

KIC 007206350

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})
007206350-01	OBS	No	424.040830	463.919470	127.5	21.698	11.7	2.6	1.49	6264	1.76	2.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007206350-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—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.

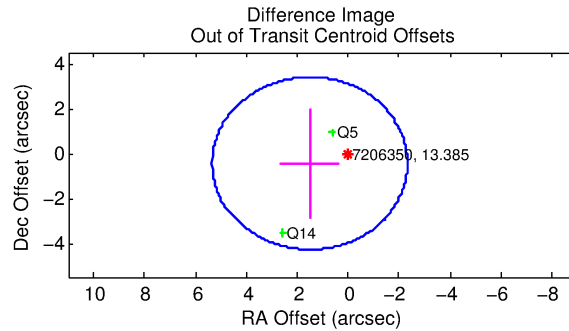
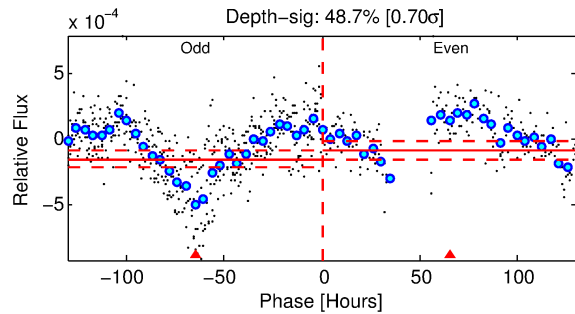
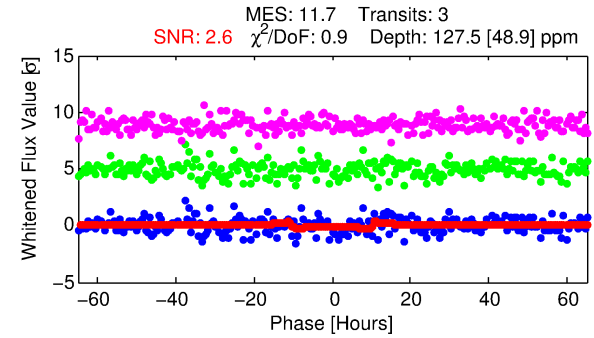
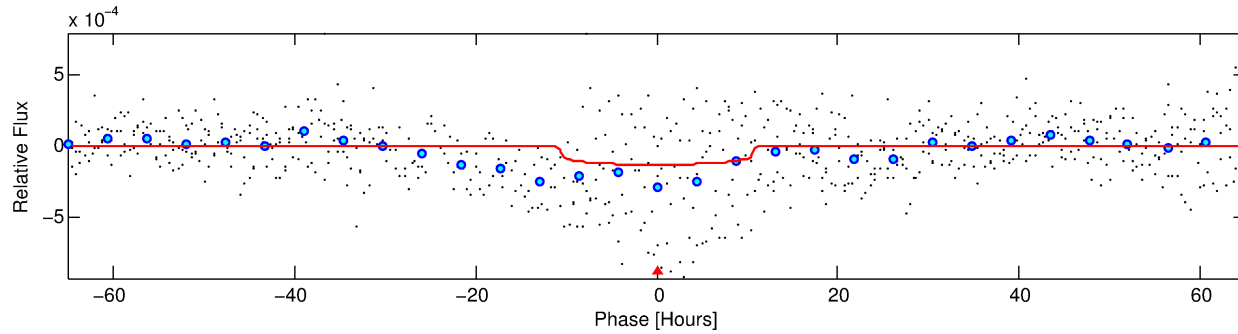
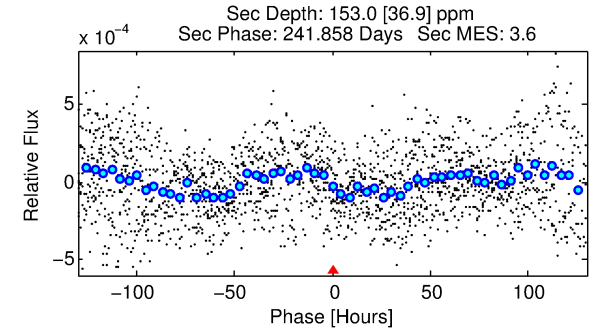
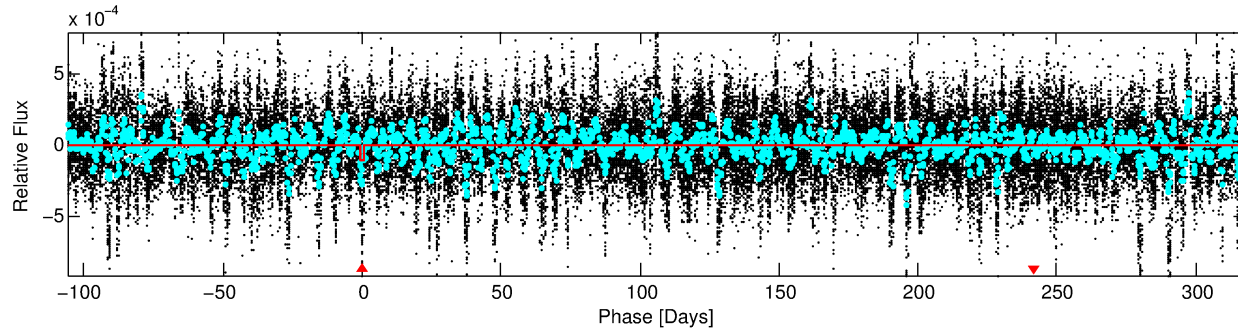
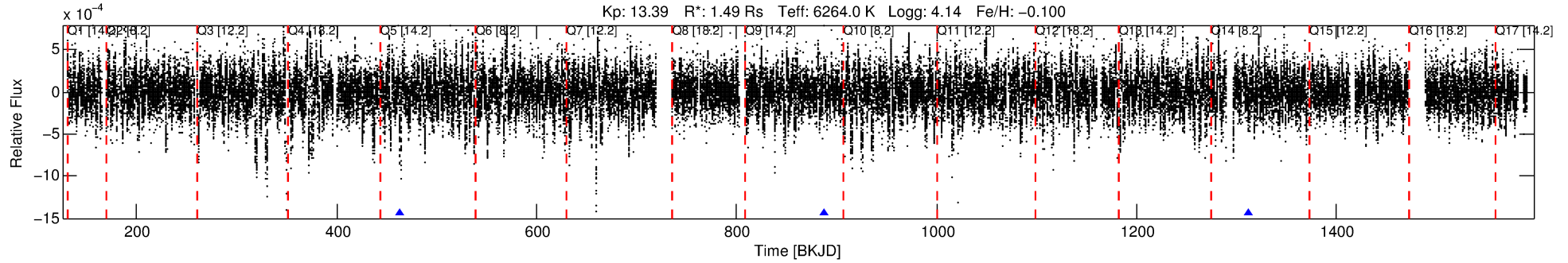
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007206350-01

No Significant Match Found

DV One-Page Summary

KIC: 7206350 Candidate: 1 of 1 Period: 424.041 d



DV Fit Results:

Period = 424.04083 [0.02320] d
Epoch = 463.9195 [0.0307] BKJD
Rp/R* = 0.0108 [0.0066]
a/R* = 120.94 [352.21]
b = 0.60 [3.06]
Seff = 2.31 [0.83]
Teq = 314 [28] K
Rp = 1.76 [1.15] Re
a = 1.1505 [0.2478] AU
Ag = 35976.36 [46467.78] [0.77σ]
Teffp = 6694 [2095] K [3.04σ]

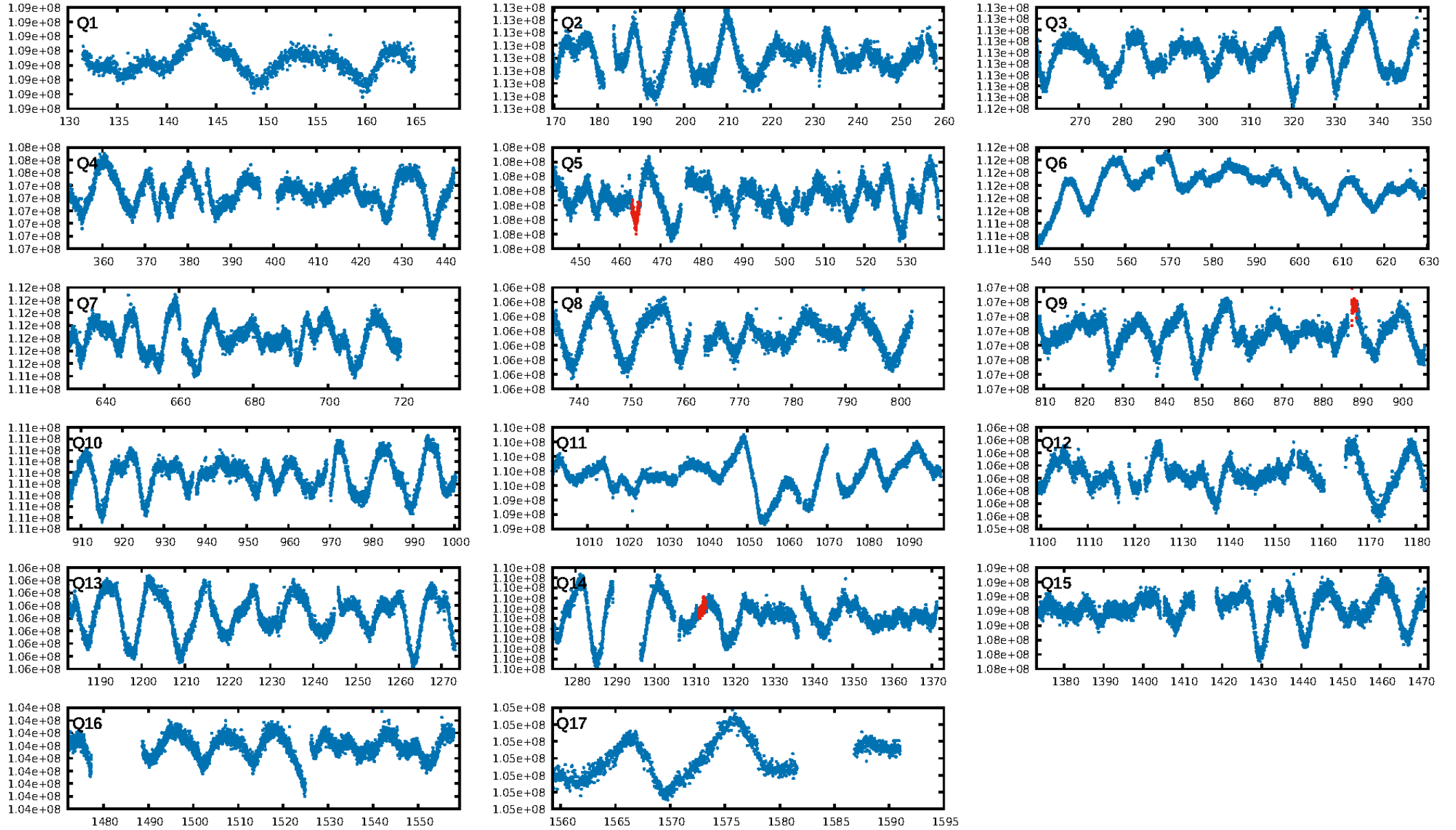
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 11.2%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 9.72e-20
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 3.998
Centroid-sig: 0.0%
Centroid-so: 3.679 arcsec [2.56σ]
OotOffset-rm: 1.570 arcsec [1.23σ]
KicOffset-rm: 1.560 arcsec [1.23σ]
OotOffset-st: 1/0/0/1 [2]
KicOffset-st: 1/0/0/1 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [2/2]

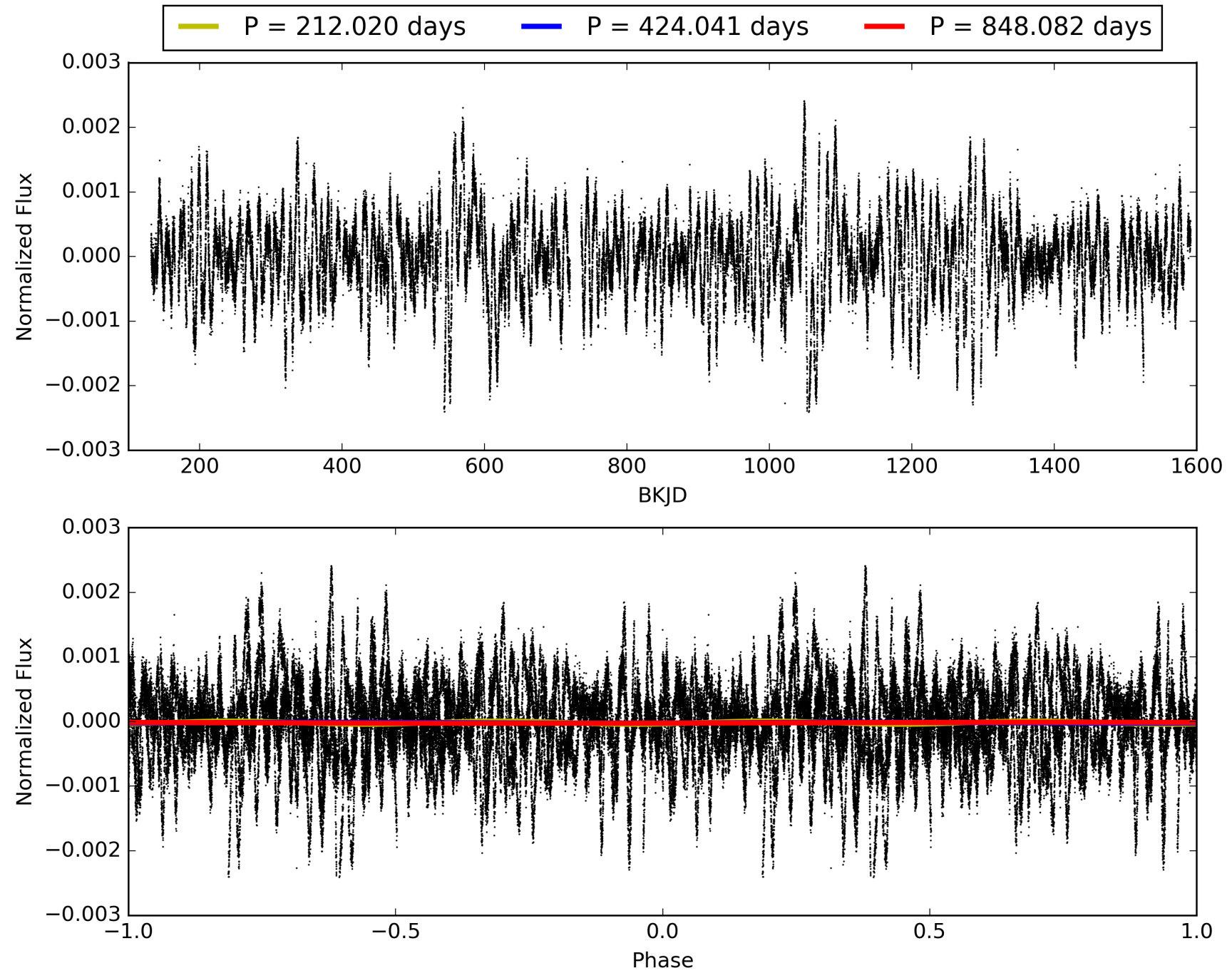
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 03:23:05 Z

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

TCE 007206350-01, PDC Light Curves

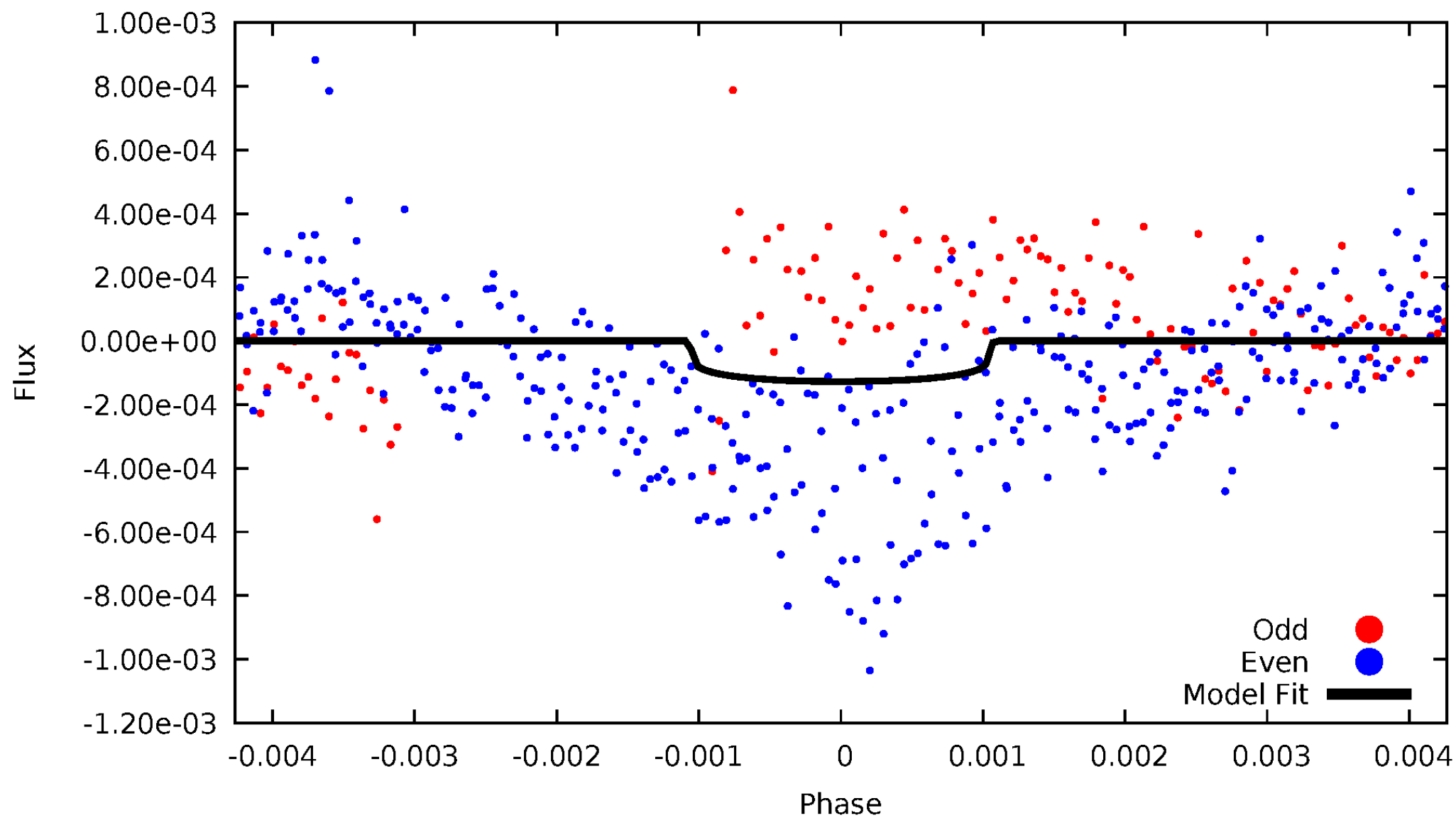


TCE 007206350-01



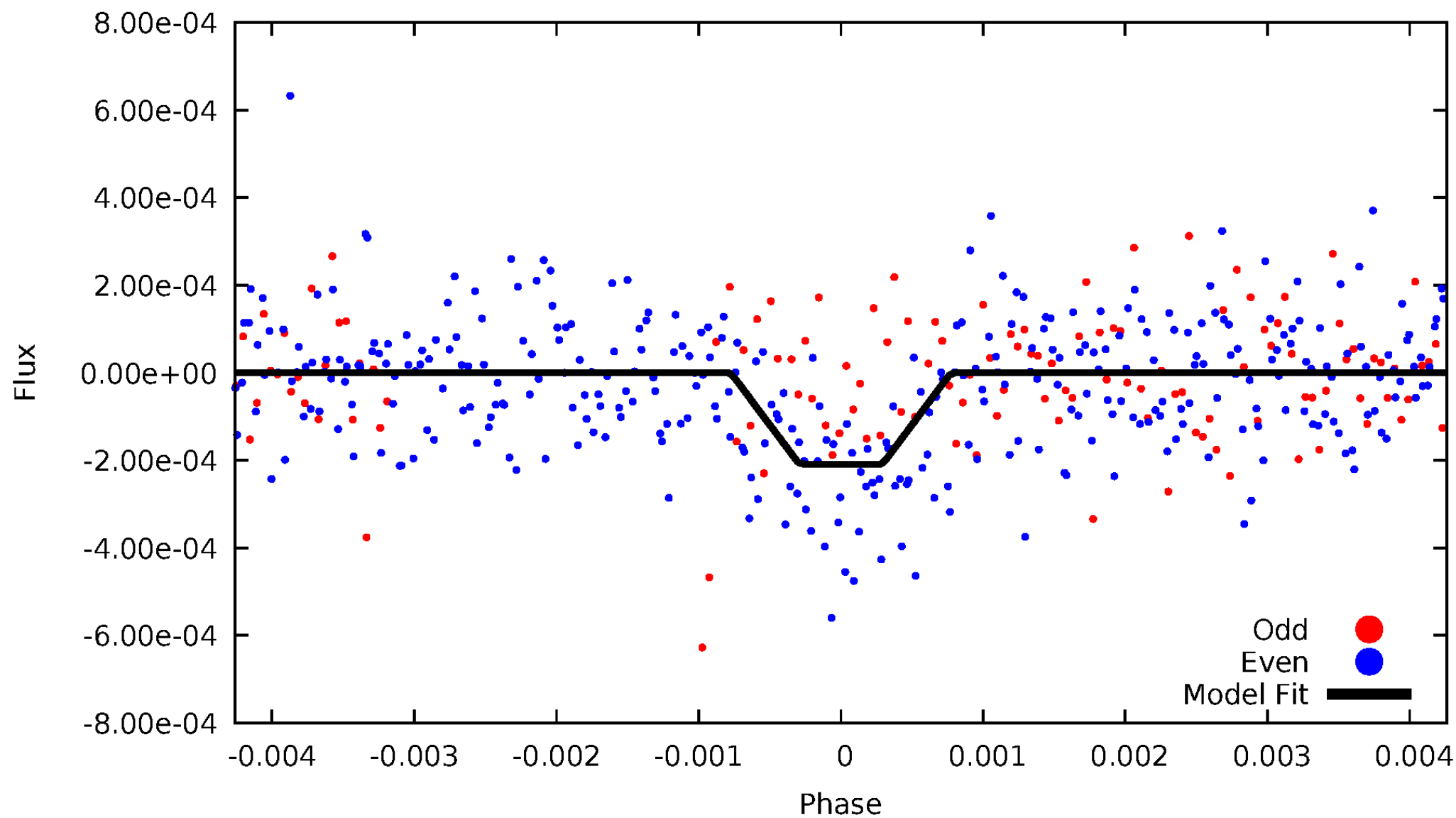
DV Odd/Even

TCE 007206350-01



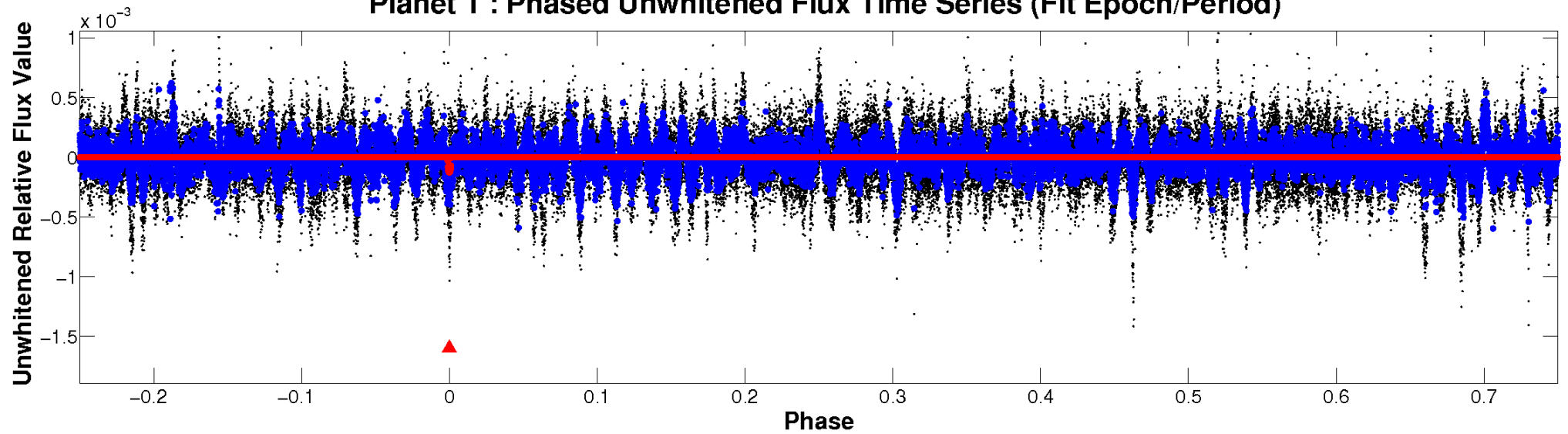
ALT Odd/Even

TCE 007206350-01

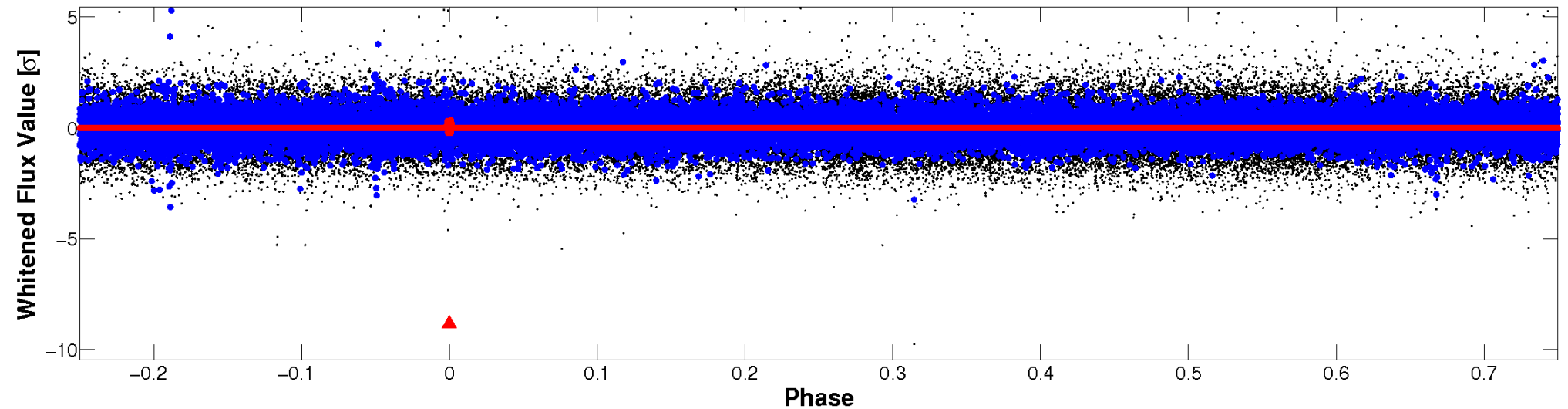


Non-Whitened Vs. Whitened Light Curve

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

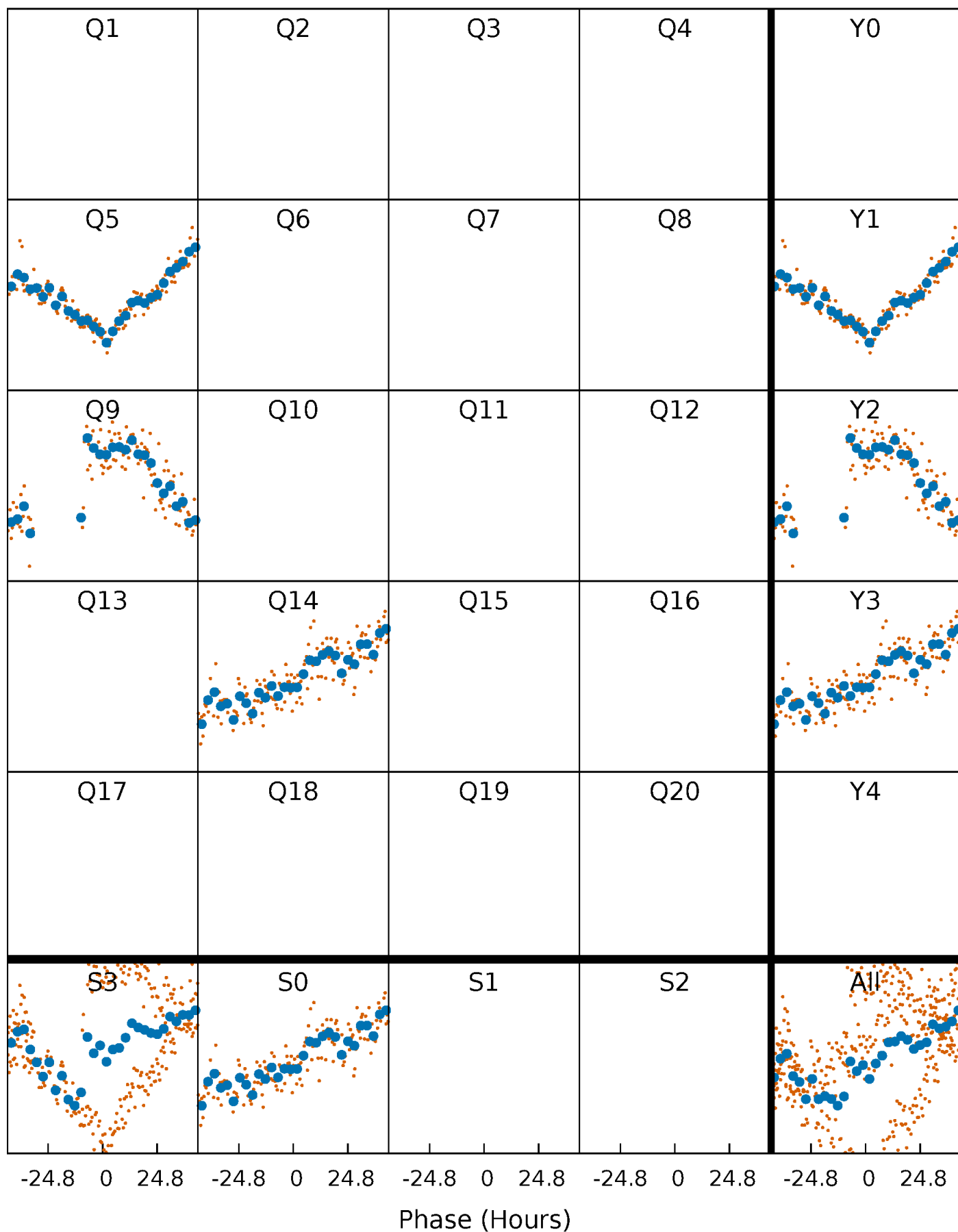


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 007206350-01 P=424.040830 Days $T_0=463.919470$ (BKJD)



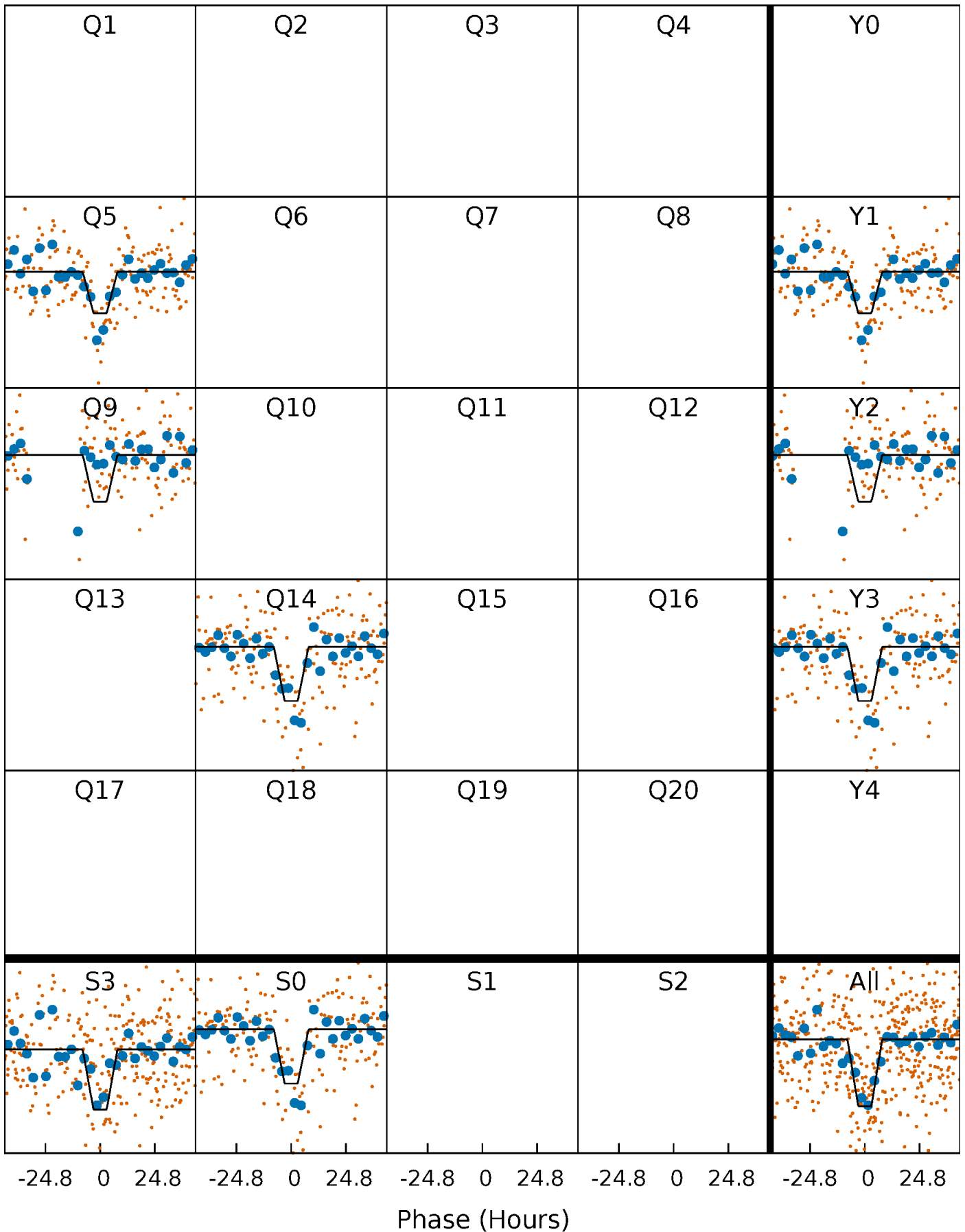
DV Quarter-Phased Transit Curves

TCE 007206350-01 $P=424.040830$ Days $T_0=463.919470$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

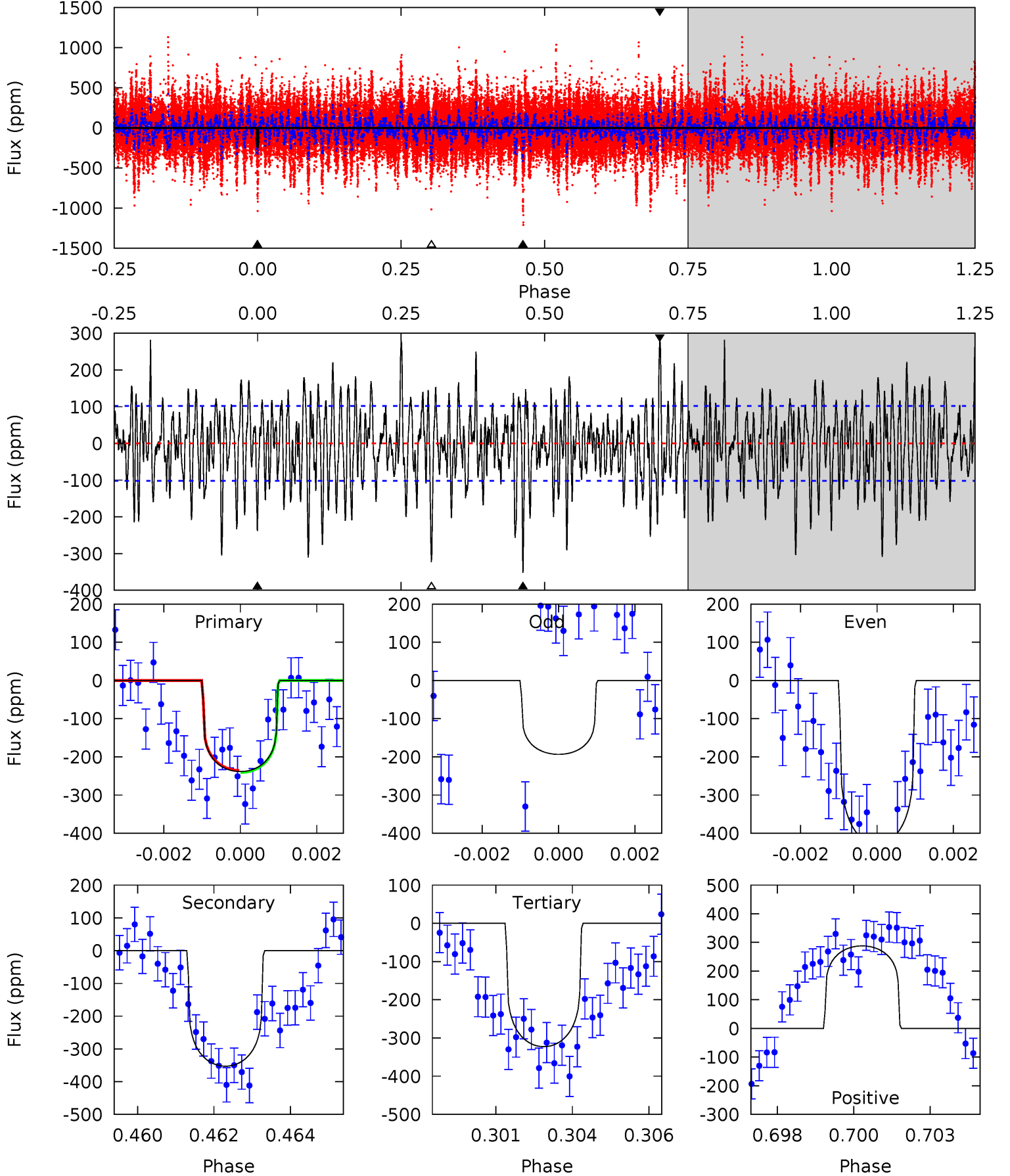
TCE 007206350-01 P=423.955503 Days $T_0=464.034001$ (BKJD)



DV Model-Shift Uniqueness Test

007206350-01, P = 424.040830 Days, E = 39.878640 Days

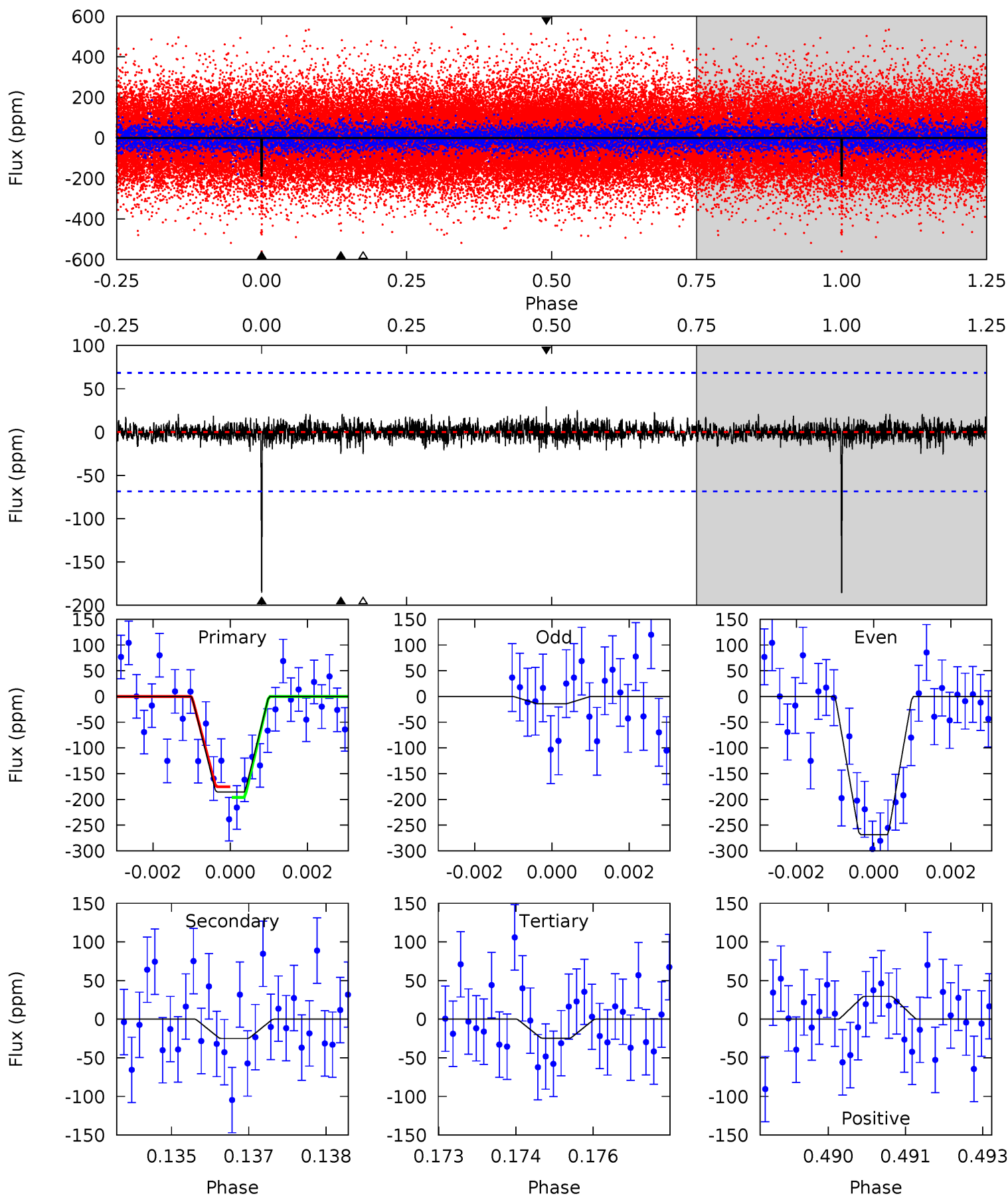
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.4	18.4	16.8	15.0	5.31	3.07	4.71	-4.39	-2.58	1.56	3.38	5.83	1.18	0.45	0.13



Alt Model-Shift Uniqueness Test

007206350-01, $P = 423.955503$ Days, $E = 40.078498$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.6	1.96	1.95	2.31	5.37	3.16	0.49	12.6	12.3	0.01	-0.35	9.46	0.72	0.14	0.82



Stellar Parameters For KIC 007206350

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6264^{+170}_{-189}	$4.145^{+0.198}_{-0.132}$	$-0.100^{+0.250}_{-0.300}$	$1.489^{+0.341}_{-0.341}$	$1.128^{+0.181}_{-0.148}$	$0.481^{+0.508}_{-0.182}$
	+3%/-3%	+5%/-3%	+250%/-300%	+23%/-23%	+16%/-13%	+106%/-38%
Source	PHO1	FLK73	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 007206350-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-353 ± 19	$1.81^{+1.11}_{-0.99}$	436^{+27}_{-30}	8332^{+7191}_{-1911}	$79255^{+311676}_{-49204}$
Alt.	-25 ± 13	$2.37^{+1.02}_{-1.03}$	435^{+26}_{-29}	3927^{+985}_{-602}	3114^{+6700}_{-2034}

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 $A_{obs} \gg 1.0$

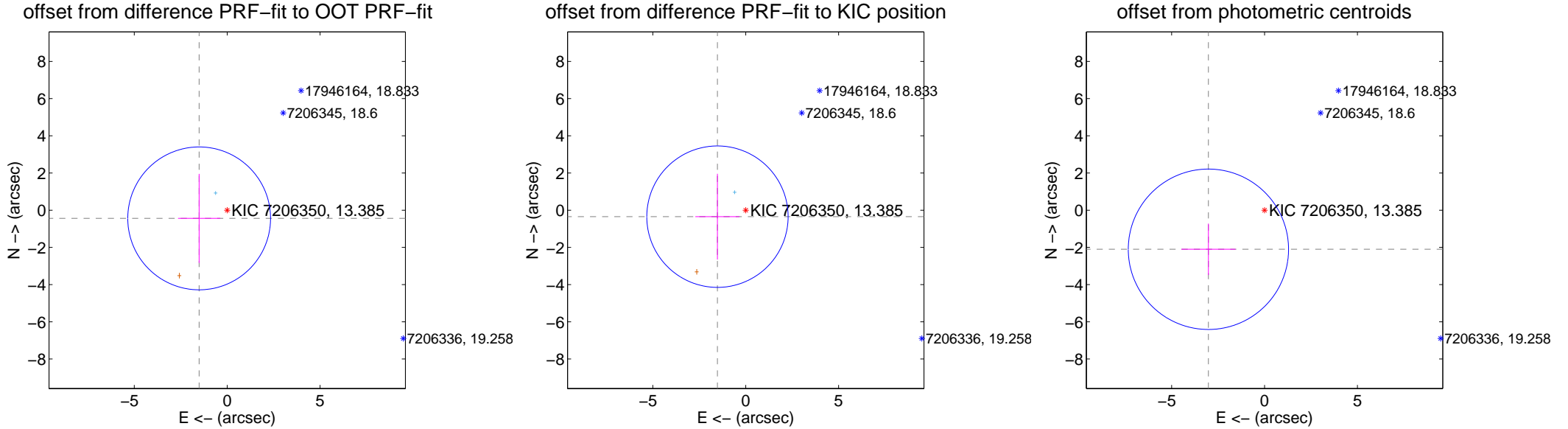
DV Centroid Data

Supplemental centroid analysis for 007206350-01. Kepler magnitude: 13.38. Transit SNR 2.65

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.570 ± 1.280	1.23	1.507 ± 1.136	-0.440 ± 2.395
PRF-fit source offset from KIC position	1.560 ± 1.267	1.23	1.521 ± 1.188	-0.348 ± 2.306
photometric centroid source offset	3.68 ± 1.44	2.56	3.02 ± 1.46	-2.10 ± 1.38

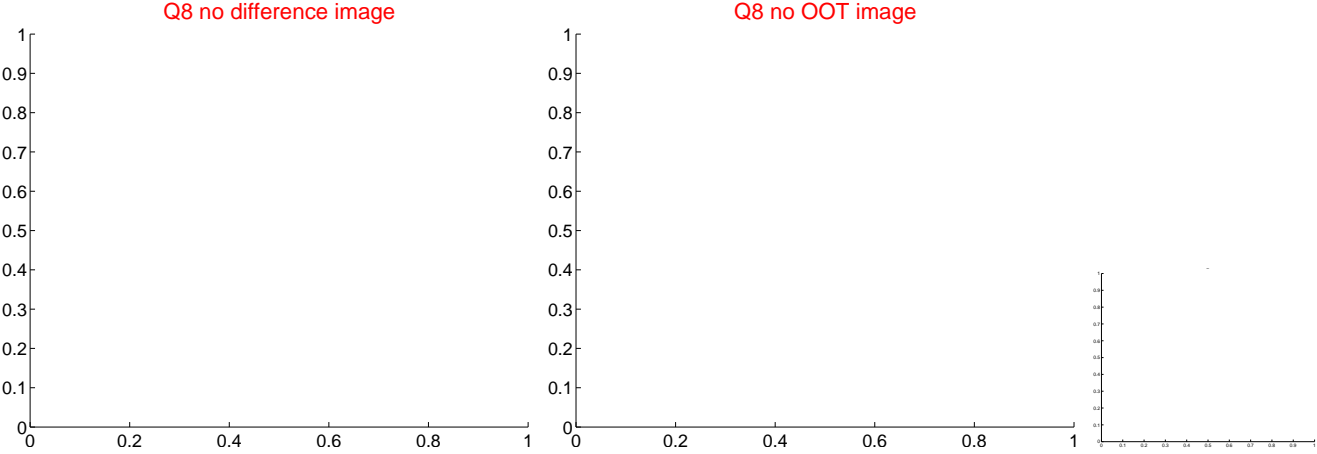
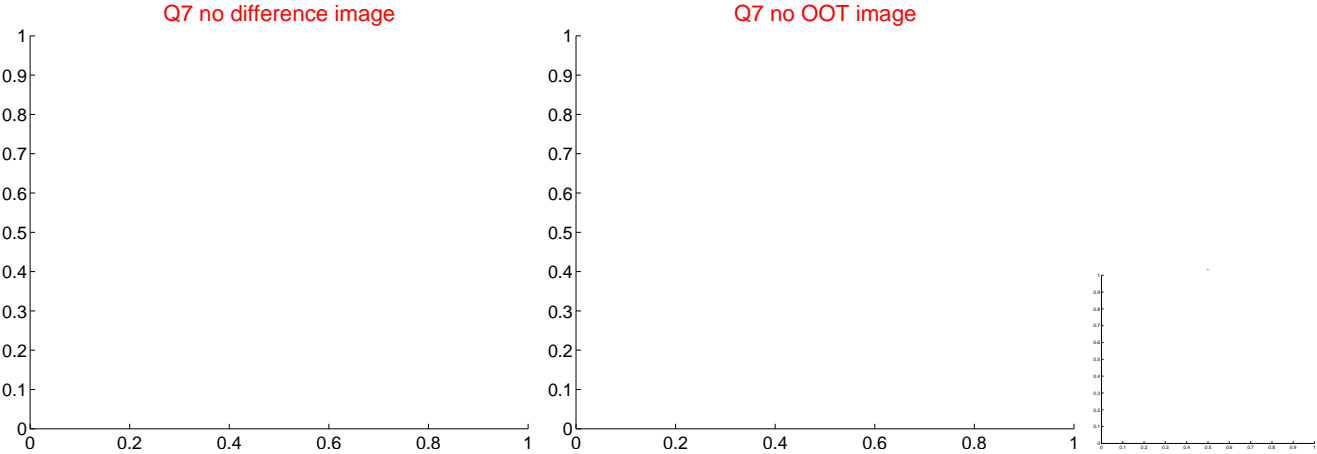
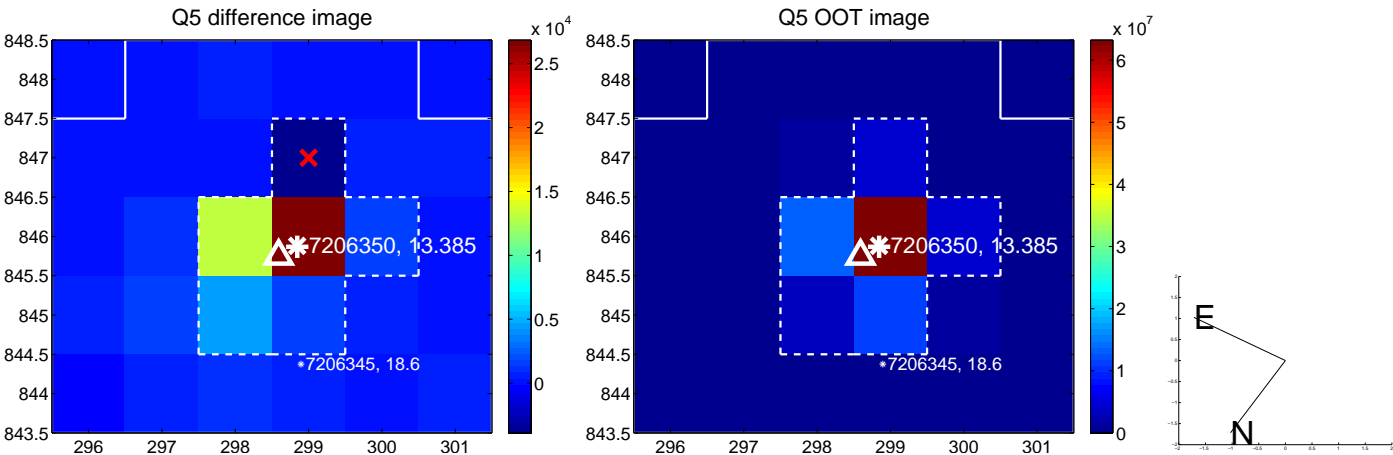


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



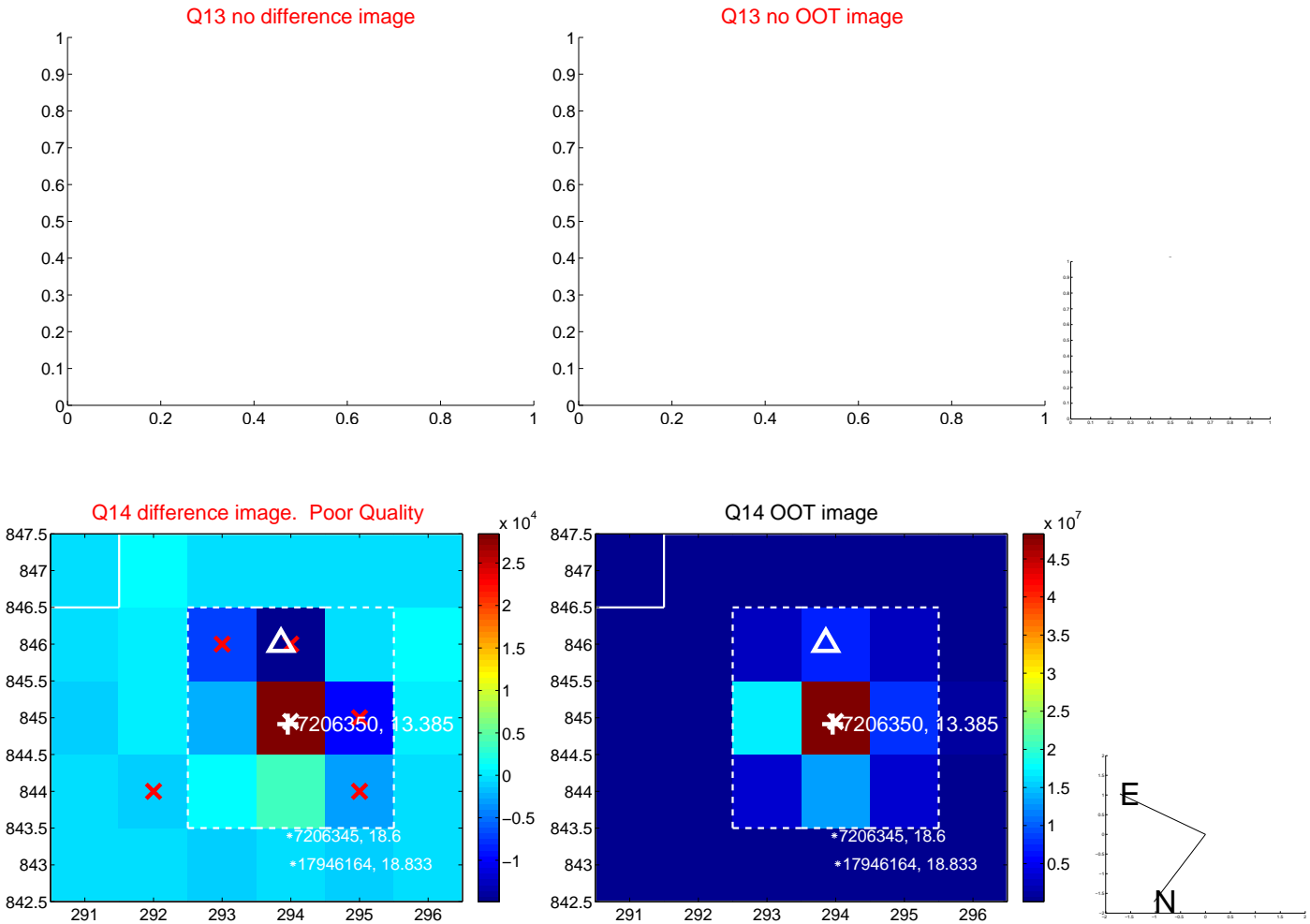
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



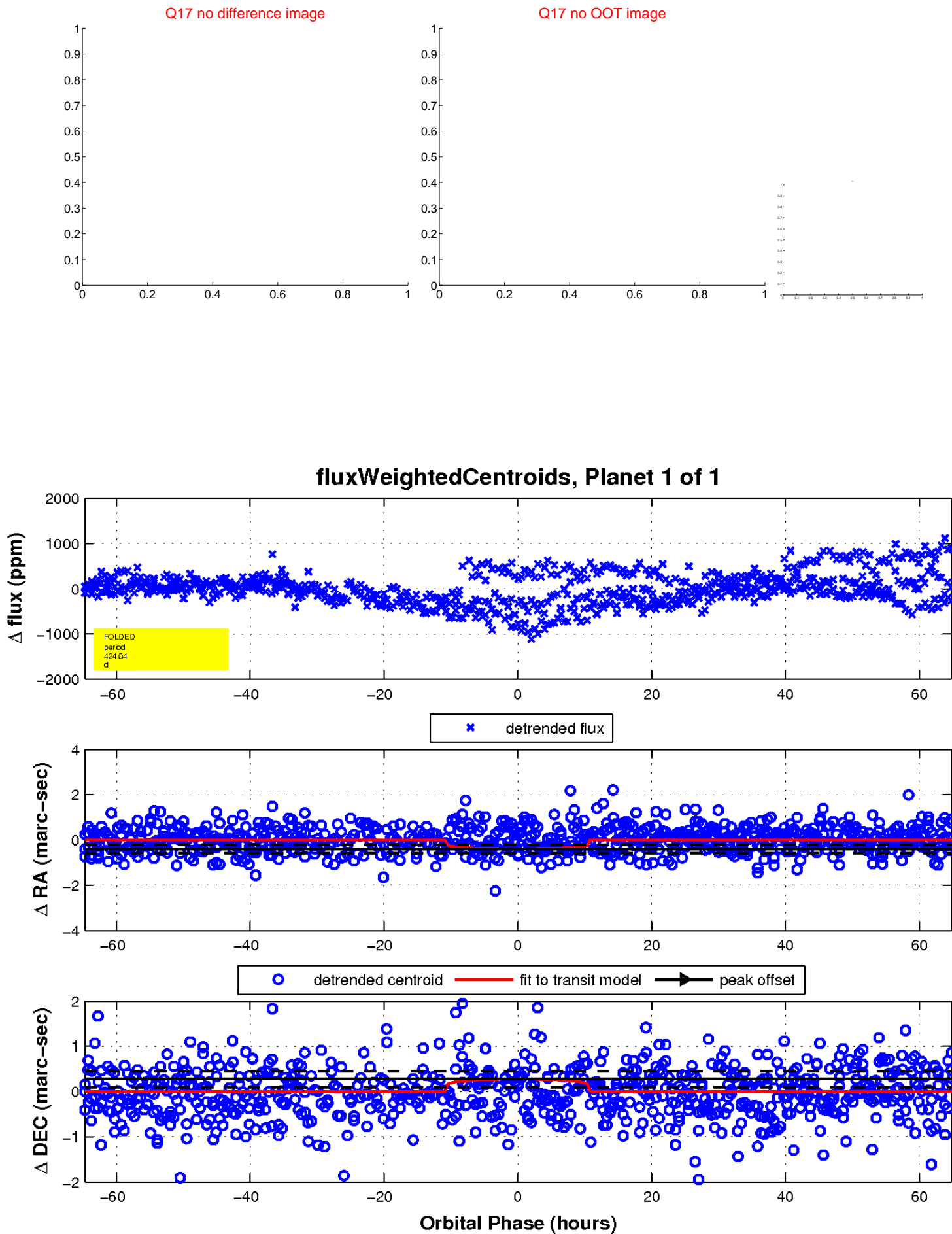
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

