

KIC 005106292

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})
005106292-01	OBS	No	4.421619	132.684023	0.0	36.837	8.1	0.0	1.39	7247	0.00	1483.27

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005106292-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT

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

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

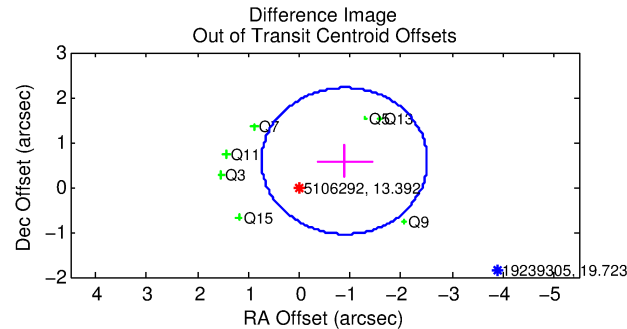
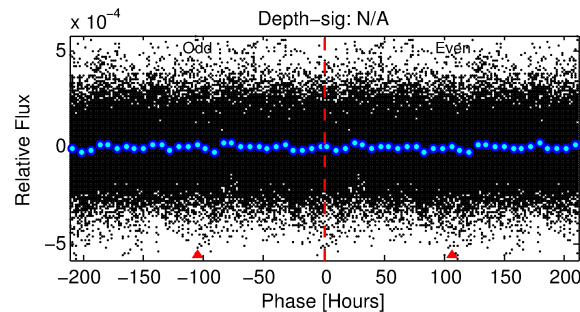
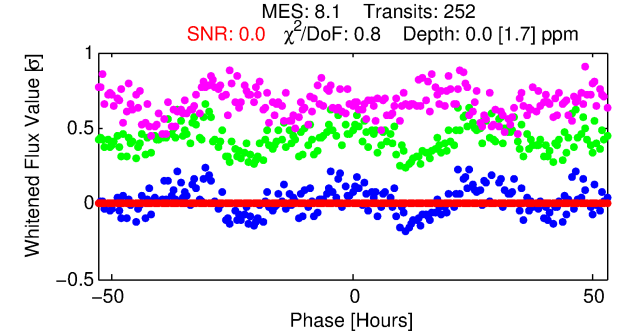
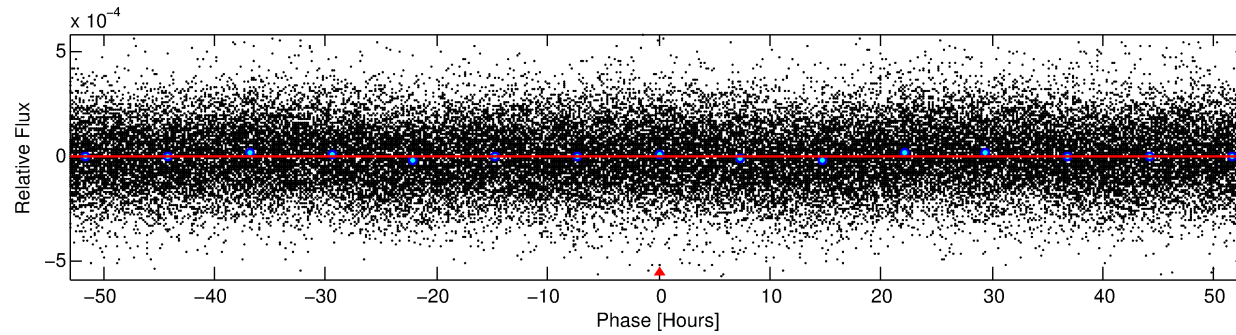
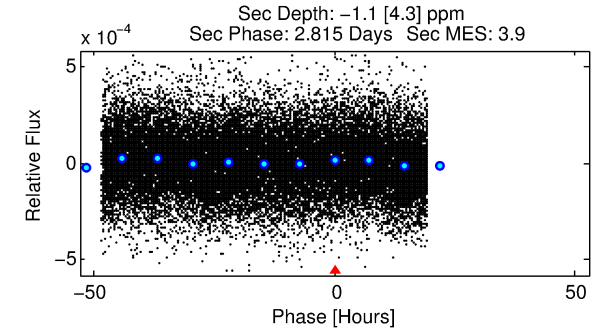
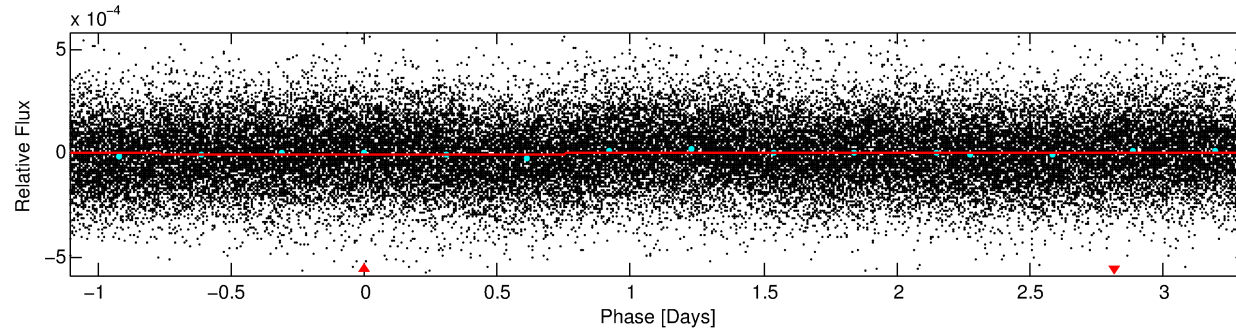
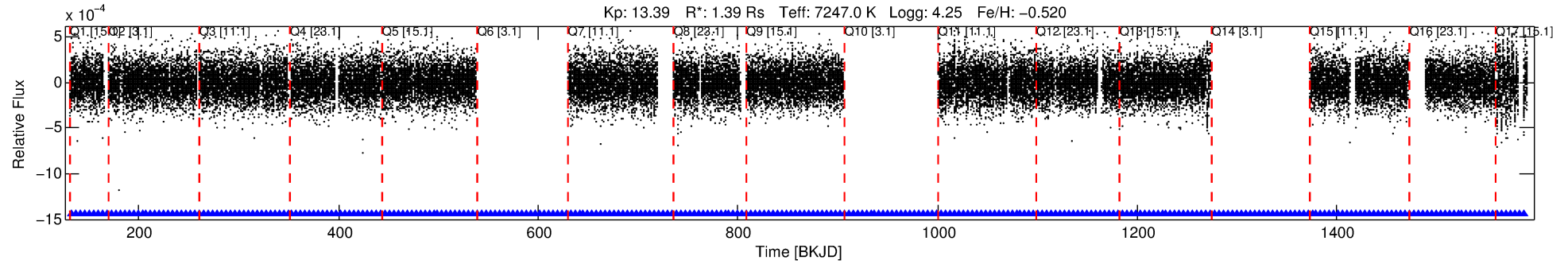
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005106292-01

No Significant Match Found

DV One-Page Summary

KIC: 5106292 Candidate: 1 of 1 Period: 4.422 d



DV Fit Results:

Period = 4.42162 [34.82819] d
Epoch = 132.6840 [5257.1208] BKJD
Rp/R* = 0.0000 [0.1068]
a/R* = 1.09 [577.98]
b = 0.54 [7088.36]
Seff = 1483.27 [15587.88]
Teff = 1582 [4158] K
Rp = 0.00 [16.18] Re
a = 0.0567 [0.2980] AU
Ag = N/A
Teffp = N/A

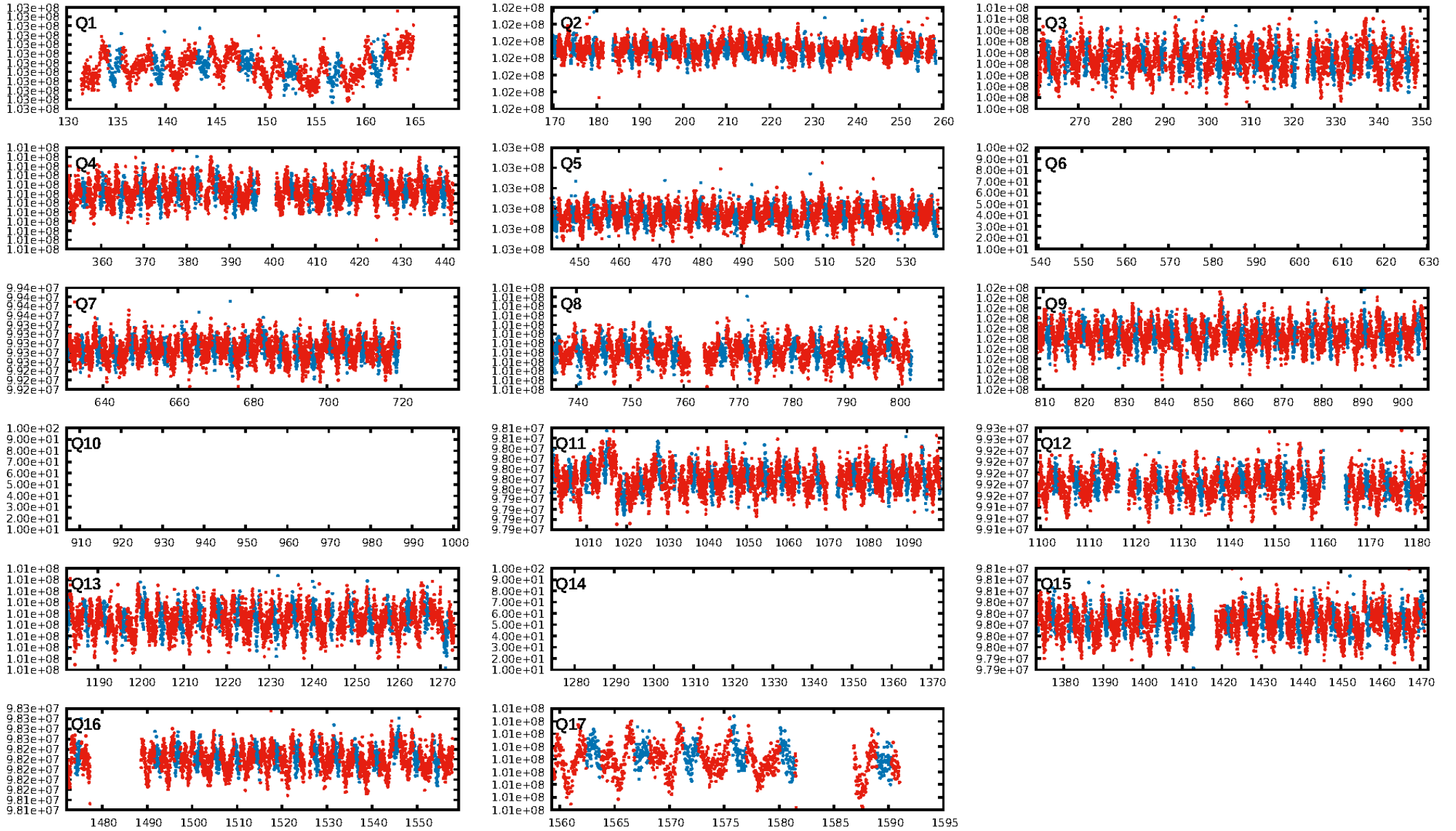
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [238/238]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 1.064 arcsec [1.96σ]
KicOffset-rm: 1.053 arcsec [2.06σ]
OotOffset-st: 0/4/0/3 [7]
KicOffset-st: 0/4/0/3 [7]
DiffImageQuality-fgm: 1.00 [7/7]
DiffImageOverlap-fno: 1.00 [14/14]

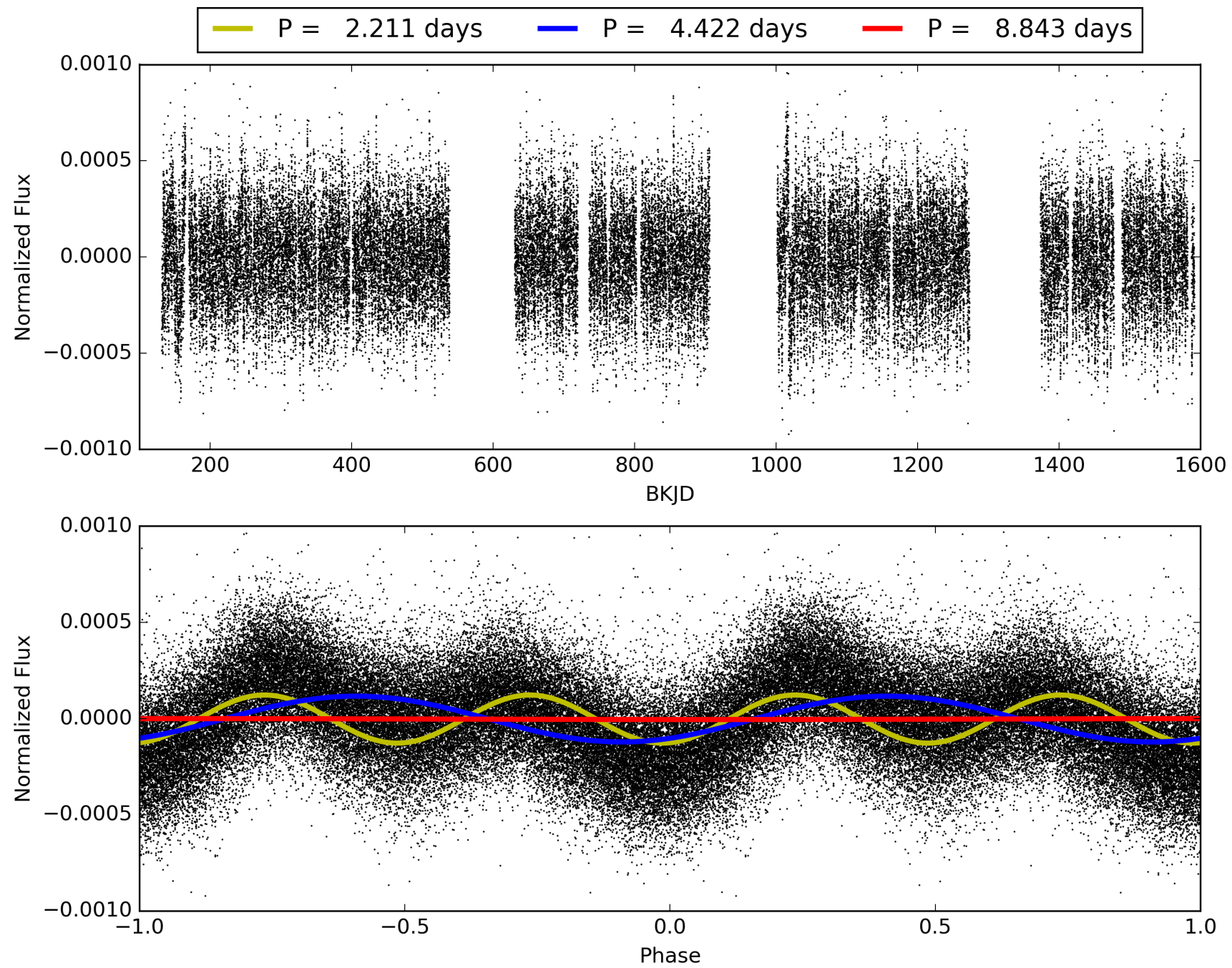
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 02:11:09 Z

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

TCE 005106292-01, PDC Light Curves

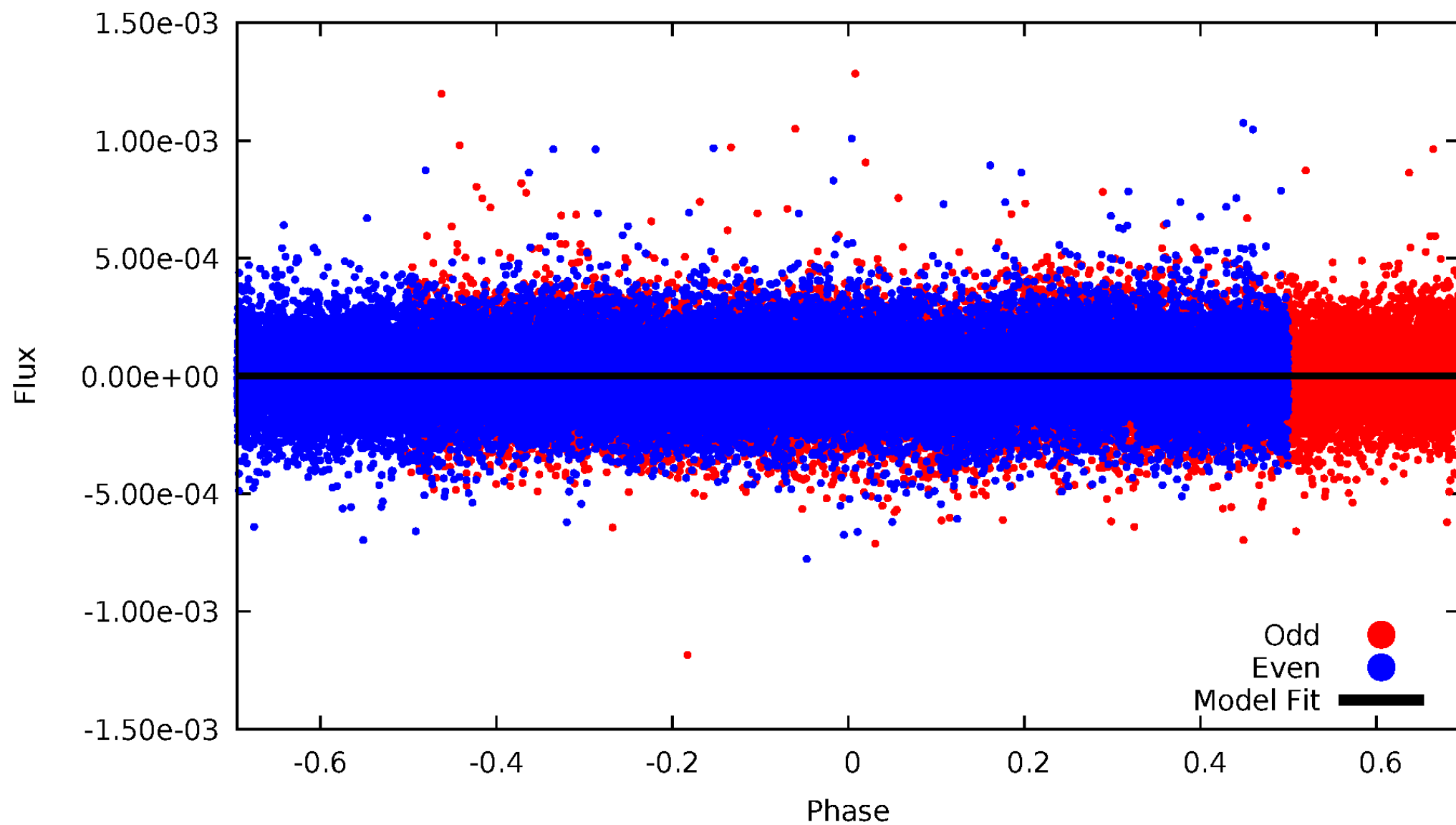


TCE 005106292-01



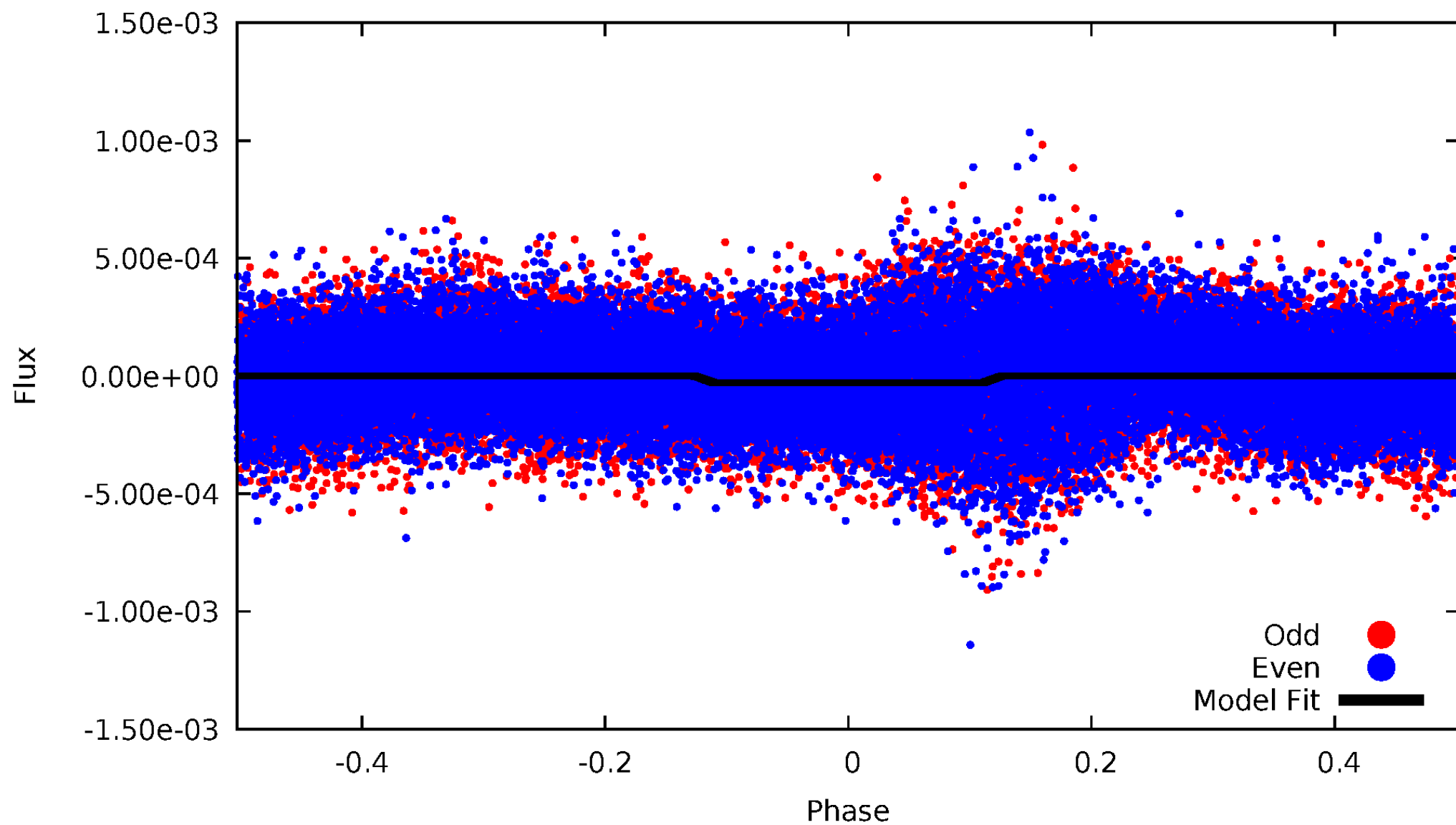
DV Odd/Even

TCE 005106292-01



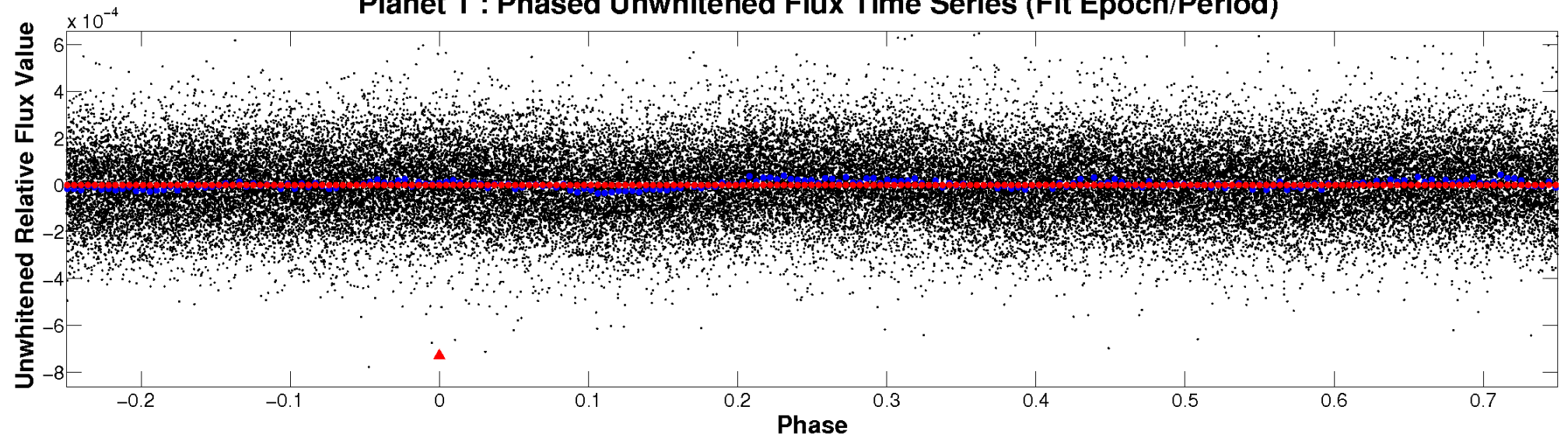
ALT Odd/Even

TCE 005106292-01

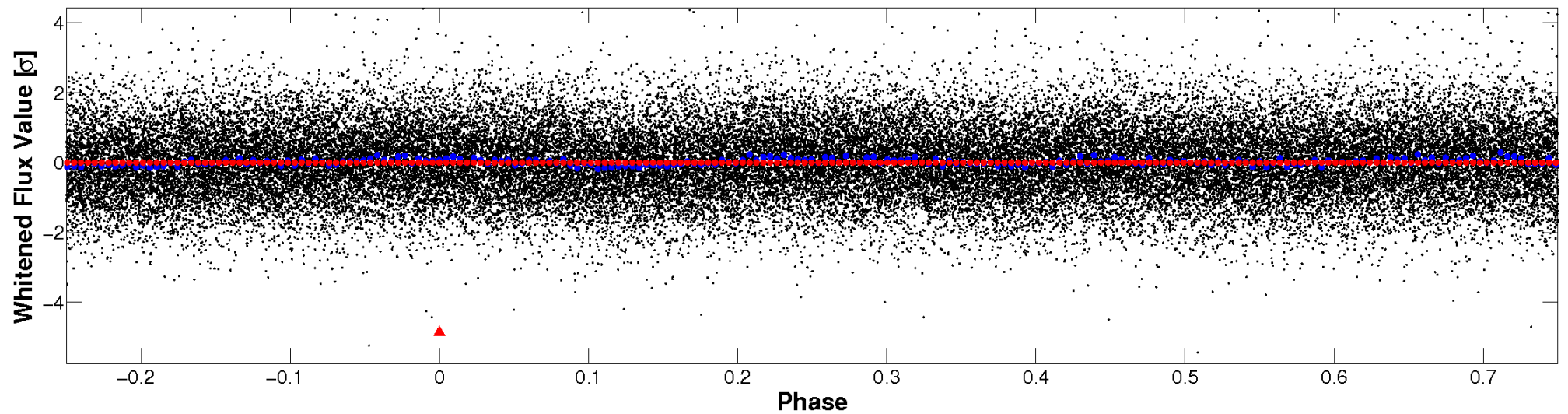


Non-Whitened Vs. Whitened Light Curve

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

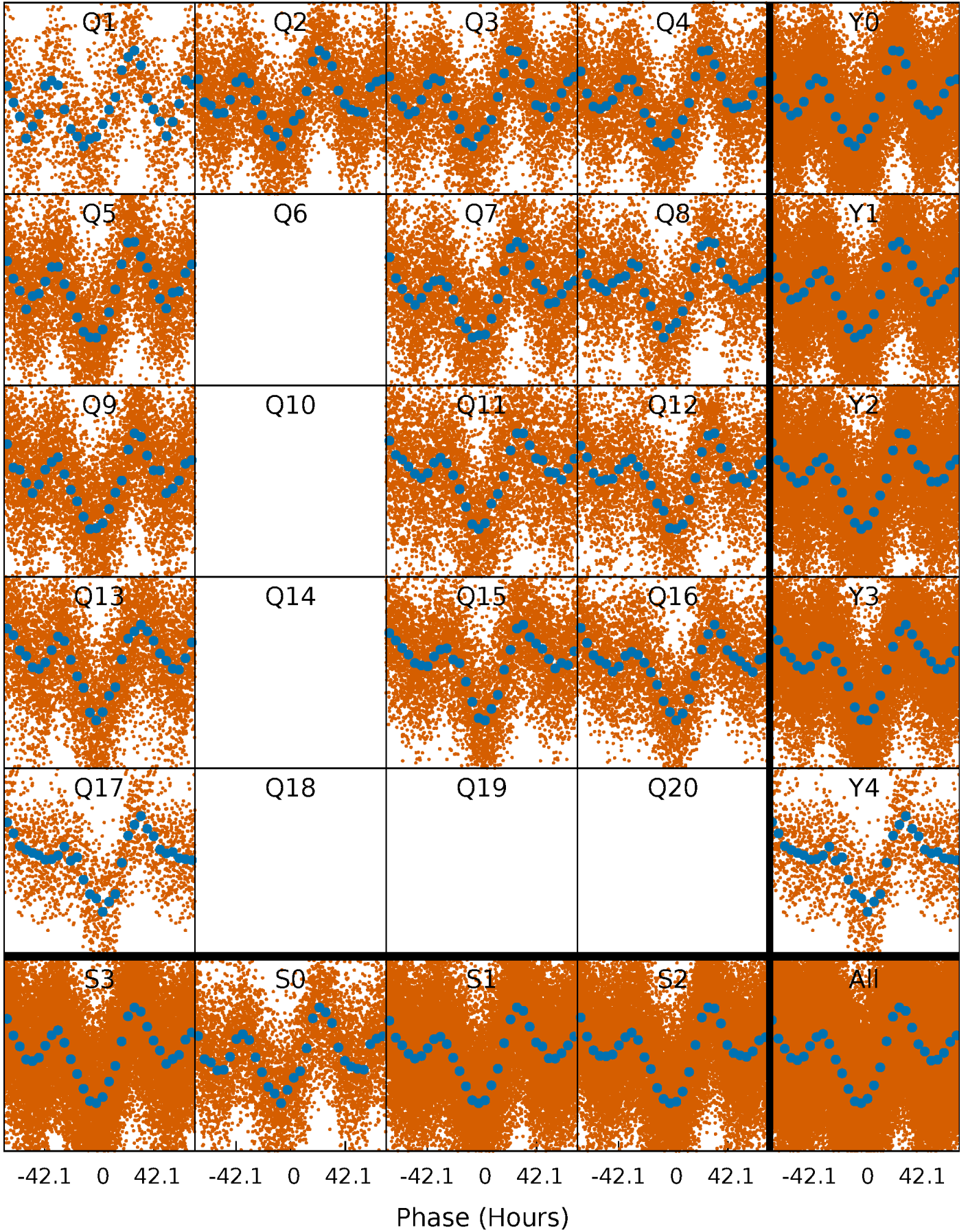


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



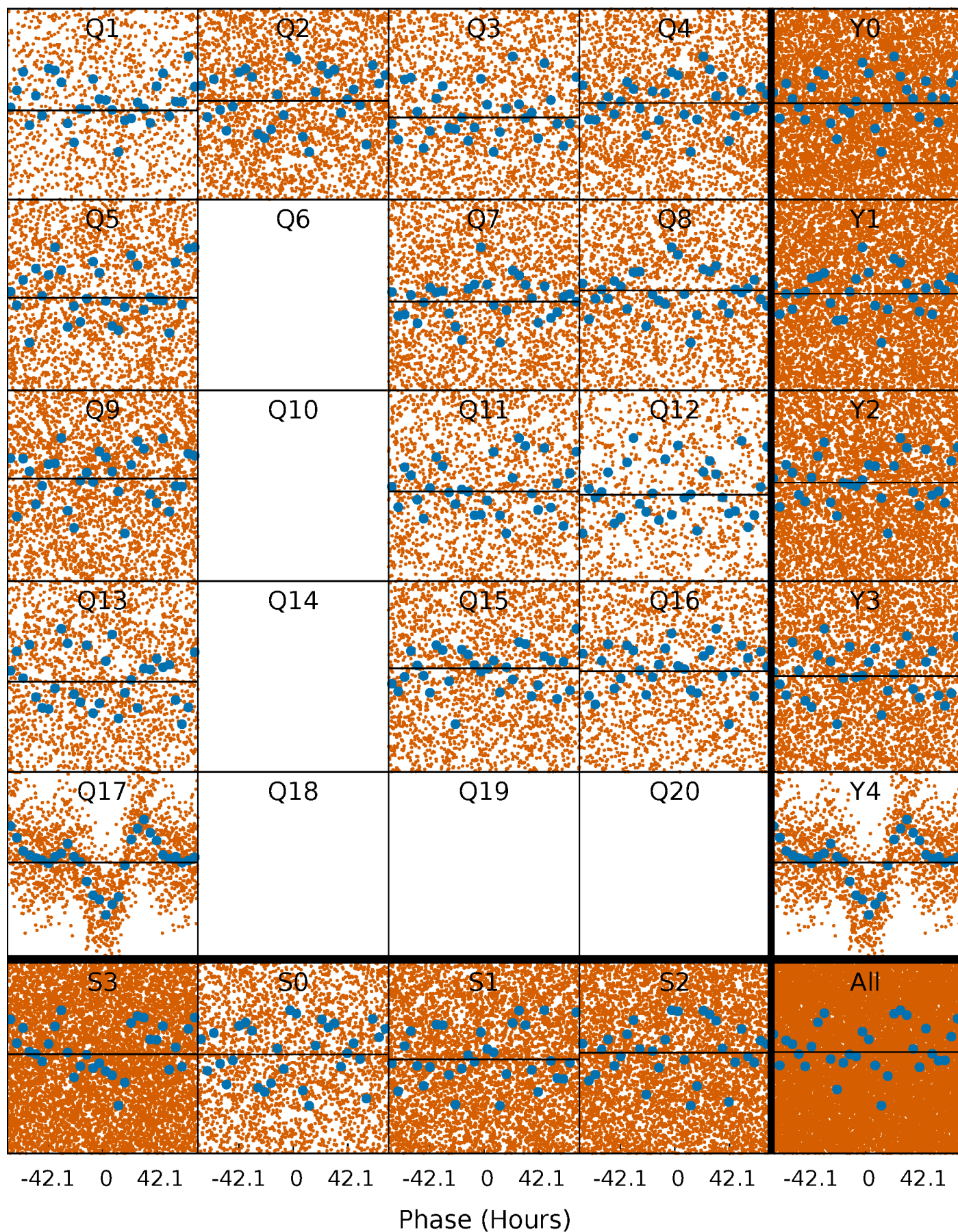
PDC Quarter-Phased Transit Curves

TCE 005106292-01 P= 4.421619 Days $T_0=132.684023$ (BKJD)



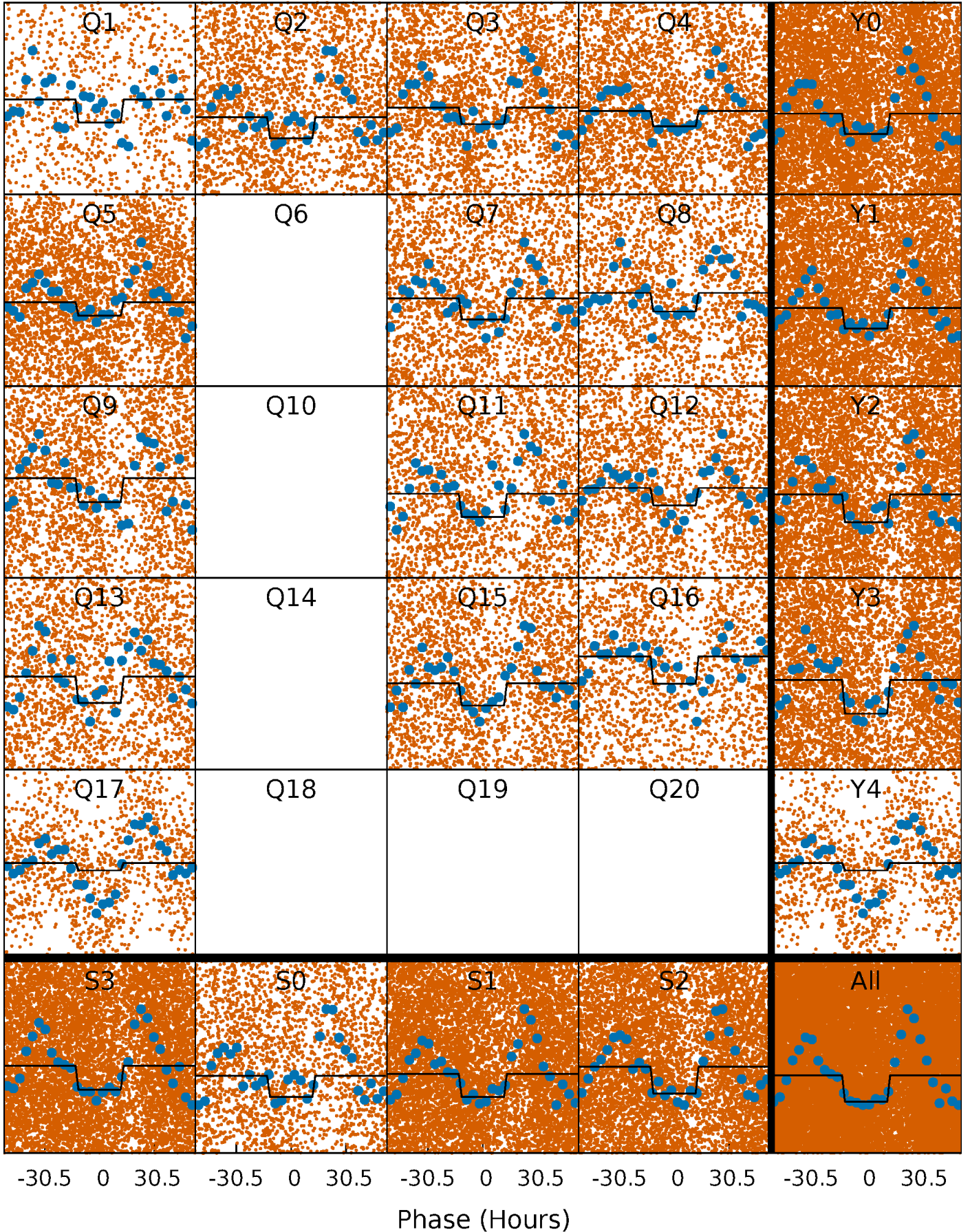
DV Quarter-Phased Transit Curves

TCE 005106292-01 P= 4.421619 Days $T_0=132.684023$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

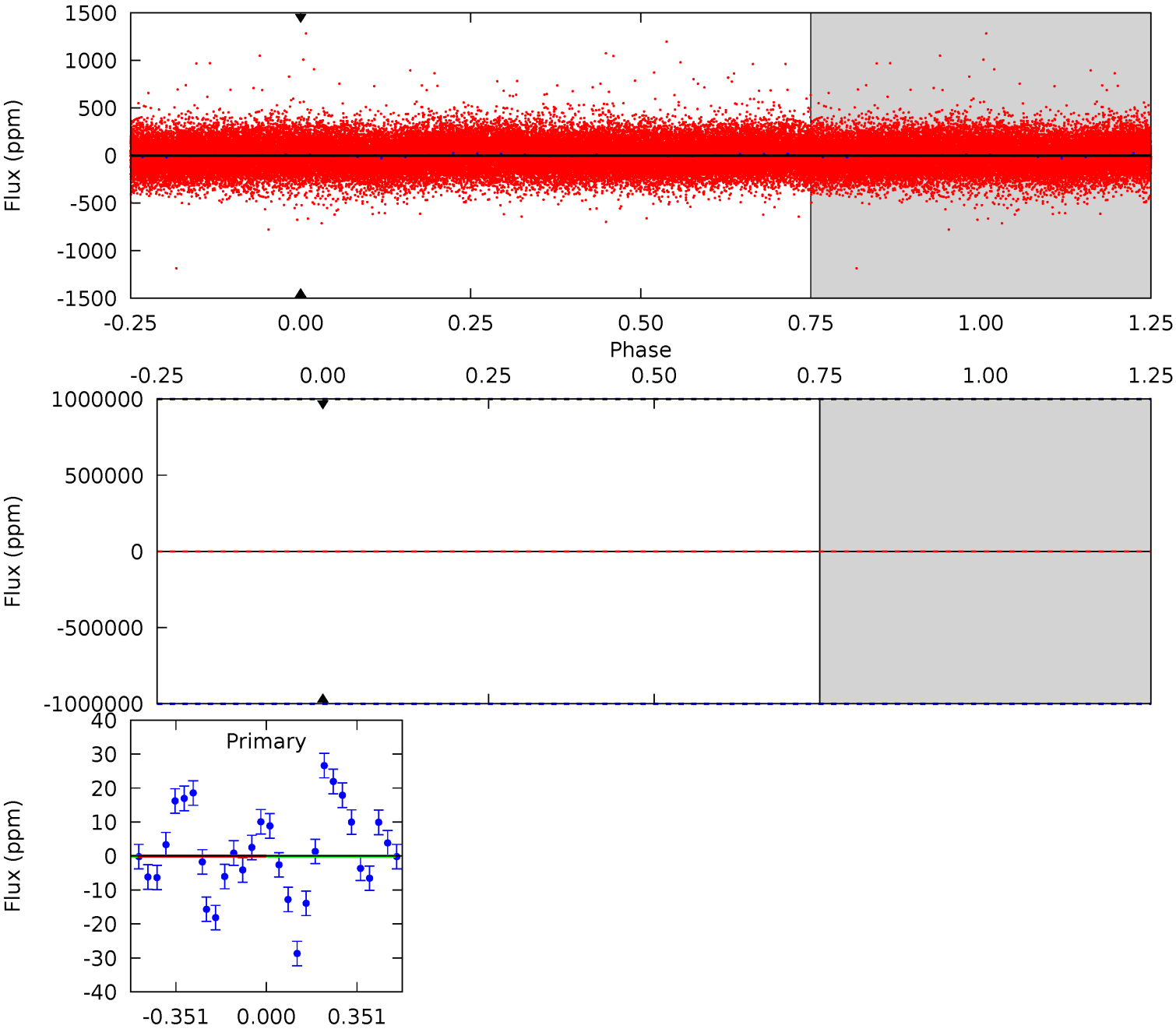
TCE 005106292-01 P= 4.422325 Days $T_0=132.646247$ (BKJD)



DV Model-Shift Uniqueness Test

005106292-01, P = 4.421619 Days, E = 128.262404 Days

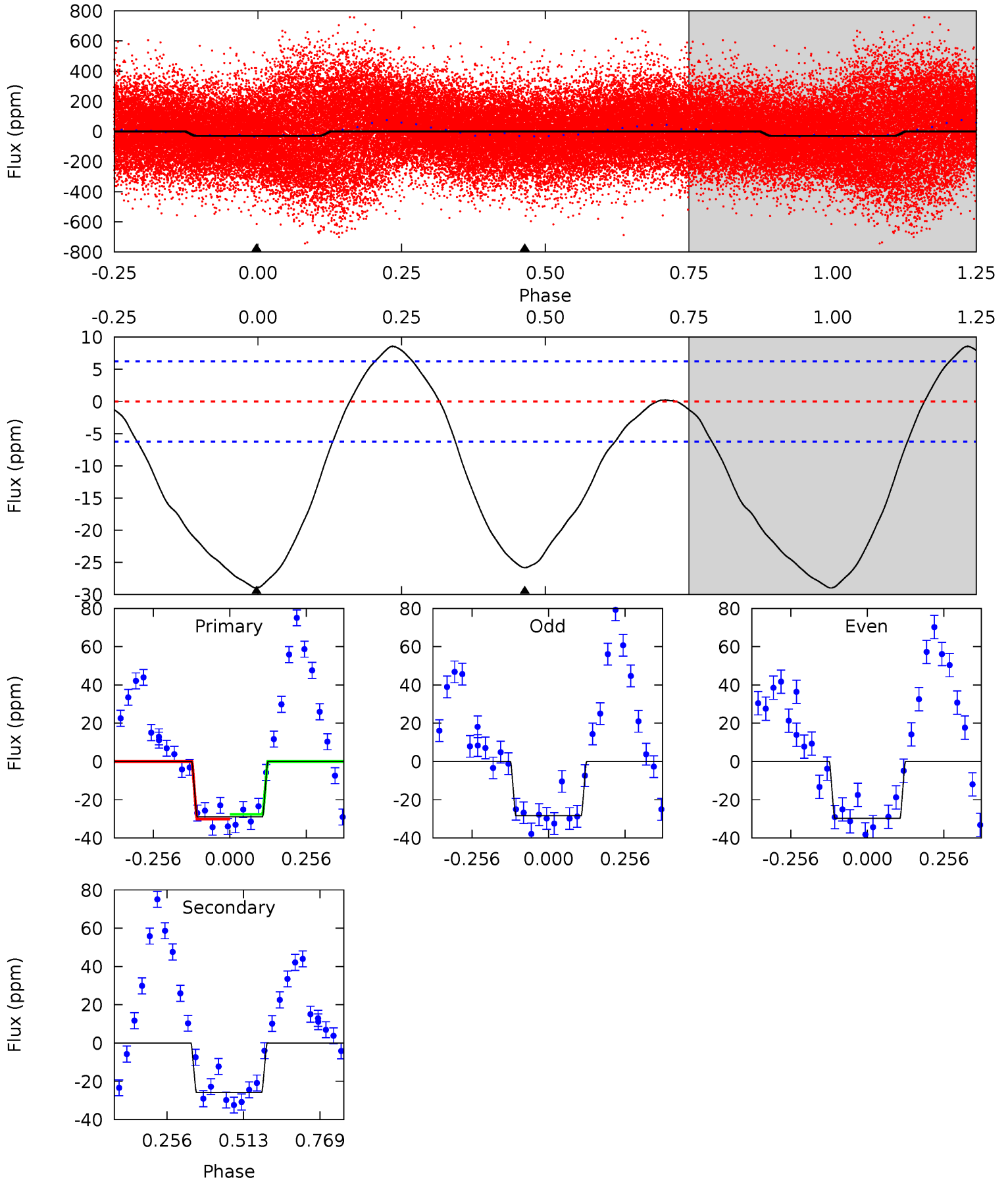
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005106292-01, P = 4.422325 Days, E = 128.223922 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.3	18.1	0	0	4.36	1.14	2.54	20.3	20.3	18.1	18.1	0.46	1.08	0.23	0.71



Stellar Parameters For KIC 005106292

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7247^{+233}_{-285}	$4.247^{+0.120}_{-0.180}$	$-0.520^{+0.250}_{-0.300}$	$1.389^{+0.419}_{-0.226}$	$1.241^{+0.178}_{-0.161}$	$0.653^{+0.381}_{-0.329}$
	+3%/-4%	+3%/-4%	+48%/-58%	+30%/-16%	+14%/-13%	+58%/-50%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 005106292-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$10.59^{+12.12}_{-7.55}$	1262^{+628}_{-285}	-4971^{+43509}_{-31463}	$-18.937^{+26946.930}_{-25579.052}$
Alt.	-26 ± 1	$11.81^{+11.93}_{-8.34}$	1266^{+679}_{-282}	2550^{+1127}_{-686}	$2.835^{+37.790}_{-2.470}$

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

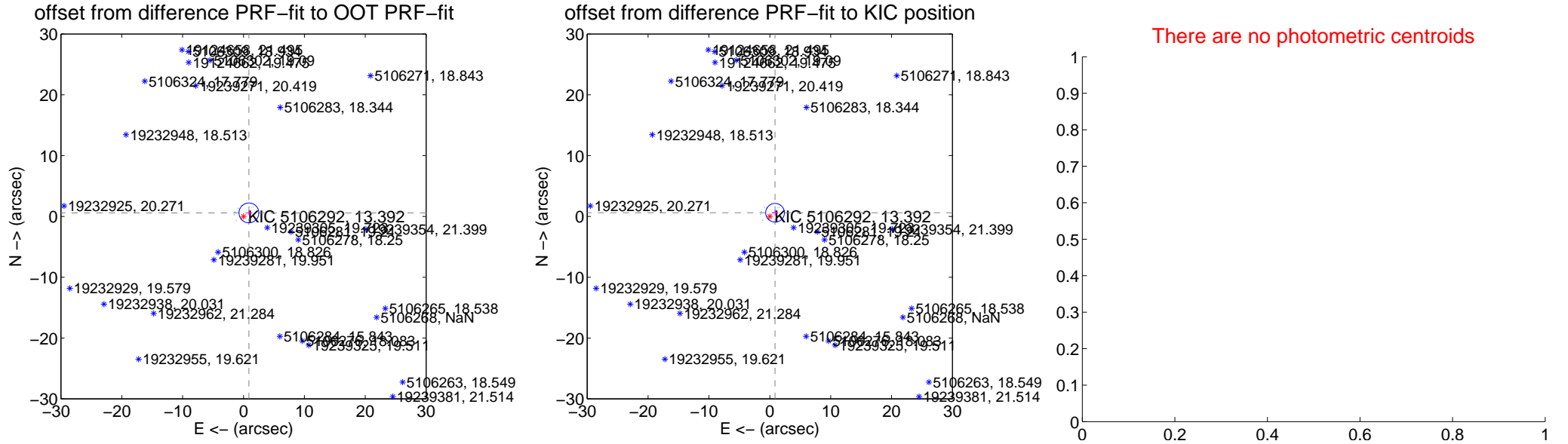
DV Centroid Data

Supplemental centroid analysis for 005106292-01. Kepler magnitude: 13.39. Transit SNR 0.00

There are 7 quarters with good PRF difference image offsets

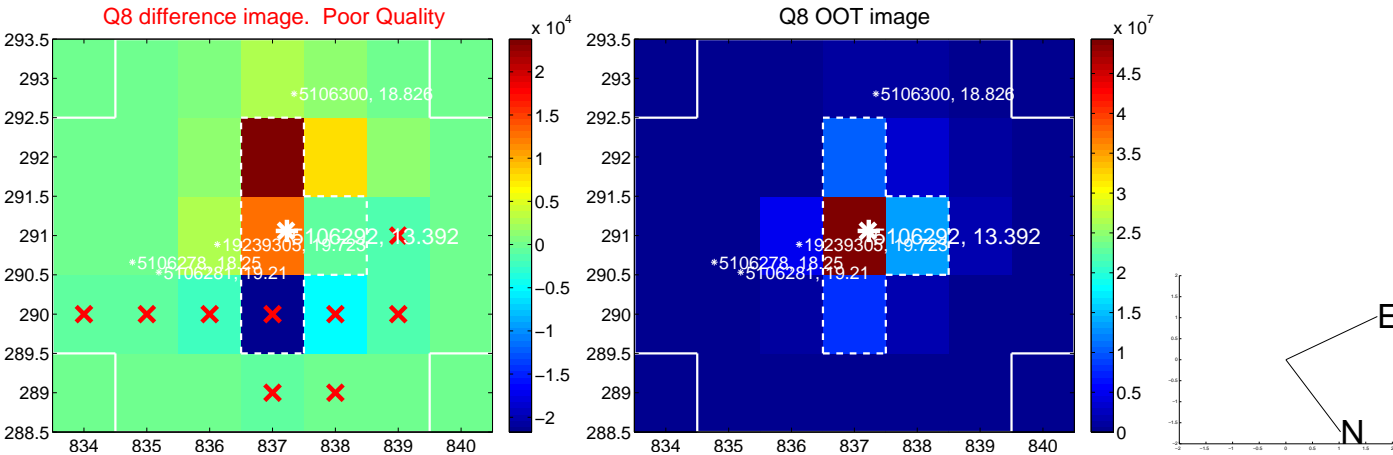
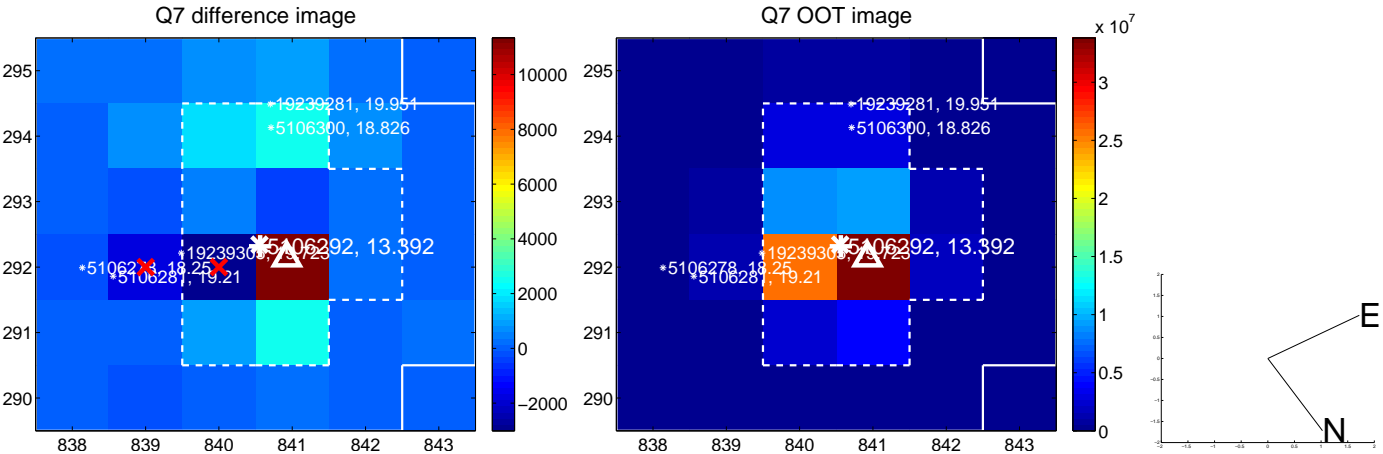
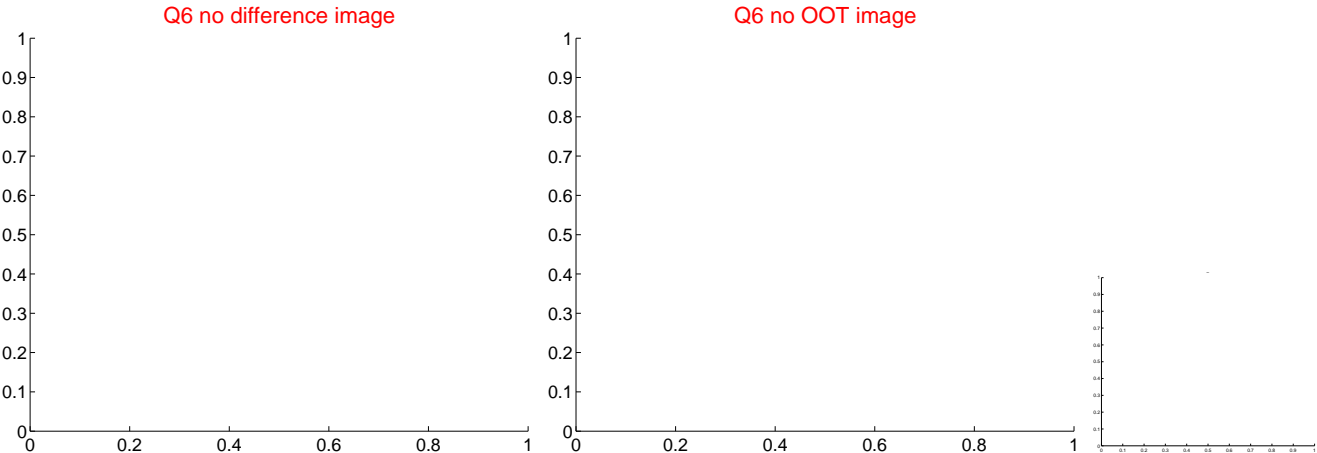
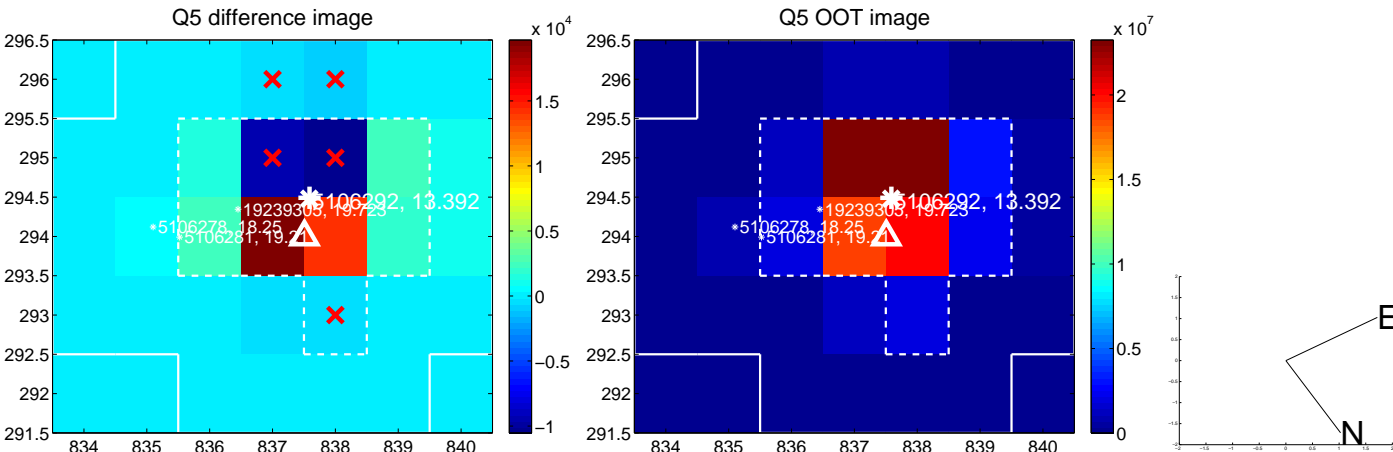
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.064 ± 0.543	1.96	-0.890 ± 0.534	0.582 ± 0.373
PRF-fit source offset from KIC position	1.053 ± 0.512	2.06	-0.863 ± 0.528	0.603 ± 0.478
photometric centroid source offset	—	—	—	—

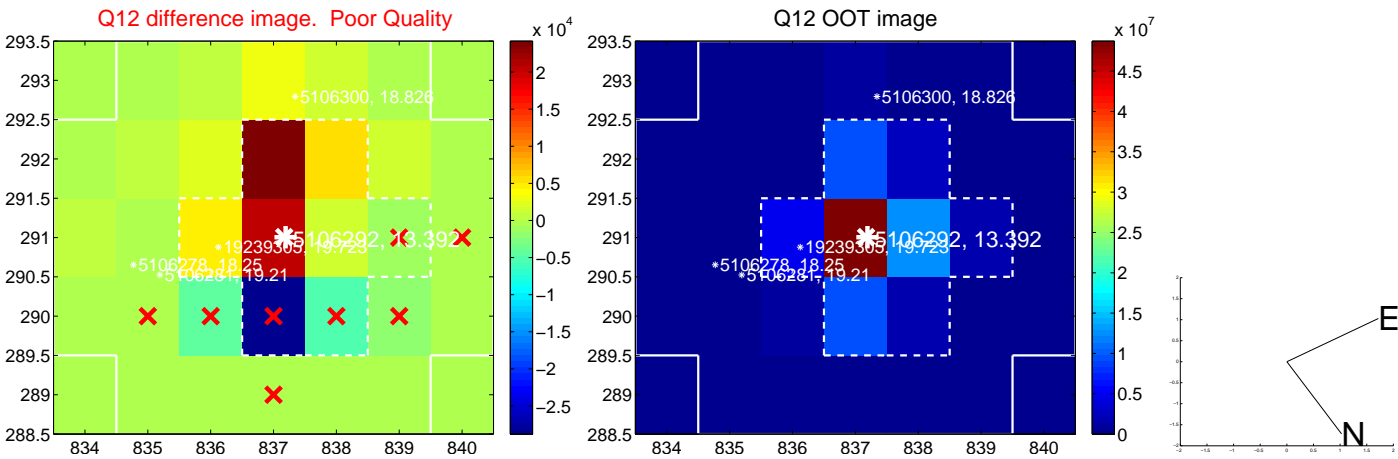
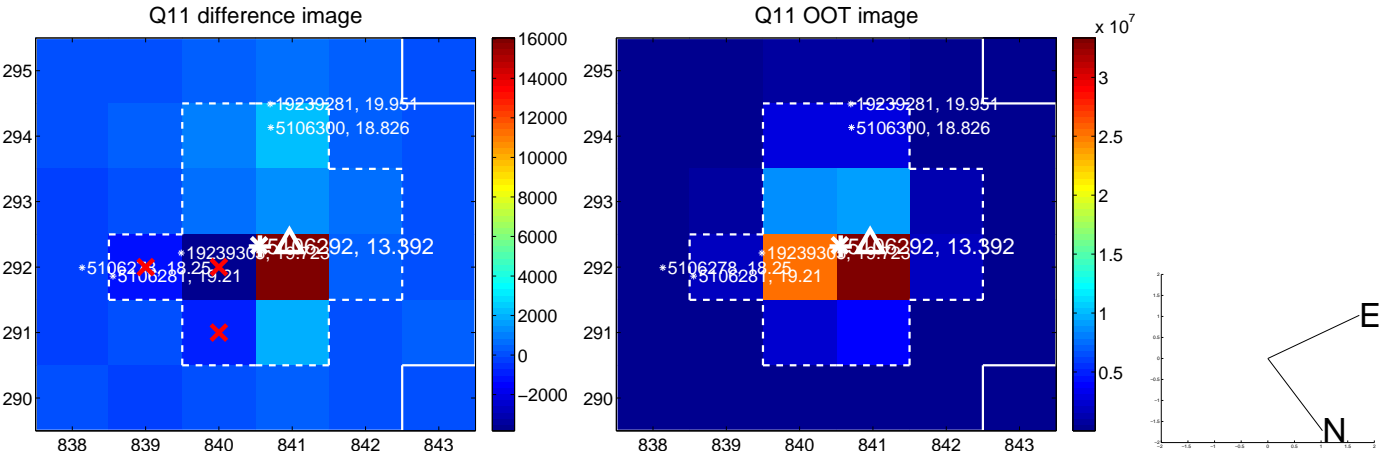
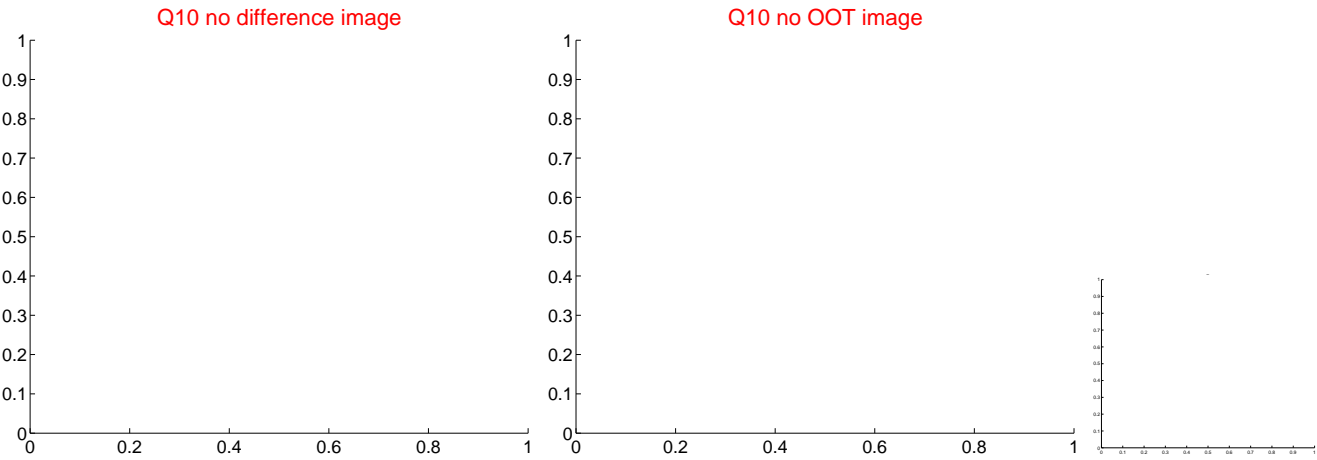
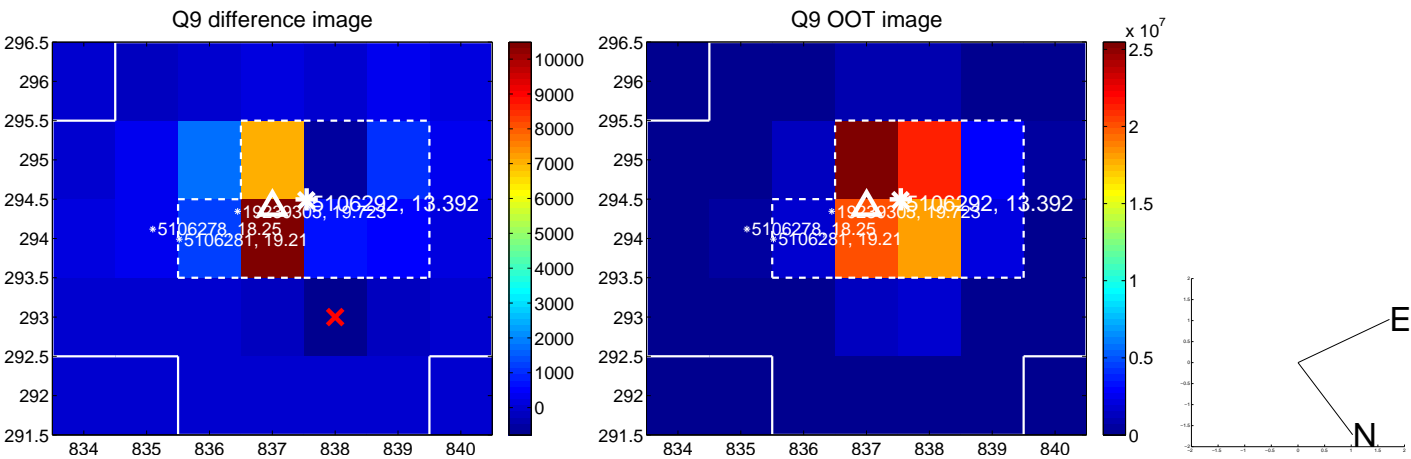


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

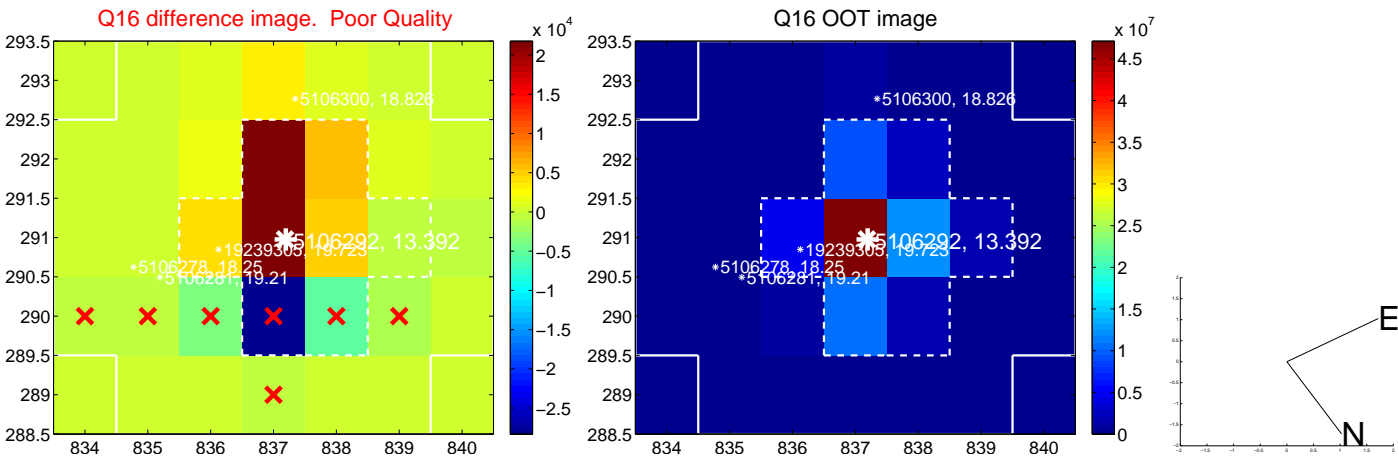
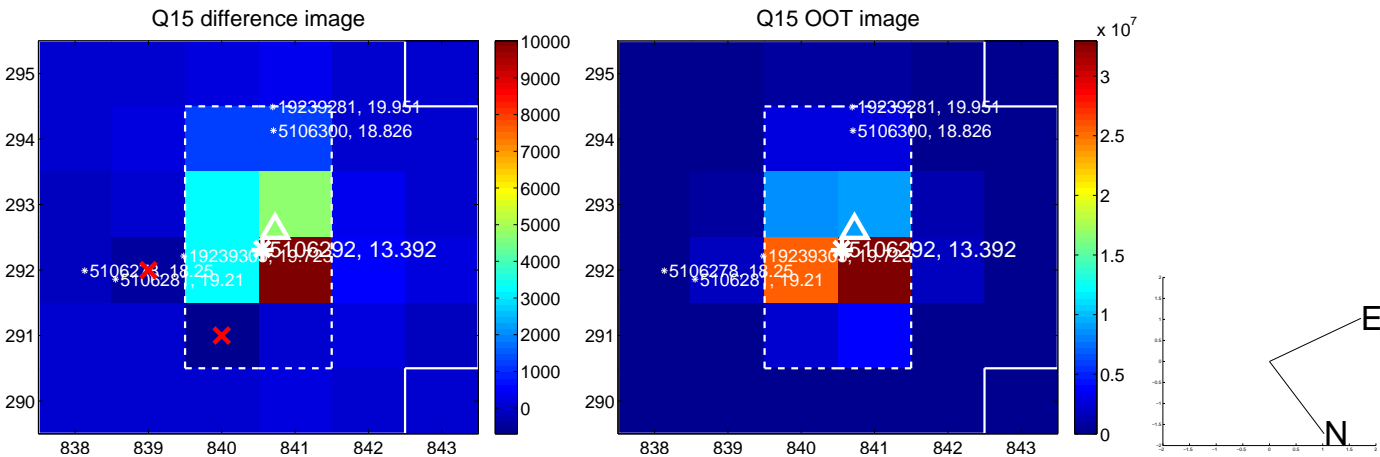
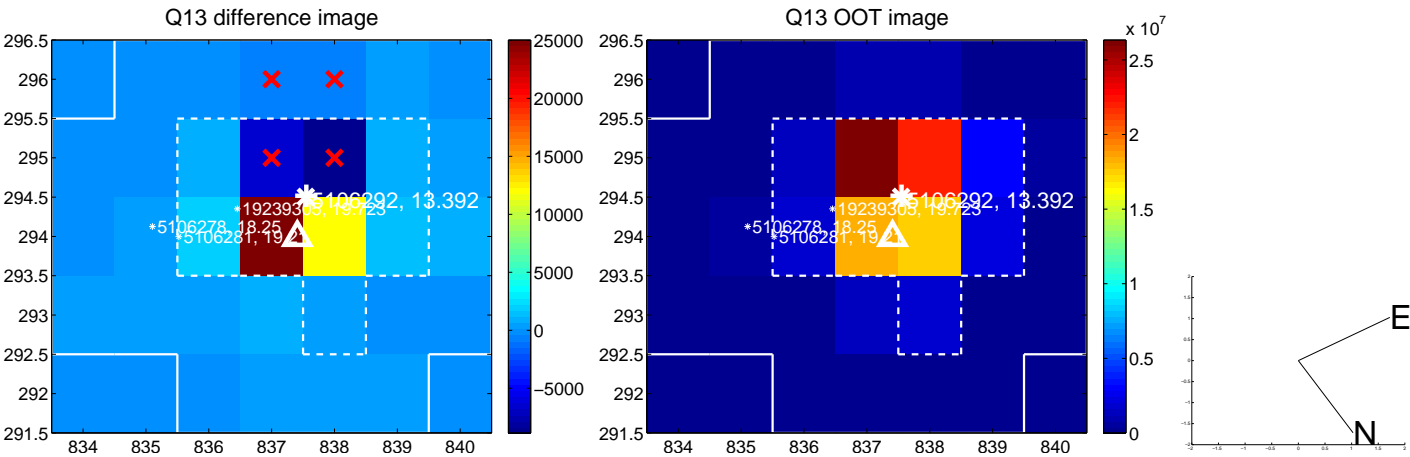
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



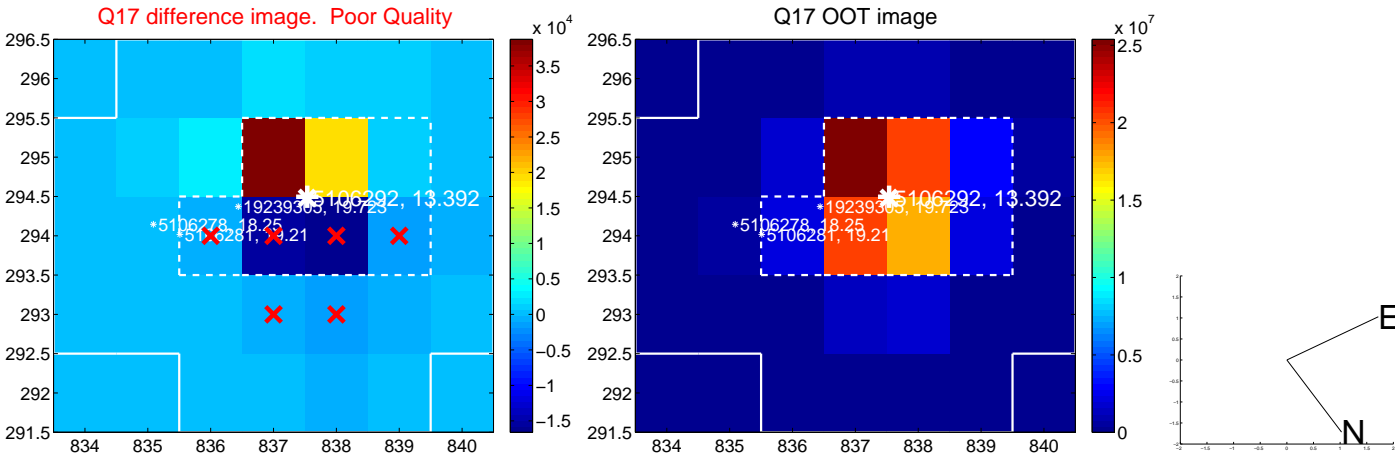
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



folded centroid time series figure for this object.

UKIRT Image

Declination

