

KIC 007191311

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})
007191311-01	OBS	No	666.160876	213.322133	1711.8	4.892	14.2	6.7	0.42	3677	1.77	0.02
007191311-02	OBS	No	560.711818	386.632503	2168.0	5.045	12.9	8.2	0.42	3677	2.01	0.03
007191311-03	OBS	No	547.267947	272.852055	2600.7	13.692	10.5	8.3	0.42	3677	2.30	0.03
007191311-04	OBS	No	497.528068	135.140244	1794.5	10.472	13.6	6.9	0.42	3677	1.79	0.03
007191311-05	OBS	No	260.456612	190.342825	994.9	4.534	9.9	5.2	0.42	3677	1.39	0.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007191311-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007191311-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_DV
007191311-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007191311-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007191311-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS

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

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

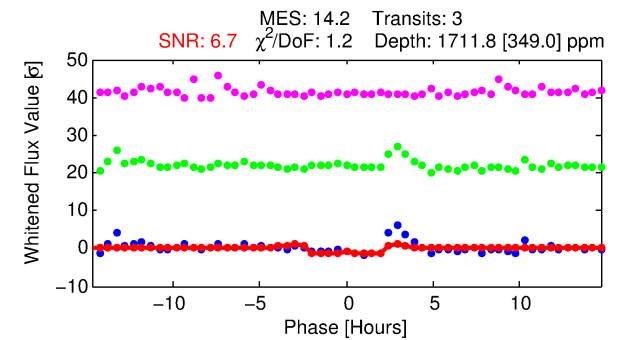
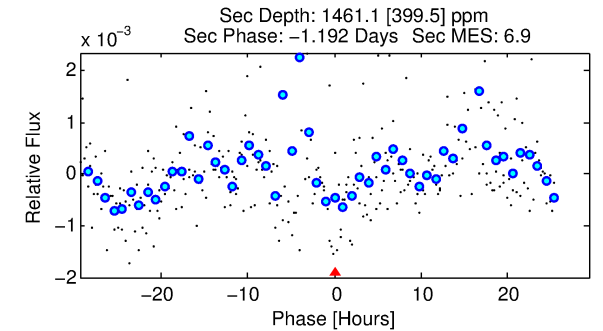
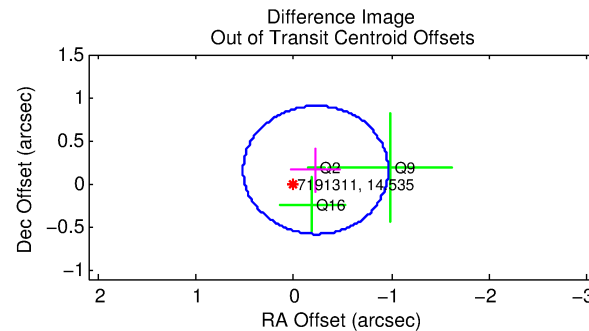
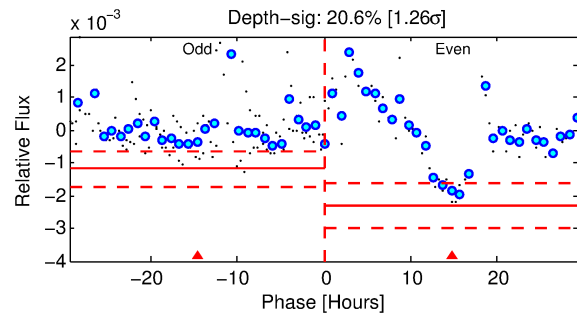
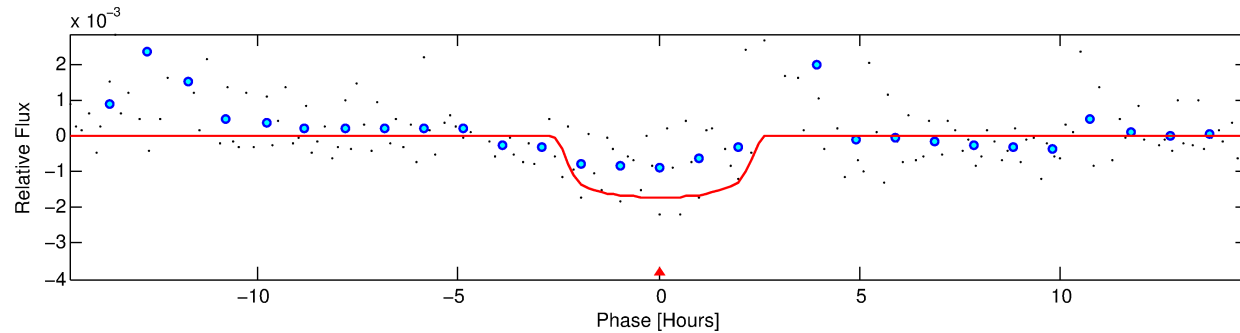
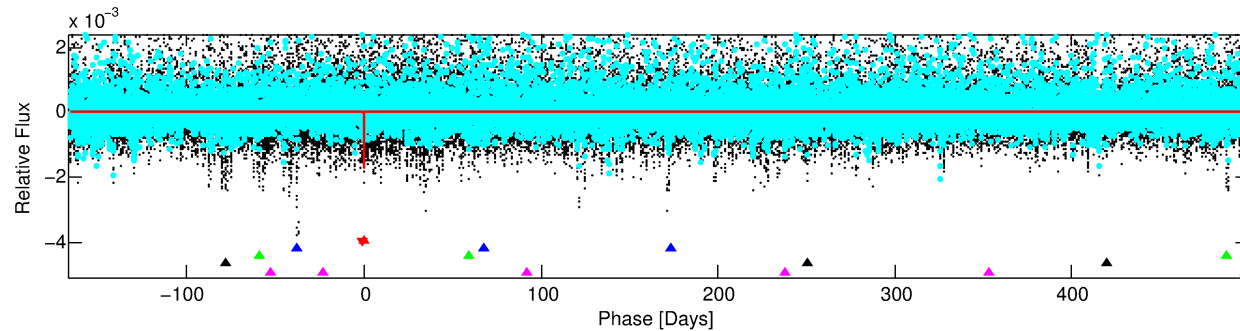
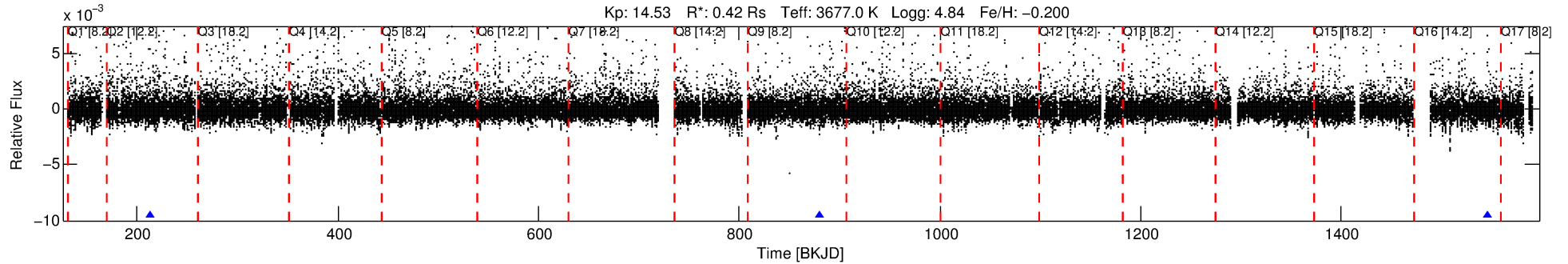
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007191311-01

No Significant Match Found

DV One-Page Summary

KIC: 7191311 Candidate: 1 of 5 Period: 666.161 d



DV Fit Results:

Period = 666.16088 [0.00622] d
Epoch = 213.3221 [0.0084] BKJD
Rp/R* = 0.0381 [0.0312]
a/R* = 1023.38 [3801.01]
b = 0.33 [9.93]
Seff = 0.02 [0.00]
Teq = 99 [4] K
Rp = 1.77 [1.47] Re
a = 1.1482 [0.1268] AU
Ag = 338888.92 [563819.07] [0.60 σ]
Teffp = 3682 [1529] K [2.34 σ]

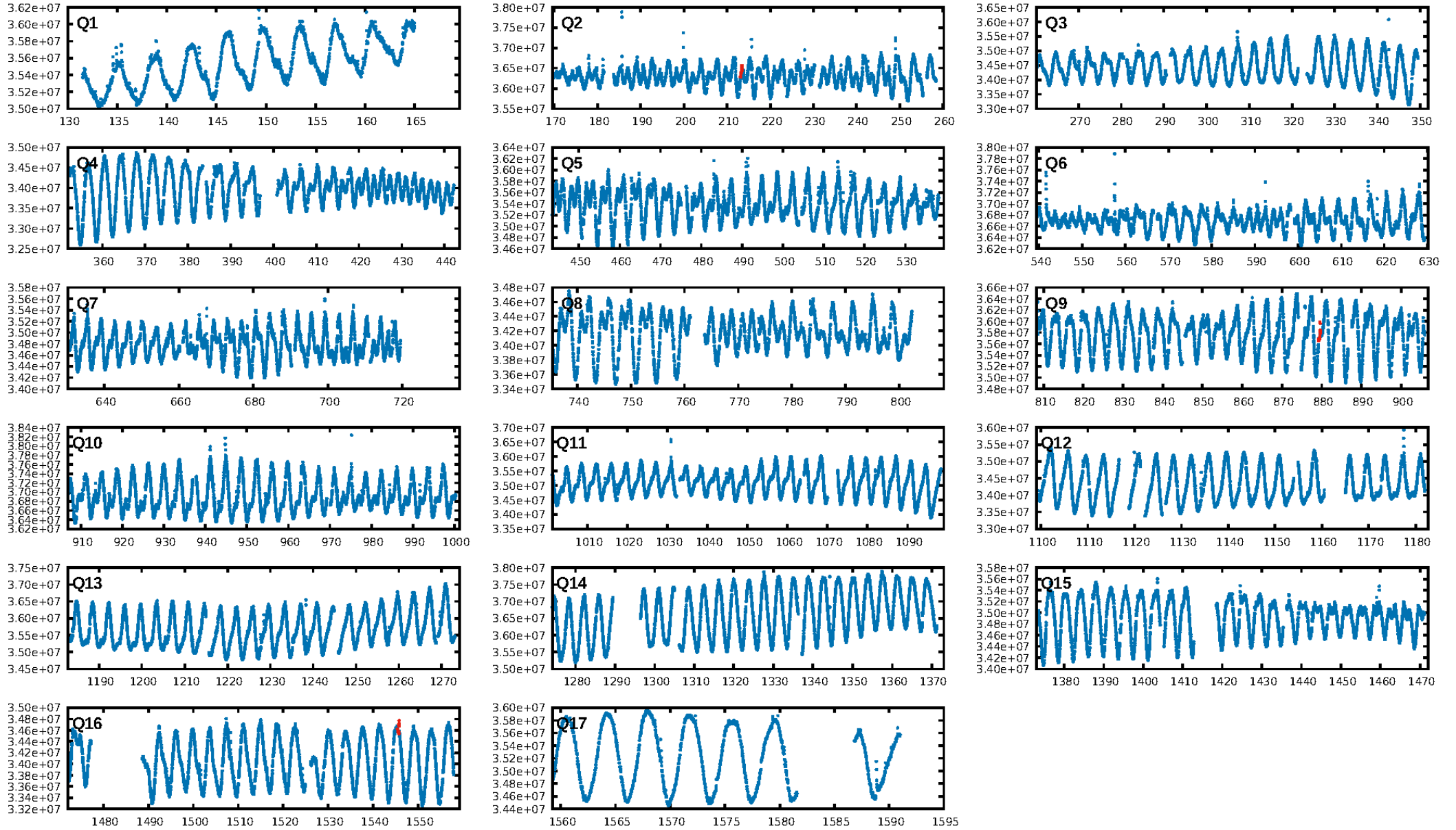
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [360.15 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 4.7%
ModelChiSquareGof-sig: 47.6%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 4.419
Centroid-sig: 0.5%
Centroid-so: 1.110 arcsec [1.54 σ]
OotOffset-rm: 0.277 arcsec [1.12 σ]
OotOffset-st: 1/0/1/1 [3]
KicOffset-rm: 0.154 arcsec [0.63 σ]
KicOffset-st: 1/0/1/1 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [3/3]

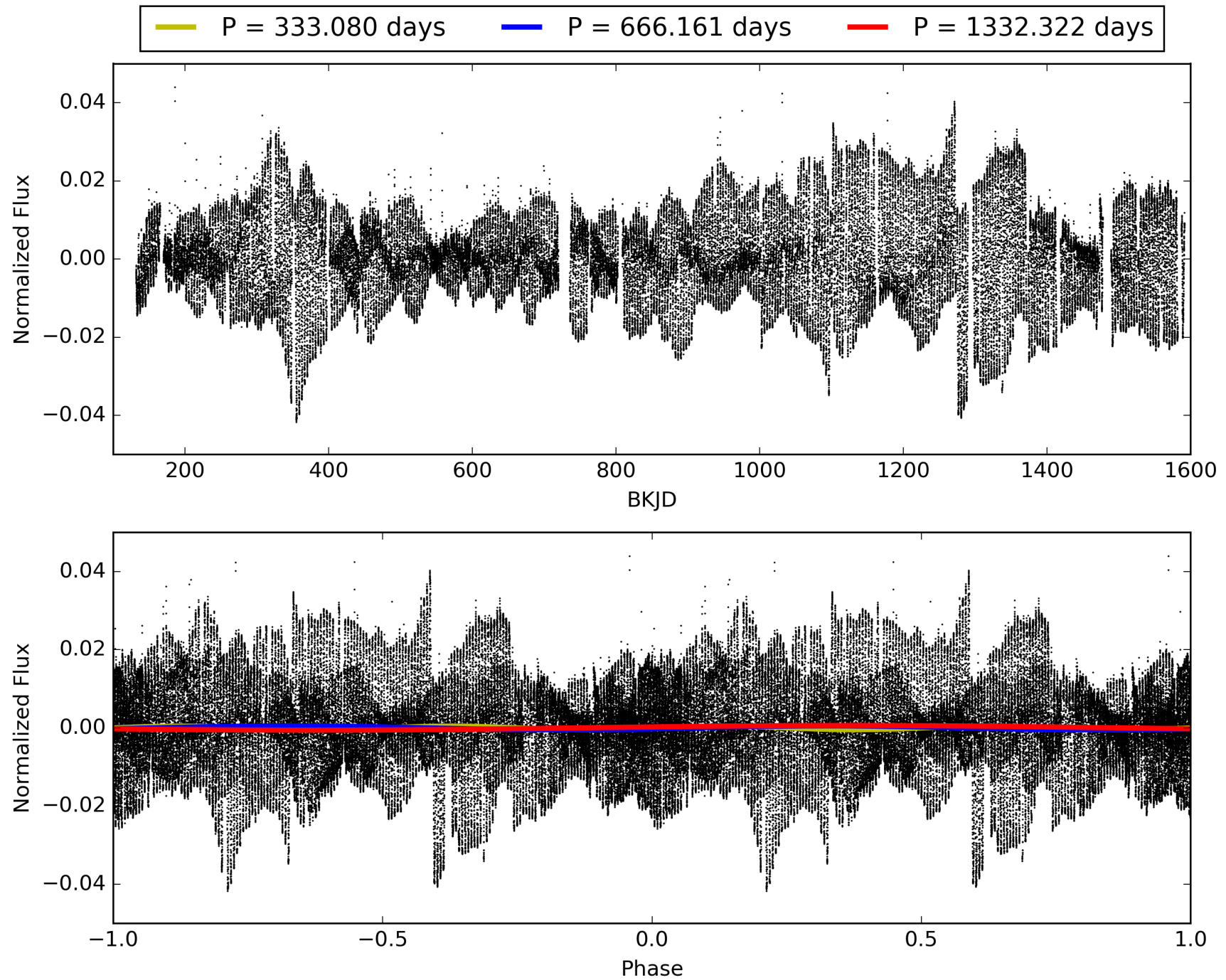
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:30:12 Z

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

TCE 007191311-01, PDC Light Curves

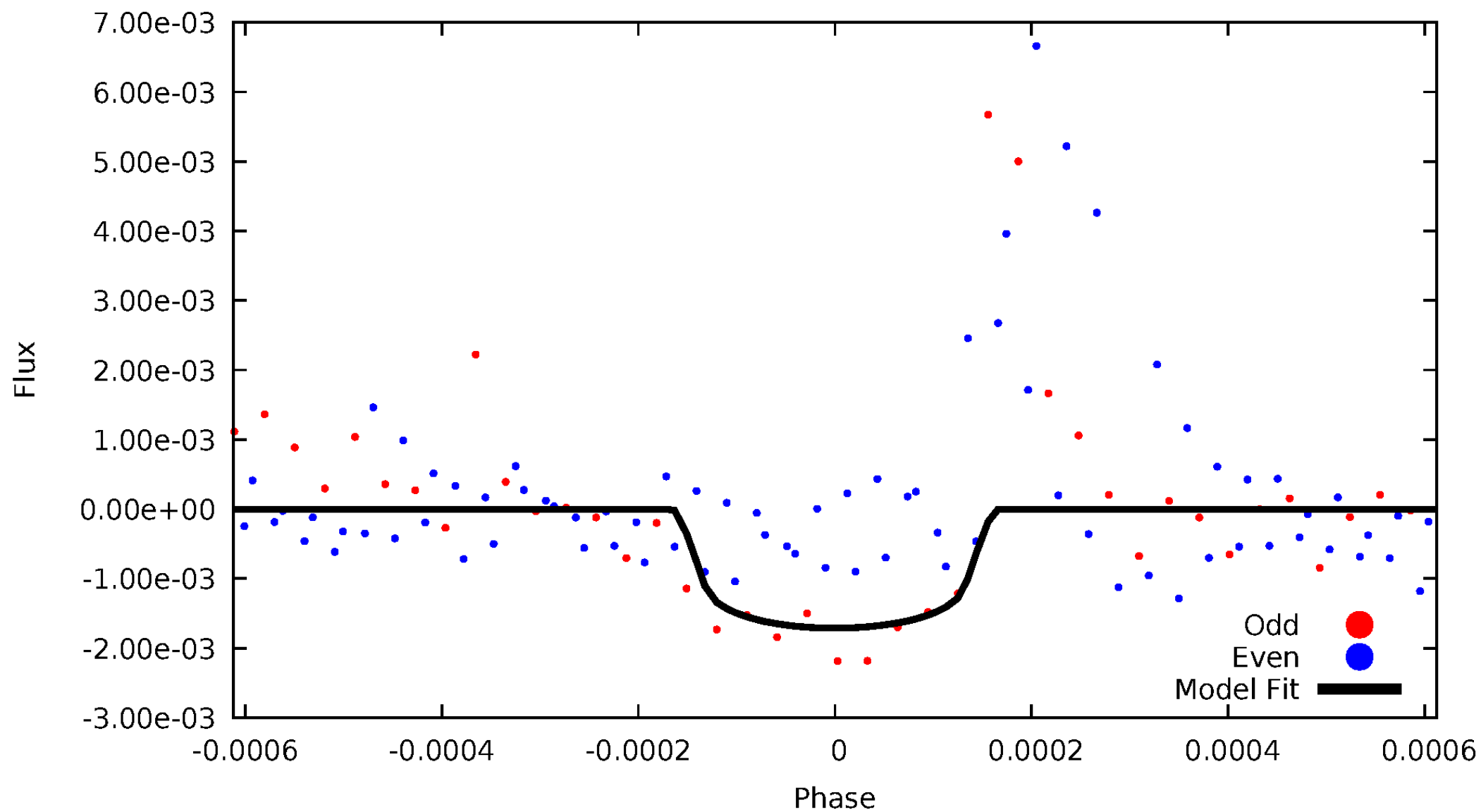


TCE 007191311-01



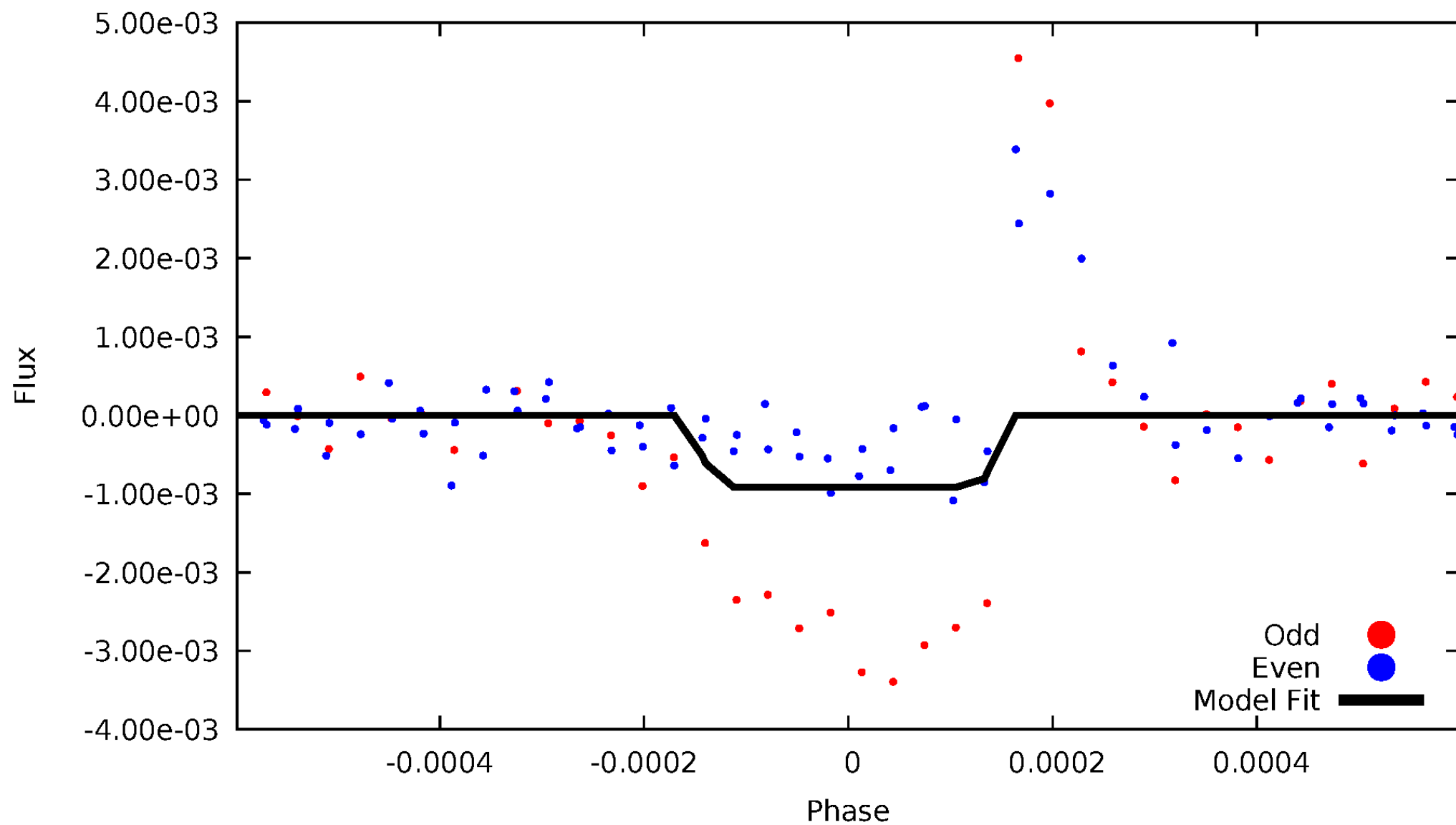
DV Odd/Even

TCE 007191311-01

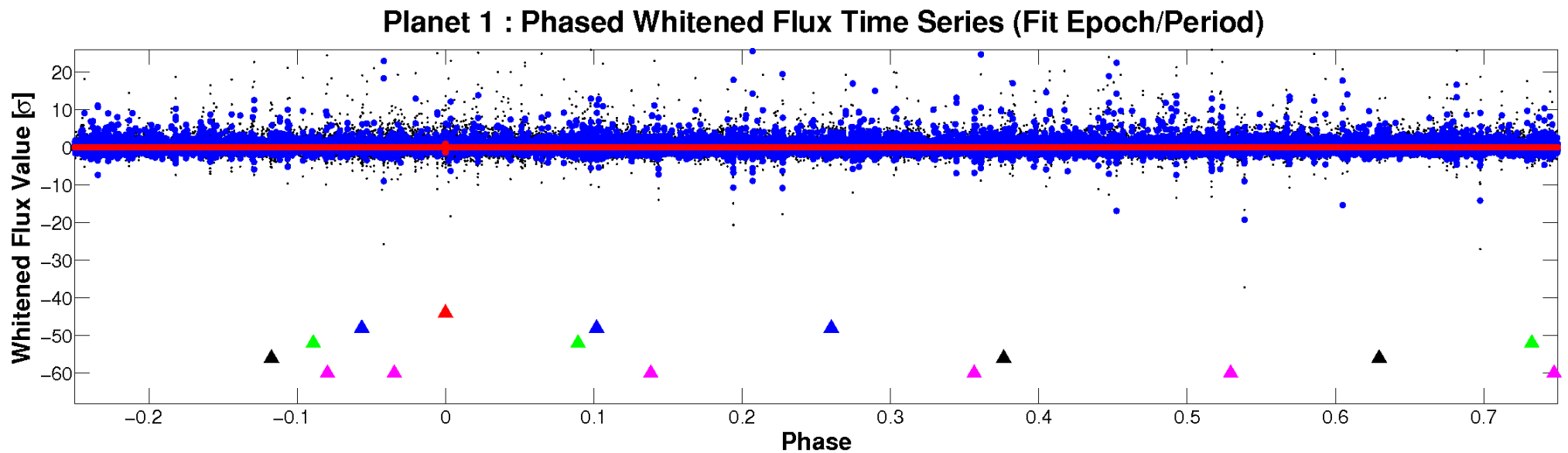
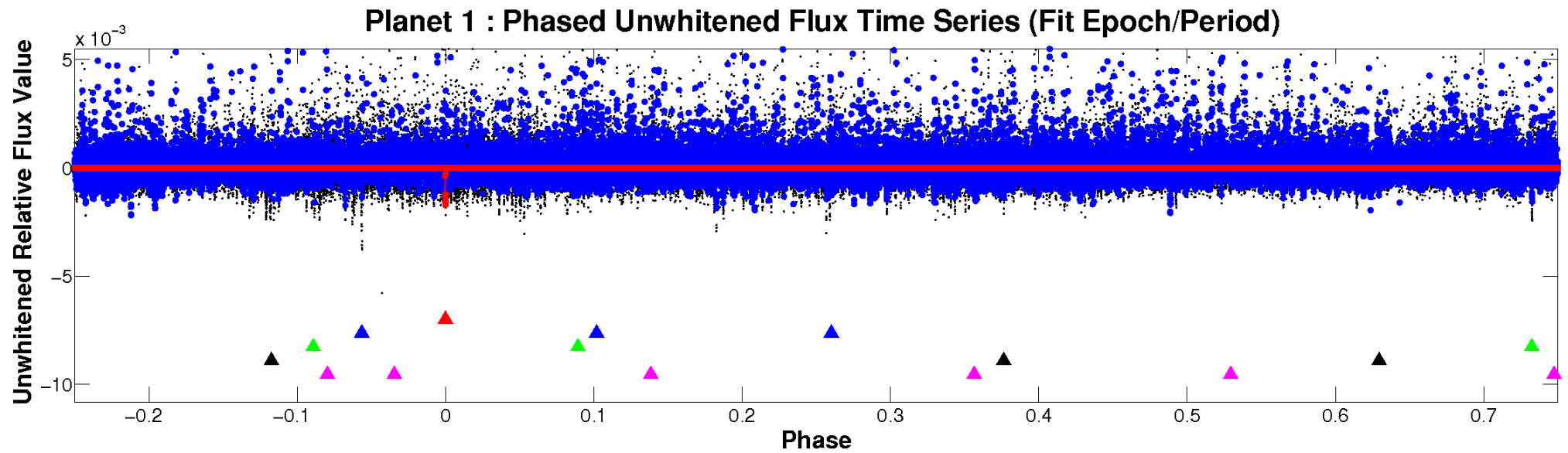


ALT Odd/Even

TCE 007191311-01

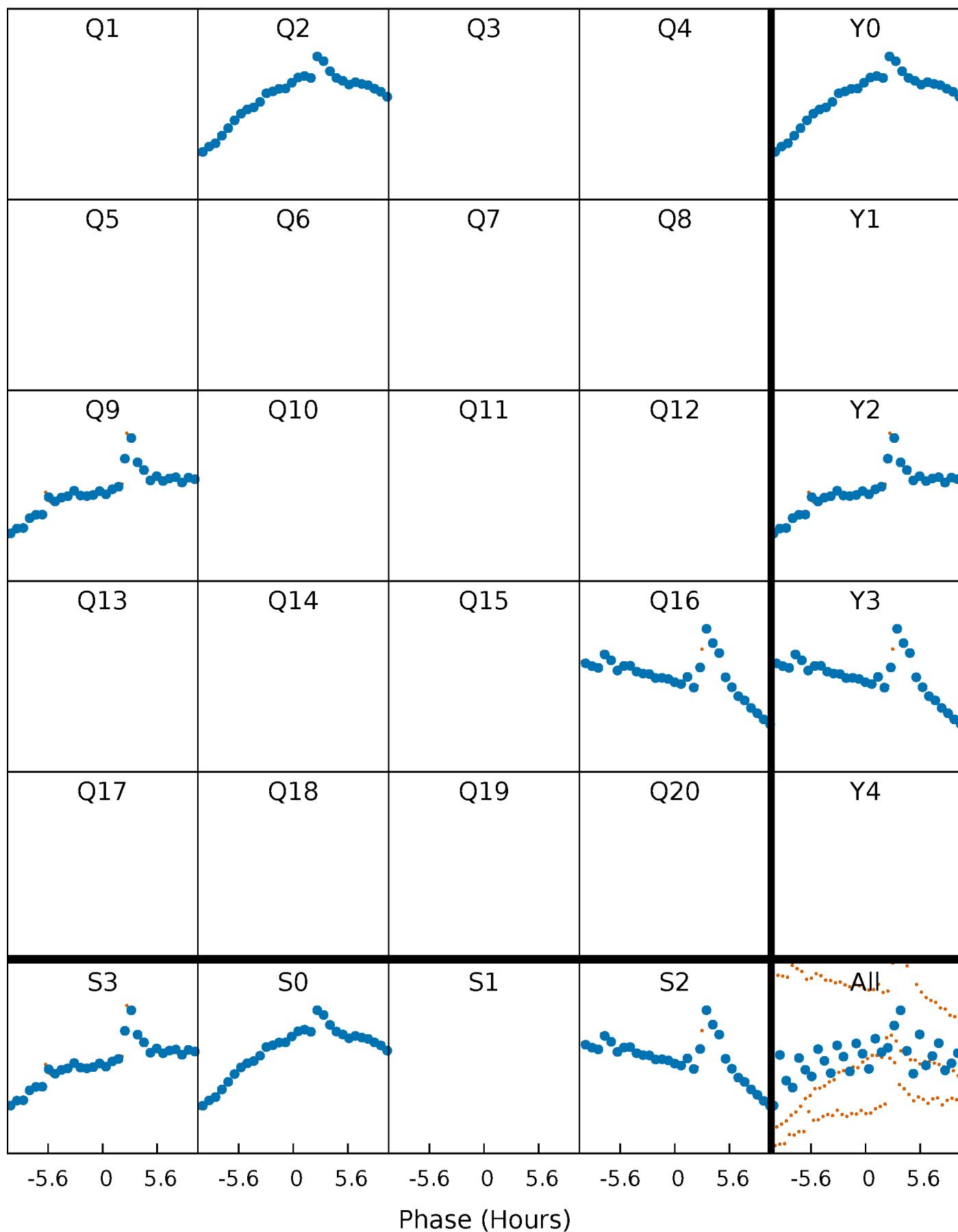


Non-Whitened Vs. Whitened Light Curve



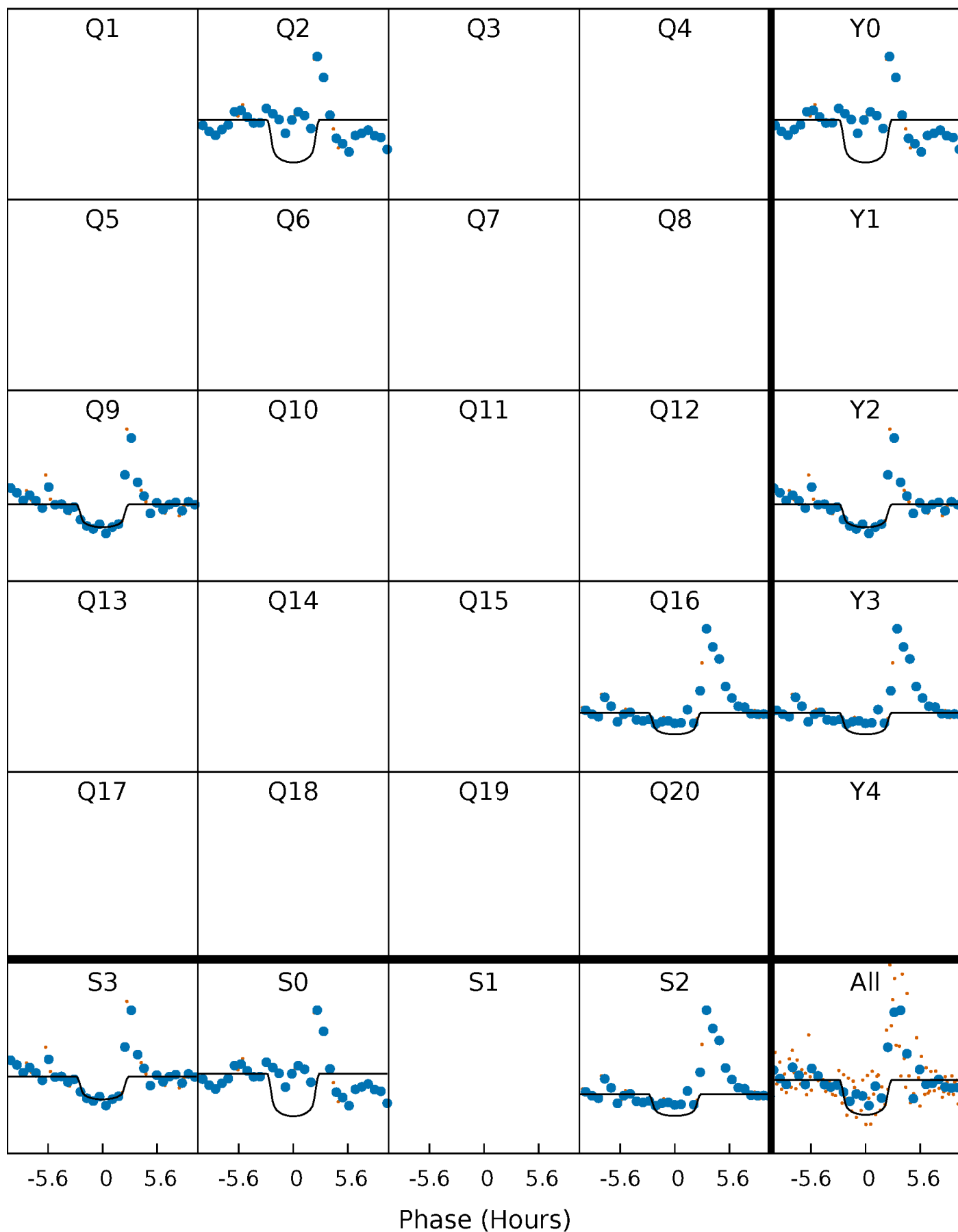
PDC Quarter-Phased Transit Curves

TCE 007191311-01 P=666.160876 Days $T_0=213.322133$ (BKJD)



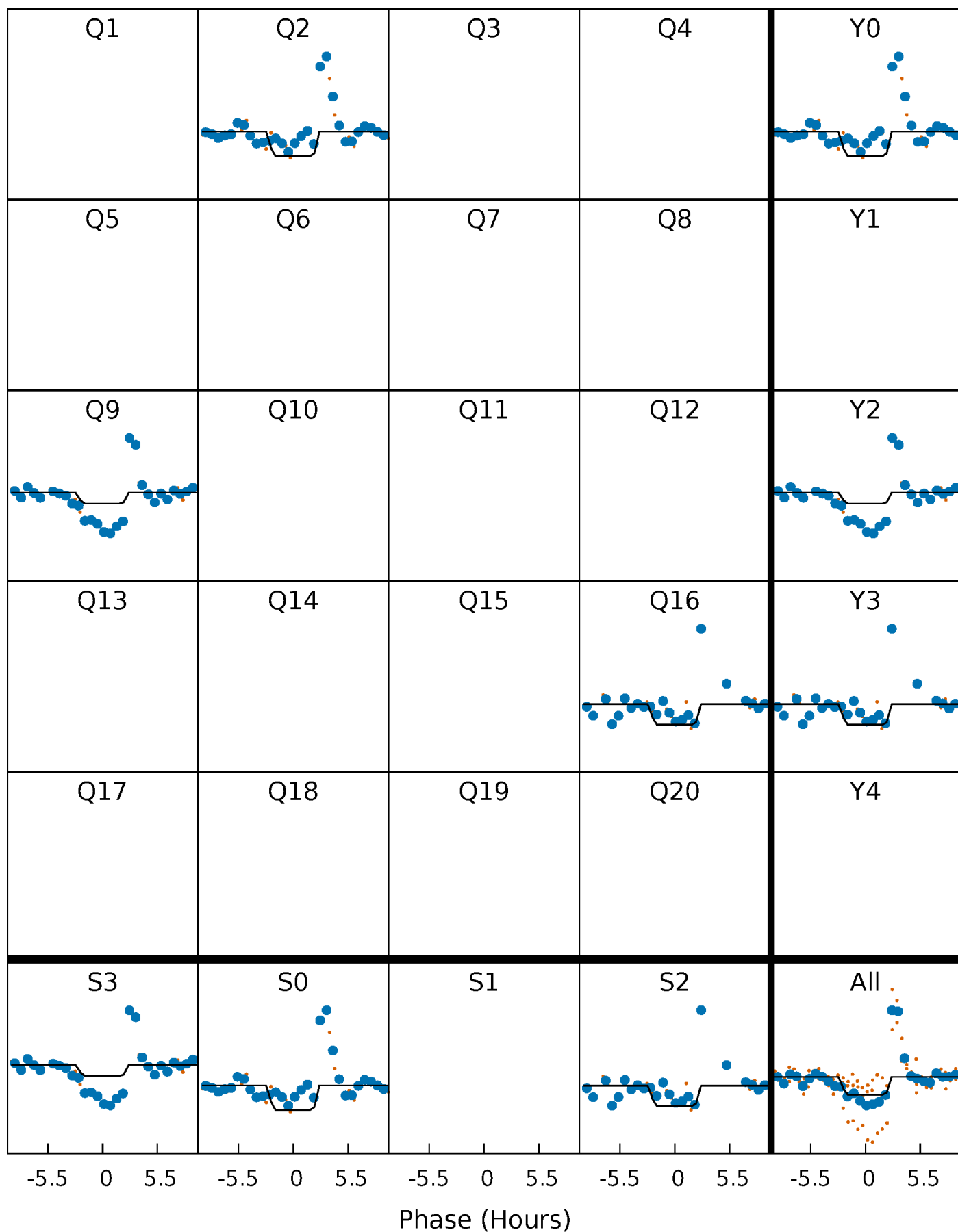
DV Quarter-Phased Transit Curves

TCE 007191311-01 P=666.160876 Days $T_0=213.322133$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

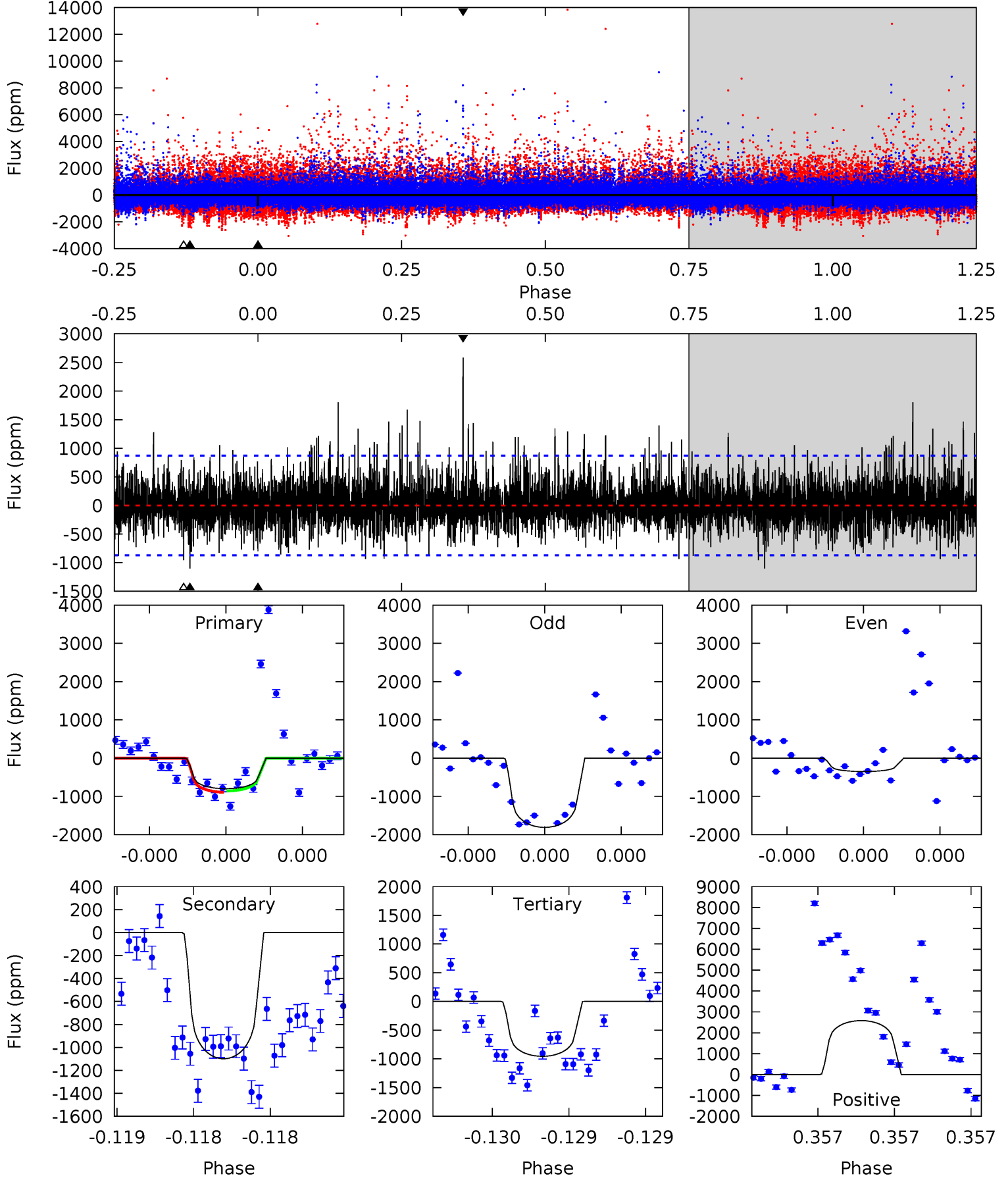
TCE 007191311-01 P=666.174923 Days $T_0=213.300993$ (BKJD)



DV Model-Shift Uniqueness Test

007191311-01, P = 666.160876 Days, E = 213.322133 Days

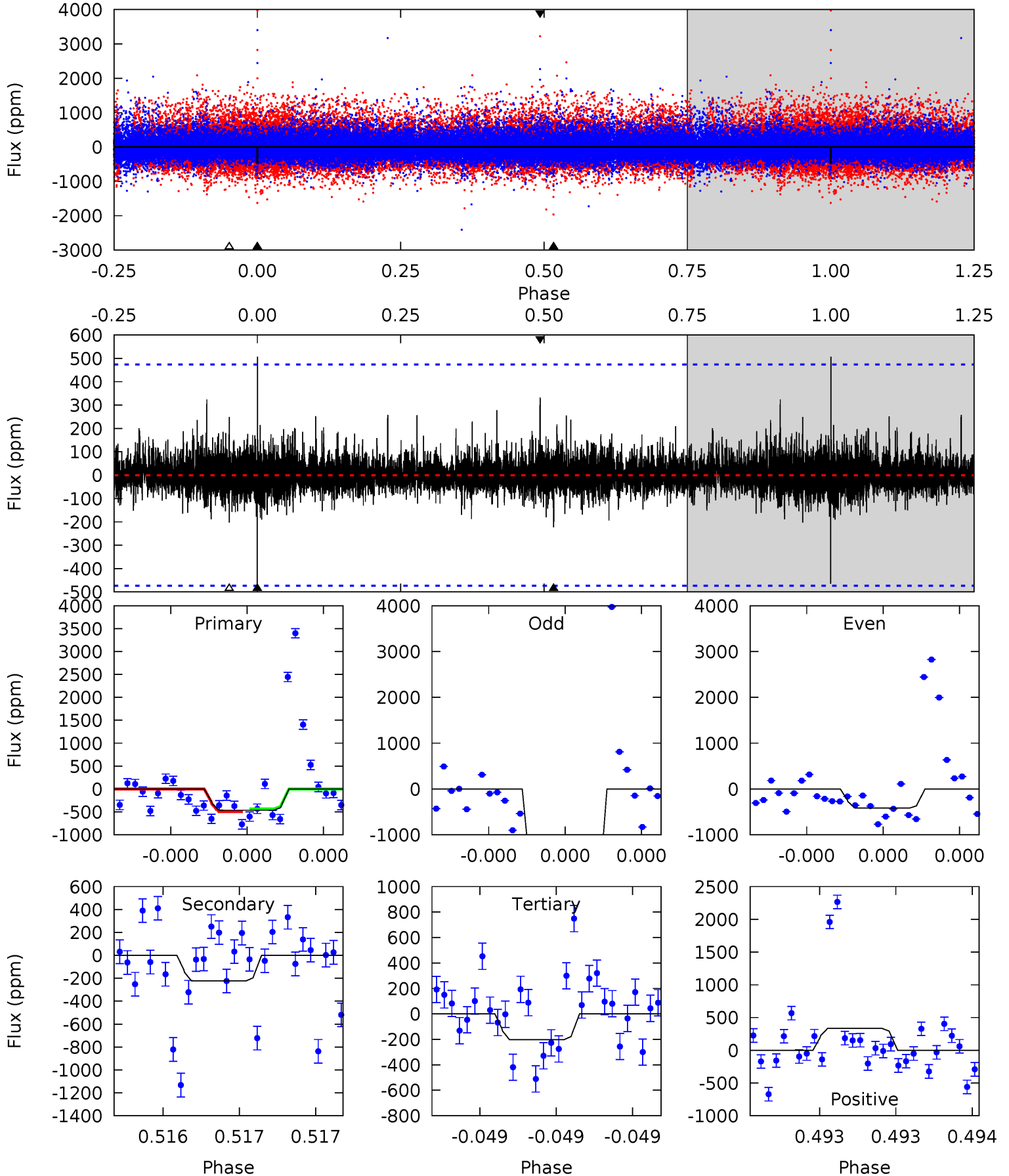
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.18	7.13	6.20	16.7	5.65	3.60	1.98	-1.02	-11.6	0.93	-9.62	3.66	1.07	0.70	0.11



Alt Model-Shift Uniqueness Test

007191311-01, P = 666.174923 Days, E = 213.300993 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.56	2.66	2.41	3.98	5.66	3.61	0.57	3.14	1.58	0.25	-1.32	15.3	2.45	0.52	0.35



Stellar Parameters For KIC 007191311

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3677^{+82}_{-100}	$4.839^{+0.060}_{-0.060}$	$-0.200^{+0.200}_{-0.200}$	$0.425^{+0.052}_{-0.064}$	$0.456^{+0.046}_{-0.069}$	$8.332^{+2.960}_{-1.835}$
	+2%/-3%	+1%/-1%	+100%/-100%	+12%/-15%	+10%/-15%	+36%/-22%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 007191311-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1099 ± 154	$1.92^{+1.48}_{-1.06}$	138^{+5}_{-5}	3409^{+1116}_{-518}	$210199^{+836124}_{-140375}$
Alt.	-223 ± 84	$1.81^{+1.29}_{-1.12}$	138^{+5}_{-5}	2743^{+895}_{-359}	$46710^{+271809}_{-32283}$

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

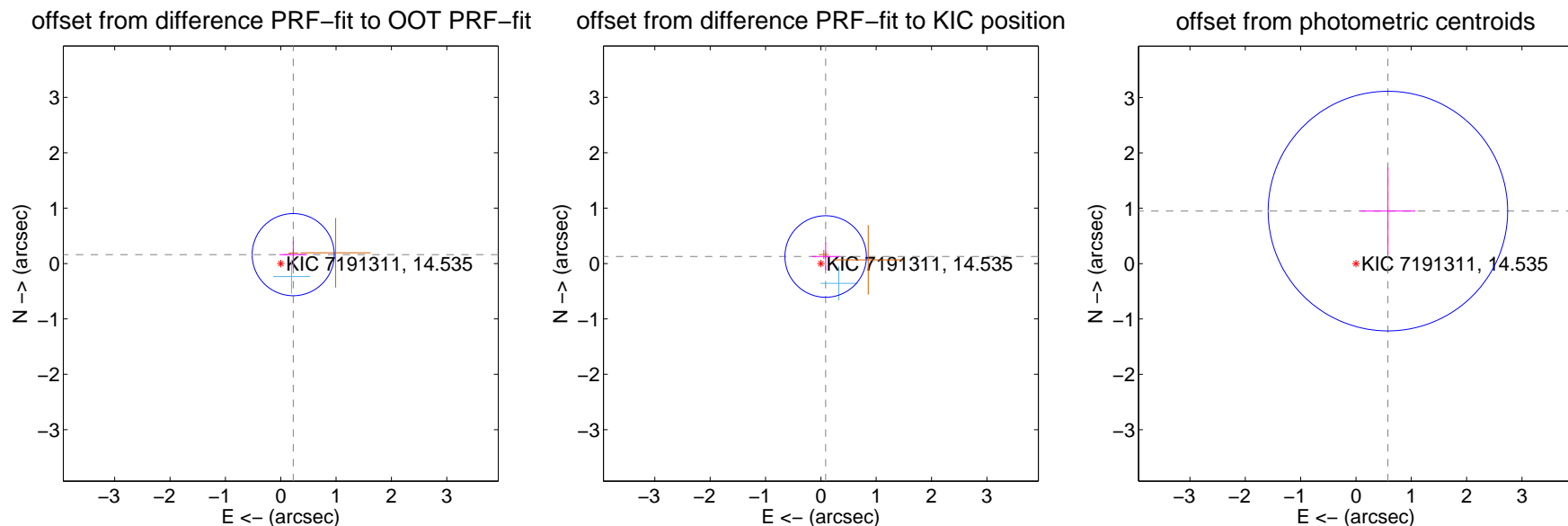
DV Centroid Data

Supplemental centroid analysis for 007191311-01. Kepler magnitude: 14.54. Transit SNR 6.70

There are 1 quarters with good PRF difference image offsets

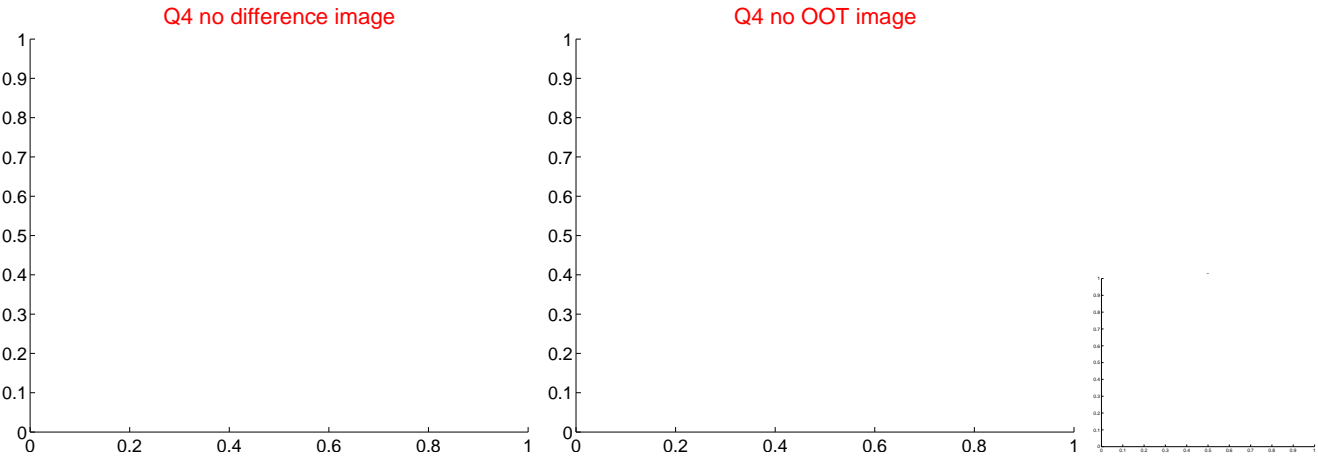
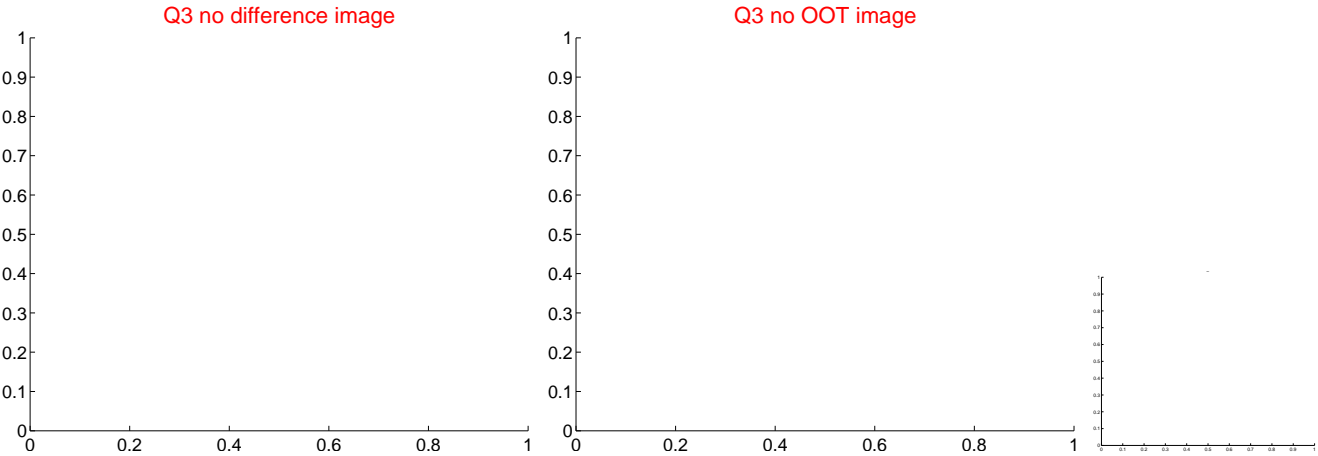
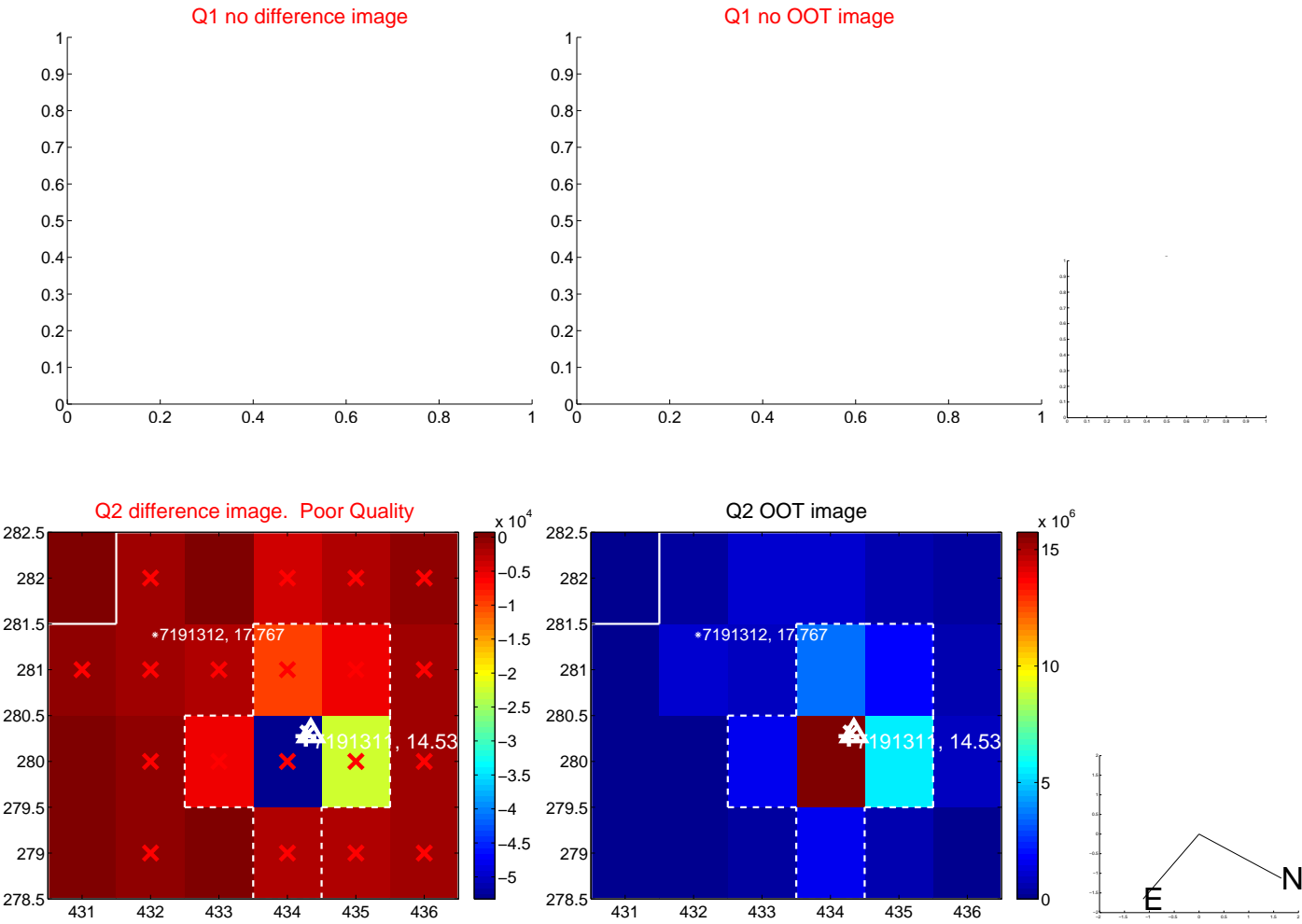
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.277 ± 0.247	1.12	-0.225 ± 0.249	0.161 ± 0.244
PRF-fit source offset from KIC position	0.154 ± 0.245	0.63	-0.087 ± 0.249	0.127 ± 0.244
photometric centroid source offset	1.11 ± 0.72	1.54	-0.58 ± 0.50	0.95 ± 0.79



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.

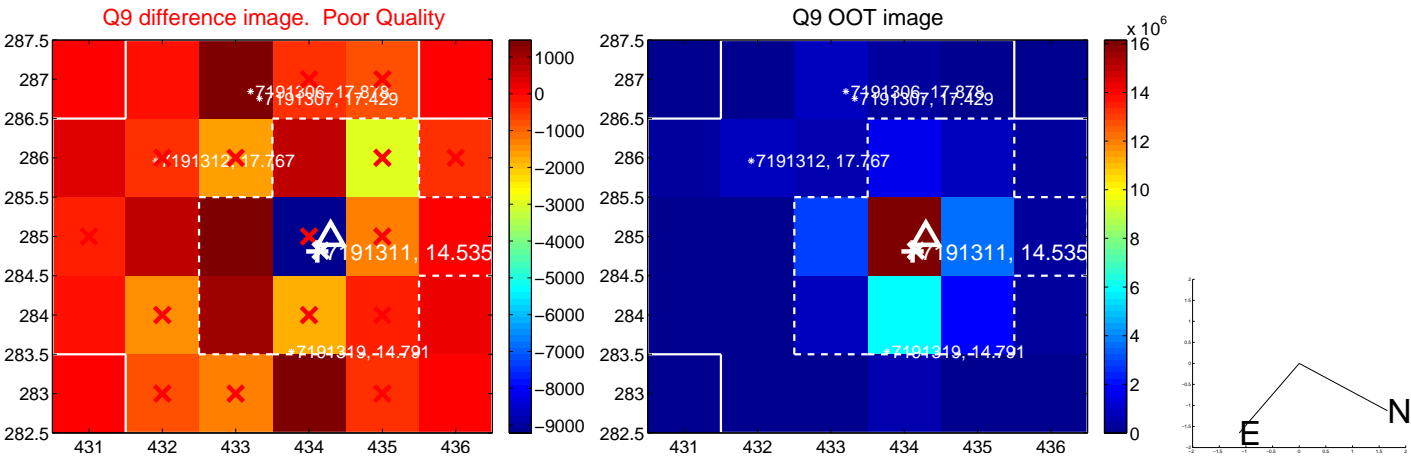
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



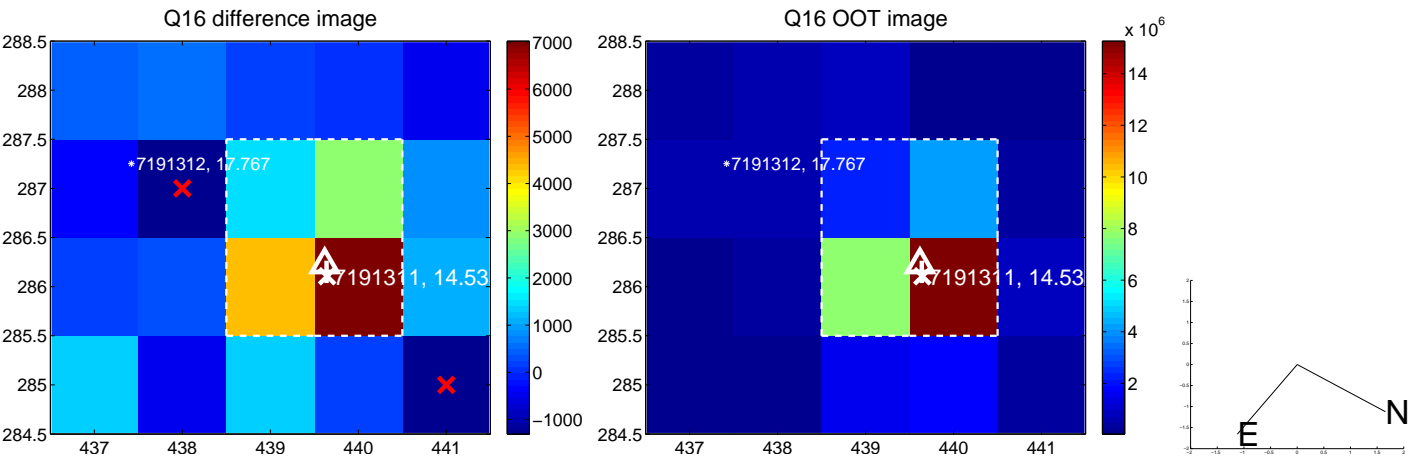
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



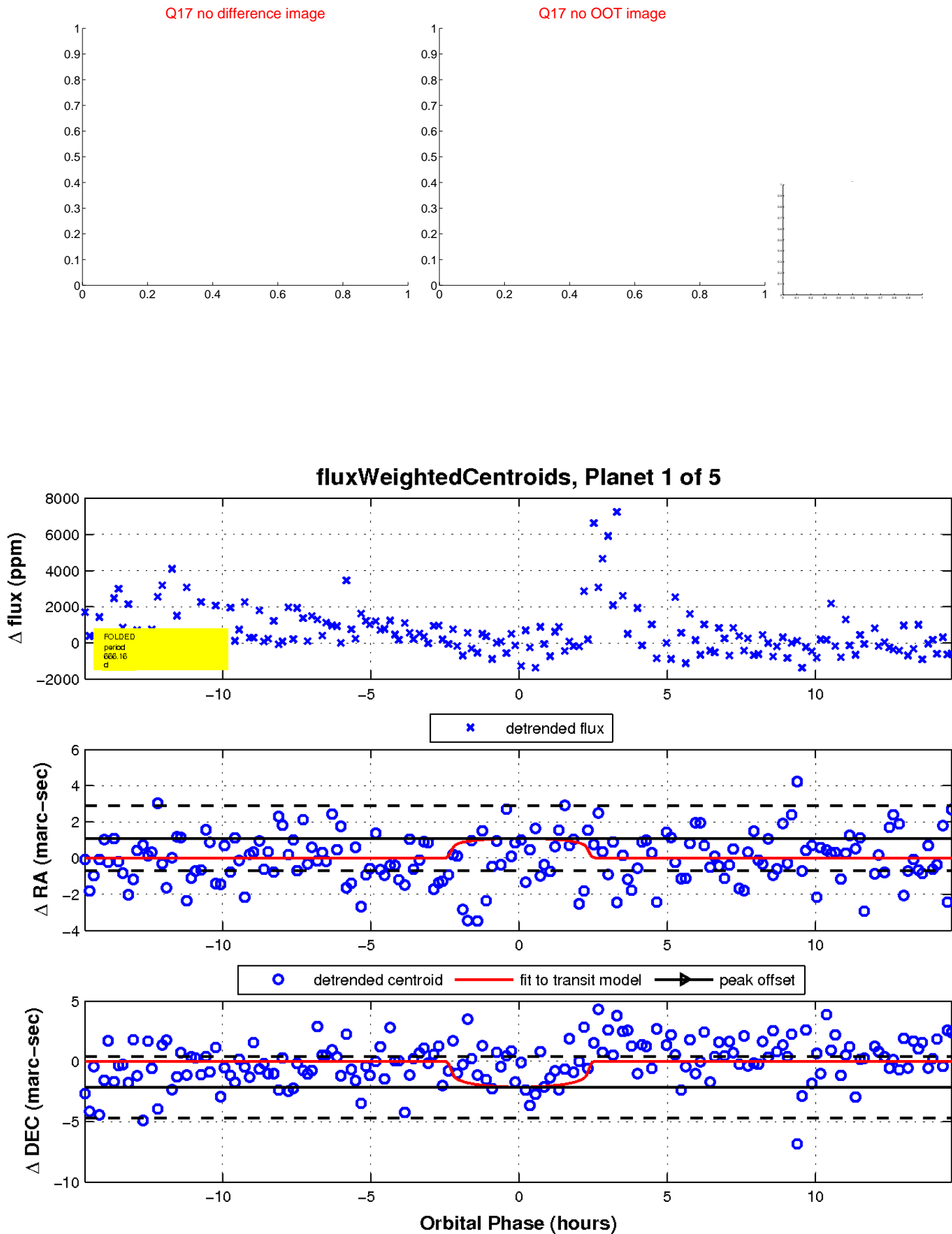
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

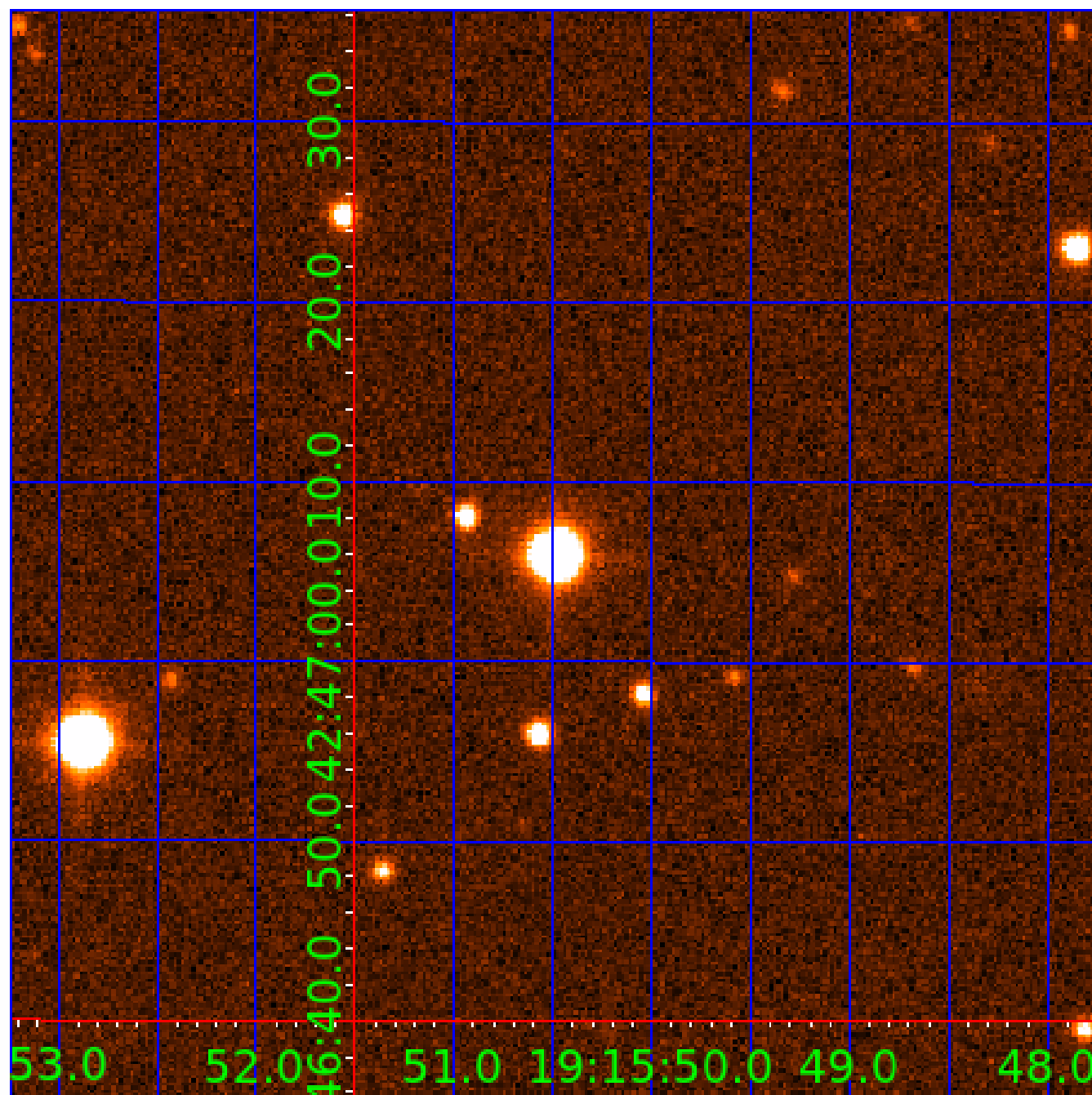


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007191311

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})
007191311-01	OBS	No	666.160876	213.322133	1711.8	4.892	14.2	6.7	0.42	3677	1.77	0.02
007191311-02	OBS	No	560.711818	386.632503	2168.0	5.045	12.9	8.2	0.42	3677	2.01	0.03
007191311-03	OBS	No	547.267947	272.852055	2600.7	13.692	10.5	8.3	0.42	3677	2.30	0.03
007191311-04	OBS	No	497.528068	135.140244	1794.5	10.472	13.6	6.9	0.42	3677	1.79	0.03
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
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007191311-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_DV
007191311-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007191311-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007191311-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS

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

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

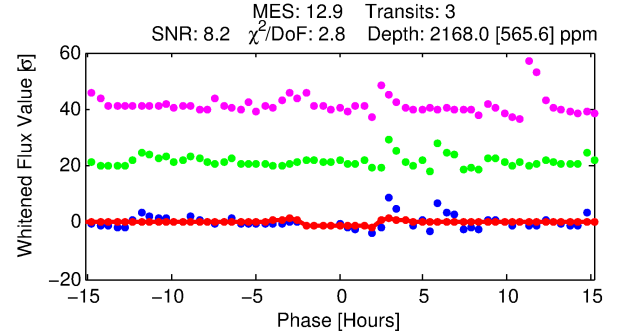
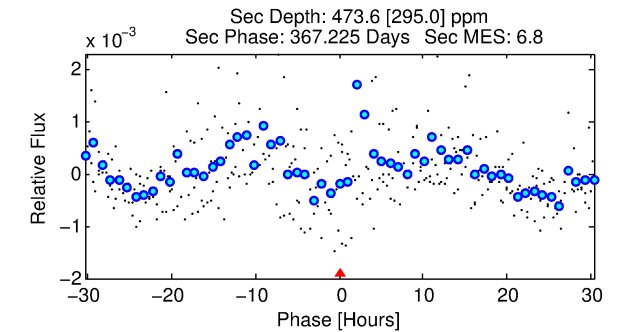
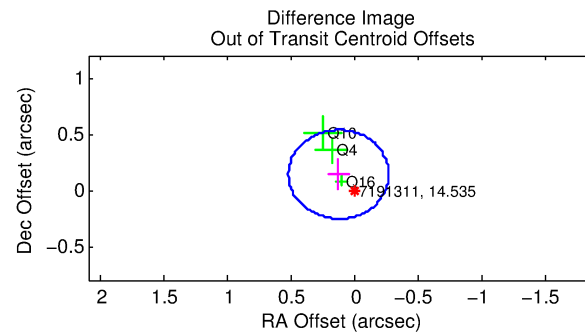
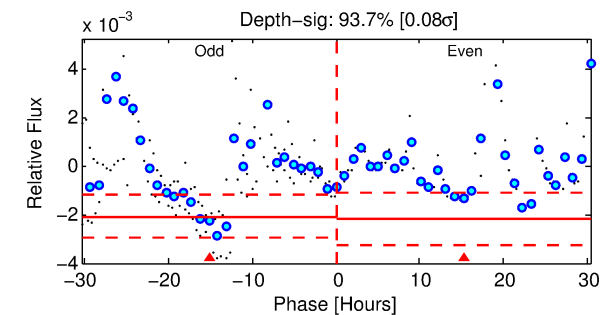
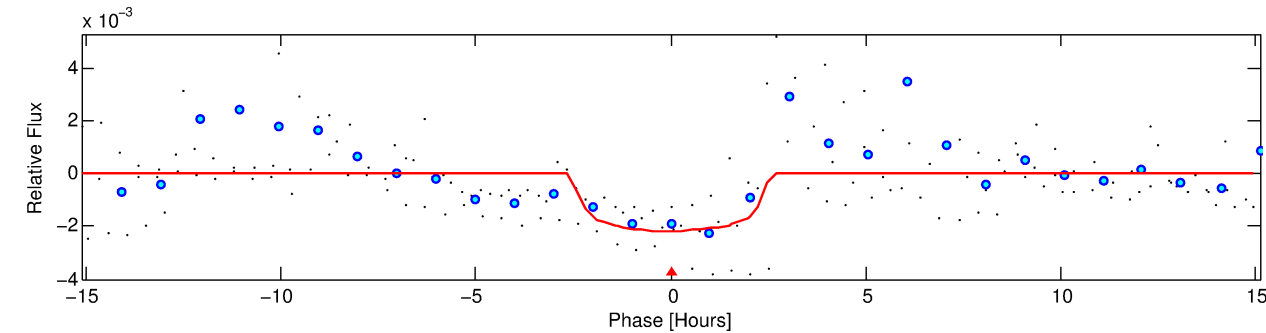
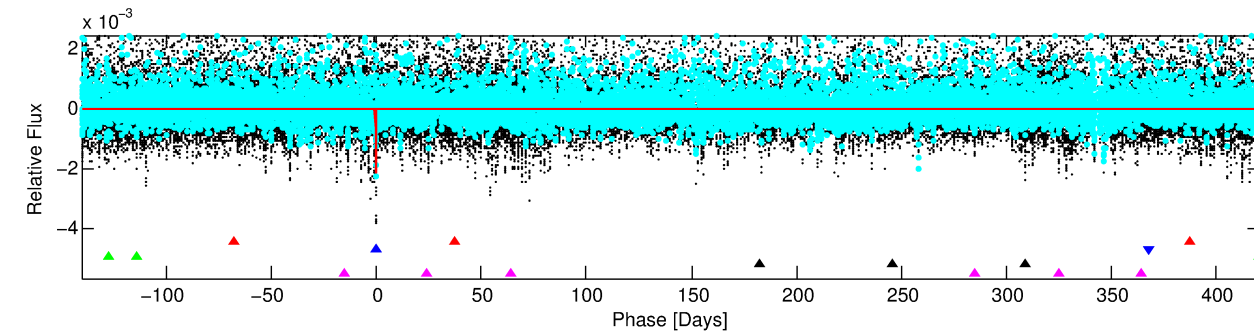
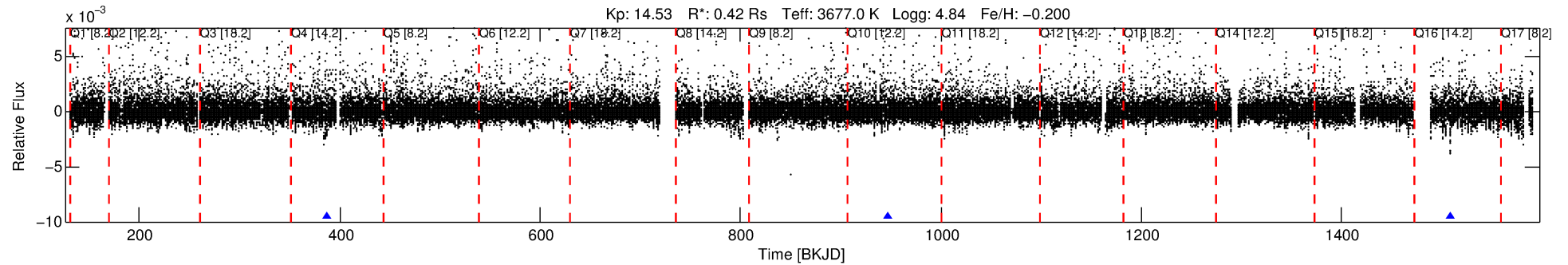
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007191311-02

No Significant Match Found

DV One-Page Summary

KIC: 7191311 Candidate: 2 of 5 Period: 560.712 d



DV Fit Results:

Period = 560.71182 [0.00799] d
Epoch = 386.6325 [0.0112] BKJD
Rp/R* = 0.0432 [0.0538]
a/R* = 812.35 [4600.45]
b = 0.42 [11.28]
Seff = 0.03 [0.00]
Teq = 105 [5] K
Rp = 2.01 [2.51] Re
a = 1.0236 [0.1131] AU
Ag = 67860.06 [174331.22] [0.39 σ]
Teffp = 2608 [1674] K [1.50 σ]

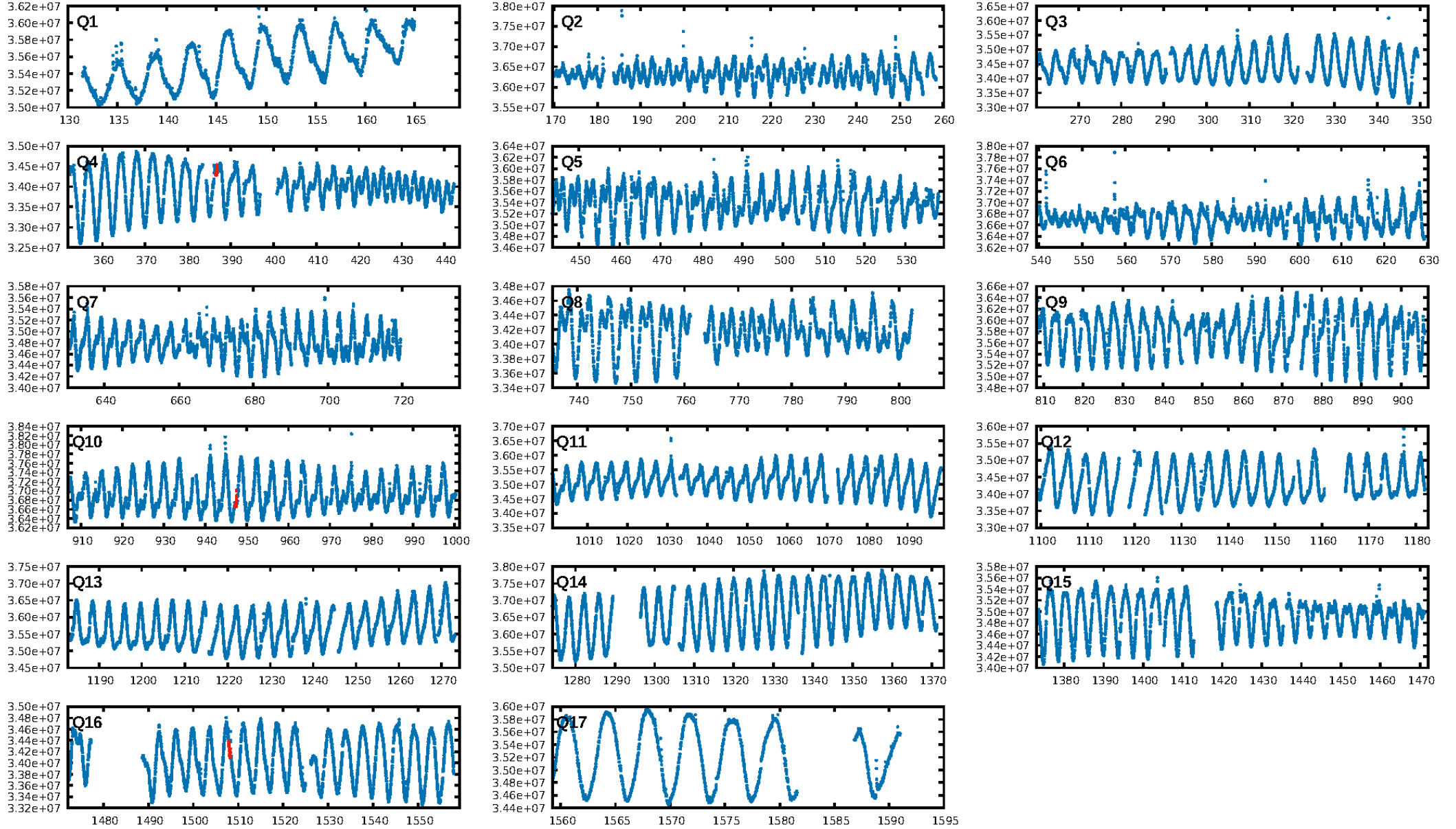
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [22.11 σ]
LongPeriod-sig: 100.0% [360.15 σ]
ModelChiSquare2-sig: 67.2%
ModelChiSquareGof-sig: 35.9%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -15.11
Centroid-sig: 0.5%
Centroid-so: 0.727 arcsec [1.22 σ]
OotOffset-rm: 0.192 arcsec [1.46 σ]
OotOffset-st: 1/0/2/0 [3]
KicOffset-rm: 0.051 arcsec [0.34 σ]
KicOffset-st: 1/0/2/0 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 1.00 [3/3]

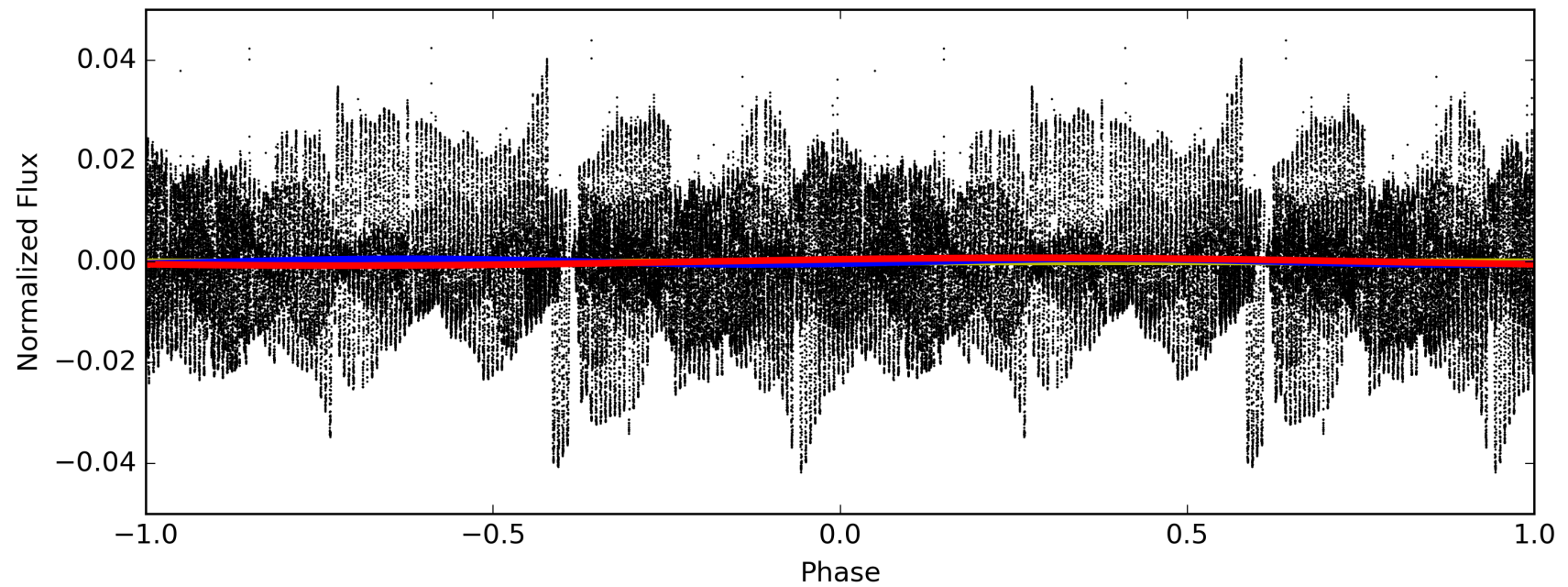
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 007191311-02, PDC Light Curves

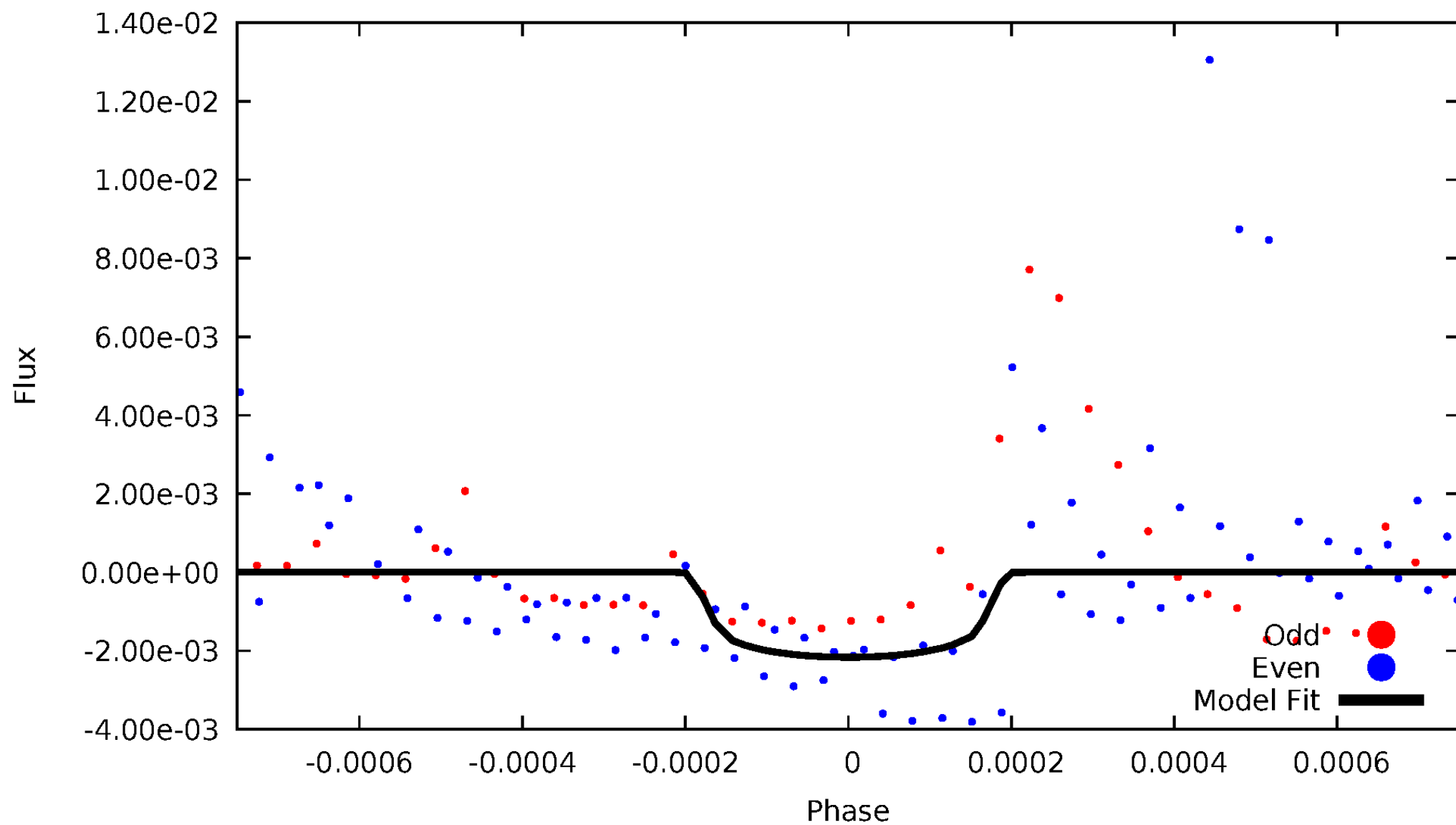


— P = 280.356 days — P = 560.712 days — P = 1121.424 days



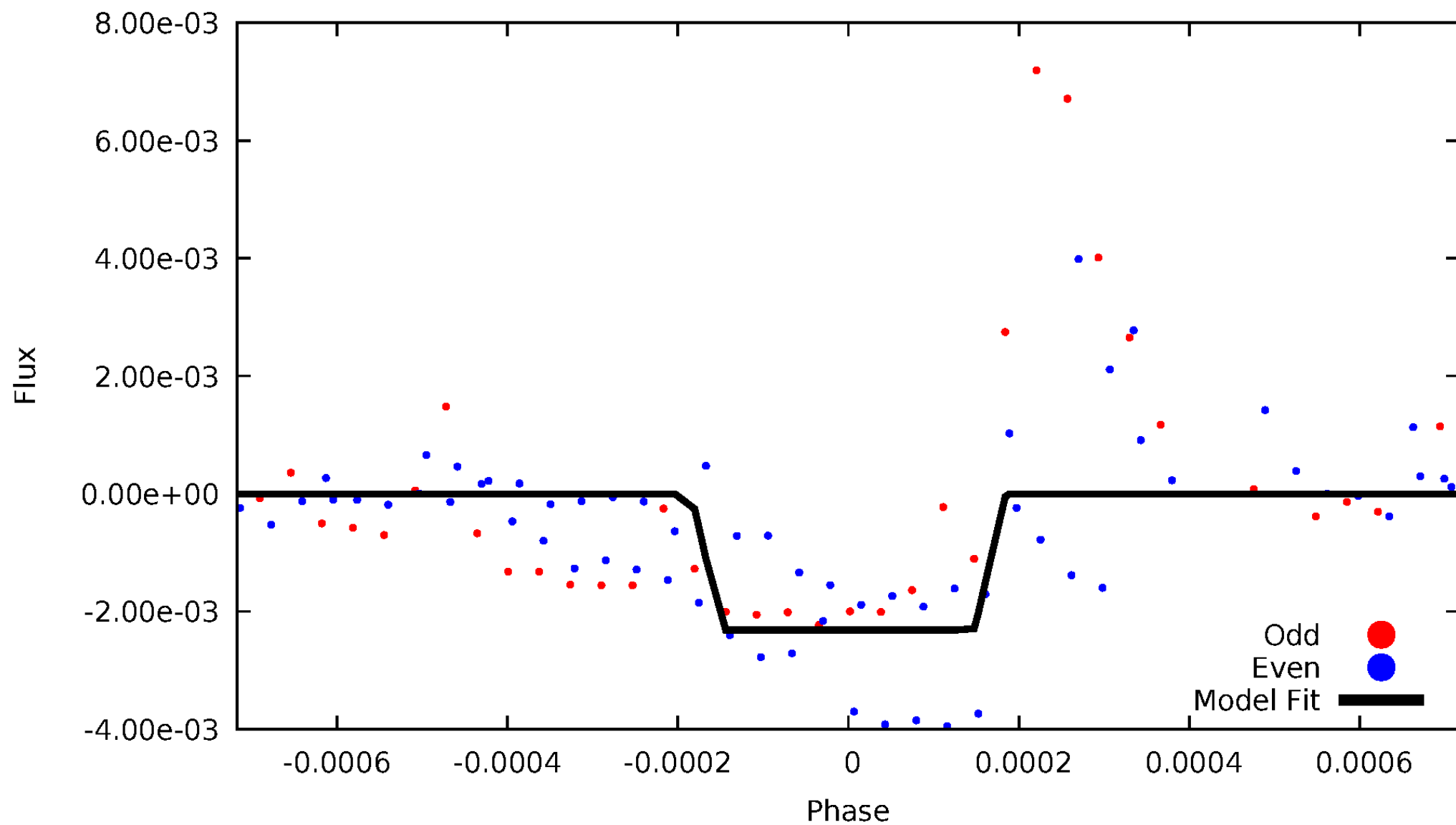
DV Odd/Even

TCE 007191311-02



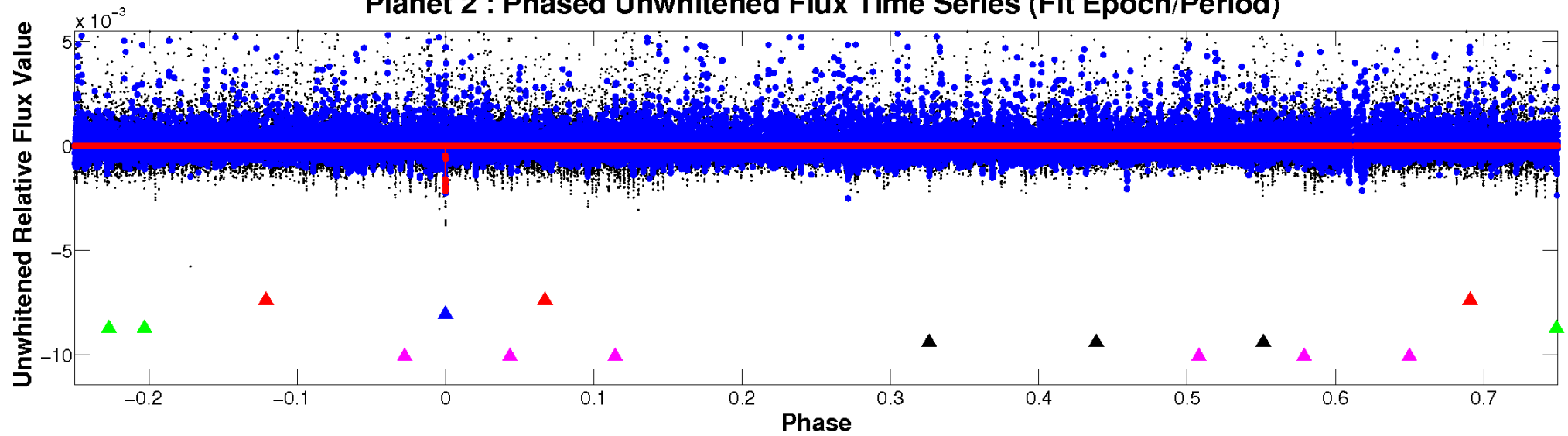
ALT Odd/Even

TCE 007191311-02

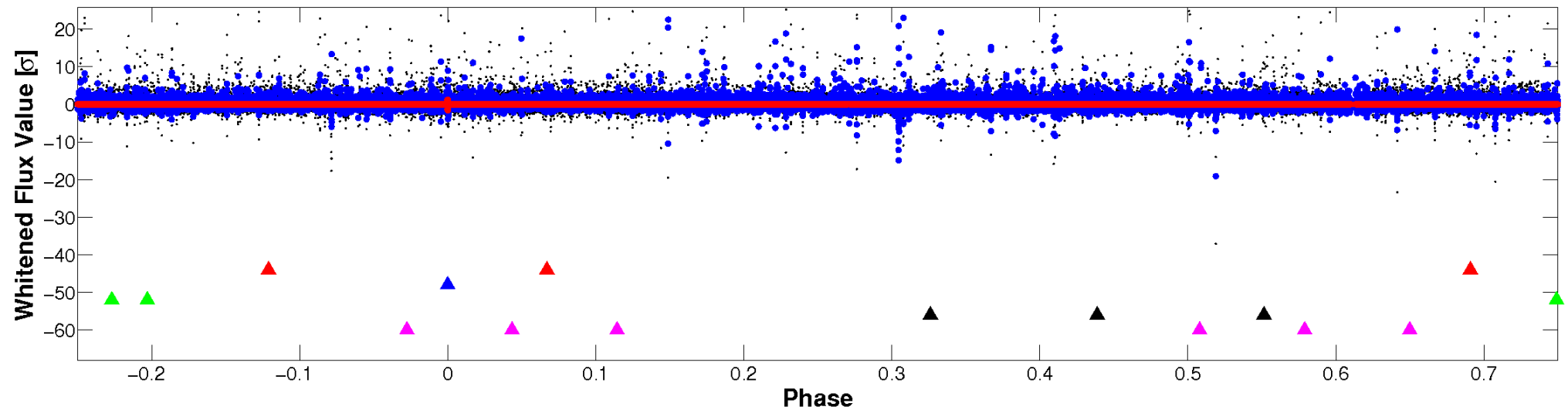


Non-Whitened Vs. Whitened Light Curve

Planet 2 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

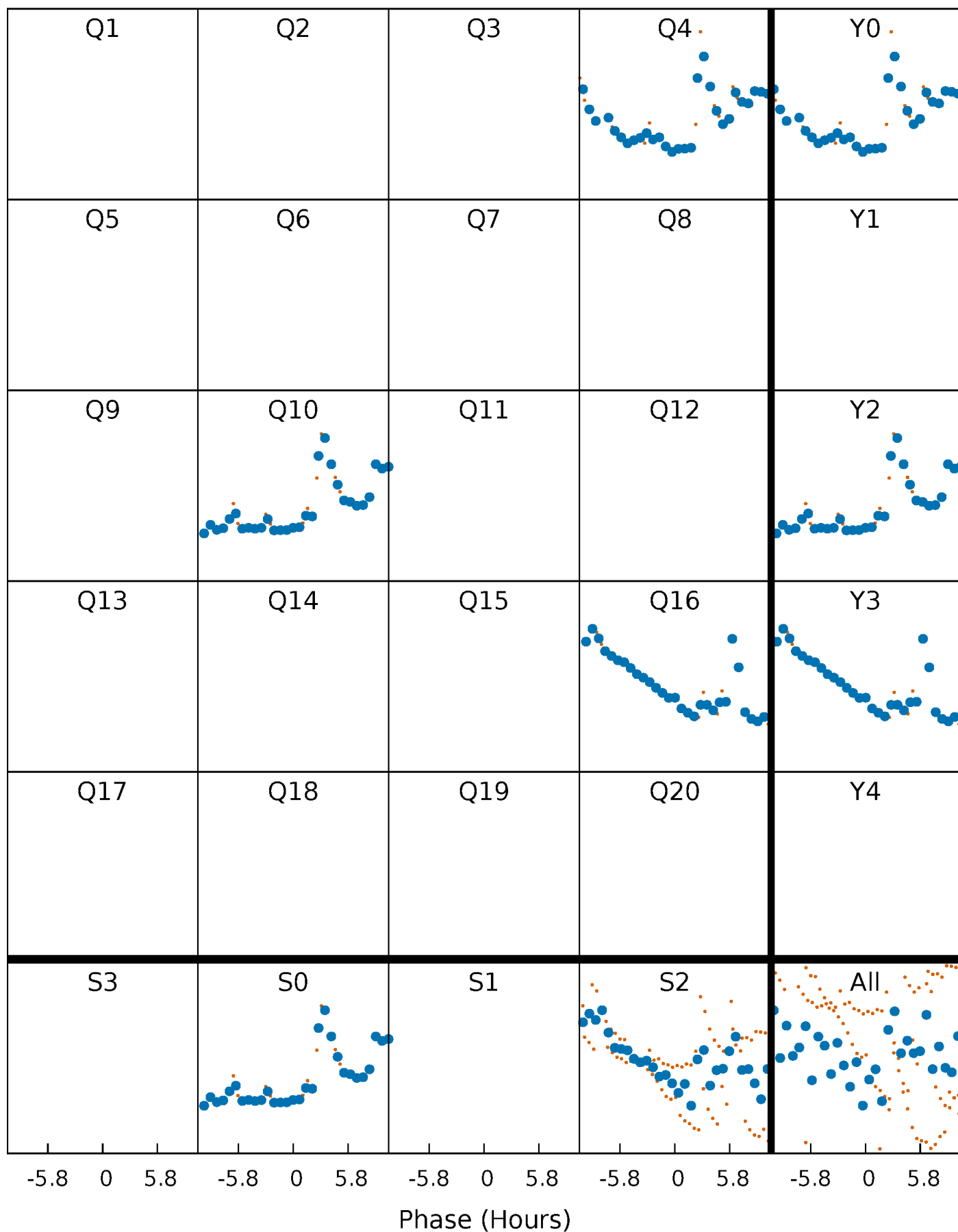


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



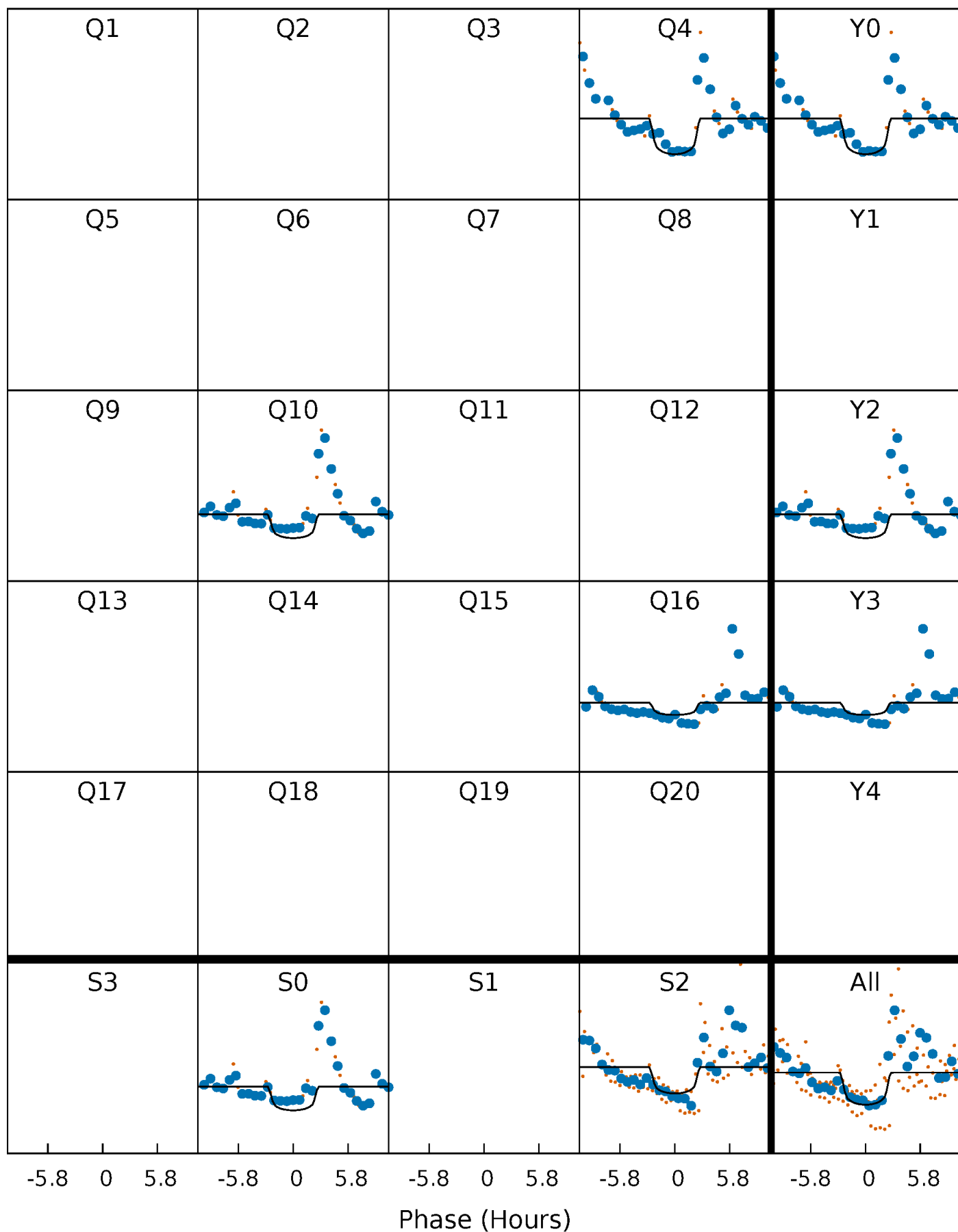
PDC Quarter-Phased Transit Curves

TCE 007191311-02 P=560.711818 Days $T_0=386.632503$ (BKJD)



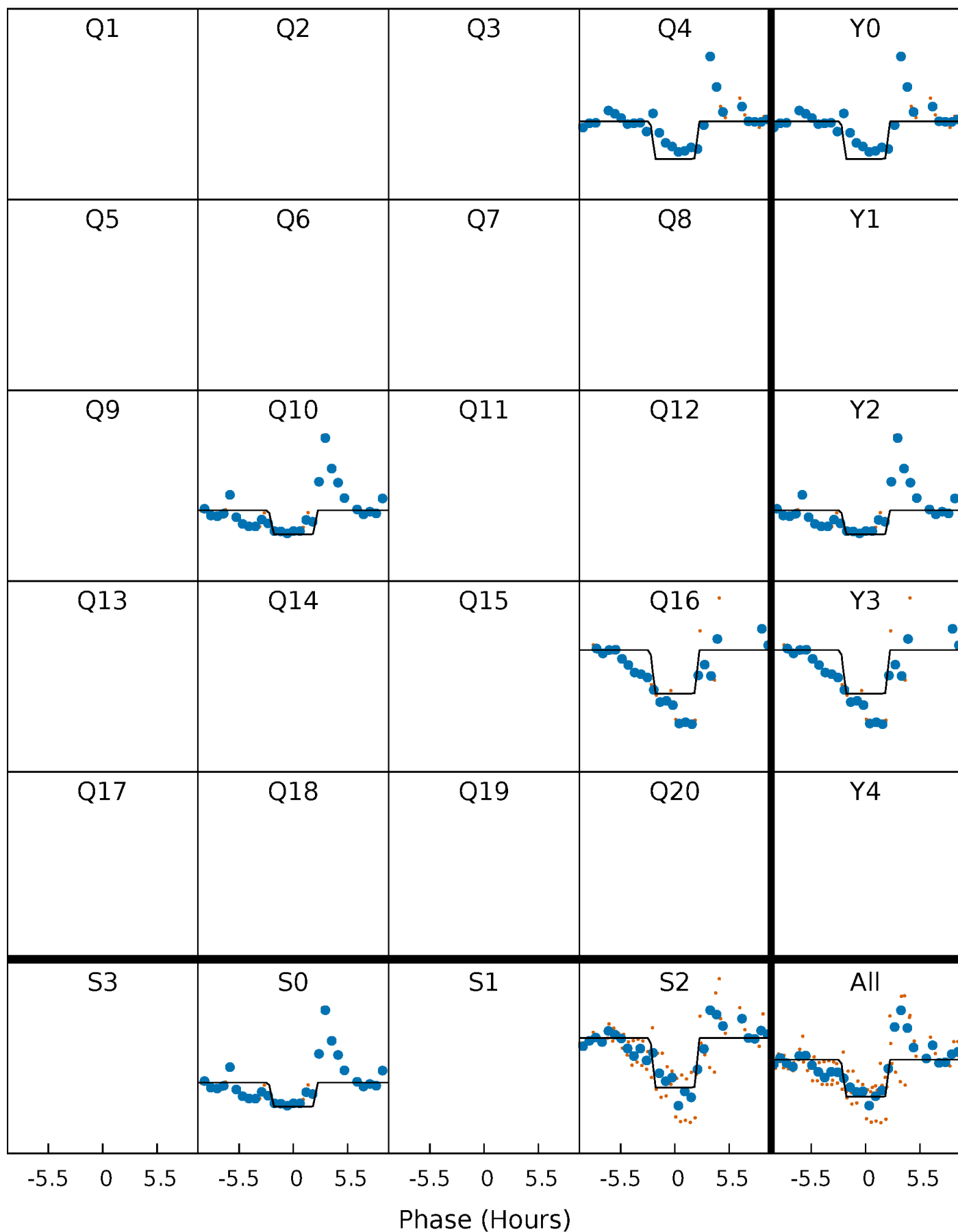
DV Quarter-Phased Transit Curves

TCE 007191311-02 P=560.711818 Days $T_0=386.632503$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

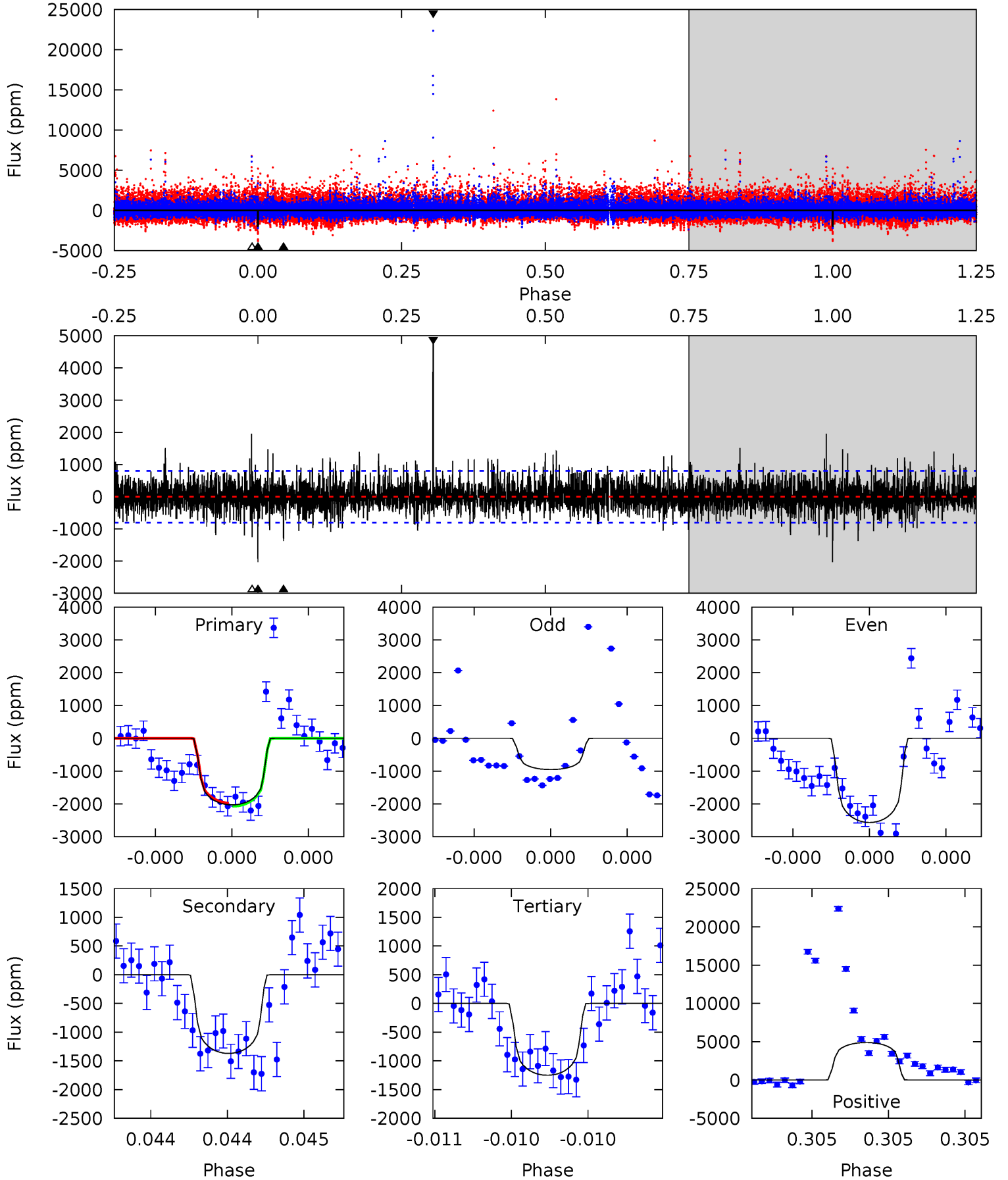
TCE 007191311-02 P=560.730942 Days $T_0=386.614226$ (BKJD)



DV Model-Shift Uniqueness Test

007191311-02, P = 560.711818 Days, E = 386.632503 Days

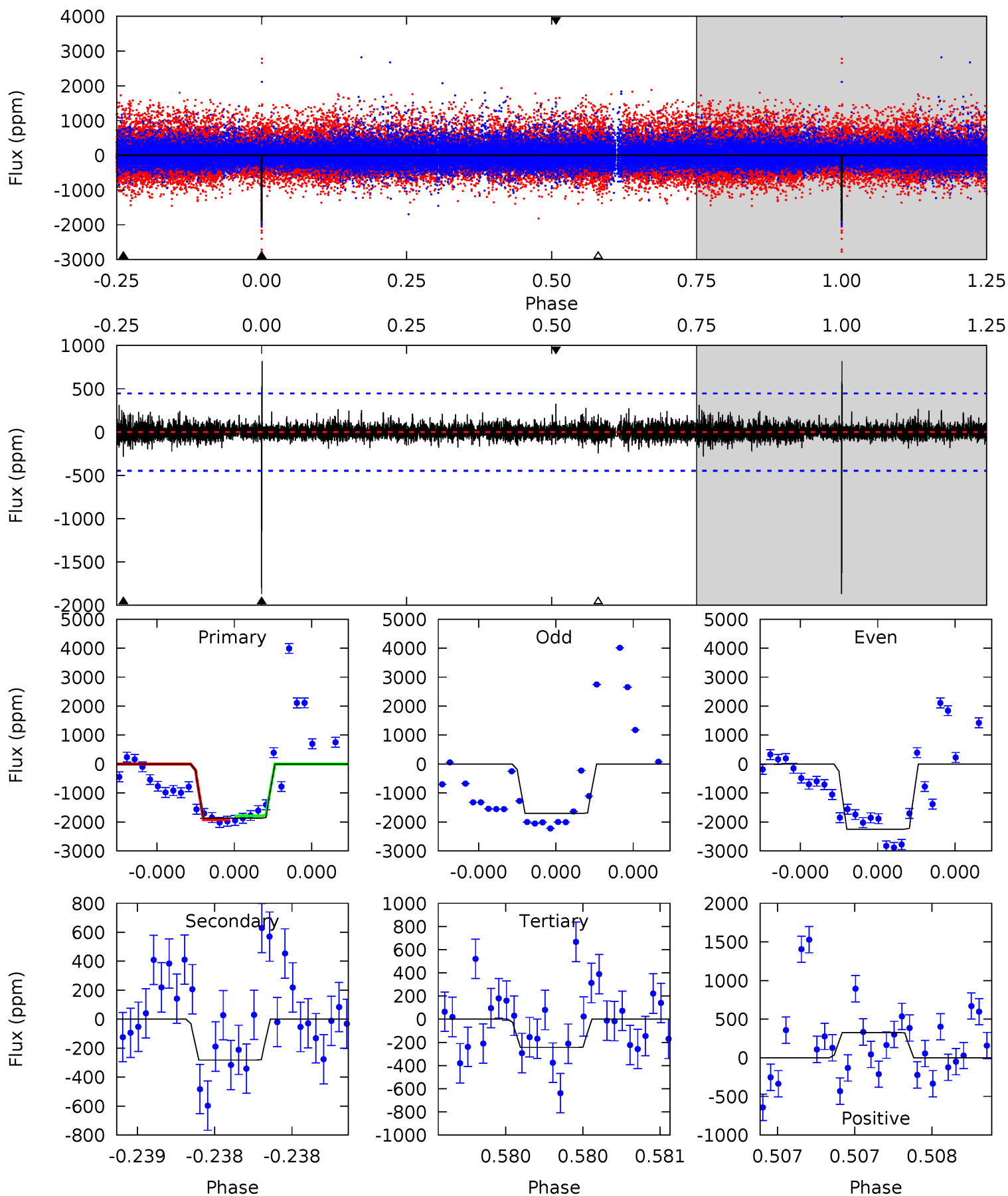
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.2	9.58	8.75	34.3	5.61	3.54	2.41	5.45	-20.1	0.84	-24.7	4.38	1.13	0.71	0.33



Alt Model-Shift Uniqueness Test

007191311-02, P = 560.730942 Days, E = 386.614226 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.6	3.57	3.08	4.13	5.63	3.57	0.66	20.5	19.5	0.48	-0.57	3.46	1.26	0.30	0.90



Stellar Parameters For KIC 007191311

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3677^{+82}_{-100}	$4.839^{+0.060}_{-0.060}$	$-0.200^{+0.200}_{-0.200}$	$0.425^{+0.052}_{-0.064}$	$0.456^{+0.046}_{-0.069}$	$8.332^{+2.960}_{-1.835}$
	+2%/-3%	+1%/-1%	+100%/-100%	+12%/-15%	+10%/-15%	+36%/-22%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 007191311-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1370 ± 143	$2.66^{+2.25}_{-1.69}$	146^{+5}_{-6}	3209^{+1270}_{-510}	$109897^{+693907}_{-77513}$
Alt.	-282 ± 79	$2.95^{+2.12}_{-1.86}$	146^{+5}_{-5}	2515^{+758}_{-323}	$18754^{+109559}_{-13260}$

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

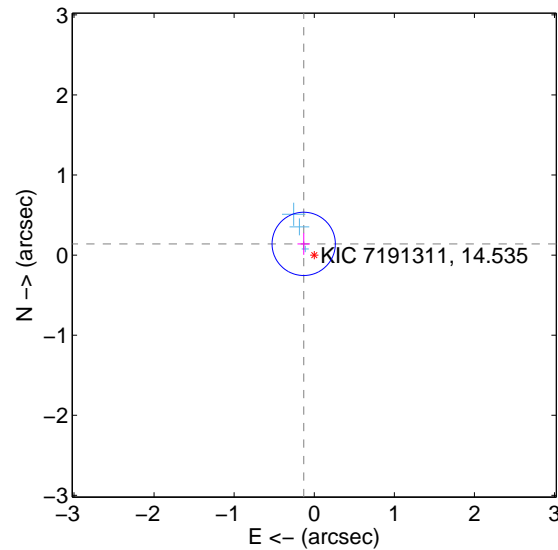
Supplemental centroid analysis for 007191311-02. Kepler magnitude: 14.54. Transit SNR 8.16

There are 3 quarters with good PRF difference image offsets

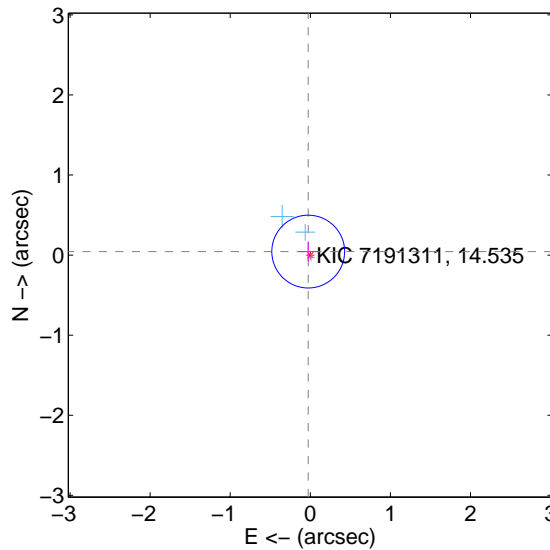
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.192 ± 0.132	1.46	0.132 ± 0.078	0.140 ± 0.136
PRF-fit source offset from KIC position	0.051 ± 0.152	0.34	0.026 ± 0.122	0.044 ± 0.121
photometric centroid source offset	0.73 ± 0.60	1.22	0.12 ± 0.35	0.72 ± 0.60

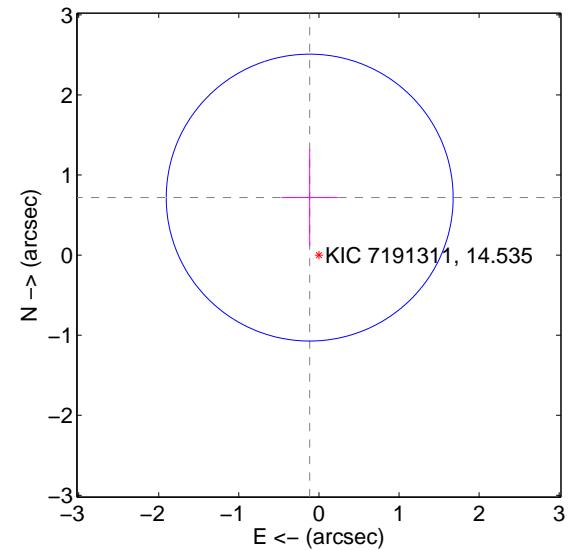
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

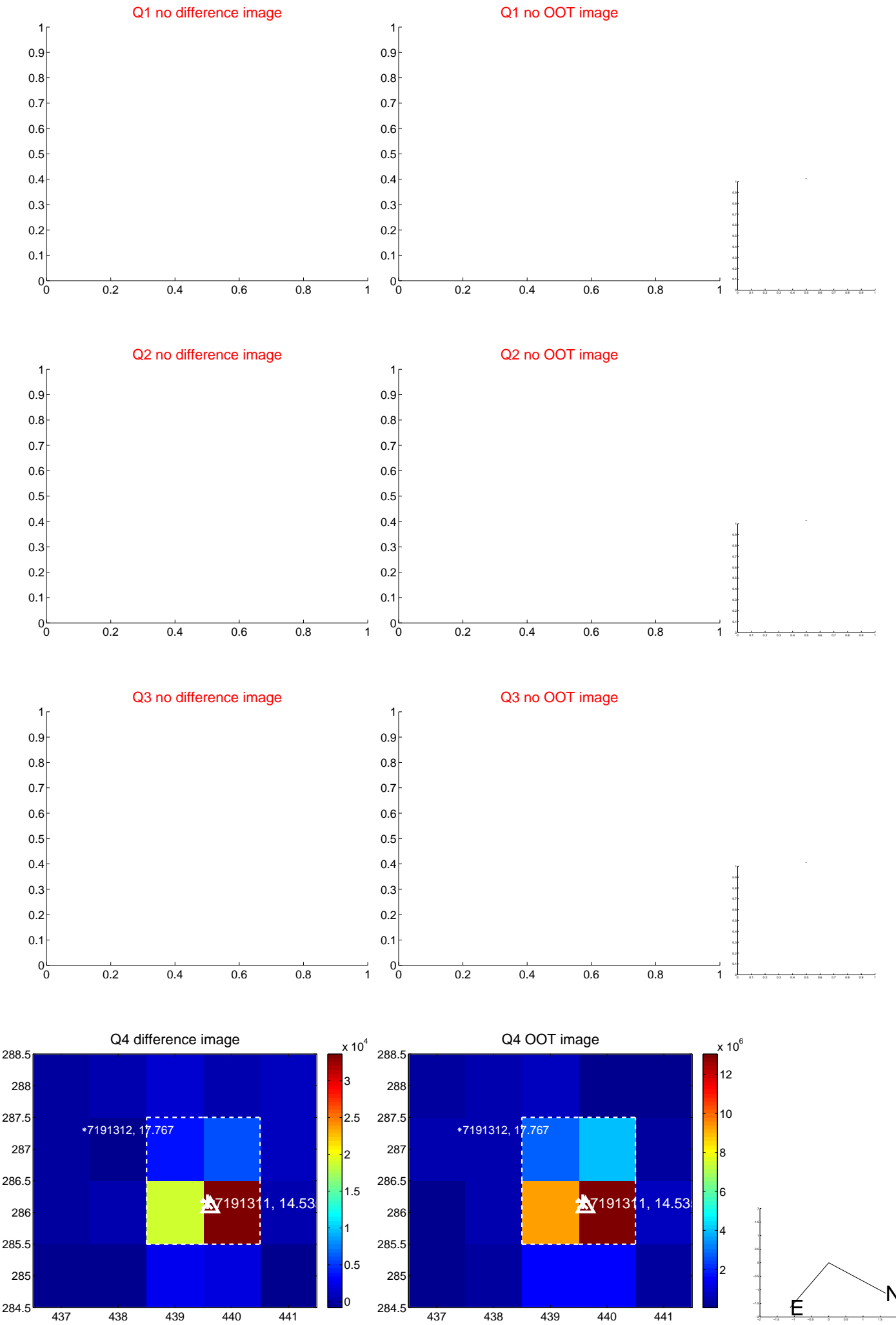


offset from photometric centroids



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.

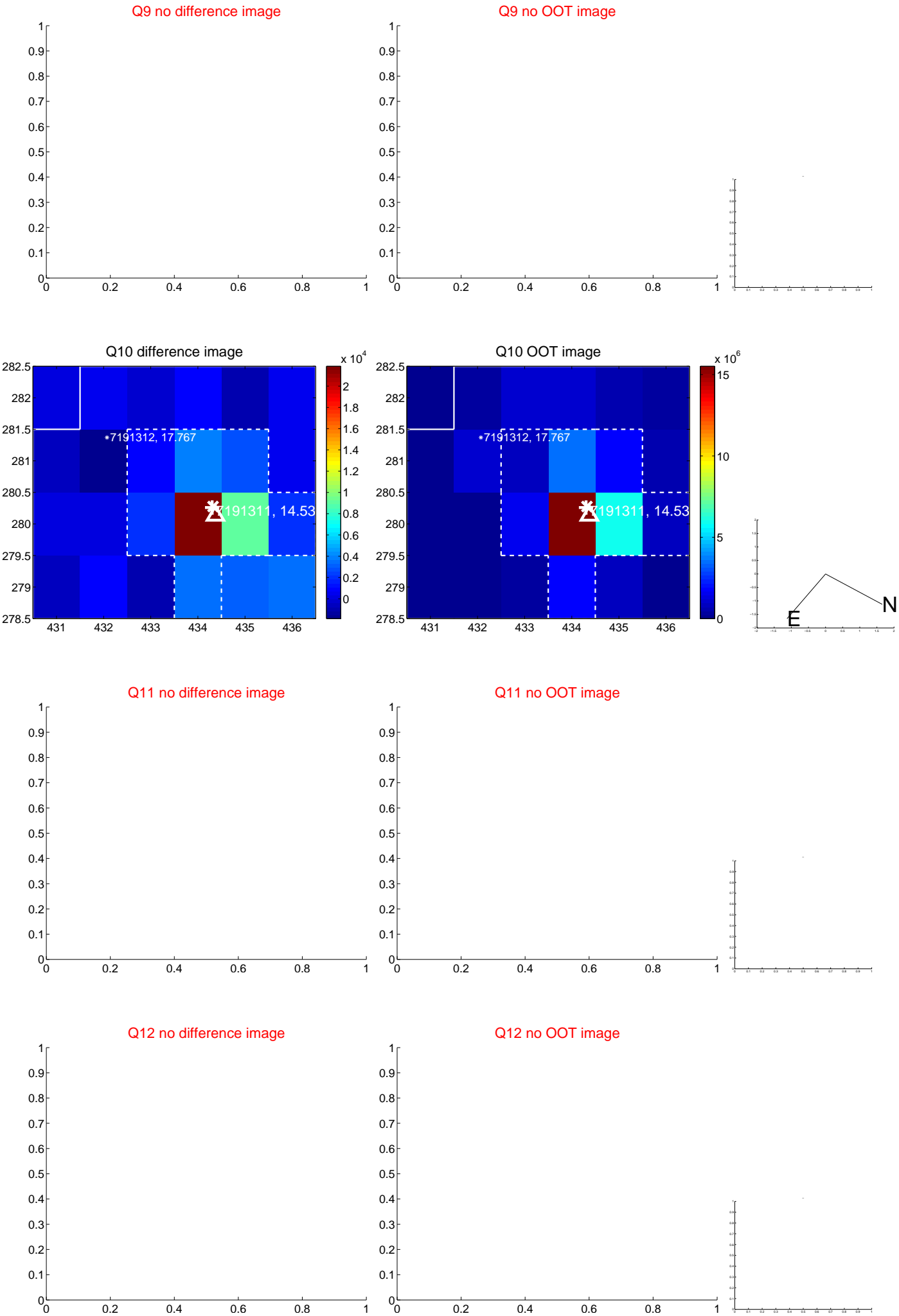
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



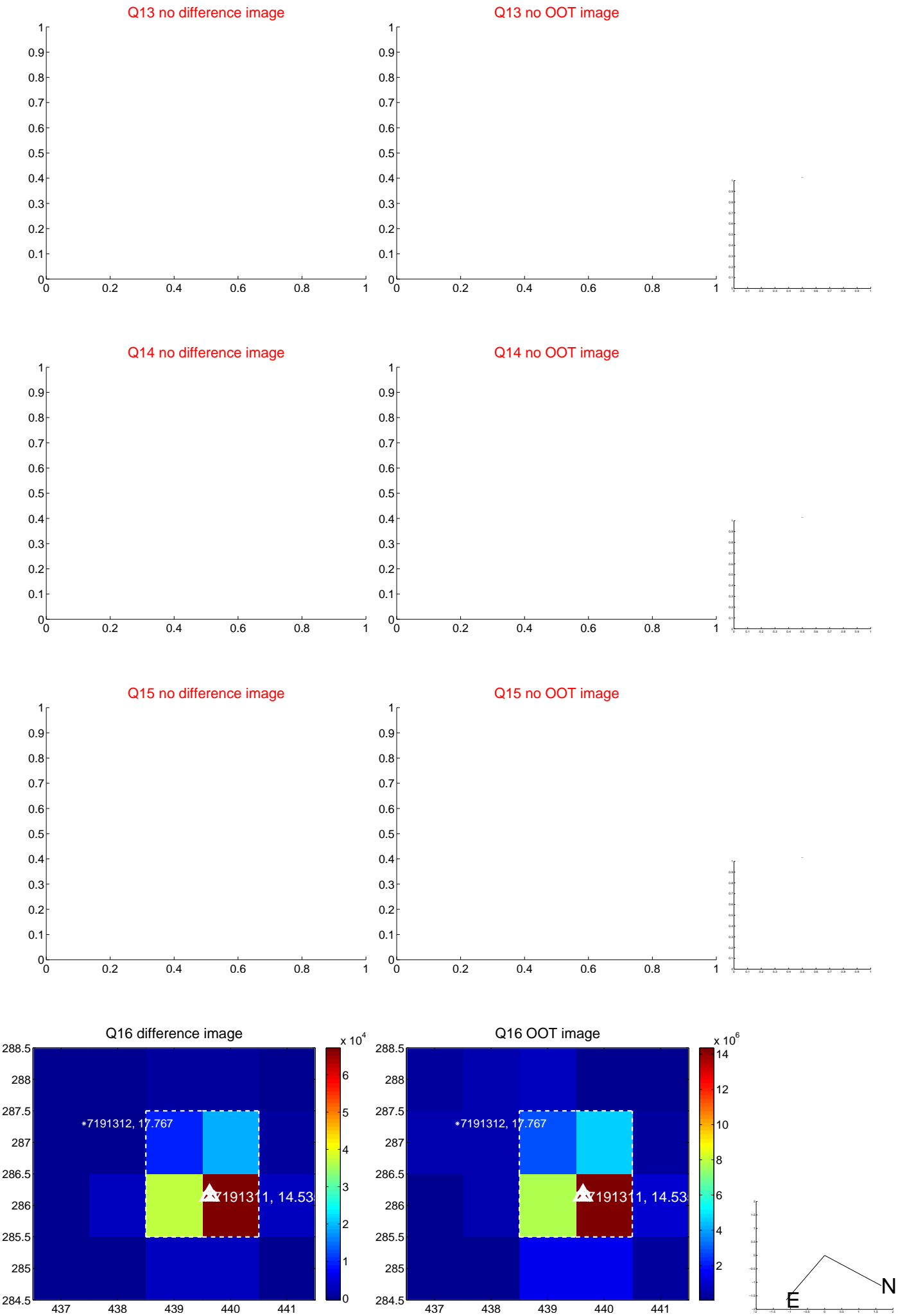
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



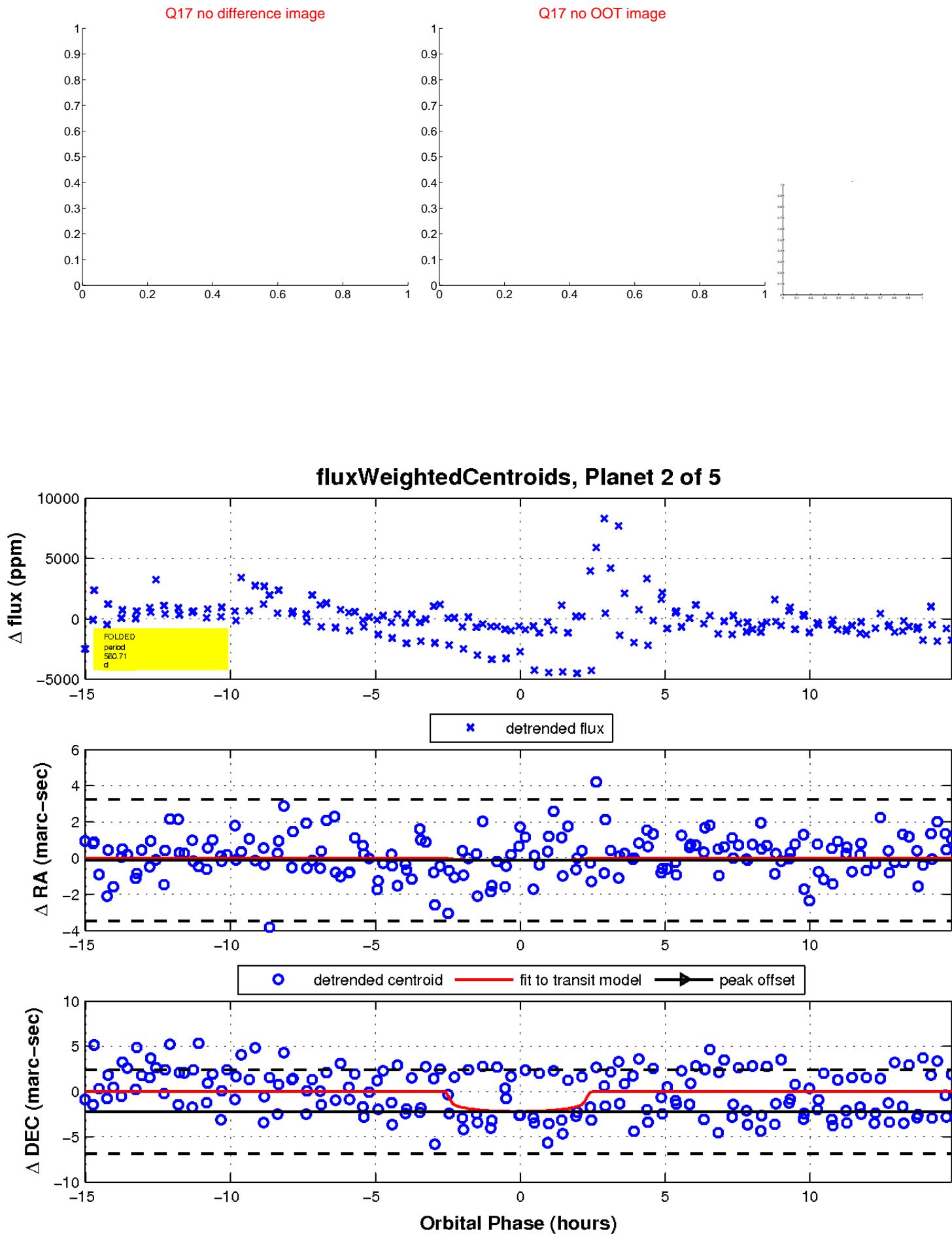
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



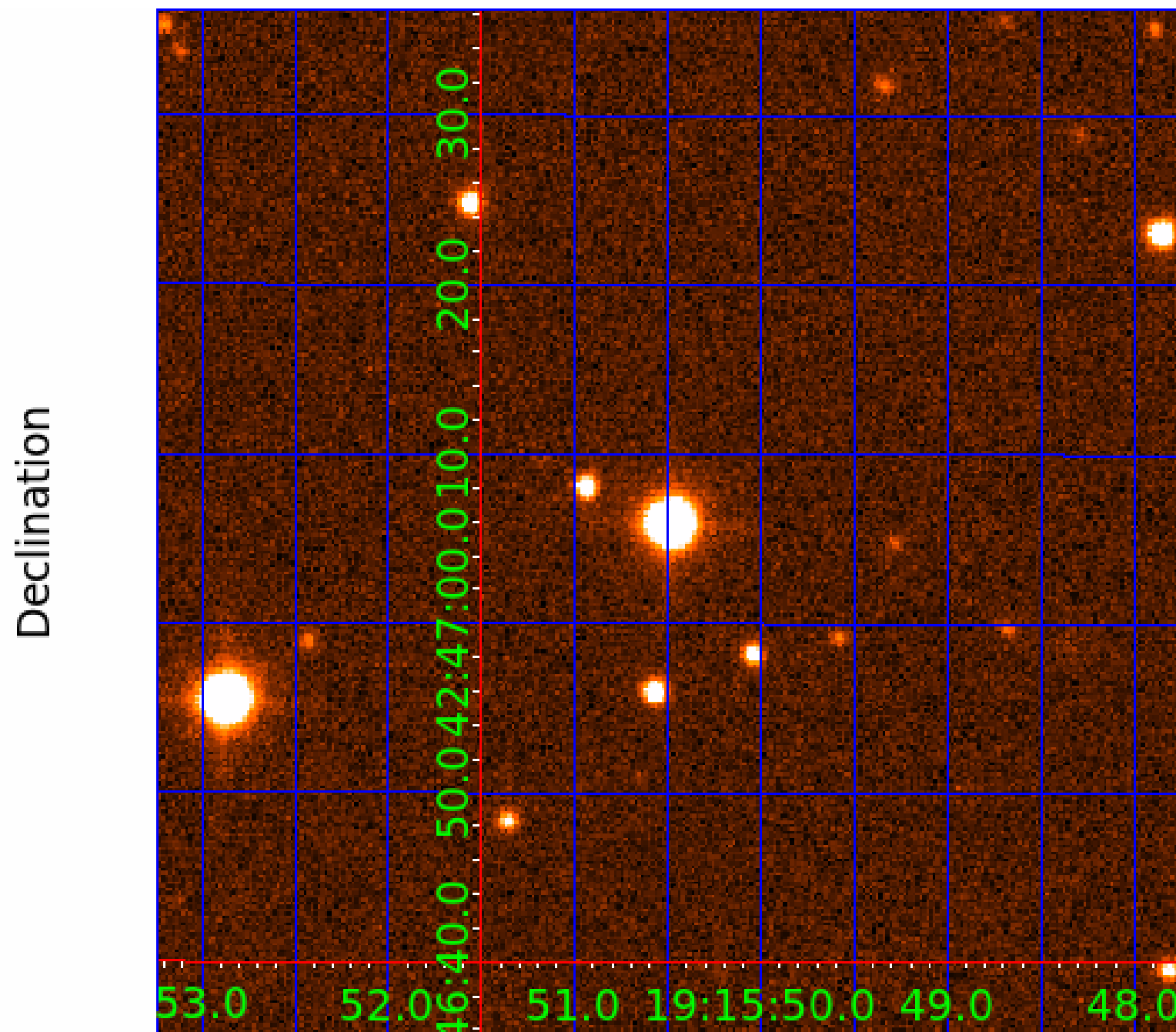
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



UKIRT Image



KIC 007191311

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})
007191311-01	OBS	No	666.160876	213.322133	1711.8	4.892	14.2	6.7	0.42	3677	1.77	0.02
007191311-02	OBS	No	560.711818	386.632503	2168.0	5.045	12.9	8.2	0.42	3677	2.01	0.03
007191311-03	OBS	No	547.267947	272.852055	2600.7	13.692	10.5	8.3	0.42	3677	2.30	0.03
007191311-04	OBS	No	497.528068	135.140244	1794.5	10.472	13.6	6.9	0.42	3677	1.79	0.03
007191311-05	OBS	No	260.456612	190.342825	994.9	4.534	9.9	5.2	0.42	3677	1.39	0.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007191311-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007191311-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_DV
007191311-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007191311-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007191311-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS

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

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

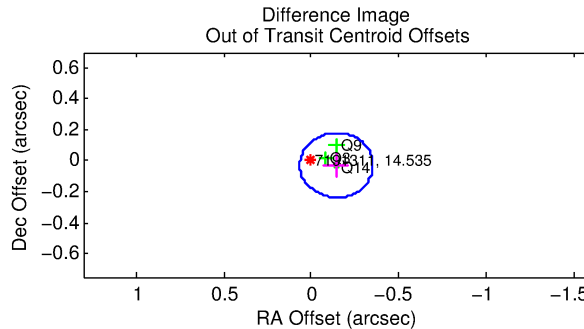
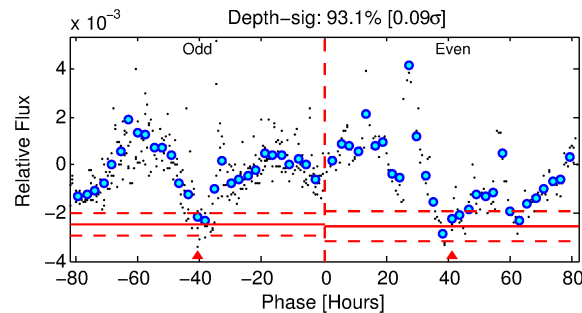
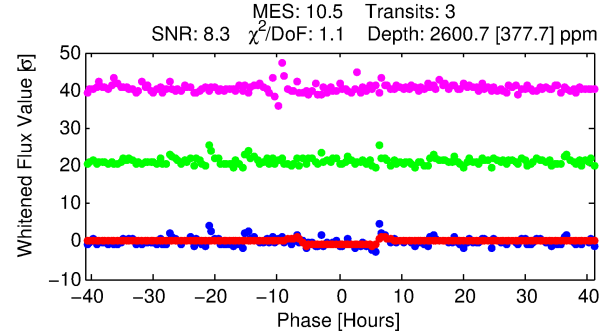
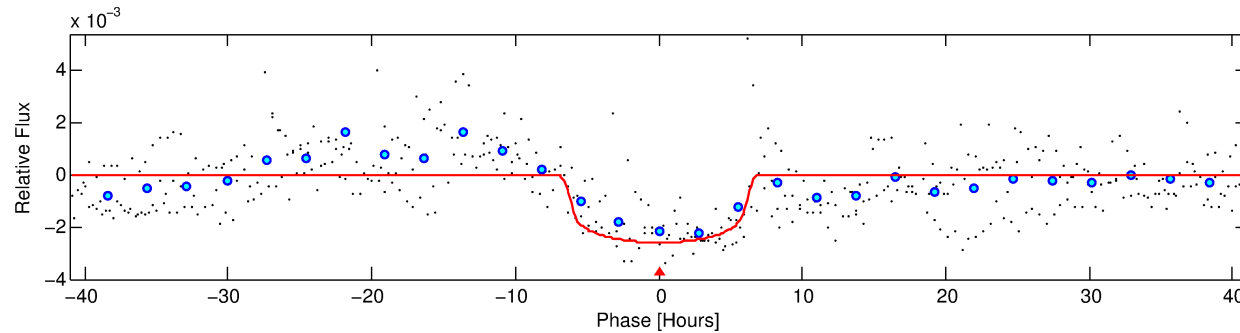
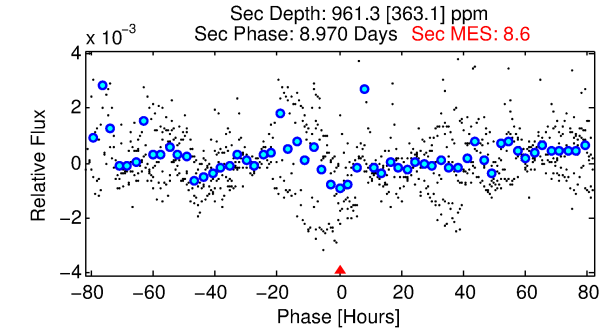
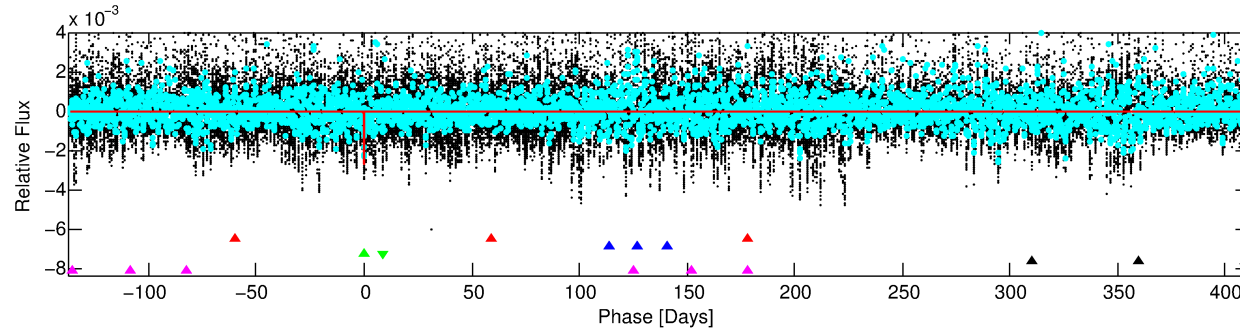
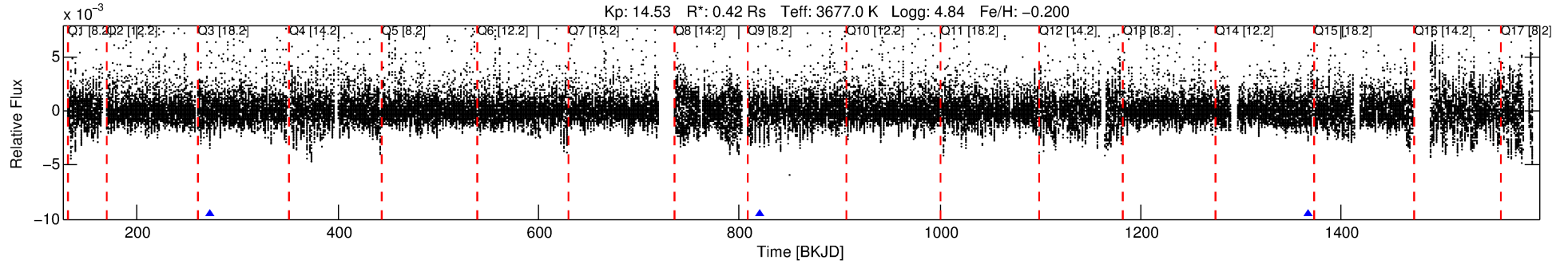
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007191311-03

No Significant Match Found

DV One-Page Summary

KIC: 7191311 Candidate: 3 of 5 Period: 547.268 d



DV Fit Results:

Period = 547.26795 [0.00694] d
Epoch = 272.8521 [0.0091] BKJD
Rp/R* = 0.0495 [0.0047]
a/R* = 244.49 [54.07]
b = 0.68 [0.18]
Seff = 0.03 [0.01]
Teq = 105 [5] K
Rp = 2.30 [0.41] Re
a = 1.0071 [0.1112] AU
Ag = 101656.37 [45066.15] [2.26 σ]
Teffp = 2909 [317] K [8.85 σ]

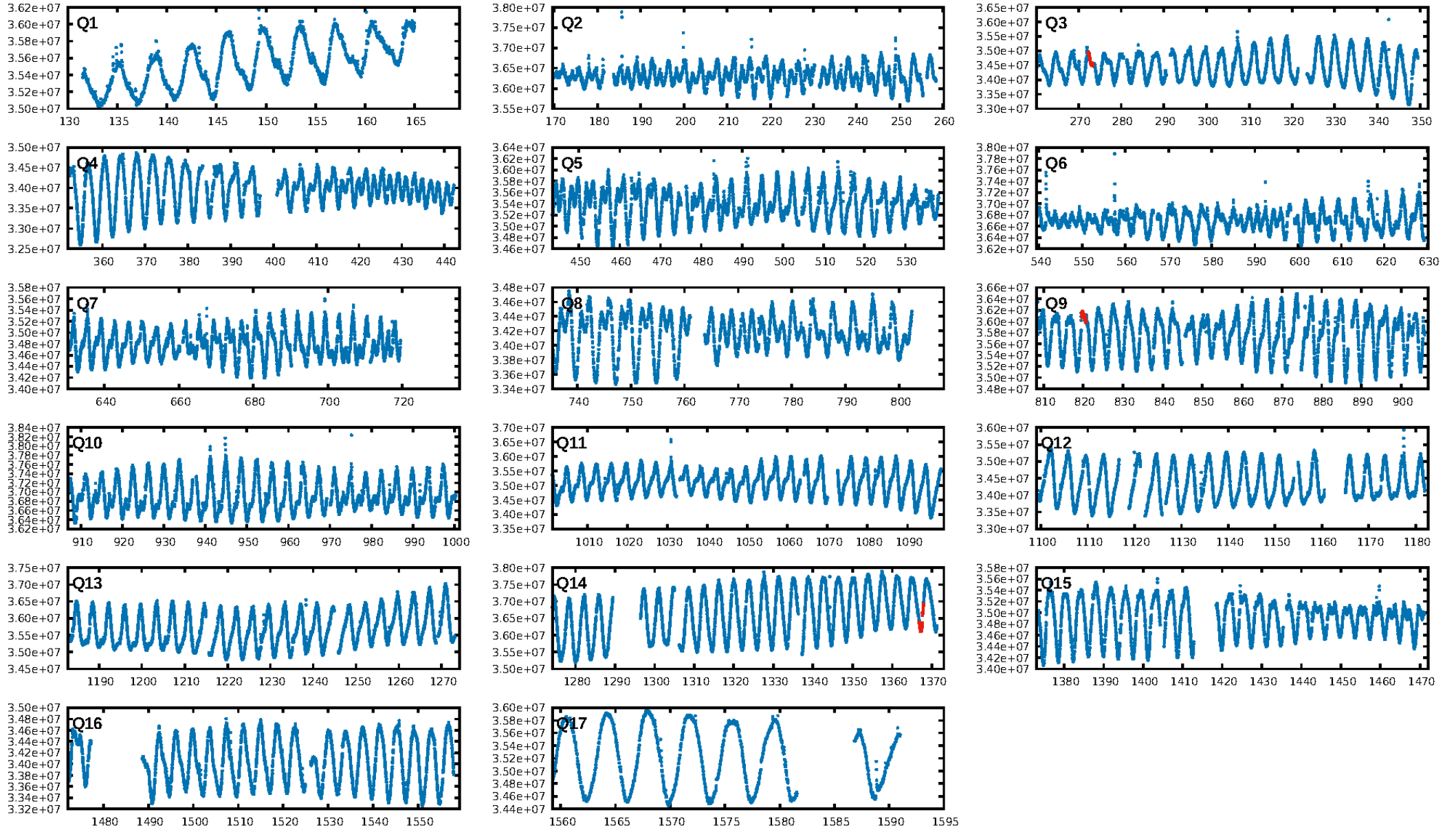
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [69.25 σ]
LongPeriod-sig: 100.0% [22.11 σ]
ModelChiSquare2-sig: 40.1%
ModelChiSquareGof-sig: 97.2%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -1.41
Centroid-sig: 0.4%
Centroid-so: 0.451 arcsec [1.56 σ]
OotOffset-rm: 0.145 arcsec [2.09 σ]
OotOffset-st: 1/1/0/1 [3]
KicOffset-rm: 0.073 arcsec [1.05 σ]
KicOffset-st: 1/1/0/1 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 1.00 [3/3]

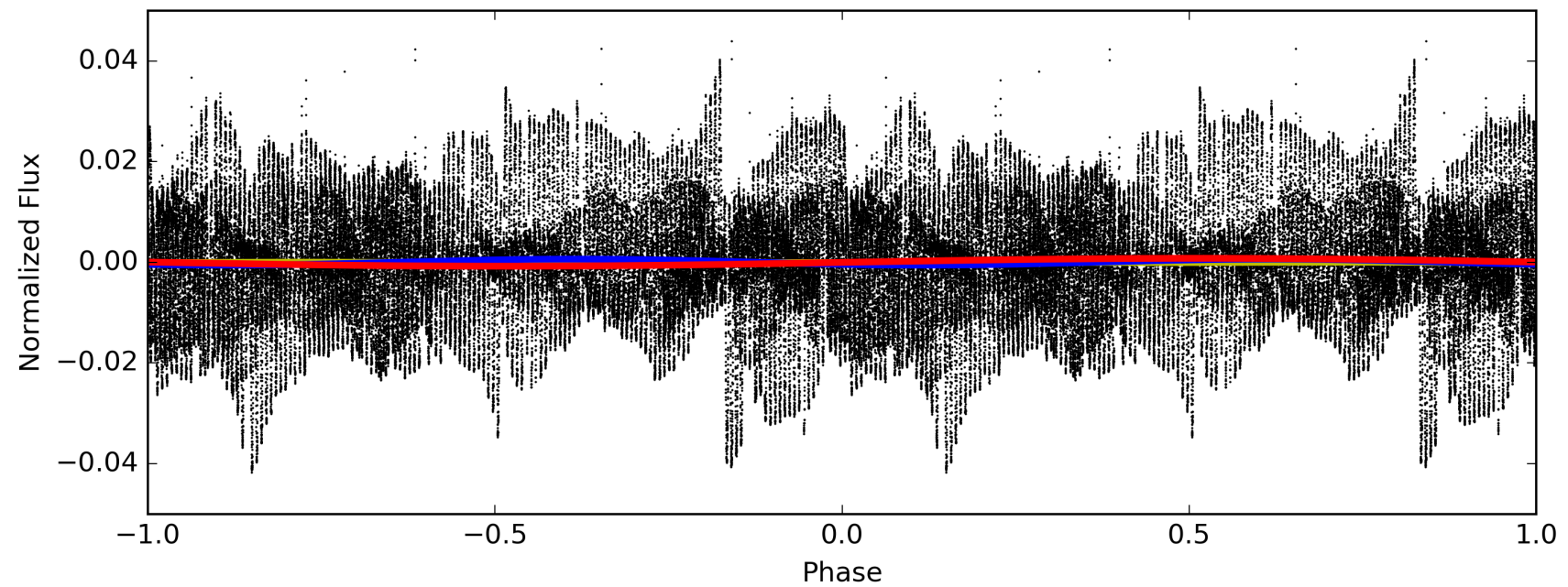
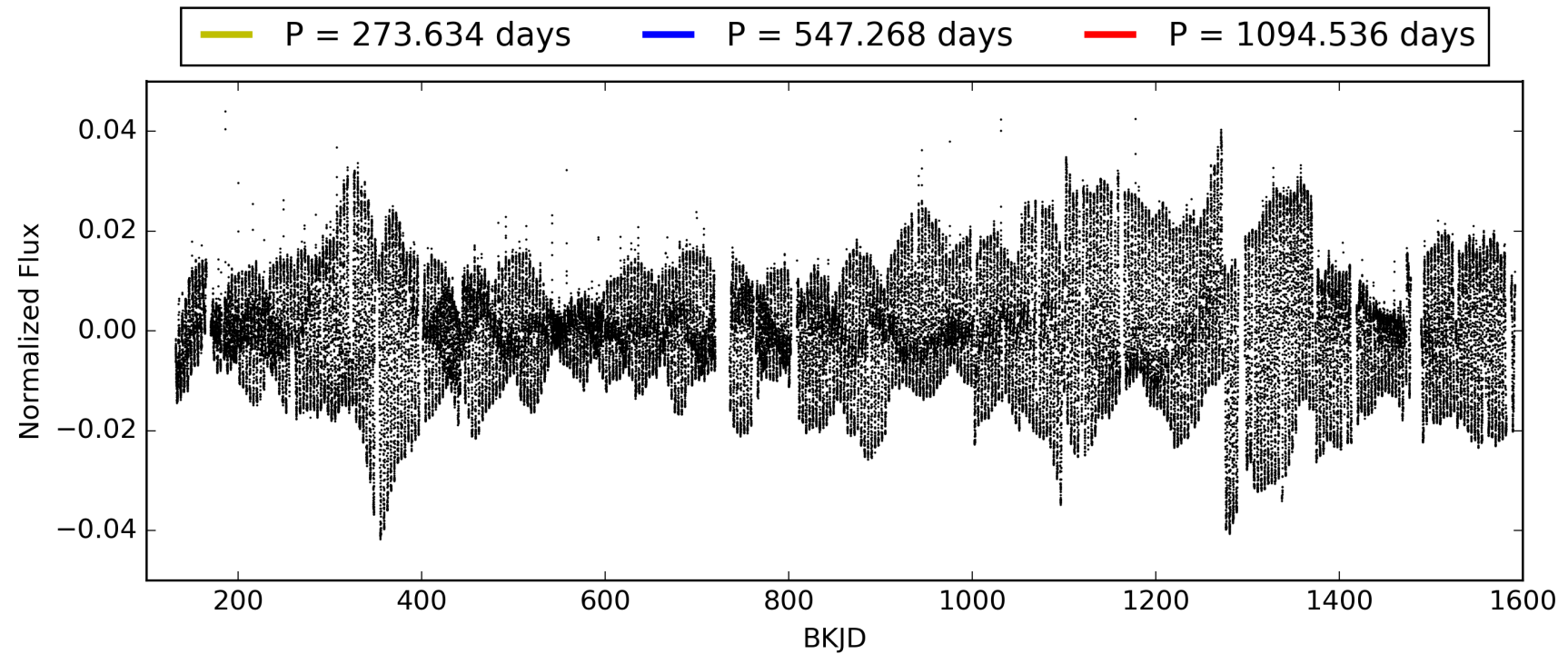
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:30:39 Z

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

TCE 007191311-03, PDC Light Curves

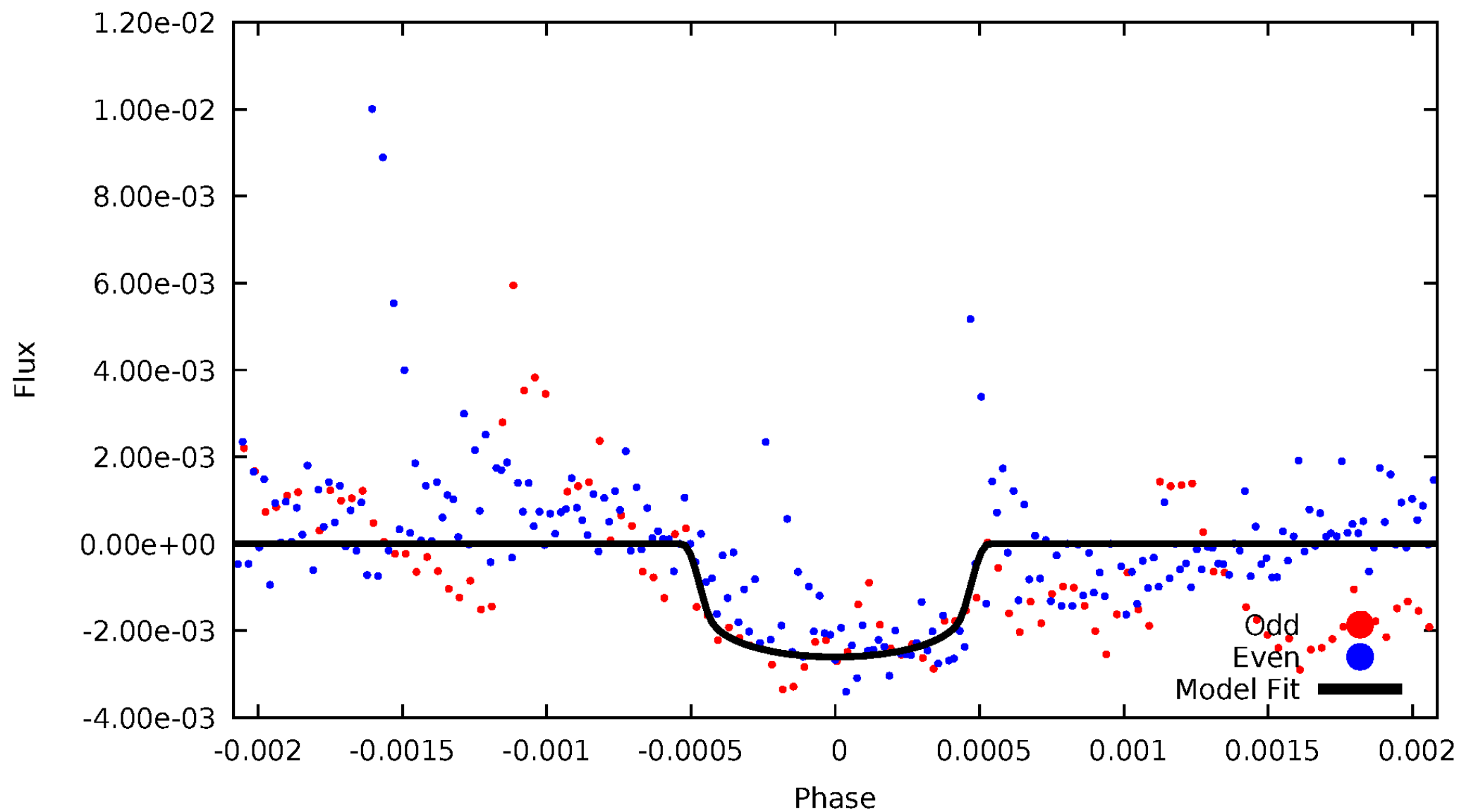


TCE 007191311-03



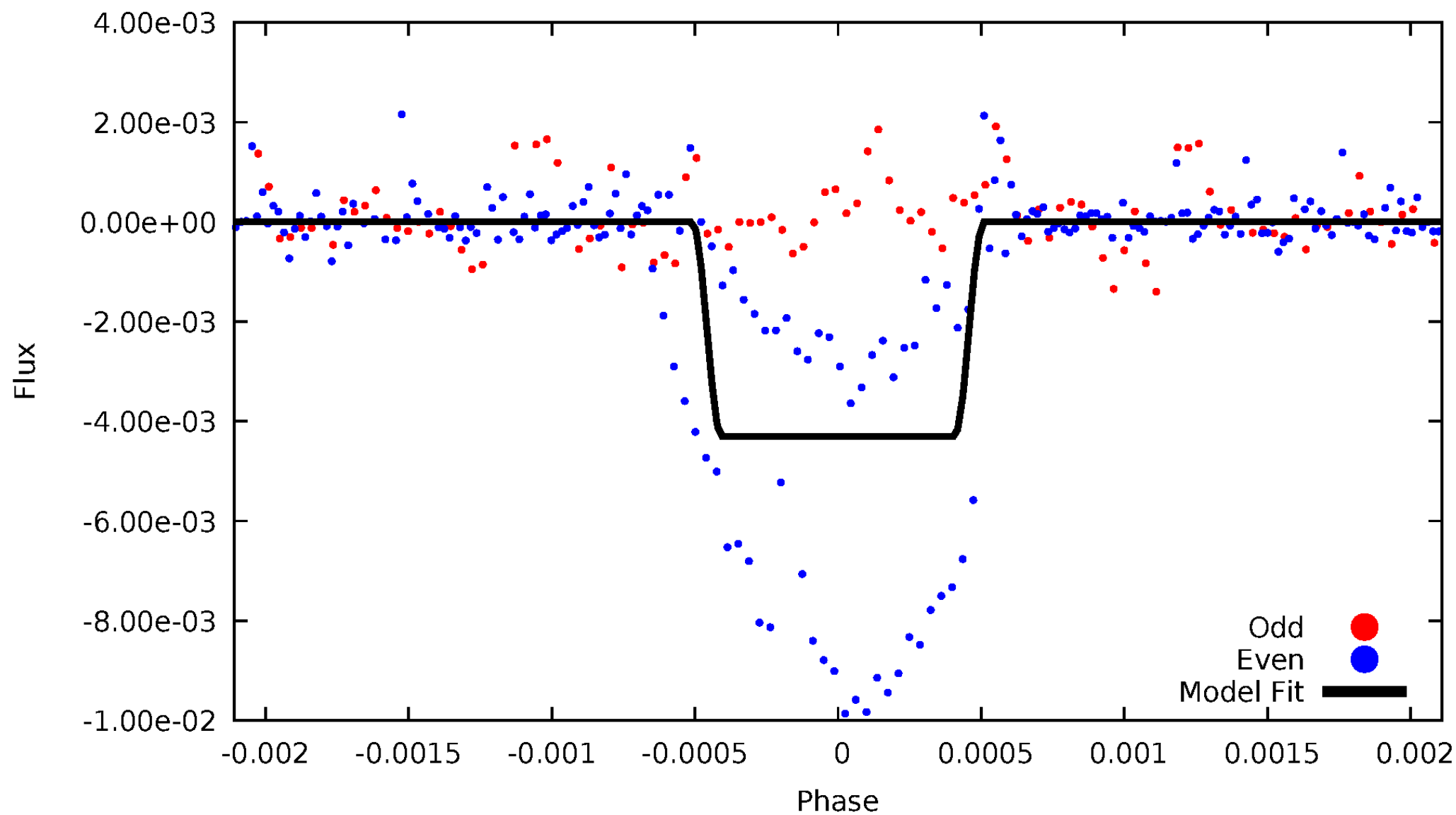
DV Odd/Even

TCE 007191311-03



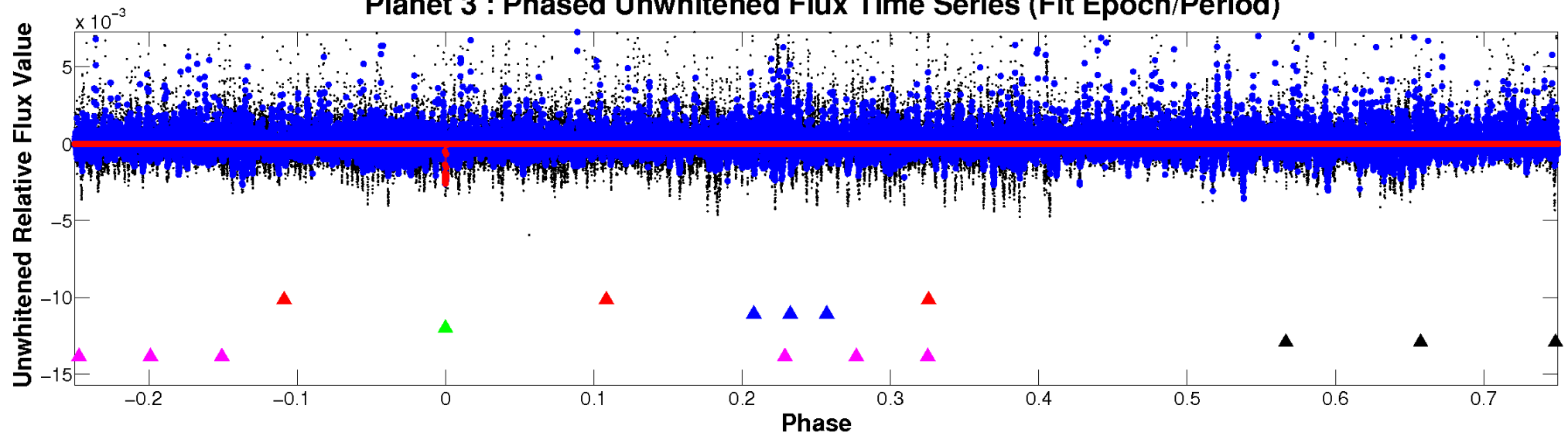
ALT Odd/Even

TCE 007191311-03

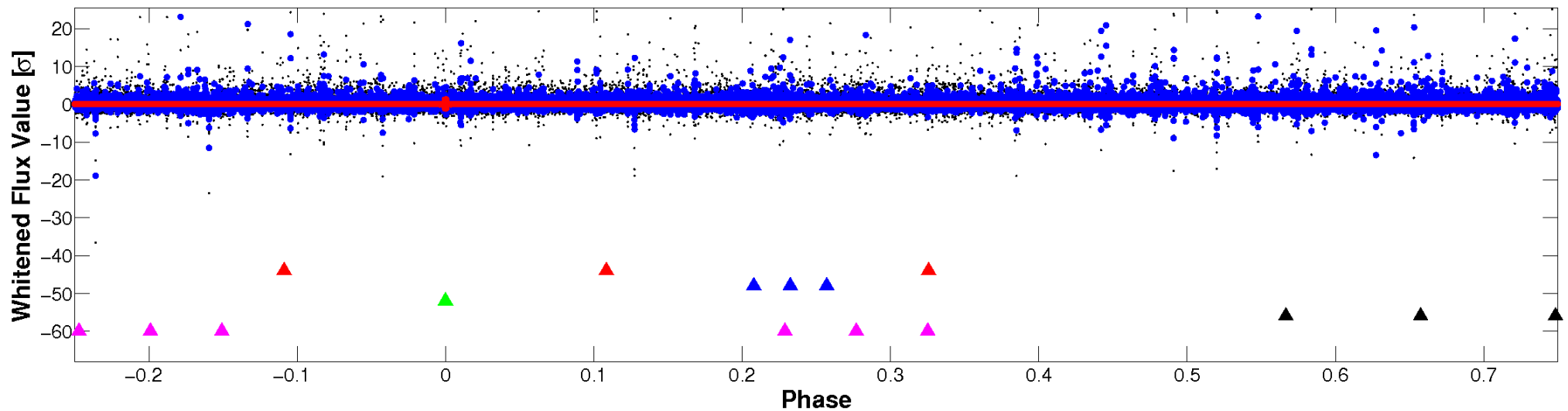


Non-Whitened Vs. Whitened Light Curve

Planet 3 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

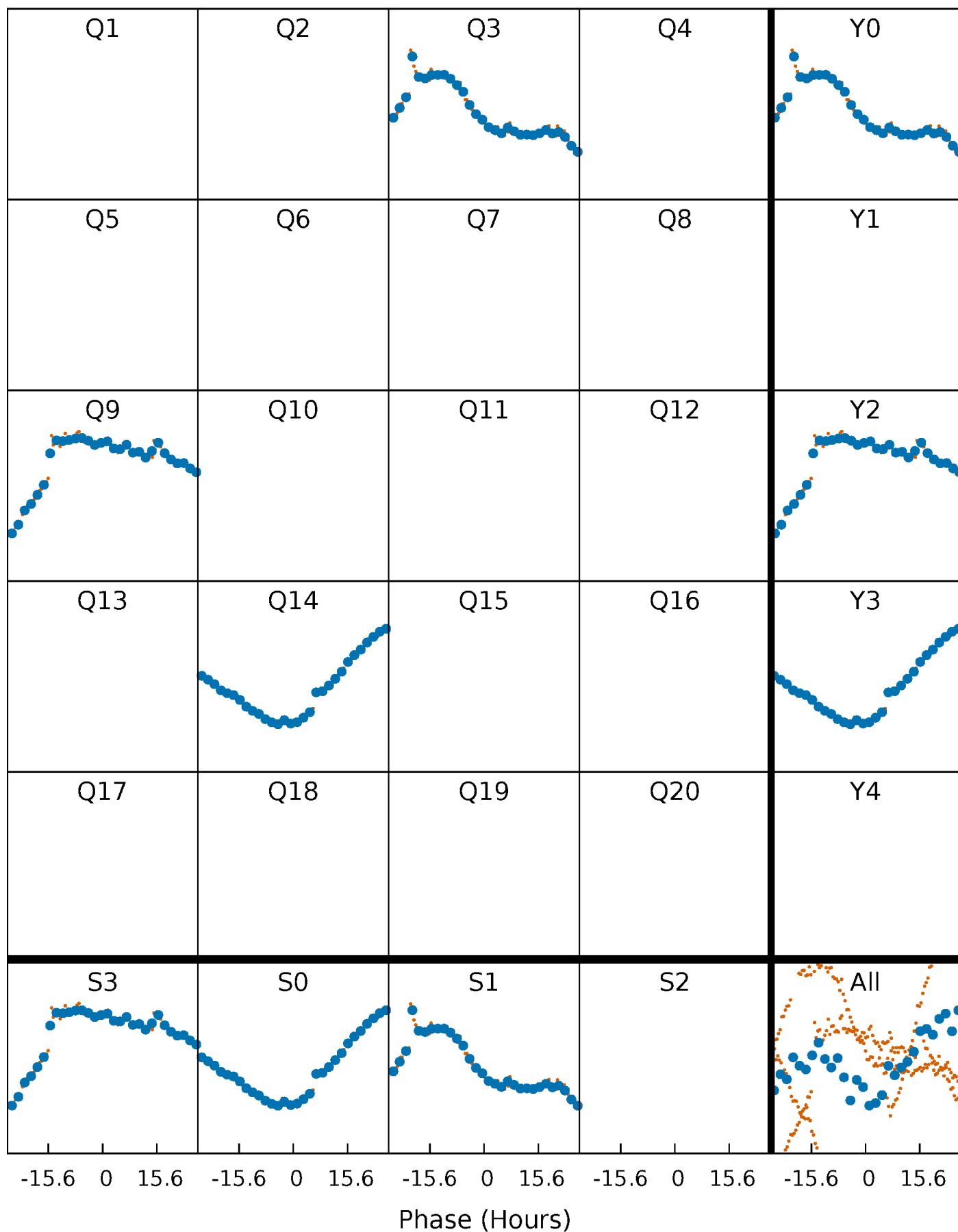


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



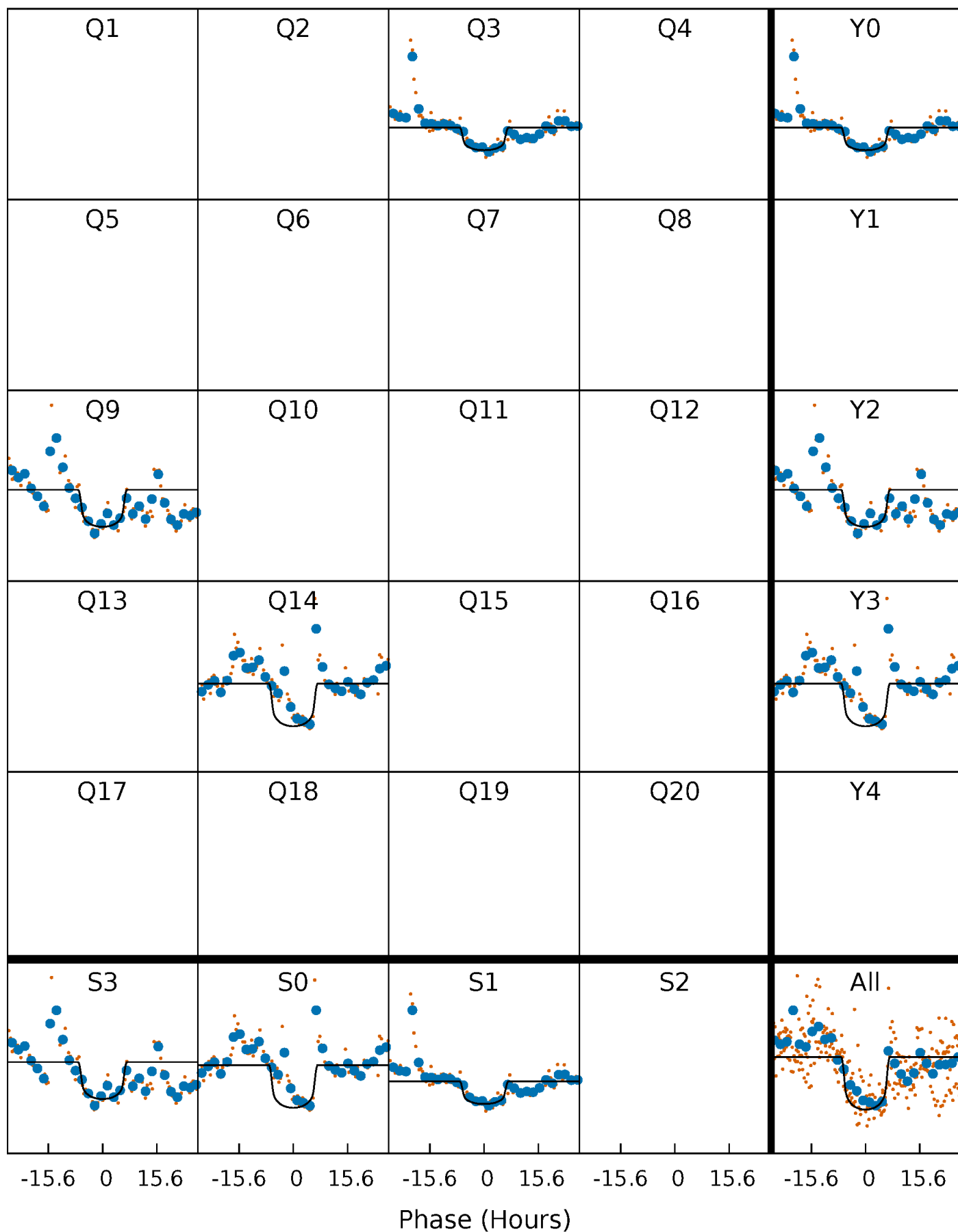
PDC Quarter-Phased Transit Curves

TCE 007191311-03 P=547.267947 Days $T_0=272.852055$ (BKJD)



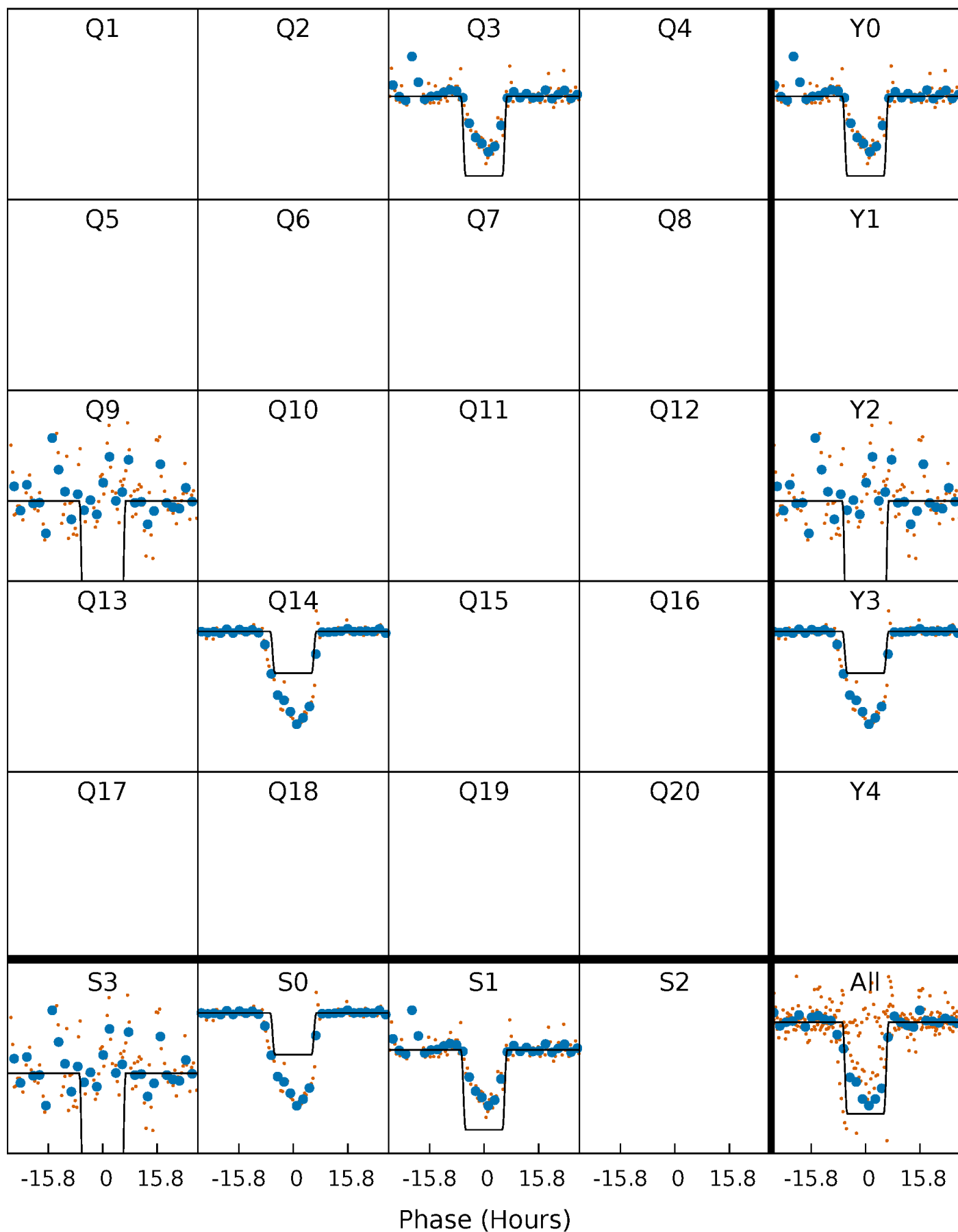
DV Quarter-Phased Transit Curves

TCE 007191311-03 P=547.267947 Days $T_0=272.852055$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

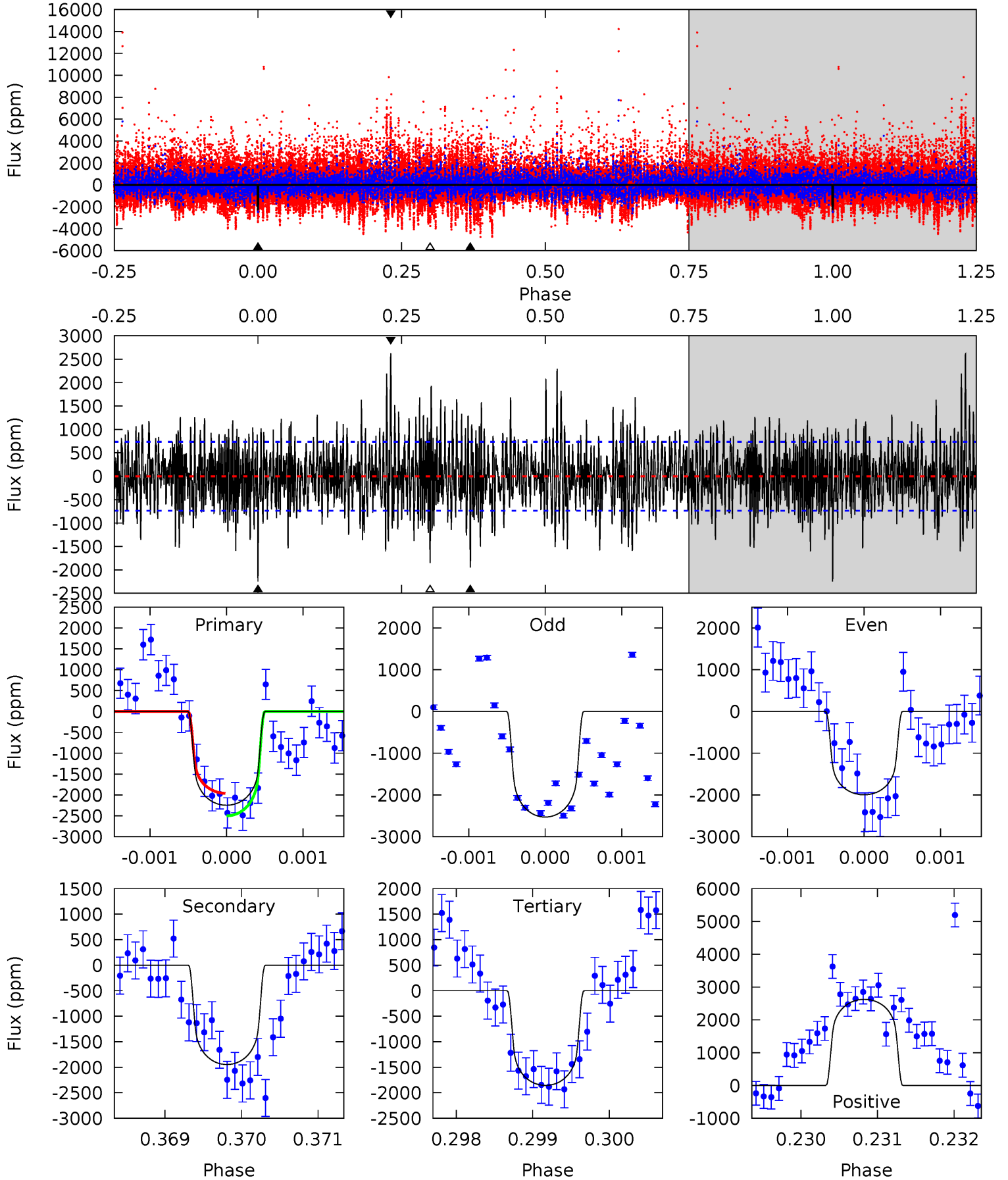
TCE 007191311-03 P=547.258415 Days $T_0=272.848393$ (BKJD)



DV Model-Shift Uniqueness Test

007191311-03, P = 547.267947 Days, E = 272.852055 Days

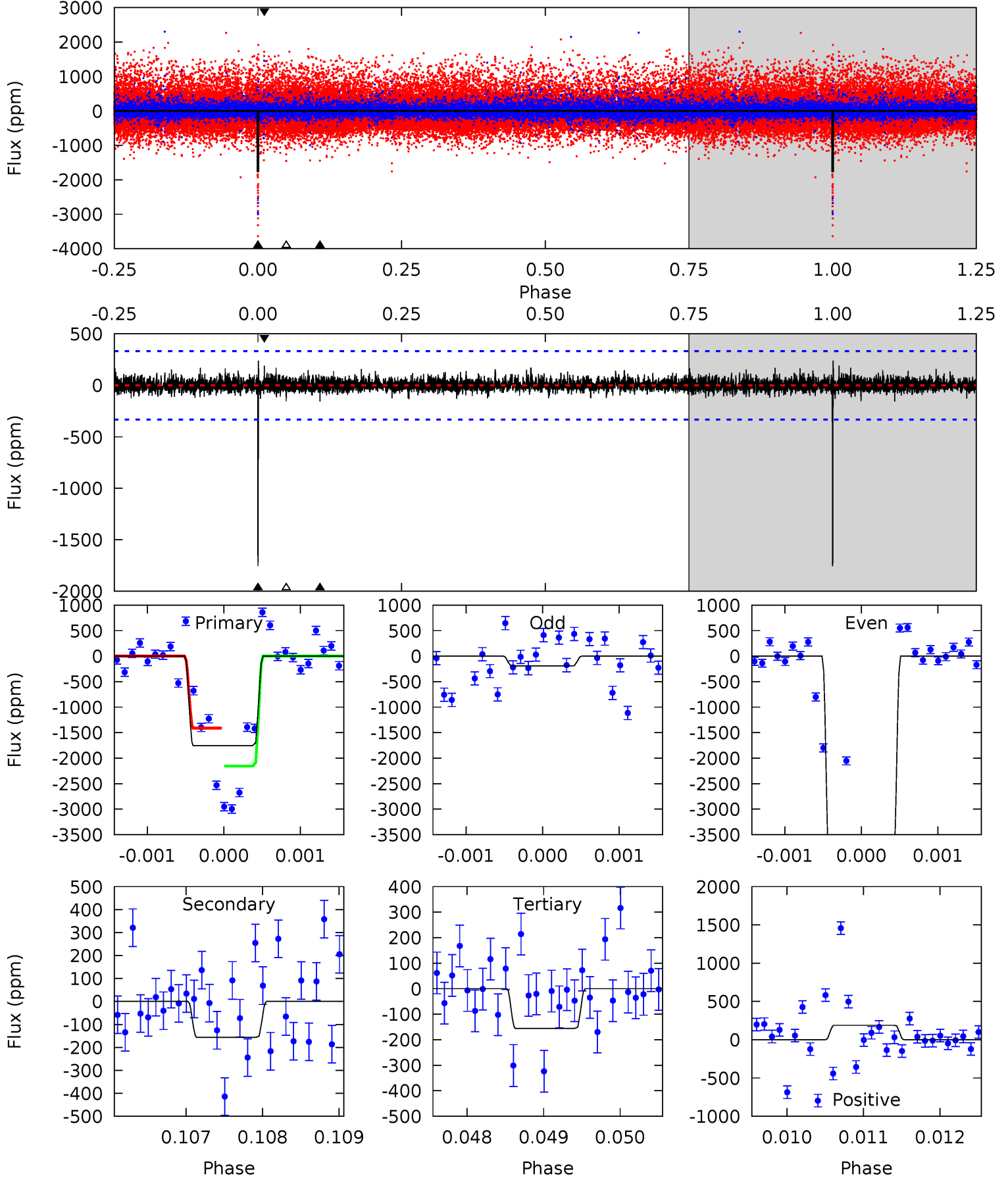
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.6	14.4	13.7	19.4	5.44	3.27	4.24	2.90	-2.80	0.68	-5.02	1.74	0.87	0.54	2.00



Alt Model-Shift Uniqueness Test

007191311-03, P = 547.258415 Days, E = 272.848393 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
28.8	2.56	2.55	3.10	5.45	3.29	0.58	26.2	25.7	0.01	-0.54	51.0	1.53	0.12	0



Stellar Parameters For KIC 007191311

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3677^{+82}_{-100}	$4.839^{+0.060}_{-0.060}$	$-0.200^{+0.200}_{-0.200}$	$0.425^{+0.052}_{-0.064}$	$0.456^{+0.046}_{-0.069}$	$8.332^{+2.960}_{-1.835}$
	+2%/-3%	+1%/-1%	+100%/-100%	+12%/-15%	+10%/-15%	+36%/-22%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 007191311-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1947 ± 135	$2.29^{+0.28}_{-0.28}$	147^{+5}_{-5}	3541^{+147}_{-123}	207283^{+54468}_{-41356}
Alt.	-156 ± 61	$3.05^{+0.29}_{-0.29}$	147^{+5}_{-5}	2319^{+114}_{-127}	9159^{+4094}_{-3721}

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 $A_{obs} \gg 1.0$

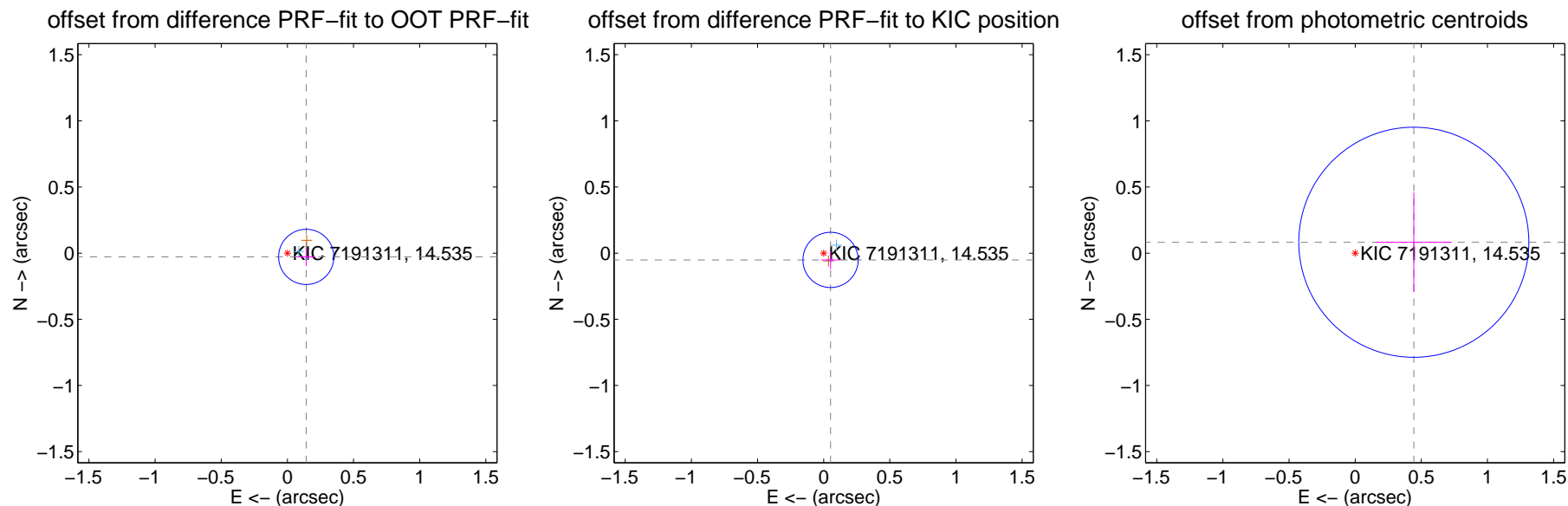
DV Centroid Data

Supplemental centroid analysis for 007191311-03. Kepler magnitude: 14.54. Transit SNR 8.29

There are 2 quarters with good PRF difference image offsets

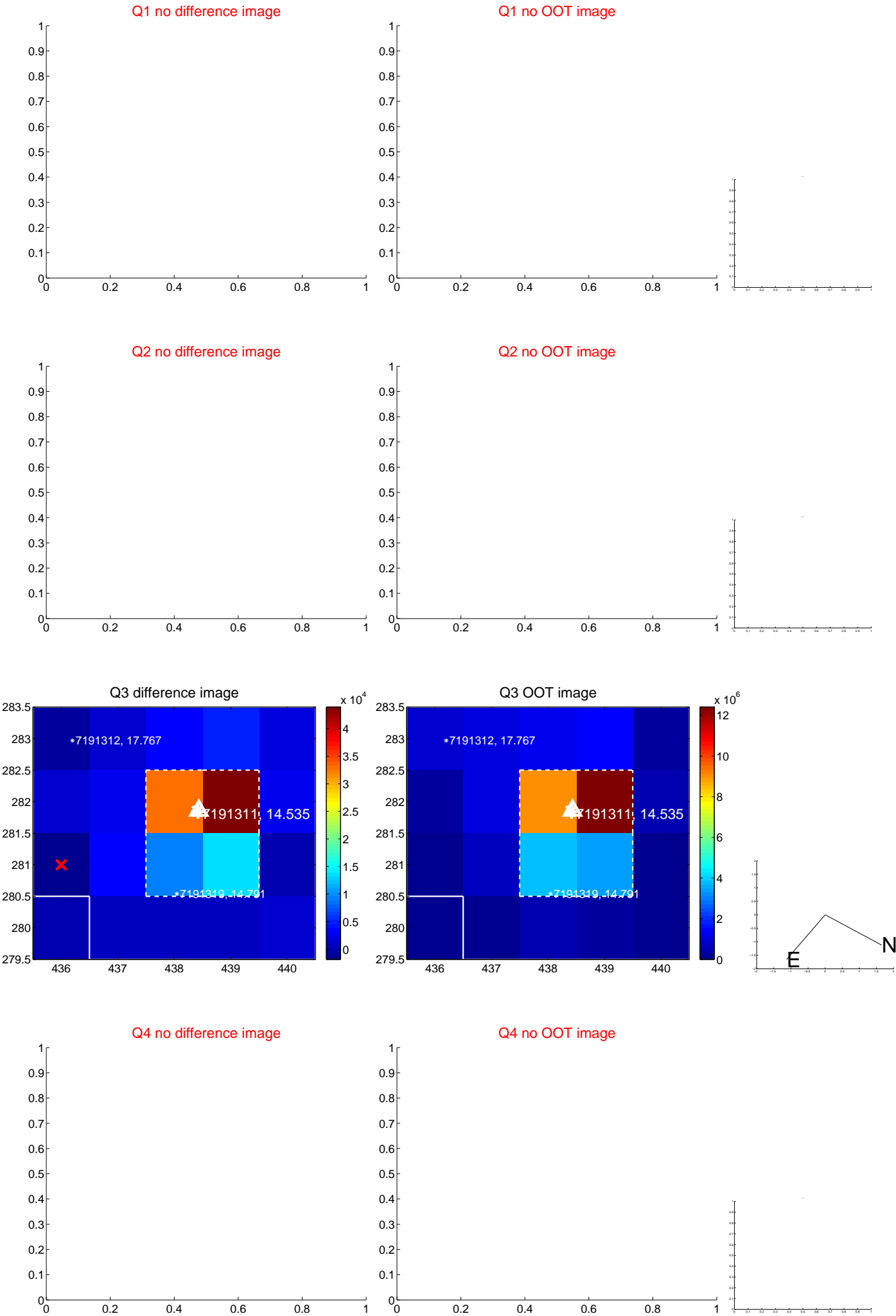
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.145 ± 0.070	2.09	-0.142 ± 0.070	-0.028 ± 0.070
PRF-fit source offset from KIC position	0.073 ± 0.070	1.05	-0.052 ± 0.070	-0.051 ± 0.070
photometric centroid source offset	0.45 ± 0.29	1.56	-0.44 ± 0.29	0.08 ± 0.38



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.

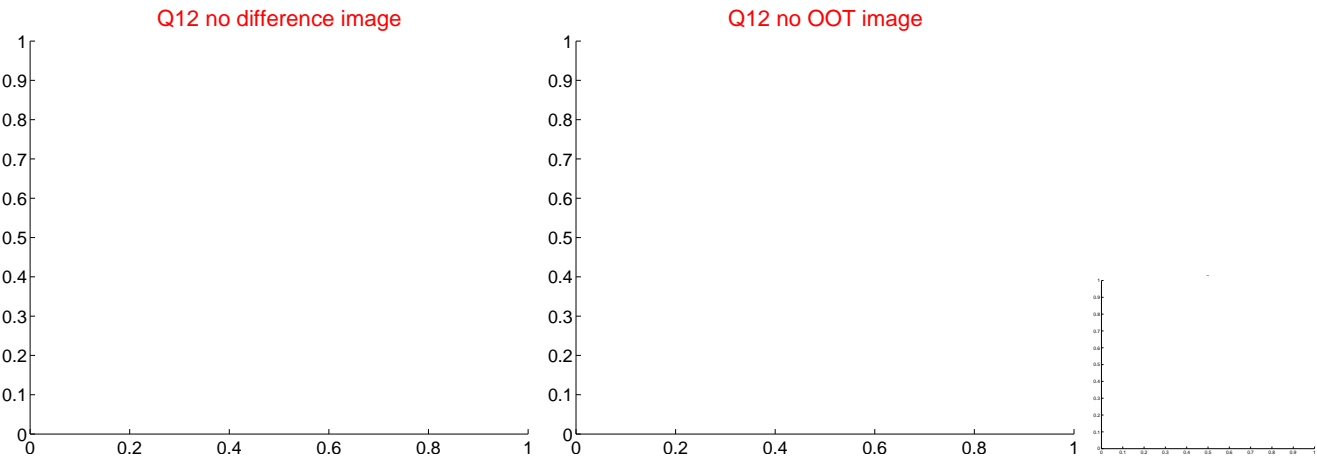
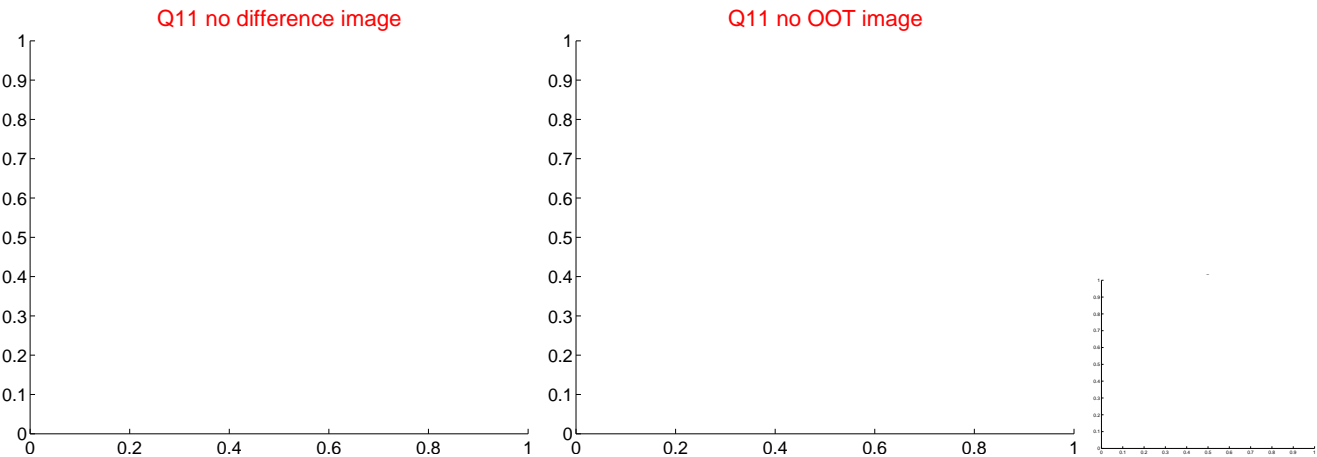
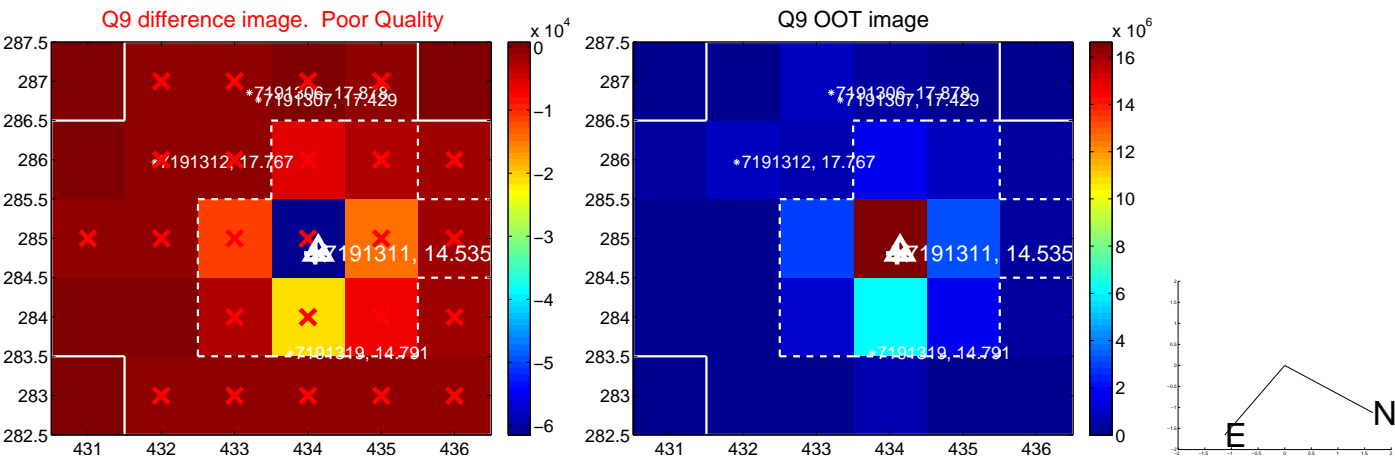
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

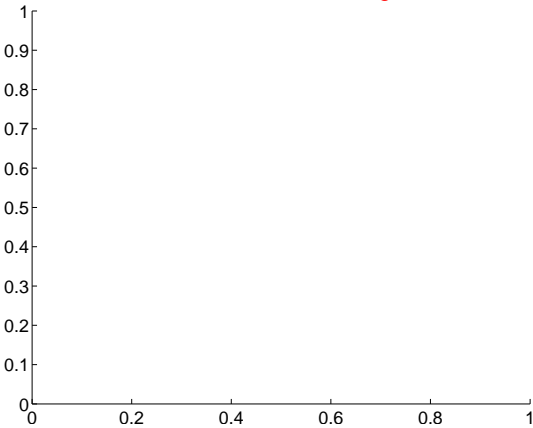


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

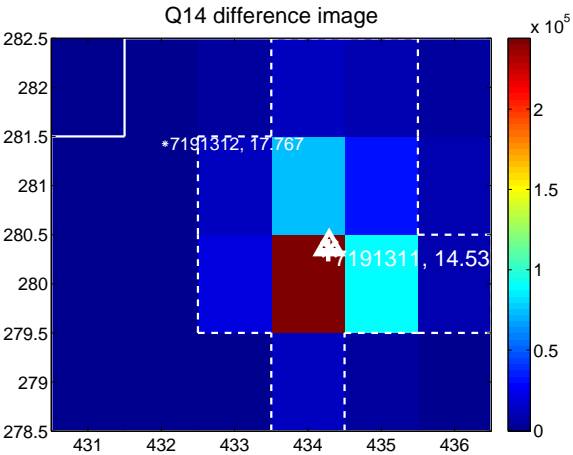
Q13 no difference image



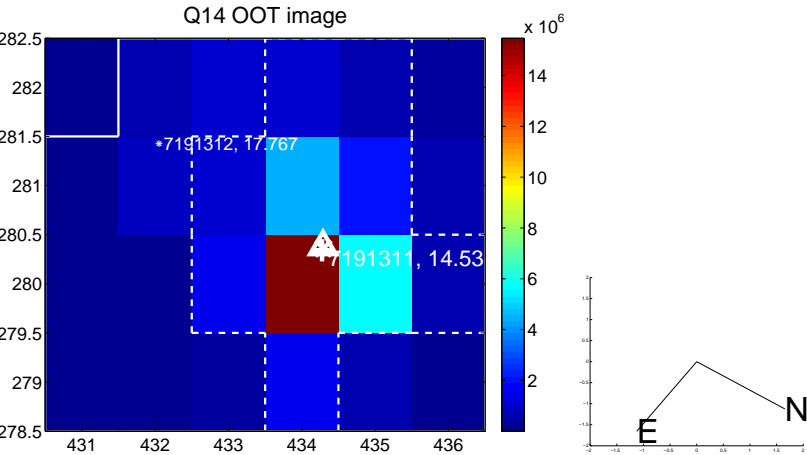
Q13 no OOT image



Q14 difference image



Q14 OOT image



Q15 no difference image



Q15 no OOT image



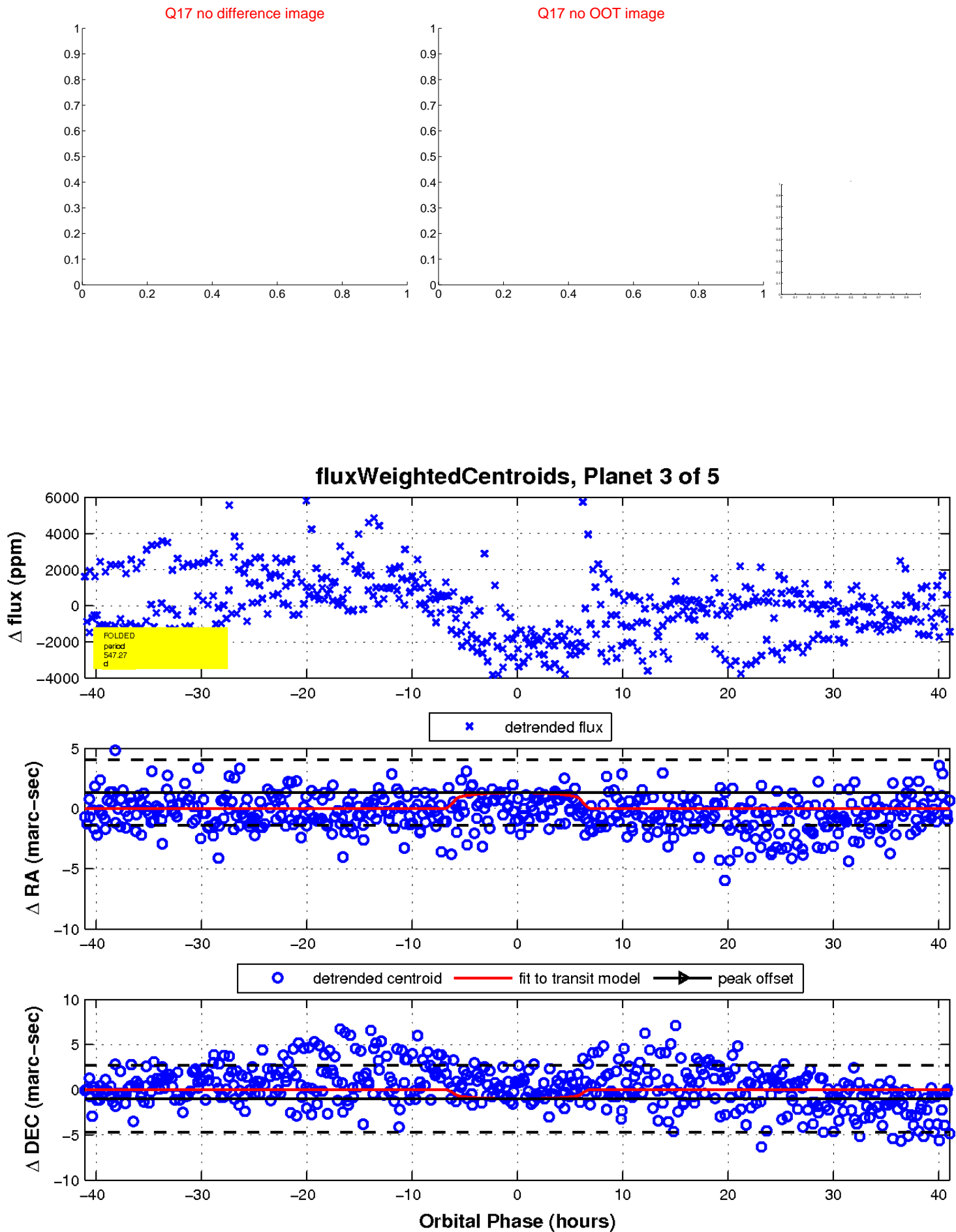
Q16 no difference image



Q16 no OOT image

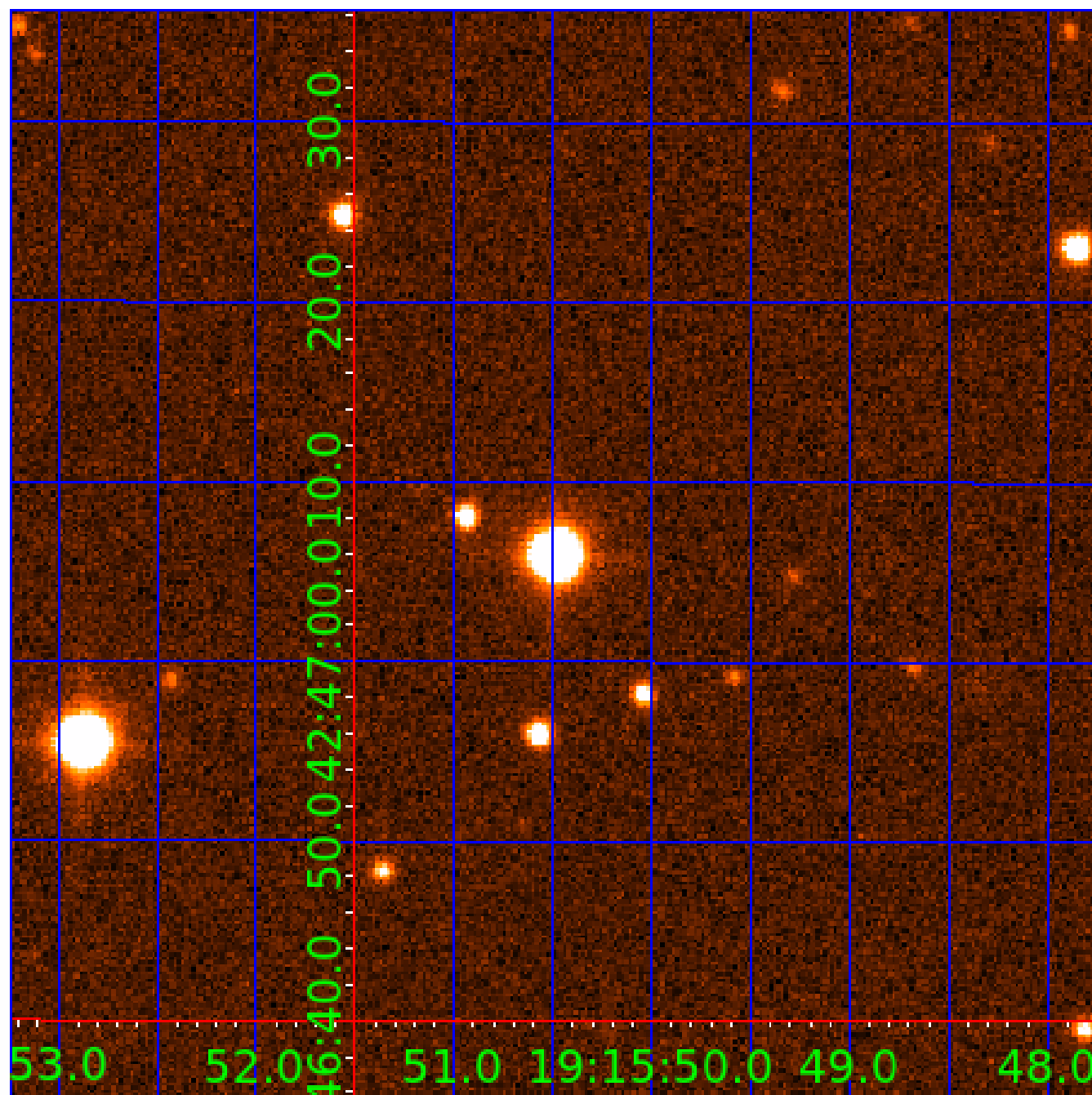


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007191311

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})
007191311-01	OBS	No	666.160876	213.322133	1711.8	4.892	14.2	6.7	0.42	3677	1.77	0.02
007191311-02	OBS	No	560.711818	386.632503	2168.0	5.045	12.9	8.2	0.42	3677	2.01	0.03
007191311-03	OBS	No	547.267947	272.852055	2600.7	13.692	10.5	8.3	0.42	3677	2.30	0.03
007191311-04	OBS	No	497.528068	135.140244	1794.5	10.472	13.6	6.9	0.42	3677	1.79	0.03
007191311-05	OBS	No	260.456612	190.342825	994.9	4.534	9.9	5.2	0.42	3677	1.39	0.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007191311-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007191311-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_DV
007191311-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007191311-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007191311-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS

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

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

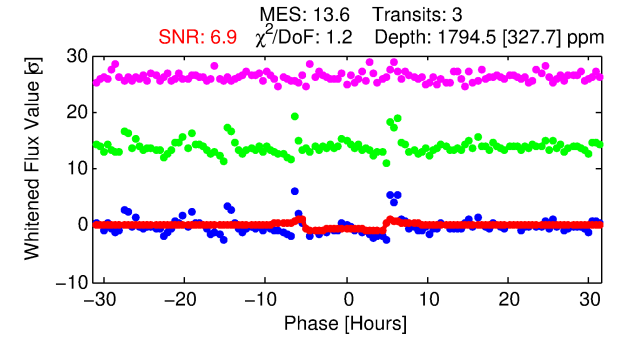
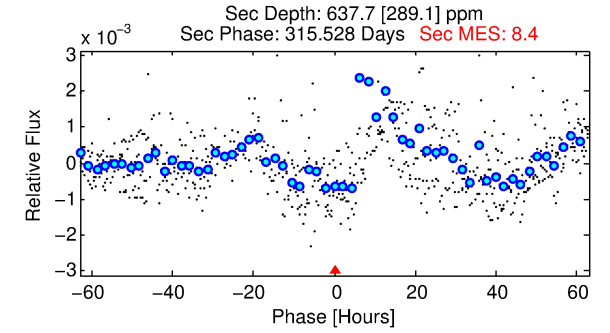
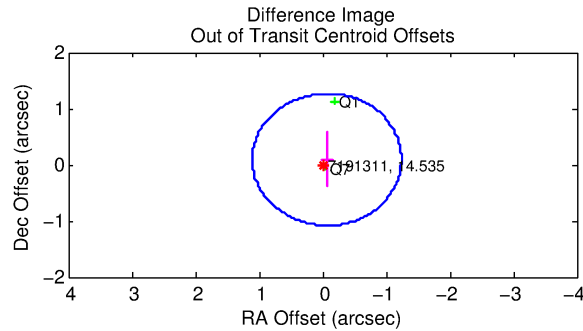
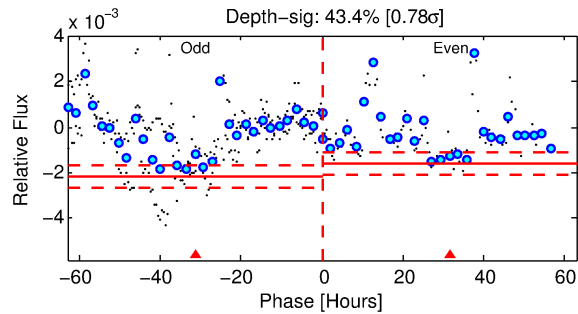
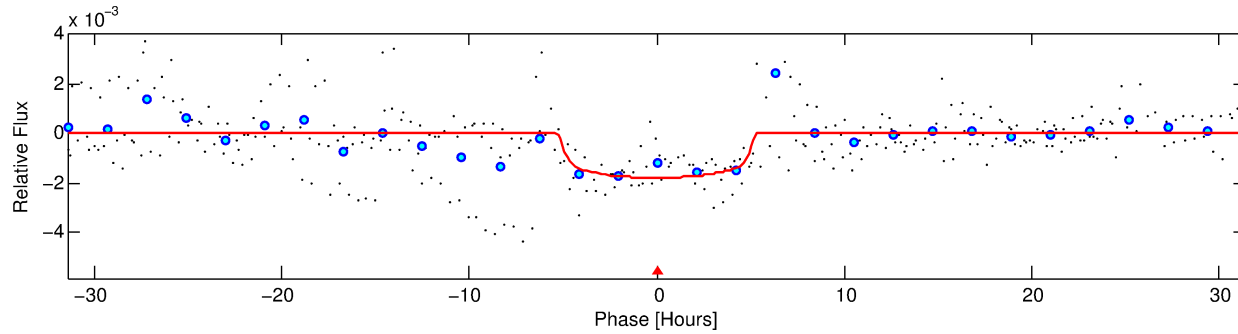
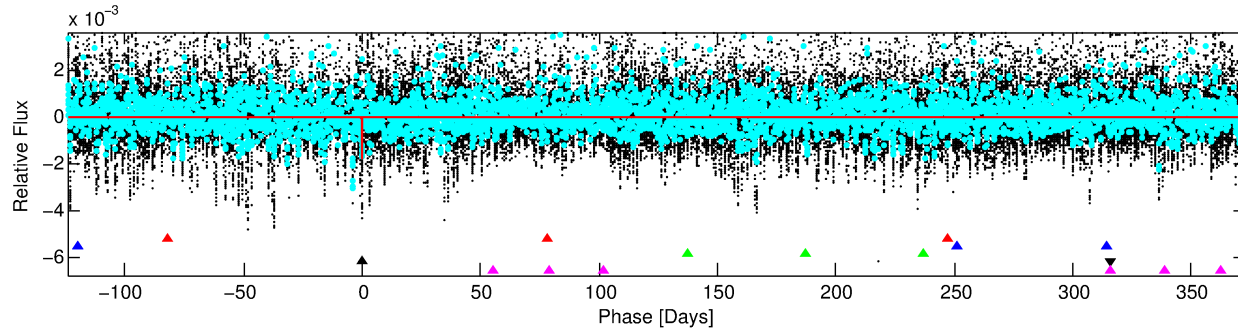
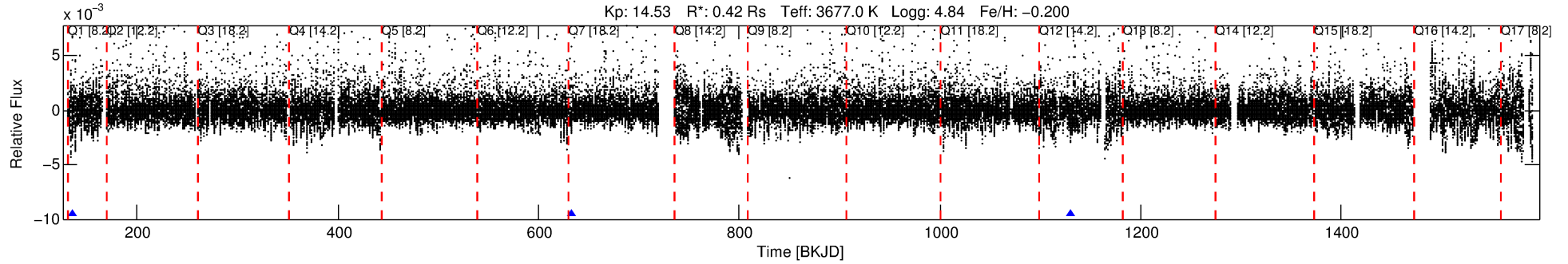
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007191311-04

No Significant Match Found

DV One-Page Summary

KIC: 7191311 Candidate: 4 of 5 Period: 497.528 d



DV Fit Results:

Period = 497.52807 [0.00732] d
Epoch = 135.1402 [0.0099] BKJD
Rp/R* = 0.0386 [0.0143]
a/R* = 374.70 [593.81]
b = 0.11 [13.71]
Seff = 0.03 [0.01]
Teq = 109 [5] K
Rp = 1.79 [0.72] Re
a = 0.9452 [0.1044] AU
Ag = 97779.97 [85887.03] [1.14 σ]
Teffp = 2974 [650] K [4.41 σ]

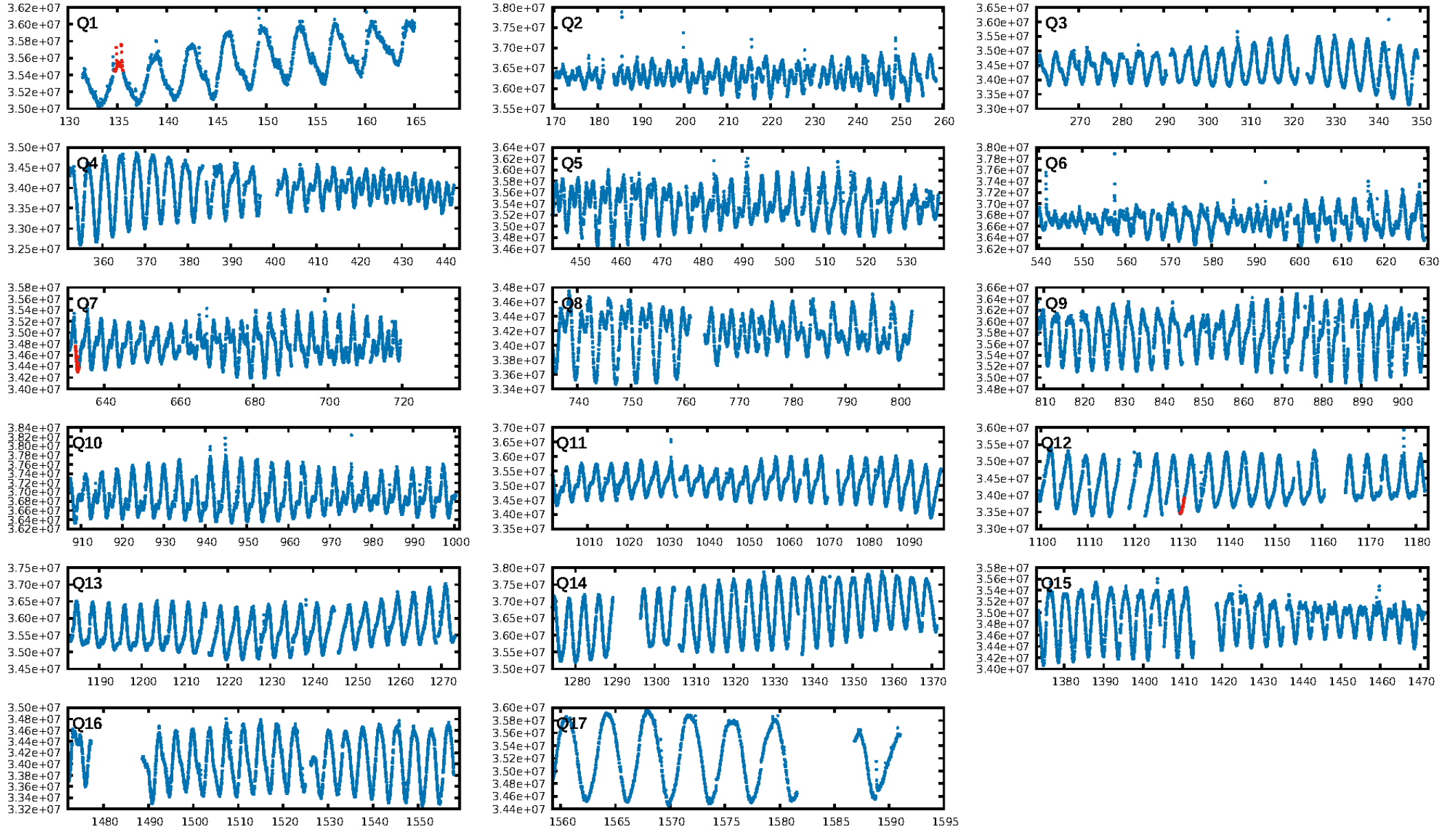
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [498.62 σ]
LongPeriod-sig: 100.0% [69.25 σ]
ModelChiSquare2-sig: 31.9%
ModelChiSquareGof-sig: 99.4%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: 2.684
Centroid-sig: 45.6%
Centroid-so: 0.577 arcsec [1.12 σ]
OotOffset-rm: 0.113 arcsec [0.29 σ]
OotOffset-st: 0/1/0/1 [2]
KicOffset-rm: 0.129 arcsec [0.34 σ]
KicOffset-st: 0/1/0/1 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [2/2]

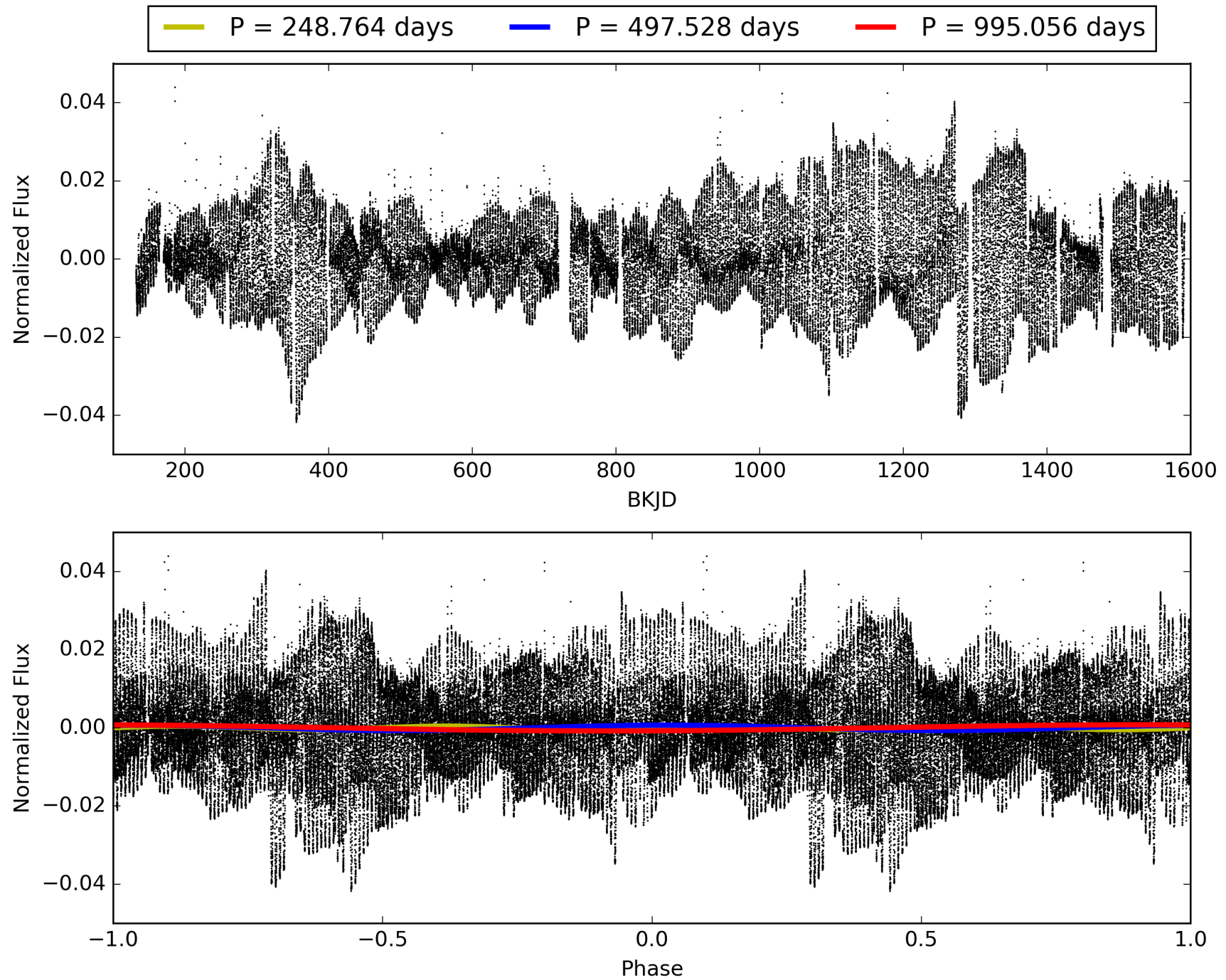
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:30:50 Z

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

TCE 007191311-04, PDC Light Curves

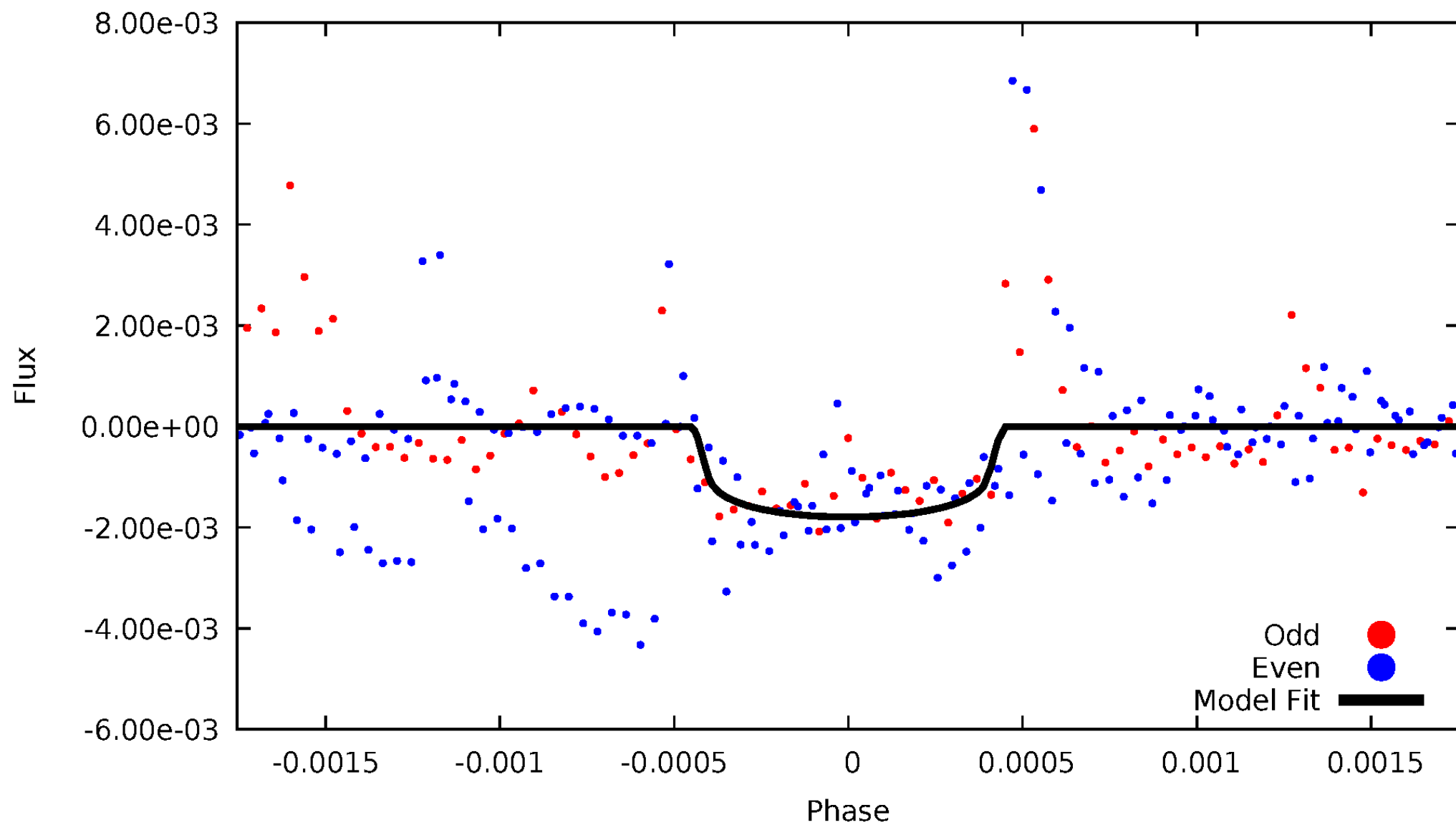


TCE 007191311-04



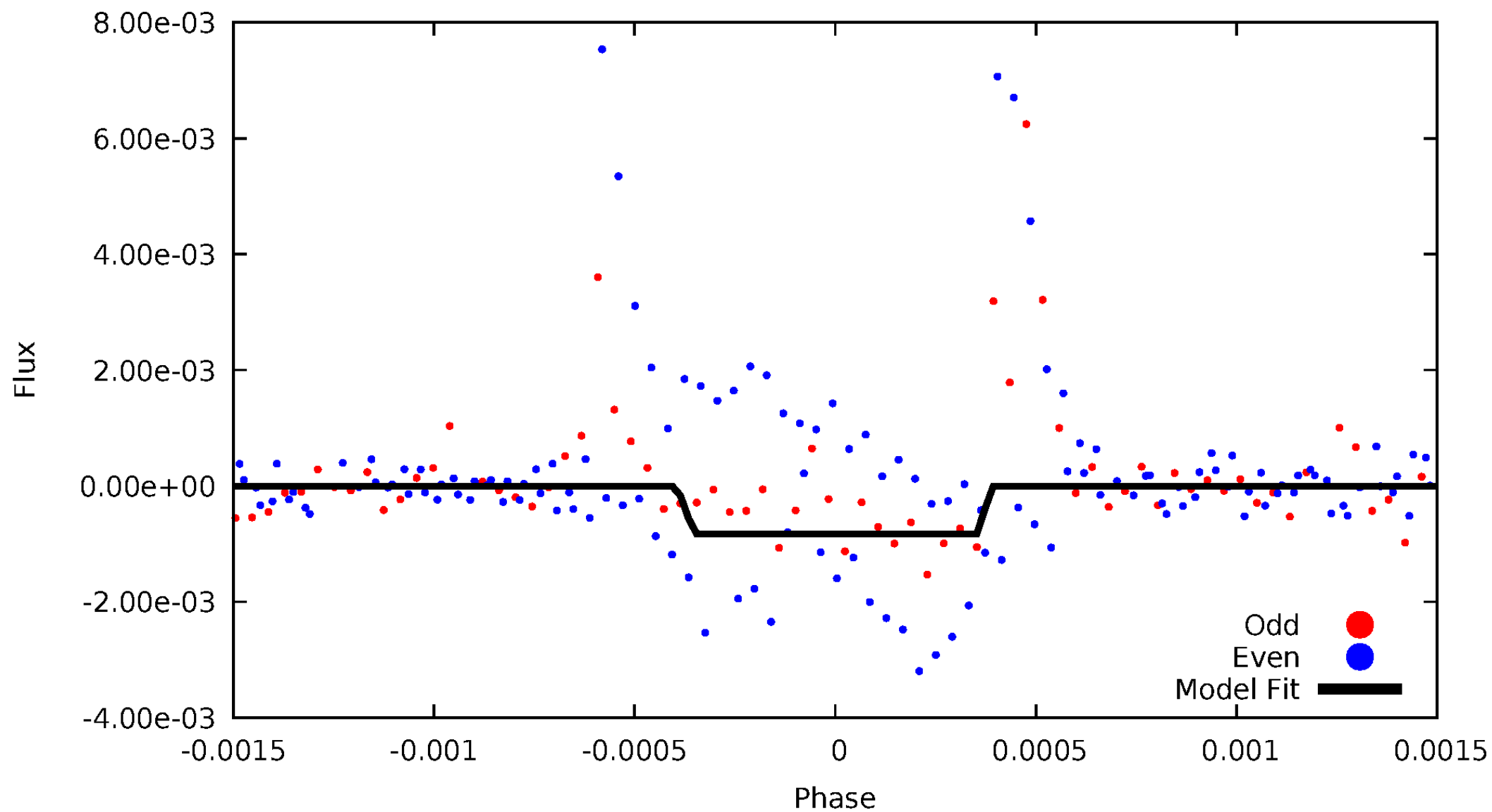
DV Odd/Even

TCE 007191311-04



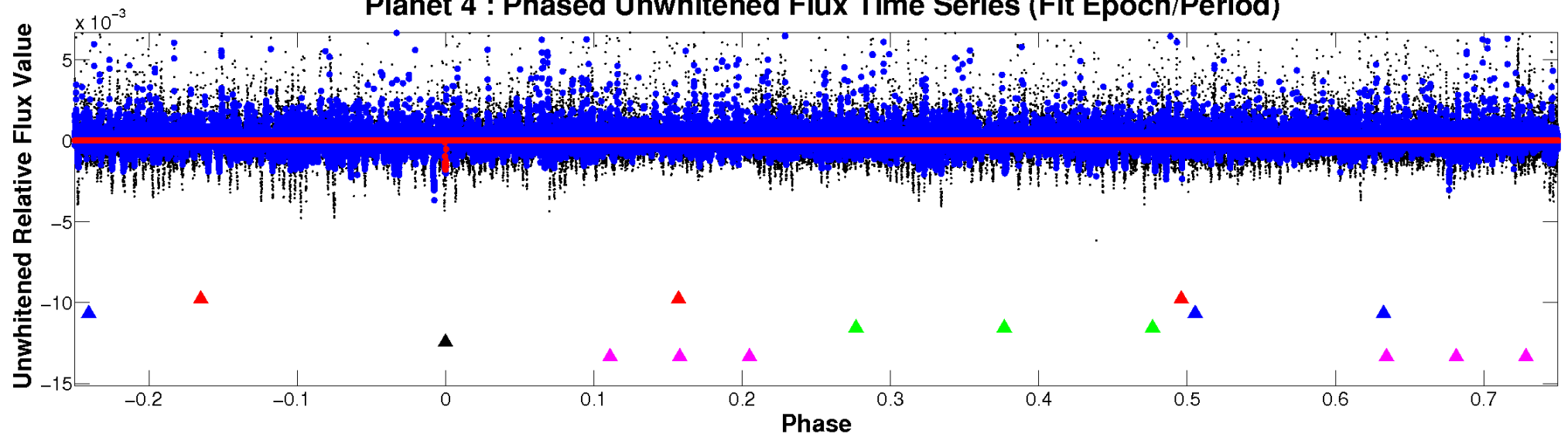
ALT Odd/Even

TCE 007191311-04

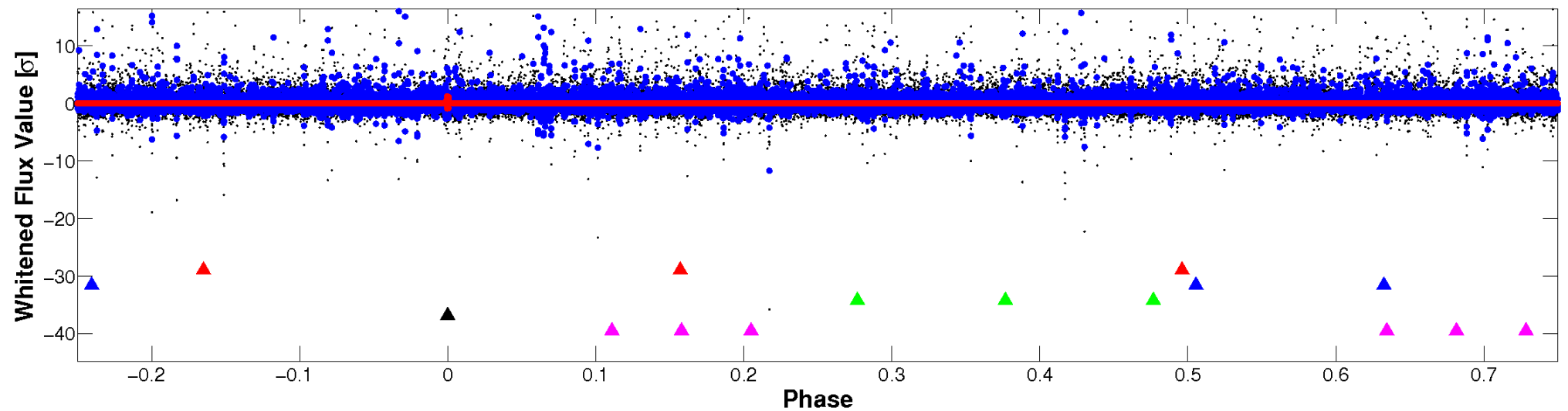


Non-Whitened Vs. Whitened Light Curve

Planet 4 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

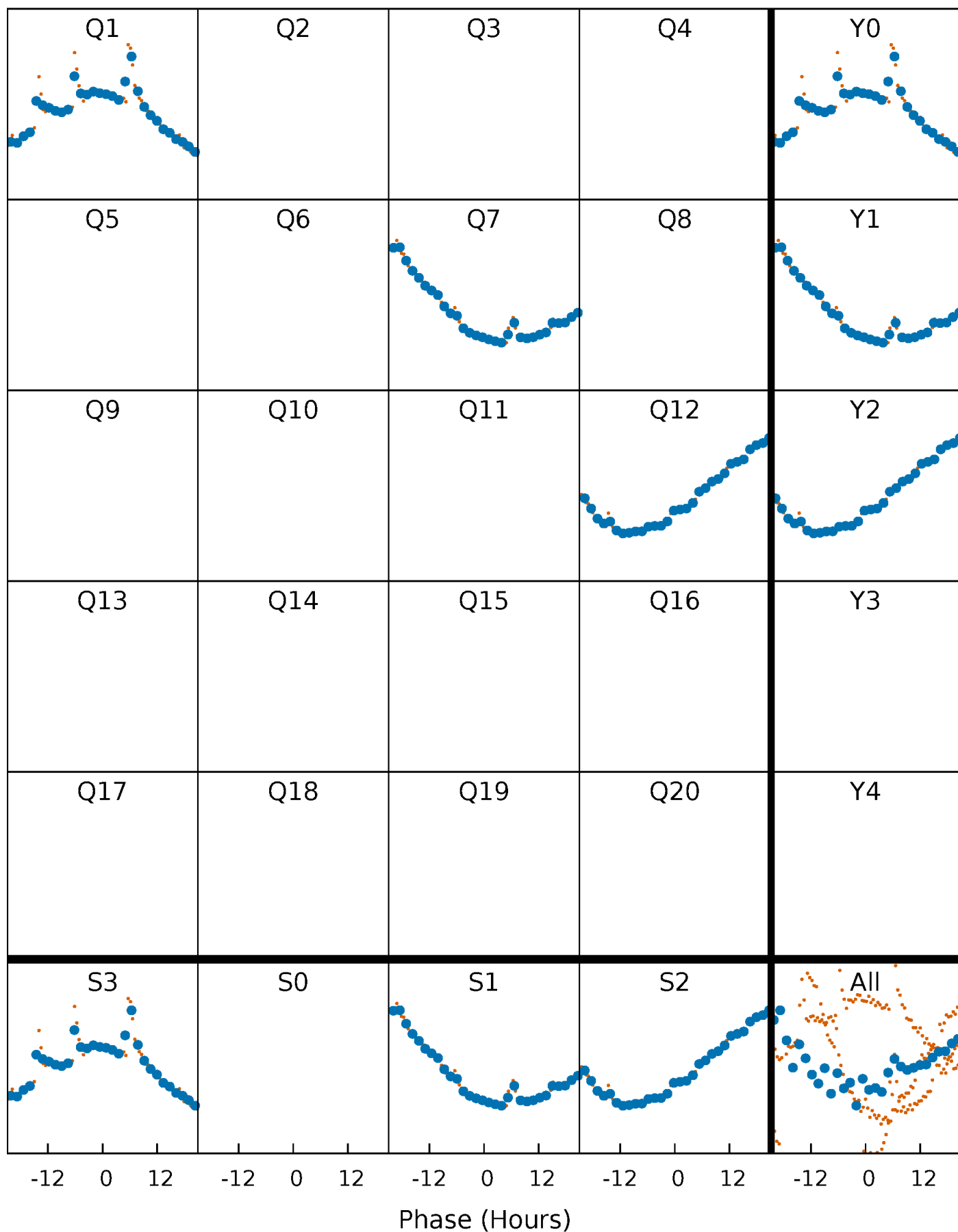


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



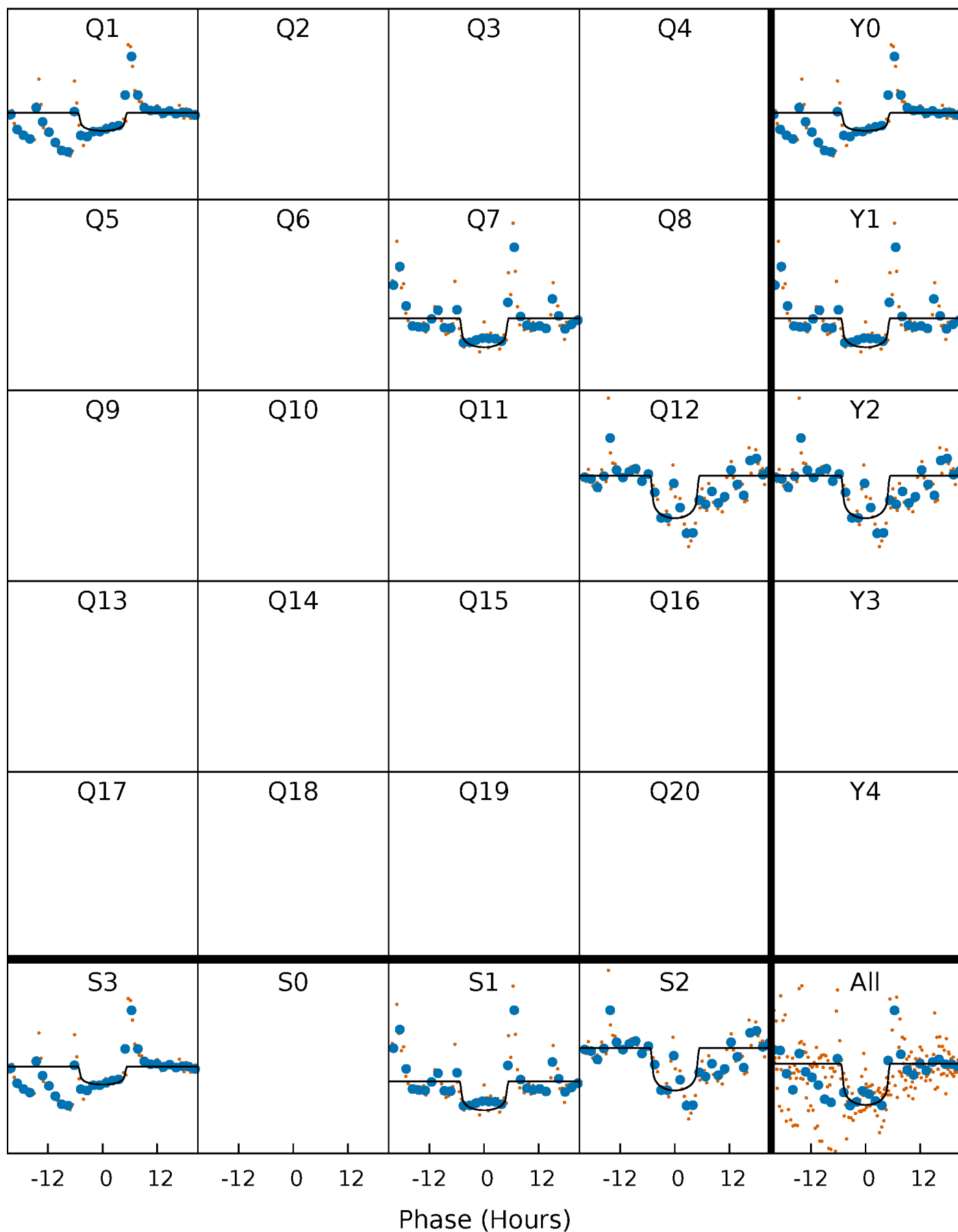
PDC Quarter-Phased Transit Curves

TCE 007191311-04 P=497.528068 Days $T_0=135.140244$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 007191311-04 P=497.528068 Days $T_0=135.140244$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

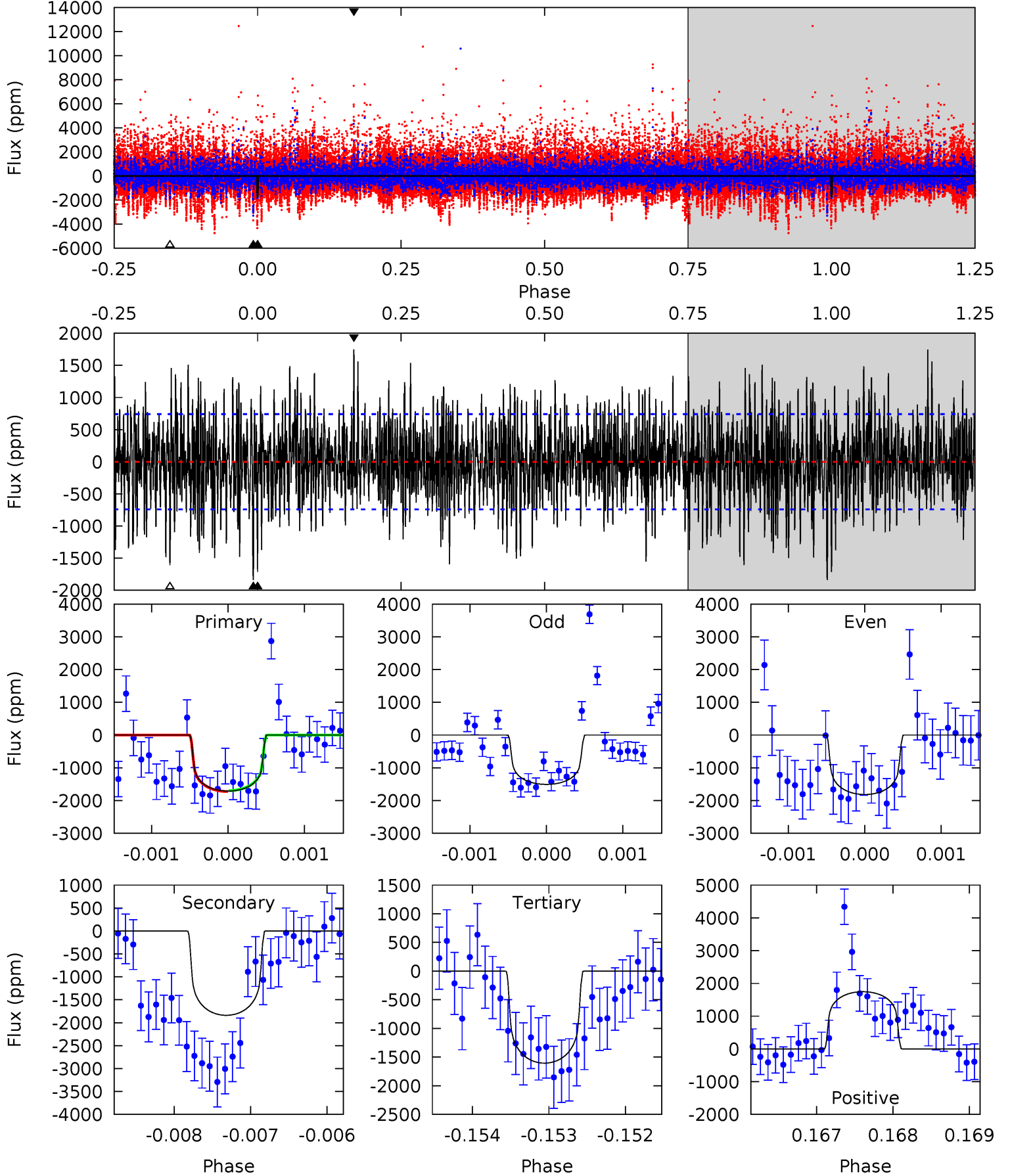
TCE 007191311-04 $P=497.523130$ Days $T_0=135.173430$ (BKJD)



DV Model-Shift Uniqueness Test

007191311-04, P = 497.528068 Days, E = 135.140244 Days

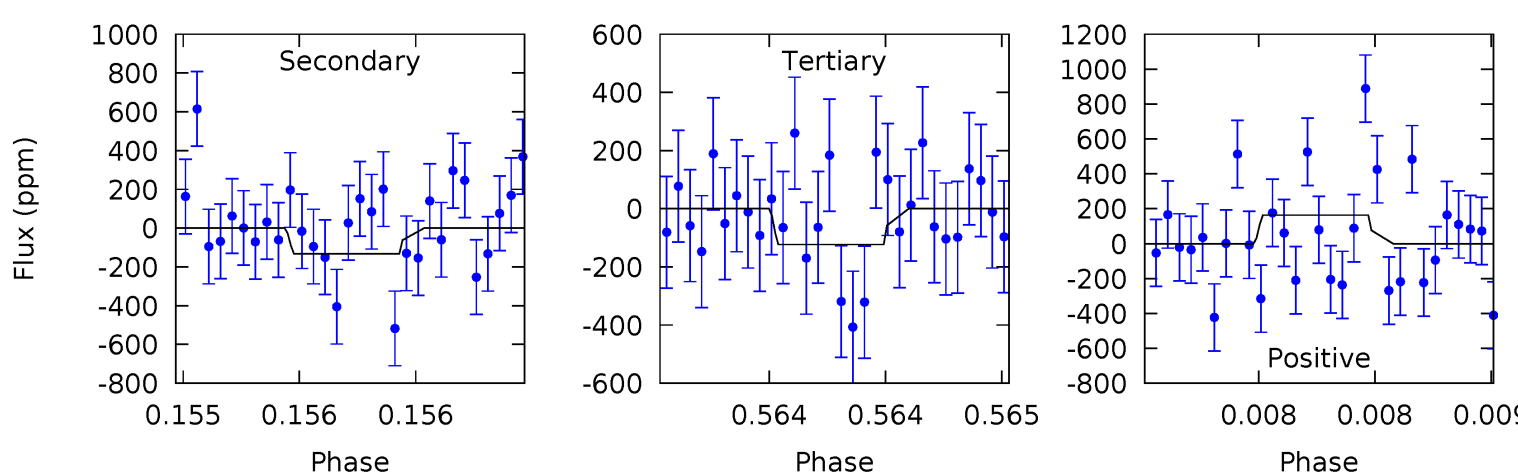
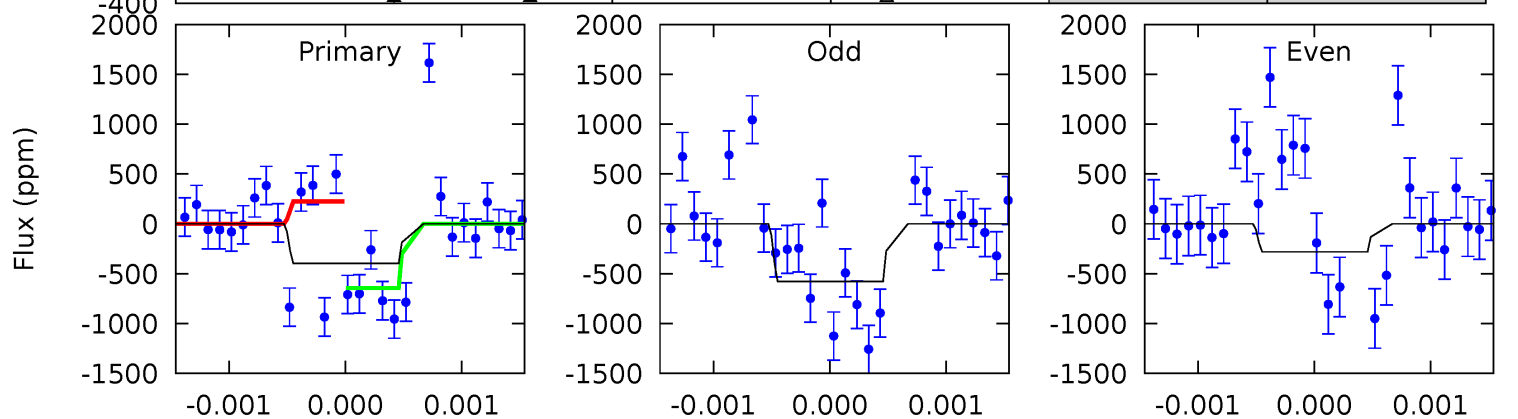
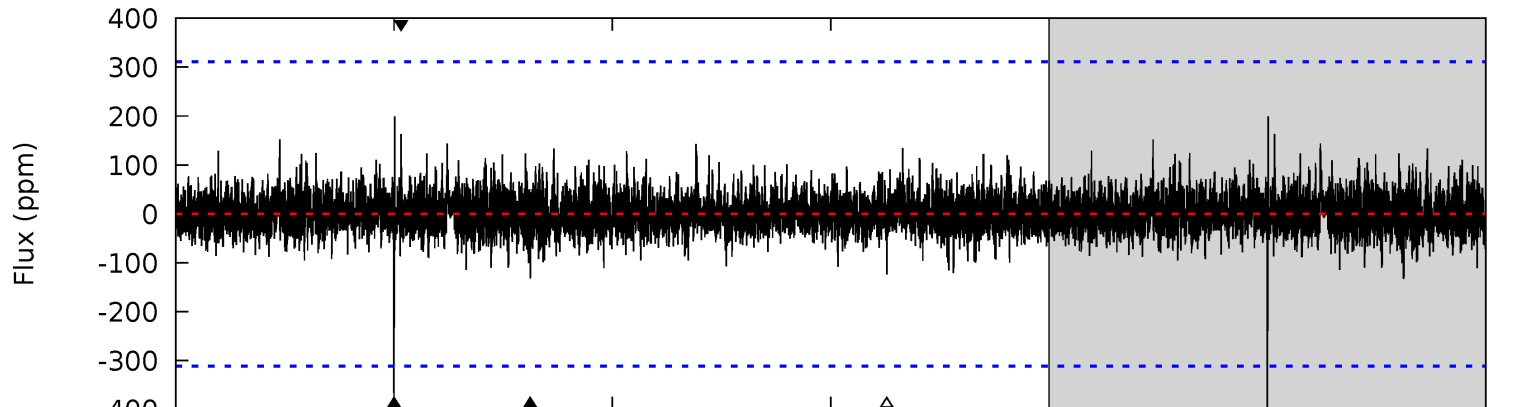
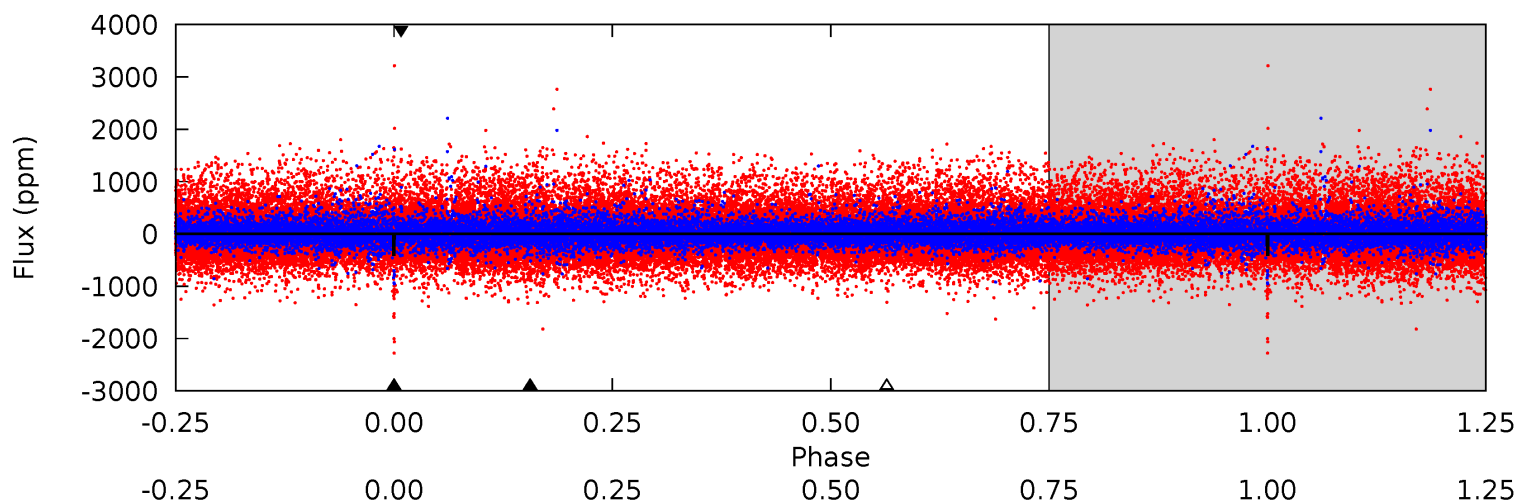
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.6	13.6	11.8	12.9	5.47	3.32	3.70	0.78	-0.26	1.72	0.68	0.97	1.02	0.49	0.10



Alt Model-Shift Uniqueness Test

007191311-04, P = 497.523130 Days, E = 135.173430 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.04	2.33	2.18	2.88	5.50	3.36	0.53	4.86	4.16	0.15	-0.55	2.78	0.93	0.33	3.56



Stellar Parameters For KIC 007191311

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3677^{+82}_{-100}	$4.839^{+0.060}_{-0.060}$	$-0.200^{+0.200}_{-0.200}$	$0.425^{+0.052}_{-0.064}$	$0.456^{+0.046}_{-0.069}$	$8.332^{+2.960}_{-1.835}$
	+2%/-3%	+1%/-1%	+100%/-100%	+12%/-15%	+10%/-15%	+36%/-22%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 007191311-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1839 ± 136	$1.78^{+0.69}_{-0.64}$	152^{+6}_{-6}	3808^{+677}_{-383}	$284484^{+414001}_{-137035}$
Alt.	-132 ± 57	$1.37^{+0.70}_{-0.67}$	152^{+5}_{-6}	2776^{+559}_{-335}	34161^{+96867}_{-21365}

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

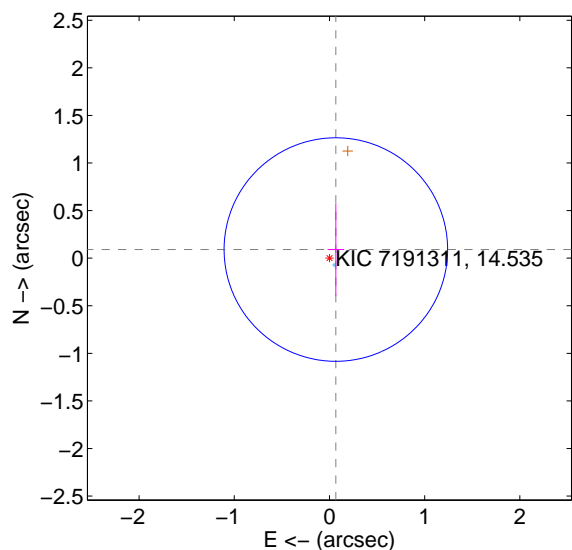
Supplemental centroid analysis for 007191311-04. Kepler magnitude: 14.54. Transit SNR 6.93

There are 1 quarters with good PRF difference image offsets

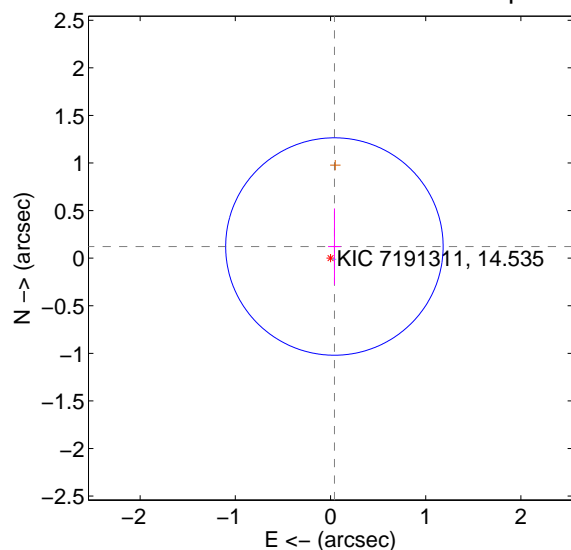
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.113 ± 0.391	0.29	-0.067 ± 0.086	0.091 ± 0.483
PRF-fit source offset from KIC position	0.129 ± 0.381	0.34	-0.041 ± 0.067	0.122 ± 0.401
photometric centroid source offset	0.58 ± 0.51	1.12	-0.11 ± 0.35	-0.57 ± 0.52

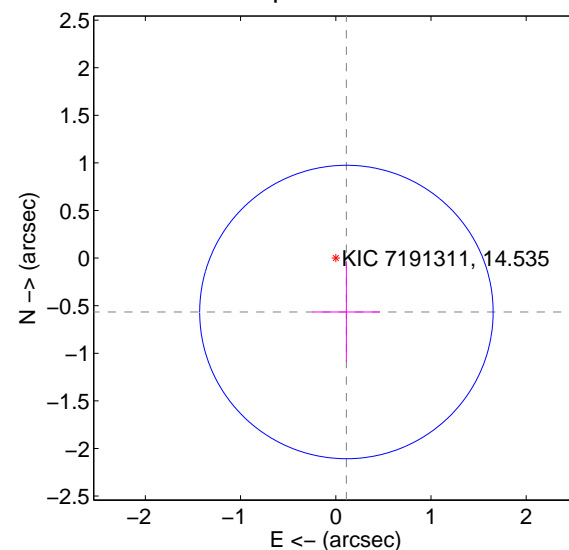
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

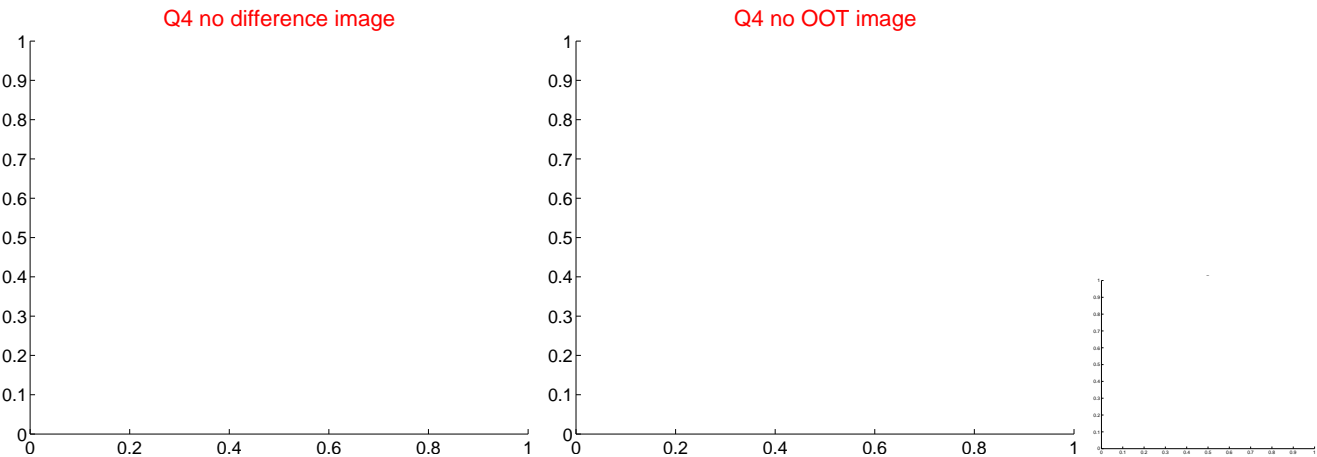
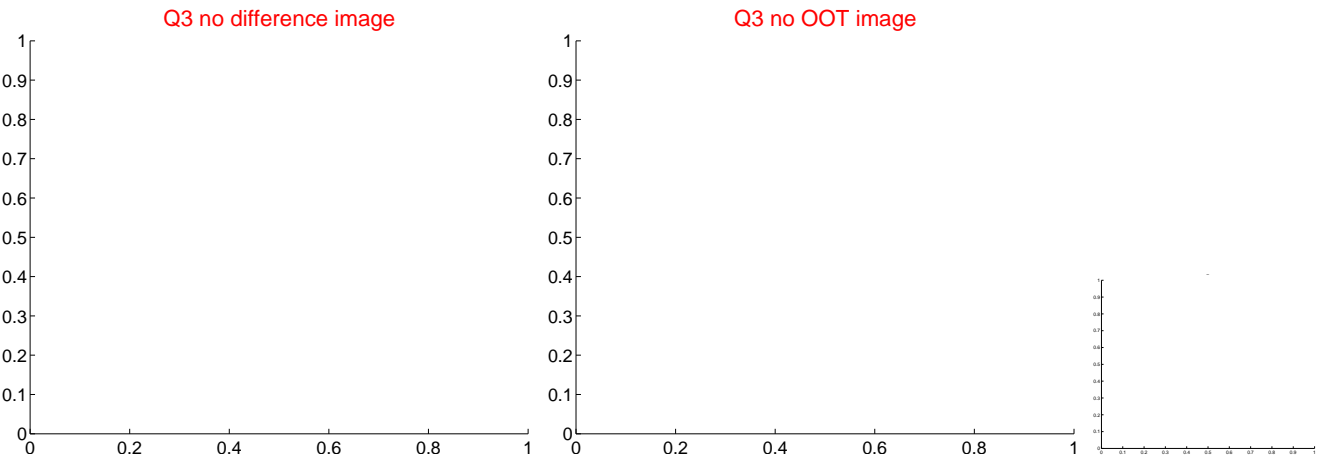
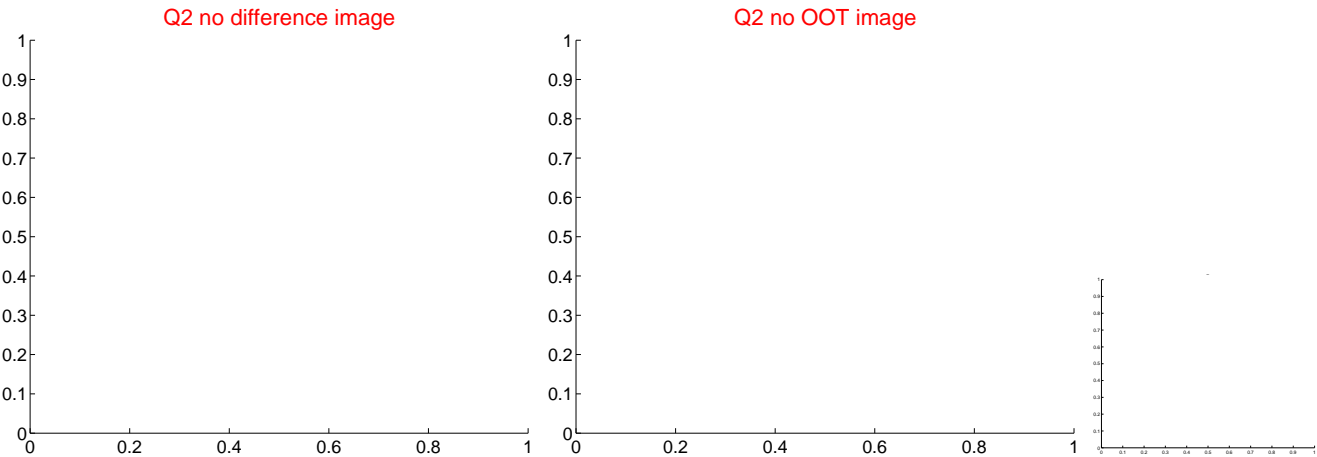
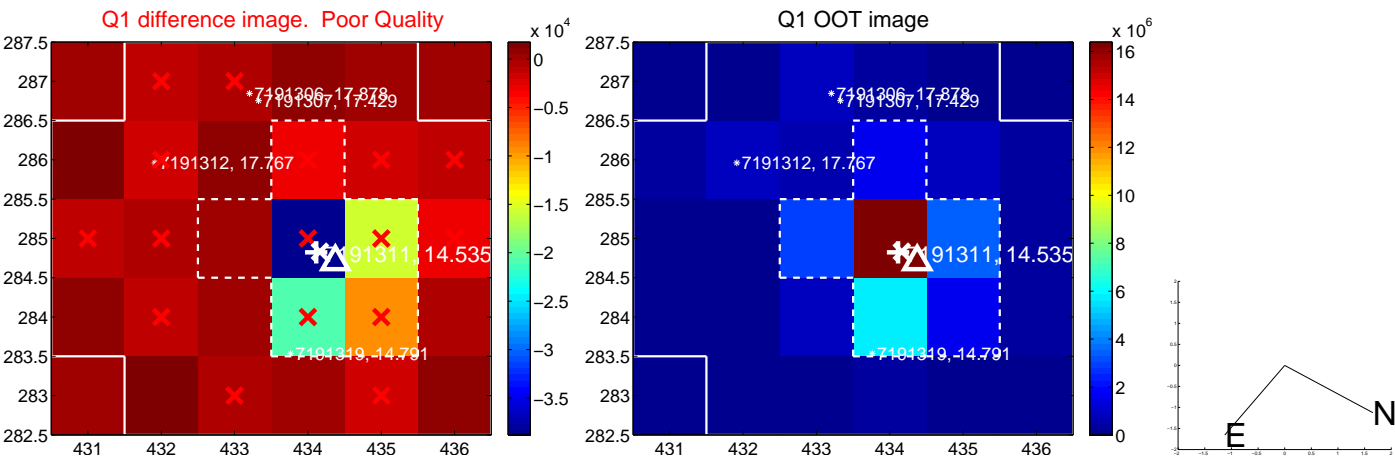


offset from photometric centroids

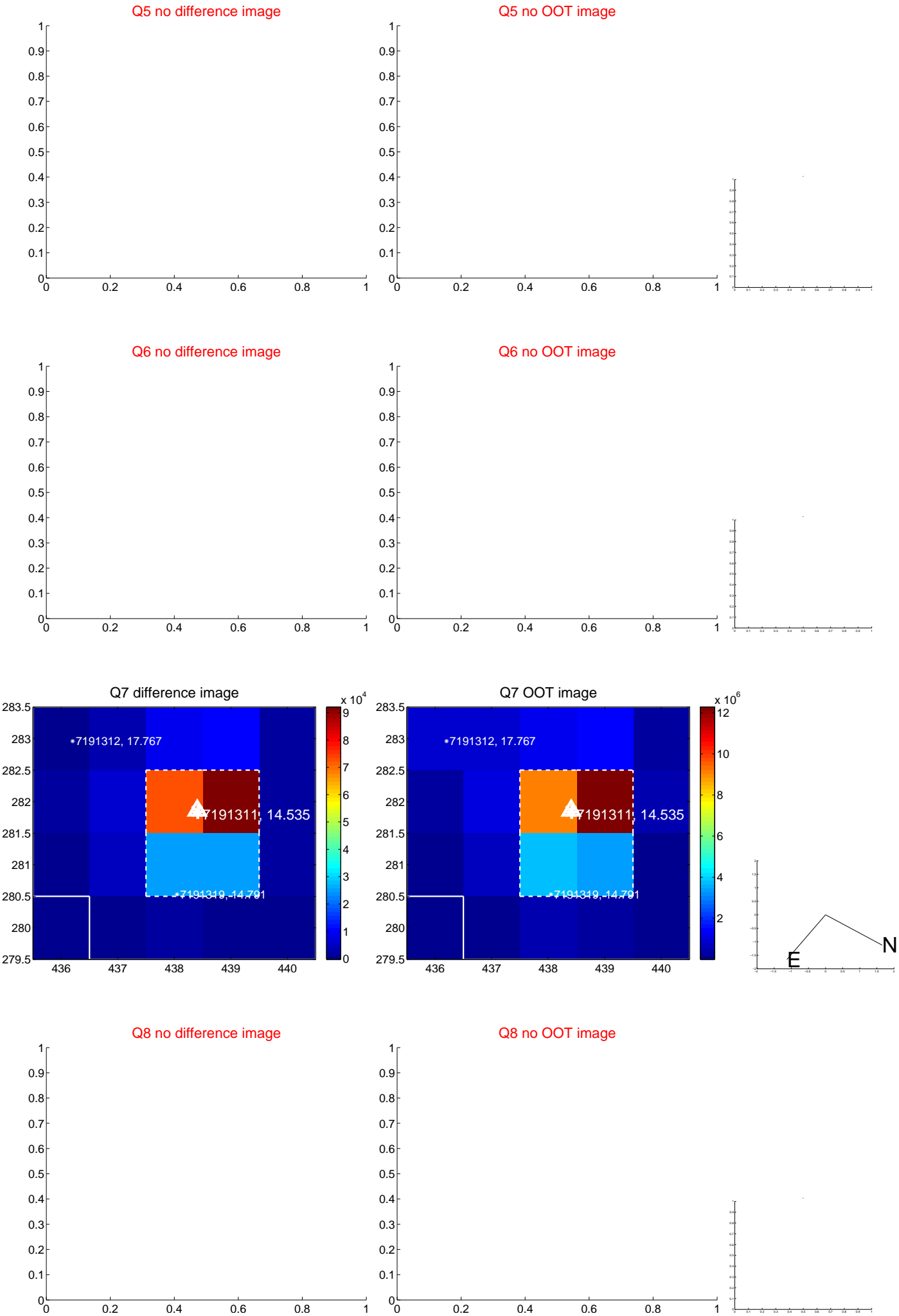


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



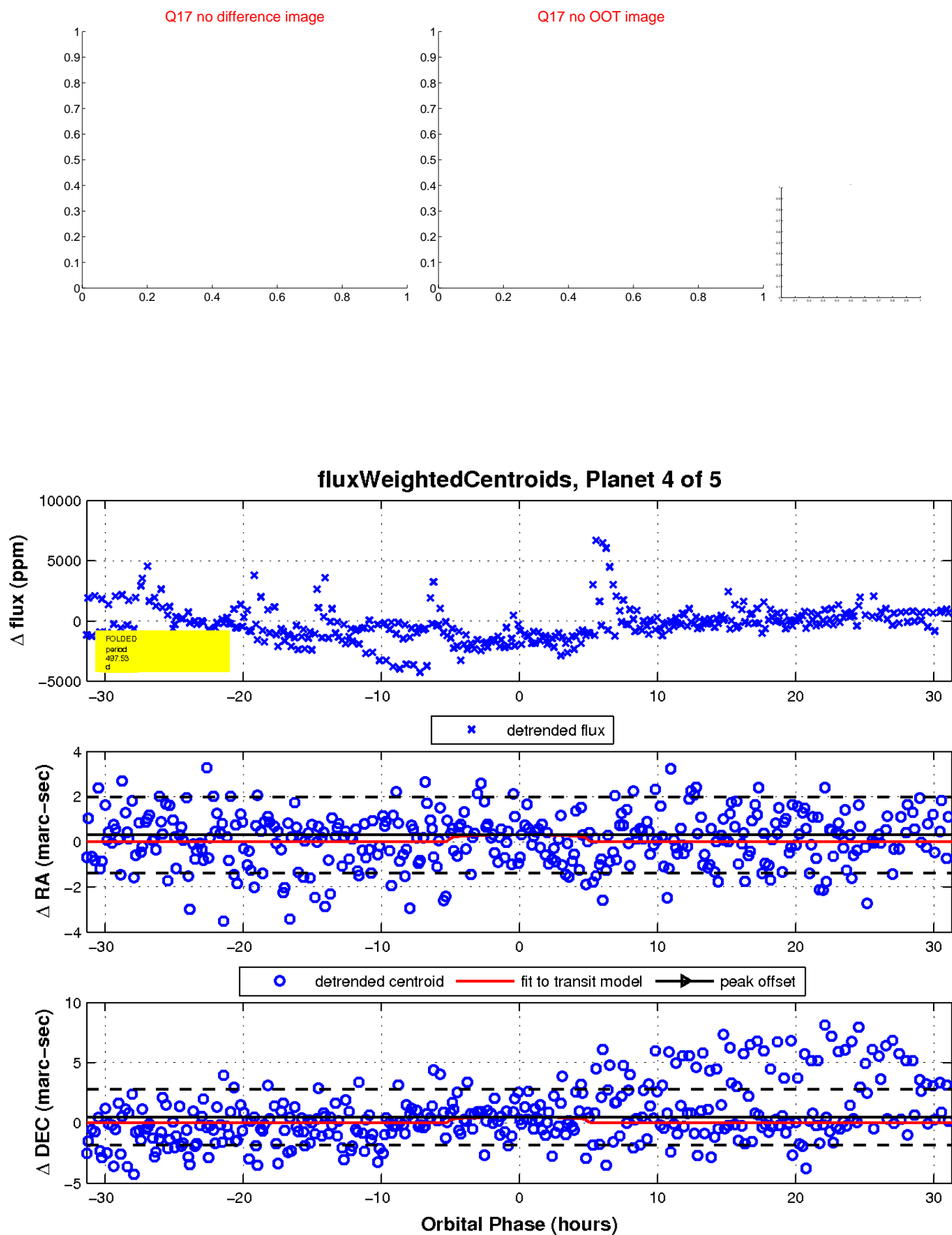
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

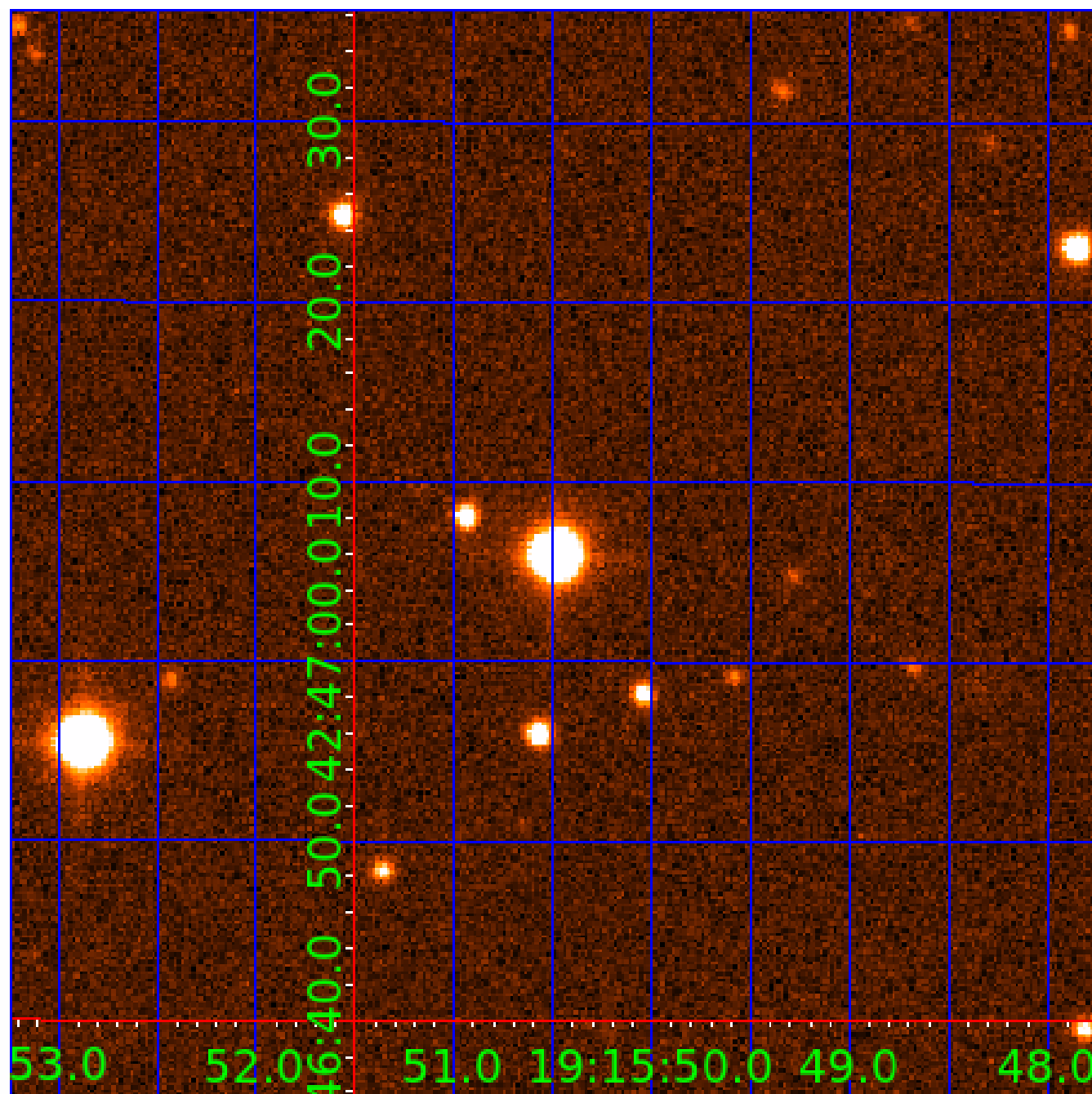


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007191311

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})
007191311-01	OBS	No	666.160876	213.322133	1711.8	4.892	14.2	6.7	0.42	3677	1.77	0.02
007191311-02	OBS	No	560.711818	386.632503	2168.0	5.045	12.9	8.2	0.42	3677	2.01	0.03
007191311-03	OBS	No	547.267947	272.852055	2600.7	13.692	10.5	8.3	0.42	3677	2.30	0.03
007191311-04	OBS	No	497.528068	135.140244	1794.5	10.472	13.6	6.9	0.42	3677	1.79	0.03
007191311-05	OBS	No	260.456612	190.342825	994.9	4.534	9.9	5.2	0.42	3677	1.39	0.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007191311-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007191311-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_DV
007191311-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007191311-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007191311-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS

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

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

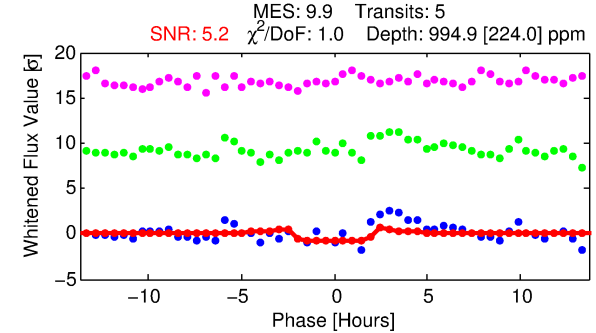
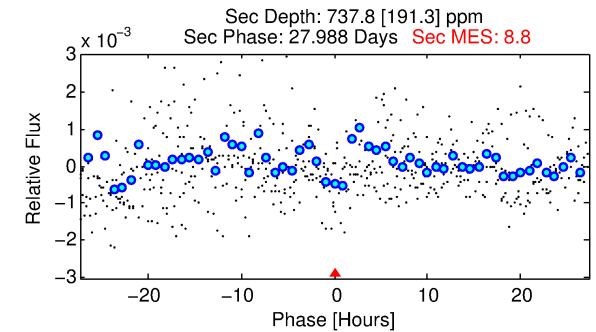
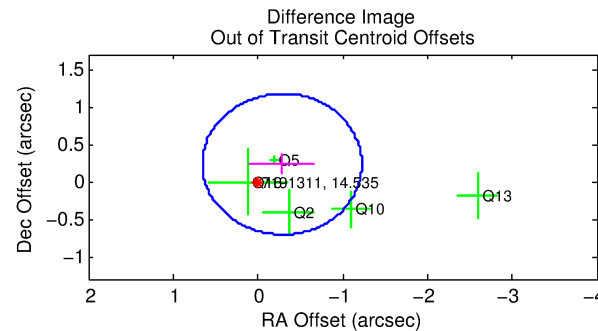
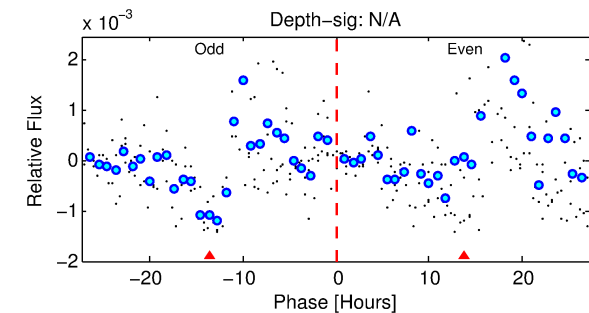
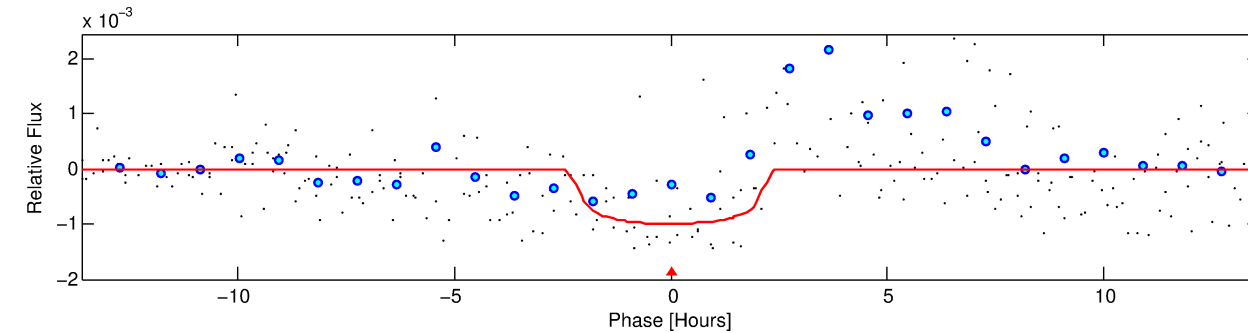
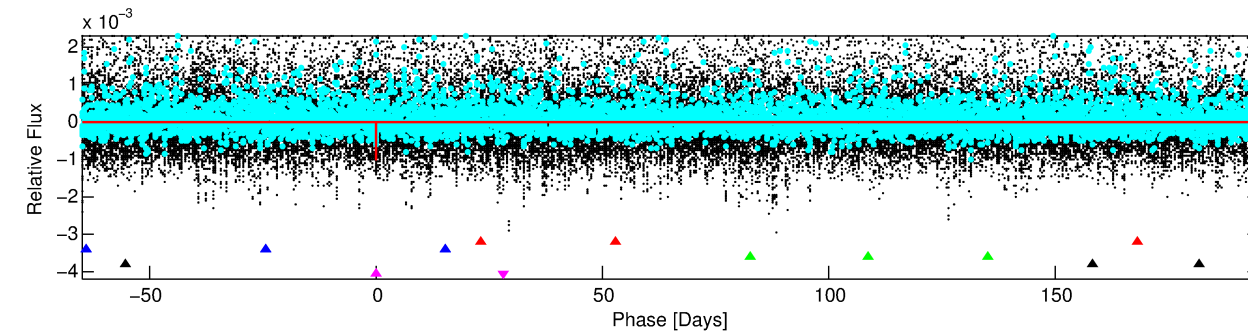
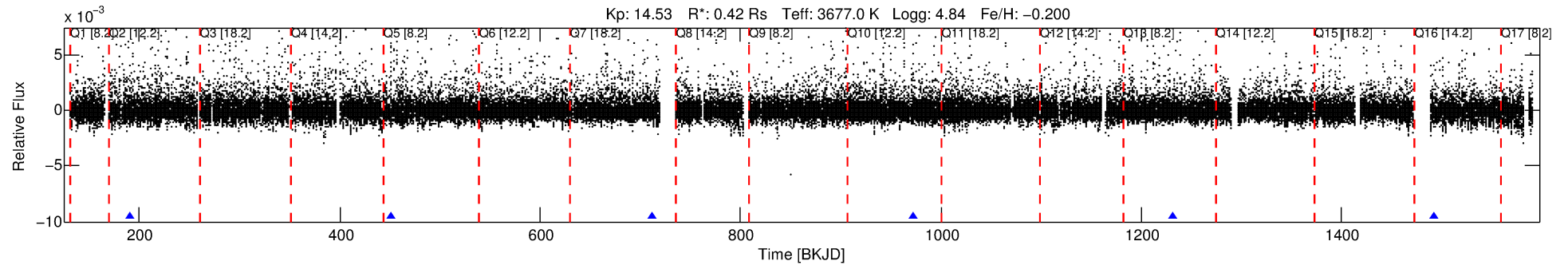
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007191311-05

No Significant Match Found

DV One-Page Summary

KIC: 7191311 Candidate: 5 of 5 Period: 260.457 d



DV Fit Results:

Period = 260.45661 [0.00294] d
Epoch = 190.3428 [0.0102] BKJD
Rp/R* = 0.0299 [0.0321]
a/R* = 375.34 [1844.85]
b = 0.57 [5.75]
Seff = 0.08 [0.01]
Teq = 135 [6] K
Rp = 1.39 [1.50] Re
a = 0.6139 [0.0678] AU
Ag = 79316.56 [171624.96] [0.46σ]
Teffp = 3502 [1893] K [1.78σ]

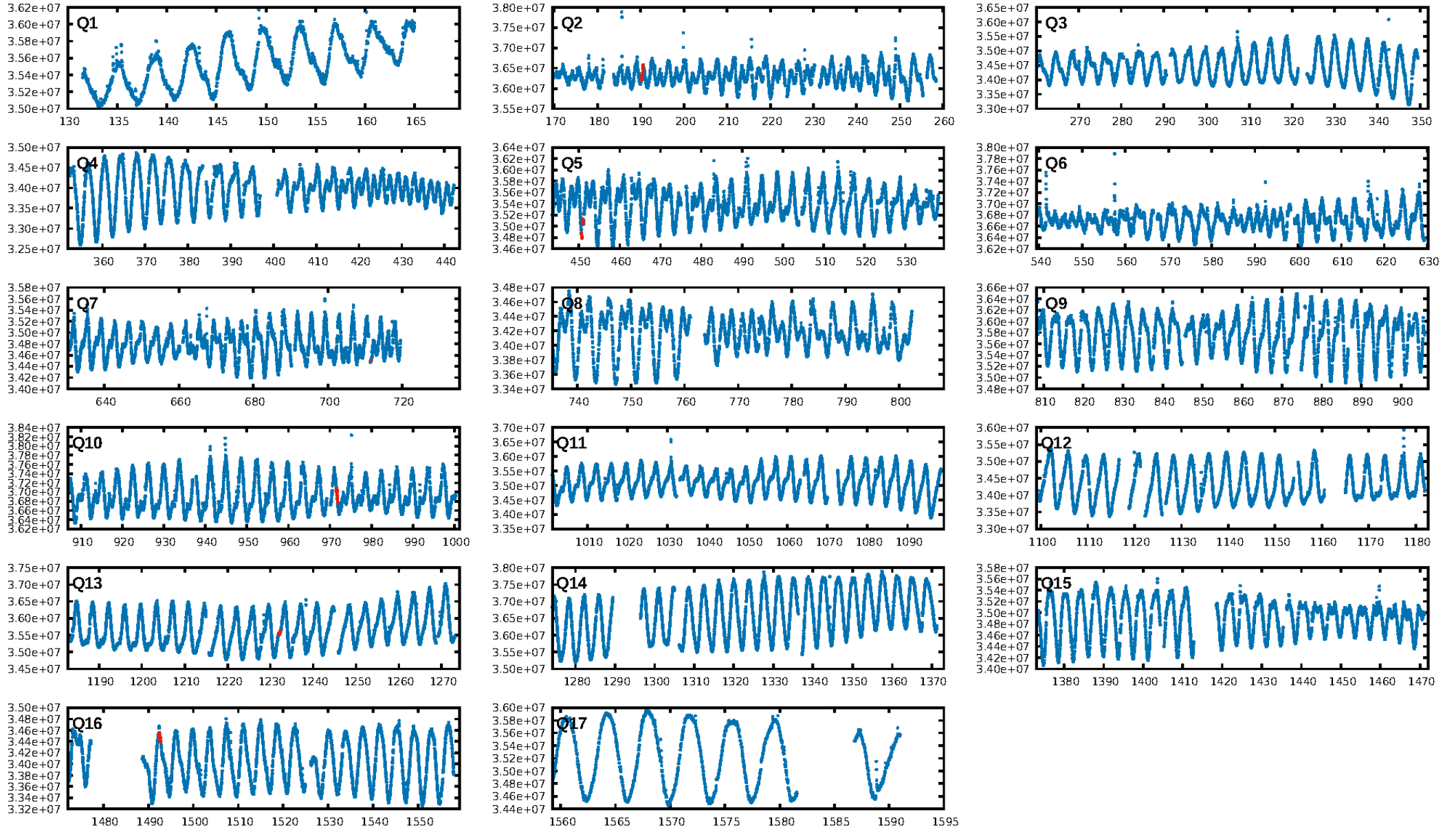
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [498.62σ]
ModelChiSquare2-sig: 67.3%
ModelChiSquareGof-sig: 98.4%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: 0.51
Centroid-sig: 20.6%
Centroid-so: 1.295 arcsec [1.32σ]
OotOffset-rm: 0.369 arcsec [1.18σ]
OotOffset-st: 2/0/1/2 [5]
KicOffset-rm: 0.198 arcsec [0.59σ]
KicOffset-st: 2/0/1/2 [5]
DiffImageQuality-fgm: 0.60 [3/5]
DiffImageOverlap-fno: 1.00 [5/5]

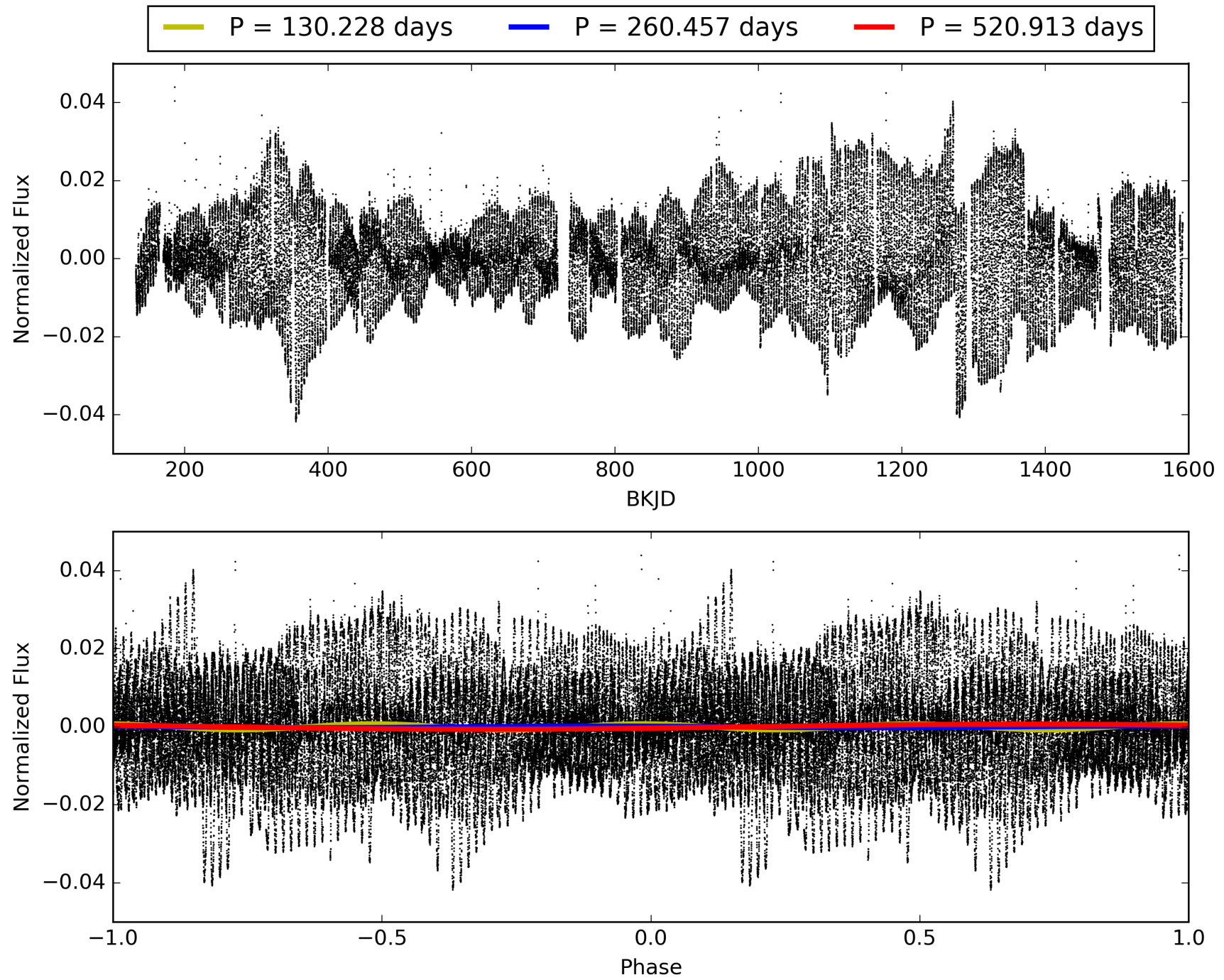
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:31:02 Z

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

TCE 007191311-05, PDC Light Curves

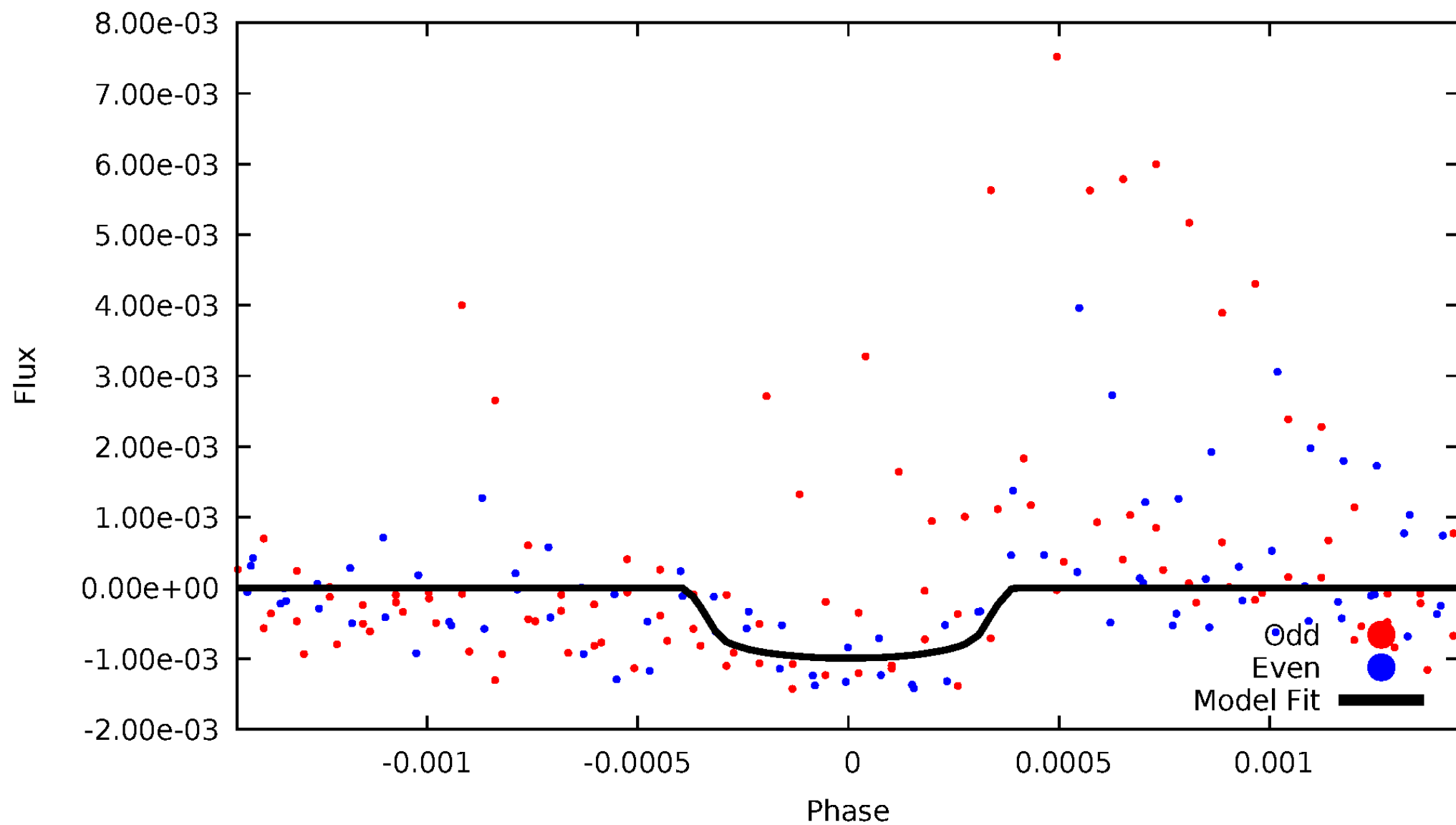


TCE 007191311-05



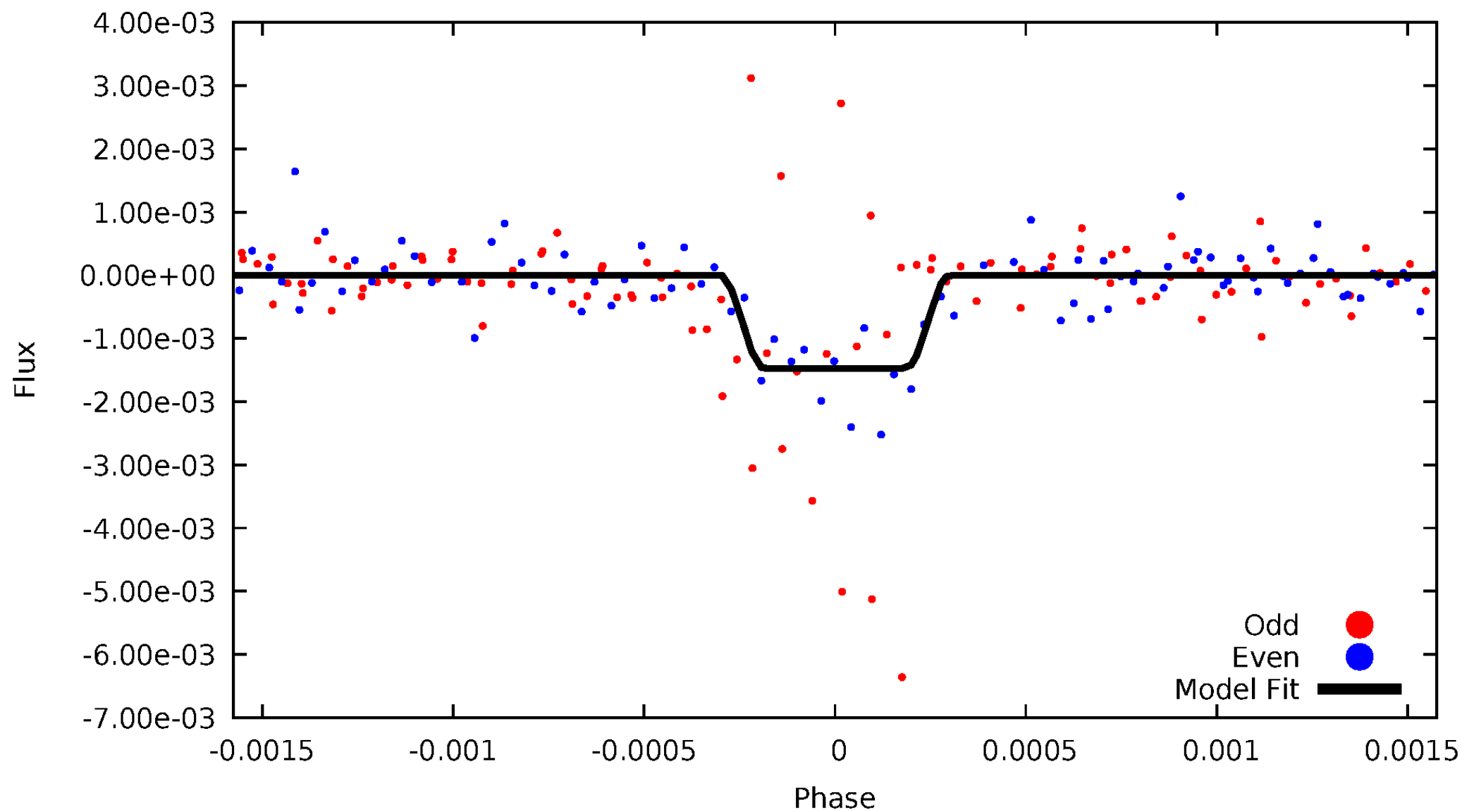
DV Odd/Even

TCE 007191311-05



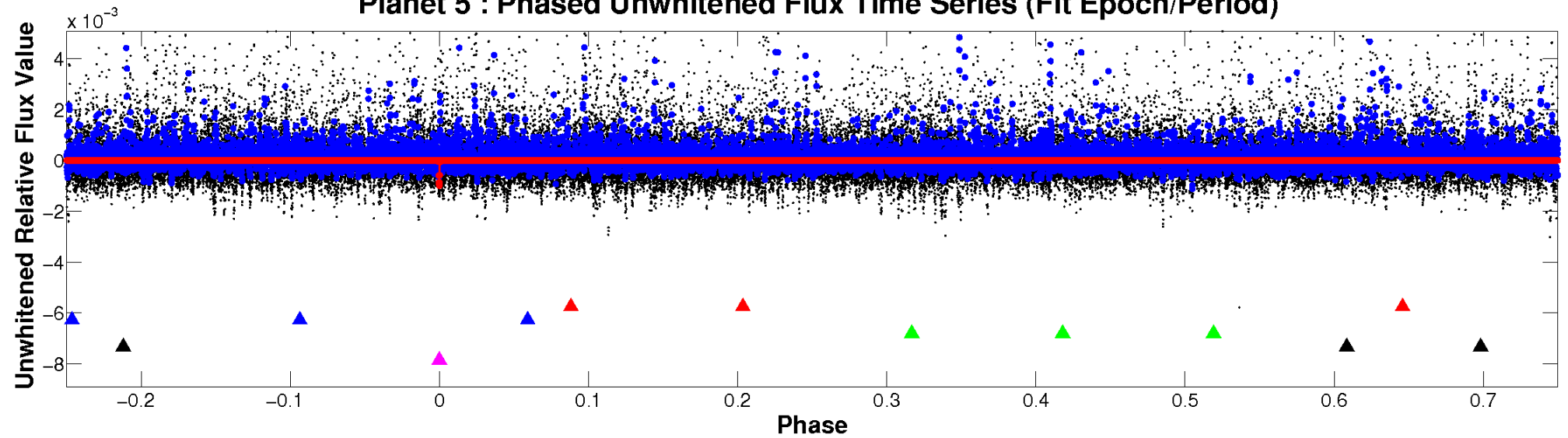
ALT Odd/Even

TCE 007191311-05

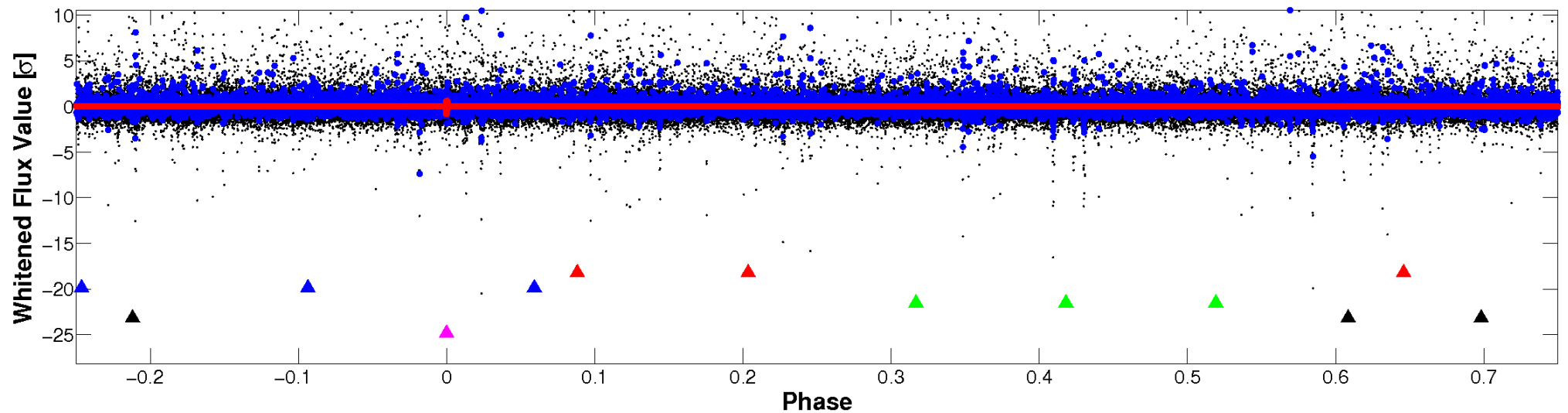


Non-Whitened Vs. Whitened Light Curve

Planet 5 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

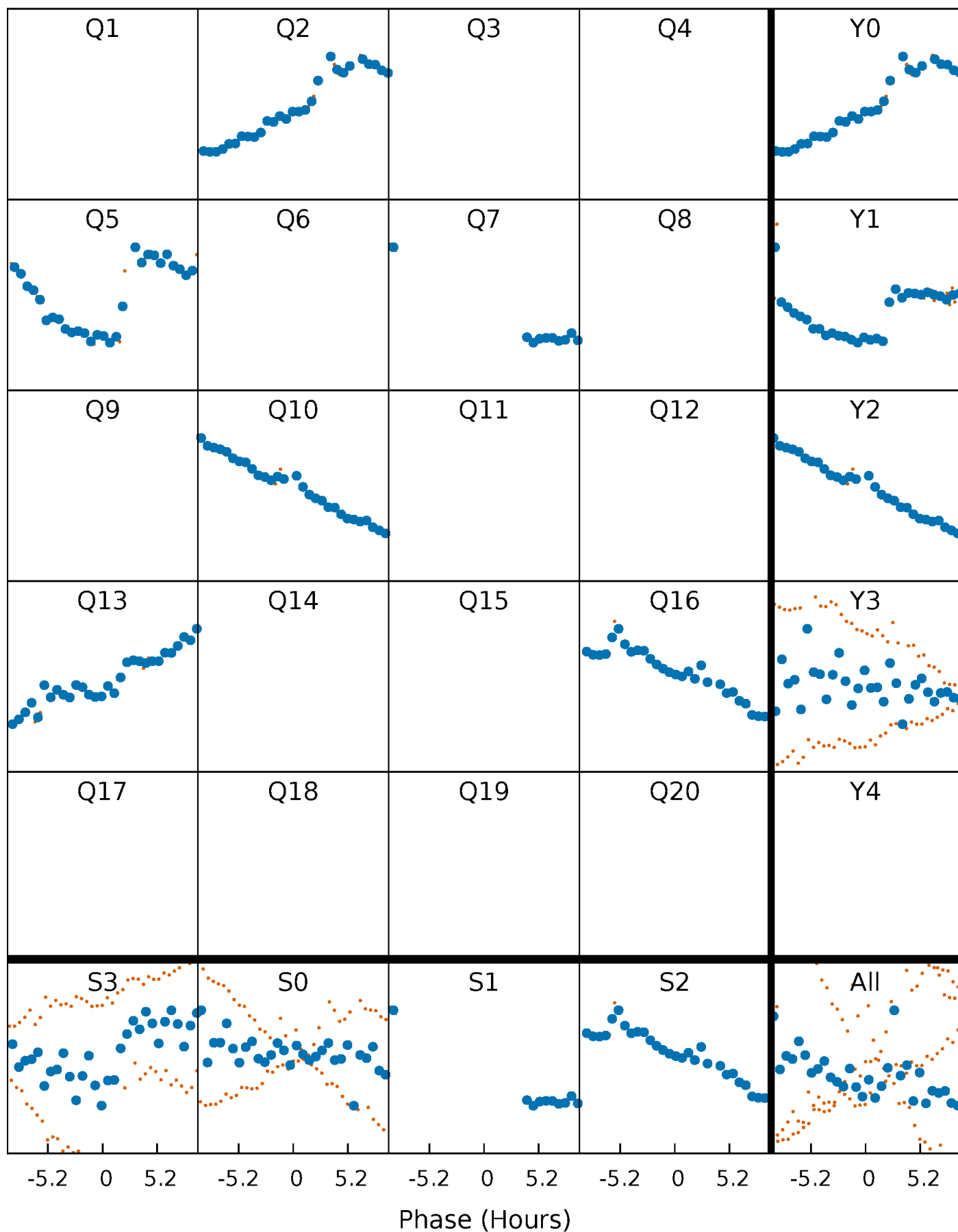


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



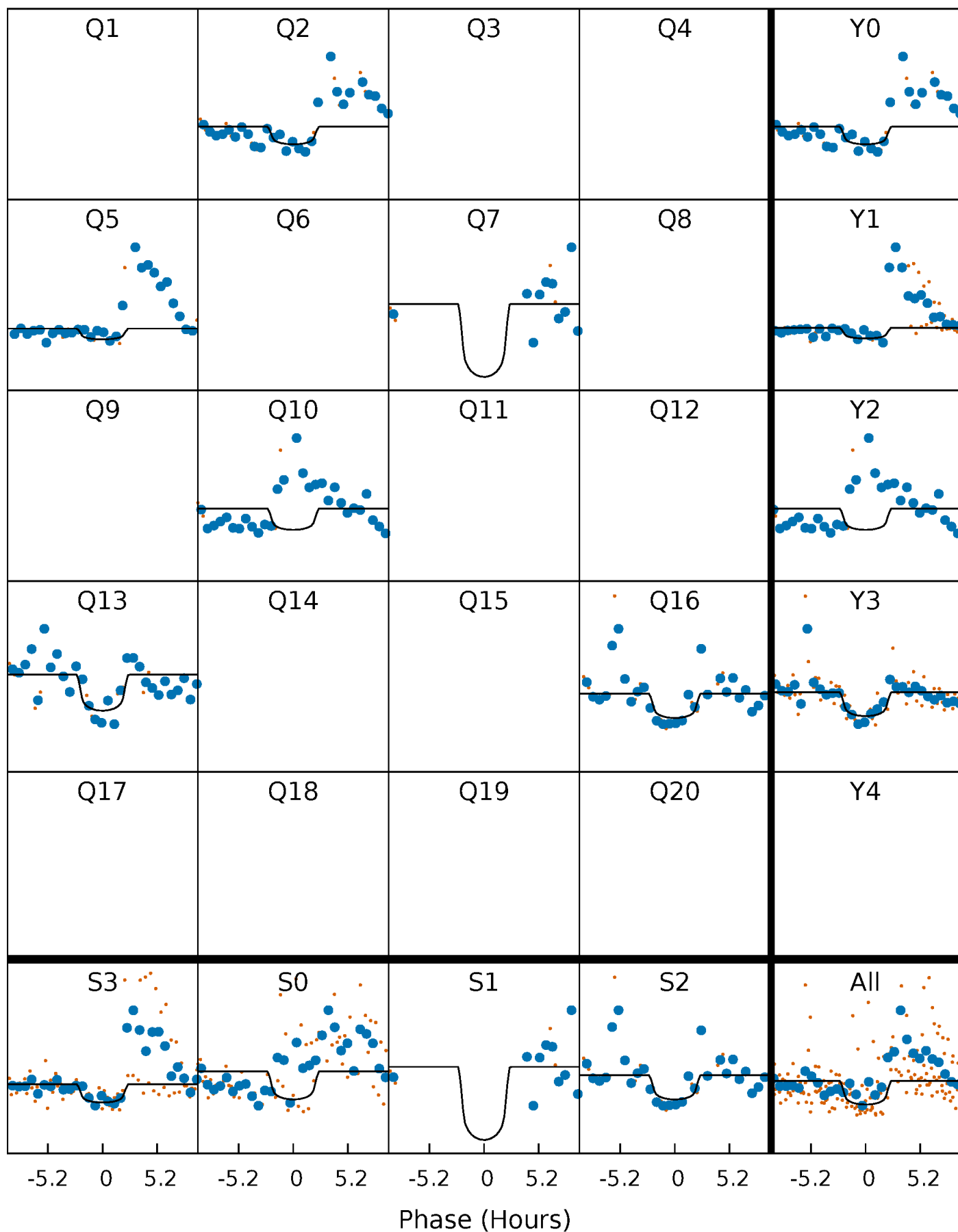
PDC Quarter-Phased Transit Curves

TCE 007191311-05 $P=260.456612$ Days $T_0=190.342825$ (BKJD)



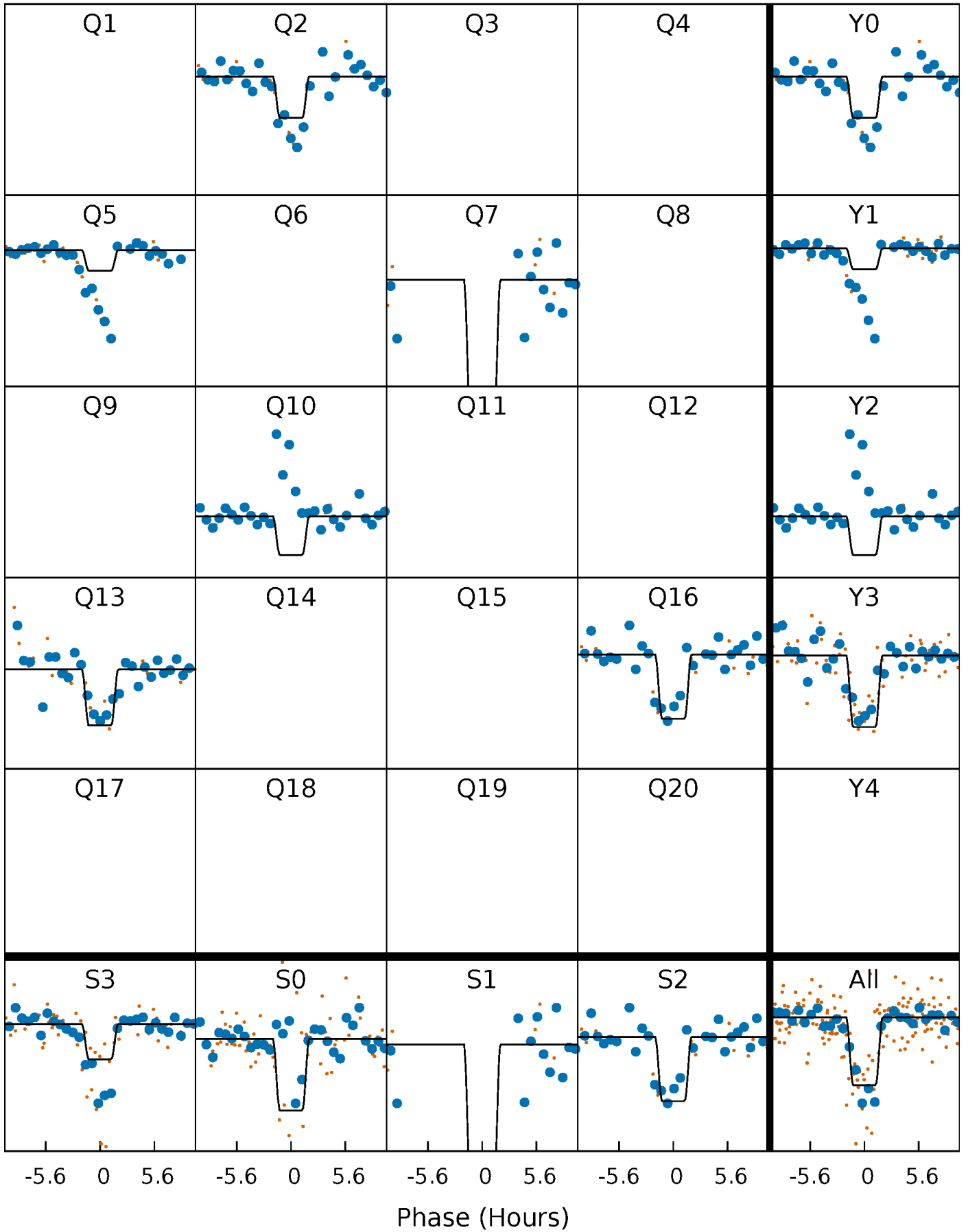
DV Quarter-Phased Transit Curves

TCE 007191311-05 P=260.456612 Days $T_0=190.342825$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

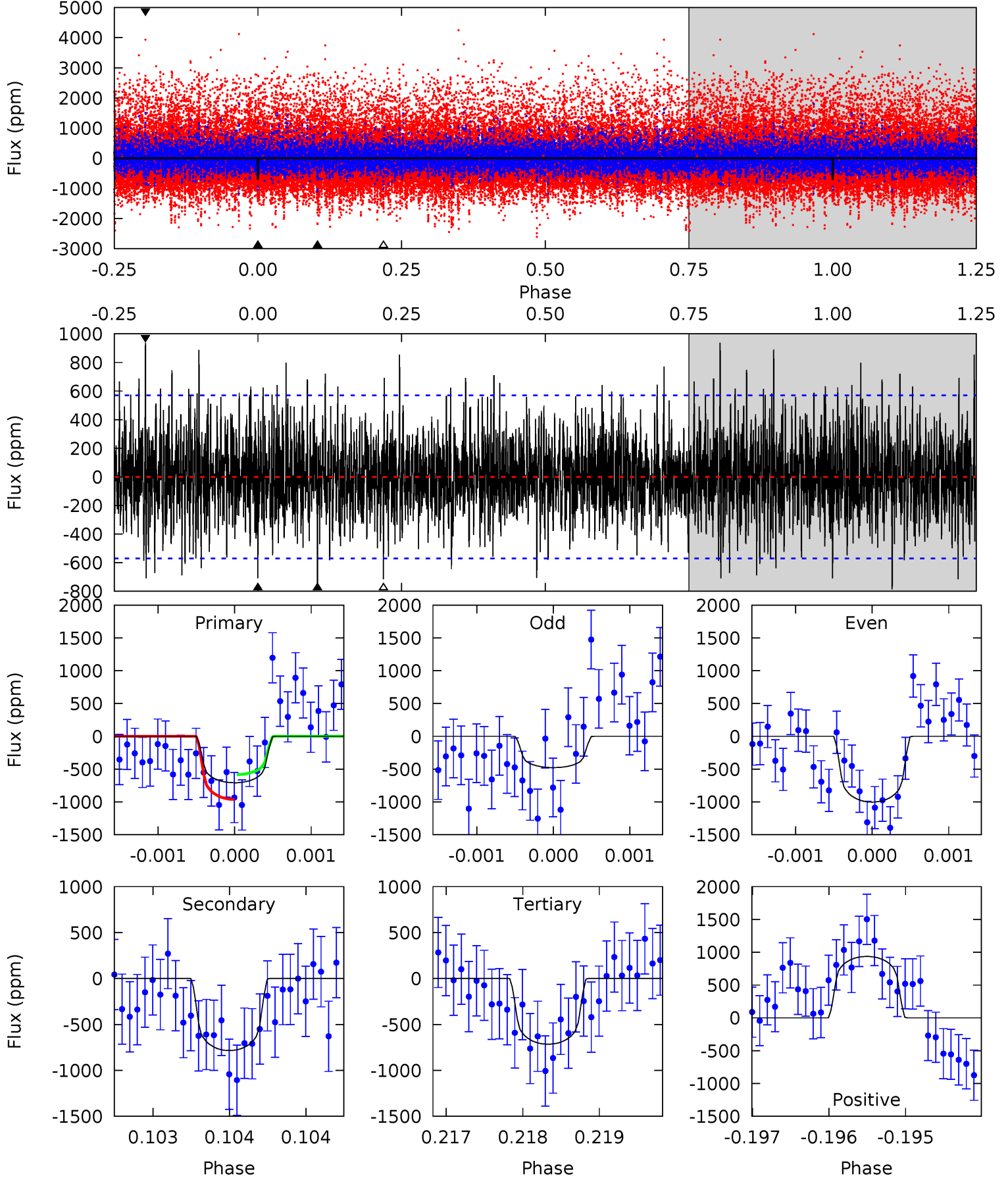
TCE 007191311-05 $P=260.448995$ Days $T_0=190.372367$ (BKJD)



DV Model-Shift Uniqueness Test

007191311-05, P = 260.456612 Days, E = 190.342825 Days

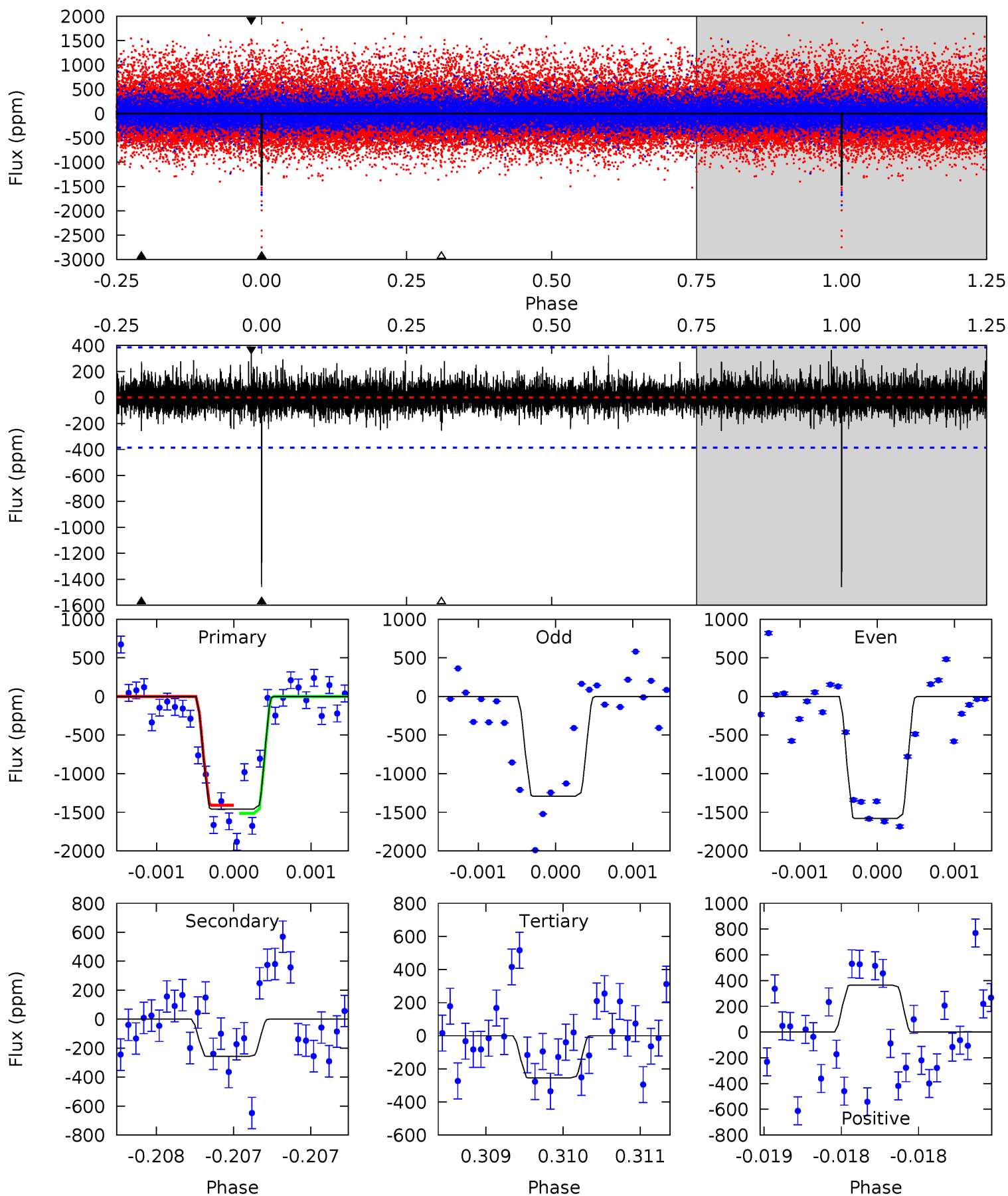
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.83	7.57	6.90	9.03	5.49	3.36	2.11	-0.06	-2.20	0.67	-1.46	2.36	0.38	0.54	1.82



Alt Model-Shift Uniqueness Test

007191311-05, P = 260.448995 Days, E = 190.372367 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.9	3.69	3.65	5.23	5.54	3.43	0.96	17.3	15.7	0.04	-1.54	2.16	1.19	0.20	0.73



Stellar Parameters For KIC 007191311

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3677^{+82}_{-100}	$4.839^{+0.060}_{-0.060}$	$-0.200^{+0.200}_{-0.200}$	$0.425^{+0.052}_{-0.064}$	$0.456^{+0.046}_{-0.069}$	$8.332^{+2.960}_{-1.835}$
	+2%/-3%	+1%/-1%	+100%/-100%	+12%/-15%	+10%/-15%	+36%/-22%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 007191311-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-785 ± 104	$1.66^{+1.39}_{-1.05}$	188^{+7}_{-6}	3375^{+1460}_{-539}	$58316^{+366038}_{-40890}$
Alt.	-257 ± 70	$1.91^{+1.46}_{-1.12}$	189^{+6}_{-7}	2772^{+818}_{-380}	14504^{+67824}_{-10132}

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

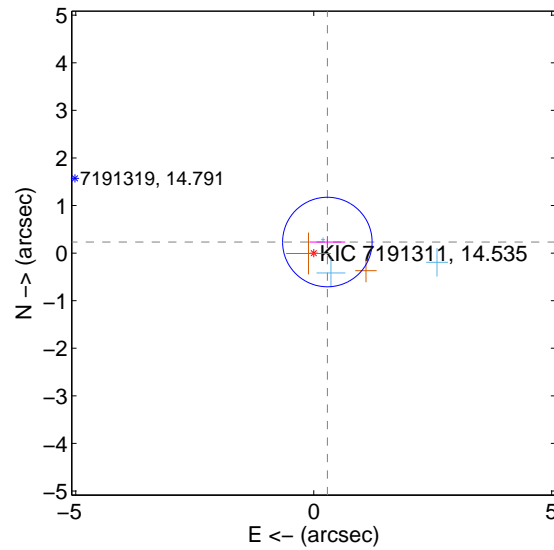
Supplemental centroid analysis for 007191311-05. Kepler magnitude: 14.54. Transit SNR 5.22

There are 3 quarters with good PRF difference image offsets

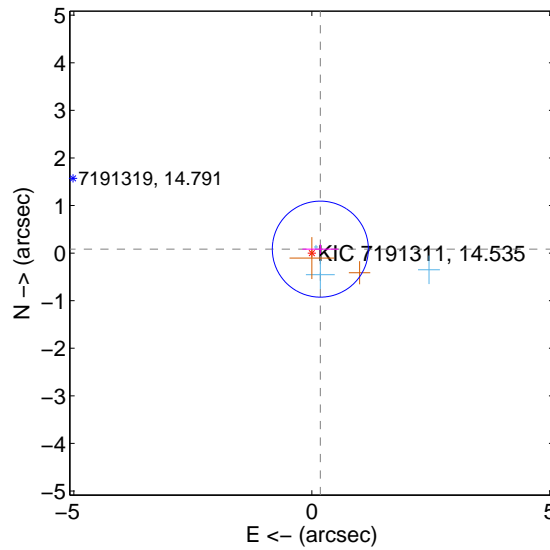
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.369 ± 0.314	1.18	-0.287 ± 0.377	0.233 ± 0.125
PRF-fit source offset from KIC position	0.198 ± 0.336	0.59	-0.180 ± 0.379	0.083 ± 0.103
photometric centroid source offset	1.30 ± 0.98	1.32	0.42 ± 0.65	-1.22 ± 1.01

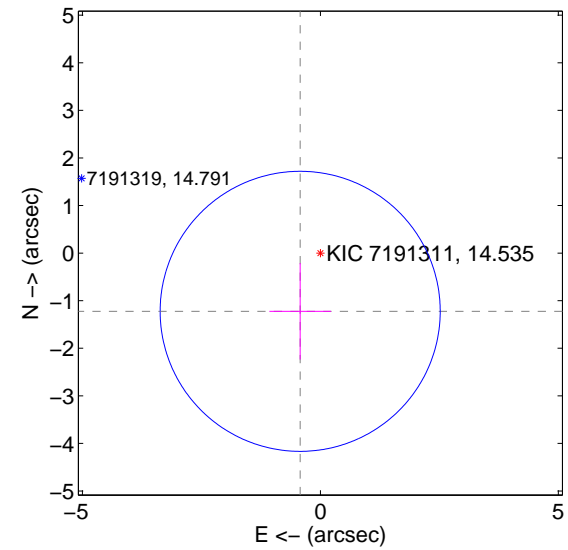
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

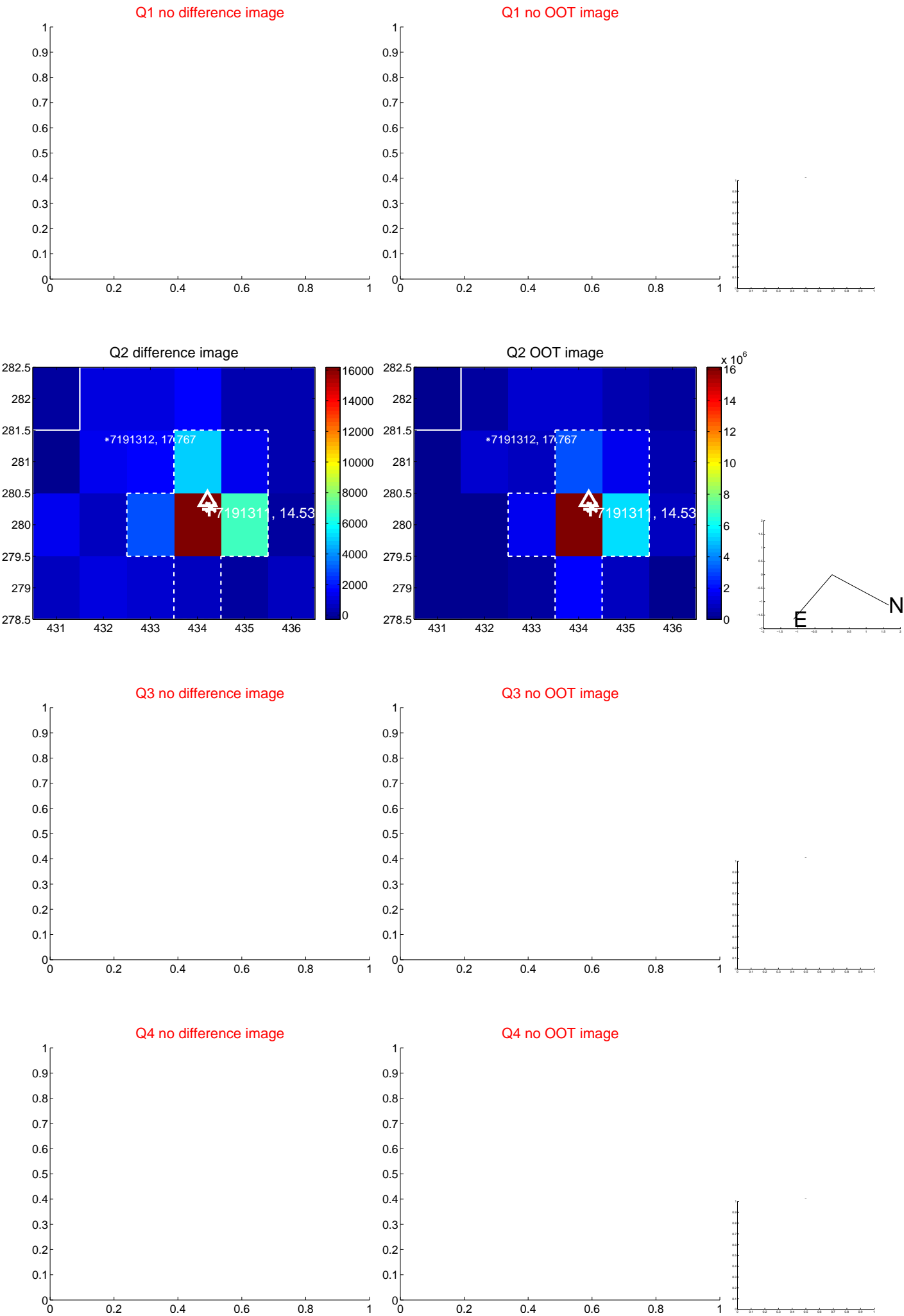


offset from photometric centroids

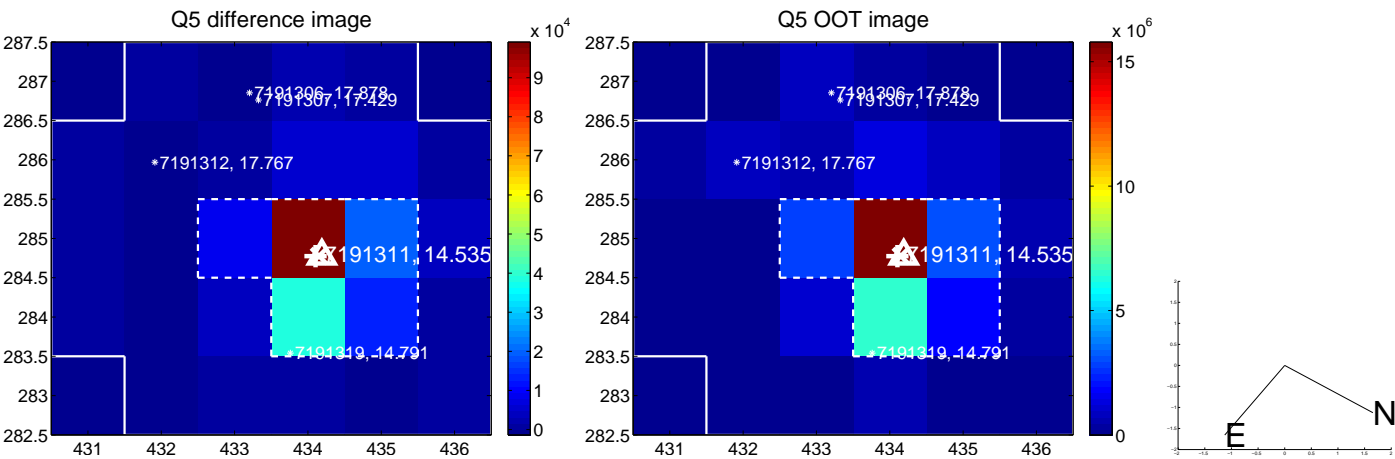


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . 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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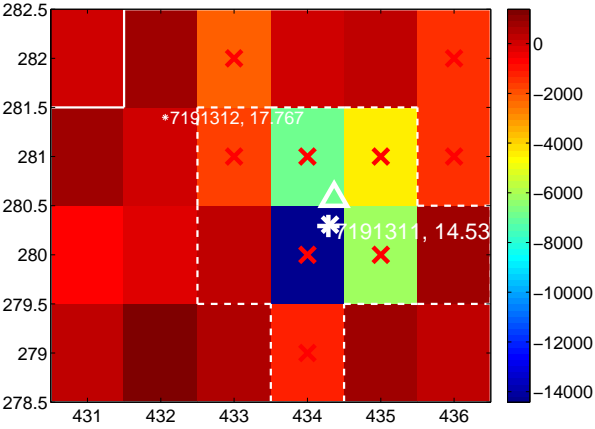
Q9 no difference image



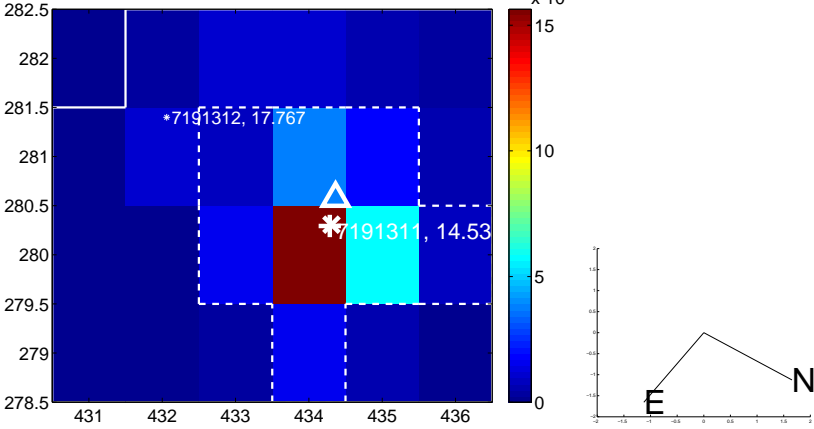
Q9 no OOT image



Q10 difference image. Poor Quality



Q10 OOT image



Q11 no difference image



Q11 no OOT image



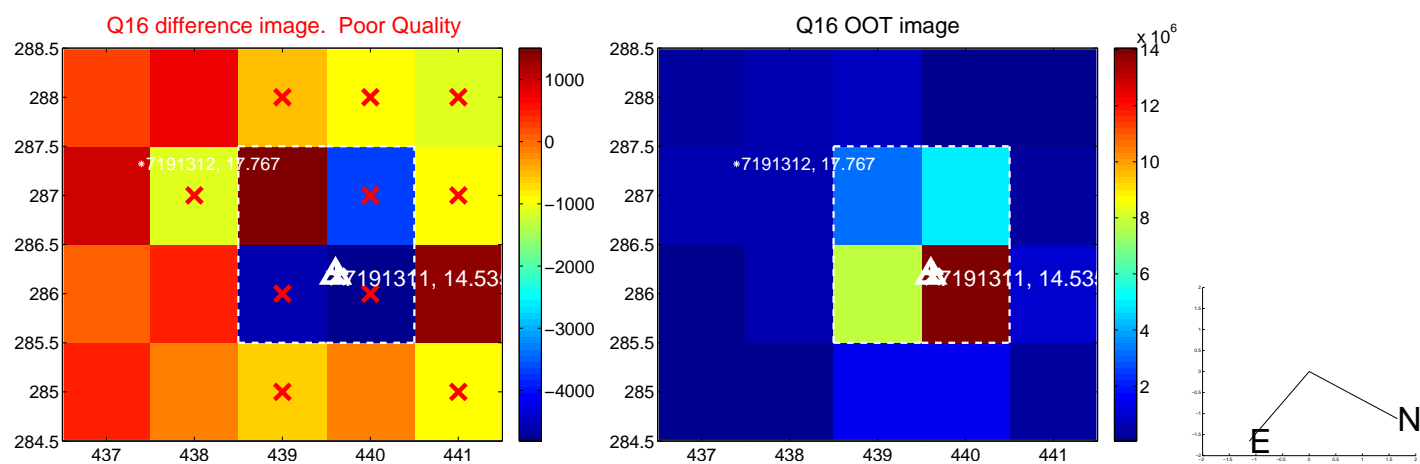
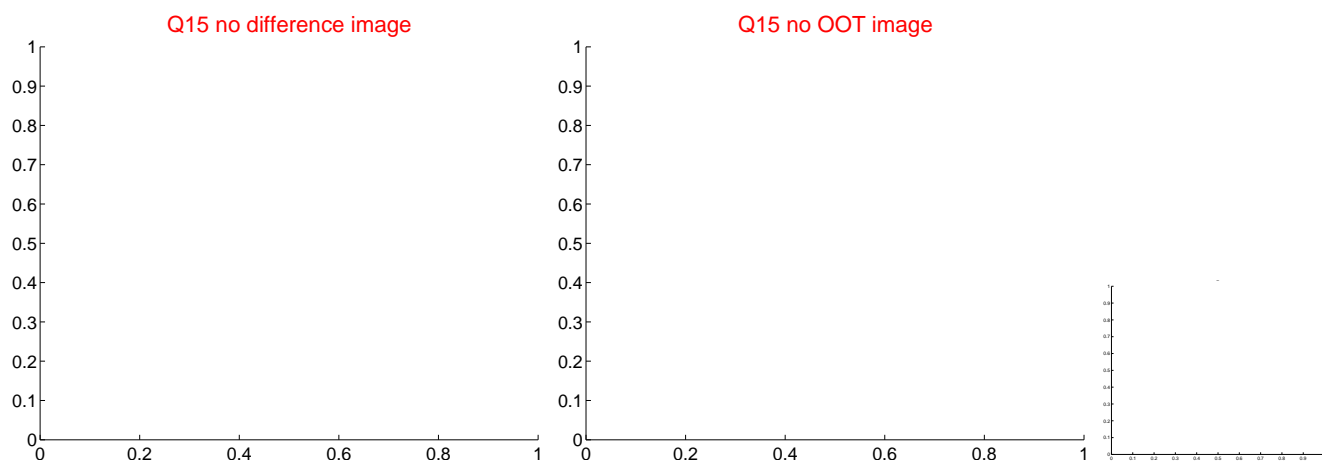
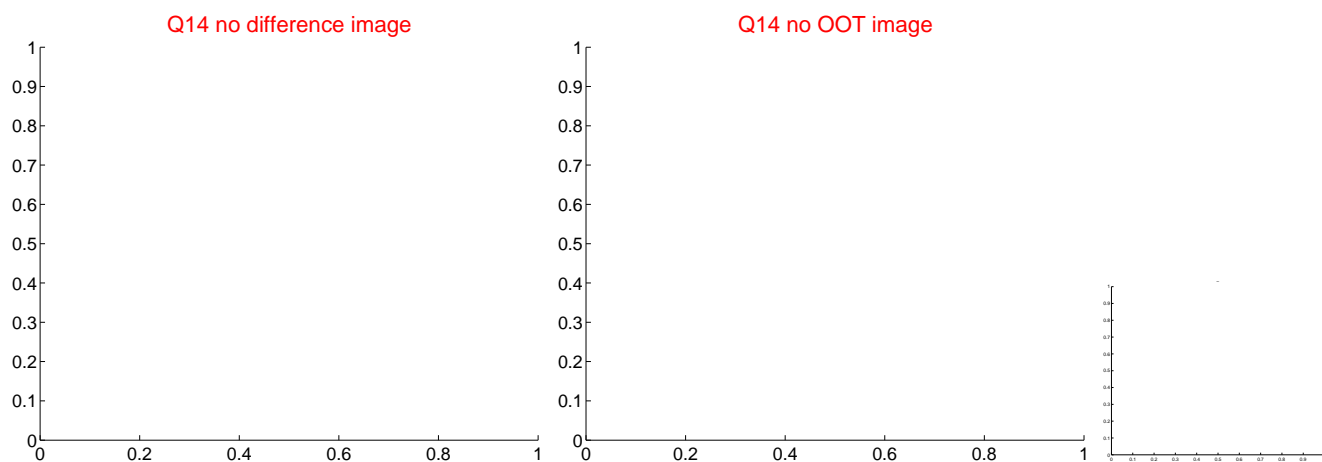
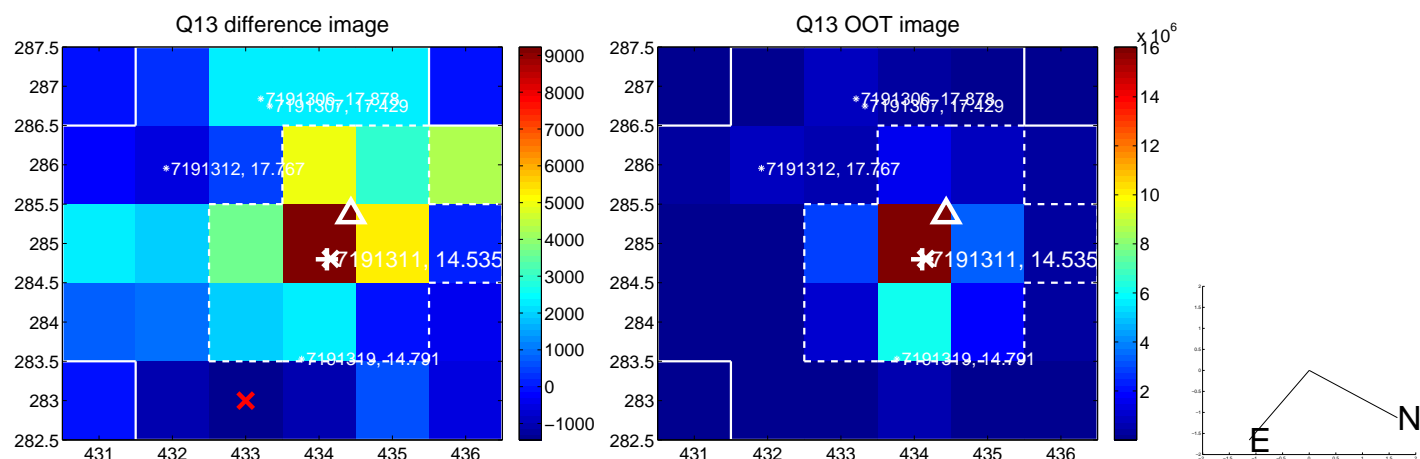
Q12 no difference image



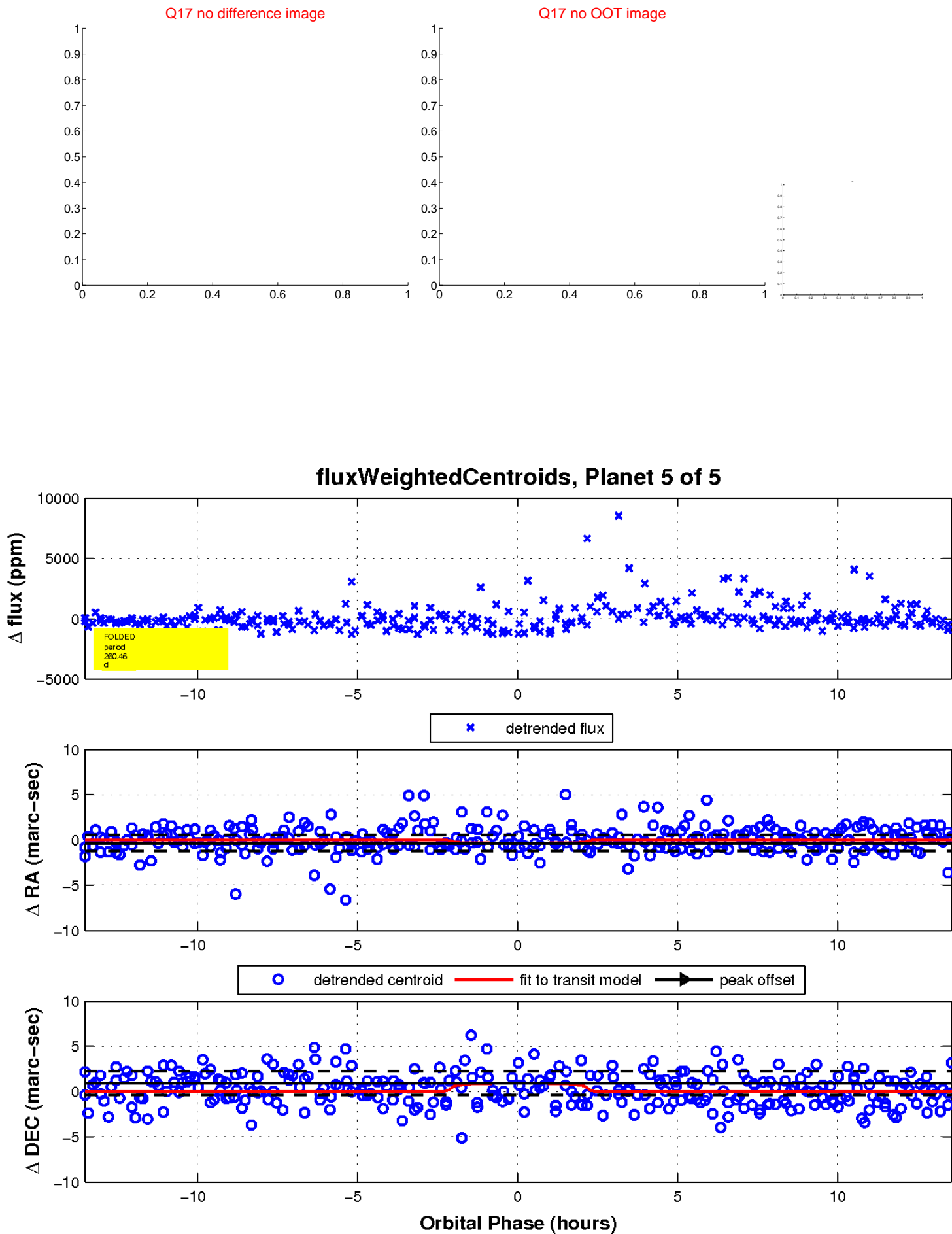
Q12 no OOT image



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.



UKIRT Image

Declination

