

KIC 011913095

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})
011913095-01	OBS	No	319.683046	410.074906	6618.4	10.500	75.4	-1.0	4.14	5180	32.81	9.07
011913095-02	OBS	No	286.482545	189.222496	81.1	100.550	612.5	1.8	4.14	5180	3.81	10.49
011913095-03	OBS	No	430.469807	140.204891	18556.0	21.279	64.7	90.4	4.14	5180	101.72	6.10
011913095-04	OBS	No	247.961251	311.741804	2874.2	15.000	35.4	-1.0	4.14	5180	21.61	12.72
011913095-05	OBS	No	468.370891	157.037551	575.2	10.085	13.9	9.4	4.14	5180	11.09	5.45

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011913095-01	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_NOFITS—HALO_GHOST
011913095-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_FEW_DIFFS
011913095-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
011913095-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_NOFITS
011913095-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

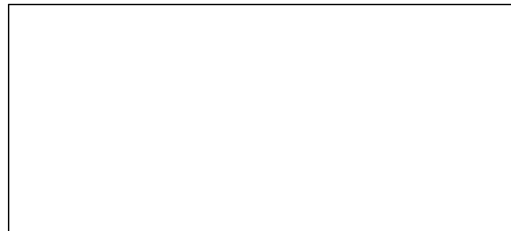
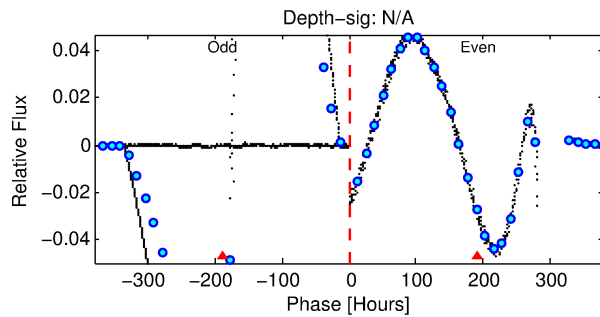
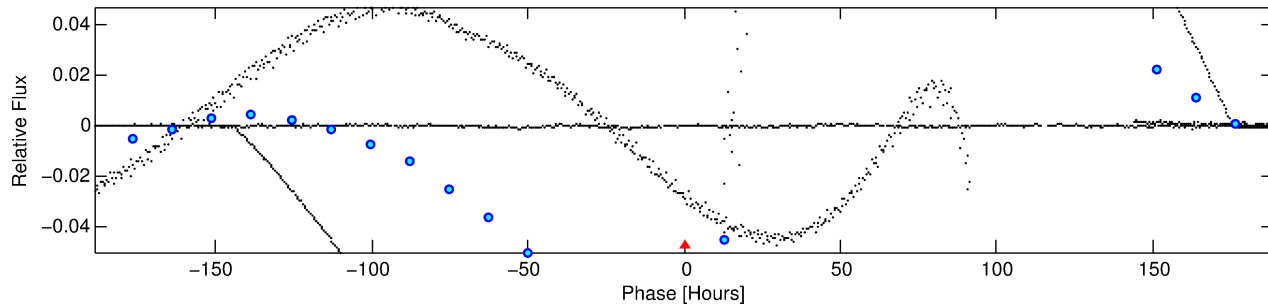
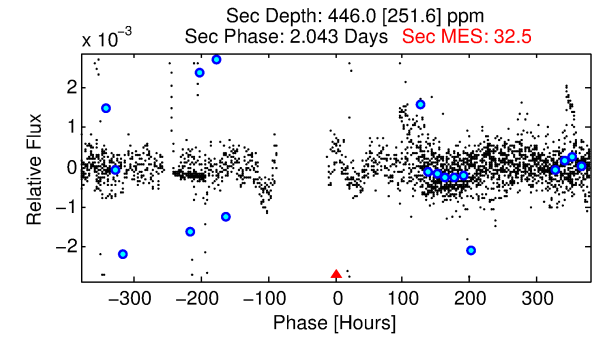
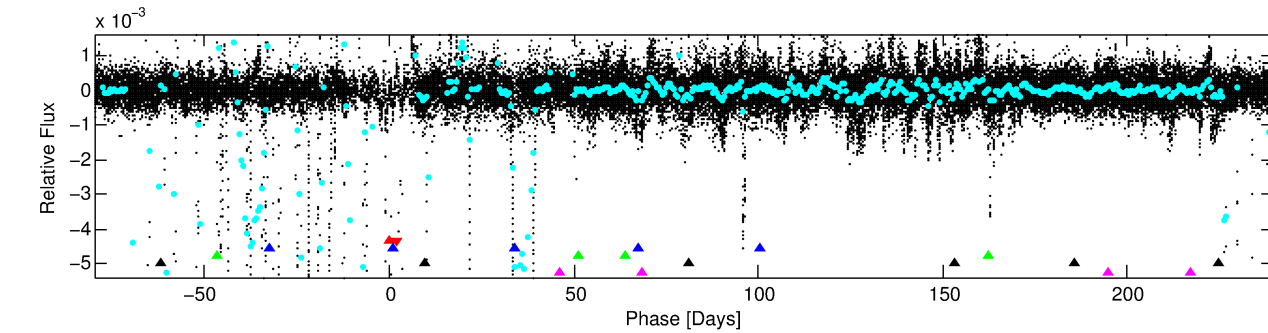
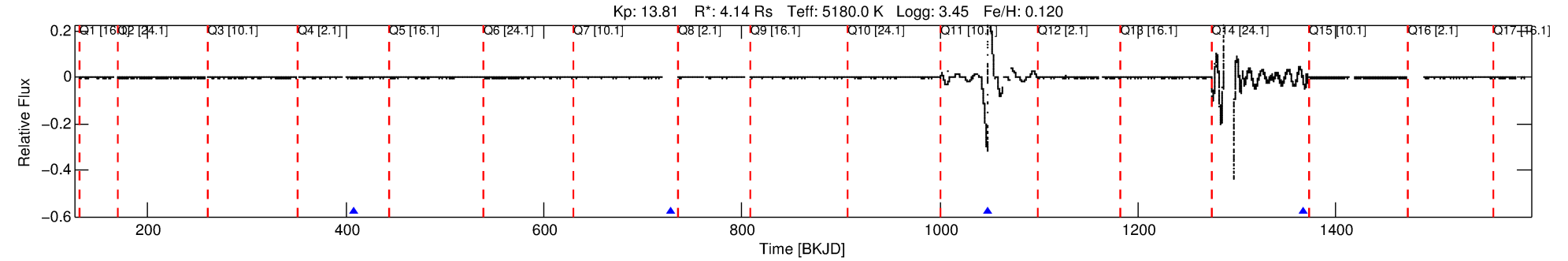
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011913095-01

No Significant Match Found

DV One-Page Summary

KIC: 11913095 Candidate: 1 of 5 Period: 319.683 d



TPS TCE Results:

Period = 319.68305 d
Epoch = 410.0749 BKJD

DV fit results are unavailable

DV Diagnostic Results:

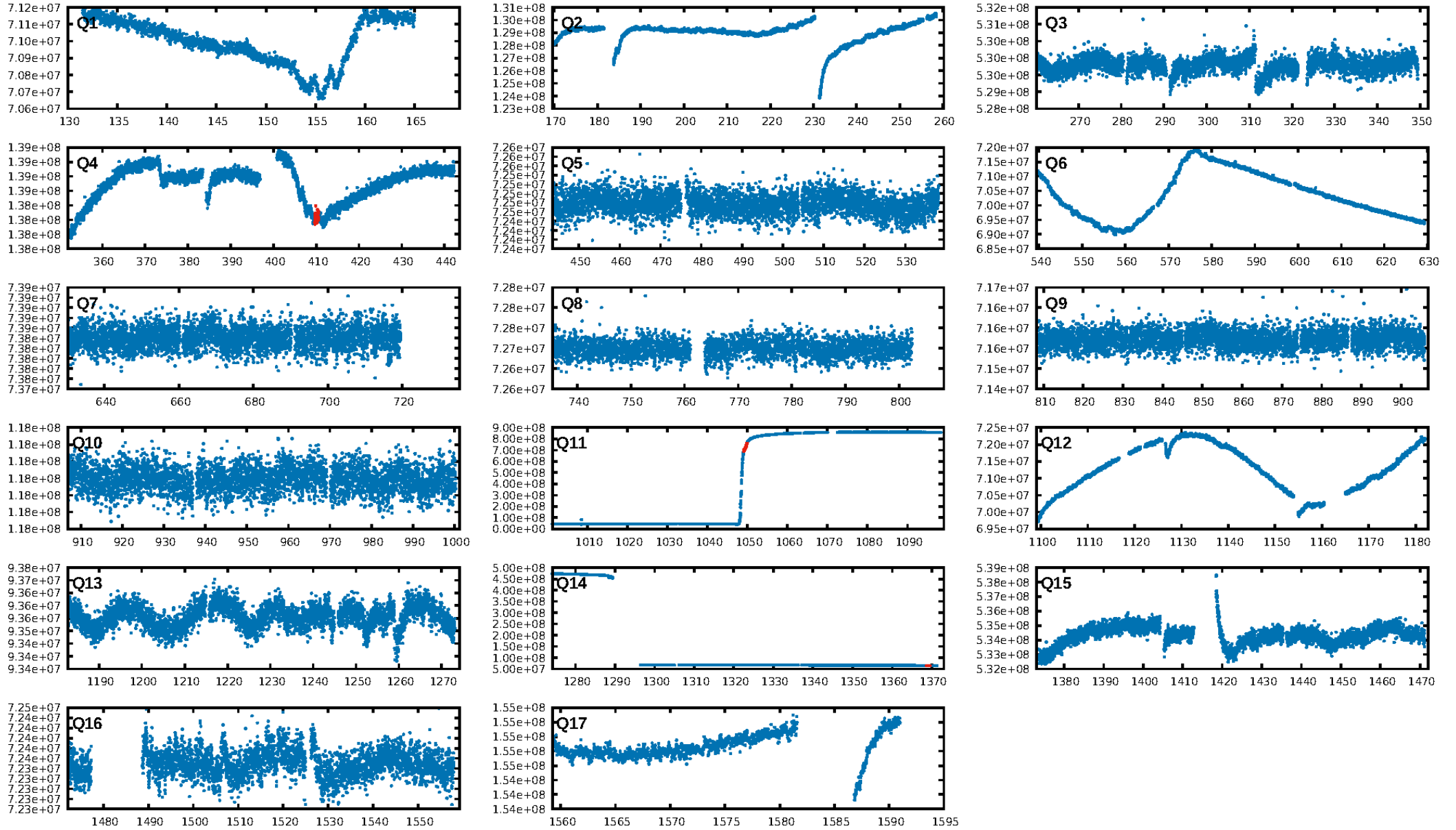
ShortPeriod-sig: 100.0% [7.88 σ]
LongPeriod-sig: 100.0% [112.05 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.99e-18
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -0.235

Centroid-sig: N/A
Centroid-so: 5.364 arcsec [0.80 σ]
OotOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 0.50 [1/2]

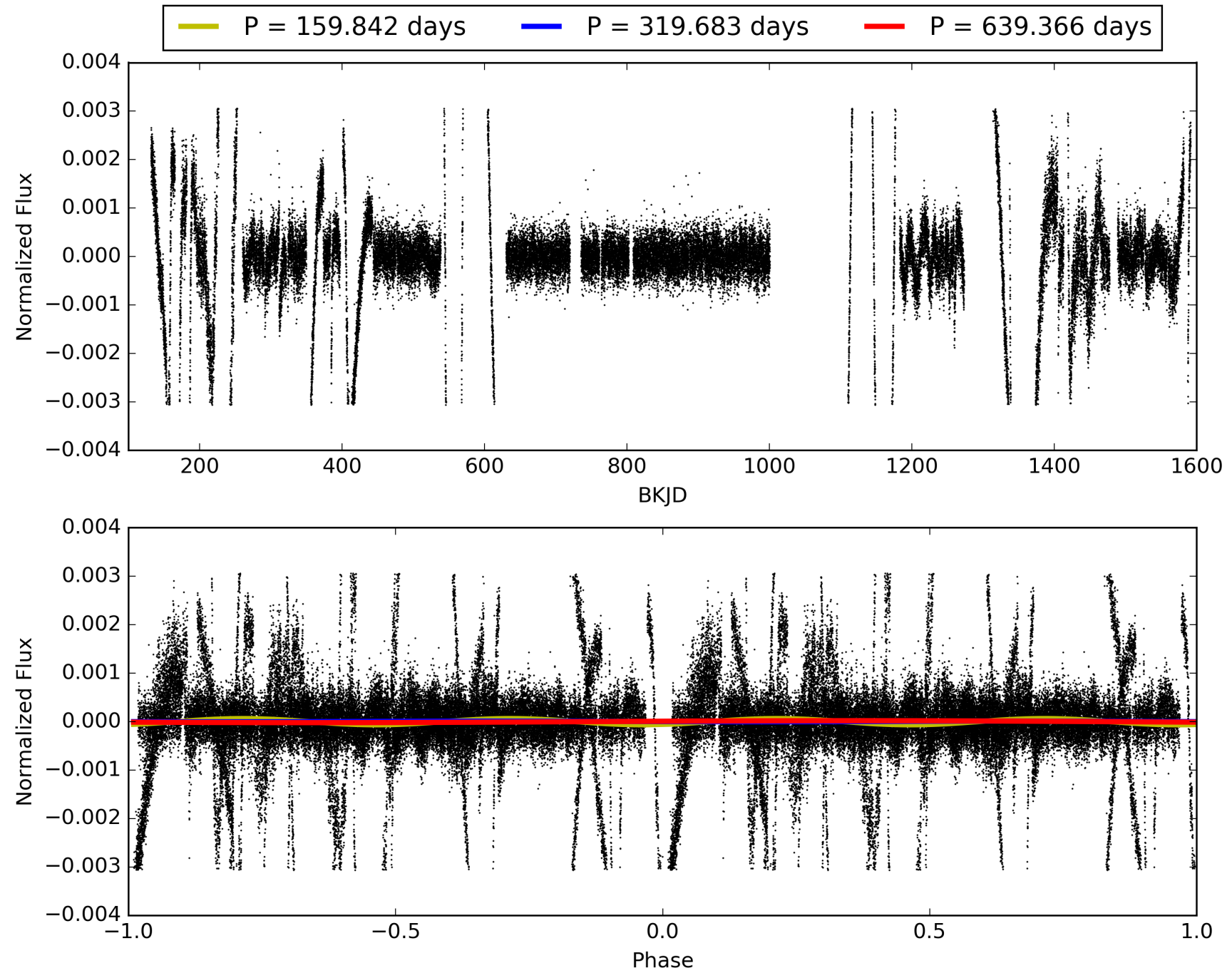
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:08:45 Z

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

TCE 011913095-01, PDC Light Curves

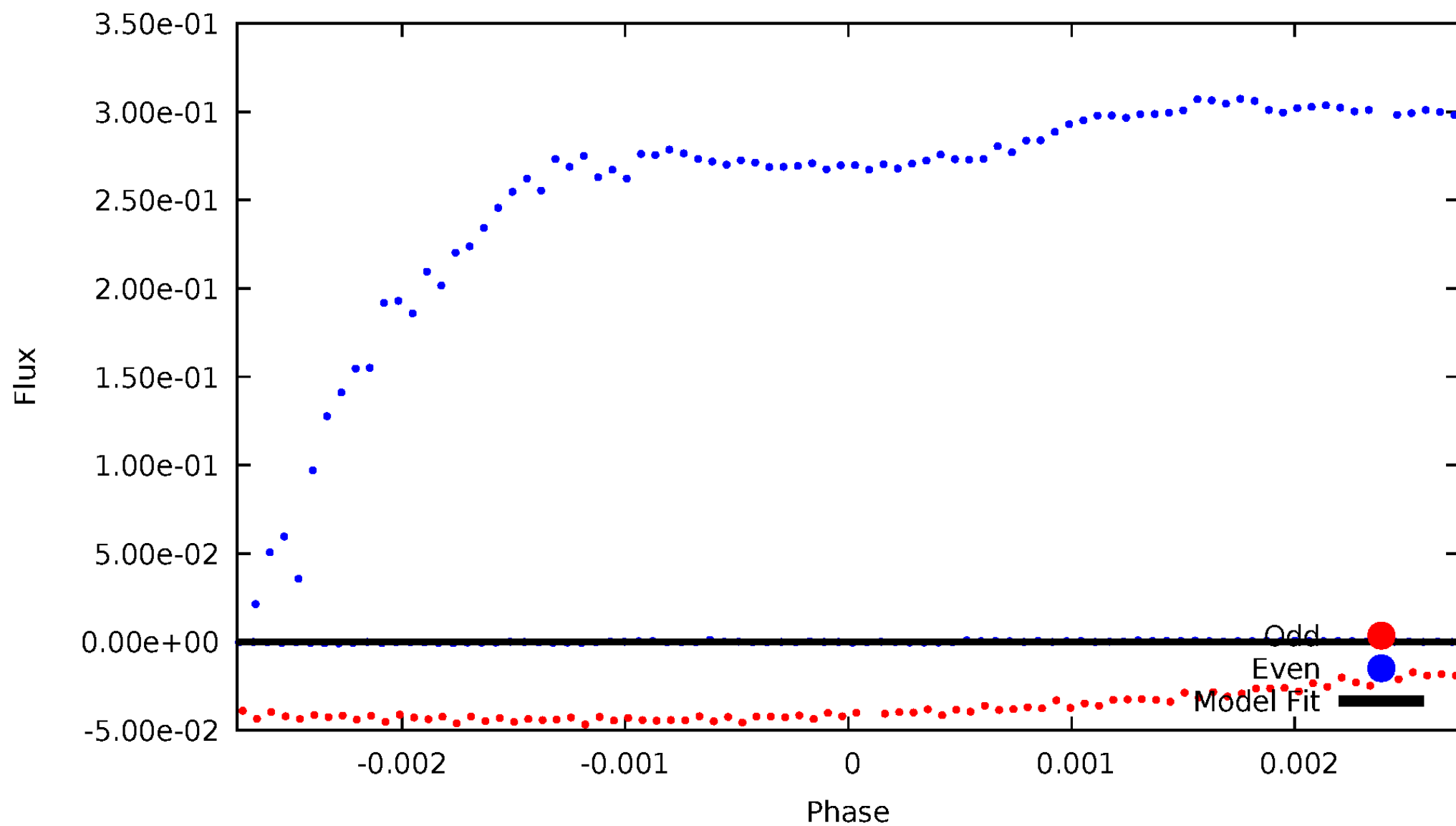


TCE 011913095-01



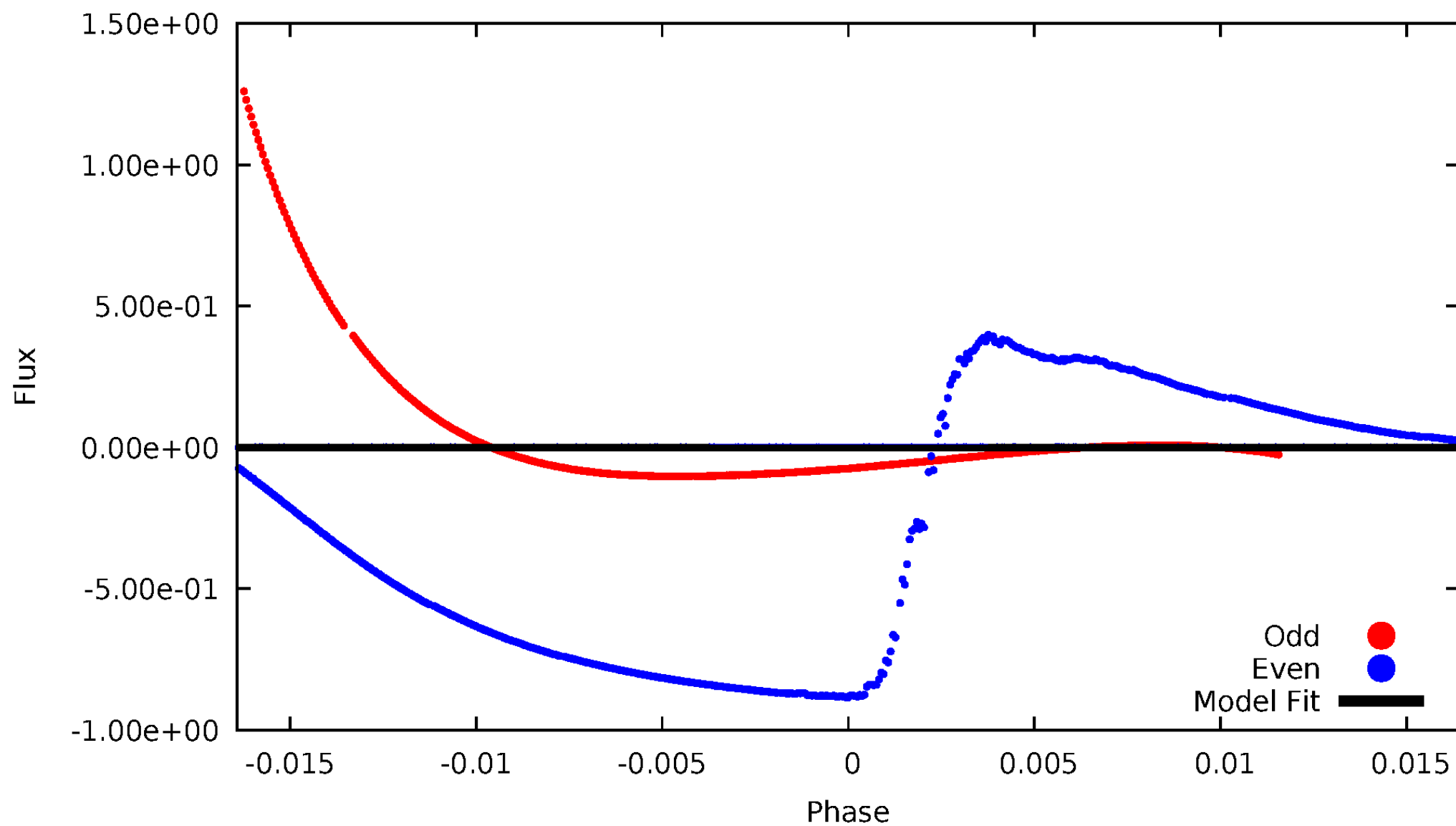
DV Odd/Even

TCE 011913095-01



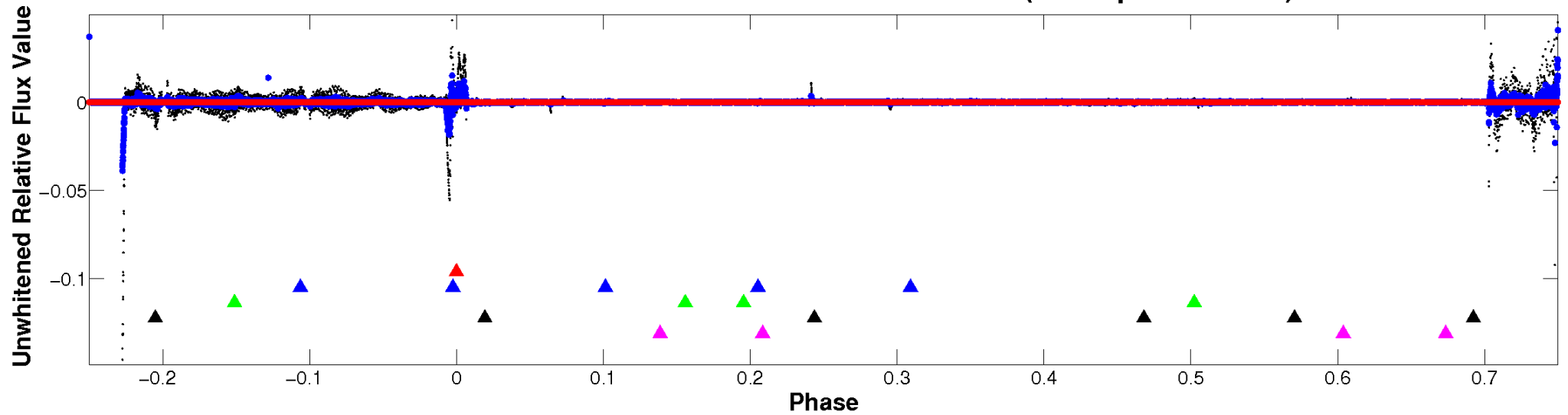
ALT Odd/Even

TCE 011913095-01

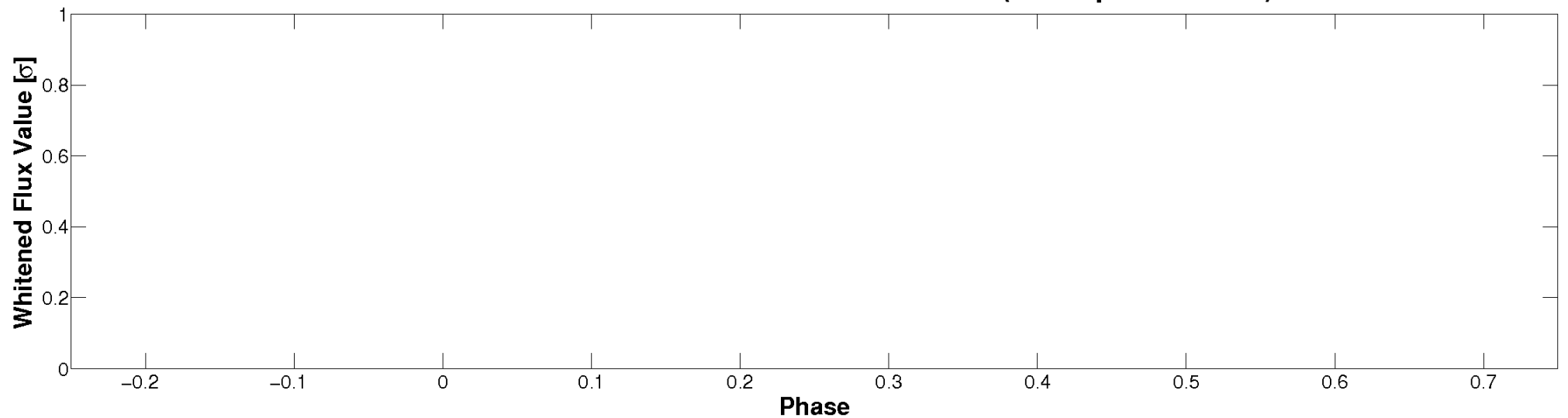


Non-Whitened Vs. Whitened Light Curve

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

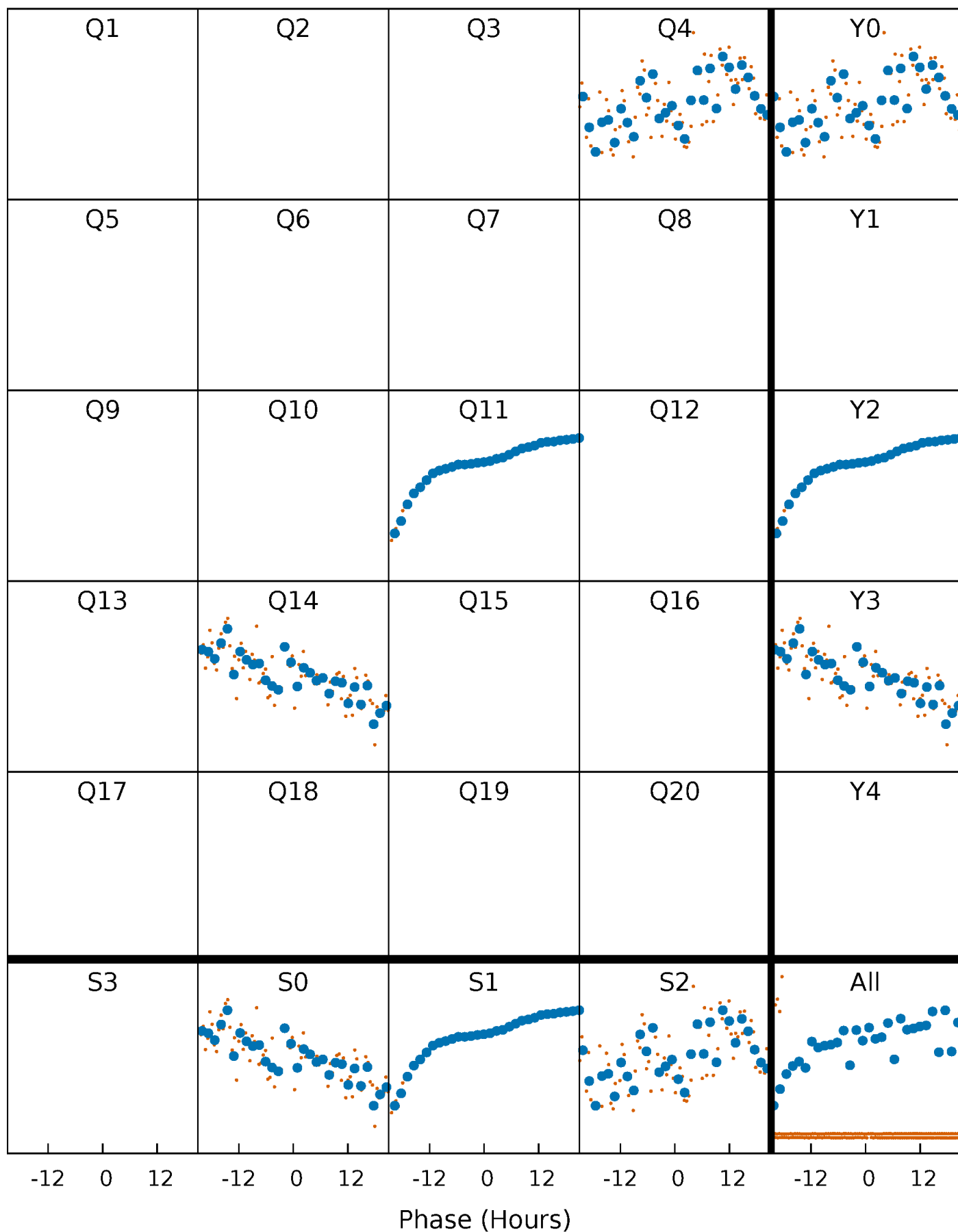


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



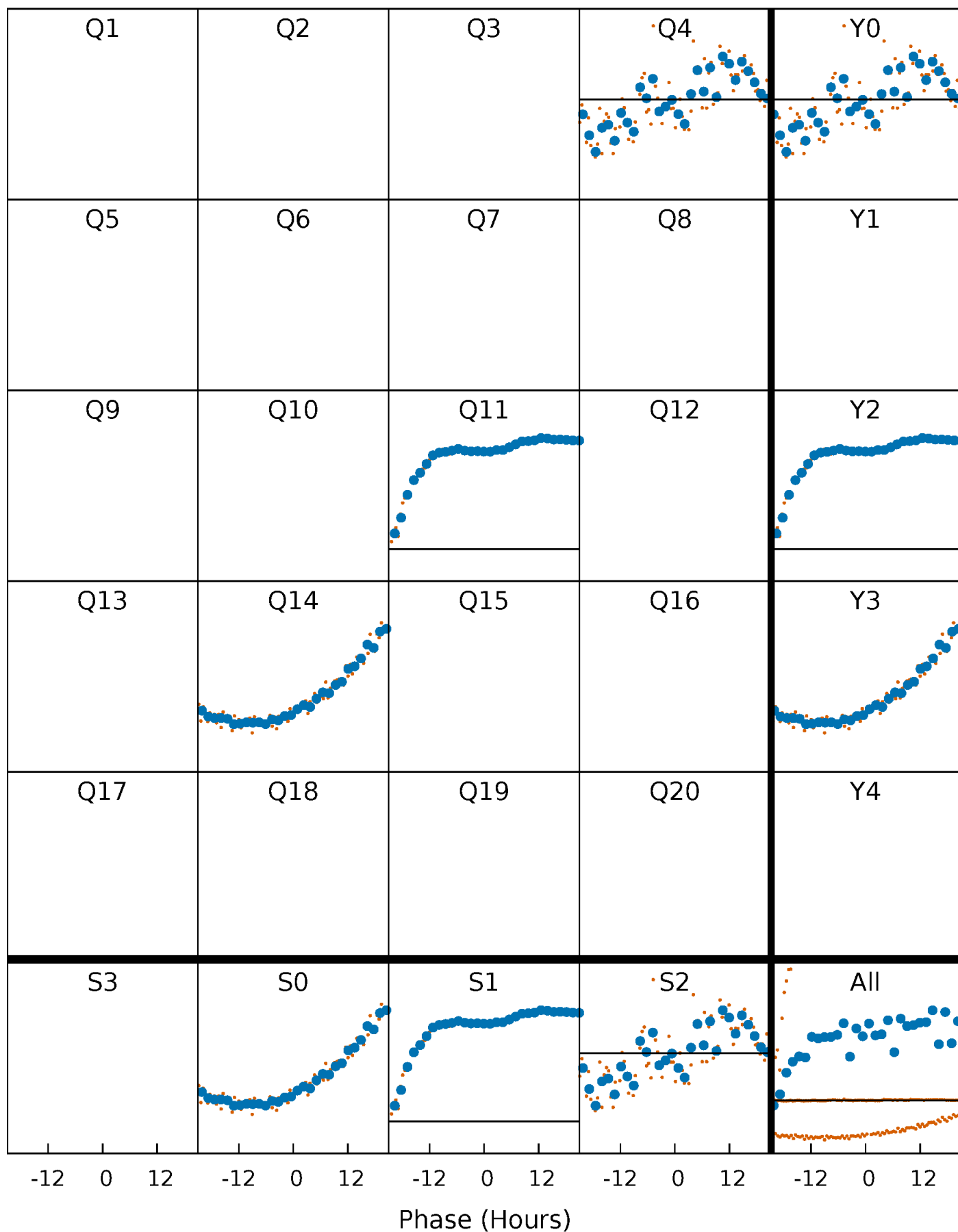
PDC Quarter-Phased Transit Curves

TCE 011913095-01 P=319.683046 Days $T_0=410.074906$ (BKJD)



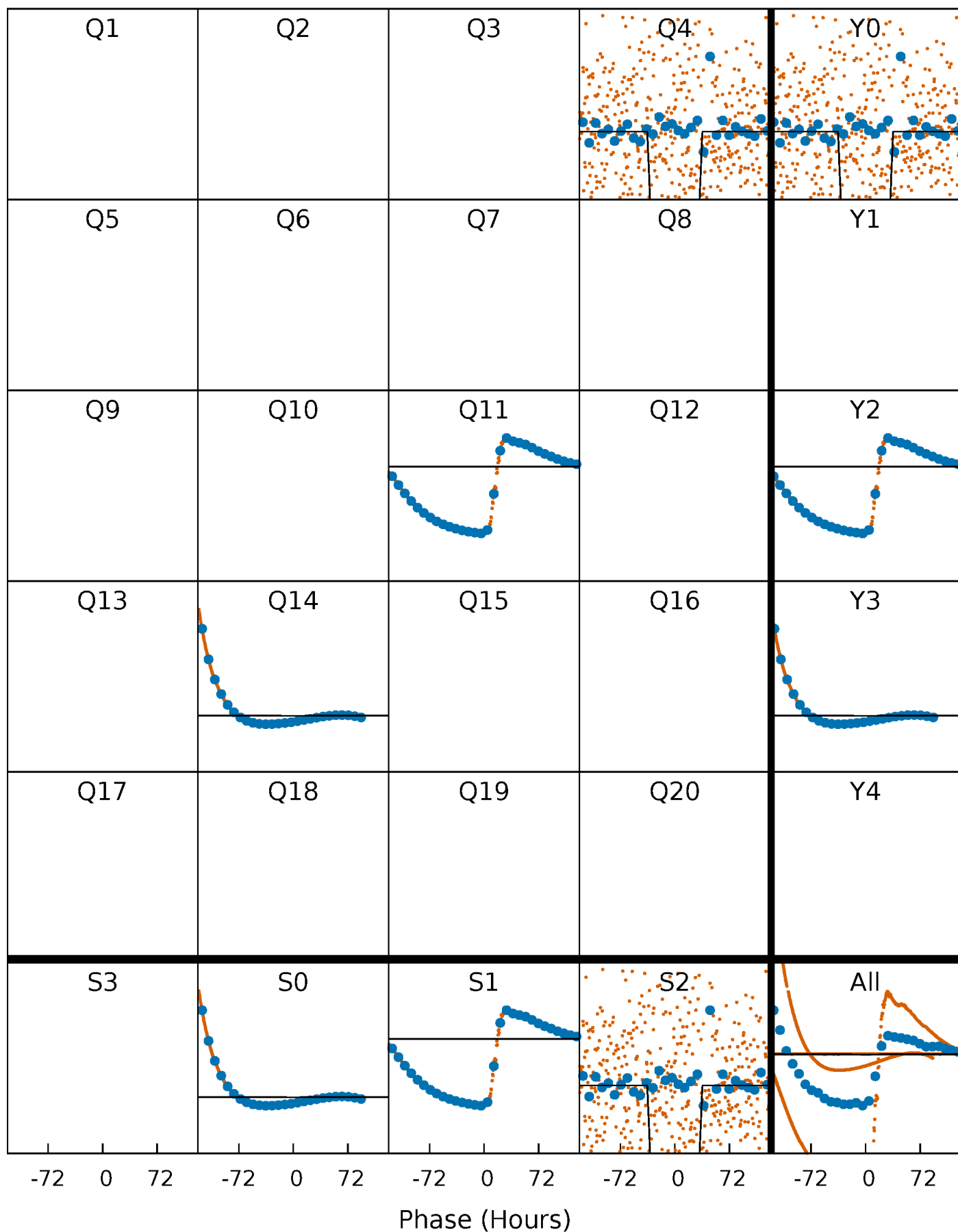
DV Quarter-Phased Transit Curves

TCE 011913095-01 P=319.683046 Days $T_0=410.074906$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

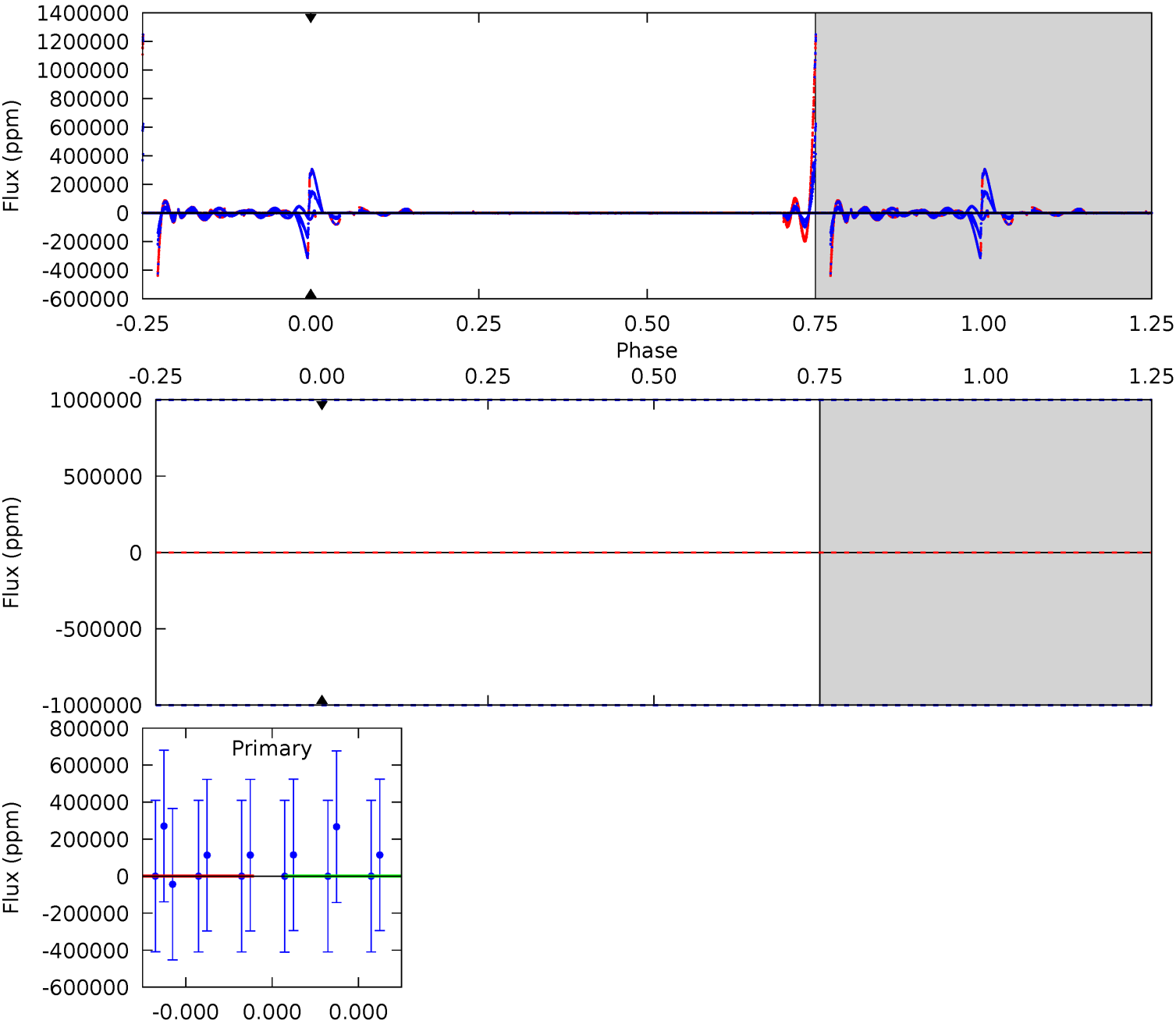
TCE 011913095-01 P=319.683046 Days $T_0=408.454020$ (BKJD)



DV Model-Shift Uniqueness Test

011913095-01, P = 319.683046 Days, E = 90.391860 Days

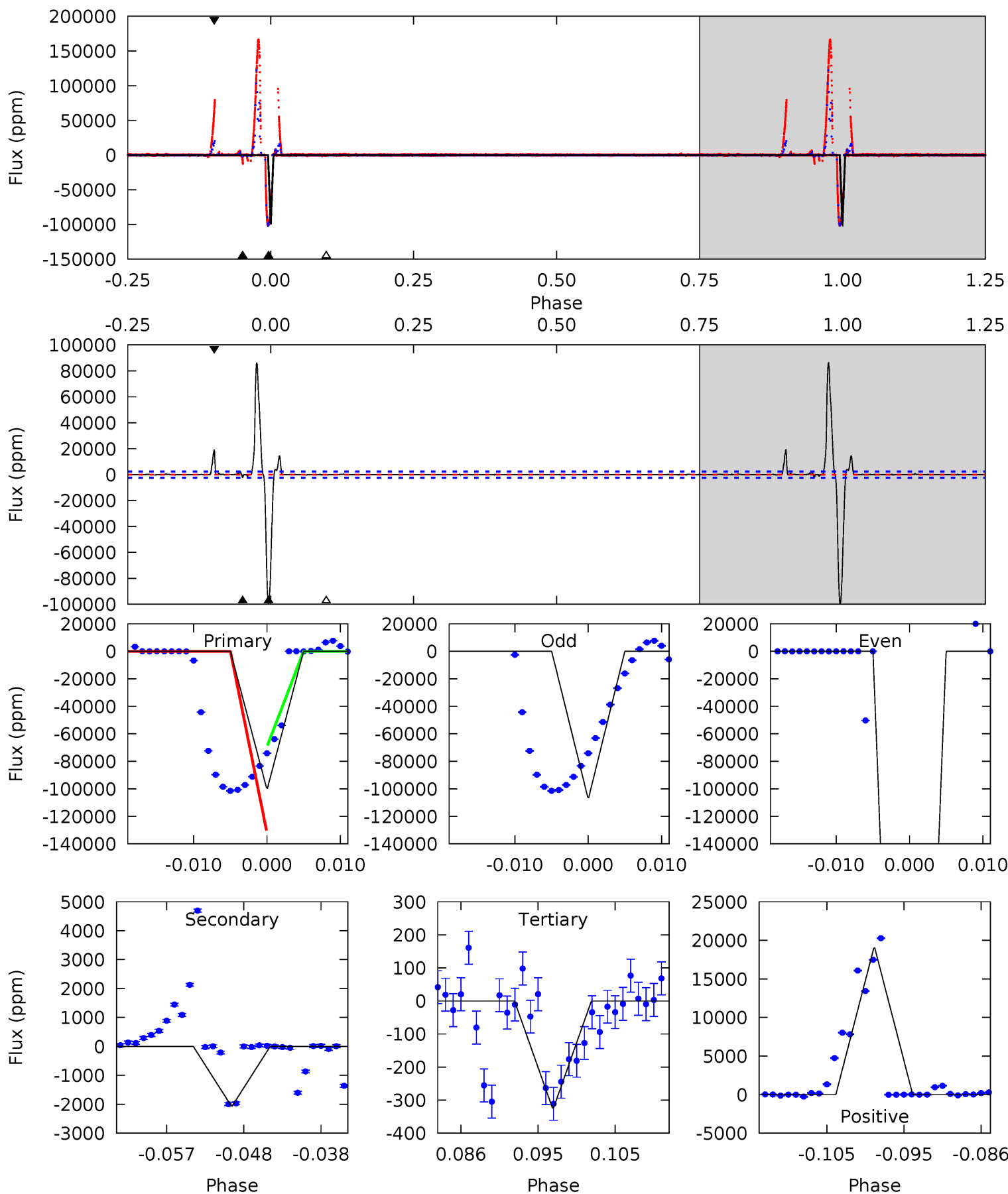
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

011913095-01, P = 319.683046 Days, E = 88.770974 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
202.6	4.20	0.66	38.7	5.04	2.59	8.02	202.0	163.9	3.54	-34.6	85.9	3.34	0.46	0



Stellar Parameters For KIC 011913095

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5180^{+199}_{-199}	$3.449^{+0.760}_{-0.190}$	$0.120^{+0.250}_{-0.350}$	$4.142^{+1.135}_{-2.647}$	$1.759^{+0.205}_{-0.820}$	$0.035^{+0.478}_{-0.017}$
	+4%/-4%	+22%/-6%	+208%/-292%	+27%/-64%	+12%/-47%	+1372%/-48%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011913095-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$35.10^{+38.36}_{-22.73}$	596^{+67}_{-103}	-3003^{+16044}_{-8238}	$-168.904^{+116789.904}_{-60211.597}$
Alt.	-2060 ± 491	$37.30^{+38.90}_{-25.34}$	599^{+68}_{-105}	3824^{+1978}_{-678}	903^{+7724}_{-679}

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

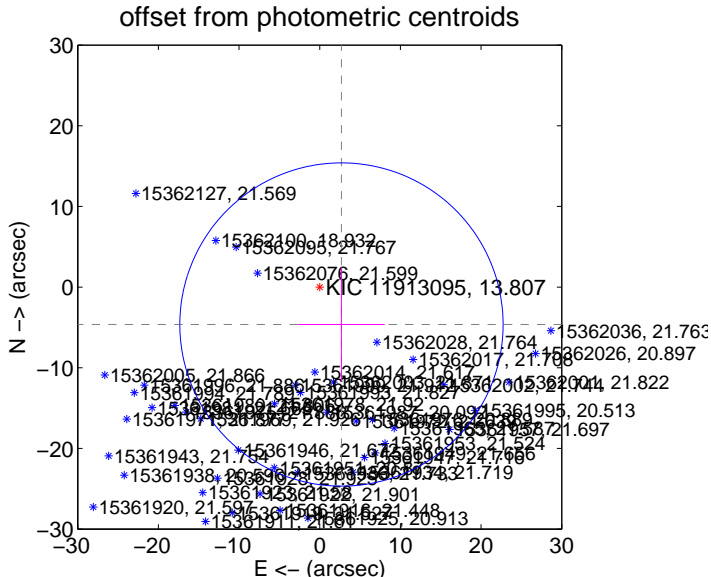
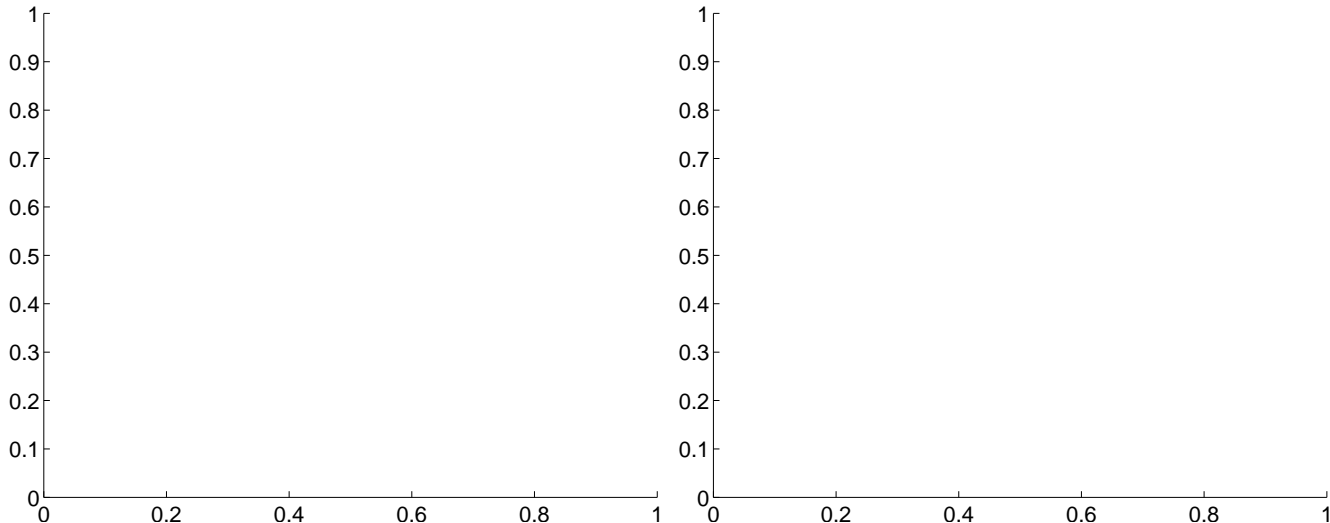
DV Centroid Data

Supplemental centroid analysis for 011913095-01. Kepler magnitude: 13.81. Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

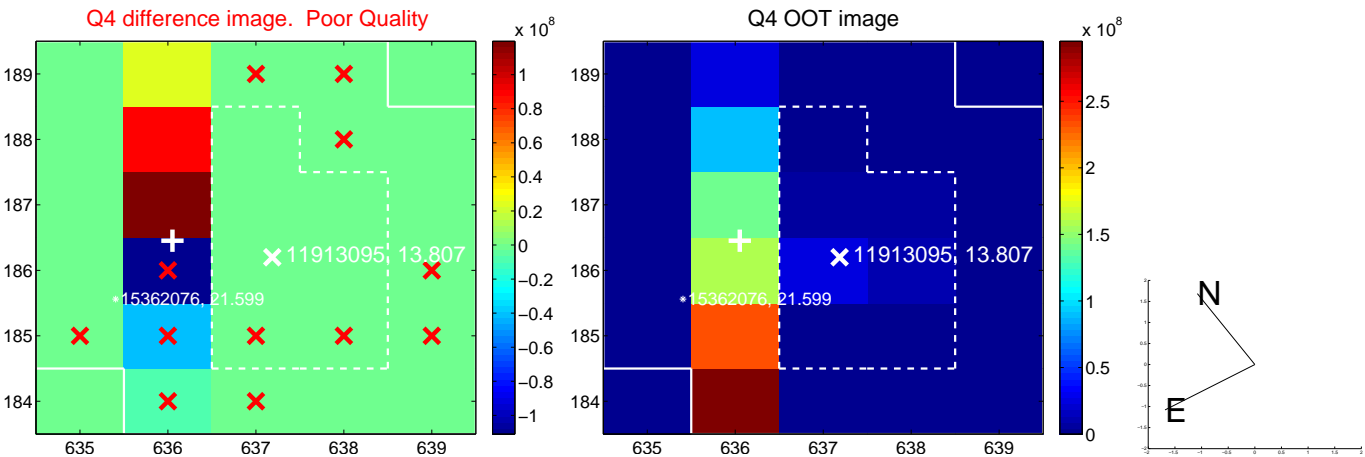
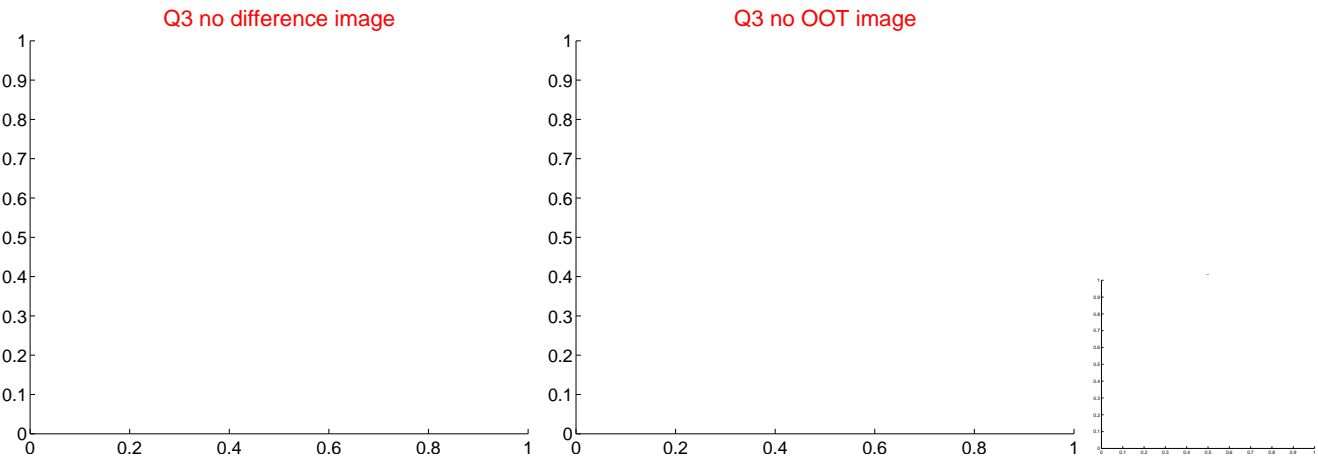
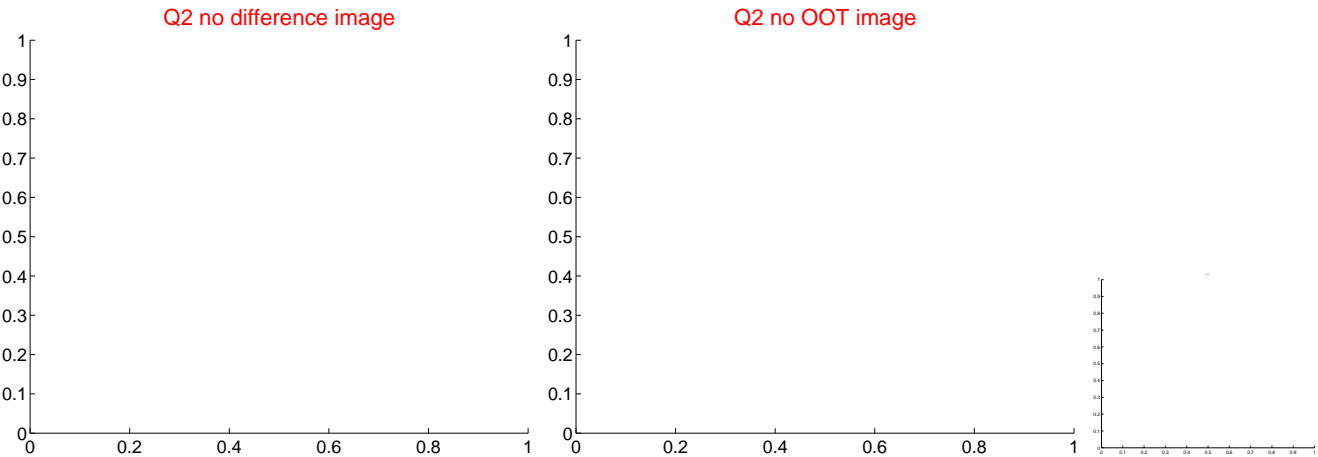
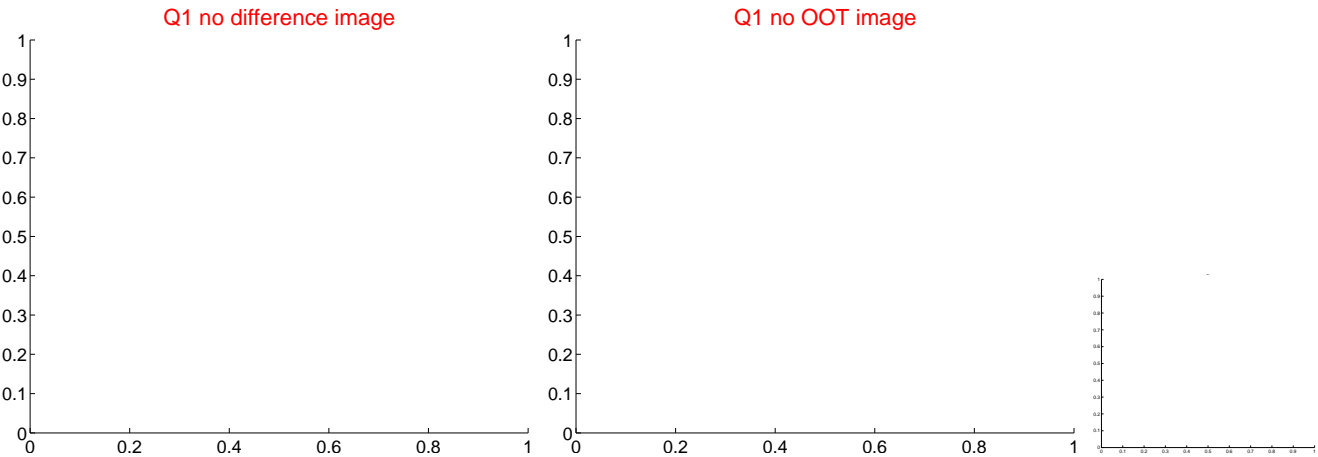
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	5.36 ± 6.68	0.80	-2.70 ± 5.36	-4.64 ± 7.07

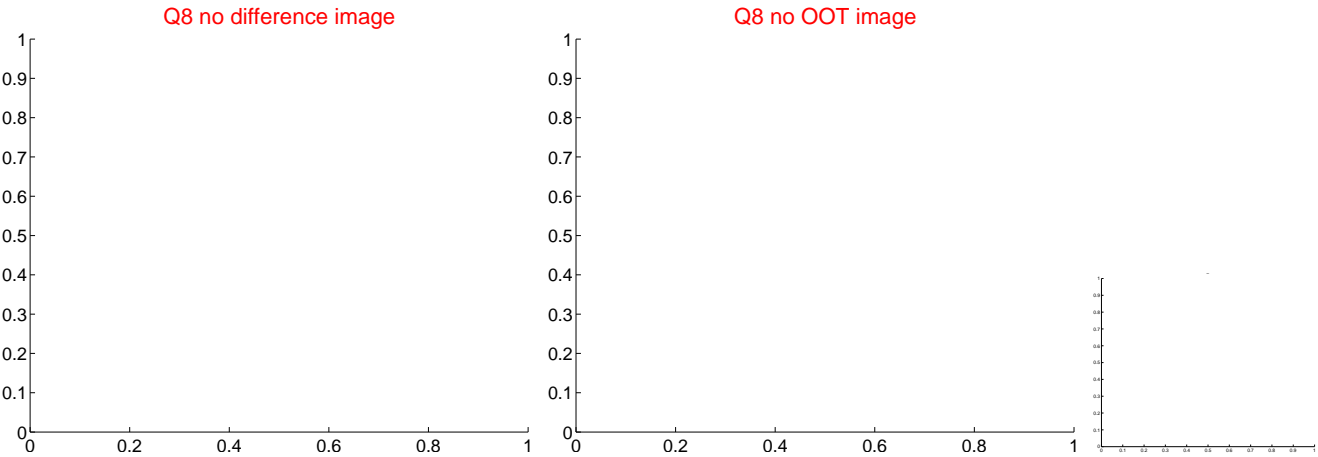
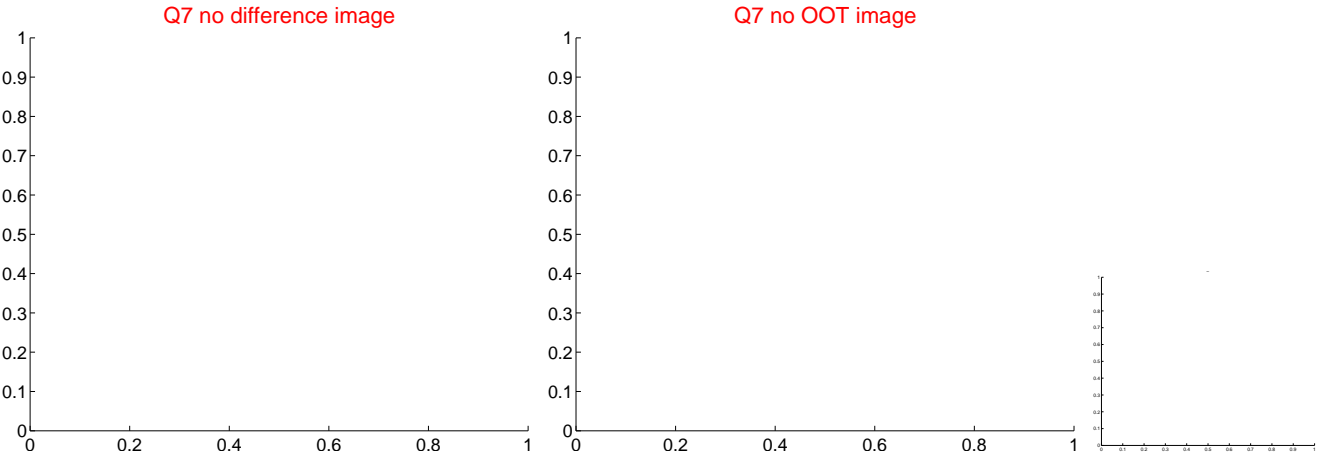
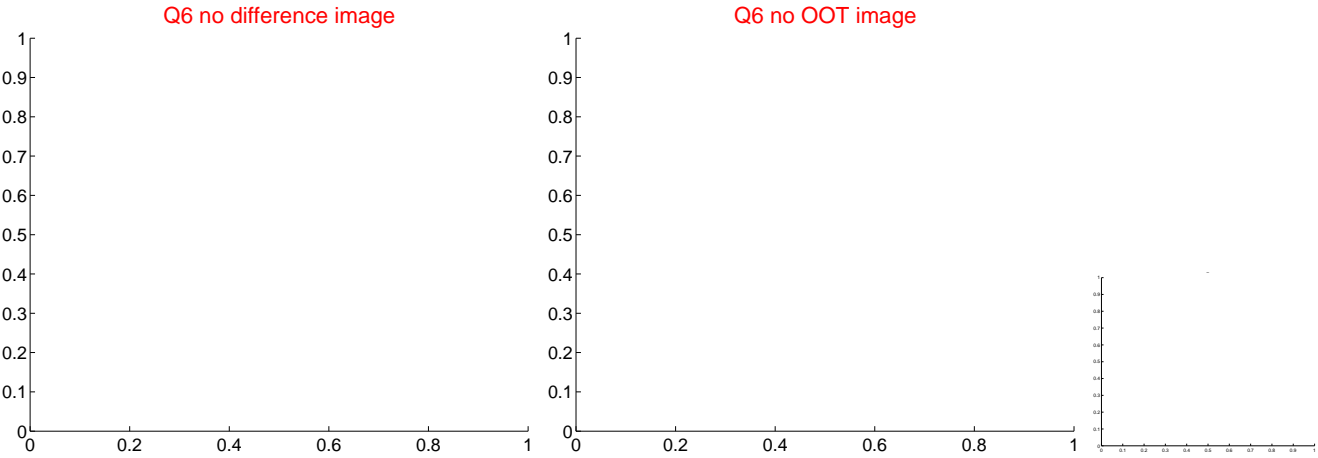
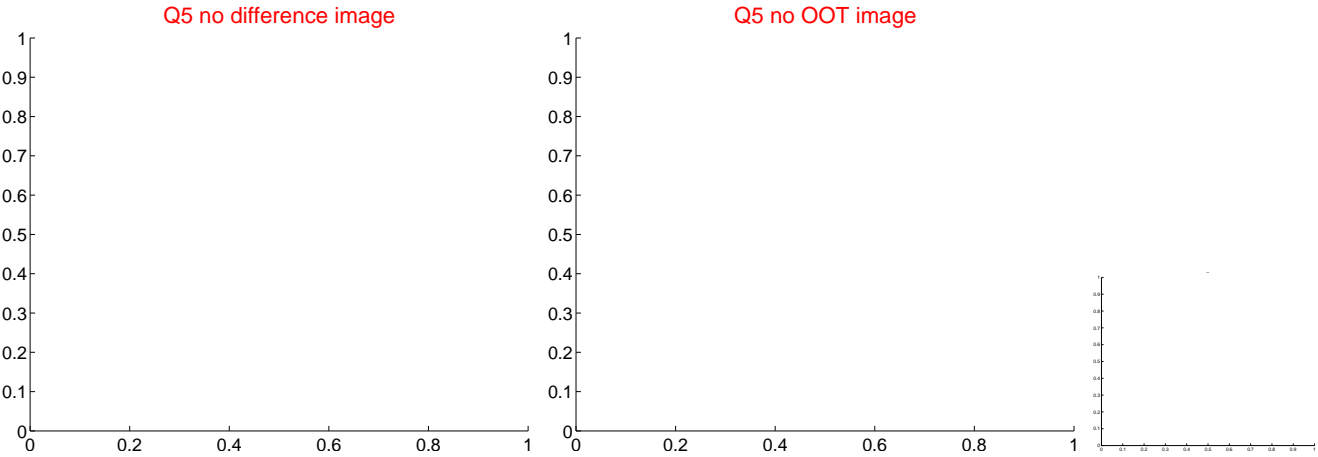


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

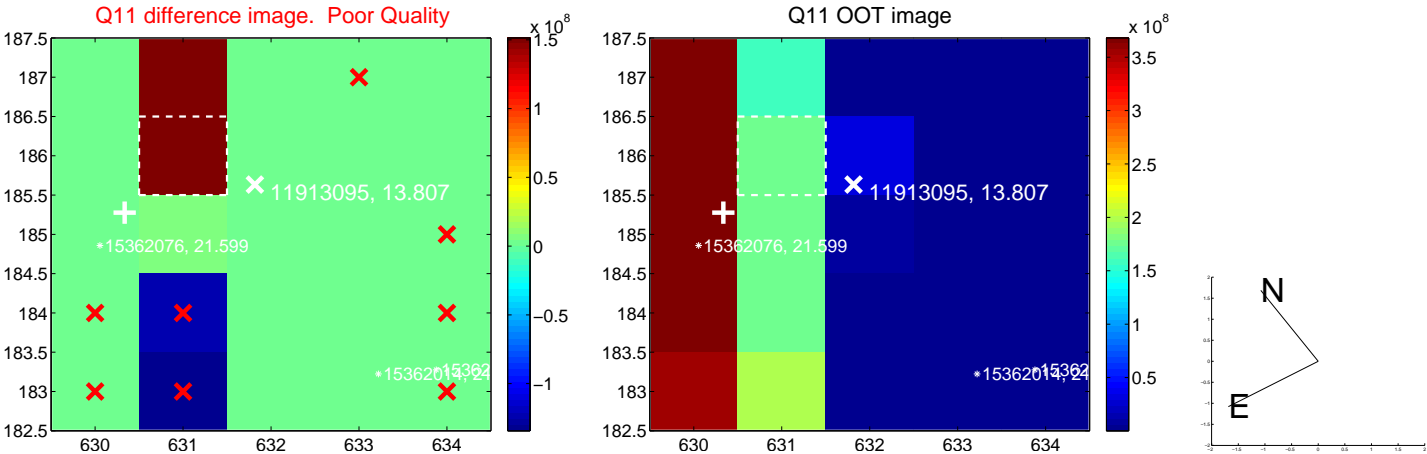
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



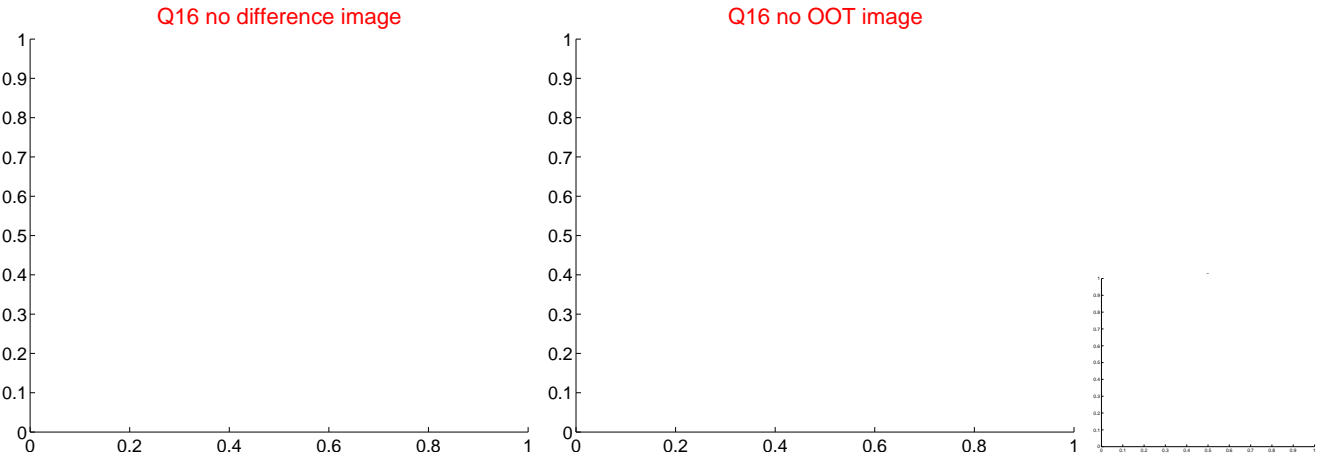
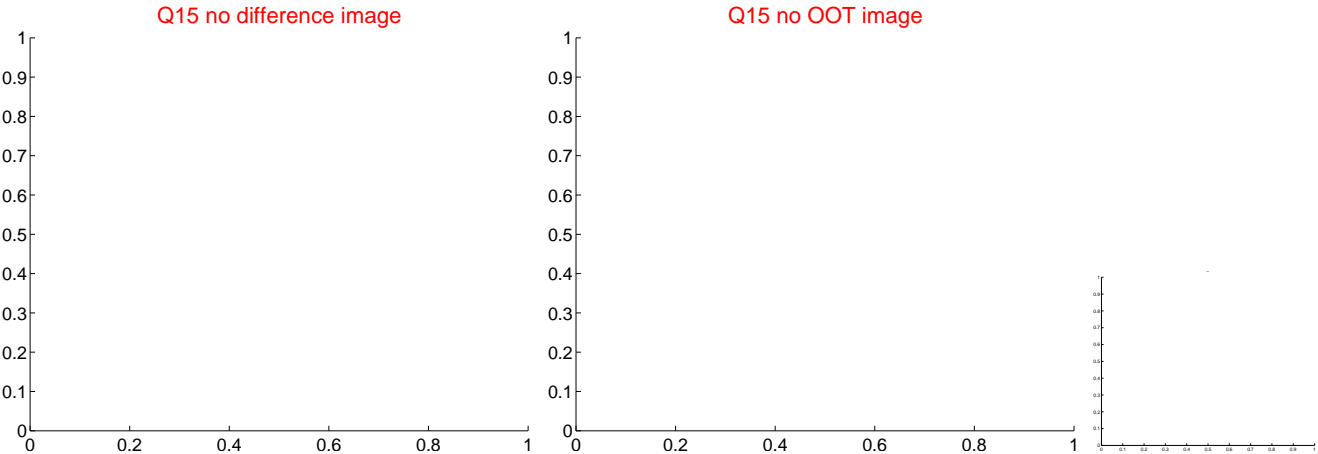
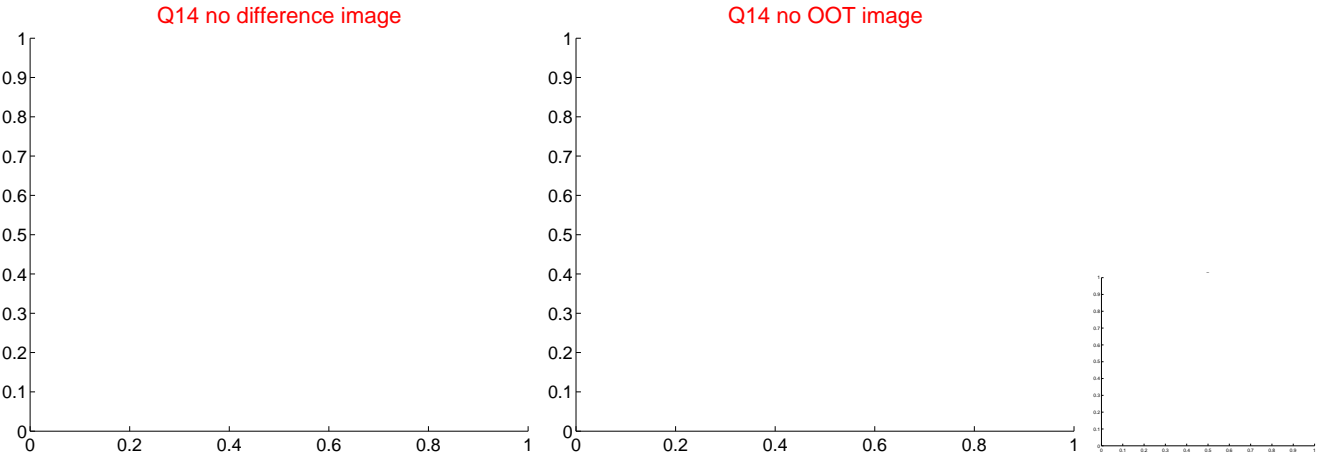
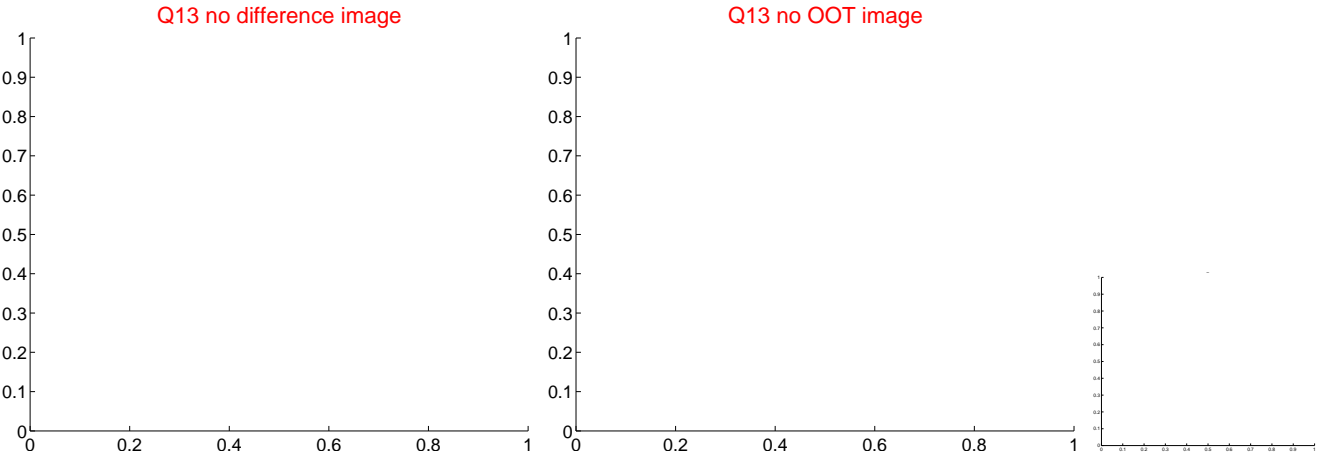
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



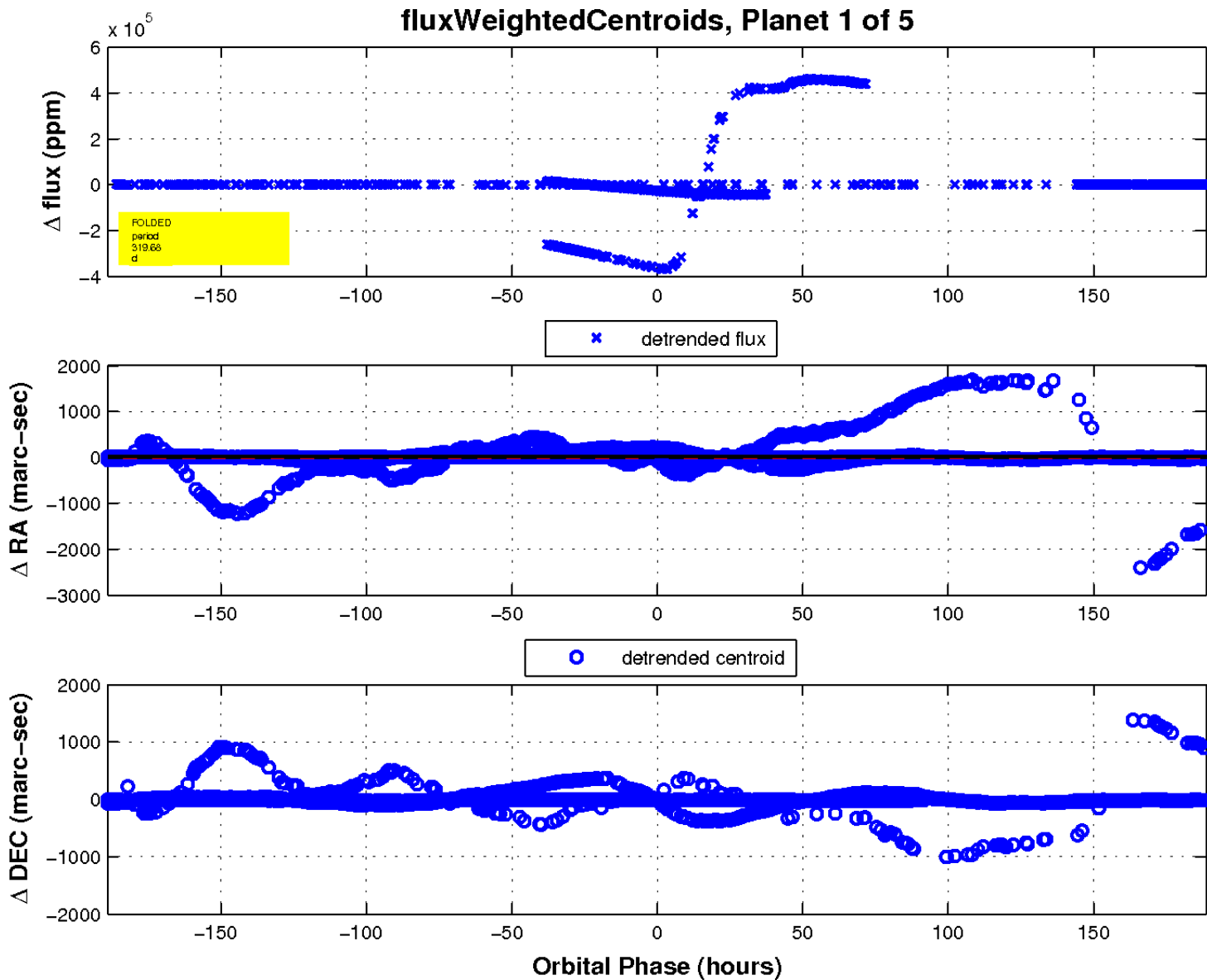
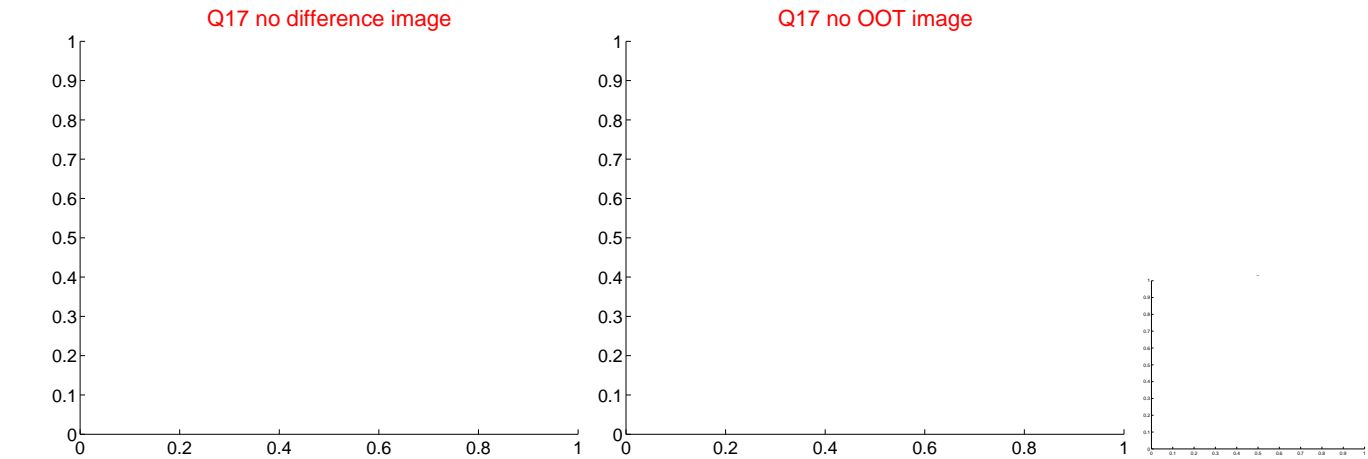
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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

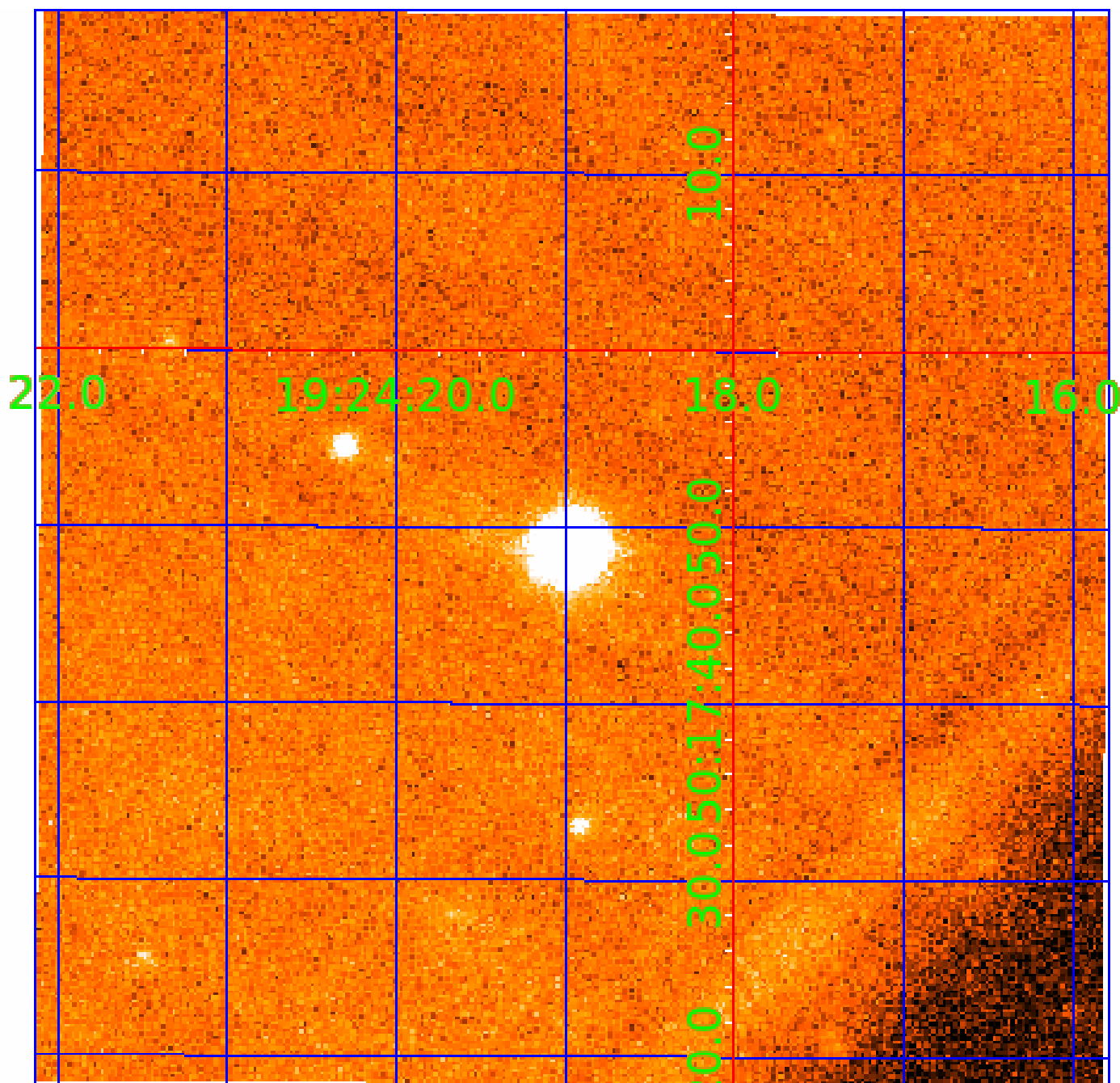


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



UKIRT Image

Declination



KIC 011913095

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
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011913095-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_FEW_DIFFS
011913095-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
011913095-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_NOFITS
011913095-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

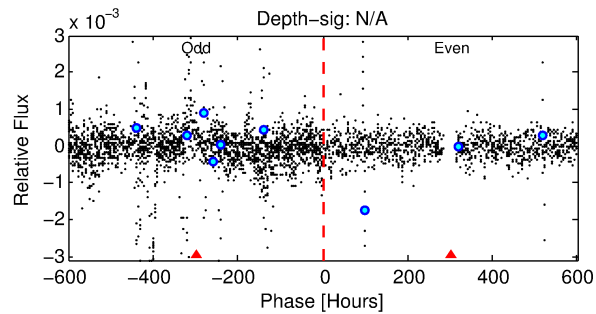
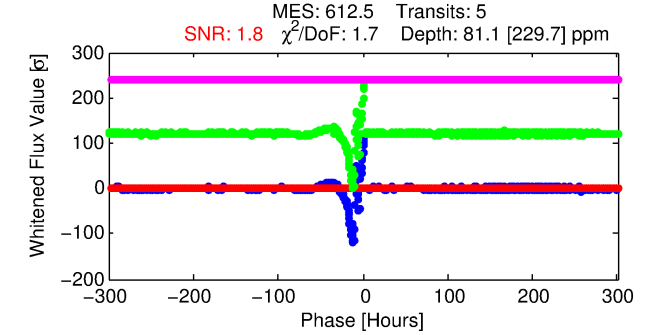
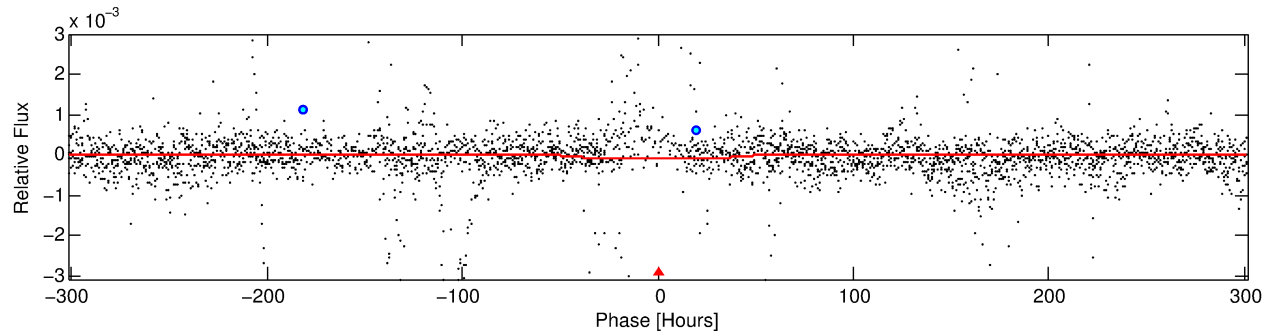
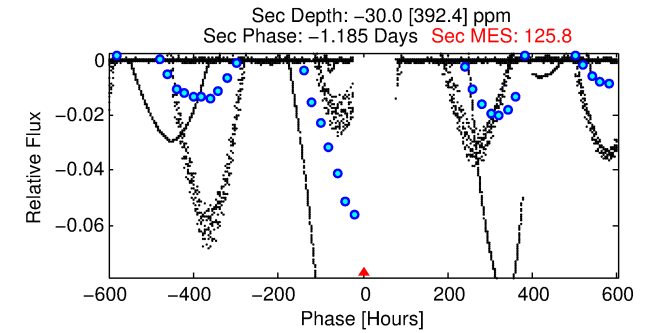
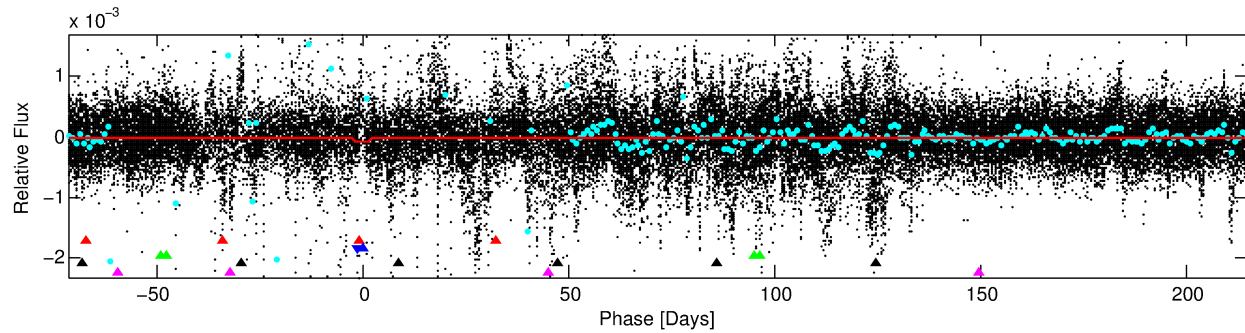
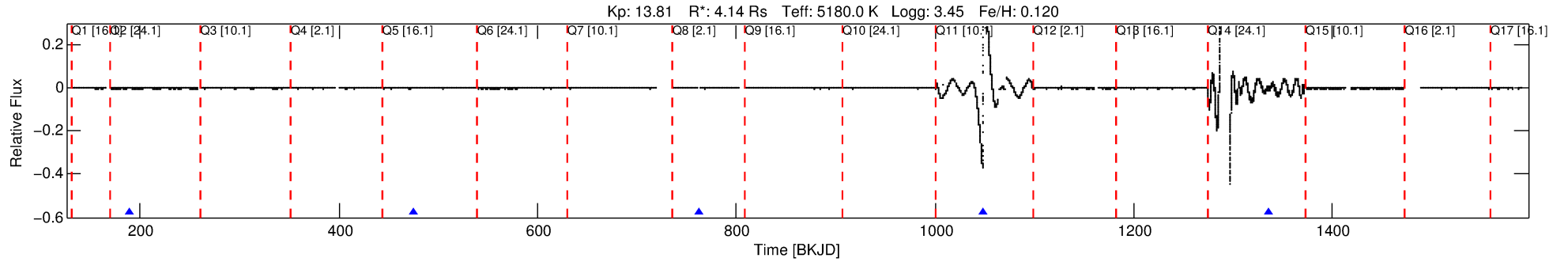
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011913095-02

No Significant Match Found

DV One-Page Summary

KIC: 11913095 Candidate: 2 of 5 Period: 286.483 d



DV Fit Results:

Period = 286.48254 [0.40235] d
Epoch = 189.2225 [0.9845] BKJD
Rp/R* = 0.0084 [0.0195]
a/R* = 18.38 [121.23]
b = 0.55 [8.35]
Seff = 10.49 [13.13]
Teq = 459 [144] K
Rp = 3.81 [9.12] Re
a = 1.0270 [0.7418] AU
Ag = N/A
Teffp = N/A

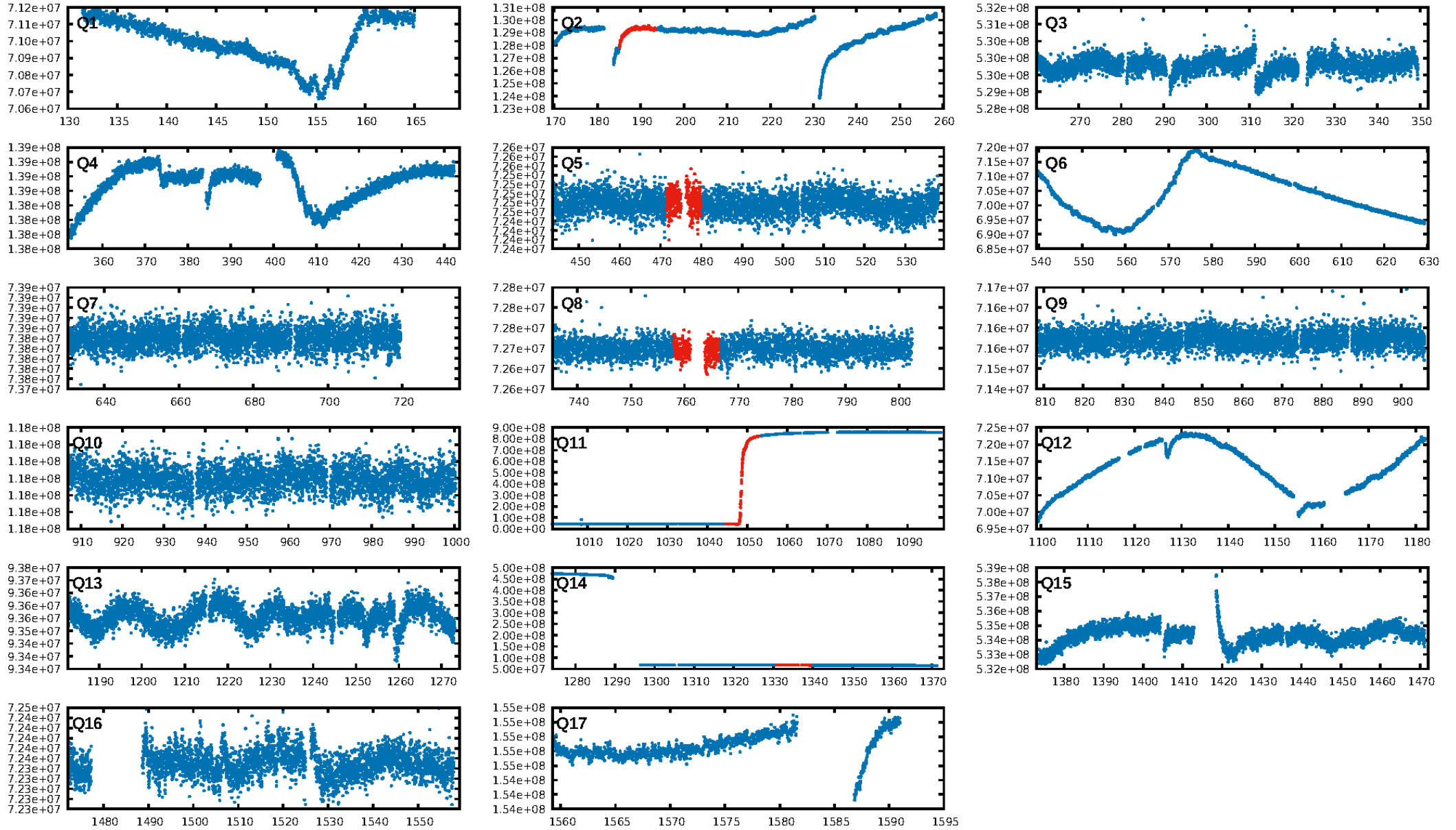
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [9.09σ]
LongPeriod-sig: 100.0% [7.88σ]
ModelChiSquare2-sig: 28.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: -2.229
Centroid-sig: N/A
Centroid-so: 1.858 arcsec [1.08σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 0.00 [0/1]

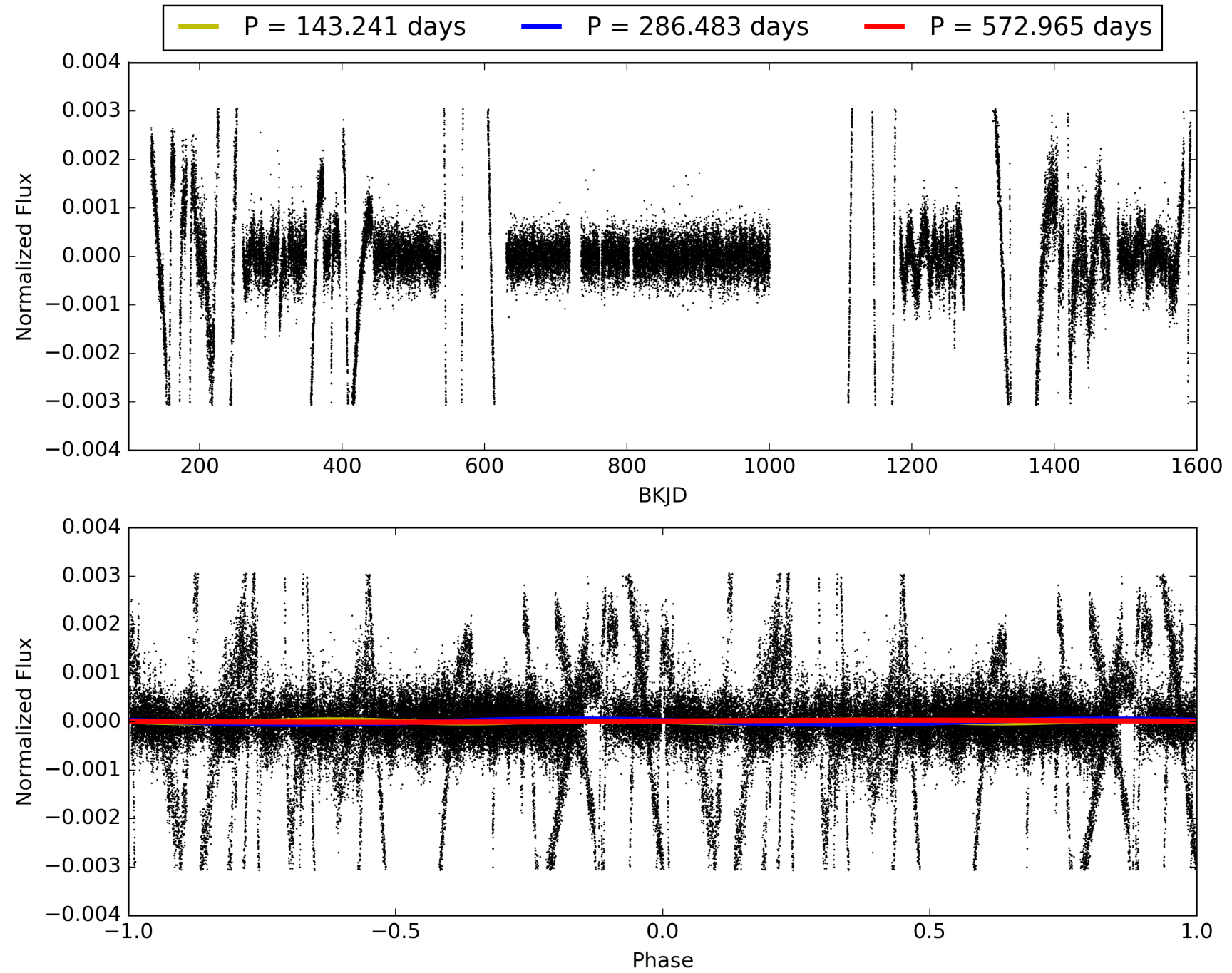
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:08:53 Z

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

TCE 011913095-02, PDC Light Curves

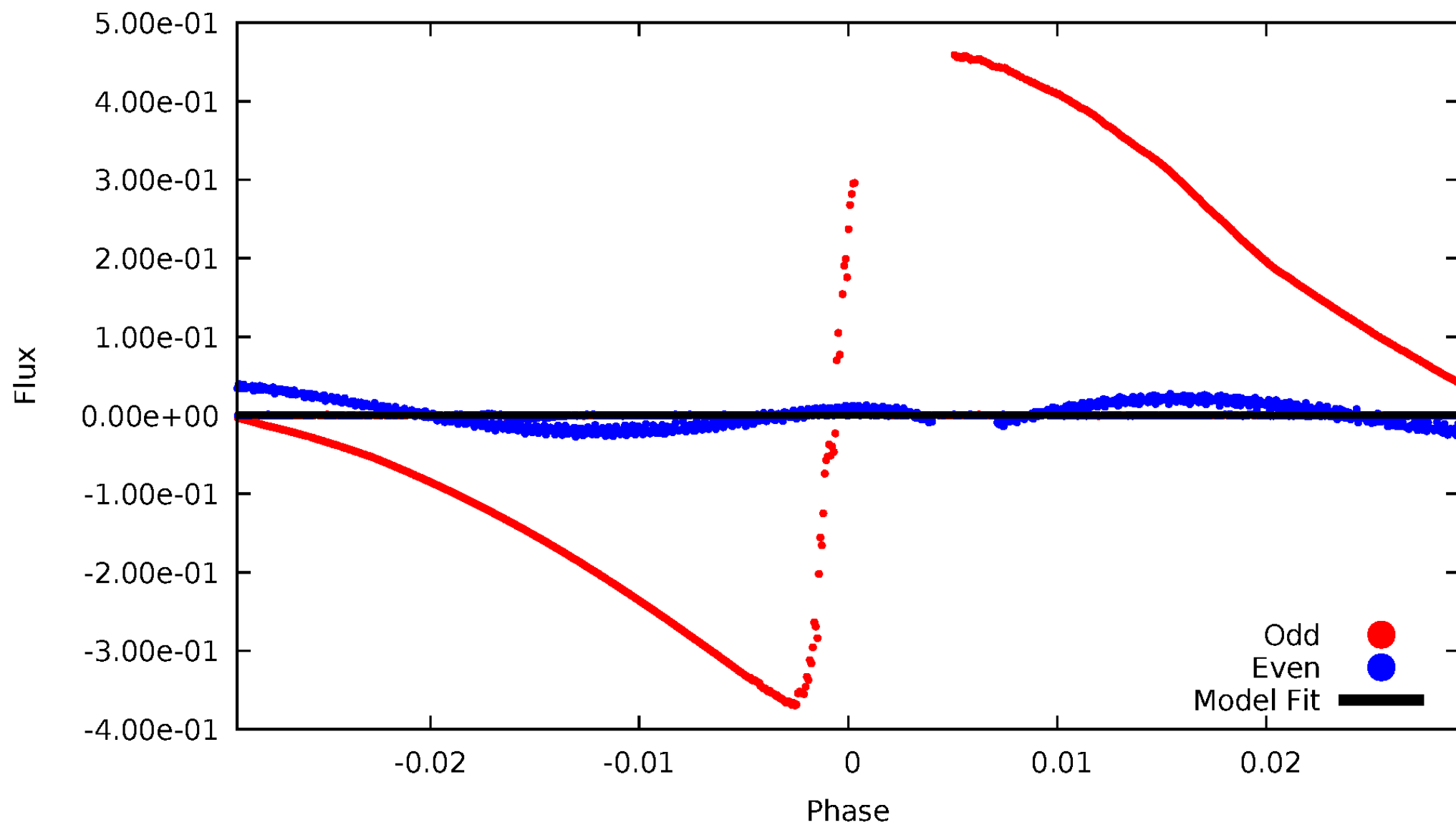


TCE 011913095-02



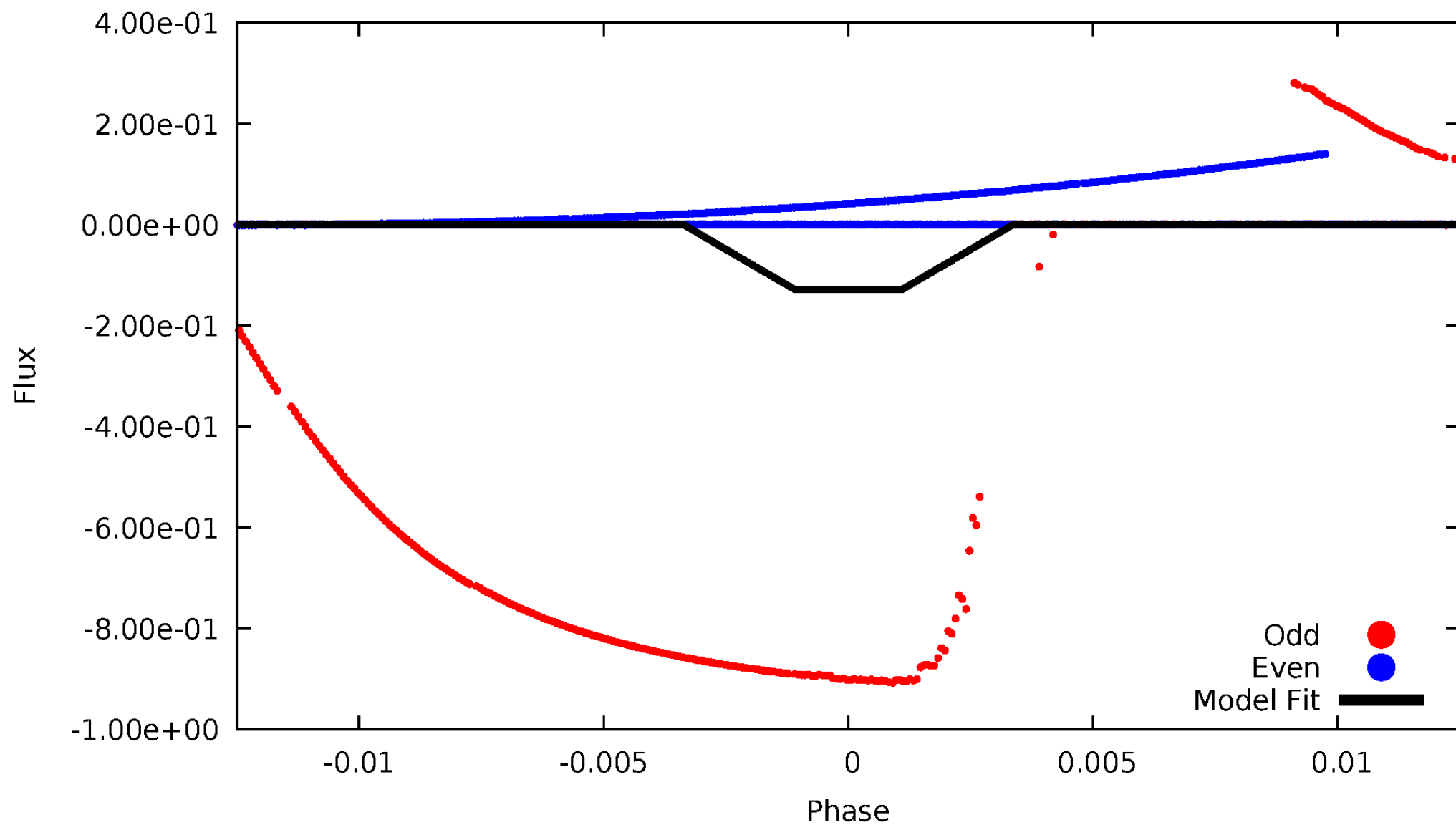
DV Odd/Even

TCE 011913095-02



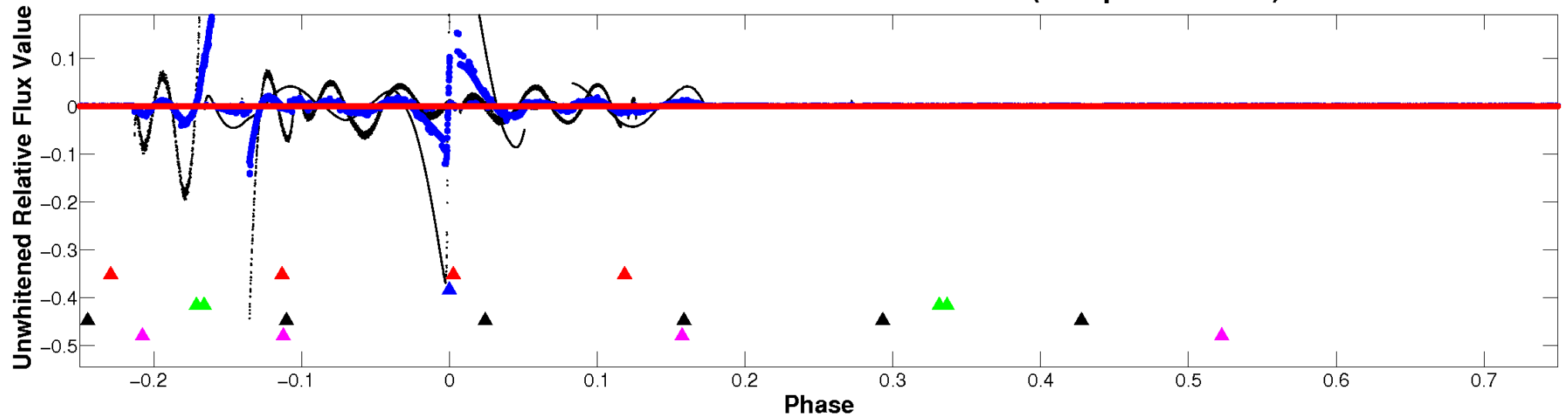
ALT Odd/Even

TCE 011913095-02

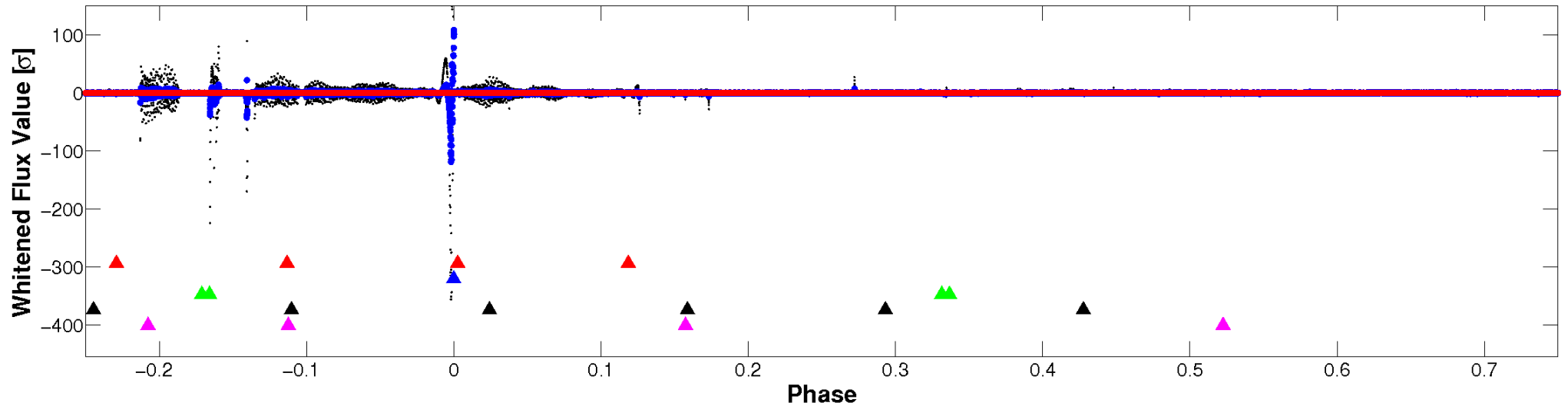


Non-Whitened Vs. Whitened Light Curve

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

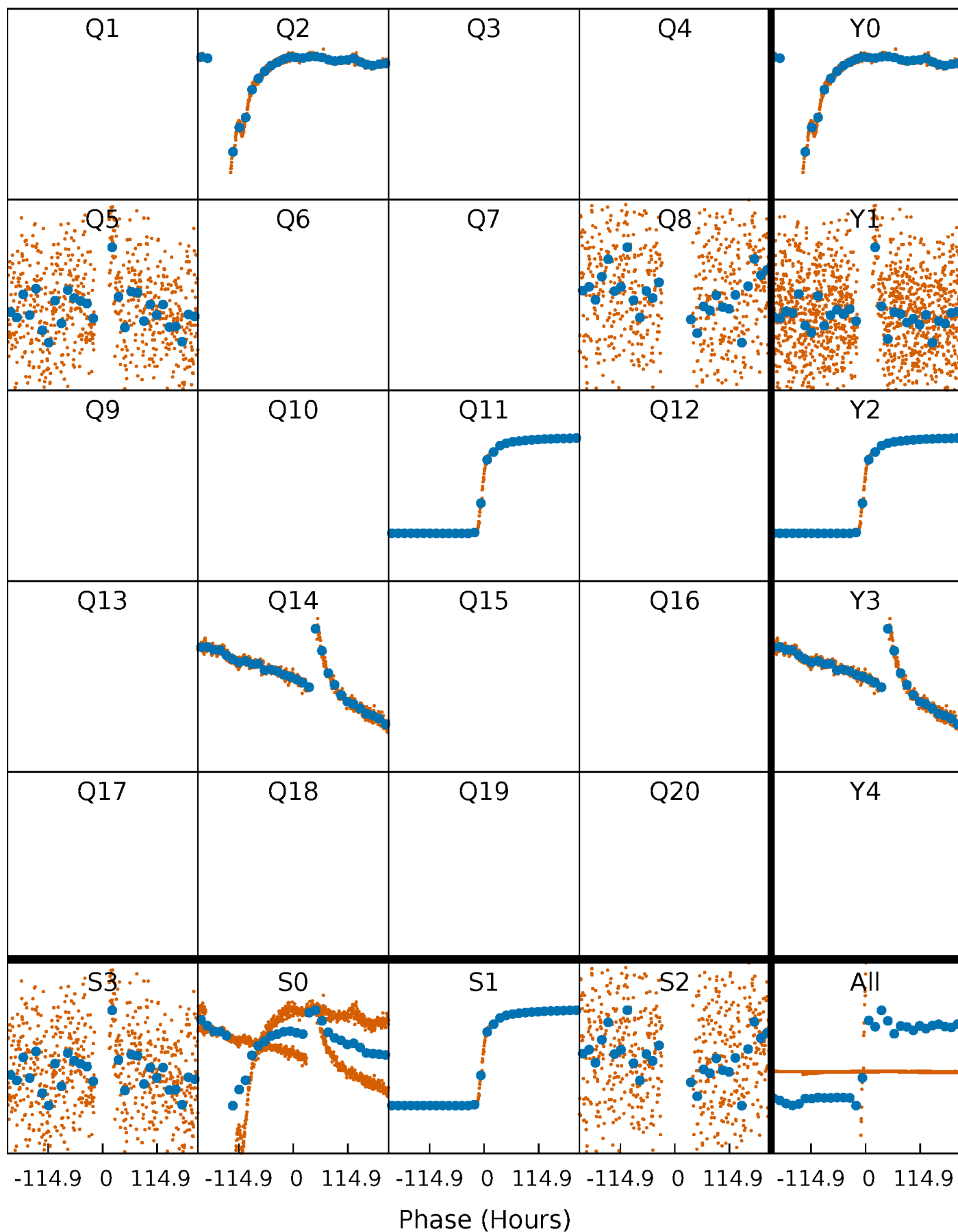


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



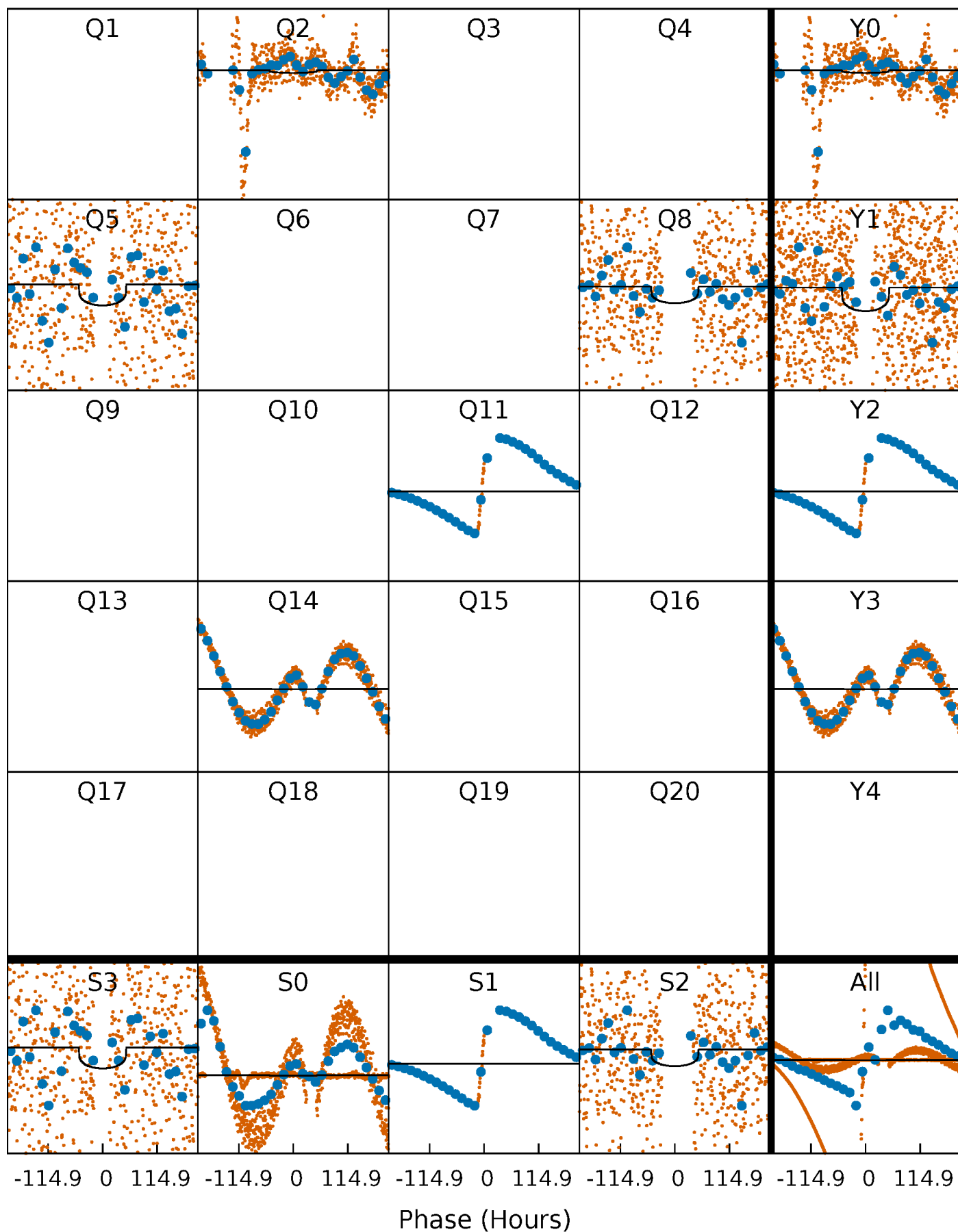
PDC Quarter-Phased Transit Curves

TCE 011913095-02 P=286.482545 Days $T_0=189.222496$ (BKJD)



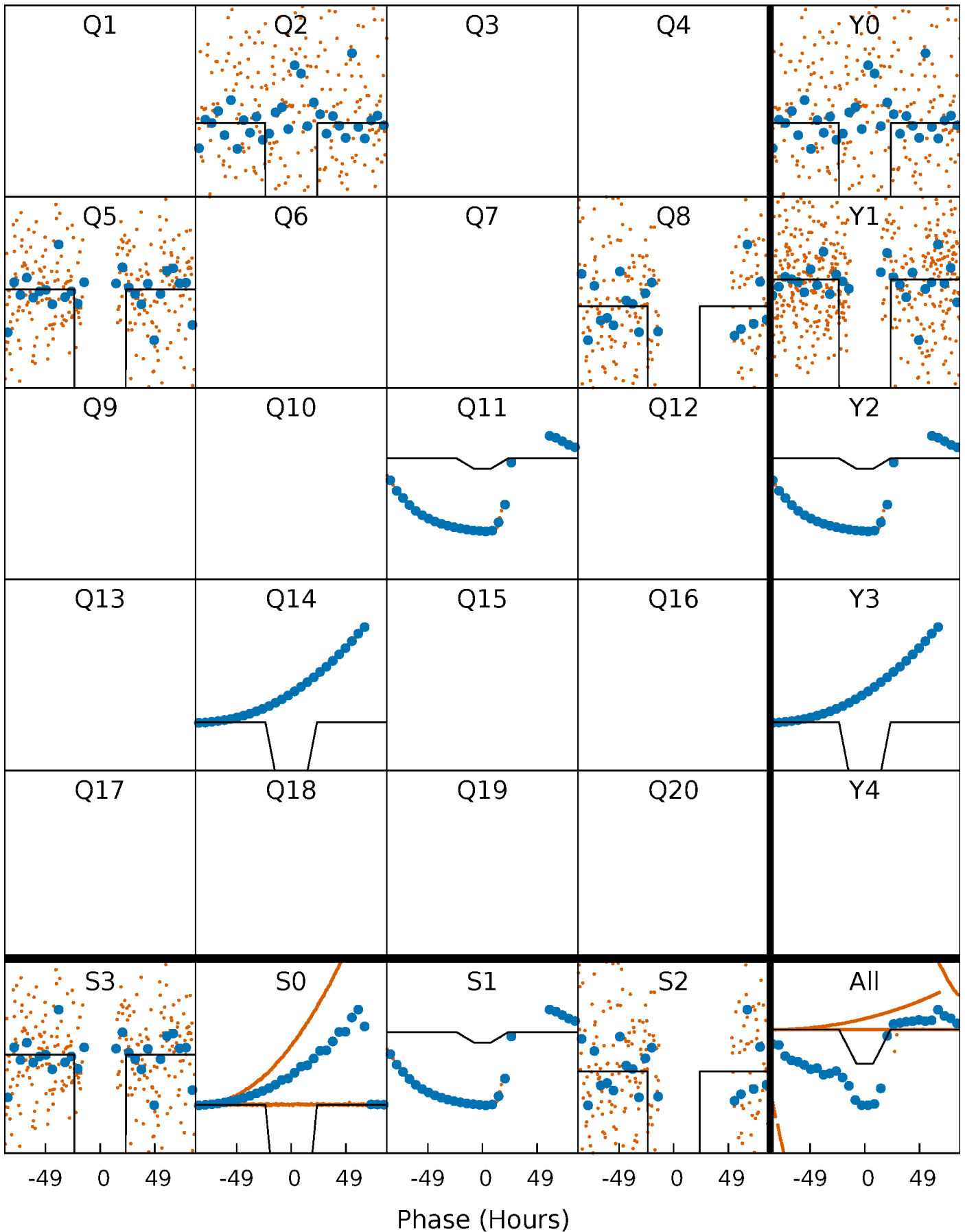
DV Quarter-Phased Transit Curves

TCE 011913095-02 P=286.482545 Days $T_0=189.222496$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

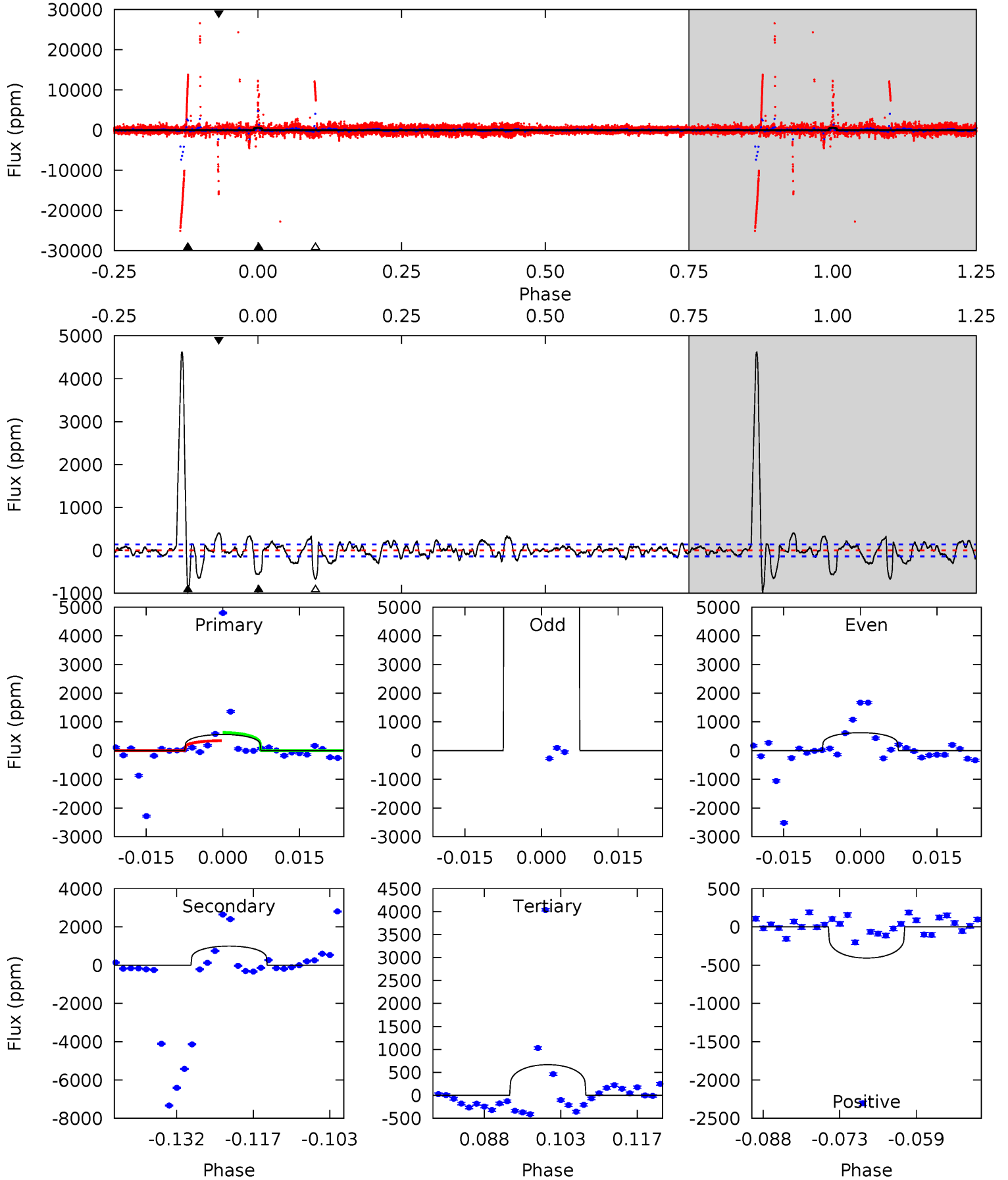
TCE 011913095-02 P=285.954050 Days $T_0=189.695664$ (BKJD)



DV Model-Shift Uniqueness Test

011913095-02, P = 286.482545 Days, E = 189.222496 Days

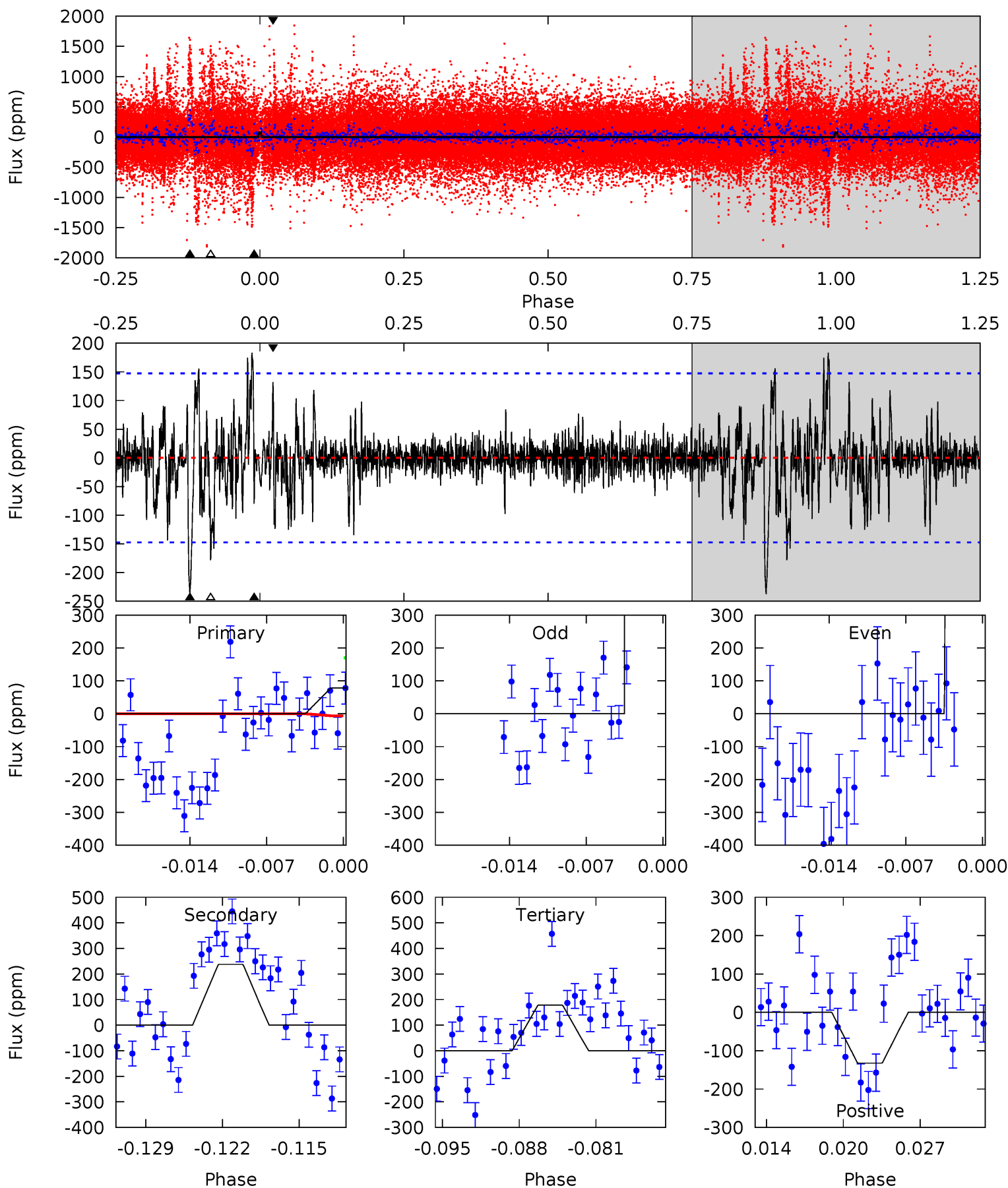
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.7	35.1	23.5	14.4	4.95	2.44	5.78	-3.78	5.38	11.6	20.8	42.1	921.0	0.82	0



Alt Model-Shift Uniqueness Test

011913095-02, P = 285.954050 Days, E = 189.695664 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.72	8.22	6.16	4.57	5.10	2.71	1.20	-3.45	-1.86	2.05	3.64	219.5	-2302	0.44	0



Stellar Parameters For KIC 011913095

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5180^{+199}_{-199}	$3.449^{+0.760}_{-0.190}$	$0.120^{+0.250}_{-0.350}$	$4.142^{+1.135}_{-2.647}$	$1.759^{+0.205}_{-0.820}$	$0.035^{+0.478}_{-0.017}$
	+4%/-4%	+22%/-6%	+208%/-292%	+27%/-64%	+12%/-47%	+1372%/-48%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011913095-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-997 ± 28	$6.38^{+7.33}_{-4.58}$	630^{+64}_{-110}	7093^{+10530}_{-2034}	$12540^{+144207}_{-9595}$
Alt.	-237 ± 29	$155.05^{+31.30}_{-56.23}$	625^{+70}_{-110}	2041^{+52}_{-51}	$5.675^{+7.247}_{-1.815}$

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 $A_{obs} \gg 1.0$

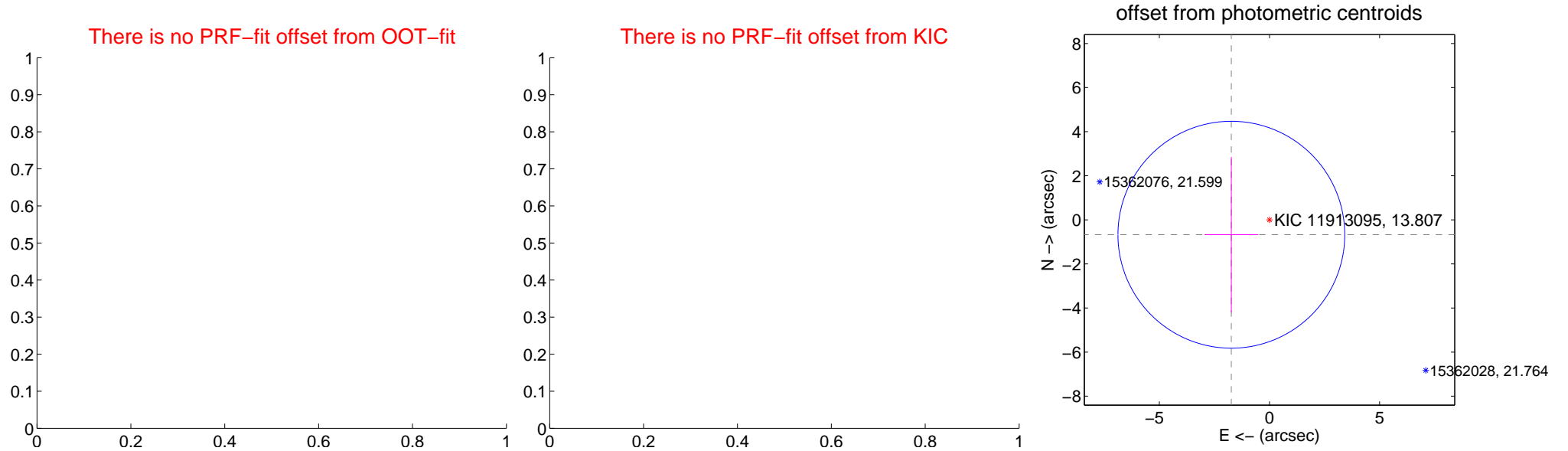
DV Centroid Data

Supplemental centroid analysis for 011913095-02. Kepler magnitude: 13.81. Transit SNR 1.76

There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	1.86 ± 1.72	1.08	1.73 ± 1.22	-0.68 ± 3.53



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.

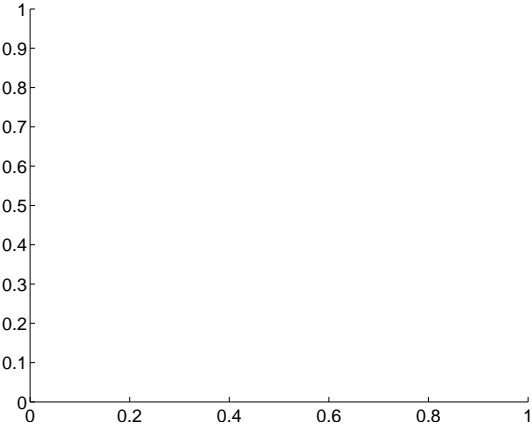


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

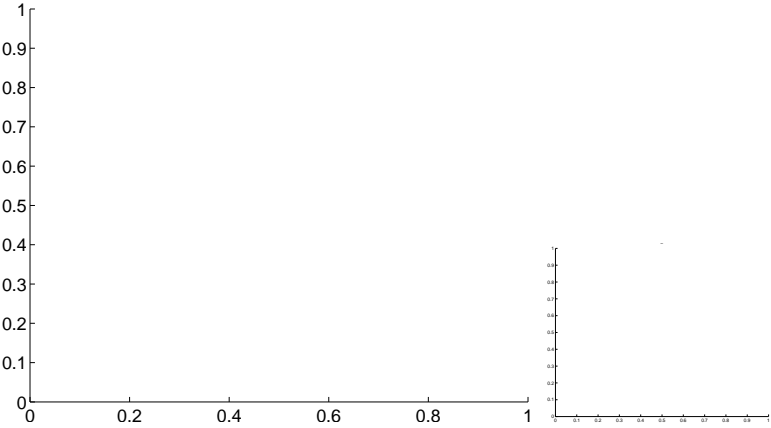


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

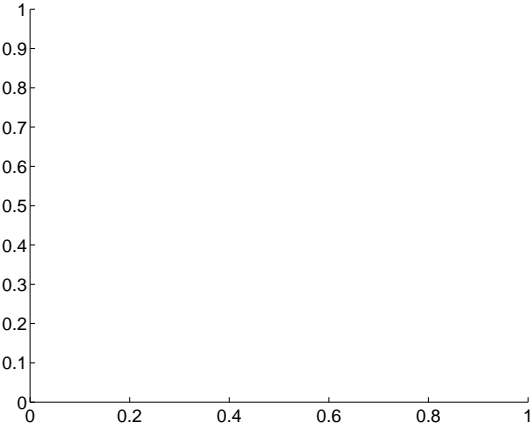
Q9 no difference image



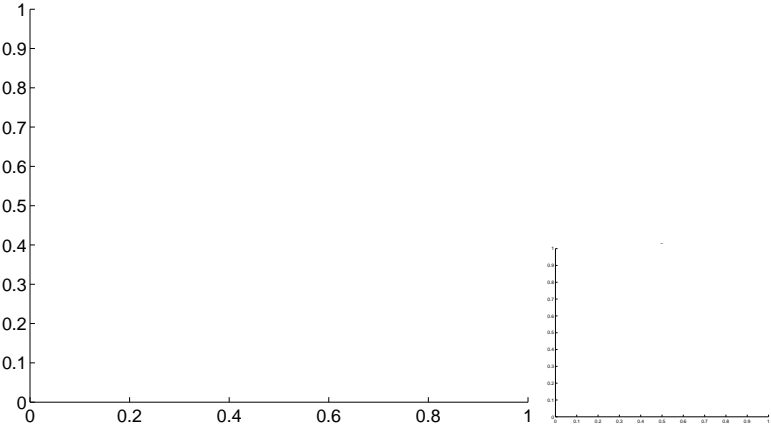
Q9 no OOT image



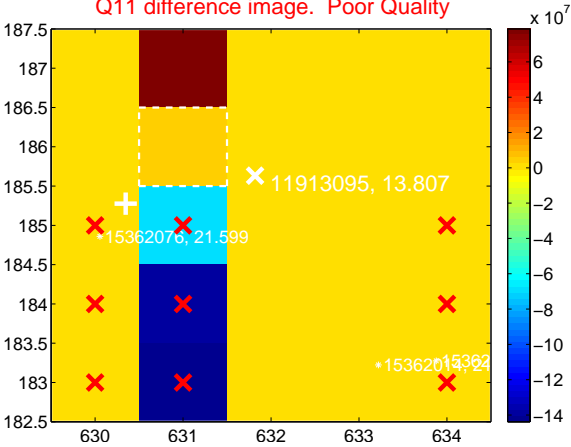
Q10 no difference image



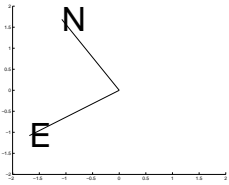
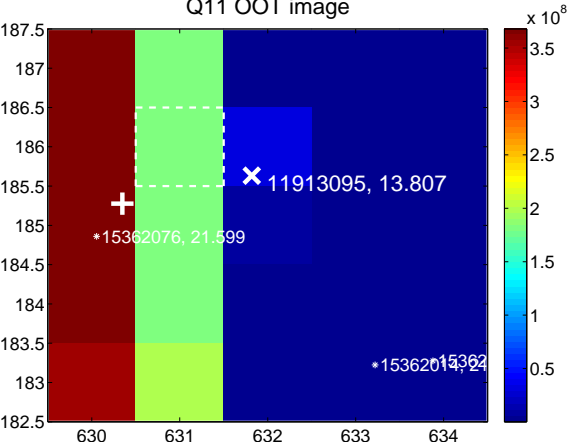
Q10 no OOT image



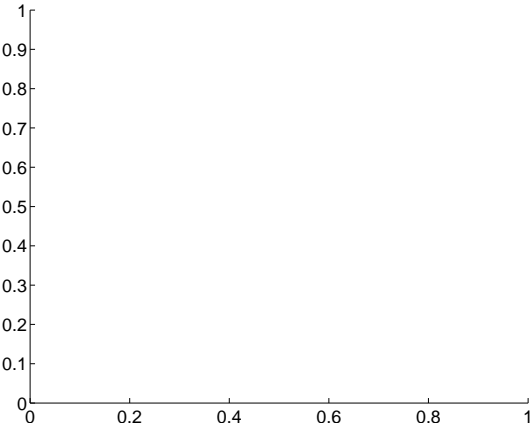
Q11 difference image. Poor Quality



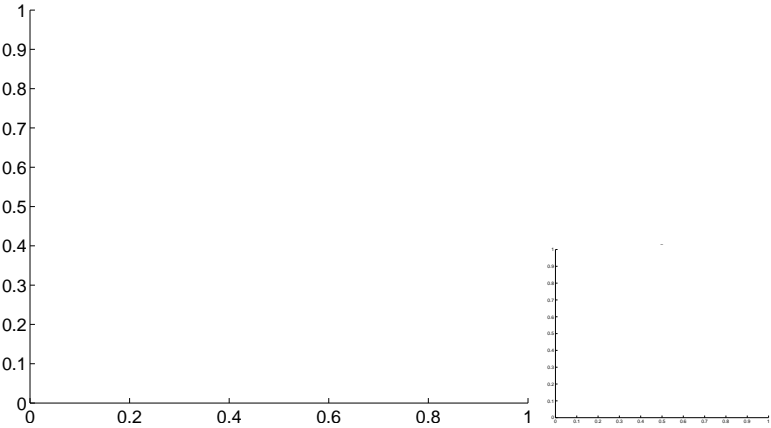
Q11 OOT image



Q12 no difference image



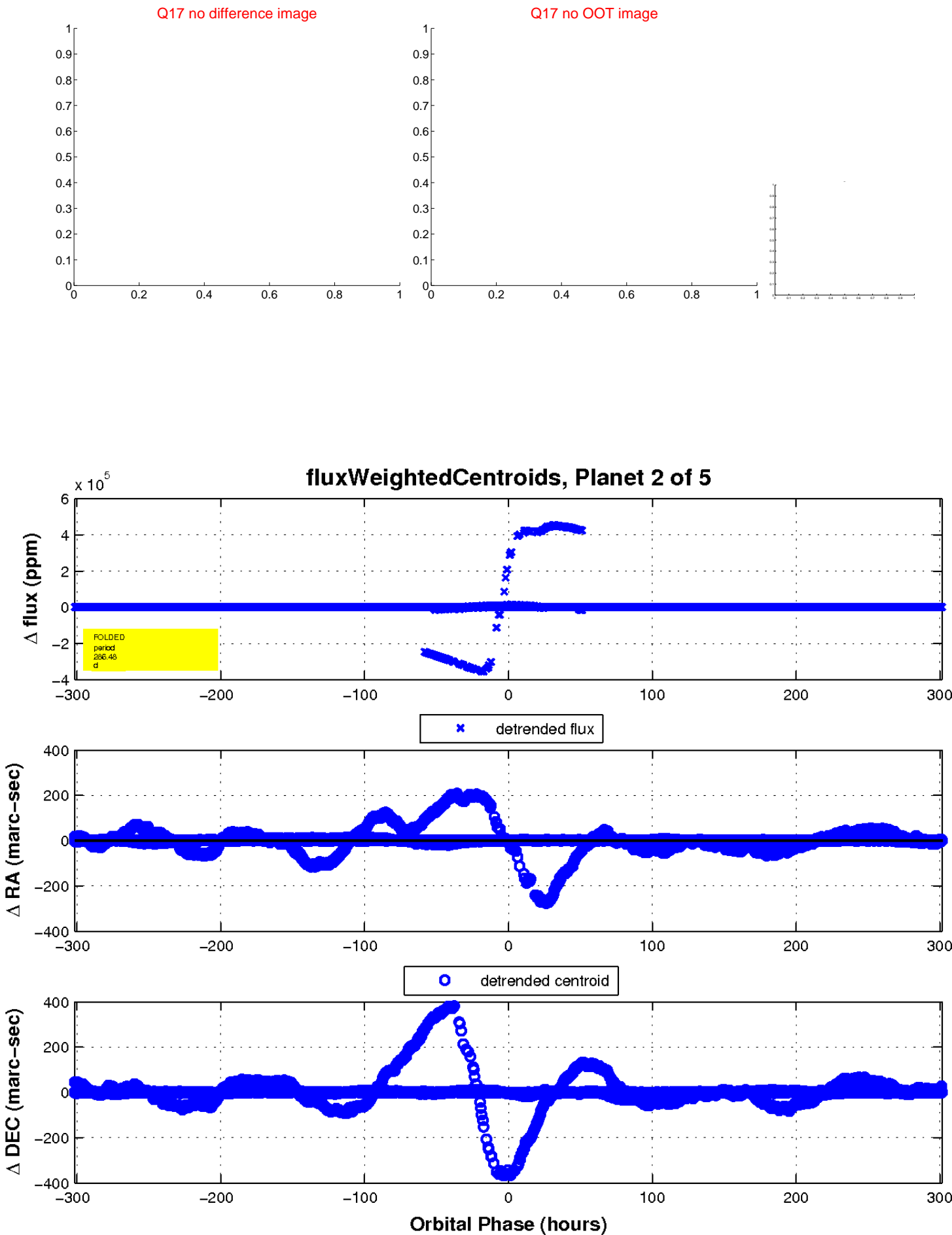
Q12 no OOT image



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

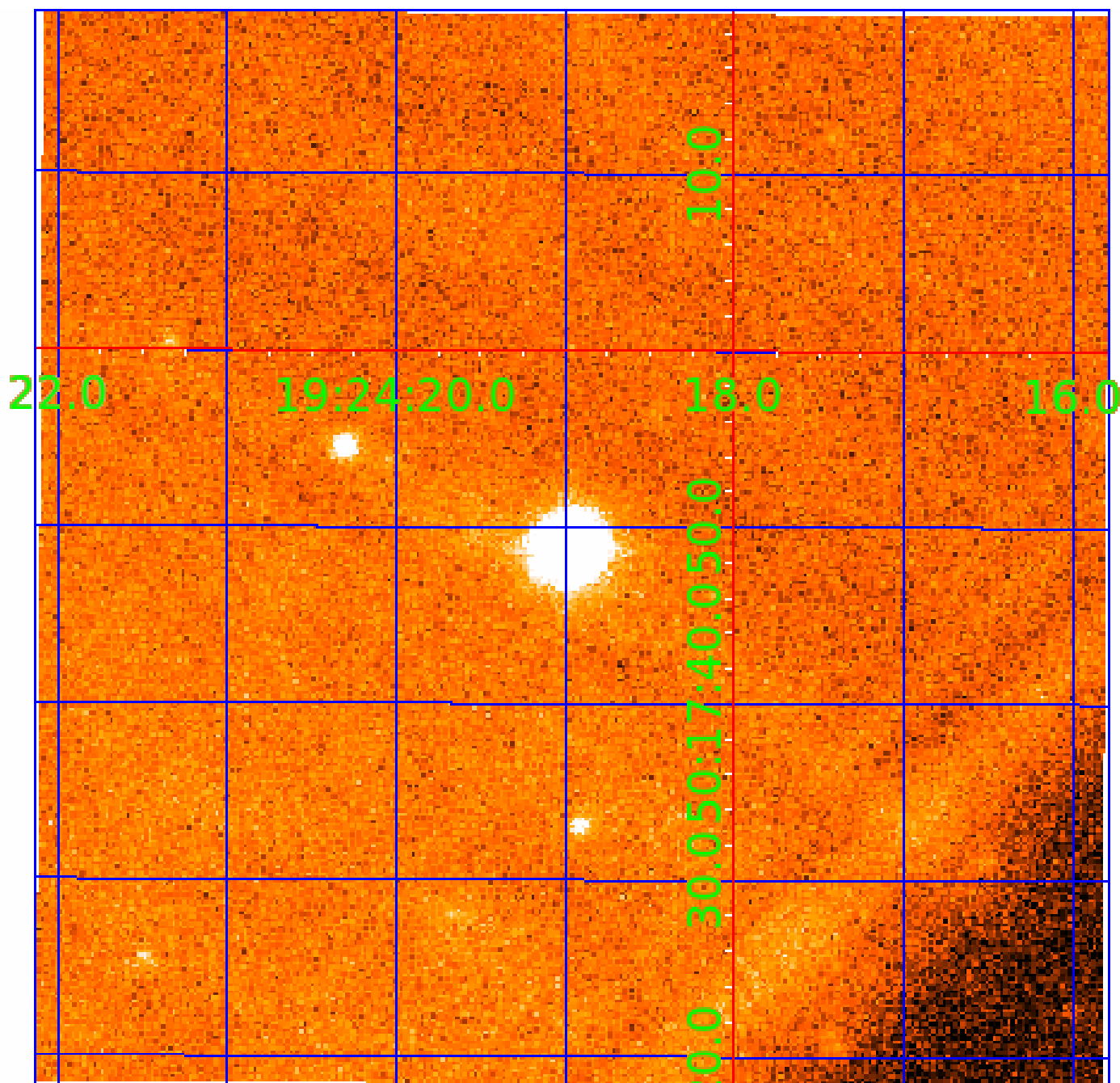


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011913095

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})
011913095-01	OBS	No	319.683046	410.074906	6618.4	10.500	75.4	-1.0	4.14	5180	32.81	9.07
011913095-02	OBS	No	286.482545	189.222496	81.1	100.550	612.5	1.8	4.14	5180	3.81	10.49
011913095-03	OBS	No	430.469807	140.204891	18556.0	21.279	64.7	90.4	4.14	5180	101.72	6.10
011913095-04	OBS	No	247.961251	311.741804	2874.2	15.000	35.4	-1.0	4.14	5180	21.61	12.72
011913095-05	OBS	No	468.370891	157.037551	575.2	10.085	13.9	9.4	4.14	5180	11.09	5.45

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011913095-01	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_NOFITS—HALO_GHOST
011913095-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_FEW_DIFFS
011913095-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
011913095-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_NOFITS
011913095-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

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

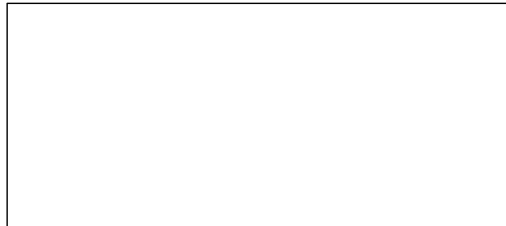
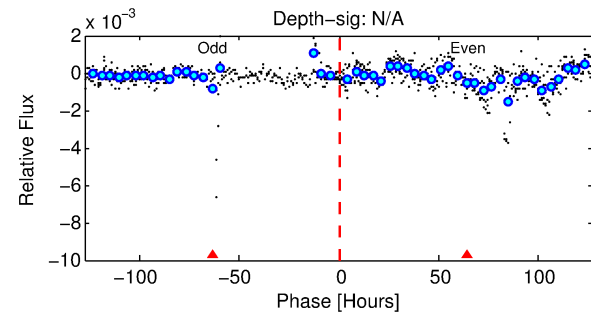
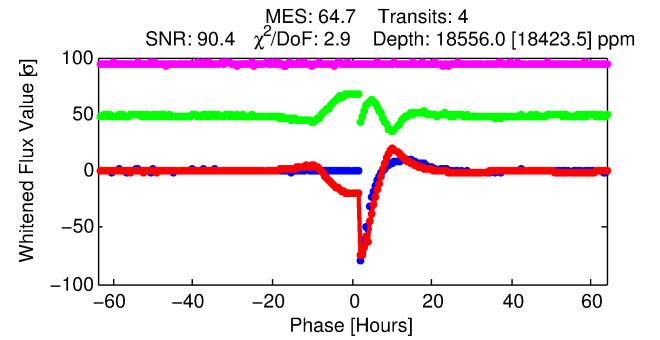
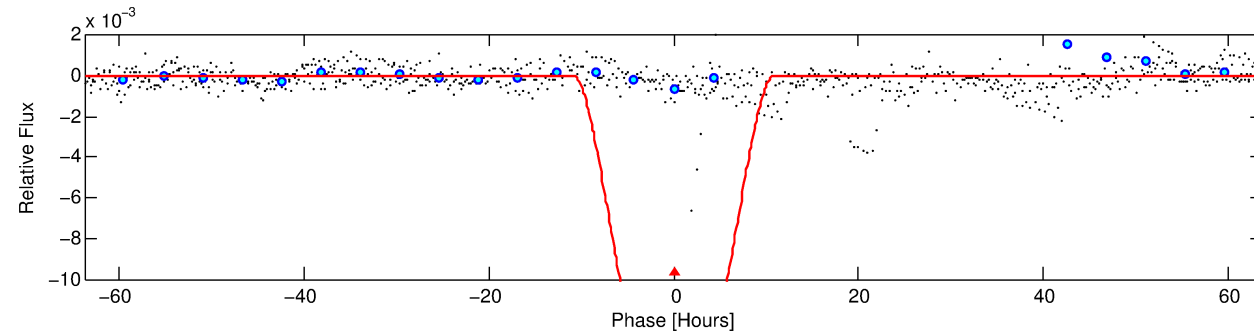
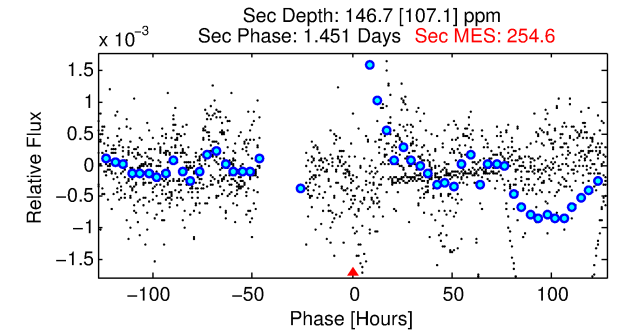
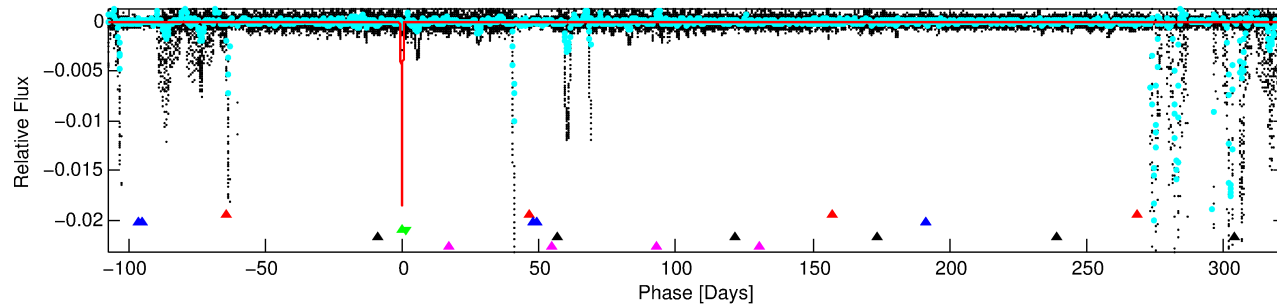
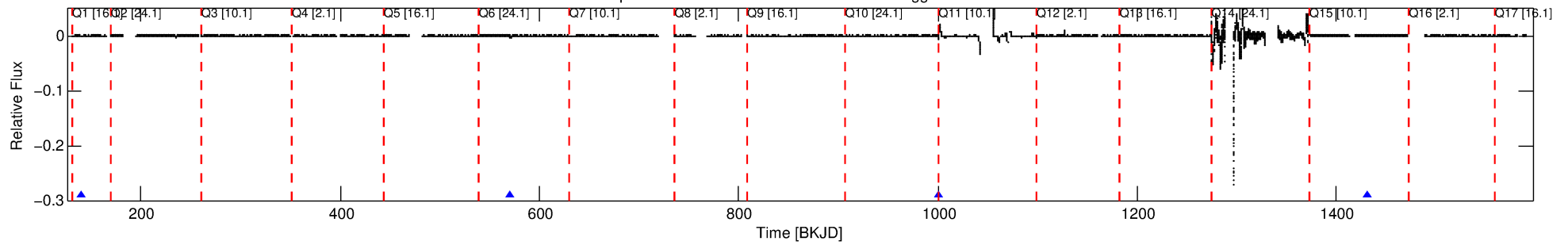
Ephemeris Match Information For 011913095-03

No Significant Match Found

DV One-Page Summary

KIC: 11913095 Candidate: 3 of 5 Period: 430.470 d

Kp: 13.81 R*: 4.14 Rs Teff: 5180.0 K Logg: 3.45 Fe/H: 0.120



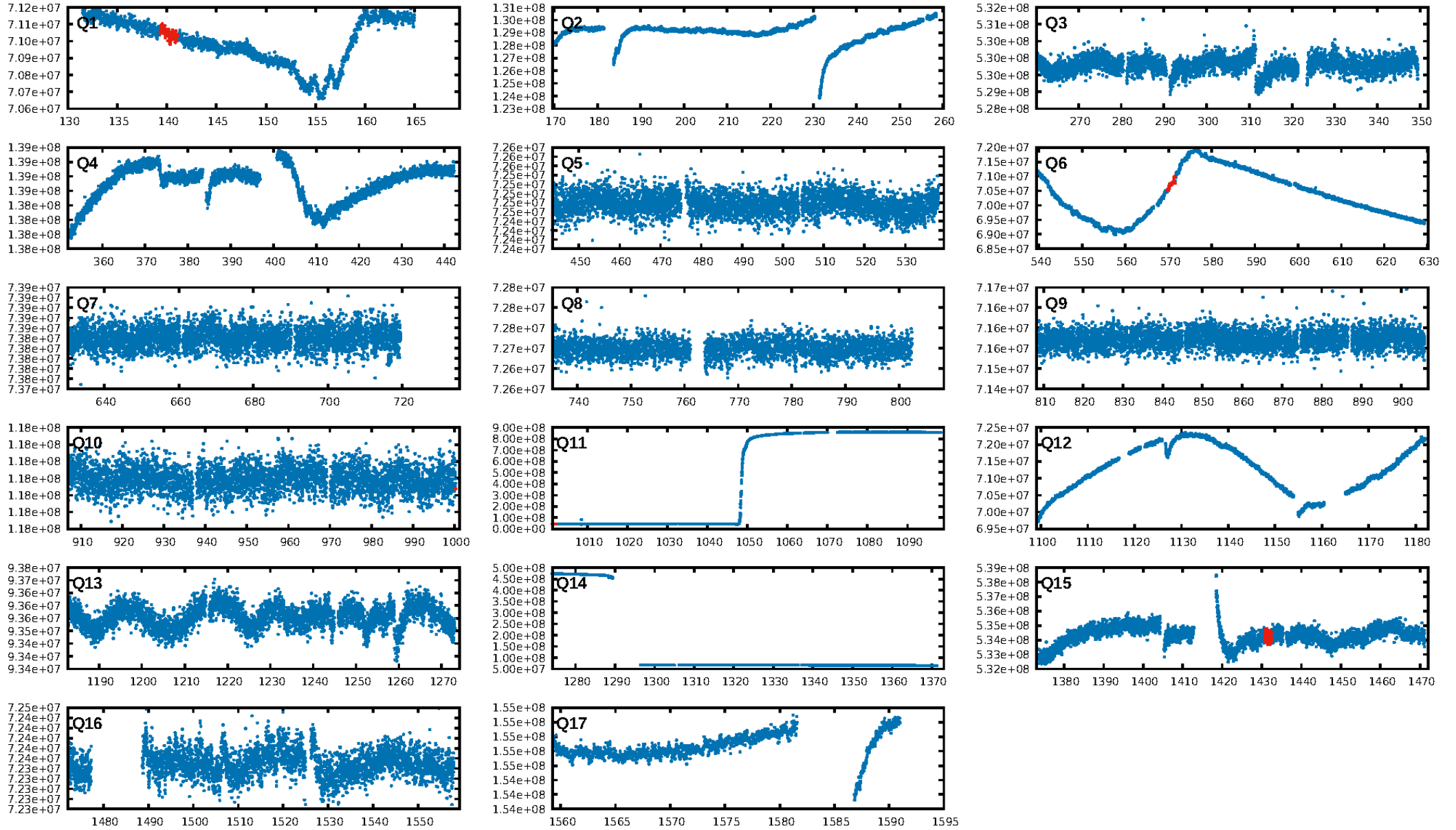
DV Fit Results:

Period = 430.46981 [0.00196] d
Epoch = 140.2049 [0.0038] BKJD
Rp/R* = 0.2250 [0.0384]
a/R* = 109.37 [1.55]
b = 1.00 [0.09]
Seff = 6.10 [7.63]
Teq = 401 [125] K
Rp = 101.72 [67.28] Re
a = 1.3473 [0.9732] AU
Ag = 14.16 [20.97] [0.63σ]
Teffp = 1202 [246] K [2.90σ]

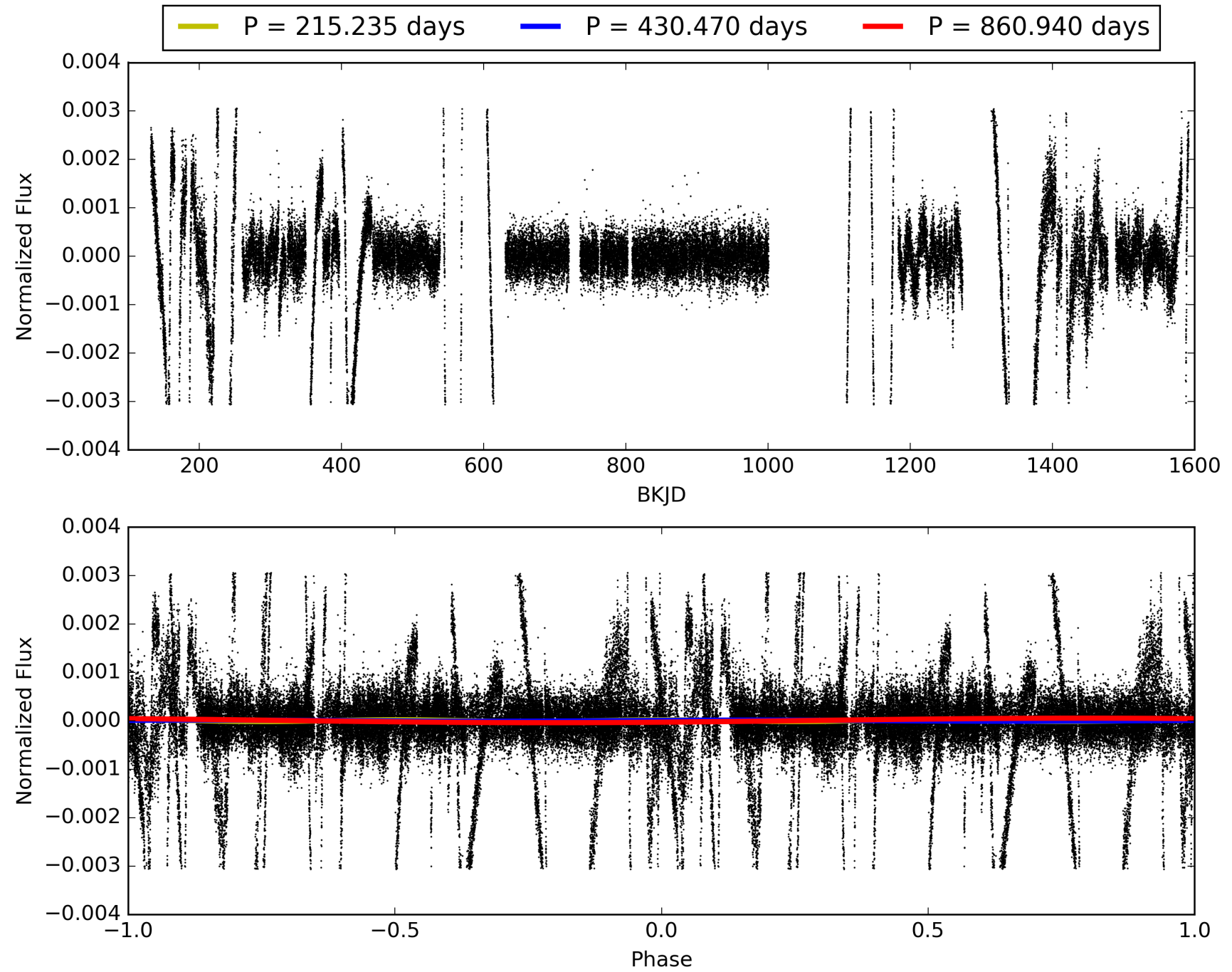
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [112.05σ]
LongPeriod-sig: 100.0% [38.63σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: 5.32e-14
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.1227
Centroid-sig: N/A
Centroid-so: 3.222 arcsec [32.10σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [3/3]

TCE 011913095-03, PDC Light Curves

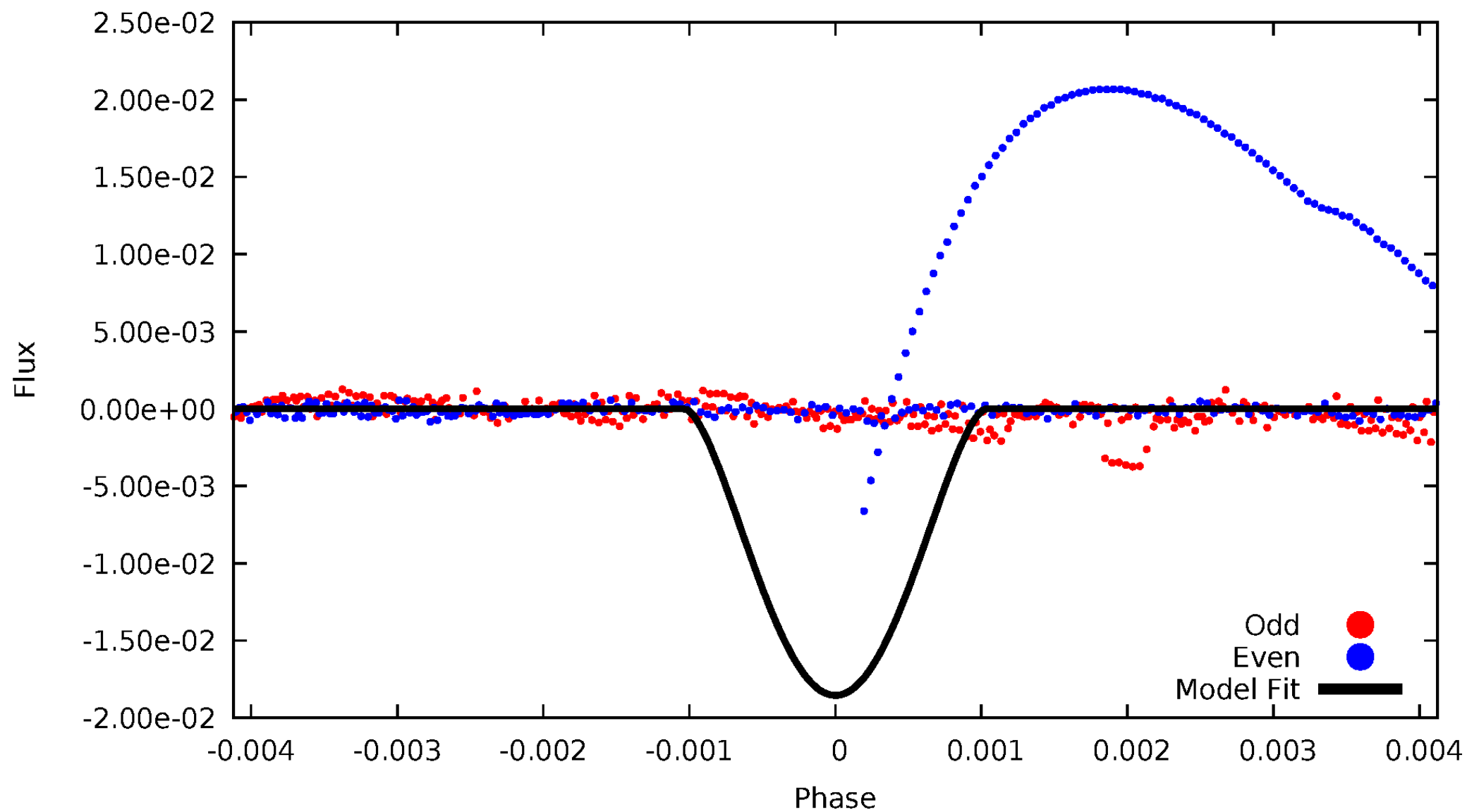


TCE 011913095-03



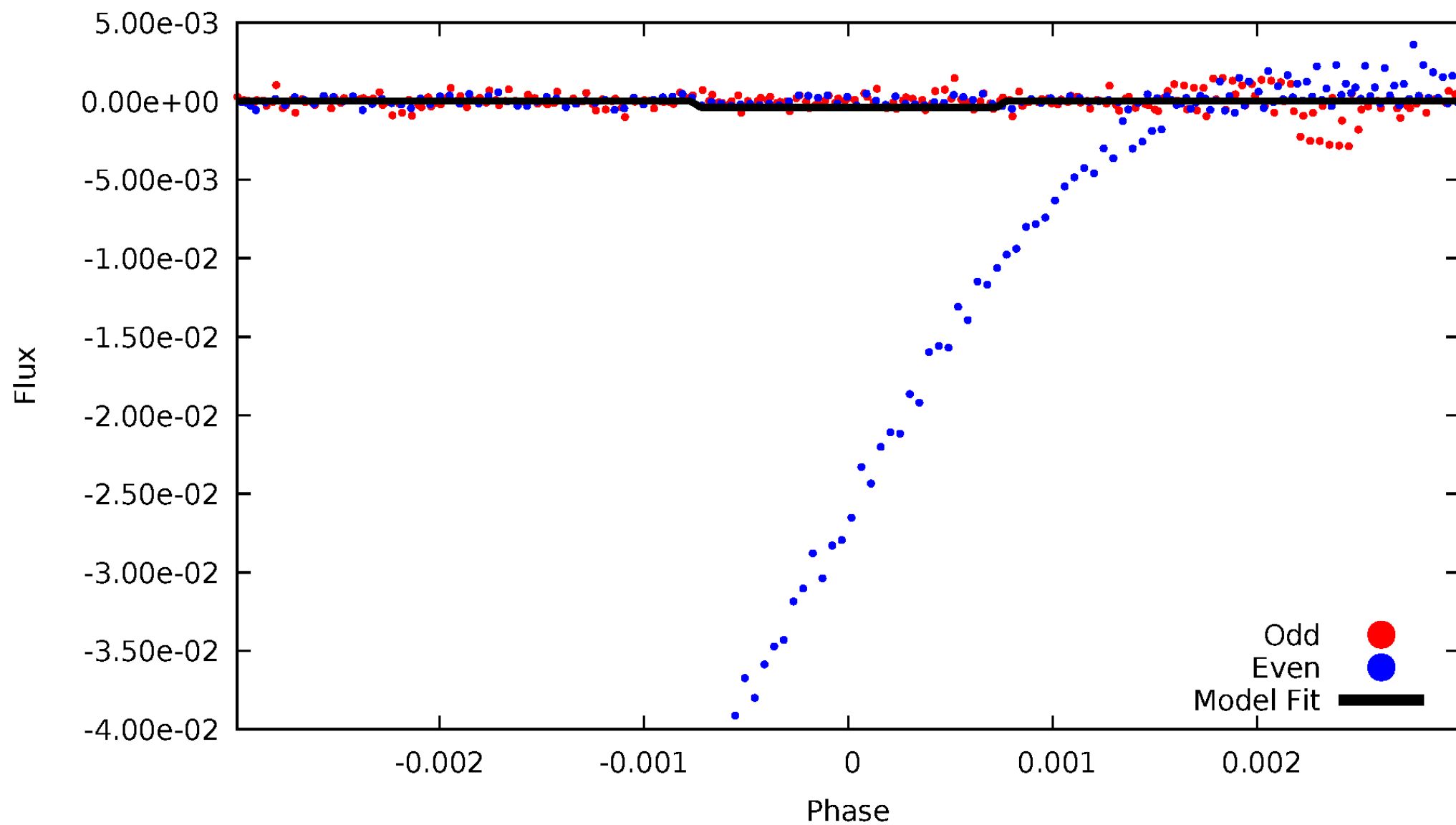
DV Odd/Even

TCE 011913095-03



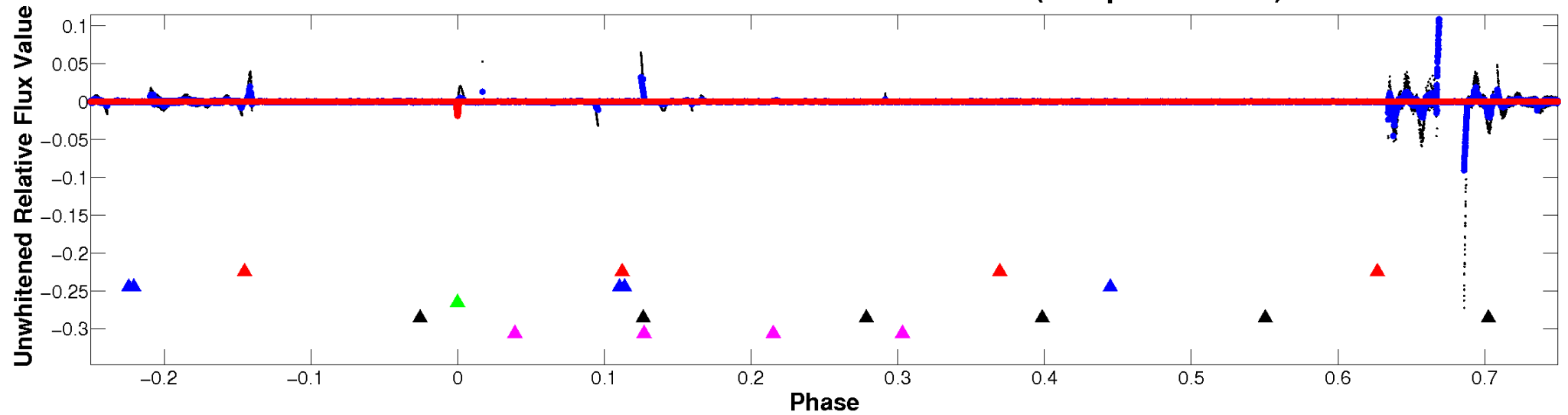
ALT Odd/Even

TCE 011913095-03

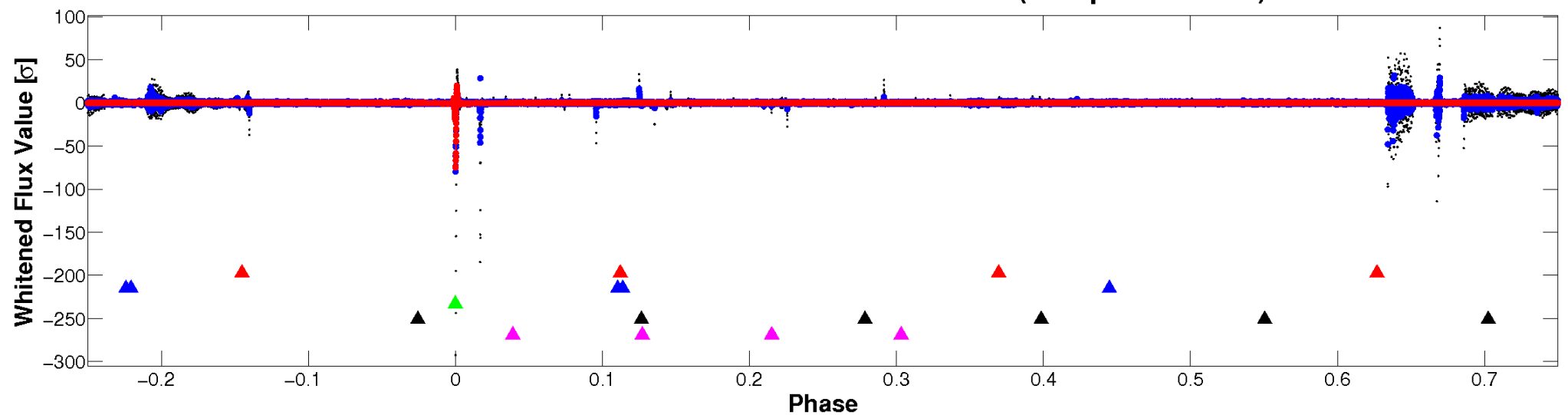


Non-Whitened Vs. Whitened Light Curve

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

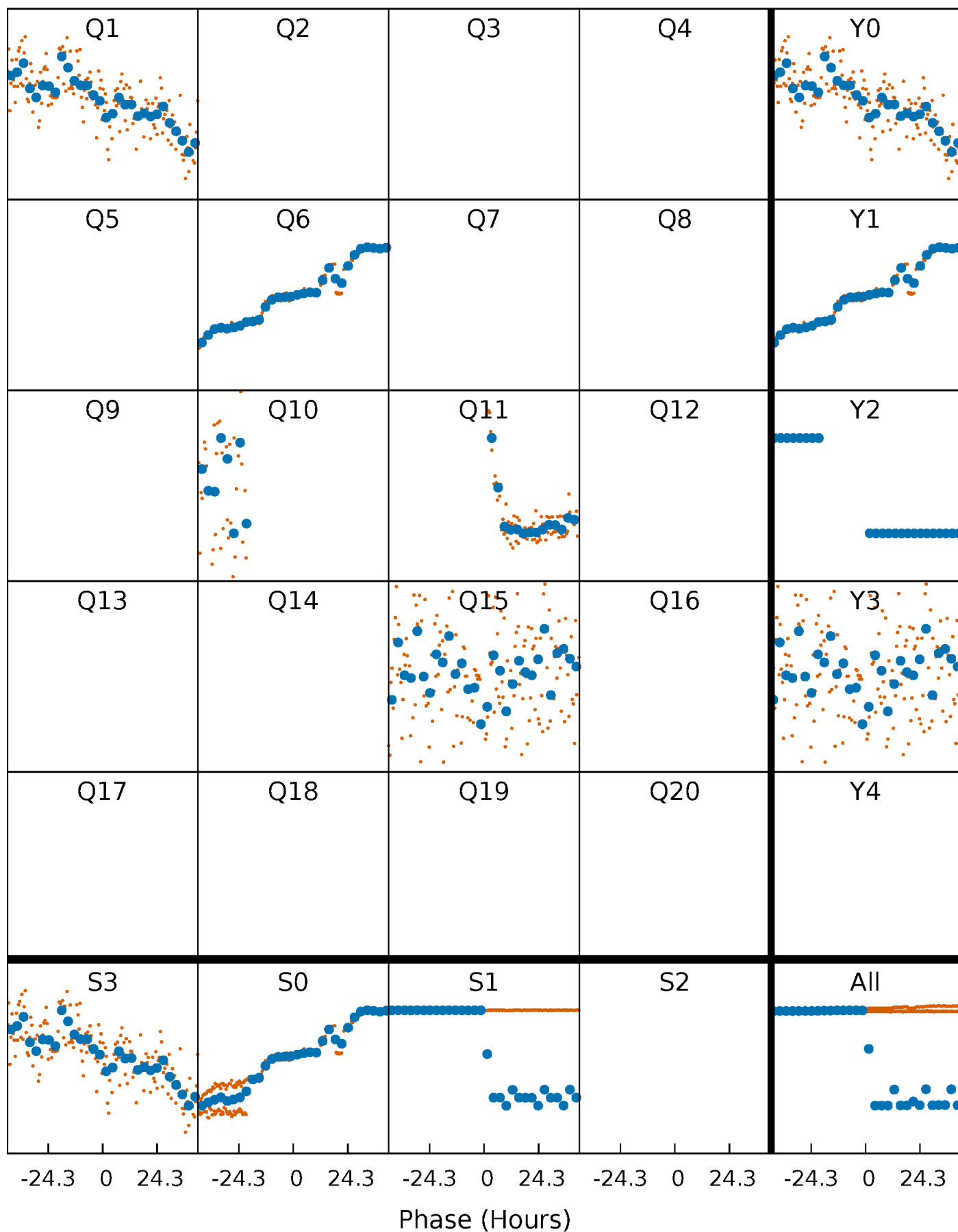


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



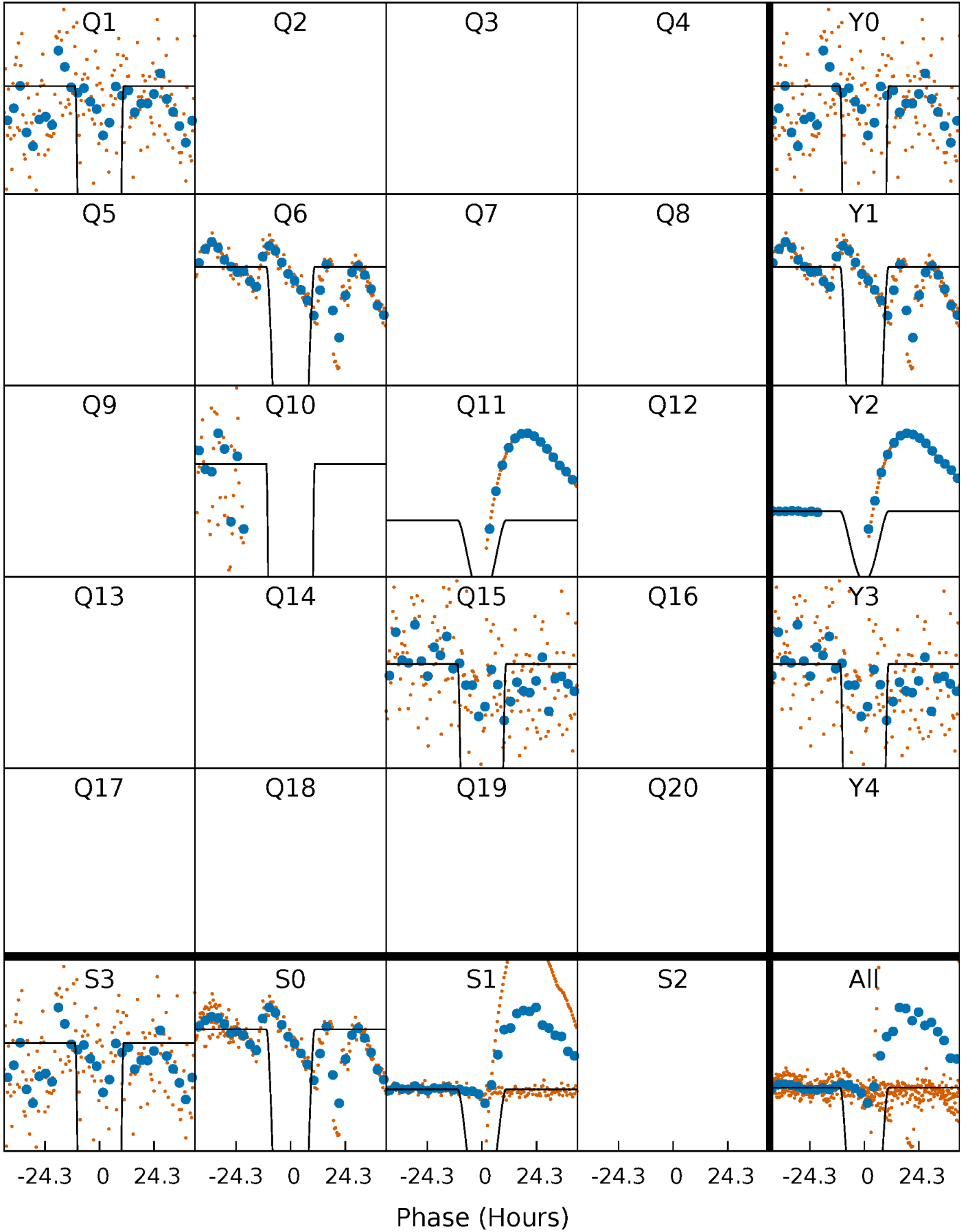
PDC Quarter-Phased Transit Curves

TCE 011913095-03 $P=430.469807$ Days $T_0=140.204891$ (BKJD)



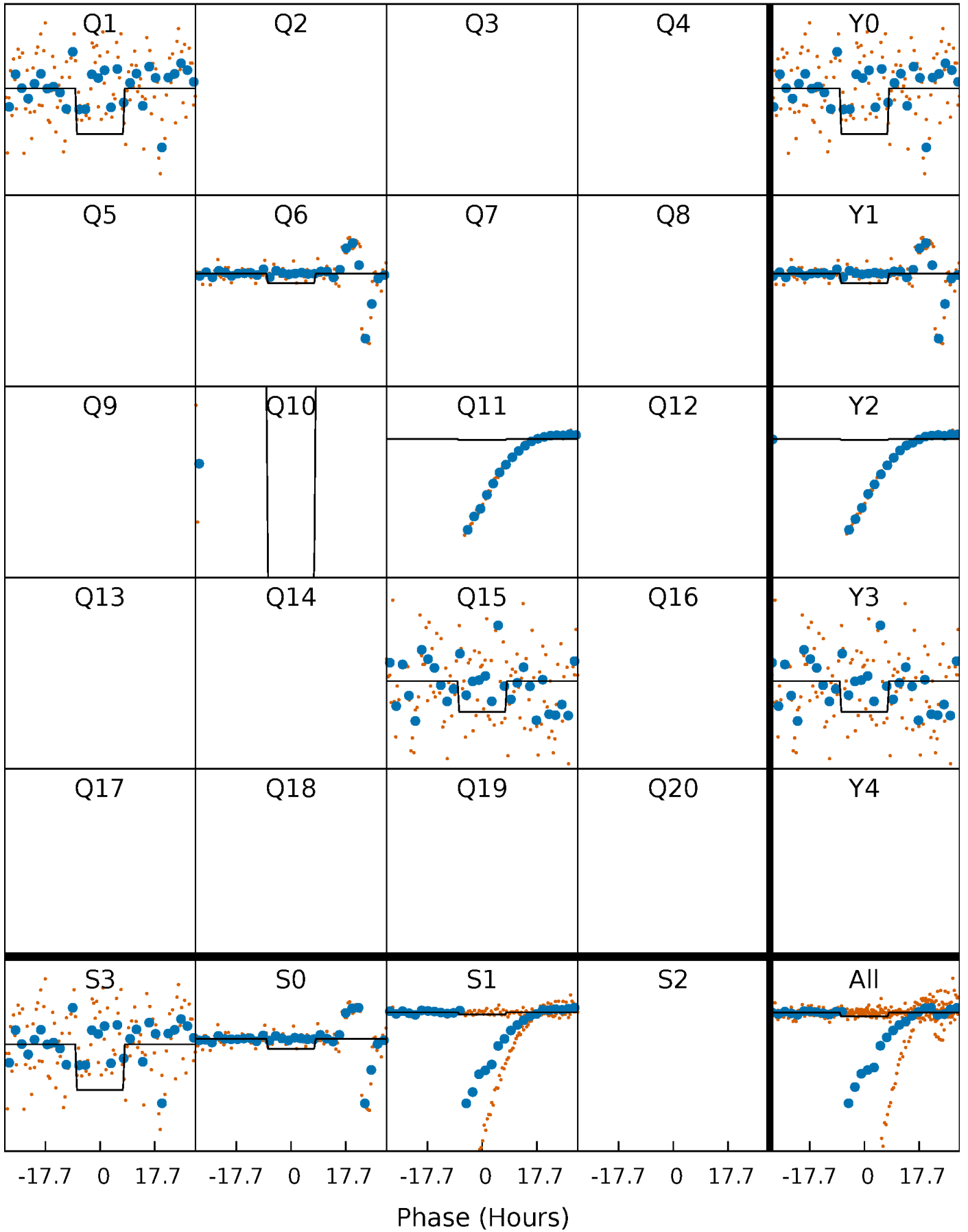
DV Quarter-Phased Transit Curves

TCE 011913095-03 $P=430.469807$ Days $T_0=140.204891$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

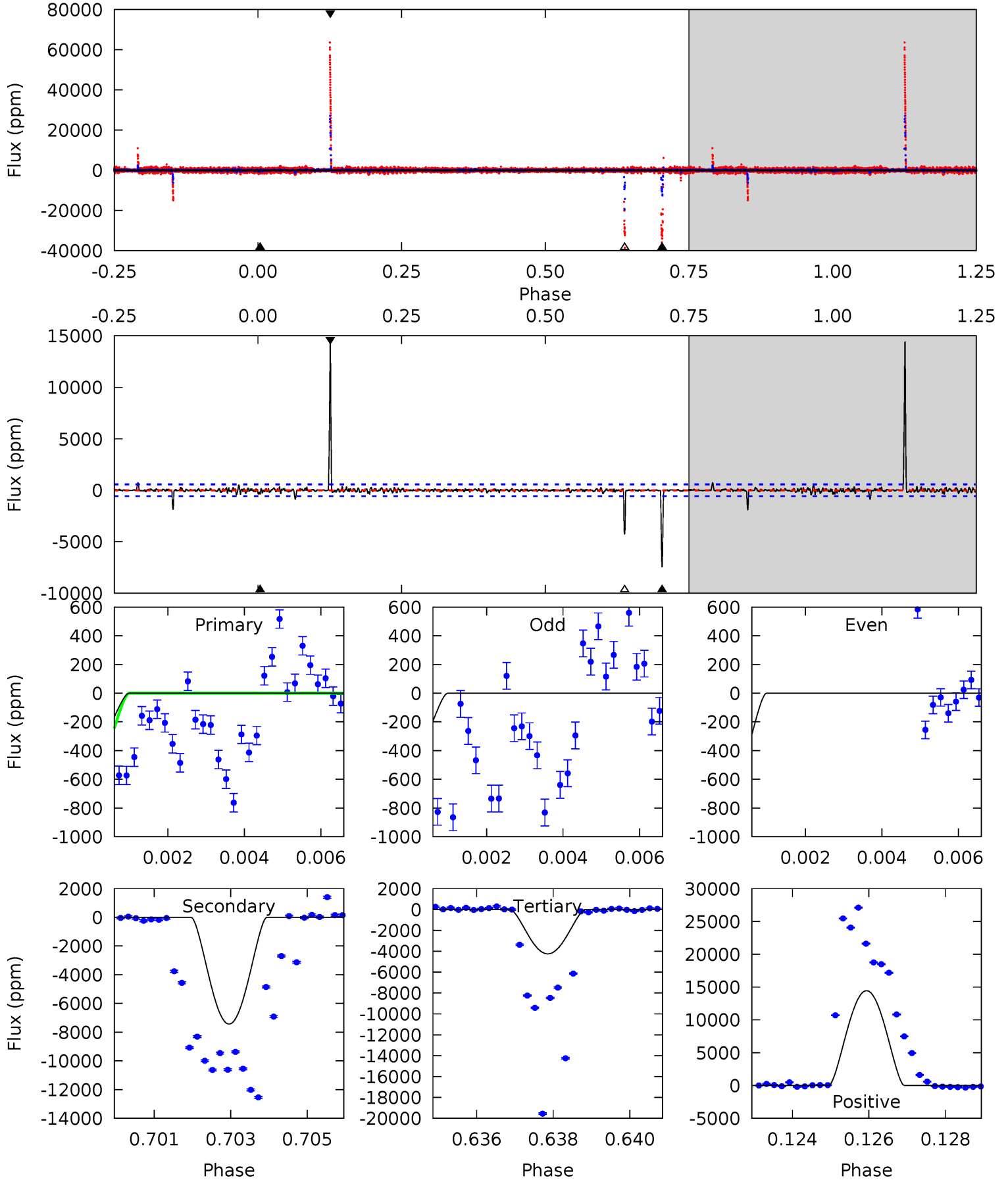
TCE 011913095-03 $P=431.011892$ Days $T_0=139.504454$ (BKJD)



DV Model-Shift Uniqueness Test

011913095-03, P = 430.469807 Days, E = 140.204891 Days

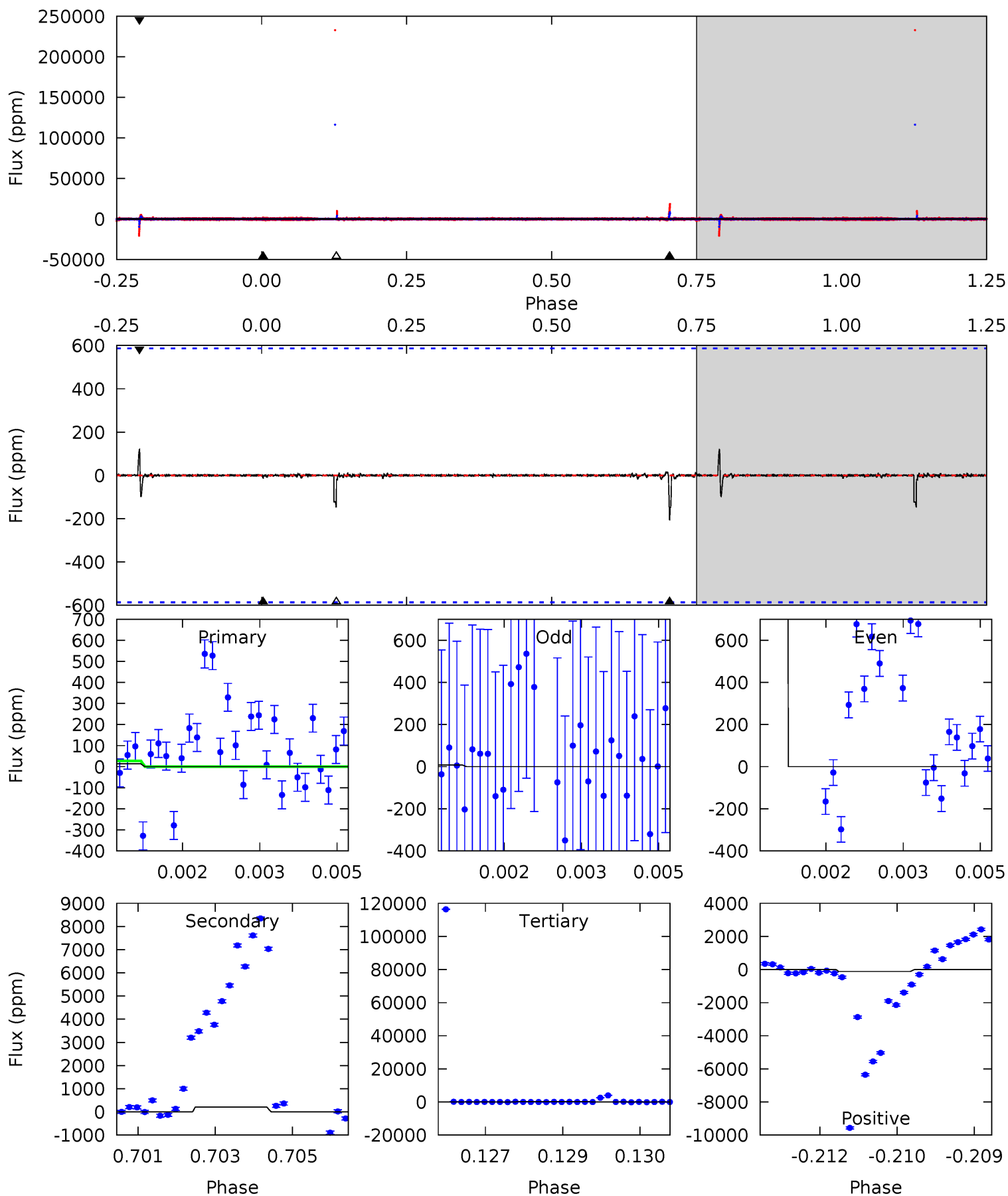
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.46	69.0	39.4	134.1	5.32	3.08	4.80	-36.0	-130.6	29.6	-65.1	0.28	-1.06	0.66	1.80



Alt Model-Shift Uniqueness Test

011913095-03, P = 431.011892 Days, E = 139.504454 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.12	1.89	1.32	1.09	5.37	3.17	0.08	-1.20	-0.97	0.57	0.80	2.15	-1685	0.37	0.32



Stellar Parameters For KIC 011913095

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5180^{+199}_{-199}	$3.449^{+0.760}_{-0.190}$	$0.120^{+0.250}_{-0.350}$	$4.142^{+1.135}_{-2.647}$	$1.759^{+0.205}_{-0.820}$	$0.035^{+0.478}_{-0.017}$
	+4%/-4%	+22%/-6%	+208%/-292%	+27%/-64%	+12%/-47%	+1372%/-48%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011913095-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-7435 ± 108	$90.08^{+30.95}_{-32.05}$	542^{+58}_{-98}	3622^{+244}_{-197}	916^{+1170}_{-411}
Alt.	-206 ± 109	$13.21^{+15.09}_{-8.69}$	549^{+56}_{-99}	3595^{+1955}_{-731}	954^{+7608}_{-786}

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 $A_{obs} \gg 1.0$

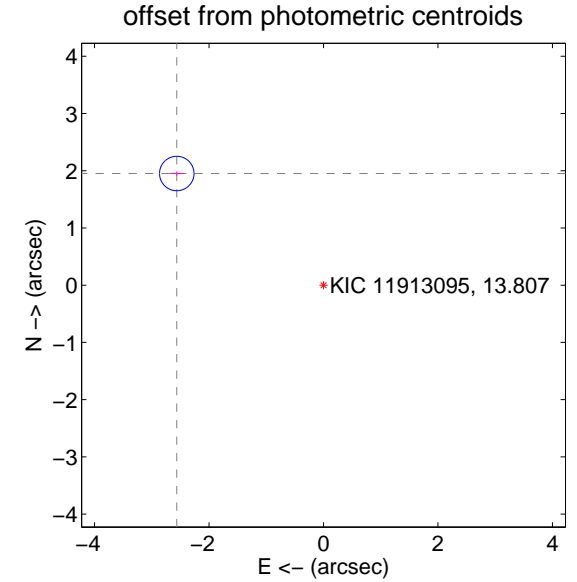
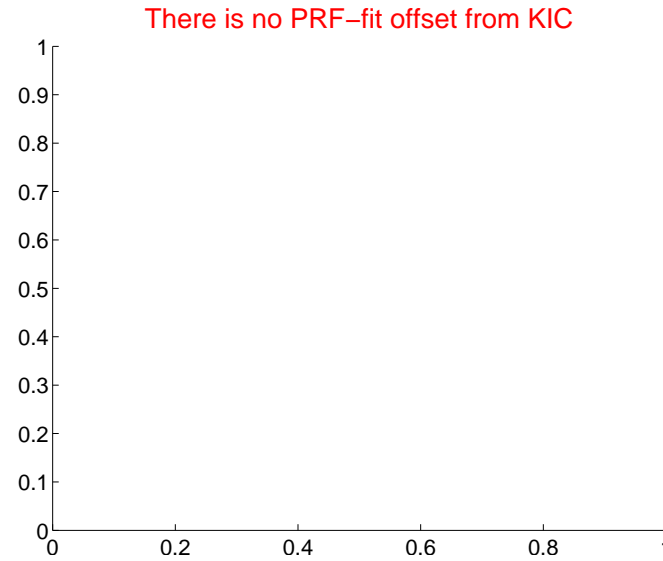
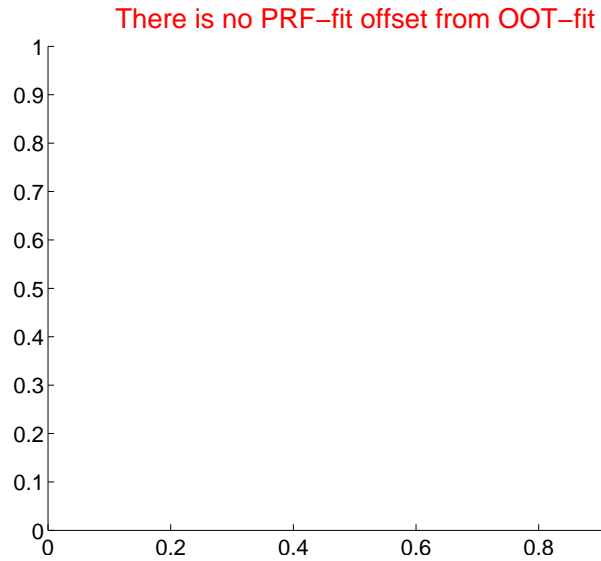
DV Centroid Data

Supplemental centroid analysis for 011913095-03. Kepler magnitude: 13.81. Transit SNR 90.42

There are 0 quarters with good PRF difference image offsets

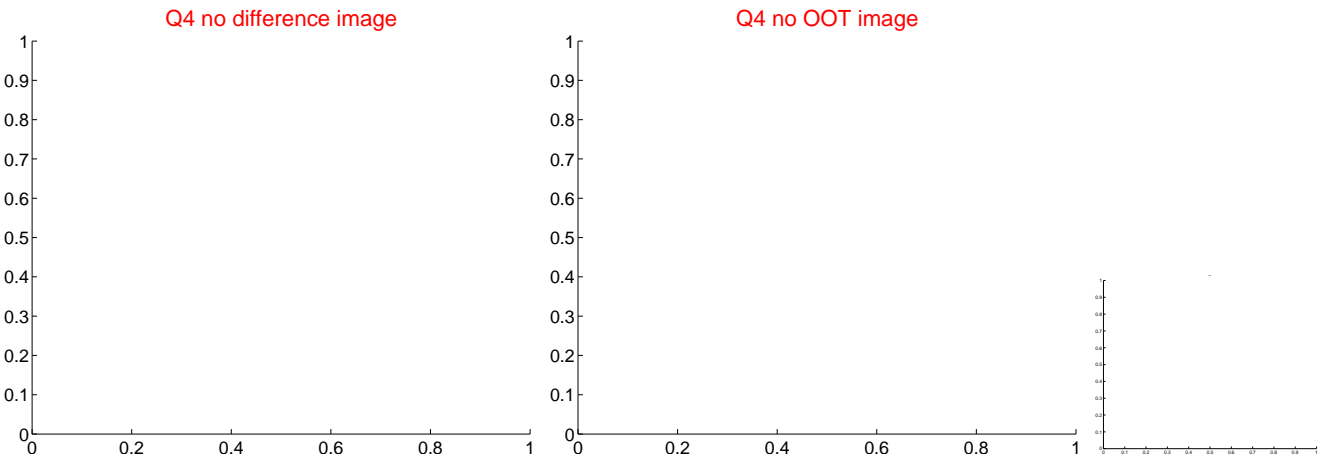
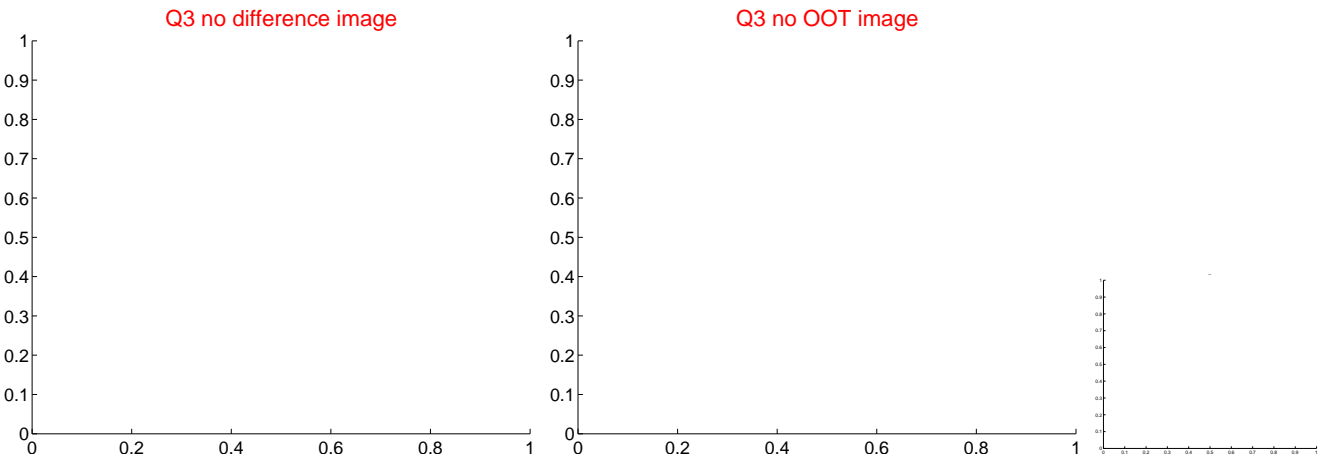
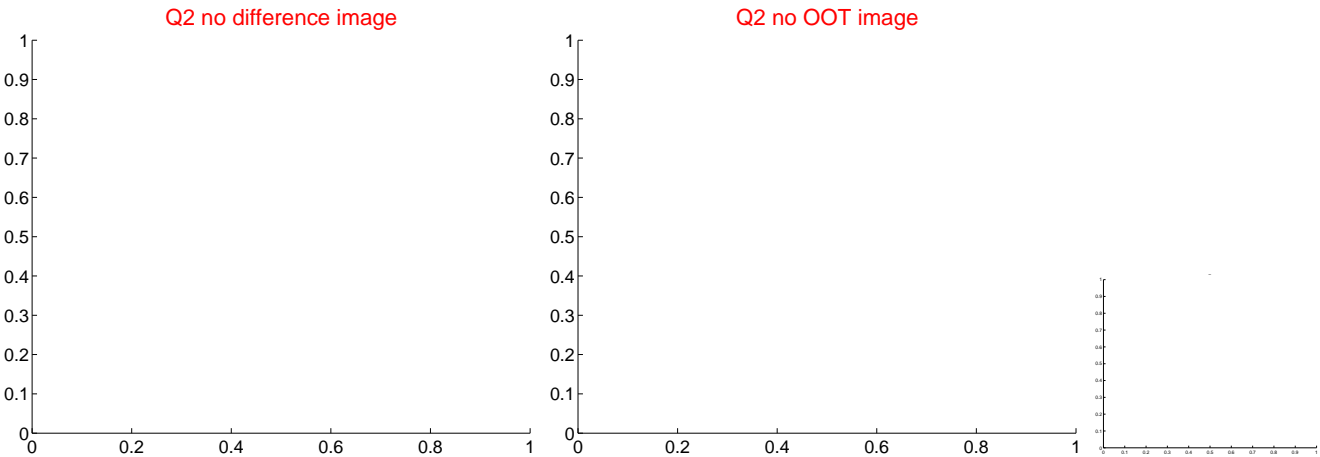
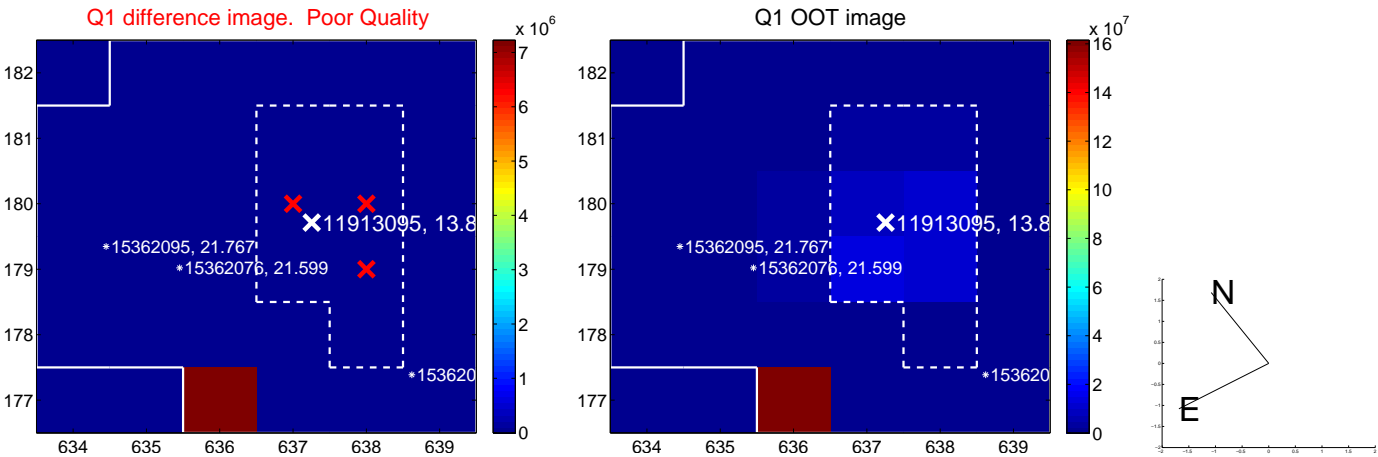
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	3.22 ± 0.10	32.10	2.56 ± 0.12	1.95 ± 0.04

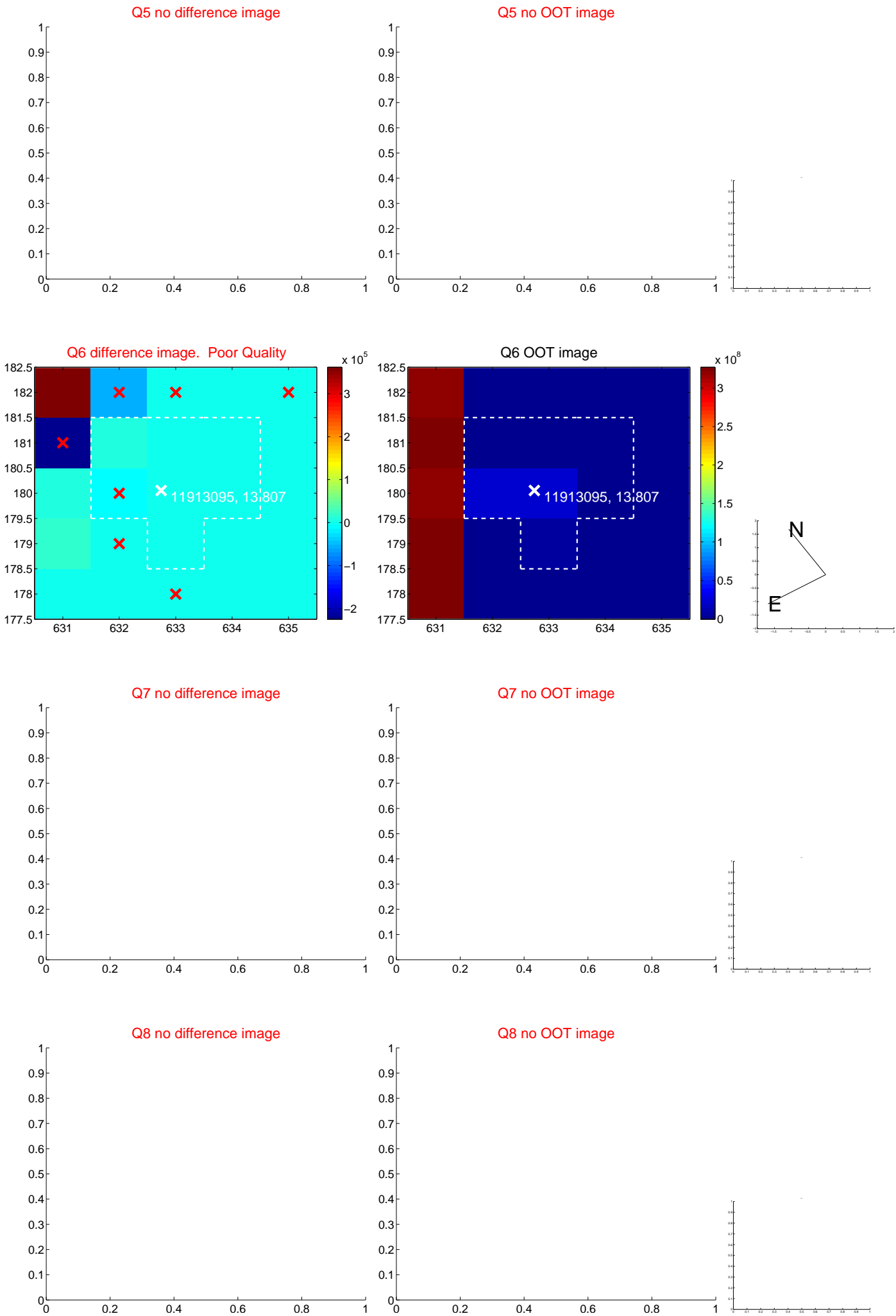


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

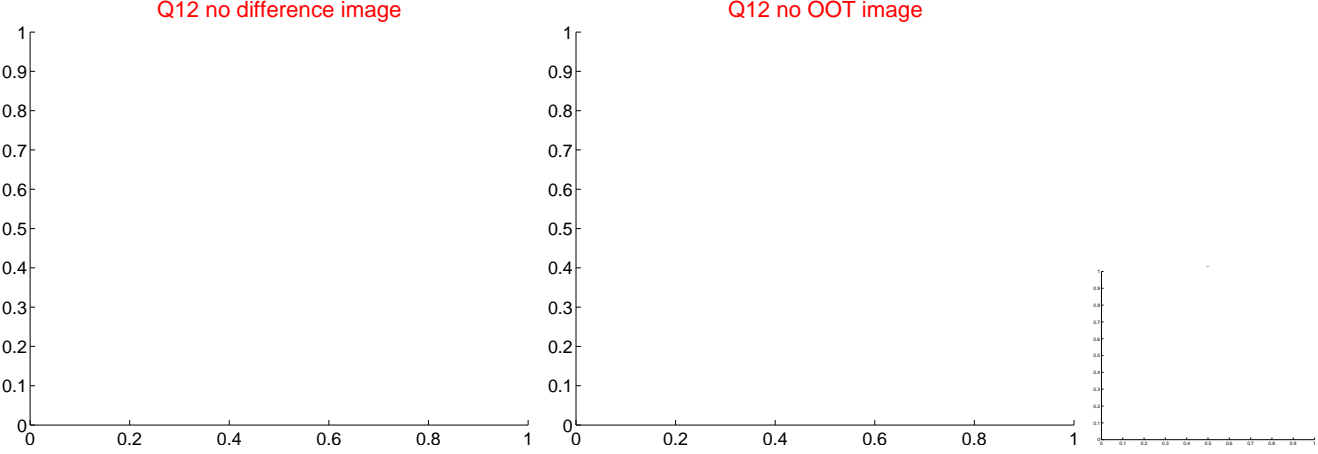
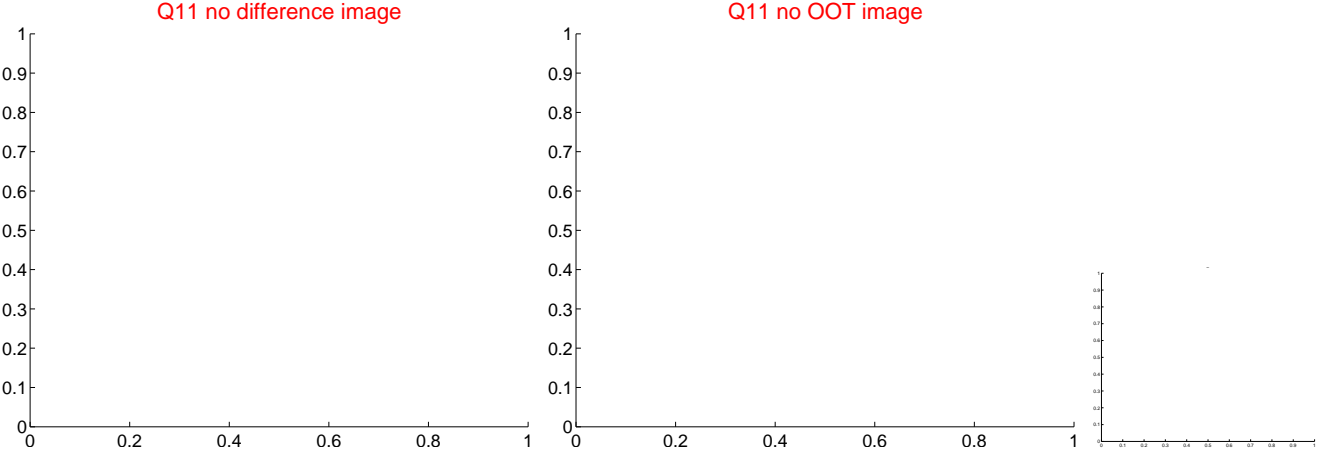
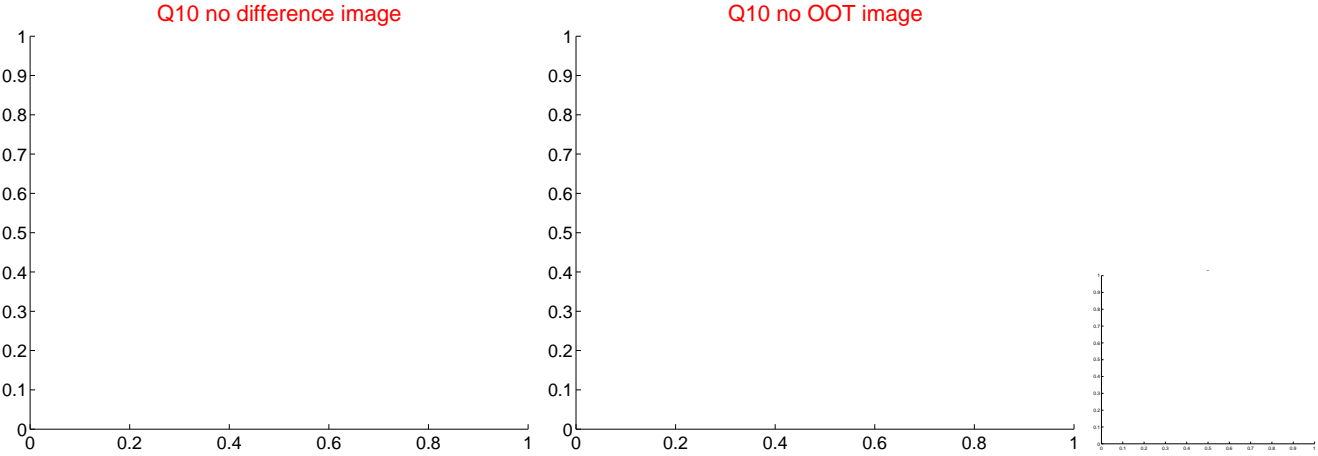
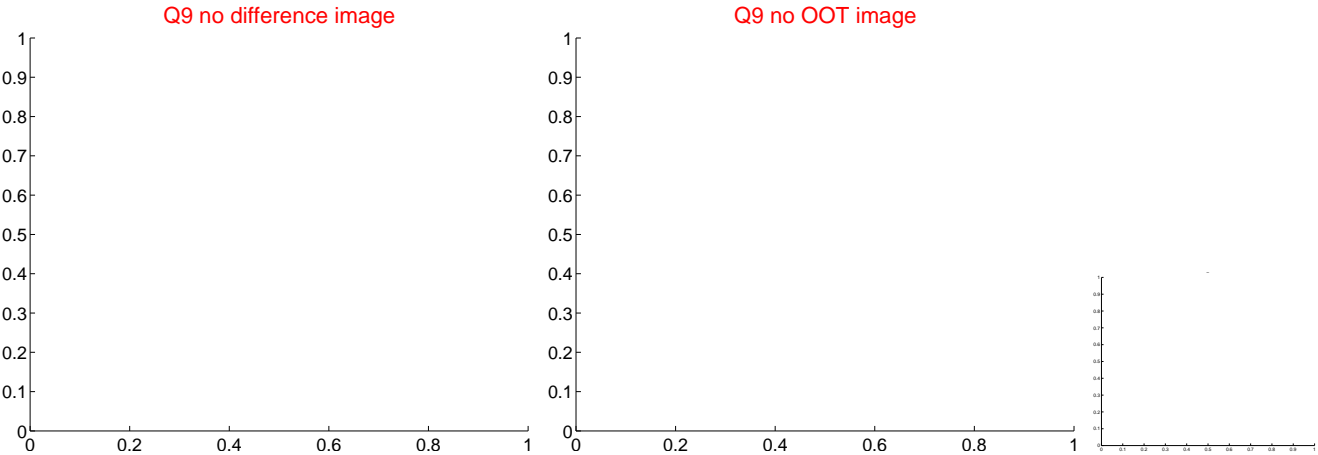
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



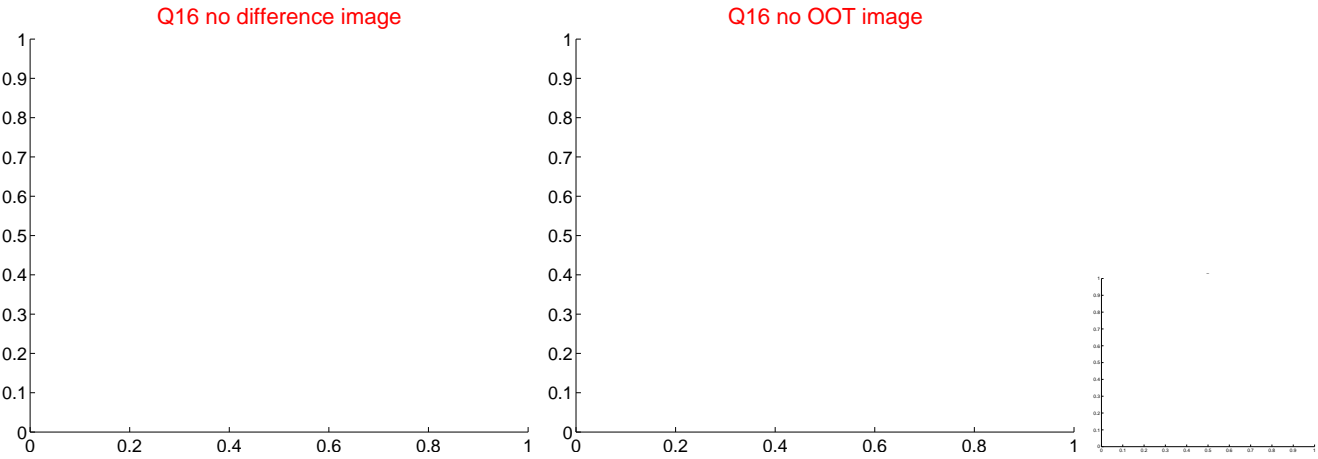
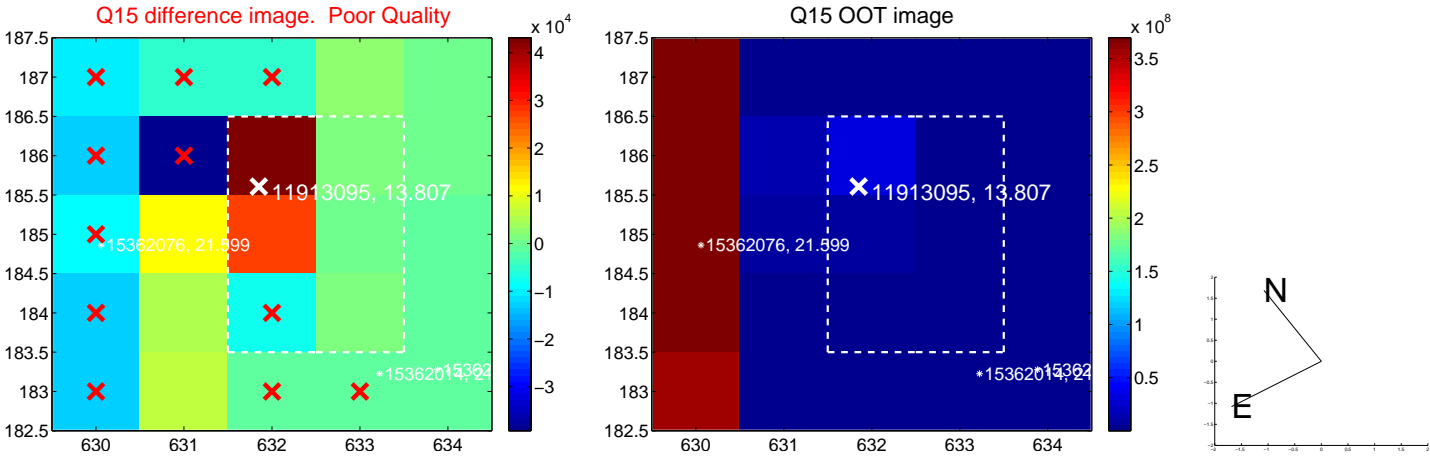
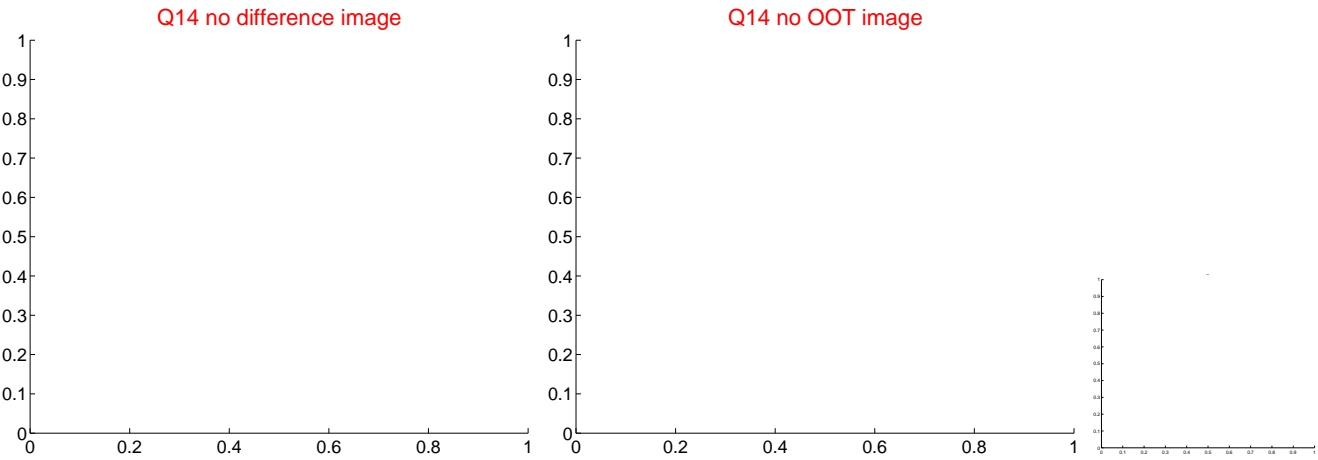
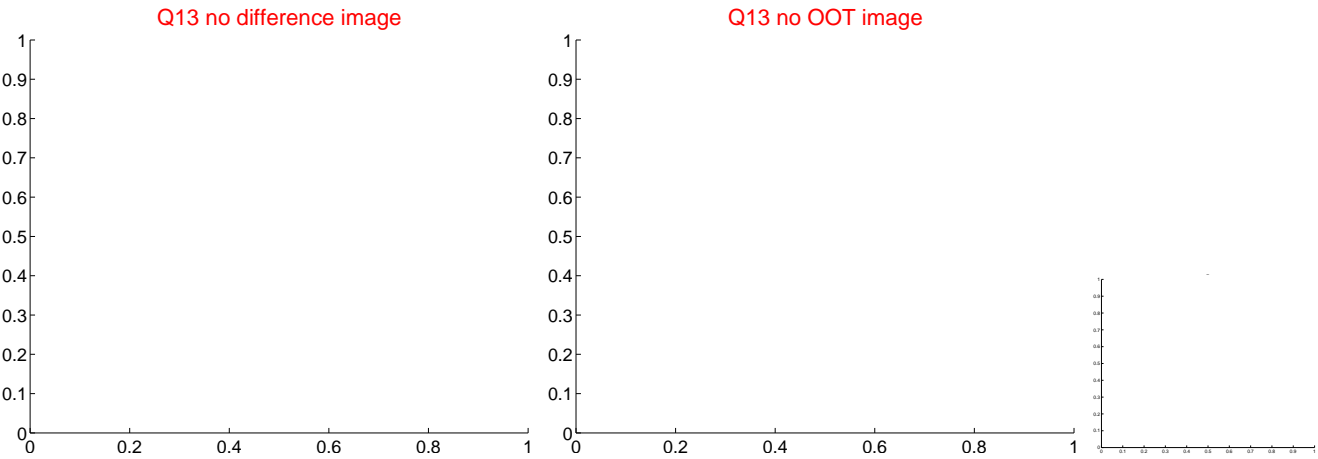
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



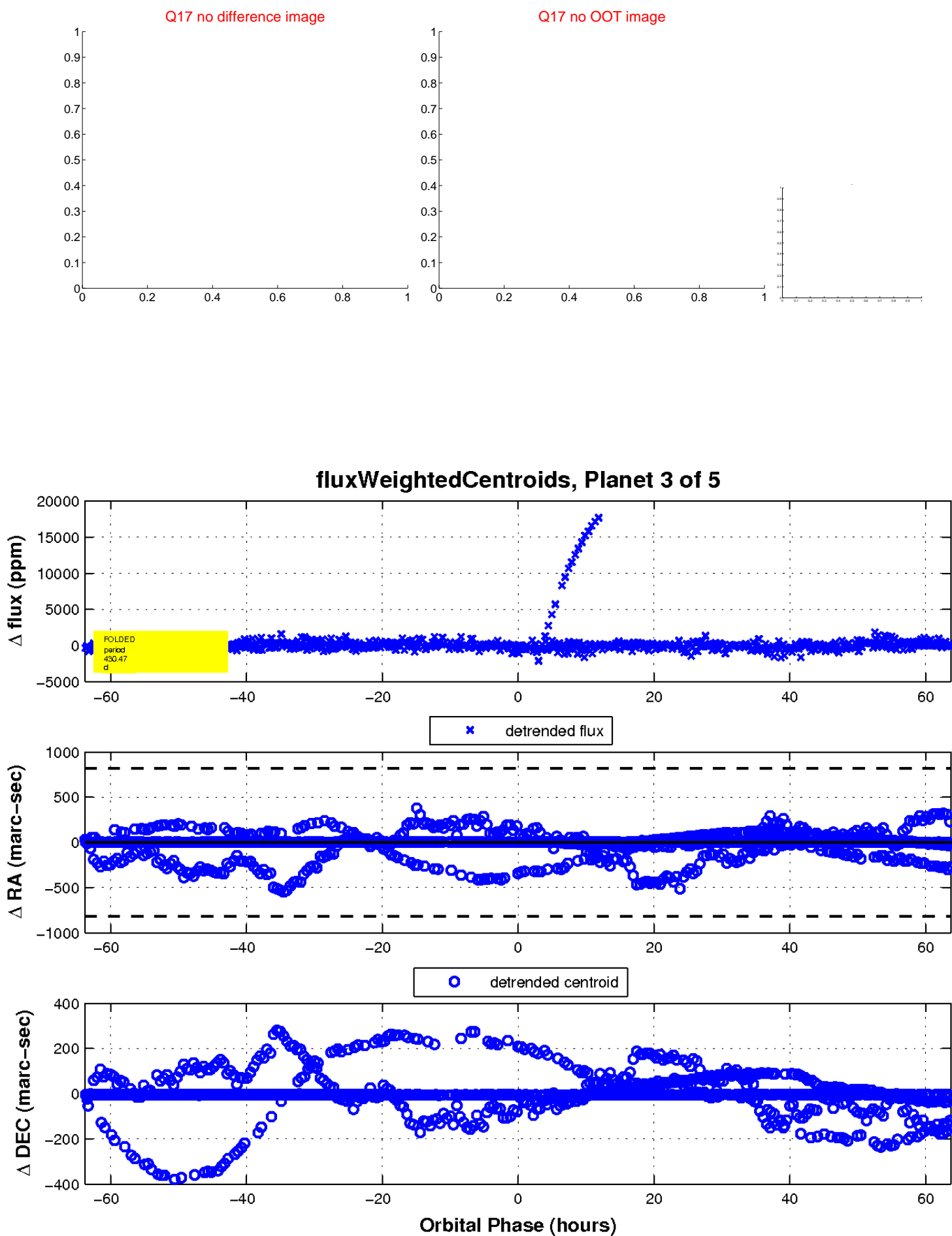
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



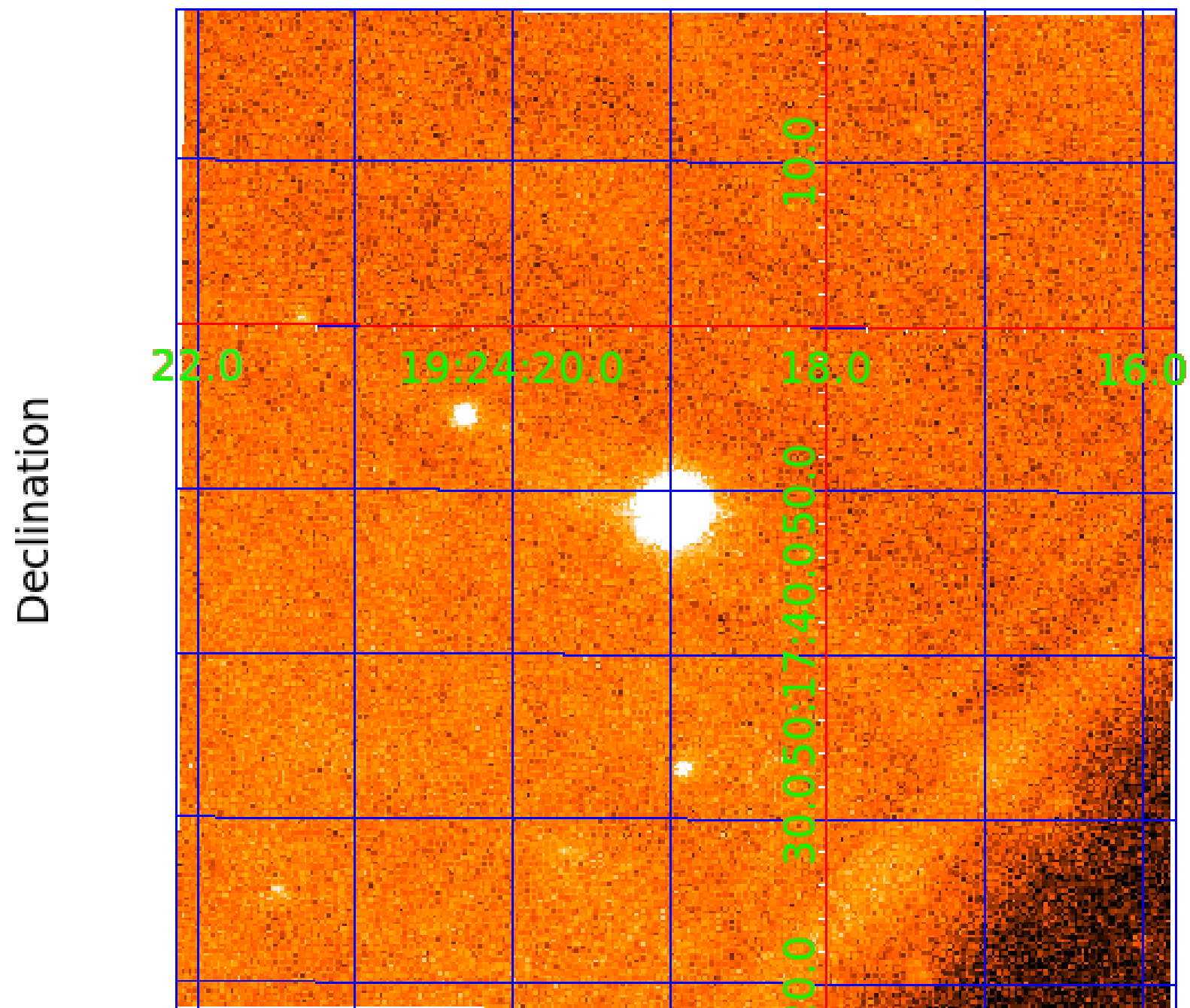
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



UKIRT Image



KIC 011913095

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})
011913095-01	OBS	No	319.683046	410.074906	6618.4	10.500	75.4	-1.0	4.14	5180	32.81	9.07
011913095-02	OBS	No	286.482545	189.222496	81.1	100.550	612.5	1.8	4.14	5180	3.81	10.49
011913095-03	OBS	No	430.469807	140.204891	18556.0	21.279	64.7	90.4	4.14	5180	101.72	6.10
011913095-04	OBS	No	247.961251	311.741804	2874.2	15.000	35.4	-1.0	4.14	5180	21.61	12.72
011913095-05	OBS	No	468.370891	157.037551	575.2	10.085	13.9	9.4	4.14	5180	11.09	5.45

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011913095-01	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_NOFITS—HALO_GHOST
011913095-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
011913095-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
011913095-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
011913095-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

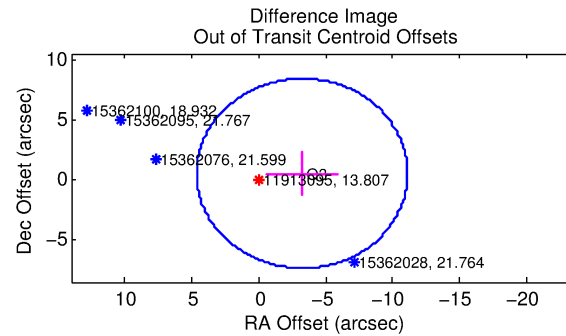
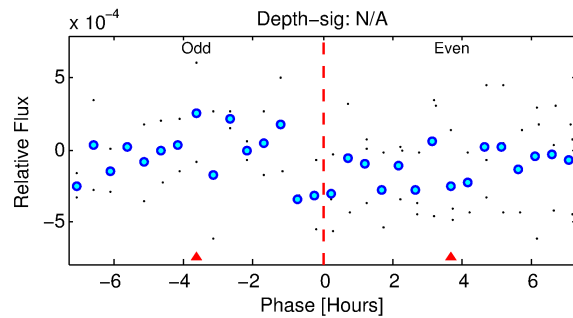
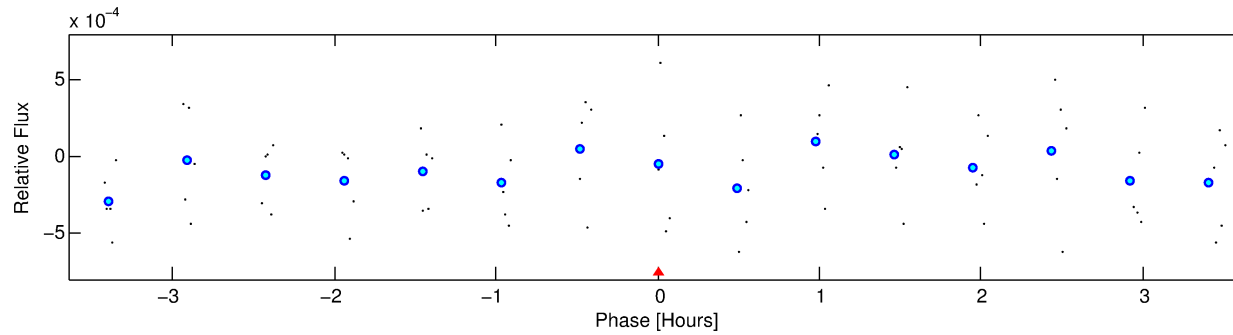
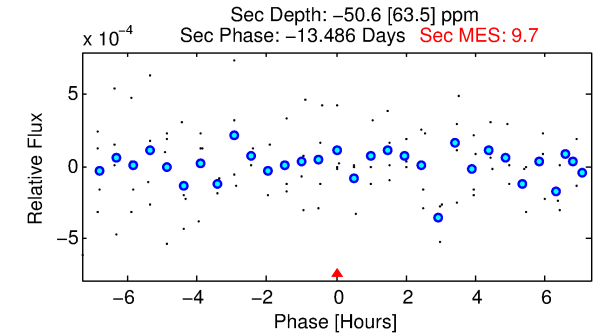
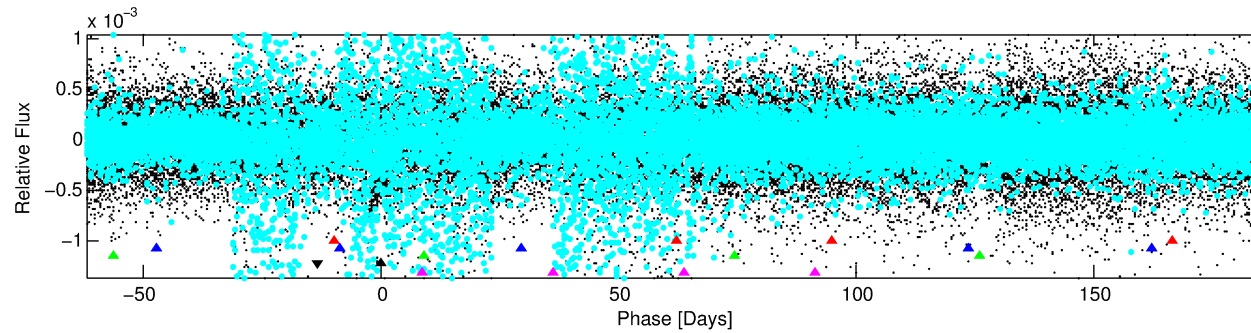
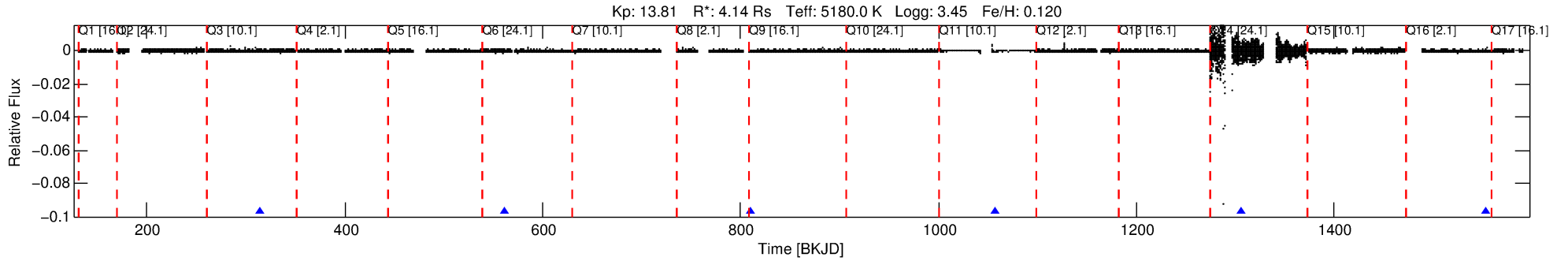
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011913095-04

No Significant Match Found

DV One-Page Summary

KIC: 11913095 Candidate: 4 of 5 Period: 247.961 d



TPS TCE Results:

Period = 247.96125 d
Epoch = 311.7418 BKJD

DV fit results are unavailable

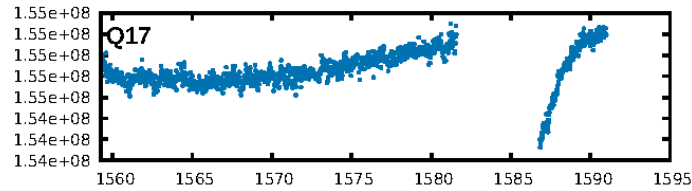
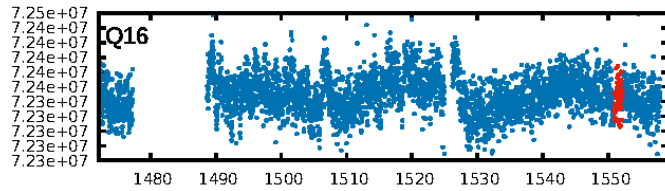
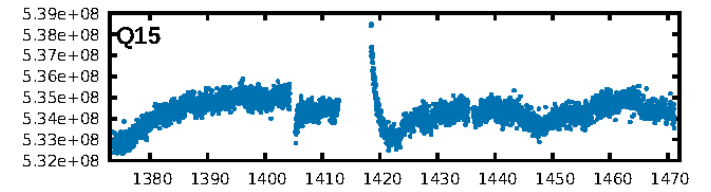
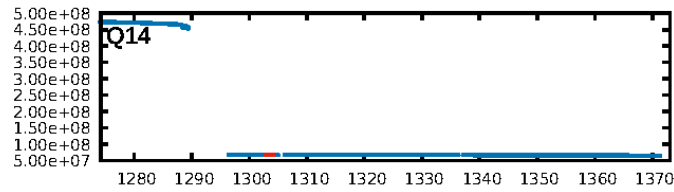
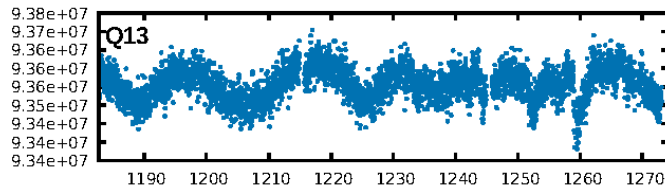
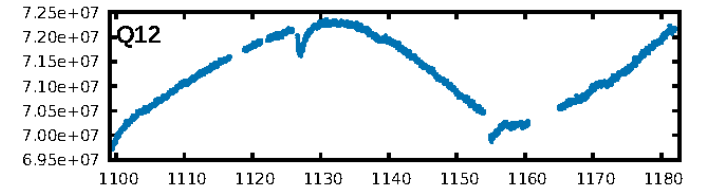
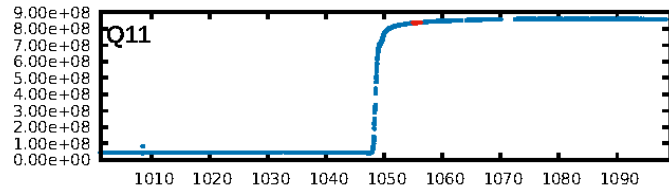
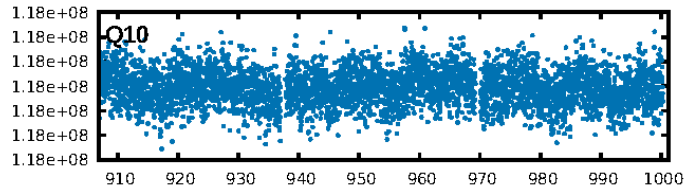
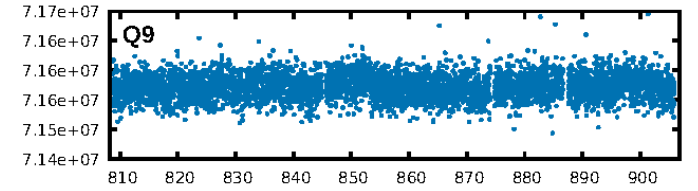
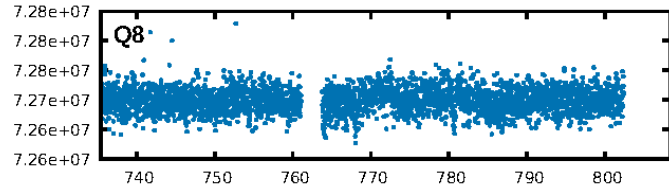
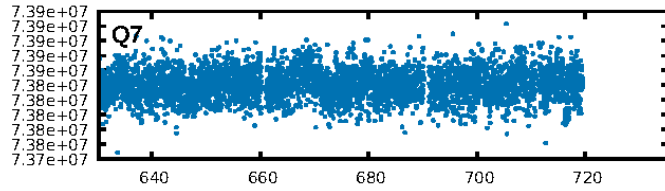
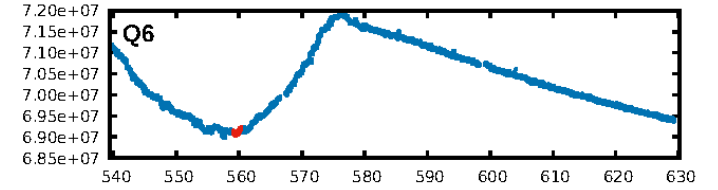
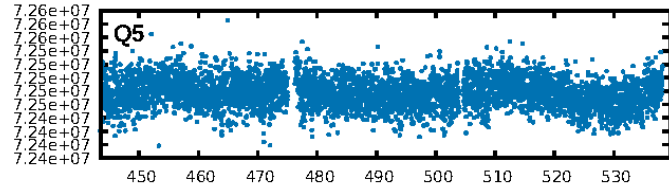
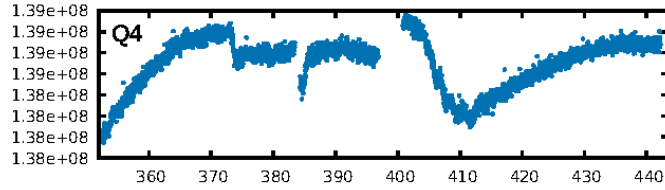
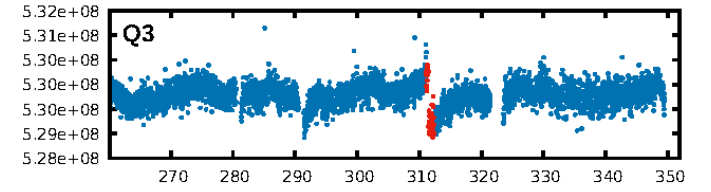
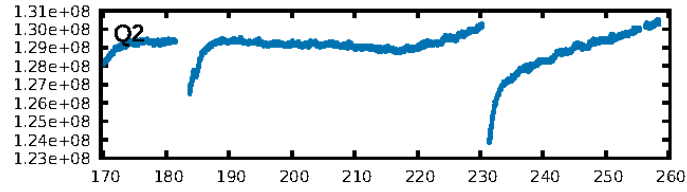
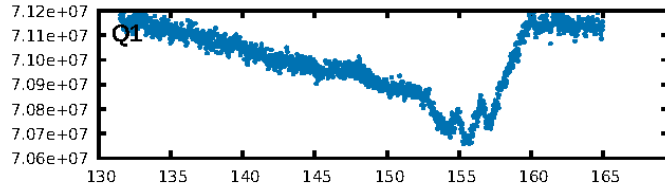
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [9.09σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 7.34e-09
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 3.288 arcsec [1.25σ]
KicOffset-rm: 1.095 arcsec [0.83σ]
OotOffset-st: 0/1/0/0 [1]
KicOffset-st: 1/1/0/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [4/4]

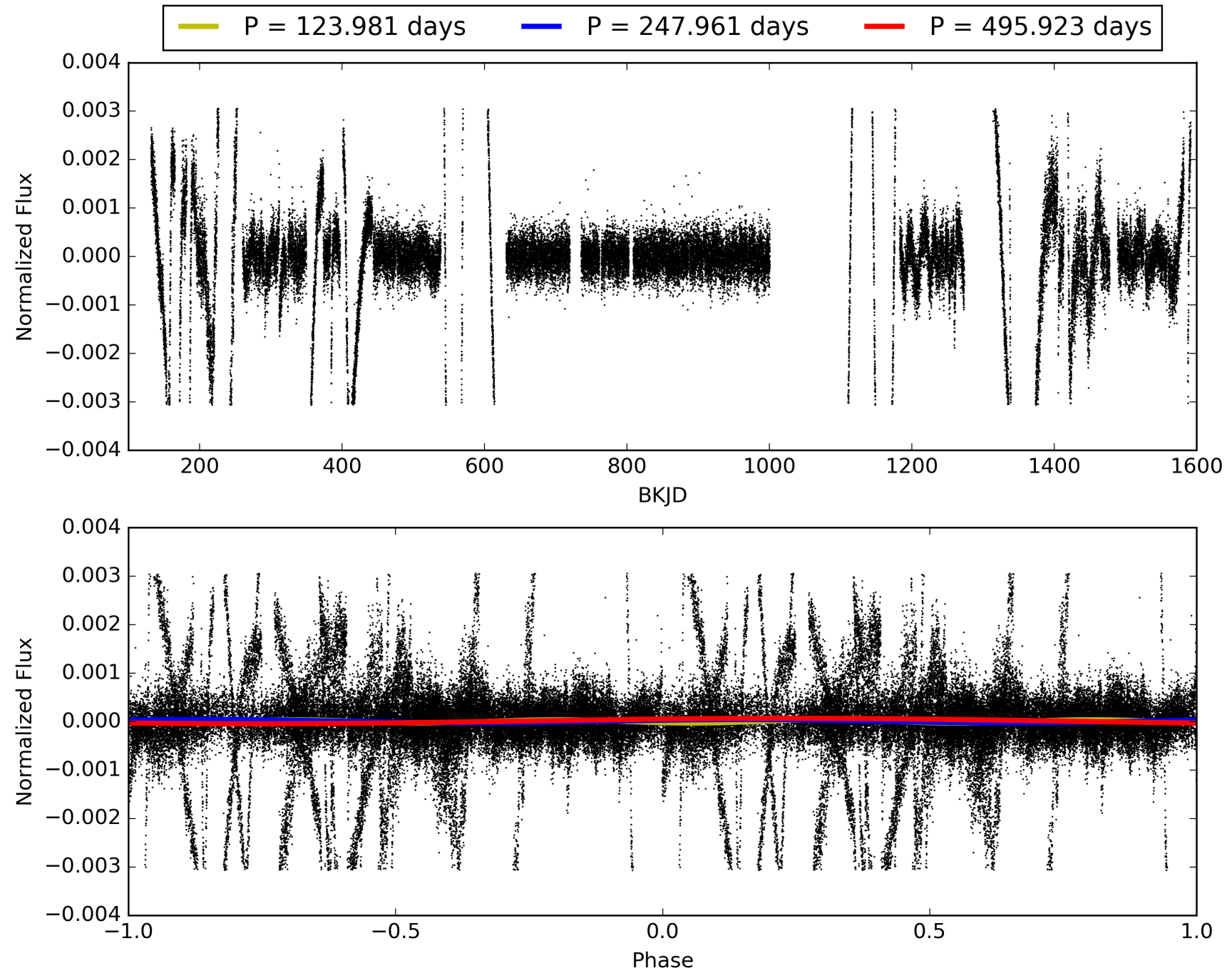
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:09:23 Z

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

TCE 011913095-04, PDC Light Curves

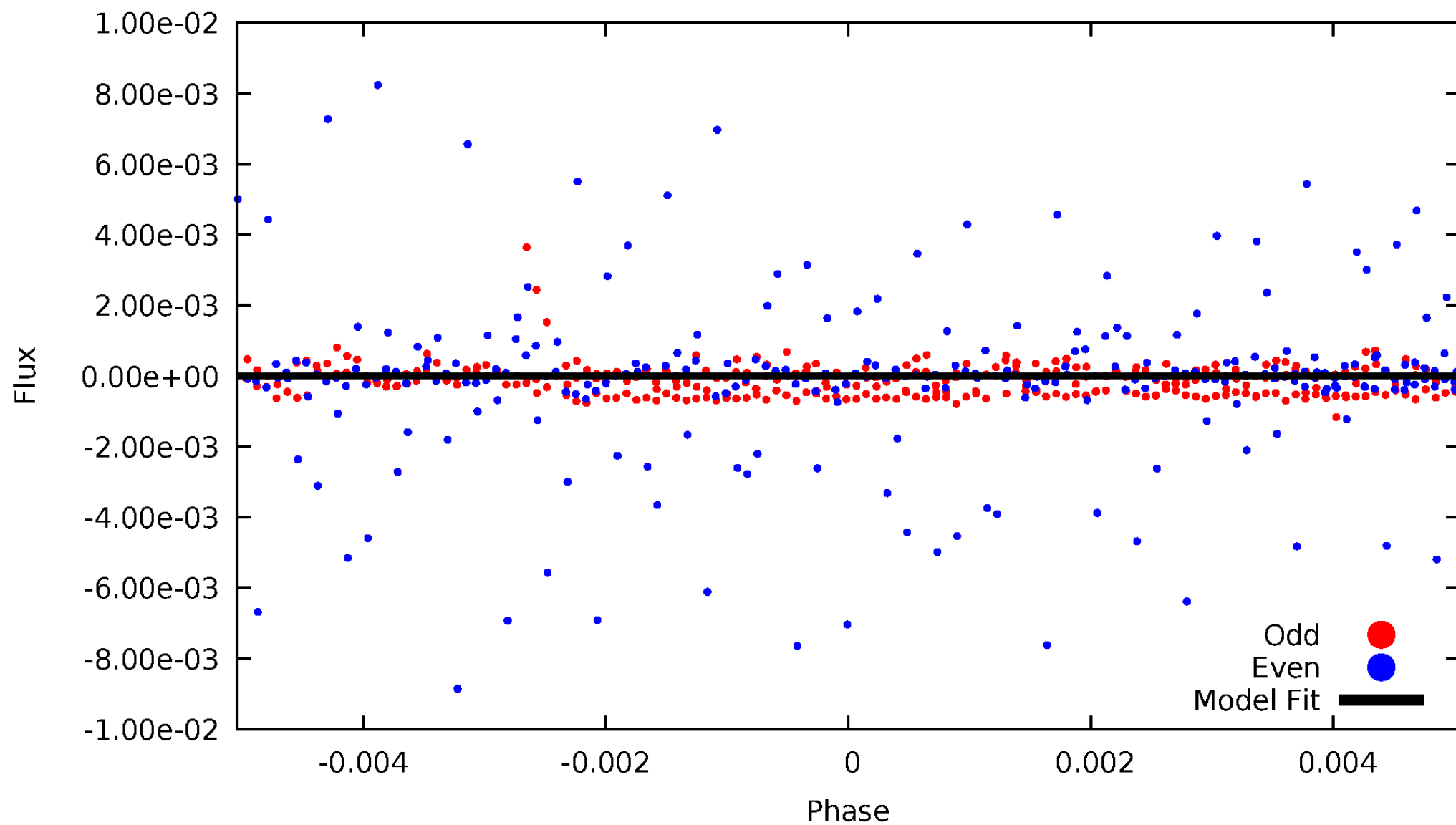


TCE 011913095-04



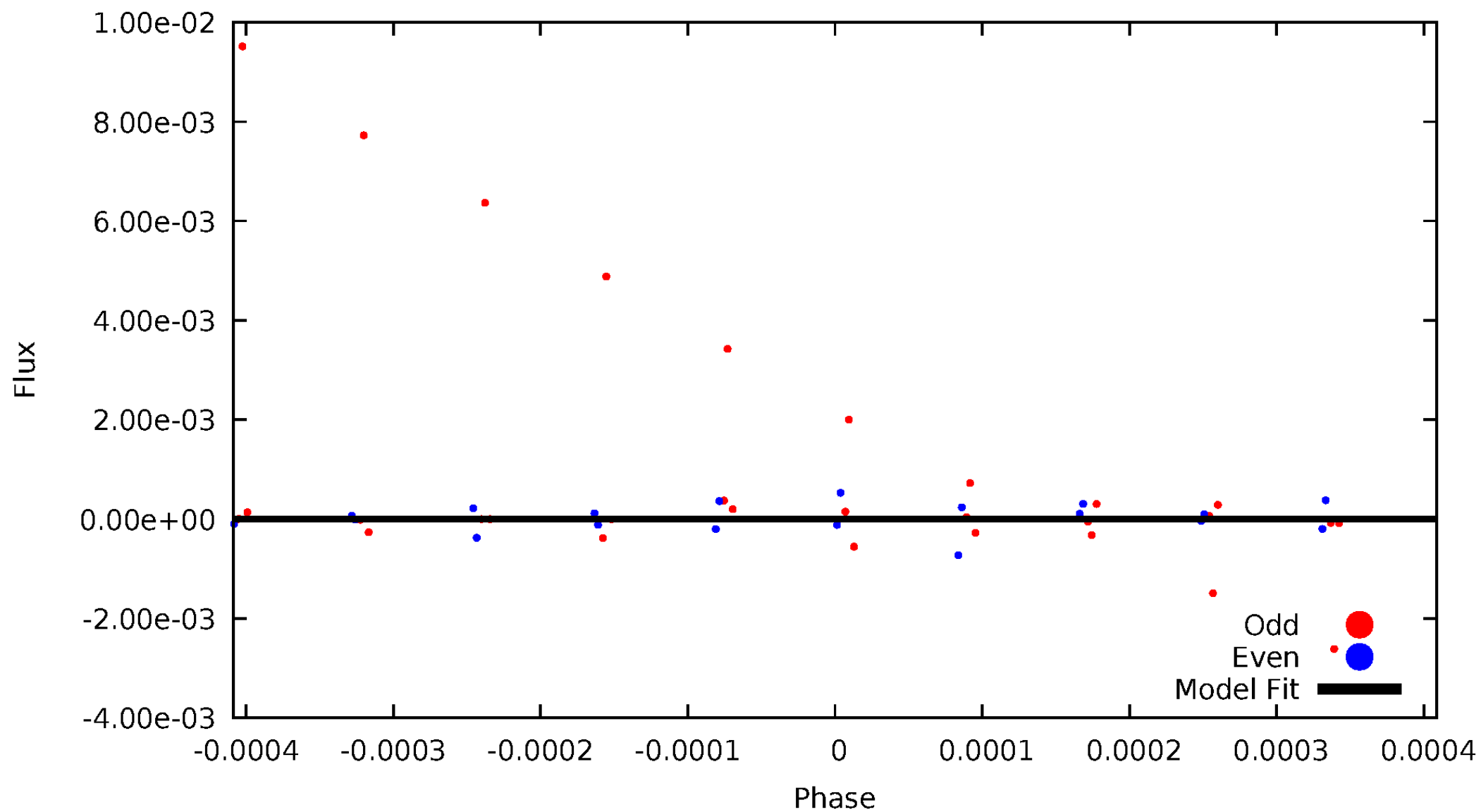
DV Odd/Even

TCE 011913095-04



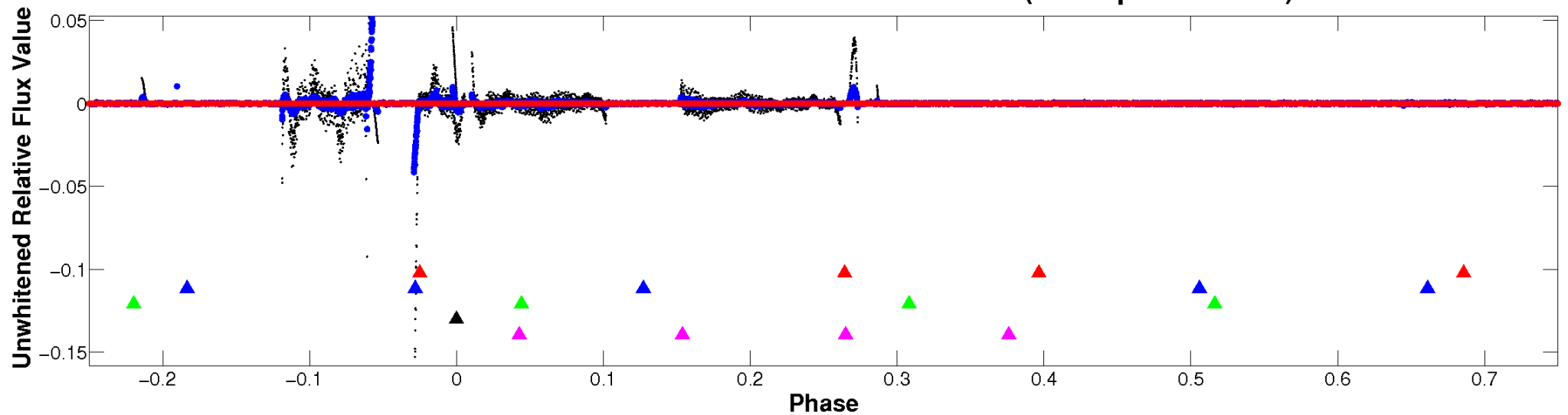
ALT Odd/Even

TCE 011913095-04

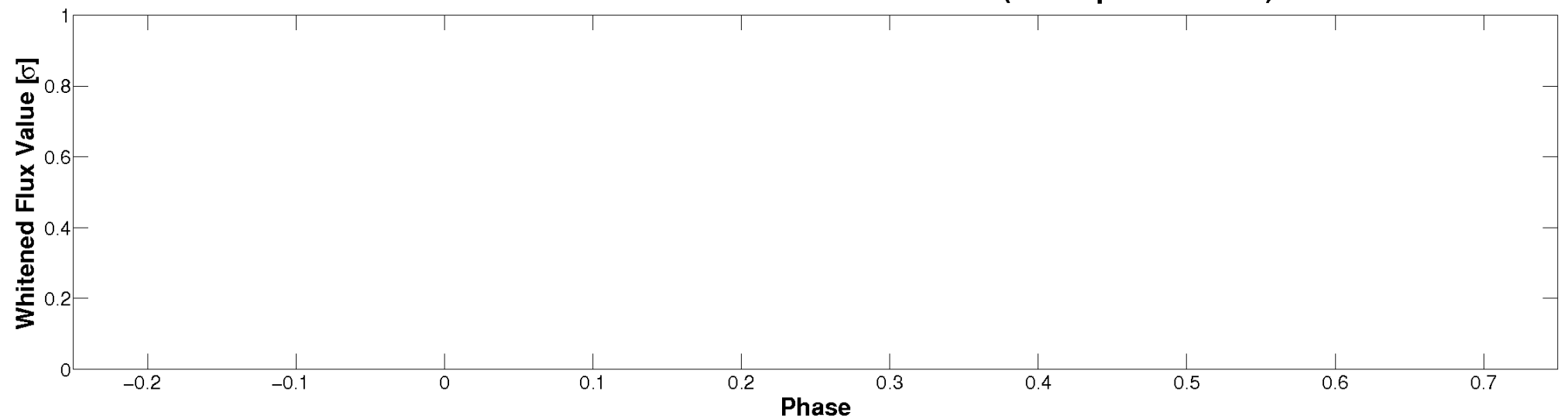


Non-Whitened Vs. Whitened Light Curve

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

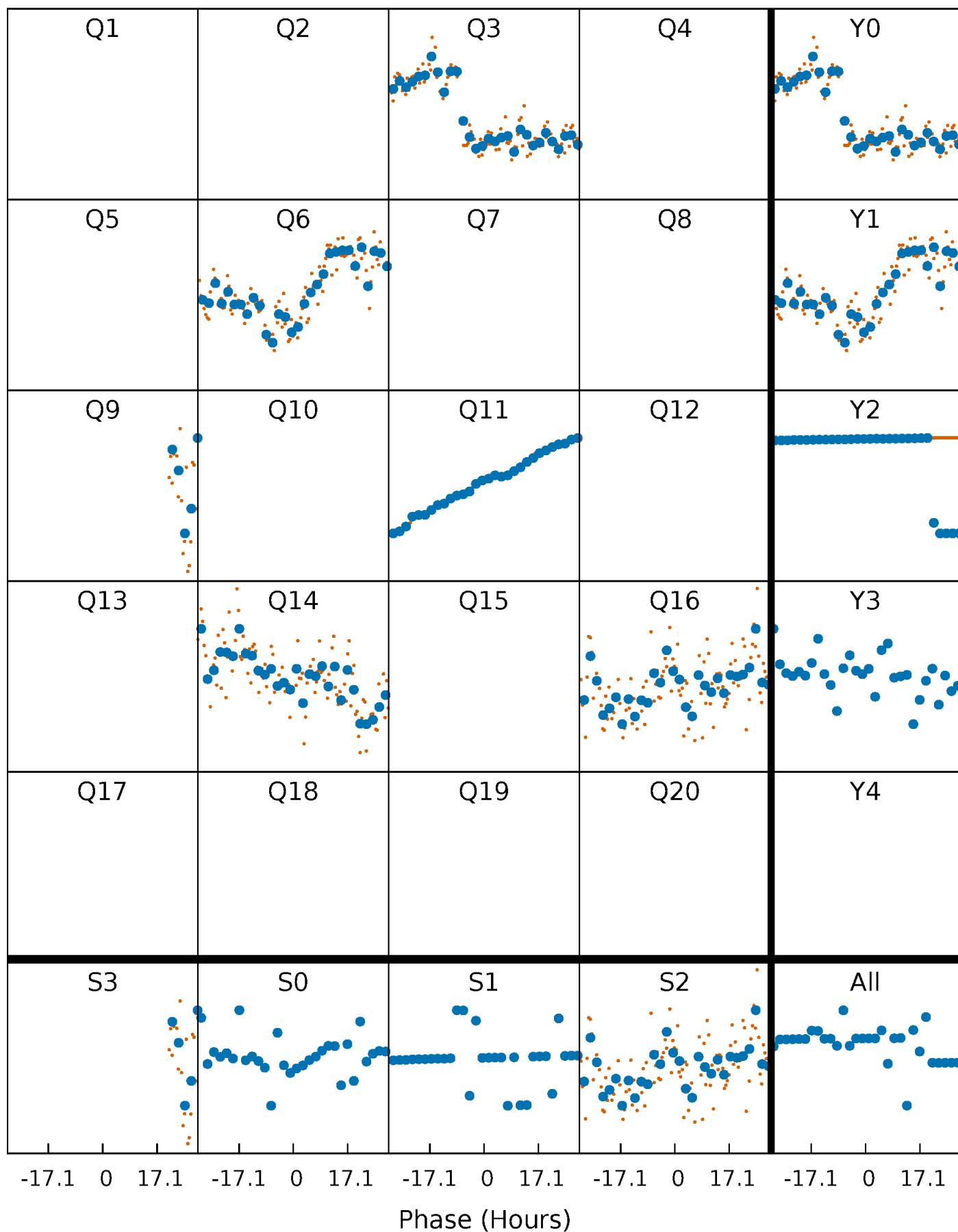


Planet 4 : Phased Whitened Flux Time Series (TPS Epoch/Period)



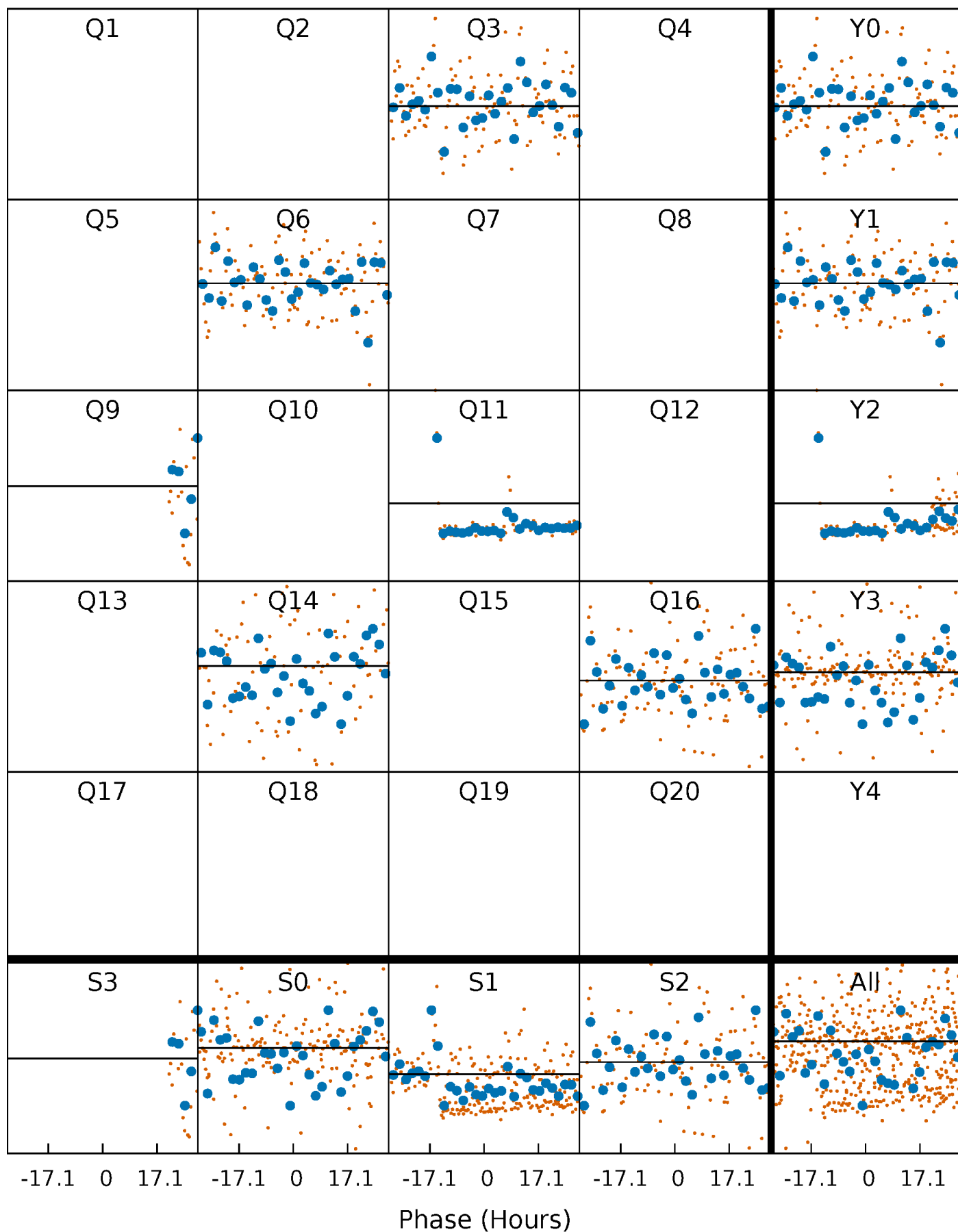
PDC Quarter-Phased Transit Curves

TCE 011913095-04 P=247.961251 Days $T_0=311.741804$ (BKJD)



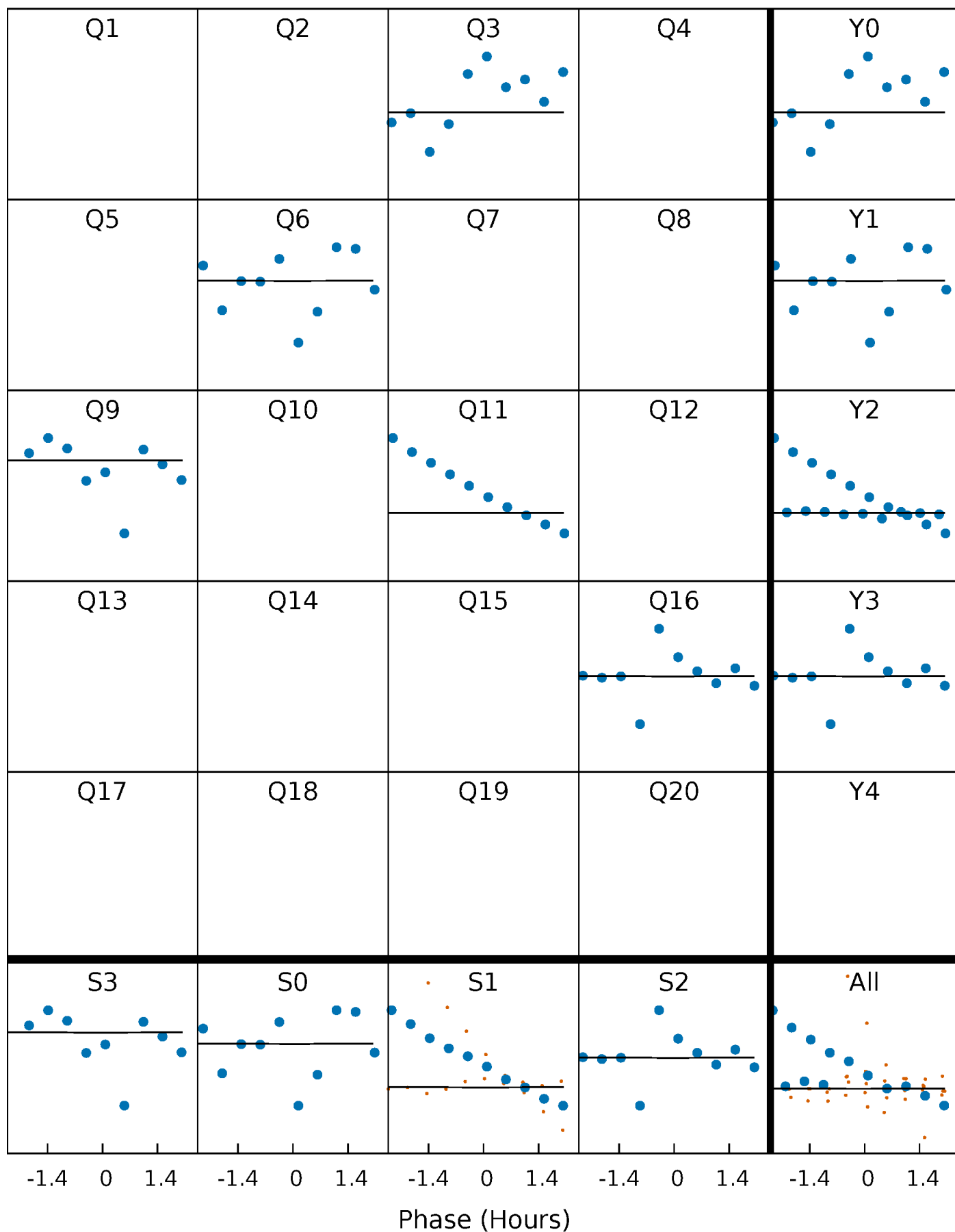
DV Quarter-Phased Transit Curves

TCE 011913095-04 P=247.961251 Days $T_0=311.741804$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

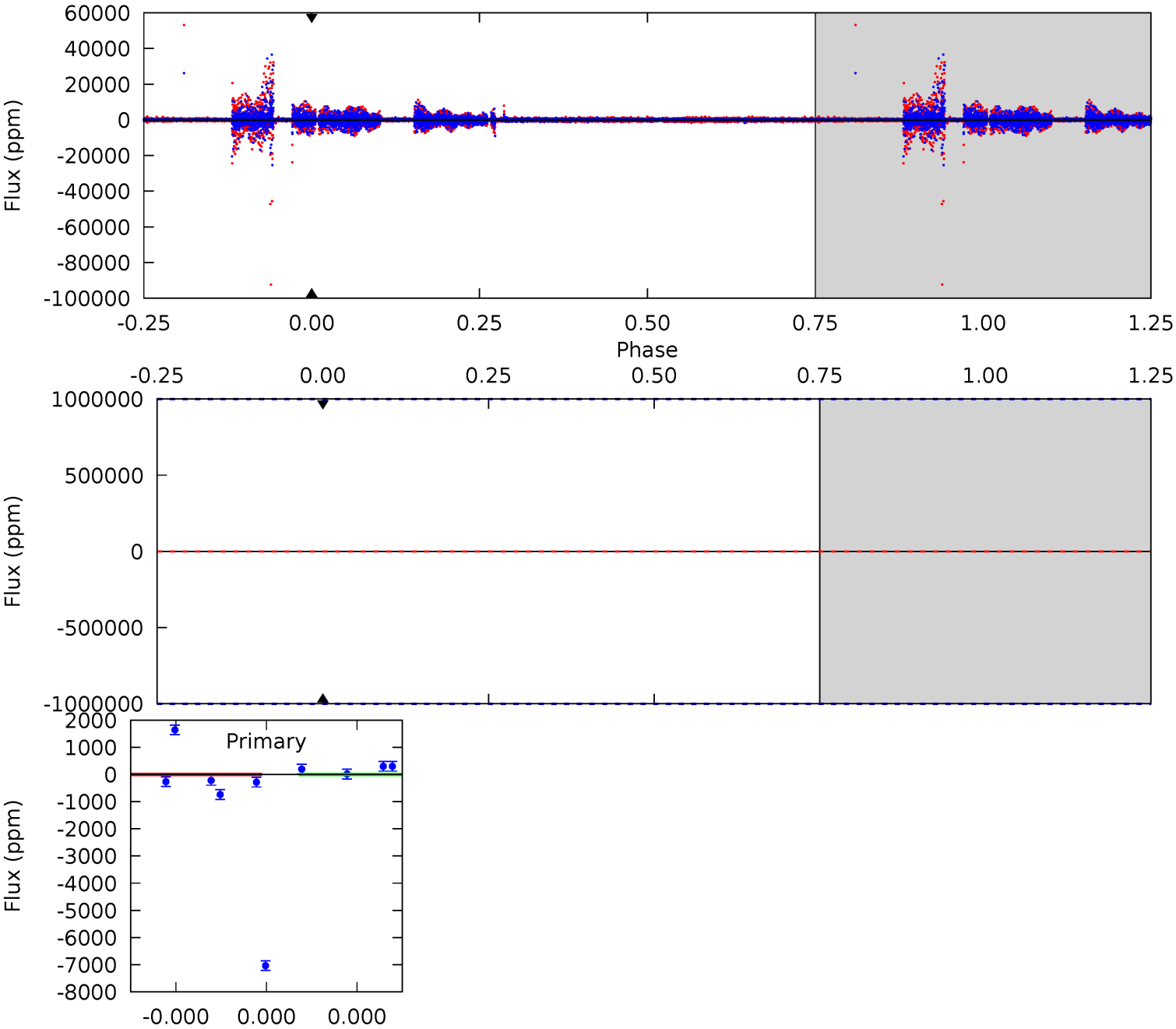
TCE 011913095-04 P=247.961251 Days $T_0=313.635426$ (BKJD)



DV Model-Shift Uniqueness Test

011913095-04, P = 247.961251 Days, E = 63.780553 Days

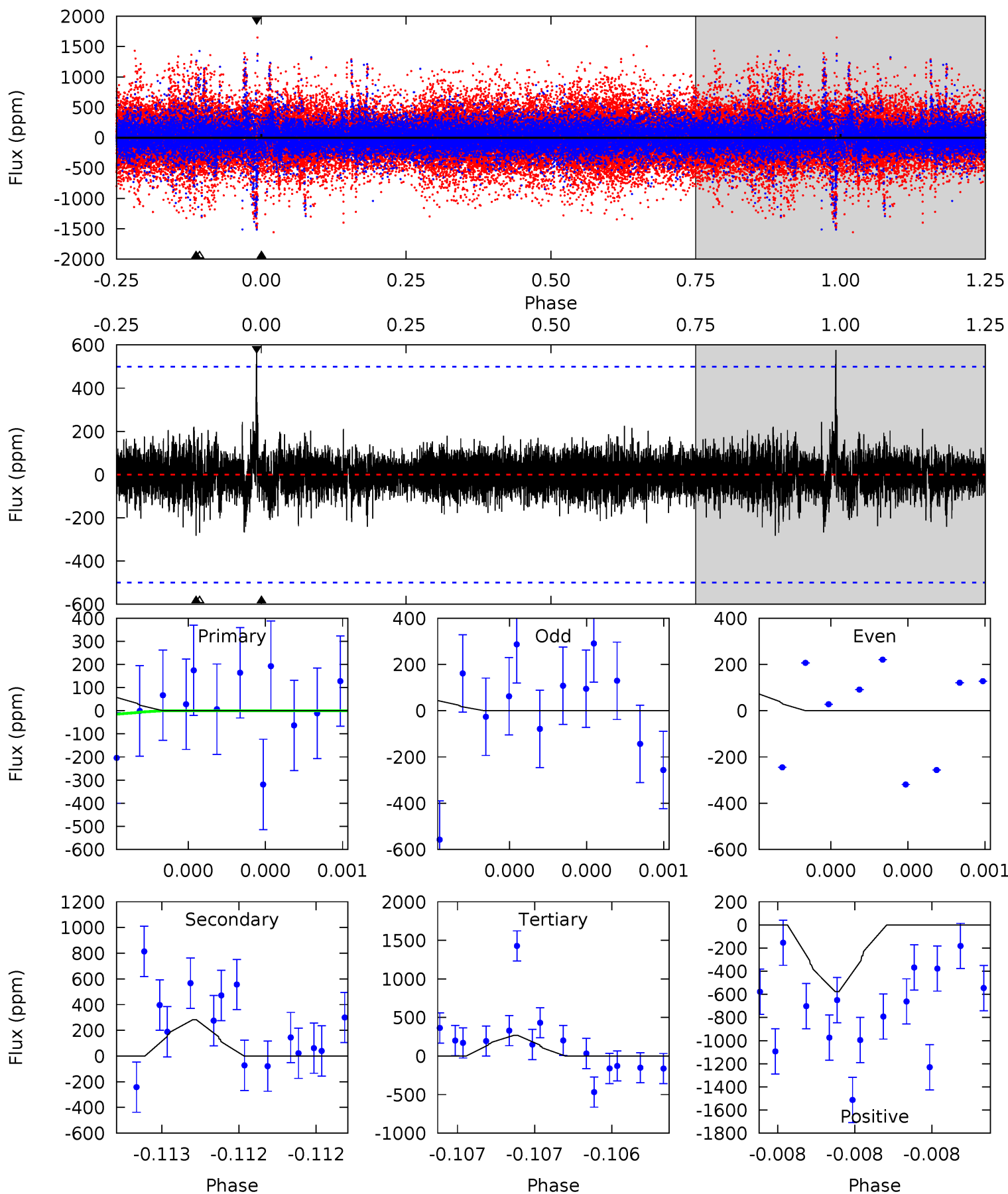
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

011913095-04, P = 247.961251 Days, E = 65.674175 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.68	3.22	3.06	6.58	5.69	3.67	0.69	-2.39	-5.90	0.16	-3.35	0.10	2.34	0.67	0.95



Stellar Parameters For KIC 011913095

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5180^{+199}_{-199}	$3.449^{+0.760}_{-0.190}$	$0.120^{+0.250}_{-0.350}$	$4.142^{+1.135}_{-2.647}$	$1.759^{+0.205}_{-0.820}$	$0.035^{+0.478}_{-0.017}$
	+4%/-4%	+22%/-6%	+208%/-292%	+27%/-64%	+12%/-47%	+1372%/-48%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011913095-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$36.91^{+37.48}_{-27.14}$	654^{+67}_{-109}	-3620^{+17587}_{-9293}	$-350.459^{+71442.560}_{-63479.911}$
Alt.	-283 ± 88	$26.39^{+36.49}_{-19.16}$	653^{+67}_{-123}	3124^{+1562}_{-594}	182^{+2407}_{-149}

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

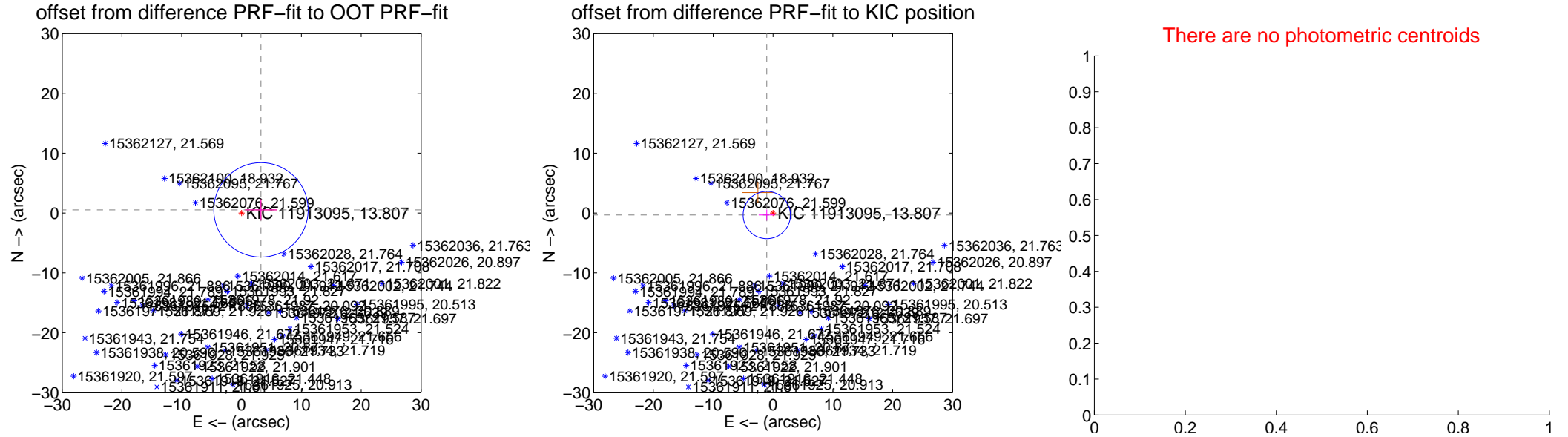
DV Centroid Data

Supplemental centroid analysis for 011913095-04. Kepler magnitude: 13.81. Transit SNR -1.00

There are 1 quarters with good PRF difference image offsets

The OOT PRF centroid is offset from the target star catalog position by about 6.45 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

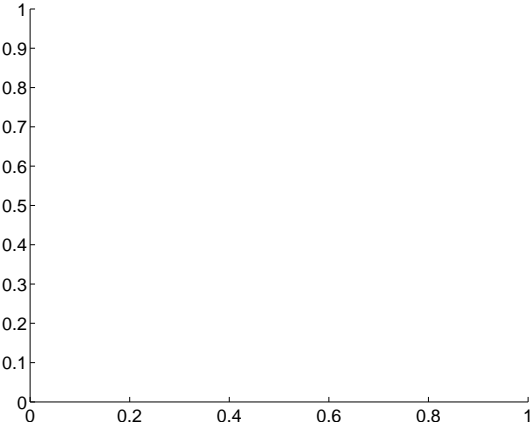
	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.288 ± 2.628	1.25	-3.246 ± 2.647	0.523 ± 1.766
PRF-fit source offset from KIC position	1.095 ± 1.318	0.83	1.042 ± 1.353	-0.339 ± 0.920
photometric centroid source offset	—	—	—	—



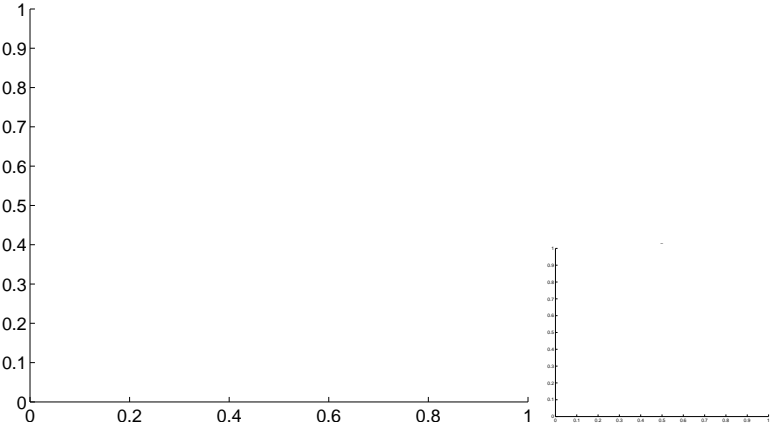
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

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

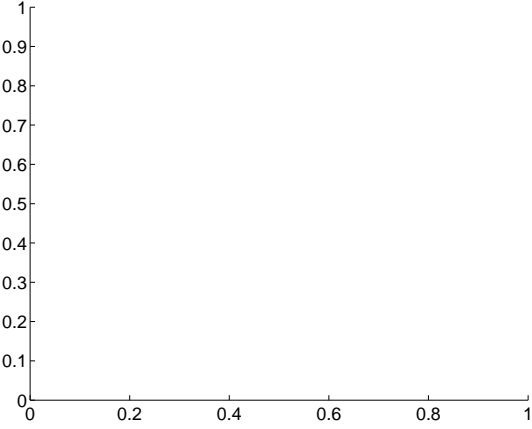
Q1 no difference image



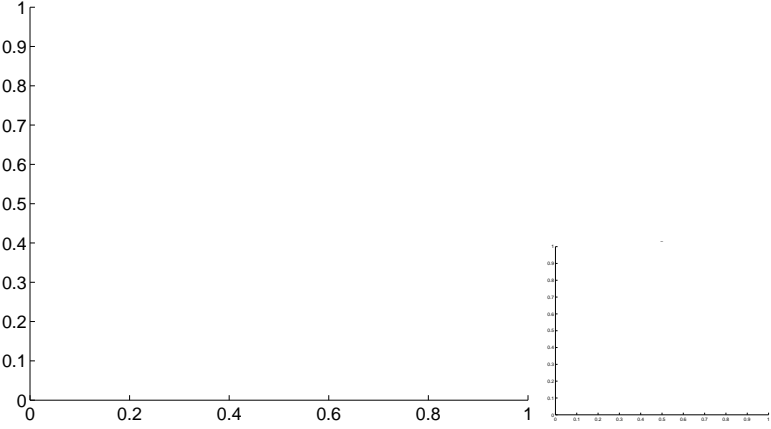
Q1 no OOT image



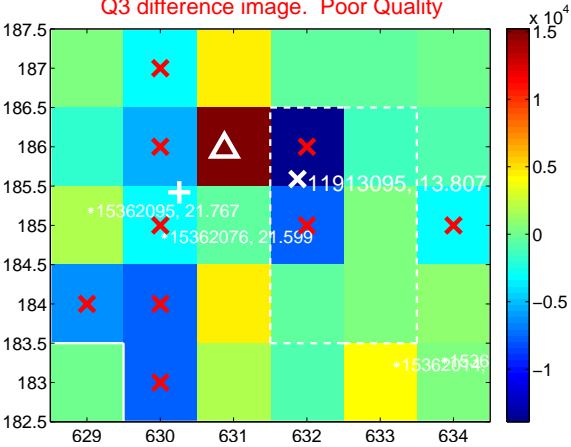
Q2 no difference image



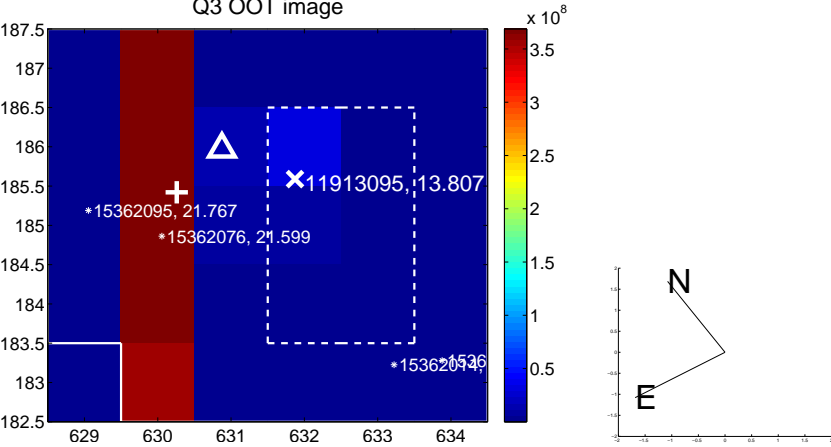
Q2 no OOT image



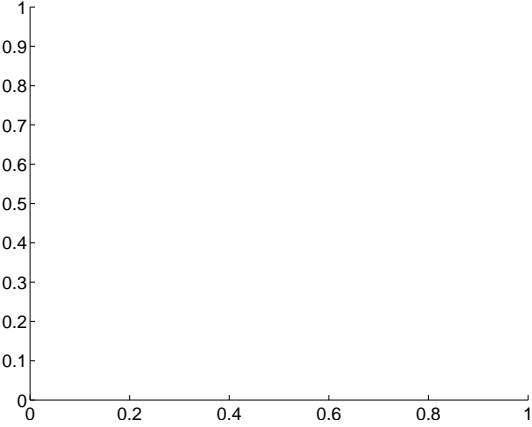
Q3 difference image. Poor Quality



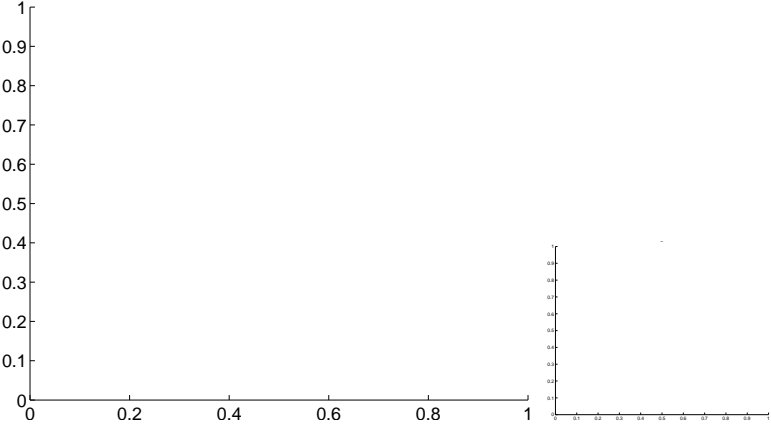
Q3 OOT image



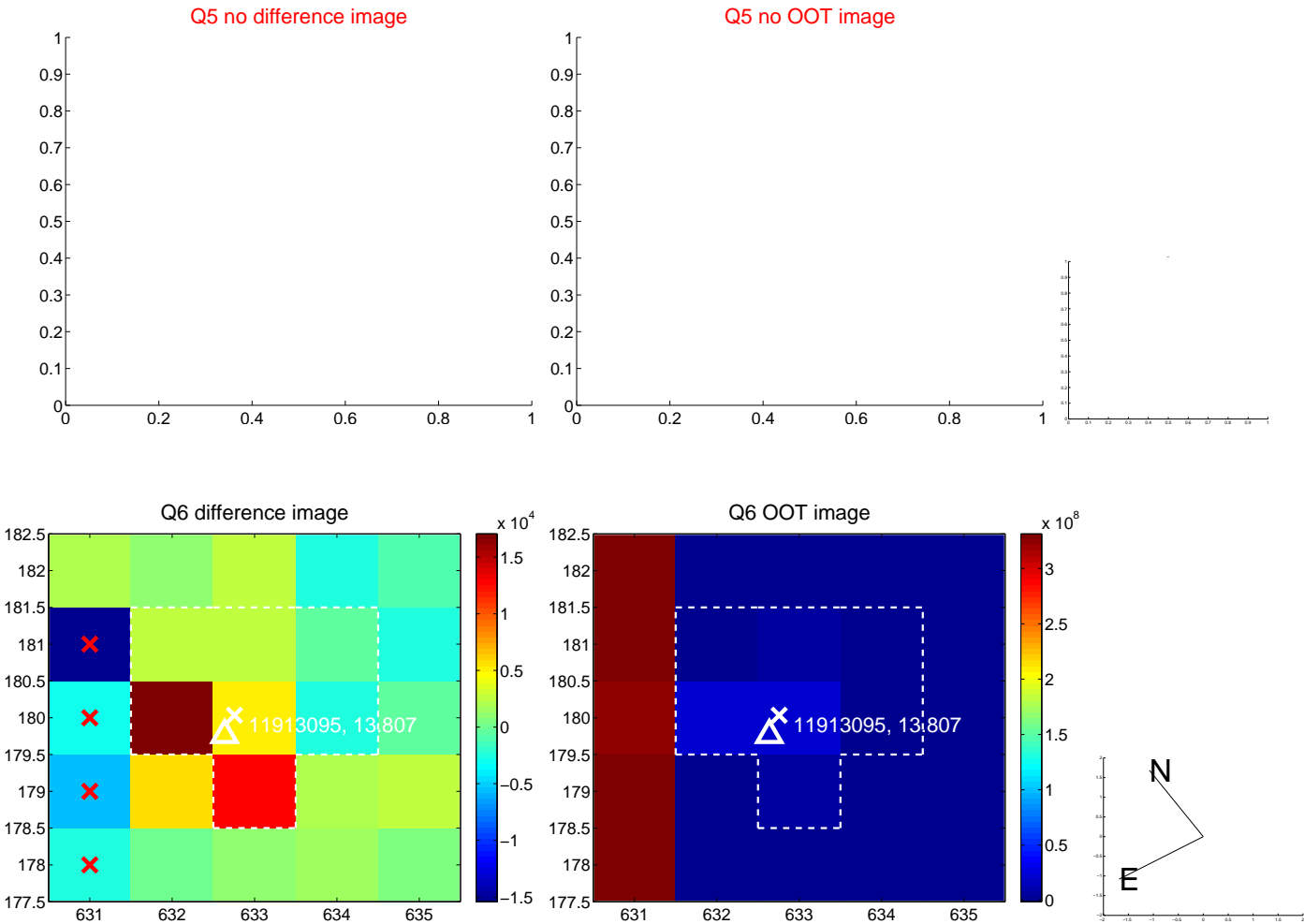
Q4 no difference image



Q4 no OOT image



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



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

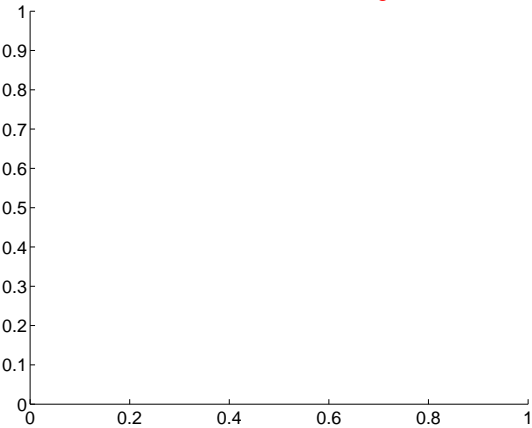
Q9 no difference image



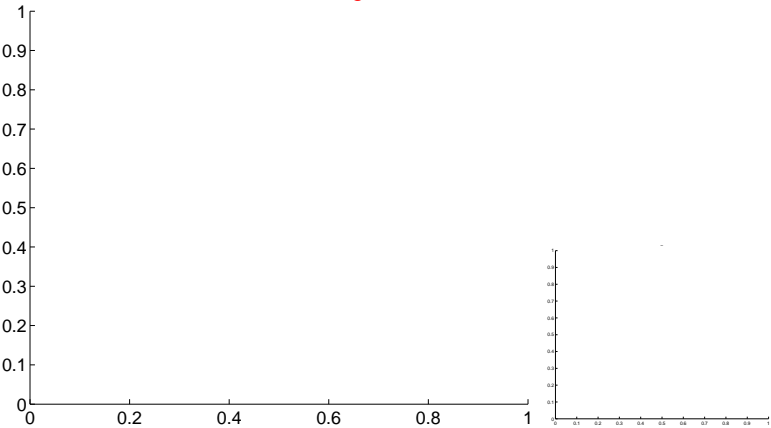
Q9 no OOT image



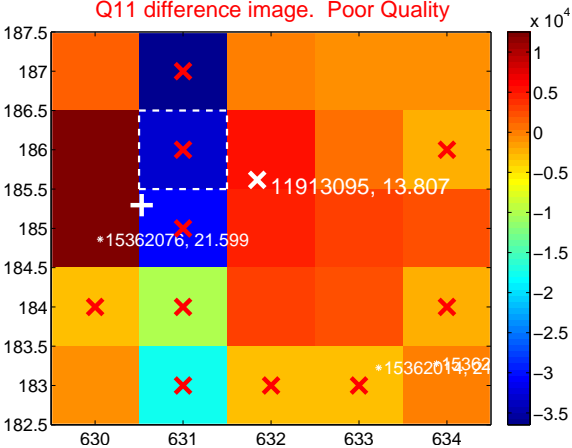
Q10 no difference image



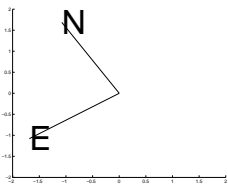
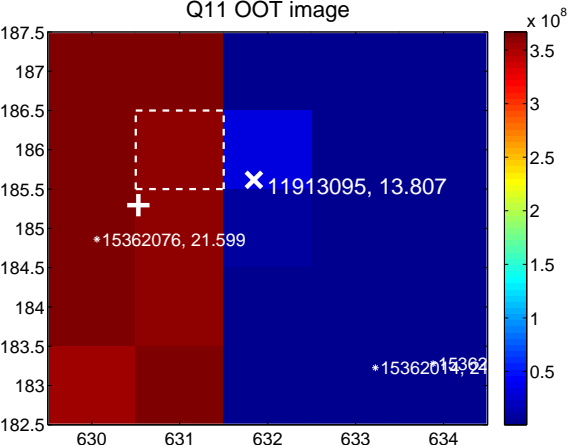
Q10 no OOT image



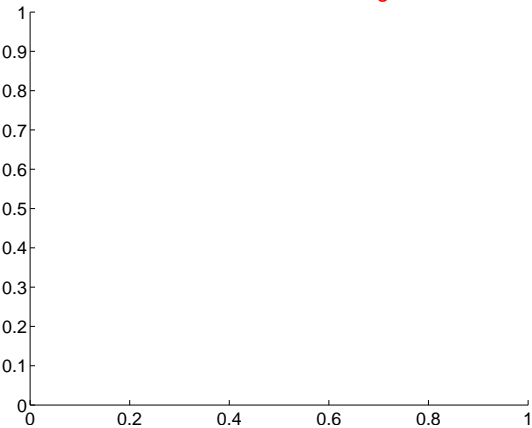
Q11 difference image. Poor Quality



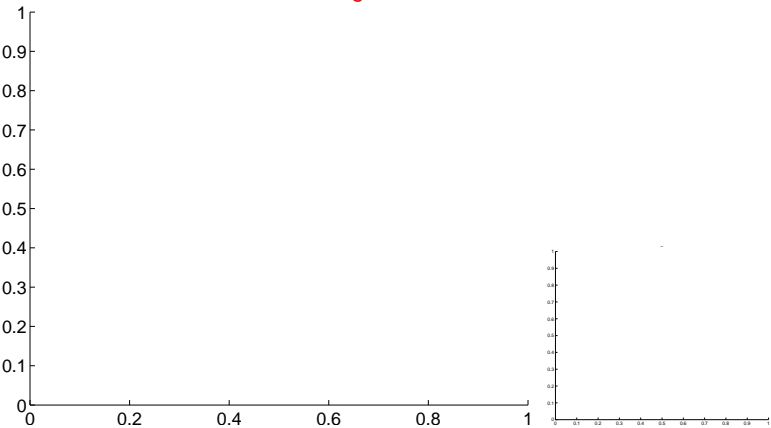
Q11 OOT image



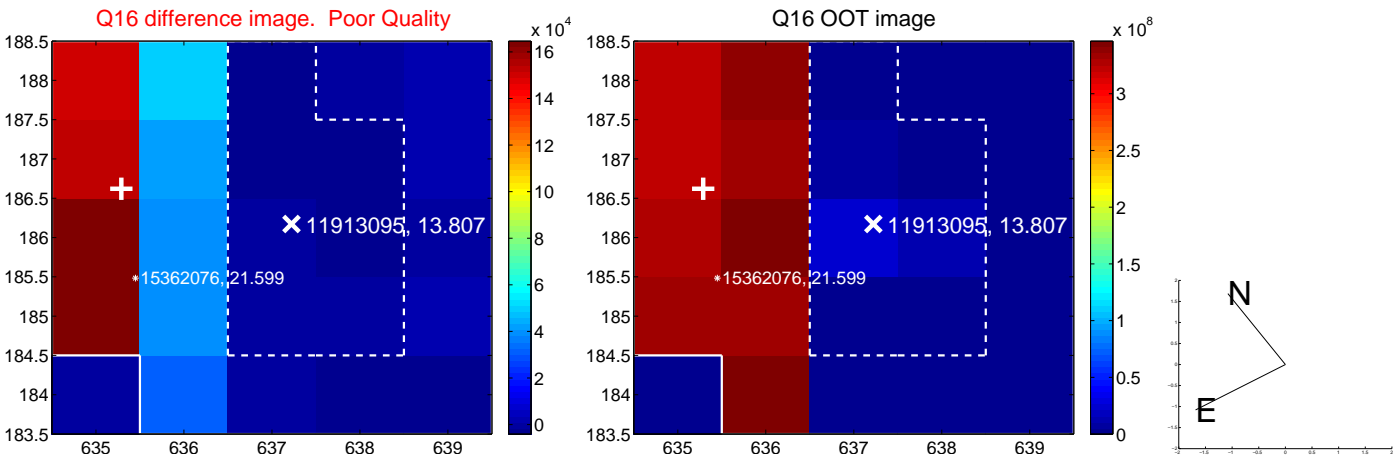
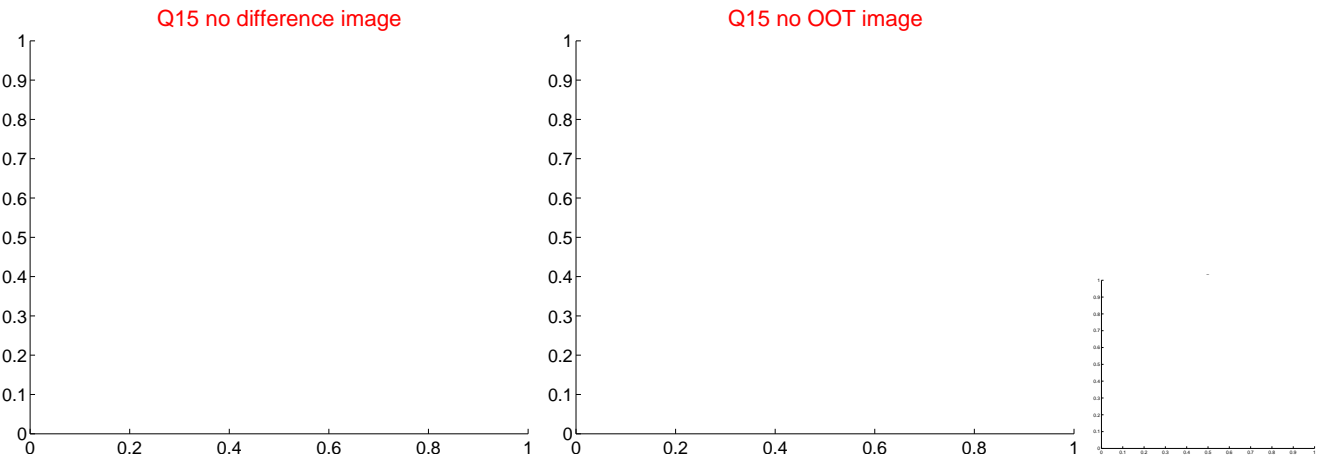
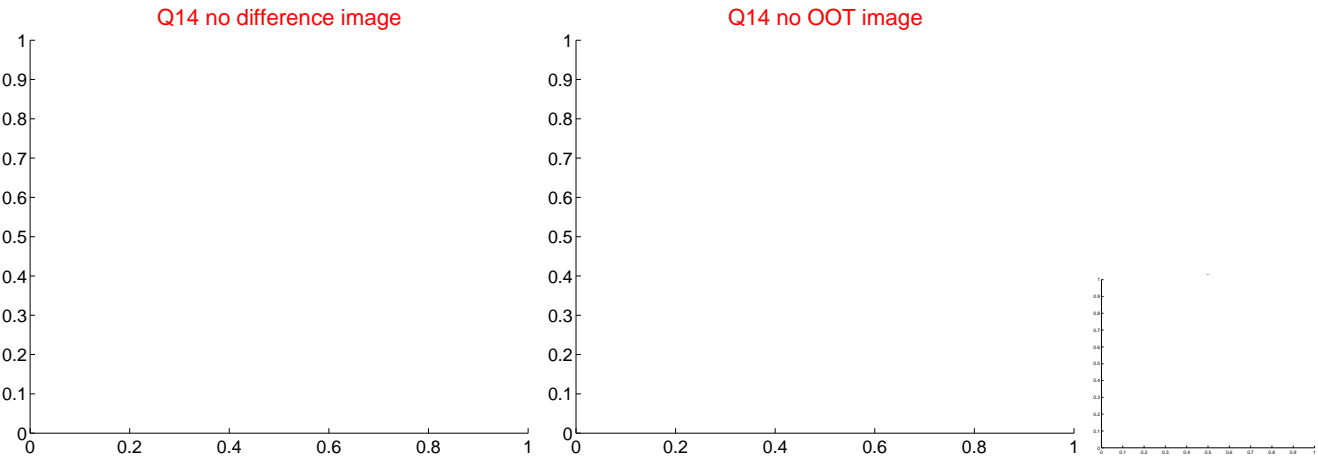
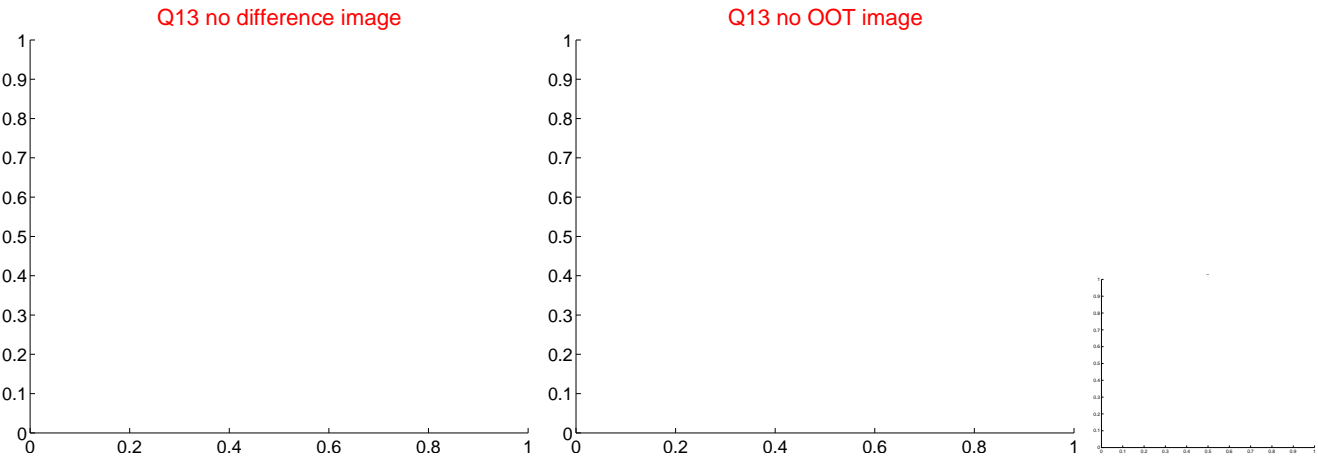
Q12 no difference image



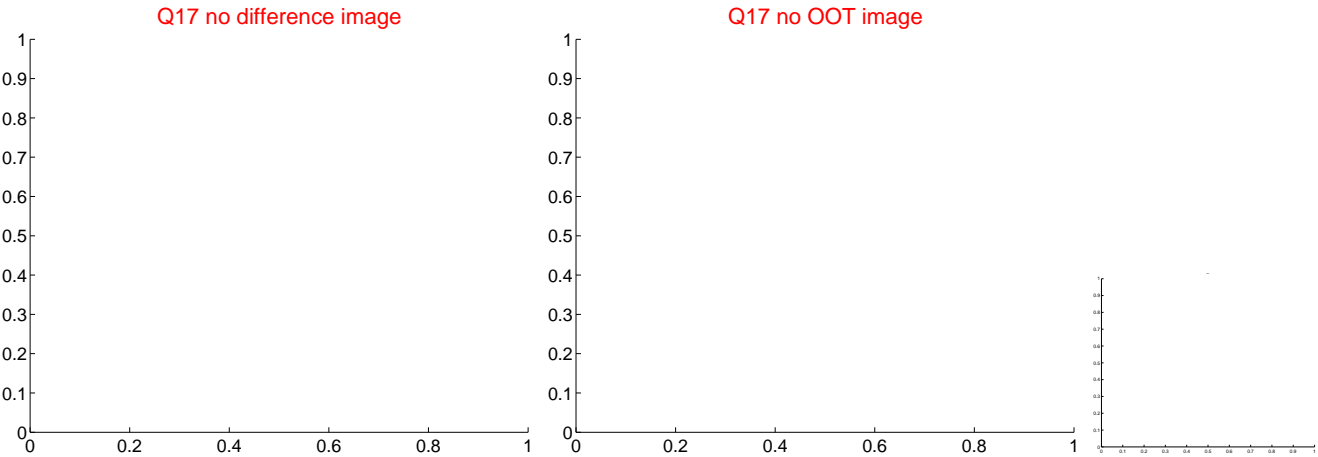
Q12 no OOT image



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



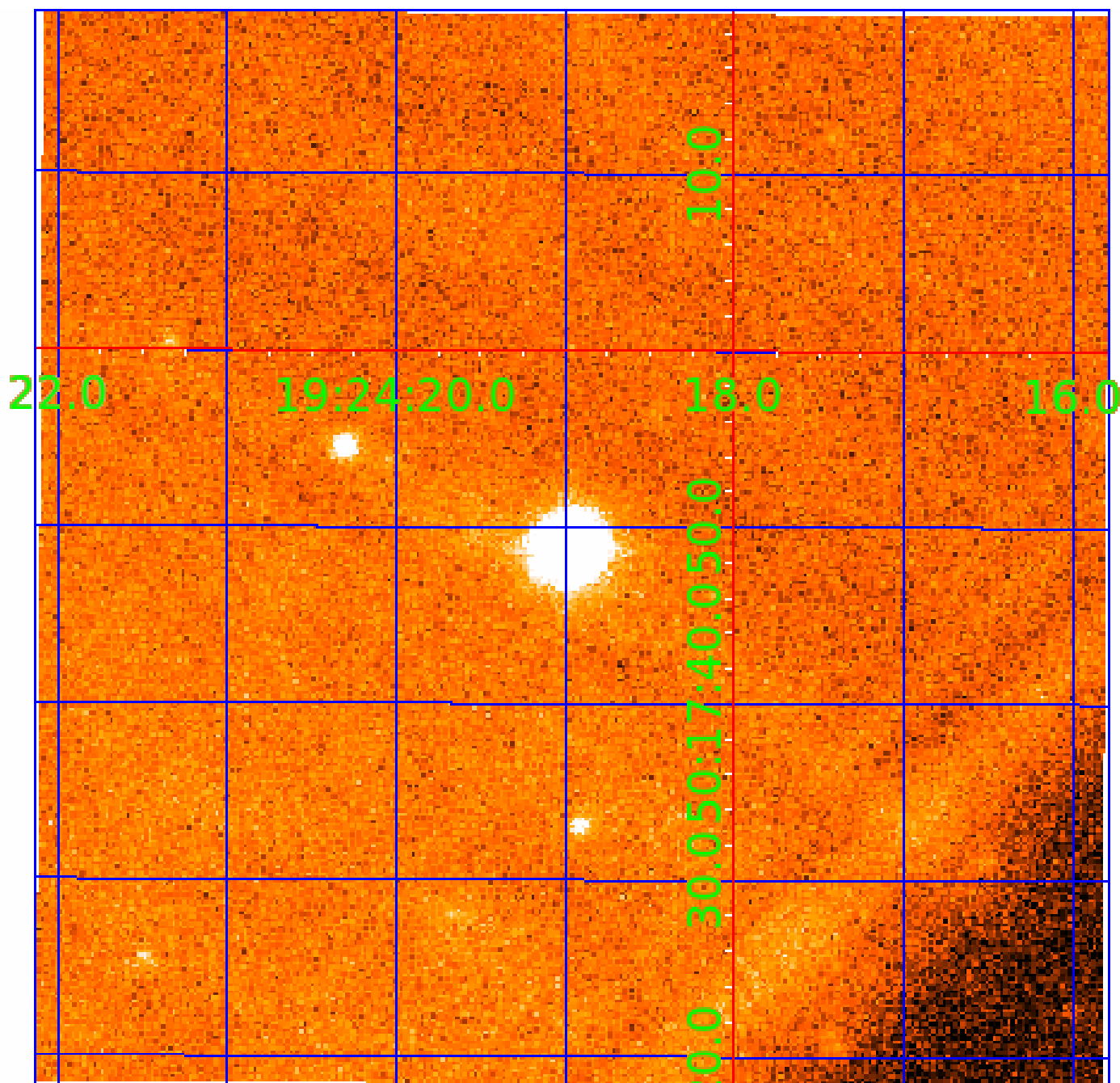
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination



KIC 011913095

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})
011913095-01	OBS	No	319.683046	410.074906	6618.4	10.500	75.4	-1.0	4.14	5180	32.81	9.07
011913095-02	OBS	No	286.482545	189.222496	81.1	100.550	612.5	1.8	4.14	5180	3.81	10.49
011913095-03	OBS	No	430.469807	140.204891	18556.0	21.279	64.7	90.4	4.14	5180	101.72	6.10
011913095-04	OBS	No	247.961251	311.741804	2874.2	15.000	35.4	-1.0	4.14	5180	21.61	12.72
011913095-05	OBS	No	468.370891	157.037551	575.2	10.085	13.9	9.4	4.14	5180	11.09	5.45

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011913095-01	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_NOFITS—HALO_GHOST
011913095-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
011913095-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
011913095-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
011913095-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

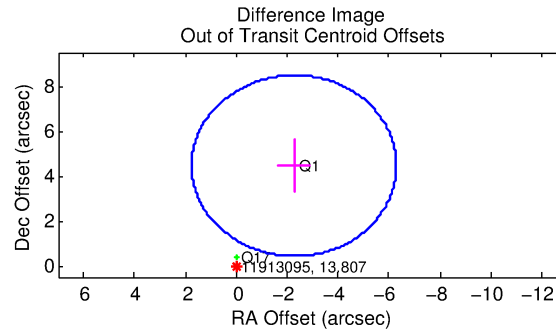
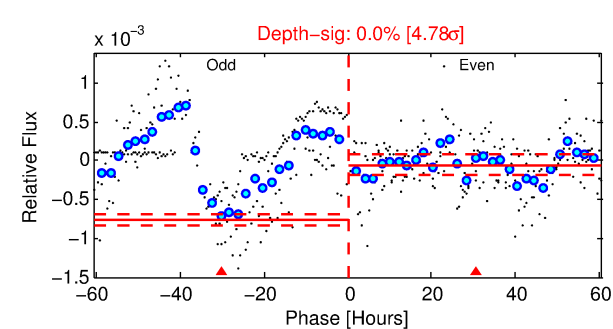
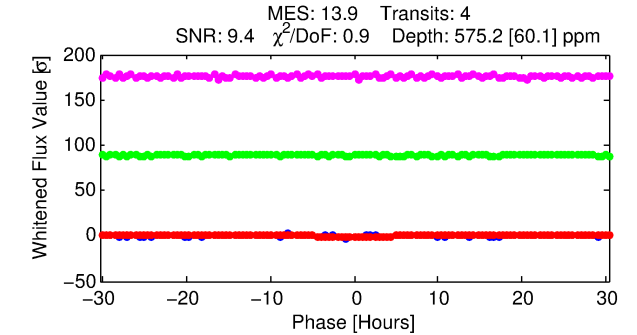
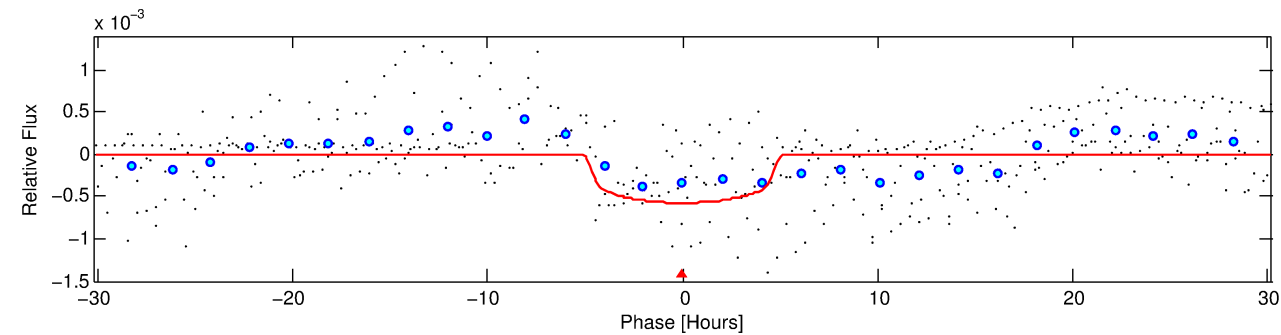
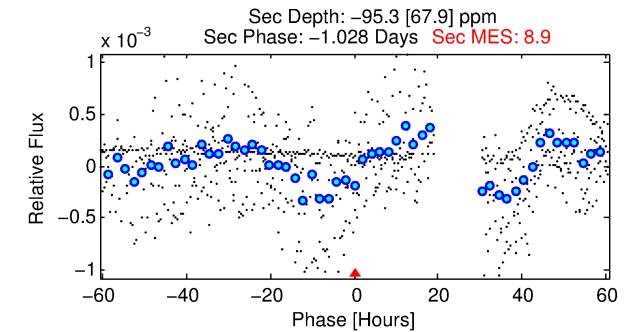
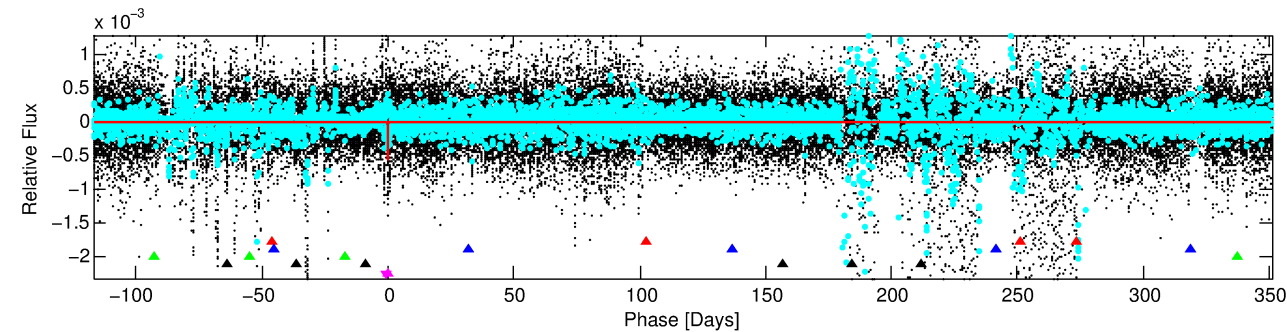
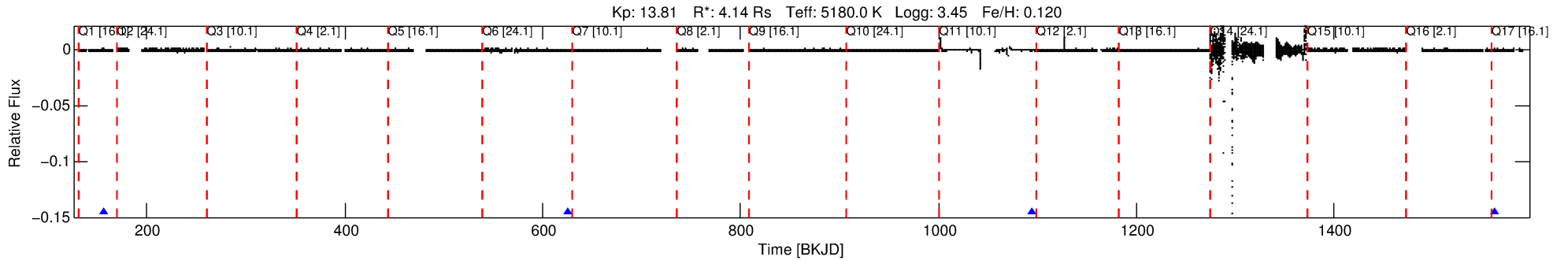
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011913095-05

No Significant Match Found

DV One-Page Summary

KIC: 11913095 Candidate: 5 of 5 Period: 468.371 d



DV Fit Results:

Period = 468.37089 [0.00727] d
Epoch = 157.0376 [0.0131] BKJD
Rp/R* = 0.0245 [0.0045]
a/R* = 227.89 [146.15]
b = 0.80 [0.29]
Seff = 5.45 [6.82]
Teq = 390 [122] K
Rp = 11.08 [7.37] Re
a = 1.4253 [1.0295] AU
Ag = N/A
Teffp = N/A

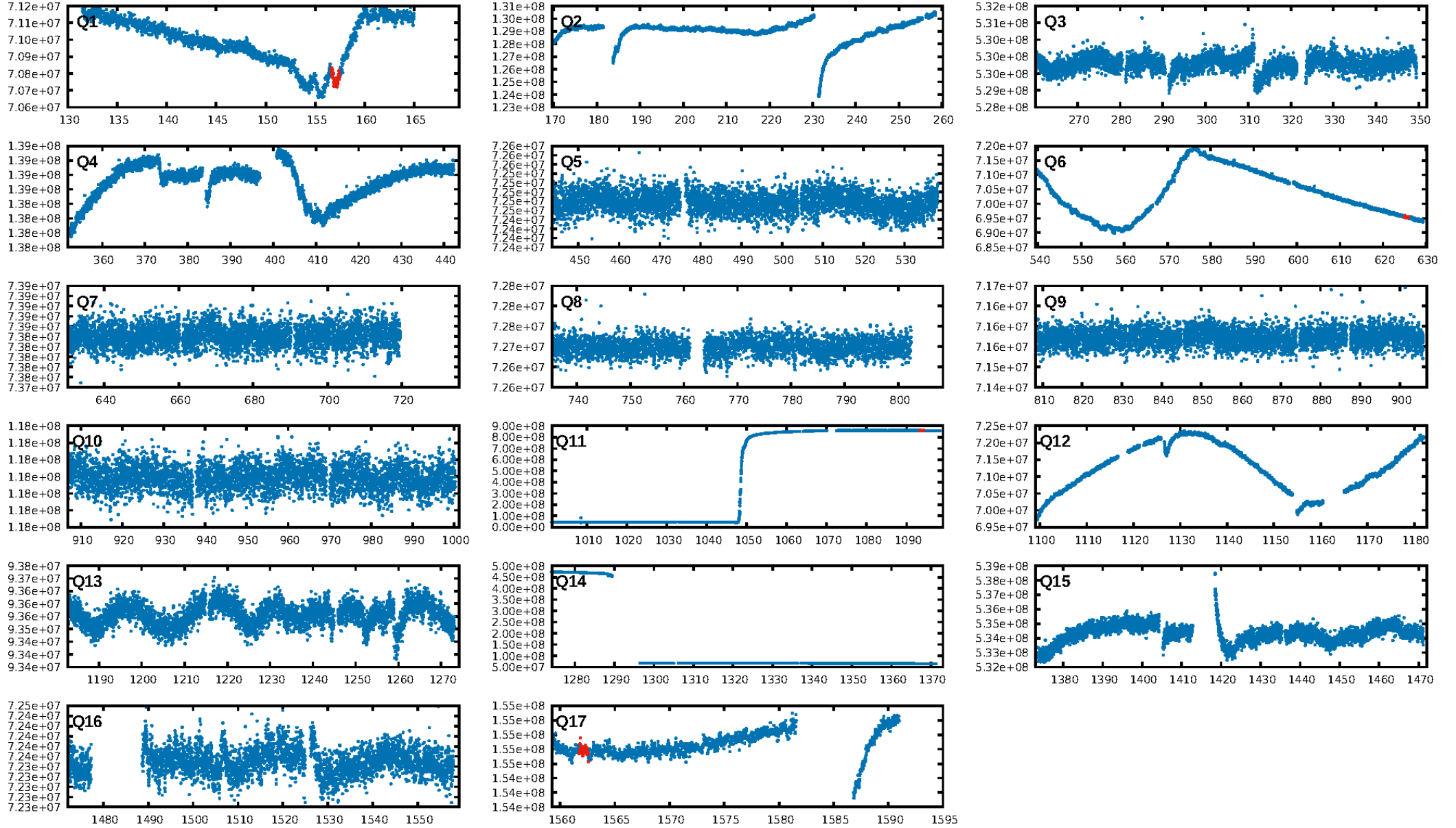
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [38.63σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.4%
ModelChiSquareGof-sig: 99.1%
Bootstrap-pfa: 4.40e-05
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: -8.102
Centroid-sig: N/A
Centroid-so: 3.015 arcsec [6.77σ]
OotOffset-rm: 4.996 arcsec [3.72σ]
KicOffset-rm: 7.842 arcsec [8.50σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [3/3]

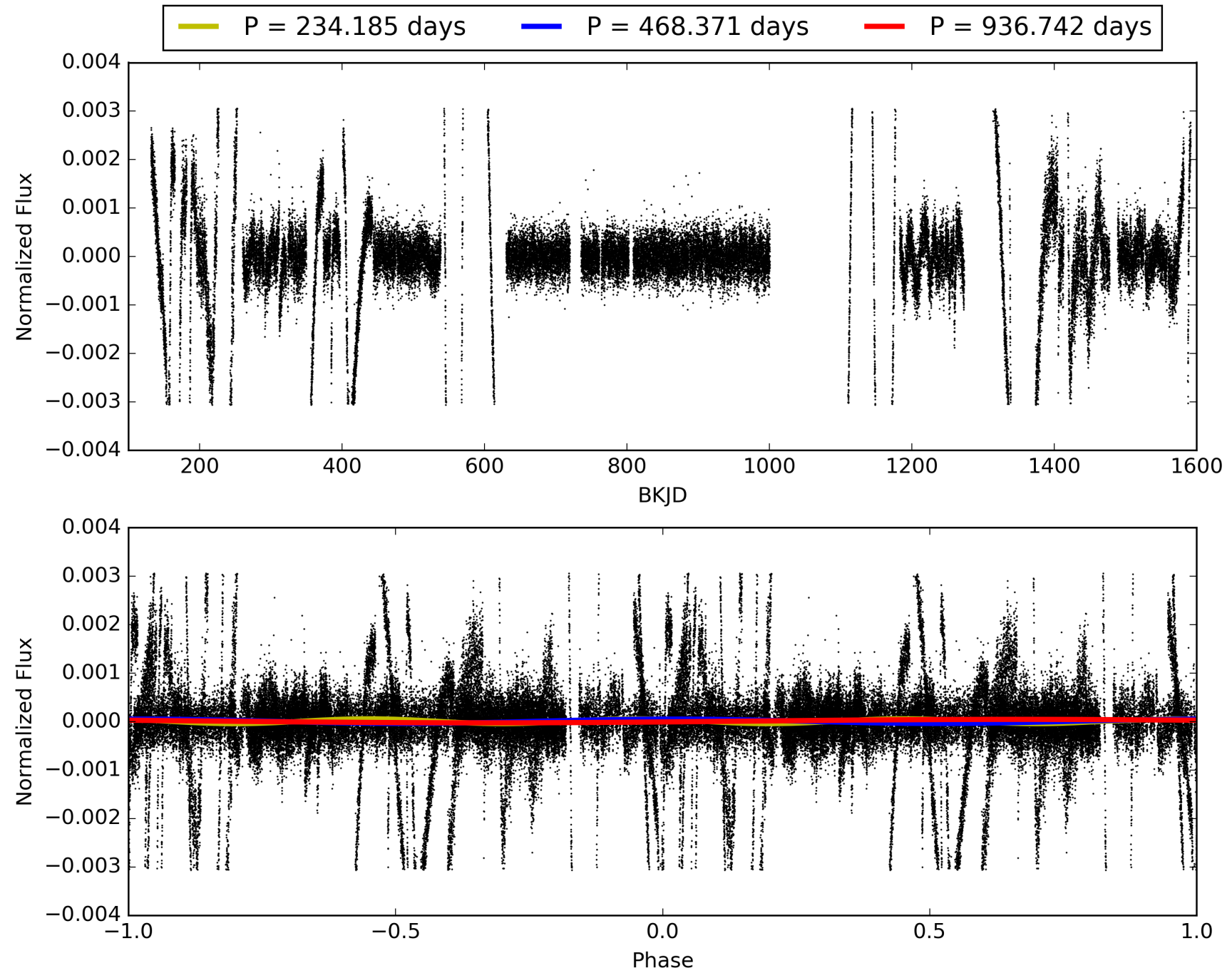
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:09:33 Z

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

TCE 011913095-05, PDC Light Curves

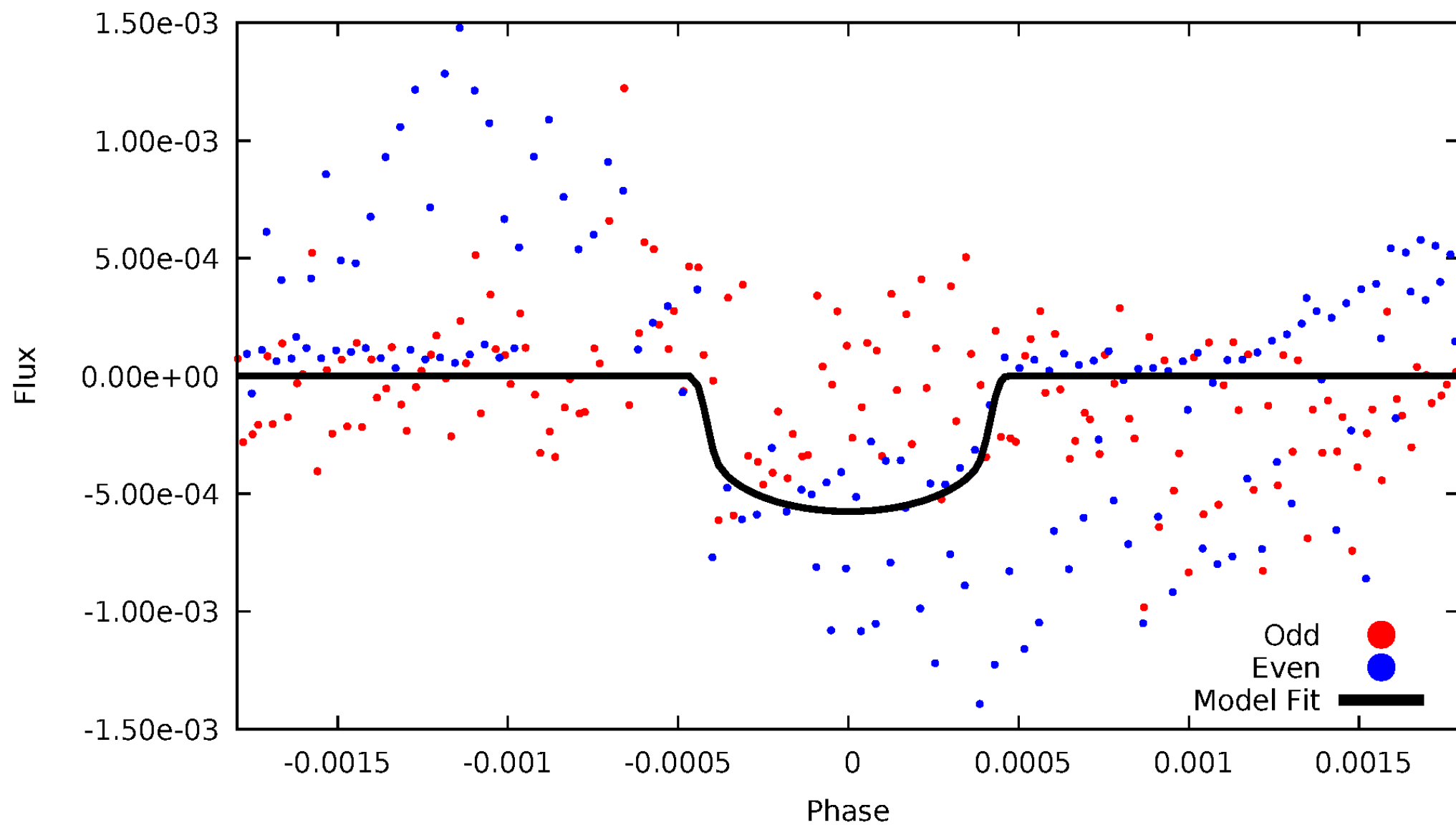


TCE 011913095-05



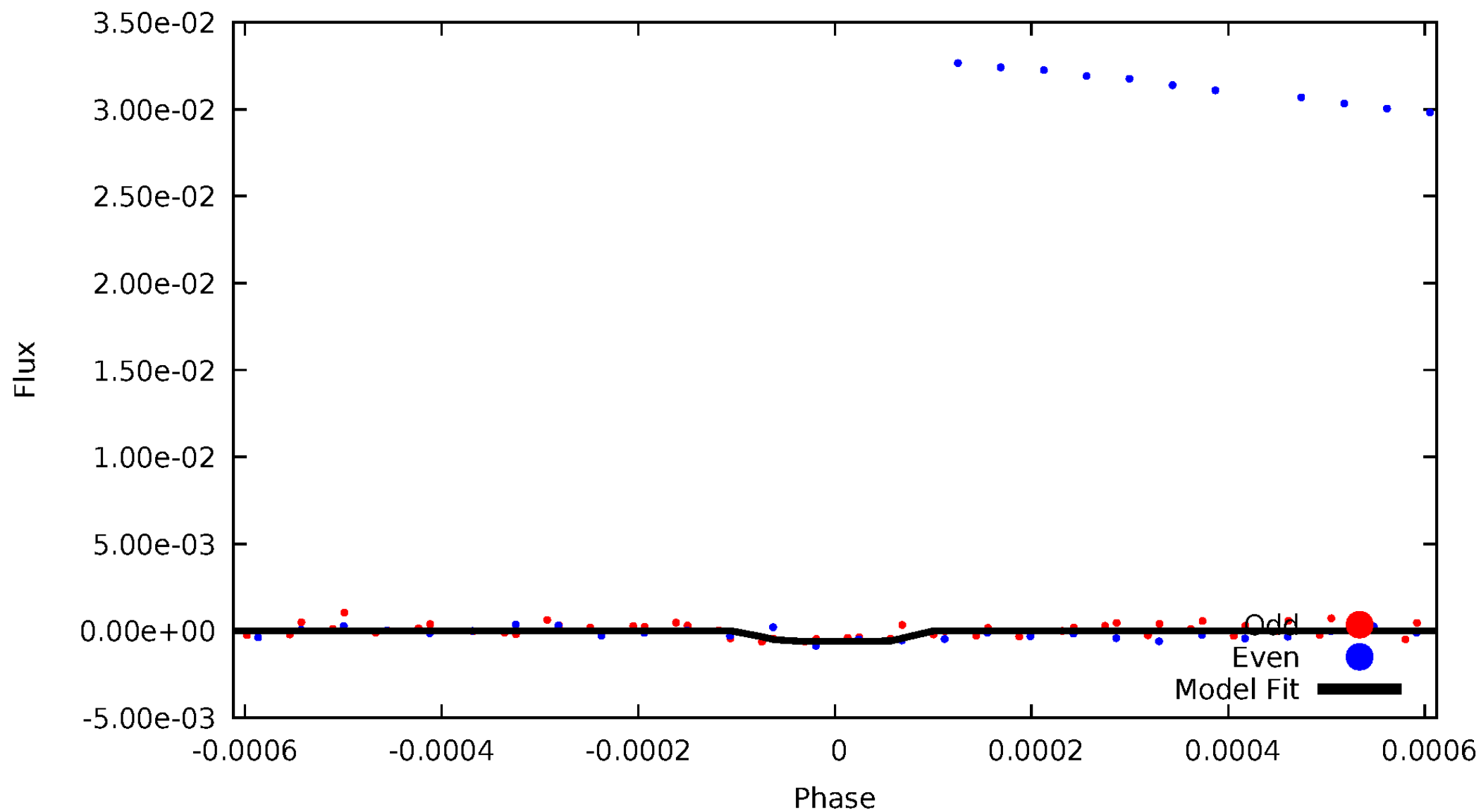
DV Odd/Even

TCE 011913095-05



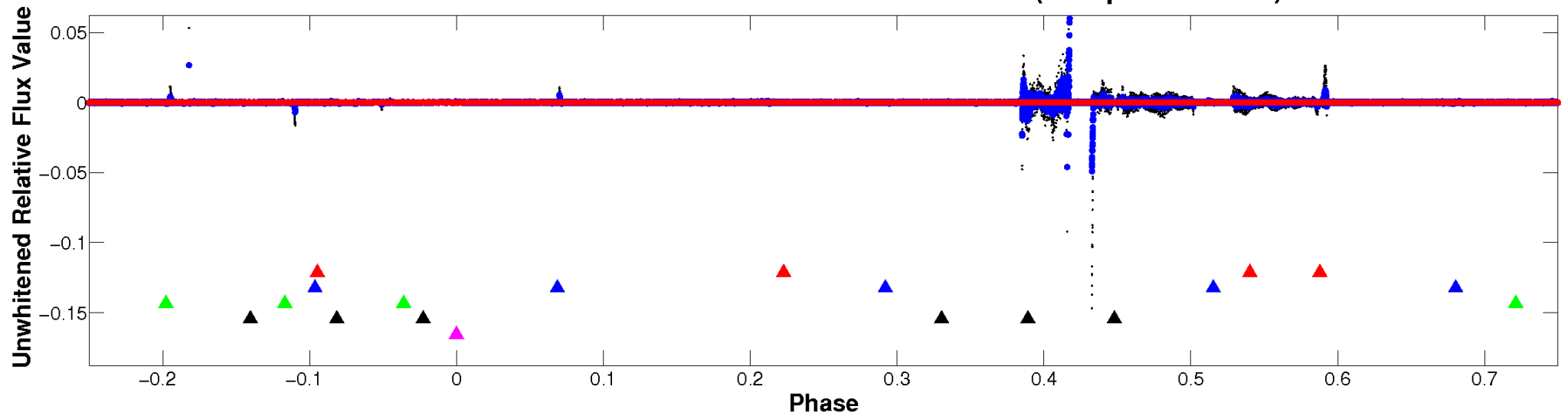
ALT Odd/Even

TCE 011913095-05

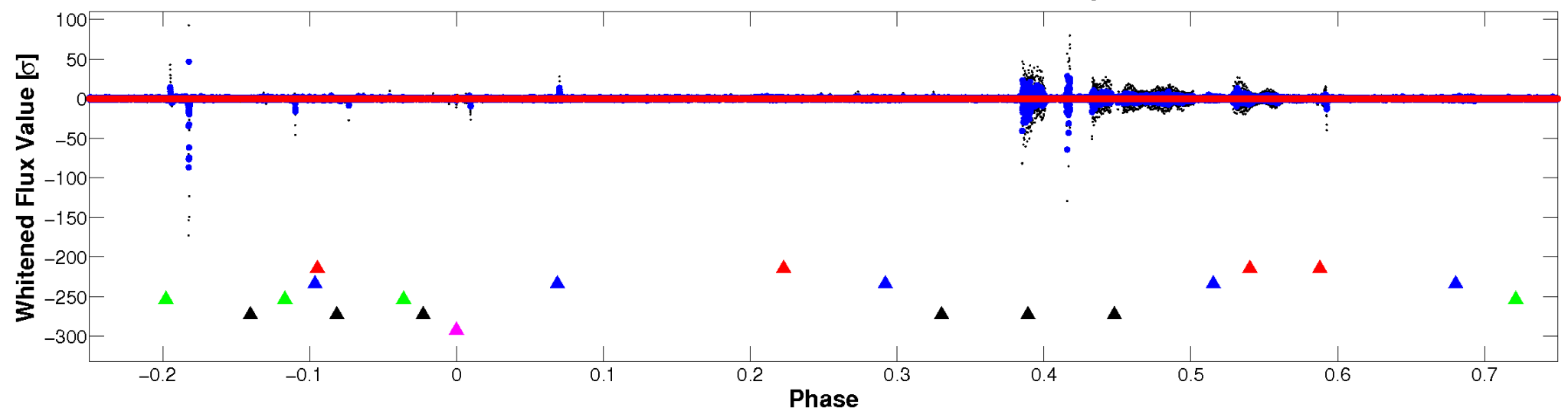


Non-Whitened Vs. Whitened Light Curve

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

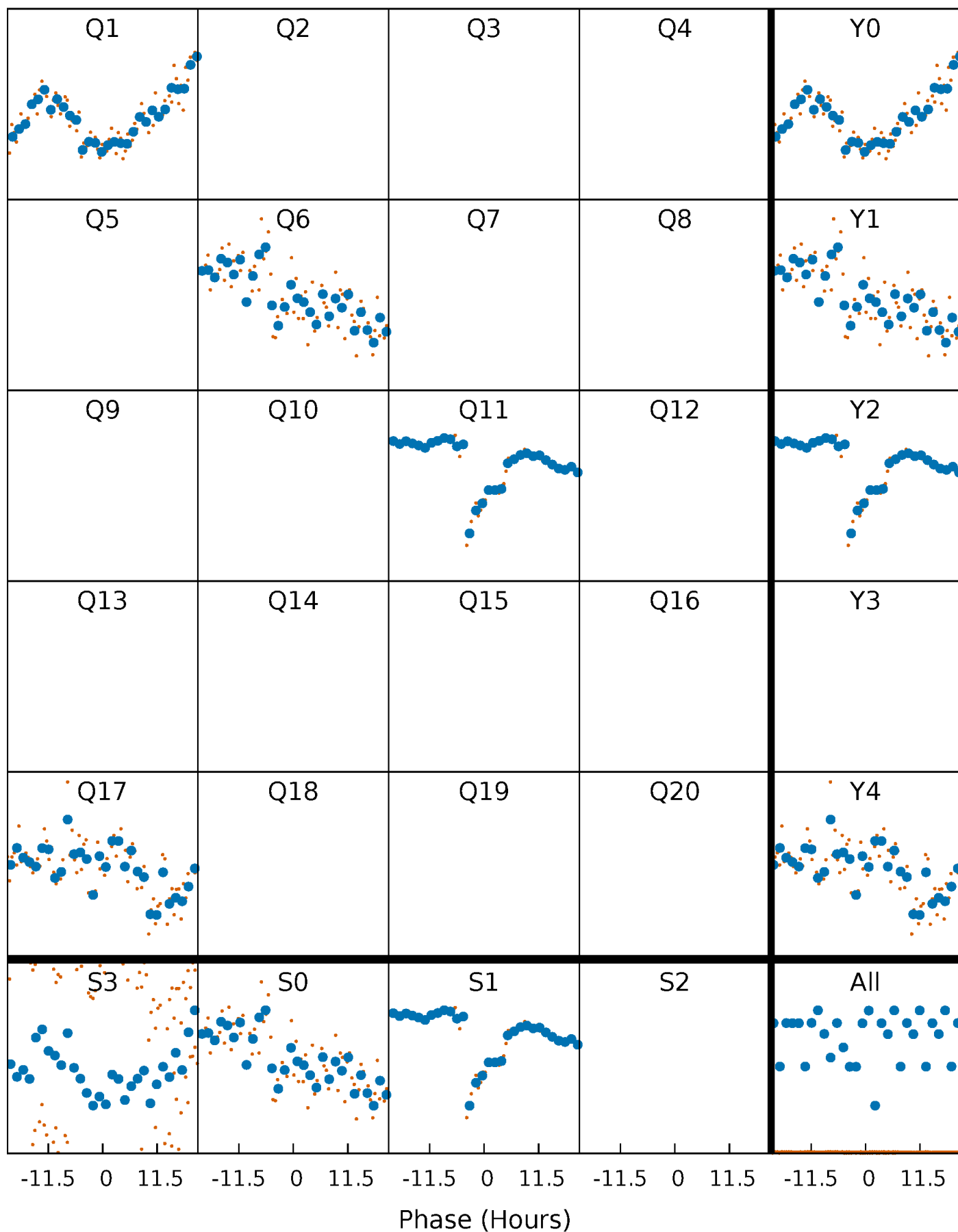


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



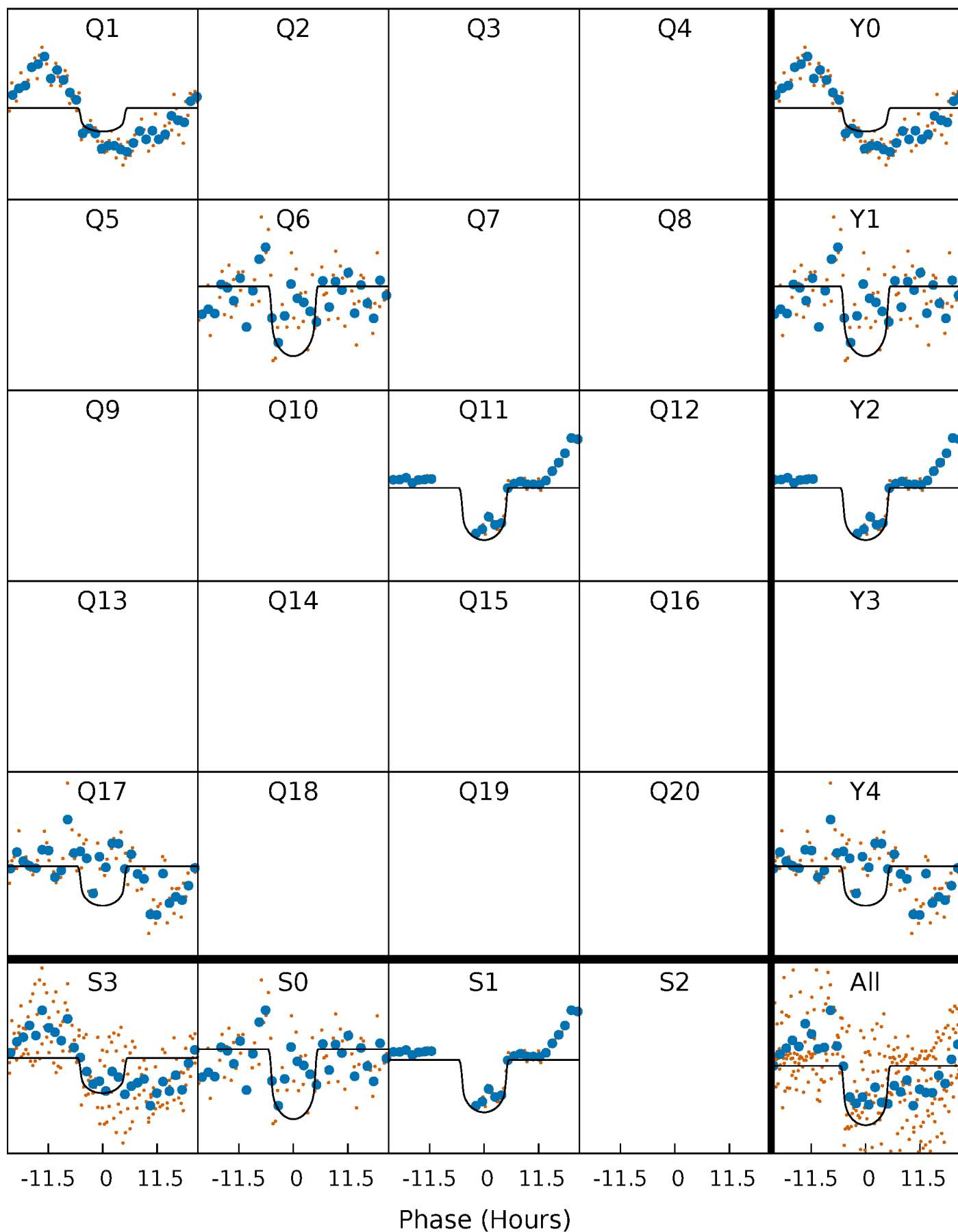
PDC Quarter-Phased Transit Curves

TCE 011913095-05 $P=468.370891$ Days $T_0=157.037552$ (BKJD)



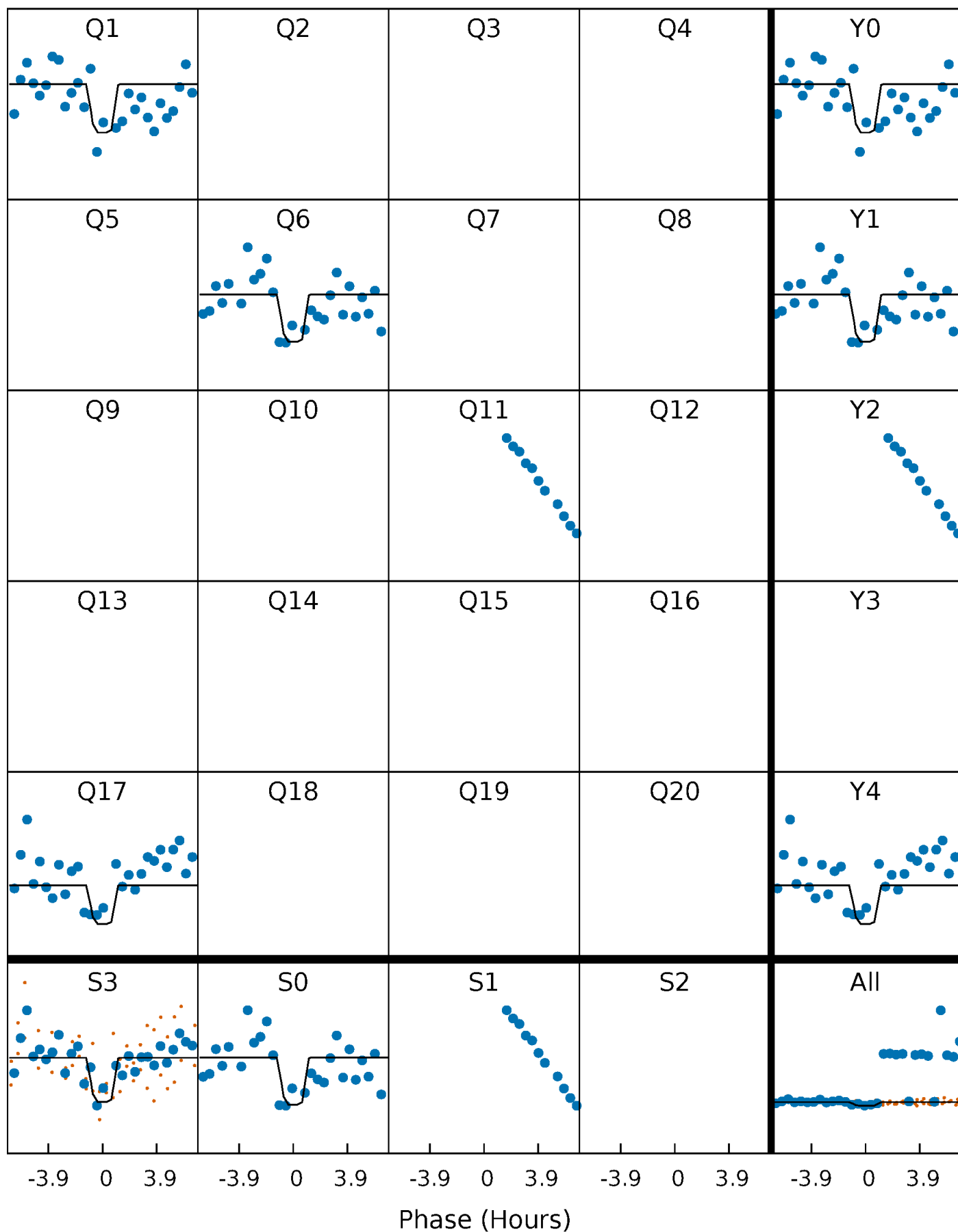
DV Quarter-Phased Transit Curves

TCE 011913095-05 $P=468.370891$ Days $T_0=157.037552$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

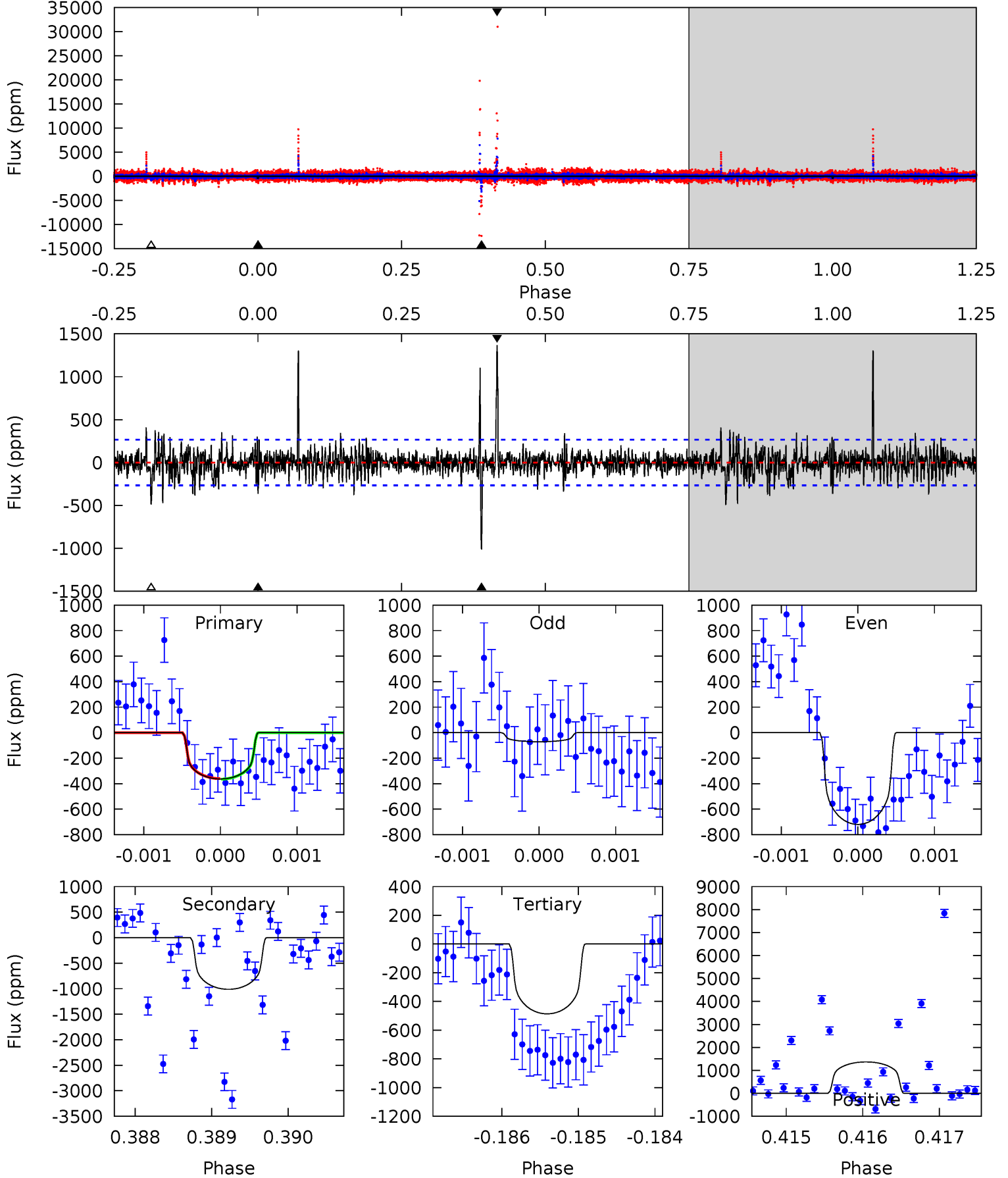
TCE 011913095-05 $P=468.405307$ Days $T_0=156.859527$ (BKJD)



DV Model-Shift Uniqueness Test

011913095-05, P = 468.370891 Days, E = 157.037552 Days

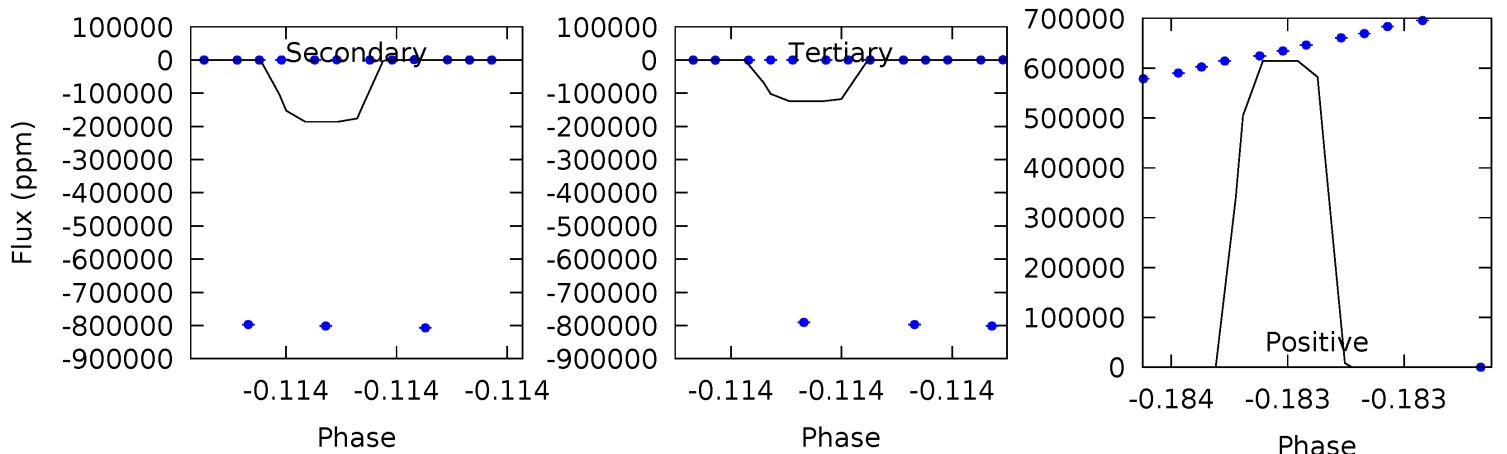
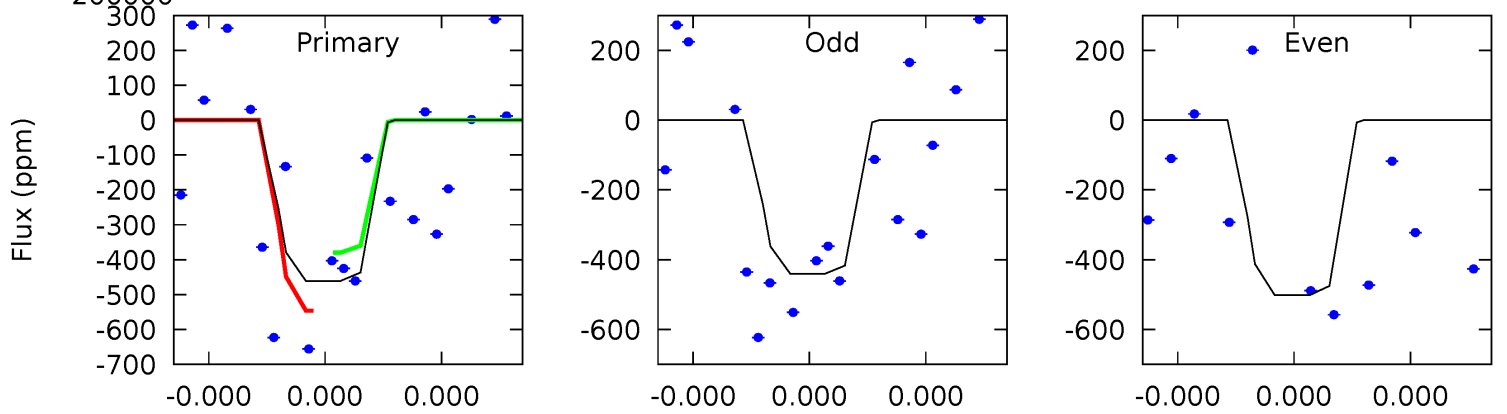
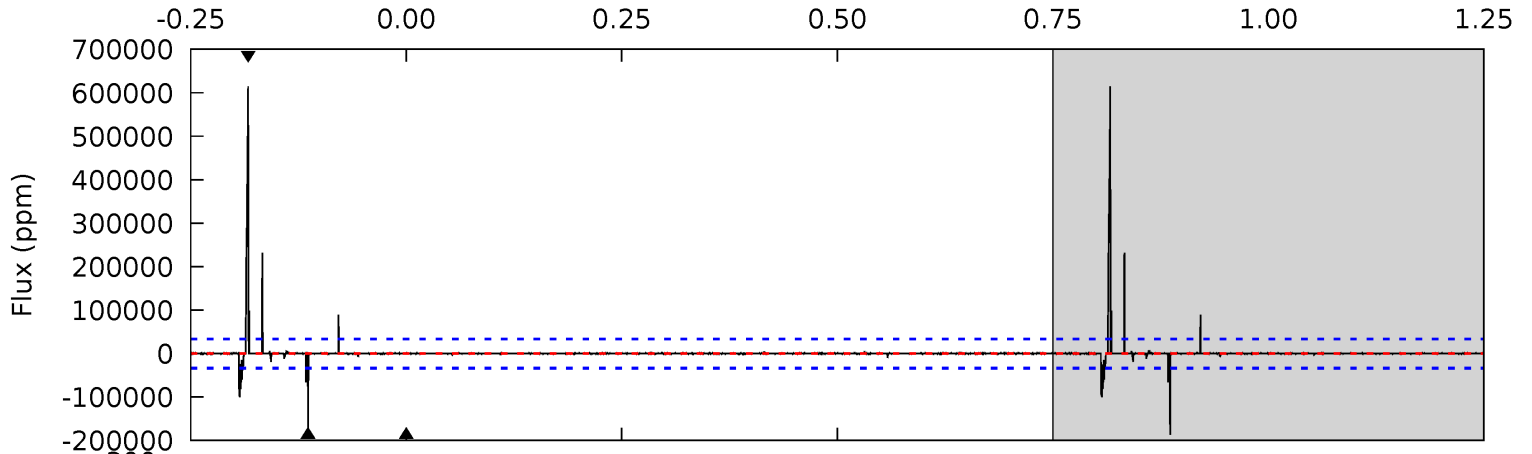
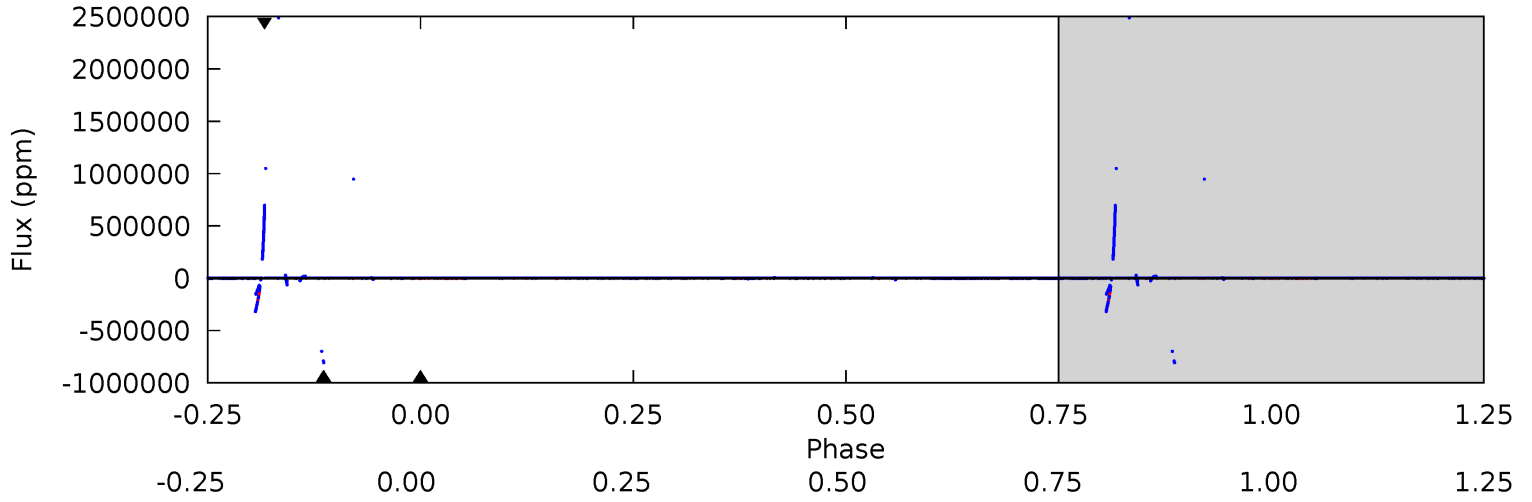
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.41	20.7	9.94	27.9	5.46	3.31	2.29	-2.52	-20.5	10.8	-7.26	1.61	1.10	0.57	0.04



Alt Model-Shift Uniqueness Test

011913095-05, P = 468.405307 Days, E = 156.859527 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.08	31.8	21.2	104.9	5.74	3.74	2.44	-21.1	-104.8	10.6	-73.1	0.00	0.92	0.77	0.01



Stellar Parameters For KIC 011913095

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5180^{+199}_{-199}	$3.449^{+0.760}_{-0.190}$	$0.120^{+0.250}_{-0.350}$	$4.142^{+1.135}_{-2.647}$	$1.759^{+0.205}_{-0.820}$	$0.035^{+0.478}_{-0.017}$
	+4%/-4%	+22%/-6%	+208%/-292%	+27%/-64%	+12%/-47%	+1372%/-48%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011913095-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1012 ± 49	$9.80^{+3.79}_{-3.52}$	529^{+58}_{-90}	5842^{+693}_{-497}	11205^{+14223}_{-5070}
Alt.	-186273 ± 5858	$9.83^{+3.65}_{-3.59}$	528^{+52}_{-101}	87322^{+40213}_{-24603}	$2550116^{+3248407}_{-1138355}$

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

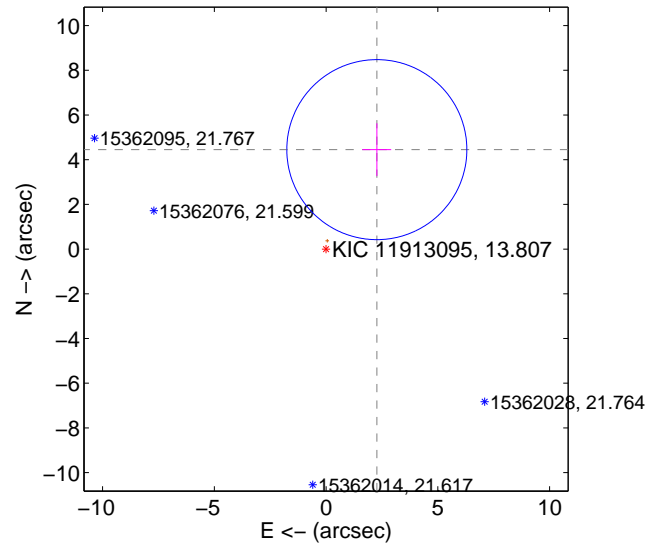
Supplemental centroid analysis for 011913095-05. Kepler magnitude: 13.81. Transit SNR 9.42

There are 1 quarters with good PRF difference image offsets

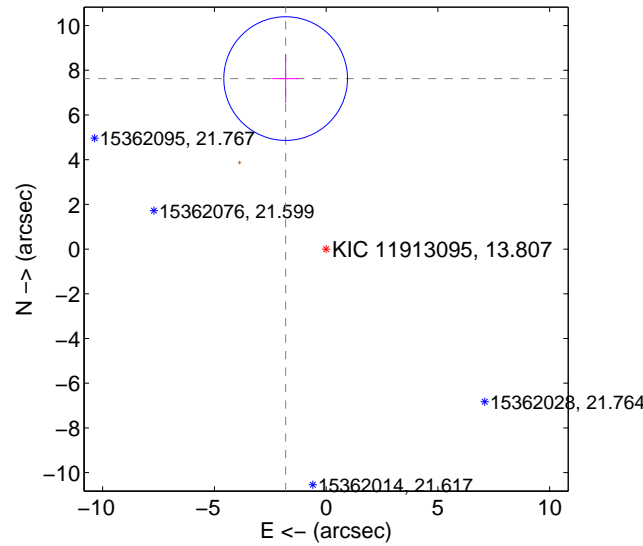
The OOT PRF centroid is offset from the target star catalog position by about 5.26 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.996 ± 1.342	3.72	-2.270 ± 0.644	4.450 ± 1.180
PRF-fit source offset from KIC position	7.842 ± 0.922	8.50	1.812 ± 0.599	7.630 ± 1.089
photometric centroid source offset	3.01 ± 0.45	6.77	2.37 ± 0.22	1.86 ± 0.67

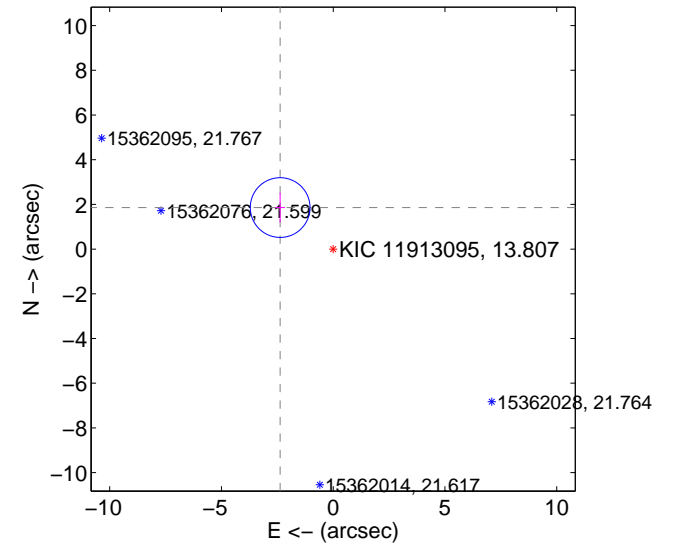
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

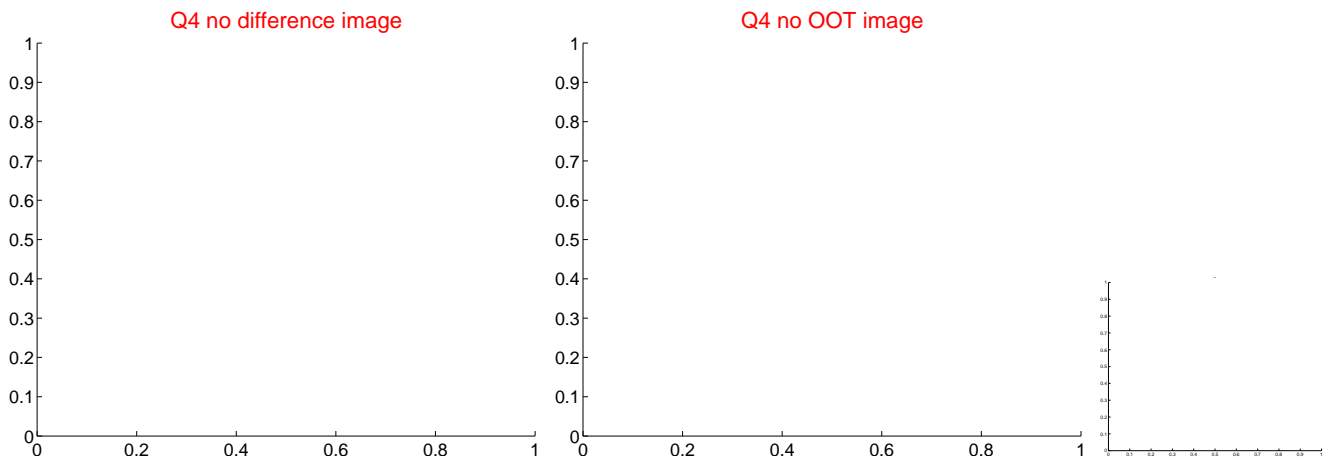
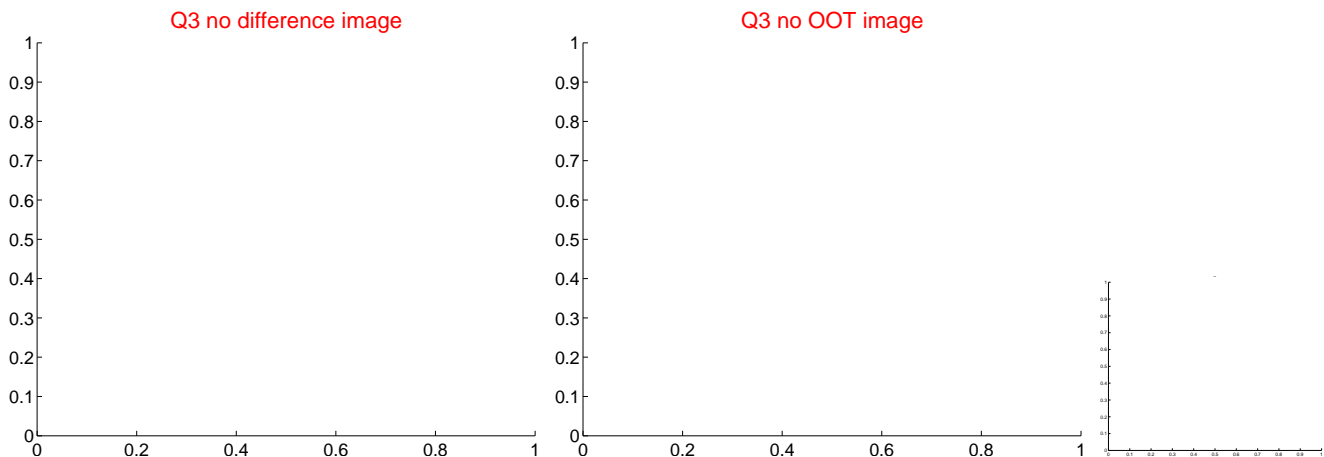
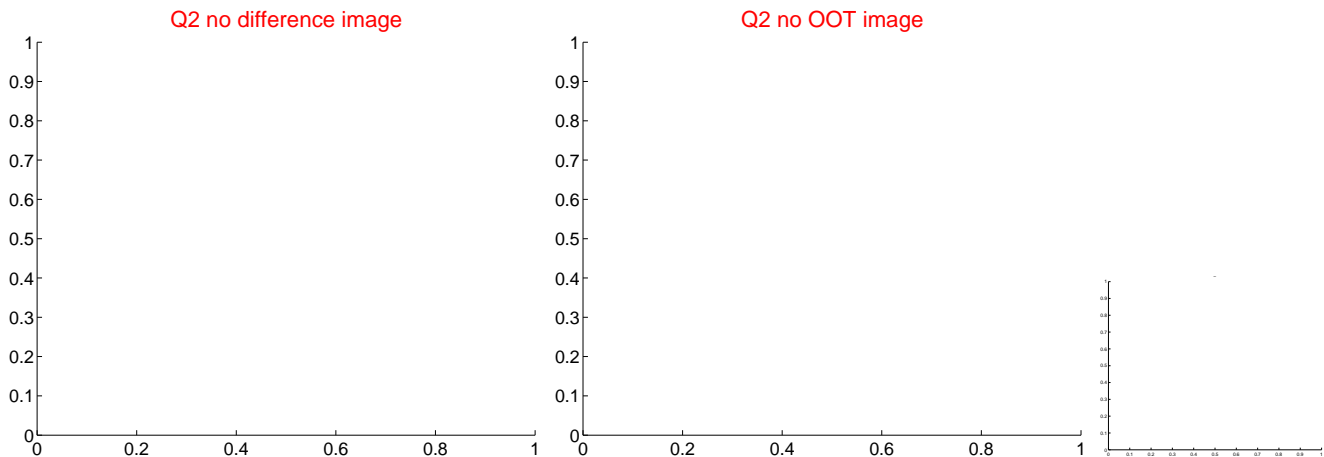
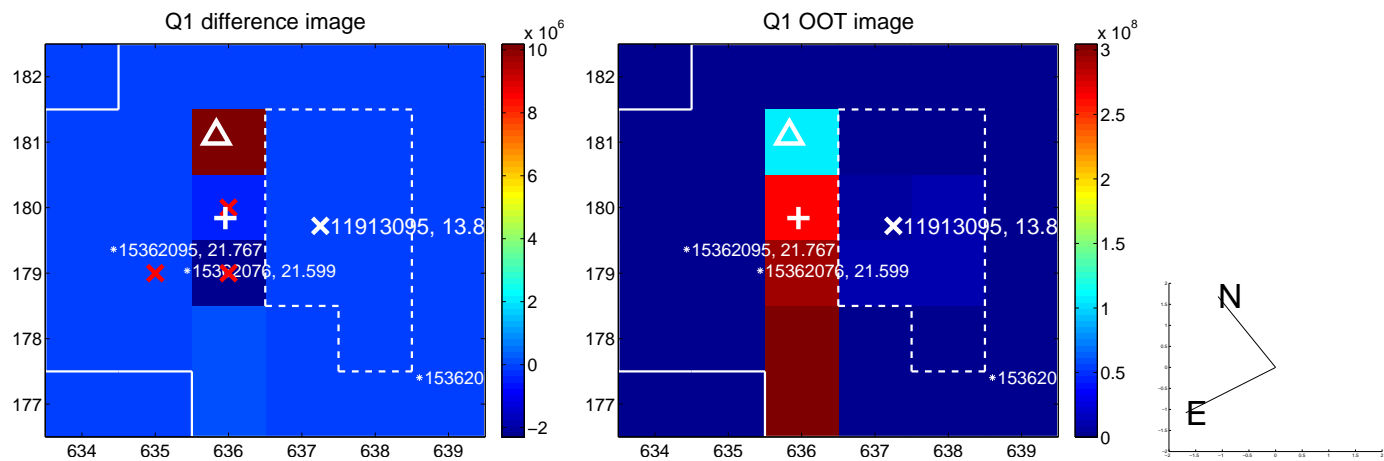


offset from photometric centroids

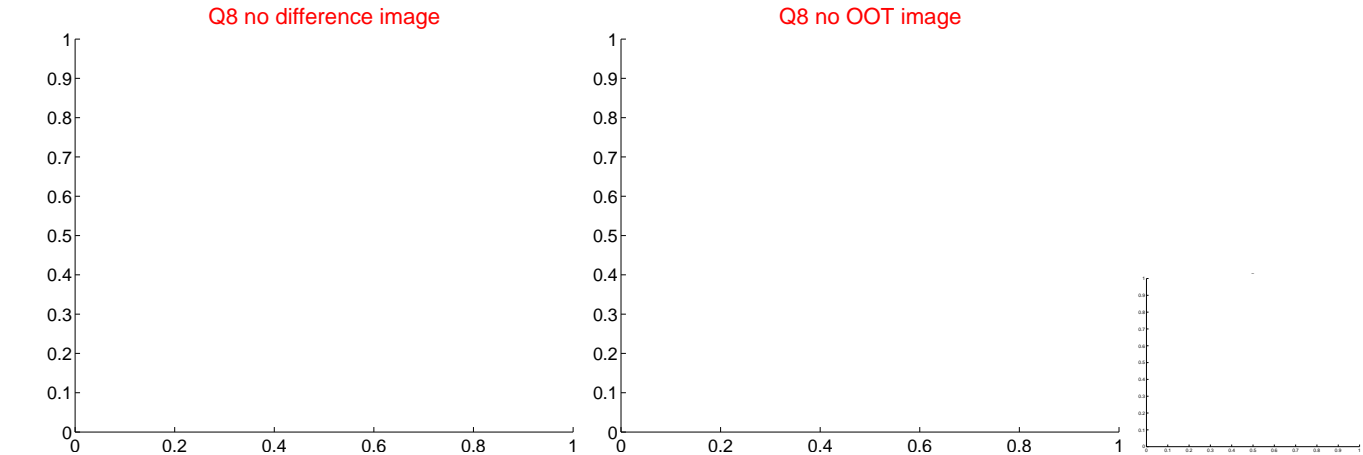
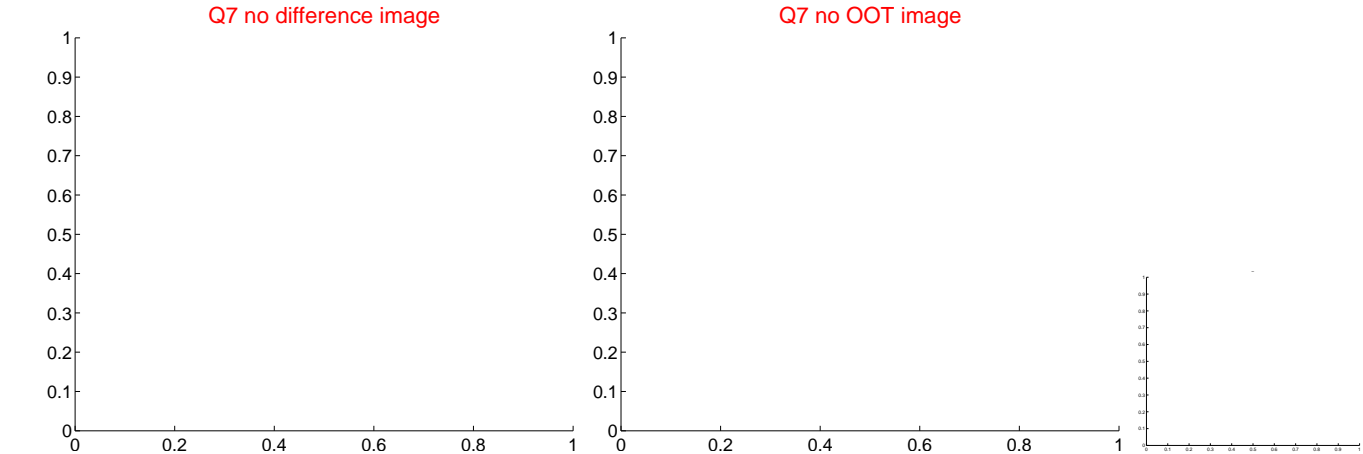
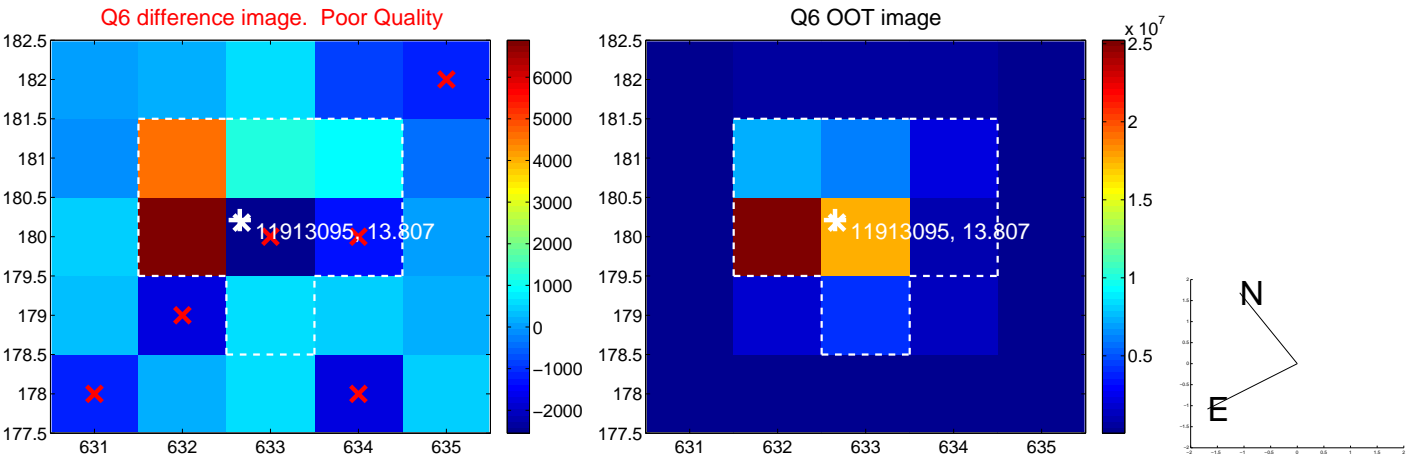
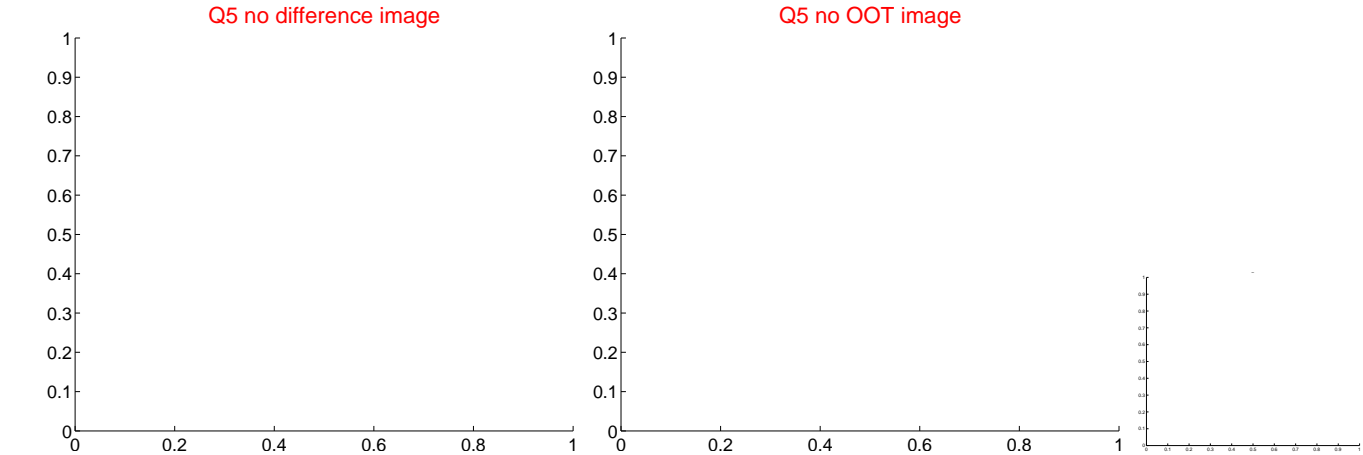


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

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



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



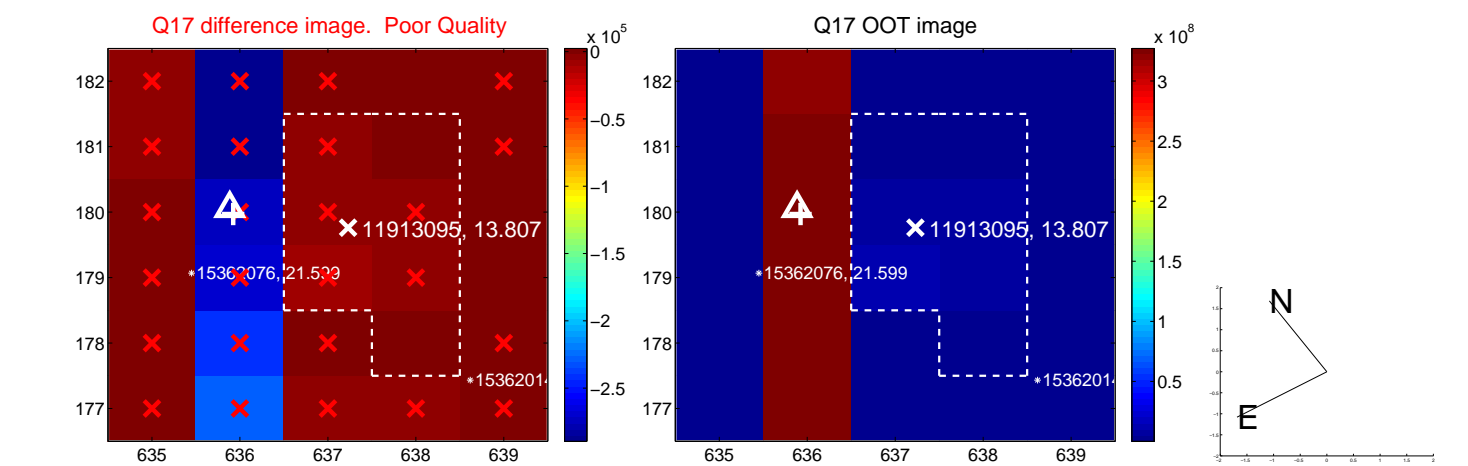
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



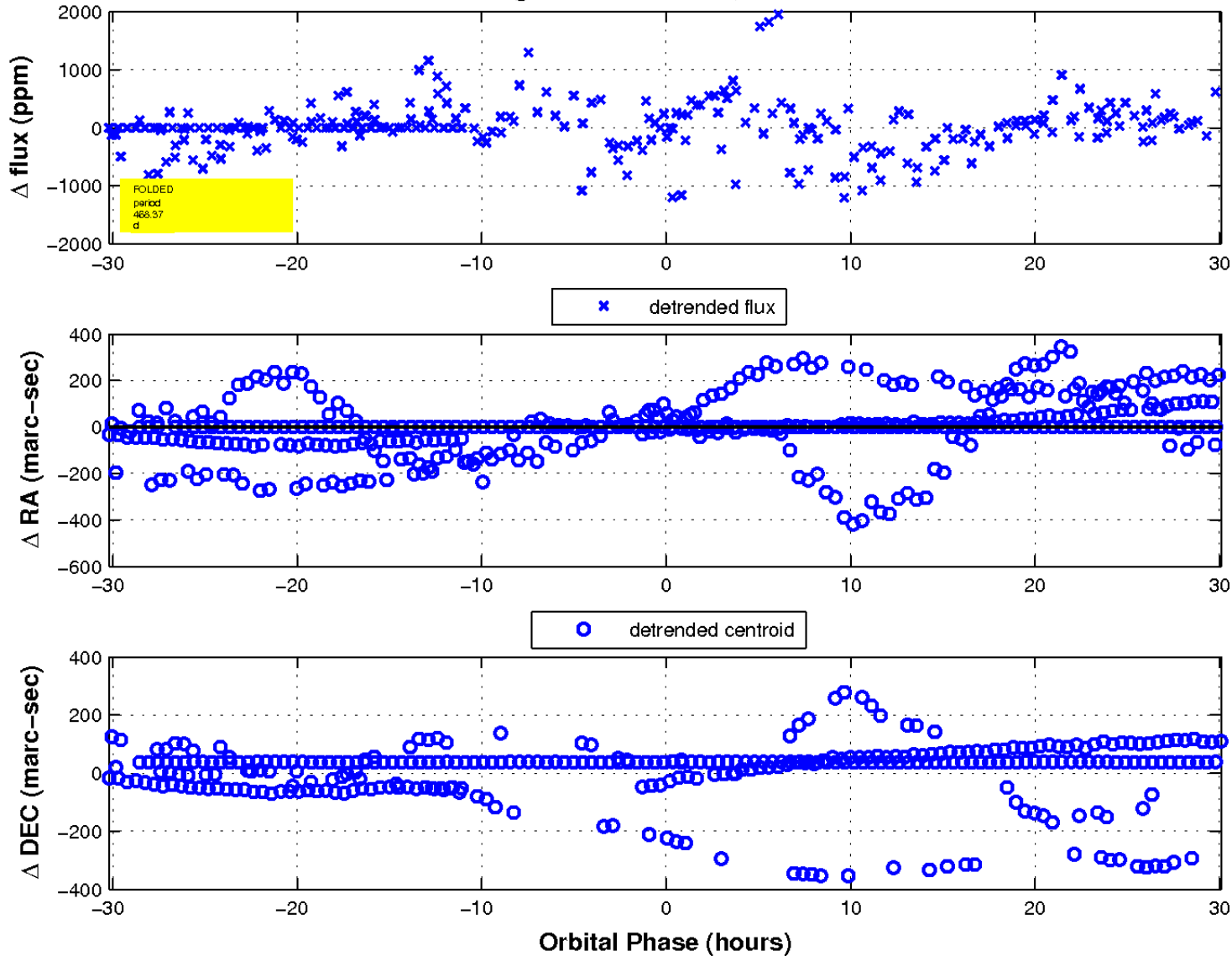
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 5 of 5



UKIRT Image

