

KIC 006850665

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})
006850665-01	OBS	3244.01	214.721671	275.568135	6484.6	78.541	58.3	87.9	5.83	5022	87.98	31.06

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006850665-01	OBS	FP	0.00	1	0	0	0	LPP_DV

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.

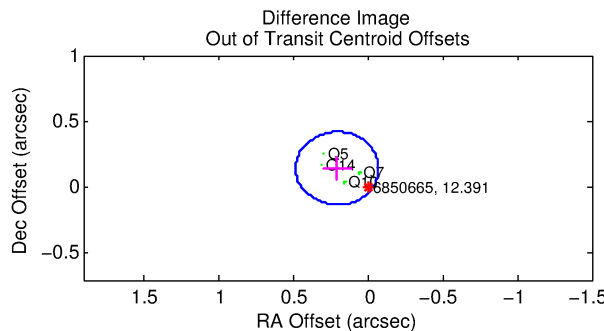
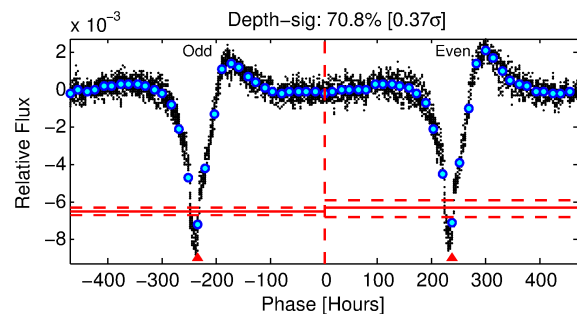
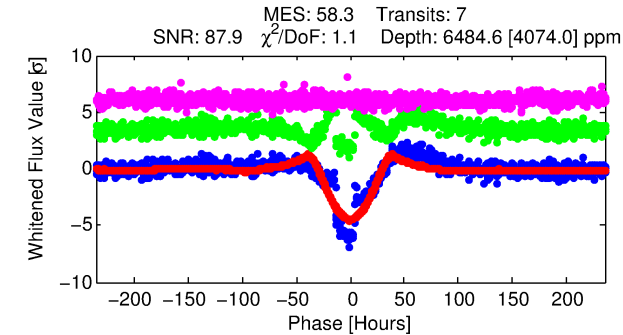
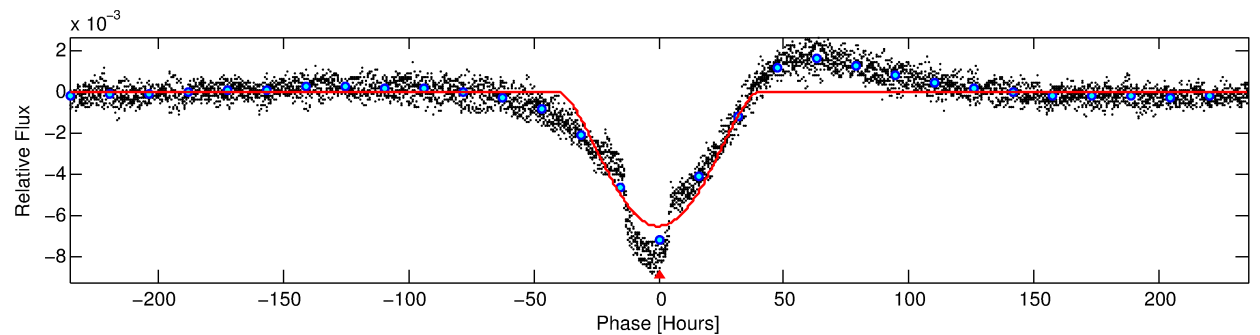
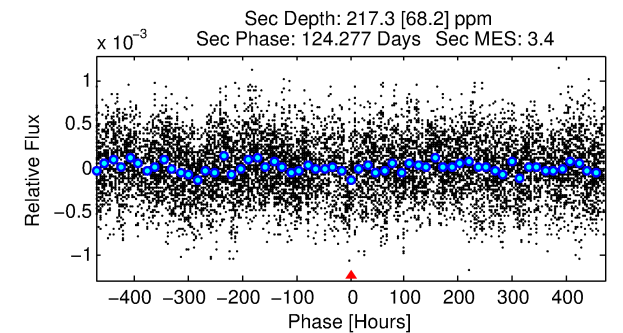
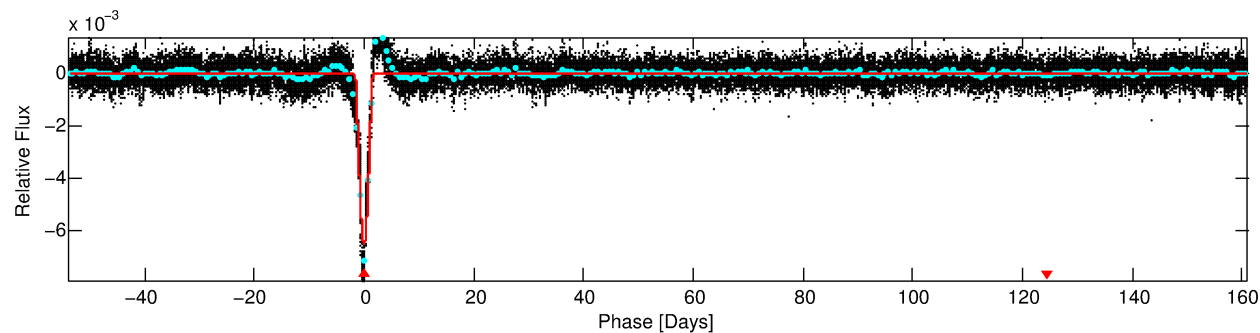
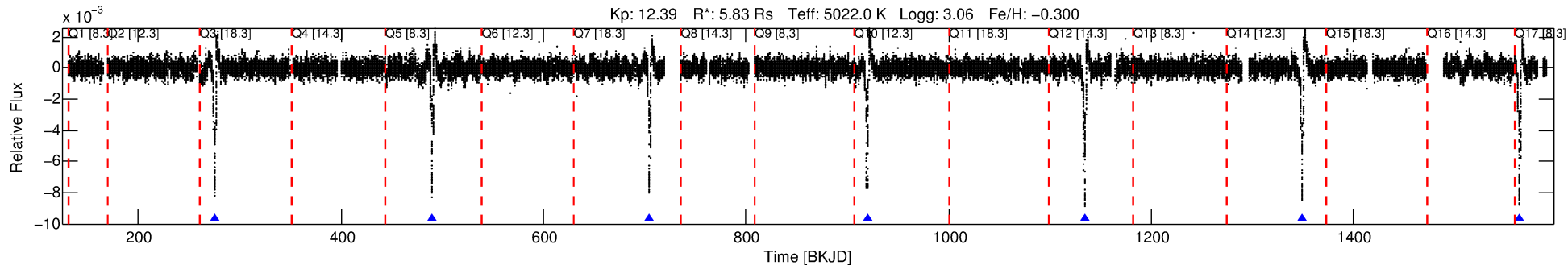
Ephemeris Match Information For 006850665-01

No Significant Match Found

DV One-Page Summary

KIC: 6850665 Candidate: 1 of 1 Period: 214.722 d
KOI: K03244 Corr: No Ephemeris Match

Kp: 12.39 R*: 5.83 Rs Teff: 5022.0 K Logg: 3.06 Fe/H: -0.300



DV Fit Results:

Period = 214.72167 [0.00438] d
Epoch = 275.5681 [0.0156] BKJD
Rp/R* = 0.1384 [0.0531]
a/R* = 11.41 [0.68]
b = 1.00 [0.02]
Seff = 31.06 [13.44]
Teq = 602 [65] K
Rp = 87.98 [43.63] Re
a = 0.7892 [0.2202] AU
Ag = 9.62 [8.95] [0.96σ]
Teffp = 1639 [341] K [2.98σ]

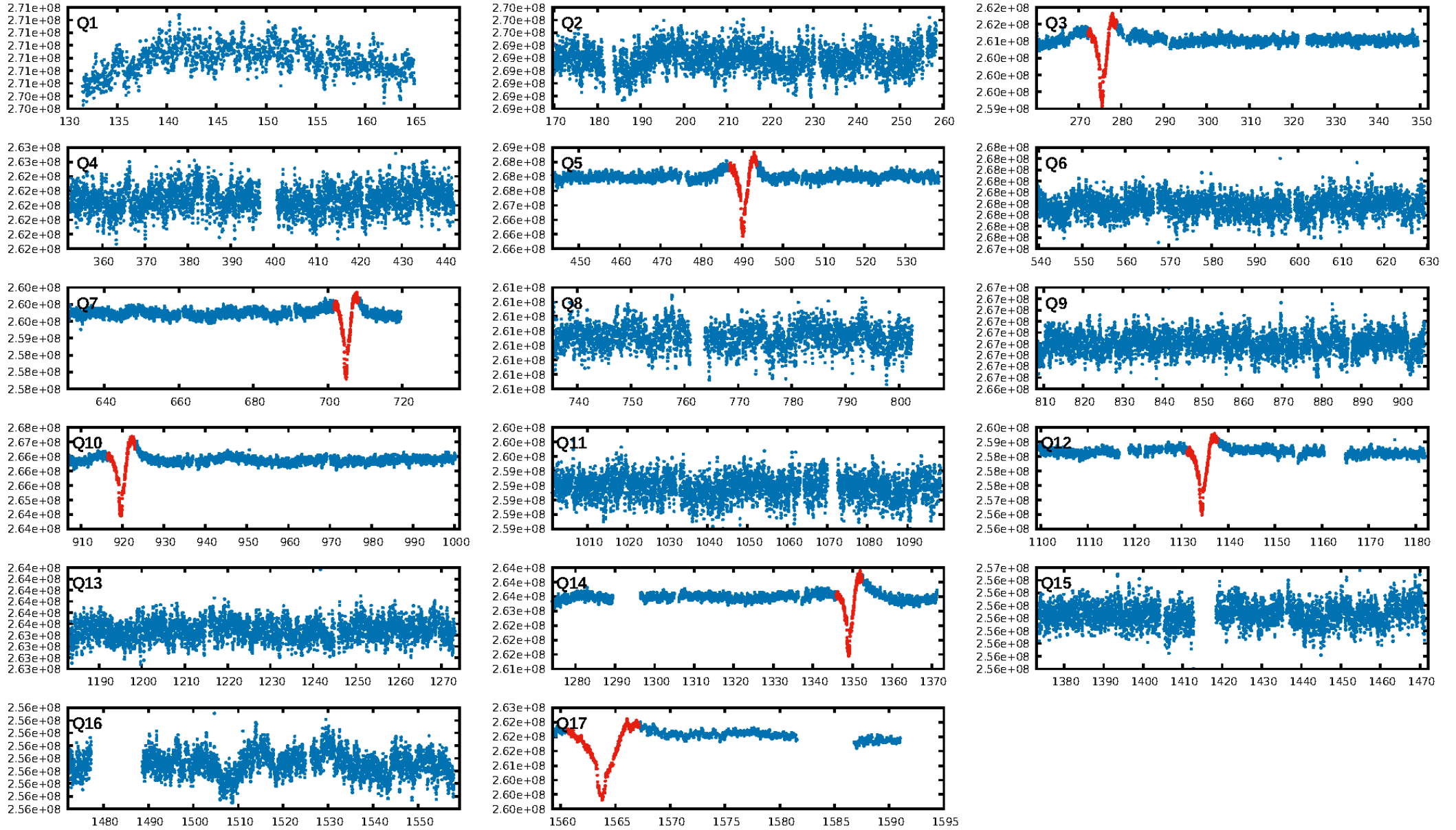
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 31.3%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: 1.731
Centroid-sig: 51.8%
Centroid-so: 0.024 arcsec [2.40σ]
OotOffset-rm: 0.250 arcsec [2.71σ]
KicOffset-rm: 0.199 arcsec [2.34σ]
OotOffset-st: 2/1/0/1 [4]
KicOffset-st: 2/1/0/1 [4]
DiffImageQuality-fgm: 1.00 [4/4]
DiffImageOverlap-fno: 1.00 [4/4]

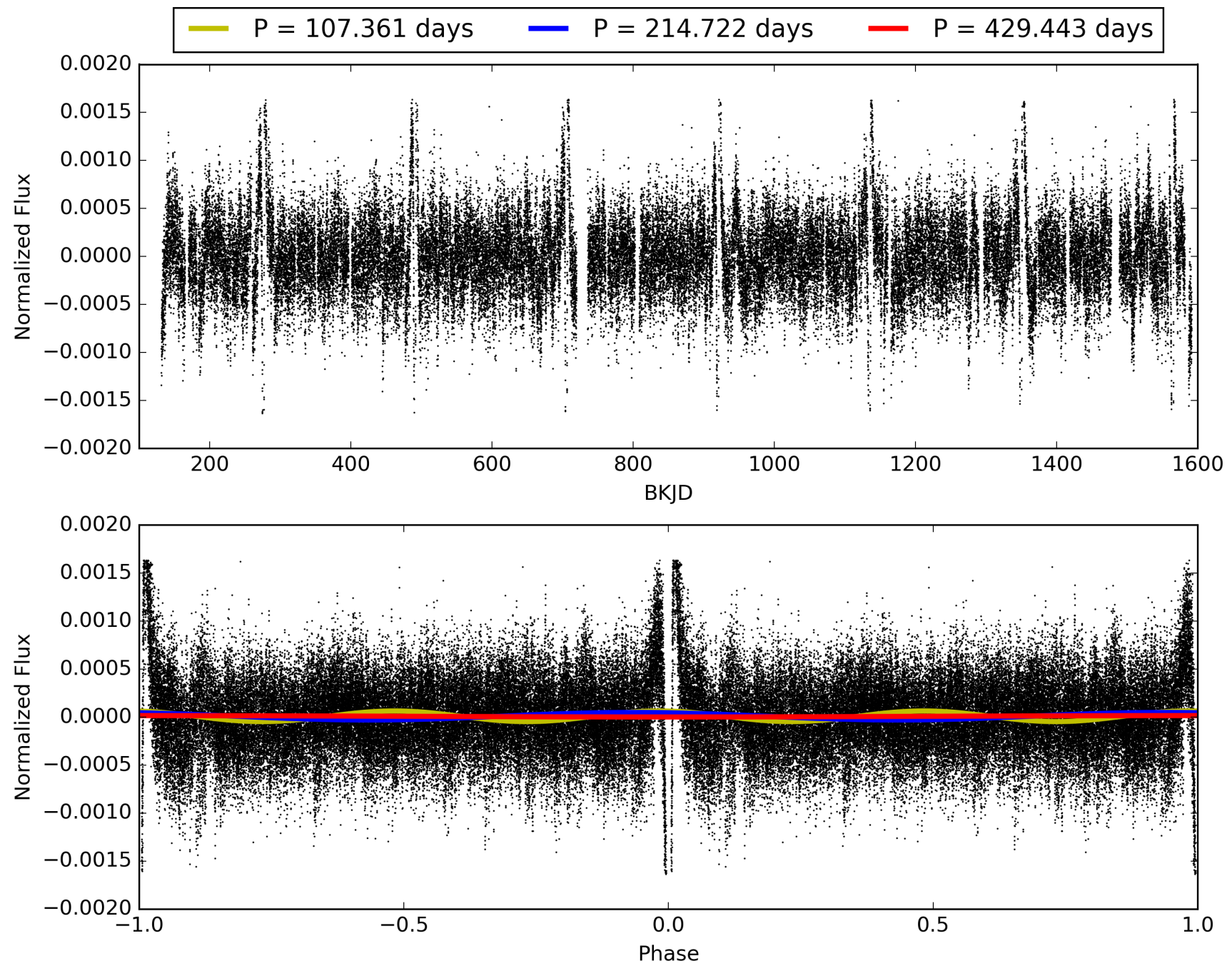
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 16:21:45 Z

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

TCE 006850665-01, PDC Light Curves

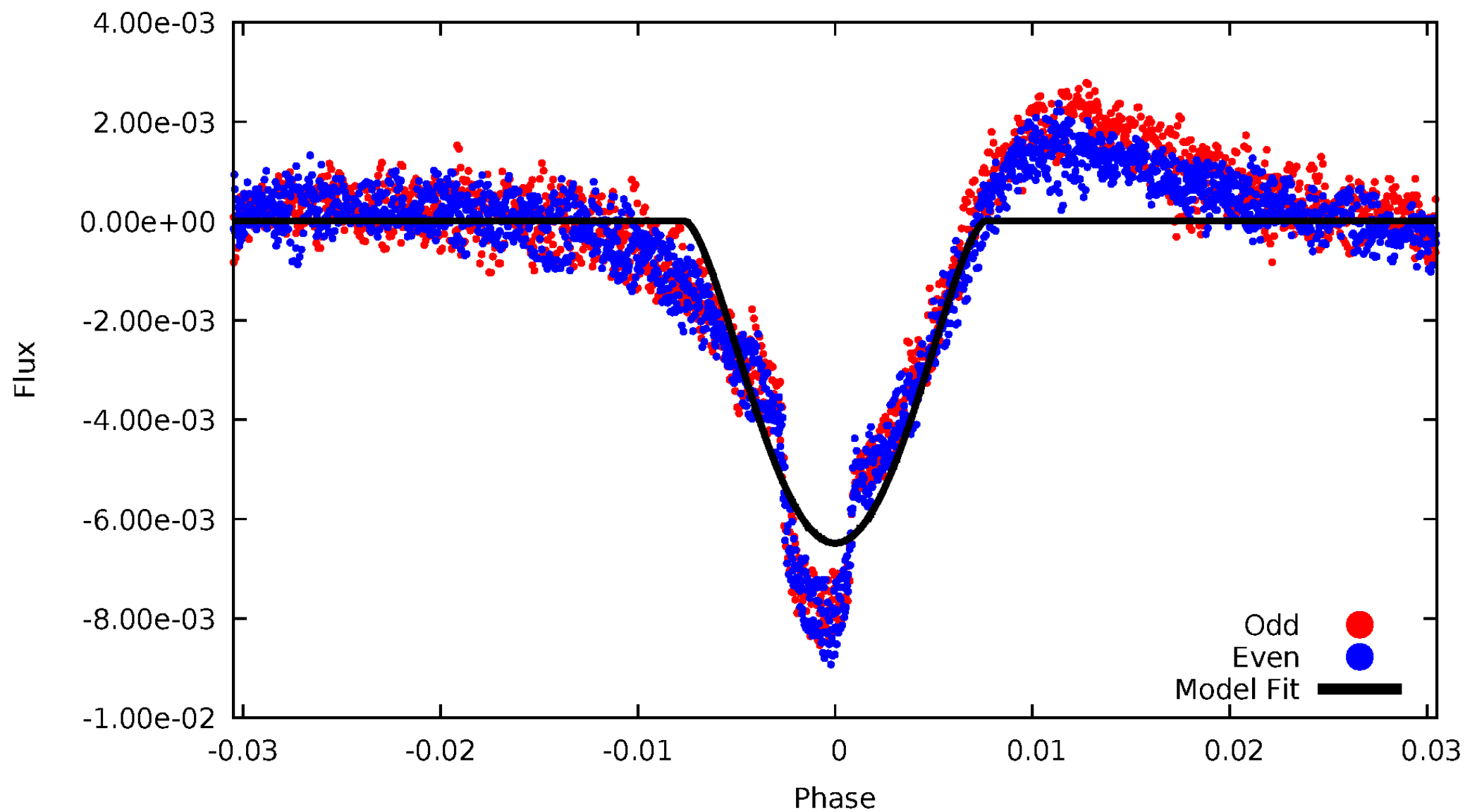


TCE 006850665-01



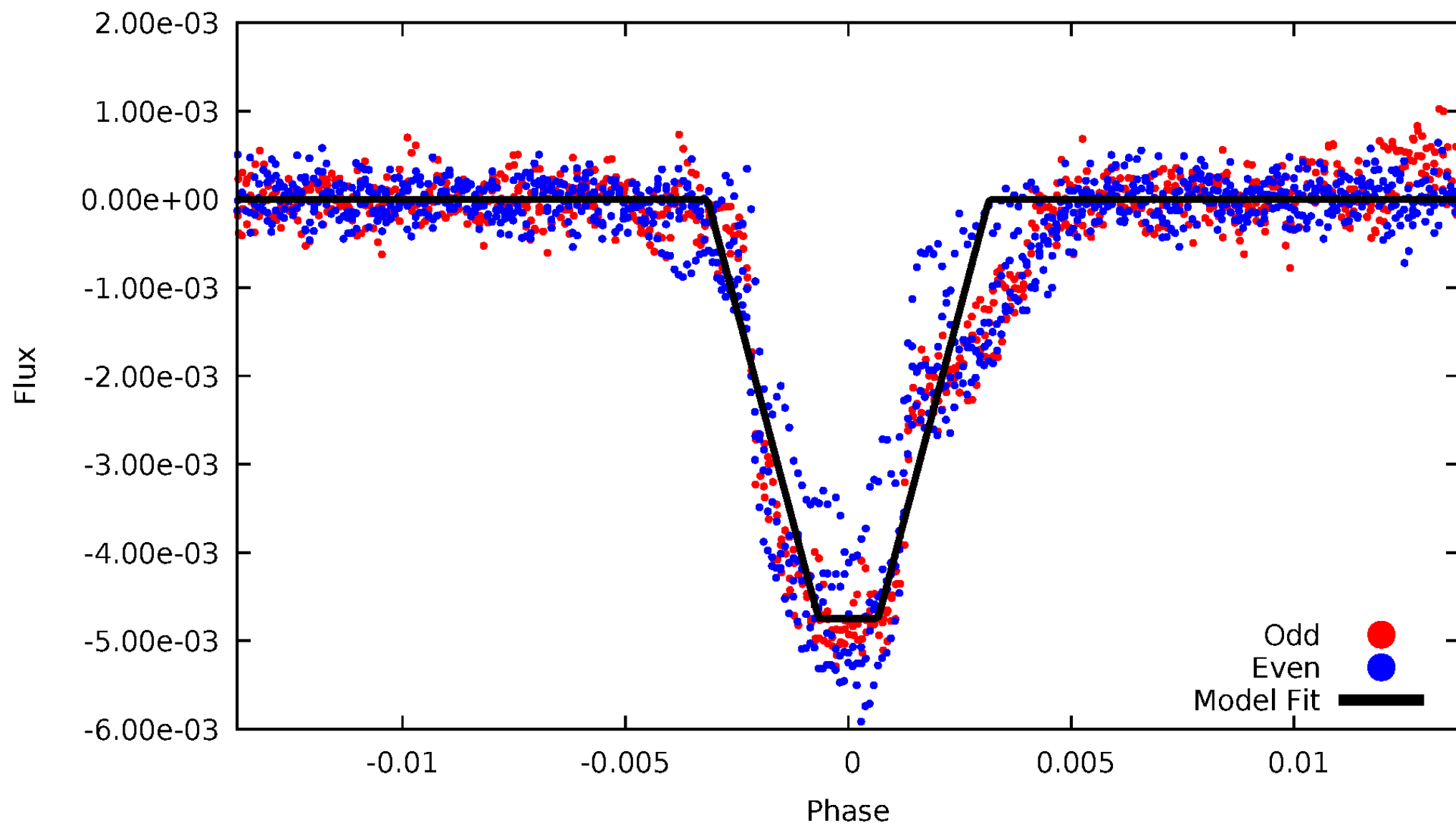
DV Odd/Even

TCE 006850665-01

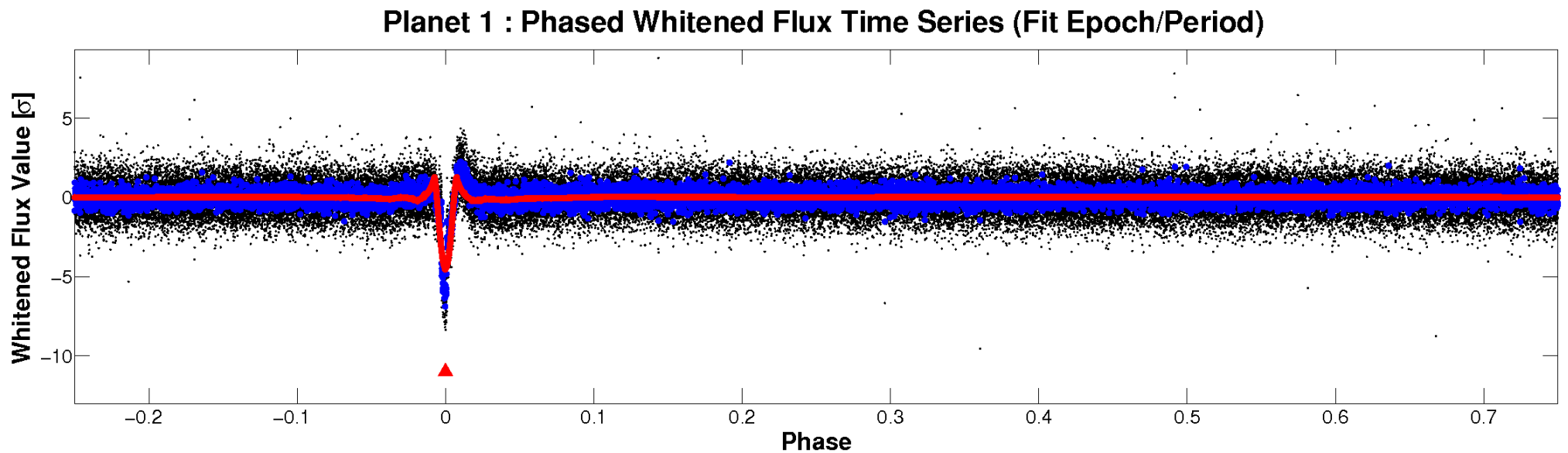
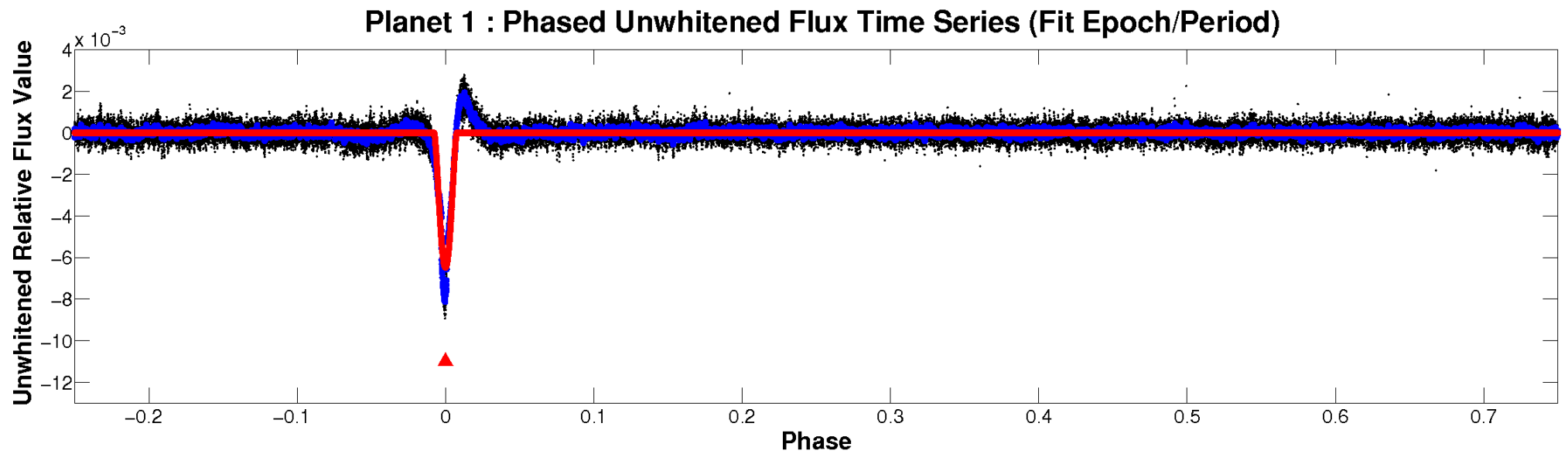


ALT Odd/Even

TCE 006850665-01

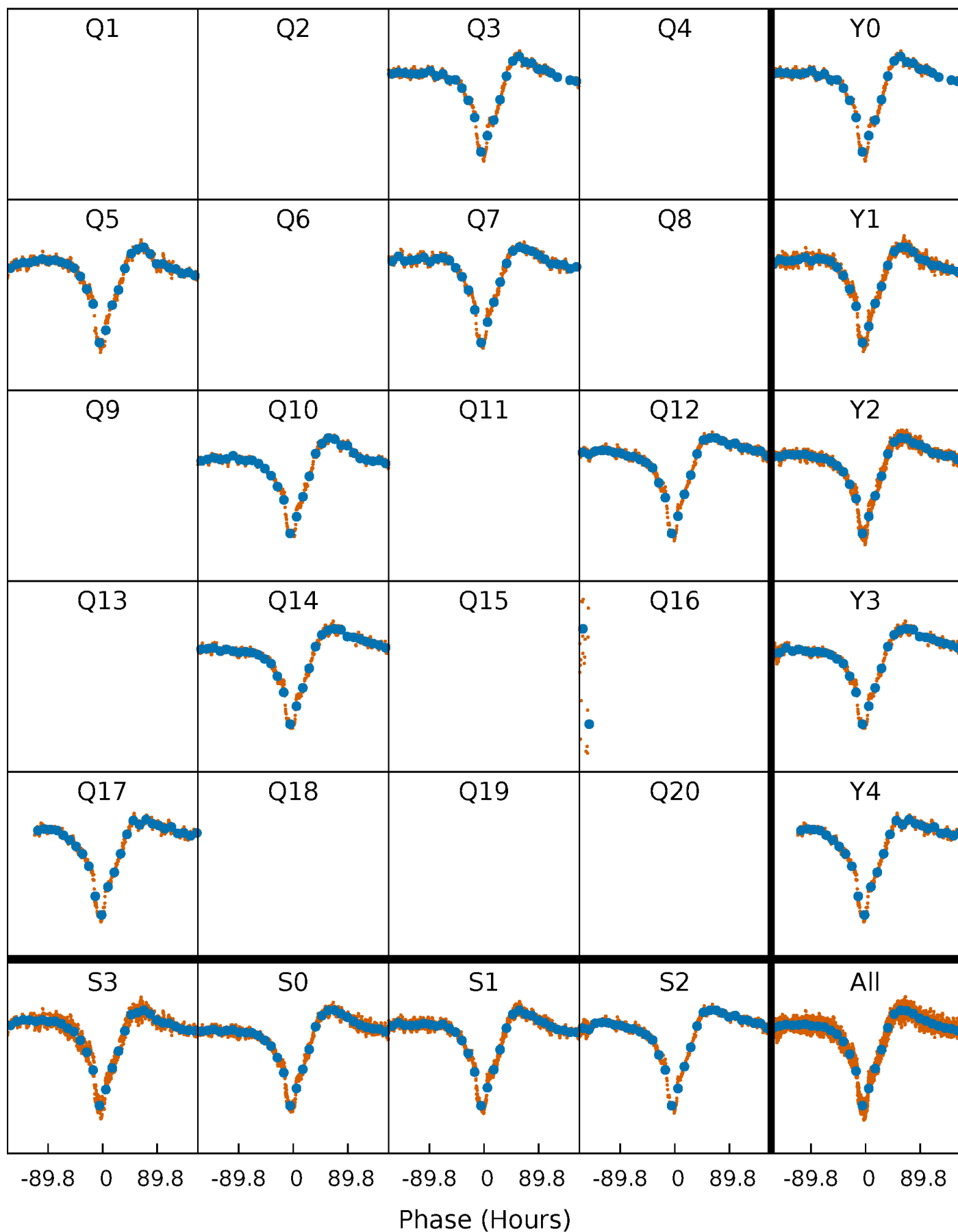


Non-Whitened Vs. Whitened Light Curve



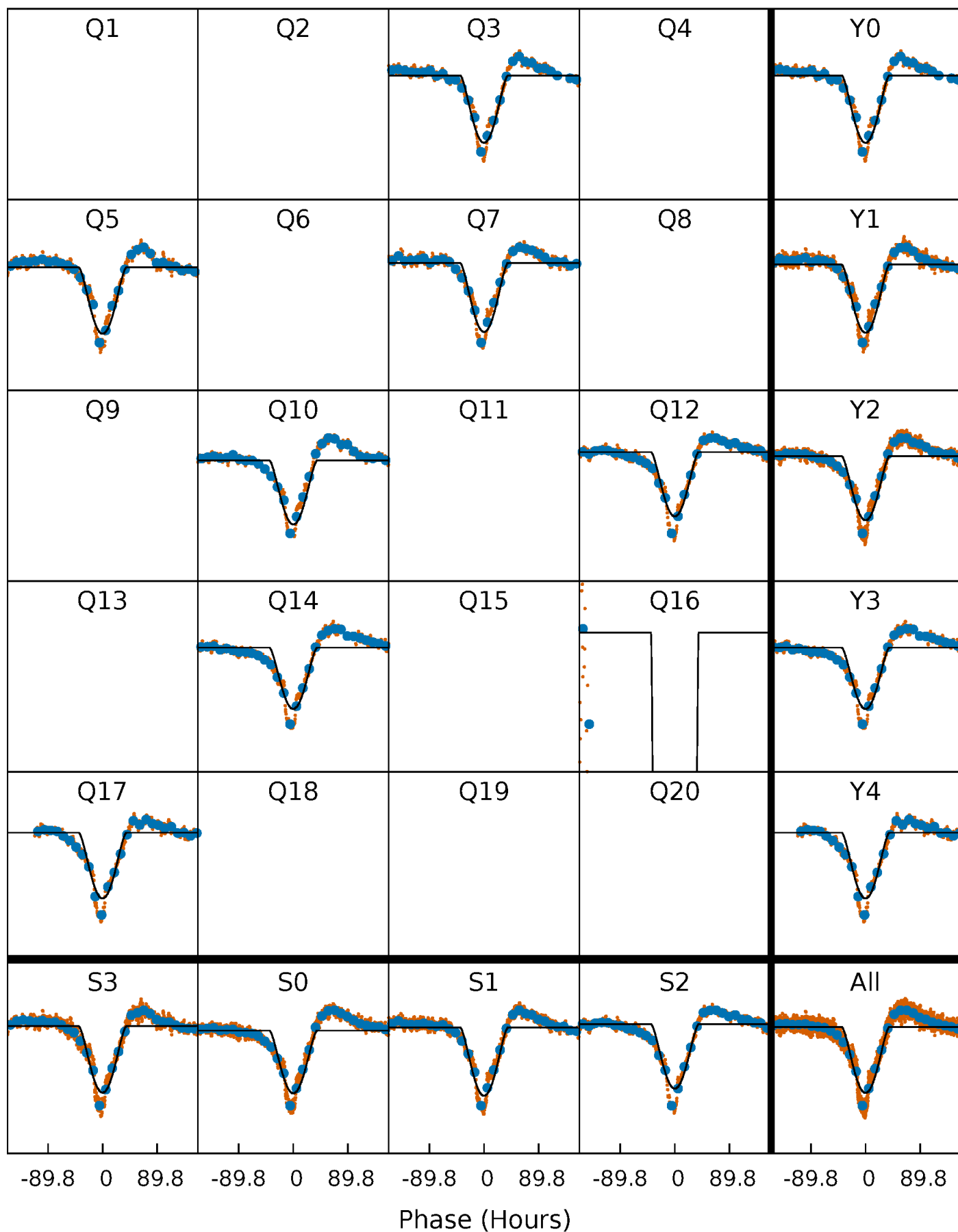
PDC Quarter-Phased Transit Curves

TCE 006850665-01 P=214.721671 Days $T_0=275.568135$ (BKJD)



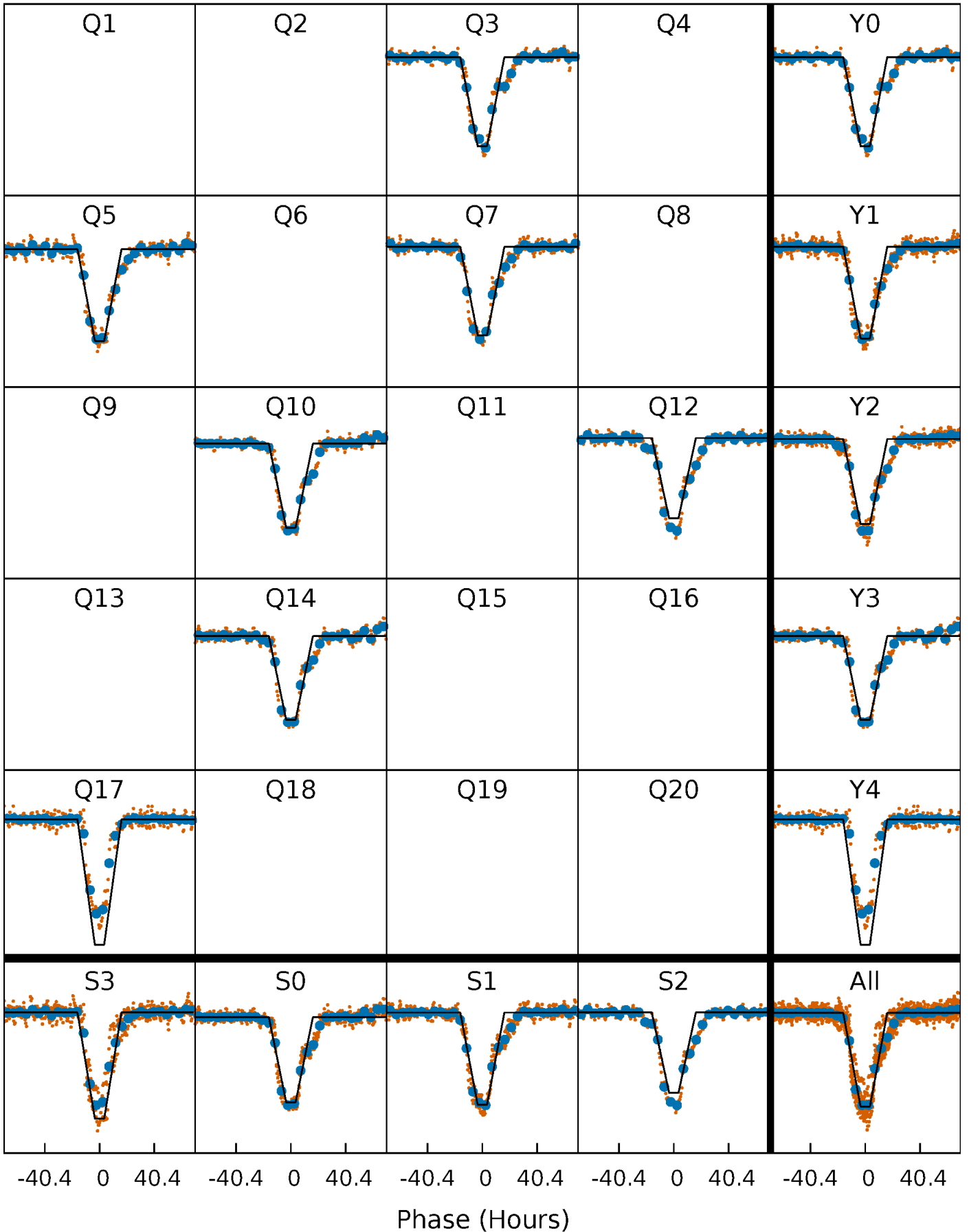
DV Quarter-Phased Transit Curves

TCE 006850665-01 P=214.721671 Days $T_0=275.568135$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

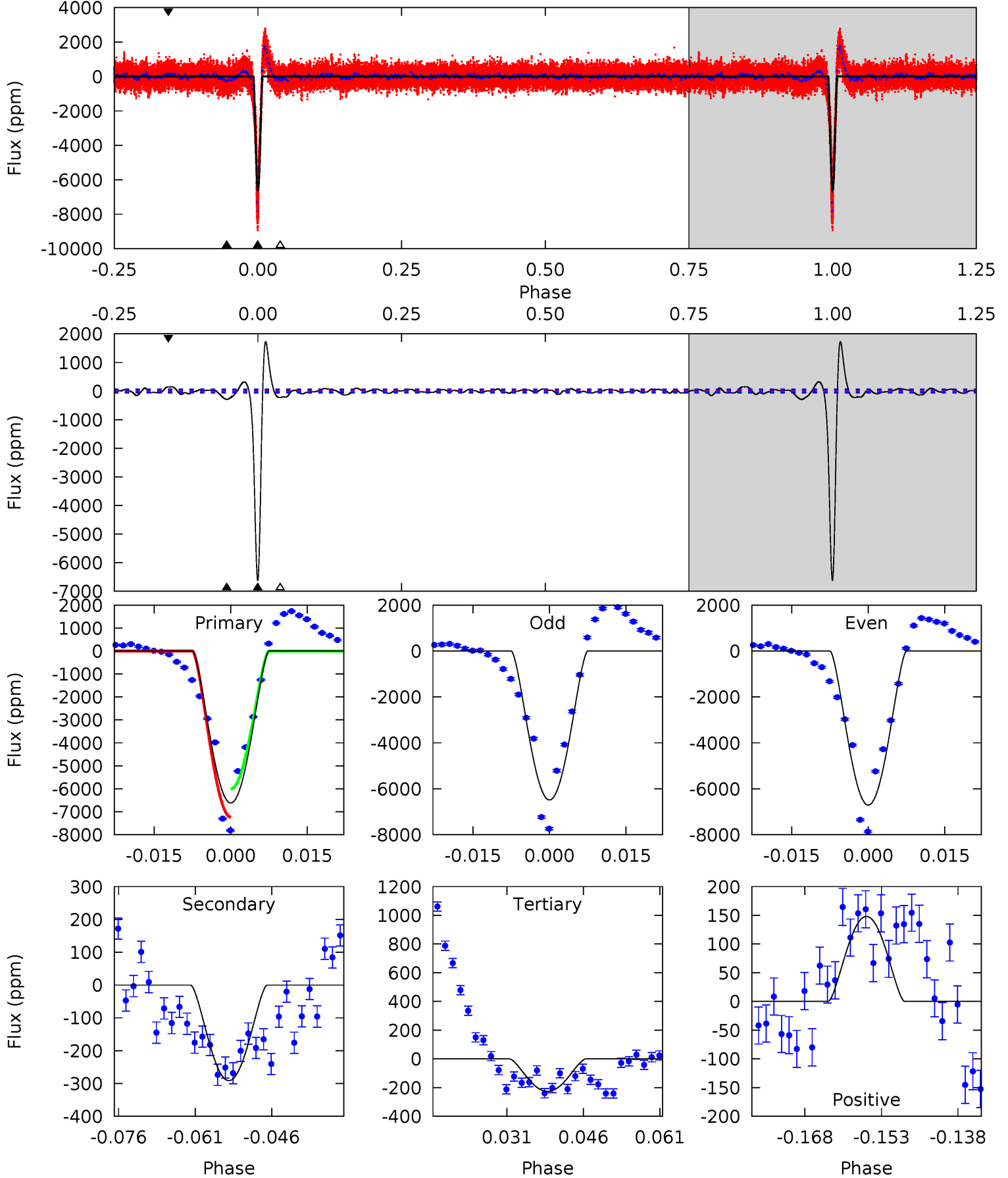
TCE 006850665-01 P=214.715848 Days $T_0=275.485983$ (BKJD)



DV Model-Shift Uniqueness Test

006850665-01, P = 214.721671 Days, E = 60.846464 Days

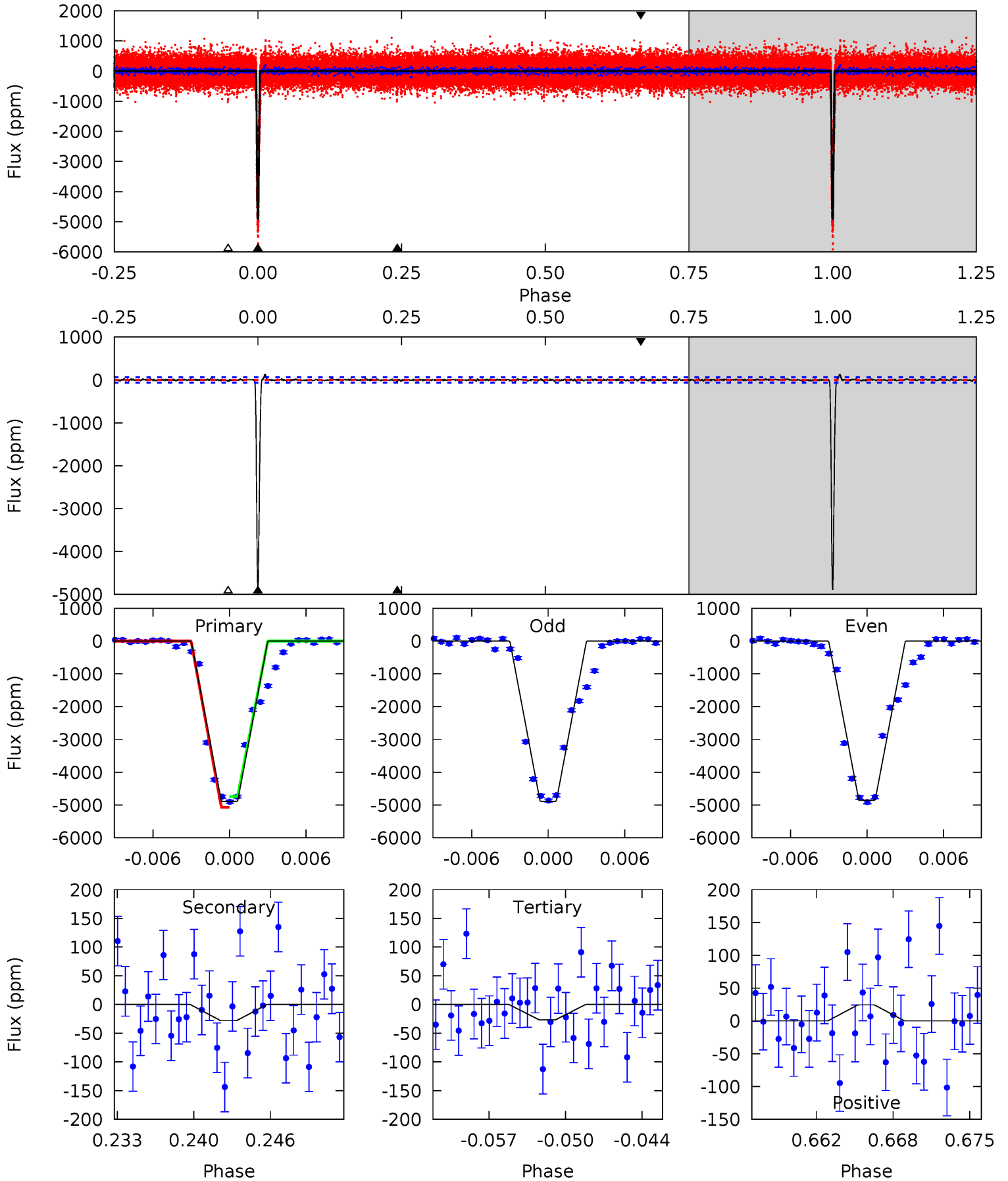
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
642.3	28.3	22.0	14.4	4.94	2.43	12.5	620.3	627.9	6.31	13.9	10.7	1.03	0.21	58.9



Alt Model-Shift Uniqueness Test

006850665-01, P = 214.715848 Days, E = 60.770135 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
403.6	2.31	2.21	2.02	5.11	2.73	0.89	401.3	401.5	0.10	0.29	1.17	0.96	0.03	13.5



Stellar Parameters For KIC 006850665

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5022^{+100}_{-110}	$3.060^{+0.240}_{-0.160}$	$-0.300^{+0.200}_{-0.250}$	$5.826^{+1.221}_{-1.832}$	$1.421^{+0.217}_{-0.403}$	$0.010^{+0.016}_{-0.004}$
	+2%/-2%	+8%/-5%	+67%/-83%	+21%/-31%	+15%/-28%	+156%/-40%
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 006850665-01 / KOI 3244.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-291 ± 10	$85.13^{+40.50}_{-34.17}$	840^{+59}_{-63}	2558^{+357}_{-198}	13^{+24}_{-7}
Alt.	-28 ± 12	$46.78^{+35.22}_{-26.68}$	841^{+57}_{-70}	2222^{+541}_{-317}	$4.056^{+19.964}_{-2.902}$

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 $A_{obs} \gg 1.0$

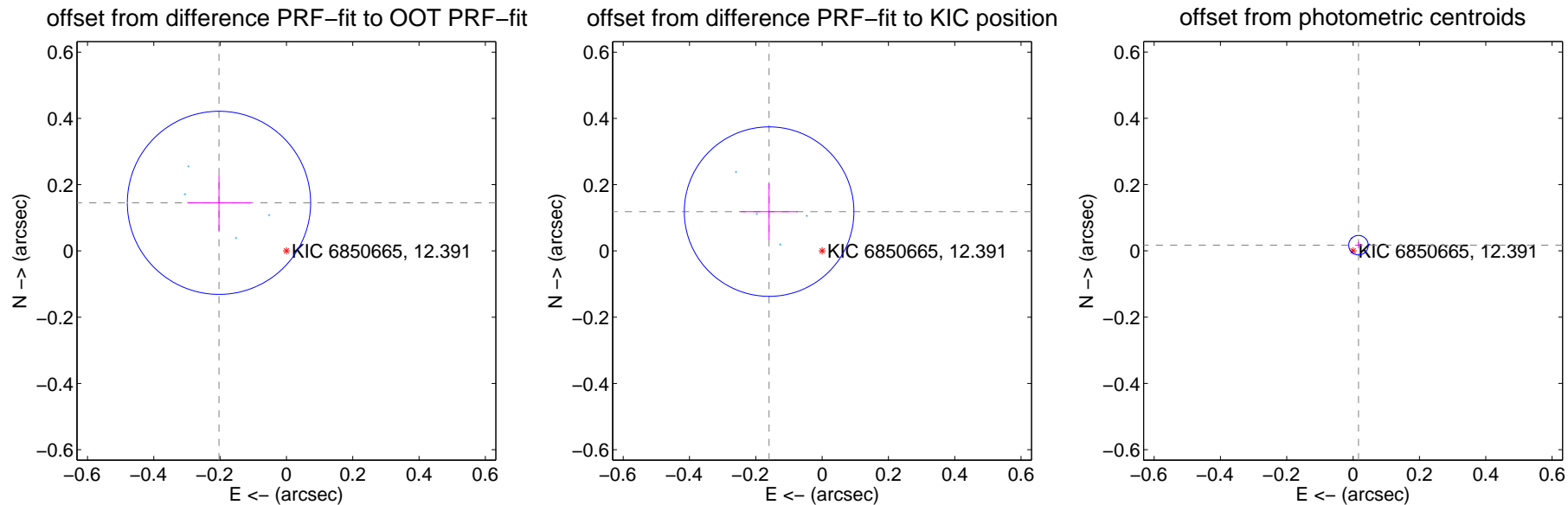
DV Centroid Data

Supplemental centroid analysis for 006850665-01. Kepler magnitude: 12.39. Transit SNR 87.90

There are 4 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.250 ± 0.092	2.71	0.203 ± 0.096	0.145 ± 0.084
PRF-fit source offset from KIC position	0.199 ± 0.085	2.34	0.160 ± 0.085	0.119 ± 0.085
photometric centroid source offset	0.02 ± 0.01	2.40	-0.02 ± 0.01	0.02 ± 0.01

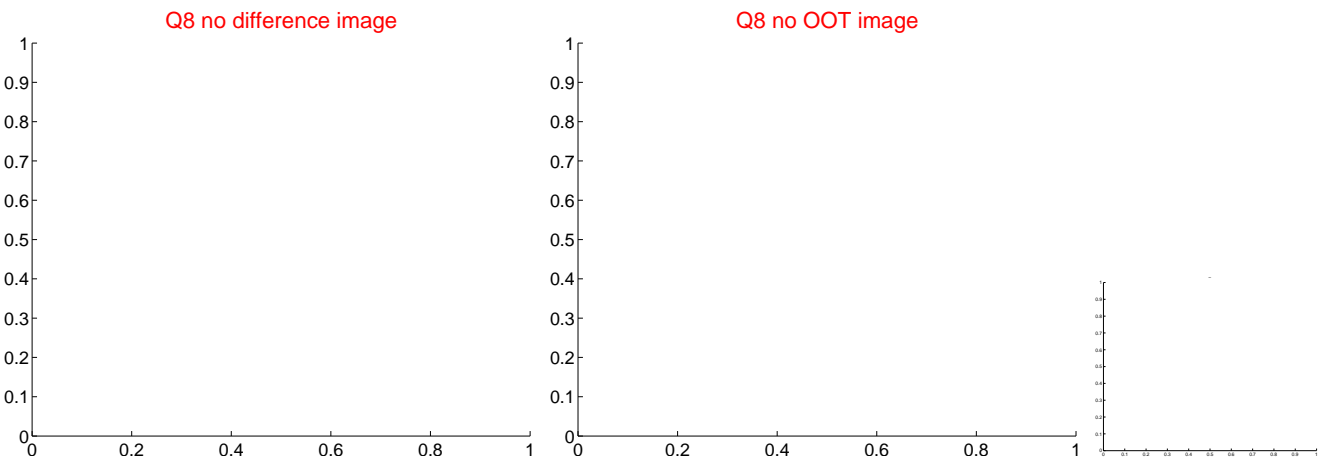
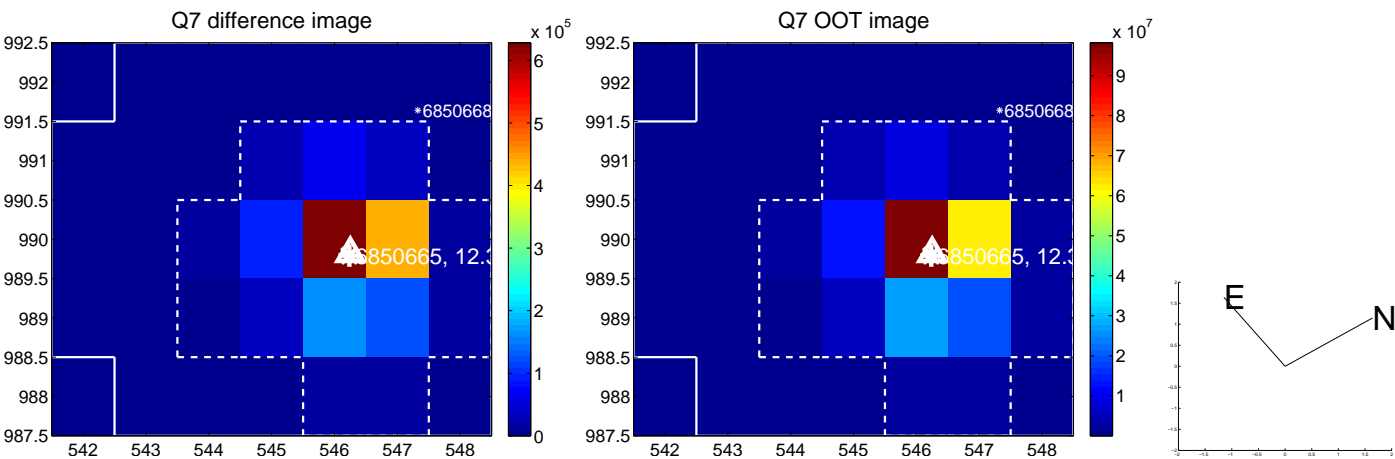
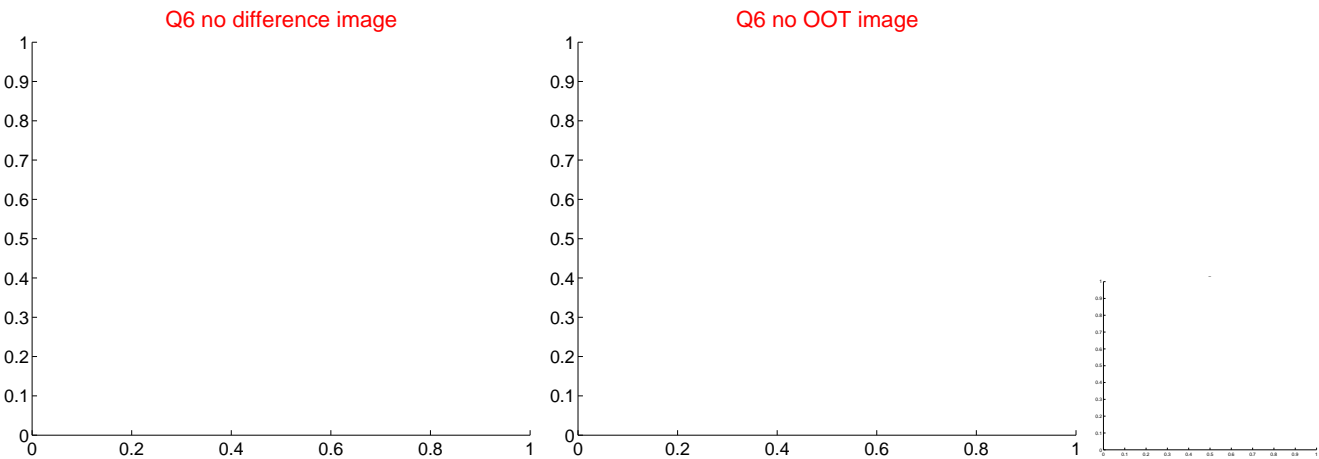
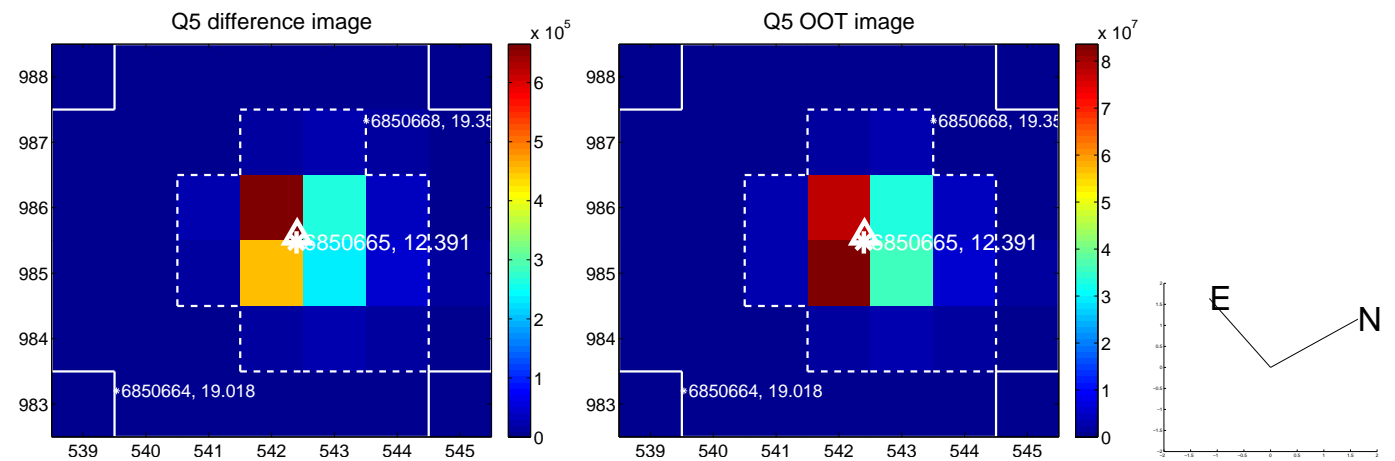


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

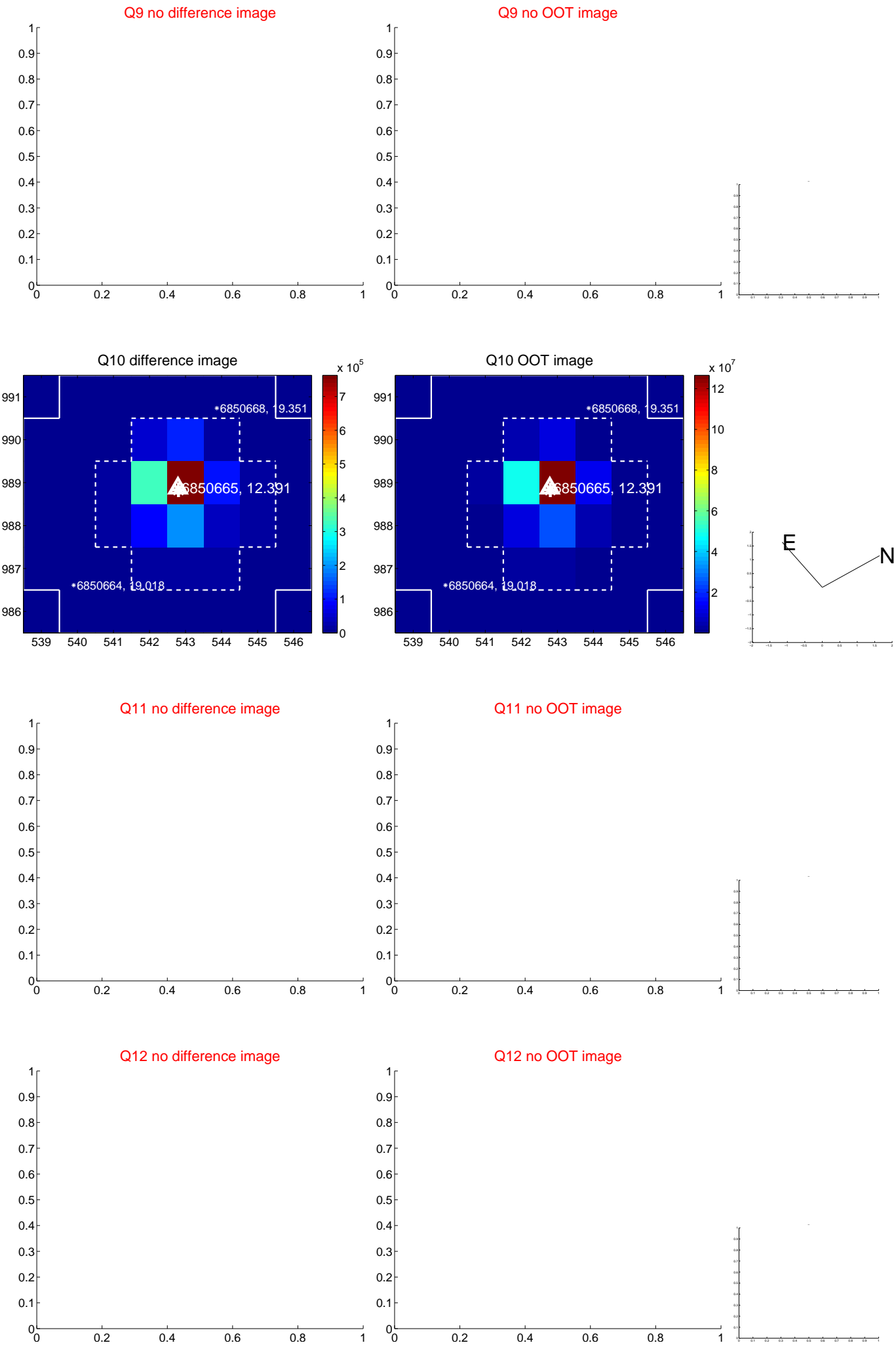
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



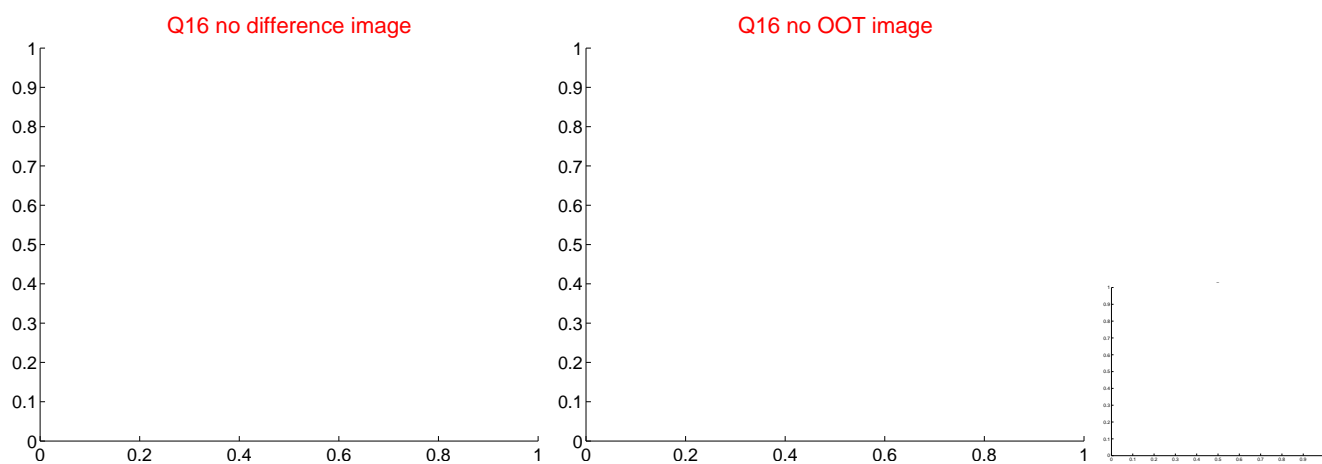
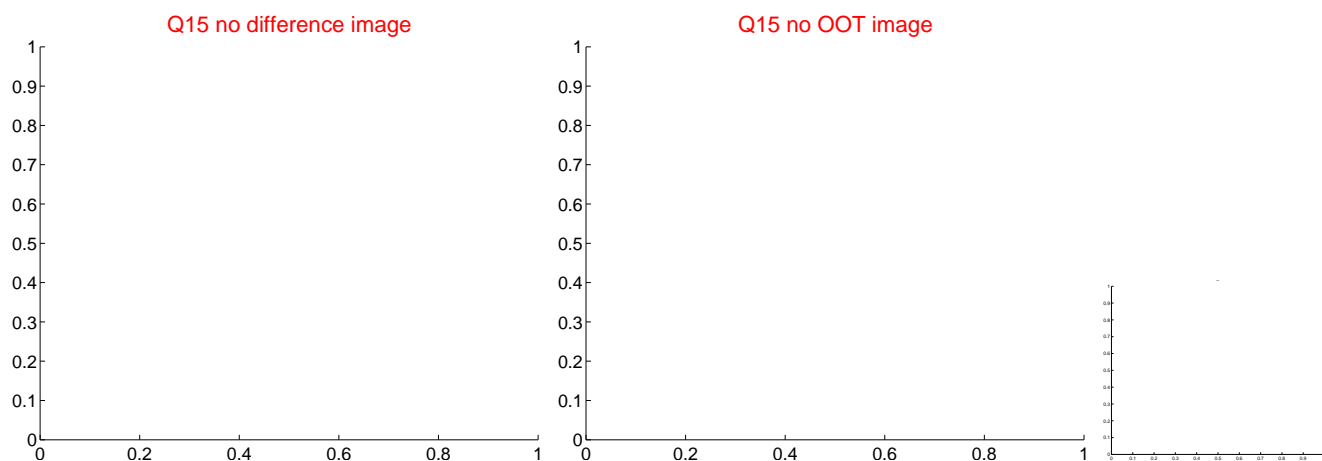
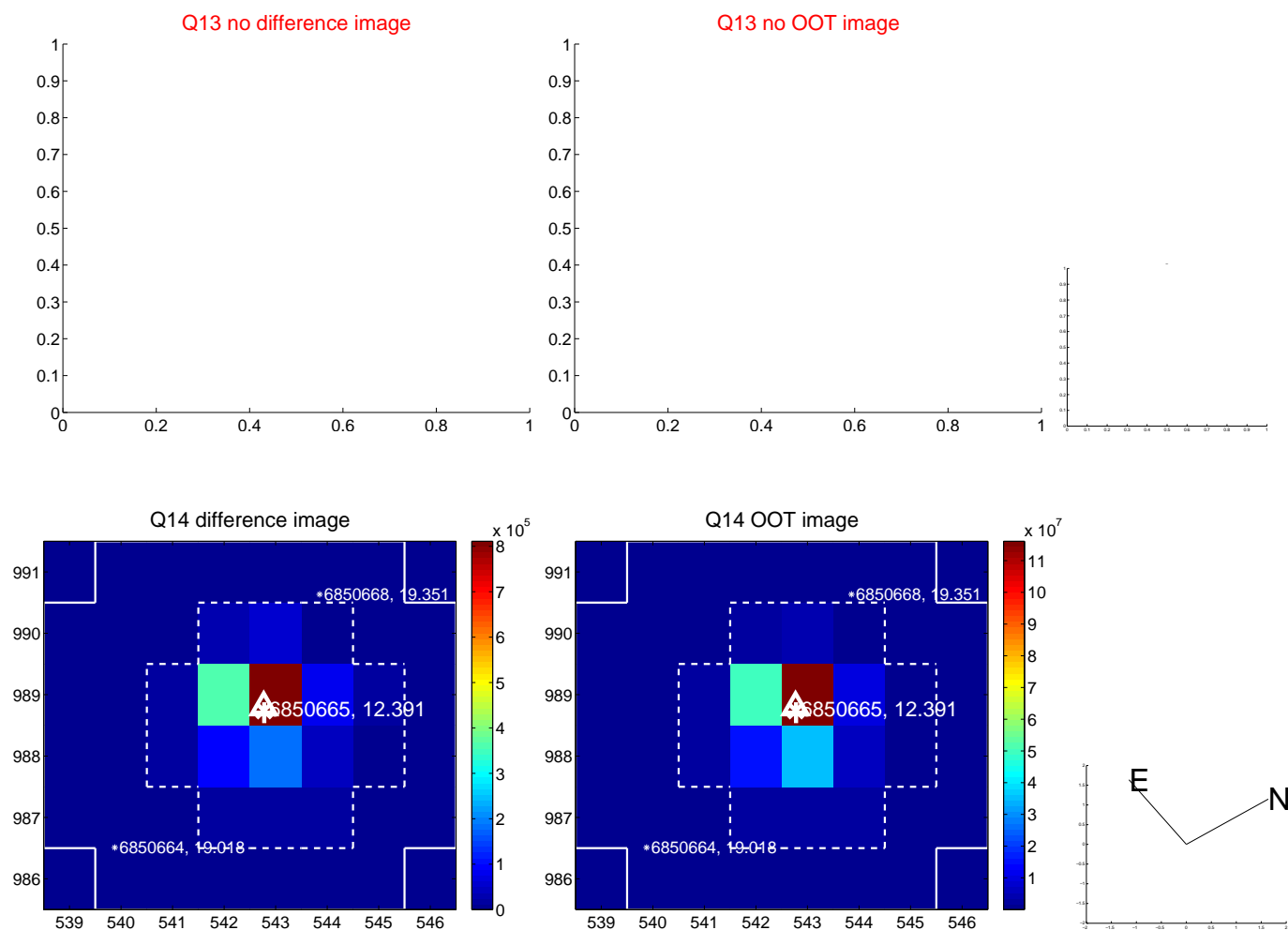
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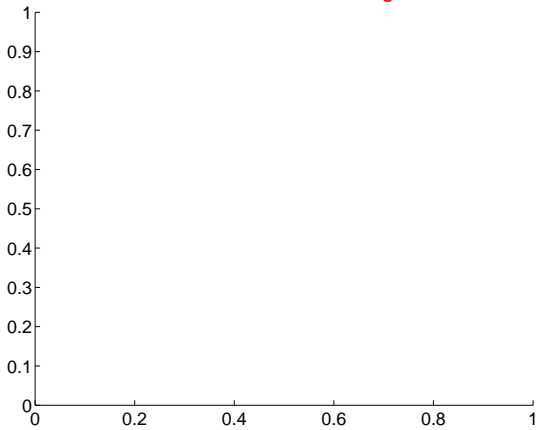


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value

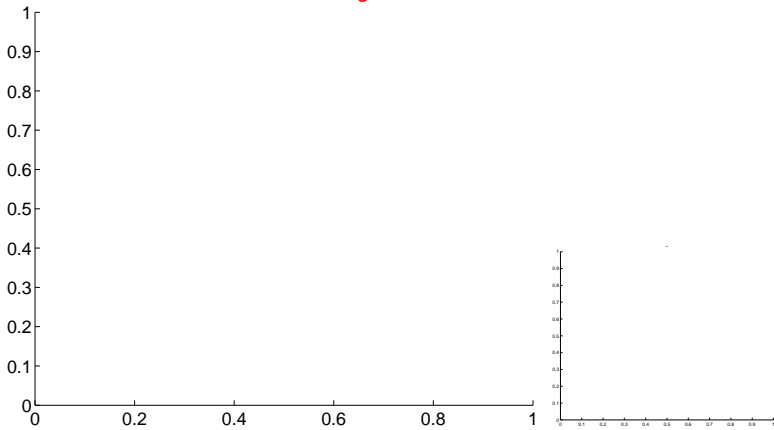


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

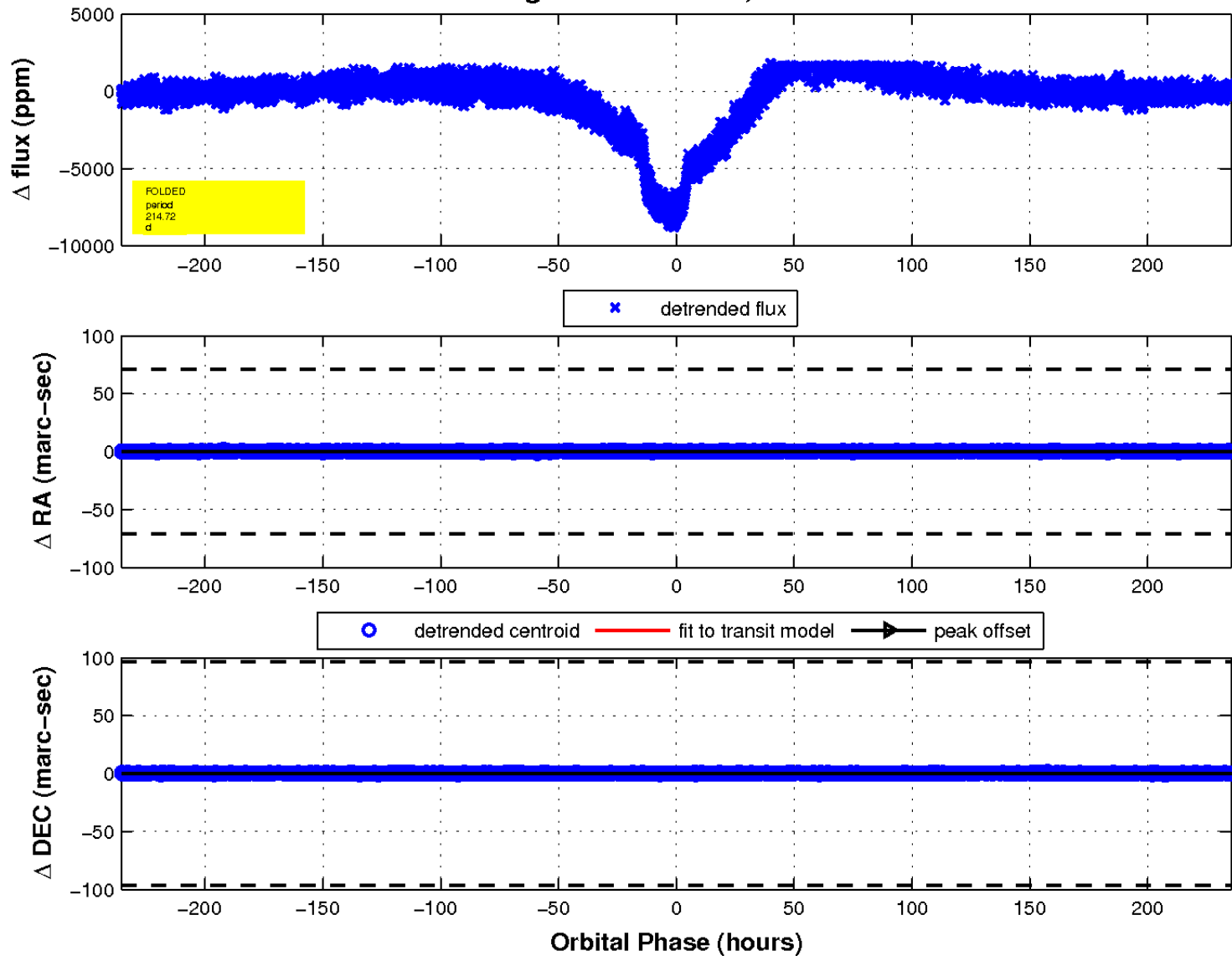
Q17 no difference image



Q17 no OOT image



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

