

KIC 005976189

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})
005976189-01	OBS	No	574.998513	355.812631	716.1	3.817	7.6	7.6	0.89	5680	2.51	0.40

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005976189-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—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.

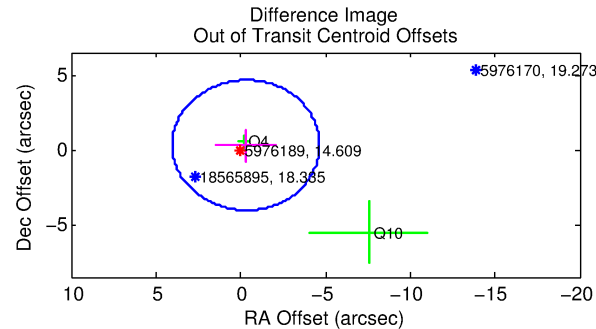
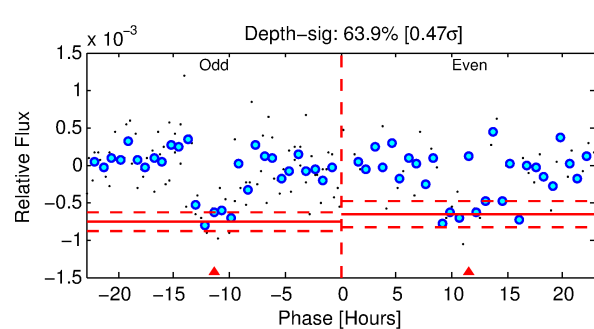
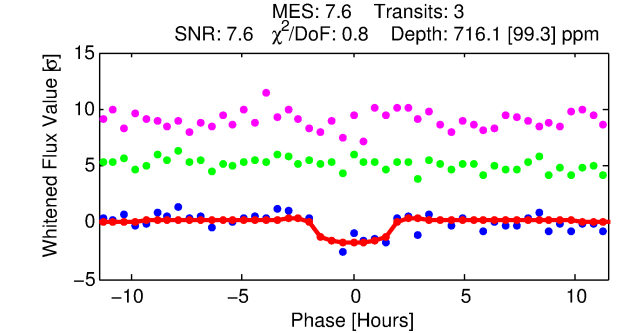
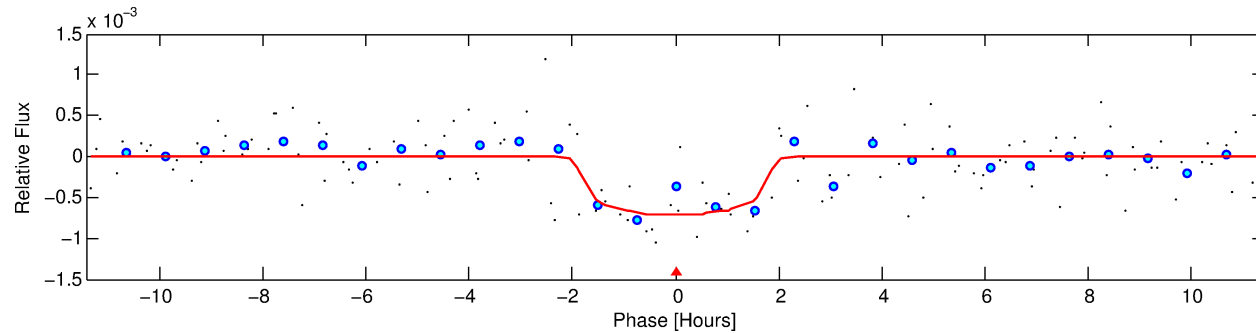
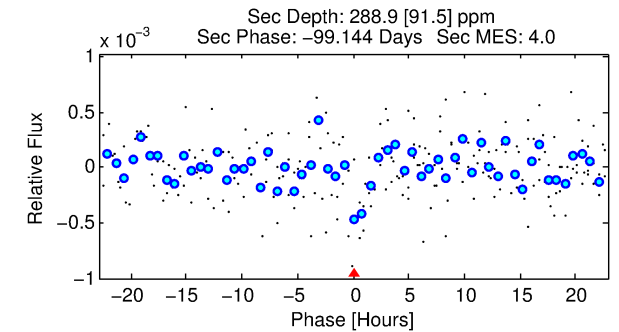
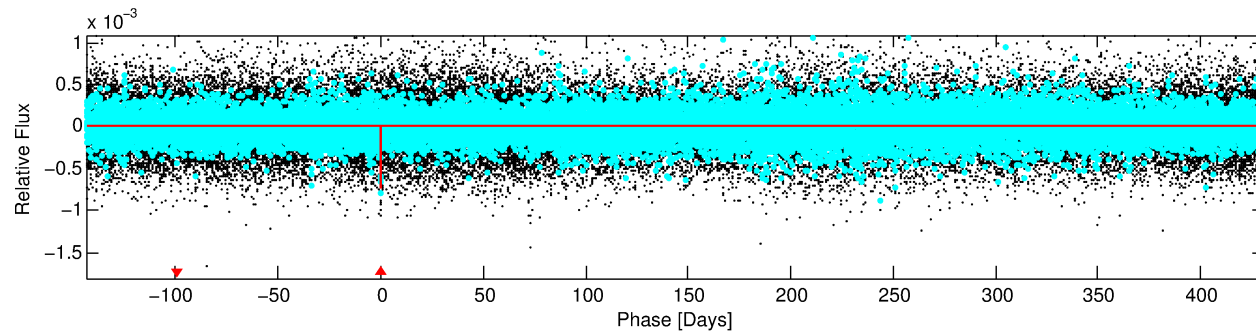
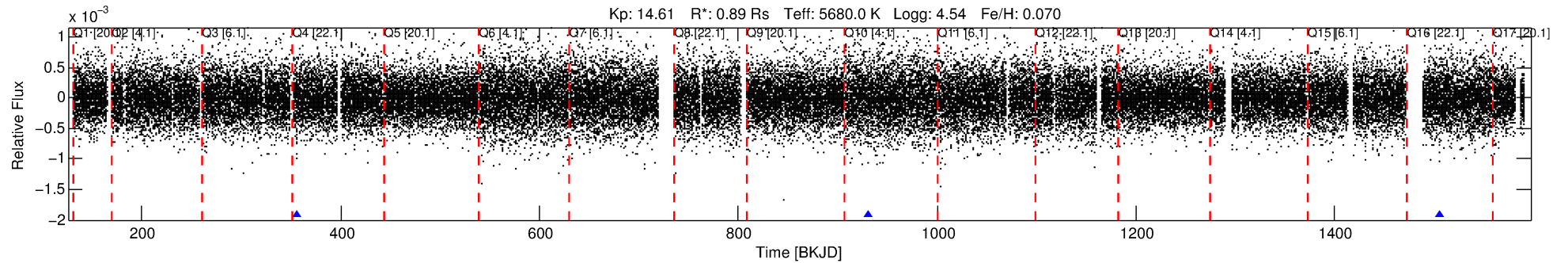
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005976189-01

No Significant Match Found

DV One-Page Summary

KIC: 5976189 Candidate: 1 of 1 Period: 574.999 d



DV Fit Results:

Period = 574.99851 [0.00700] d
Epoch = 355.8126 [0.0087] BKJD
Rp/R* = 0.0260 [0.0338]
a/R* = 892.78 [4841.02]
b = 0.67 [4.50]
Seff = 0.40 [0.09]
Teq = 203 [11] K
Rp = 2.51 [3.28] Re
a = 1.3534 [0.1812] AU
Ag = 46336.68 [121794.07] [0.38 σ]
Teffp = 4596 [3012] K [1.46 σ]

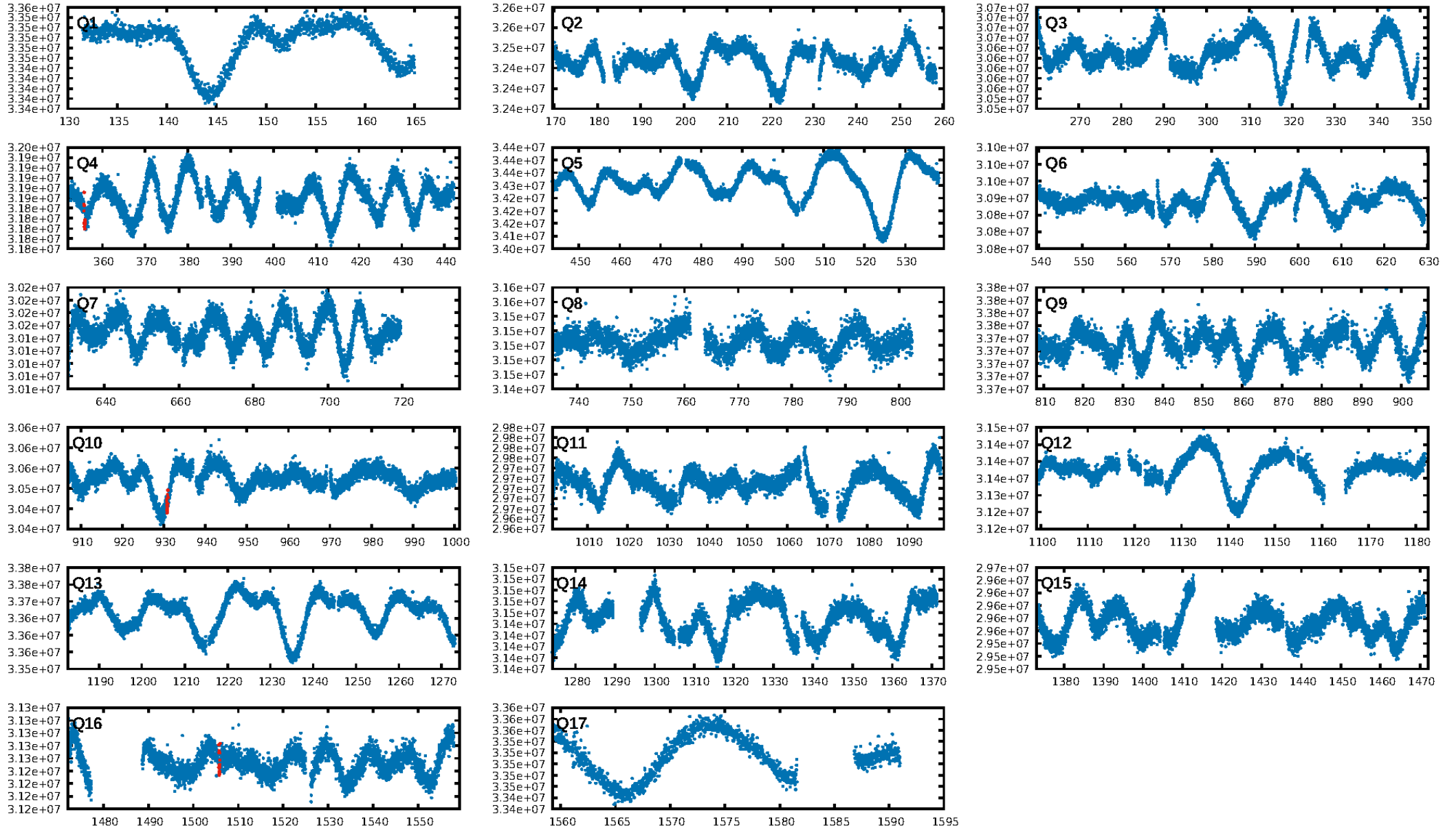
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 67.6%
ModelChiSquareGof-sig: 99.3%
Bootstrap-pfa: 2.28e-12
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -2.067
Centroid-sig: 22.8%
Centroid-so: 1.957 arcsec [1.57 σ]
OotOffset-rm: 0.428 arcsec [0.30 σ]
OotOffset-st: 1/0/1/0 [2]
KicOffset-rm: 0.241 arcsec [0.10 σ]
KicOffset-st: 1/0/1/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [2/2]

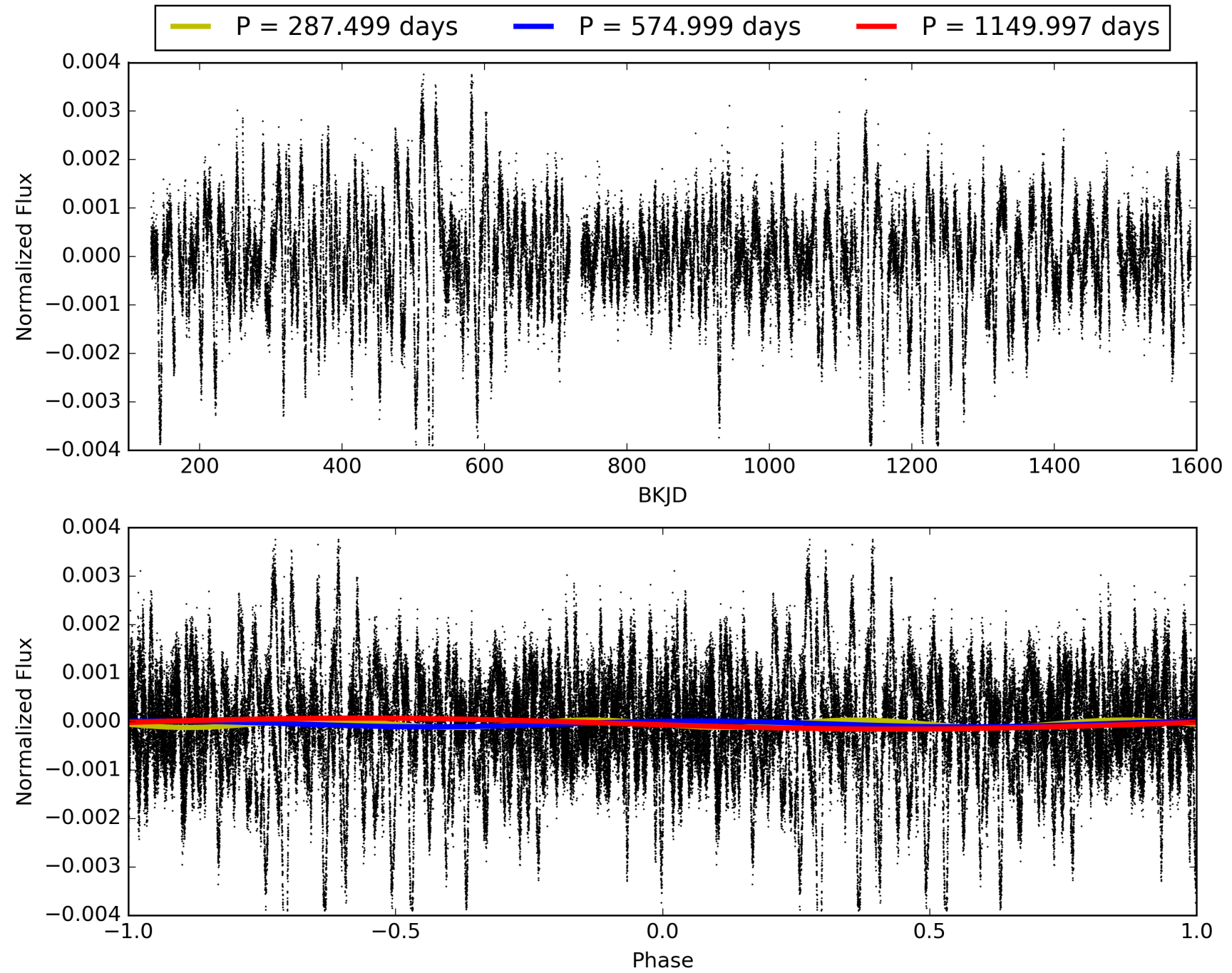
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 11:12:55 Z

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

TCE 005976189-01, PDC Light Curves

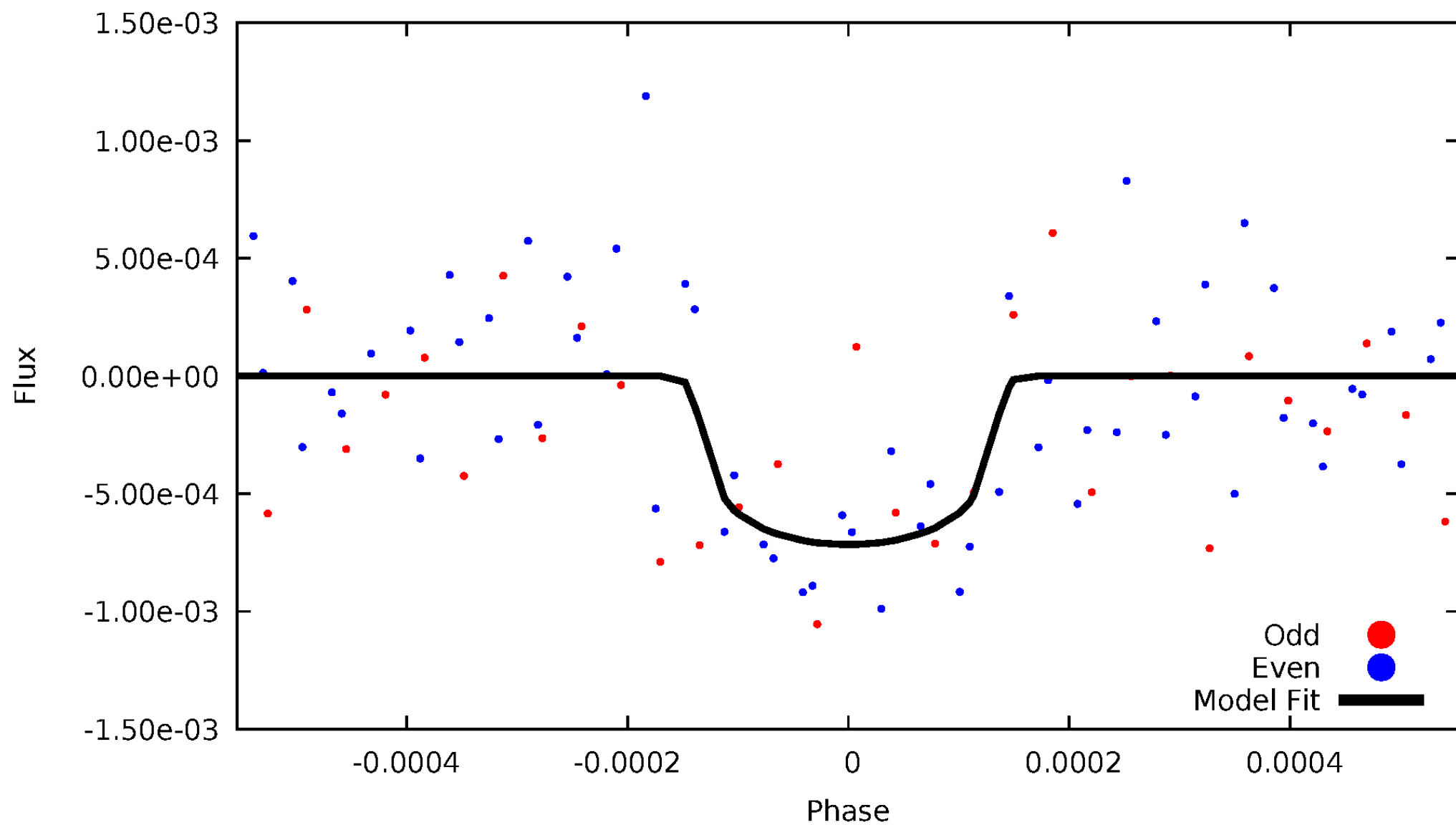


TCE 005976189-01



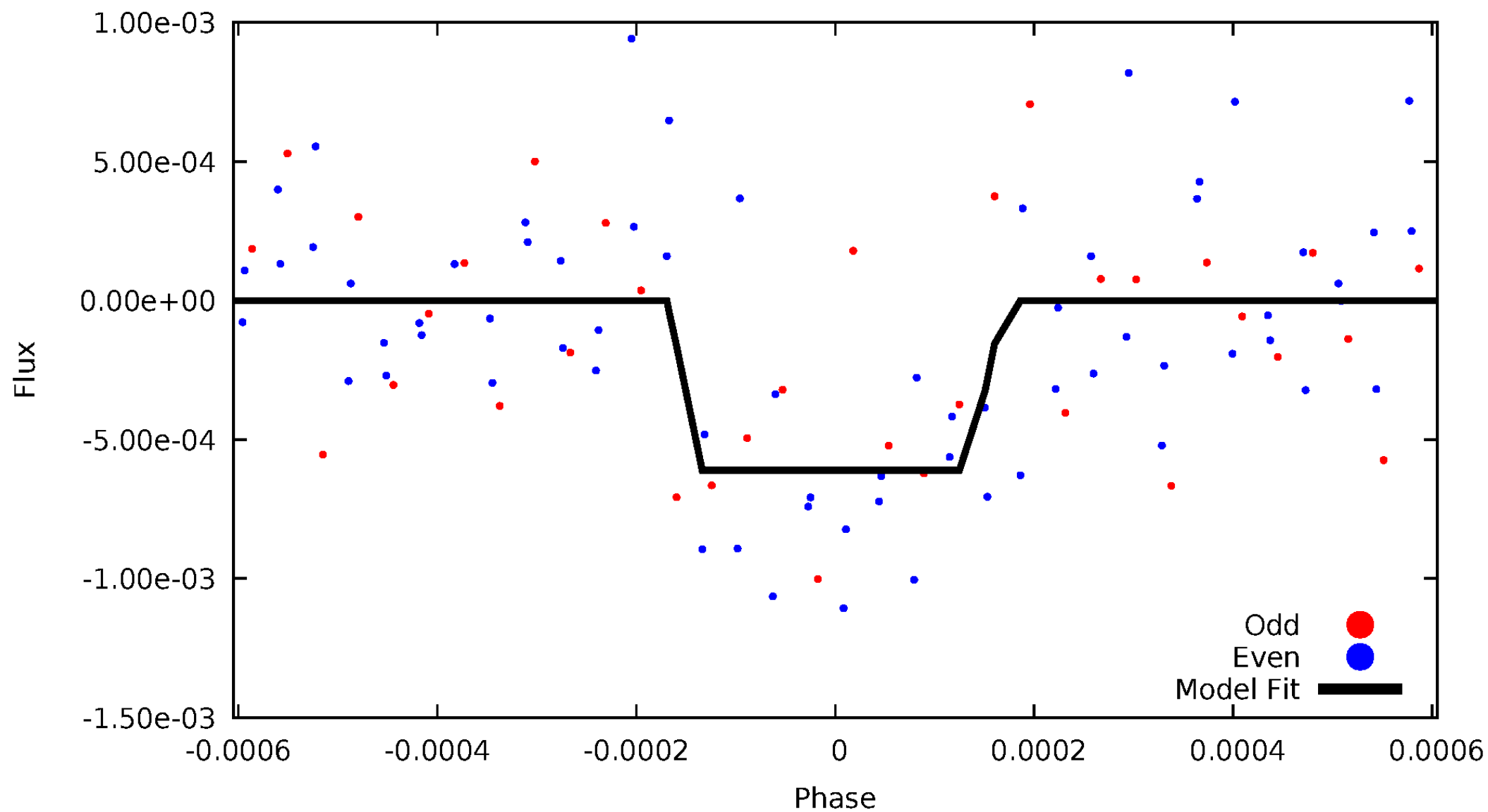
DV Odd/Even

TCE 005976189-01

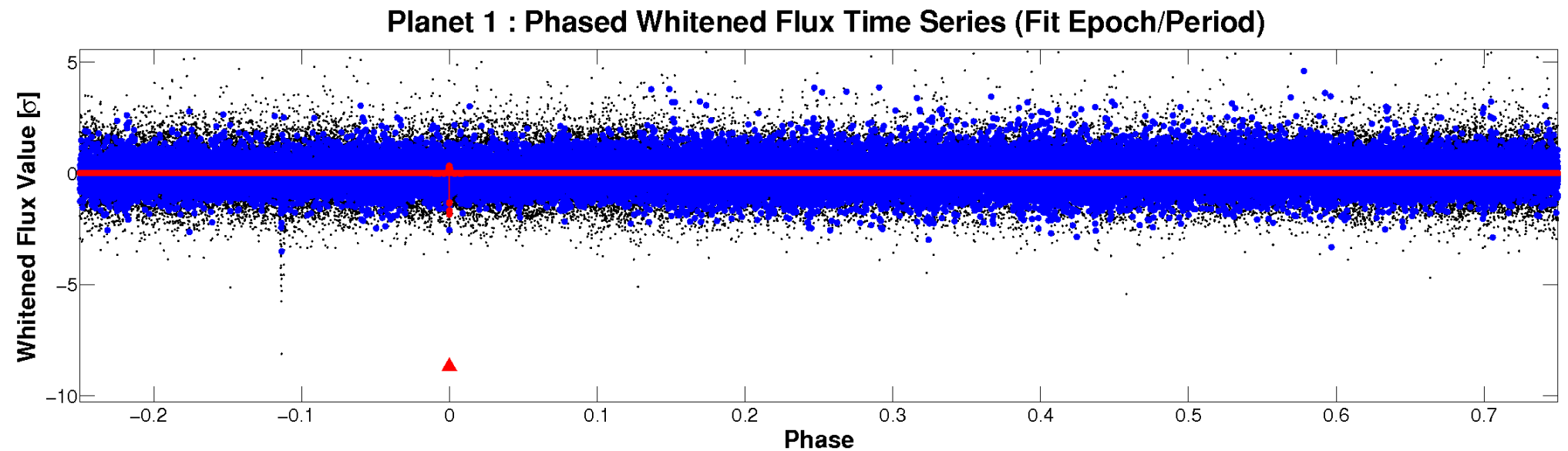
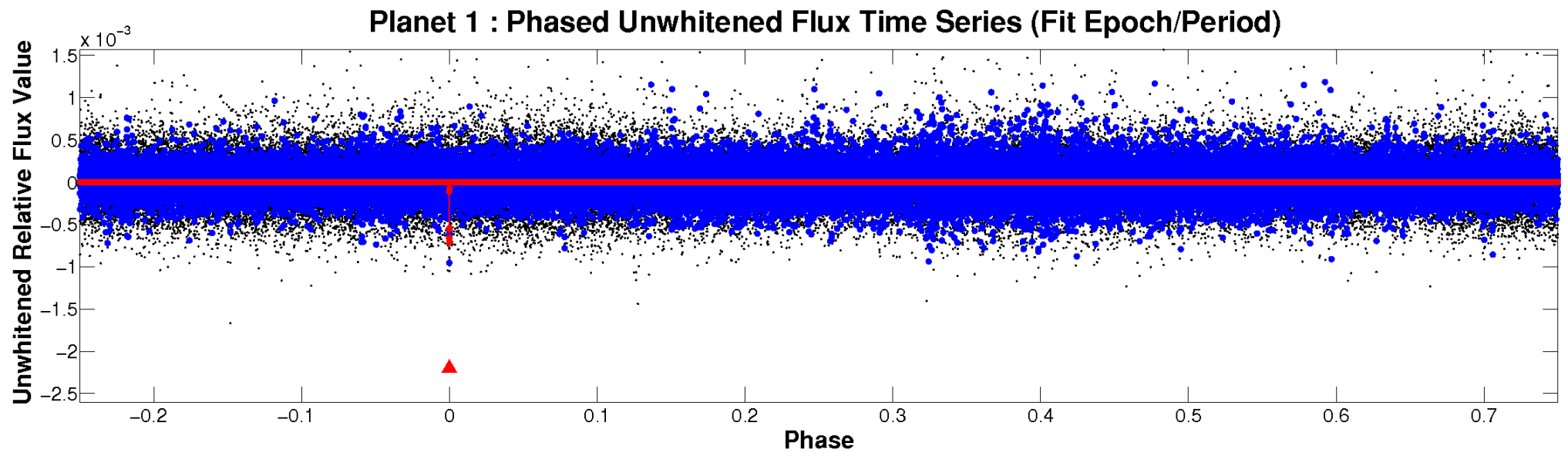


ALT Odd/Even

TCE 005976189-01

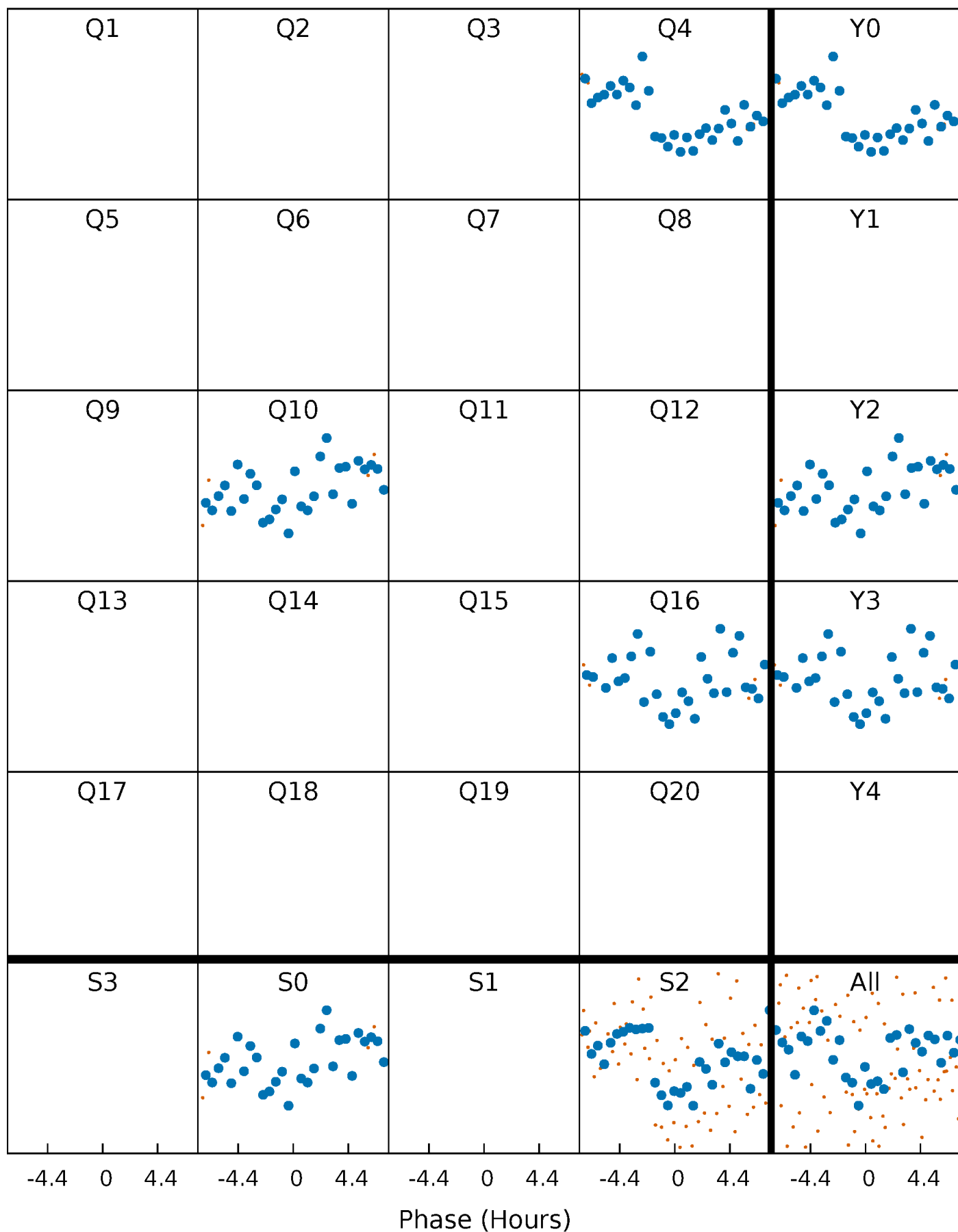


Non-Whitened Vs. Whitened Light Curve



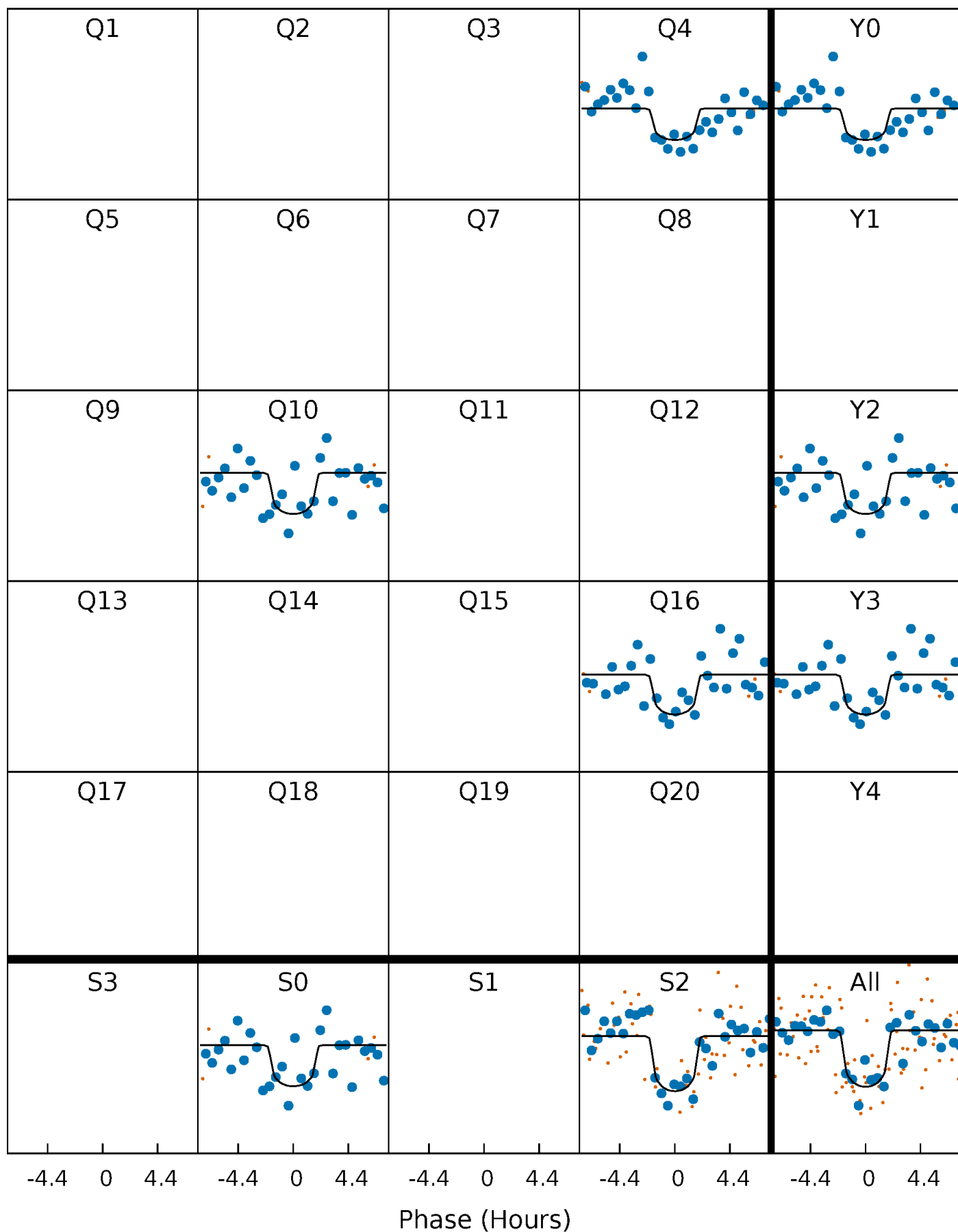
PDC Quarter-Phased Transit Curves

TCE 005976189-01 P=574.998513 Days $T_0=355.812631$ (BKJD)



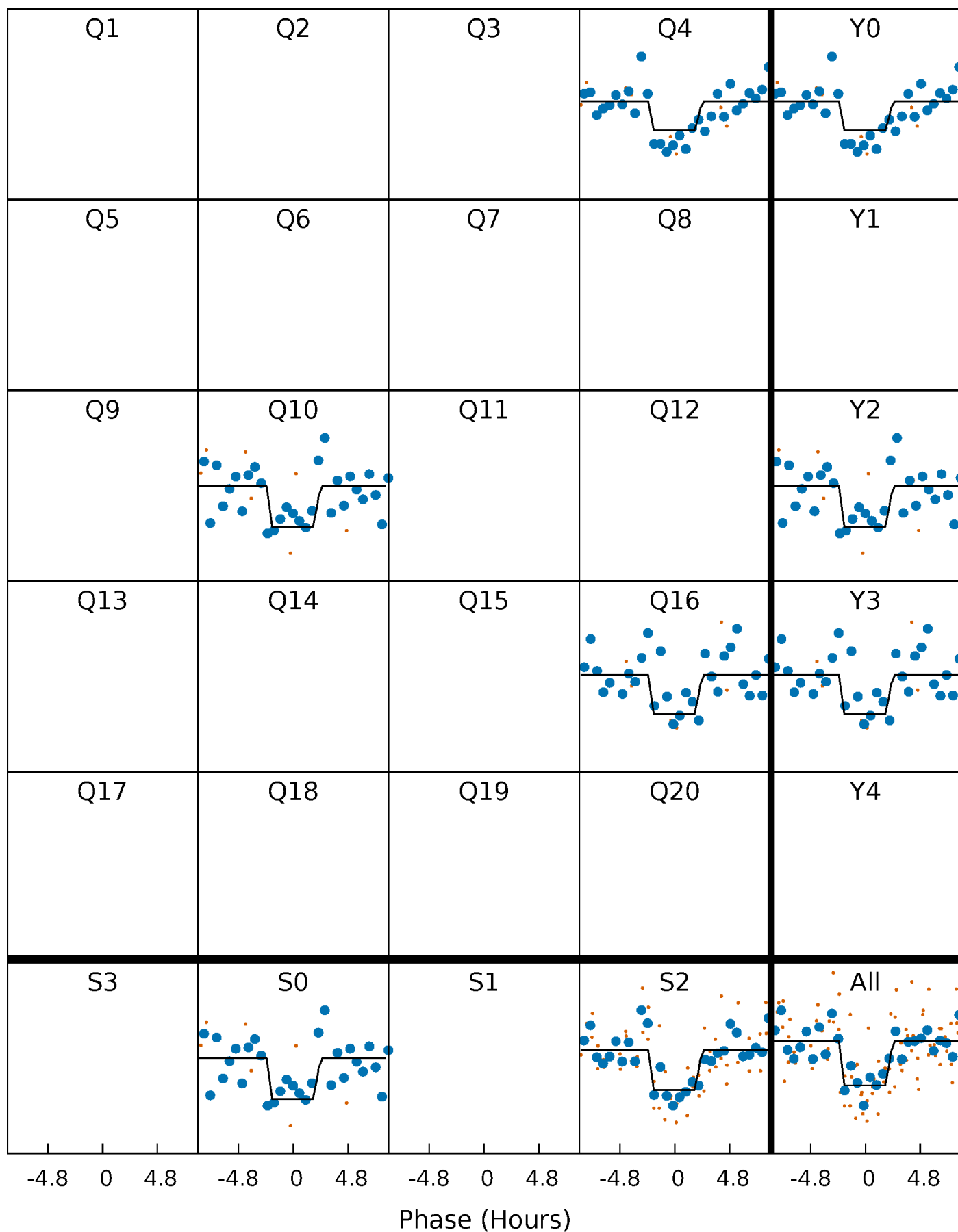
DV Quarter-Phased Transit Curves

TCE 005976189-01 P=574.998513 Days $T_0=355.812631$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

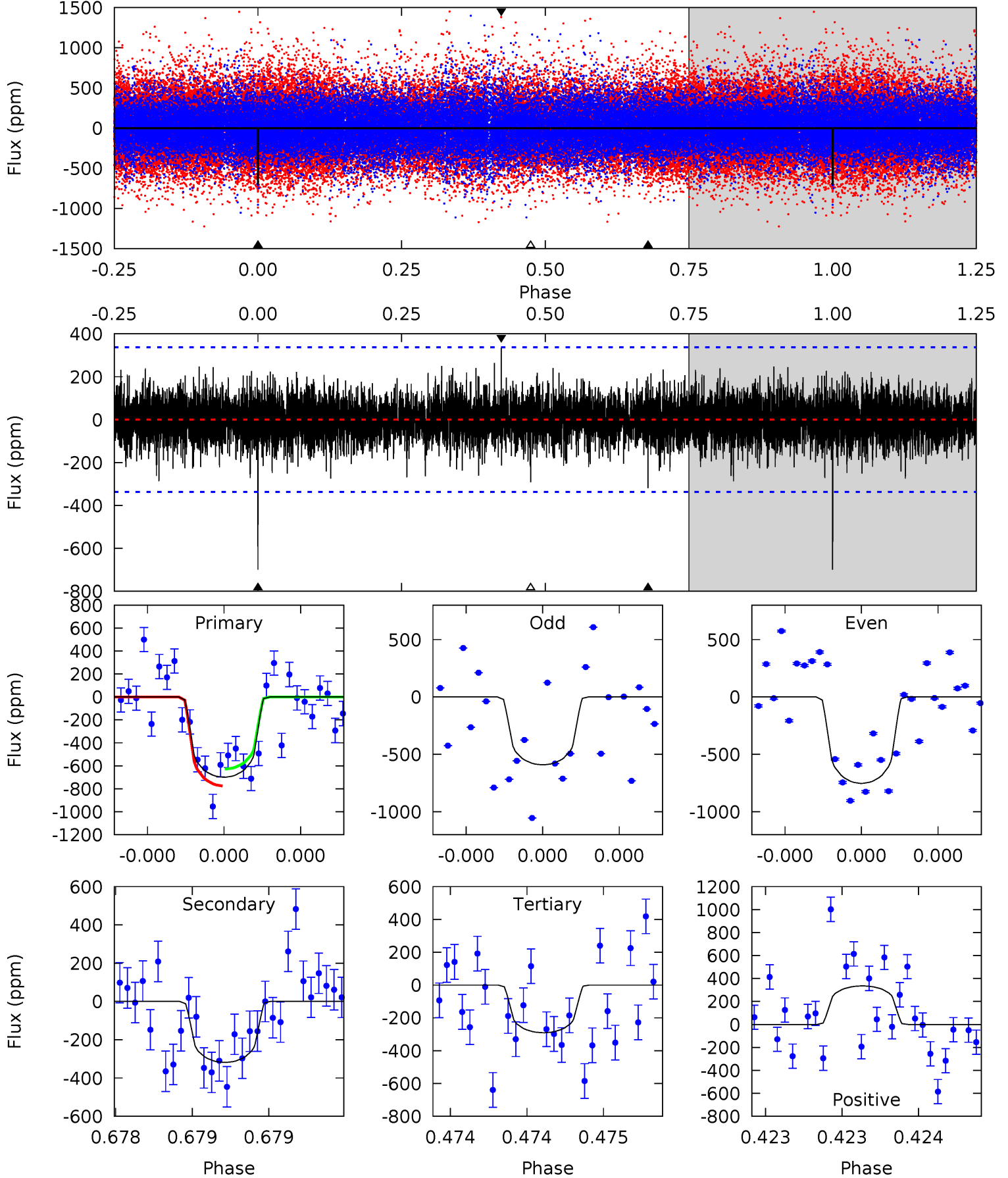
TCE 005976189-01 P=574.979945 Days $T_0=355.825074$ (BKJD)



DV Model-Shift Uniqueness Test

005976189-01, P = 574.998513 Days, E = 355.812631 Days

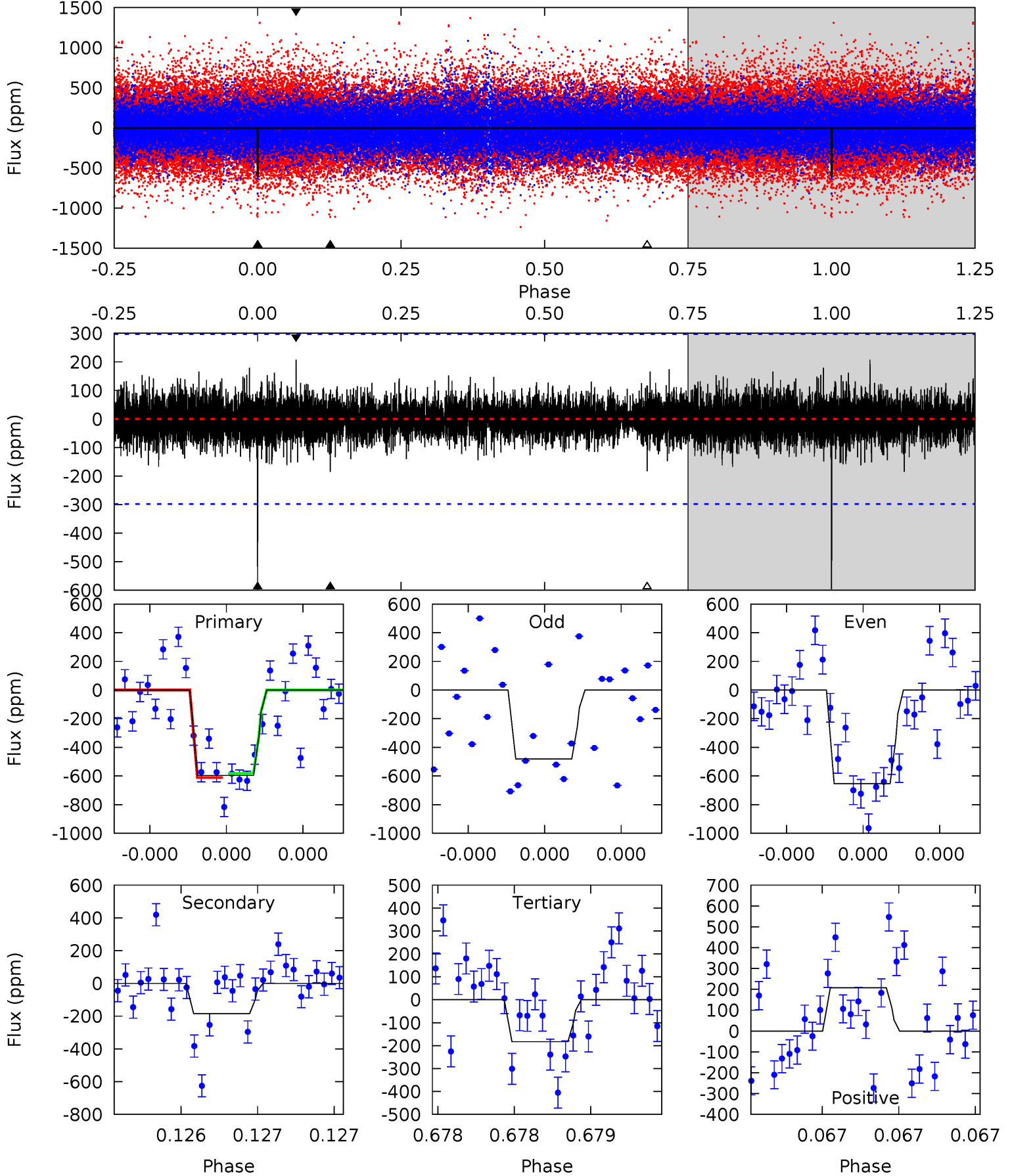
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.8	5.36	4.89	5.64	5.67	3.63	1.21	6.87	6.12	0.47	-0.28	1.26	1.08	0.32	1.23



Alt Model-Shift Uniqueness Test

005976189-01, P = 574.979945 Days, E = 355.825074 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.3	3.50	3.46	3.92	5.63	3.57	0.82	7.82	7.36	0.03	-0.43	1.54	1.24	0.26	0.27



Stellar Parameters For KIC 005976189

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	5680^{+76}_{-85}	$4.544^{+0.014}_{-0.119}$	$0.070^{+0.150}_{-0.150}$	$0.885^{+0.130}_{-0.033}$	$1.000^{+0.042}_{-0.078}$	$2.031^{+0.152}_{-0.682}$
	+1%/-1%	+0%/-3%	+214%/-214%	+15%/-4%	+4%/-8%	+7%/-34%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 005976189-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-318 ± 59	$3.44^{+2.91}_{-2.24}$	287^{+11}_{-7}	4293^{+2739}_{-782}	$26128^{+194071}_{-18146}$
Alt.	-185 ± 53	$3.42^{+3.00}_{-2.22}$	287^{+10}_{-7}	3930^{+2058}_{-728}	$15914^{+110158}_{-11621}$

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 $A_{obs} \gg 1.0$

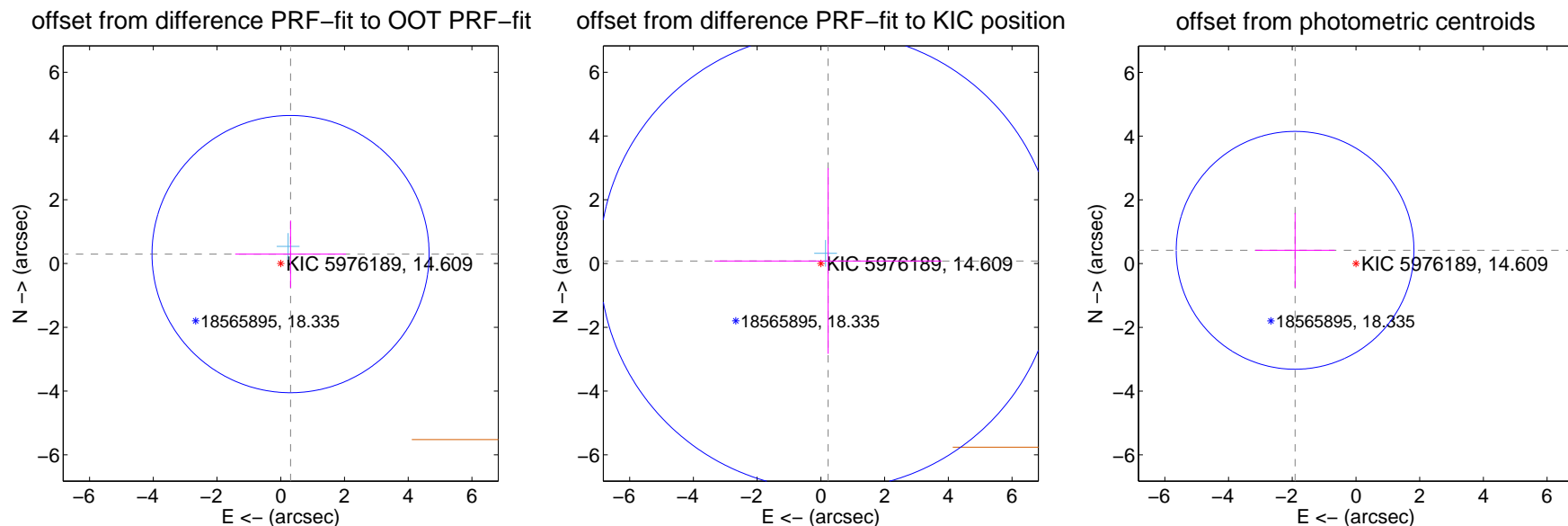
DV Centroid Data

Supplemental centroid analysis for 005976189-01. Kepler magnitude: 14.61. Transit SNR 7.60

There are 1 quarters with good PRF difference image offsets

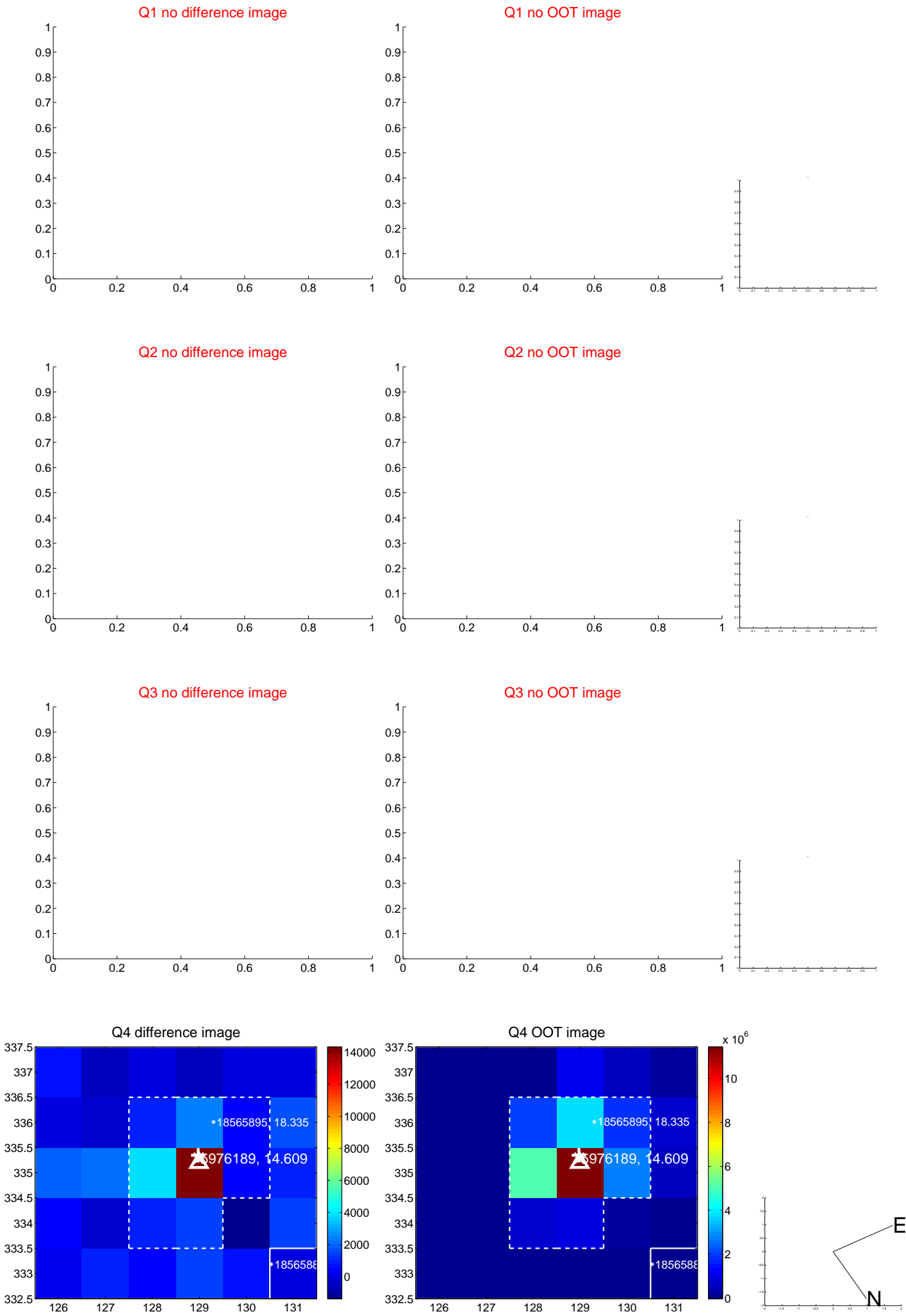
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.428 ± 1.450	0.30	-0.308 ± 1.738	0.297 ± 1.052
PRF-fit source offset from KIC position	0.241 ± 2.391	0.10	-0.227 ± 3.566	0.080 ± 2.912
photometric centroid source offset	1.96 ± 1.24	1.57	1.91 ± 1.25	0.42 ± 1.17



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.

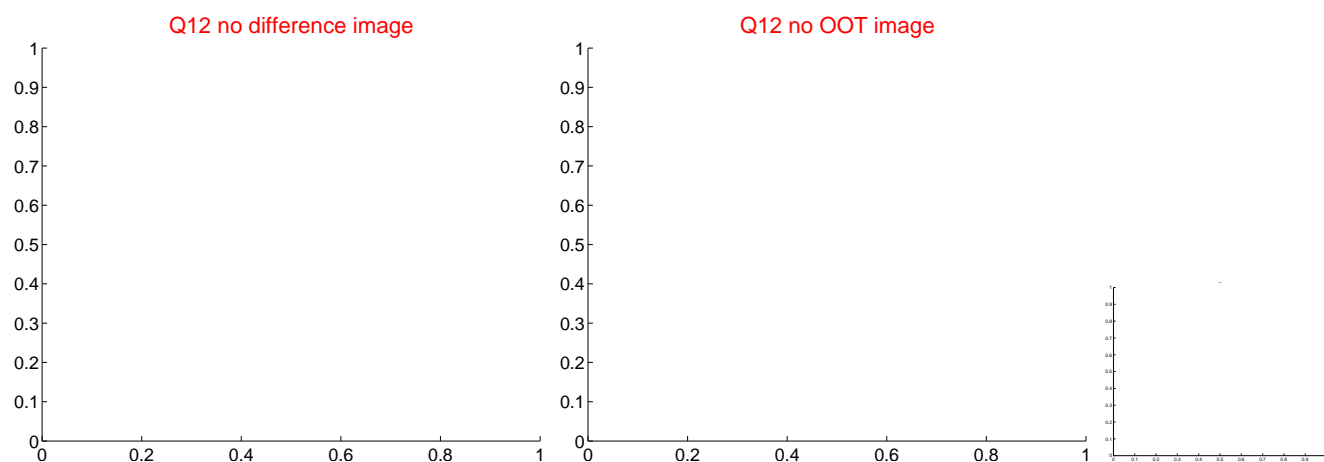
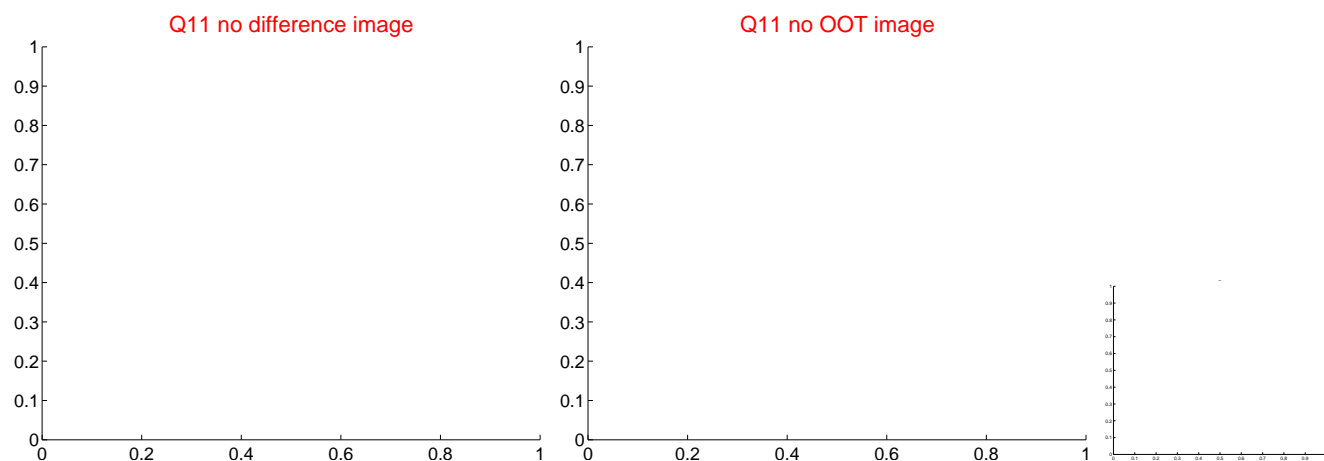
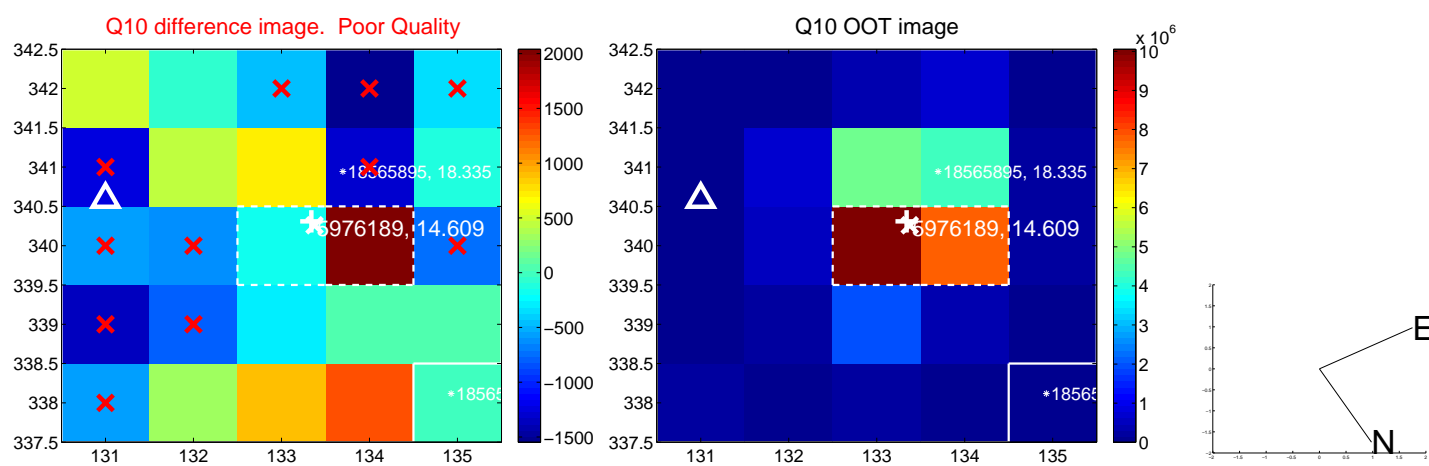
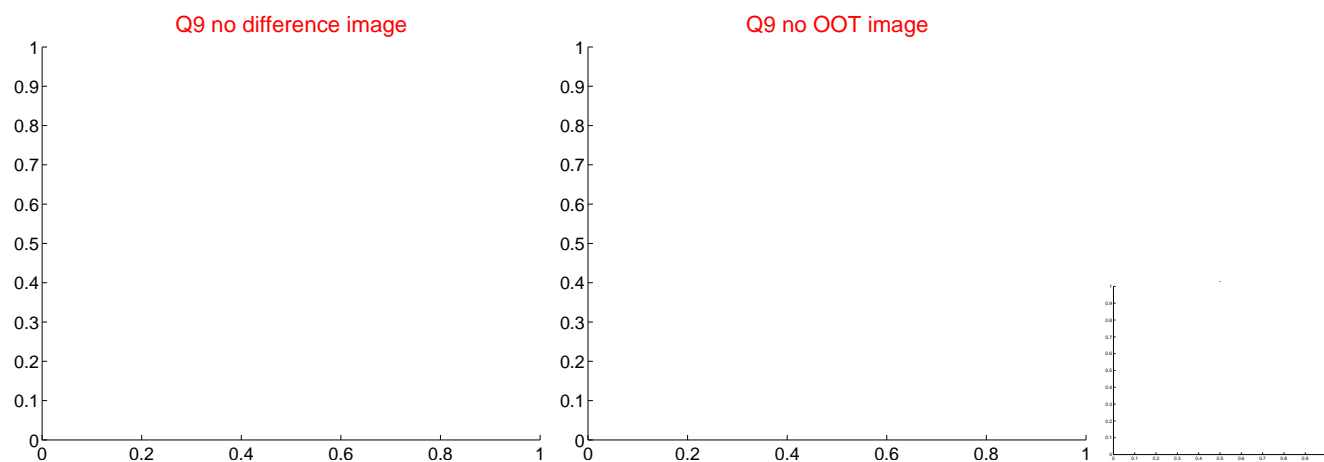
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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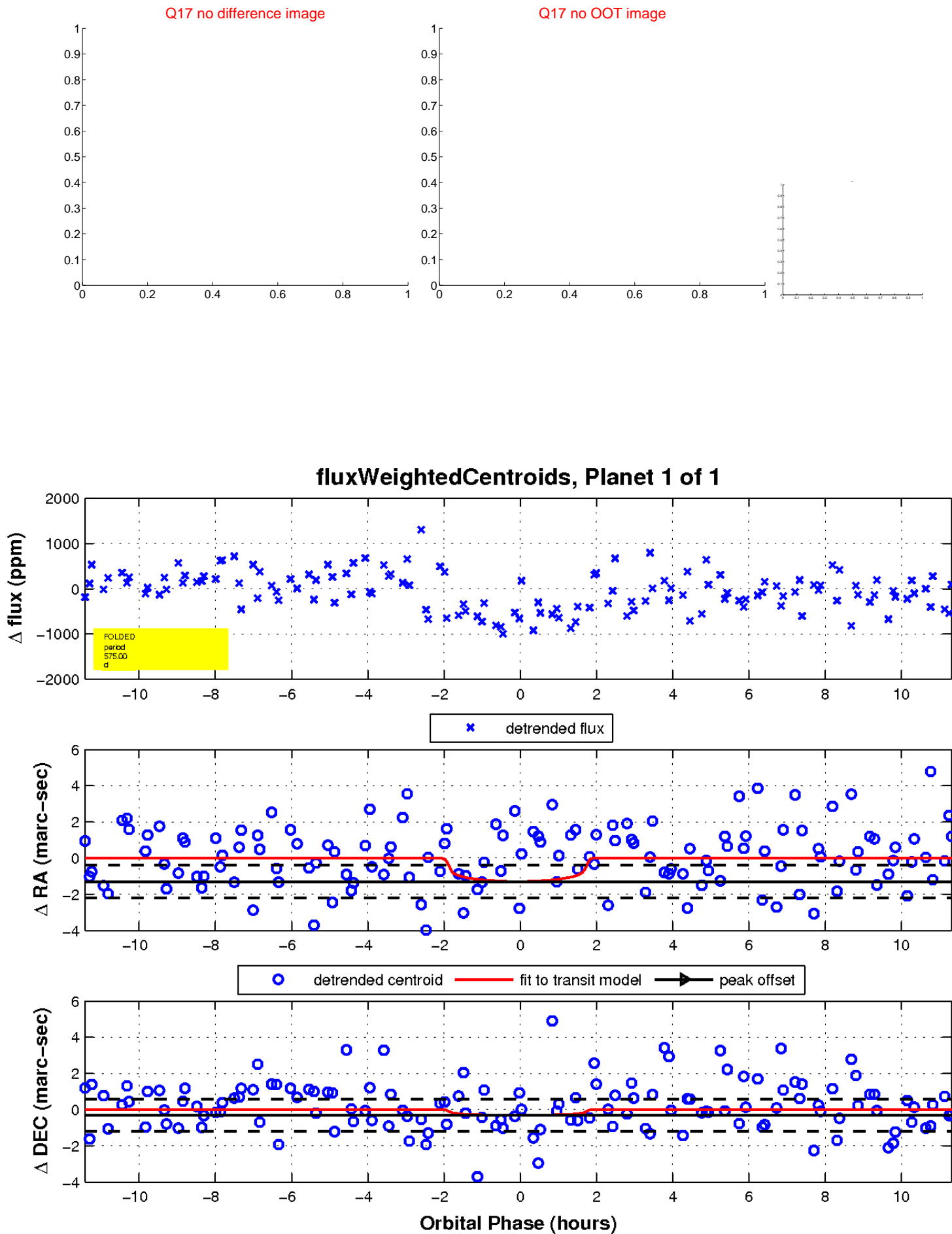
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UKIRT Image

Declination

