

KIC 009267818

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})
009267818-01	OBS	No	434.390859	453.448300	1642.3	4.375	15.3	7.1	0.37	3573	1.54	0.03
009267818-02	OBS	No	388.020460	347.170497	2304.5	5.732	14.8	7.7	0.37	3573	2.21	0.03
009267818-03	OBS	No	579.588489	236.923743	1510.7	15.490	12.4	6.2	0.37	3573	1.43	0.02
009267818-04	OBS	No	243.451777	216.453219	1065.7	9.574	10.7	7.5	0.37	3573	1.24	0.06
009267818-05	OBS	No	294.637897	325.003858	1737.1	4.098	12.2	8.4	0.37	3573	1.56	0.05
009267818-06	OBS	No	385.653215	286.467603	2179.2	4.819	10.1	10.7	0.37	3573	1.73	0.04
009267818-07	OBS	No	369.084583	335.162070	660.1	12.000	12.3	-1.0	0.37	3573	0.95	0.04

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009267818-01	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—INCONSISTENT_TRANS—CENT_FEW_DIFFS
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009267818-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—CENT_FEW_DIFFS—HALO_GHOST
009267818-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
009267818-07	OBS	FP	0.00	1	0	1	0	LPP_DV—ALL_TRANS_CHASES—CENT_NOFITS—HALO_GHOST

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

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

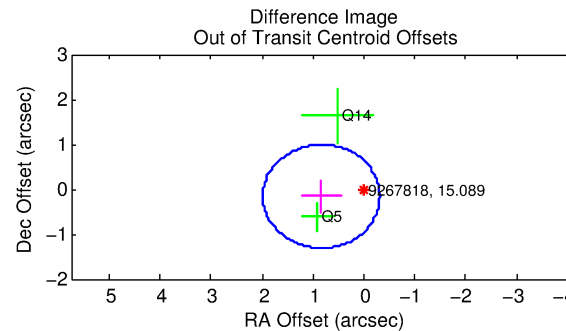
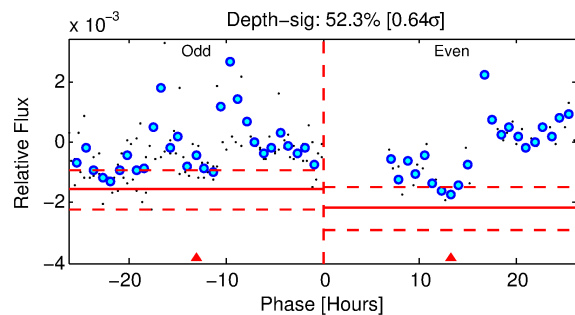
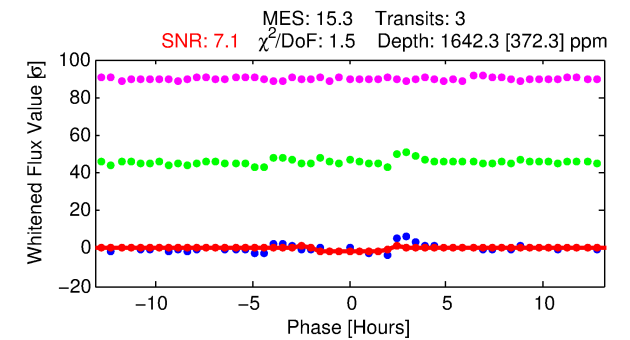
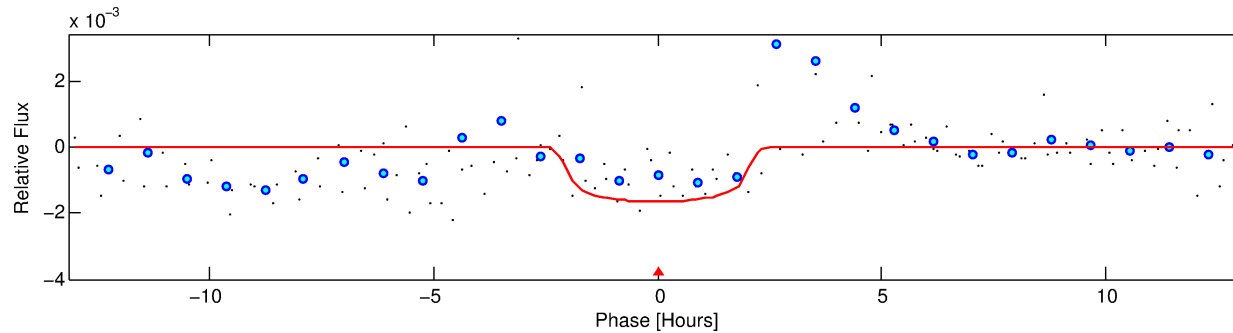
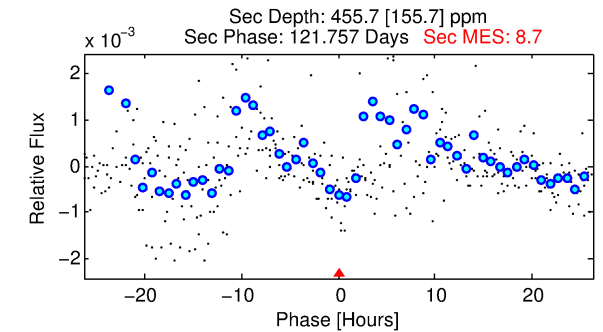
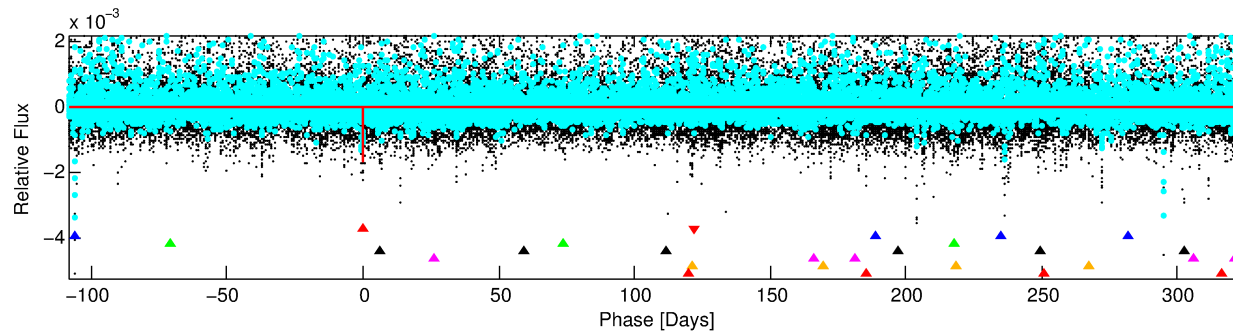
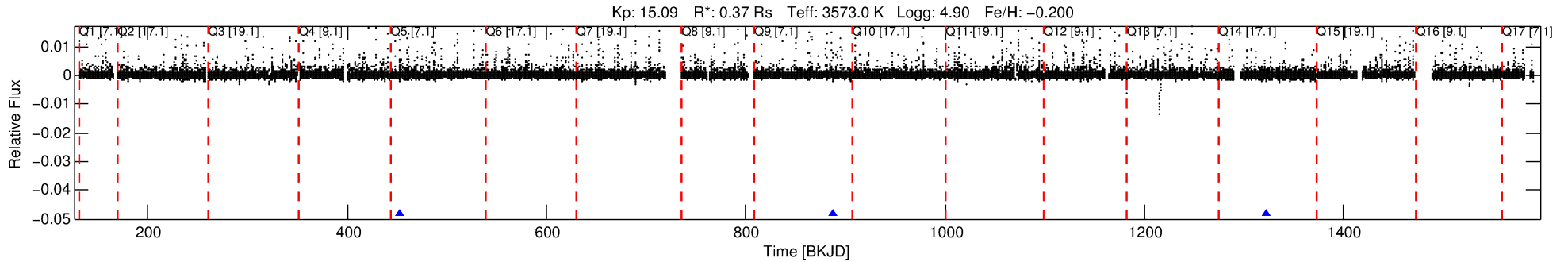
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009267818-01

No Significant Match Found

DV One-Page Summary

KIC: 9267818 Candidate: 1 of 7 Period: 434.391 d



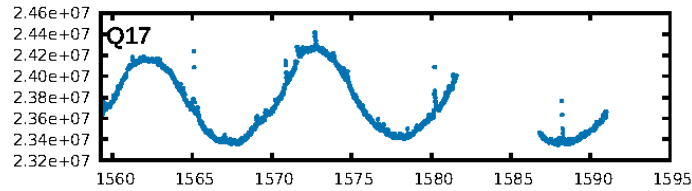
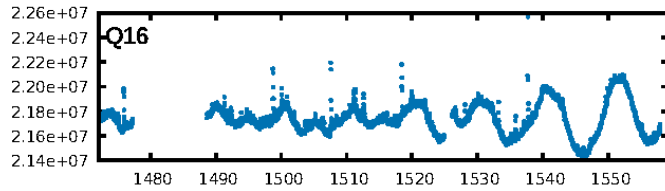
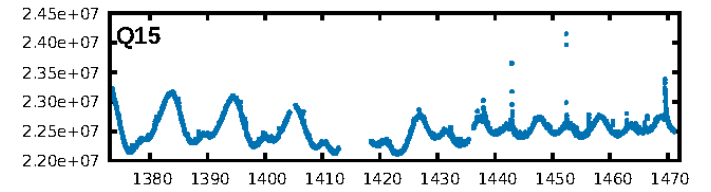
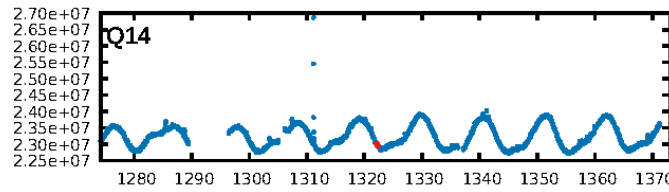
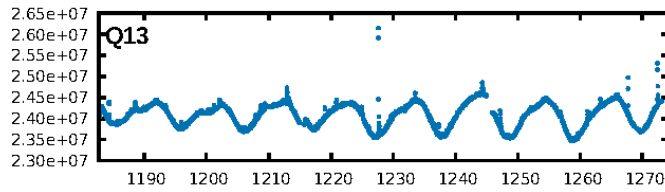
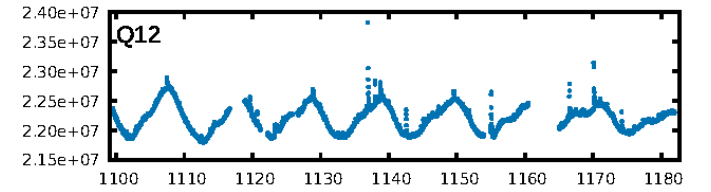
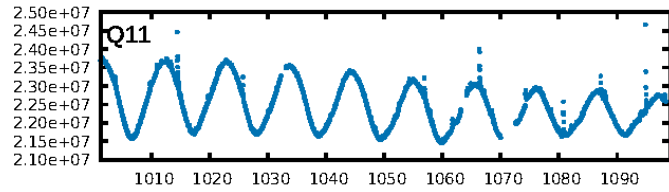
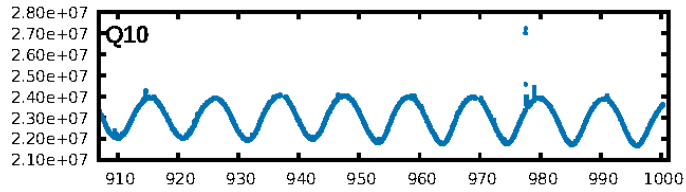
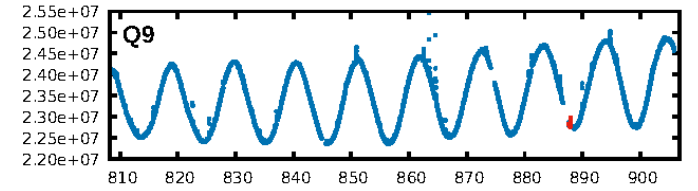
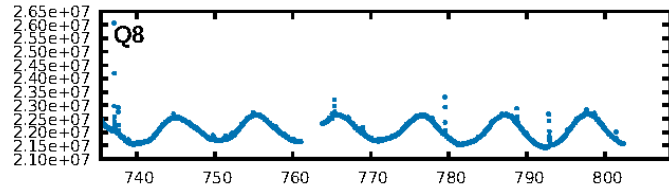
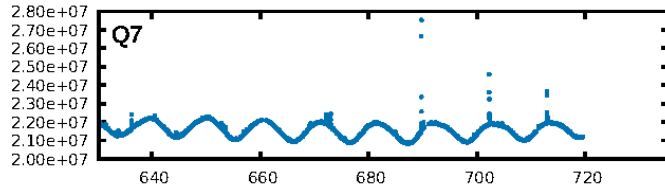
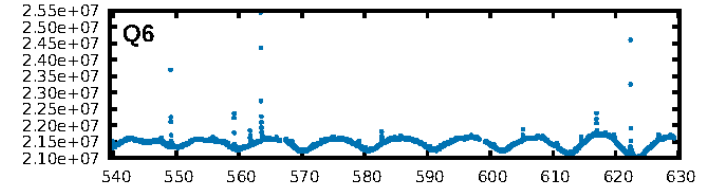
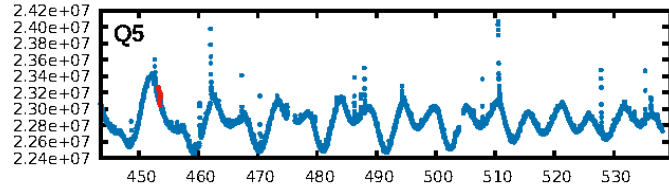
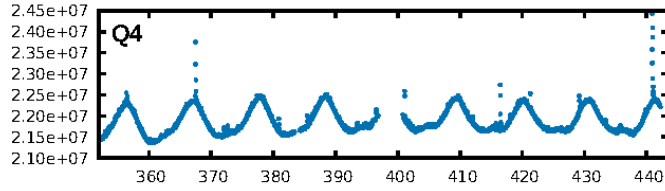
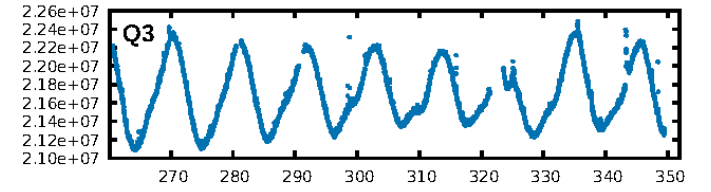
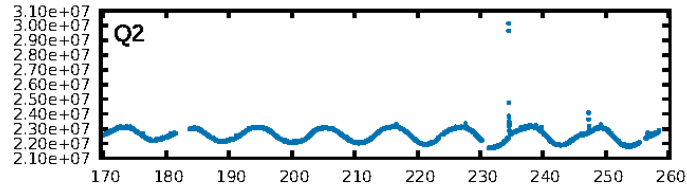
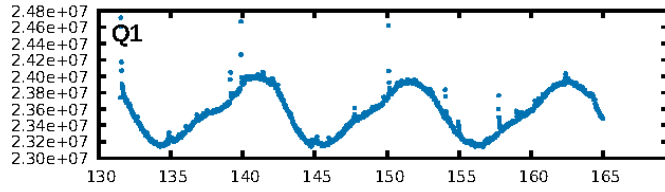
DV Fit Results:

Period = 434.39086 [0.00779] d
Epoch = 453.4483 [0.0094] BKJD
Rp/R* = 0.0380 [0.0291]
a/R* = 691.74 [2326.51]
b = 0.50 [5.13]
Seff = 0.03 [0.00]
Teq = 106 [3] K
Rp = 1.54 [1.19] Re
a = 0.8254 [0.0547] AU
Ag = 71912.04 [113162.10] [0.64σ]
Teffp = 2679 [1053] K [2.44σ]

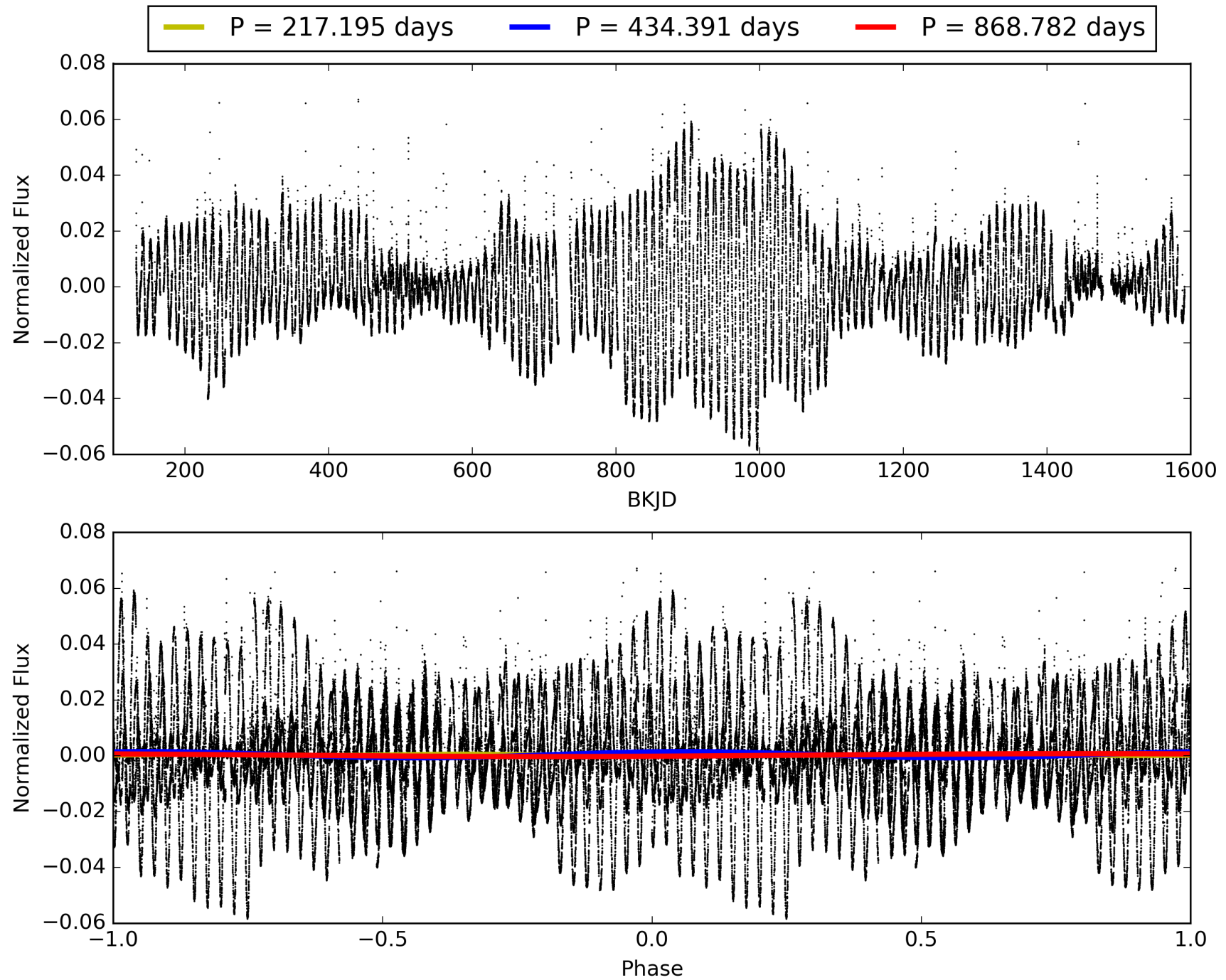
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [154.33σ]
LongPeriod-sig: 100.0% [216.50σ]
ModelChiSquare2-sig: 65.5%
ModelChiSquareGof-sig: 99.1%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.015
Centroid-sig: 27.8%
Centroid-so: 0.789 arcsec [0.79σ]
OotOffset-rm: 0.850 arcsec [2.21σ]
KicOffset-rm: 0.603 arcsec [1.57σ]
OotOffset-st: 1/0/0/1 [2]
KicOffset-st: 1/0/0/1 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [2/2]

TCE 009267818-01, PDC Light Curves

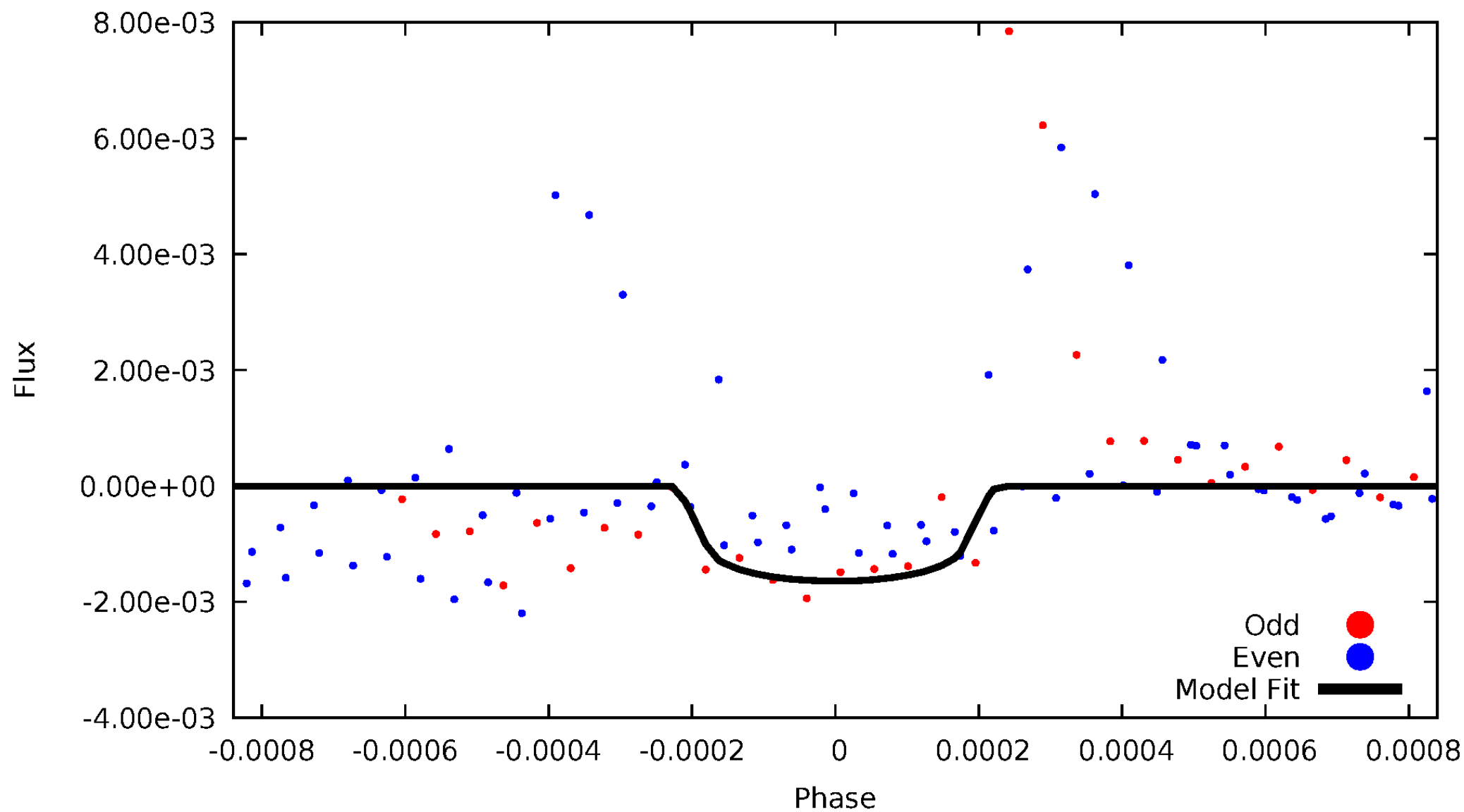


TCE 009267818-01



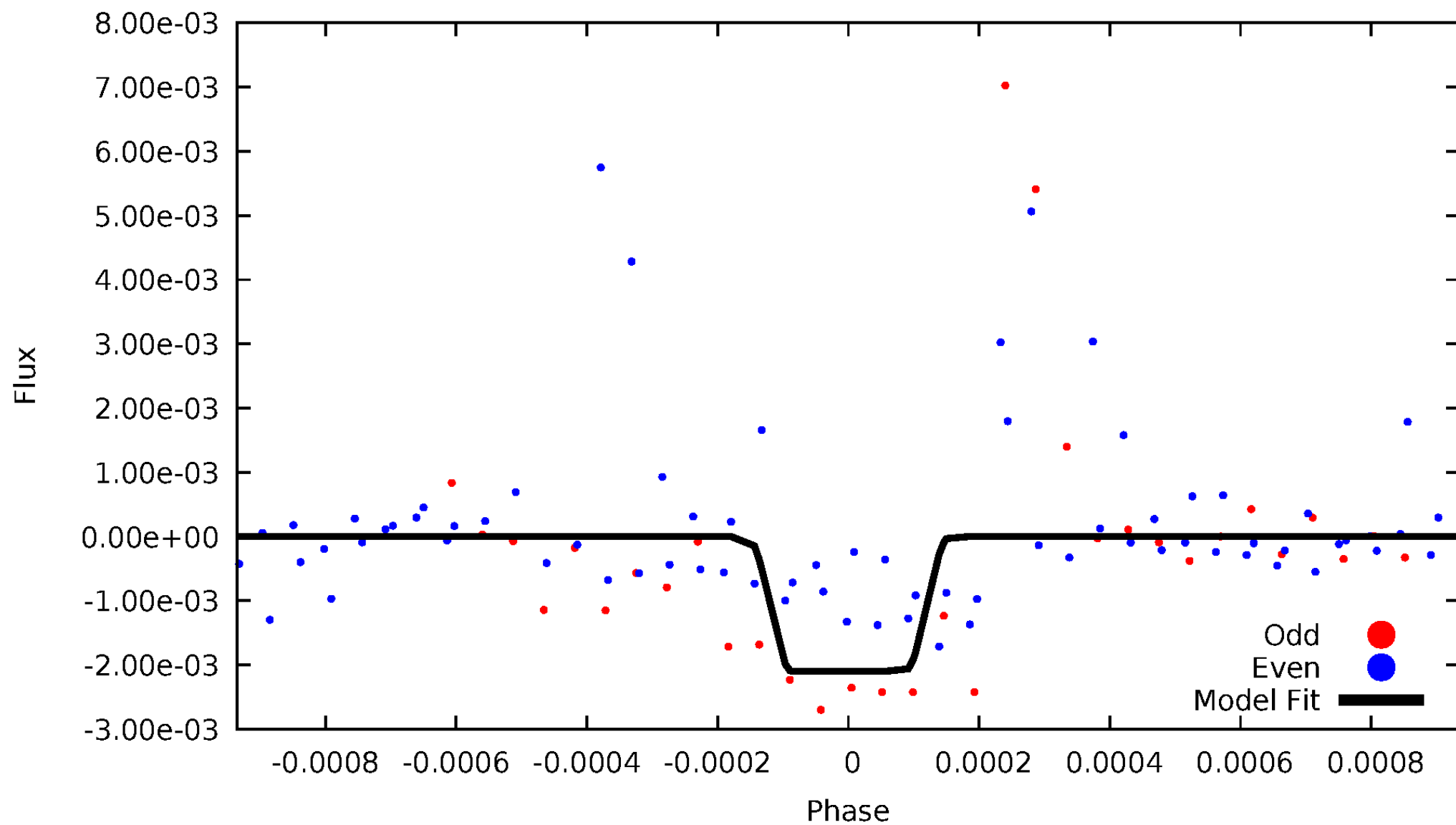
DV Odd/Even

TCE 009267818-01



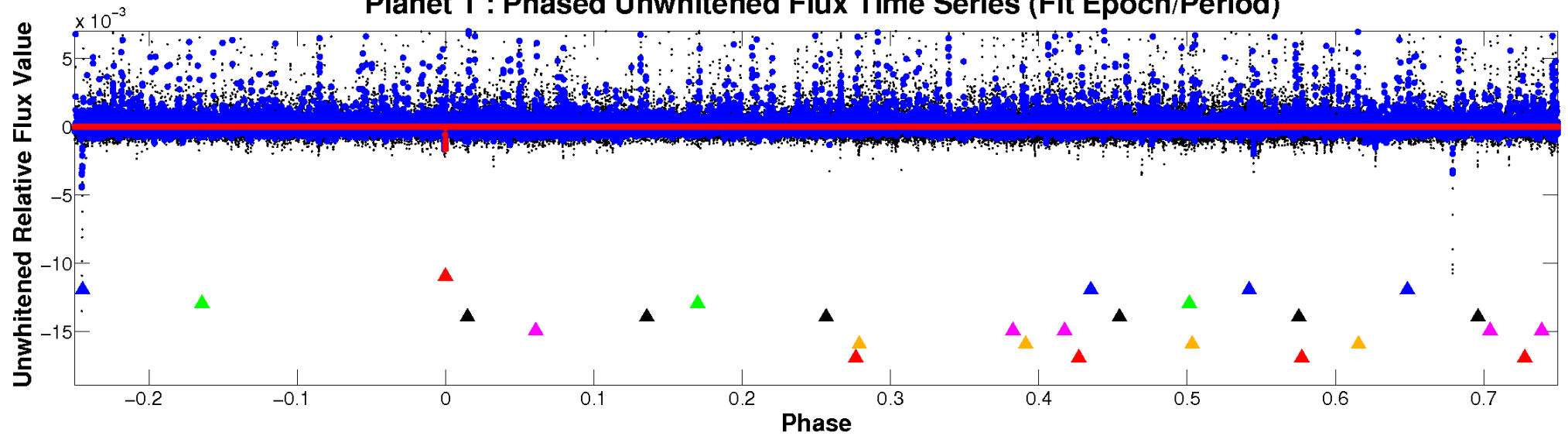
ALT Odd/Even

TCE 009267818-01

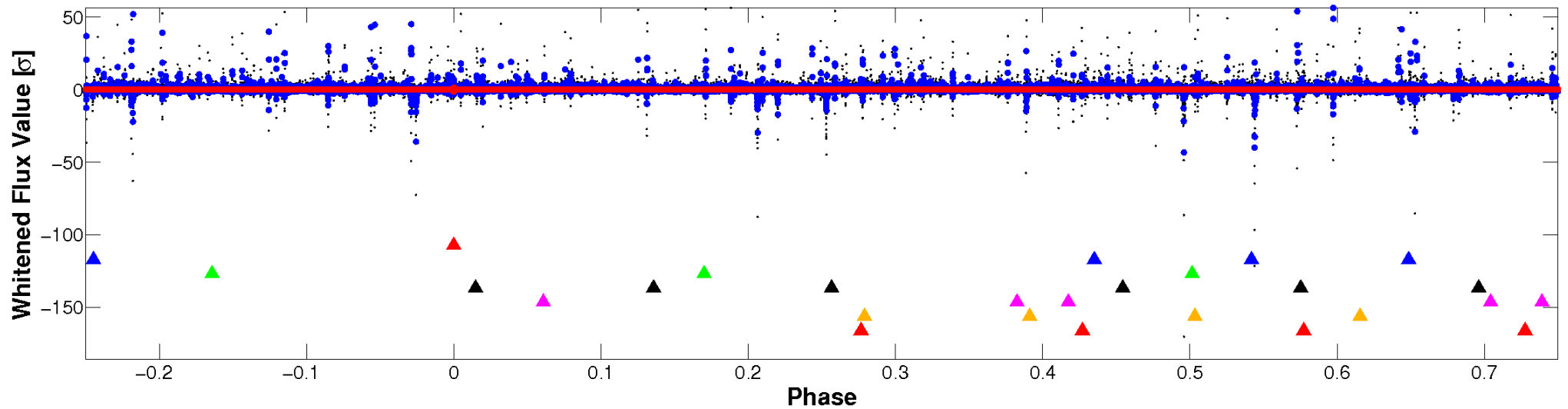


Non-Whitened Vs. Whitened Light Curve

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

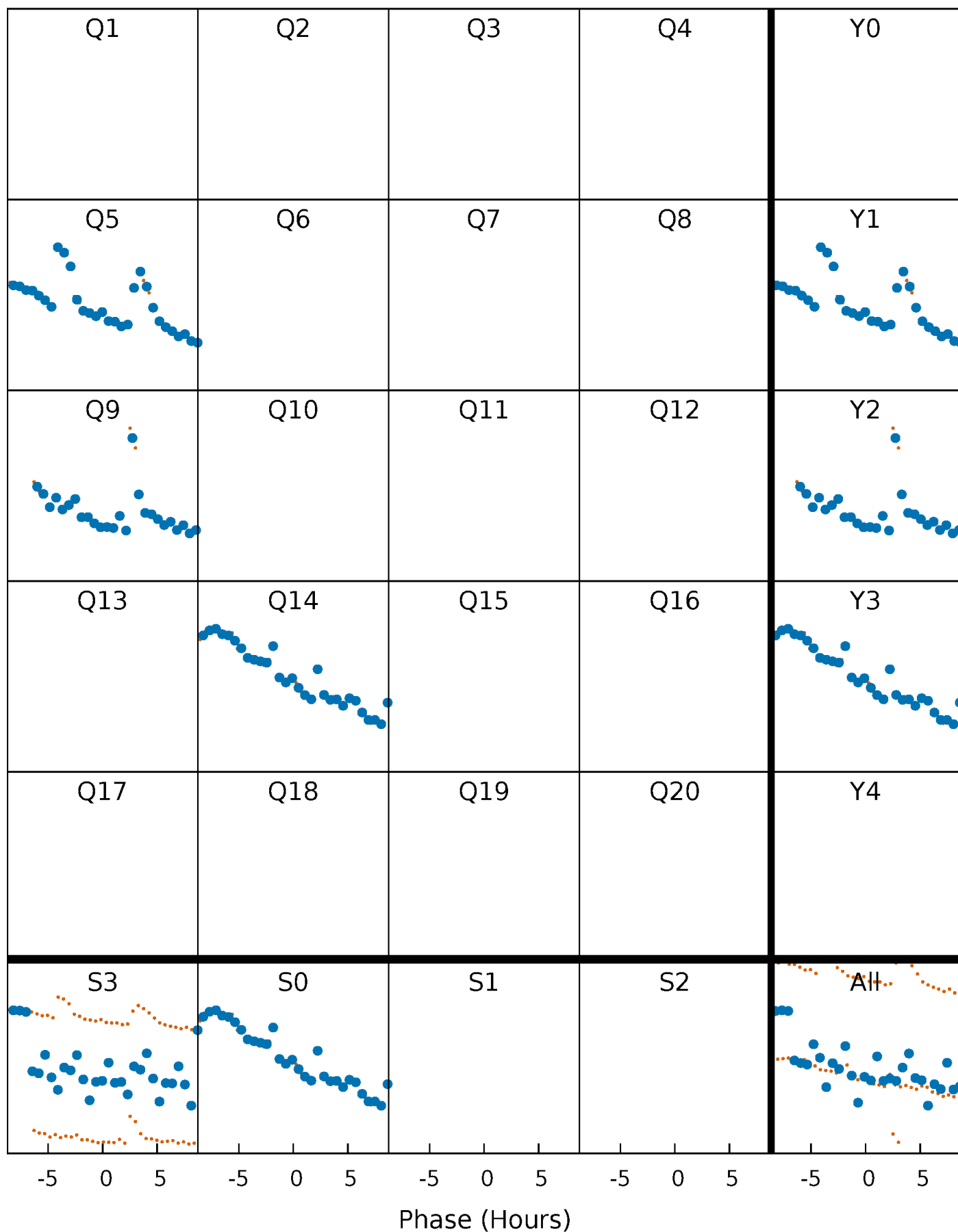


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



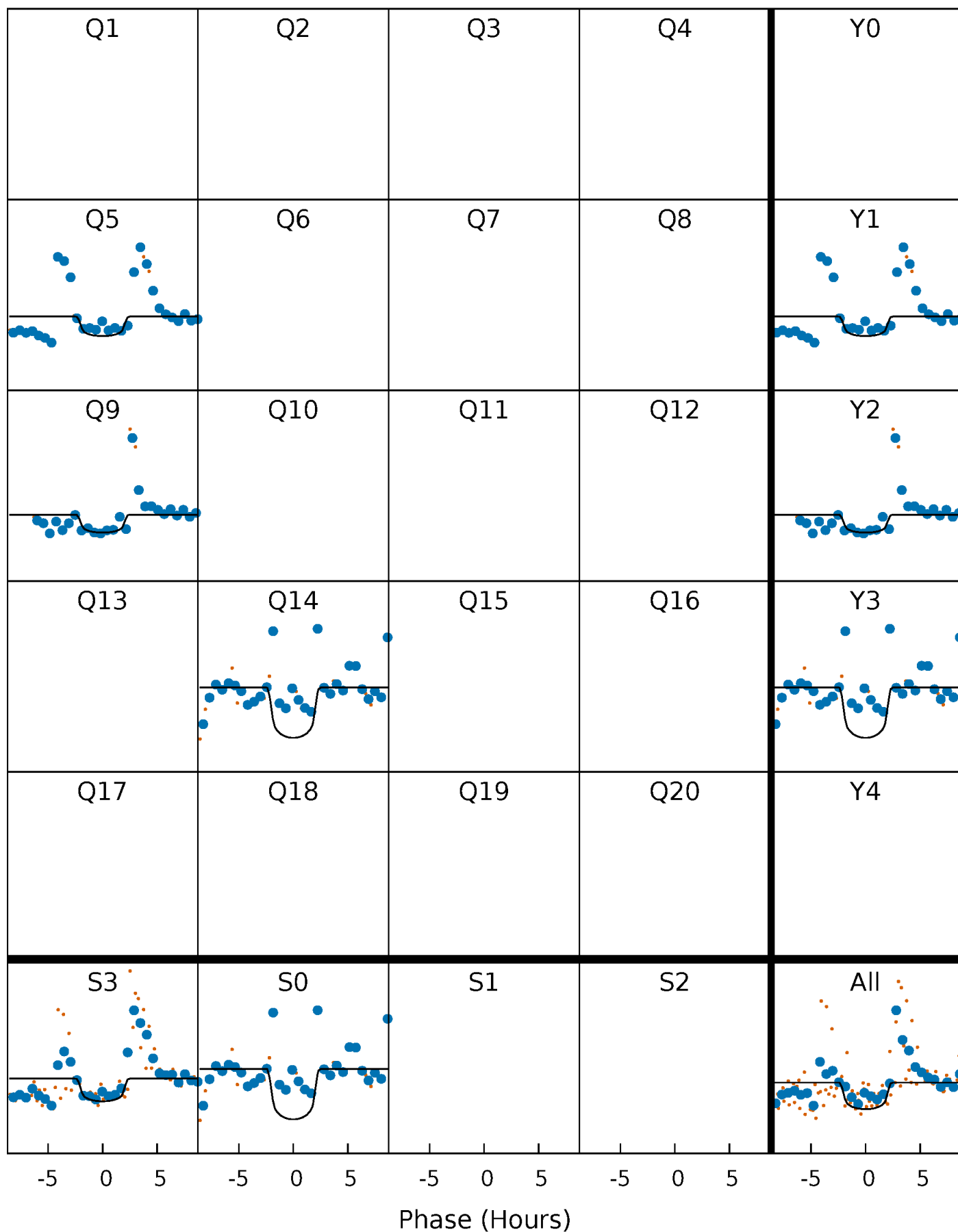
PDC Quarter-Phased Transit Curves

TCE 009267818-01 P=434.390859 Days $T_0=453.448300$ (BKJD)



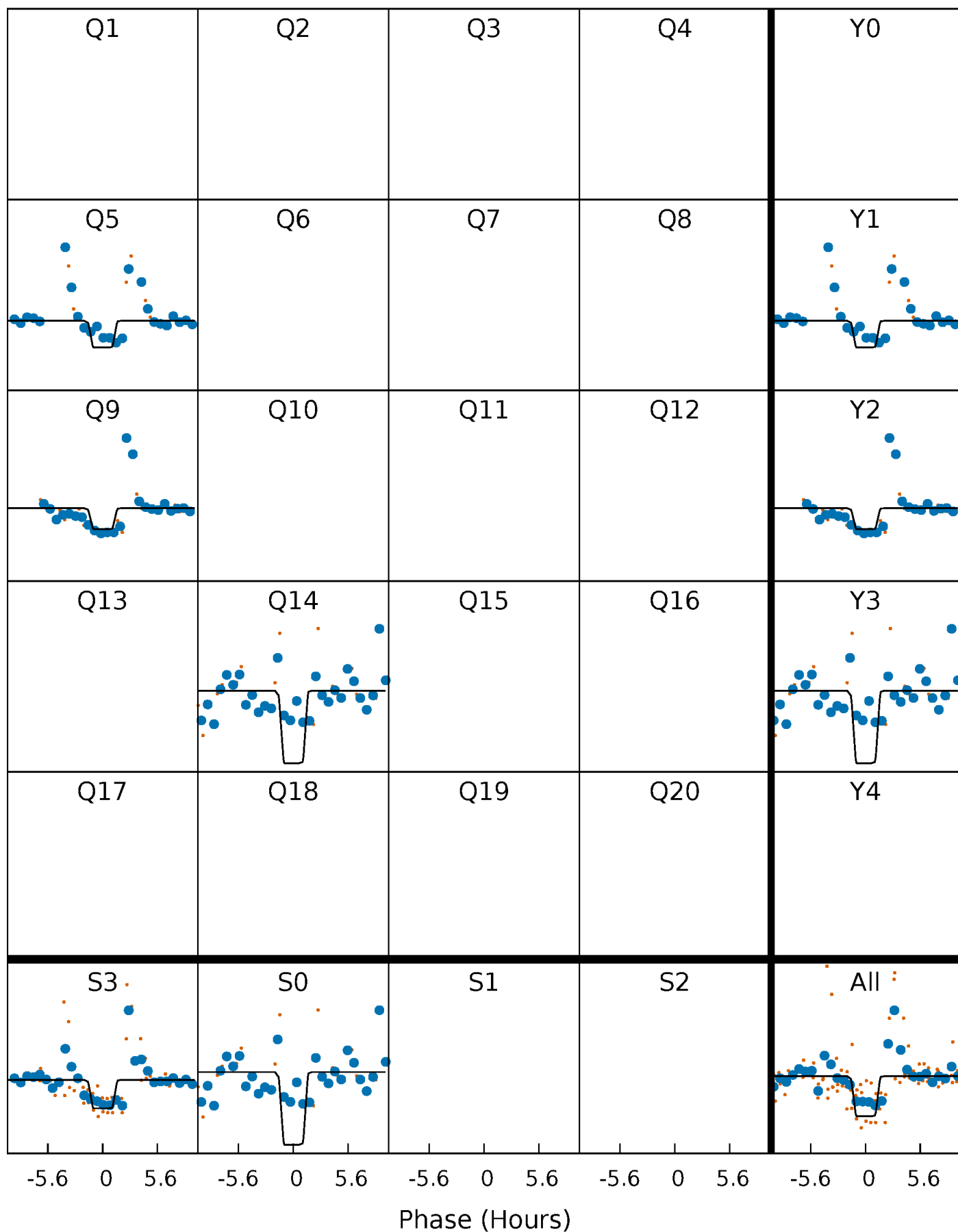
DV Quarter-Phased Transit Curves

TCE 009267818-01 P=434.390859 Days $T_0=453.448300$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

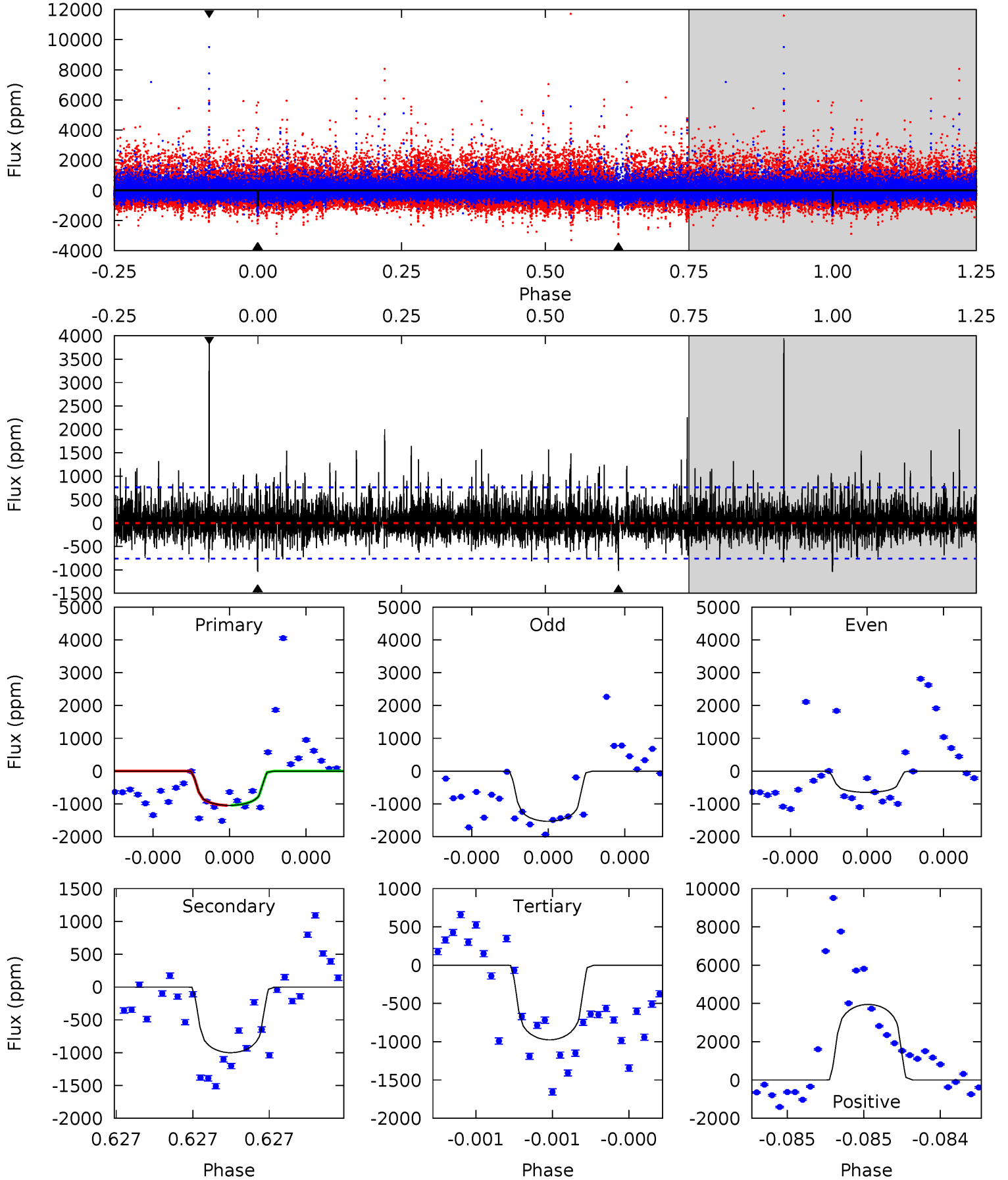
TCE 009267818-01 P=434.376619 Days $T_0=453.463626$ (BKJD)



DV Model-Shift Uniqueness Test

009267818-01, P = 434.390859 Days, E = 19.057441 Days

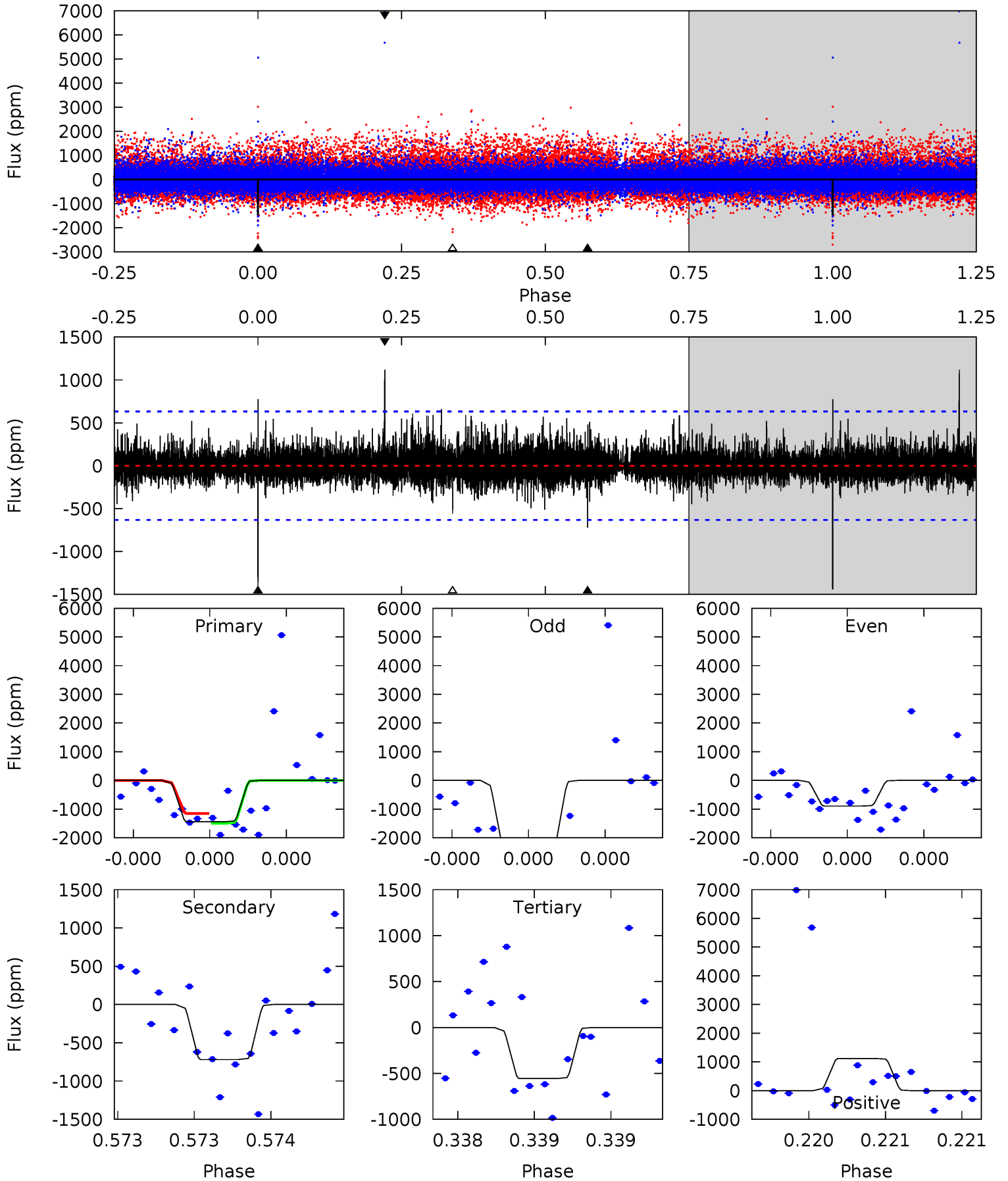
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.66	7.34	7.15	29.0	5.59	3.51	2.08	0.51	-21.3	0.19	-21.6	1.03	0.87	0.79	0.03



Alt Model-Shift Uniqueness Test

009267818-01, P = 434.376619 Days, E = 19.087007 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.9	6.45	5.00	10.0	5.67	3.63	1.12	7.93	2.89	1.45	-3.59	5.71	1.22	0.44	1.45



Stellar Parameters For KIC 009267818

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	3573^{+42}_{-48}	$4.896^{+0.028}_{-0.039}$	$-0.200^{+0.100}_{-0.100}$	$0.372^{+0.033}_{-0.030}$	$0.398^{+0.028}_{-0.042}$	$10.920^{+1.827}_{-1.723}$
	+1%/-1%	+1%/-1%	+50%/-50%	+9%/-8%	+7%/-11%	+17%/-16%
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 009267818-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1000 ± 136	$1.68^{+1.10}_{-1.01}$	148^{+3}_{-3}	3287^{+1248}_{-444}	$135455^{+676638}_{-87741}$
Alt.	-719 ± 111	$1.90^{+1.14}_{-1.07}$	148^{+3}_{-3}	3005^{+903}_{-359}	$71999^{+295505}_{-43593}$

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

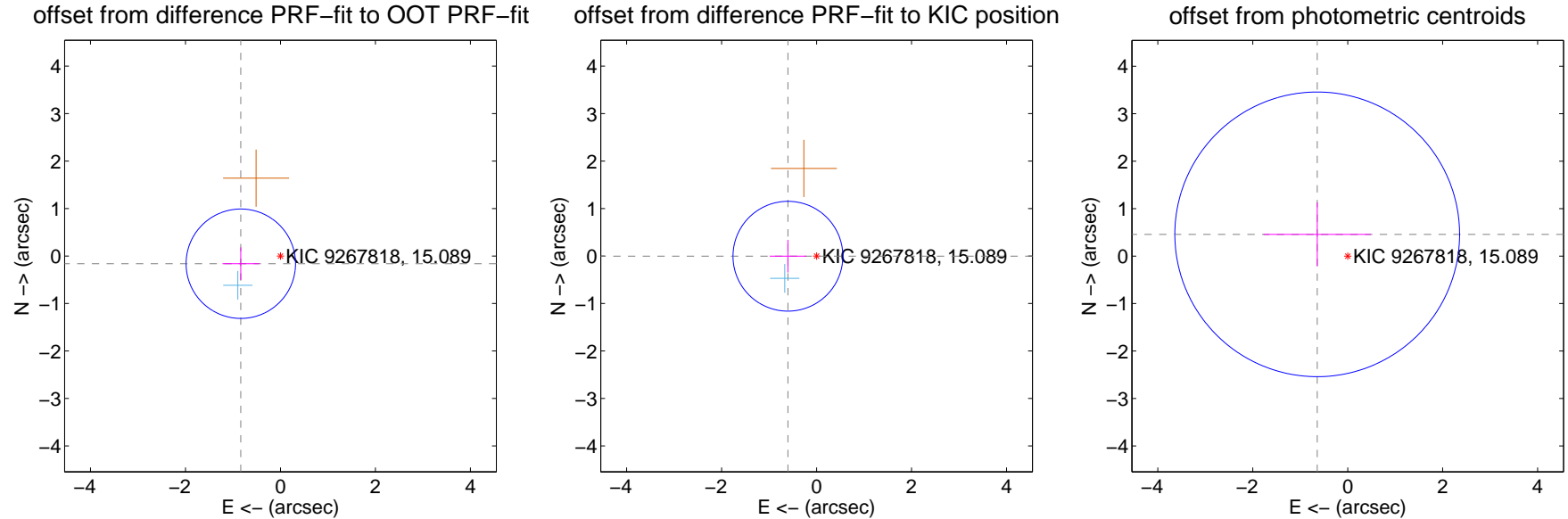
DV Centroid Data

Supplemental centroid analysis for 009267818-01. Kepler magnitude: 15.09. Transit SNR 7.10

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.32 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.850 ± 0.384	2.21	0.835 ± 0.385	-0.162 ± 0.343
PRF-fit source offset from KIC position	0.603 ± 0.385	1.57	0.603 ± 0.385	-0.004 ± 0.343
photometric centroid source offset	0.79 ± 1.00	0.79	0.64 ± 1.13	0.46 ± 0.67

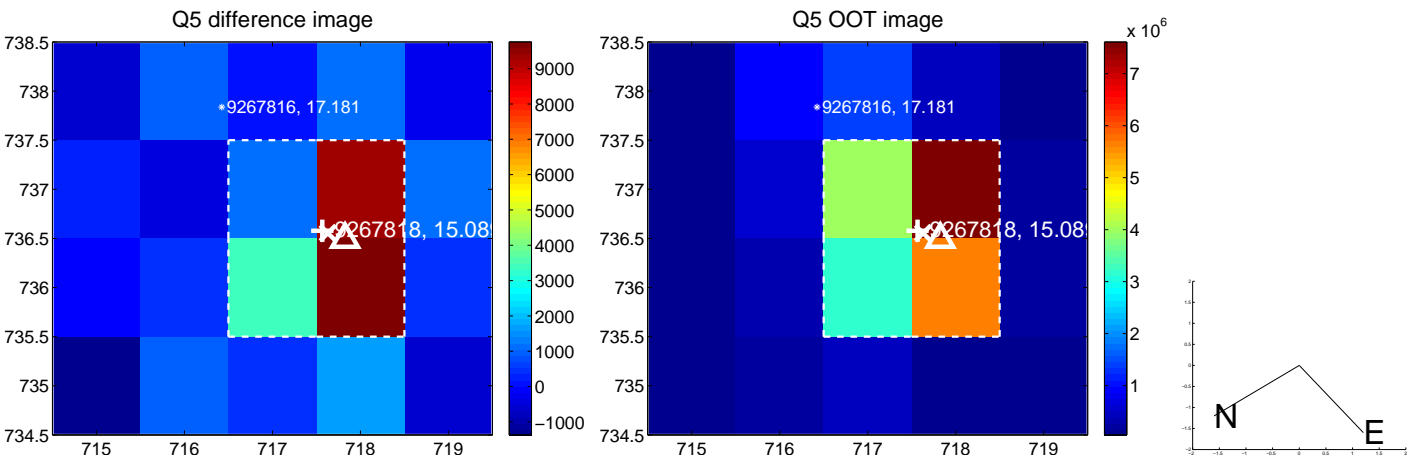


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

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



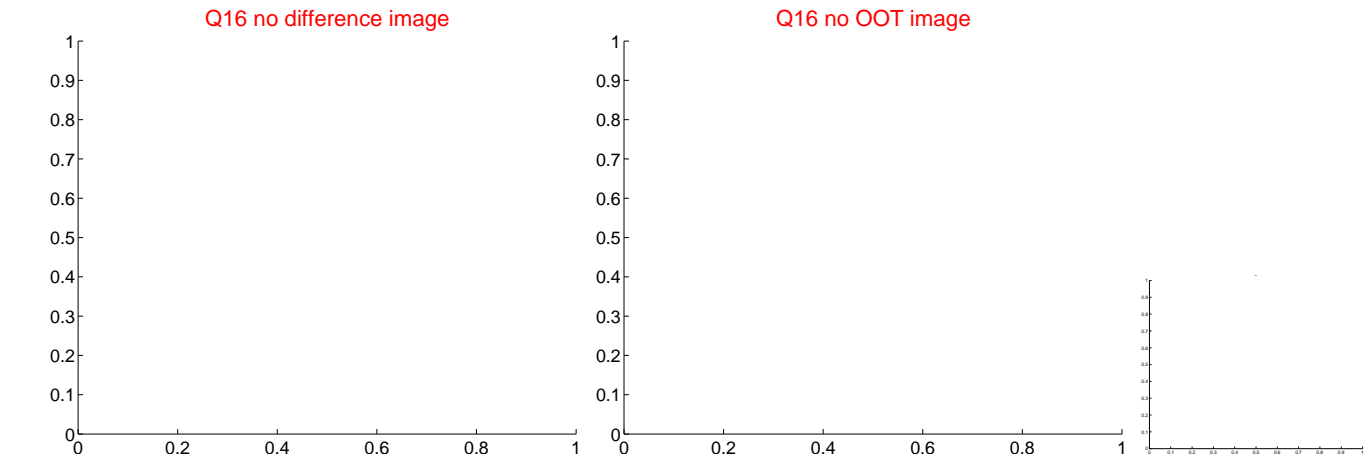
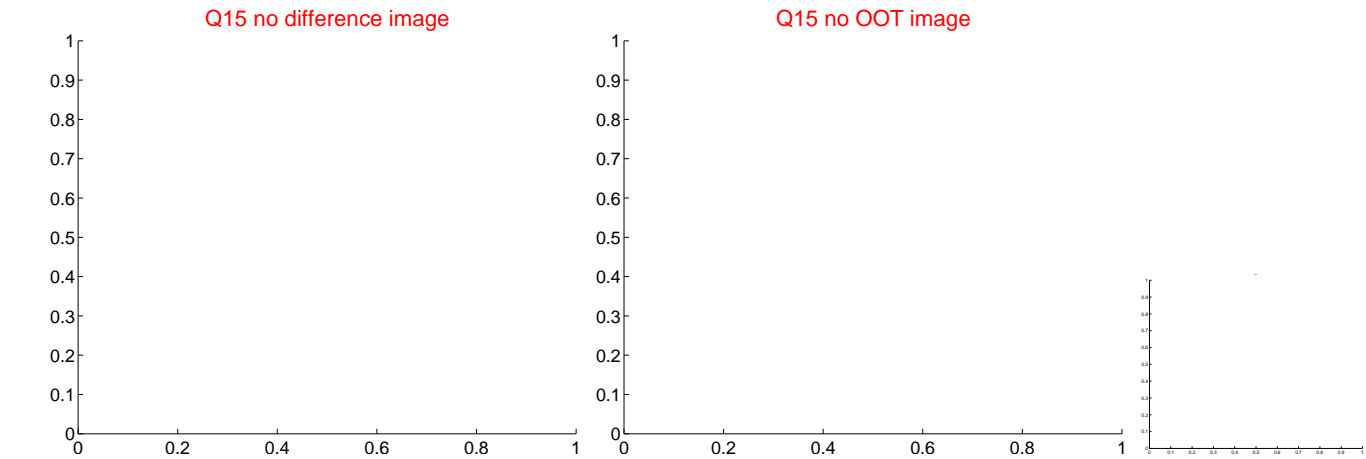
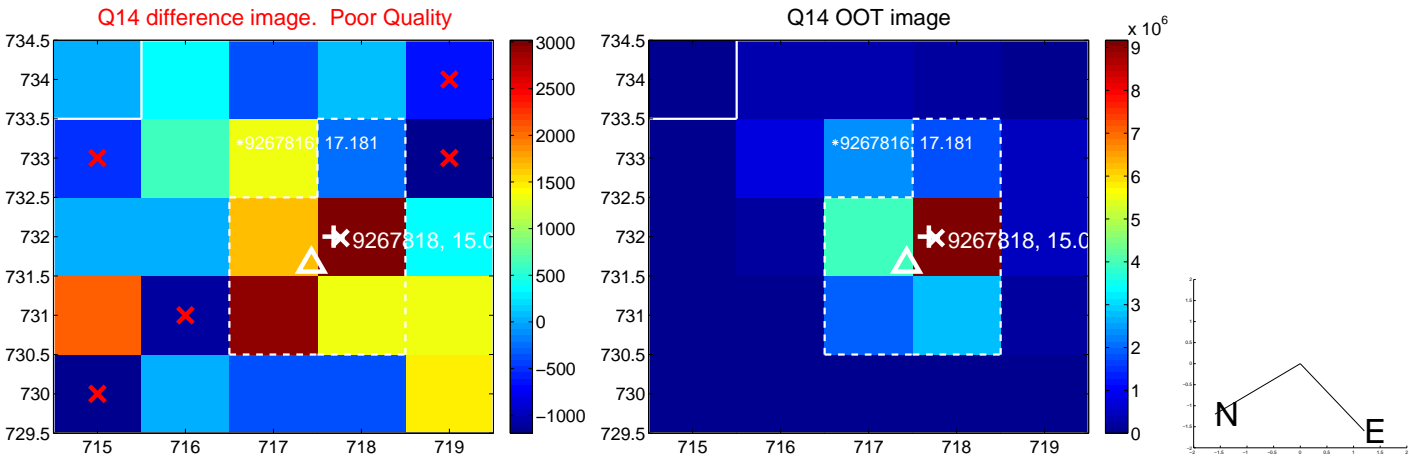
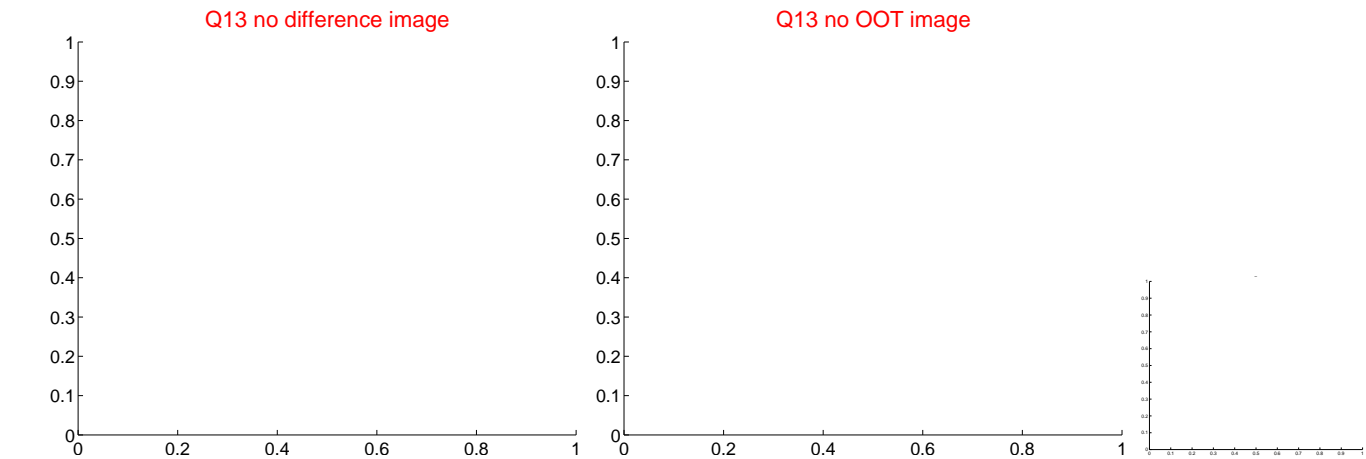
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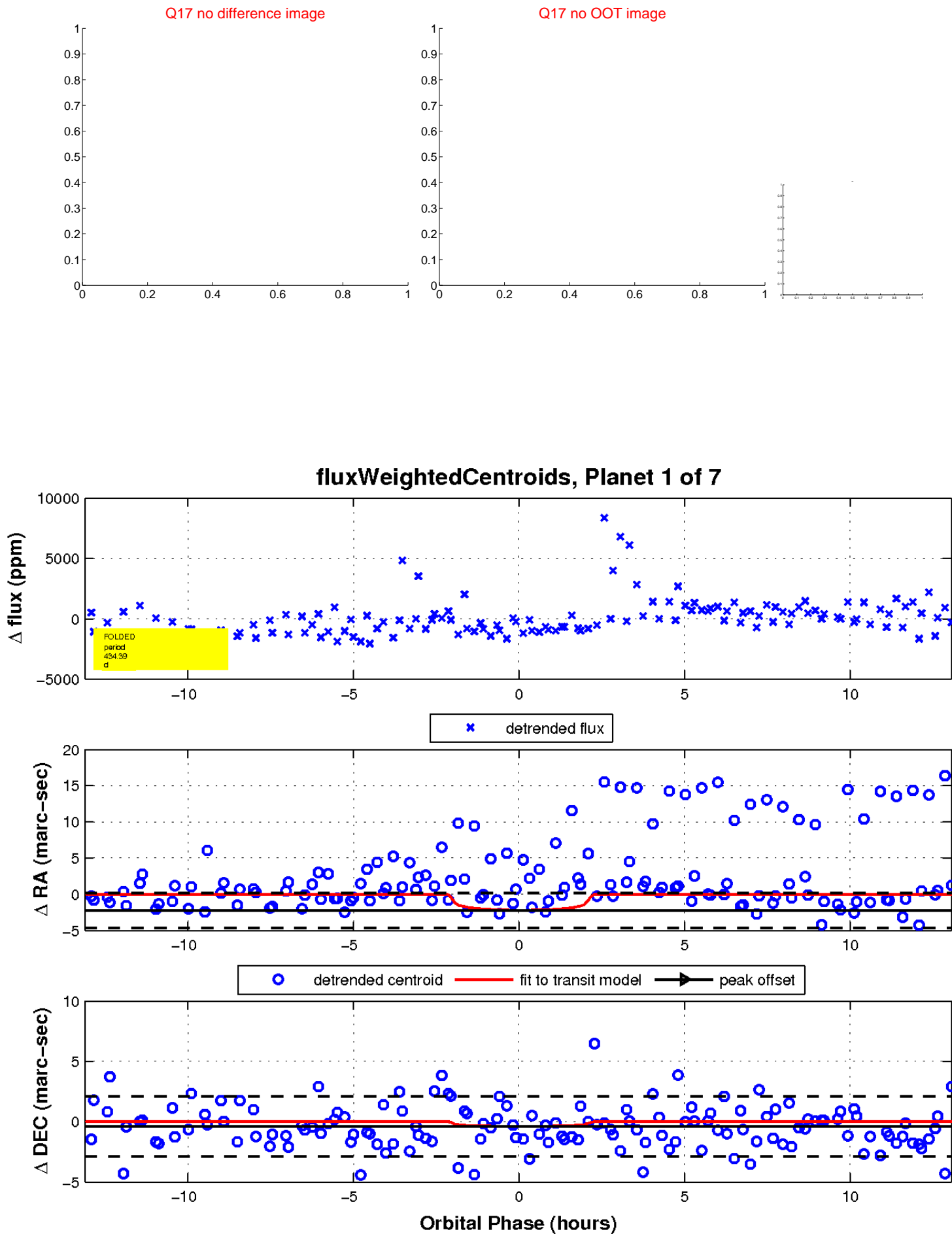
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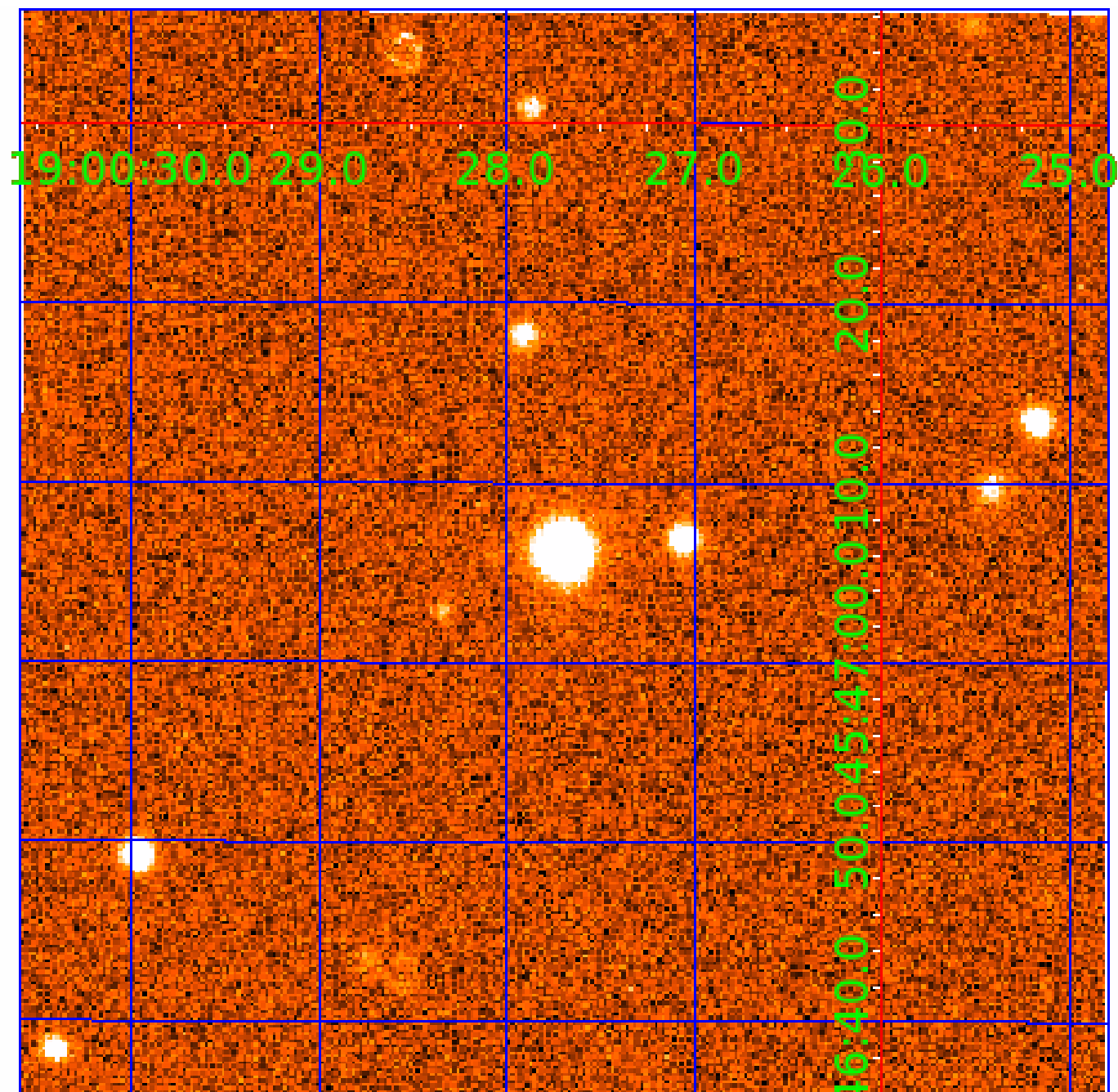


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UKIRT Image

Declination



KIC 009267818

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009267818-03	OBS	No	579.588489	236.923743	1510.7	15.490	12.4	6.2	0.37	3573	1.43	0.02
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009267818-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
009267818-04	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
009267818-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—CENT_FEW_DIFFS—HALO_GHOST
009267818-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
009267818-07	OBS	FP	0.00	1	0	1	0	LPP_DV—ALL_TRANS_CHASES—CENT_NOFITS—HALO_GHOST

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

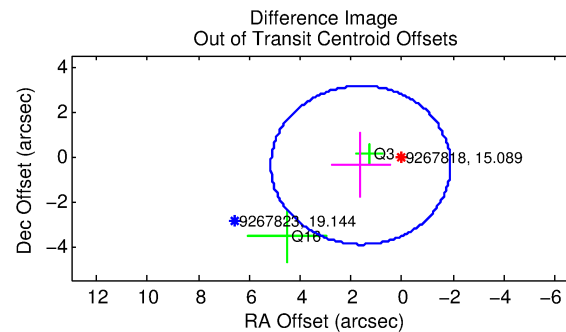
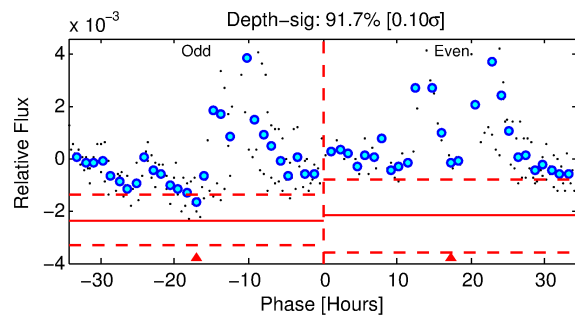
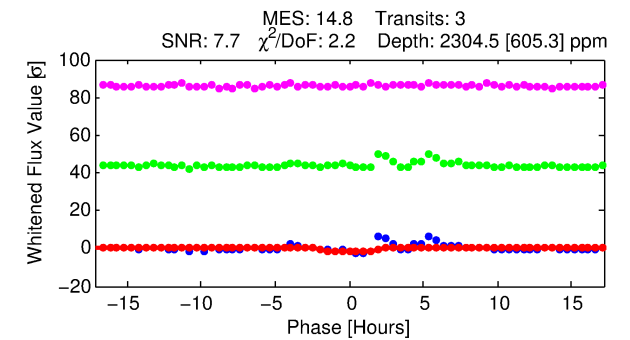
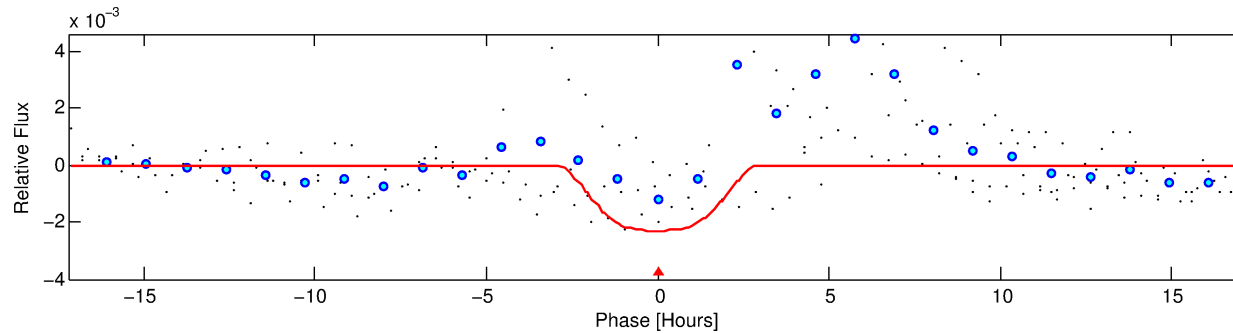
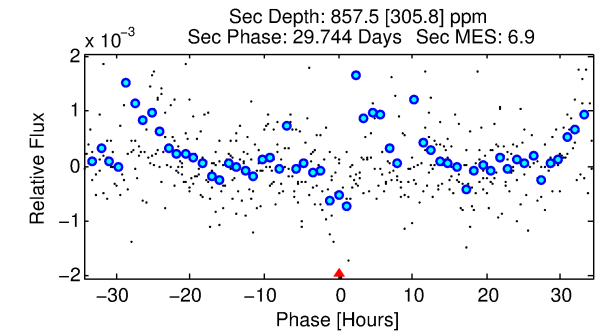
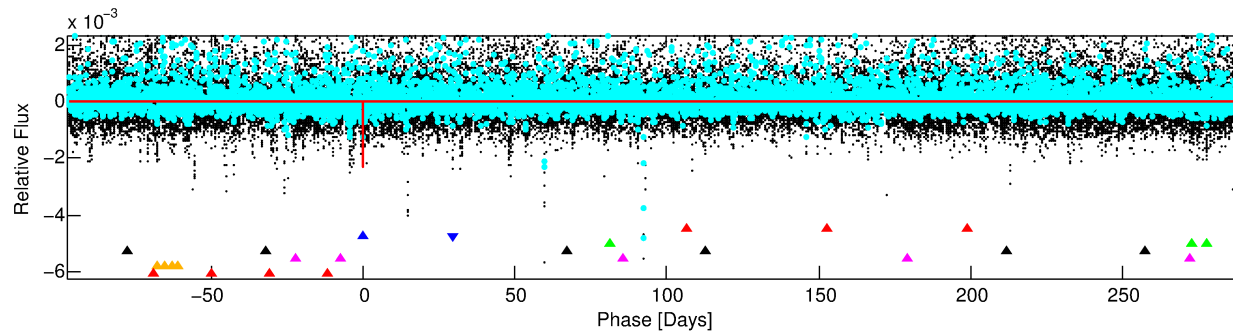
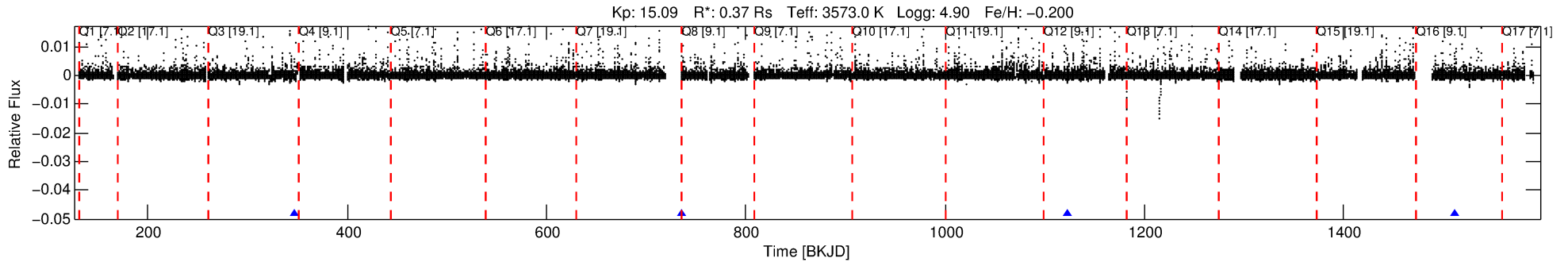
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009267818-02

No Significant Match Found

DV One-Page Summary

KIC: 9267818 Candidate: 2 of 7 Period: 388.020 d



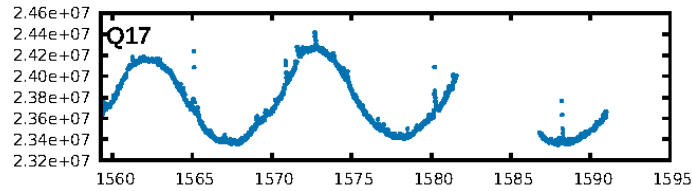
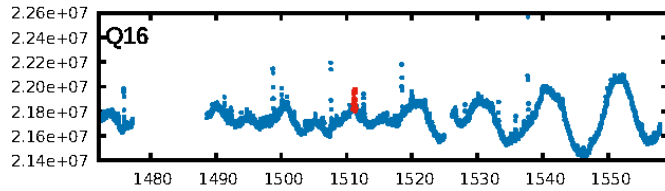
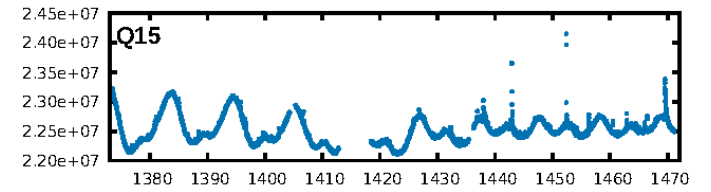
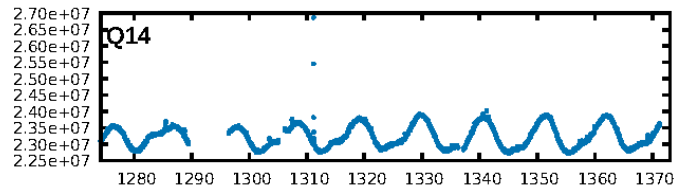
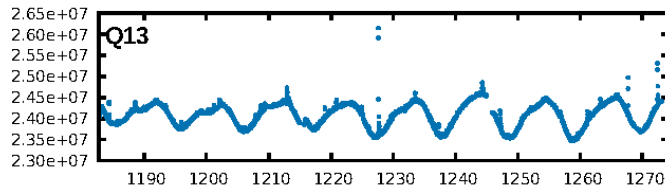
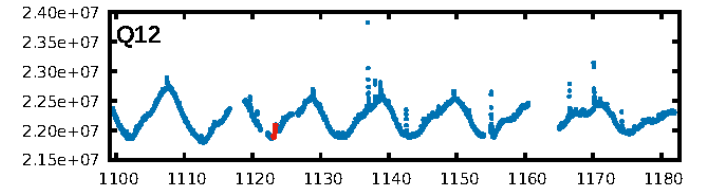
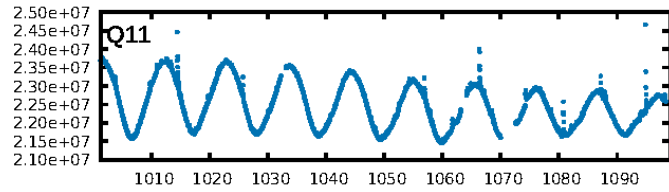
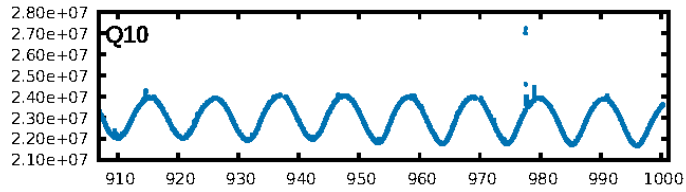
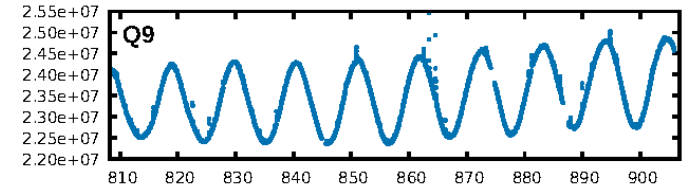
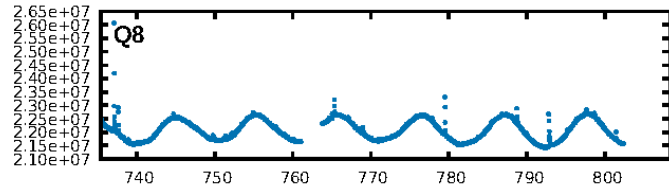
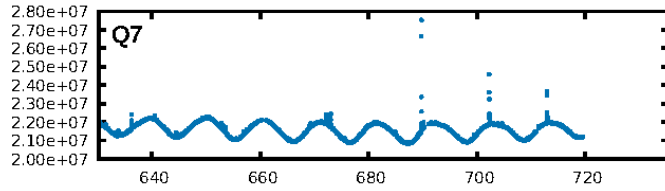
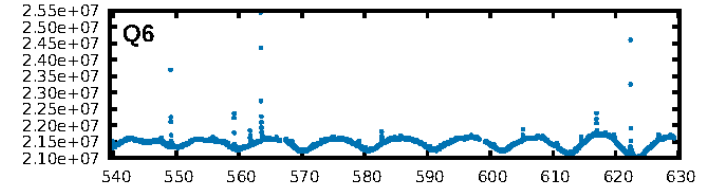
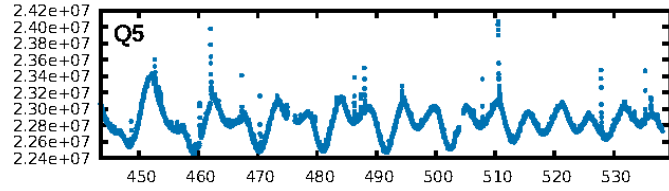
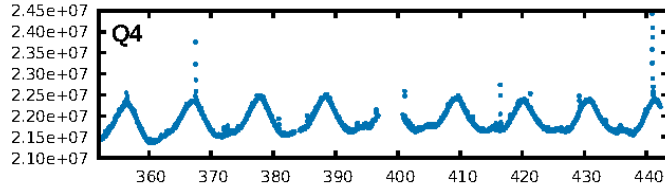
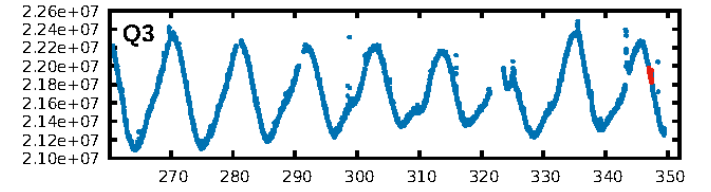
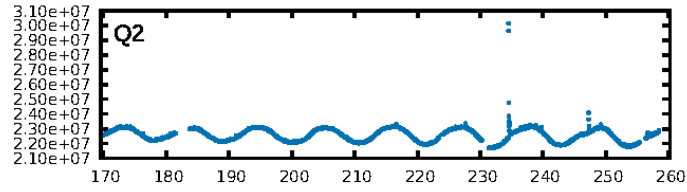
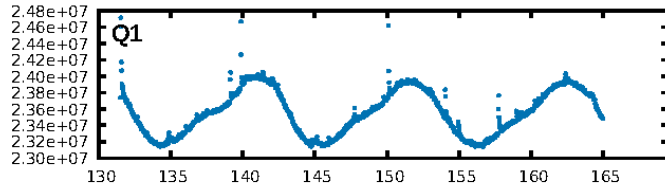
DV Fit Results:

Period = 388.02046 [0.00937] d
Epoch = 347.1705 [0.0199] BKJD
Rp/R* = 0.0544 [0.0094]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 7.2%
b = 0.93 [0.05]
Seff = 0.03 [0.00]
Teq = 110 [3] K
Rp = 2.21 [0.43] Re
a = 0.7655 [0.0507] AU
Ag = 56616.63 [28537.57] [1.98σ]
Teffp = 2621 [327] K [7.67σ]

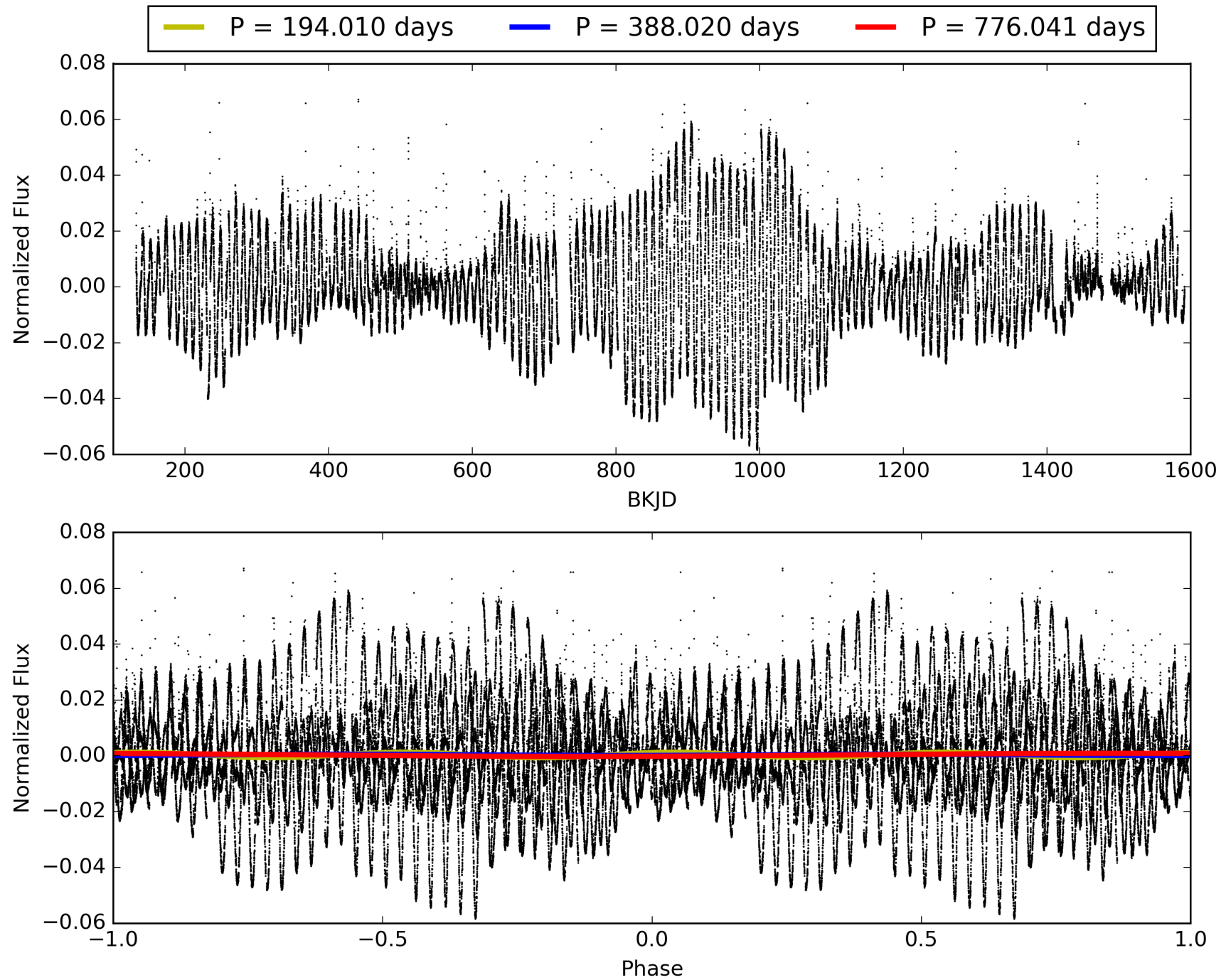
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [7.59σ]
LongPeriod-sig: 100.0% [154.33σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 7.2%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.4506
Centroid-sig: 30.5%
Centroid-so: 0.464 arcsec [1.16σ]
OotOffset-rm: 1.662 arcsec [1.41σ]
OotOffset-st: 0/1/1/0 [2]
KicOffset-rm: 1.527 arcsec [0.83σ]
KicOffset-st: 0/1/1/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [2/2]

TCE 009267818-02, PDC Light Curves

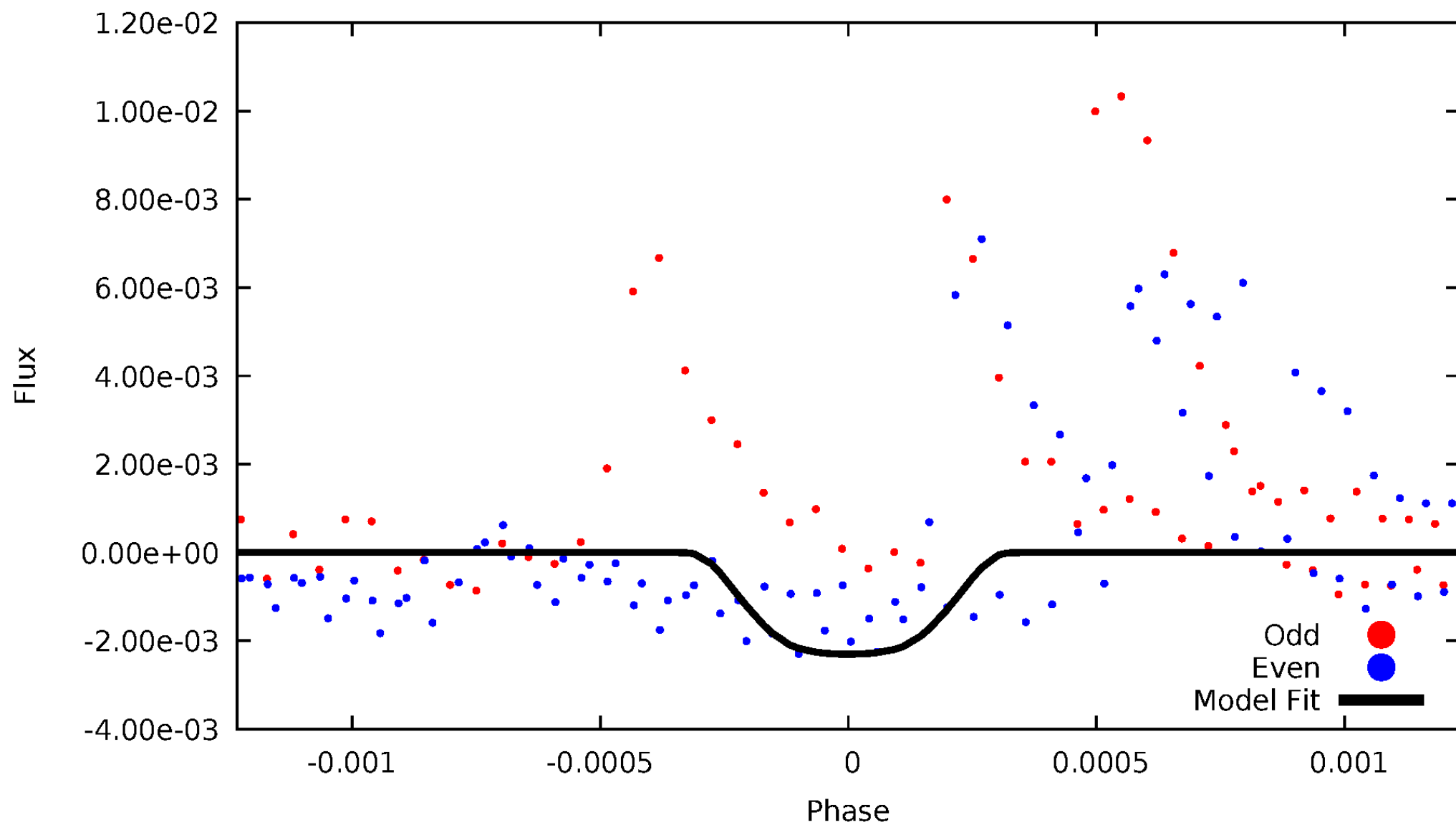


TCE 009267818-02



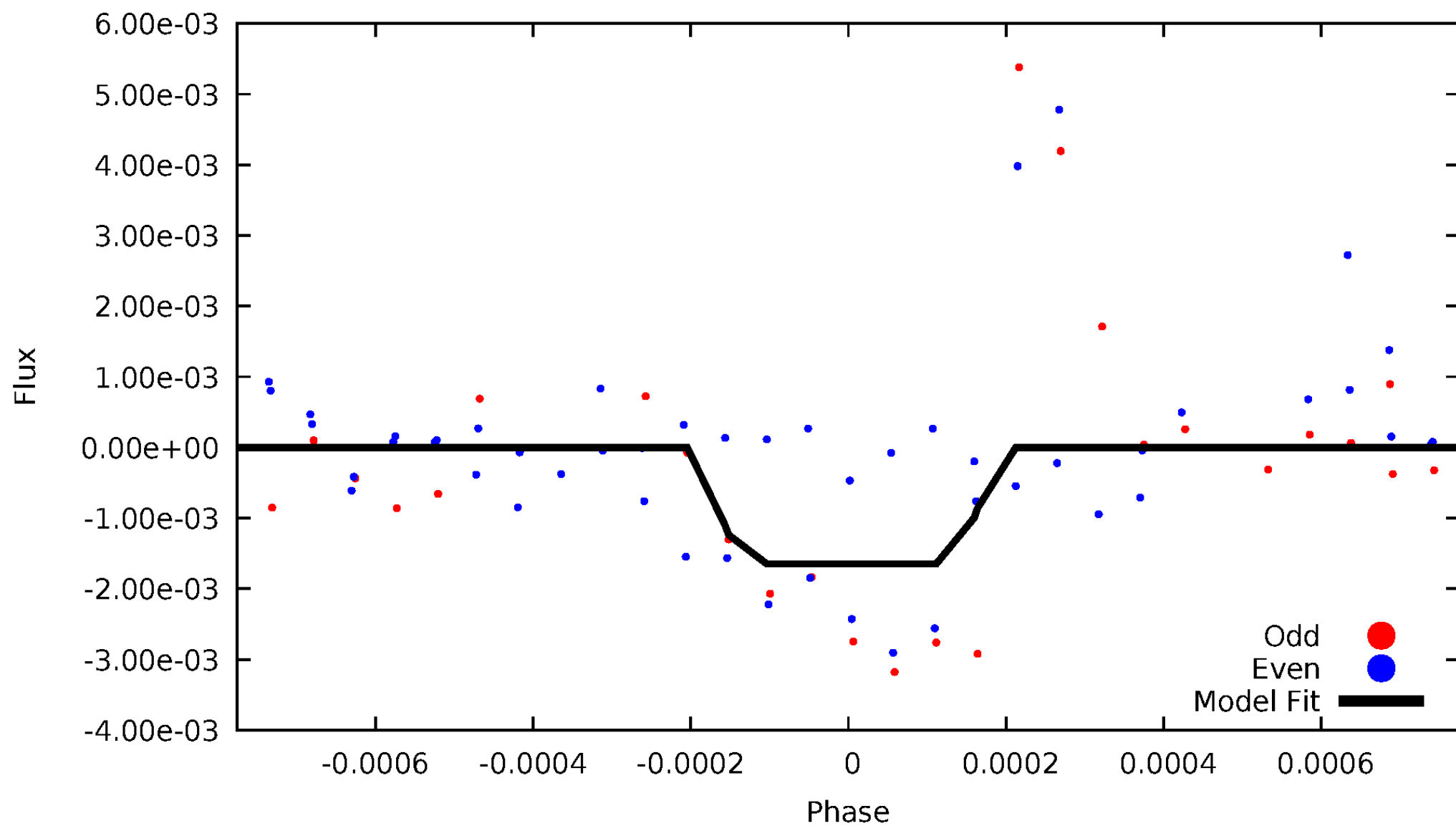
DV Odd/Even

TCE 009267818-02



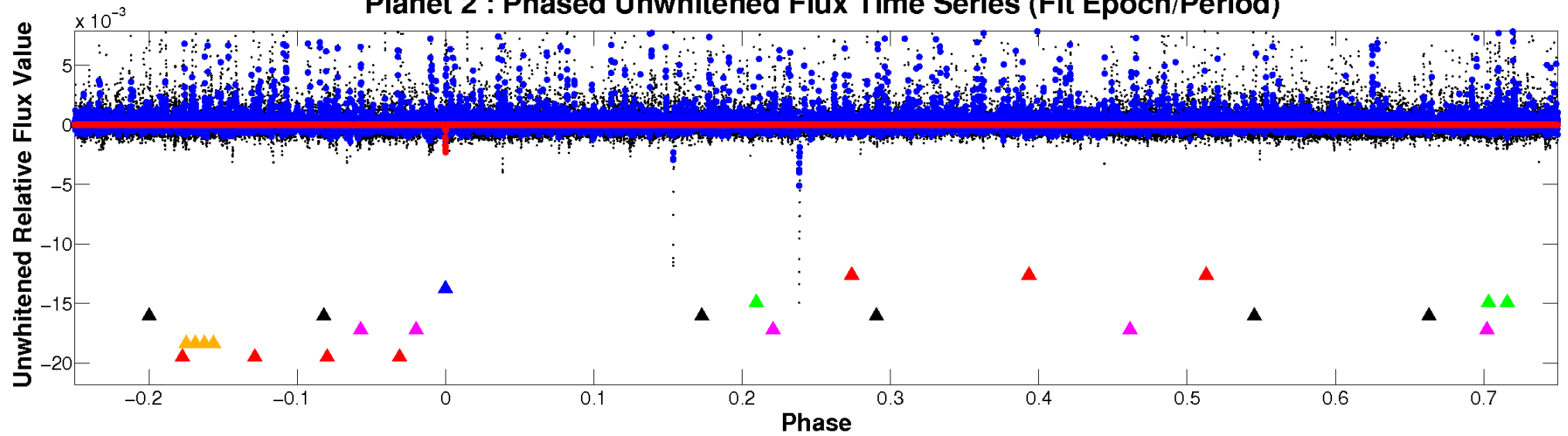
ALT Odd/Even

TCE 009267818-02

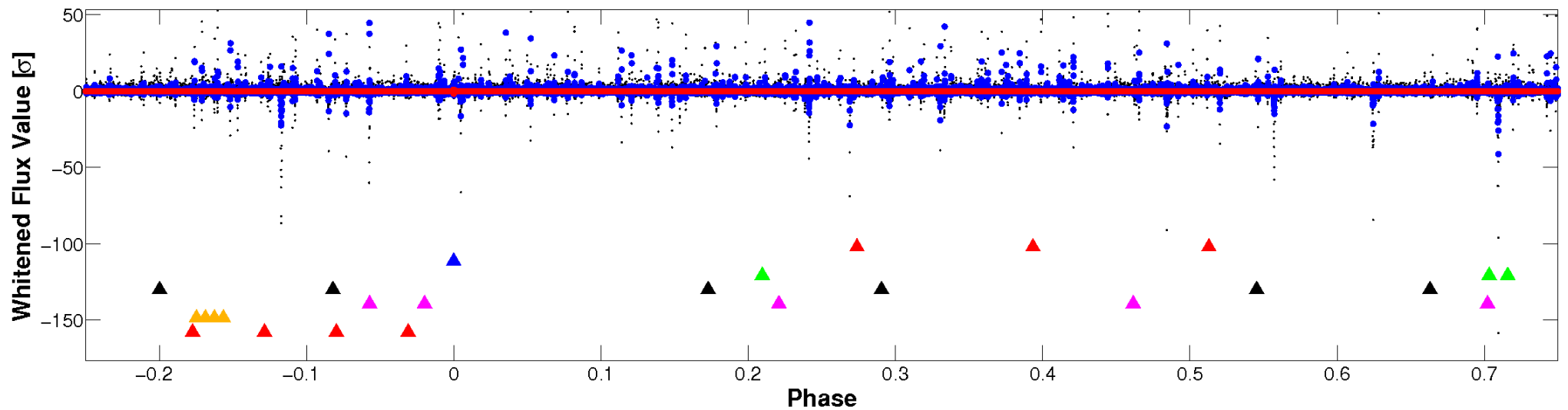


Non-Whitened Vs. Whitened Light Curve

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

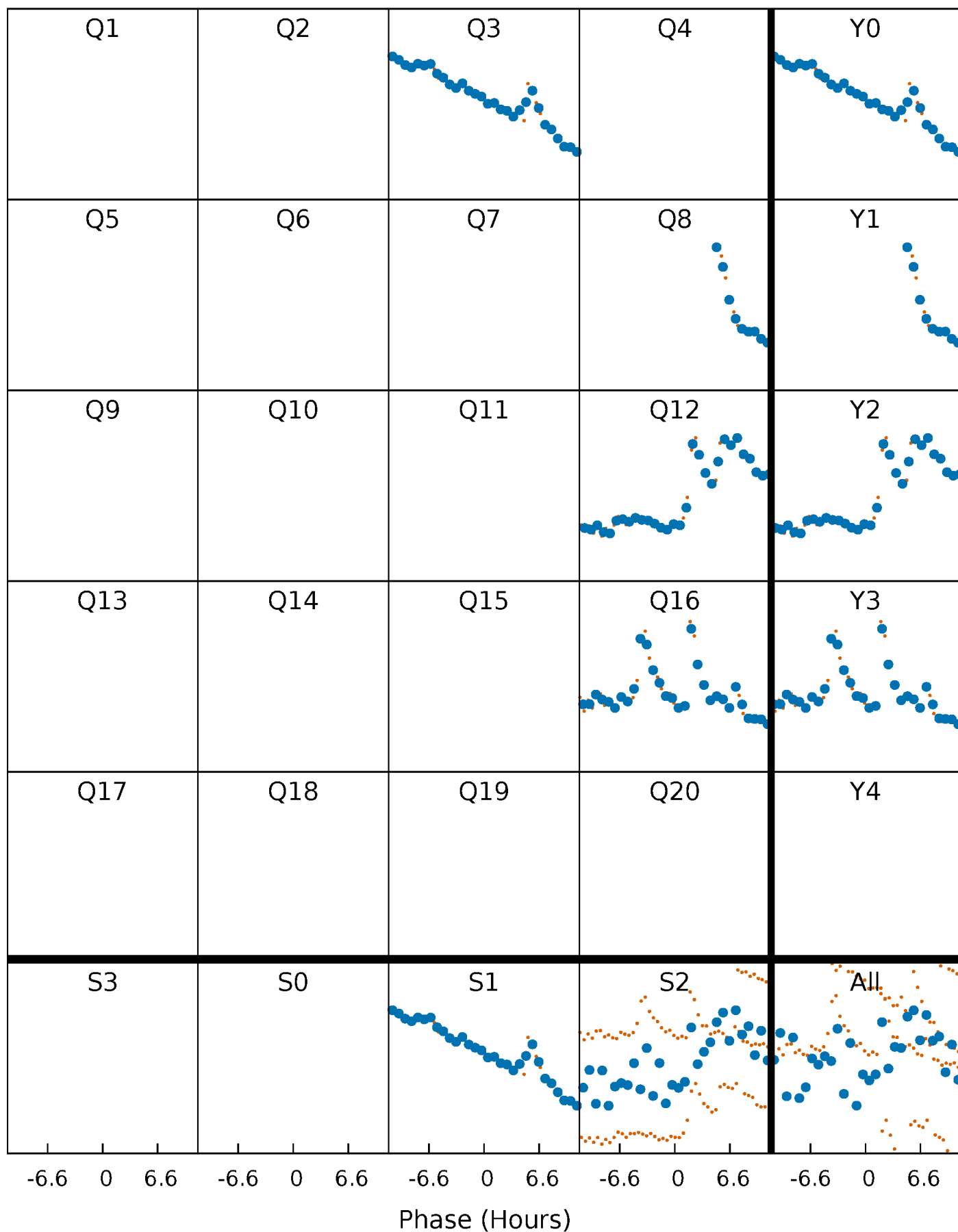


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



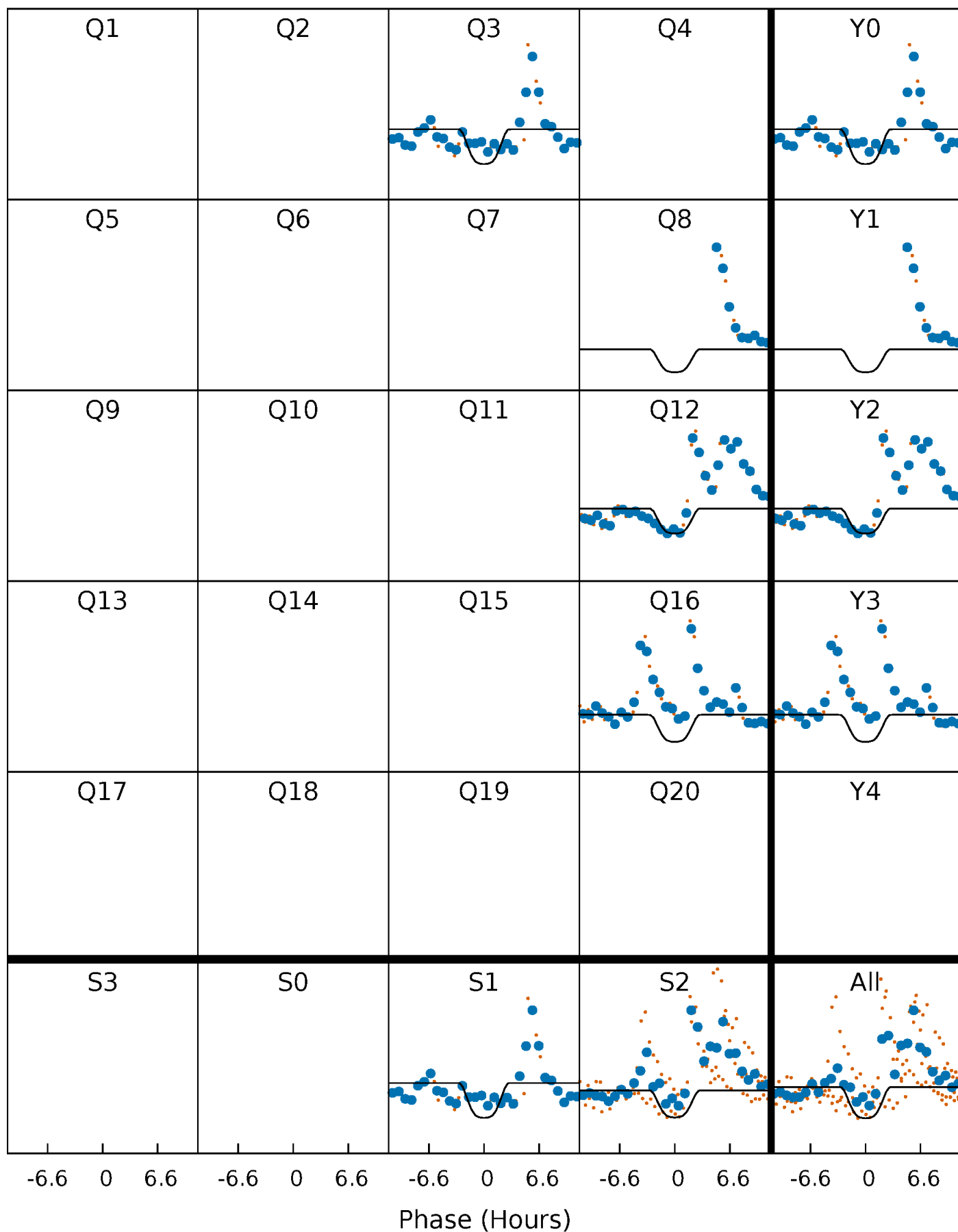
PDC Quarter-Phased Transit Curves

TCE 009267818-02 P=388.020460 Days $T_0=347.170497$ (BKJD)



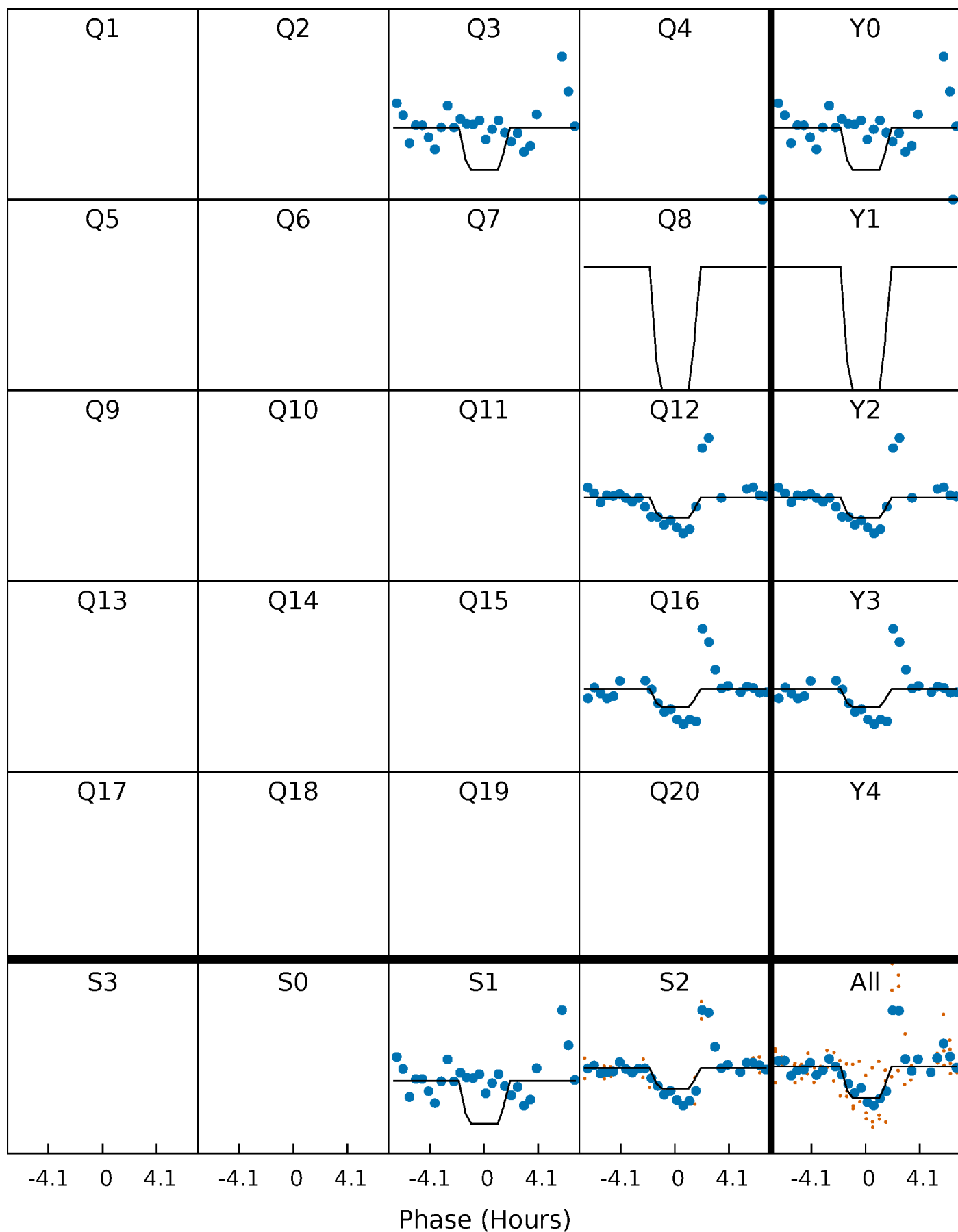
DV Quarter-Phased Transit Curves

TCE 009267818-02 P=388.020460 Days $T_0=347.170497$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

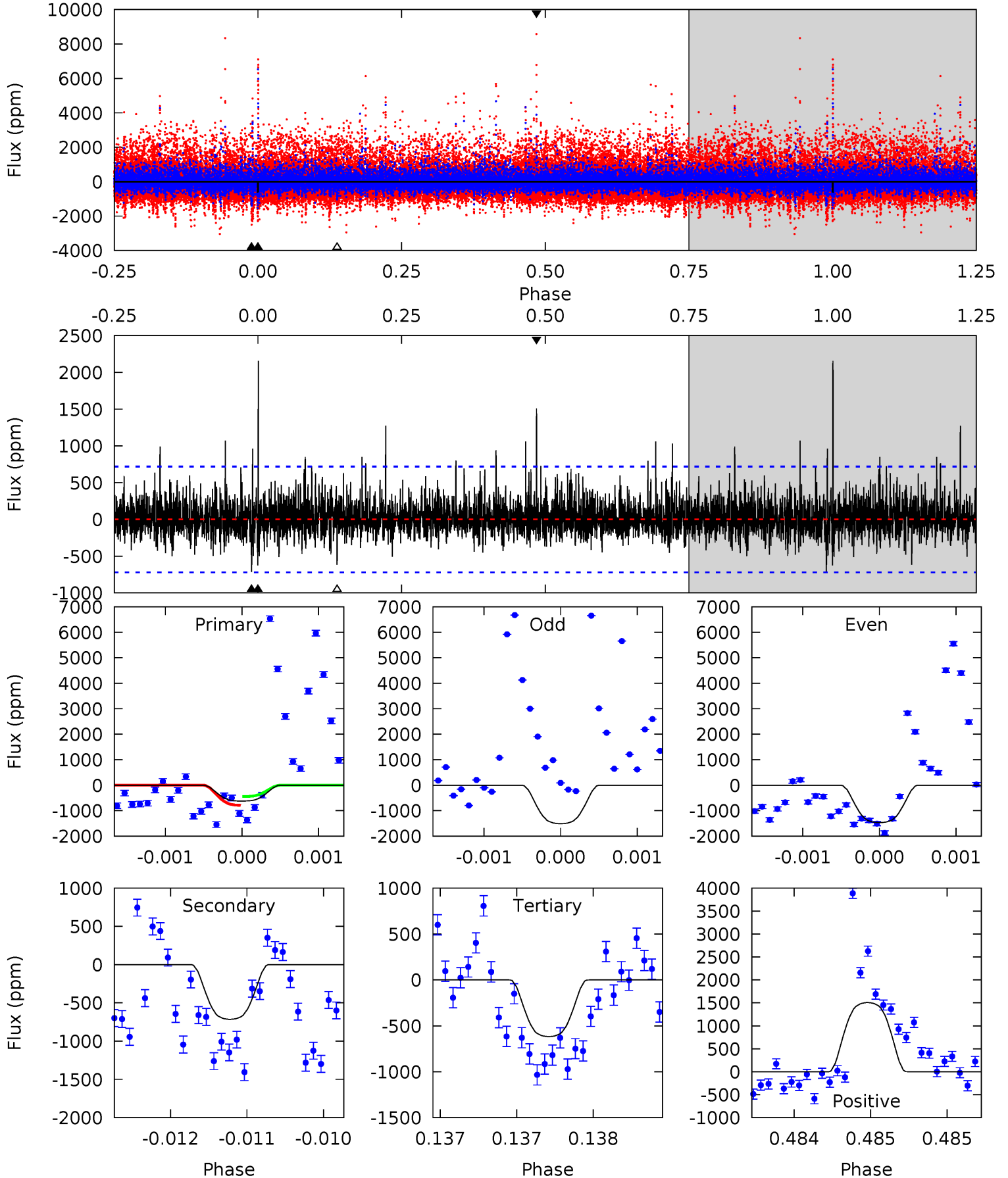
TCE 009267818-02 P=388.012871 Days $T_0=347.186016$ (BKJD)



DV Model-Shift Uniqueness Test

009267818-02, P = 388.020460 Days, E = 347.170497 Days

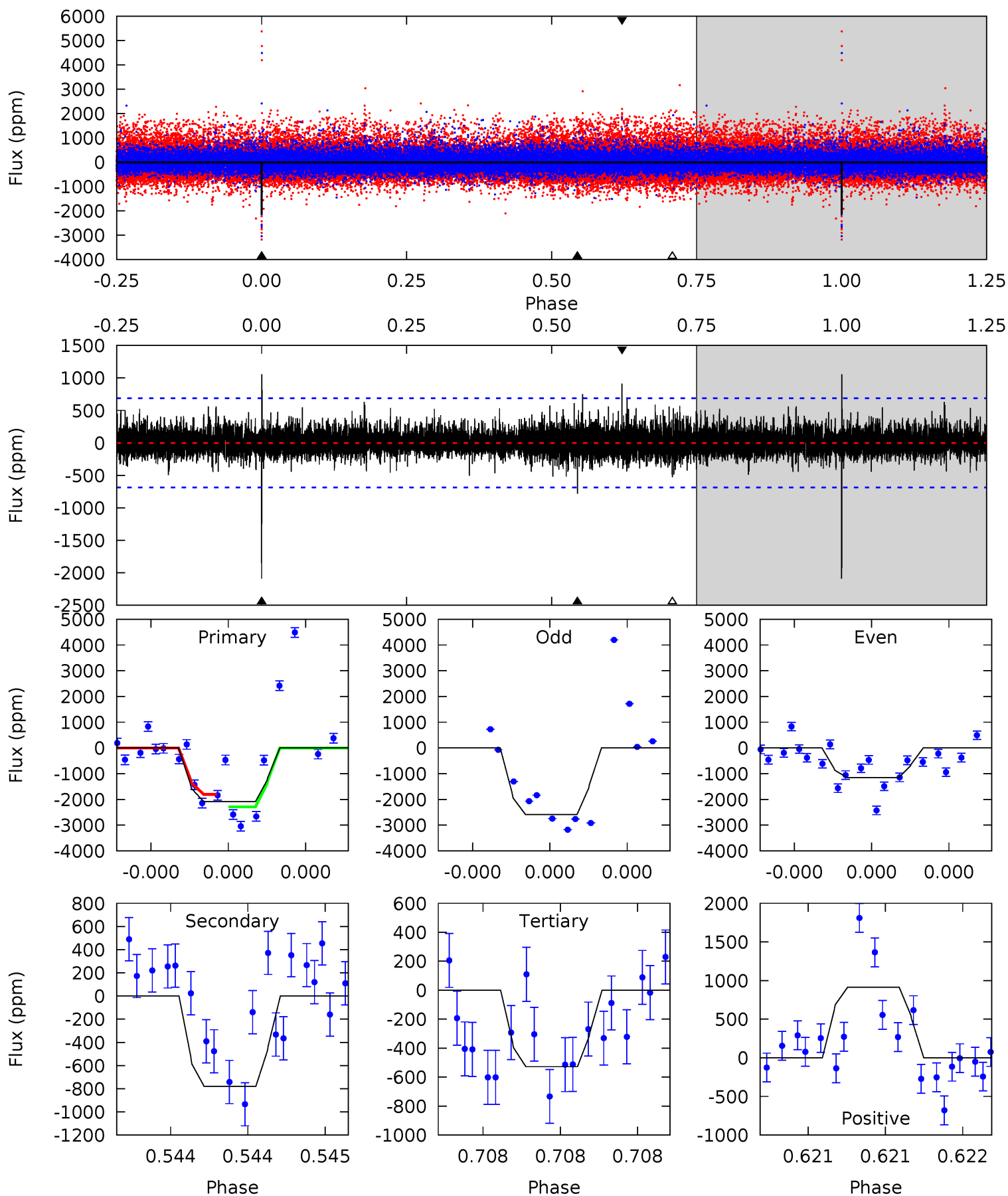
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.79	5.50	4.75	11.6	5.53	3.41	1.46	0.04	-6.81	0.75	-6.09	0.11	0.26	0.75	1.34



Alt Model-Shift Uniqueness Test

009267818-02, P = 388.012871 Days, E = 347.186016 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.2	6.42	4.34	7.51	5.65	3.60	1.10	12.8	9.67	2.07	-1.09	5.73	0.70	0.34	1.92



Stellar Parameters For KIC 009267818

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	3573^{+42}_{-48}	$4.896^{+0.028}_{-0.039}$	$-0.200^{+0.100}_{-0.100}$	$0.372^{+0.033}_{-0.030}$	$0.398^{+0.028}_{-0.042}$	$10.920^{+1.827}_{-1.723}$
	+1%/-1%	+1%/-1%	+50%/-50%	+9%/-8%	+7%/-11%	+17%/-16%
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 009267818-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-715 ± 130	$2.23^{+0.38}_{-0.40}$	154^{+3}_{-3}	2884^{+170}_{-138}	46203^{+23494}_{-14057}
Alt.	-780 ± 122	$1.66^{+0.40}_{-0.38}$	154^{+3}_{-3}	3174^{+251}_{-205}	89380^{+63486}_{-32390}

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 $A_{obs} \gg 1.0$

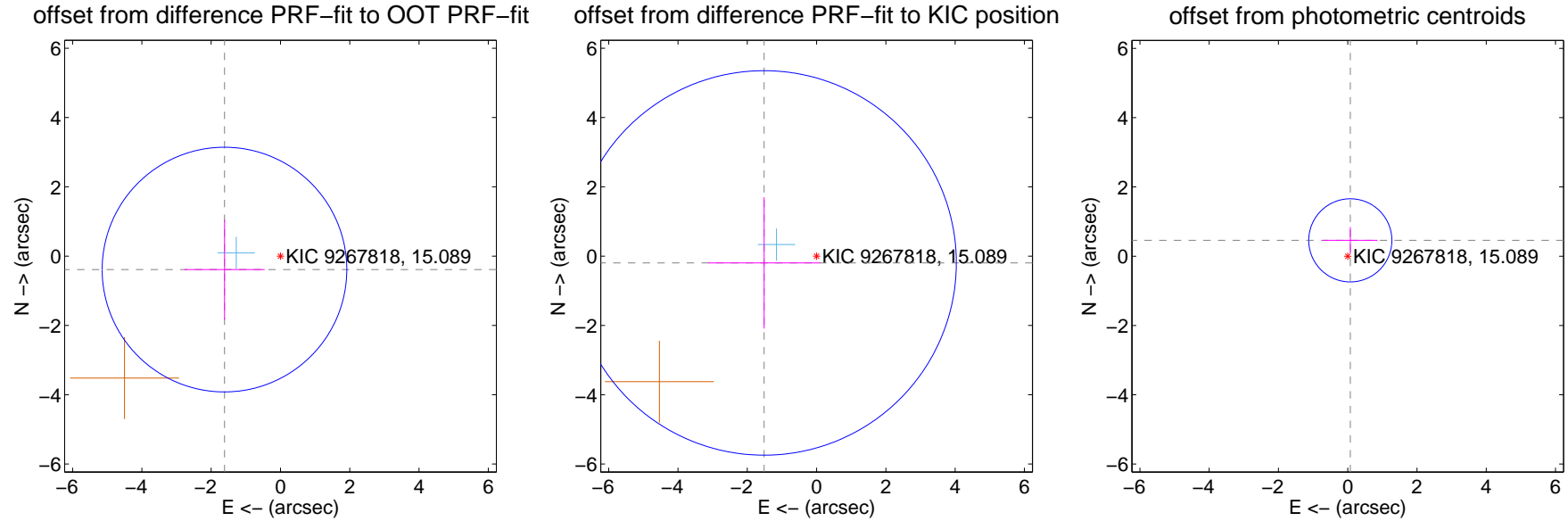
DV Centroid Data

Supplemental centroid analysis for 009267818-02. Kepler magnitude: 15.09. Transit SNR 7.71

There are 1 quarters with good PRF difference image offsets

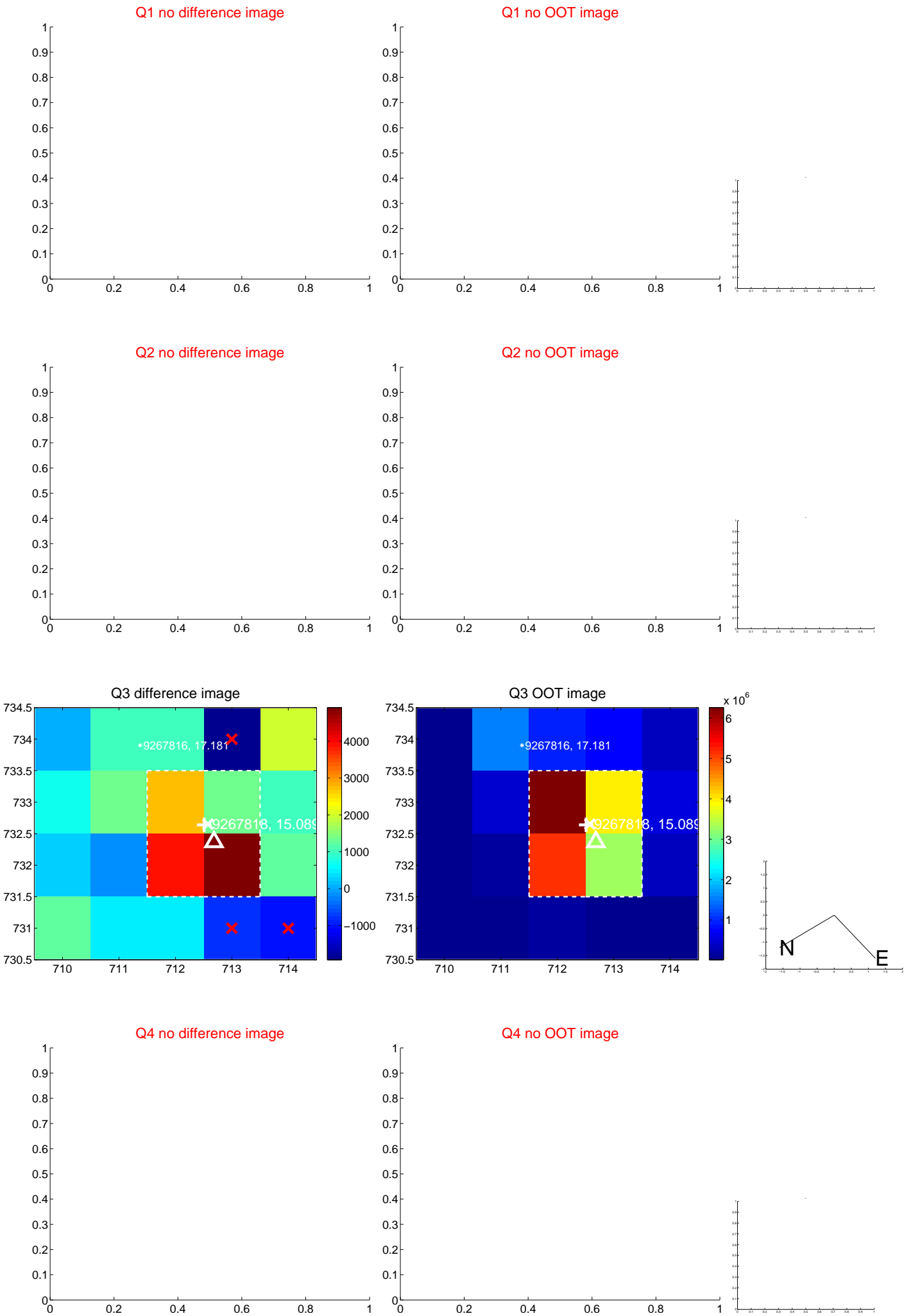
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.662 ± 1.177	1.41	1.616 ± 1.160	-0.388 ± 1.440
PRF-fit source offset from KIC position	1.527 ± 1.849	0.83	1.514 ± 1.619	-0.196 ± 1.896
photometric centroid source offset	0.46 ± 0.40	1.16	-0.07 ± 0.79	0.46 ± 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.



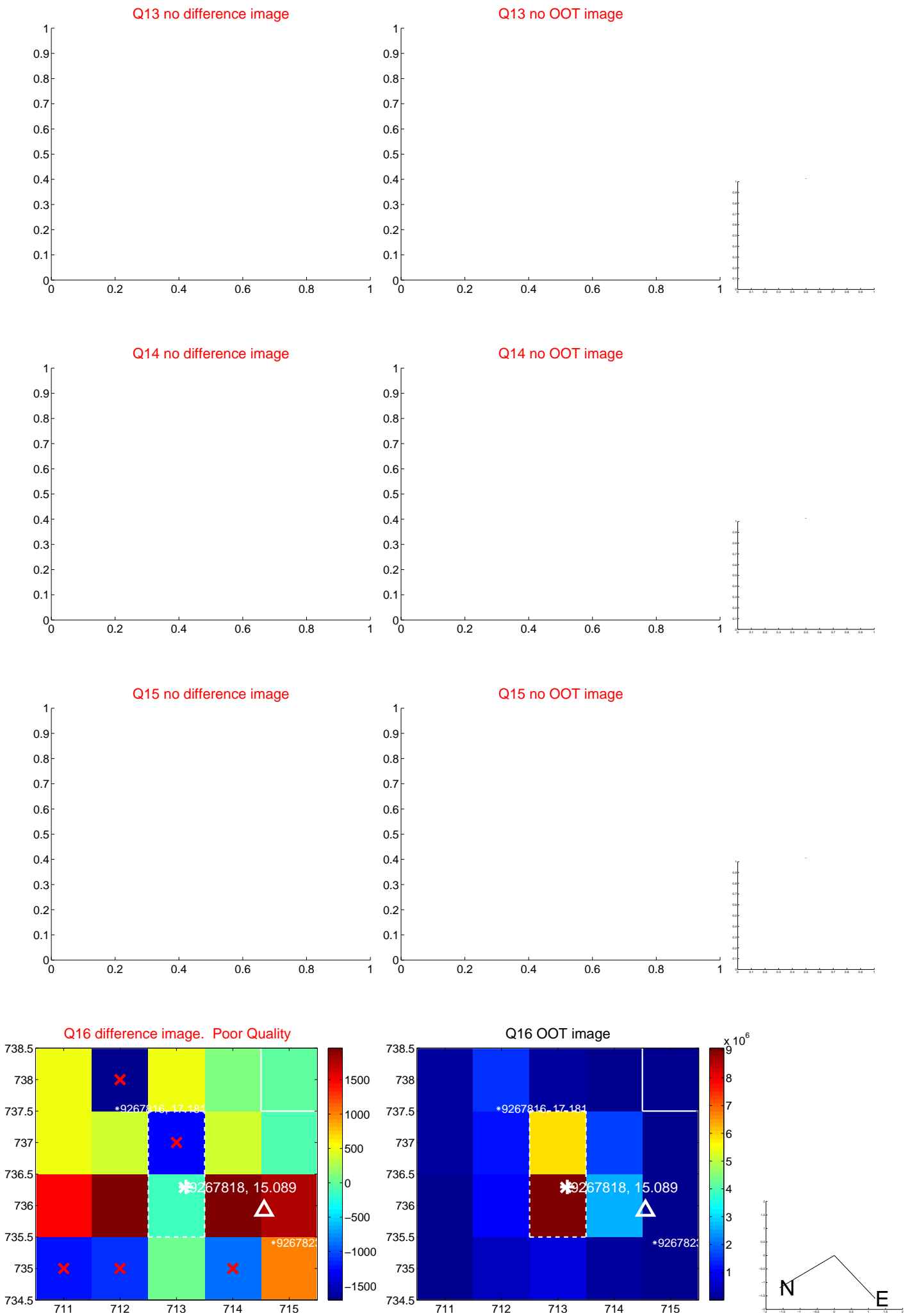
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



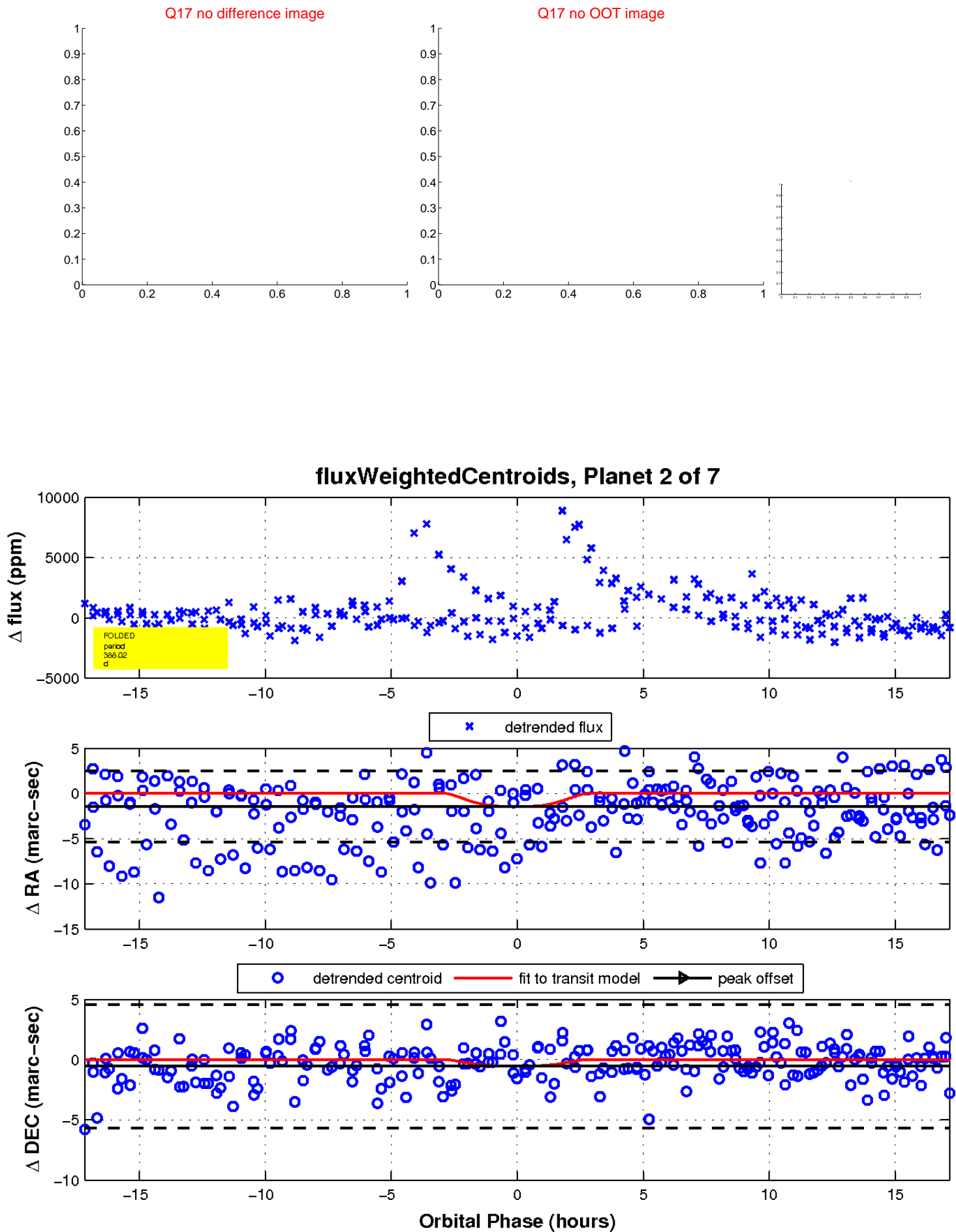
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

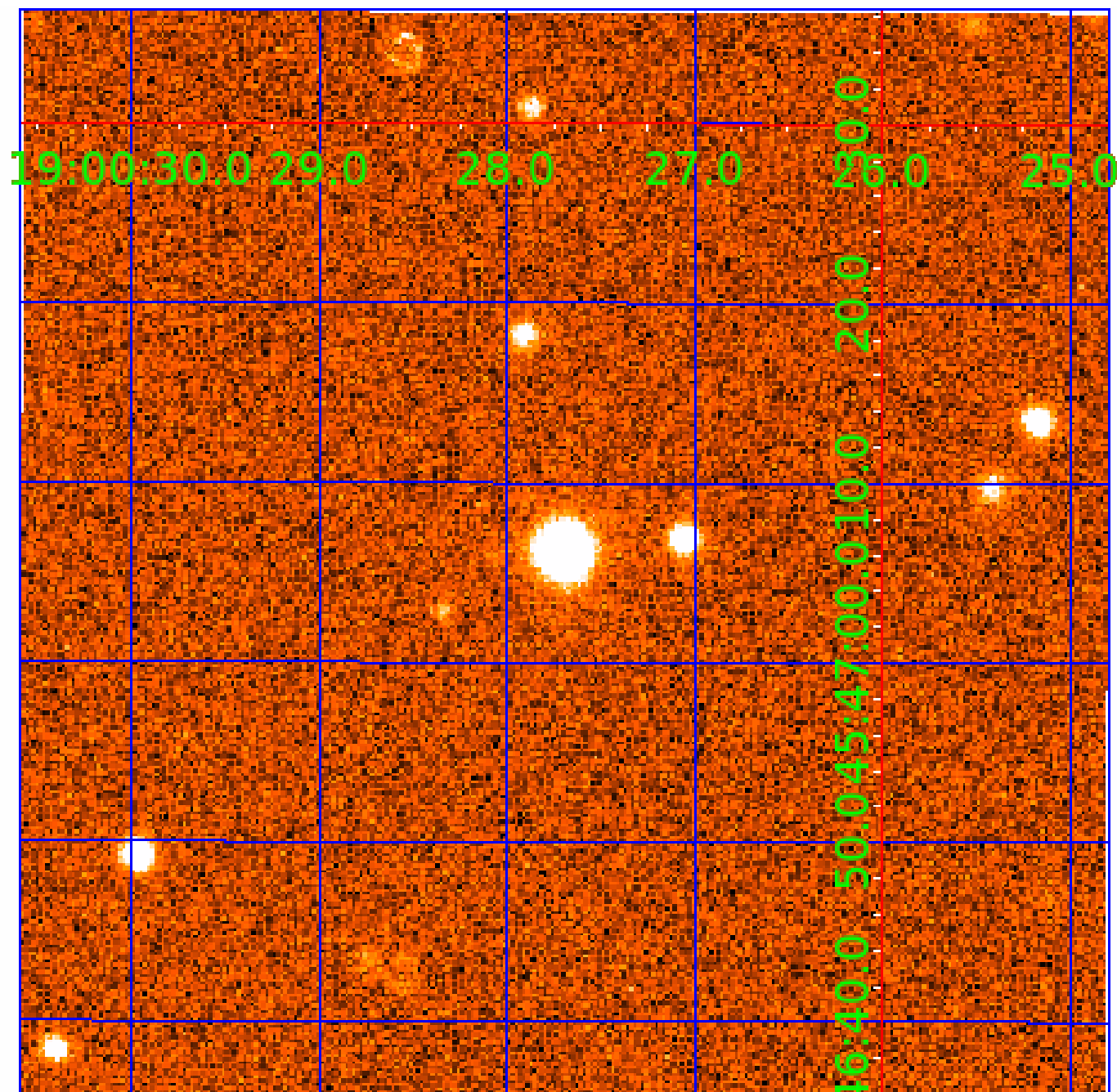


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 009267818

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})
009267818-01	OBS	No	434.390859	453.448300	1642.3	4.375	15.3	7.1	0.37	3573	1.54	0.03
009267818-02	OBS	No	388.020460	347.170497	2304.5	5.732	14.8	7.7	0.37	3573	2.21	0.03
009267818-03	OBS	No	579.588489	236.923743	1510.7	15.490	12.4	6.2	0.37	3573	1.43	0.02
009267818-04	OBS	No	243.451777	216.453219	1065.7	9.574	10.7	7.5	0.37	3573	1.24	0.06
009267818-05	OBS	No	294.637897	325.003858	1737.1	4.098	12.2	8.4	0.37	3573	1.56	0.05
009267818-06	OBS	No	385.653215	286.467603	2179.2	4.819	10.1	10.7	0.37	3573	1.73	0.04
009267818-07	OBS	No	369.084583	335.162070	660.1	12.000	12.3	-1.0	0.37	3573	0.95	0.04

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009267818-01	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—INCONSISTENT_TRANS—CENT_FEW_DIFFS
009267818-02	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
009267818-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
009267818-04	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
009267818-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—CENT_FEW_DIFFS—HALO_GHOST
009267818-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
009267818-07	OBS	FP	0.00	1	0	1	0	LPP_DV—ALL_TRANS_CHASES—CENT_NOFITS—HALO_GHOST

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

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

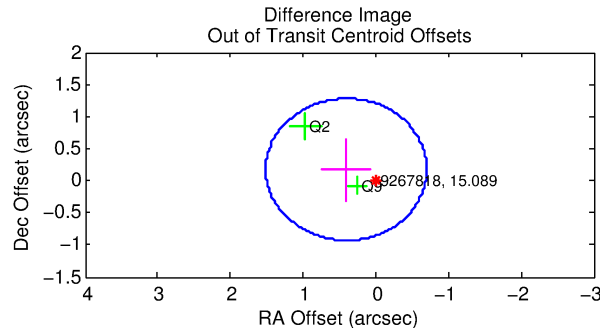
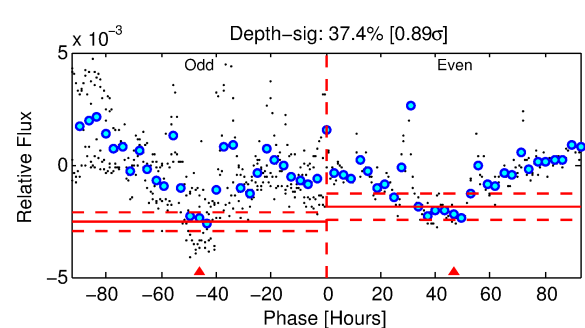
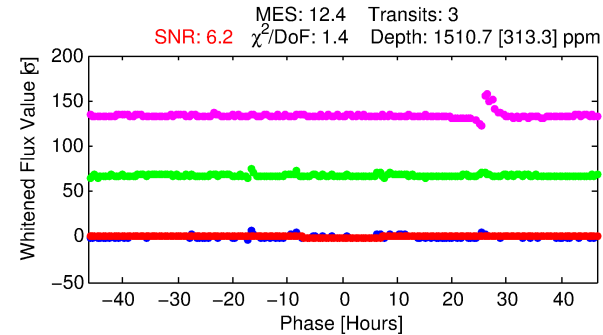
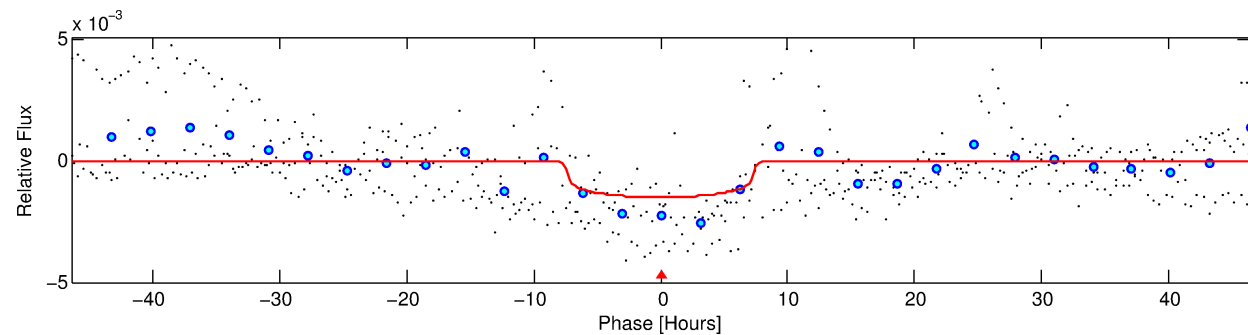
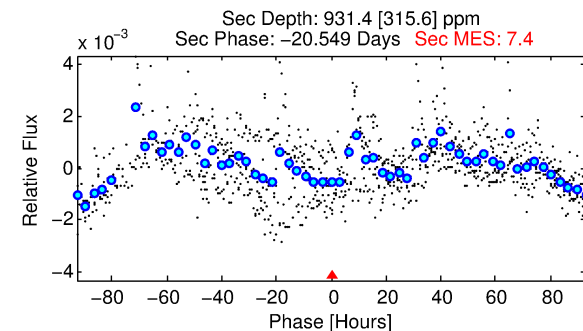
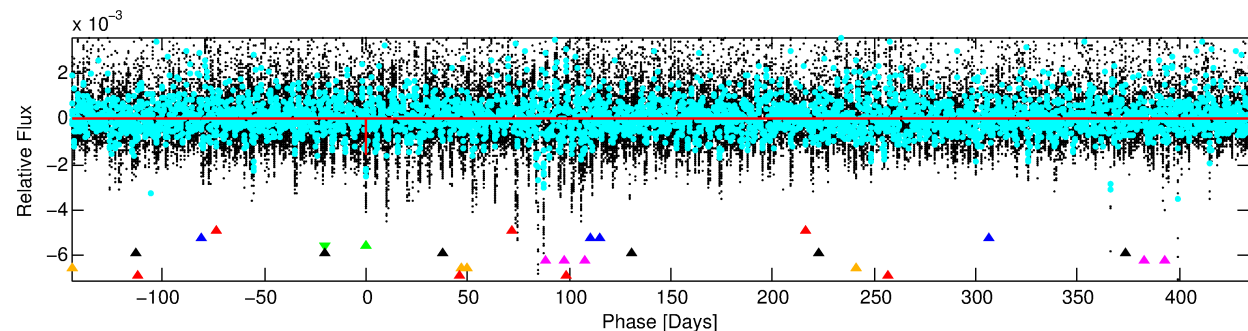
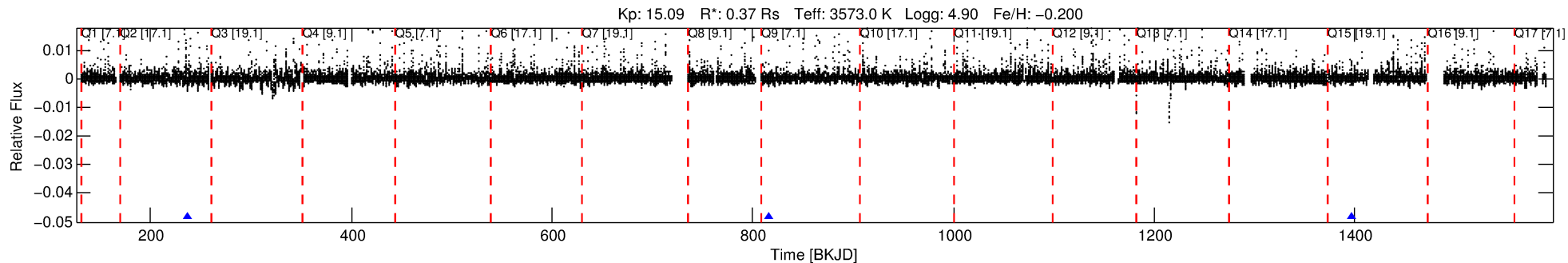
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009267818-03

No Significant Match Found

DV One-Page Summary

KIC: 9267818 Candidate: 3 of 7 Period: 579.588 d



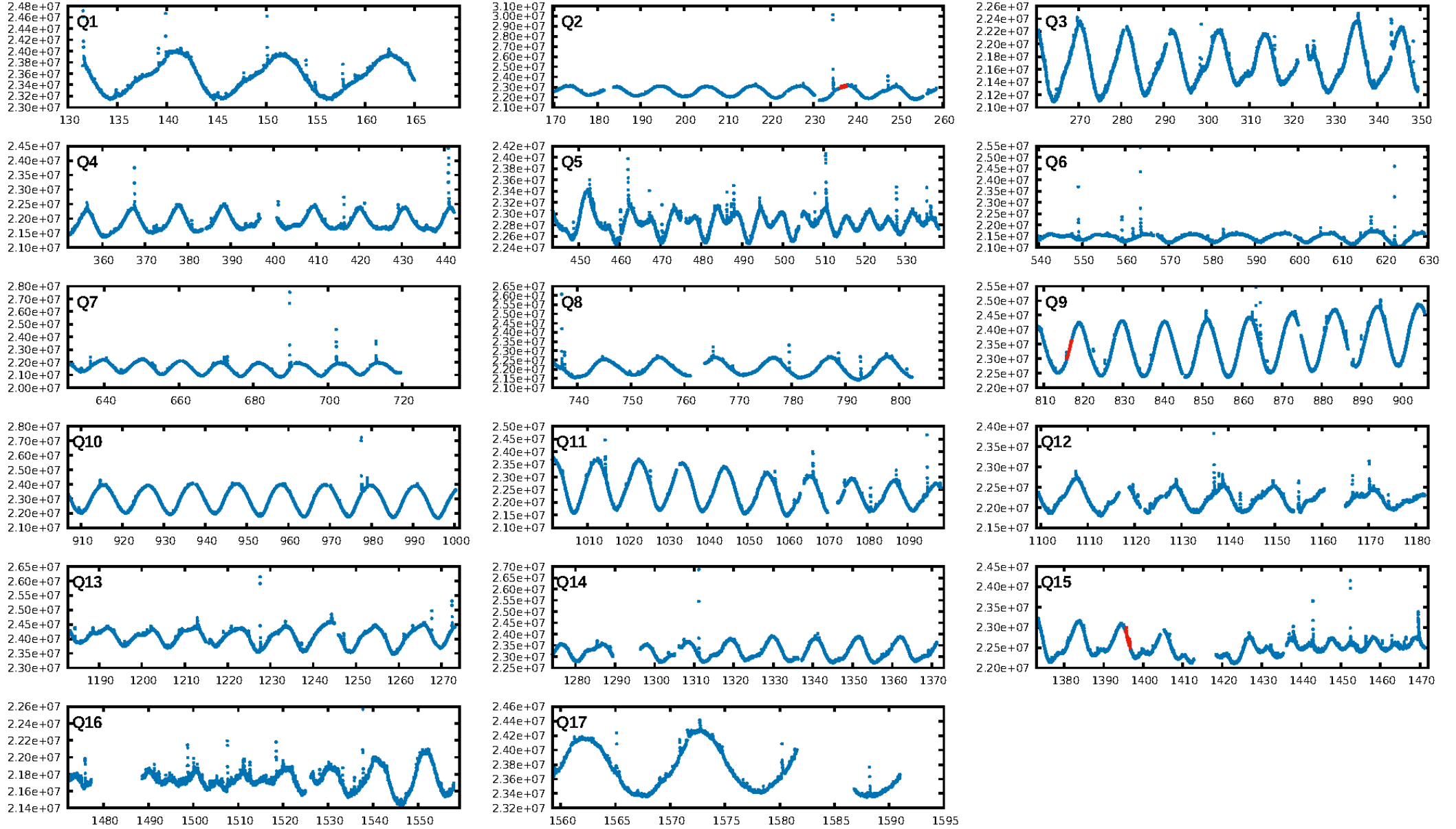
DV Fit Results:

Period = 579.58849 [0.01081] d
Epoch = 236.9237 [0.0152] BKJD
Rp/R* = 0.0353 [0.0116]
a/R* = 295.75 [400.13]
b = 0.04 [36.32]
Seff = 0.02 [0.00]
Teq = 96 [2] K
Rp = 1.43 [0.49] Re
a = 1.0003 [0.0663] AU
Ag = 249563.55 [185174.32] [1.35σ]
Teffp = 3322 [614] K [5.25σ]

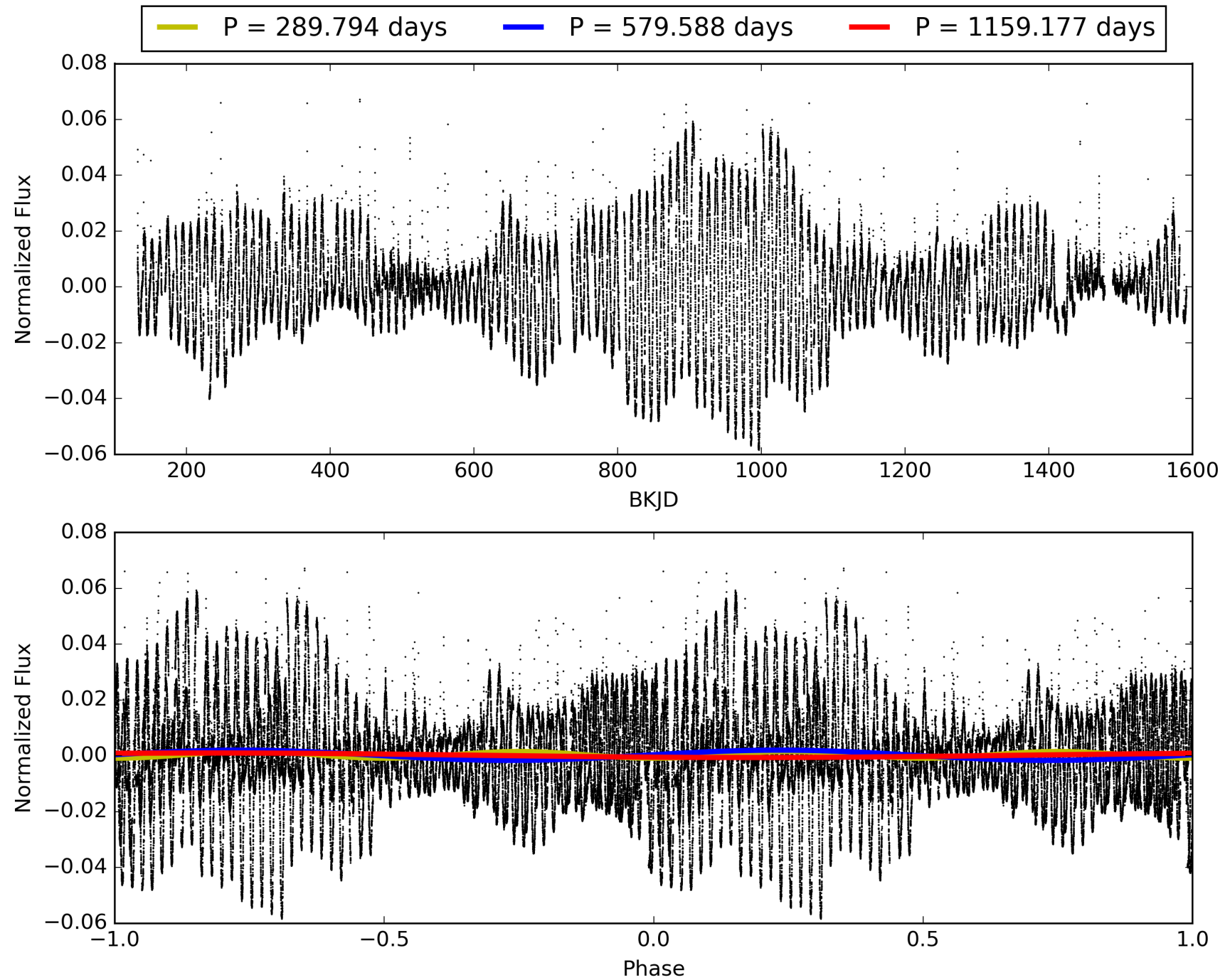
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [216.50σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.3%
ModelChiSquareGof-sig: 98.9%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.6794
Centroid-sig: 0.8%
Centroid-so: 1.968 arcsec [1.49σ]
OotOffset-rm: 0.443 arcsec [1.20σ]
OotOffset-st: 1/0/0/1 [2]
KicOffset-rm: 0.358 arcsec [0.76σ]
KicOffset-st: 1/0/0/1 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [2/2]

TCE 009267818-03, PDC Light Curves

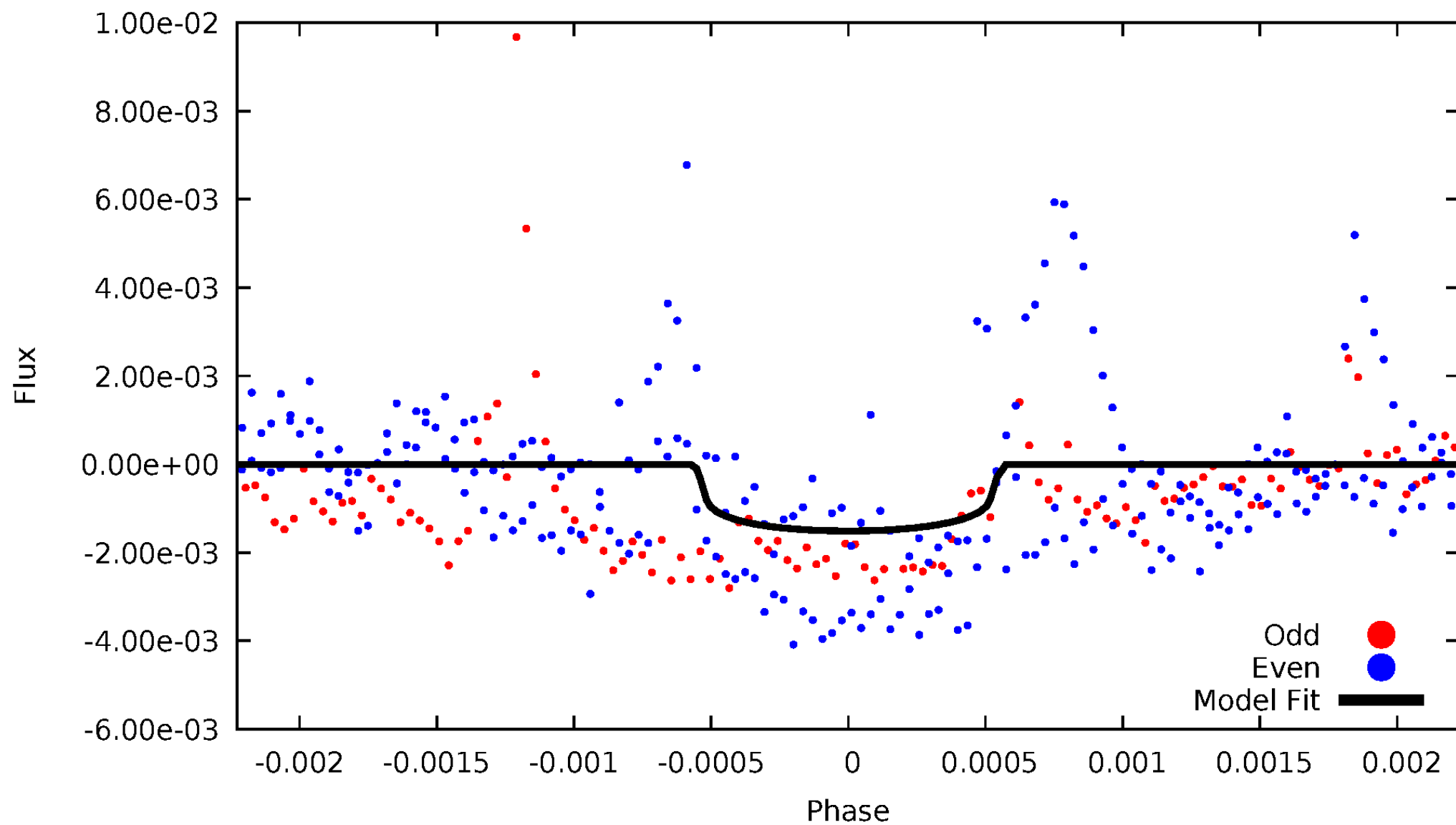


TCE 009267818-03



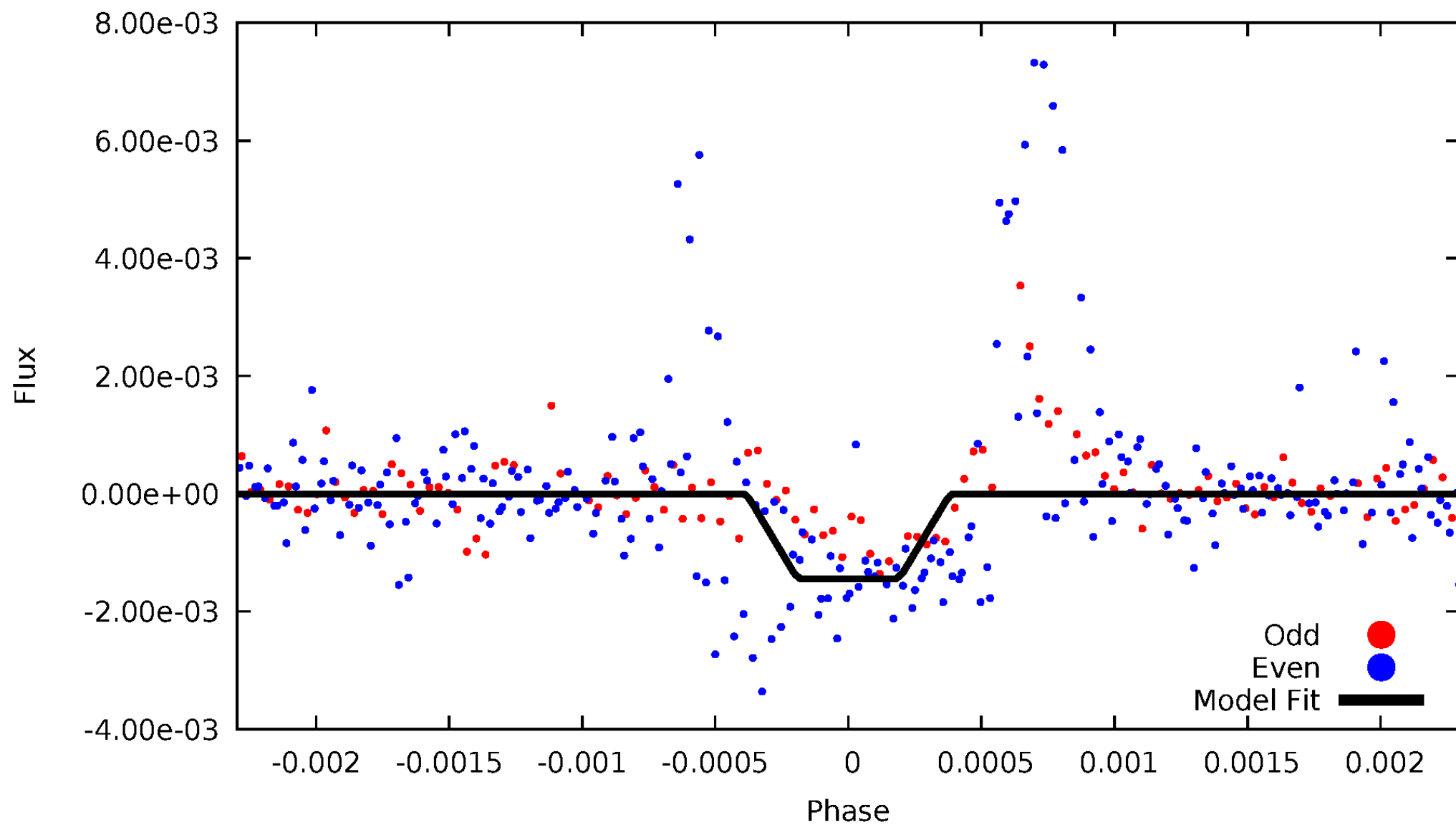
DV Odd/Even

TCE 009267818-03



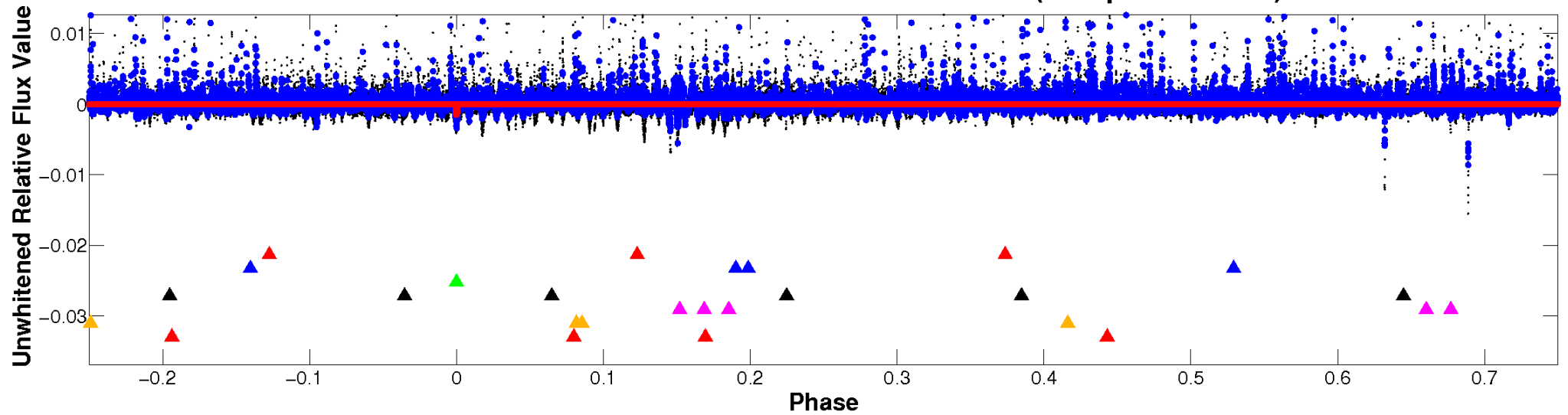
ALT Odd/Even

TCE 009267818-03

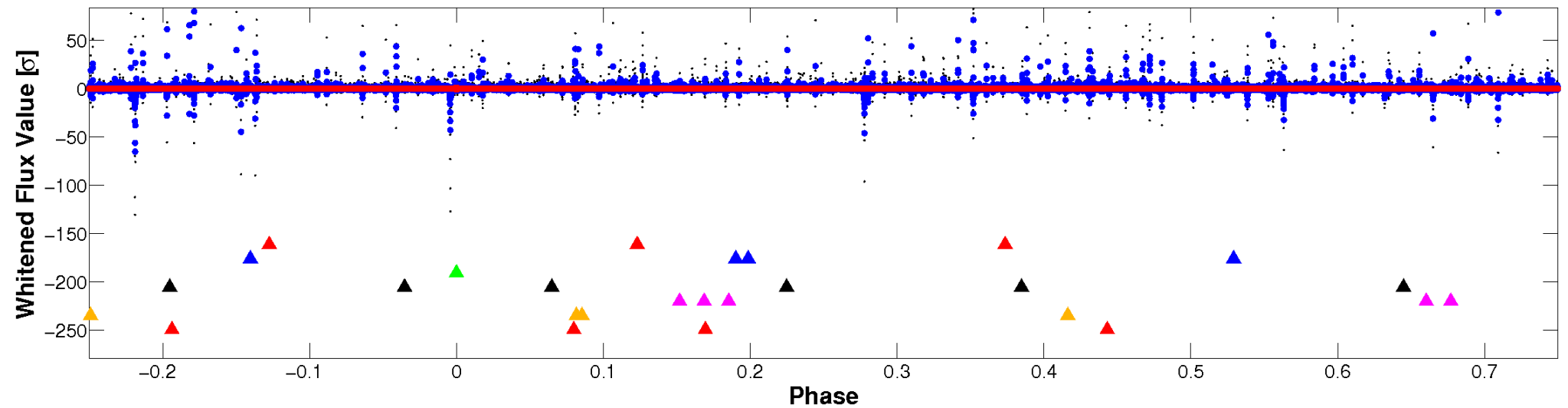


Non-Whitened Vs. Whitened Light Curve

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

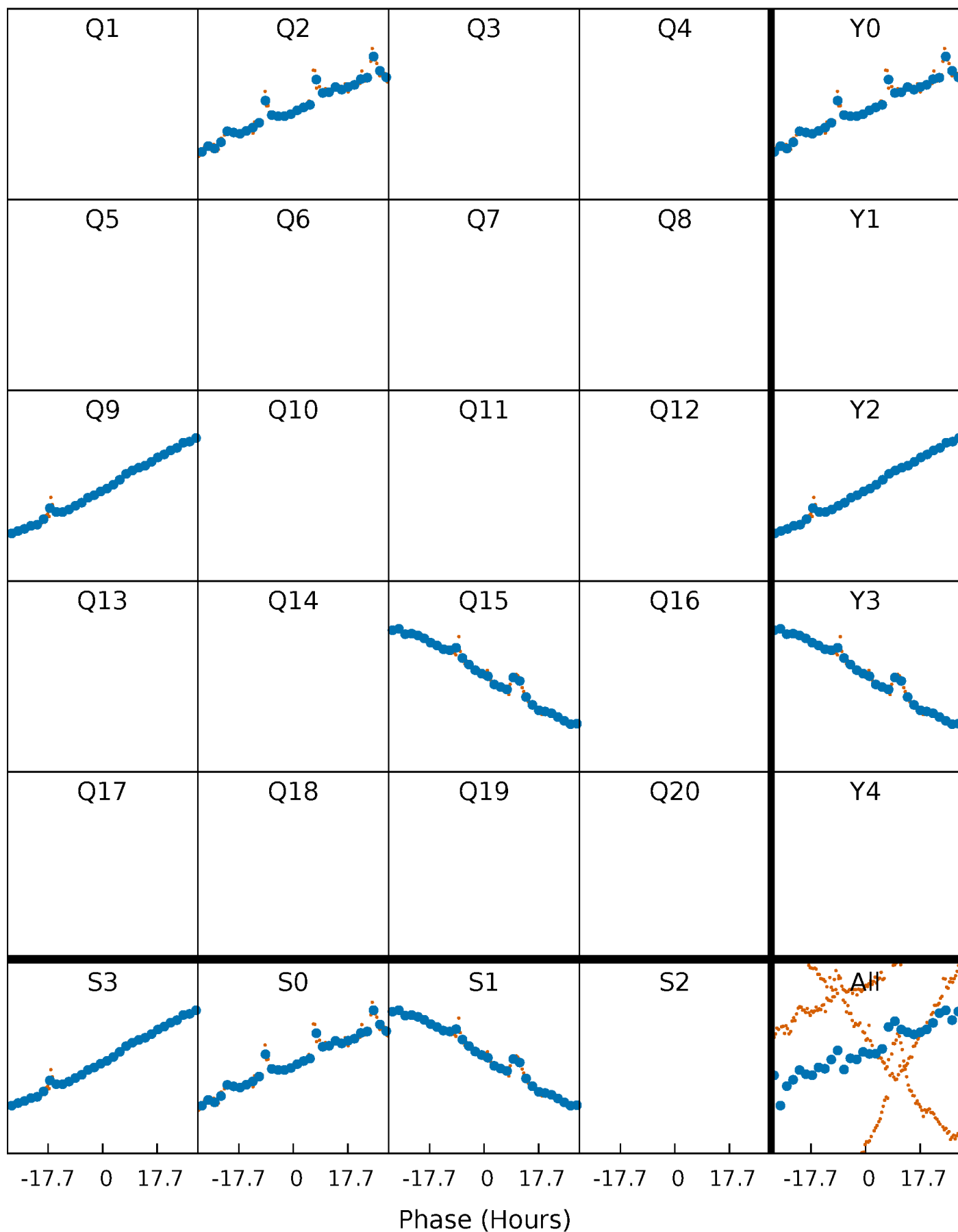


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



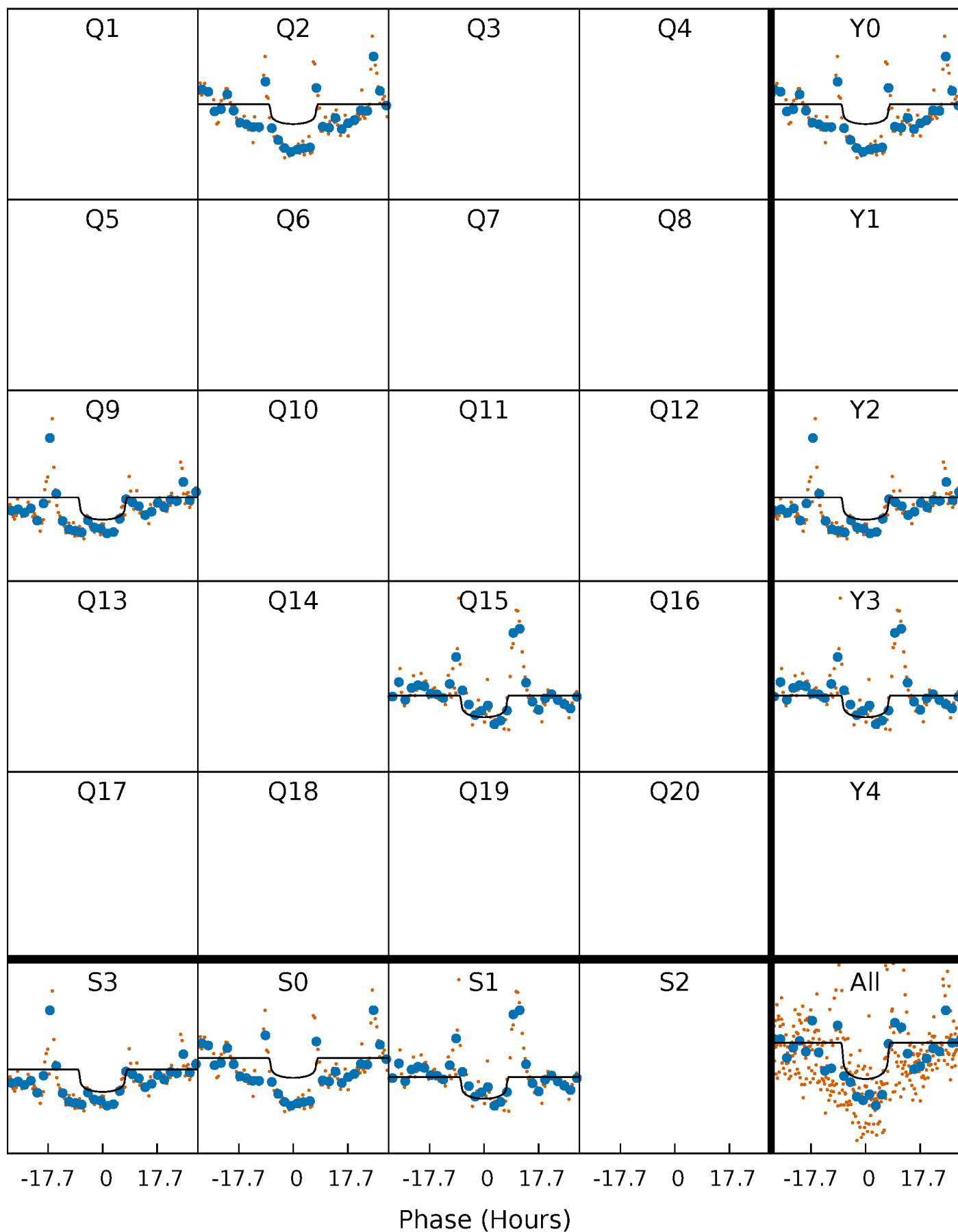
PDC Quarter-Phased Transit Curves

TCE 009267818-03 P=579.588489 Days $T_0=236.923743$ (BKJD)



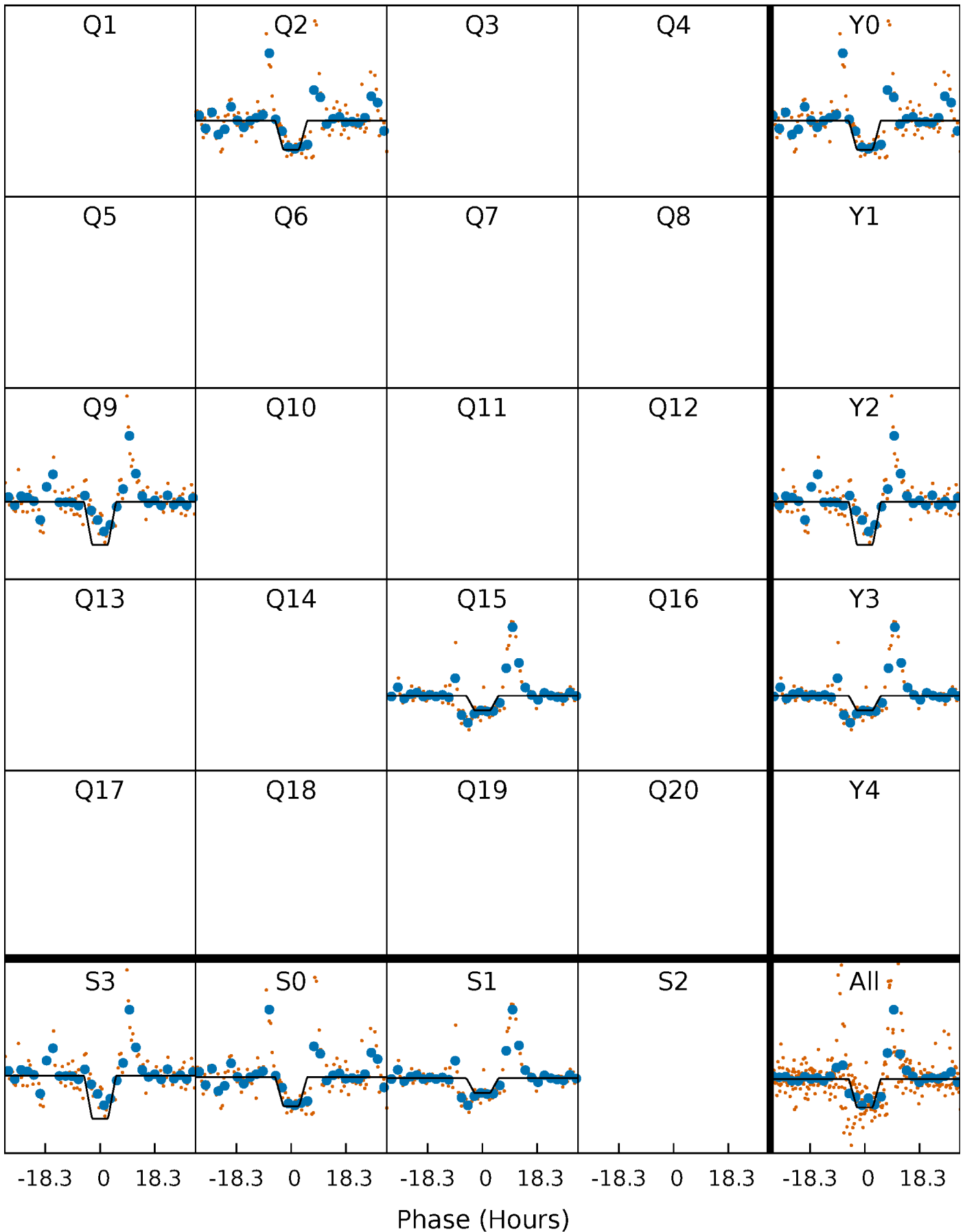
DV Quarter-Phased Transit Curves

TCE 009267818-03 P=579.588489 Days $T_0=236.923743$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

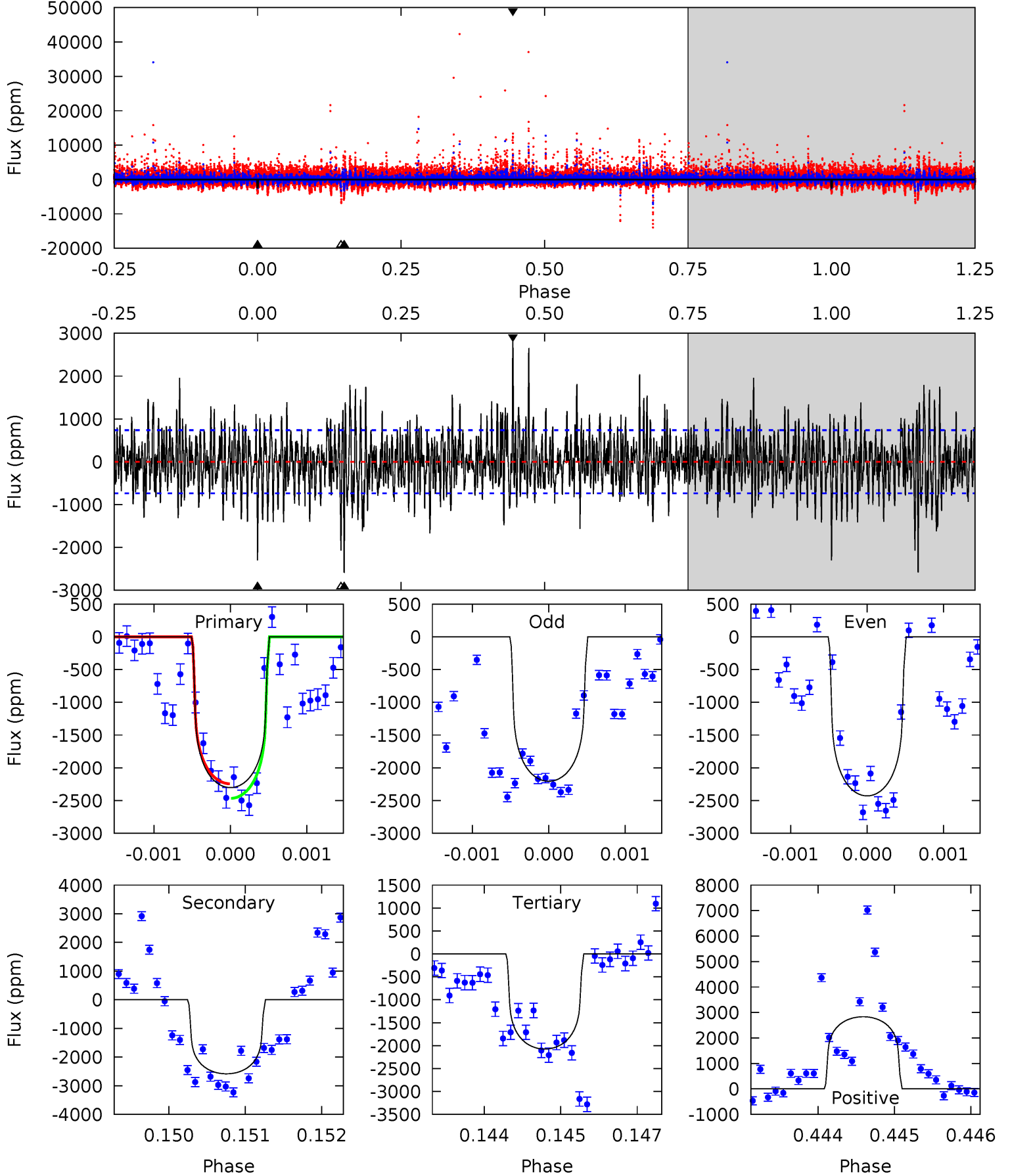
TCE 009267818-03 $P=579.631985$ Days $T_0=236.867146$ (BKJD)



DV Model-Shift Uniqueness Test

009267818-03, P = 579.588489 Days, E = 236.923743 Days

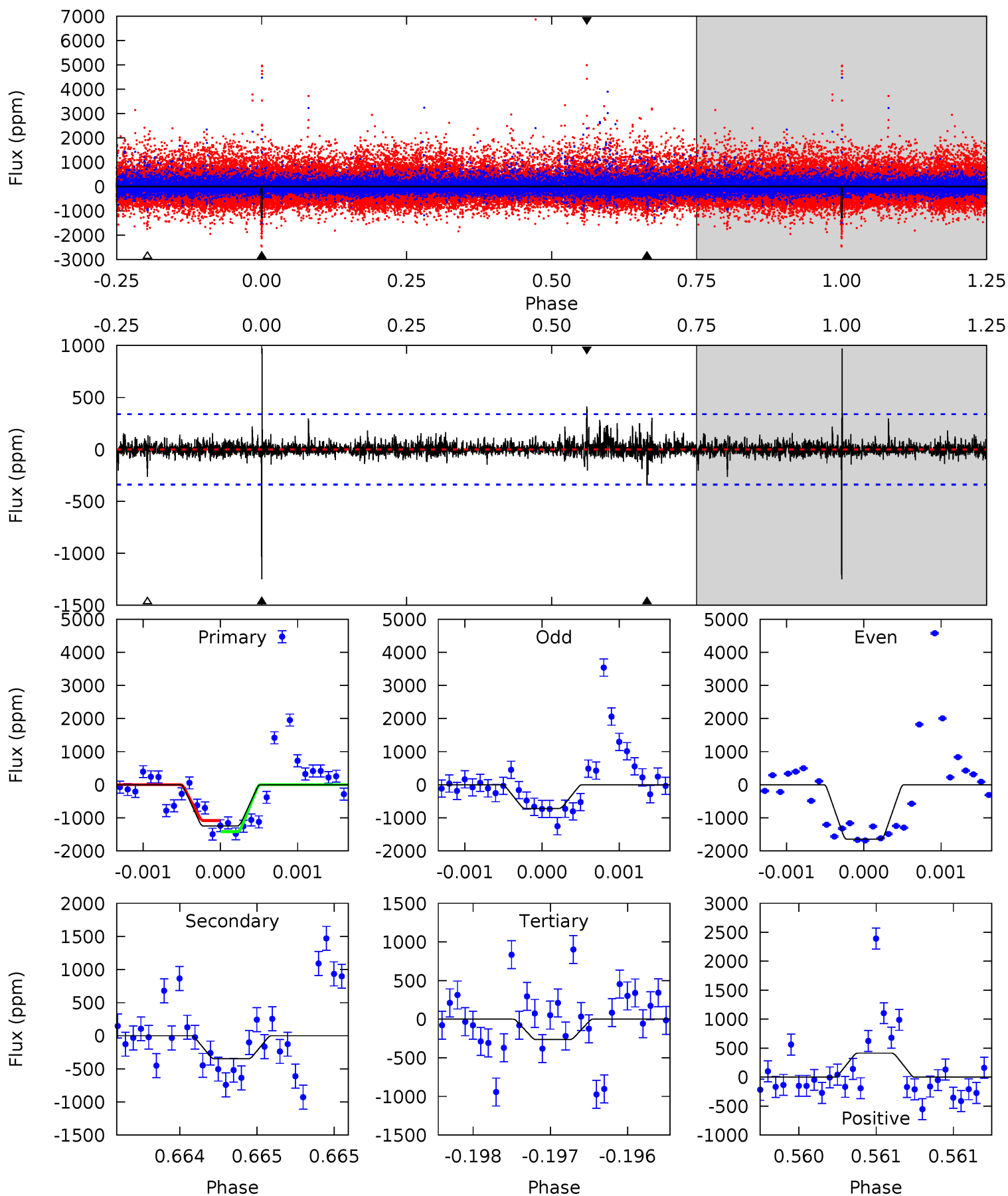
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.0	19.1	15.3	20.9	5.43	3.26	4.16	1.67	-3.91	3.76	-1.83	0.36	1.01	0.52	0.82



Alt Model-Shift Uniqueness Test

009267818-03, P = 579.631985 Days, E = 236.867146 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.2	5.64	4.27	6.70	5.50	3.36	0.76	16.0	13.5	1.37	-1.06	6.44	1.00	0.44	2.70



Stellar Parameters For KIC 009267818

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	3573^{+42}_{-48}	$4.896^{+0.028}_{-0.039}$	$-0.200^{+0.100}_{-0.100}$	$0.372^{+0.033}_{-0.030}$	$0.398^{+0.028}_{-0.042}$	$10.920^{+1.827}_{-1.723}$
	+1%/-1%	+1%/-1%	+50%/-50%	+9%/-8%	+7%/-11%	+17%/-16%
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 009267818-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-2585 ± 136	$1.42^{+0.52}_{-0.45}$	135^{+3}_{-3}	4064^{+623}_{-405}	$697193^{+784733}_{-315366}$
Alt.	-348 ± 62	$1.49^{+0.54}_{-0.41}$	134^{+3}_{-3}	2903^{+309}_{-223}	83297^{+81855}_{-38206}

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

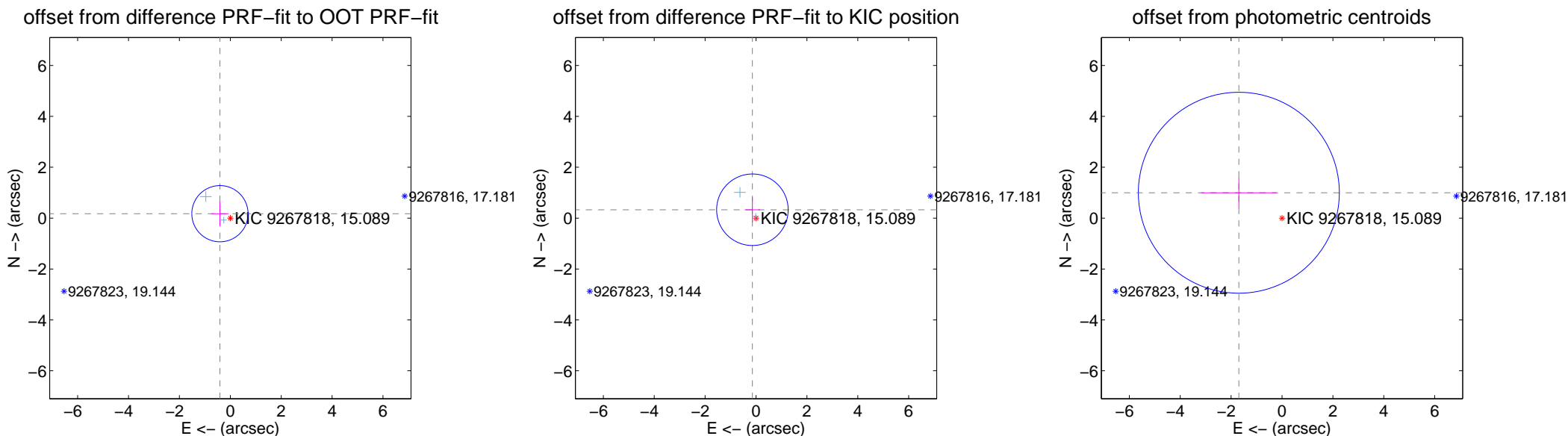
DV Centroid Data

Supplemental centroid analysis for 009267818-03. Kepler magnitude: 15.09. Transit SNR 6.21

There are 2 quarters with good PRF difference image offsets

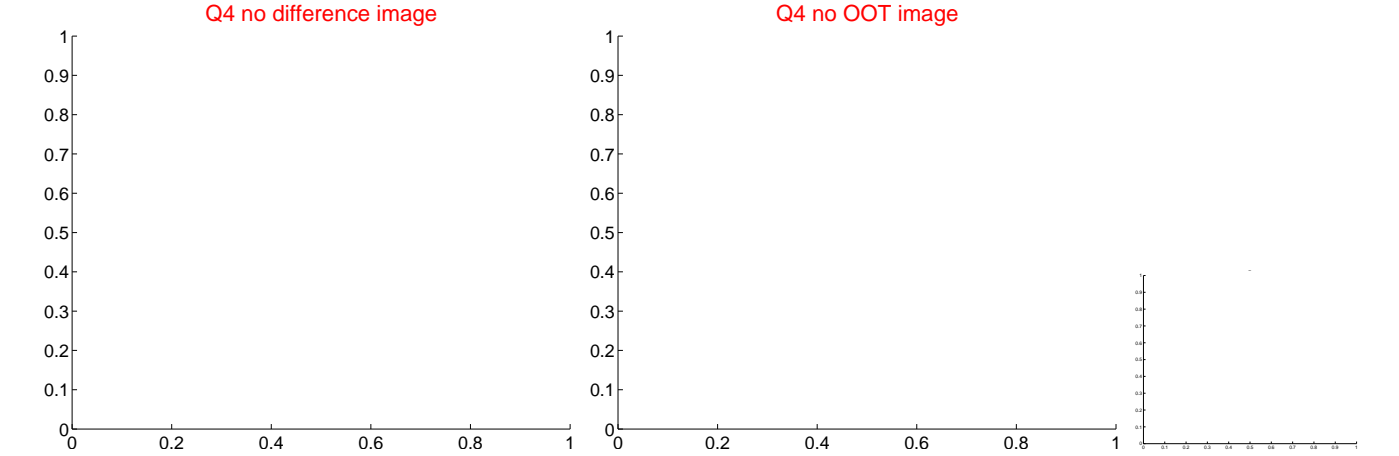
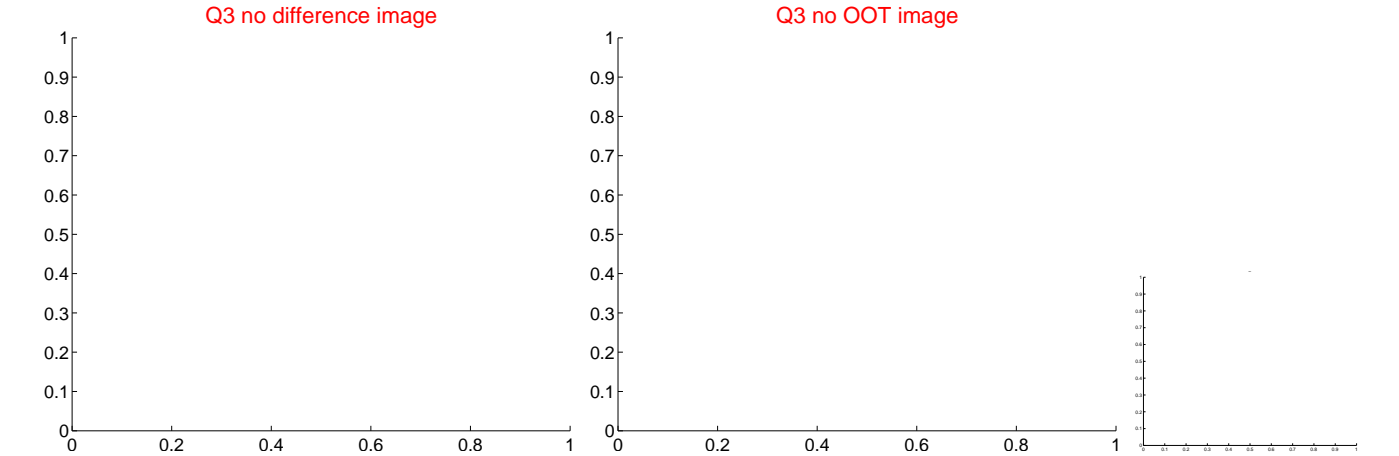
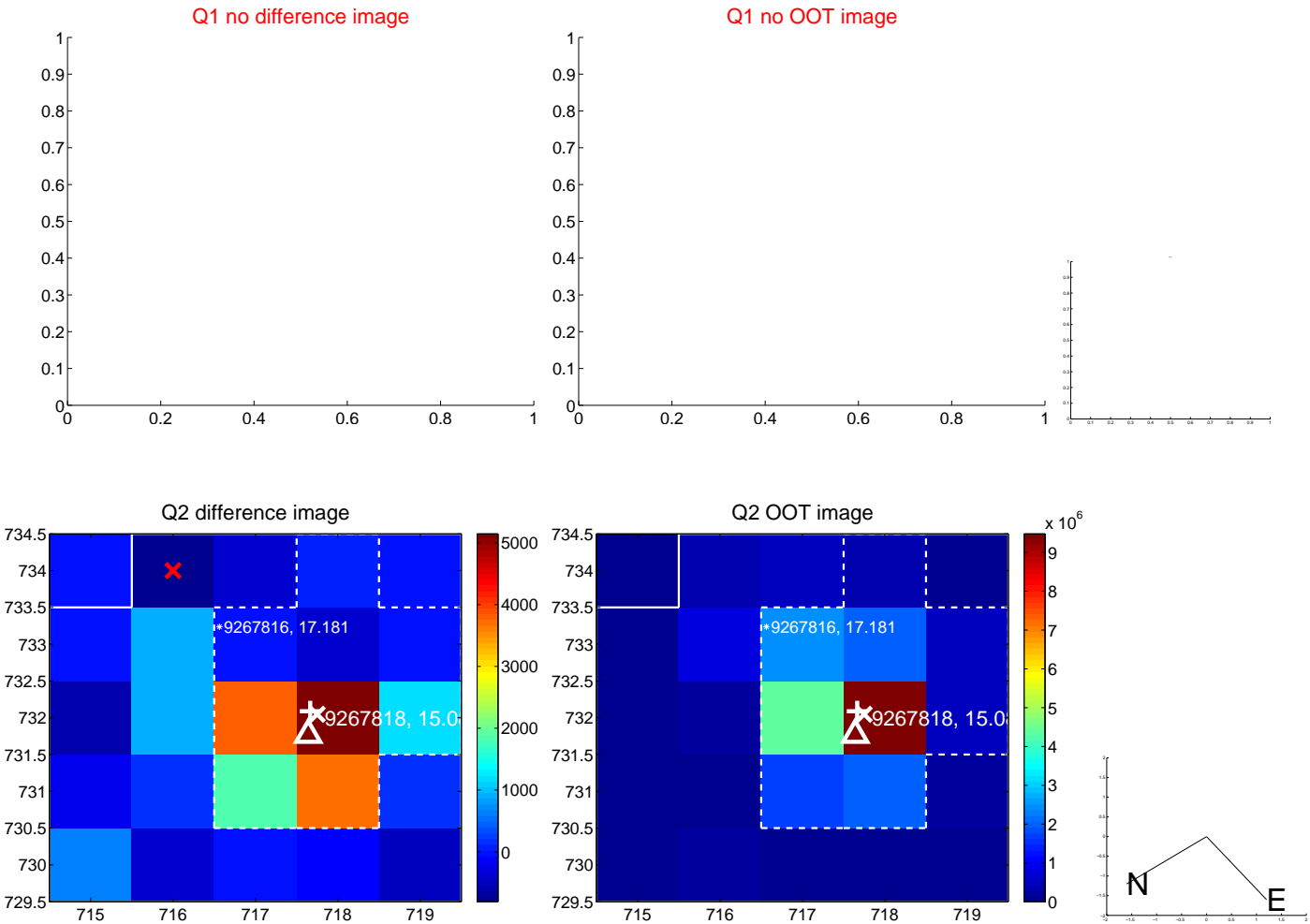
The direct PRF centroid is offset from the target star catalog position by about 0.29 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.443 ± 0.368	1.20	0.408 ± 0.343	0.174 ± 0.483
PRF-fit source offset from KIC position	0.358 ± 0.469	0.76	0.142 ± 0.304	0.329 ± 0.493
photometric centroid source offset	1.97 ± 1.32	1.49	1.70 ± 1.48	1.00 ± 0.62



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.

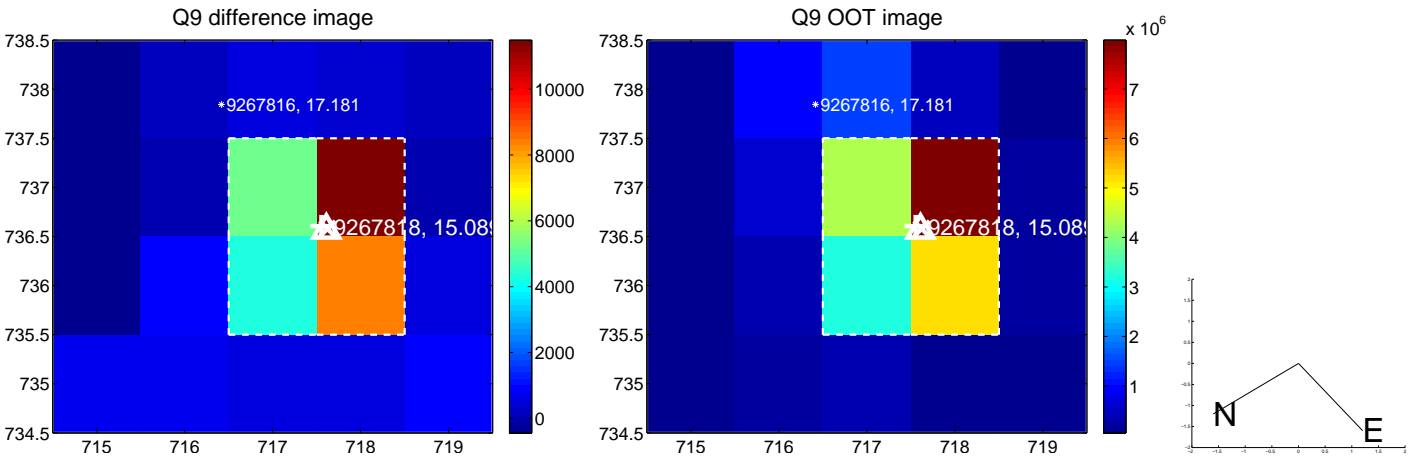
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



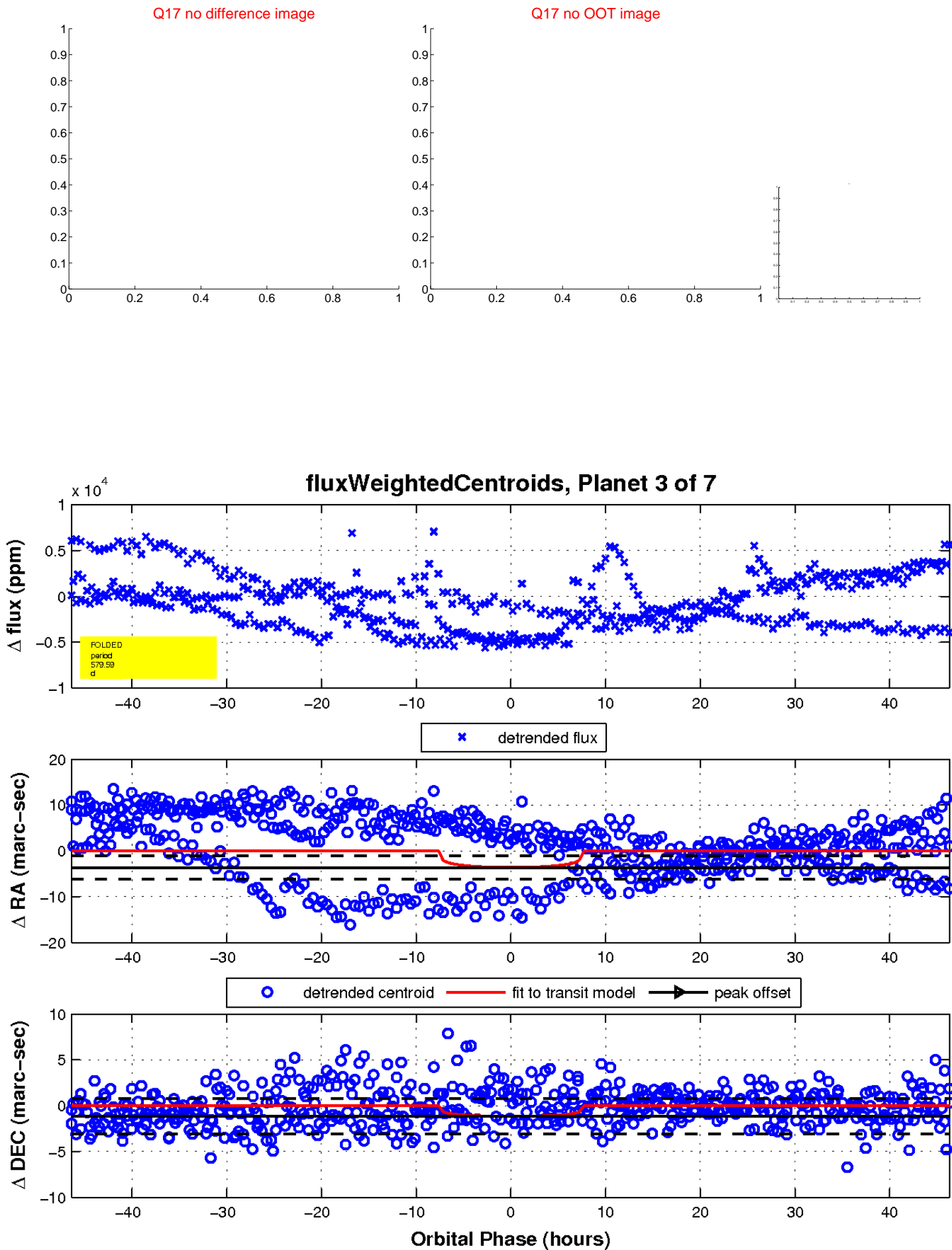
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

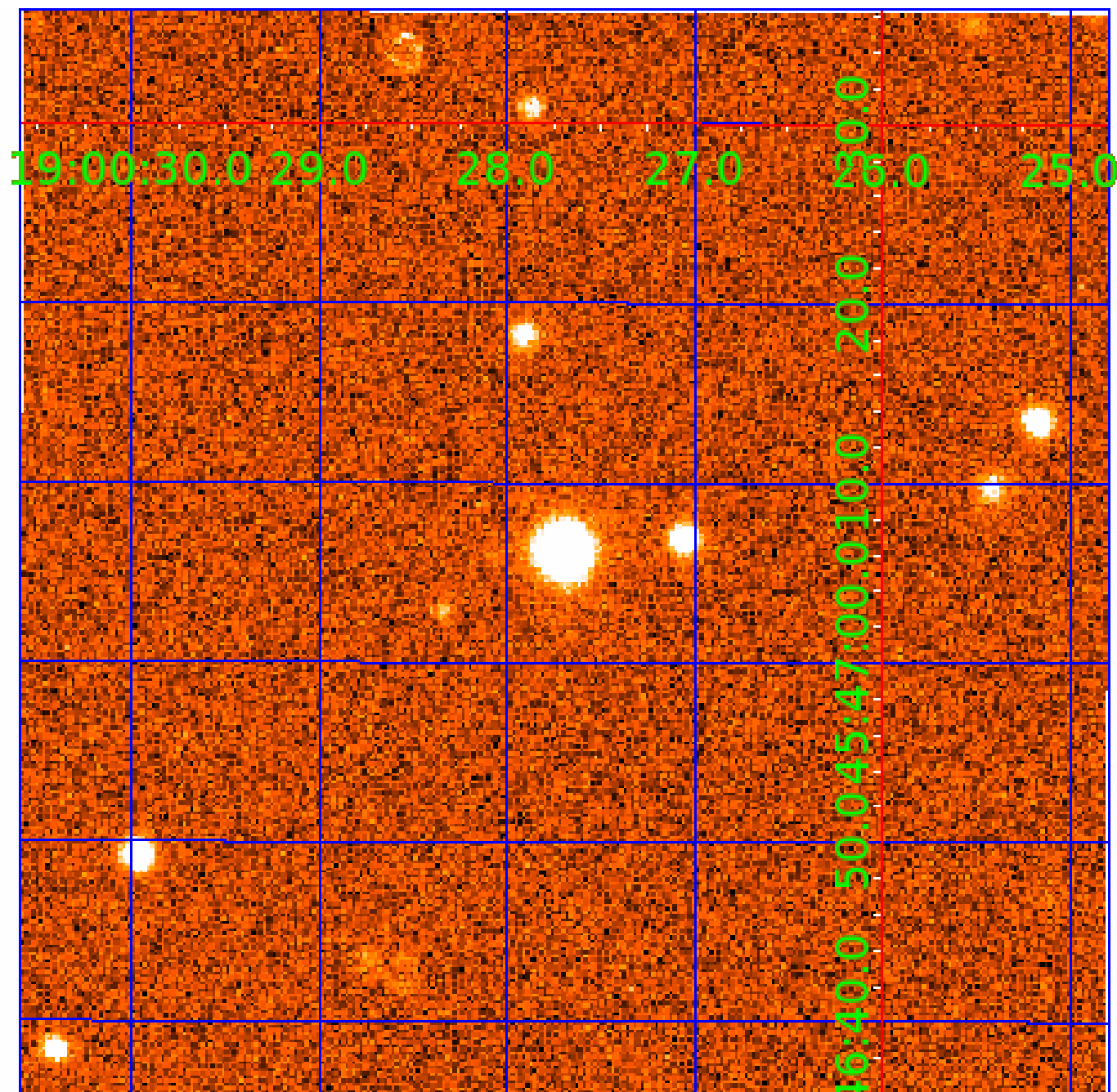


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 009267818

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})
009267818-01	OBS	No	434.390859	453.448300	1642.3	4.375	15.3	7.1	0.37	3573	1.54	0.03
009267818-02	OBS	No	388.020460	347.170497	2304.5	5.732	14.8	7.7	0.37	3573	2.21	0.03
009267818-03	OBS	No	579.588489	236.923743	1510.7	15.490	12.4	6.2	0.37	3573	1.43	0.02
009267818-04	OBS	No	243.451777	216.453219	1065.7	9.574	10.7	7.5	0.37	3573	1.24	0.06
009267818-05	OBS	No	294.637897	325.003858	1737.1	4.098	12.2	8.4	0.37	3573	1.56	0.05
009267818-06	OBS	No	385.653215	286.467603	2179.2	4.819	10.1	10.7	0.37	3573	1.73	0.04
009267818-07	OBS	No	369.084583	335.162070	660.1	12.000	12.3	-1.0	0.37	3573	0.95	0.04

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009267818-01	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—INCONSISTENT_TRANS—CENT_FEW_DIFFS
009267818-02	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
009267818-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
009267818-04	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
009267818-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—CENT_FEW_DIFFS—HALO_GHOST
009267818-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
009267818-07	OBS	FP	0.00	1	0	1	0	LPP_DV—ALL_TRANS_CHASES—CENT_NOFITS—HALO_GHOST

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

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

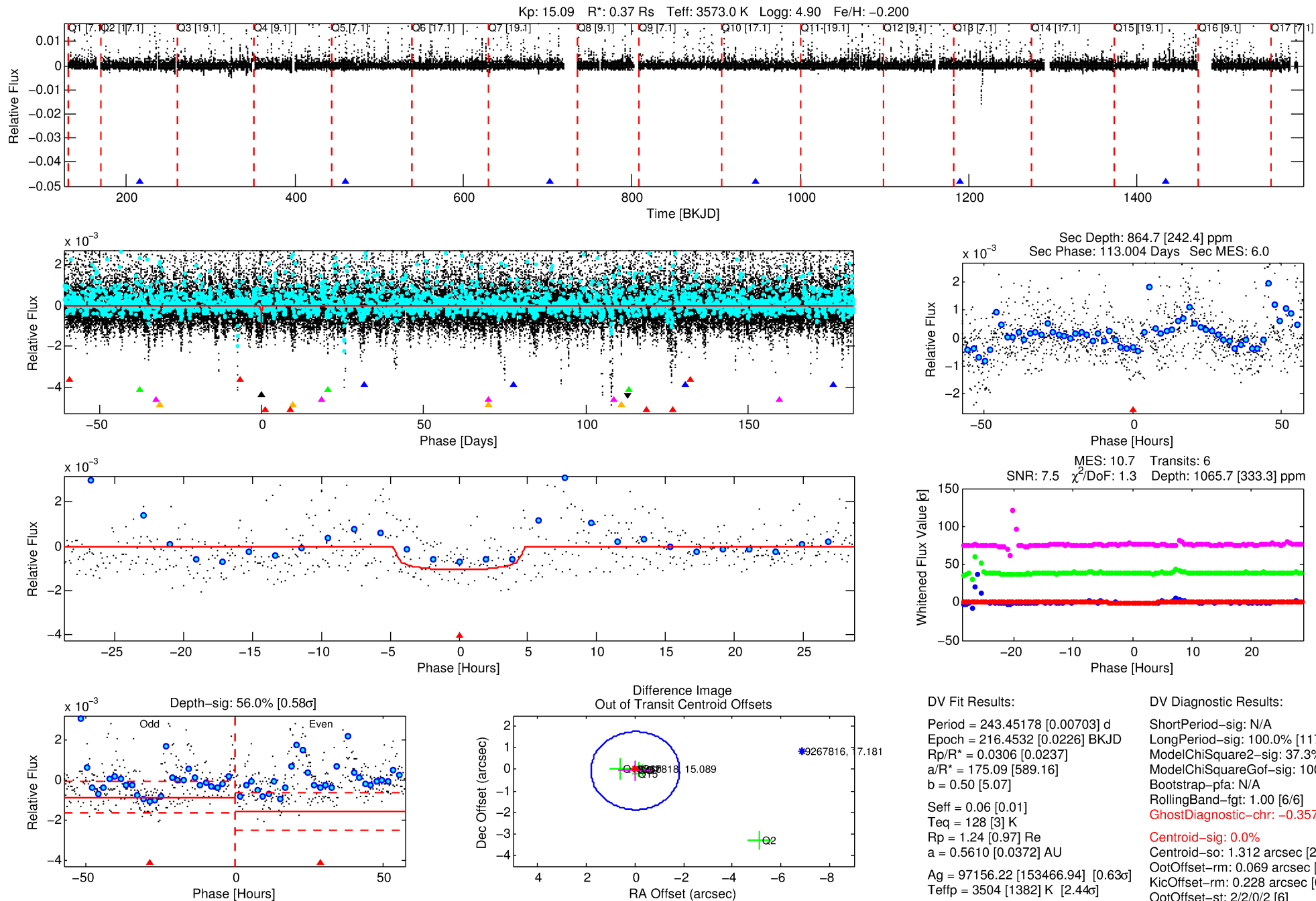
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009267818-04

No Significant Match Found

DV One-Page Summary

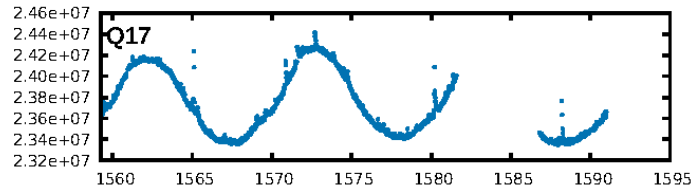
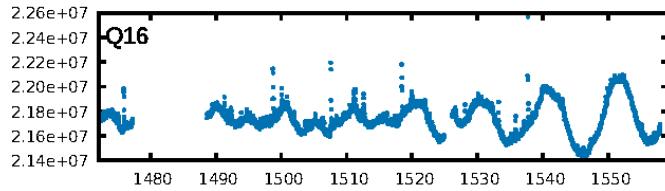
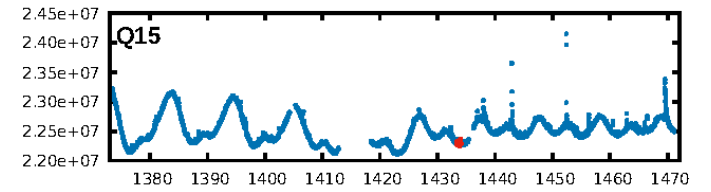
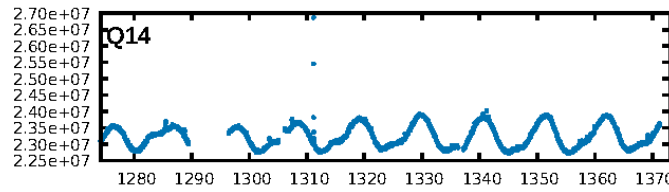
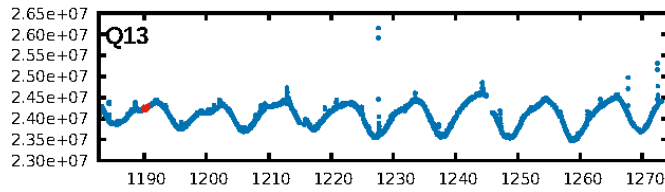
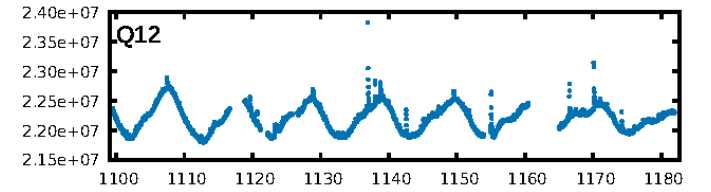
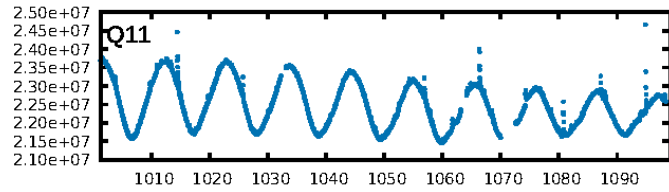
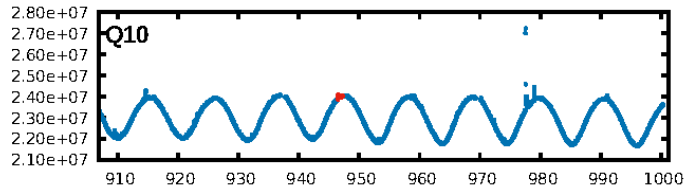
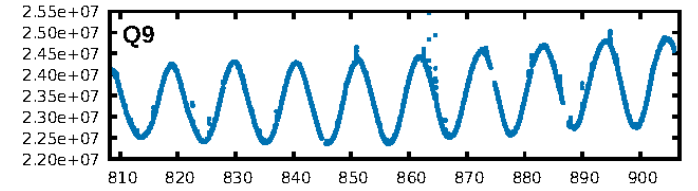
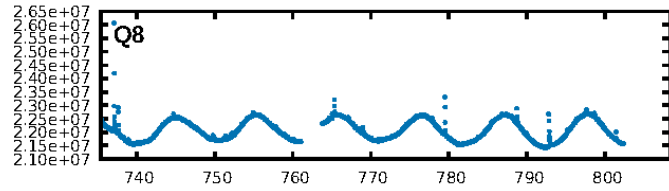
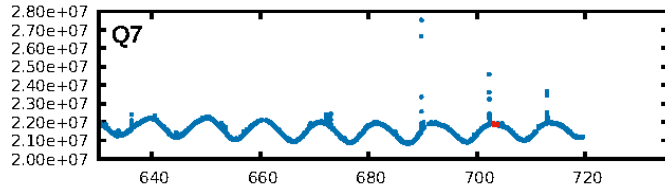
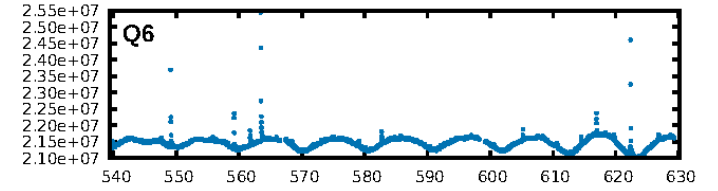
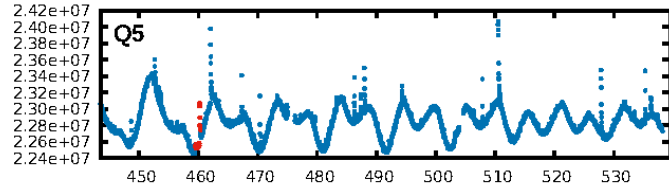
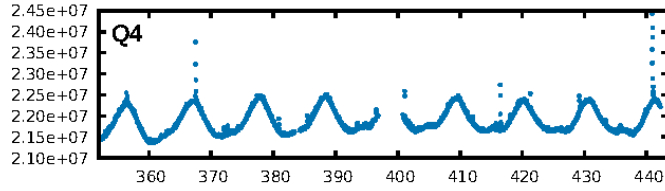
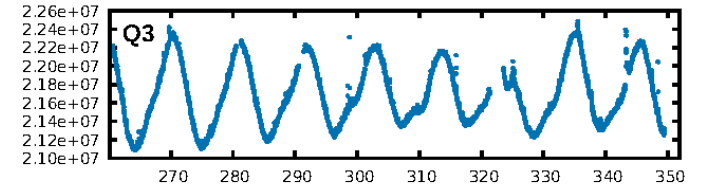
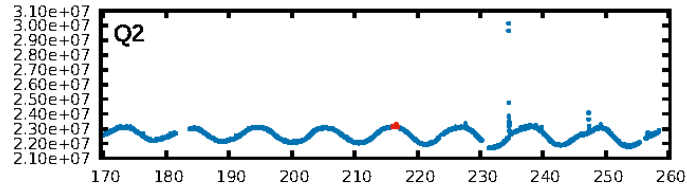
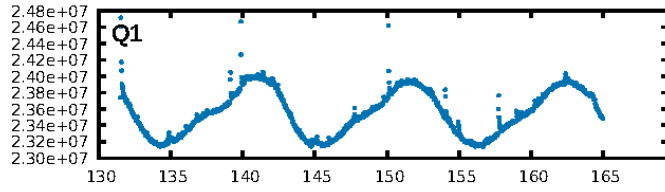
KIC: 9267818 Candidate: 4 of 7 Period: 243.452 d



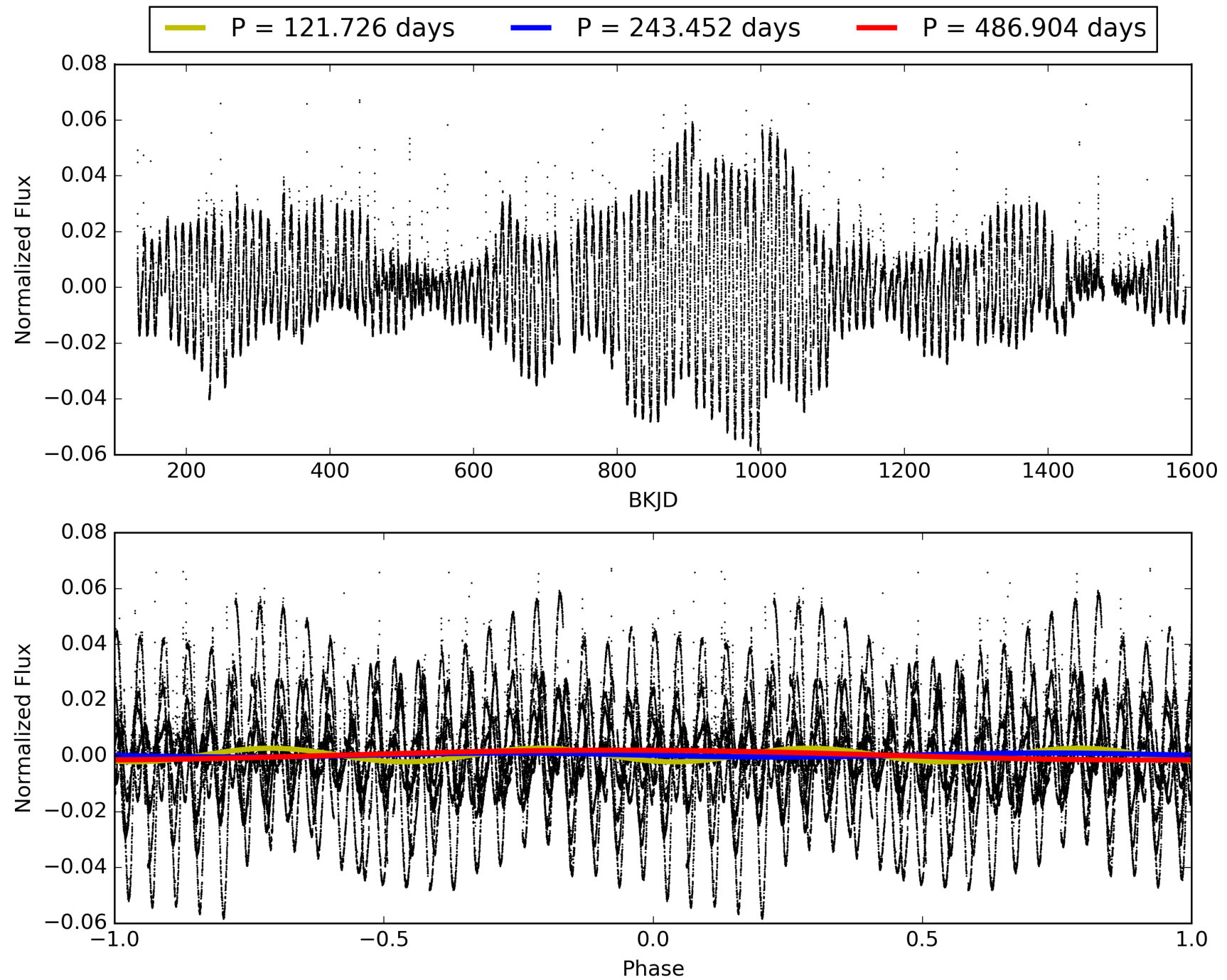
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:51:30 Z

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

TCE 009267818-04, PDC Light Curves

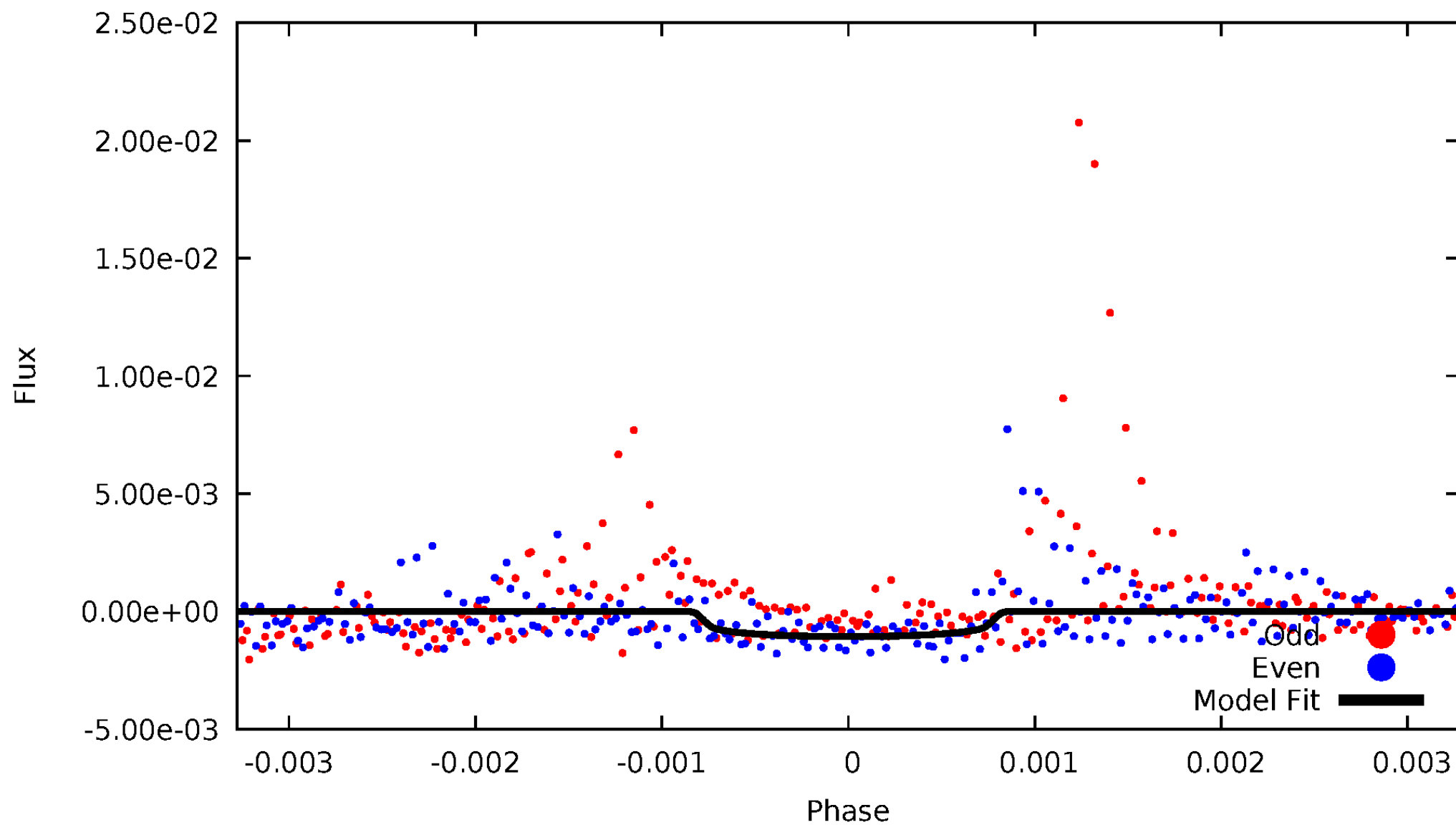


TCE 009267818-04



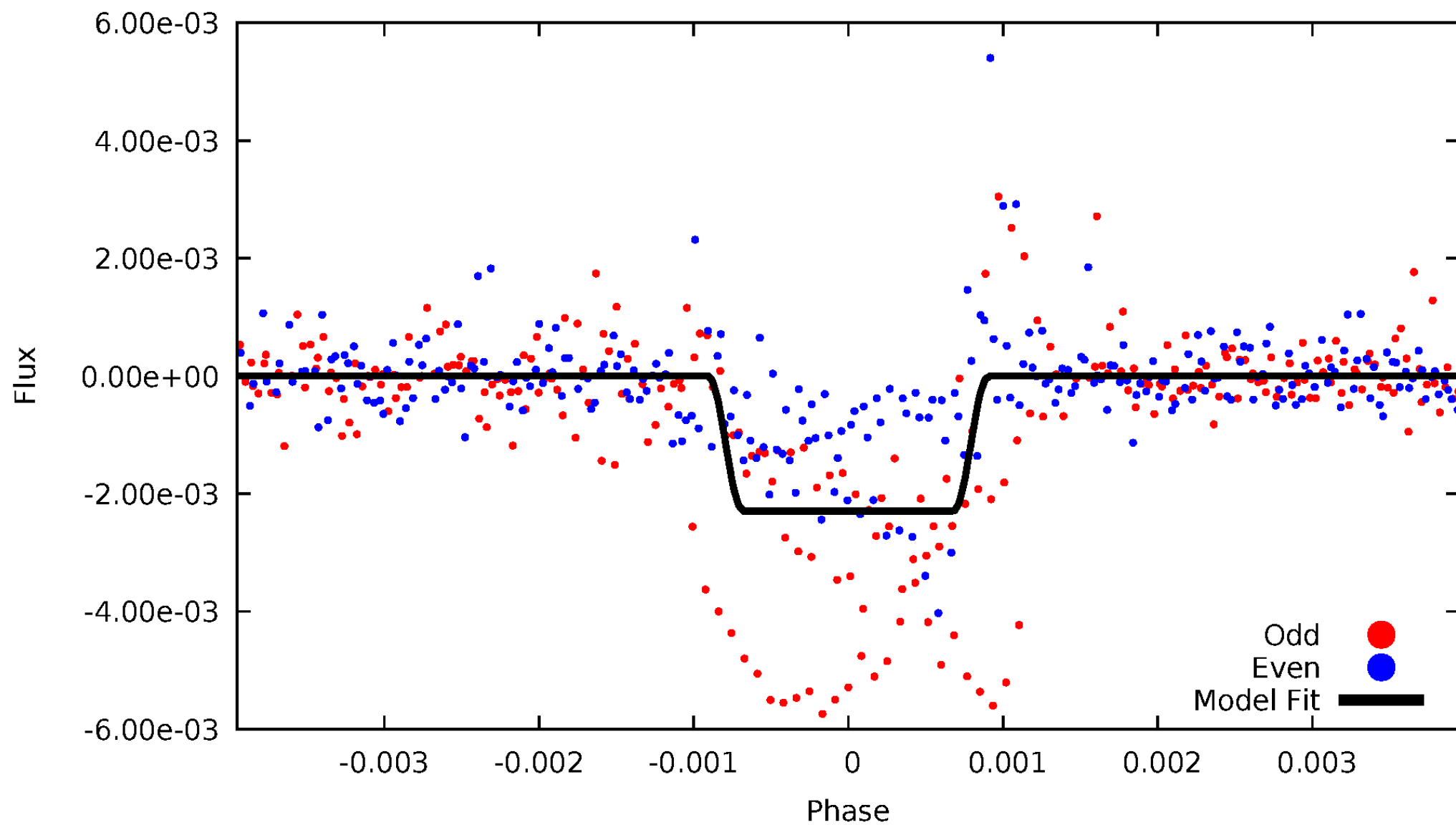
DV Odd/Even

TCE 009267818-04



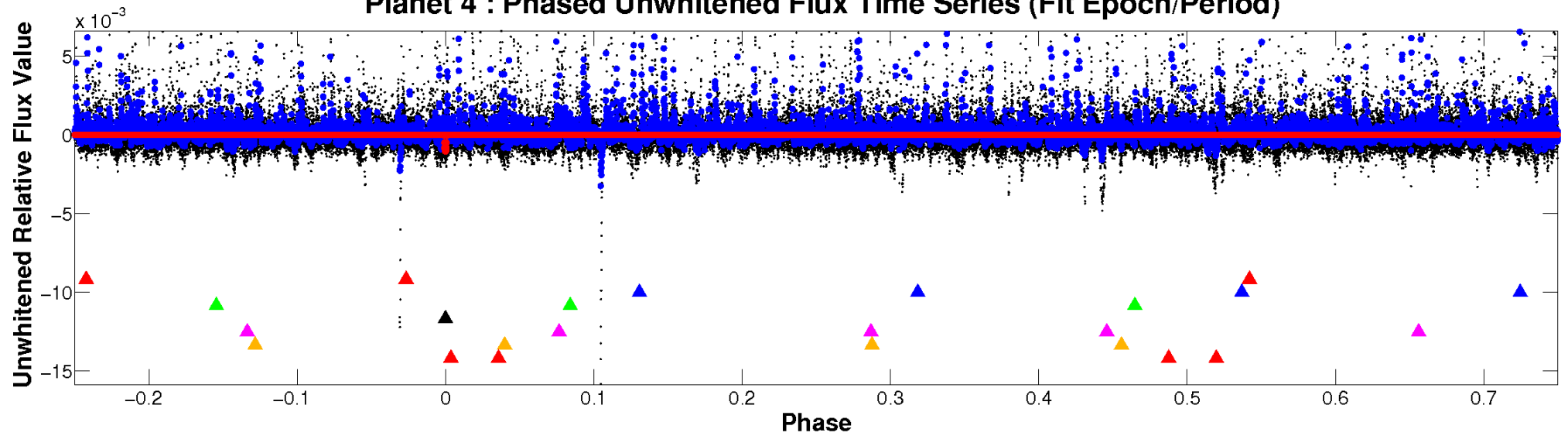
ALT Odd/Even

TCE 009267818-04

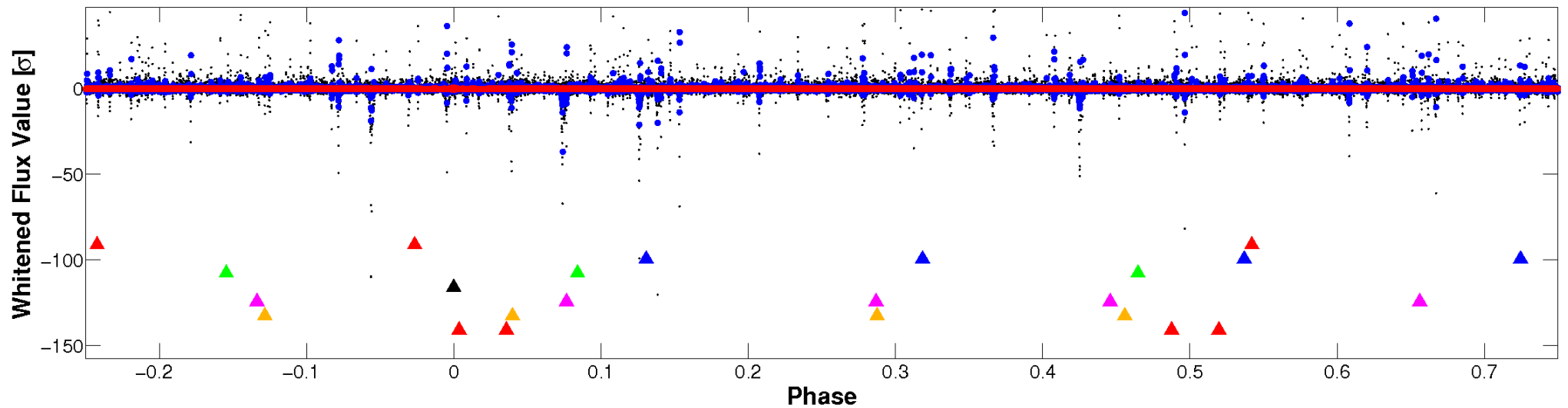


Non-Whitened Vs. Whitened Light Curve

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

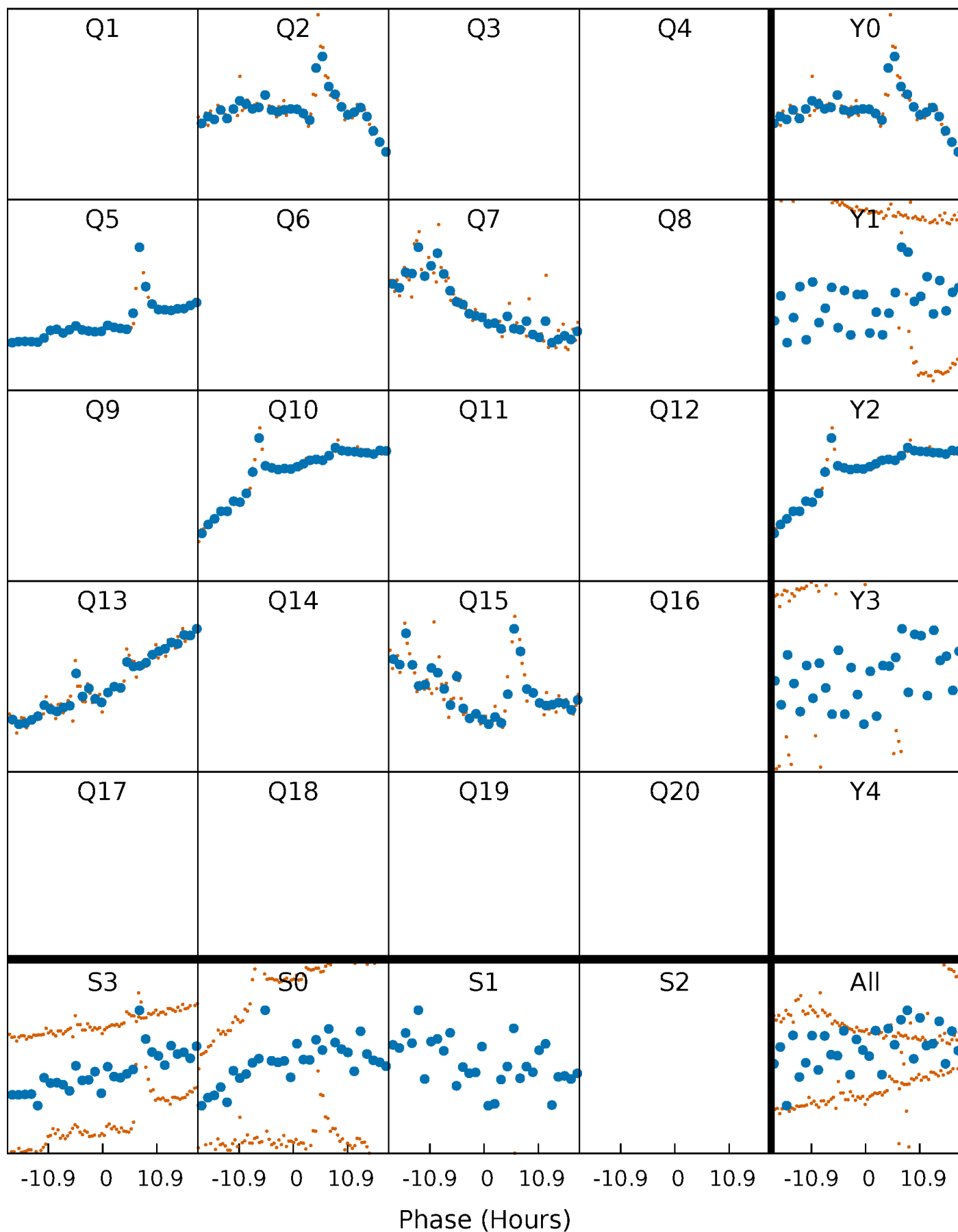


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



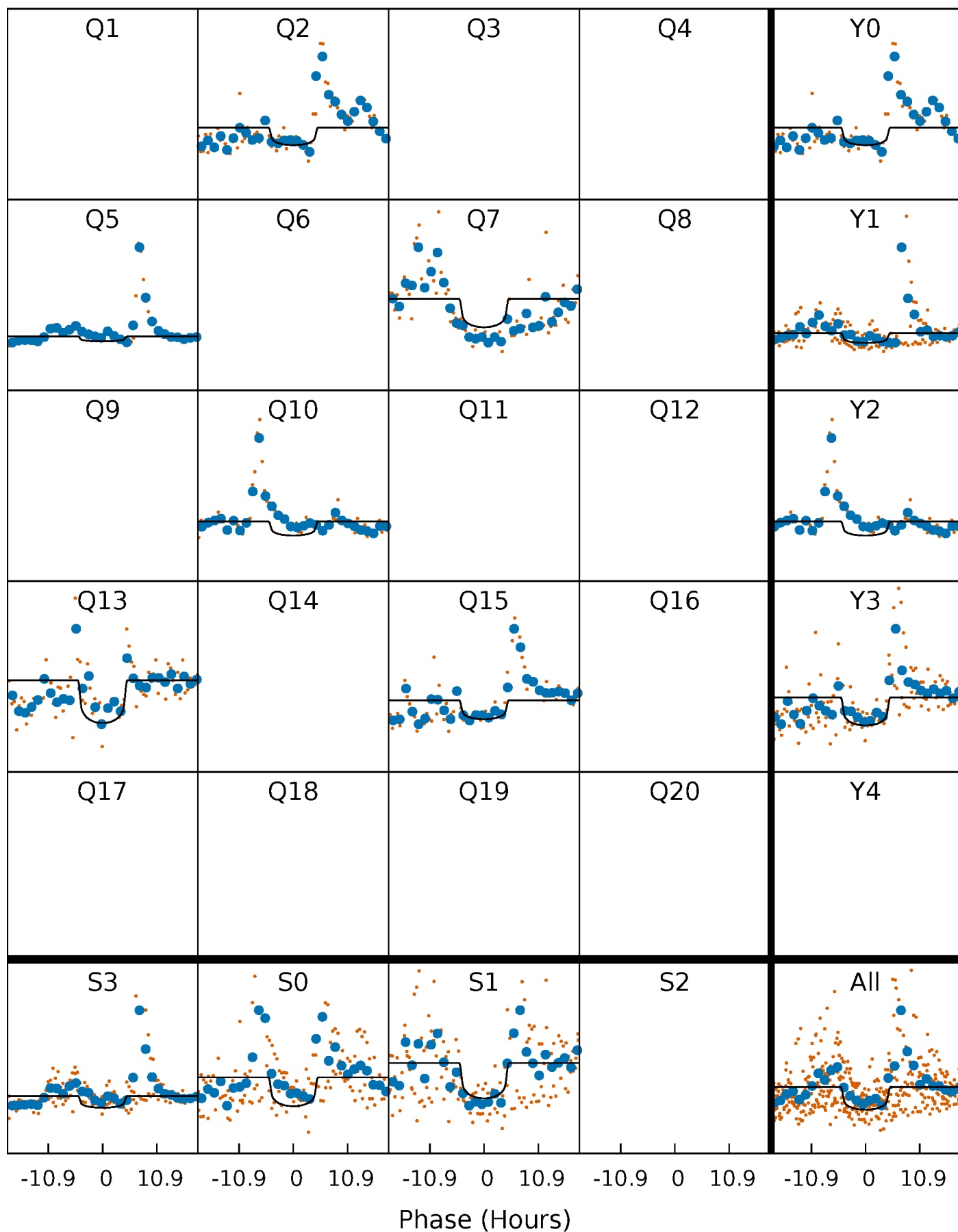
PDC Quarter-Phased Transit Curves

TCE 009267818-04 P=243.451777 Days $T_0=216.453219$ (BKJD)



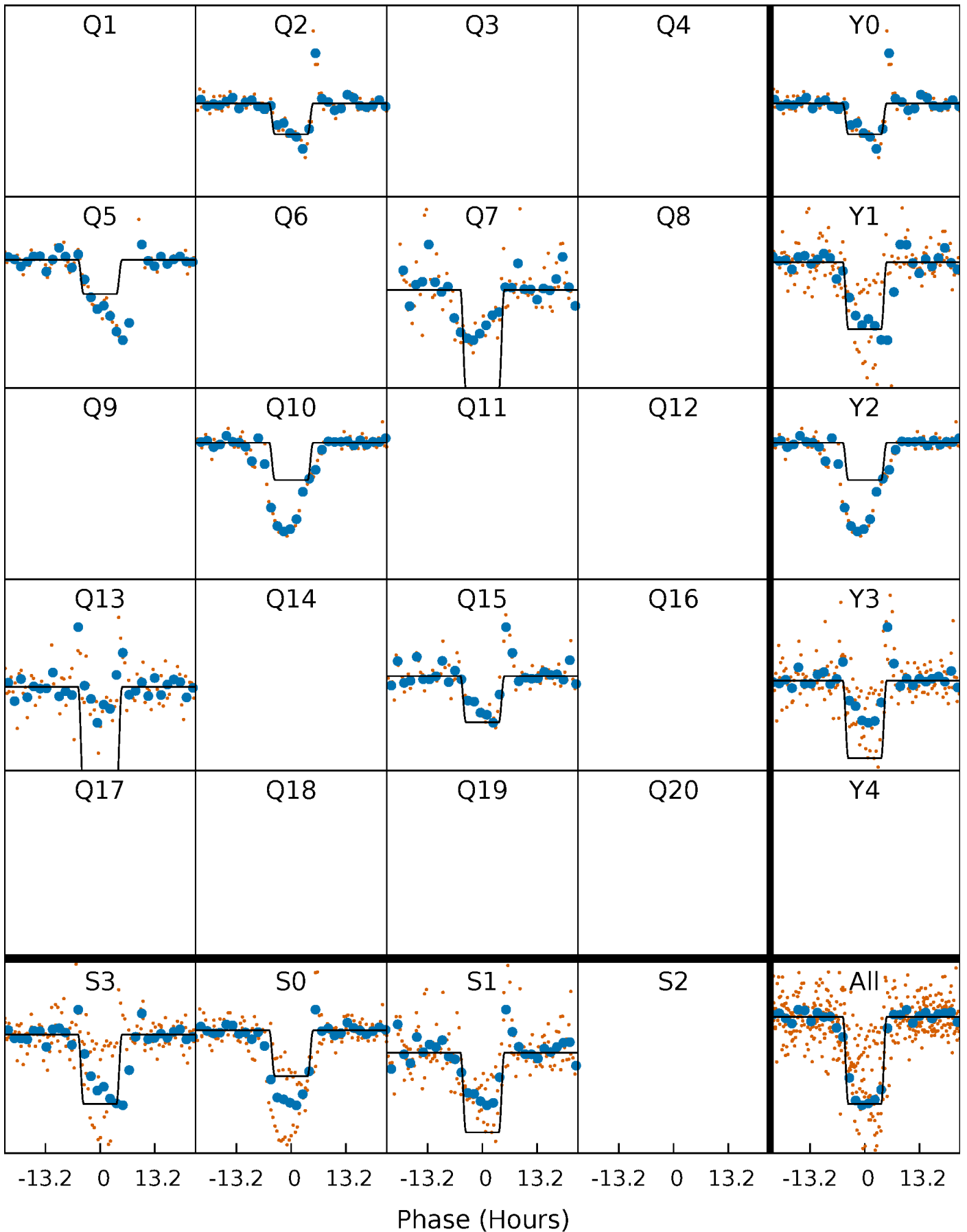
DV Quarter-Phased Transit Curves

TCE 009267818-04 P=243.451777 Days $T_0=216.453219$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

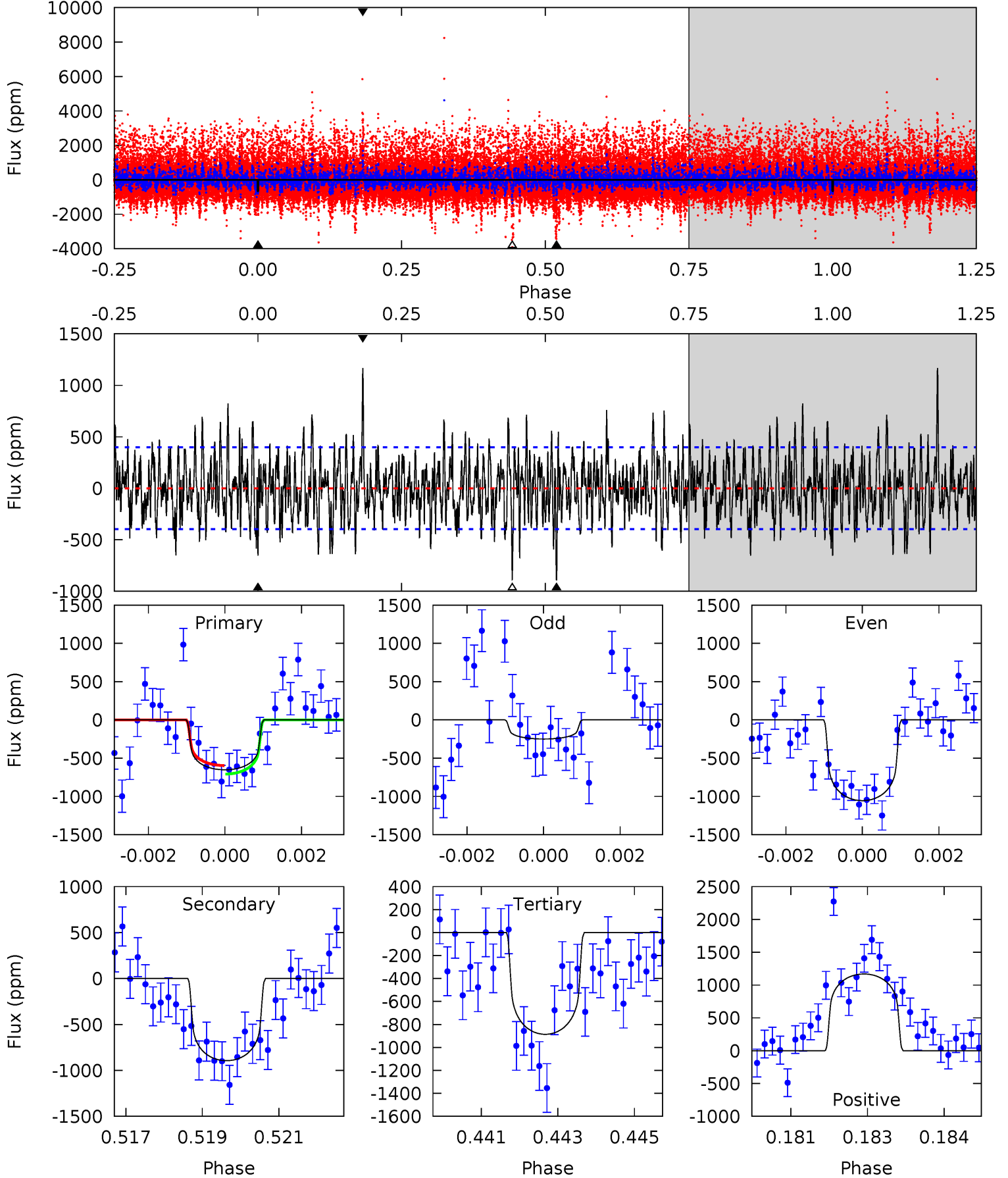
TCE 009267818-04 P=243.459056 Days $T_0=216.437430$ (BKJD)



DV Model-Shift Uniqueness Test

009267818-04, P = 243.451777 Days, E = 216.453219 Days

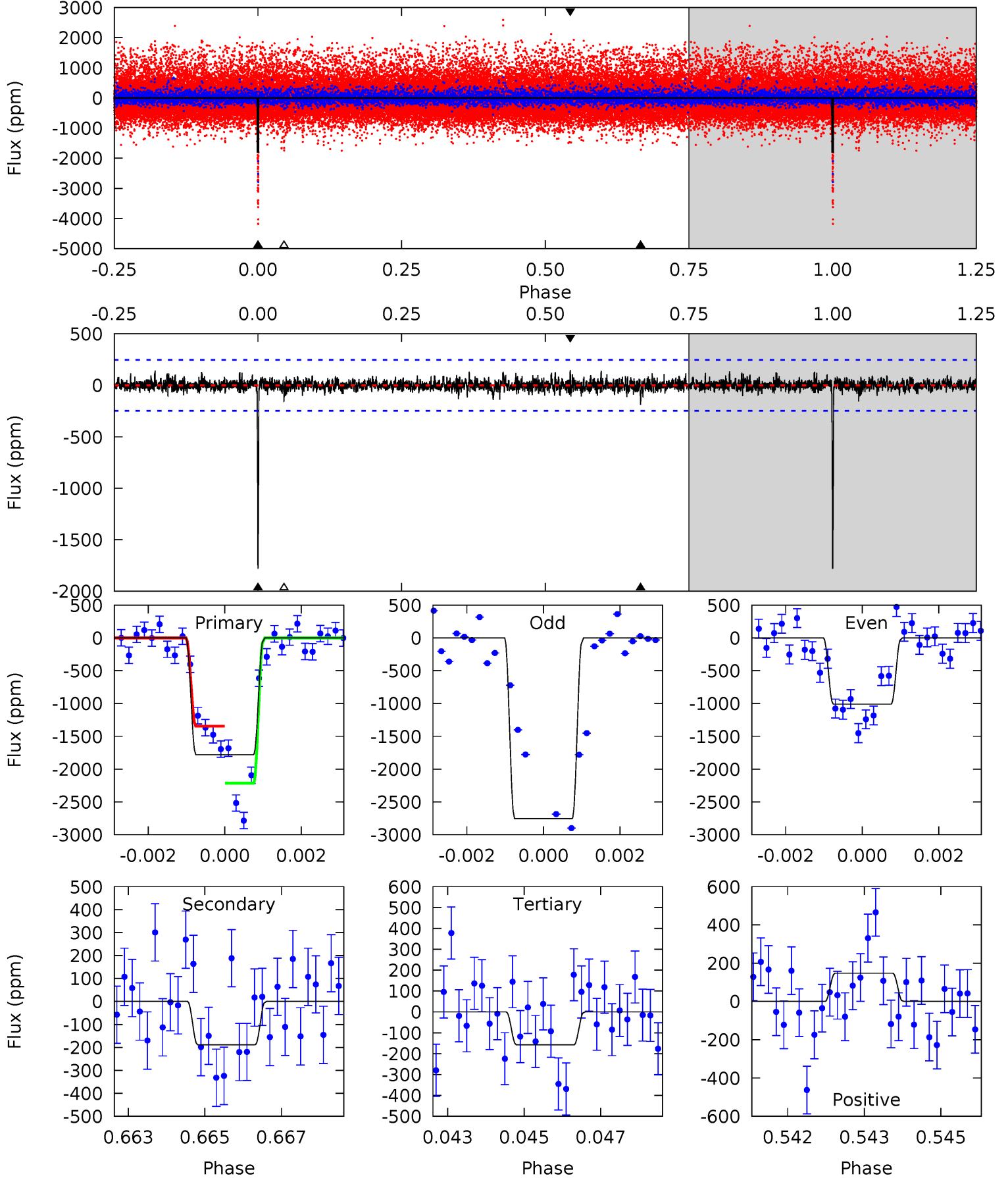
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.79	12.1	11.9	15.8	5.36	3.14	3.32	-3.15	-6.96	0.12	-3.70	4.75	0.84	0.57	0.76



Alt Model-Shift Uniqueness Test

009267818-04, P = 243.459056 Days, E = 216.437430 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
38.5	4.07	3.41	3.19	5.35	3.12	0.76	35.1	35.3	0.66	0.87	19.1	1.12	0.08	9.41



Stellar Parameters For KIC 009267818

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3573^{+42}_{-48}	$4.896^{+0.028}_{-0.039}$	$-0.200^{+0.100}_{-0.100}$	$0.372^{+0.033}_{-0.030}$	$0.398^{+0.028}_{-0.042}$	$10.920^{+1.827}_{-1.723}$
	+1%/-1%	+1%/-1%	+50%/-50%	+9%/-8%	+7%/-11%	+17%/-16%
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 009267818-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-894 ± 74	$1.33^{+0.88}_{-0.78}$	180^{+3}_{-3}	3436^{+1304}_{-443}	$85262^{+422993}_{-53590}$
Alt.	-188 ± 46	$2.03^{+0.97}_{-0.95}$	180^{+4}_{-4}	2490^{+439}_{-241}	7677^{+20354}_{-4404}

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

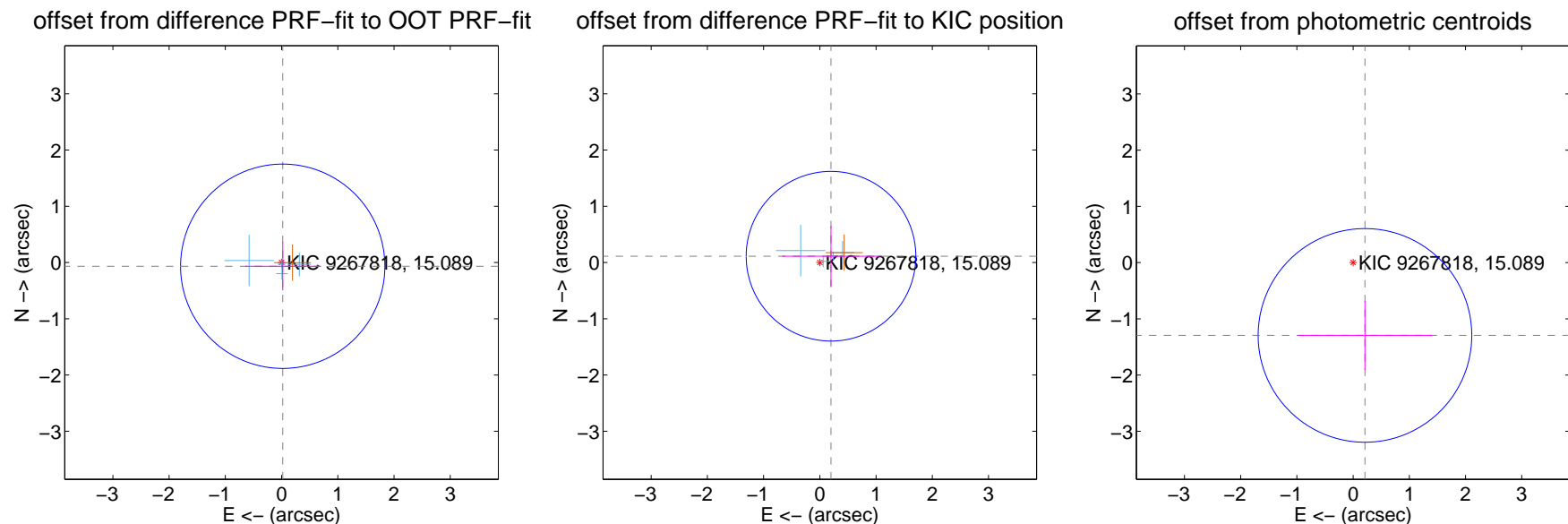
DV Centroid Data

Supplemental centroid analysis for 009267818-04. Kepler magnitude: 15.09. Transit SNR 7.46

There are 4 quarters with good PRF difference image offsets

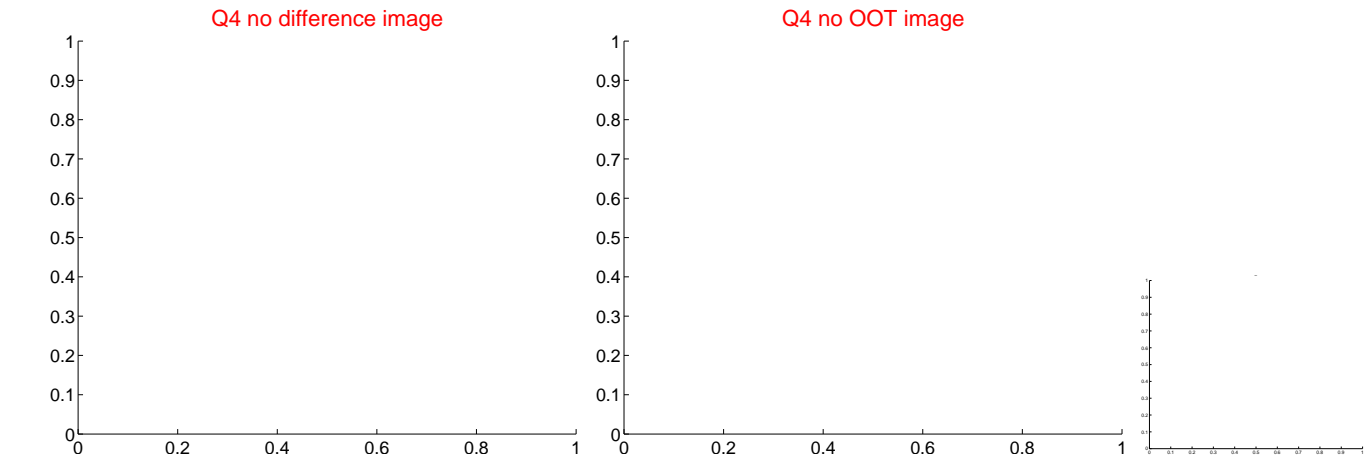
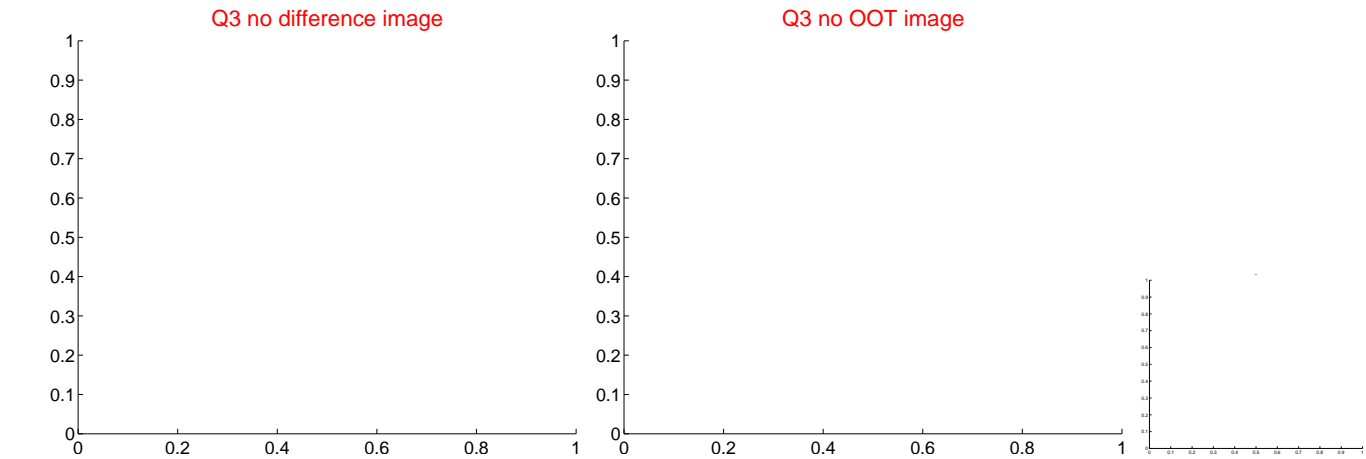
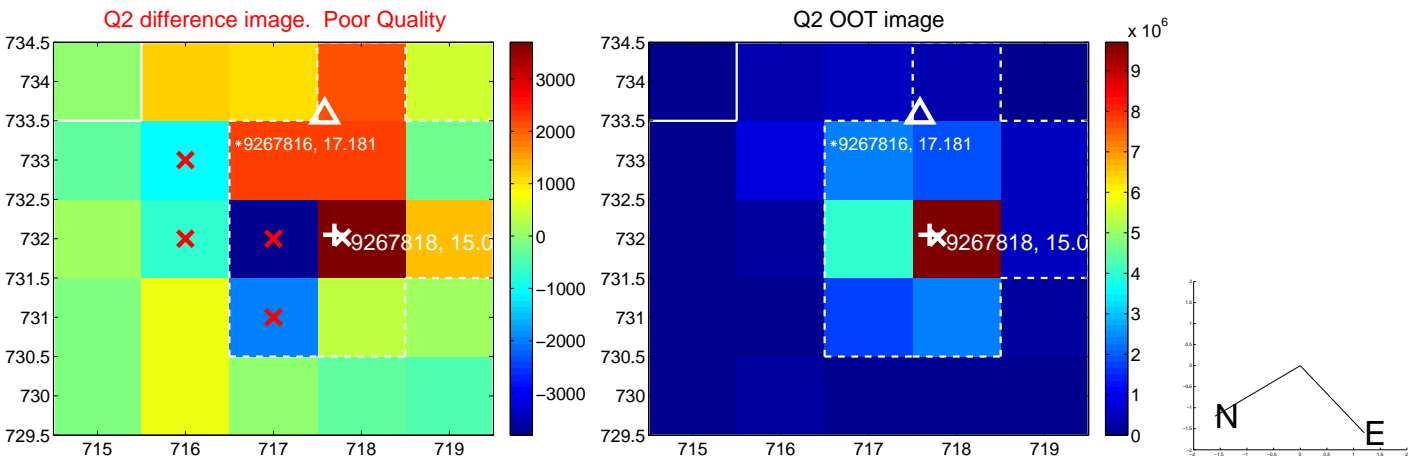
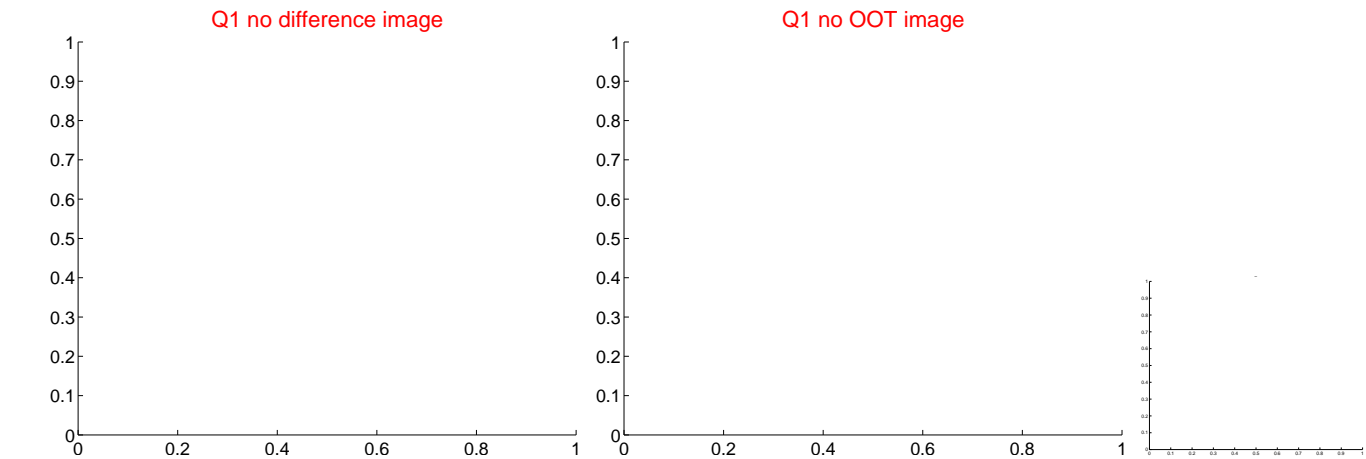
The direct PRF centroid is offset from the target star catalog position by about 0.23 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.069 ± 0.605	0.11	-0.020 ± 0.668	-0.066 ± 0.432
PRF-fit source offset from KIC position	0.228 ± 0.503	0.45	-0.198 ± 0.871	0.112 ± 0.536
photometric centroid source offset	1.31 ± 0.63	2.07	-0.21 ± 1.19	-1.29 ± 0.61

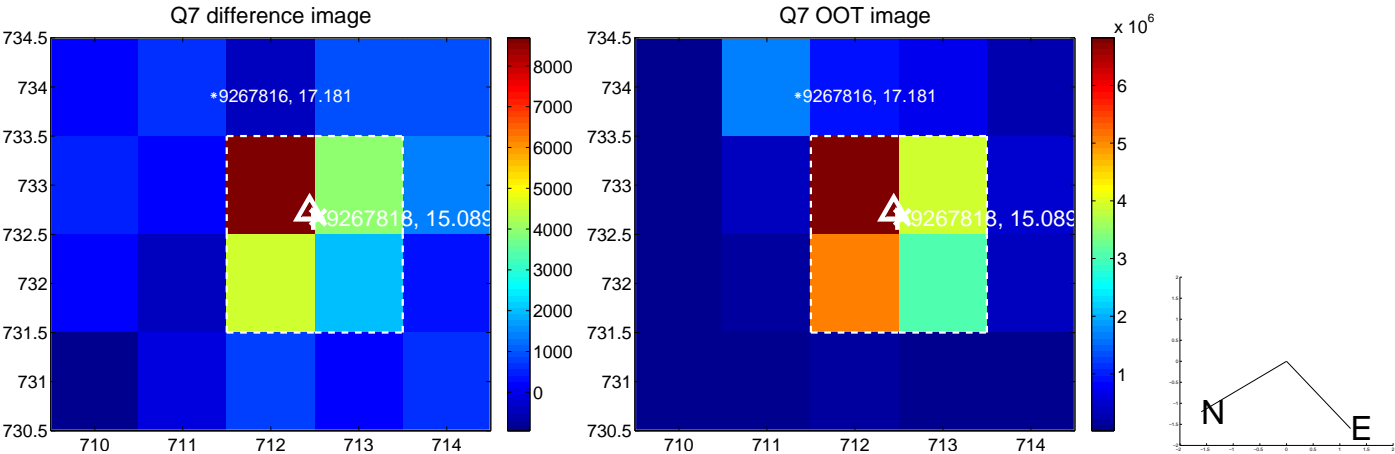
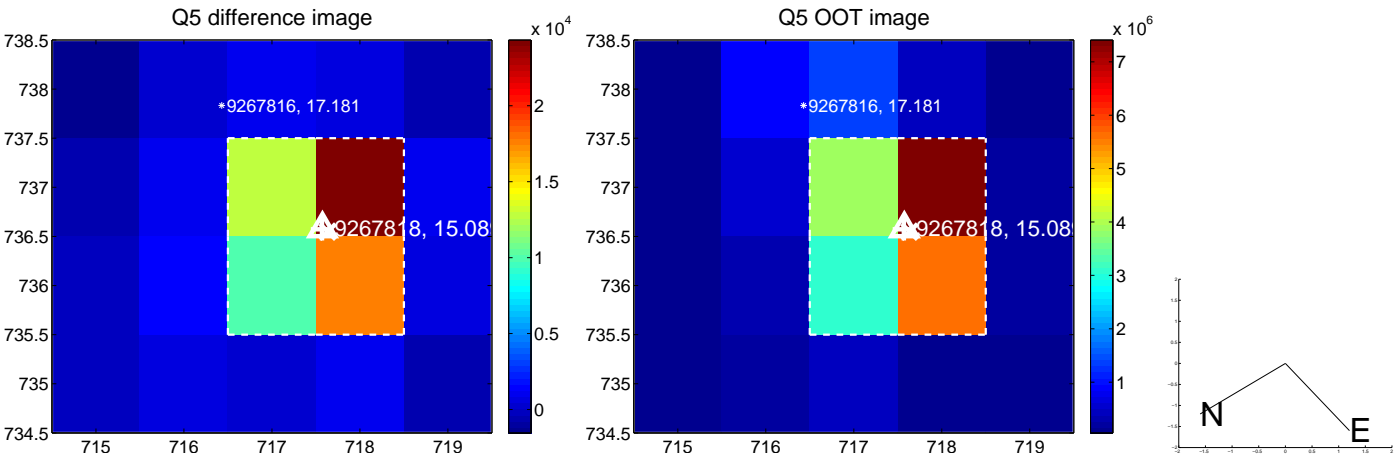


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

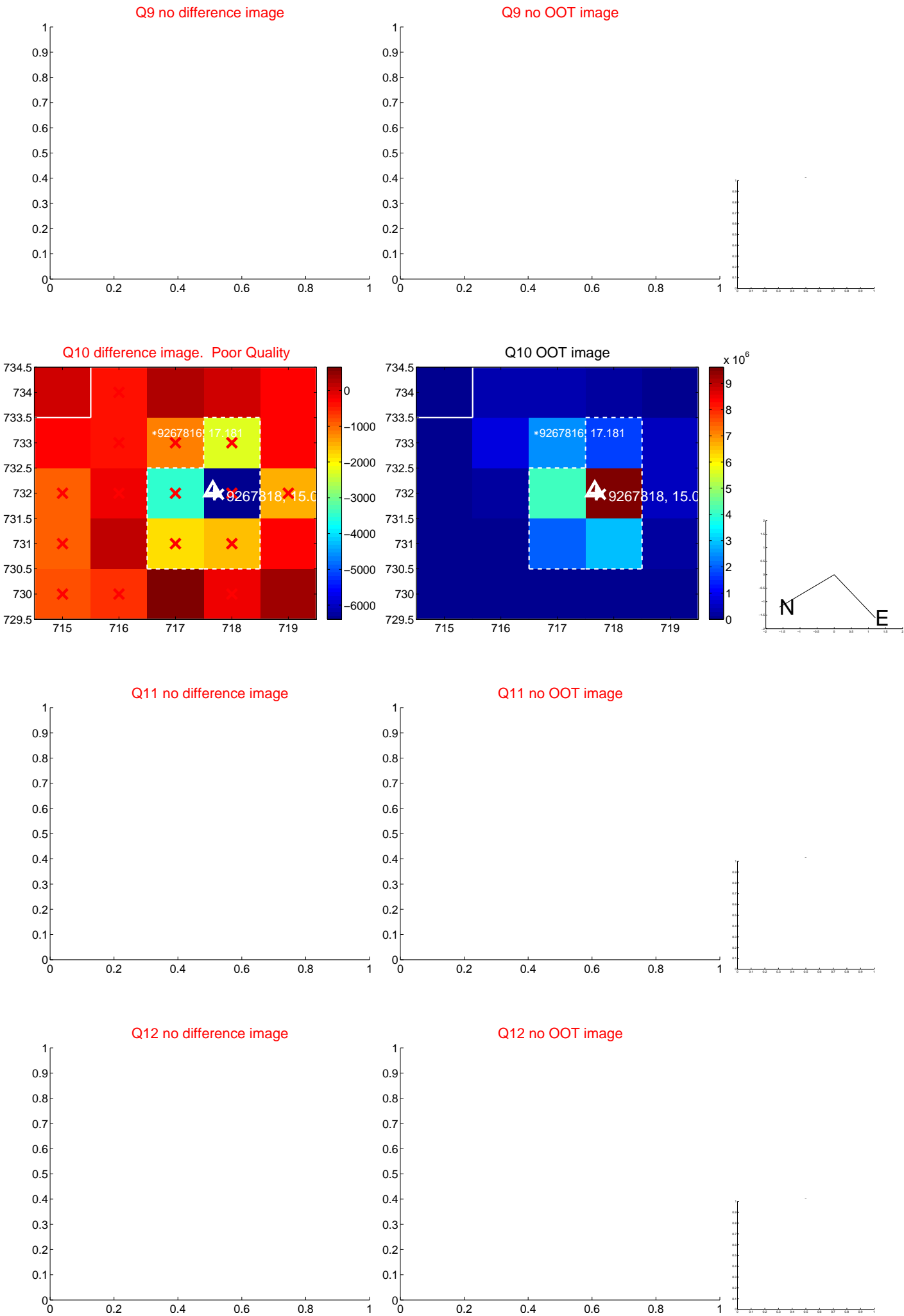
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



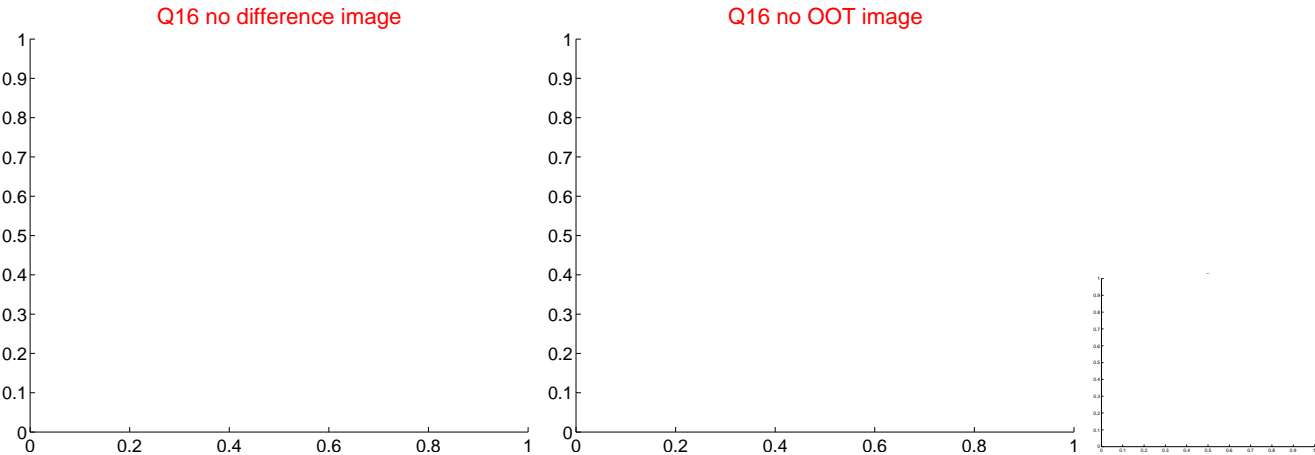
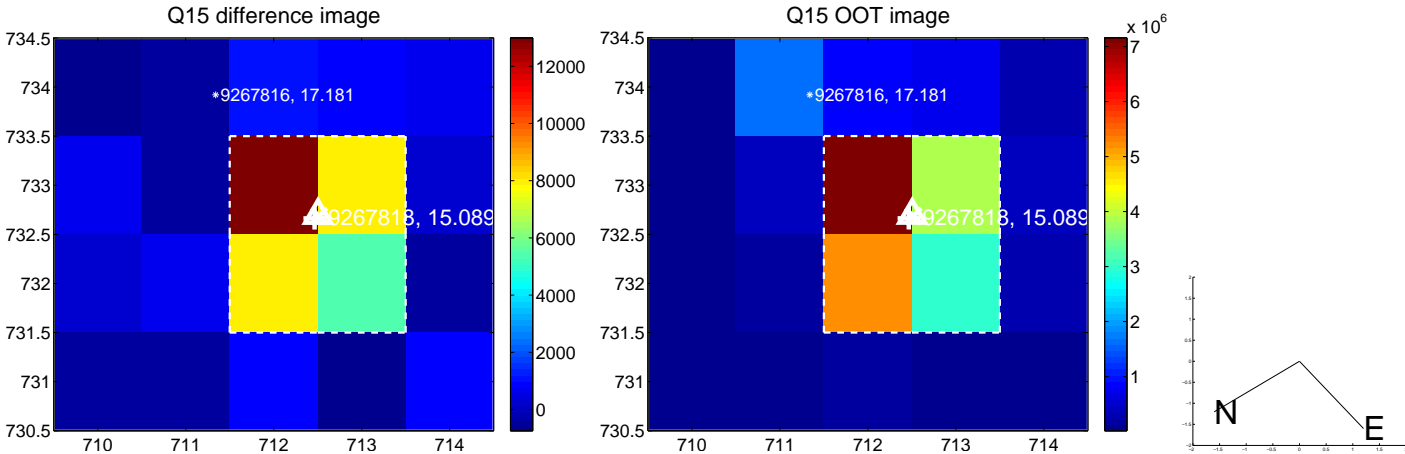
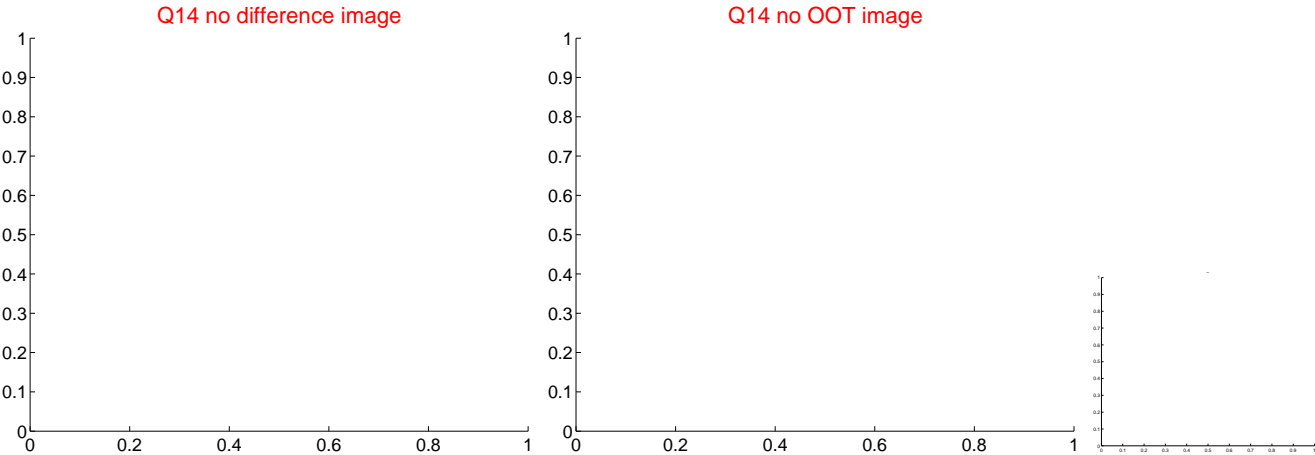
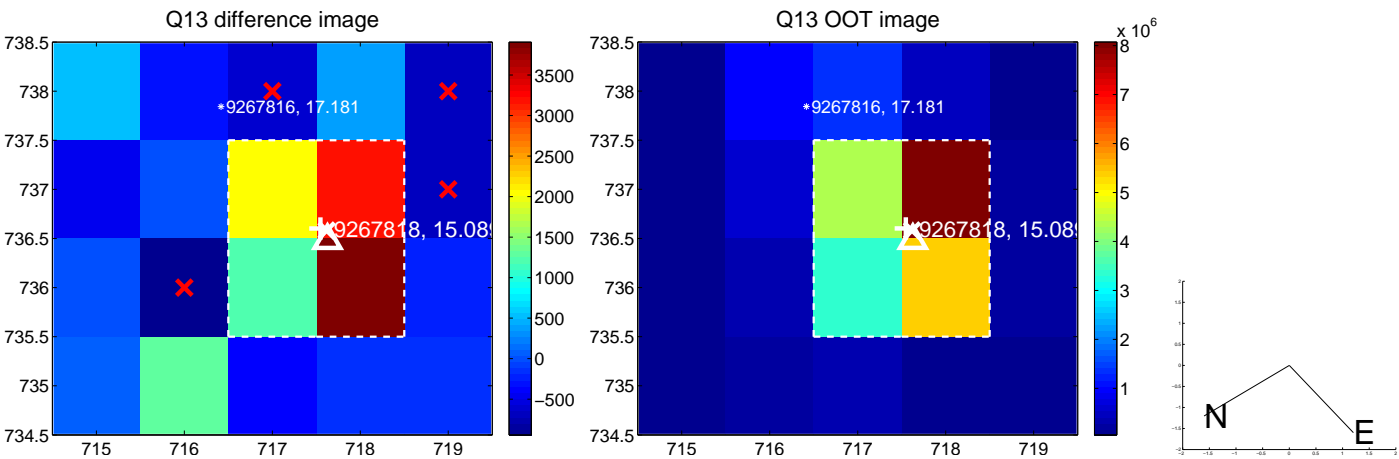
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



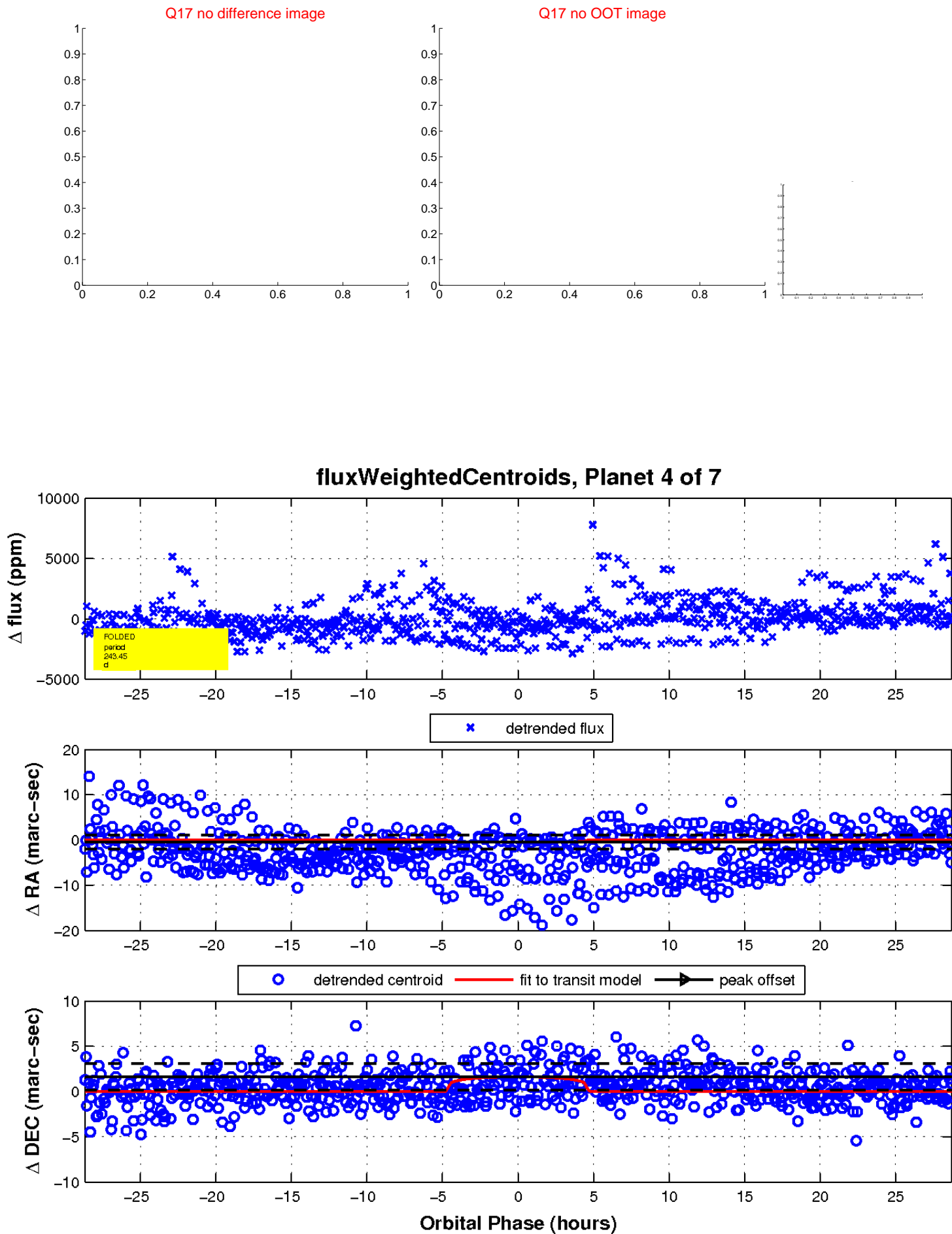
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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

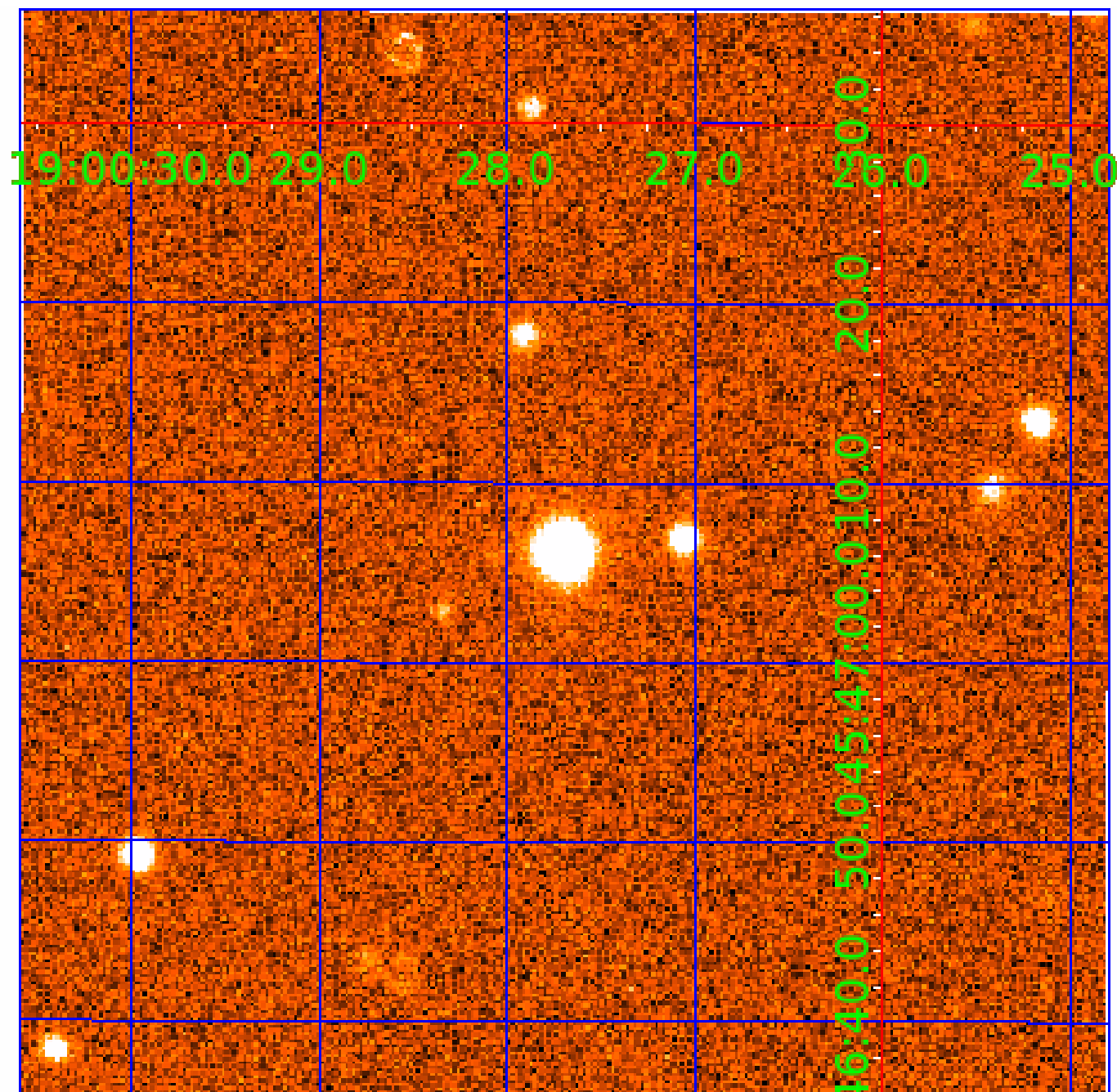


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 009267818

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})
009267818-01	OBS	No	434.390859	453.448300	1642.3	4.375	15.3	7.1	0.37	3573	1.54	0.03
009267818-02	OBS	No	388.020460	347.170497	2304.5	5.732	14.8	7.7	0.37	3573	2.21	0.03
009267818-03	OBS	No	579.588489	236.923743	1510.7	15.490	12.4	6.2	0.37	3573	1.43	0.02
009267818-04	OBS	No	243.451777	216.453219	1065.7	9.574	10.7	7.5	0.37	3573	1.24	0.06
009267818-05	OBS	No	294.637897	325.003858	1737.1	4.098	12.2	8.4	0.37	3573	1.56	0.05
009267818-06	OBS	No	385.653215	286.467603	2179.2	4.819	10.1	10.7	0.37	3573	1.73	0.04
009267818-07	OBS	No	369.084583	335.162070	660.1	12.000	12.3	-1.0	0.37	3573	0.95	0.04

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009267818-01	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—INCONSISTENT_TRANS—CENT_FEW_DIFFS
009267818-02	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
009267818-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
009267818-04	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
009267818-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—CENT_FEW_DIFFS—HALO_GHOST
009267818-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
009267818-07	OBS	FP	0.00	1	0	1	0	LPP_DV—ALL_TRANS_CHASES—CENT_NOFITS—HALO_GHOST

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

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

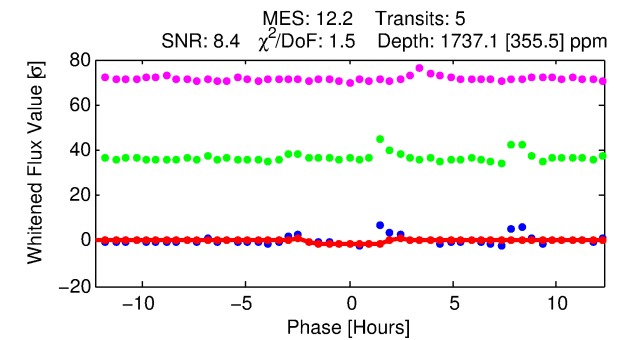
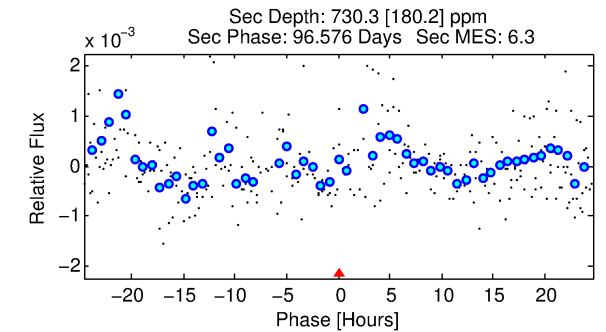
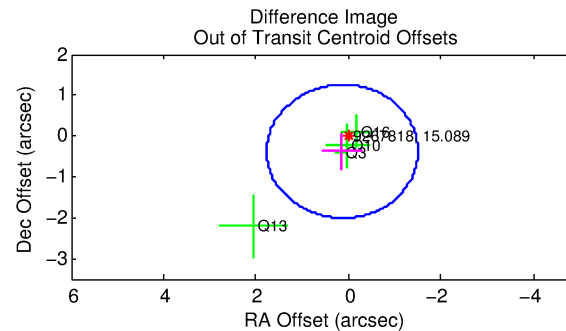
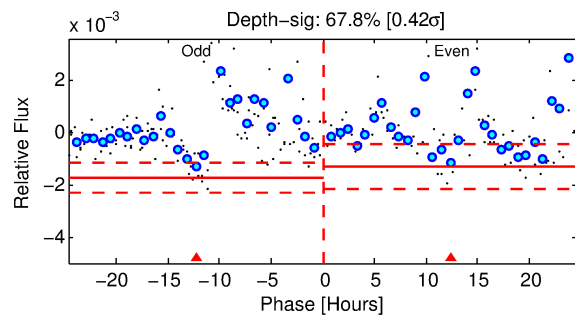
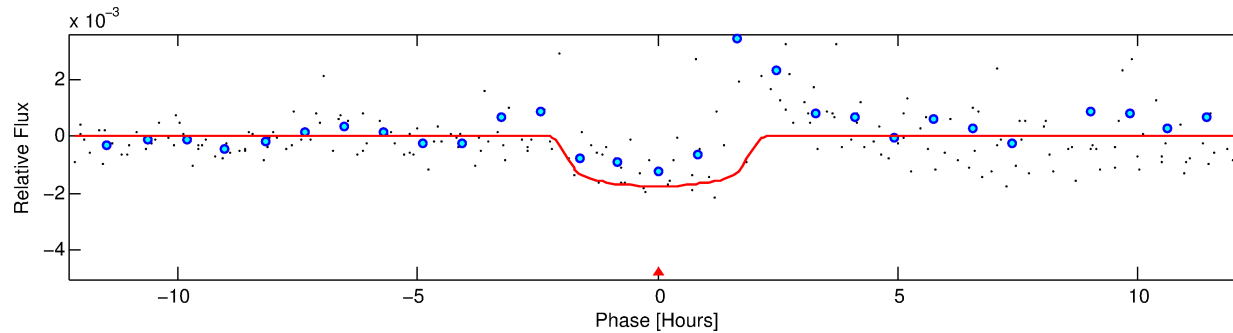
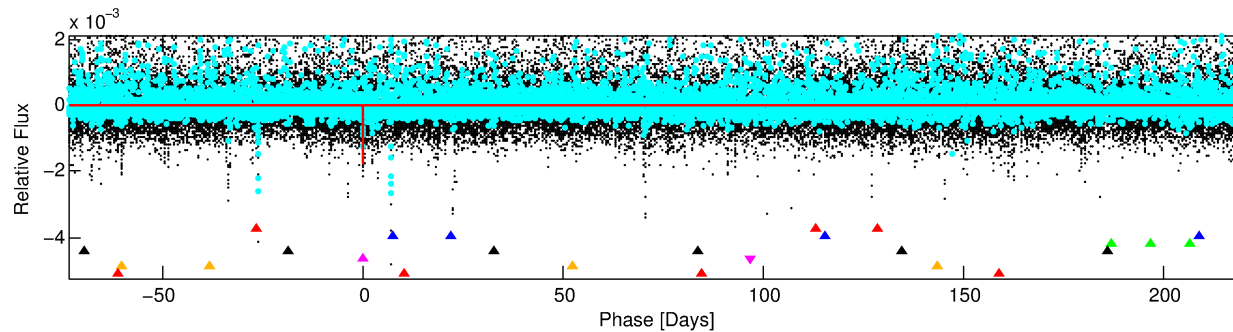
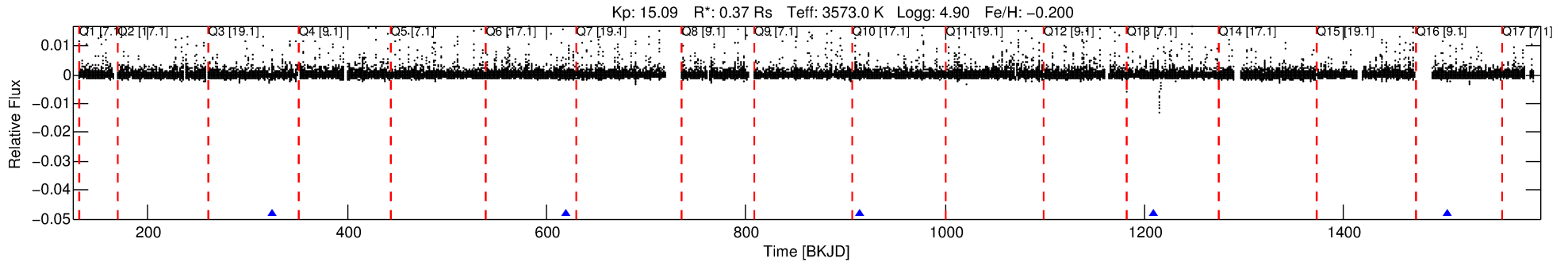
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009267818-05

No Significant Match Found

DV One-Page Summary

KIC: 9267818 Candidate: 5 of 7 Period: 294.638 d



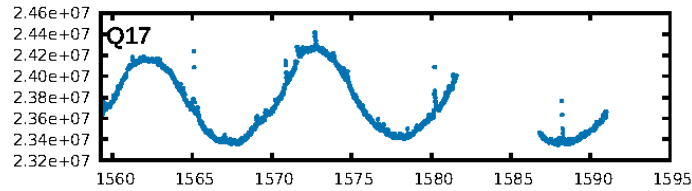
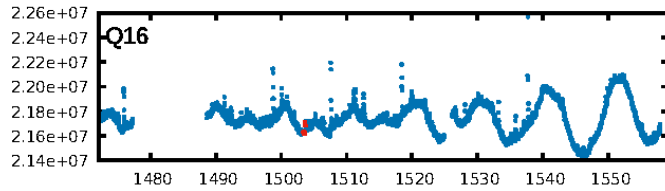
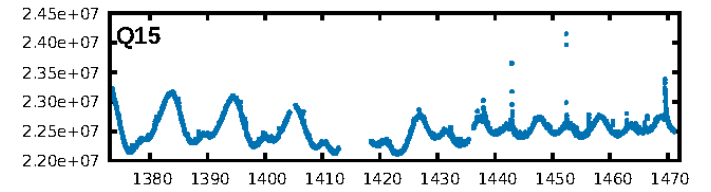
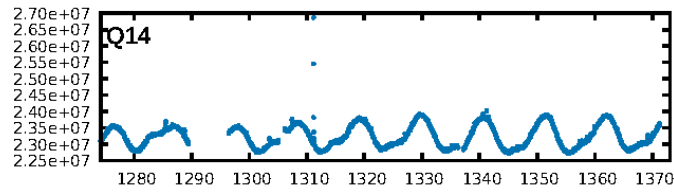
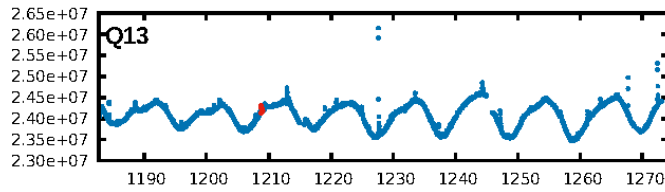
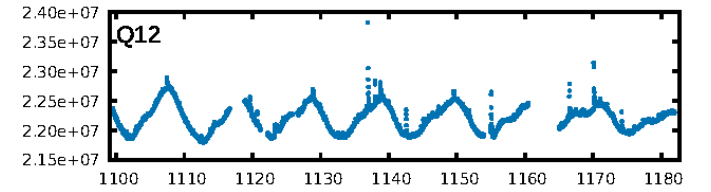
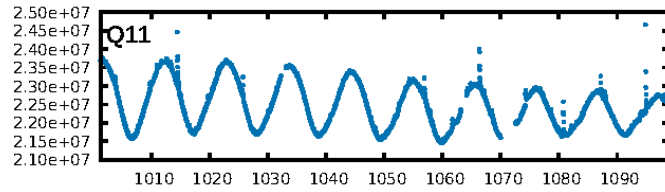
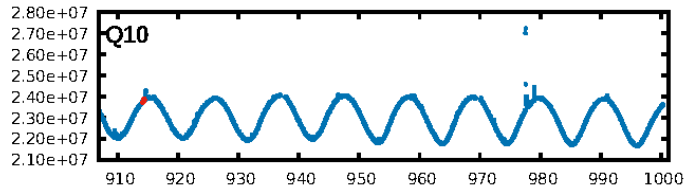
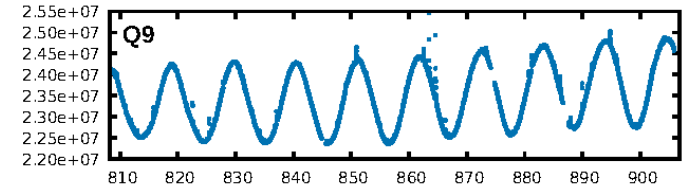
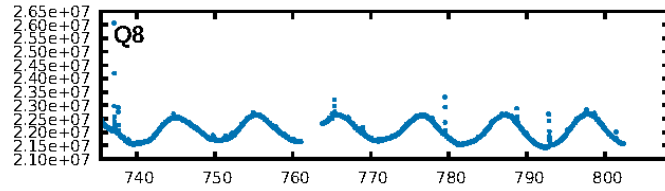
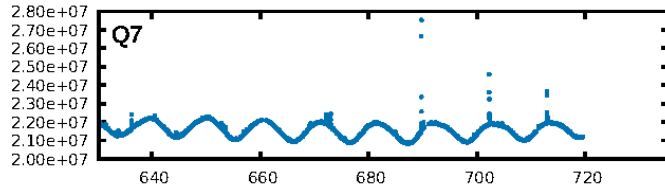
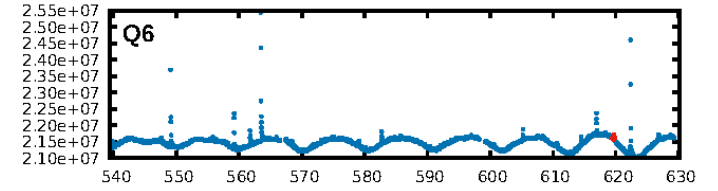
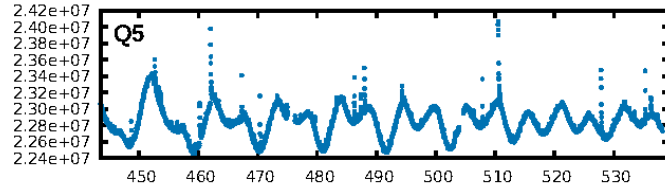
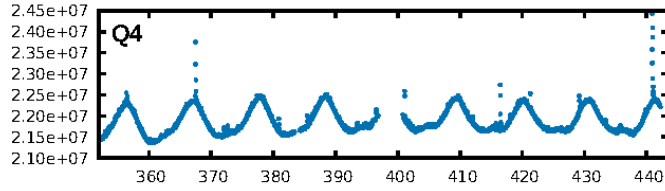
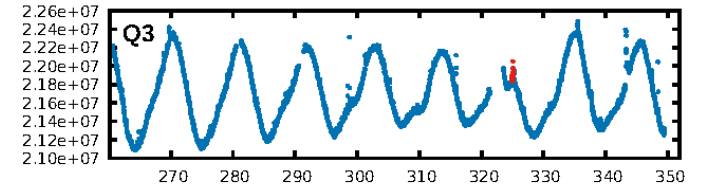
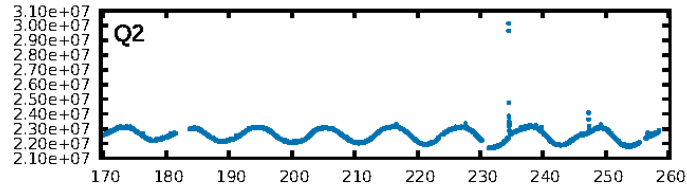
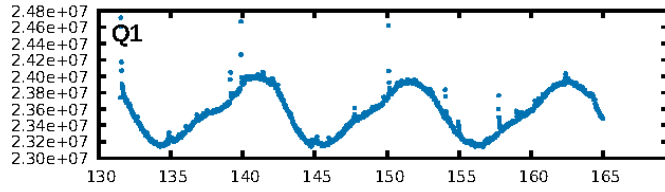
DV Fit Results:

Period = 294.63790 [0.00391] d
Epoch = 325.0039 [0.0107] BKJD
Rp/R* = 0.0384 [0.0313]
a/R* = 536.10 [1955.89]
b = 0.35 [8.99]
Seff = 0.05 [0.00]
Teq = 120 [3] K
Rp = 1.56 [1.28] Re
a = 0.6372 [0.0422] AU
Ag = 67002.50 [110668.44] [0.61 σ]
Teffp = 2996 [1236] K [2.33 σ]

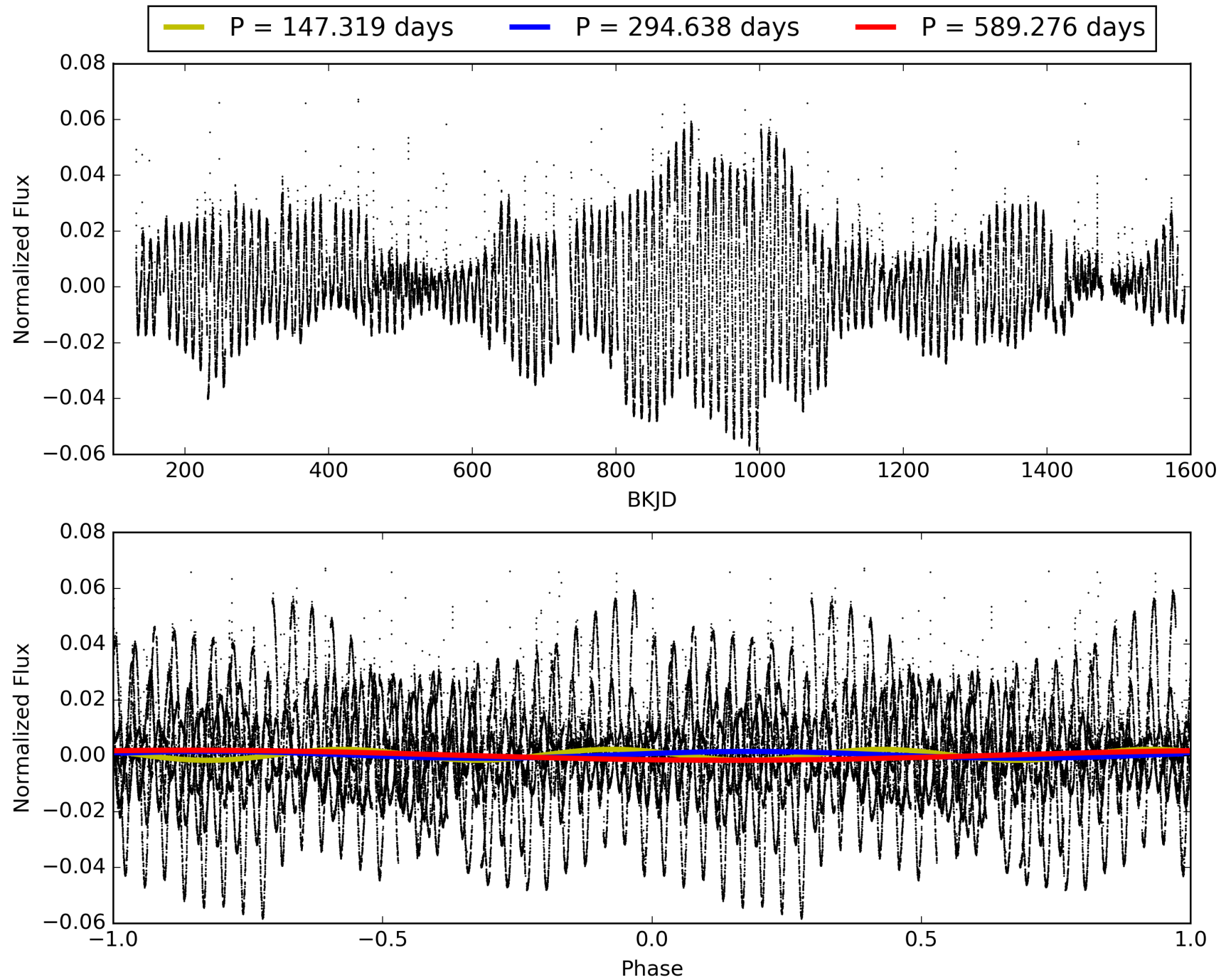
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [117.96 σ]
LongPeriod-sig: 100.0% [140.90 σ]
ModelChiSquare2-sig: 70.5%
ModelChiSquareGof-sig: 67.5%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: 0.08105
Centroid-sig: 77.3%
Centroid-so: 0.317 arcsec [0.44 σ]
OotOffset-rm: 0.401 arcsec [0.74 σ]
KicOffset-rm: 0.141 arcsec [0.33 σ]
OotOffset-st: 1/1/1/1 [4]
KicOffset-st: 1/1/1/1 [4]
DiffImageQuality-fgm: 0.25 [1/4]
DiffImageOverlap-fno: 1.00 [5/5]

TCE 009267818-05, PDC Light Curves

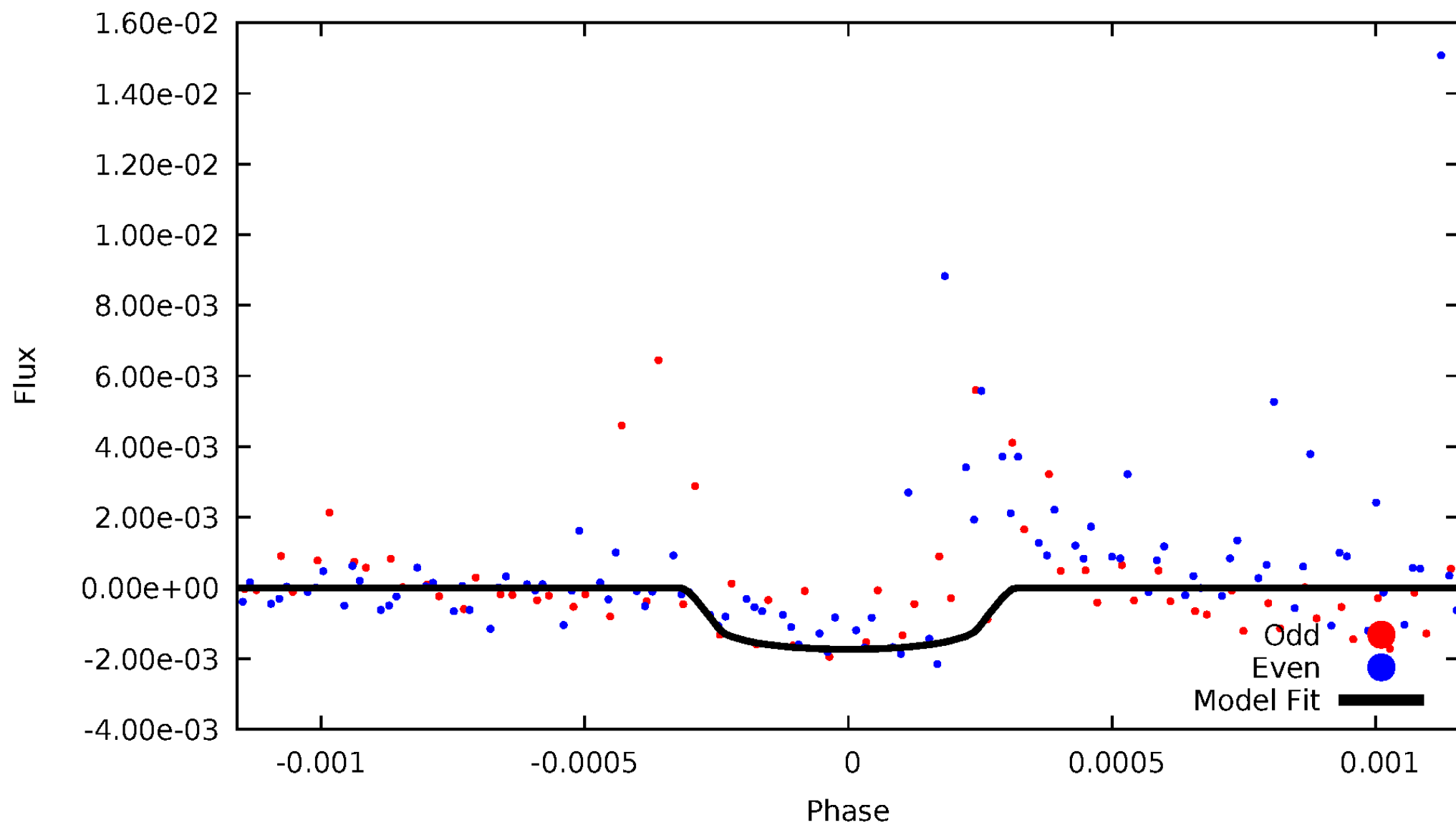


TCE 009267818-05



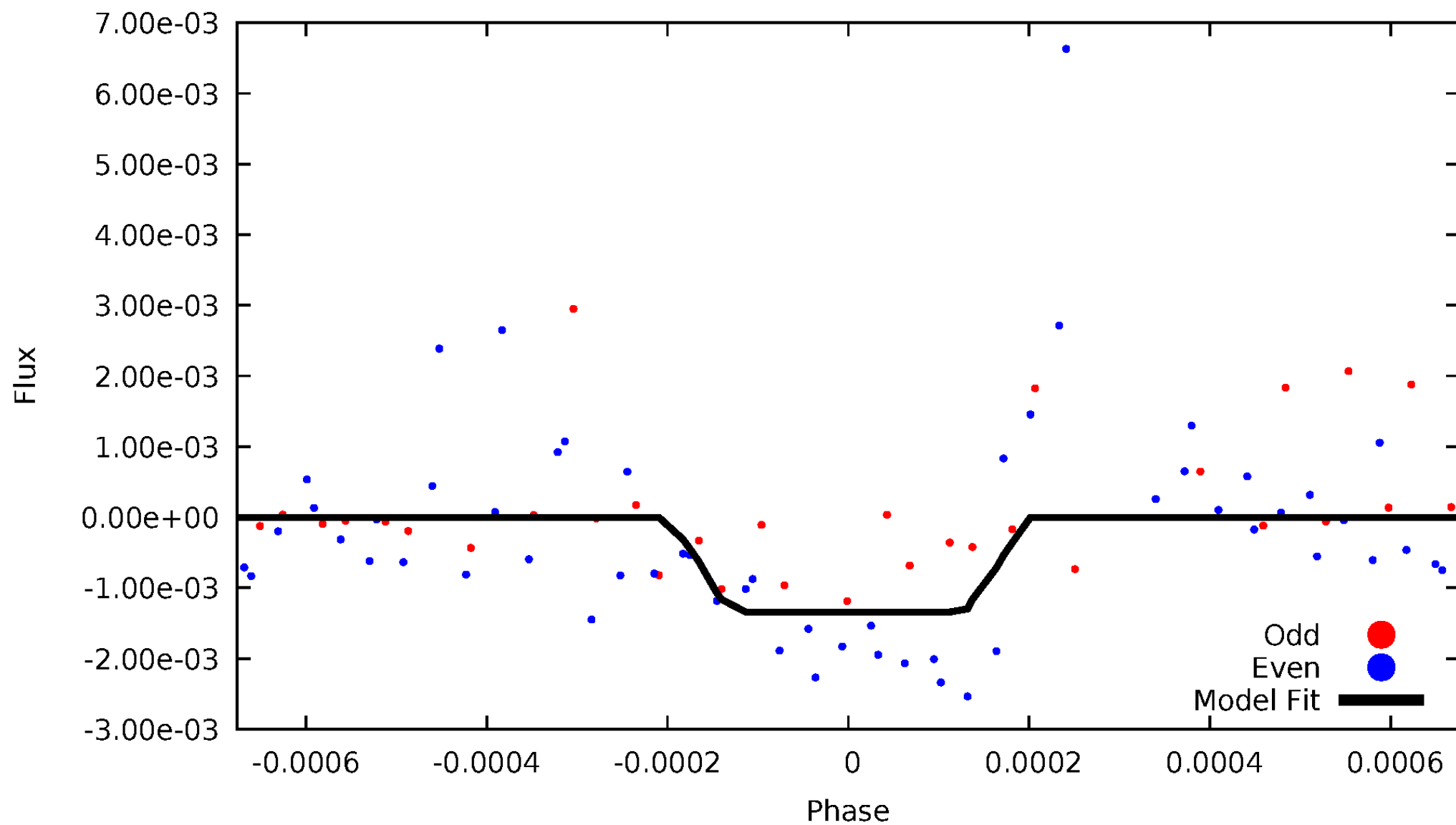
DV Odd/Even

TCE 009267818-05



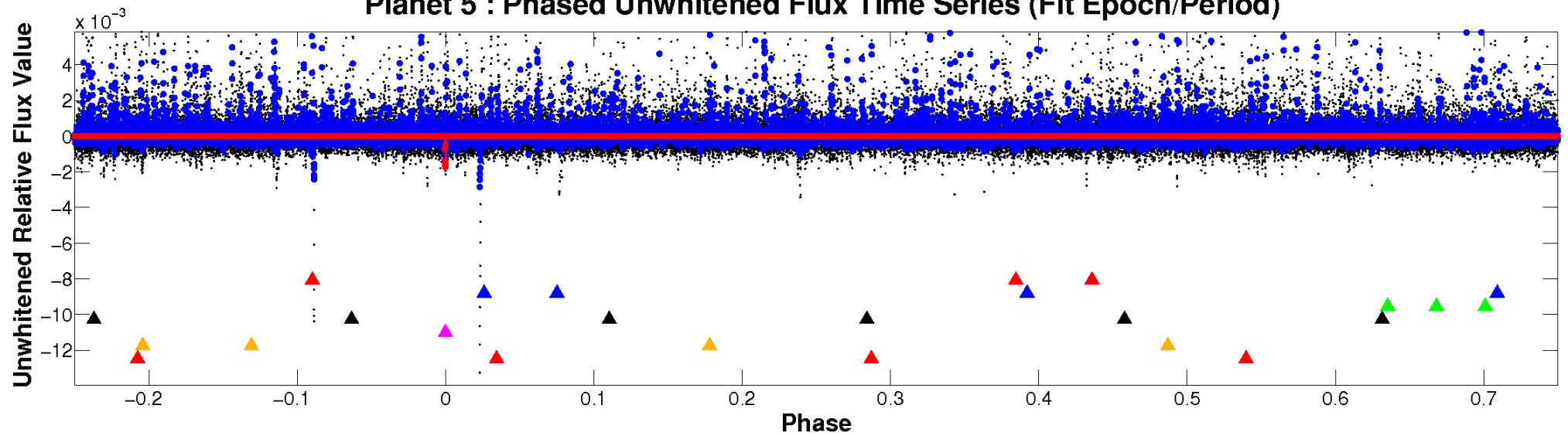
ALT Odd/Even

TCE 009267818-05

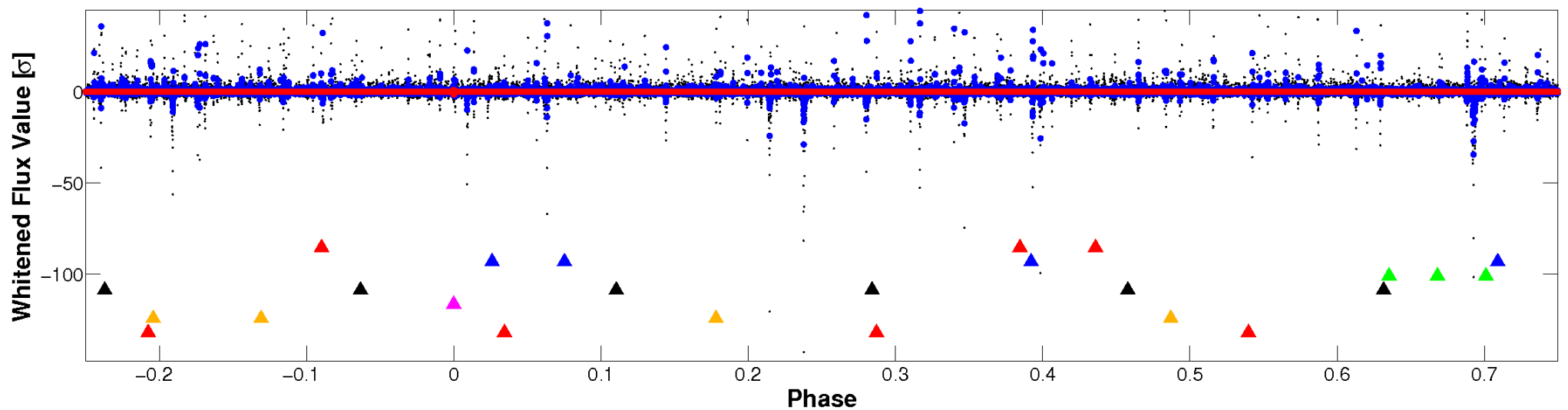


Non-Whitened Vs. Whitened Light Curve

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

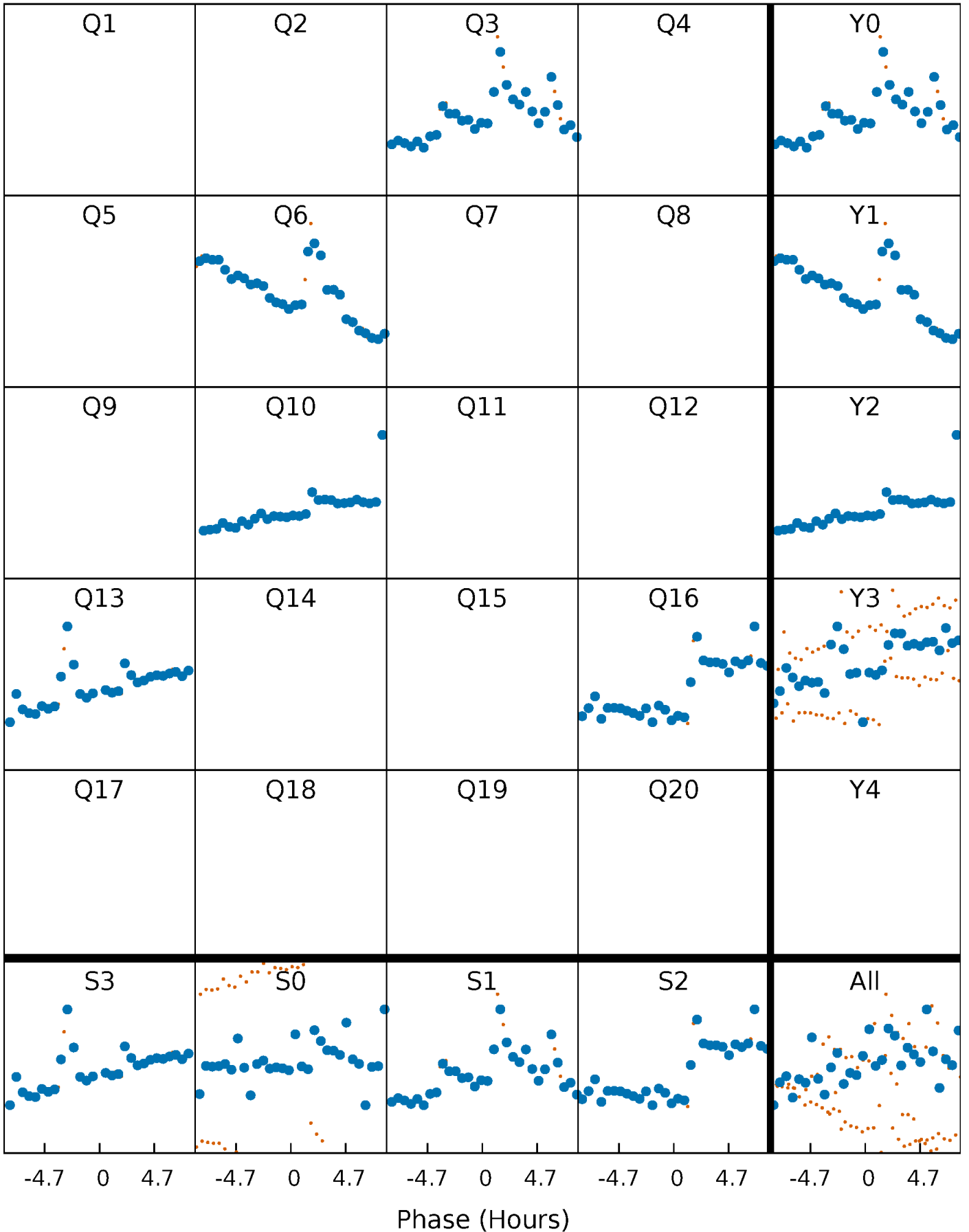


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



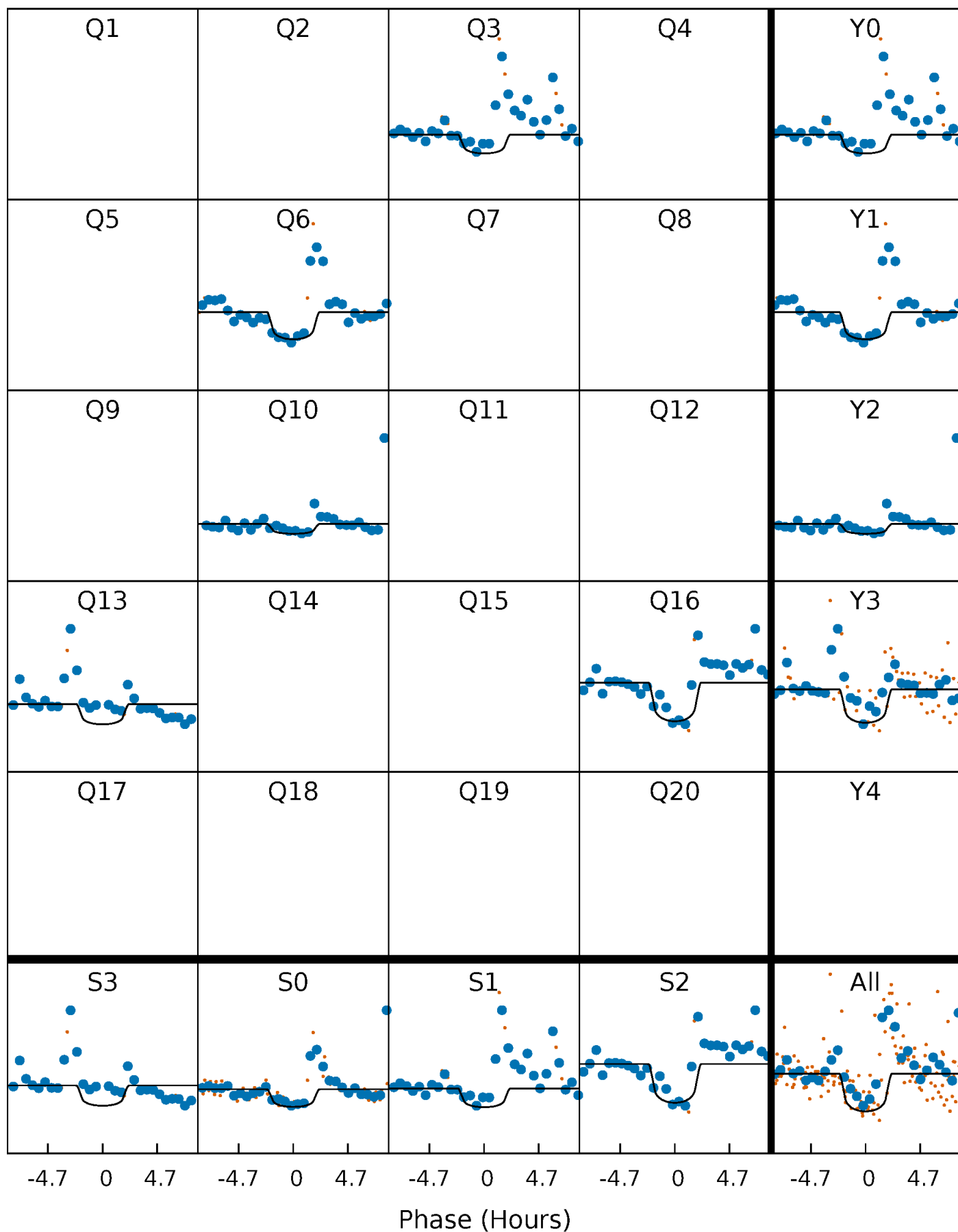
PDC Quarter-Phased Transit Curves

TCE 009267818-05 $P=294.637897$ Days $T_0=325.003858$ (BKJD)



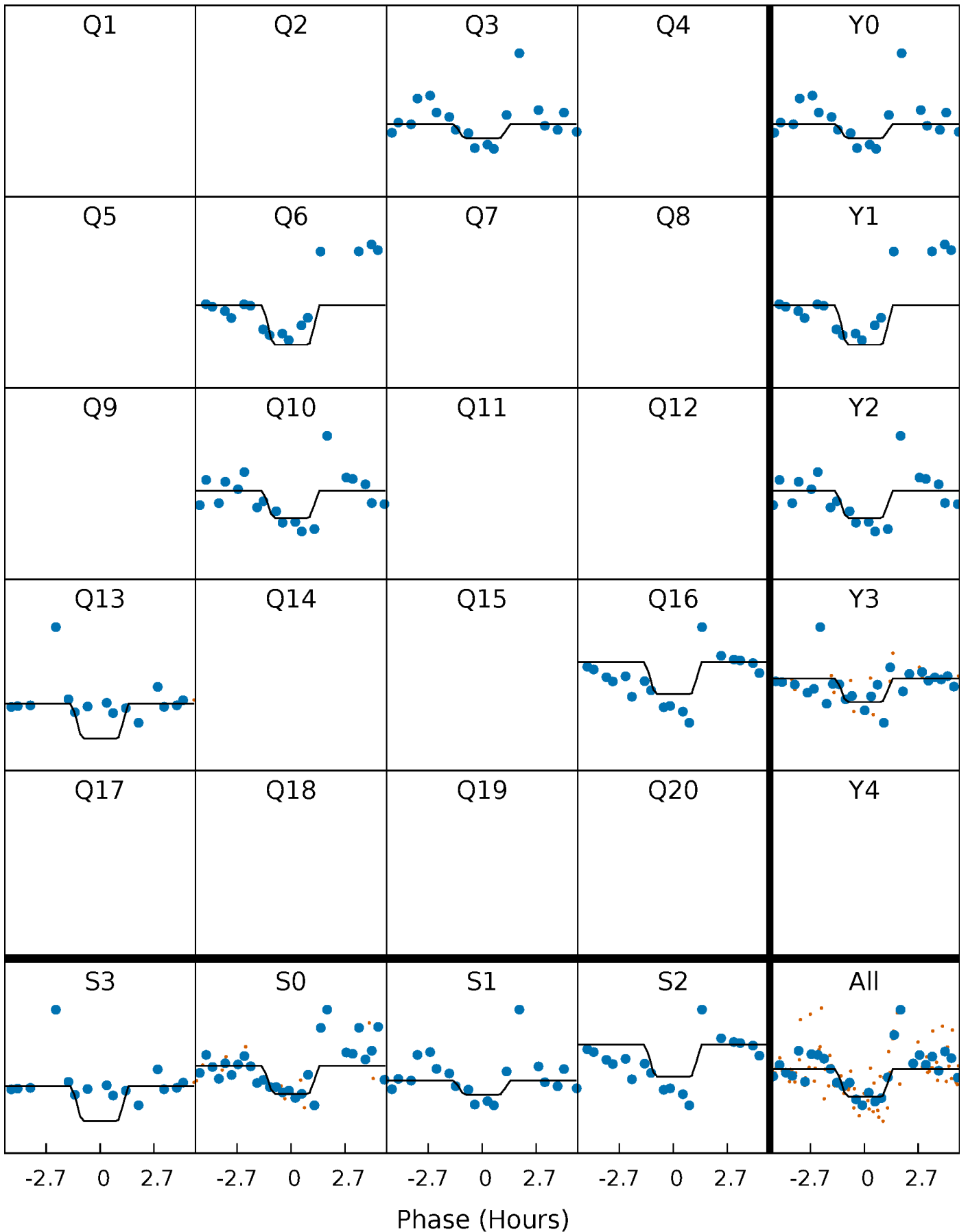
DV Quarter-Phased Transit Curves

TCE 009267818-05 $P=294.637897$ Days $T_0=325.003858$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

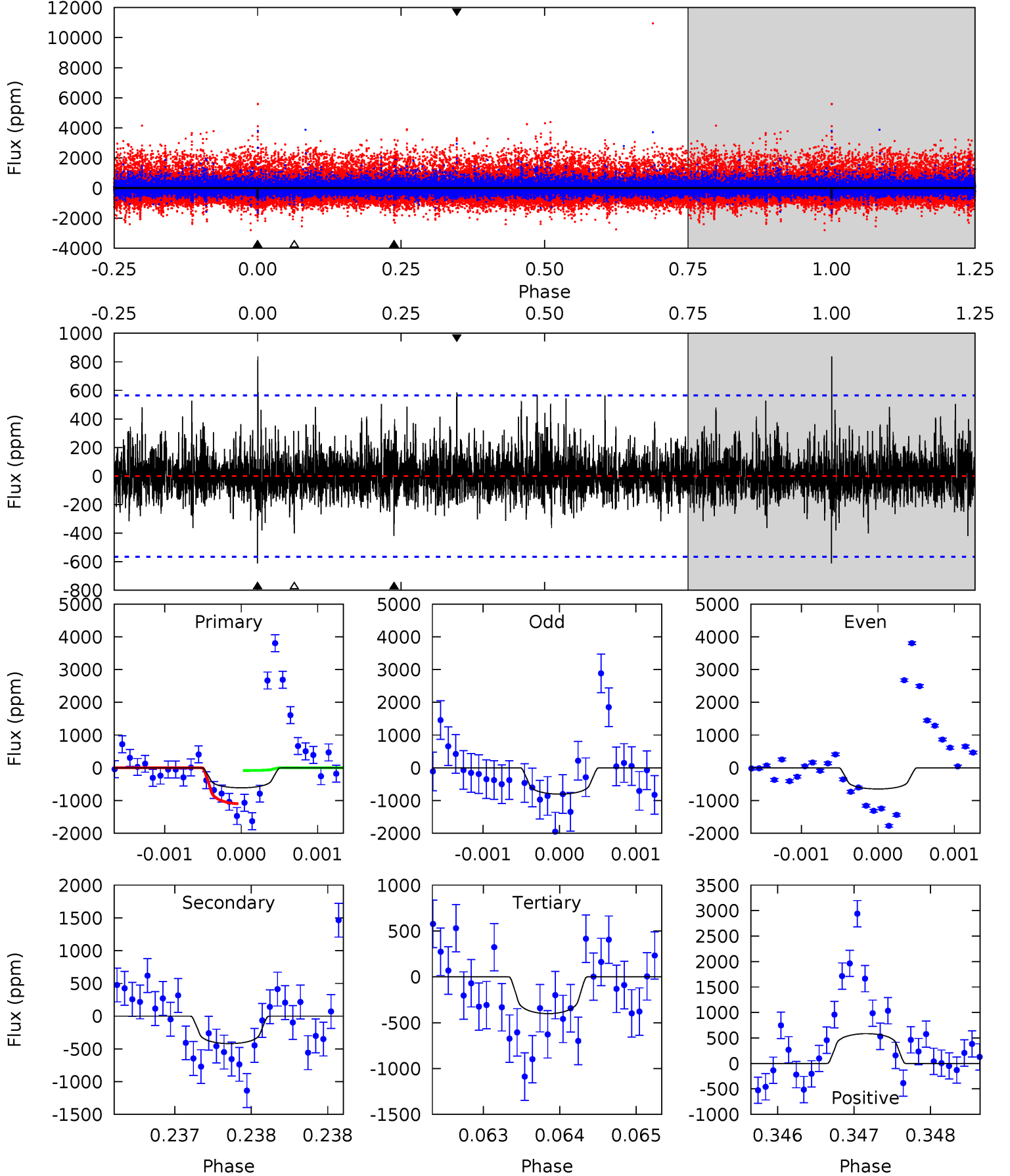
TCE 009267818-05 $P=294.644897$ Days $T_0=324.986773$ (BKJD)



DV Model-Shift Uniqueness Test

009267818-05, P = 294.637897 Days, E = 30.365961 Days

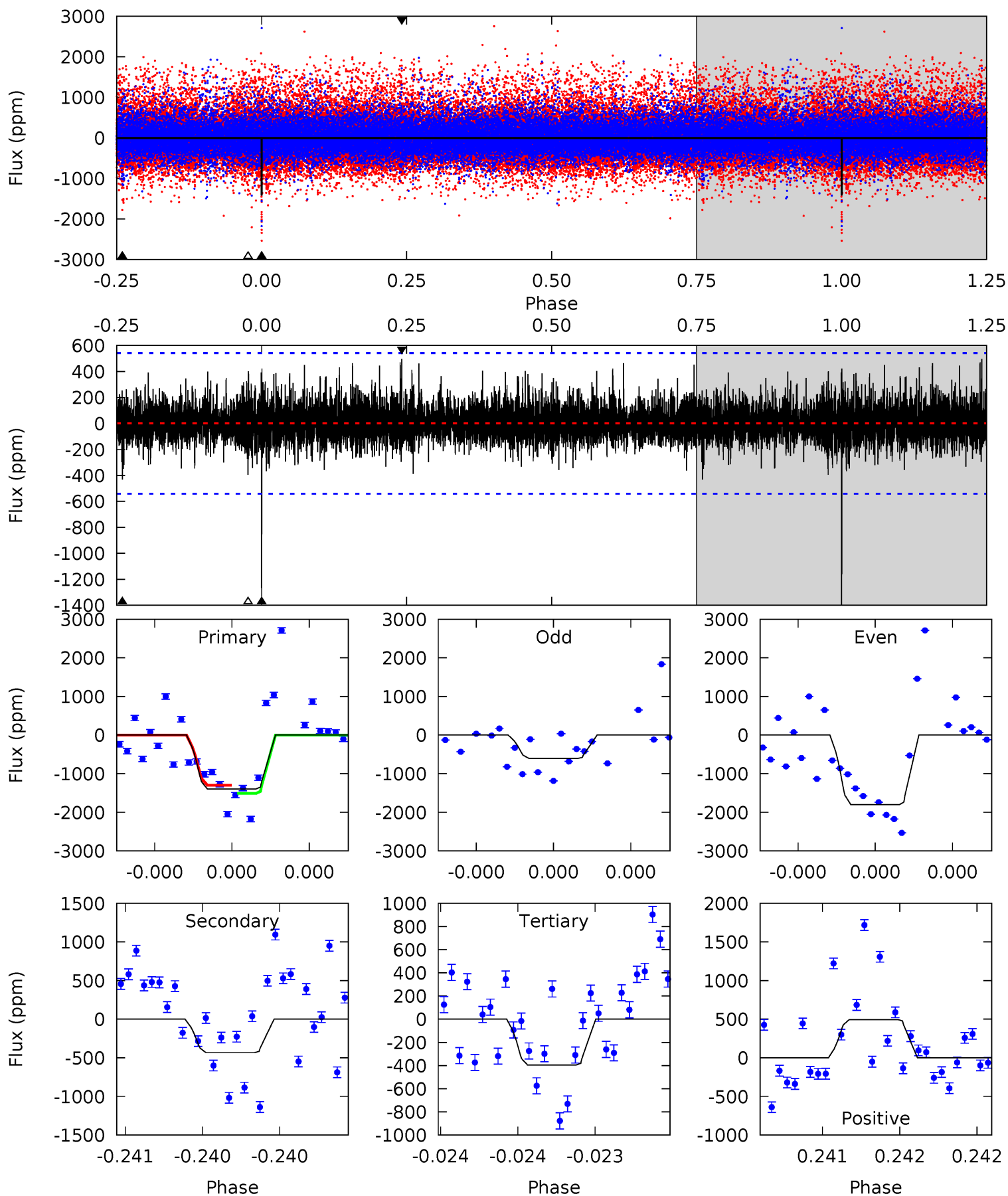
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.98	4.10	3.93	5.72	5.53	3.42	1.16	2.05	0.26	0.18	-1.62	0.45	0.41	0.58	4.99



Alt Model-Shift Uniqueness Test

009267818-05, $P = 294.644897$ Days, $E = 30.341876$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.5	4.50	4.11	5.15	5.63	3.57	1.10	10.4	9.36	0.39	-0.65	5.71	0.77	0.26	1.11



Stellar Parameters For KIC 009267818

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	3573^{+42}_{-48}	$4.896^{+0.028}_{-0.039}$	$-0.200^{+0.100}_{-0.100}$	$0.372^{+0.033}_{-0.030}$	$0.398^{+0.028}_{-0.042}$	$10.920^{+1.827}_{-1.723}$
	+1%/-1%	+1%/-1%	+50%/-50%	+9%/-8%	+7%/-11%	+17%/-16%
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 009267818-05 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-419 ± 102	$1.76^{+1.14}_{-1.00}$	169^{+3}_{-3}	2871^{+822}_{-358}	$30453^{+126805}_{-19781}$
Alt.	-432 ± 96	$1.59^{+1.27}_{-0.94}$	168^{+3}_{-3}	2939^{+972}_{-419}	$36675^{+194229}_{-25453}$

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 $A_{obs} \gg 1.0$

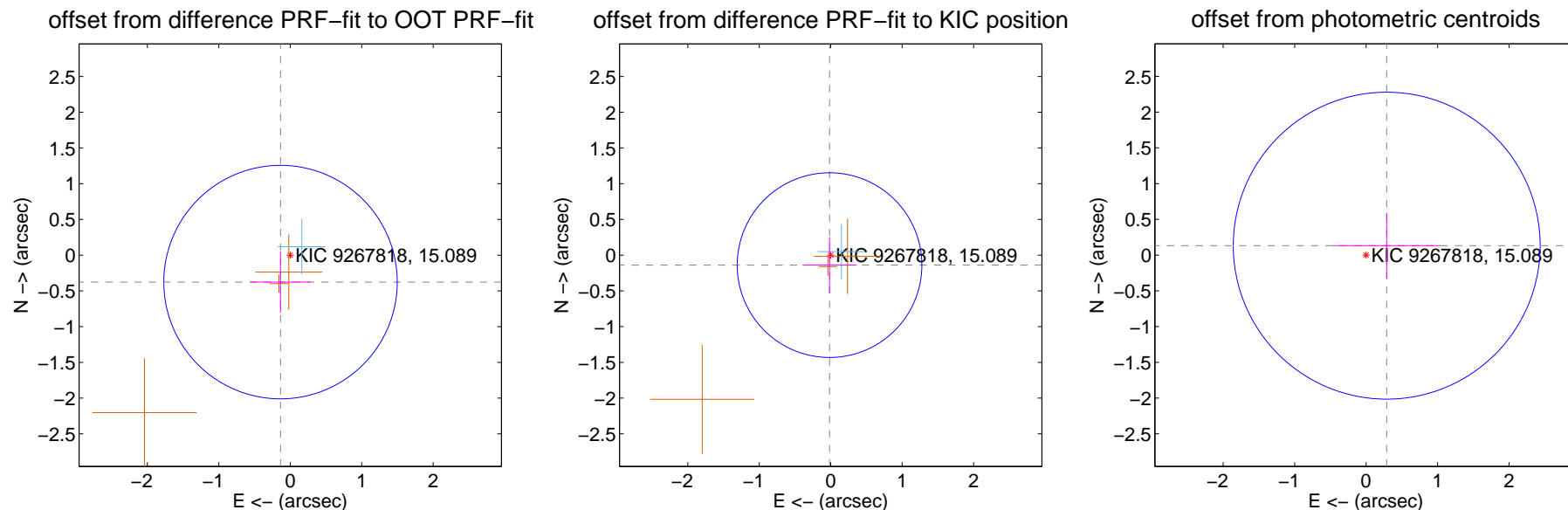
DV Centroid Data

Supplemental centroid analysis for 009267818-05. Kepler magnitude: 15.09. Transit SNR 8.39

There are 1 quarters with good PRF difference image offsets

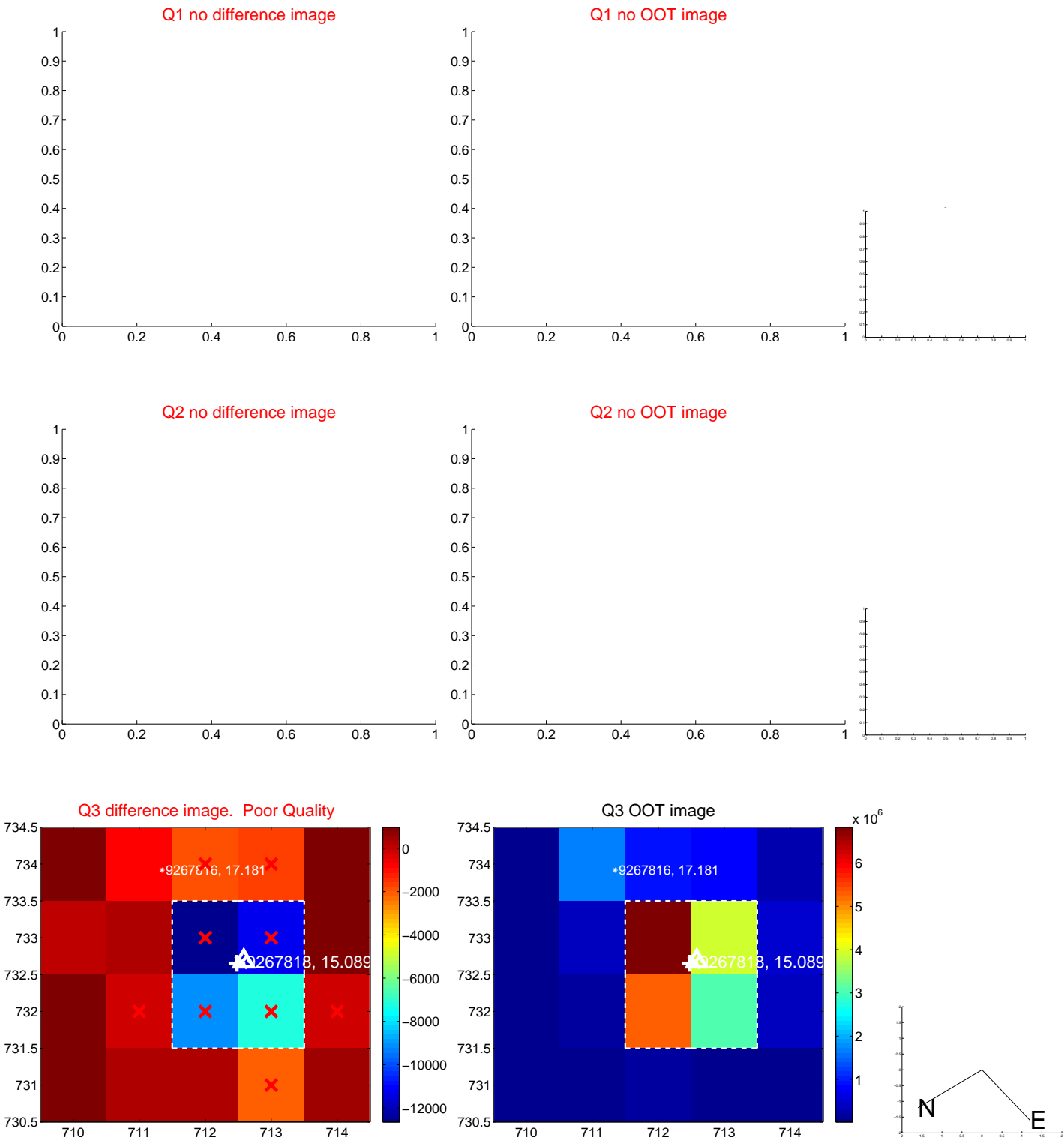
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.401 ± 0.544	0.74	0.136 ± 0.422	-0.377 ± 0.430
PRF-fit source offset from KIC position	0.141 ± 0.431	0.33	0.016 ± 0.378	-0.140 ± 0.391
photometric centroid source offset	0.32 ± 0.72	0.44	-0.29 ± 0.76	0.13 ± 0.46

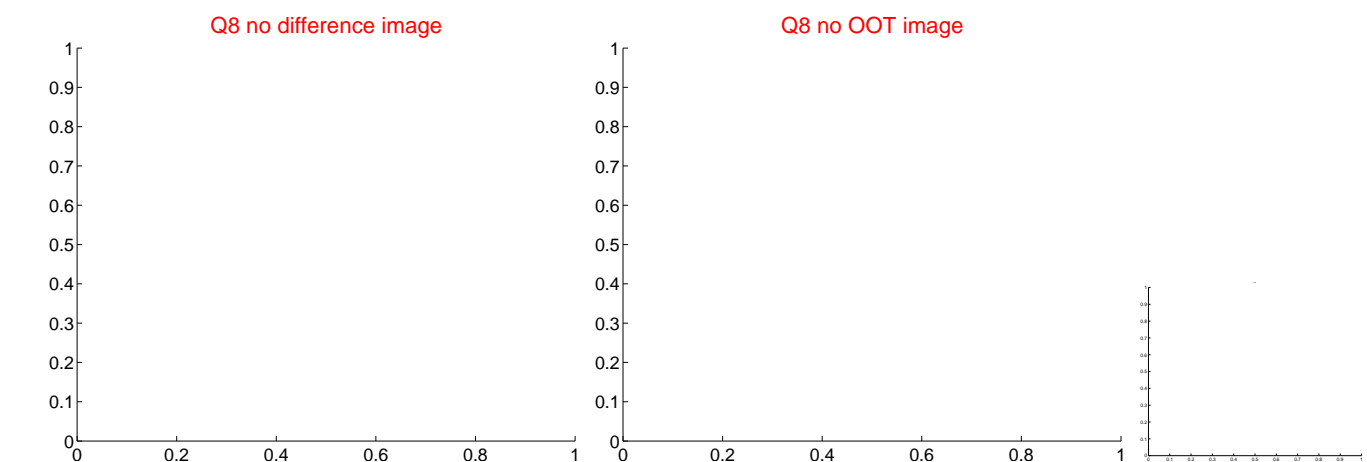
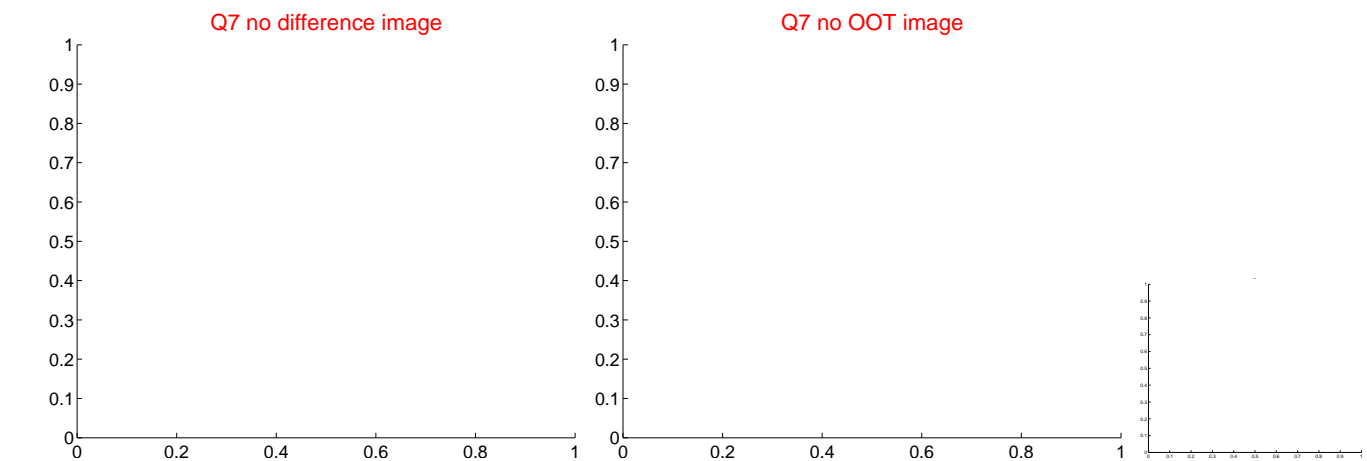
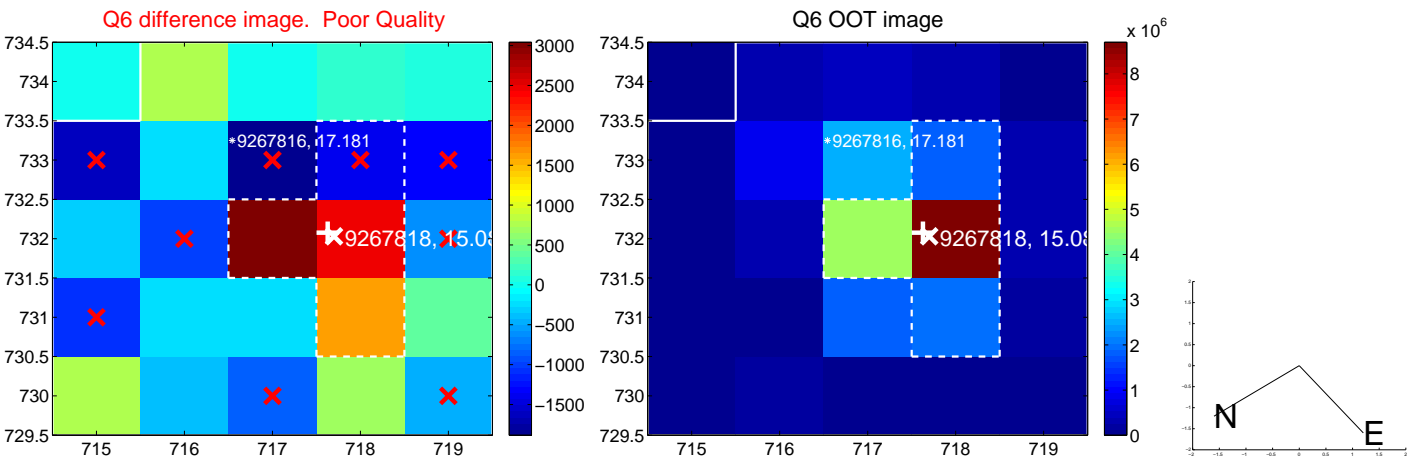
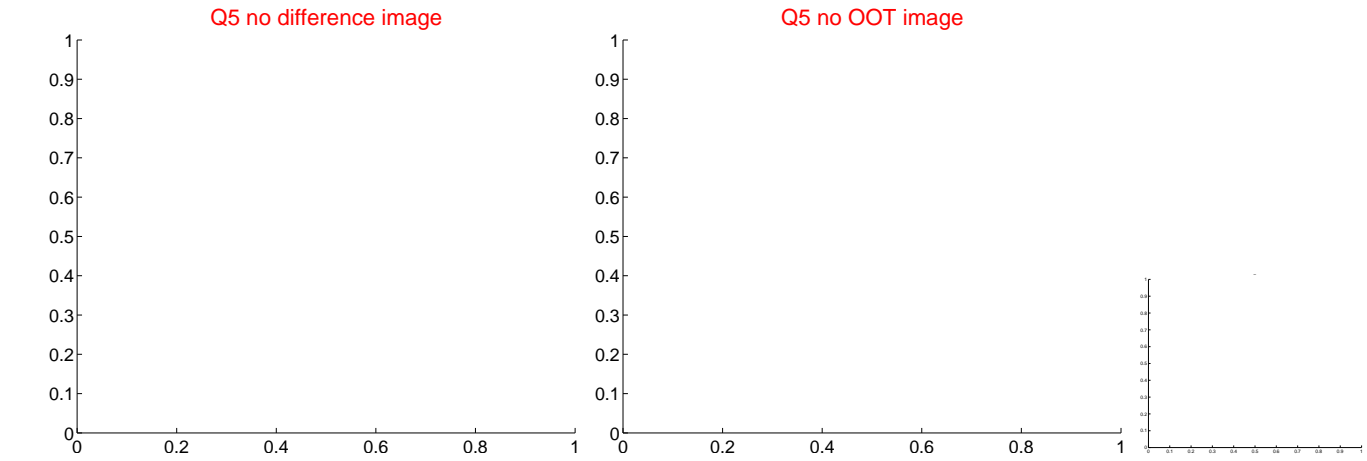


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

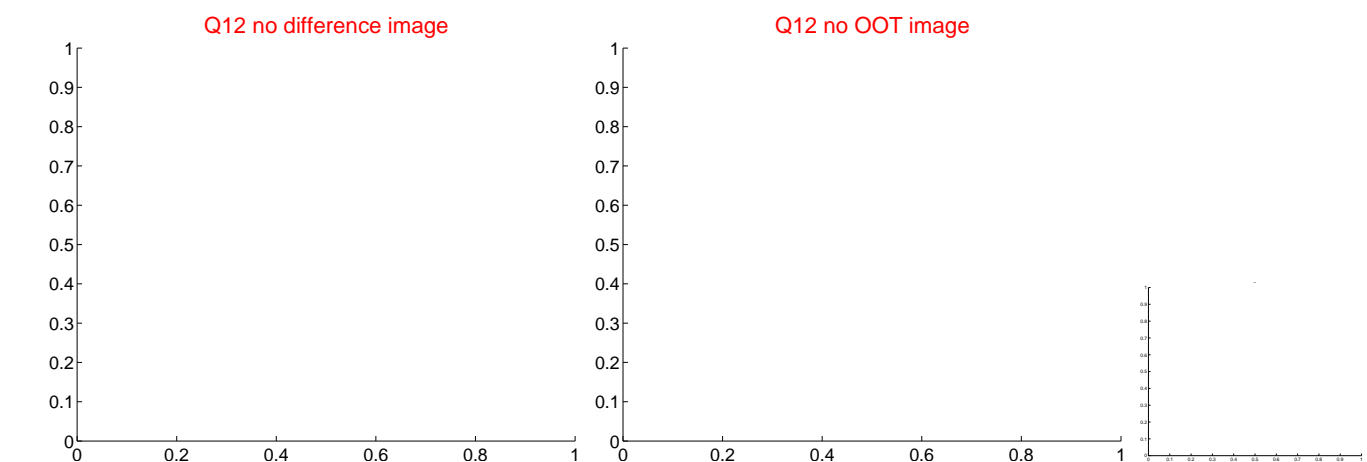
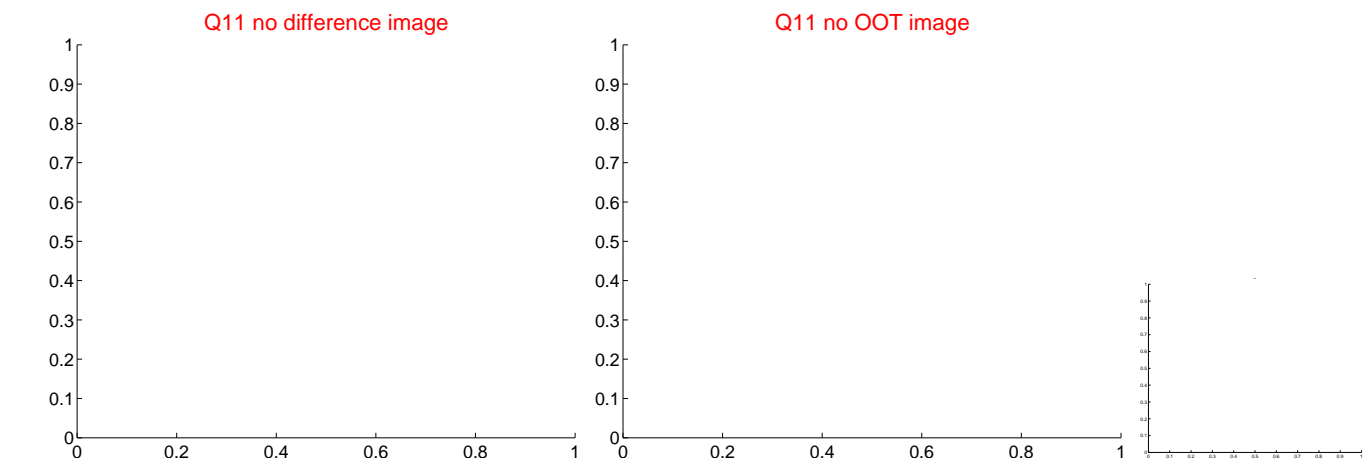
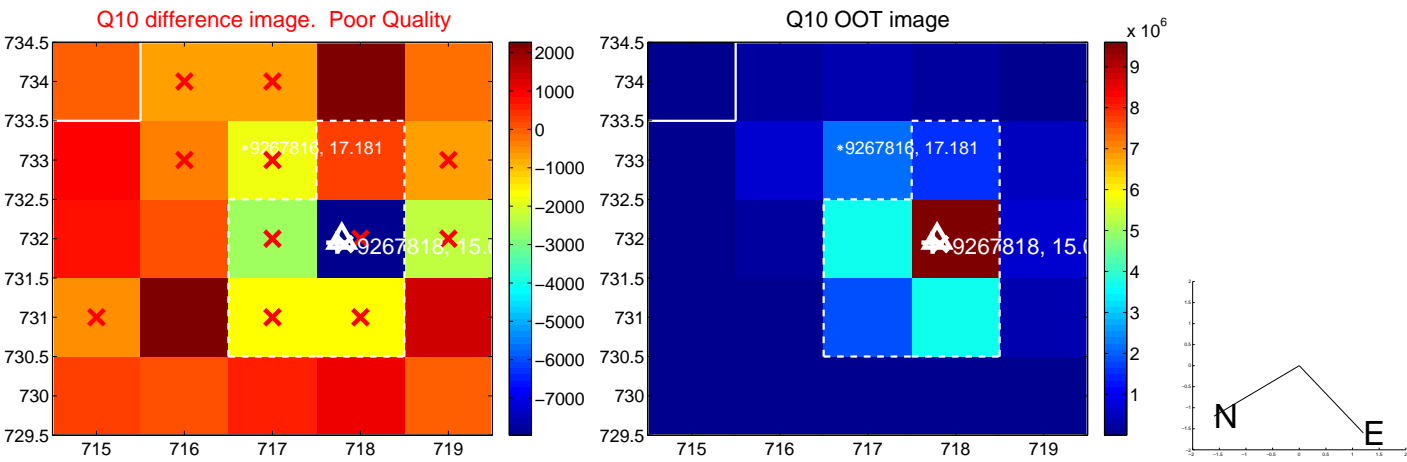
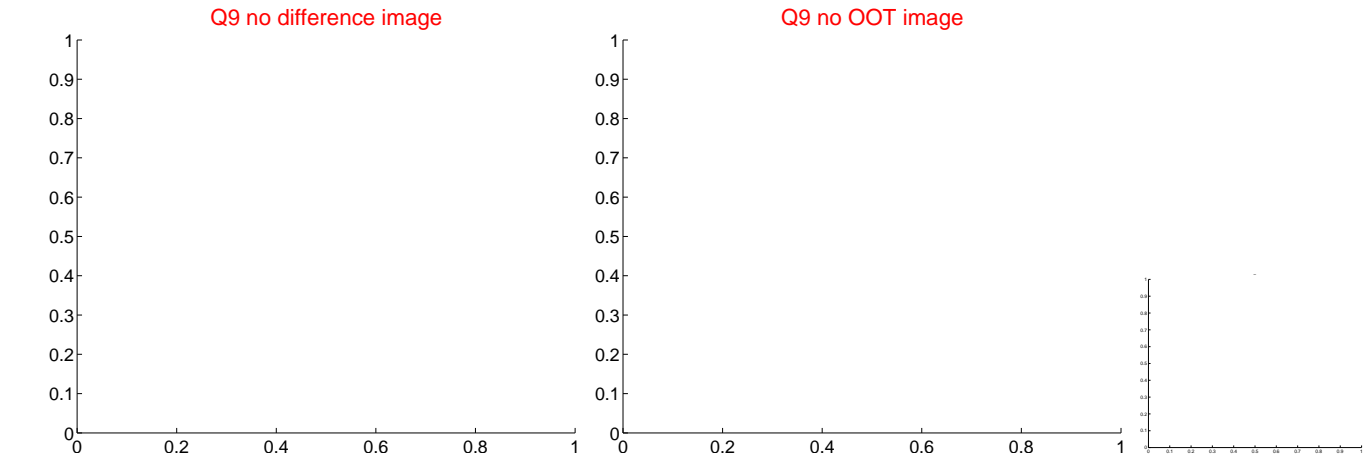
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



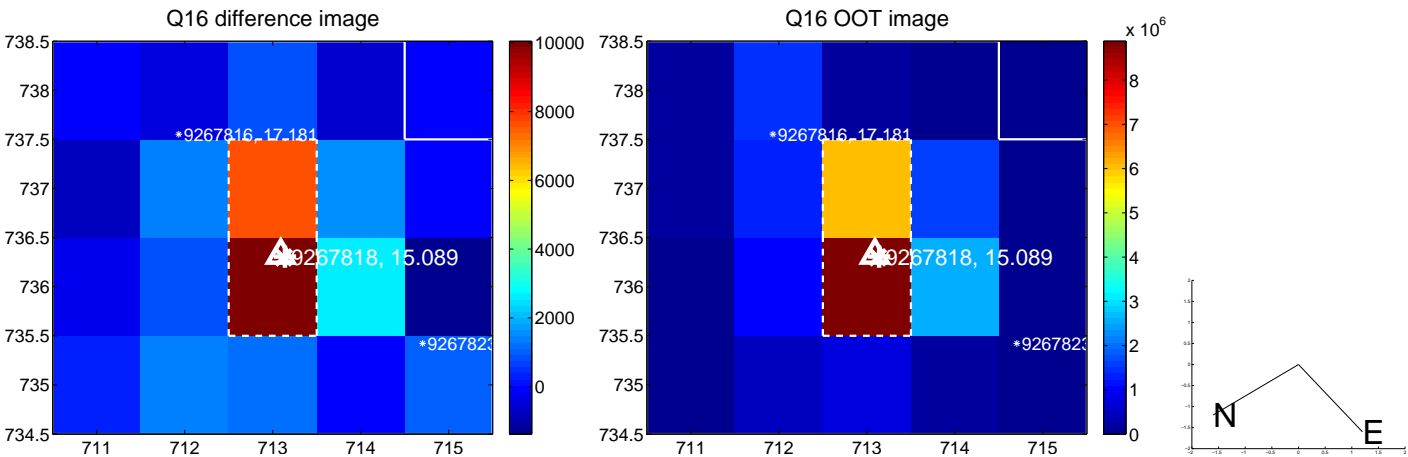
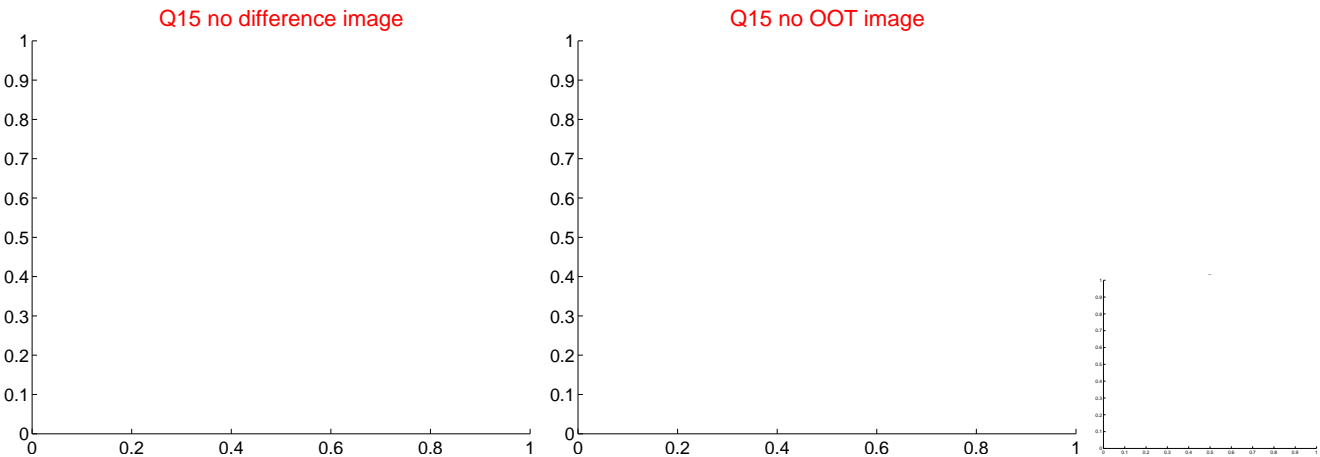
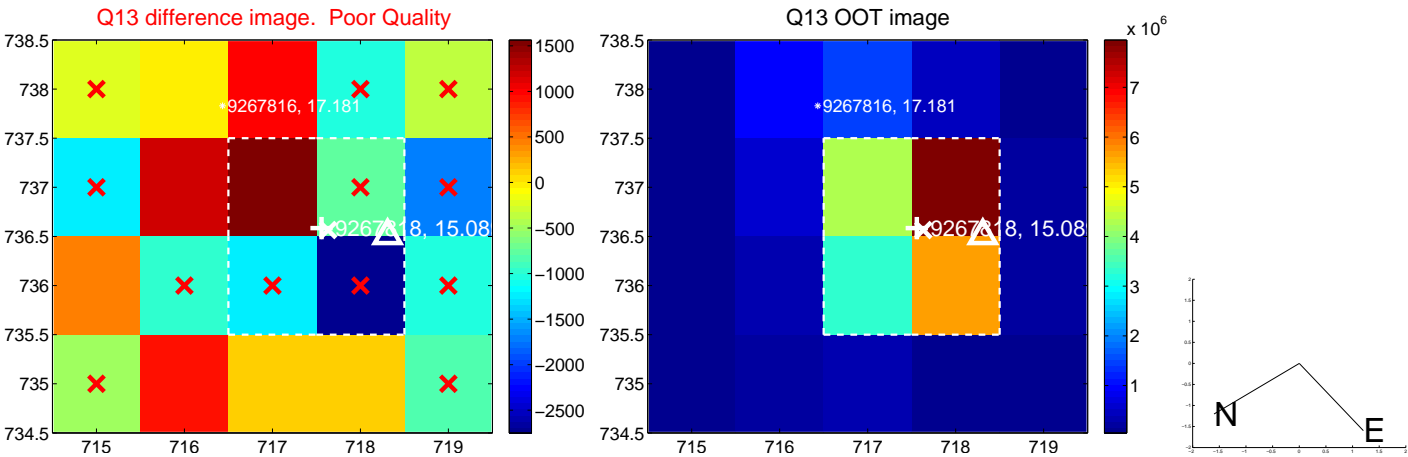
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



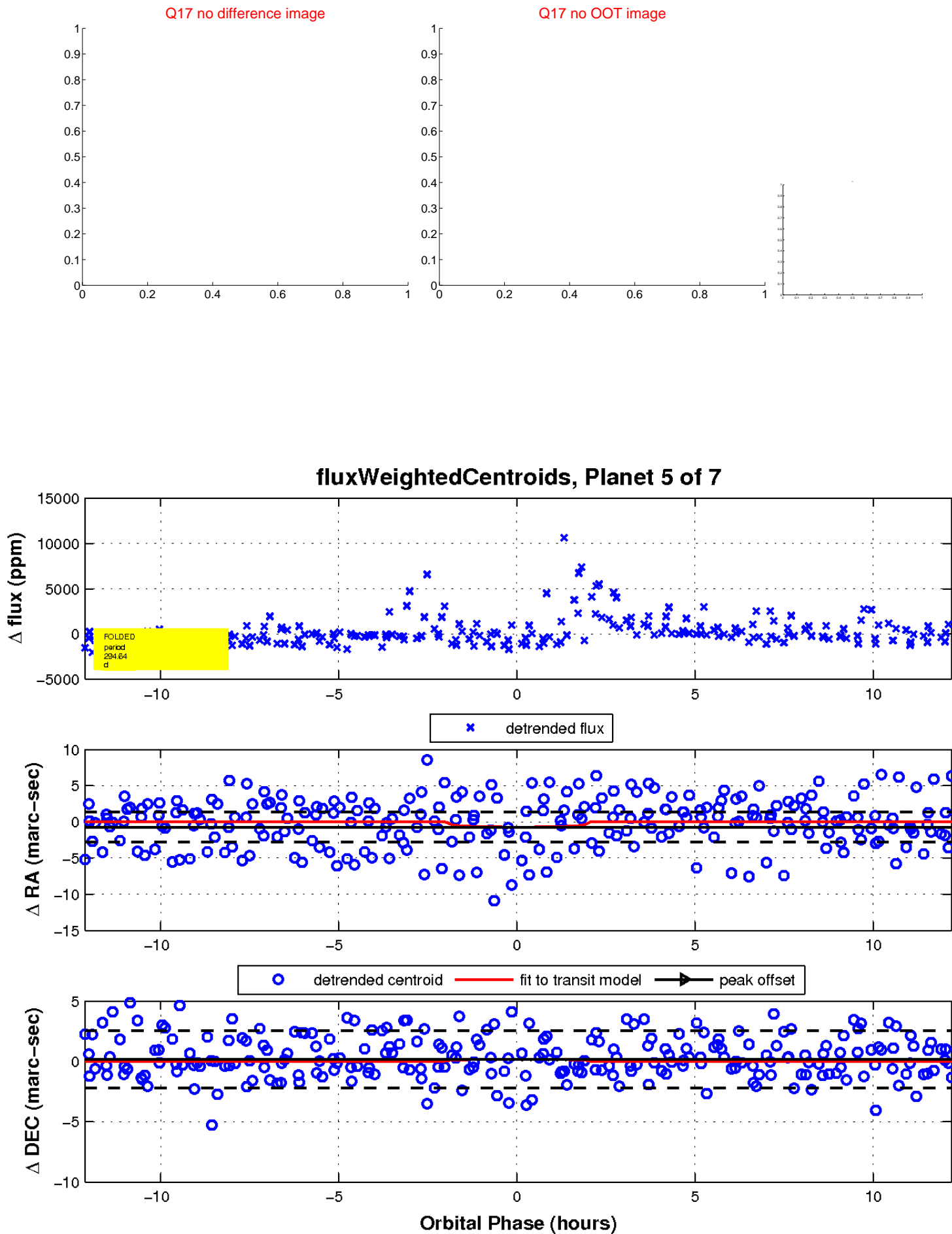
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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

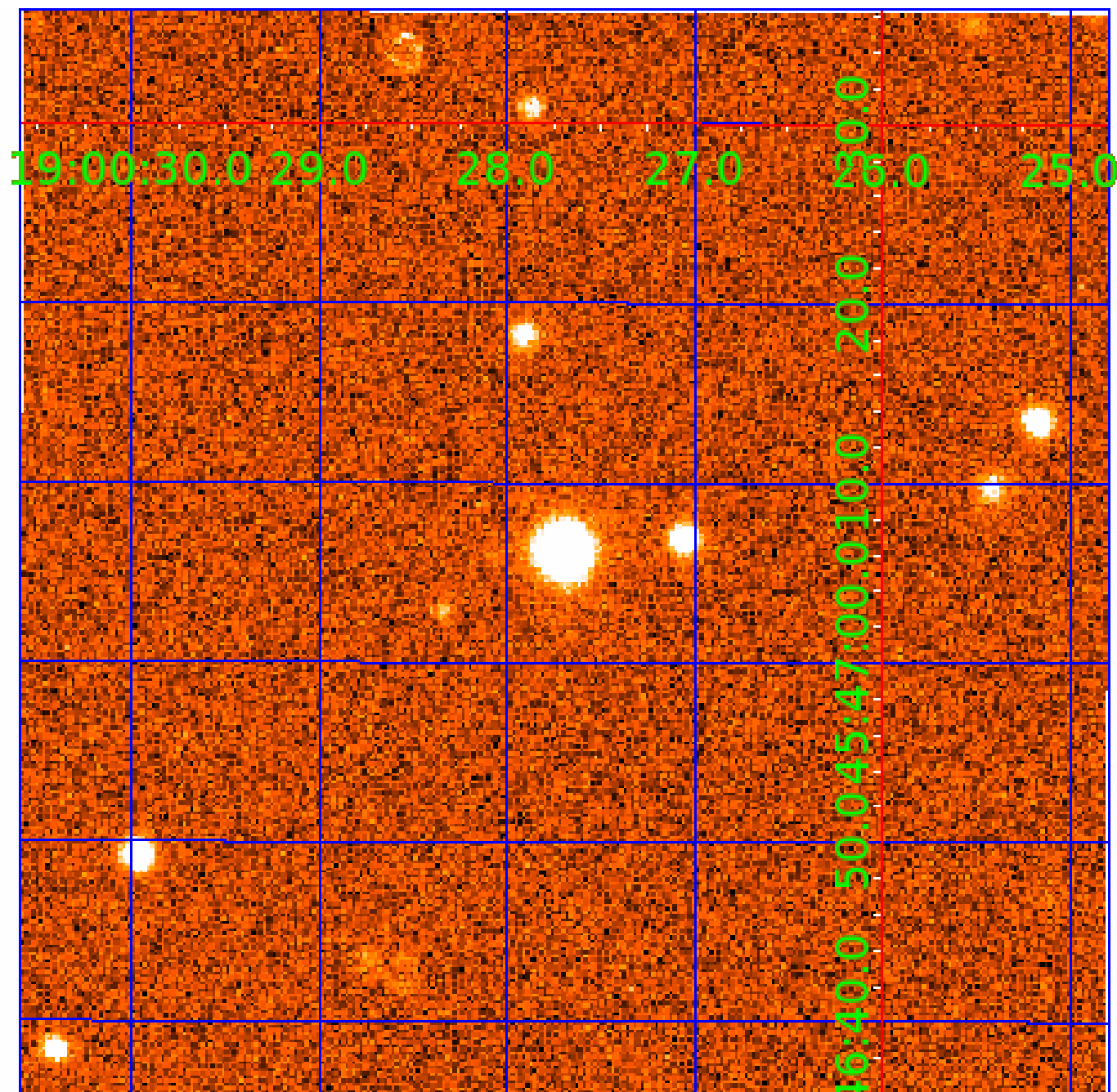


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 009267818

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})
009267818-01	OBS	No	434.390859	453.448300	1642.3	4.375	15.3	7.1	0.37	3573	1.54	0.03
009267818-02	OBS	No	388.020460	347.170497	2304.5	5.732	14.8	7.7	0.37	3573	2.21	0.03
009267818-03	OBS	No	579.588489	236.923743	1510.7	15.490	12.4	6.2	0.37	3573	1.43	0.02
009267818-04	OBS	No	243.451777	216.453219	1065.7	9.574	10.7	7.5	0.37	3573	1.24	0.06
009267818-05	OBS	No	294.637897	325.003858	1737.1	4.098	12.2	8.4	0.37	3573	1.56	0.05
009267818-06	OBS	No	385.653215	286.467603	2179.2	4.819	10.1	10.7	0.37	3573	1.73	0.04
009267818-07	OBS	No	369.084583	335.162070	660.1	12.000	12.3	-1.0	0.37	3573	0.95	0.04

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009267818-01	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—INCONSISTENT_TRANS—CENT_FEW_DIFFS
009267818-02	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
009267818-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
009267818-04	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
009267818-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—CENT_FEW_DIFFS—HALO_GHOST
009267818-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
009267818-07	OBS	FP	0.00	1	0	1	0	LPP_DV—ALL_TRANS_CHASES—CENT_NOFITS—HALO_GHOST

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

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

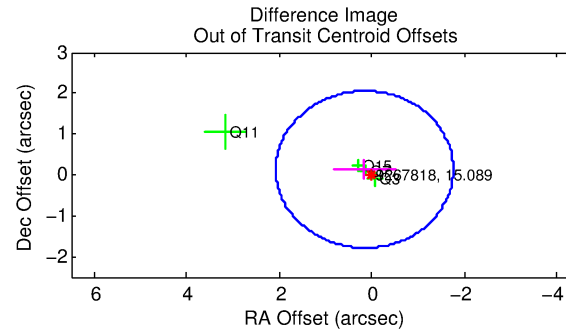
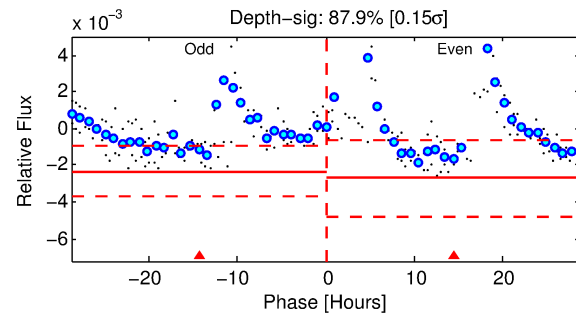
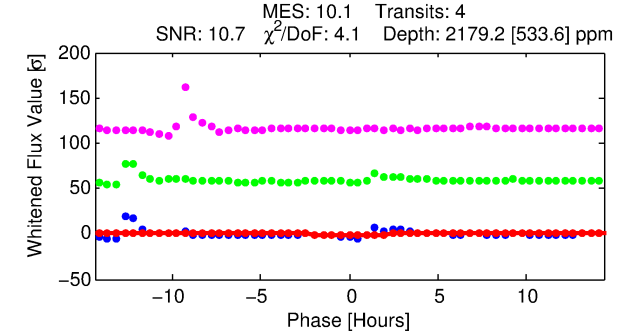
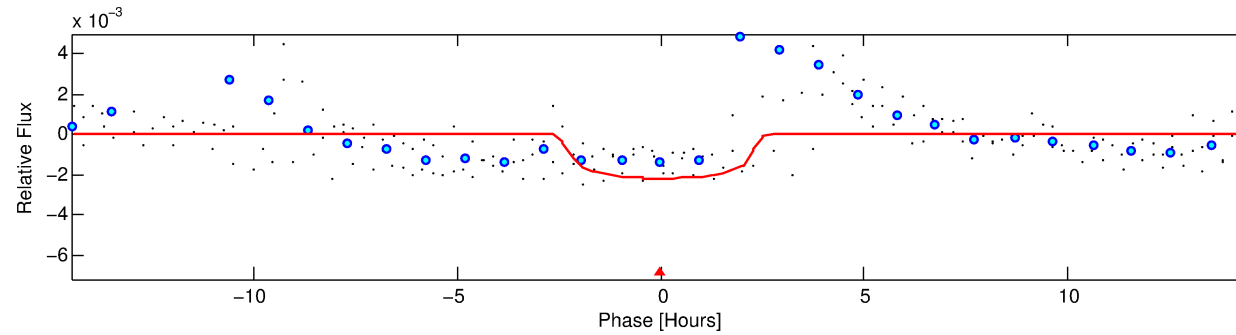
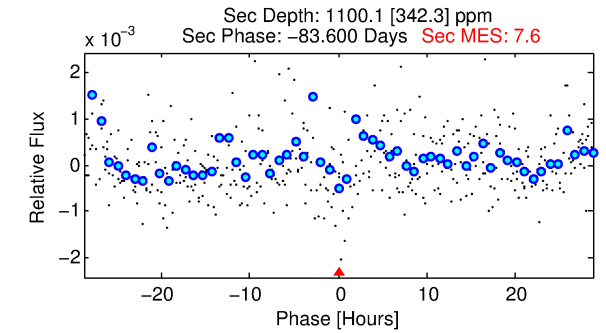
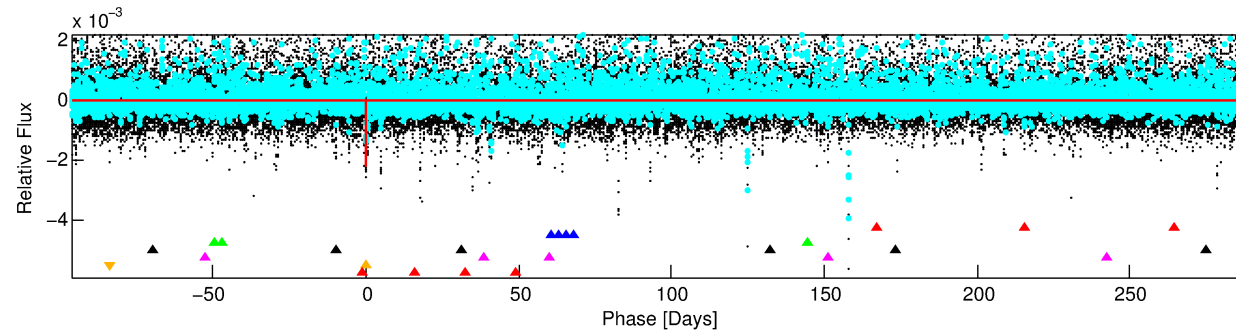
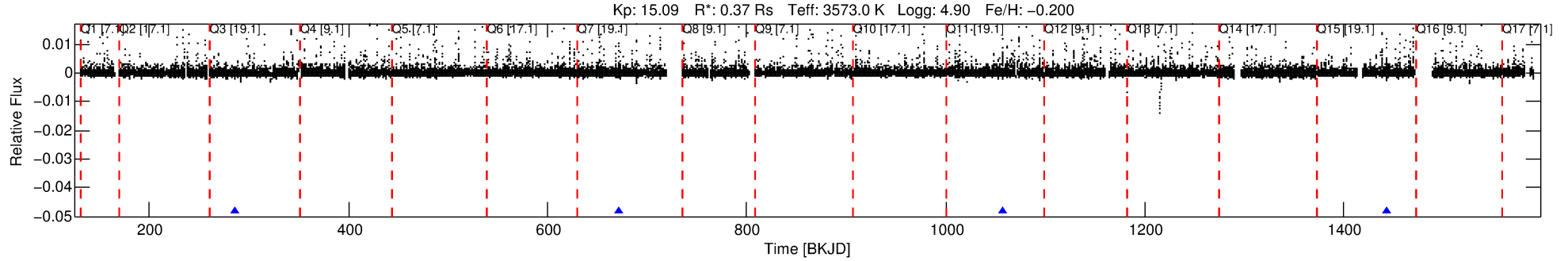
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009267818-06

No Significant Match Found

DV One-Page Summary

KIC: 9267818 Candidate: 6 of 7 Period: 385.653 d



DV Fit Results:

Period = 385.65321 [0.00511] d
Epoch = 286.4676 [0.0089] BKJD
Rp/R* = 0.0426 [0.0547]
a/R* = 626.25 [3623.04]
b = 0.19 [28.67]
Seff = 0.03 [0.00]
Teq = 110 [3] K
Rp = 1.73 [2.23] Re
a = 0.7624 [0.0505] AU
Ag = 117655.83 [304511.72] [0.39σ]
Teffp = 3153 [2039] K [1.49σ]

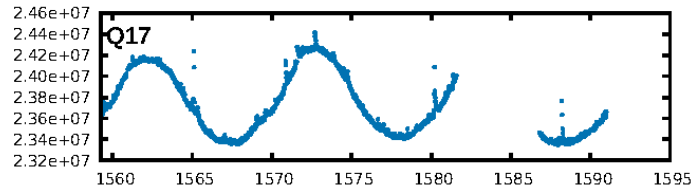
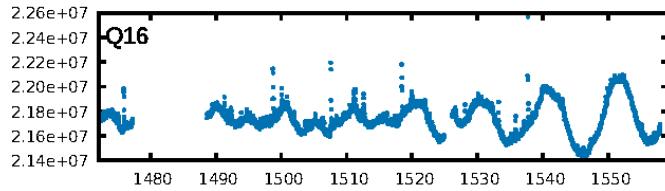
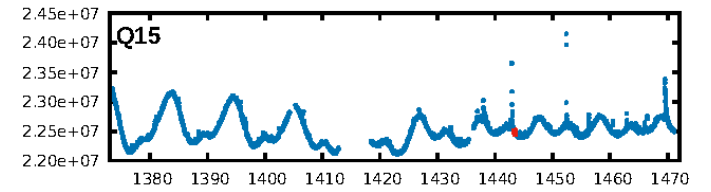
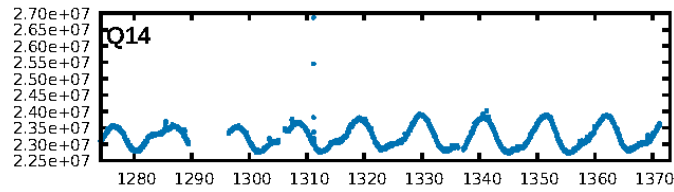
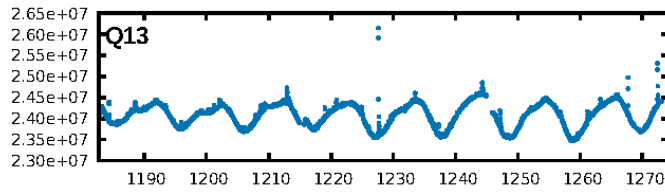
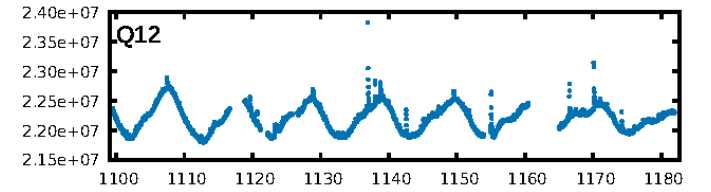
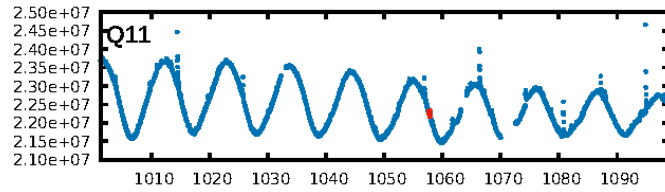
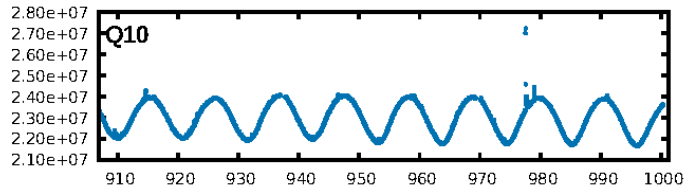
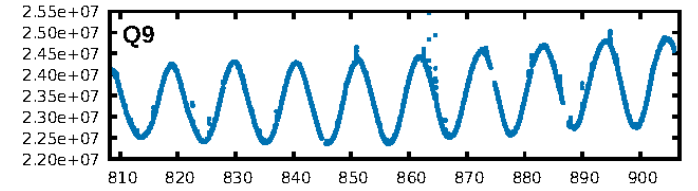
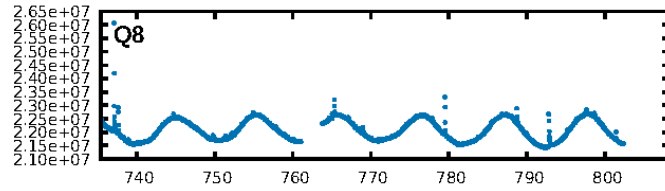
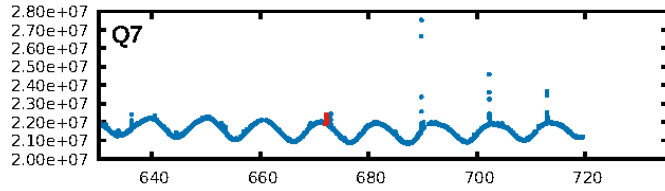
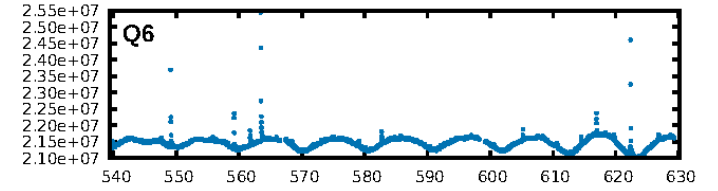
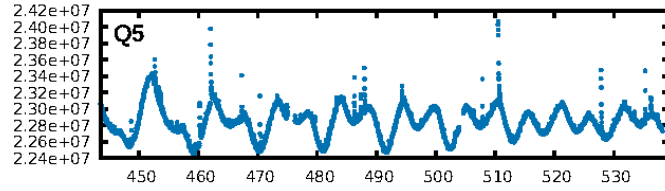
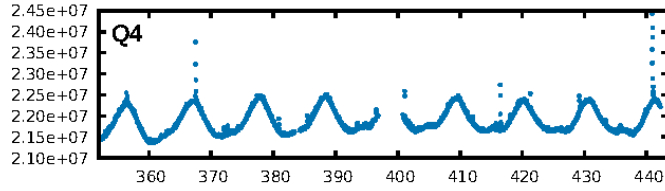
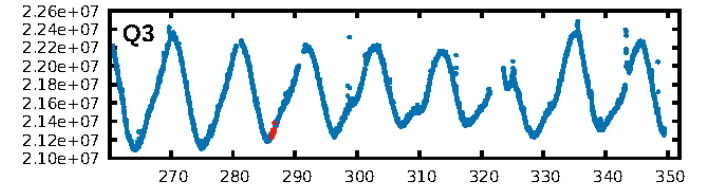
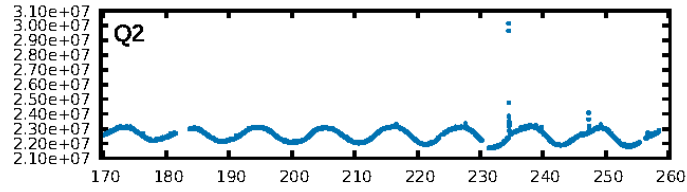
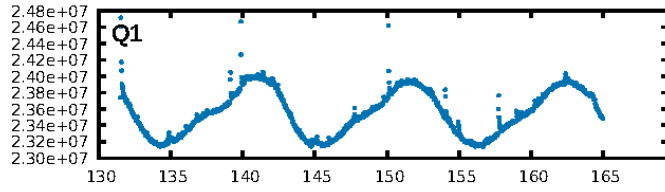
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [30.75σ]
LongPeriod-sig: 100.0% [7.59σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.1%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 0.9021
Centroid-sig: 0.4%
Centroid-so: 0.612 arcsec [1.28σ]
OotOffset-rm: 0.205 arcsec [0.32σ]
KicOffset-rm: 0.335 arcsec [0.76σ]
OotOffset-st: 0/4/0/0 [4]
KicOffset-st: 0/4/0/0 [4]
DiffImageQuality-fgm: 0.75 [3/4]
DiffImageOverlap-fno: 1.00 [4/4]

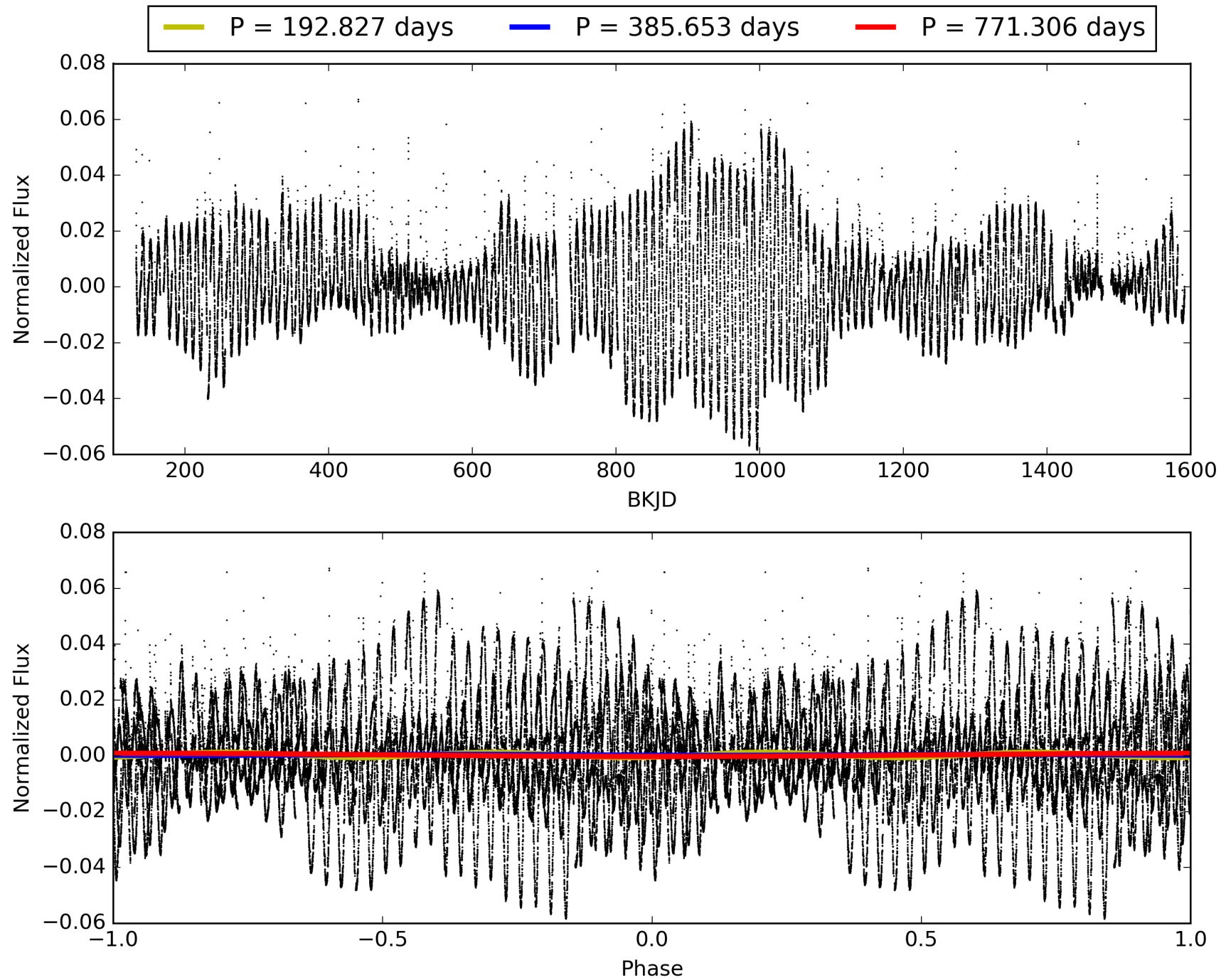
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:51:55 Z

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

TCE 009267818-06, PDC Light Curves

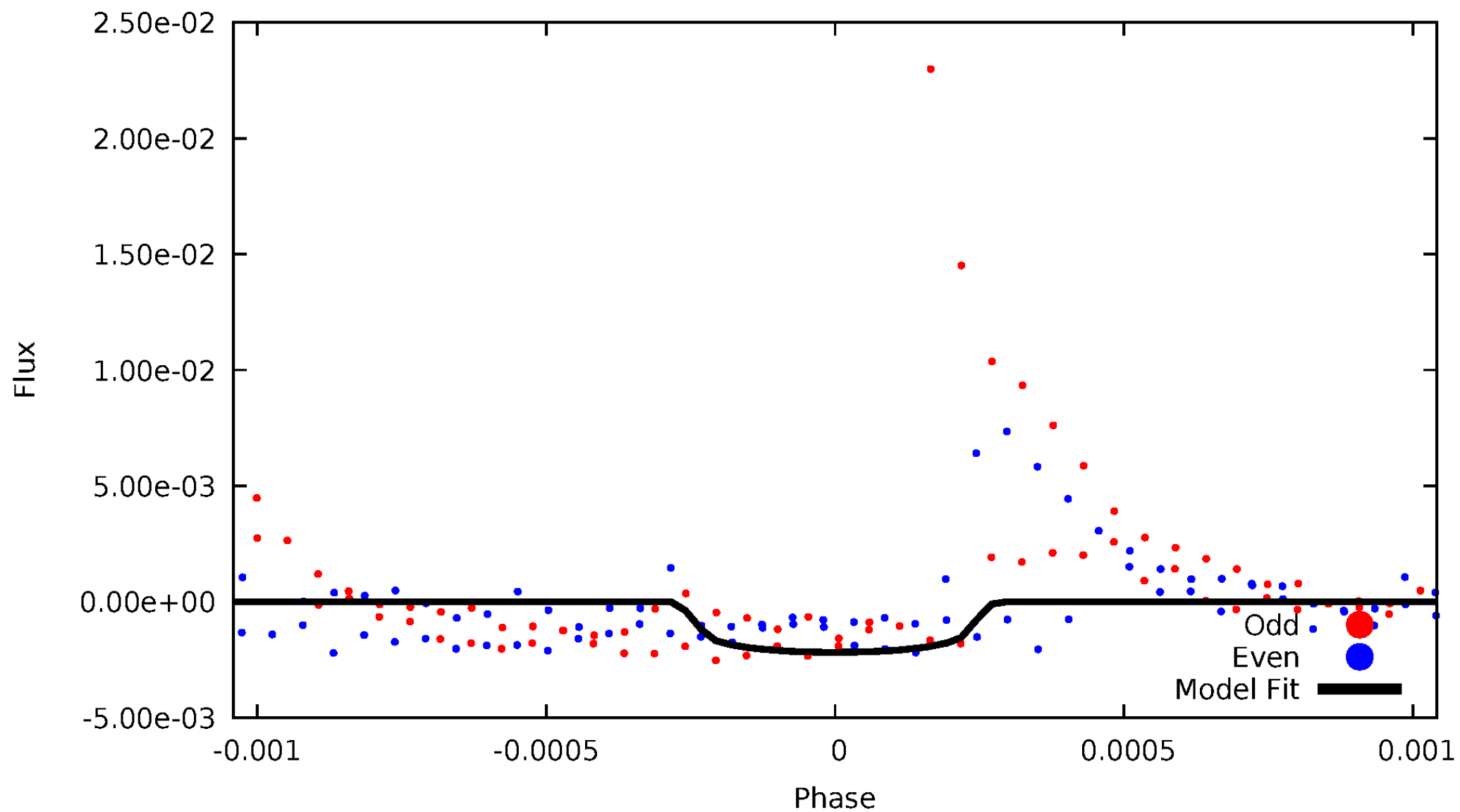


TCE 009267818-06



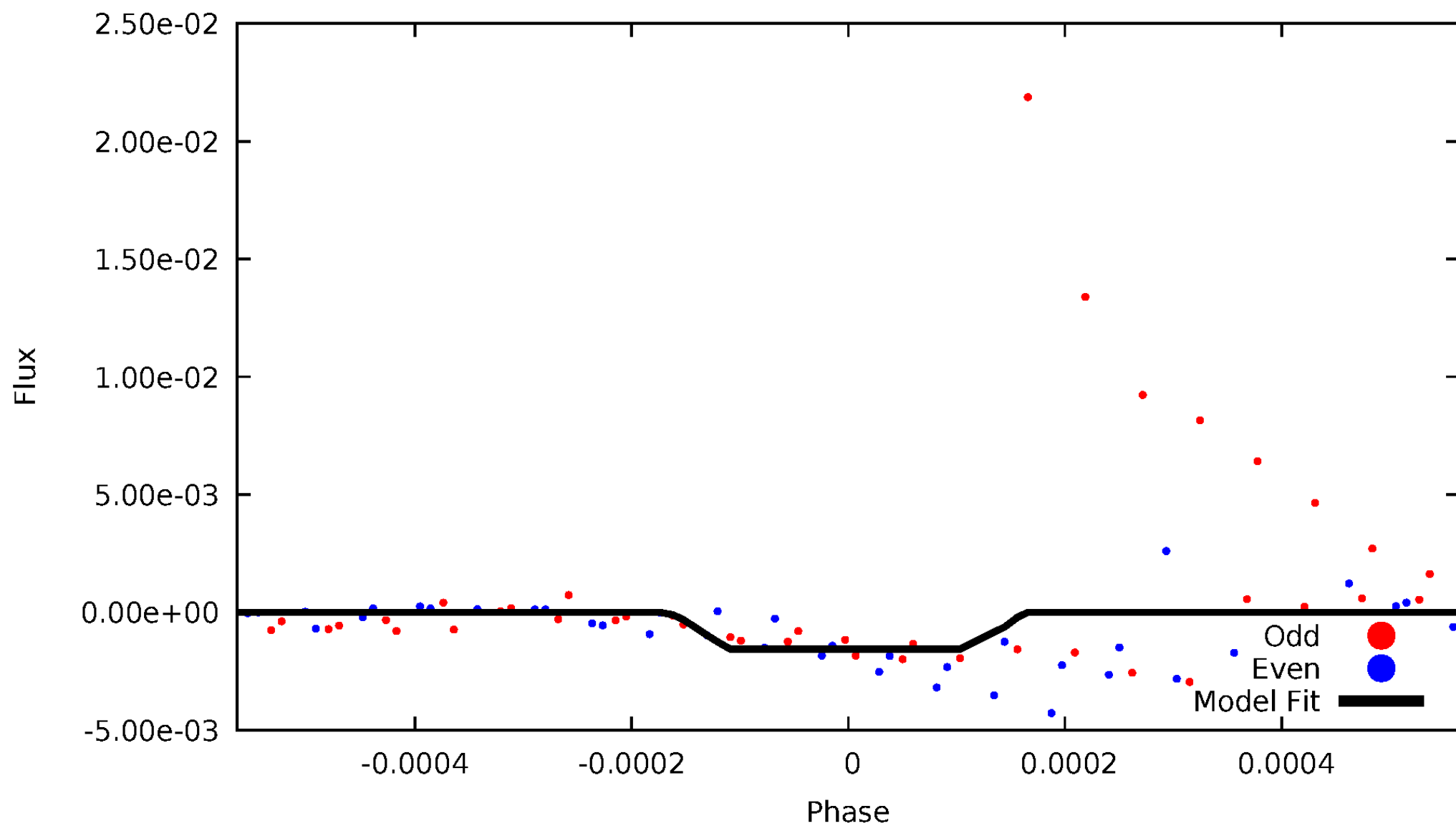
DV Odd/Even

TCE 009267818-06



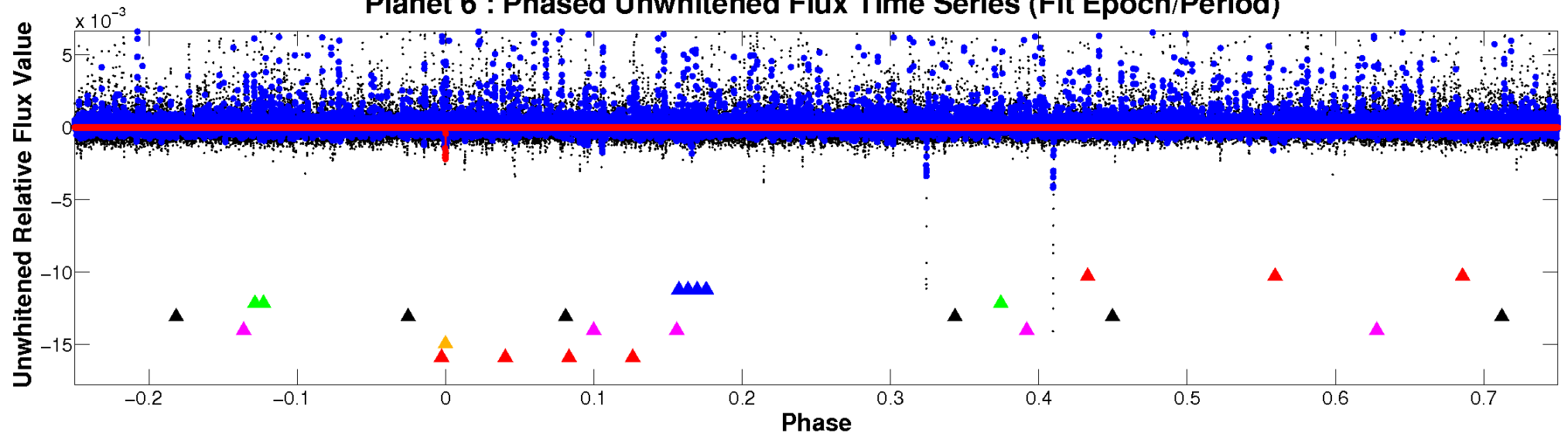
ALT Odd/Even

TCE 009267818-06

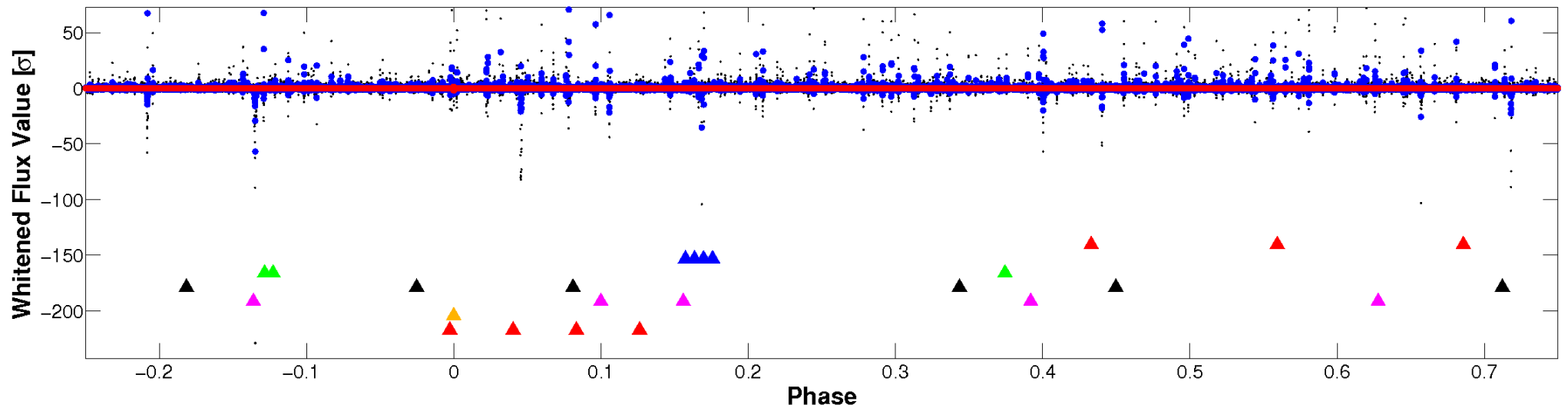


Non-Whitened Vs. Whitened Light Curve

Planet 6 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

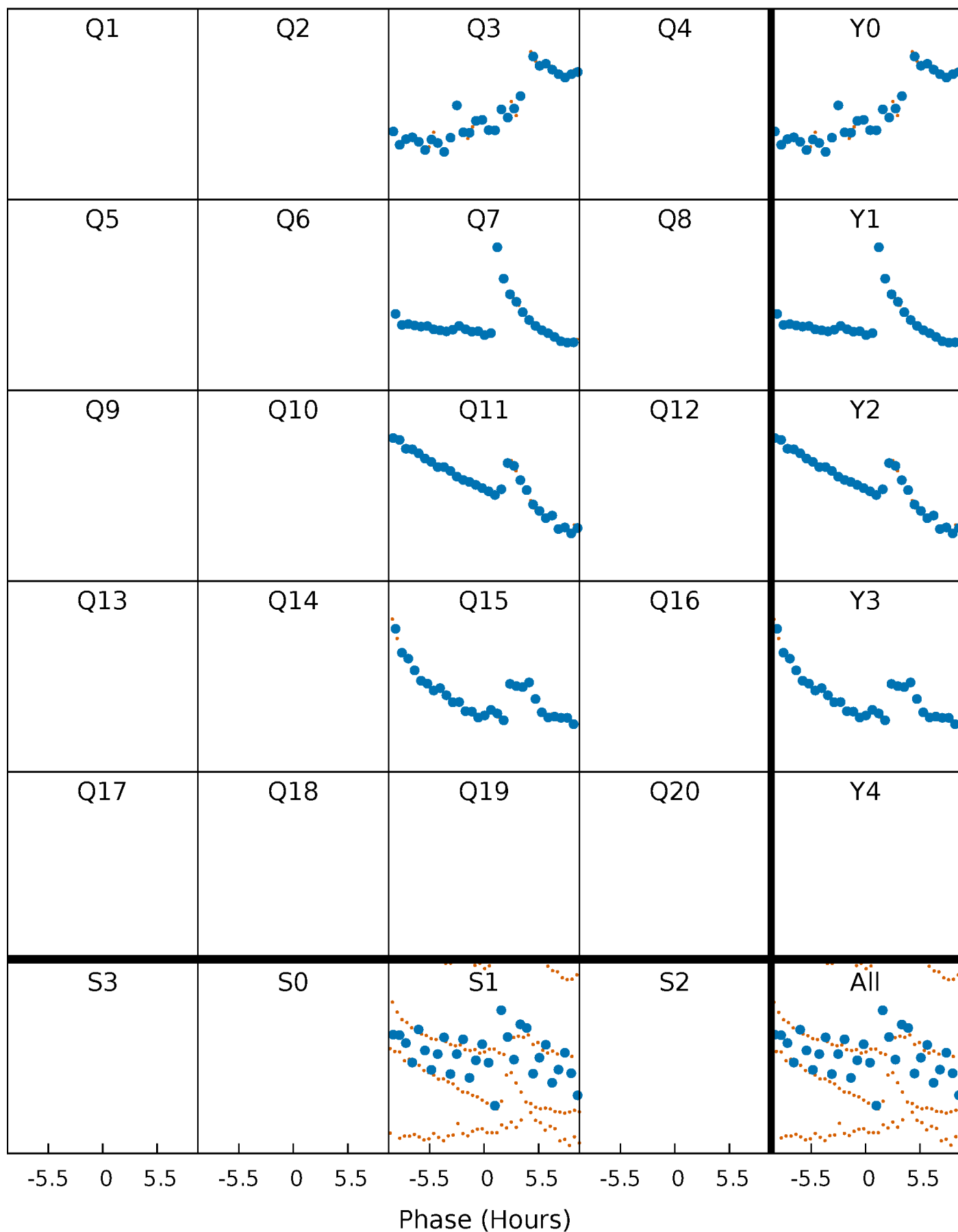


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



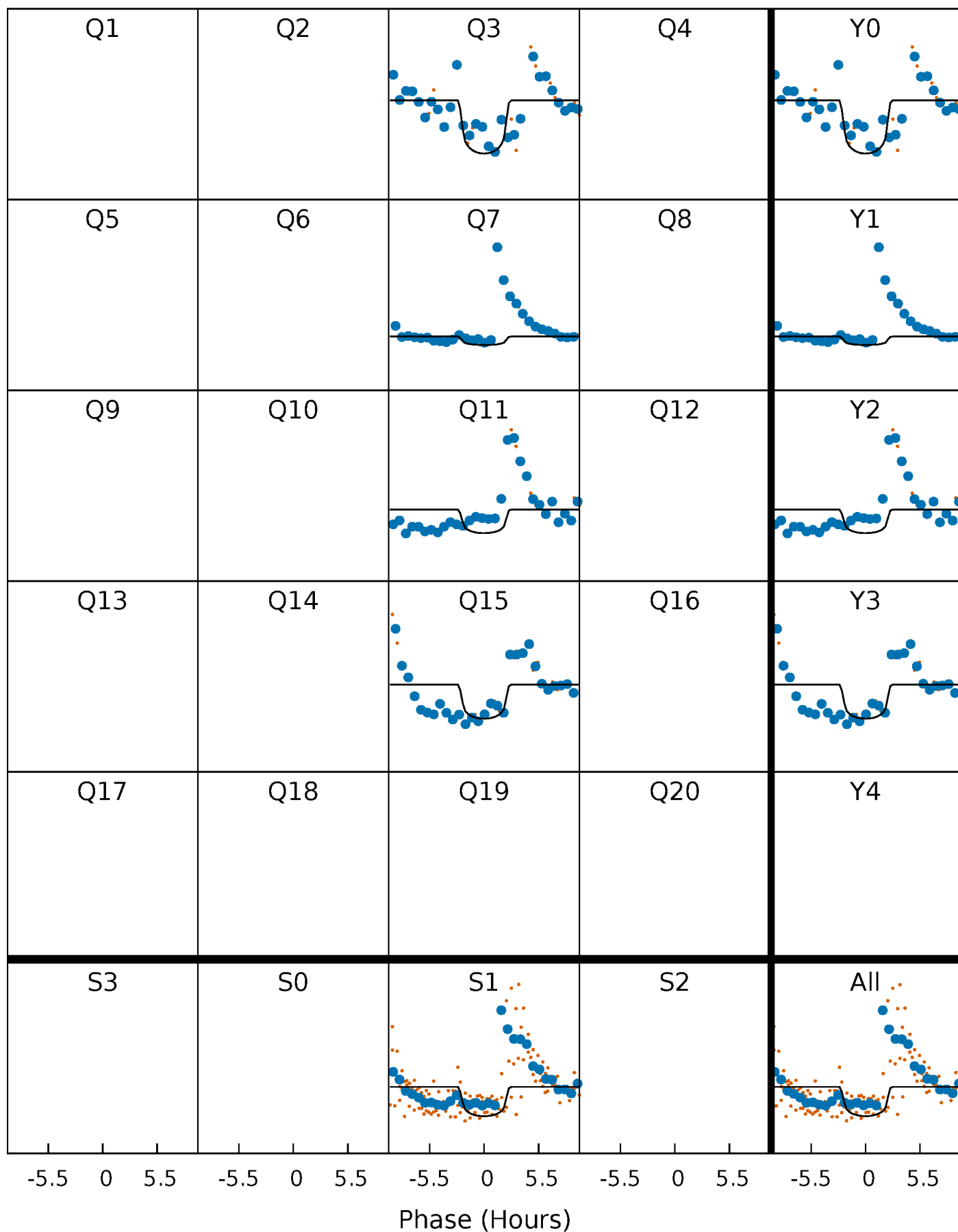
PDC Quarter-Phased Transit Curves

TCE 009267818-06 P=385.653215 Days $T_0=286.467603$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 009267818-06 P=385.653215 Days $T_0=286.467603$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

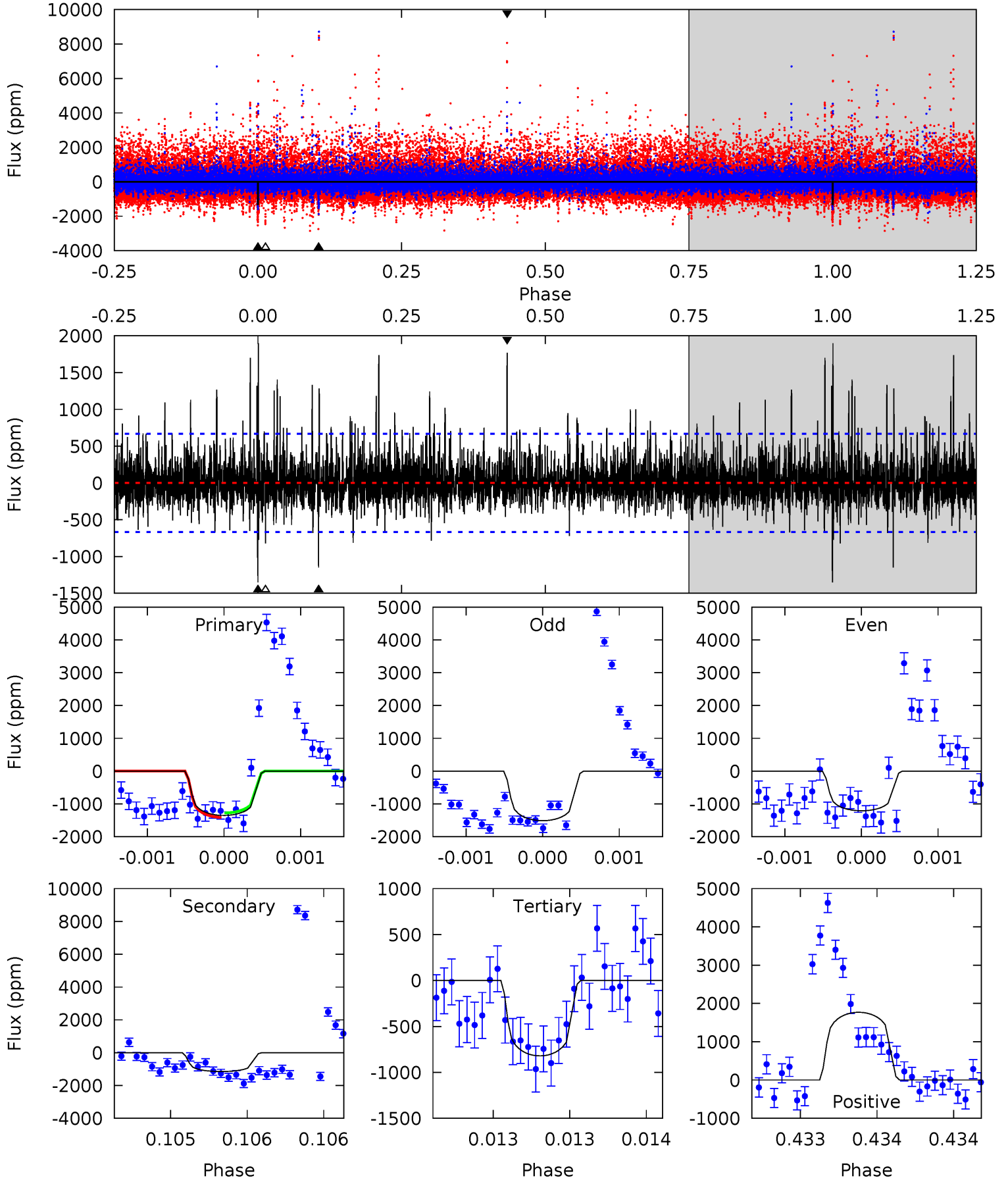
TCE 009267818-06 P=385.634442 Days $T_0=286.486315$ (BKJD)



DV Model-Shift Uniqueness Test

009267818-06, P = 385.653215 Days, E = 286.467603 Days

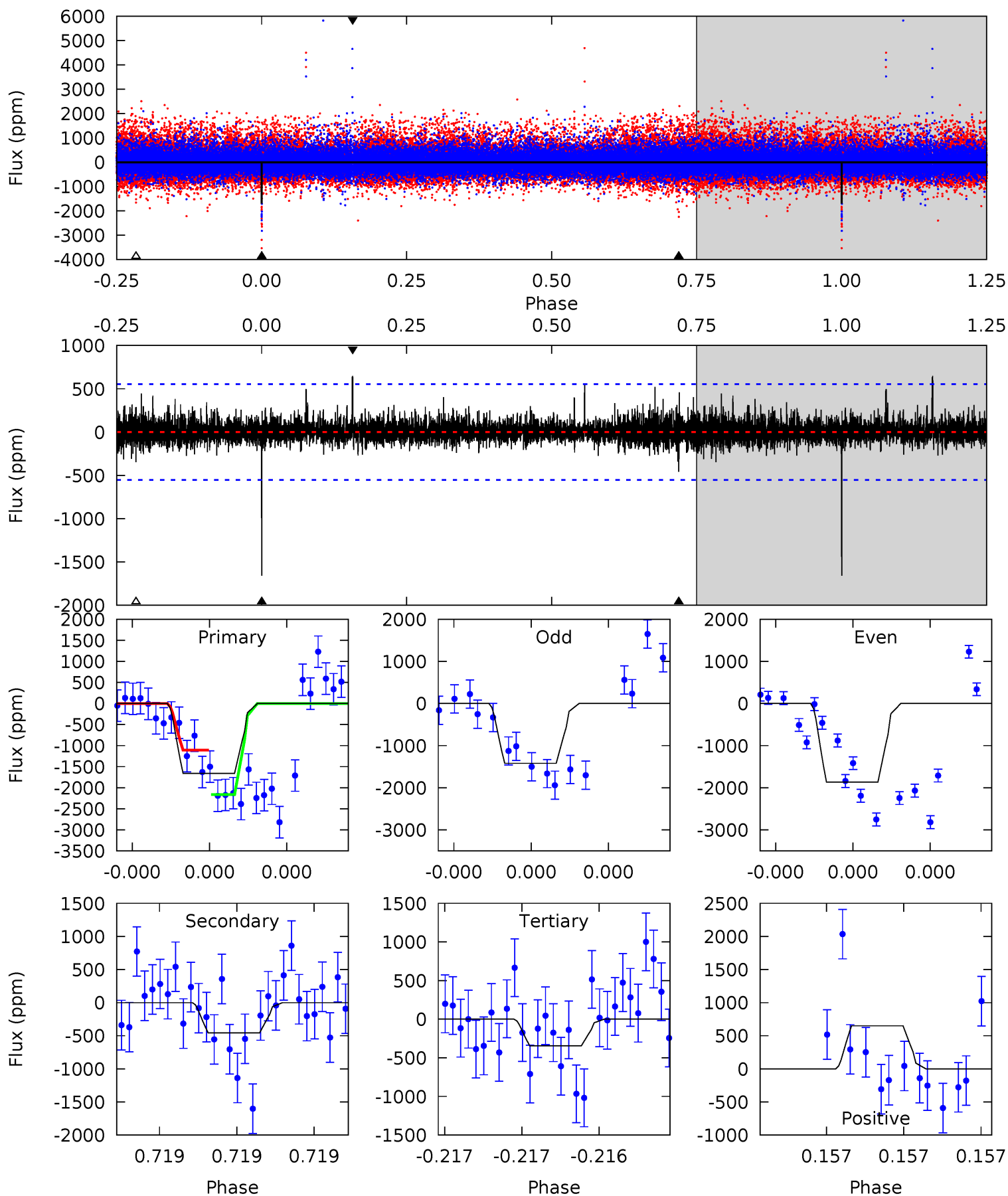
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.2	9.57	6.82	14.7	5.55	3.45	2.03	4.42	-3.47	2.75	-5.14	0.77	0.05	0.58	0.58



Alt Model-Shift Uniqueness Test

009267818-06, P = 385.634442 Days, E = 286.486315 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.9	4.65	3.52	6.63	5.65	3.60	0.89	13.4	10.3	1.13	-1.98	2.07	1.17	0.28	5.27



Stellar Parameters For KIC 009267818

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3573^{+42}_{-48}	$4.896^{+0.028}_{-0.039}$	$-0.200^{+0.100}_{-0.100}$	$0.372^{+0.033}_{-0.030}$	$0.398^{+0.028}_{-0.042}$	$10.920^{+1.827}_{-1.723}$
	+1%/-1%	+1%/-1%	+50%/-50%	+9%/-8%	+7%/-11%	+17%/-16%
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 009267818-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1151 ± 120	$2.27^{+2.22}_{-1.49}$	154^{+3}_{-3}	3079^{+1222}_{-513}	$70165^{+507014}_{-51899}$
Alt.	-455 ± 98	$2.20^{+2.02}_{-1.46}$	154^{+3}_{-3}	2732^{+1007}_{-402}	$30110^{+224114}_{-21873}$

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

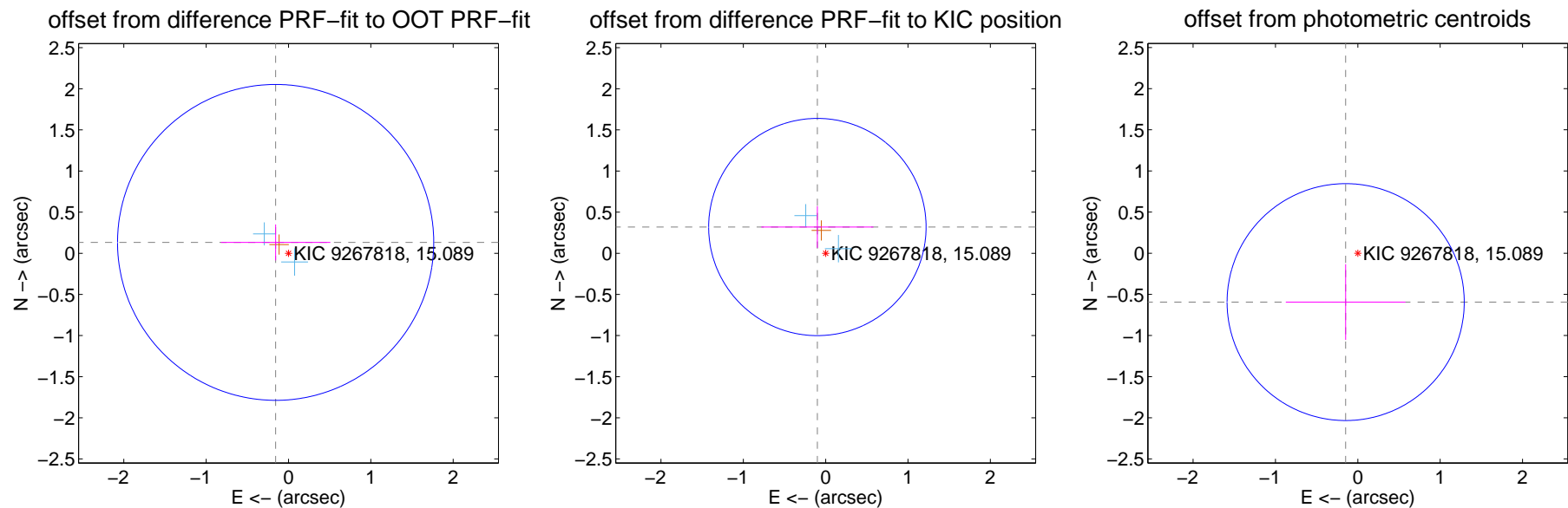
DV Centroid Data

Supplemental centroid analysis for 009267818-06. Kepler magnitude: 15.09. Transit SNR 10.75

There are 3 quarters with good PRF difference image offsets

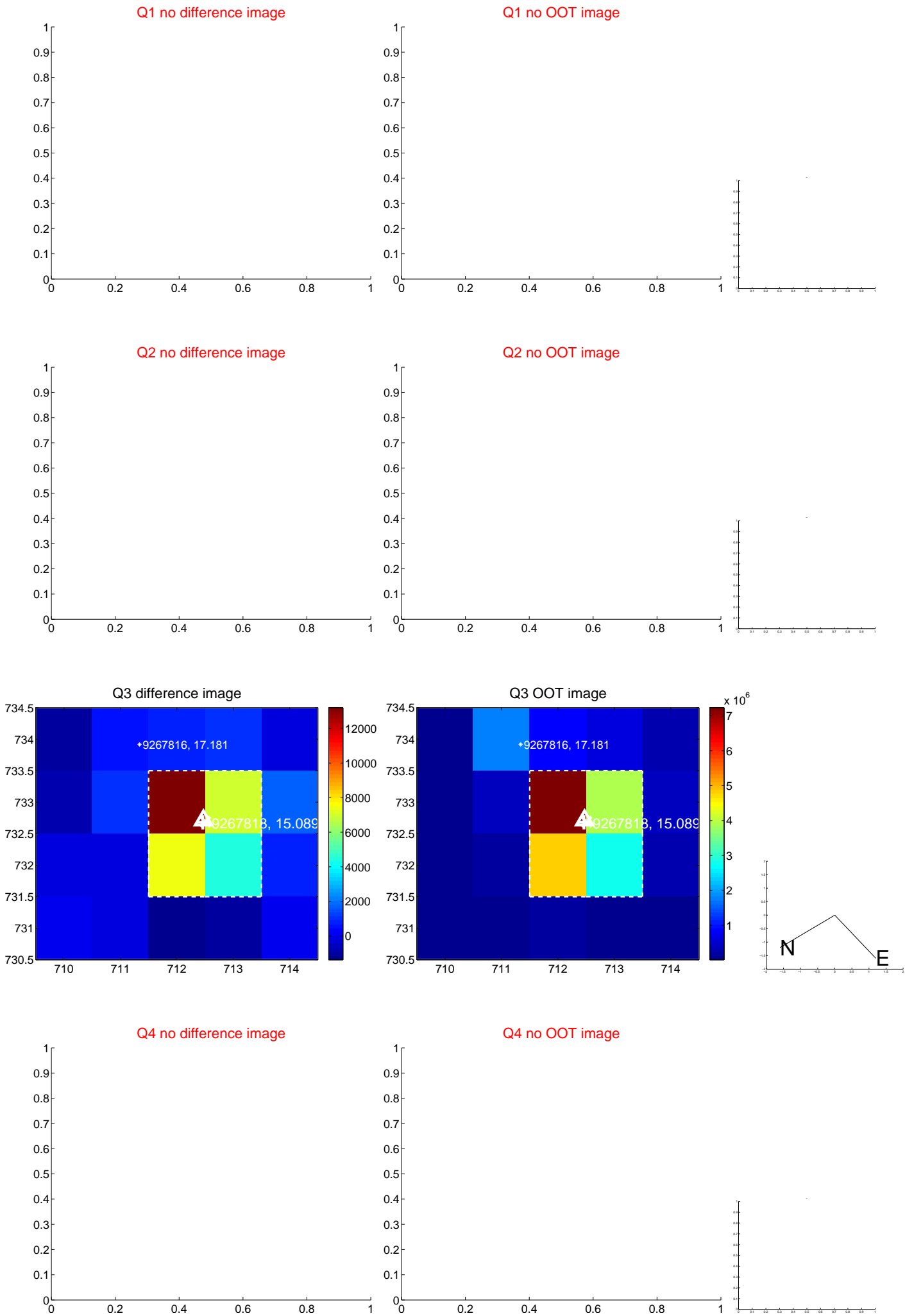
The direct PRF centroid is offset from the target star catalog position by about 0.23 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.205 ± 0.640	0.32	0.156 ± 0.664	0.132 ± 0.219
PRF-fit source offset from KIC position	0.335 ± 0.440	0.76	0.101 ± 0.681	0.319 ± 0.254
photometric centroid source offset	0.61 ± 0.48	1.28	0.15 ± 0.73	-0.59 ± 0.46

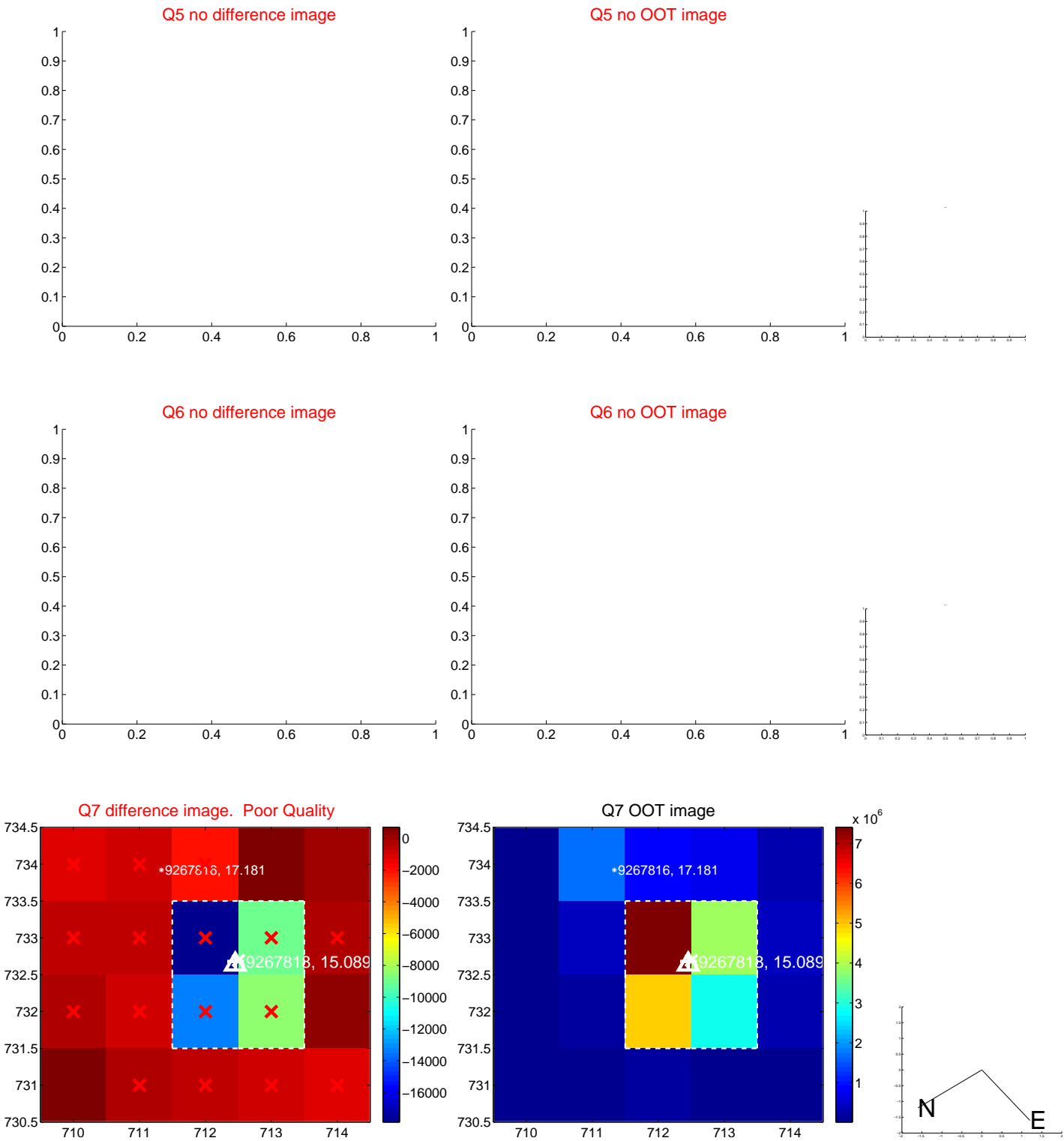


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

Q9 no difference image



Q9 no OOT image



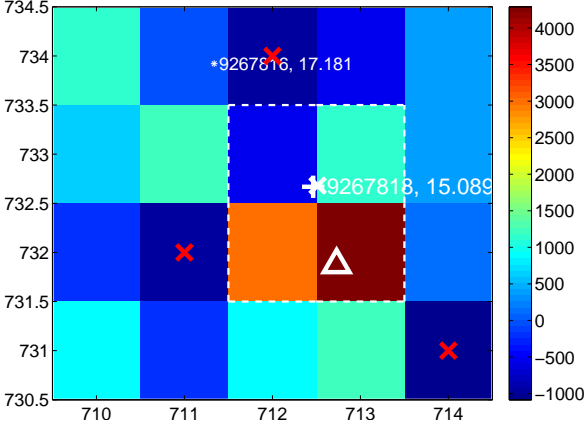
Q10 no difference image



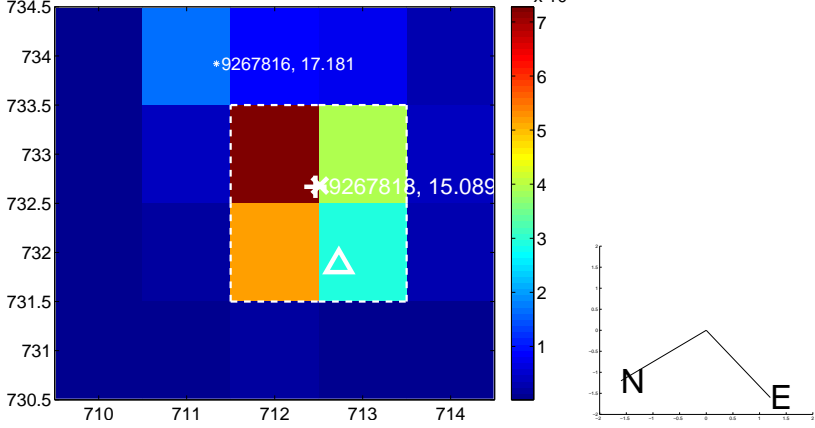
Q10 no OOT image



Q11 difference image



Q11 OOT image



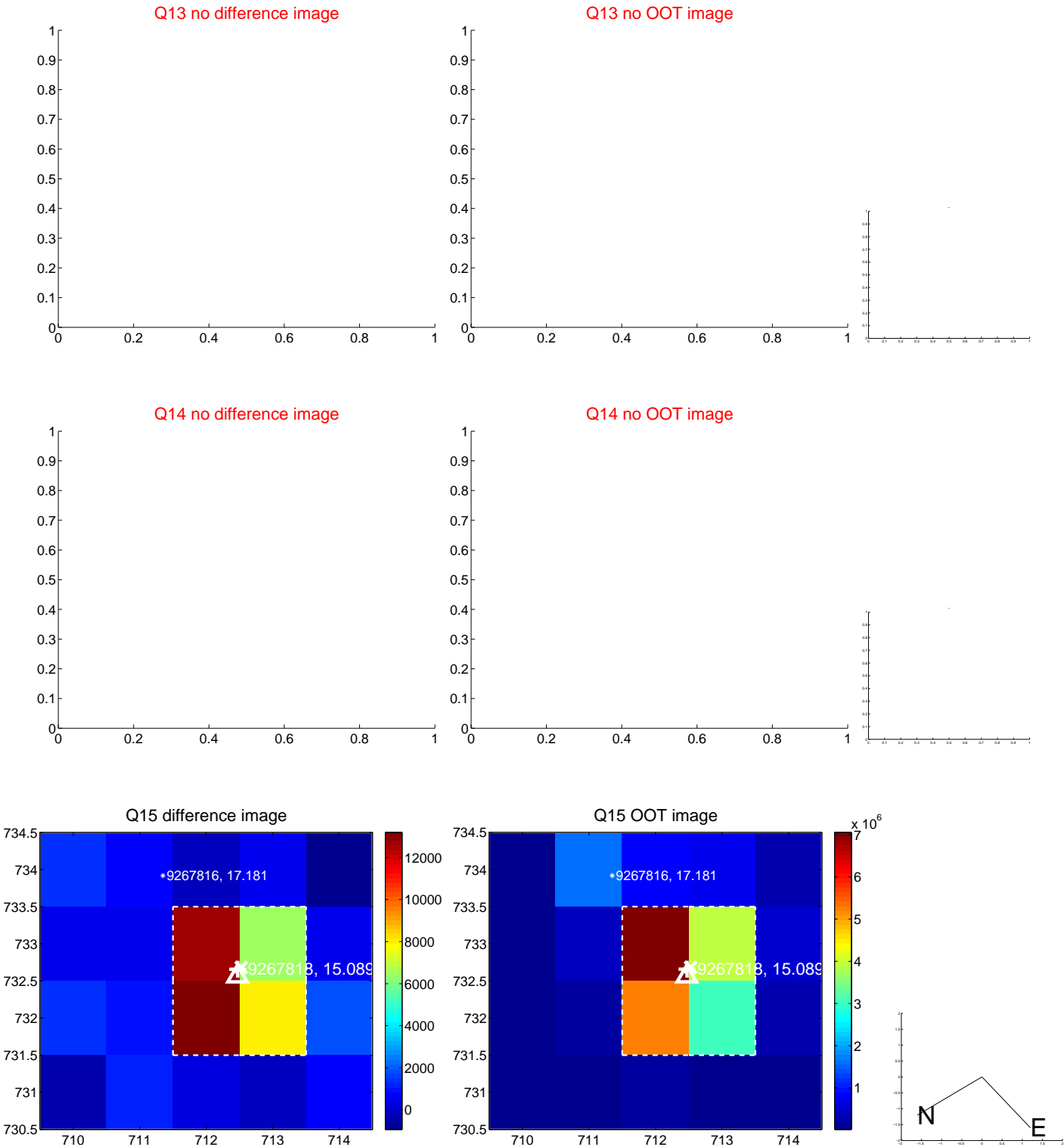
Q12 no difference image



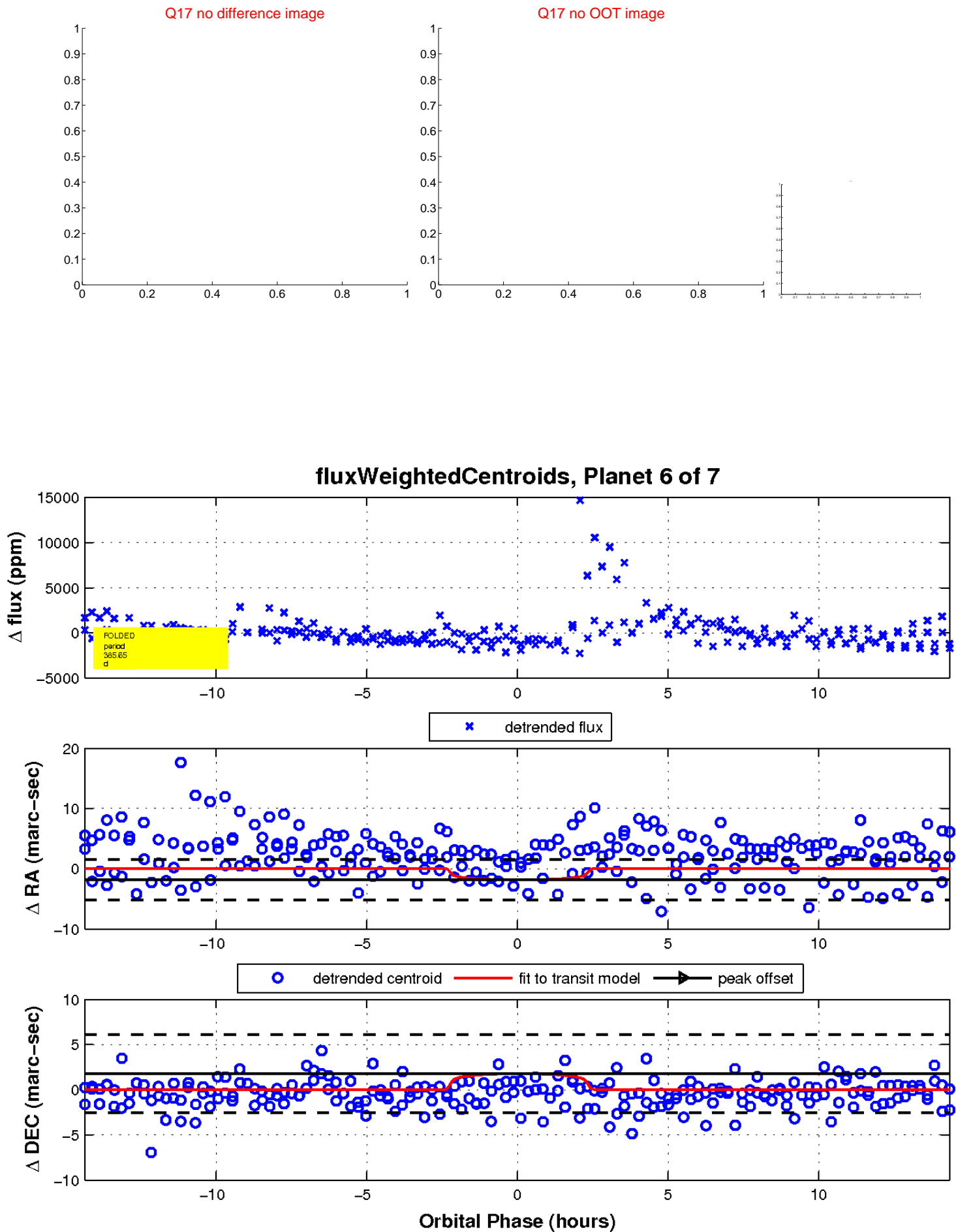
Q12 no OOT image



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

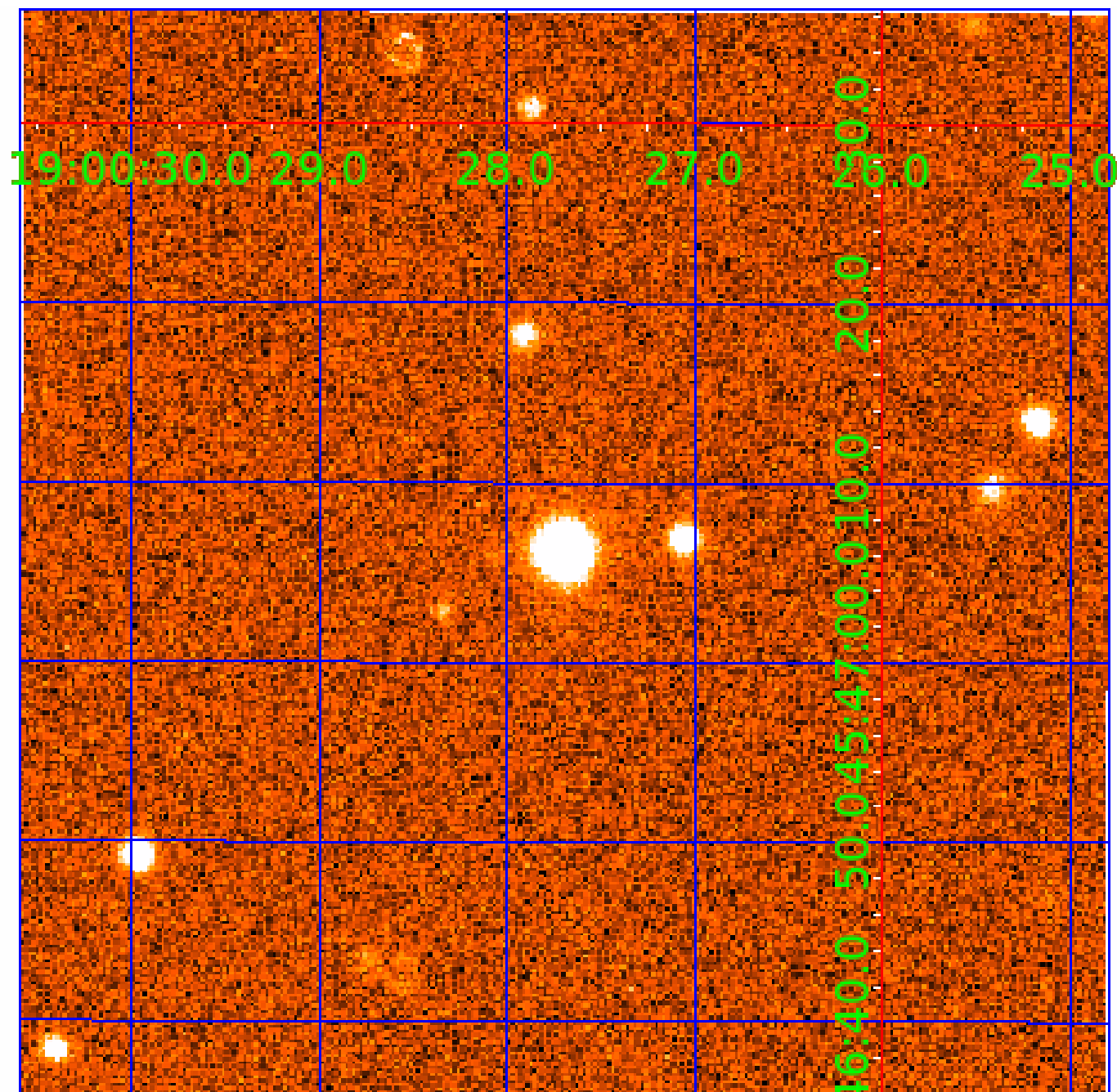


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 009267818

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})
009267818-01	OBS	No	434.390859	453.448300	1642.3	4.375	15.3	7.1	0.37	3573	1.54	0.03
009267818-02	OBS	No	388.020460	347.170497	2304.5	5.732	14.8	7.7	0.37	3573	2.21	0.03
009267818-03	OBS	No	579.588489	236.923743	1510.7	15.490	12.4	6.2	0.37	3573	1.43	0.02
009267818-04	OBS	No	243.451777	216.453219	1065.7	9.574	10.7	7.5	0.37	3573	1.24	0.06
009267818-05	OBS	No	294.637897	325.003858	1737.1	4.098	12.2	8.4	0.37	3573	1.56	0.05
009267818-06	OBS	No	385.653215	286.467603	2179.2	4.819	10.1	10.7	0.37	3573	1.73	0.04
009267818-07	OBS	No	369.084583	335.162070	660.1	12.000	12.3	-1.0	0.37	3573	0.95	0.04

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009267818-01	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—INCONSISTENT_TRANS—CENT_FEW_DIFFS
009267818-02	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
009267818-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
009267818-04	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
009267818-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—CENT_FEW_DIFFS—HALO_GHOST
009267818-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
009267818-07	OBS	FP	0.00	1	0	1	0	LPP_DV—ALL_TRANS_CHASES—CENT_NOFITS—HALO_GHOST

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

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

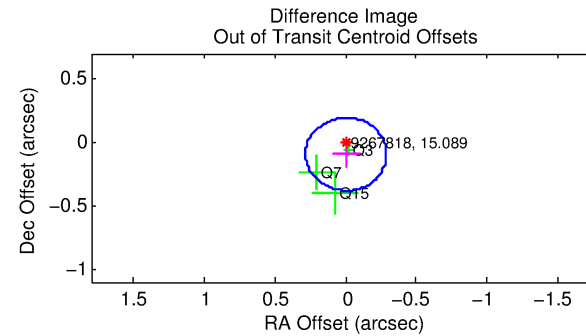
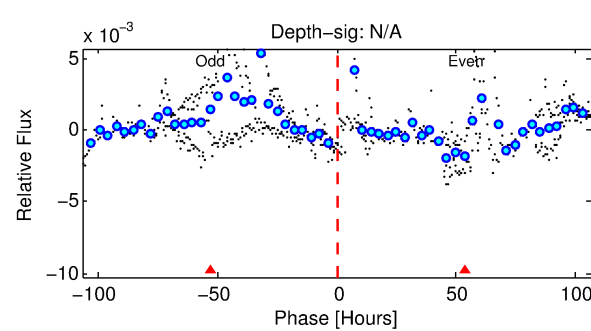
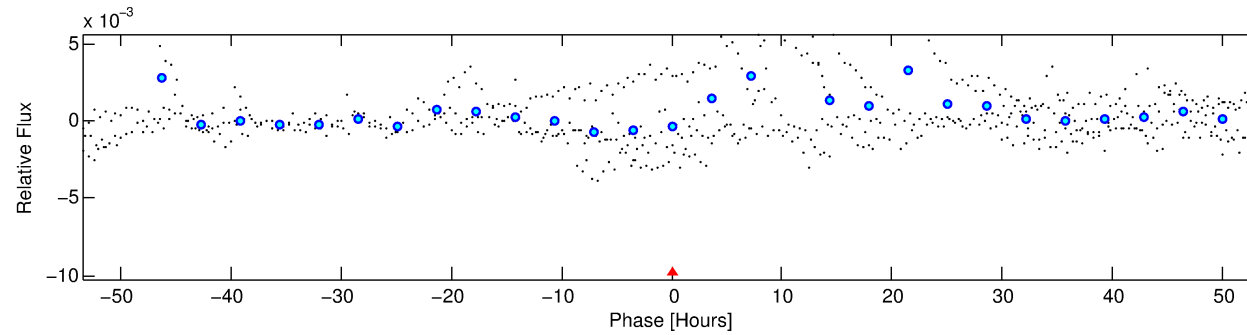
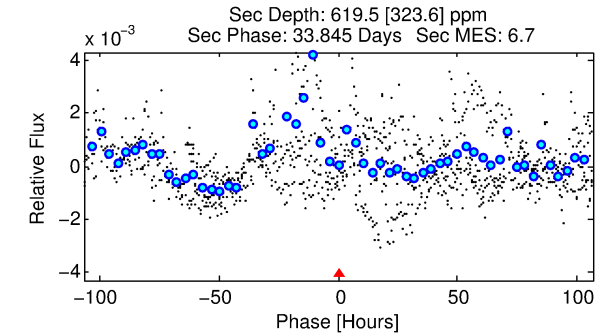
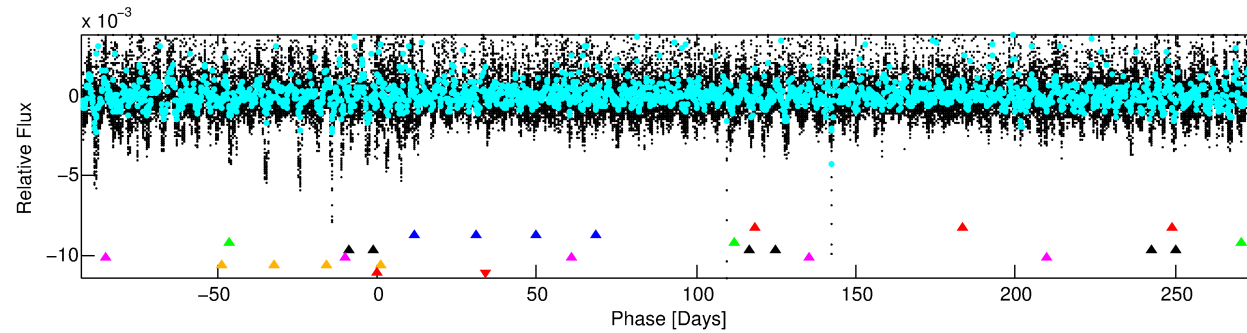
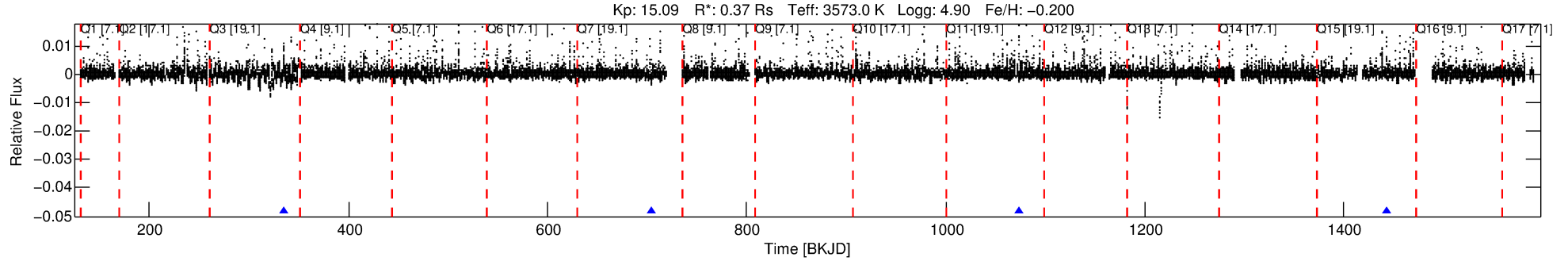
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009267818-07

No Significant Match Found

DV One-Page Summary

KIC: 9267818 Candidate: 7 of 7 Period: 369.085 d



TPS TCE Results:

Period = 369.08458 d
Epoch = 335.1621 BKJD

DV fit results are unavailable

DV Diagnostic Results:

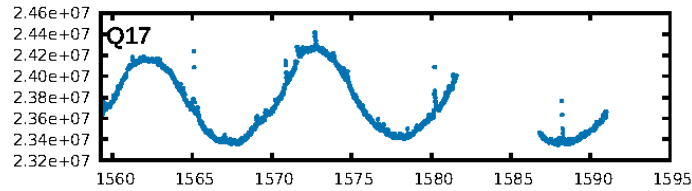
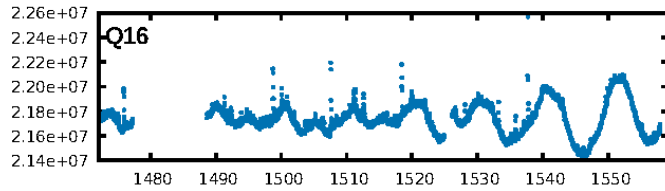
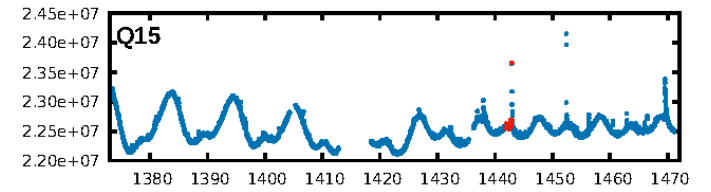
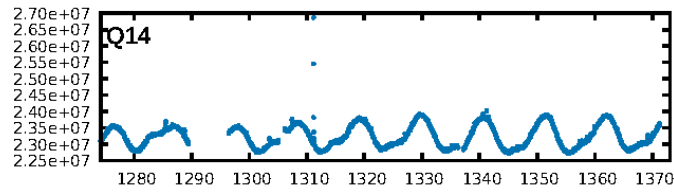
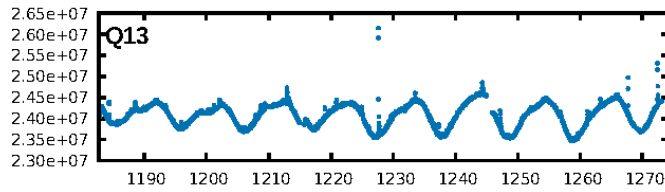
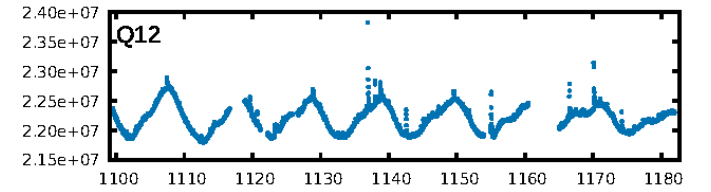
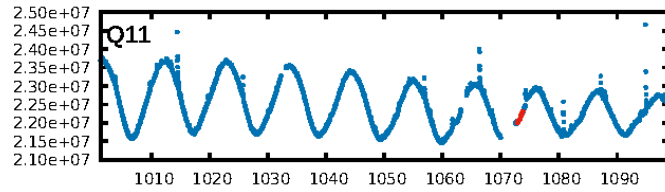
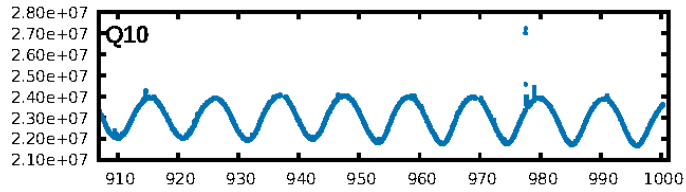
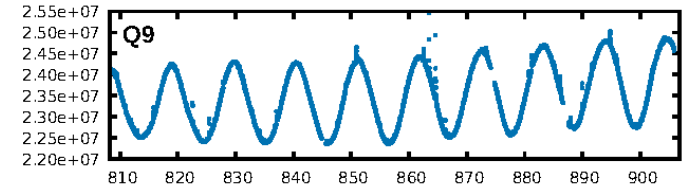
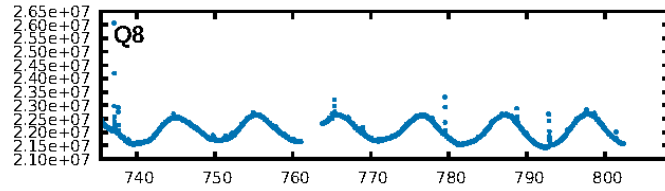
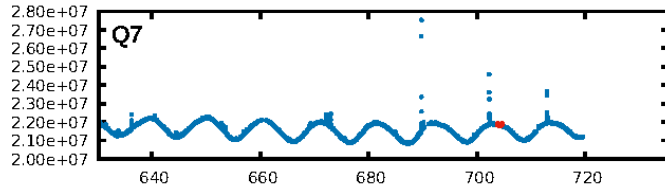
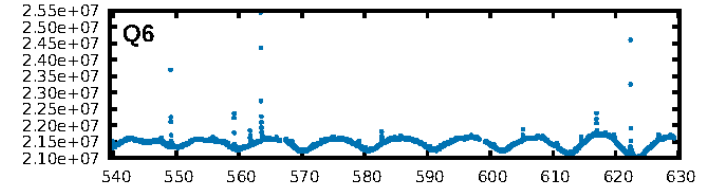
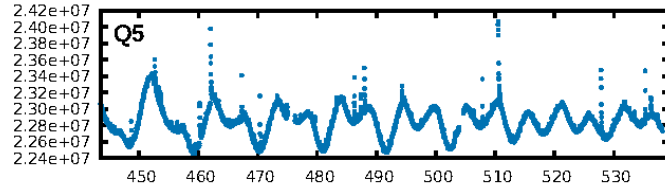
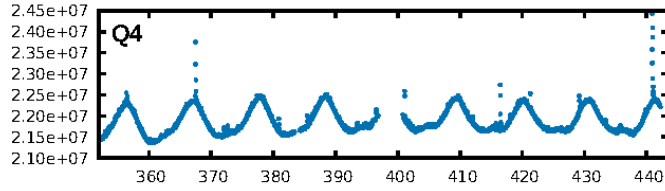
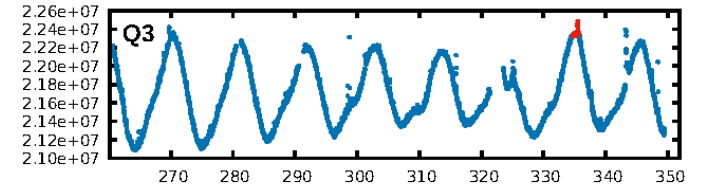
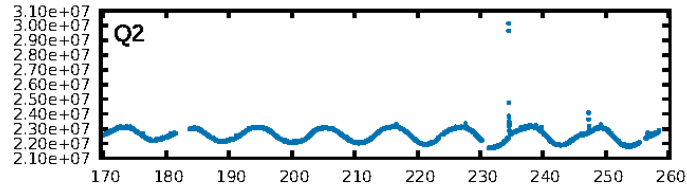
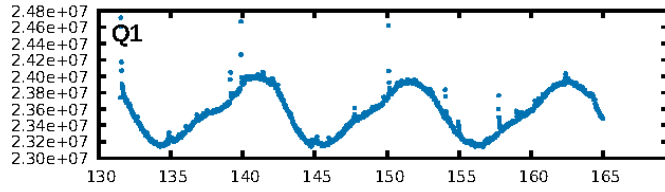
ShortPeriod-sig: 100.0% [140.90σ]
LongPeriod-sig: 100.0% [30.75σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 0.1603

Centroid-sig: 95.0%
Centroid-so: 0.823 arcsec [2.09σ]
OotOffset-rm: 0.093 arcsec [0.97σ]
KicOffset-rm: 0.179 arcsec [1.36σ]
OotOffset-st: 0/3/0/0 [3]
KicOffset-st: 0/3/0/0 [3]
DiffImageQuality-fgm: 0.00 [0/3]
DiffImageOverlap-fno: 0.33 [1/3]

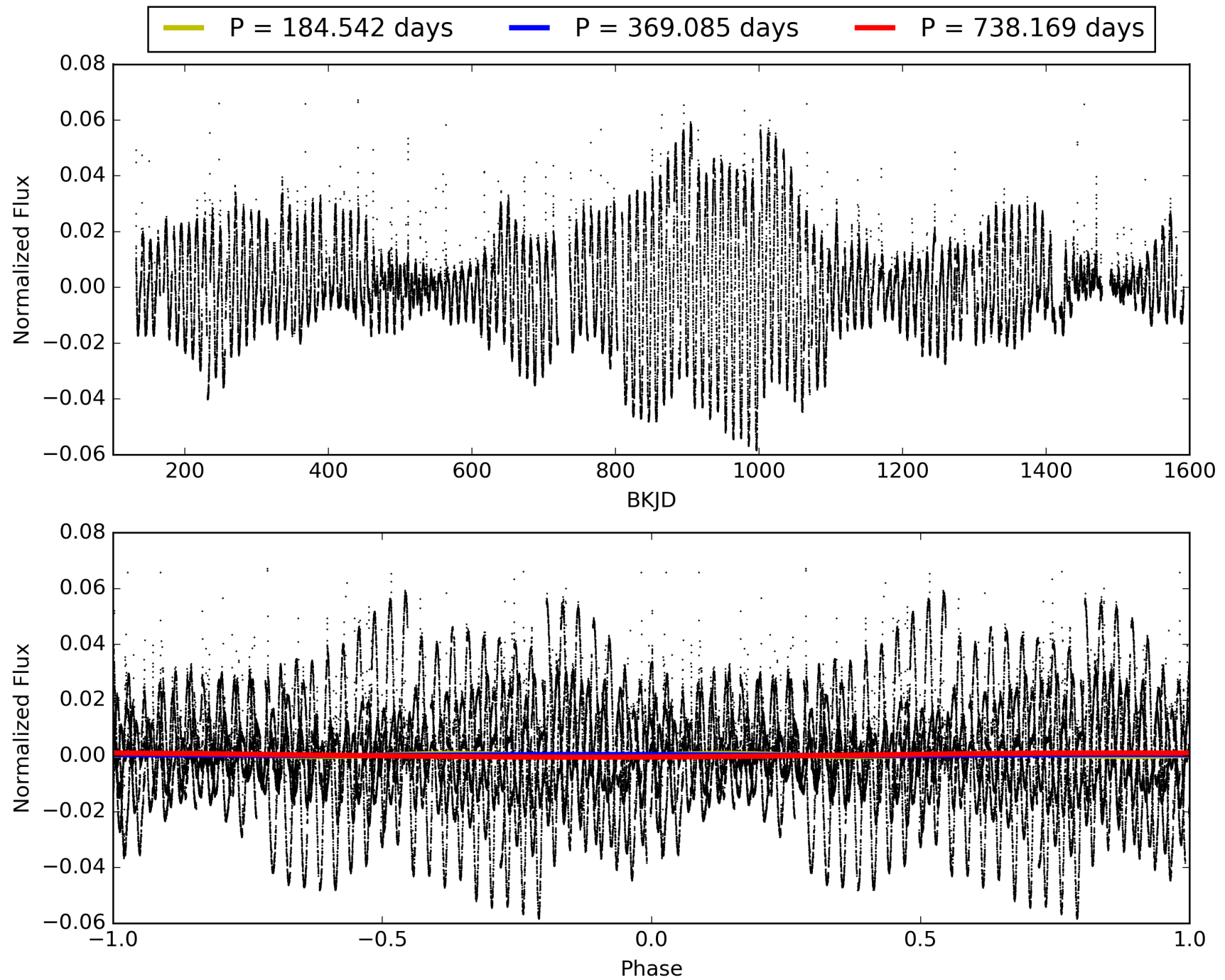
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:52:03 Z

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

TCE 009267818-07, PDC Light Curves

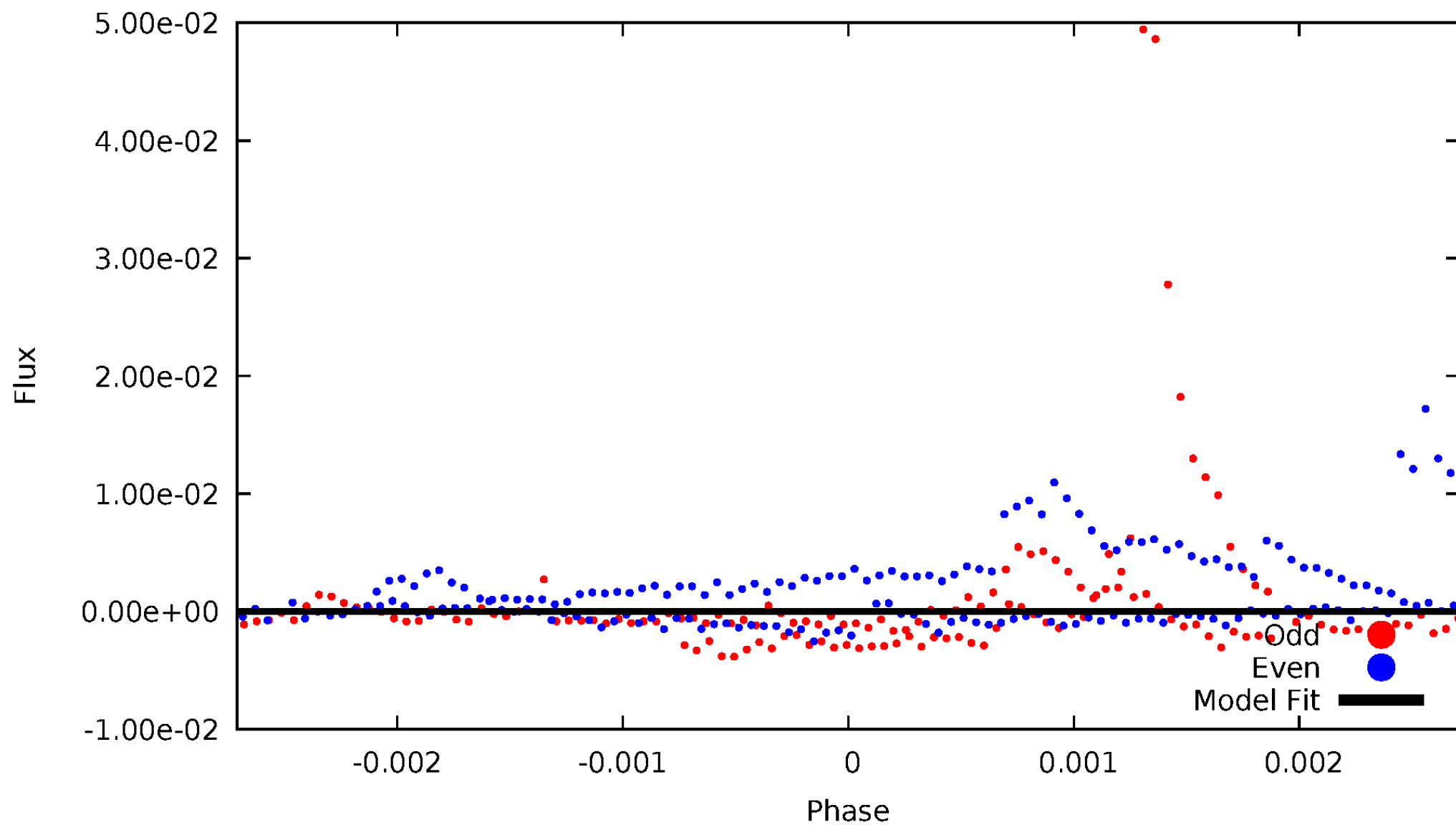


TCE 009267818-07



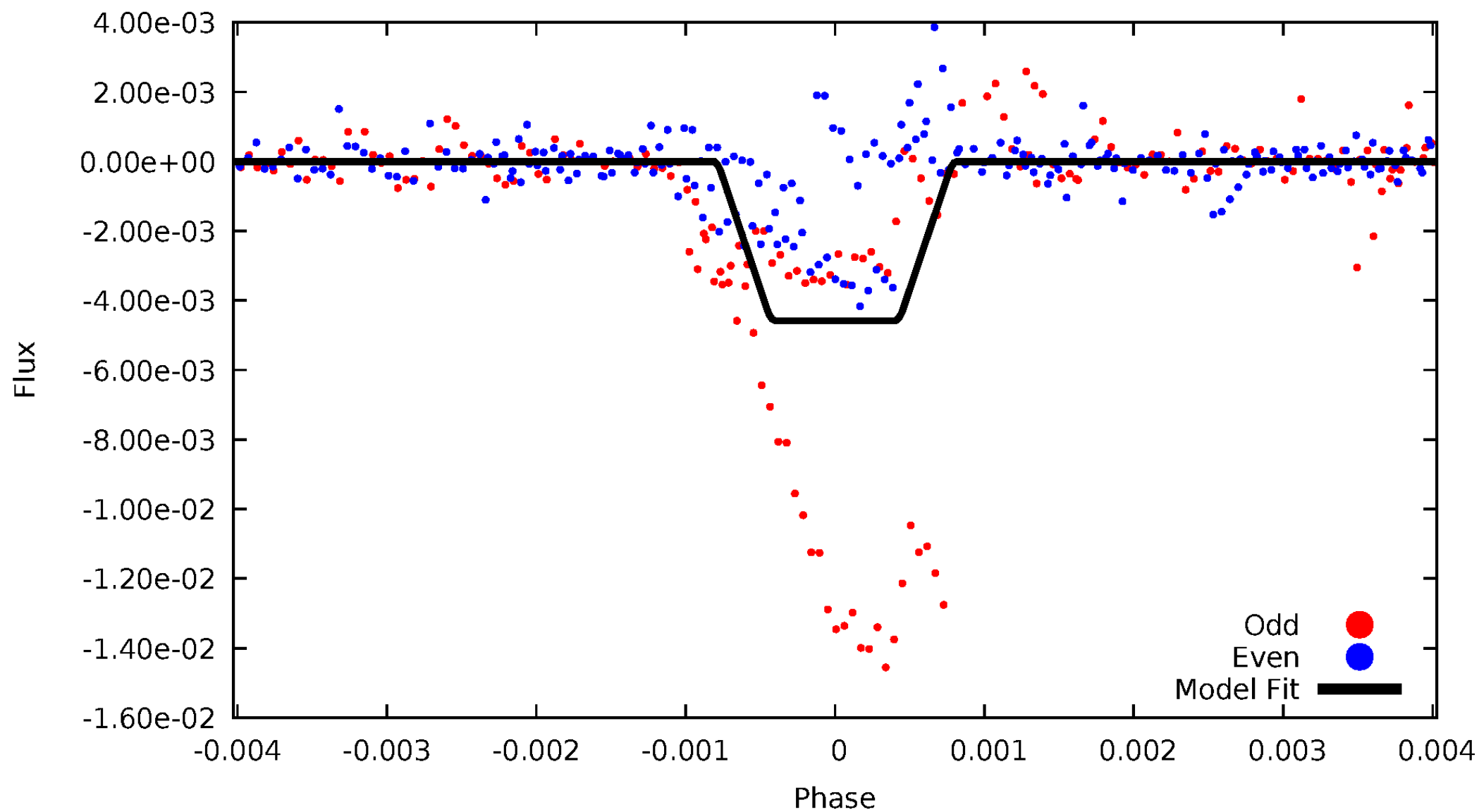
DV Odd/Even

TCE 009267818-07

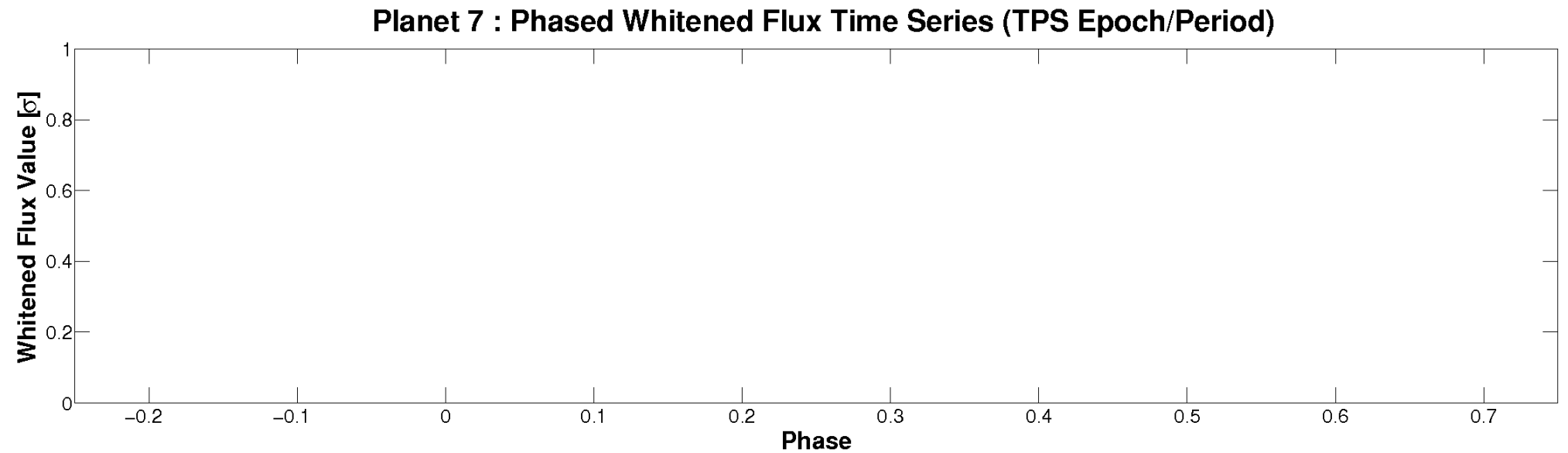
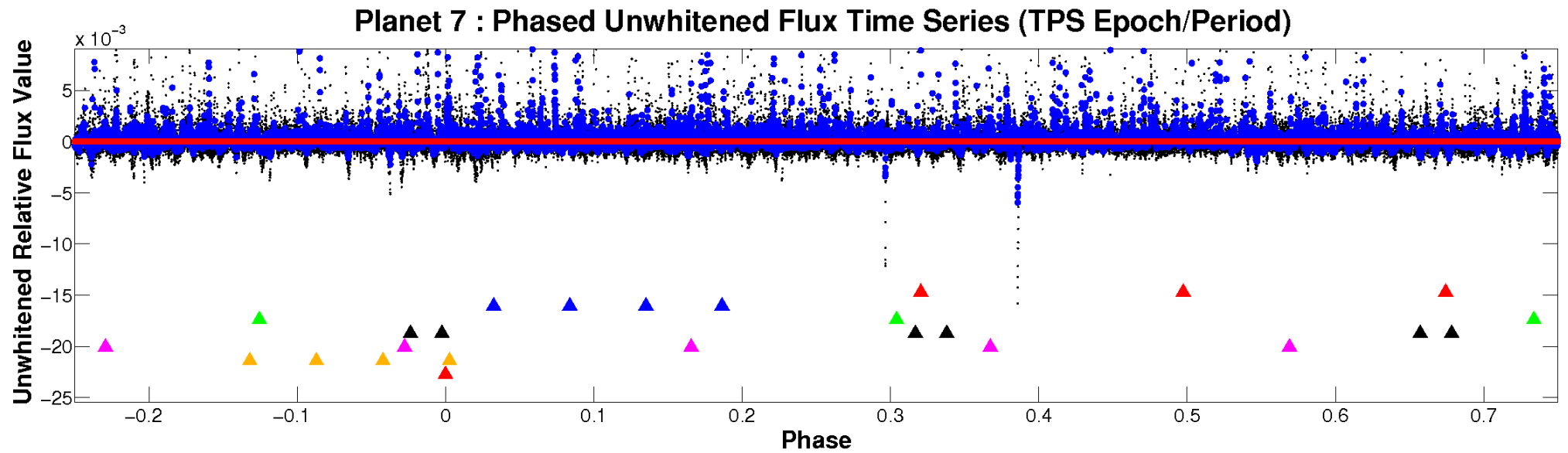


ALT Odd/Even

TCE 009267818-07

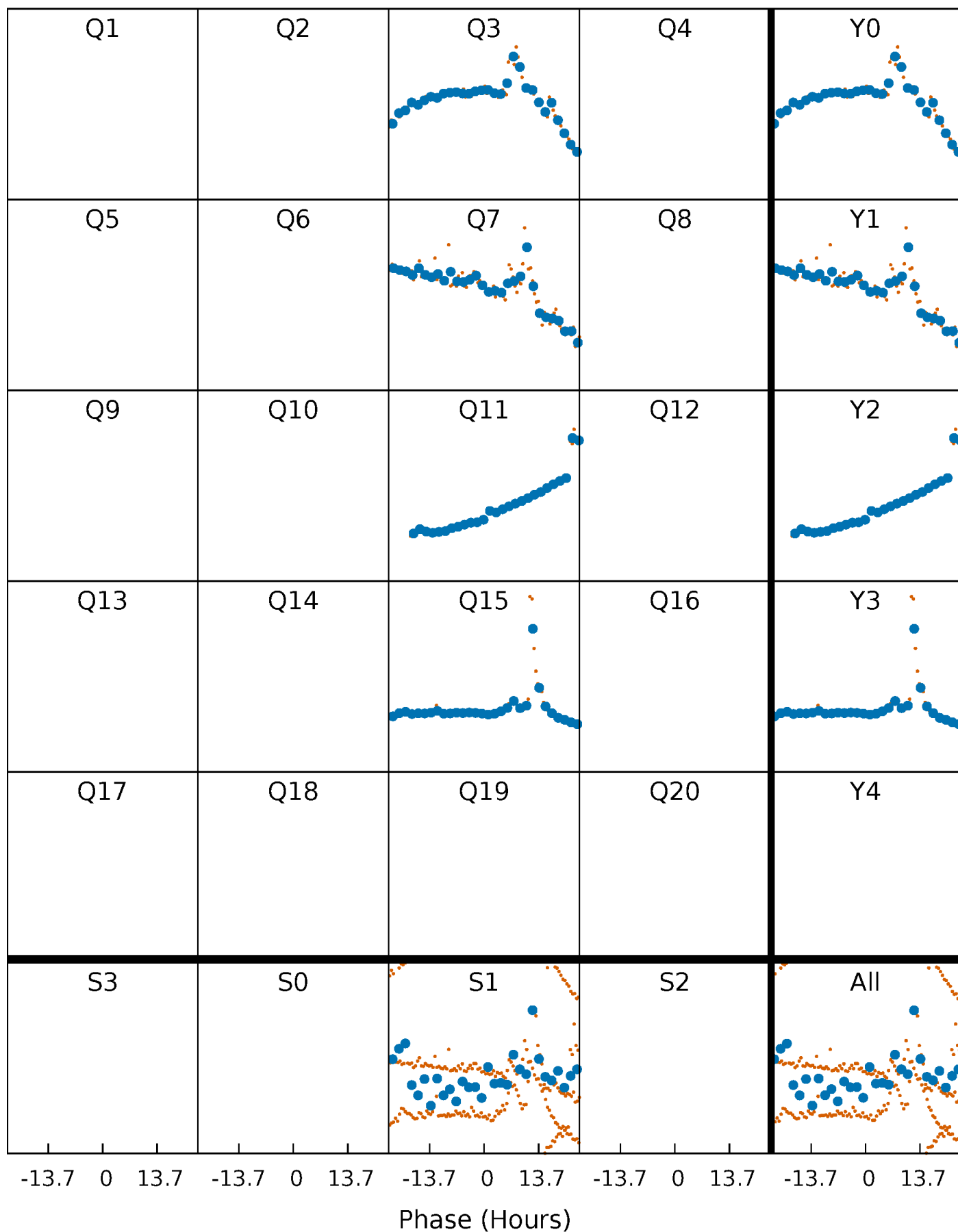


Non-Whitened Vs. Whitened Light Curve



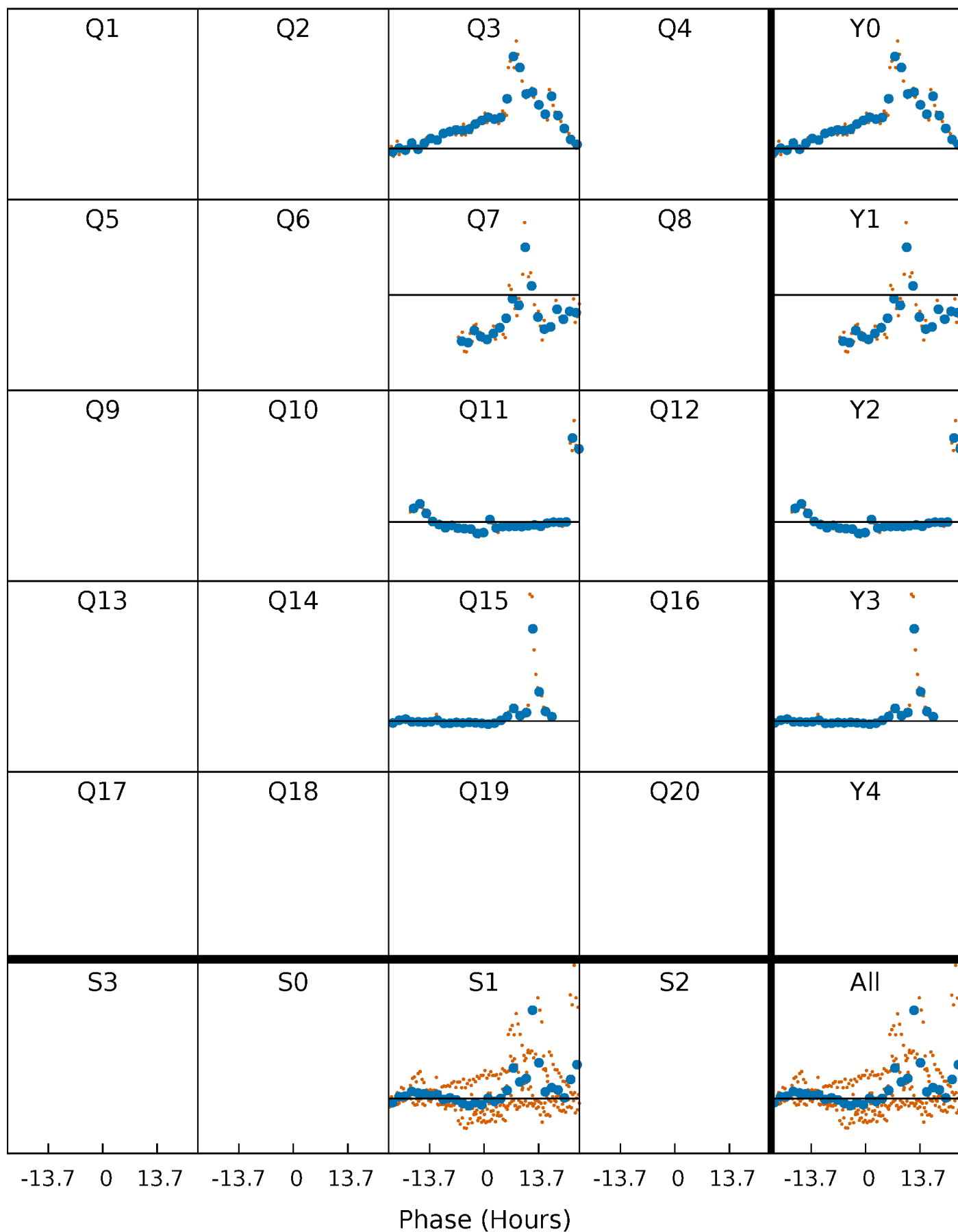
PDC Quarter-Phased Transit Curves

TCE 009267818-07 $P=369.084583$ Days $T_0=335.162070$ (BKJD)



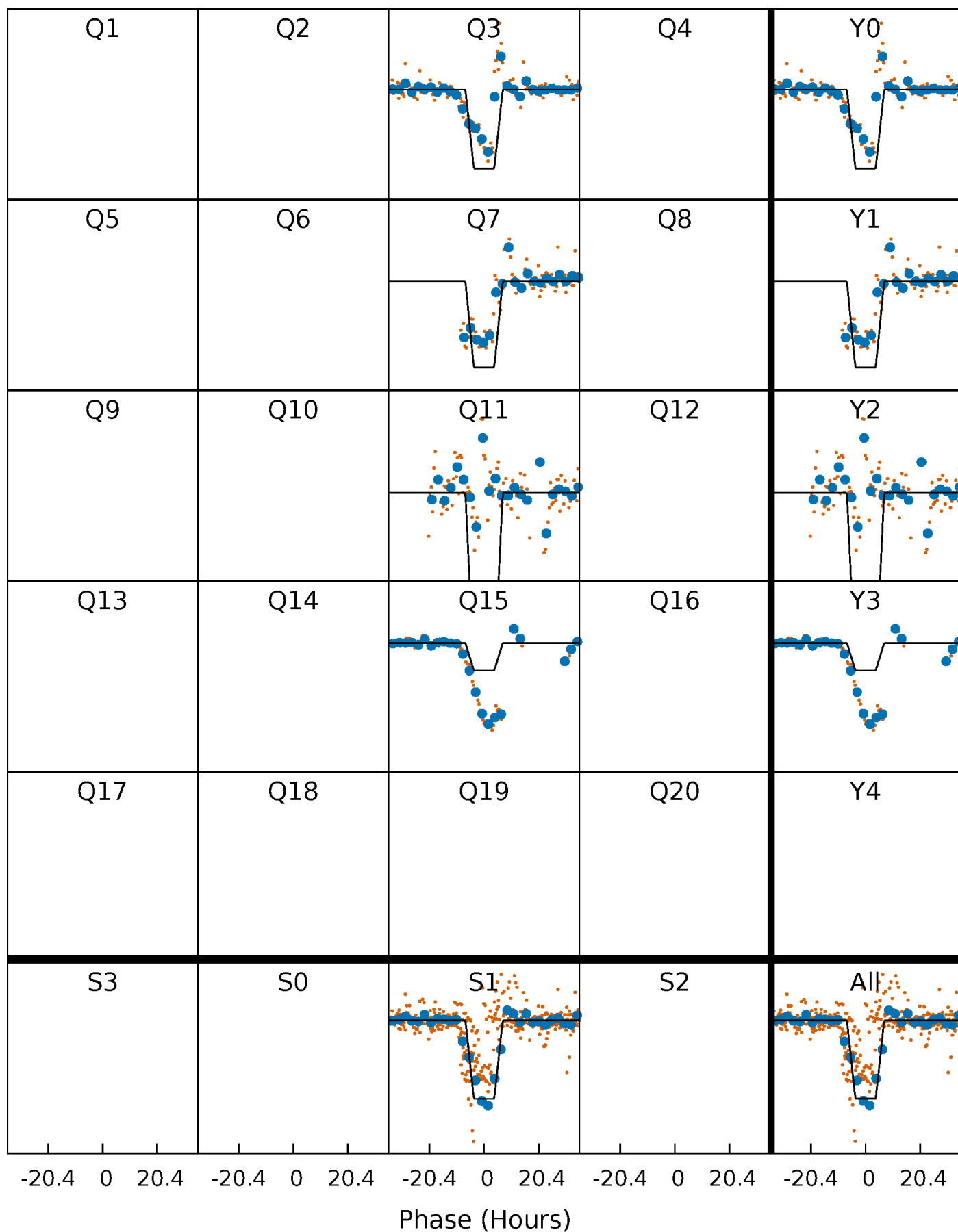
DV Quarter-Phased Transit Curves

TCE 009267818-07 $P=369.084583$ Days $T_0=335.162070$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

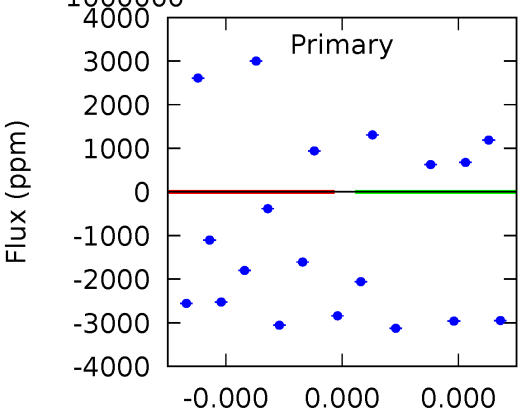
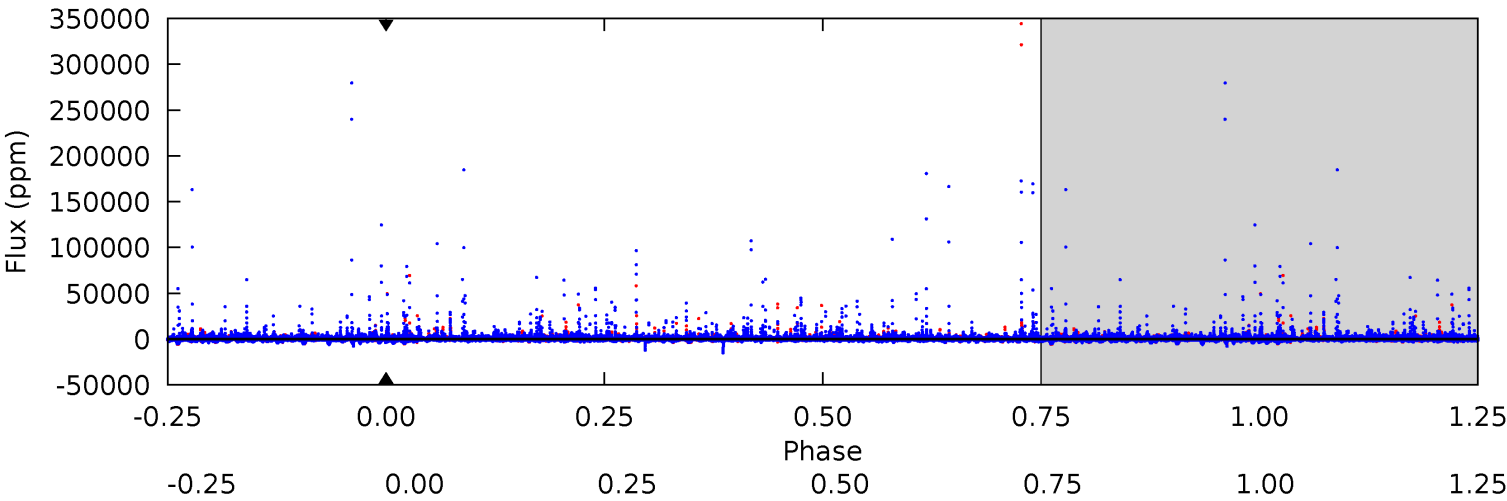
TCE 009267818-07 $P=369.084583$ Days $T_0=335.253459$ (BKJD)



DV Model-Shift Uniqueness Test

009267818-07, P = 369.084583 Days, E = 335.162070 Days

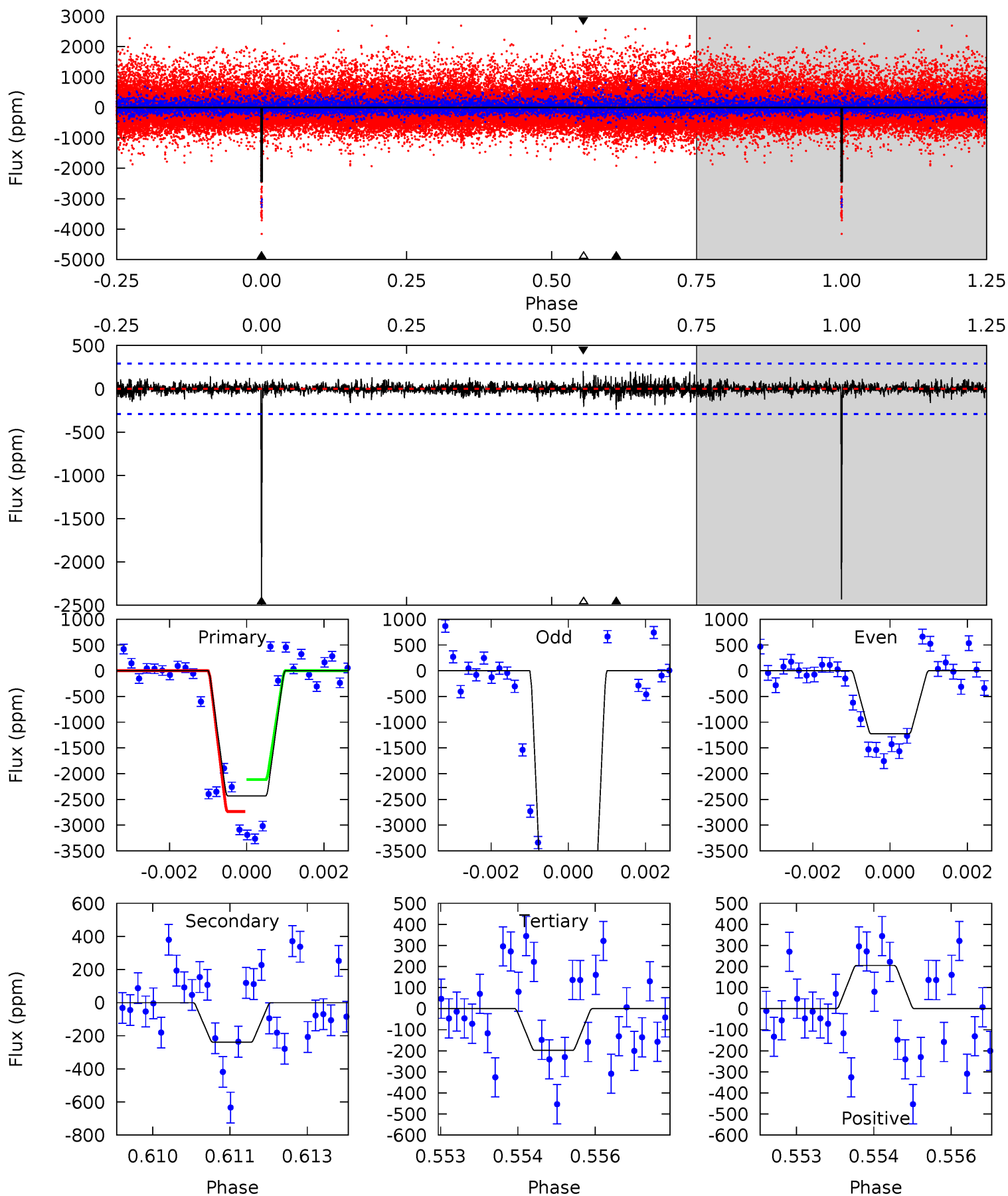
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

009267818-07, P = 369.084583 Days, E = 335.253459 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
44.7	4.39	3.64	3.76	5.36	3.15	0.74	41.0	40.9	0.75	0.64	66.4	1.65	0.08	0



Stellar Parameters For KIC 009267818

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3573^{+42}_{-48}	$4.896^{+0.028}_{-0.039}$	$-0.200^{+0.100}_{-0.100}$	$0.372^{+0.033}_{-0.030}$	$0.398^{+0.028}_{-0.042}$	$10.920^{+1.827}_{-1.723}$
	+1%/-1%	+1%/-1%	+50%/-50%	+9%/-8%	+7%/-11%	+17%/-16%
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 009267818-07 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$3.21^{+2.93}_{-2.37}$	156^{+3}_{-3}	3040^{+4508}_{-10416}	$56335^{+5825061}_{-5190871}$
Alt.	-239 ± 54	$4.03^{+3.67}_{-2.64}$	156^{+3}_{-3}	2183^{+632}_{-267}	4418^{+32444}_{-3196}

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

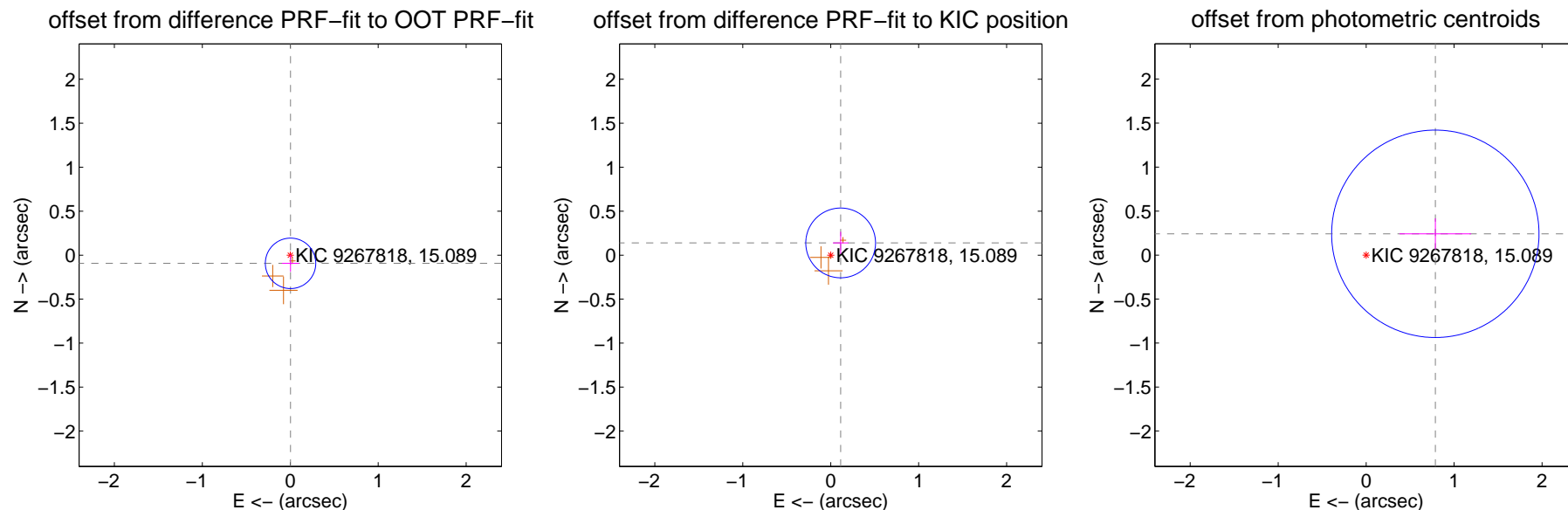
DV Centroid Data

Supplemental centroid analysis for 009267818-07. Kepler magnitude: 15.09. Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

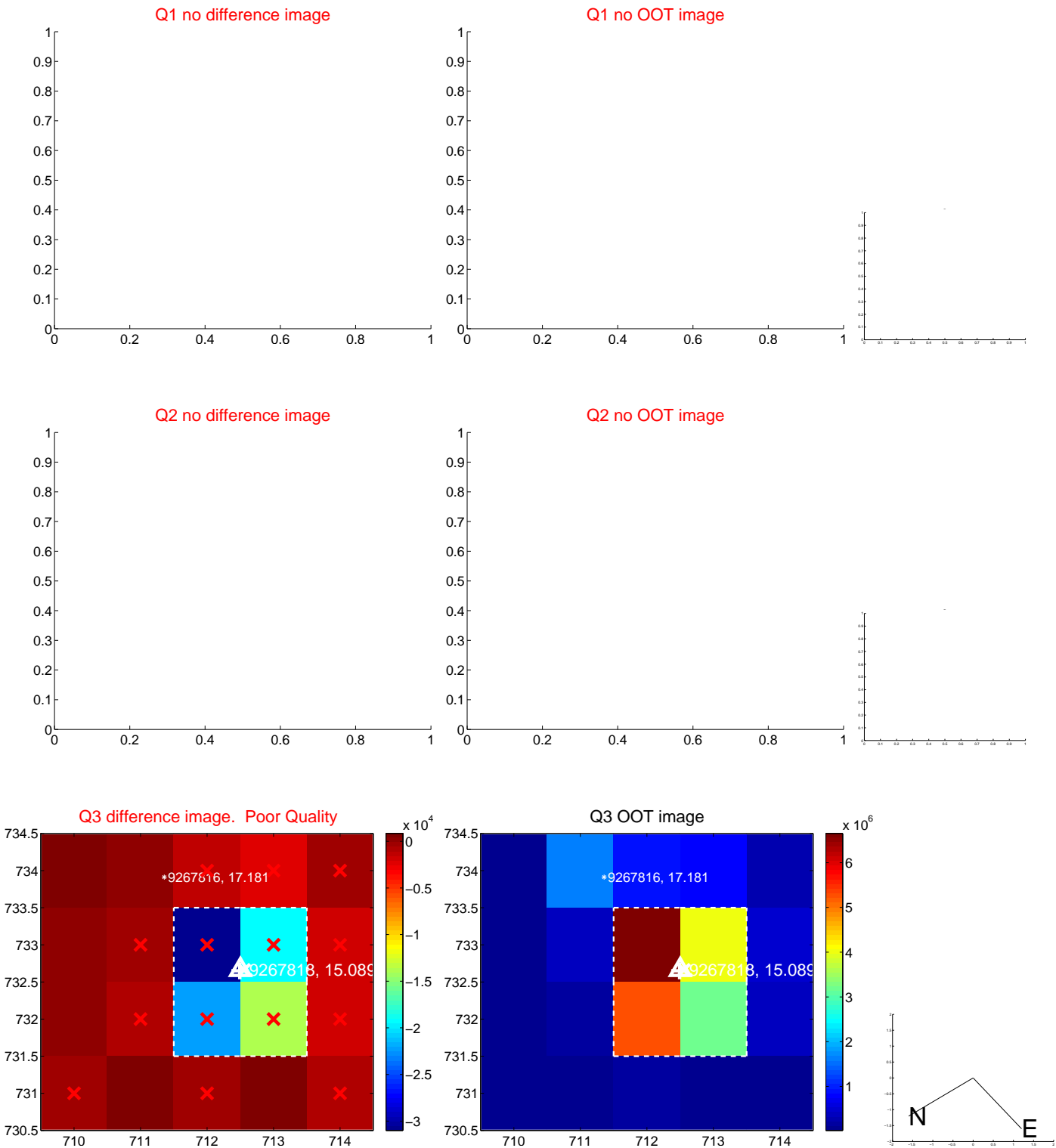
The direct PRF centroid is offset from the target star catalog position by about 0.23 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.093 ± 0.096	0.97	-0.003 ± 0.095	-0.093 ± 0.096
PRF-fit source offset from KIC position	0.179 ± 0.132	1.36	-0.113 ± 0.088	0.139 ± 0.126
photometric centroid source offset	0.82 ± 0.39	2.09	-0.79 ± 0.41	0.24 ± 0.18

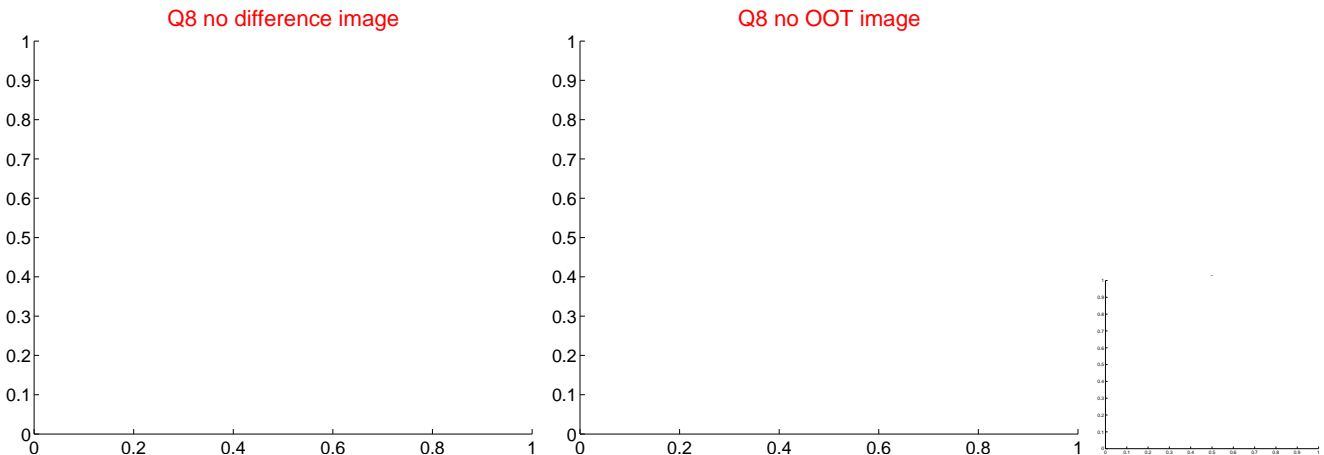
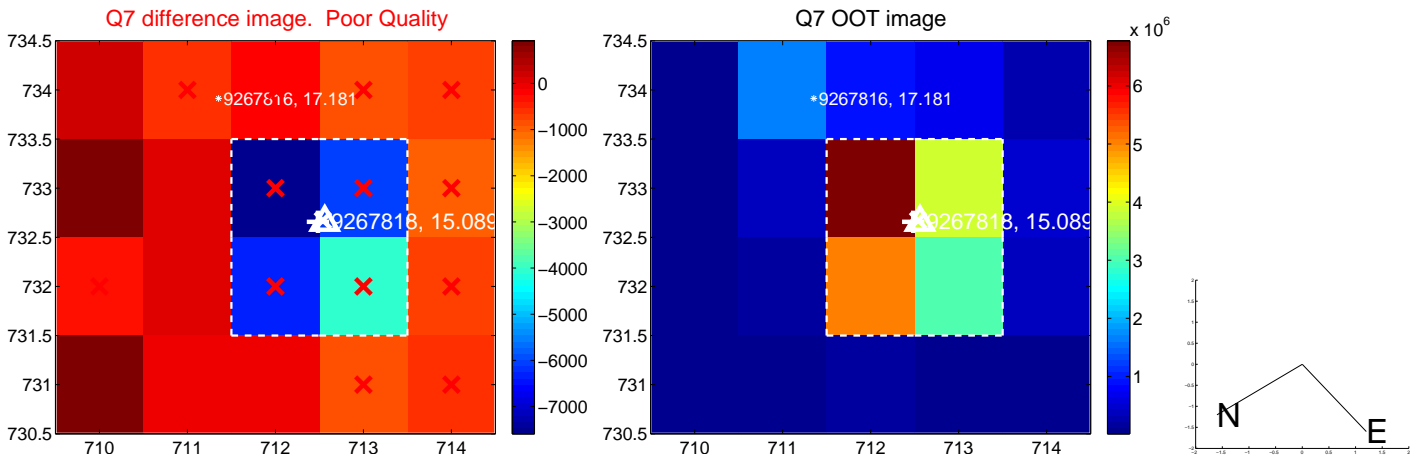
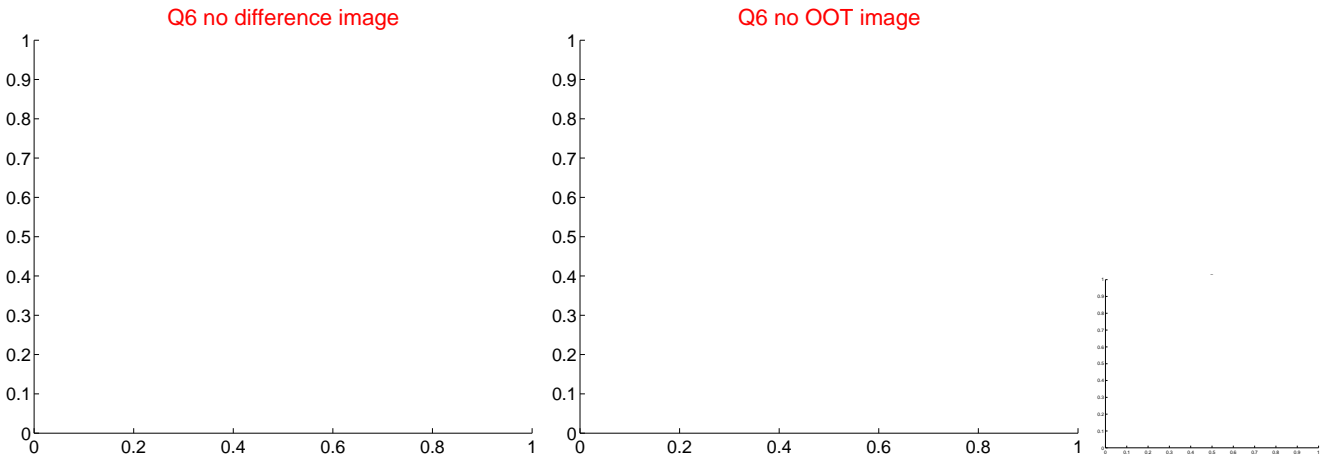
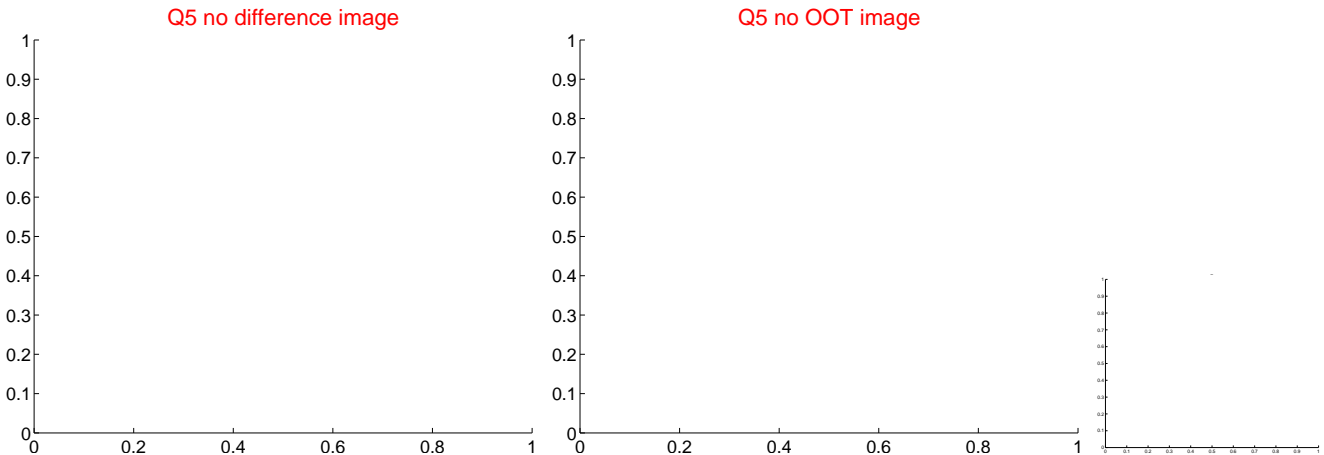


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



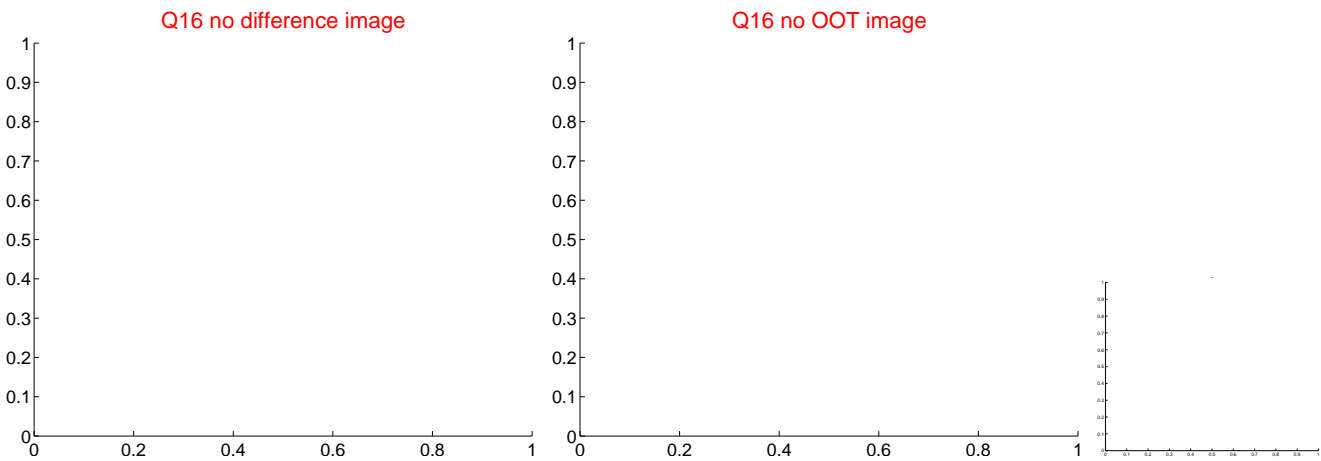
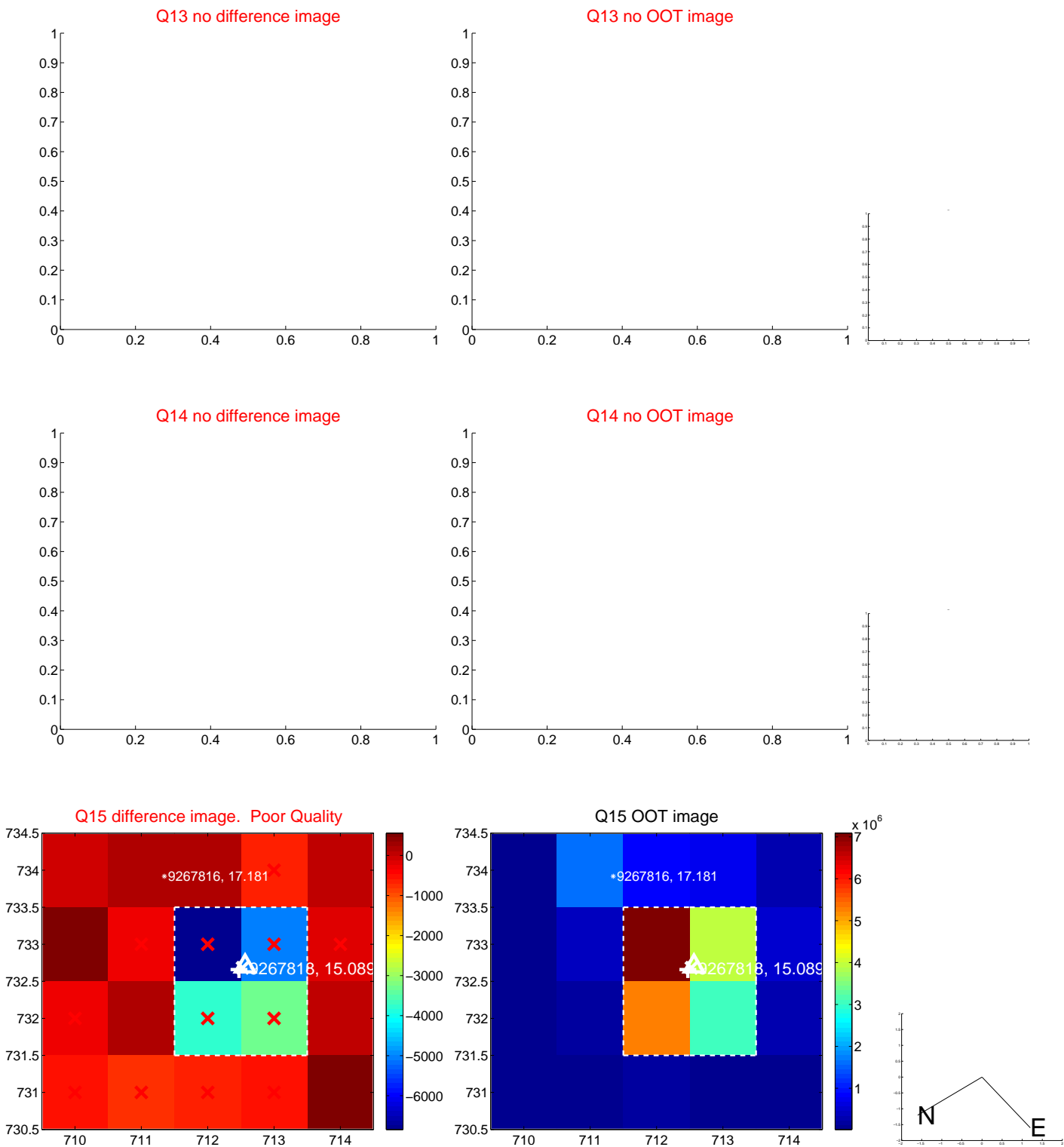
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



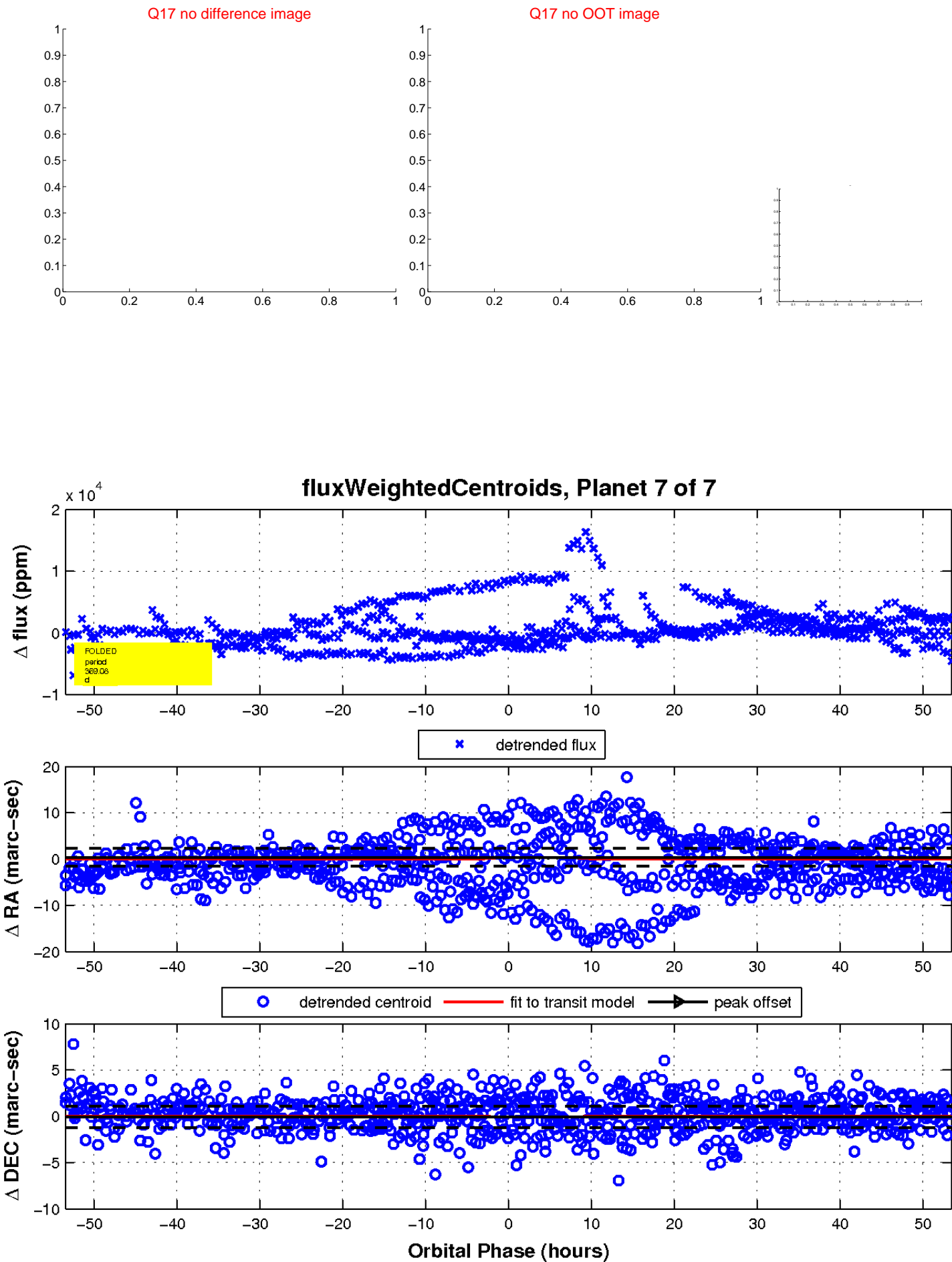
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

