

KIC 008482565

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})
008482565-01	OBS	No	329.479161	434.018830	2199.8	3.132	9.9	7.5	0.70	4492	3.38	0.26

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008482565-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_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.

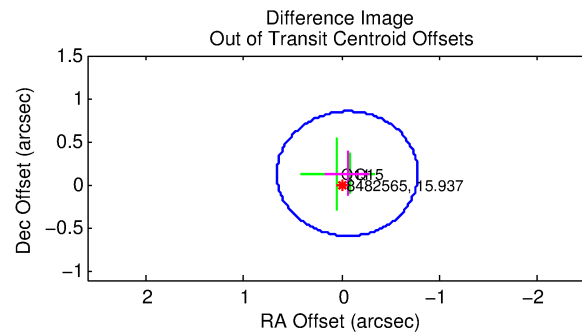
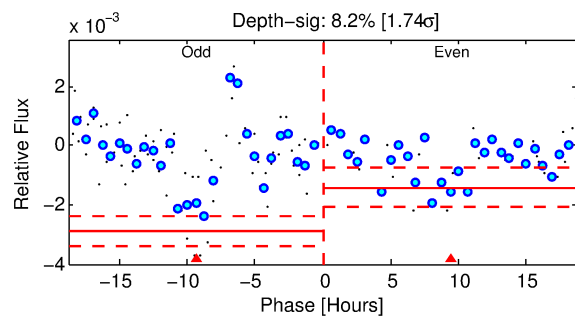
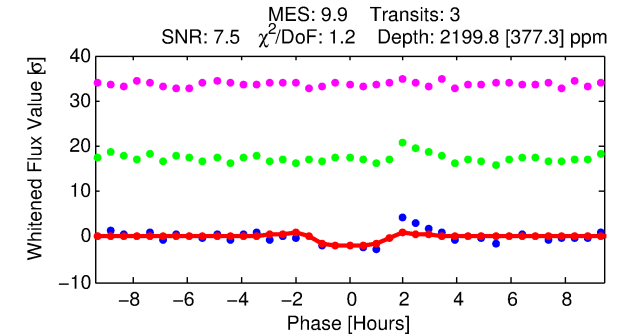
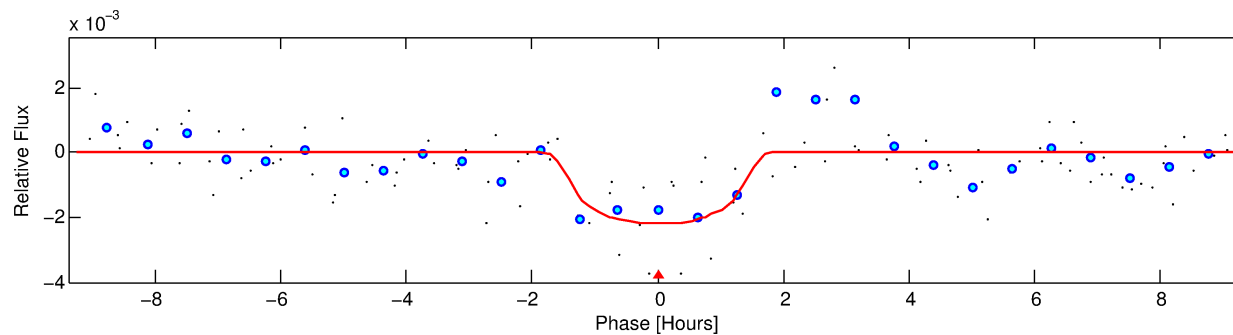
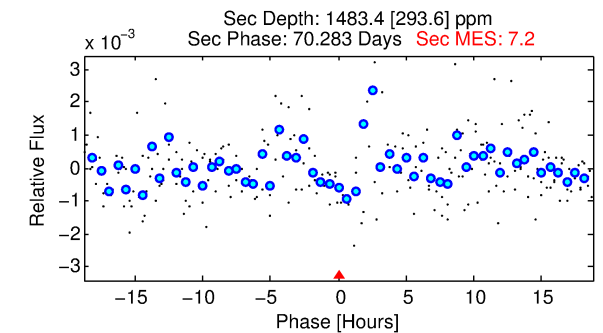
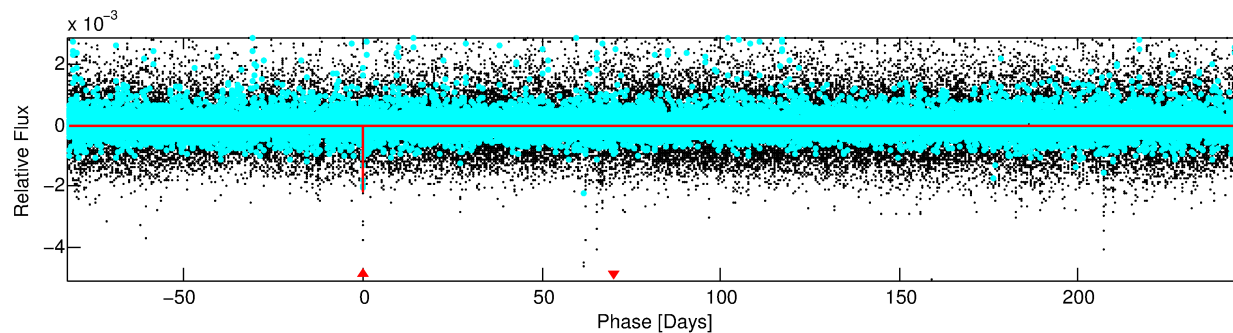
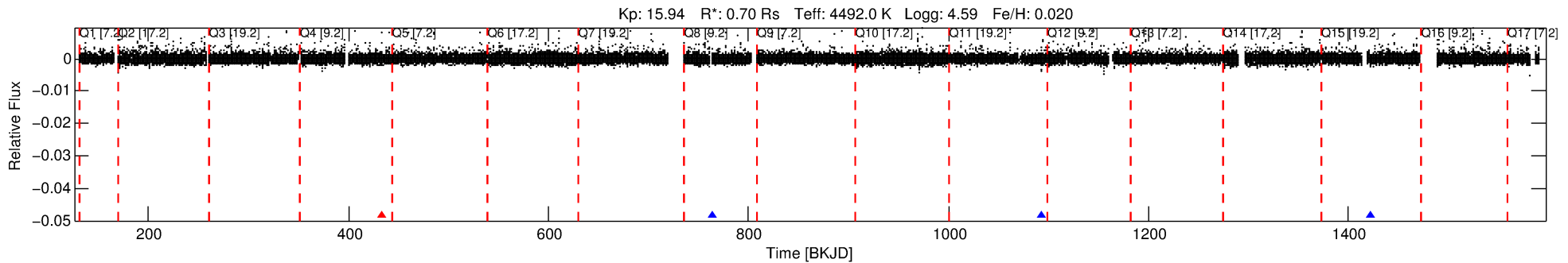
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008482565-01

No Significant Match Found

DV One-Page Summary

KIC: 8482565 Candidate: 1 of 1 Period: 329.479 d



DV Fit Results:

Period = 329.47916 [0.00376] d
Epoch = 434.0188 [0.0073] BKJD
Rp/R* = 0.0446 [0.0674]
a/R* = 674.61 [2963.98]
b = 0.62 [4.48]
Seff = 0.26 [0.04]
Teq = 182 [7] K
Rp = 3.38 [5.13] Re
a = 0.8229 [0.0603] AU
Ag = 48236.42 [146333.26] [0.33σ]
Teffp = 4176 [3168] K [1.26σ]

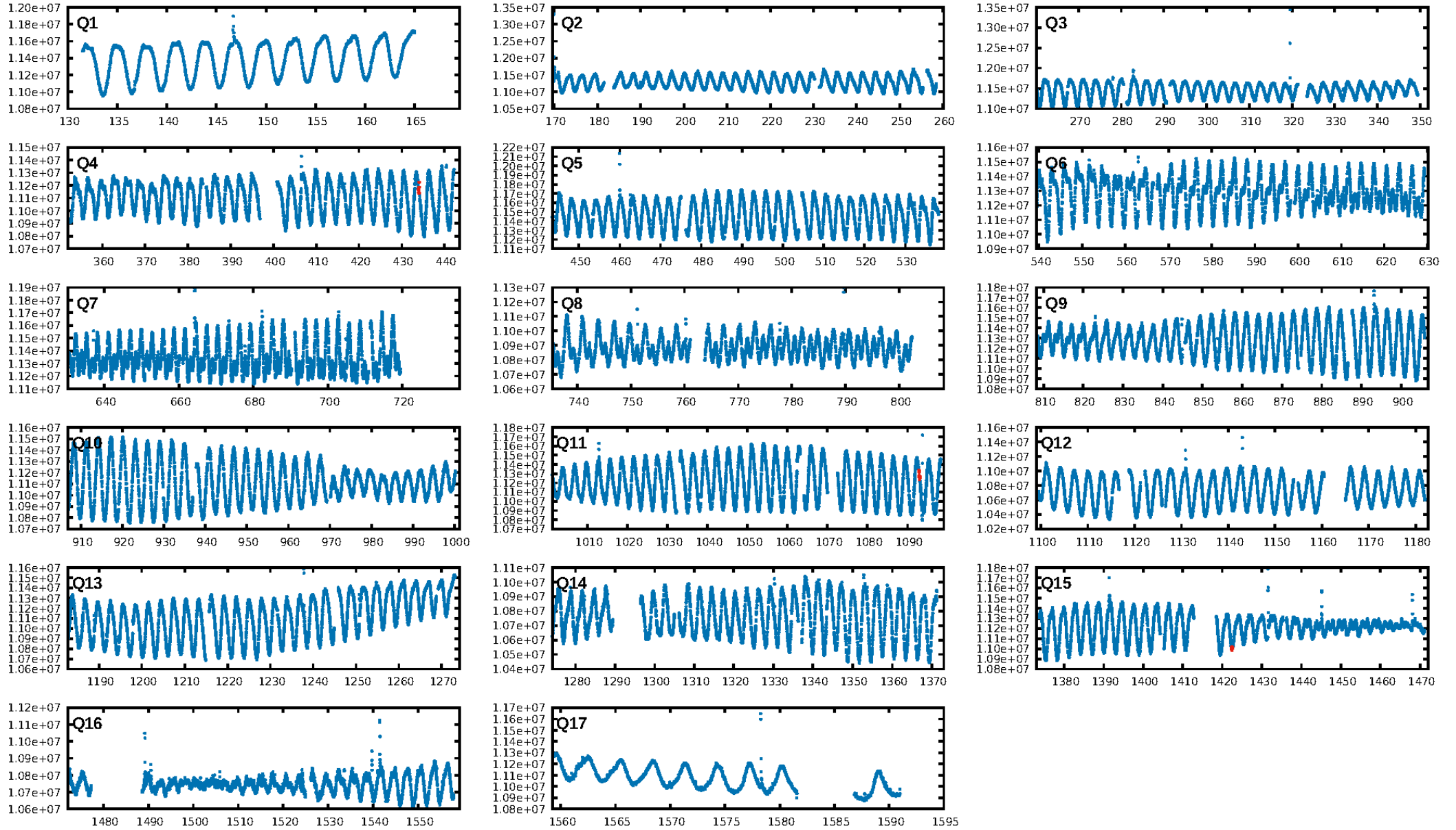
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 2.7%
ModelChiSquareGof-sig: 72.6%
Bootstrap-pfa: 9.43e-11
RollingBand-fgt: 0.67 [2/3]
GhostDiagnostic-chr: -10.25
Centroid-sig: 40.4%
Centroid-so: 1.178 arcsec [0.91σ]
OotOffset-rm: 0.144 arcsec [0.60σ]
KicOffset-rm: 0.128 arcsec [0.56σ]
OotOffset-st: 0/2/0/0 [2]
KicOffset-st: 0/2/0/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [3/3]

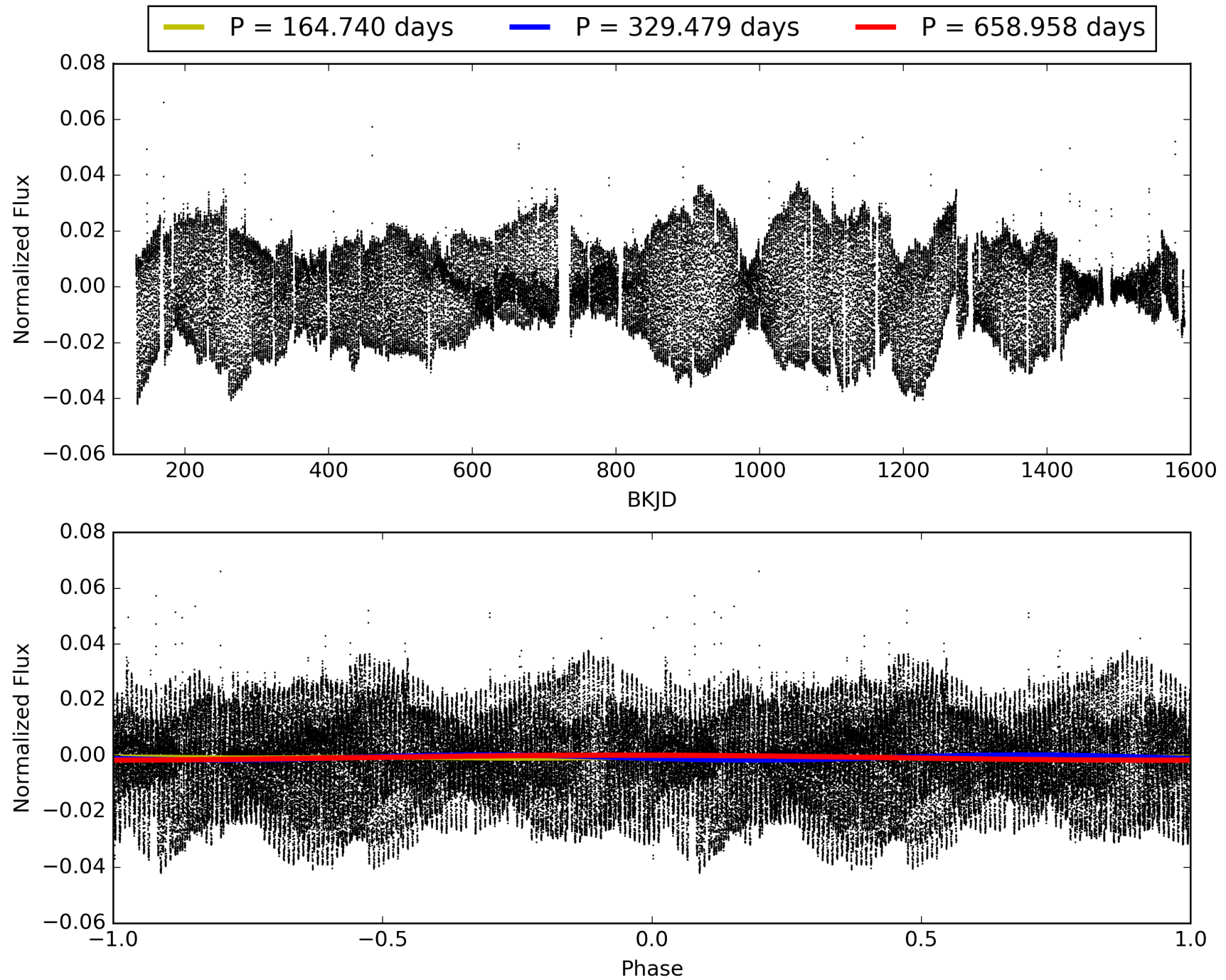
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:20:28 Z

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

TCE 008482565-01, PDC Light Curves

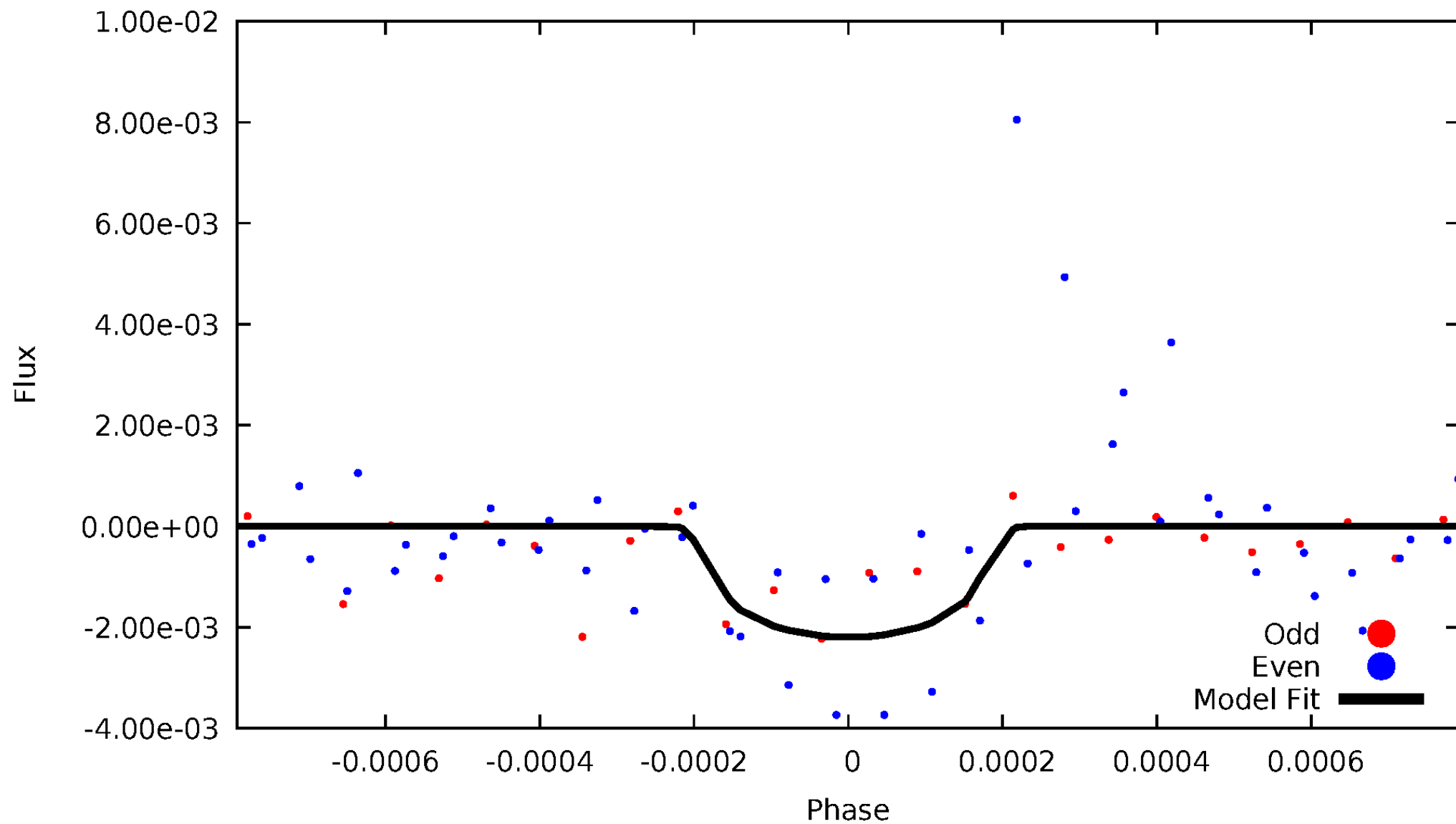


TCE 008482565-01



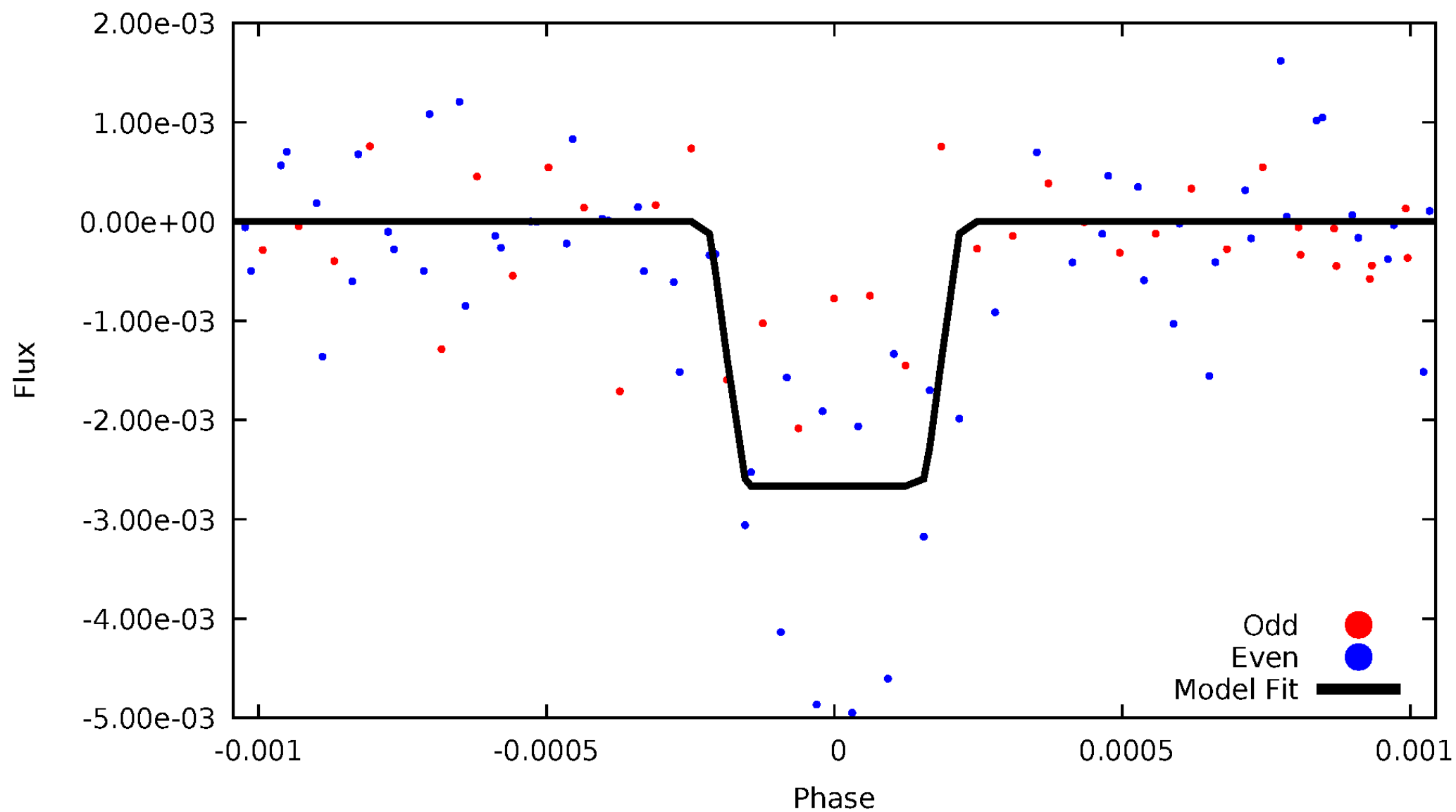
DV Odd/Even

TCE 008482565-01



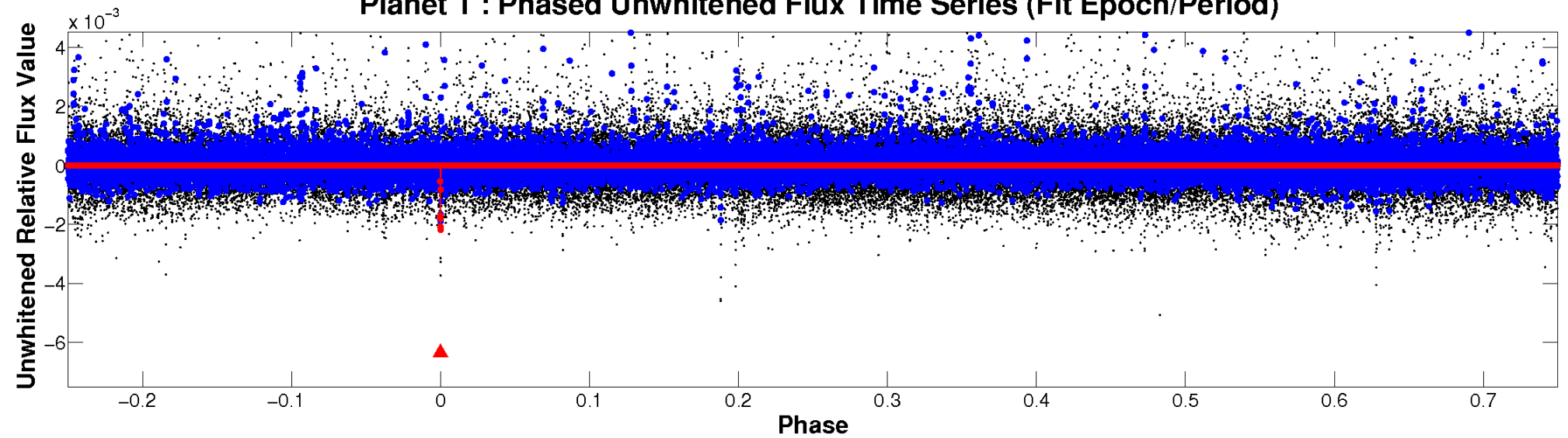
ALT Odd/Even

TCE 008482565-01

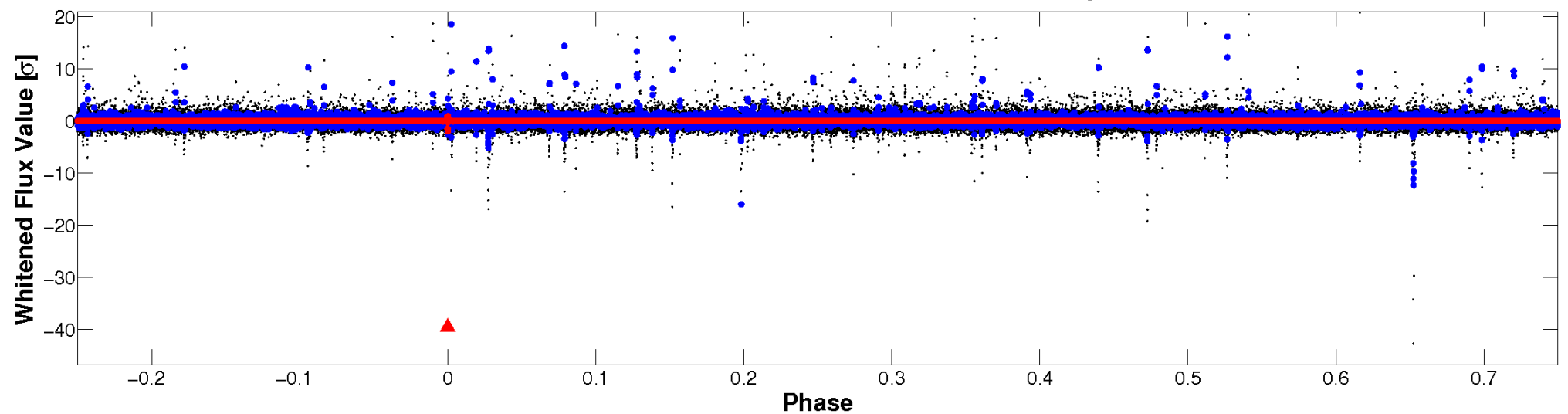


Non-Whitened Vs. Whitened Light Curve

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

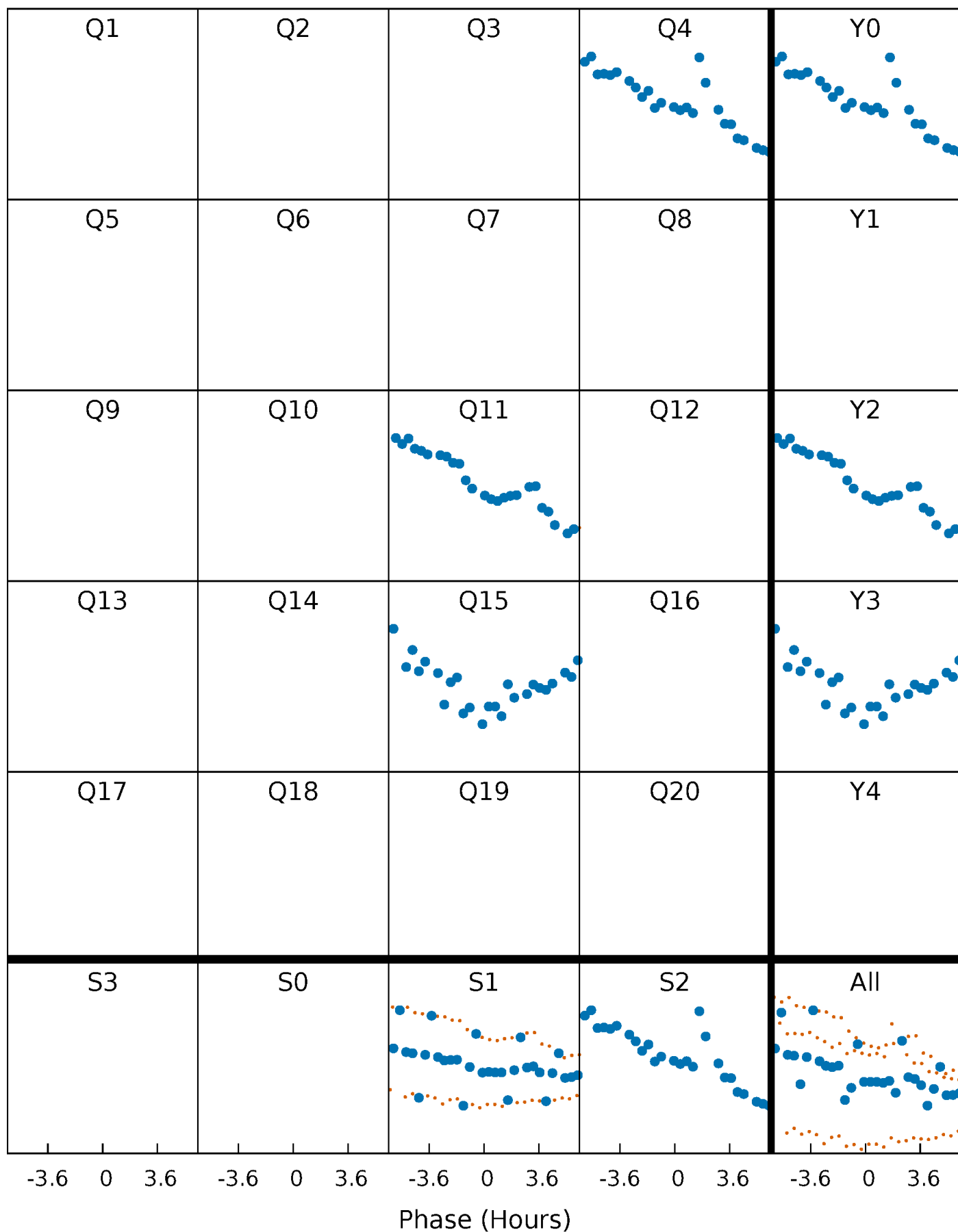


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



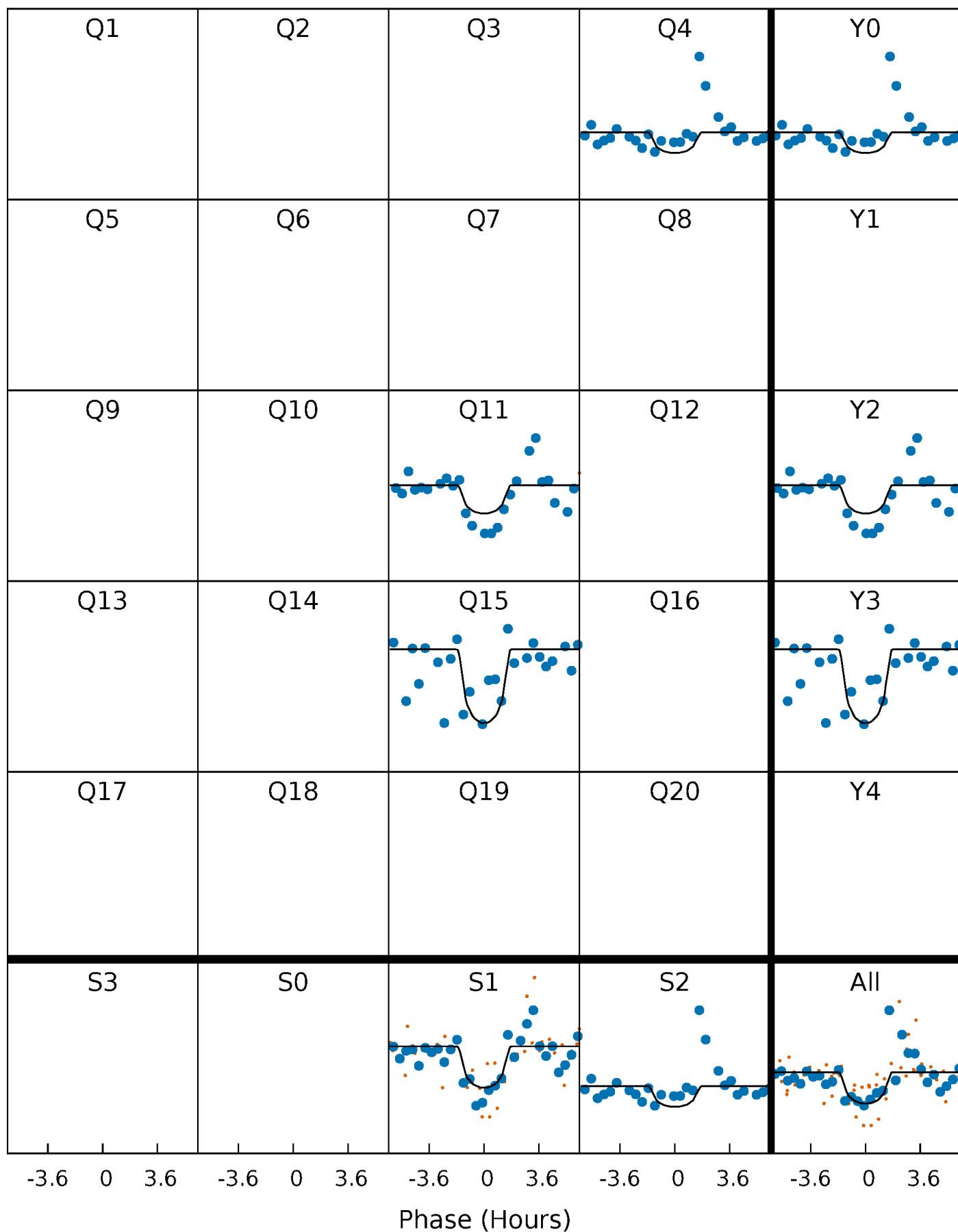
PDC Quarter-Phased Transit Curves

TCE 008482565-01 P=329.479161 Days $T_0=434.018829$ (BKJD)



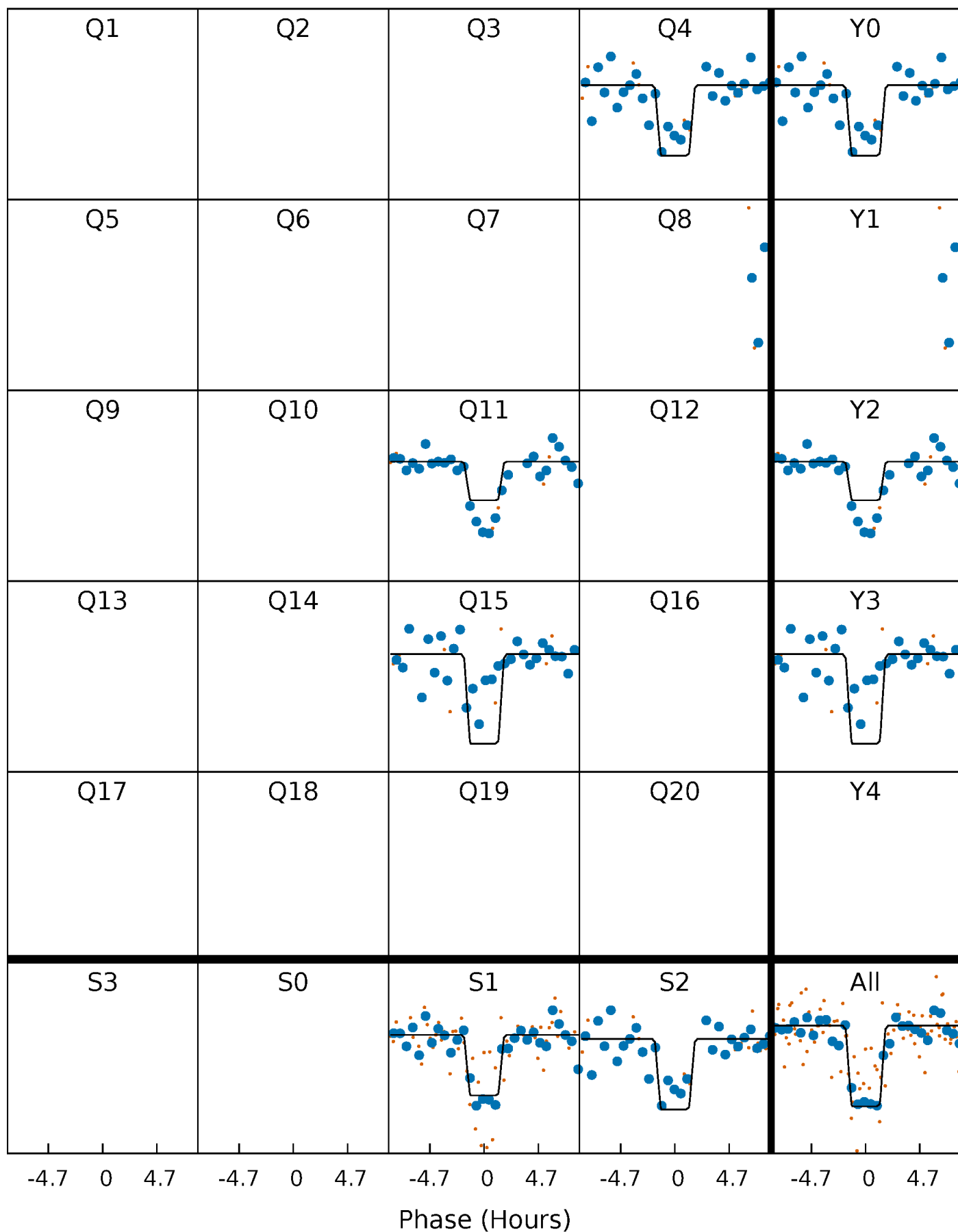
DV Quarter-Phased Transit Curves

TCE 008482565-01 P=329.479161 Days $T_0=434.018829$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

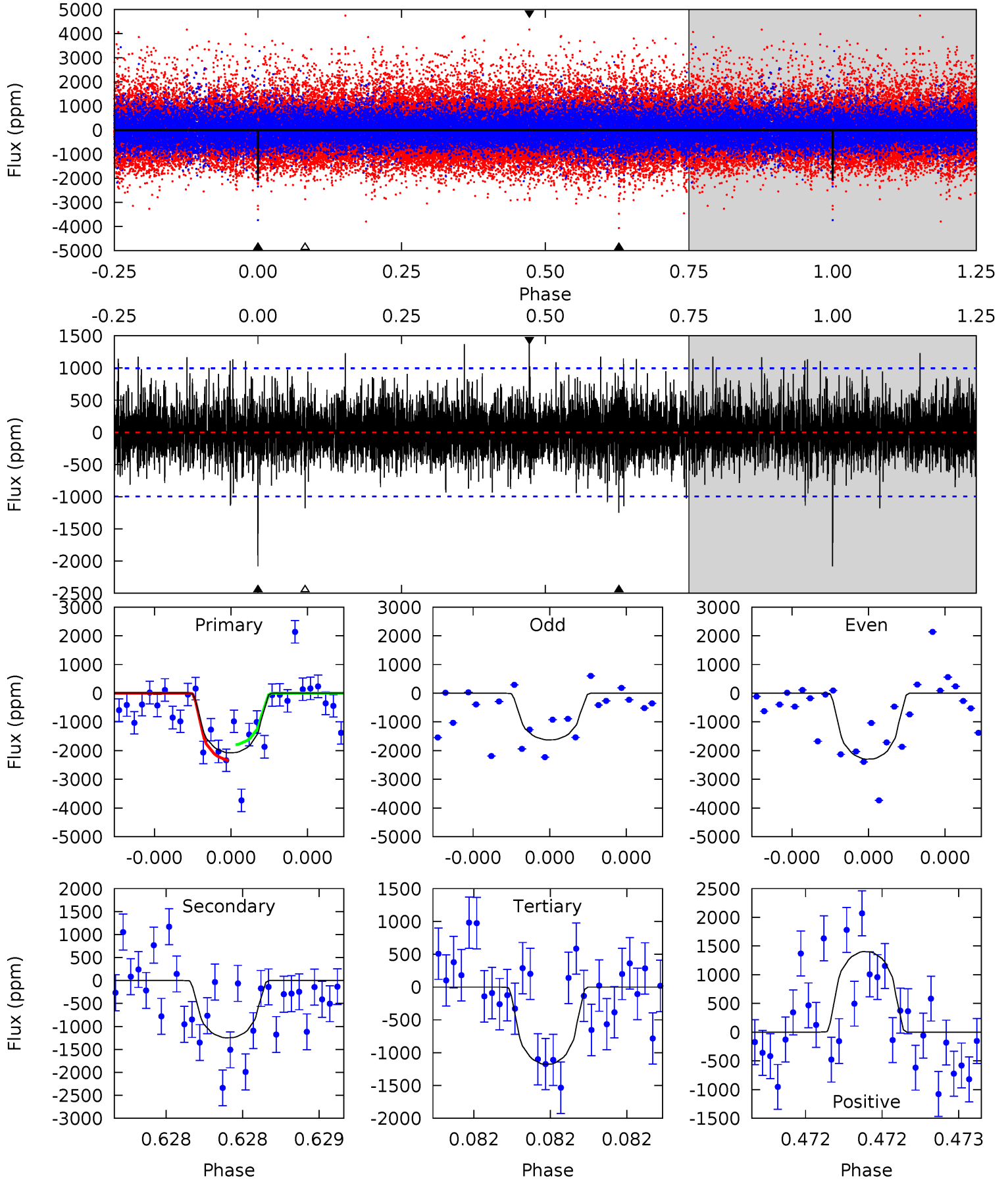
TCE 008482565-01 P=329.483178 Days $T_0=434.015917$ (BKJD)



DV Model-Shift Uniqueness Test

008482565-01, P = 329.479161 Days, E = 104.539668 Days

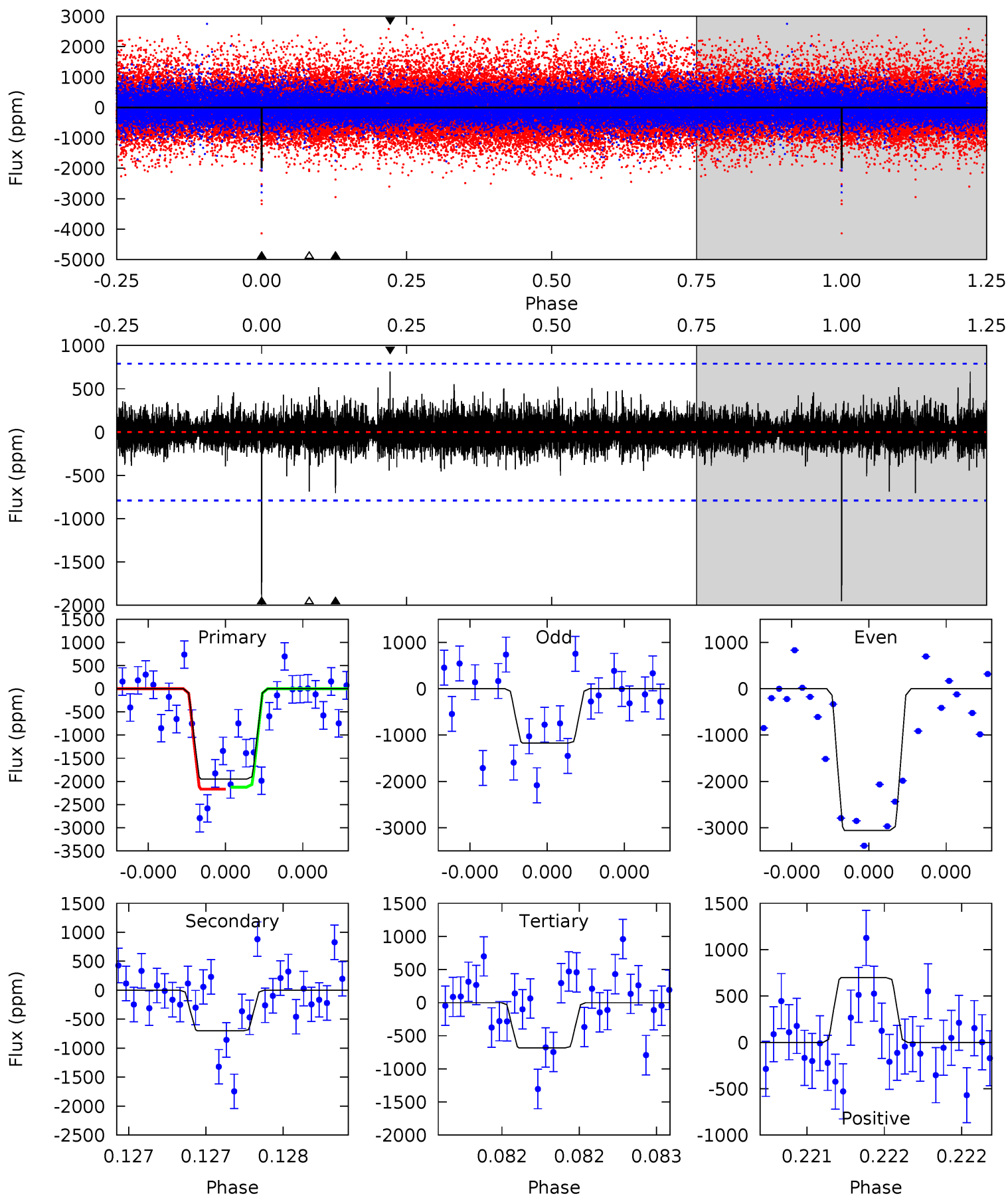
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.7	7.02	6.62	7.90	5.60	3.52	1.58	5.06	3.79	0.40	-0.87	1.68	1.27	0.40	1.51



Alt Model-Shift Uniqueness Test

008482565-01, P = 329.483178 Days, E = 104.532739 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.8	4.96	4.84	4.93	5.59	3.51	0.82	8.96	8.88	0.12	0.03	6.83	1.28	0.26	0.17



Stellar Parameters For KIC 008482565

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4492^{+121}_{-134}	$4.588^{+0.056}_{-0.020}$	$0.020^{+0.300}_{-0.300}$	$0.696^{+0.038}_{-0.062}$	$0.684^{+0.060}_{-0.054}$	$2.858^{+0.671}_{-0.265}$
	+3%/-3%	+1%/-0%	+1500%/-1500%	+5%/-9%	+9%/-8%	+23%/-9%
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 008482565-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1249 ± 178	$5.27^{+4.10}_{-3.54}$	253^{+8}_{-9}	3517^{+1826}_{-553}	$16696^{+140561}_{-11216}$
Alt.	-702 ± 141	$5.32^{+4.27}_{-3.32}$	252^{+8}_{-8}	3215^{+1232}_{-484}	9517^{+57468}_{-6628}

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

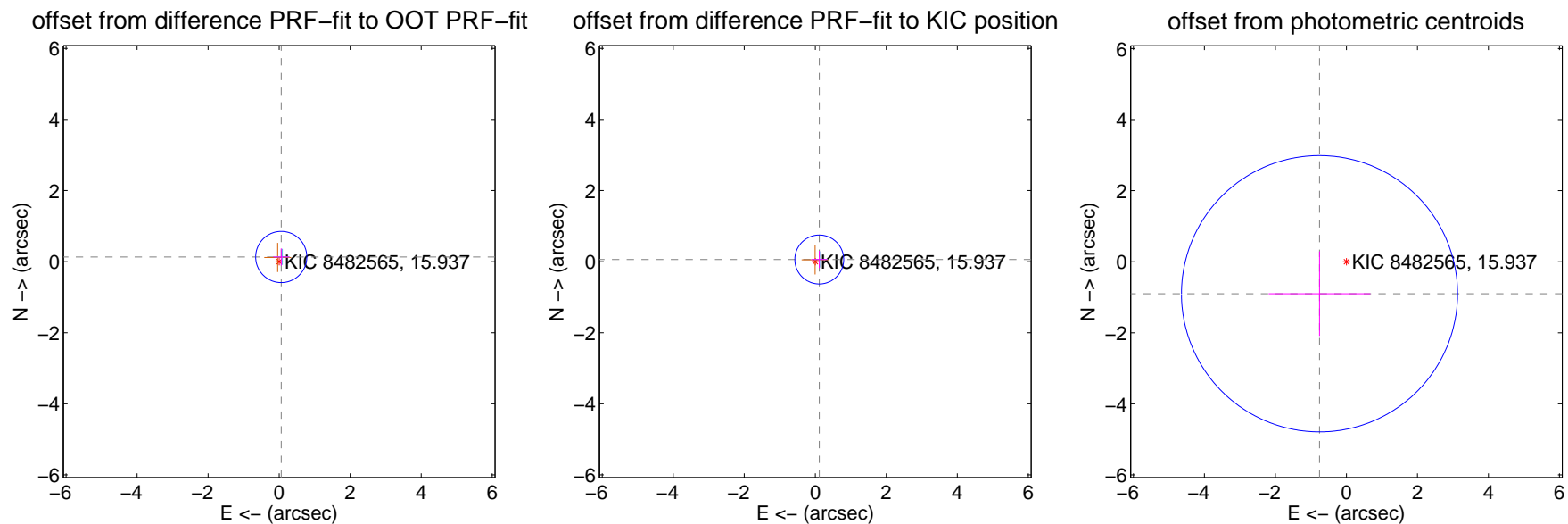
DV Centroid Data

Supplemental centroid analysis for 008482565-01. Kepler magnitude: 15.94. Transit SNR 7.53

There are 1 quarters with good PRF difference image offsets

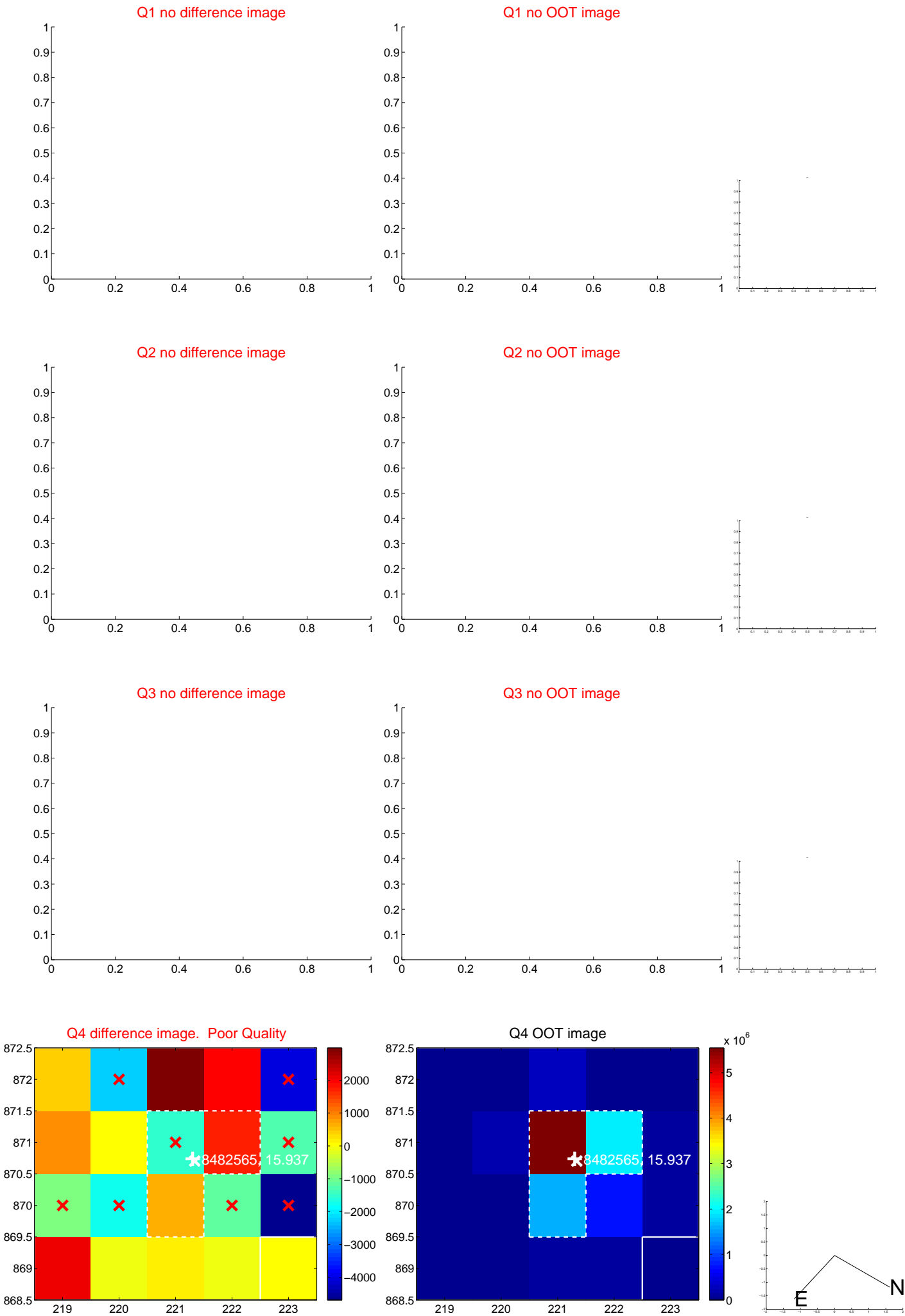
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.144 ± 0.240	0.60	-0.059 ± 0.226	0.131 ± 0.243
PRF-fit source offset from KIC position	0.128 ± 0.229	0.56	-0.113 ± 0.226	0.060 ± 0.243
photometric centroid source offset	1.18 ± 1.30	0.91	0.76 ± 1.43	-0.90 ± 1.19



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.

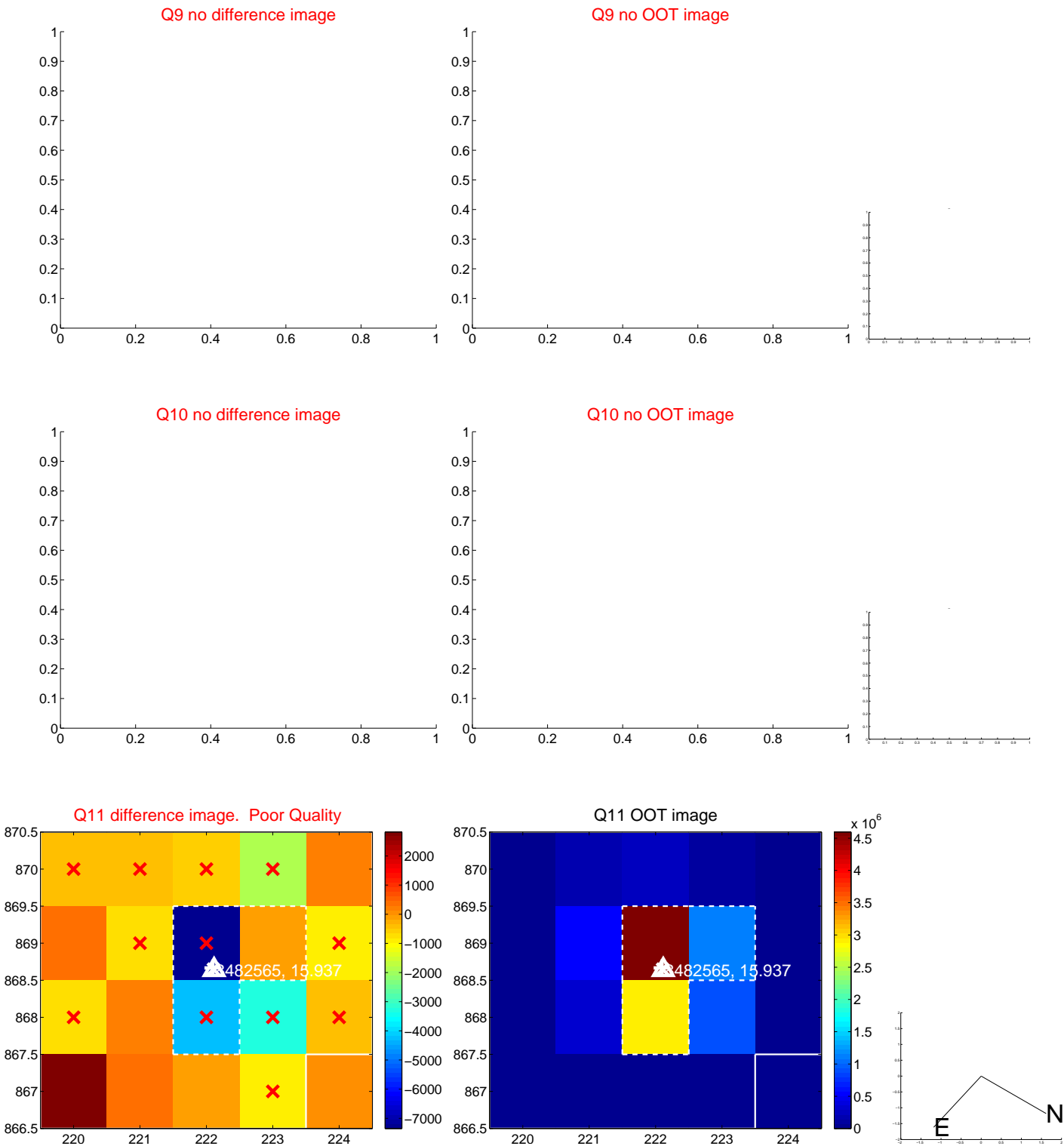
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



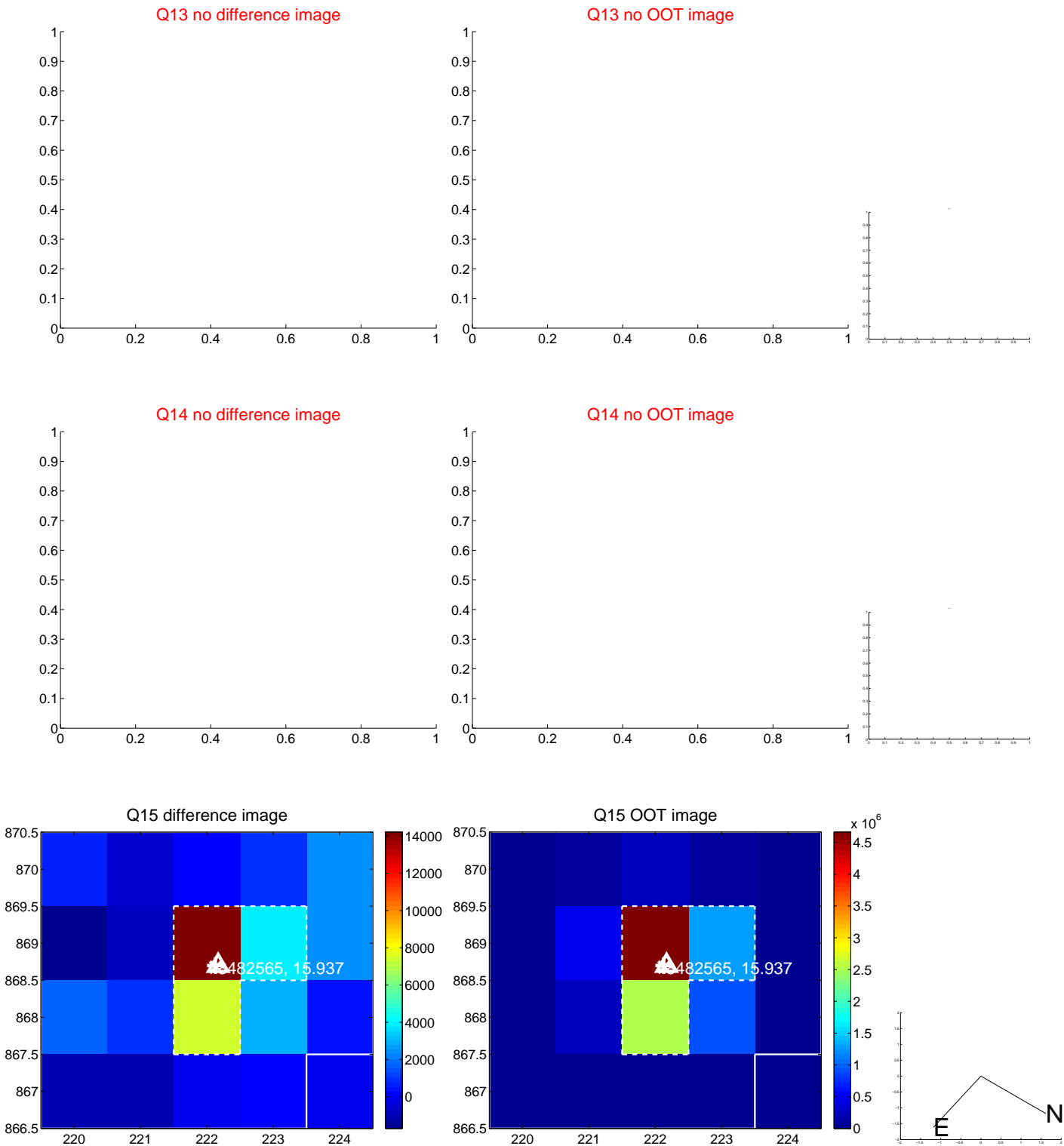
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



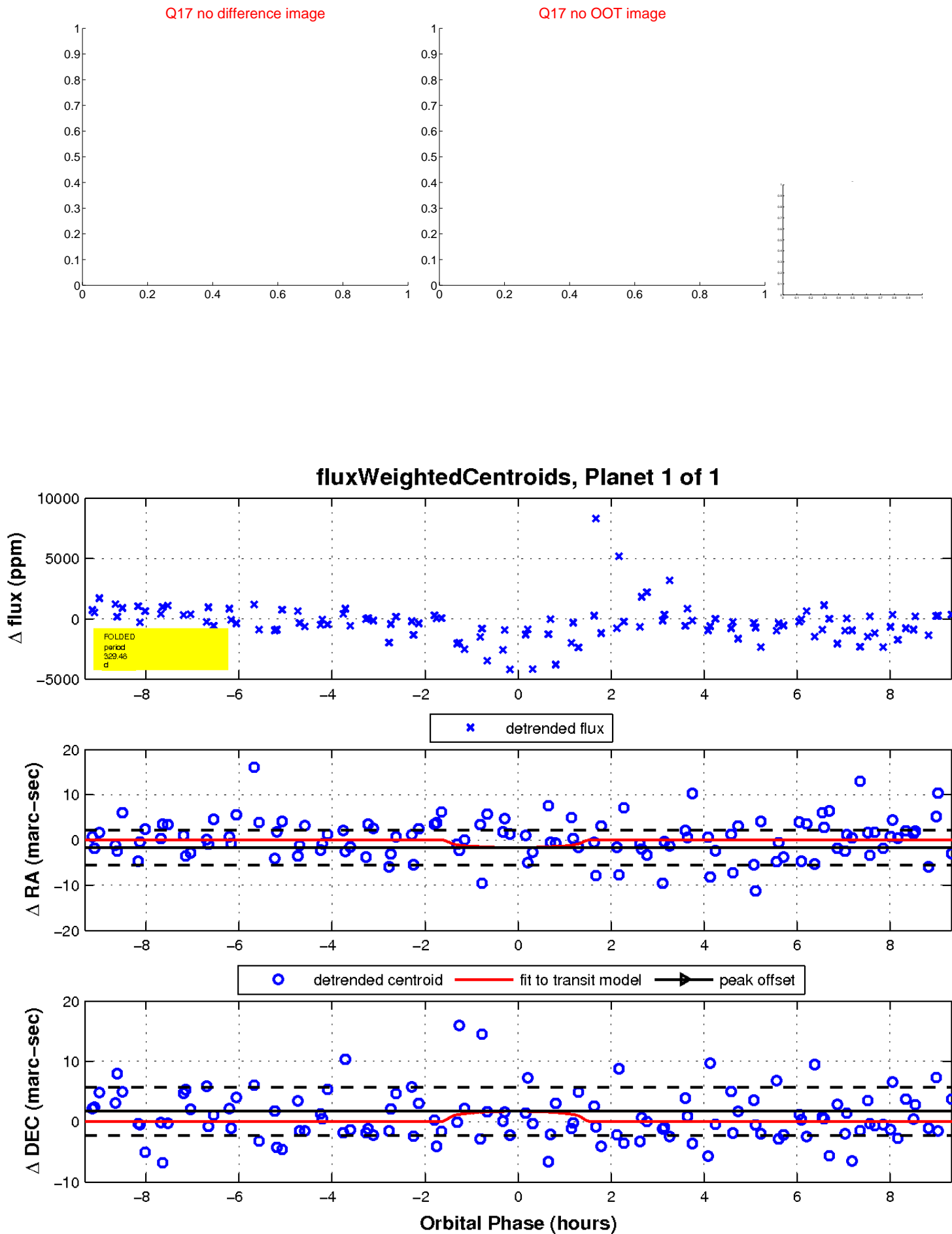
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



UKIRT Image

Declination

