

KIC 008557261

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})
008557261-01	OBS	No	374.583027	133.597152	2306.5	65.640	17.3	25.2	0.92	6126	8.16	1.02

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008557261-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—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.

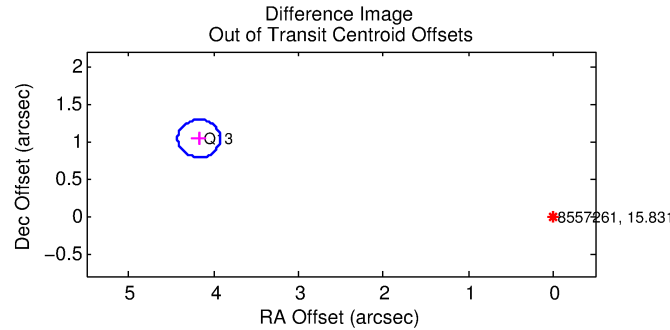
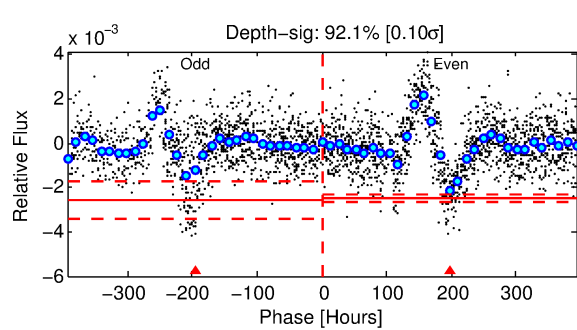
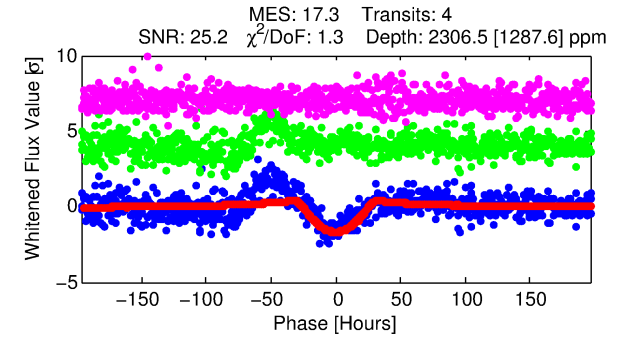
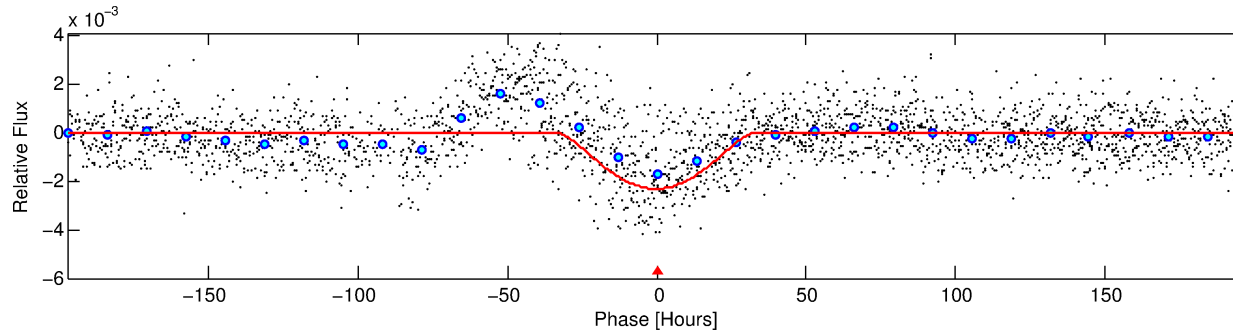
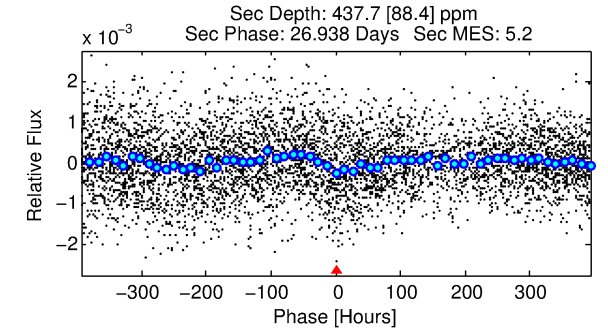
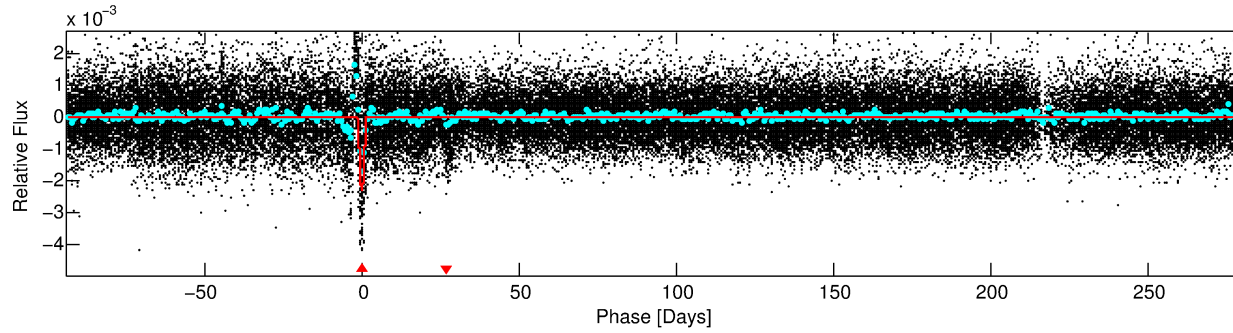
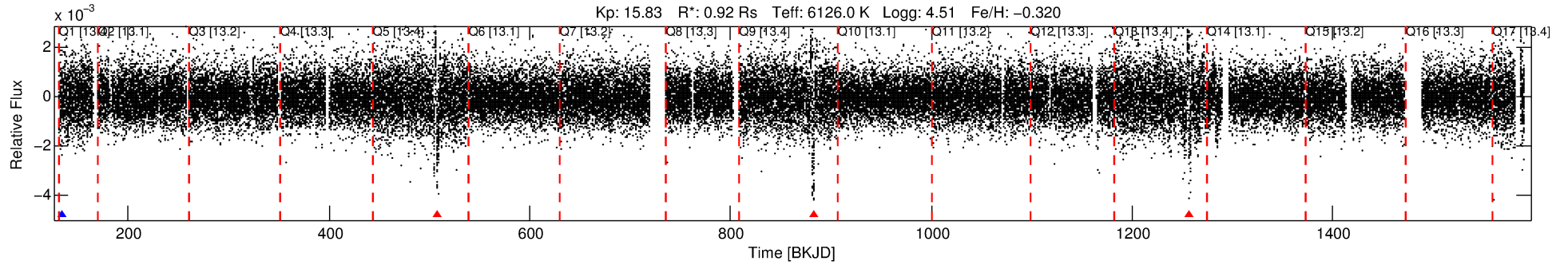
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008557261-01

No Significant Match Found

DV One-Page Summary

KIC: 8557261 Candidate: 1 of 1 Period: 374.583 d



DV Fit Results:

Period = 374.58303 [0.03257] d
Epoch = 133.5972 [0.0574] BKJD
Rp/R* = 0.0817 [0.1174]
a/R* = 18.01 [5.52]
b = 1.00 [0.14]
Seff = 1.02 [0.39]
Teq = 257 [24] K
Rp = 8.16 [11.97] Re
a = 1.0155 [0.2514] AU
Ag = 3730.83 [10827.79] [0.34σ]
Teff = 3100 [2234] K [1.27σ]

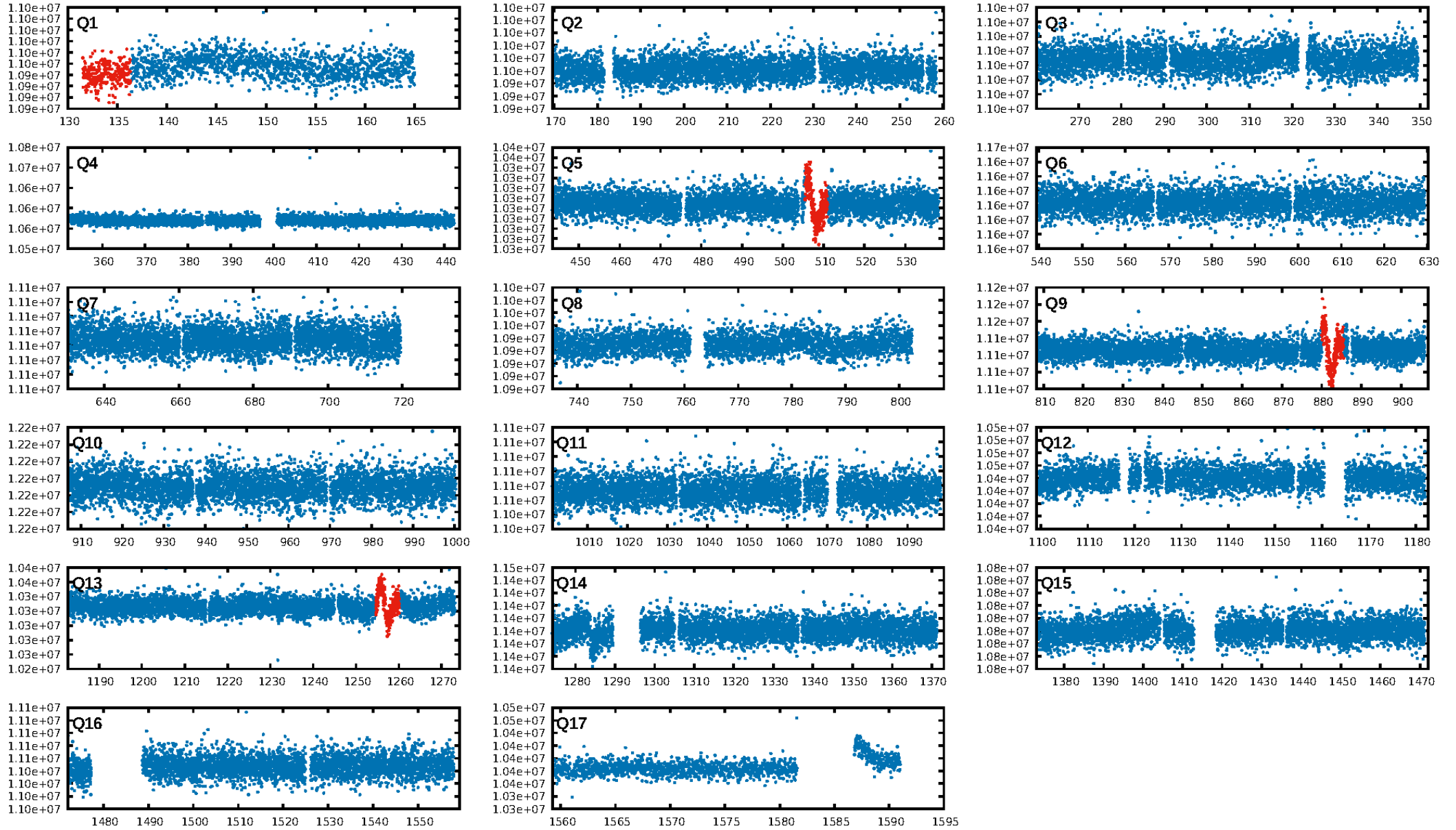
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGoF-sig: 75.3%
Bootstrap-pfa: 1.46e-80
RollingBand-fgt: 0.00 [0/3]
GhostDiagnostic-chr: 4.27
Centroid-sig: 0.2%
Centroid-so: 0.996 arcsec [2.51σ]
OotOffset-rm: 4.301 arcsec [51.40σ]
KicOffset-rm: 4.168 arcsec [49.81σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [1/1]

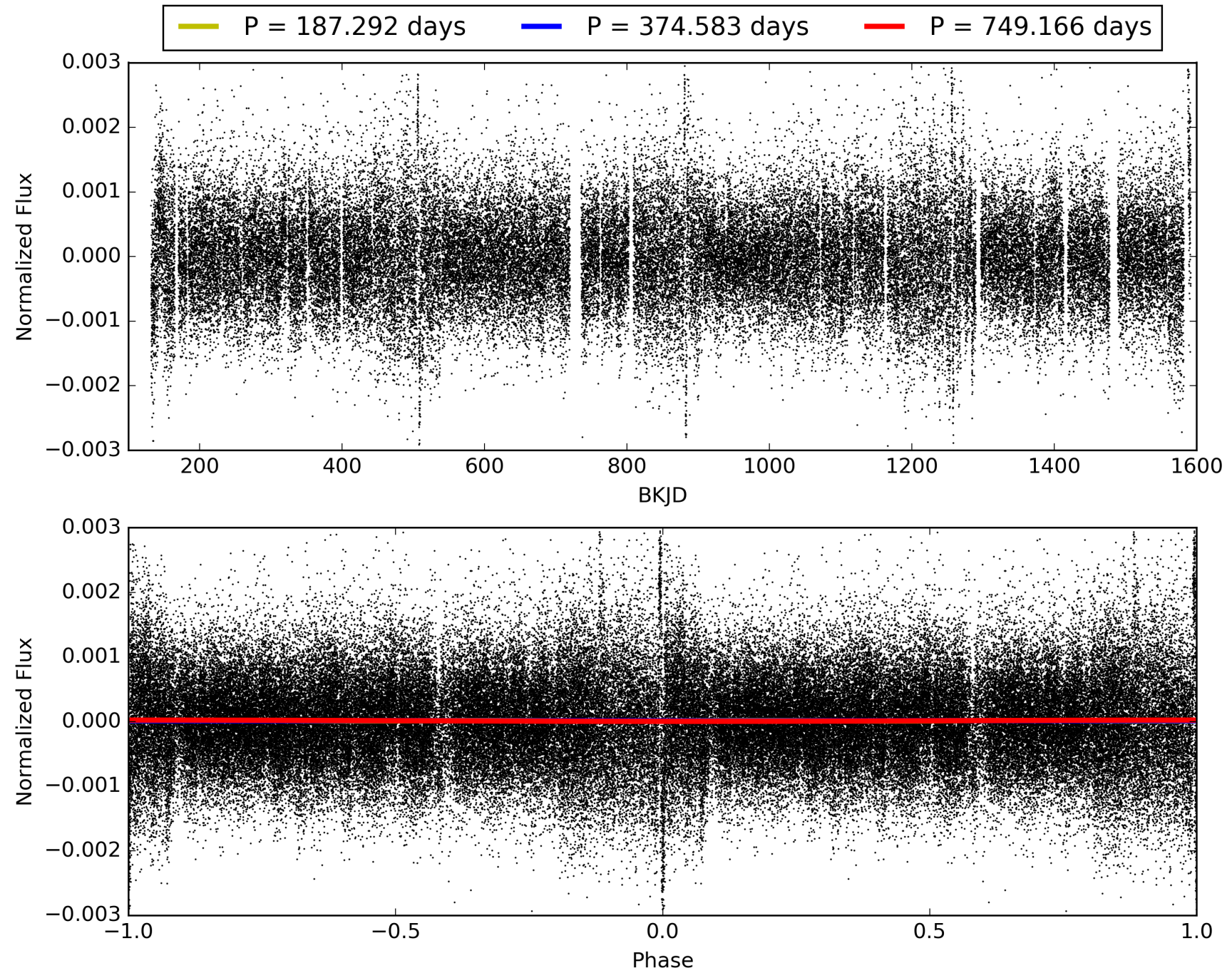
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 16:12:31 Z

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

TCE 008557261-01, PDC Light Curves

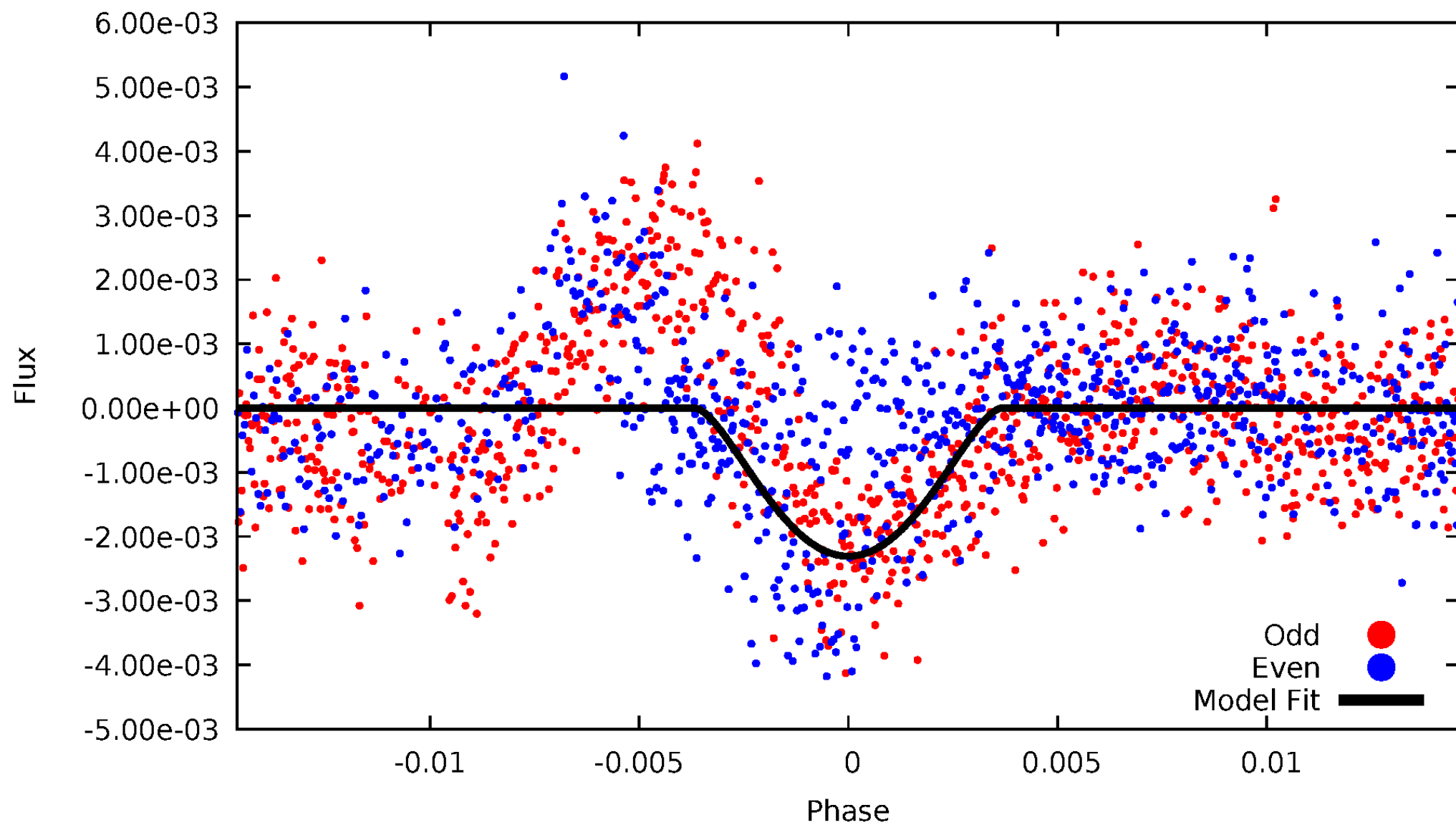


TCE 008557261-01



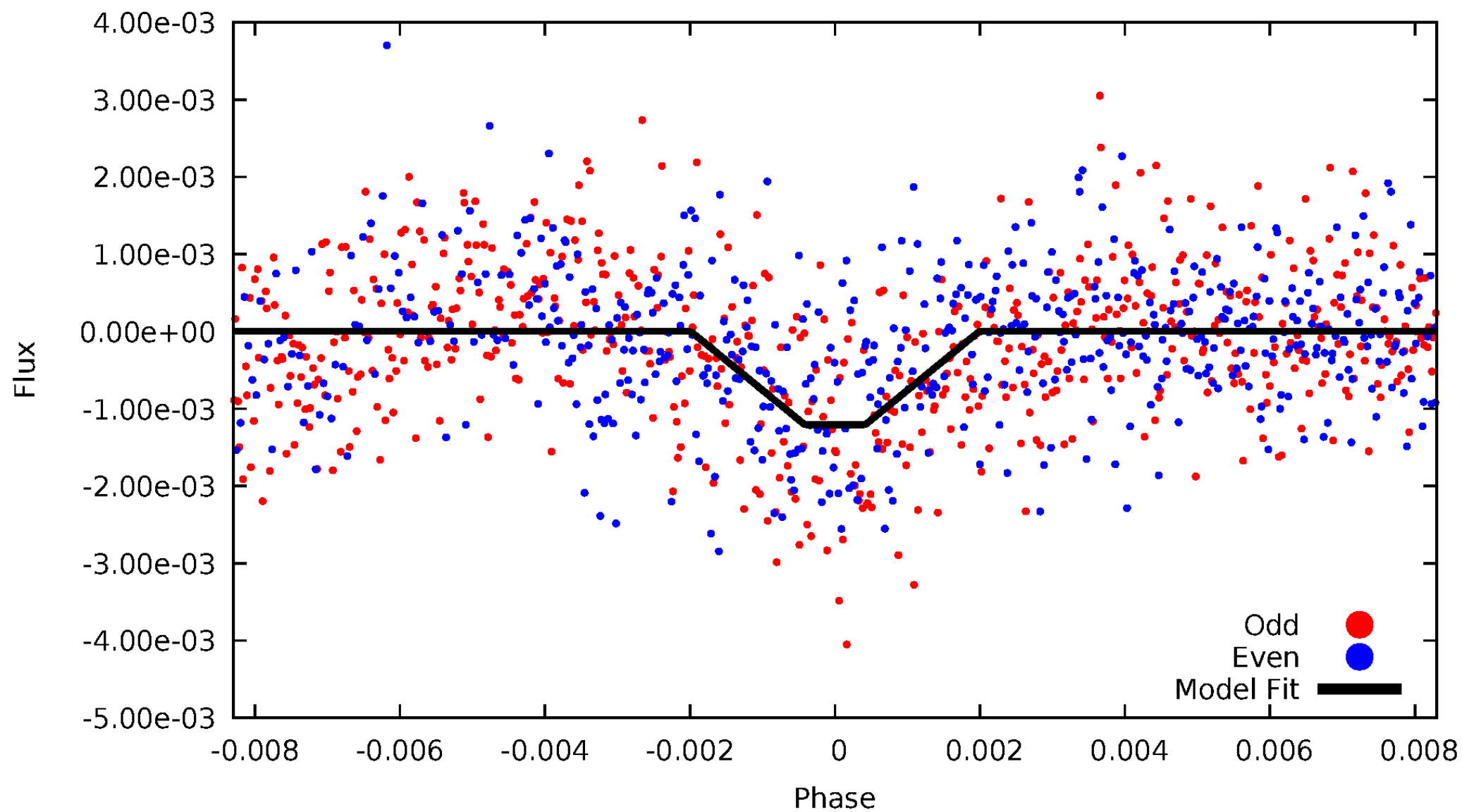
DV Odd/Even

TCE 008557261-01

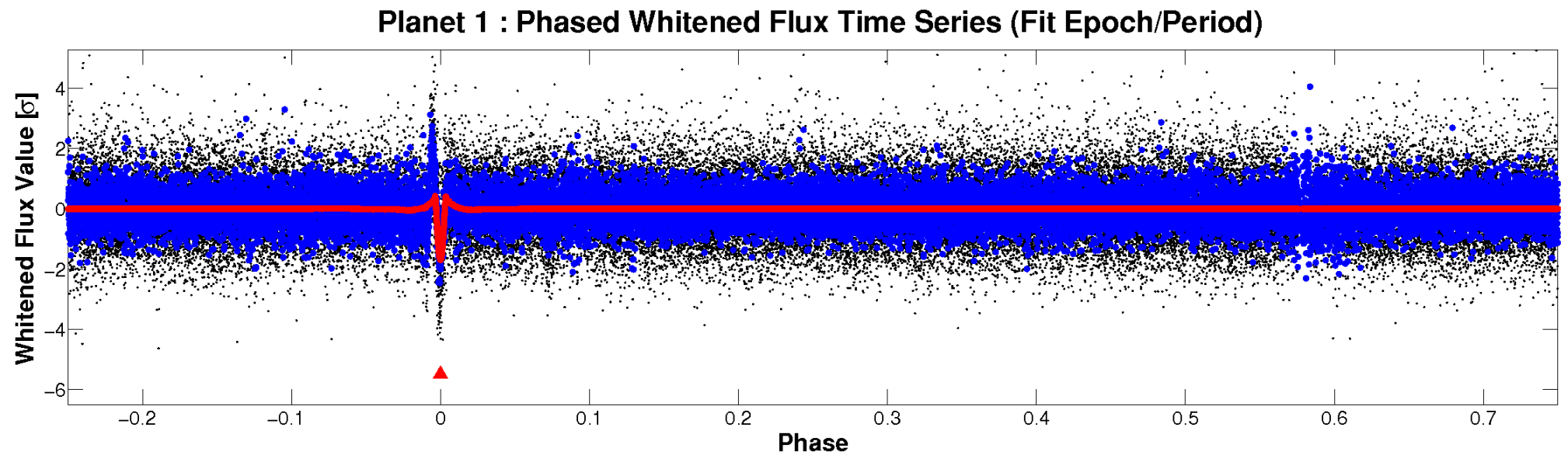
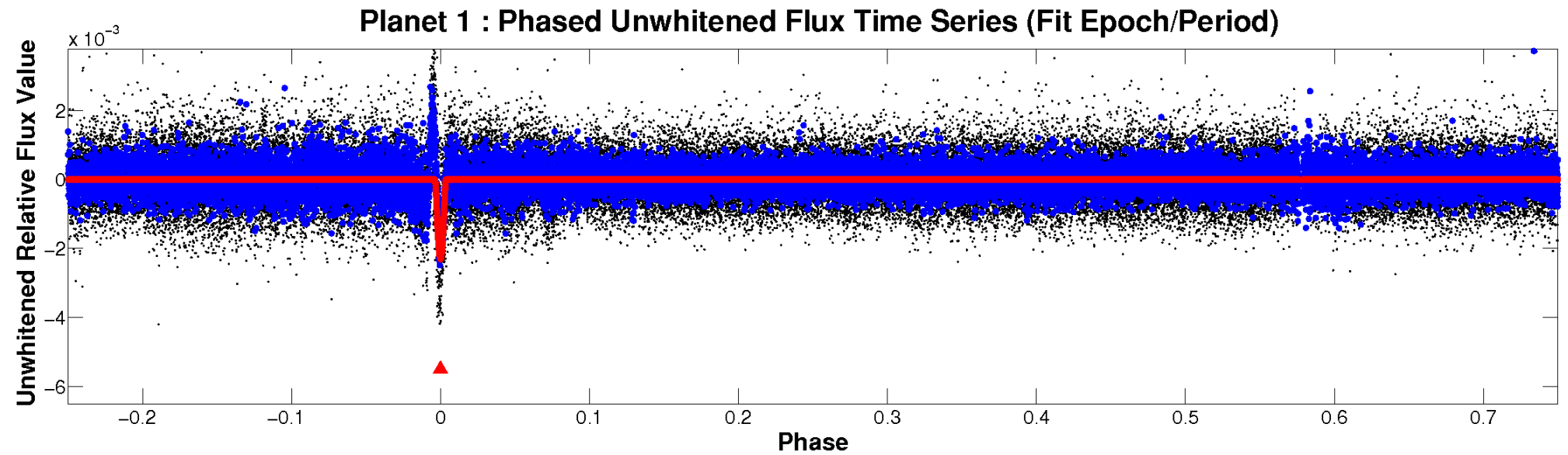


ALT Odd/Even

TCE 008557261-01



Non-Whitened Vs. Whitened Light Curve



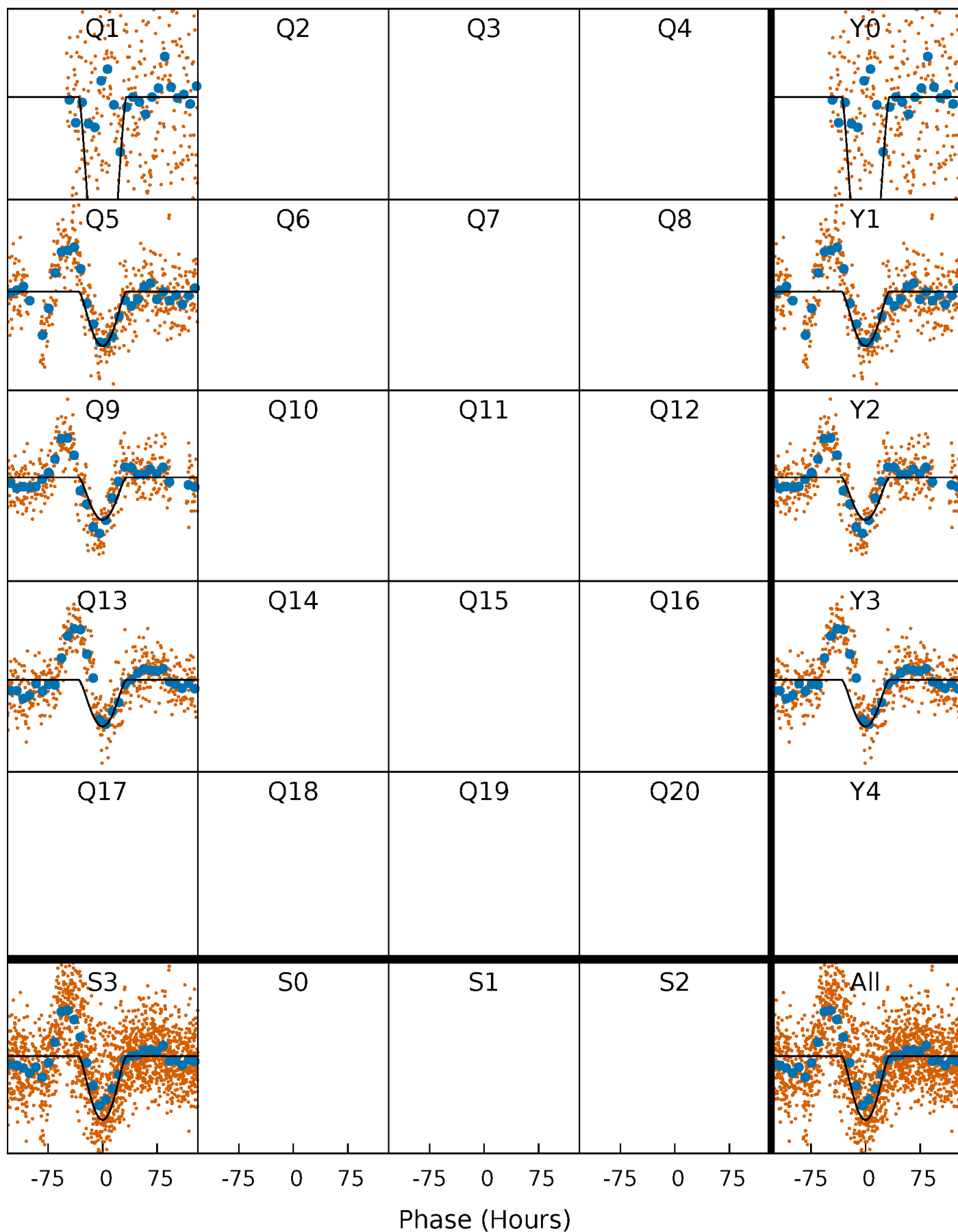
PDC Quarter-Phased Transit Curves

TCE 008557261-01 P=374.583027 Days $T_0=133.597152$ (BKJD)



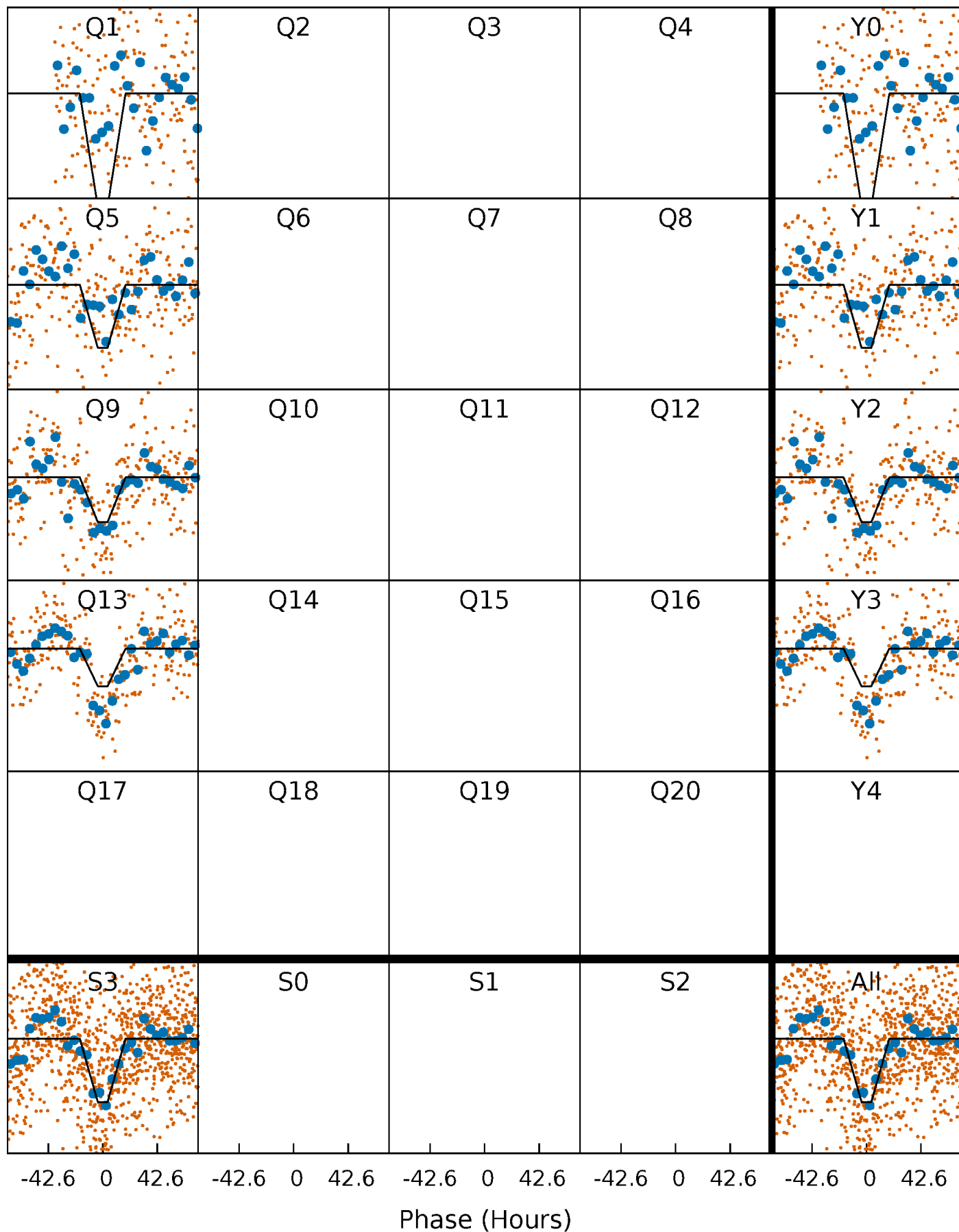
DV Quarter-Phased Transit Curves

TCE 008557261-01 P=374.583027 Days $T_0=133.597152$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

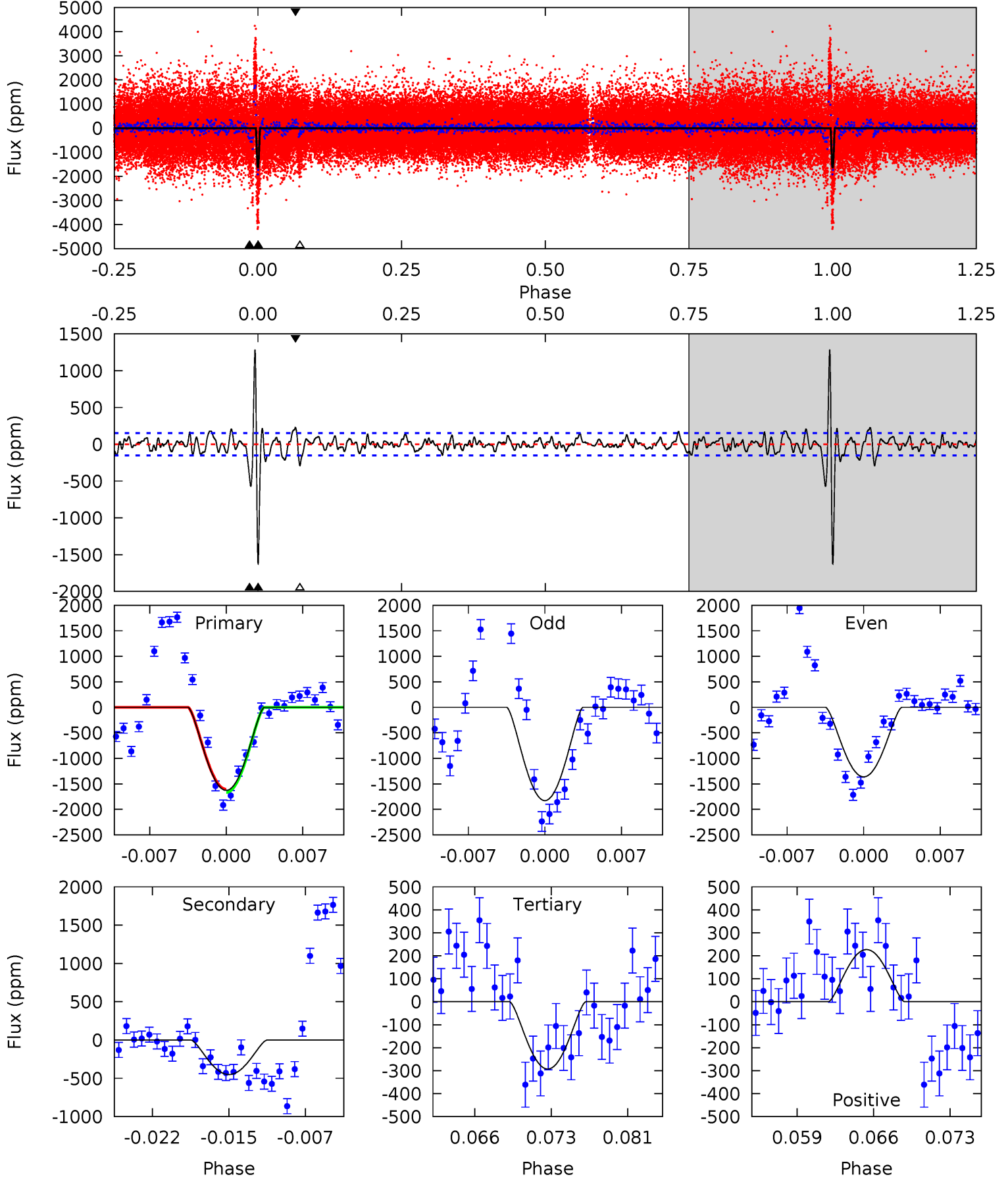
TCE 008557261-01 P=374.724246 Days $T_0=133.088187$ (BKJD)



DV Model-Shift Uniqueness Test

008557261-01, P = 374.583027 Days, E = 133.597152 Days

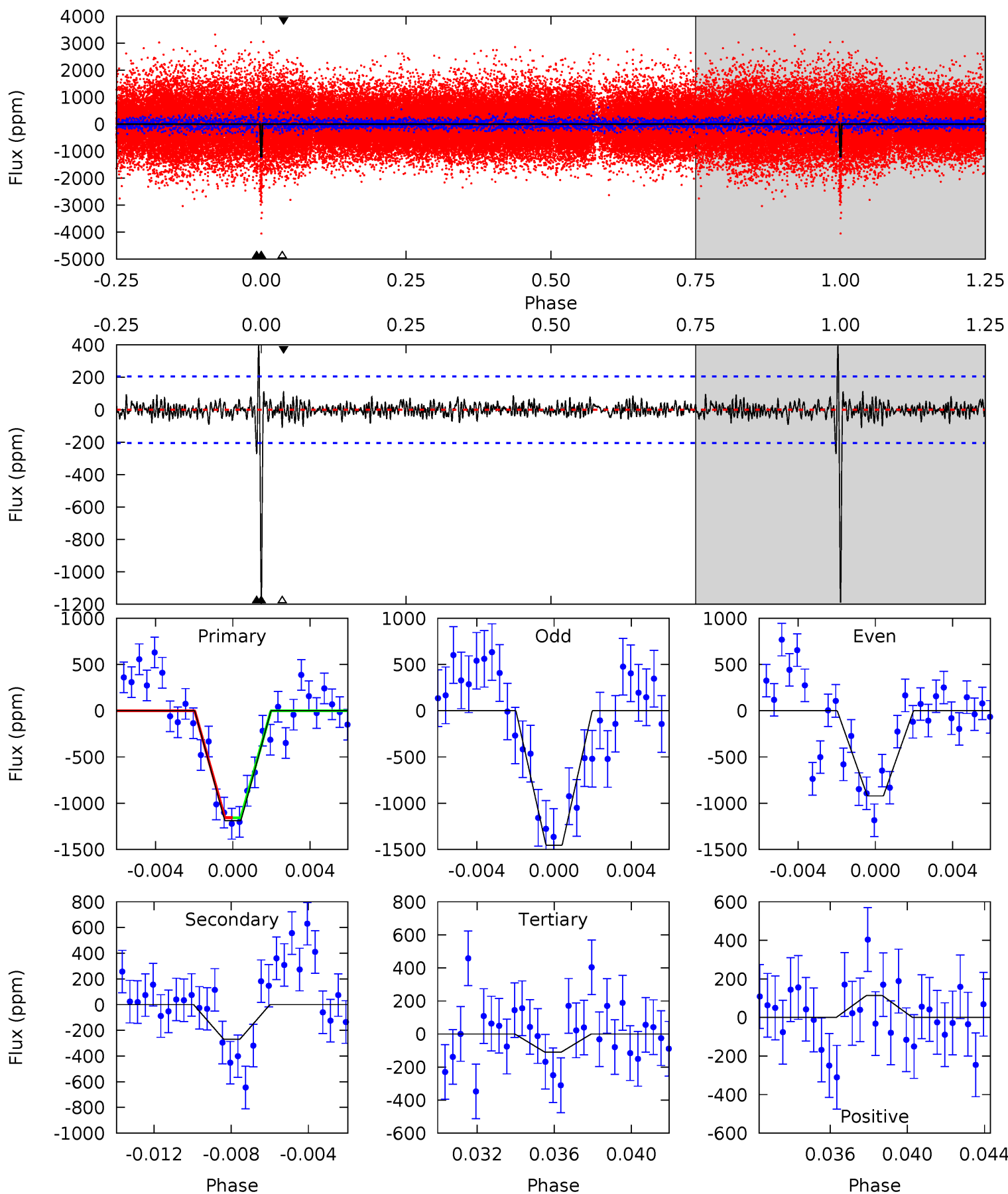
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
54.2	15.0	9.77	7.57	5.09	2.68	2.35	44.5	46.7	5.25	7.45	7.79	0.87	0.44	1.02



Alt Model-Shift Uniqueness Test

008557261-01, P = 374.724246 Days, E = 133.088187 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
30.1	6.83	2.79	2.88	5.20	2.88	0.76	27.3	27.2	4.04	3.95	6.77	1.03	0.25	0.01



Stellar Parameters For KIC 008557261

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6126^{+183}_{-201}	$4.513^{+0.048}_{-0.192}$	$-0.320^{+0.300}_{-0.300}$	$0.915^{+0.273}_{-0.091}$	$0.994^{+0.128}_{-0.128}$	$1.830^{+0.366}_{-0.953}$
	+3%/-3%	+1%/-4%	+94%/-94%	+30%/-10%	+13%/-13%	+20%/-52%
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 008557261-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-450 ± 30	$12.21^{+11.42}_{-8.41}$	366^{+27}_{-18}	3203^{+1540}_{-517}	1748^{+15225}_{-1302}
Alt.	-270 ± 39	$9.37^{+10.73}_{-6.14}$	366^{+20}_{-18}	3214^{+1434}_{-600}	1675^{+12717}_{-1309}

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 $A_{obs} \gg 1.0$

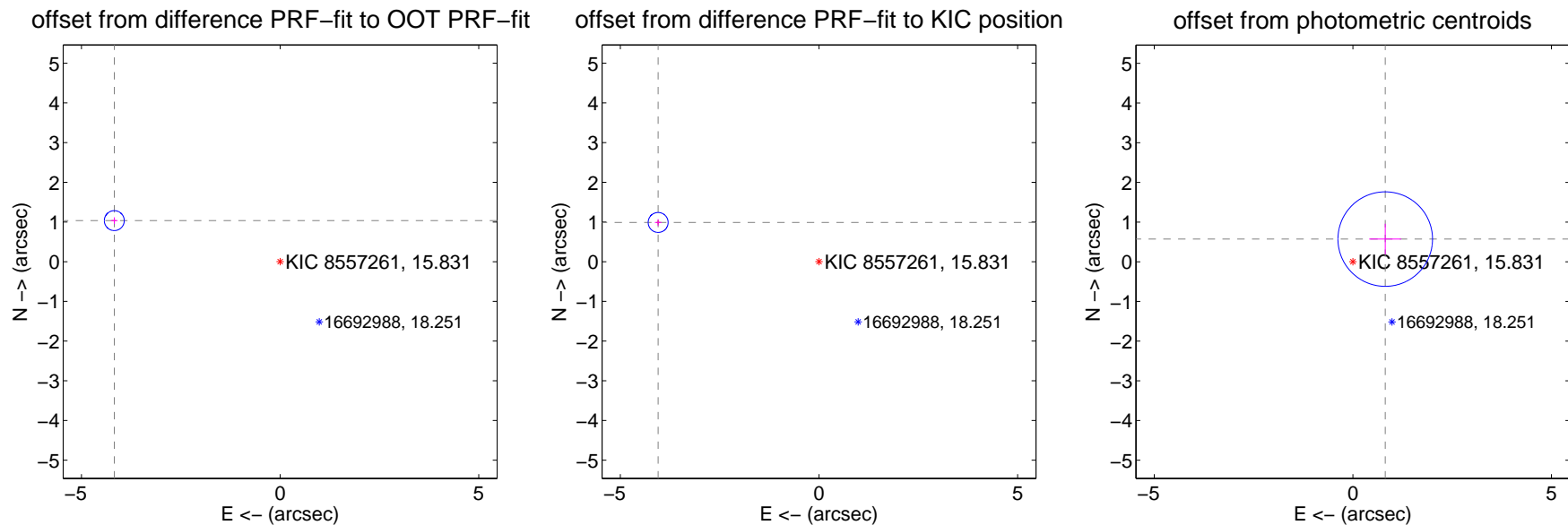
DV Centroid Data

Supplemental centroid analysis for 008557261-01. Kepler magnitude: 15.83. Transit SNR 25.22

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.301 \pm 0.084	51.40	4.174 \pm 0.084	1.035 \pm 0.084
PRF-fit source offset from KIC position	4.168 \pm 0.084	49.81	4.049 \pm 0.084	0.988 \pm 0.084
photometric centroid source offset	1.00 \pm 0.40	2.51	-0.82 \pm 0.40	0.57 \pm 0.39



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.



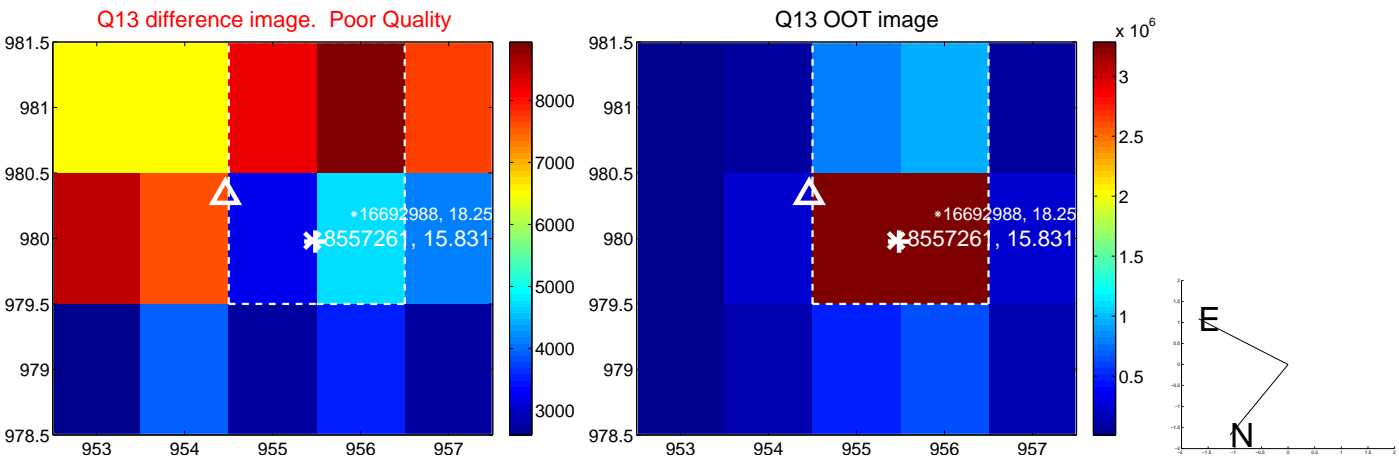
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



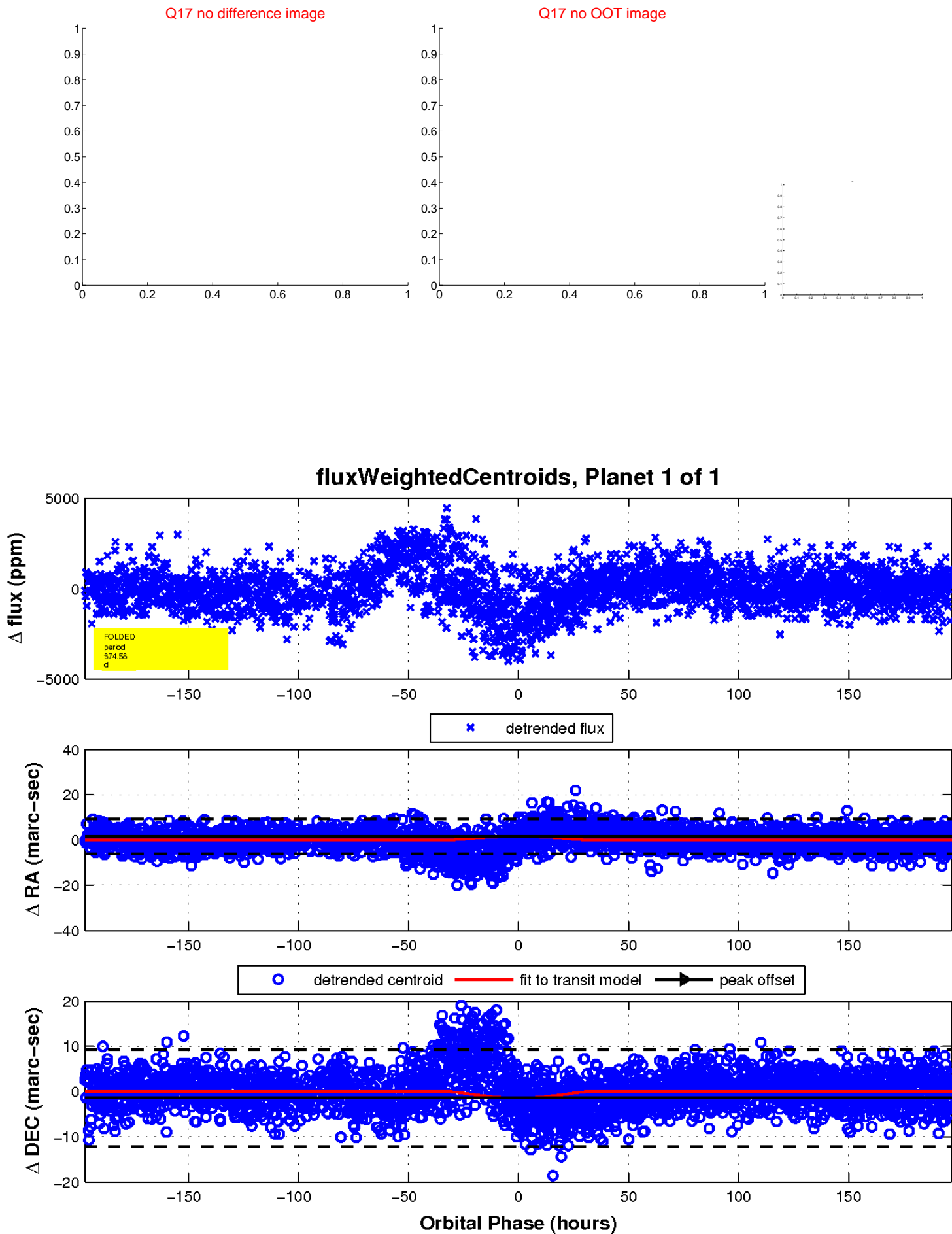
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

