

KIC 011446073

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})
011446073-01	OBS	No	1.035719	131.817503	0.0	0.885	8.8	0.0	0.52	3932	0.02	215.29

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011446073-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT

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

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

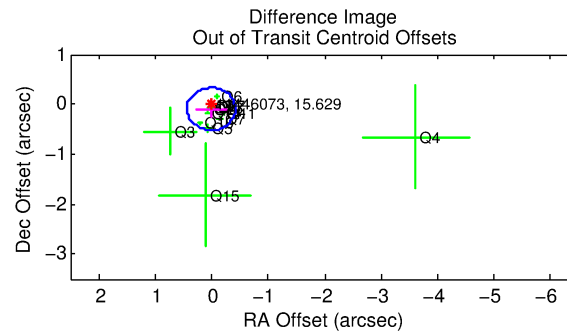
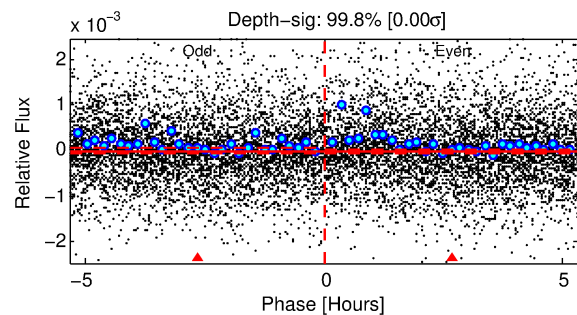
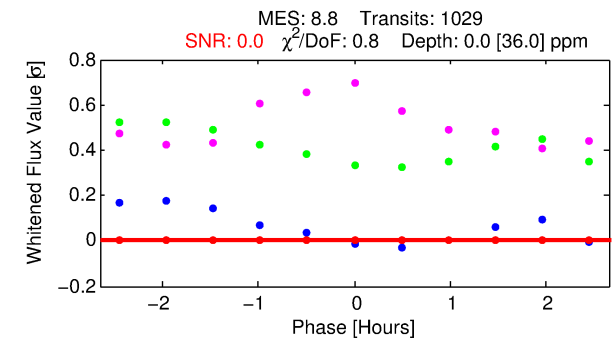
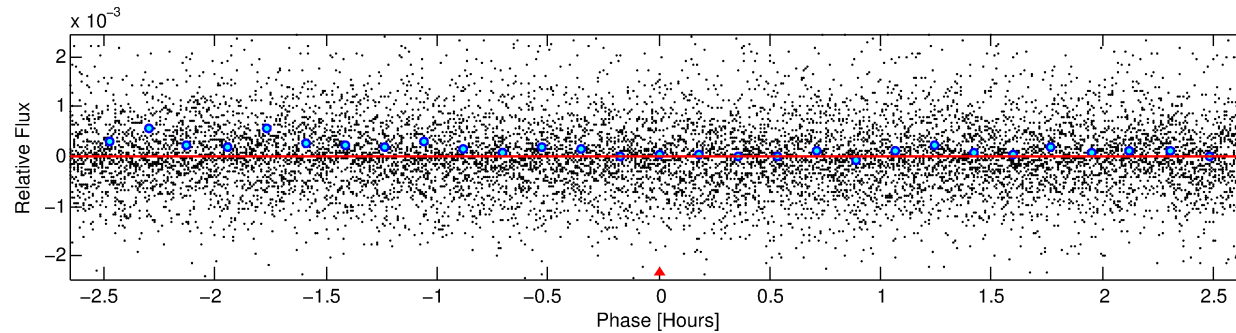
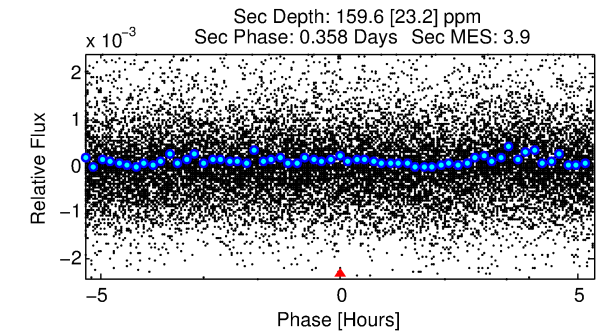
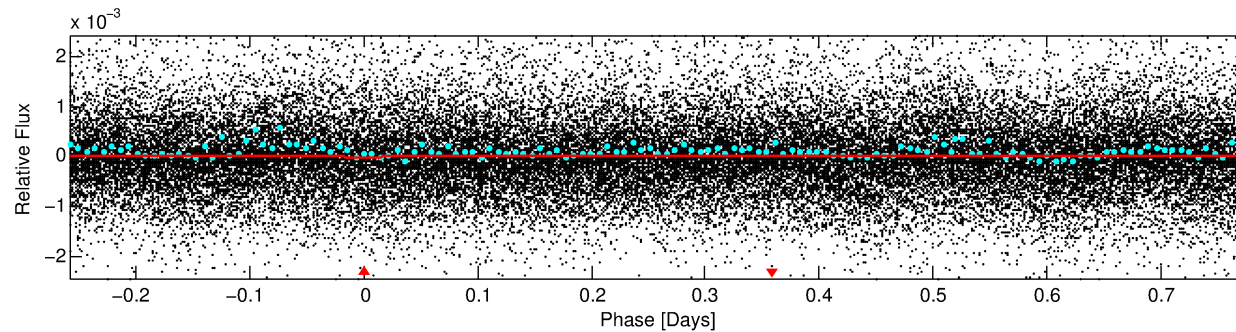
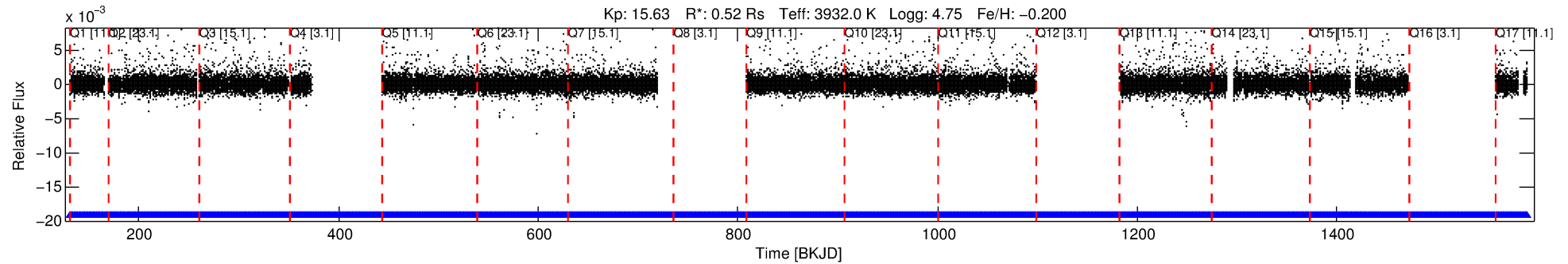
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011446073-01

No Significant Match Found

DV One-Page Summary

KIC: 11446073 Candidate: 1 of 1 Period: 1.036 d



DV Fit Results:

Period = 1.03572 [0.06890] d
Epoch = 131.8175 [8.8728] BKJD
Rp/R* = 0.0003 [0.1655]
a/R* = 1.24 [911.81]
b = 1.00 [13.56]
Seff = 215.29 [30.31]
Teff = 977 [34] K
Rp = 0.02 [9.39] Re
a = 0.0164 [0.0012] AU
Ag = 94948.01 [113054058.75] [0.00σ]
Teffp = 26509 [7891389] K [0.00σ]

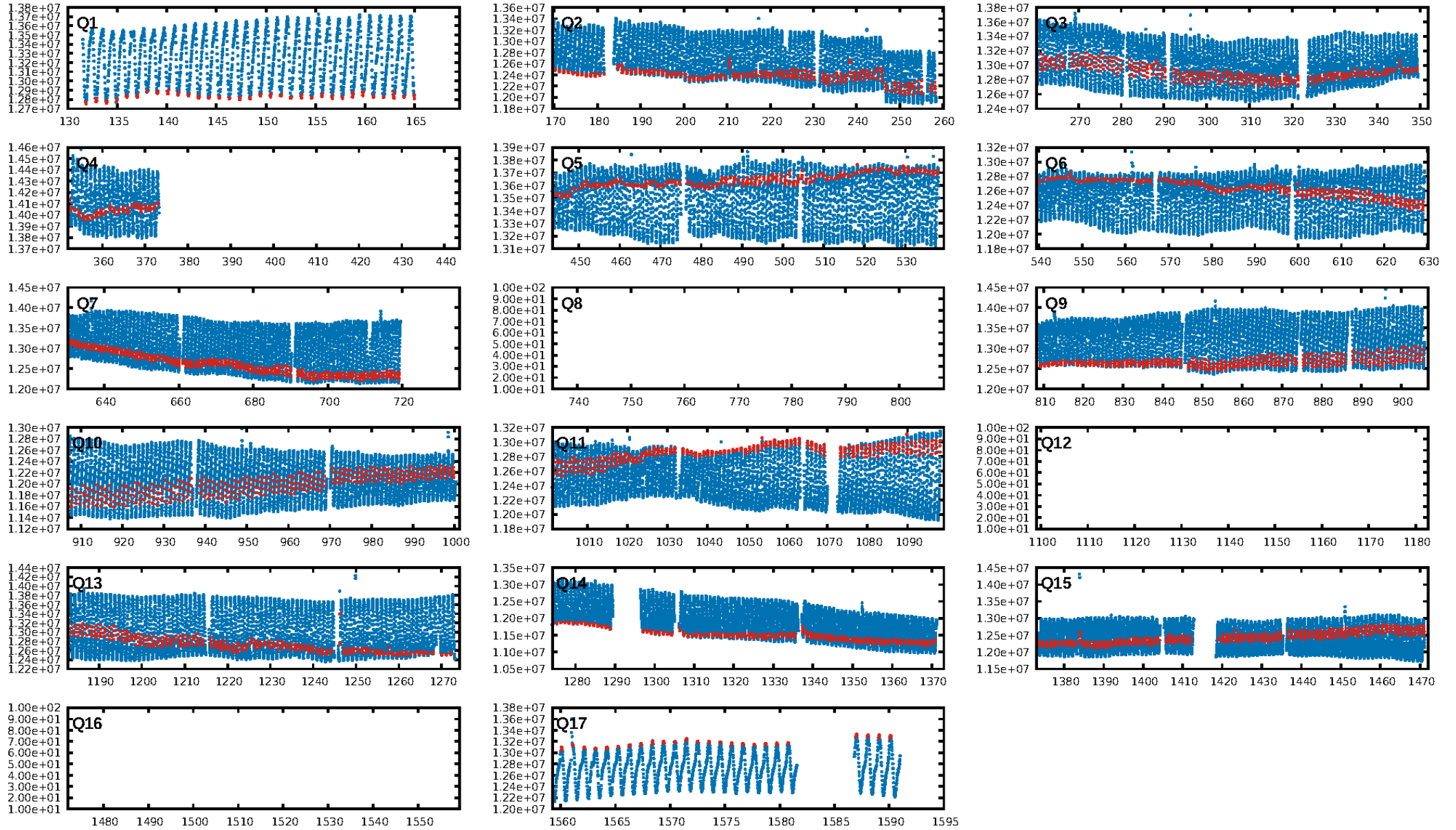
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.25e-15
RollingBand-fgt: 1.00 [950/950]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.097 arcsec [0.68σ]
KicOffset-rm: 0.184 arcsec [1.01σ]
OotOffset-st: 4/4/1/5 [14]
KicOffset-st: 4/4/1/5 [14]
DiffImageQuality-fgm: 0.64 [9/14]
DiffImageOverlap-fno: 1.00 [14/14]

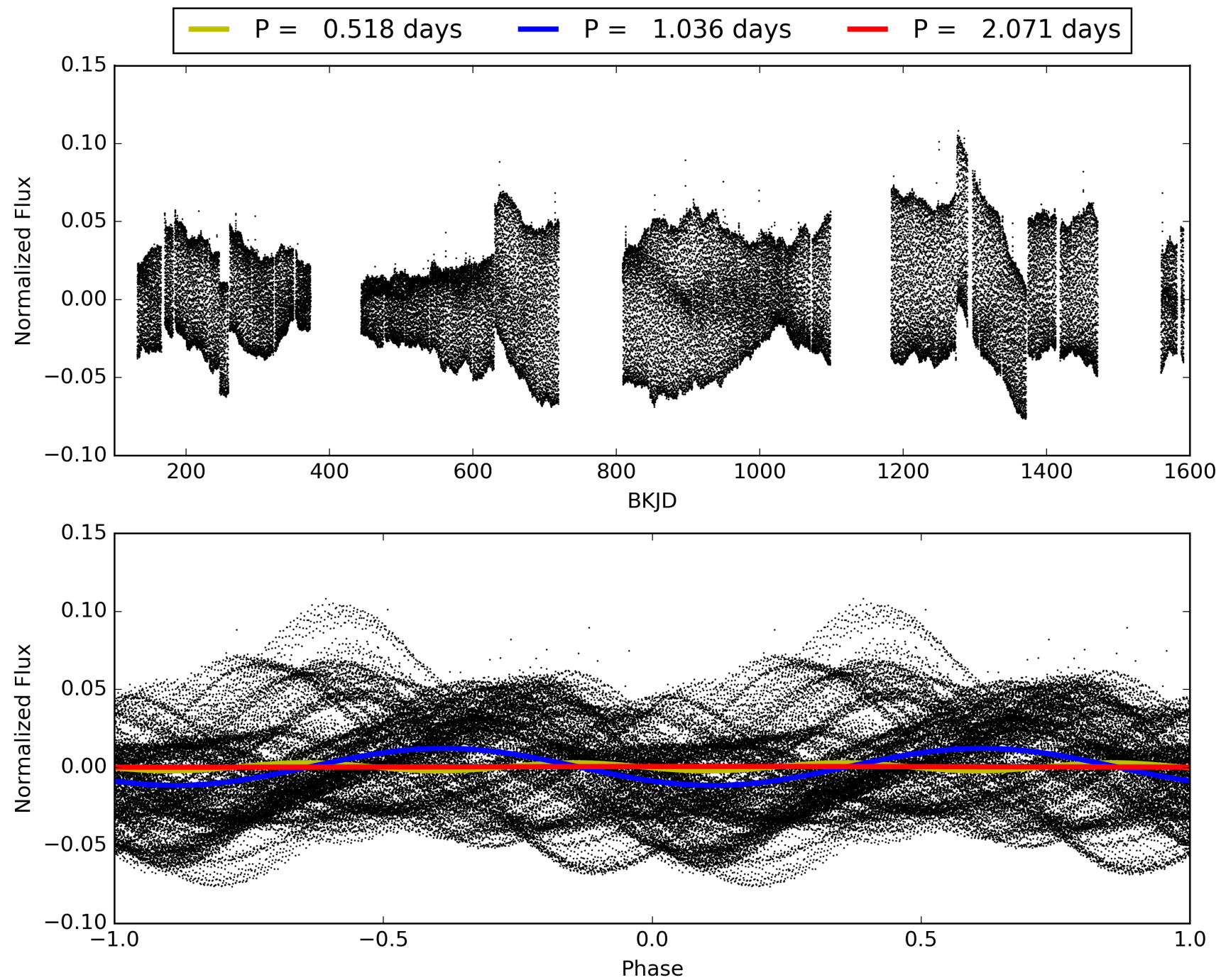
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 23:03:34 Z

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

TCE 011446073-01, PDC Light Curves

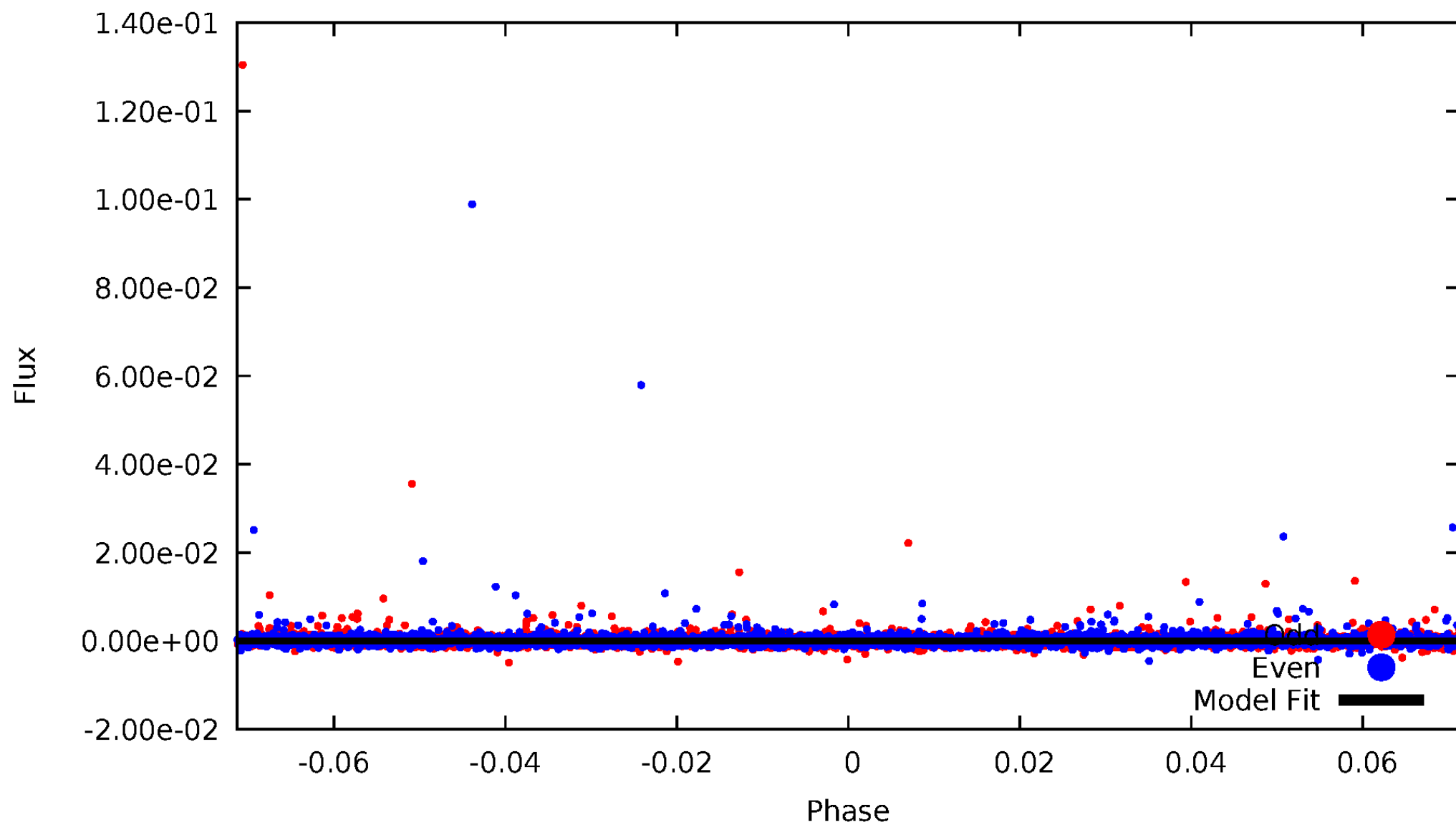


TCE 011446073-01



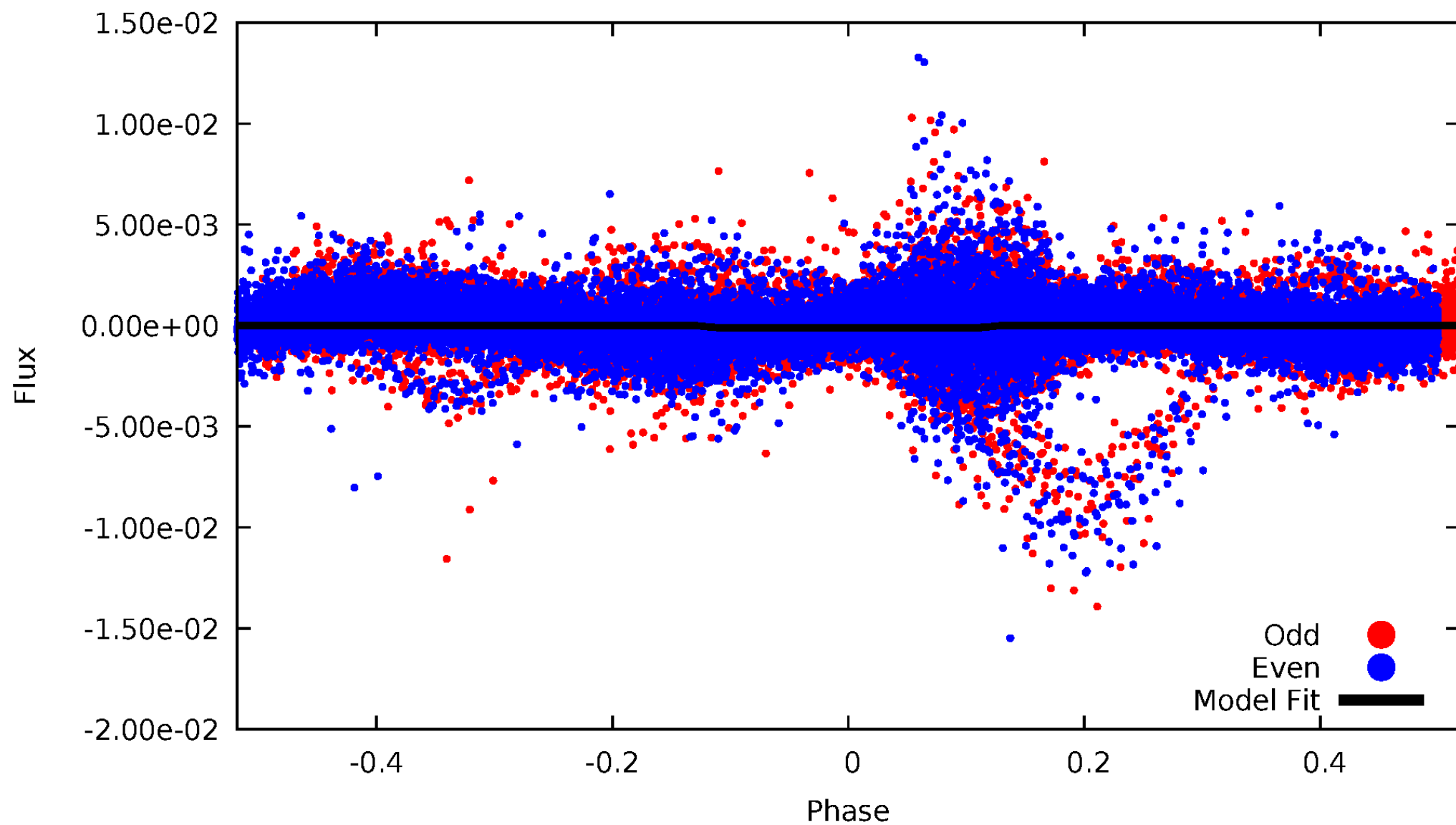
DV Odd/Even

TCE 011446073-01



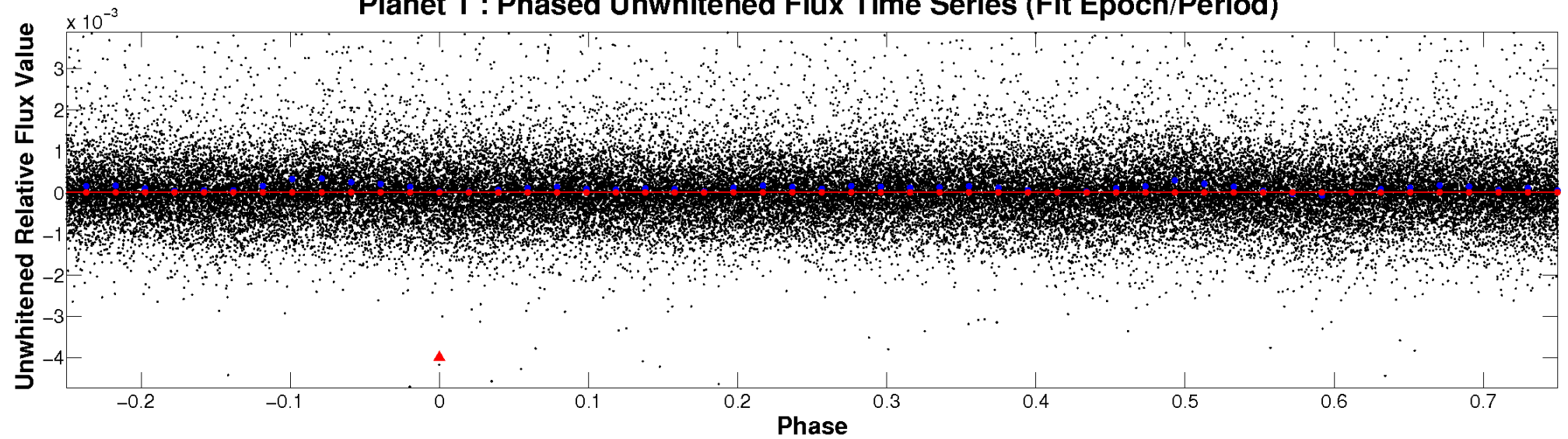
ALT Odd/Even

TCE 011446073-01

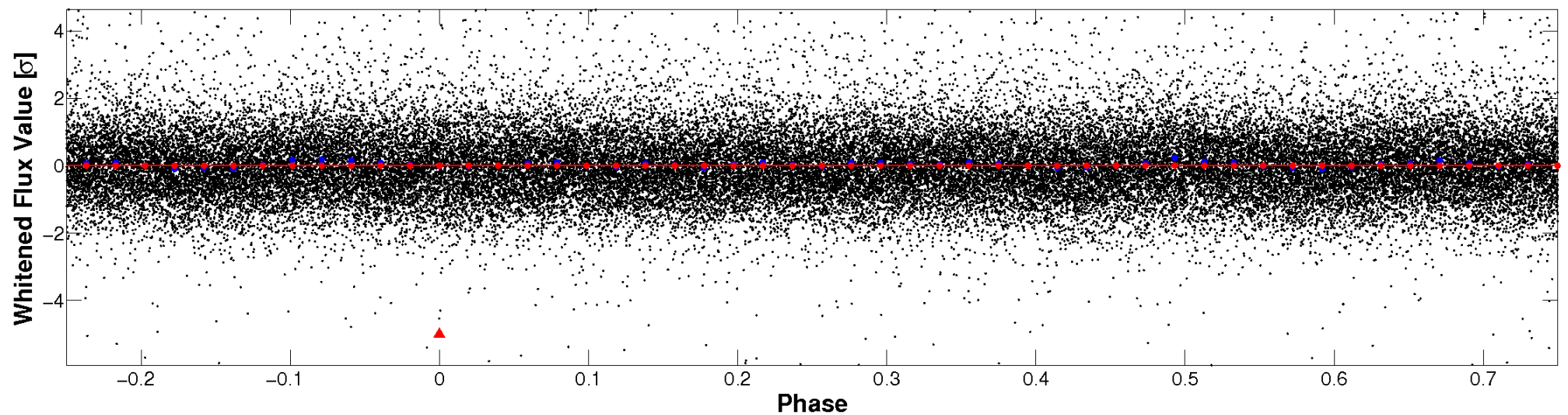


Non-Whitened Vs. Whitened Light Curve

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

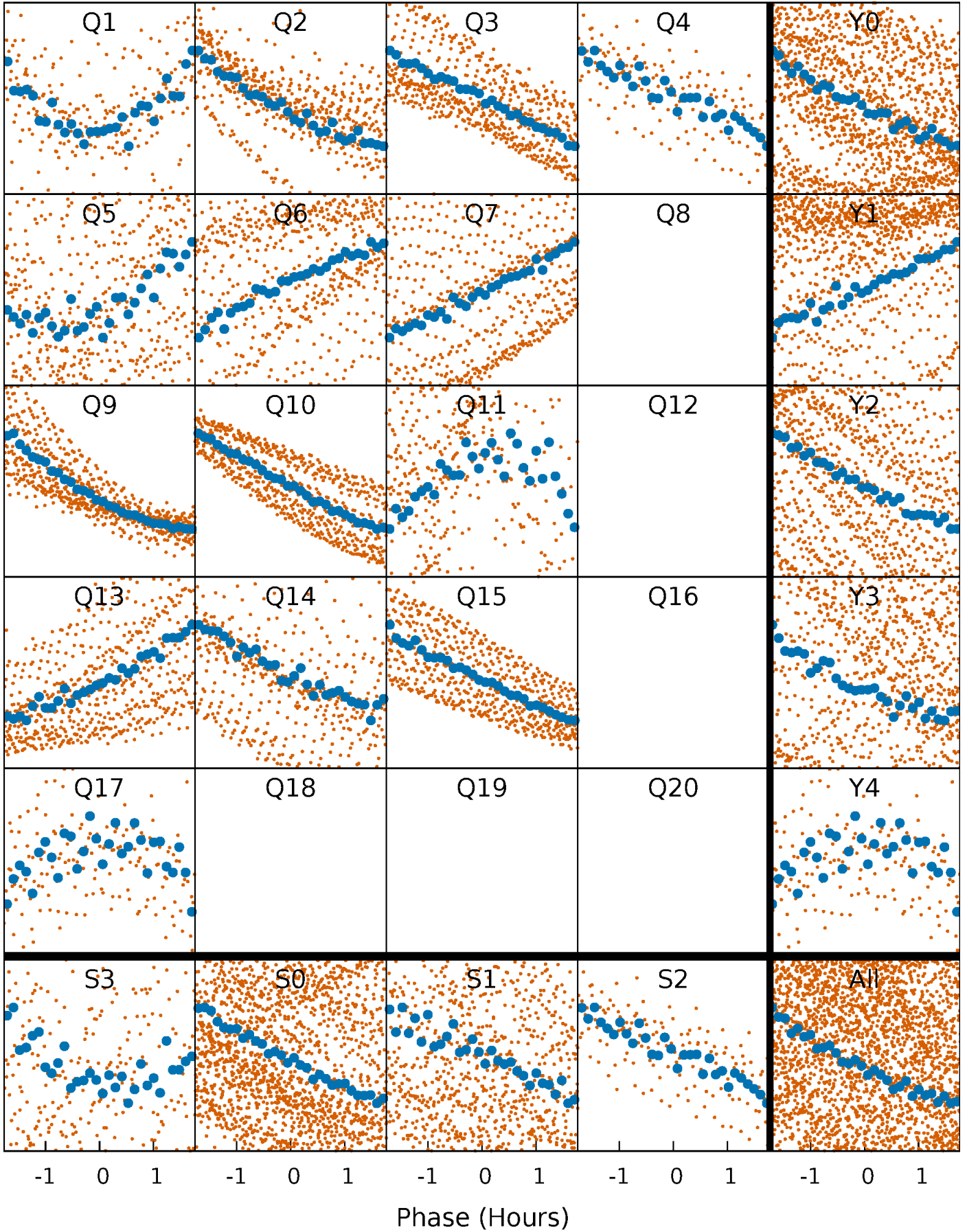


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



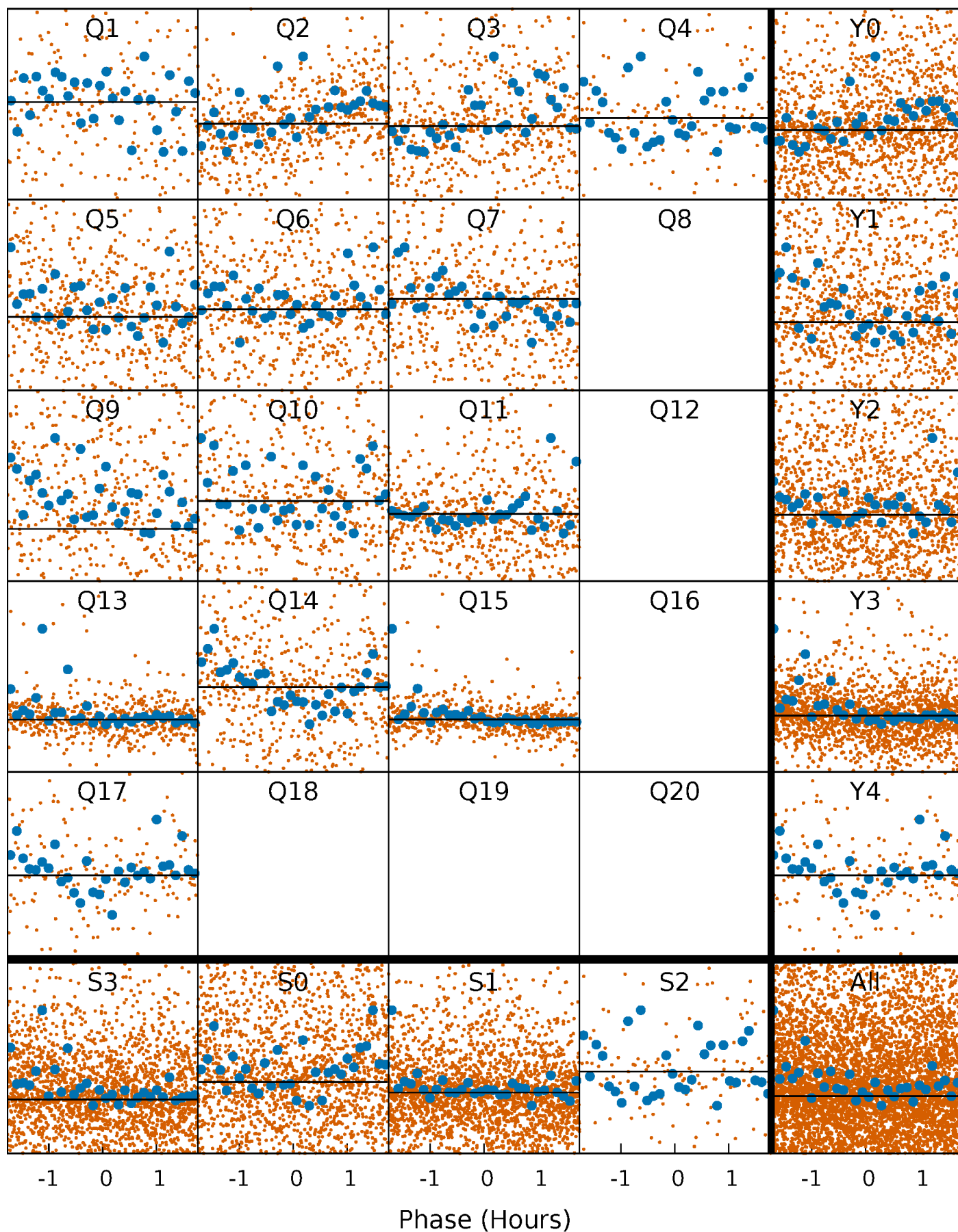
PDC Quarter-Phased Transit Curves

TCE 011446073-01 P= 1.035719 Days $T_0=131.817503$ (BKJD)



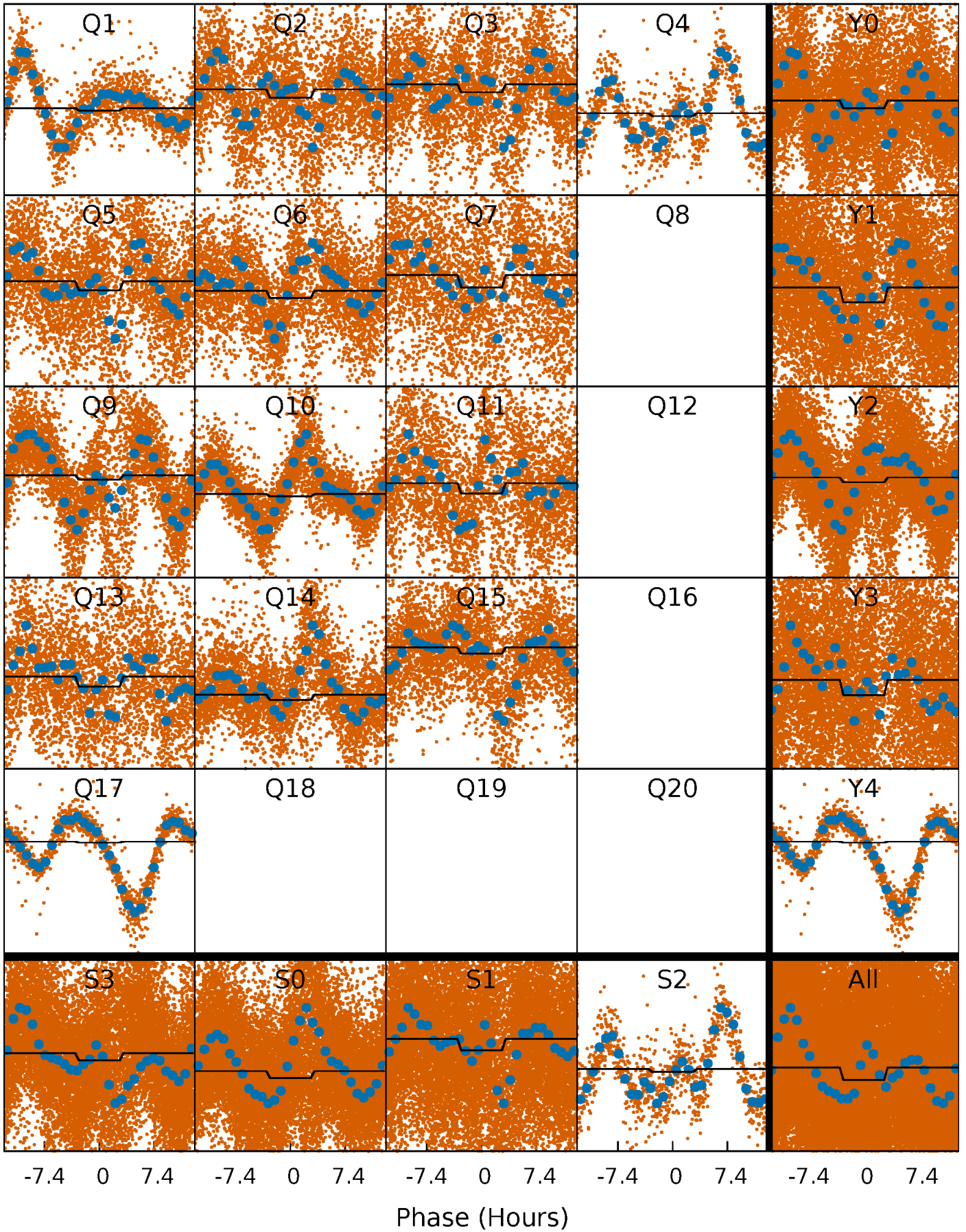
DV Quarter-Phased Transit Curves

TCE 011446073-01 P= 1.035719 Days $T_0=131.817503$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

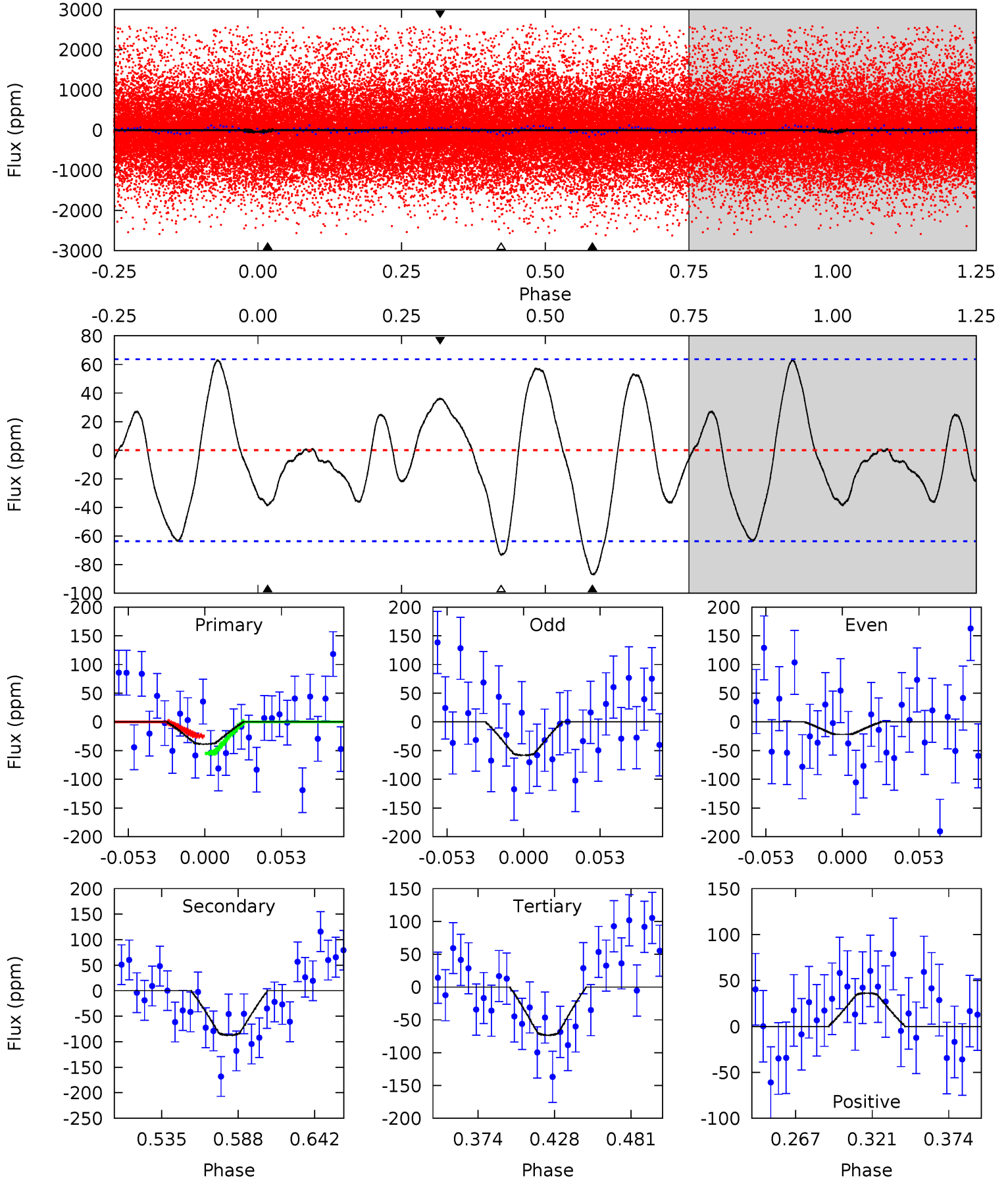
TCE 011446073-01 P= 1.037262 Days $T_0=131.907236$ (BKJD)



DV Model-Shift Uniqueness Test

011446073-01, P = 1.035719 Days, E = 130.781784 Days

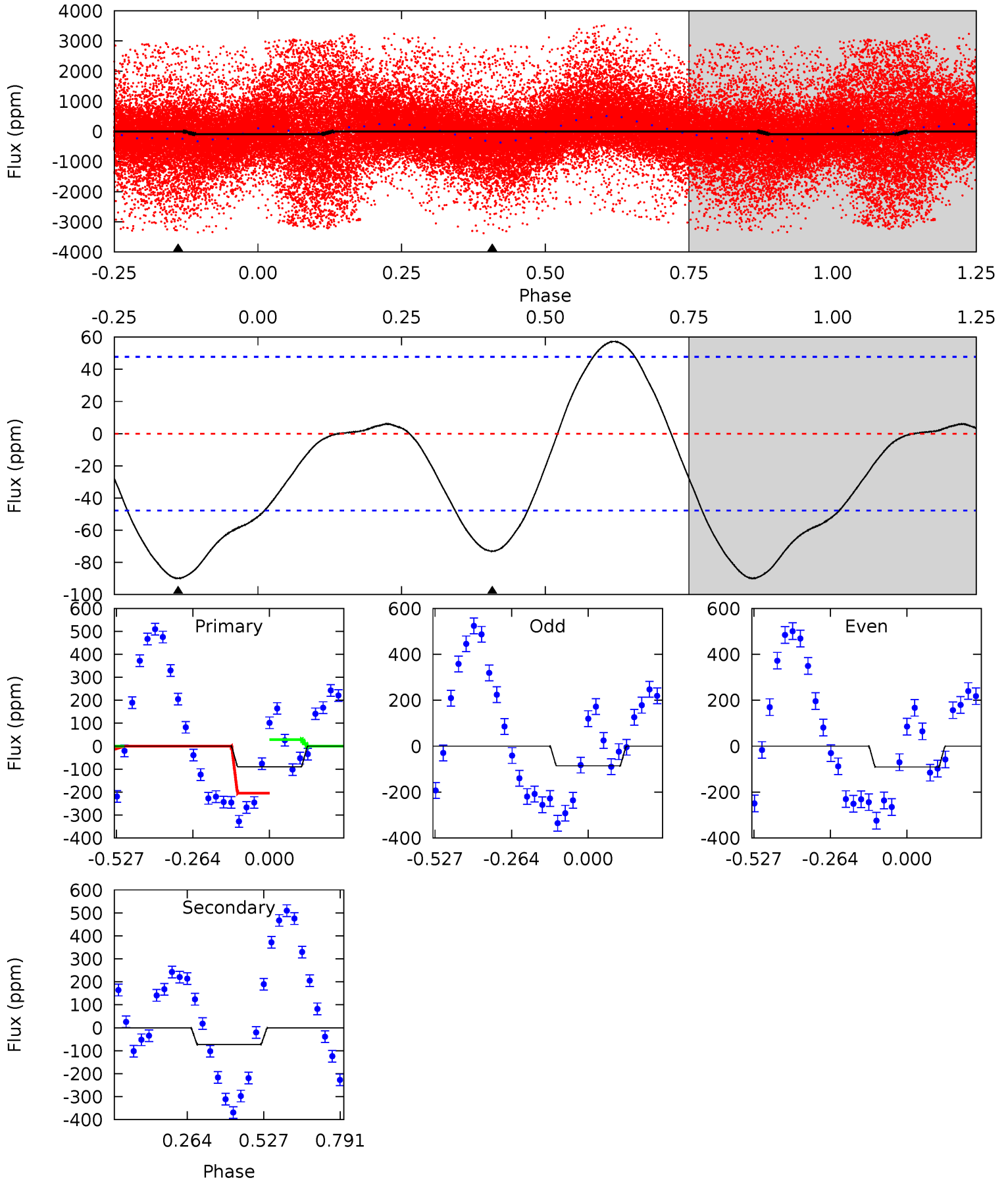
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.85	6.42	5.41	2.67	4.69	1.93	2.45	-2.56	0.17	1.01	3.75	1.35	-2.14	0.42	0



Alt Model-Shift Uniqueness Test

011446073-01, P = 1.037262 Days, E = 130.869974 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.21	6.67	0	0	4.36	1.12	1.46	8.21	8.21	6.67	6.67	0.25	0.74	0.39	13.5



Stellar Parameters For KIC 011446073

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3932^{+62}_{-78}	$4.745^{+0.028}_{-0.038}$	$-0.200^{+0.200}_{-0.200}$	$0.520^{+0.037}_{-0.037}$	$0.548^{+0.031}_{-0.043}$	$5.498^{+0.798}_{-0.840}$
	+2%/-2%	+1%/-1%	+100%/-100%	+7%/-7%	+6%/-8%	+15%/-15%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 011446073-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-87 ± 14	$6.26^{+7.26}_{-4.39}$	1371^{+42}_{-44}	1599^{+1086}_{-3568}	$0.327^{+3.204}_{-0.259}$
Alt.	-73 ± 11	$6.51^{+6.96}_{-4.36}$	1367^{+43}_{-43}	-1703^{+4208}_{-276}	$0.252^{+2.099}_{-0.196}$

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 $A_{obs} \gg 1.0$

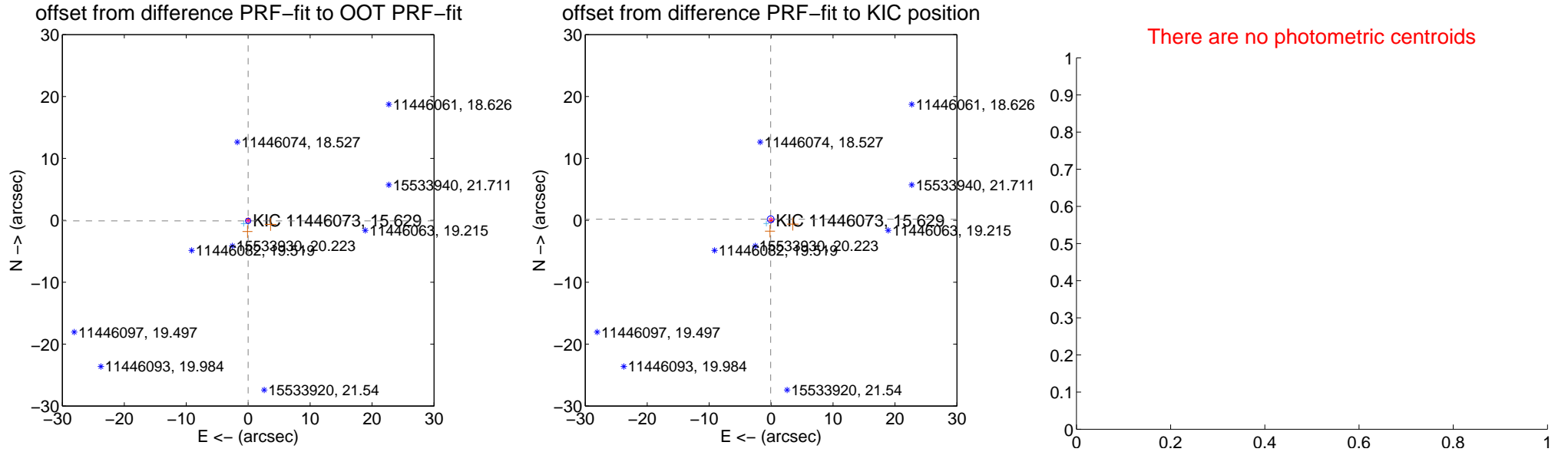
DV Centroid Data

Supplemental centroid analysis for 011446073-01. Kepler magnitude: 15.63. Transit SNR 0.00

There are 9 quarters with good PRF difference image offsets

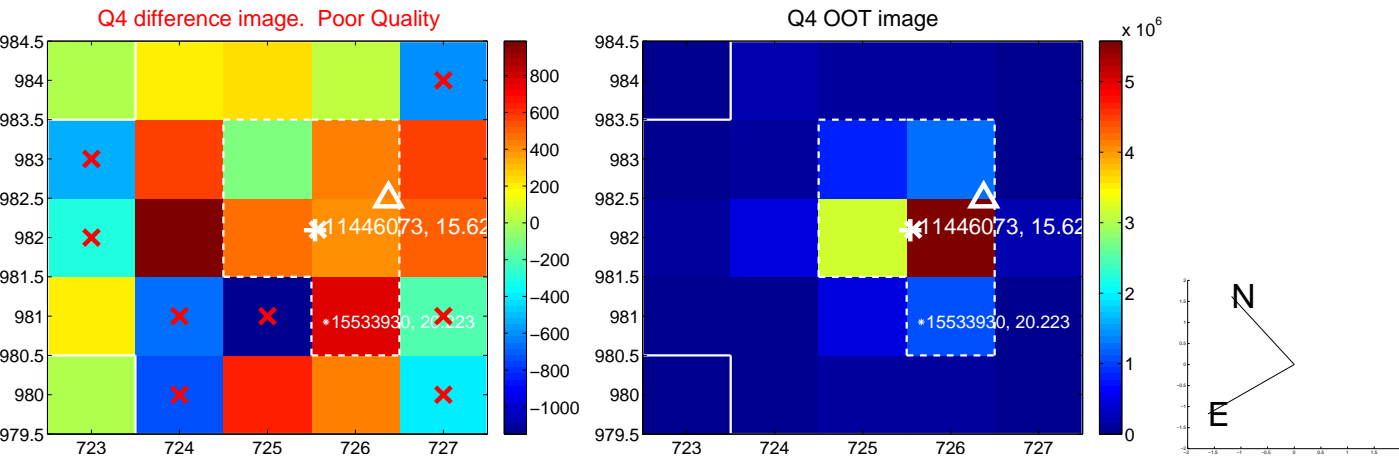
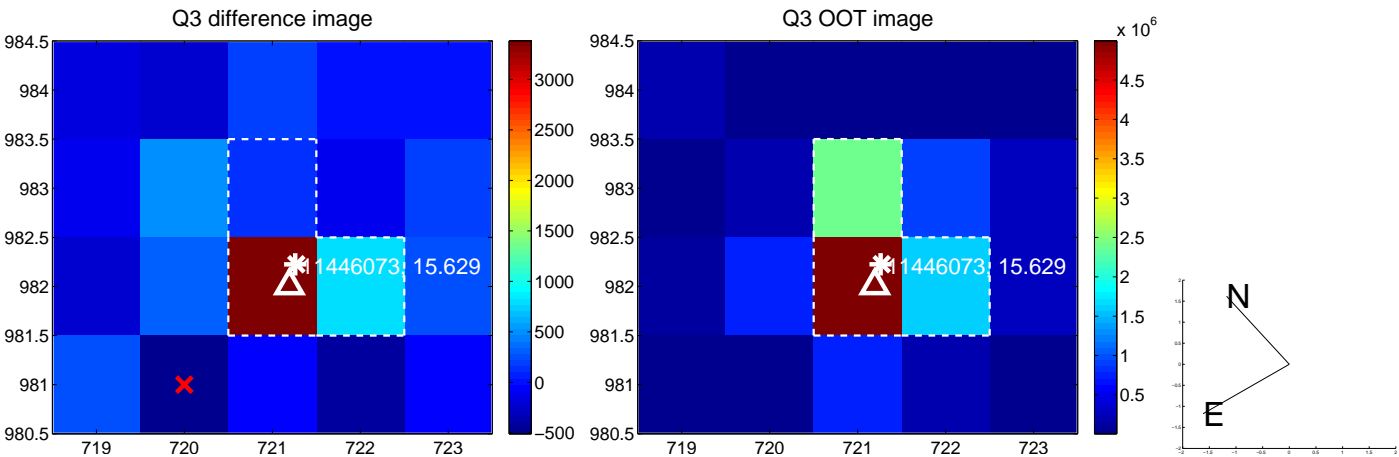
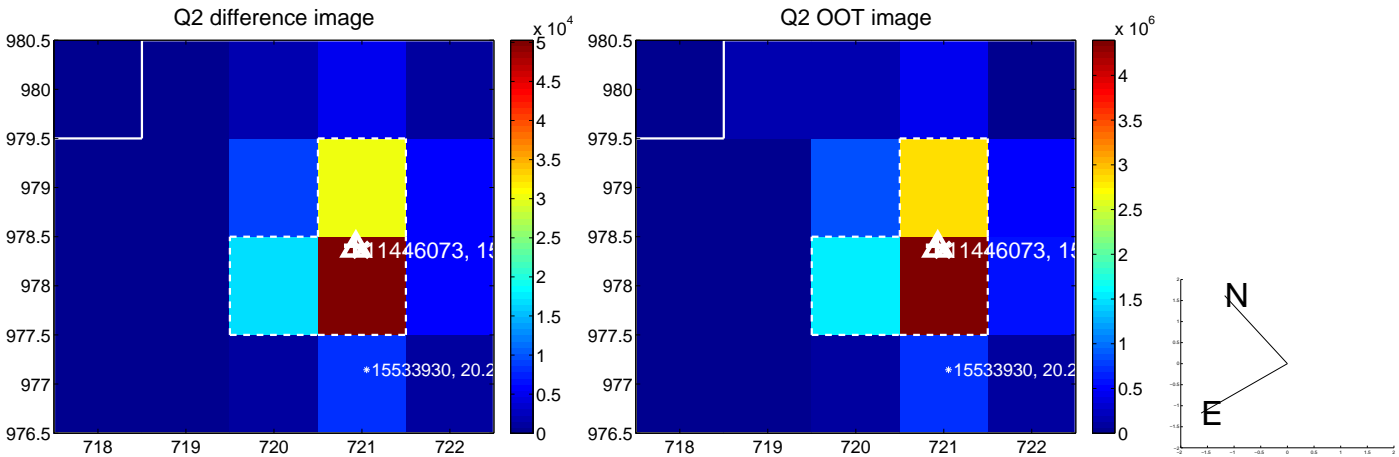
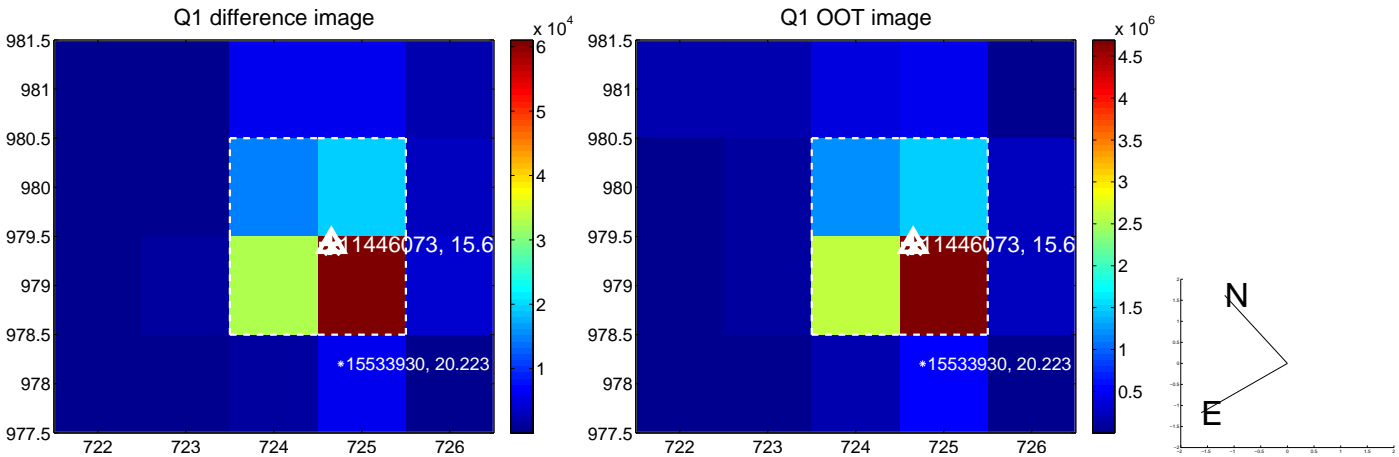
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.097 ± 0.142	0.68	0.008 ± 0.272	-0.096 ± 0.144
PRF-fit source offset from KIC position	0.184 ± 0.183	1.01	0.062 ± 0.273	0.173 ± 0.150
photometric centroid source offset	—	—	—	—

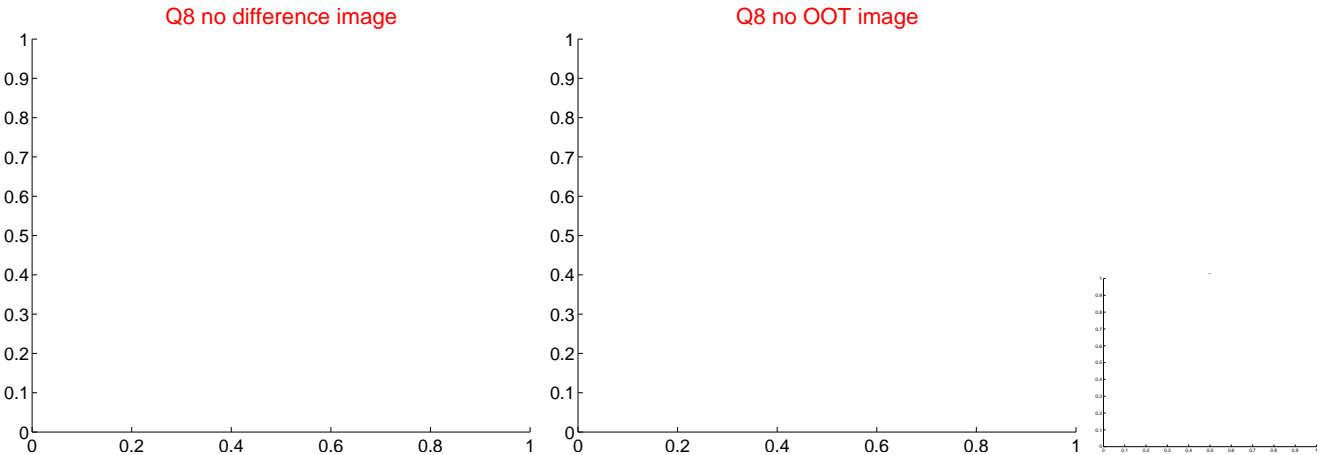
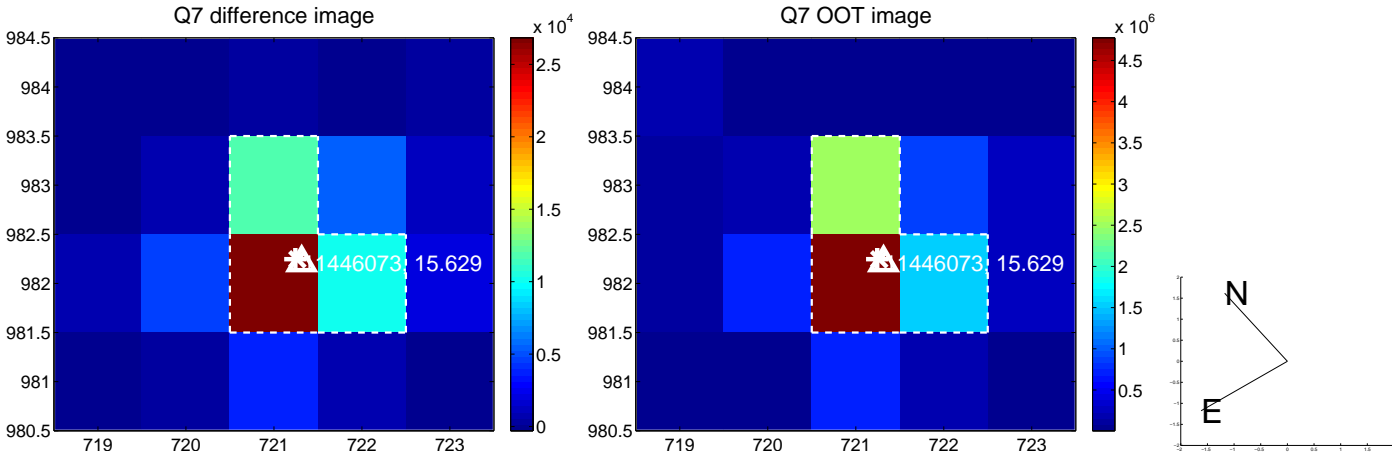
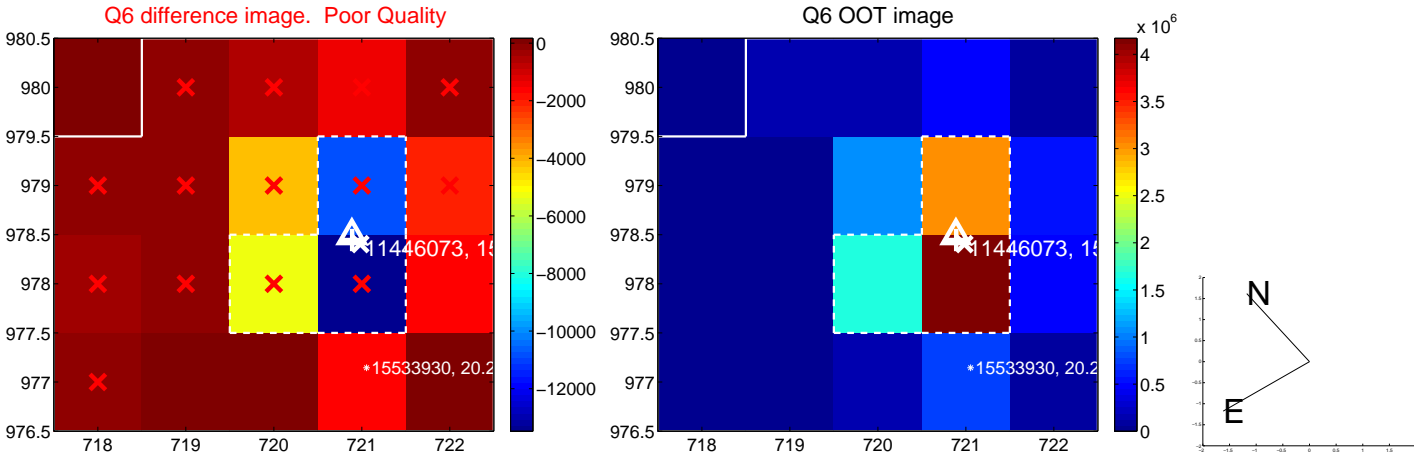
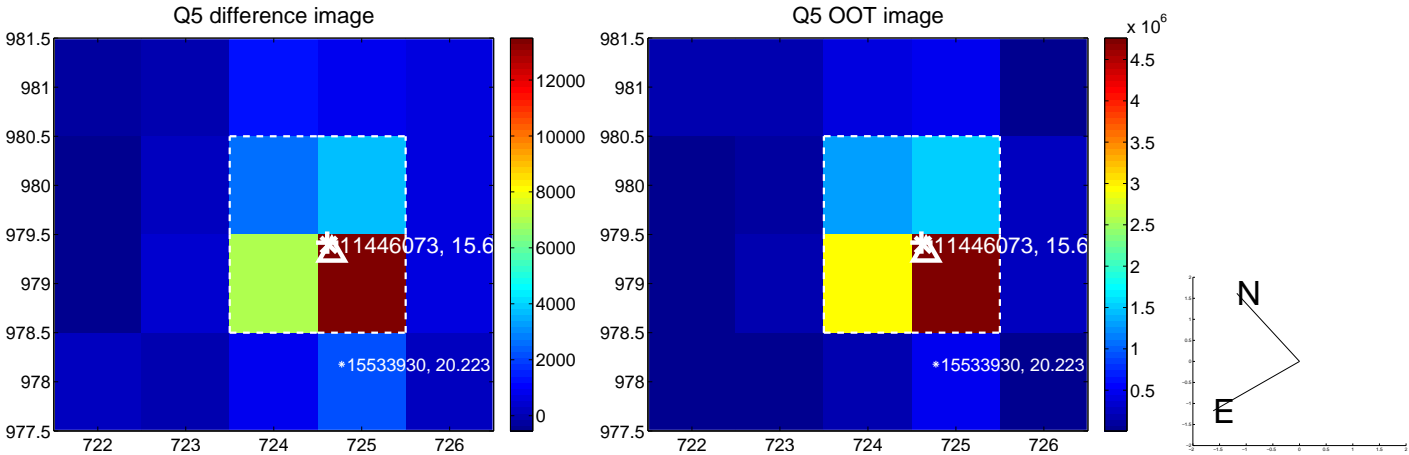


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

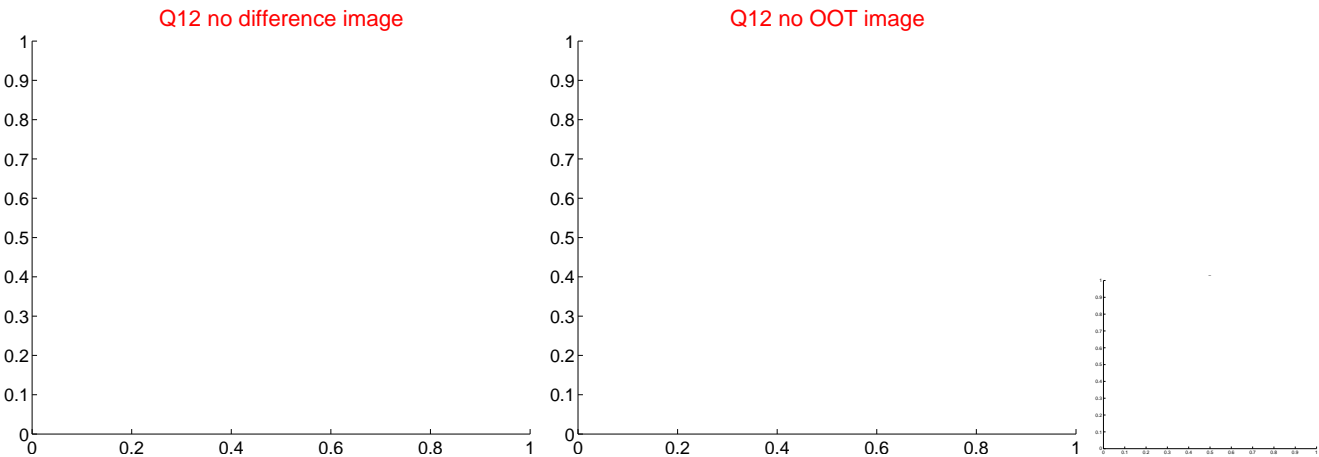
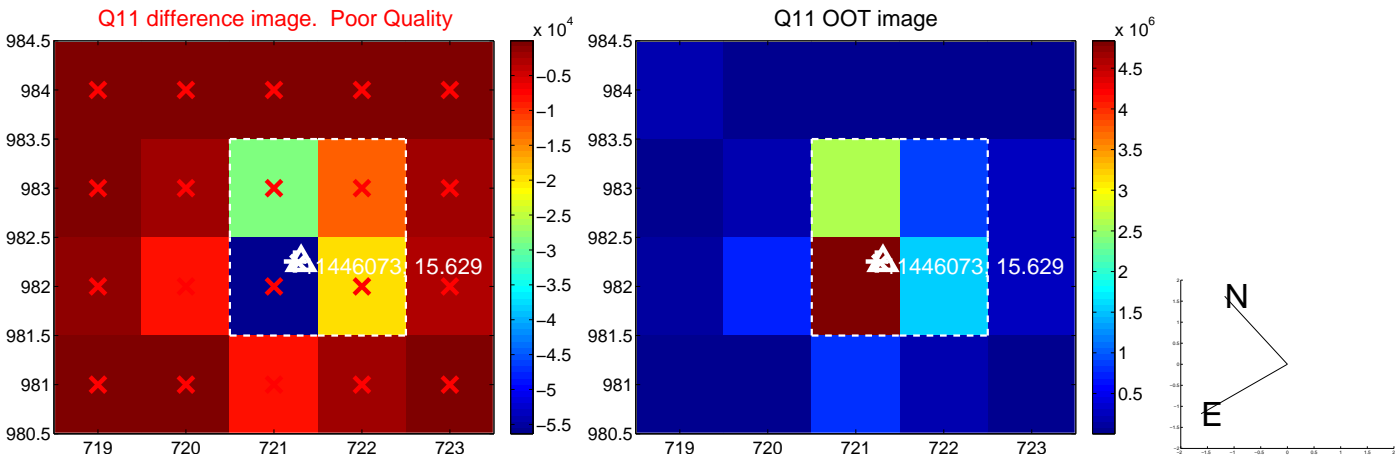
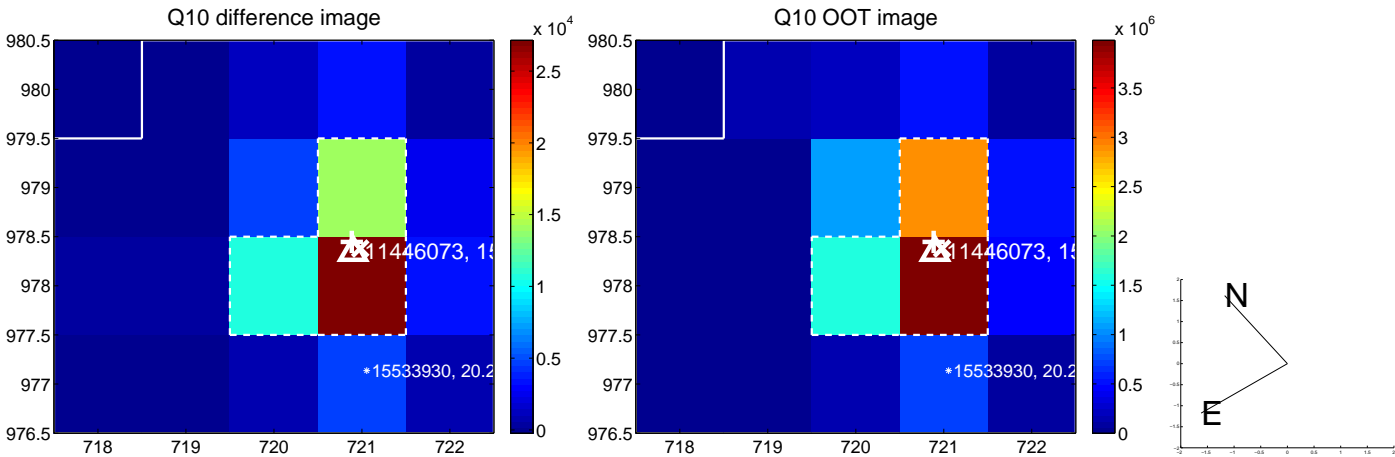
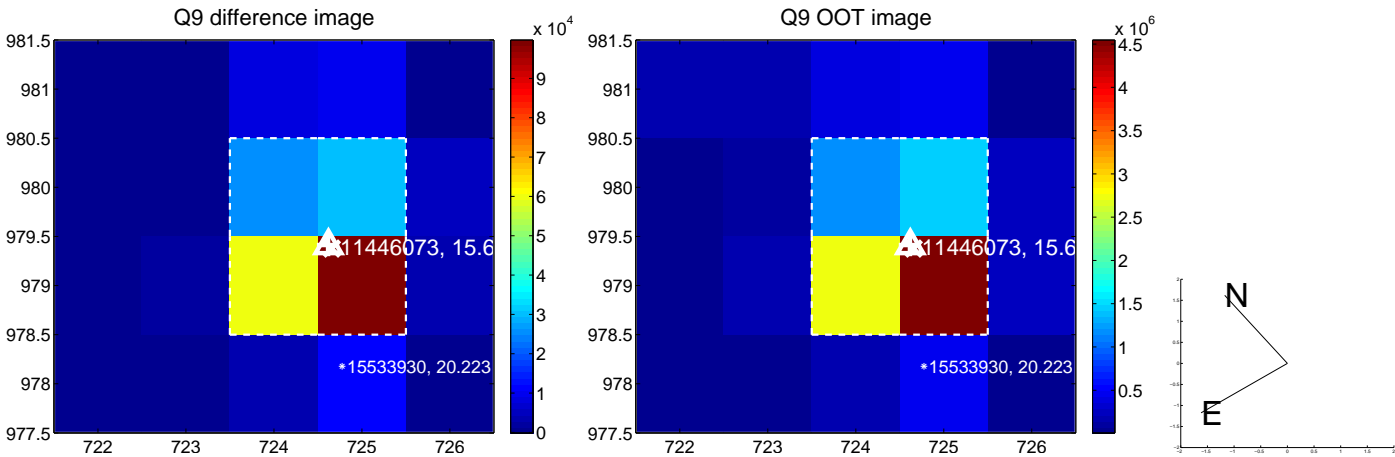
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



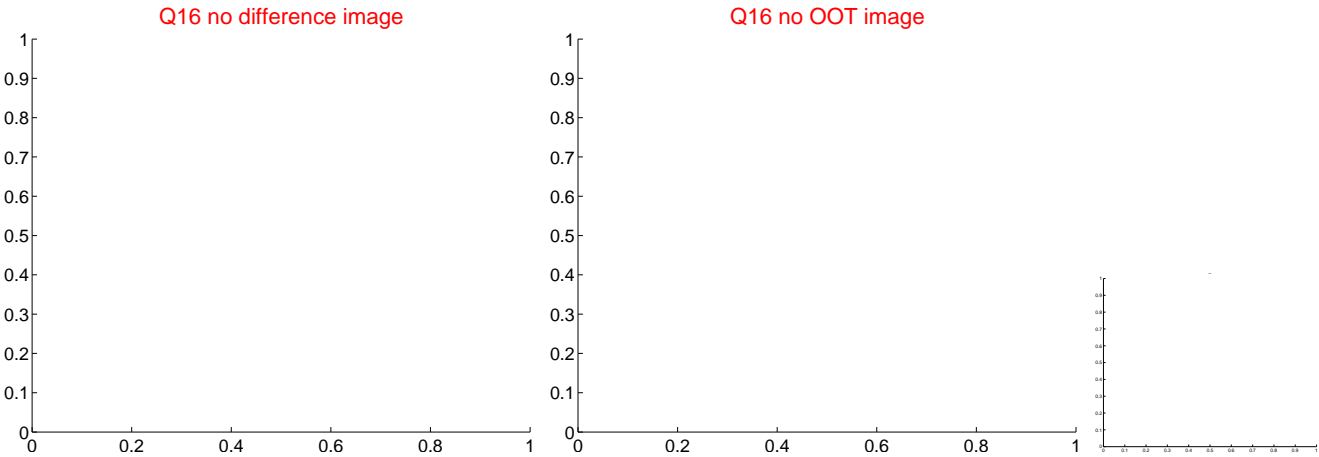
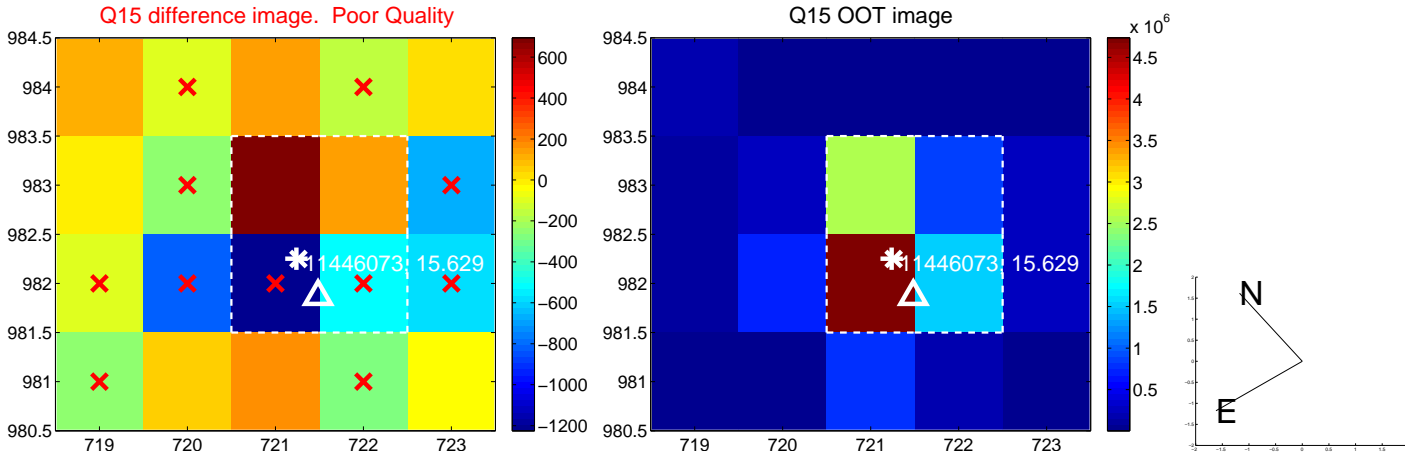
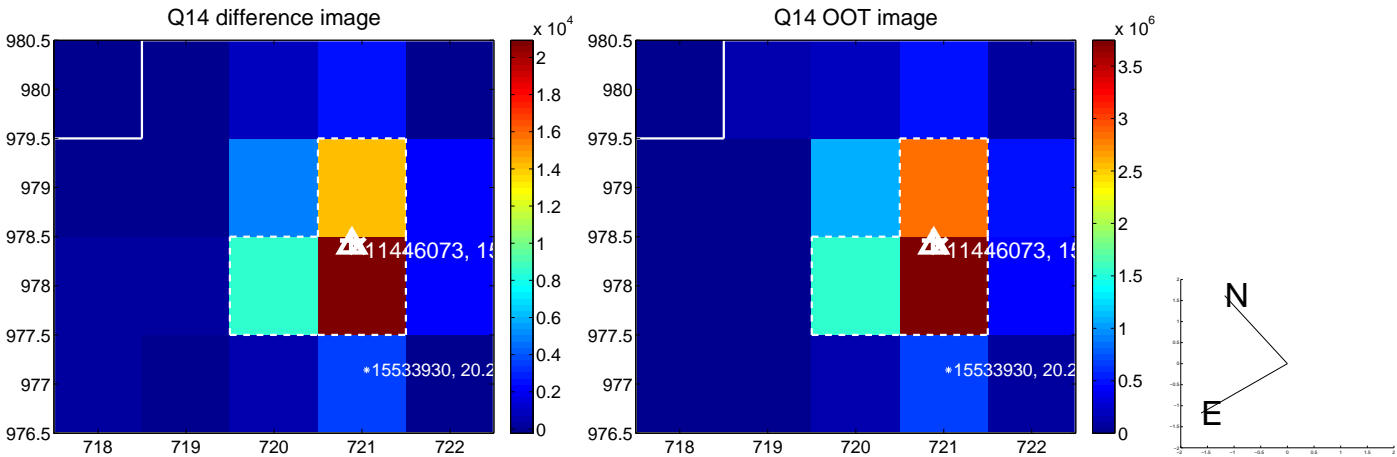
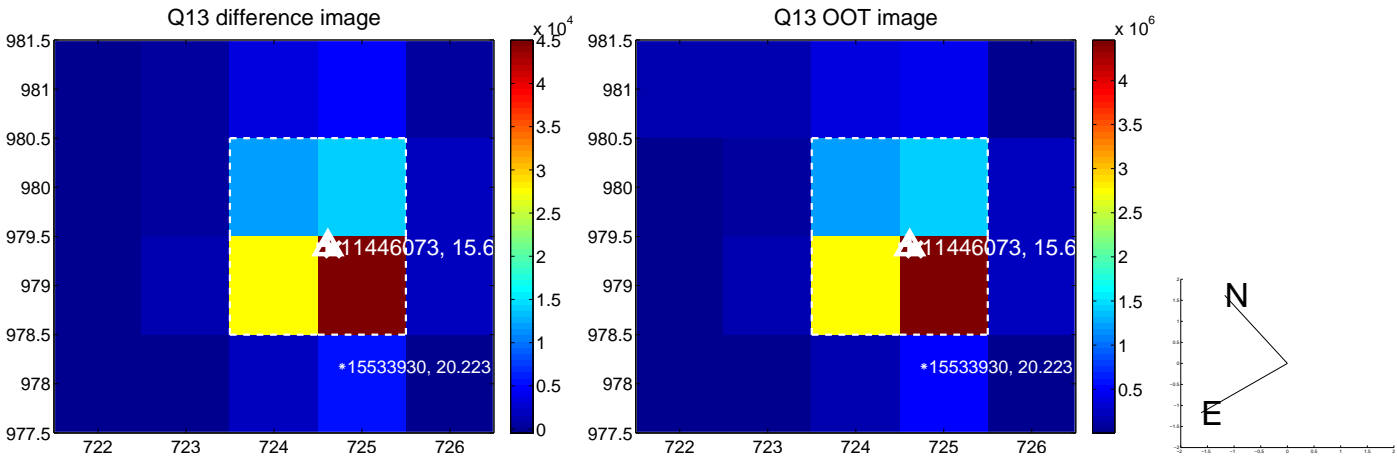
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



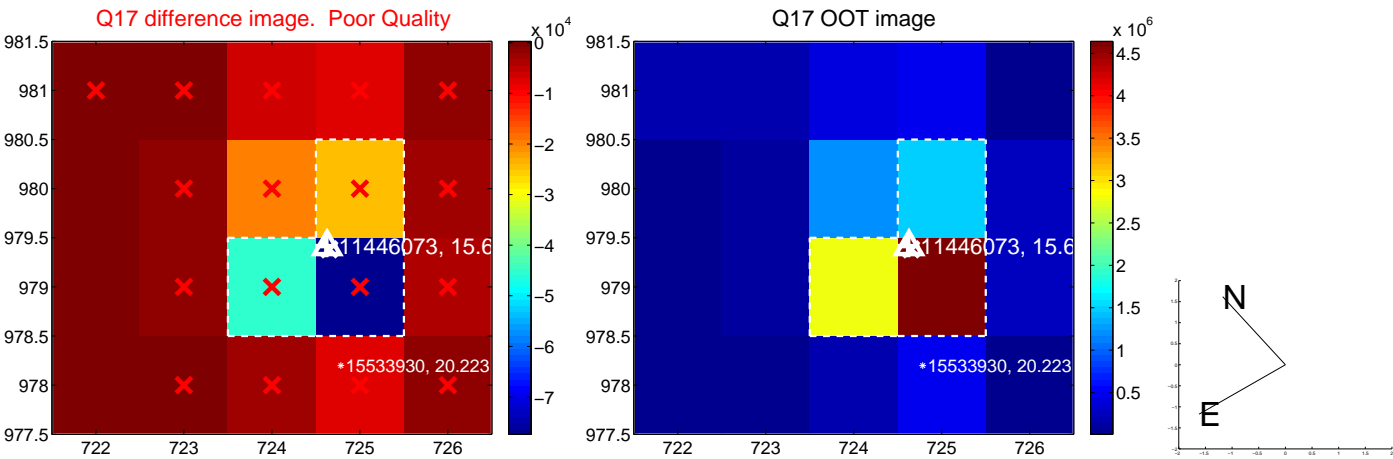
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination

