

KIC 007849619

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})
007849619-01	OBS	No	0.773043	131.965294	183.1	1.946	8.0	14.0	0.49	3801	0.79	264.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007849619-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_KIC_POS

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

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

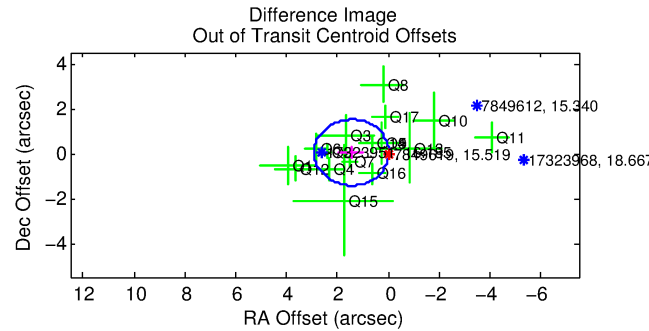
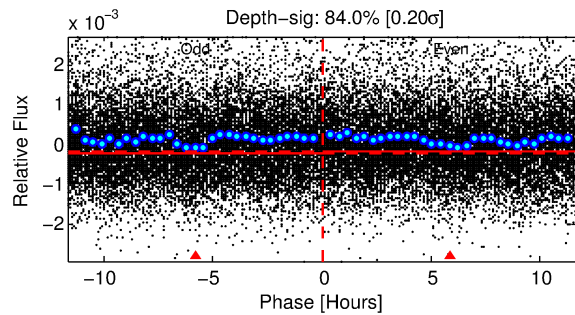
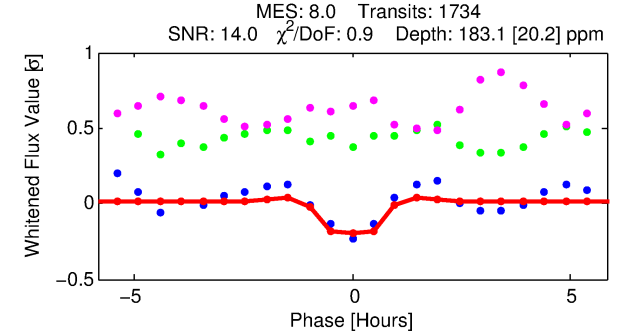
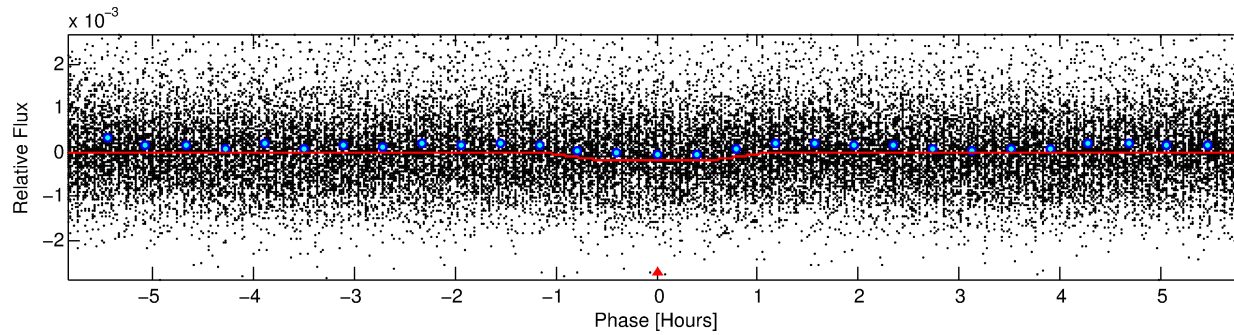
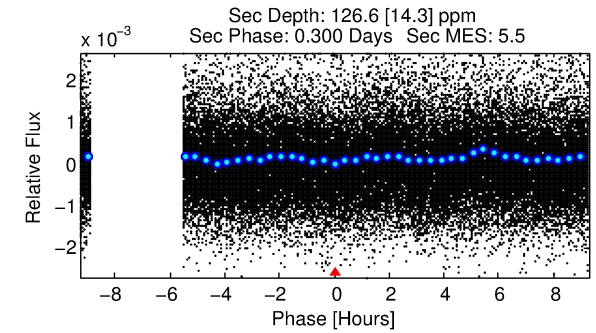
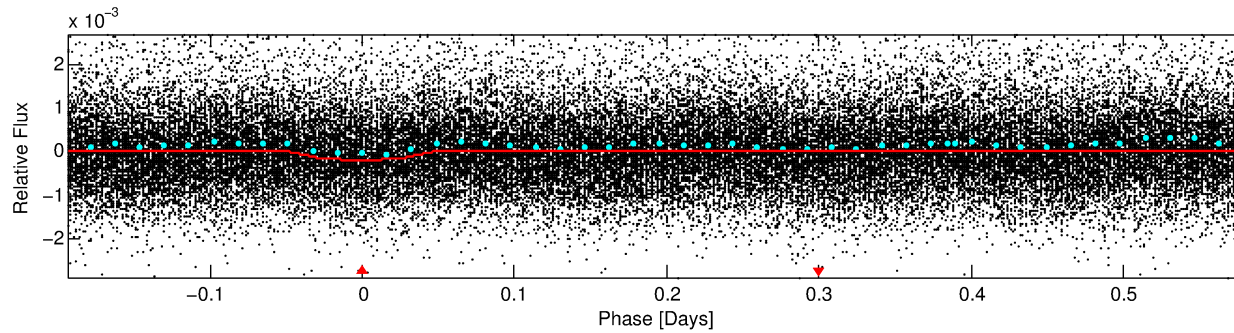
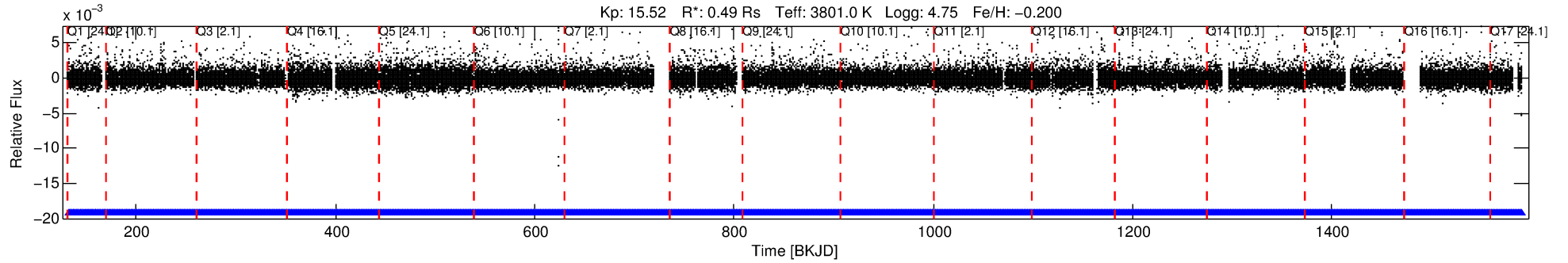
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007849619-01

No Significant Match Found

DV One-Page Summary

KIC: 7849619 Candidate: 1 of 1 Period: 0.773 d



DV Fit Results:

Period = 0.77304 [0.00001] d
Epoch = 131.9653 [0.0016] BKJD
Rp/R* = 0.0147 [0.0068]
a/R* = 1.70 [2.38]
b = 0.90 [0.45]
Seff = 264.76 [35.02]
Teq = 1029 [34] K
Rp = 0.79 [0.37] Re
a = 0.0131 [0.0010] AU
Ag = 19.03 [17.82] [1.01σ]
Teffp = 3321 [776] K [2.95σ]

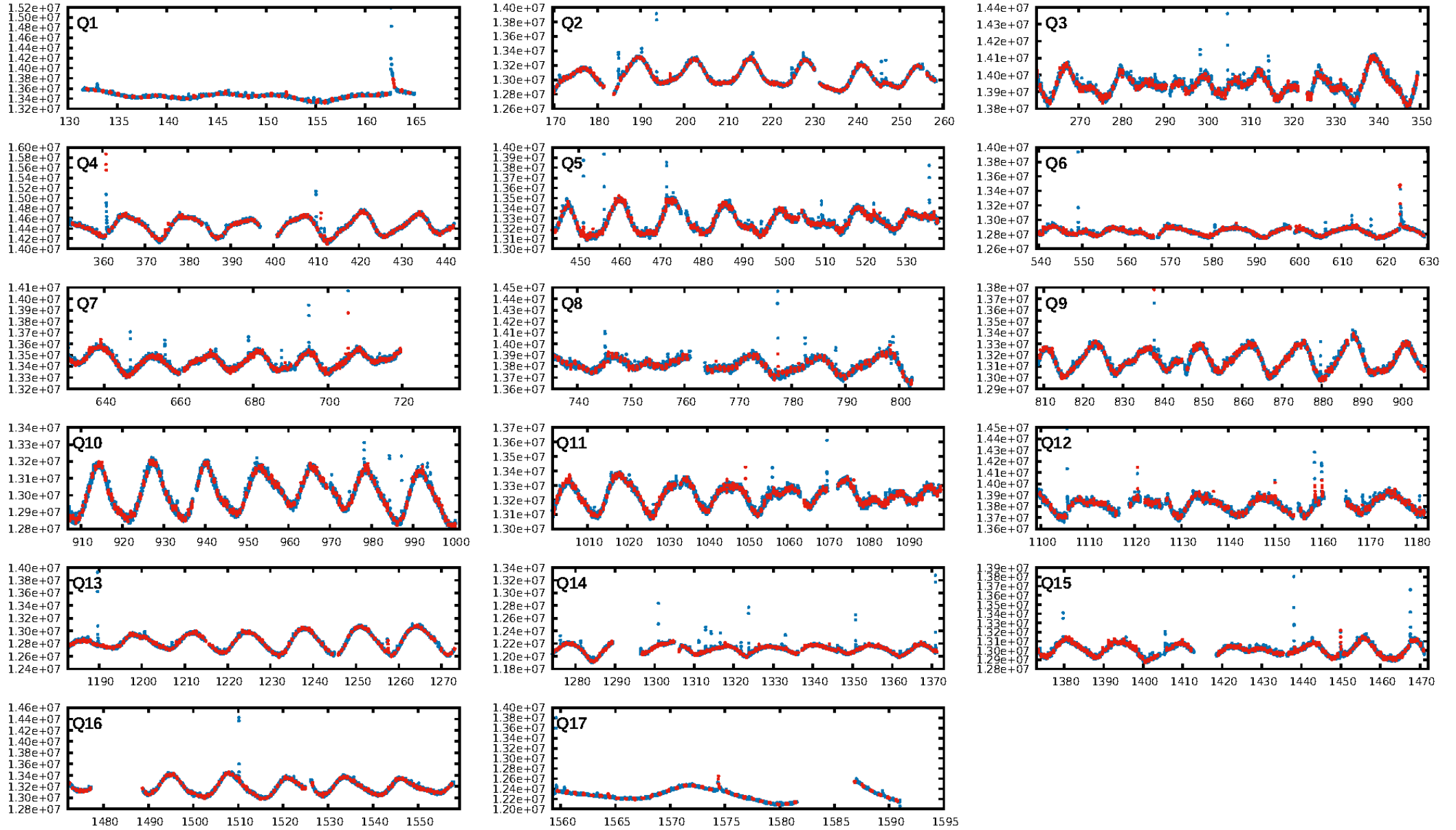
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.16e-15
RollingBand-fgt: 1.00 [1656/1656]
GhostDiagnostic-chr: 0.6005
Centroid-sig: 0.1%
Centroid-so: 1.045 arcsec [1.65σ]
OotOffset-rm: 1.450 arcsec [2.96σ]
KicOffset-rm: 1.255 arcsec [2.85σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.65 [11/17]
DiffImageOverlap-fno: 1.00 [17/17]

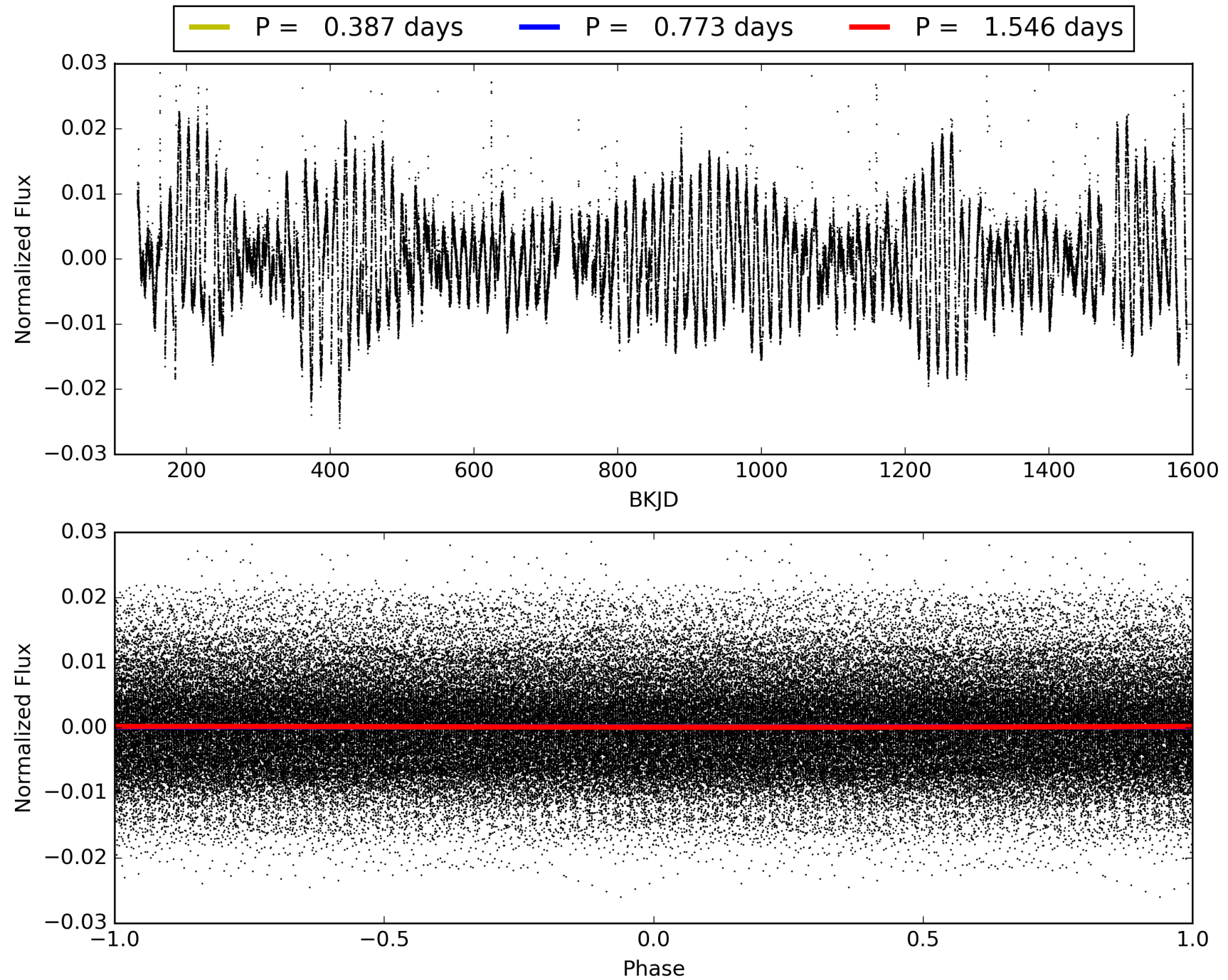
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 02:10:29 Z

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

TCE 007849619-01, PDC Light Curves

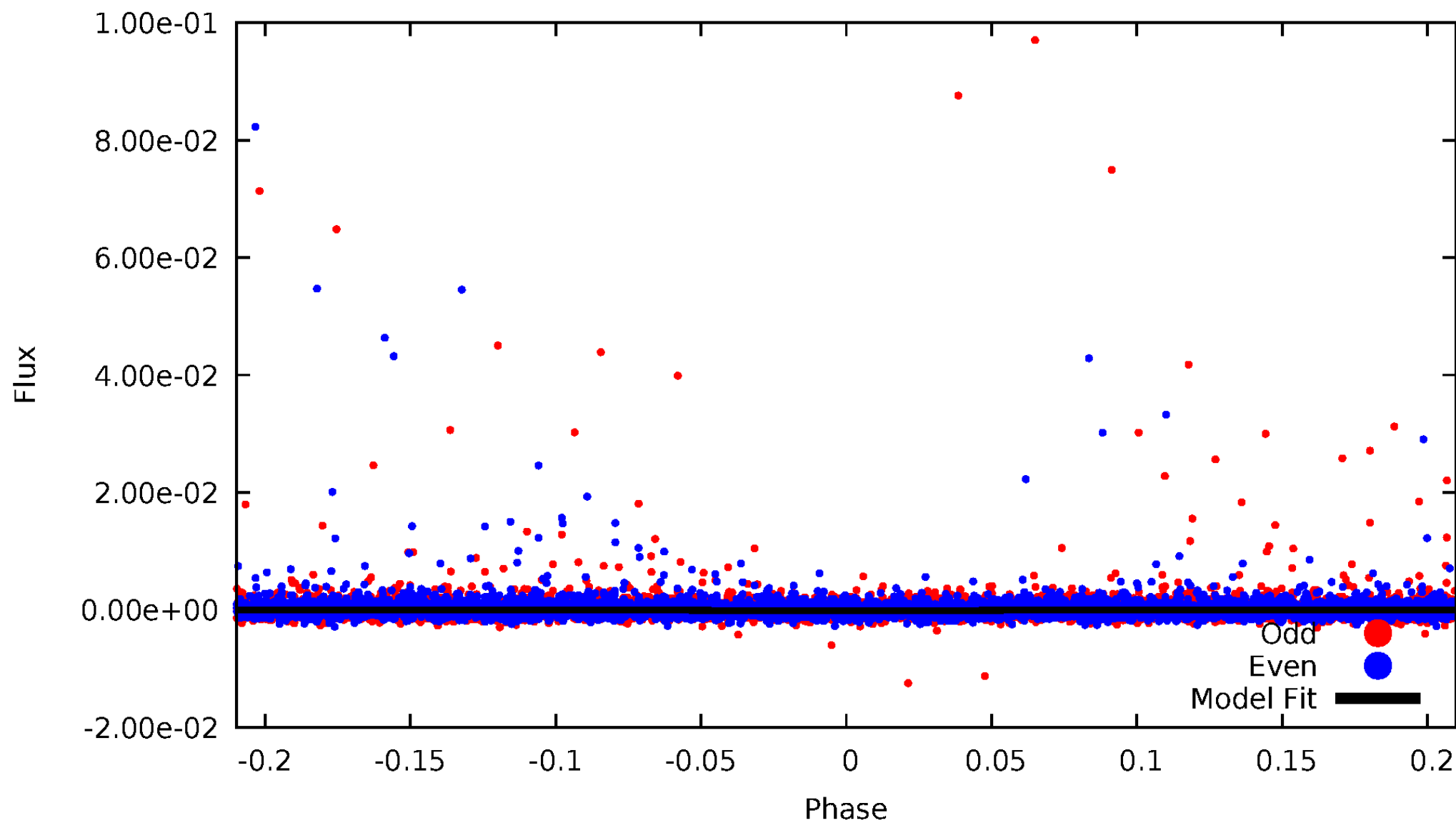


TCE 007849619-01



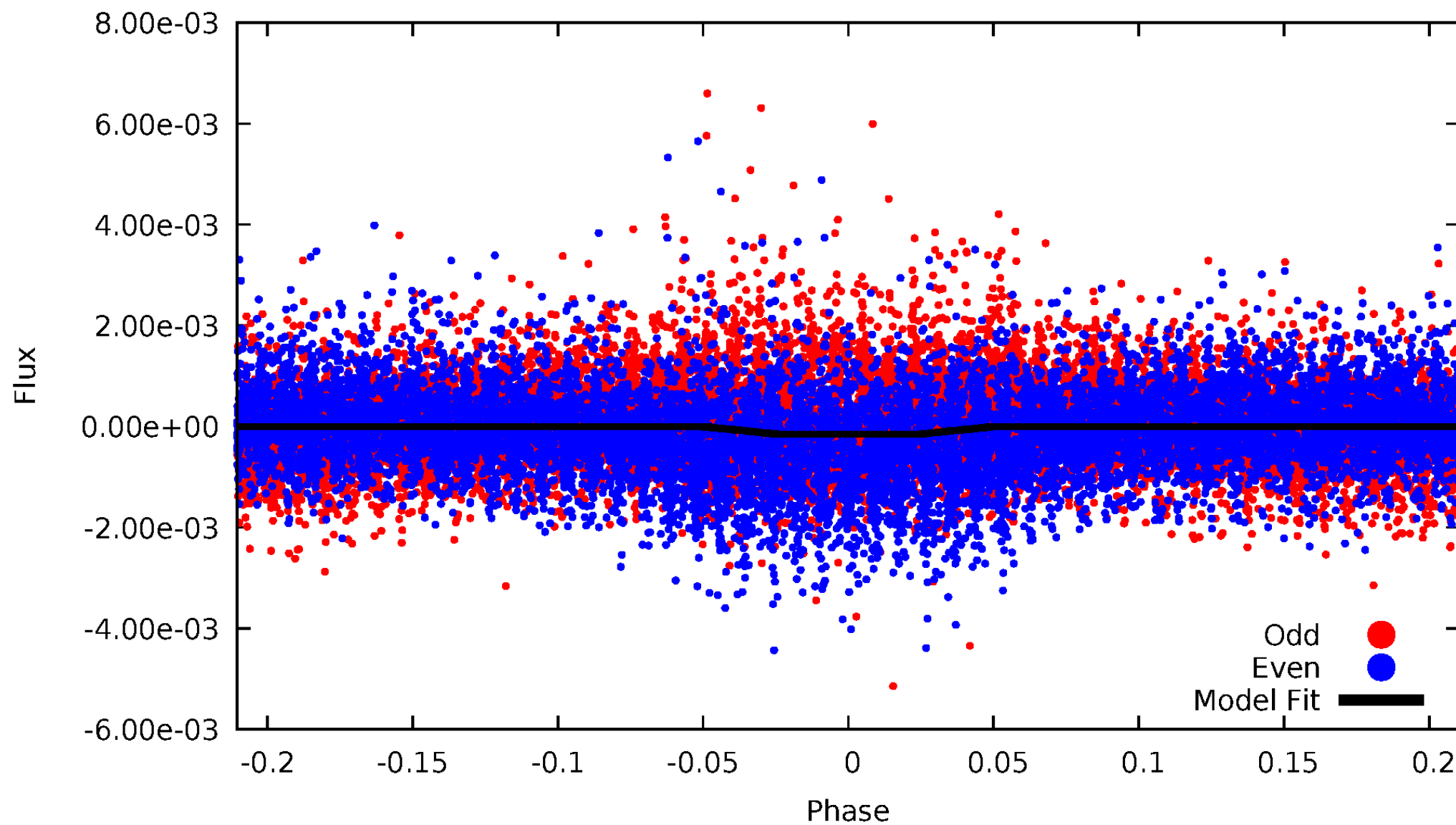
DV Odd/Even

TCE 007849619-01



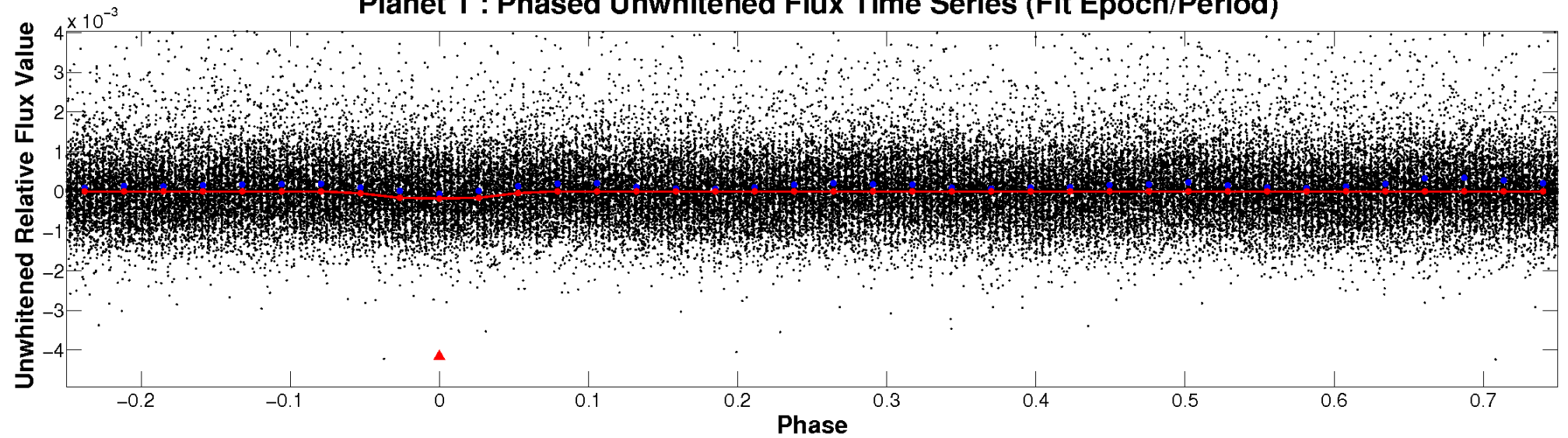
ALT Odd/Even

TCE 007849619-01

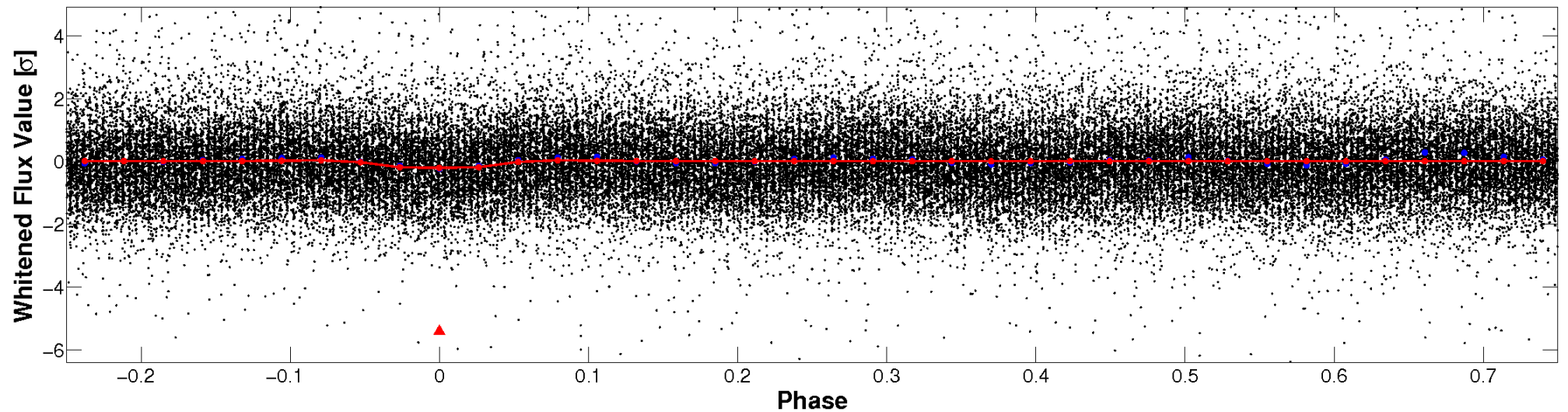


Non-Whitened Vs. Whitened Light Curve

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

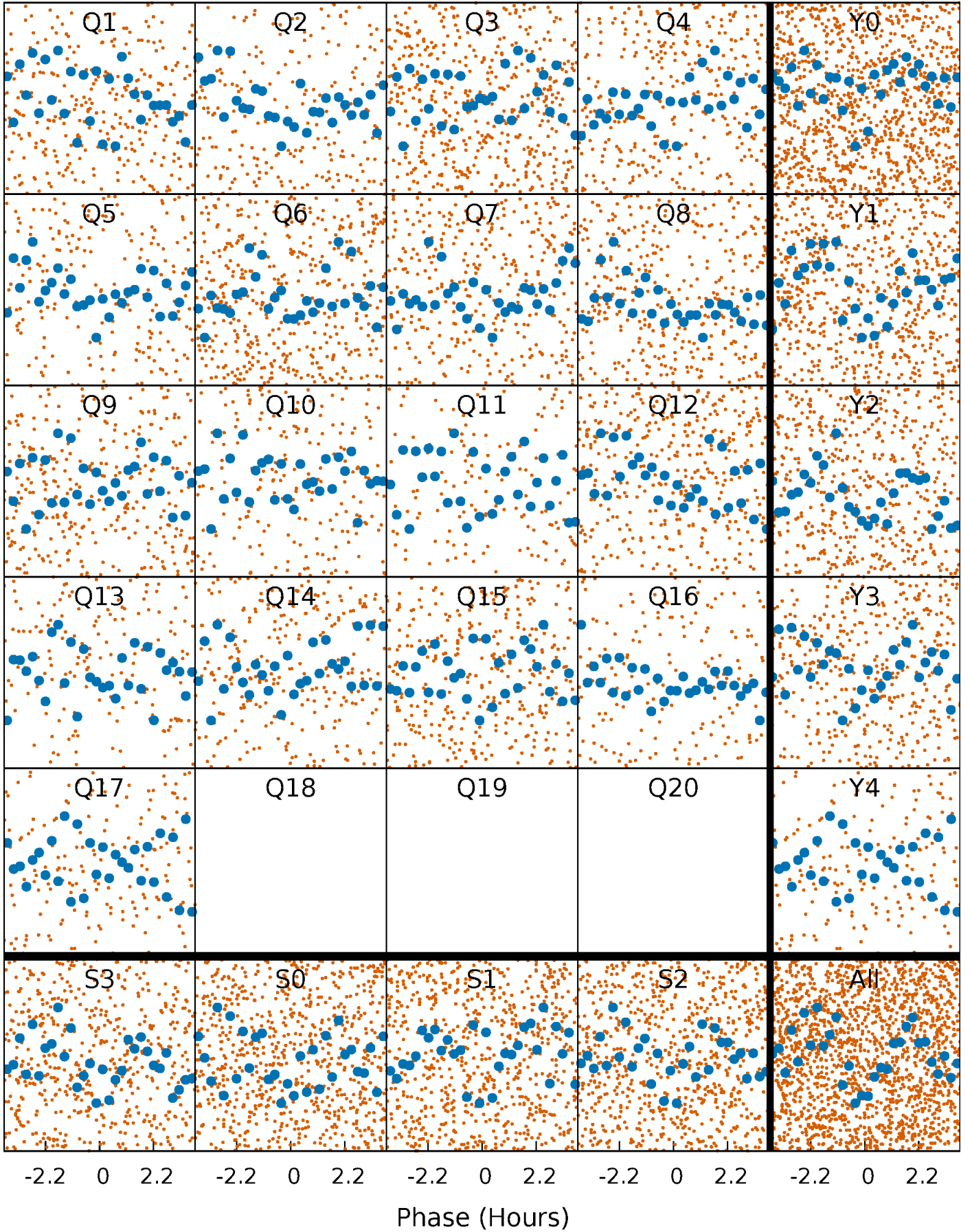


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



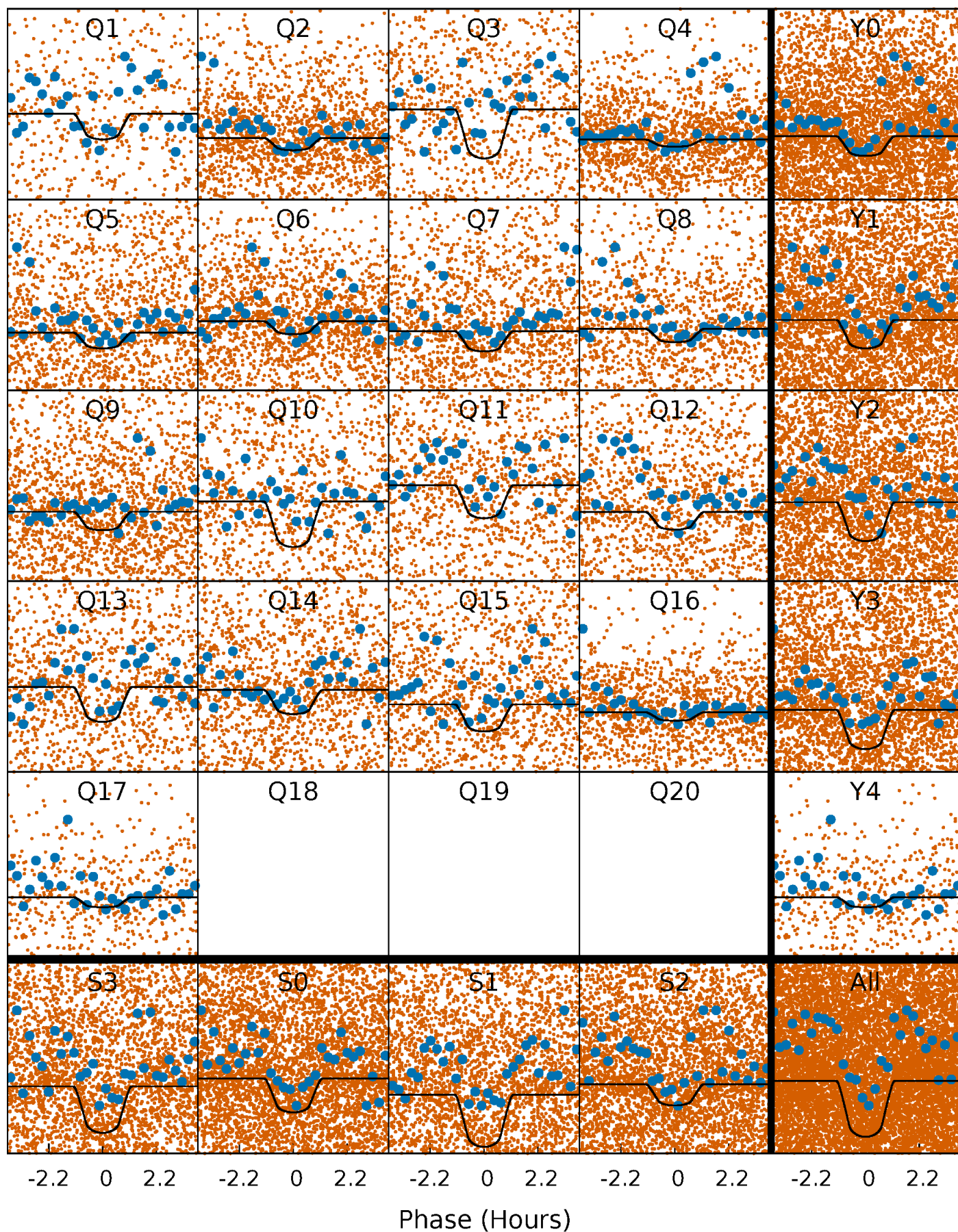
PDC Quarter-Phased Transit Curves

TCE 007849619-01 P= 0.773043 Days $T_0=131.965294$ (BKJD)



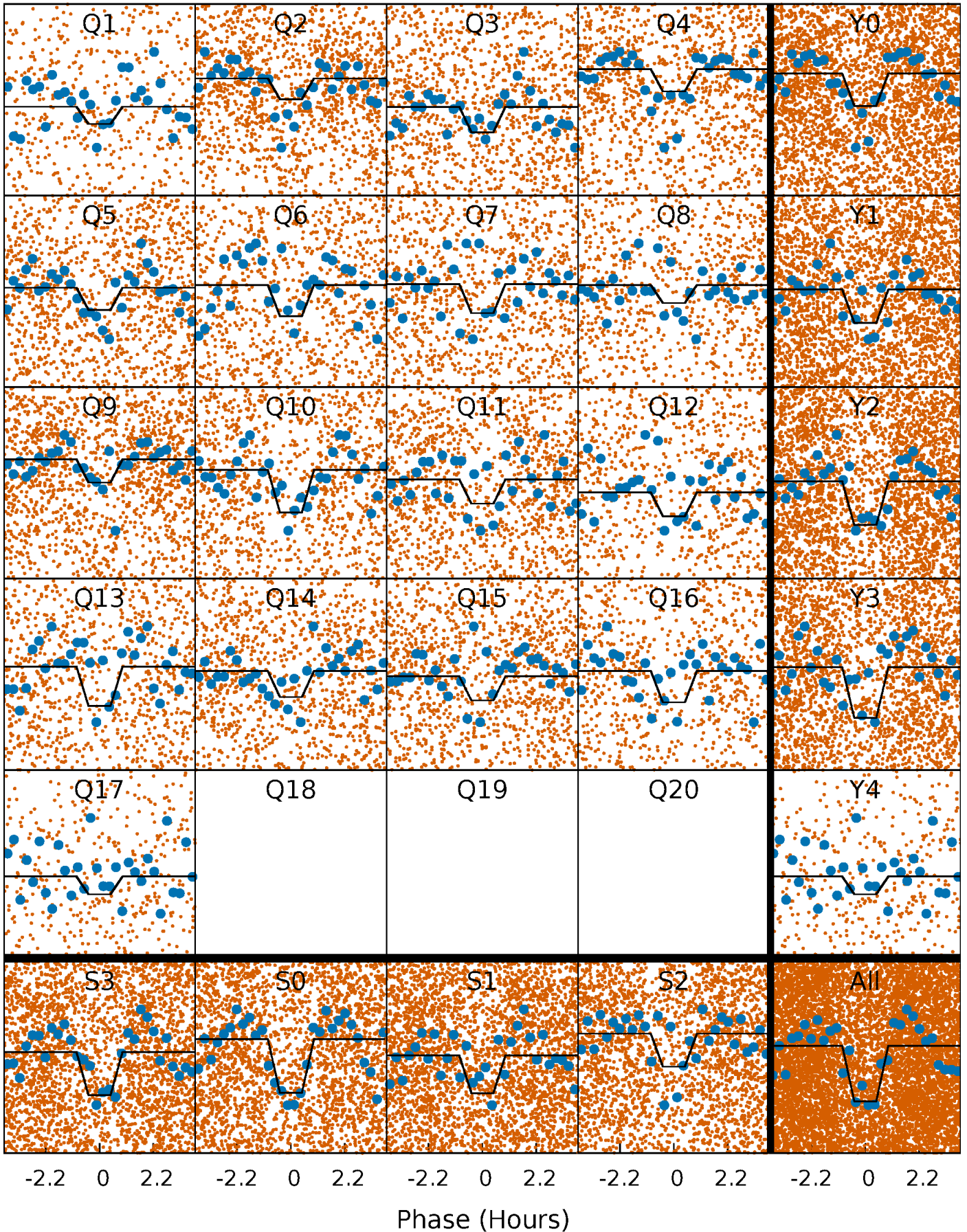
DV Quarter-Phased Transit Curves

TCE 007849619-01 P= 0.773043 Days $T_0=131.965294$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

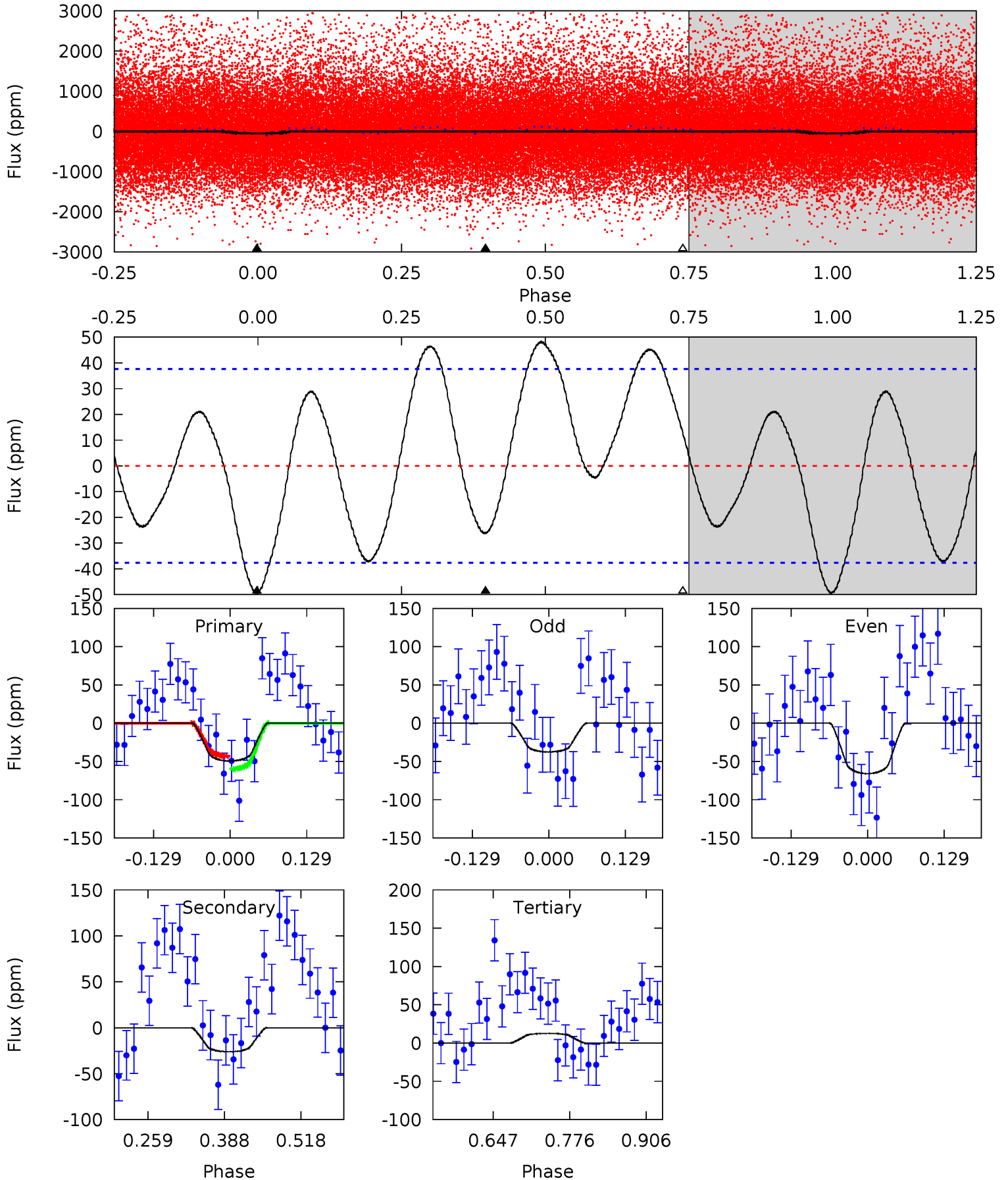
TCE 007849619-01 P= 0.773044 Days $T_0=131.963288$ (BKJD)



DV Model-Shift Uniqueness Test

007849619-01, P = 0.773043 Days, E = 131.192251 Days

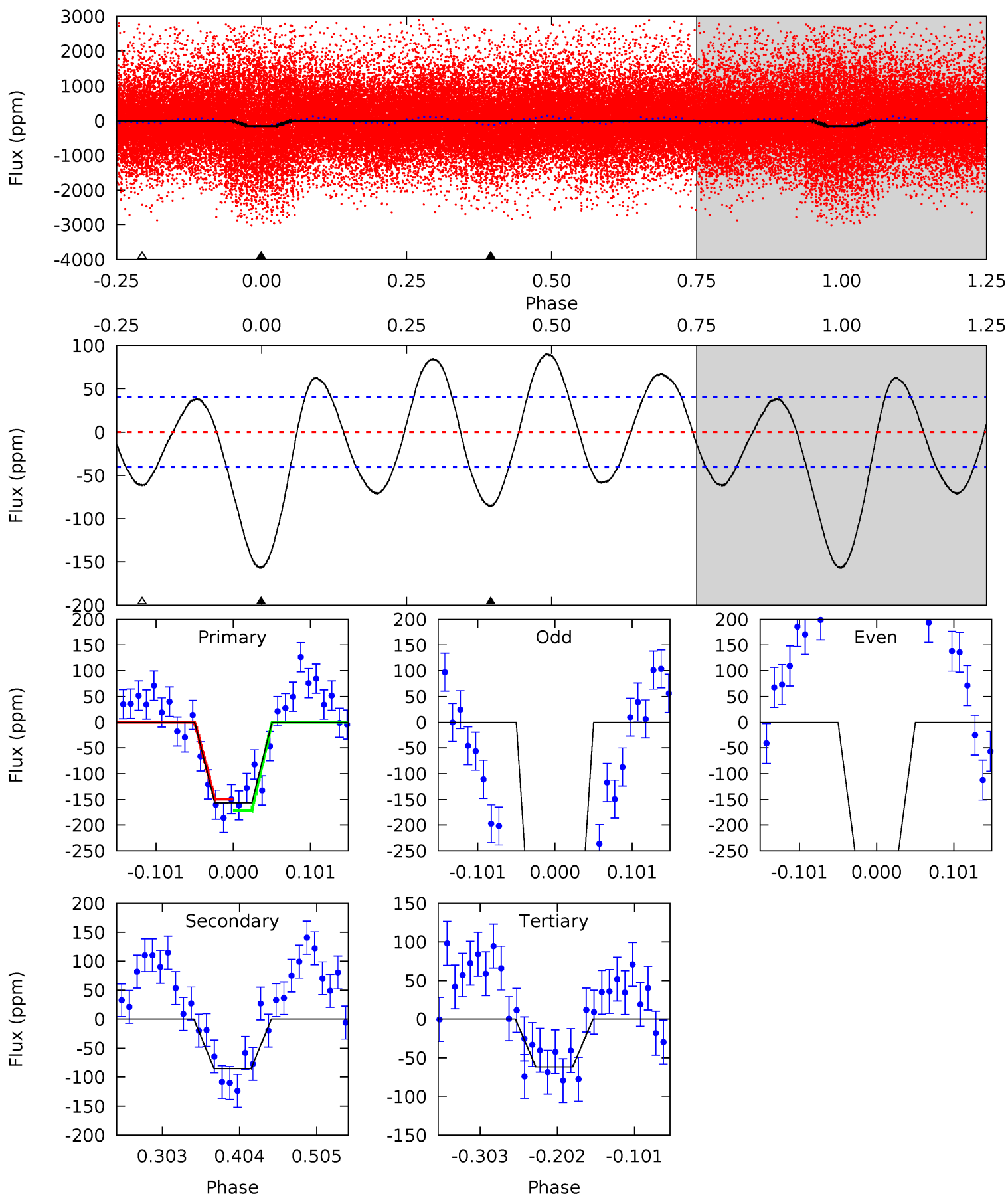
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.91	3.14	-1.51	0	4.51	1.52	2.77	7.42	5.91	4.65	3.14	1.71	0.16	0.49	1.03



Alt Model-Shift Uniqueness Test

007849619-01, P = 0.773044 Days, E = 131.190244 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.7	9.62	6.94	0	4.56	1.64	5.29	10.7	17.7	2.69	9.62	16.7	0.91	0.37	1.23



Stellar Parameters For KIC 007849619

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	3801^{+68}_{-76}	$4.752^{+0.054}_{-0.031}$	$-0.200^{+0.200}_{-0.200}$	$0.492^{+0.040}_{-0.048}$	$0.499^{+0.041}_{-0.045}$	$5.898^{+1.592}_{-0.806}$
	+2%/-2%	+1%/-1%	+100%/-100%	+8%/-10%	+8%/-9%	+27%/-14%
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 007849619-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-26 ± 8	$0.81^{+0.34}_{-0.35}$	1433^{+37}_{-42}	2704^{+495}_{-288}	$3.647^{+7.921}_{-1.988}$
Alt.	-85 ± 9	$0.67^{+0.35}_{-0.33}$	1429^{+34}_{-40}	3420^{+889}_{-422}	18^{+48}_{-10}

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 $A_{obs} \gg 1.0$

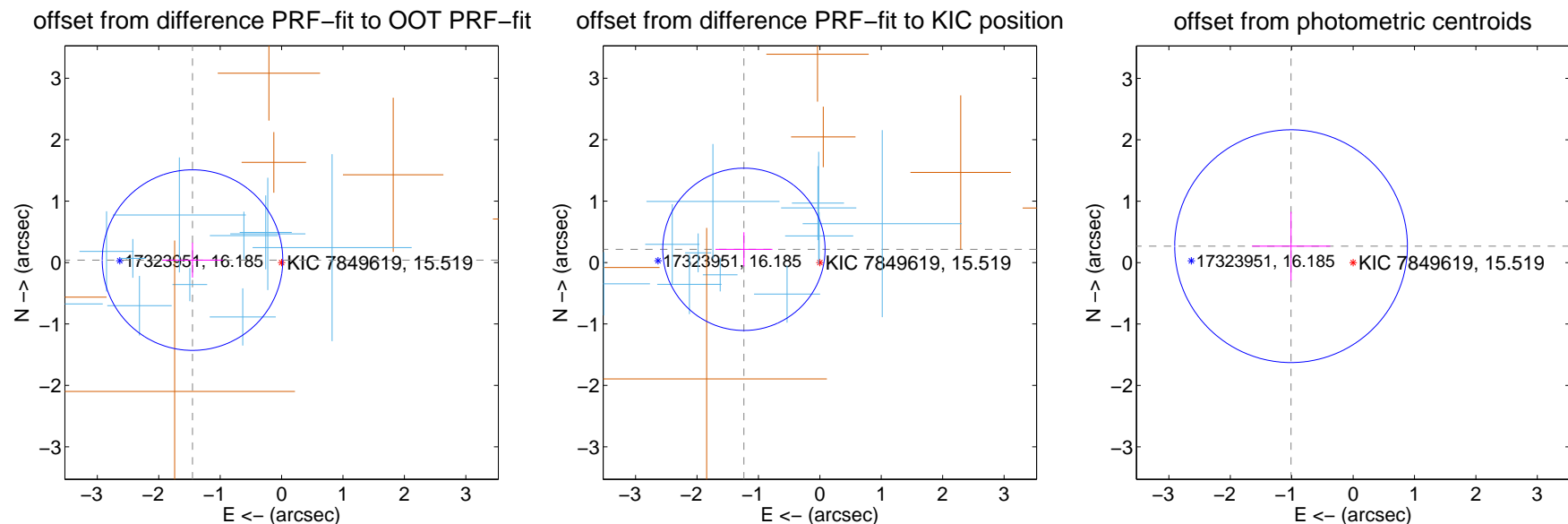
DV Centroid Data

Supplemental centroid analysis for 007849619-01. Kepler magnitude: 15.52. Transit SNR 13.97

There are 11 quarters with good PRF difference image offsets

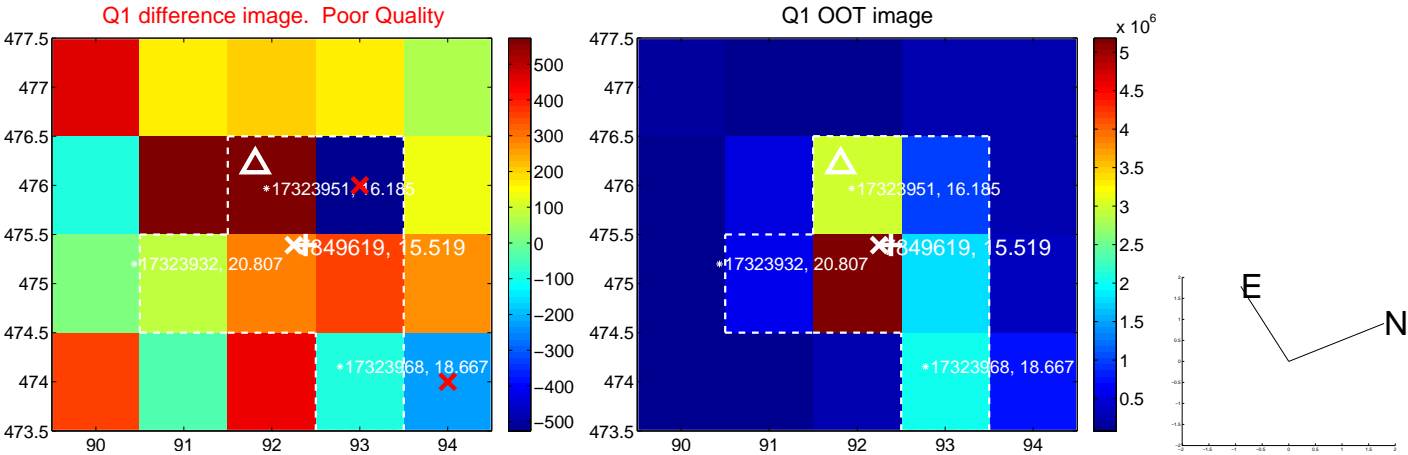
The direct PRF centroid is offset from the target star catalog position by about 0.45 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.450 ± 0.490	2.96	1.450 ± 0.494	0.040 ± 0.283
PRF-fit source offset from KIC position	1.255 ± 0.440	2.85	1.236 ± 0.463	0.215 ± 0.278
photometric centroid source offset	1.05 ± 0.63	1.65	1.01 ± 0.64	0.27 ± 0.56

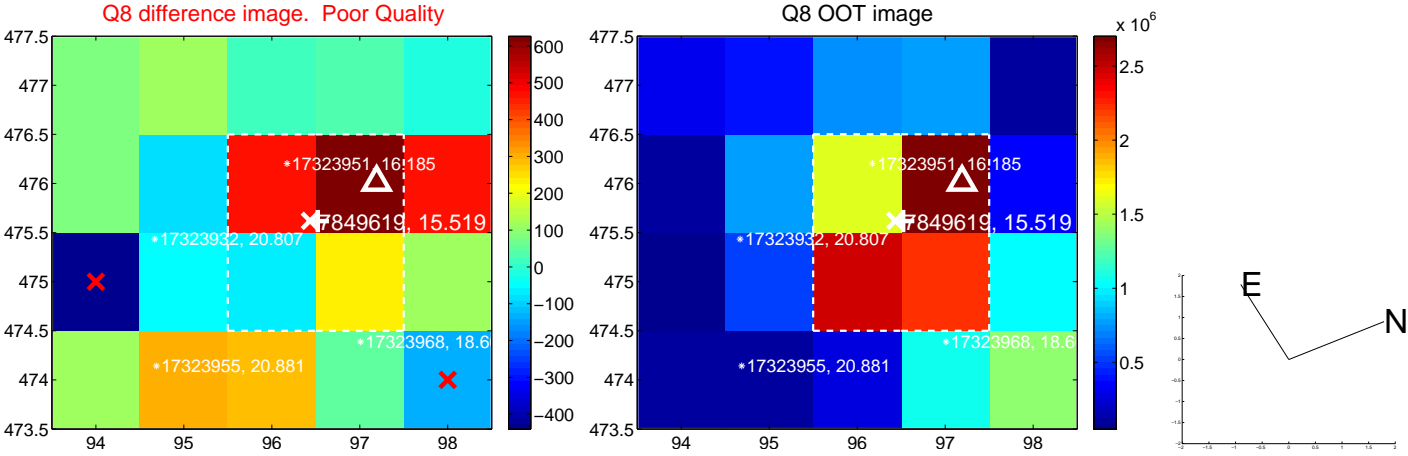
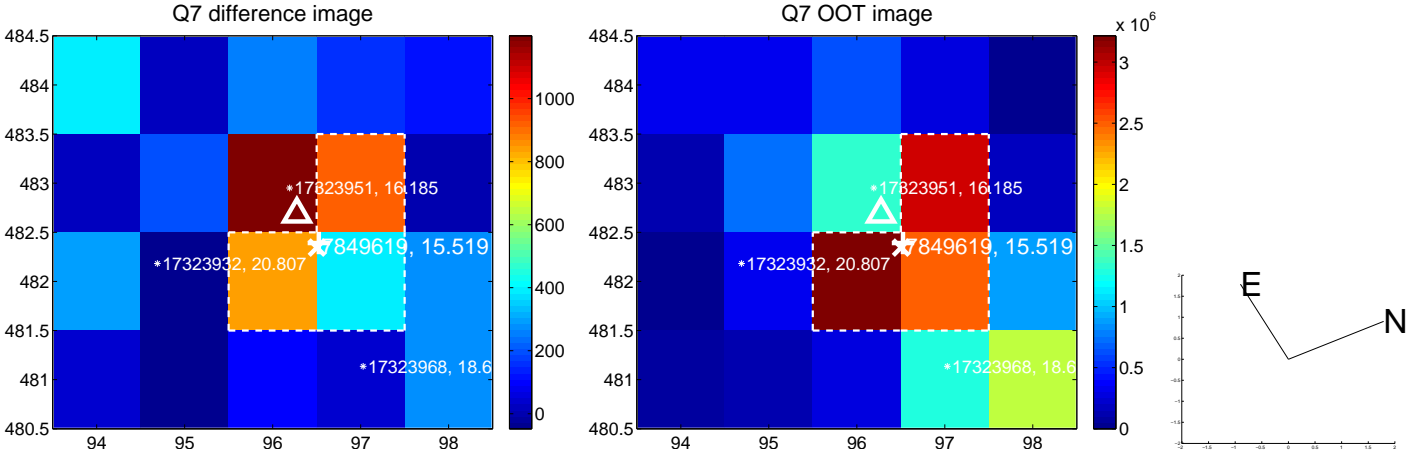
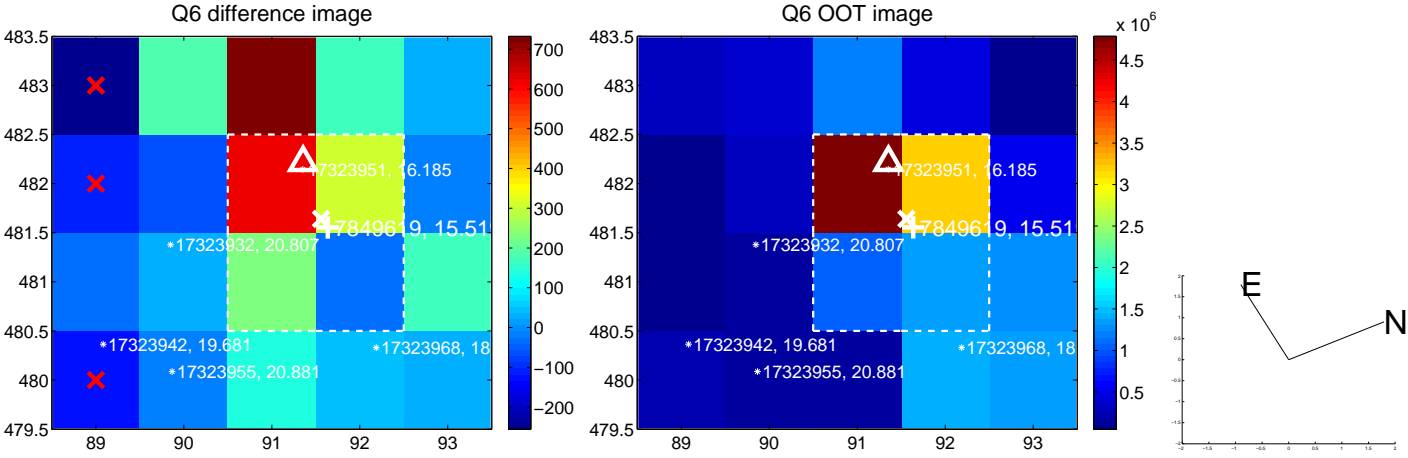
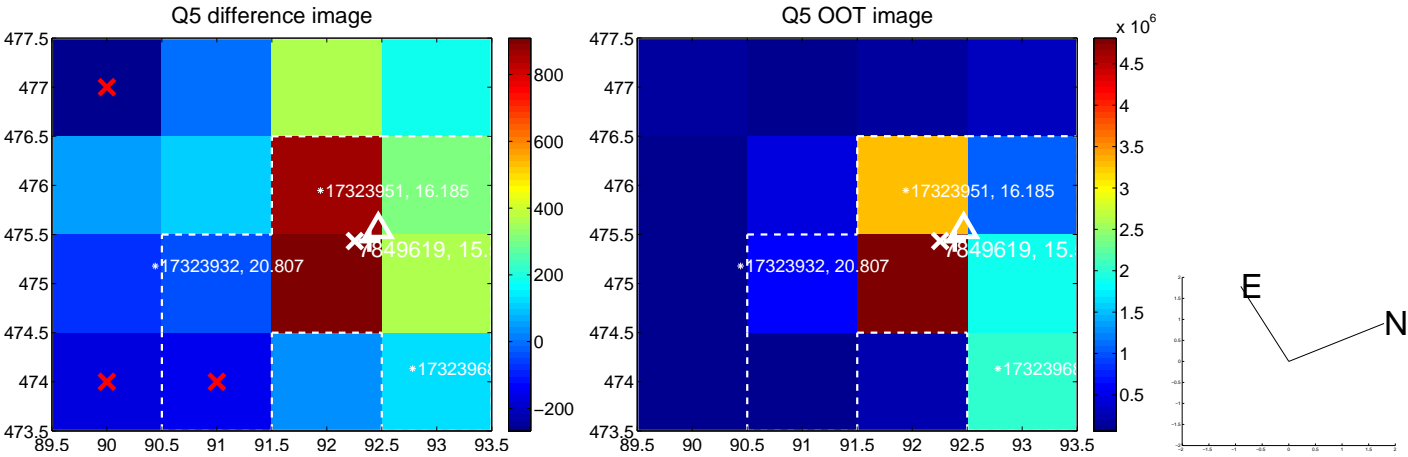


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

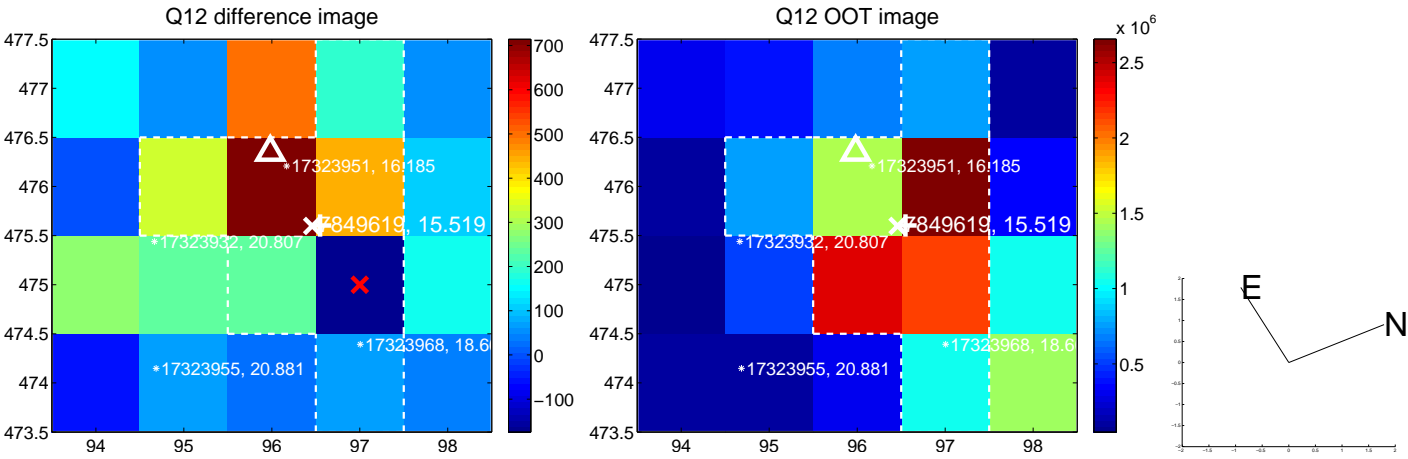
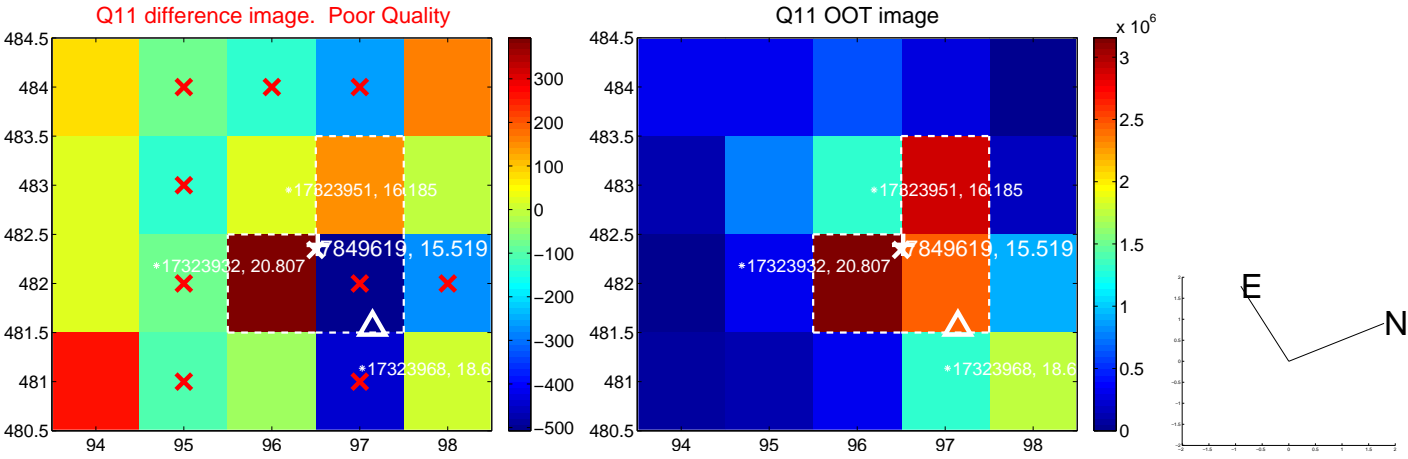
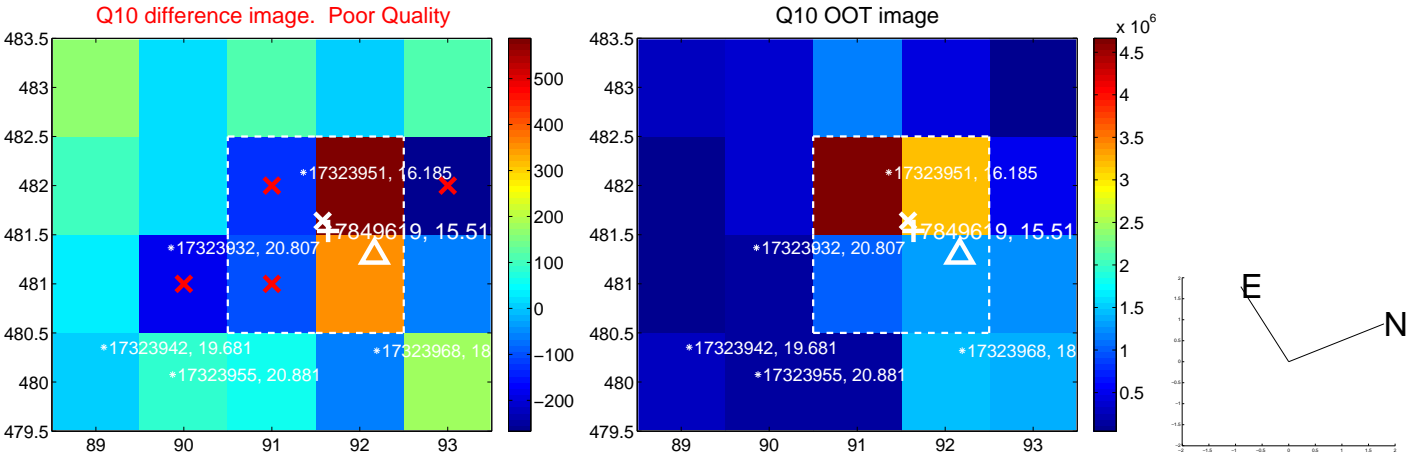
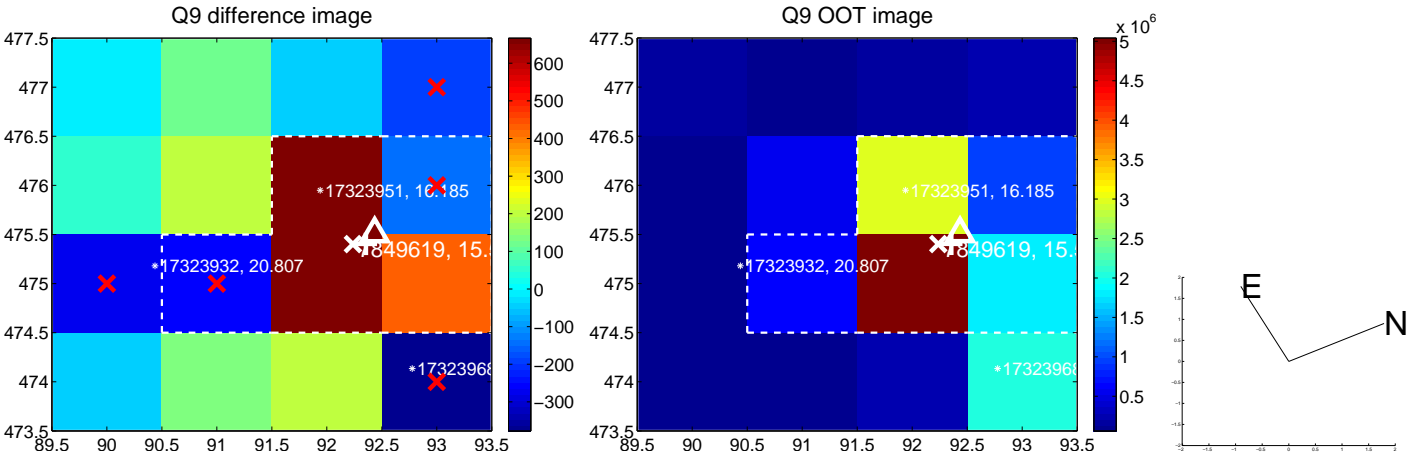
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



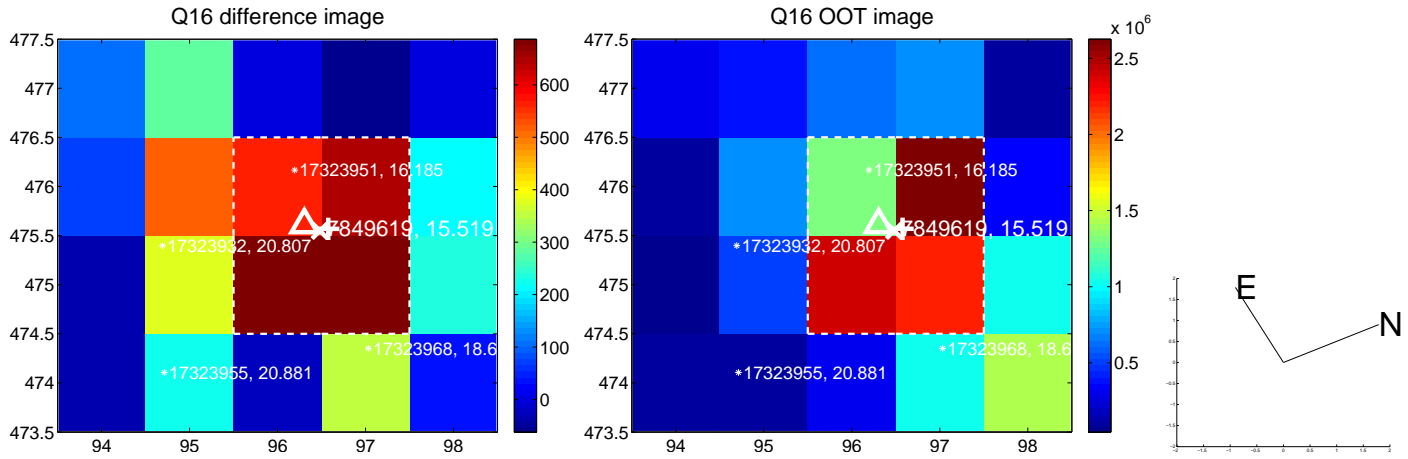
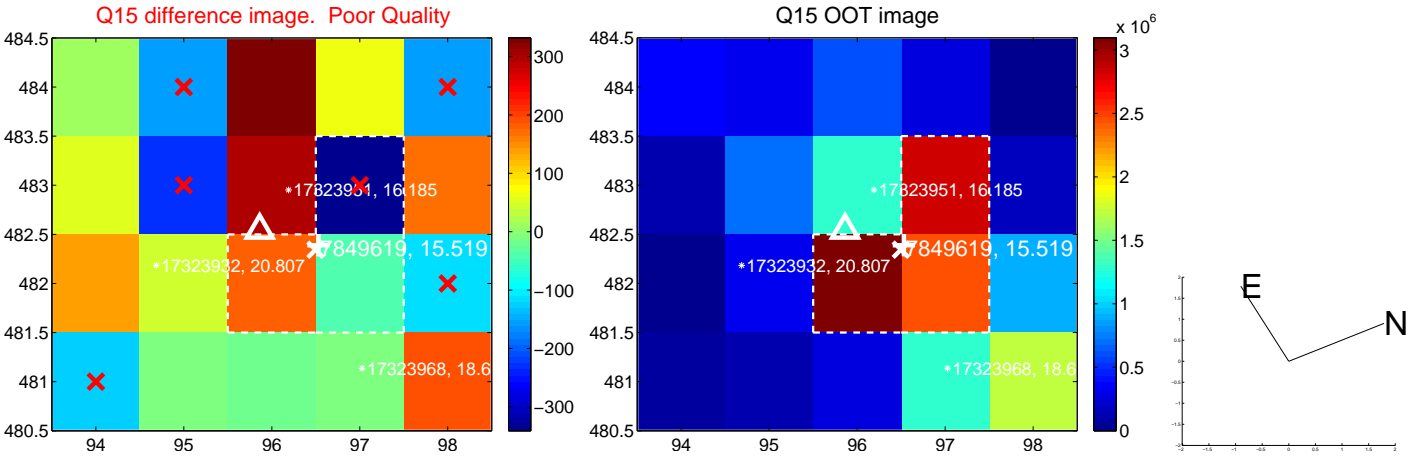
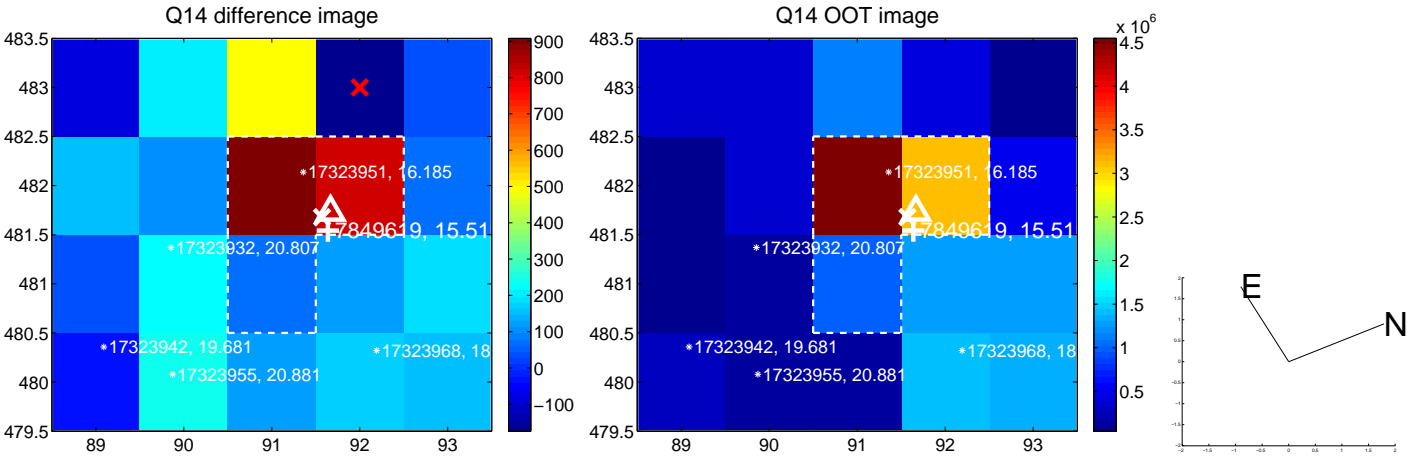
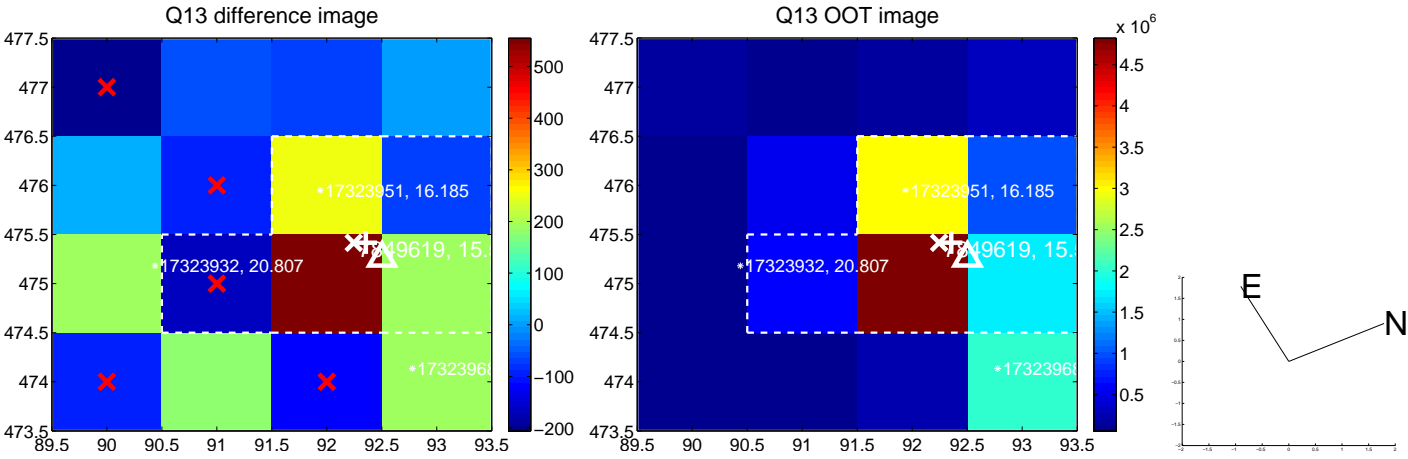
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



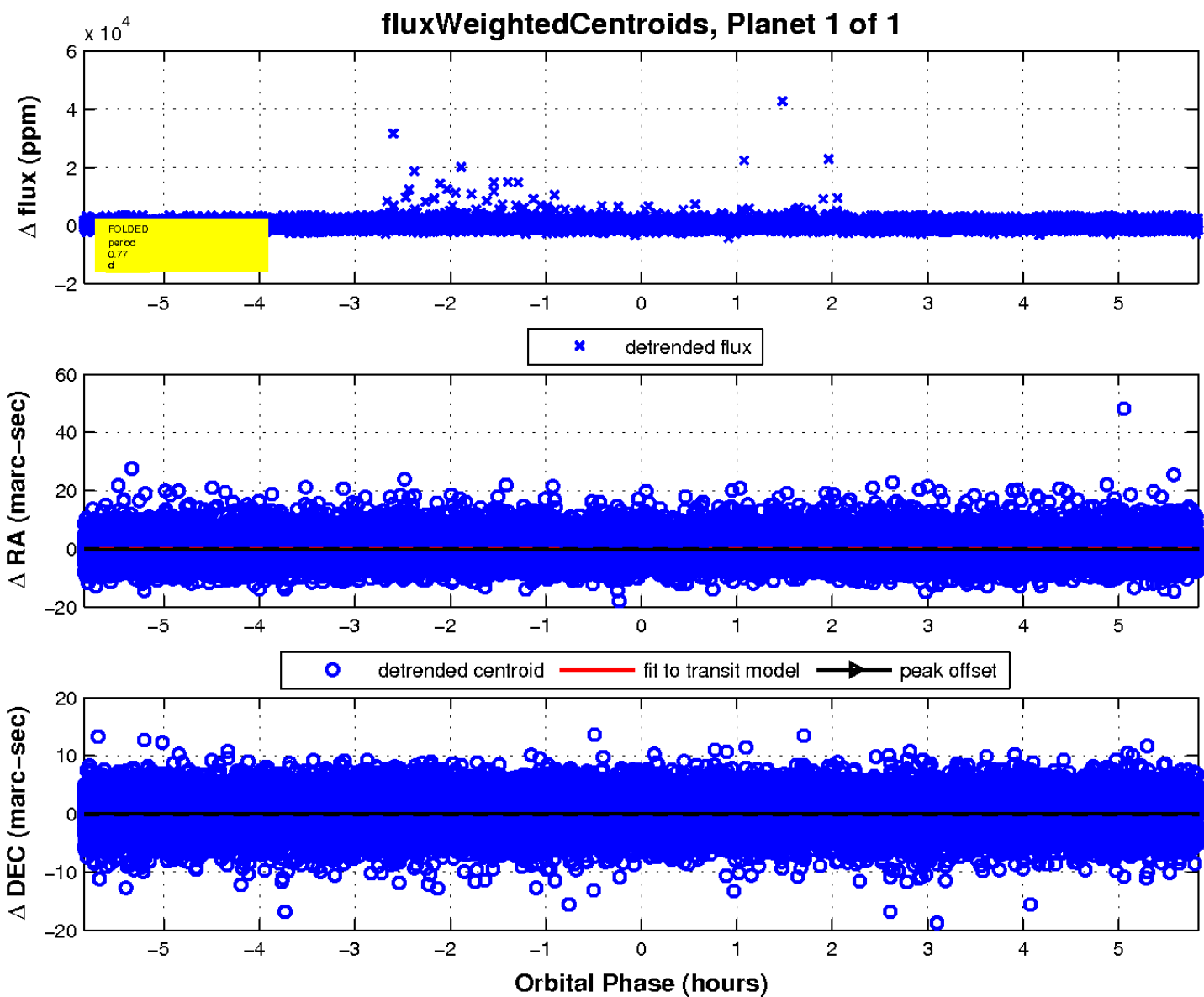
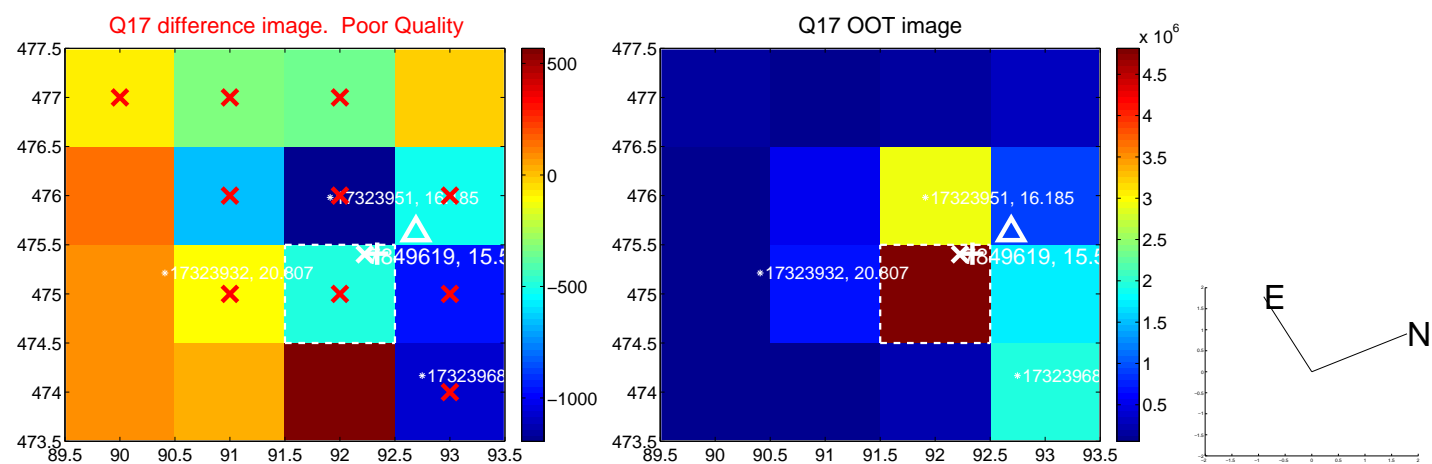
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

