

KIC 011449696

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})
011449696-01	OBS	8224.01	371.202692	307.659680	753.5	20.788	7.4	7.5	0.94	6106	2.95	1.07

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011449696-01	OBS	FP	0.03	1	0	0	0	ALL_TRANS_CHASES—INCONSISTENT_TRANS—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.

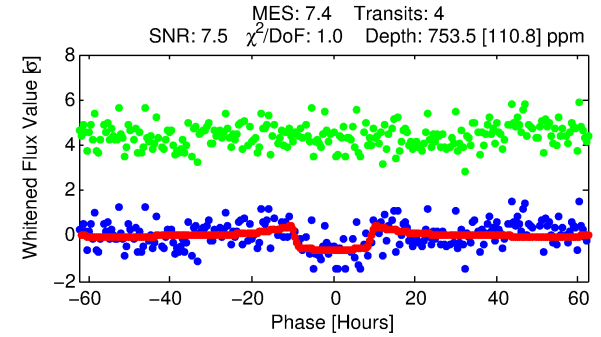
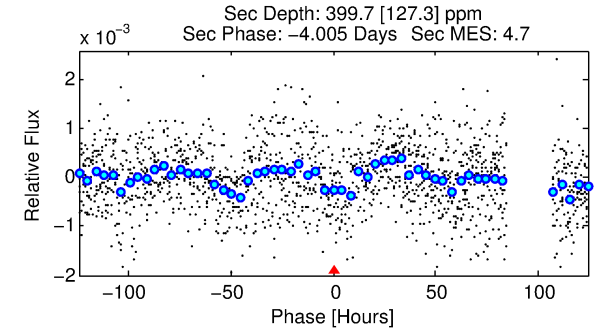
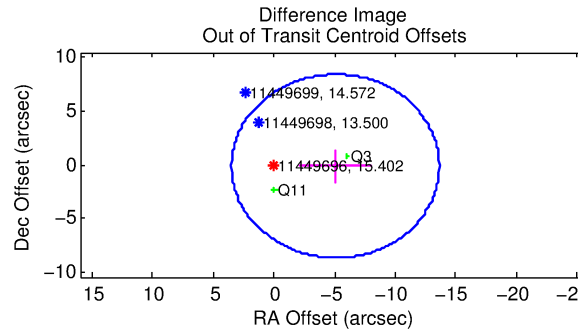
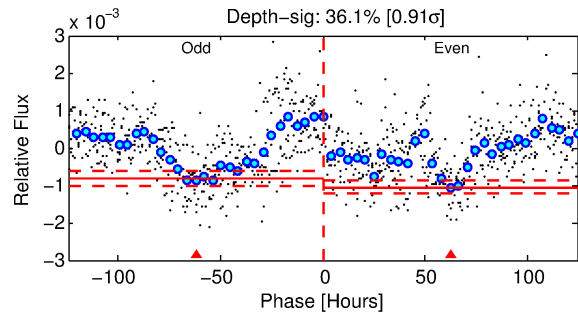
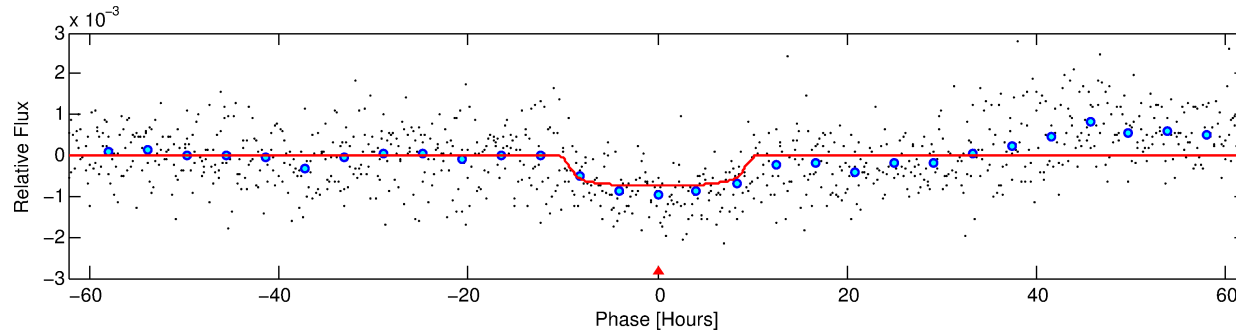
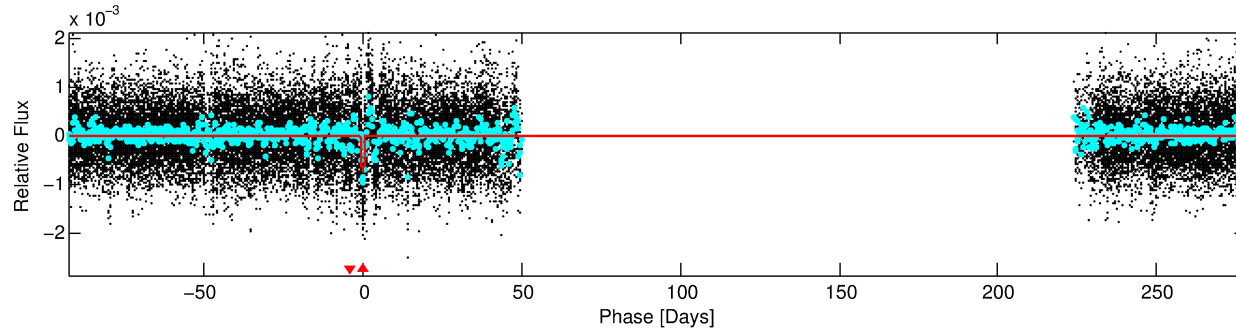
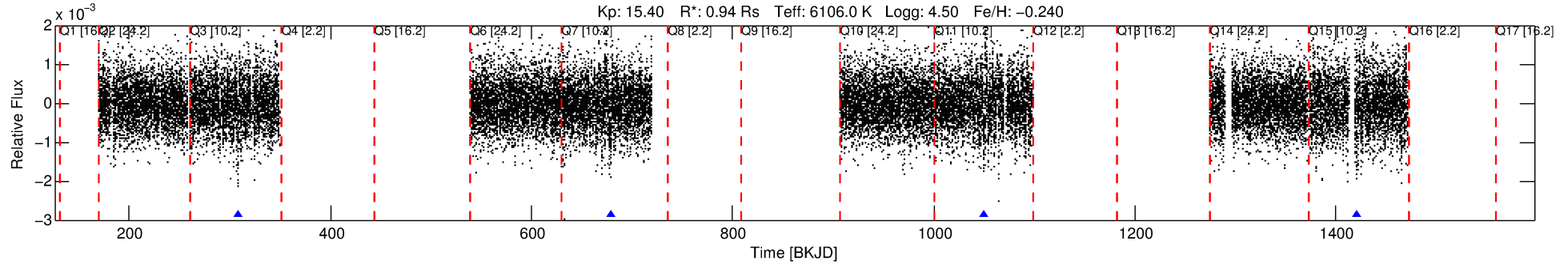
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011449696-01

No Significant Match Found

DV One-Page Summary

KIC: 11449696 Candidate: 1 of 1 Period: 371.203 d



DV Fit Results:

Period = 371.20269 [0.01591] d
Epoch = 307.6597 [0.0283] BKJD
Rp/R* = 0.0288 [0.0034]
a/R* = 76.31 [33.33]
b = 0.86 [0.13]
Seff = 1.07 [0.45]
Teq = 259 [27] K
Rp = 2.95 [0.99] Re
a = 1.0151 [0.2710] AU
Ag = 26009.44 [14531.66] [1.79 σ]
Teffp = 5090 [542] K [8.89 σ]

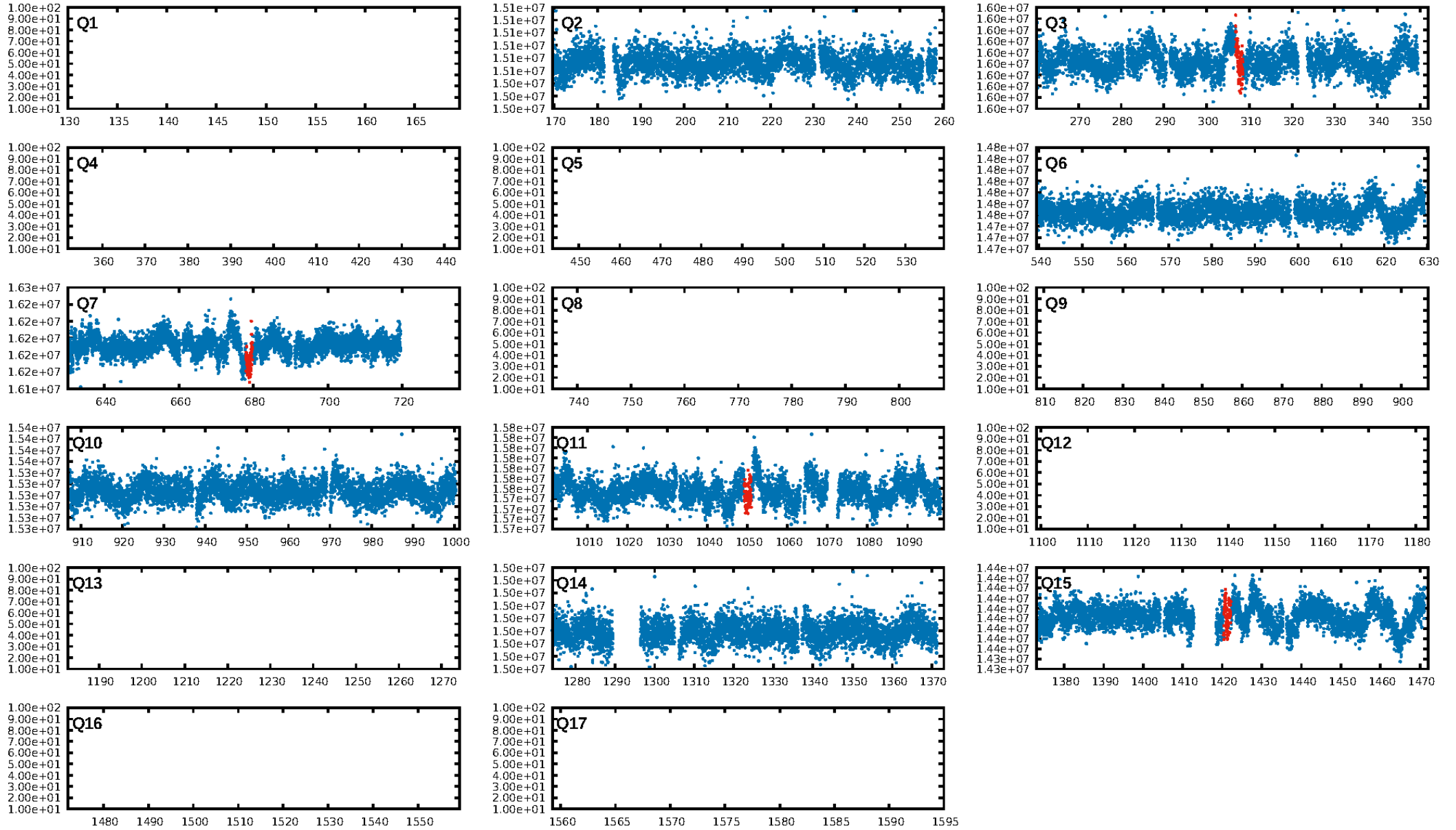
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 42.2%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.33e-10
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -0.9404
Centroid-sig: 0.0%
Centroid-so: 5.954 arcsec [4.98 σ]
OotOffset-rm: 5.080 arcsec [1.78 σ]
KicOffset-rm: 5.194 arcsec [2.34 σ]
OotOffset-st: 0/2/0/0 [2]
KicOffset-st: 0/2/0/0 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [4/4]

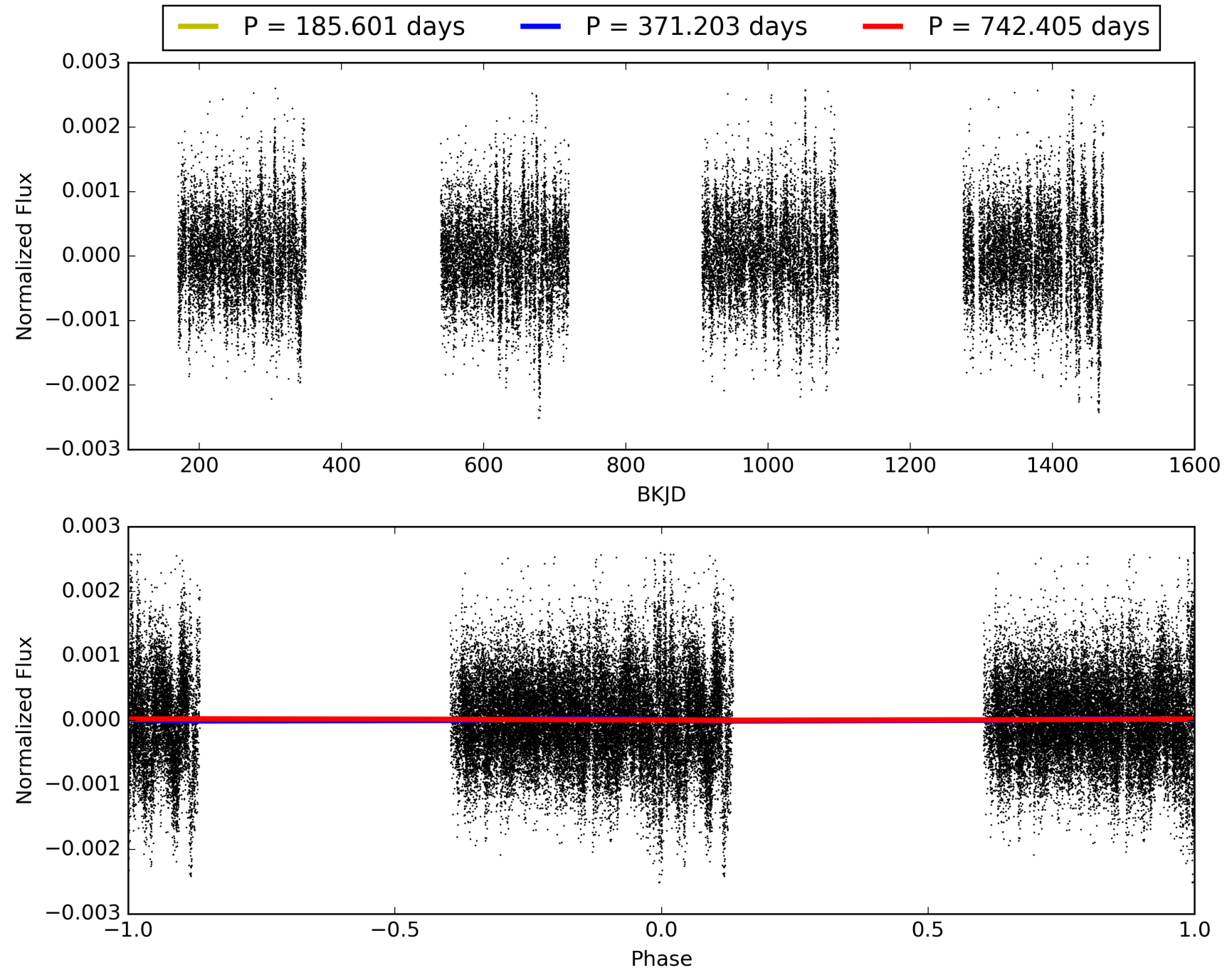
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:14:18 Z

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

TCE 011449696-01, PDC Light Curves

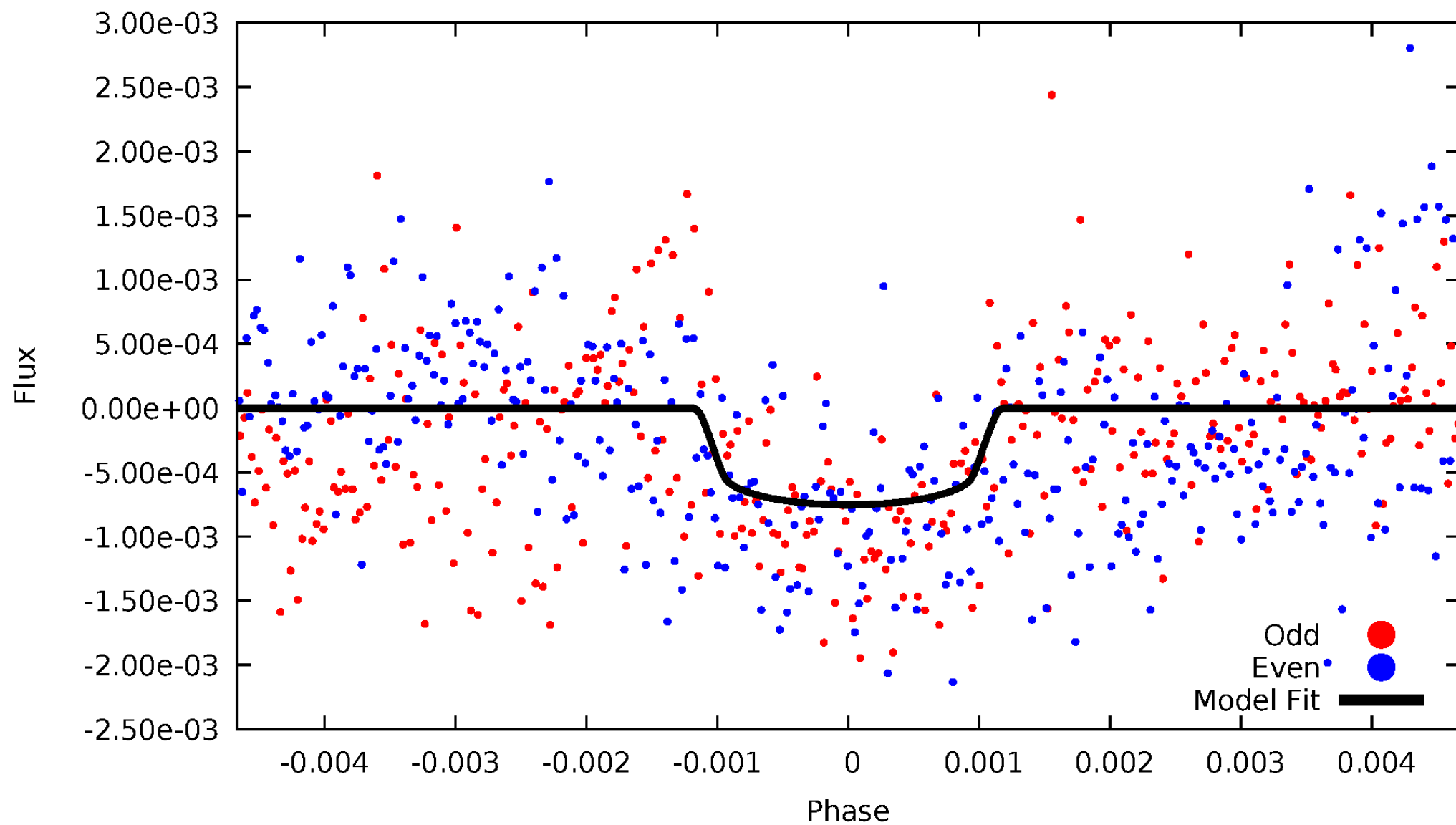


TCE 011449696-01



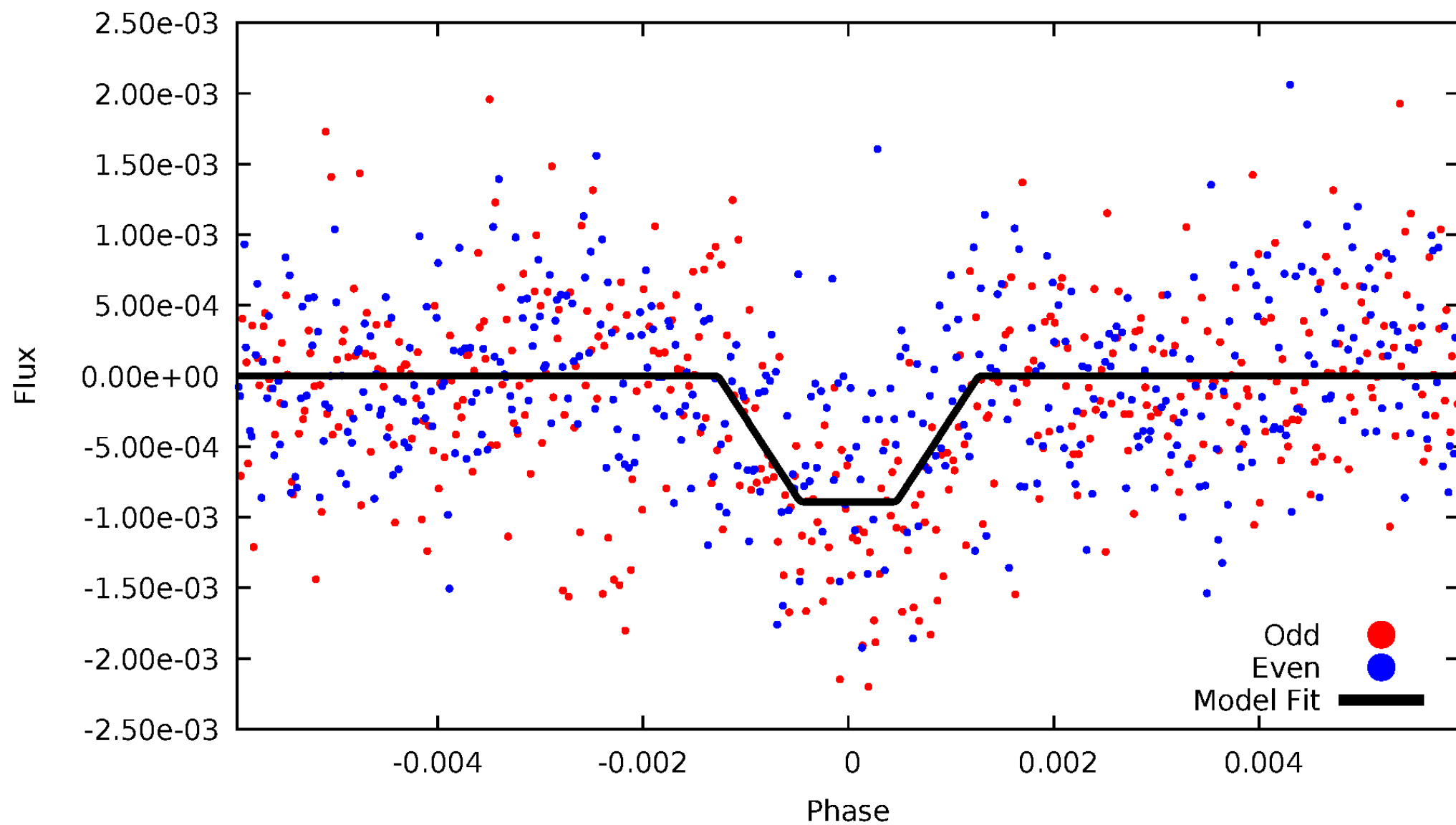
DV Odd/Even

TCE 011449696-01



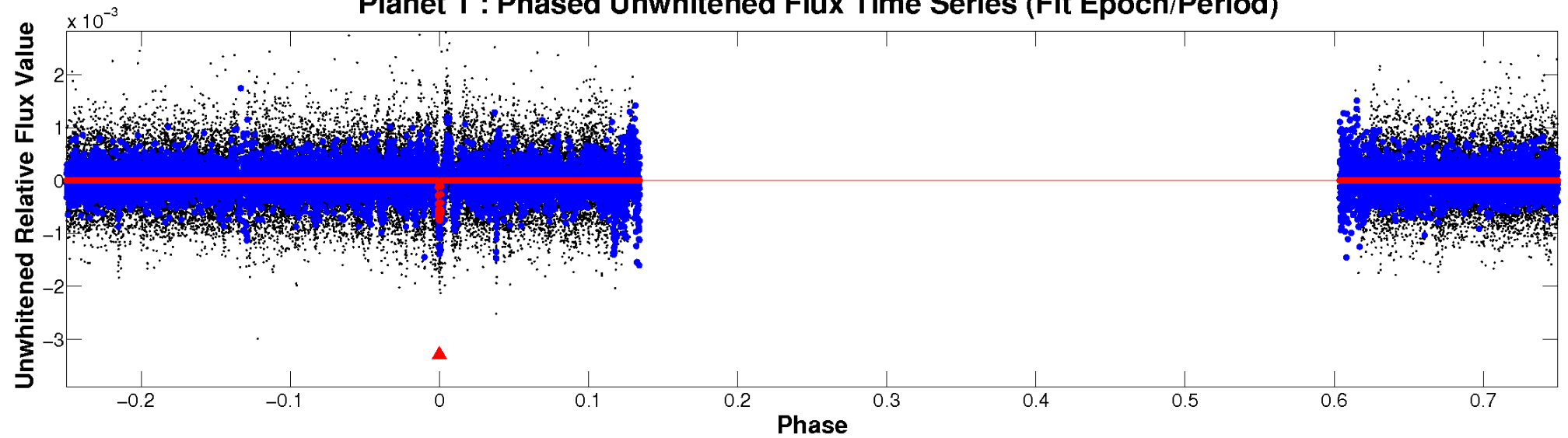
ALT Odd/Even

TCE 011449696-01

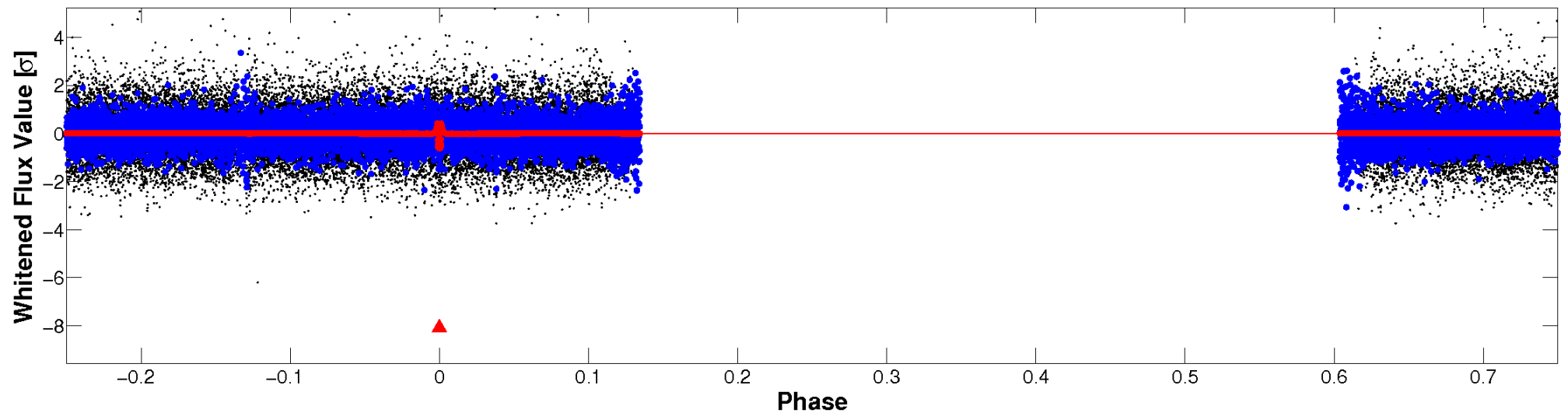


Non-Whitened Vs. Whitened Light Curve

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



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



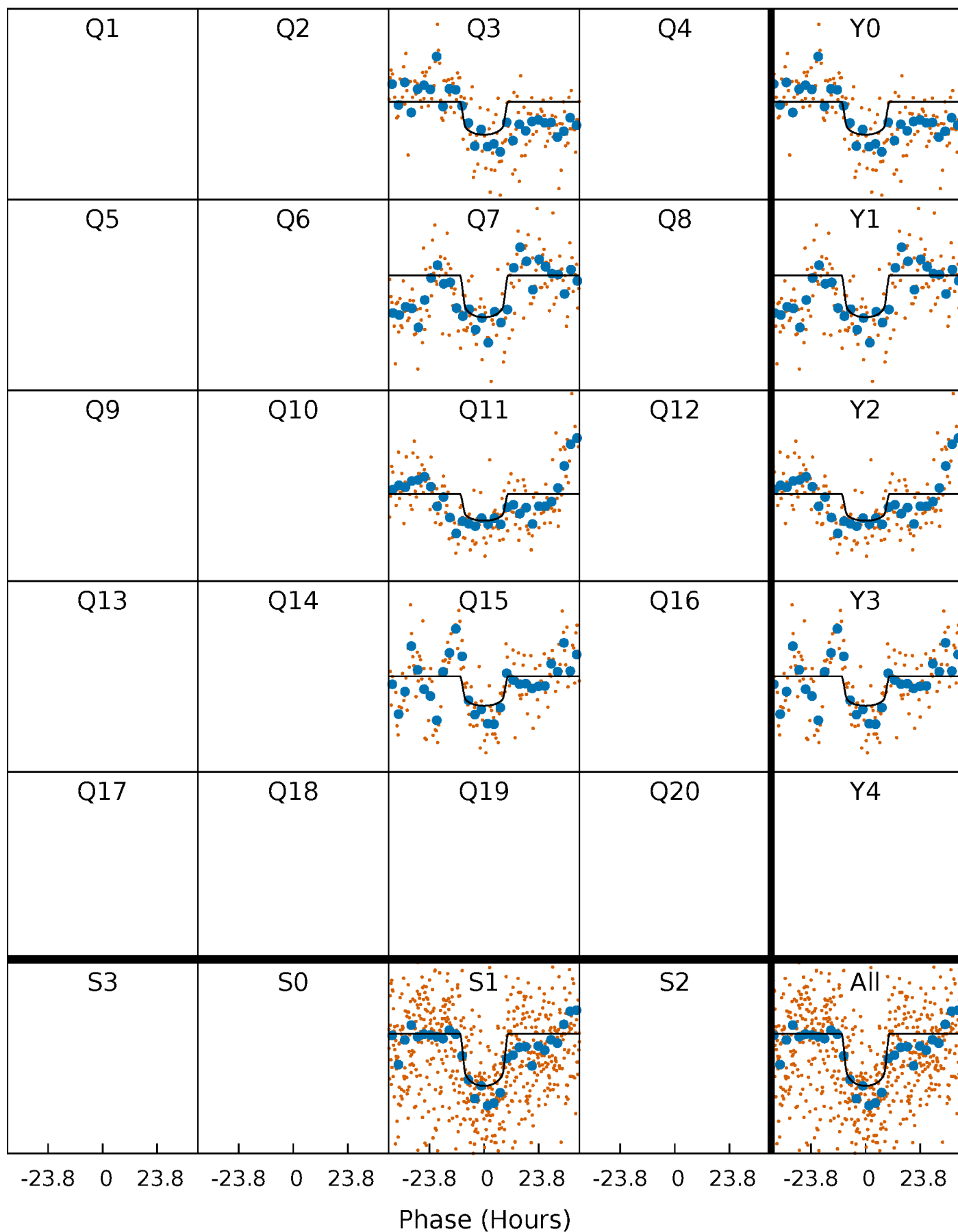
PDC Quarter-Phased Transit Curves

TCE 011449696-01 P=371.202692 Days $T_0=307.659680$ (BKJD)



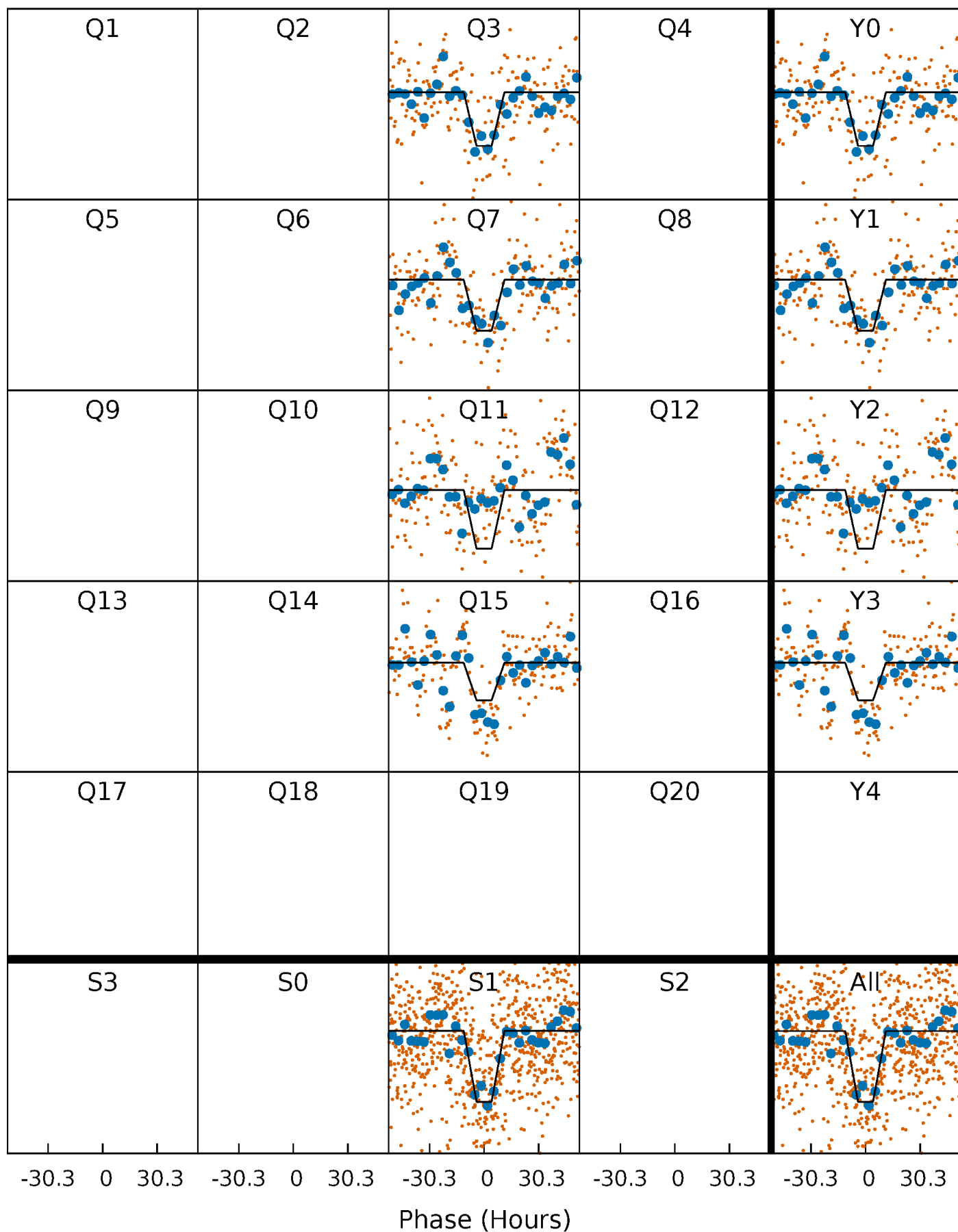
DV Quarter-Phased Transit Curves

TCE 011449696-01 P=371.202692 Days $T_0=307.659680$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

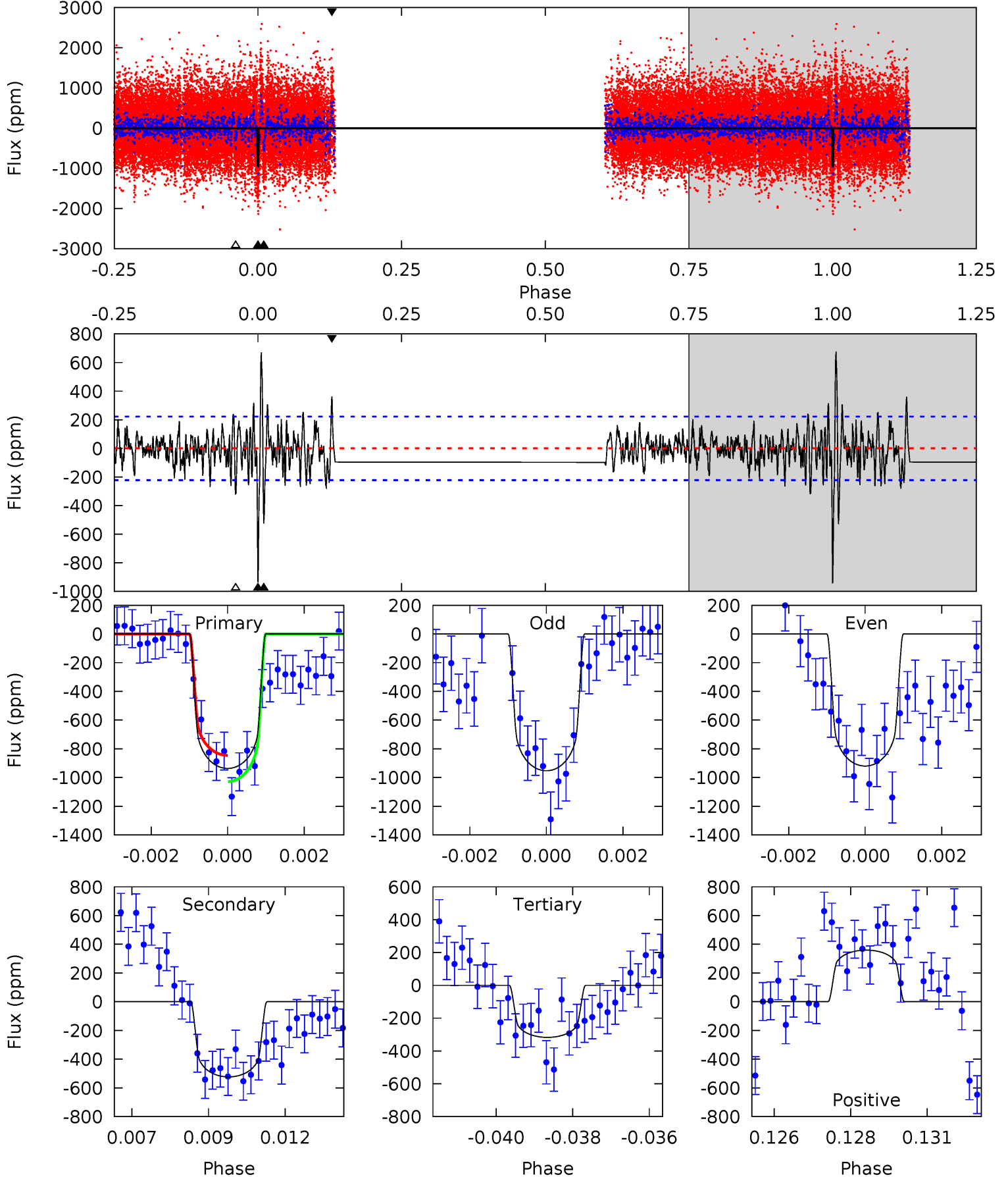
TCE 011449696-01 P=371.168806 Days $T_0=307.722434$ (BKJD)



DV Model-Shift Uniqueness Test

011449696-01, P = 371.202692 Days, E = 307.659680 Days

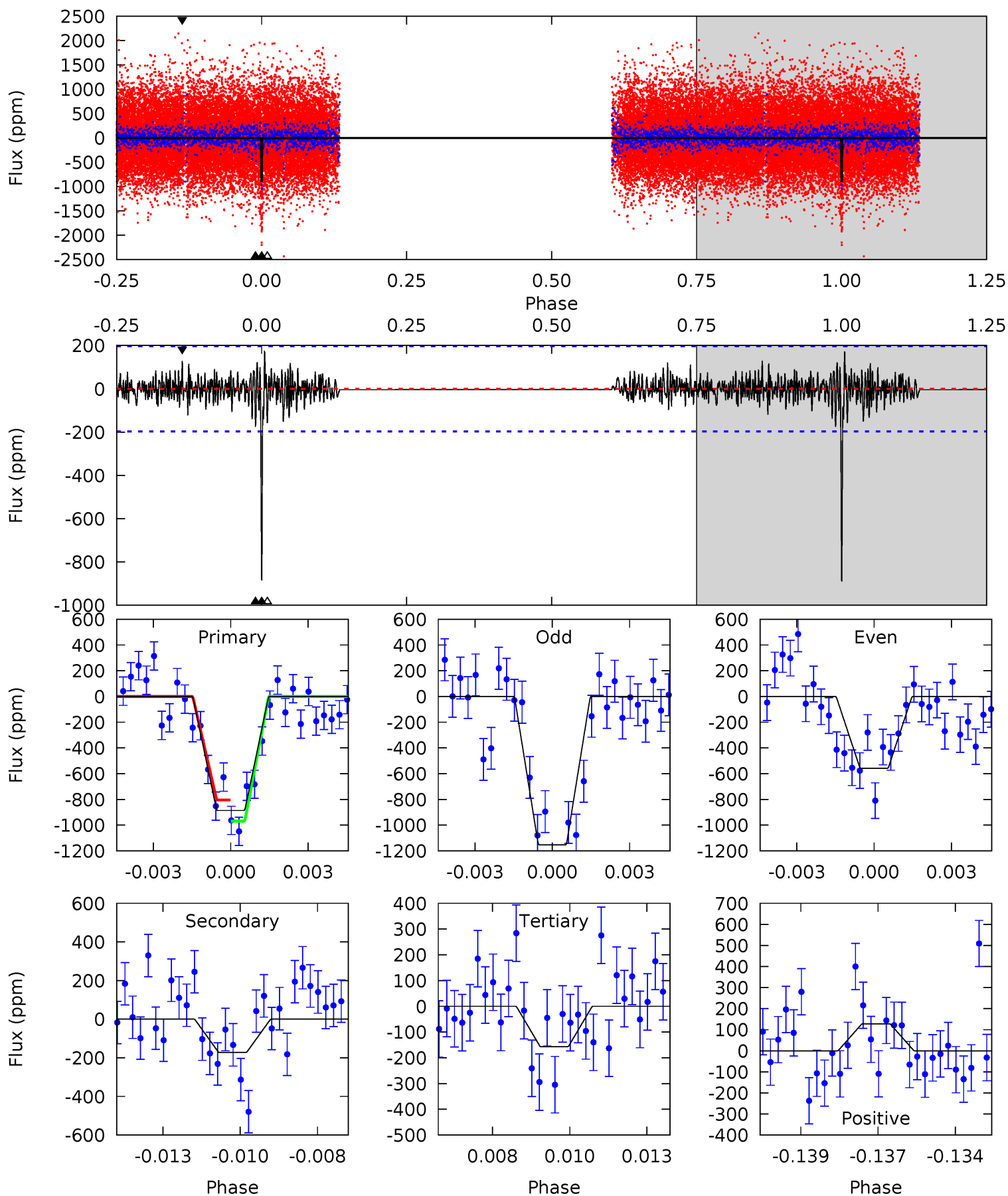
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.4	12.5	7.57	8.58	5.30	3.04	2.52	14.8	13.8	4.92	3.92	0.39	1.00	0.42	2.13



Alt Model-Shift Uniqueness Test

011449696-01, P = 371.168806 Days, E = 307.722434 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.7	4.60	4.20	3.43	5.28	3.01	1.12	19.5	20.2	0.40	1.16	8.01	0.92	0.16	2.19



Stellar Parameters For KIC 011449696

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6106^{+191}_{-233}	$4.497^{+0.054}_{-0.216}$	$-0.240^{+0.300}_{-0.300}$	$0.940^{+0.295}_{-0.105}$	$1.013^{+0.139}_{-0.139}$	$1.716^{+0.483}_{-0.940}$
	+3%/-4%	+1%/-5%	+125%/-125%	+31%/-11%	+14%/-14%	+28%/-55%
Source	KIC0	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 011449696-01 / KOI 8224.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-524 ± 42	$3.05^{+0.62}_{-0.41}$	370^{+25}_{-20}	5467^{+410}_{-333}	31469^{+10631}_{-9340}
Alt.	-172 ± 37	$3.18^{+0.65}_{-0.43}$	370^{+29}_{-20}	4260^{+299}_{-243}	9093^{+3960}_{-3016}

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

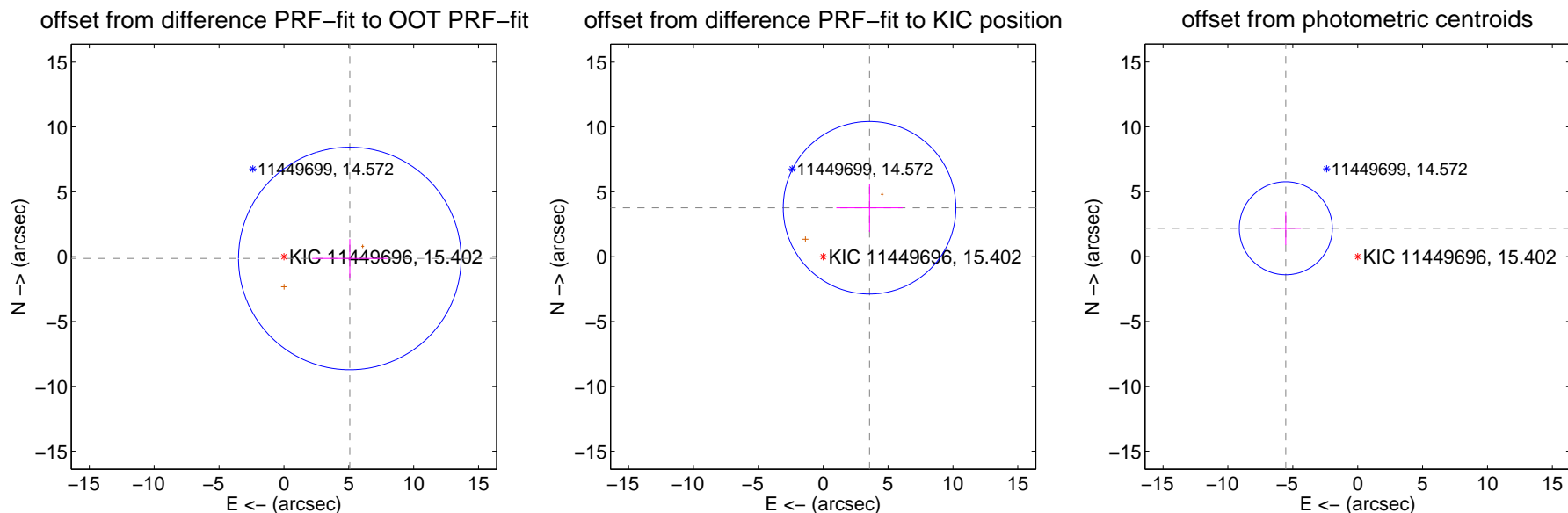
DV Centroid Data

Supplemental centroid analysis for 011449696-01. Kepler magnitude: 15.40. Transit SNR 7.48

There are 0 quarters with good PRF difference image offsets

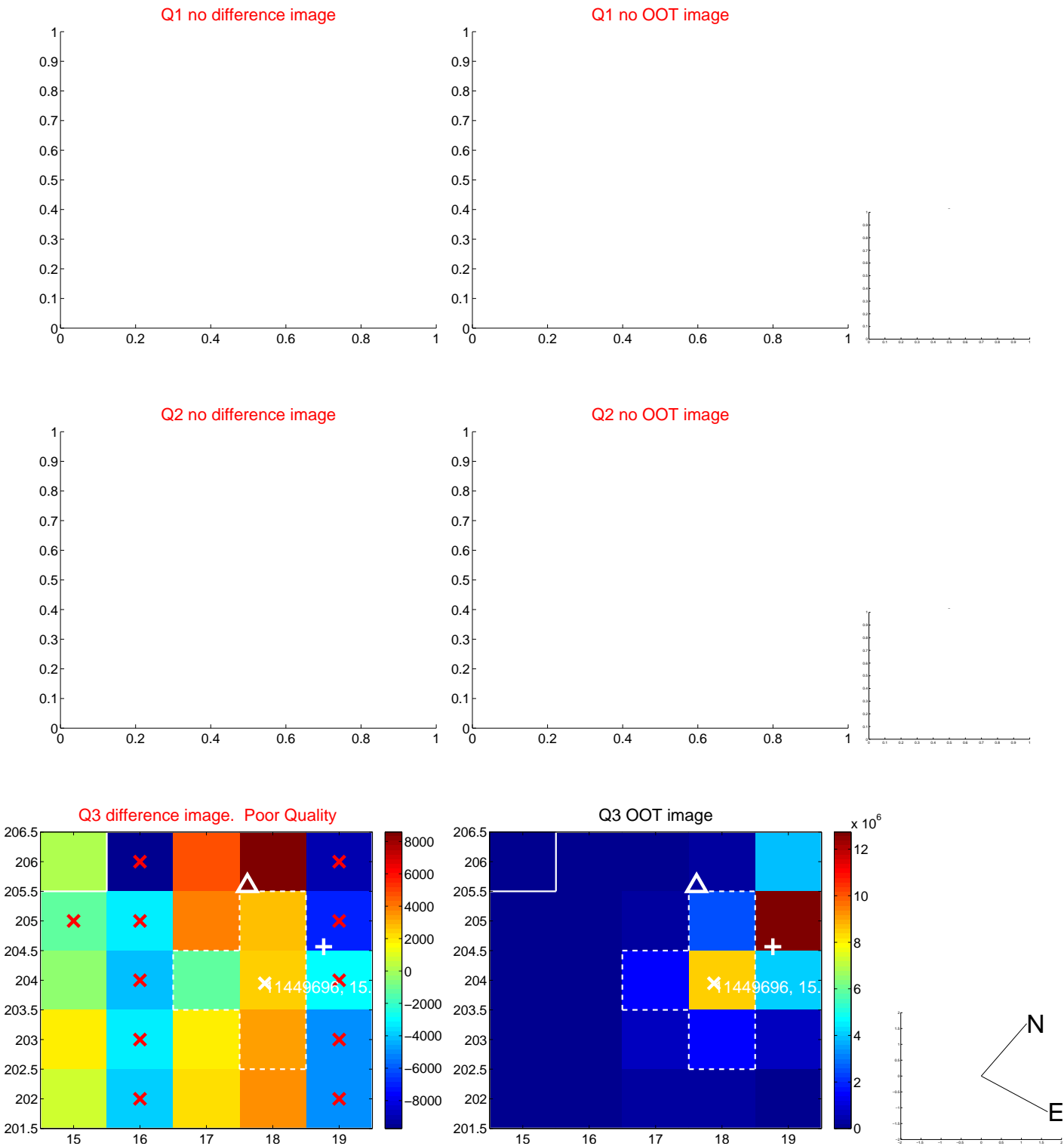
The OOT PRF centroid is offset from the target star catalog position by about 3.92 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.080 ± 2.860	1.78	-5.078 ± 2.901	-0.138 ± 1.495
PRF-fit source offset from KIC position	5.194 ± 2.217	2.34	-3.573 ± 2.562	3.770 ± 1.855
photometric centroid source offset	5.95 ± 1.19	4.98	5.54 ± 1.18	2.18 ± 1.29

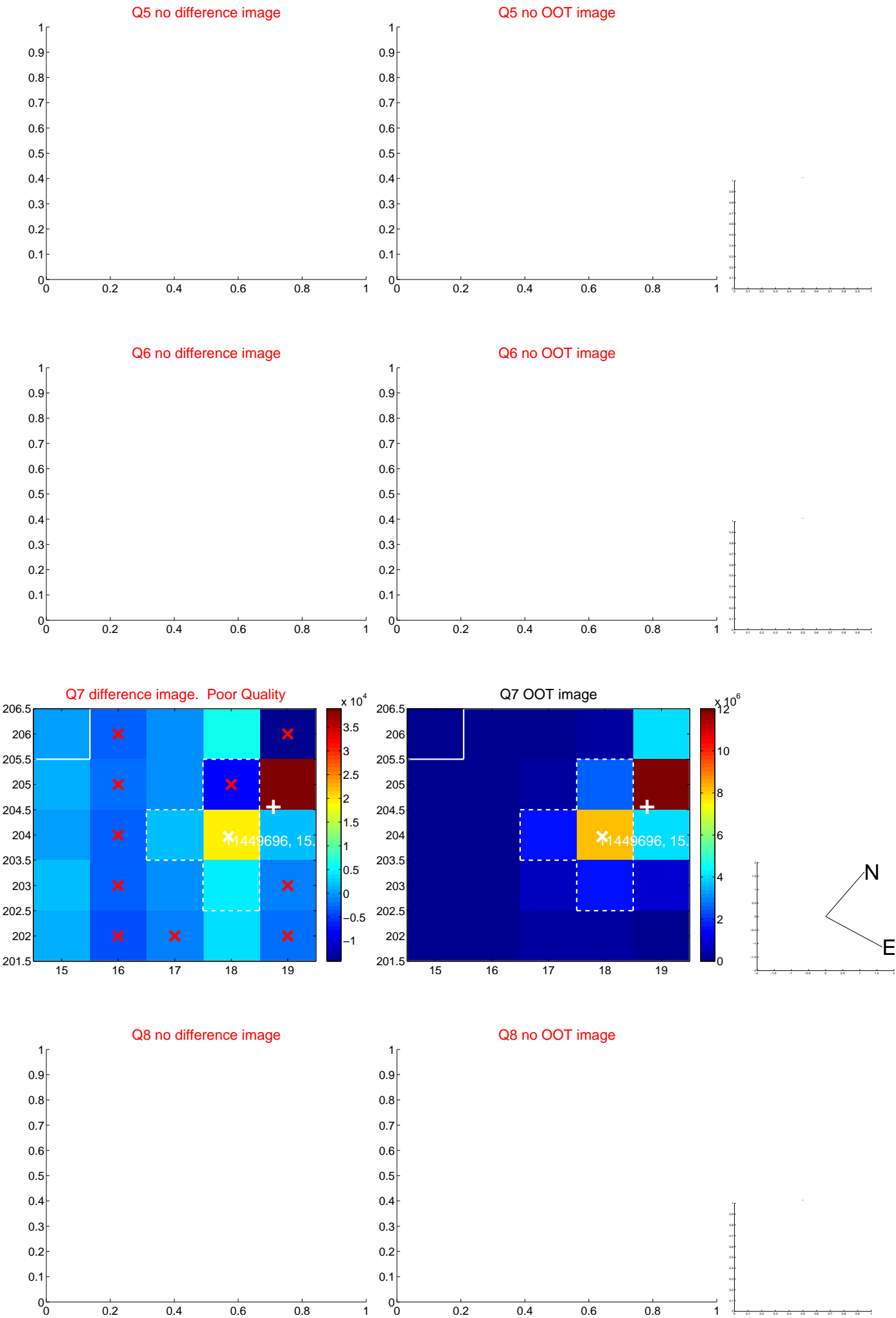


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

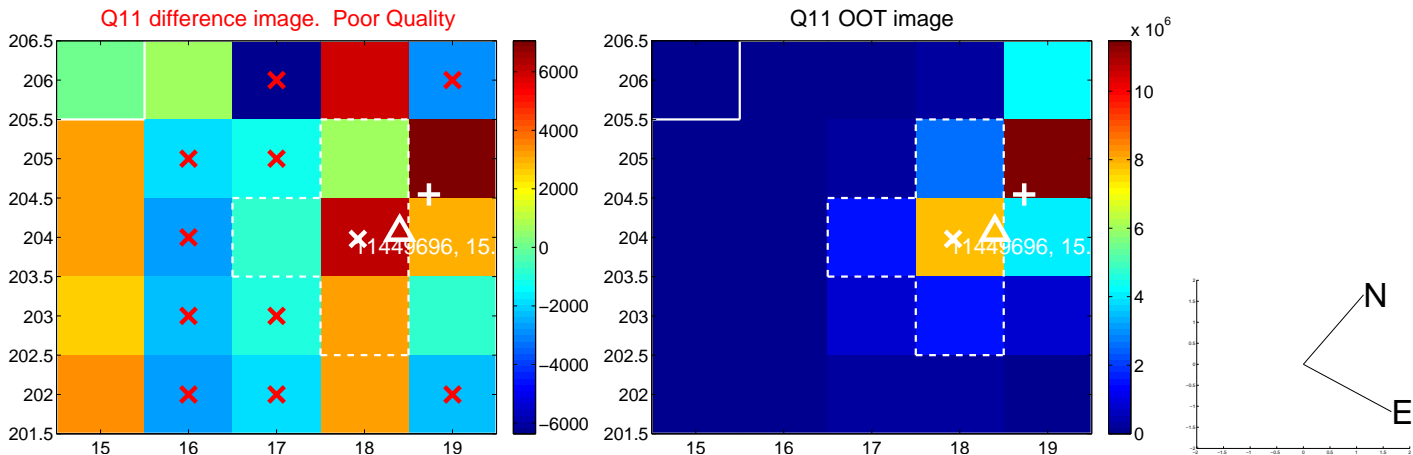
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



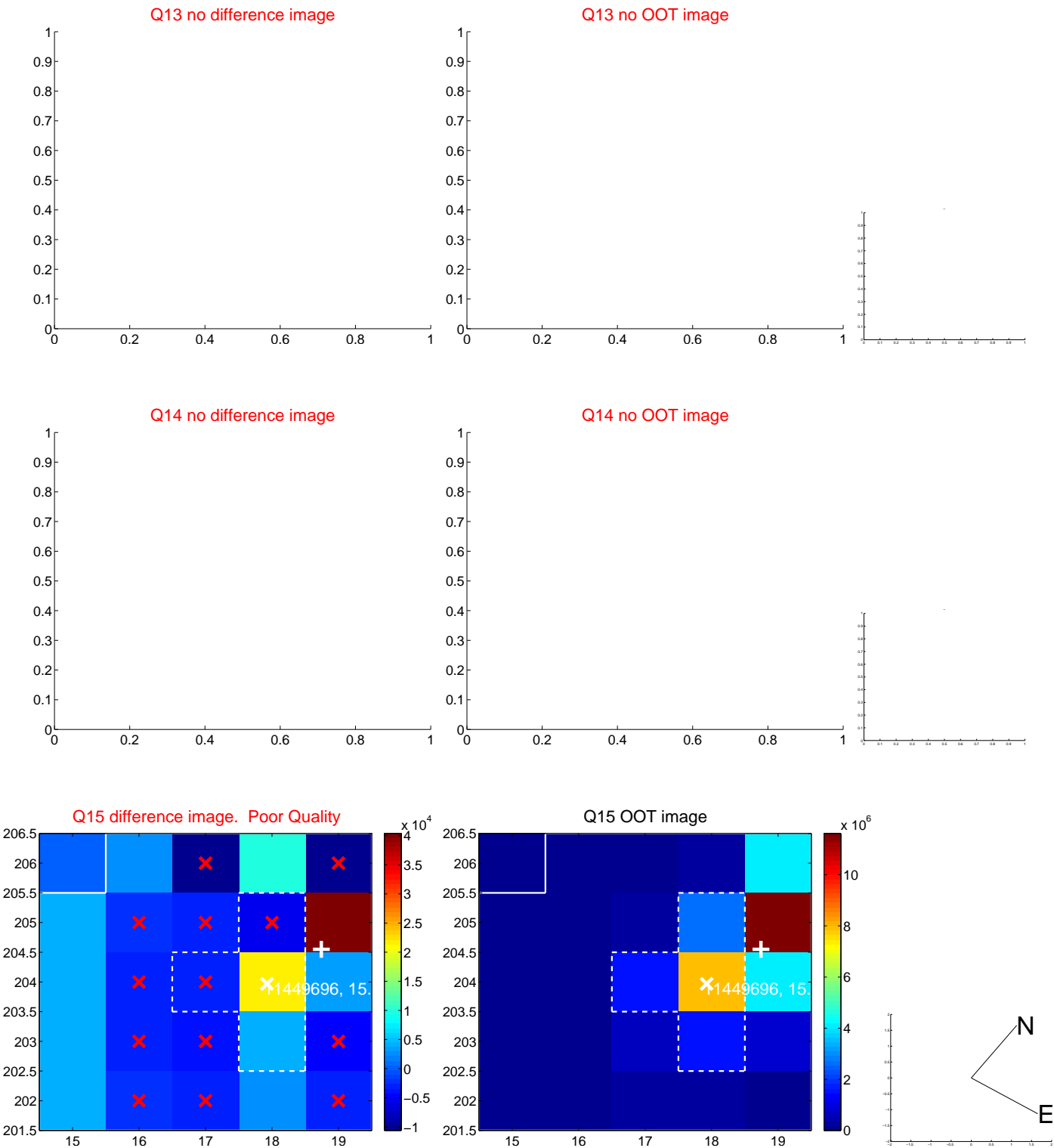
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



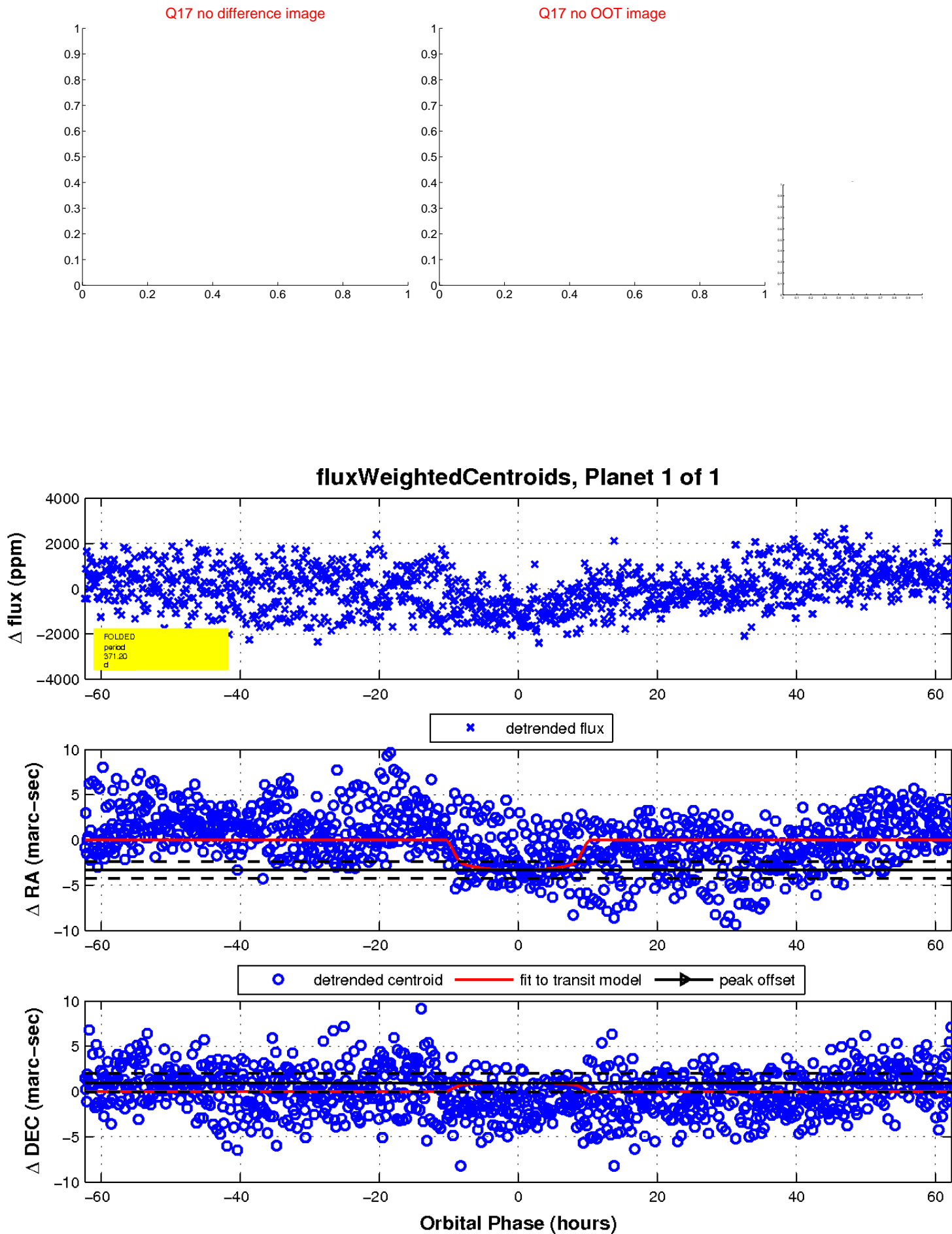
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



UKIRT Image

Declination

