

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})
003439126-01	OBS	No	466.598907	562.202843	1581.3	9.515	13.7	6.5	0.66	4236	2.77	0.12
003439126-02	OBS	No	456.286524	484.430344	1711.3	7.600	11.8	7.8	0.66	4236	3.27	0.12
003439126-03	OBS	7655.01	2.976224	132.922051	197.1	6.191	11.6	10.9	0.66	4236	1.14	102.47
003439126-04	OBS	No	272.945566	224.384038	662.9	9.352	11.7	4.0	0.66	4236	1.87	0.25
003439126-05	OBS	No	398.924392	256.302150	1050.5	9.000	11.6	-1.0	0.66	4236	2.05	0.15
003439126-06	OBS	No	347.186618	410.217941	1194.3	7.500	11.4	-1.0	0.66	4236	2.19	0.18
003439126-07	OBS	No	251.654938	196.634295	584.4	8.995	11.4	3.1	0.66	4236	1.57	0.28
003439126-08	OBS	No	428.663233	529.169612	3632.6	17.808	10.9	9.7	0.66	4236	3.81	0.14
003439126-09	OBS	No	323.272075	281.919624	2046.6	20.411	9.8	7.4	0.66	4236	2.88	0.20
003439126-10	OBS	No	229.359900	174.128589	1174.7	7.500	10.2	-1.0	0.66	4236	2.17	0.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003439126-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-03	OBS	FP	0.00	0	0	0	1	EPHEM_MATCH
003439126-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV
003439126-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST
003439126-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
003439126-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
003439126-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

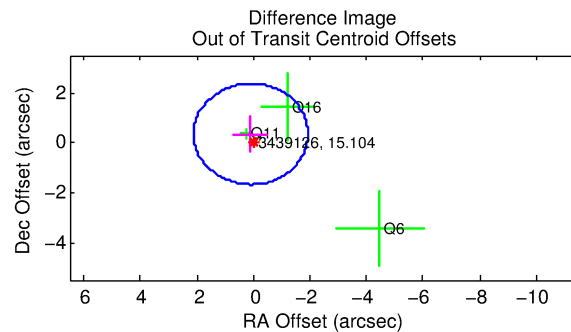
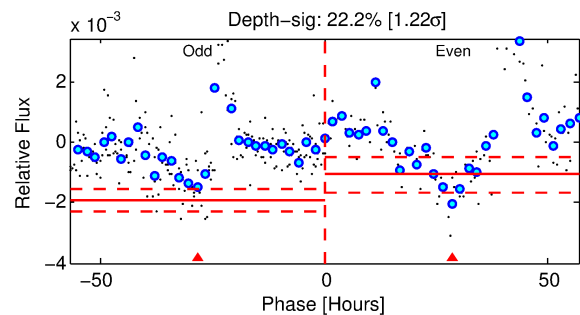
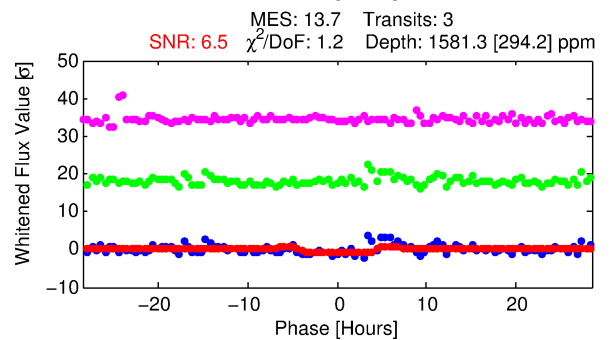
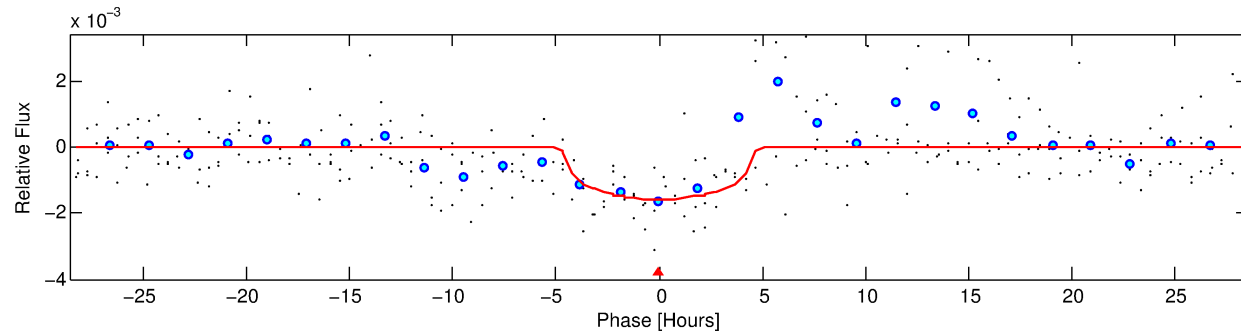
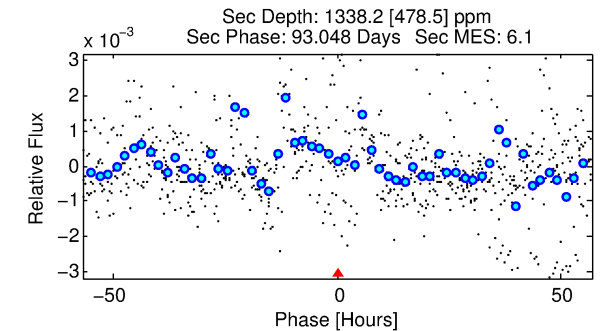
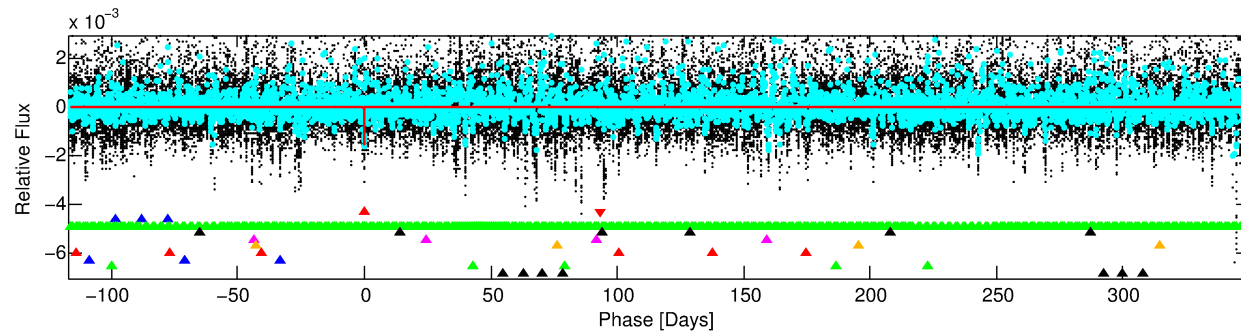
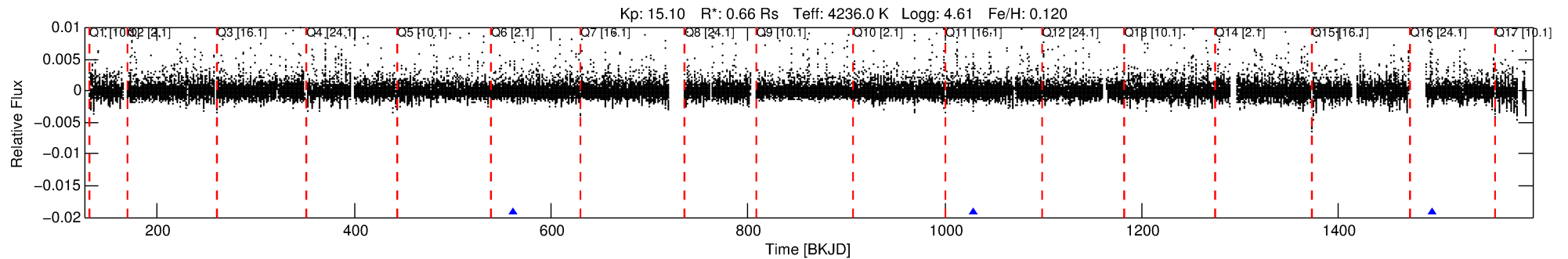
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003439126-01

No Significant Match Found

DV One-Page Summary

KIC: 3439126 Candidate: 1 of 10 Period: 466.599 d



DV Fit Results:

Period = 466.59891 [0.01142] d
Epoch = 562.2028 [0.0148] BKJD
Rp/R* = 0.0382 [0.0128]
a/R* = 300.56 [284.98]
b = 0.66 [0.83]
Seff = 0.12 [0.02]
Teq = 150 [6] K
Rp = 2.77 [0.96] Re
a = 1.0243 [0.0749] AU
Ag = 100571.10 [76864.37] [1.31σ]
Teff = 4143 [797] K [5.01σ]

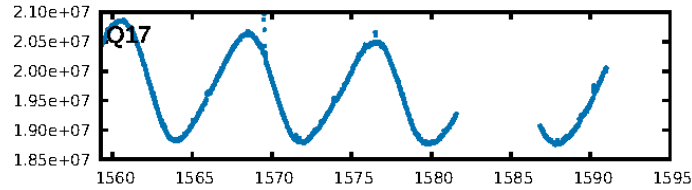
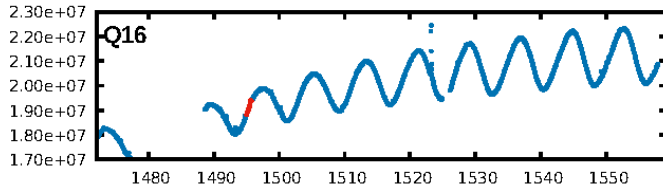
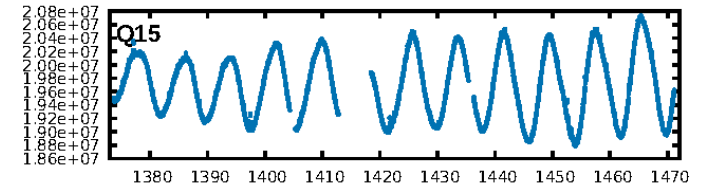
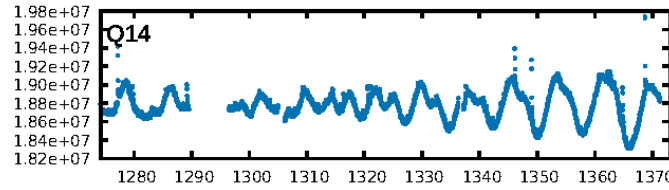
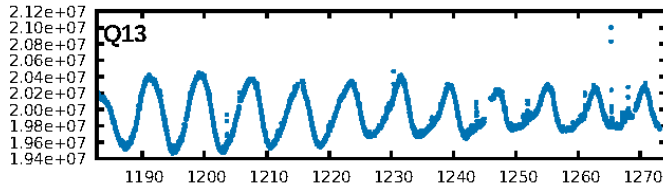
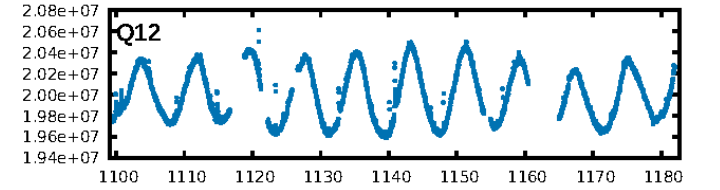
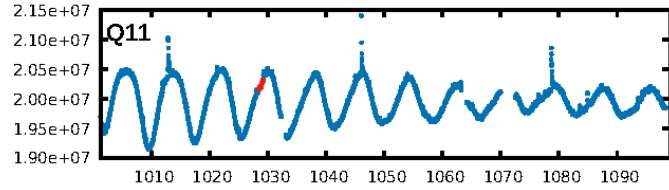
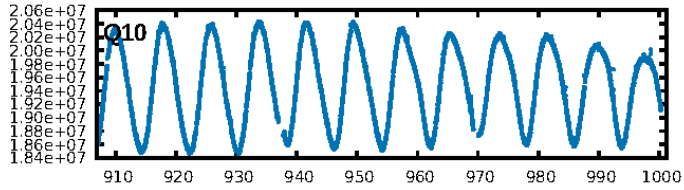
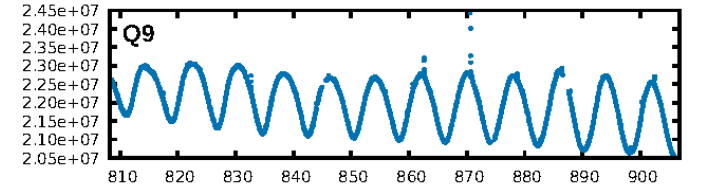
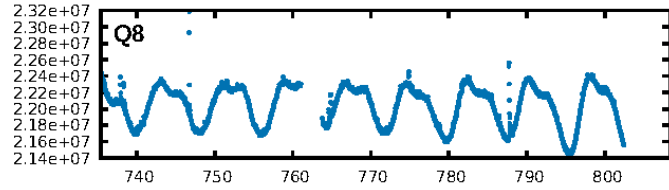
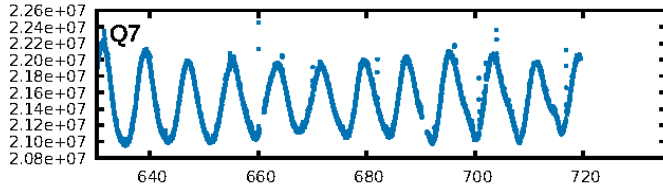
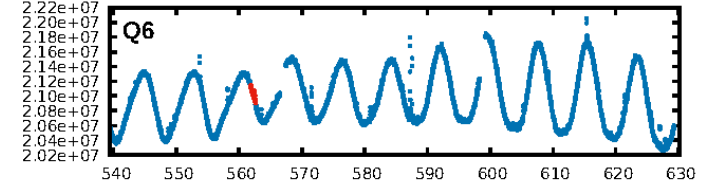
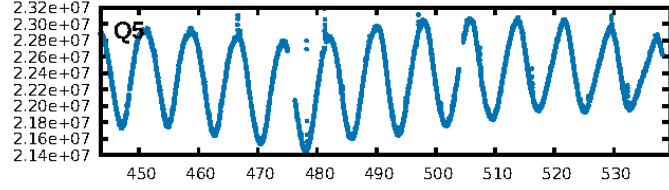
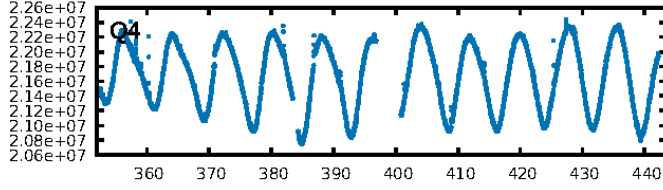
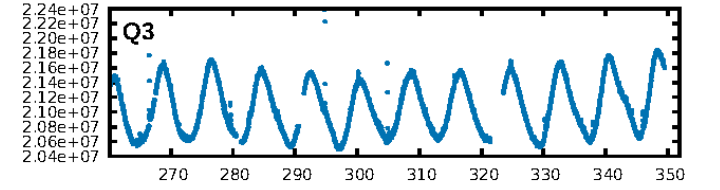
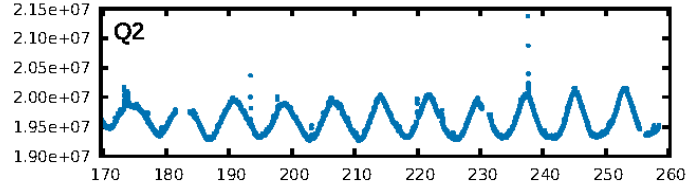
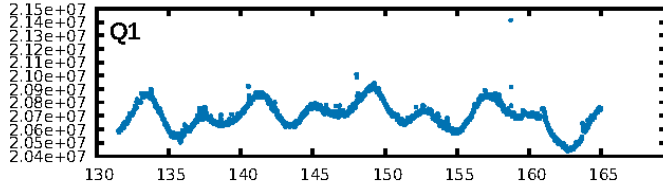
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [20.32σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 1.2%
ModelChiSquareGof-sig: 93.5%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.293
Centroid-sig: 9.4%
Centroid-so: 0.846 arcsec [1.05σ]
OotOffset-rm: 0.360 arcsec [0.53σ]
KicOffset-rm: 0.460 arcsec [0.28σ]
OotOffset-st: 1/1/1/0 [3]
KicOffset-st: 1/1/1/0 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 0.00 [0/3]

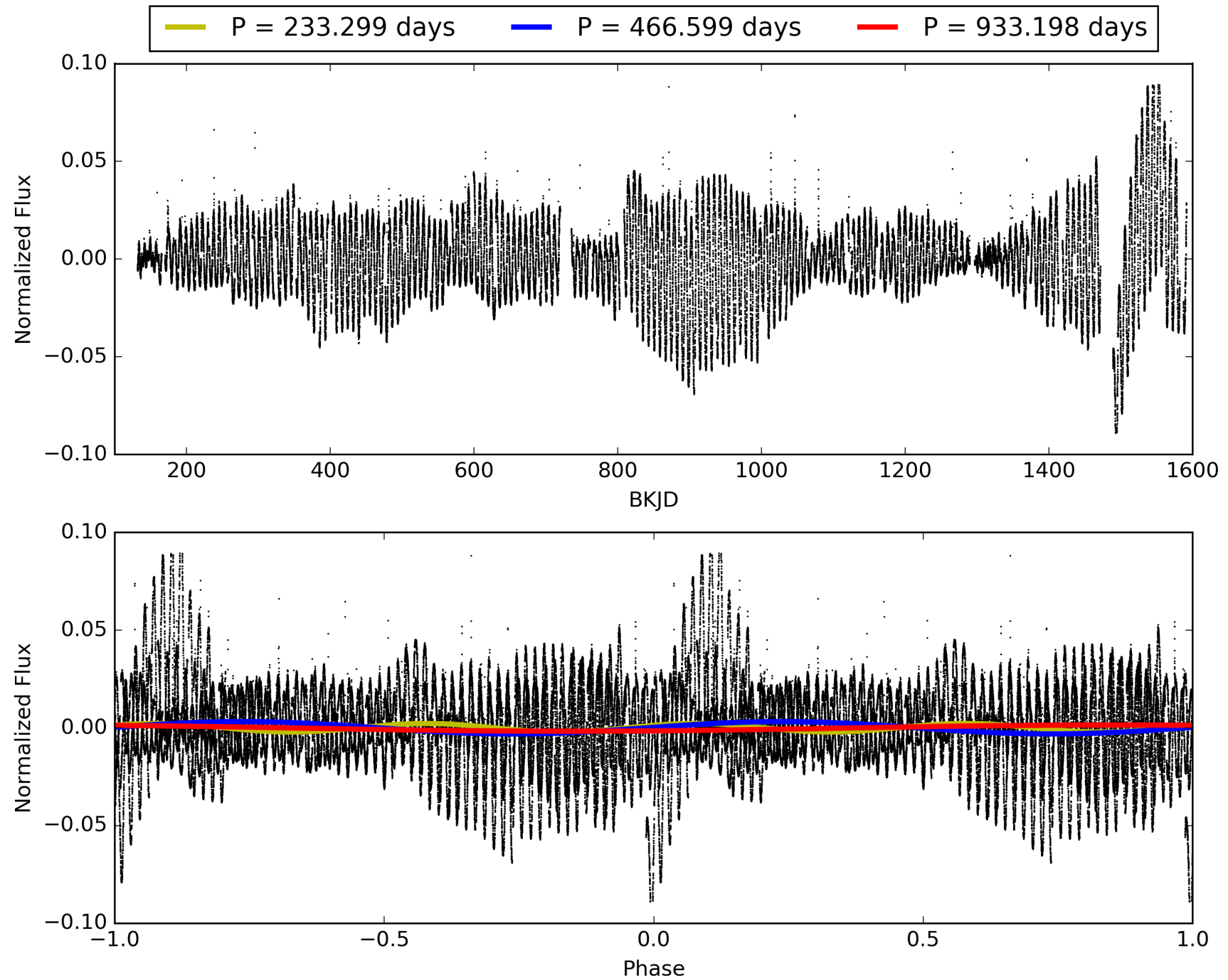
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:53:27 Z

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

TCE 003439126-01, PDC Light Curves

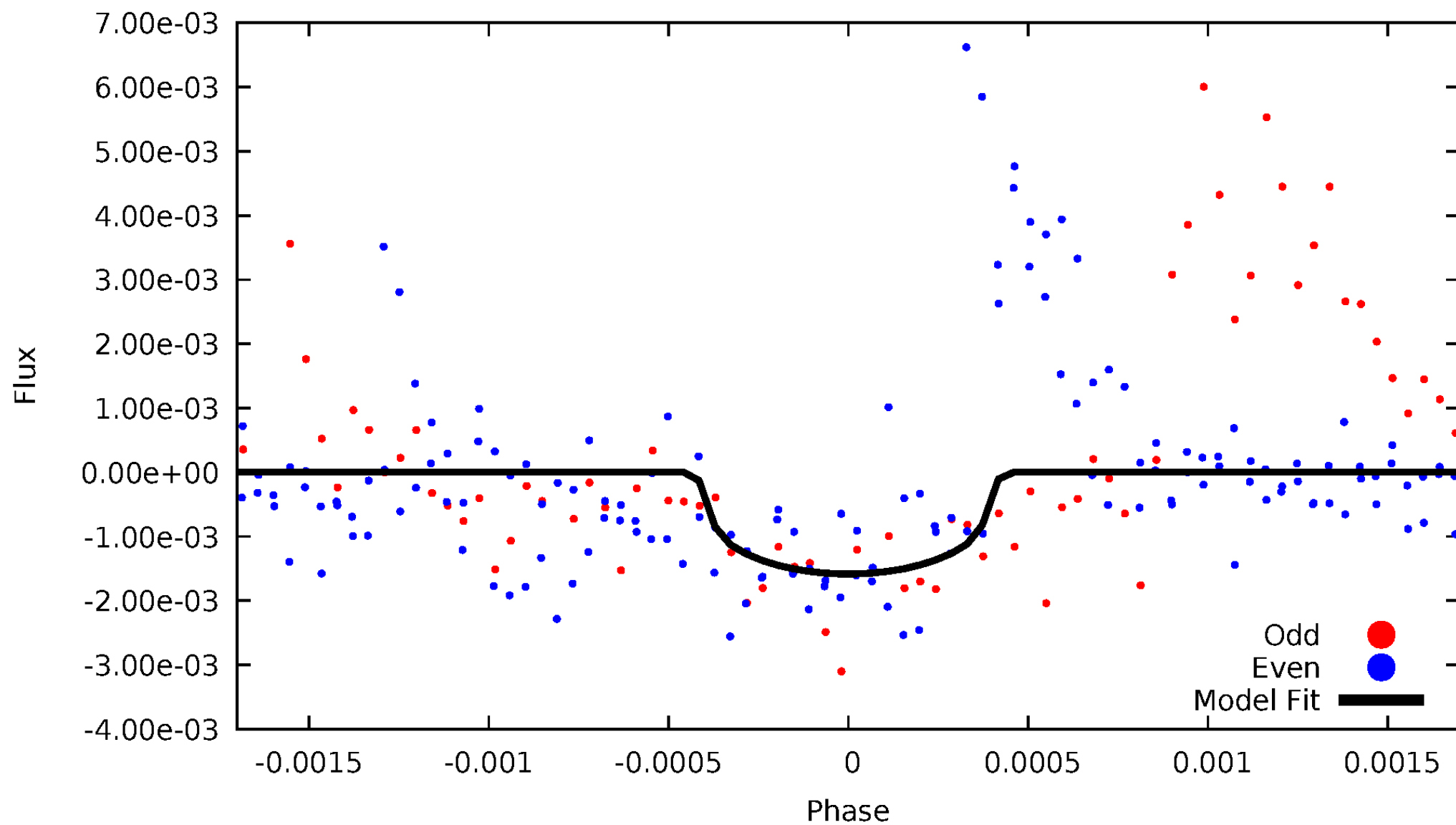


TCE 003439126-01



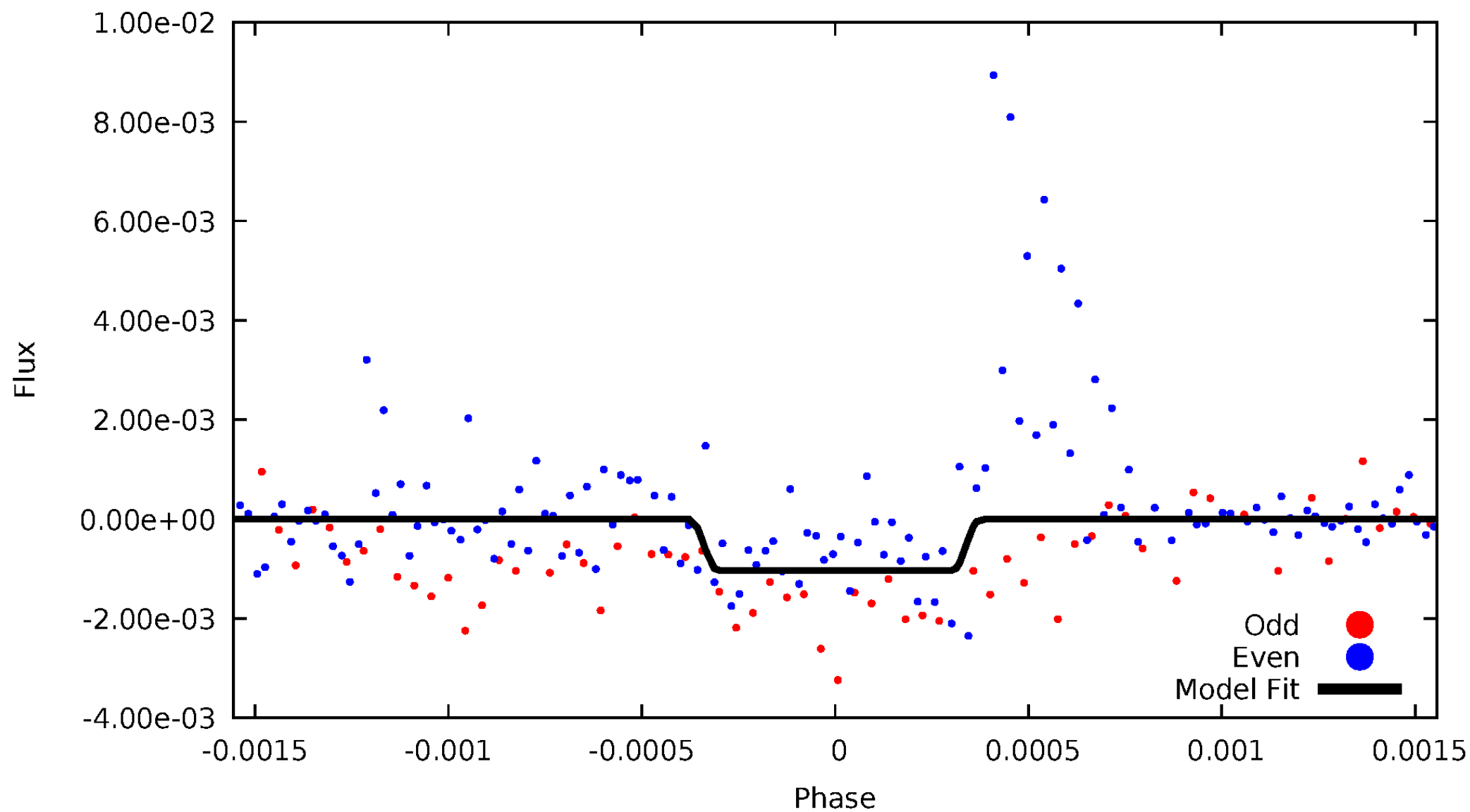
DV Odd/Even

TCE 003439126-01

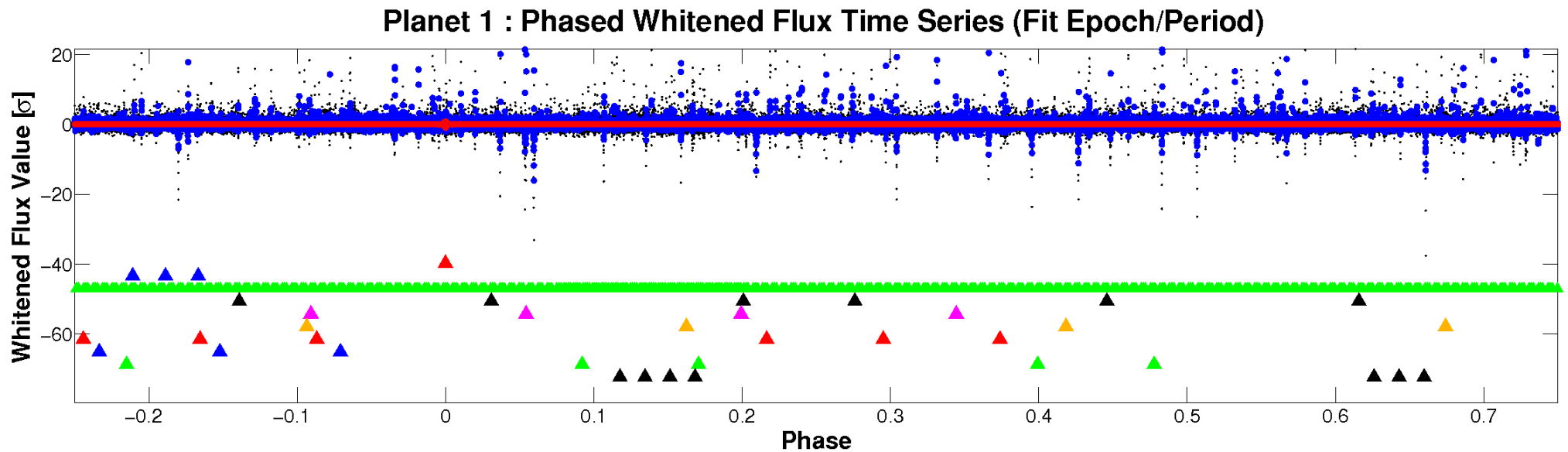
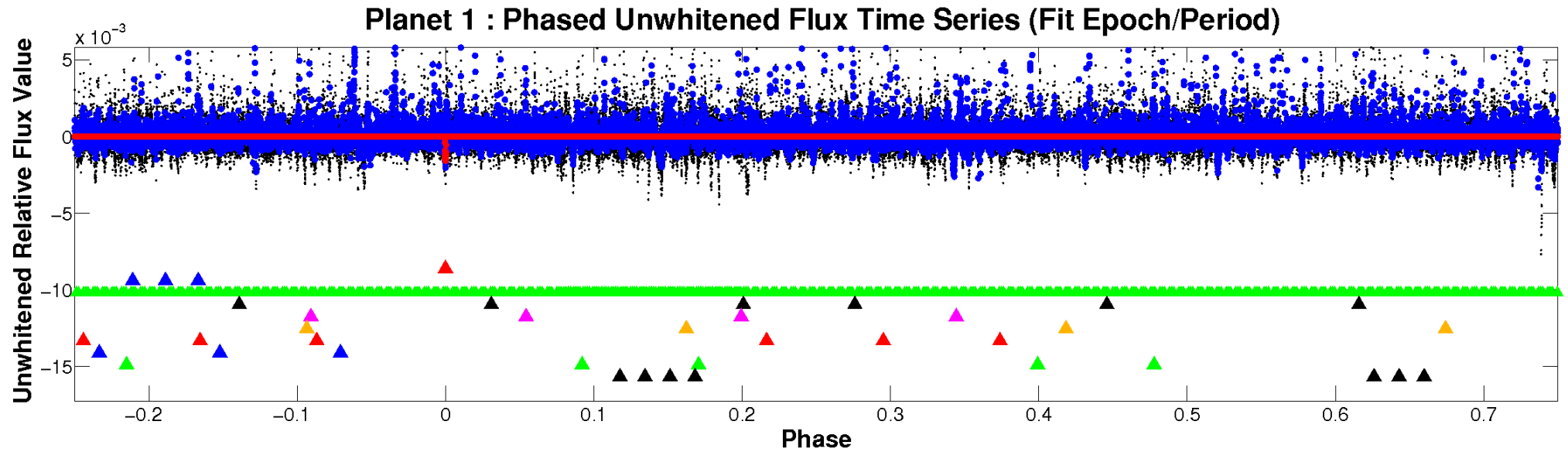


ALT Odd/Even

TCE 003439126-01

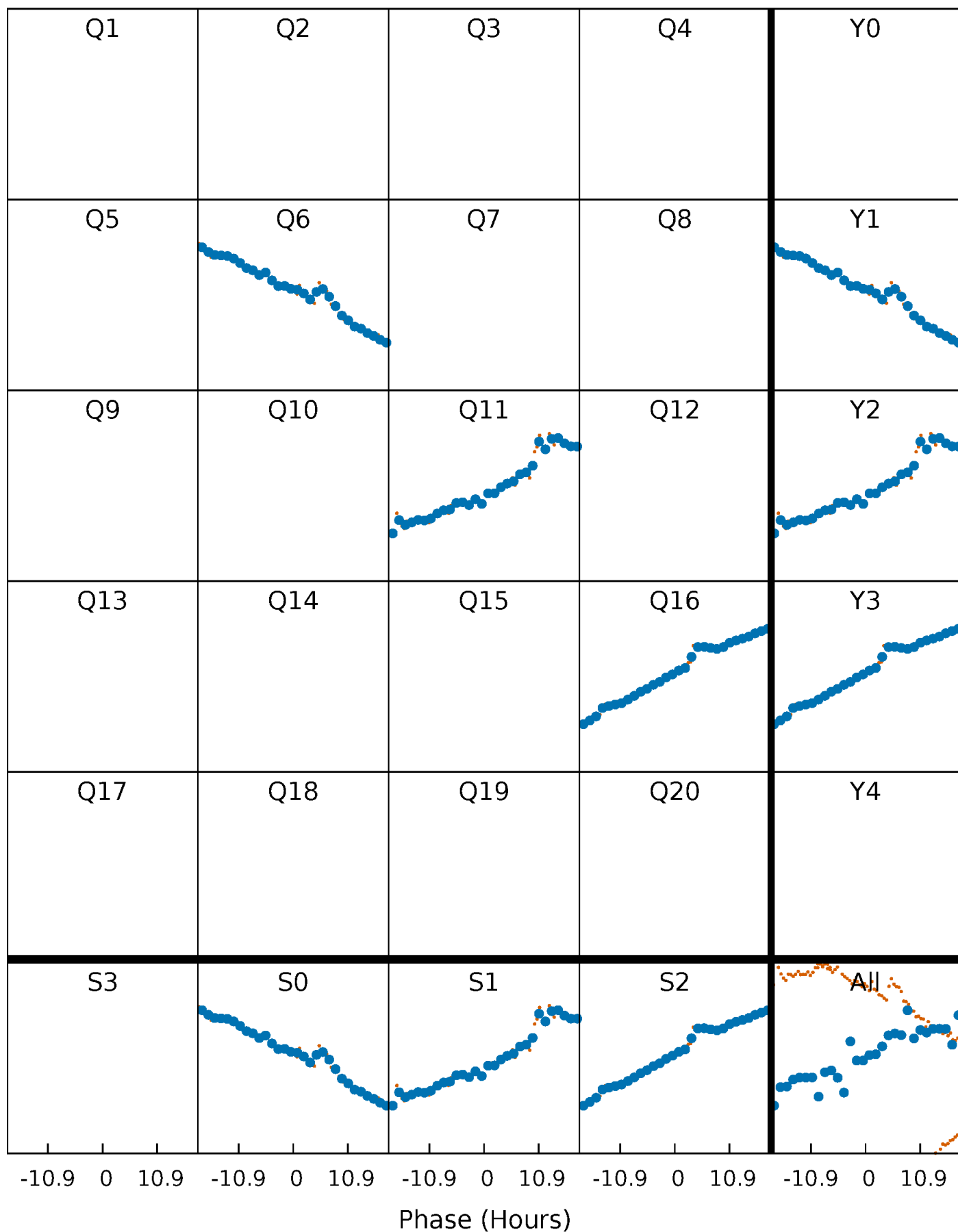


Non-Whitened Vs. Whitened Light Curve



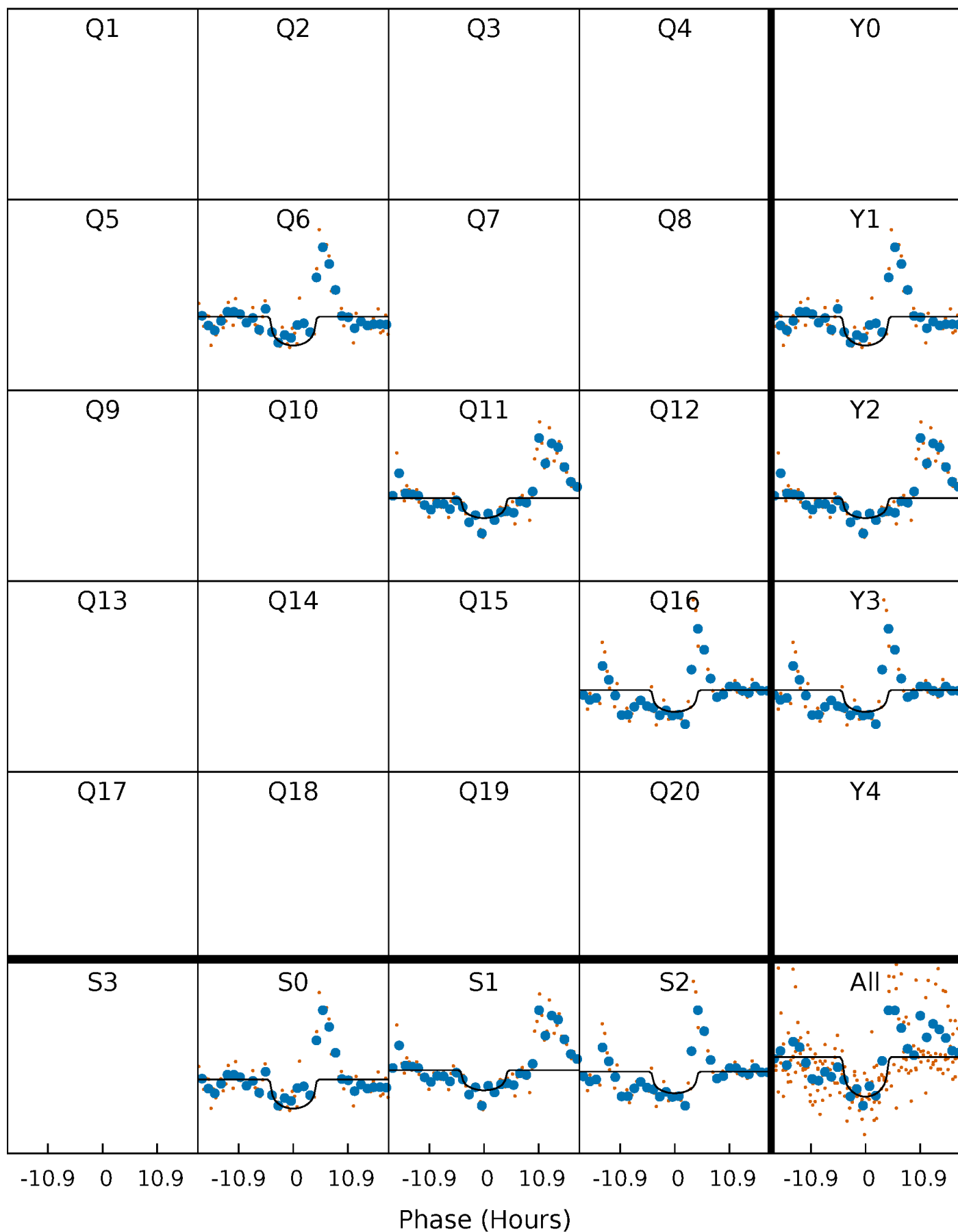
PDC Quarter-Phased Transit Curves

TCE 003439126-01 P=466.598907 Days $T_0=562.202843$ (BKJD)



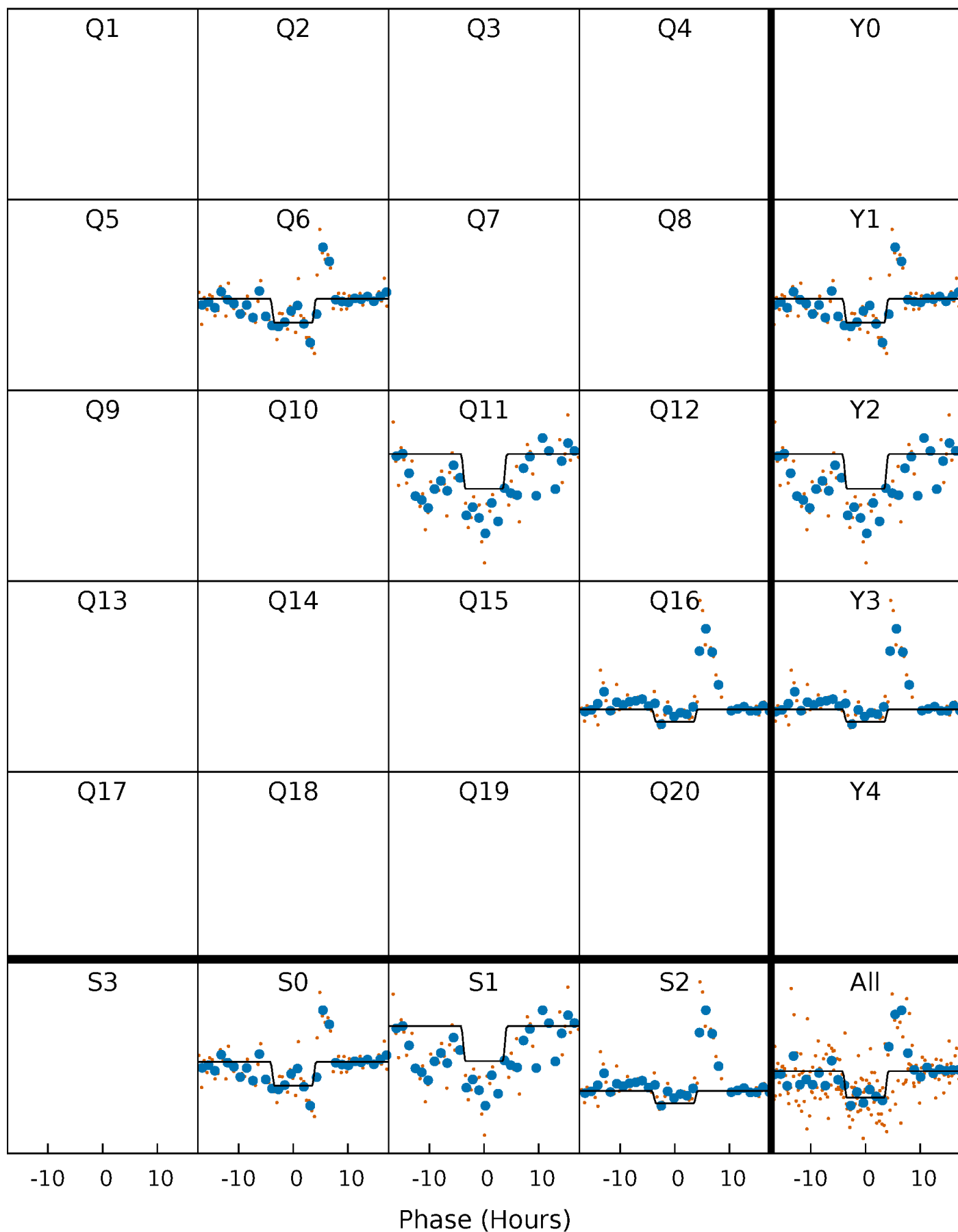
DV Quarter-Phased Transit Curves

TCE 003439126-01 P=466.598907 Days $T_0=562.202843$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

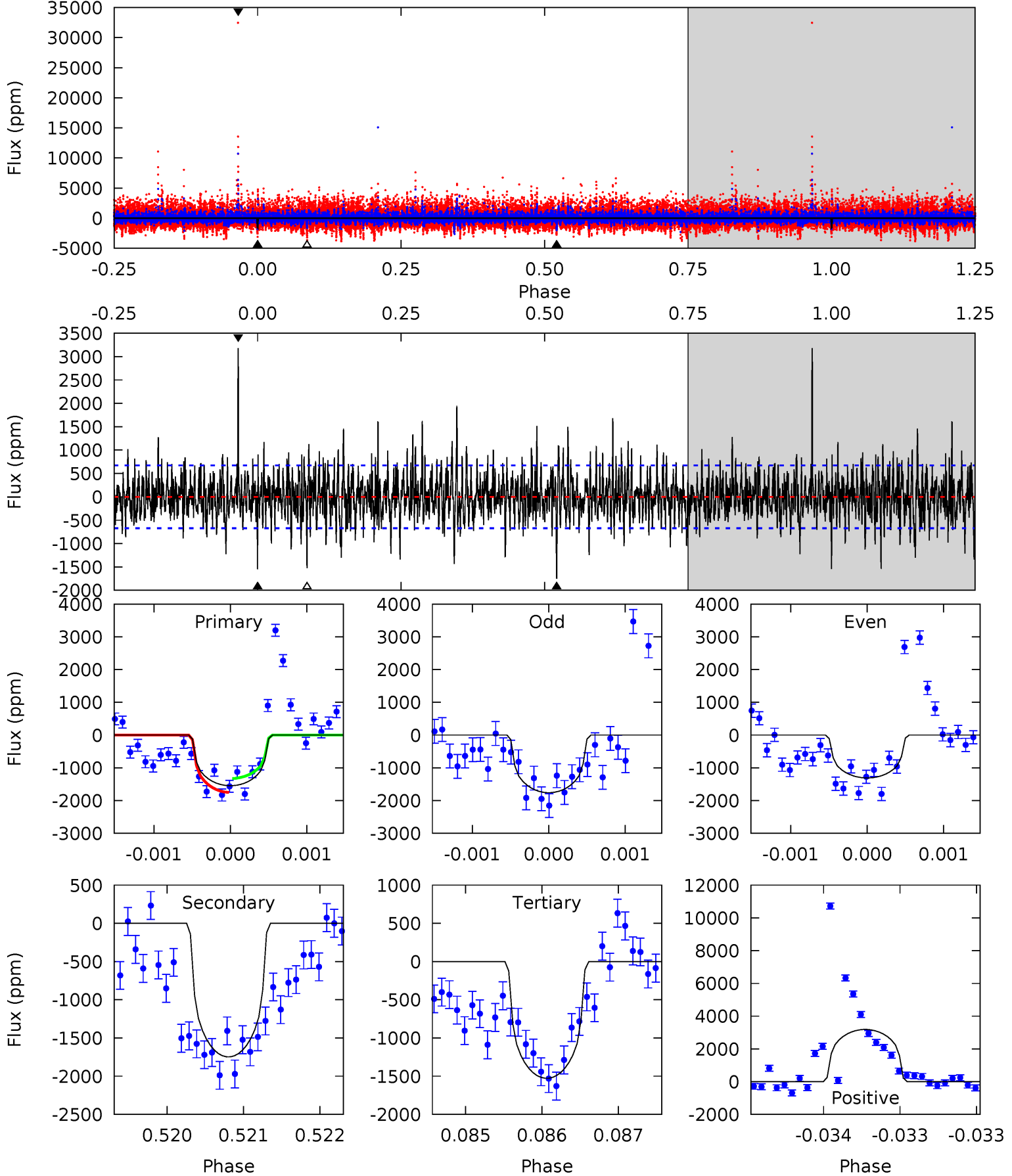
TCE 003439126-01 P=466.573098 Days $T_0=562.216589$ (BKJD)



DV Model-Shift Uniqueness Test

003439126-01, P = 466.598907 Days, E = 95.603936 Days

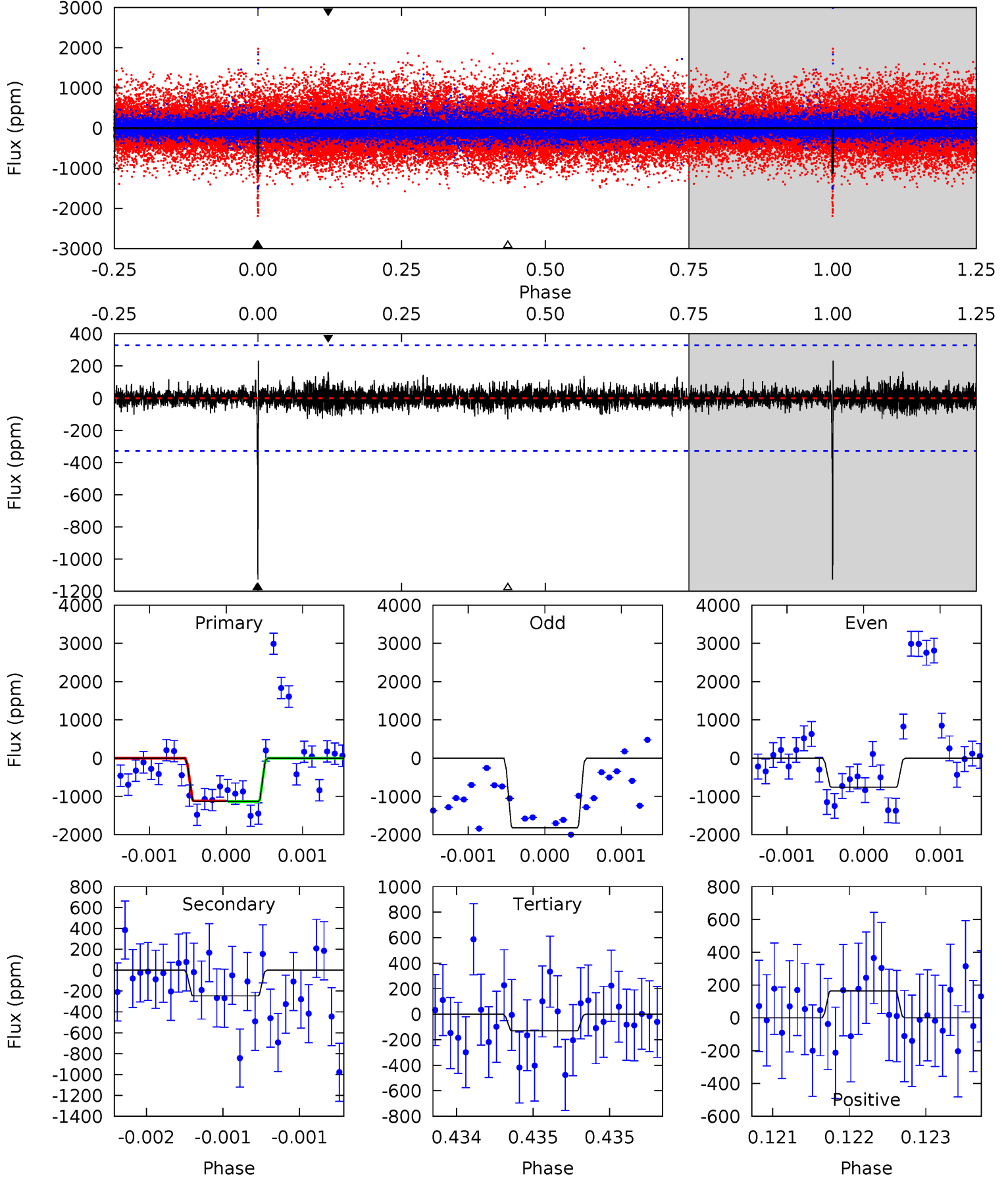
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.6	14.2	12.4	26.0	5.48	3.34	3.27	0.16	-13.4	1.79	-11.7	1.28	1.05	0.65	1.74



Alt Model-Shift Uniqueness Test

003439126-01, P = 466.573098 Days, E = 95.643491 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.9	4.14	2.19	2.76	5.51	3.39	0.52	16.7	16.1	1.95	1.38	8.79	0.99	0.17	0.17



Stellar Parameters For KIC 003439126

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4236^{+129}_{-142}	$4.612^{+0.052}_{-0.017}$	$0.120^{+0.250}_{-0.300}$	$0.664^{+0.028}_{-0.061}$	$0.657^{+0.047}_{-0.053}$	$3.163^{+0.729}_{-0.252}$
	+3%/-3%	+1%/-0%	+208%/-250%	+4%/-9%	+7%/-8%	+23%/-8%
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 003439126-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1747 ± 123	$2.75^{+0.96}_{-1.01}$	208^{+8}_{-8}	4366^{+935}_{-485}	$136033^{+197531}_{-62121}$
Alt.	-247 ± 60	$2.30^{+0.95}_{-0.82}$	208^{+7}_{-7}	3310^{+534}_{-348}	26785^{+39442}_{-14223}

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

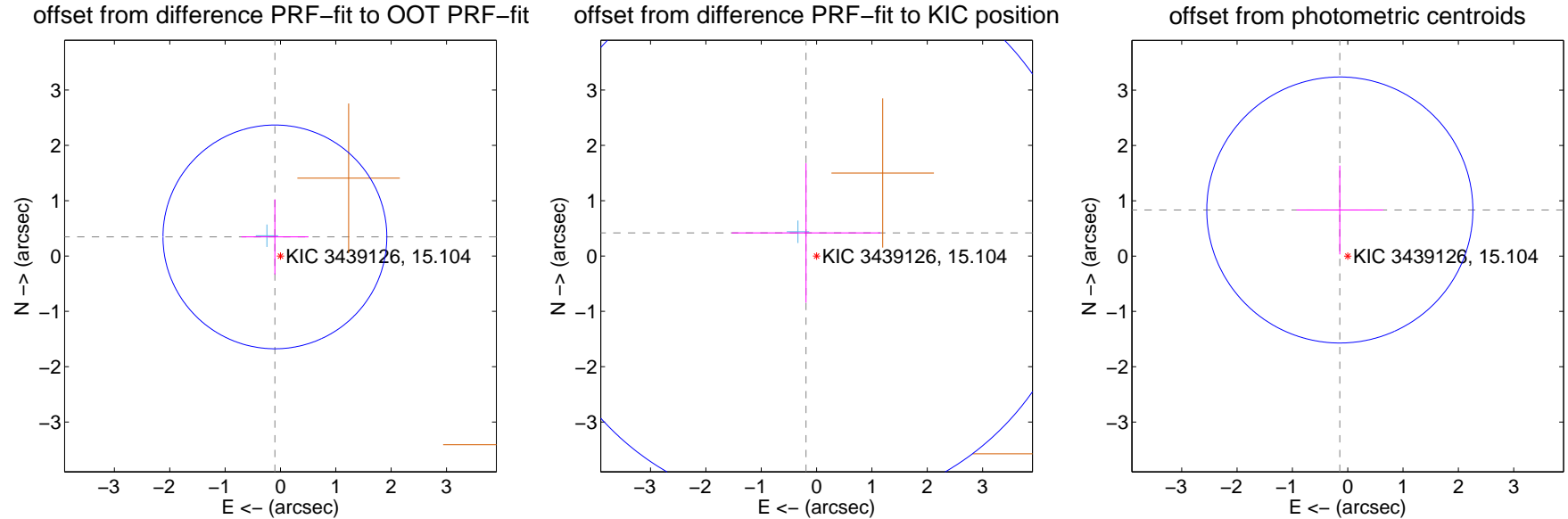
DV Centroid Data

Supplemental centroid analysis for 003439126-01. Kepler magnitude: 15.10. Transit SNR 6.47

There are 1 quarters with good PRF difference image offsets

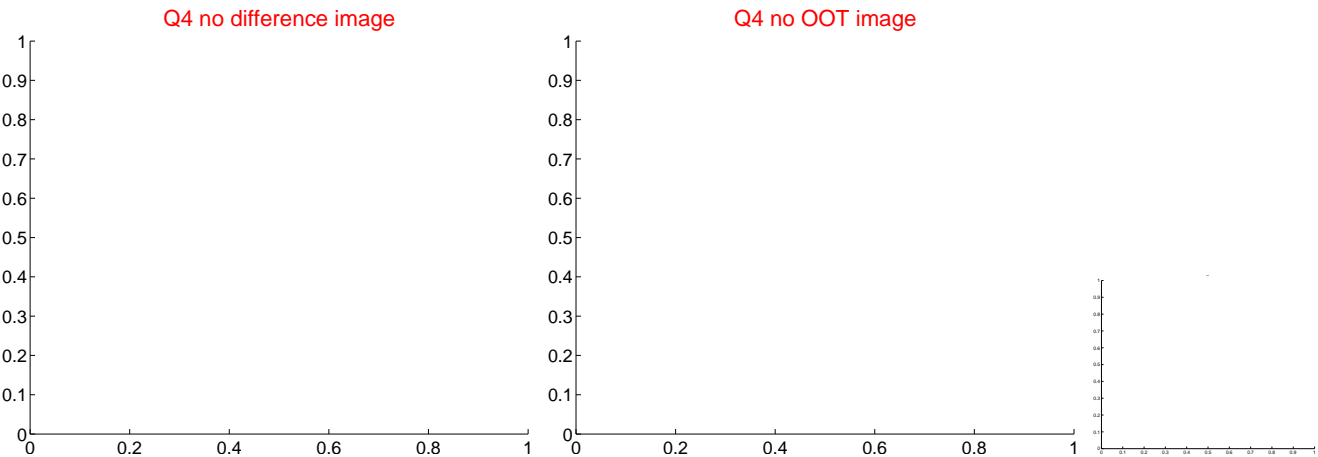
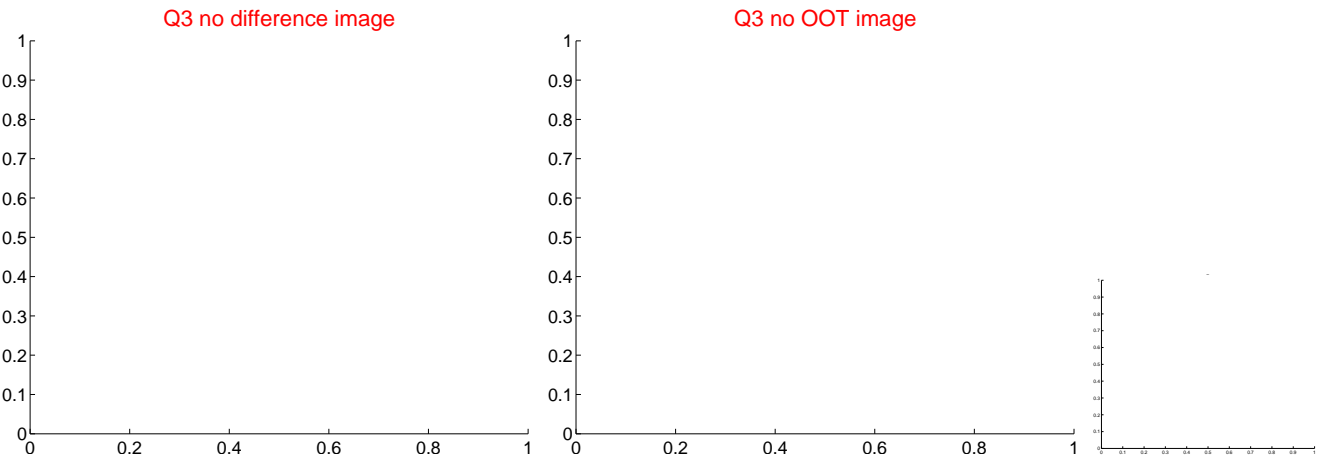
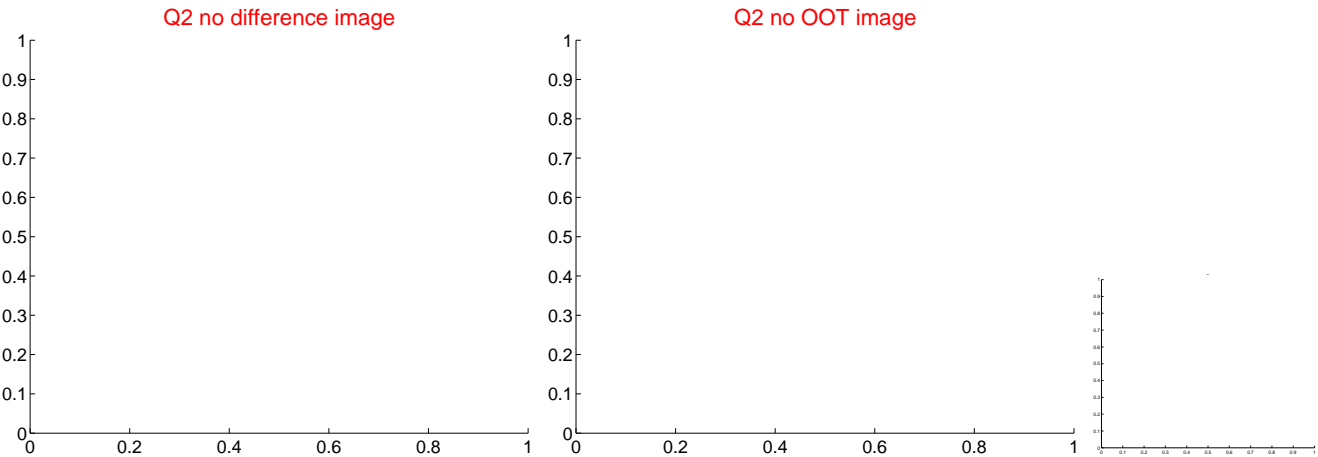
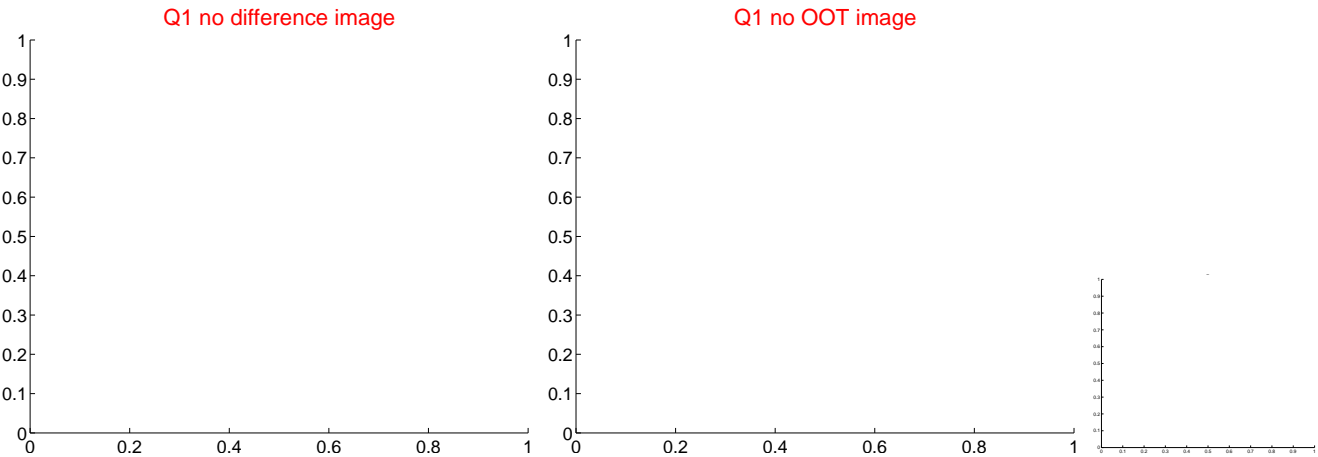
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.360 ± 0.674	0.53	0.100 ± 0.607	0.346 ± 0.679
PRF-fit source offset from KIC position	0.460 ± 1.666	0.28	0.190 ± 1.344	0.419 ± 1.259
photometric centroid source offset	0.85 ± 0.80	1.05	0.14 ± 0.78	0.83 ± 0.80

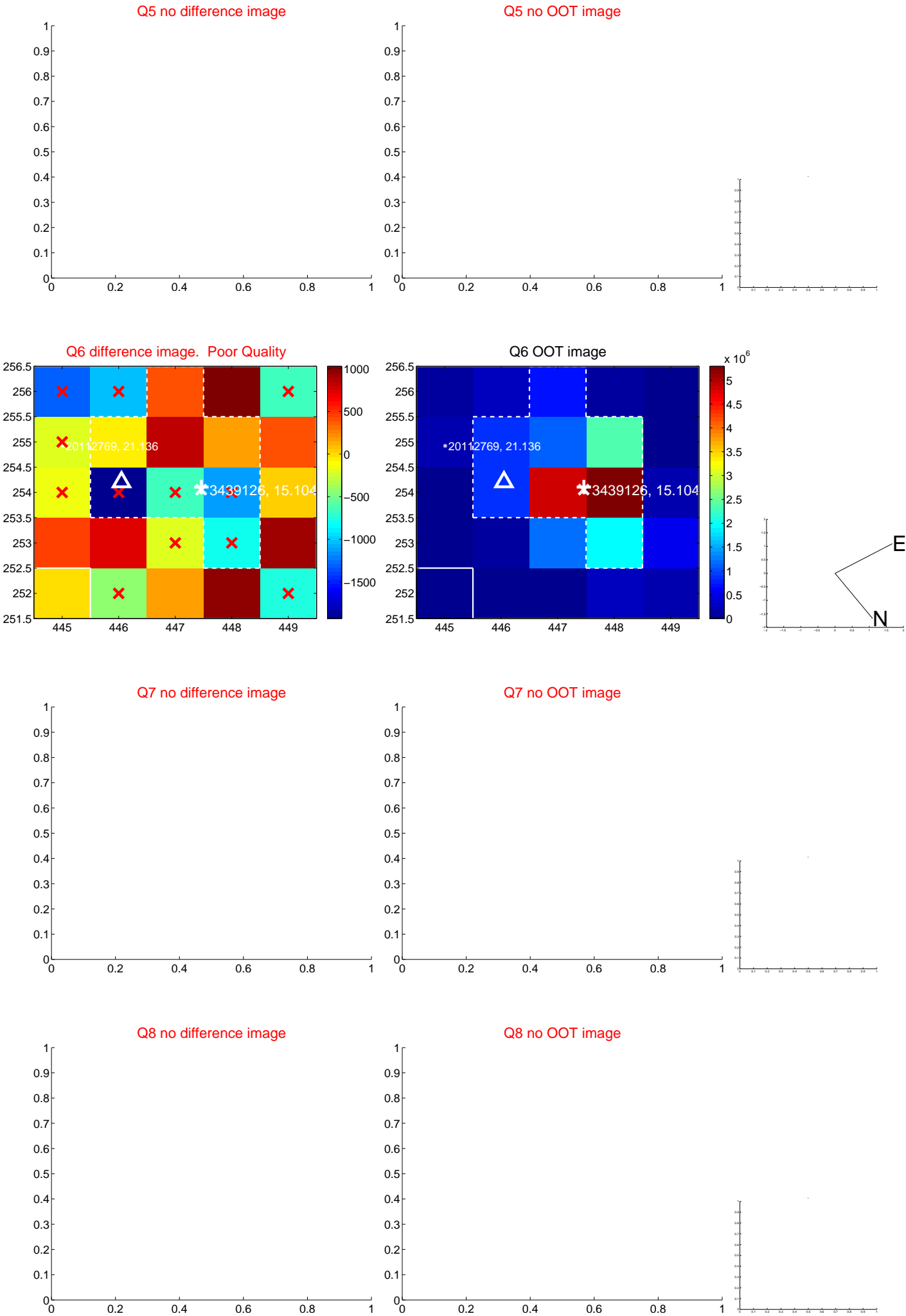


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

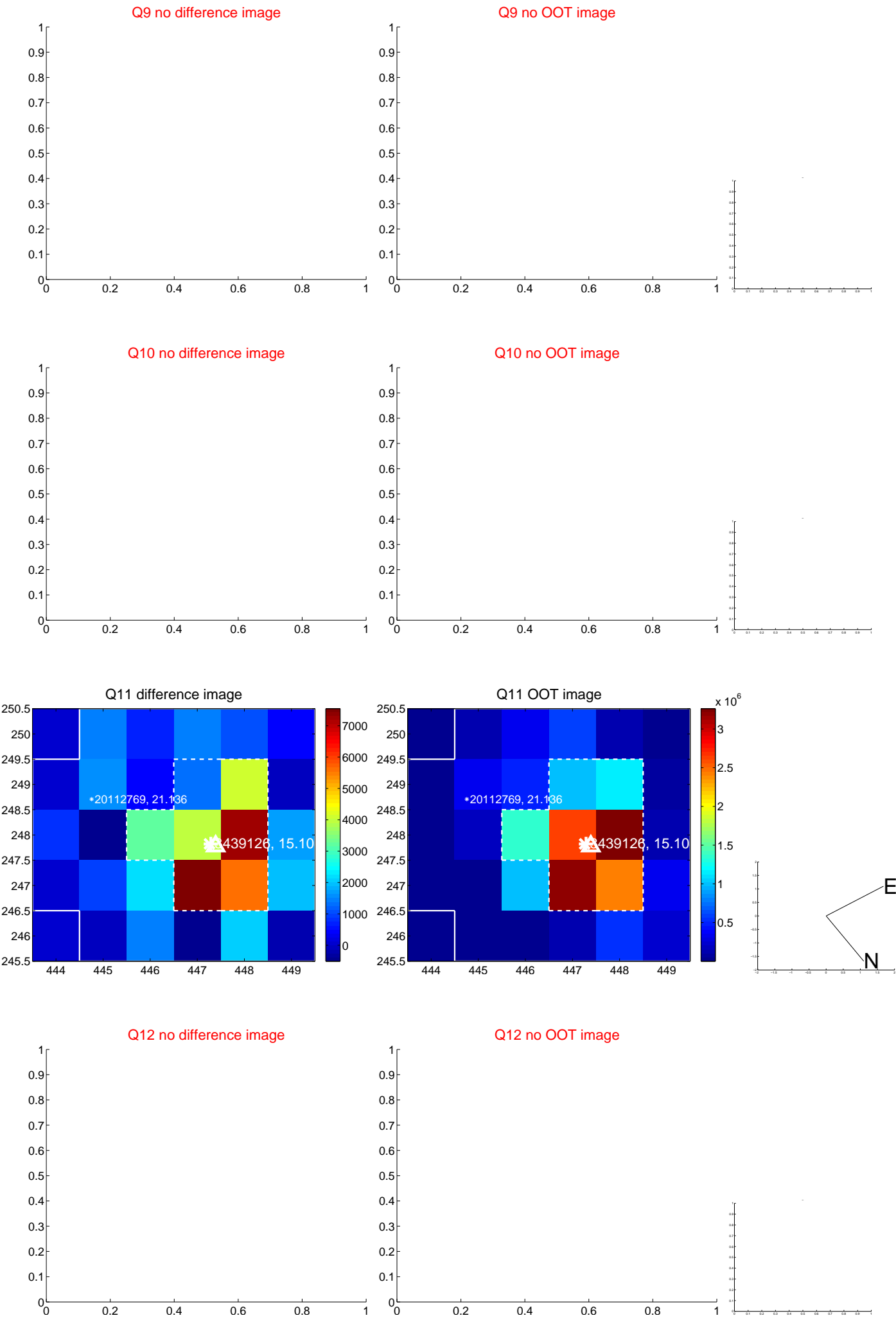
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



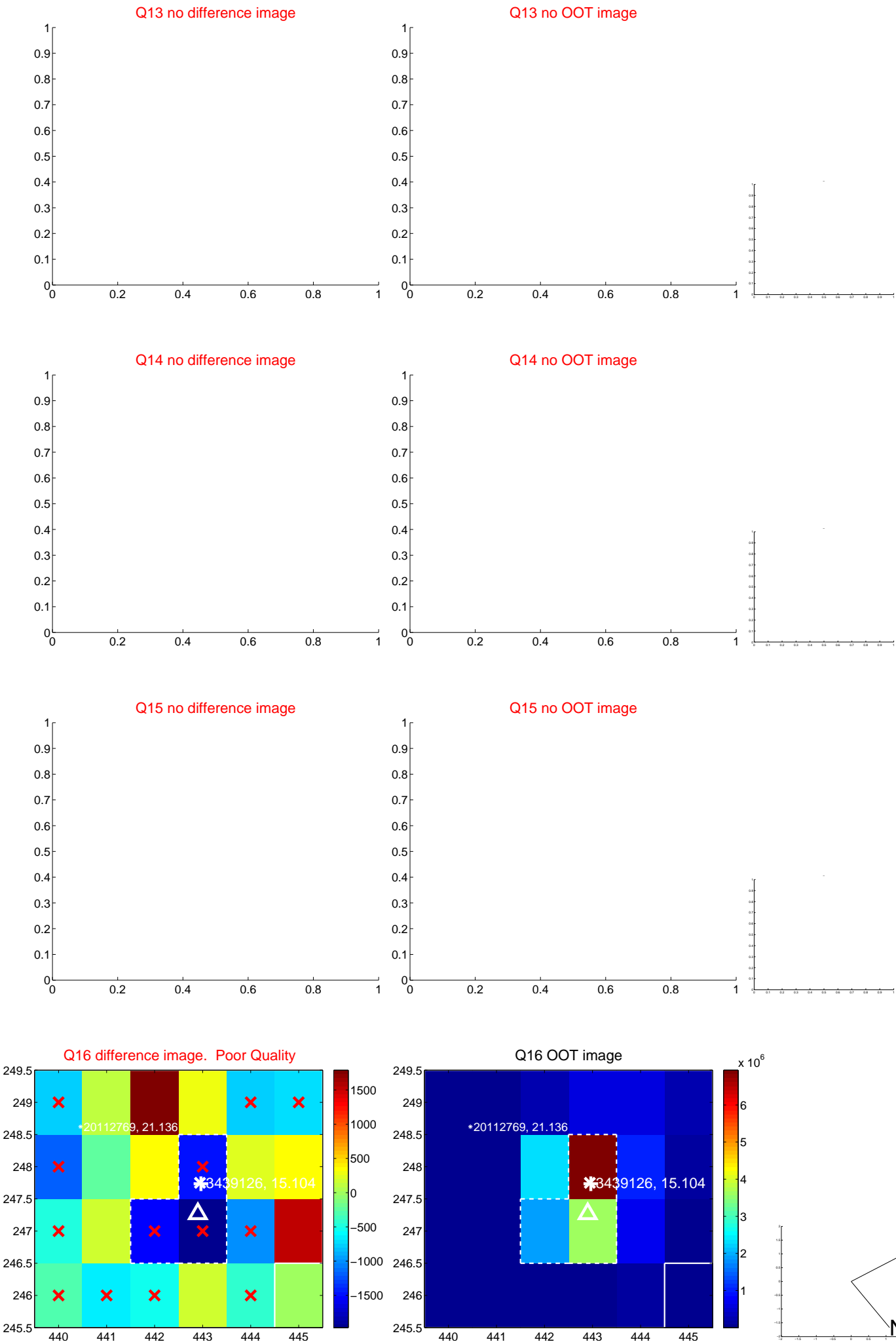
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



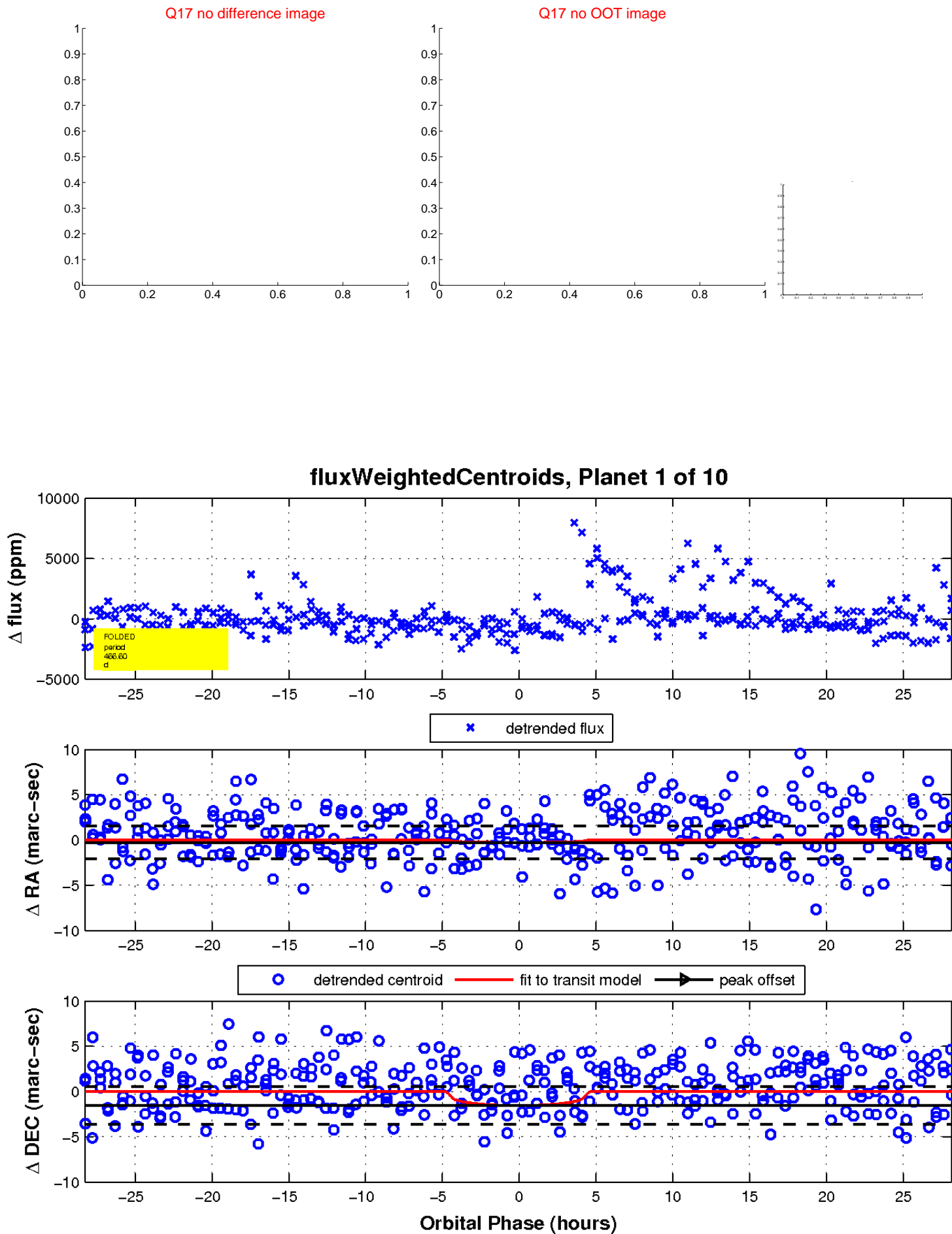
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



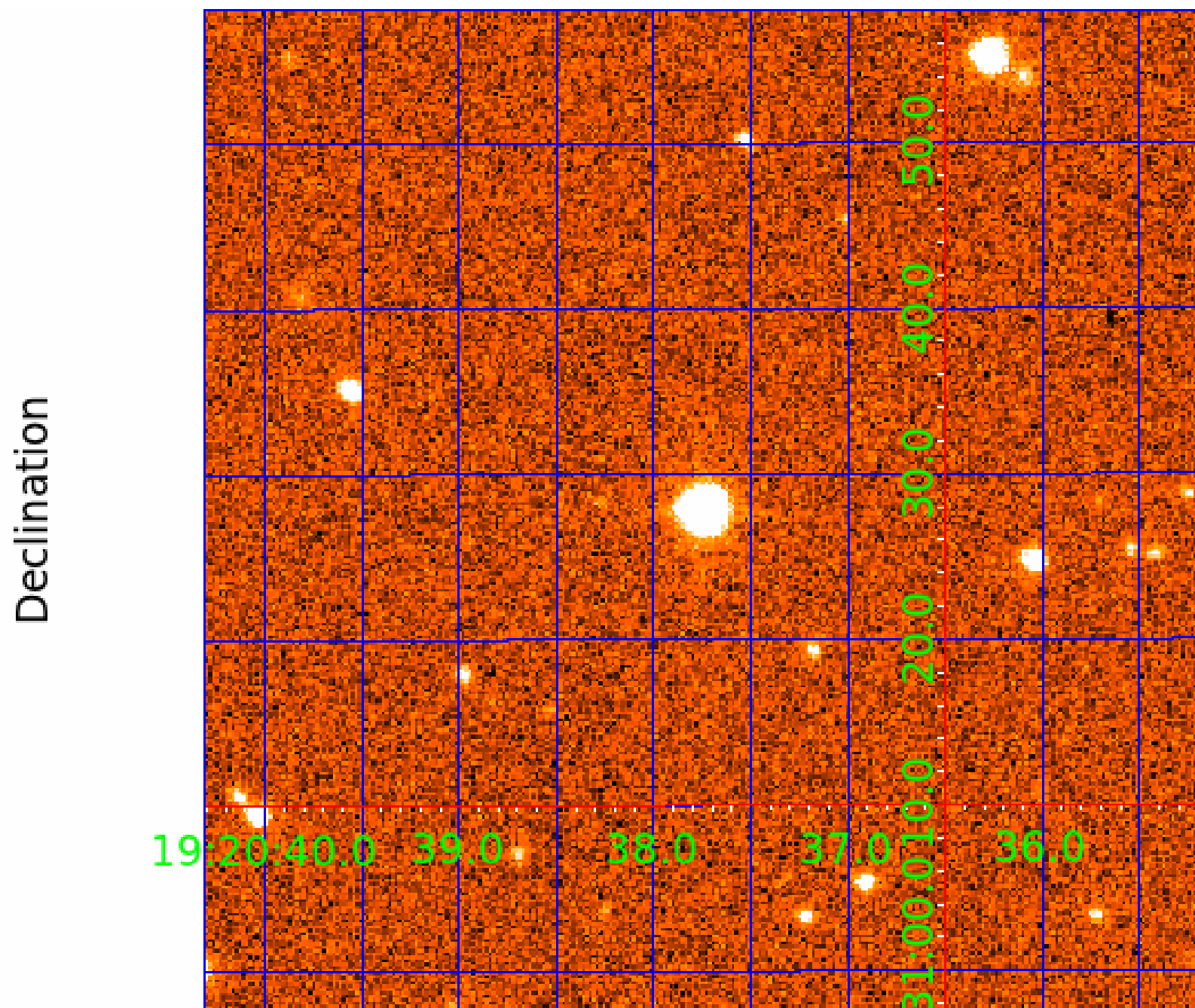
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



UKIRT Image



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})
003439126-01	OBS	No	466.598907	562.202843	1581.3	9.515	13.7	6.5	0.66	4236	2.77	0.12
003439126-02	OBS	No	456.286524	484.430344	1711.3	7.600	11.8	7.8	0.66	4236	3.27	0.12
003439126-03	OBS	7655.01	2.976224	132.922051	197.1	6.191	11.6	10.9	0.66	4236	1.14	102.47
003439126-04	OBS	No	272.945566	224.384038	662.9	9.352	11.7	4.0	0.66	4236	1.87	0.25
003439126-05	OBS	No	398.924392	256.302150	1050.5	9.000	11.6	-1.0	0.66	4236	2.05	0.15
003439126-06	OBS	No	347.186618	410.217941	1194.3	7.500	11.4	-1.0	0.66	4236	2.19	0.18
003439126-07	OBS	No	251.654938	196.634295	584.4	8.995	11.4	3.1	0.66	4236	1.57	0.28
003439126-08	OBS	No	428.663233	529.169612	3632.6	17.808	10.9	9.7	0.66	4236	3.81	0.14
003439126-09	OBS	No	323.272075	281.919624	2046.6	20.411	9.8	7.4	0.66	4236	2.88	0.20
003439126-10	OBS	No	229.359900	174.128589	1174.7	7.500	10.2	-1.0	0.66	4236	2.17	0.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003439126-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-03	OBS	FP	0.00	0	0	0	1	EPHEM_MATCH
003439126-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV
003439126-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST
003439126-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
003439126-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
003439126-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

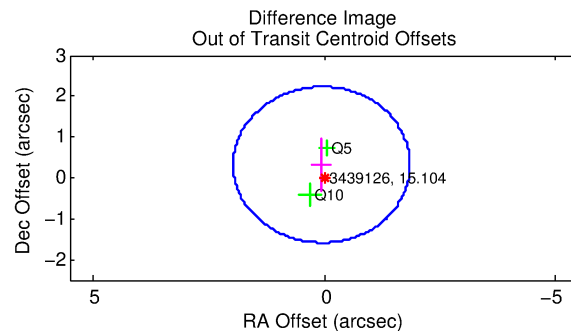
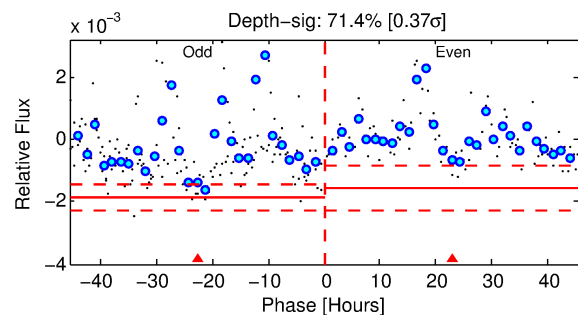
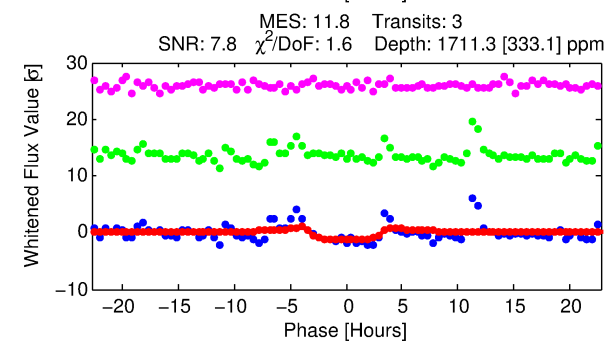
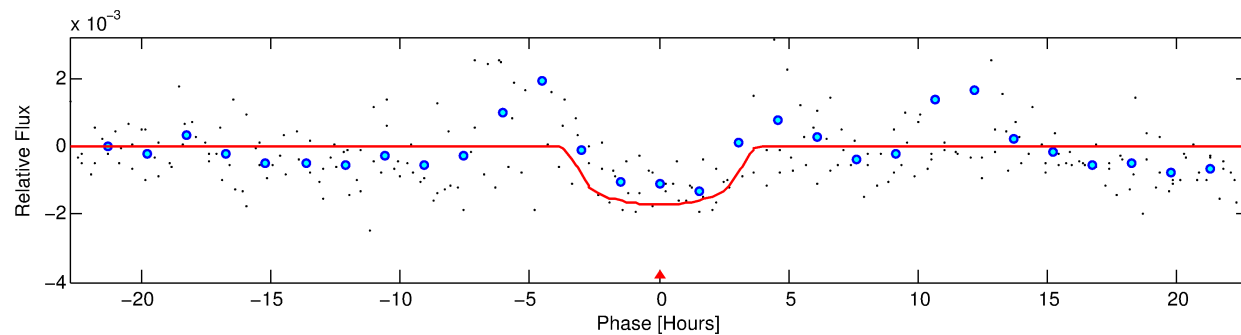
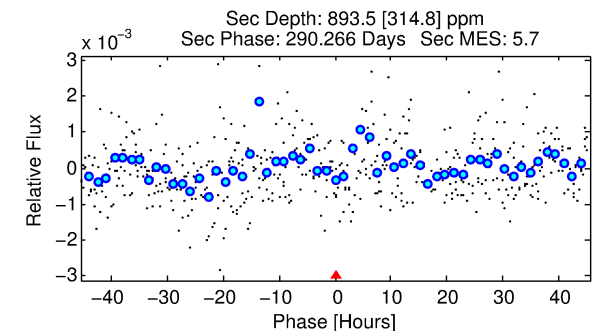
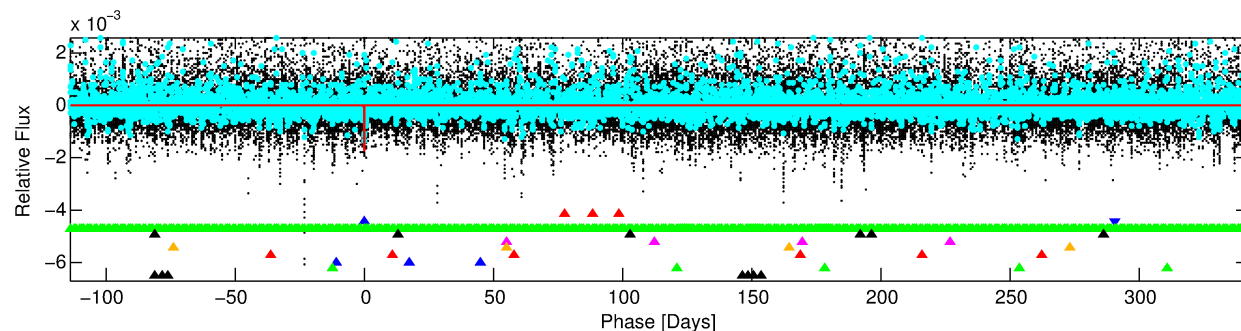
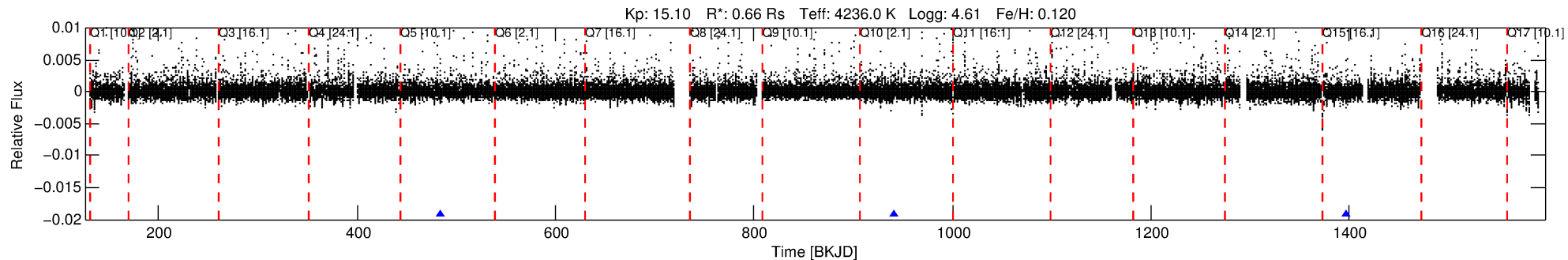
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003439126-02

No Significant Match Found

DV One-Page Summary

KIC: 3439126 Candidate: 2 of 10 Period: 456.287 d



DV Fit Results:

Period = 456.28652 [0.01250] d
Epoch = 484.4303 [0.0147] BKJD
Rp/R* = 0.0452 [0.0086]
a/R* = 266.91 [129.43]
b = 0.87 [0.14]
Seff = 0.12 [0.02]
Teq = 152 [6] K
Rp = 3.28 [0.69] Re
a = 1.0092 [0.0738] AU
Ag = 46667.78 [24603.17] [1.90σ]
Teff = 3445 [460] K [7.15σ]

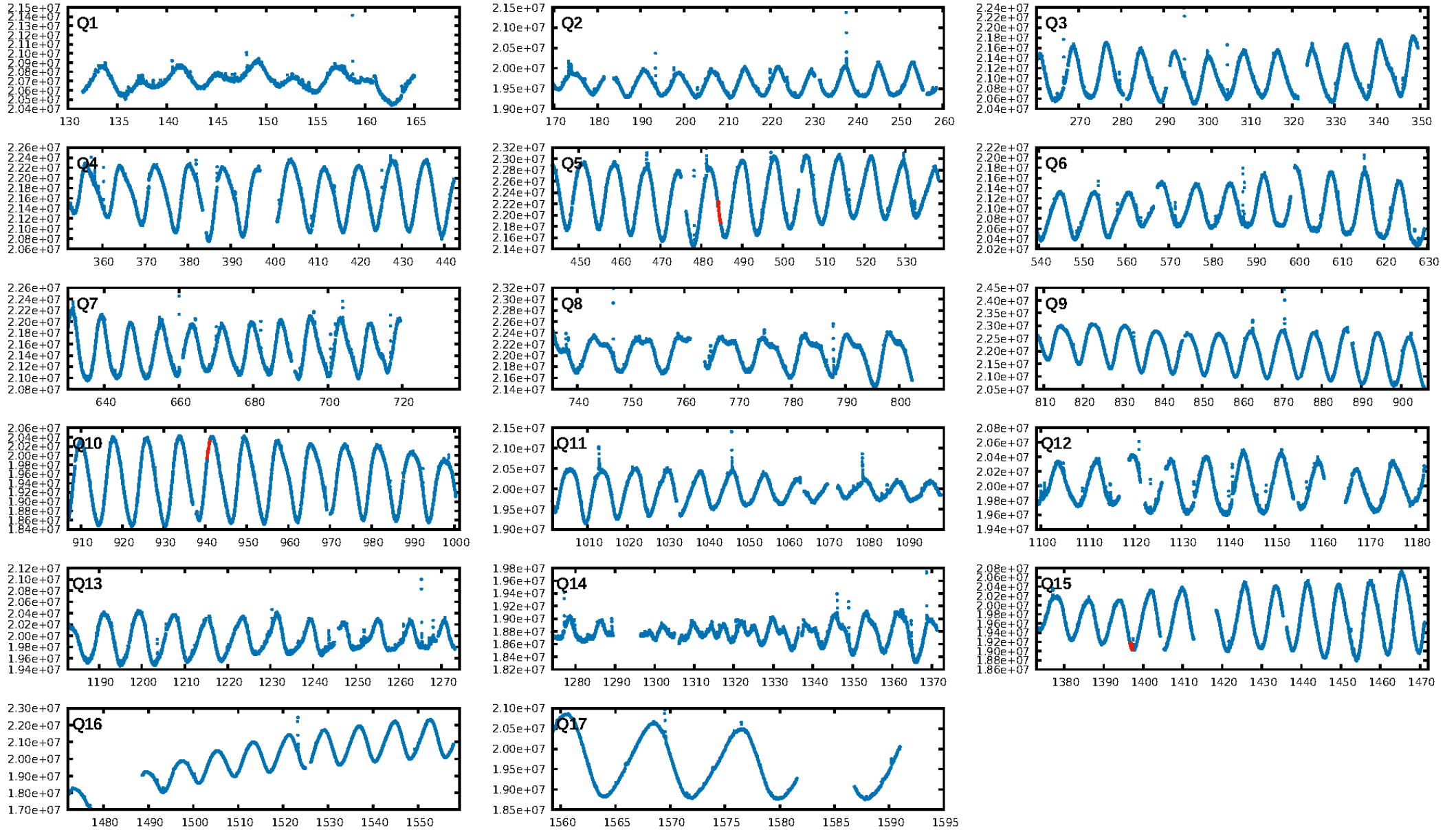
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [34.24σ]
LongPeriod-sig: 100.0% [20.32σ]
ModelChiSquare2-sig: 15.3%
ModelChiSquareGof-sig: 98.2%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.558
Centroid-sig: 92.4%
Centroid-so: 0.114 arcsec [0.16σ]
OotOffset-rm: 0.326 arcsec [0.51σ]
KicOffset-rm: 0.286 arcsec [0.41σ]
OotOffset-st: 1/0/0/1 [2]
KicOffset-st: 1/0/0/1 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 0.50 [1/2]

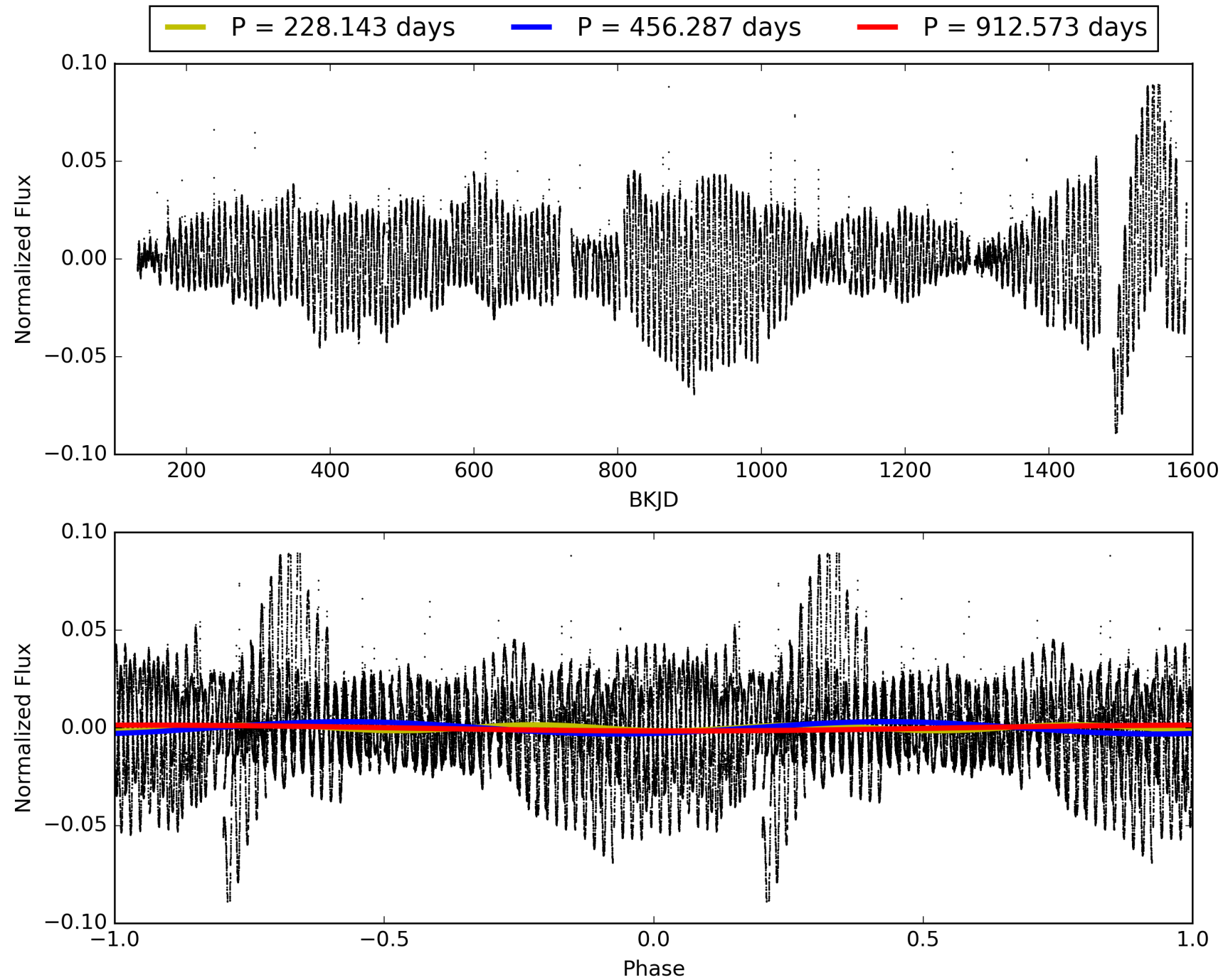
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:53:38 Z

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

TCE 003439126-02, PDC Light Curves

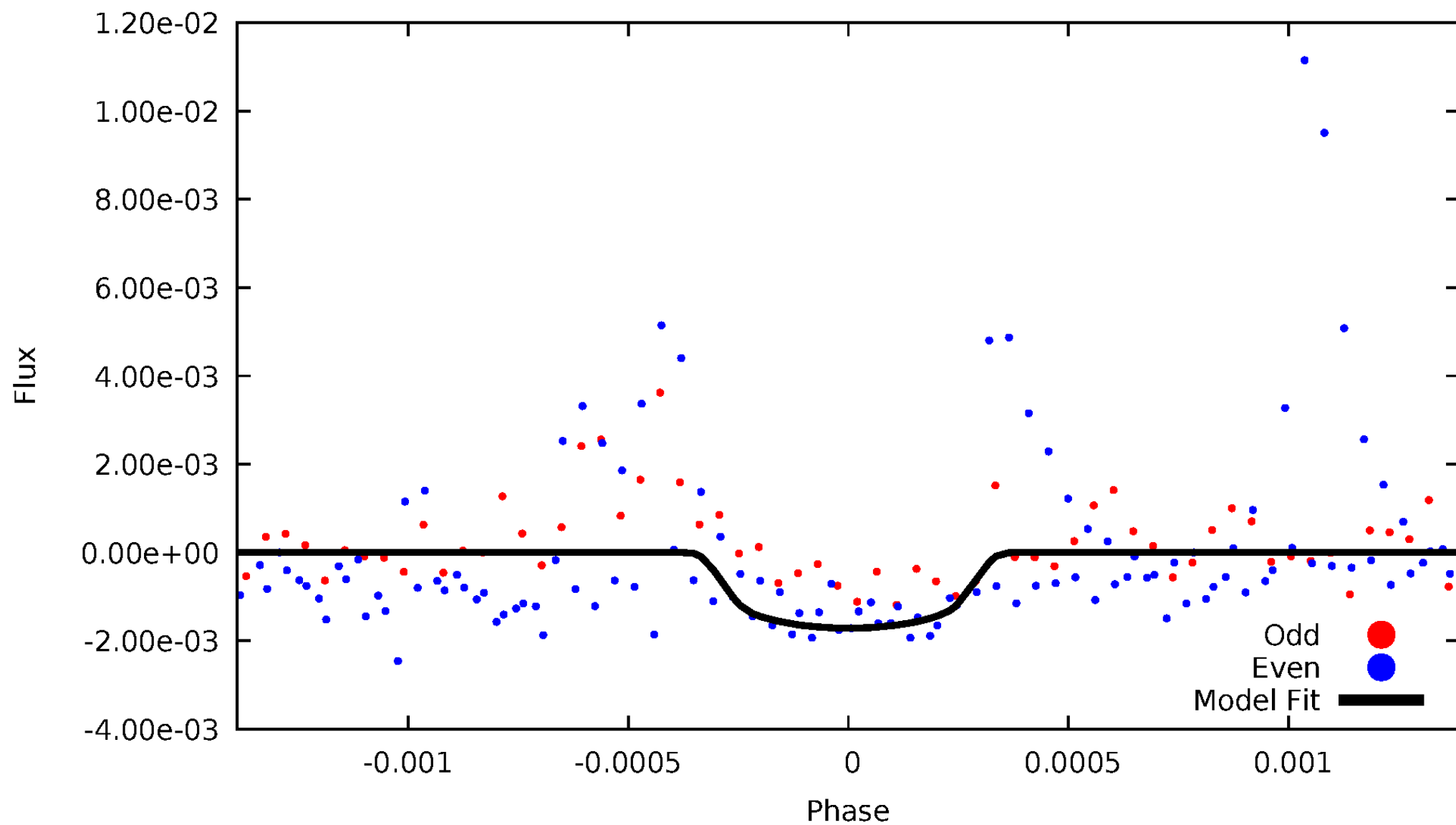


TCE 003439126-02



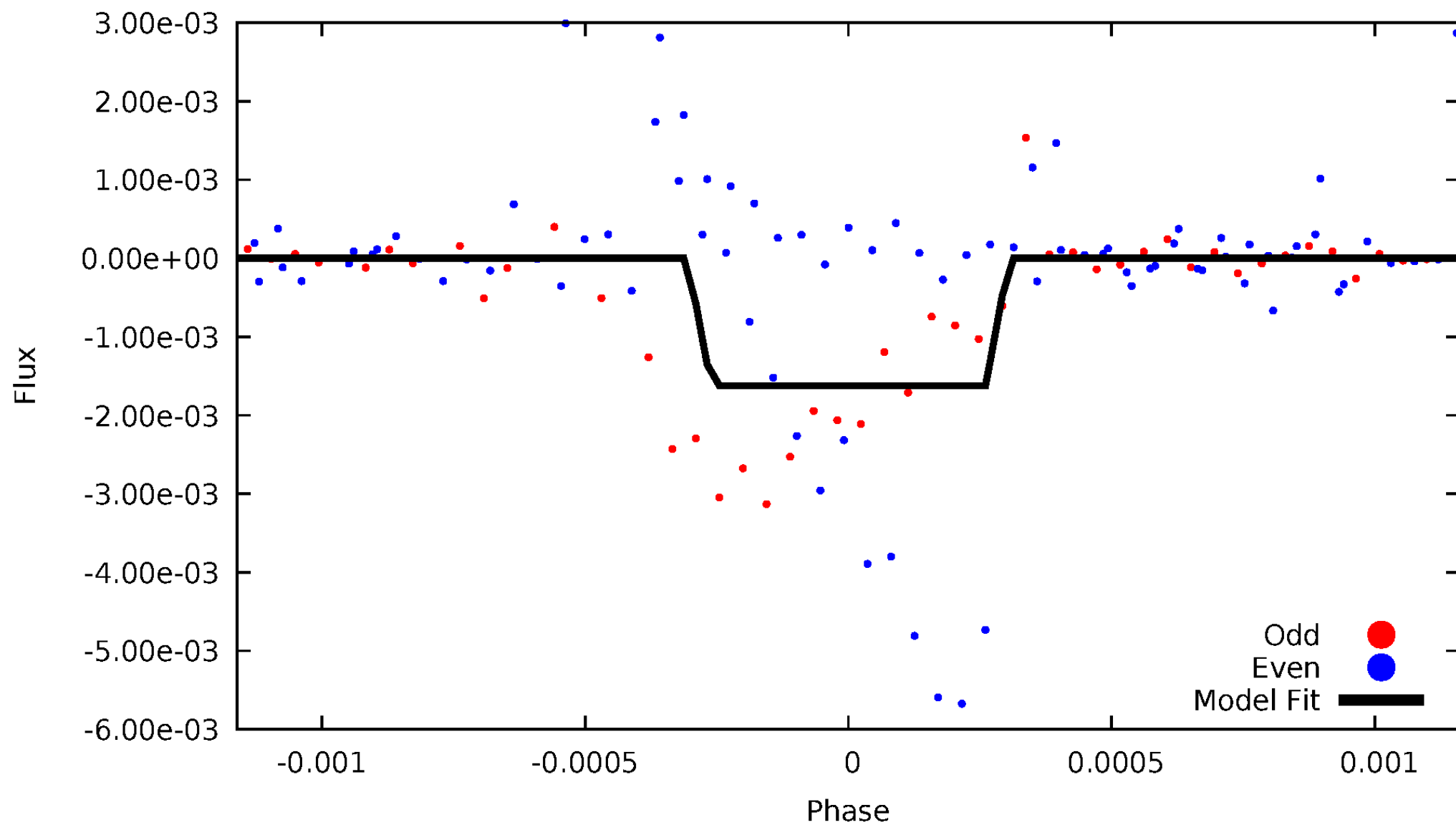
DV Odd/Even

TCE 003439126-02



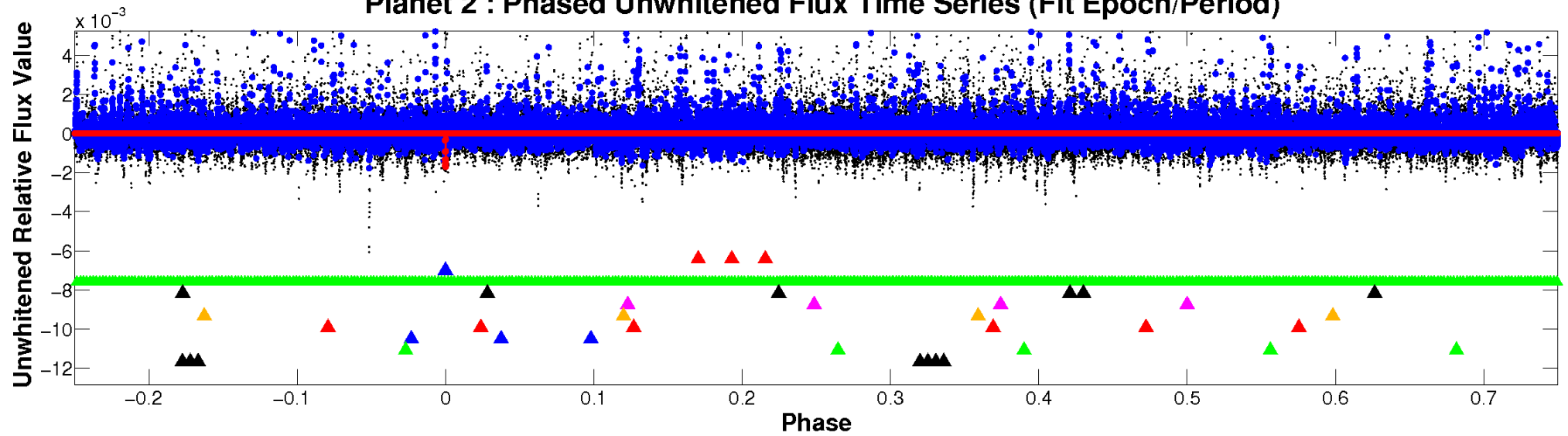
ALT Odd/Even

TCE 003439126-02

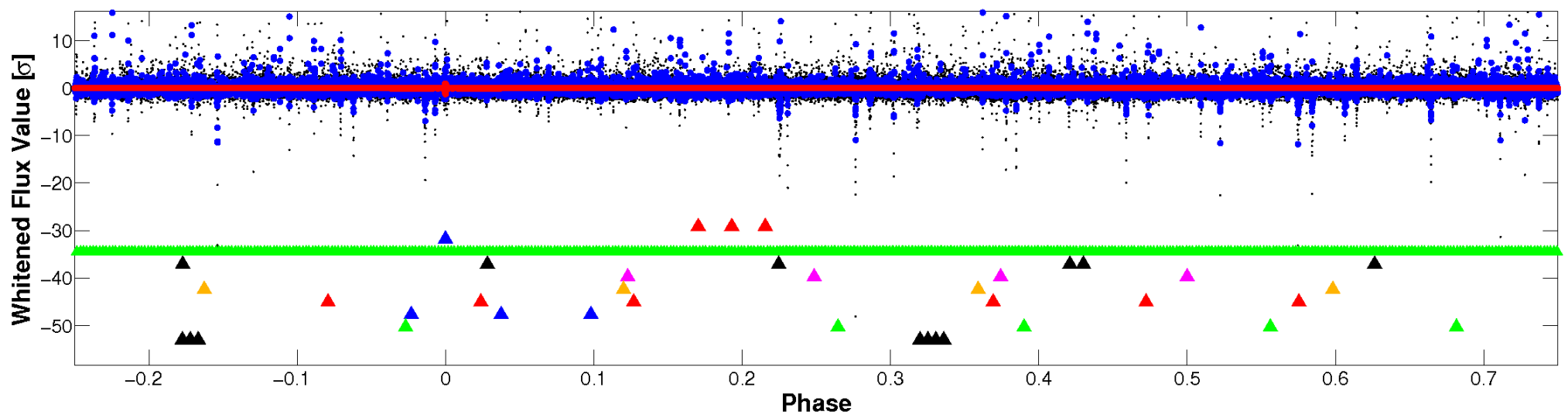


Non-Whitened Vs. Whitened Light Curve

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

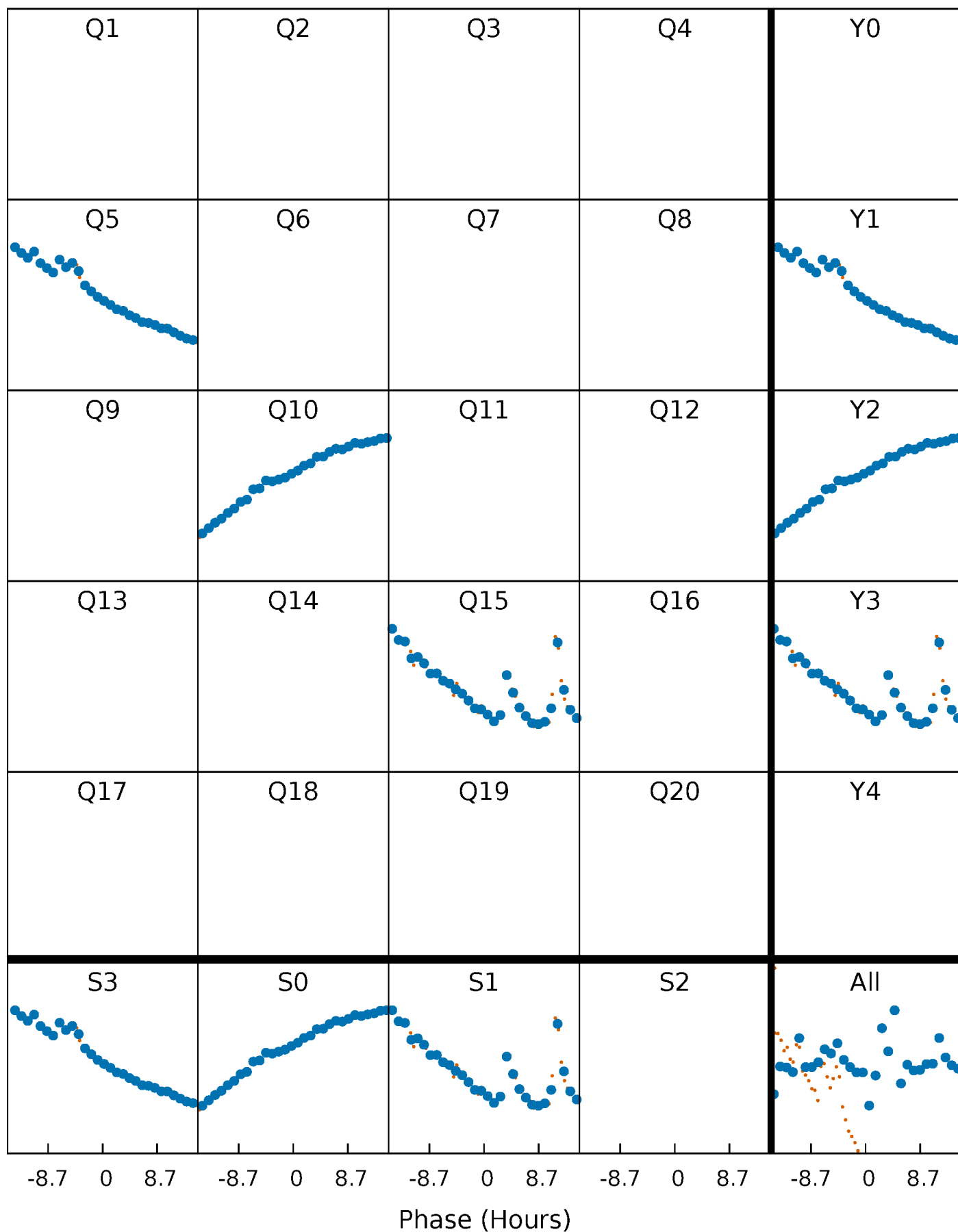


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



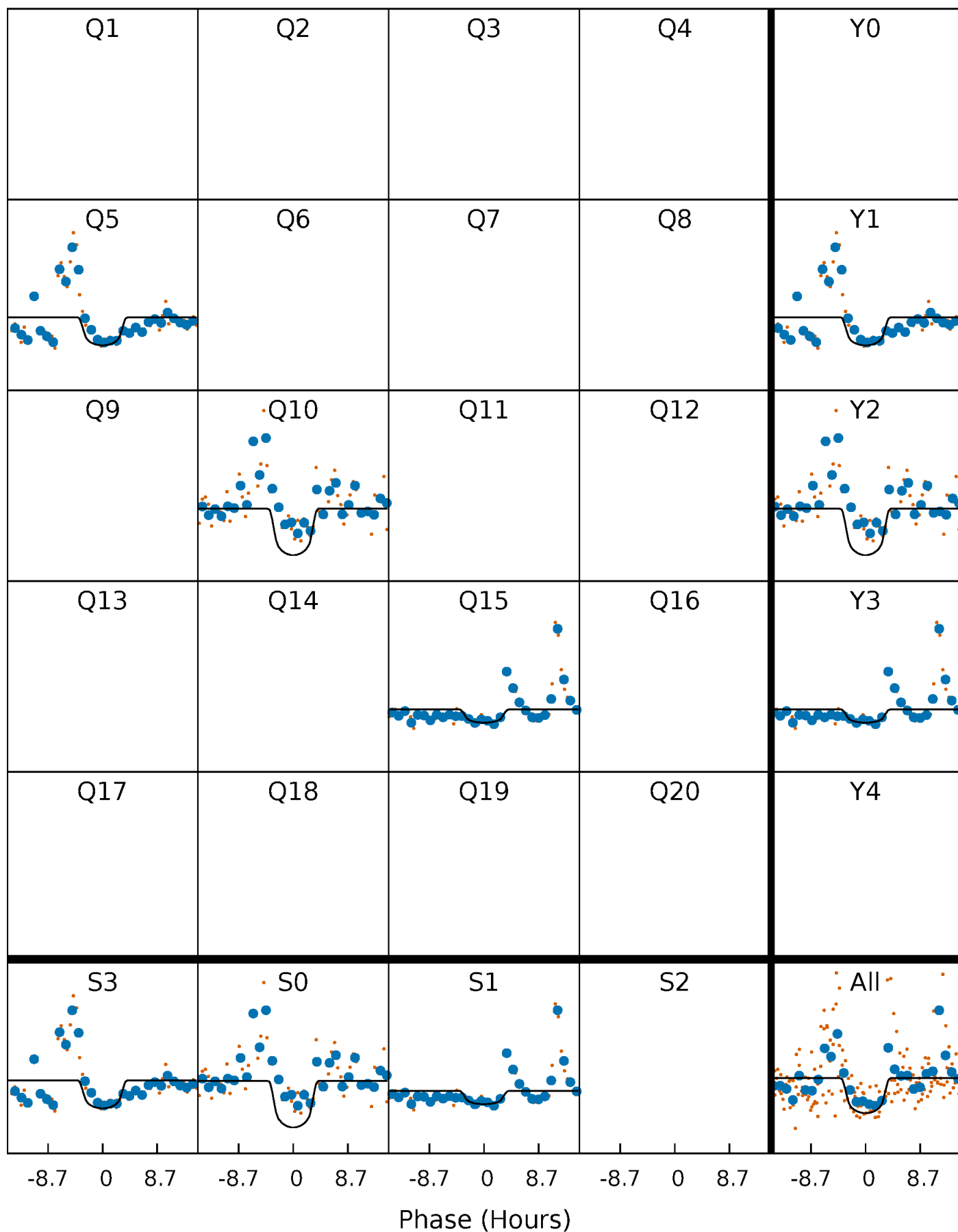
PDC Quarter-Phased Transit Curves

TCE 003439126-02 $P=456.286524$ Days $T_0=484.430344$ (BKJD)



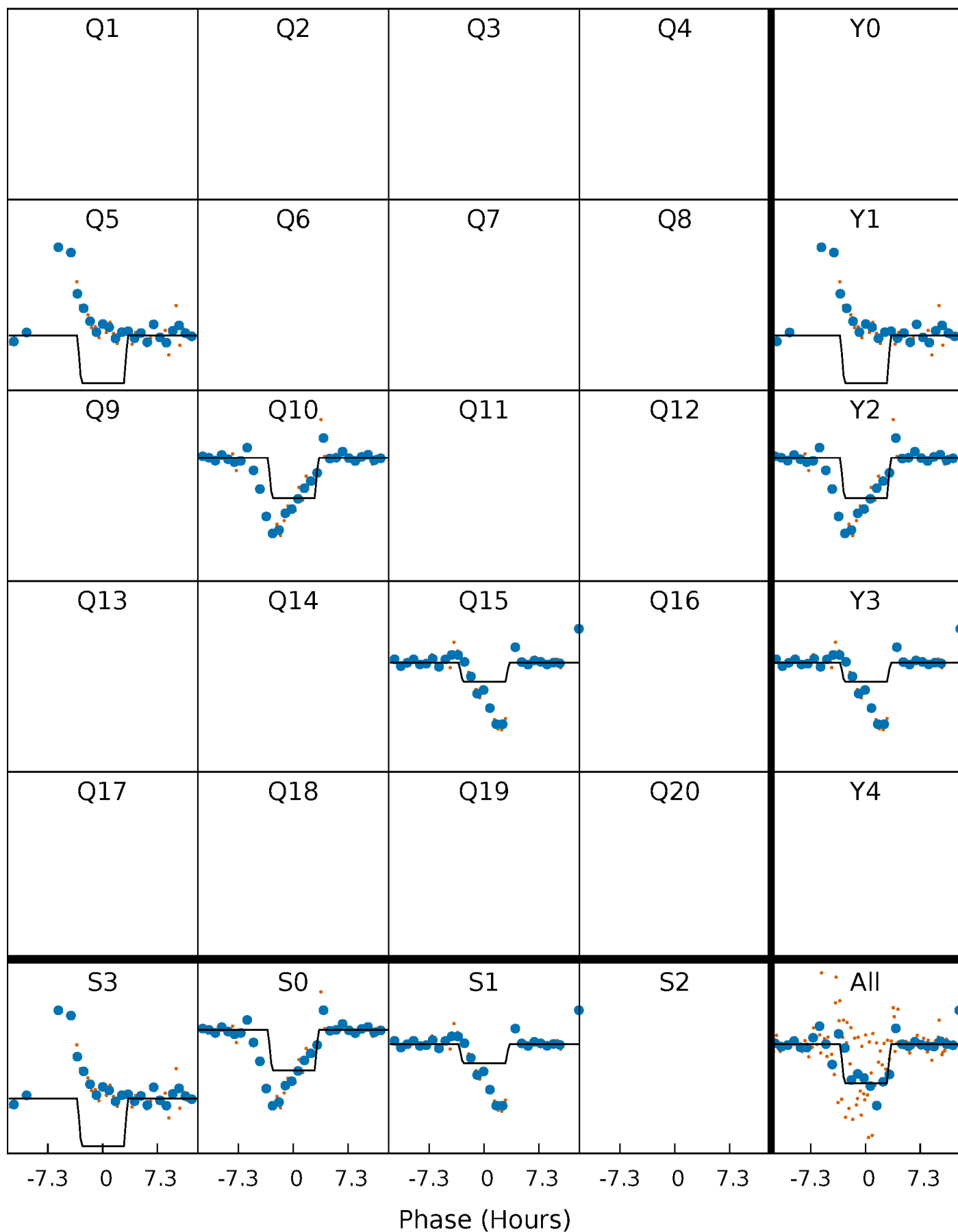
DV Quarter-Phased Transit Curves

TCE 003439126-02 $P=456.286524$ Days $T_0=484.430344$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

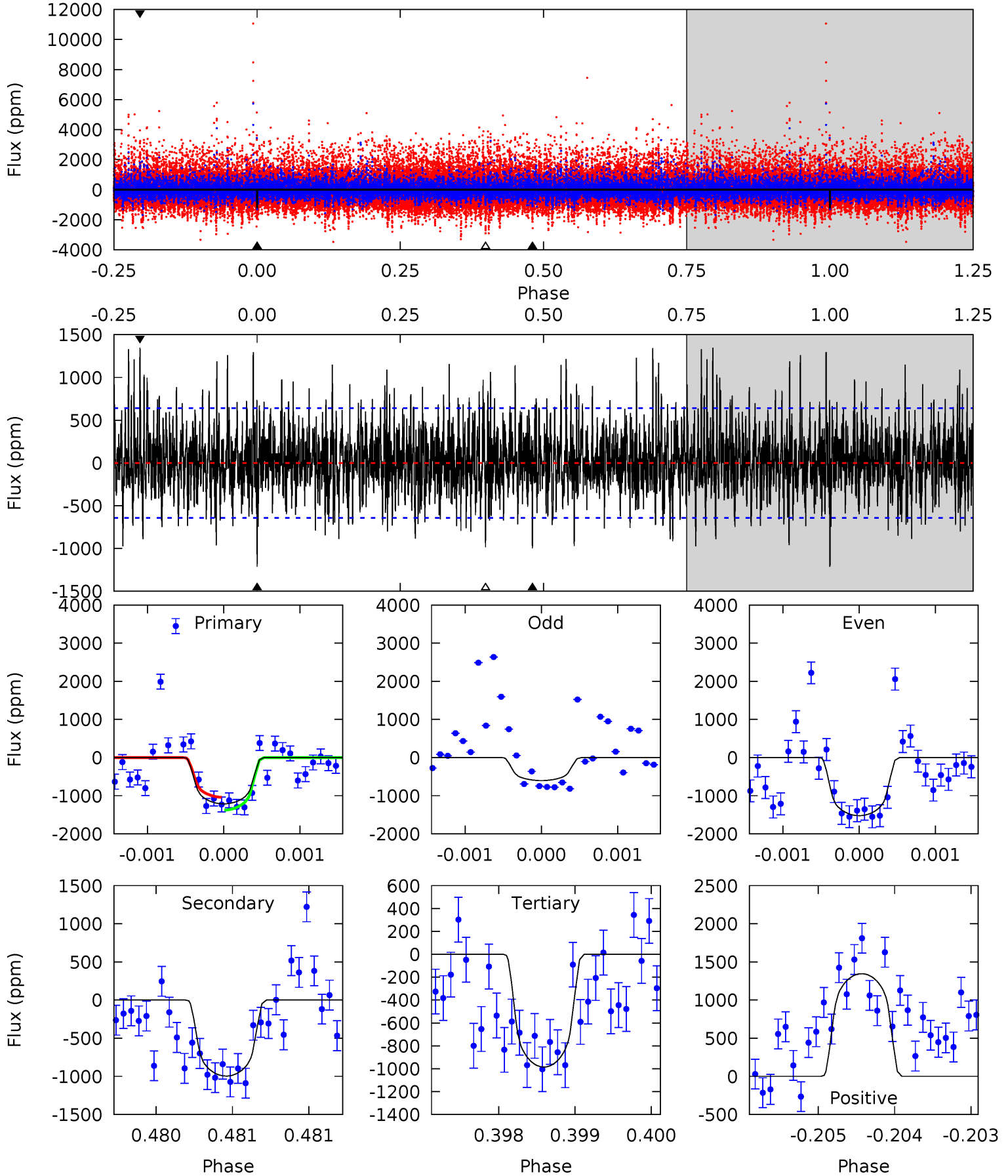
TCE 003439126-02 P=456.274584 Days $T_0=484.440688$ (BKJD)



DV Model-Shift Uniqueness Test

003439126-02, $P = 456.286524$ Days, $E = 28.143820$ Days

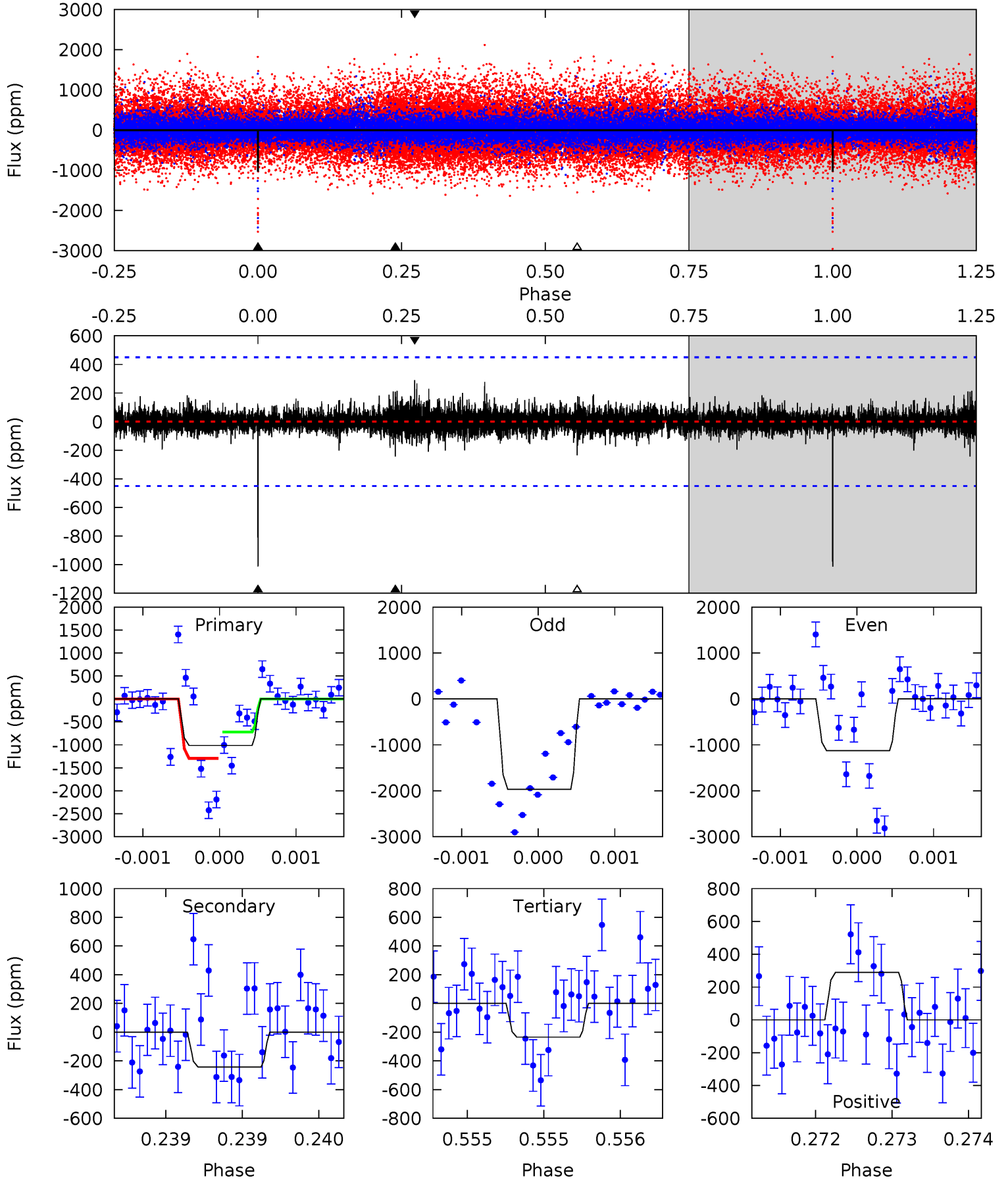
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.4	8.55	8.46	11.6	5.51	3.38	2.67	1.96	-1.14	0.09	-3.00	2.47	0.87	0.53	1.45



Alt Model-Shift Uniqueness Test

003439126-02, P = 456.274584 Days, E = 28.166104 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.5	2.99	2.89	3.58	5.55	3.44	0.56	9.60	8.92	0.10	-0.58	6.08	0.80	0.22	3.57



Stellar Parameters For KIC 003439126

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4236^{+129}_{-142}	$4.612^{+0.052}_{-0.017}$	$0.120^{+0.250}_{-0.300}$	$0.664^{+0.028}_{-0.061}$	$0.657^{+0.047}_{-0.053}$	$3.163^{+0.729}_{-0.252}$
	+3%/-3%	+1%/-0%	+208%/-250%	+4%/-9%	+7%/-8%	+23%/-8%
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 003439126-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-996 ± 116	$3.21^{+0.59}_{-0.62}$	210^{+7}_{-7}	3727^{+326}_{-220}	54407^{+29972}_{-16633}
Alt.	-243 ± 81	$2.88^{+0.60}_{-0.67}$	210^{+7}_{-7}	3123^{+281}_{-249}	17376^{+11840}_{-7420}

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 $A_{obs} \gg 1.0$

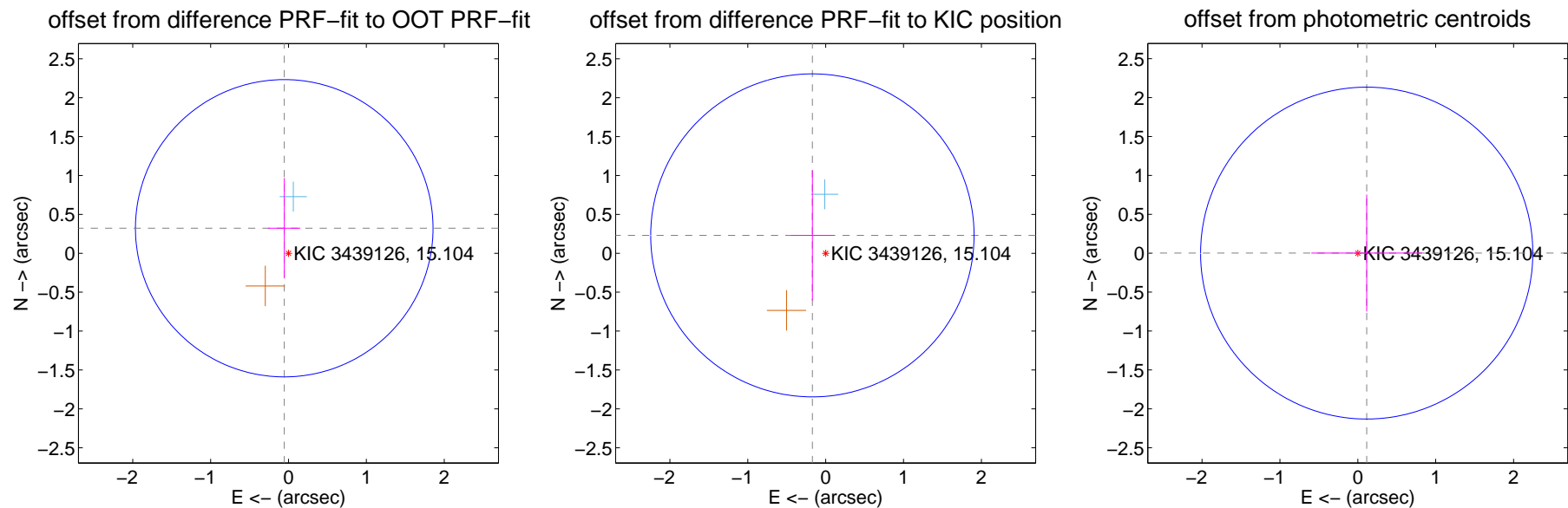
DV Centroid Data

Supplemental centroid analysis for 003439126-02. Kepler magnitude: 15.10. Transit SNR 7.78

There are 1 quarters with good PRF difference image offsets

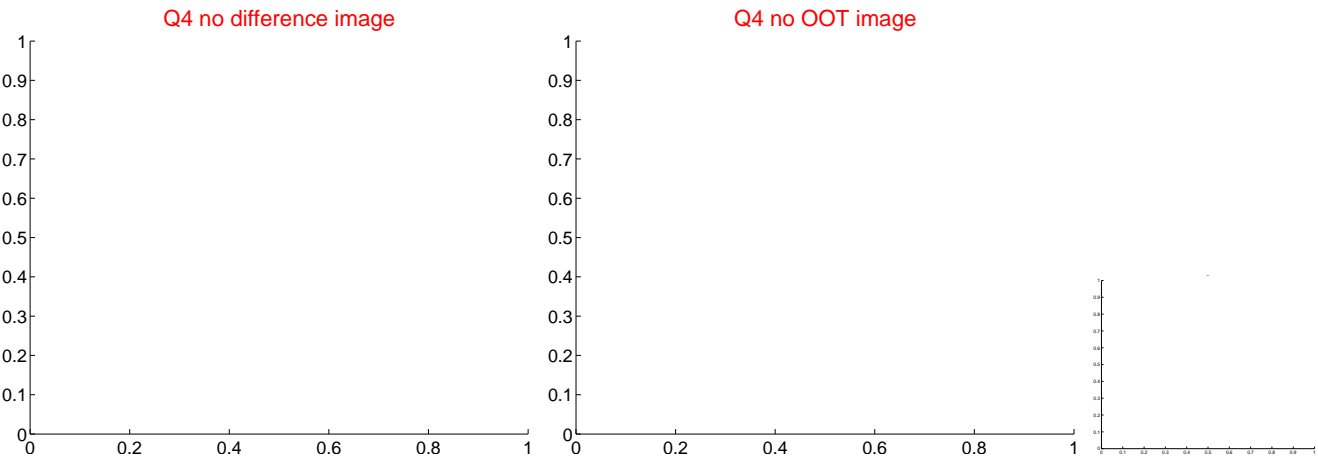
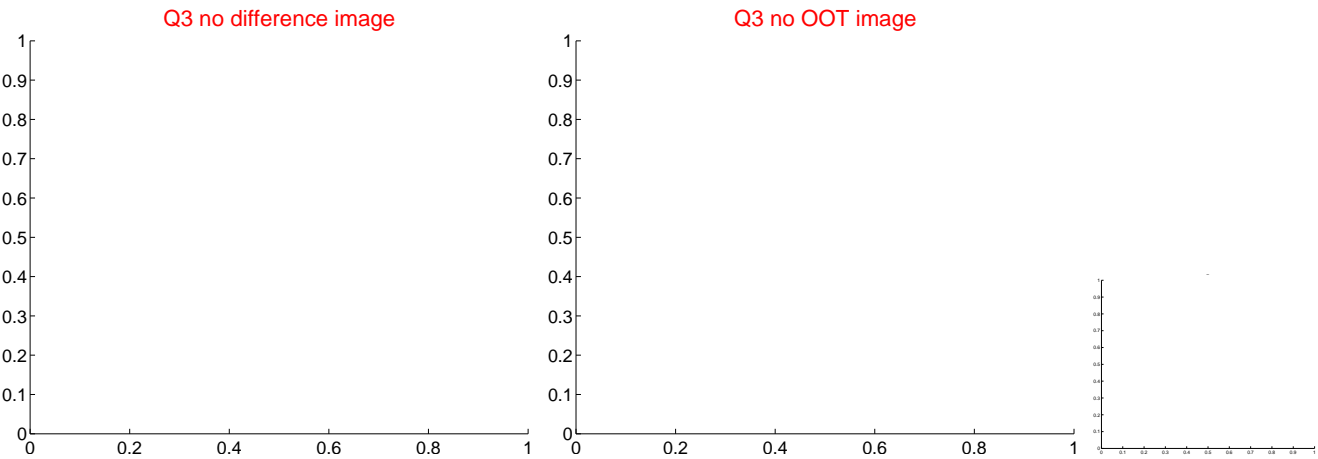
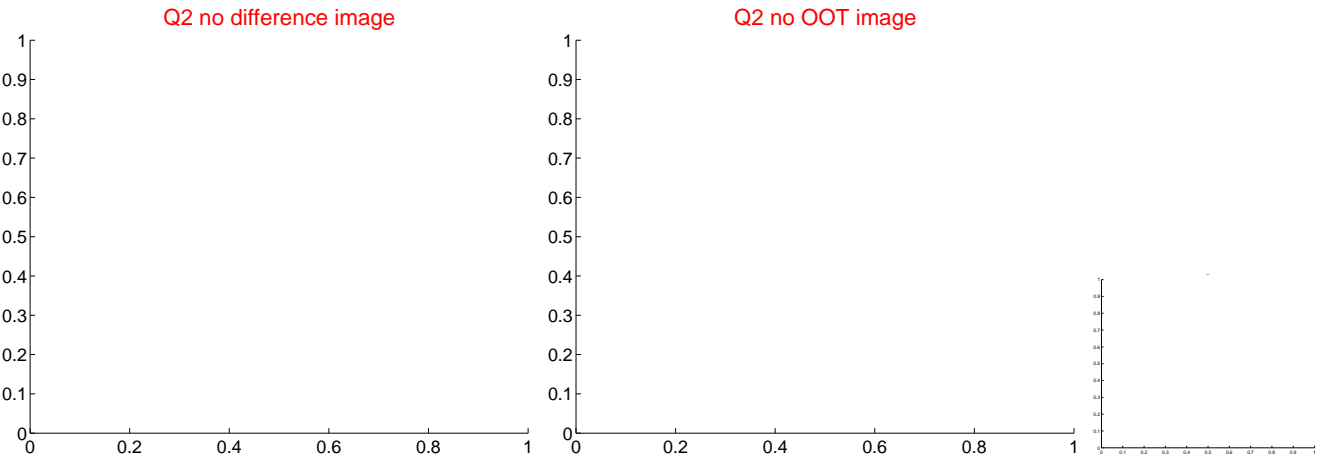
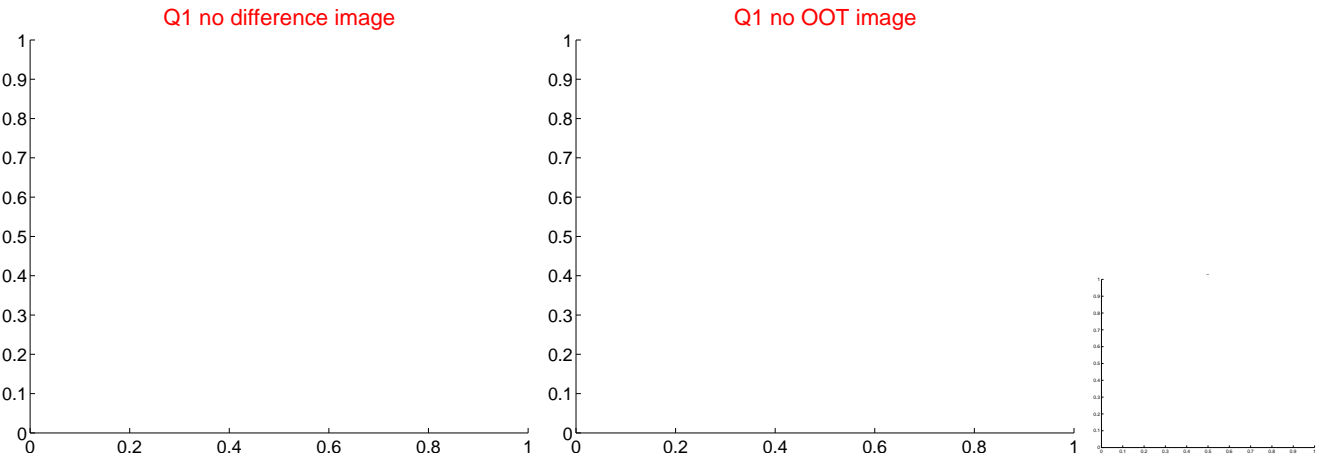
The direct PRF centroid is offset from the target star catalog position by about 0.37 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.326 ± 0.637	0.51	0.055 ± 0.208	0.322 ± 0.645
PRF-fit source offset from KIC position	0.286 ± 0.692	0.41	0.170 ± 0.276	0.230 ± 0.836
photometric centroid source offset	0.11 ± 0.71	0.16	-0.11 ± 0.71	0.00 ± 0.75

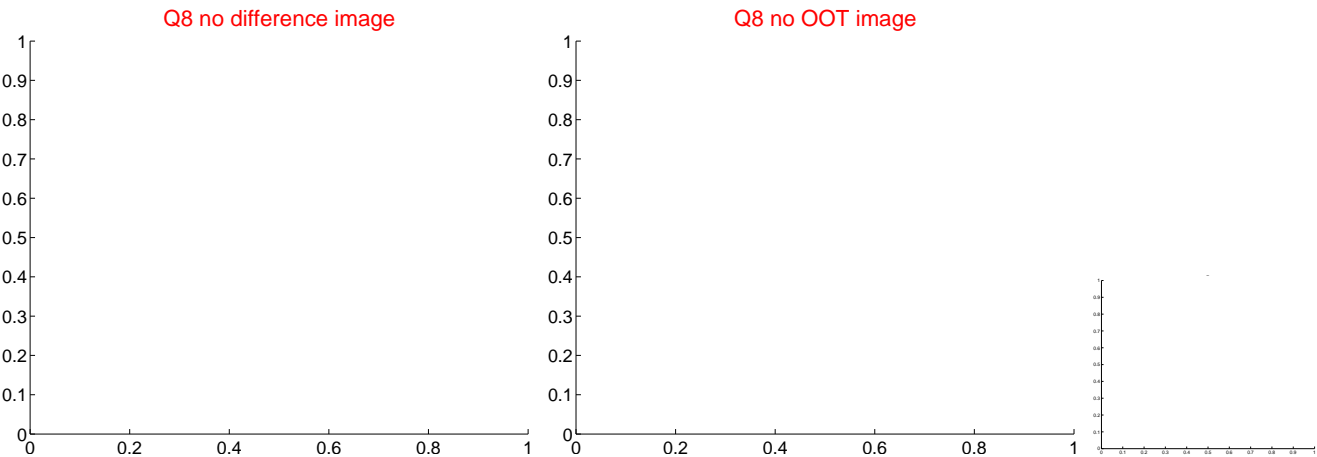
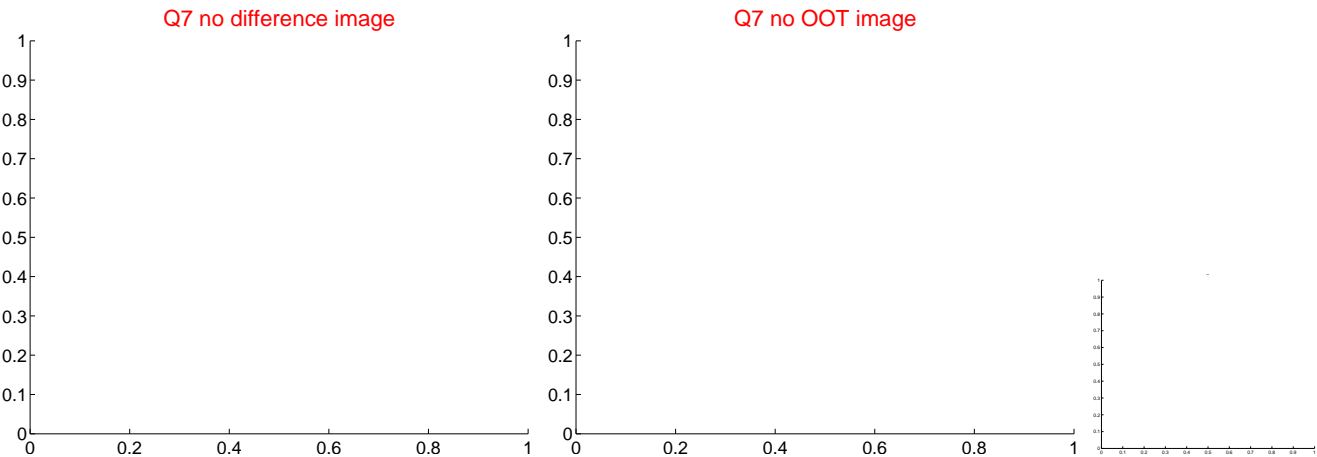
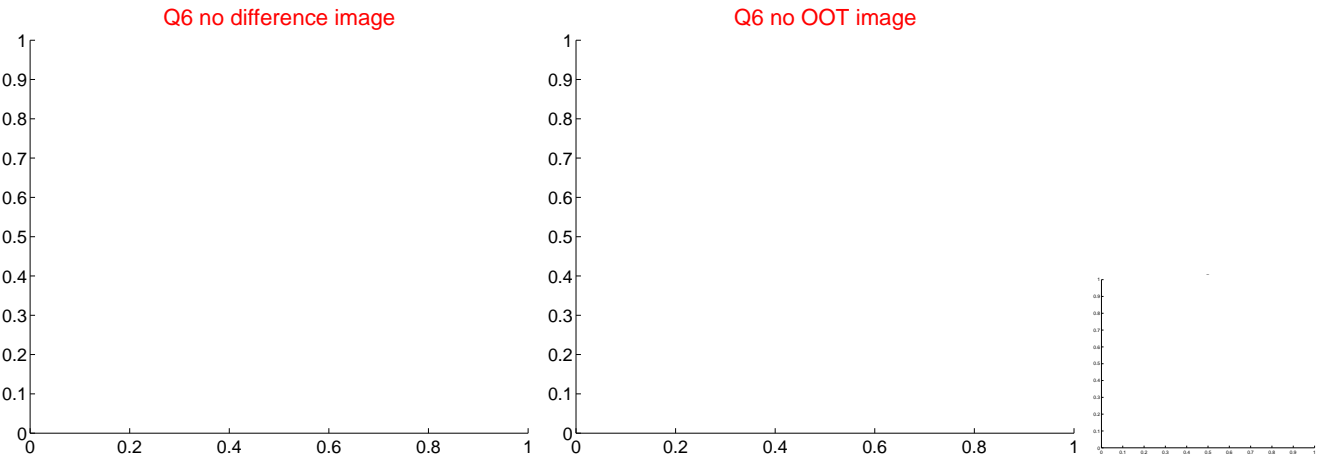
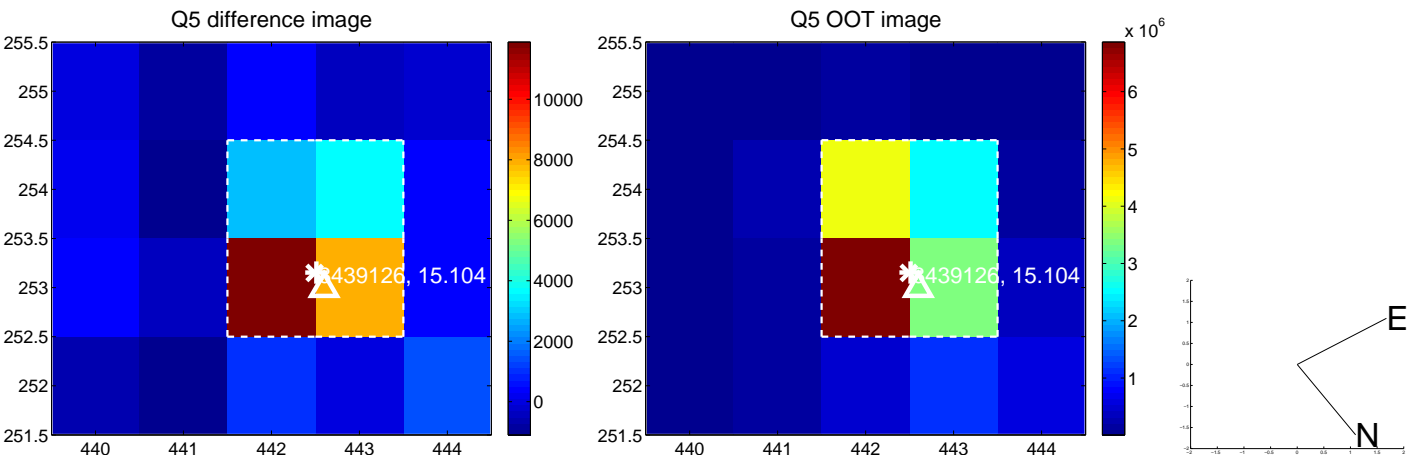


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

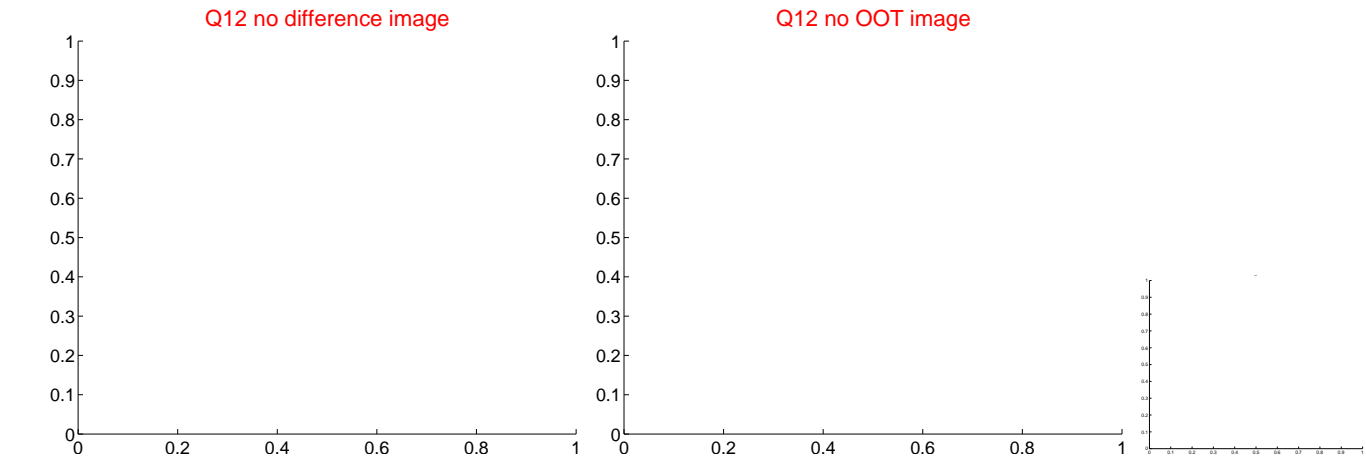
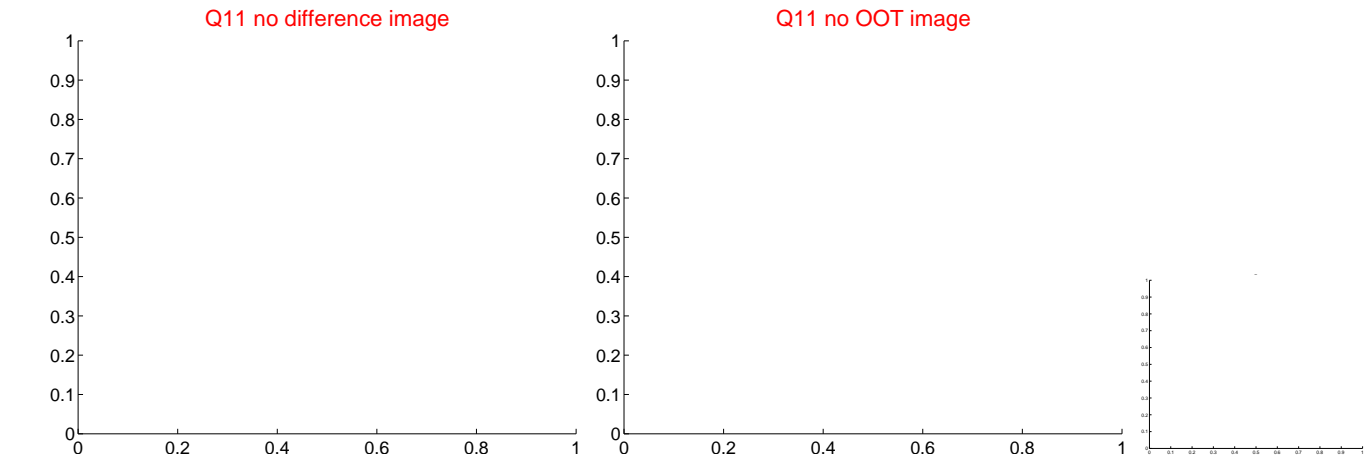
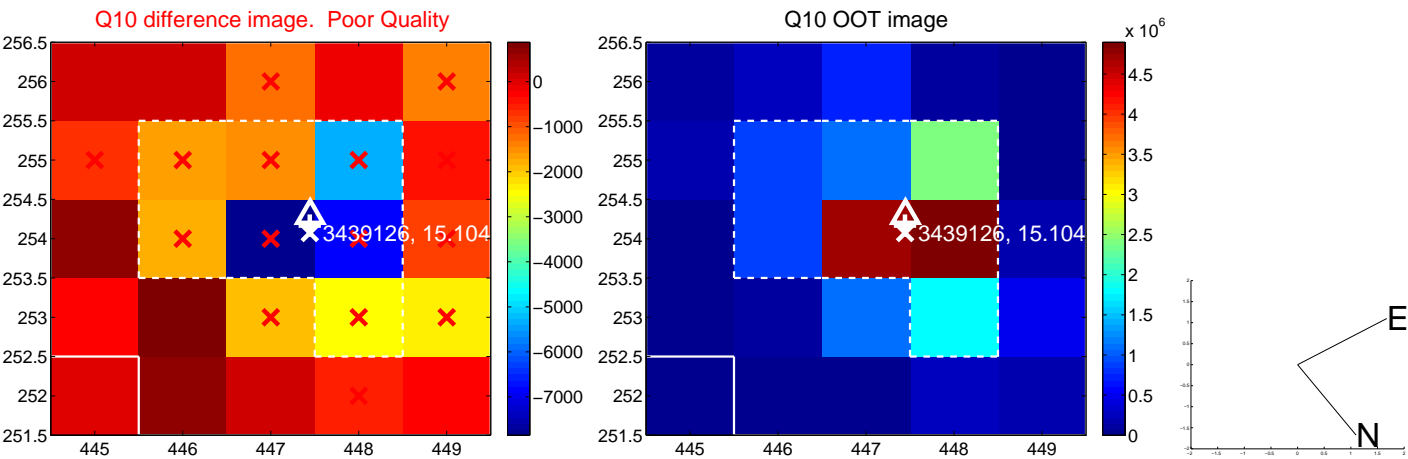
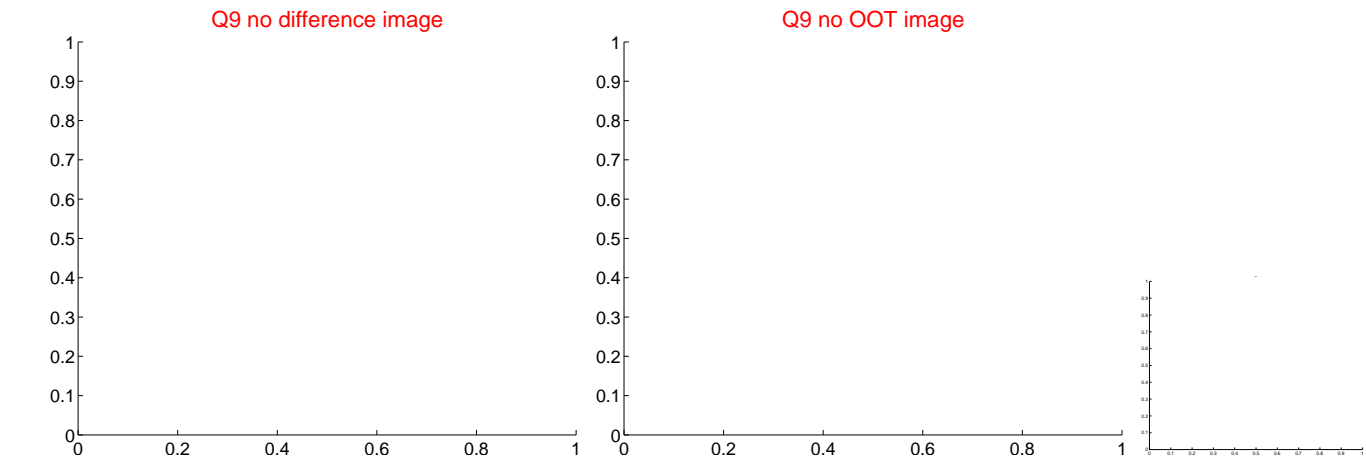
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



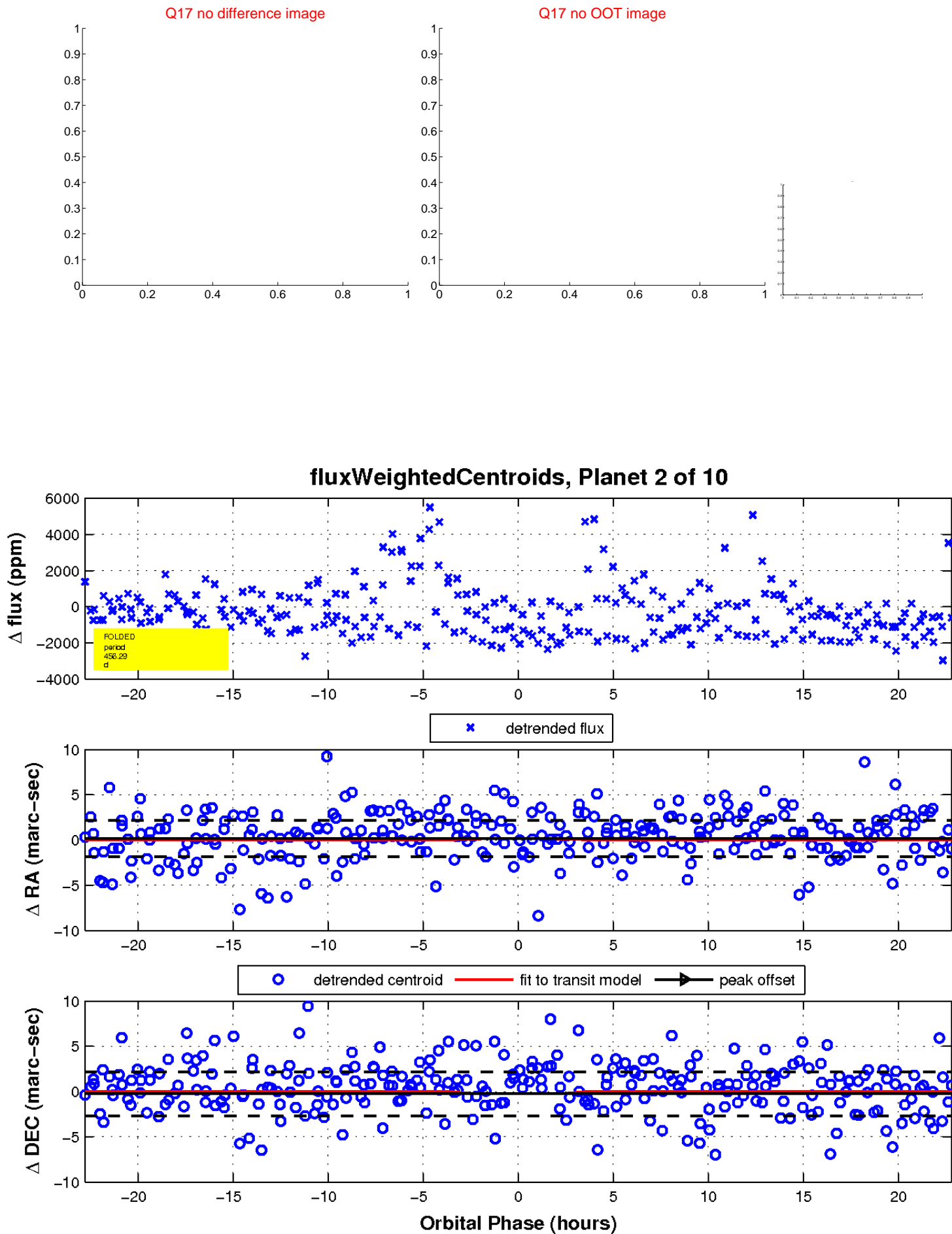
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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

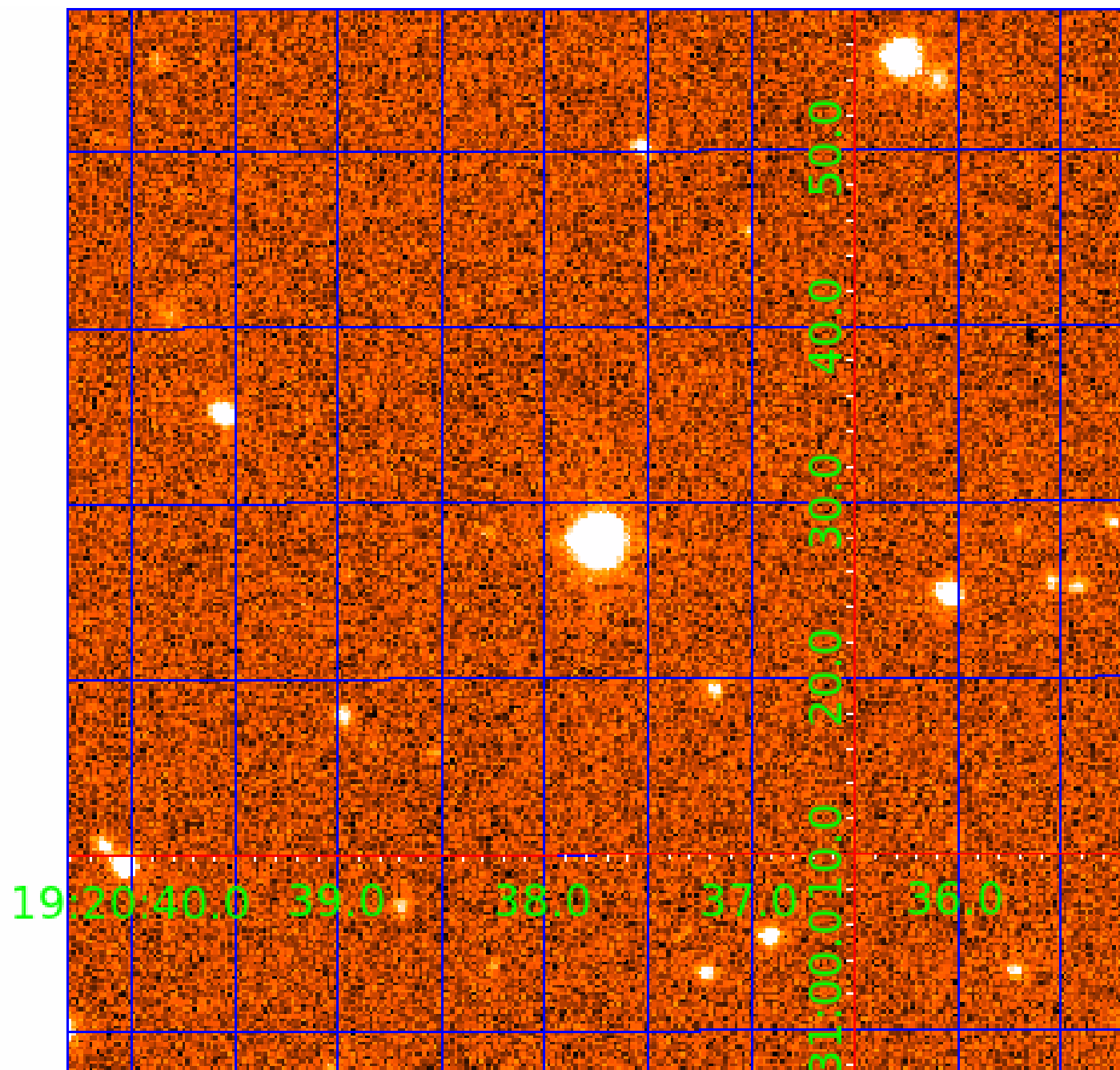


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 003439126

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})
003439126-01	OBS	No	466.598907	562.202843	1581.3	9.515	13.7	6.5	0.66	4236	2.77	0.12
003439126-02	OBS	No	456.286524	484.430344	1711.3	7.600	11.8	7.8	0.66	4236	3.27	0.12
003439126-03	OBS	7655.01	2.976224	132.922051	197.1	6.191	11.6	10.9	0.66	4236	1.14	102.47
003439126-04	OBS	No	272.945566	224.384038	662.9	9.352	11.7	4.0	0.66	4236	1.87	0.25
003439126-05	OBS	No	398.924392	256.302150	1050.5	9.000	11.6	-1.0	0.66	4236	2.05	0.15
003439126-06	OBS	No	347.186618	410.217941	1194.3	7.500	11.4	-1.0	0.66	4236	2.19	0.18
003439126-07	OBS	No	251.654938	196.634295	584.4	8.995	11.4	3.1	0.66	4236	1.57	0.28
003439126-08	OBS	No	428.663233	529.169612	3632.6	17.808	10.9	9.7	0.66	4236	3.81	0.14
003439126-09	OBS	No	323.272075	281.919624	2046.6	20.411	9.8	7.4	0.66	4236	2.88	0.20
003439126-10	OBS	No	229.359900	174.128589	1174.7	7.500	10.2	-1.0	0.66	4236	2.17	0.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003439126-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-03	OBS	FP	0.00	0	0	0	1	EPHEM_MATCH
003439126-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV
003439126-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST
003439126-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
003439126-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
003439126-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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.

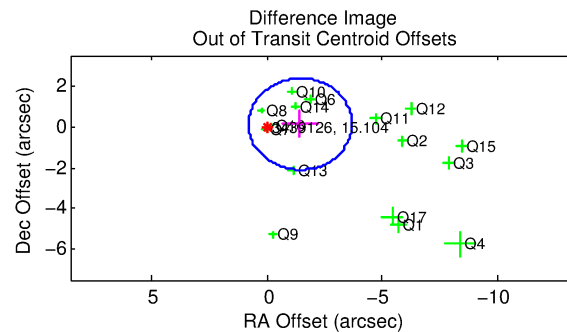
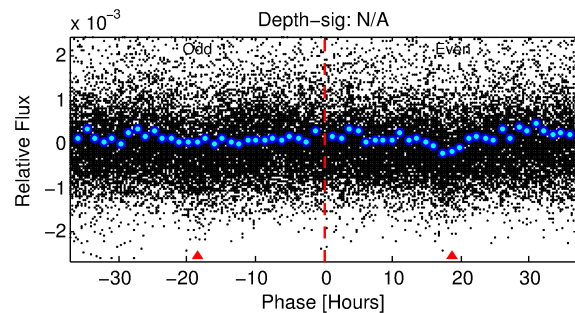
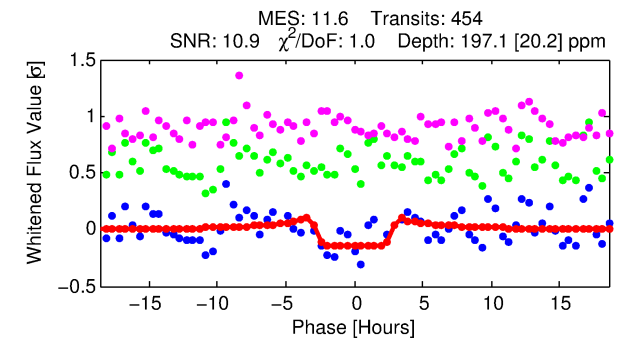
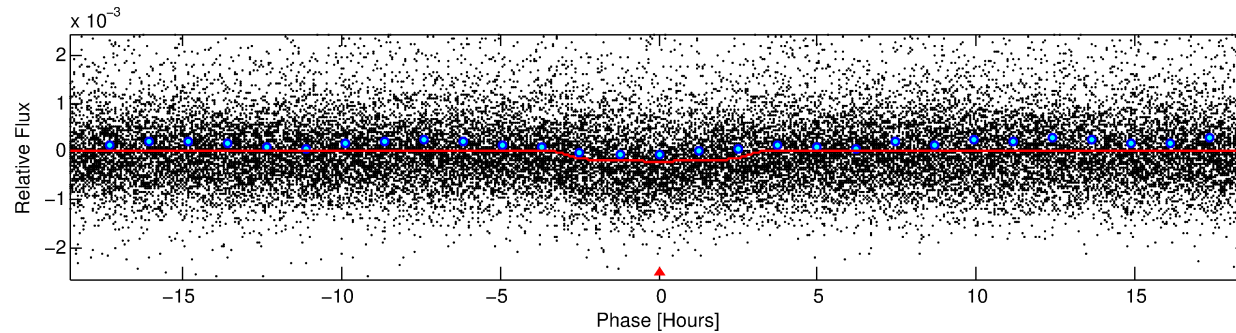
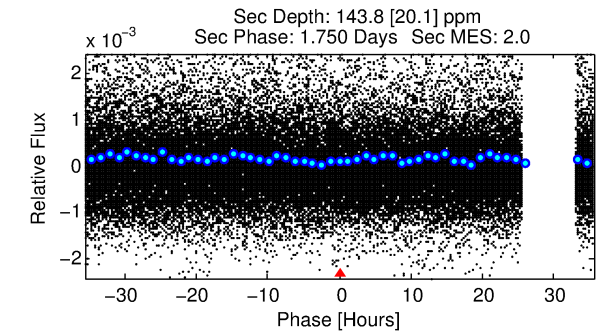
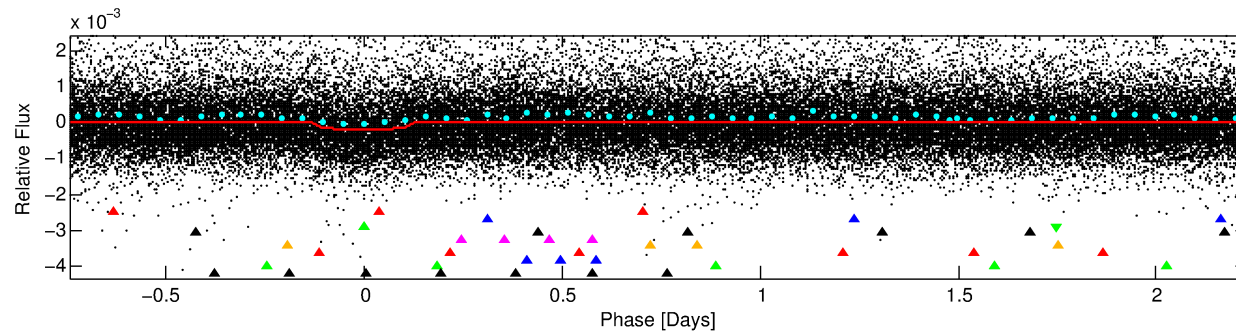
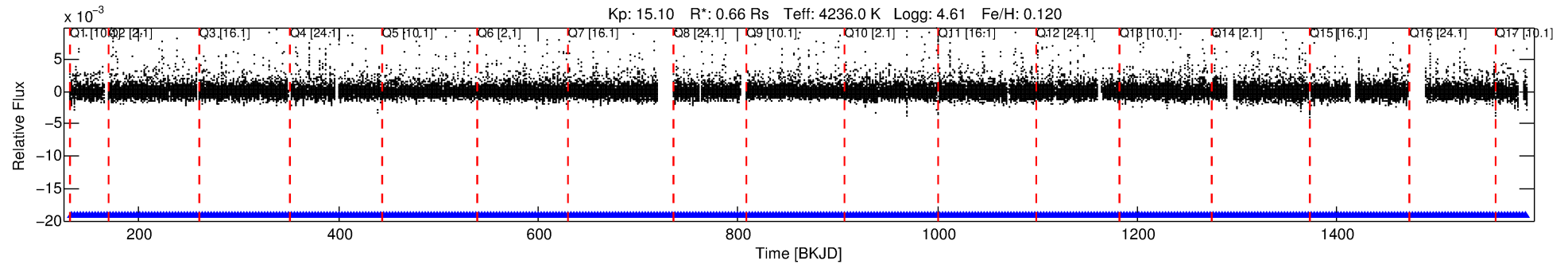
Ephemeris Match Information For 003439126-03

TCE (1)	KIC	Parent (2)	Parent KIC	P ₁ :P ₂	Dist (″)	ΔRow	ΔCol	m ₂	m ₁	D ₂ /D ₁	Mechanism	Flag	σ_P	σ_T
003439126-03	3439126	4980.01	3439031	1:1	79.1	1	20	11.29	15.11	2265.70	Direct-PRF	0	4.36	2.38

Notes: P₁:P₂ is the period ratio. Dist is the distance in arcseconds. ΔRow and ΔCol are the number of pixels apart in row and column. m₂ and m₁ are the magnitudes of the parent and child. D₂/D₁ is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

KIC: 3439126 Candidate: 3 of 10 Period: 2.976 d



DV Fit Results:

Period = 2.97622 [0.00002] d
Epoch = 132.9221 [0.0044] BKJD
Rp/R* = 0.0157 [0.0033]
a/R* = 2.03 [1.15]
b = 0.89 [0.18]
Seff = 102.47 [17.18]
Teq = 811 [34] K
Rp = 1.14 [0.26] Re
a = 0.0352 [0.0026] AU
Ag = 76.07 [34.79] [2.16σ]
Teffp = 3704 [431] K [6.68σ]

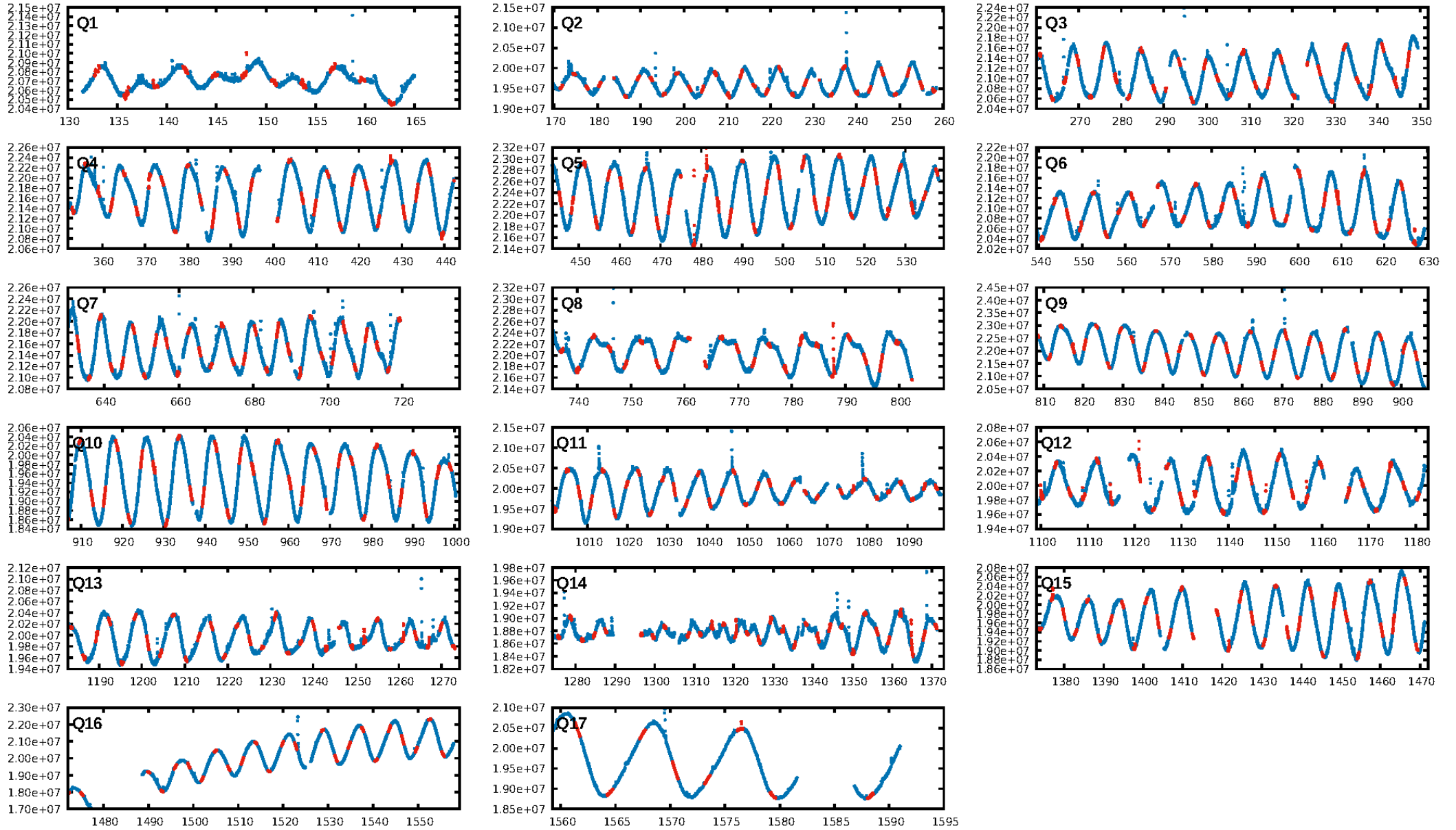
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [558.69σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [435/435]
GhostDiagnostic-chr: 0.3135
Centroid-sig: 0.0%
Centroid-so: 3.413 arcsec [6.33σ]
OotOffset-rm: 1.448 arcsec [1.94σ]
KicOffset-rm: 1.370 arcsec [1.83σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.19 [3/16]
DiffImageOverlap-fno: 1.00 [17/17]

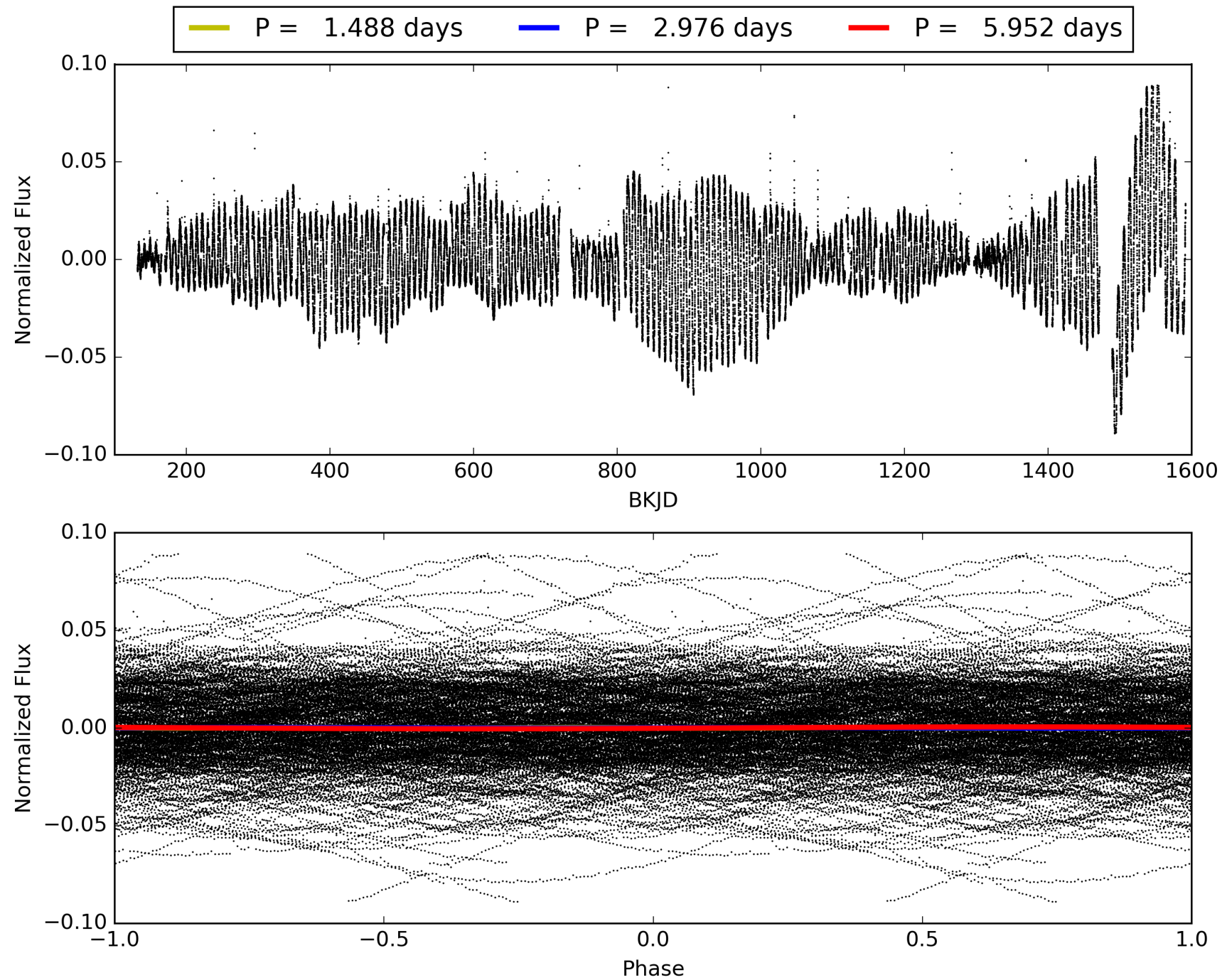
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:53:45 Z

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

TCE 003439126-03, PDC Light Curves

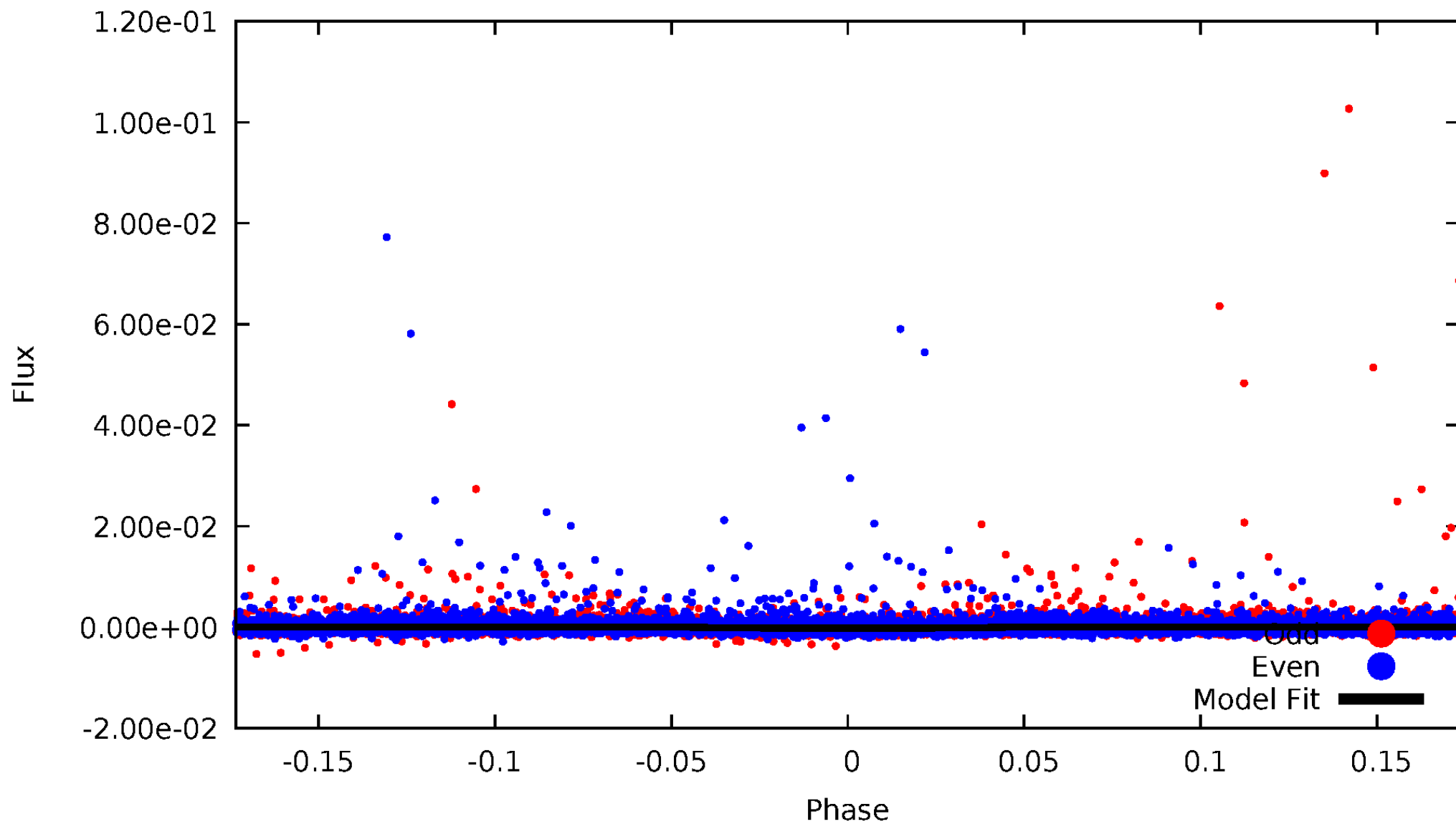


TCE 003439126-03



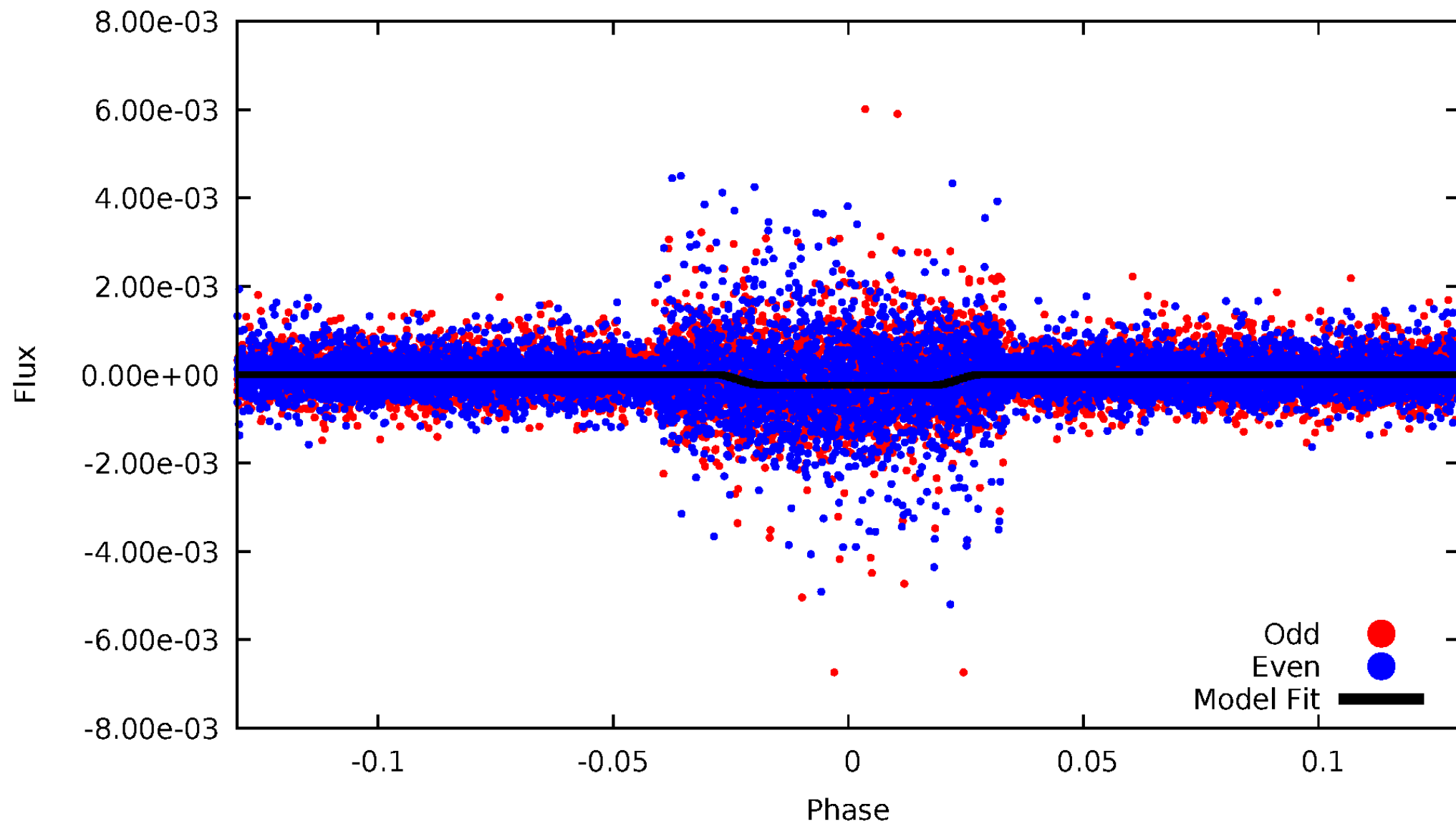
DV Odd/Even

TCE 003439126-03



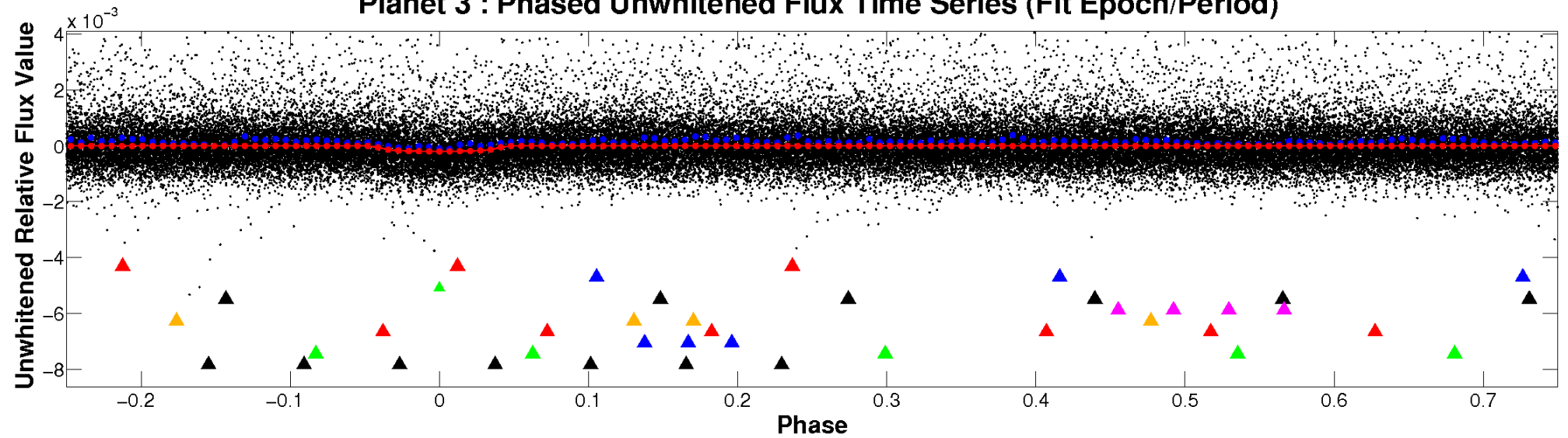
ALT Odd/Even

TCE 003439126-03

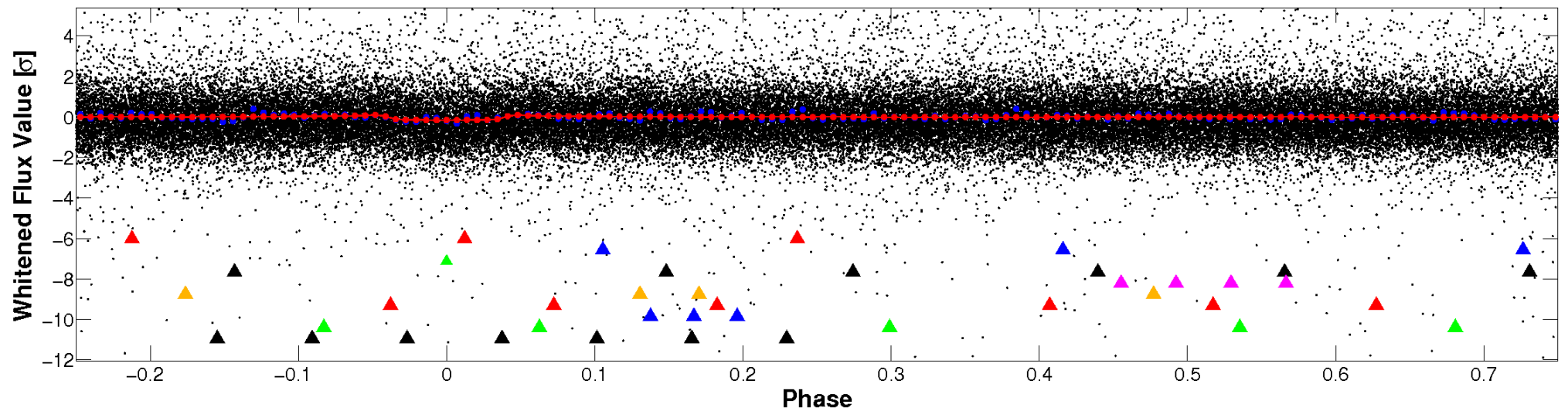


Non-Whitened Vs. Whitened Light Curve

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

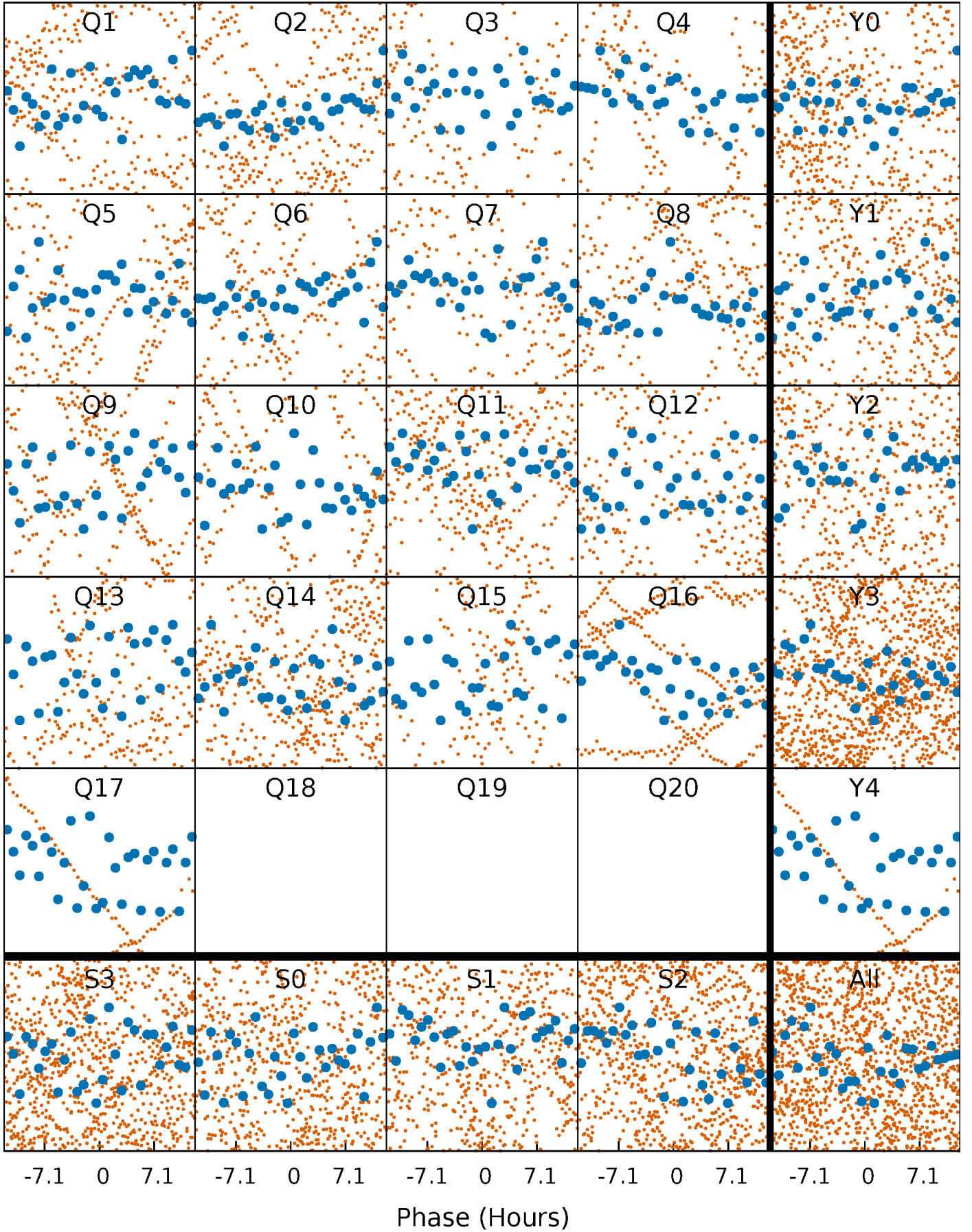


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



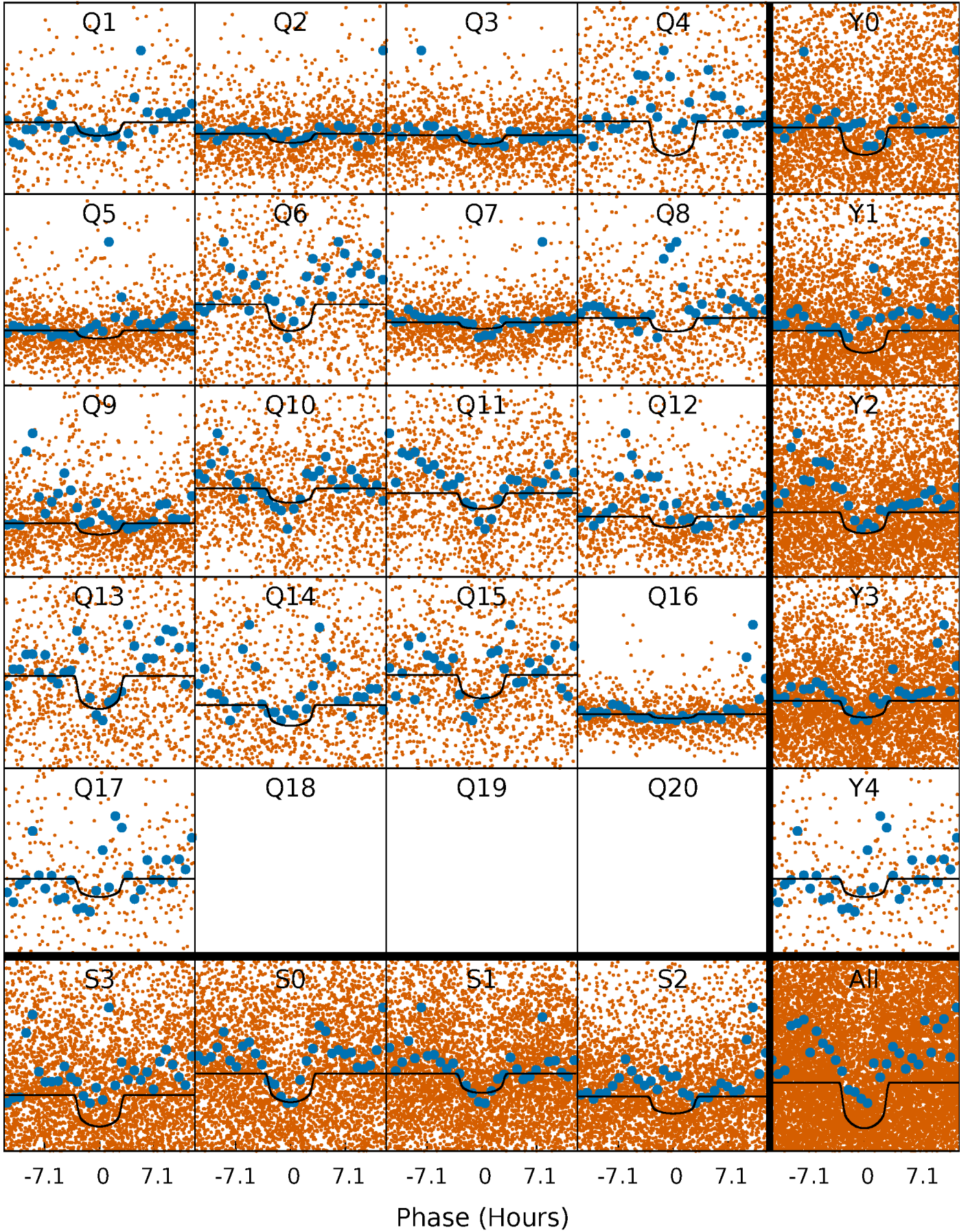
PDC Quarter-Phased Transit Curves

TCE 003439126-03 P= 2.976224 Days $T_0=132.922051$ (BKJD)



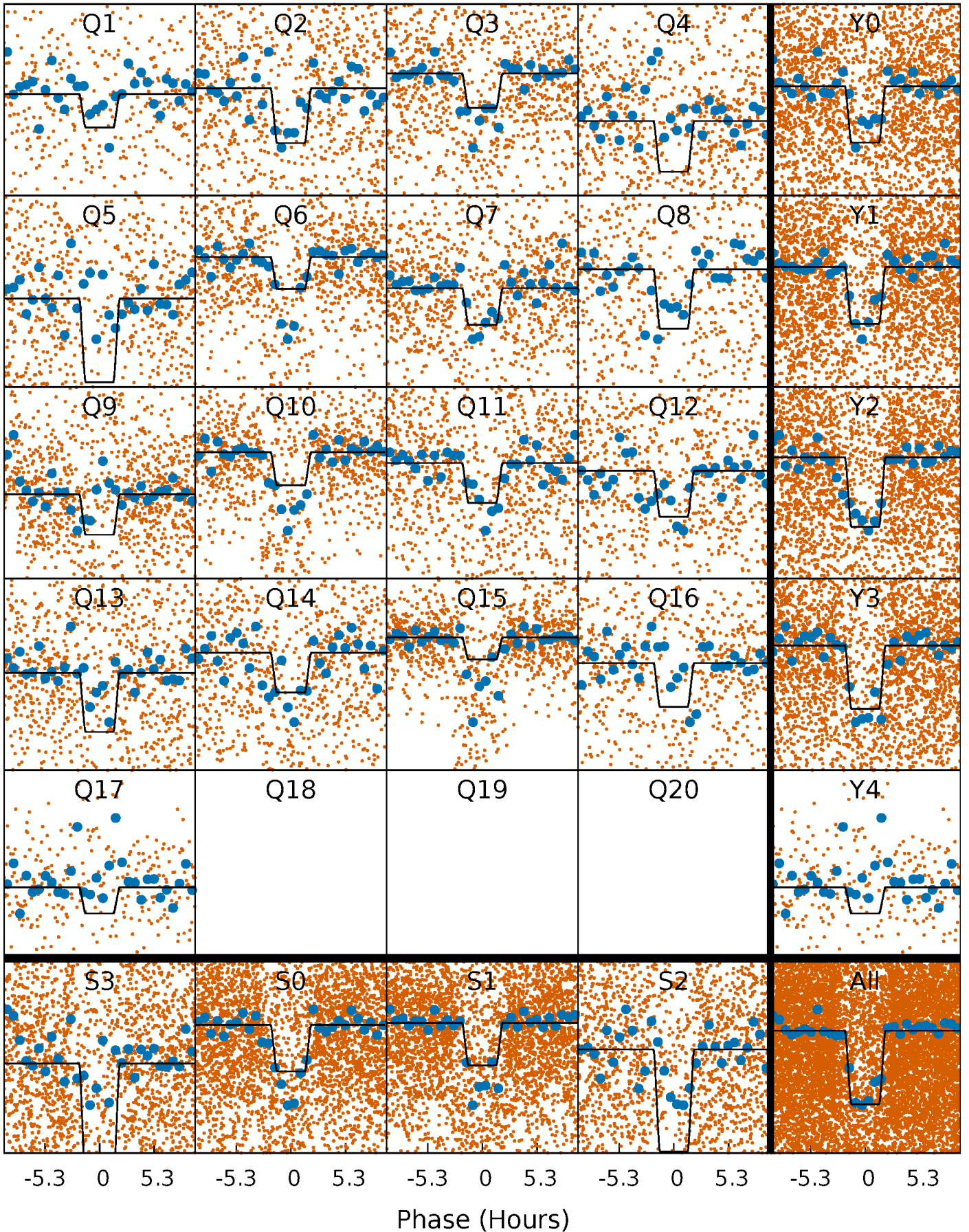
DV Quarter-Phased Transit Curves

TCE 003439126-03 P= 2.976224 Days $T_0=132.922051$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

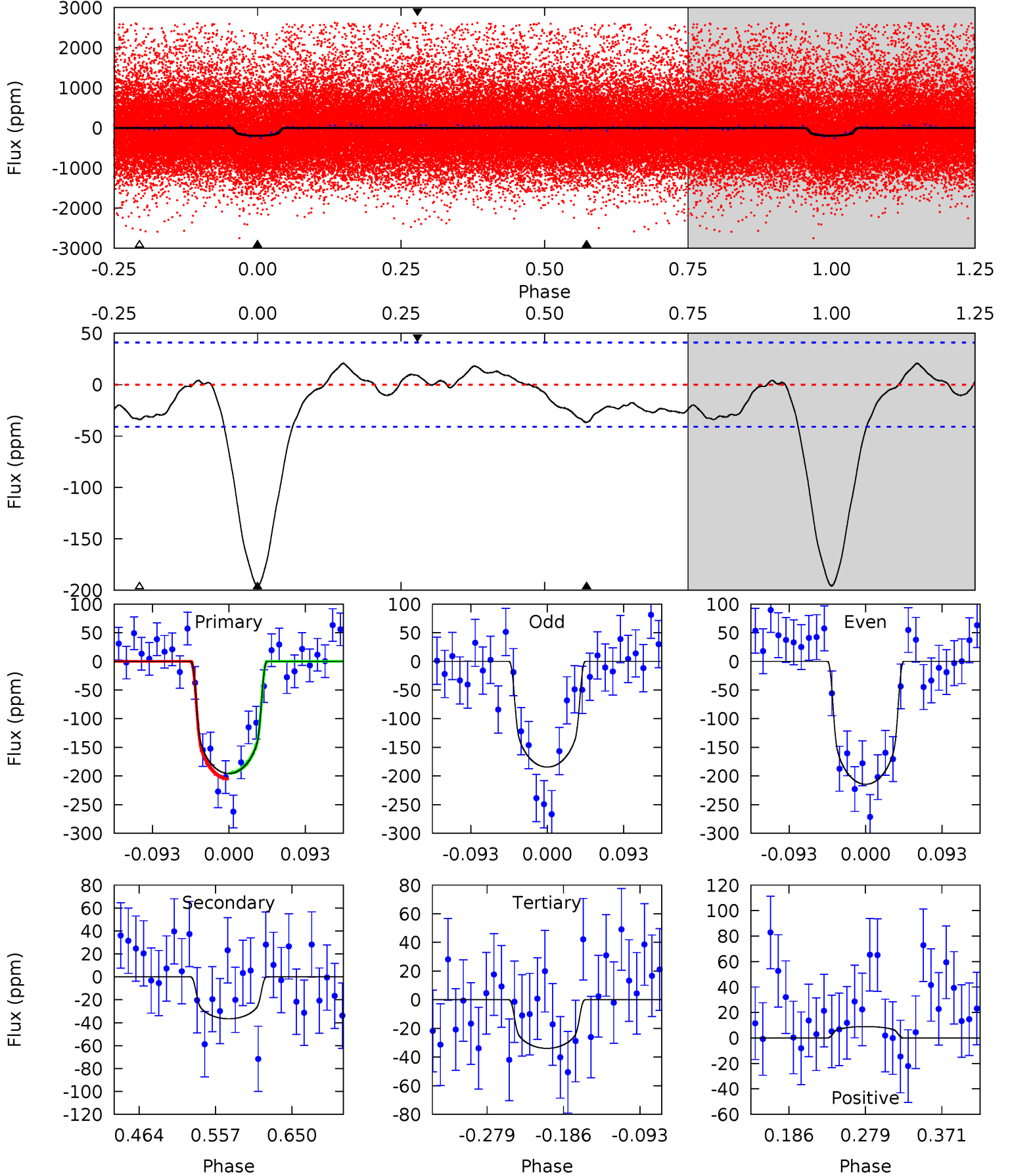
TCE 003439126-03 P= 2.975935 Days $T_0=132.995445$ (BKJD)



DV Model-Shift Uniqueness Test

003439126-03, P = 2.976224 Days, E = 129.945827 Days

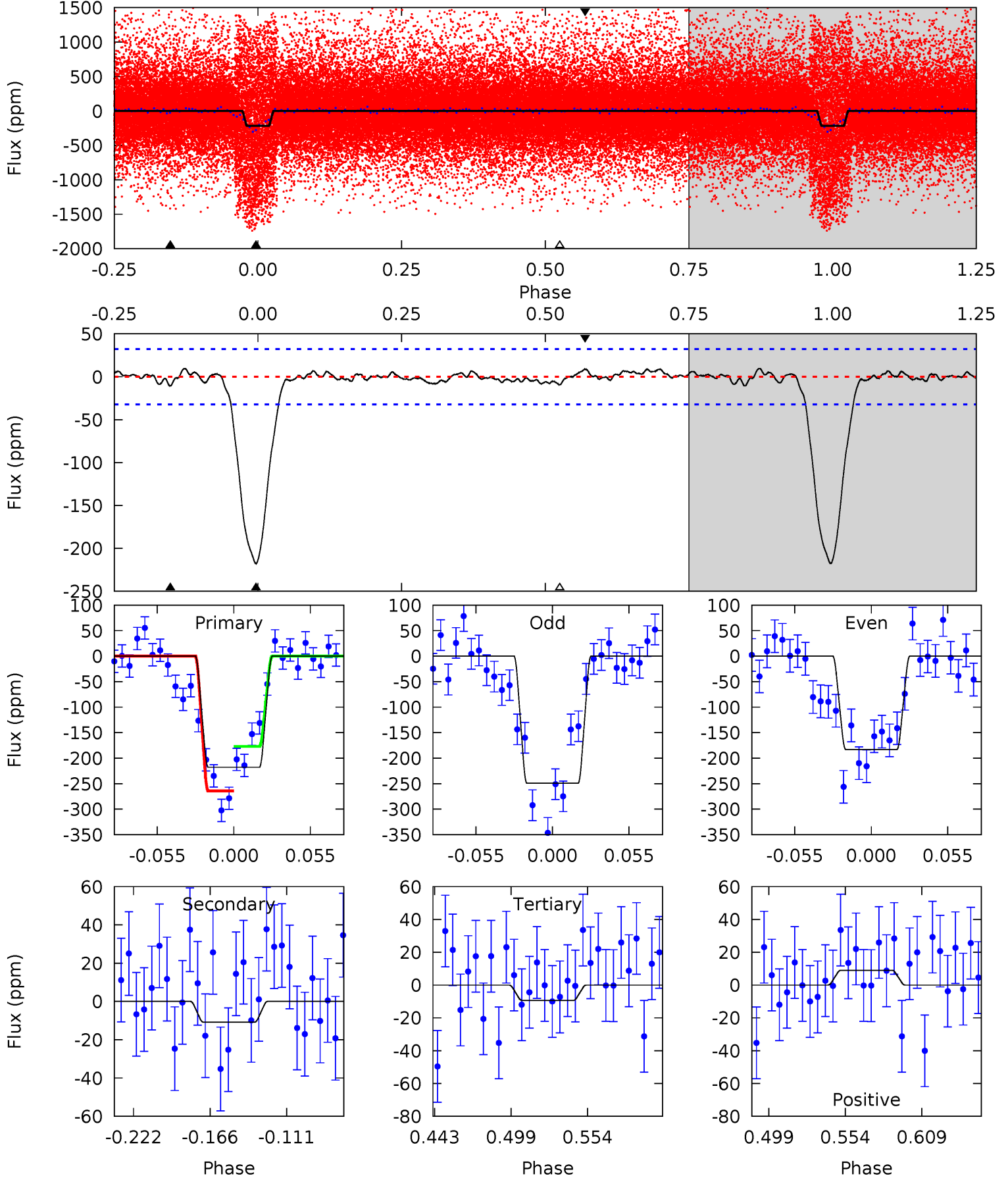
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.9	4.10	3.80	1.00	4.58	1.68	1.76	18.1	20.9	0.30	3.10	1.69	0.12	0.10	0.57



Alt Model-Shift Uniqueness Test

003439126-03, P = 2.975935 Days, E = 130.019510 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
31.6	1.57	1.36	1.30	4.69	1.92	0.60	30.2	30.3	0.21	0.26	4.83	1.16	0.04	6.37



Stellar Parameters For KIC 003439126

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4236^{+129}_{-142}	$4.612^{+0.052}_{-0.017}$	$0.120^{+0.250}_{-0.300}$	$0.664^{+0.028}_{-0.061}$	$0.657^{+0.047}_{-0.053}$	$3.163^{+0.729}_{-0.252}$
	+3%/-3%	+1%/-0%	+208%/-250%	+4%/-9%	+7%/-8%	+23%/-8%
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 003439126-03 / KOI 7655.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-37 ± 9	$1.12^{+0.24}_{-0.26}$	1121^{+43}_{-41}	3088^{+276}_{-216}	20^{+14}_{-8}
Alt.	-11 ± 7	$1.09^{+0.25}_{-0.23}$	1123^{+42}_{-41}	2616^{+276}_{-331}	$5.949^{+5.743}_{-3.730}$

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 $A_{obs} \gg 1.0$

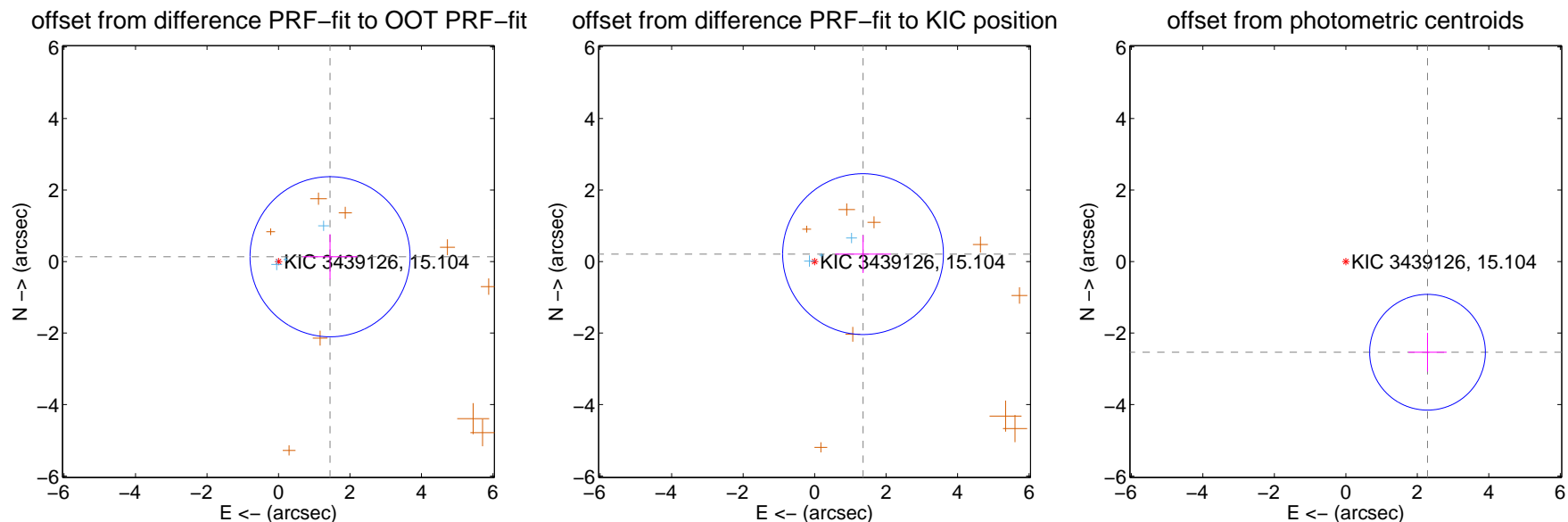
DV Centroid Data

Supplemental centroid analysis for 003439126-03. Kepler magnitude: 15.10. Transit SNR 10.91

There are 3 quarters with good PRF difference image offsets

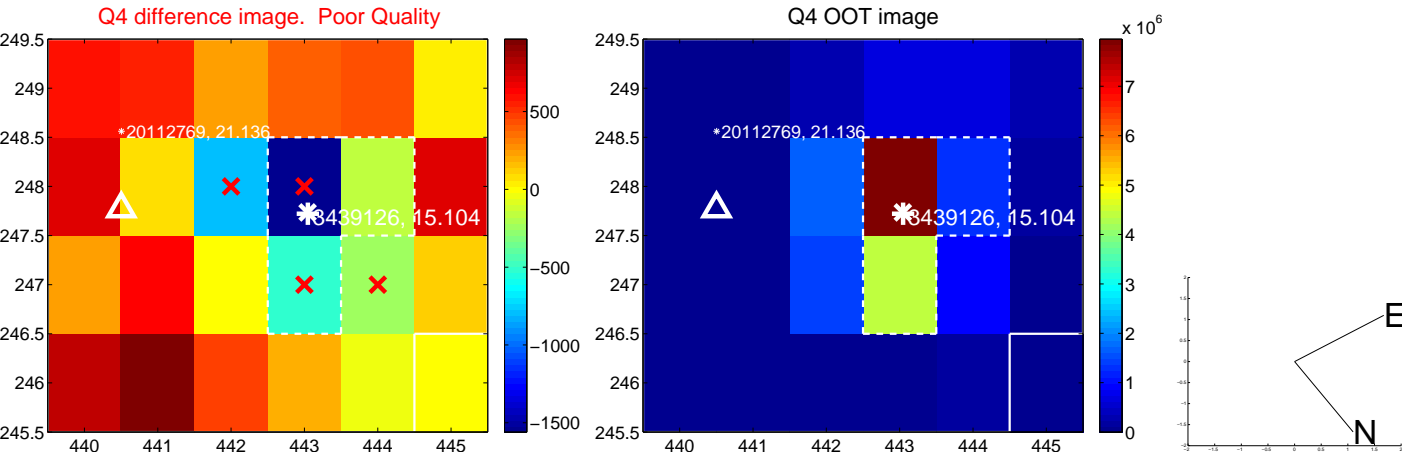
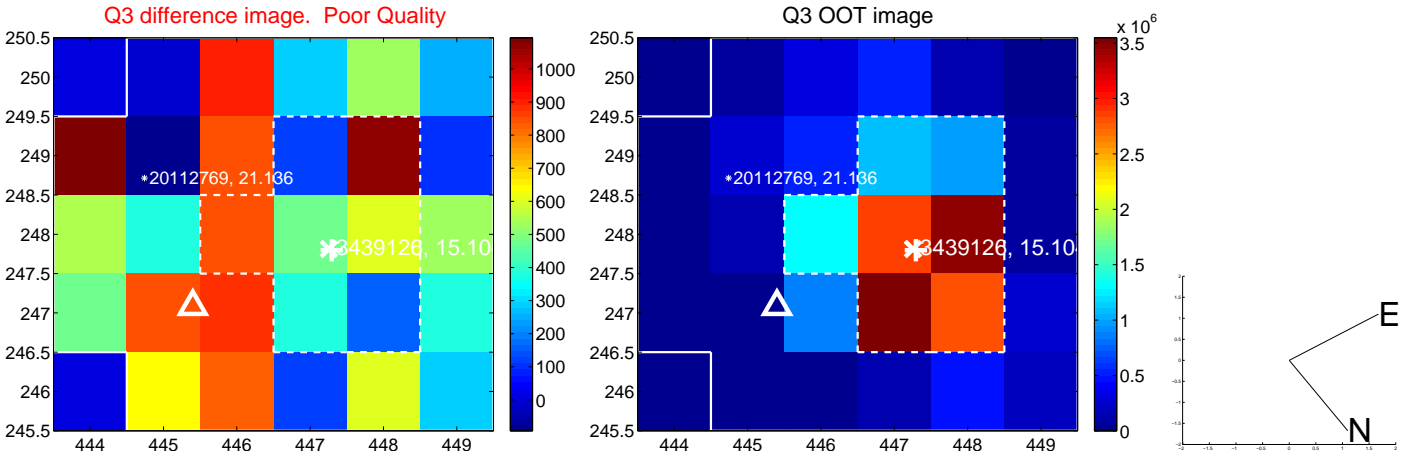
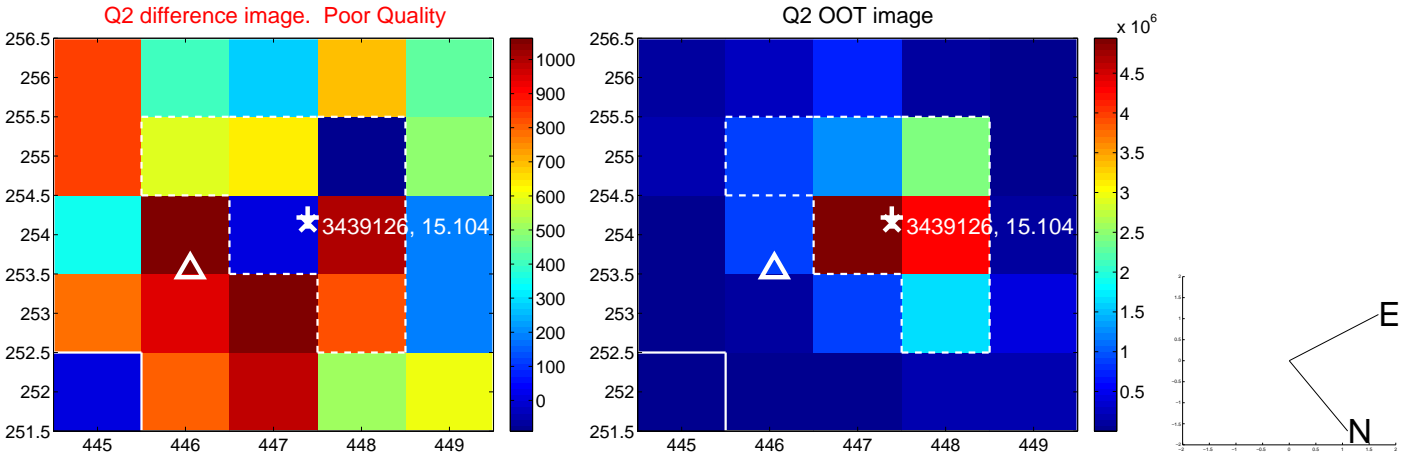
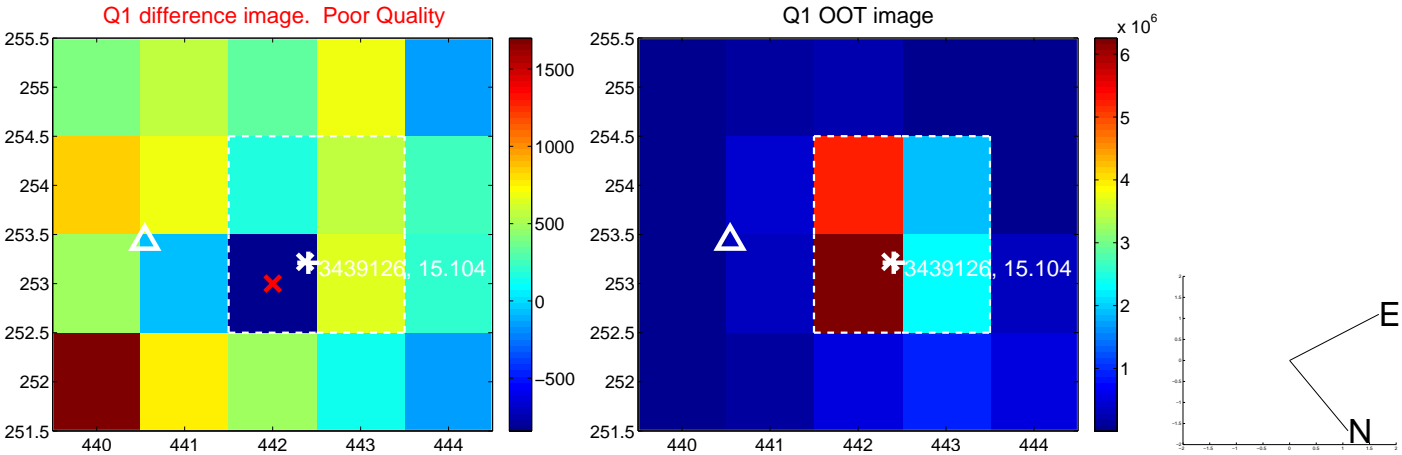
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.448 ± 0.746	1.94	-1.442 ± 0.766	0.134 ± 0.630
PRF-fit source offset from KIC position	1.370 ± 0.750	1.83	-1.355 ± 0.780	0.207 ± 0.530
photometric centroid source offset	3.41 ± 0.54	6.33	-2.28 ± 0.53	-2.54 ± 0.54

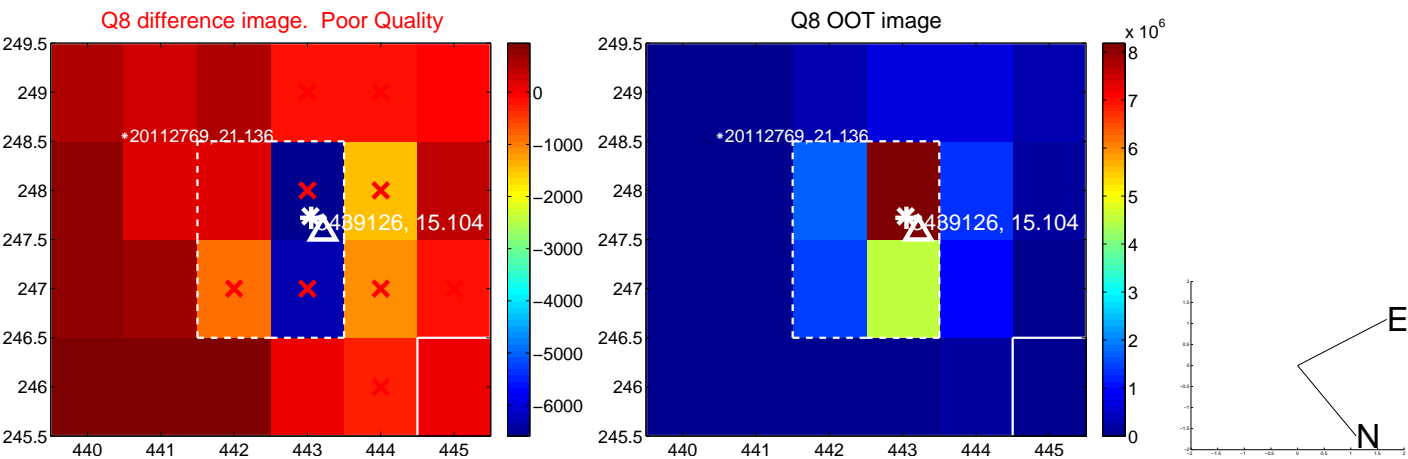
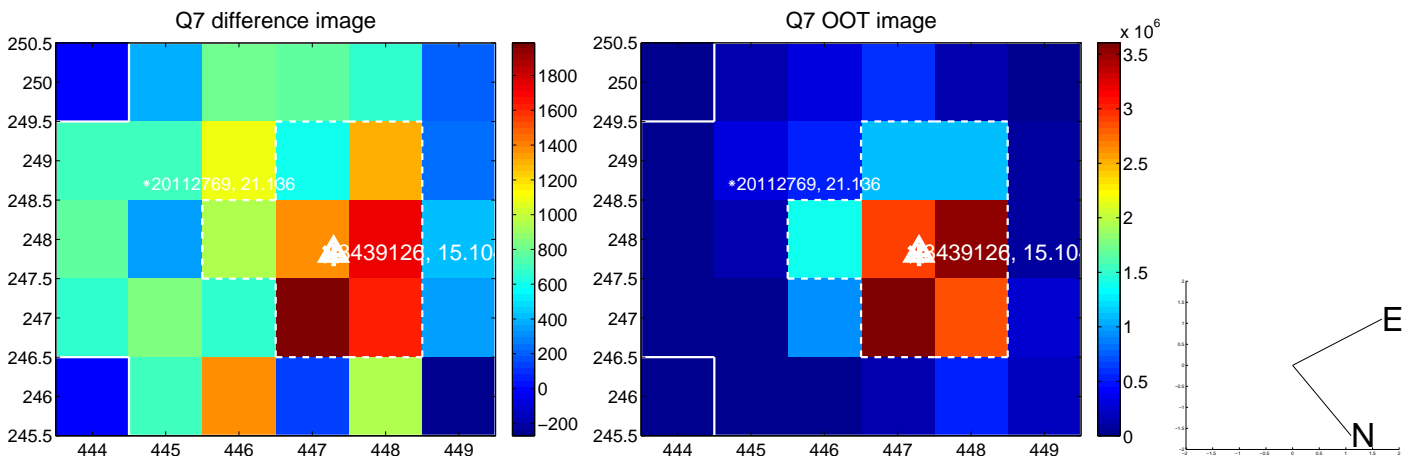
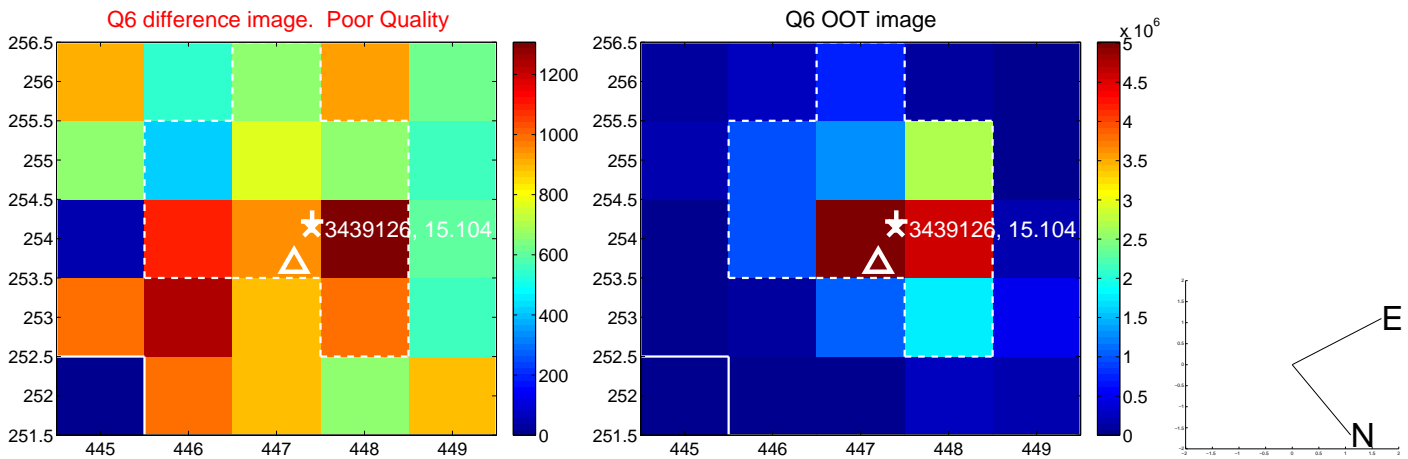
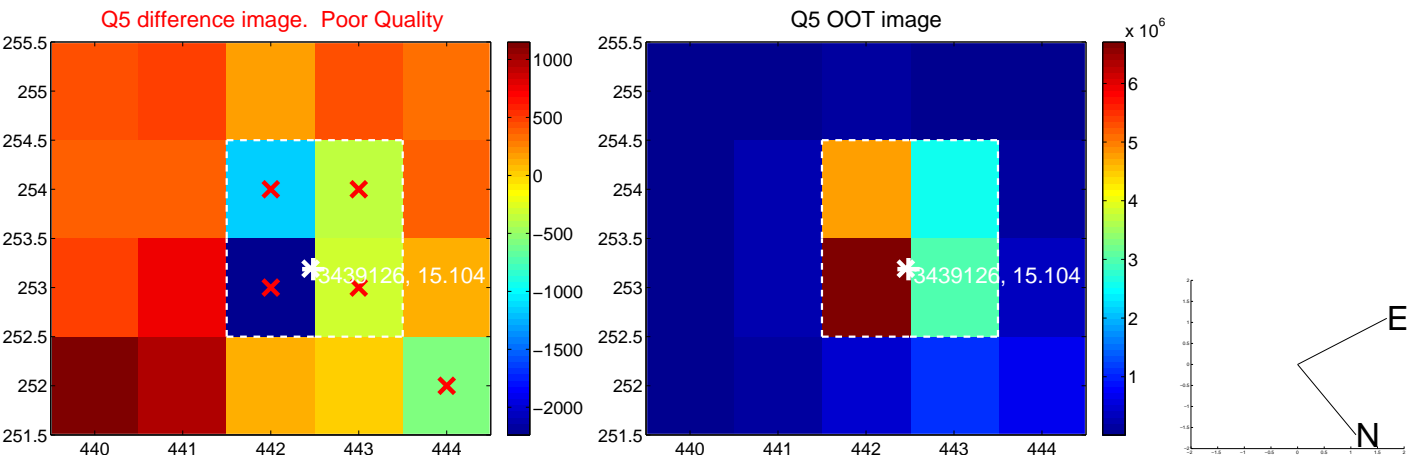


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

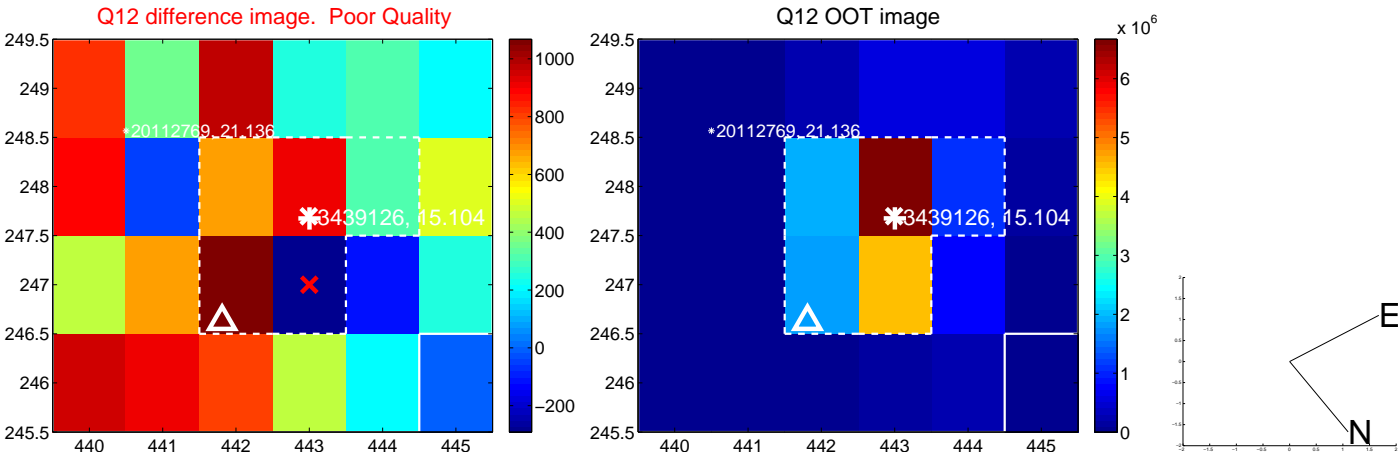
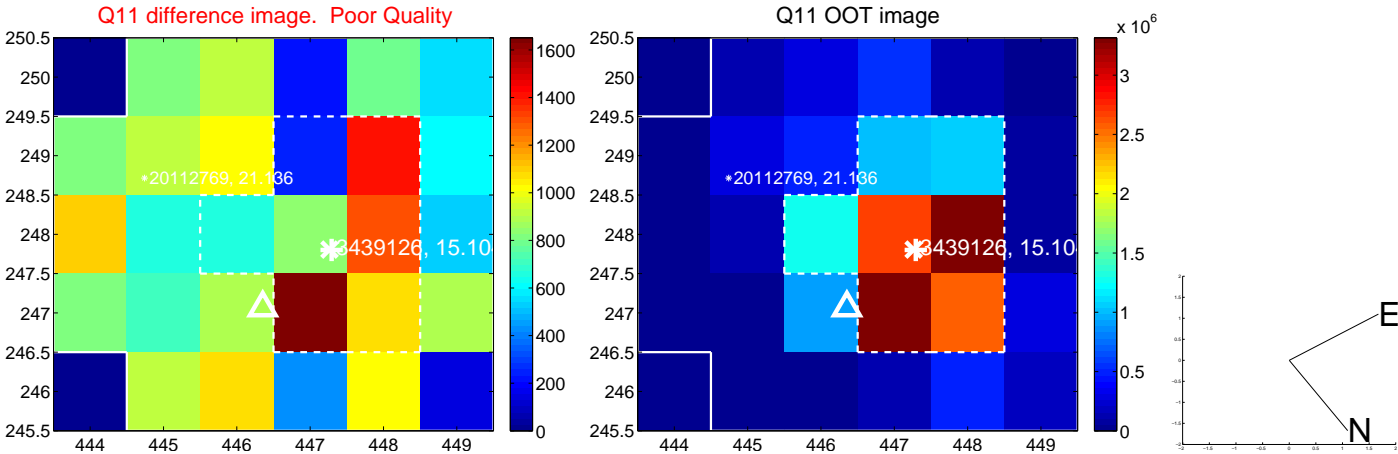
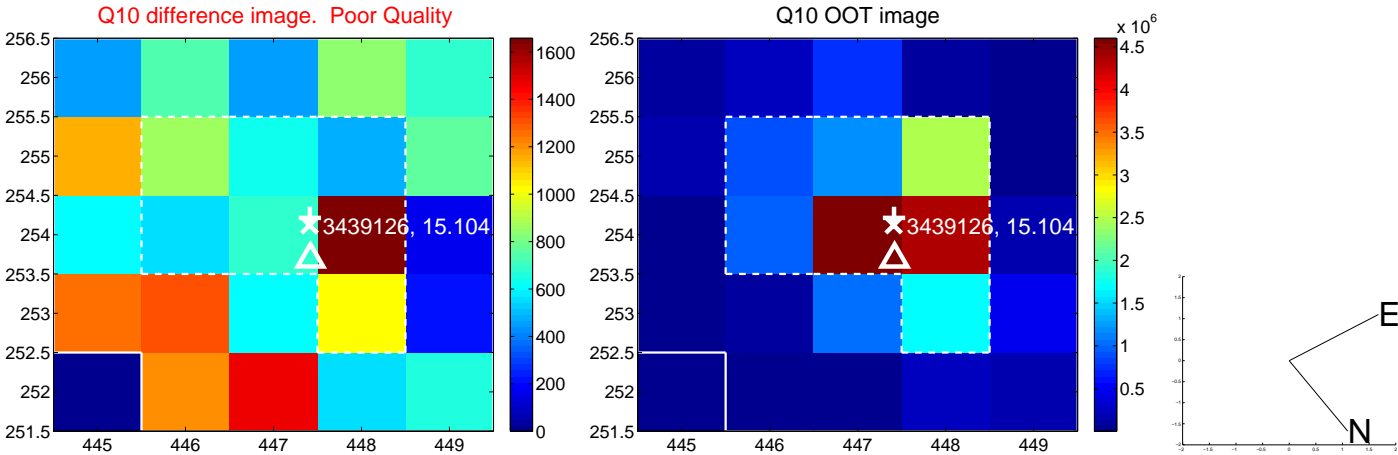
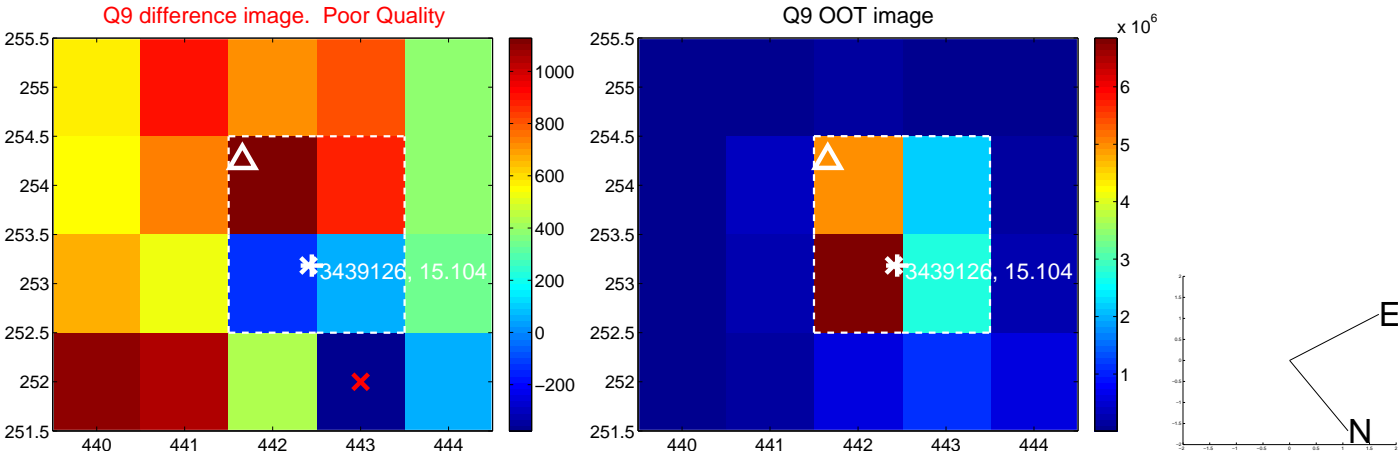
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



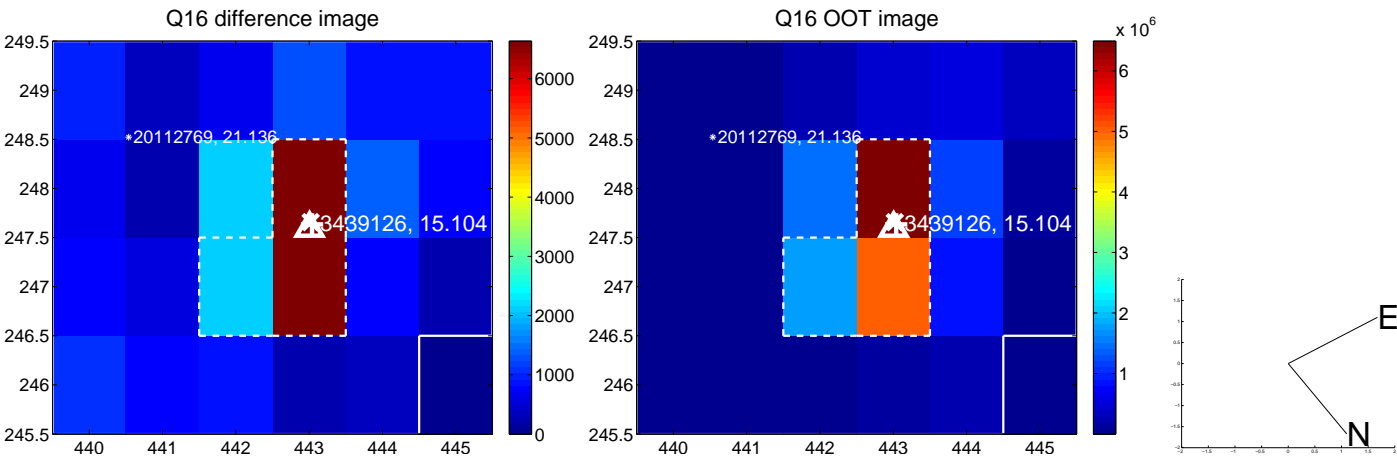
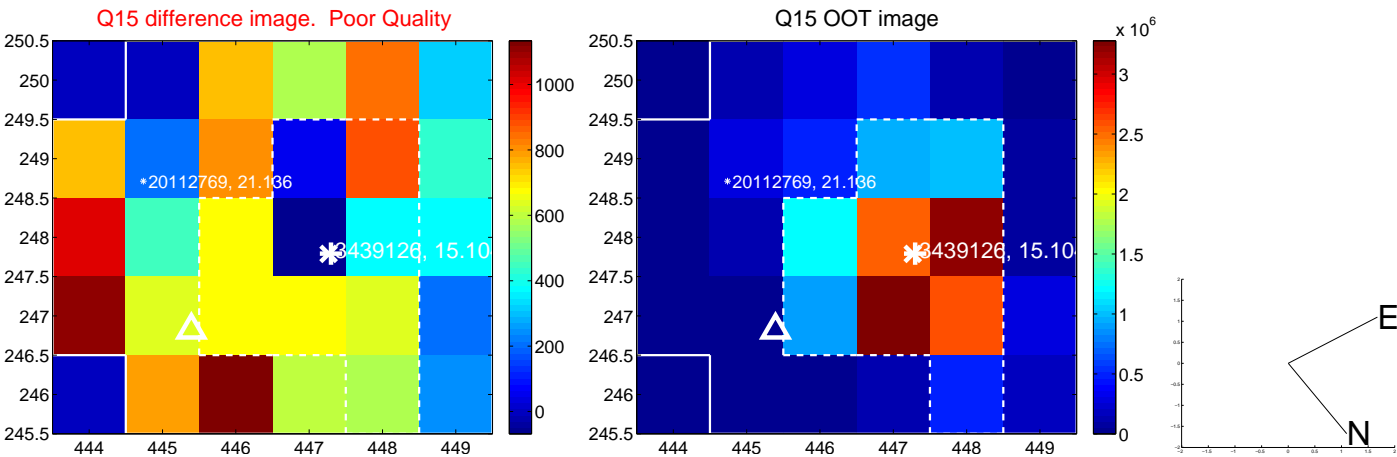
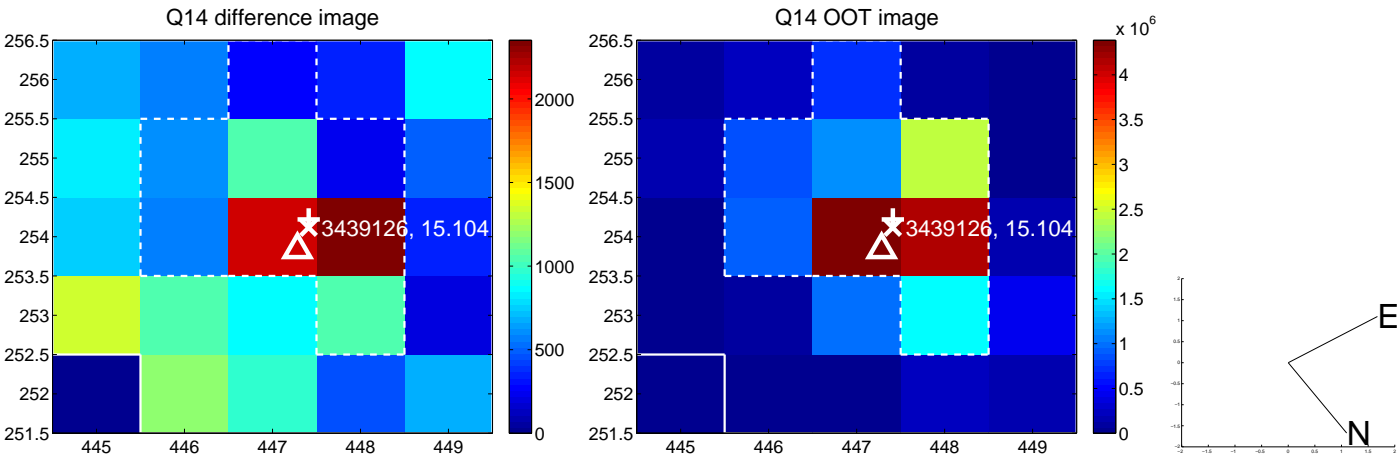
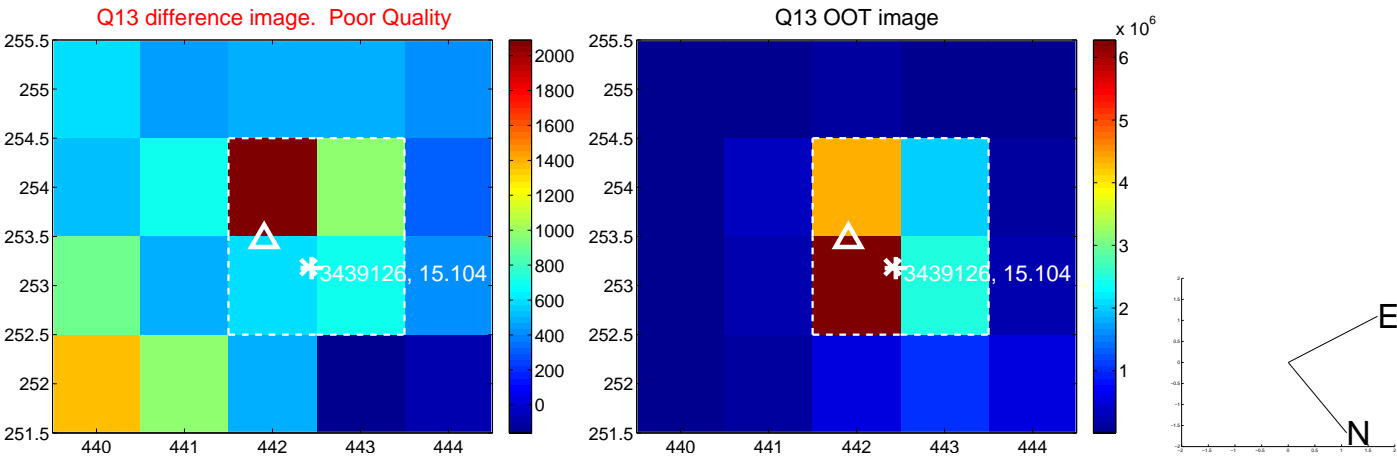
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



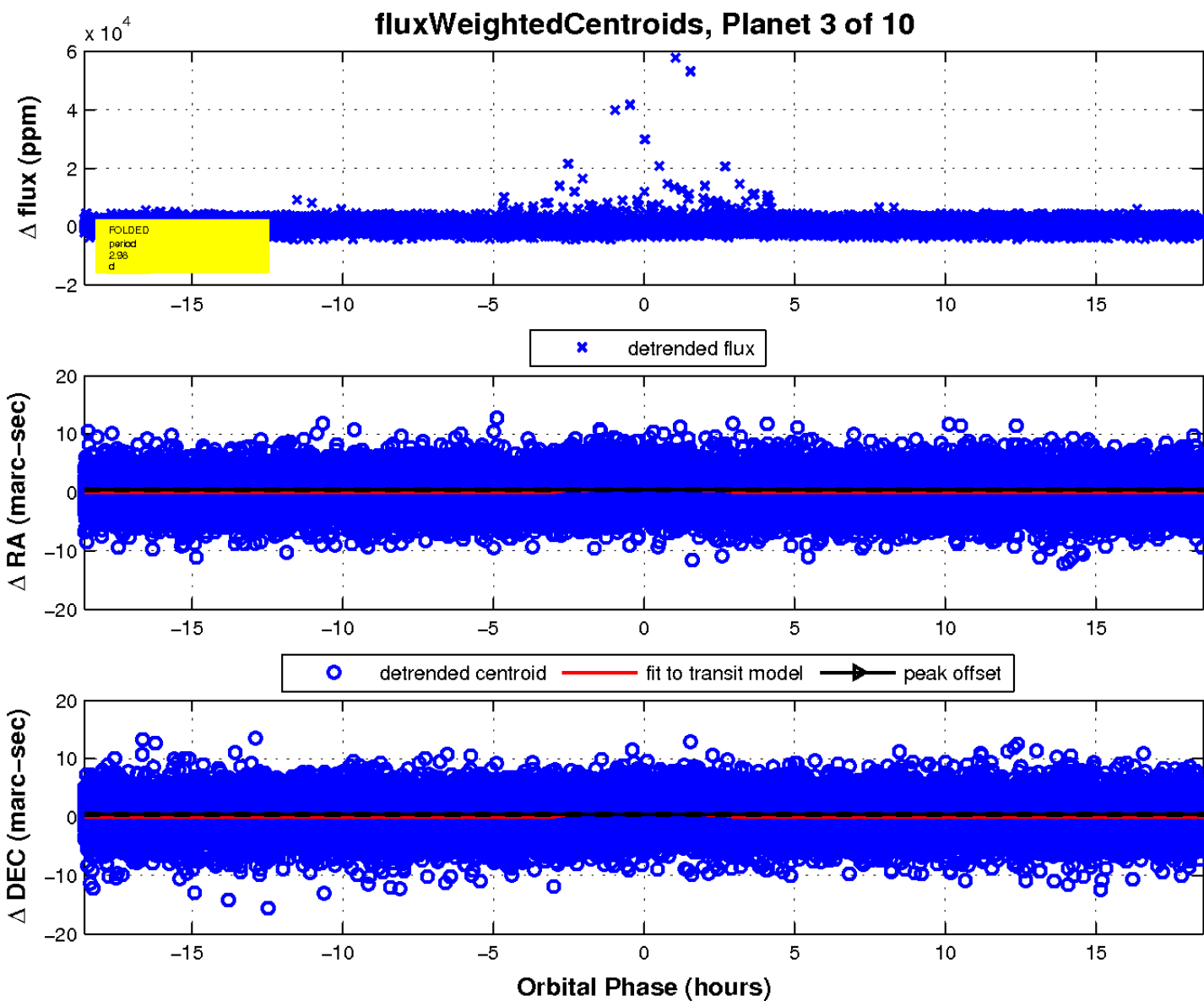
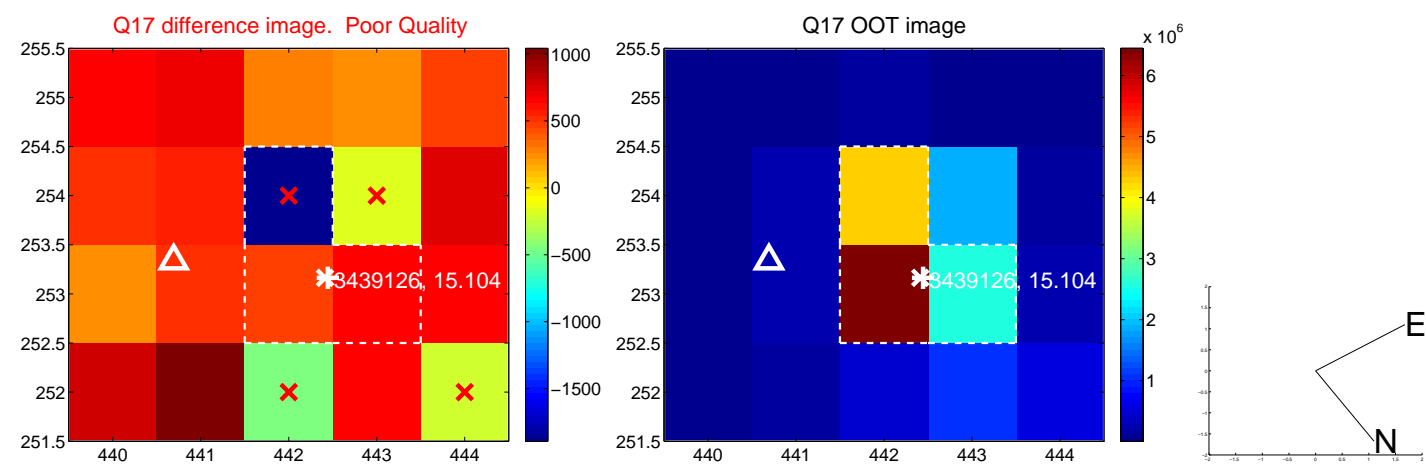
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



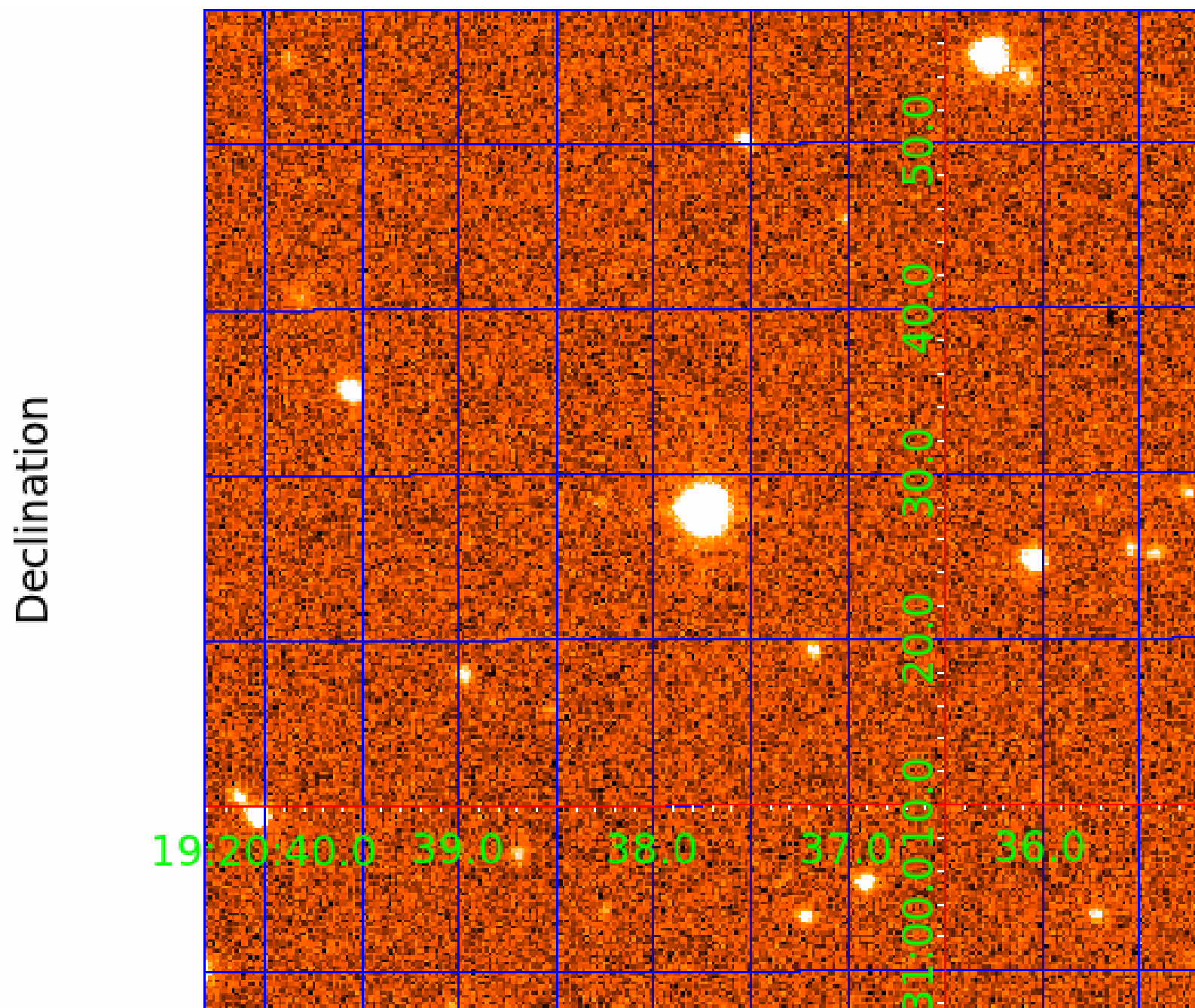
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



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})
003439126-01	OBS	No	466.598907	562.202843	1581.3	9.515	13.7	6.5	0.66	4236	2.77	0.12
003439126-02	OBS	No	456.286524	484.430344	1711.3	7.600	11.8	7.8	0.66	4236	3.27	0.12
003439126-03	OBS	7655.01	2.976224	132.922051	197.1	6.191	11.6	10.9	0.66	4236	1.14	102.47
003439126-04	OBS	No	272.945566	224.384038	662.9	9.352	11.7	4.0	0.66	4236	1.87	0.25
003439126-05	OBS	No	398.924392	256.302150	1050.5	9.000	11.6	-1.0	0.66	4236	2.05	0.15
003439126-06	OBS	No	347.186618	410.217941	1194.3	7.500	11.4	-1.0	0.66	4236	2.19	0.18
003439126-07	OBS	No	251.654938	196.634295	584.4	8.995	11.4	3.1	0.66	4236	1.57	0.28
003439126-08	OBS	No	428.663233	529.169612	3632.6	17.808	10.9	9.7	0.66	4236	3.81	0.14
003439126-09	OBS	No	323.272075	281.919624	2046.6	20.411	9.8	7.4	0.66	4236	2.88	0.20
003439126-10	OBS	No	229.359900	174.128589	1174.7	7.500	10.2	-1.0	0.66	4236	2.17	0.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003439126-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-03	OBS	FP	0.00	0	0	0	1	EPHEM_MATCH
003439126-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV
003439126-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST
003439126-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
003439126-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
003439126-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

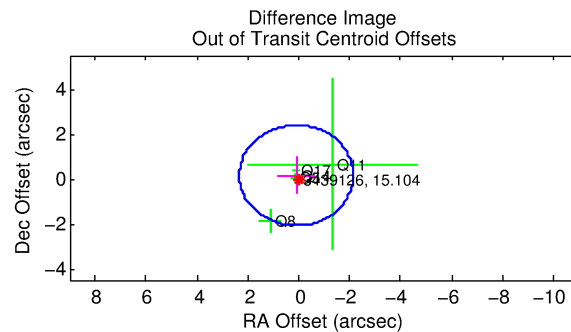
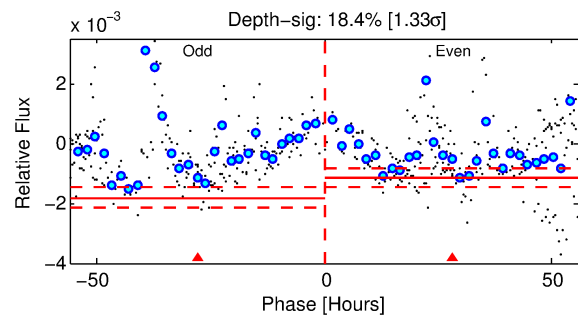
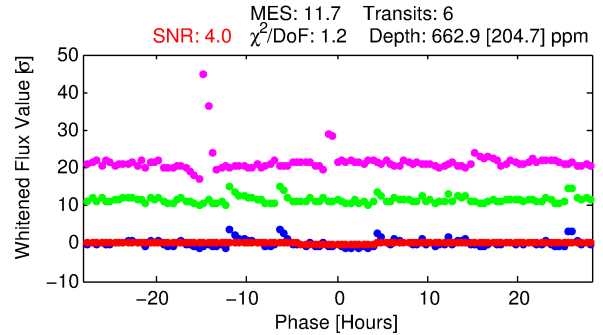
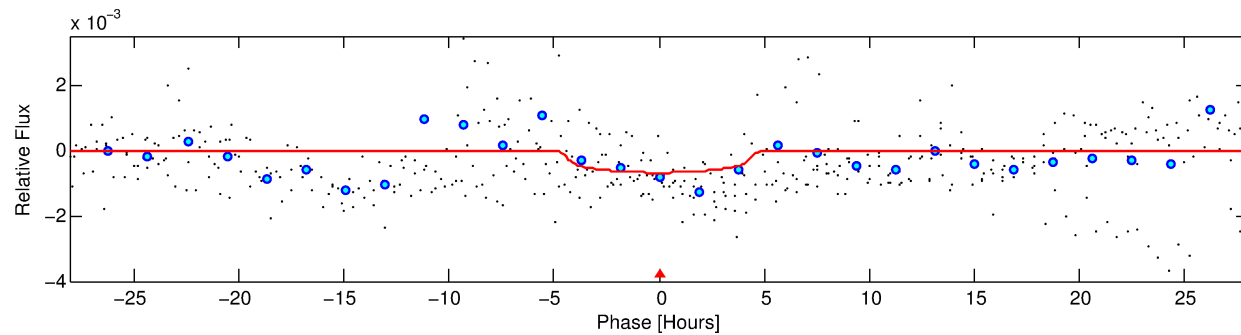
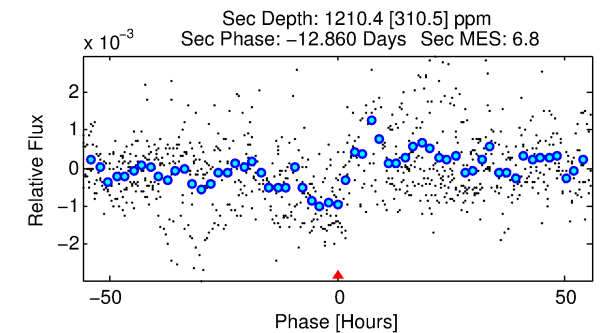
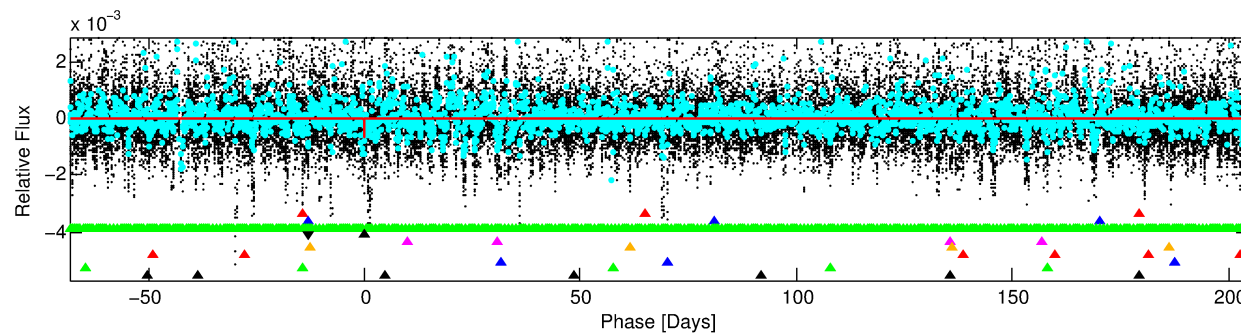
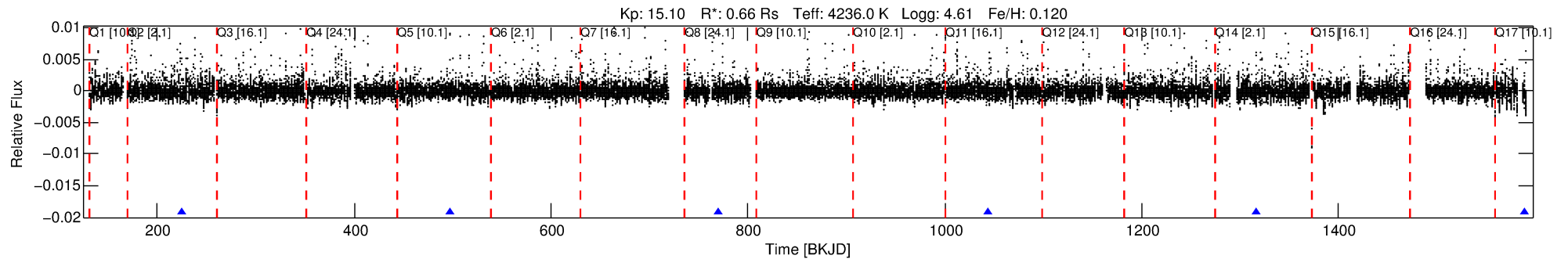
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003439126-04

No Significant Match Found

DV One-Page Summary

KIC: 3439126 Candidate: 4 of 10 Period: 272.946 d



DV Fit Results:

Period = 272.94557 [0.00793] d
Epoch = 224.3840 [0.0227] BKJD
Rp/R* = 0.0258 [0.0187]
a/R* = 155.43 [346.65]
b = 0.75 [1.31]
Seff = 0.25 [0.04]
Teq = 180 [8] K
Rp = 1.87 [1.36] Re
a = 0.7165 [0.0524] AU
Ag = 97614.67 [143581.17] [0.68σ]
Teff = 4917 [1811] K [2.62σ]

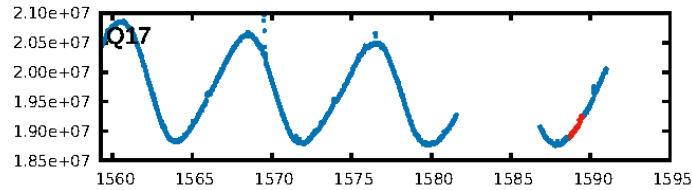
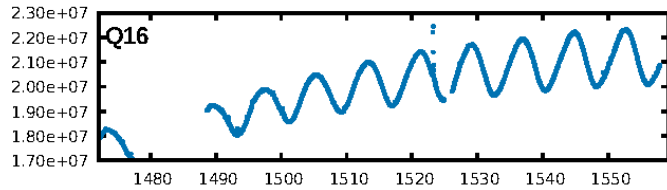
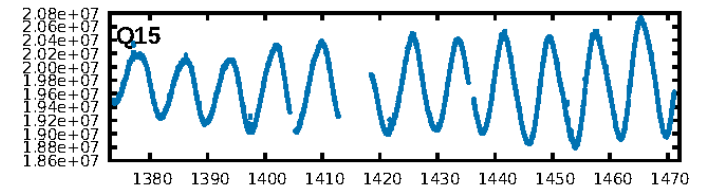
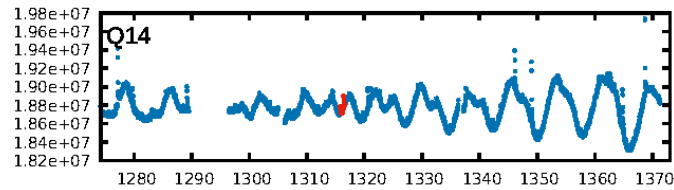
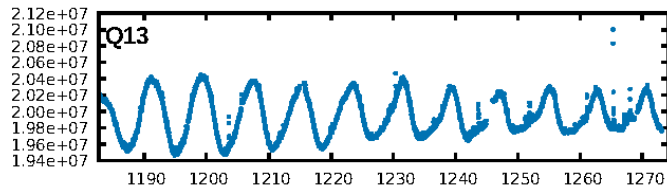
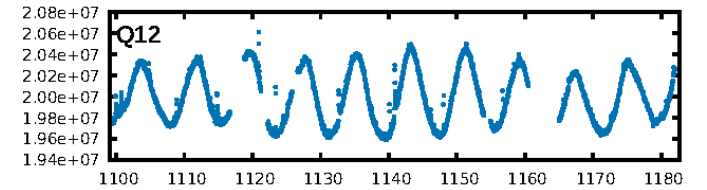
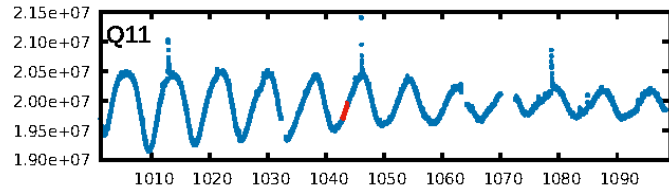
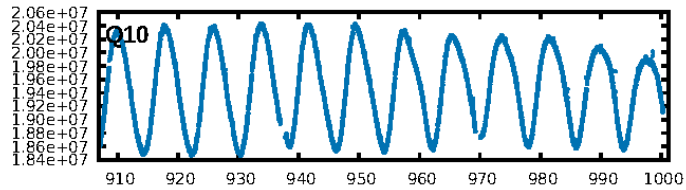
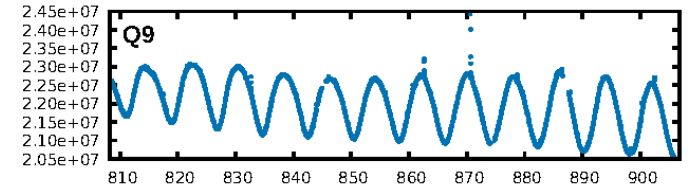
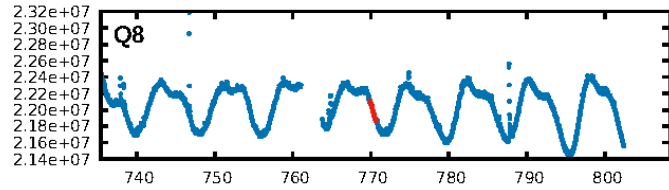
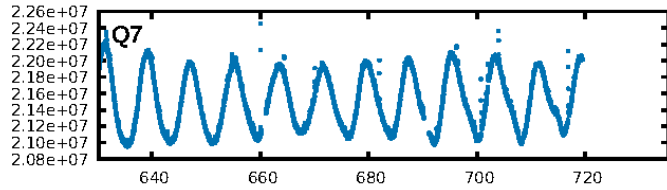
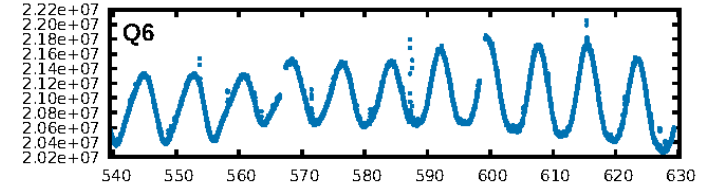
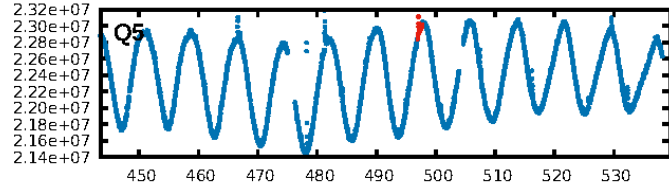
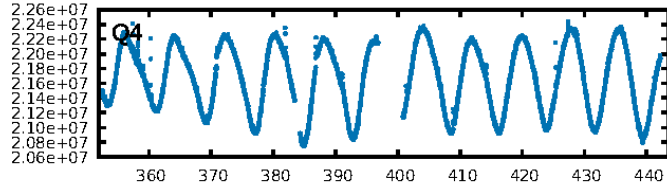
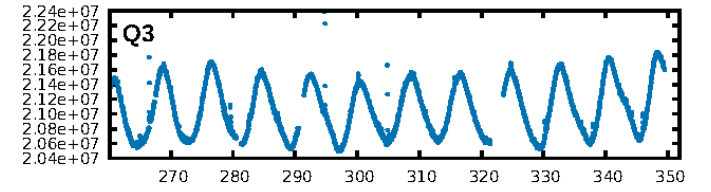
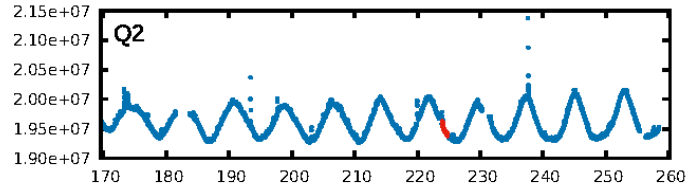
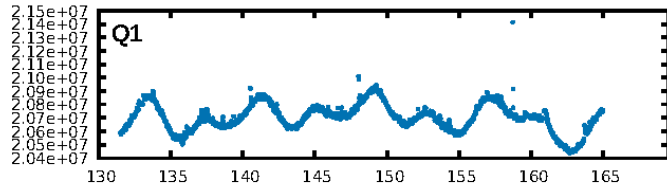
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [39.38σ]
LongPeriod-sig: 100.0% [53.80σ]
ModelChiSquare2-sig: 3.3%
ModelChiSquareGof-sig: 99.8%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: 0.5464
Centroid-sig: 90.3%
Centroid-so: 0.433 arcsec [0.41σ]
OotOffset-rm: 0.182 arcsec [0.24σ]
KicOffset-rm: 0.264 arcsec [0.38σ]
OotOffset-st: 1/1/1/2 [5]
KicOffset-st: 1/1/1/2 [5]
DiffImageQuality-fgm: 0.60 [3/5]
DiffImageOverlap-fno: 0.40 [2/5]

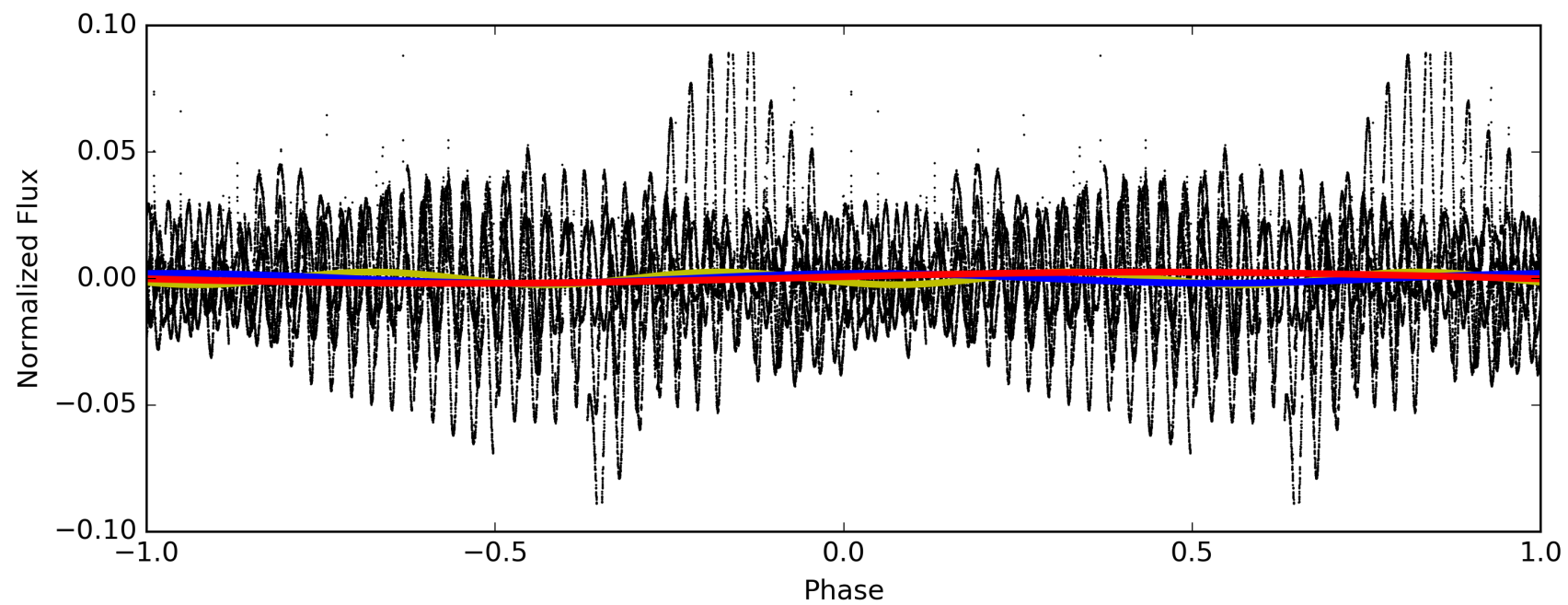
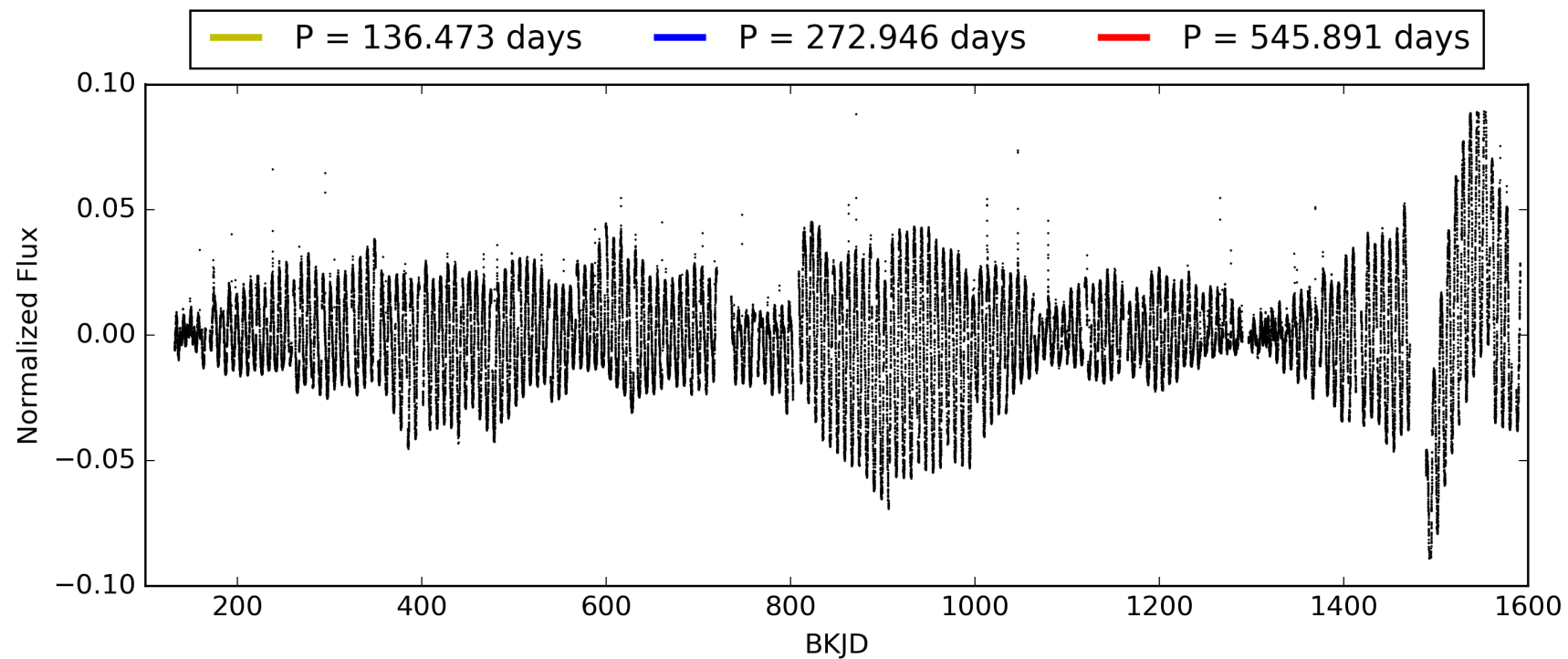
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:53:56 Z

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

TCE 003439126-04, PDC Light Curves

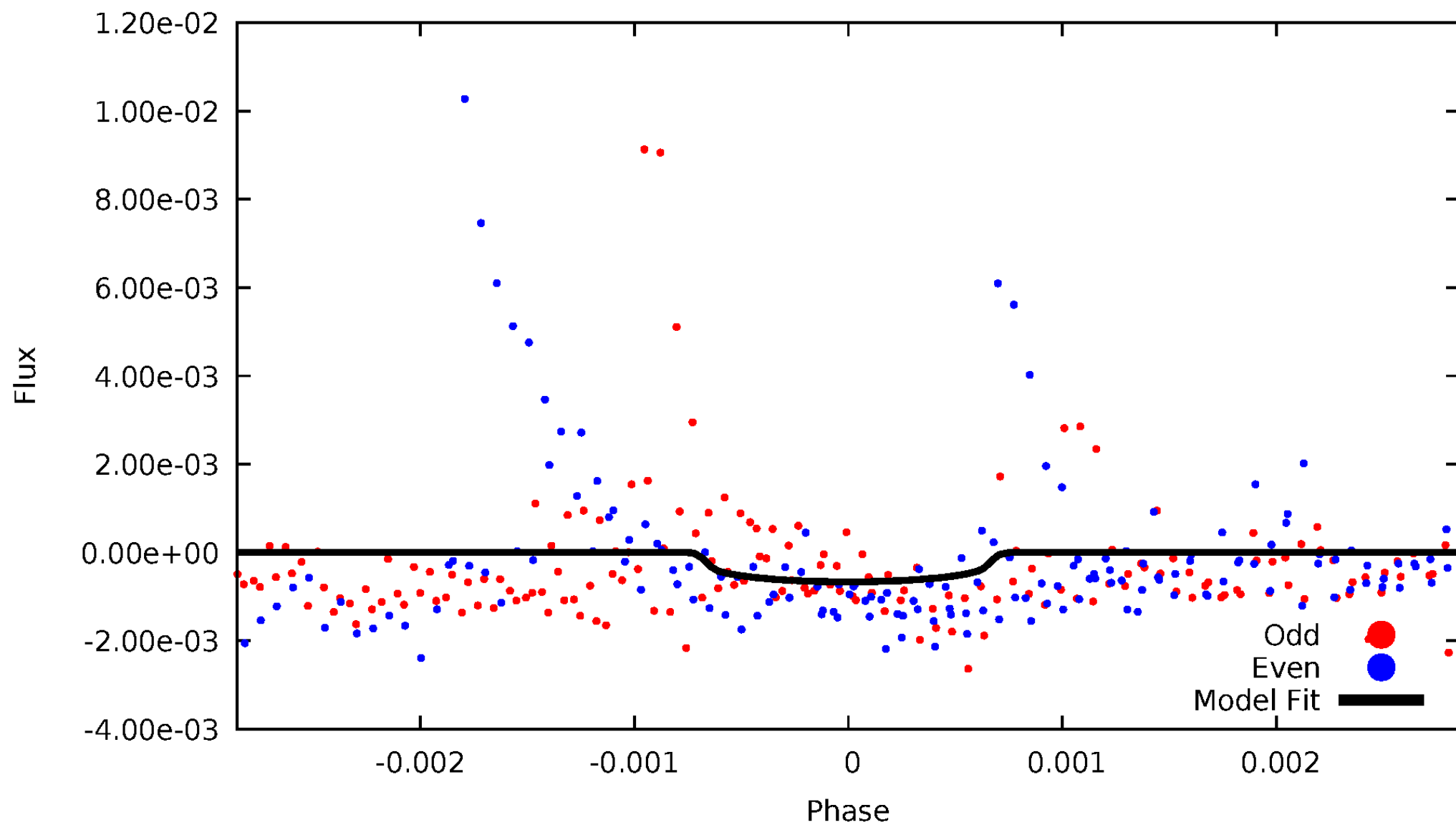


TCE 003439126-04



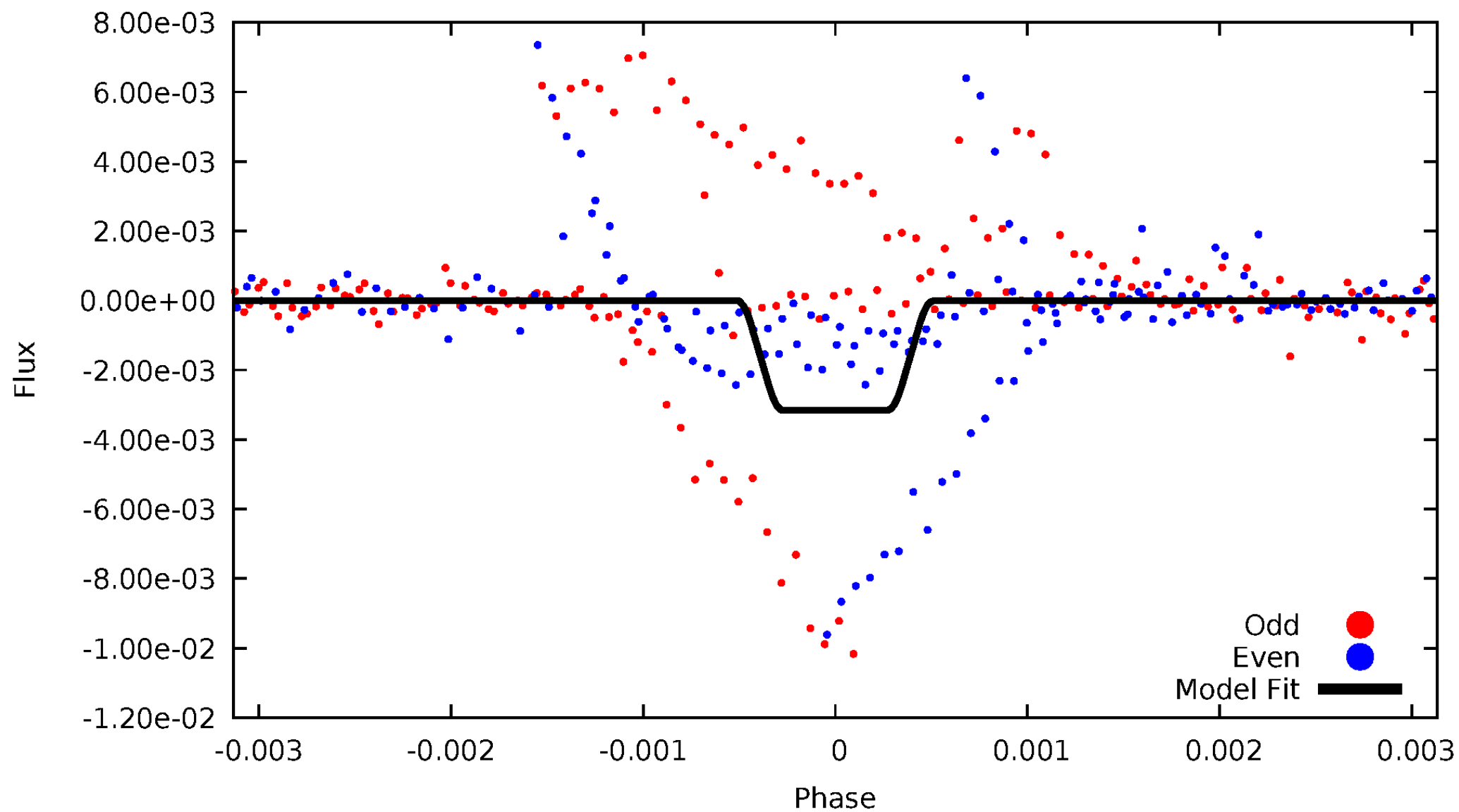
DV Odd/Even

TCE 003439126-04



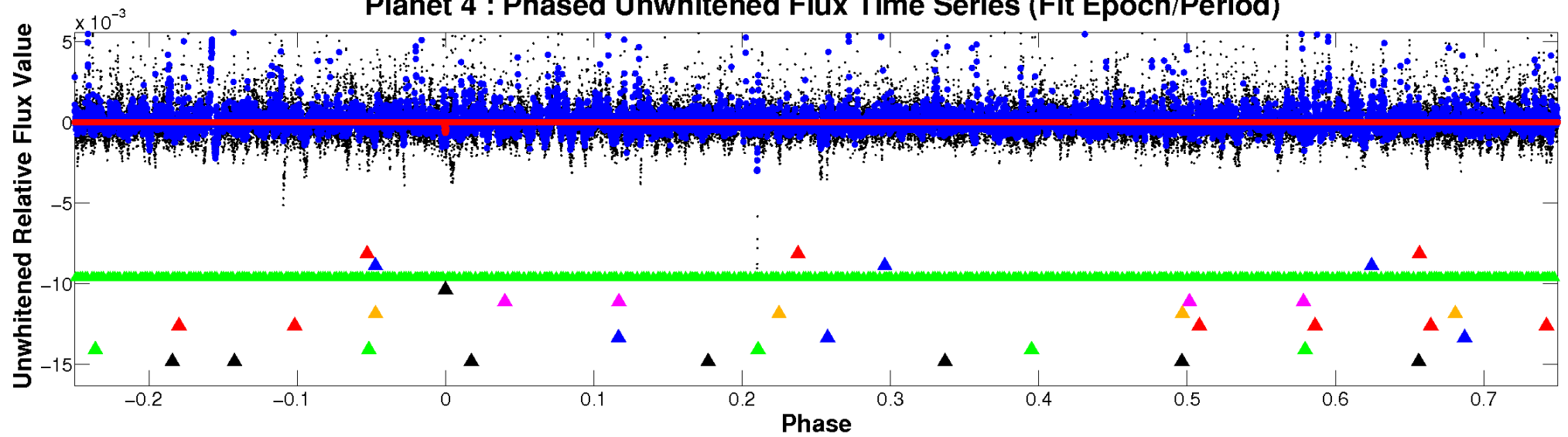
ALT Odd/Even

TCE 003439126-04

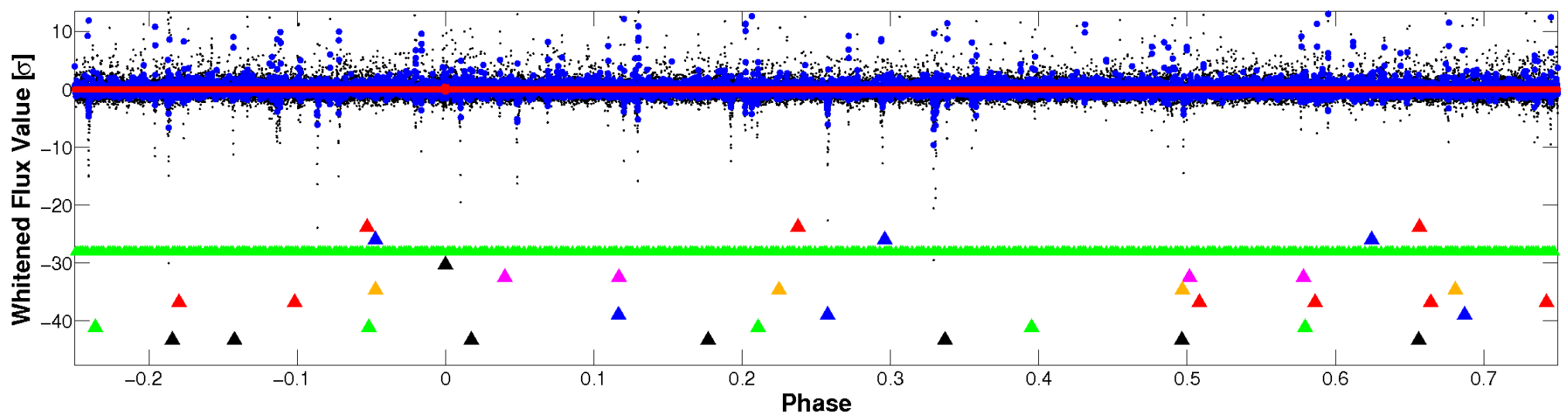


Non-Whitened Vs. Whitened Light Curve

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

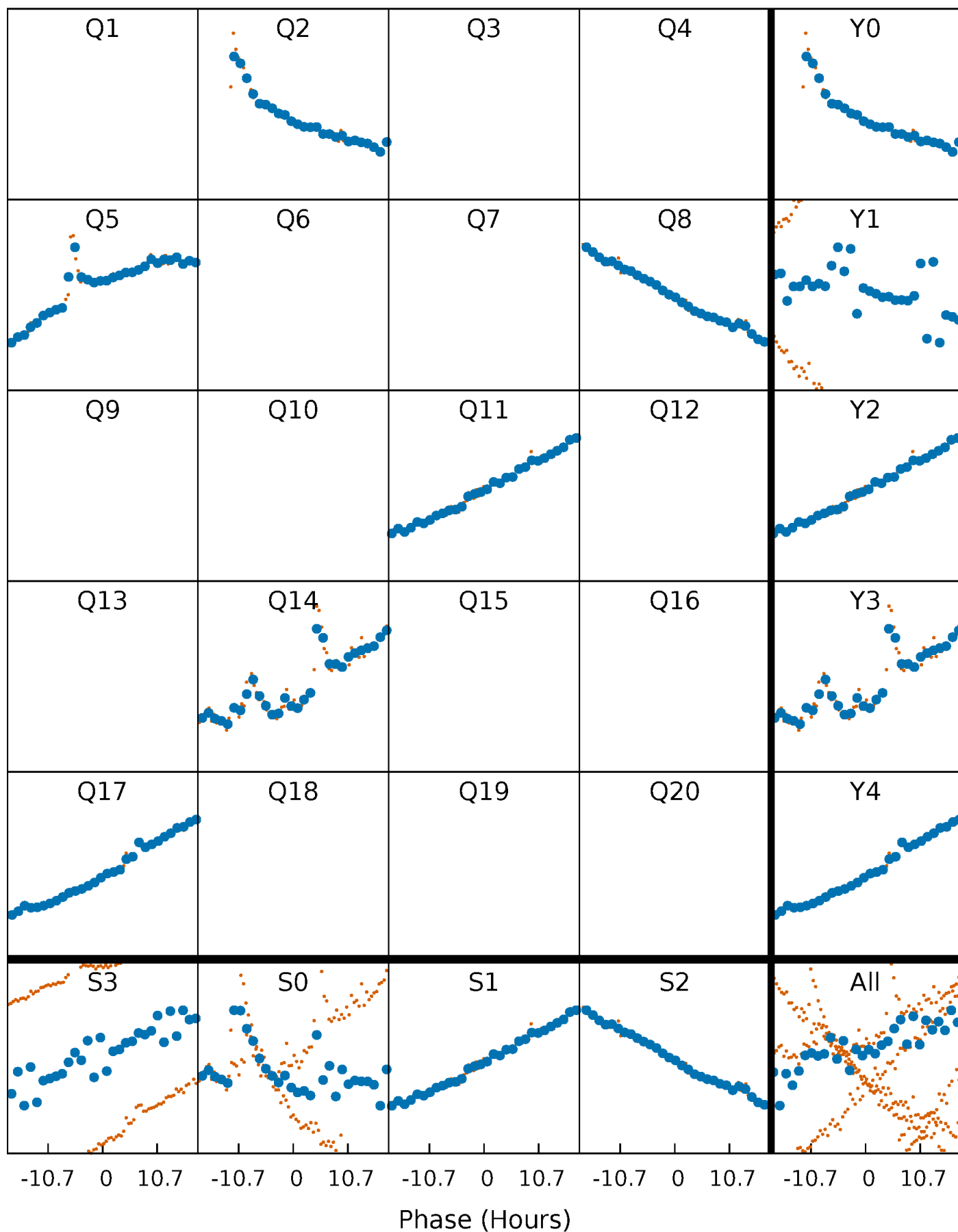


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



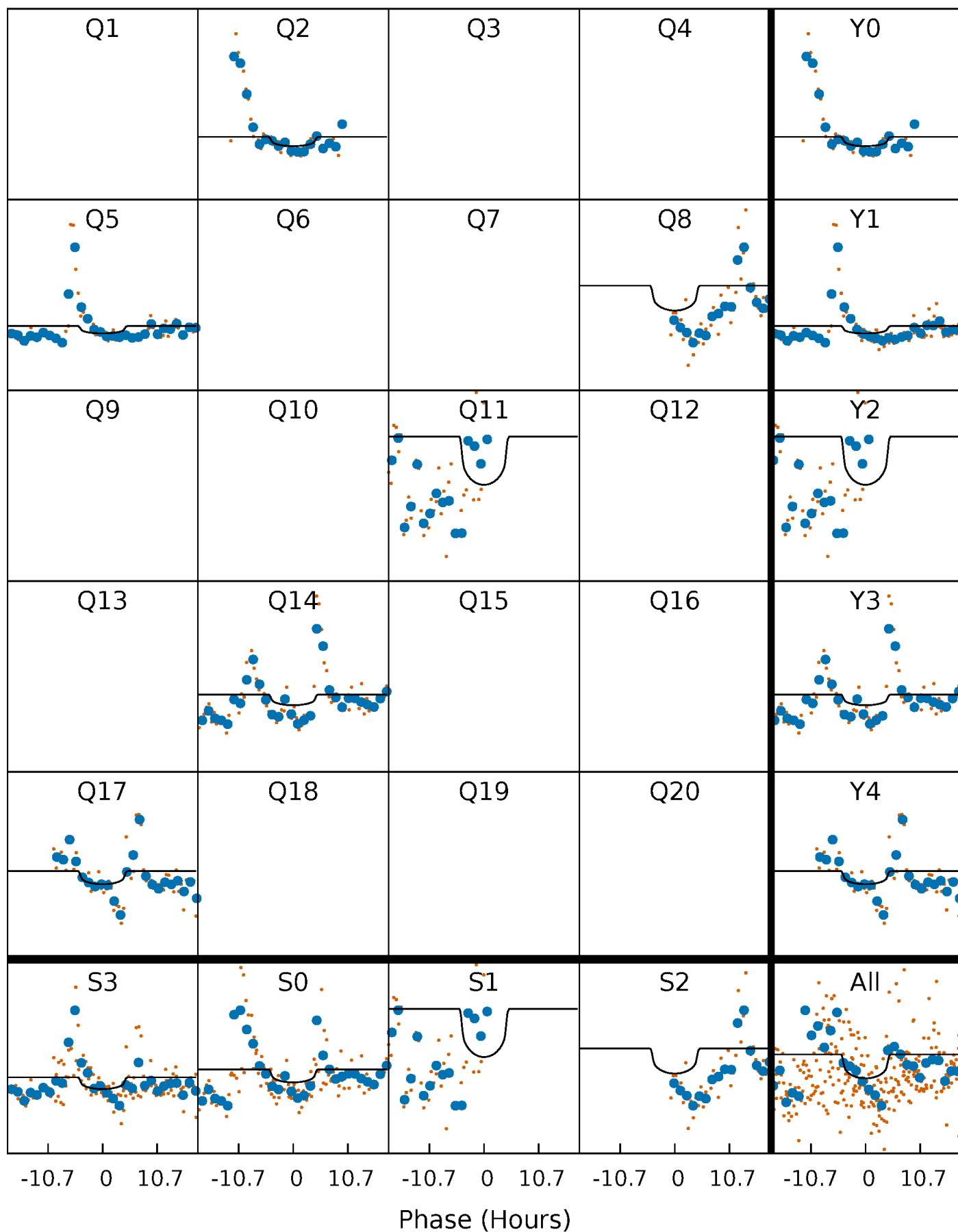
PDC Quarter-Phased Transit Curves

TCE 003439126-04 P=272.945566 Days $T_0=224.384038$ (BKJD)



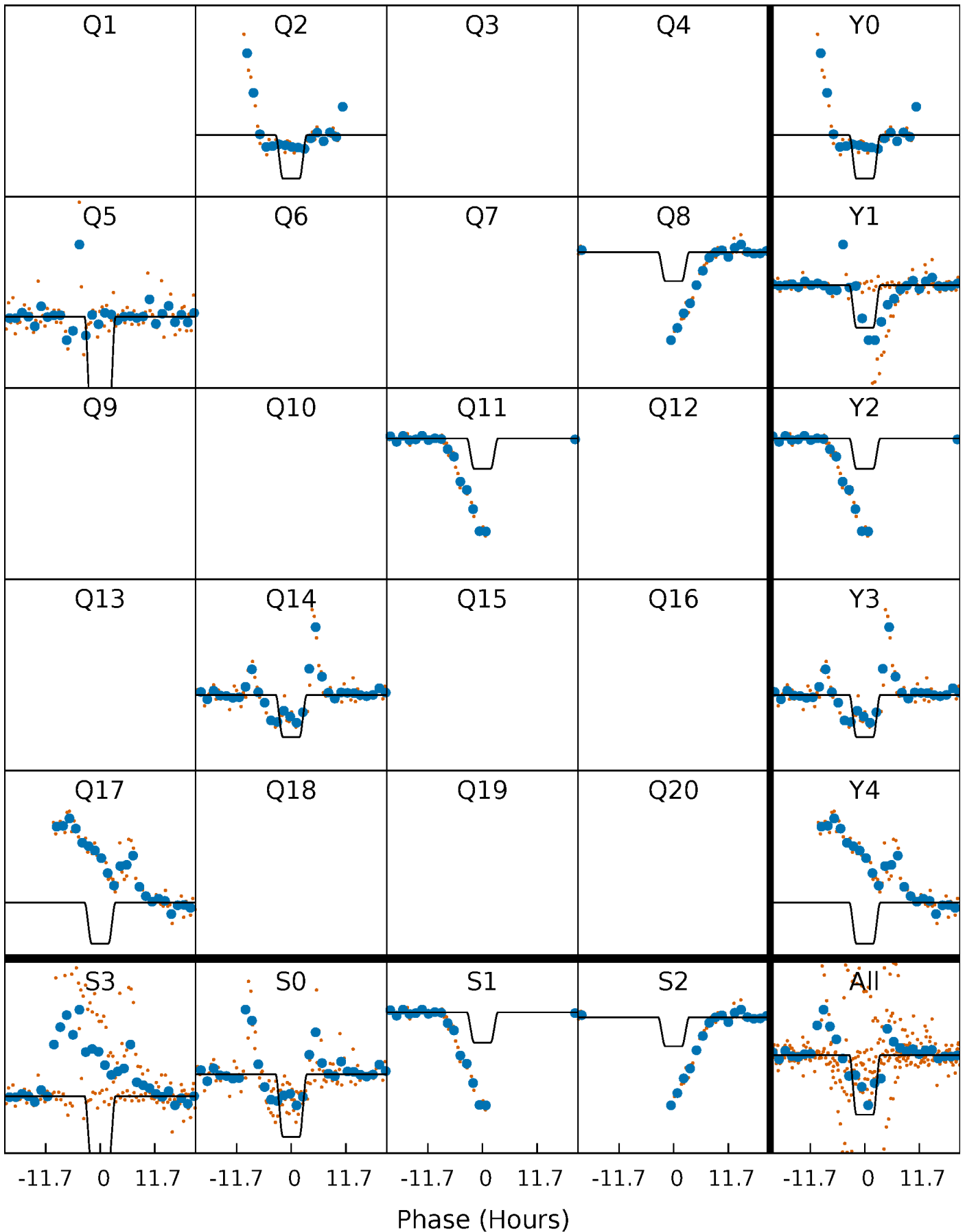
DV Quarter-Phased Transit Curves

TCE 003439126-04 $P=272.945566$ Days $T_0=224.384038$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

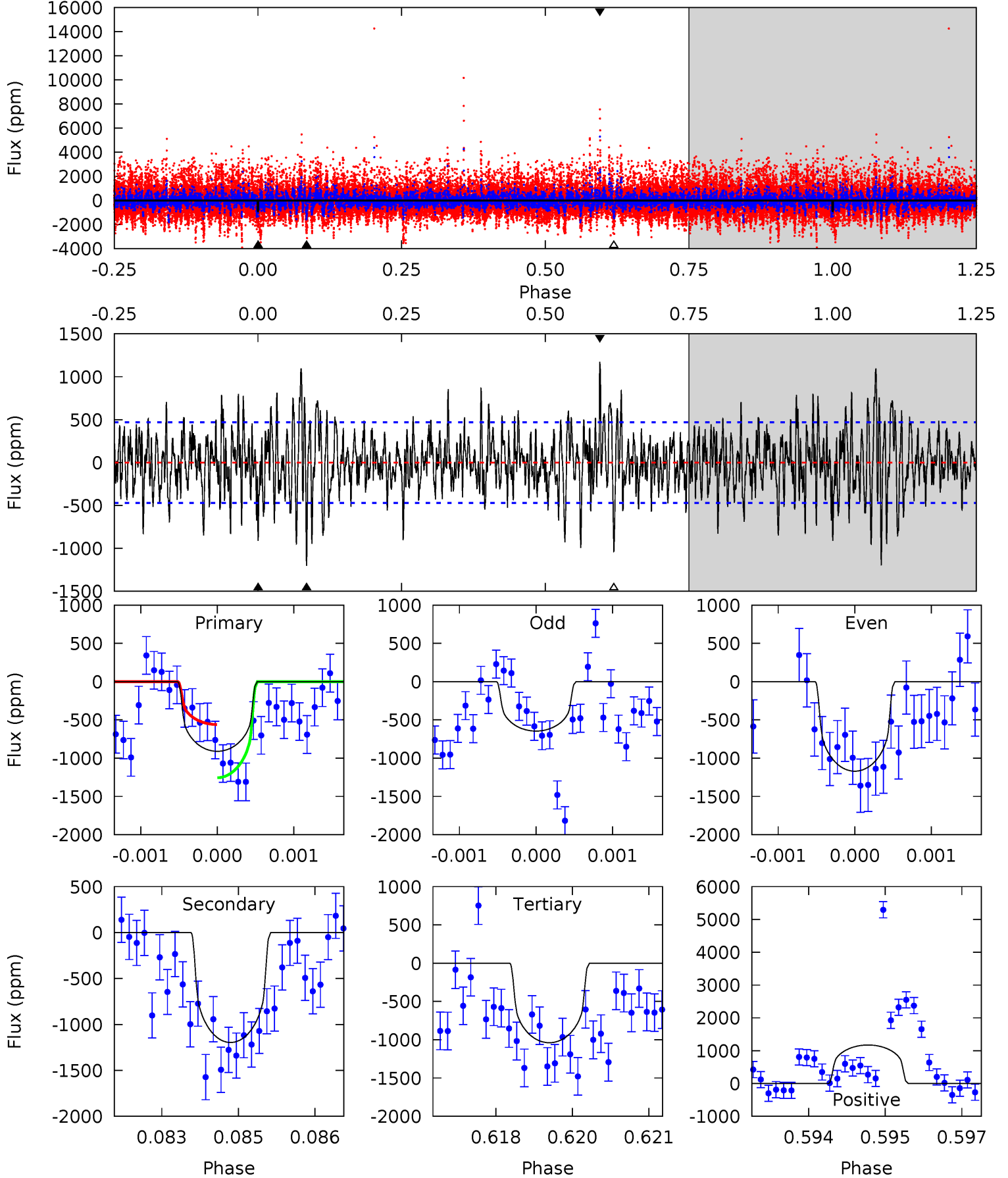
TCE 003439126-04 P=272.958306 Days $T_0=224.337940$ (BKJD)



DV Model-Shift Uniqueness Test

003439126-04, P = 272.945566 Days, E = 224.384038 Days

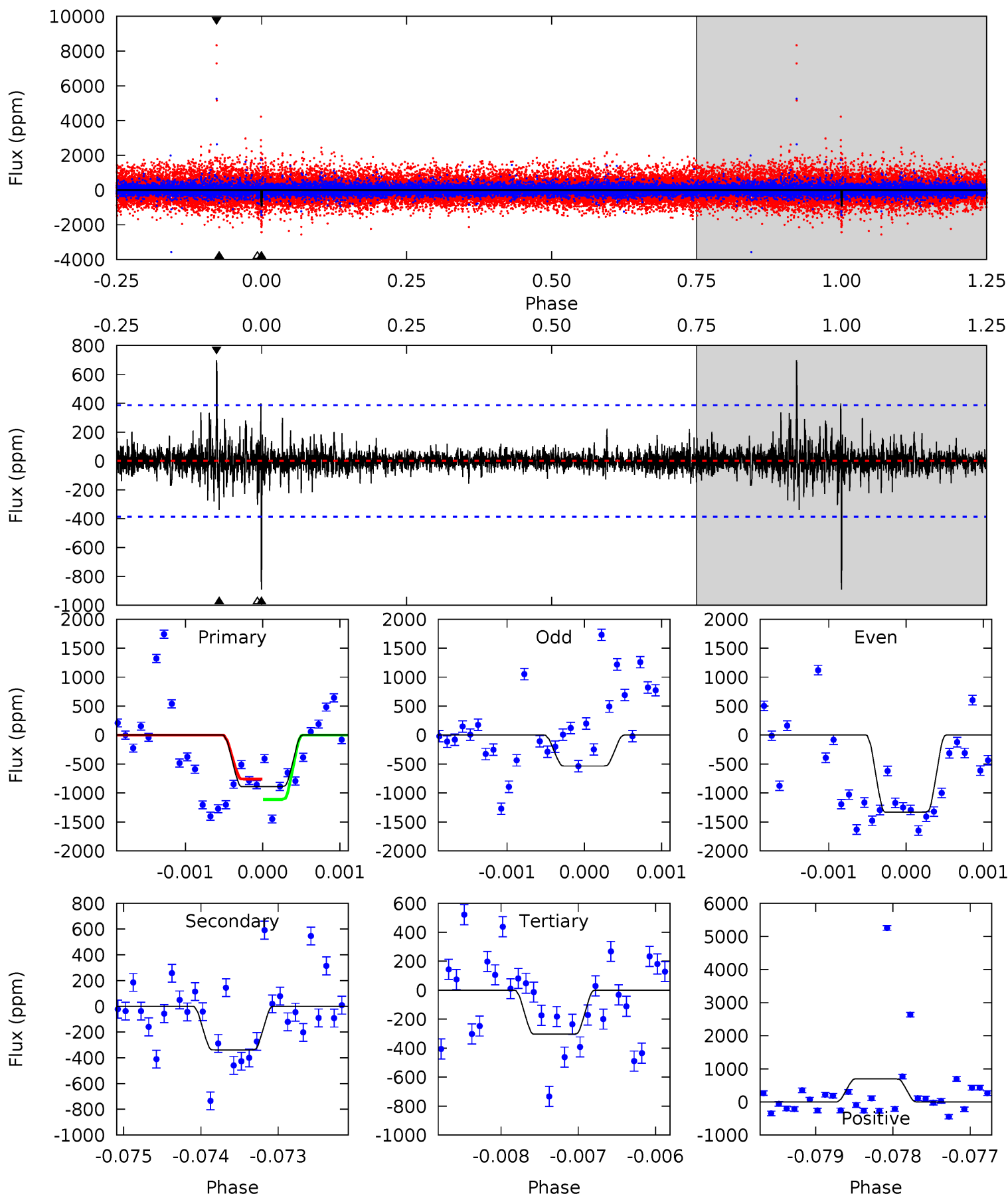
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.4	13.7	11.9	13.4	5.39	3.19	3.38	-1.47	-3.01	1.81	0.27	2.48	0.89	0.49	4.03



Alt Model-Shift Uniqueness Test

003439126-04, P = 272.958306 Days, E = 224.337940 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.6	4.77	4.28	9.85	5.45	3.29	0.79	8.28	2.72	0.49	-5.08	4.78	2.12	0.44	2.48



Stellar Parameters For KIC 003439126

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4236^{+129}_{-142}	$4.612^{+0.052}_{-0.017}$	$0.120^{+0.250}_{-0.300}$	$0.664^{+0.028}_{-0.061}$	$0.657^{+0.047}_{-0.053}$	$3.163^{+0.729}_{-0.252}$
	+3%/-3%	+1%/-0%	+208%/-250%	+4%/-9%	+7%/-8%	+23%/-8%
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 003439126-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1197 ± 87	$1.99^{+1.27}_{-1.18}$	250^{+8}_{-9}	4607^{+2410}_{-764}	$85052^{+445025}_{-53275}$
Alt.	-338 ± 71	$4.06^{+1.36}_{-1.34}$	250^{+9}_{-9}	2970^{+369}_{-249}	6001^{+6747}_{-2849}

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 $A_{obs} \gg 1.0$

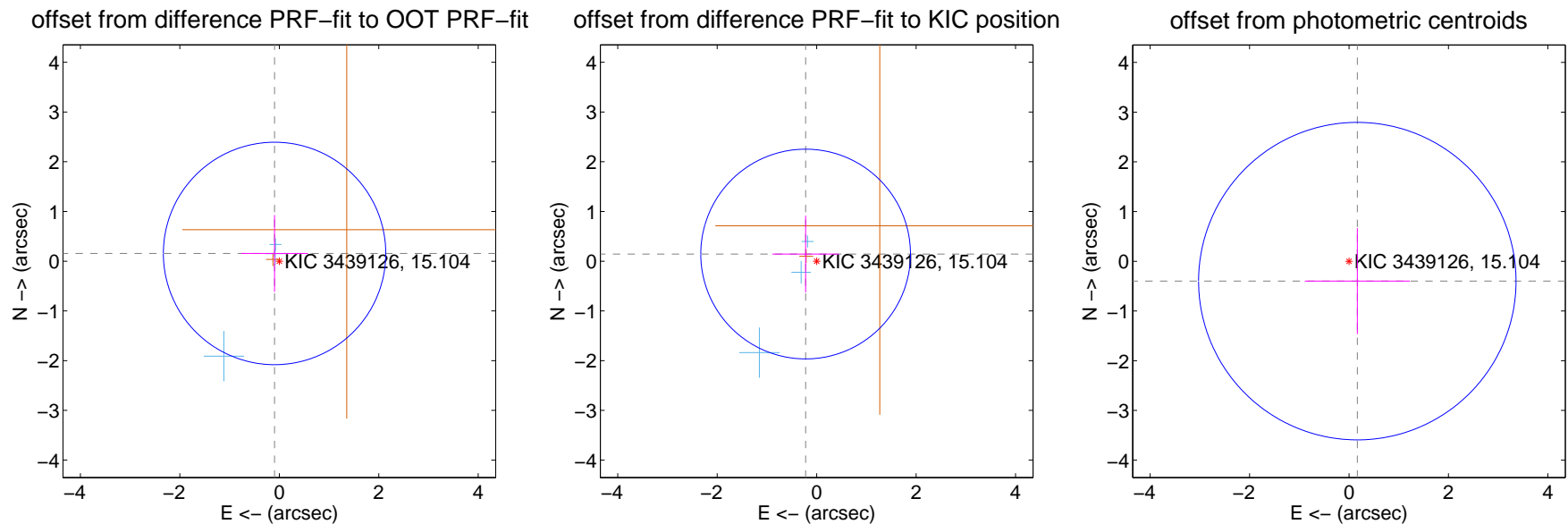
DV Centroid Data

Supplemental centroid analysis for 003439126-04. Kepler magnitude: 15.10. Transit SNR 3.97

There are 3 quarters with good PRF difference image offsets

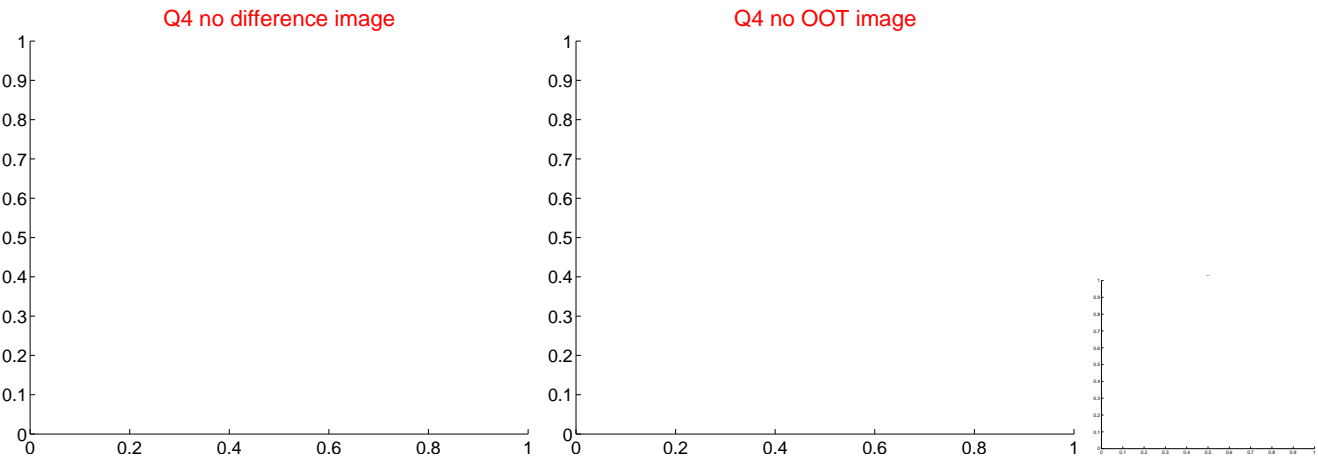
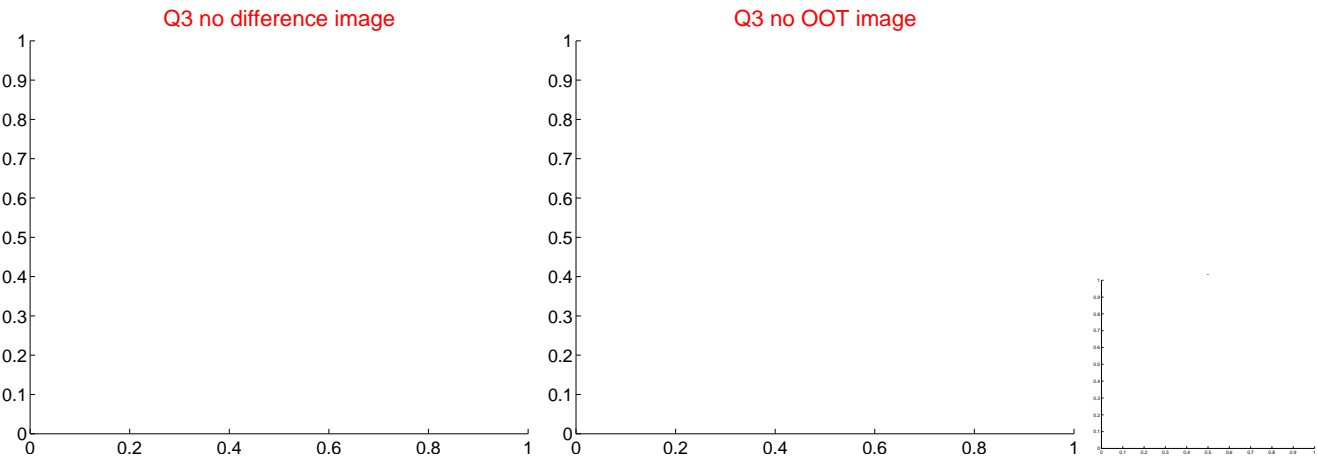
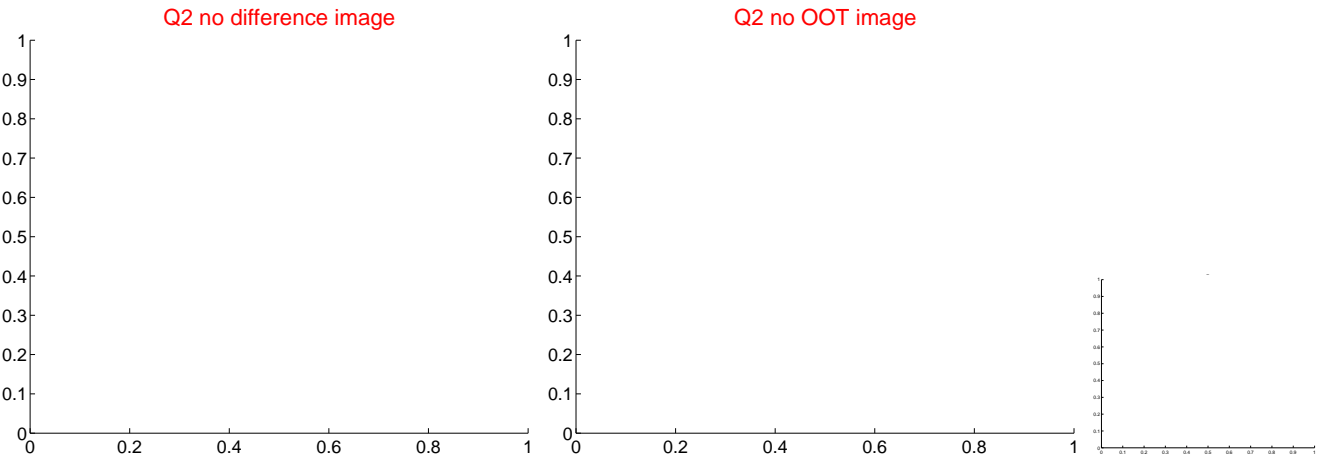
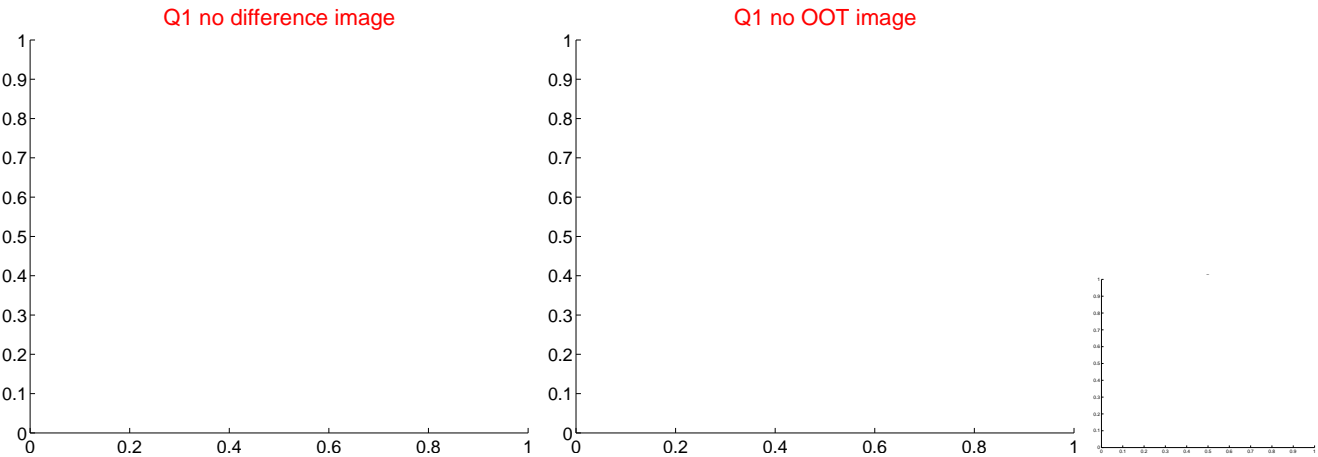
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.182 ± 0.745	0.24	0.095 ± 0.672	0.156 ± 0.771
PRF-fit source offset from KIC position	0.264 ± 0.703	0.38	0.222 ± 0.672	0.144 ± 0.771
photometric centroid source offset	0.43 ± 1.06	0.41	-0.17 ± 1.06	-0.40 ± 1.07

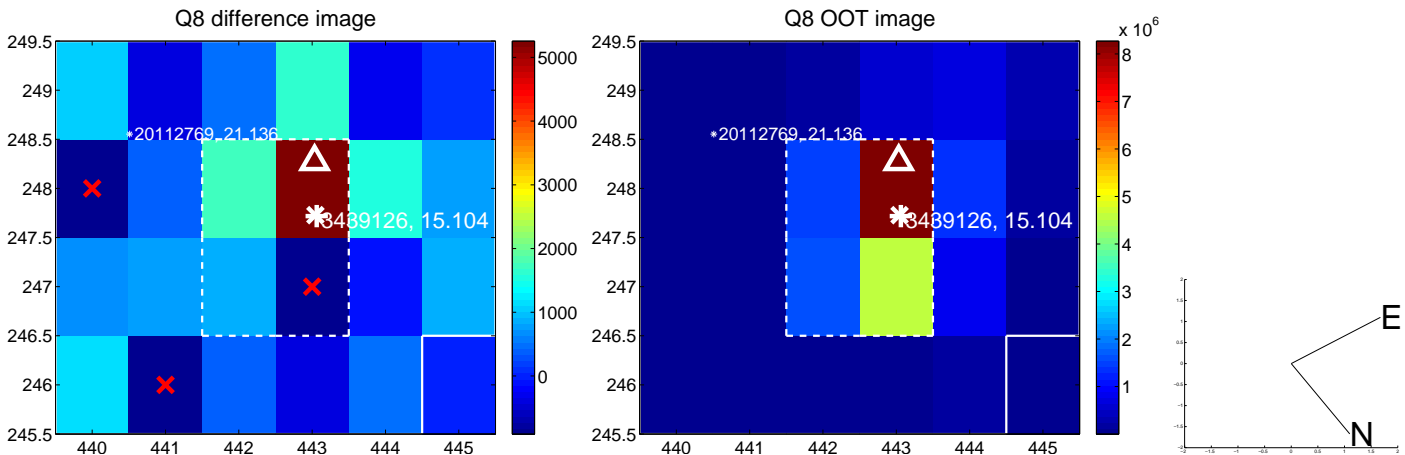
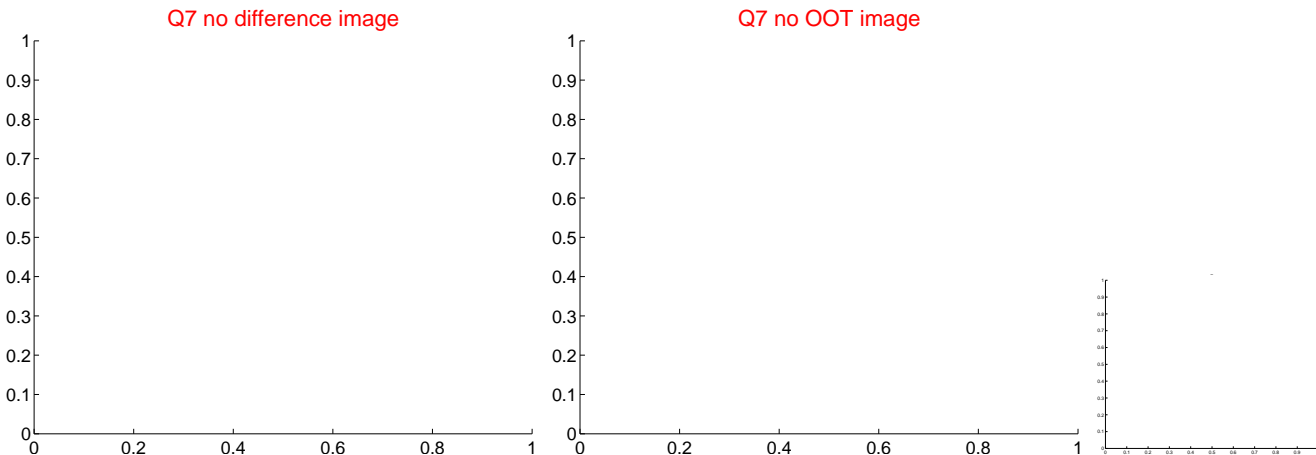
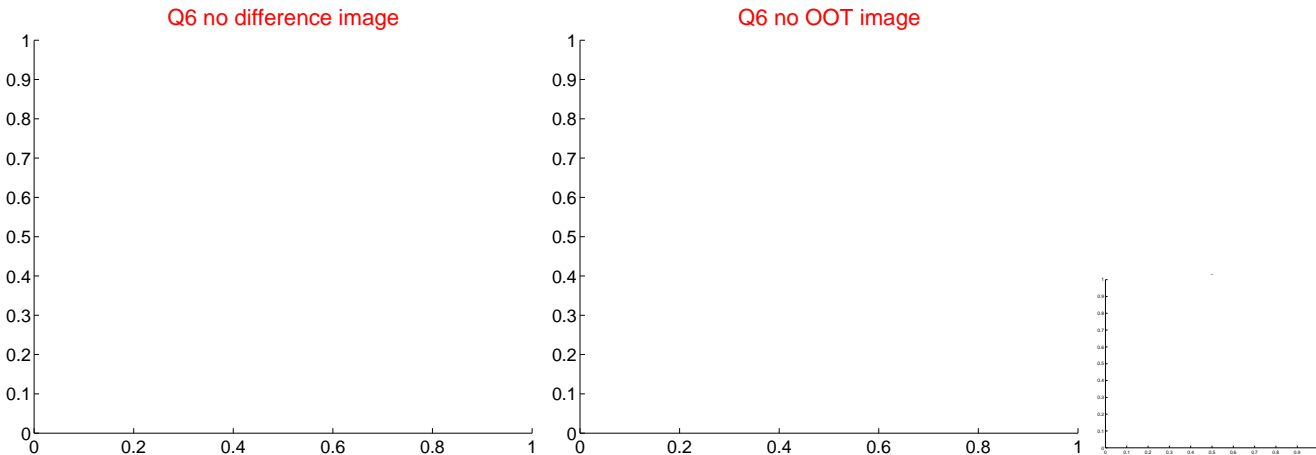
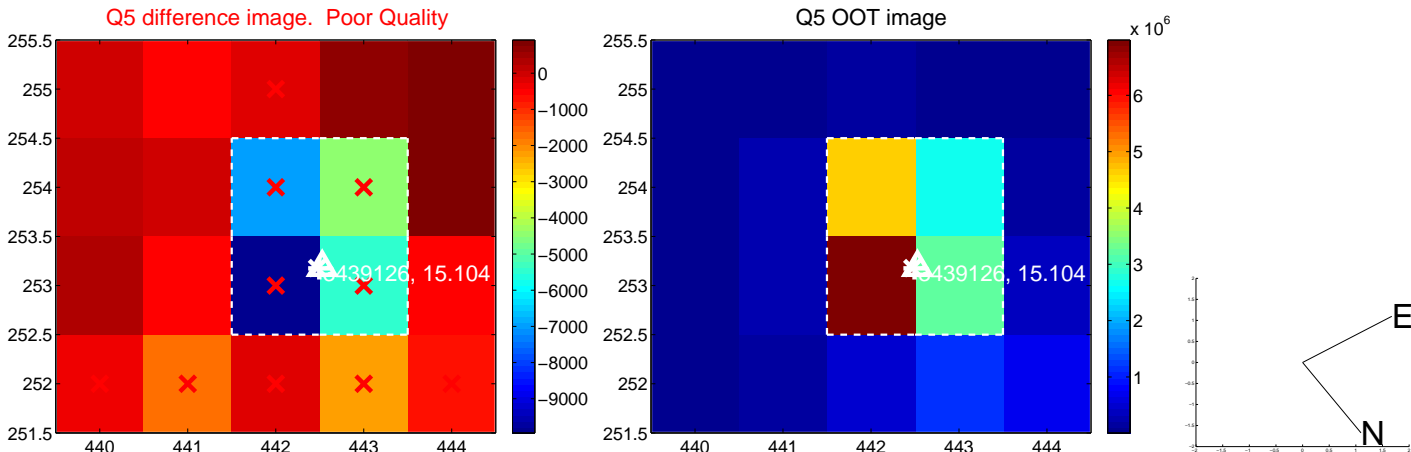


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

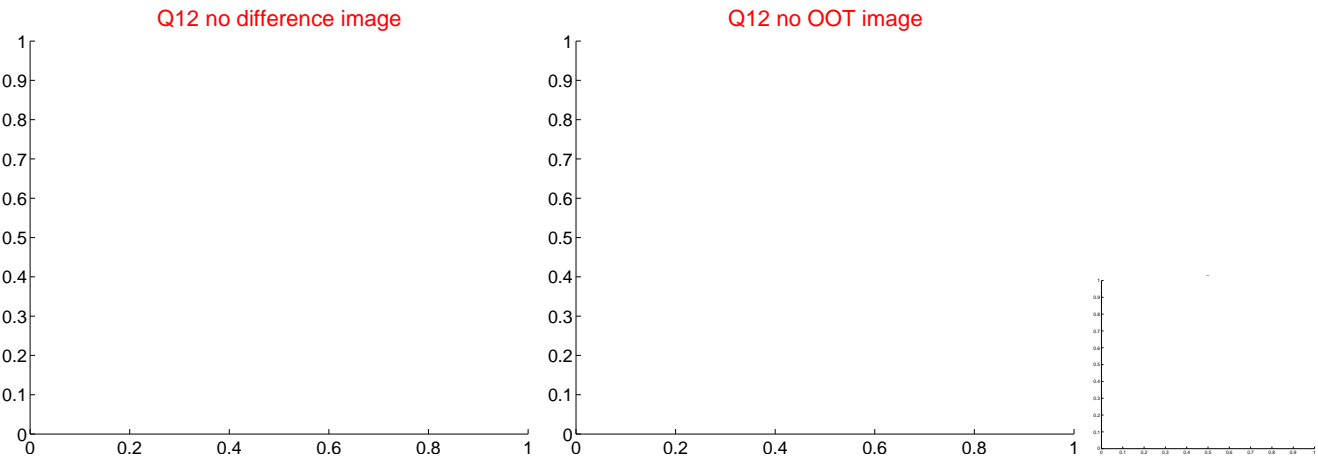
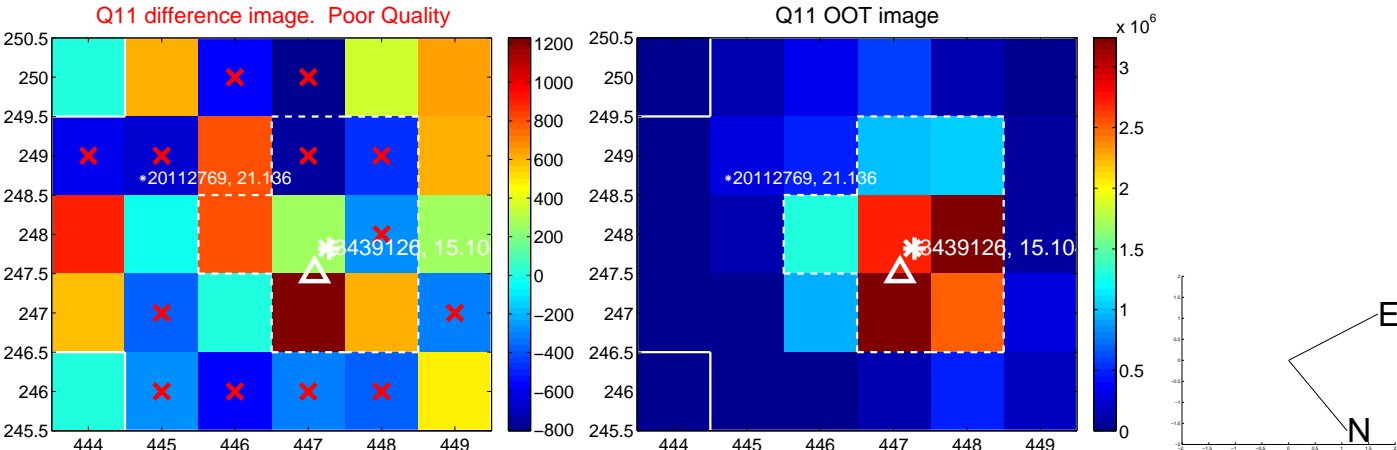
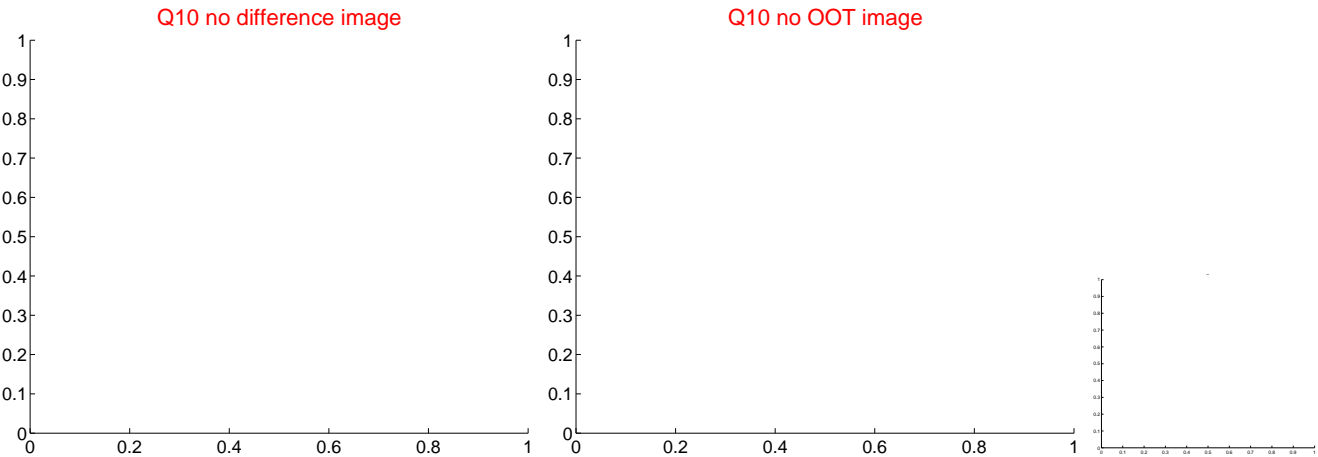
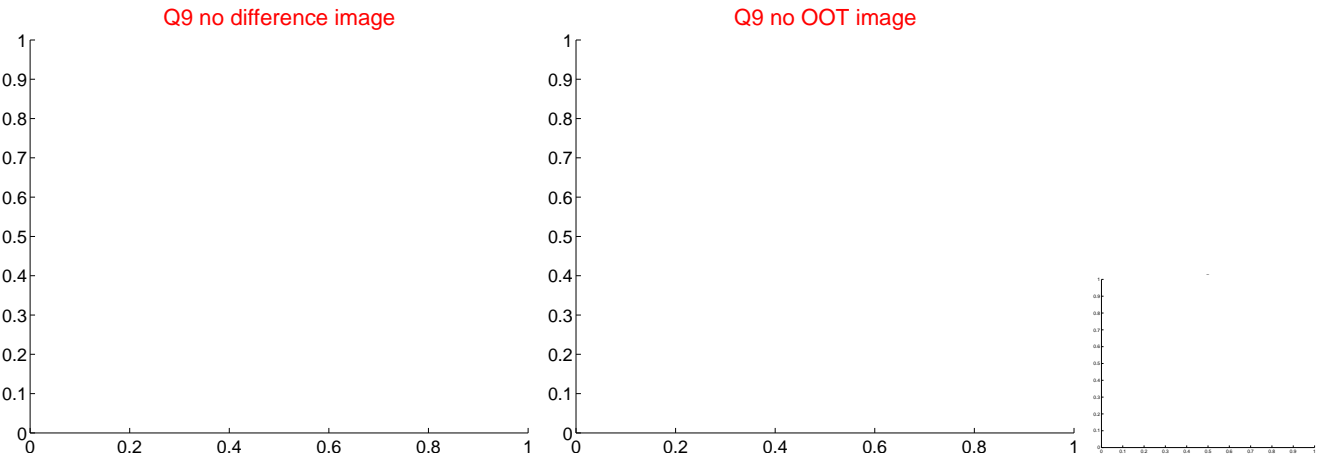
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



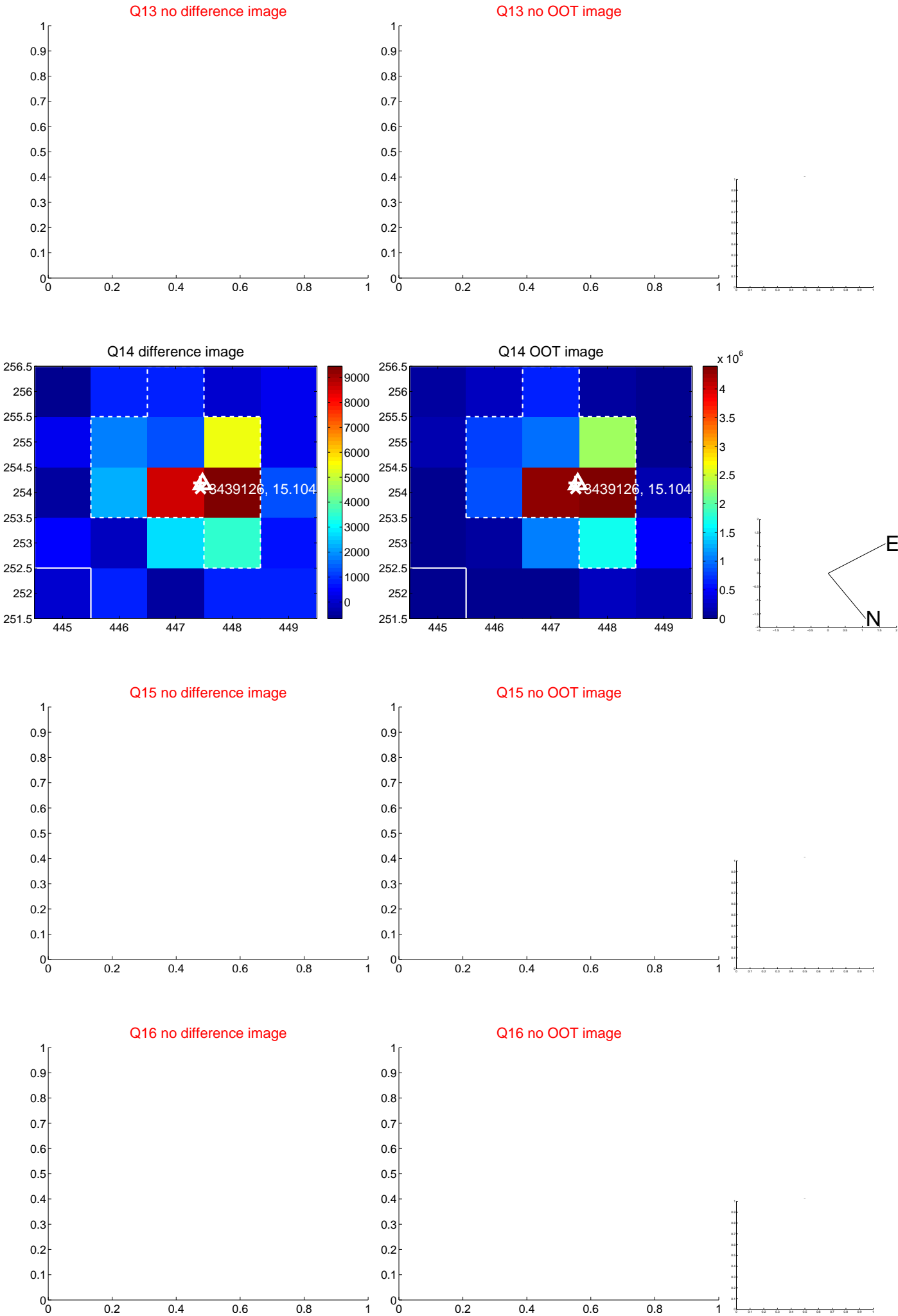
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



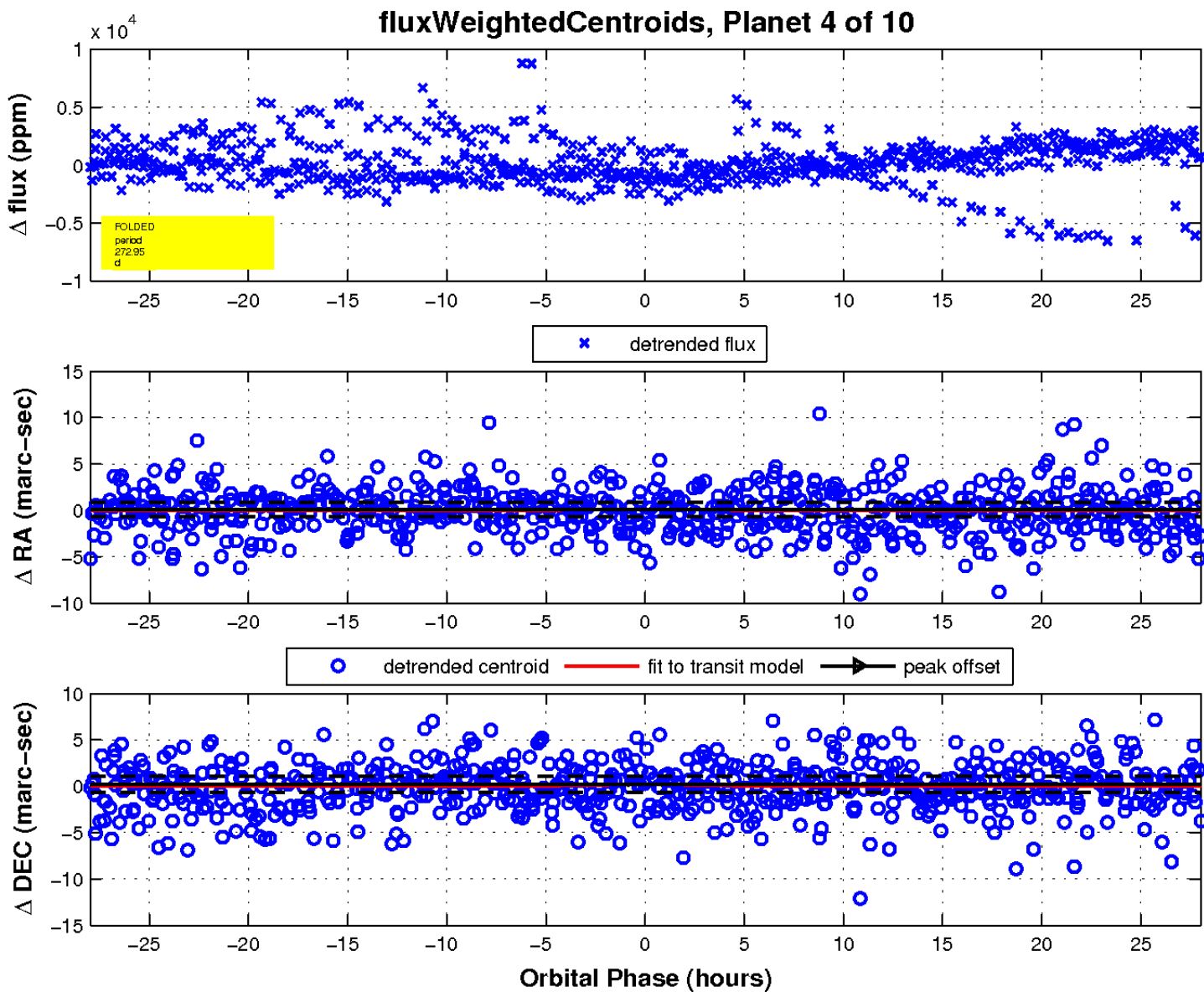
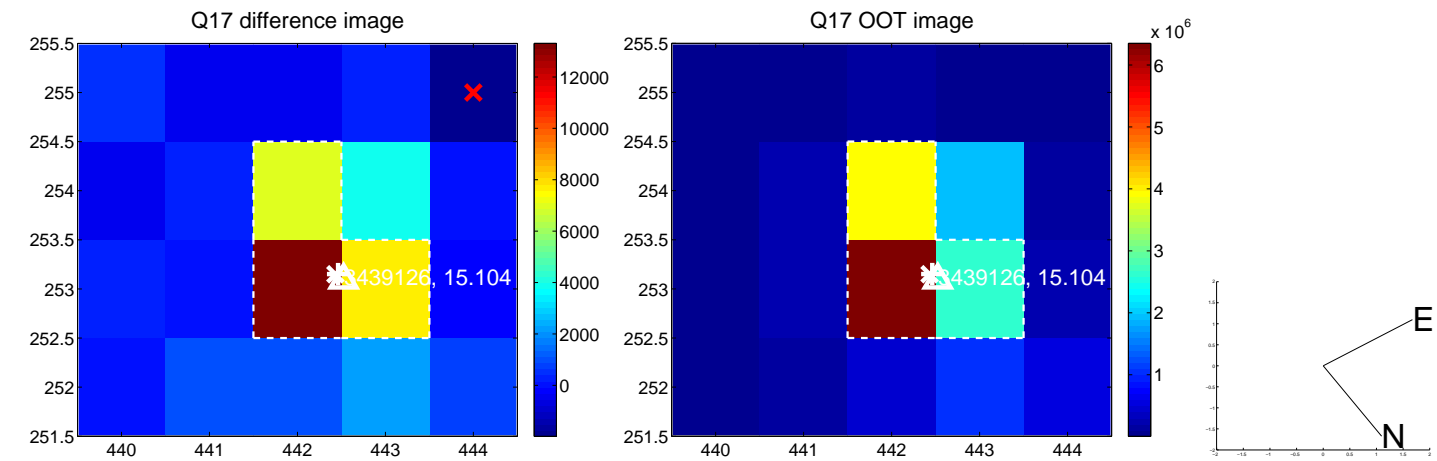
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



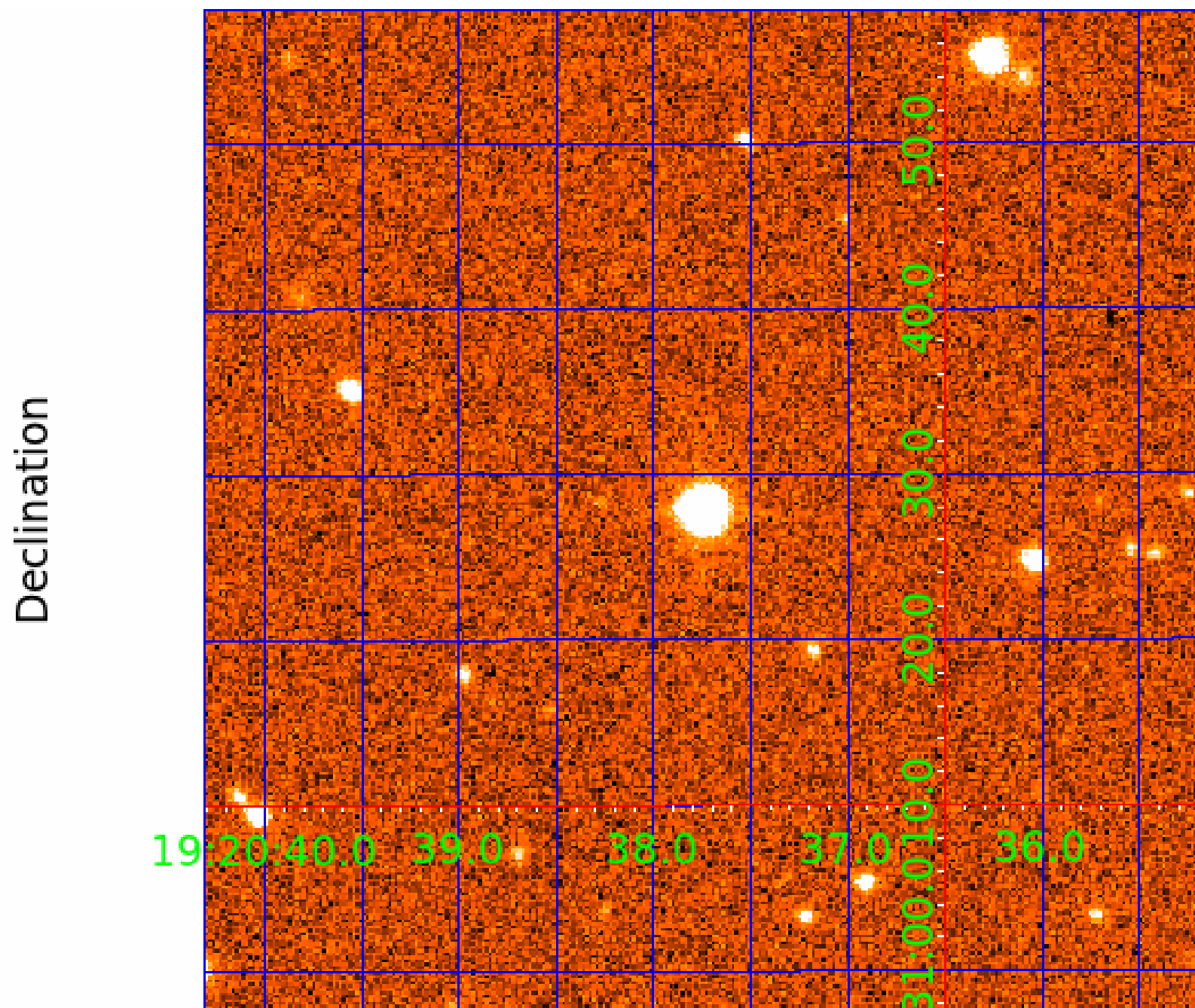
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



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})
003439126-01	OBS	No	466.598907	562.202843	1581.3	9.515	13.7	6.5	0.66	4236	2.77	0.12
003439126-02	OBS	No	456.286524	484.430344	1711.3	7.600	11.8	7.8	0.66	4236	3.27	0.12
003439126-03	OBS	7655.01	2.976224	132.922051	197.1	6.191	11.6	10.9	0.66	4236	1.14	102.47
003439126-04	OBS	No	272.945566	224.384038	662.9	9.352	11.7	4.0	0.66	4236	1.87	0.25
003439126-05	OBS	No	398.924392	256.302150	1050.5	9.000	11.6	-1.0	0.66	4236	2.05	0.15
003439126-06	OBS	No	347.186618	410.217941	1194.3	7.500	11.4	-1.0	0.66	4236	2.19	0.18
003439126-07	OBS	No	251.654938	196.634295	584.4	8.995	11.4	3.1	0.66	4236	1.57	0.28
003439126-08	OBS	No	428.663233	529.169612	3632.6	17.808	10.9	9.7	0.66	4236	3.81	0.14
003439126-09	OBS	No	323.272075	281.919624	2046.6	20.411	9.8	7.4	0.66	4236	2.88	0.20
003439126-10	OBS	No	229.359900	174.128589	1174.7	7.500	10.2	-1.0	0.66	4236	2.17	0.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003439126-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-03	OBS	FP	0.00	0	0	0	1	EPHEM_MATCH
003439126-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV
003439126-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST
003439126-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
003439126-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
003439126-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

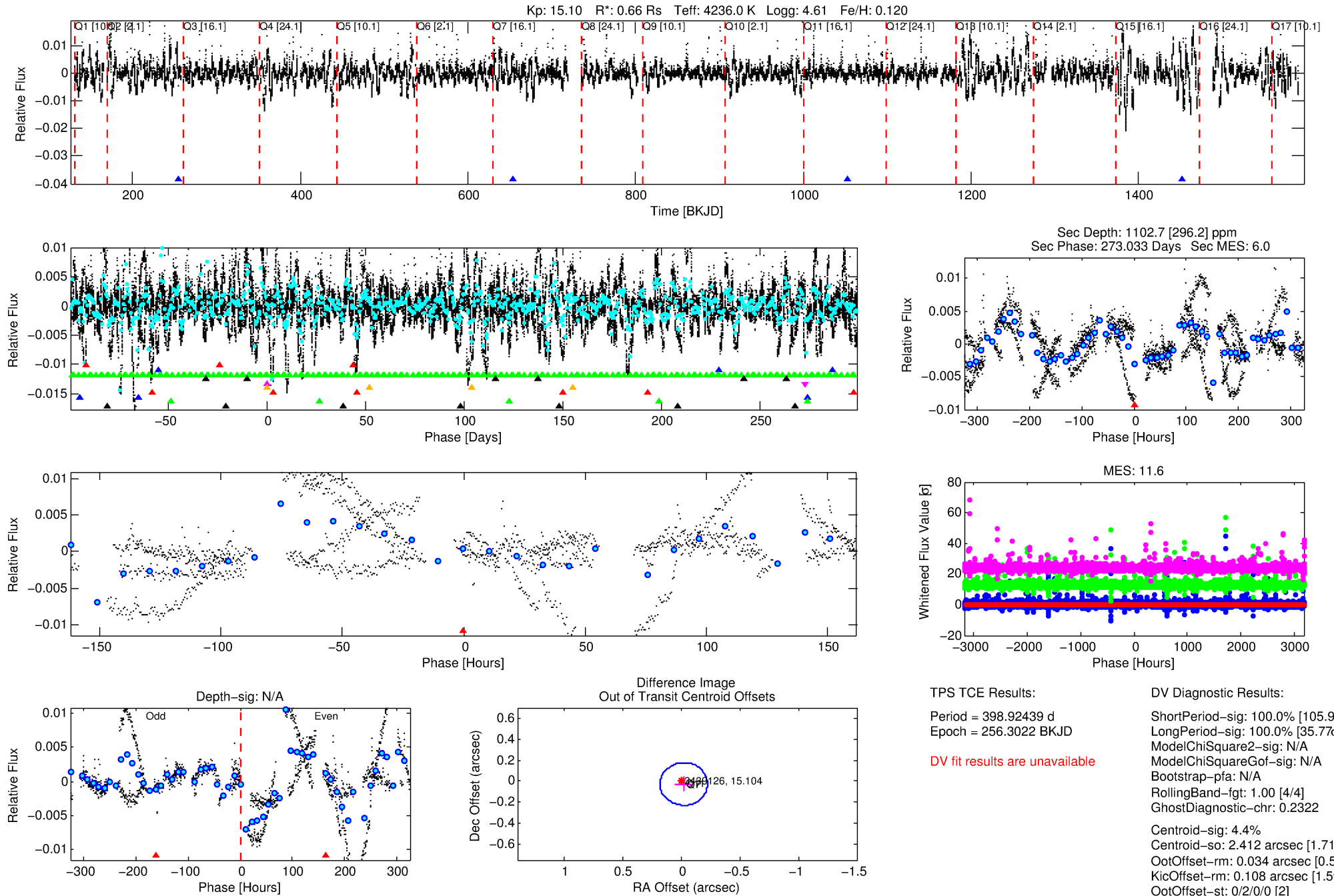
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003439126-05

No Significant Match Found

DV One-Page Summary

KIC: 3439126 Candidate: 5 of 10 Period: 398.924 d

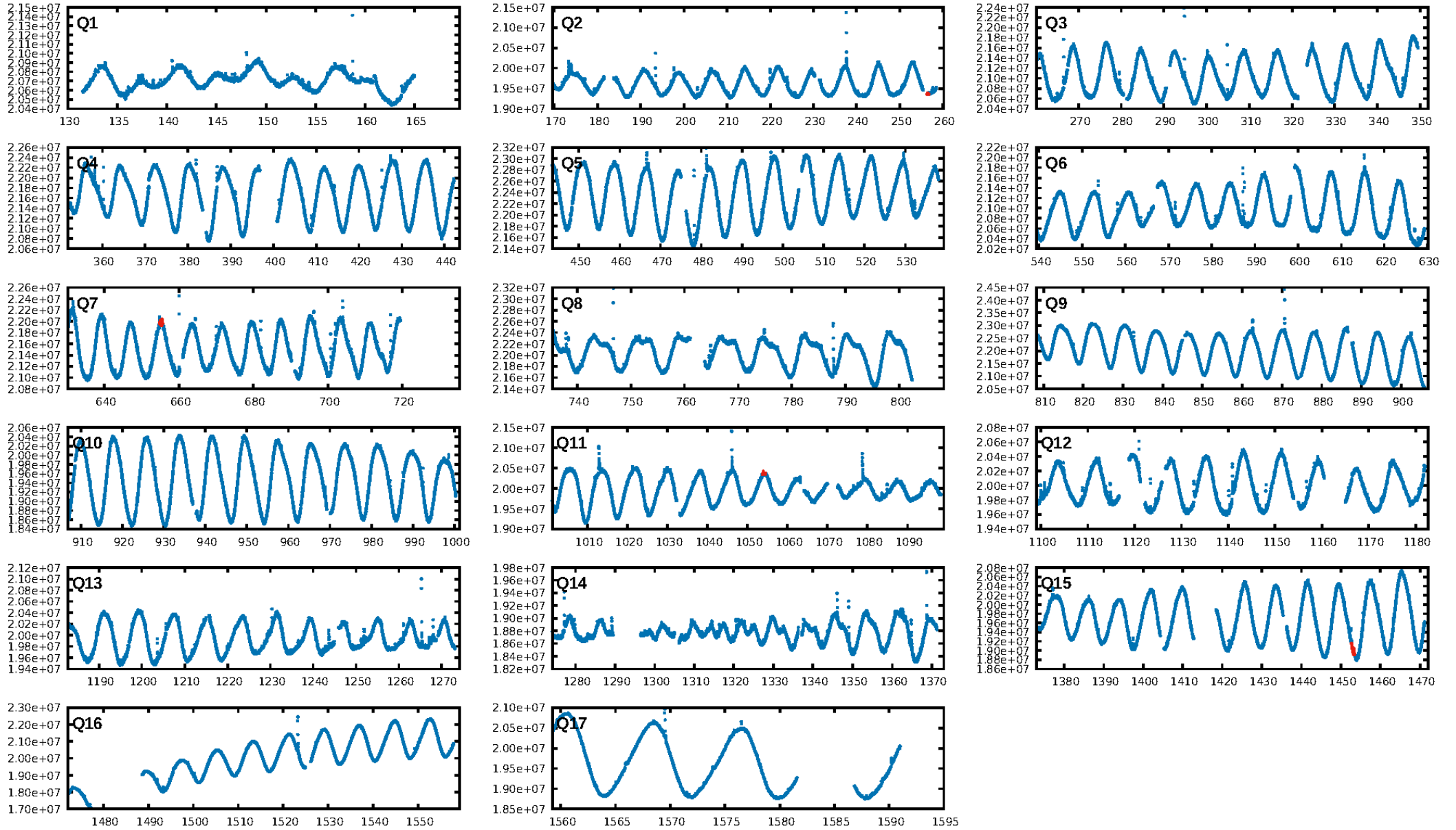


DV fit results are unavailable

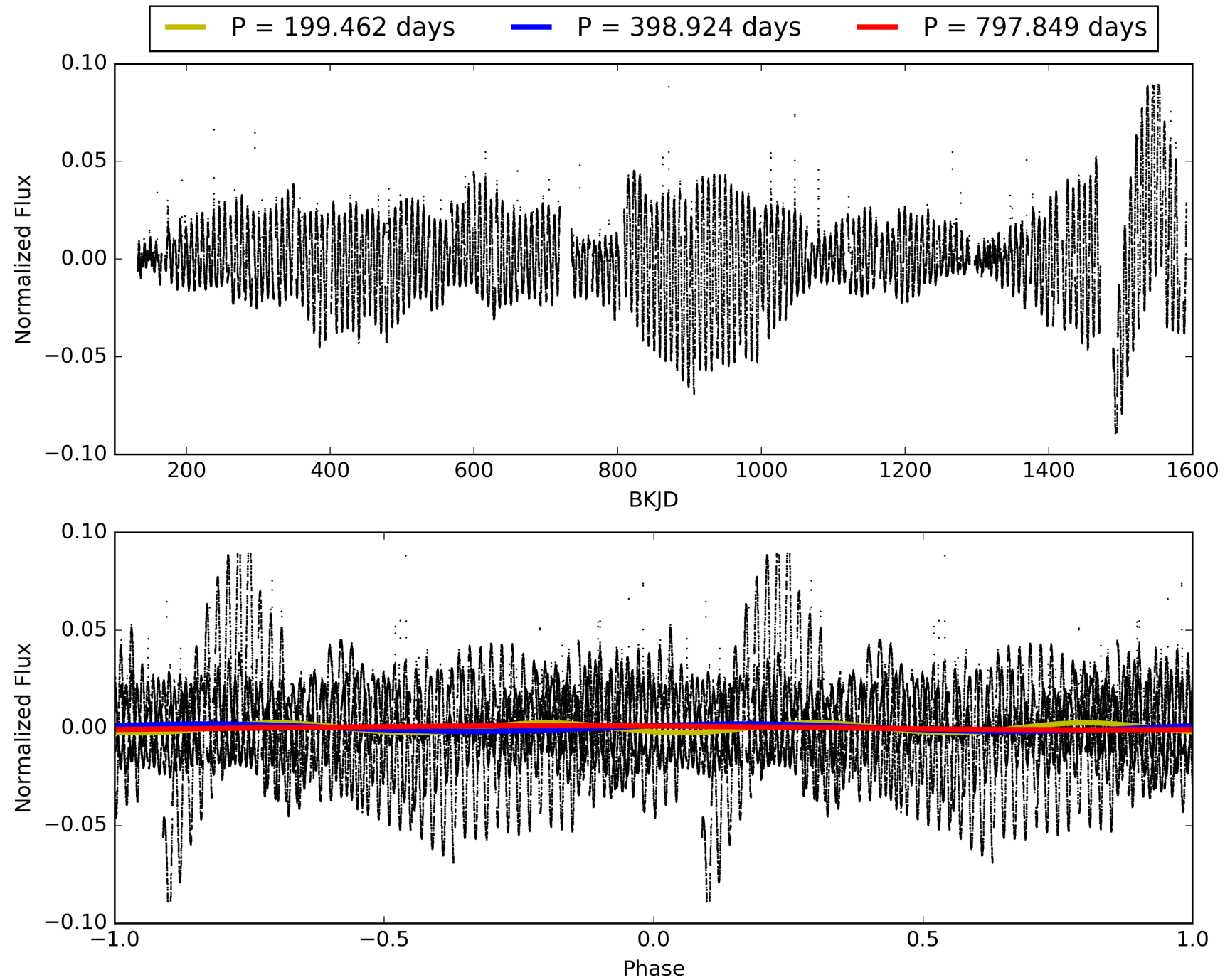
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:54:02 Z

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

TCE 003439126-05, PDC Light Curves

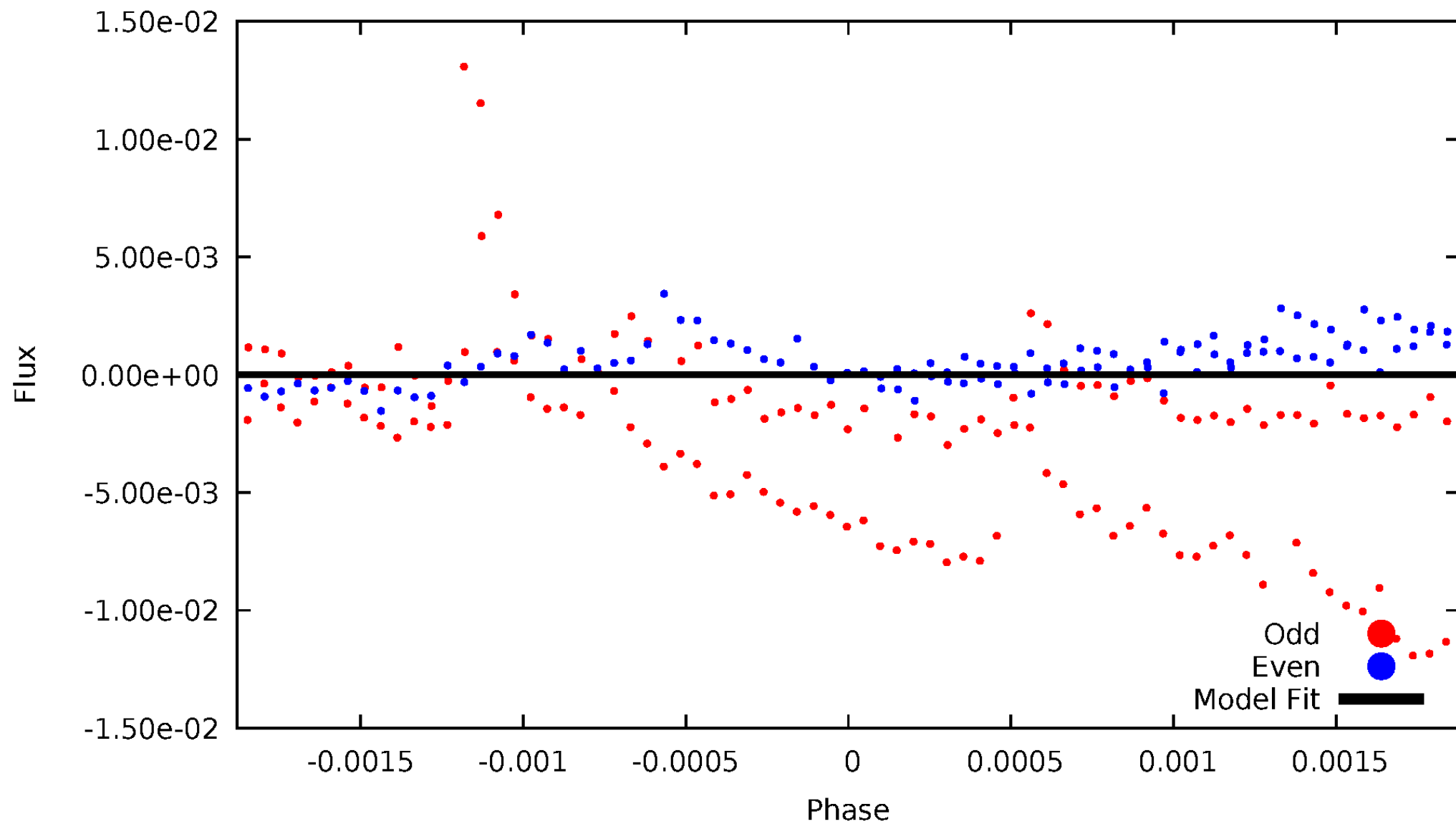


TCE 003439126-05



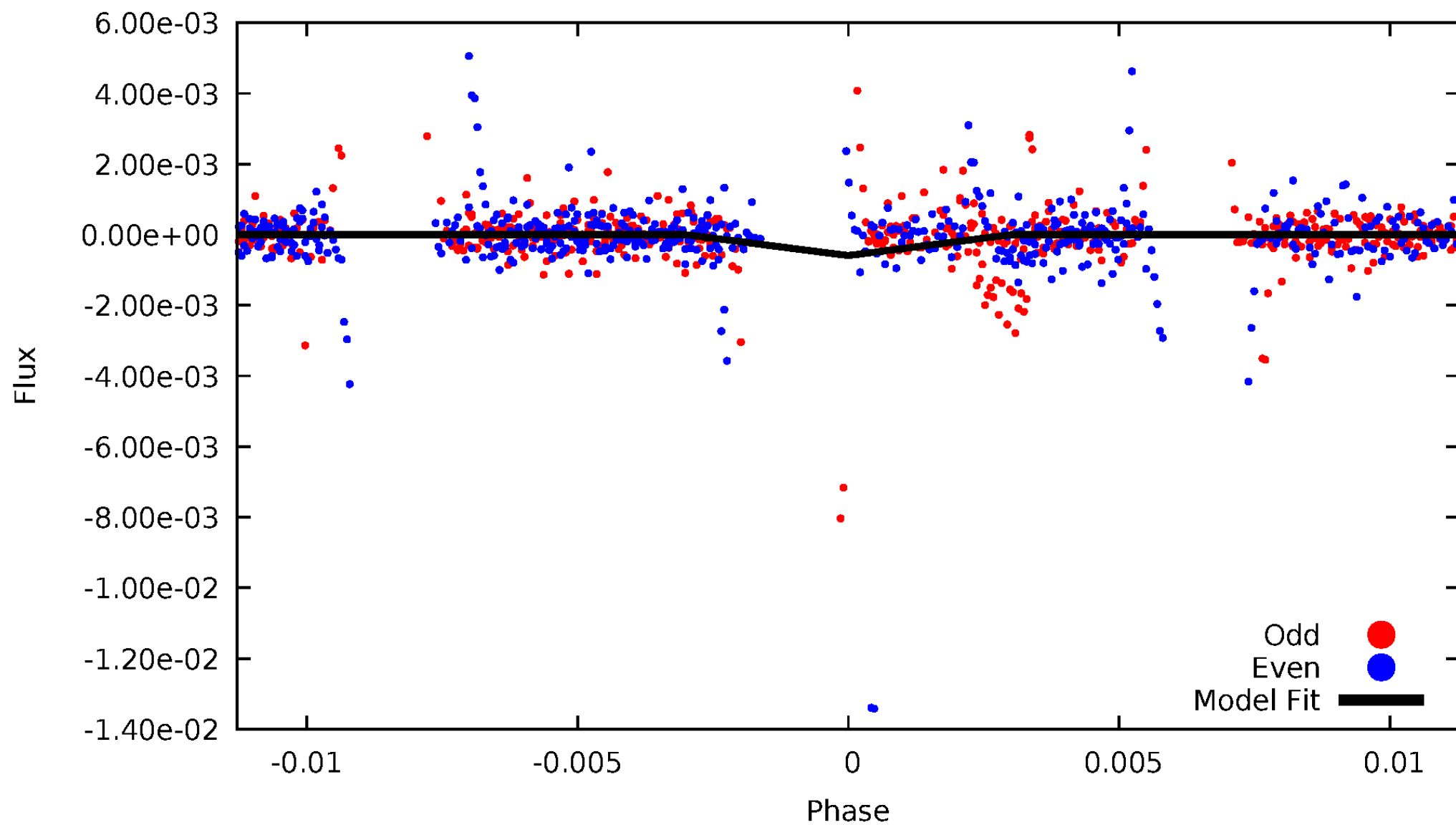
DV Odd/Even

TCE 003439126-05

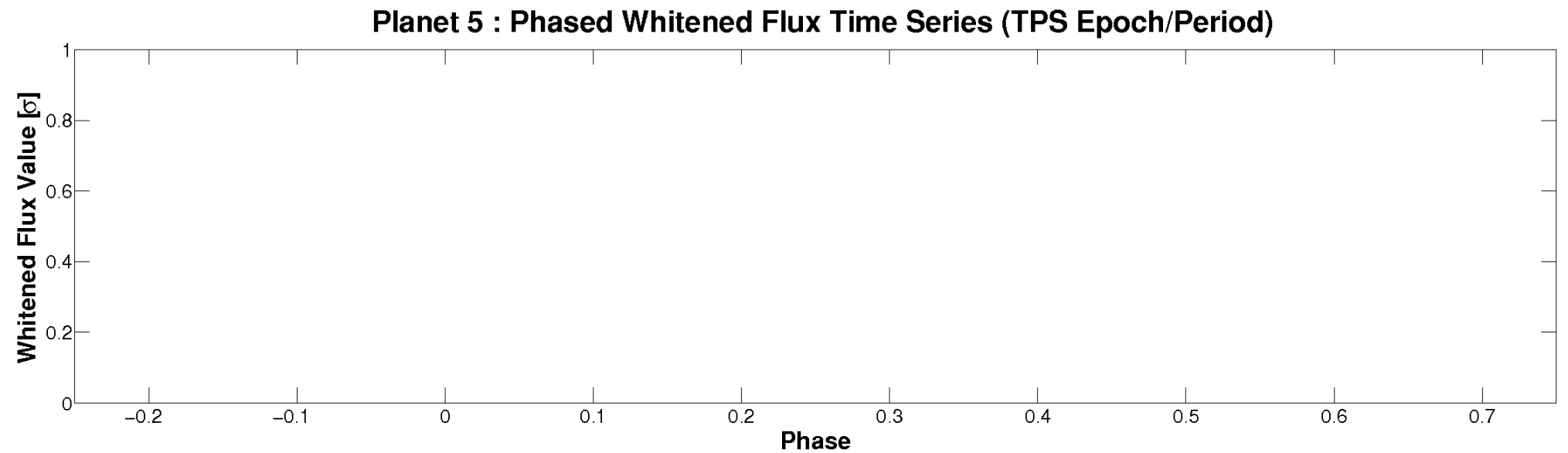
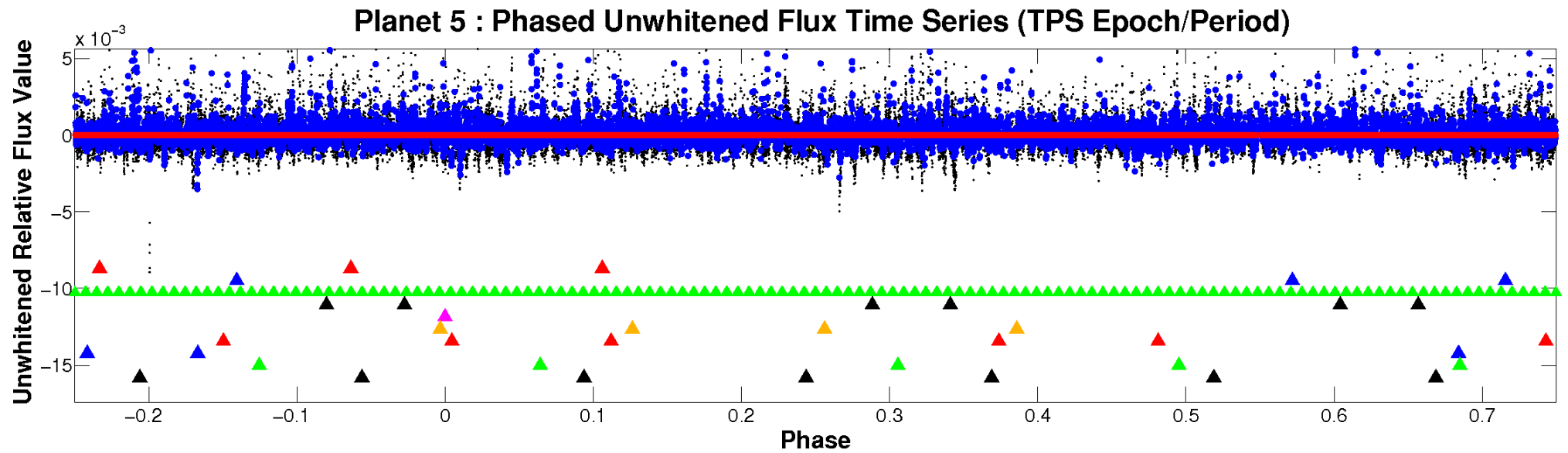


ALT Odd/Even

TCE 003439126-05

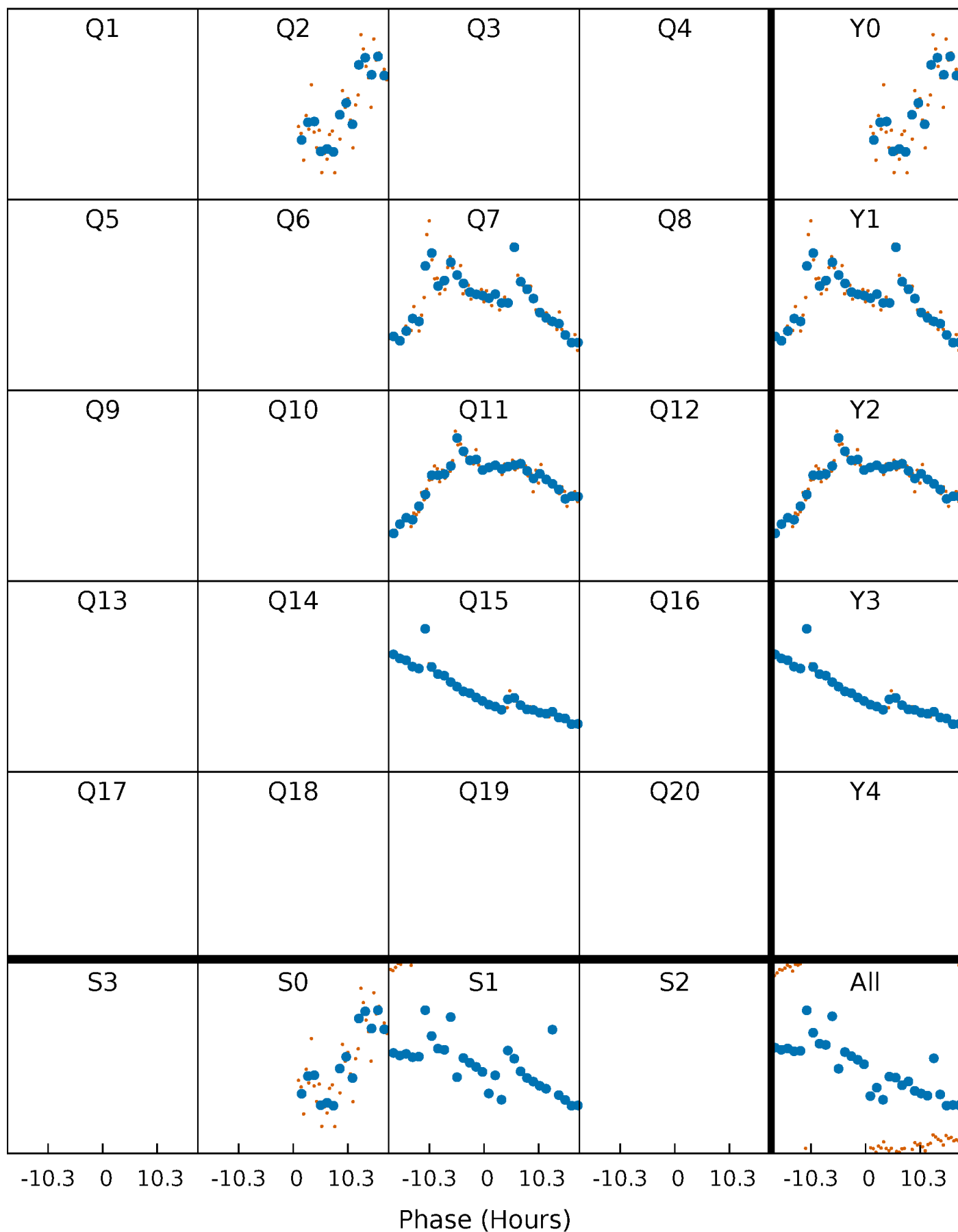


Non-Whitened Vs. Whitened Light Curve



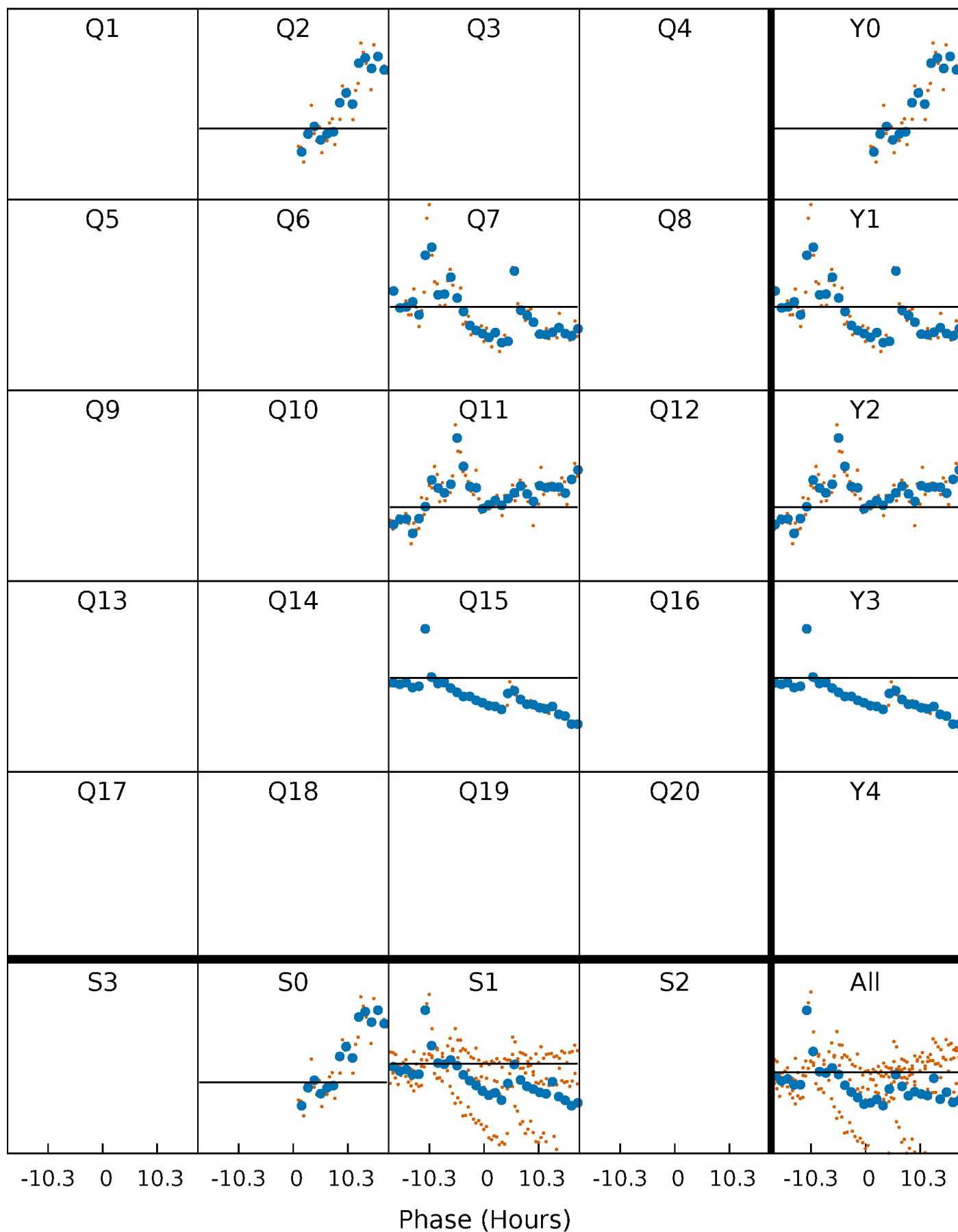
PDC Quarter-Phased Transit Curves

TCE 003439126-05 $P=398.924392$ Days $T_0=256.302150$ (BKJD)



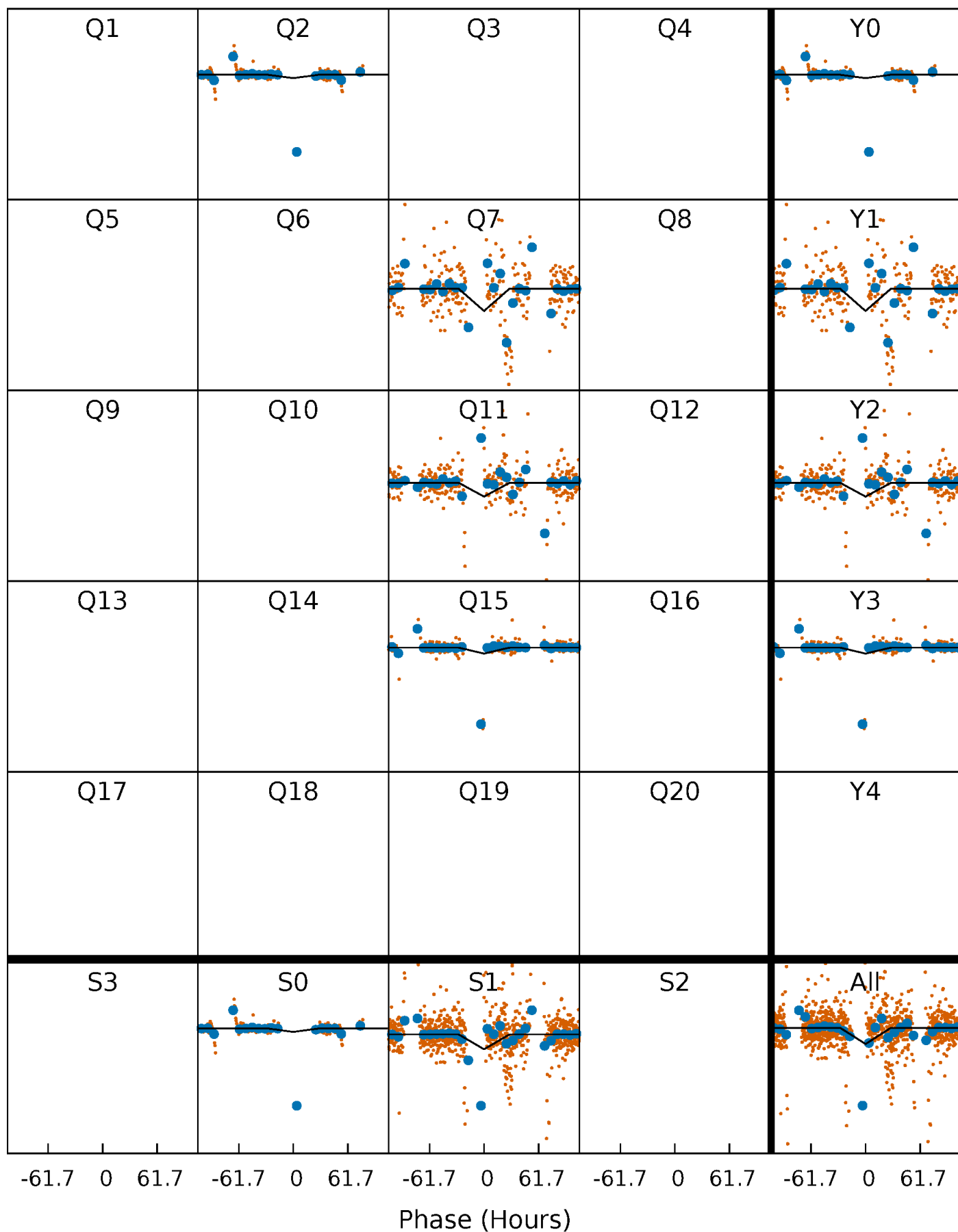
DV Quarter-Phased Transit Curves

TCE 003439126-05 $P=398.924392$ Days $T_0=256.302150$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

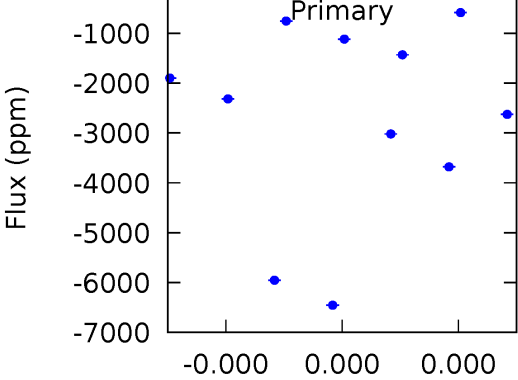
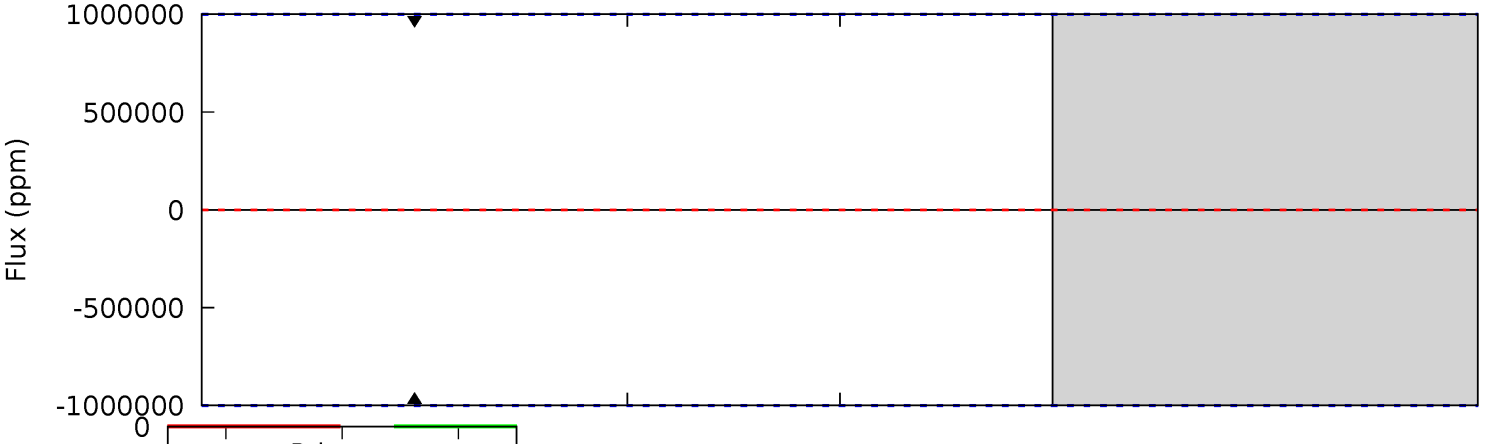
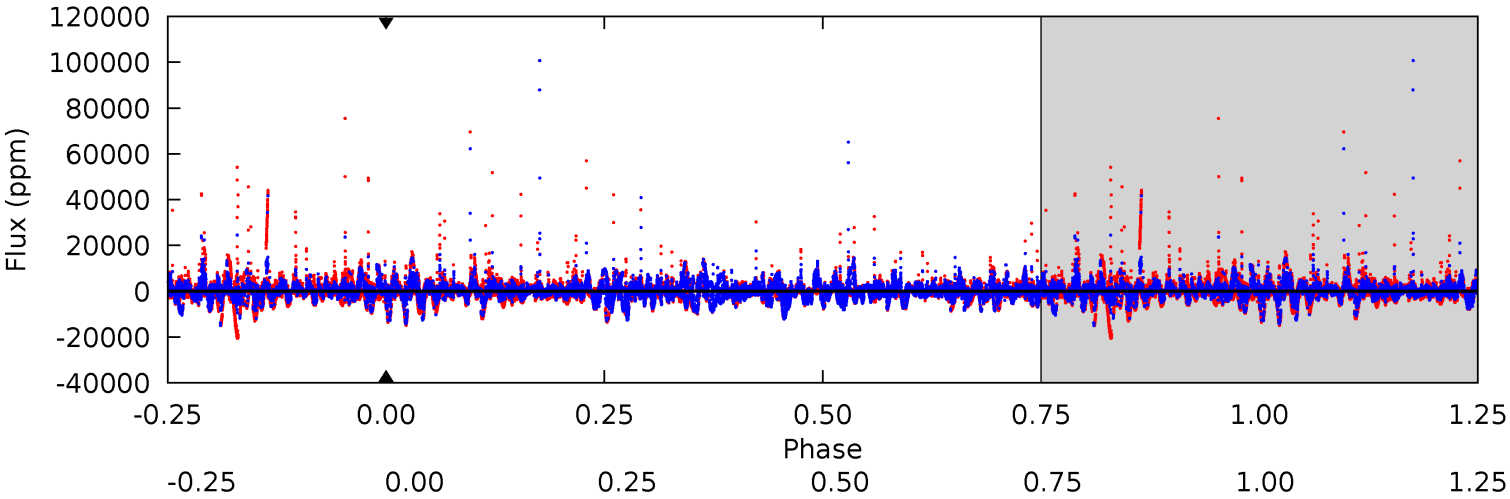
TCE 003439126-05 $P=398.924392$ Days $T_0=255.192422$ (BKJD)



DV Model-Shift Uniqueness Test

003439126-05, P = 398.924392 Days, E = 256.302150 Days

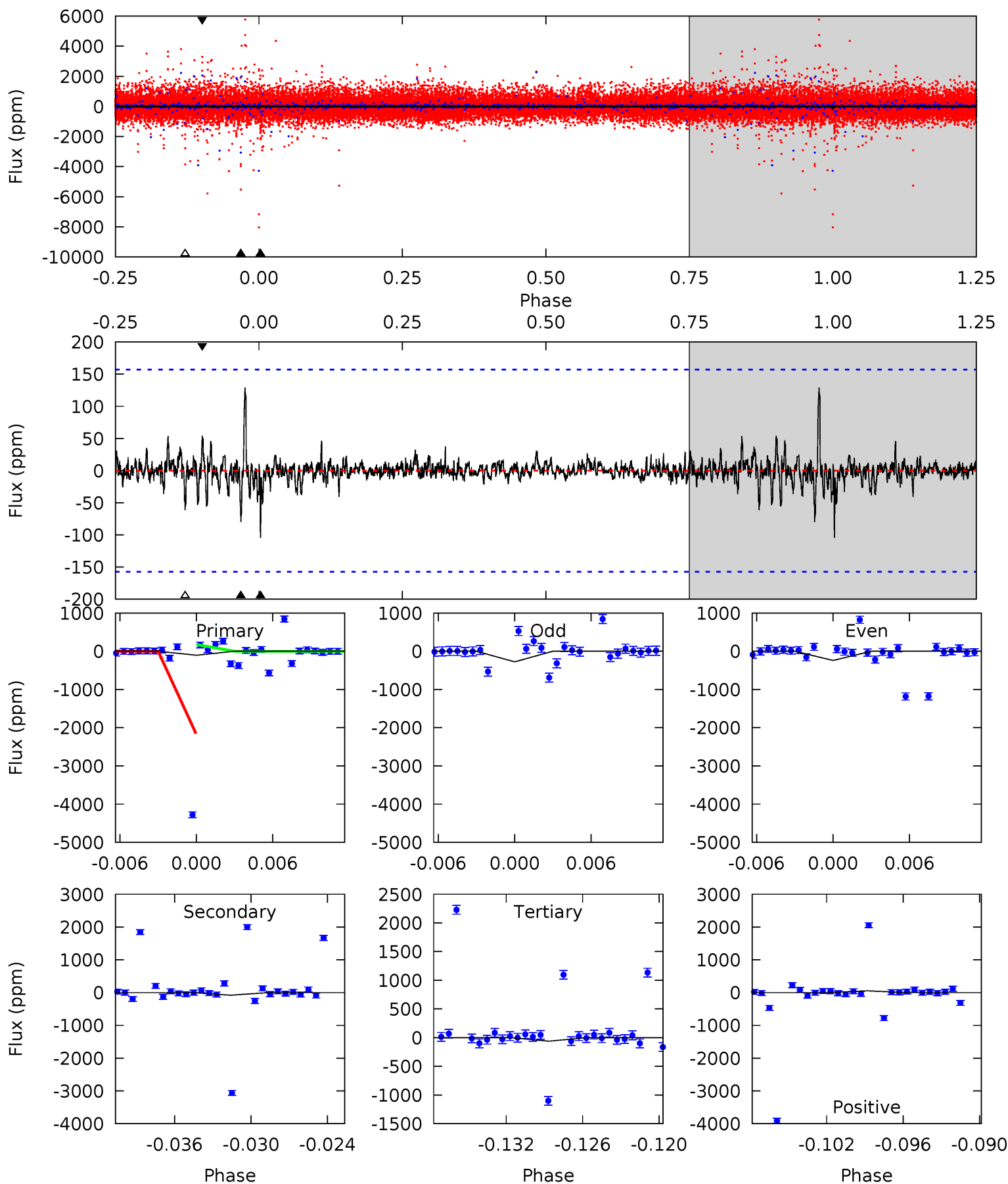
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

003439126-05, P = 398.924392 Days, E = 255.192422 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.41	2.60	2.00	1.76	5.12	2.75	0.34	1.40	1.65	0.60	0.84	0.55	4.05	0.55	30.3



Stellar Parameters For KIC 003439126

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4236^{+129}_{-142}	$4.612^{+0.052}_{-0.017}$	$0.120^{+0.250}_{-0.300}$	$0.664^{+0.028}_{-0.061}$	$0.657^{+0.047}_{-0.053}$	$3.163^{+0.729}_{-0.252}$
	+3%/-3%	+1%/-0%	+208%/-250%	+4%/-9%	+7%/-8%	+23%/-8%
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 003439126-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$5.74^{+5.01}_{-3.99}$	219^{+8}_{-8}	-3501^{+13378}_{-6670}	$-30186.795^{+2738452.820}_{-2754589.767}$
Alt.	-80 ± 31	$5.52^{+6.29}_{-3.81}$	220^{+7}_{-8}	2281^{+786}_{-364}	1204^{+11029}_{-953}

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

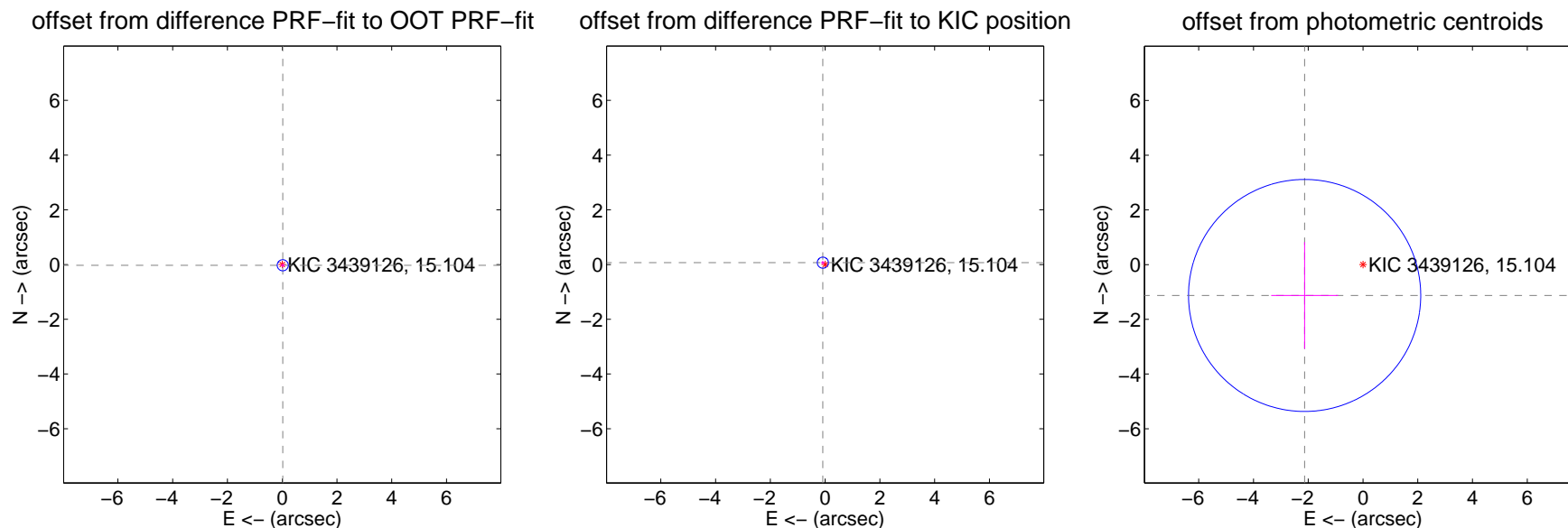
DV Centroid Data

Supplemental centroid analysis for 003439126-05. Kepler magnitude: 15.10. Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

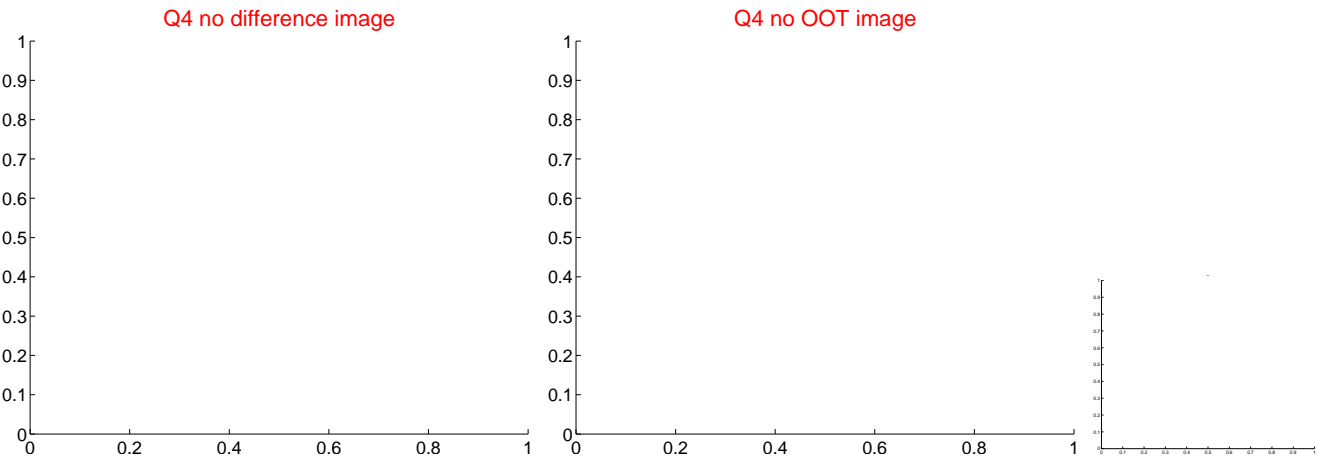
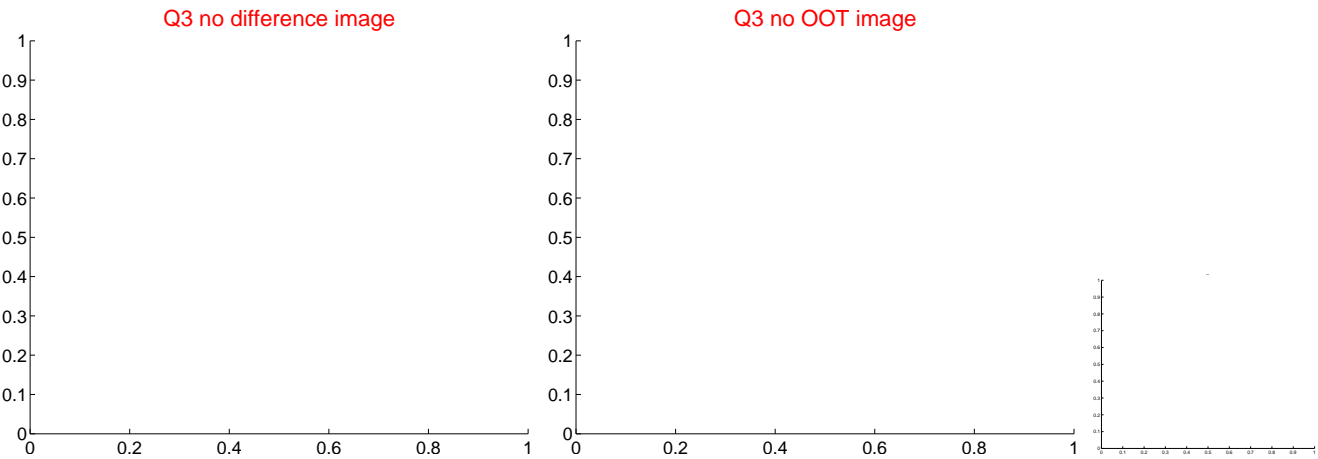
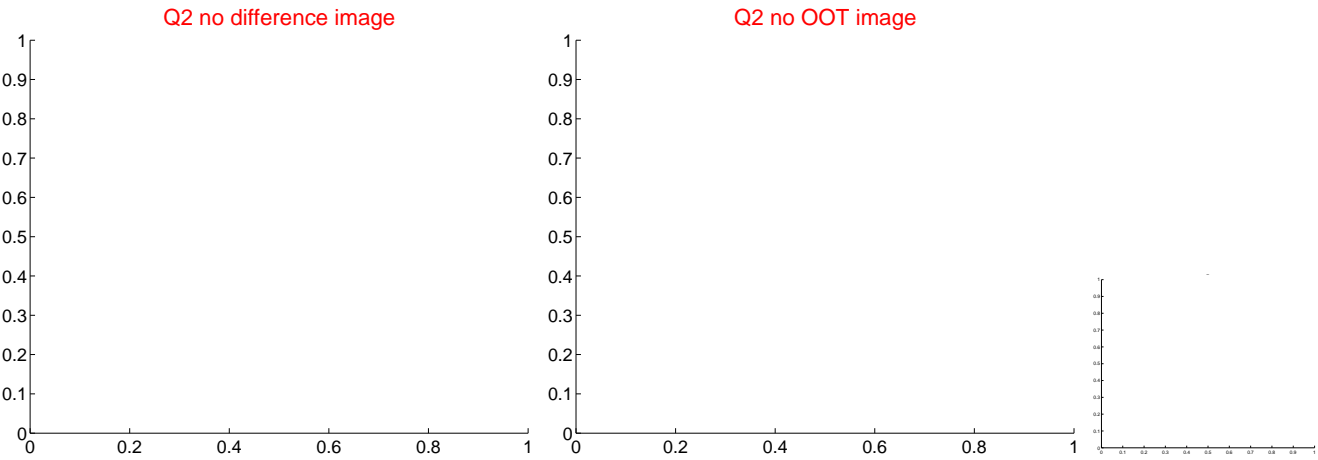
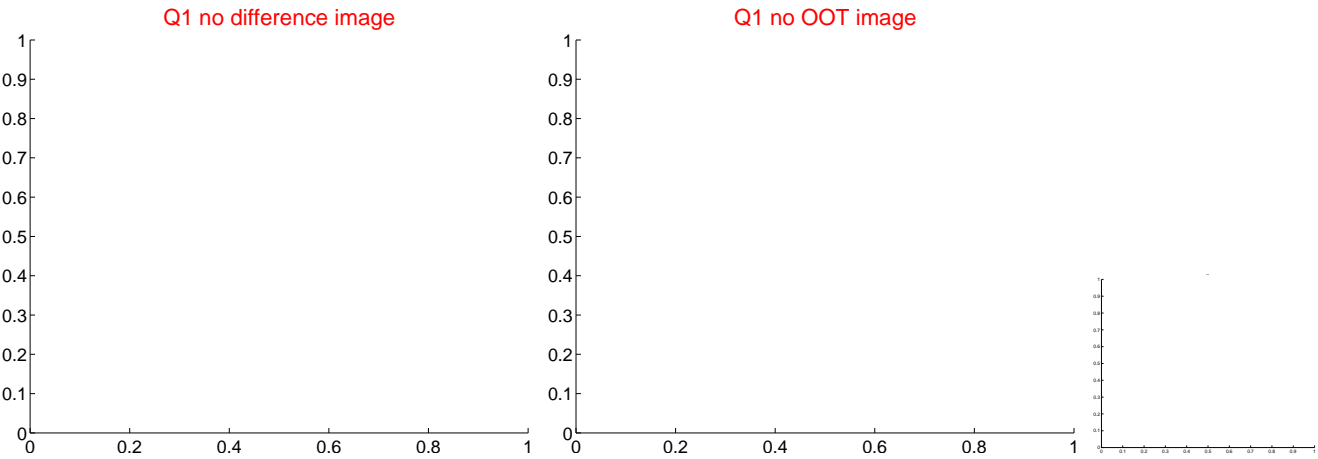
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.034 ± 0.068	0.50	-0.020 ± 0.068	-0.027 ± 0.068
PRF-fit source offset from KIC position	0.108 ± 0.068	1.59	0.083 ± 0.068	0.069 ± 0.068
photometric centroid source offset	2.41 ± 1.41	1.71	2.13 ± 1.22	-1.13 ± 1.95

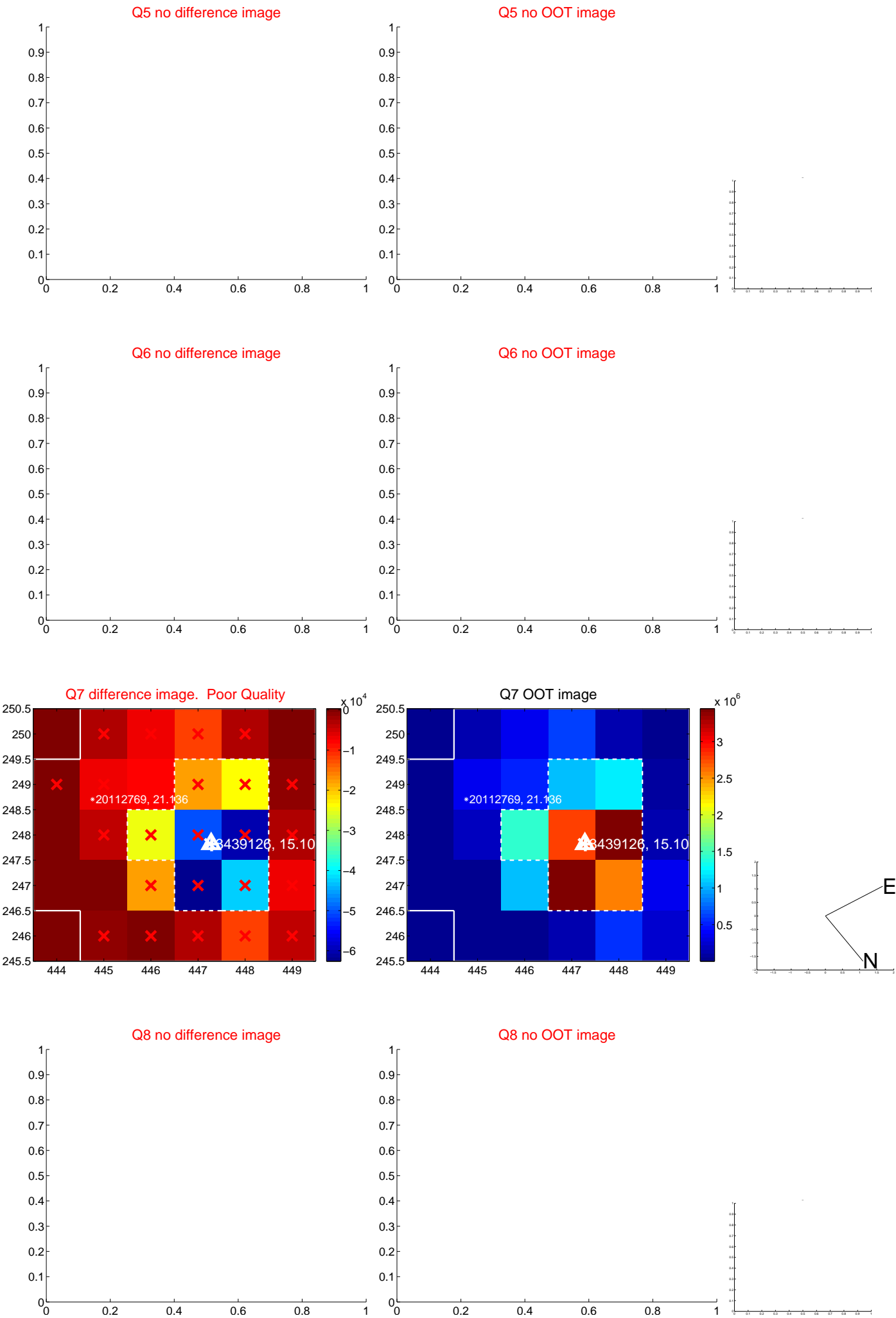


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

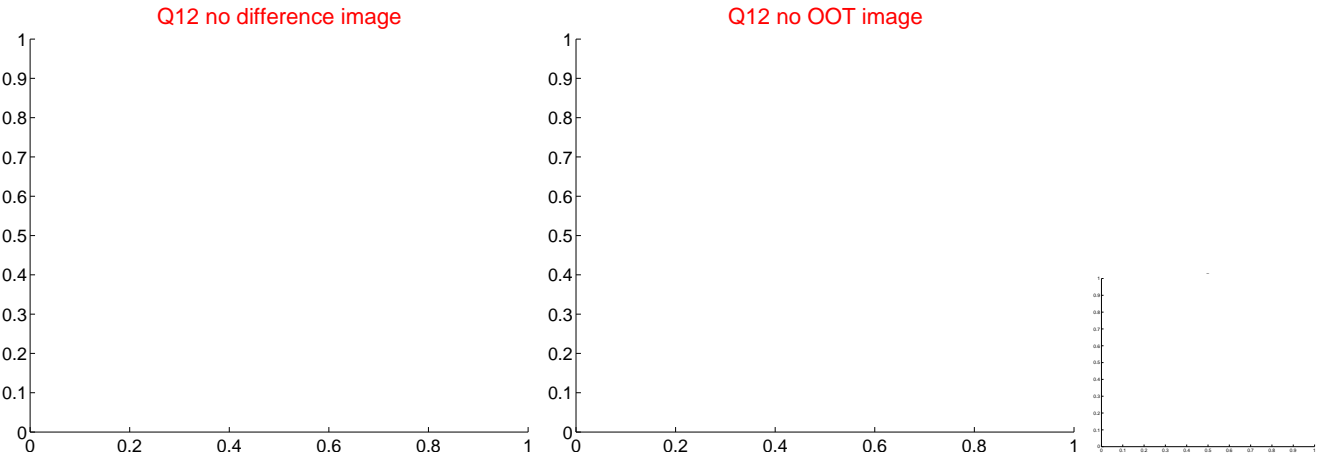
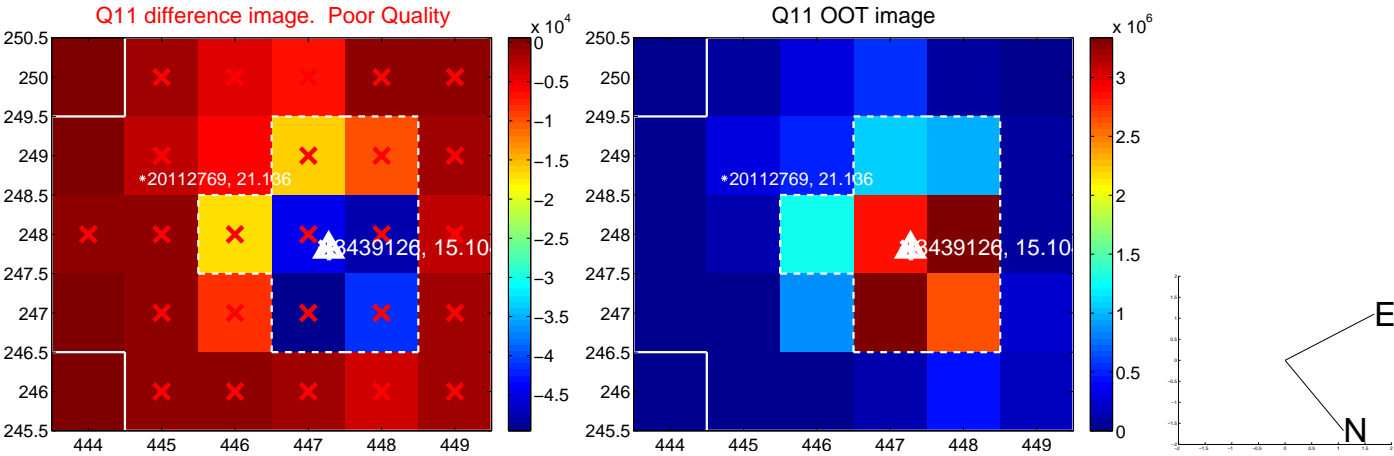
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



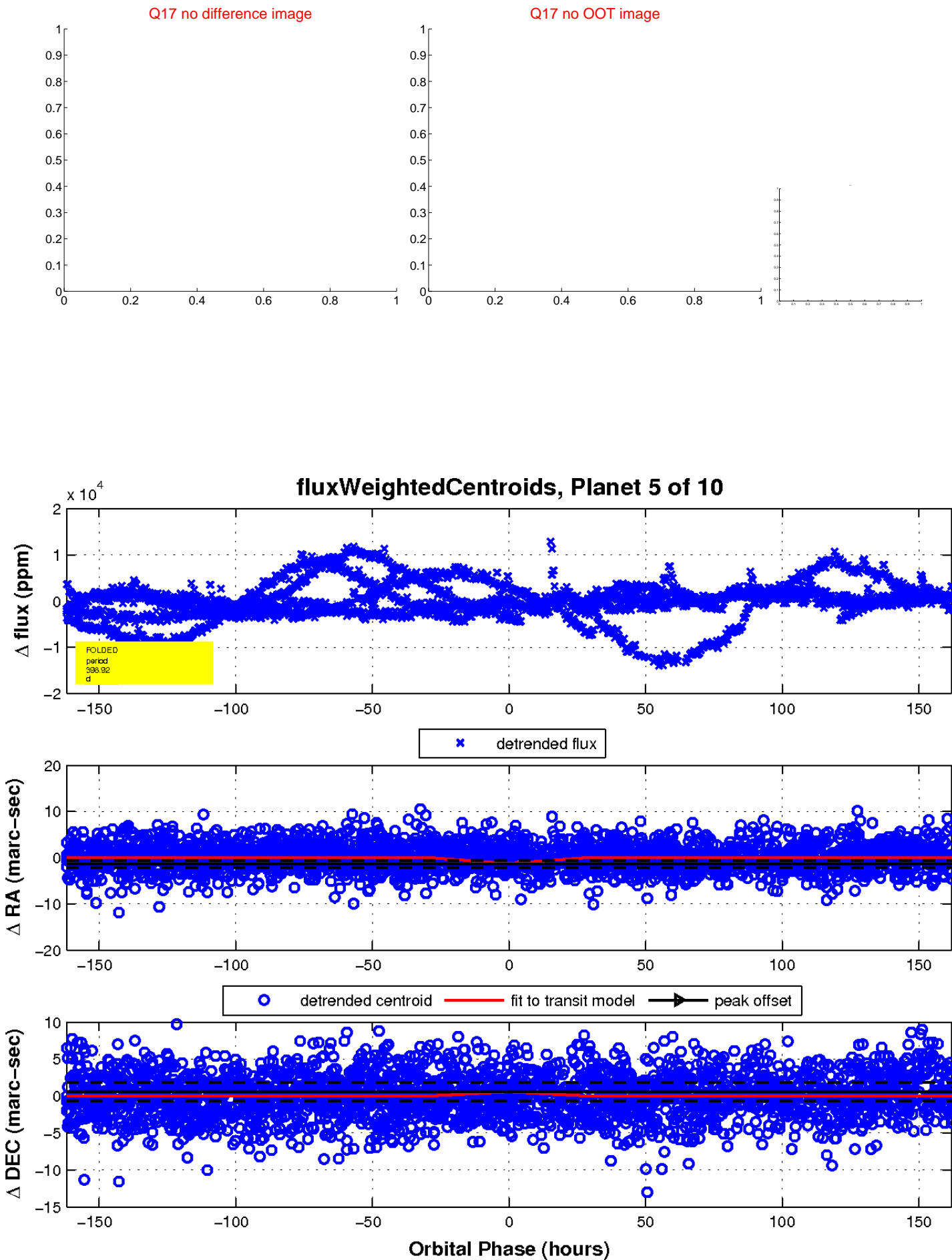
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

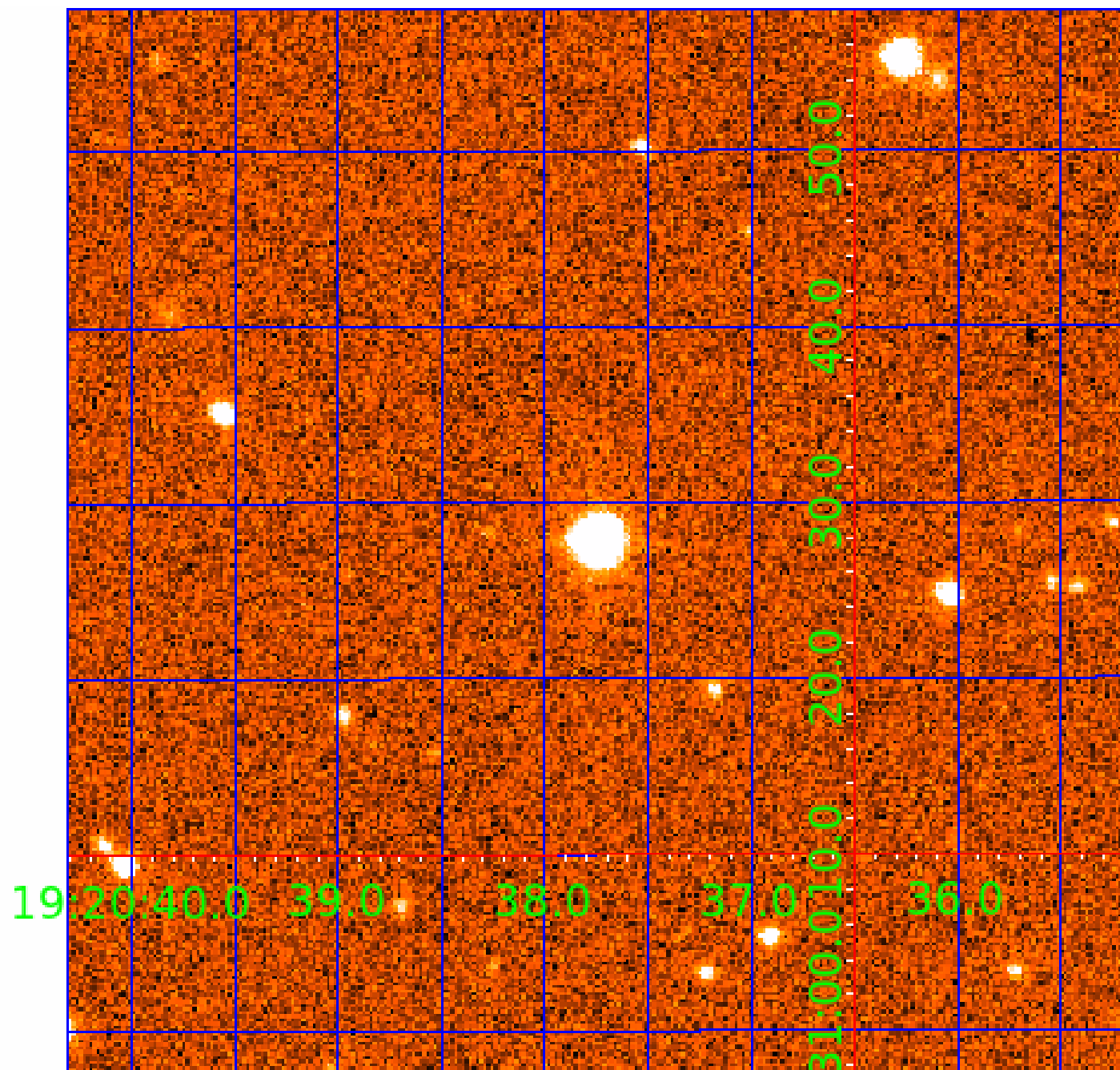


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



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})
003439126-01	OBS	No	466.598907	562.202843	1581.3	9.515	13.7	6.5	0.66	4236	2.77	0.12
003439126-02	OBS	No	456.286524	484.430344	1711.3	7.600	11.8	7.8	0.66	4236	3.27	0.12
003439126-03	OBS	7655.01	2.976224	132.922051	197.1	6.191	11.6	10.9	0.66	4236	1.14	102.47
003439126-04	OBS	No	272.945566	224.384038	662.9	9.352	11.7	4.0	0.66	4236	1.87	0.25
003439126-05	OBS	No	398.924392	256.302150	1050.5	9.000	11.6	-1.0	0.66	4236	2.05	0.15
003439126-06	OBS	No	347.186618	410.217941	1194.3	7.500	11.4	-1.0	0.66	4236	2.19	0.18
003439126-07	OBS	No	251.654938	196.634295	584.4	8.995	11.4	3.1	0.66	4236	1.57	0.28
003439126-08	OBS	No	428.663233	529.169612	3632.6	17.808	10.9	9.7	0.66	4236	3.81	0.14
003439126-09	OBS	No	323.272075	281.919624	2046.6	20.411	9.8	7.4	0.66	4236	2.88	0.20
003439126-10	OBS	No	229.359900	174.128589	1174.7	7.500	10.2	-1.0	0.66	4236	2.17	0.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003439126-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-03	OBS	FP	0.00	0	0	0	1	EPHEM_MATCH
003439126-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV
003439126-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST
003439126-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
003439126-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
003439126-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

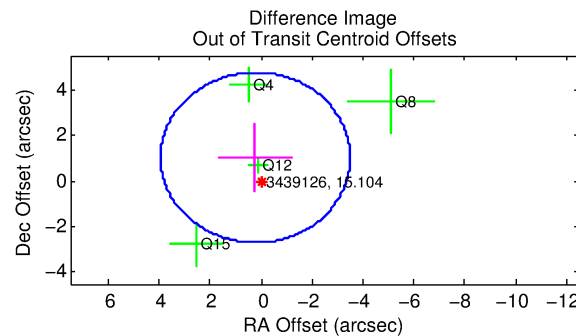
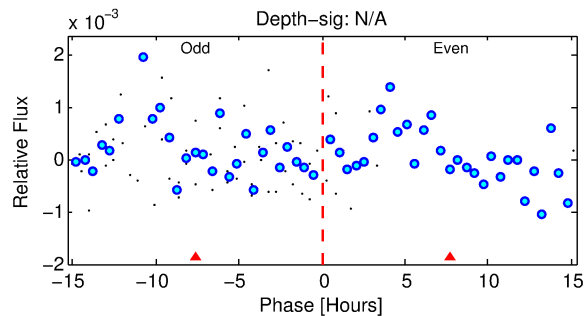
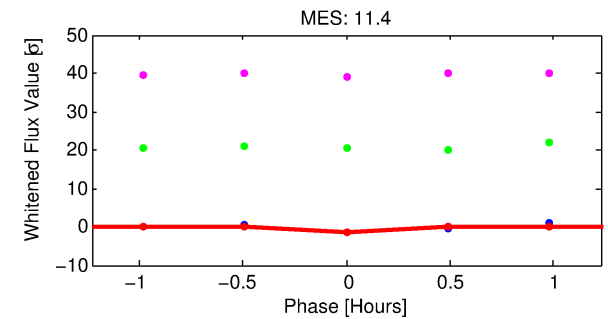
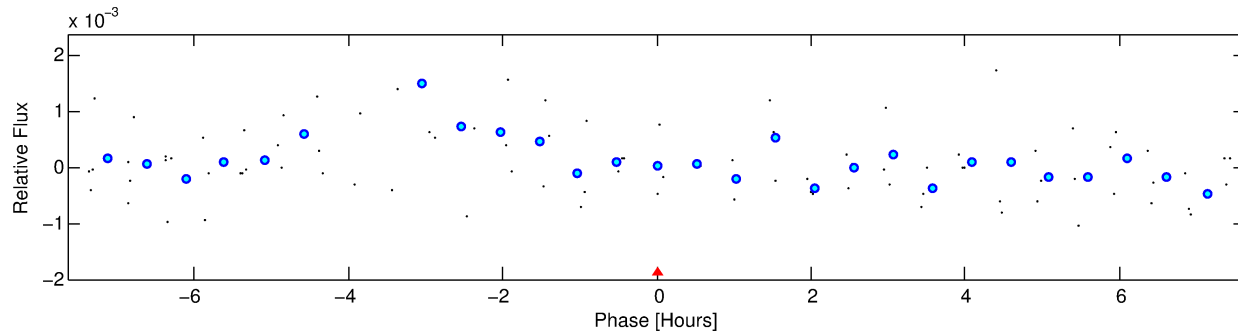
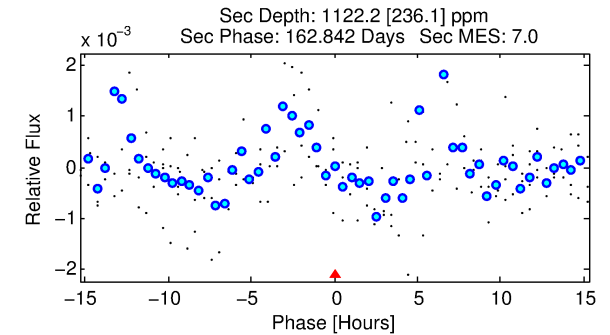
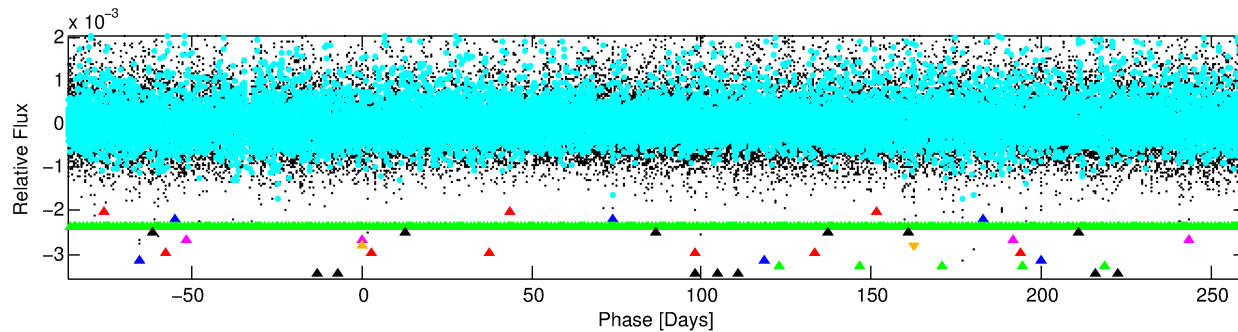
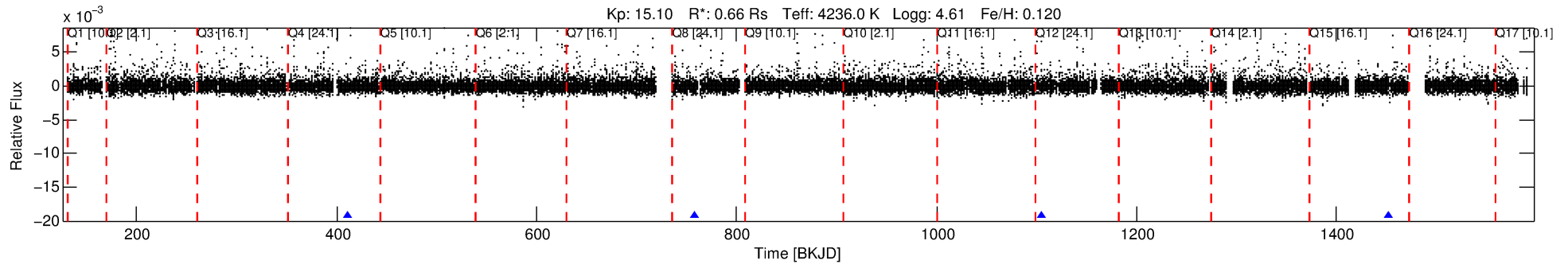
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003439126-06

No Significant Match Found

DV One-Page Summary

KIC: 3439126 Candidate: 6 of 10 Period: 347.187 d



TPS TCE Results:

Period = 347.18662 d
Epoch = 410.2179 BKJD

DV fit results are unavailable

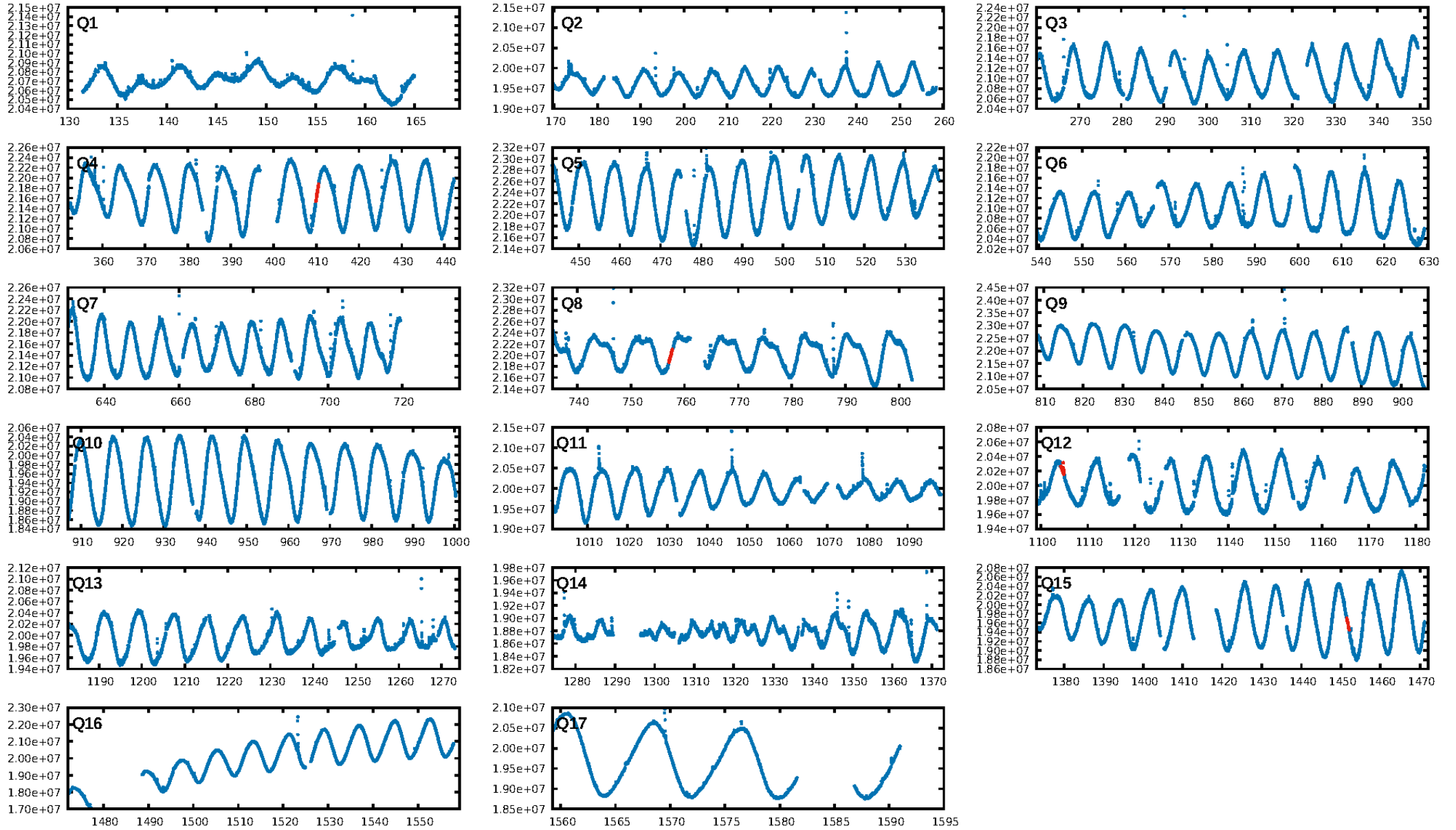
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [26.39σ]
LongPeriod-sig: 100.0% [105.99σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -1.955
Centroid-sig: 0.9%
Centroid-so: 28.719 arcsec [1.72σ]
OotOffset-rm: 1.059 arcsec [0.85σ]
KicOffset-rm: 1.132 arcsec [0.88σ]
OotOffset-st: 0/1/3/0 [4]
KicOffset-st: 0/1/3/0 [4]
DiffImageQuality-fgm: 0.25 [1/4]
DiffImageOverlap-fno: 0.50 [2/4]

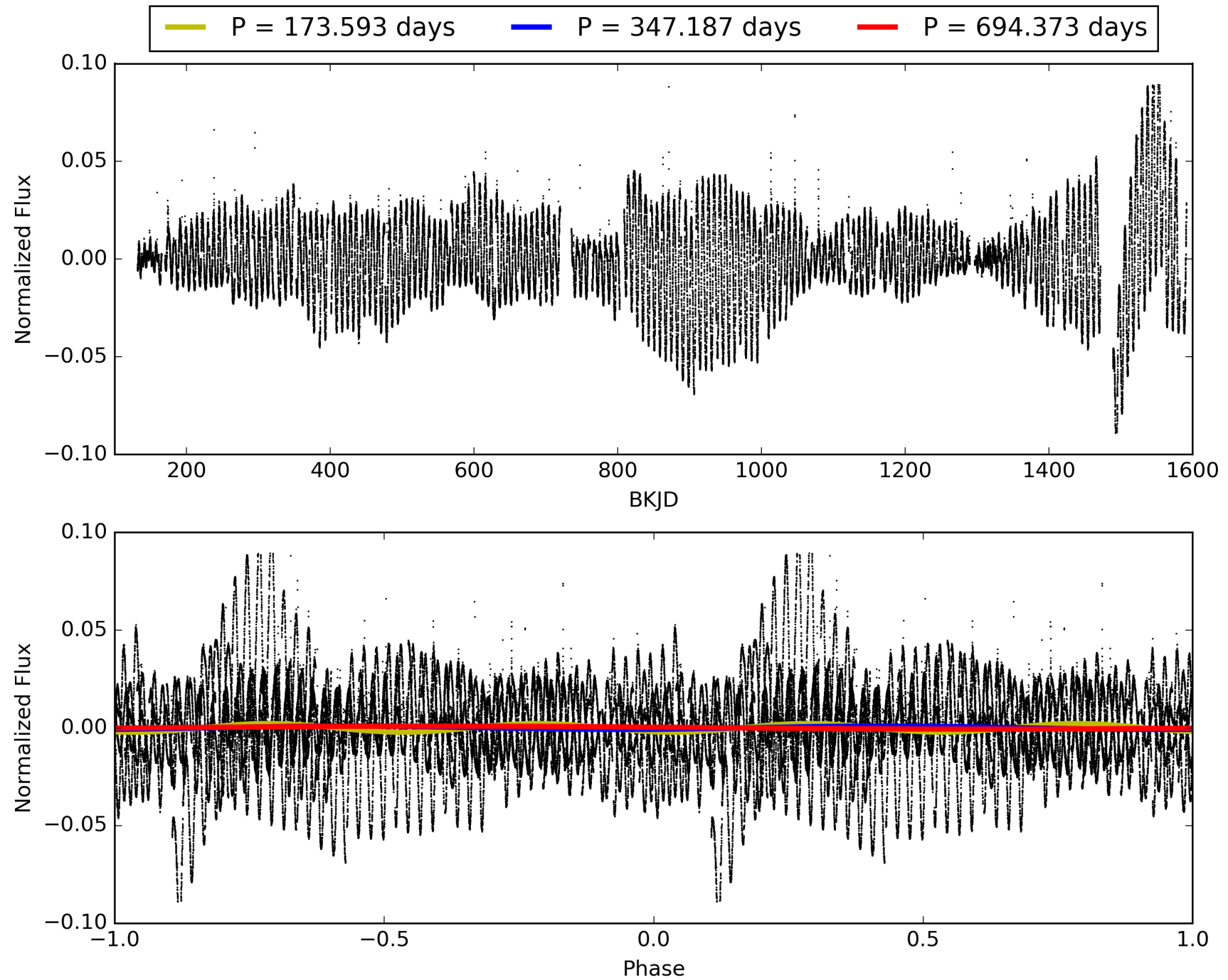
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:54:17 Z

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

TCE 003439126-06, PDC Light Curves

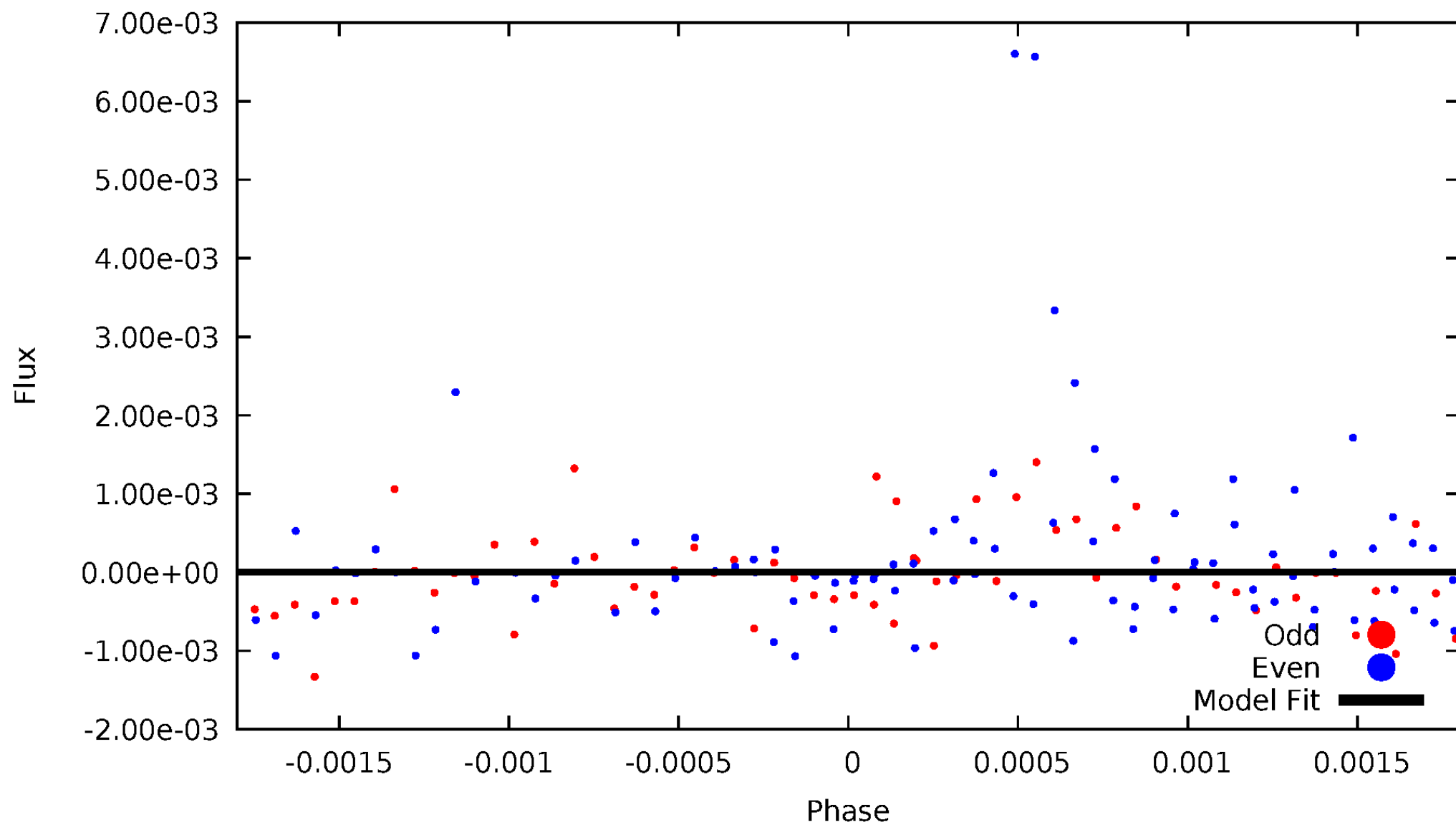


TCE 003439126-06



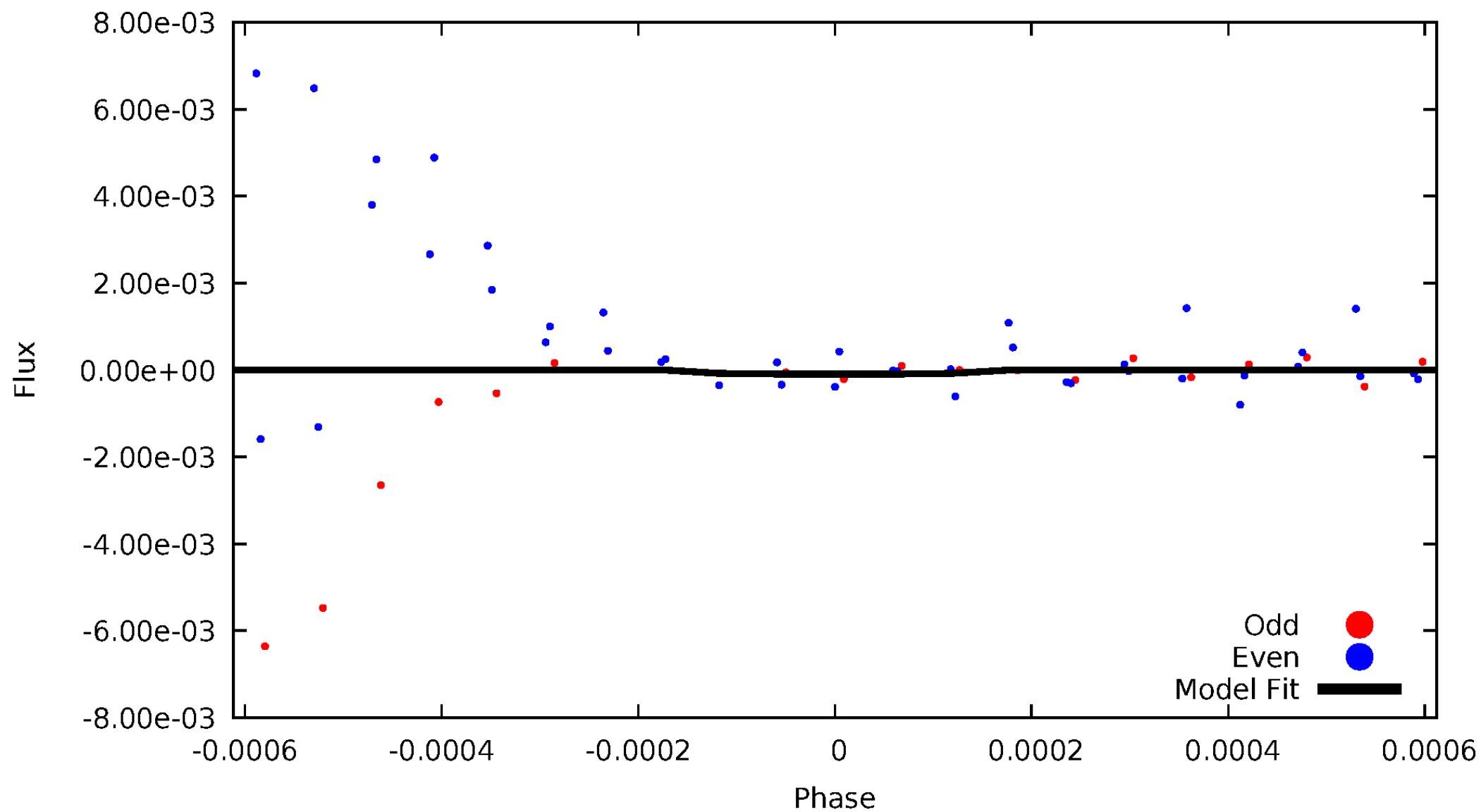
DV Odd/Even

TCE 003439126-06



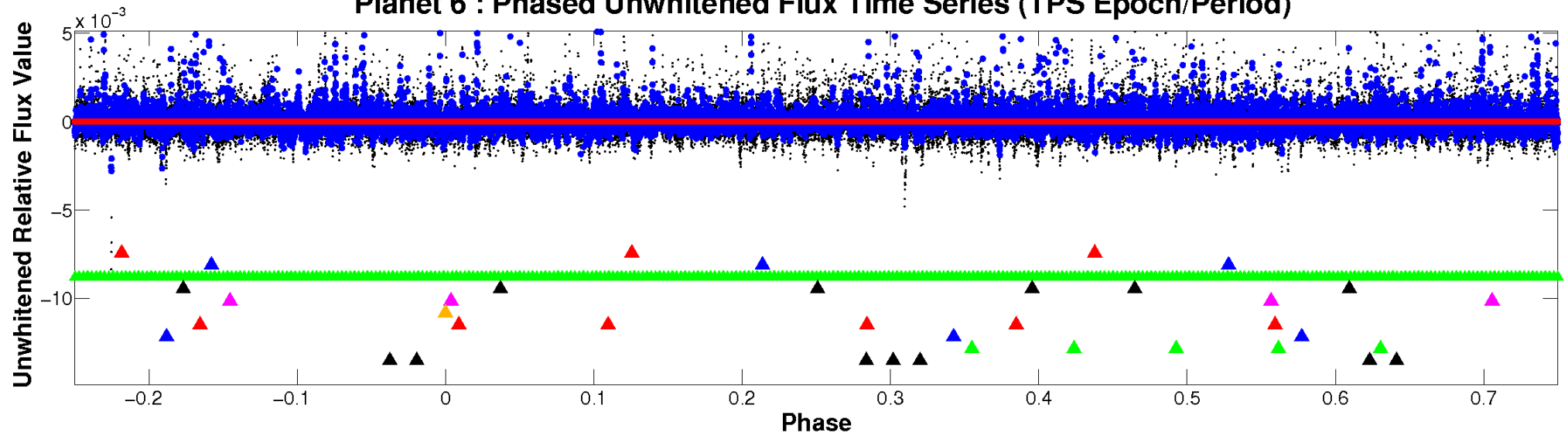
ALT Odd/Even

TCE 003439126-06

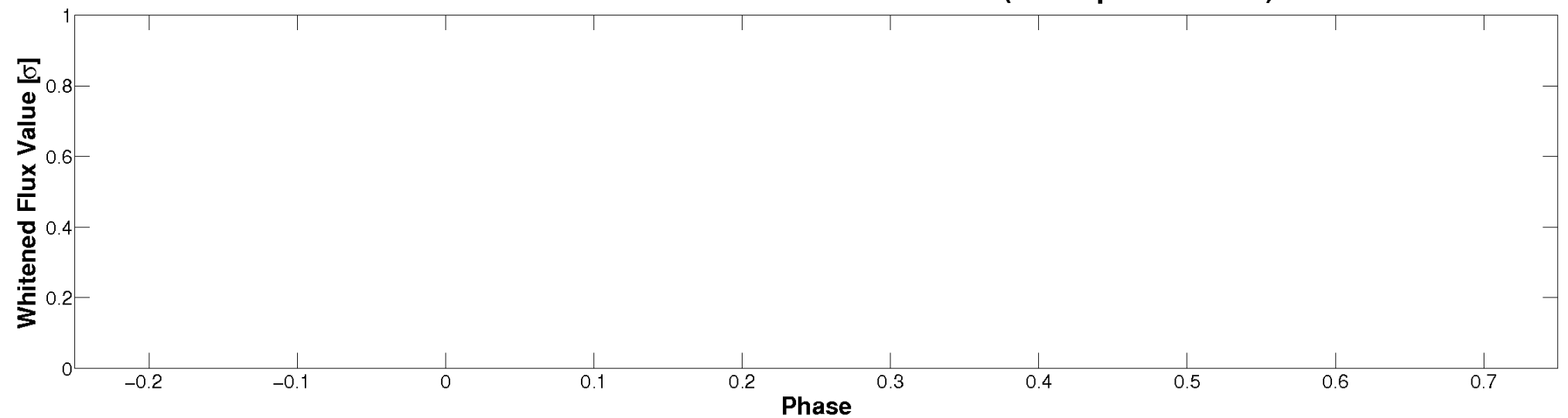


Non-Whitened Vs. Whitened Light Curve

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

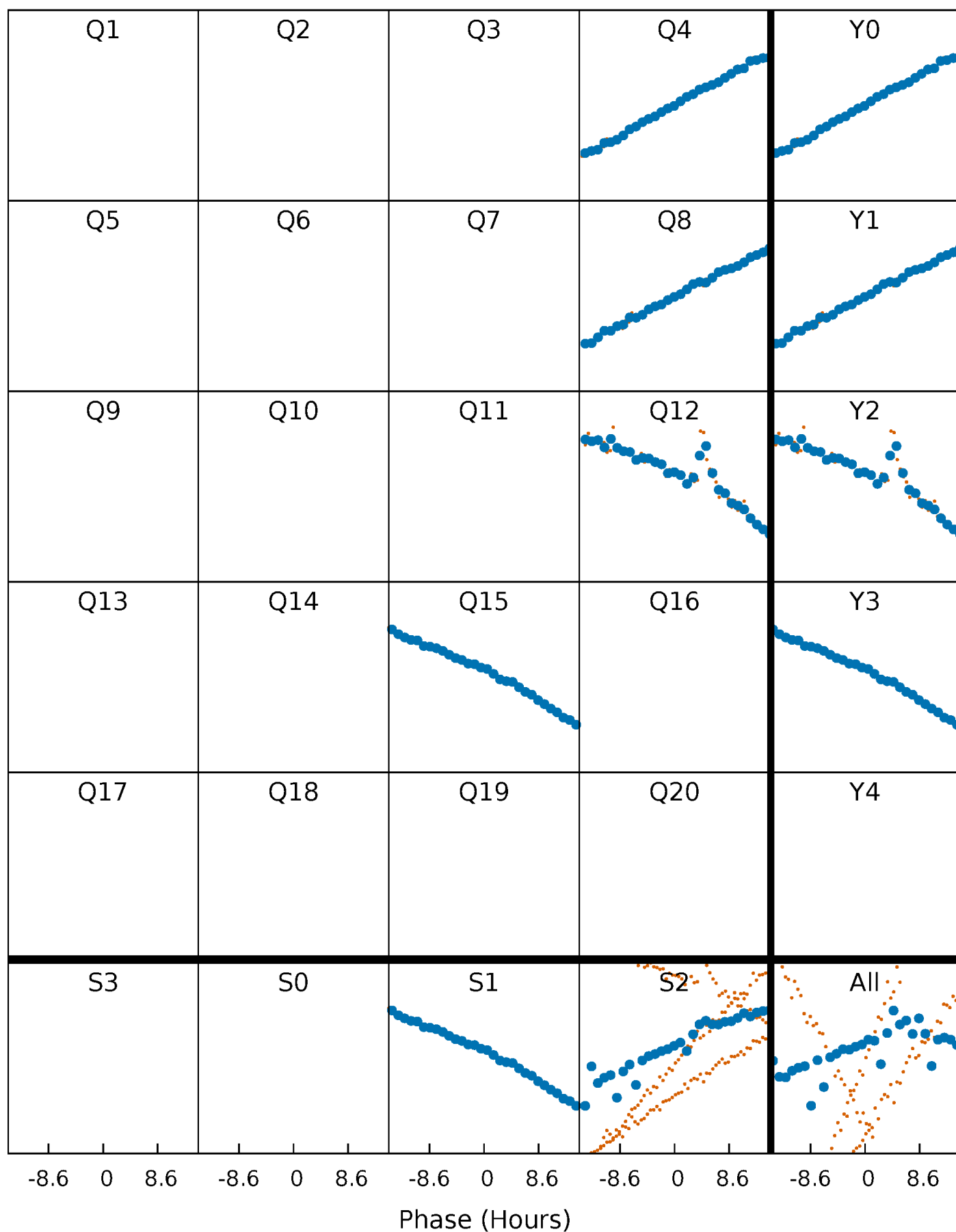


Planet 6 : Phased Whitened Flux Time Series (TPS Epoch/Period)



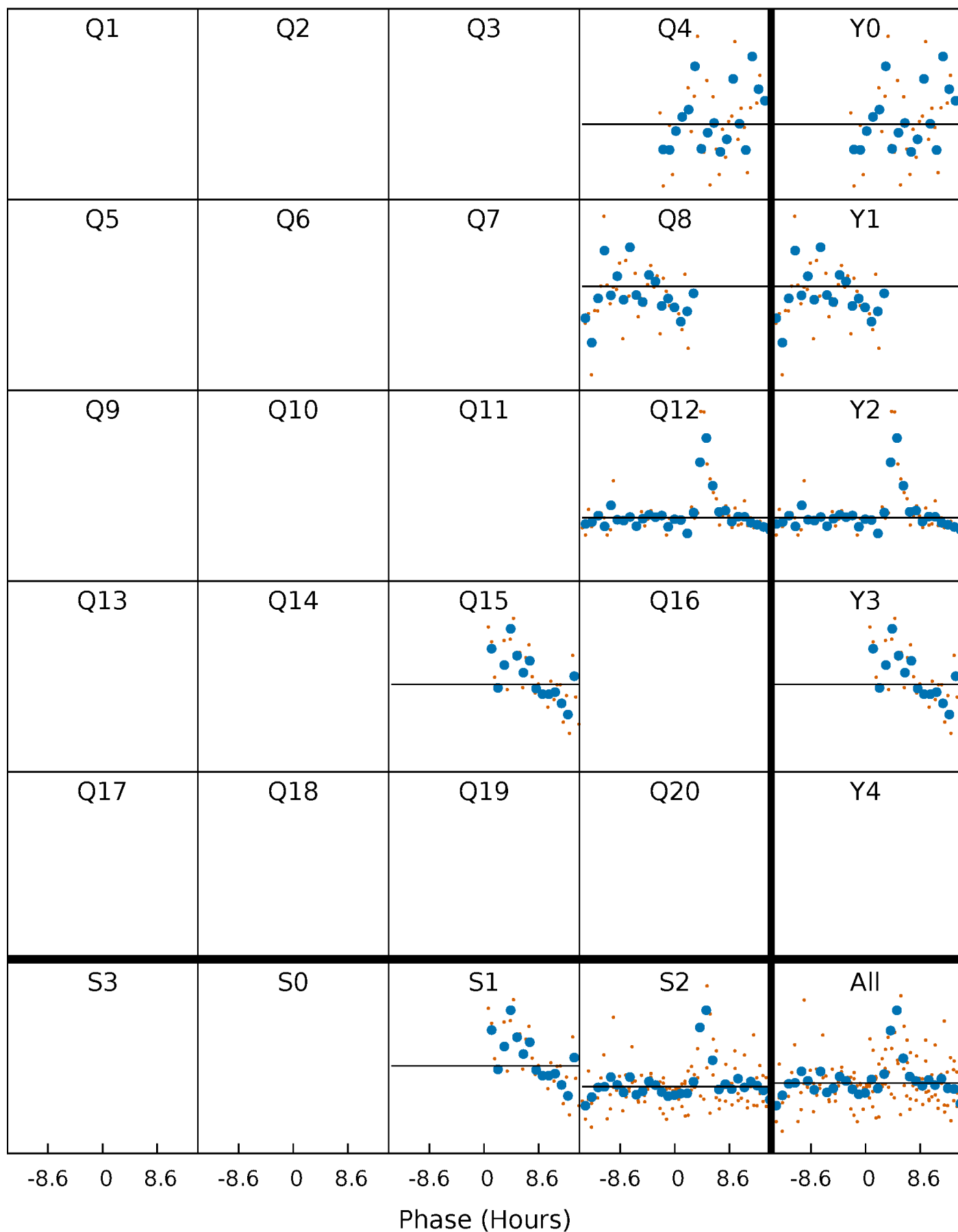
PDC Quarter-Phased Transit Curves

TCE 003439126-06 P=347.186618 Days $T_0=410.217941$ (BKJD)



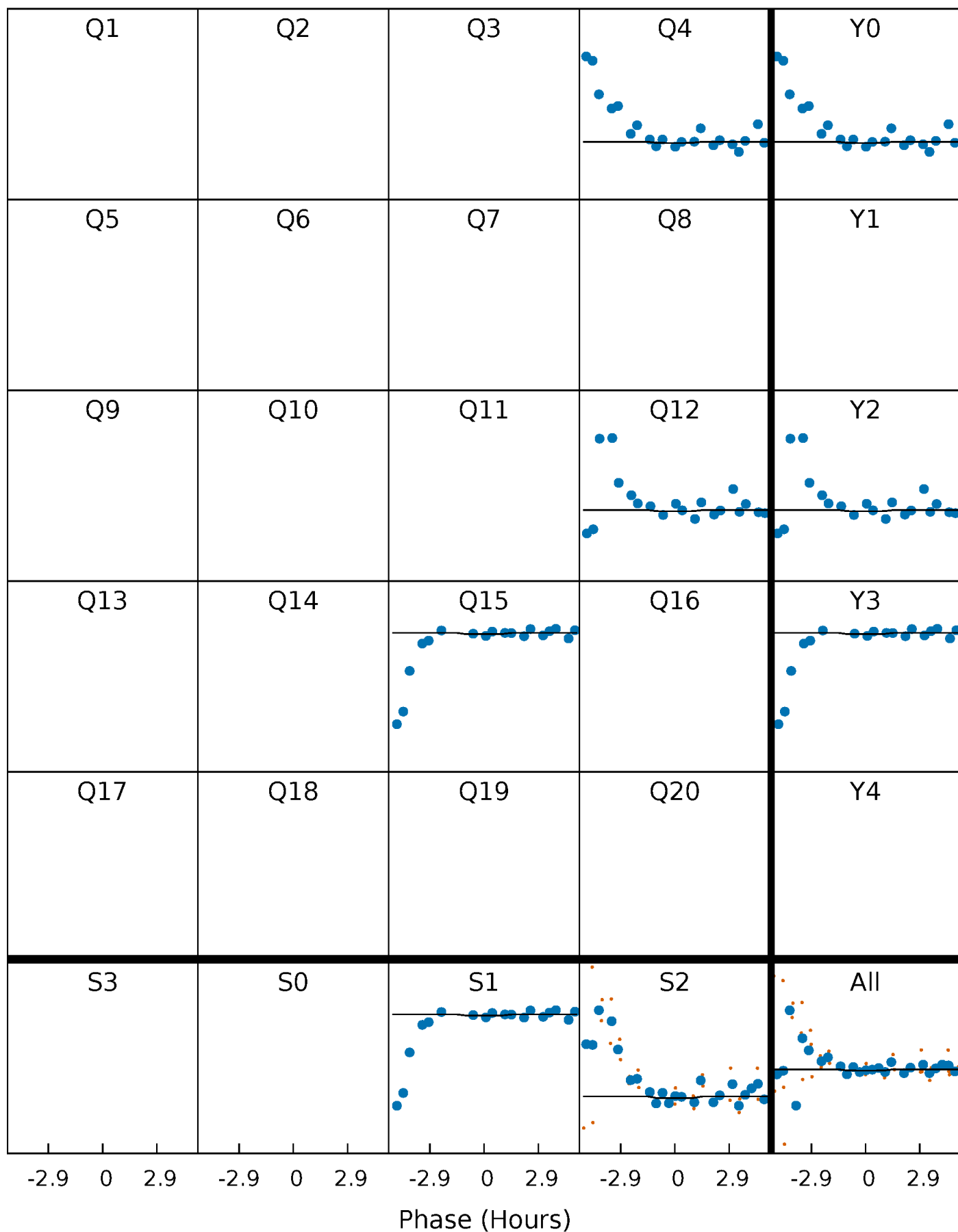
DV Quarter-Phased Transit Curves

TCE 003439126-06 $P=347.186618$ Days $T_0=410.217941$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

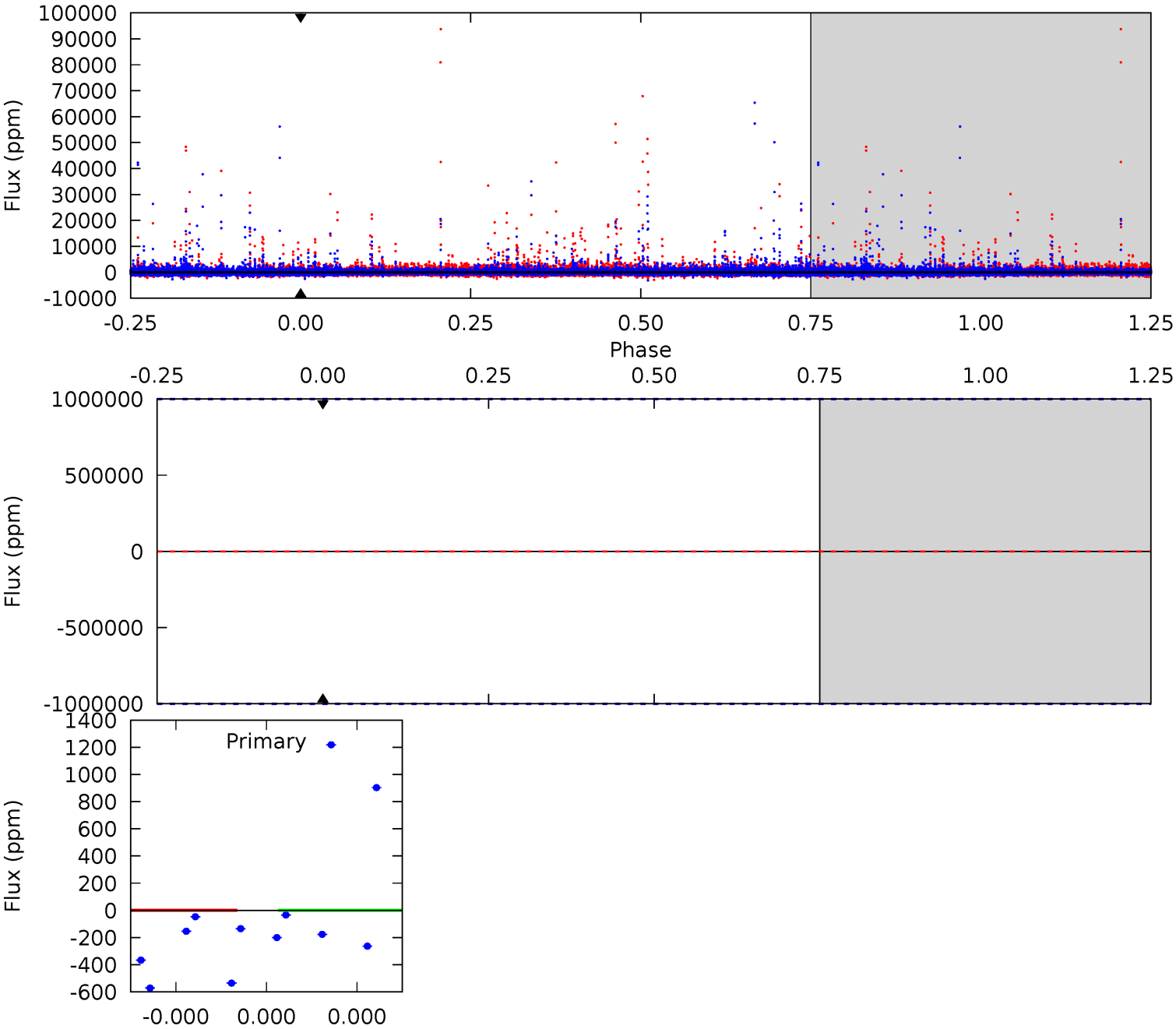
TCE 003439126-06 P=347.186618 Days $T_0=410.550203$ (BKJD)



DV Model-Shift Uniqueness Test

003439126-06, P = 347.186618 Days, E = 63.031323 Days

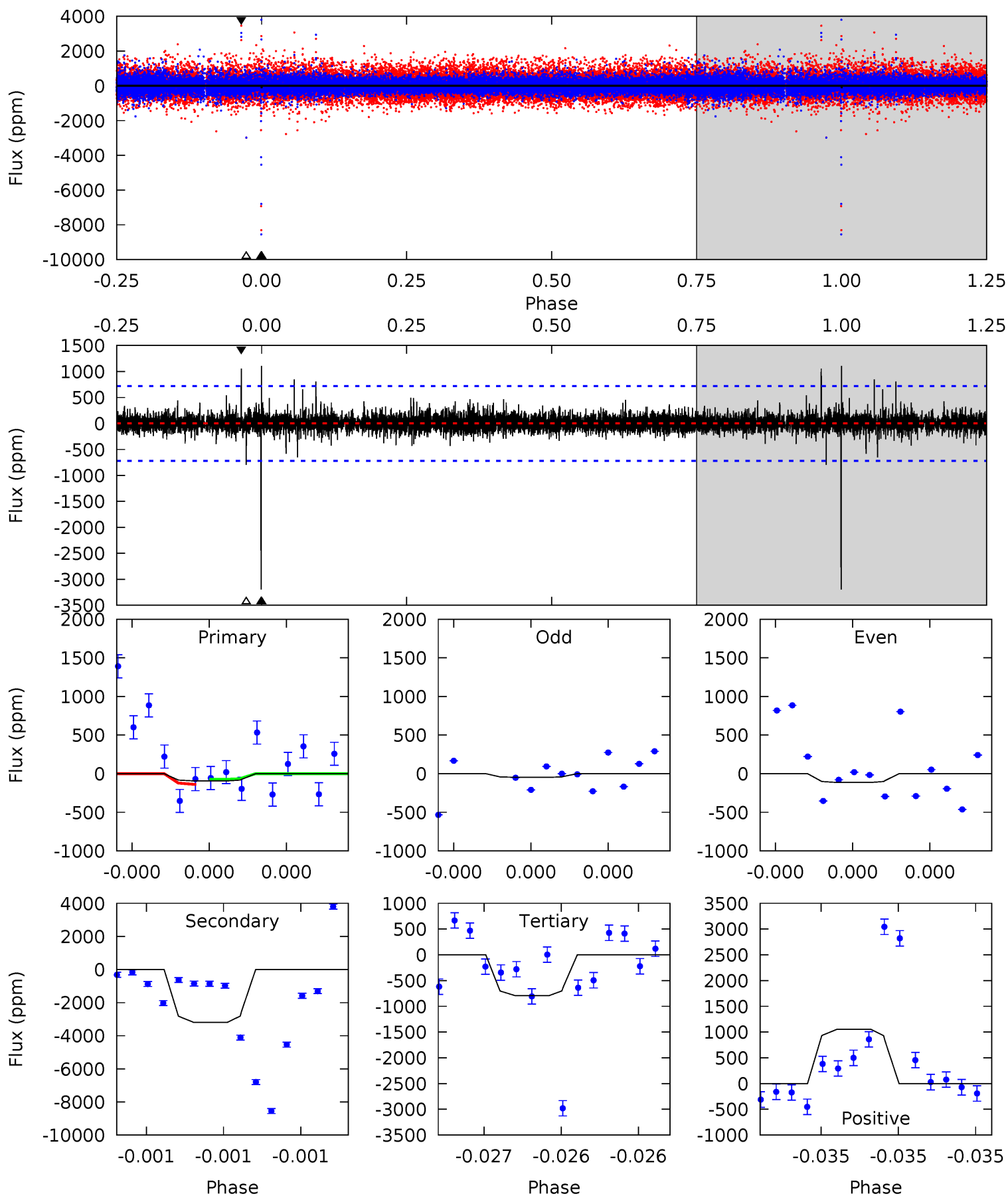
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

003439126-06, P = 347.186618 Days, E = 63.363585 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.74	25.1	6.26	8.30	5.66	3.62	0.82	-5.52	-7.56	18.9	16.8	0.22	0.82	0.26	0.22



Stellar Parameters For KIC 003439126

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4236^{+129}_{-142}	$4.612^{+0.052}_{-0.017}$	$0.120^{+0.250}_{-0.300}$	$0.664^{+0.028}_{-0.061}$	$0.657^{+0.047}_{-0.053}$	$3.163^{+0.729}_{-0.252}$
	+3%/-3%	+1%/-0%	+208%/-250%	+4%/-9%	+7%/-8%	+23%/-8%
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 003439126-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$5.38^{+6.41}_{-3.66}$	230^{+8}_{-8}	3850^{+6588}_{-13060}	$42387^{+2609934}_{-1797277}$
Alt.	-3194 ± 127	$5.08^{+5.49}_{-3.60}$	230^{+8}_{-8}	3881^{+2792}_{-784}	$48352^{+501640}_{-37235}$

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

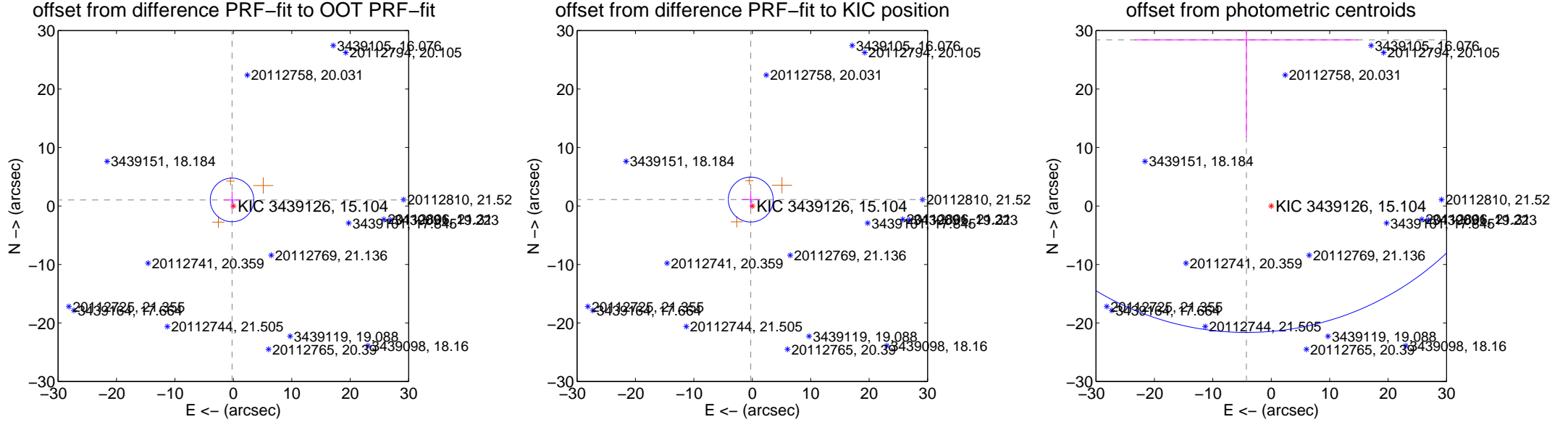
DV Centroid Data

Supplemental centroid analysis for 003439126-06. Kepler magnitude: 15.10. Transit SNR -1.00

There are 1 quarters with good PRF difference image offsets

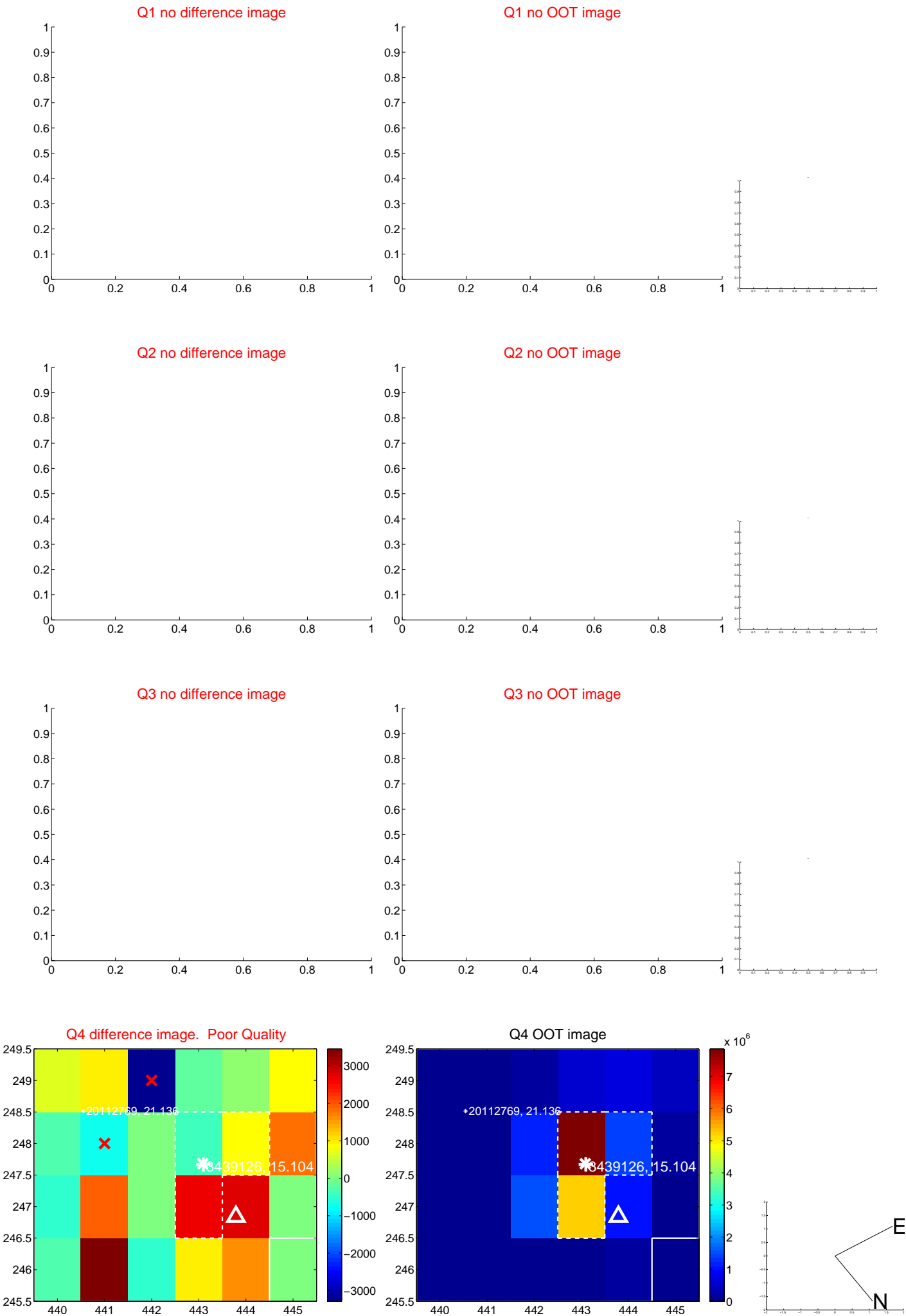
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.059 ± 1.242	0.85	0.227 ± 1.416	1.035 ± 1.484
PRF-fit source offset from KIC position	1.132 ± 1.280	0.88	0.265 ± 1.583	1.100 ± 1.516
photometric centroid source offset	28.72 ± 16.67	1.72	4.25 ± 19.11	28.40 ± 16.62

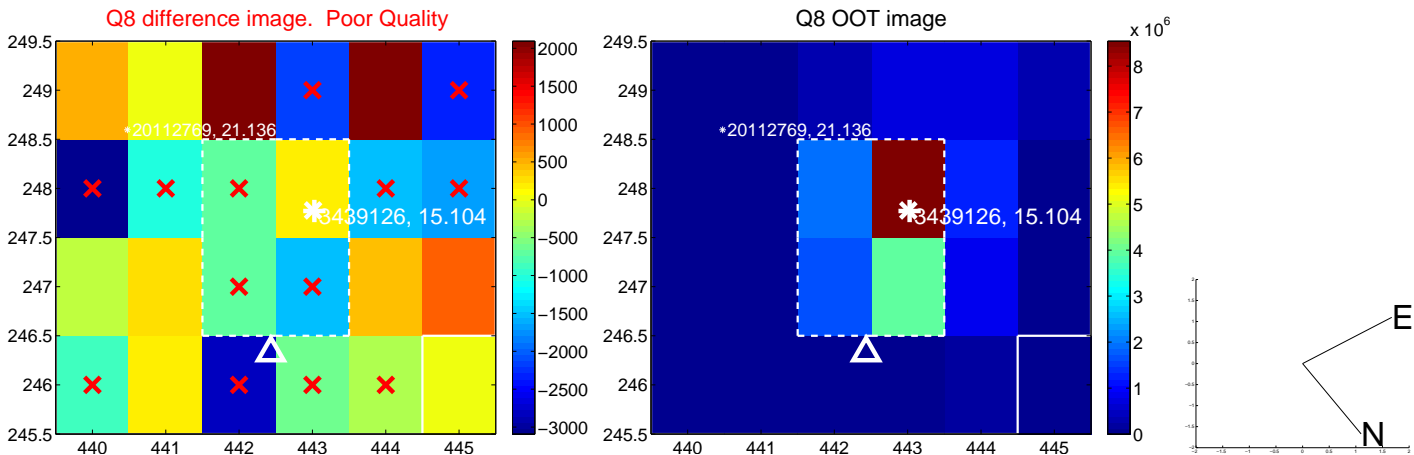
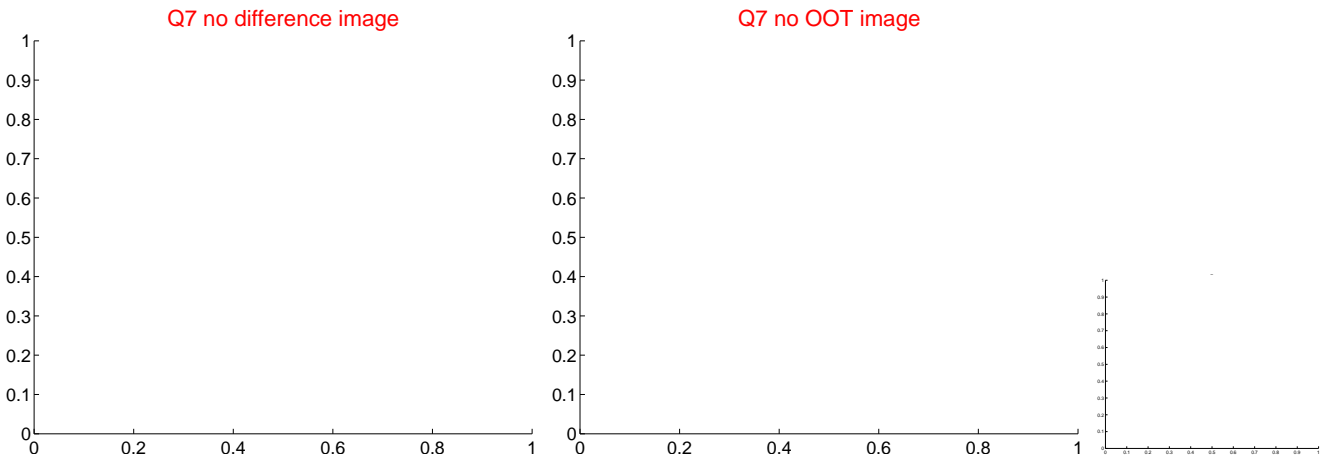
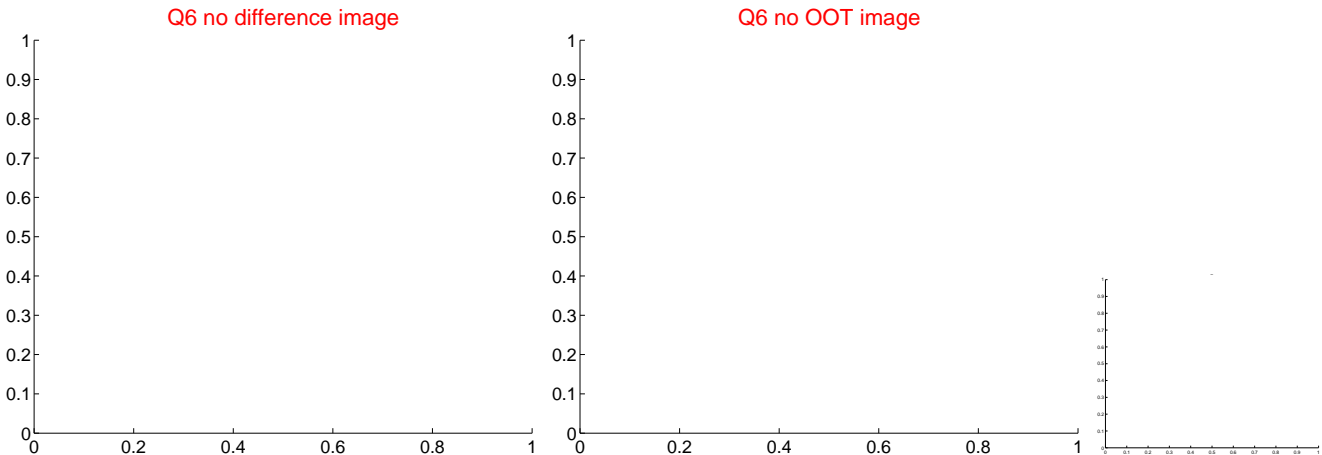
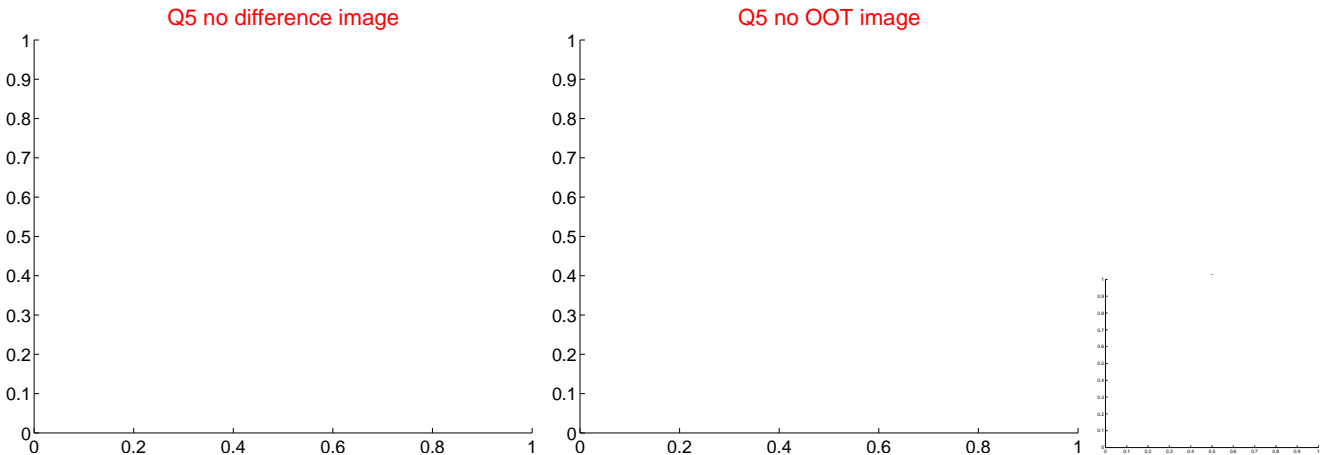


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

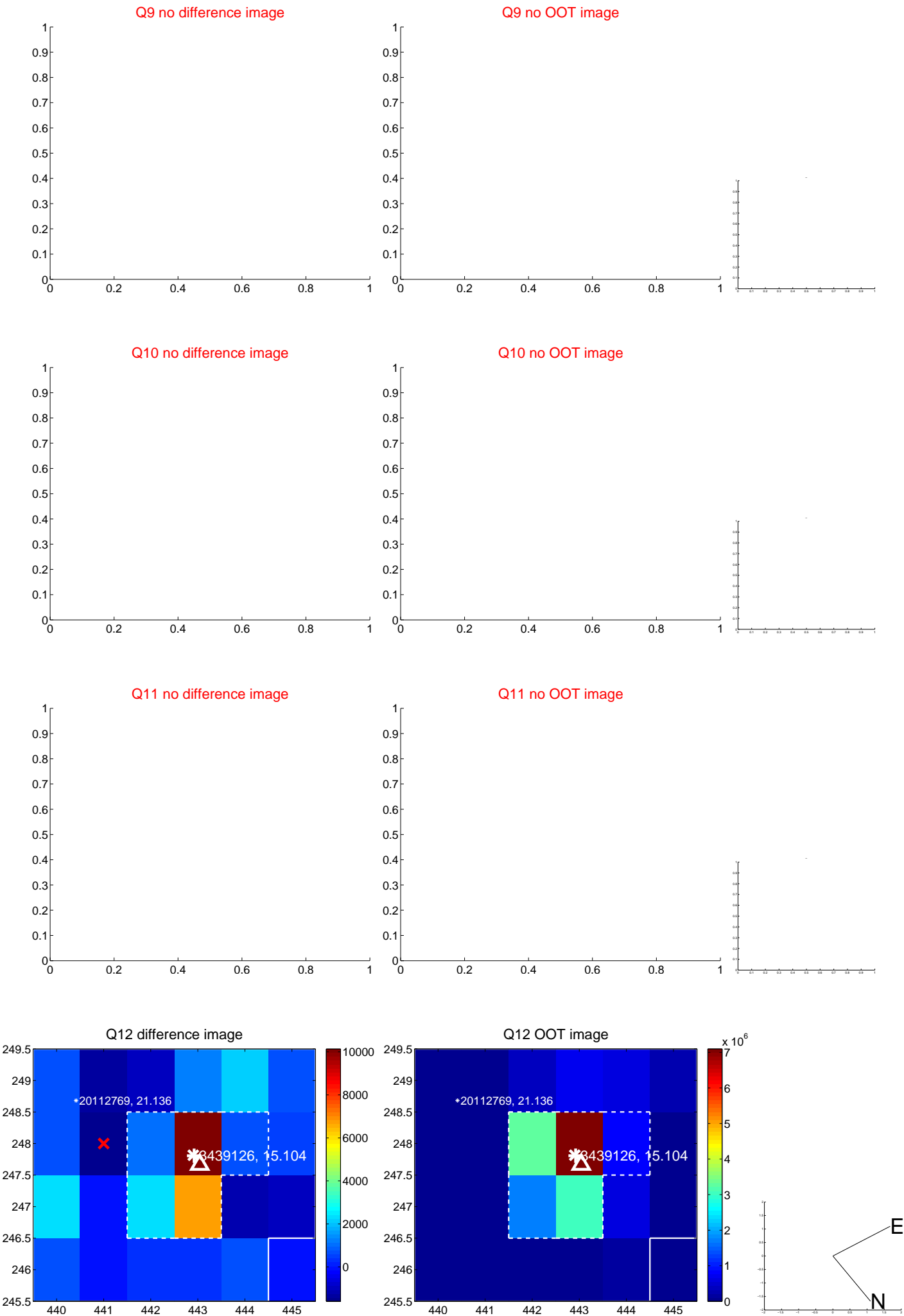
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



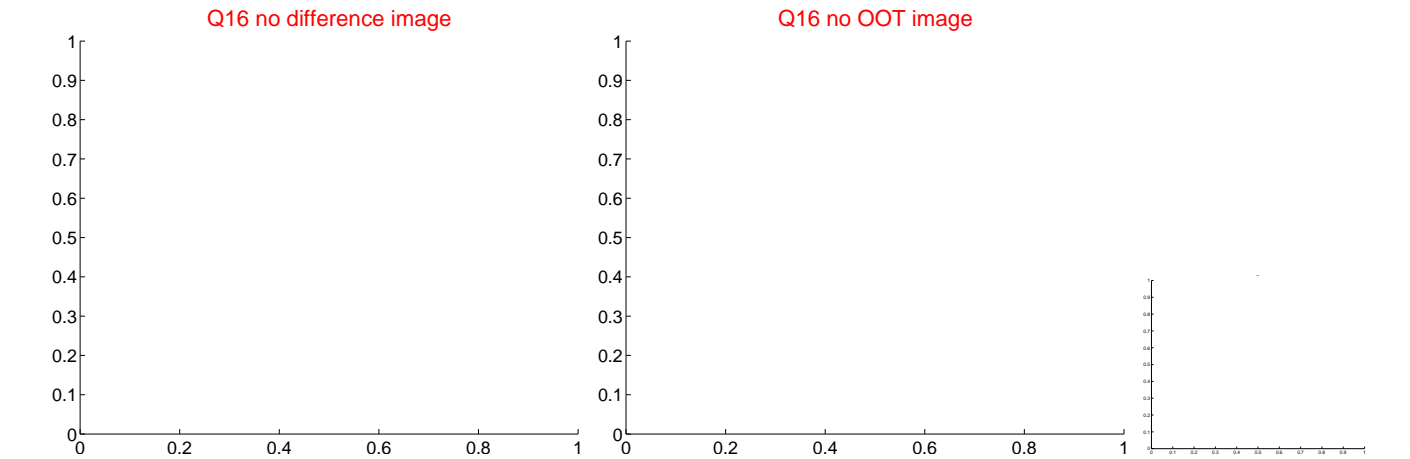
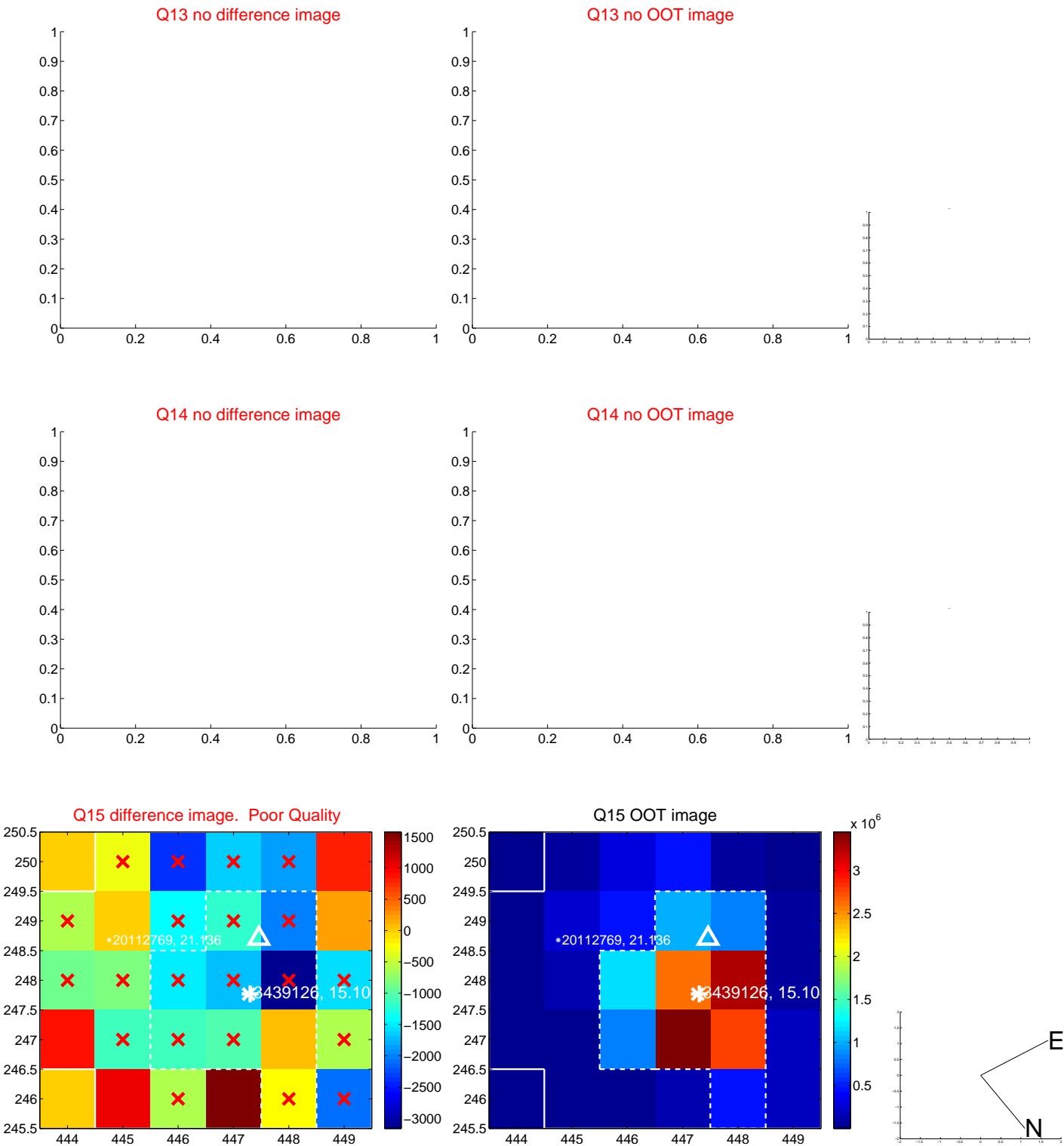
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



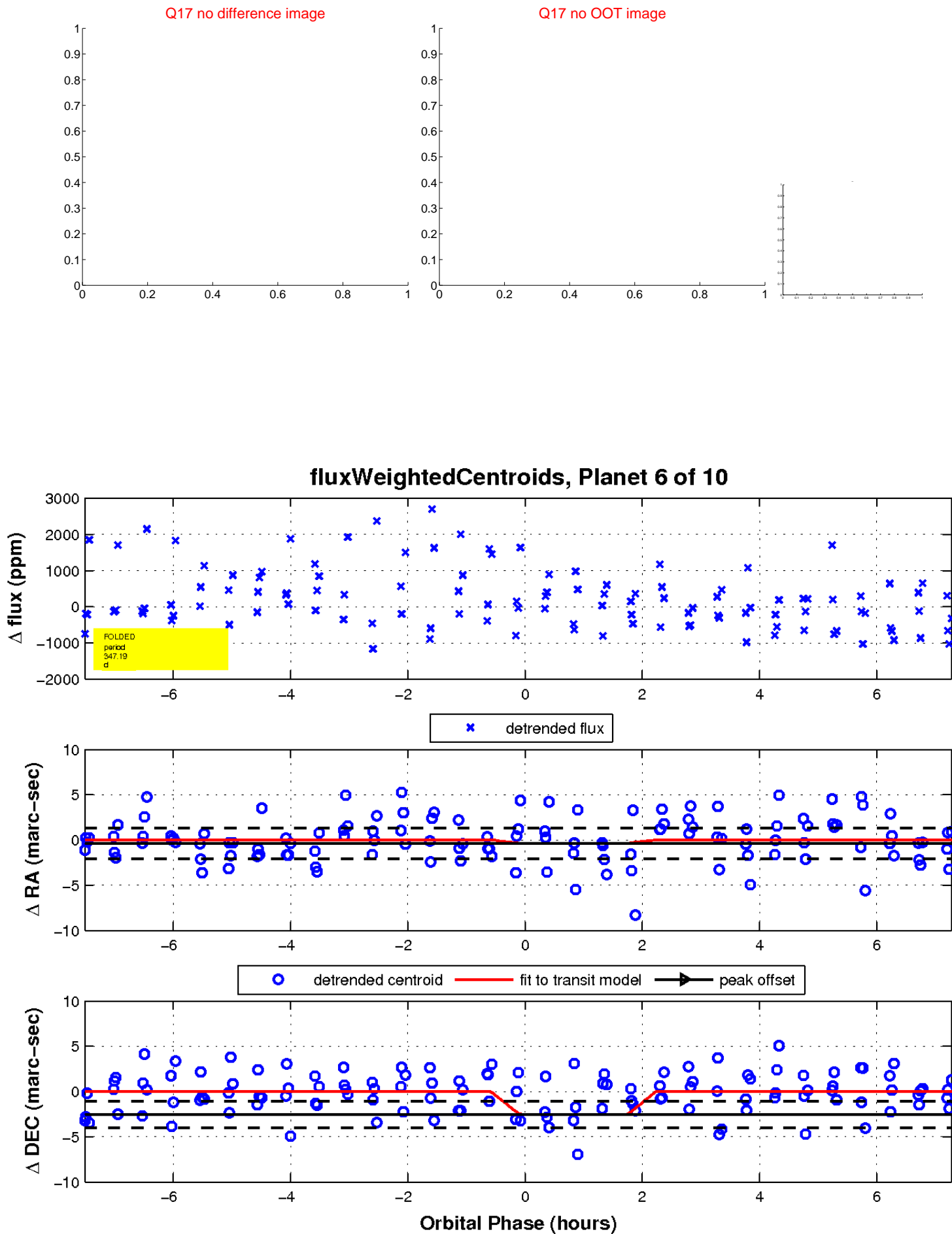
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

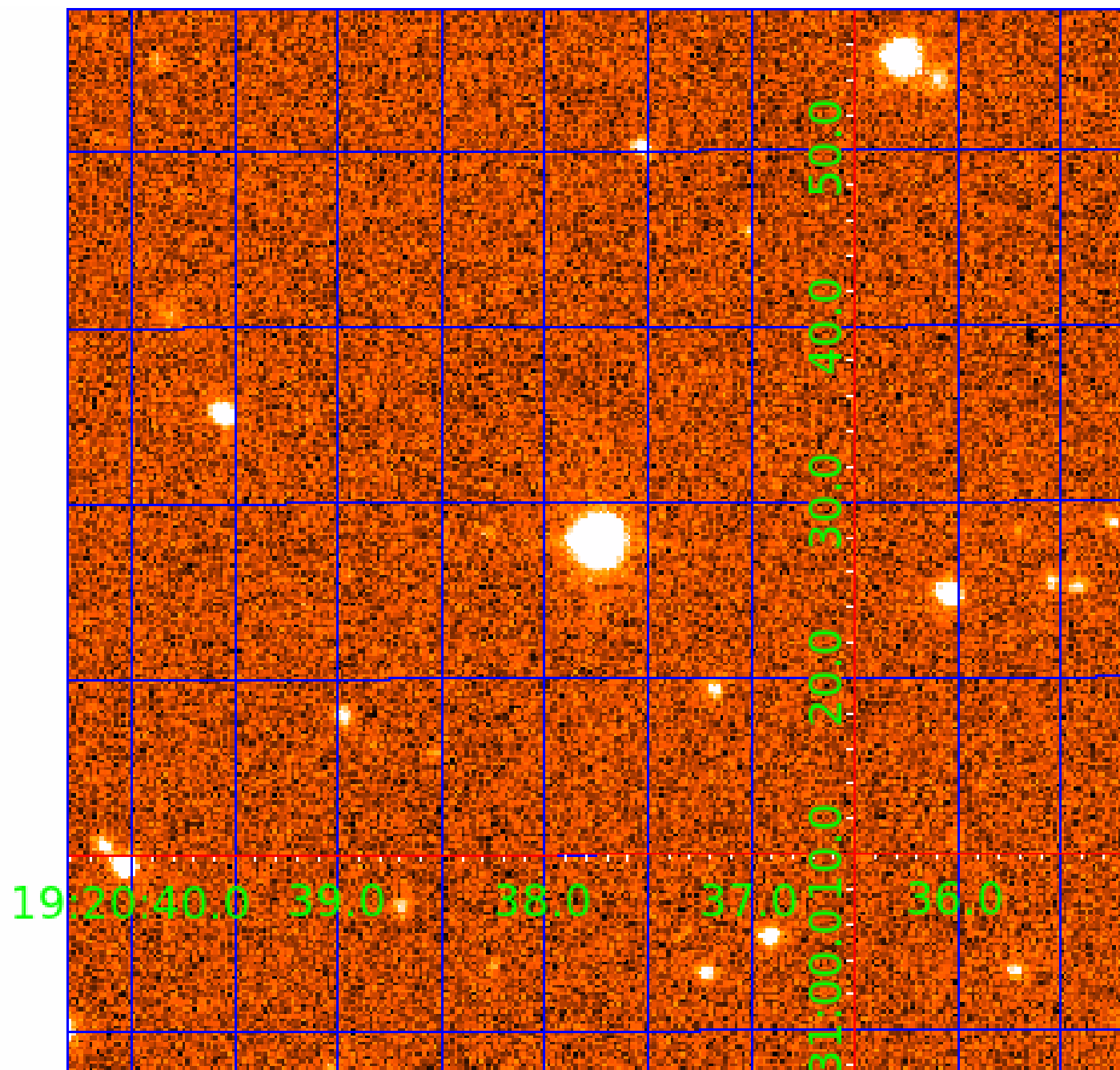


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



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})
003439126-01	OBS	No	466.598907	562.202843	1581.3	9.515	13.7	6.5	0.66	4236	2.77	0.12
003439126-02	OBS	No	456.286524	484.430344	1711.3	7.600	11.8	7.8	0.66	4236	3.27	0.12
003439126-03	OBS	7655.01	2.976224	132.922051	197.1	6.191	11.6	10.9	0.66	4236	1.14	102.47
003439126-04	OBS	No	272.945566	224.384038	662.9	9.352	11.7	4.0	0.66	4236	1.87	0.25
003439126-05	OBS	No	398.924392	256.302150	1050.5	9.000	11.6	-1.0	0.66	4236	2.05	0.15
003439126-06	OBS	No	347.186618	410.217941	1194.3	7.500	11.4	-1.0	0.66	4236	2.19	0.18
003439126-07	OBS	No	251.654938	196.634295	584.4	8.995	11.4	3.1	0.66	4236	1.57	0.28
003439126-08	OBS	No	428.663233	529.169612	3632.6	17.808	10.9	9.7	0.66	4236	3.81	0.14
003439126-09	OBS	No	323.272075	281.919624	2046.6	20.411	9.8	7.4	0.66	4236	2.88	0.20
003439126-10	OBS	No	229.359900	174.128589	1174.7	7.500	10.2	-1.0	0.66	4236	2.17	0.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003439126-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-03	OBS	FP	0.00	0	0	0	1	EPHEM_MATCH
003439126-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV
003439126-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST
003439126-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
003439126-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
003439126-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

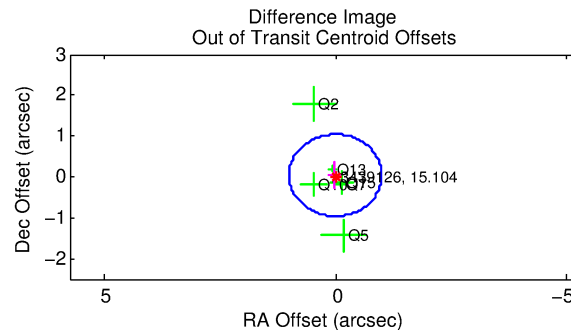
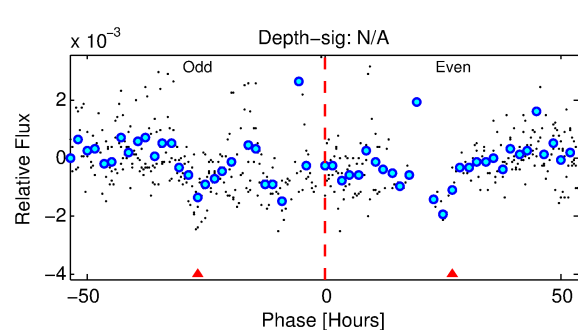
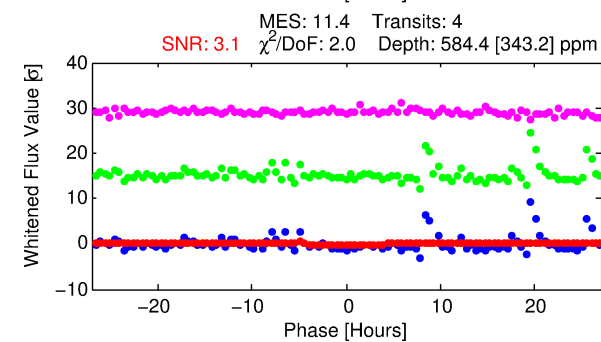
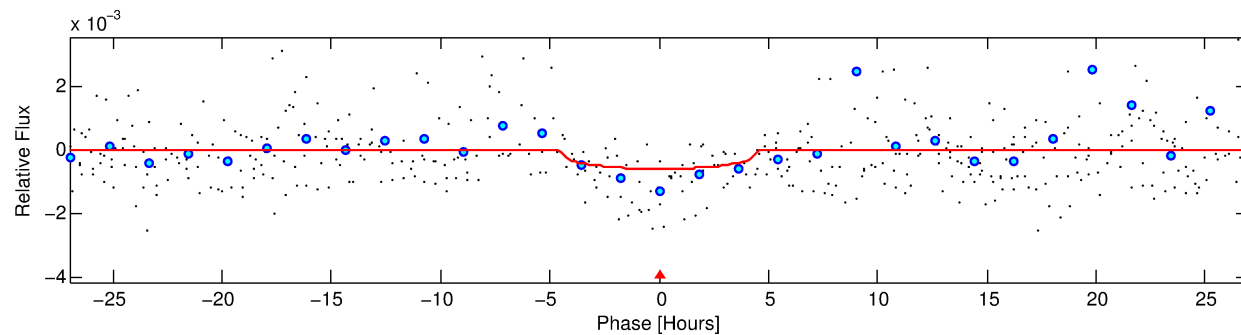
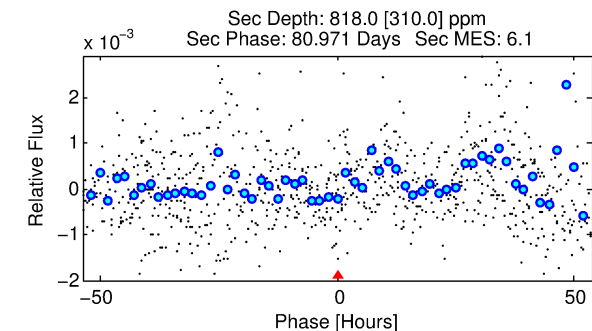
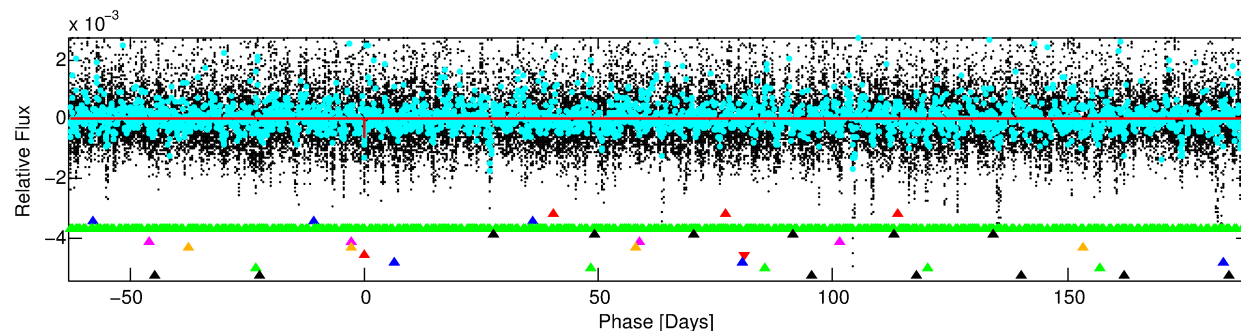
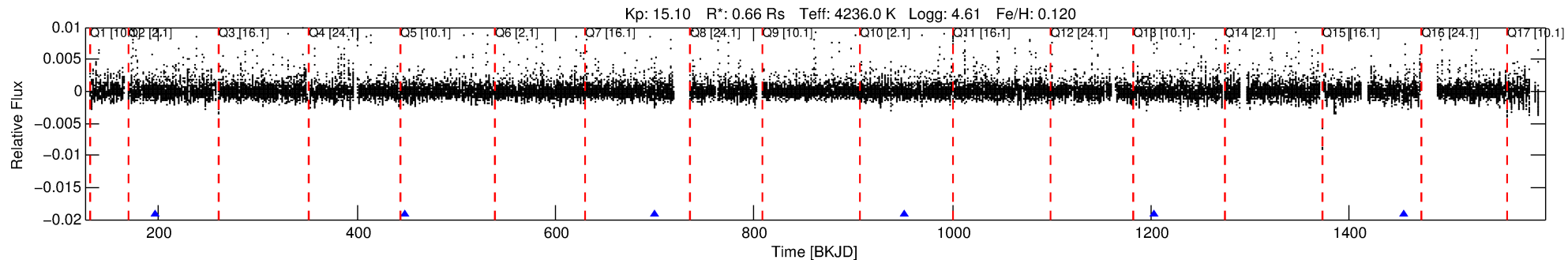
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003439126-07

No Significant Match Found

DV One-Page Summary

KIC: 3439126 Candidate: 7 of 10 Period: 251.655 d



DV Fit Results:

Period = 251.65494 [0.01357] d
Epoch = 196.6343 [0.0414] BKJD
Rp/R* = 0.0217 [0.0563]
a/R* = 202.45 [1553.88]
b = 0.38 [17.36]
Seff = 0.28 [0.05]
Teq = 185 [8] K
Rp = 1.57 [4.08] Re
a = 0.6787 [0.0496] AU
Ag = 83963.12 [437157.64] [0.19σ]
Teffp = 4865 [6333] K [0.74σ]

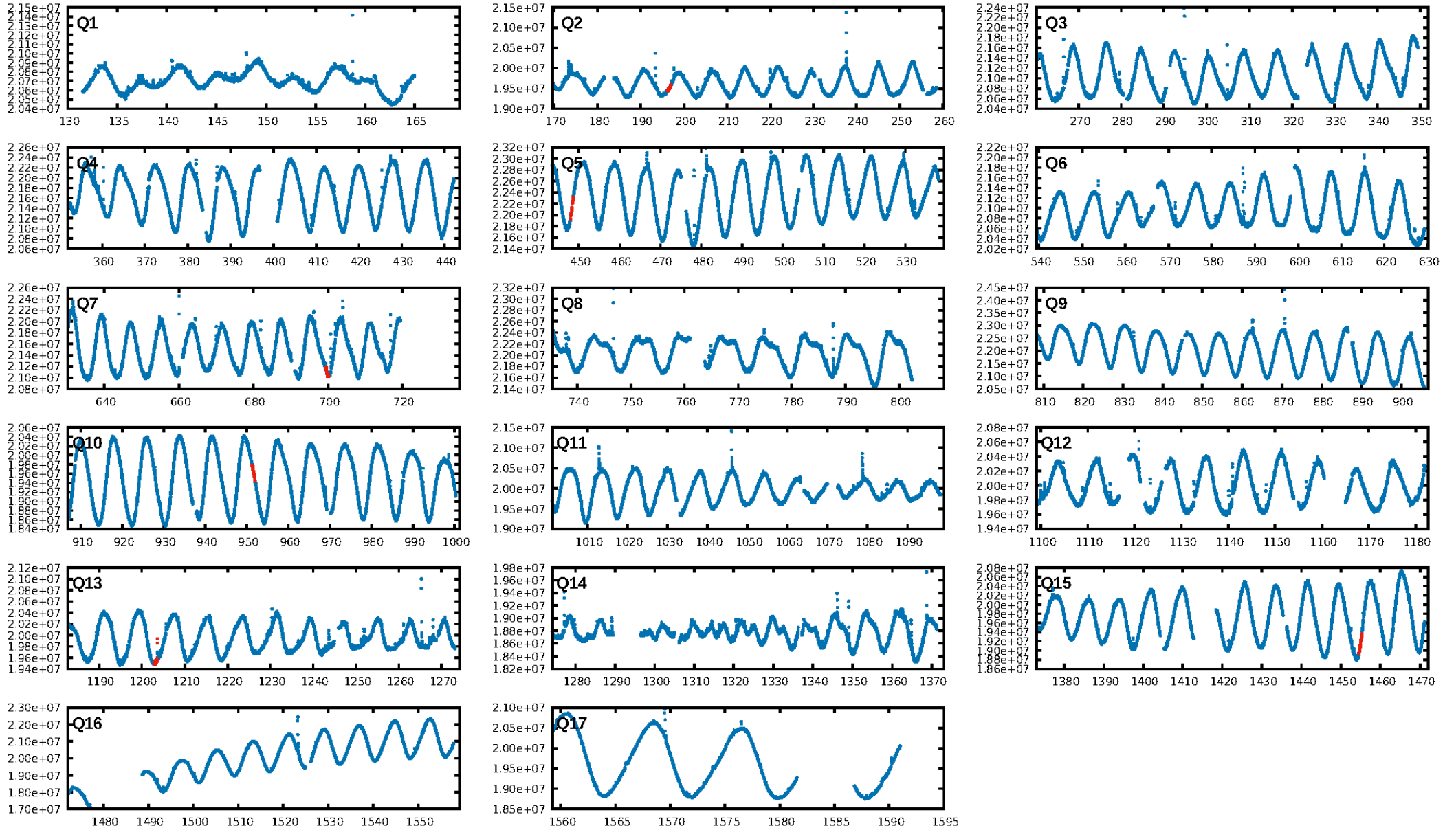
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [45.69σ]
LongPeriod-sig: 100.0% [39.38σ]
ModelChiSquare2-sig: 11.9%
ModelChiSquareGof-sig: 86.4%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 7.38
Centroid-sig: 47.7%
Centroid-so: 1.025 arcsec [0.78σ]
OotOffset-rm: 0.040 arcsec [0.12σ]
OotOffset-st: 2/2/0/2 [6]
KicOffset-rm: 0.128 arcsec [0.44σ]
KicOffset-st: 2/2/0/2 [6]
DiffImageQuality-fgm: 0.67 [4/6]
DiffImageOverlap-fno: 0.50 [3/6]

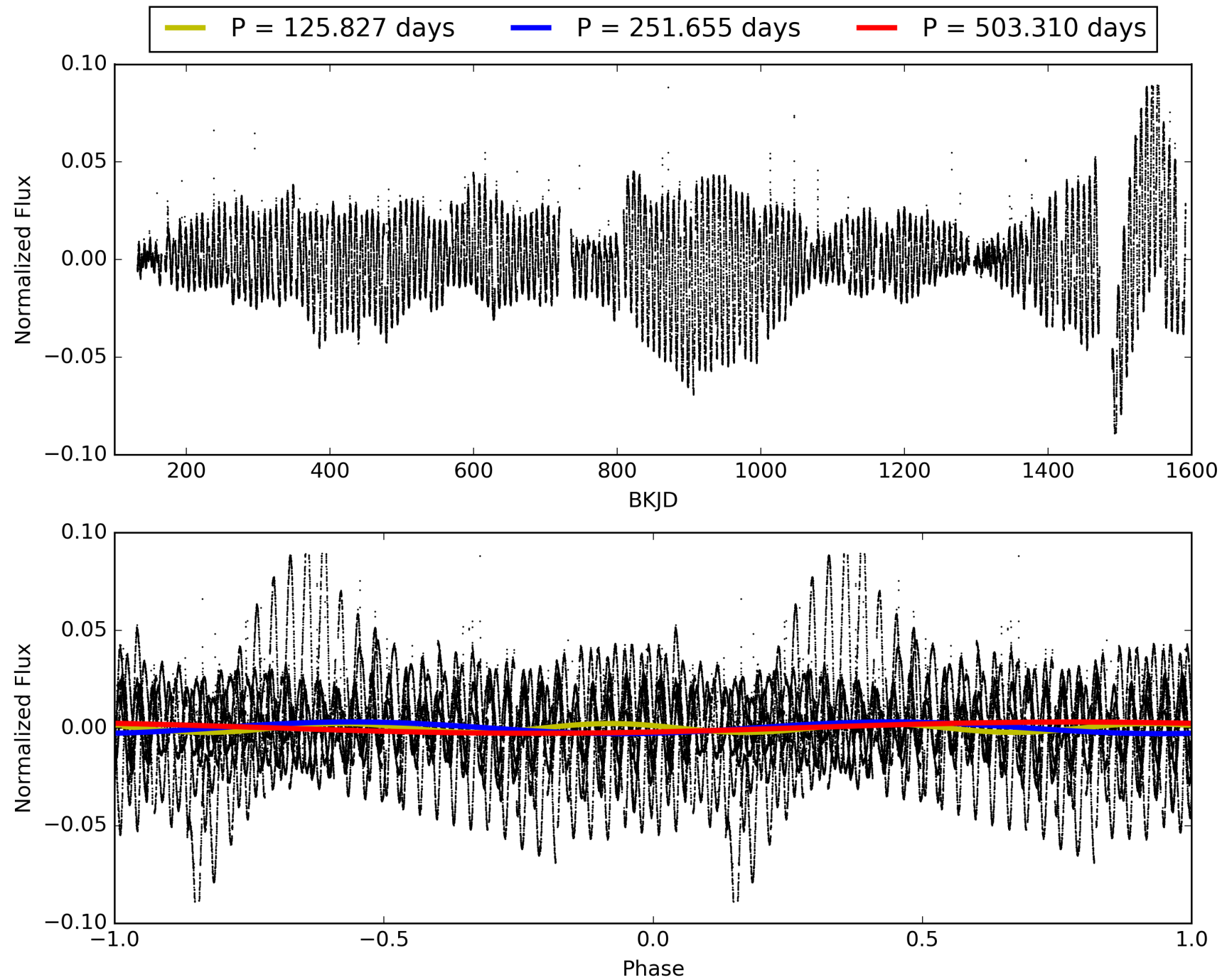
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:54:25 Z

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

TCE 003439126-07, PDC Light Curves

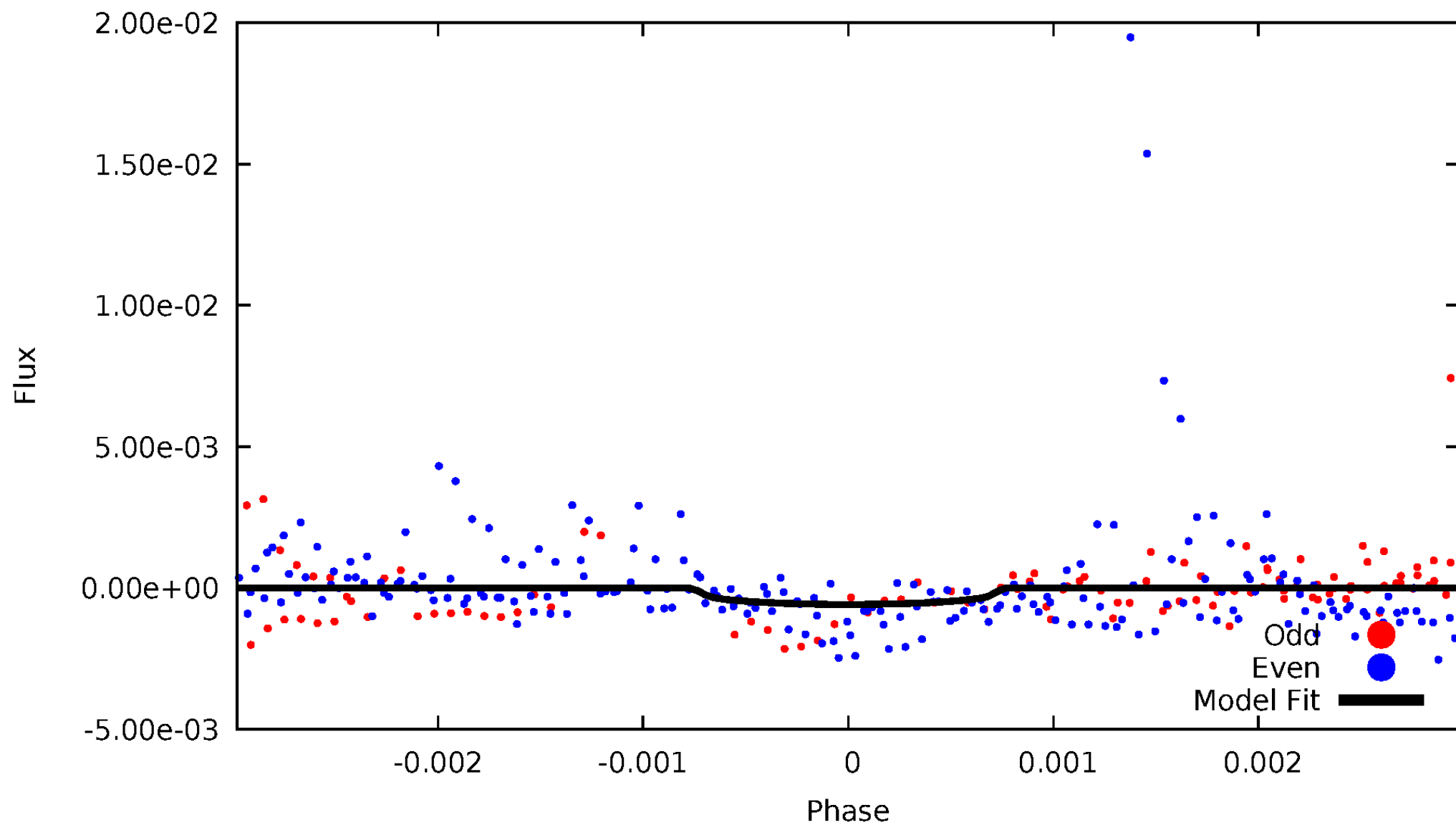


TCE 003439126-07



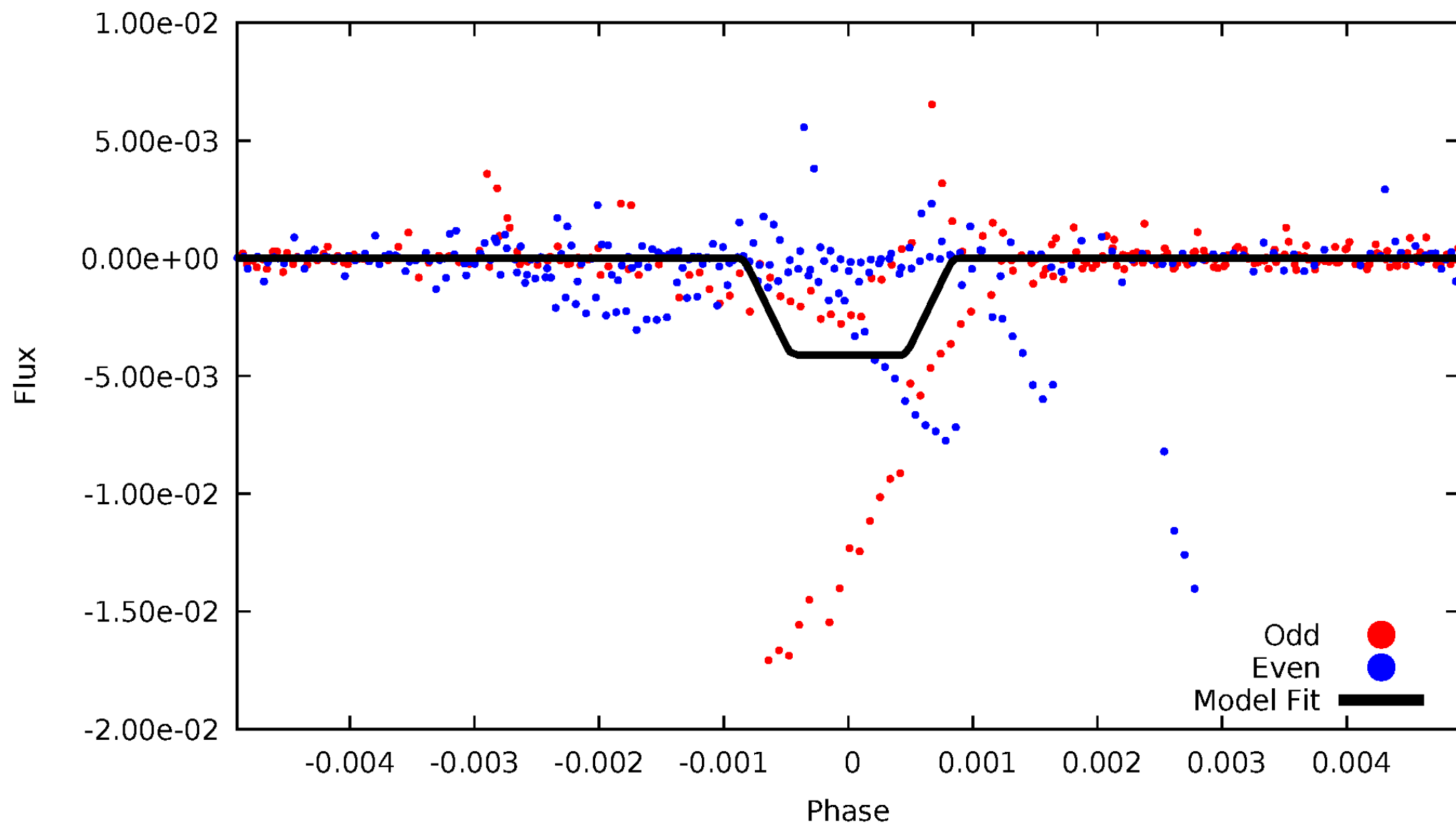
DV Odd/Even

TCE 003439126-07



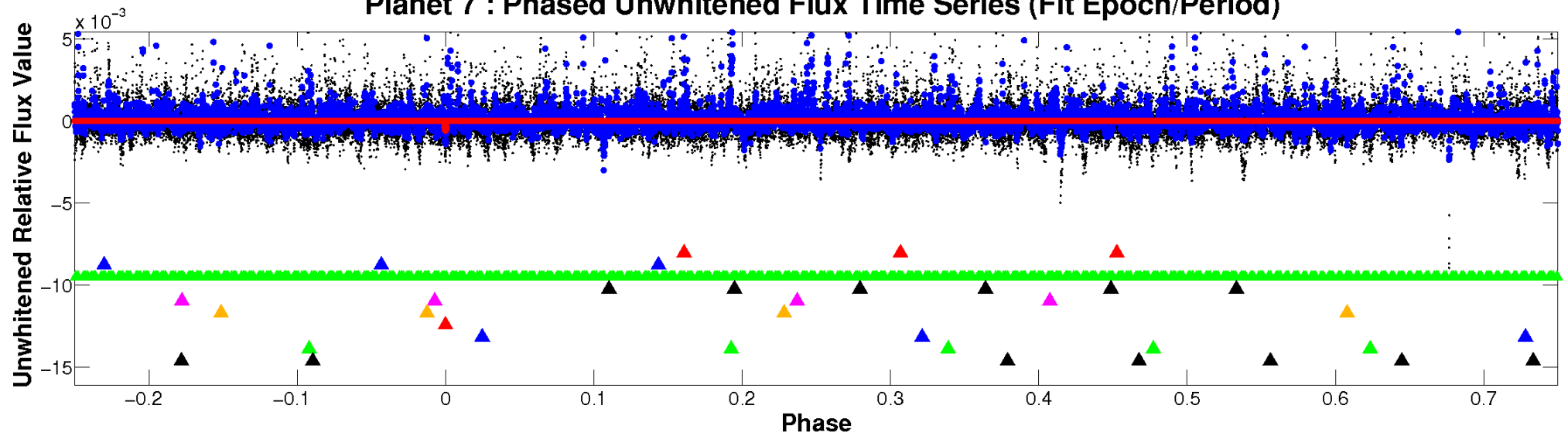
ALT Odd/Even

TCE 003439126-07

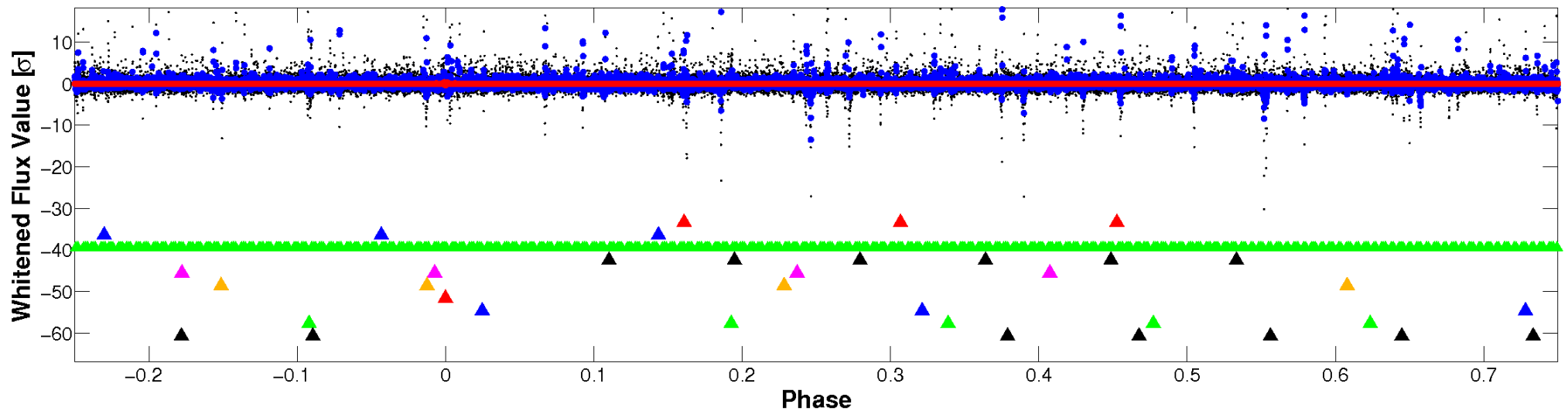


Non-Whitened Vs. Whitened Light Curve

Planet 7 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

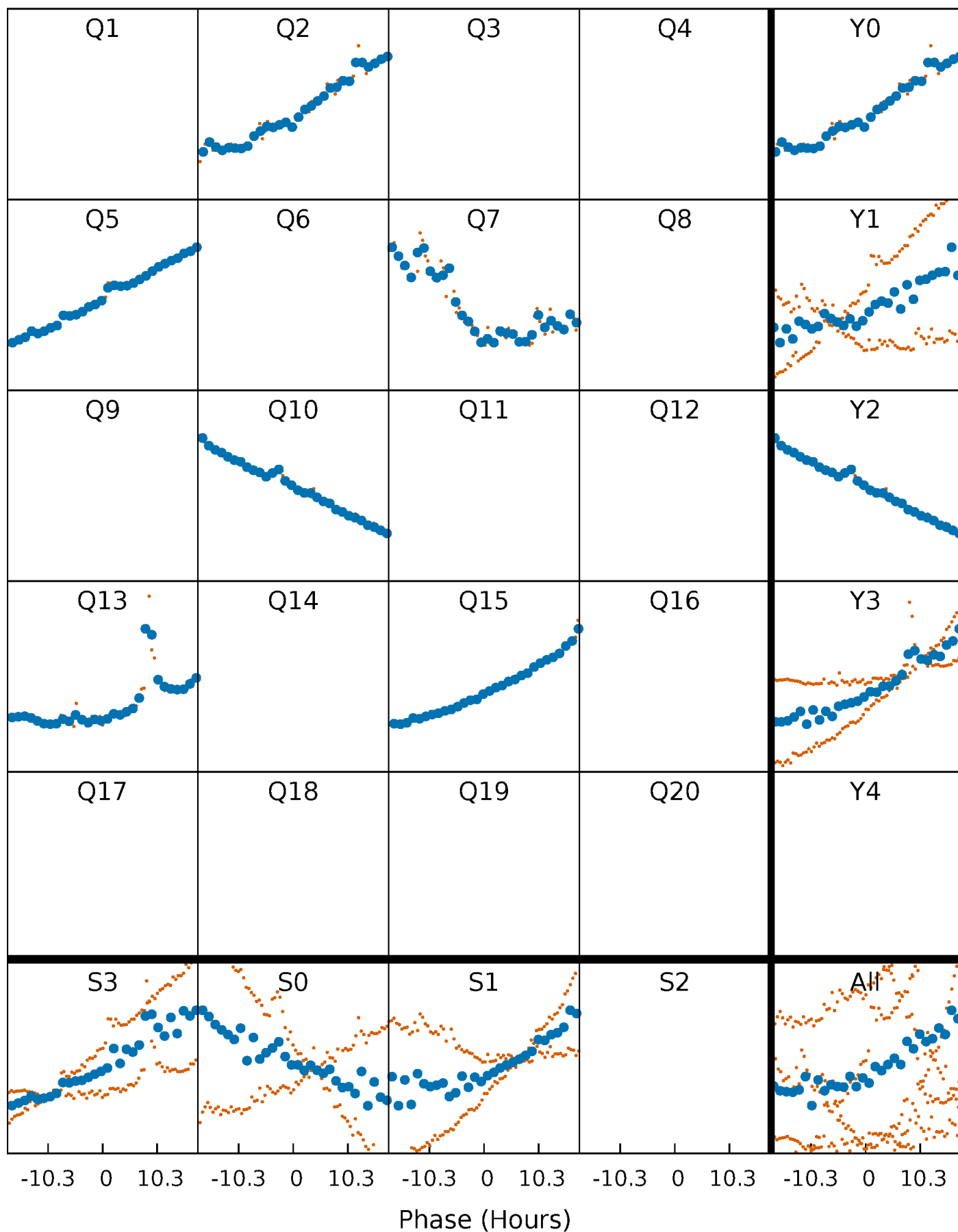


Planet 7 : Phased Whitened Flux Time Series (Fit Epoch/Period)



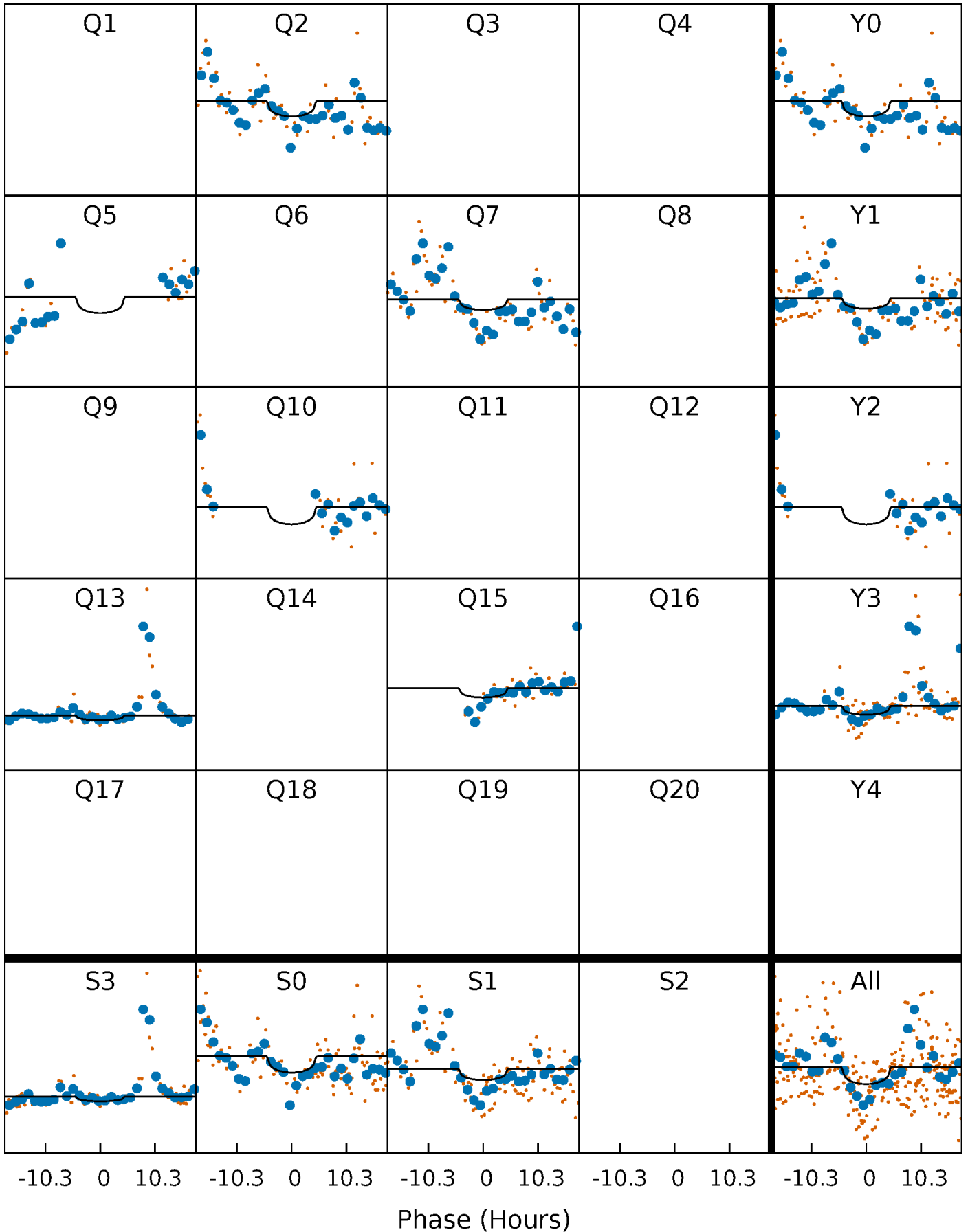
PDC Quarter-Phased Transit Curves

TCE 003439126-07 $P=251.654938$ Days $T_0=196.634295$ (BKJD)



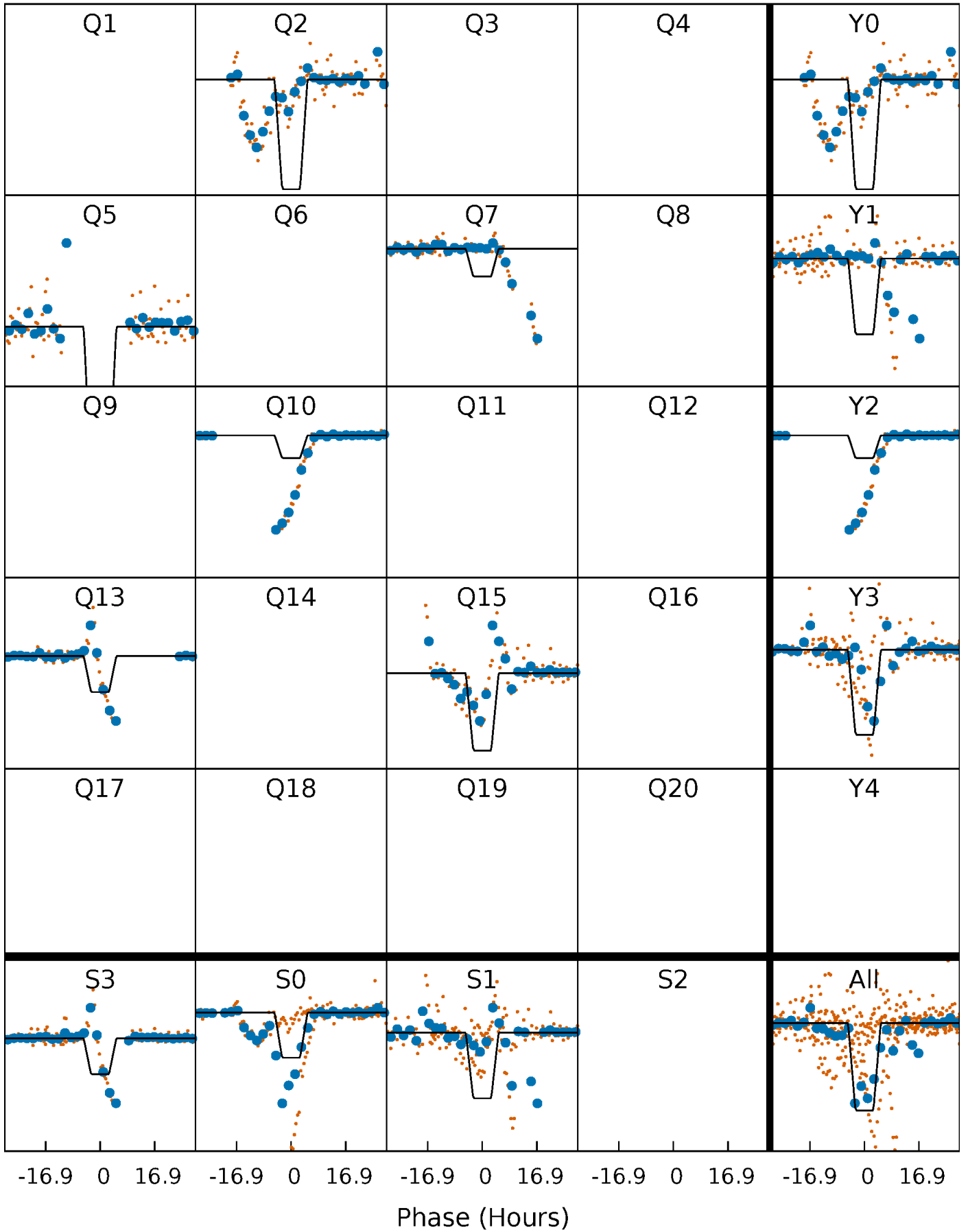
DV Quarter-Phased Transit Curves

TCE 003439126-07 $P=251.654938$ Days $T_0=196.634295$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

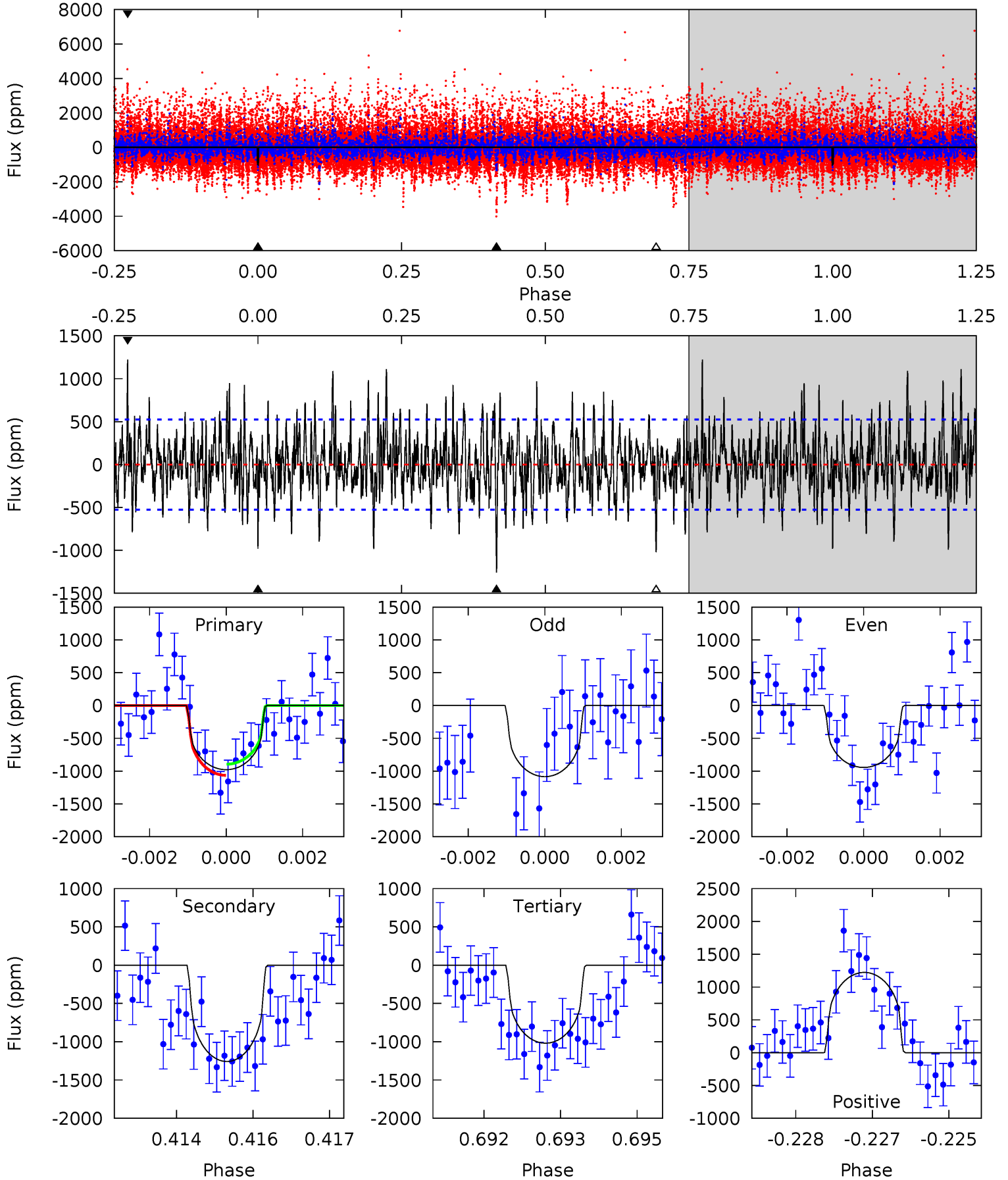
TCE 003439126-07 $P=251.768704$ Days $T_0=196.655845$ (BKJD)



DV Model-Shift Uniqueness Test

003439126-07, P = 251.654938 Days, E = 196.634295 Days

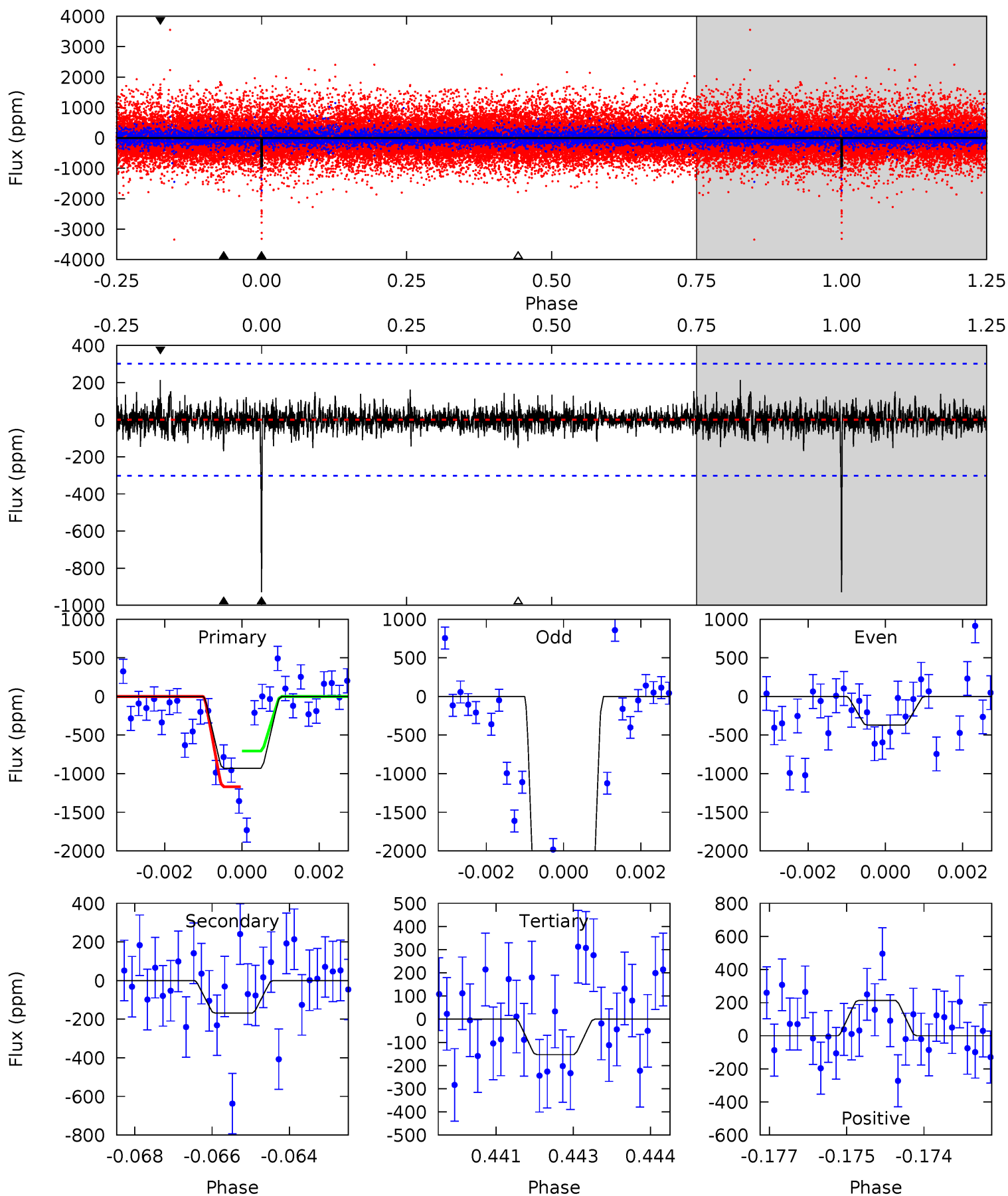
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.0	12.9	10.4	12.5	5.38	3.17	3.05	-0.42	-2.50	2.45	0.36	0.48	0.98	0.49	0.87



Alt Model-Shift Uniqueness Test

003439126-07, P = 251.768704 Days, E = 196.655845 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.5	2.99	2.71	3.79	5.35	3.13	0.68	13.8	12.7	0.28	-0.80	49.2	2.79	0.19	4.14



Stellar Parameters For KIC 003439126

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4236^{+129}_{-142}	$4.612^{+0.052}_{-0.017}$	$0.120^{+0.250}_{-0.300}$	$0.664^{+0.028}_{-0.061}$	$0.657^{+0.047}_{-0.053}$	$3.163^{+0.729}_{-0.252}$
	+3%/-3%	+1%/-0%	+208%/-250%	+4%/-9%	+7%/-8%	+23%/-8%
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 003439126-07 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1258 ± 98	$3.41^{+3.38}_{-2.20}$	256^{+9}_{-10}	3799^{+1998}_{-732}	$26878^{+189991}_{-19958}$
Alt.	-169 ± 56	$5.08^{+4.01}_{-2.93}$	256^{+9}_{-9}	2539^{+659}_{-338}	1639^{+7487}_{-1136}

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 $A_{obs} \gg 1.0$

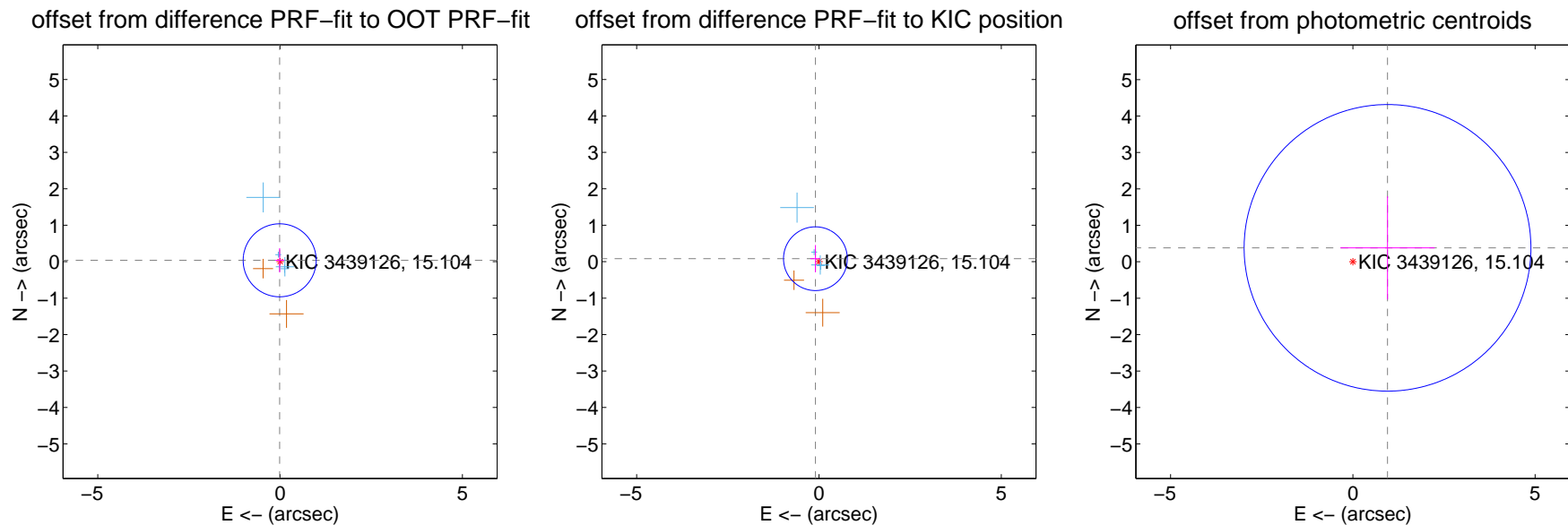
DV Centroid Data

Supplemental centroid analysis for 003439126-07. Kepler magnitude: 15.10. Transit SNR 3.12

There are 4 quarters with good PRF difference image offsets

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

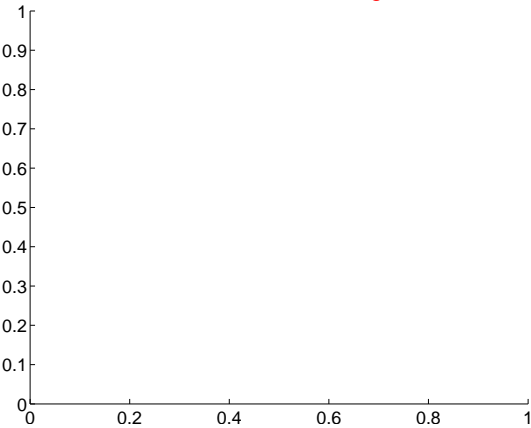
	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.040 ± 0.334	0.12	0.012 ± 0.124	0.038 ± 0.333
PRF-fit source offset from KIC position	0.128 ± 0.292	0.44	0.098 ± 0.136	0.082 ± 0.374
photometric centroid source offset	1.02 ± 1.31	0.78	-0.95 ± 1.29	0.38 ± 1.42



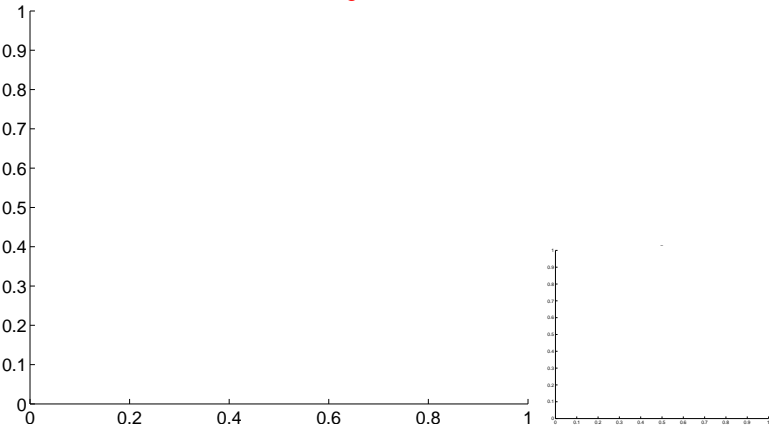
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

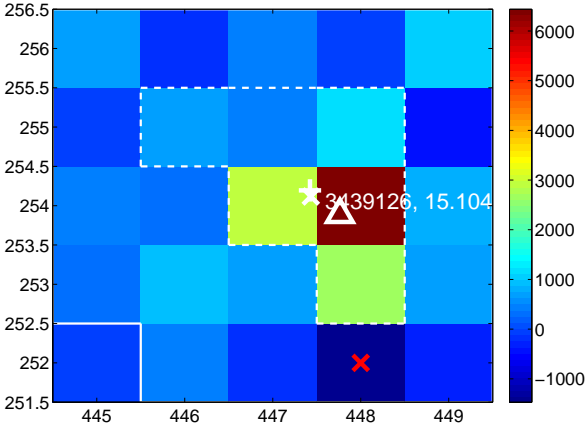
Q1 no difference image



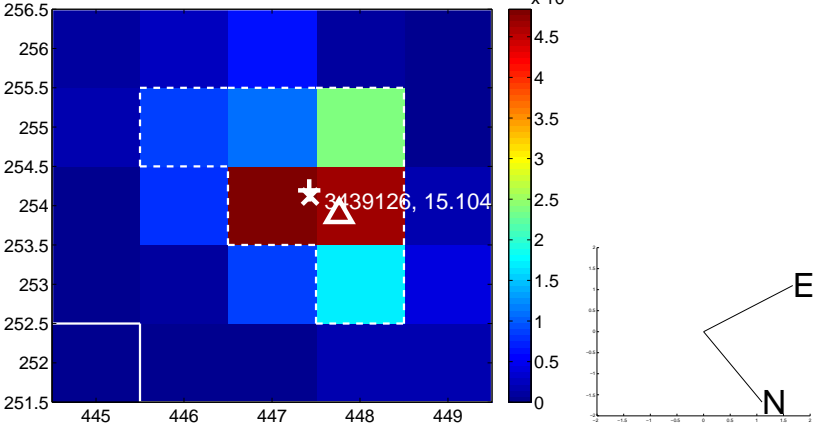
Q1 no OOT image



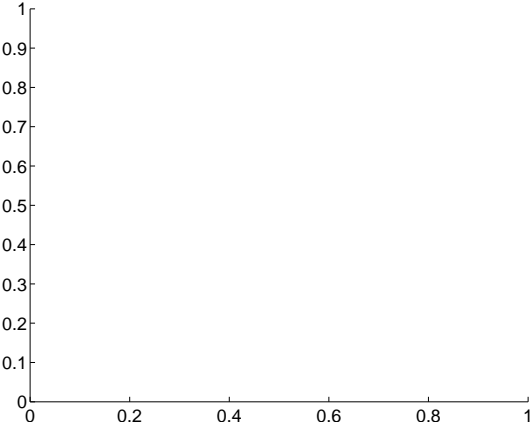
Q2 difference image



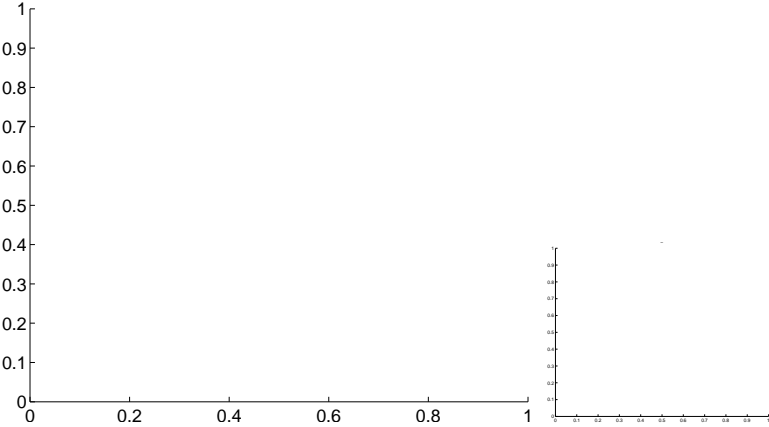
Q2 OOT image



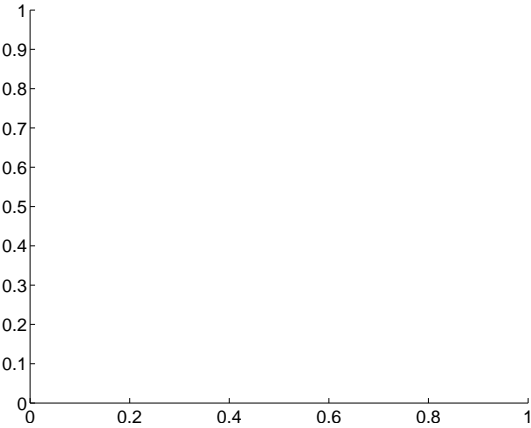
Q3 no difference image



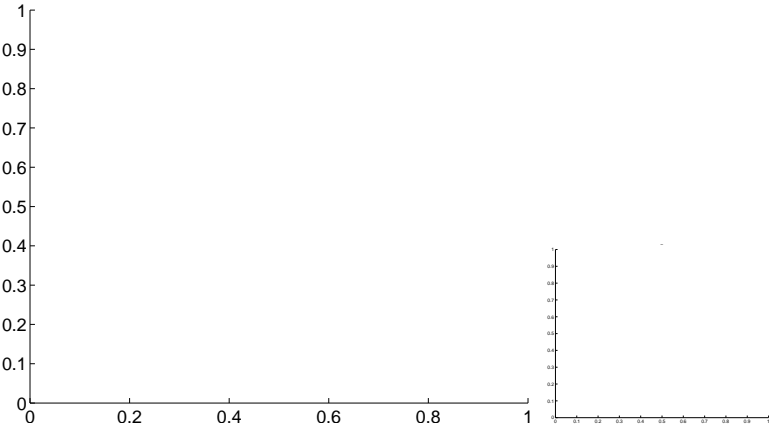
Q3 no OOT image



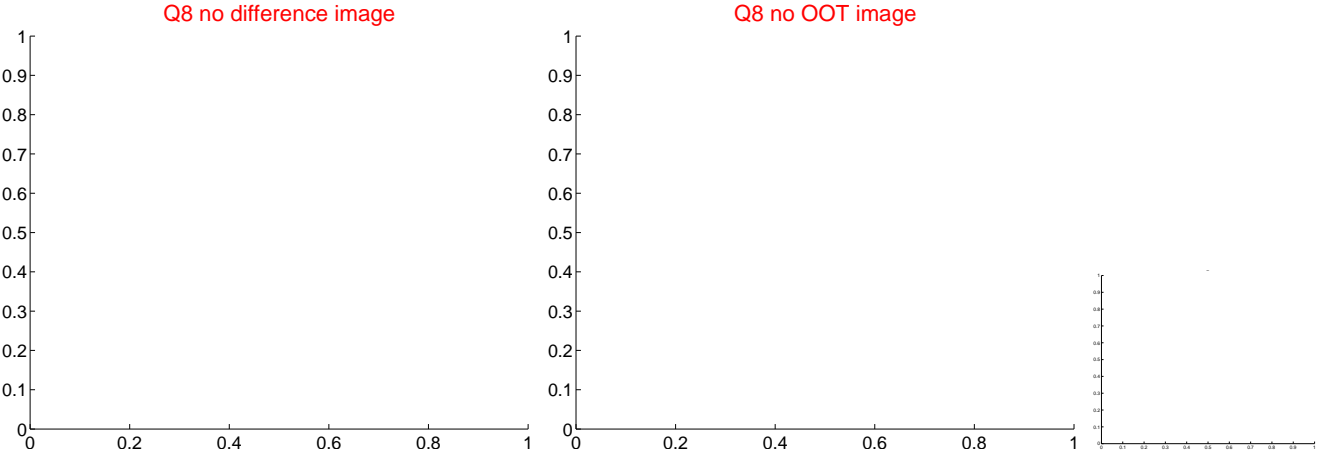
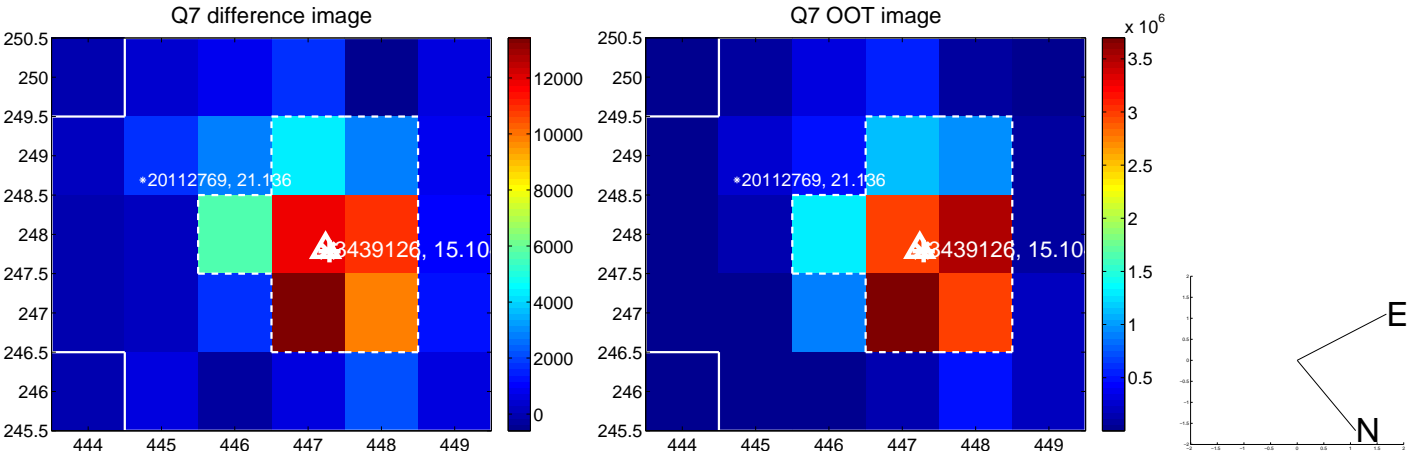
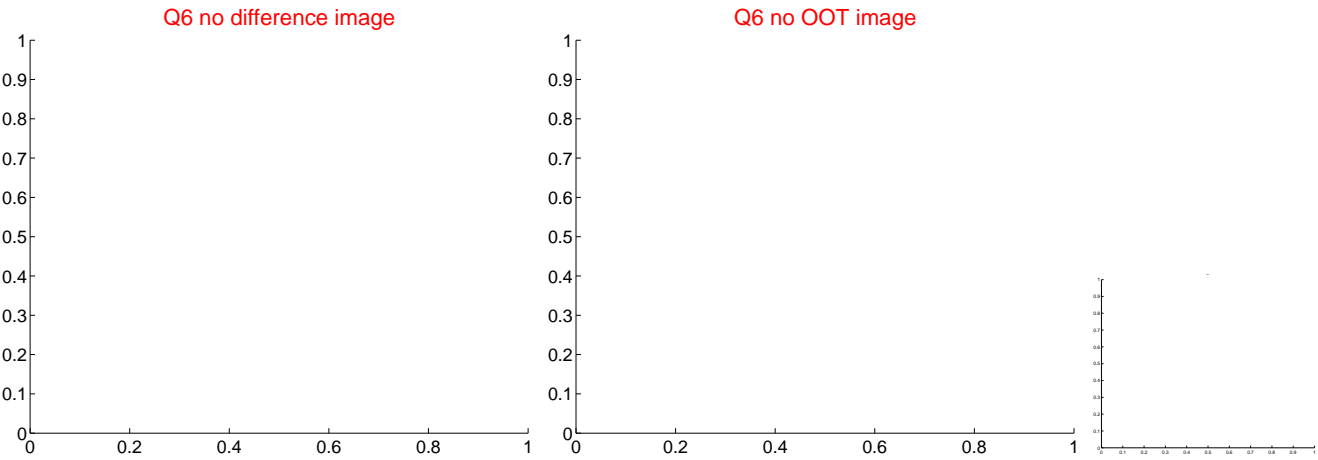
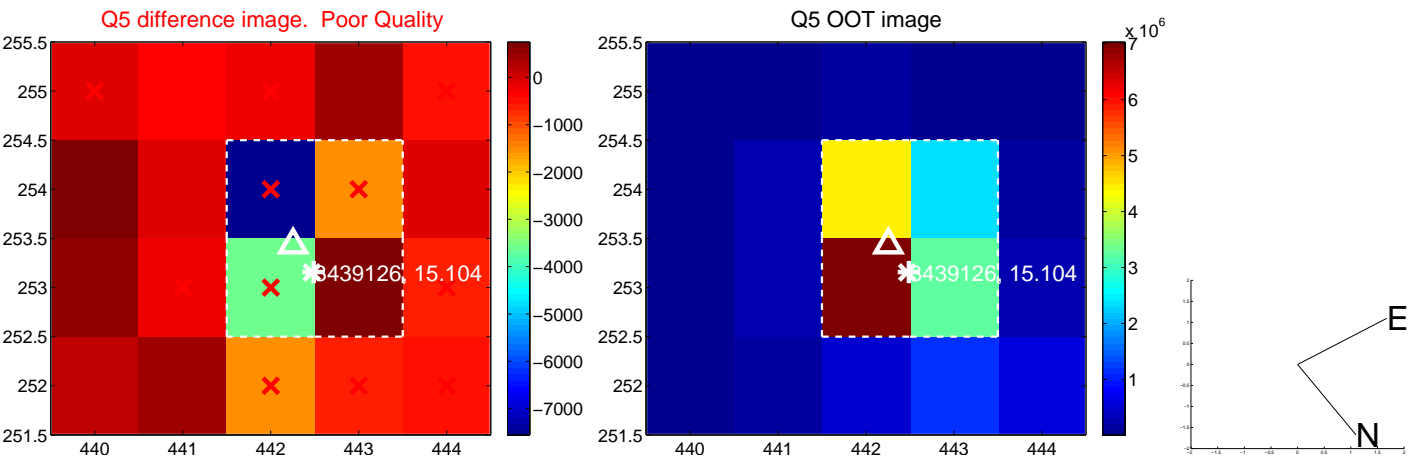
Q4 no difference image



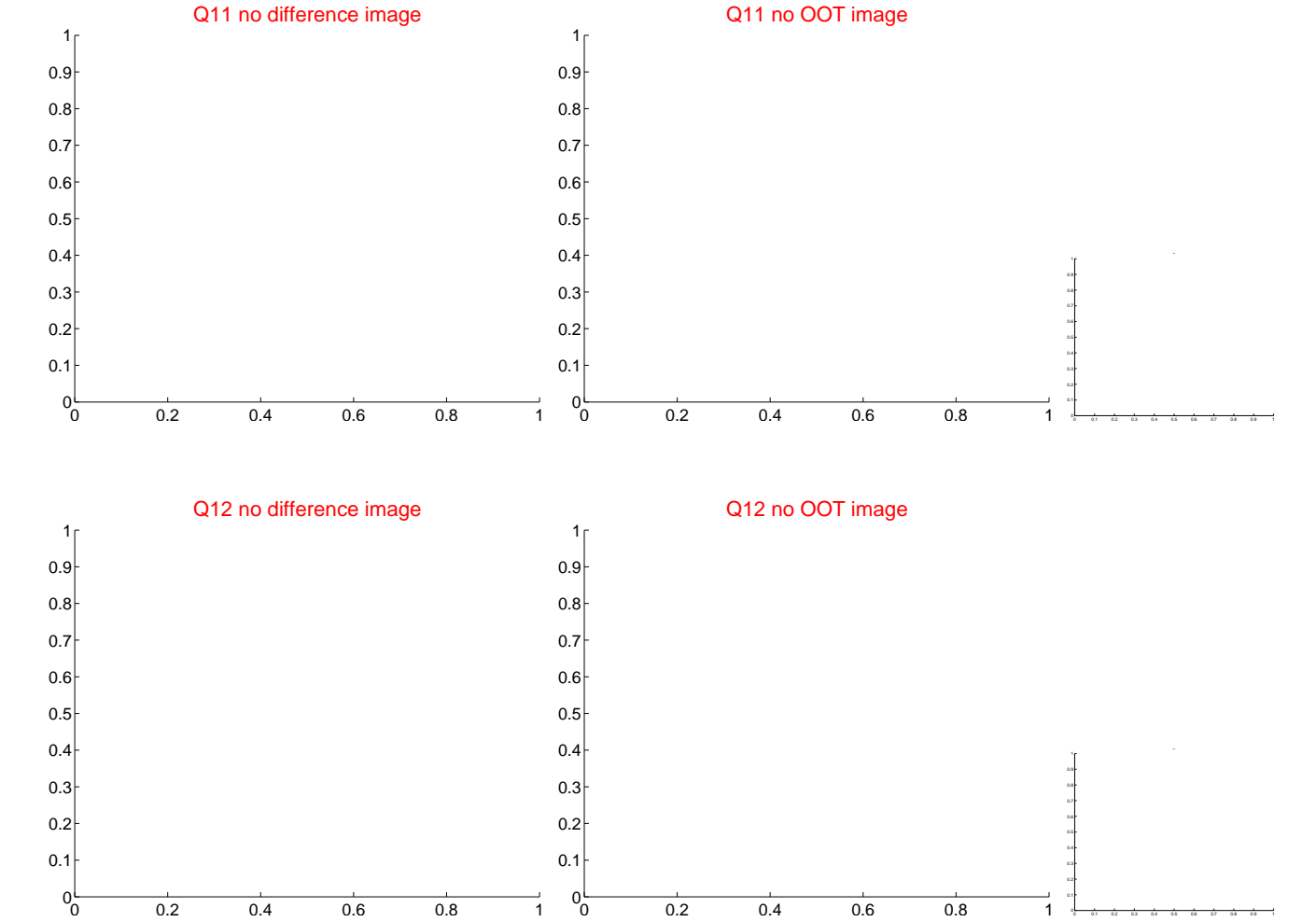
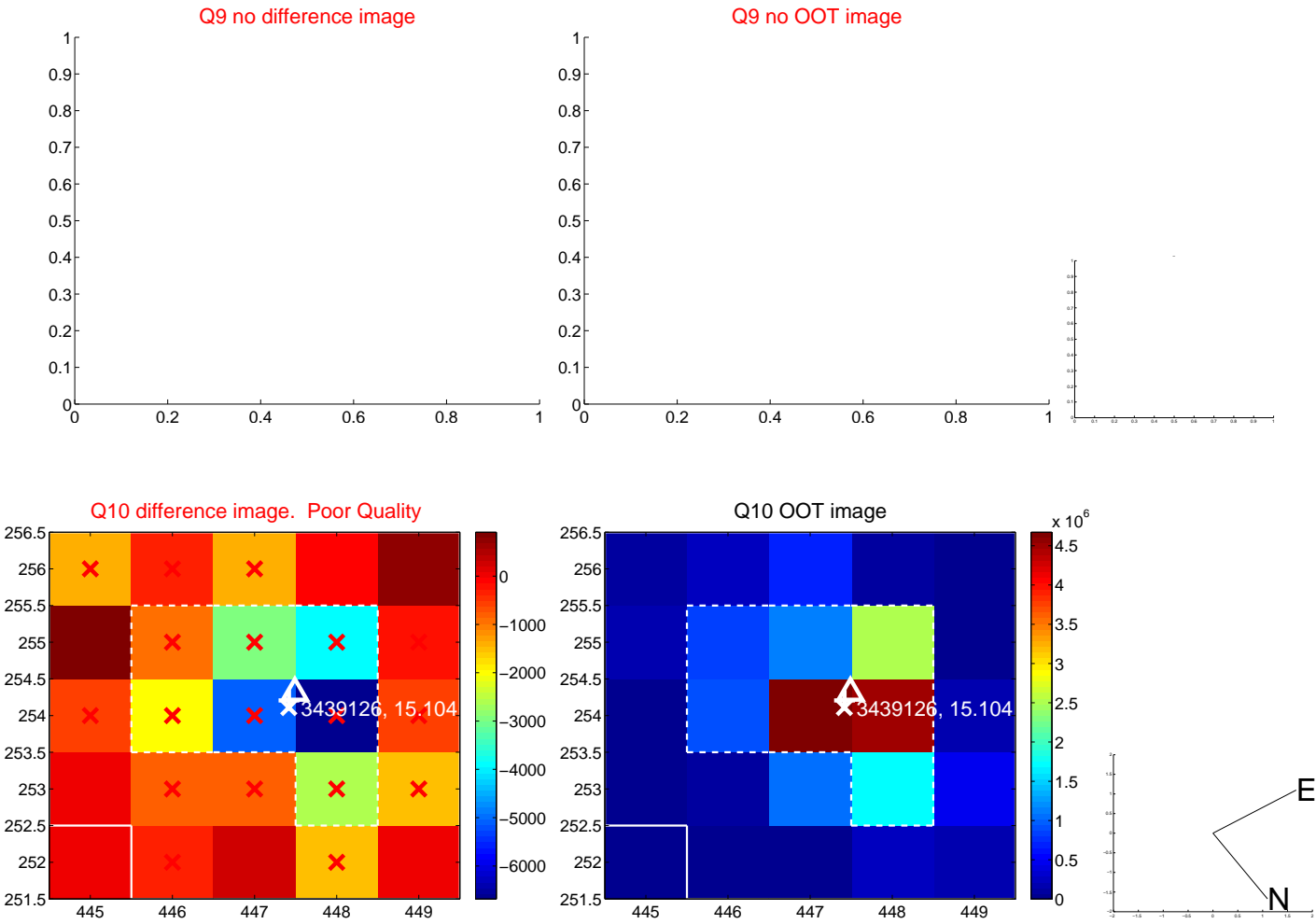
Q4 no OOT image



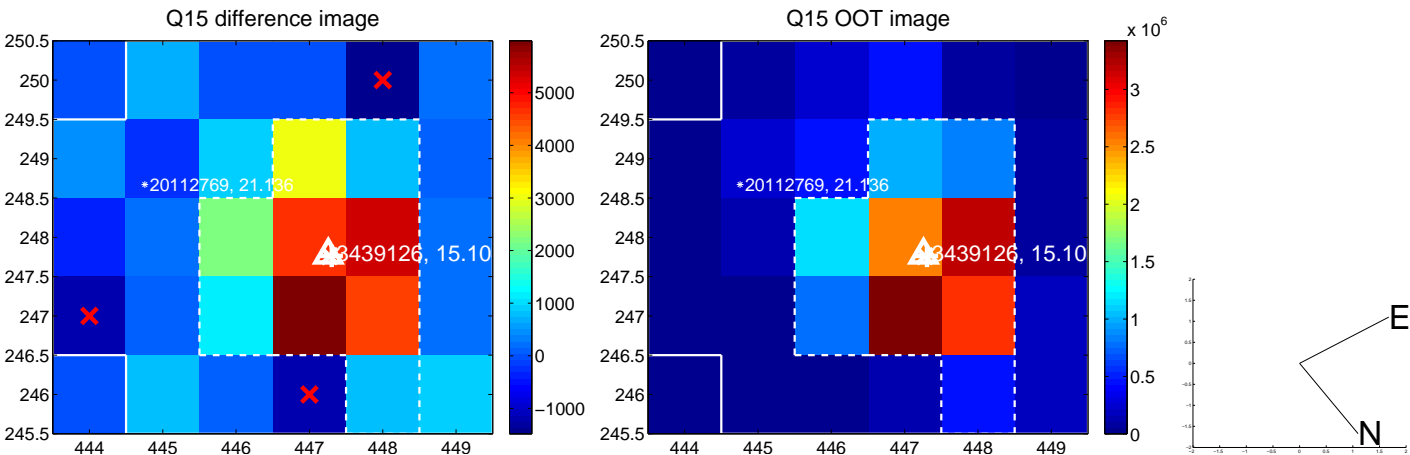
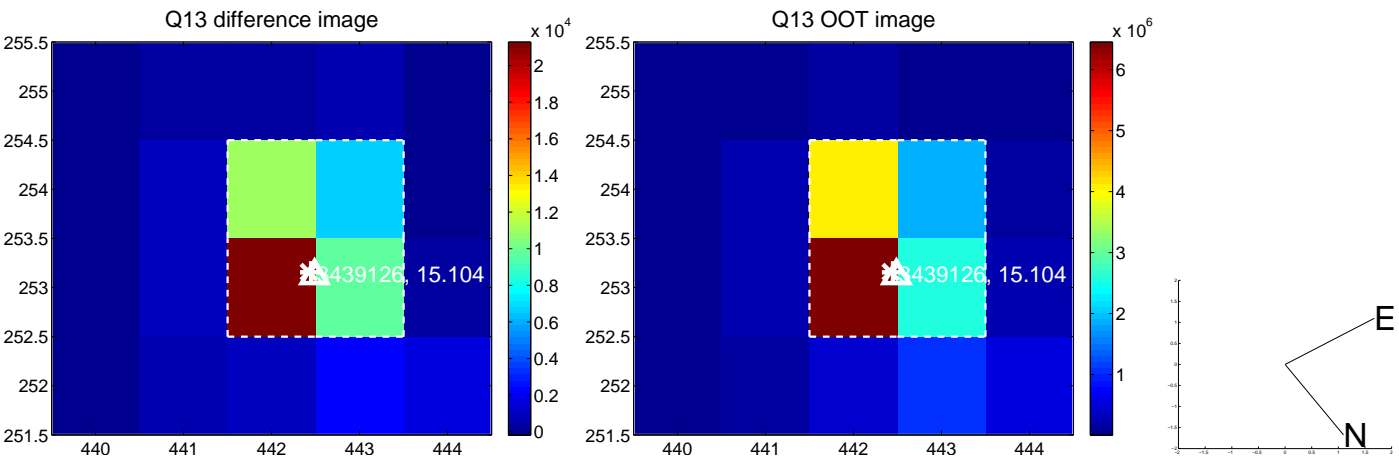
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



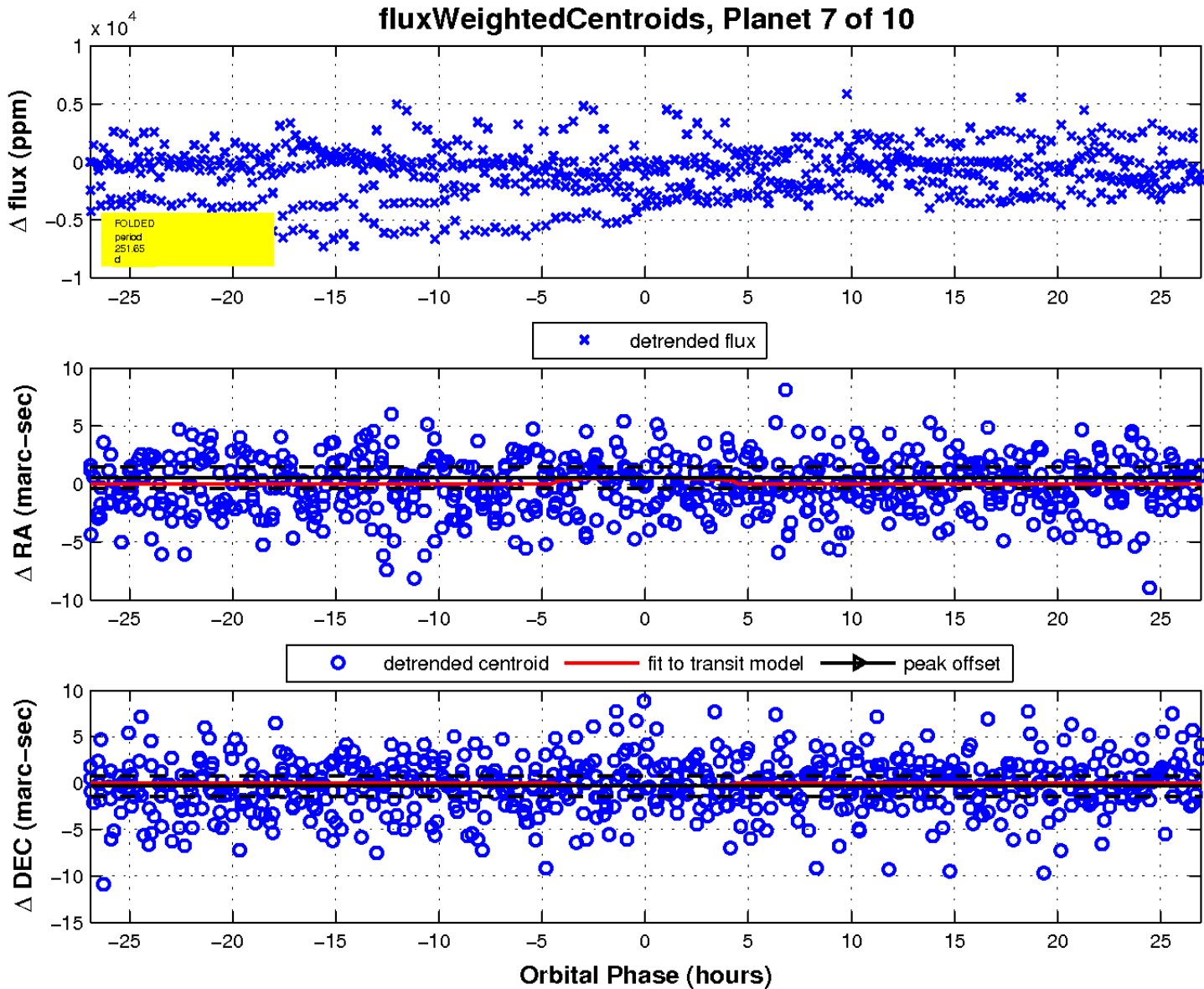
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

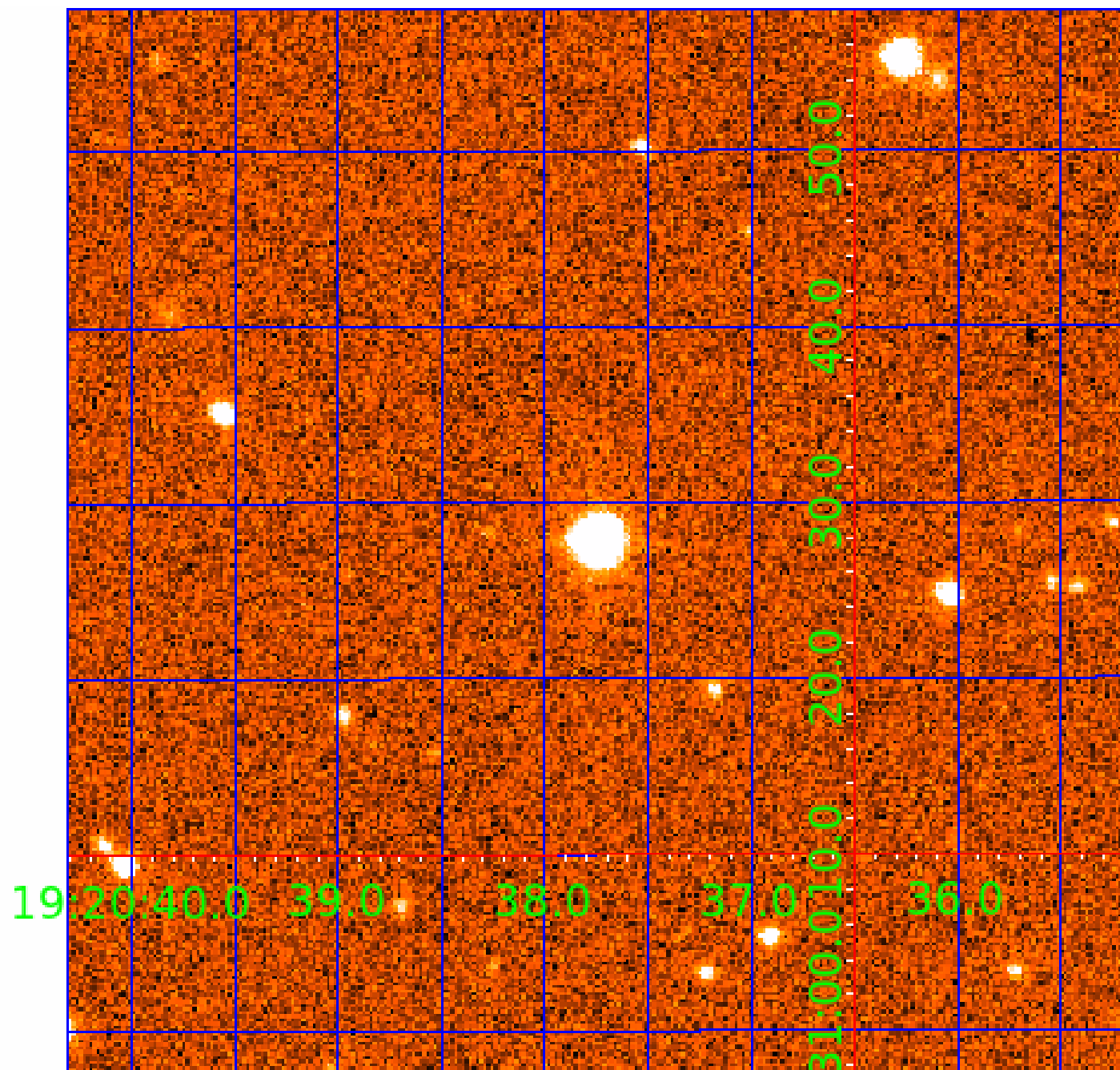
Q17 no difference image

Q17 no OOT image



UKIRT Image

Declination



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})
003439126-01	OBS	No	466.598907	562.202843	1581.3	9.515	13.7	6.5	0.66	4236	2.77	0.12
003439126-02	OBS	No	456.286524	484.430344	1711.3	7.600	11.8	7.8	0.66	4236	3.27	0.12
003439126-03	OBS	7655.01	2.976224	132.922051	197.1	6.191	11.6	10.9	0.66	4236	1.14	102.47
003439126-04	OBS	No	272.945566	224.384038	662.9	9.352	11.7	4.0	0.66	4236	1.87	0.25
003439126-05	OBS	No	398.924392	256.302150	1050.5	9.000	11.6	-1.0	0.66	4236	2.05	0.15
003439126-06	OBS	No	347.186618	410.217941	1194.3	7.500	11.4	-1.0	0.66	4236	2.19	0.18
003439126-07	OBS	No	251.654938	196.634295	584.4	8.995	11.4	3.1	0.66	4236	1.57	0.28
003439126-08	OBS	No	428.663233	529.169612	3632.6	17.808	10.9	9.7	0.66	4236	3.81	0.14
003439126-09	OBS	No	323.272075	281.919624	2046.6	20.411	9.8	7.4	0.66	4236	2.88	0.20
003439126-10	OBS	No	229.359900	174.128589	1174.7	7.500	10.2	-1.0	0.66	4236	2.17	0.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003439126-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-03	OBS	FP	0.00	0	0	0	1	EPHEM_MATCH
003439126-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV
003439126-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST
003439126-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
003439126-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
003439126-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

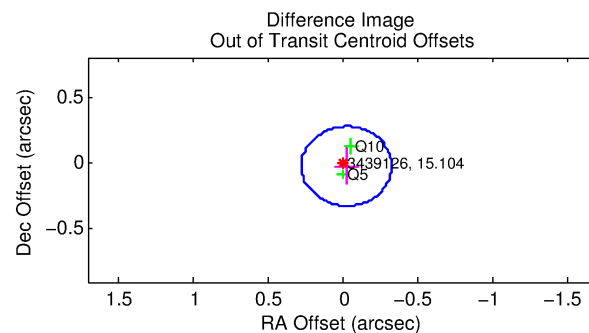
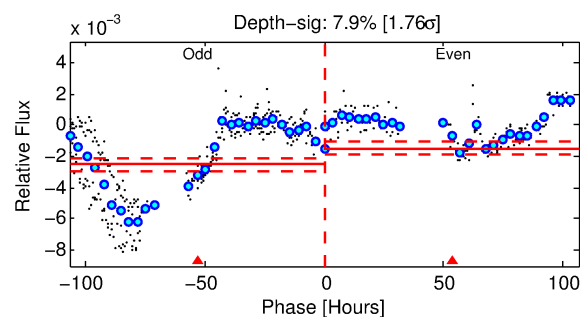
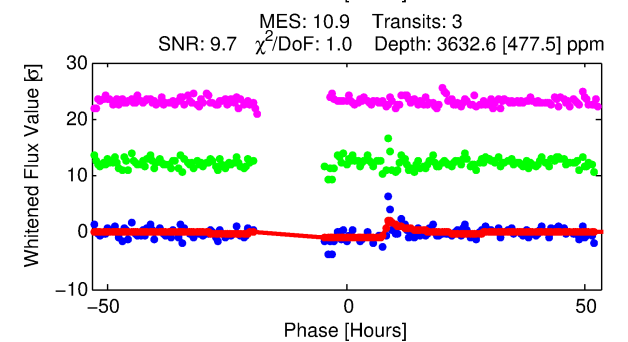
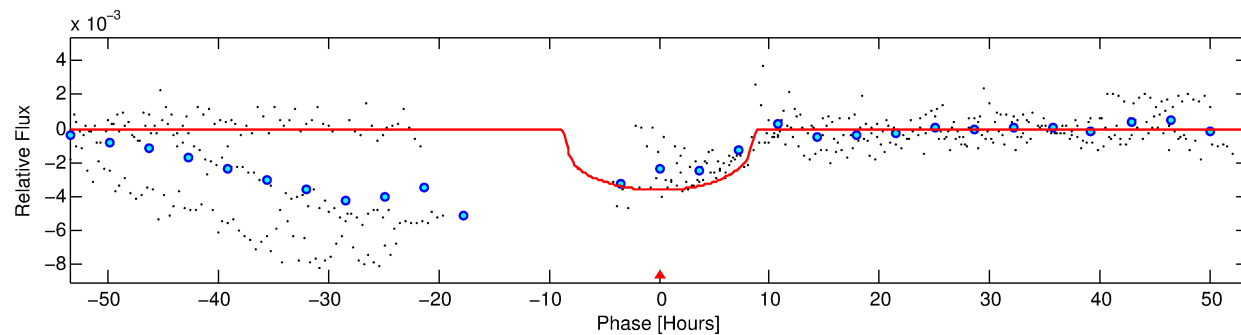
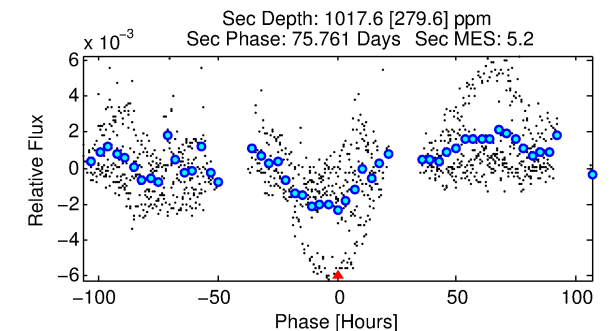
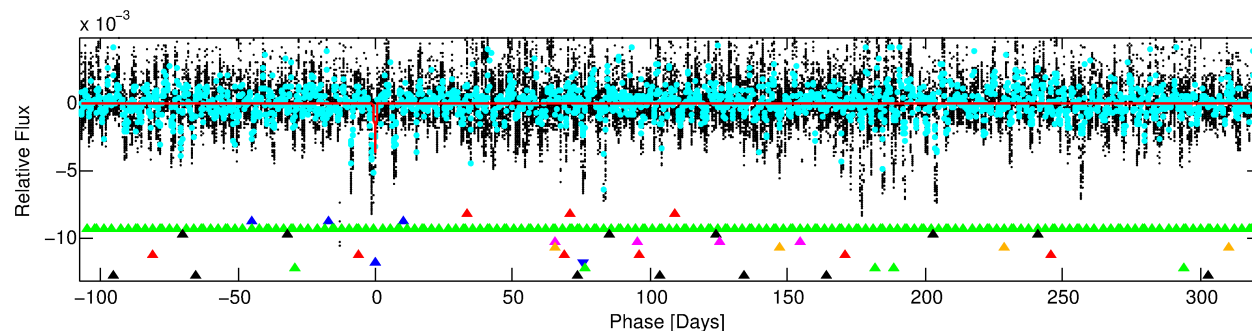
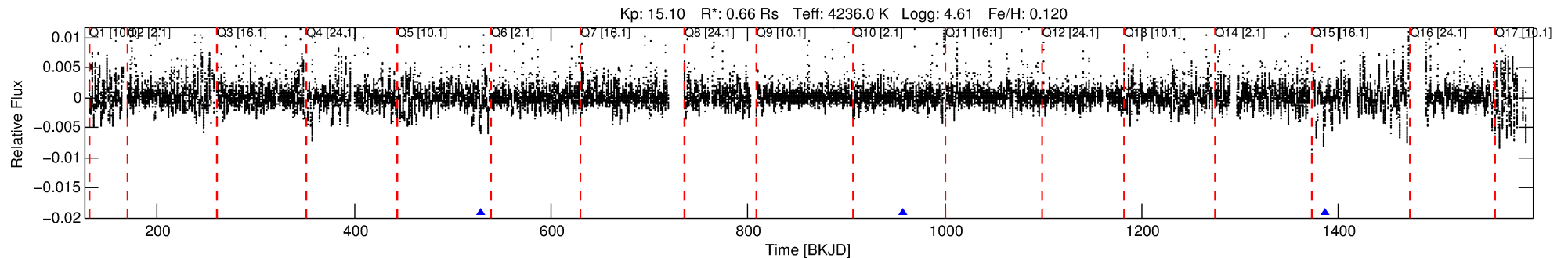
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003439126-08

No Significant Match Found

DV One-Page Summary

KIC: 3439126 Candidate: 8 of 10 Period: 428.663 d



DV Fit Results:

Period = 428.66323 [0.00773] d
Epoch = 529.1696 [0.0426] BKJD
Rp/R* = 0.0526 [0.0126]
a/R* = 193.56 [126.59]
b = 0.00 [193.98]
Seff = 0.14 [0.02]
Teq = 155 [6] K
Rp = 3.81 [0.98] Re
a = 0.9680 [0.0708] AU
Ag = 36117.48 [20235.81] [1.78σ]
Teffp = 3299 [468] K [6.72σ]

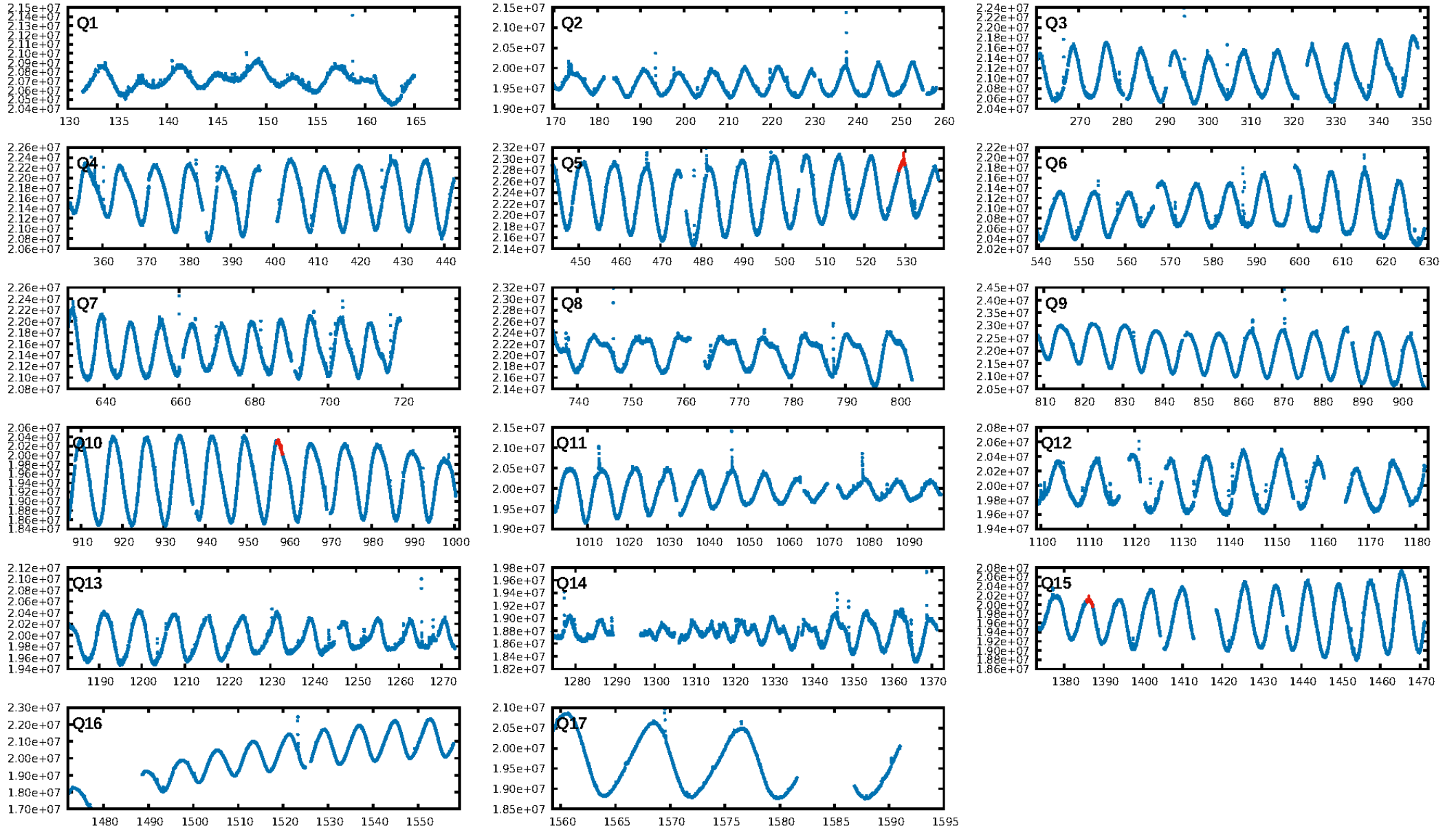
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [35.77σ]
LongPeriod-sig: 100.0% [34.24σ]
ModelChiSquare2-sig: 12.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -2.541
Centroid-sig: 57.5%
Centroid-so: 0.302 arcsec [1.25σ]
OotOffset-rm: 0.037 arcsec [0.37σ]
KicOffset-rm: 0.119 arcsec [1.47σ]
OotOffset-st: 1/0/0/1 [2]
KicOffset-st: 1/0/0/1 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 0.00 [0/2]

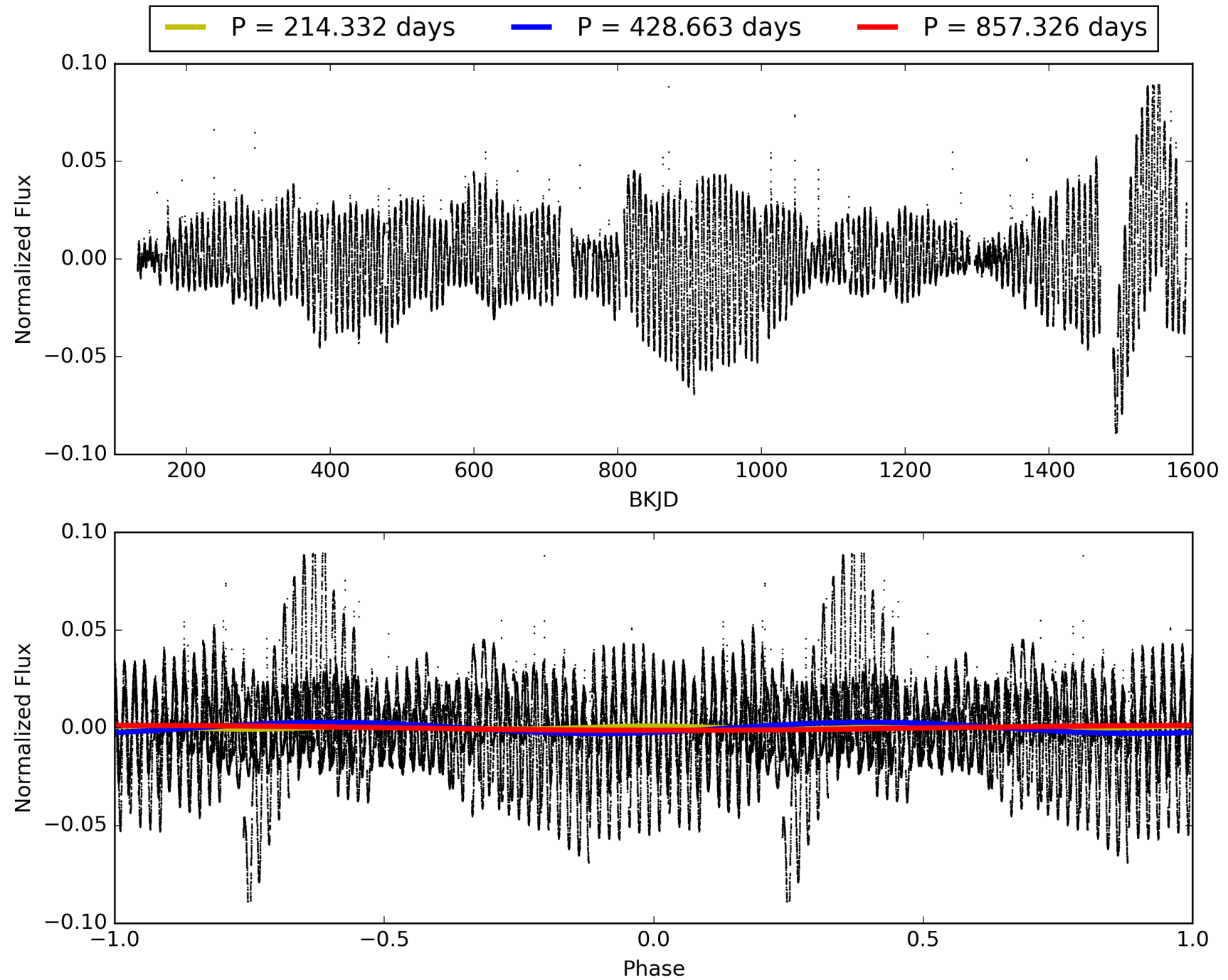
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:54:31 Z

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

TCE 003439126-08, PDC Light Curves

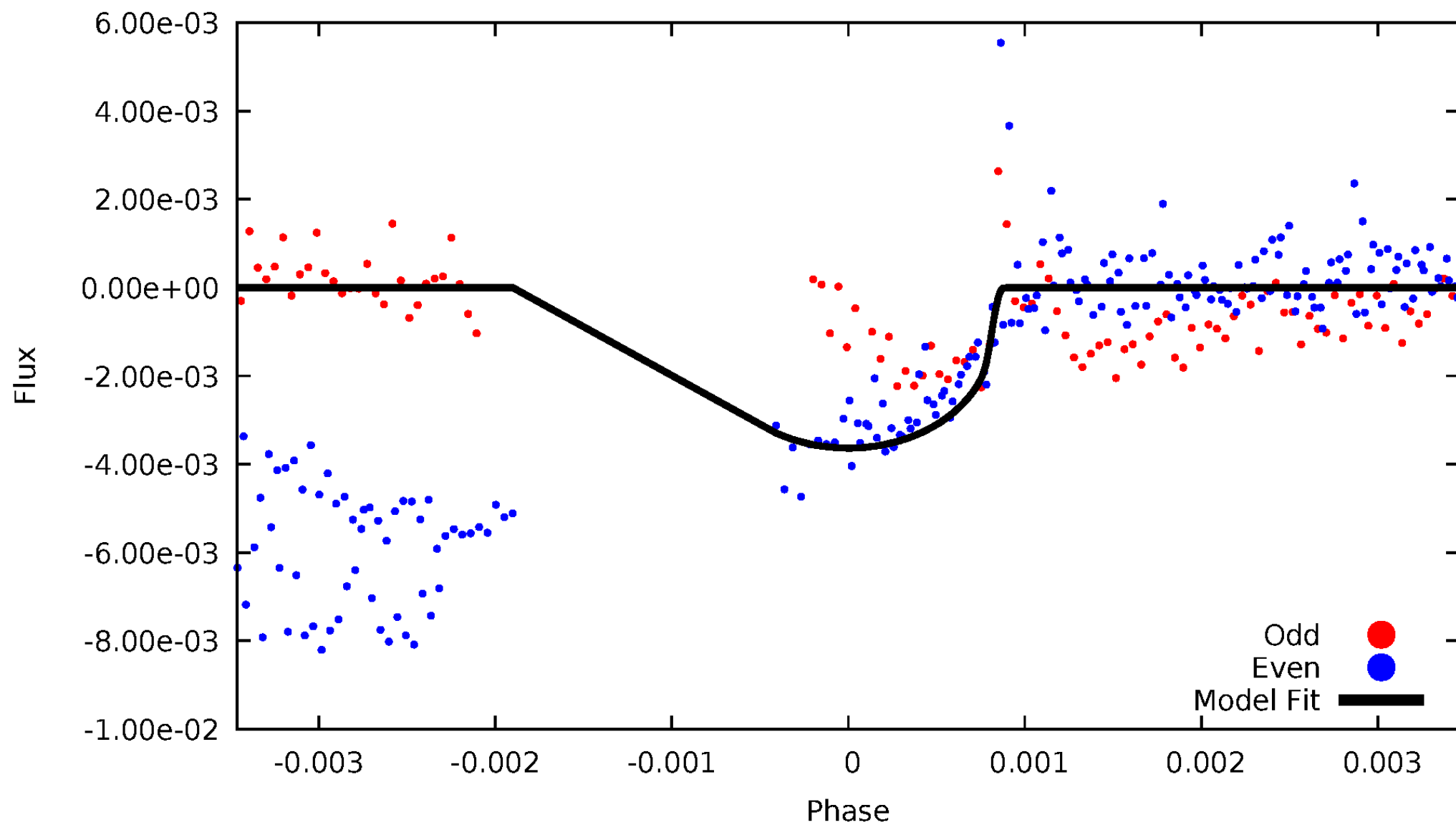


TCE 003439126-08



DV Odd/Even

TCE 003439126-08

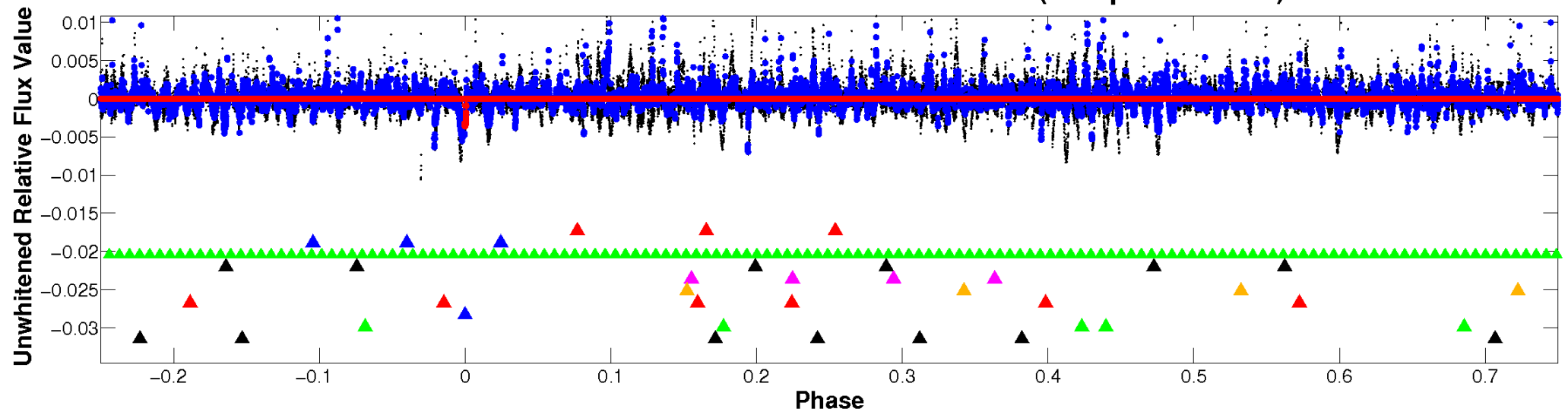


ALT Odd/Even

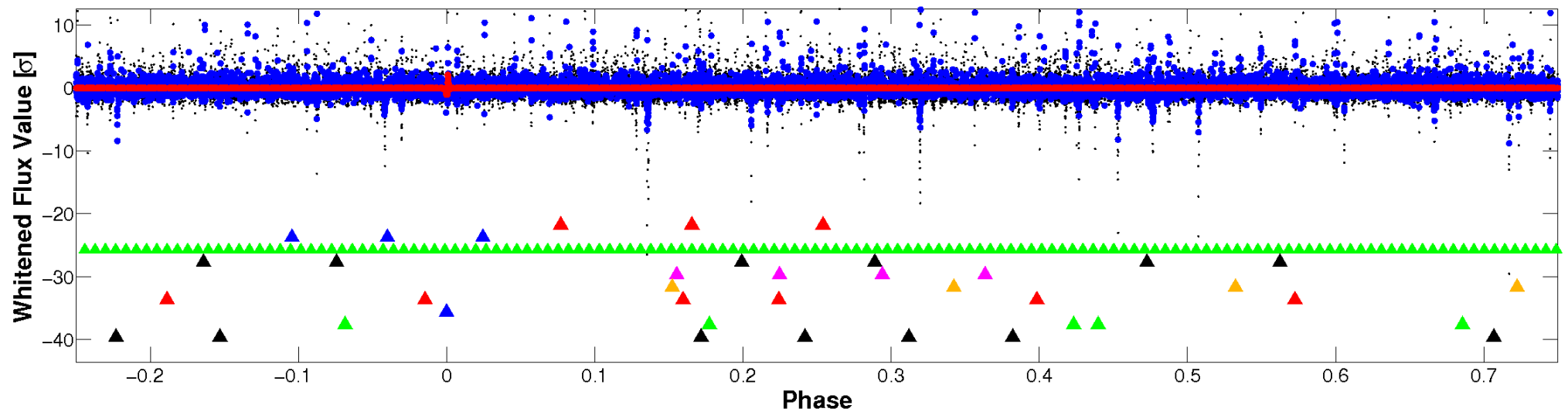
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

Planet 8 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

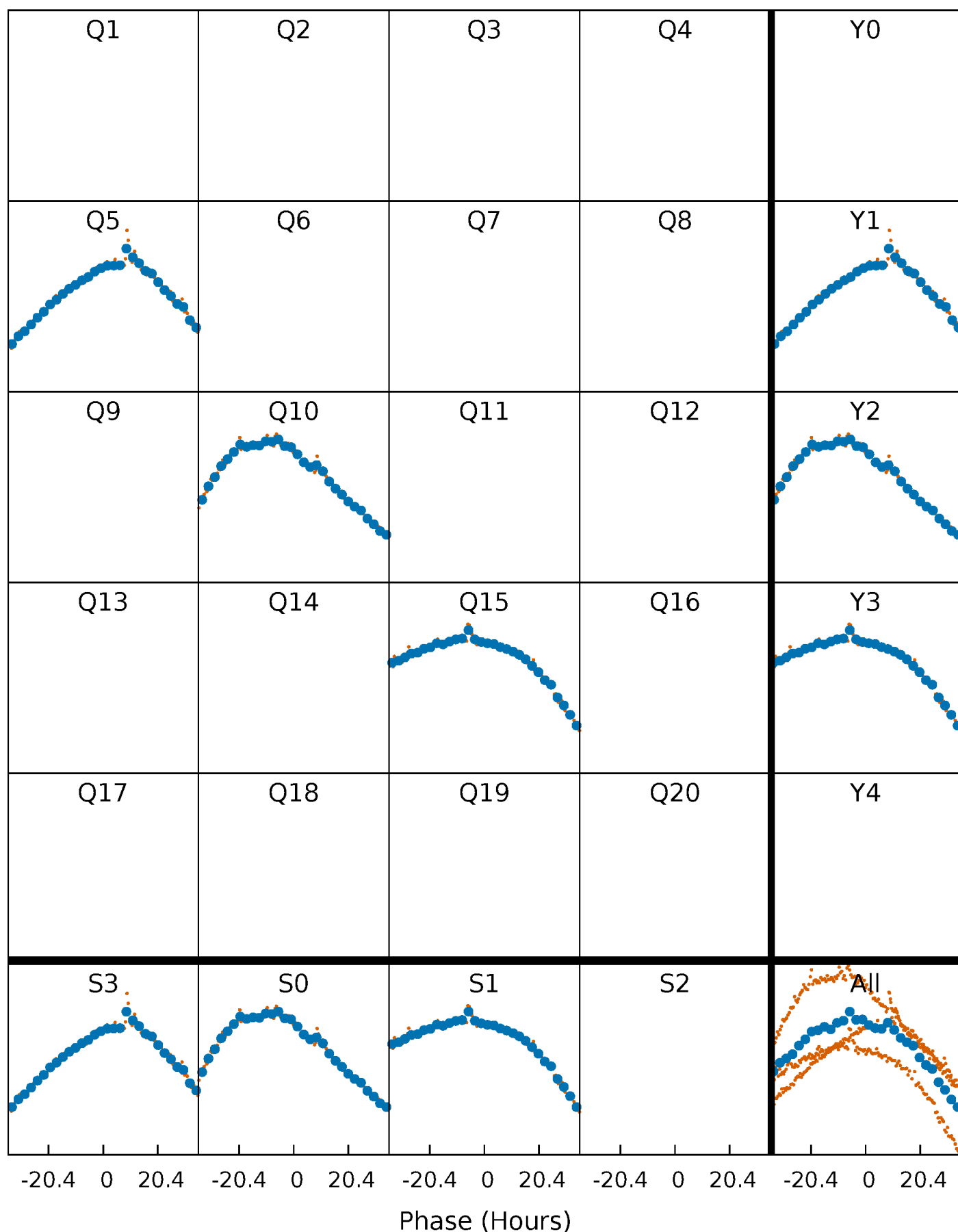


Planet 8 : Phased Whitened Flux Time Series (Fit Epoch/Period)



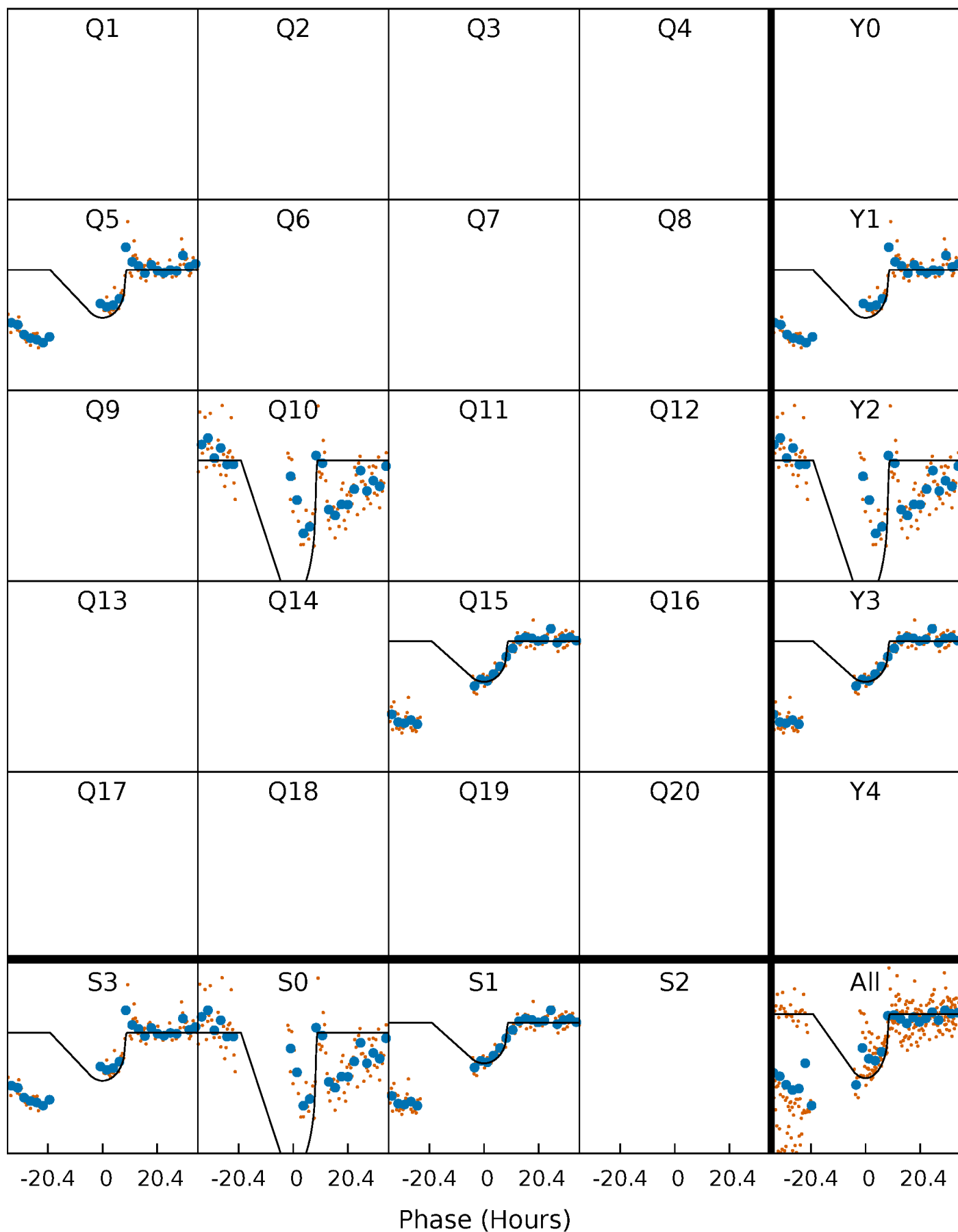
PDC Quarter-Phased Transit Curves

TCE 003439126-08 $P=428.663233$ Days $T_0=529.169611$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 003439126-08 $P=428.663233$ Days $T_0=529.169611$ (BKJD)

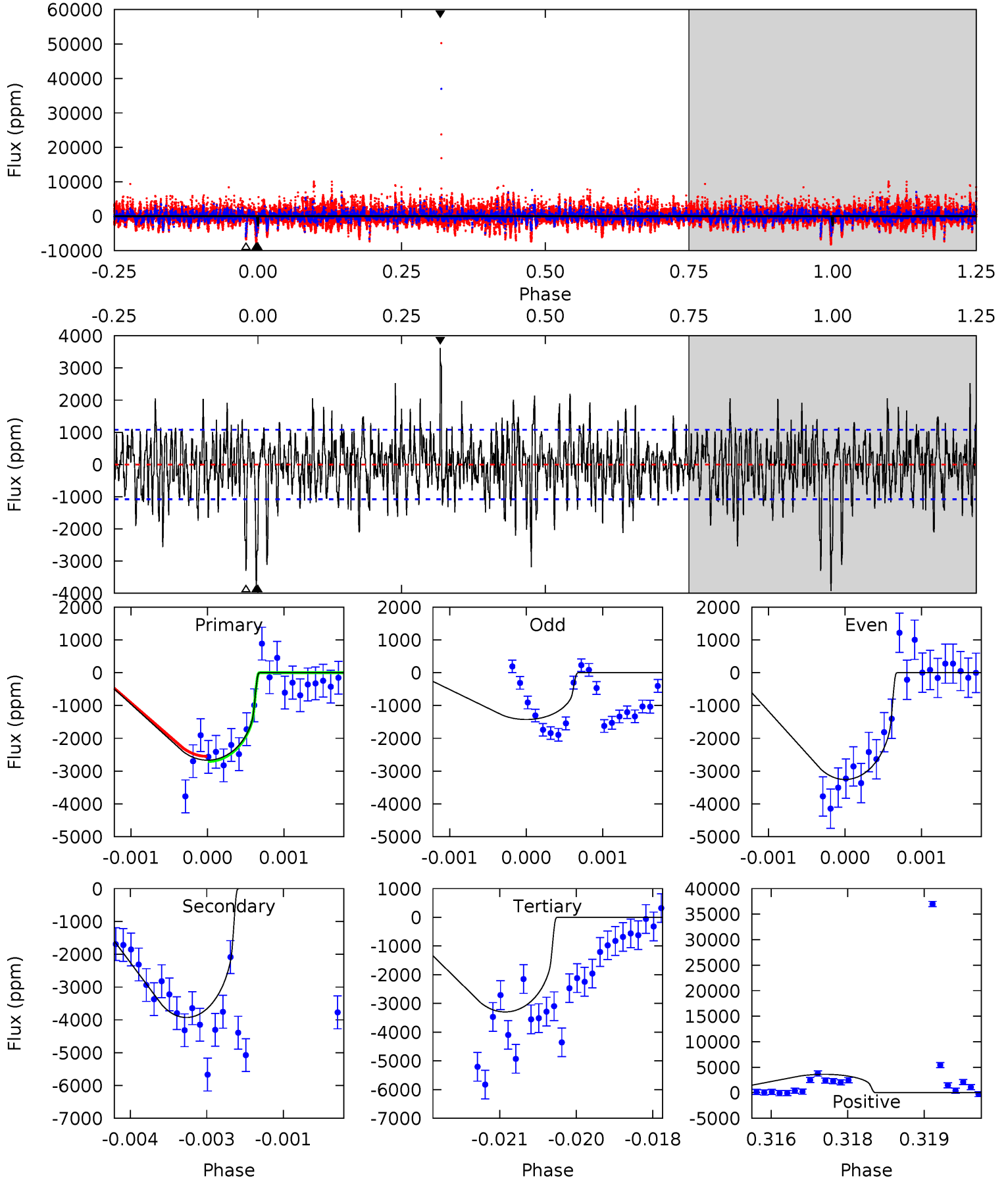


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

003439126-08, P = 428.663233 Days, E = 100.506378 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.4	19.7	16.5	18.1	5.40	3.21	3.79	-3.15	-4.76	3.17	1.55	3.65	0.90	0.48	0.33



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 003439126

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4236^{+129}_{-142}	$4.612^{+0.052}_{-0.017}$	$0.120^{+0.250}_{-0.300}$	$0.664^{+0.028}_{-0.061}$	$0.657^{+0.047}_{-0.053}$	$3.163^{+0.729}_{-0.252}$
	+3%/-3%	+1%/-0%	+208%/-250%	+4%/-9%	+7%/-8%	+23%/-8%
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 003439126-08 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-3928 ± 200	$3.75^{+0.93}_{-0.97}$	214^{+8}_{-7}	4547^{+577}_{-415}	$147157^{+113464}_{-54511}$
Alt.	N/A	N/A	N/A	N/A	N/A

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

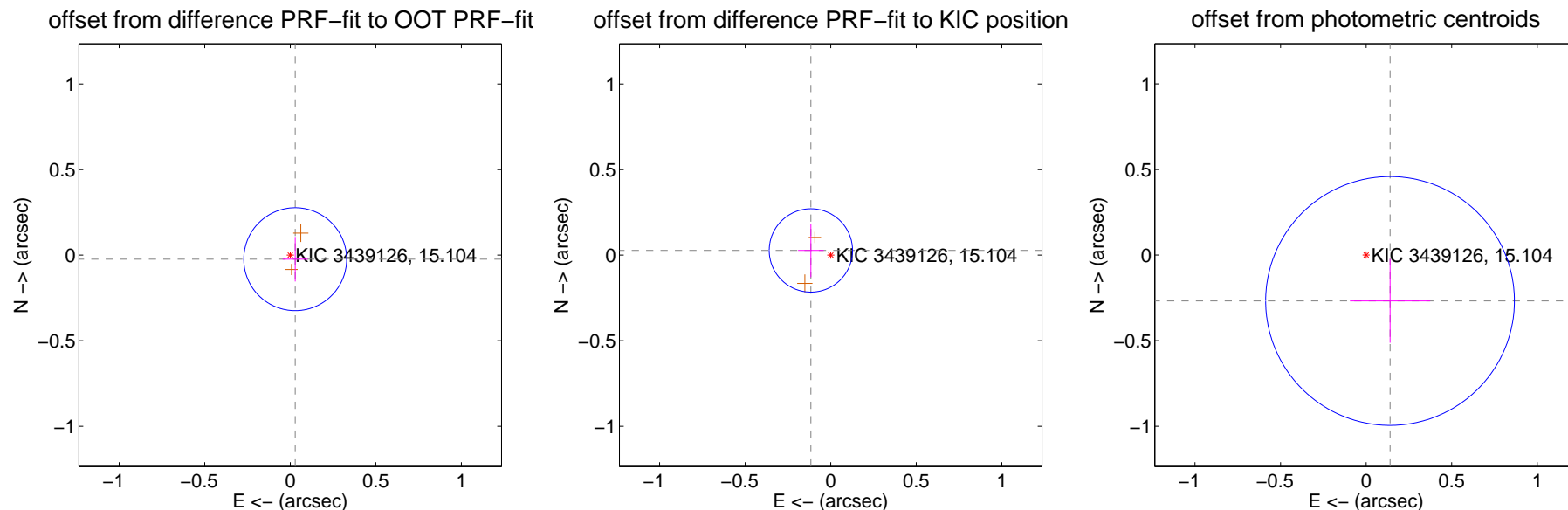
DV Centroid Data

Supplemental centroid analysis for 003439126-08. Kepler magnitude: 15.10. Transit SNR 9.73

There are 0 quarters with good PRF difference image offsets

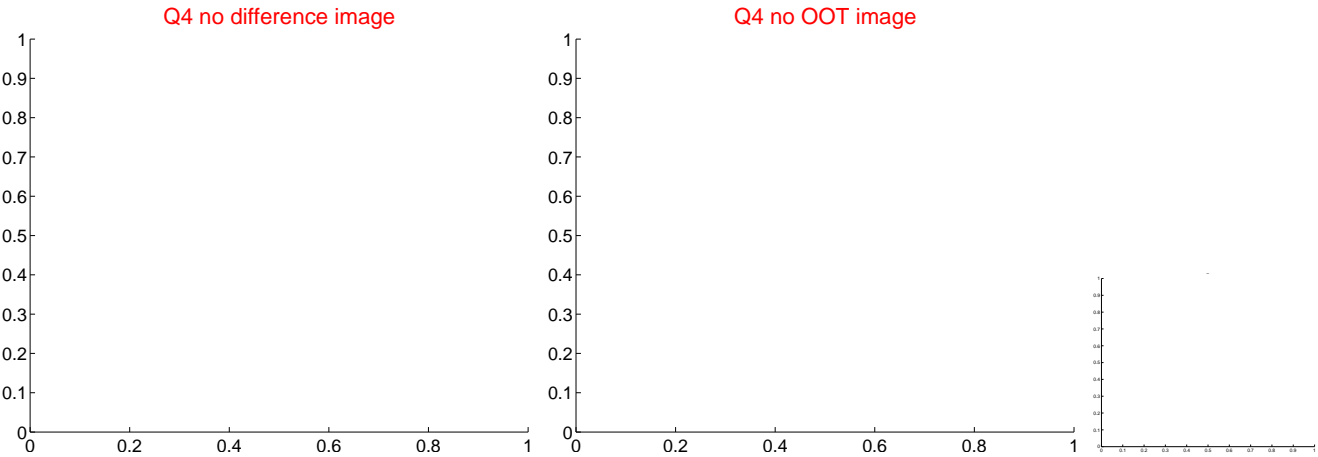
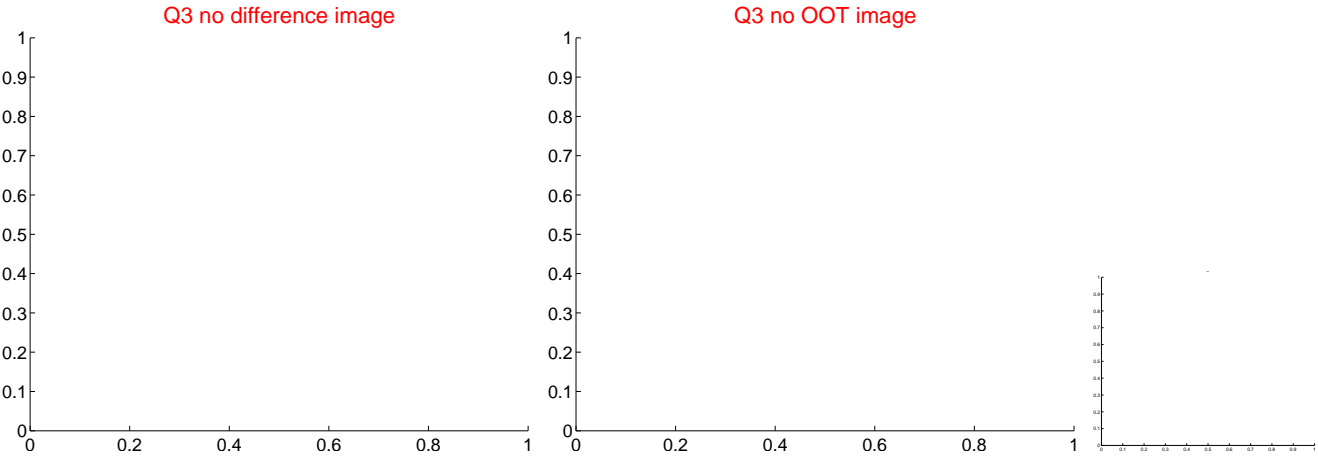
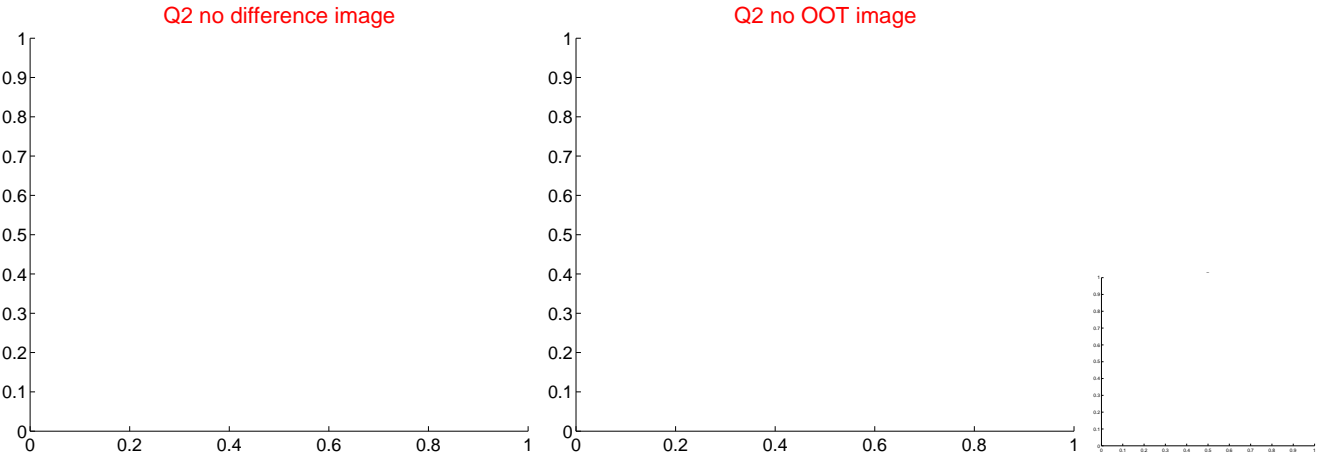
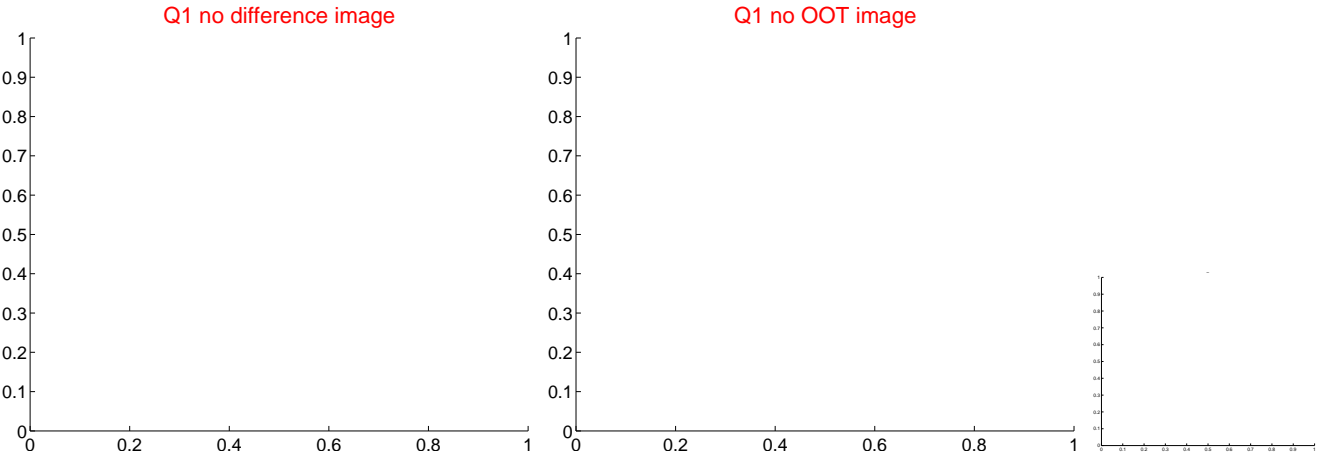
The direct PRF centroid is offset from the target star catalog position by about 0.36 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.037 ± 0.100	0.37	-0.029 ± 0.074	-0.024 ± 0.130
PRF-fit source offset from KIC position	0.119 ± 0.081	1.47	0.116 ± 0.075	0.028 ± 0.156
photometric centroid source offset	0.30 ± 0.24	1.25	-0.14 ± 0.23	-0.27 ± 0.24

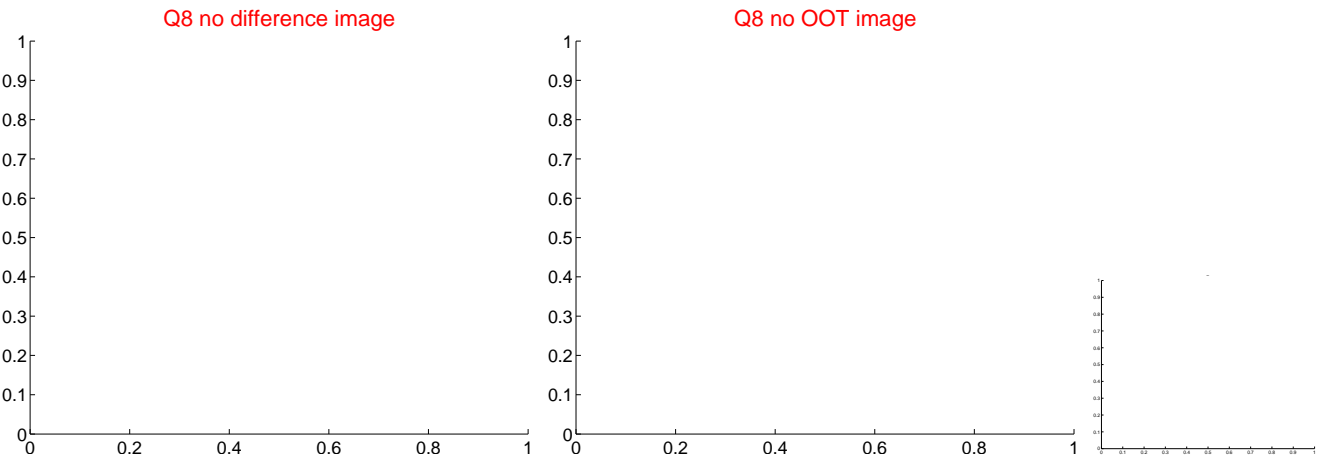
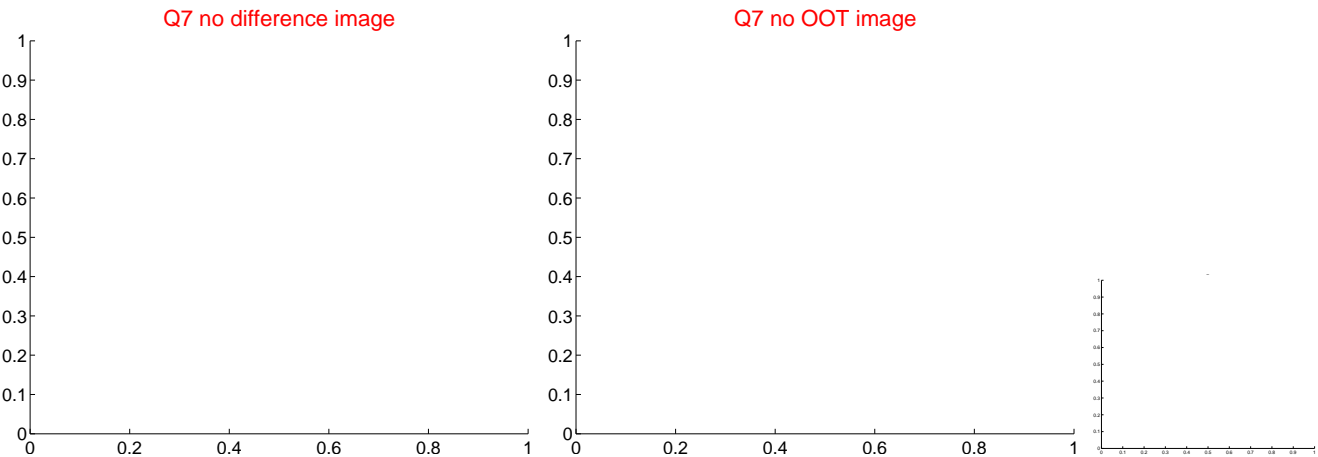
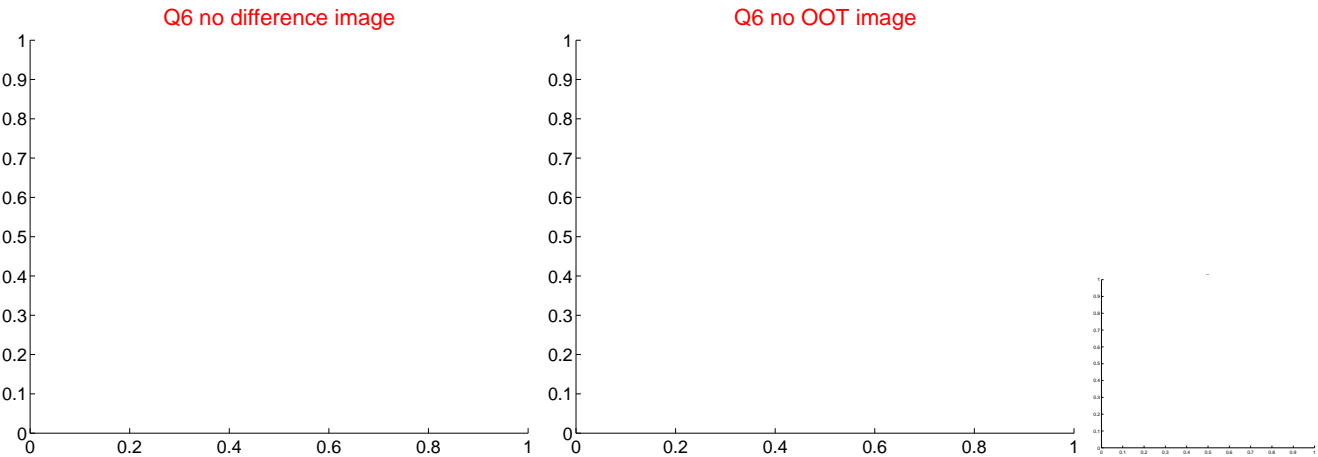
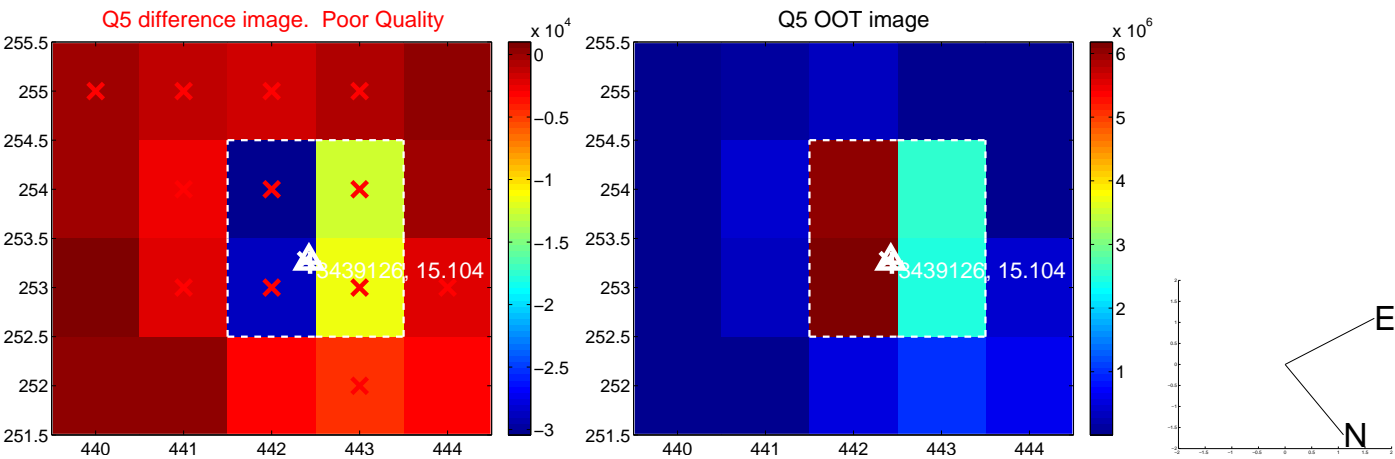


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

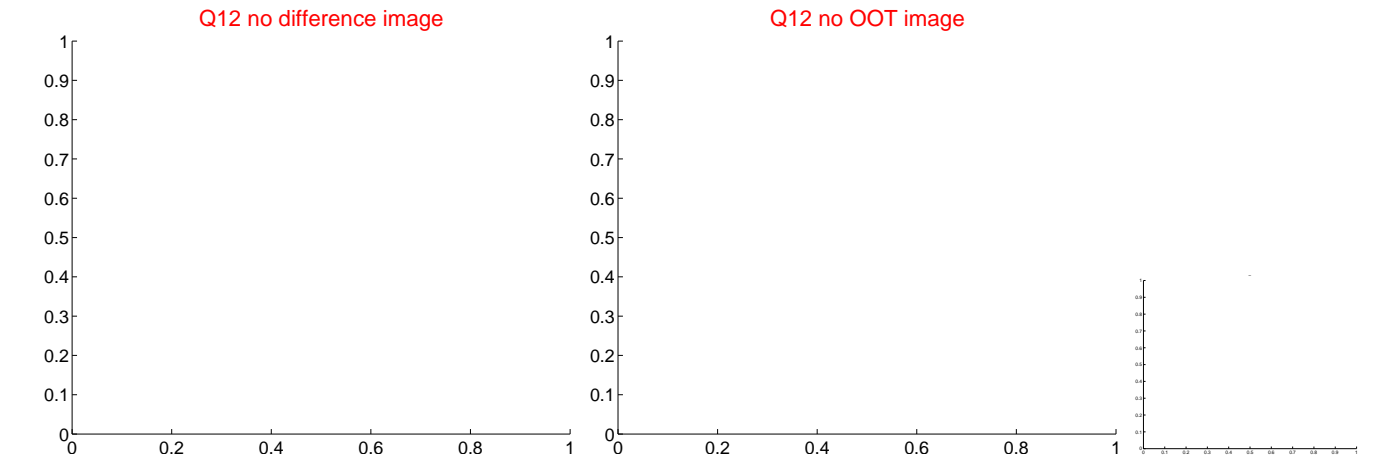
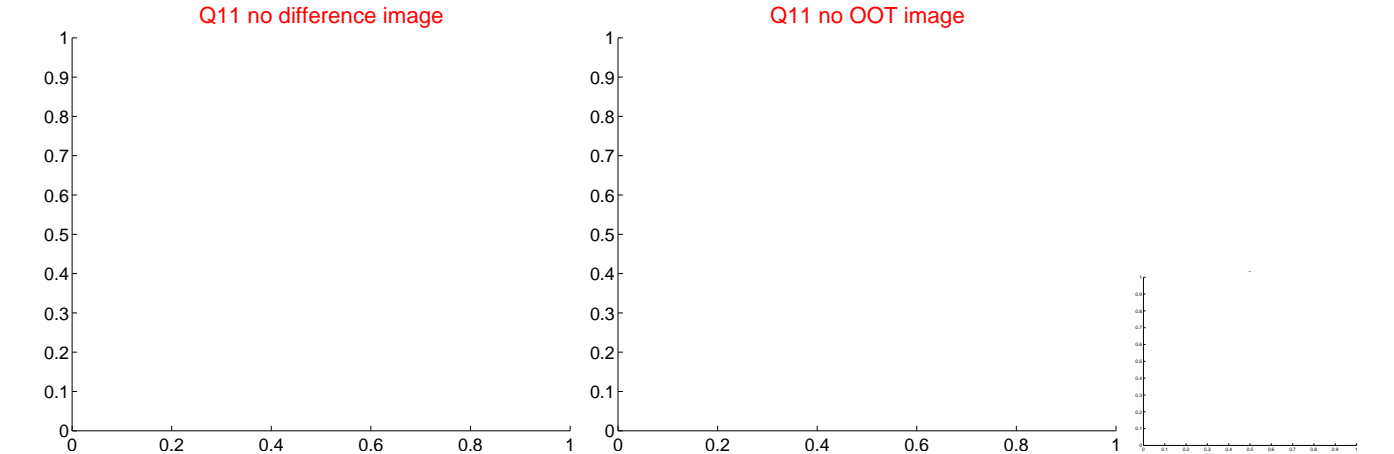
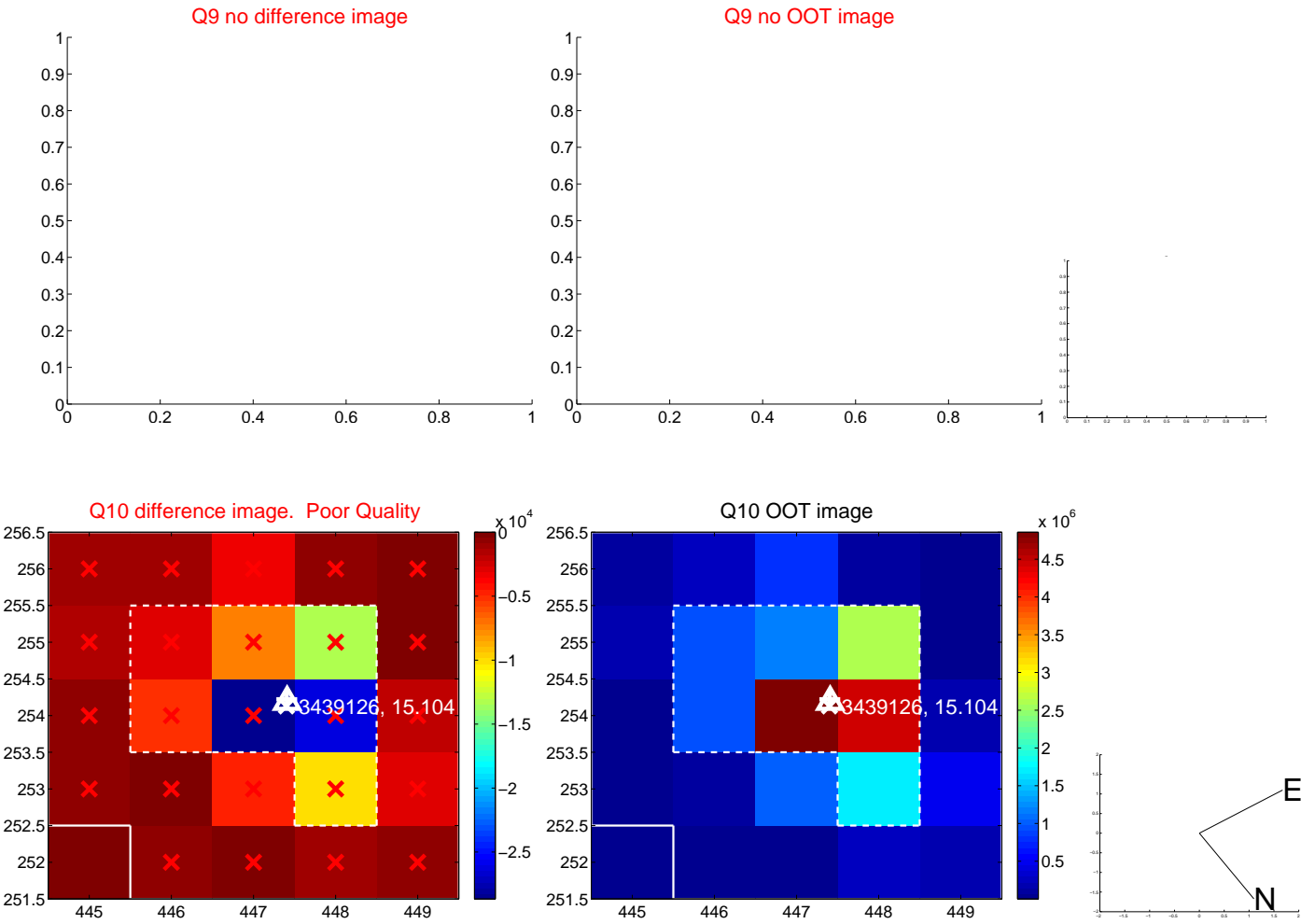
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



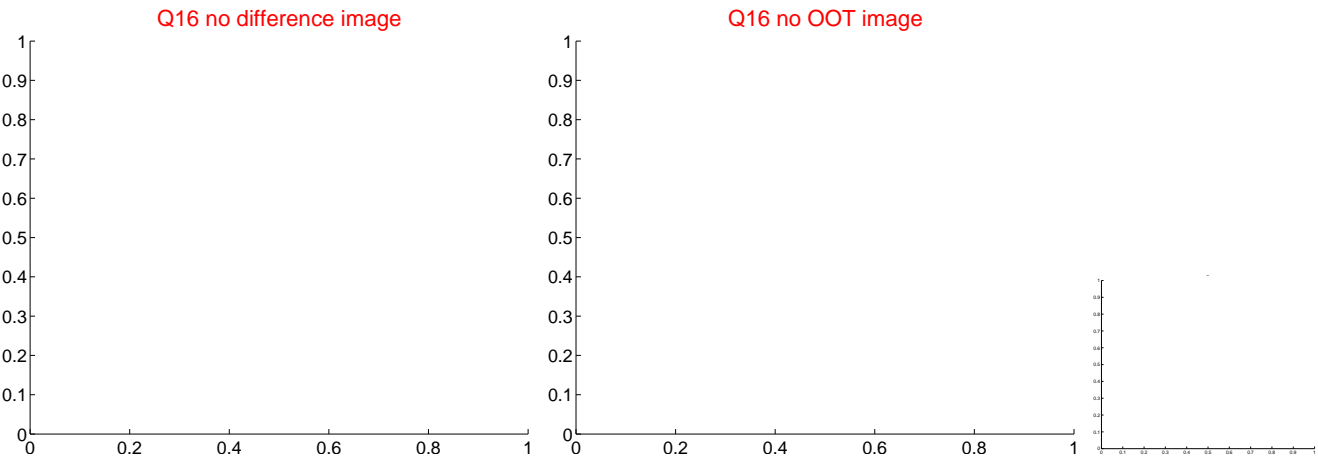
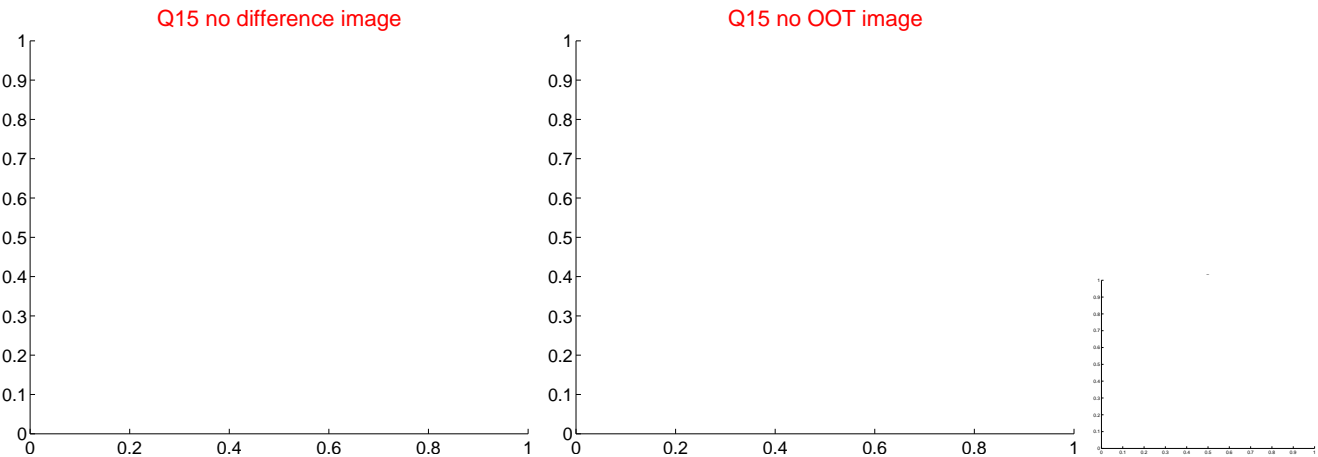
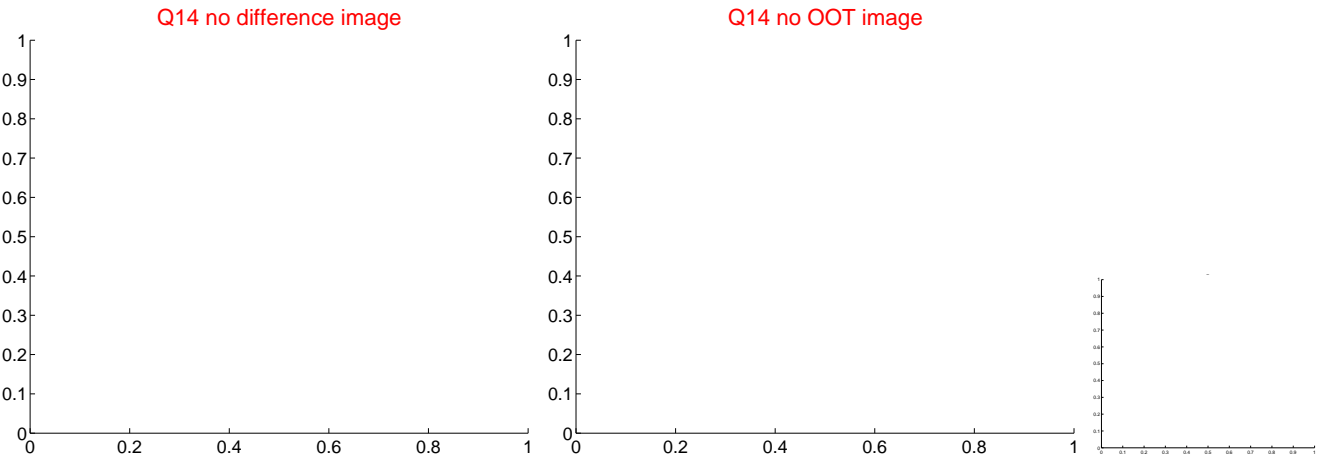
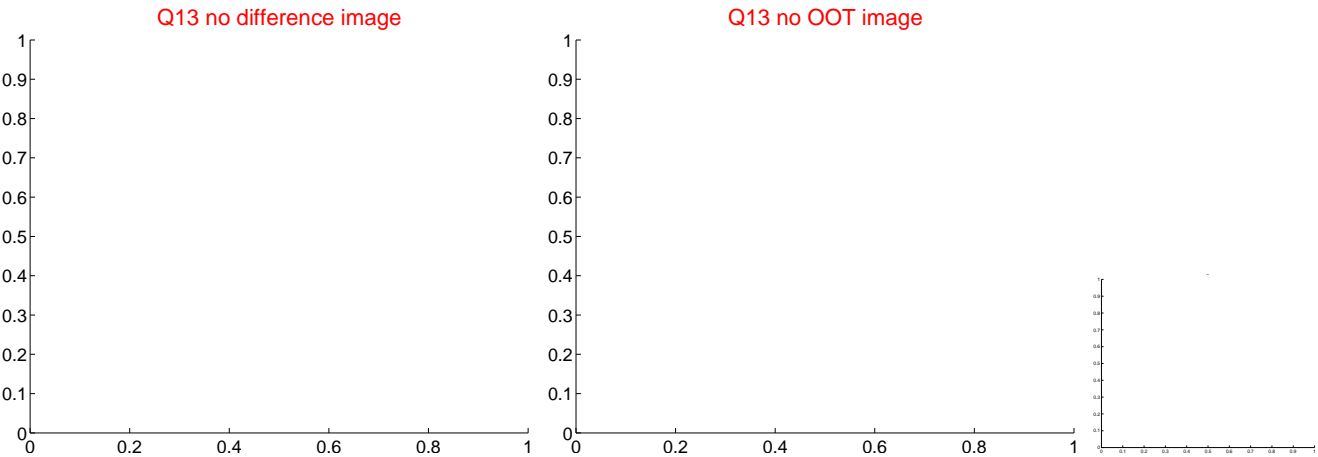
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



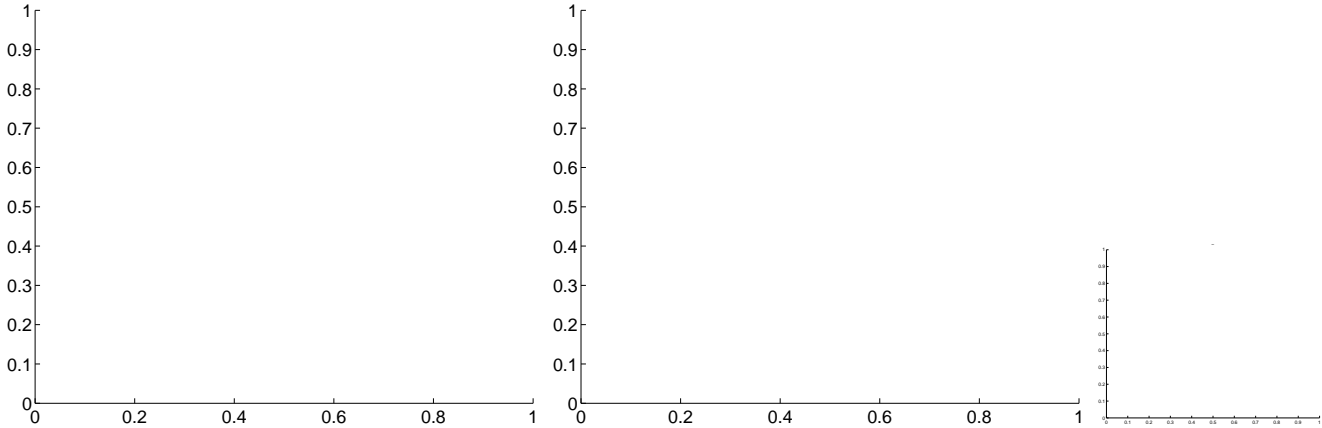
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



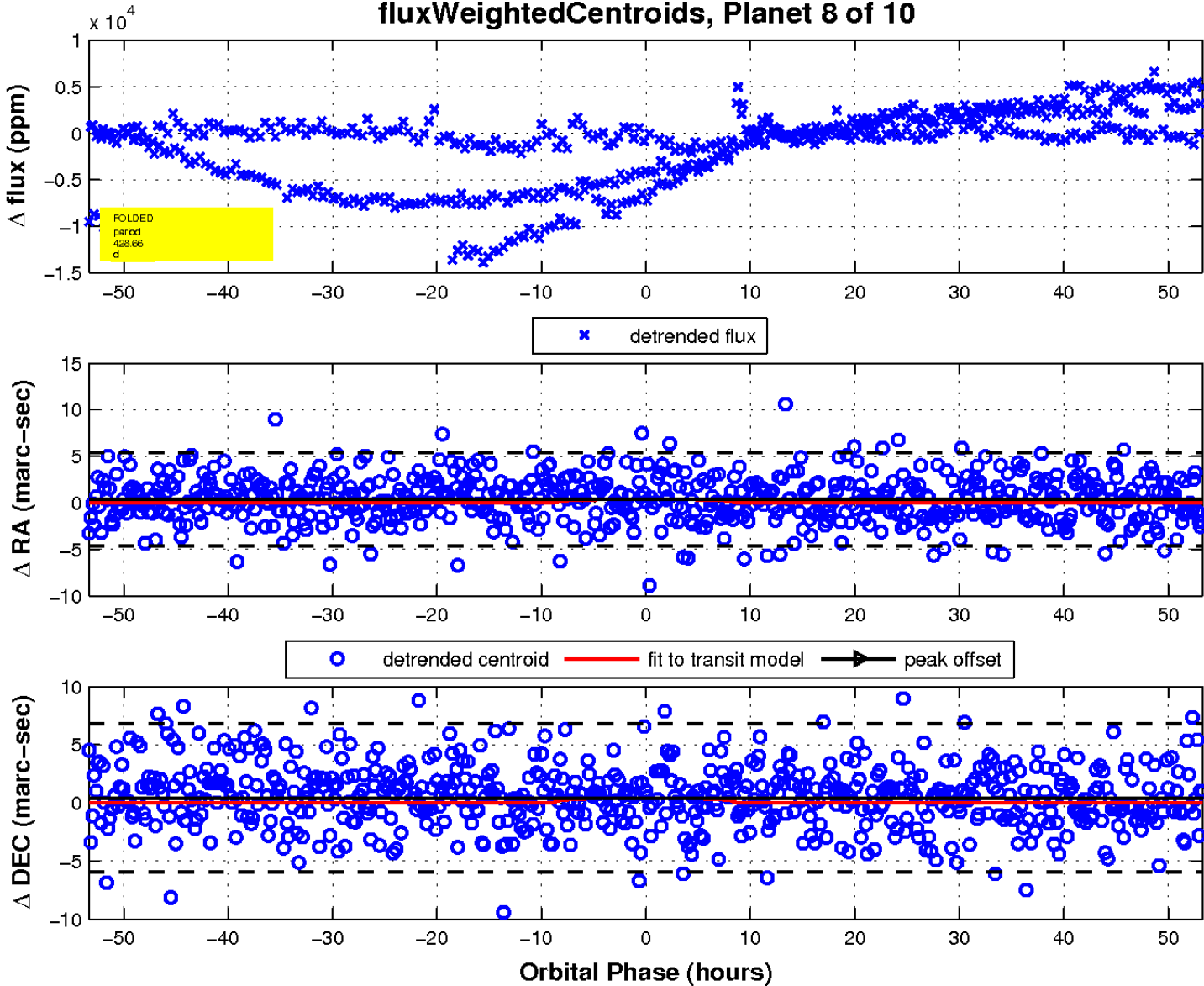
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

Q17 no difference image

Q17 no OOT image

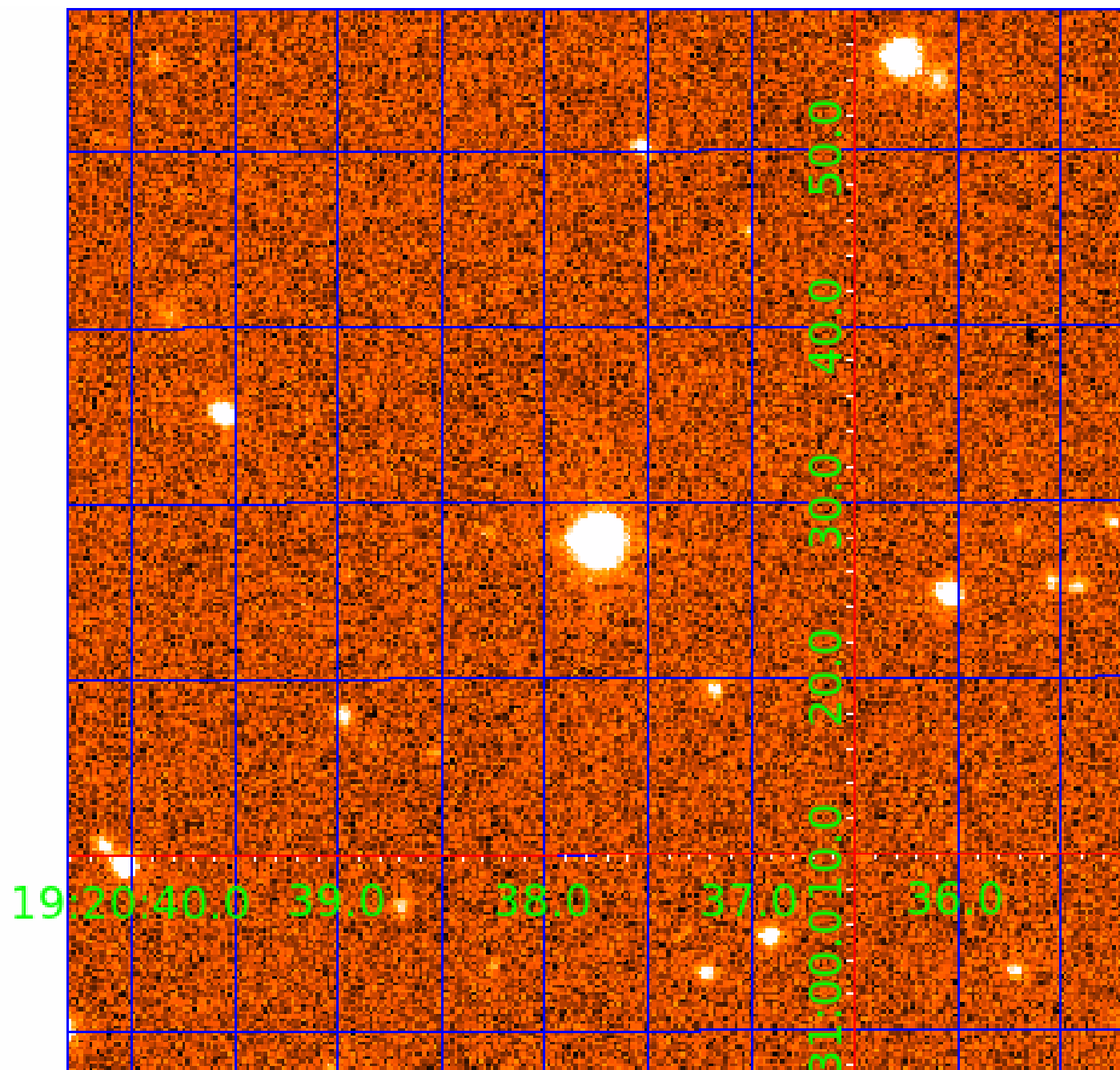


fluxWeightedCentroids, Planet 8 of 10



UKIRT Image

Declination



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})
003439126-01	OBS	No	466.598907	562.202843	1581.3	9.515	13.7	6.5	0.66	4236	2.77	0.12
003439126-02	OBS	No	456.286524	484.430344	1711.3	7.600	11.8	7.8	0.66	4236	3.27	0.12
003439126-03	OBS	7655.01	2.976224	132.922051	197.1	6.191	11.6	10.9	0.66	4236	1.14	102.47
003439126-04	OBS	No	272.945566	224.384038	662.9	9.352	11.7	4.0	0.66	4236	1.87	0.25
003439126-05	OBS	No	398.924392	256.302150	1050.5	9.000	11.6	-1.0	0.66	4236	2.05	0.15
003439126-06	OBS	No	347.186618	410.217941	1194.3	7.500	11.4	-1.0	0.66	4236	2.19	0.18
003439126-07	OBS	No	251.654938	196.634295	584.4	8.995	11.4	3.1	0.66	4236	1.57	0.28
003439126-08	OBS	No	428.663233	529.169612	3632.6	17.808	10.9	9.7	0.66	4236	3.81	0.14
003439126-09	OBS	No	323.272075	281.919624	2046.6	20.411	9.8	7.4	0.66	4236	2.88	0.20
003439126-10	OBS	No	229.359900	174.128589	1174.7	7.500	10.2	-1.0	0.66	4236	2.17	0.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003439126-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-03	OBS	FP	0.00	0	0	0	1	EPHEM_MATCH
003439126-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV
003439126-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST
003439126-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
003439126-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
003439126-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

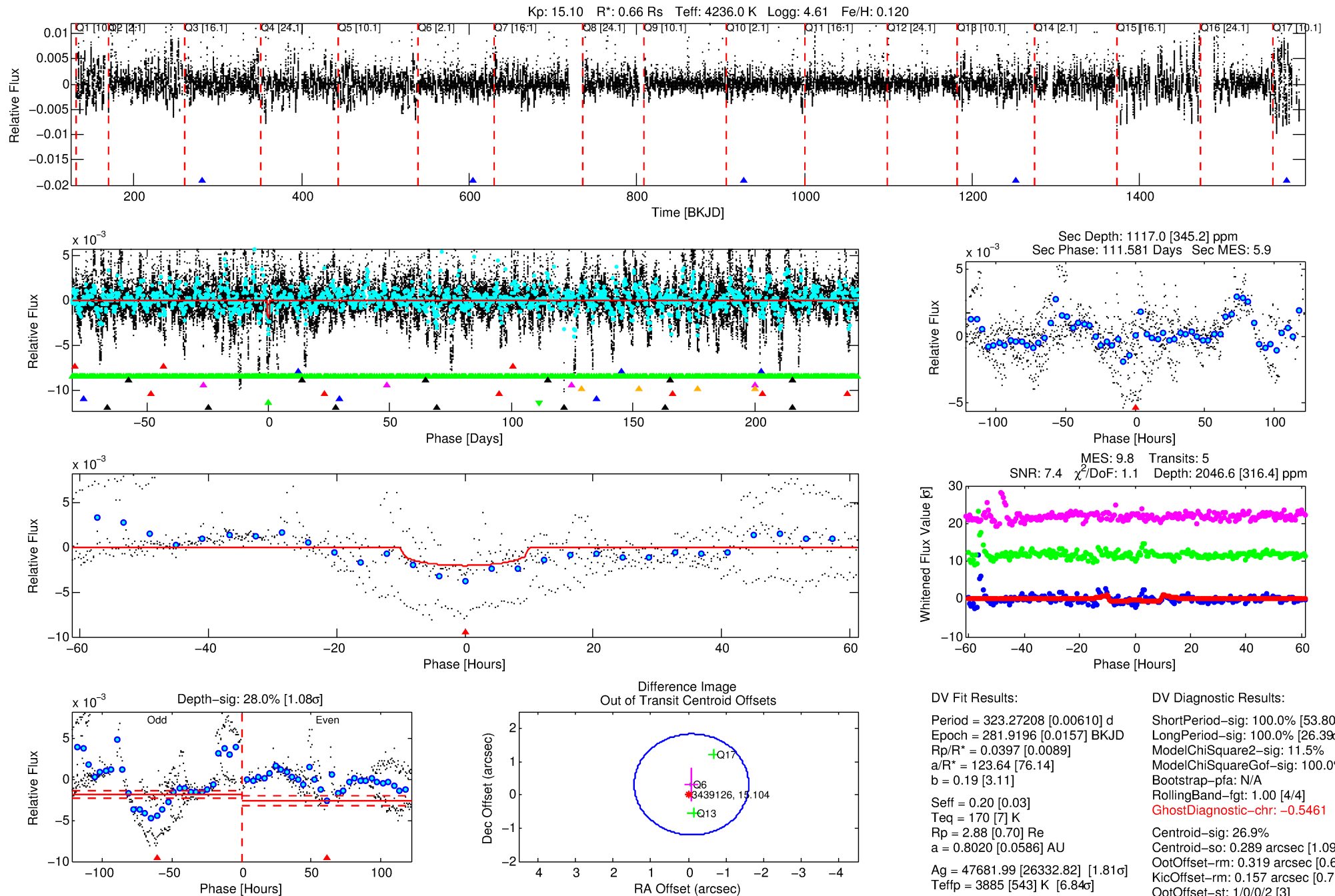
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003439126-09

No Significant Match Found

DV One-Page Summary

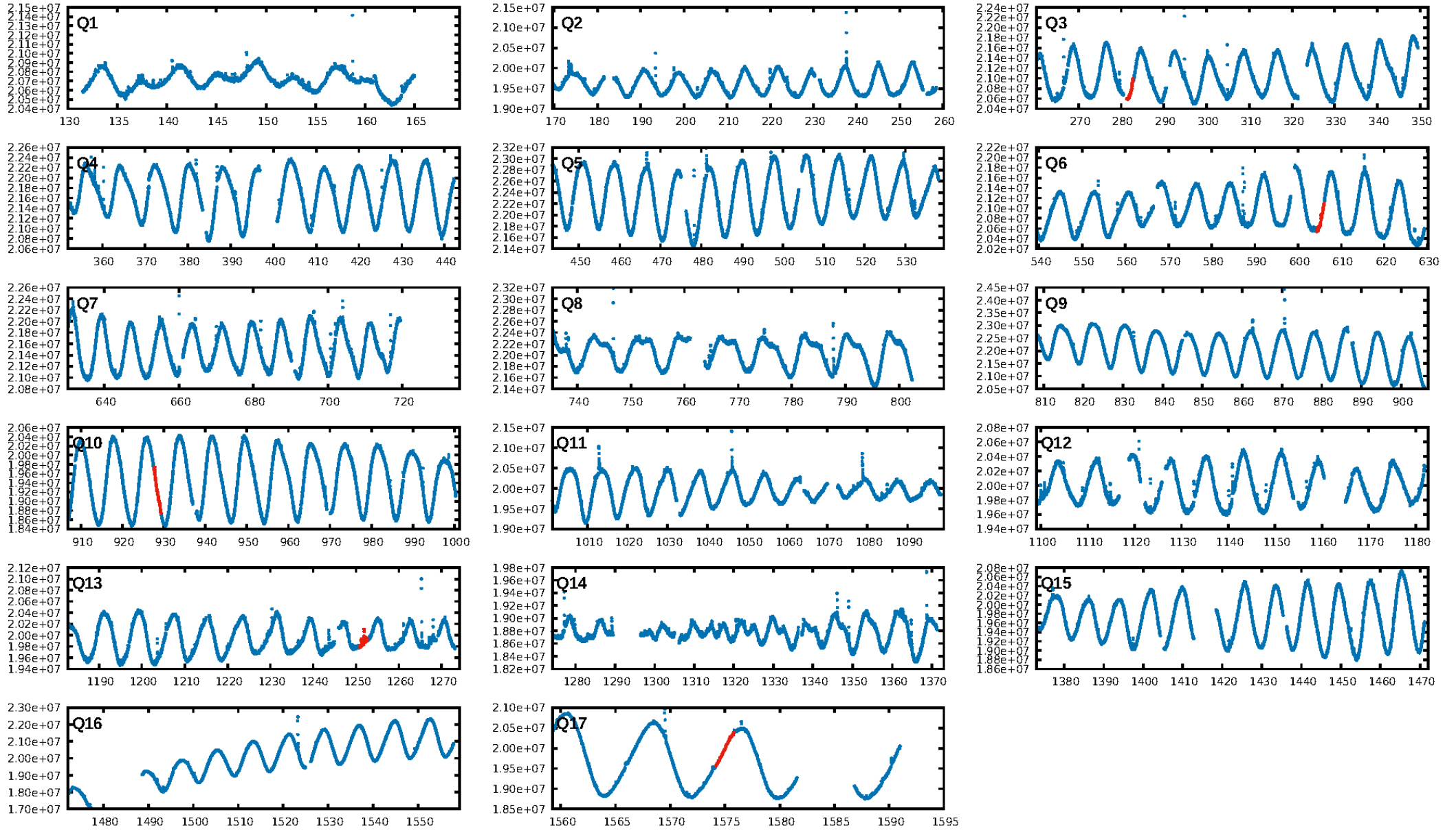
KIC: 3439126 Candidate: 9 of 10 Period: 323.272 d



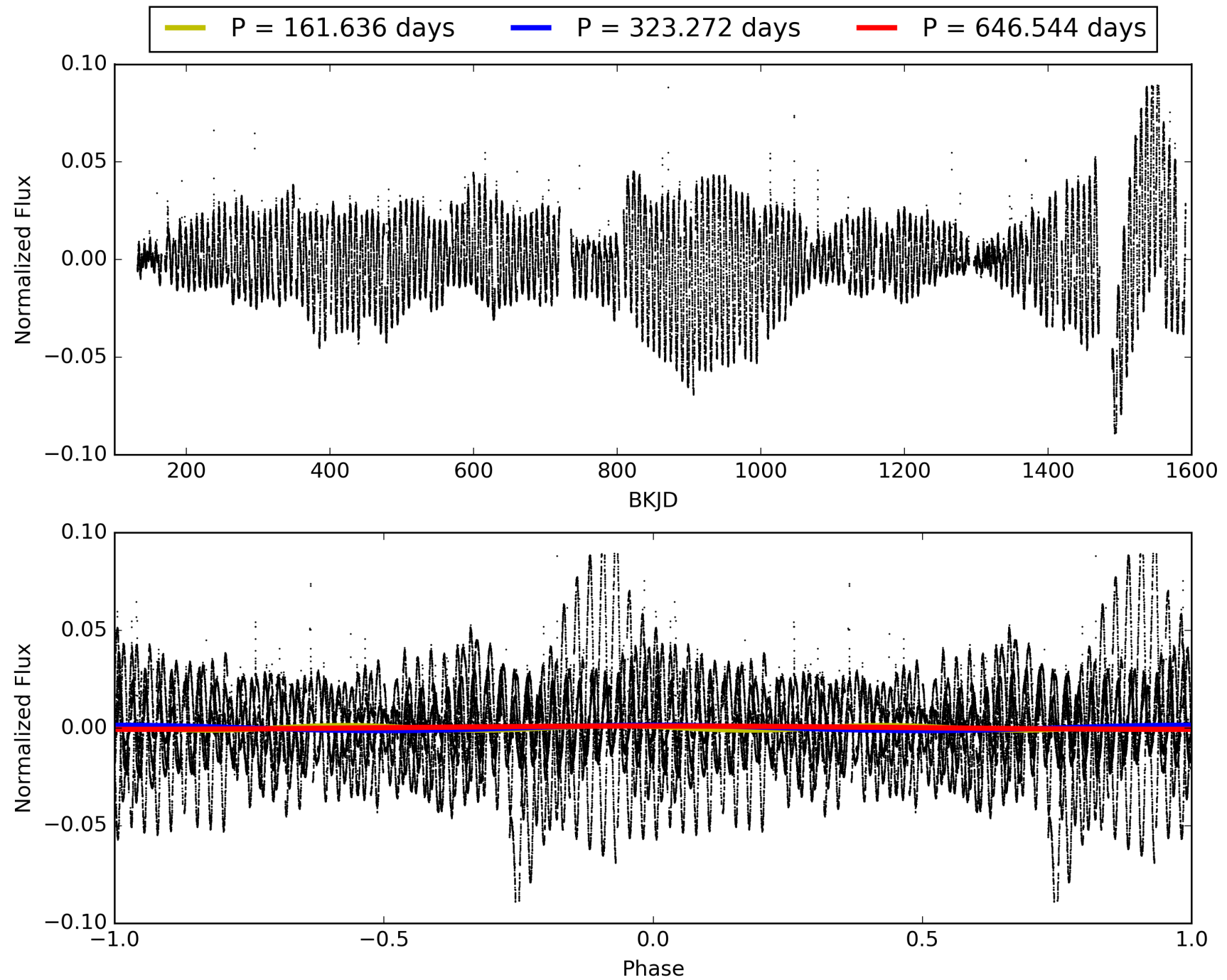
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:54:38 Z

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

TCE 003439126-09, PDC Light Curves

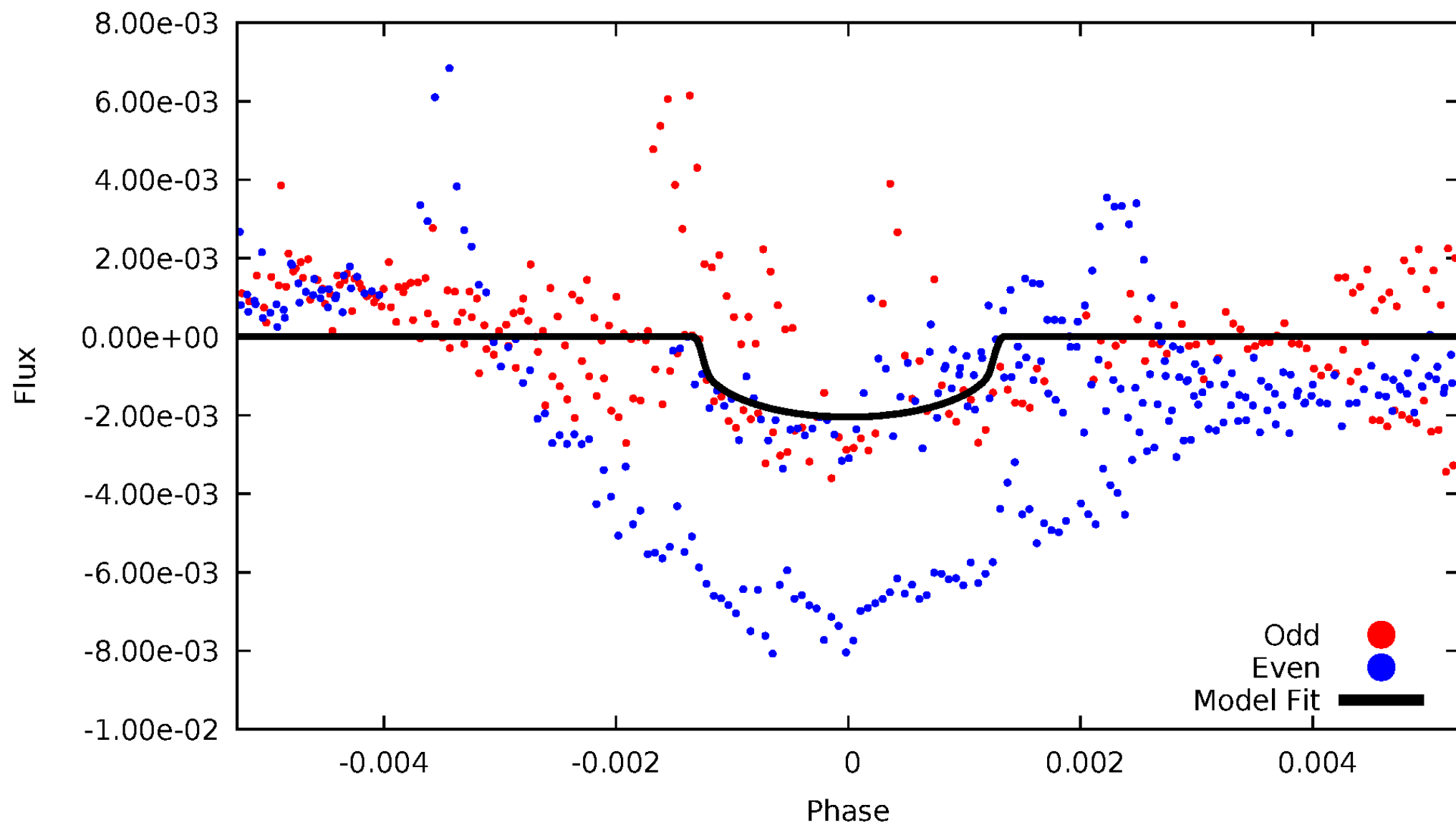


TCE 003439126-09



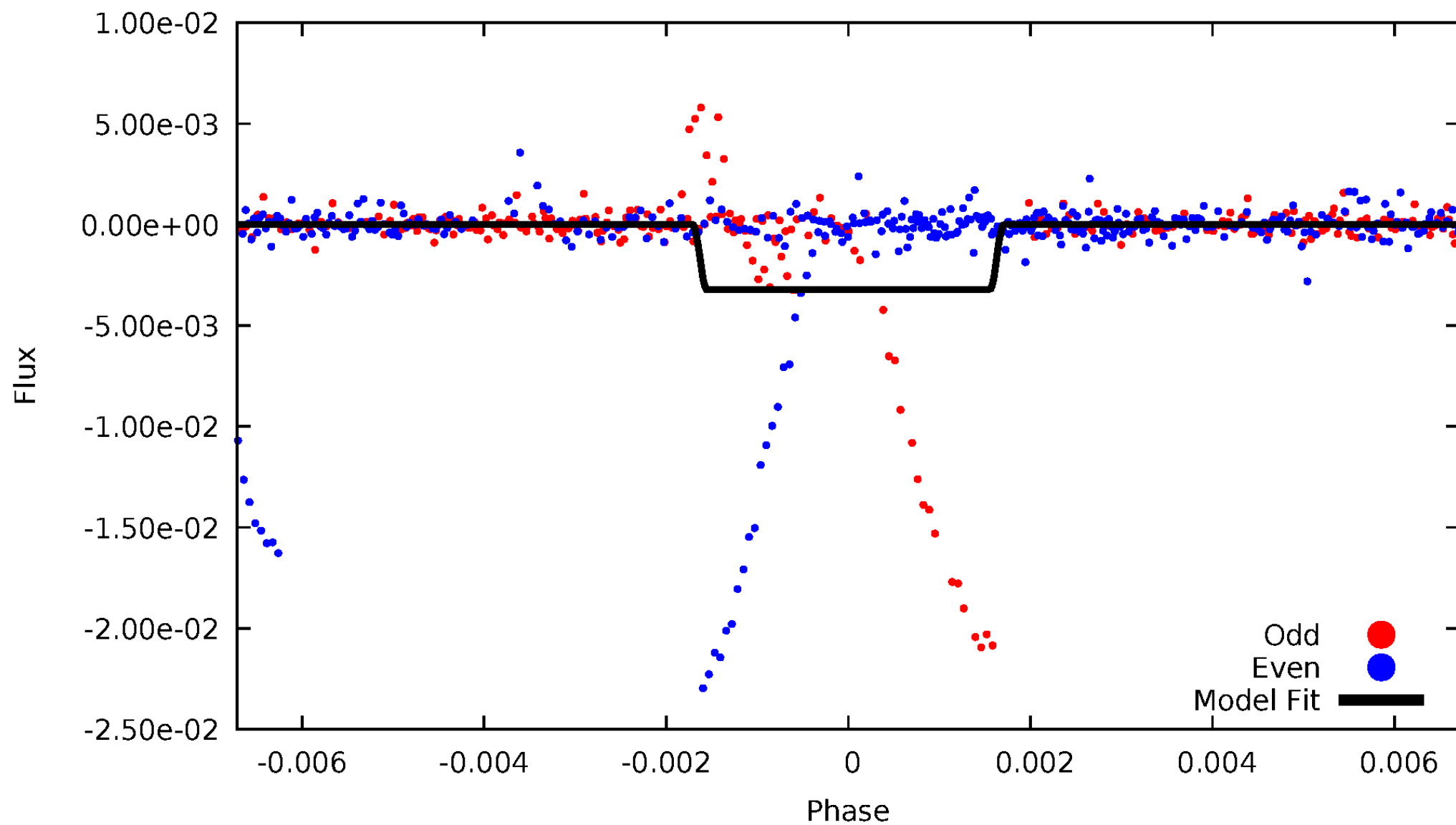
DV Odd/Even

TCE 003439126-09



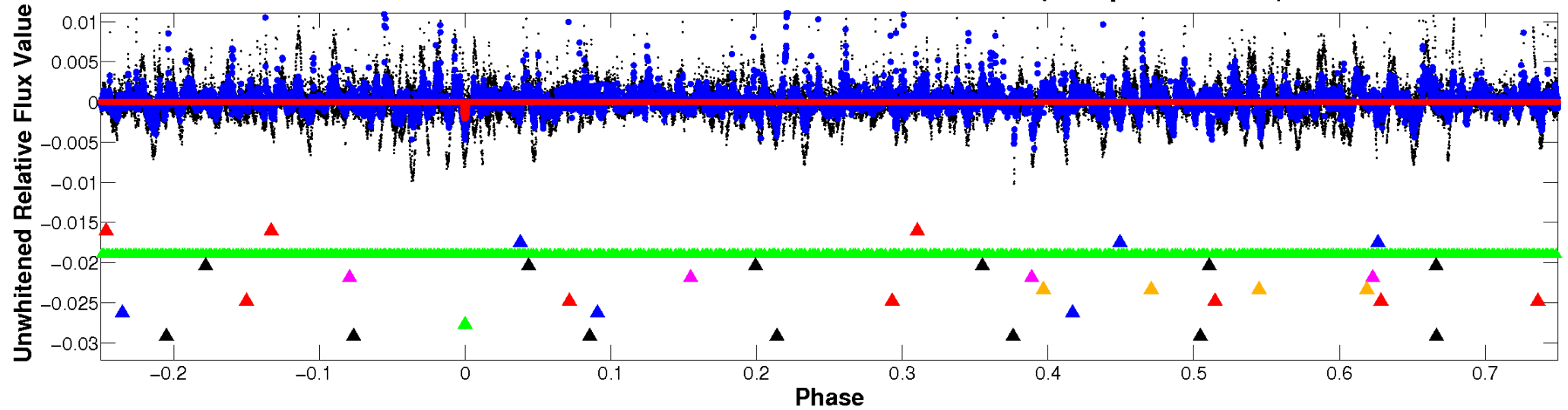
ALT Odd/Even

TCE 003439126-09

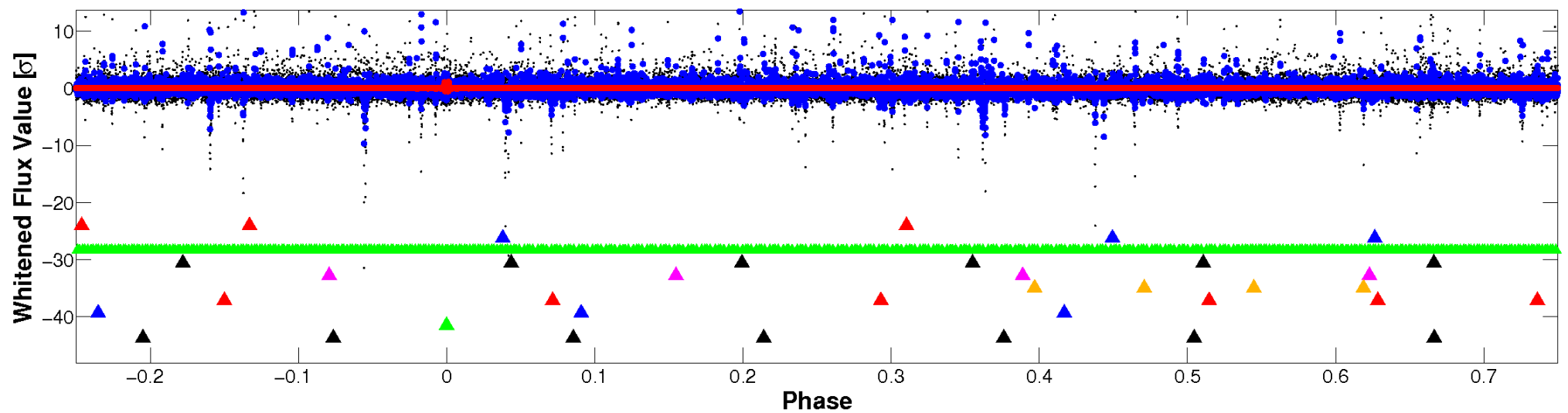


Non-Whitened Vs. Whitened Light Curve

Planet 9 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

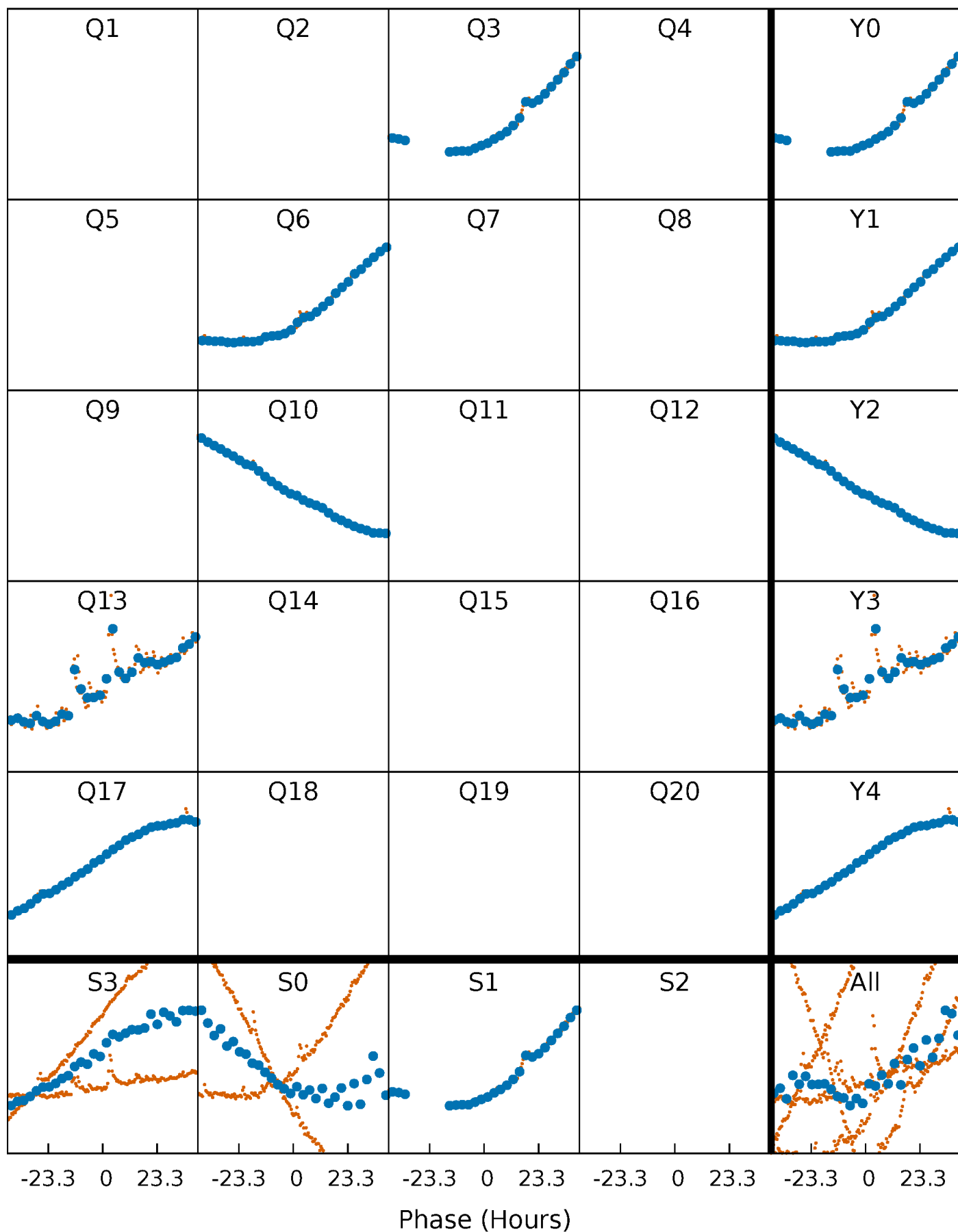


Planet 9 : Phased Whitened Flux Time Series (Fit Epoch/Period)



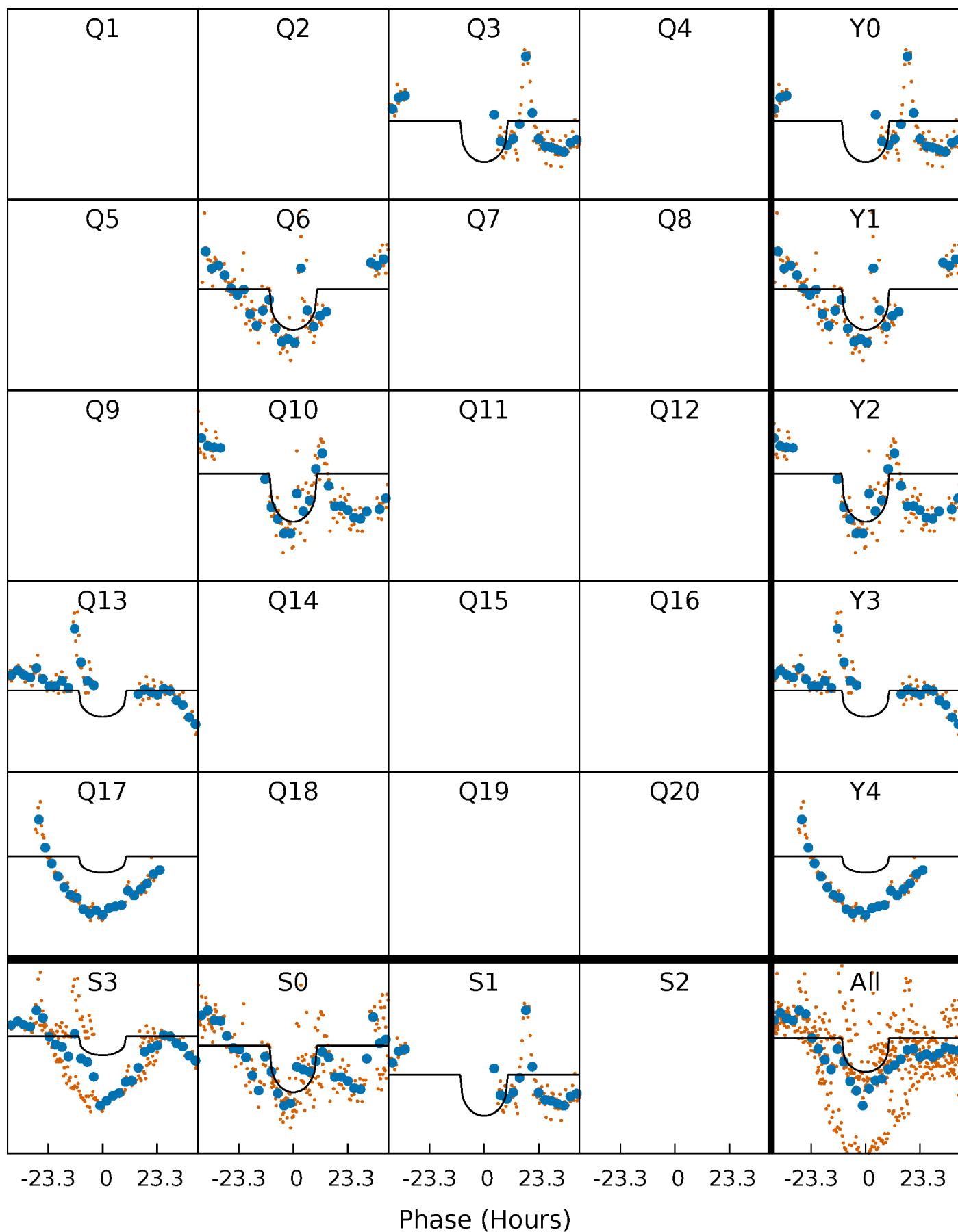
PDC Quarter-Phased Transit Curves

TCE 003439126-09 $P=323.272075$ Days $T_0=281.919624$ (BKJD)



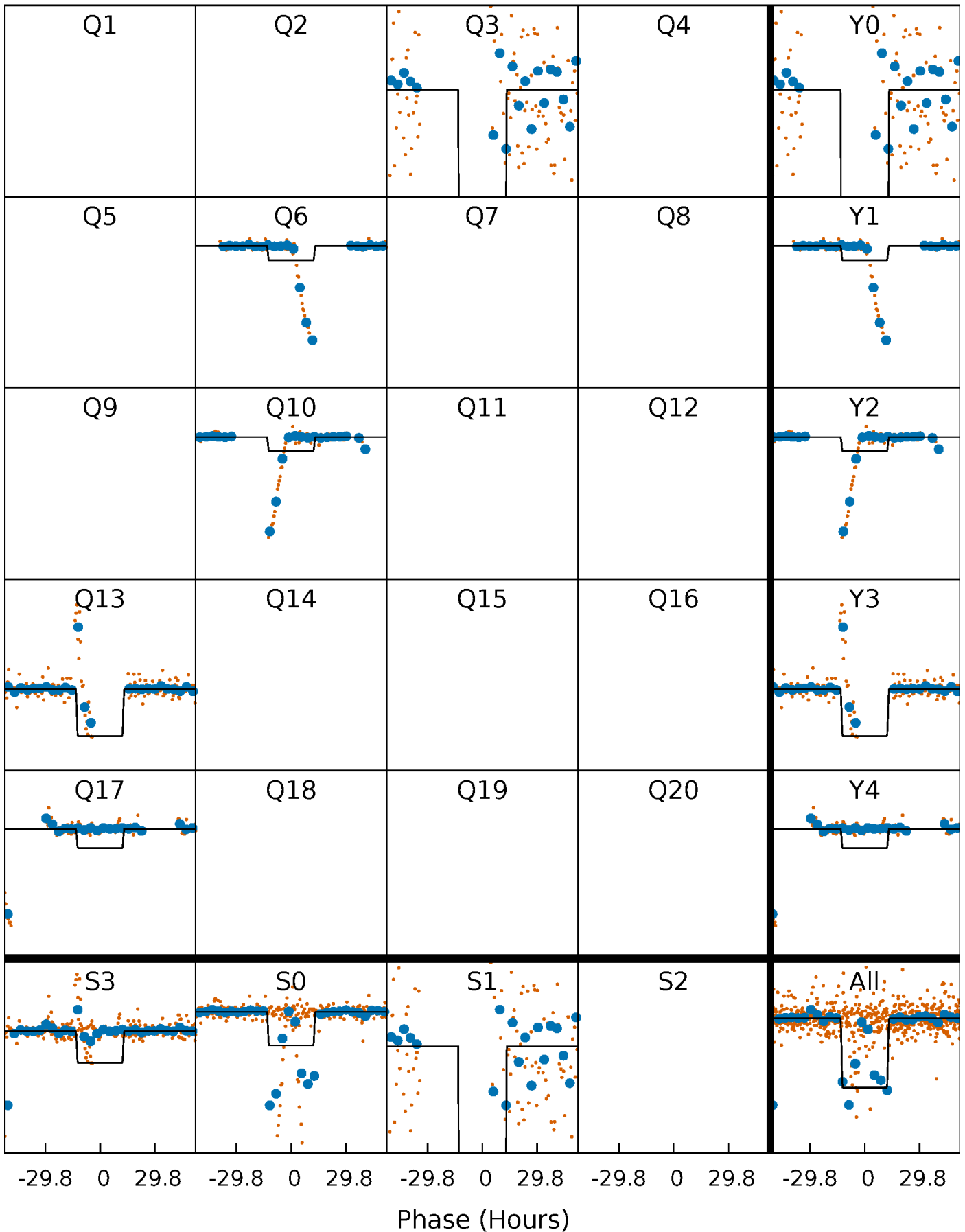
DV Quarter-Phased Transit Curves

TCE 003439126-09 $P=323.272075$ Days $T_0=281.919624$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

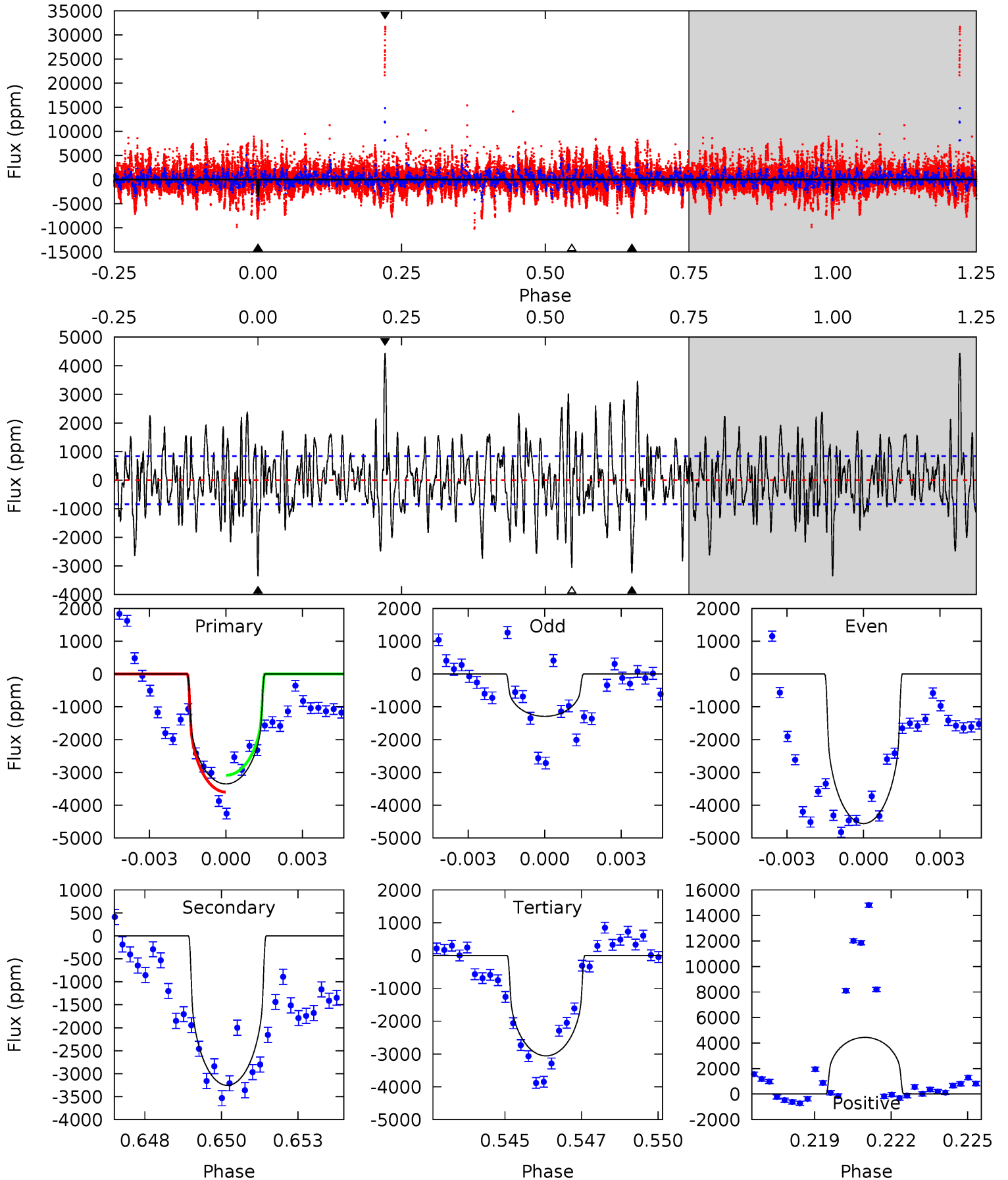
TCE 003439126-09 P=323.265730 Days $T_0=281.959685$ (BKJD)



DV Model-Shift Uniqueness Test

003439126-09, P = 323.272075 Days, E = 281.919624 Days

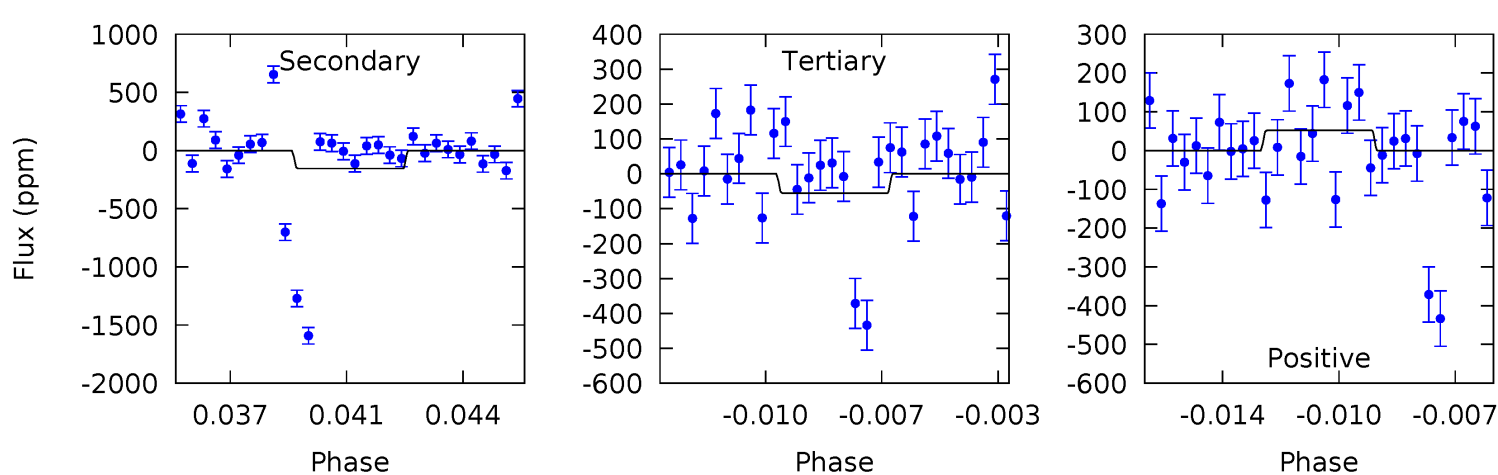
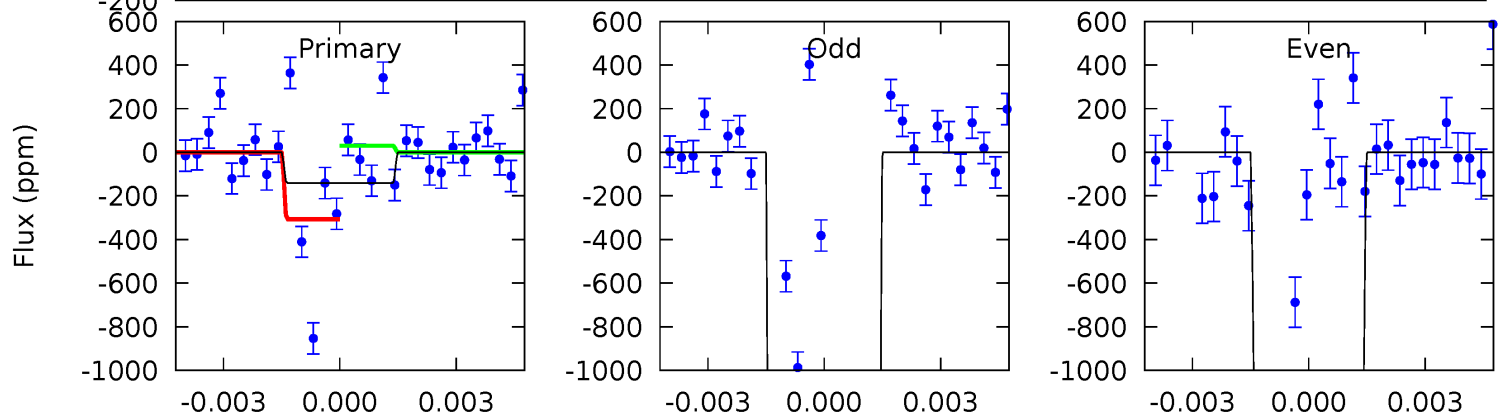
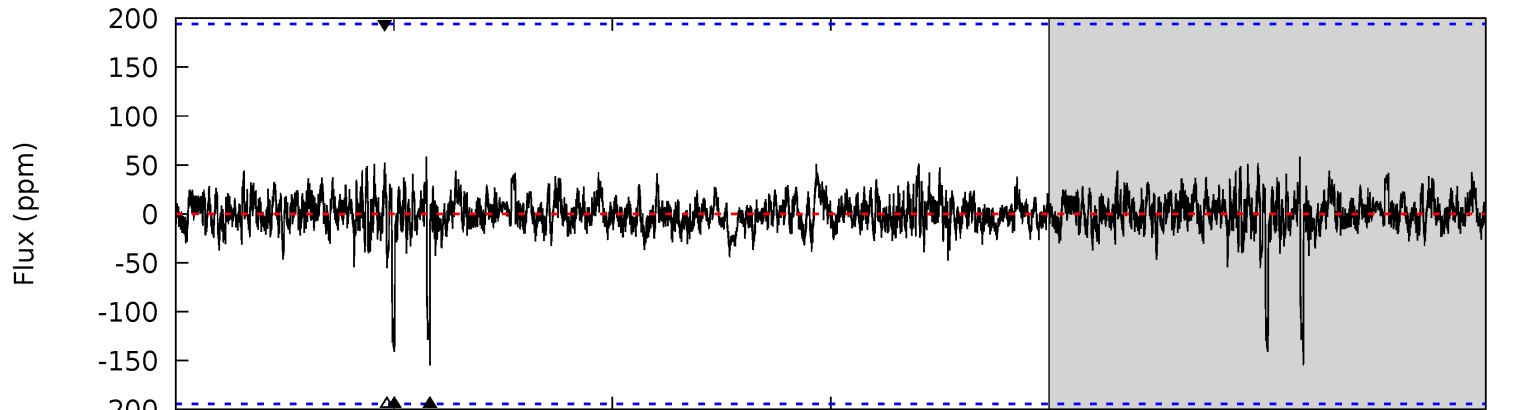
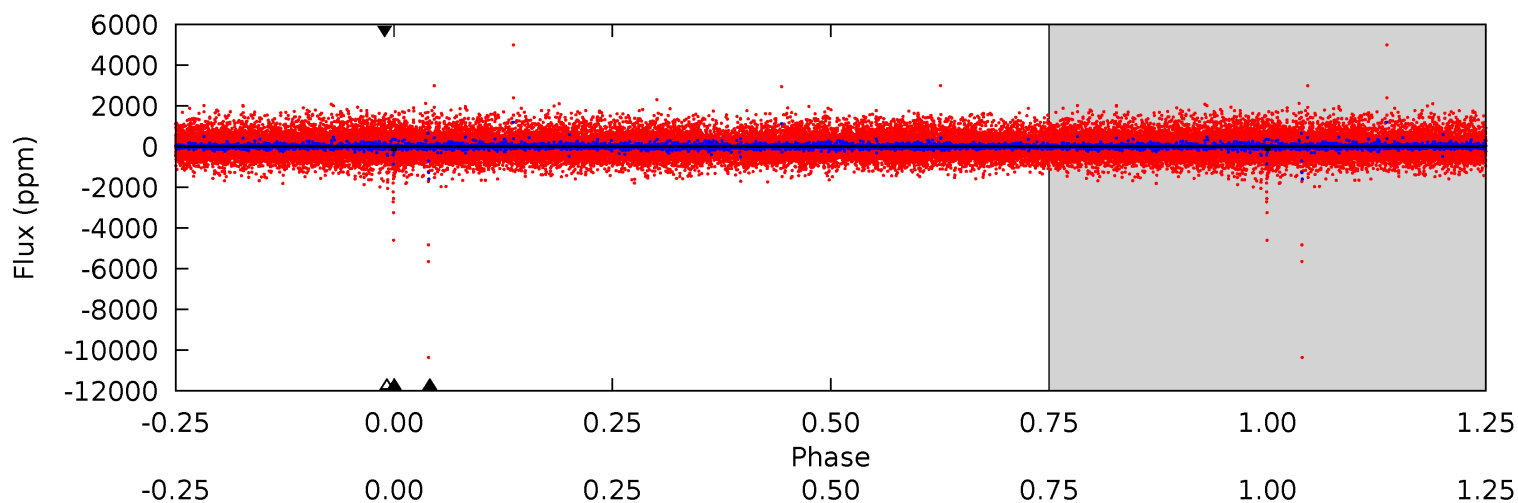
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.0	20.4	19.2	27.8	5.28	3.01	6.17	1.85	-6.84	1.24	-7.45	8.86	1.21	0.57	1.62



Alt Model-Shift Uniqueness Test

003439126-09, P = 323.265730 Days, E = 281.959685 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.80	4.17	1.49	1.41	5.23	2.93	0.37	2.31	2.39	2.68	2.76	31.5	11.0	0.27	3.70



Stellar Parameters For KIC 003439126

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4236^{+129}_{-142}	$4.612^{+0.052}_{-0.017}$	$0.120^{+0.250}_{-0.300}$	$0.664^{+0.028}_{-0.061}$	$0.657^{+0.047}_{-0.053}$	$3.163^{+0.729}_{-0.252}$
	+3%/-3%	+1%/-0%	+208%/-250%	+4%/-9%	+7%/-8%	+23%/-8%
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 003439126-09 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-3255 ± 160	$2.81^{+0.71}_{-0.66}$	236^{+8}_{-9}	4928^{+623}_{-462}	$147953^{+104260}_{-52771}$
Alt.	-155 ± 37	$4.05^{+0.63}_{-0.63}$	236^{+8}_{-8}	2656^{+156}_{-139}	3315^{+1589}_{-1070}

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

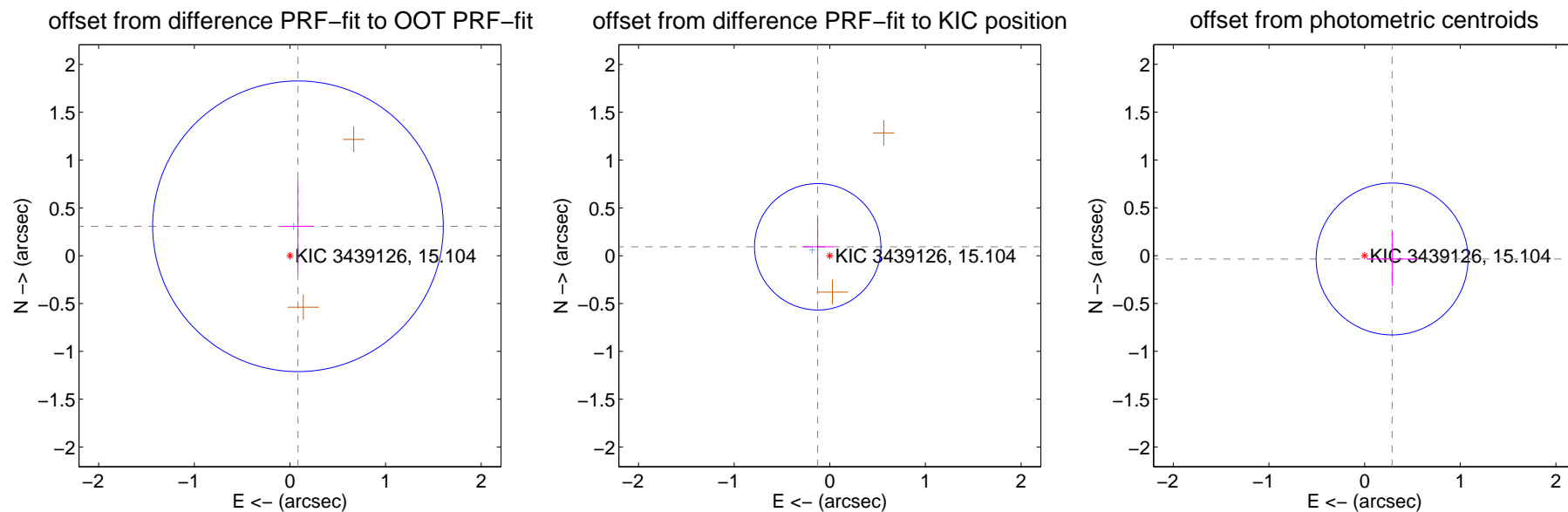
DV Centroid Data

Supplemental centroid analysis for 003439126-09. Kepler magnitude: 15.10. Transit SNR 7.44

There are 1 quarters with good PRF difference image offsets

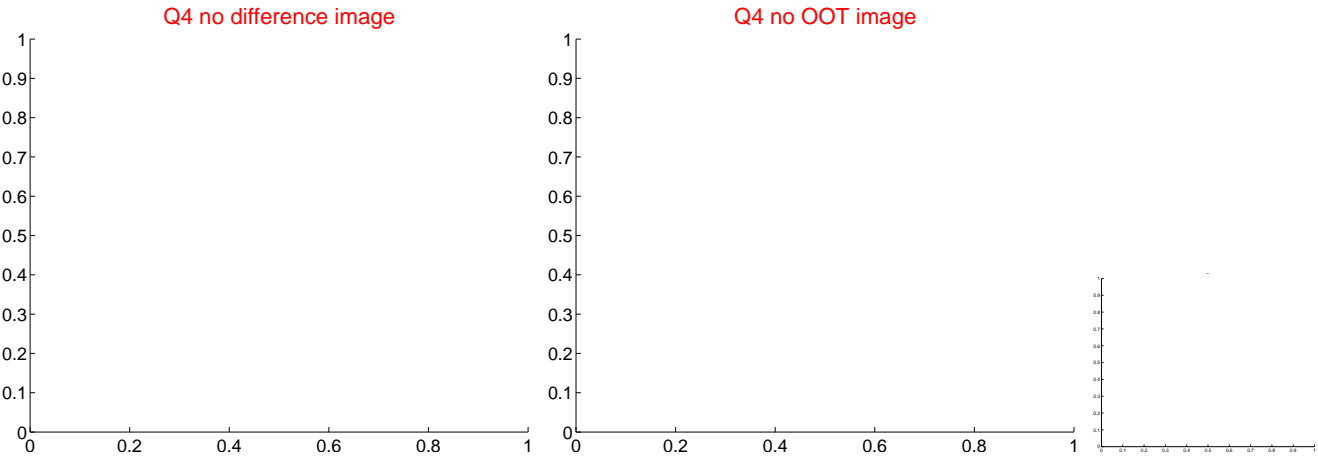
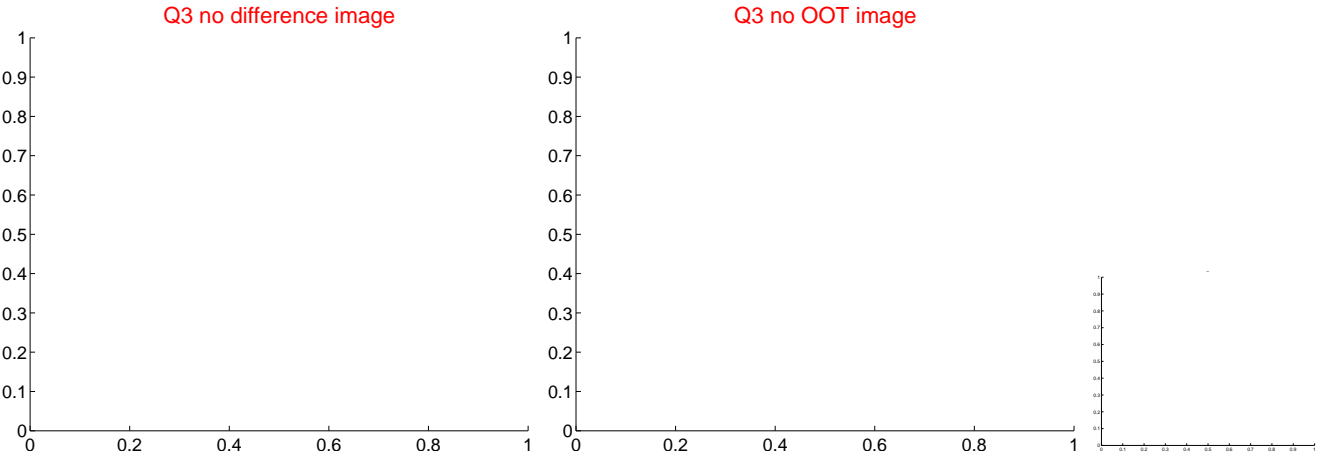
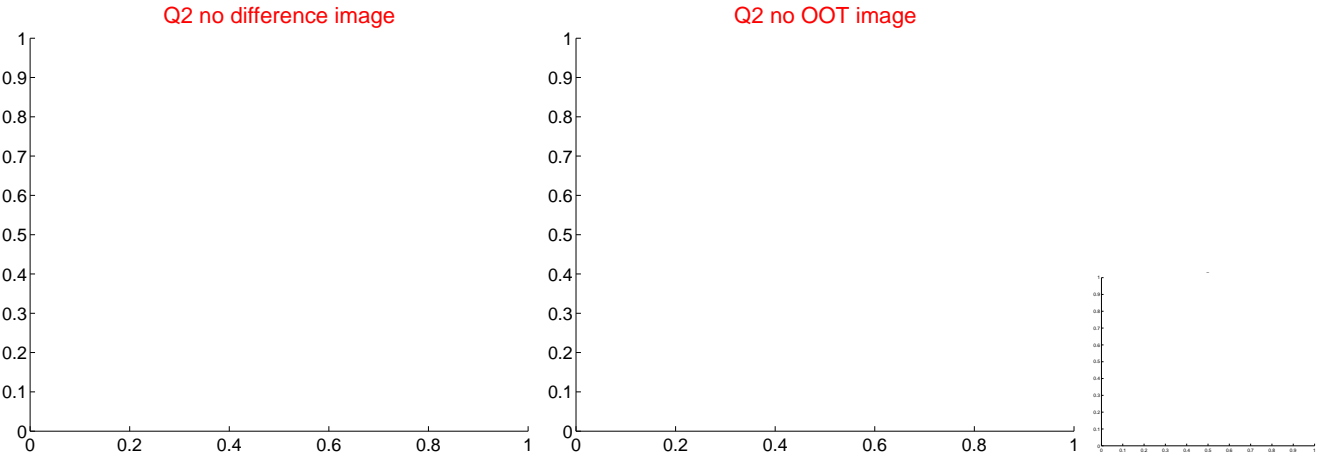
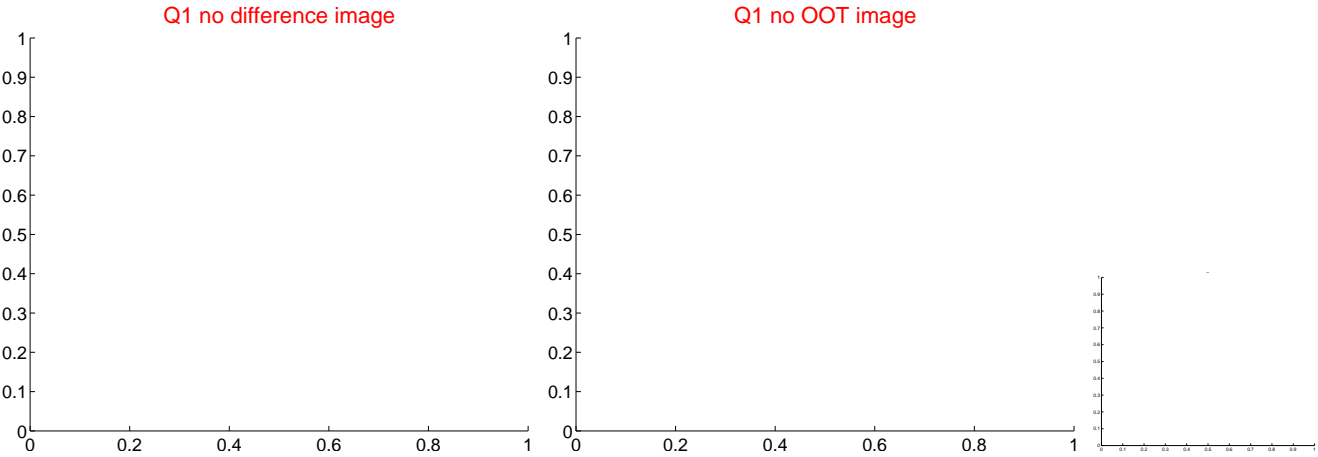
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.319 ± 0.506	0.63	-0.084 ± 0.168	0.308 ± 0.490
PRF-fit source offset from KIC position	0.157 ± 0.220	0.71	0.127 ± 0.160	0.093 ± 0.301
photometric centroid source offset	0.29 ± 0.26	1.09	-0.29 ± 0.26	-0.03 ± 0.28

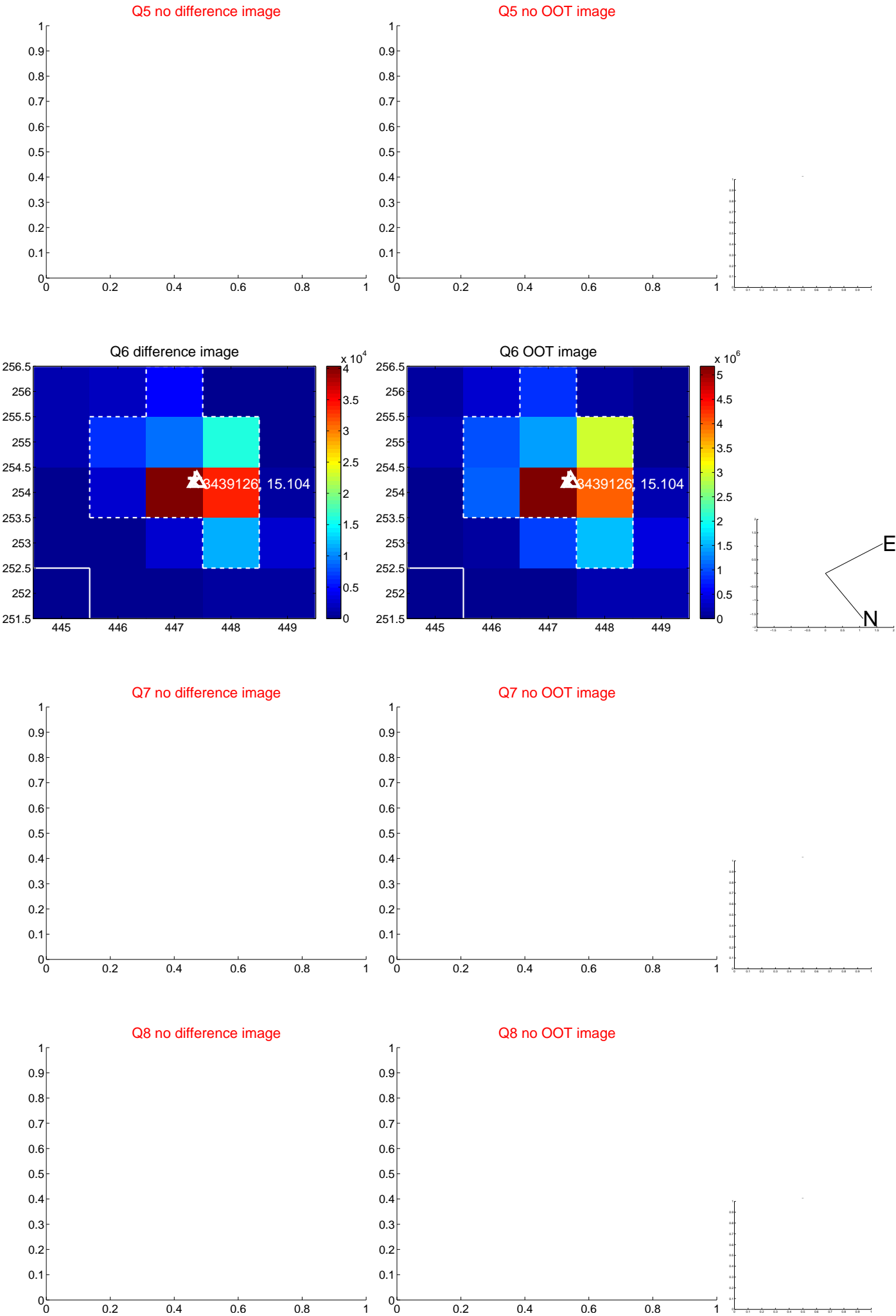


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

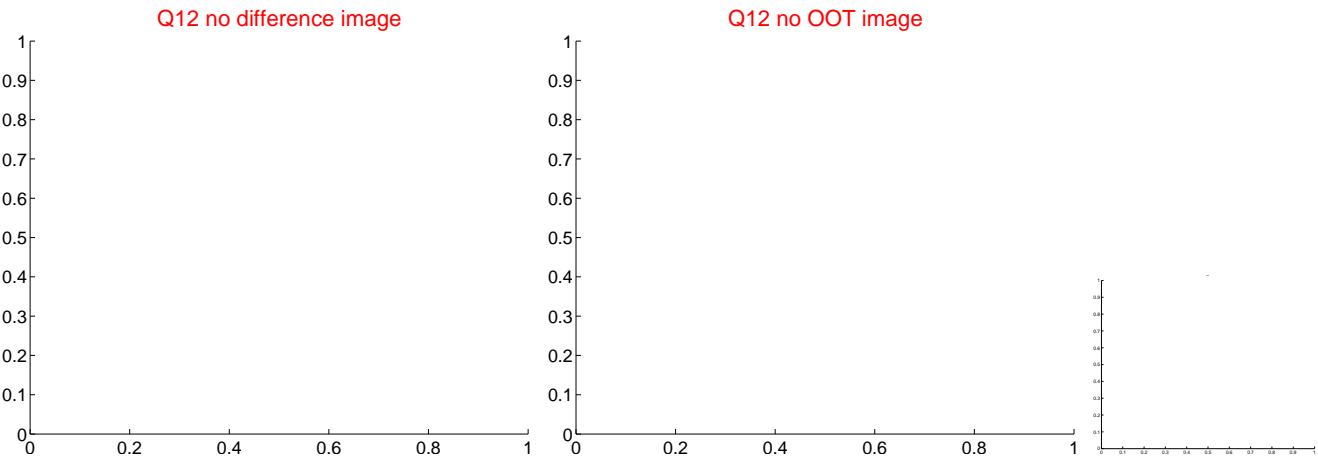
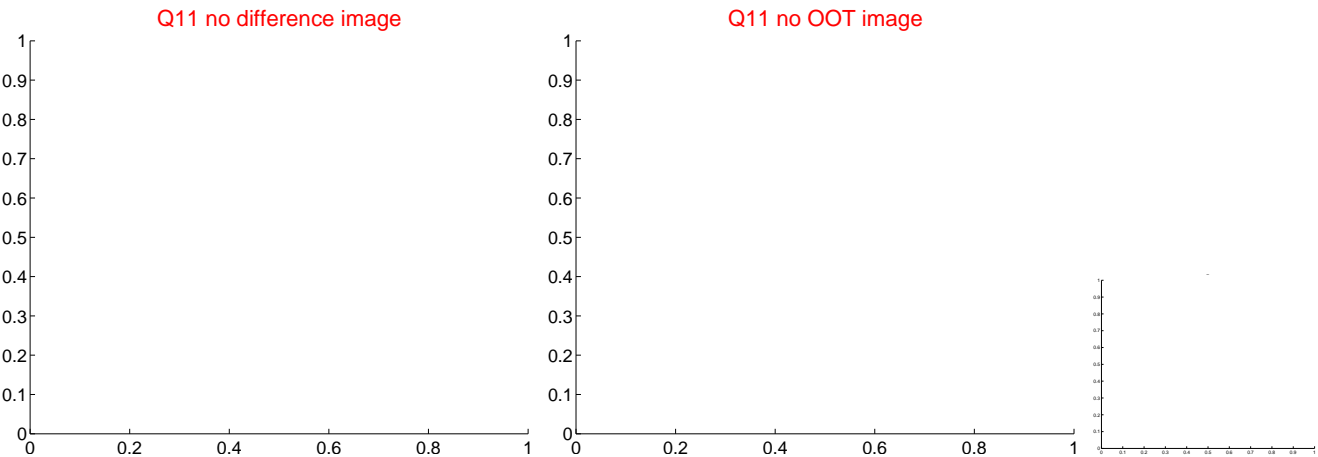
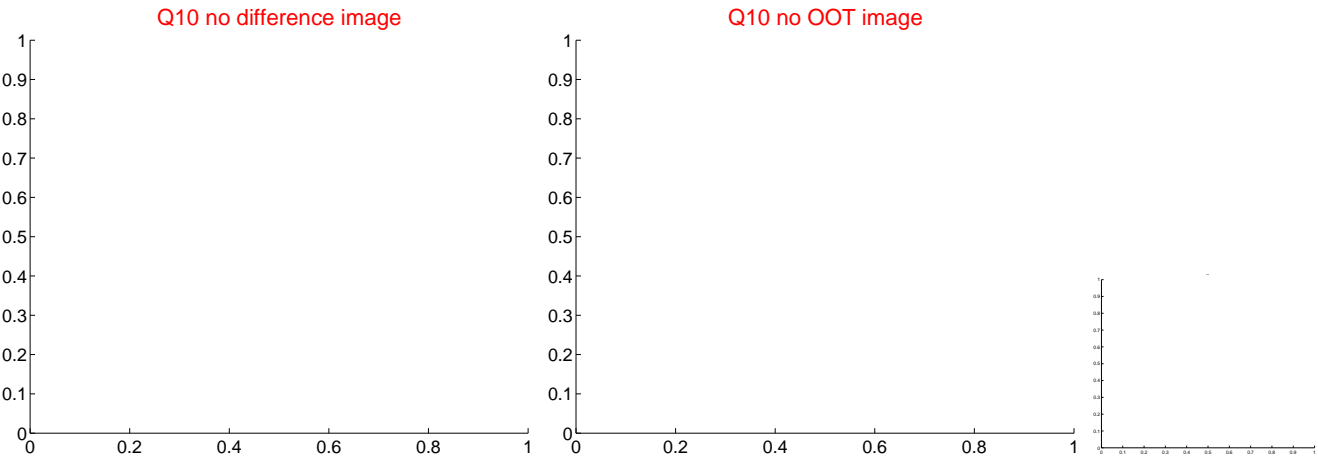
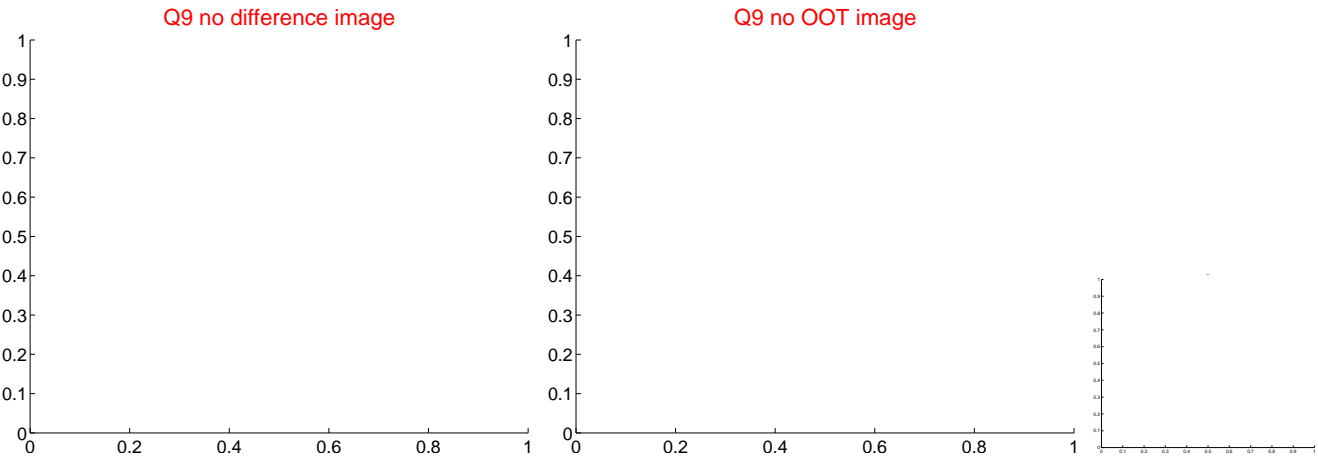
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



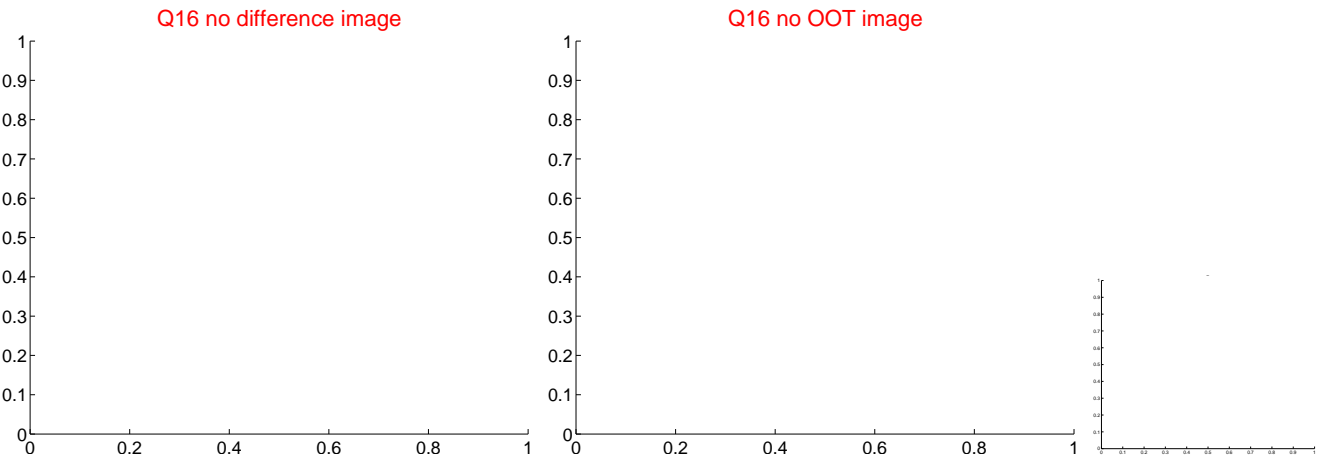
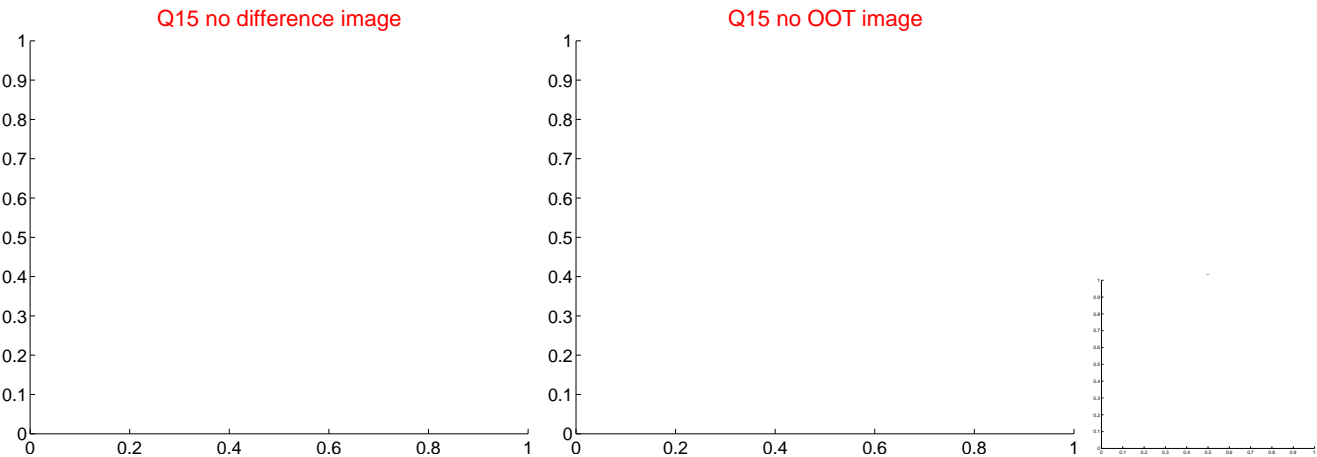
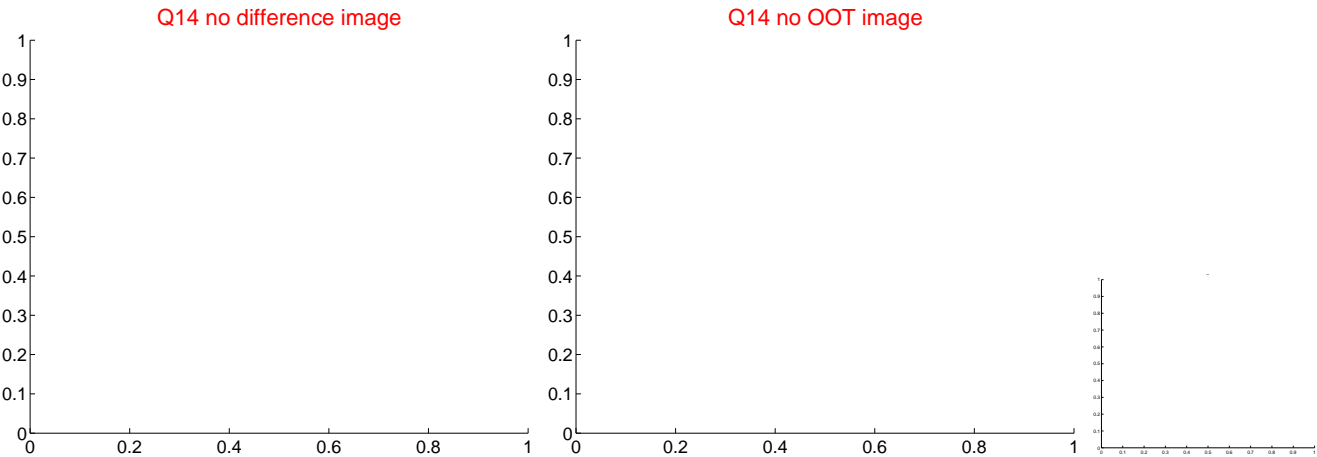
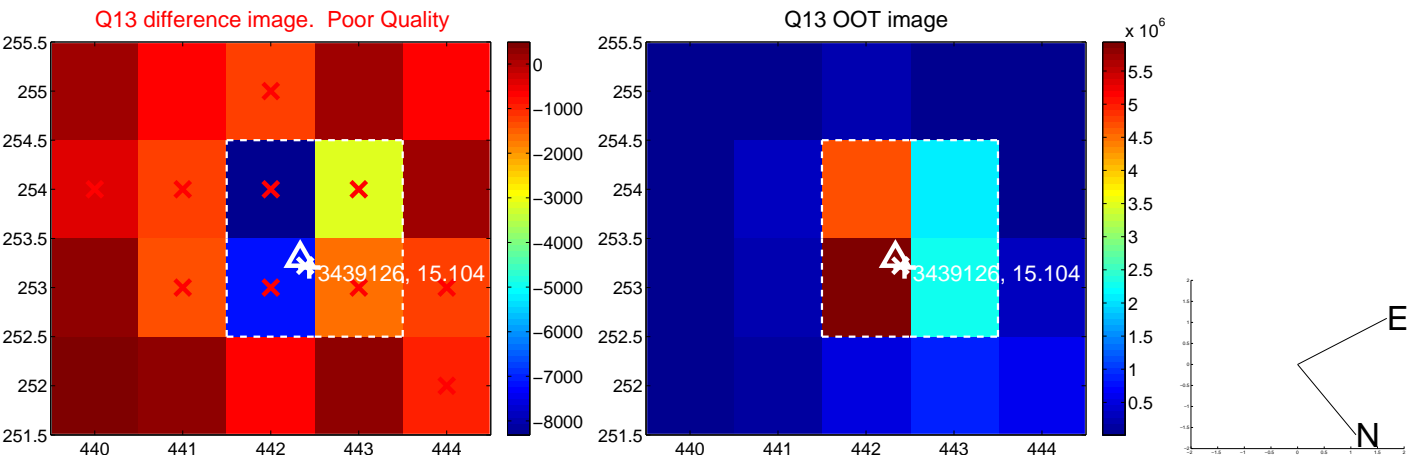
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



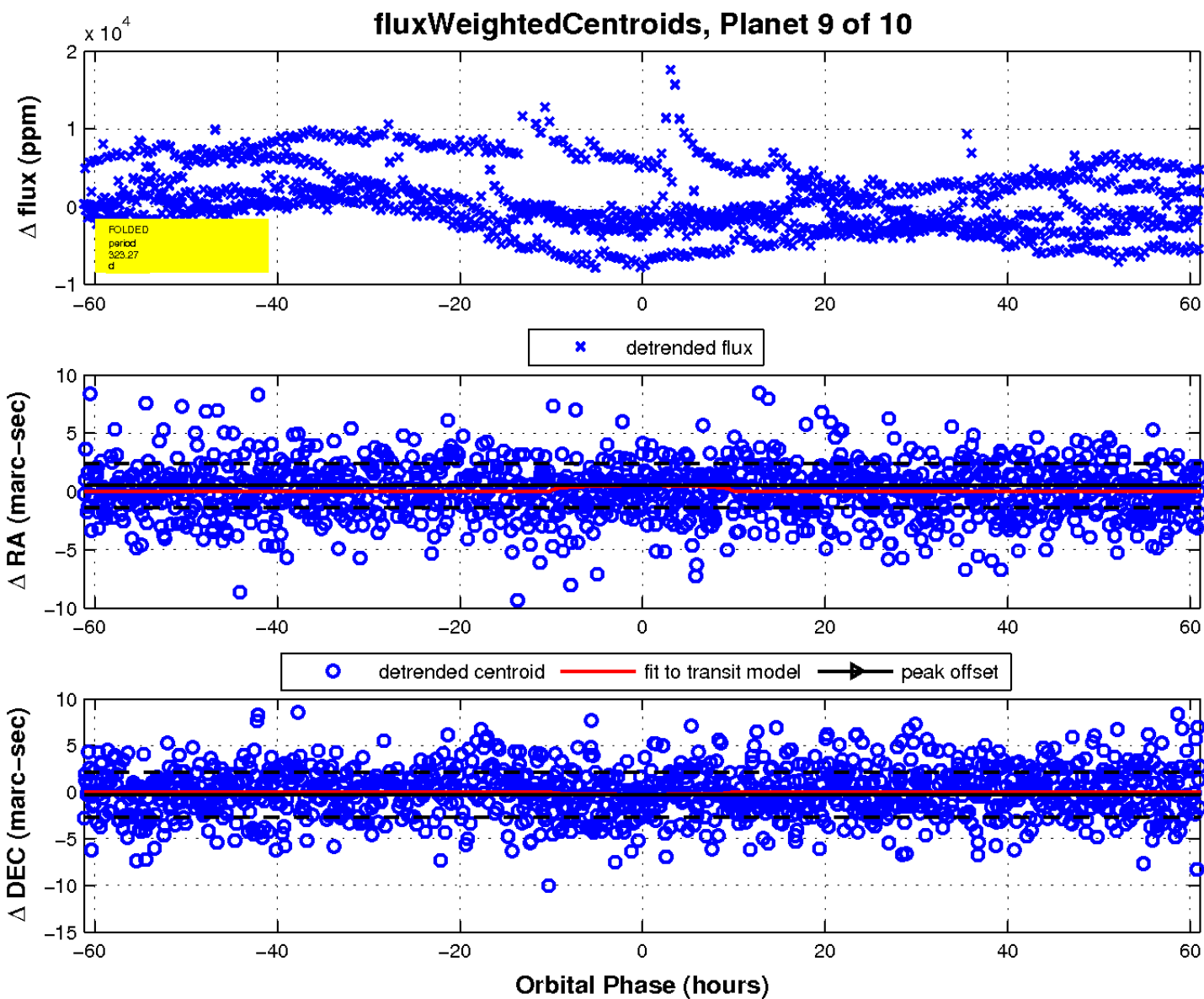
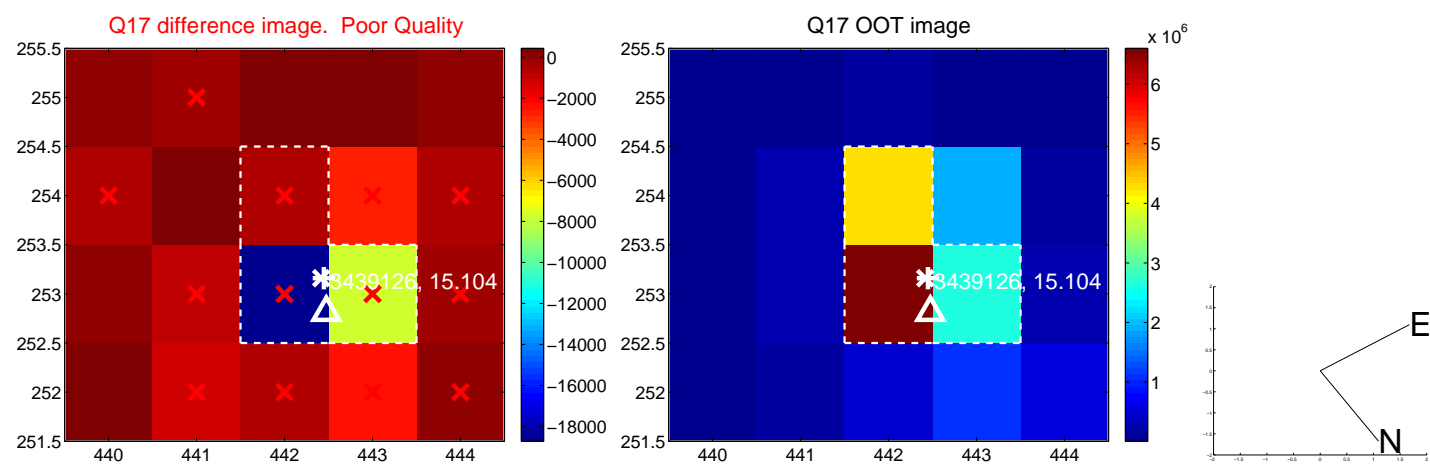
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



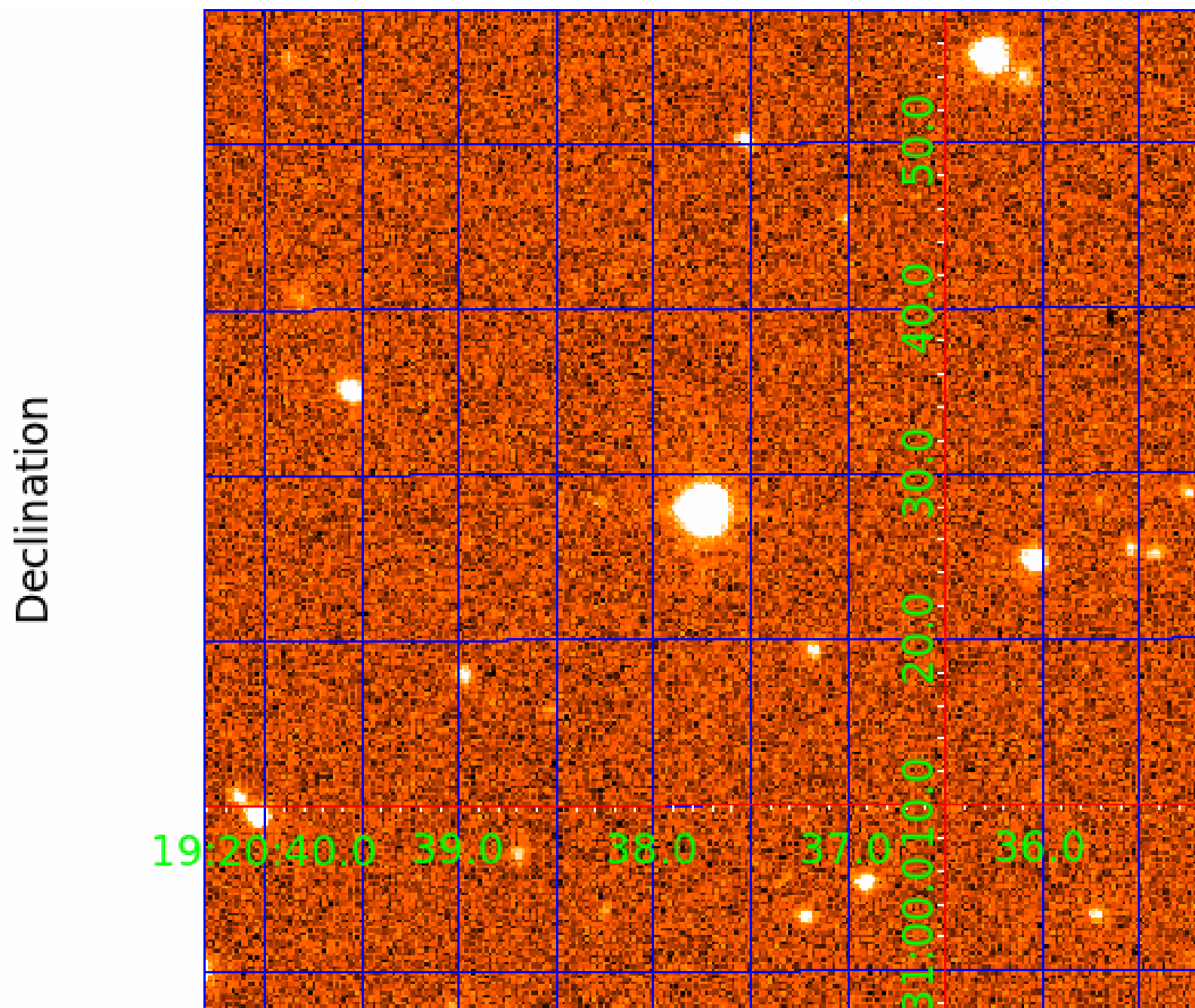
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



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})
003439126-01	OBS	No	466.598907	562.202843	1581.3	9.515	13.7	6.5	0.66	4236	2.77	0.12
003439126-02	OBS	No	456.286524	484.430344	1711.3	7.600	11.8	7.8	0.66	4236	3.27	0.12
003439126-03	OBS	7655.01	2.976224	132.922051	197.1	6.191	11.6	10.9	0.66	4236	1.14	102.47
003439126-04	OBS	No	272.945566	224.384038	662.9	9.352	11.7	4.0	0.66	4236	1.87	0.25
003439126-05	OBS	No	398.924392	256.302150	1050.5	9.000	11.6	-1.0	0.66	4236	2.05	0.15
003439126-06	OBS	No	347.186618	410.217941	1194.3	7.500	11.4	-1.0	0.66	4236	2.19	0.18
003439126-07	OBS	No	251.654938	196.634295	584.4	8.995	11.4	3.1	0.66	4236	1.57	0.28
003439126-08	OBS	No	428.663233	529.169612	3632.6	17.808	10.9	9.7	0.66	4236	3.81	0.14
003439126-09	OBS	No	323.272075	281.919624	2046.6	20.411	9.8	7.4	0.66	4236	2.88	0.20
003439126-10	OBS	No	229.359900	174.128589	1174.7	7.500	10.2	-1.0	0.66	4236	2.17	0.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003439126-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-03	OBS	FP	0.00	0	0	0	1	EPHEM_MATCH
003439126-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV
003439126-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST
003439126-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
003439126-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
003439126-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS
003439126-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003439126-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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.

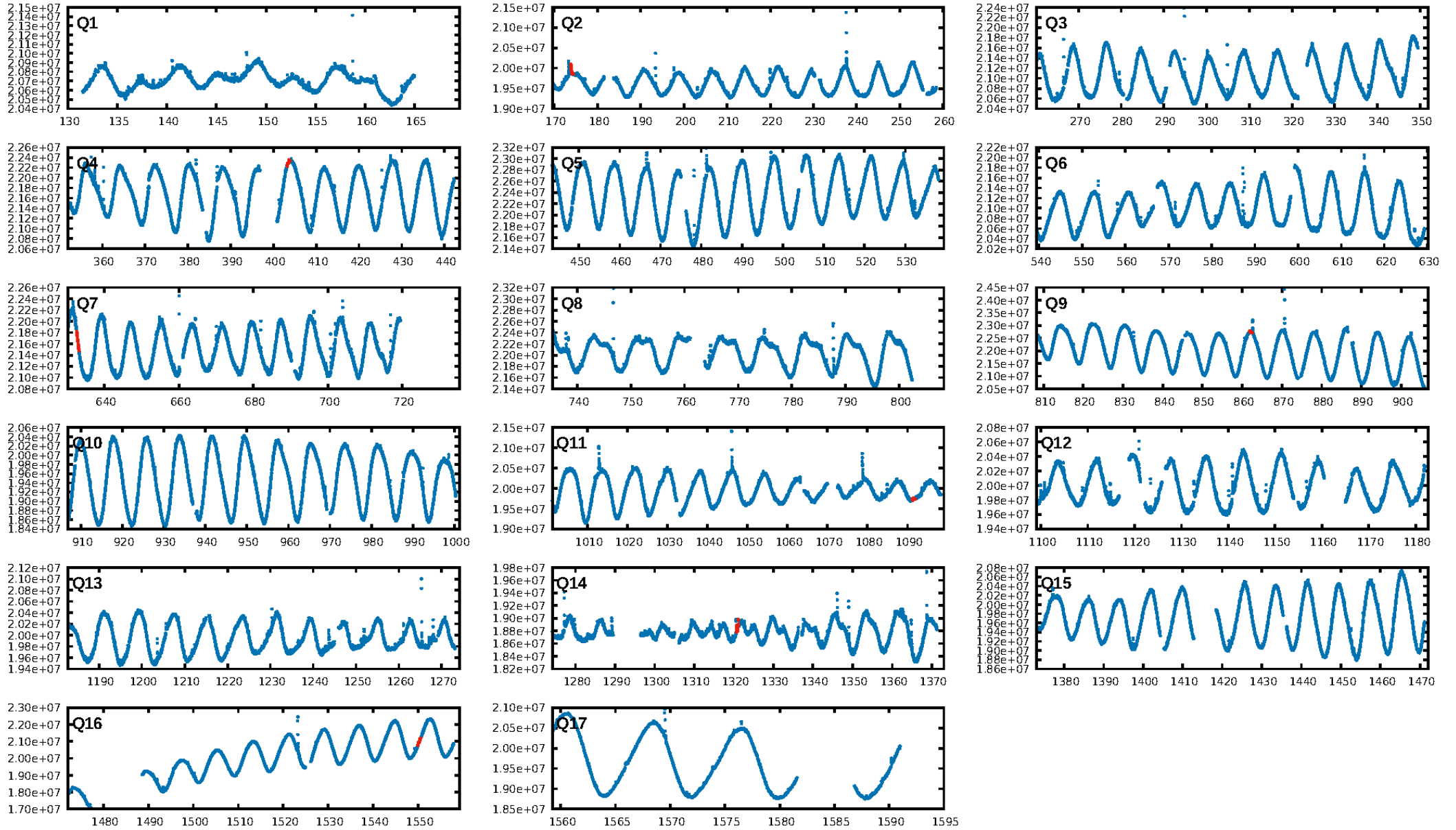
Ephemeris Match Information For 003439126-10

No Significant Match Found

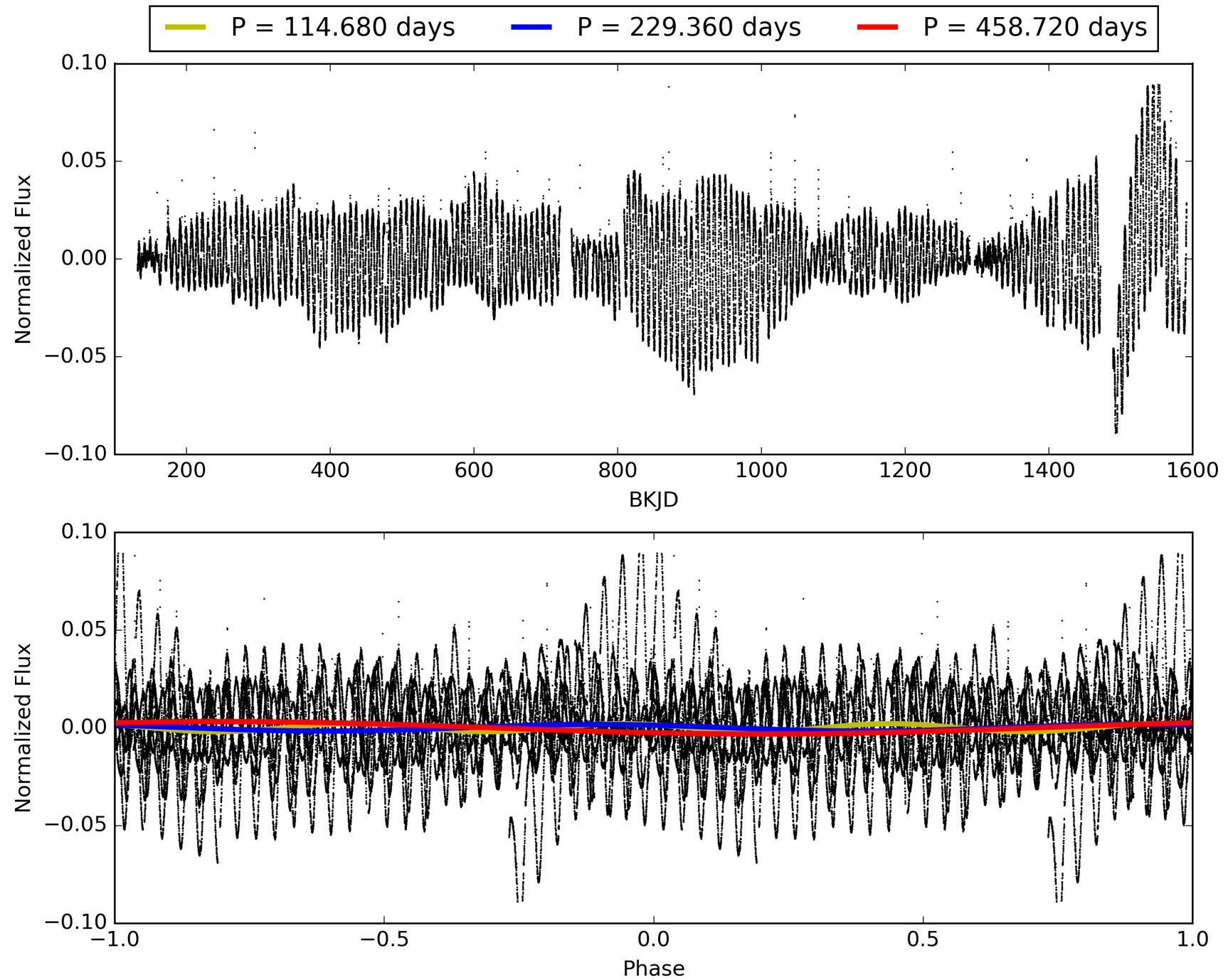
KIC: 3439126 Candidate: 10 of 10 Period: 229.360 d



TCE 003439126-10, PDC Light Curves

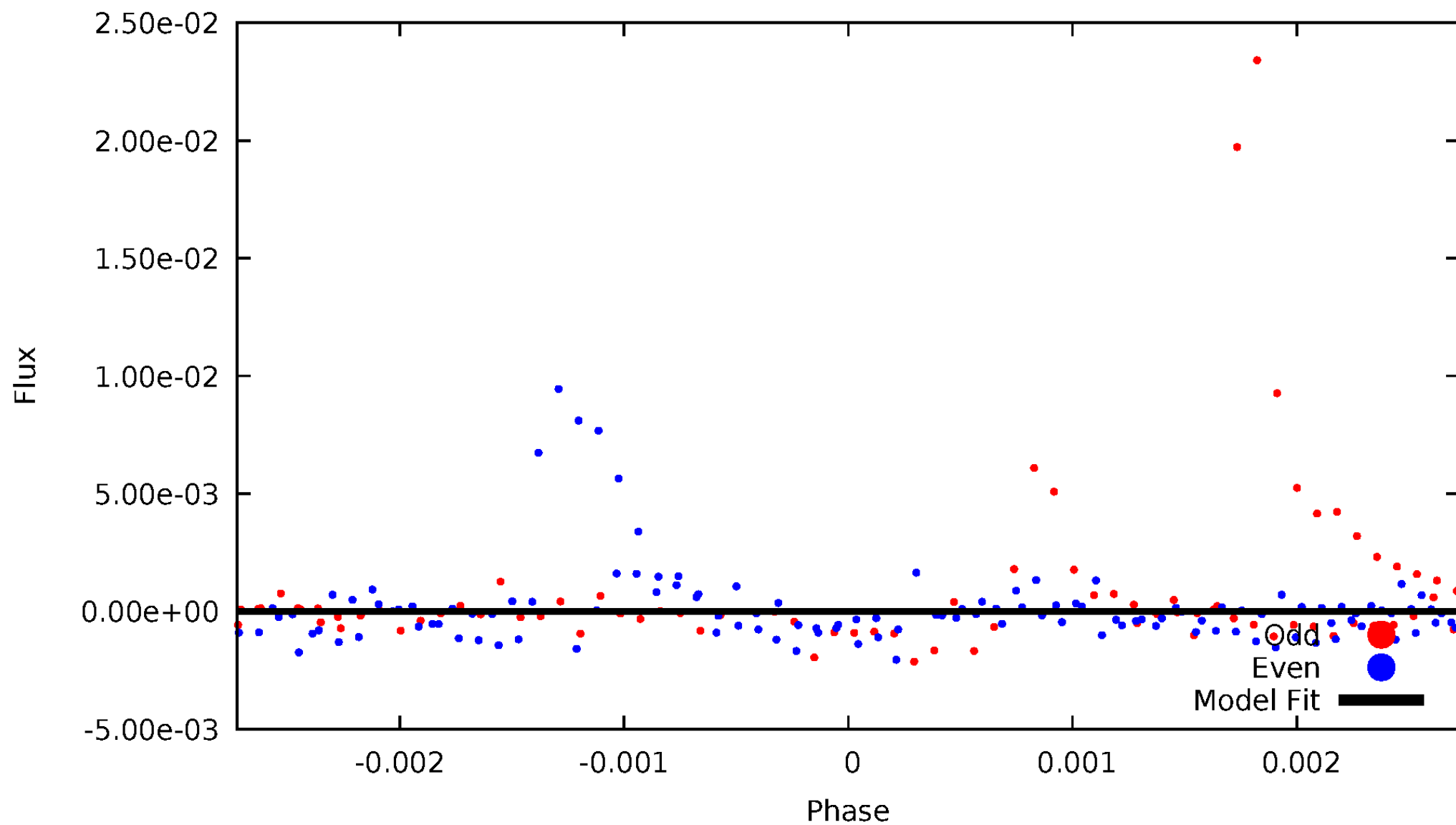


TCE 003439126-10



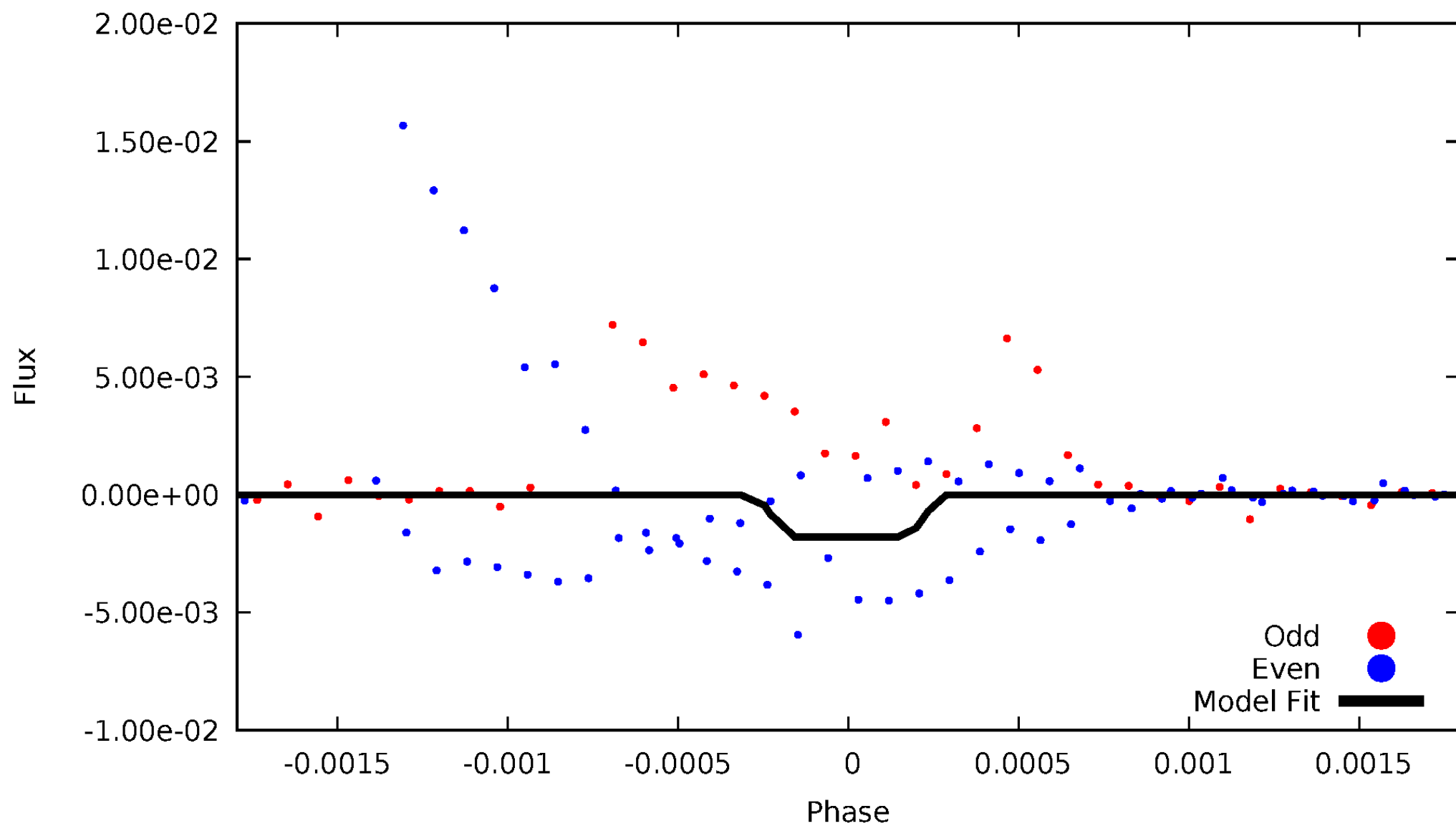
DV Odd/Even

TCE 003439126-10



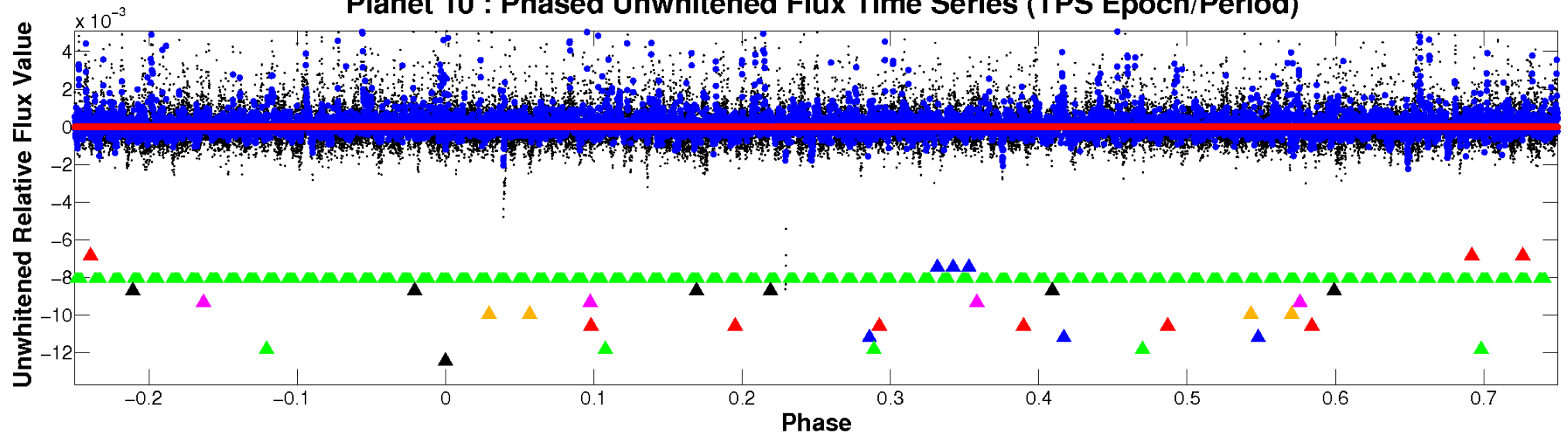
ALT Odd/Even

TCE 003439126-10

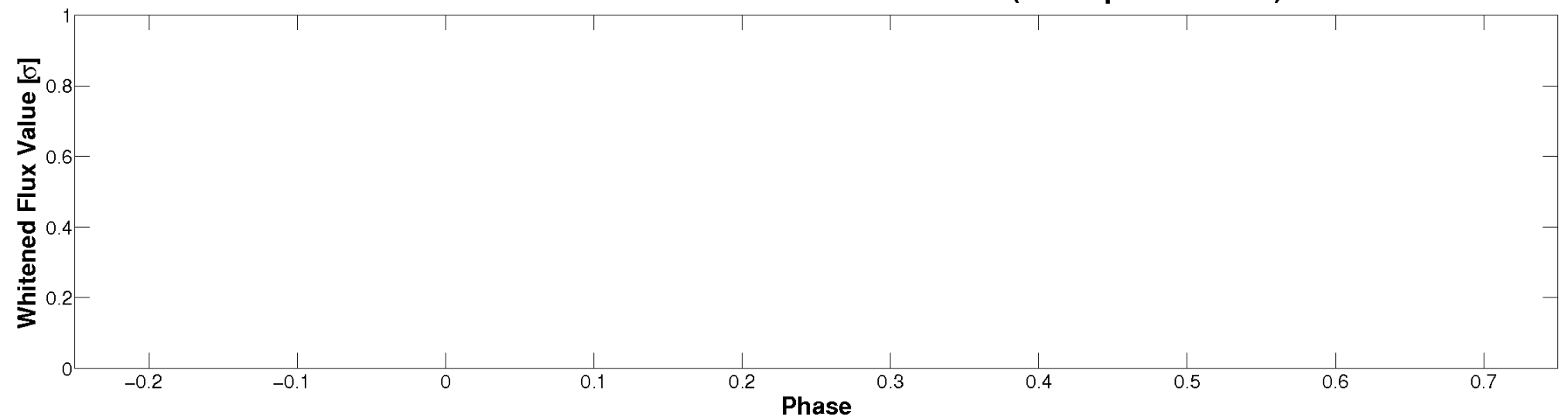


Non-Whitened Vs. Whitened Light Curve

Planet 10 : Phased Unwhitened Flux Time Series (TPS Epoch/Period)

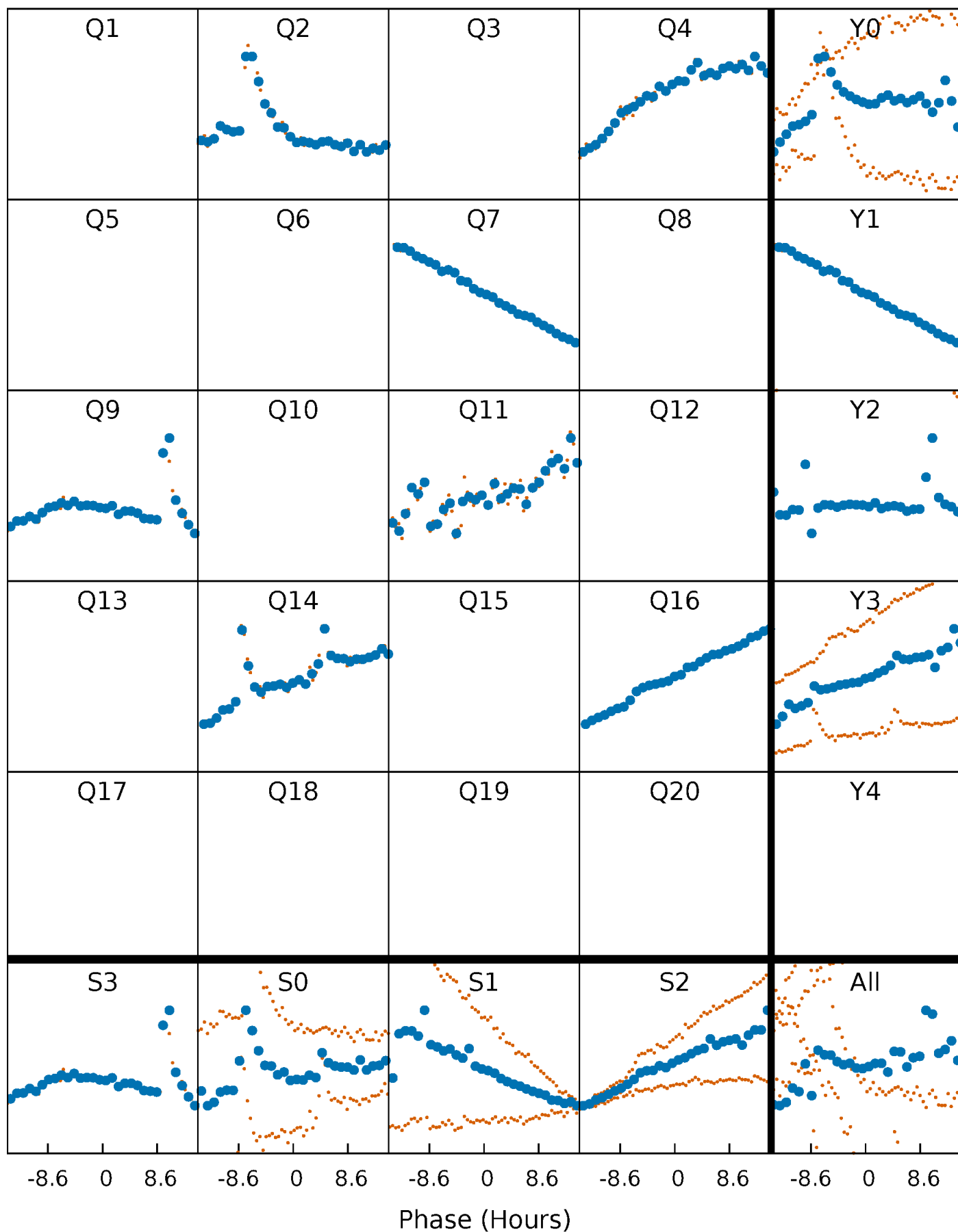


Planet 10 : Phased Whitened Flux Time Series (TPS Epoch/Period)



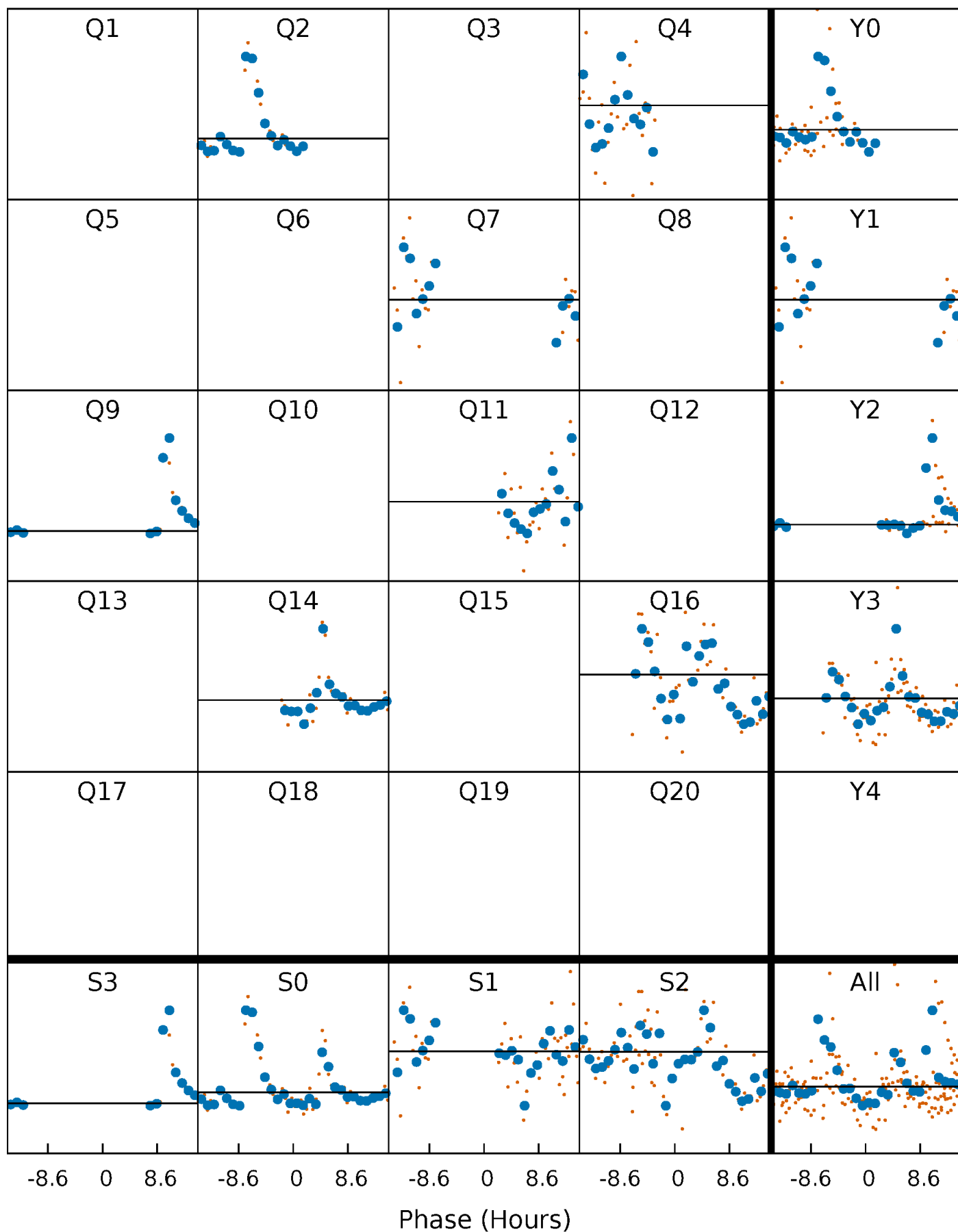
PDC Quarter-Phased Transit Curves

TCE 003439126-10 P=229.359900 Days $T_0=174.128589$ (BKJD)



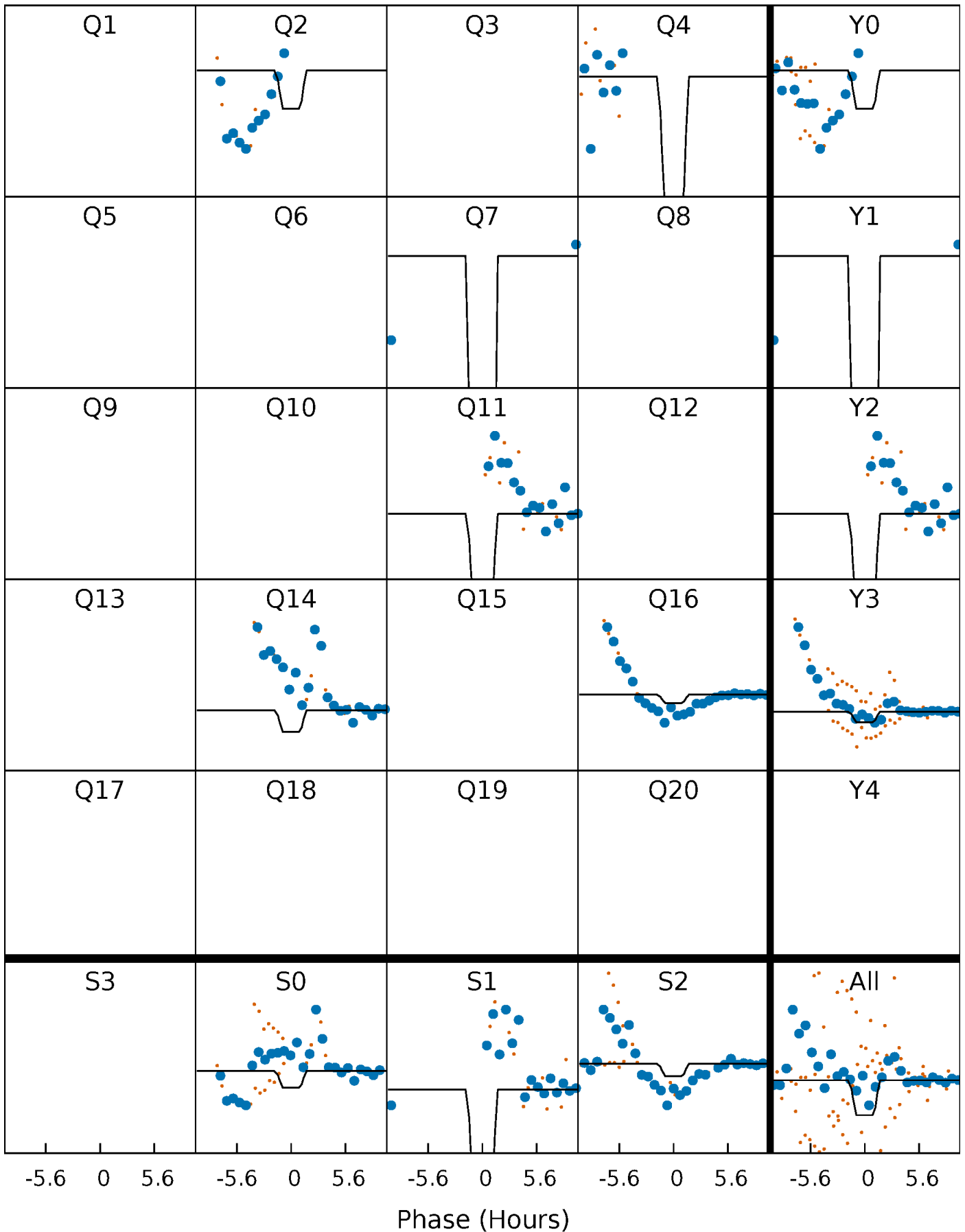
DV Quarter-Phased Transit Curves

TCE 003439126-10 P=229.359900 Days $T_0=174.128589$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

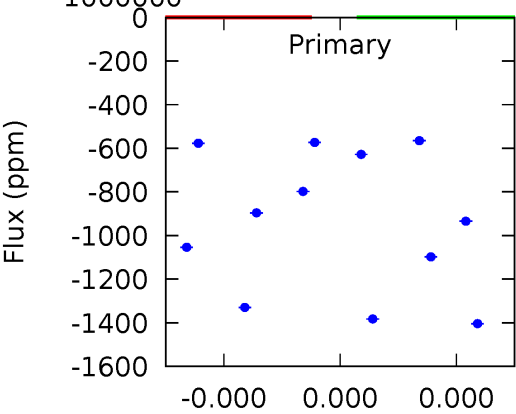
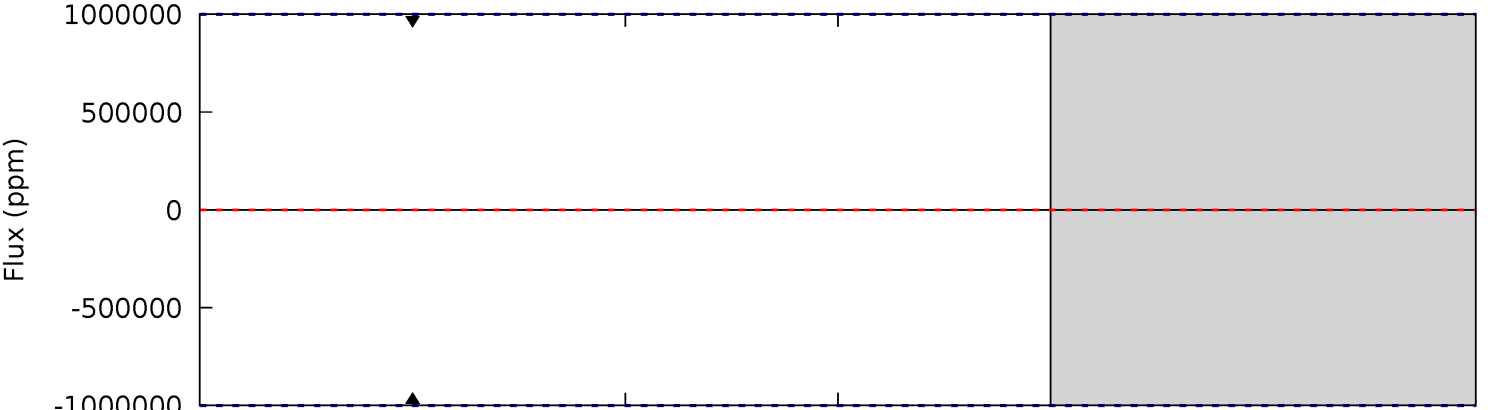
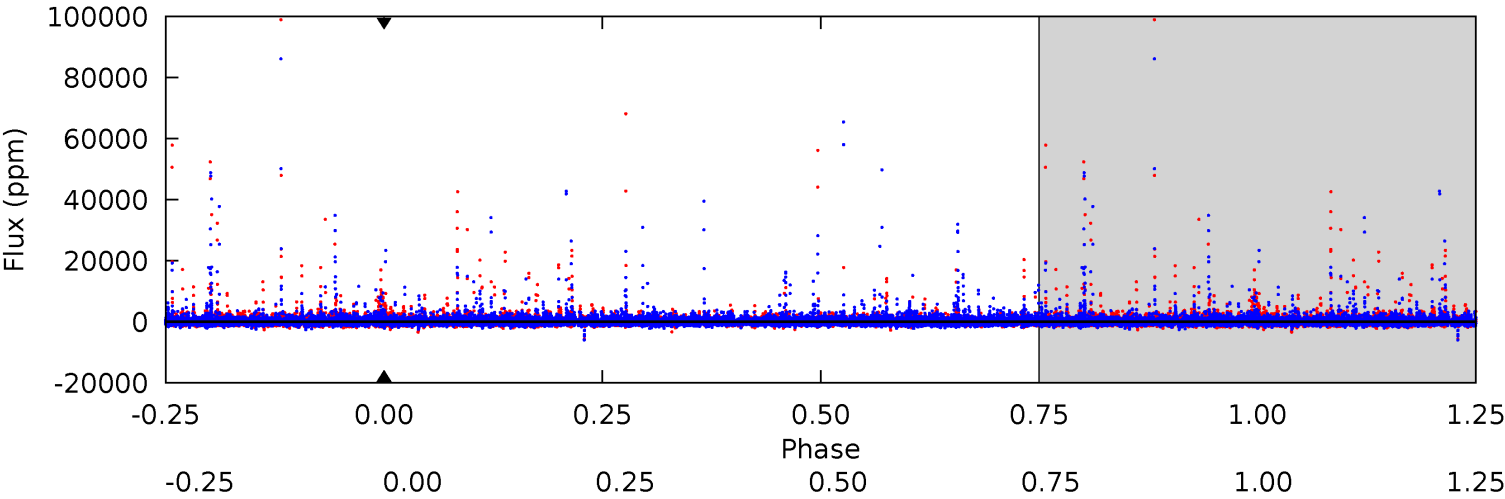
TCE 003439126-10 P=229.359900 Days $T_0=174.211594$ (BKJD)



DV Model-Shift Uniqueness Test

003439126-10, P = 229.359900 Days, E = 174.128589 Days

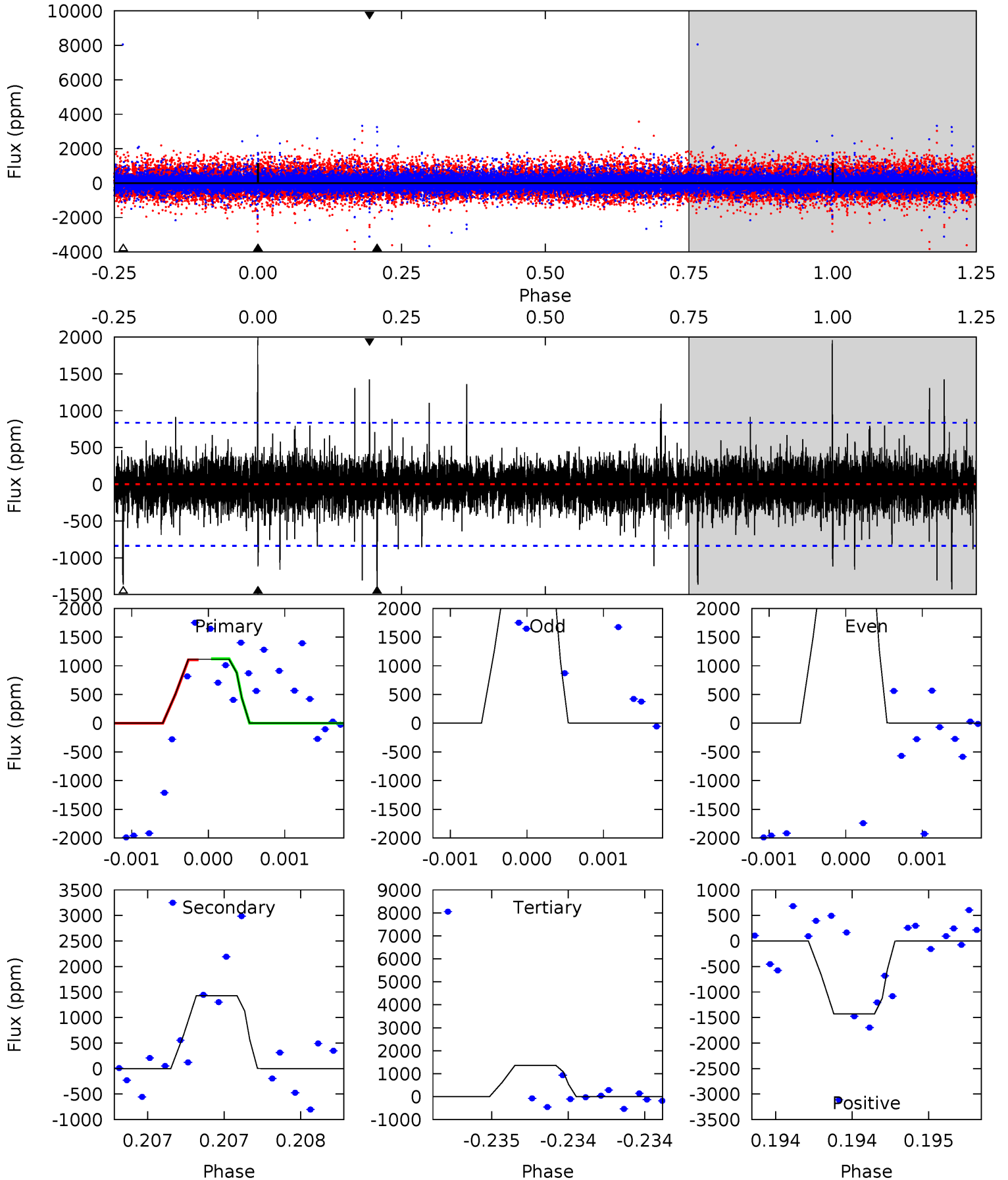
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

003439126-10, P = 229.359900 Days, E = 174.211594 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	9.48	9.06	9.48	5.56	3.46	1.13	-1.65	-2.07	0.42	0.00	1.80	-0.22	0.58	0



Stellar Parameters For KIC 003439126

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4236^{+129}_{-142}	$4.612^{+0.052}_{-0.017}$	$0.120^{+0.250}_{-0.300}$	$0.664^{+0.028}_{-0.061}$	$0.657^{+0.047}_{-0.053}$	$3.163^{+0.729}_{-0.252}$
	+3%/-3%	+1%/-0%	+208%/-250%	+4%/-9%	+7%/-8%	+23%/-8%
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 003439126-10 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$5.74^{+6.00}_{-3.98}$	264^{+9}_{-10}	3644^{+6401}_{-12965}	$16266^{+1283180}_{-1023566}$
Alt.	-1427 ± 150	$6.06^{+5.93}_{-4.37}$	264^{+9}_{-10}	3270^{+1779}_{-598}	$8690^{+101127}_{-6530}$

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 $A_{obs} \gg 1.0$

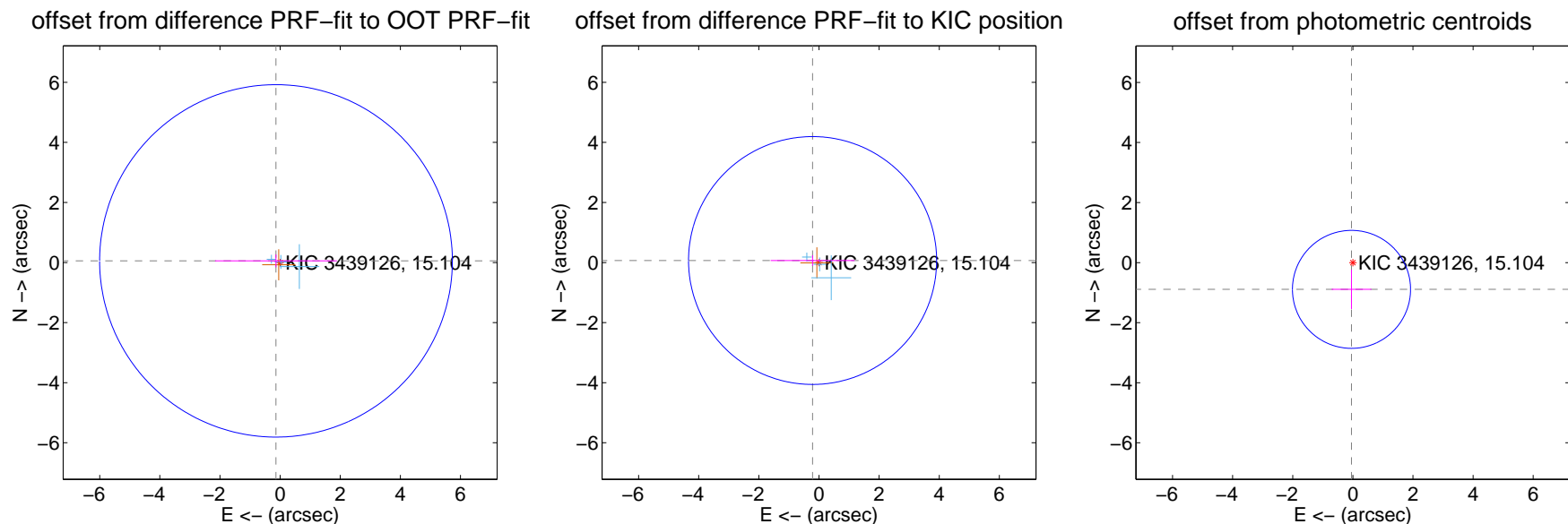
DV Centroid Data

Supplemental centroid analysis for 003439126-10. Kepler magnitude: 15.10. Transit SNR -1.00

There are 3 quarters with good PRF difference image offsets

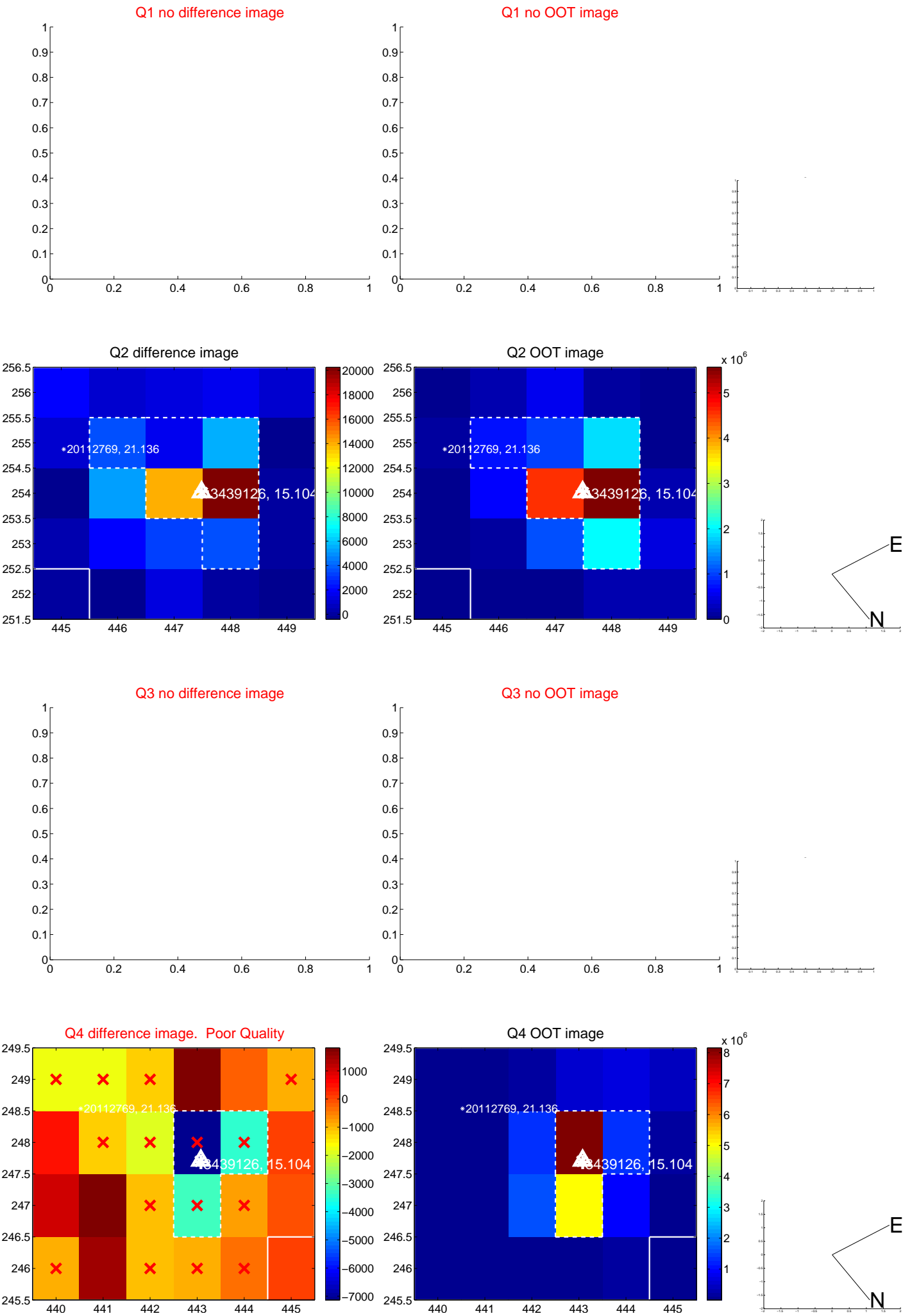
The direct PRF centroid is offset from the target star catalog position by about 0.44 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.148 ± 1.955	0.08	0.137 ± 2.027	0.055 ± 0.214
PRF-fit source offset from KIC position	0.223 ± 1.375	0.16	0.213 ± 1.395	0.068 ± 0.178
photometric centroid source offset	0.89 ± 0.65	1.36	0.05 ± 0.66	-0.89 ± 0.65



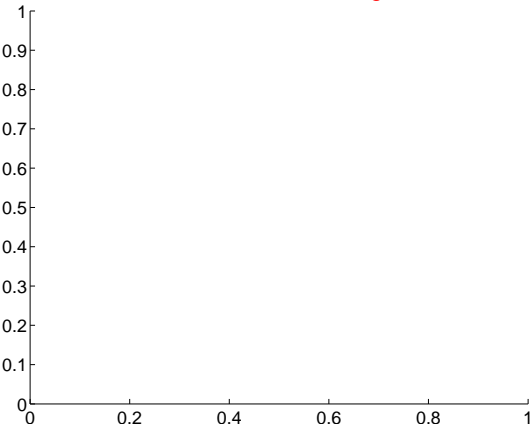
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

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

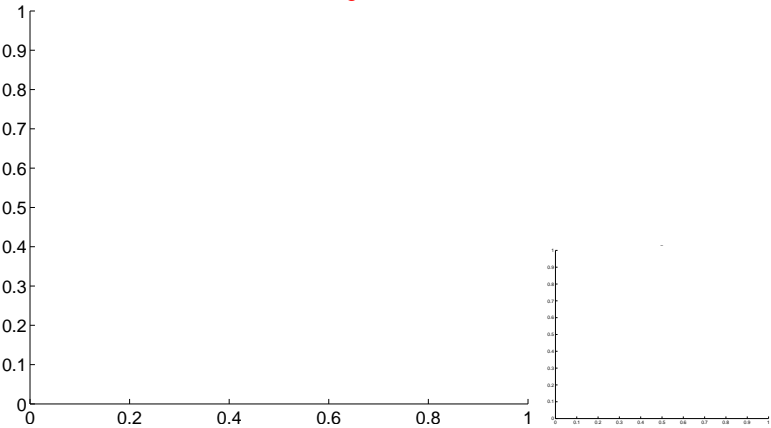


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

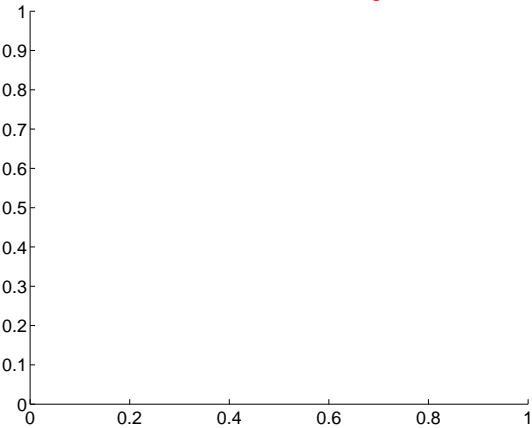
Q5 no difference image



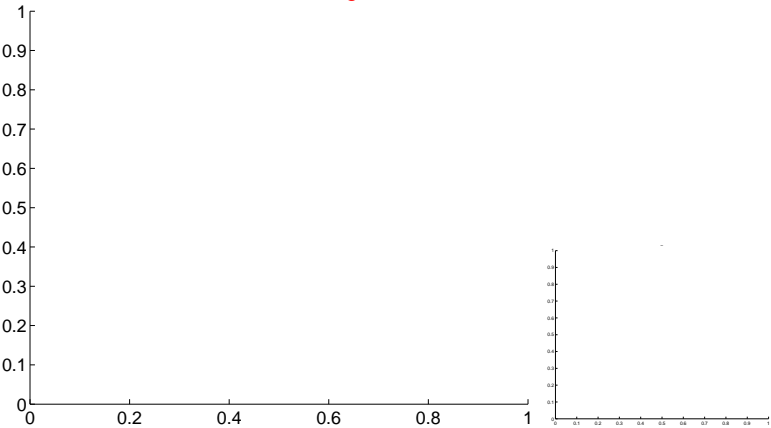
Q5 no OOT image



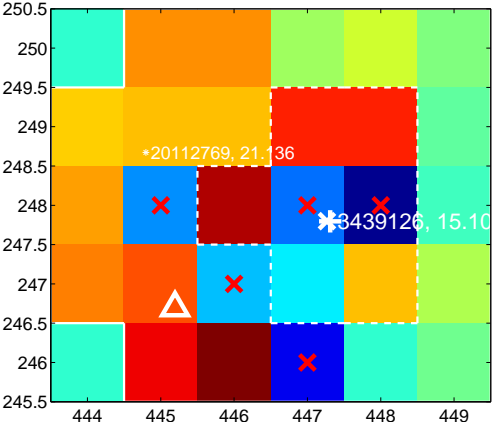
Q6 no difference image



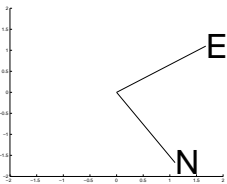
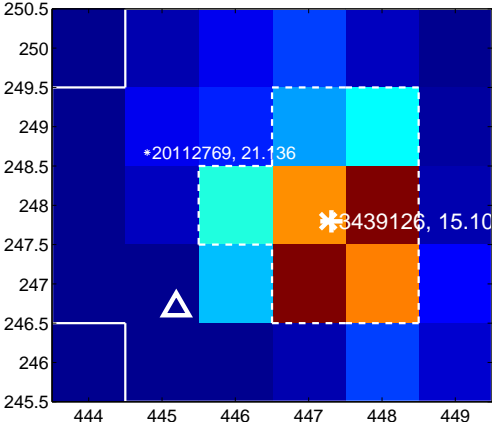
Q6 no OOT image



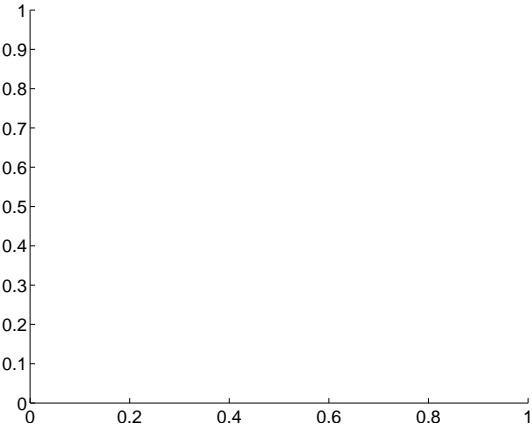
Q7 difference image. Poor Quality



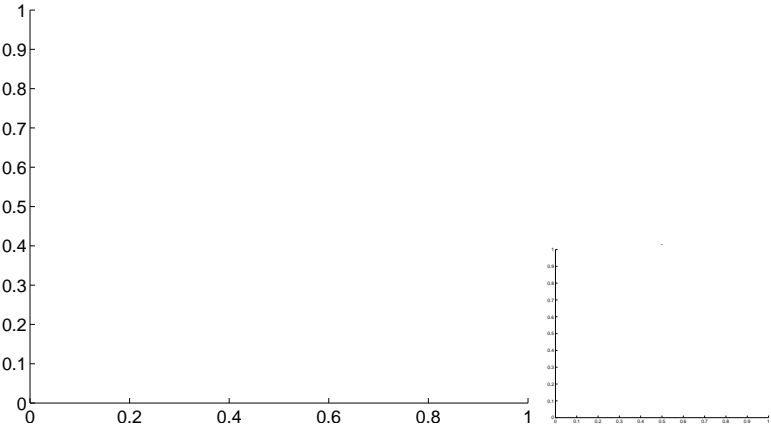
Q7 OOT image



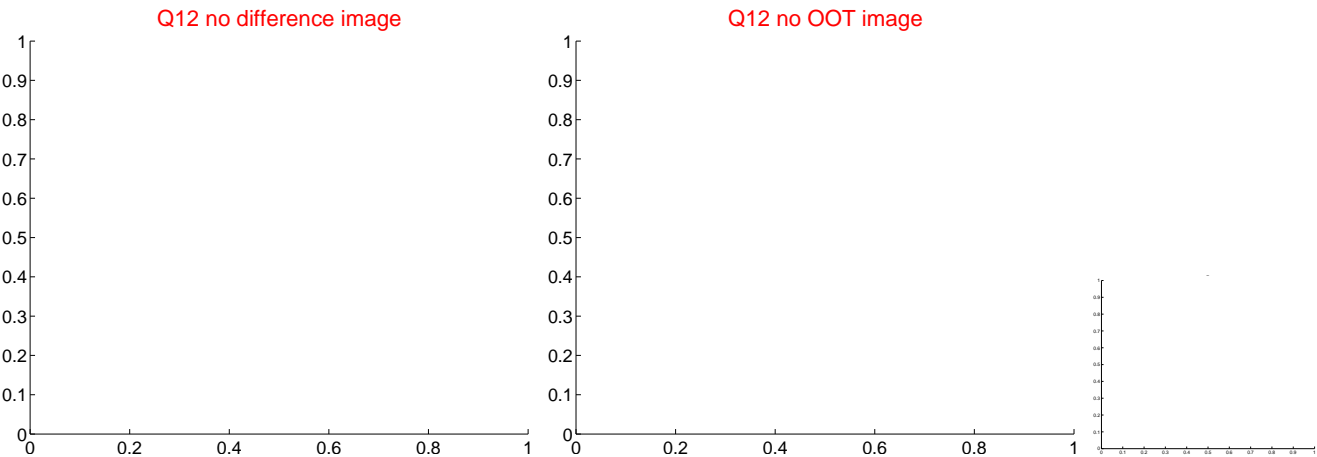
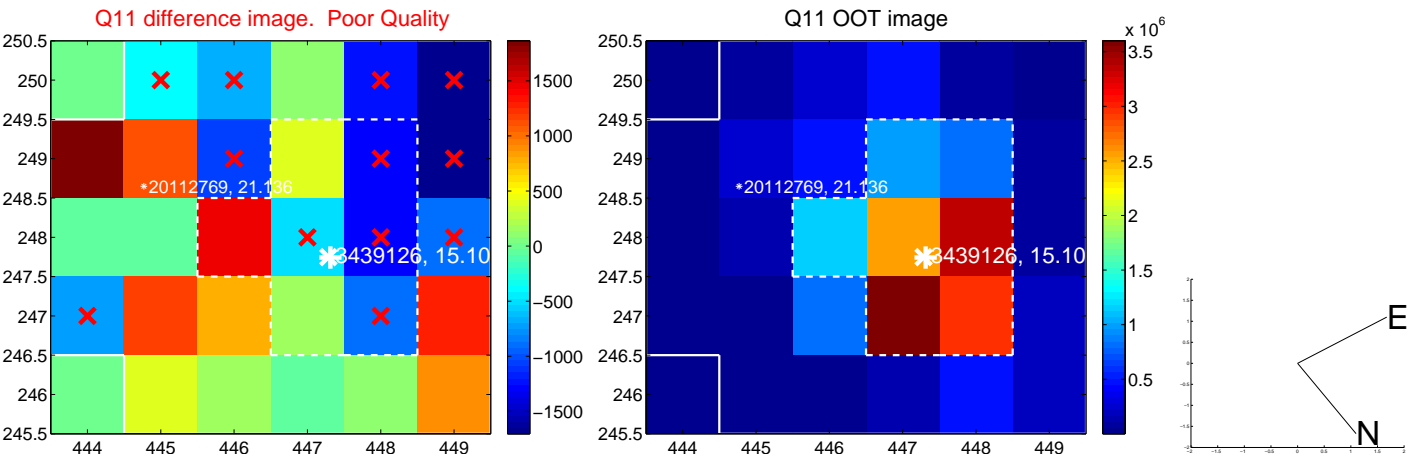
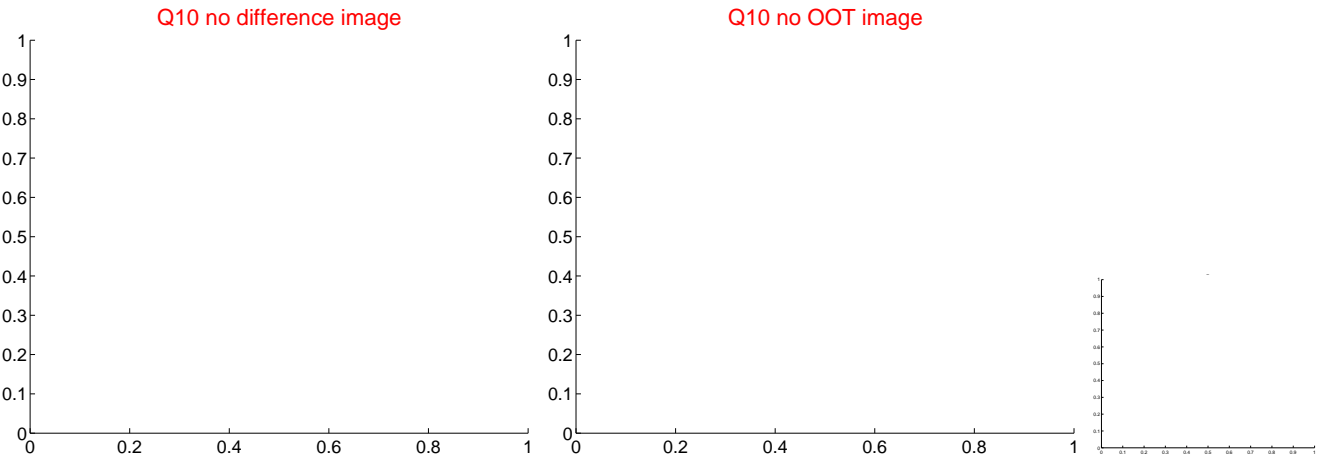
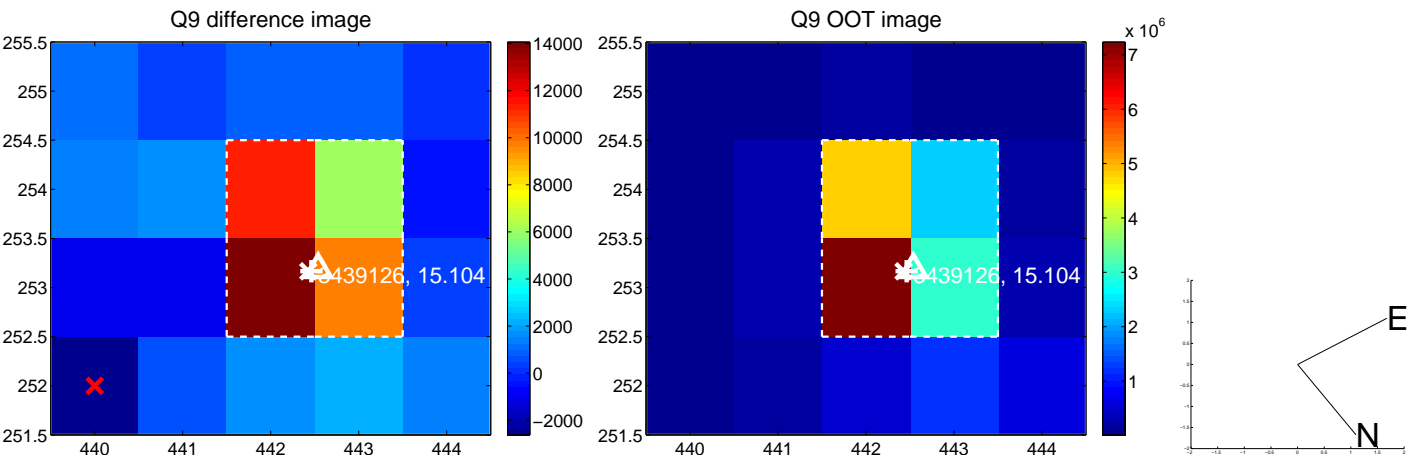
Q8 no difference image



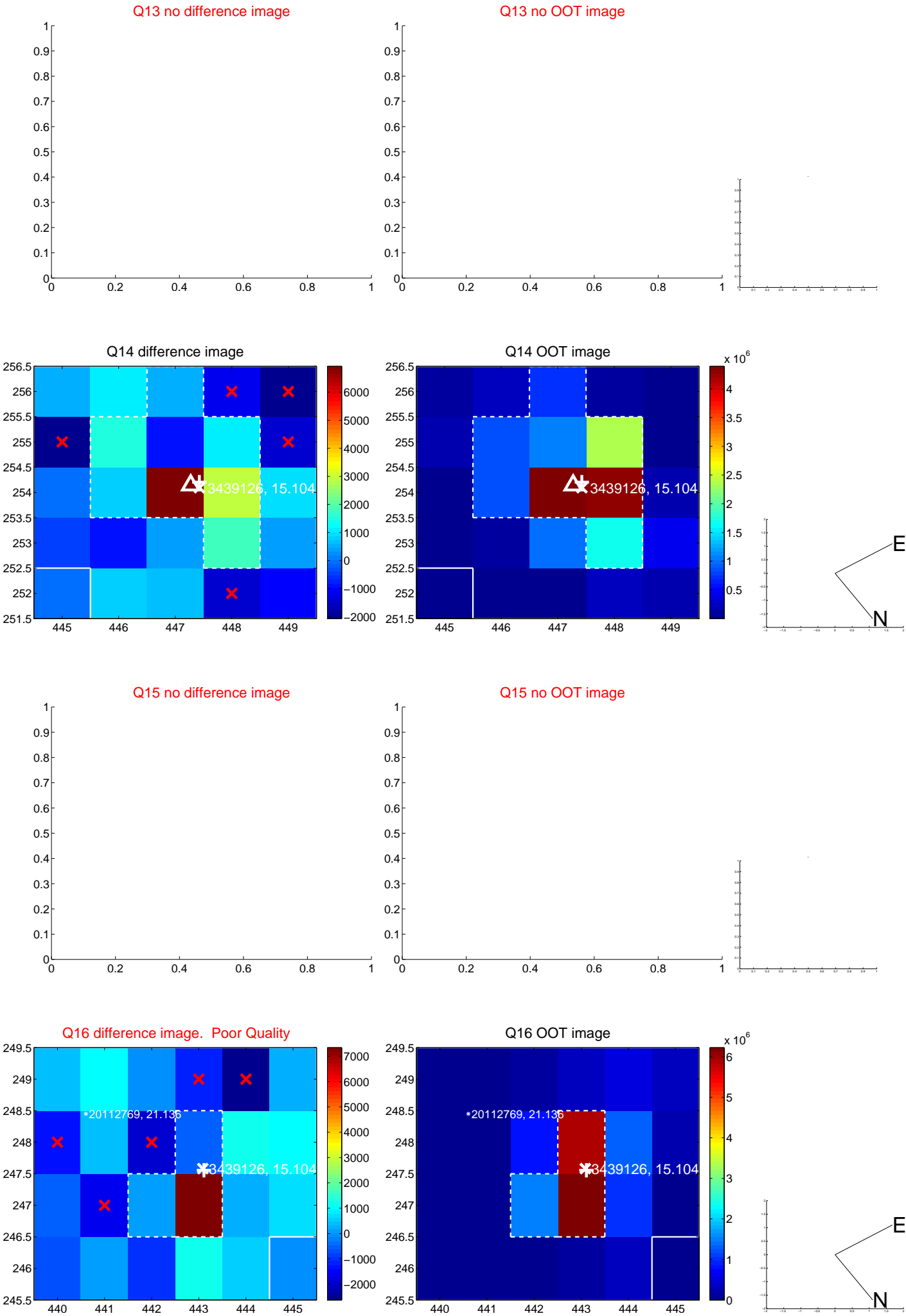
Q8 no OOT image



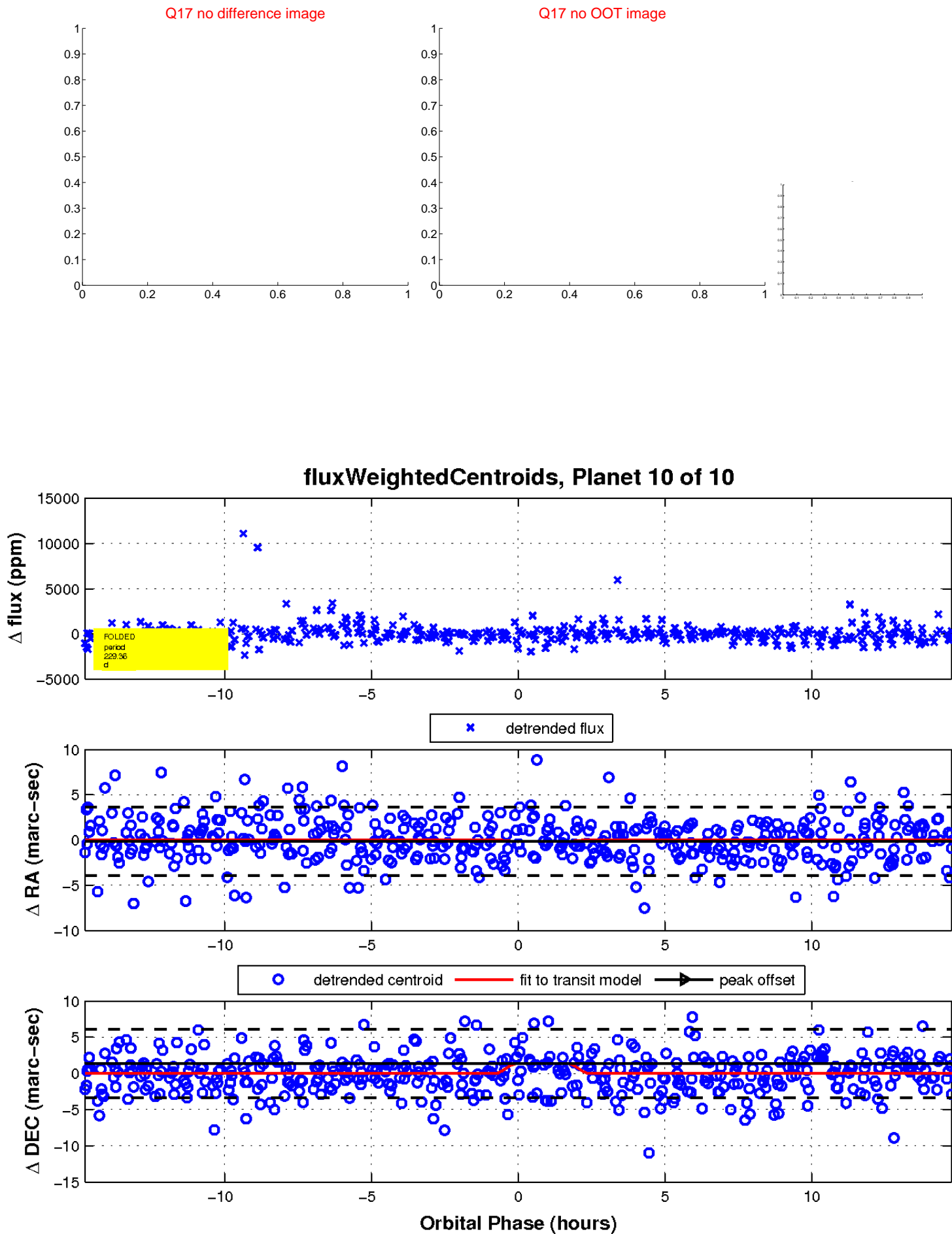
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

