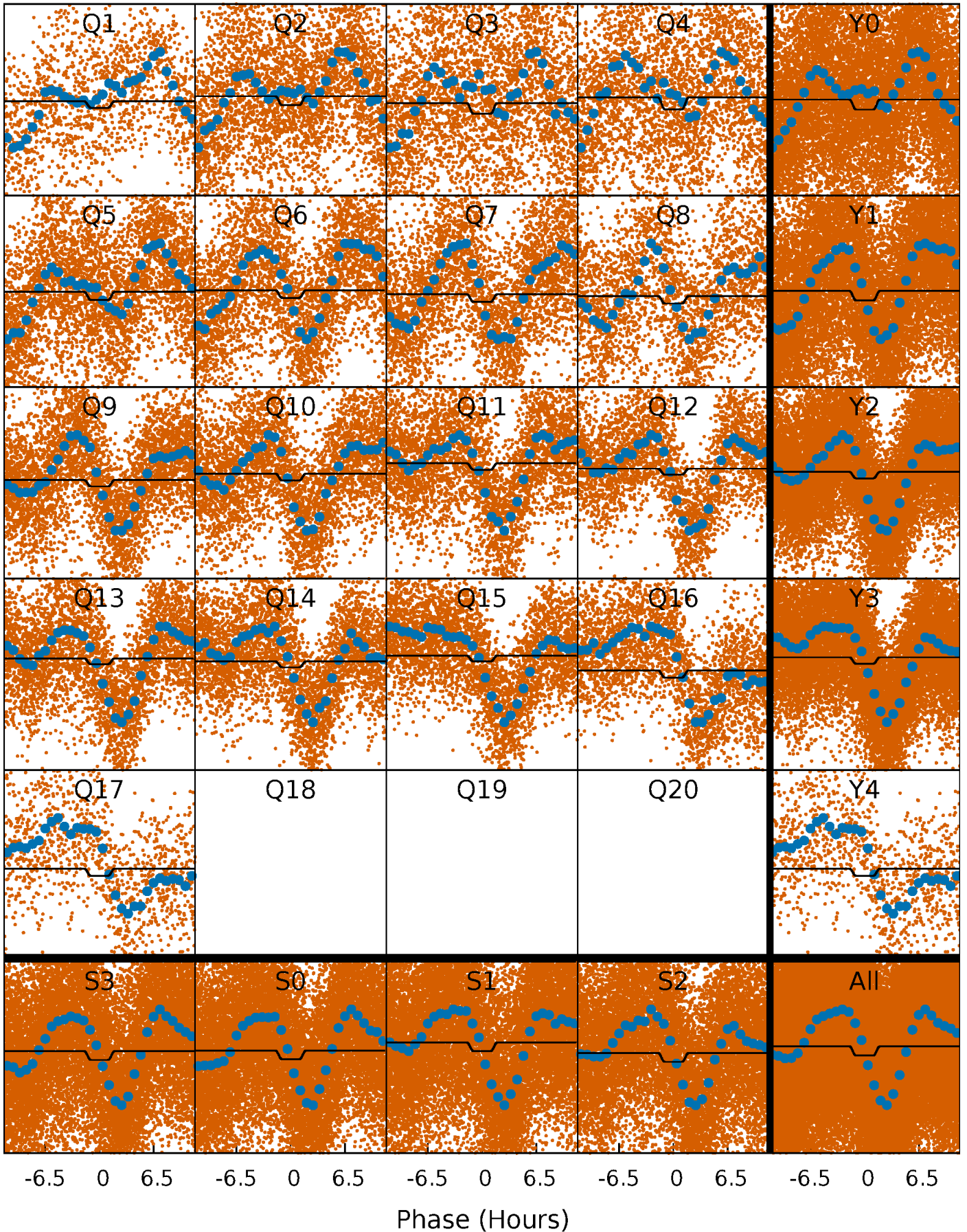
DV Quarter-Phased Transit Curves

TCE 011404033-01 P= 1.047041 Days $T_0=132.070219$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

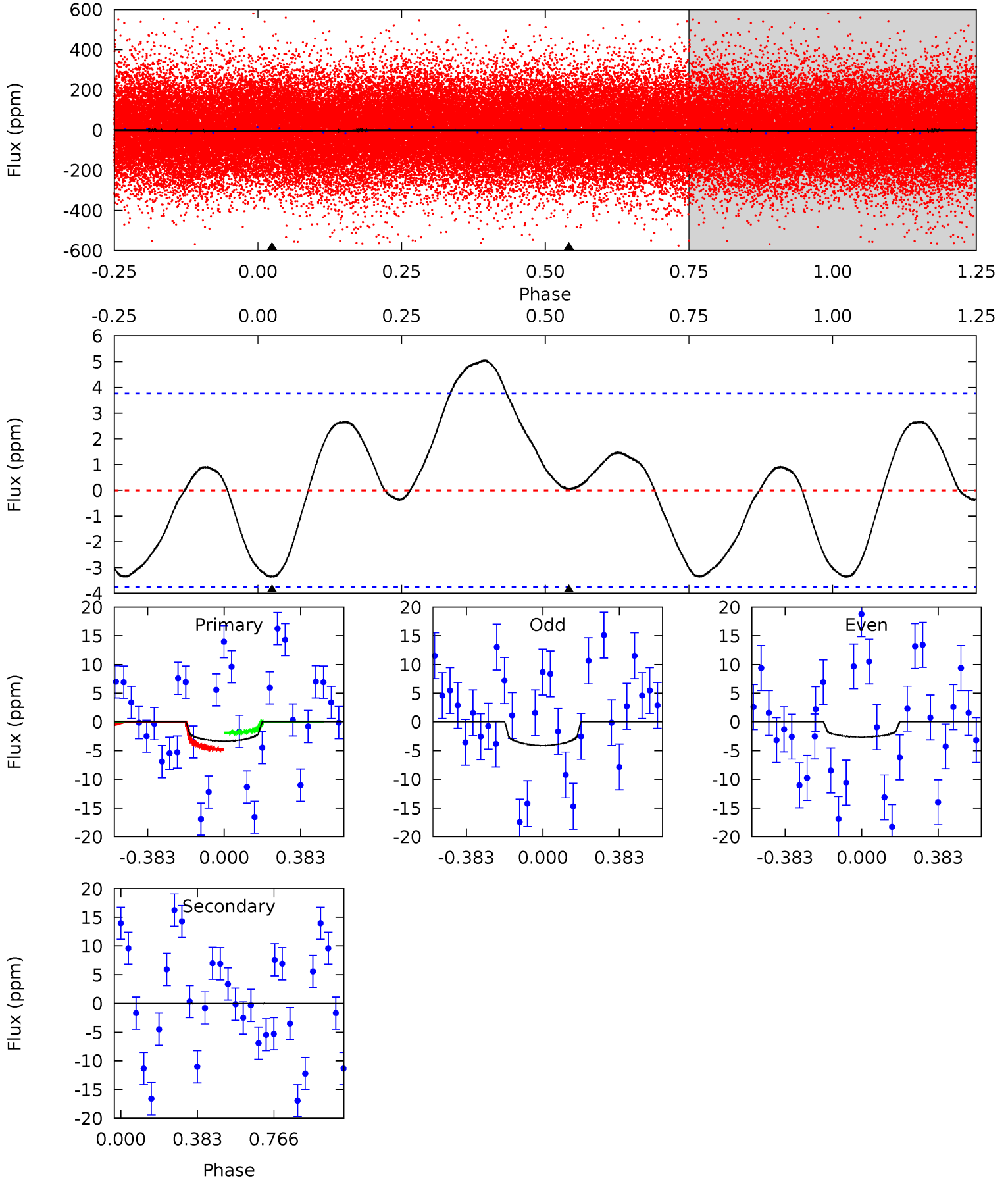
TCE 011404033-01 P= 1.047056 Days $T_0=132.097312$ (BKJD)



DV Model-Shift Uniqueness Test

011404033-01, P = 1.047041 Days, E = 131.023178 Days

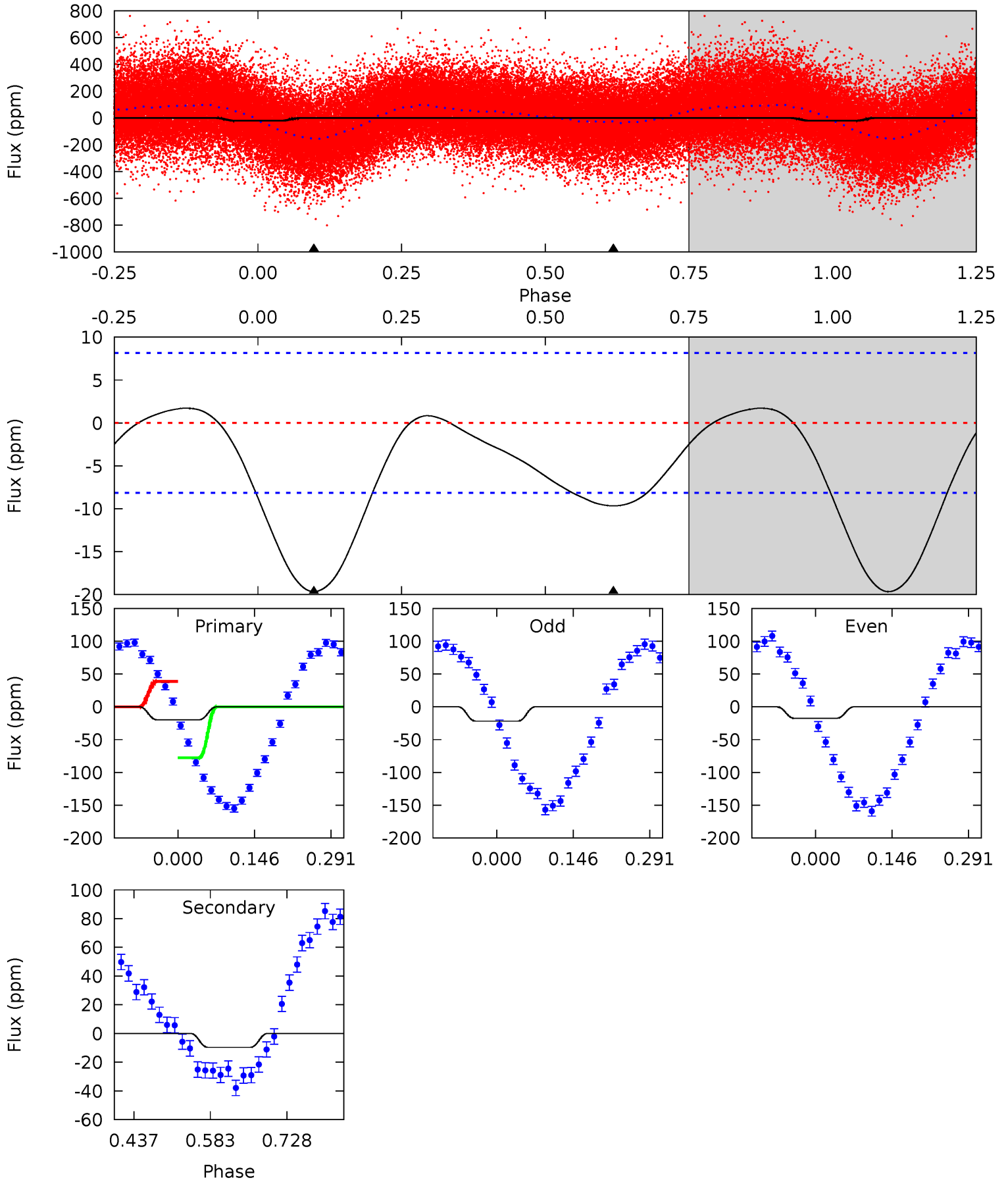
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.81	-0.05	0	0	4.27	0.87	2.33	3.81	3.81	-0.05	-0.05	0.83	1.12	0.60	1.63



Alt Model-Shift Uniqueness Test

011404033-01, P = 1.047056 Days, E = 131.050256 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.8	5.32	0	0	4.49	1.45	0.98	10.8	10.8	5.32	5.32	1.21	1.53	0.08	11.6



Stellar Parameters For KIC 011404033

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6569^{+181}_{-227}	$3.988^{+0.306}_{-0.165}$	$-0.100^{+0.250}_{-0.300}$	$1.998^{+0.592}_{-0.724}$	$1.419^{+0.193}_{-0.314}$	$0.251^{+0.560}_{-0.118}$
	+3%/-3%	+8%/-4%	+250%/-300%	+30%/-36%	+14%/-22%	+224%/-47%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 011404033-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1	$0.77^{+0.81}_{-0.52}$	3735^{+295}_{-297}	-3527^{+7154}_{-850}	$-0.005^{+0.687}_{-0.685}$
Alt.	-10 ± 2	$1.18^{+1.04}_{-0.79}$	3766^{+289}_{-378}	4725^{+3738}_{-1232}	$1.916^{+14.378}_{-1.331}$

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 $A_{obs} \gg 1.0$

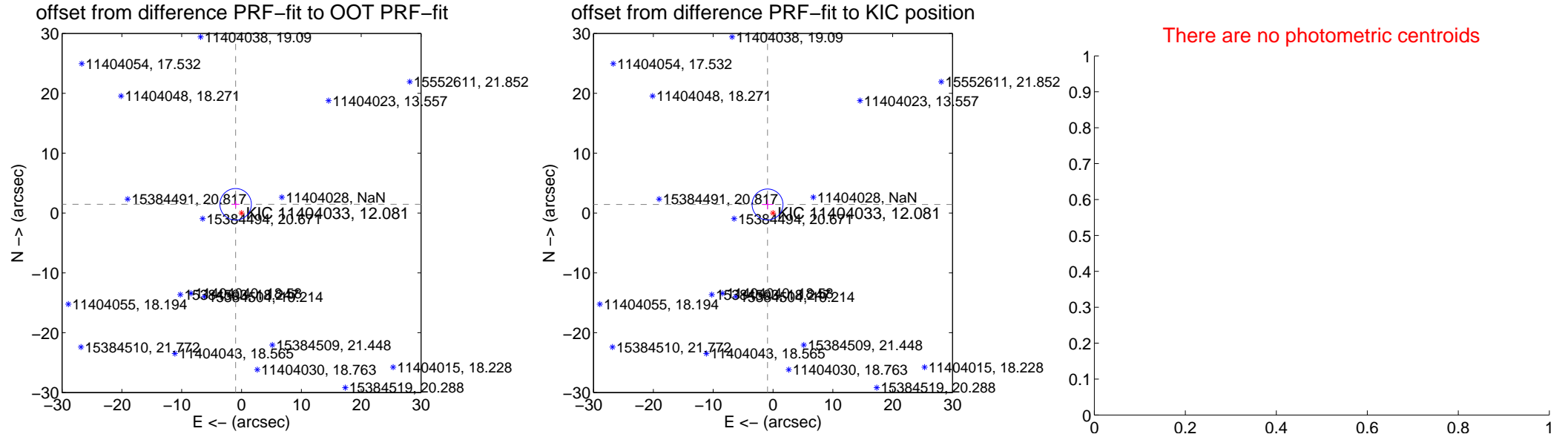
DV Centroid Data

Supplemental centroid analysis for 011404033-01. Kepler magnitude: 12.08. Transit SNR 1.38

There are 3 quarters with good PRF difference image offsets

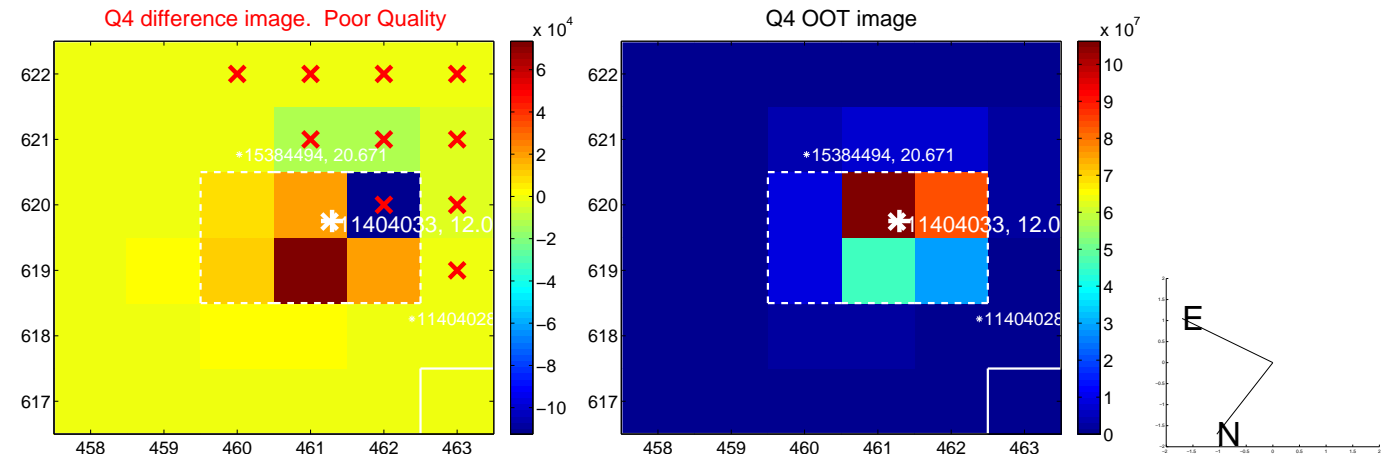
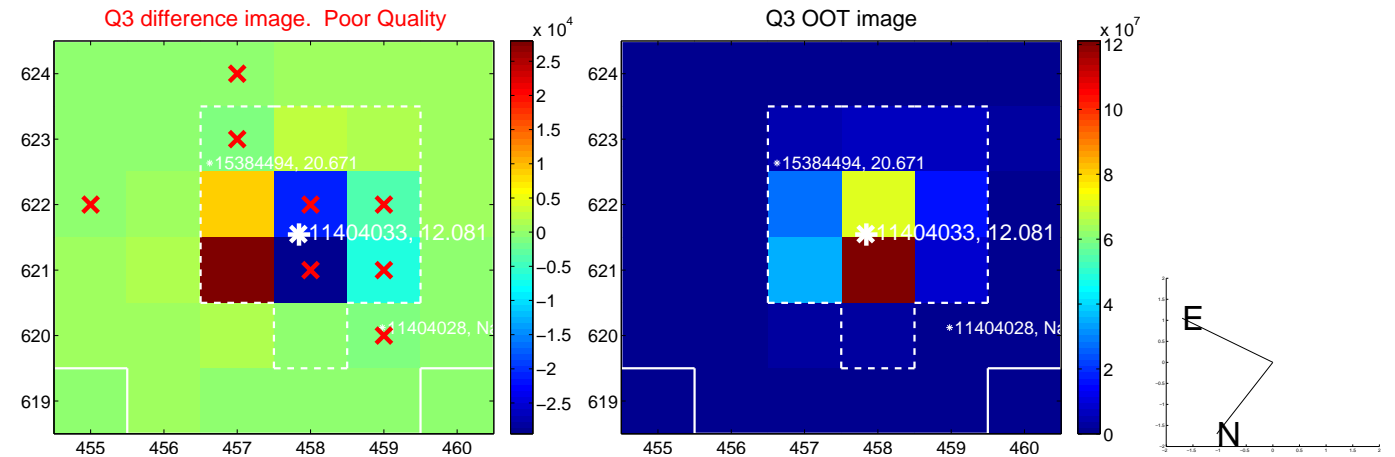
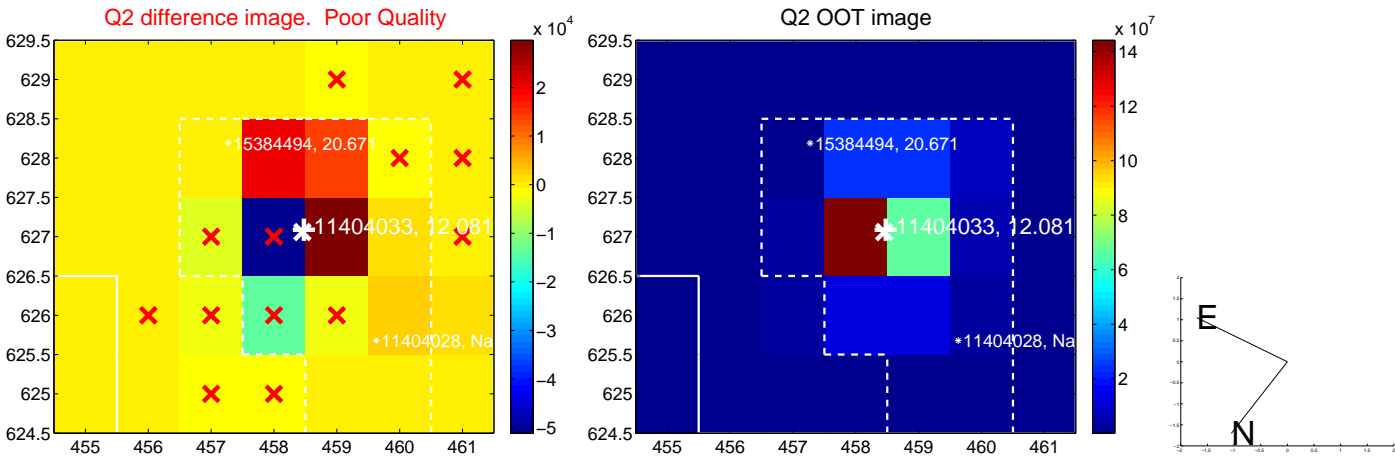
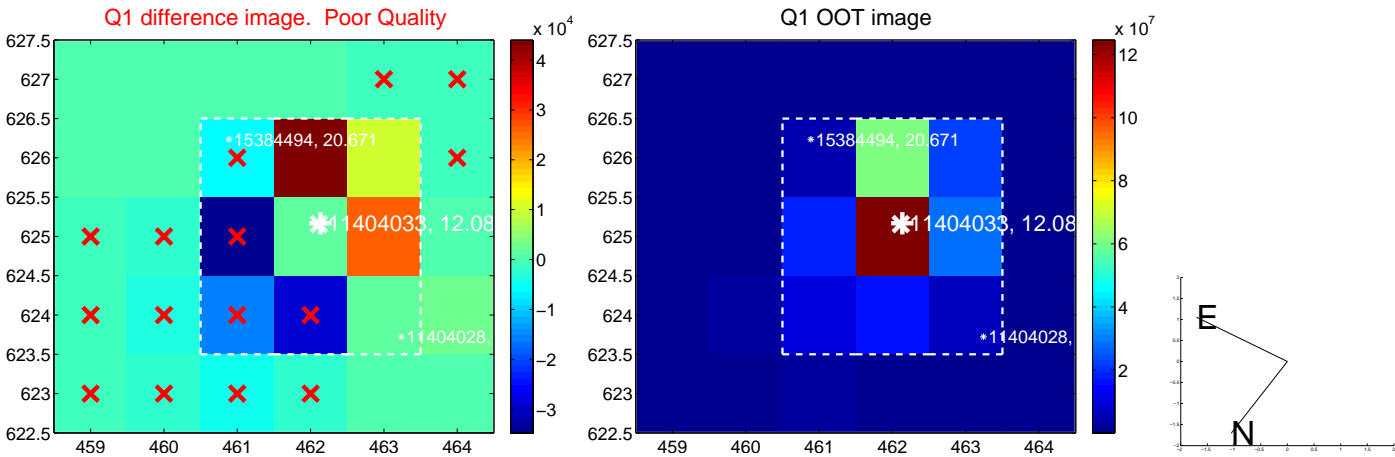
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.759 ± 0.878	2.00	0.988 ± 0.660	1.455 ± 0.619
PRF-fit source offset from KIC position	1.697 ± 0.860	1.97	0.915 ± 0.940	1.429 ± 0.825
photometric centroid source offset	—	—	—	—

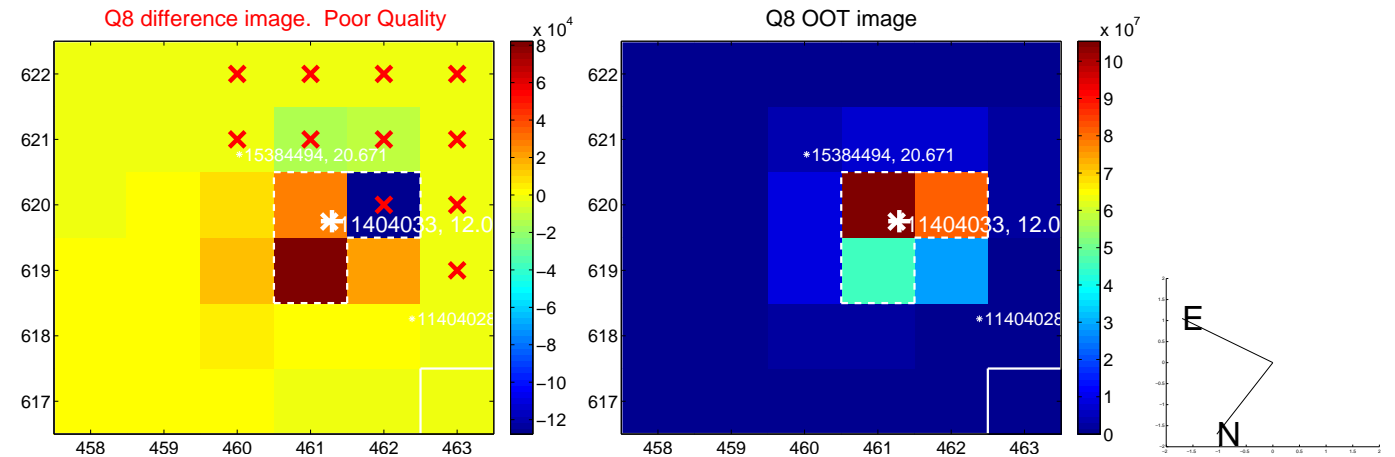
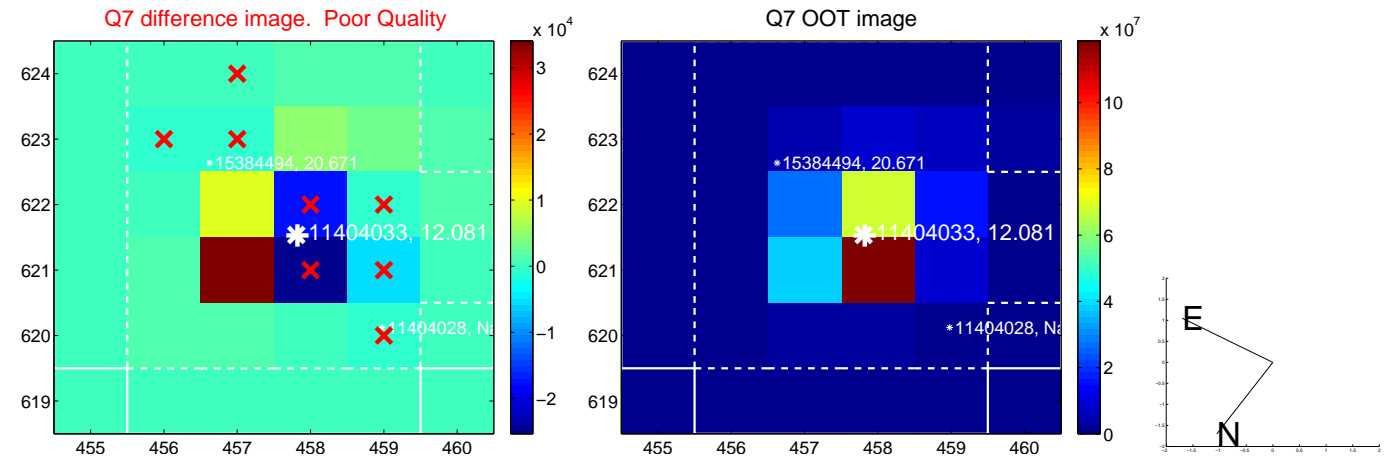
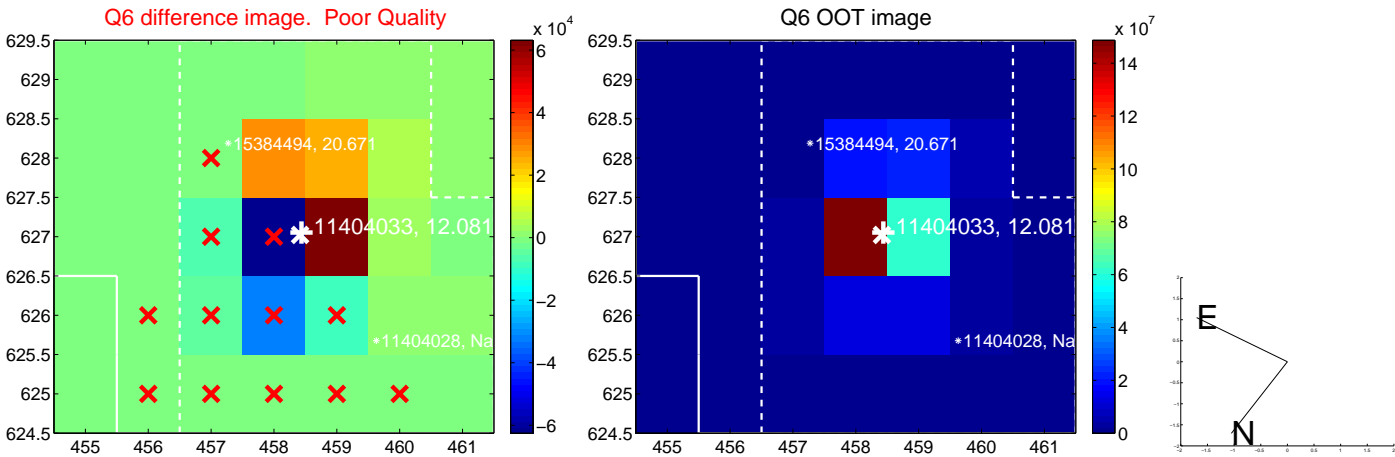
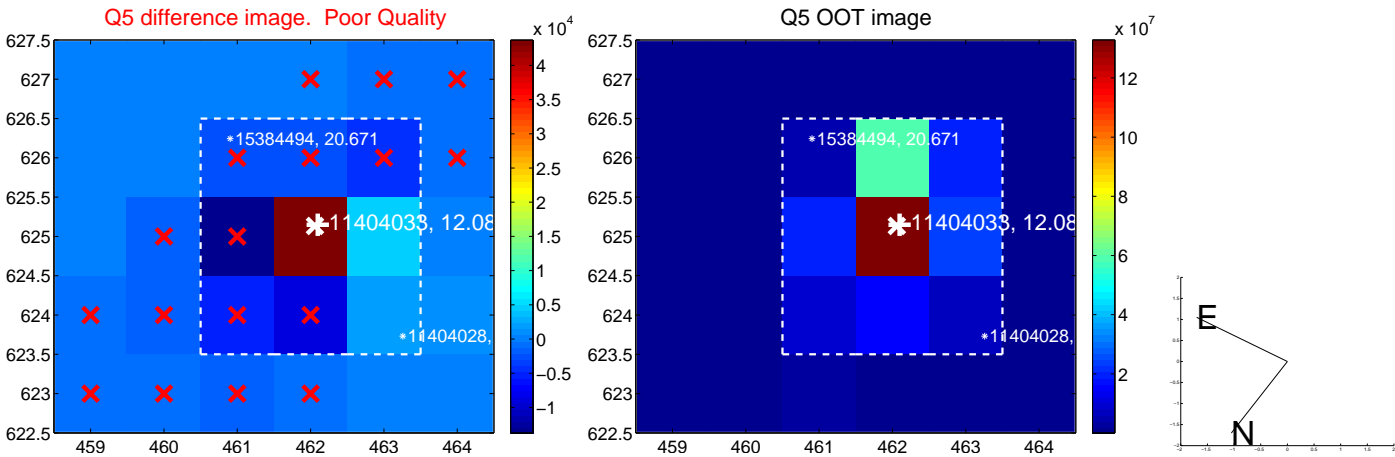


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

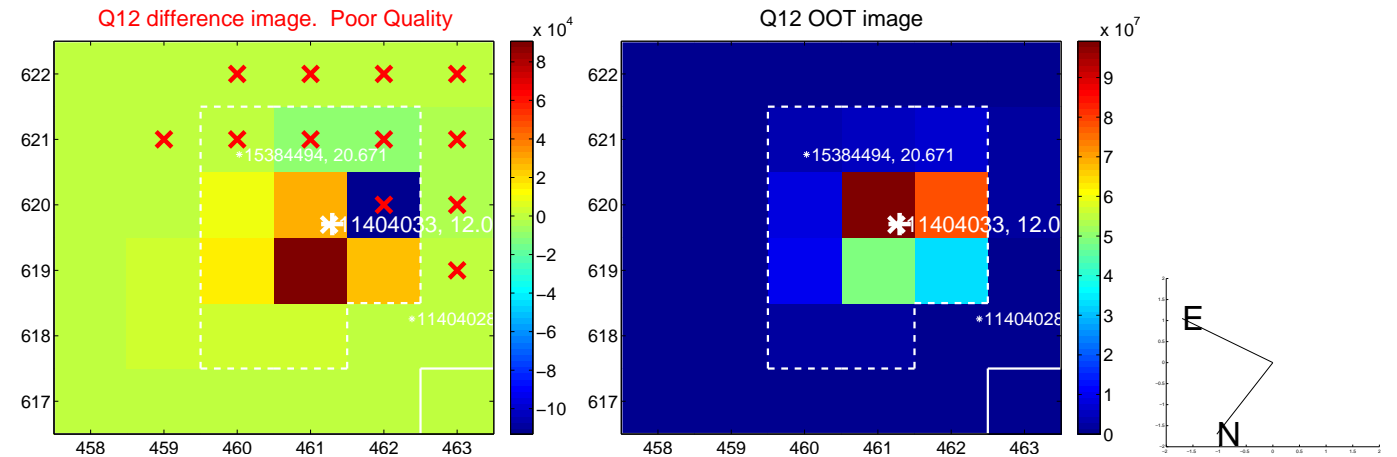
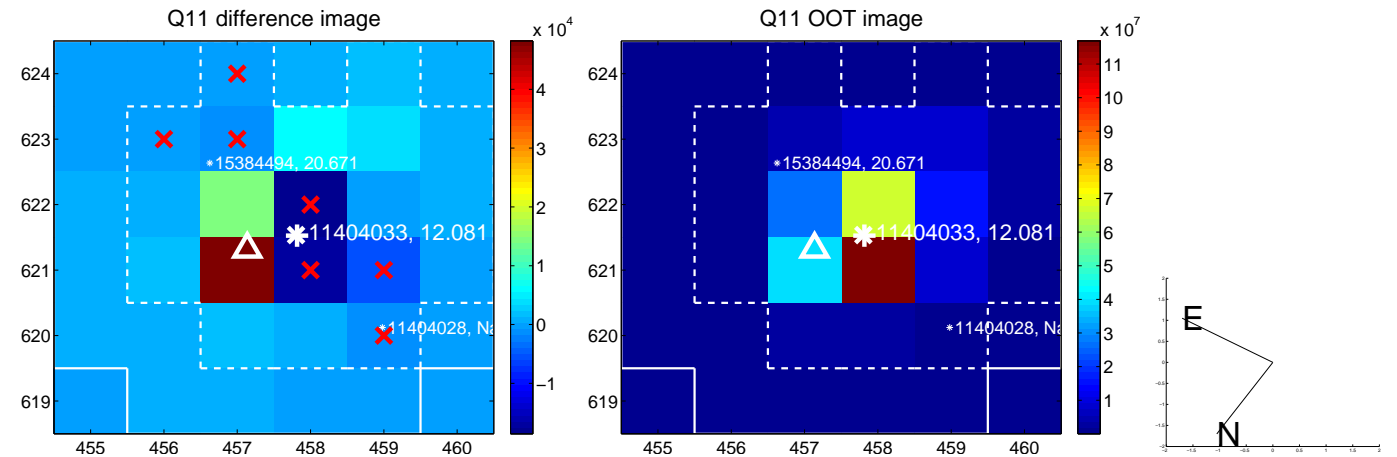
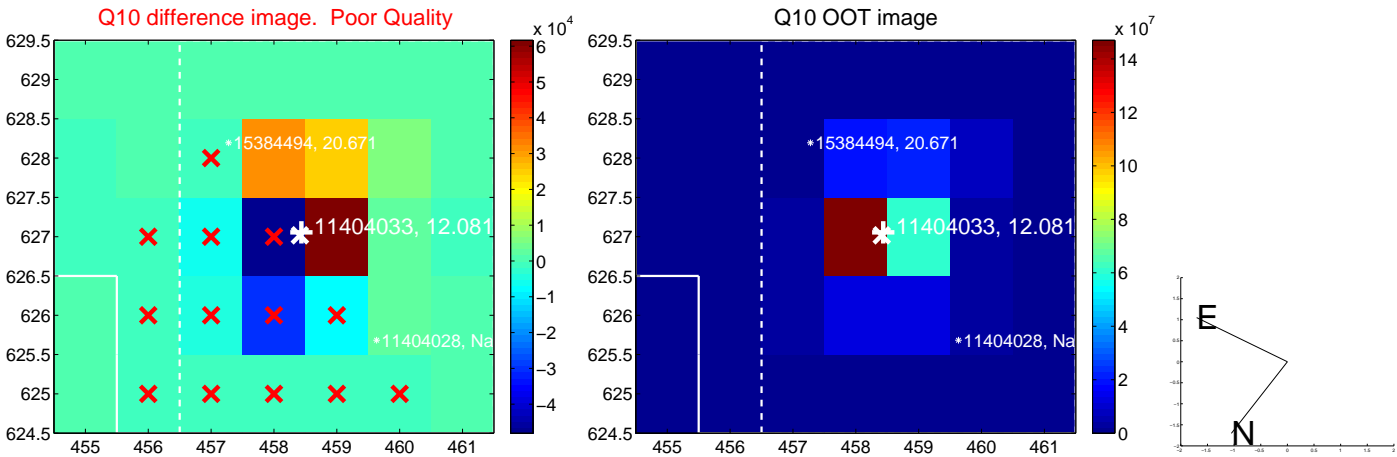
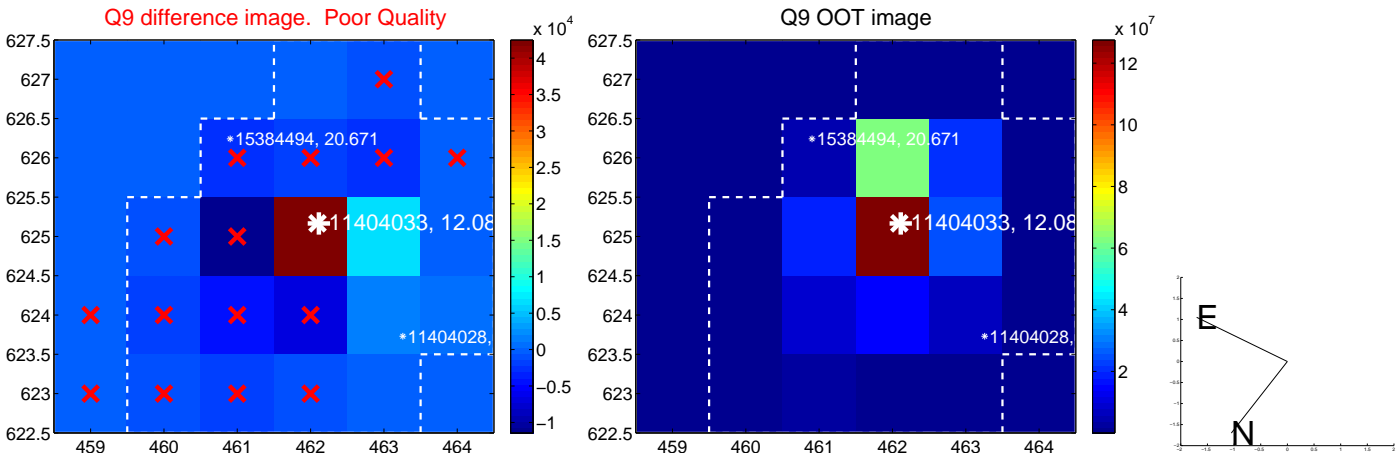
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



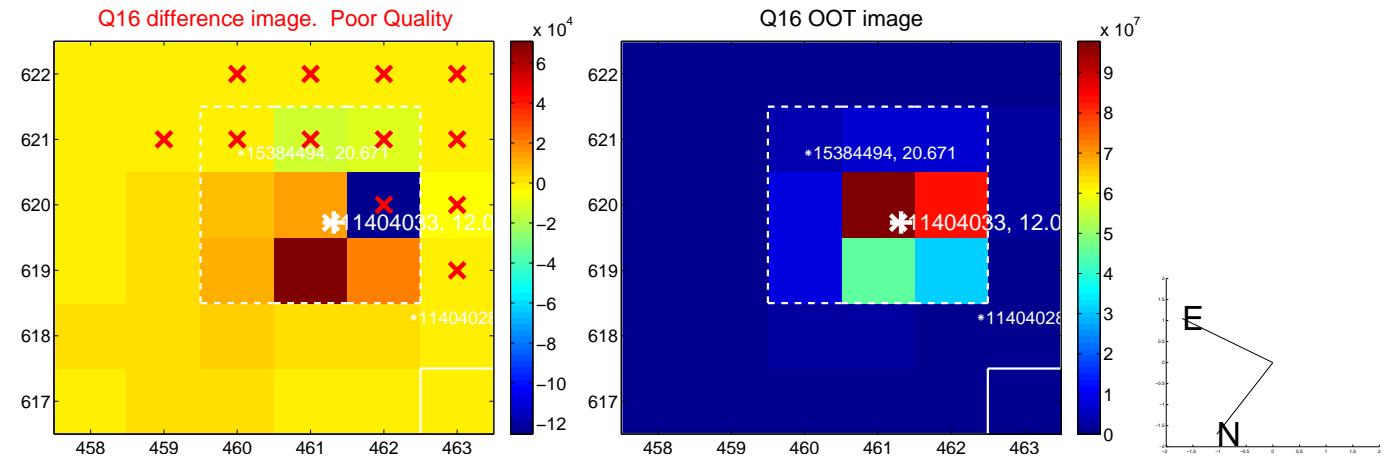
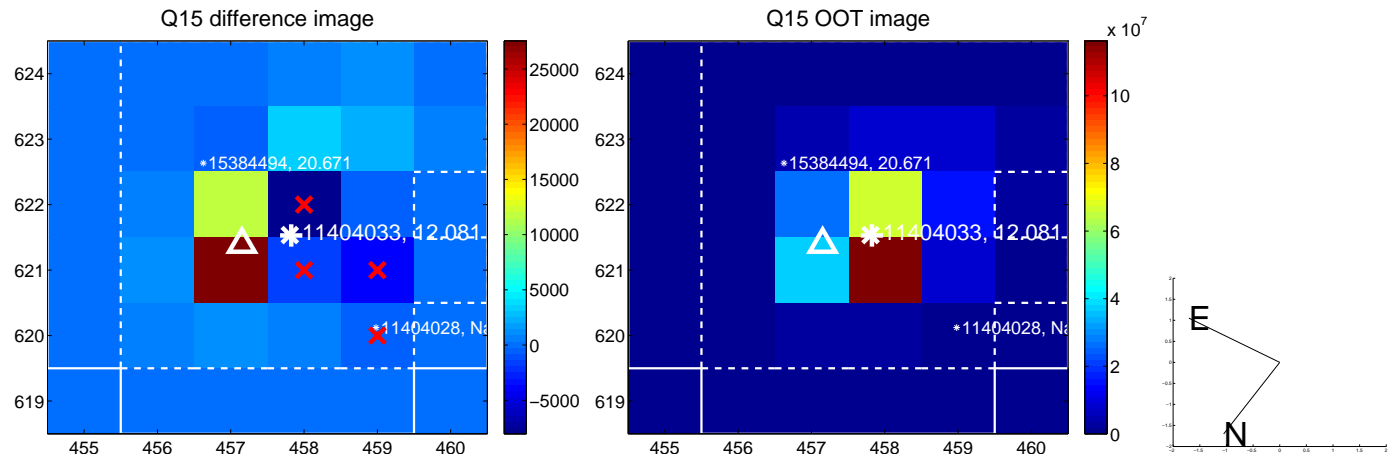
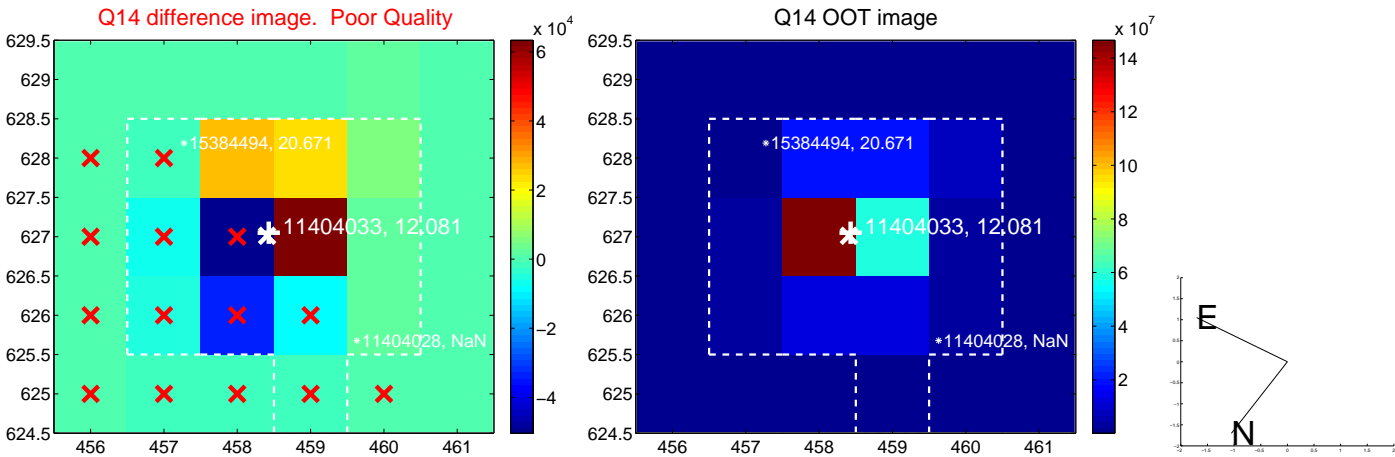
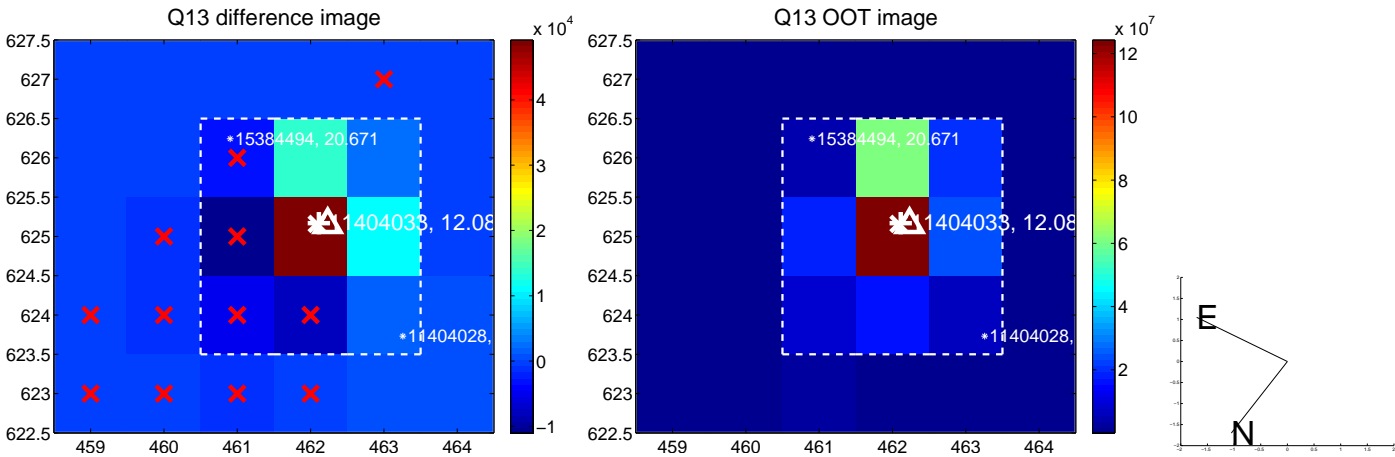
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



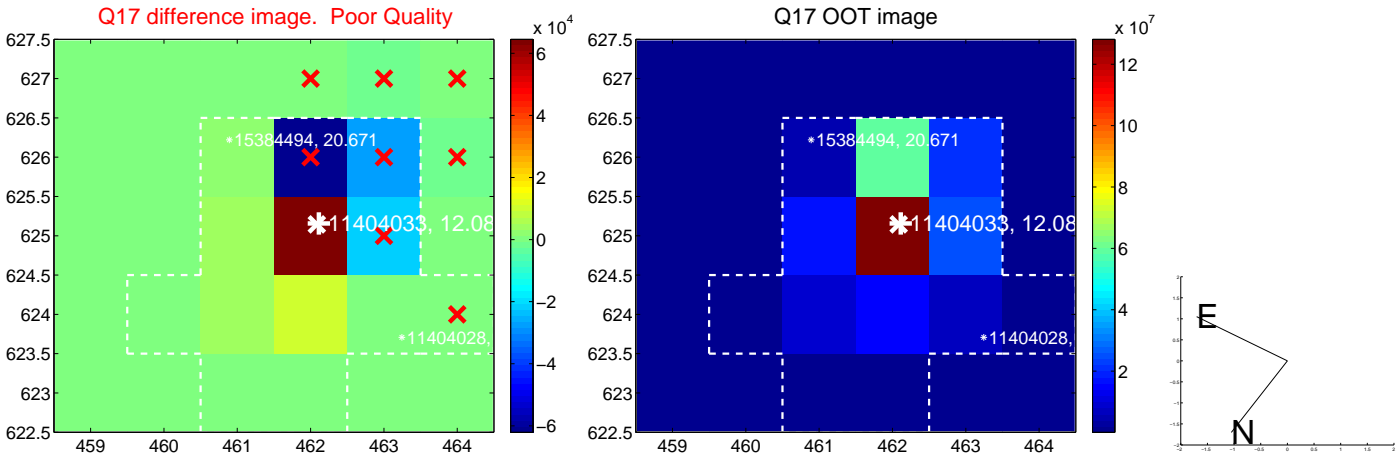
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



folded centroid time series figure for this object.

UKIRT Image

Declination

