

KIC 011753949

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})
011753949-01	OBS	No	435.525095	211.806771	133.0	7.692	38.3	3.7	20.71	4378	24.83	70.28

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011753949-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_SATURATED

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

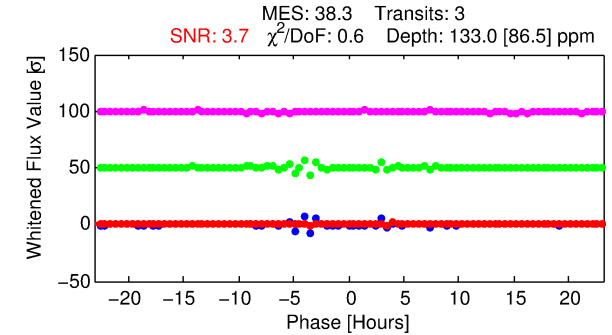
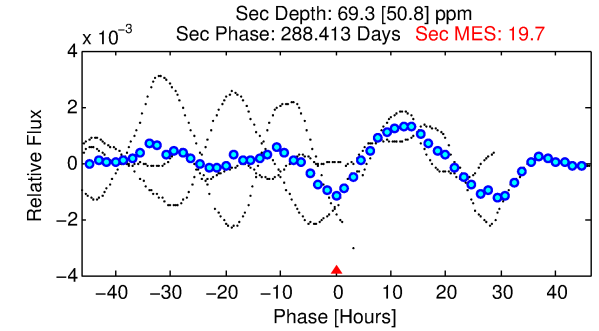
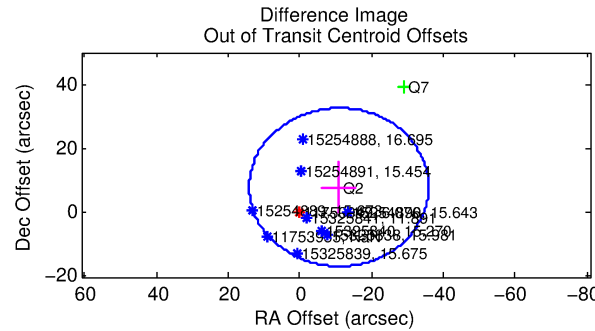
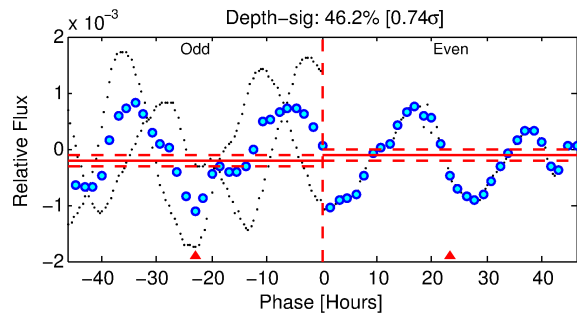
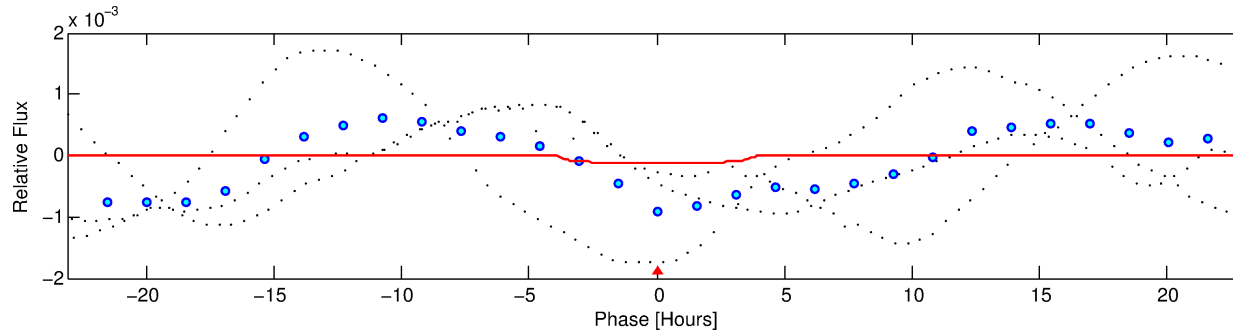
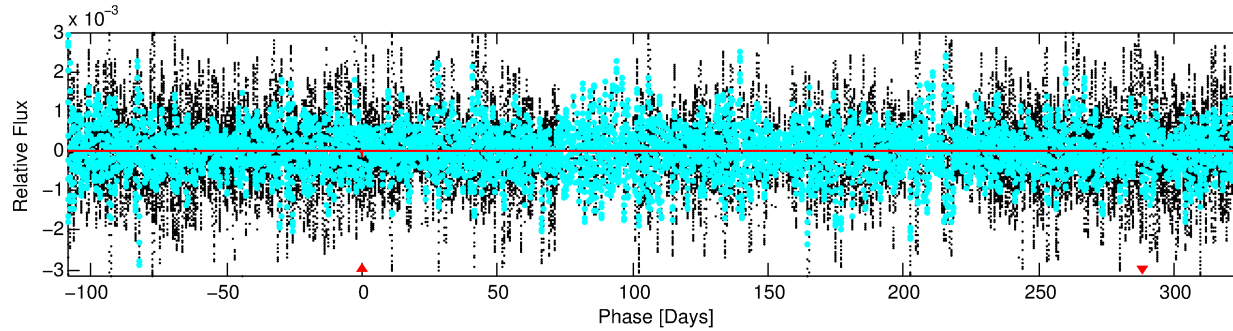
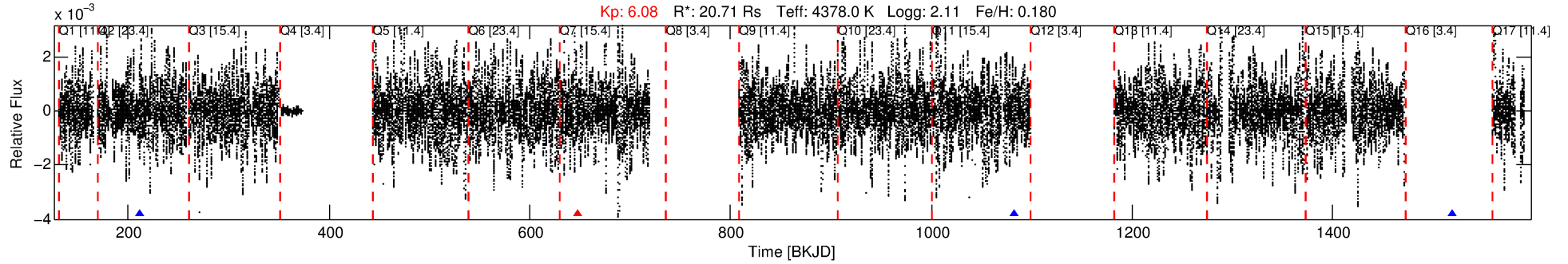
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011753949-01

No Significant Match Found

DV One-Page Summary

KIC: 11753949 Candidate: 1 of 1 Period: 435.525 d



DV Fit Results:

Period = 435.52509 [0.00305] d
Epoch = 211.8068 [0.0052] BKJD
Rp/R* = 0.0110 [0.0059]
a/R* = 338.66 [802.64]
b = 0.64 [2.20]
Seff = 70.28 [22.78]
Teq = 738 [60] K
Rp = 24.83 [15.46] Re
a = 1.4176 [0.3414] AU
Ag = 124.23 [166.59] [0.74 σ]
Teff = 3811 [1243] K [2.47 σ]

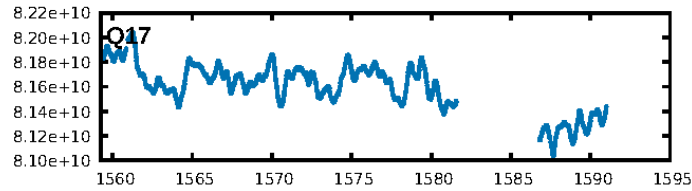
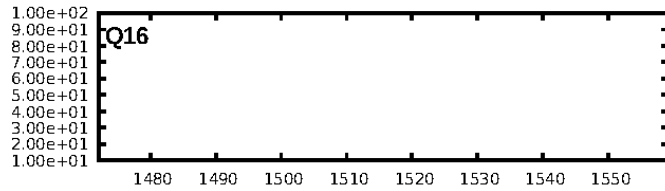
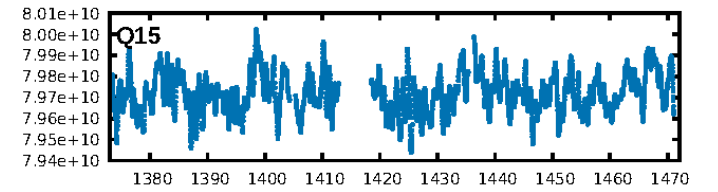
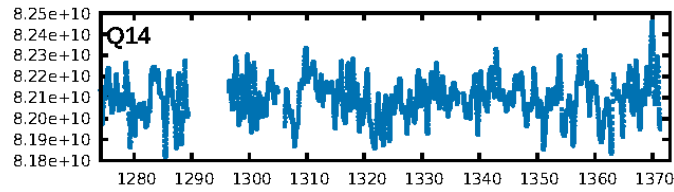
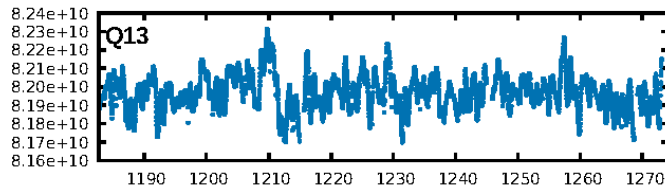
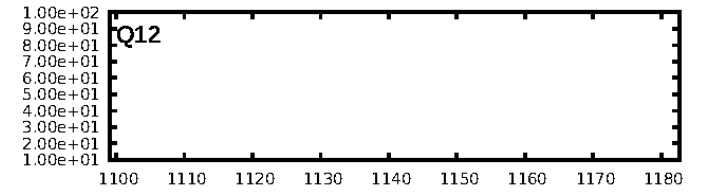
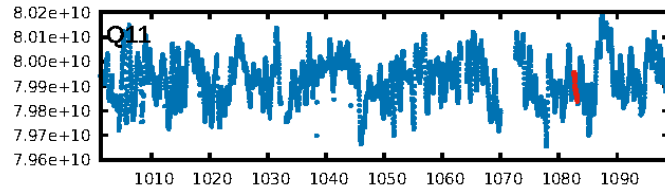
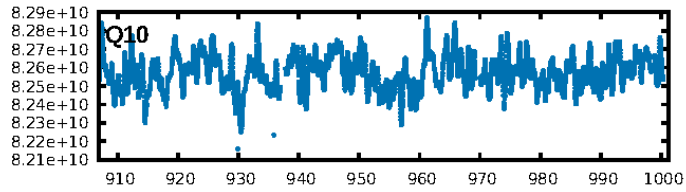
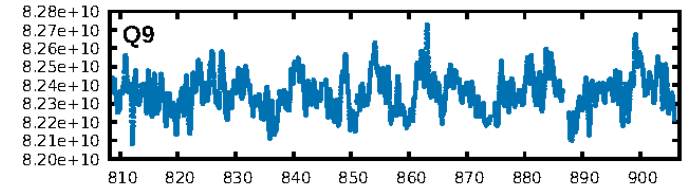
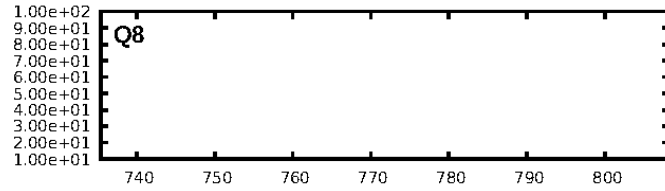
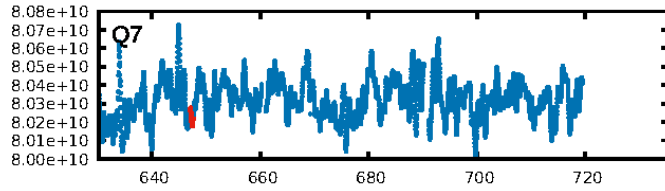
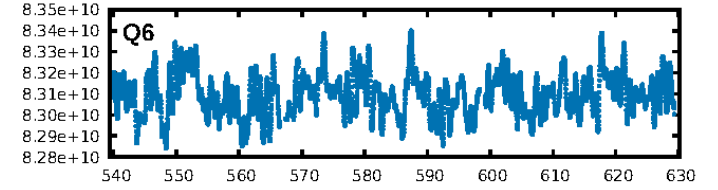
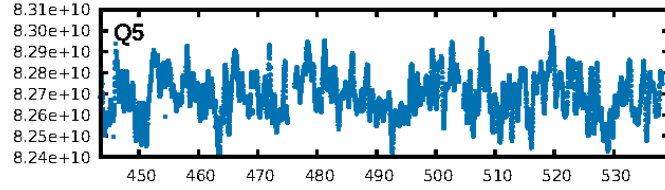
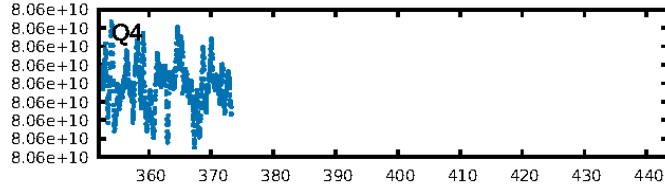
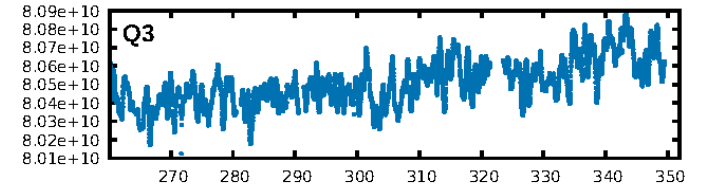
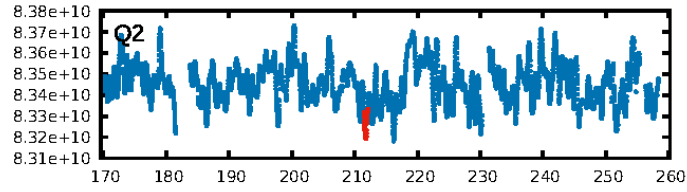
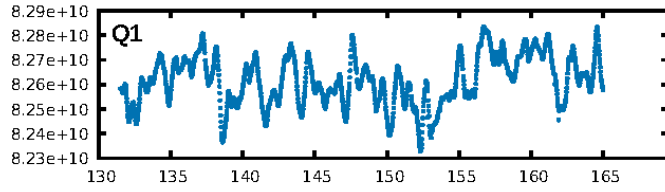
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 64.8%
ModelChiSquareGoF-sig: 99.9%
Bootstrap-pfa: 2.65e-08
RollingBand-fgt: 0.67 [2/3]
GhostDiagnostic-chr: N/A
Centroid-sig: 94.9%
Centroid-so: 47.693 arcsec [0.55 σ]
OotOffset-rm: 13.420 arcsec [1.61 σ]
OotOffset-st: 1/1/0/0 [2]
KicOffset-rm: 54.112 arcsec [6.81 σ]
KicOffset-st: 1/1/0/0 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [2/2]

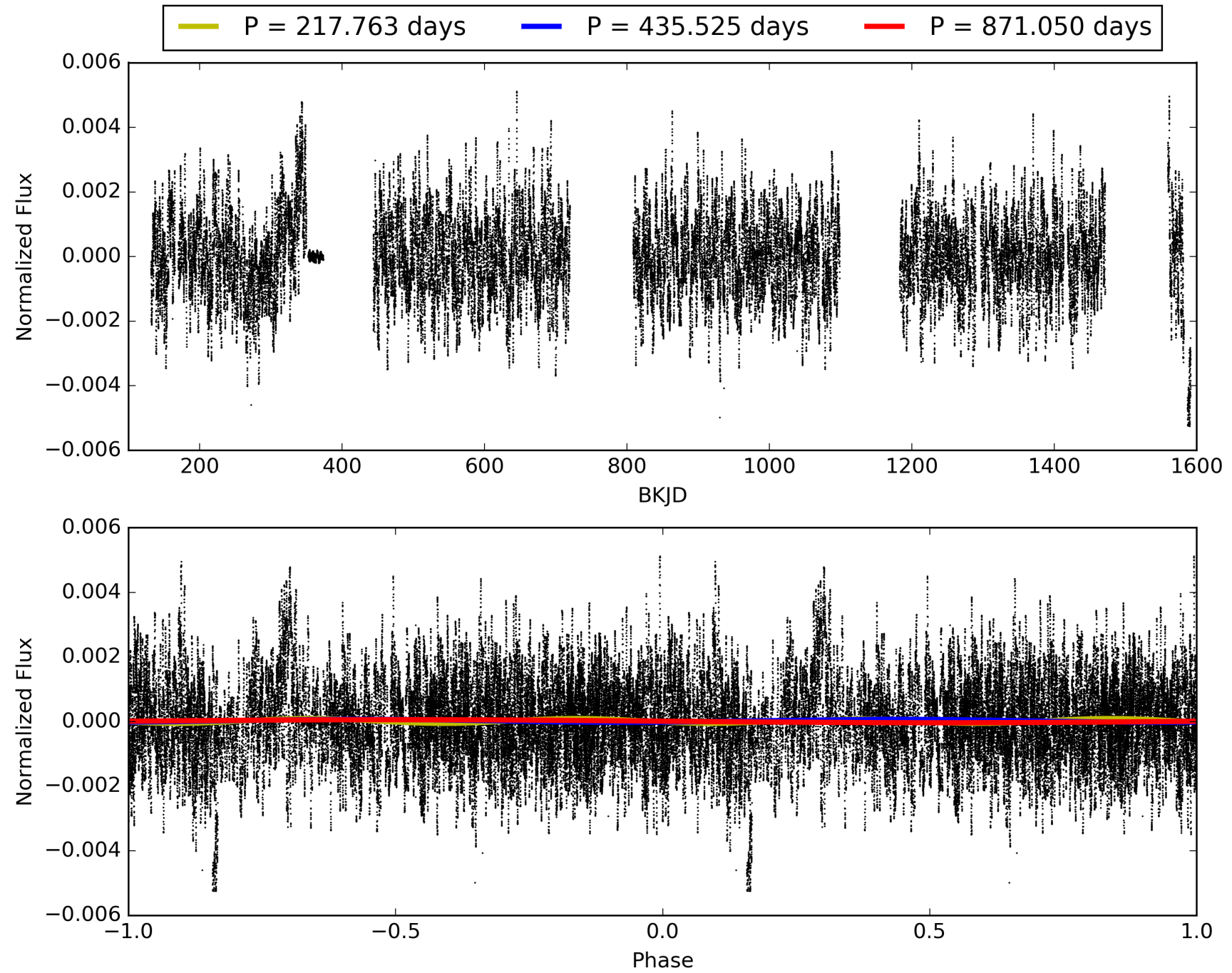
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:45:21 Z

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

TCE 011753949-01, PDC Light Curves

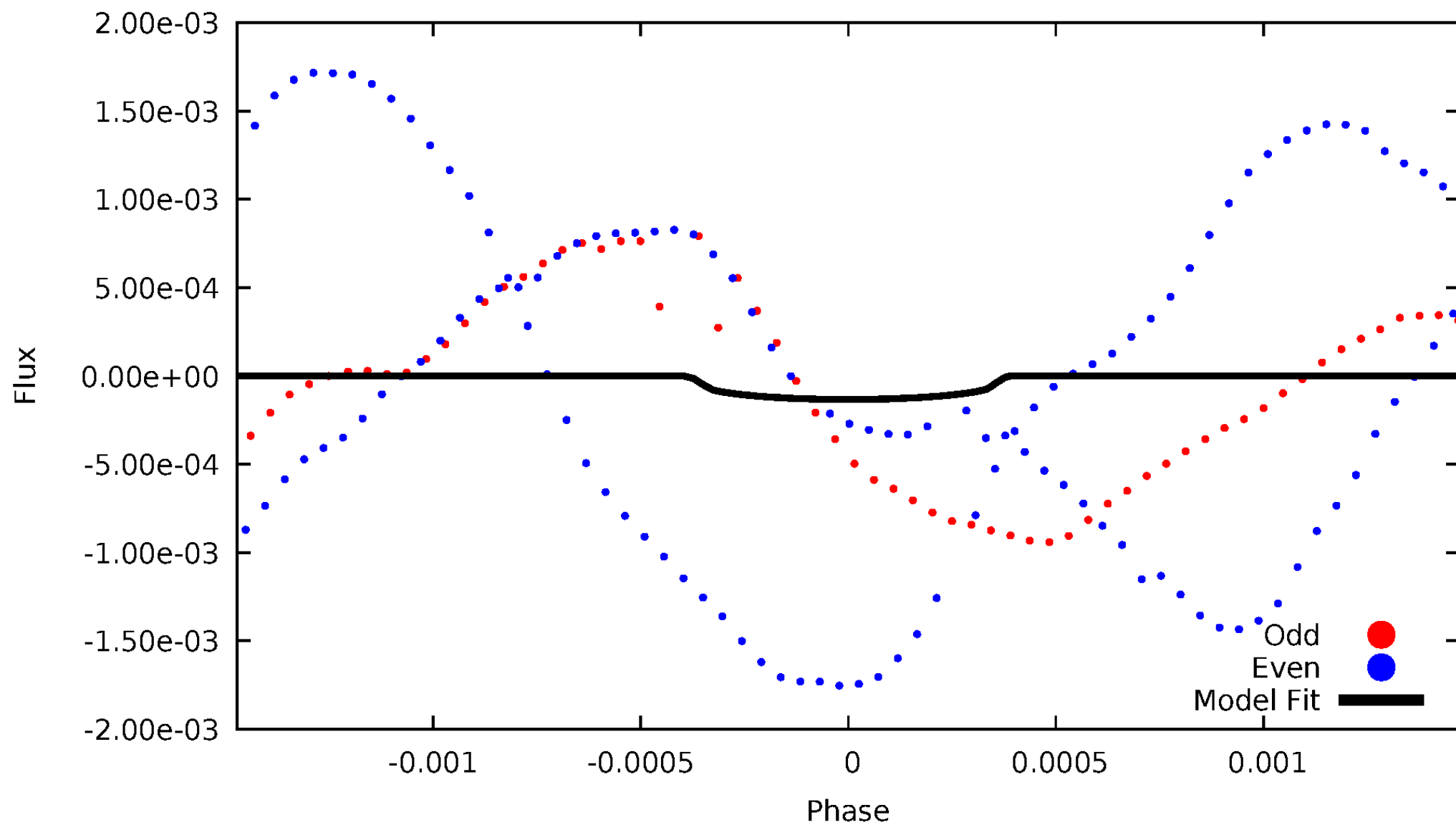


TCE 011753949-01



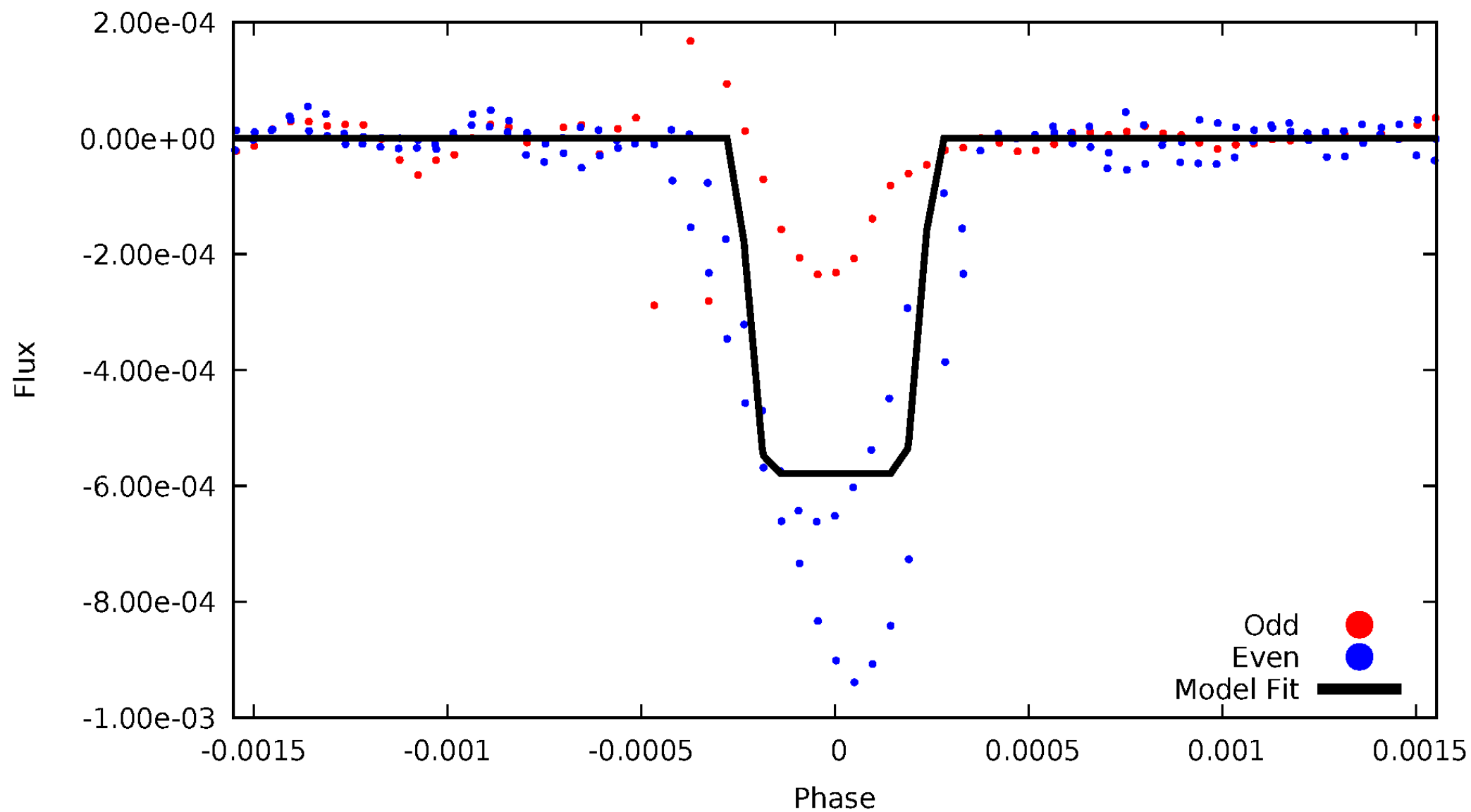
DV Odd/Even

TCE 011753949-01



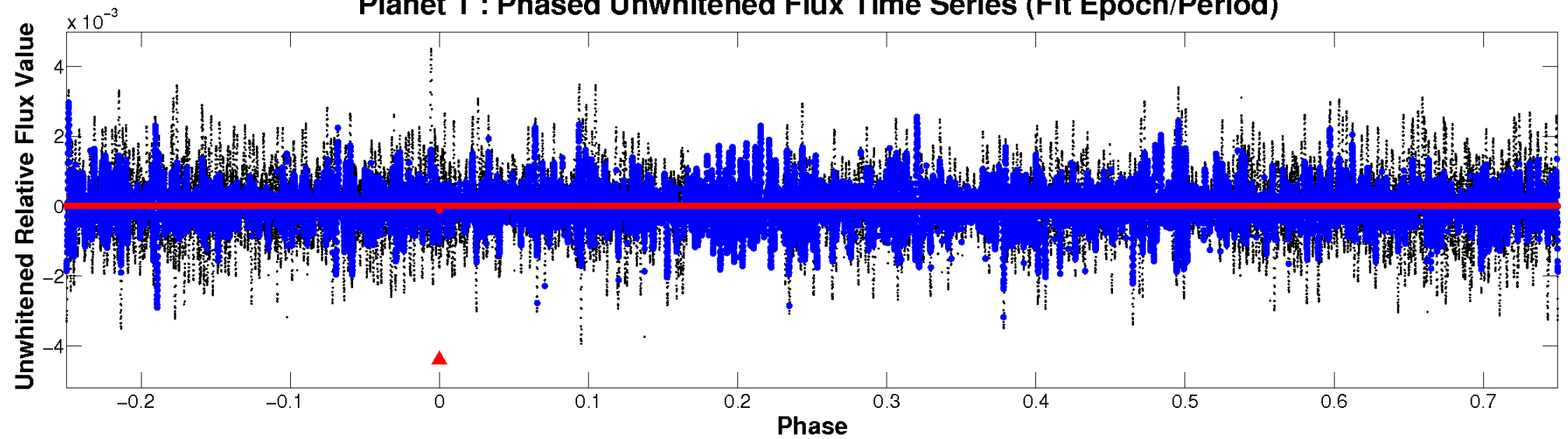
ALT Odd/Even

TCE 011753949-01

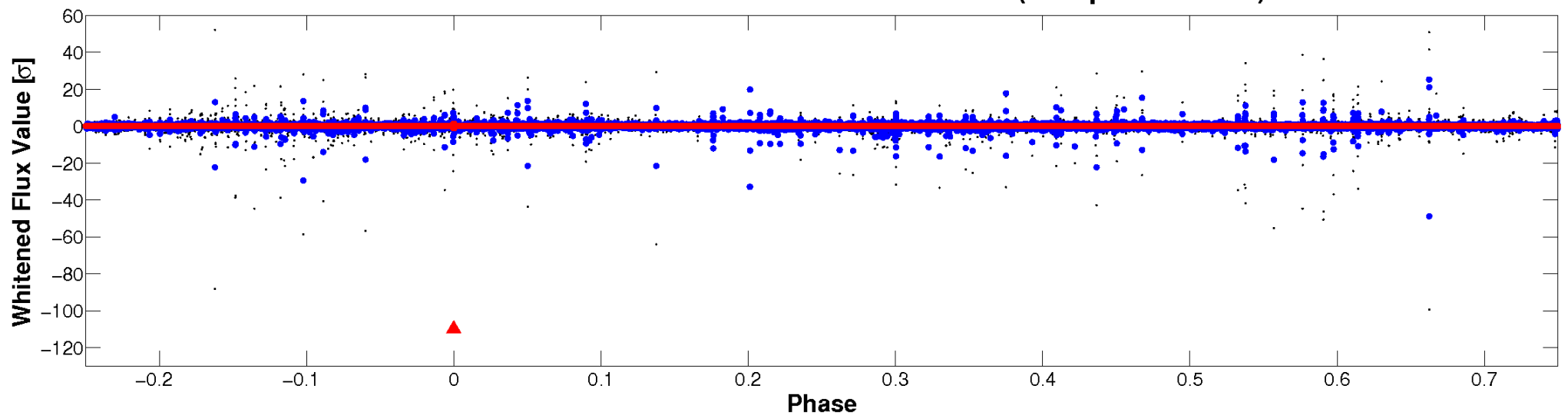


Non-Whitened Vs. Whitened Light Curve

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

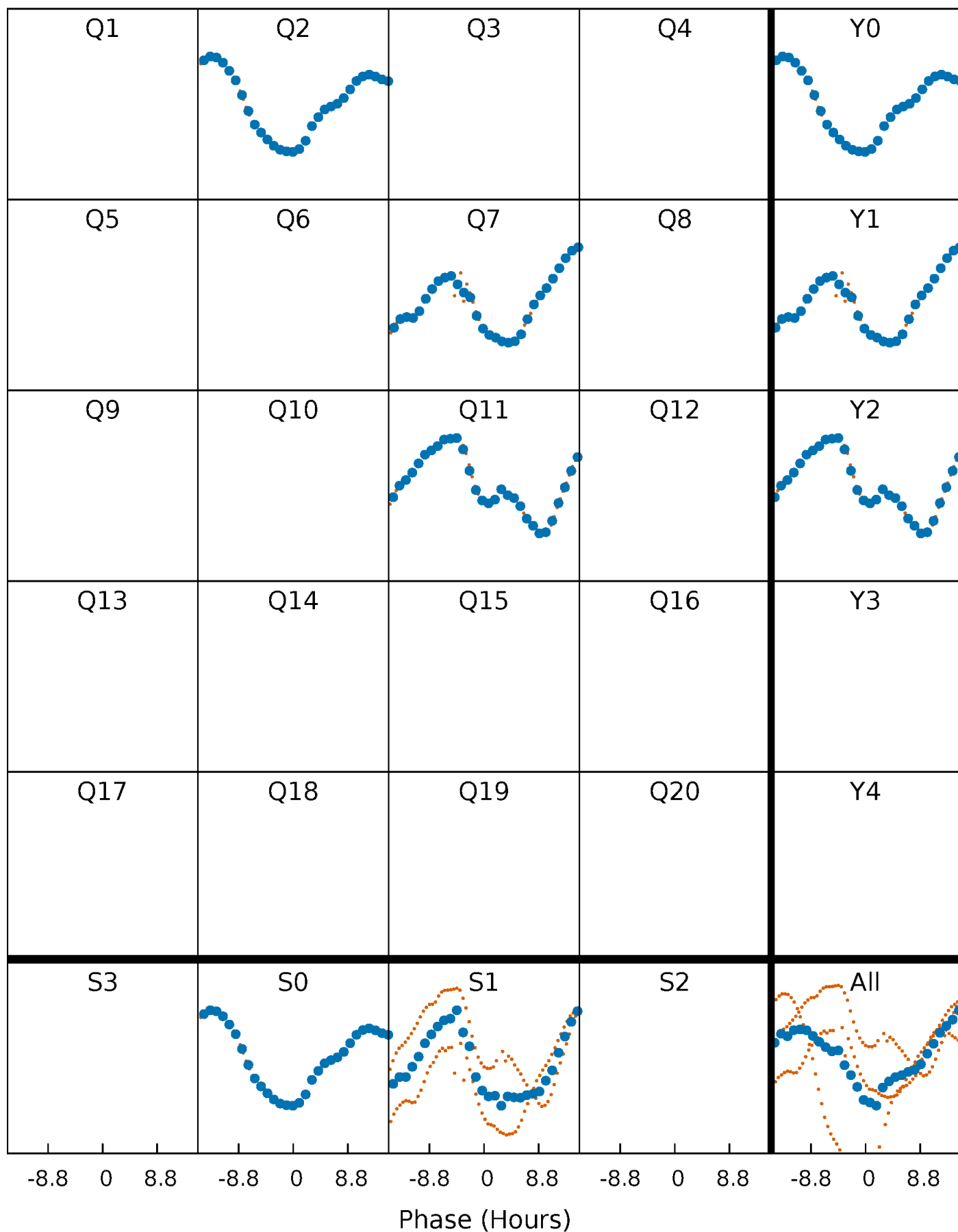


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



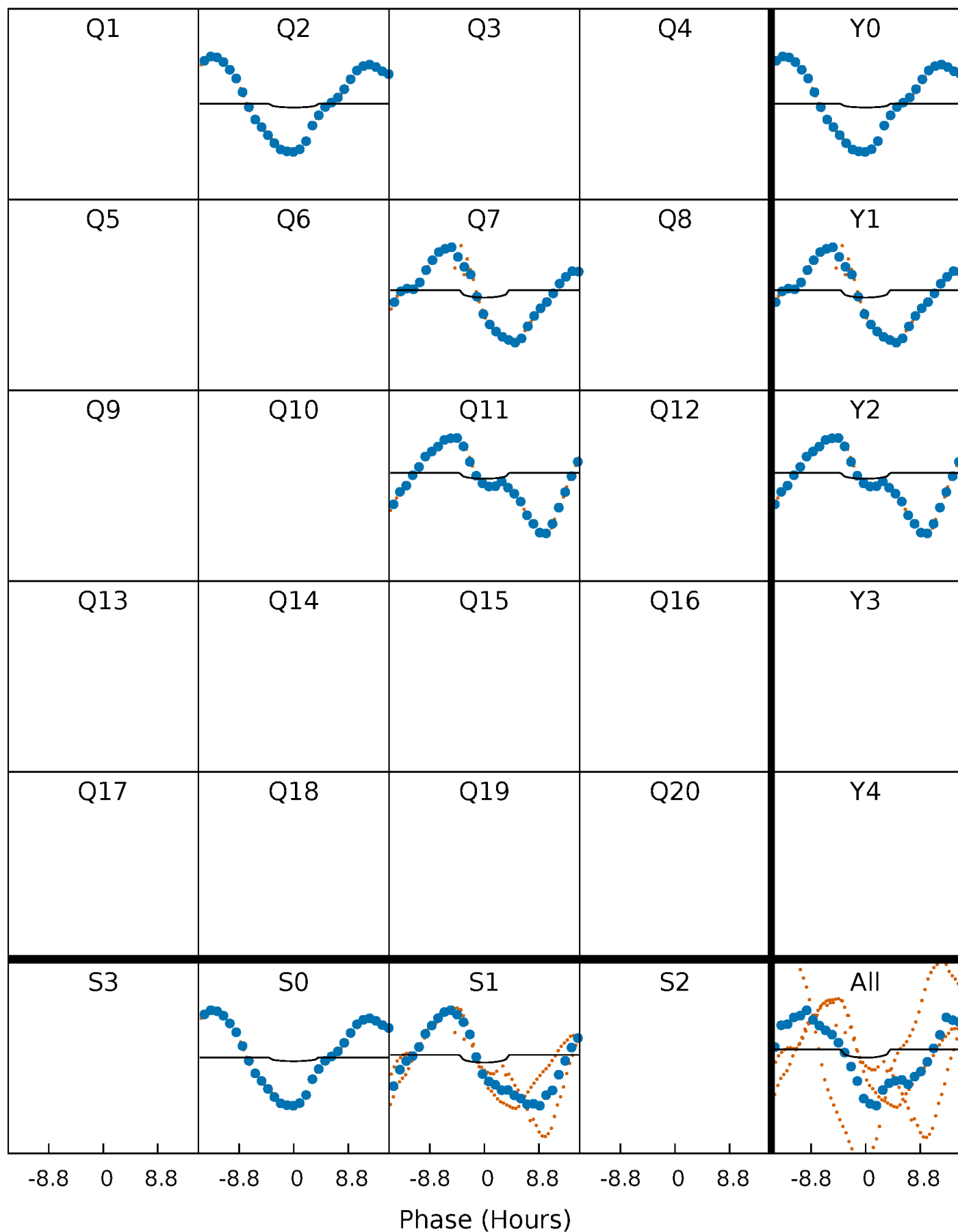
PDC Quarter-Phased Transit Curves

TCE 011753949-01 P=435.525095 Days $T_0=211.806771$ (BKJD)



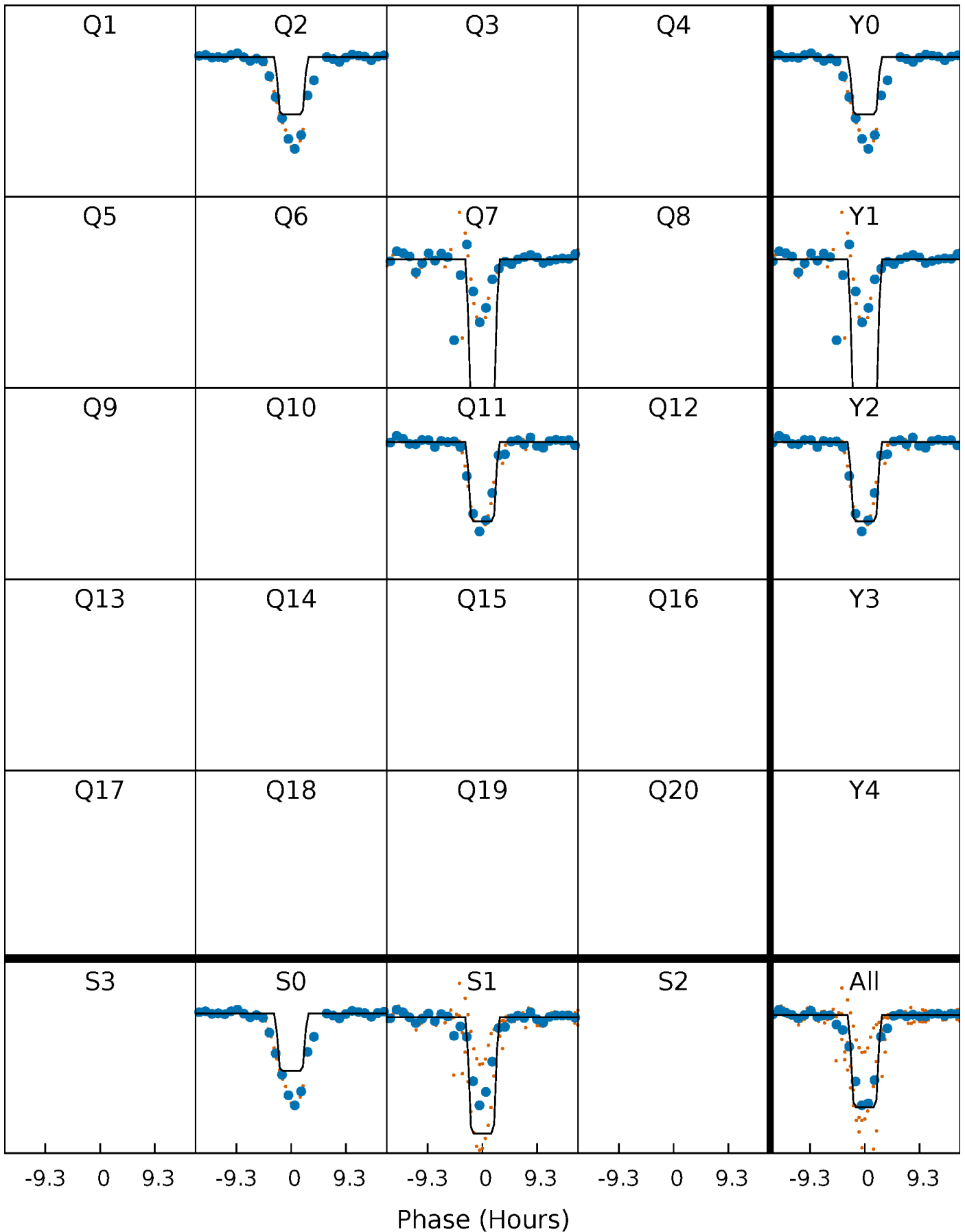
DV Quarter-Phased Transit Curves

TCE 011753949-01 P=435.525095 Days $T_0=211.806771$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

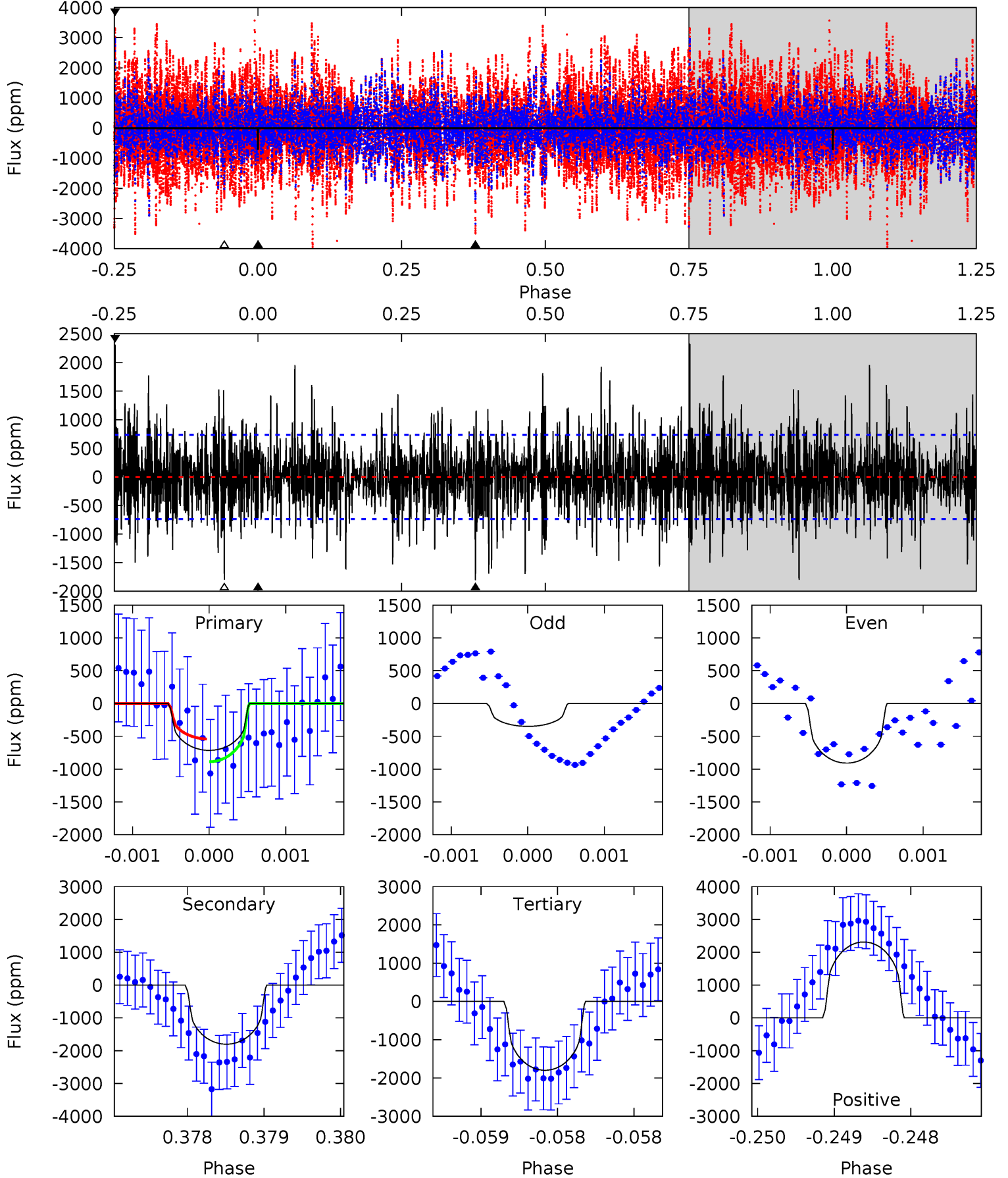
TCE 011753949-01 P=435.520898 Days $T_0=211.816331$ (BKJD)



DV Model-Shift Uniqueness Test

011753949-01, P = 435.525095 Days, E = 211.806771 Days

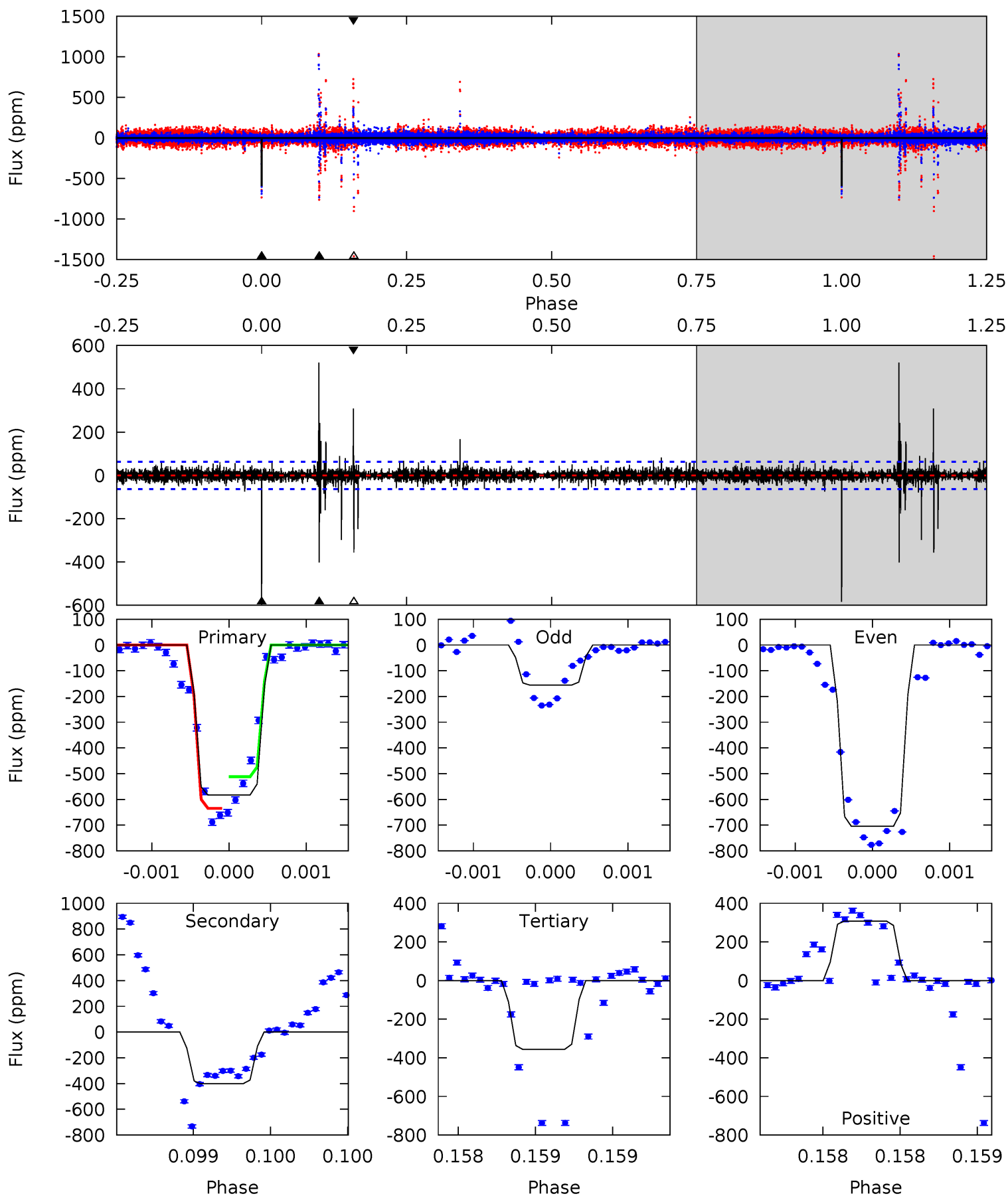
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.35	13.5	13.5	17.3	5.50	3.37	3.66	-8.12	-12.0	0.04	-3.82	1.97	2.07	0.56	1.30



Alt Model-Shift Uniqueness Test

011753949-01, P = 435.520898 Days, E = 211.816331 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
51.3	35.4	31.3	27.1	5.57	3.47	1.72	20.0	24.2	4.04	8.23	20.3	0.91	0.47	0



Stellar Parameters For KIC 011753949

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4378^{+61}_{-70}	$2.107^{+0.156}_{-0.091}$	$0.180^{+0.150}_{-0.150}$	$20.714^{+3.246}_{-6.492}$	$1.998^{+0.753}_{-0.753}$	$0.000^{+0.000}_{-0.000}$
	+1%/-2%	+7%/-4%	+83%/-83%	+16%/-31%	+38%/-38%	+102%/-26%
Source	SPE74	SPE74	SPE74	DSEP		

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

Secondary Eclipse Parameters for KIC 011753949-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1803 ± 133	$25.45^{+13.71}_{-12.12}$	1023^{+45}_{-56}	8371^{+4981}_{-1800}	3300^{+7851}_{-1835}
Alt.	-402 ± 11	$54.09^{+17.19}_{-16.02}$	1026^{+44}_{-56}	4090^{+456}_{-304}	156^{+144}_{-58}

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 $A_{obs} \gg 1.0$

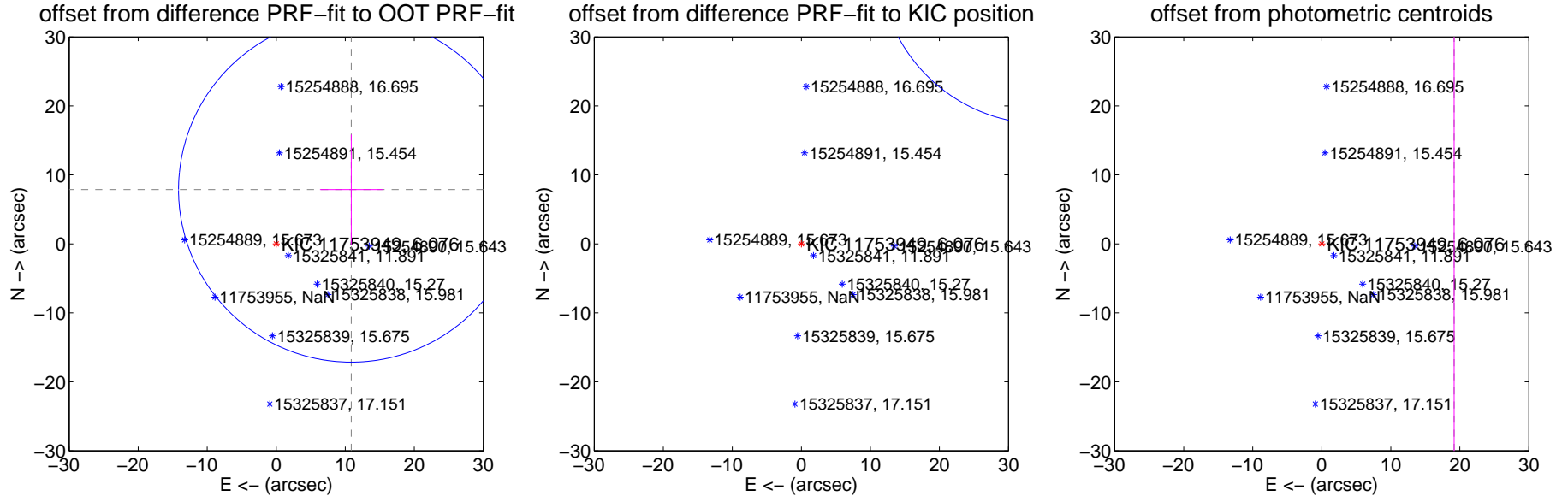
DV Centroid Data

Supplemental centroid analysis for 011753949-01. **Kepler magnitude: 6.08.** Transit SNR 3.75

There are 0 quarters with good PRF difference image offsets

The OOT PRF centroid is offset from the target star catalog position by about 32.68 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

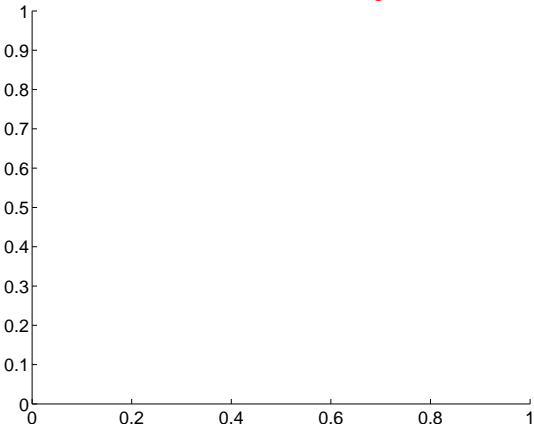
	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	13.420 ± 8.340	1.61	-10.870 ± 4.532	7.870 ± 7.961
PRF-fit source offset from KIC position	54.112 ± 7.944	6.81	-35.055 ± 3.789	41.222 ± 7.206
photometric centroid source offset	47.69 ± 87.40	0.55	-19.17 ± 67.95	43.67 ± 90.67



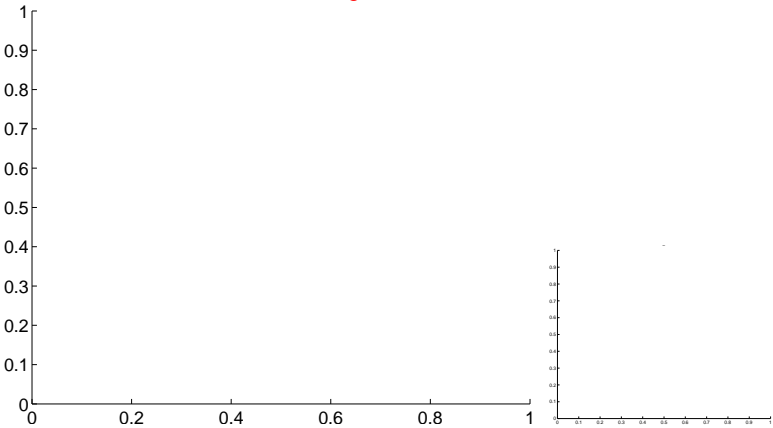
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

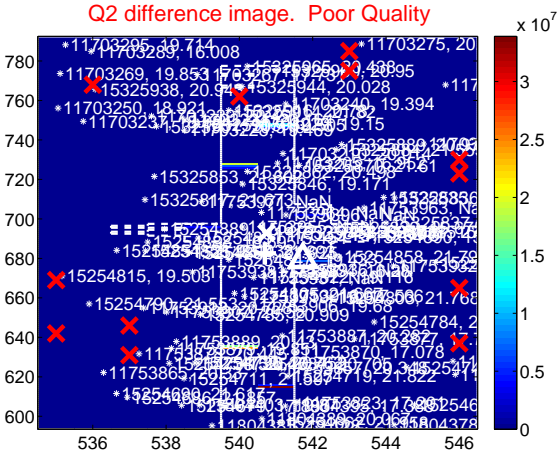
Q1 no difference image



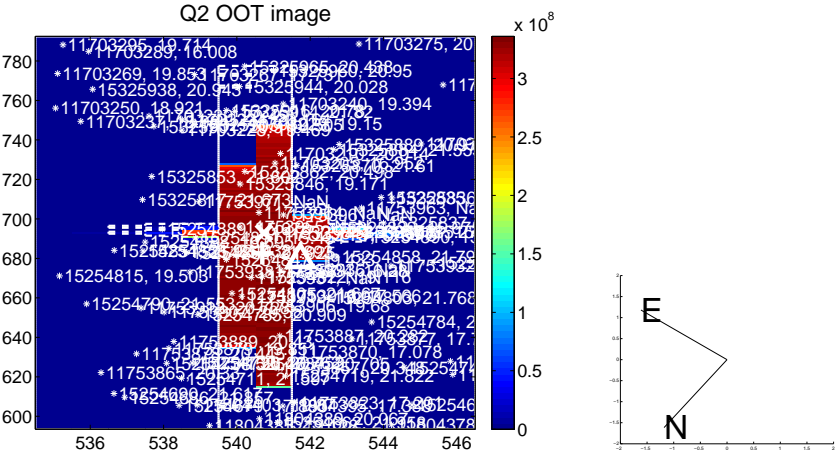
Q1 no OOT image



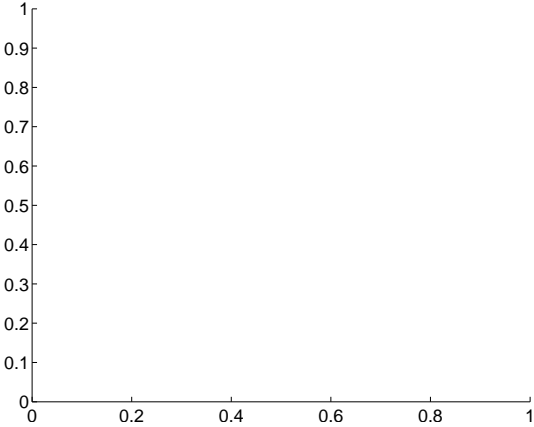
Q2 difference image. Poor Quality



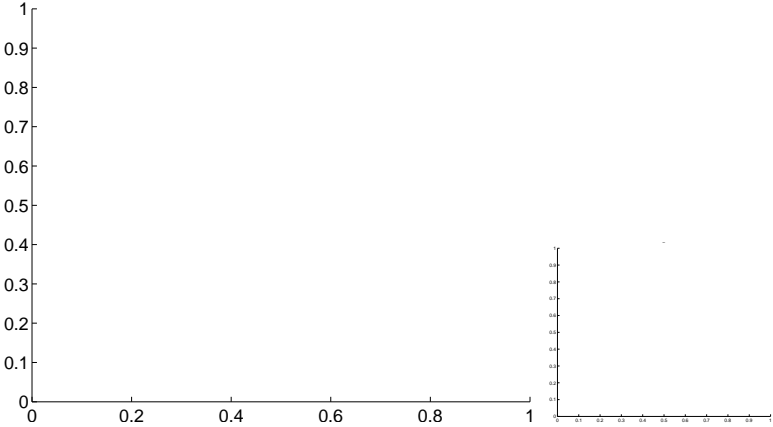
Q2 OOT image



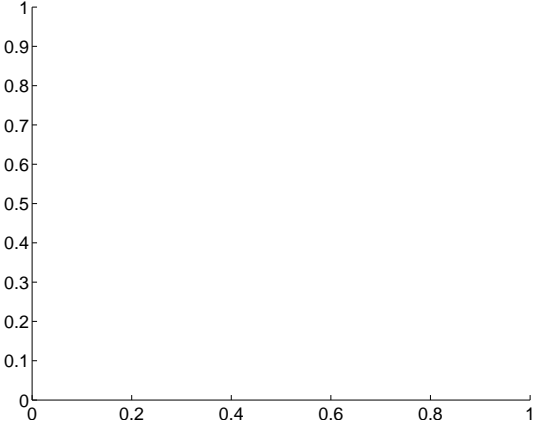
Q3 no difference image



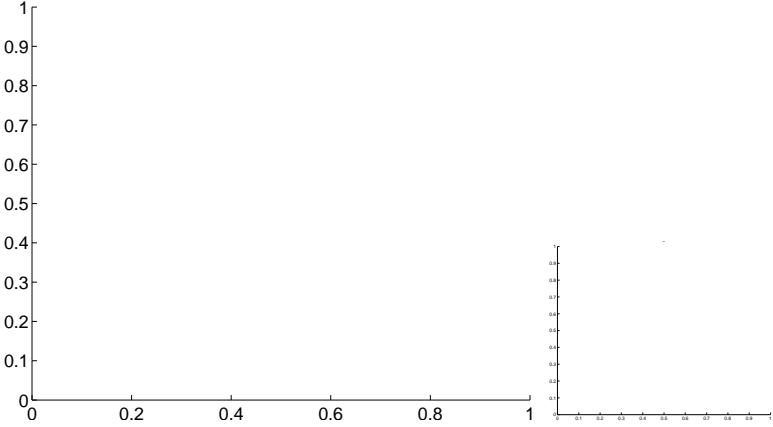
Q3 no OOT image



Q4 no difference image

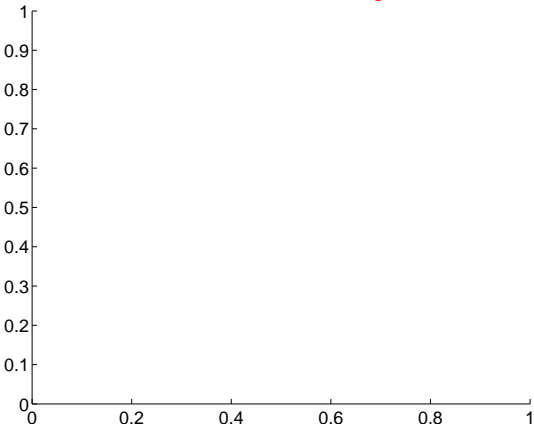


Q4 no OOT image

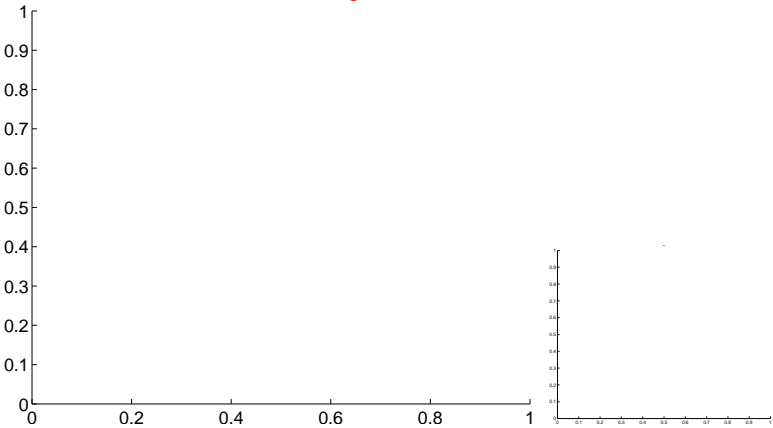


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.

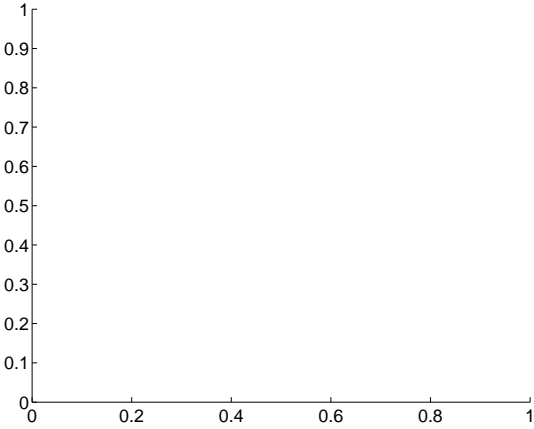
Q5 no difference image



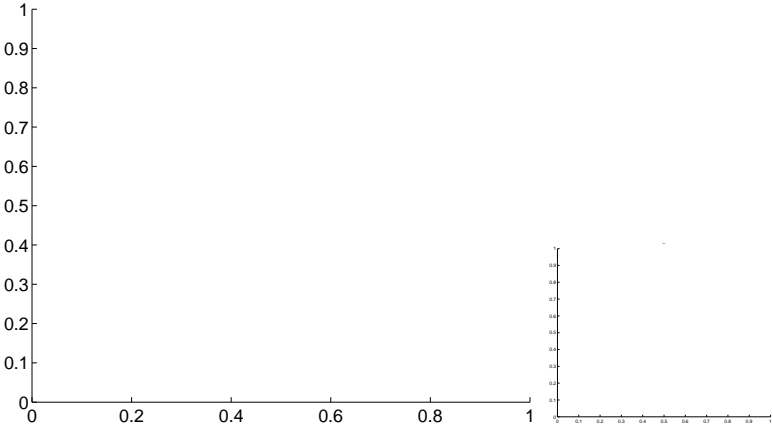
Q5 no OOT image



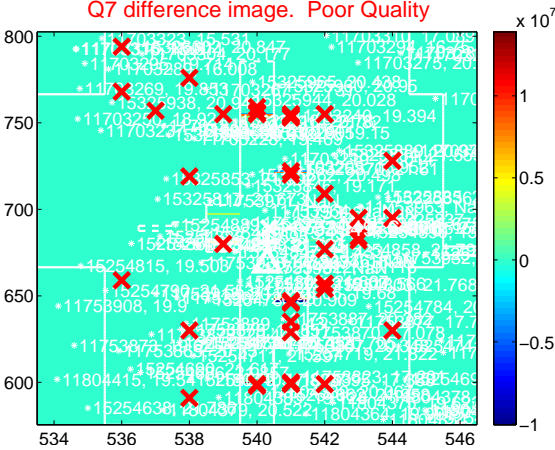
Q6 no difference image



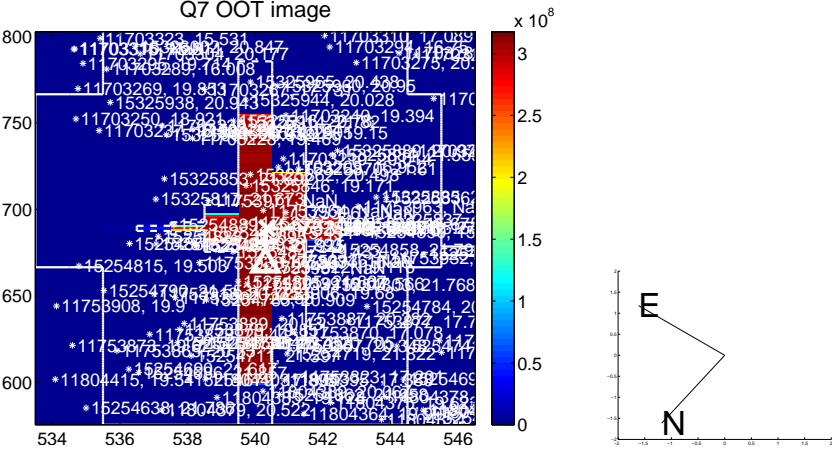
Q6 no OOT image



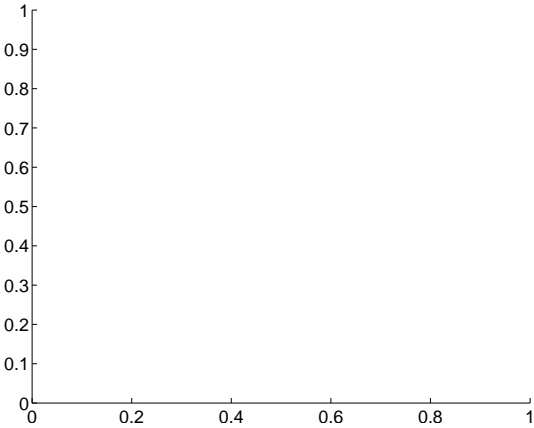
Q7 difference image. Poor Quality



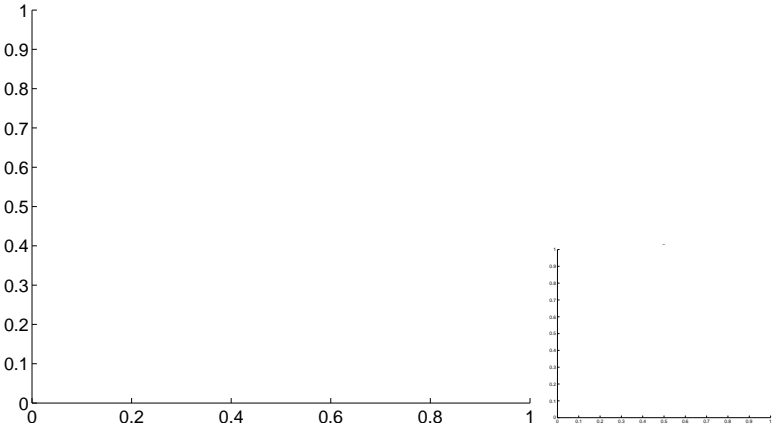
Q7 OOT image



Q8 no difference image



Q8 no OOT image



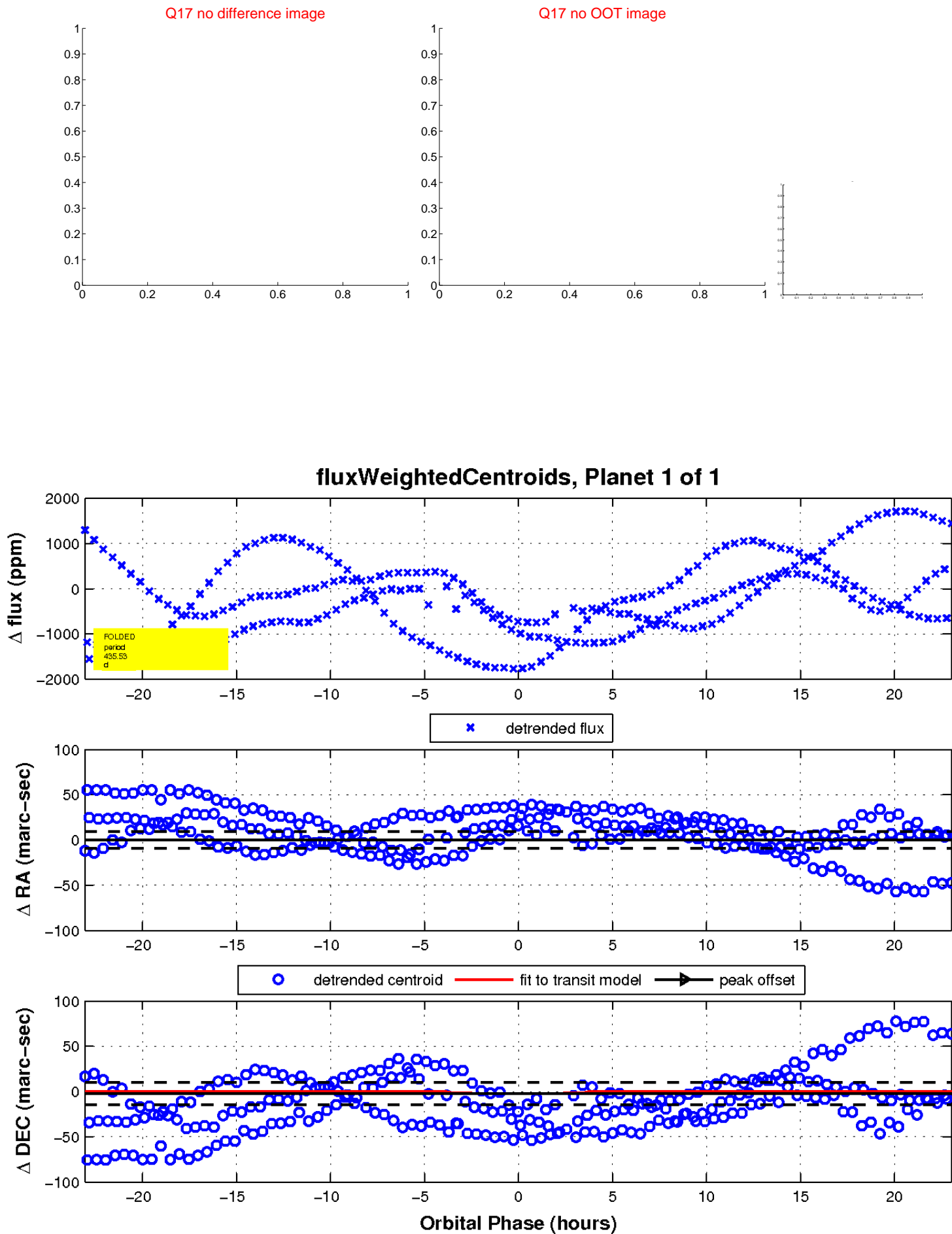
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

