

KIC 011284185

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})
011284185-01	OBS	No	243.274756	287.773642	907.2	6.045	12.4	4.1	3.69	4965	10.79	14.11
011284185-02	OBS	No	449.662290	195.649527	1181.2	4.297	11.9	5.3	3.69	4965	14.26	6.22
011284185-03	OBS	No	523.920808	189.542503	1605.4	3.676	11.1	7.4	3.69	4965	14.40	5.07

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011284185-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
011284185-02	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
011284185-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

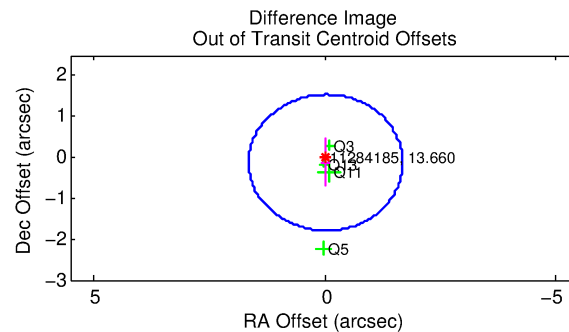
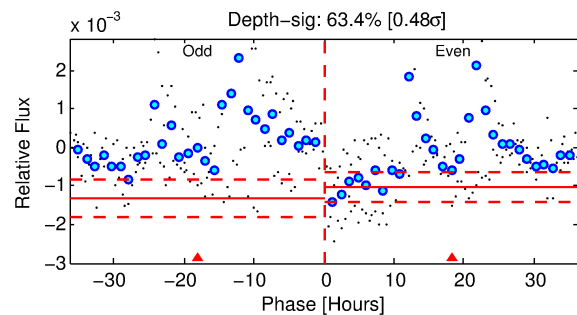
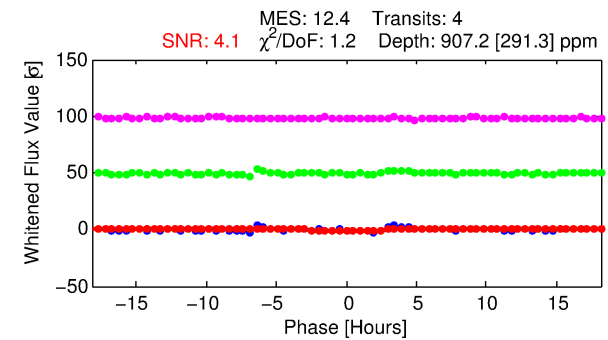
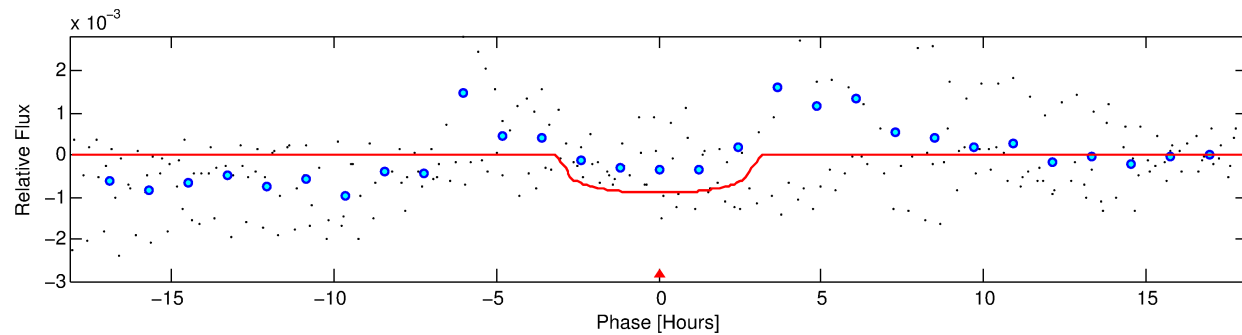
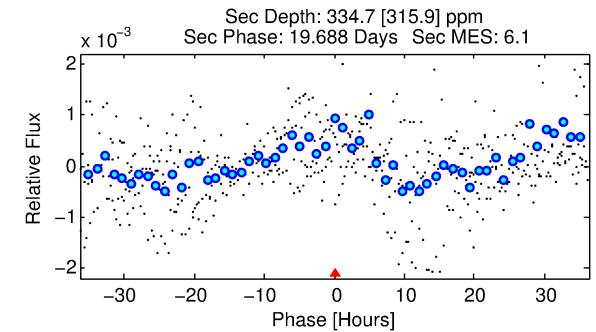
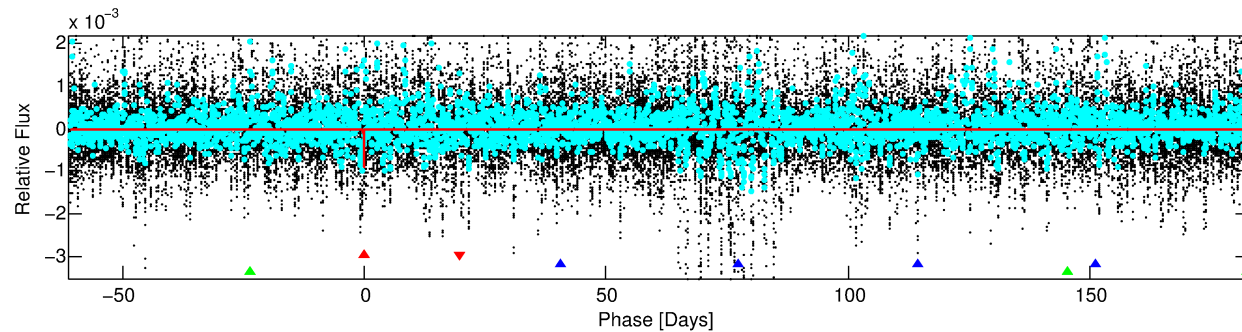
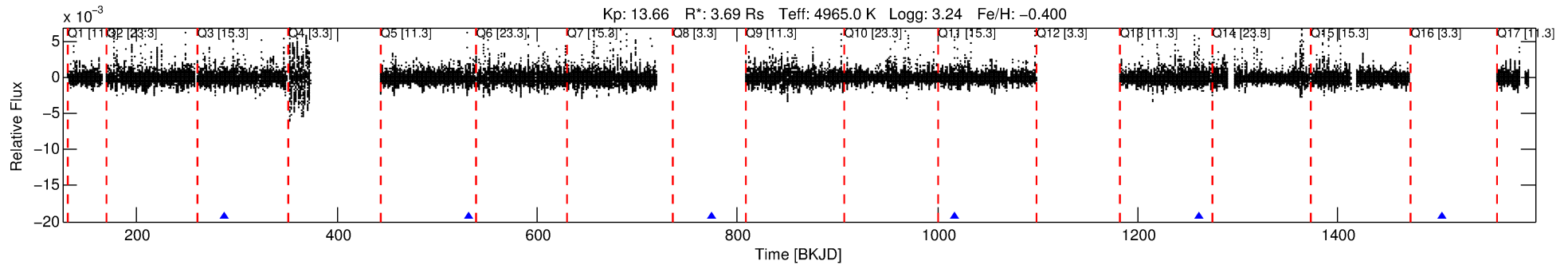
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011284185-01

No Significant Match Found

DV One-Page Summary

KIC: 11284185 Candidate: 1 of 3 Period: 243.275 d



DV Fit Results:

Period = 243.27476 [0.00398] d
Epoch = 287.7736 [0.0117] BKJD
Rp/R* = 0.0268 [0.0658]
a/R* = 315.67 [2827.08]
b = 0.01 [1192.55]
Seff = 14.11 [9.56]
Teq = 494 [84] K
Rp = 10.79 [27.24] Re
a = 0.7241 [0.3492] AU
Ag = 829.29 [4179.49] [0.20 σ]
Teffp = 4100 [5121] K [0.70 σ]

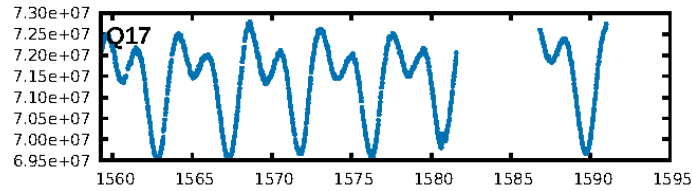
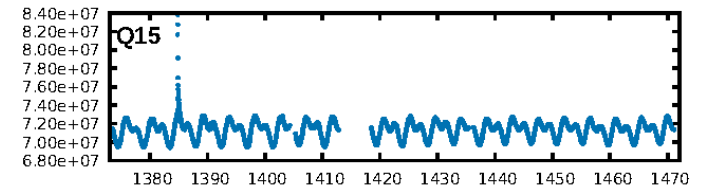
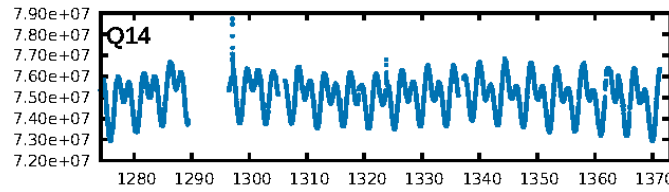
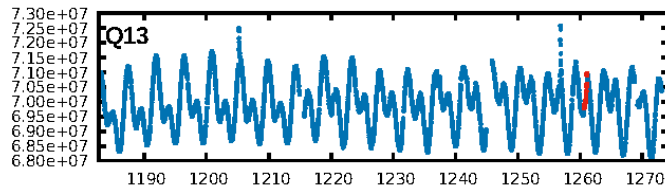
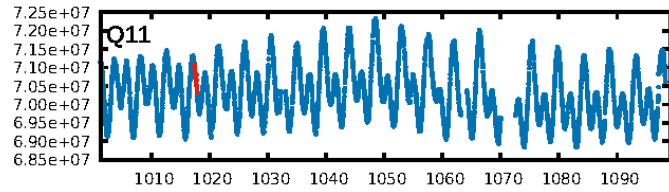
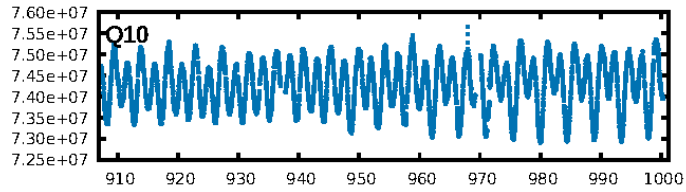
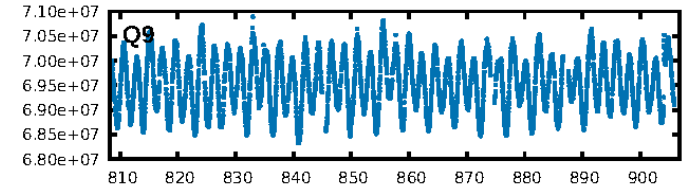
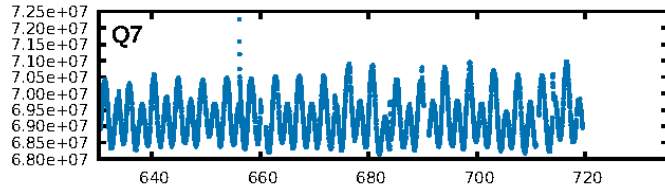
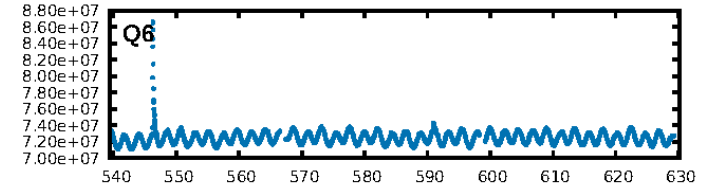
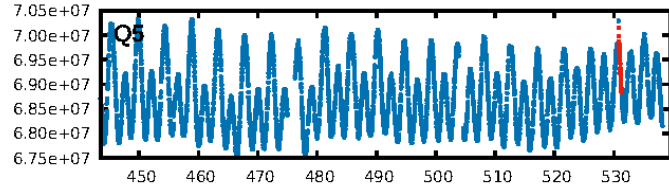
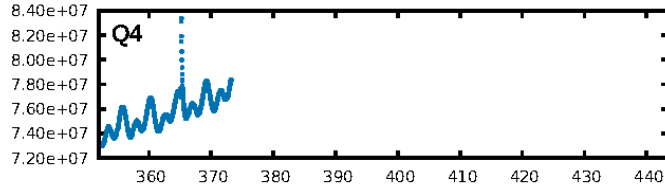
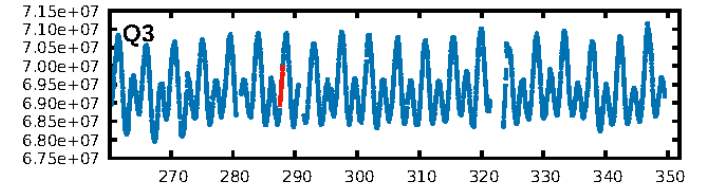
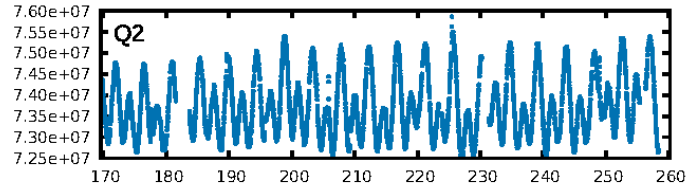
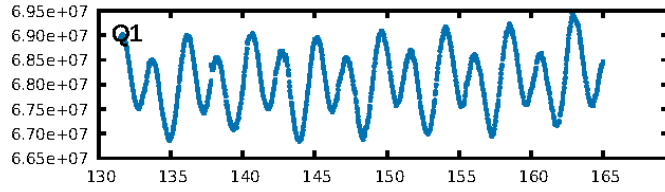
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [667.86 σ]
ModelChiSquare2-sig: 0.6%
ModelChiSquareGof-sig: 65.6%
Bootstrap-pfa: 1.46e-11
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 2.42
Centroid-sig: 3.0%
Centroid-so: 0.815 arcsec [1.21 σ]
OotOffset-rm: 0.130 arcsec [0.23 σ]
OotOffset-st: 0/2/0/2 [4]
KicOffset-rm: 0.019 arcsec [0.08 σ]
KicOffset-st: 0/2/0/2 [4]
DiffImageQuality-fgm: 0.50 [2/4]
DiffImageOverlap-fno: 1.00 [4/4]

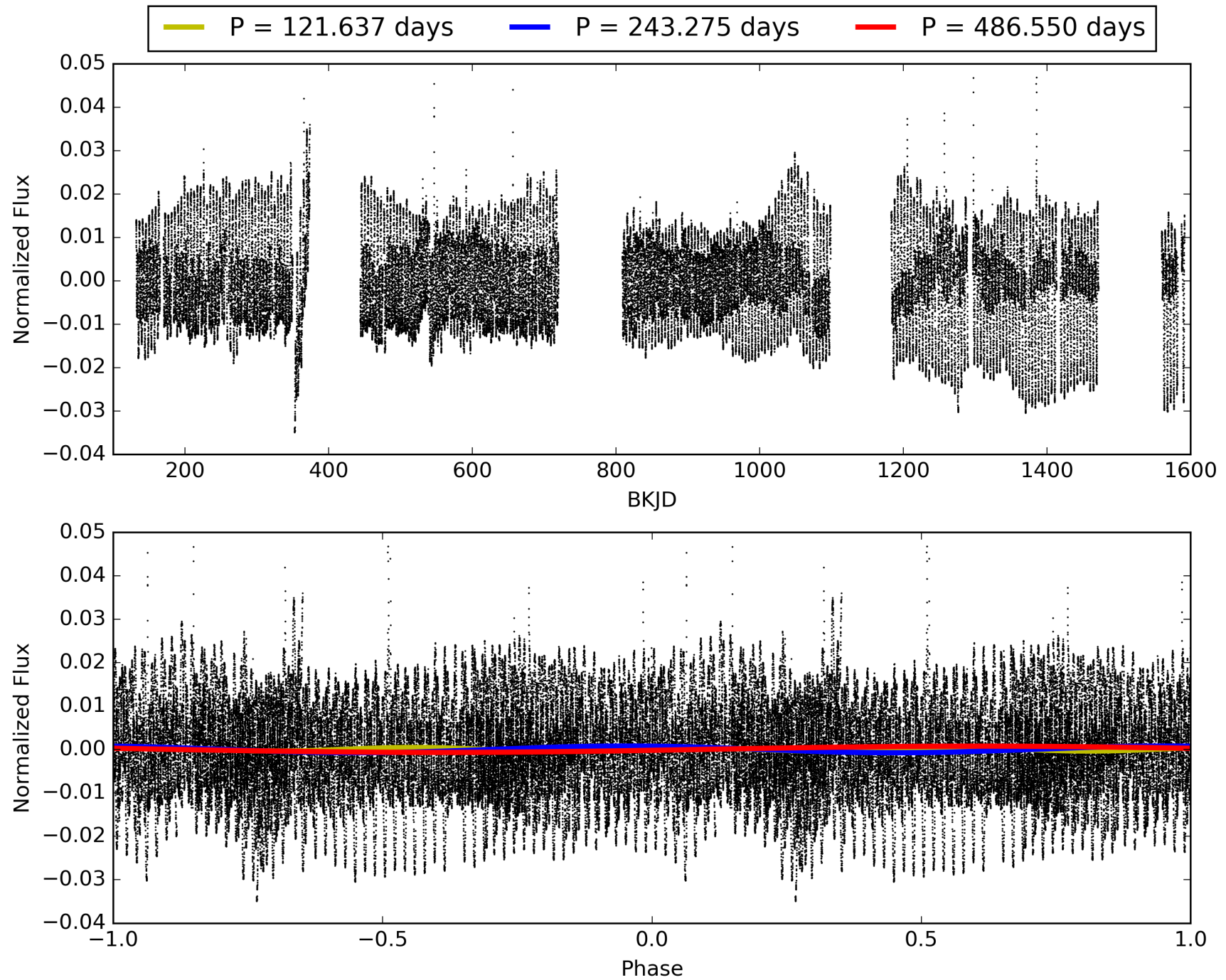
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 13:59:37 Z

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

TCE 011284185-01, PDC Light Curves

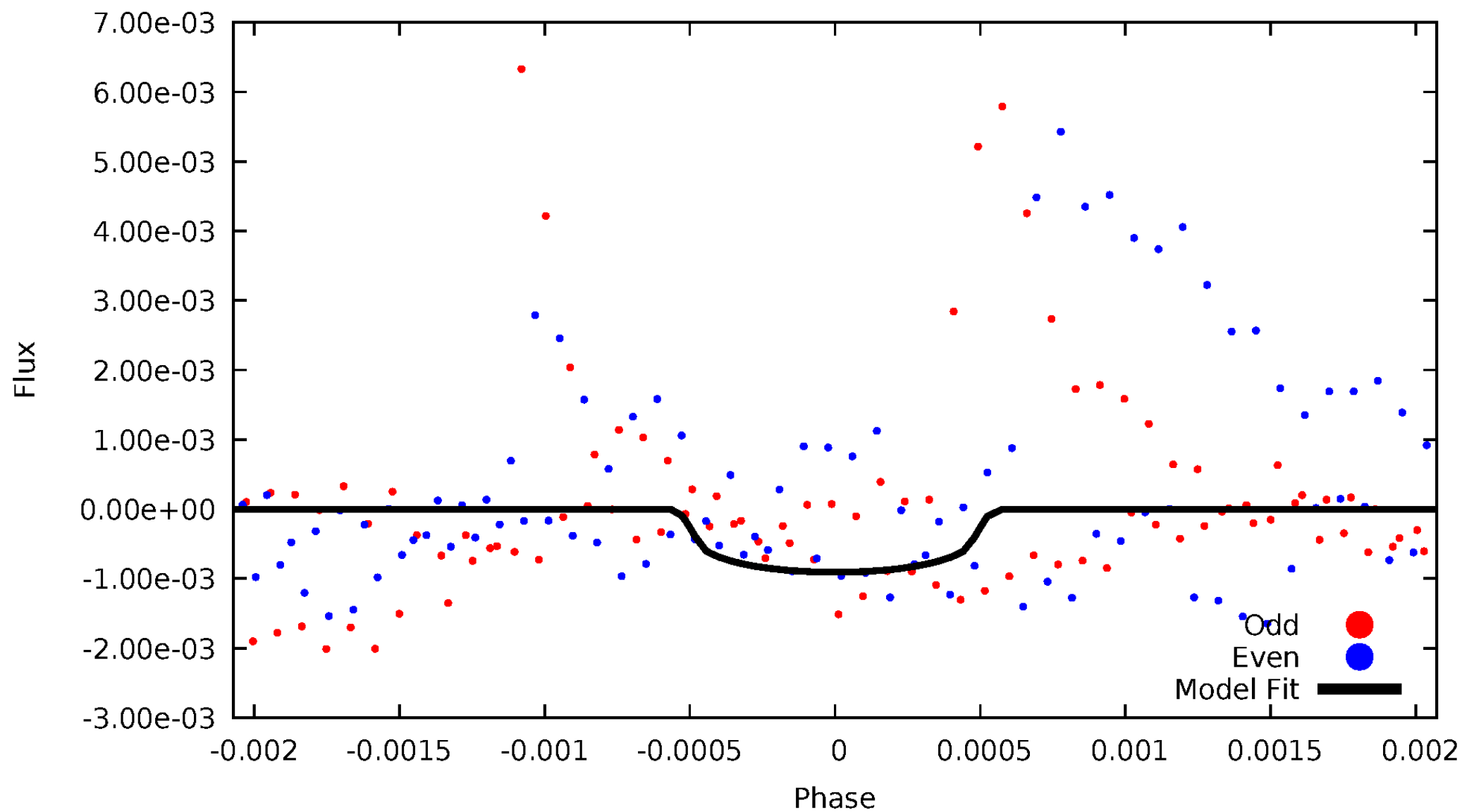


TCE 011284185-01



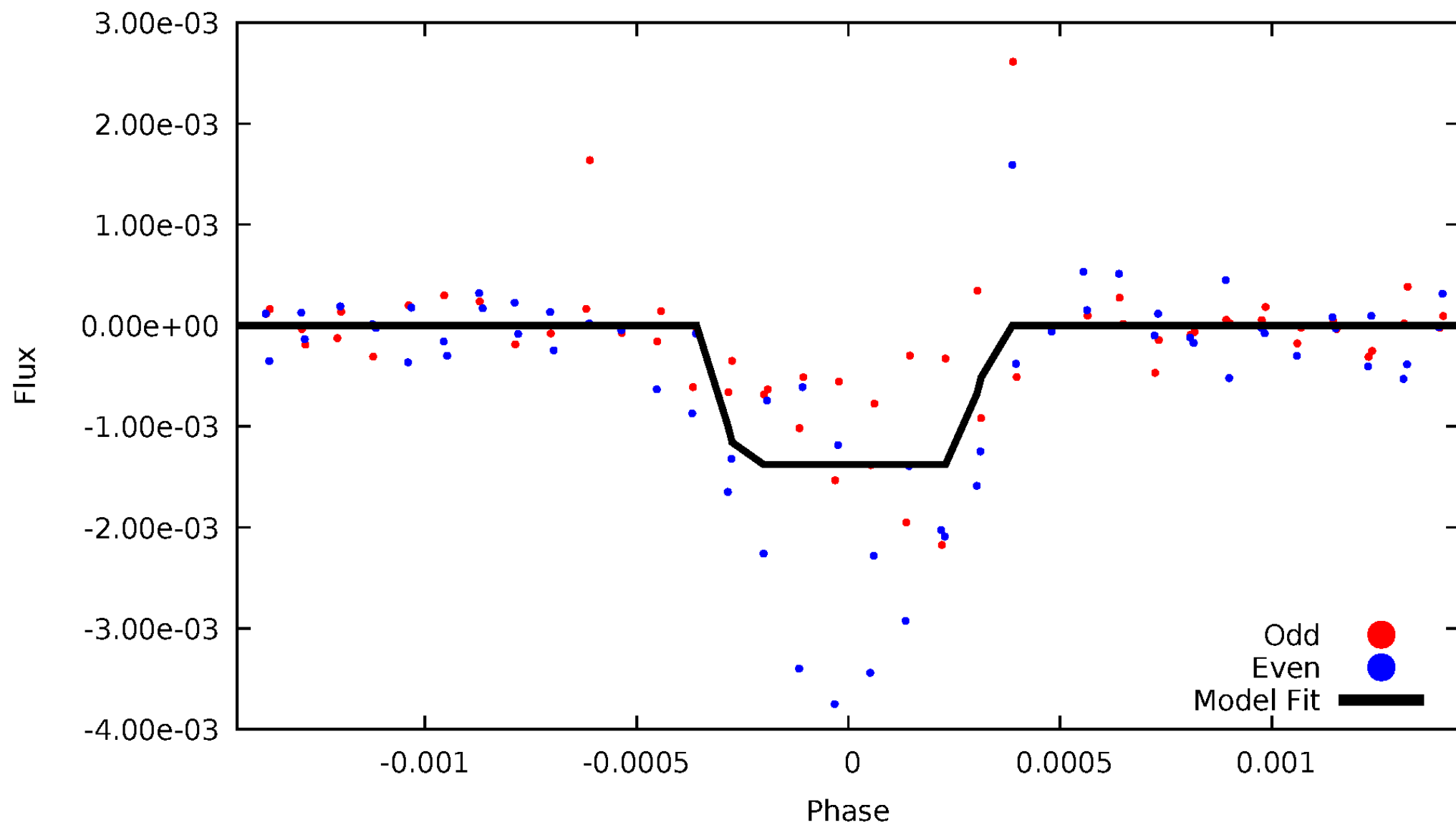
DV Odd/Even

TCE 011284185-01



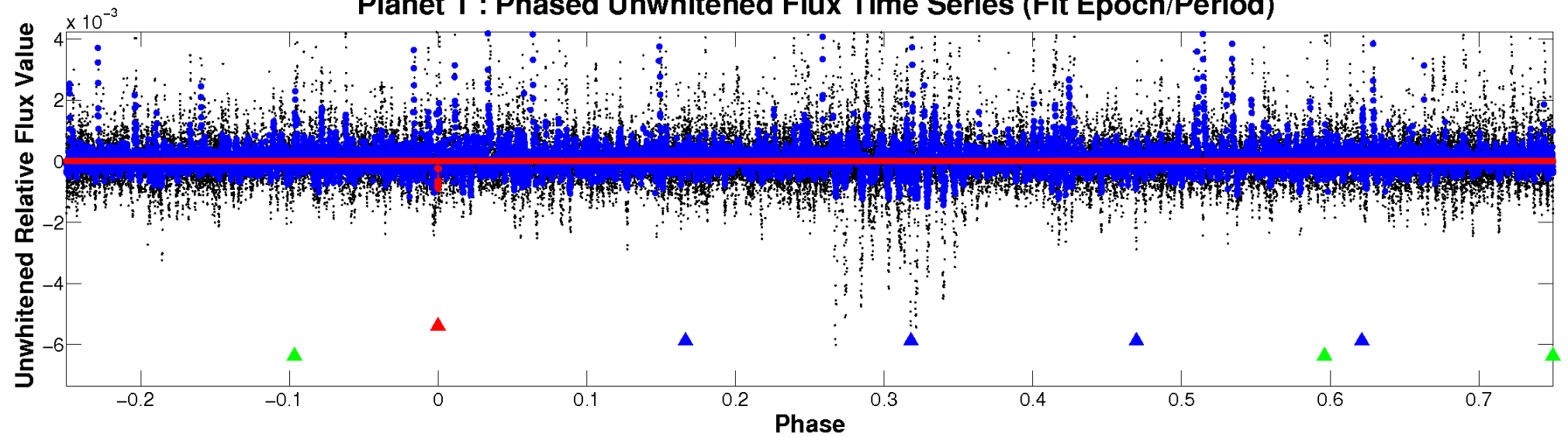
ALT Odd/Even

TCE 011284185-01

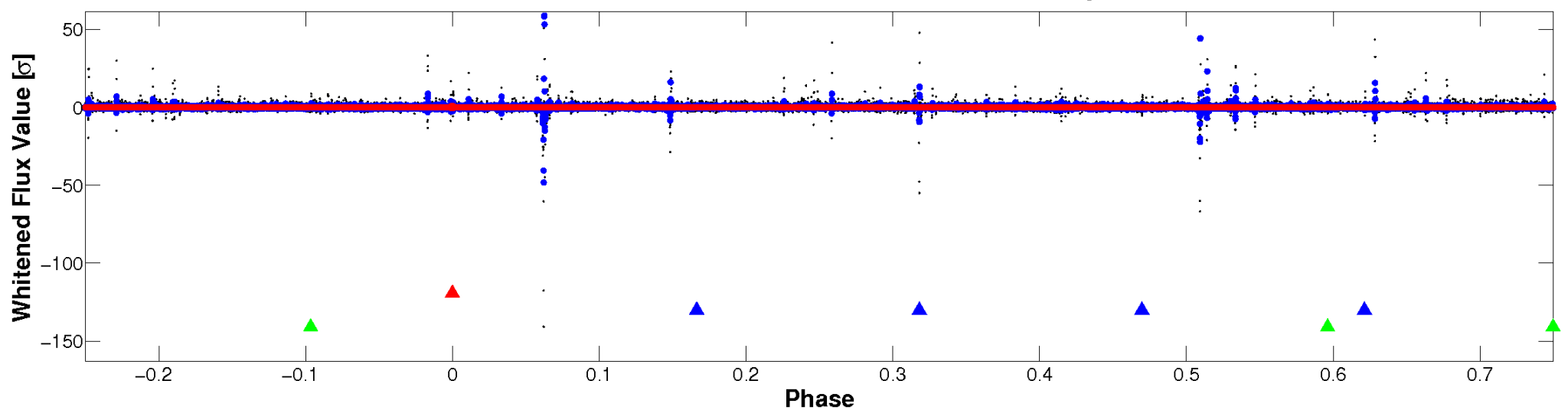


Non-Whitened Vs. Whitened Light Curve

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

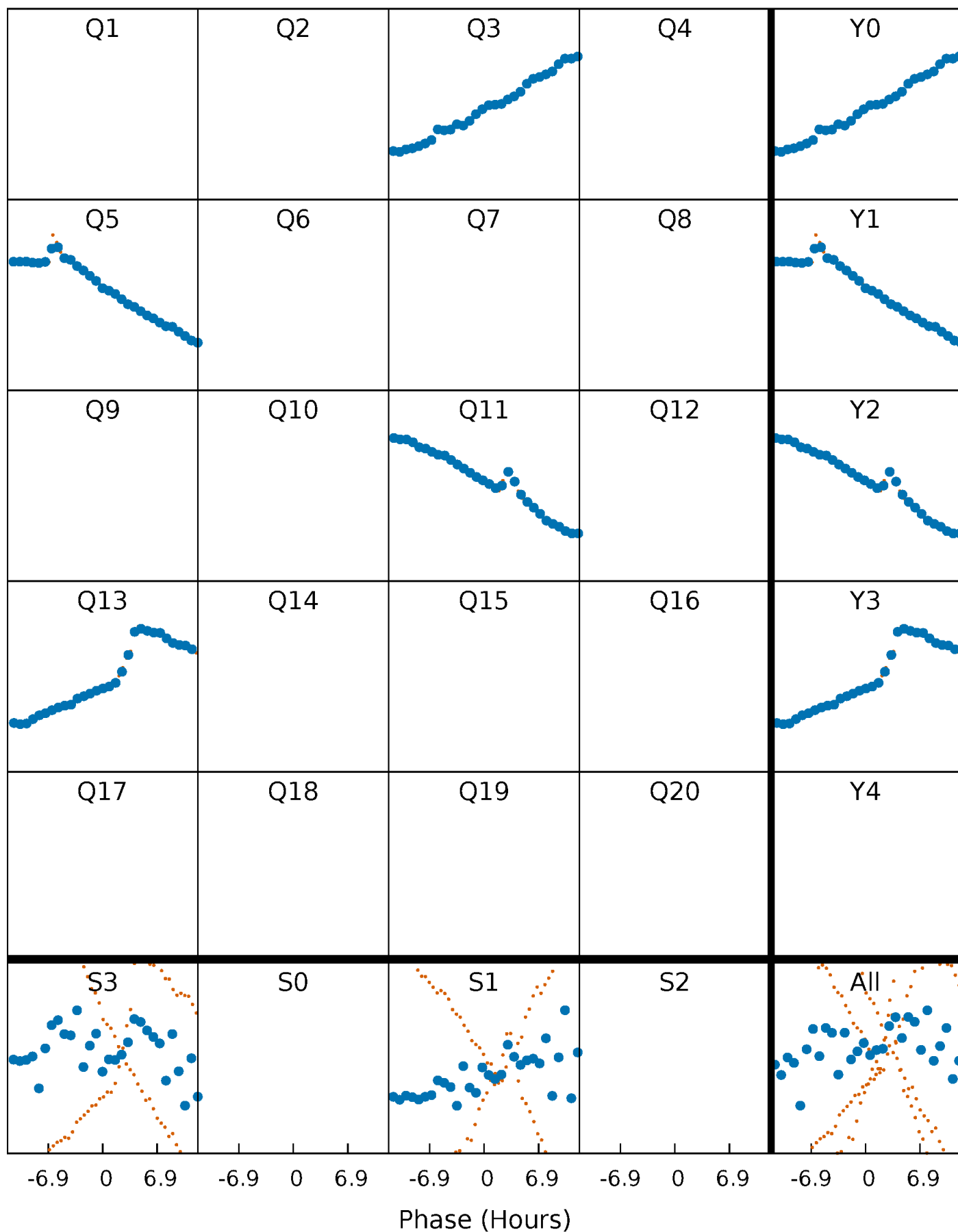


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



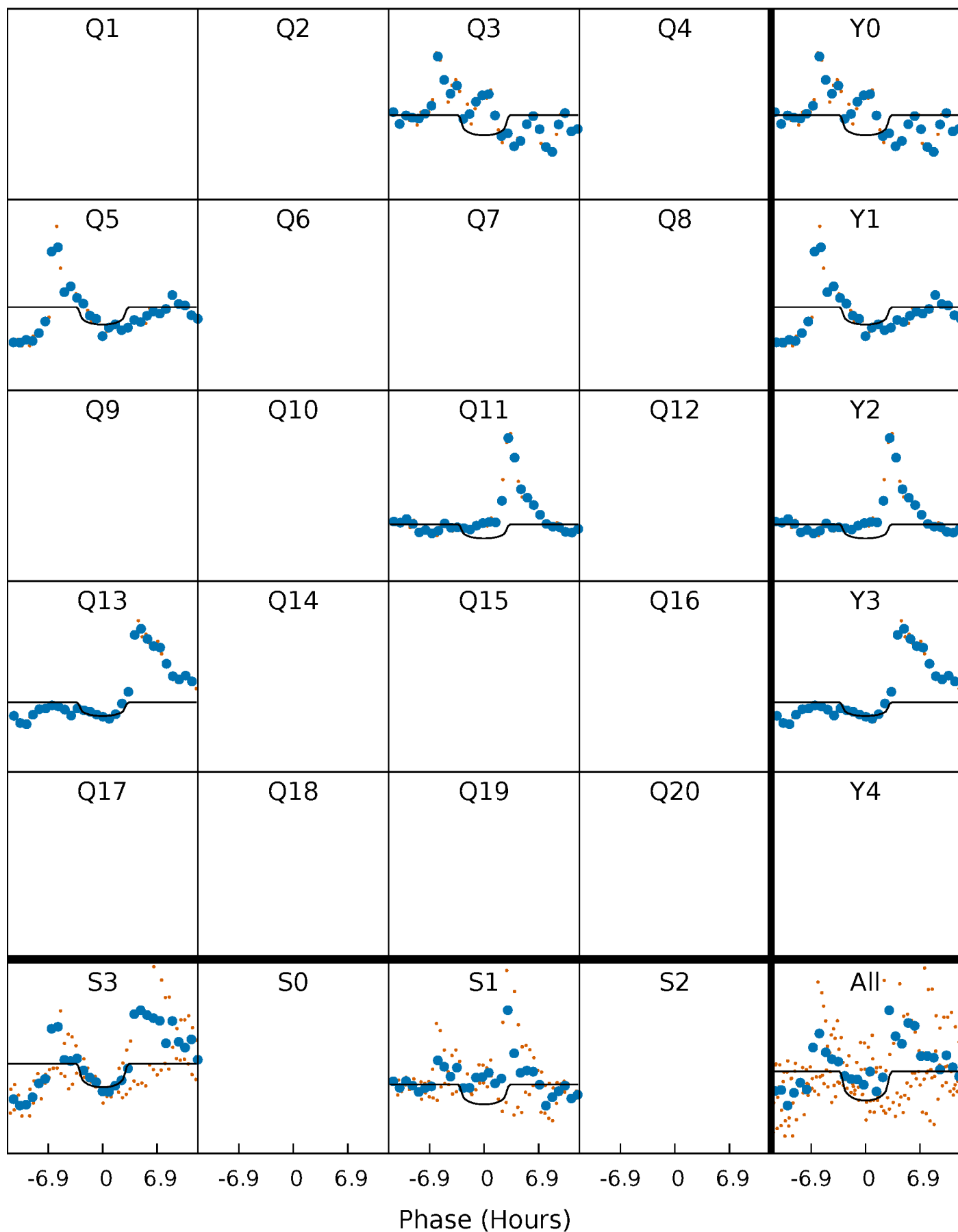
PDC Quarter-Phased Transit Curves

TCE 011284185-01 P=243.274756 Days $T_0=287.773642$ (BKJD)



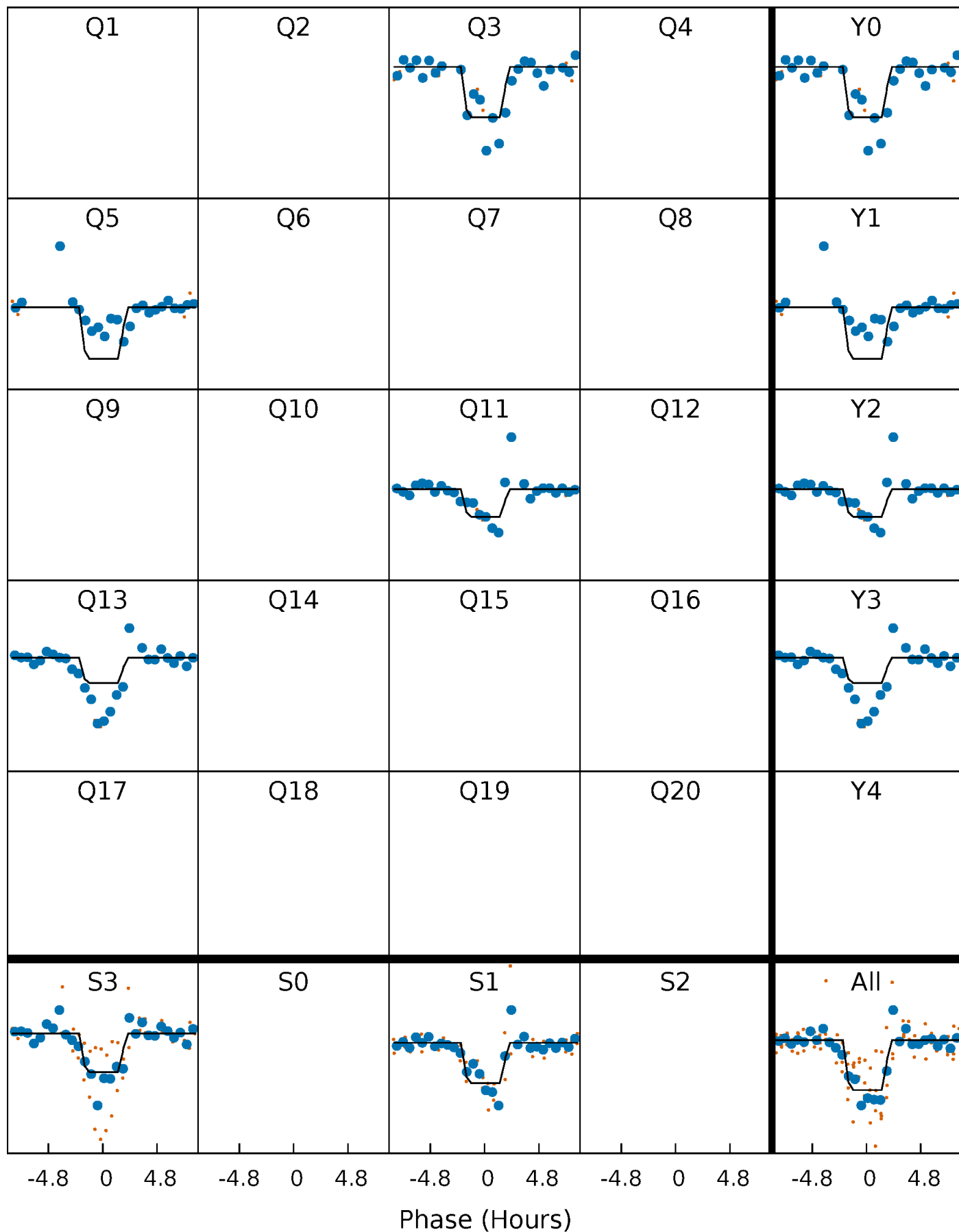
DV Quarter-Phased Transit Curves

TCE 011284185-01 P=243.274756 Days $T_0=287.773642$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

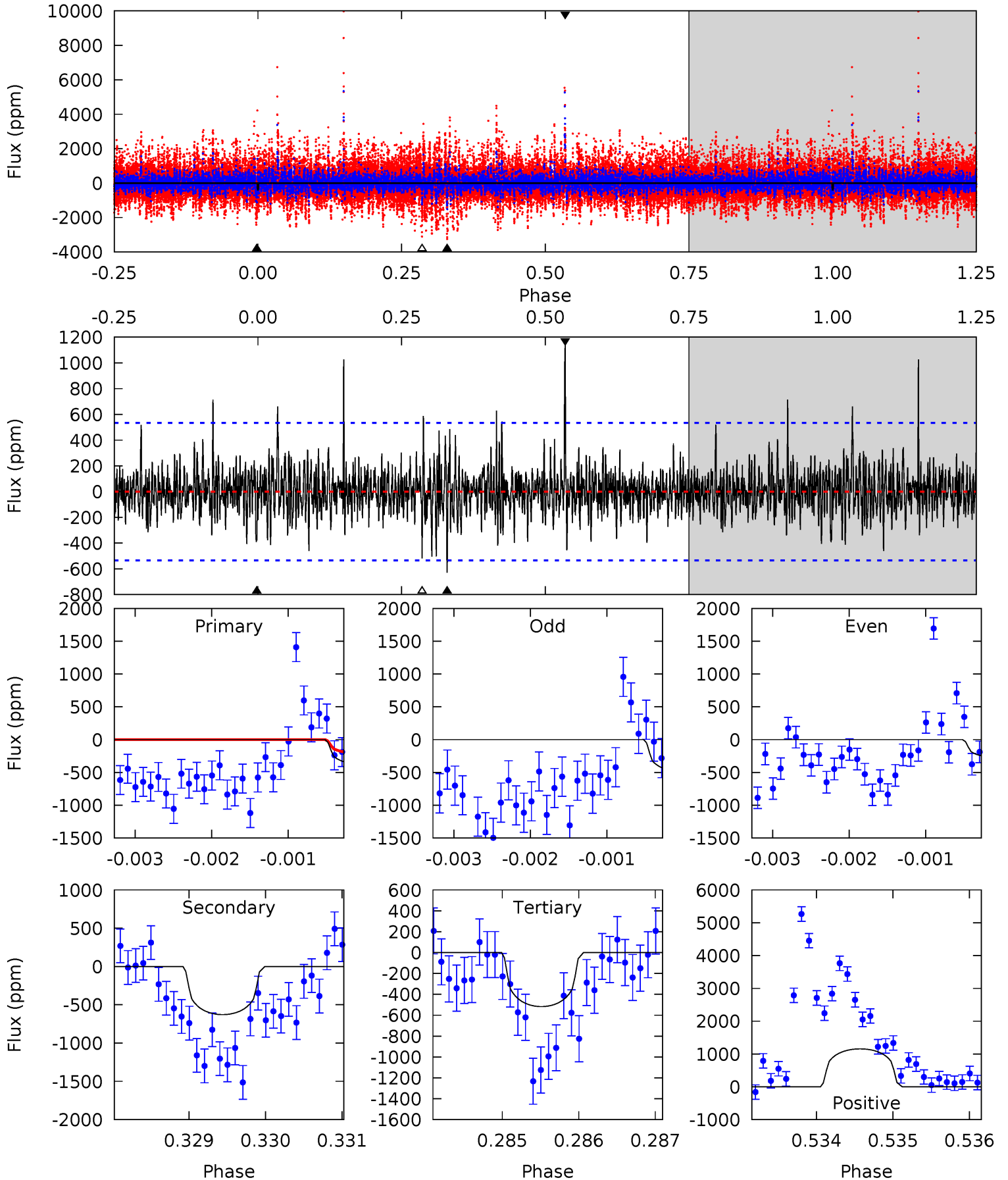
TCE 011284185-01 P=243.323991 Days $T_0=287.651121$ (BKJD)



DV Model-Shift Uniqueness Test

011284185-01, $P = 243.274756$ Days, $E = 44.498886$ Days

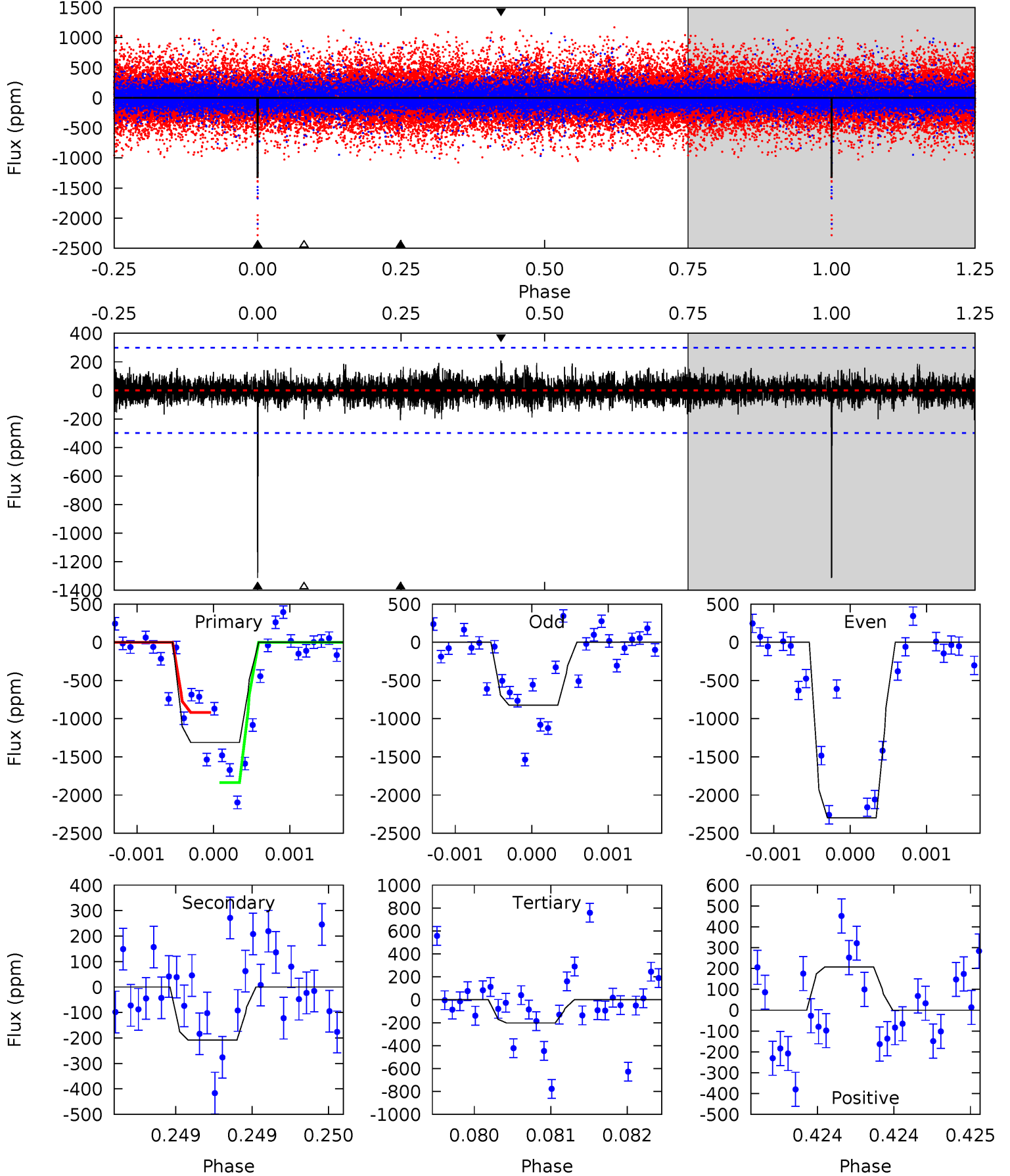
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.87	6.40	5.27	11.8	5.44	3.27	1.49	-1.40	-7.89	1.13	-5.37	0.40	0.96	0.65	1.77



Alt Model-Shift Uniqueness Test

011284185-01, $P = 243.323991$ Days, $E = 44.327130$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.3	3.86	3.75	3.84	5.52	3.40	0.89	20.5	20.4	0.11	0.02	14.3	1.12	0.14	8.56



Stellar Parameters For KIC 011284185

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4965^{+124}_{-111}	$3.237^{+0.350}_{-0.350}$	$-0.400^{+0.300}_{-0.200}$	$3.686^{+2.214}_{-1.192}$	$0.854^{+0.284}_{-0.190}$	$0.024^{+0.057}_{-0.017}$
	+2%/-2%	+11%/-11%	+75%/-50%	+60%/-32%	+33%/-22%	+237%/-70%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011284185-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-628 ± 98	$22.93^{+20.76}_{-15.28}$	689^{+97}_{-75}	3679^{+1848}_{-694}	356^{+2690}_{-266}
Alt.	-208 ± 54	$24.42^{+24.92}_{-16.27}$	691^{+100}_{-77}	3029^{+1298}_{-487}	101^{+759}_{-77}

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

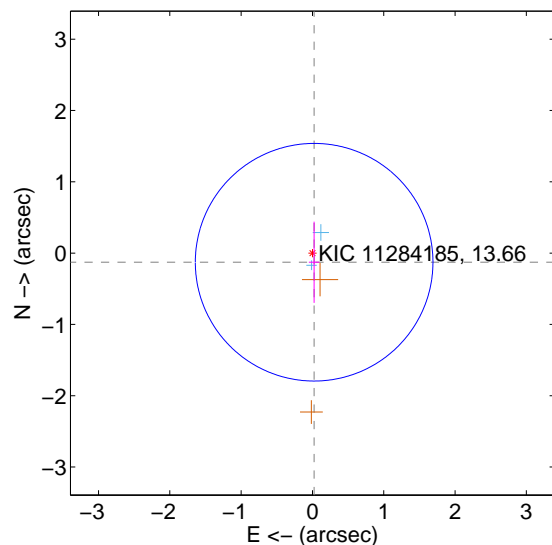
Supplemental centroid analysis for 011284185-01. Kepler magnitude: 13.66. Transit SNR 4.06

There are 2 quarters with good PRF difference image offsets

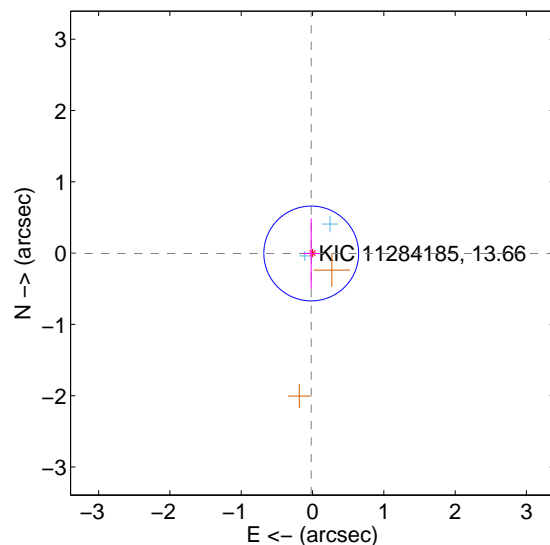
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.130 ± 0.555	0.23	-0.024 ± 0.074	-0.128 ± 0.570
PRF-fit source offset from KIC position	0.019 ± 0.222	0.08	0.018 ± 0.118	-0.005 ± 0.494
photometric centroid source offset	0.81 ± 0.67	1.21	0.29 ± 0.63	-0.76 ± 0.68

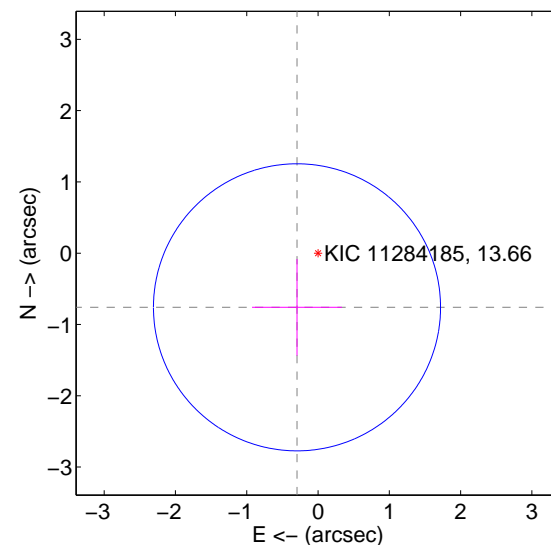
offset from difference PRF-fit to OOT PRF-fit



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.

Q1 no difference image



Q1 no OOT image



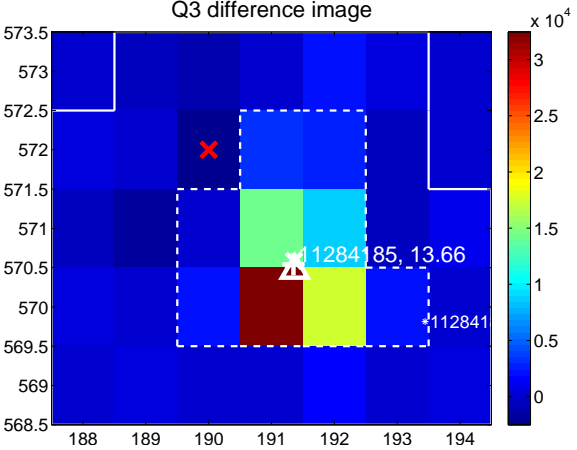
Q2 no difference image



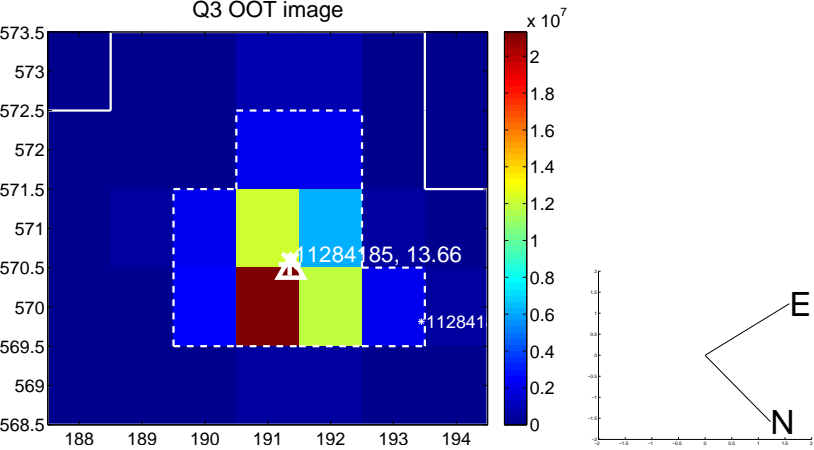
Q2 no OOT image



Q3 difference image



Q3 OOT image



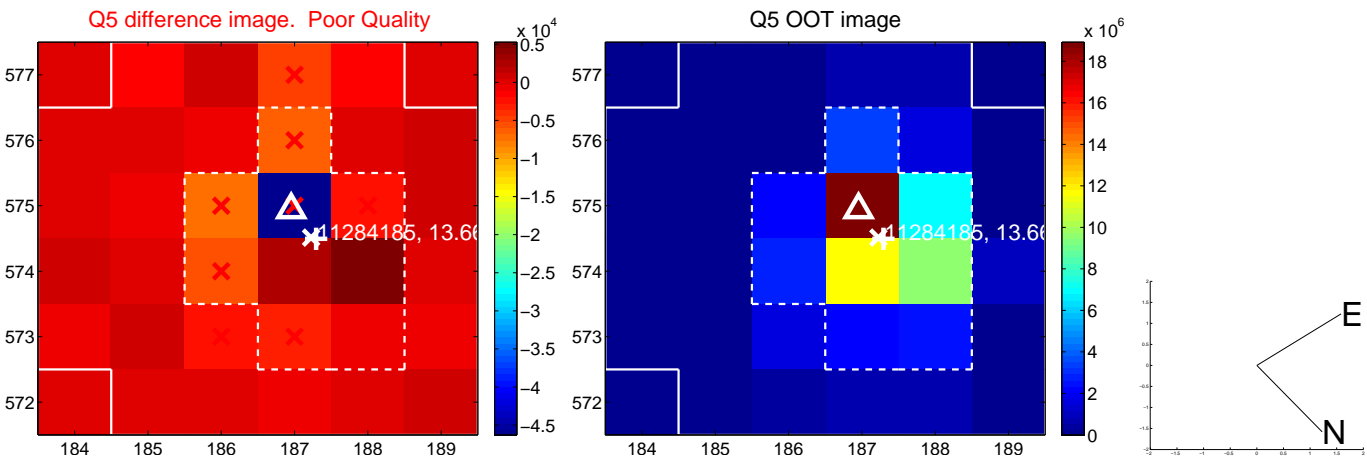
Q4 no difference image



Q4 no OOT image



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



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

Q9 no difference image



Q9 no OOT image



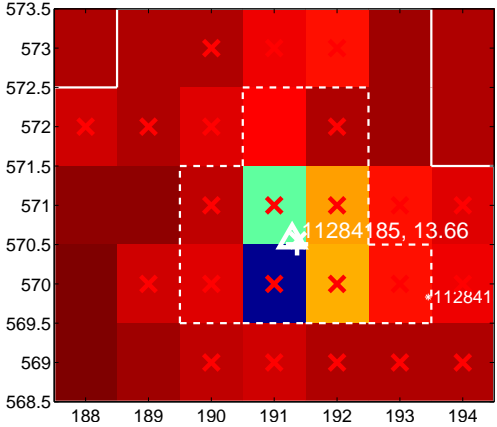
Q10 no difference image



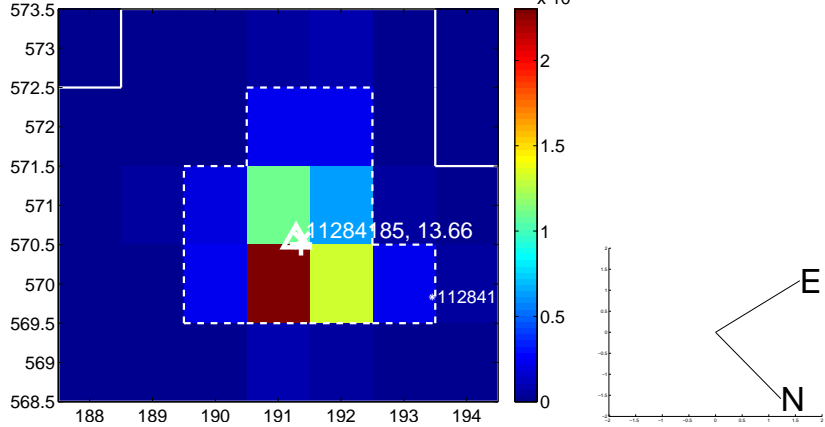
Q10 no OOT image



Q11 difference image. Poor Quality



Q11 OOT image



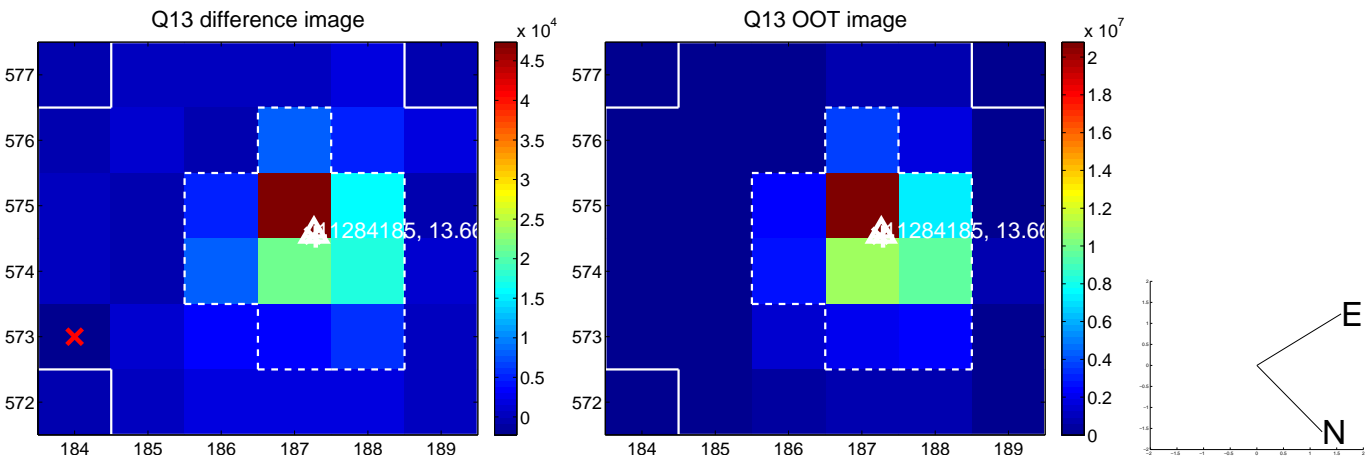
Q12 no difference image



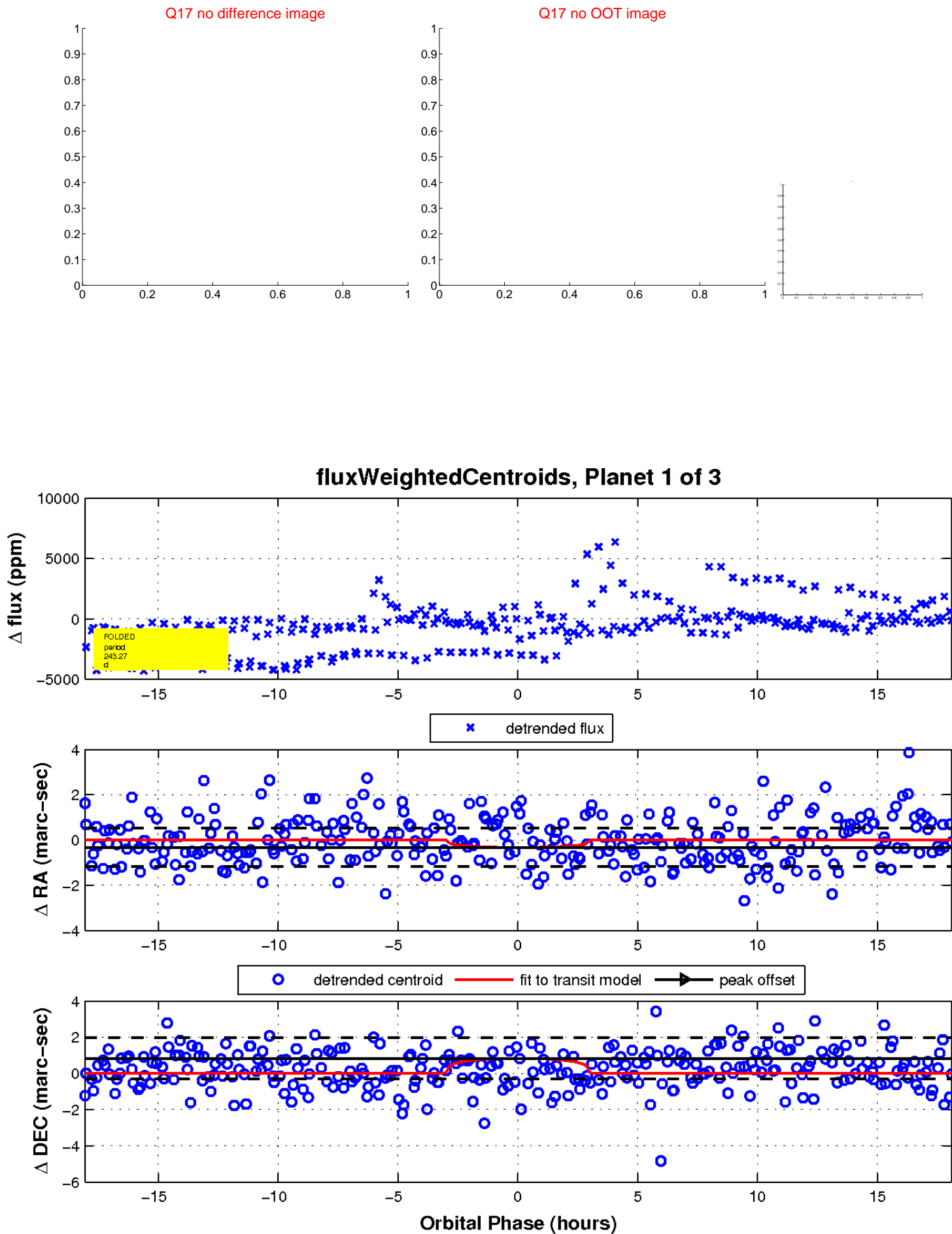
Q12 no OOT image



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

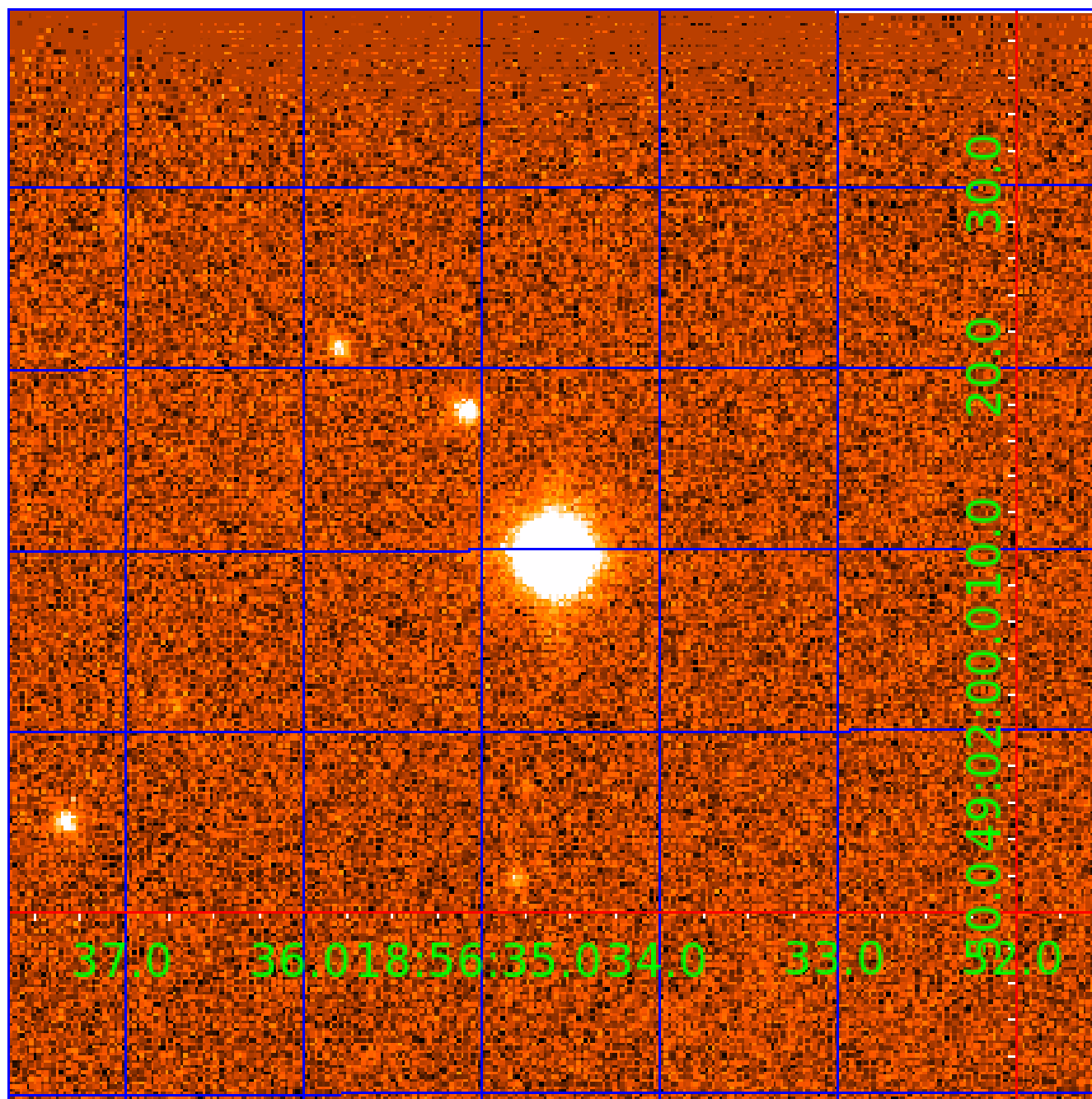


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011284185

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})
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
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011284185-02	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
011284185-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

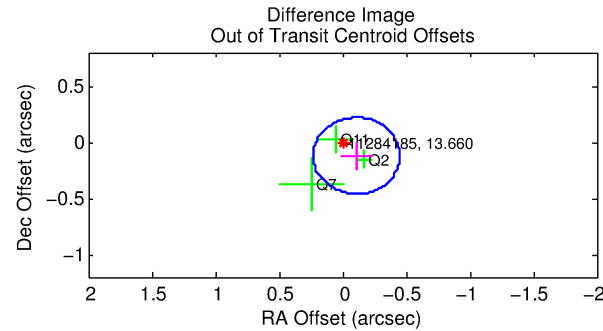
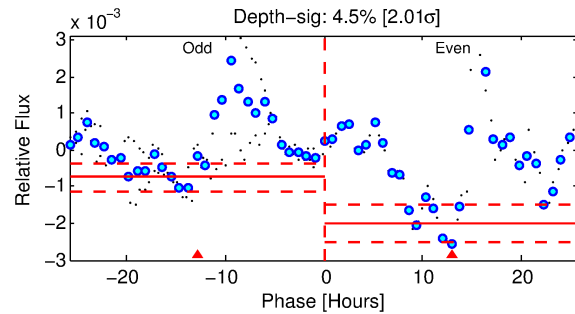
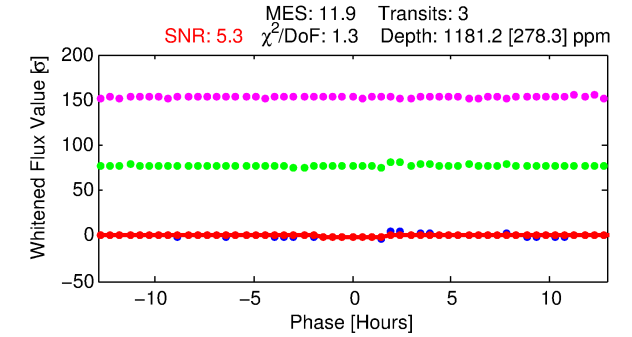
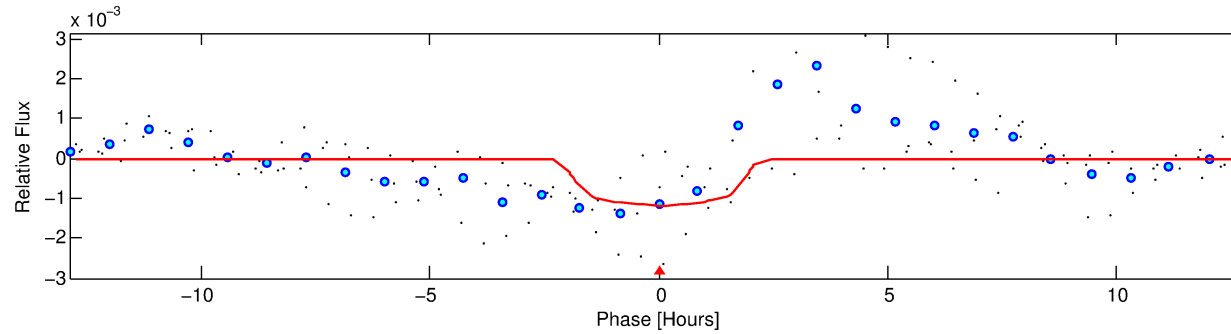
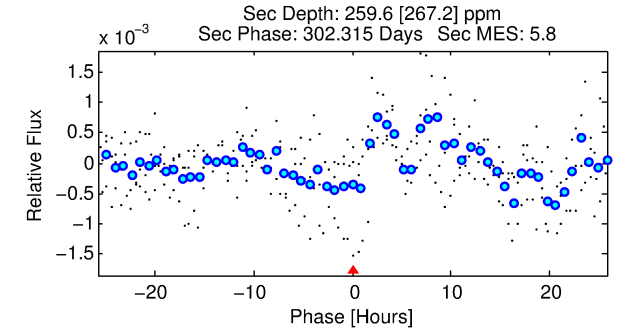
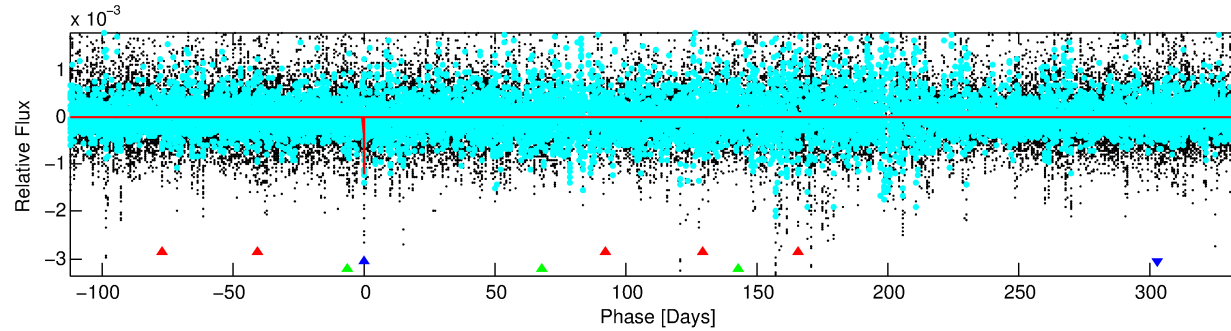
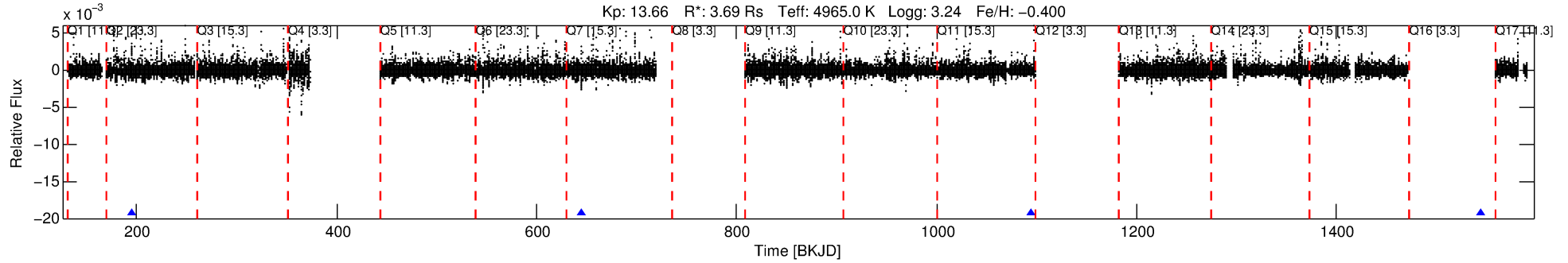
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011284185-02

No Significant Match Found

DV One-Page Summary

KIC: 11284185 Candidate: 2 of 3 Period: 449.662 d



DV Fit Results:

Period = 449.66229 [0.00600] d
Epoch = 195.6495 [0.0094] BKJD
Rp/R* = 0.0354 [0.0245]
a/R* = 514.74 [1279.69]
b = 0.81 [1.08]
Seff = 6.22 [4.21]
Teq = 403 [68] K
Rp = 14.26 [13.05] Re
a = 1.0906 [0.5259] AU
Ag = 835.82 [1544.89] [0.54 σ]
Teffp = 3348 [1444] K [2.04 σ]

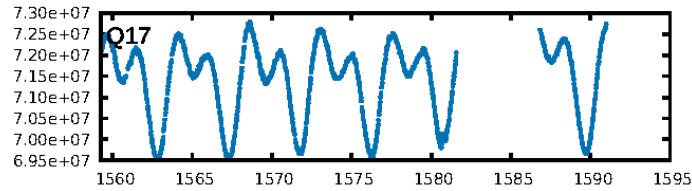
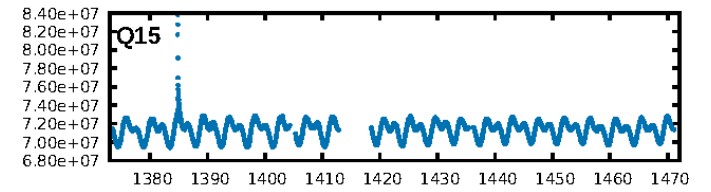
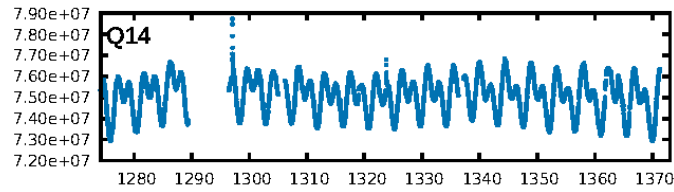
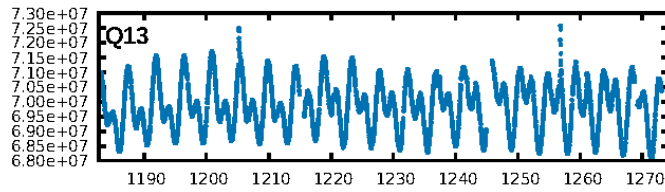
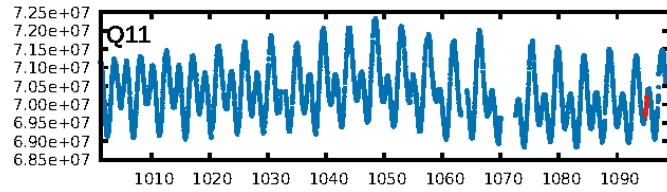
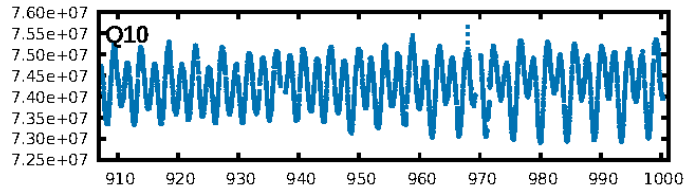
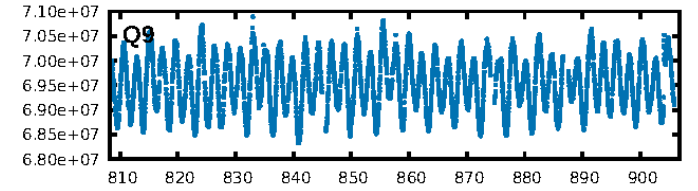
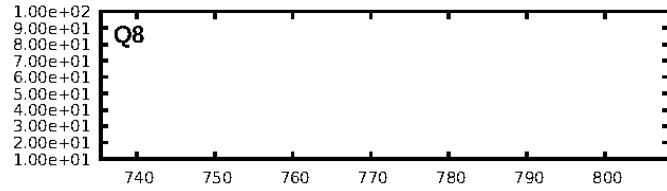
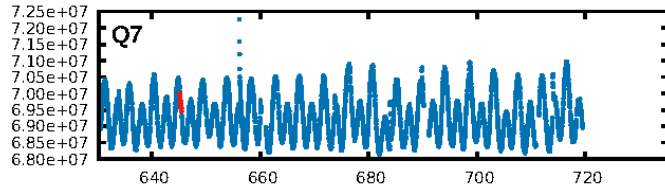
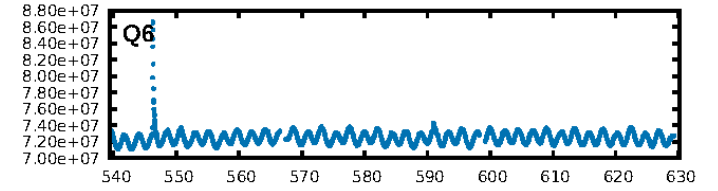
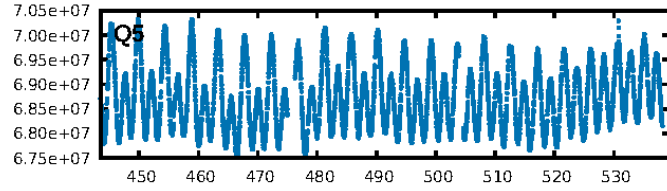
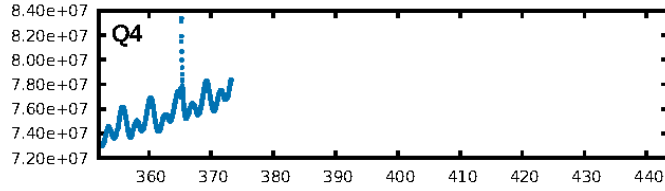
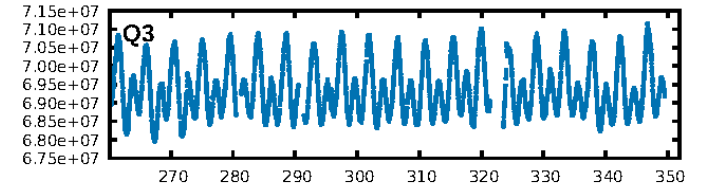
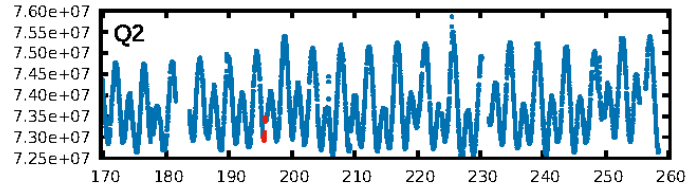
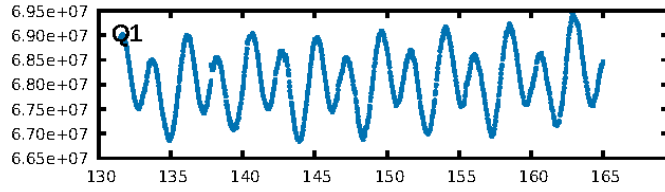
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [667.86 σ]
LongPeriod-sig: 100.0% [315.17 σ]
ModelChiSquare2-sig: 1.7%
ModelChiSquareGof-sig: 76.5%
Bootstrap-pfa: 3.78e-10
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.738
Centroid-sig: 71.9%
Centroid-so: 0.219 arcsec [0.34 σ]
OotOffset-rm: 0.162 arcsec [1.43 σ]
KicOffset-rm: 0.076 arcsec [0.66 σ]
OotOffset-st: 1/2/0/0 [3]
KicOffset-st: 1/2/0/0 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 1.00 [3/3]

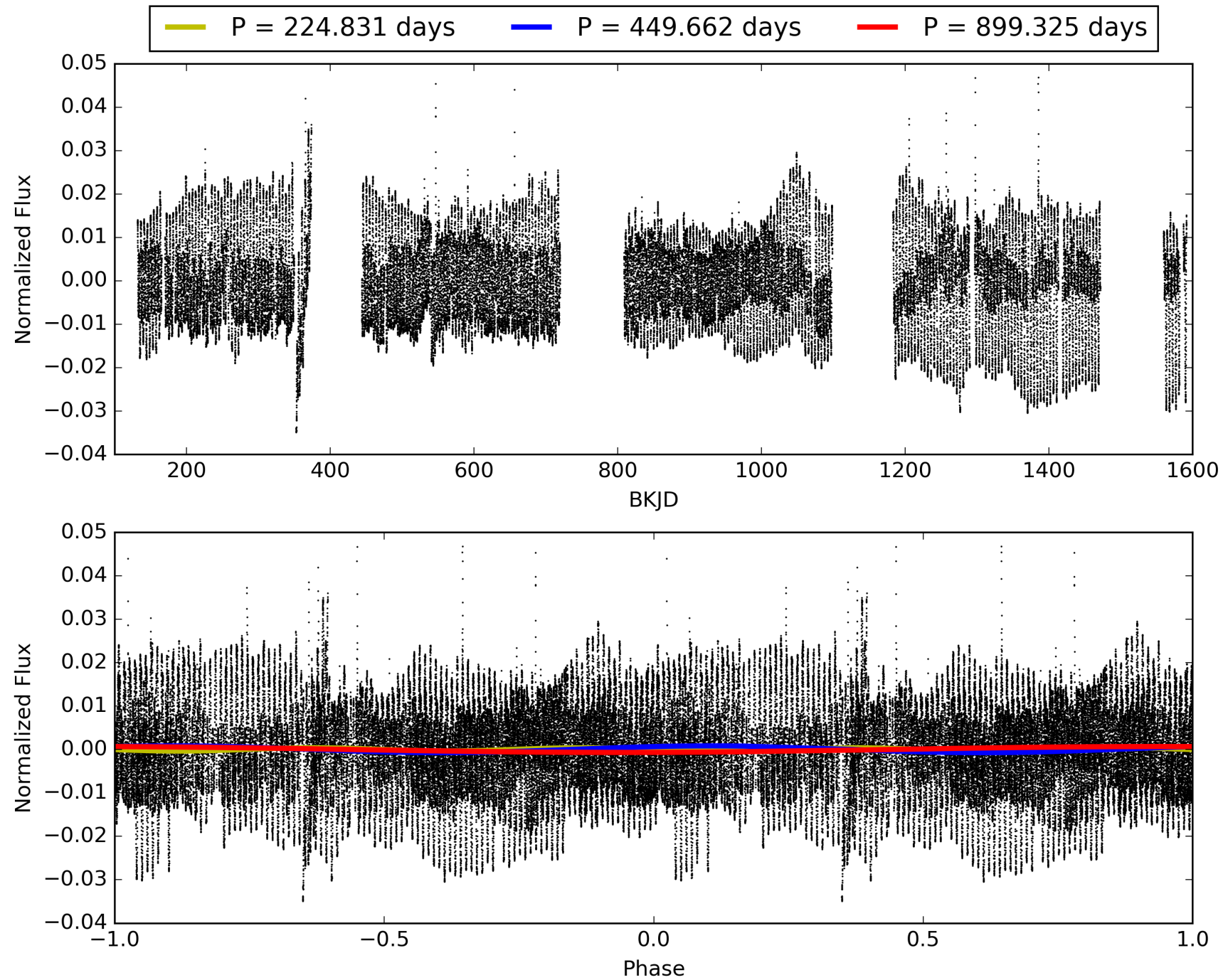
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 13:59:51 Z

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

TCE 011284185-02, PDC Light Curves

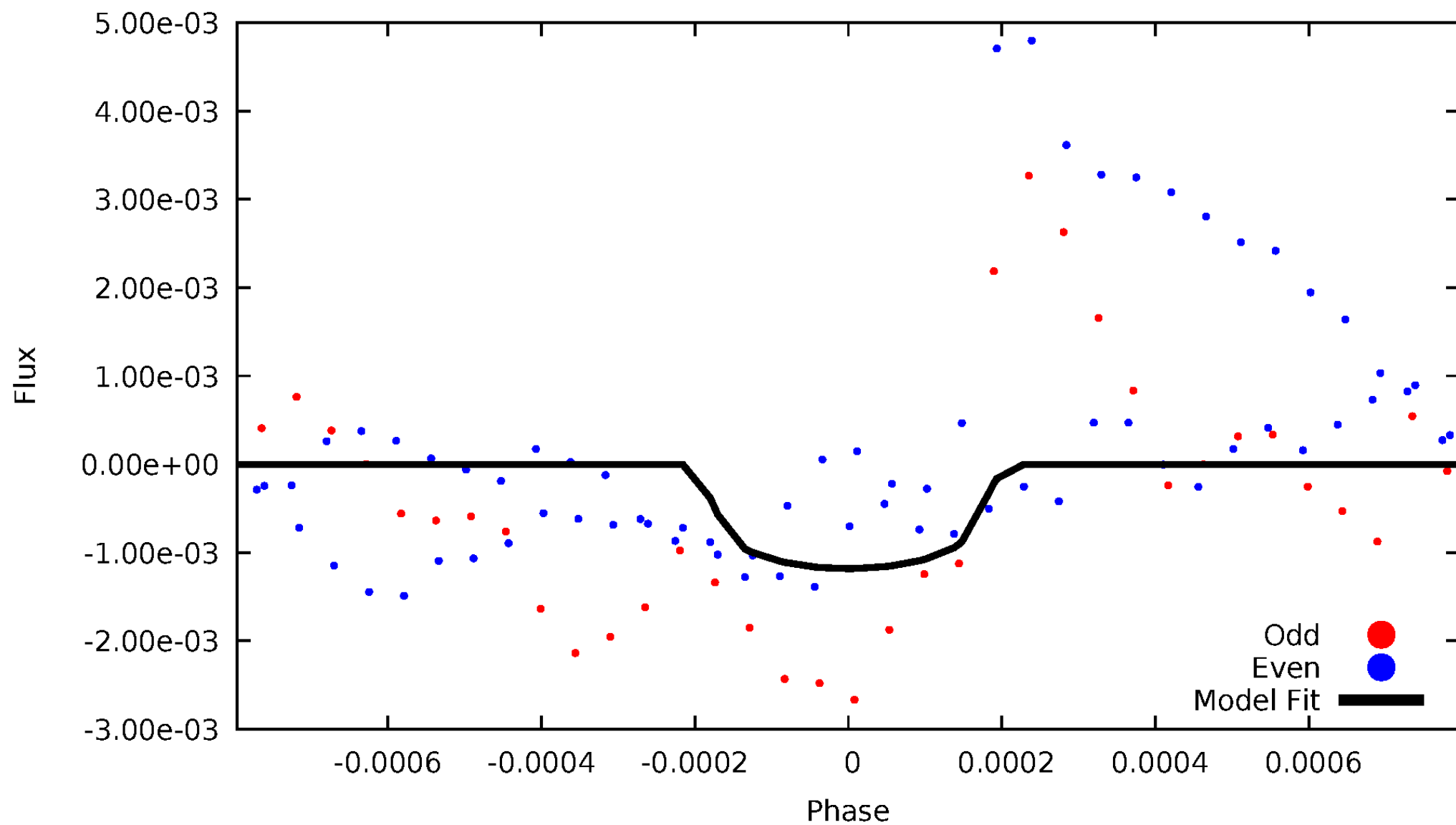


TCE 011284185-02



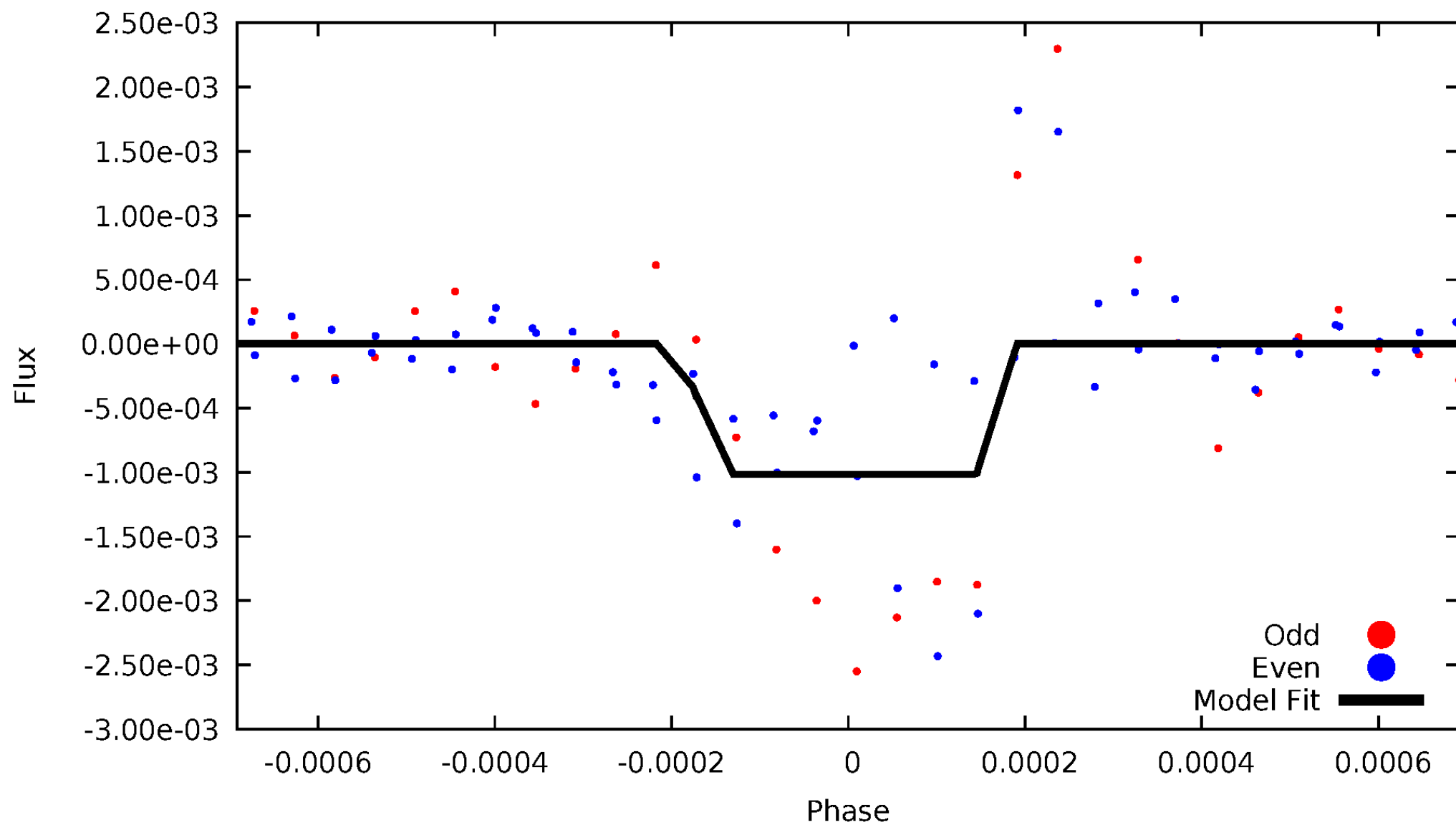
DV Odd/Even

TCE 011284185-02



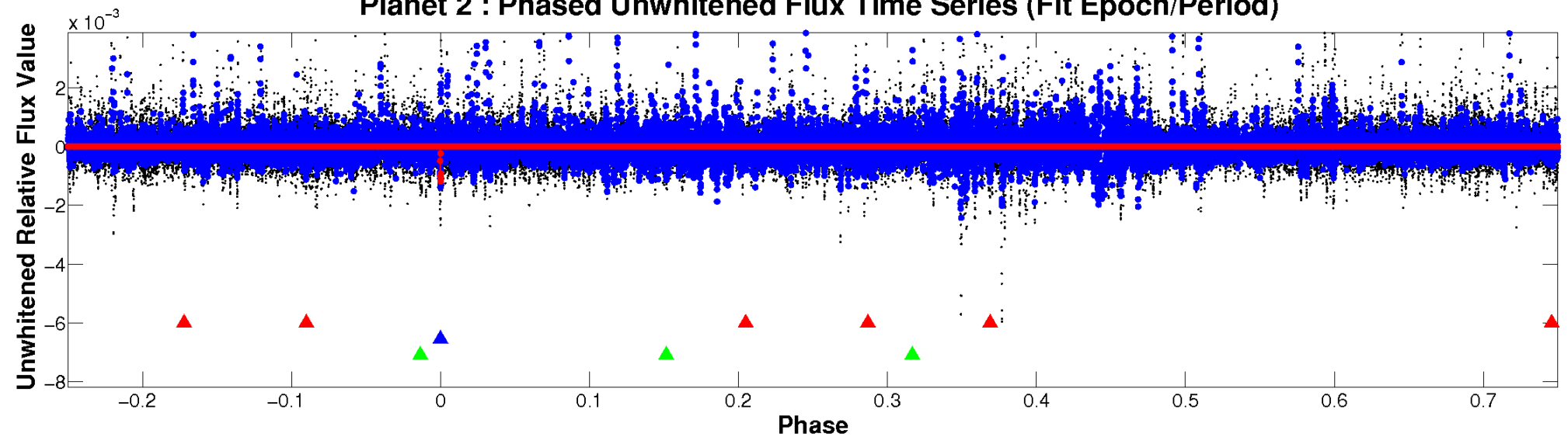
ALT Odd/Even

TCE 011284185-02

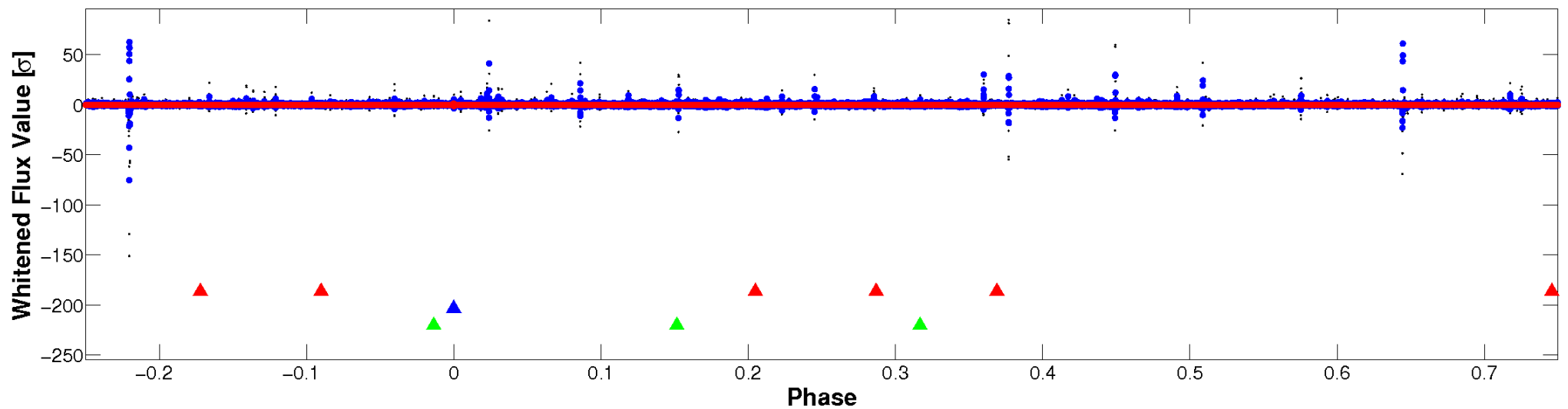


Non-Whitened Vs. Whitened Light Curve

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

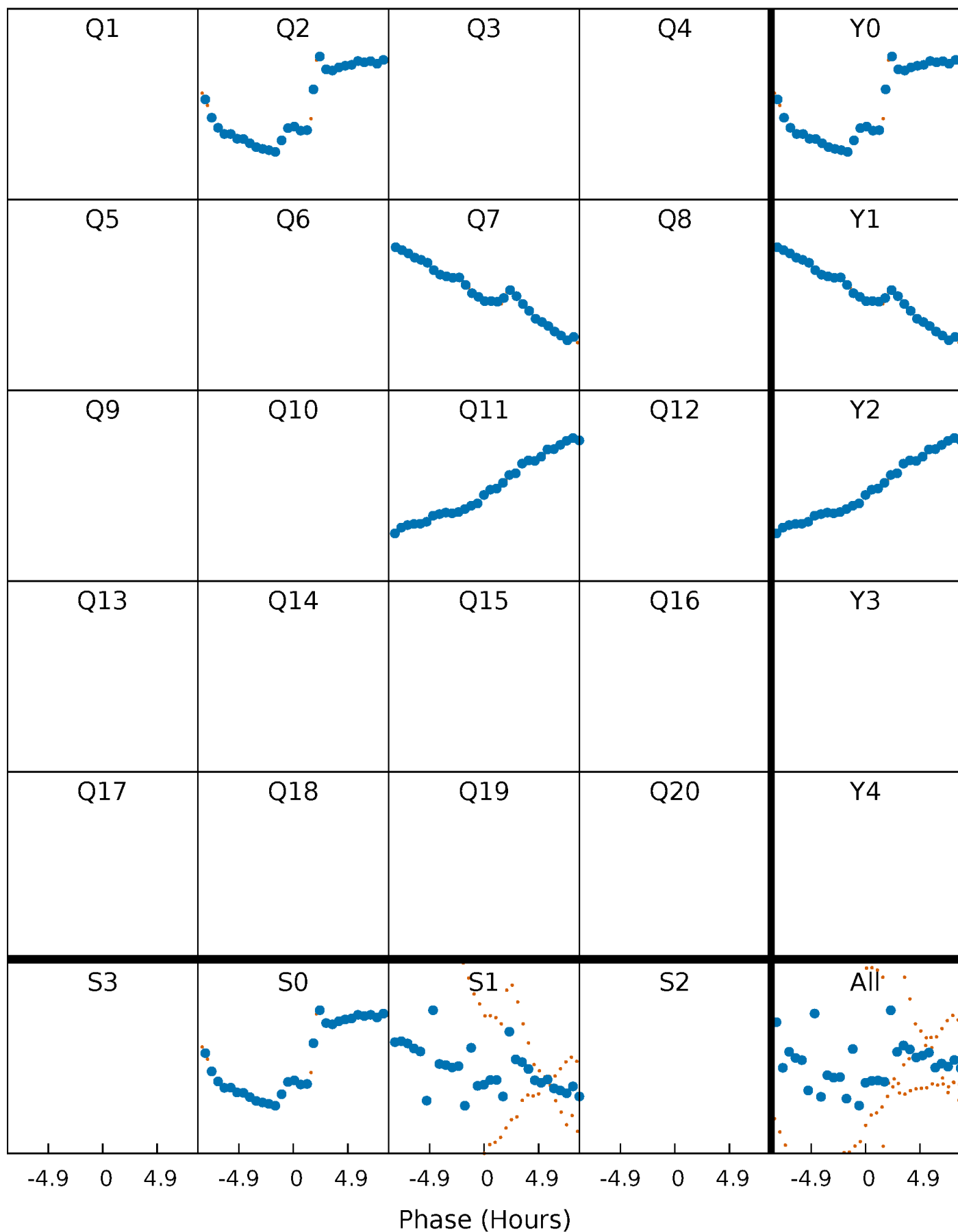


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



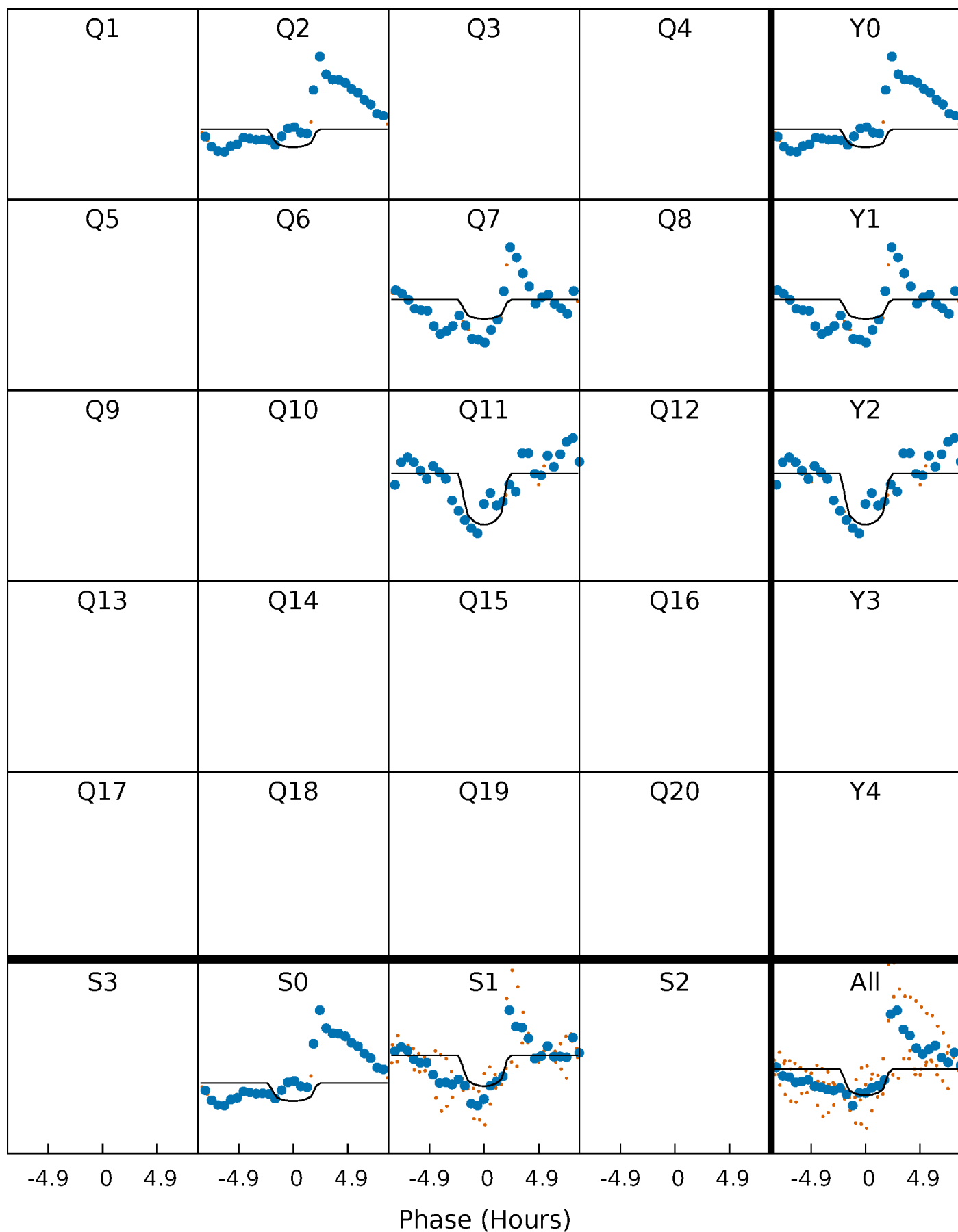
PDC Quarter-Phased Transit Curves

TCE 011284185-02 P=449.662290 Days $T_0=195.649527$ (BKJD)



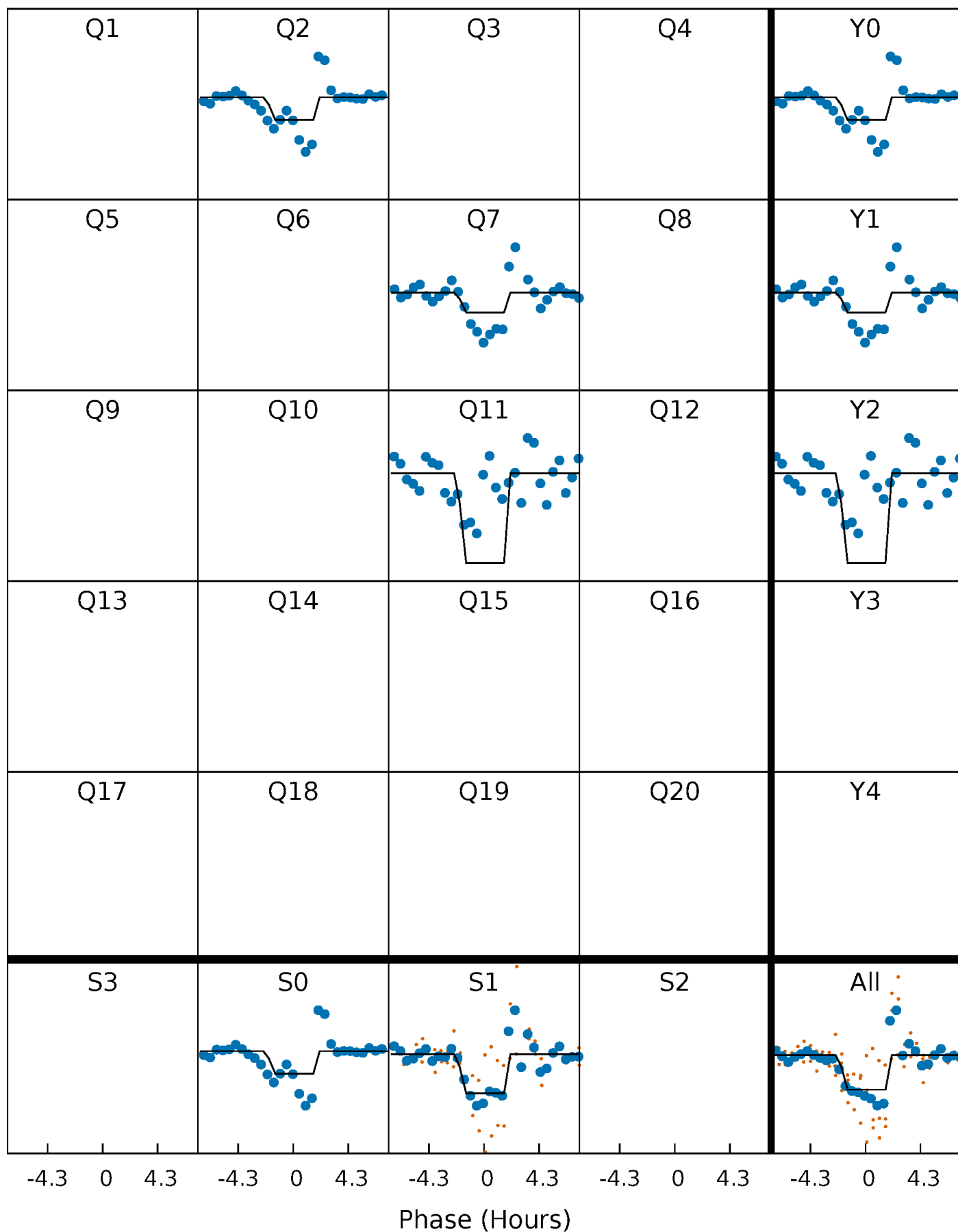
DV Quarter-Phased Transit Curves

TCE 011284185-02 P=449.662290 Days $T_0=195.649527$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

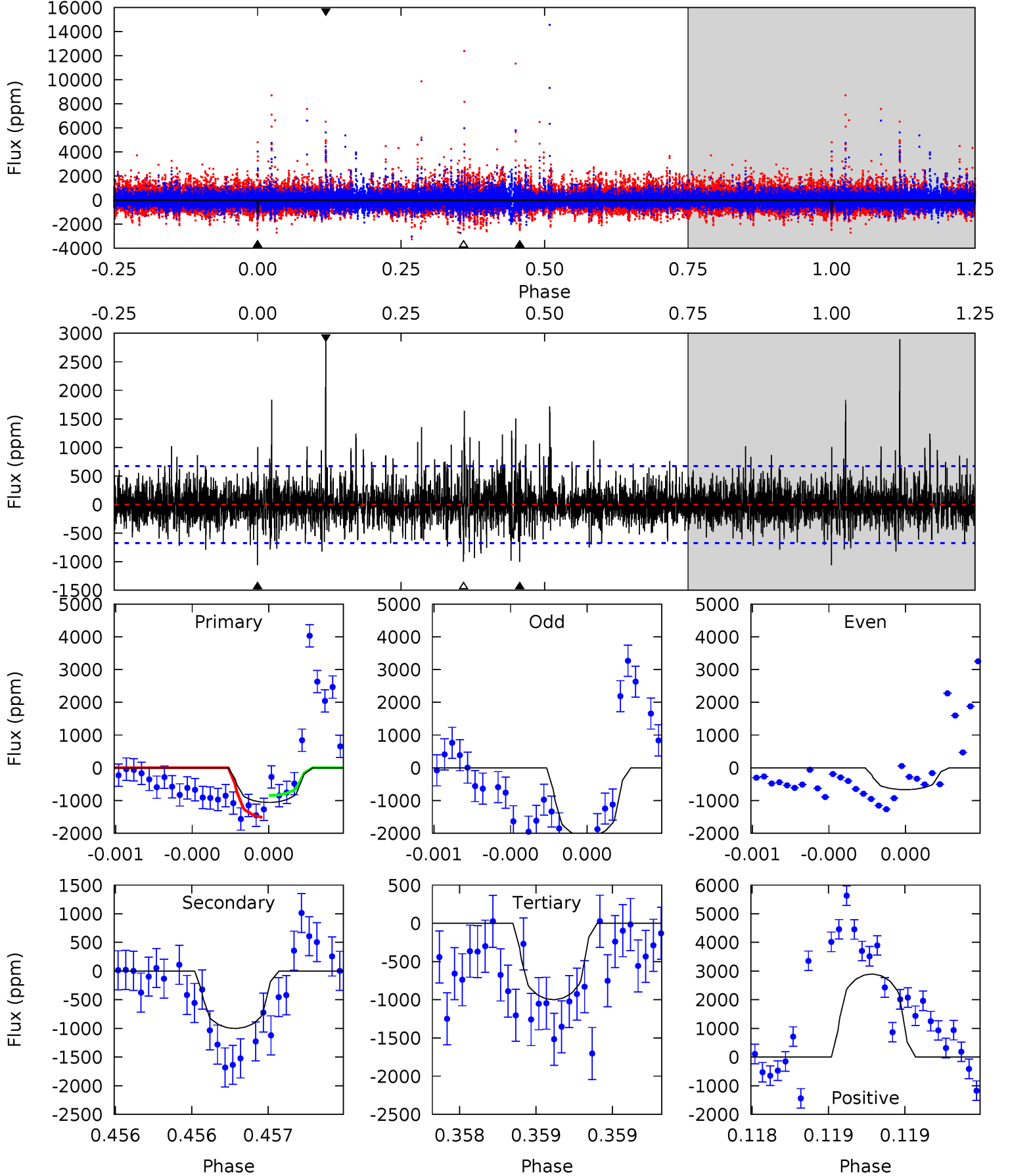
TCE 011284185-02 P=449.660921 Days $T_0=195.650185$ (BKJD)



DV Model-Shift Uniqueness Test

011284185-02, P = 449.662290 Days, E = 195.649527 Days

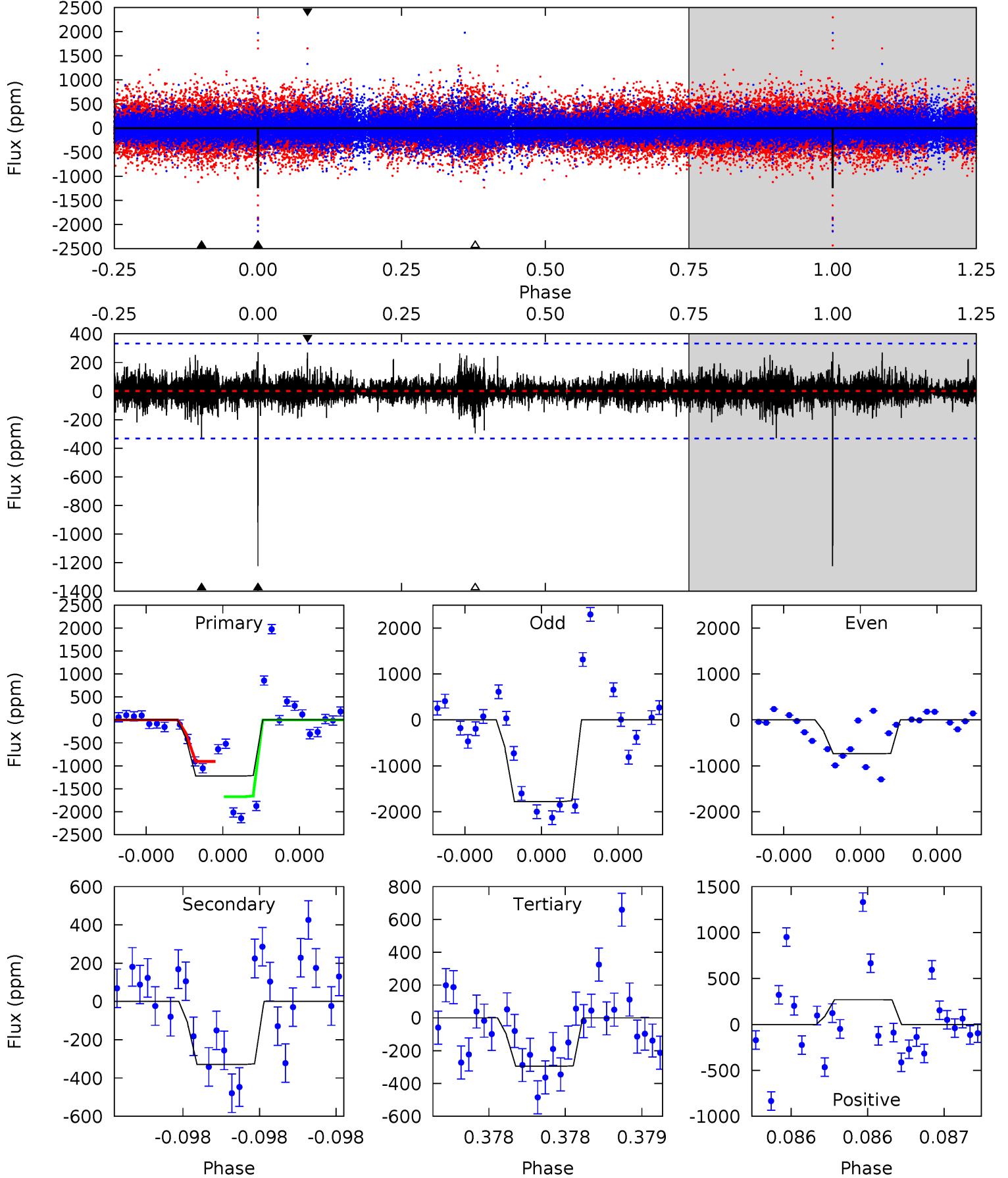
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.82	8.33	8.31	24.1	5.61	3.53	2.14	0.51	-15.3	0.02	-15.8	4.52	1.05	0.73	2.81



Alt Model-Shift Uniqueness Test

011284185-02, P = 449.660921 Days, E = 195.650185 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.7	5.58	5.00	4.56	5.63	3.56	0.82	15.7	16.2	0.58	1.02	9.12	0.79	0.18	6.63



Stellar Parameters For KIC 011284185

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4965^{+124}_{-111}	$3.237^{+0.350}_{-0.350}$	$-0.400^{+0.300}_{-0.200}$	$3.686^{+2.214}_{-1.192}$	$0.854^{+0.284}_{-0.190}$	$0.024^{+0.057}_{-0.017}$
	+2%/-2%	+11%/-11%	+75%/-50%	+60%/-32%	+33%/-22%	+237%/-70%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011284185-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1001 ± 120	$14.54^{+11.46}_{-8.76}$	564^{+86}_{-61}	4715^{+2565}_{-837}	3025^{+16423}_{-2079}
Alt.	-329 ± 59	$13.42^{+11.29}_{-8.07}$	559^{+73}_{-58}	3893^{+1738}_{-638}	1160^{+6819}_{-820}

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

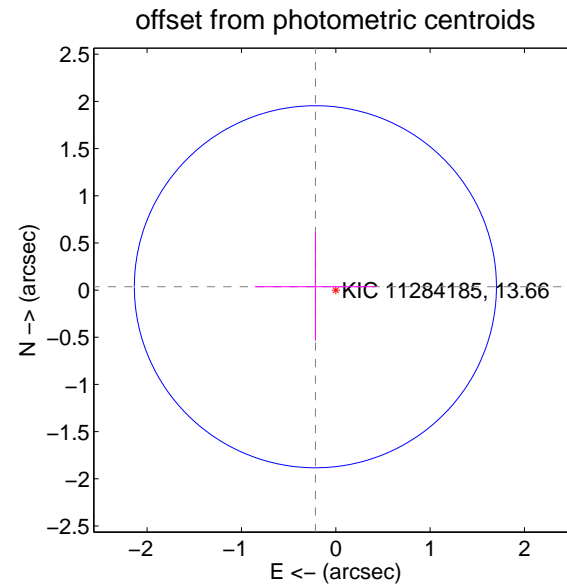
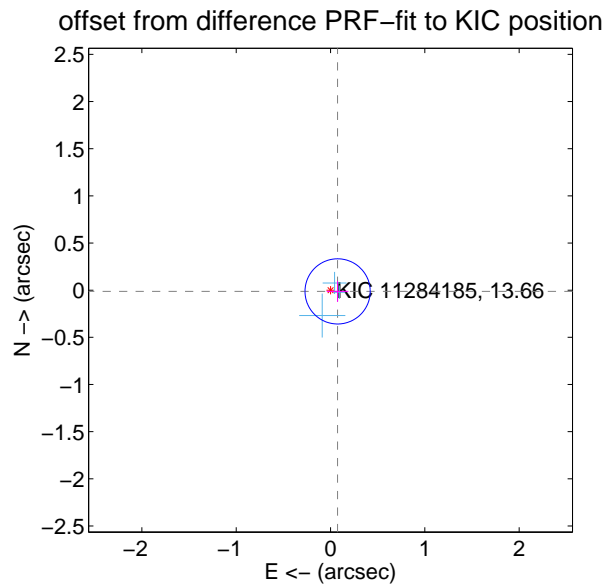
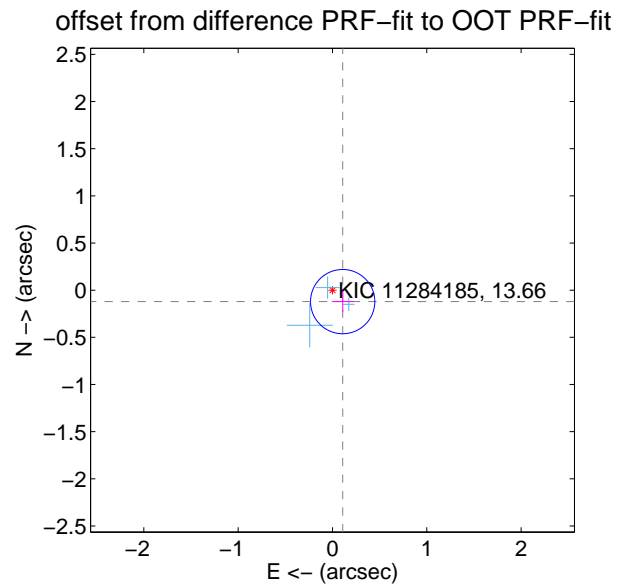
DV Centroid Data

Supplemental centroid analysis for 011284185-02. Kepler magnitude: 13.66. Transit SNR 5.35

There are 3 quarters with good PRF difference image offsets

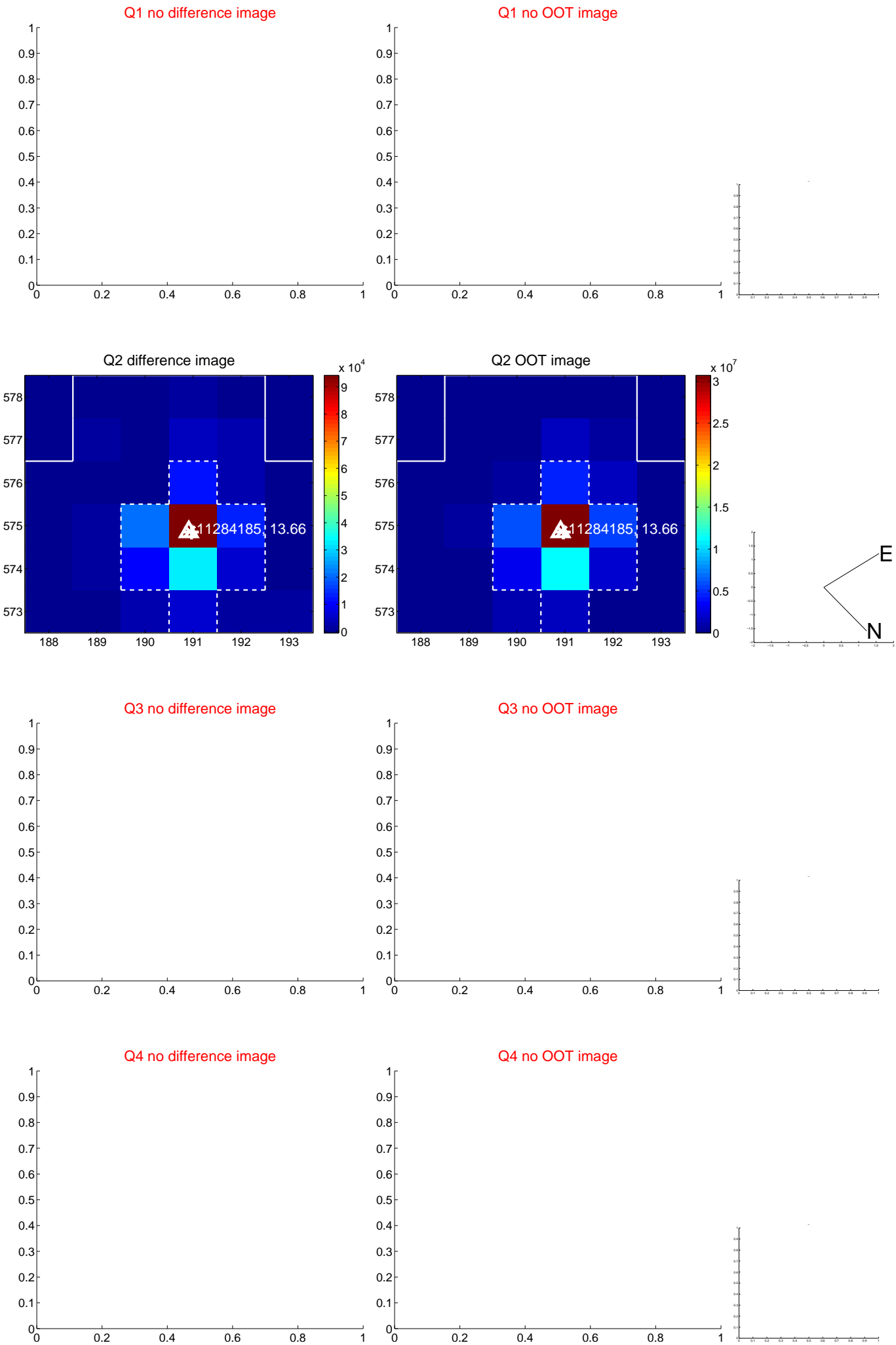
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.162 ± 0.114	1.43	-0.108 ± 0.115	-0.121 ± 0.112
PRF-fit source offset from KIC position	0.076 ± 0.115	0.66	-0.075 ± 0.115	-0.013 ± 0.112
photometric centroid source offset	0.22 ± 0.64	0.34	0.22 ± 0.64	0.04 ± 0.57



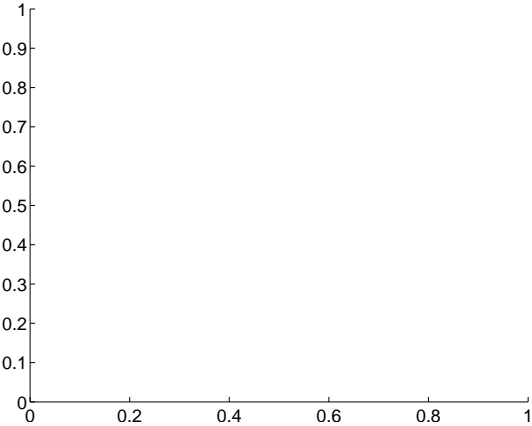
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

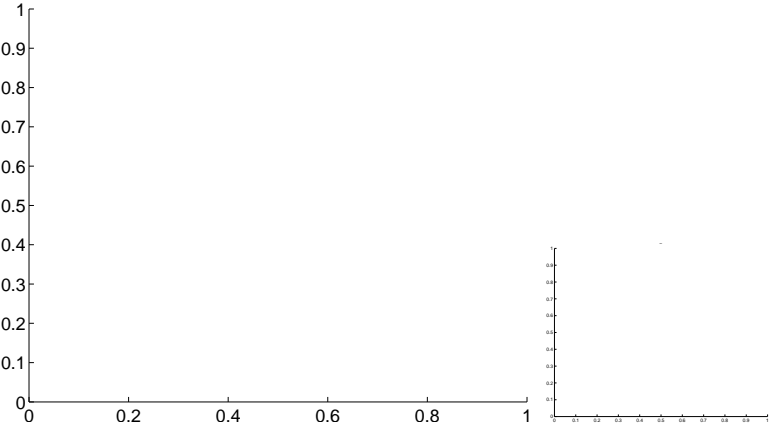


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

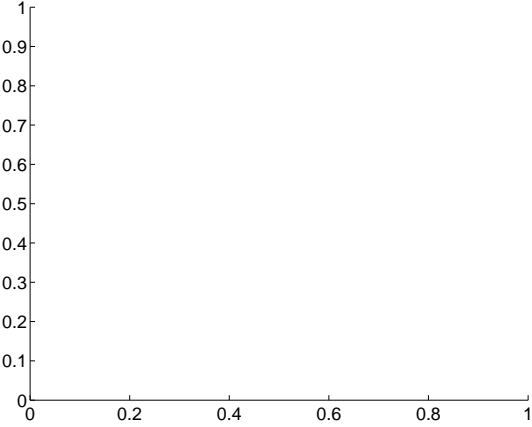
Q5 no difference image



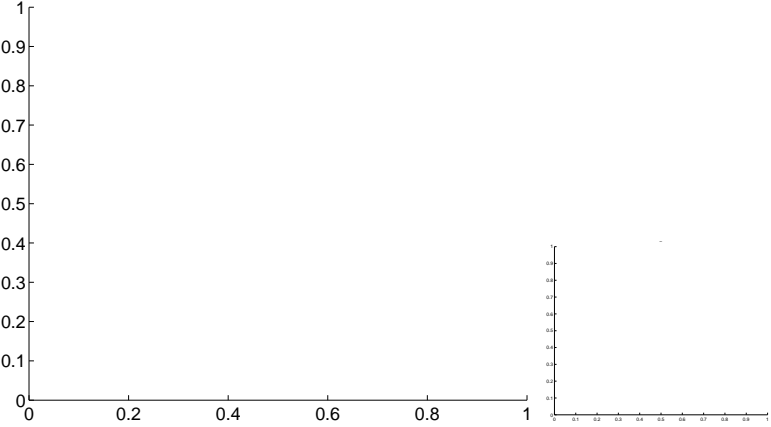
Q5 no OOT image



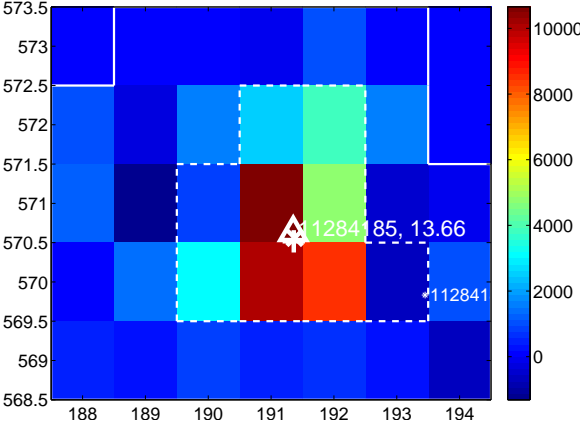
Q6 no difference image



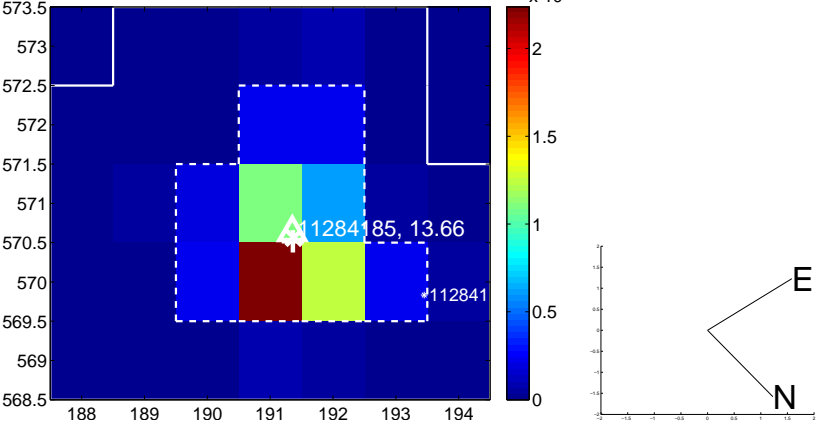
Q6 no OOT image



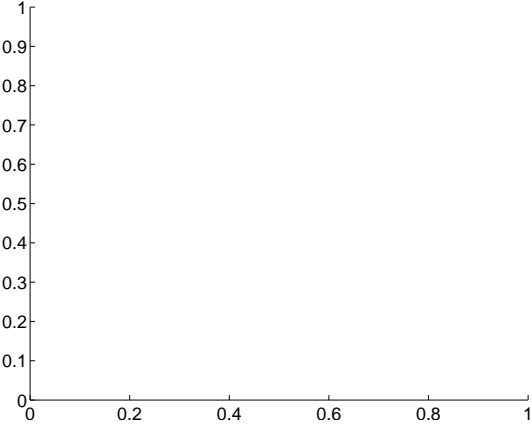
Q7 difference image



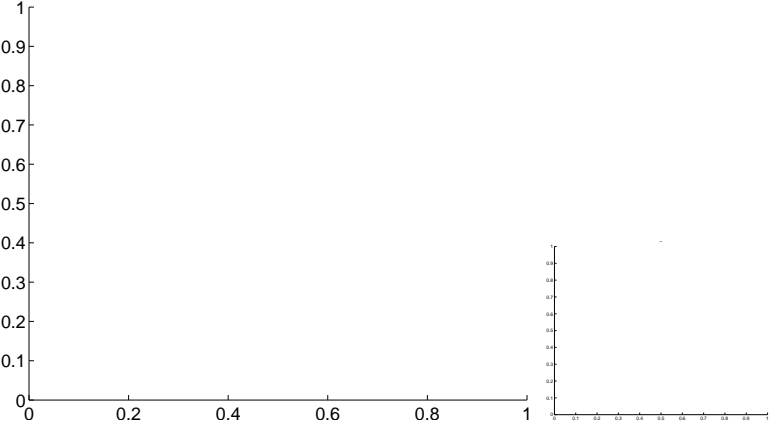
Q7 OOT image



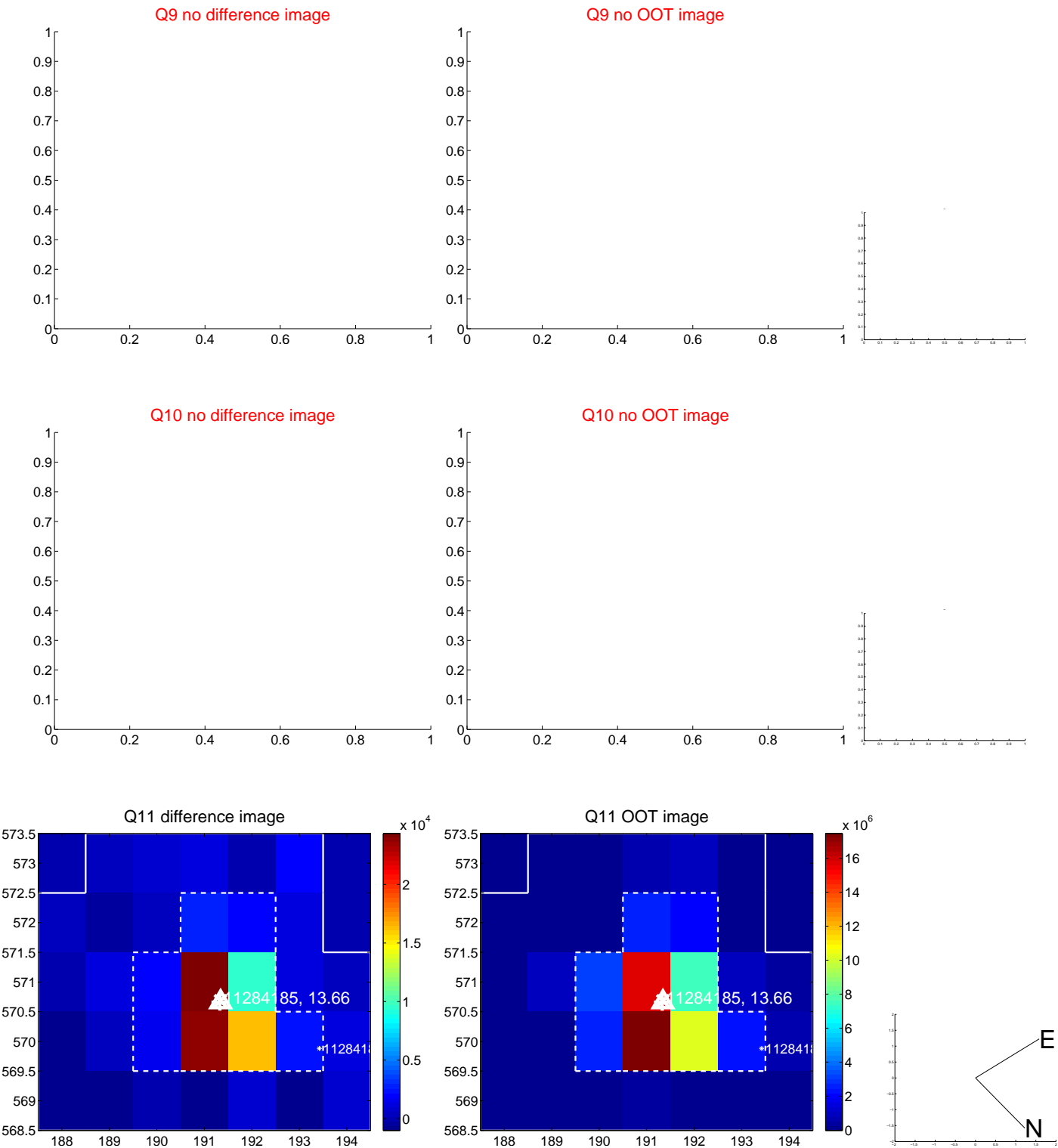
Q8 no difference image



Q8 no OOT image



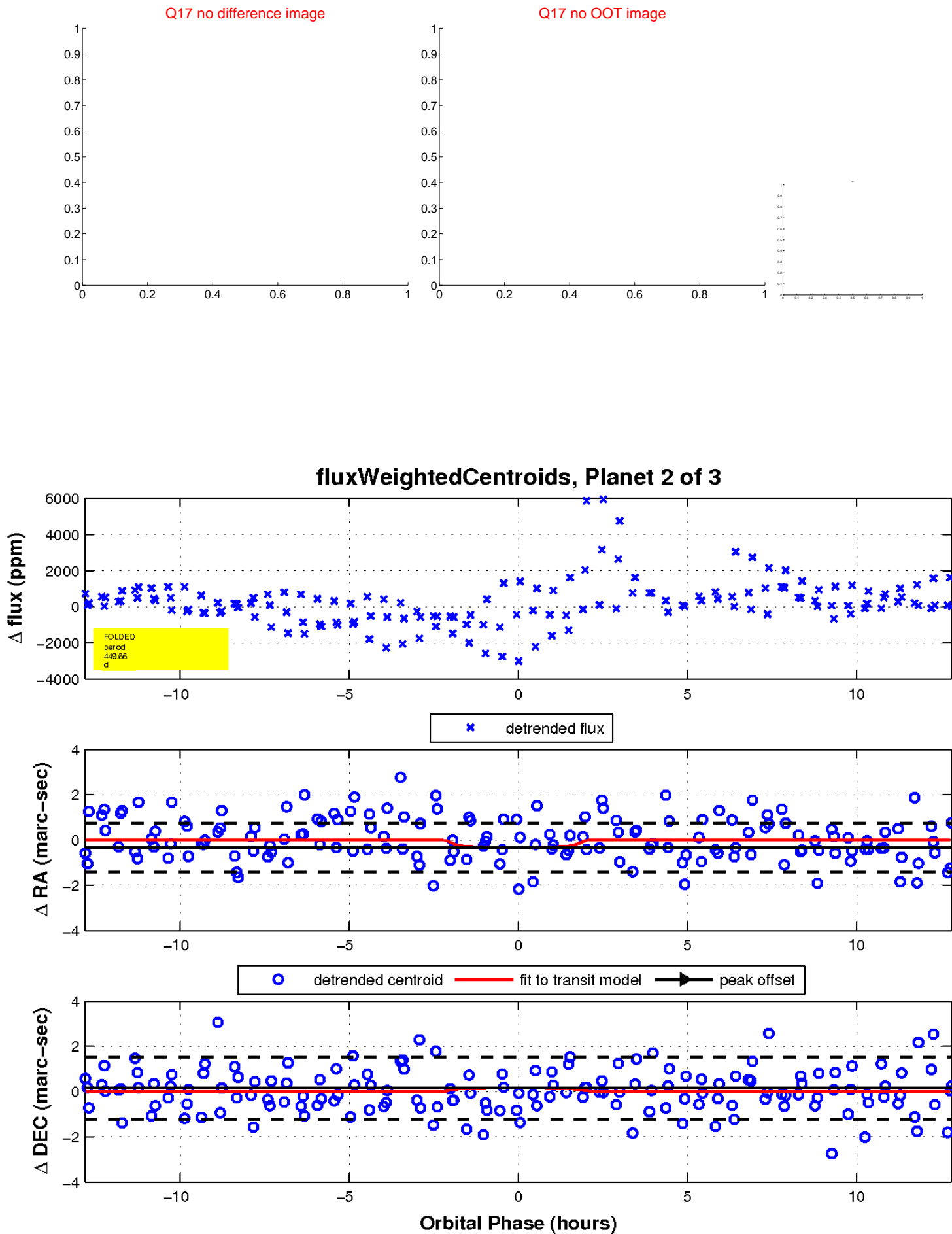
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

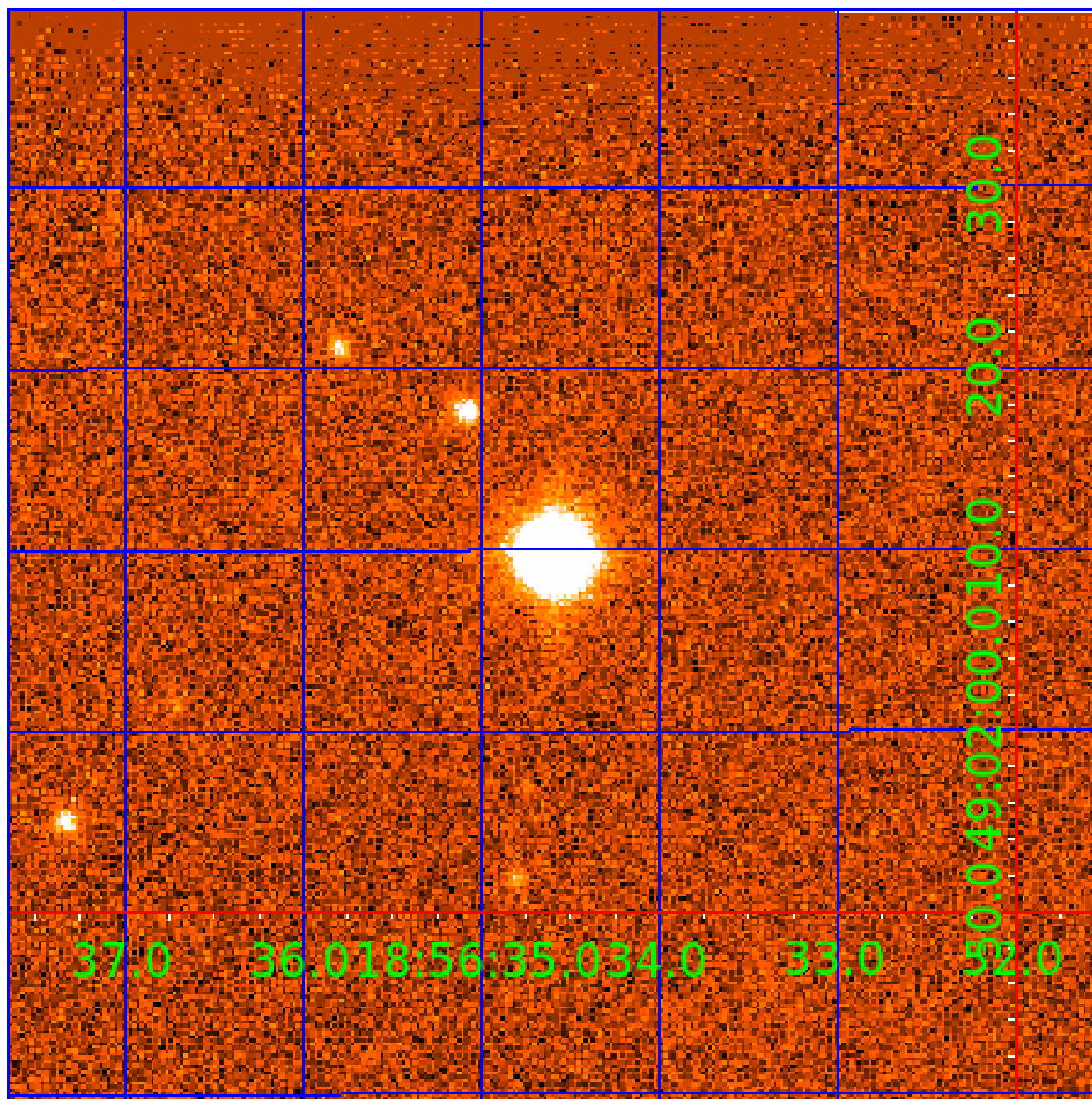


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011284185

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})
011284185-01	OBS	No	243.274756	287.773642	907.2	6.045	12.4	4.1	3.69	4965	10.79	14.11
011284185-02	OBS	No	449.662290	195.649527	1181.2	4.297	11.9	5.3	3.69	4965	14.26	6.22
011284185-03	OBS	No	523.920808	189.542503	1605.4	3.676	11.1	7.4	3.69	4965	14.40	5.07

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011284185-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
011284185-02	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
011284185-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

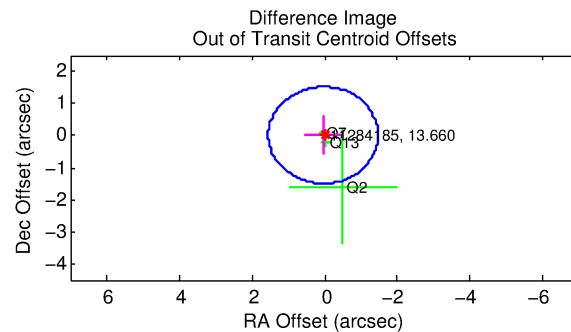
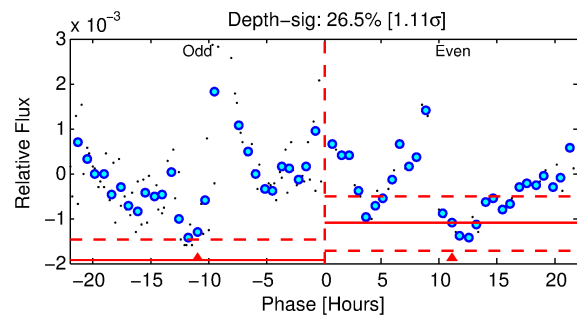
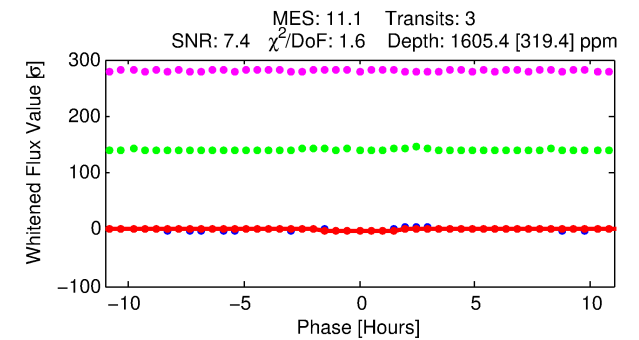
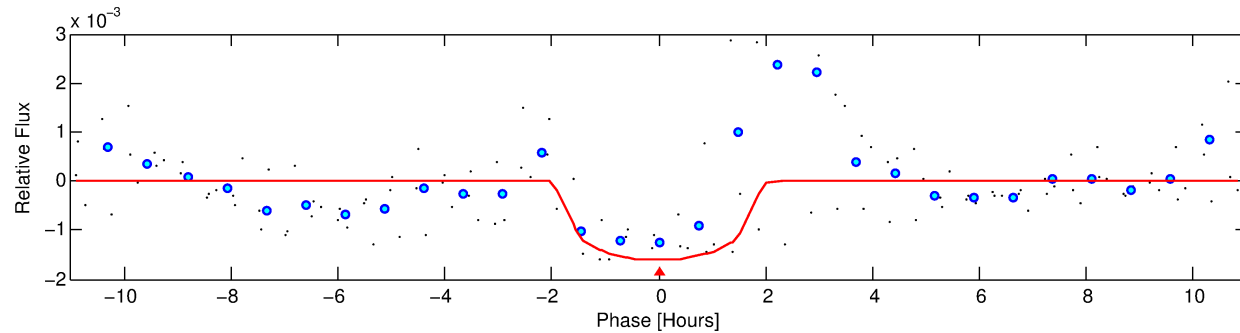
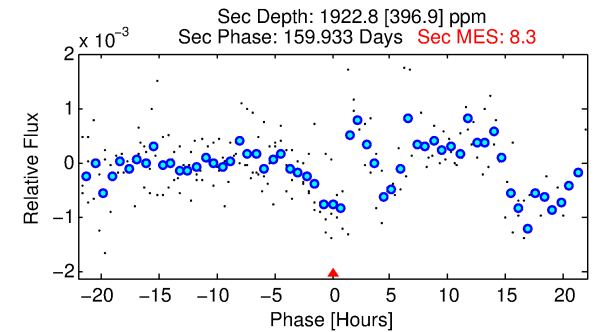
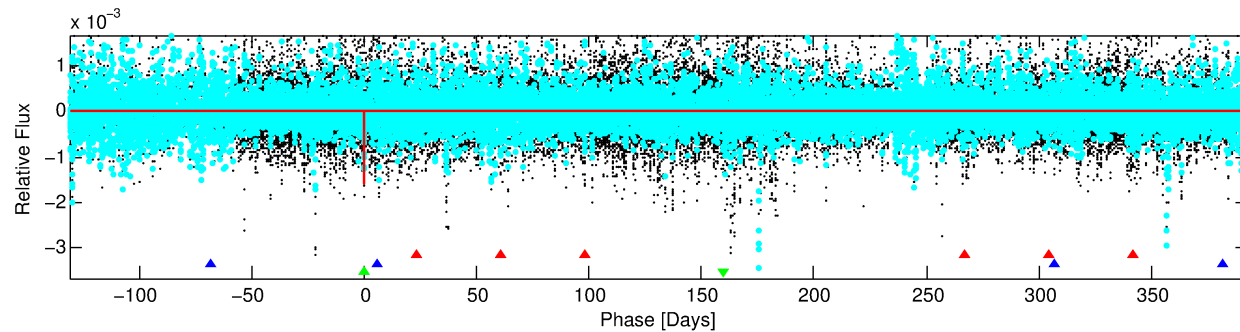
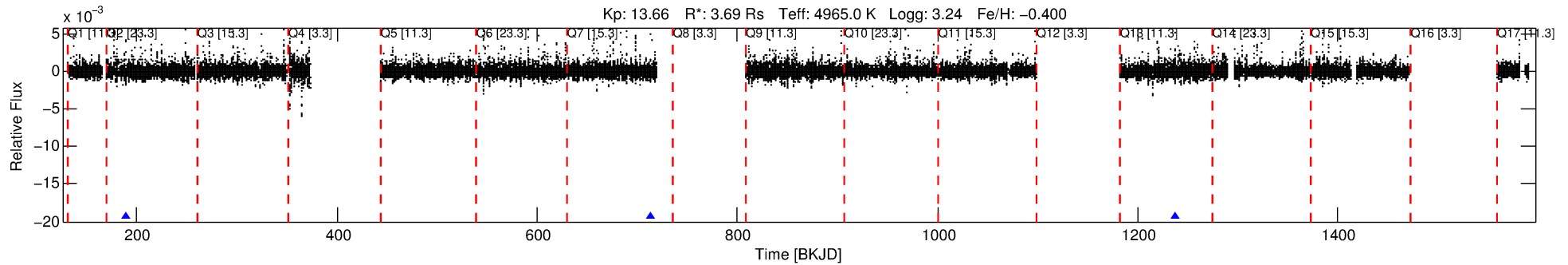
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011284185-03

No Significant Match Found

DV One-Page Summary

KIC: 11284185 Candidate: 3 of 3 Period: 523.921 d



DV Fit Results:

Period = 523.92081 [0.00633] d
Epoch = 189.5425 [0.0088] BKJD
Rp/R* = 0.0358 [0.0817]
a/R* = 1116.80 [9044.15]
b = 0.14 [55.57]
Seff = 5.07 [3.44]
Teq = 383 [65] K
Rp = 14.40 [33.99] Re
a = 1.2076 [0.5823] AU
Ag = 7434.75 [34332.93] [0.22 σ]
Teffp = 5494 [6277] K [0.81 σ]

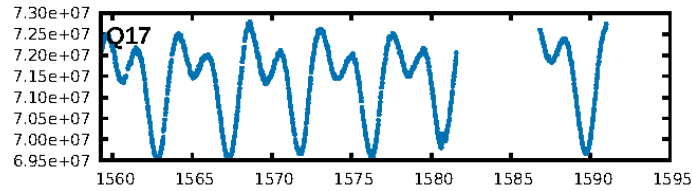
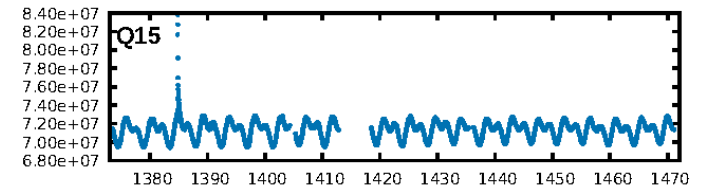
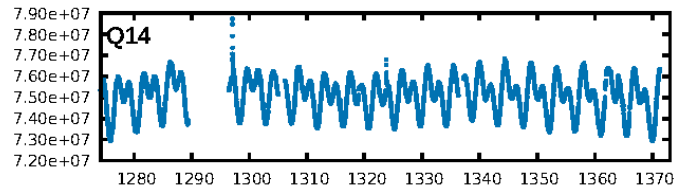
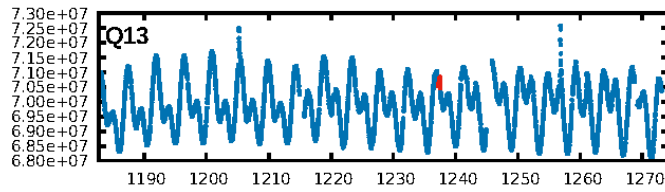
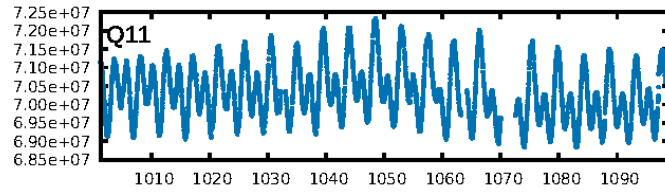
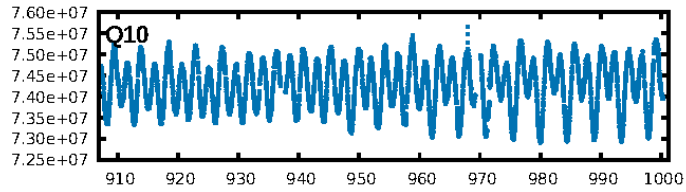
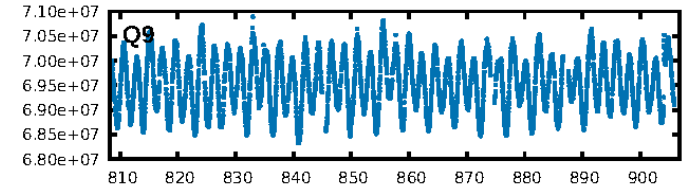
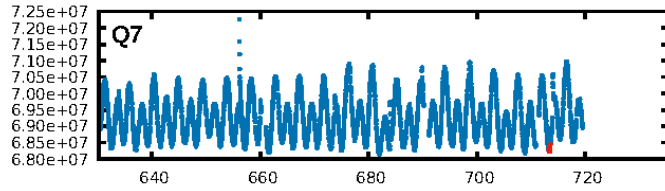
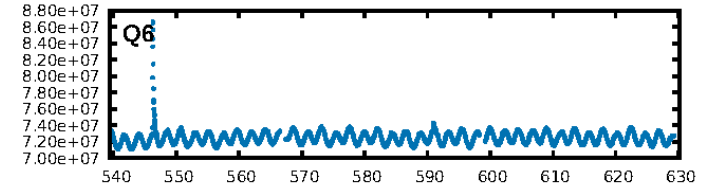
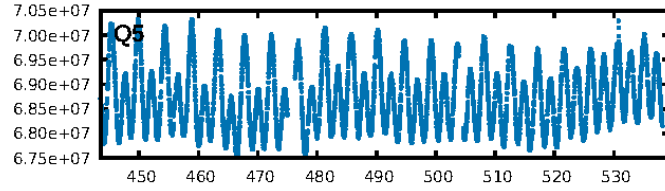
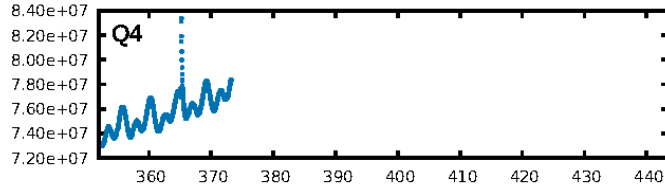
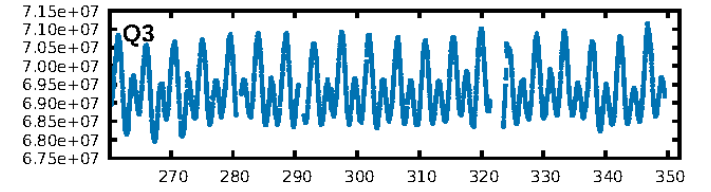
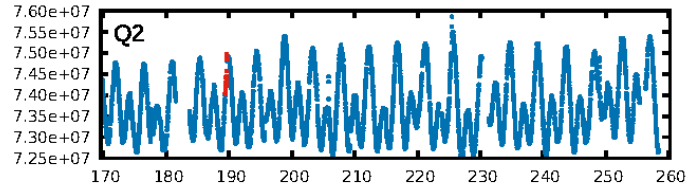
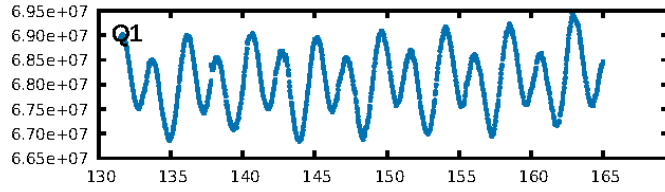
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [315.17 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 3.0%
ModelChiSquareGof-sig: 76.6%
Bootstrap-pfa: 1.08e-08
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.7187
Centroid-sig: 52.1%
Centroid-so: 0.524 arcsec [1.00 σ]
OotOffset-rm: 0.043 arcsec [0.08 σ]
OotOffset-st: 1/1/0/1 [3]
KicOffset-rm: 0.040 arcsec [0.07 σ]
KicOffset-st: 1/1/0/1 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [3/3]

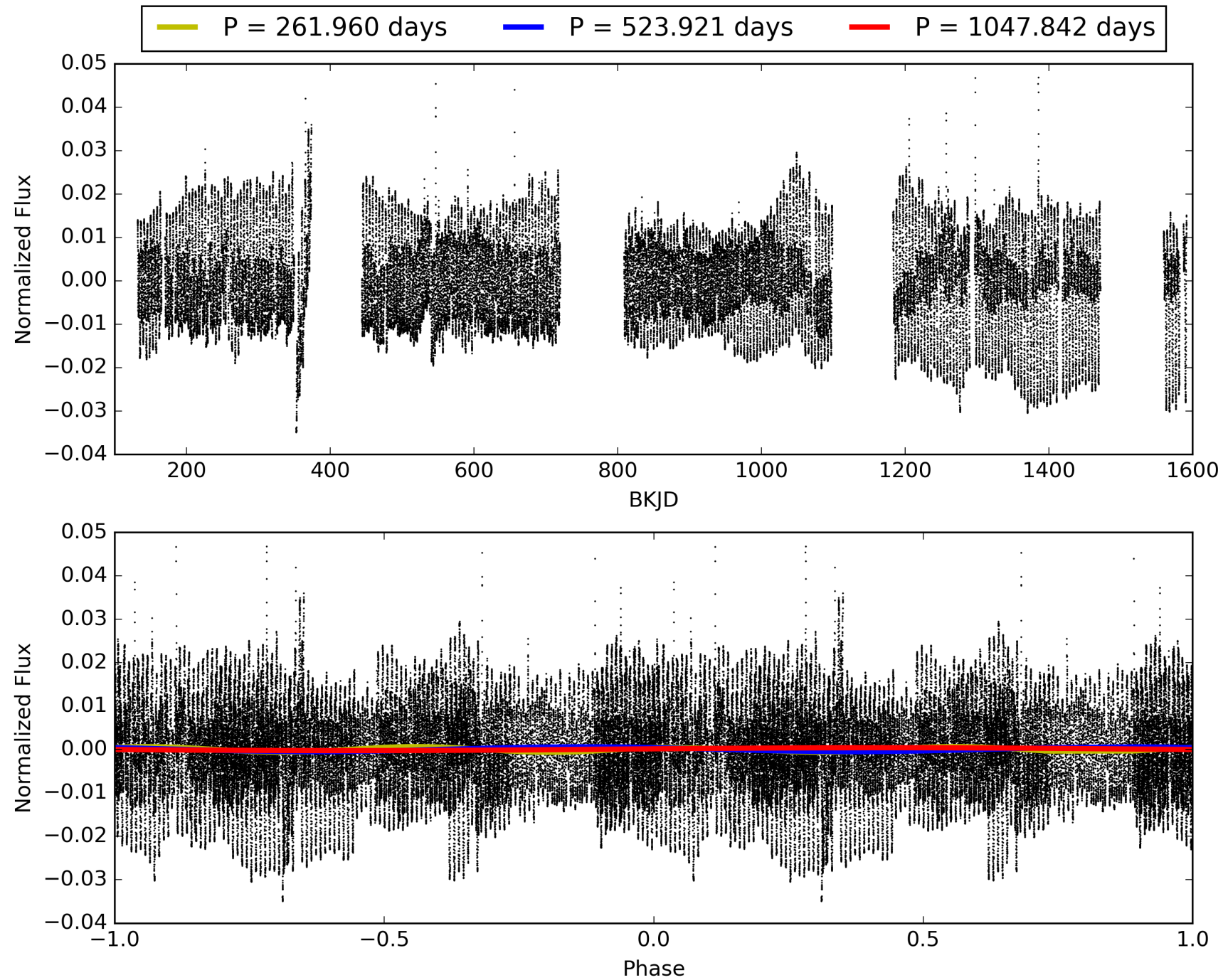
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:00:08 Z

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

TCE 011284185-03, PDC Light Curves

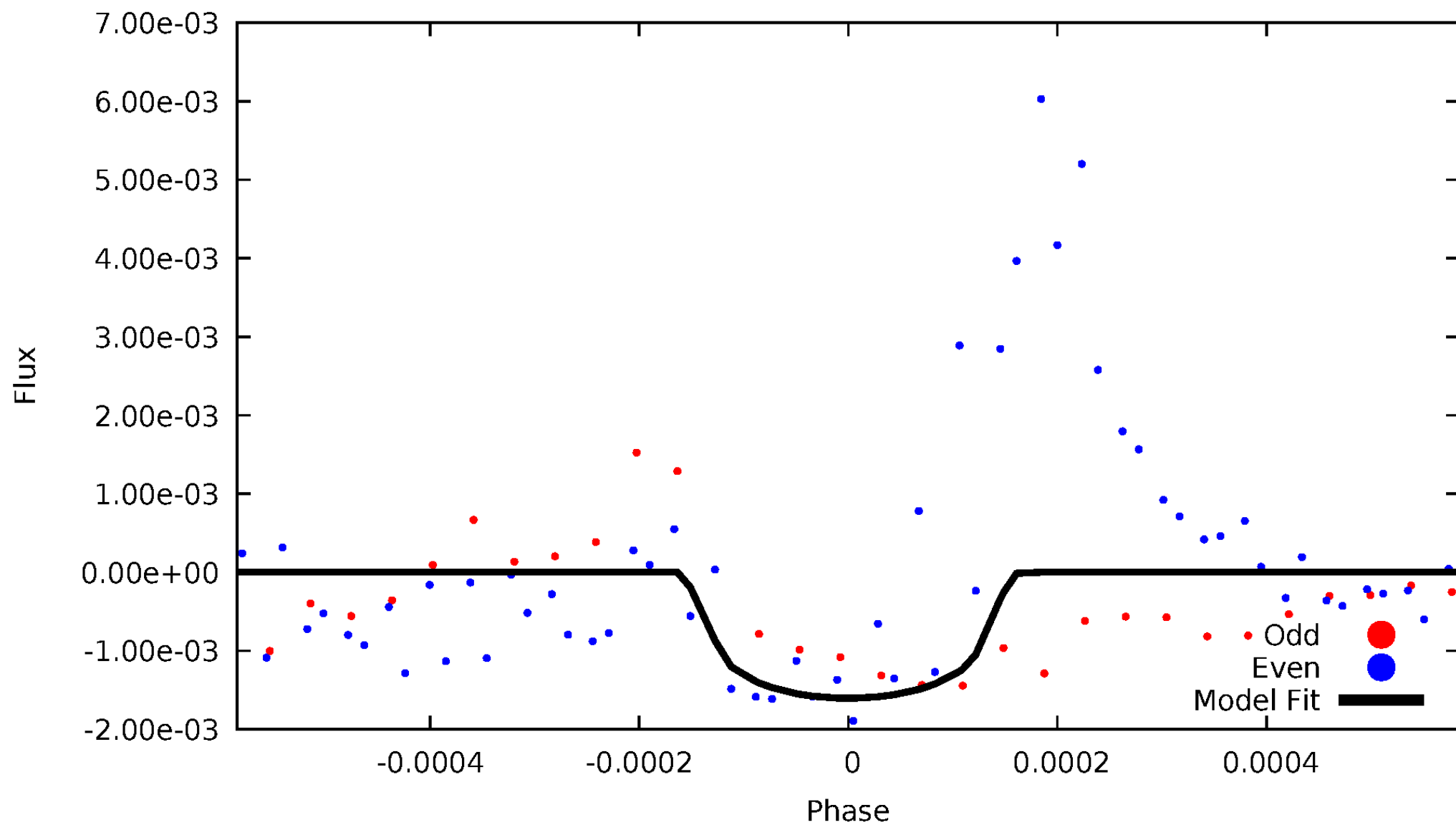


TCE 011284185-03



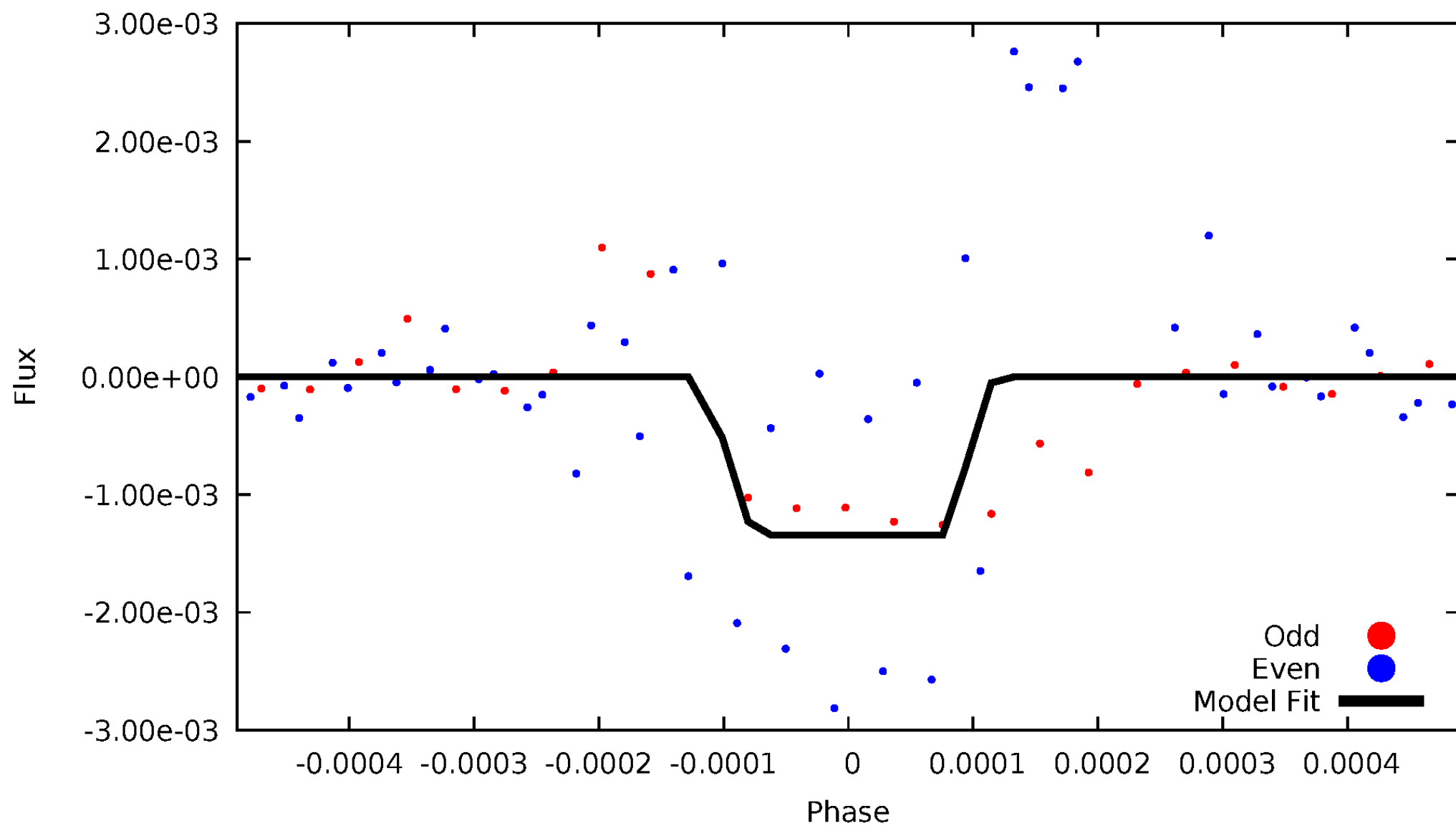
DV Odd/Even

TCE 011284185-03



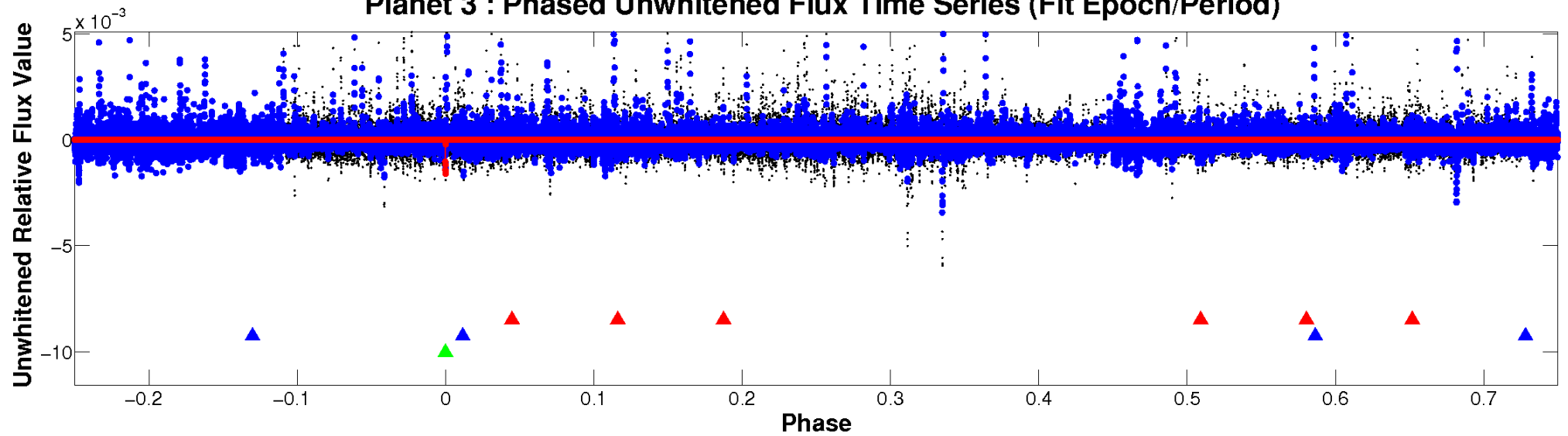
ALT Odd/Even

TCE 011284185-03

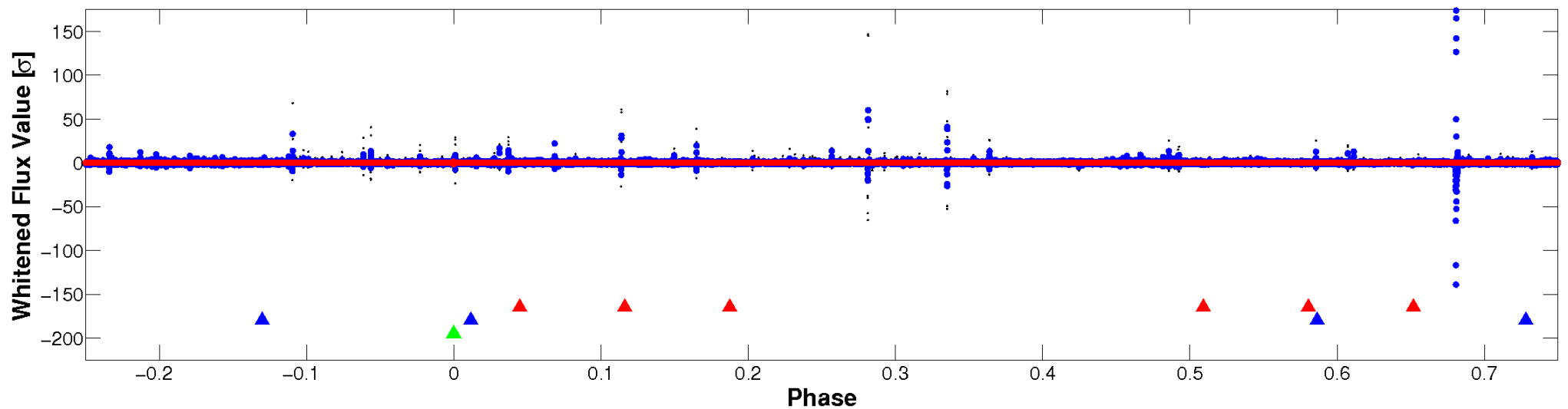


Non-Whitened Vs. Whitened Light Curve

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

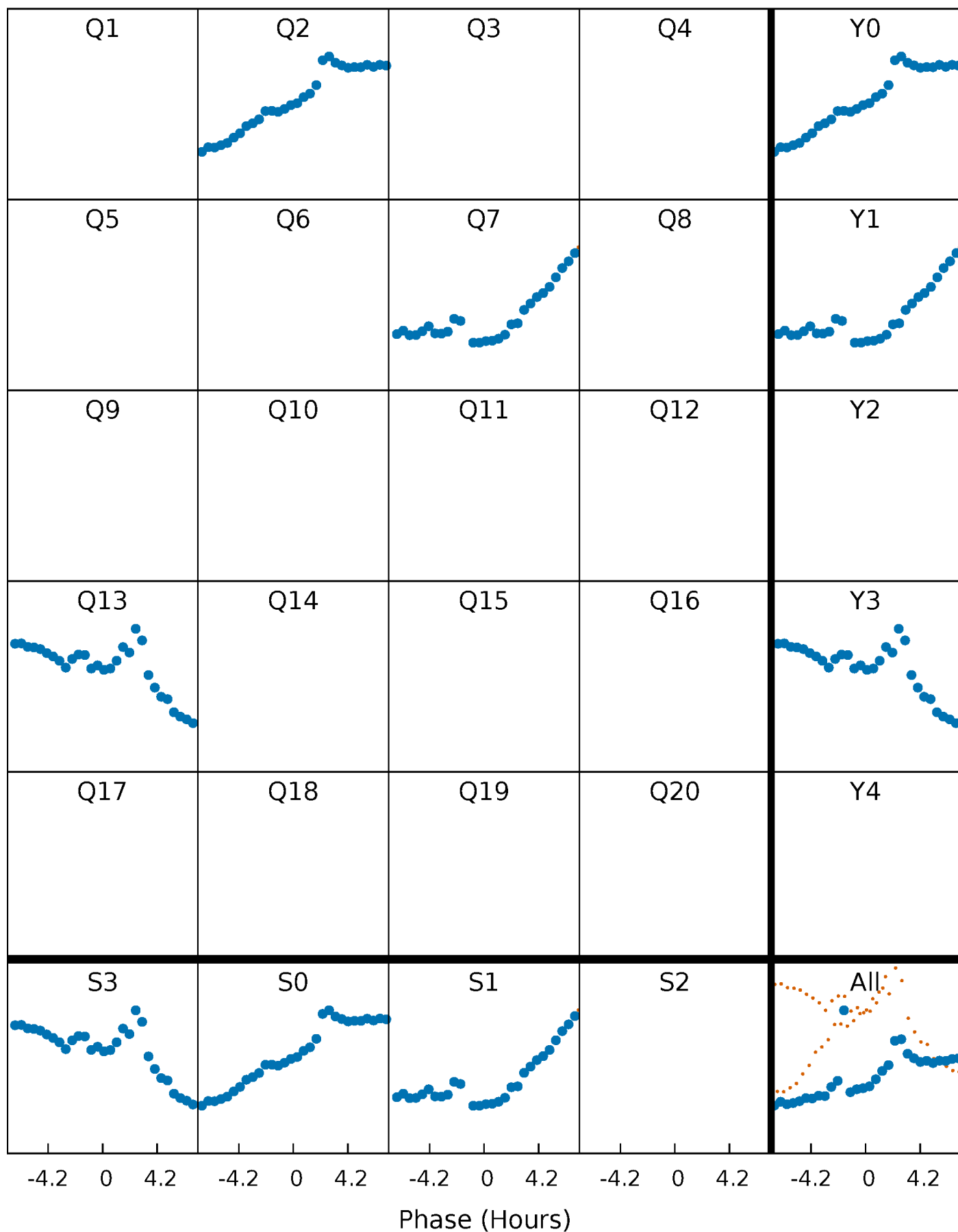


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



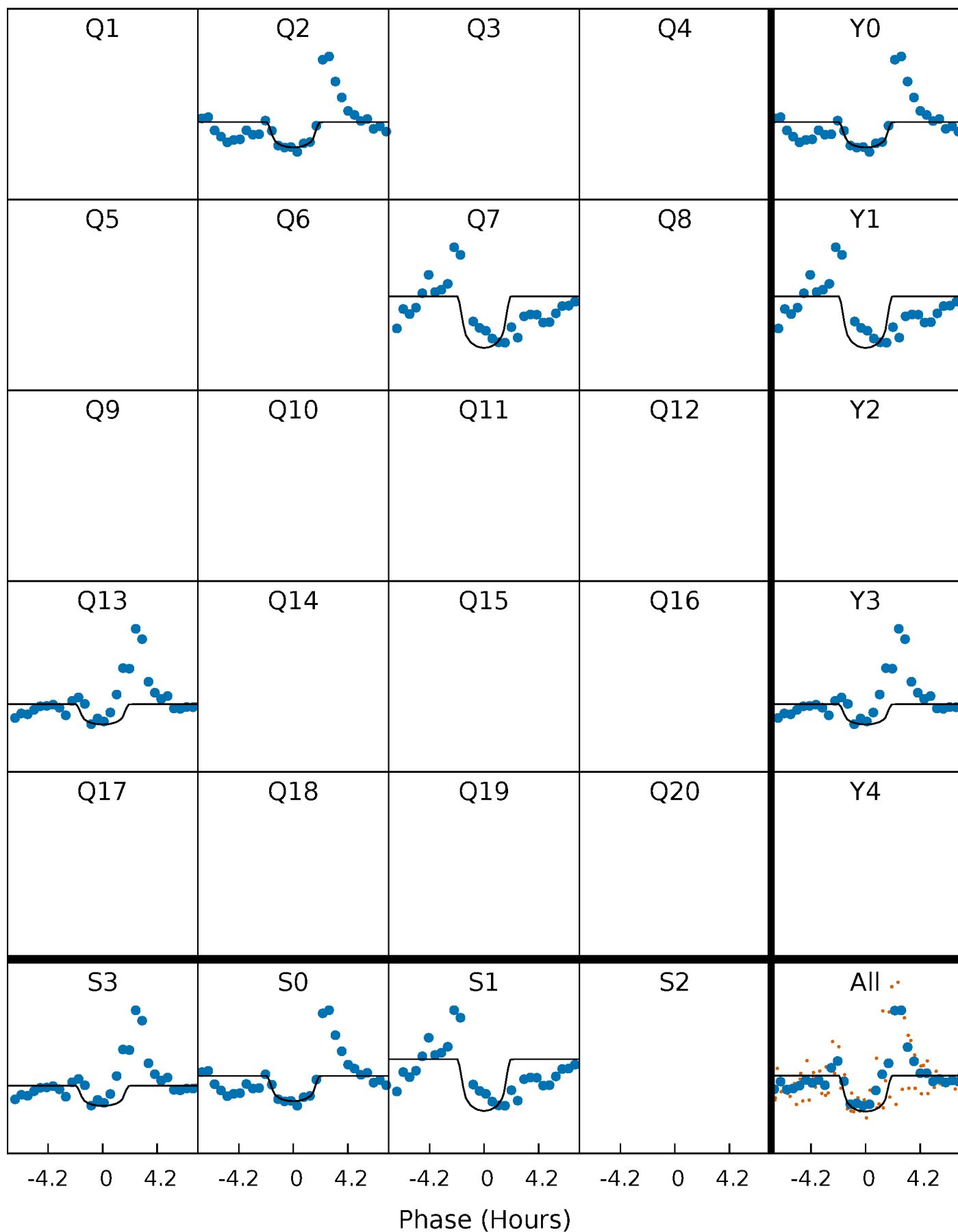
PDC Quarter-Phased Transit Curves

TCE 011284185-03 P=523.920808 Days $T_0=189.542503$ (BKJD)



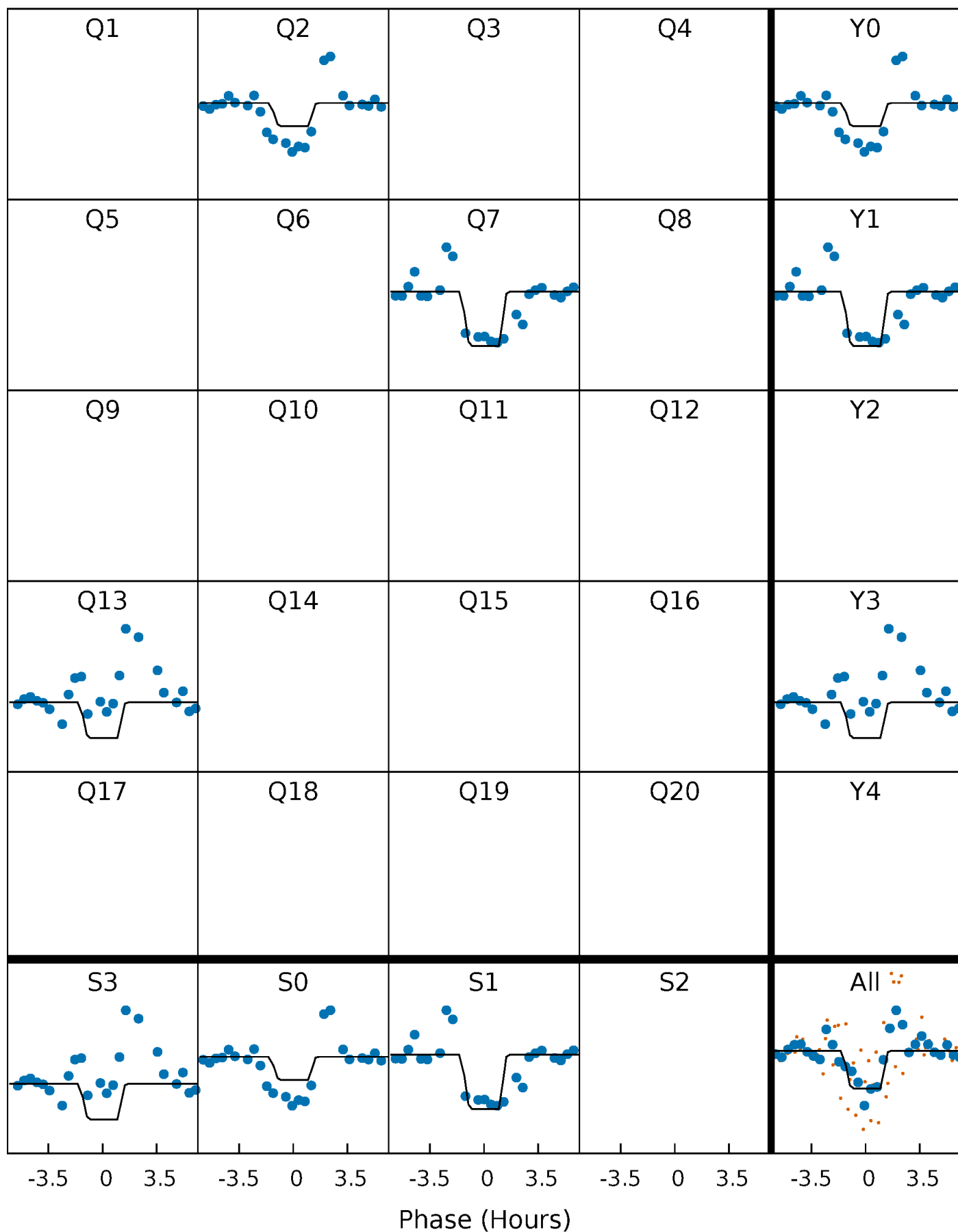
DV Quarter-Phased Transit Curves

TCE 011284185-03 $P=523.920808$ Days $T_0=189.542503$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

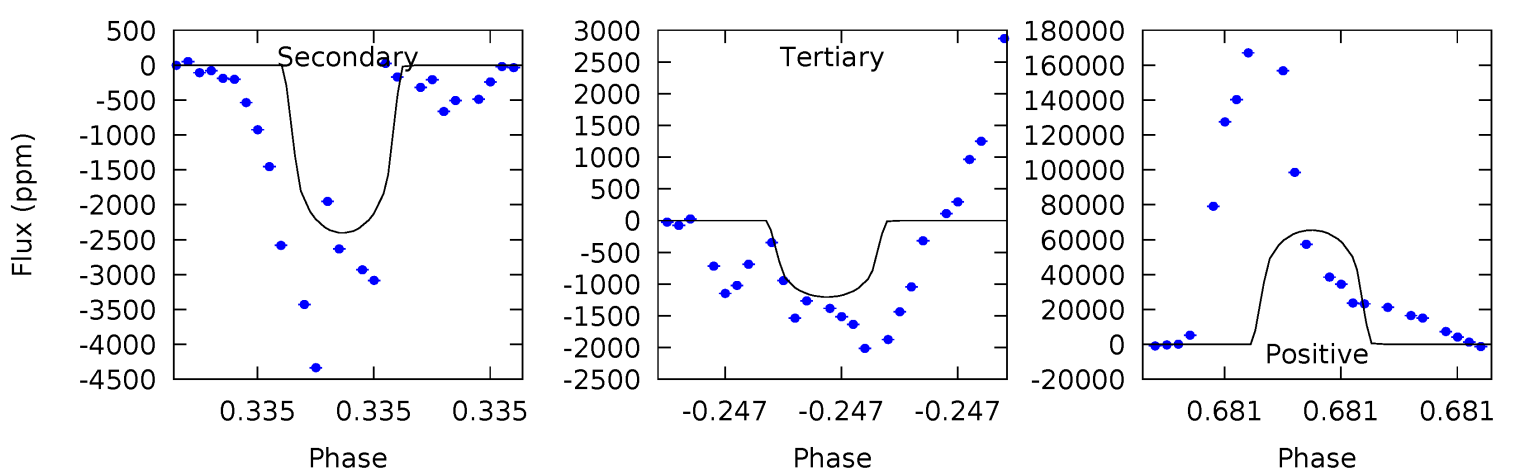
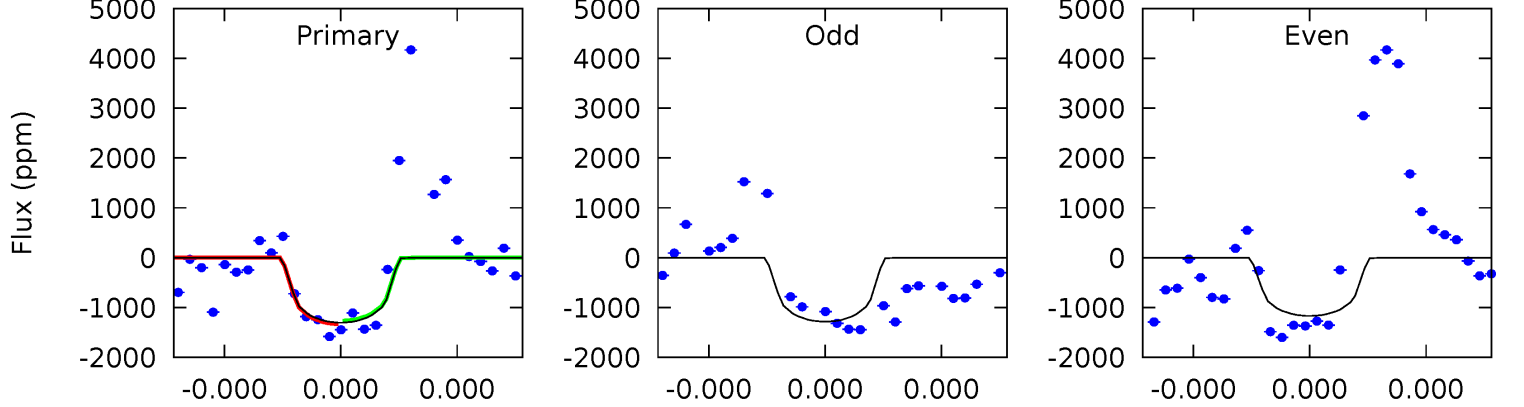
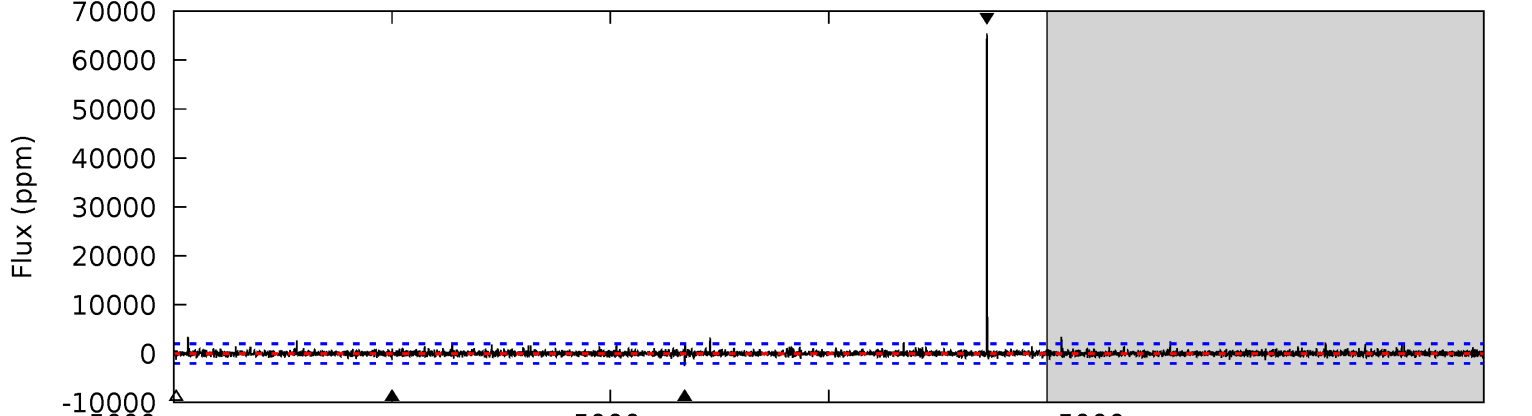
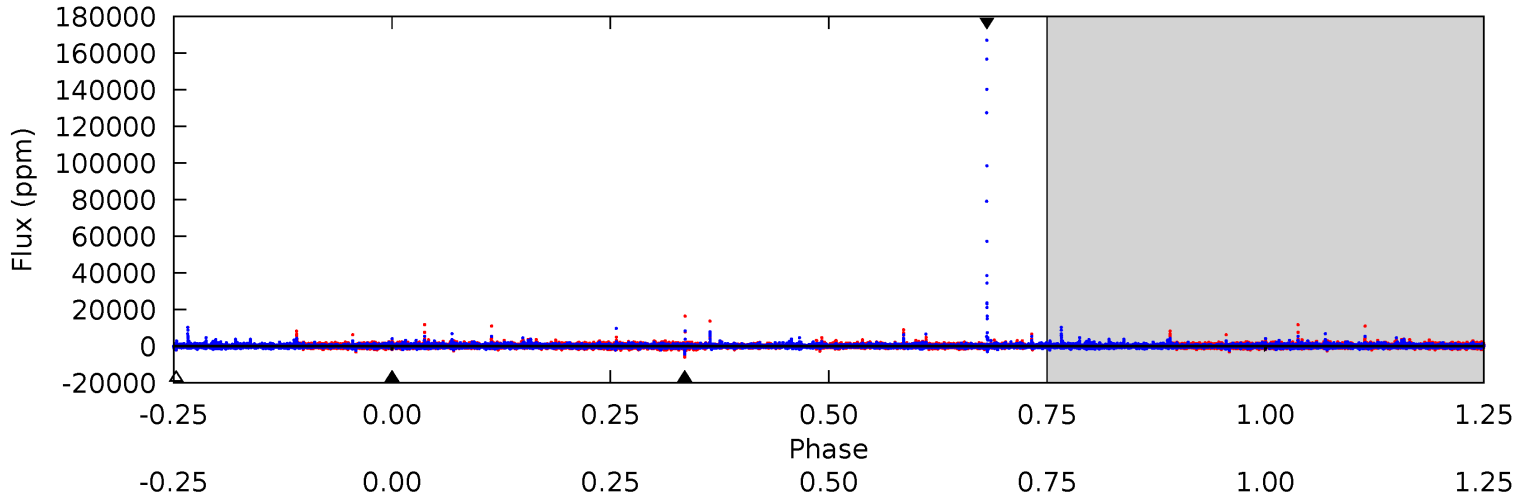
TCE 011284185-03 P=523.909667 Days $T_0=189.550934$ (BKJD)



DV Model-Shift Uniqueness Test

011284185-03, P = 523.920808 Days, E = 189.542503 Days

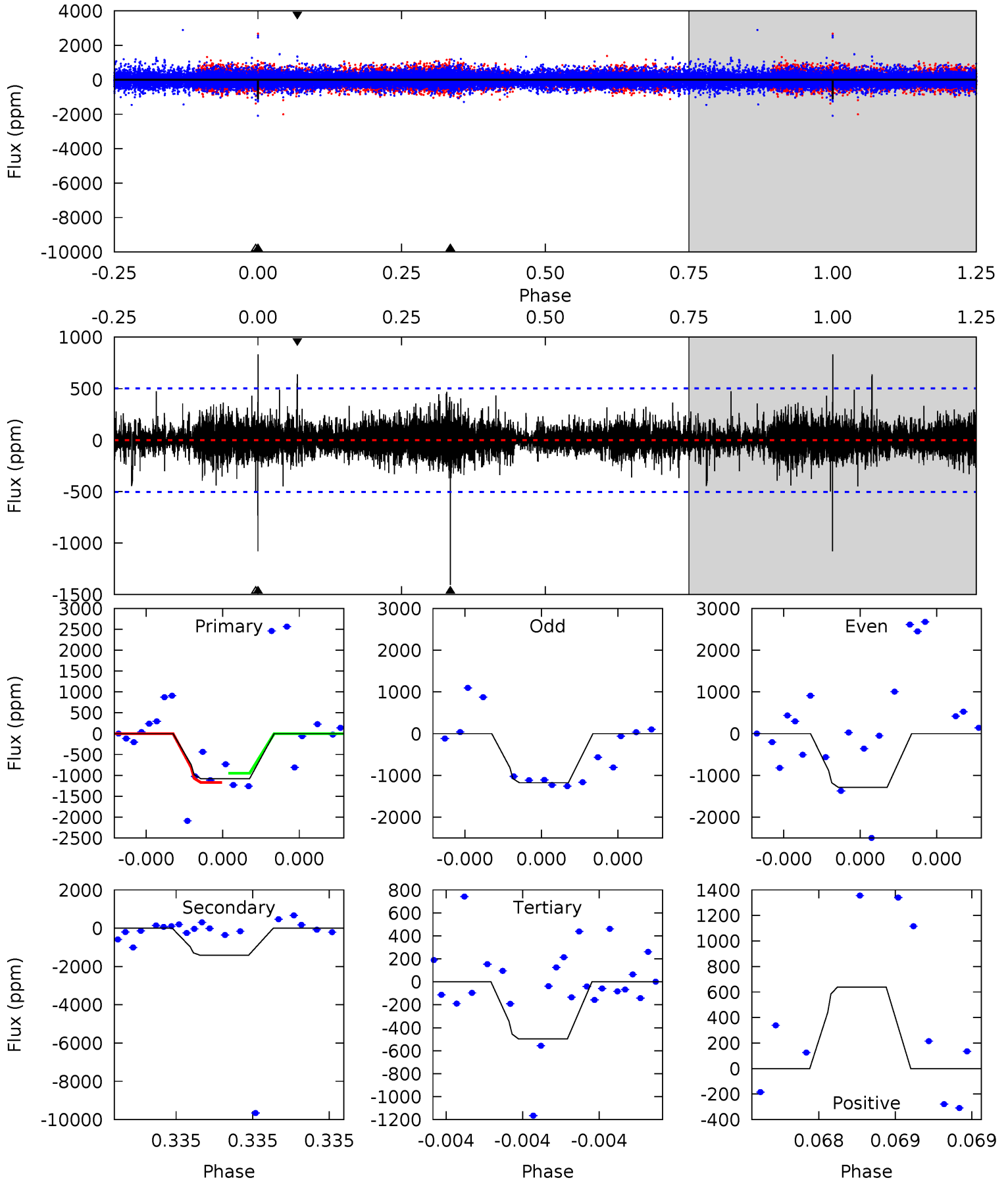
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.65	6.73	3.37	183.3	5.65	3.61	3.11	0.28	-179.6	3.36	-176.5	0.12	0.78	0.96	0.09



Alt Model-Shift Uniqueness Test

011284185-03, P = 523.909667 Days, E = 189.550934 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.3	16.0	5.66	7.25	5.72	3.70	0.96	6.61	5.01	10.3	8.73	0.78	1.08	0.37	1.21



Stellar Parameters For KIC 011284185

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4965^{+124}_{-111}	$3.237^{+0.350}_{-0.350}$	$-0.400^{+0.300}_{-0.200}$	$3.686^{+2.214}_{-1.192}$	$0.854^{+0.284}_{-0.190}$	$0.024^{+0.057}_{-0.017}$
	+2%/-2%	+11%/-11%	+75%/-50%	+60%/-32%	+33%/-22%	+237%/-70%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011284185-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-2404 ± 357	$28.24^{+29.74}_{-19.78}$	532^{+80}_{-55}	4255^{+2966}_{-808}	2354^{+23121}_{-1772}
Alt.	-1406 ± 88	$27.30^{+31.26}_{-17.78}$	534^{+75}_{-52}	3918^{+2322}_{-771}	1406^{+11223}_{-1063}

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 $A_{obs} \gg 1.0$

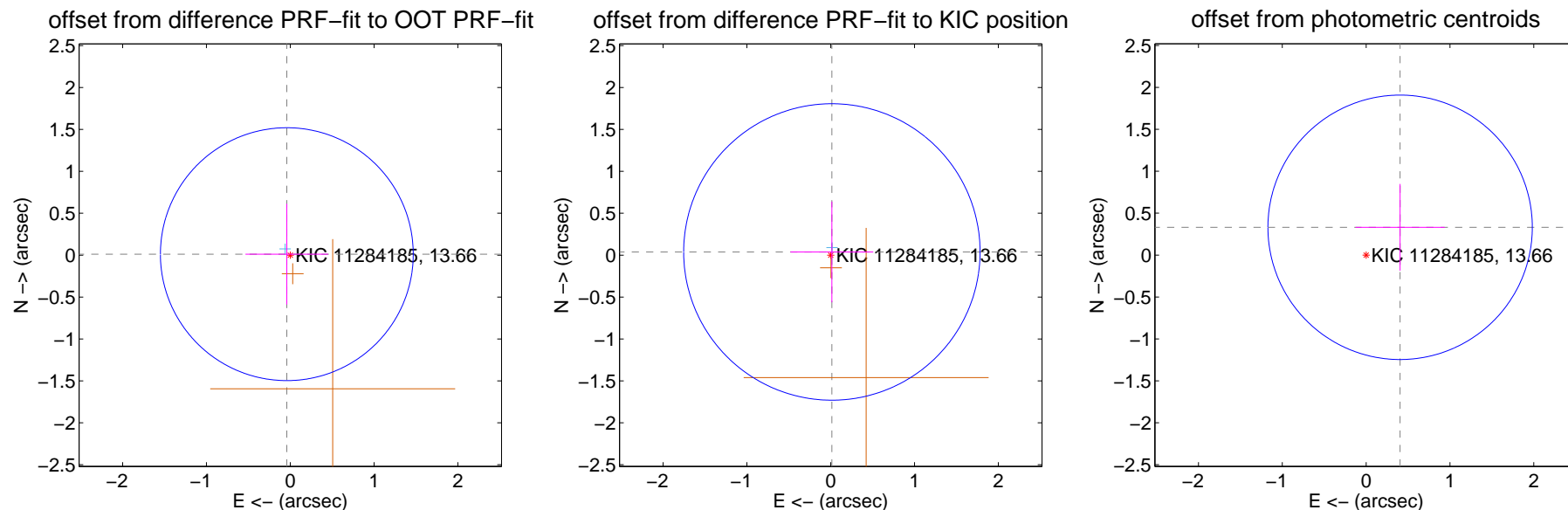
DV Centroid Data

Supplemental centroid analysis for 011284185-03. Kepler magnitude: 13.66. Transit SNR 7.42

There are 1 quarters with good PRF difference image offsets

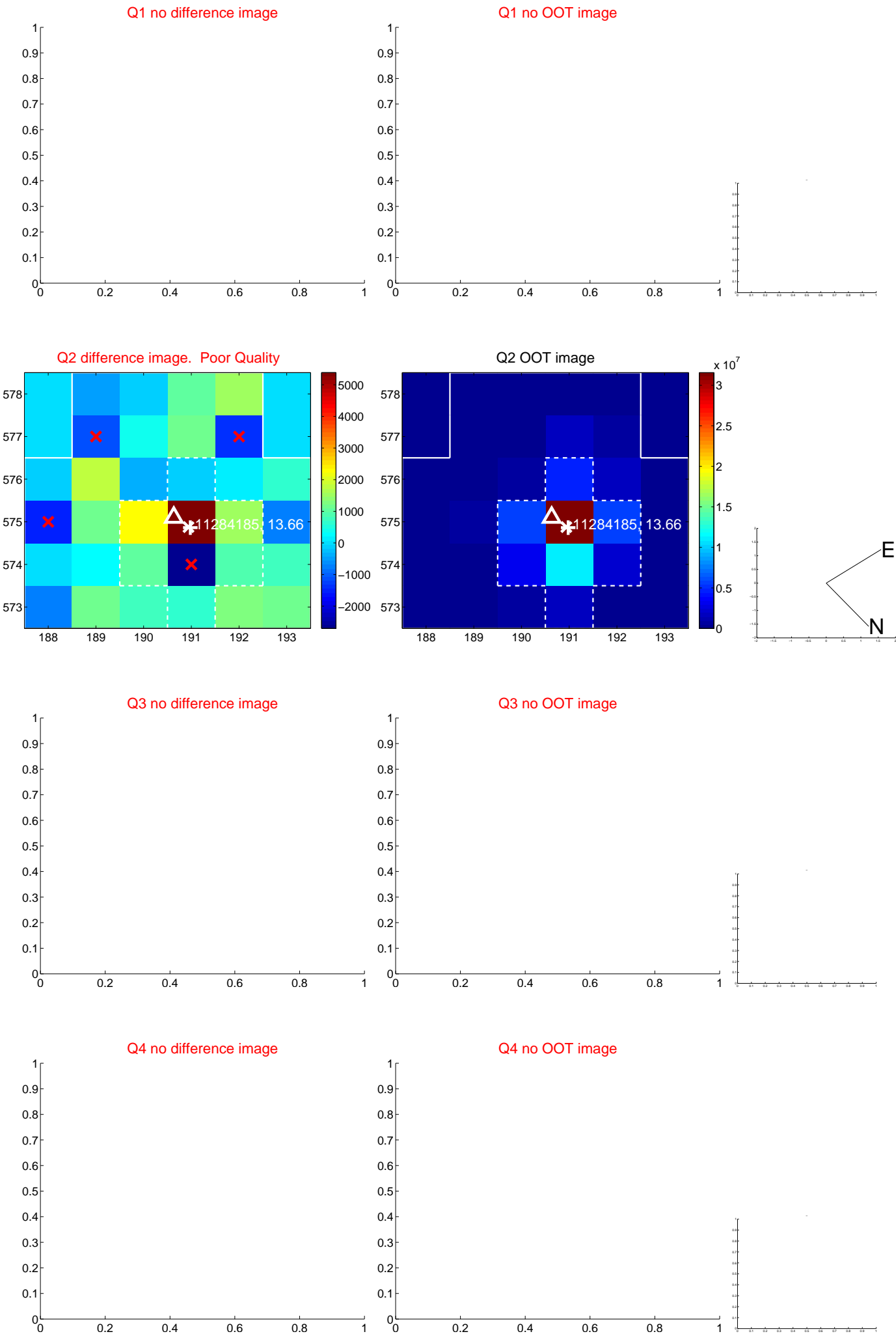
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.043 ± 0.503	0.08	0.041 ± 0.494	0.012 ± 0.601
PRF-fit source offset from KIC position	0.040 ± 0.590	0.07	-0.014 ± 0.494	0.038 ± 0.601
photometric centroid source offset	0.52 ± 0.53	1.00	-0.41 ± 0.53	0.33 ± 0.52

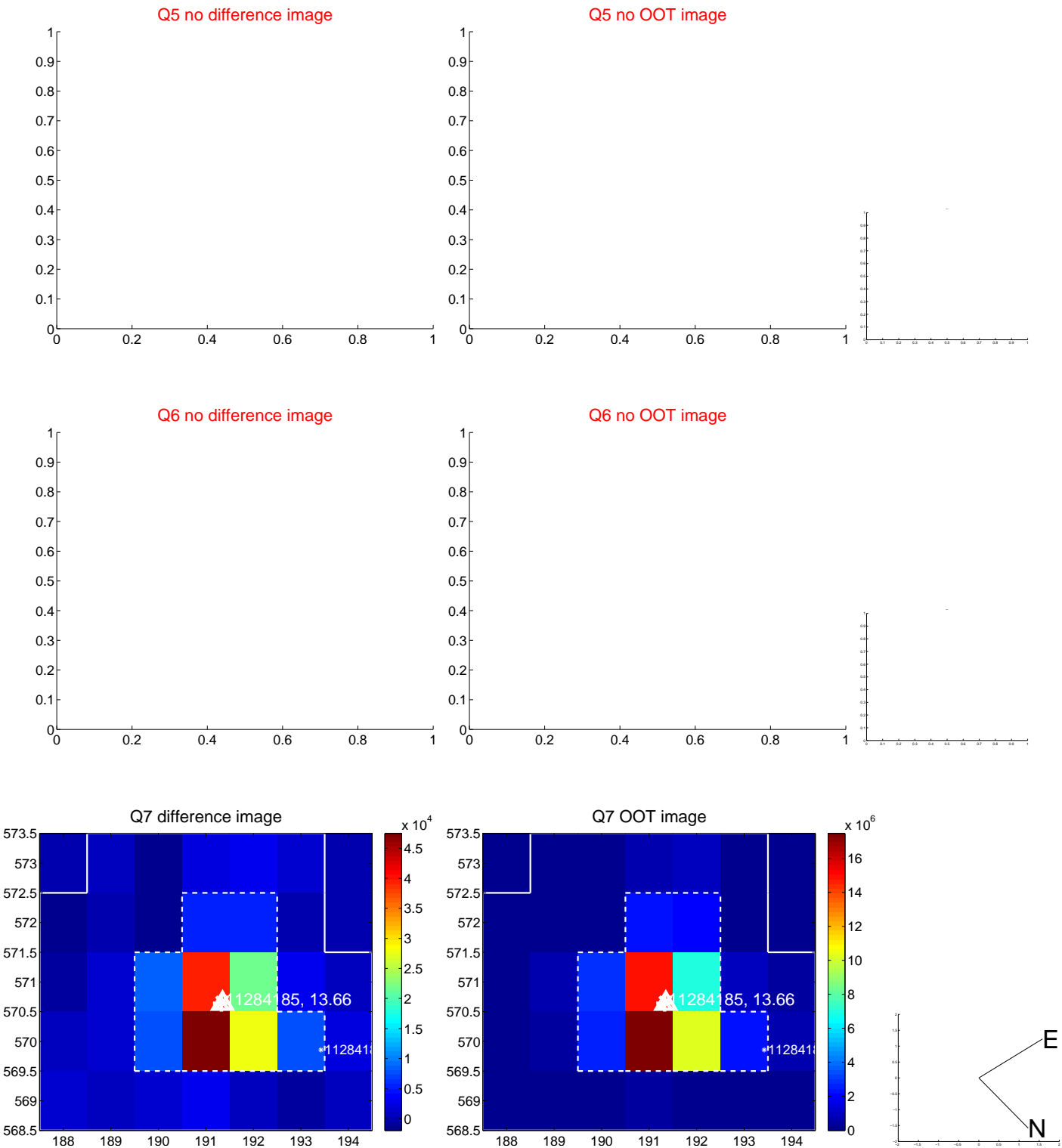


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



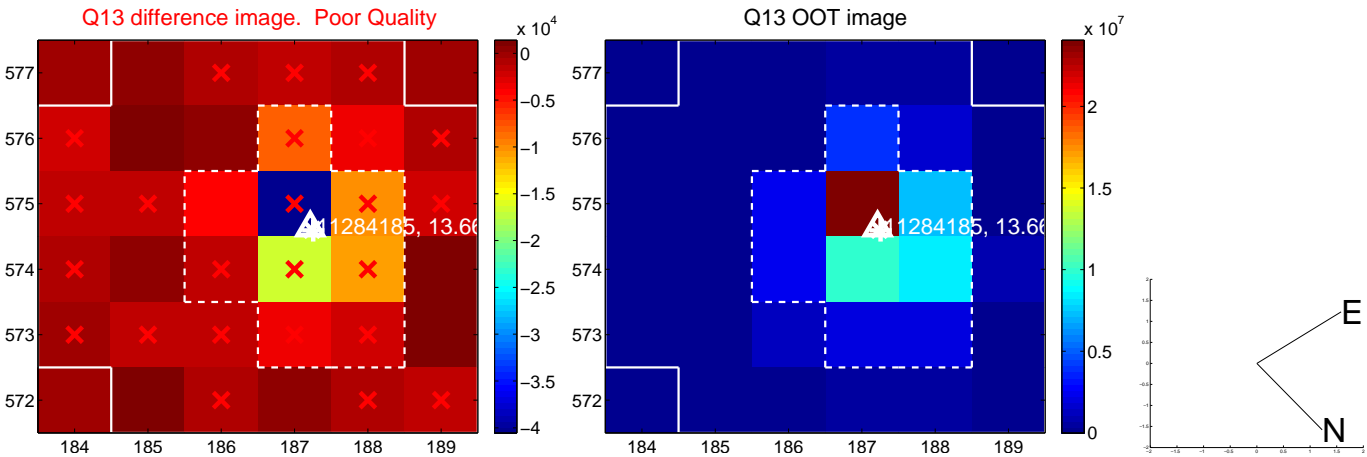
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



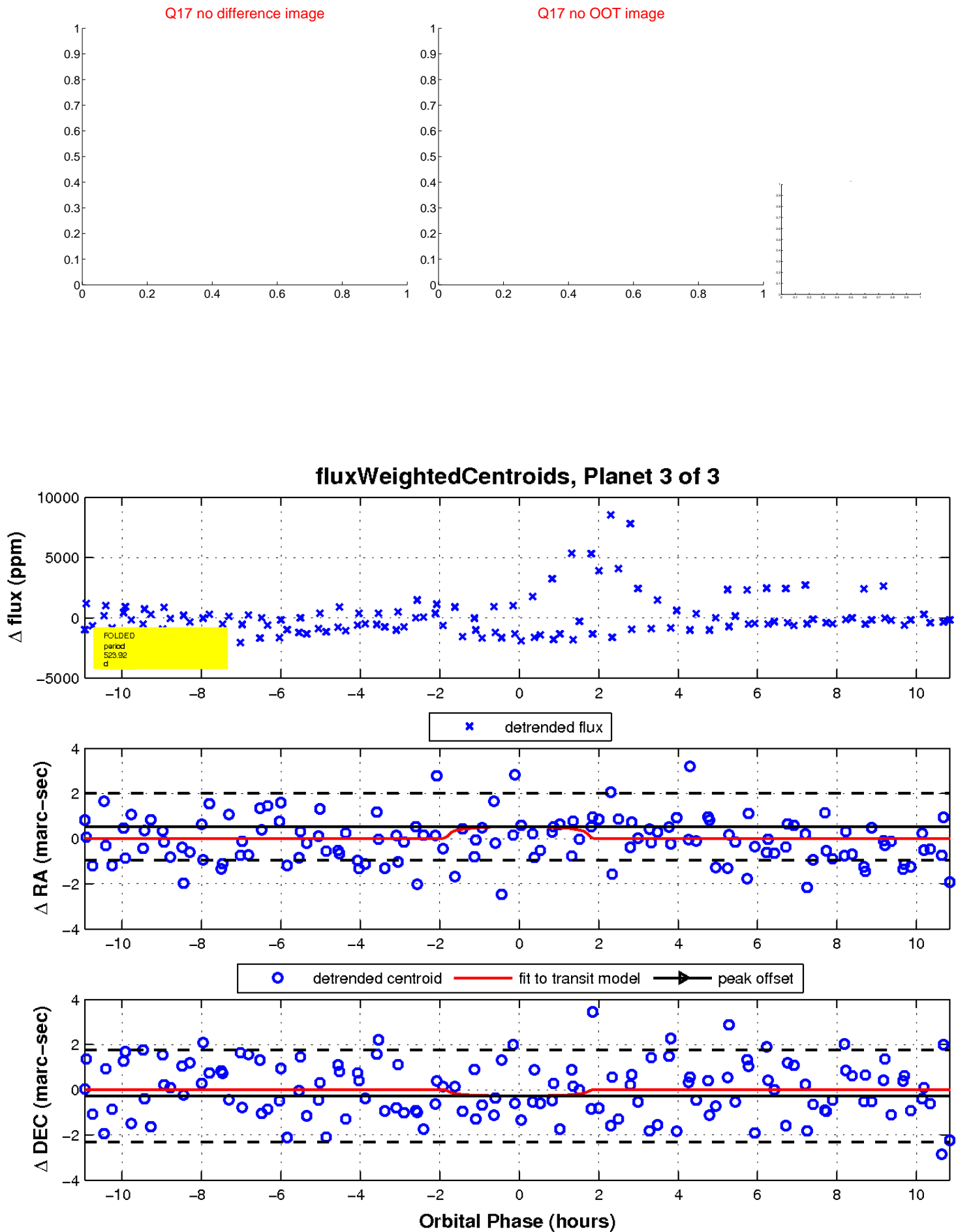
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

