

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})
010652379-01	OBS	No	3.314708	133.196939	56.4	6.019	11.1	12.3	2.65	6649	4.05	5104.19
010652379-02	OBS	No	3.314624	131.743175	34.5	5.989	10.9	10.5	2.65	6649	1.84	5104.36
010652379-03	OBS	No	3.314671	133.663432	19.7	14.851	10.8	6.4	2.65	6649	1.43	5104.26
010652379-04	OBS	No	78.280988	161.932625	205.4	7.495	16.9	9.7	2.65	6649	4.03	75.33
010652379-05	OBS	No	89.406597	199.428664	114.3	6.777	16.6	6.7	2.65	6649	3.33	63.10
010652379-06	OBS	No	1.656077	132.257770	43.0	1.724	11.7	7.0	2.65	6649	1.76	12874.97
010652379-07	OBS	No	88.846588	212.851630	207.0	10.888	8.4	9.1	2.65	6649	4.12	63.63
010652379-08	OBS	No	22.094042	141.525125	82.3	7.323	8.5	8.9	2.65	6649	2.78	406.90
010652379-09	OBS	No	106.495223	202.067155	176.6	6.010	8.2	8.4	2.65	6649	3.99	49.97
010652379-10	OBS	No	73.079893	200.304960	69.2	2.000	7.5	-1.0	2.65	6649	2.23	82.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010652379-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
010652379-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—TRANS_GAPPED—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010652379-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

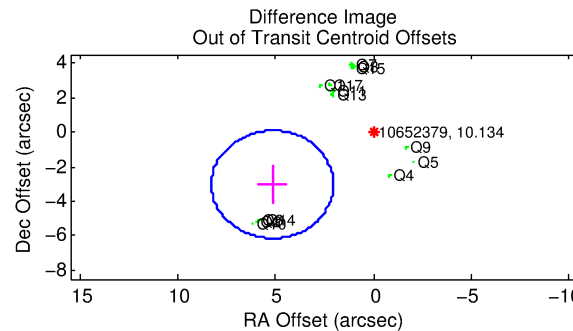
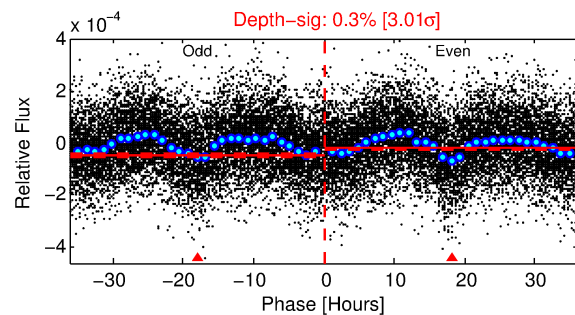
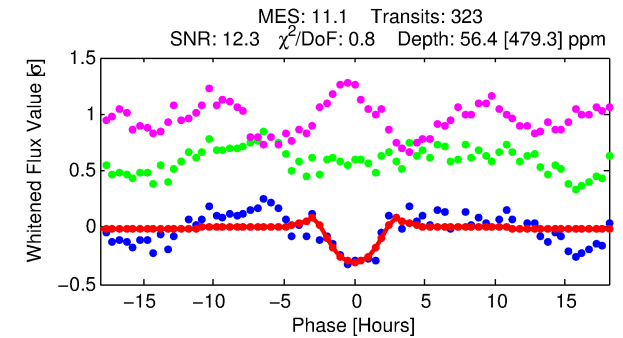
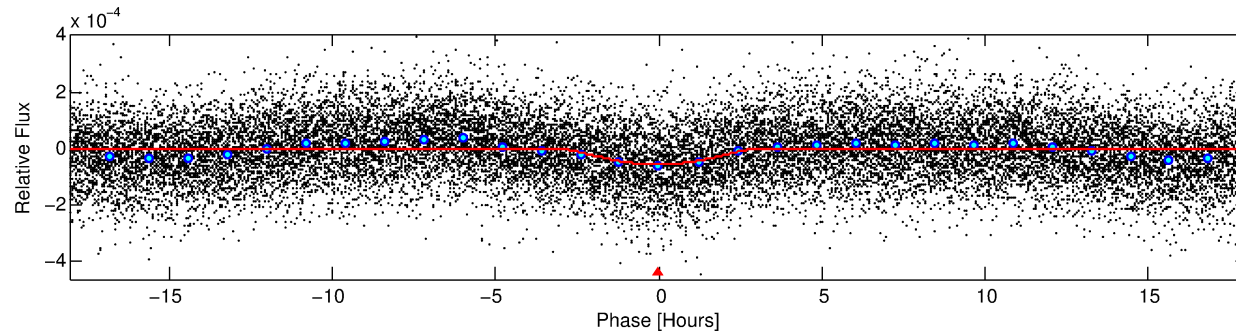
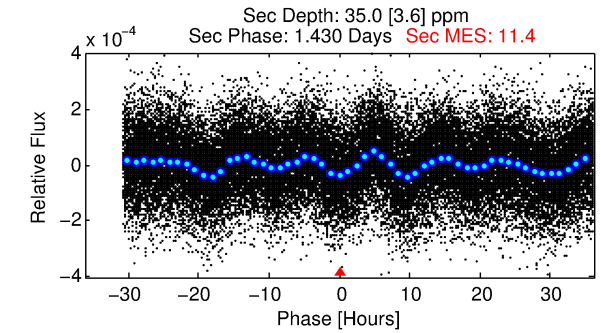
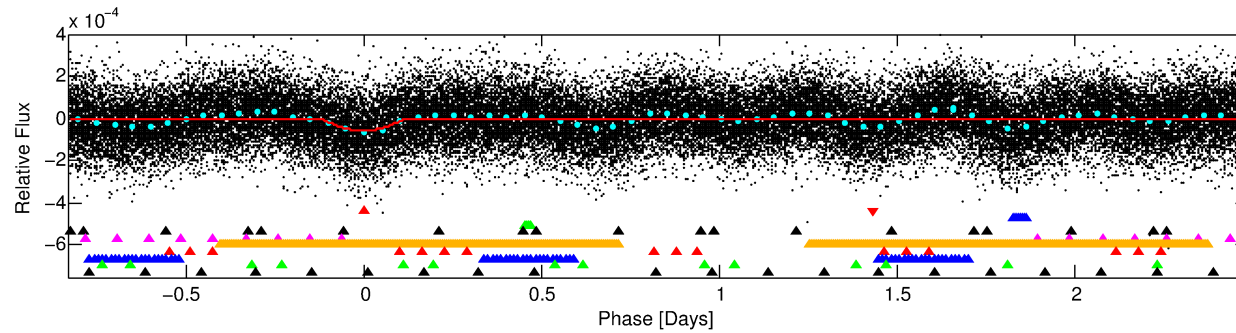
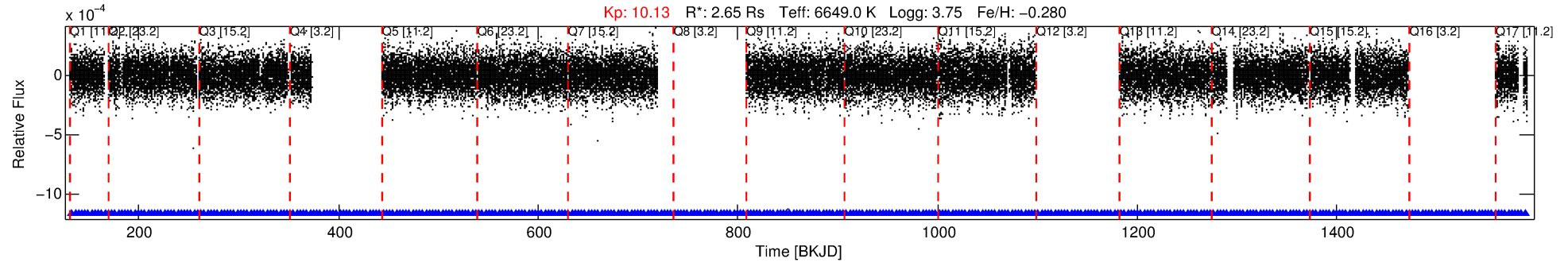
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010652379-01

No Significant Match Found

DV One-Page Summary

KIC: 10652379 Candidate: 1 of 10 Period: 3.315 d



DV Fit Results:

Period = 3.31471 [0.00003] d
Epoch = 133.1969 [0.0071] BKJD
Rp/R* = 0.0140 [0.0188]
a/R* = 1.23 [0.14]
b = 1.00 [0.06]
Seff = 5104.19 [2710.08]
Teq = 2155 [286] K
Rp = 4.05 [5.62] Re
a = 0.0492 [0.0160] AU
Ag = 2.83 [7.77] [0.24σ]
Teffp = 4323 [2912] K [0.74σ]

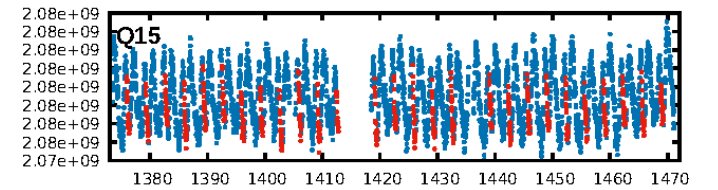
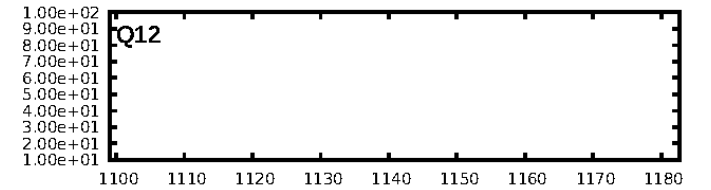
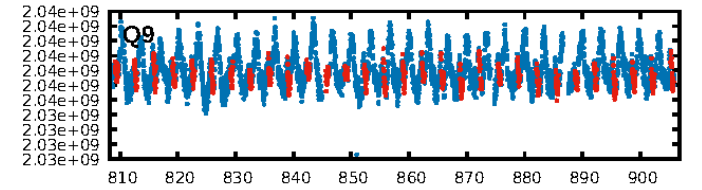
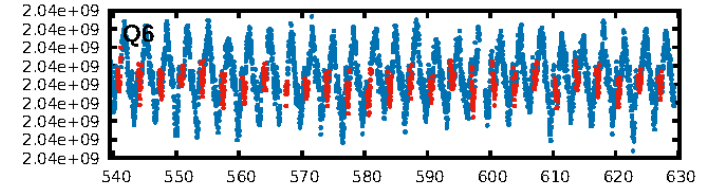
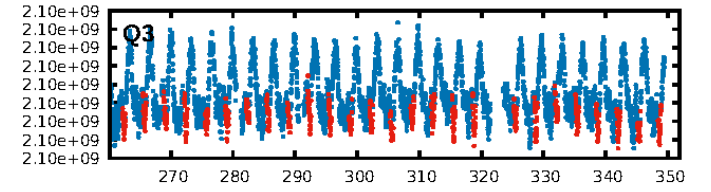
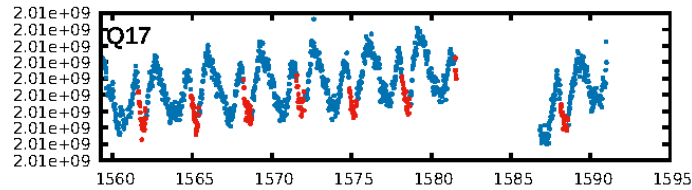
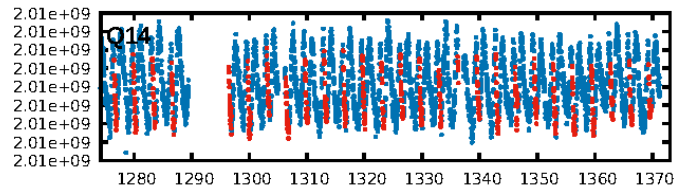
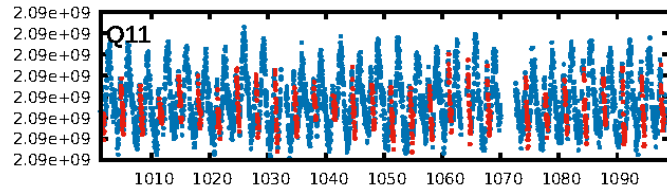
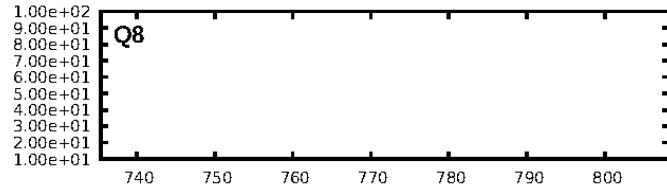
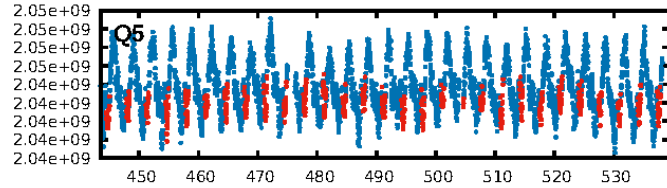
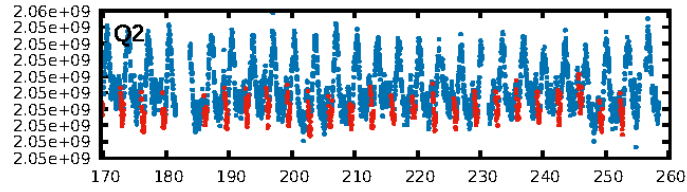
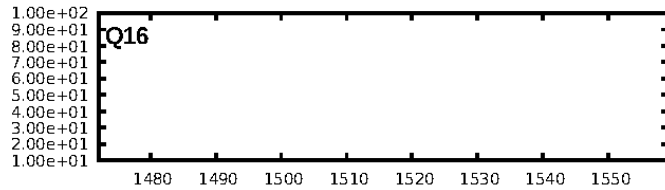
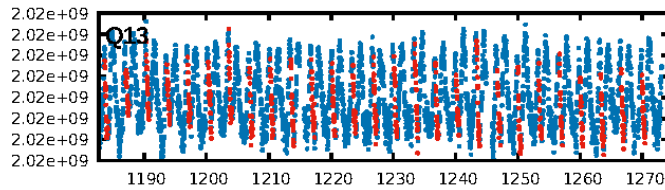
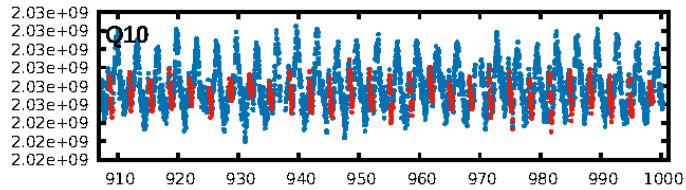
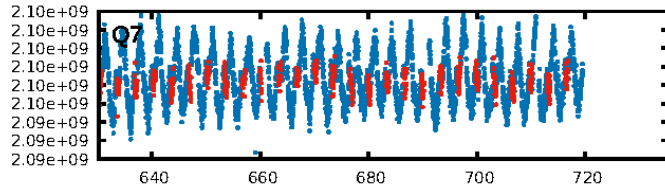
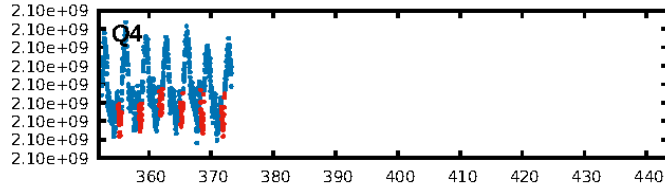
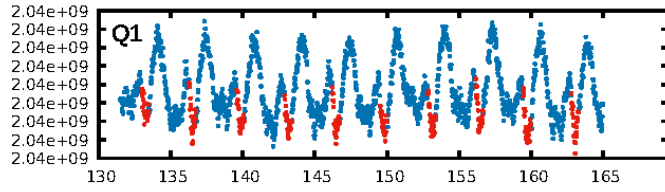
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 100.0% [47.55σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [300/300]
GhostDiagnostic-chr: N/A
Centroid-sig: 0.0%
Centroid-so: 1.530 arcsec [4.17σ]
OotOffset-rm: 5.994 arcsec [5.77σ]
KicOffset-rm: 4.736 arcsec [6.07σ]
OotOffset-st: 4/4/1/5 [14]
KicOffset-st: 4/4/1/5 [14]
DiffImageQuality-fgm: 0.00 [0/14]
DiffImageOverlap-fno: 0.00 [0/14]

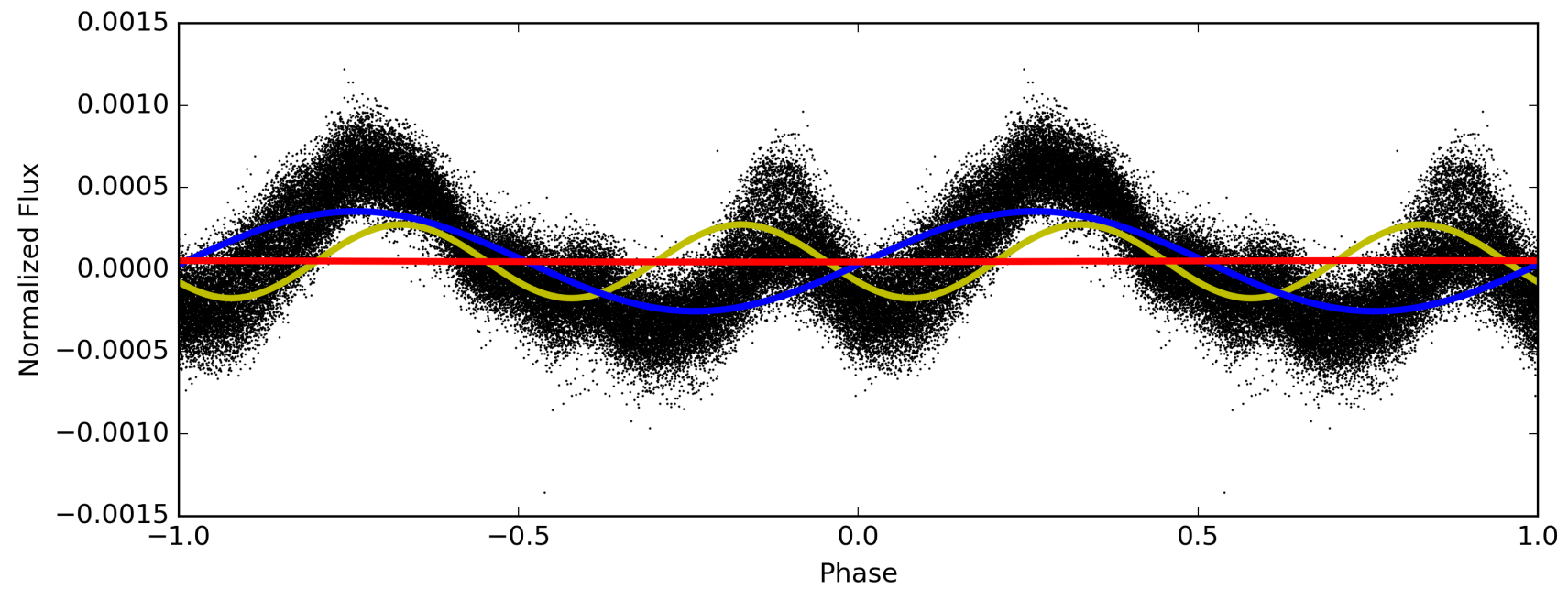
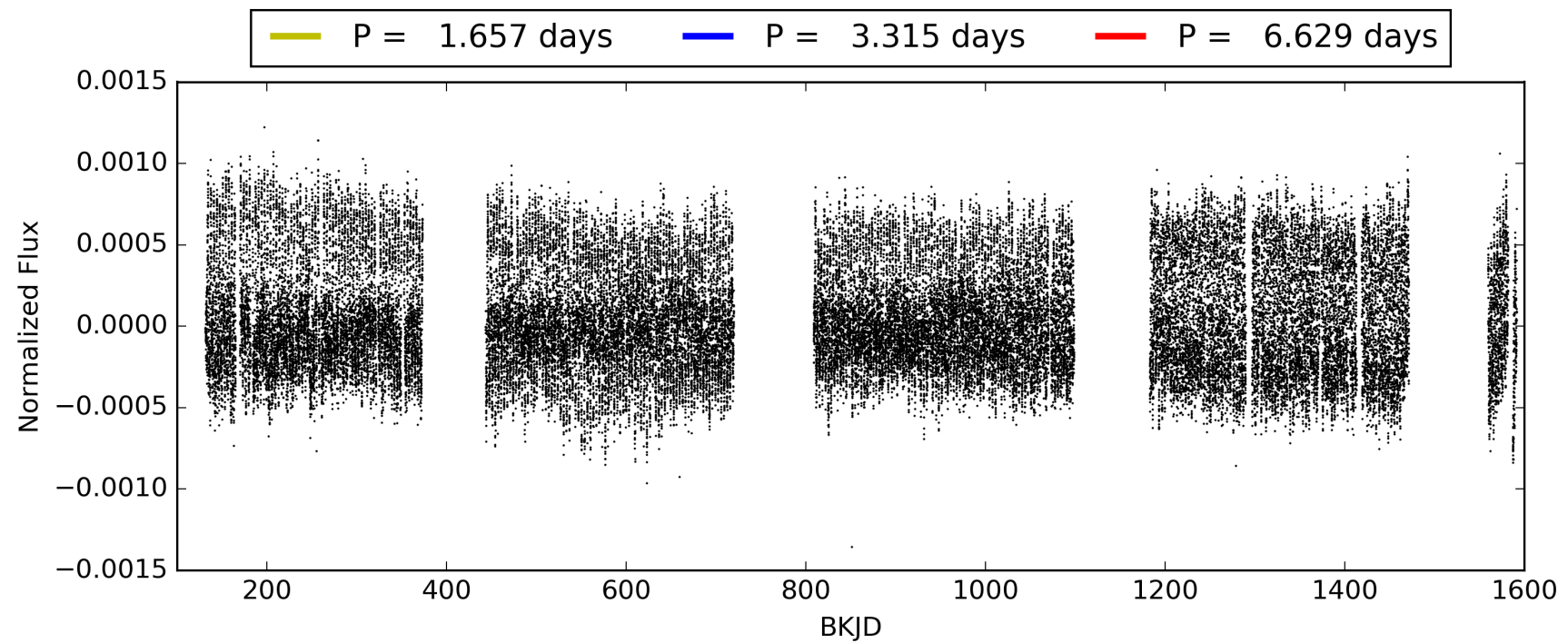
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:14:04 Z

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

TCE 010652379-01, PDC Light Curves

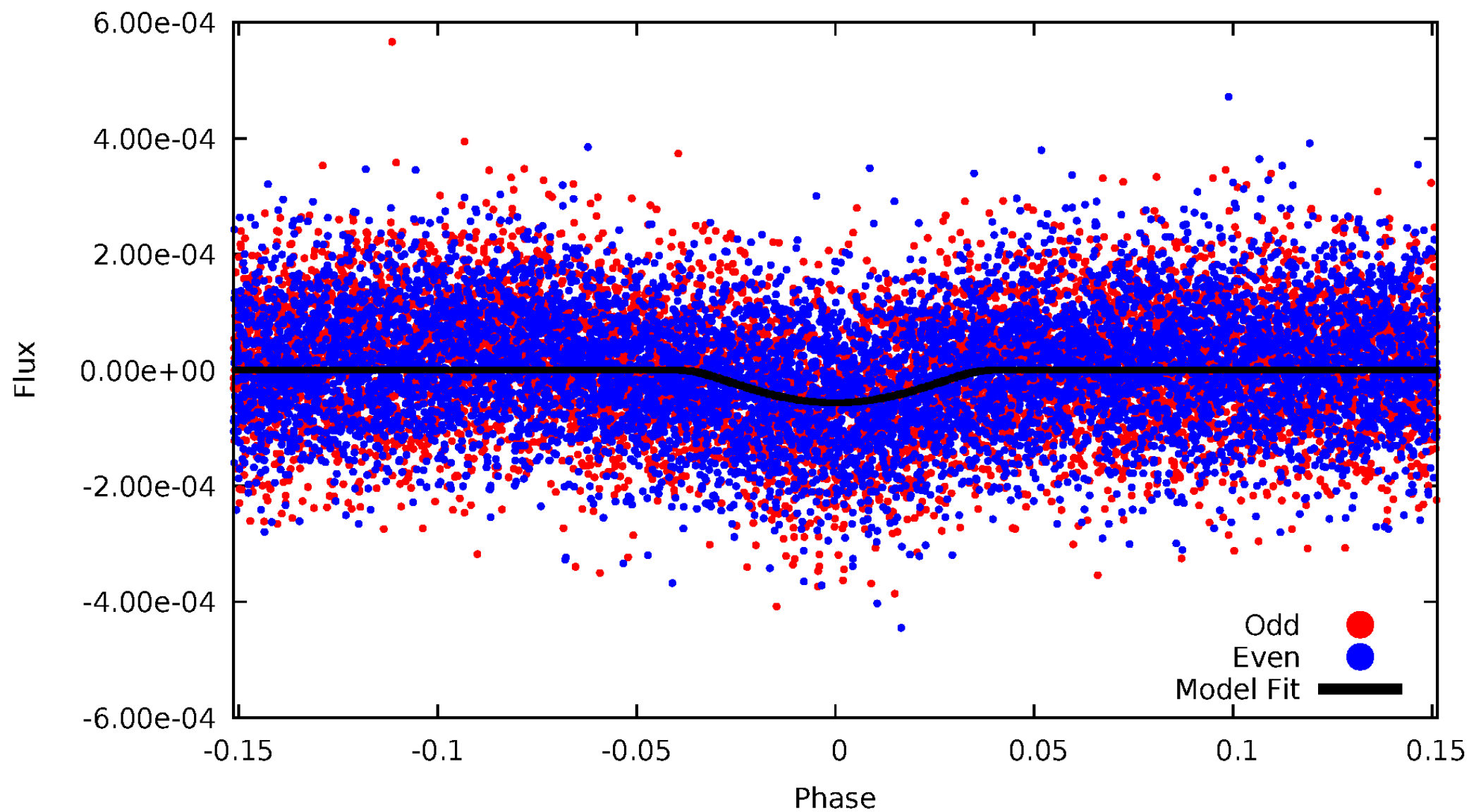


TCE 010652379-01



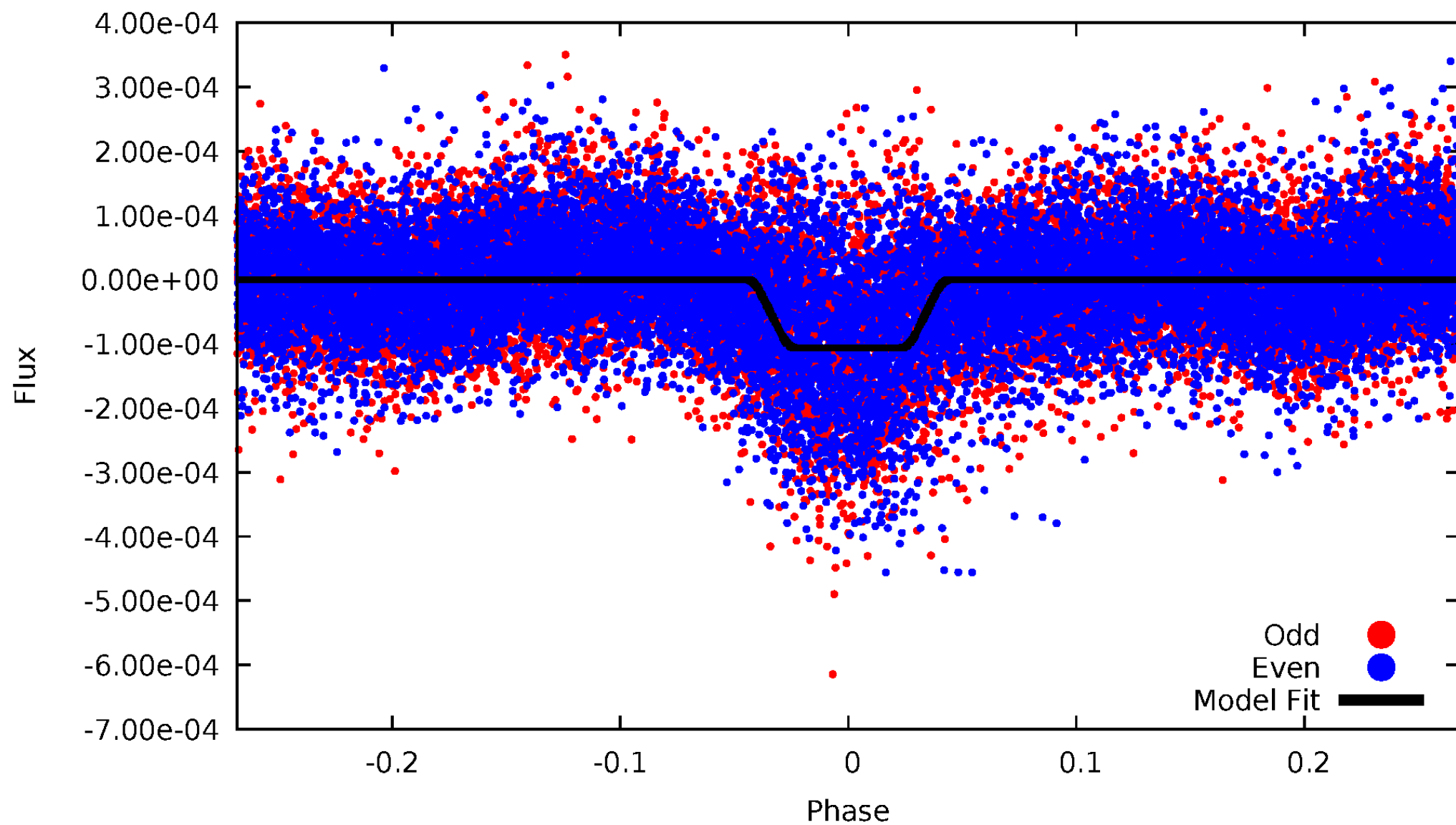
DV Odd/Even

TCE 010652379-01



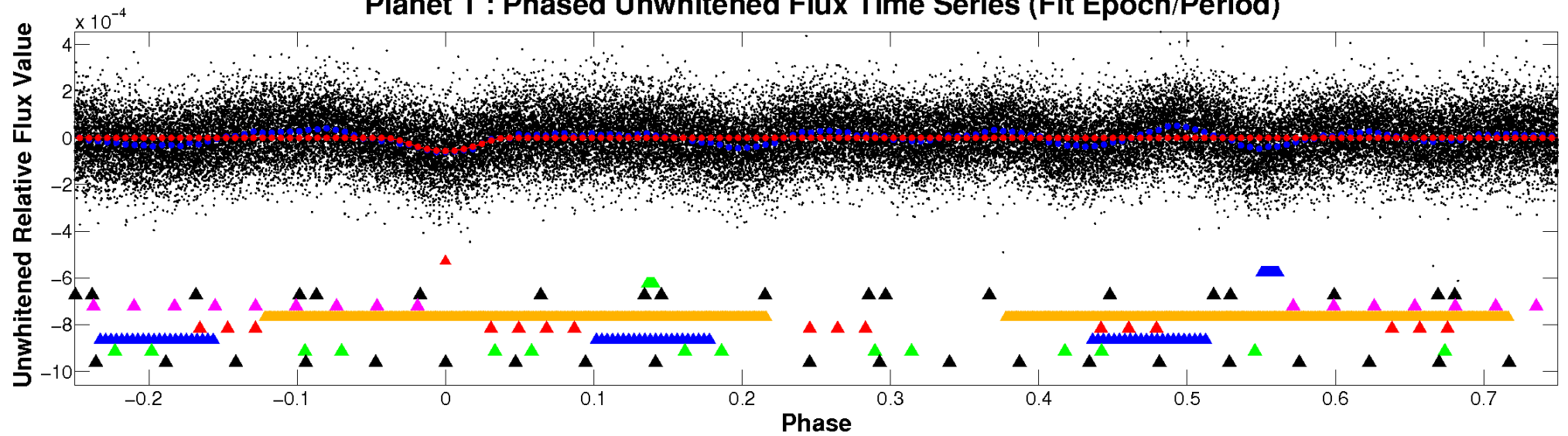
ALT Odd/Even

TCE 010652379-01

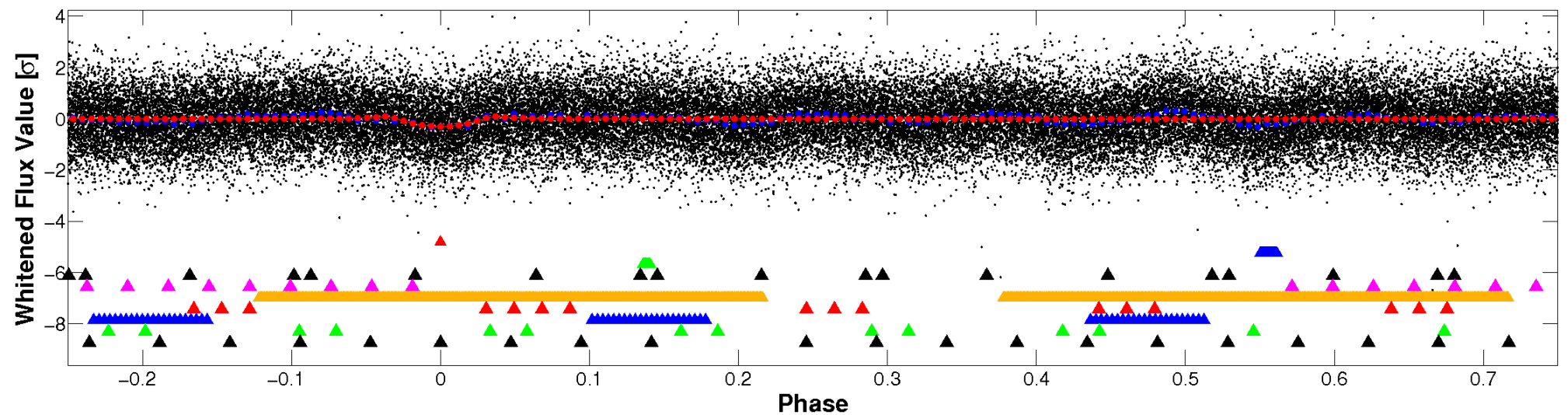


Non-Whitened Vs. Whitened Light Curve

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

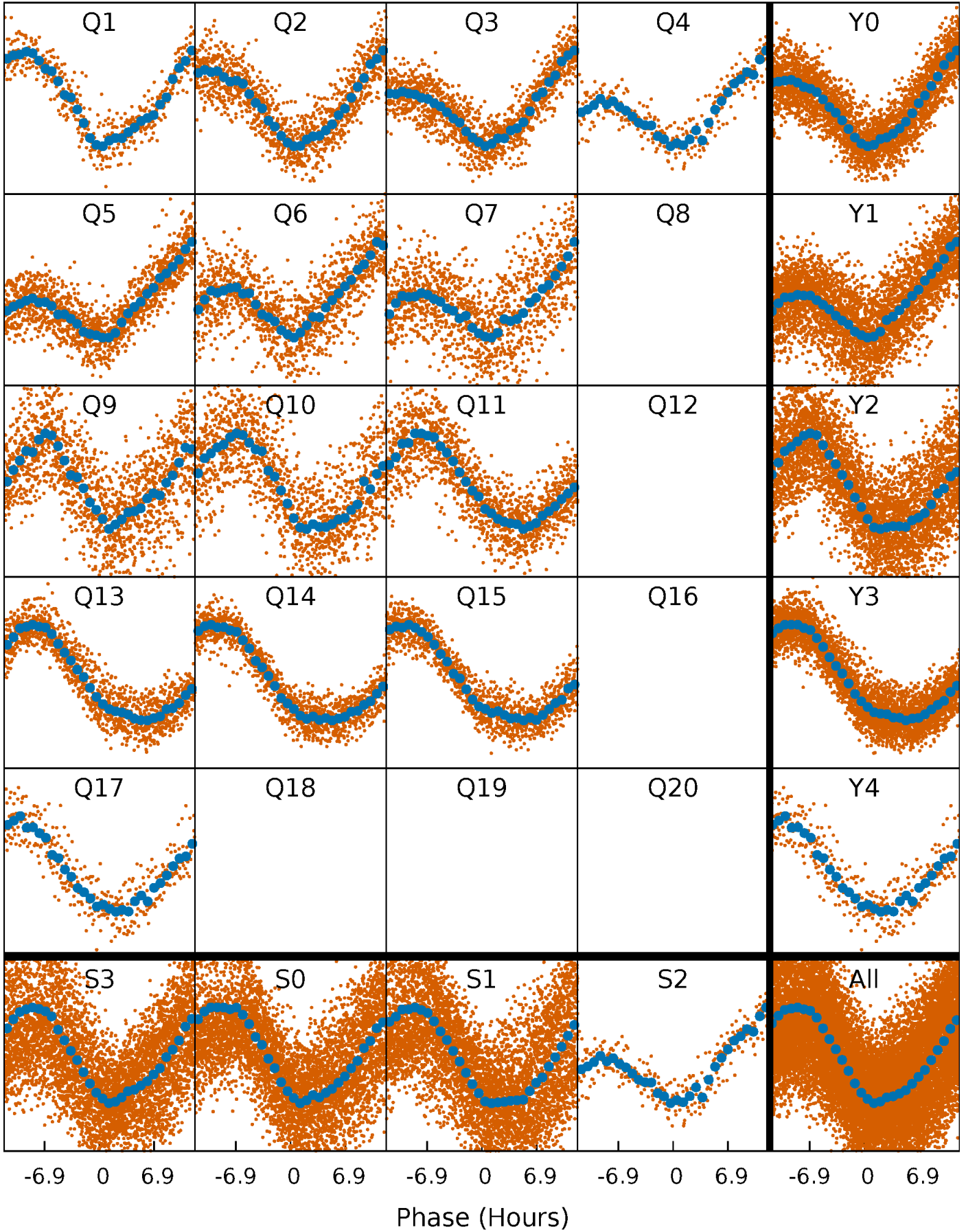


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



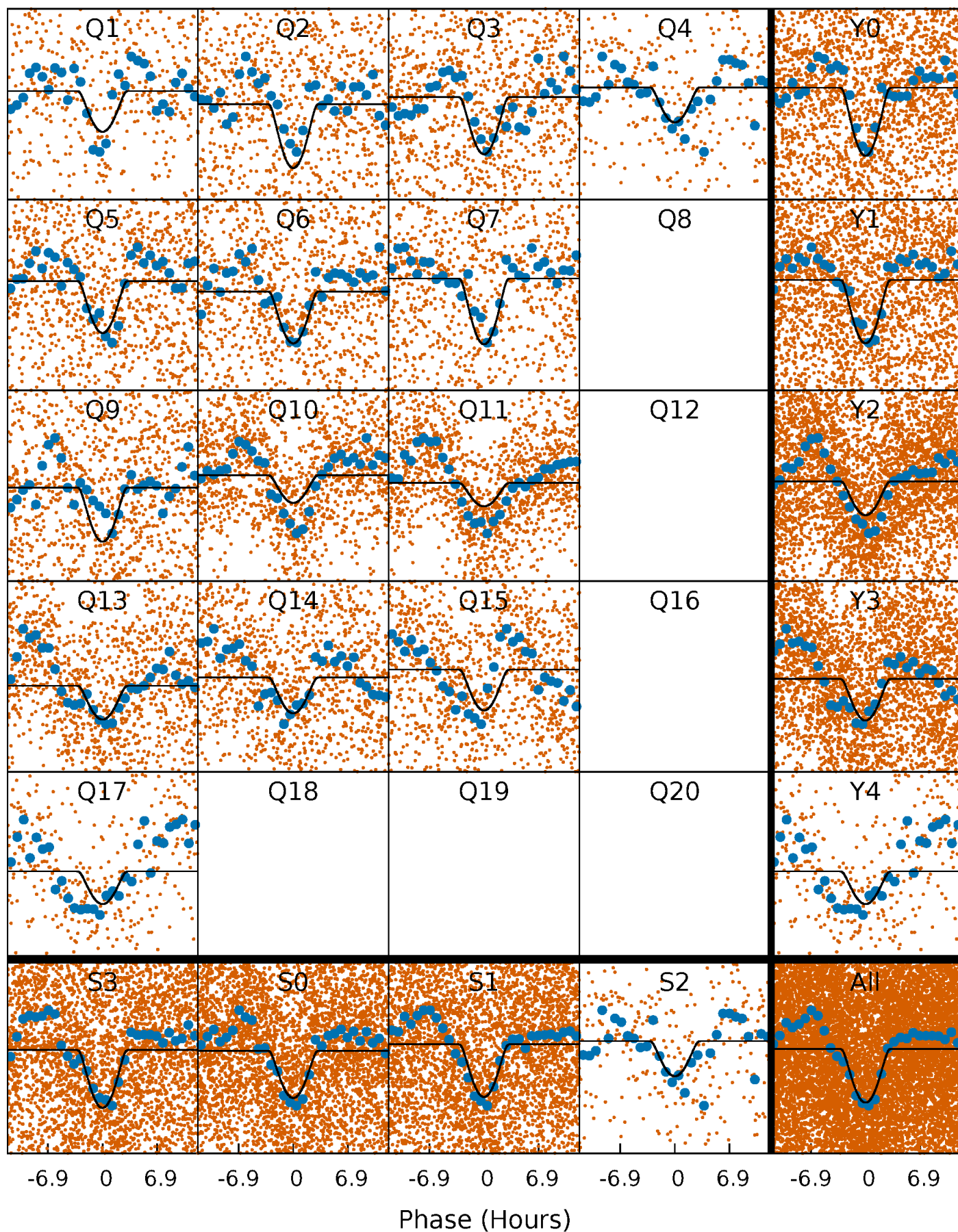
PDC Quarter-Phased Transit Curves

TCE 010652379-01 P= 3.314708 Days $T_0=133.196939$ (BKJD)



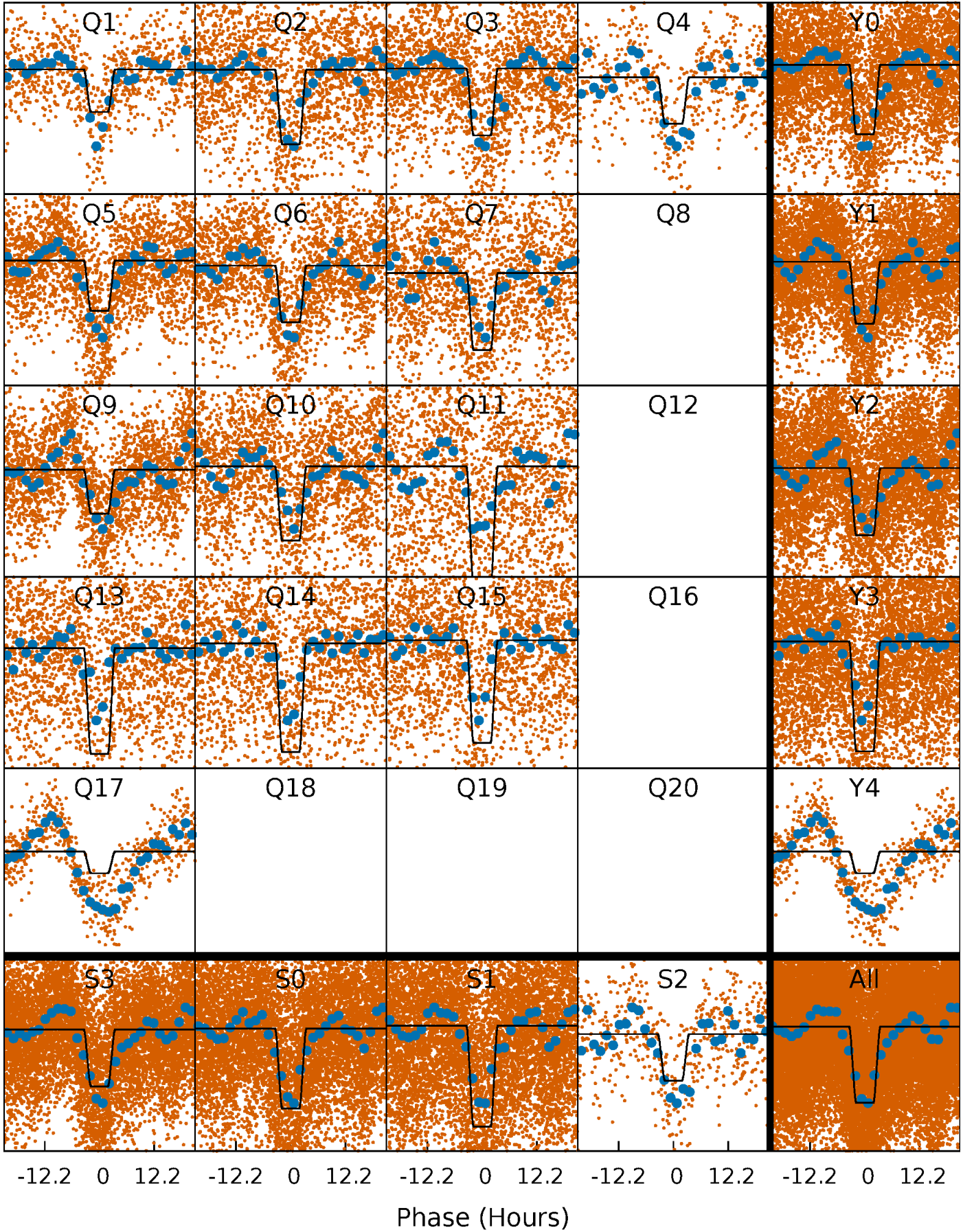
DV Quarter-Phased Transit Curves

TCE 010652379-01 P= 3.314708 Days $T_0=133.196939$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

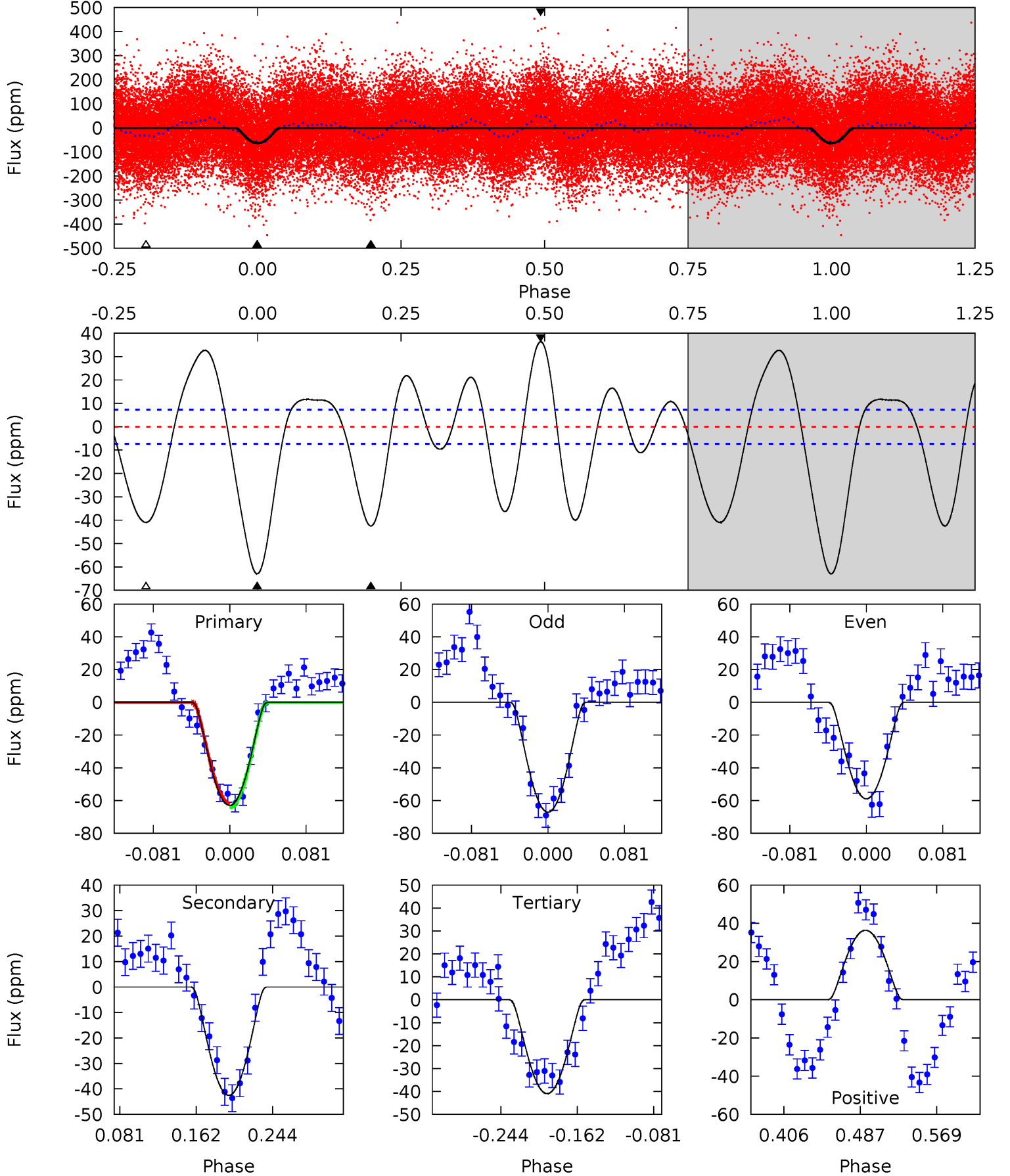
TCE 010652379-01 $P = 3.314715$ Days $T_0 = 133.202207$ (BKJD)



DV Model-Shift Uniqueness Test

010652379-01, P = 3.314708 Days, E = 129.882231 Days

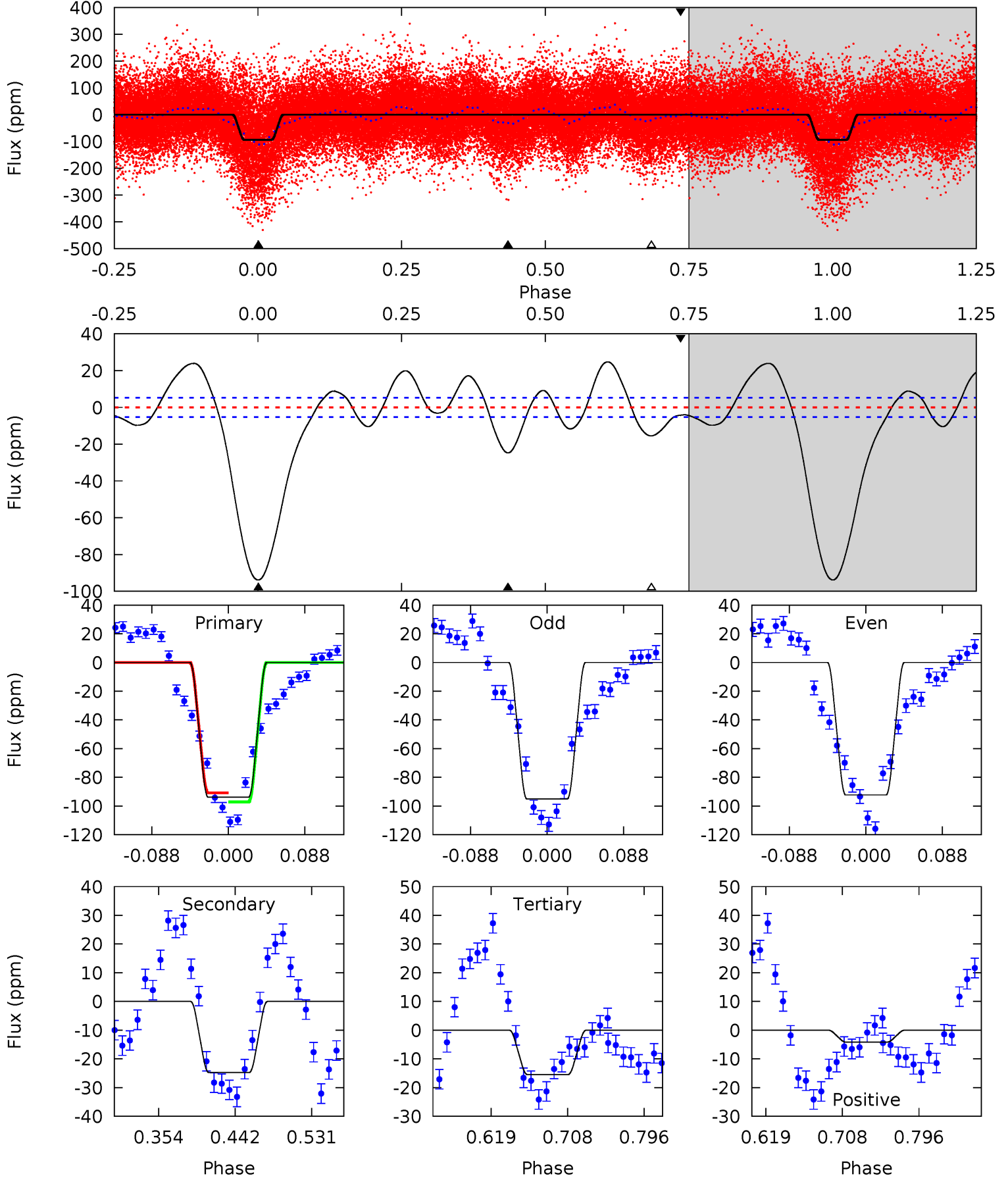
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
39.6	26.7	25.8	22.9	4.61	1.74	13.1	13.8	16.7	0.96	3.86	2.57	1.06	0.37	0.85



Alt Model-Shift Uniqueness Test

010652379-01, P = 3.314715 Days, E = 129.887492 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
81.8	21.6	13.5	-3.65	4.59	1.70	10.0	68.3	85.5	8.08	25.2	1.19	1.02	0.21	2.78



Stellar Parameters For KIC 010652379

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6649^{+166}_{-183}	$3.749^{+0.304}_{-0.095}$	$-0.280^{+0.300}_{-0.250}$	$2.654^{+0.489}_{-0.908}$	$1.443^{+0.264}_{-0.264}$	$0.109^{+0.209}_{-0.032}$
	+2%/-3%	+8%/-3%	+107%/-89%	+18%/-34%	+18%/-18%	+192%/-30%
Source	PHO1	FLK73	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 010652379-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-43 ± 2	$5.40^{+4.45}_{-3.45}$	2962^{+176}_{-265}	3957^{+2421}_{-895}	$1.919^{+12.279}_{-1.328}$
Alt.	-25 ± 1	$4.49^{+4.76}_{-2.97}$	2953^{+176}_{-259}	3807^{+2450}_{-1250}	$1.618^{+13.649}_{-1.241}$

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 $A_{obs} \gg 1.0$

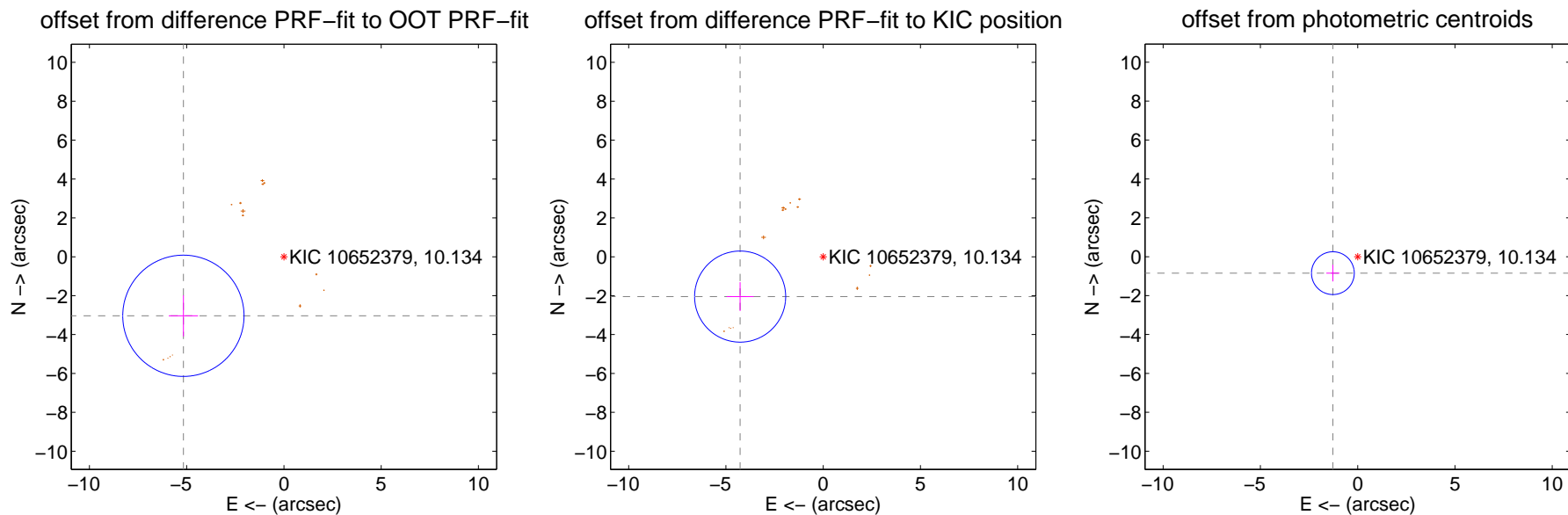
DV Centroid Data

Supplemental centroid analysis for 010652379-01. **Kepler magnitude: 10.13.** Transit SNR 12.34

There are 0 quarters with good PRF difference image offsets

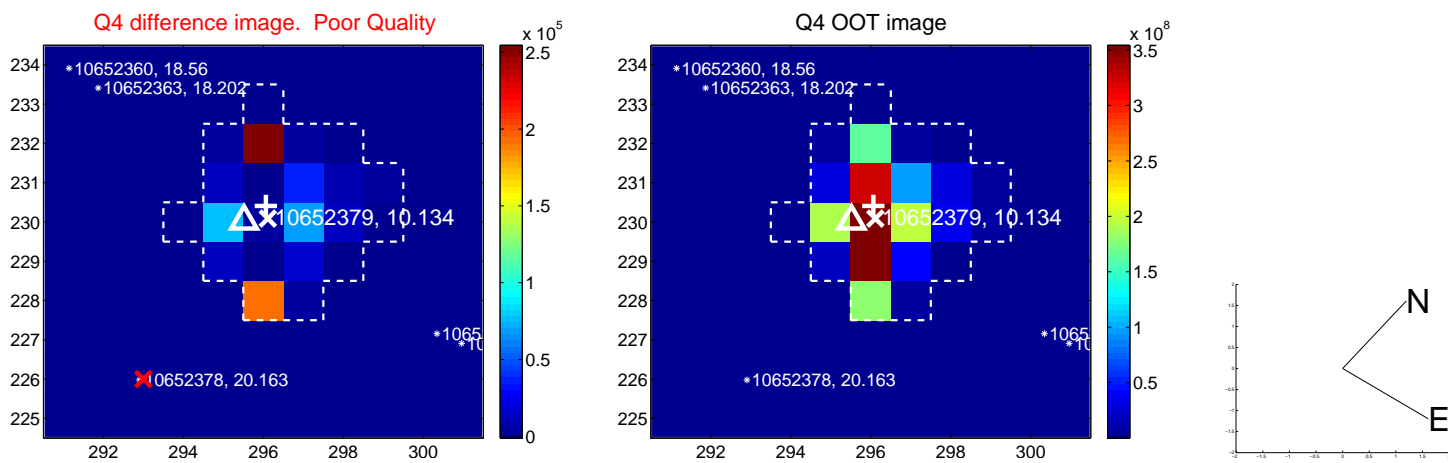
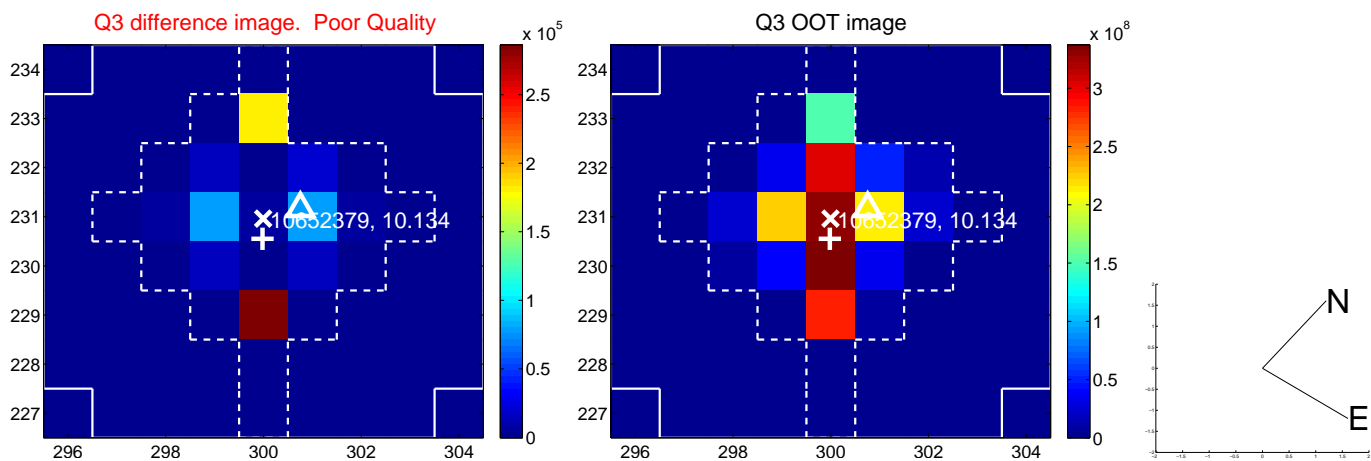
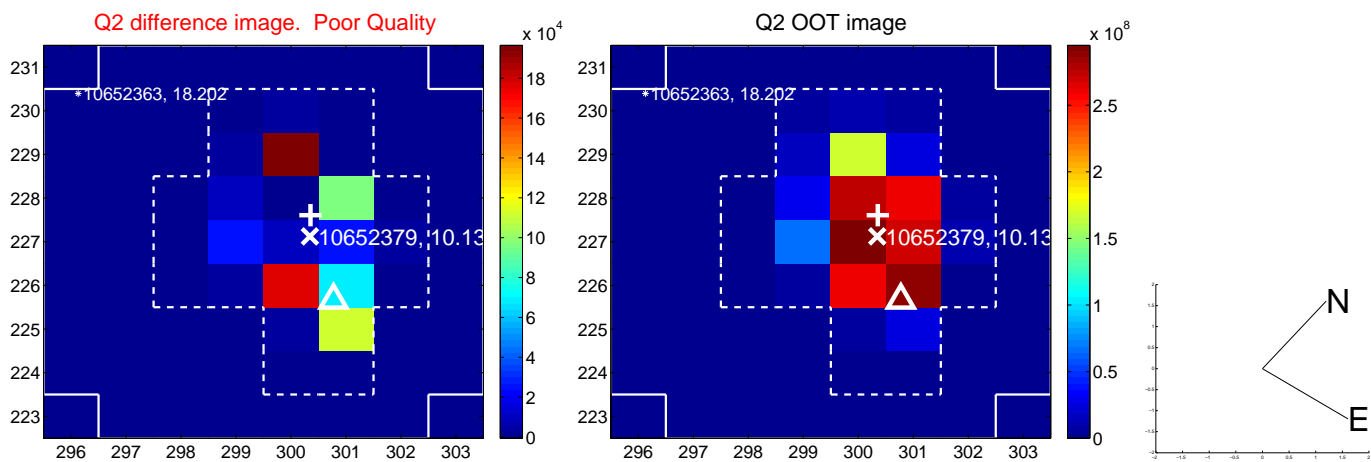
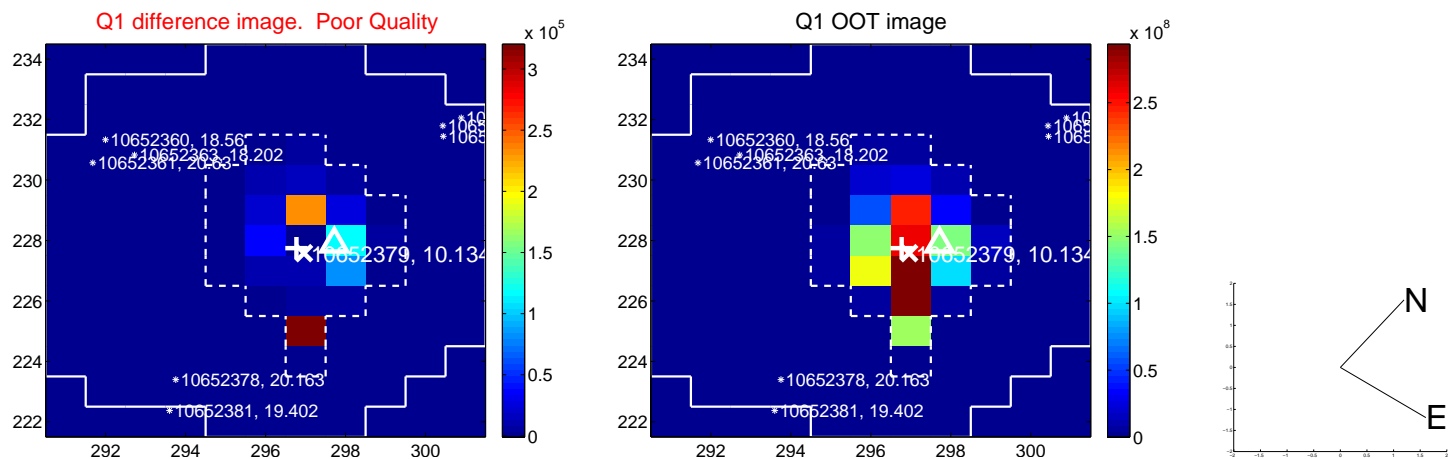
The direct PRF centroid is offset from the target star catalog position by about 1.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.994 ± 1.039	5.77	5.169 ± 0.752	-3.035 ± 1.055
PRF-fit source offset from KIC position	4.736 ± 0.781	6.07	4.271 ± 0.691	-2.048 ± 0.740
photometric centroid source offset	1.53 ± 0.37	4.17	1.27 ± 0.34	-0.85 ± 0.43

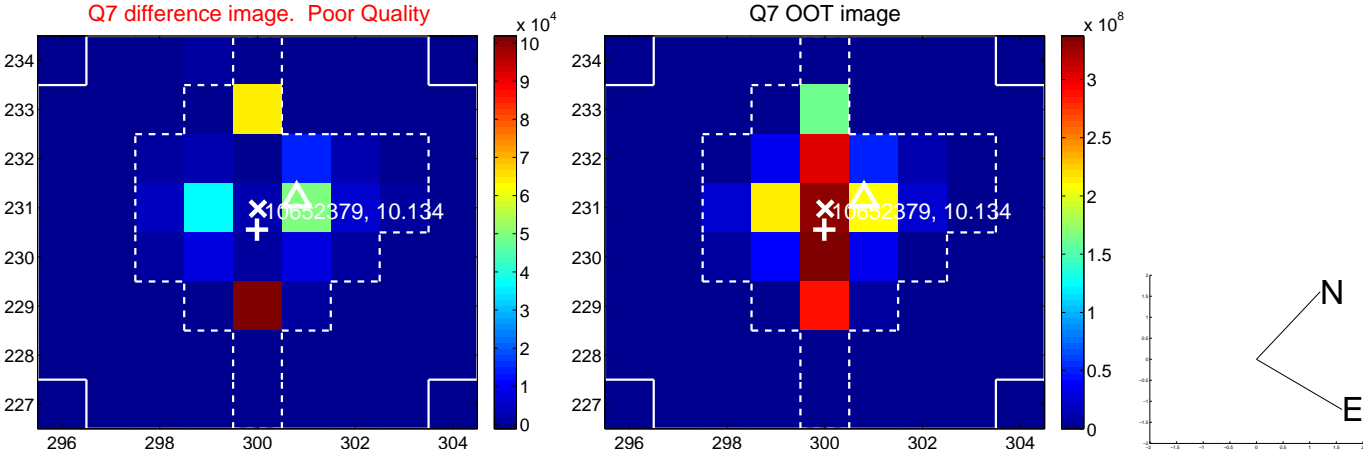
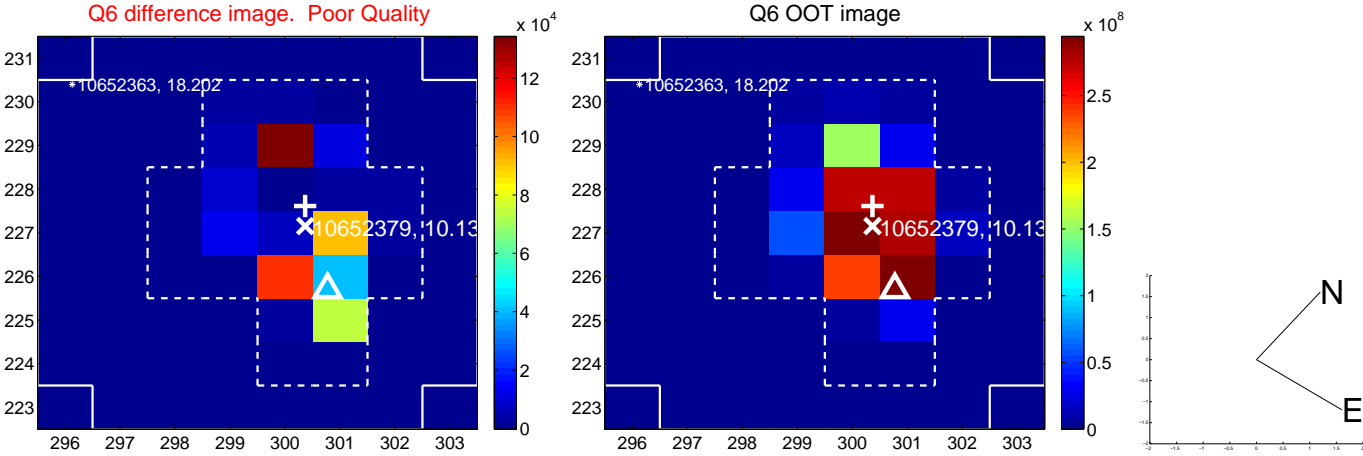
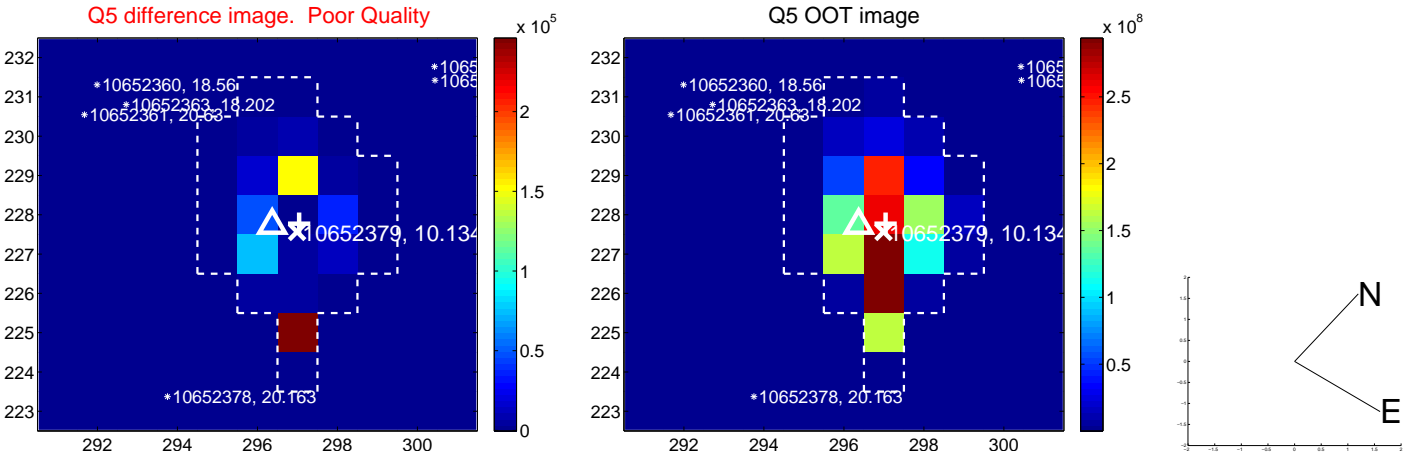


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

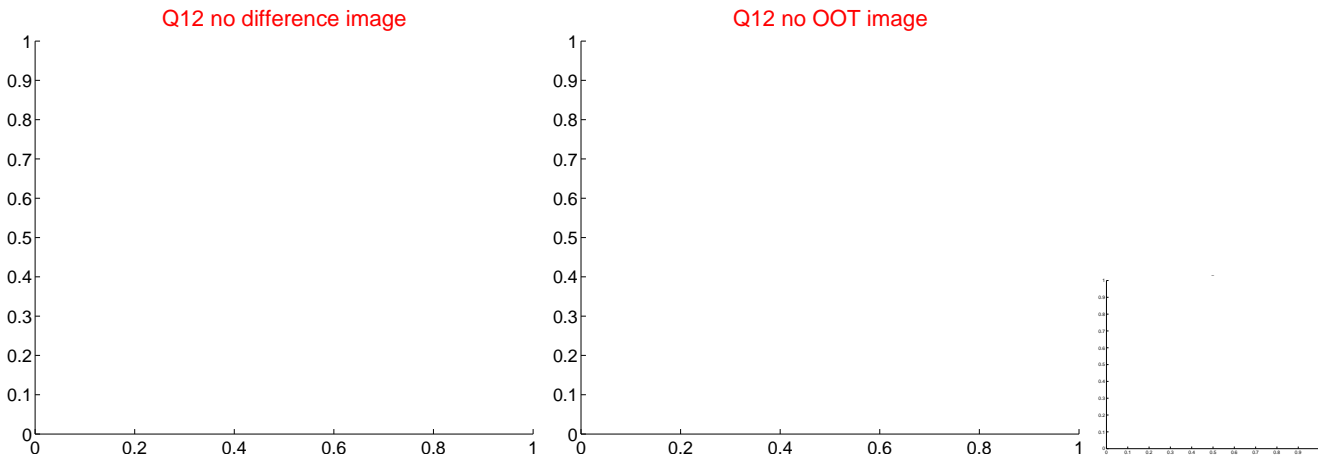
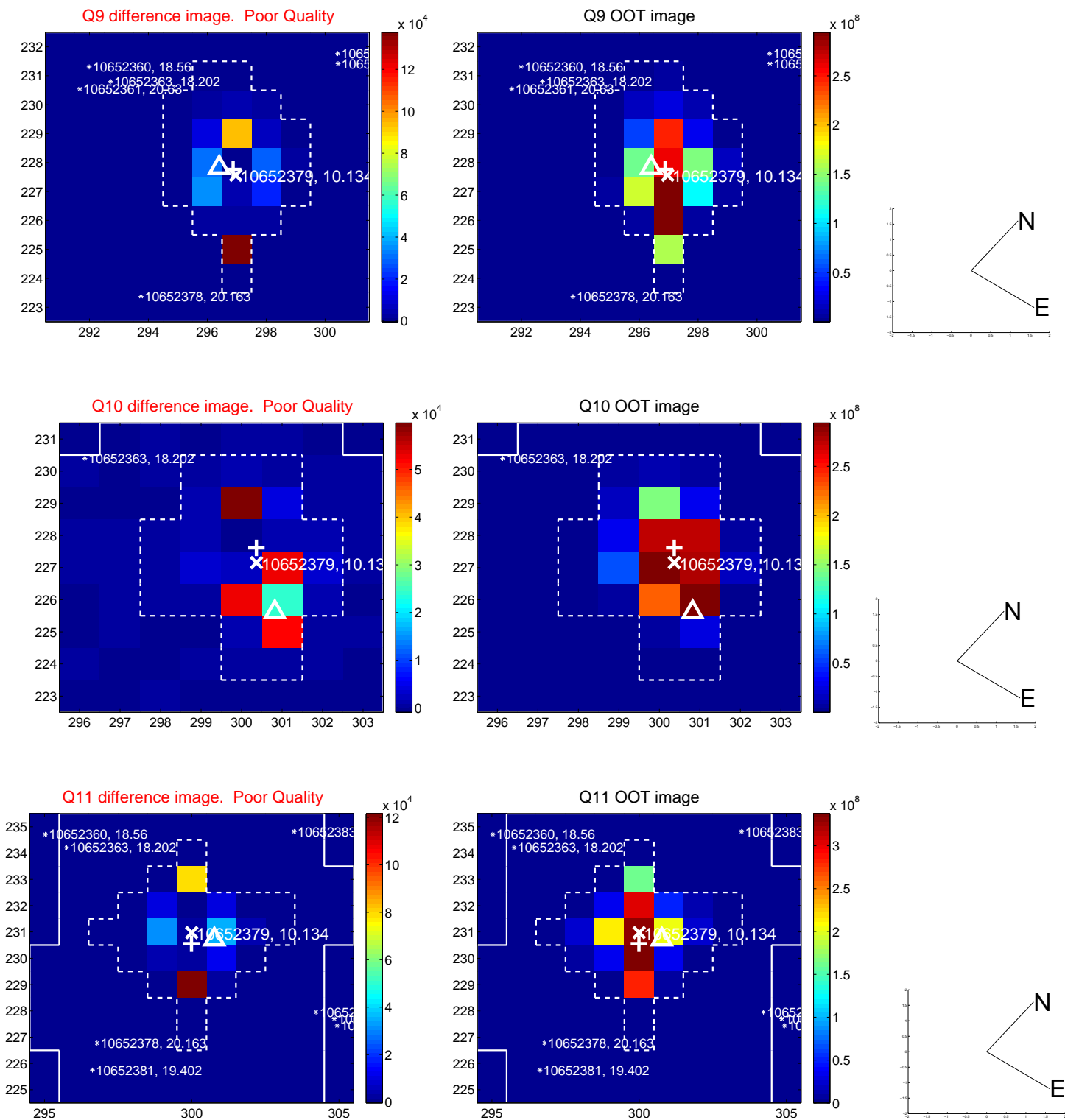
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



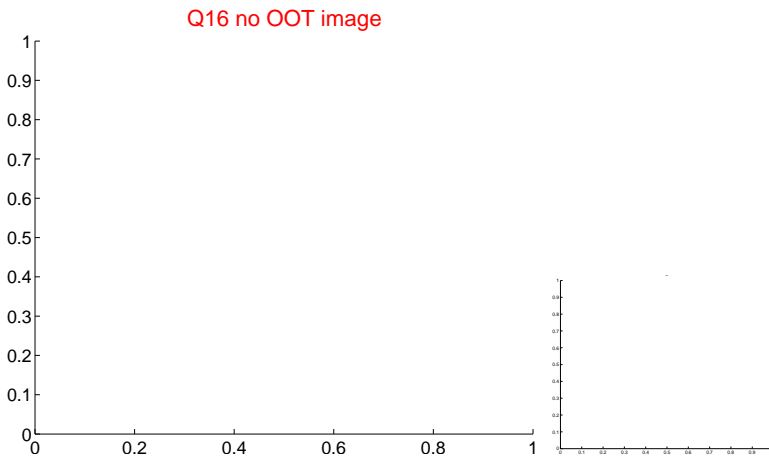
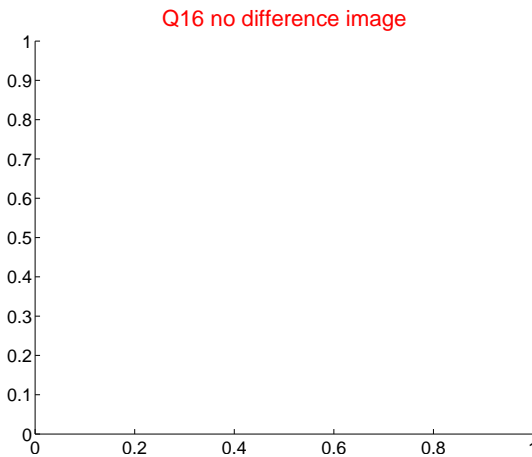
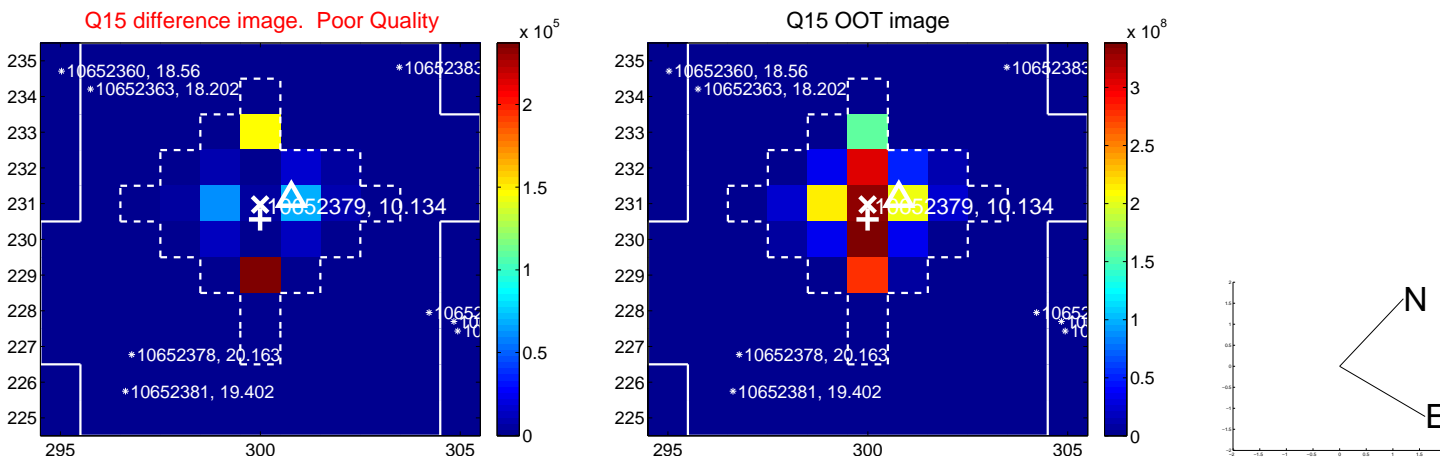
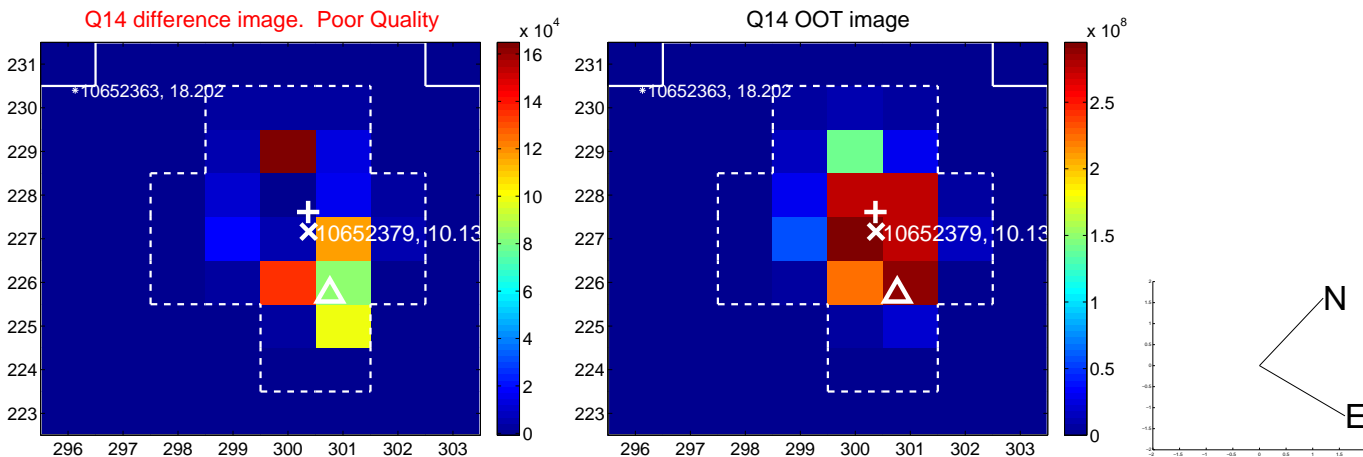
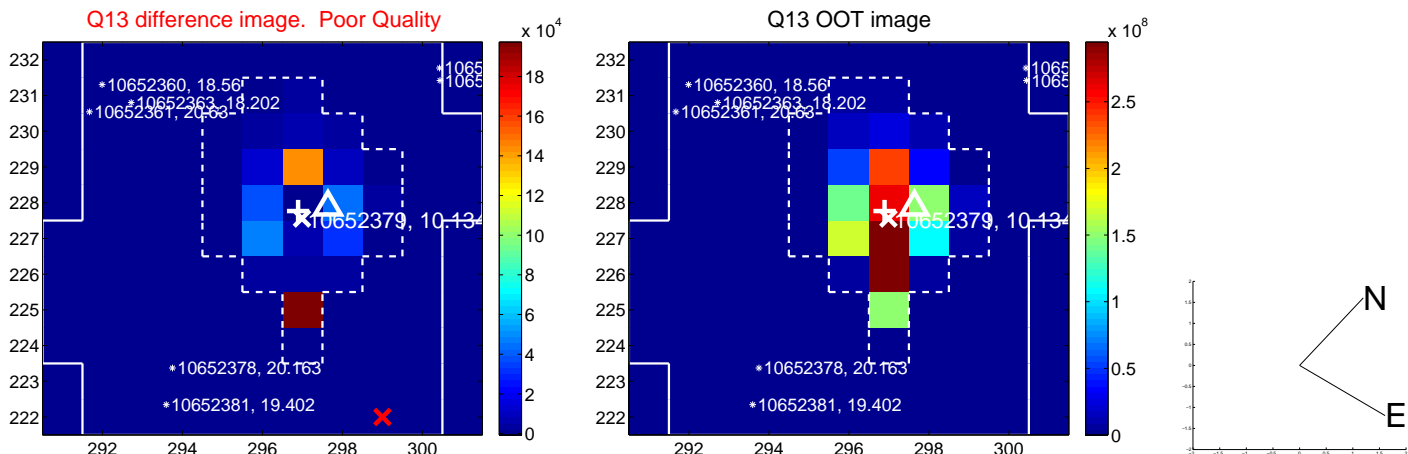
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



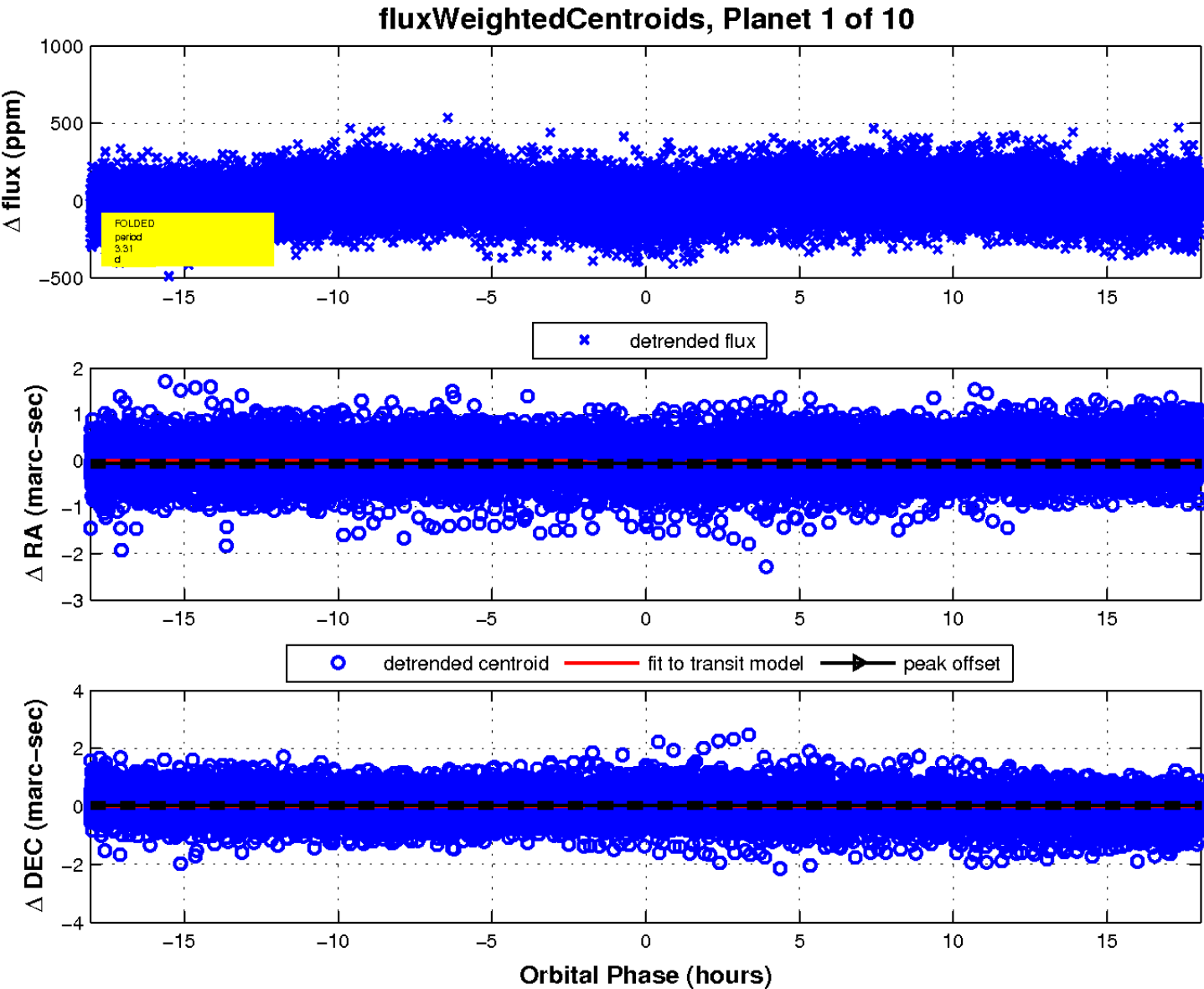
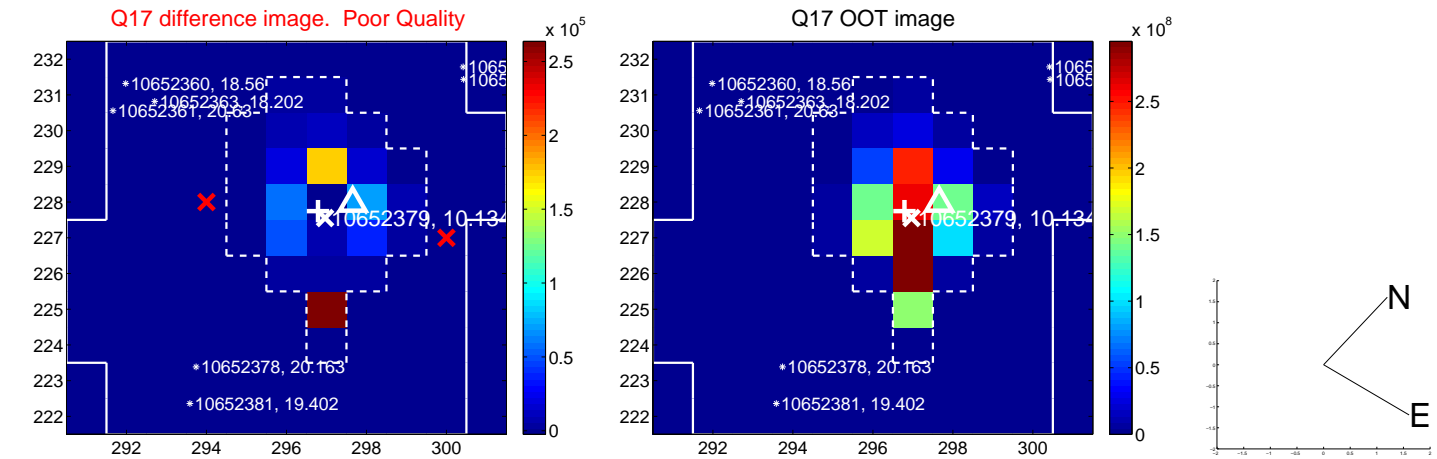
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



This plot does not exist for this TCE.

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})
010652379-01	OBS	No	3.314708	133.196939	56.4	6.019	11.1	12.3	2.65	6649	4.05	5104.19
010652379-02	OBS	No	3.314624	131.743175	34.5	5.989	10.9	10.5	2.65	6649	1.84	5104.36
010652379-03	OBS	No	3.314671	133.663432	19.7	14.851	10.8	6.4	2.65	6649	1.43	5104.26
010652379-04	OBS	No	78.280988	161.932625	205.4	7.495	16.9	9.7	2.65	6649	4.03	75.33
010652379-05	OBS	No	89.406597	199.428664	114.3	6.777	16.6	6.7	2.65	6649	3.33	63.10
010652379-06	OBS	No	1.656077	132.257770	43.0	1.724	11.7	7.0	2.65	6649	1.76	12874.97
010652379-07	OBS	No	88.846588	212.851630	207.0	10.888	8.4	9.1	2.65	6649	4.12	63.63
010652379-08	OBS	No	22.094042	141.525125	82.3	7.323	8.5	8.9	2.65	6649	2.78	406.90
010652379-09	OBS	No	106.495223	202.067155	176.6	6.010	8.2	8.4	2.65	6649	3.99	49.97
010652379-10	OBS	No	73.079893	200.304960	69.2	2.000	7.5	-1.0	2.65	6649	2.23	82.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010652379-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
010652379-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—TRANS_GAPPED—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010652379-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

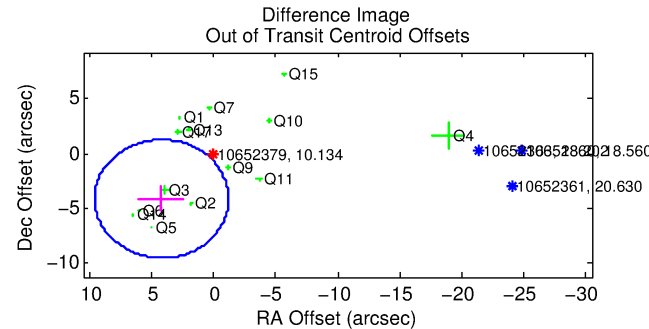
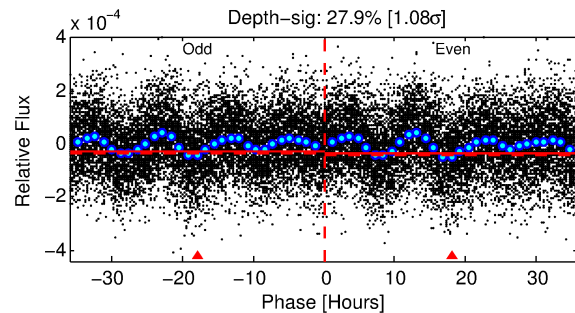
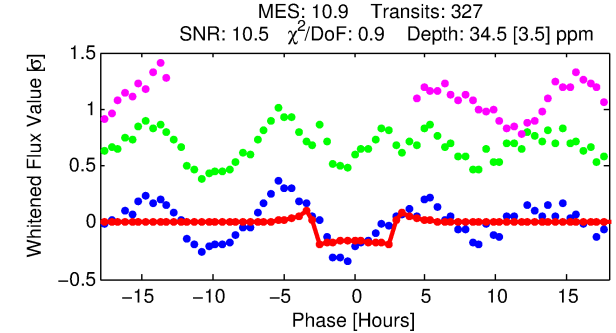
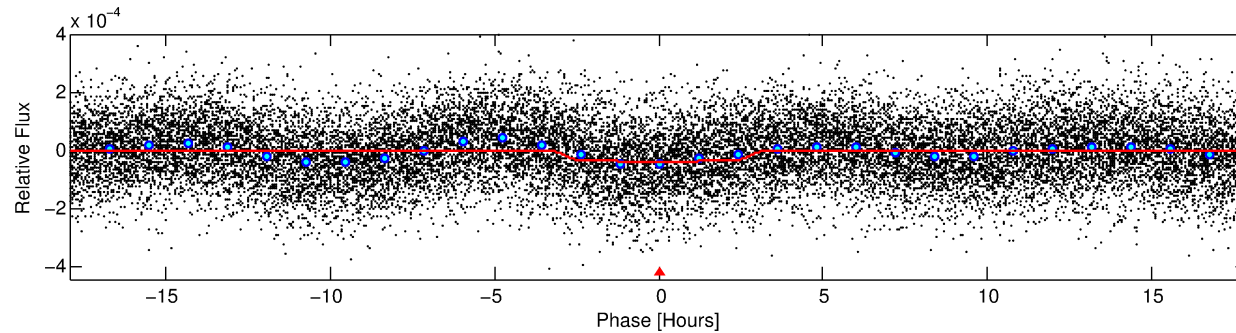
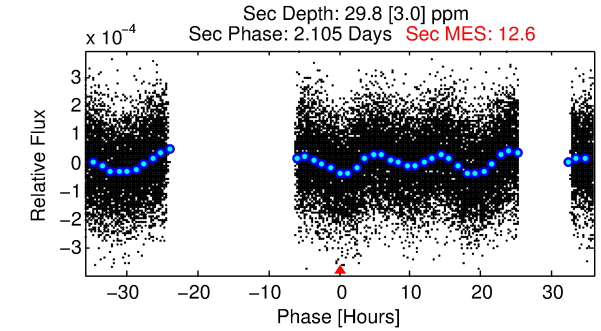
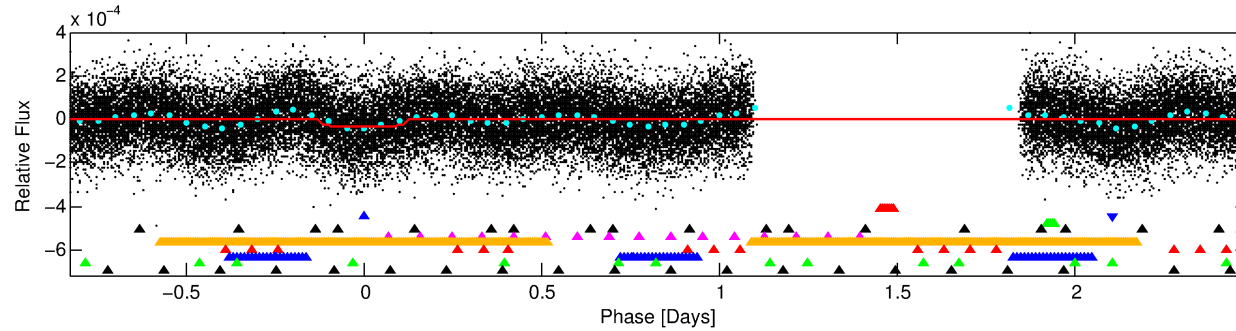
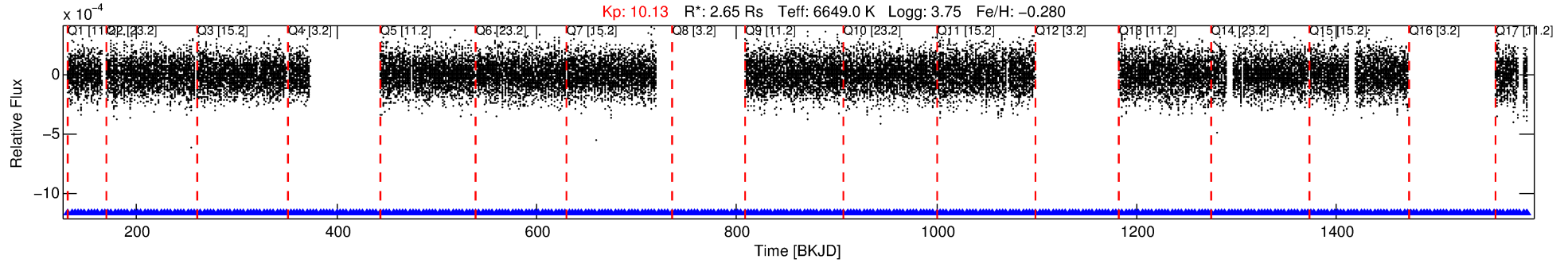
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010652379-02

No Significant Match Found

DV One-Page Summary

KIC: 10652379 Candidate: 2 of 10 Period: 3.315 d



DV Fit Results:

Period = 3.31462 [0.00002] d
Epoch = 131.7432 [0.0033] BKJD
Rp/R* = 0.0064 [0.0009]
a/R* = 2.00 [1.23]
b = 0.92 [0.15]
Seff = 5104.36 [2710.18]
Teq = 2155 [286] K
Rp = 1.84 [0.69] Re
a = 0.0492 [0.0160] AU
Ag = 11.72 [7.10] [1.51σ]
Teffp = 6166 [510] K [6.86σ]

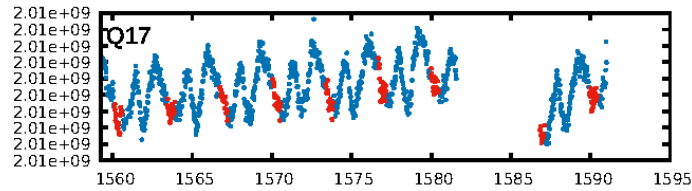
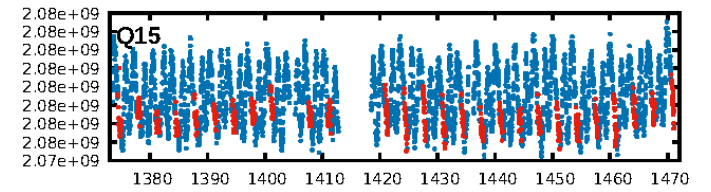
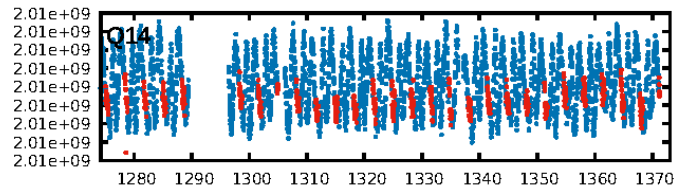
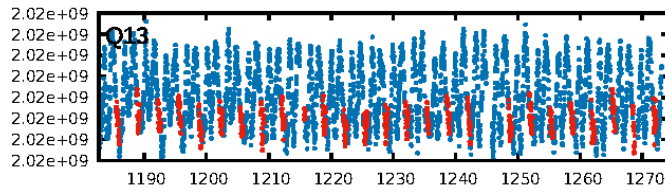
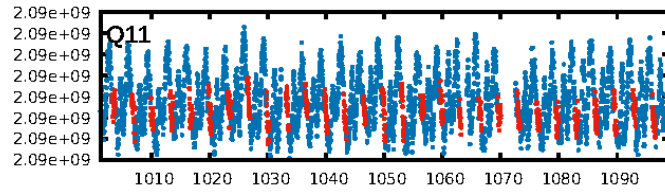
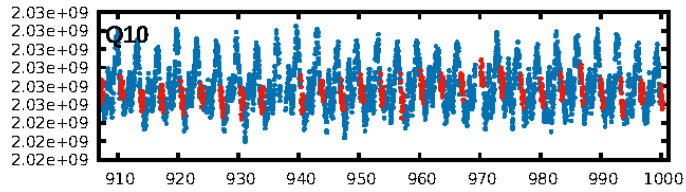
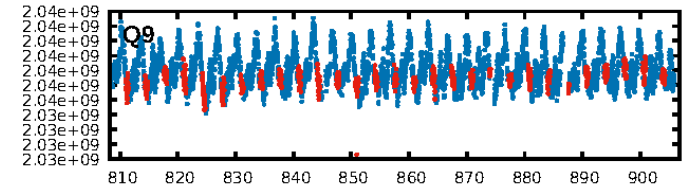
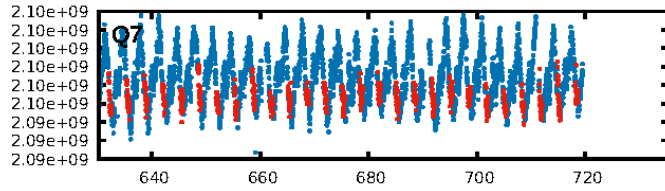
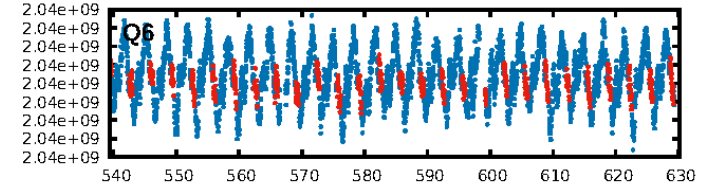
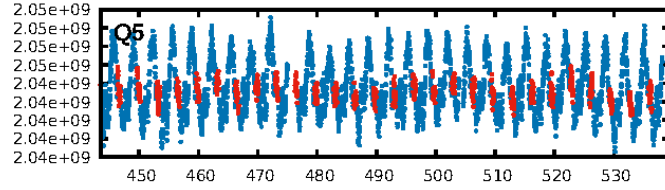
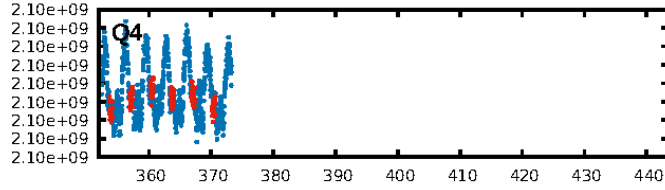
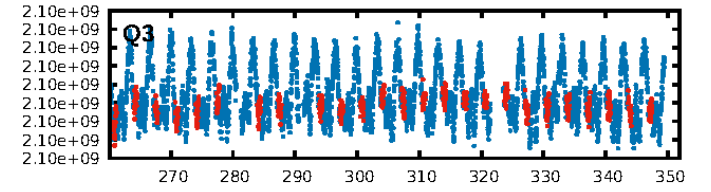
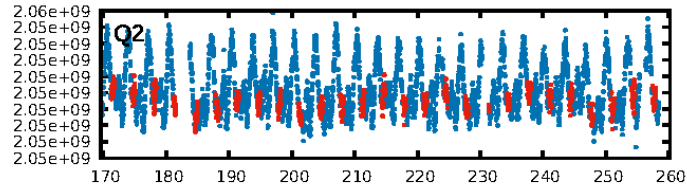
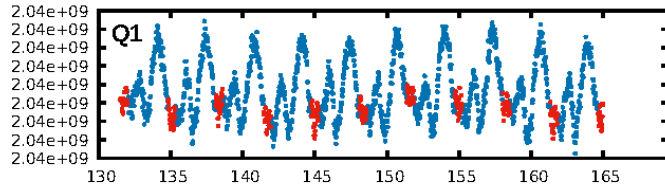
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [6.39σ]
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [301/301]
GhostDiagnostic-chr: N/A
Centroid-sig: 100.0%
Centroid-so: 0.247 arcsec [0.48σ]
OotOffset-rm: 5.875 arcsec [3.26σ]
OotOffset-st: 4/4/1/5 [14]
KicOffset-rm: 4.608 arcsec [2.61σ]
KicOffset-st: 4/4/1/5 [14]
DiffImageQuality-fgm: 0.00 [0/14]
DiffImageOverlap-fno: 0.07 [1/14]

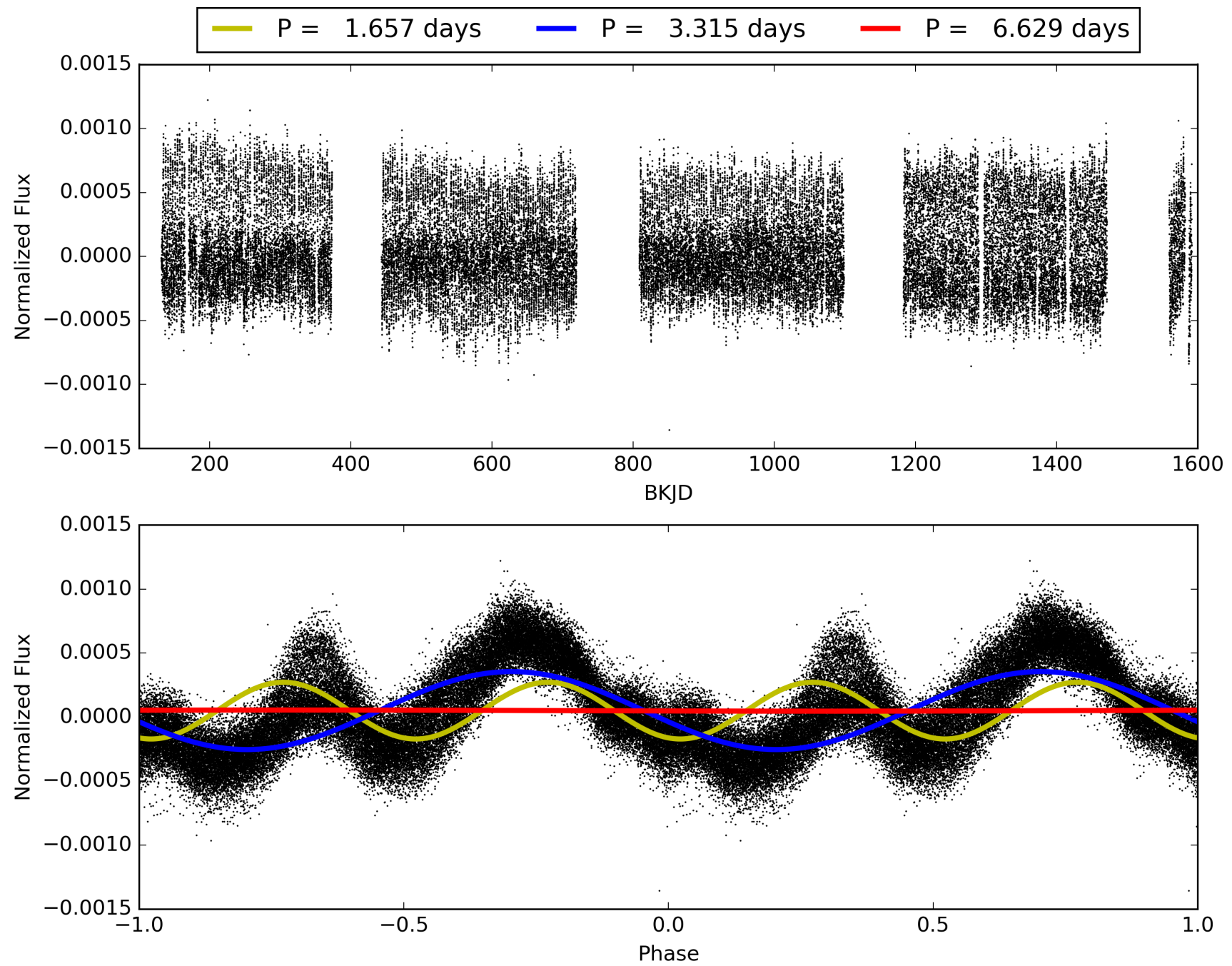
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:14:13 Z

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

TCE 010652379-02, PDC Light Curves

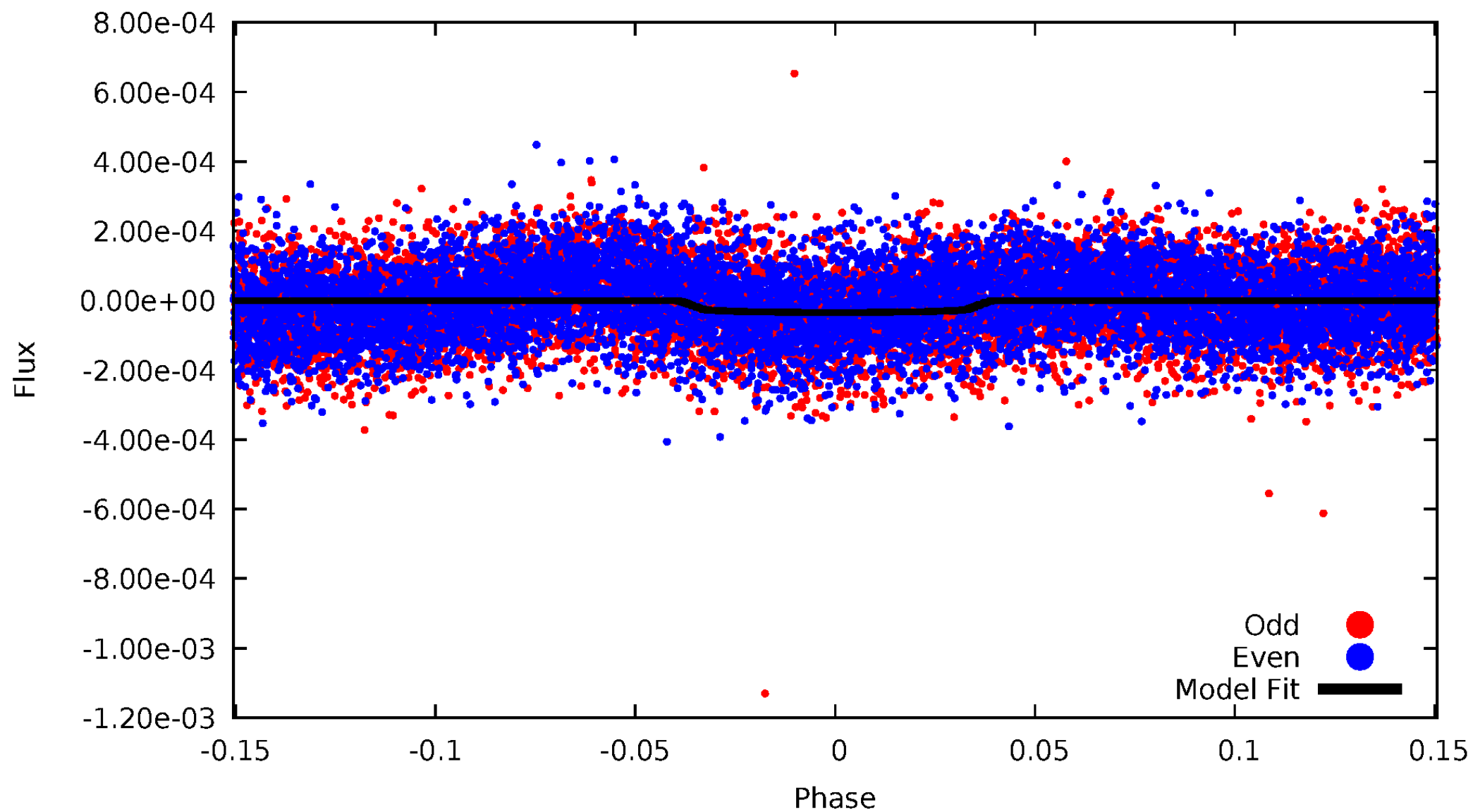


TCE 010652379-02



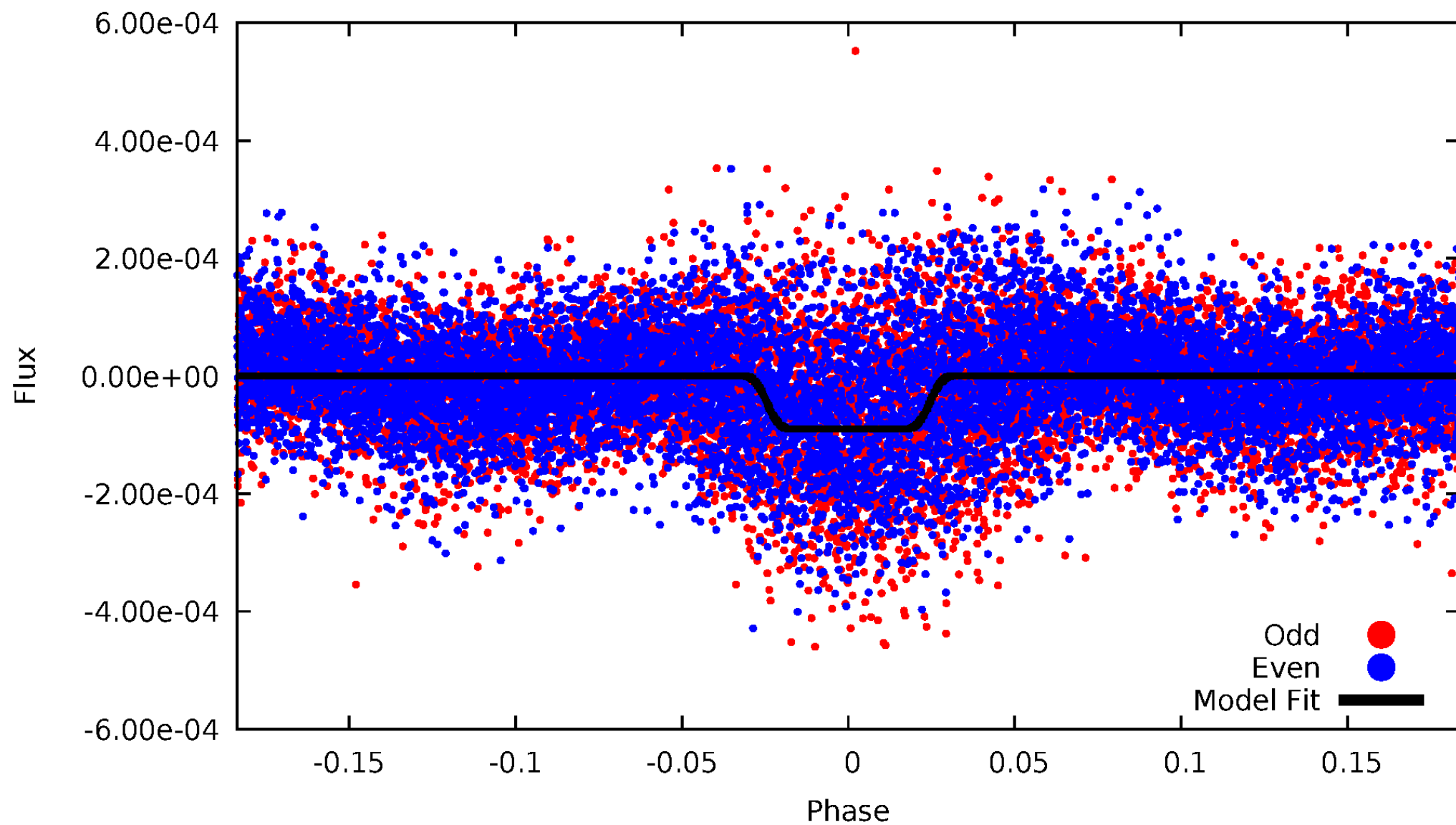
DV Odd/Even

TCE 010652379-02



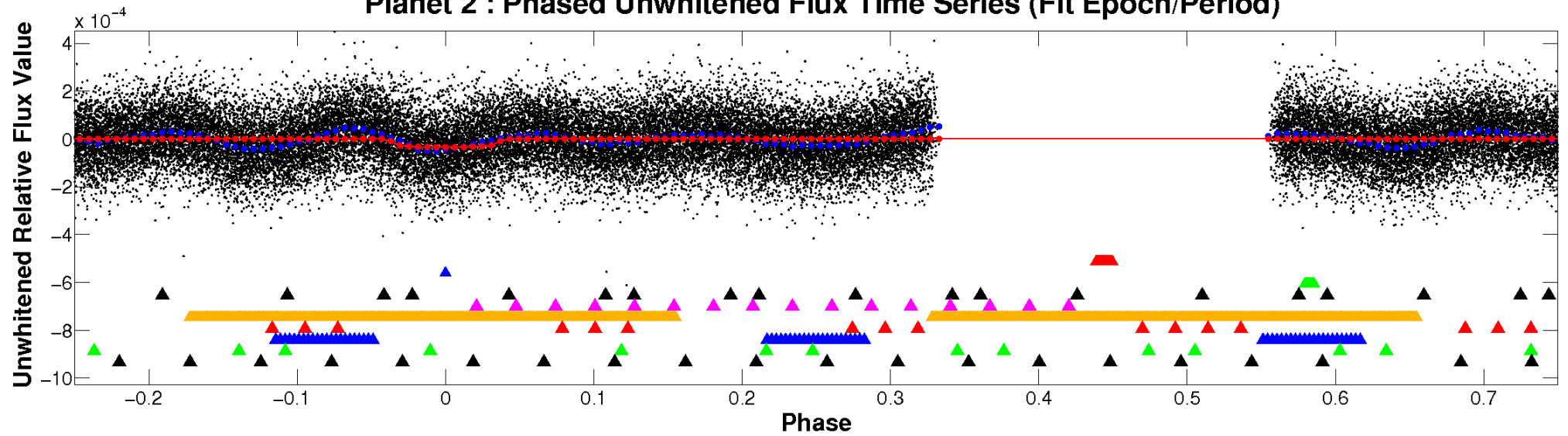
ALT Odd/Even

TCE 010652379-02

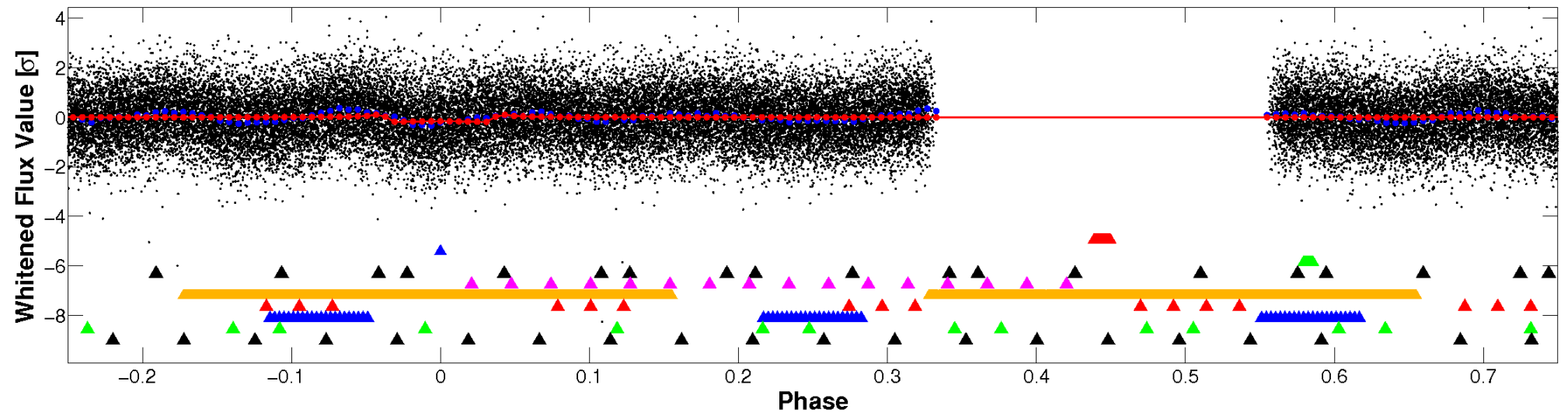


Non-Whitened Vs. Whitened Light Curve

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

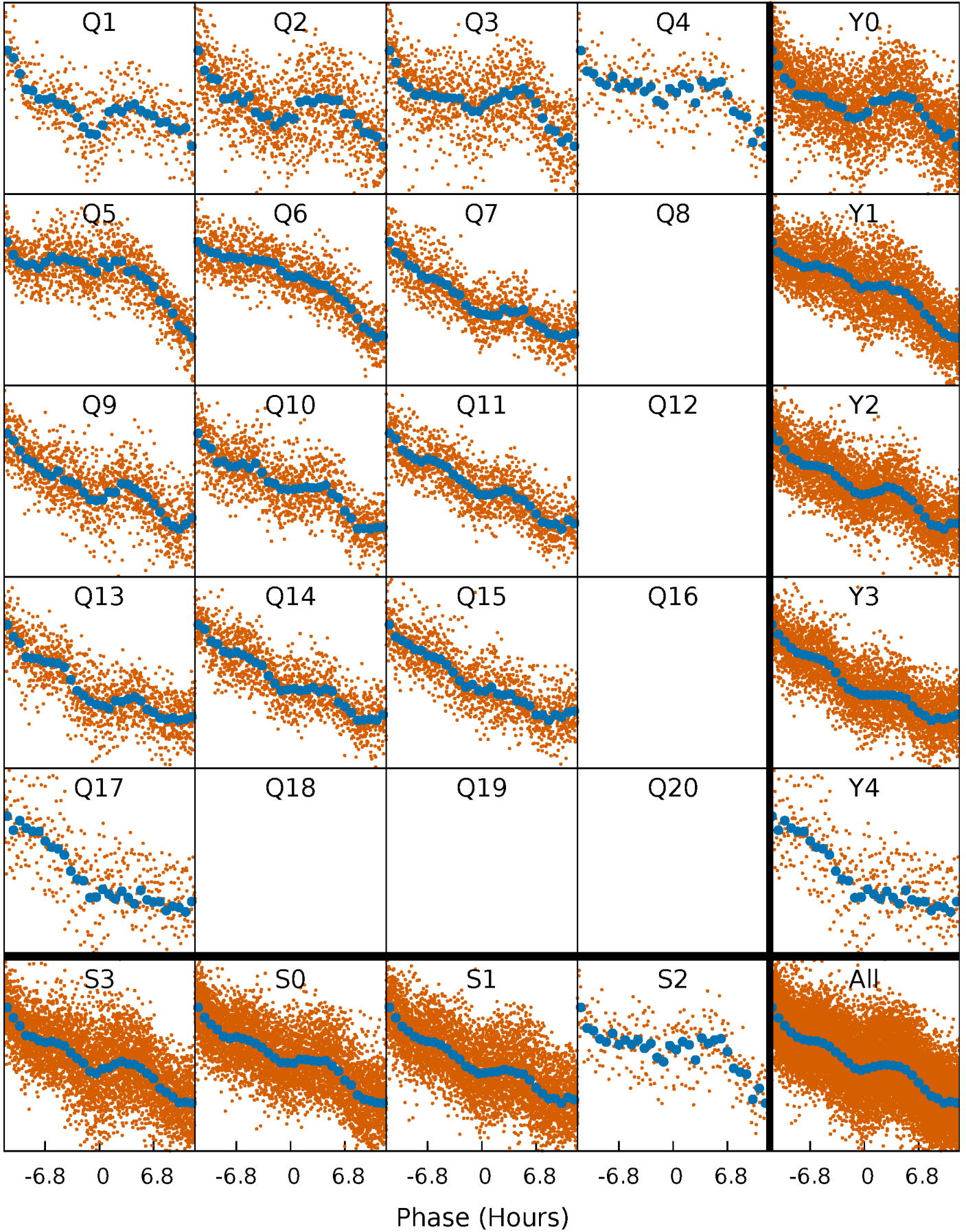


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



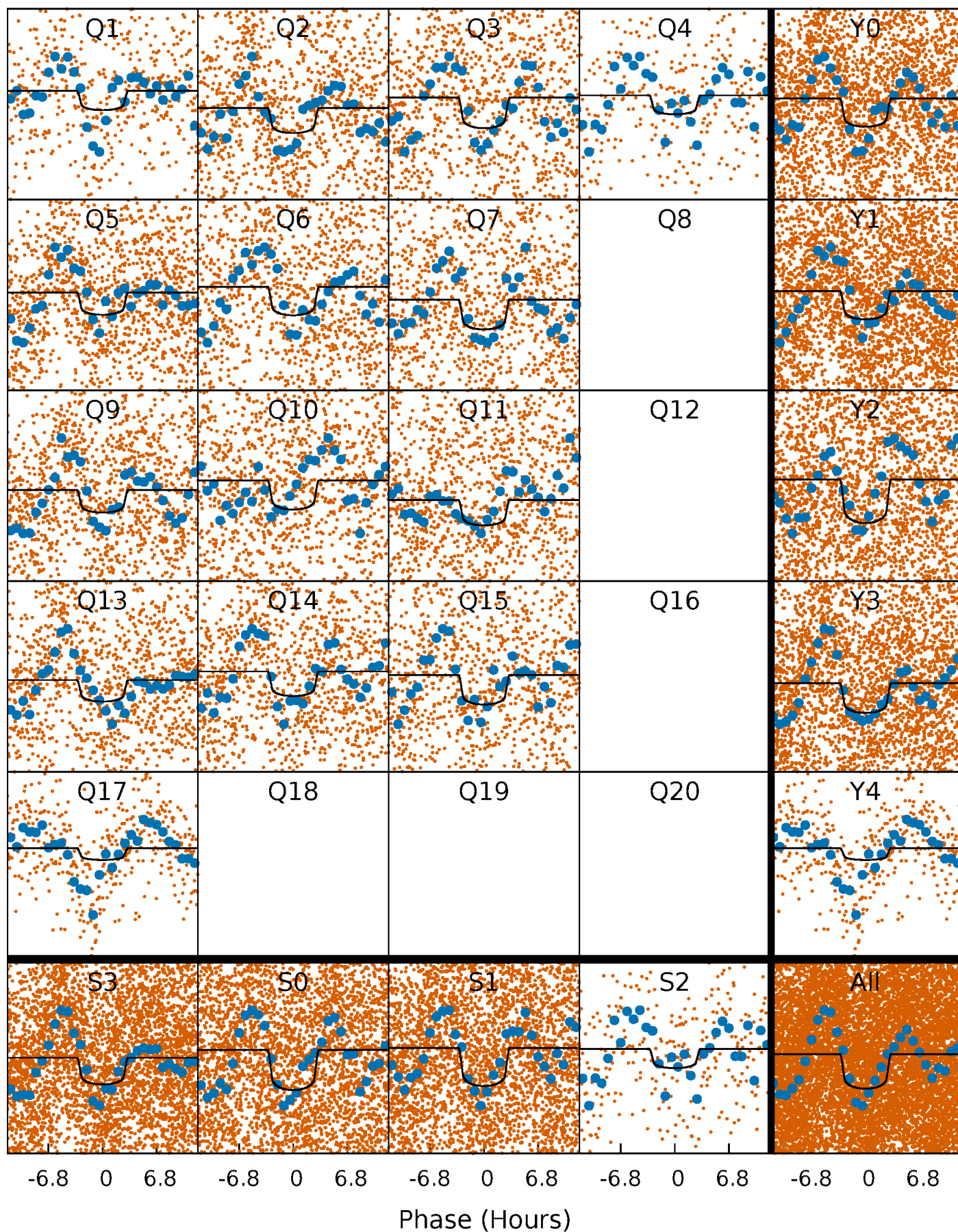
PDC Quarter-Phased Transit Curves

TCE 010652379-02 $P = 3.314624$ Days $T_0 = 131.743175$ (BKJD)



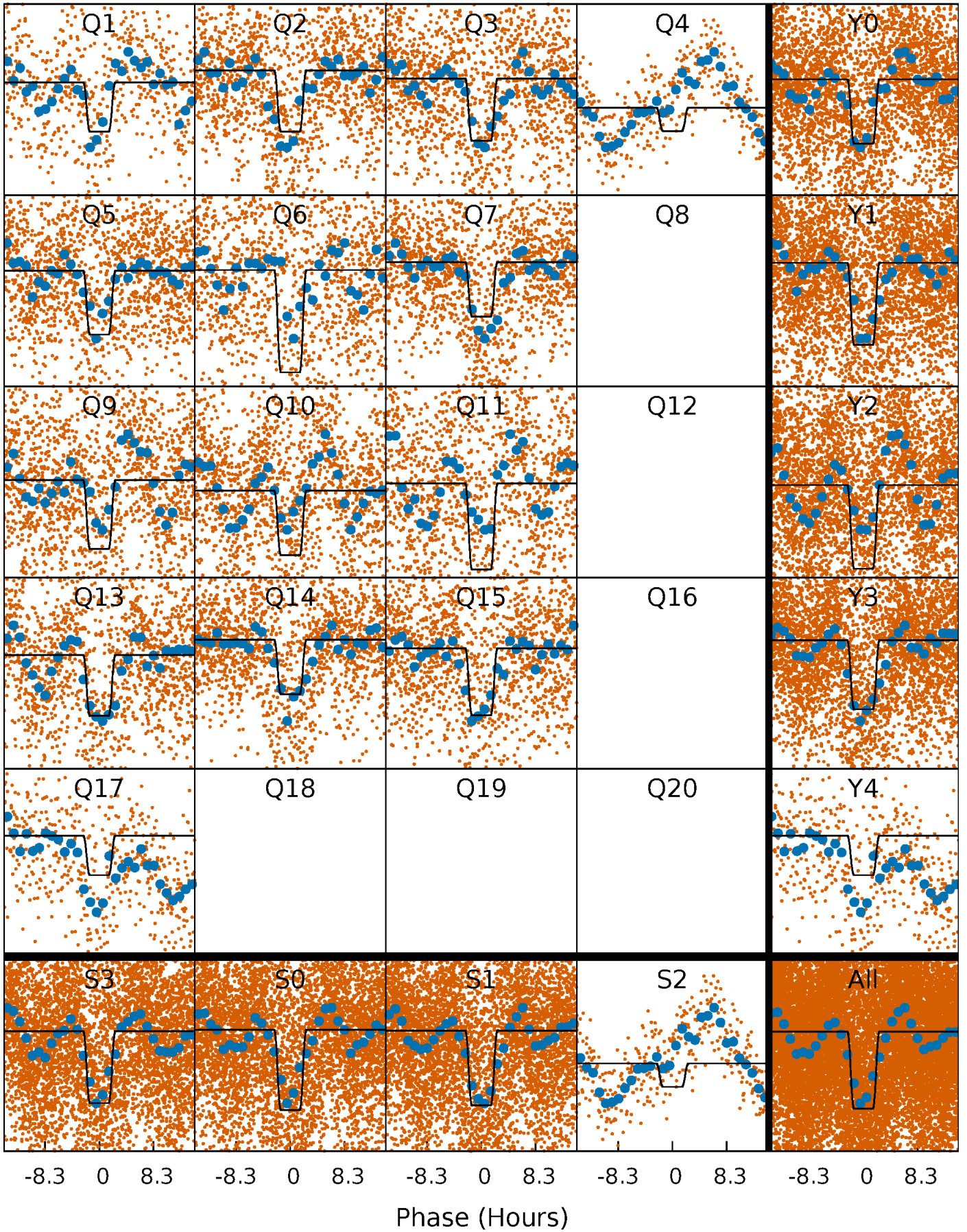
DV Quarter-Phased Transit Curves

TCE 010652379-02 P= 3.314624 Days $T_0=131.743175$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

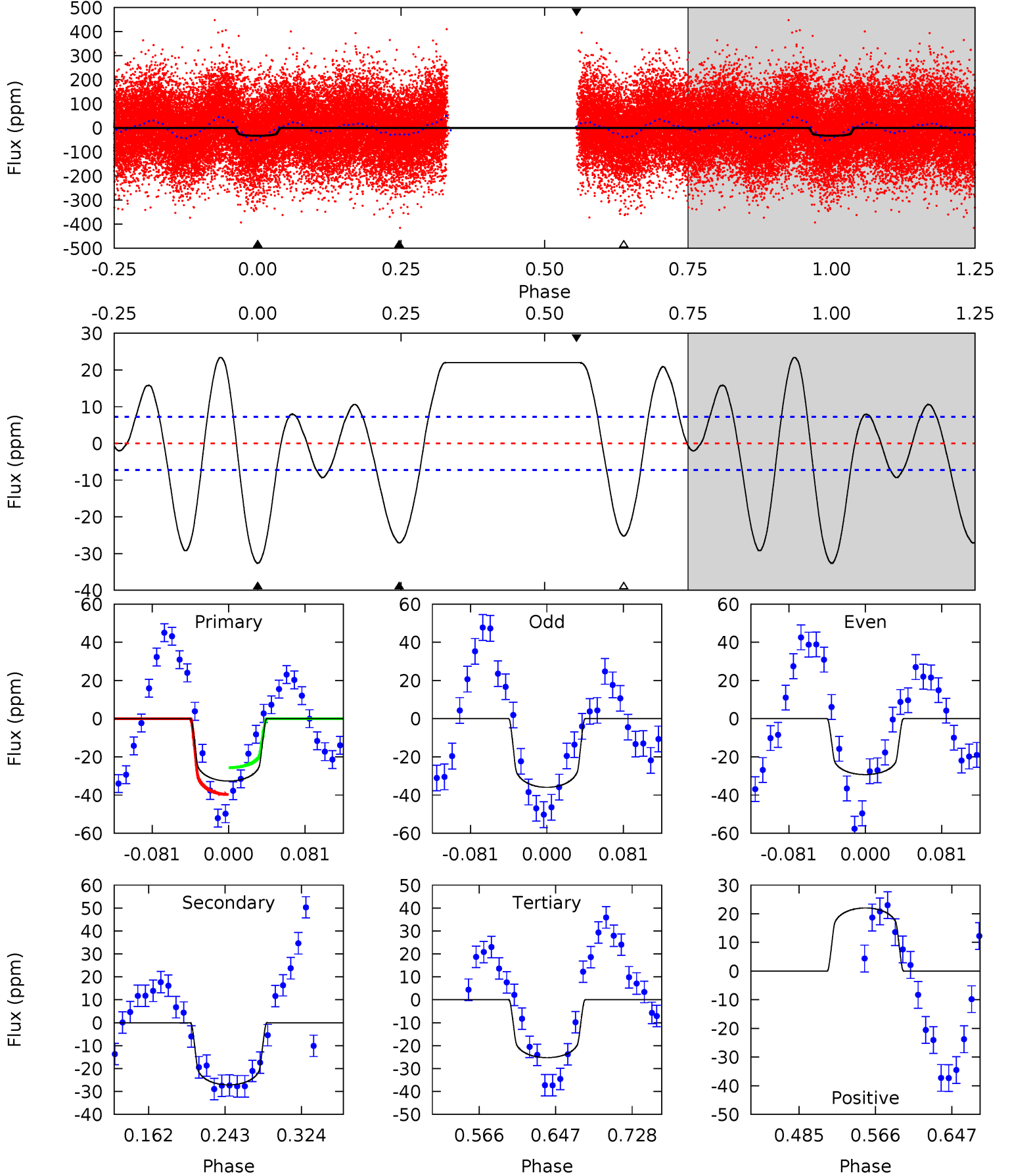
TCE 010652379-02 P= 3.314560 Days $T_0=131.726106$ (BKJD)



DV Model-Shift Uniqueness Test

010652379-02, P = 3.314624 Days, E = 128.428551 Days

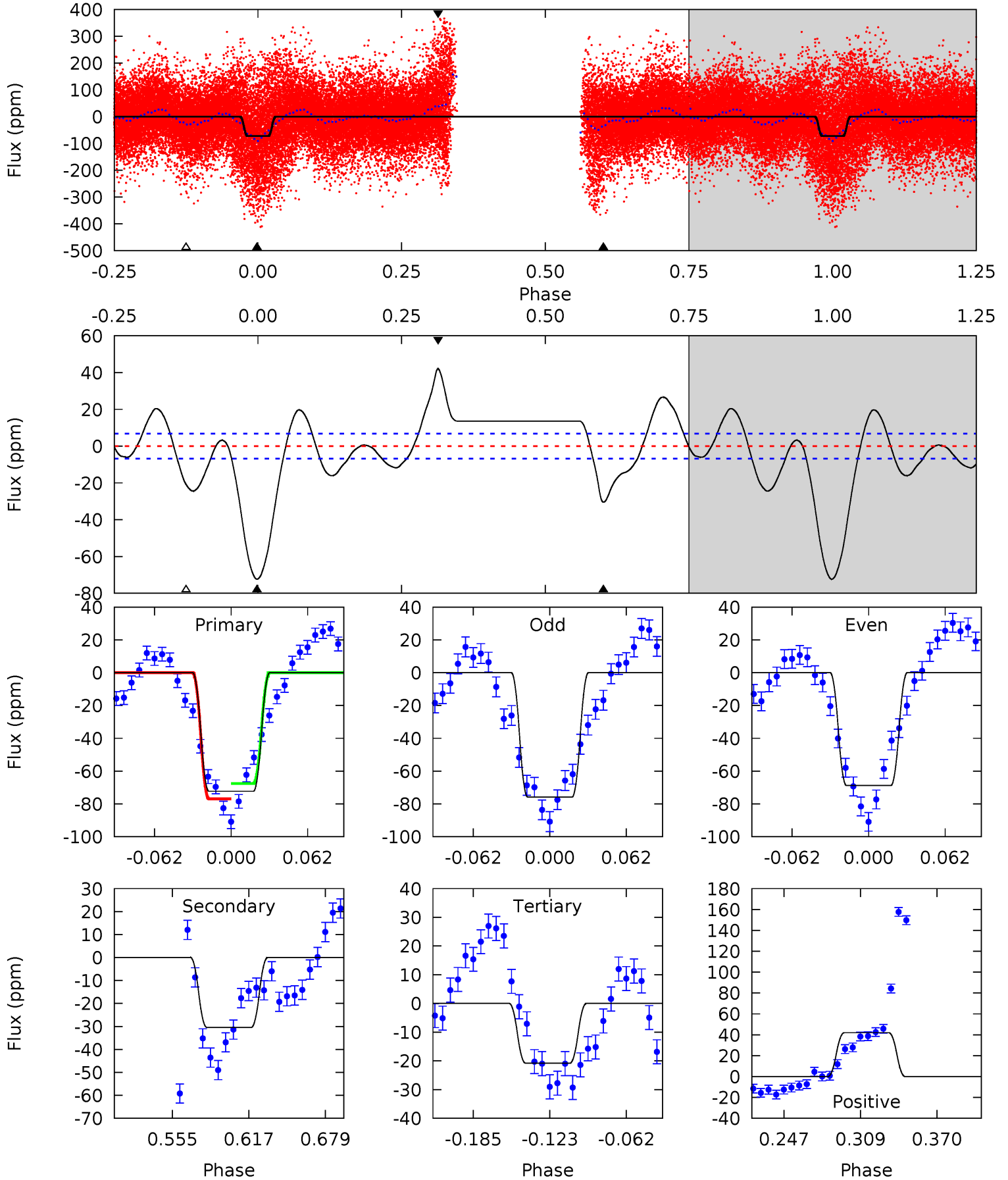
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.8	17.3	16.1	14.0	4.61	1.75	8.98	4.71	6.77	1.19	3.25	2.12	1.20	0.42	4.46



Alt Model-Shift Uniqueness Test

010652379-02, P = 3.314560 Days, E = 128.411546 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
49.8	21.0	14.3	29.0	4.67	1.87	10.3	35.5	20.9	6.66	-7.99	2.41	0.94	0.37	3.41



Stellar Parameters For KIC 010652379

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6649^{+166}_{-183}	$3.749^{+0.304}_{-0.095}$	$-0.280^{+0.300}_{-0.250}$	$2.654^{+0.489}_{-0.908}$	$1.443^{+0.264}_{-0.264}$	$0.109^{+0.209}_{-0.032}$
	+2%/-3%	+8%/-3%	+107%/-89%	+18%/-34%	+18%/-18%	+192%/-30%
Source	PHO1	FLK73	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 010652379-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-27 ± 2	$1.74^{+0.39}_{-0.36}$	2948^{+174}_{-244}	5976^{+541}_{-422}	12^{+7}_{-4}
Alt.	-30 ± 1	$2.59^{+0.50}_{-0.47}$	2947^{+181}_{-265}	5092^{+270}_{-255}	$6.077^{+2.883}_{-1.667}$

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

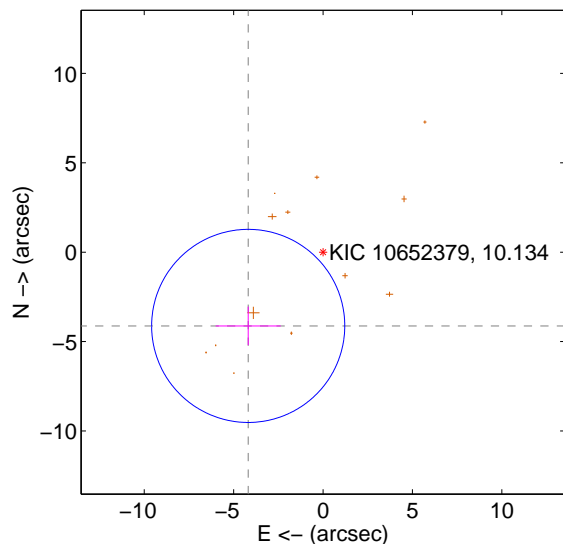
Supplemental centroid analysis for 010652379-02. **Kepler magnitude: 10.13.** Transit SNR 10.52

There are 0 quarters with good PRF difference image offsets

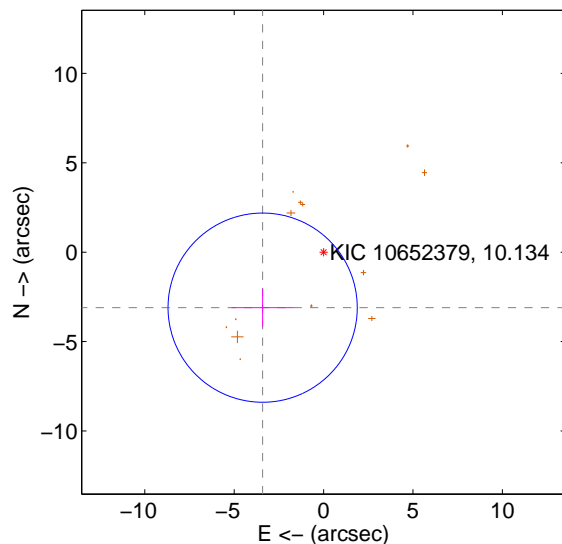
The direct PRF centroid is offset from the target star catalog position by about 1.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.875 ± 1.800	3.26	4.185 ± 1.818	-4.123 ± 1.080
PRF-fit source offset from KIC position	4.608 ± 1.763	2.61	3.407 ± 1.740	-3.102 ± 1.058
photometric centroid source offset	0.25 ± 0.51	0.48	0.18 ± 0.45	-0.17 ± 0.58

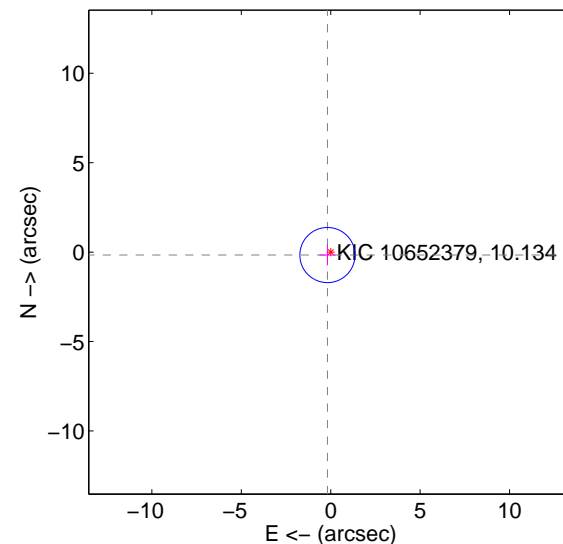
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

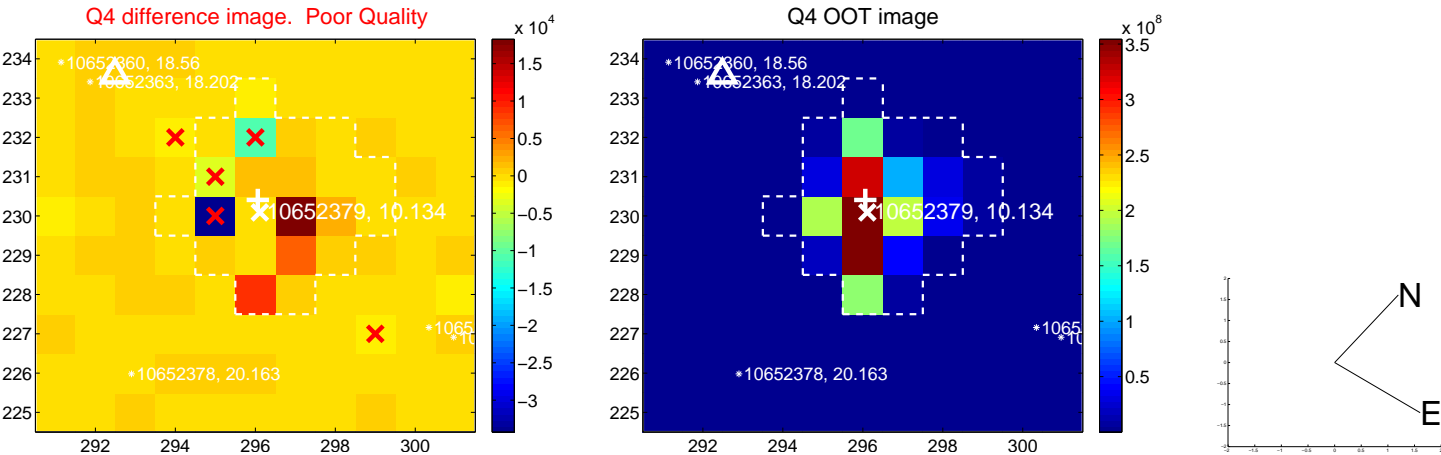
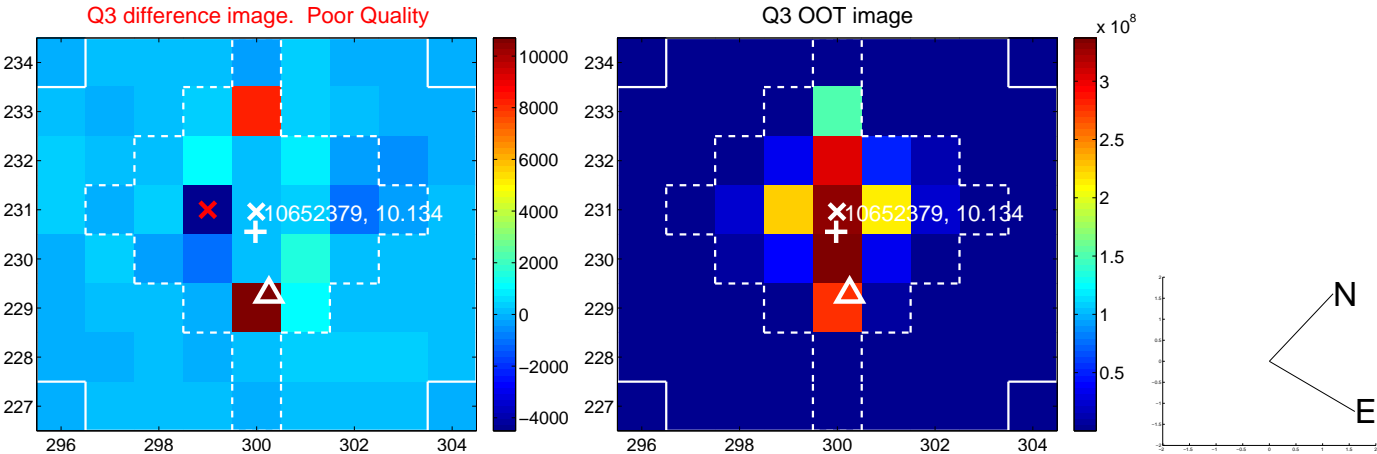
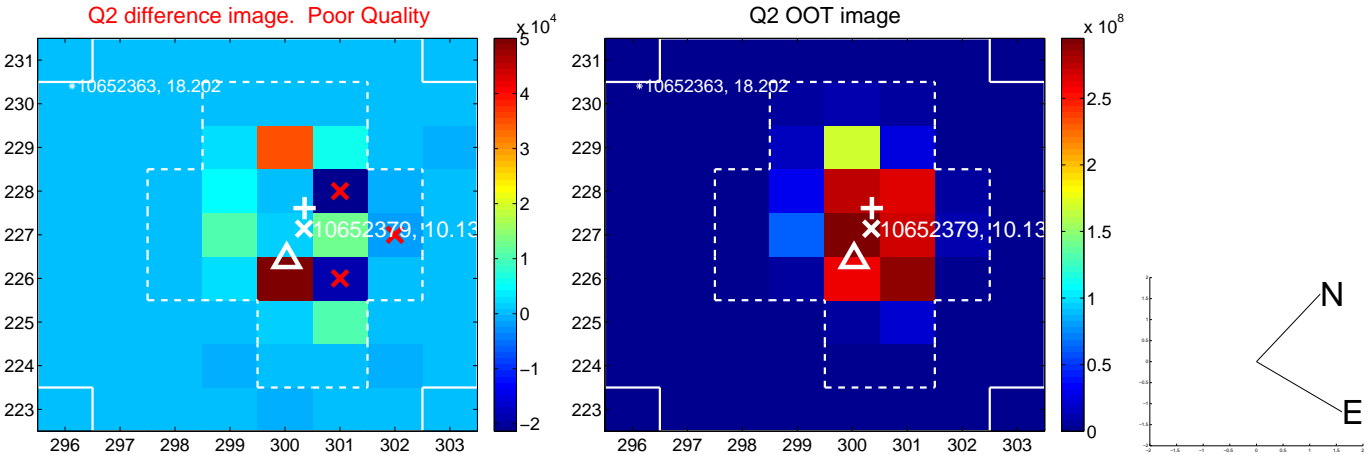
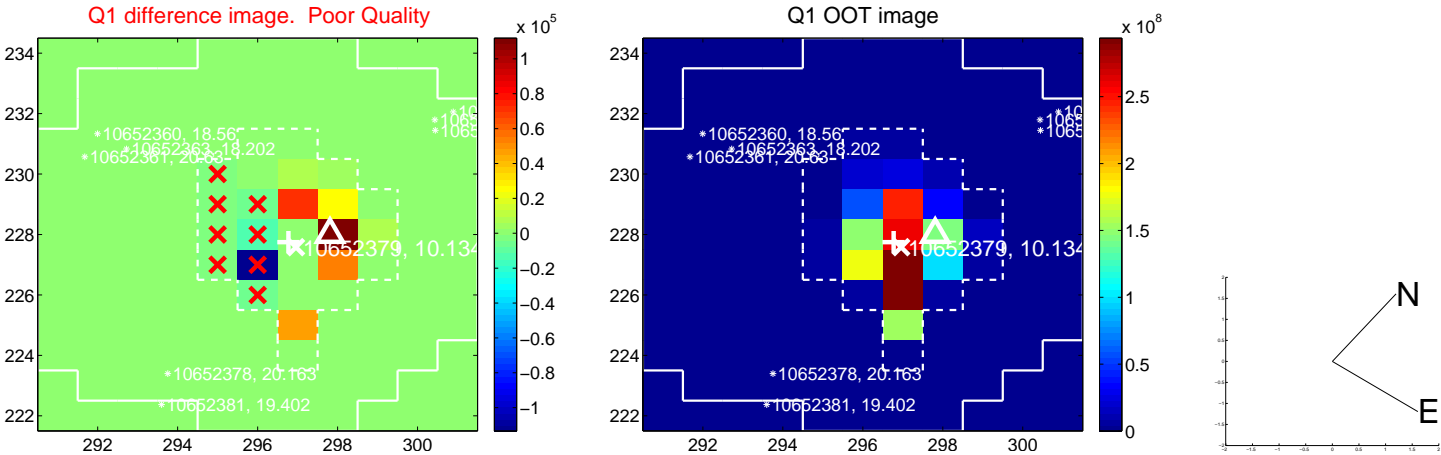


offset from photometric centroids

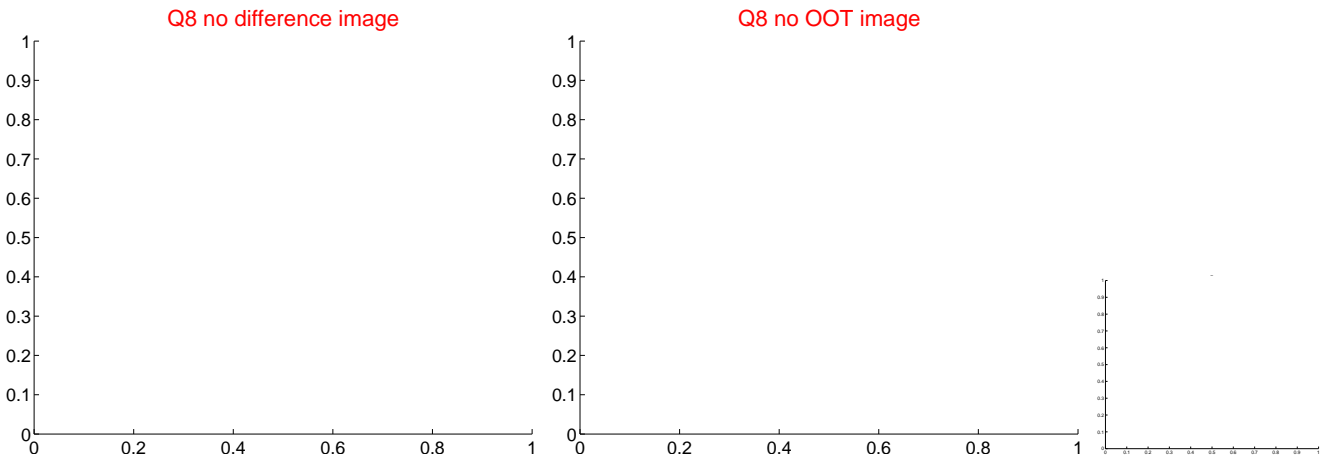
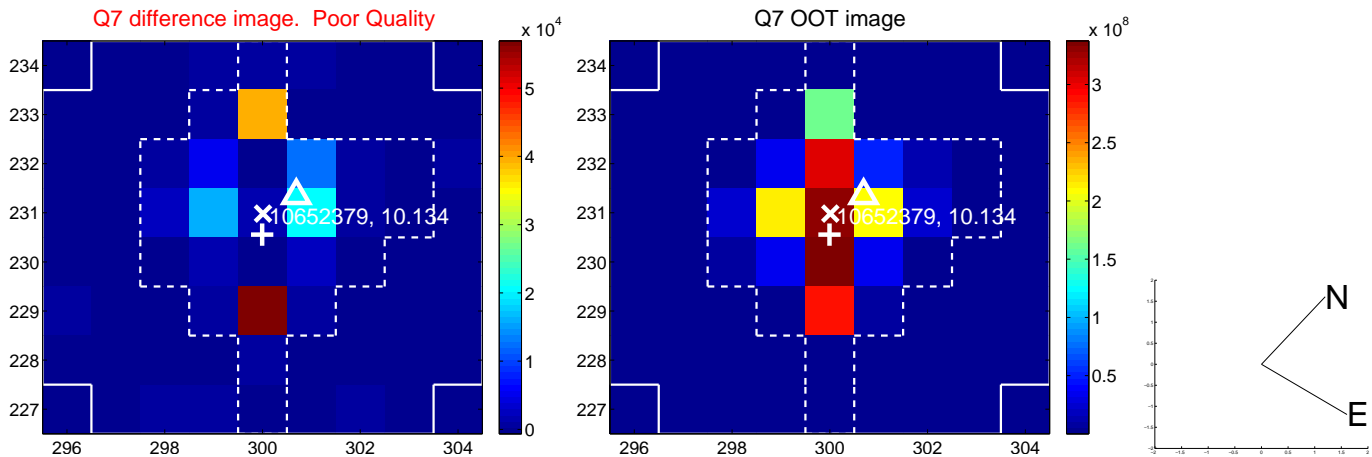
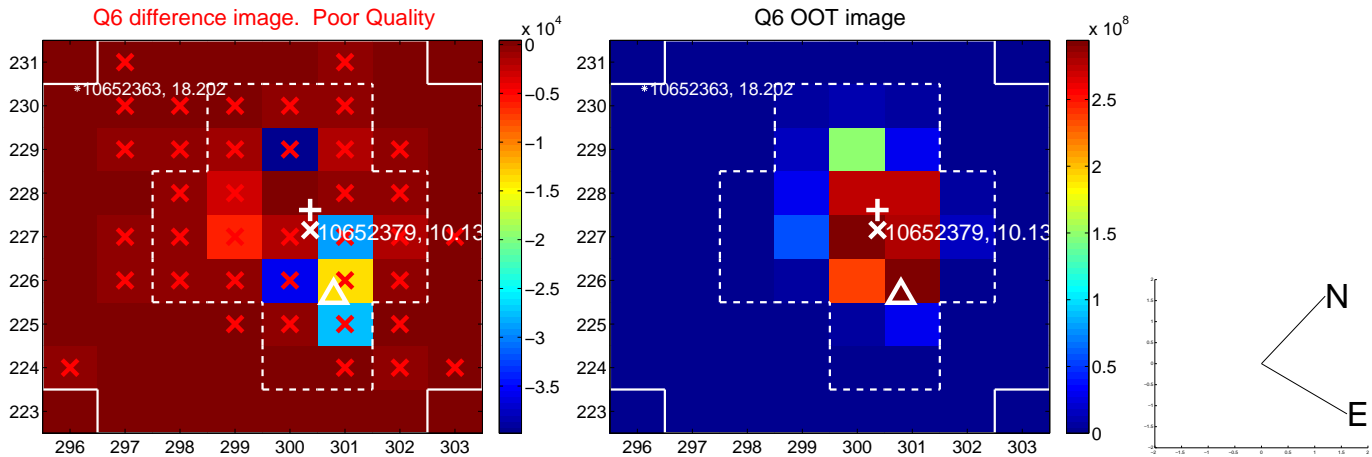
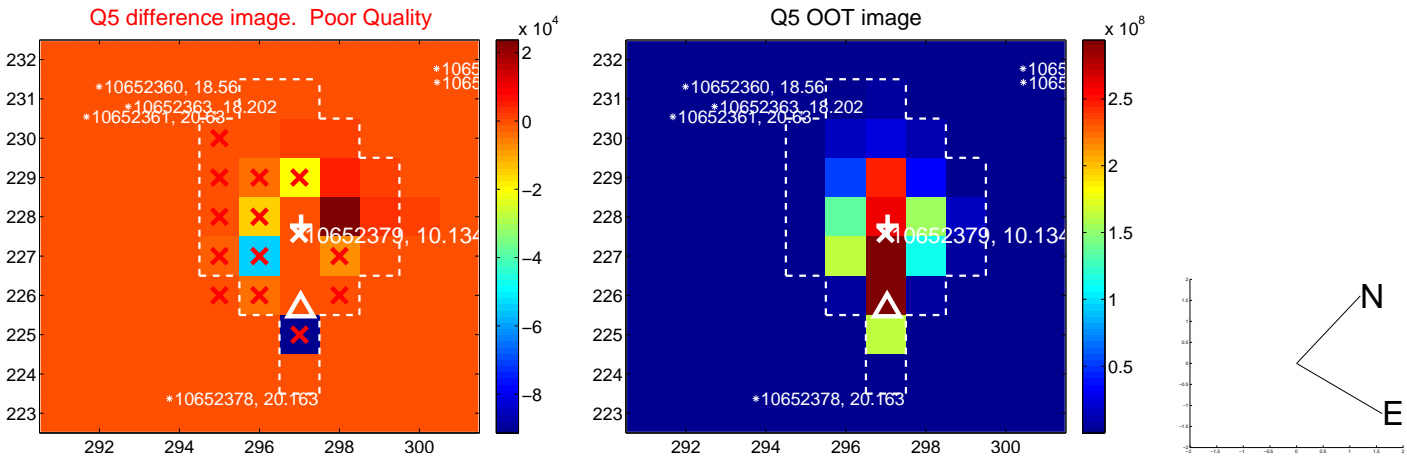


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

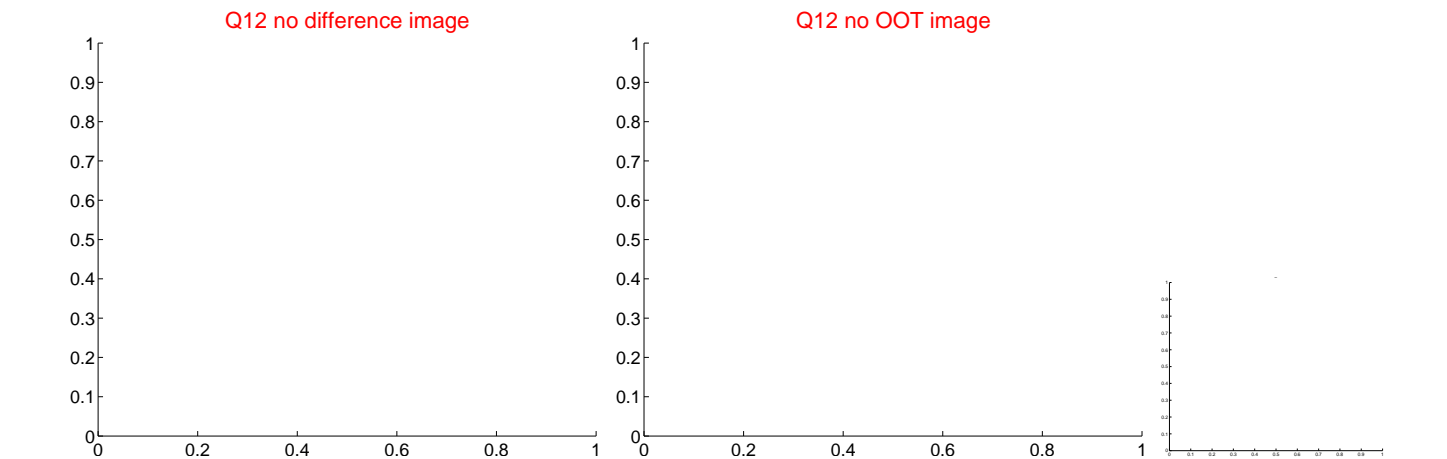
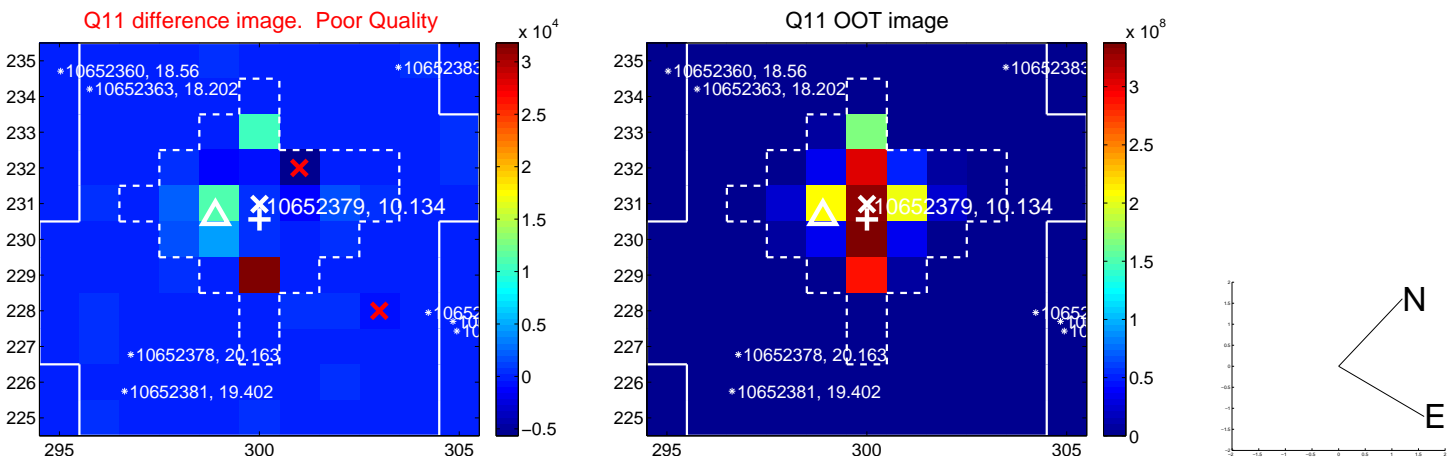
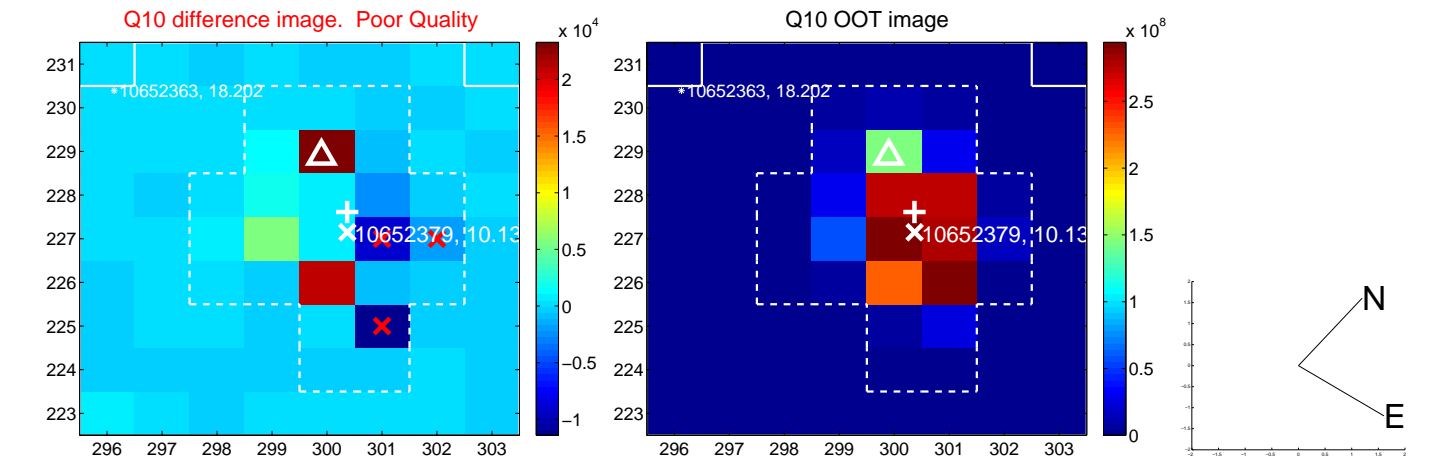
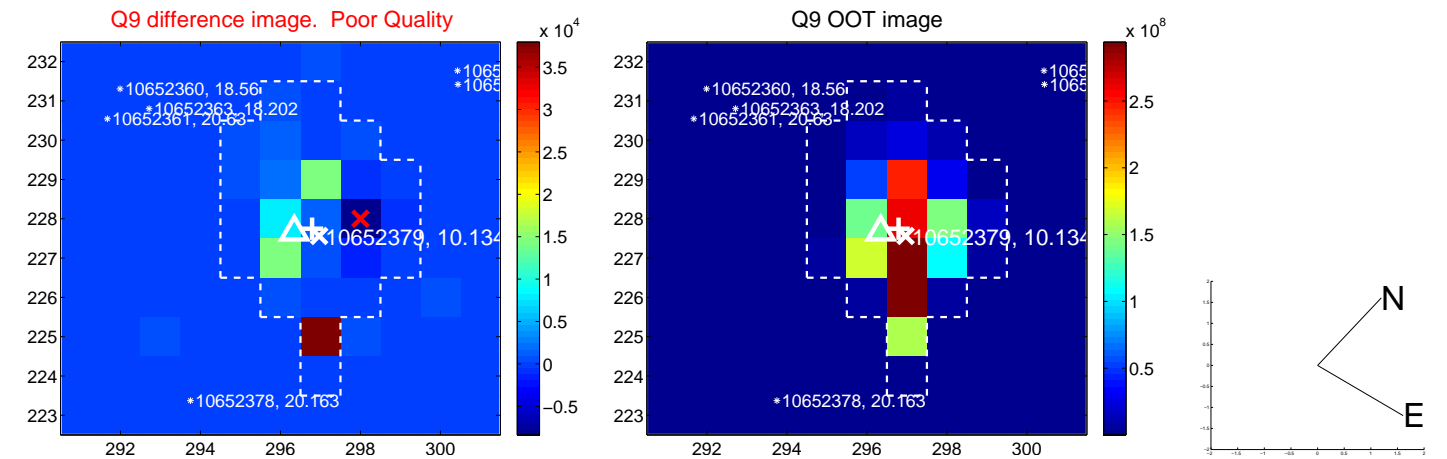
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



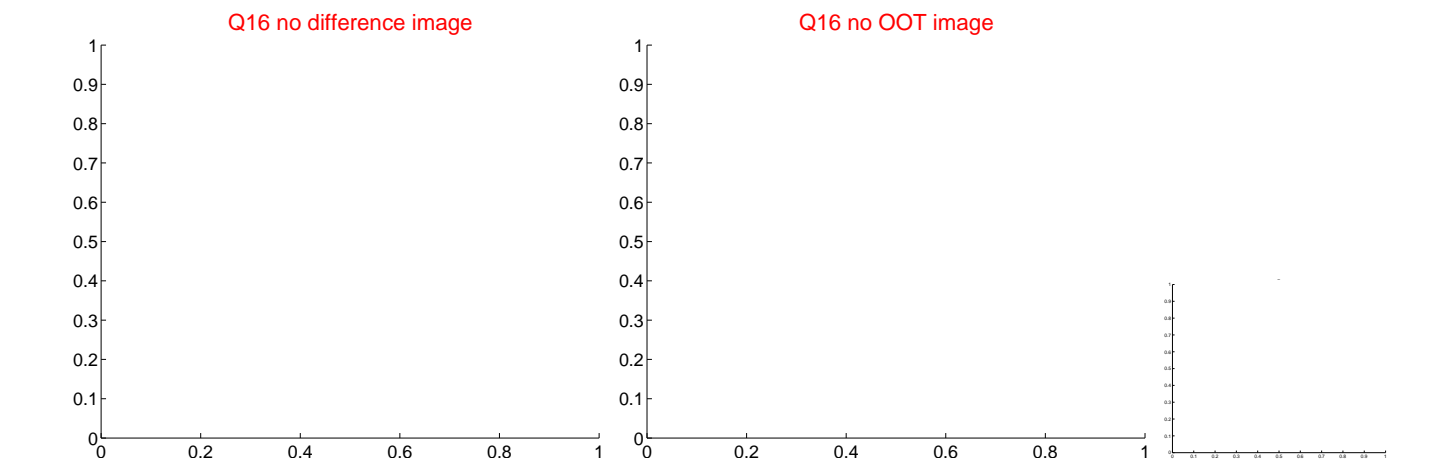
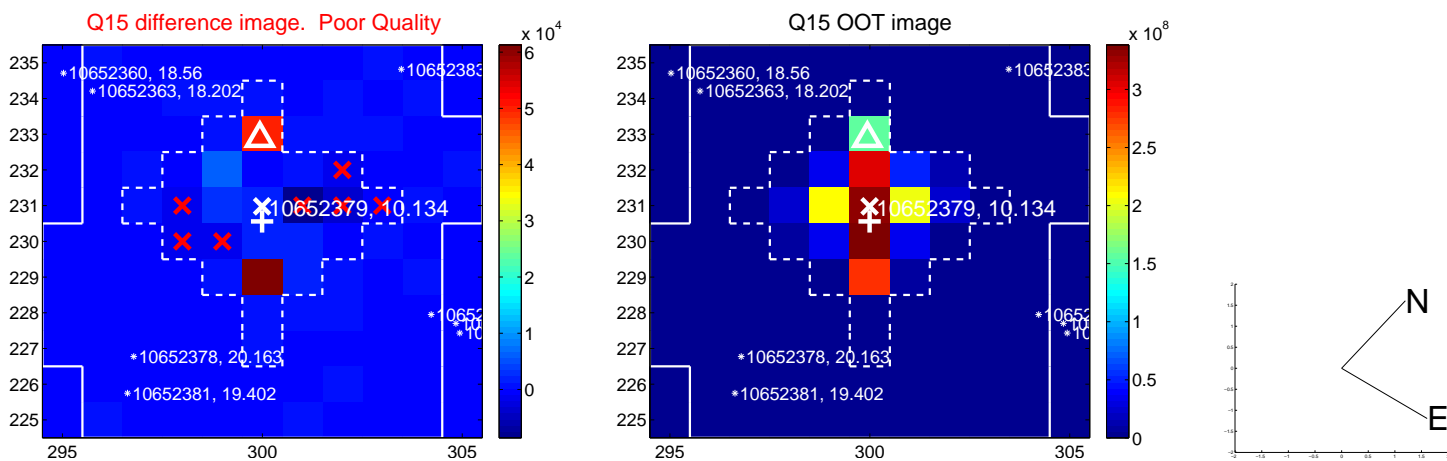
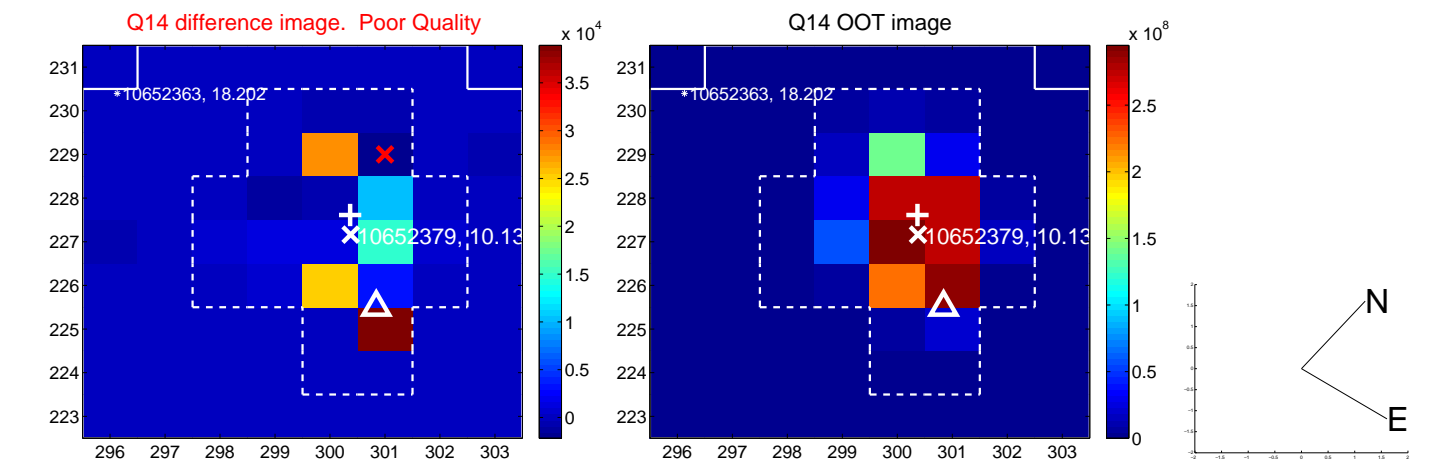
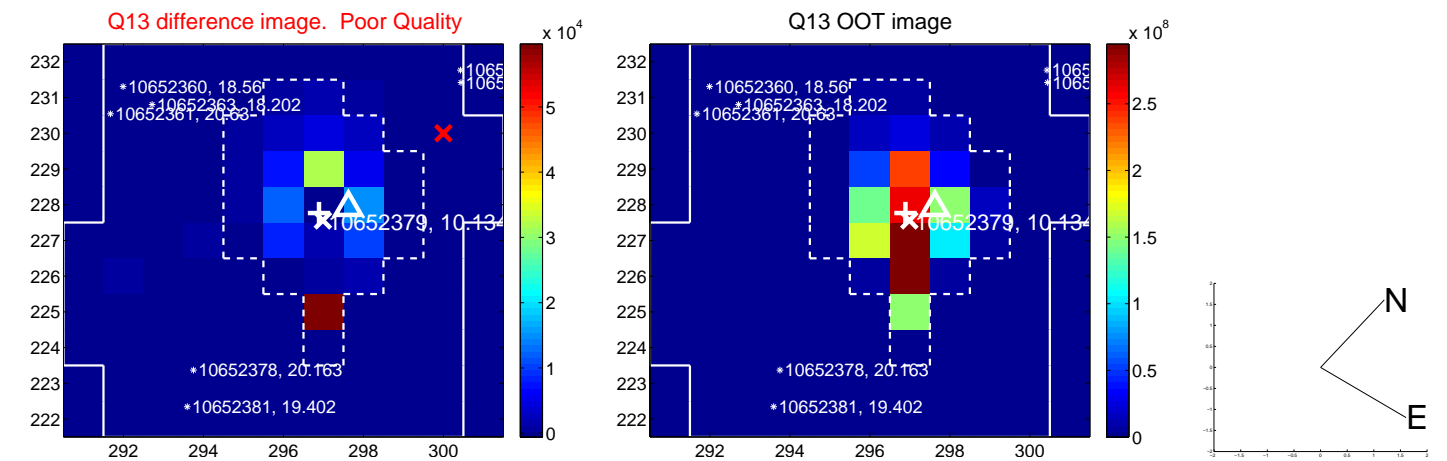
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



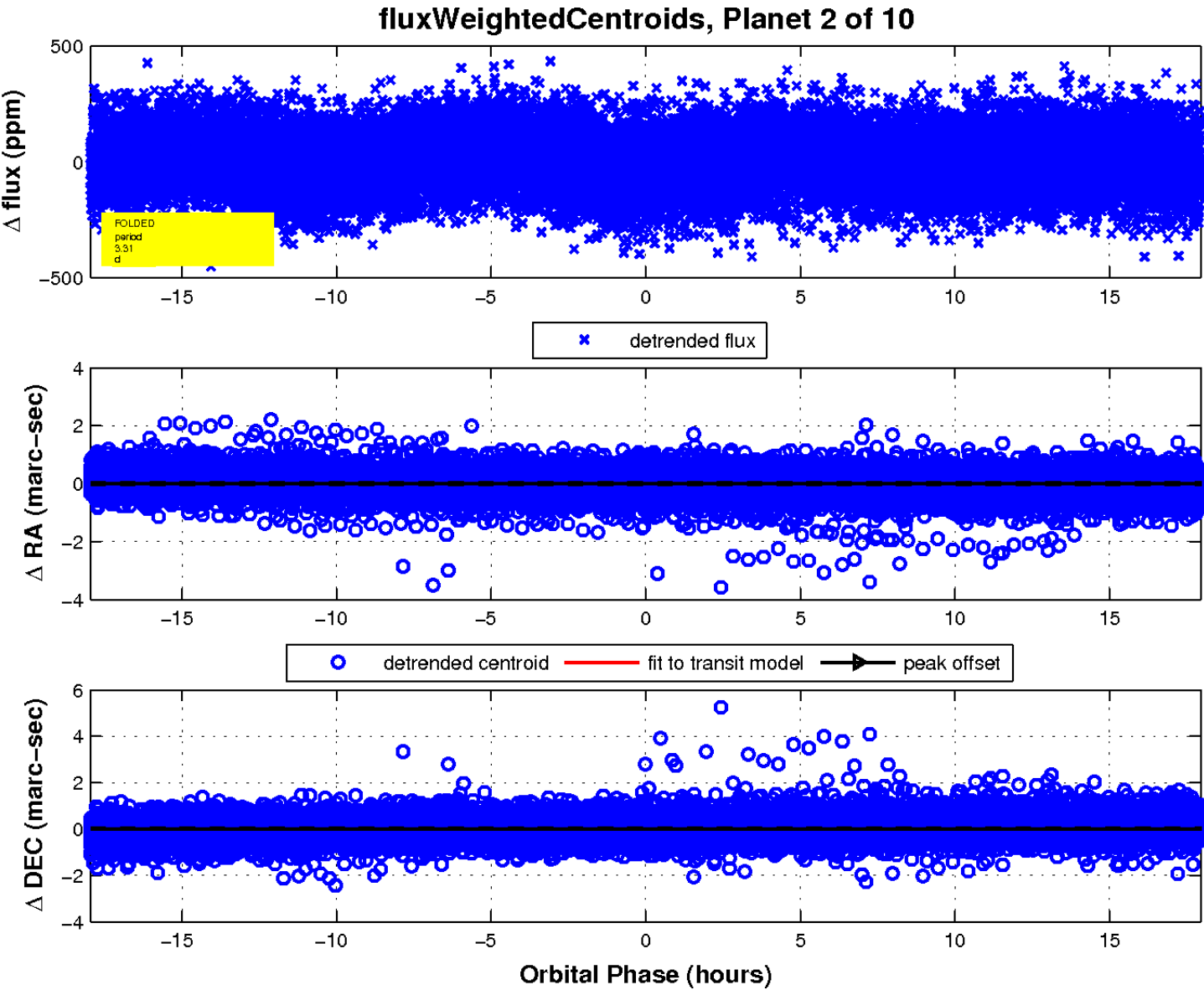
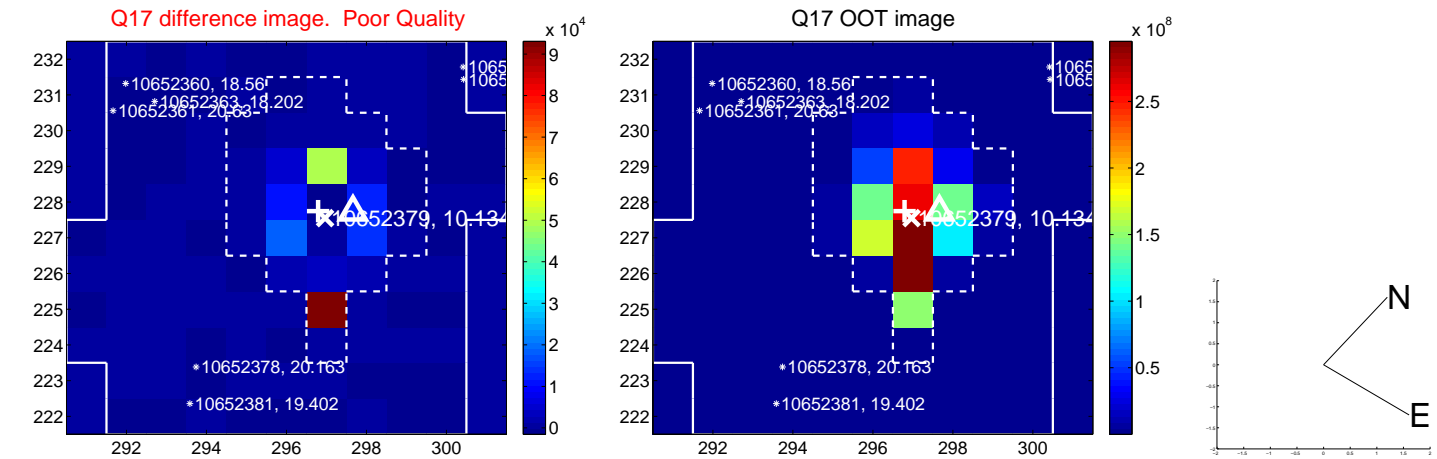
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



This plot does not exist for this TCE.

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})
010652379-01	OBS	No	3.314708	133.196939	56.4	6.019	11.1	12.3	2.65	6649	4.05	5104.19
010652379-02	OBS	No	3.314624	131.743175	34.5	5.989	10.9	10.5	2.65	6649	1.84	5104.36
010652379-03	OBS	No	3.314671	133.663432	19.7	14.851	10.8	6.4	2.65	6649	1.43	5104.26
010652379-04	OBS	No	78.280988	161.932625	205.4	7.495	16.9	9.7	2.65	6649	4.03	75.33
010652379-05	OBS	No	89.406597	199.428664	114.3	6.777	16.6	6.7	2.65	6649	3.33	63.10
010652379-06	OBS	No	1.656077	132.257770	43.0	1.724	11.7	7.0	2.65	6649	1.76	12874.97
010652379-07	OBS	No	88.846588	212.851630	207.0	10.888	8.4	9.1	2.65	6649	4.12	63.63
010652379-08	OBS	No	22.094042	141.525125	82.3	7.323	8.5	8.9	2.65	6649	2.78	406.90
010652379-09	OBS	No	106.495223	202.067155	176.6	6.010	8.2	8.4	2.65	6649	3.99	49.97
010652379-10	OBS	No	73.079893	200.304960	69.2	2.000	7.5	-1.0	2.65	6649	2.23	82.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010652379-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
010652379-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—TRANS_GAPPED—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010652379-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

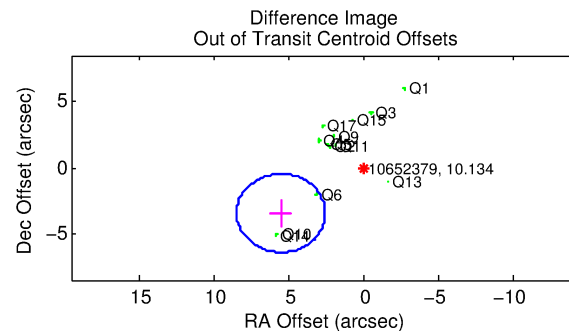
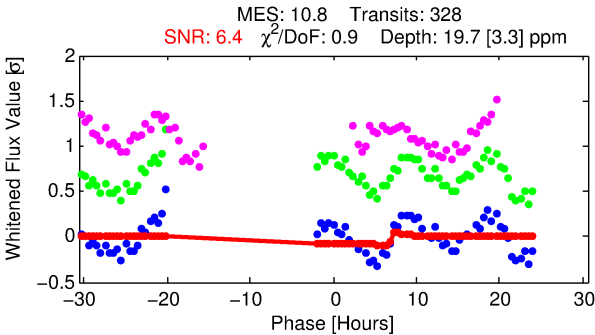
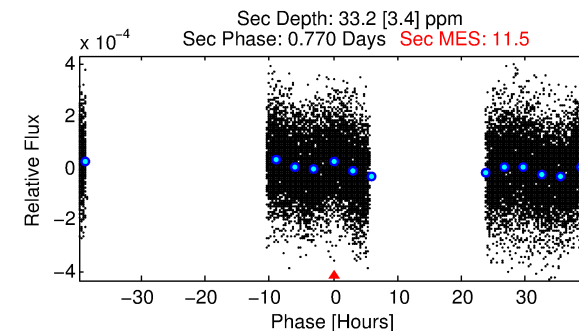
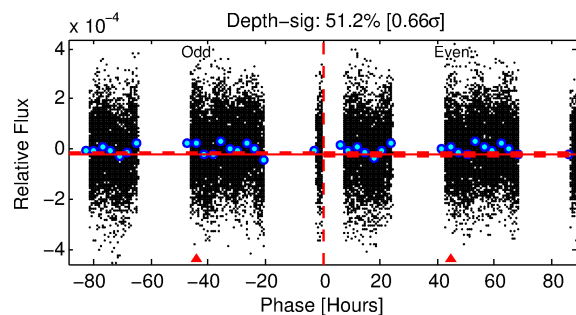
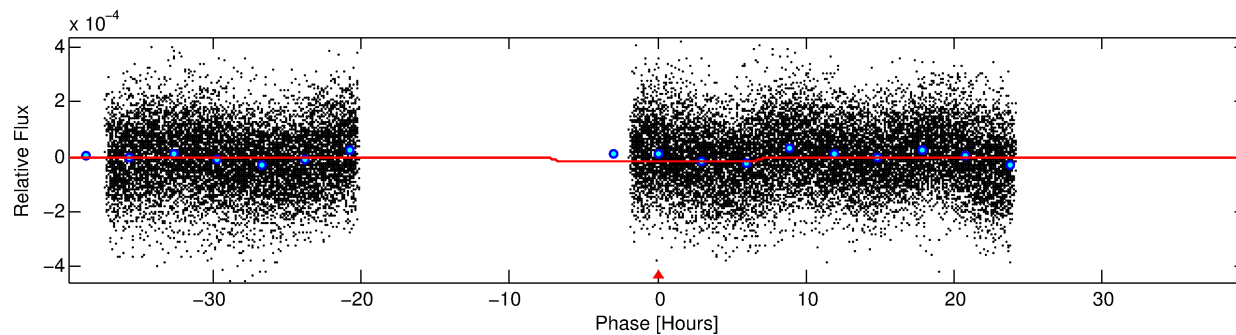
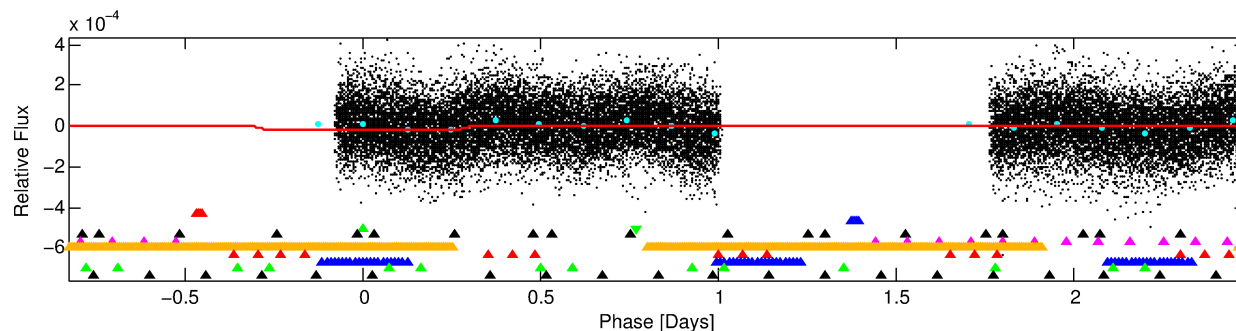
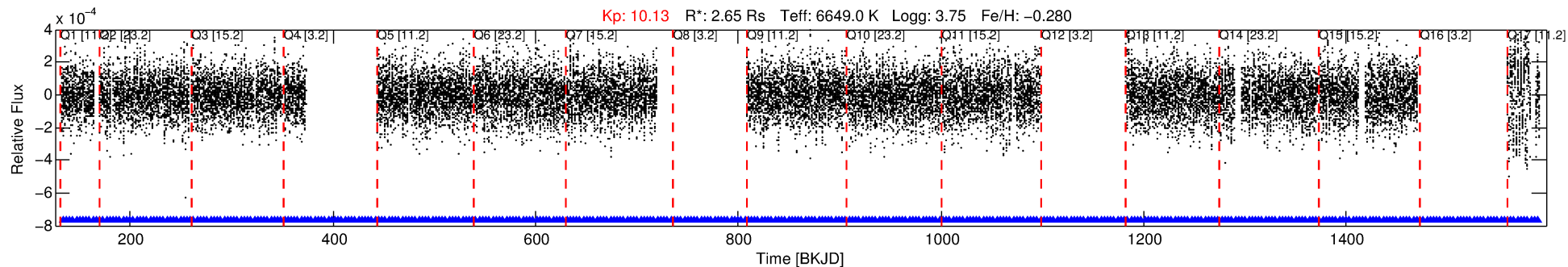
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010652379-03

No Significant Match Found

DV One-Page Summary

KIC: 10652379 Candidate: 3 of 10 Period: 3.315 d



DV Fit Results:

Period = 3.31467 [0.00007] d
Epoch = 133.6634 [0.1172] BKJD
Rp/R* = 0.0049 [0.0010]
a/R* = 1.14 [0.38]
b = 0.94 [0.13]
Seff = 5104.26 [2710.12]
Teq = 2155 [286] K
Rp = 1.43 [0.57] Re
a = 0.0492 [0.0160] AU
Ag = 21.55 [14.46] [1.42 σ]
Teffp = 7180 [788] K [5.99 σ]

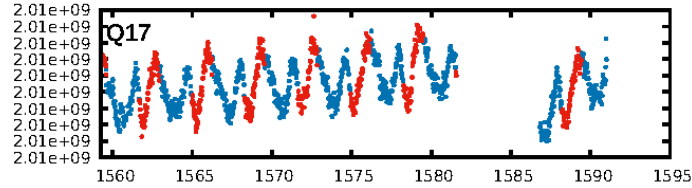
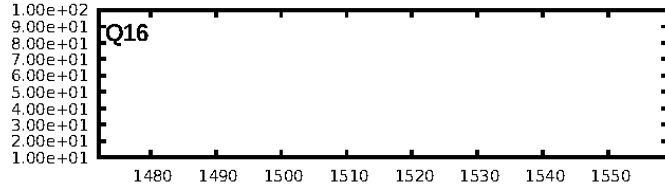
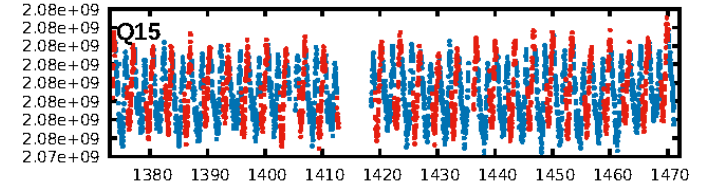
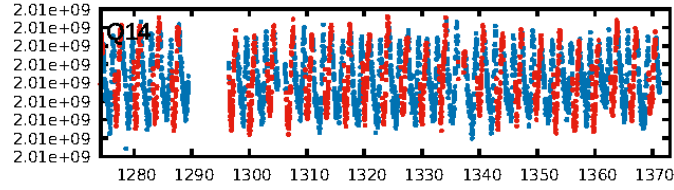
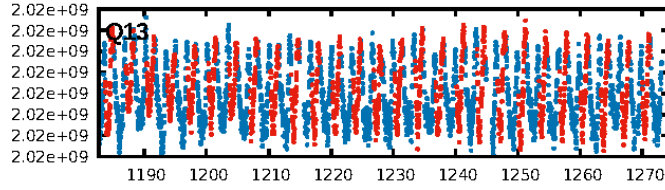
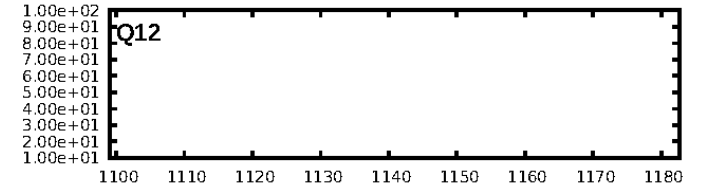
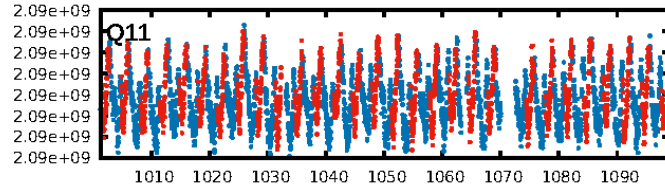
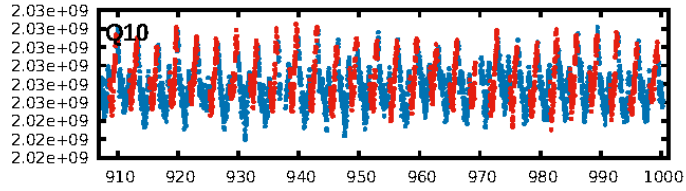
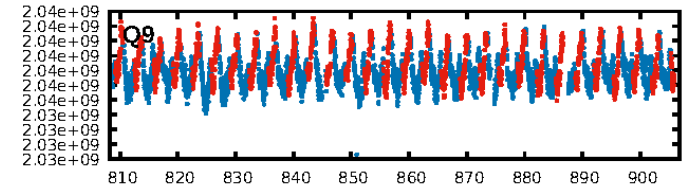
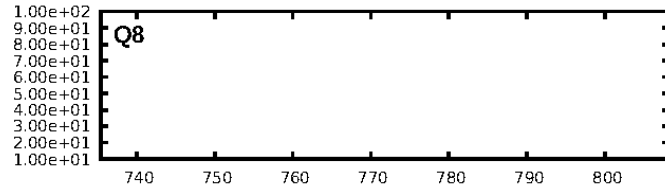
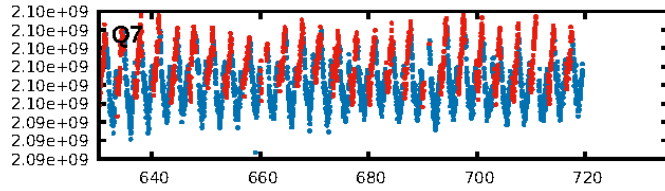
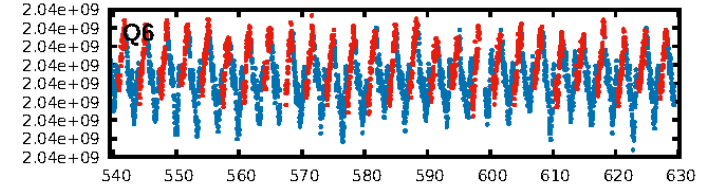
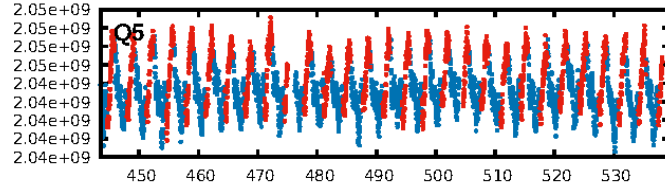
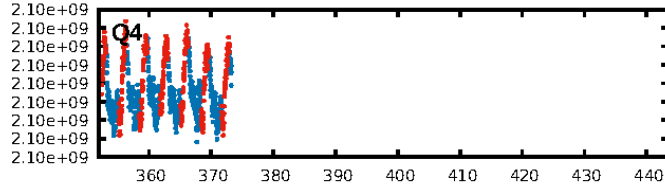
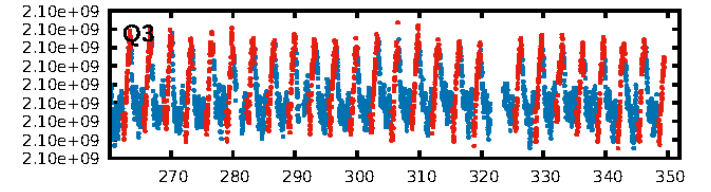
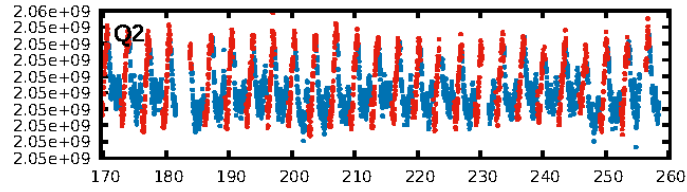
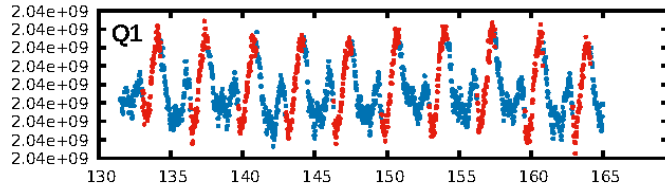
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00 σ]
LongPeriod-sig: 0.0% [0.00 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgm: 1.00 [303/303]
GhostDiagnostic-chr: N/A
Centroid-sig: 0.0%
Centroid-so: 2.531 arcsec [2.87 σ]
OotOffset-rm: 6.479 arcsec [6.55 σ]
KicOffset-rm: 5.071 arcsec [6.28 σ]
OotOffset-st: 4/3/1/5 [13]
KicOffset-st: 4/3/1/5 [13]
DiffImageQuality-fgm: 0.00 [0/13]
DiffImageOverlap-fno: 0.00 [0/14]

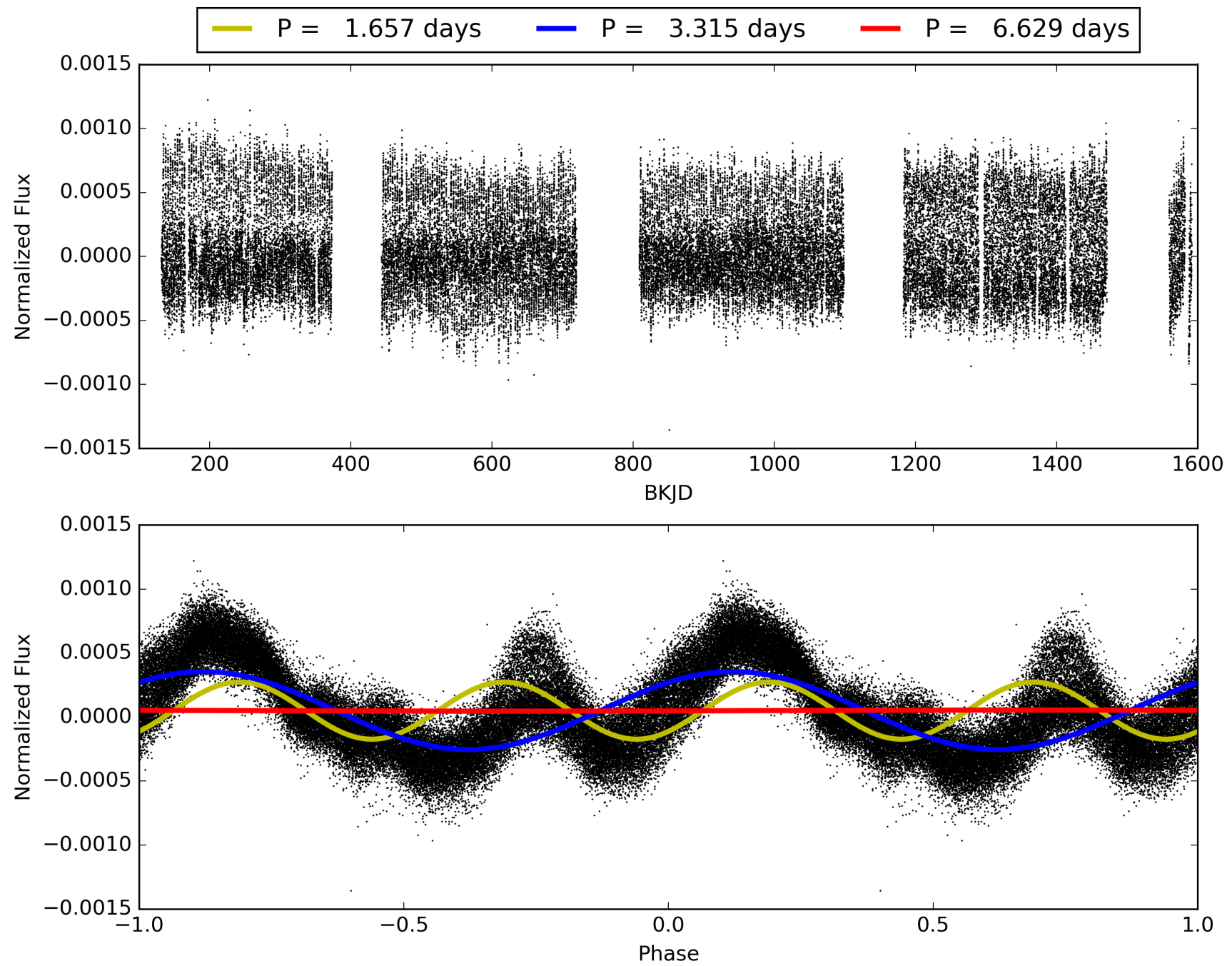
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:14:23 Z

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

TCE 010652379-03, PDC Light Curves

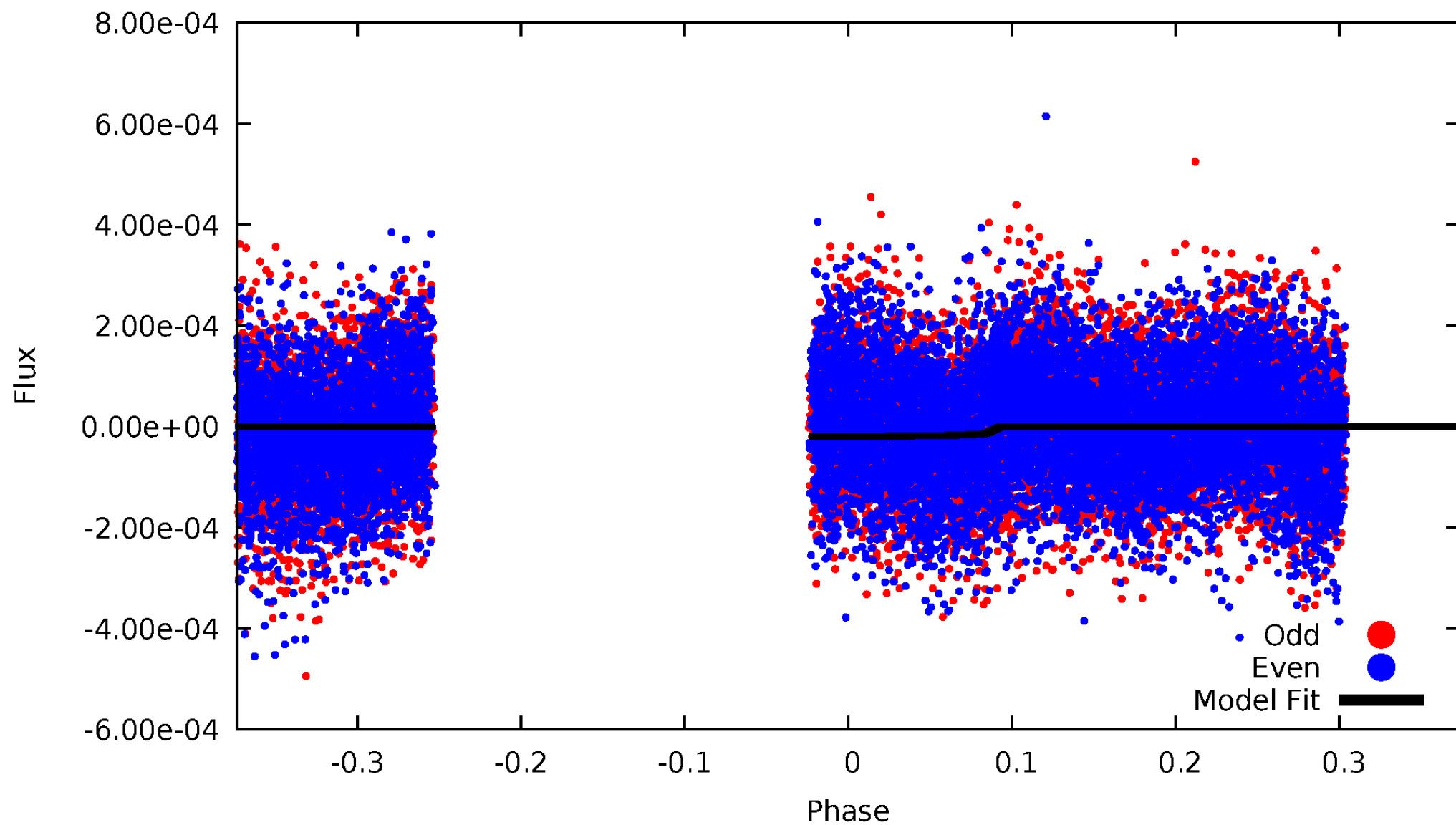


TCE 010652379-03



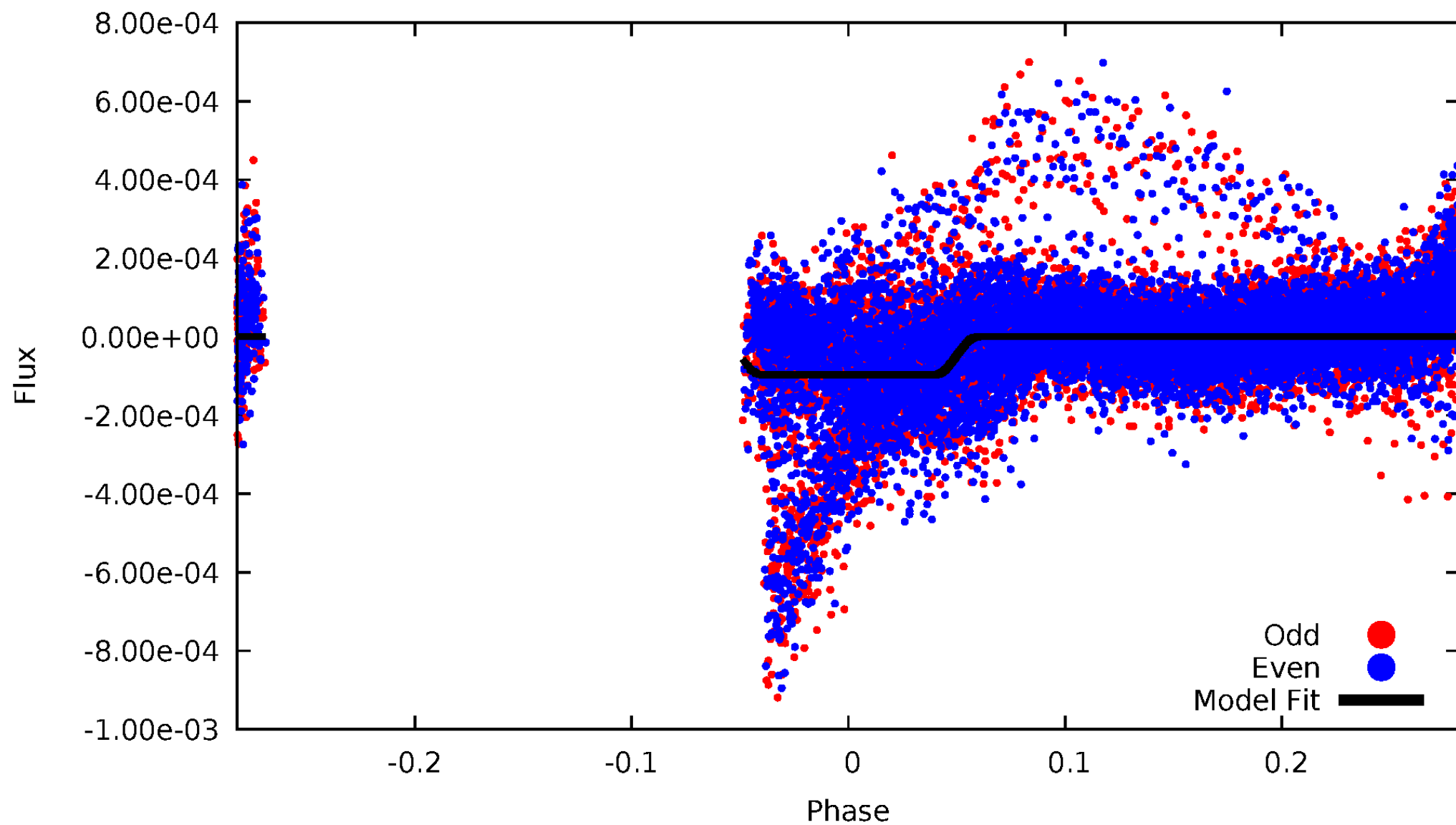
DV Odd/Even

TCE 010652379-03



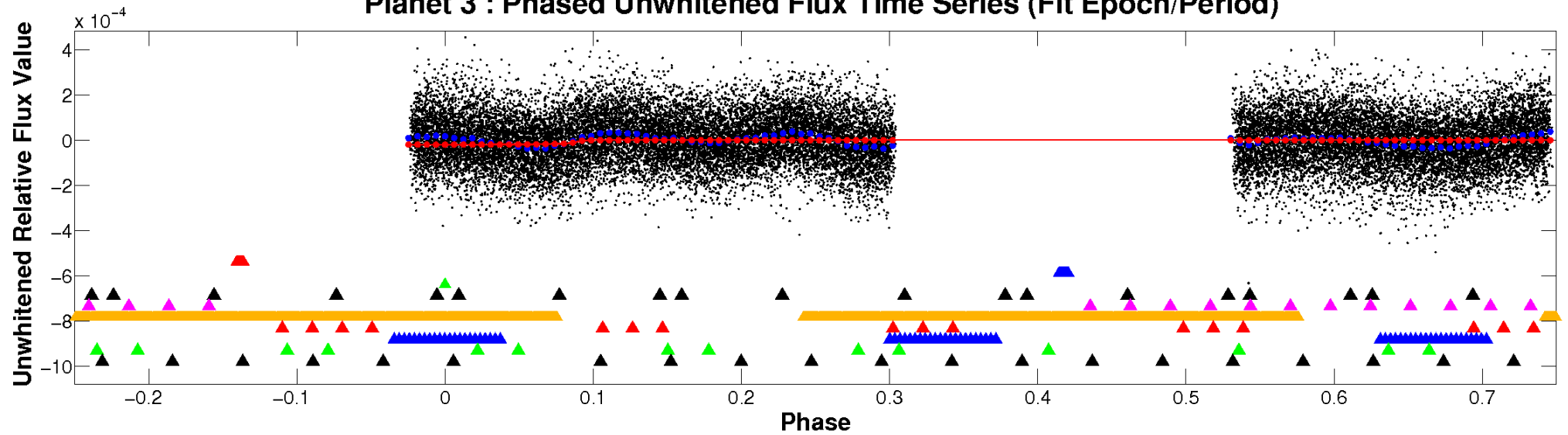
ALT Odd/Even

TCE 010652379-03

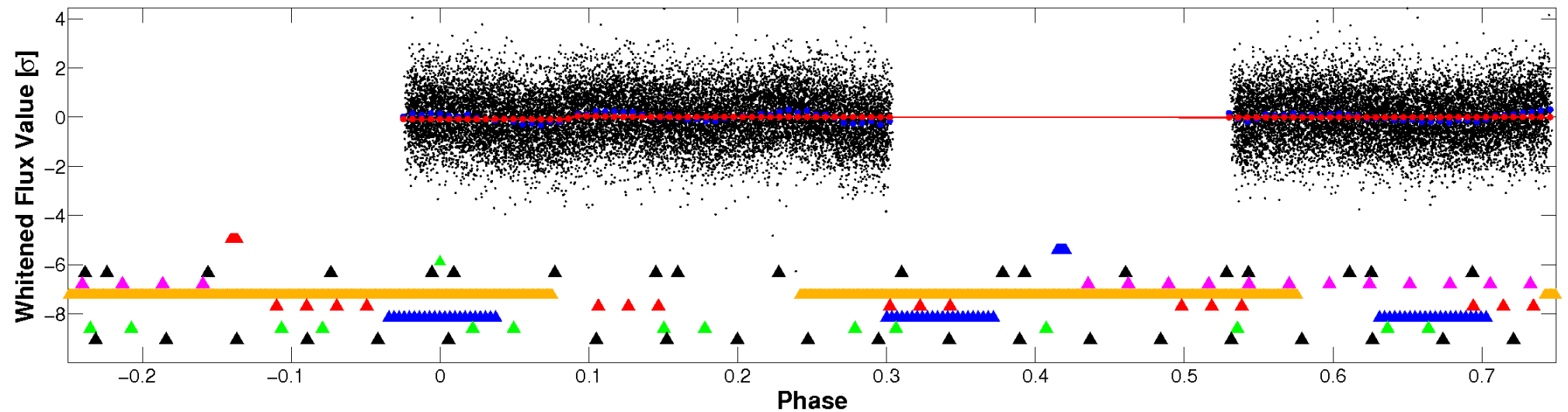


Non-Whitened Vs. Whitened Light Curve

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

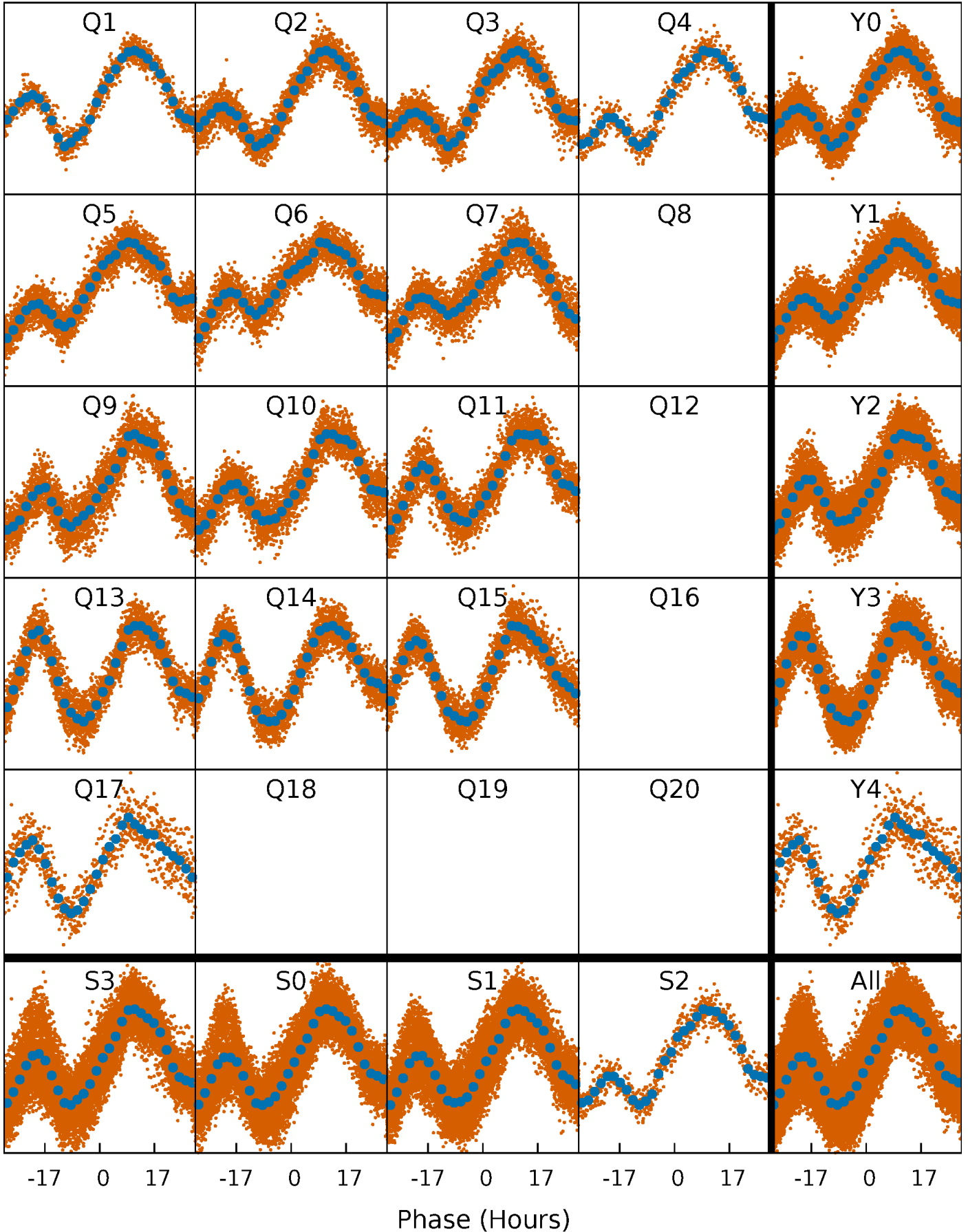


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



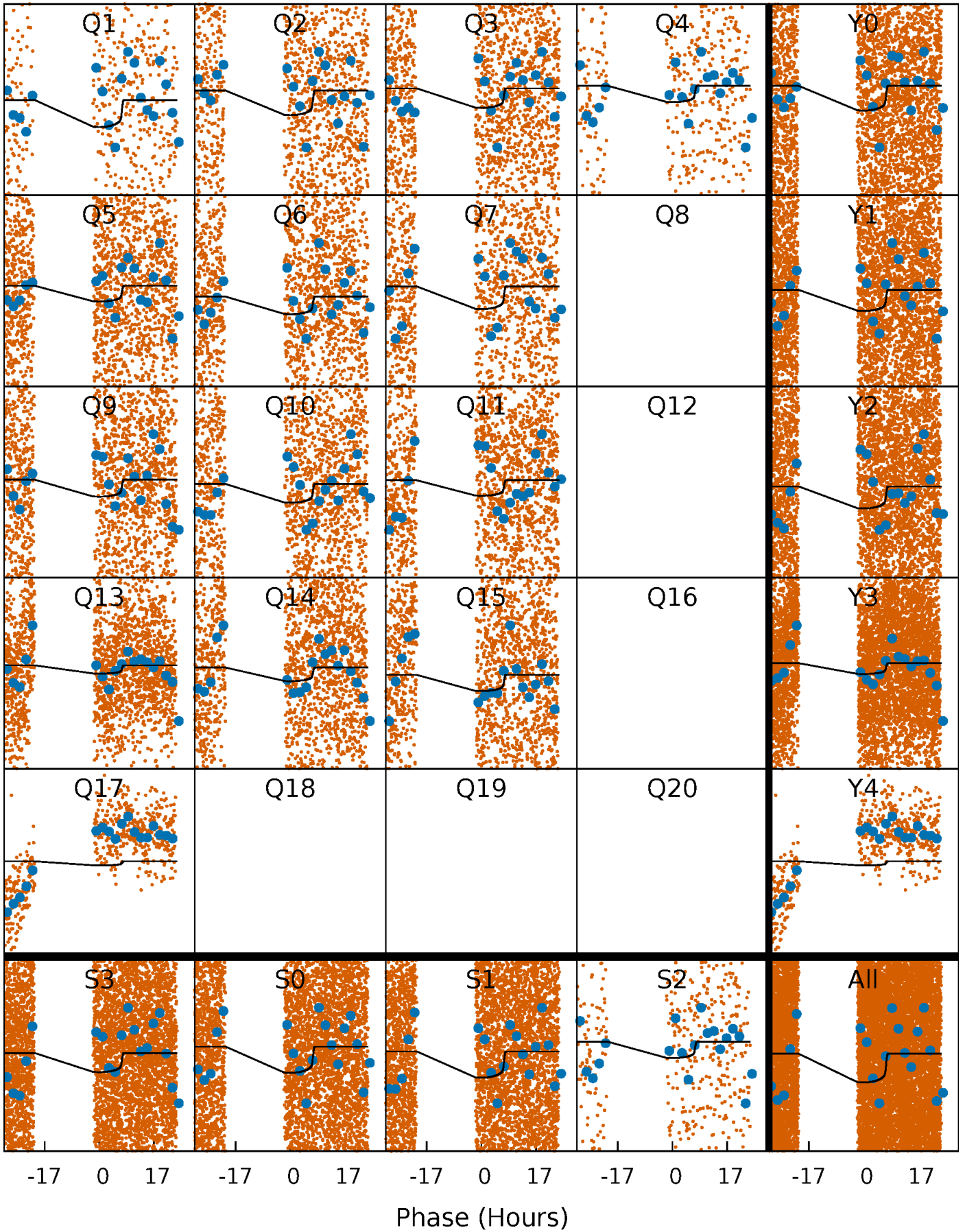
PDC Quarter-Phased Transit Curves

TCE 010652379-03 $P = 3.314671$ Days $T_0 = 133.663432$ (BKJD)



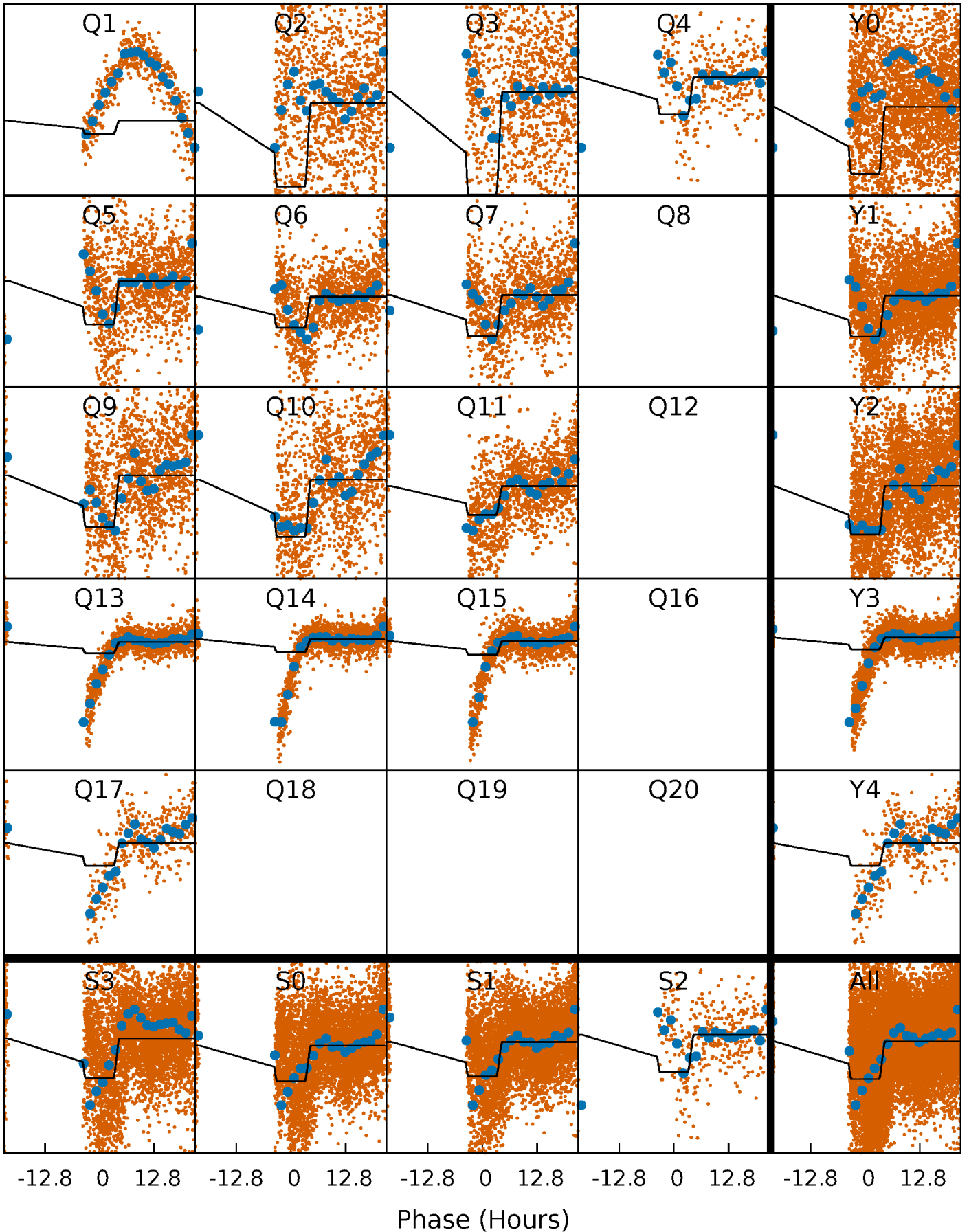
DV Quarter-Phased Transit Curves

TCE 010652379-03 P= 3.314671 Days $T_0=133.663432$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

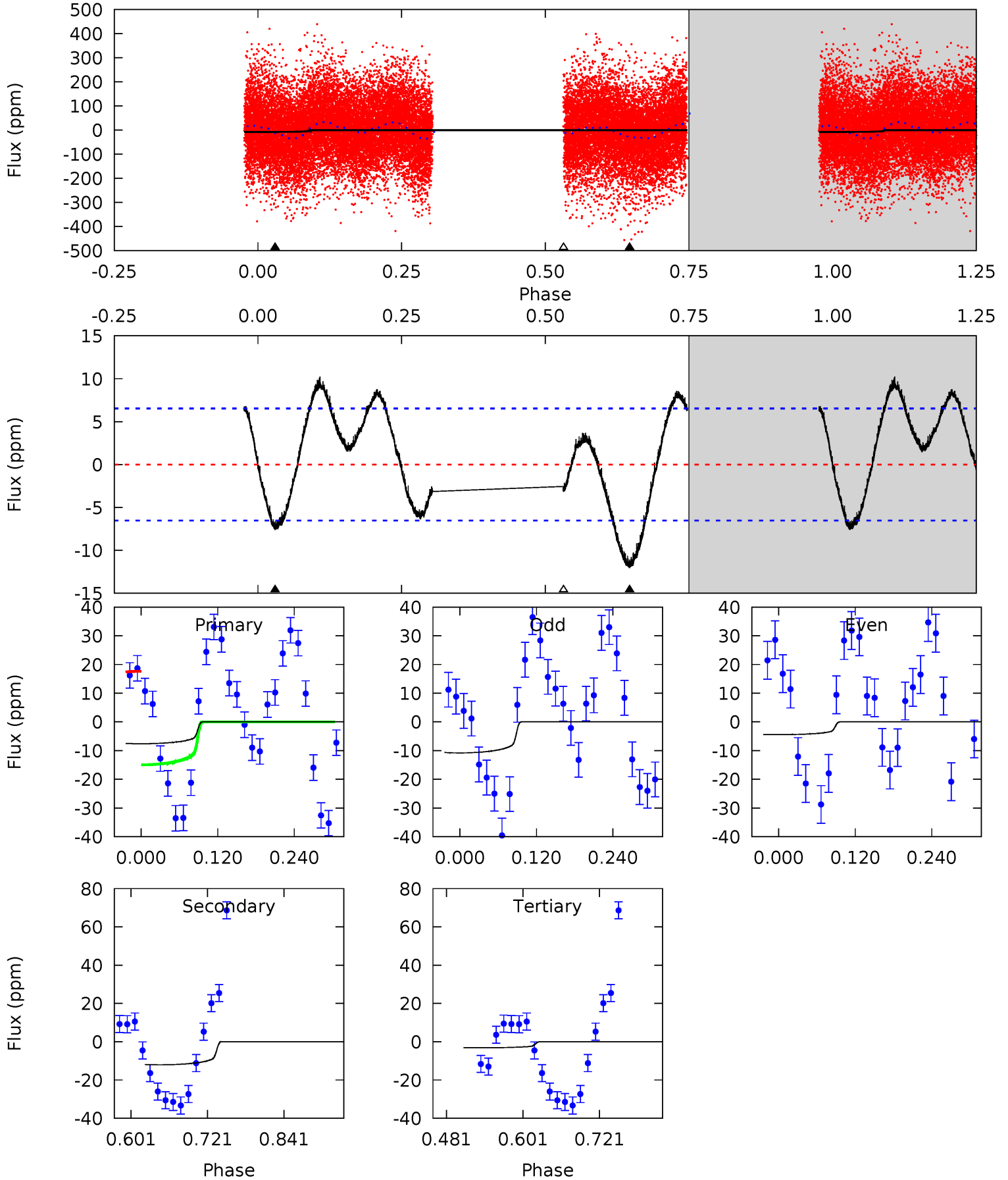
TCE 010652379-03 P= 3.314605 Days $T_0=133.745294$ (BKJD)



DV Model-Shift Uniqueness Test

010652379-03, P = 3.314671 Days, E = 130.348761 Days

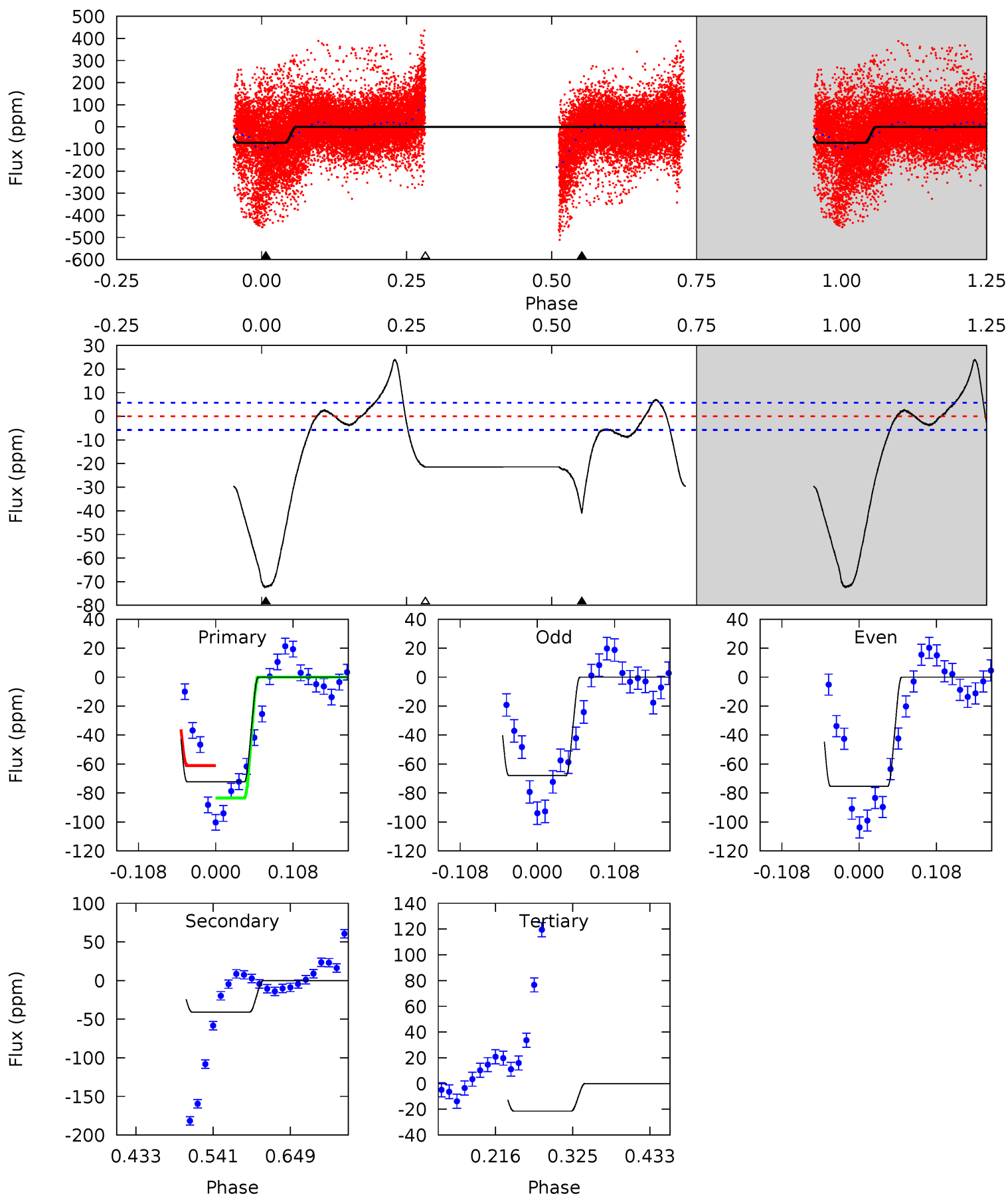
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.28	8.35	2.19	0	4.53	1.55	2.45	3.09	5.28	6.16	8.35	2.22	0.78	0.46	0.72



Alt Model-Shift Uniqueness Test

010652379-03, P = 3.314605 Days, E = 130.430689 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
57.4	32.5	17.0	0	4.55	1.61	9.29	40.4	57.4	15.5	32.5	2.98	1.32	0.25	9.28



Stellar Parameters For KIC 010652379

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6649^{+166}_{-183}	$3.749^{+0.304}_{-0.095}$	$-0.280^{+0.300}_{-0.250}$	$2.654^{+0.489}_{-0.908}$	$1.443^{+0.264}_{-0.264}$	$0.109^{+0.209}_{-0.032}$
	+2%/-3%	+8%/-3%	+107%/-89%	+18%/-34%	+18%/-18%	+192%/-30%
Source	PHO1	FLK73	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 010652379-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-12 ± 1	$1.36^{+0.38}_{-0.35}$	2954^{+178}_{-249}	5516^{+747}_{-529}	$8.752^{+7.079}_{-3.496}$
Alt.	-41 ± 1	$2.72^{+0.47}_{-0.52}$	2944^{+185}_{-267}	5359^{+289}_{-261}	$7.592^{+3.626}_{-1.951}$

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

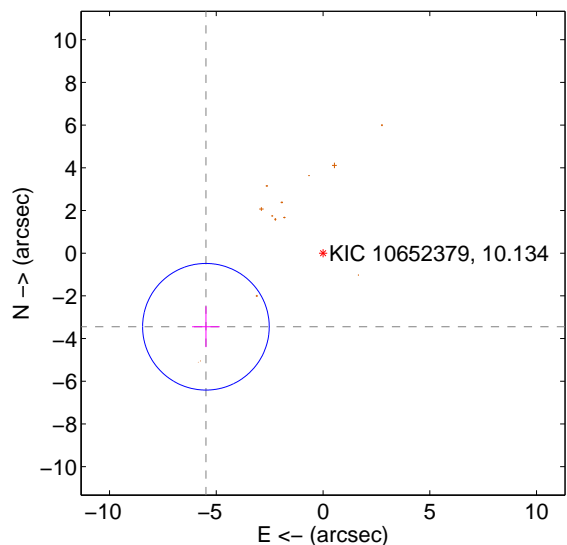
Supplemental centroid analysis for 010652379-03. **Kepler magnitude: 10.13.** Transit SNR 6.41

There are 0 quarters with good PRF difference image offsets

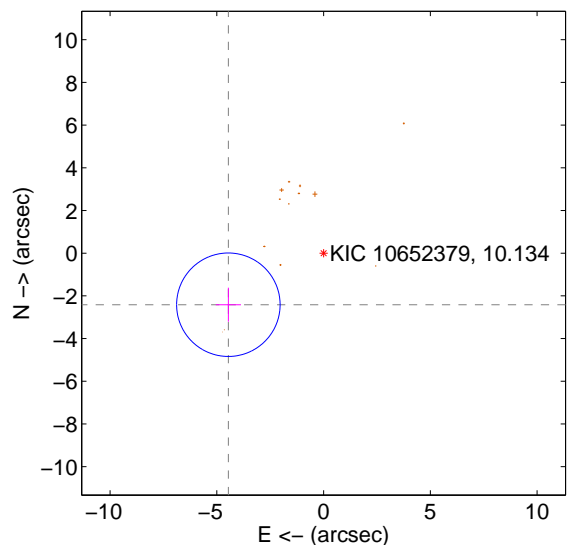
The direct PRF centroid is offset from the target star catalog position by about 1.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.479 ± 0.988	6.55	5.486 ± 0.646	-3.447 ± 0.954
PRF-fit source offset from KIC position	5.071 ± 0.808	6.28	4.460 ± 0.591	-2.414 ± 0.795
photometric centroid source offset	2.53 ± 0.88	2.87	-0.96 ± 0.70	2.34 ± 0.91

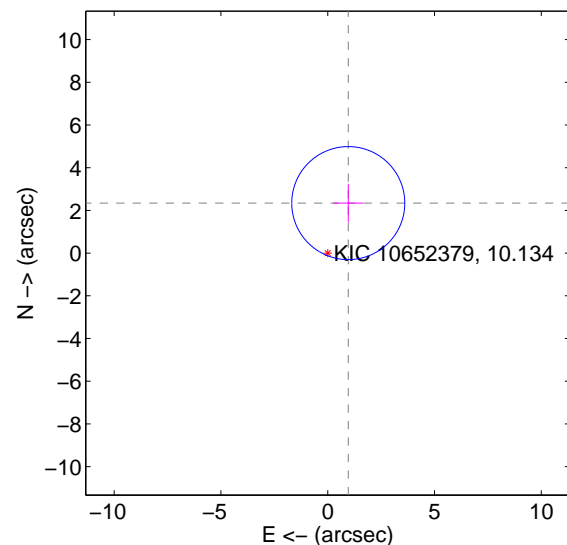
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

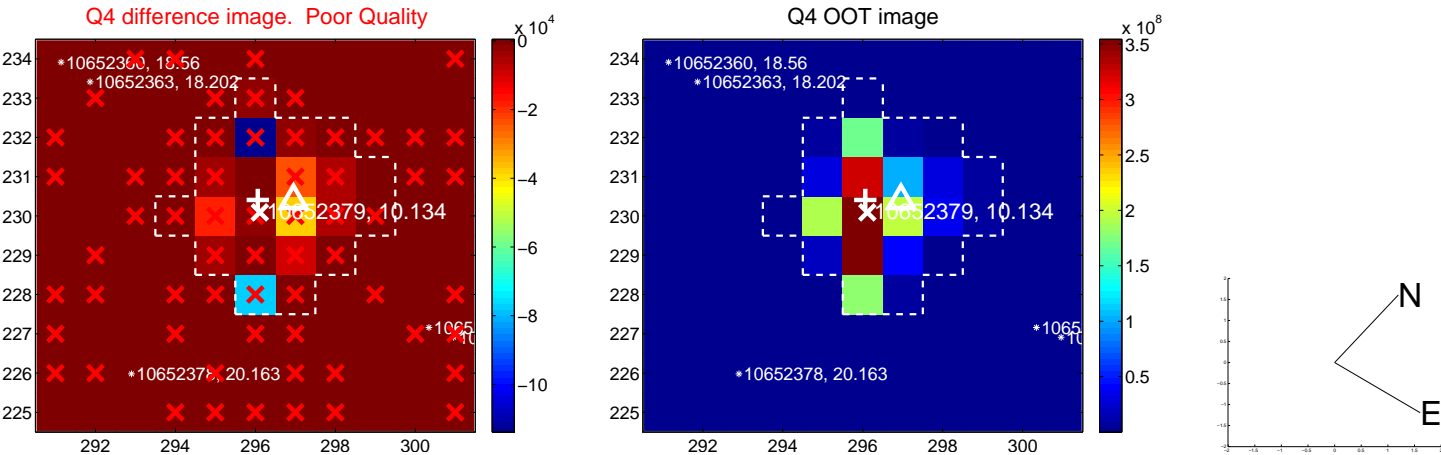
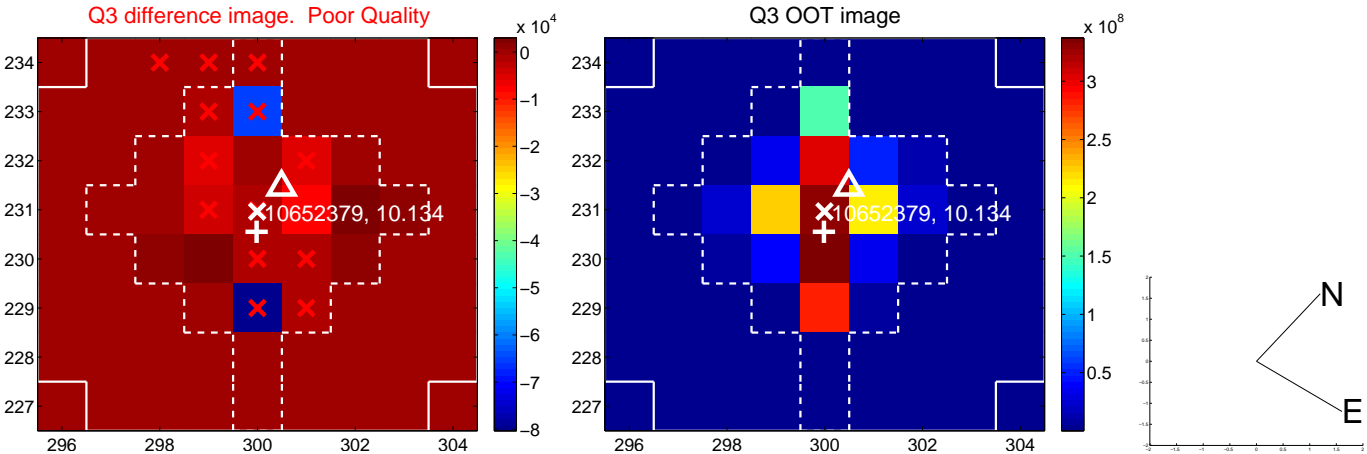
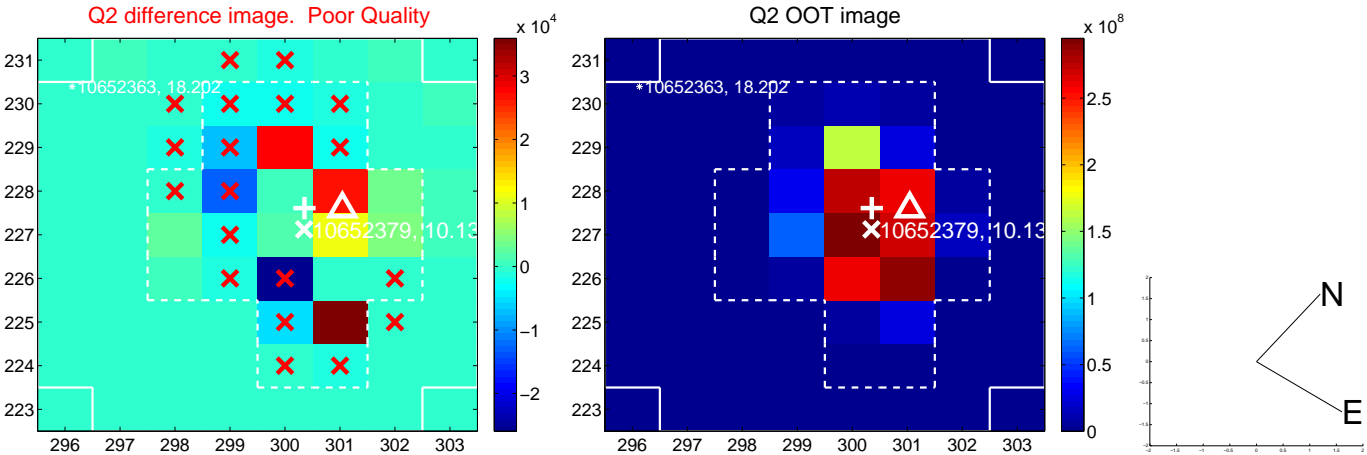
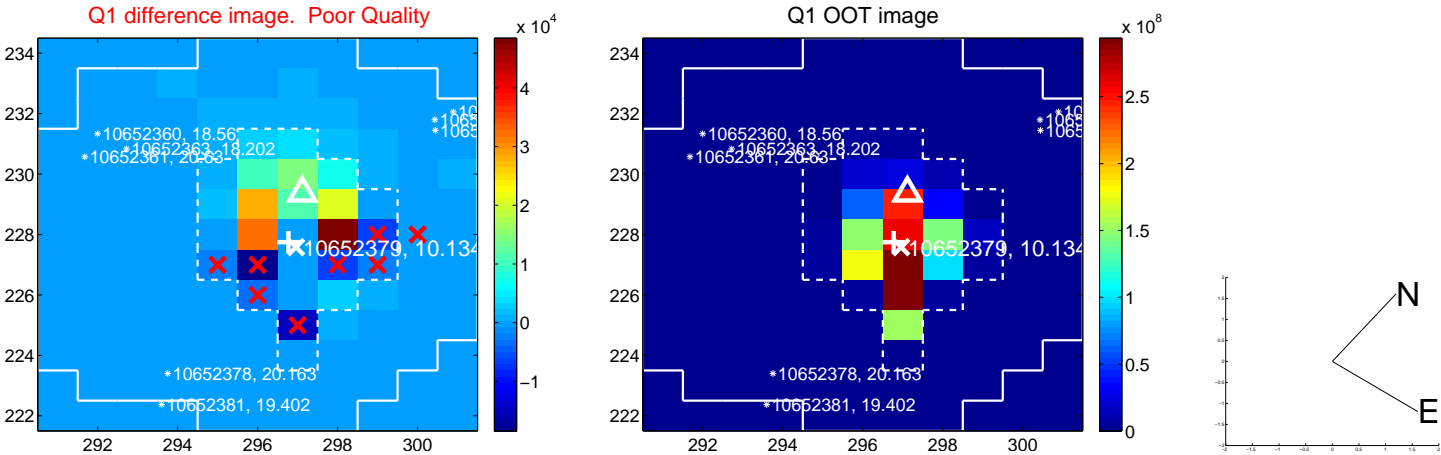


offset from photometric centroids

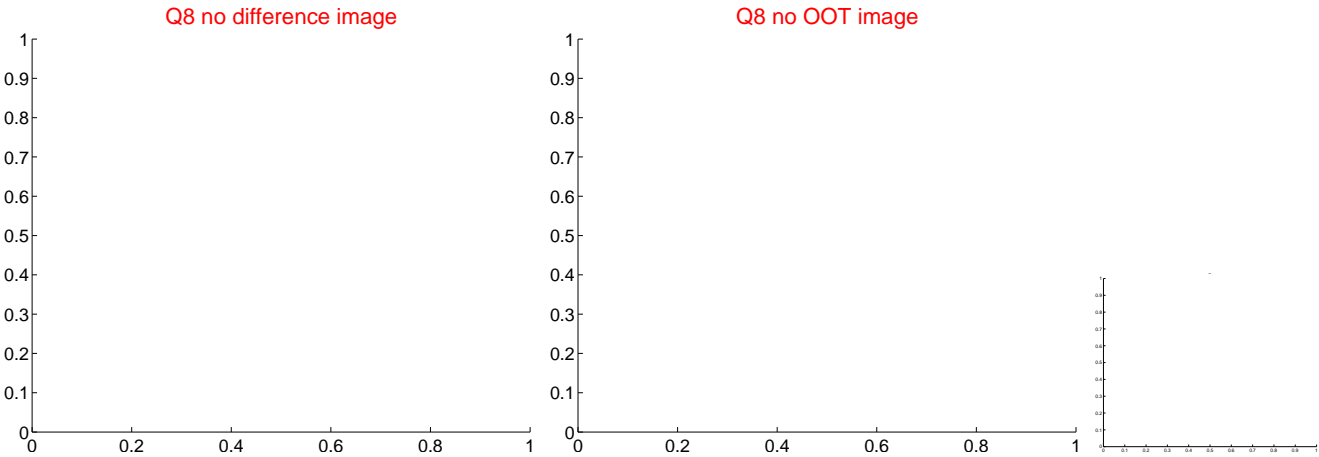
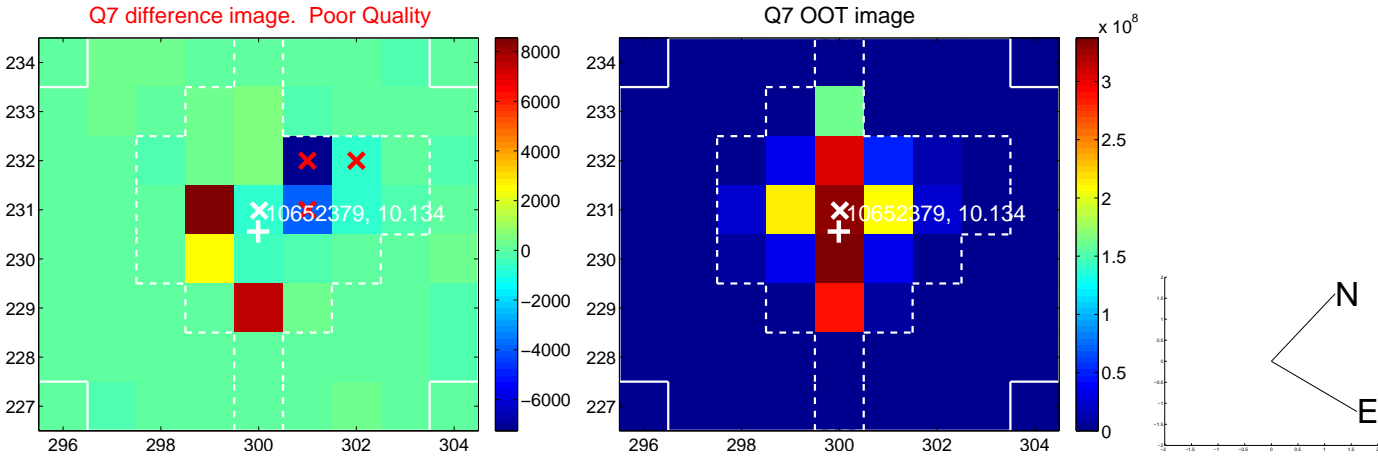
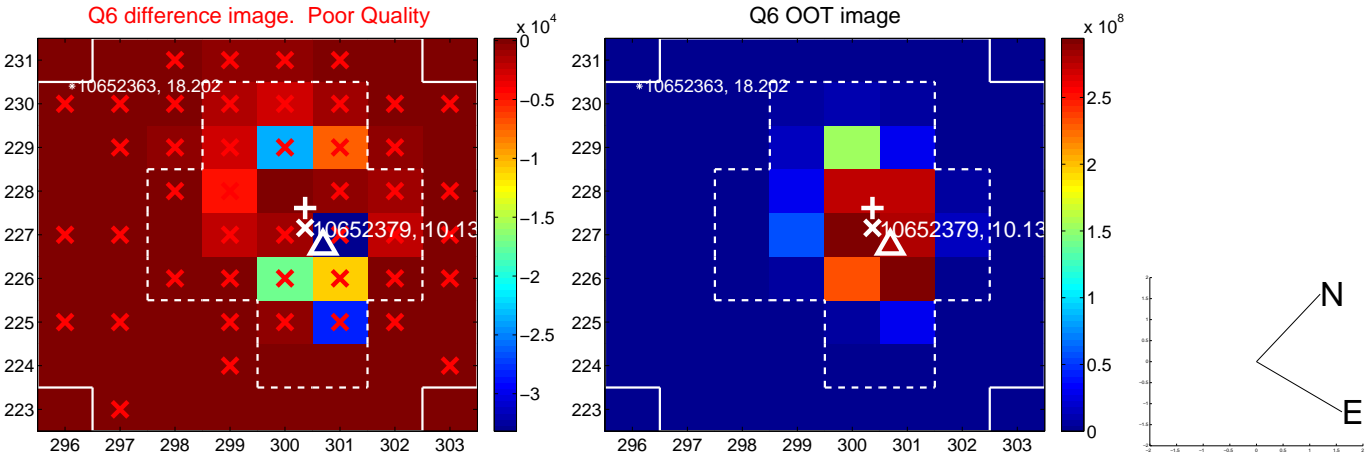
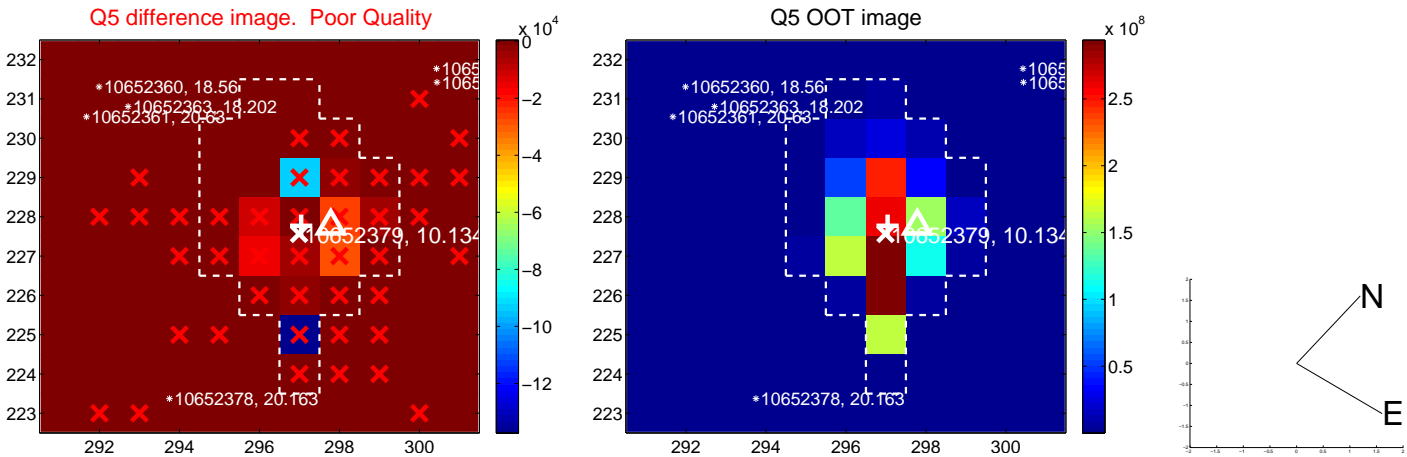


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

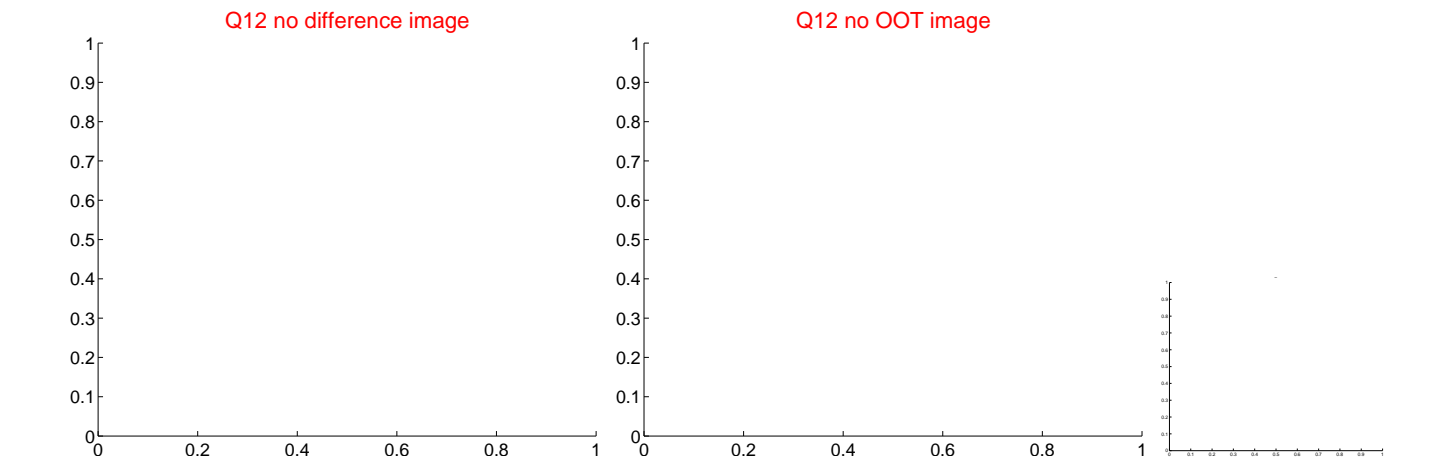
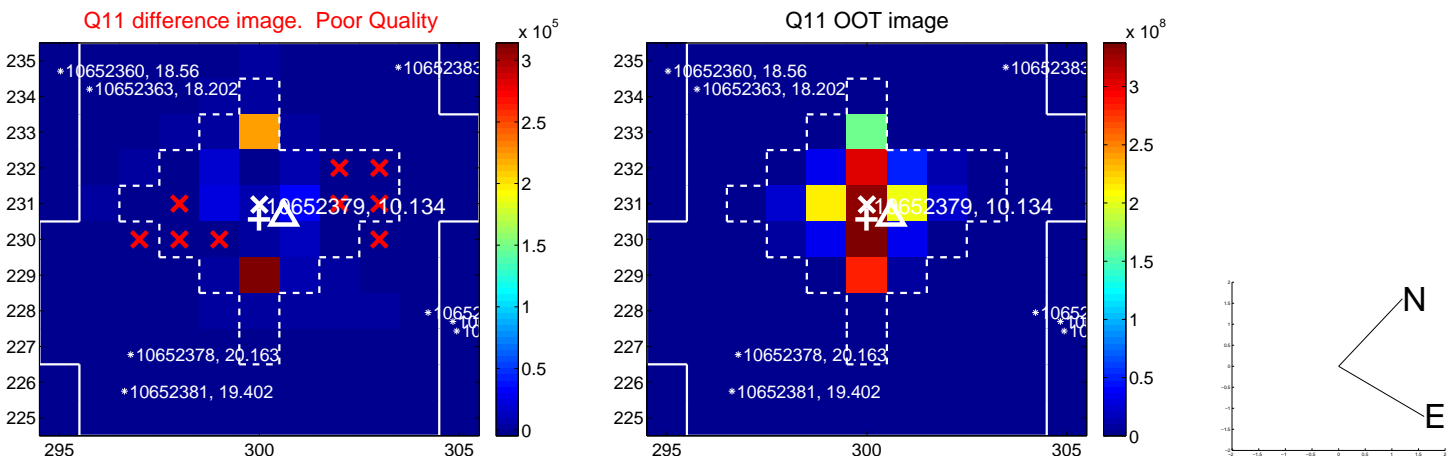
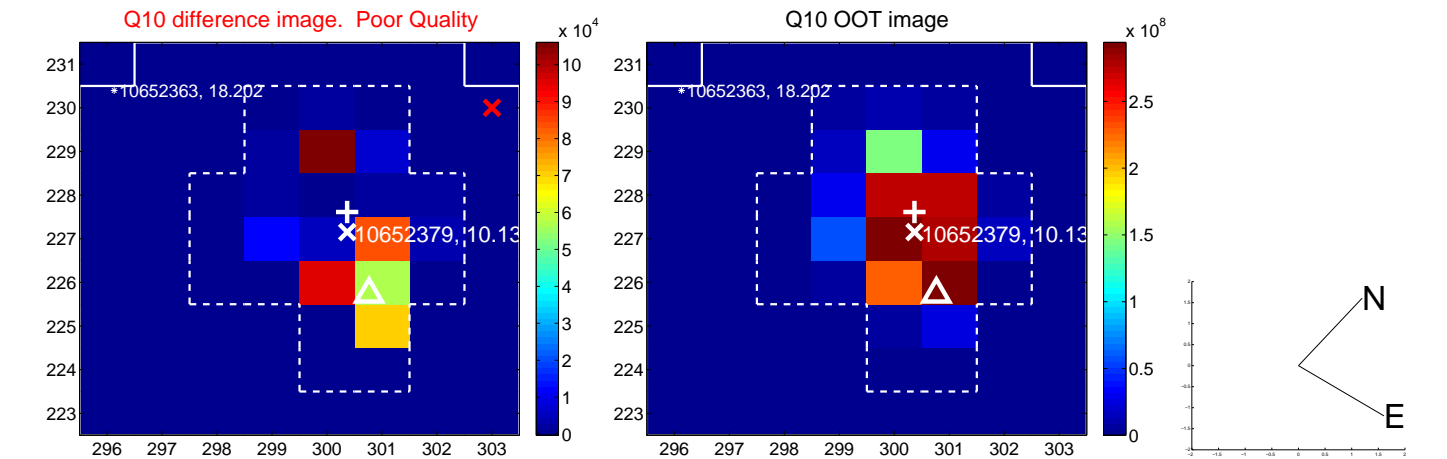
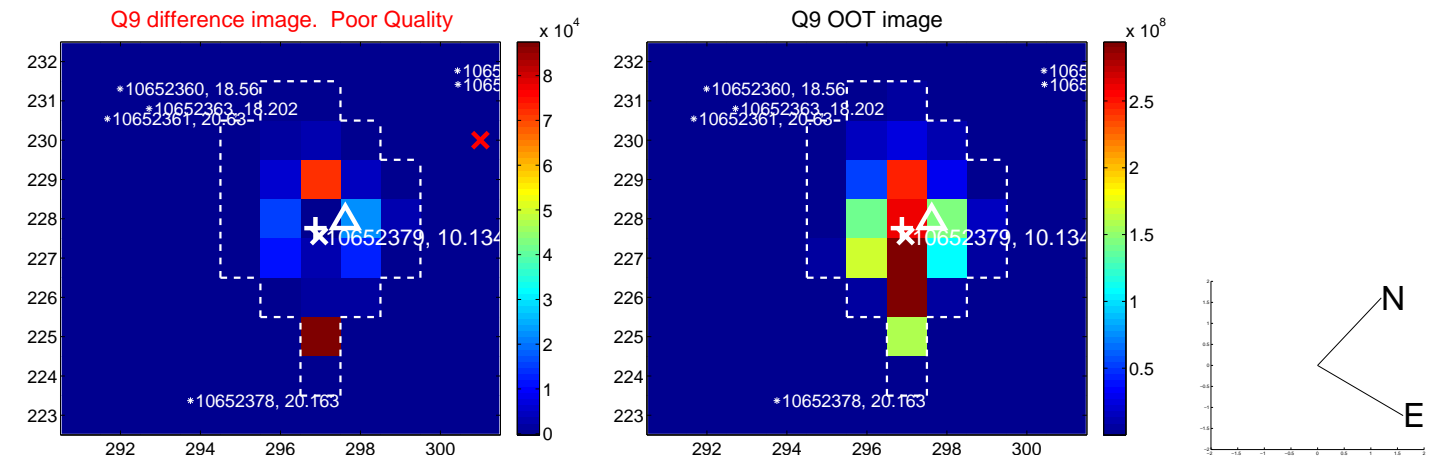
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



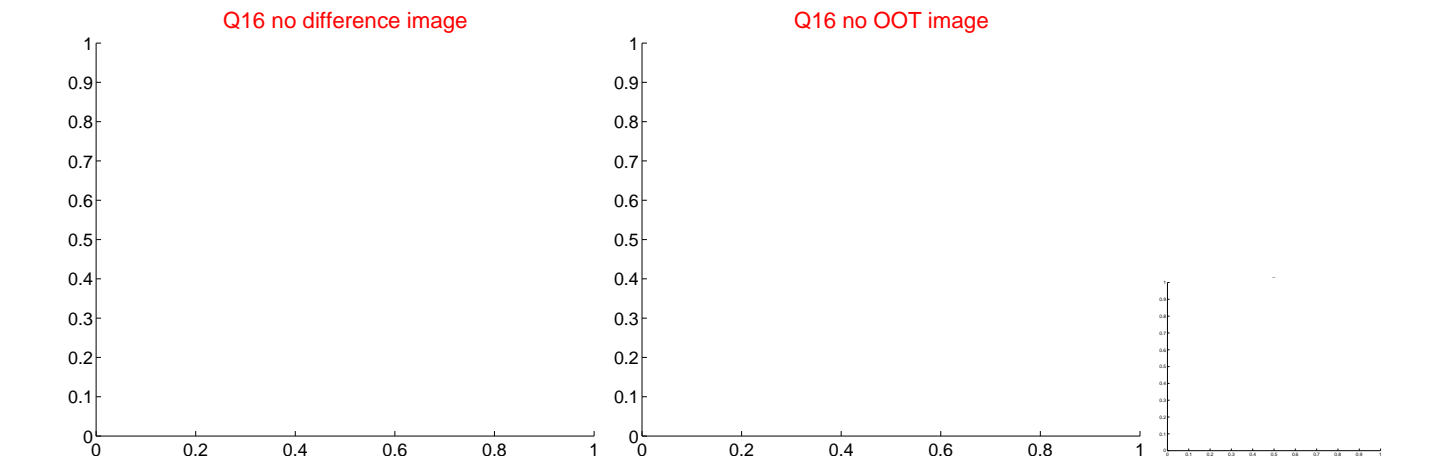
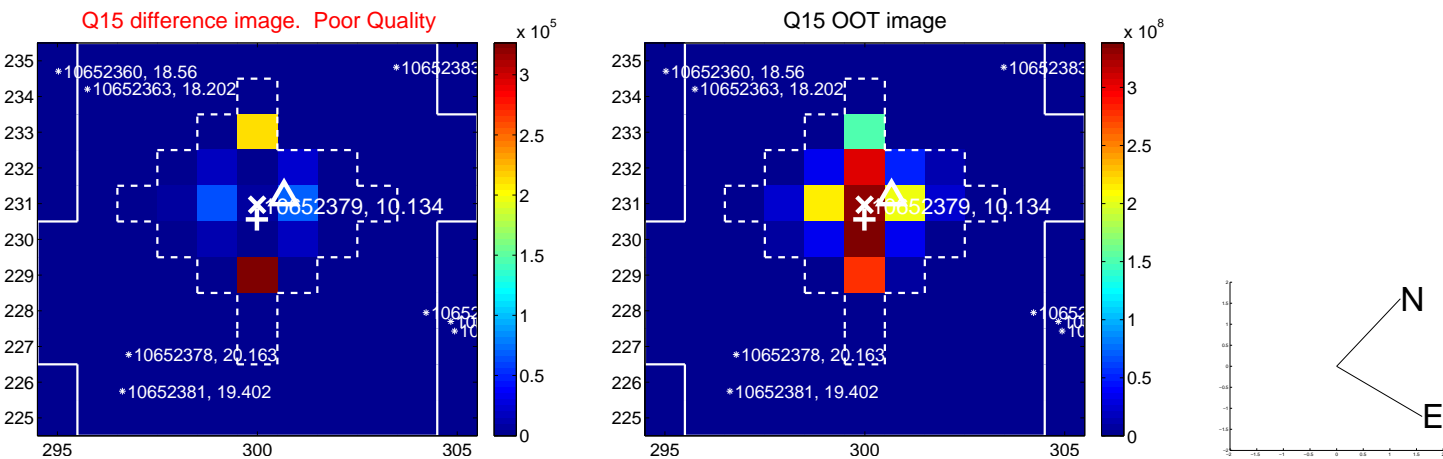
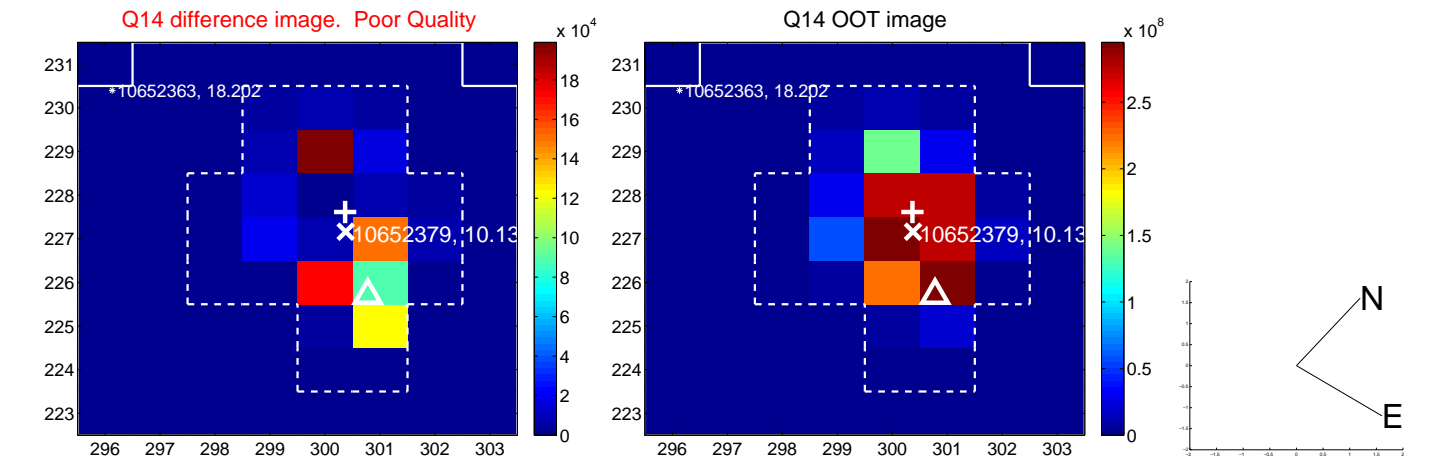
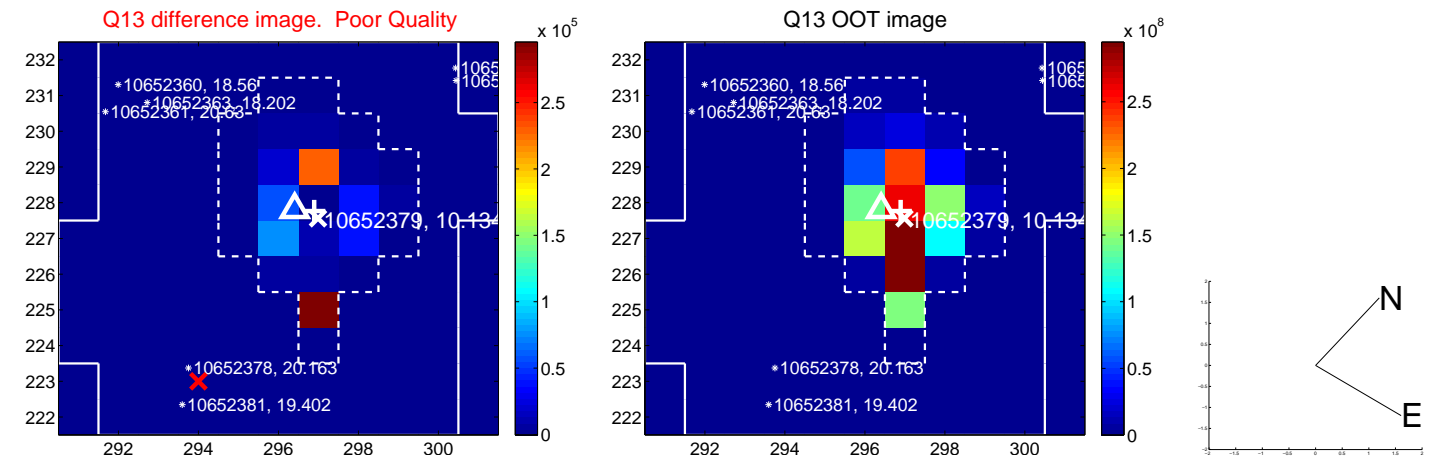
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



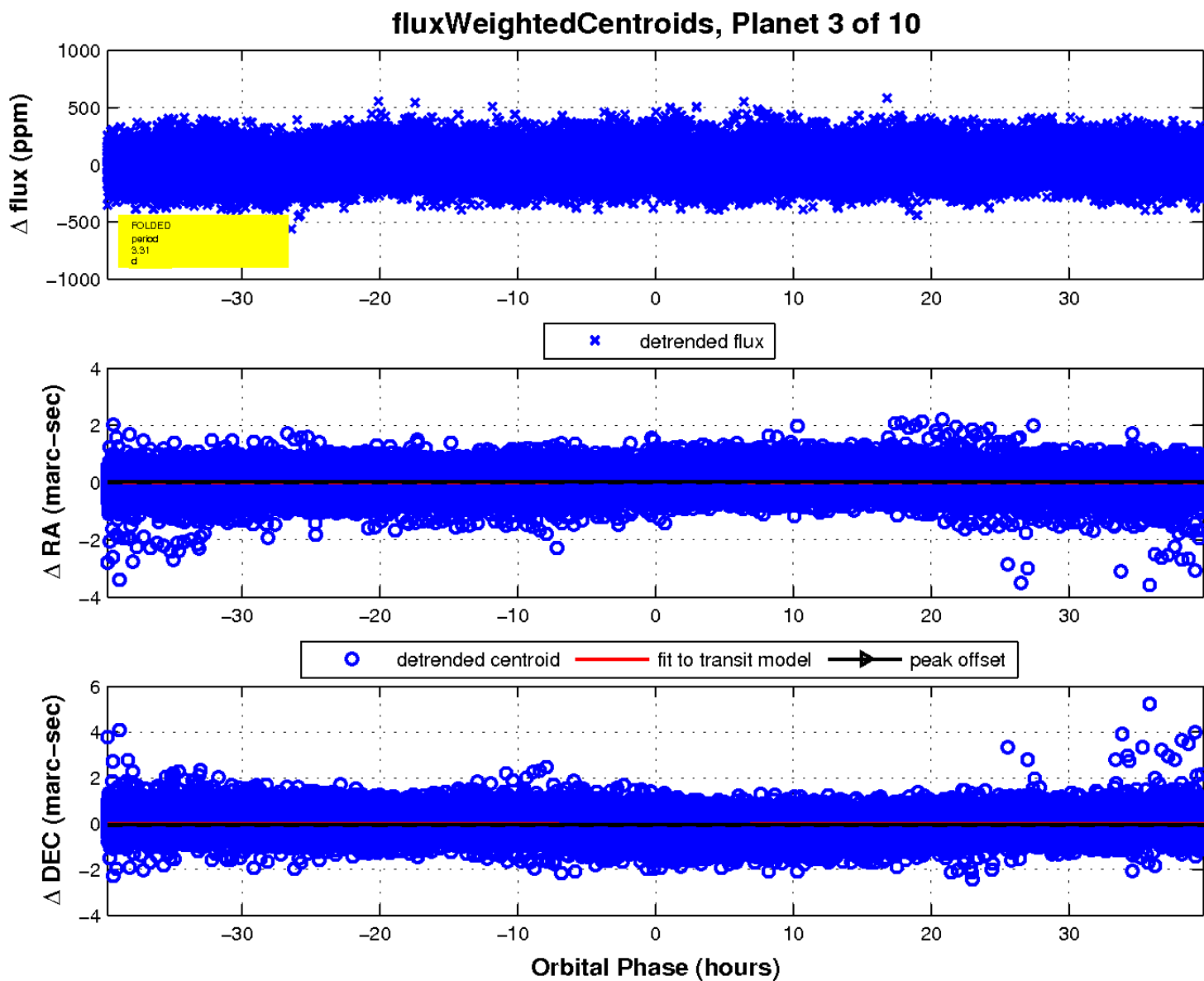
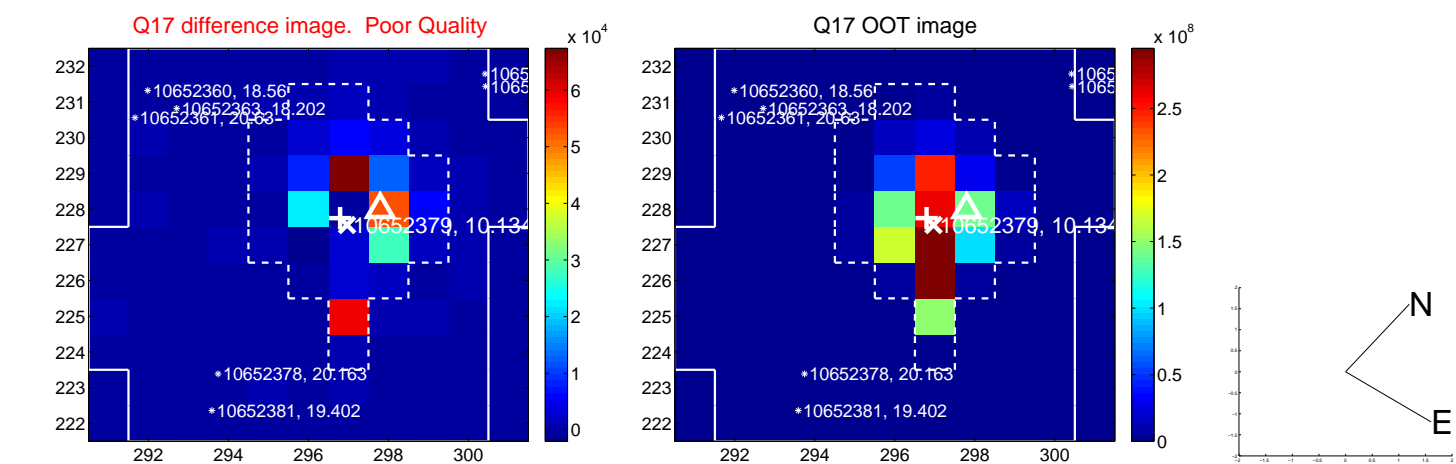
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



This plot does not exist for this TCE.

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})
010652379-01	OBS	No	3.314708	133.196939	56.4	6.019	11.1	12.3	2.65	6649	4.05	5104.19
010652379-02	OBS	No	3.314624	131.743175	34.5	5.989	10.9	10.5	2.65	6649	1.84	5104.36
010652379-03	OBS	No	3.314671	133.663432	19.7	14.851	10.8	6.4	2.65	6649	1.43	5104.26
010652379-04	OBS	No	78.280988	161.932625	205.4	7.495	16.9	9.7	2.65	6649	4.03	75.33
010652379-05	OBS	No	89.406597	199.428664	114.3	6.777	16.6	6.7	2.65	6649	3.33	63.10
010652379-06	OBS	No	1.656077	132.257770	43.0	1.724	11.7	7.0	2.65	6649	1.76	12874.97
010652379-07	OBS	No	88.846588	212.851630	207.0	10.888	8.4	9.1	2.65	6649	4.12	63.63
010652379-08	OBS	No	22.094042	141.525125	82.3	7.323	8.5	8.9	2.65	6649	2.78	406.90
010652379-09	OBS	No	106.495223	202.067155	176.6	6.010	8.2	8.4	2.65	6649	3.99	49.97
010652379-10	OBS	No	73.079893	200.304960	69.2	2.000	7.5	-1.0	2.65	6649	2.23	82.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010652379-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
010652379-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—TRANS_GAPPED—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010652379-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

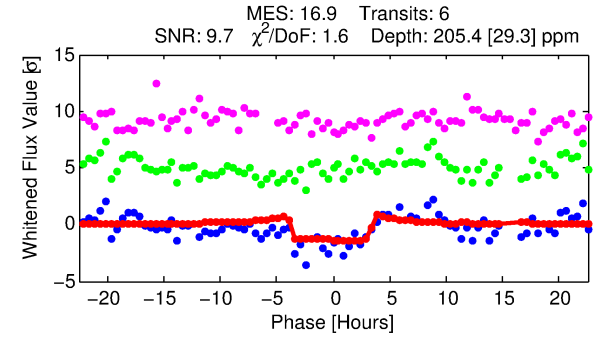
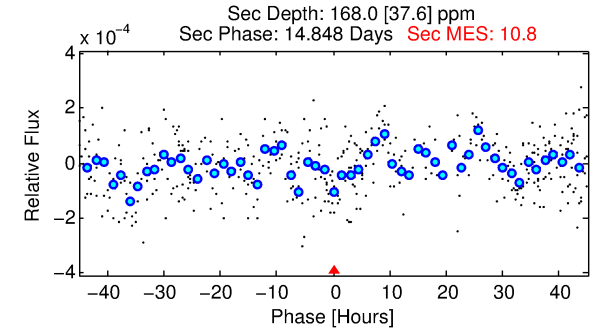
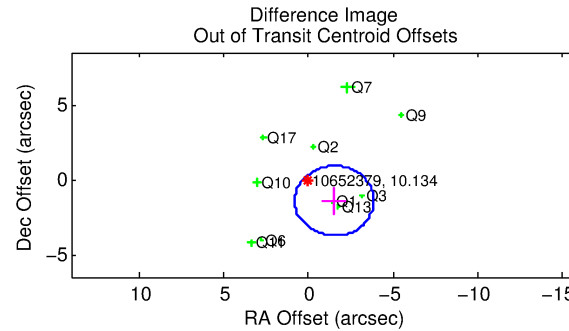
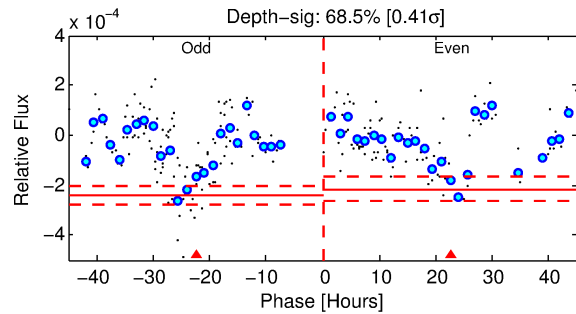
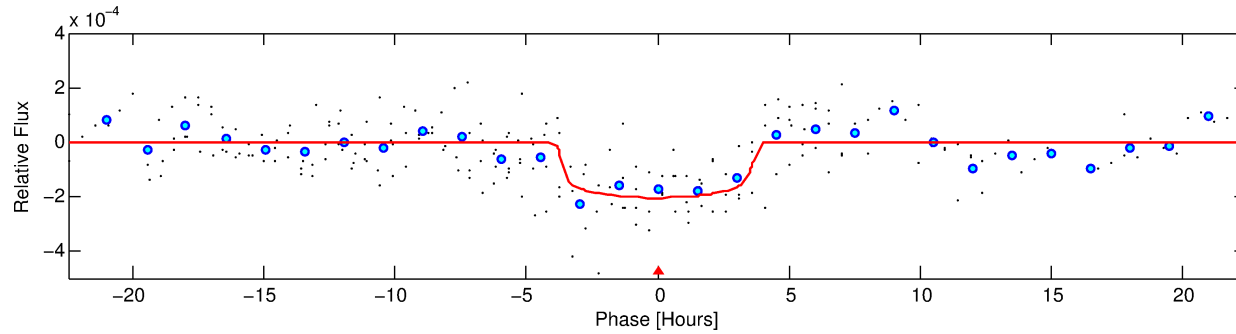
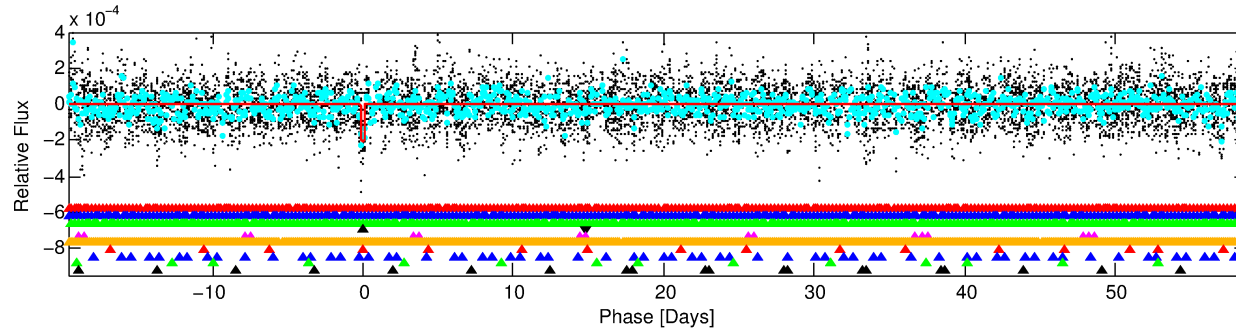
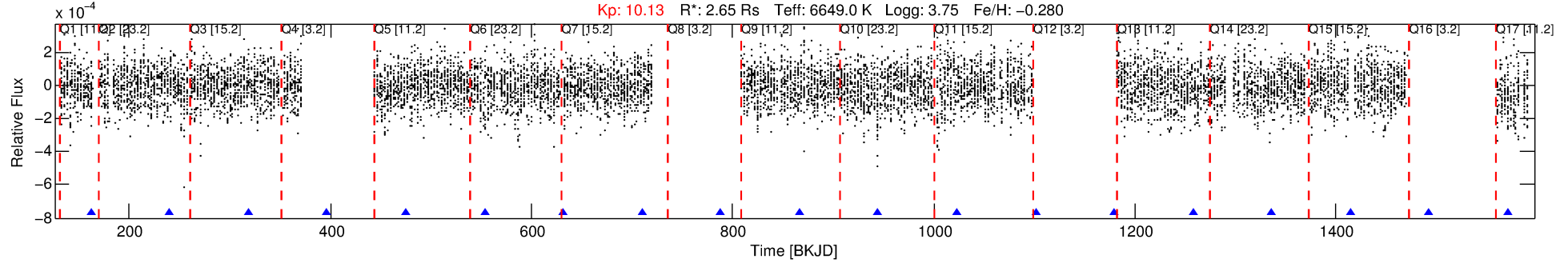
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010652379-04

No Significant Match Found

DV One-Page Summary

KIC: 10652379 Candidate: 4 of 10 Period: 78.281 d



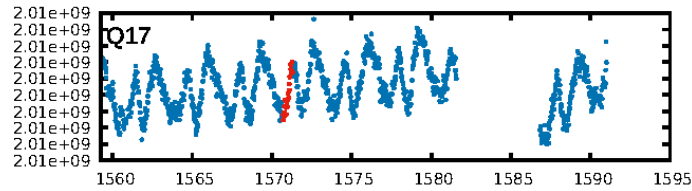
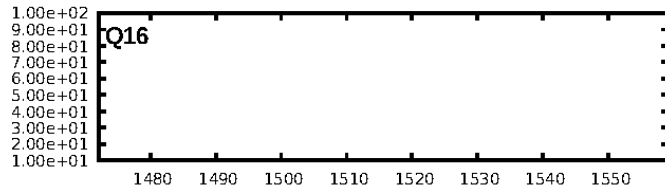
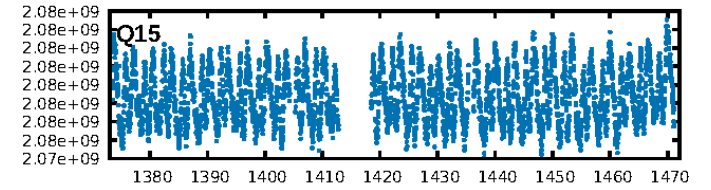
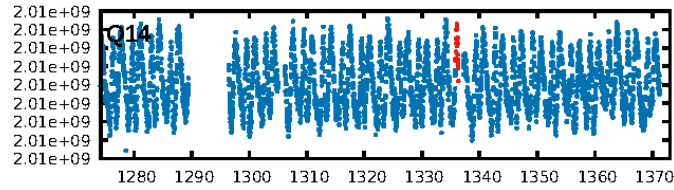
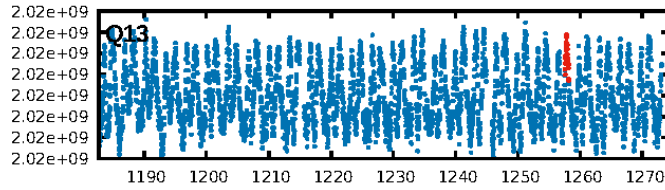
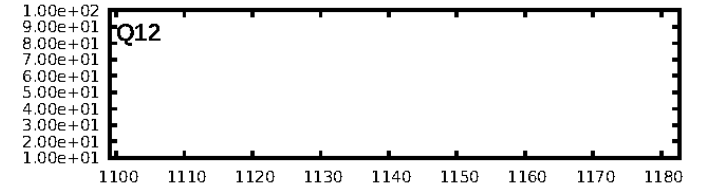
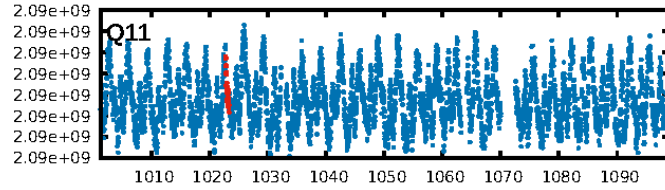
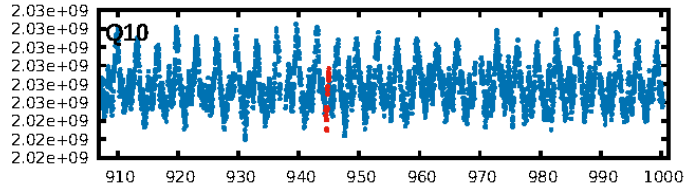
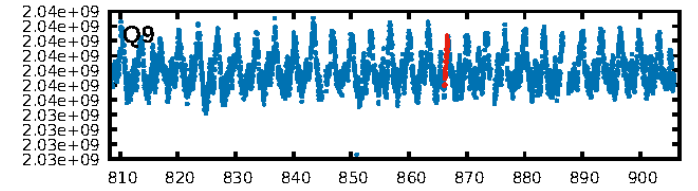
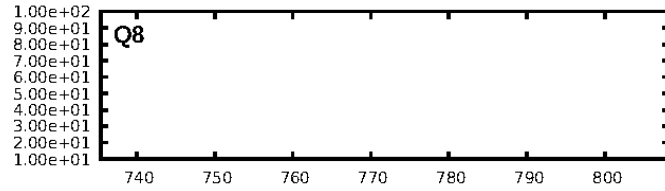
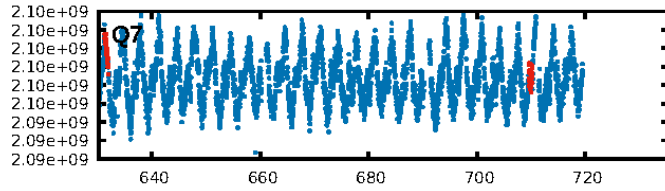
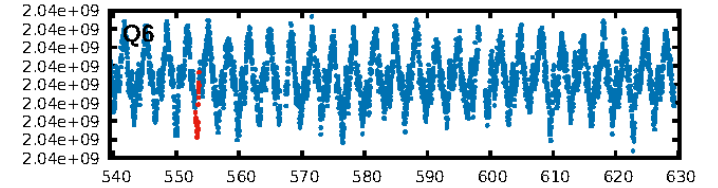
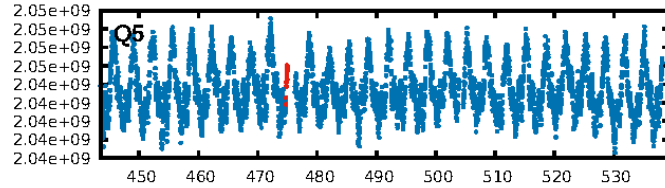
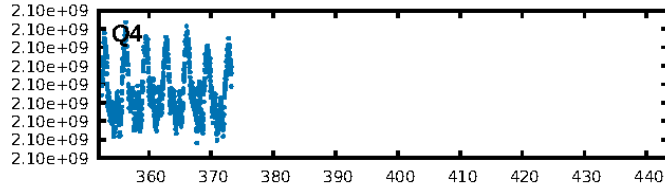
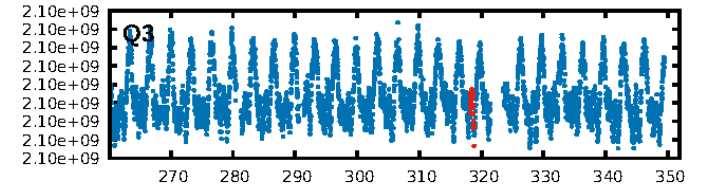
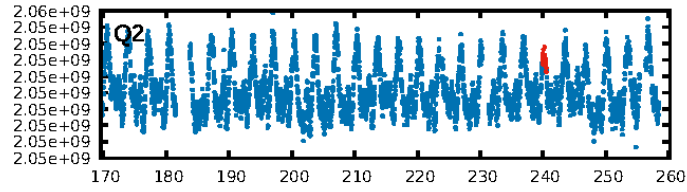
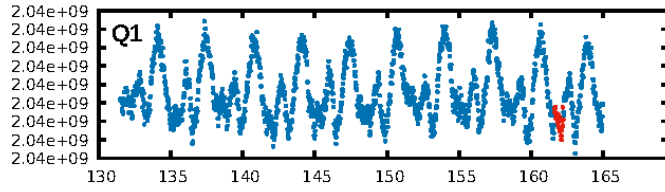
DV Fit Results:

Period = 78.28099 [0.00084] d
Epoch = 161.9326 [0.0096] BKJD
Rp/R* = 0.0139 [0.0136]
a/R* = 61.96 [344.68]
b = 0.65 [4.93]
Seff = 75.33 [40.00]
Teq = 751 [100] K
Rp = 4.03 [4.18] Re
a = 0.4046 [0.1320] AU
Ag = 932.18 [1899.76] [0.49 σ]
Teffp = 6418 [3167] K [1.79 σ]

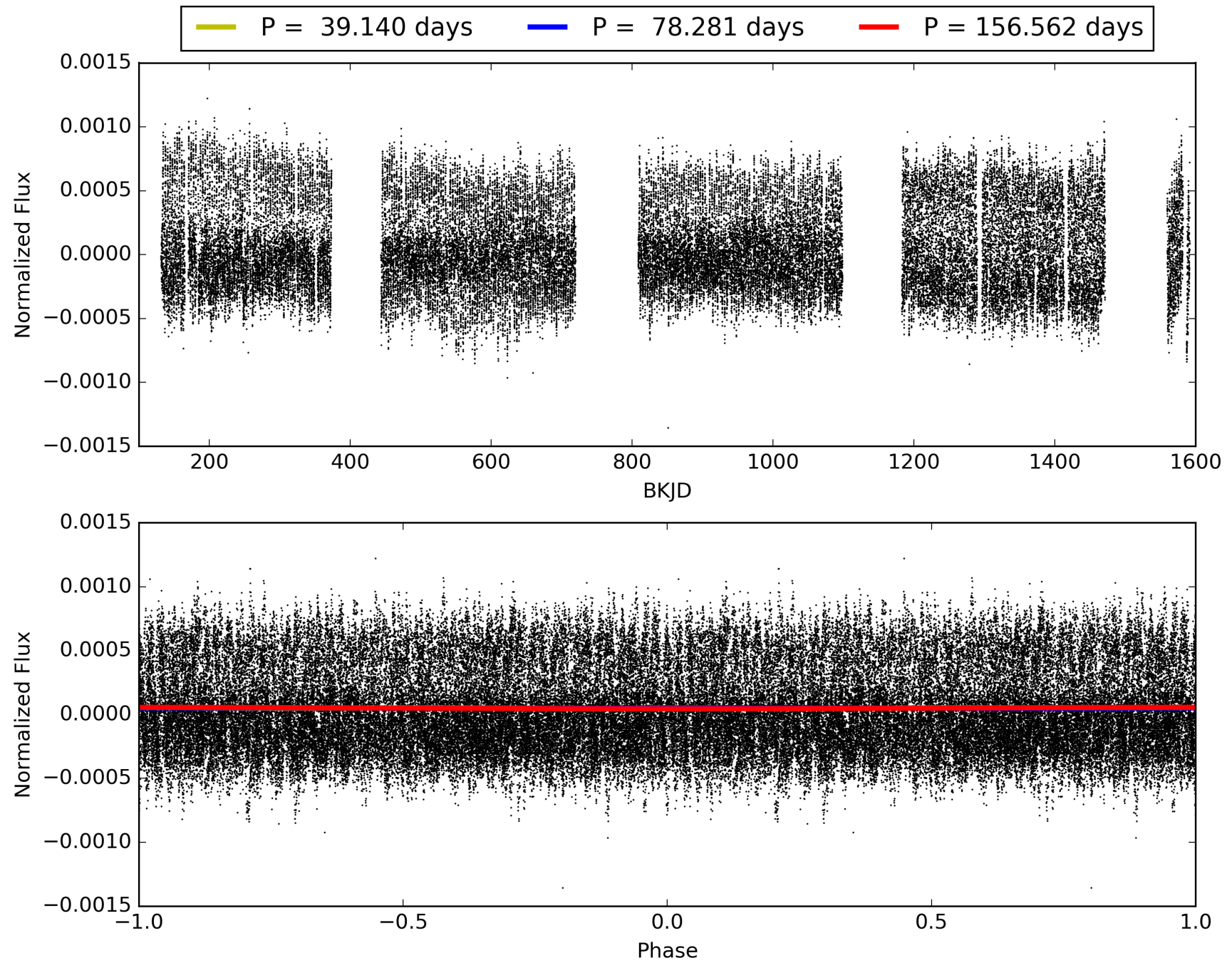
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [16.09 σ]
LongPeriod-sig: 100.0% [19.18 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: N/A
Centroid-sig: 30.6%
Centroid-so: 0.549 arcsec [1.32 σ]
OotOffset-rm: 2.074 arcsec [2.67 σ]
KicOffset-rm: 2.235 arcsec [2.92 σ]
OotOffset-st: 3/3/0/4 [10]
KicOffset-st: 3/3/0/4 [10]
DiffImageQuality-fgm: 0.10 [1/10]
DiffImageOverlap-fno: 0.00 [0/10]

TCE 010652379-04, PDC Light Curves

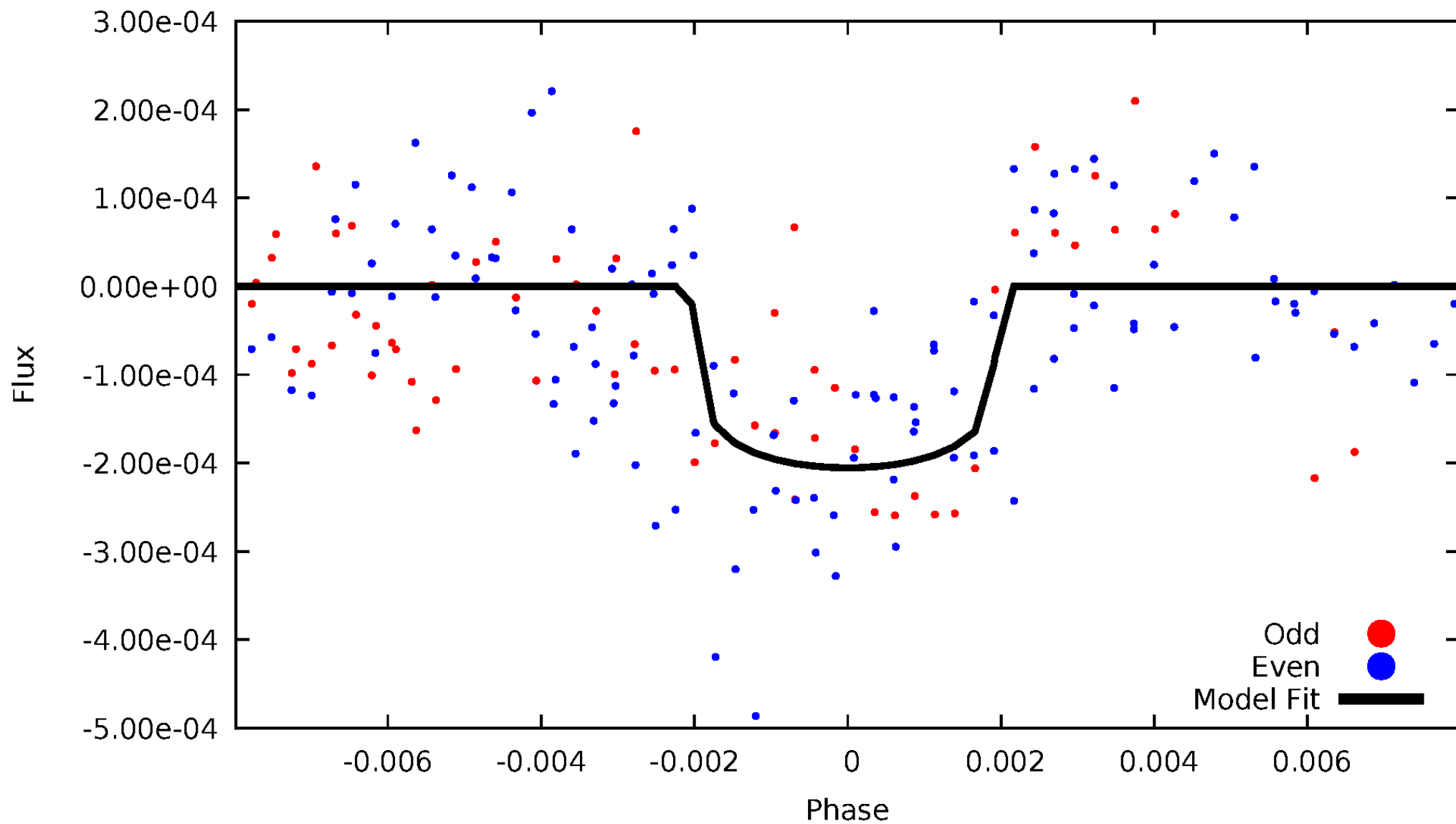


TCE 010652379-04



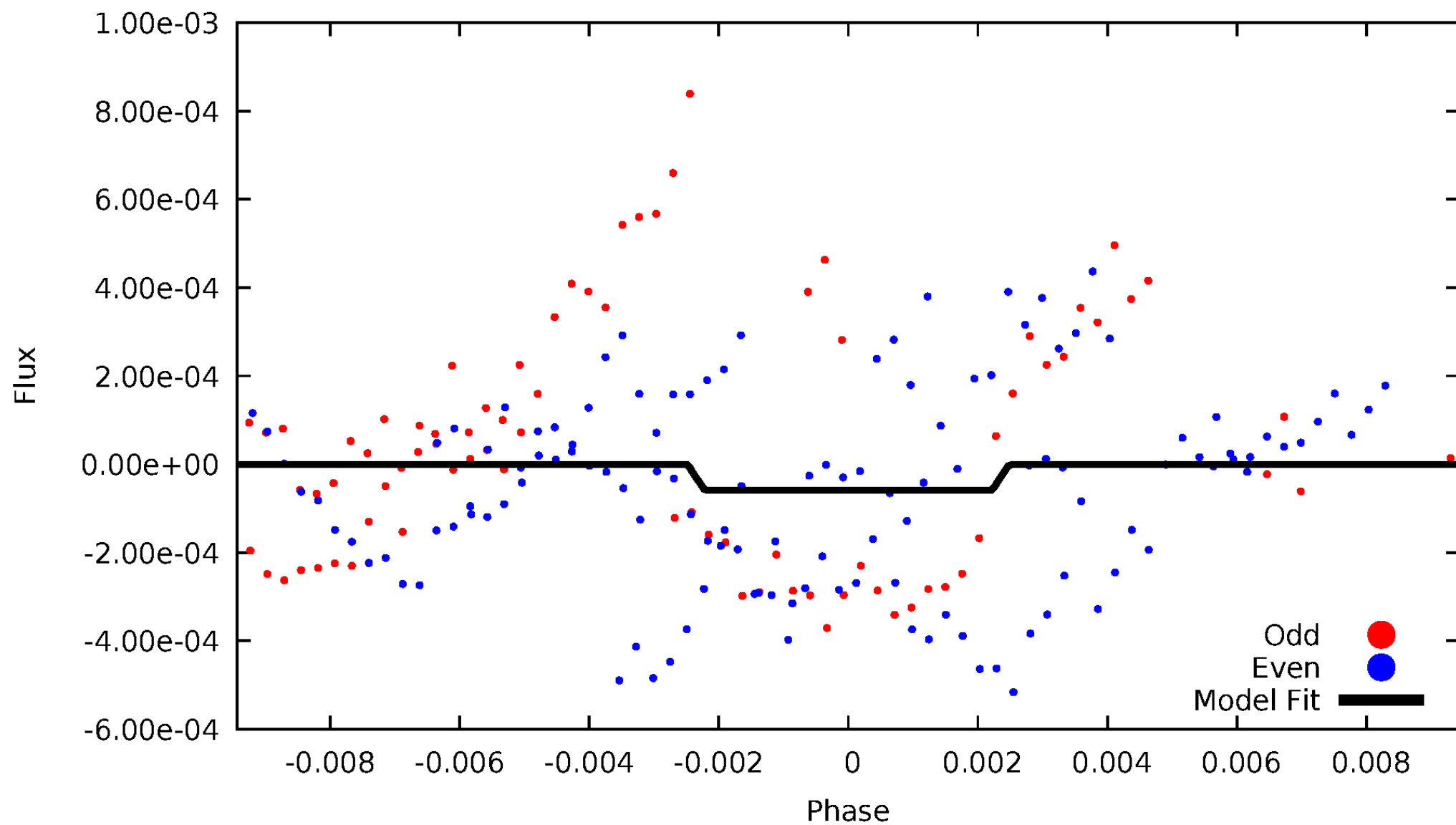
DV Odd/Even

TCE 010652379-04



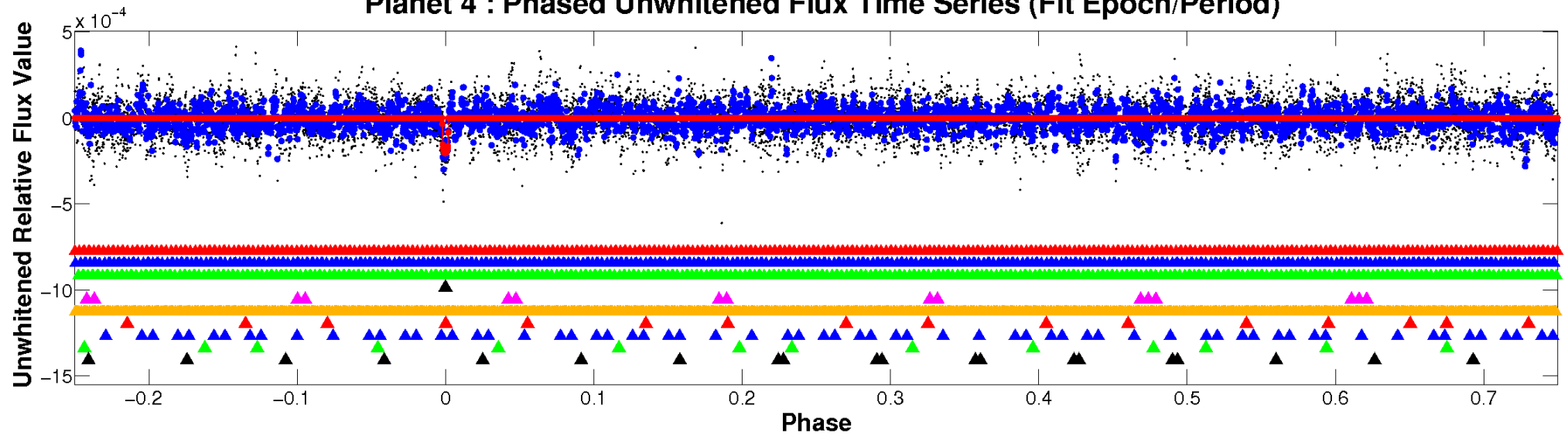
ALT Odd/Even

TCE 010652379-04

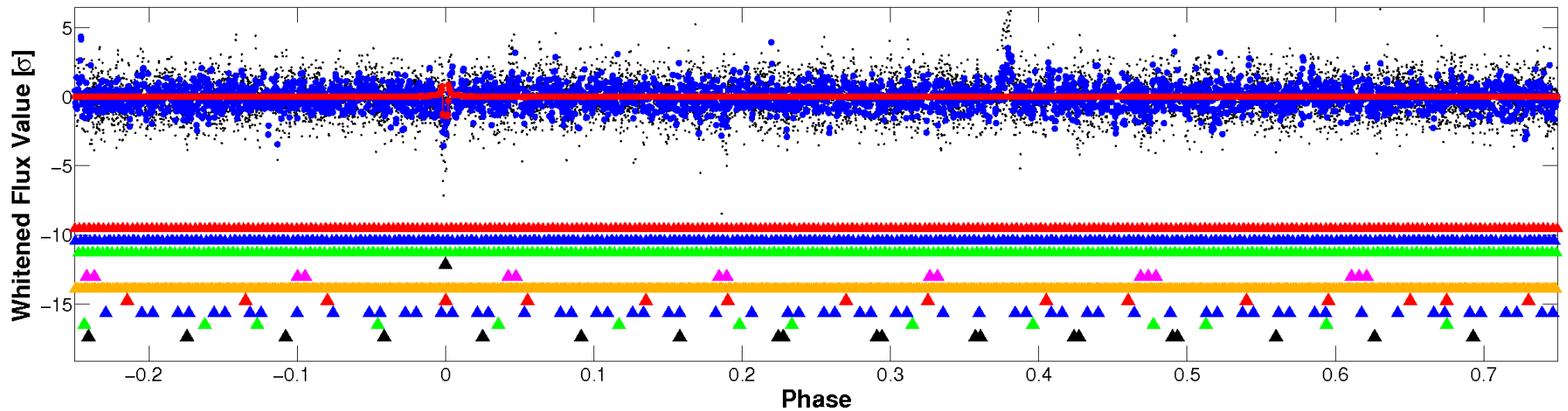


Non-Whitened Vs. Whitened Light Curve

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

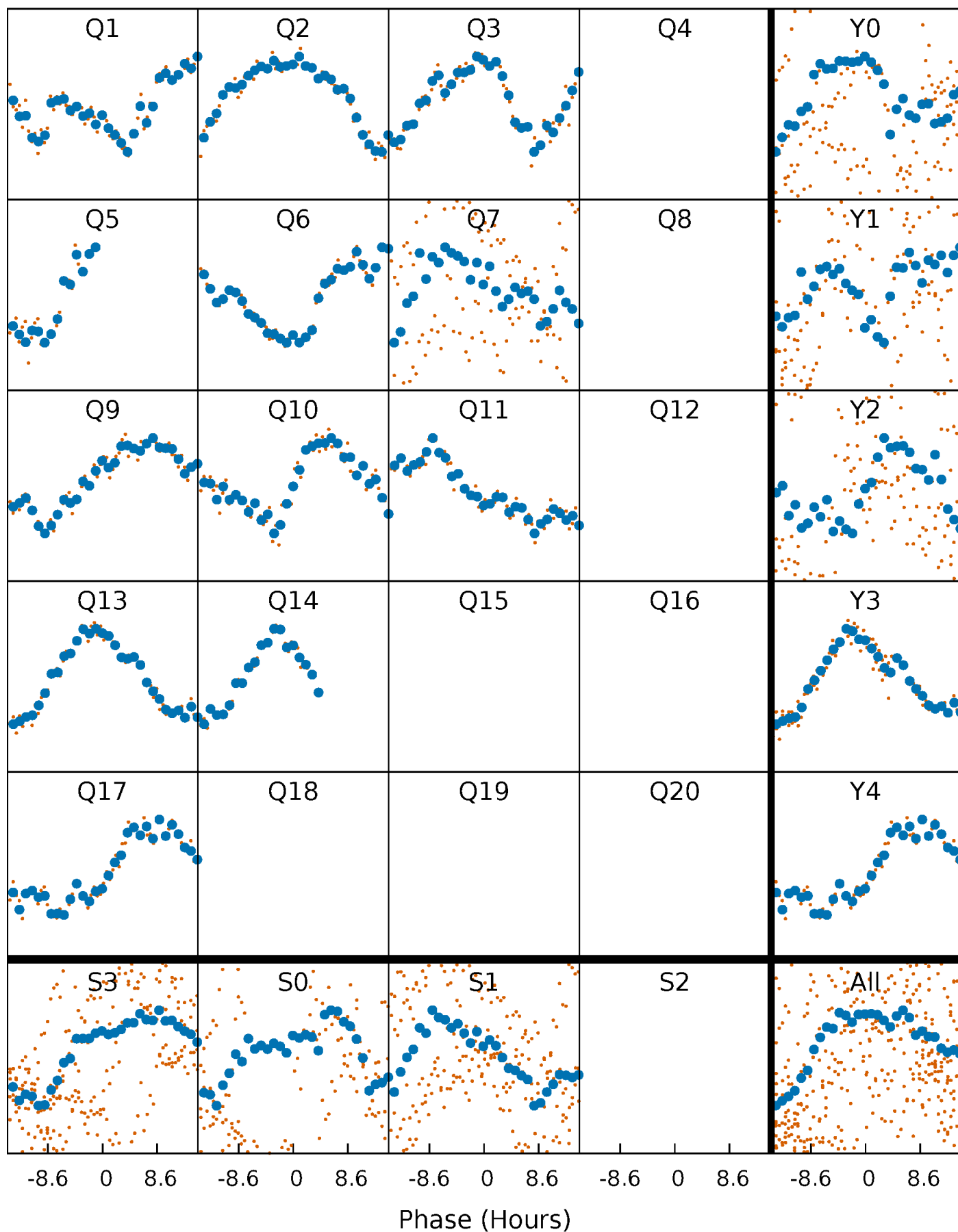


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



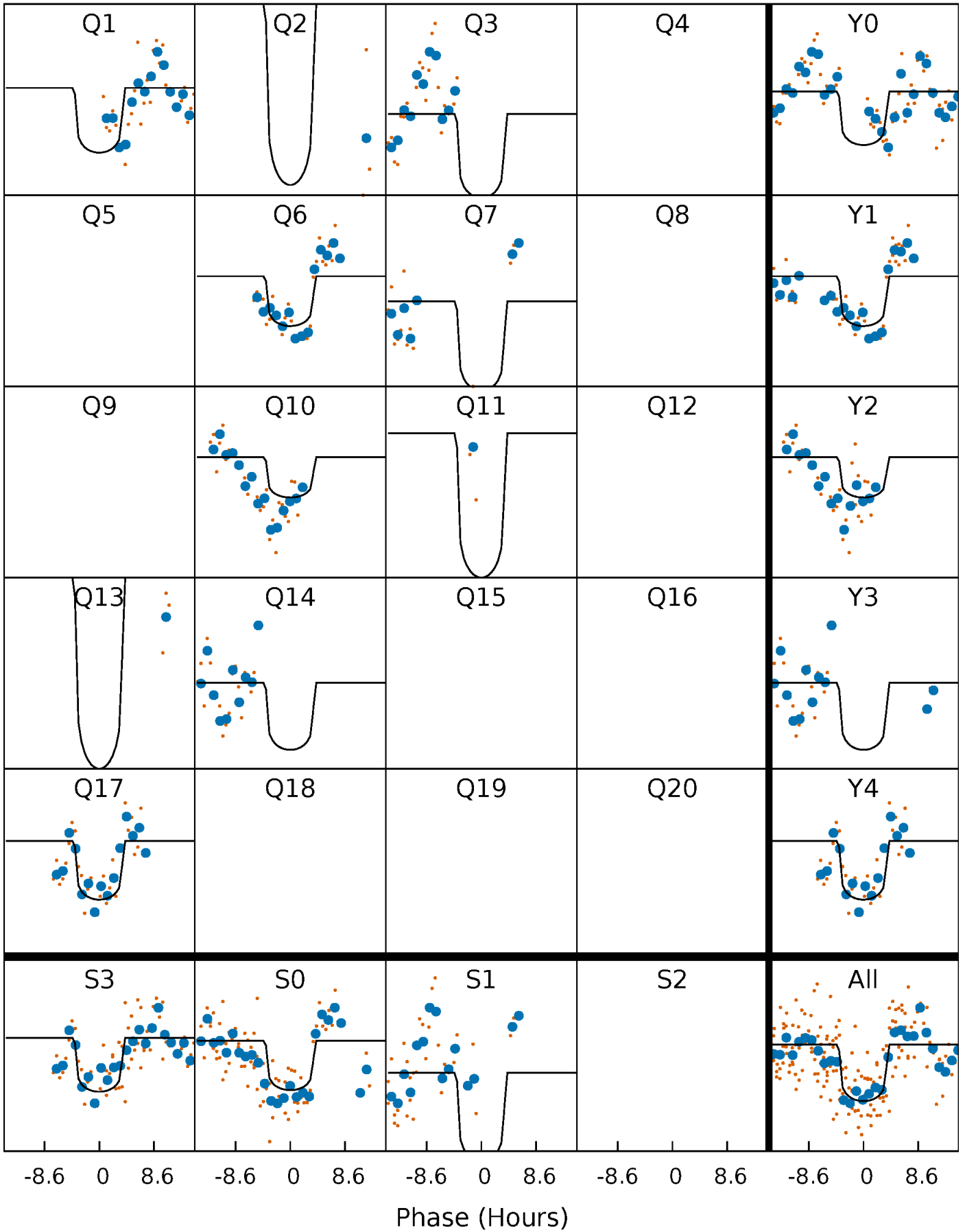
PDC Quarter-Phased Transit Curves

TCE 010652379-04 P= 78.280988 Days $T_0=161.932625$ (BKJD)



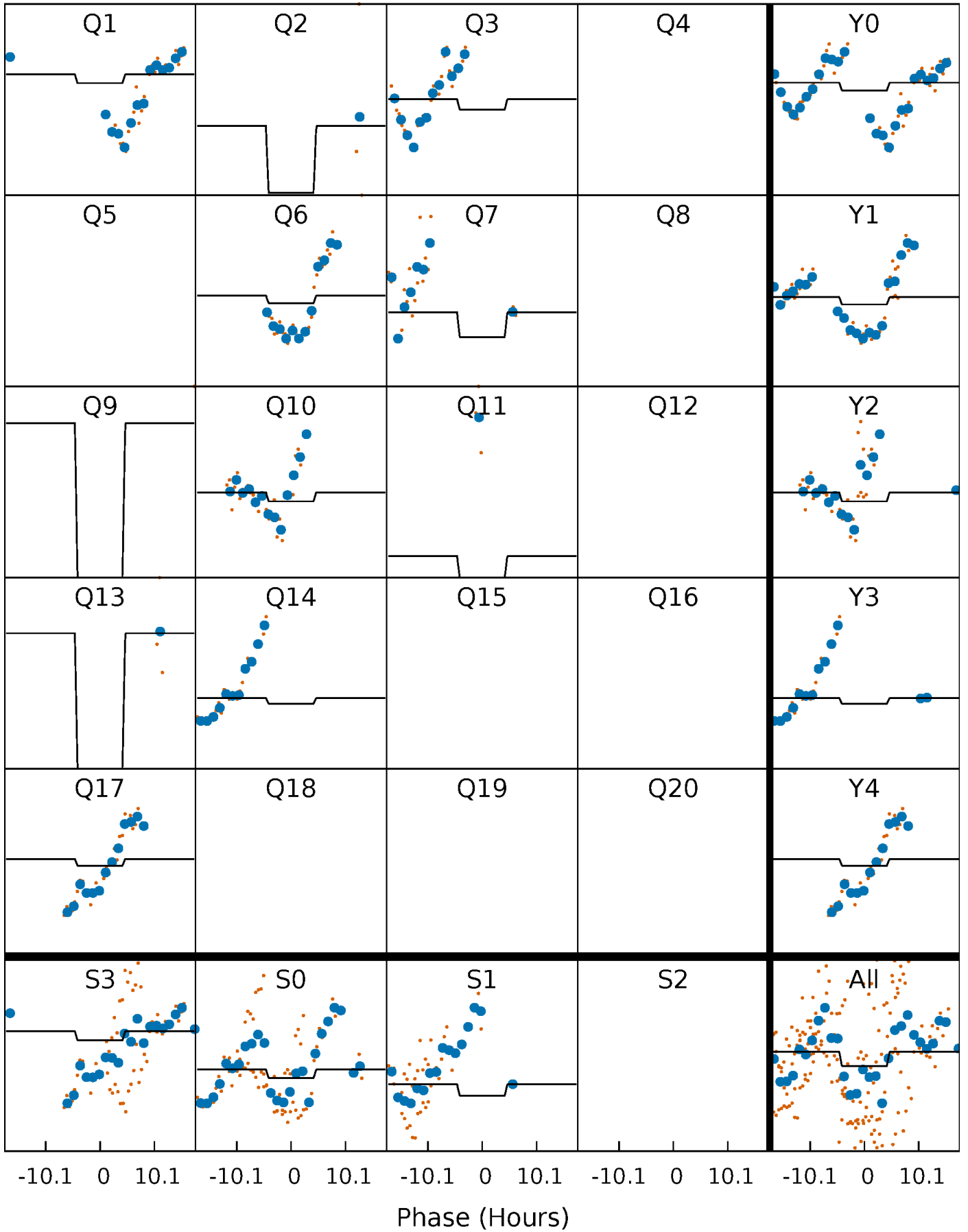
DV Quarter-Phased Transit Curves

TCE 010652379-04 P= 78.280988 Days $T_0=161.932625$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

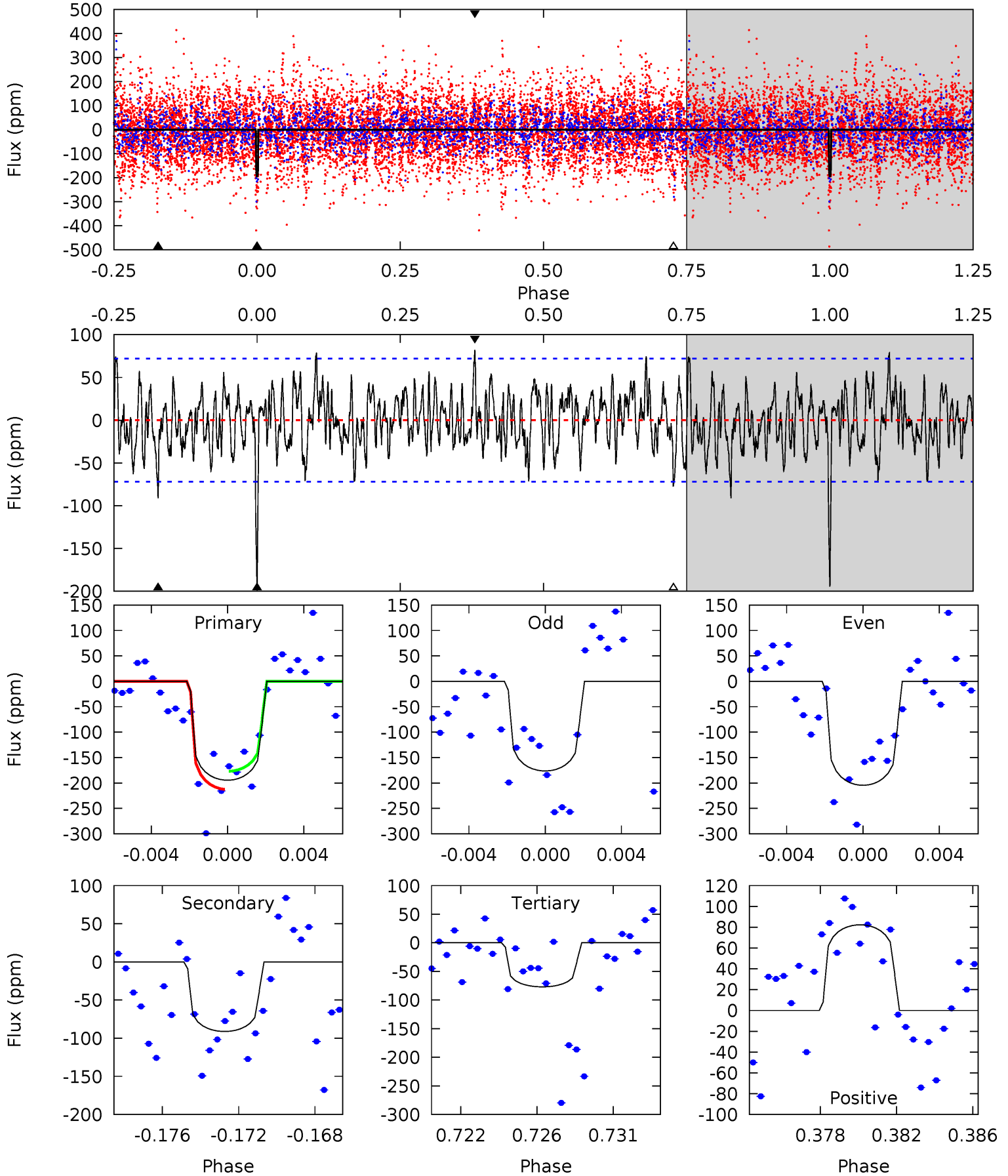
TCE 010652379-04 P= 78.281336 Days $T_0=161.902819$ (BKJD)



DV Model-Shift Uniqueness Test

010652379-04, P = 78.280988 Days, E = 83.651637 Days

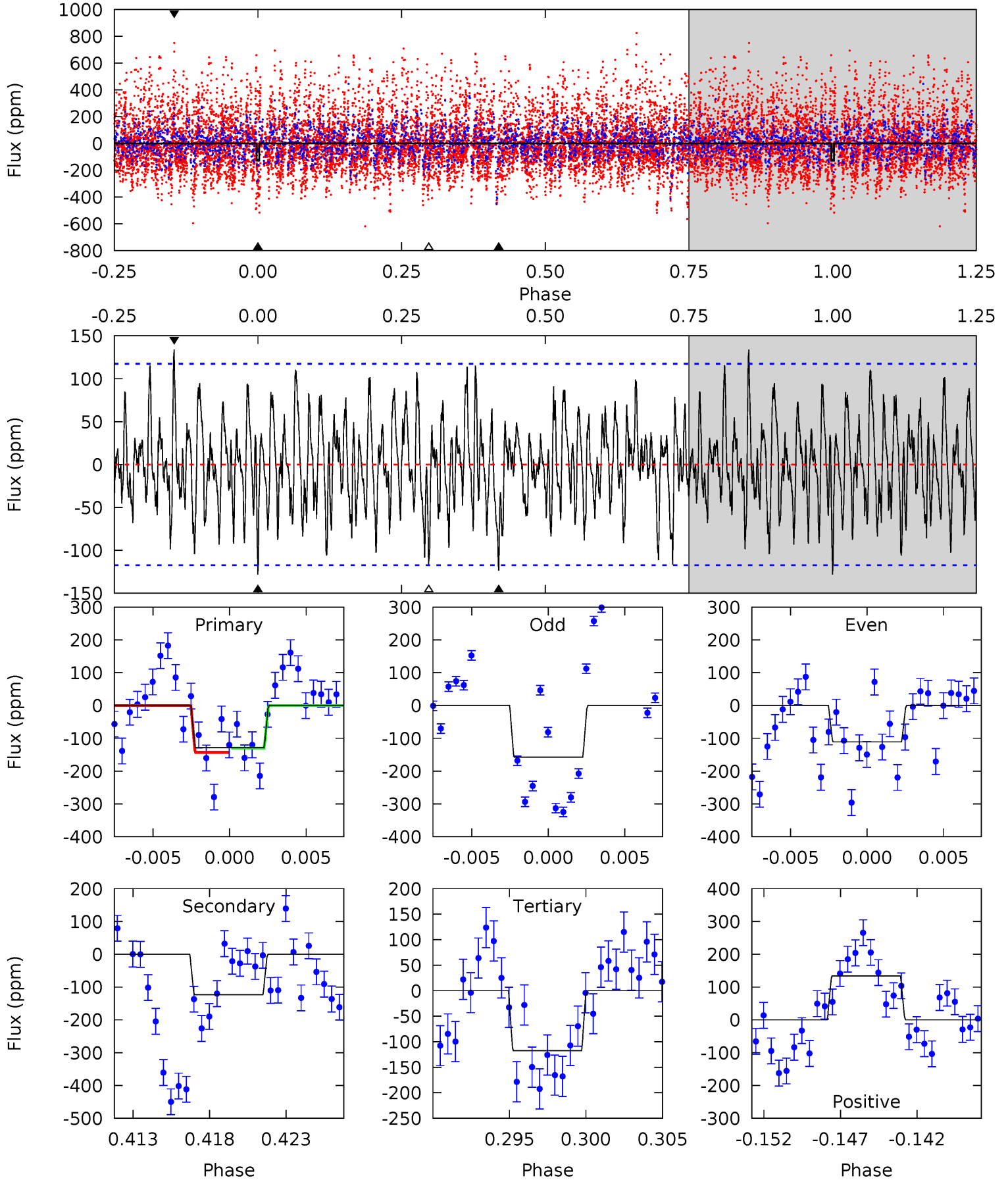
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.0	6.58	5.55	5.94	5.19	2.86	2.00	8.48	8.09	1.03	0.64	0.98	0.95	0.30	1.28



Alt Model-Shift Uniqueness Test

010652379-04, P = 78.281336 Days, E = 83.621483 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.64	5.44	5.17	5.89	5.16	2.81	2.00	0.48	-0.25	0.27	-0.45	0.96	0.40	0.51	0.29



Stellar Parameters For KIC 010652379

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6649^{+166}_{-183}	$3.749^{+0.304}_{-0.095}$	$-0.280^{+0.300}_{-0.250}$	$2.654^{+0.489}_{-0.908}$	$1.443^{+0.264}_{-0.264}$	$0.109^{+0.209}_{-0.032}$
	+2%/-3%	+8%/-3%	+107%/-89%	+18%/-34%	+18%/-18%	+192%/-30%
Source	PHO1	FLK73	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 010652379-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-91±14	$4.48^{+3.50}_{-2.62}$	1025^{+62}_{-98}	4998^{+2942}_{-947}	404^{+1950}_{-275}
Alt.	-124±23	$3.32^{+3.28}_{-2.23}$	1027^{+62}_{-92}	6234^{+6735}_{-1607}	1025^{+8089}_{-766}

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

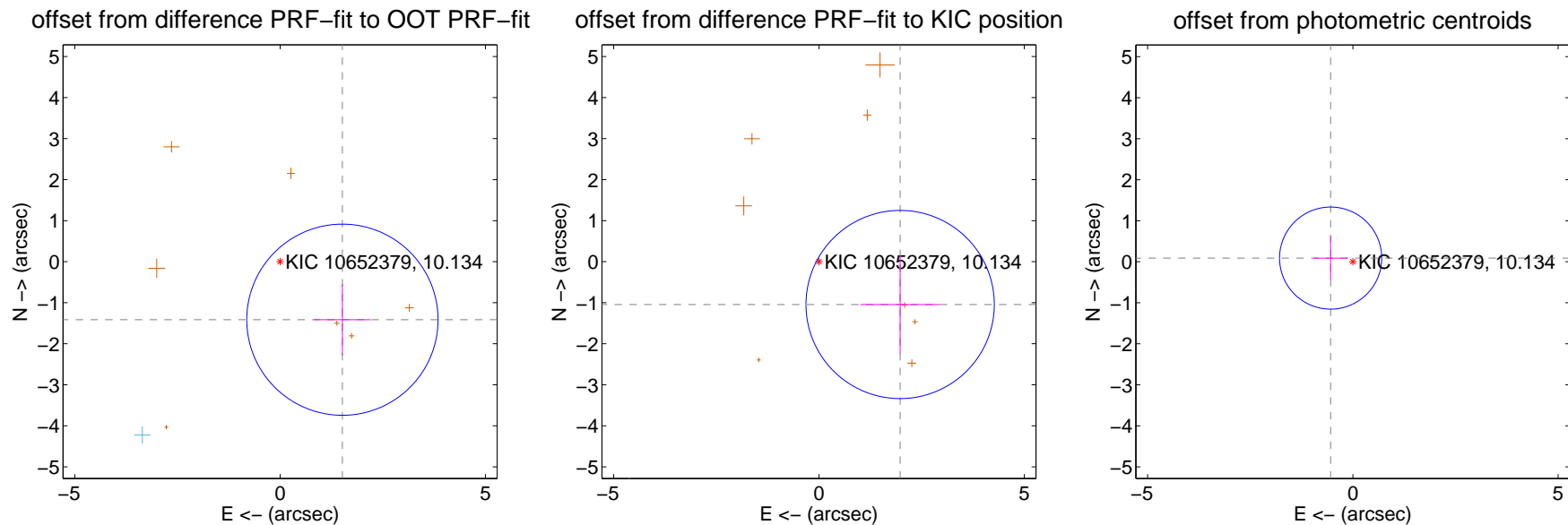
DV Centroid Data

Supplemental centroid analysis for 010652379-04. **Kepler magnitude: 10.13.** Transit SNR 9.69

There are 1 quarters with good PRF difference image offsets

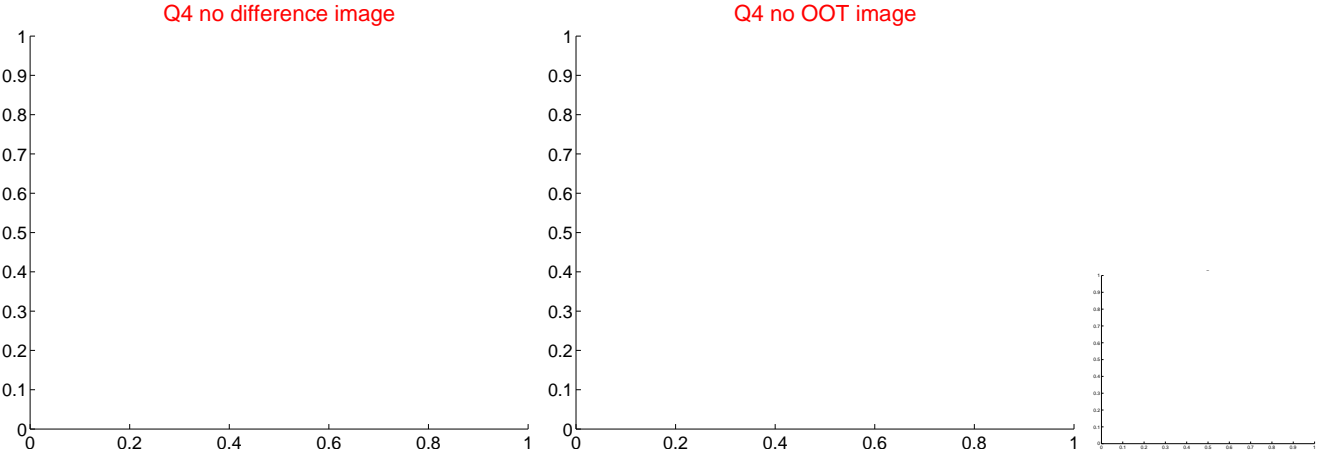
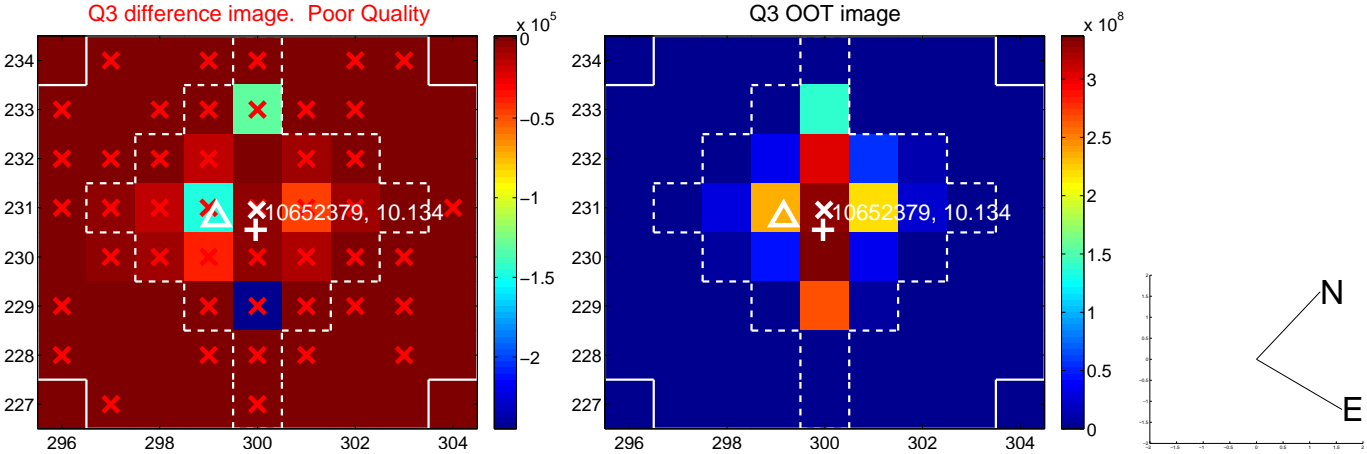
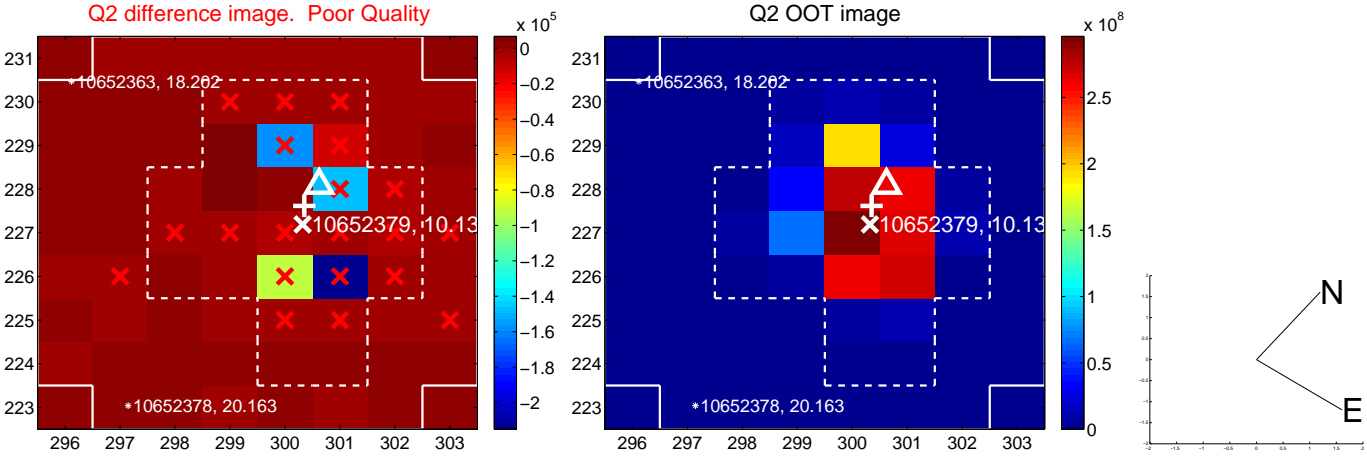
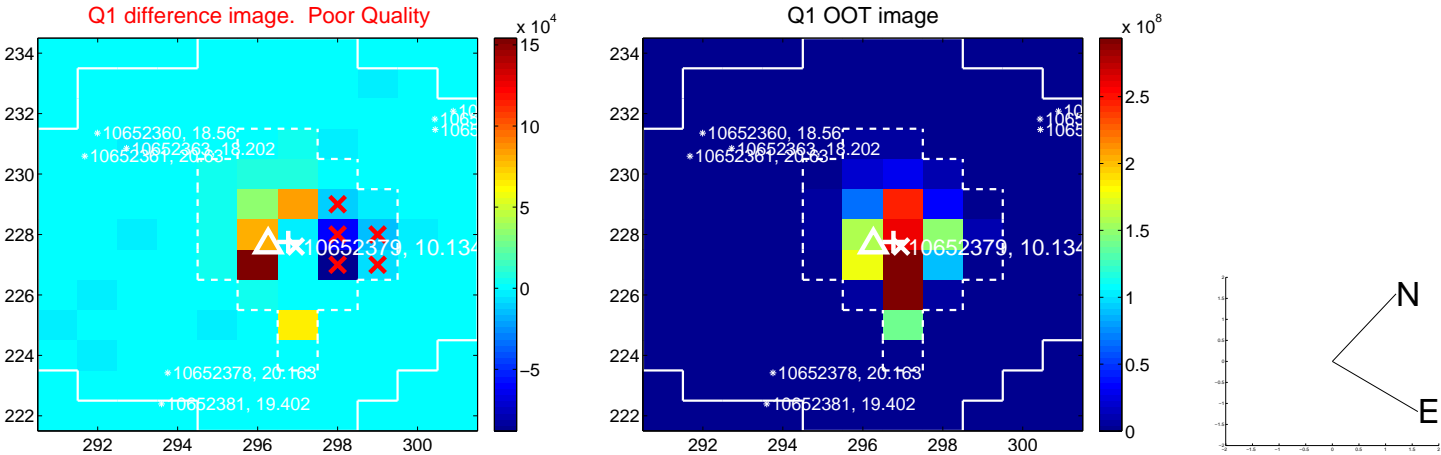
The direct PRF centroid is offset from the target star catalog position by about 1.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.074 ± 0.776	2.67	-1.517 ± 0.688	-1.414 ± 0.867
PRF-fit source offset from KIC position	2.235 ± 0.764	2.92	-1.976 ± 0.969	-1.043 ± 1.193
photometric centroid source offset	0.55 ± 0.41	1.32	0.54 ± 0.41	0.09 ± 0.53



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

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



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

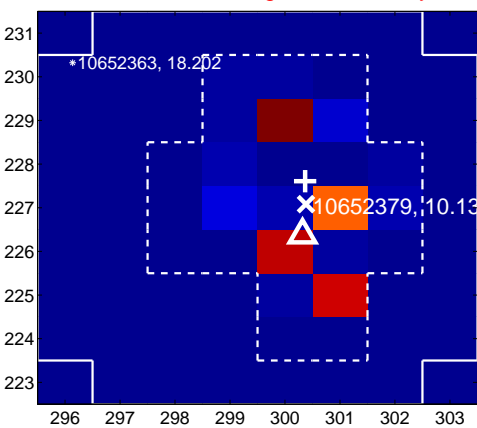
Q5 no difference image



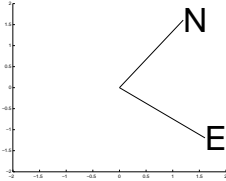
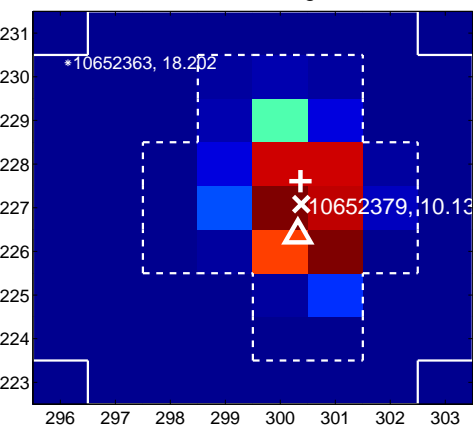
Q5 no OOT image



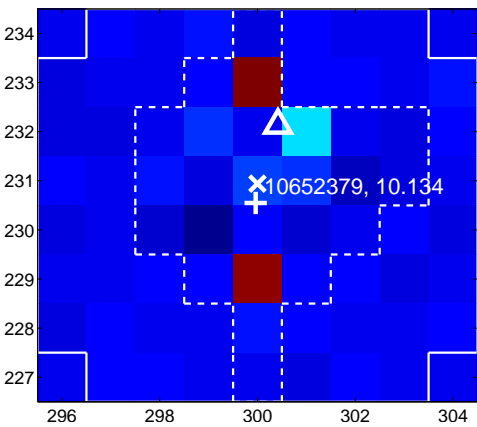
Q6 difference image. Poor Quality



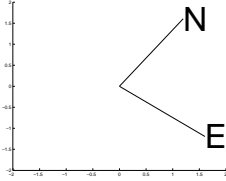
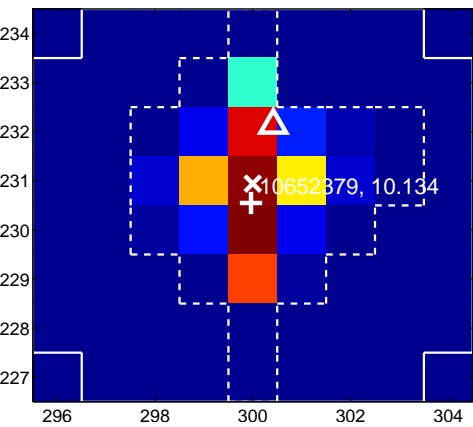
Q6 OOT image



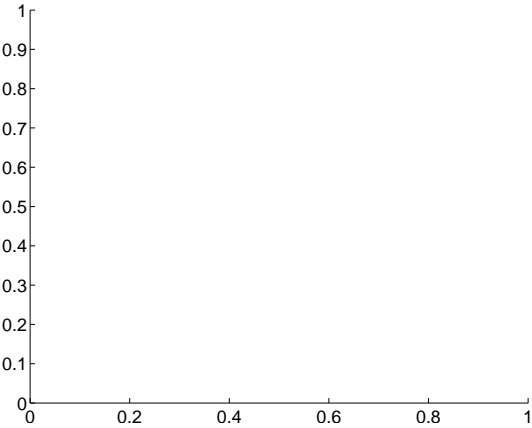
Q7 difference image. Poor Quality



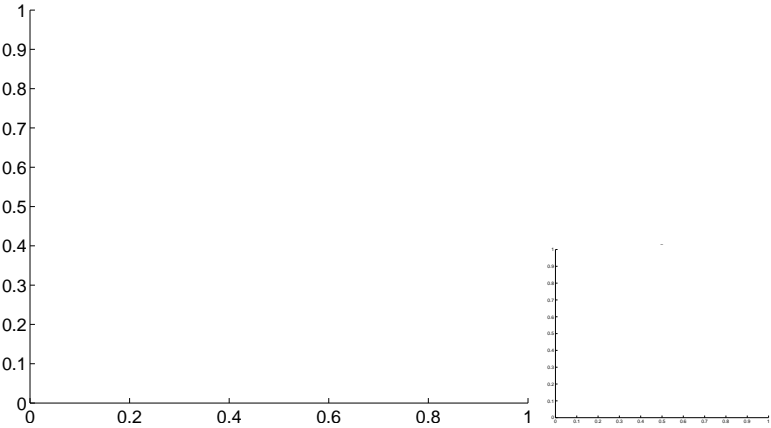
Q7 OOT image



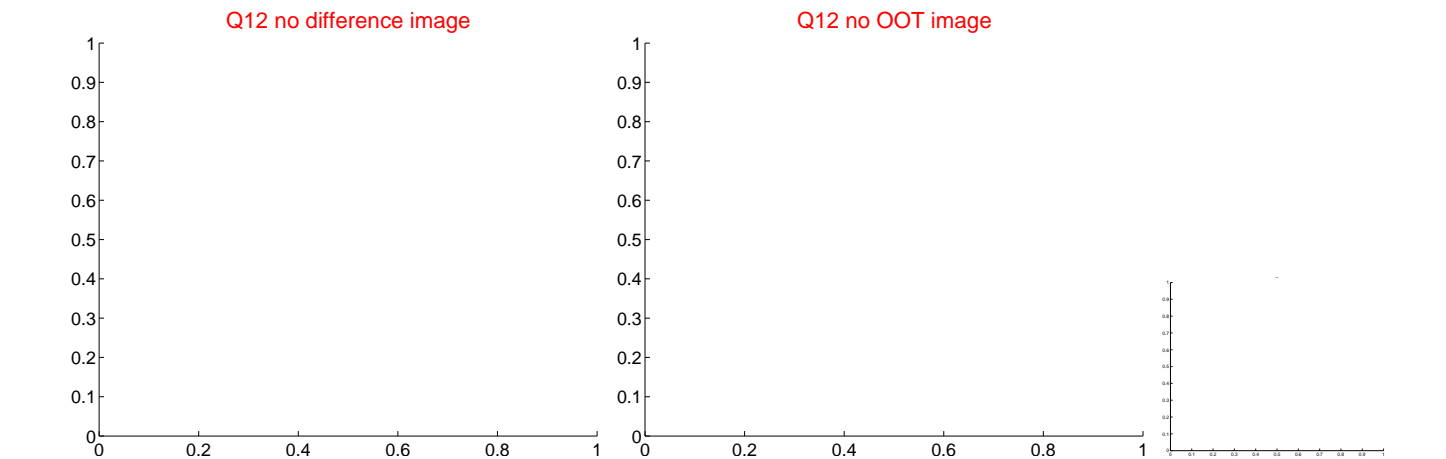
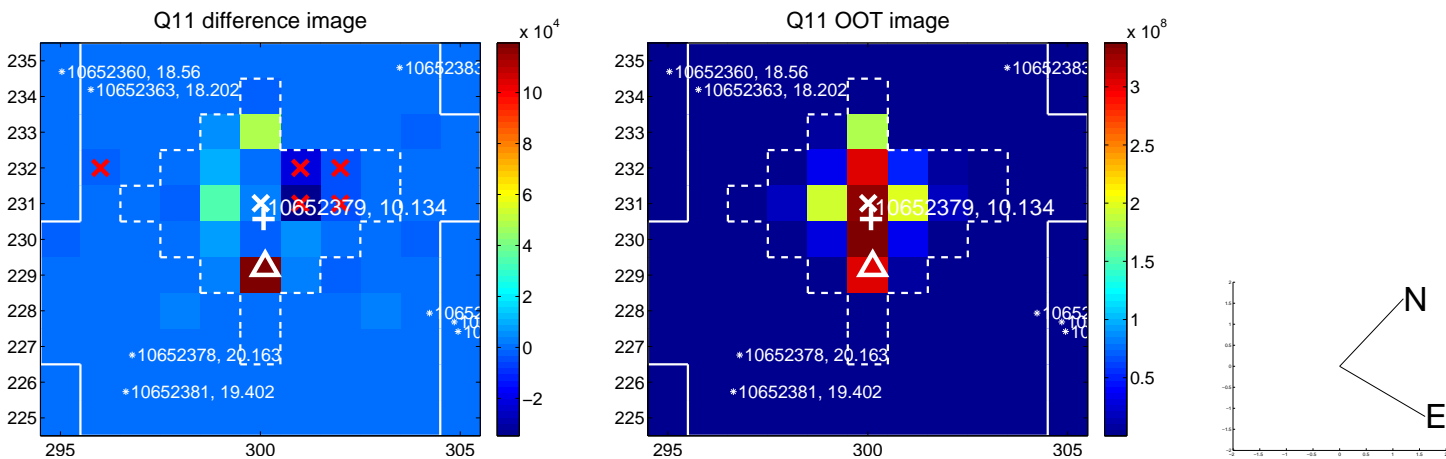
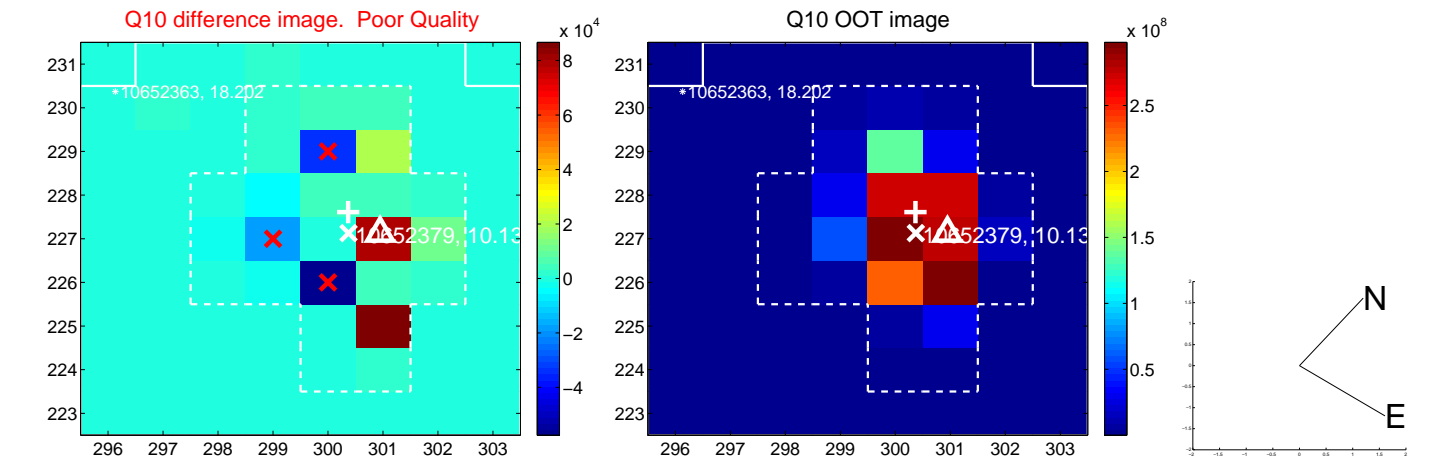
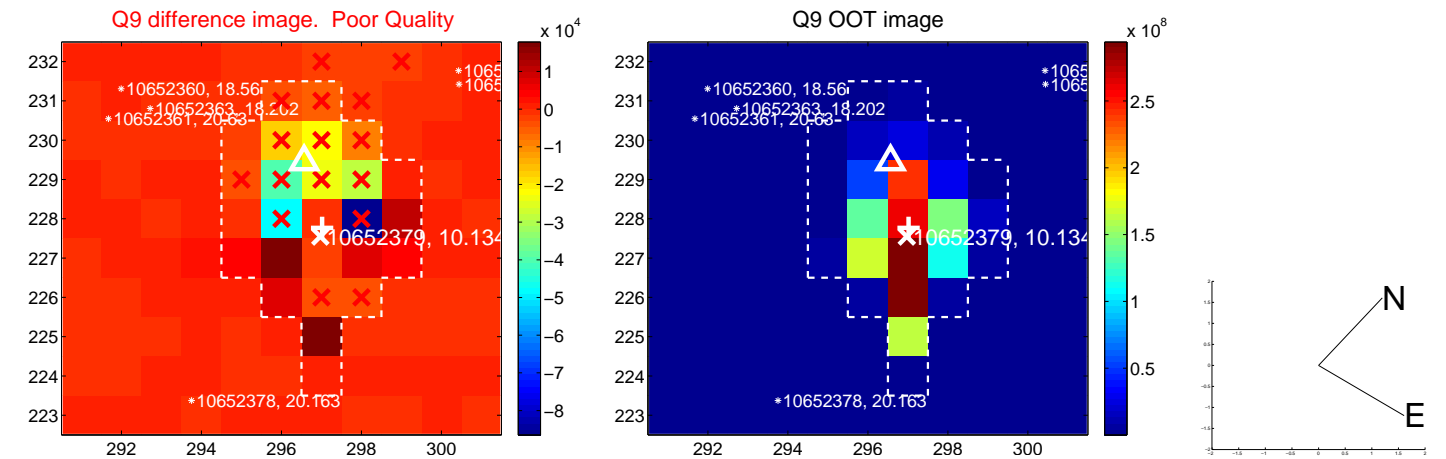
Q8 no difference image



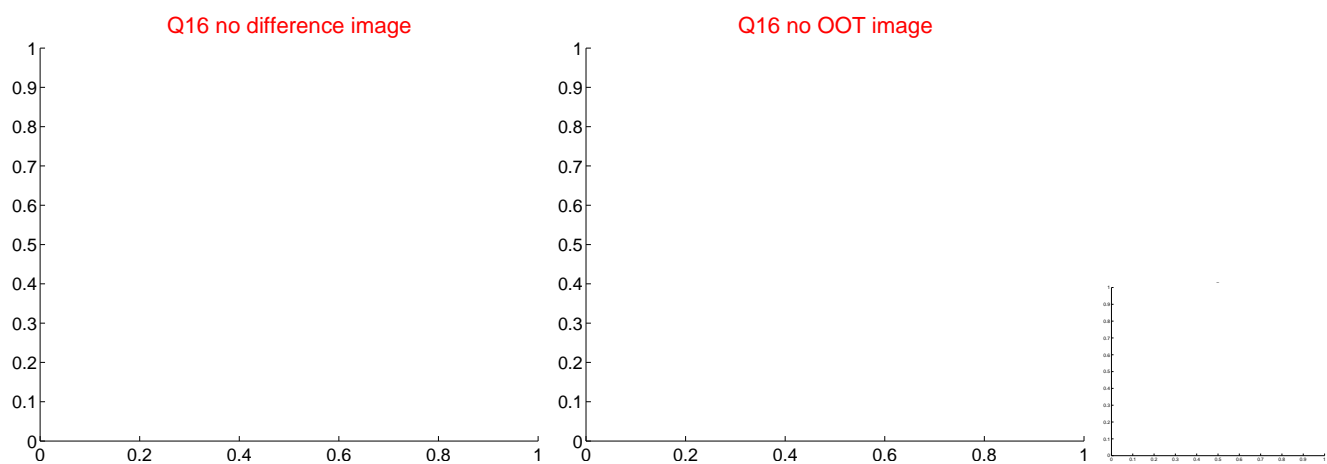
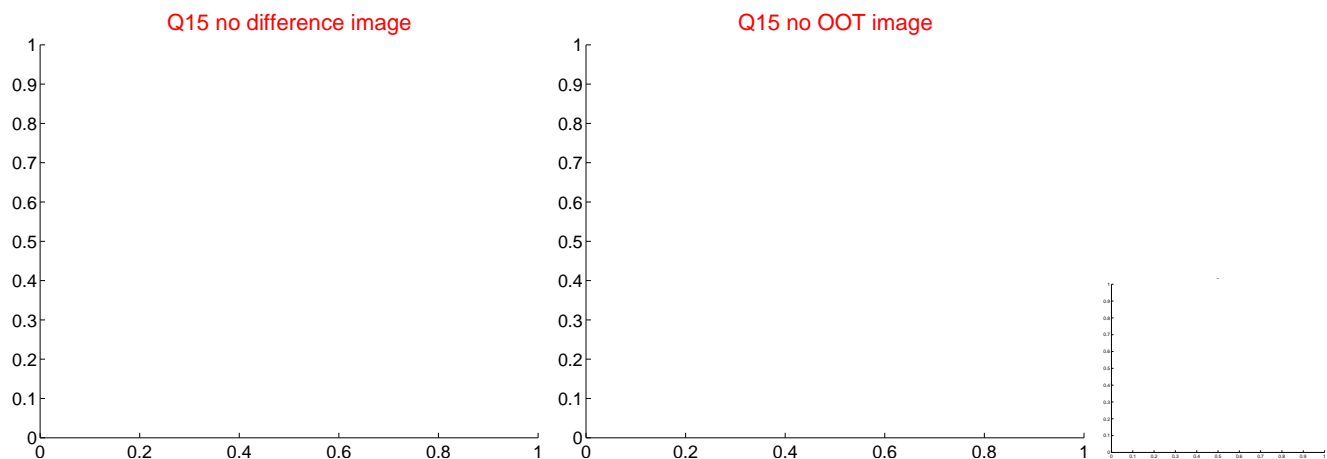
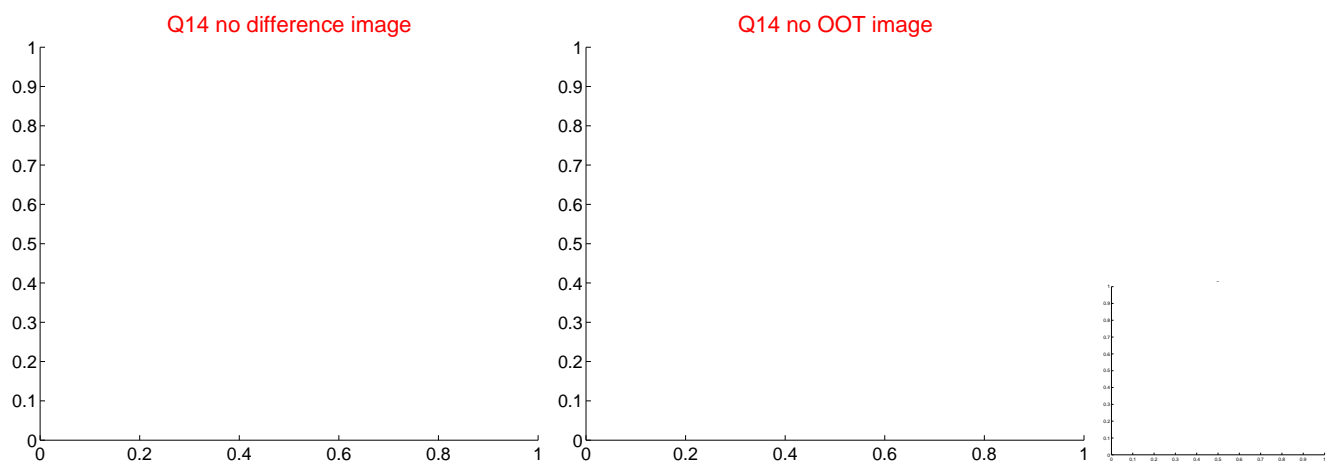
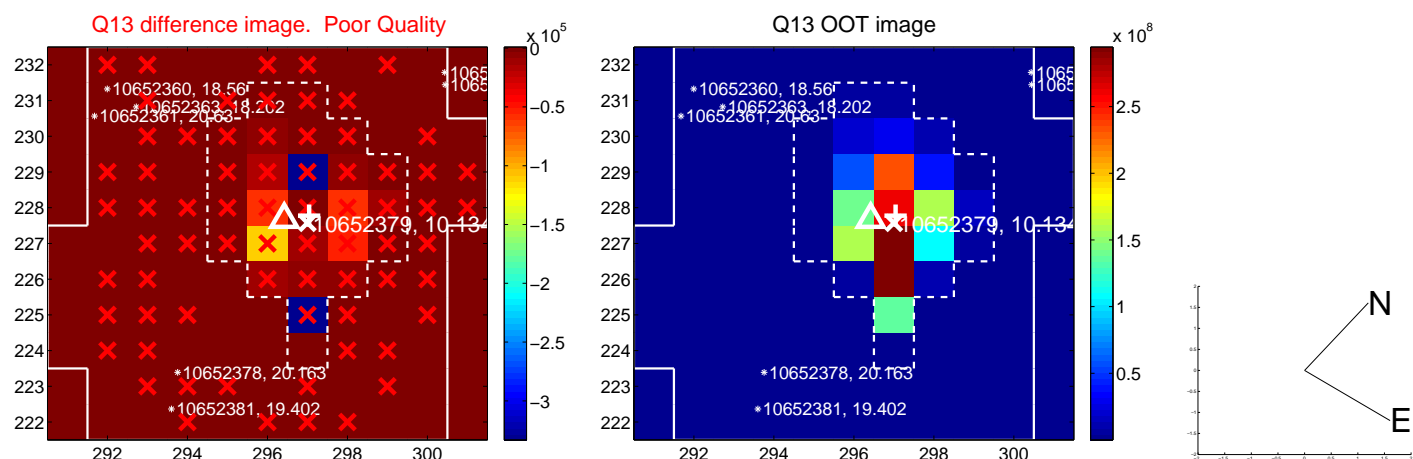
Q8 no OOT image



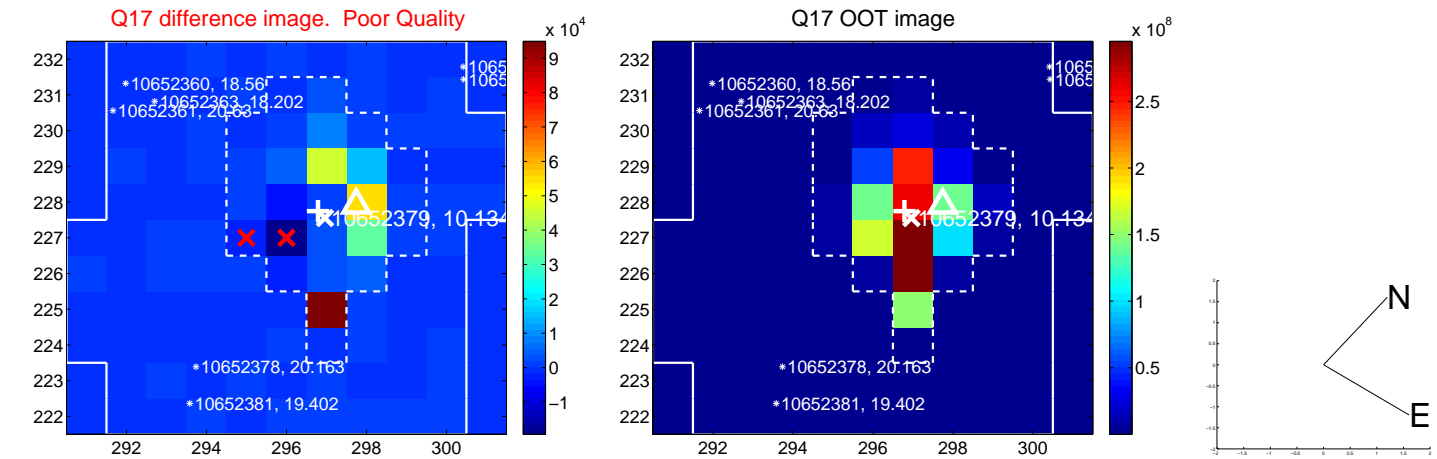
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



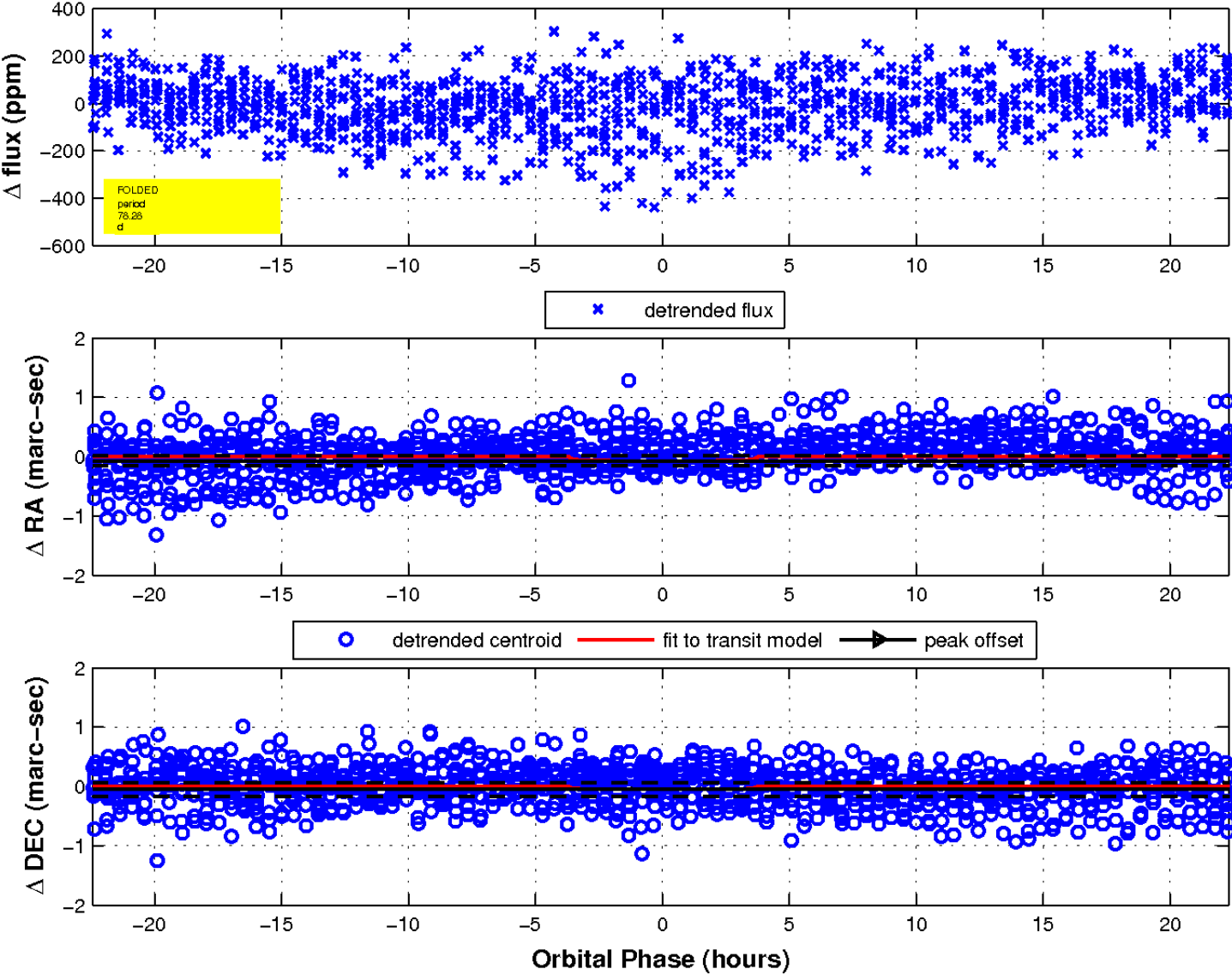
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



fluxWeightedCentroids, Planet 4 of 10



This plot does not exist for this TCE.

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})
010652379-01	OBS	No	3.314708	133.196939	56.4	6.019	11.1	12.3	2.65	6649	4.05	5104.19
010652379-02	OBS	No	3.314624	131.743175	34.5	5.989	10.9	10.5	2.65	6649	1.84	5104.36
010652379-03	OBS	No	3.314671	133.663432	19.7	14.851	10.8	6.4	2.65	6649	1.43	5104.26
010652379-04	OBS	No	78.280988	161.932625	205.4	7.495	16.9	9.7	2.65	6649	4.03	75.33
010652379-05	OBS	No	89.406597	199.428664	114.3	6.777	16.6	6.7	2.65	6649	3.33	63.10
010652379-06	OBS	No	1.656077	132.257770	43.0	1.724	11.7	7.0	2.65	6649	1.76	12874.97
010652379-07	OBS	No	88.846588	212.851630	207.0	10.888	8.4	9.1	2.65	6649	4.12	63.63
010652379-08	OBS	No	22.094042	141.525125	82.3	7.323	8.5	8.9	2.65	6649	2.78	406.90
010652379-09	OBS	No	106.495223	202.067155	176.6	6.010	8.2	8.4	2.65	6649	3.99	49.97
010652379-10	OBS	No	73.079893	200.304960	69.2	2.000	7.5	-1.0	2.65	6649	2.23	82.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010652379-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
010652379-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—TRANS_GAPPED—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010652379-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

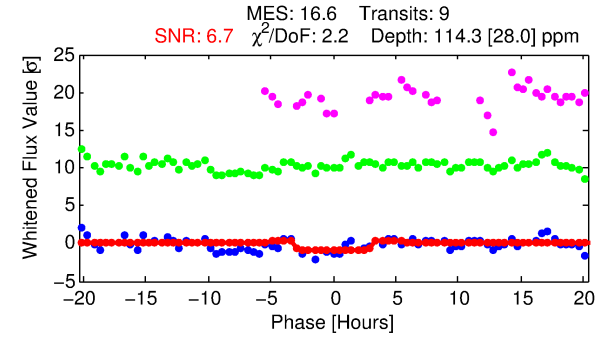
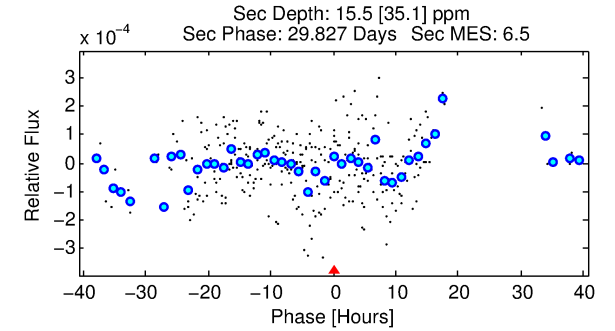
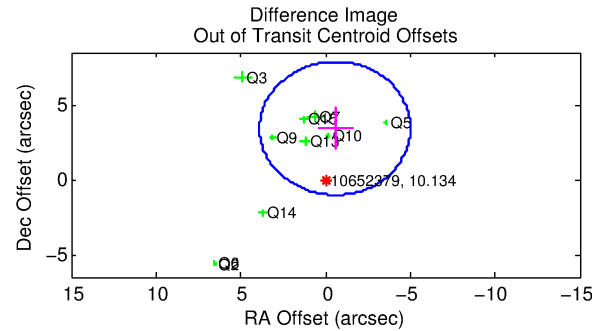
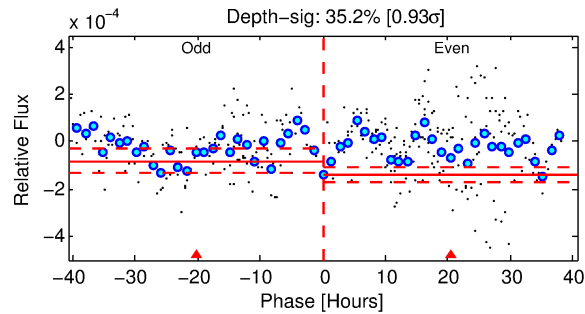
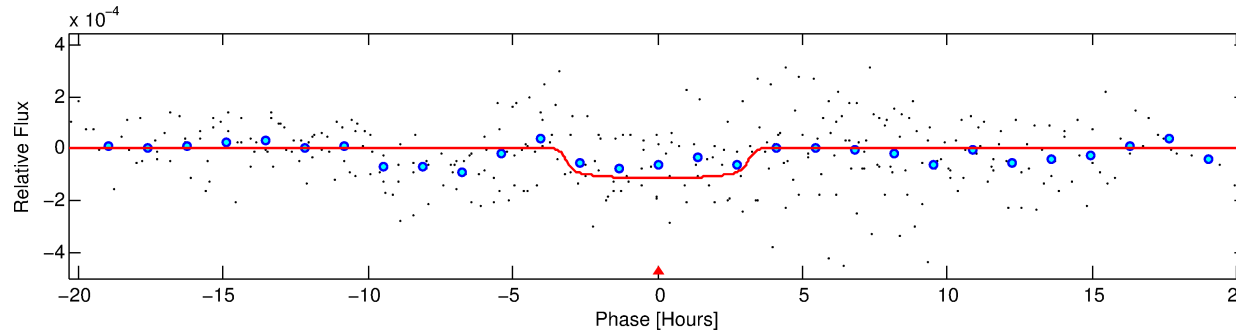
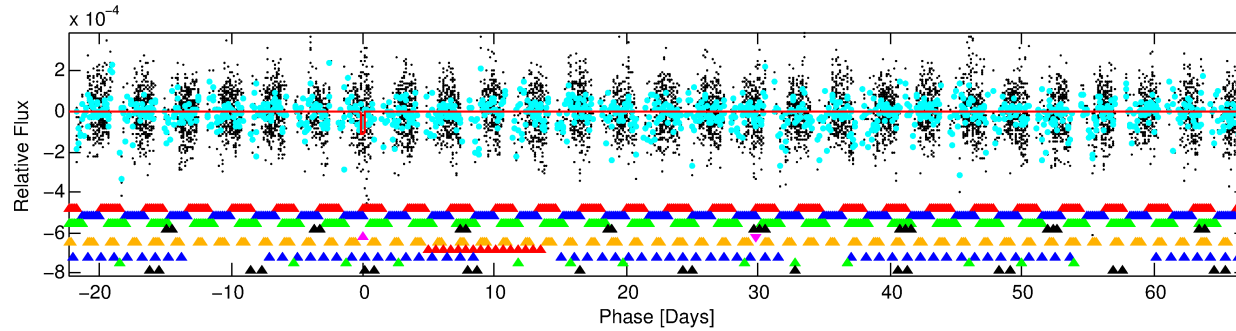
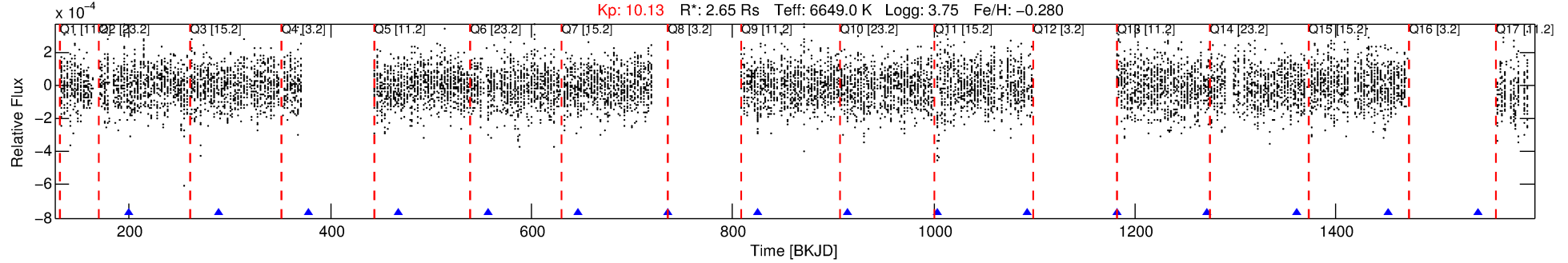
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010652379-05

No Significant Match Found

DV One-Page Summary

KIC: 10652379 Candidate: 5 of 10 Period: 89.407 d



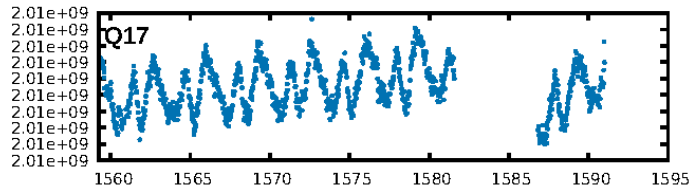
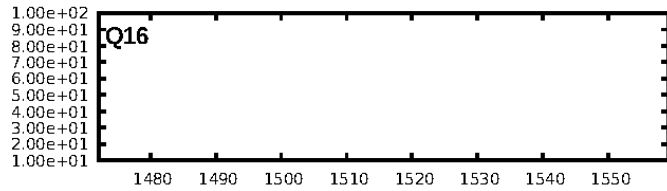
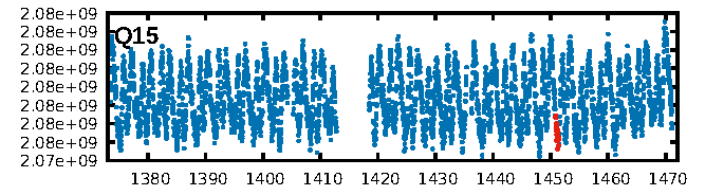
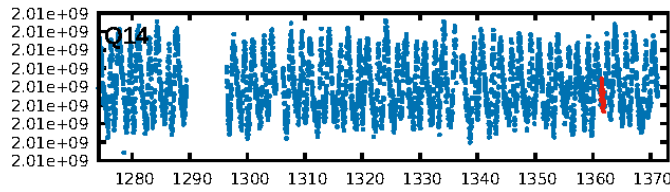
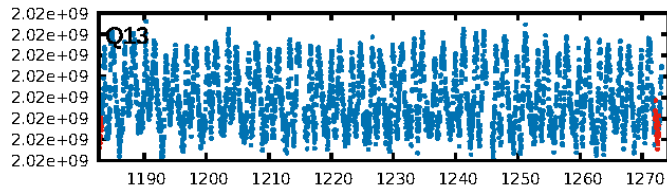
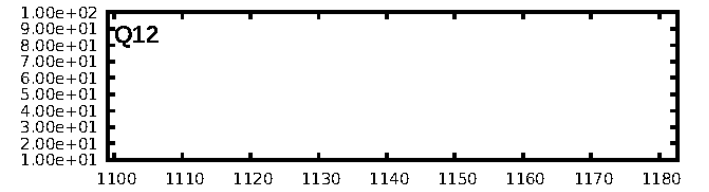
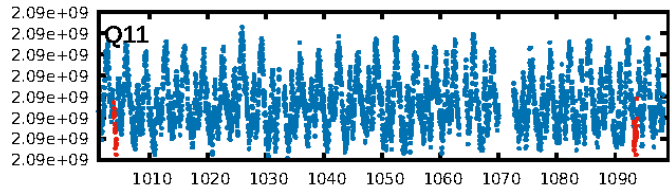
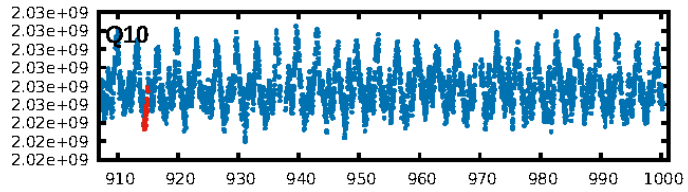
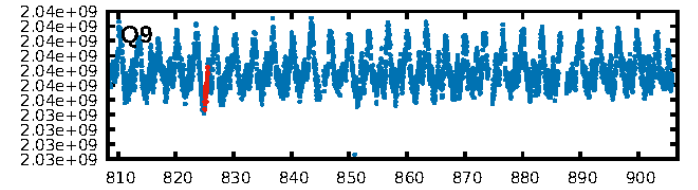
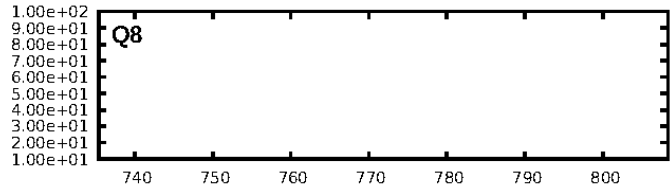
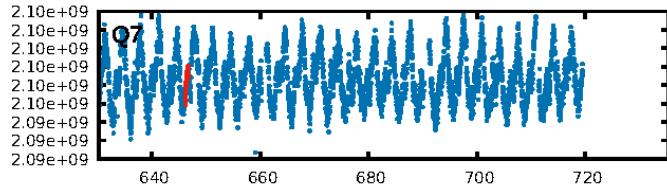
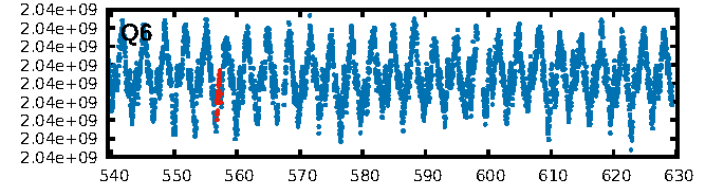
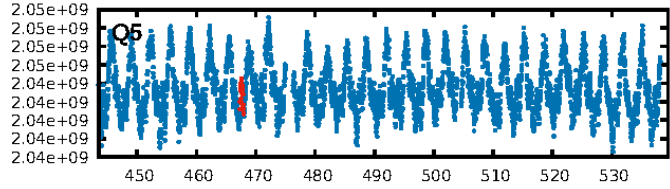
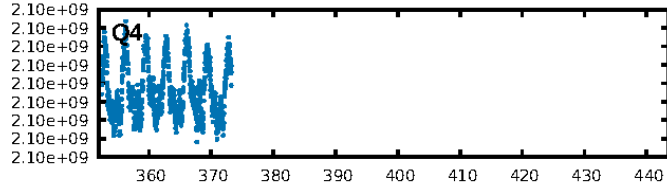
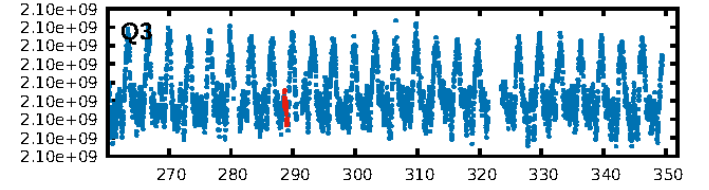
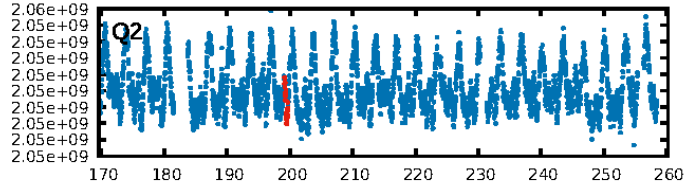
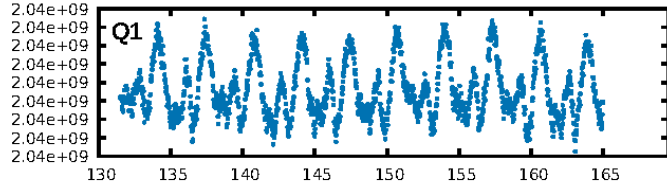
DV Fit Results:

Period = 89.40660 [0.00548] d
Epoch = 199.4287 [0.0459] BKJD
Rp/R* = 0.0115 [0.0043]
a/R* = 45.06 [92.38]
b = 0.91 [0.41]
Seff = 63.10 [33.50]
Teq = 719 [95] K
Rp = 3.33 [1.69] Re
a = 0.4421 [0.1443] AU
Ag = 150.51 [368.07] [0.41 σ]
Teffp = 3892 [2328] K [1.36 σ]

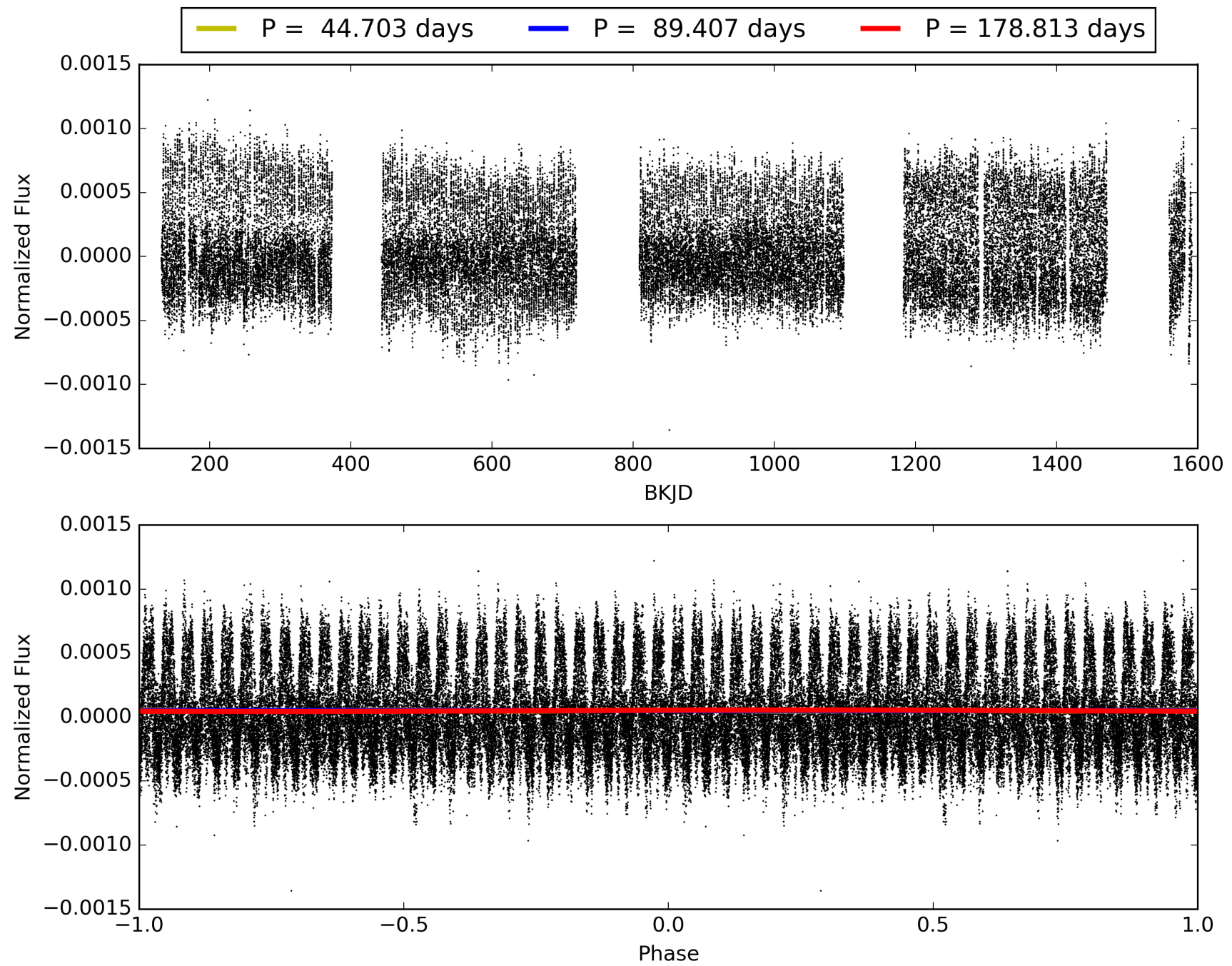
DV Diagnostic Results:

ShortPeriod-sig: 70.5% [1.05 σ]
LongPeriod-sig: 100.0% [45.28 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 84.4%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [9/9]
GhostDiagnostic-chr: N/A
Centroid-sig: 5.2%
Centroid-so: 1.278 arcsec [1.35 σ]
OotOffset-rm: 3.468 arcsec [2.34 σ]
OotOffset-st: 4/3/0/3 [10]
KicOffset-rm: 3.383 arcsec [4.60 σ]
KicOffset-st: 4/3/0/3 [10]
DiffImageQuality-fgm: 0.20 [2/10]
DiffImageOverlap-fno: 0.10 [1/10]

TCE 010652379-05, PDC Light Curves

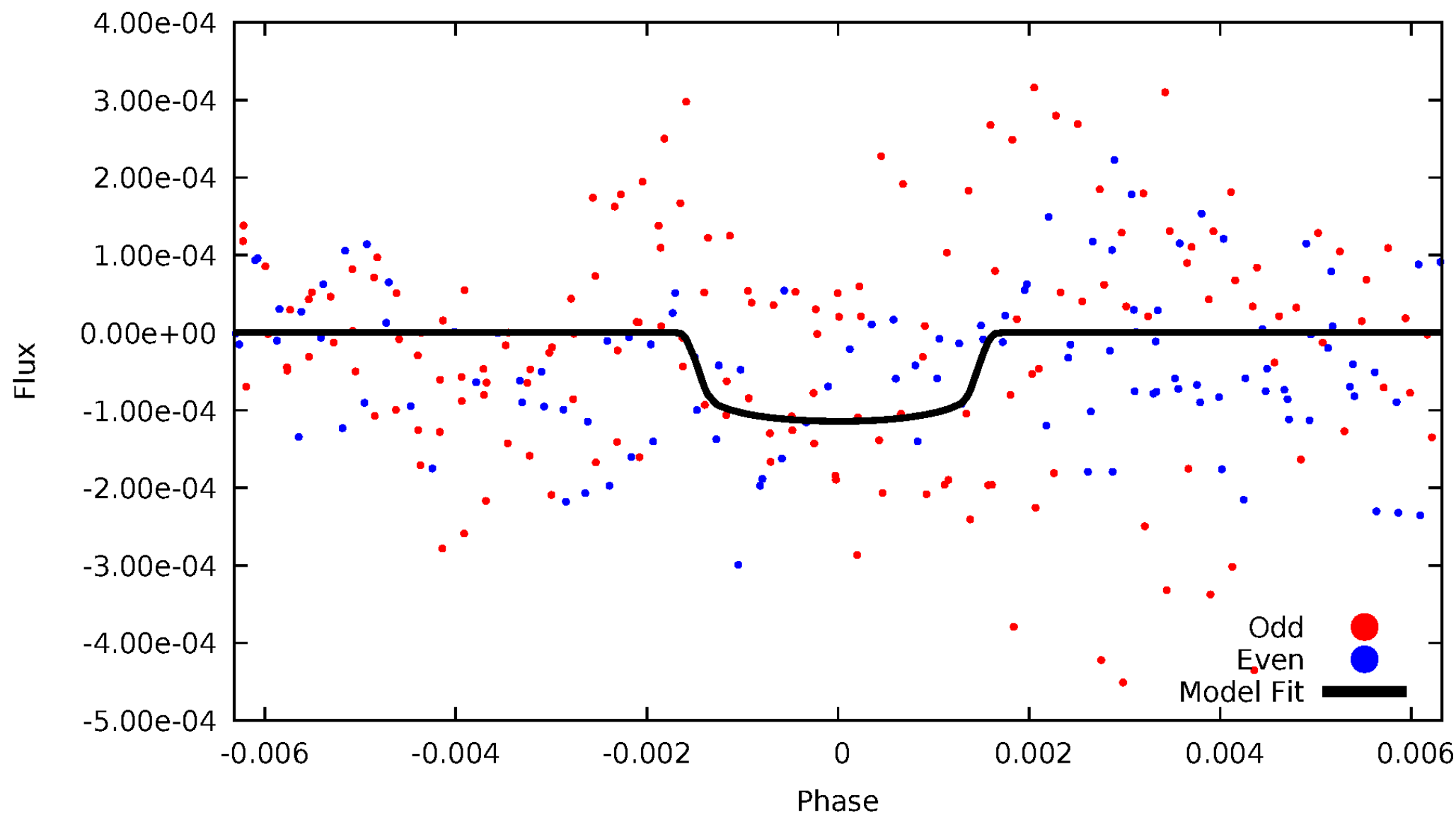


TCE 010652379-05



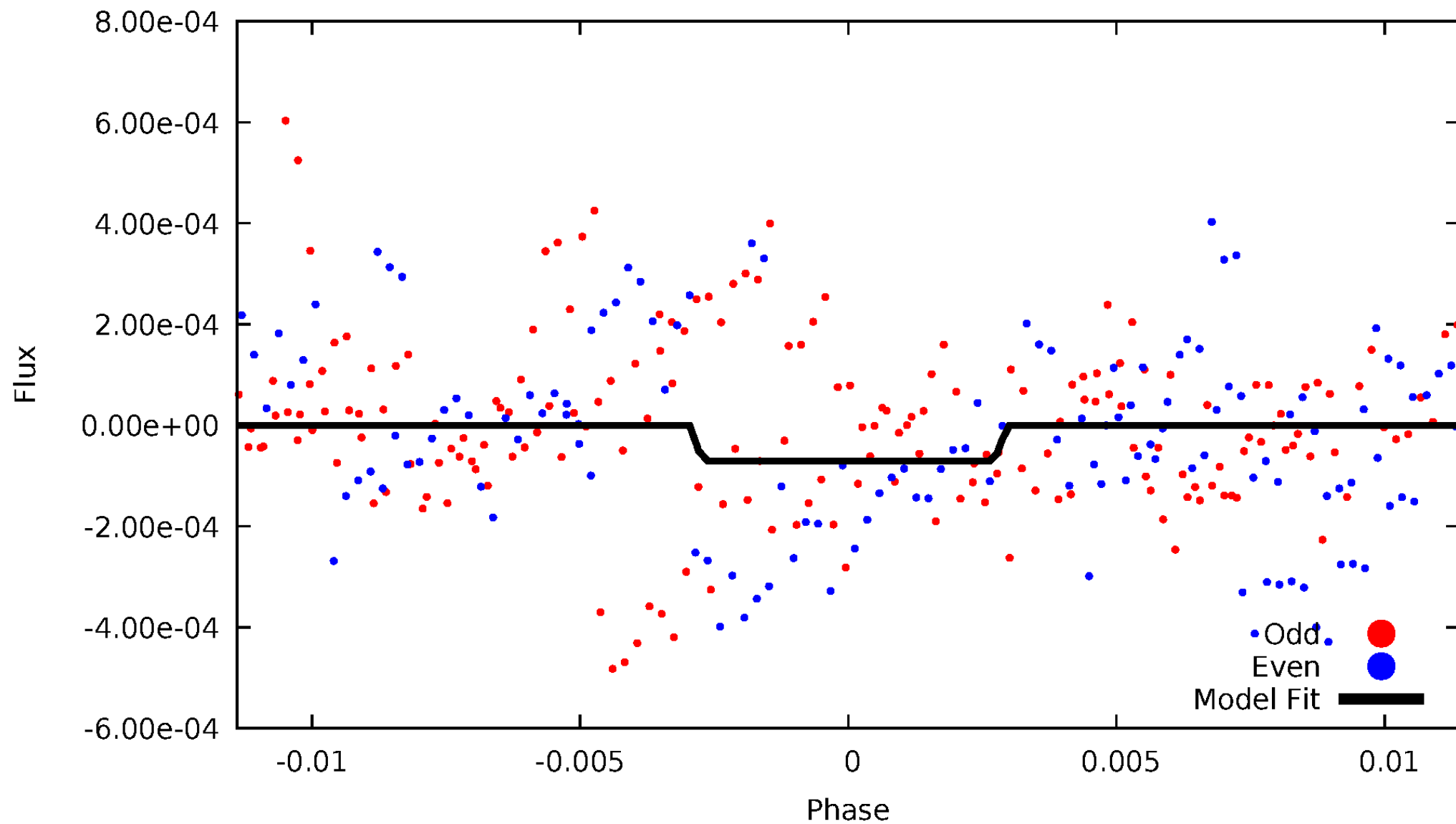
DV Odd/Even

TCE 010652379-05



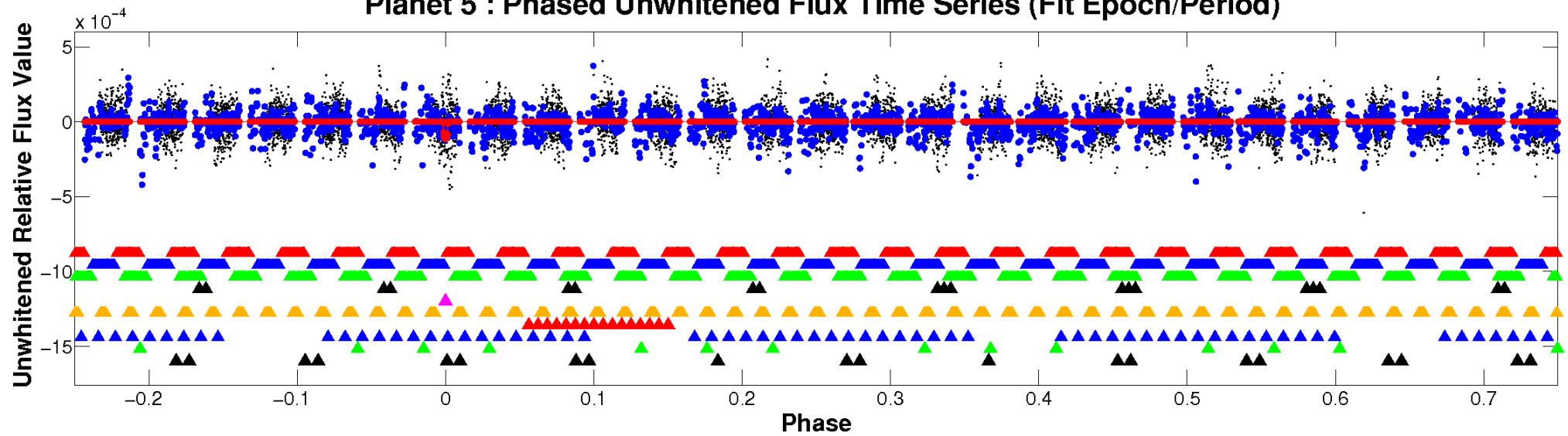
ALT Odd/Even

TCE 010652379-05

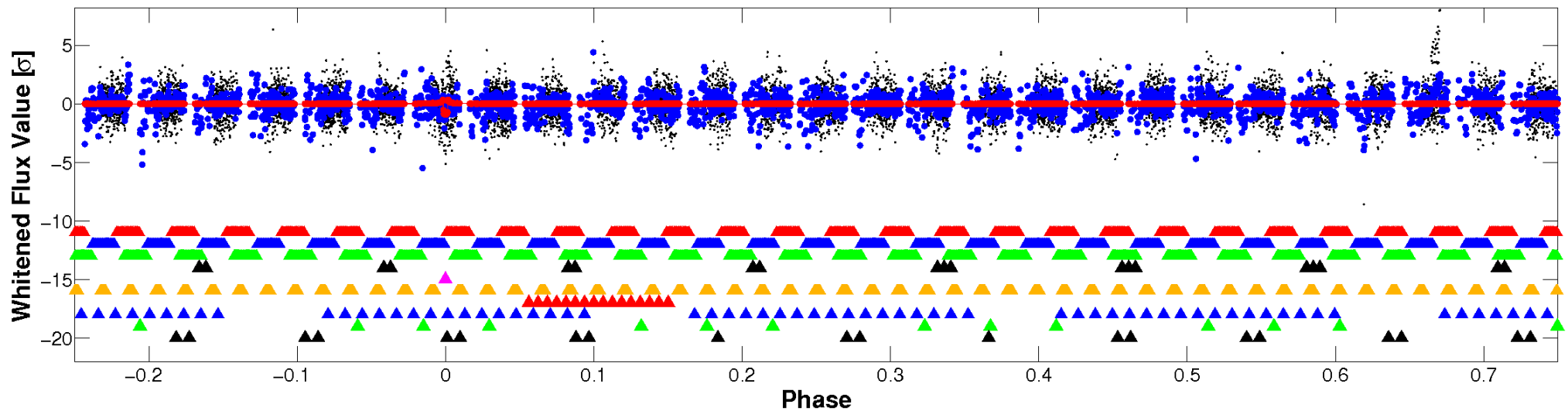


Non-Whitened Vs. Whitened Light Curve

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

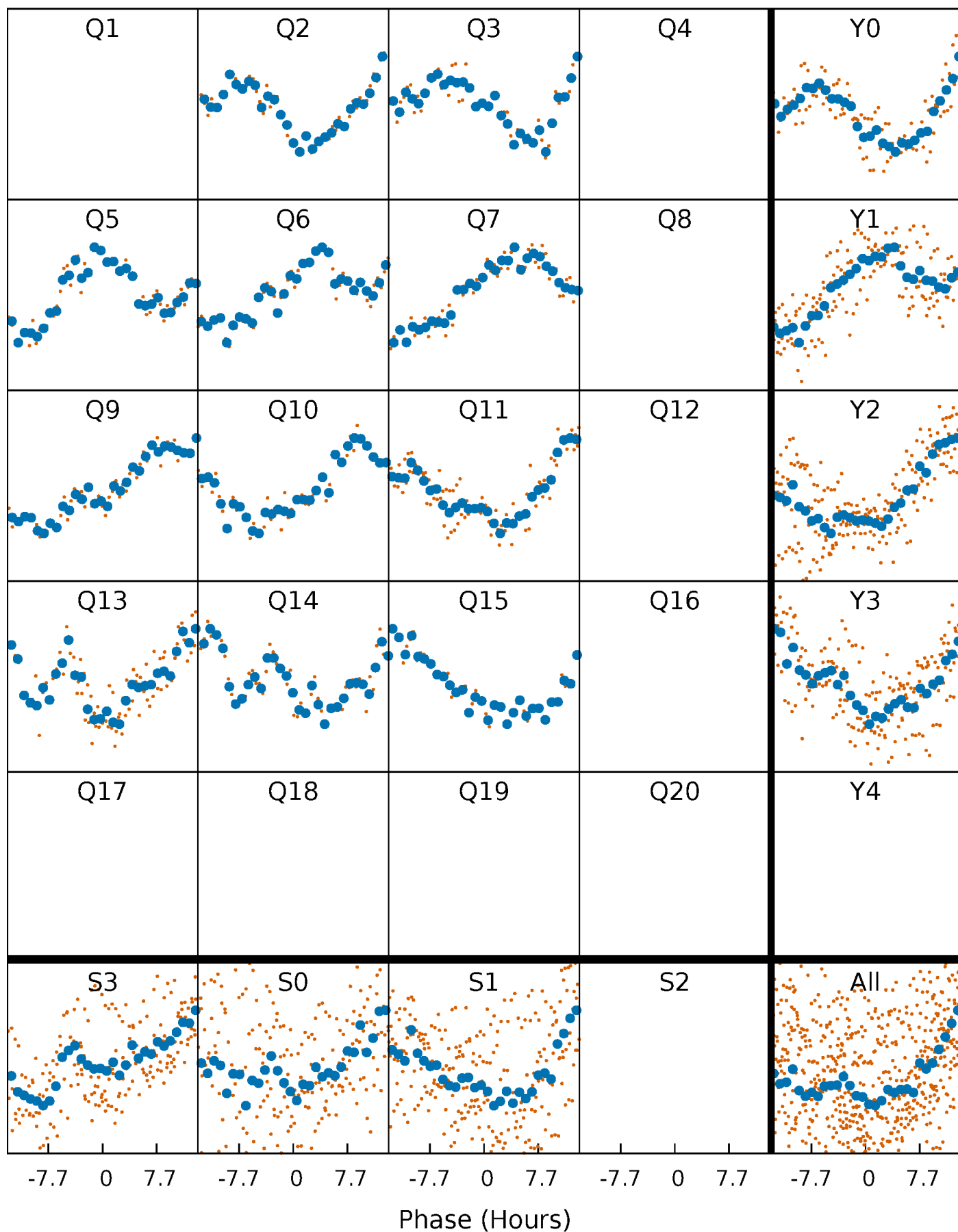


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



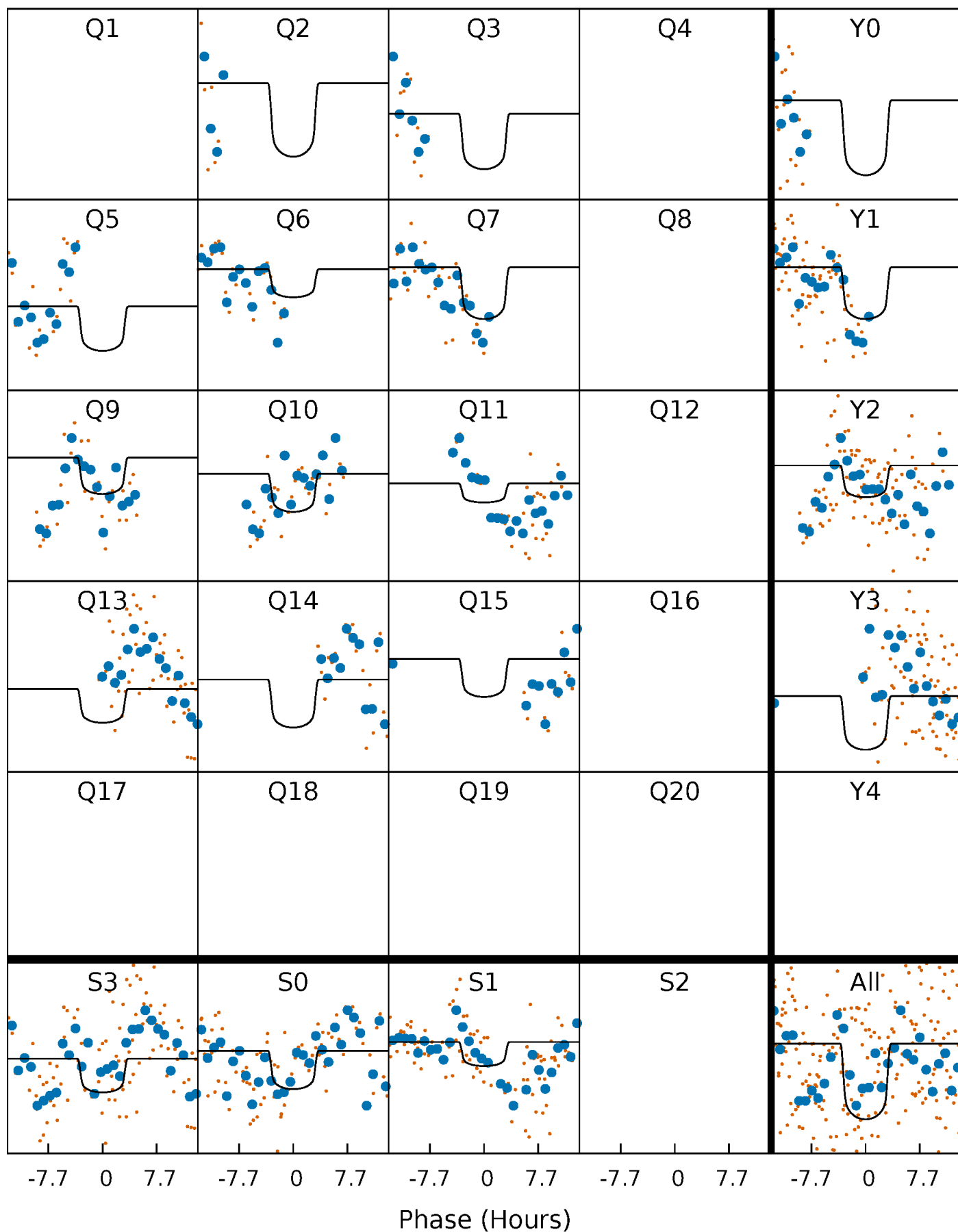
PDC Quarter-Phased Transit Curves

TCE 010652379-05 $P = 89.406597$ Days $T_0 = 199.428664$ (BKJD)



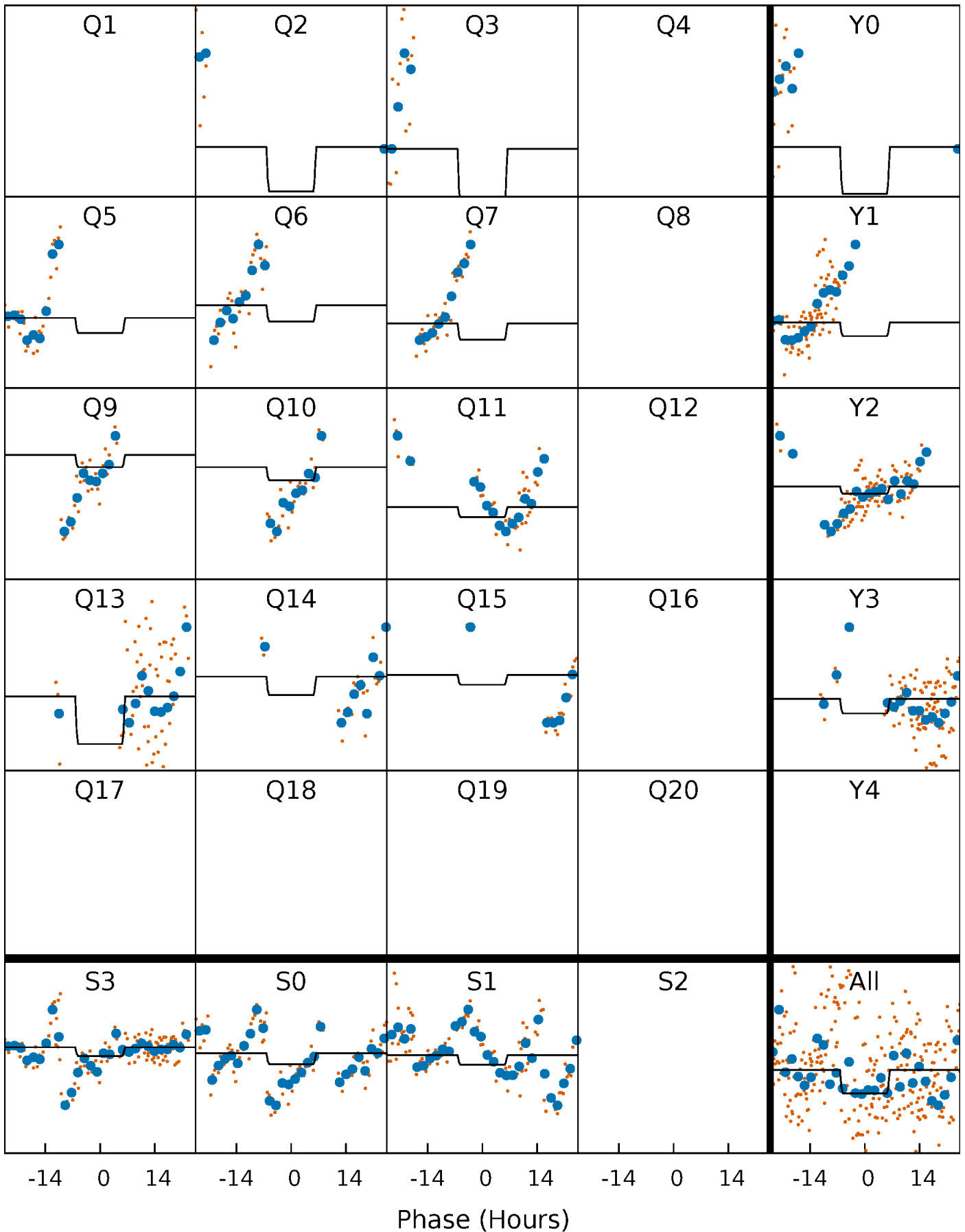
DV Quarter-Phased Transit Curves

TCE 010652379-05 $P = 89.406597$ Days $T_0 = 199.428664$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

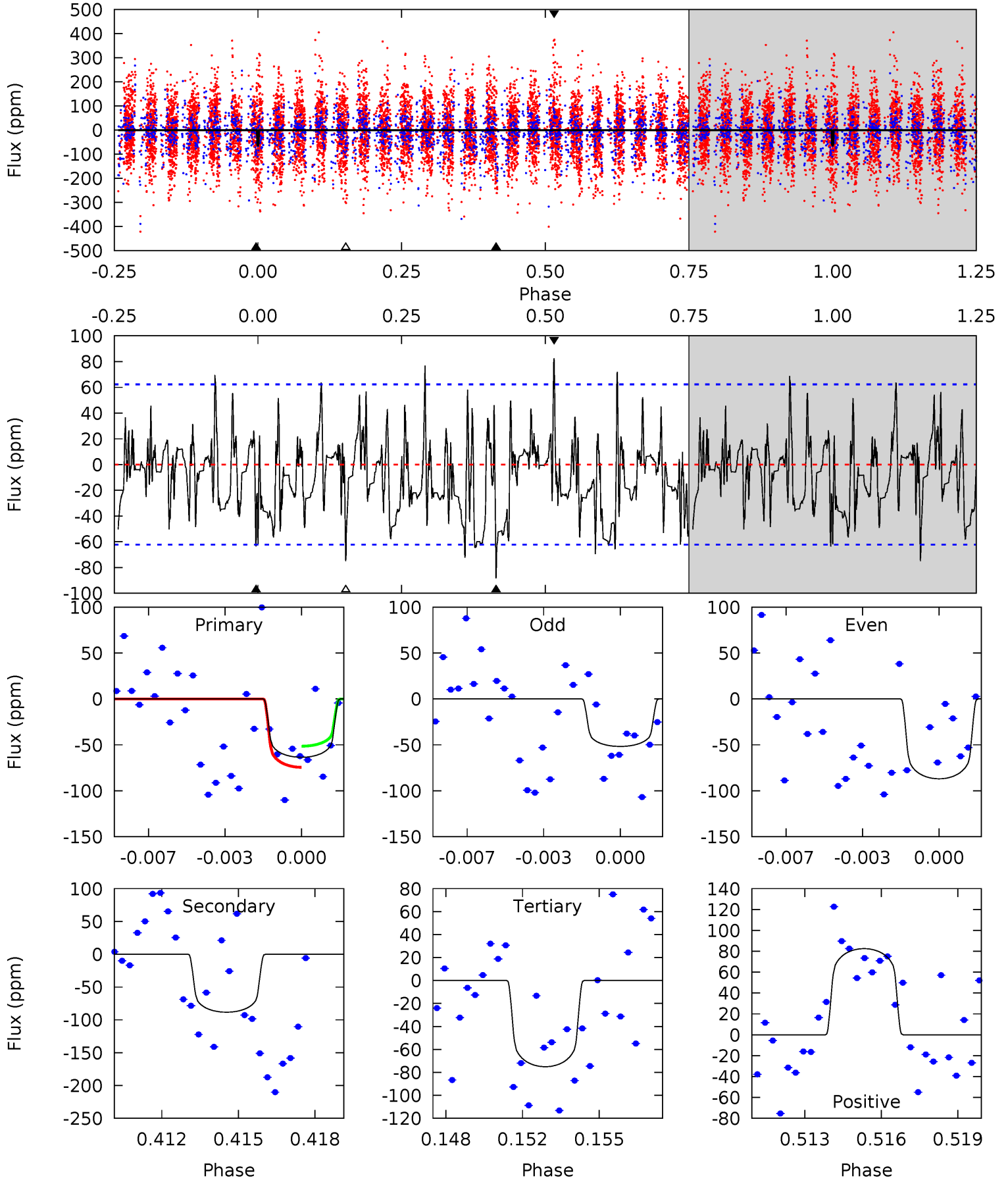
TCE 010652379-05 $P = 89.343394$ Days $T_0 = 199.893458$ (BKJD)



DV Model-Shift Uniqueness Test

010652379-05, P = 89.406597 Days, E = 110.022067 Days

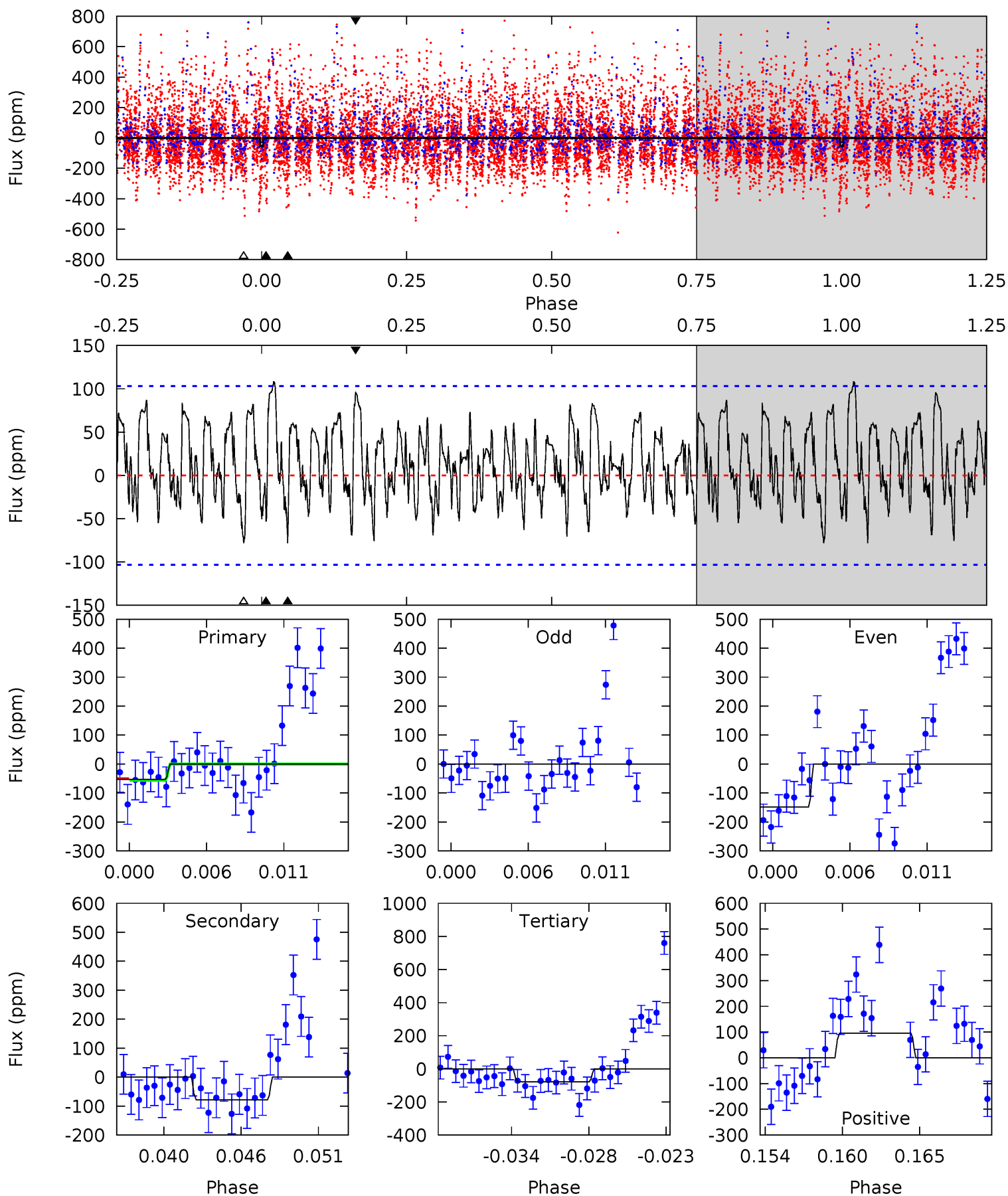
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.34	7.43	6.31	6.94	5.23	2.93	2.24	-0.97	-1.59	1.12	0.49	1.40	0.91	0.48	0.97



Alt Model-Shift Uniqueness Test

010652379-05, P = 89.343394 Days, E = 110.550064 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.65	3.89	3.87	4.77	5.13	2.76	1.63	-1.21	-2.12	0.02	-0.88	3.53	-2.02	0.58	0.15



Stellar Parameters For KIC 010652379

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6649^{+166}_{-183}	$3.749^{+0.304}_{-0.095}$	$-0.280^{+0.300}_{-0.250}$	$2.654^{+0.489}_{-0.908}$	$1.443^{+0.264}_{-0.264}$	$0.109^{+0.209}_{-0.032}$
	+2%/-3%	+8%/-3%	+107%/-89%	+18%/-34%	+18%/-18%	+192%/-30%
Source	PHO1	FLK73	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 010652379-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-88 ± 12	$3.09^{+1.36}_{-1.17}$	983^{+60}_{-84}	5996^{+1653}_{-833}	1008^{+1643}_{-522}
Alt.	-78 ± 20	$2.25^{+1.36}_{-1.09}$	985^{+55}_{-80}	6891^{+3602}_{-1498}	1653^{+5098}_{-1049}

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

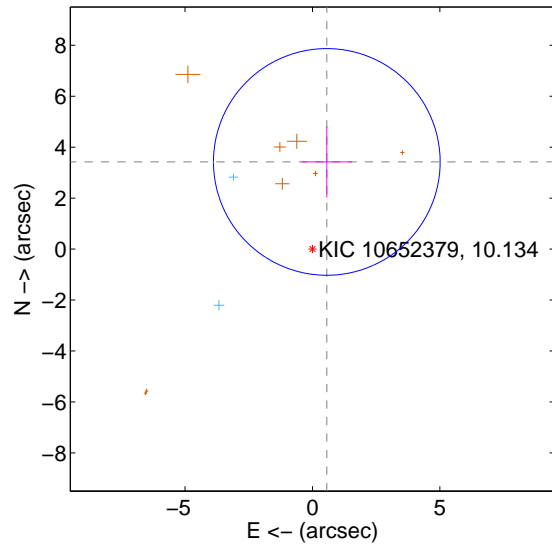
Supplemental centroid analysis for 010652379-05. **Kepler magnitude: 10.13.** Transit SNR 6.70

There are 2 quarters with good PRF difference image offsets

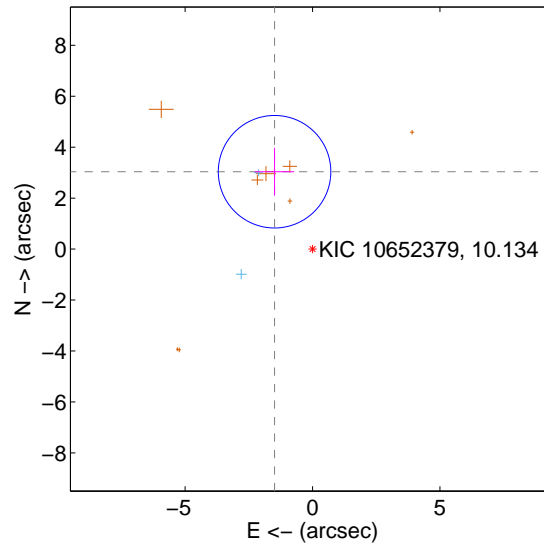
The direct PRF centroid is offset from the target star catalog position by about 1.57 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.468 ± 1.483	2.34	-0.564 ± 0.985	3.422 ± 1.390
PRF-fit source offset from KIC position	3.383 ± 0.736	4.60	1.490 ± 0.771	3.037 ± 0.939
photometric centroid source offset	1.28 ± 0.95	1.35	0.00 ± 0.74	-1.28 ± 0.95

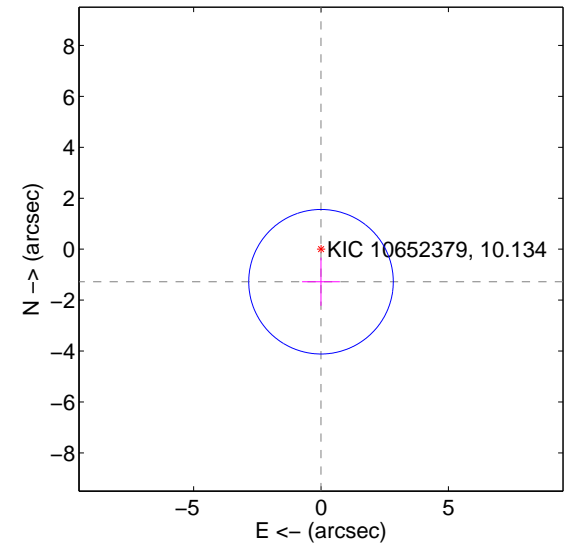
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids



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

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

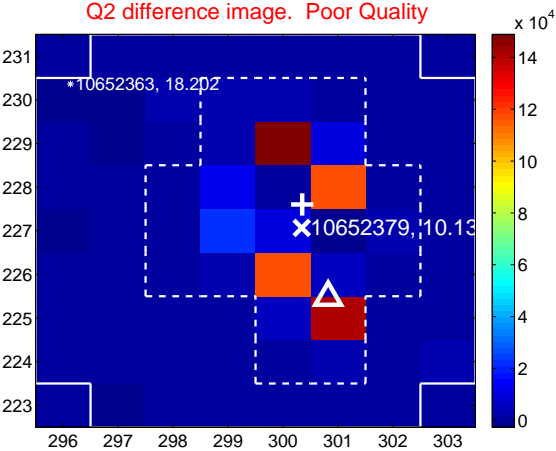
Q1 no difference image



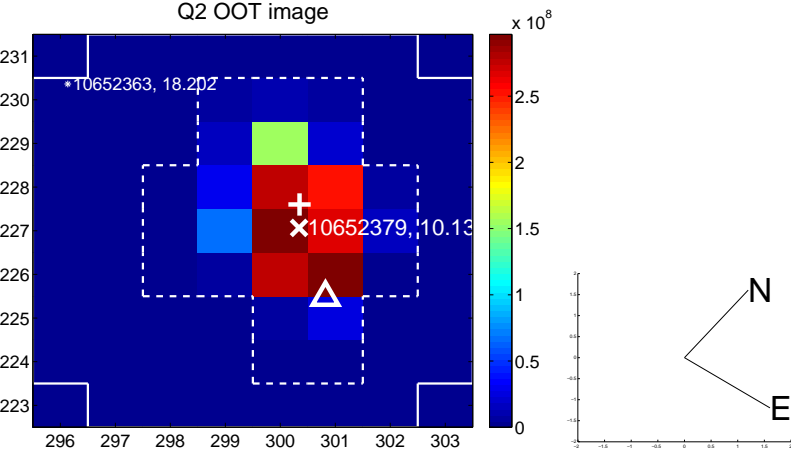
Q1 no OOT image



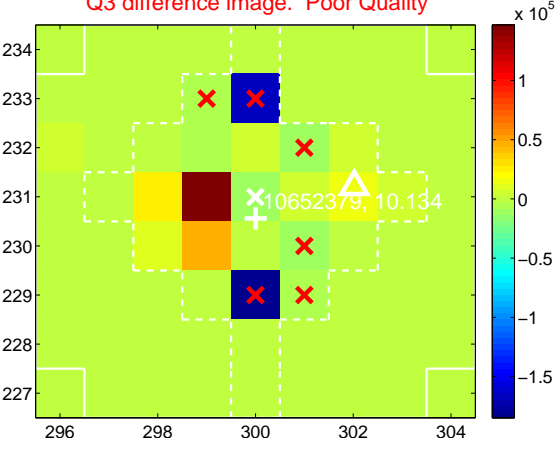
Q2 difference image. Poor Quality



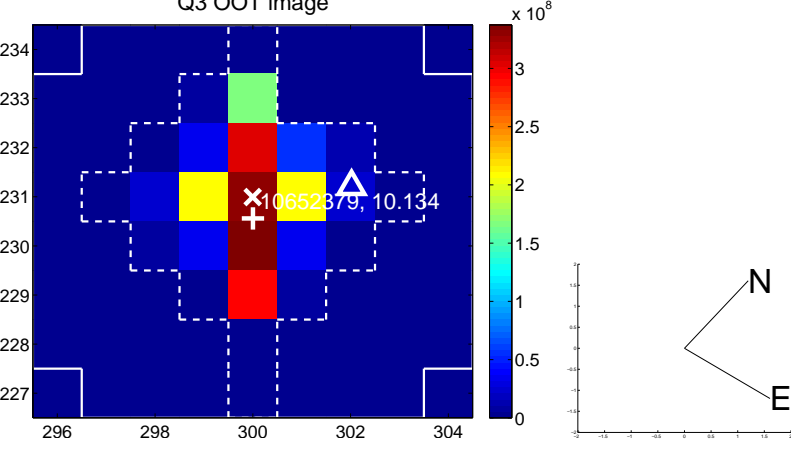
Q2 OOT image



Q3 difference image. Poor Quality



Q3 OOT image



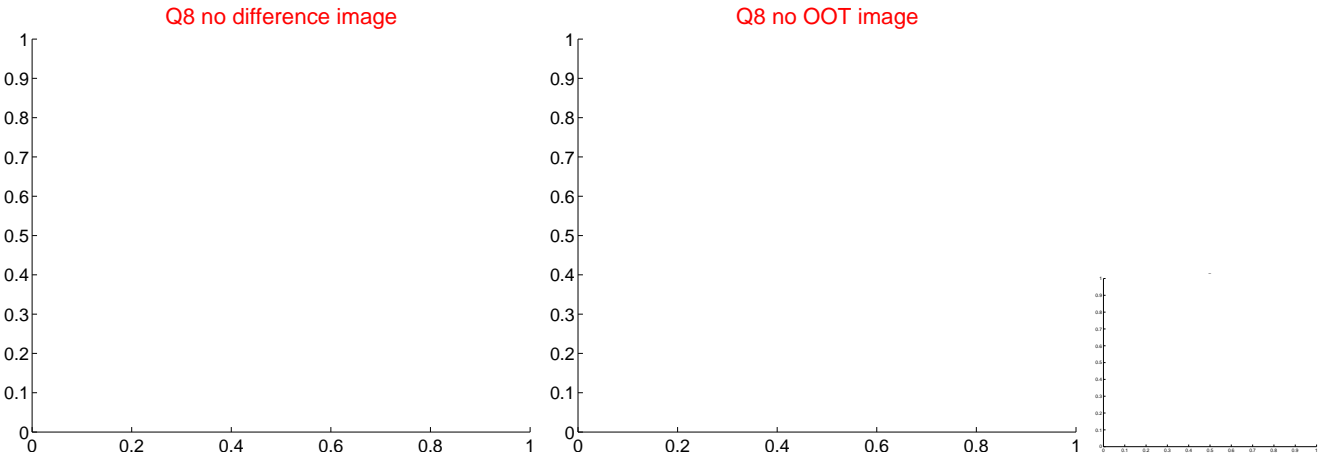
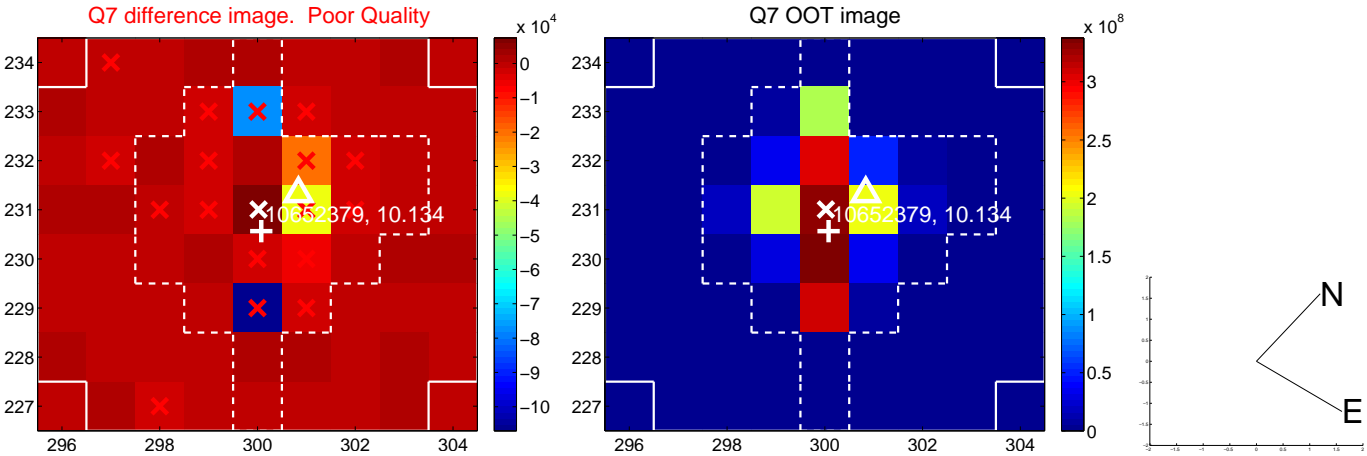
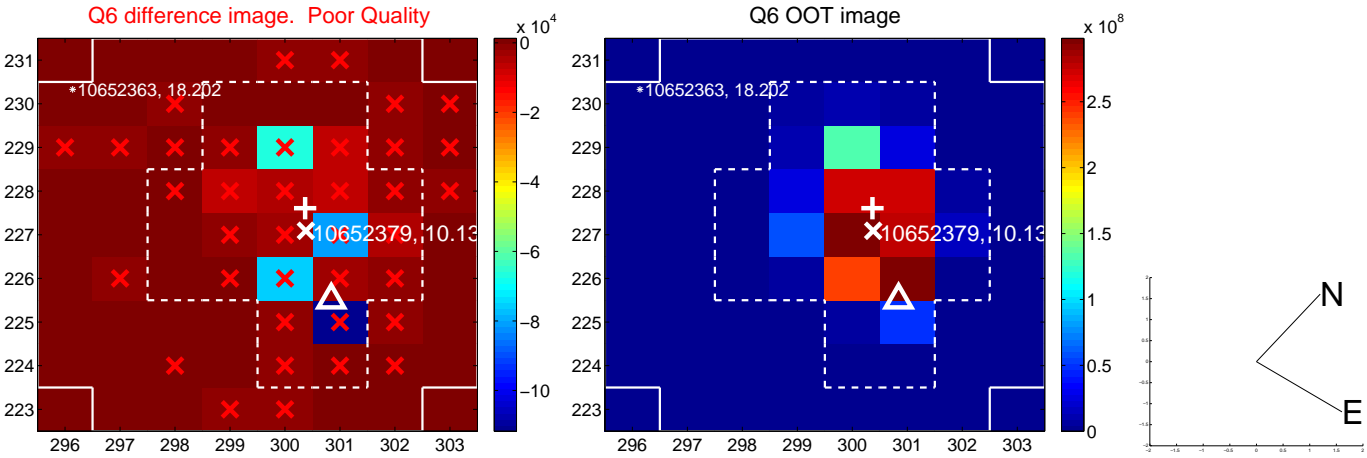
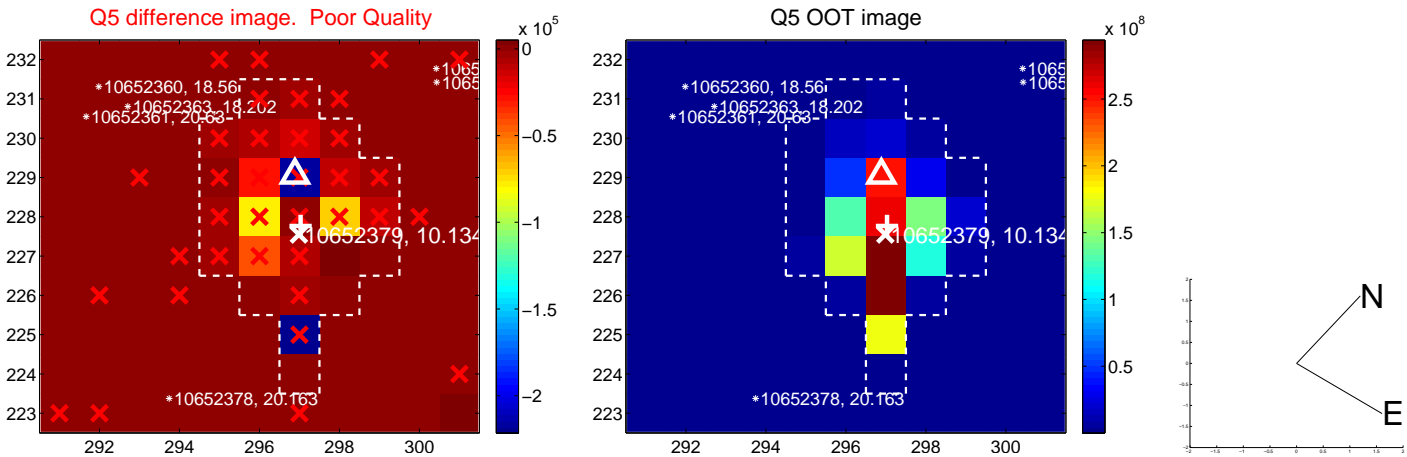
Q4 no difference image



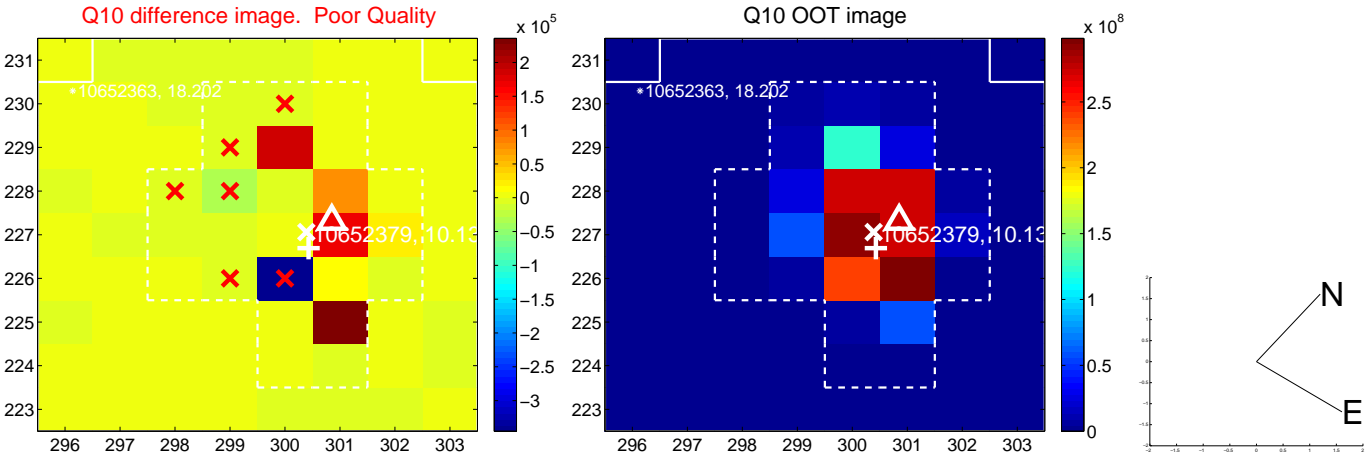
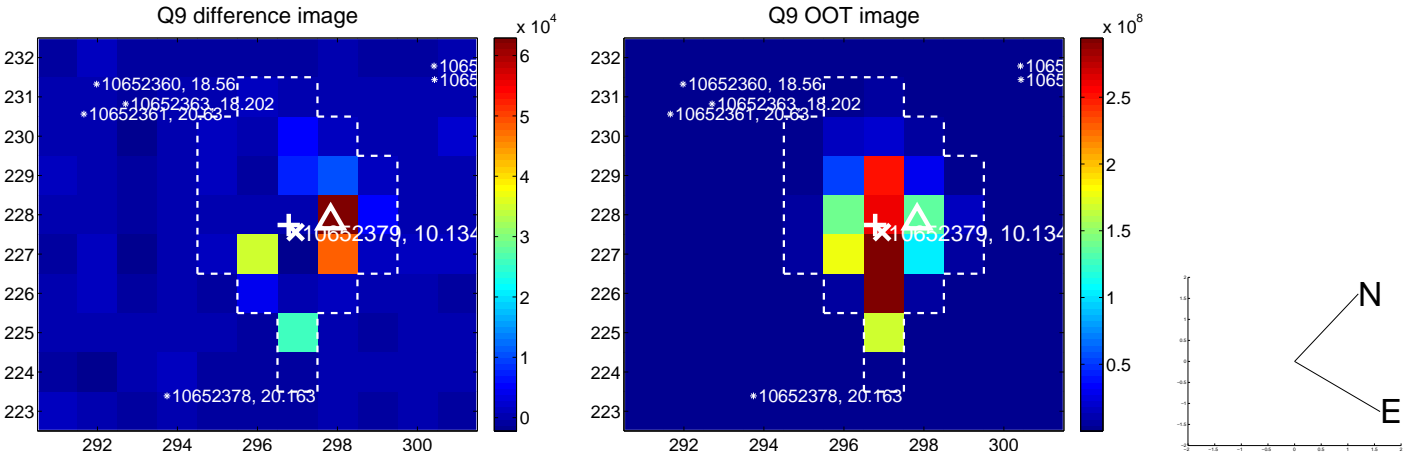
Q4 no OOT image



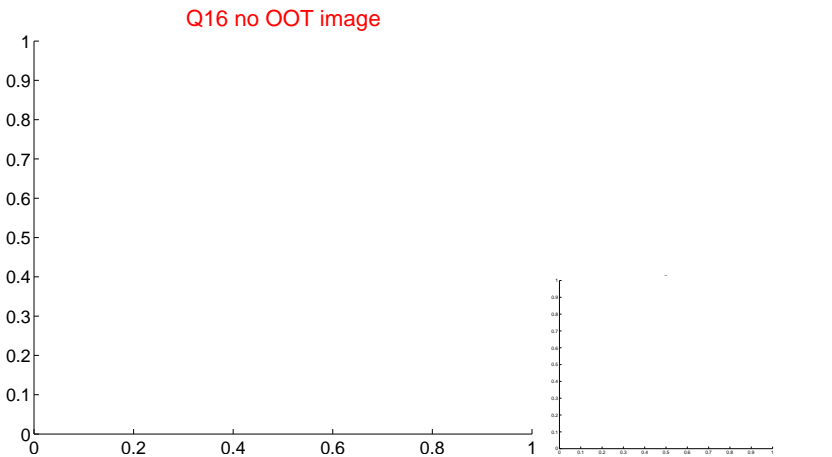
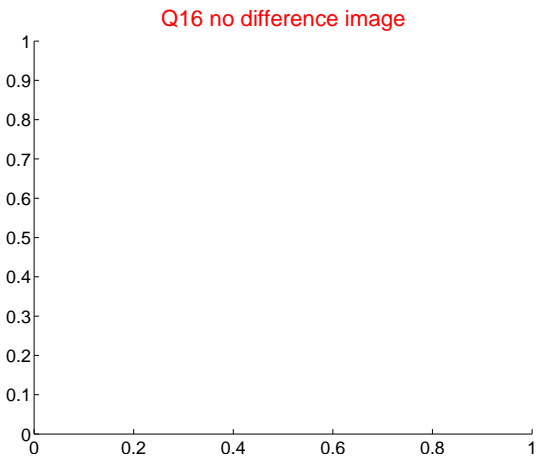
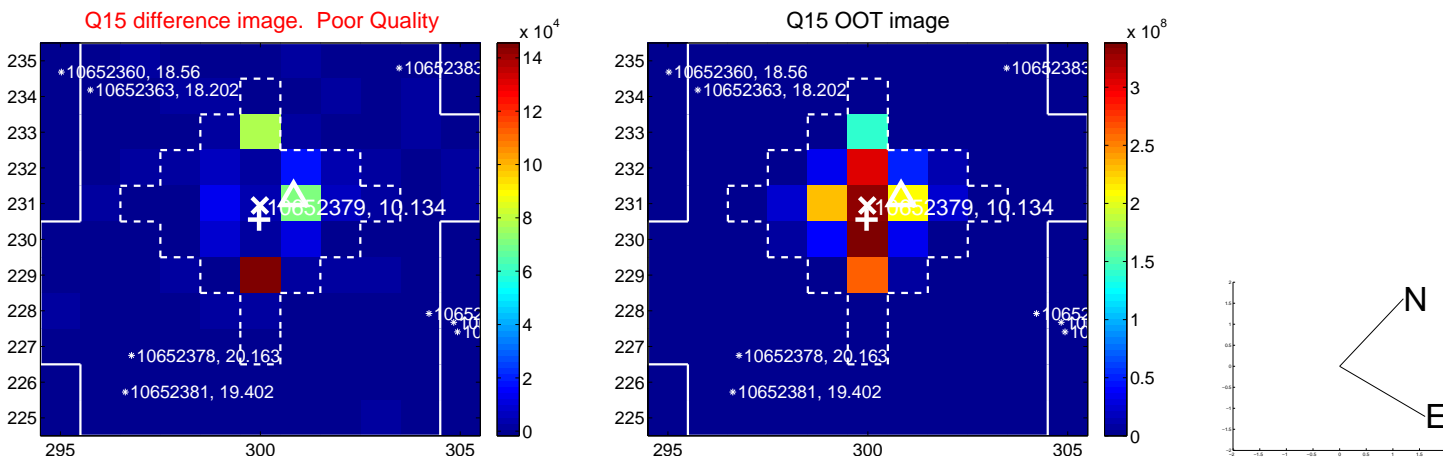
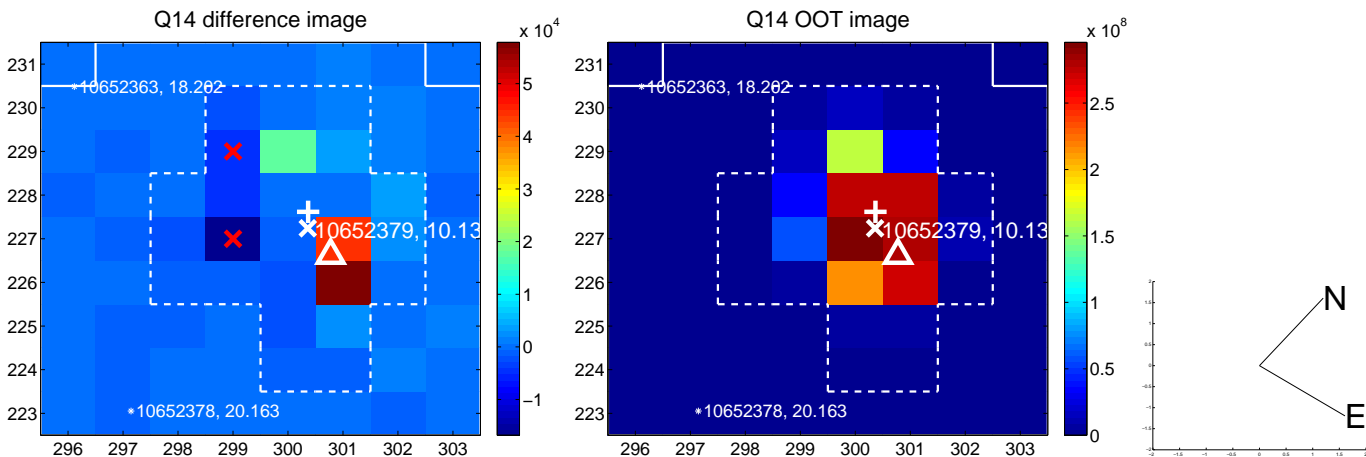
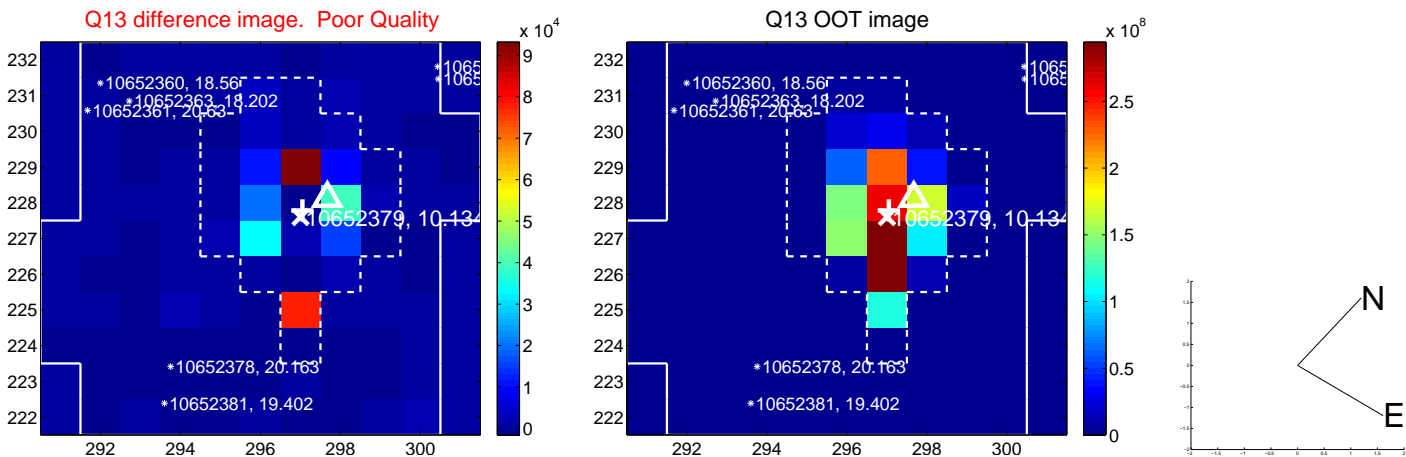
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



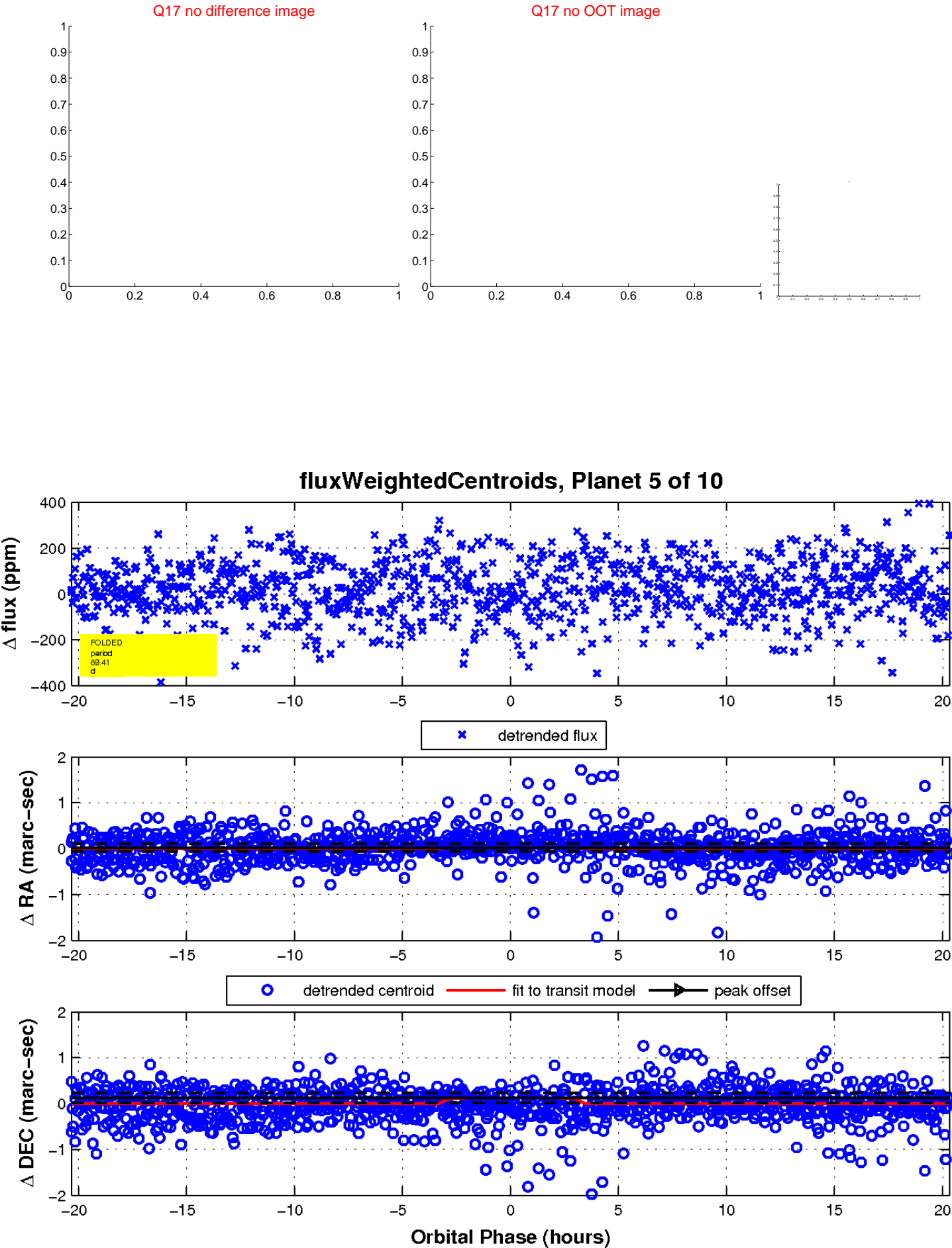
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



This plot does not exist for this TCE.

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})
010652379-01	OBS	No	3.314708	133.196939	56.4	6.019	11.1	12.3	2.65	6649	4.05	5104.19
010652379-02	OBS	No	3.314624	131.743175	34.5	5.989	10.9	10.5	2.65	6649	1.84	5104.36
010652379-03	OBS	No	3.314671	133.663432	19.7	14.851	10.8	6.4	2.65	6649	1.43	5104.26
010652379-04	OBS	No	78.280988	161.932625	205.4	7.495	16.9	9.7	2.65	6649	4.03	75.33
010652379-05	OBS	No	89.406597	199.428664	114.3	6.777	16.6	6.7	2.65	6649	3.33	63.10
010652379-06	OBS	No	1.656077	132.257770	43.0	1.724	11.7	7.0	2.65	6649	1.76	12874.97
010652379-07	OBS	No	88.846588	212.851630	207.0	10.888	8.4	9.1	2.65	6649	4.12	63.63
010652379-08	OBS	No	22.094042	141.525125	82.3	7.323	8.5	8.9	2.65	6649	2.78	406.90
010652379-09	OBS	No	106.495223	202.067155	176.6	6.010	8.2	8.4	2.65	6649	3.99	49.97
010652379-10	OBS	No	73.079893	200.304960	69.2	2.000	7.5	-1.0	2.65	6649	2.23	82.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010652379-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
010652379-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—TRANS_GAPPED—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010652379-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

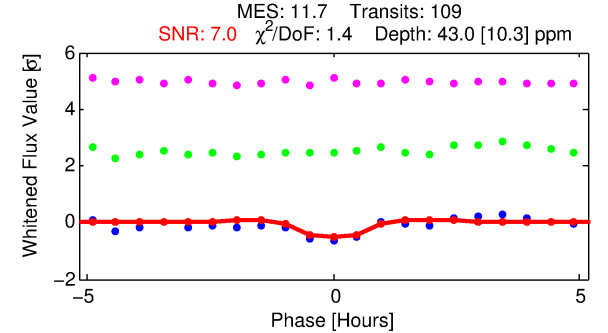
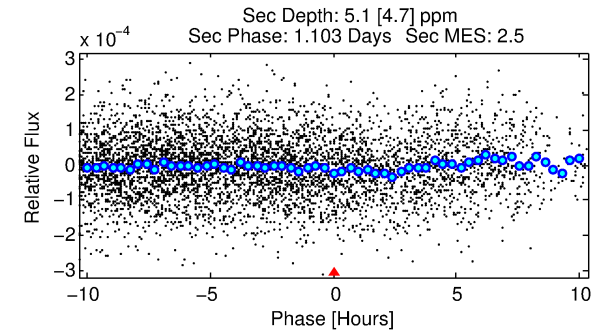
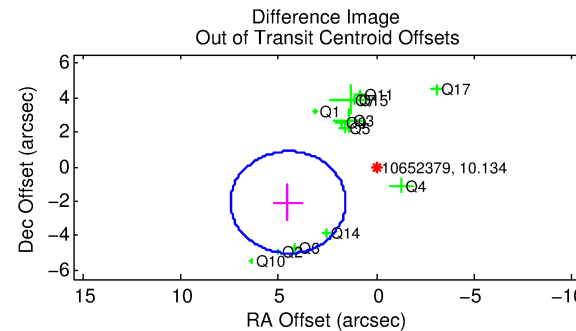
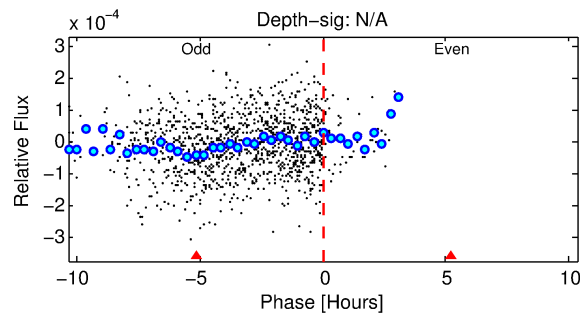
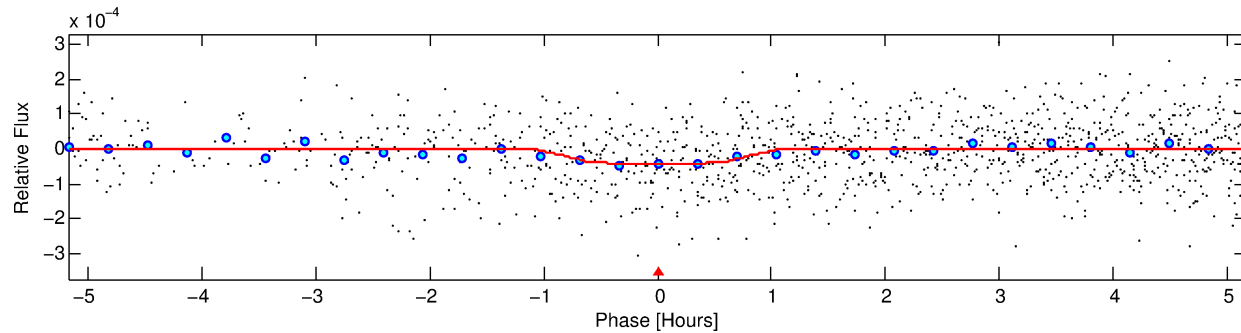
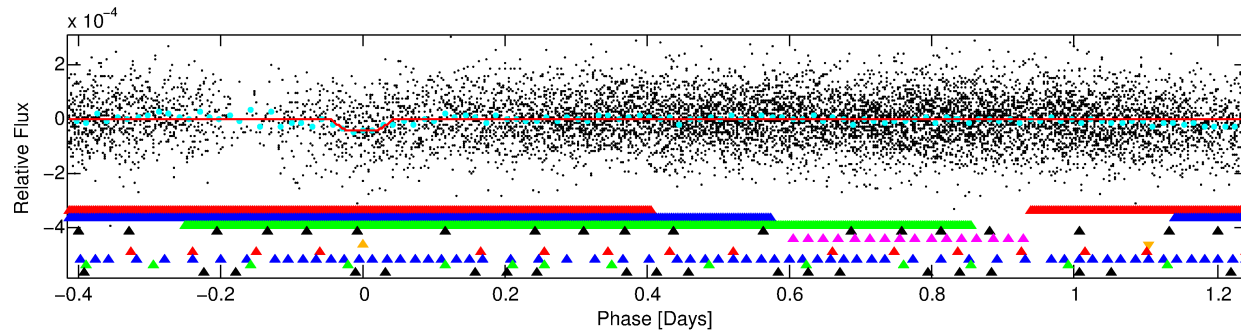
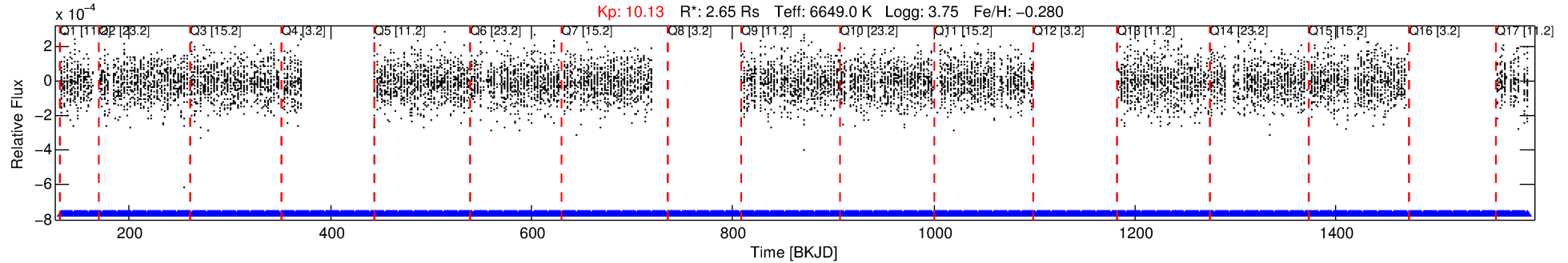
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010652379-06

No Significant Match Found

DV One-Page Summary

KIC: 10652379 Candidate: 6 of 10 Period: 1.656 d



DV Fit Results:

Period = 1.65608 [0.00003] d
Epoch = 132.2578 [0.0044] BKJD
Rp/R* = 0.0061 [0.0136]
a/R* = 7.40 [88.16]
b = 0.00 [3009.14]
Seff = 12874.97 [6836.00]
Teq = 2716 [361] K
Rp = 1.76 [4.00] Re
a = 0.0310 [0.0101] AU
Ag = 0.87 [4.03] [-0.03σ]
Teffp = 4059 [4661] K [0.29σ]

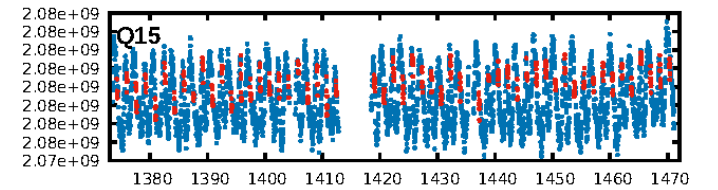
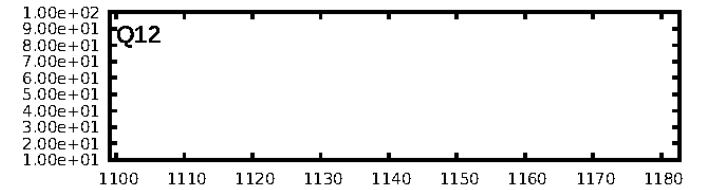
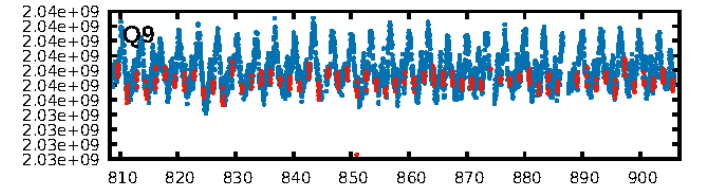
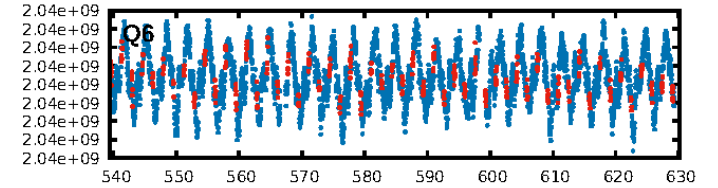
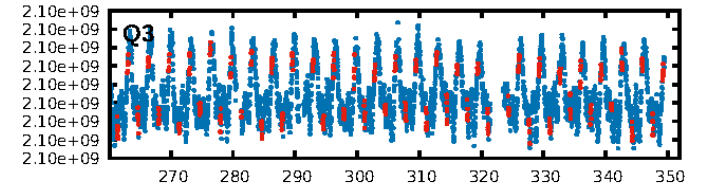
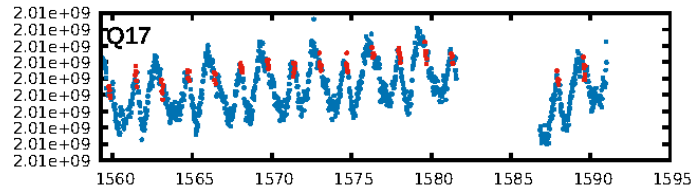
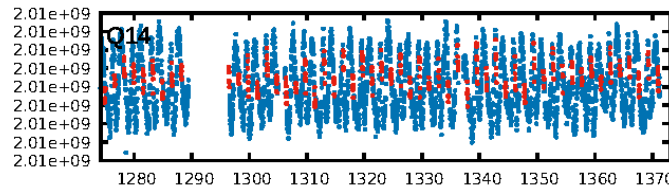
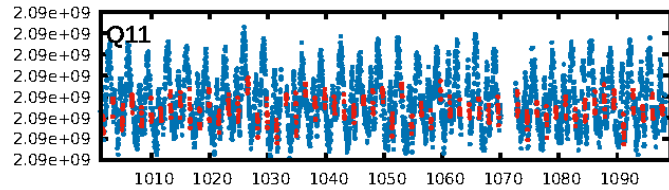
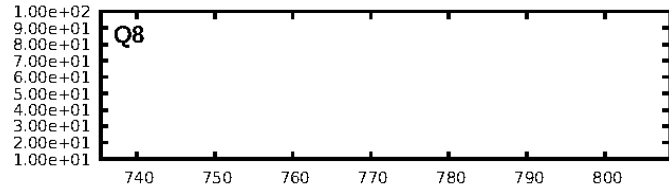
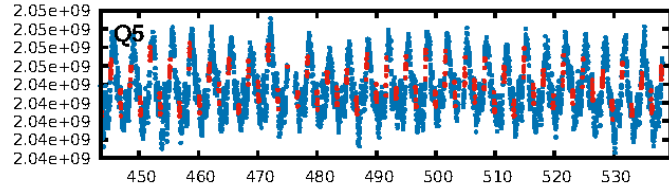
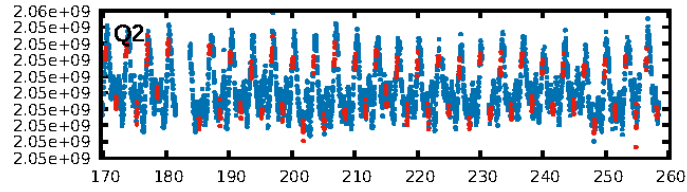
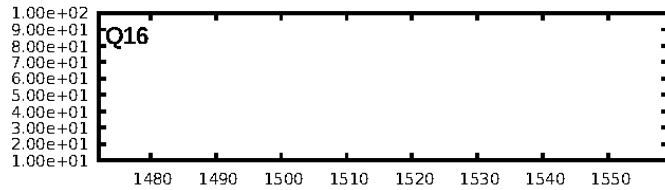
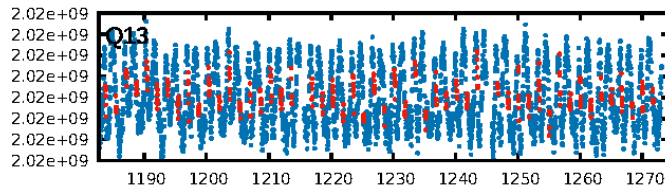
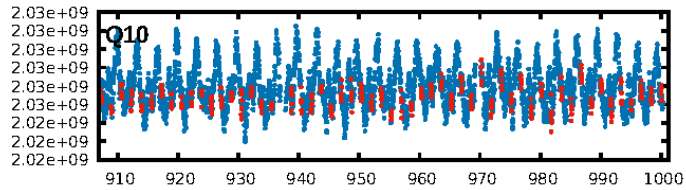
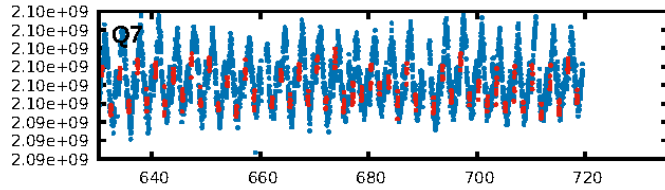
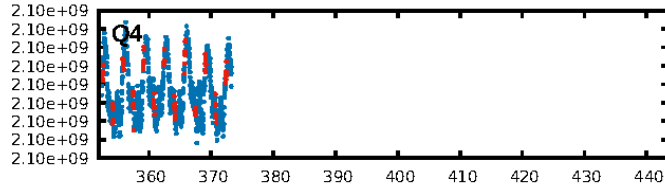
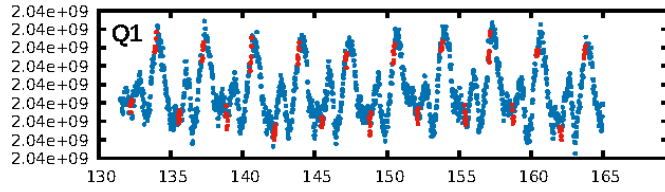
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [6.39σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [98/98]
GhostDiagnostic-chr: N/A
Centroid-sig: 10.4%
Centroid-so: 0.214 arcsec [0.60σ]
OotOffset-rm: 4.965 arcsec [5.05σ]
KicOffset-rm: 3.717 arcsec [4.82σ]
OotOffset-st: 4/4/1/4 [13]
KicOffset-st: 4/4/1/4 [13]
DiffImageQuality-fgm: 0.15 [2/13]
DiffImageOverlap-fno: 0.43 [6/14]

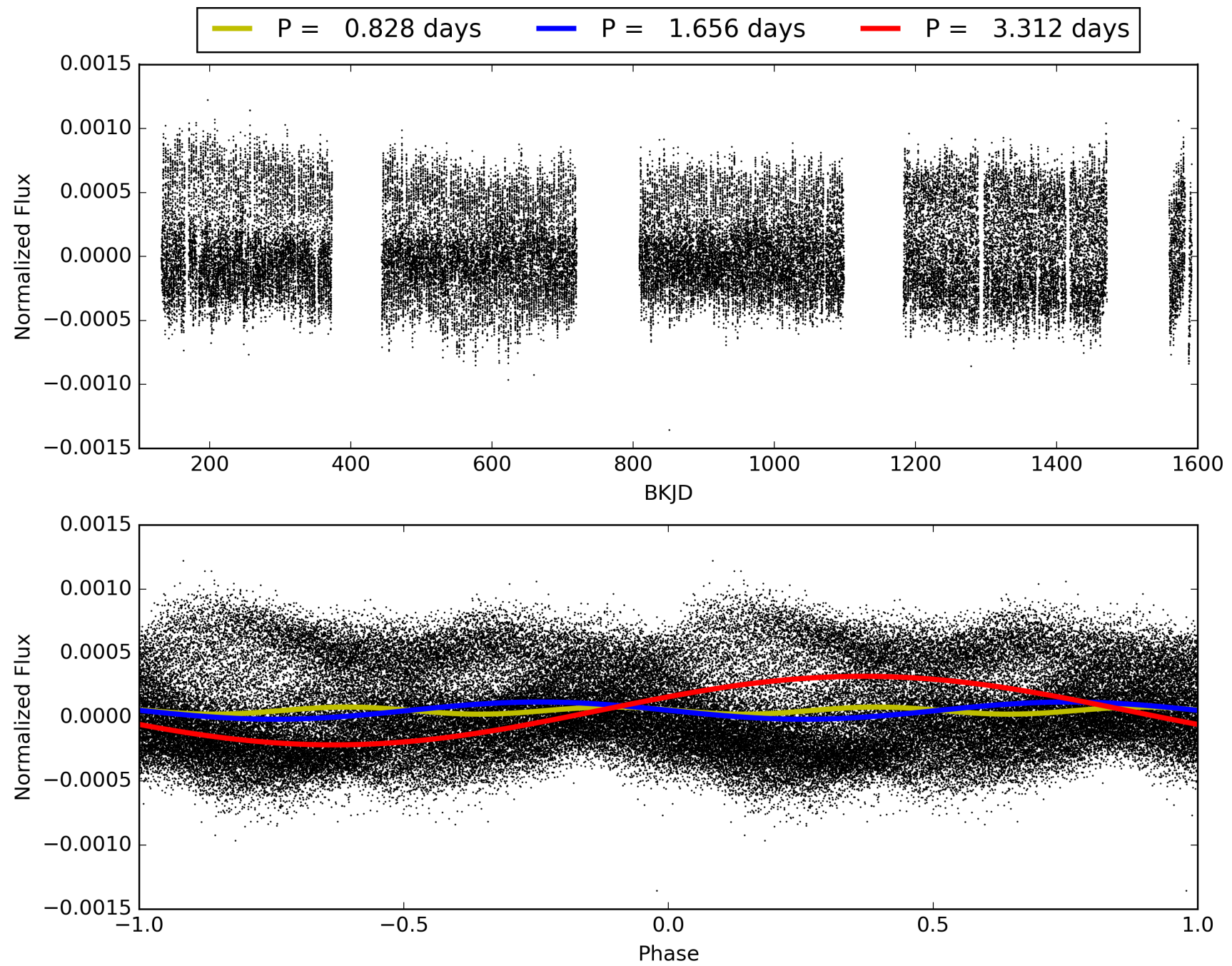
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:14:37 Z

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

TCE 010652379-06, PDC Light Curves

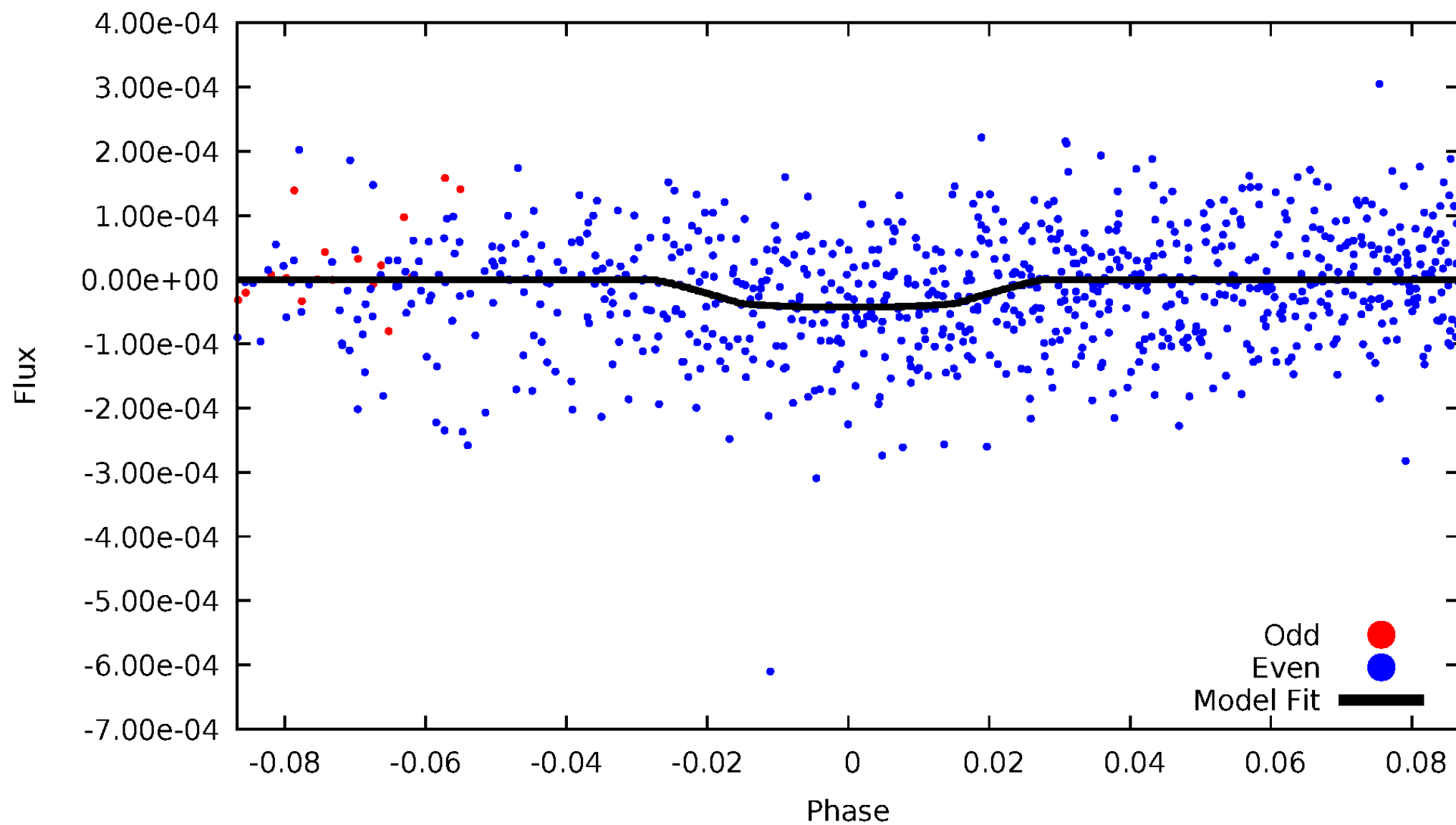


TCE 010652379-06



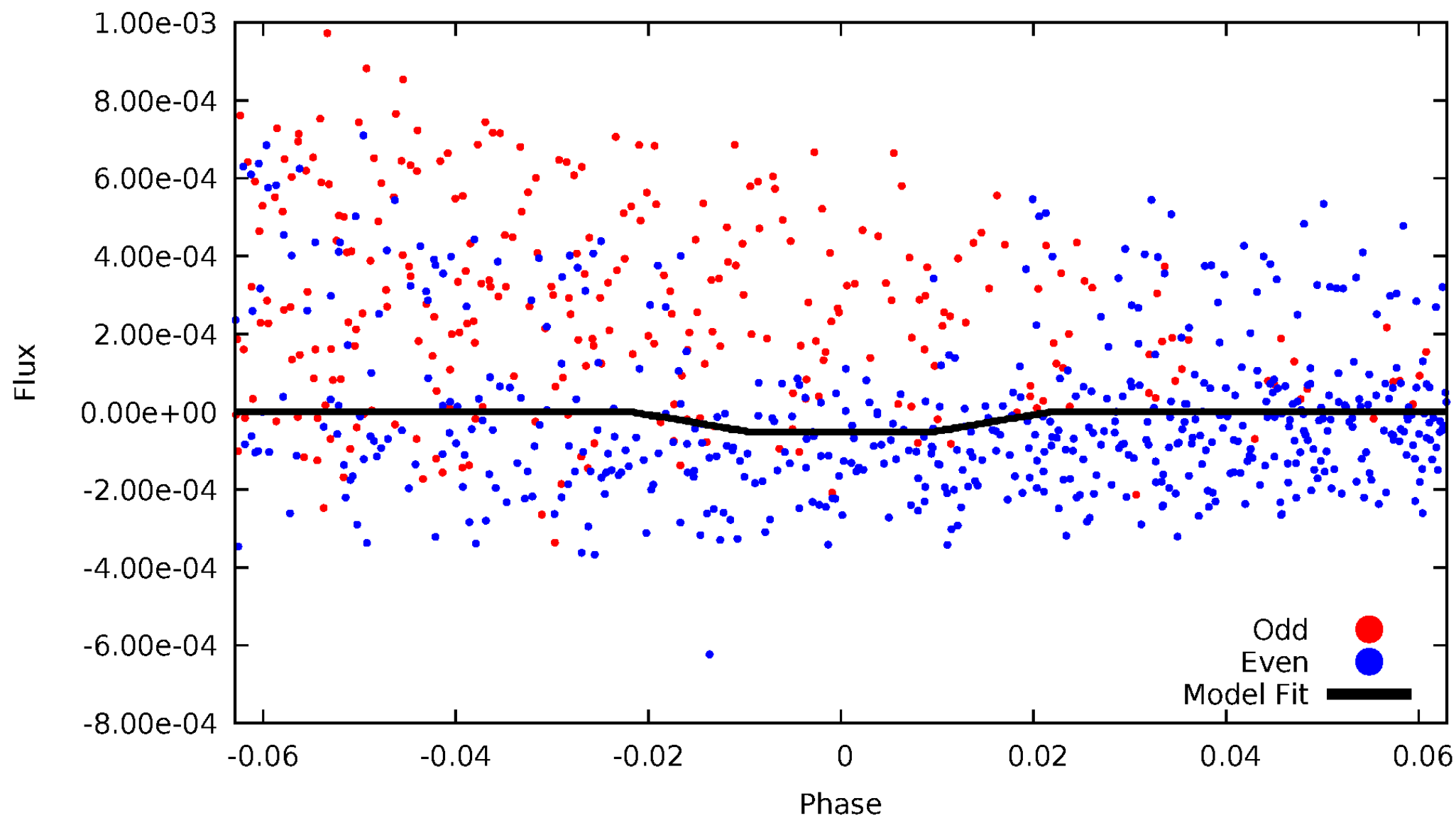
DV Odd/Even

TCE 010652379-06



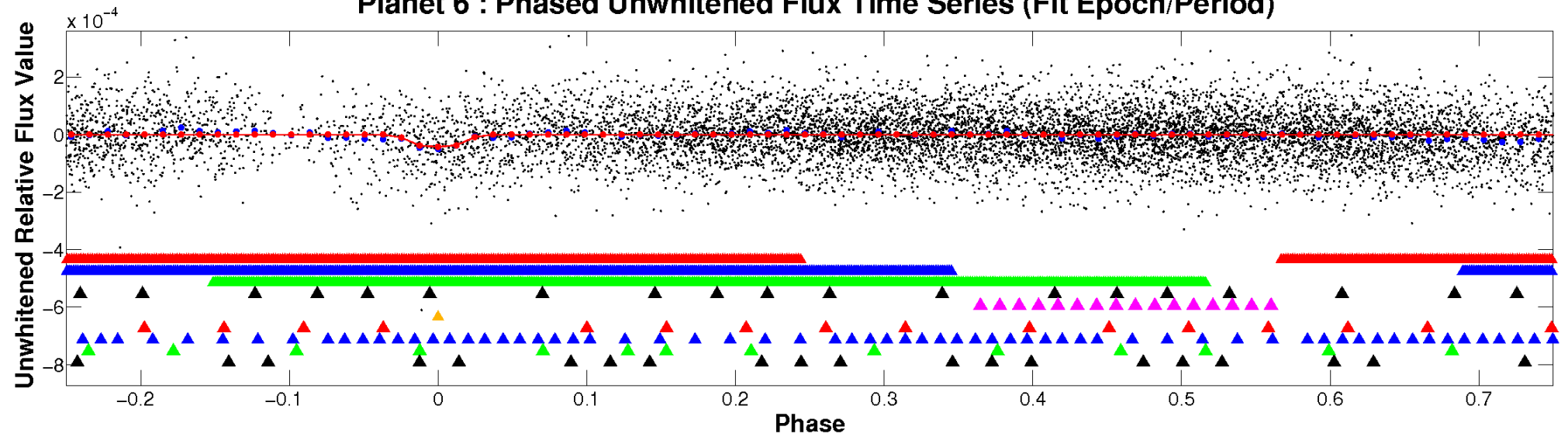
ALT Odd/Even

TCE 010652379-06

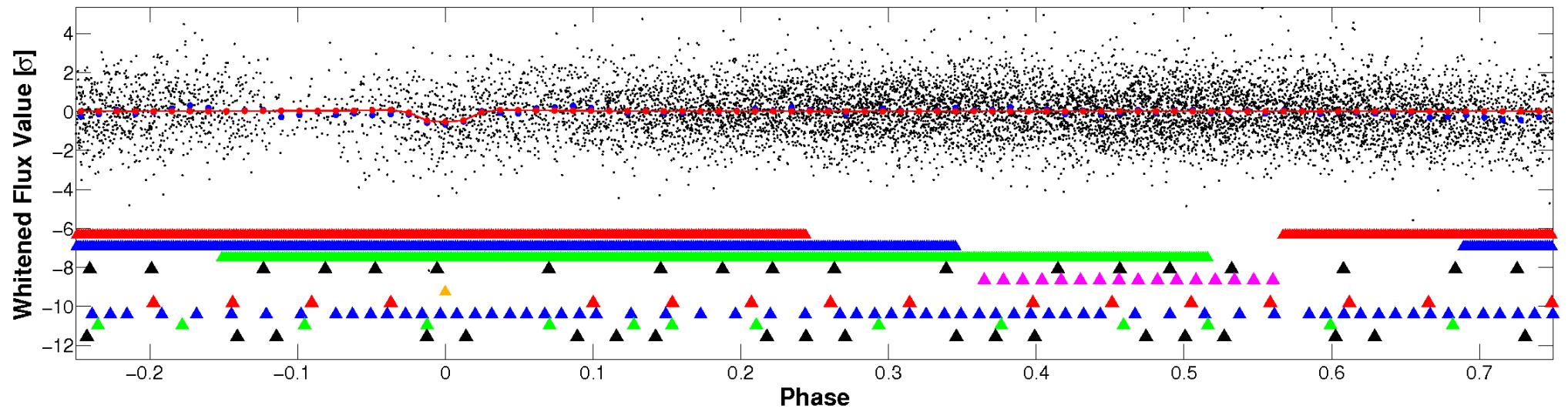


Non-Whitened Vs. Whitened Light Curve

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

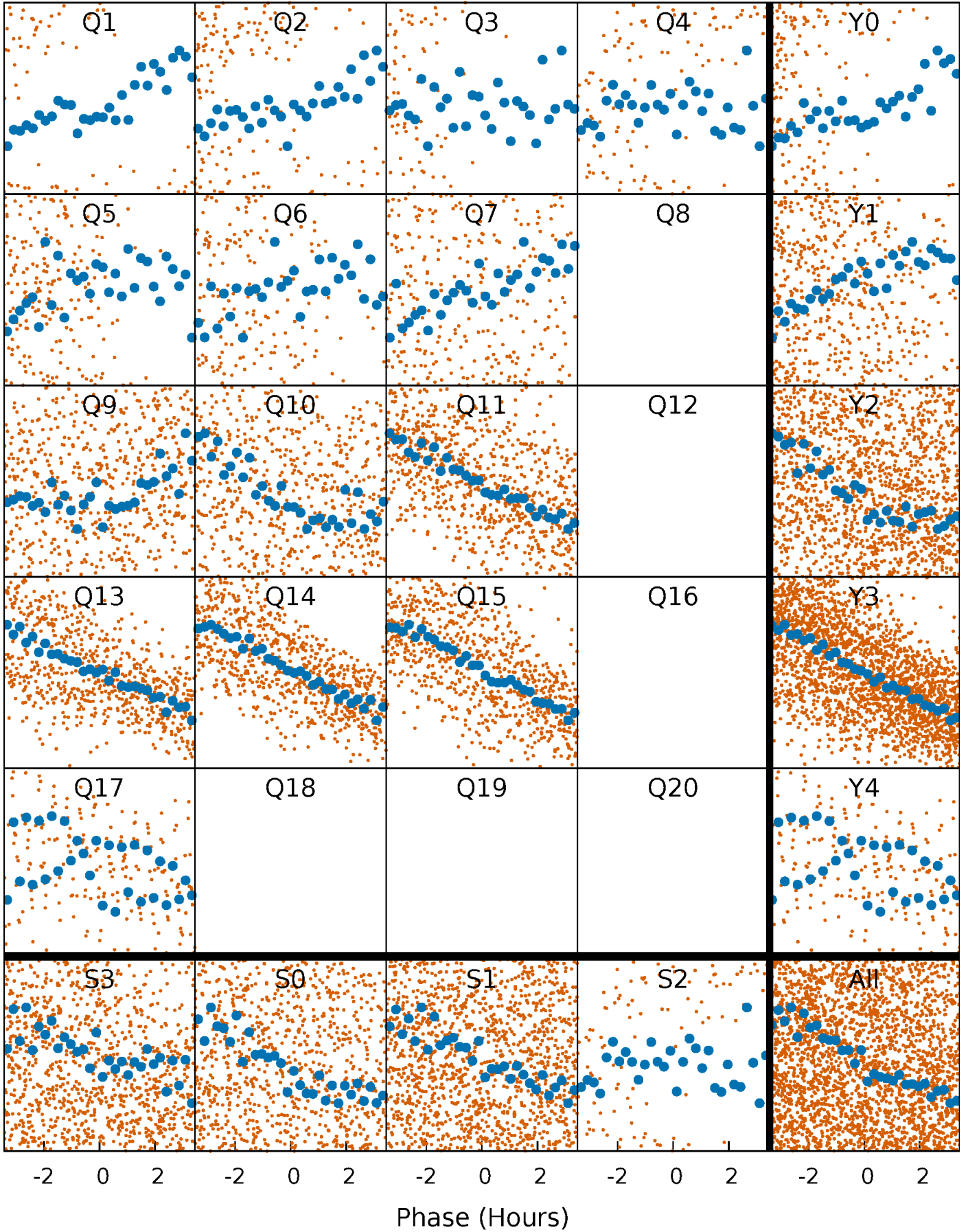


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



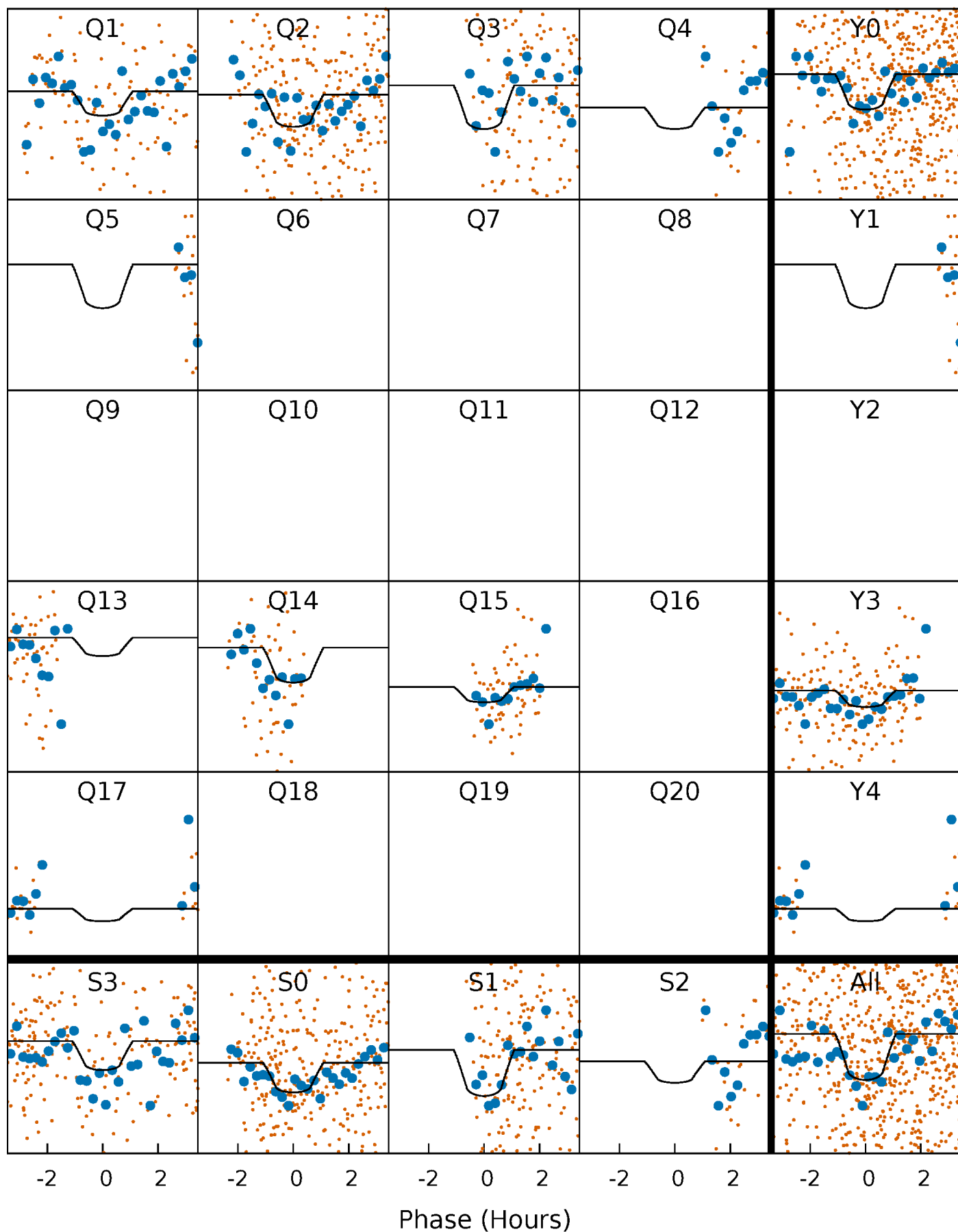
PDC Quarter-Phased Transit Curves

TCE 010652379-06 $P = 1.656077$ Days $T_0 = 132.257770$ (BKJD)



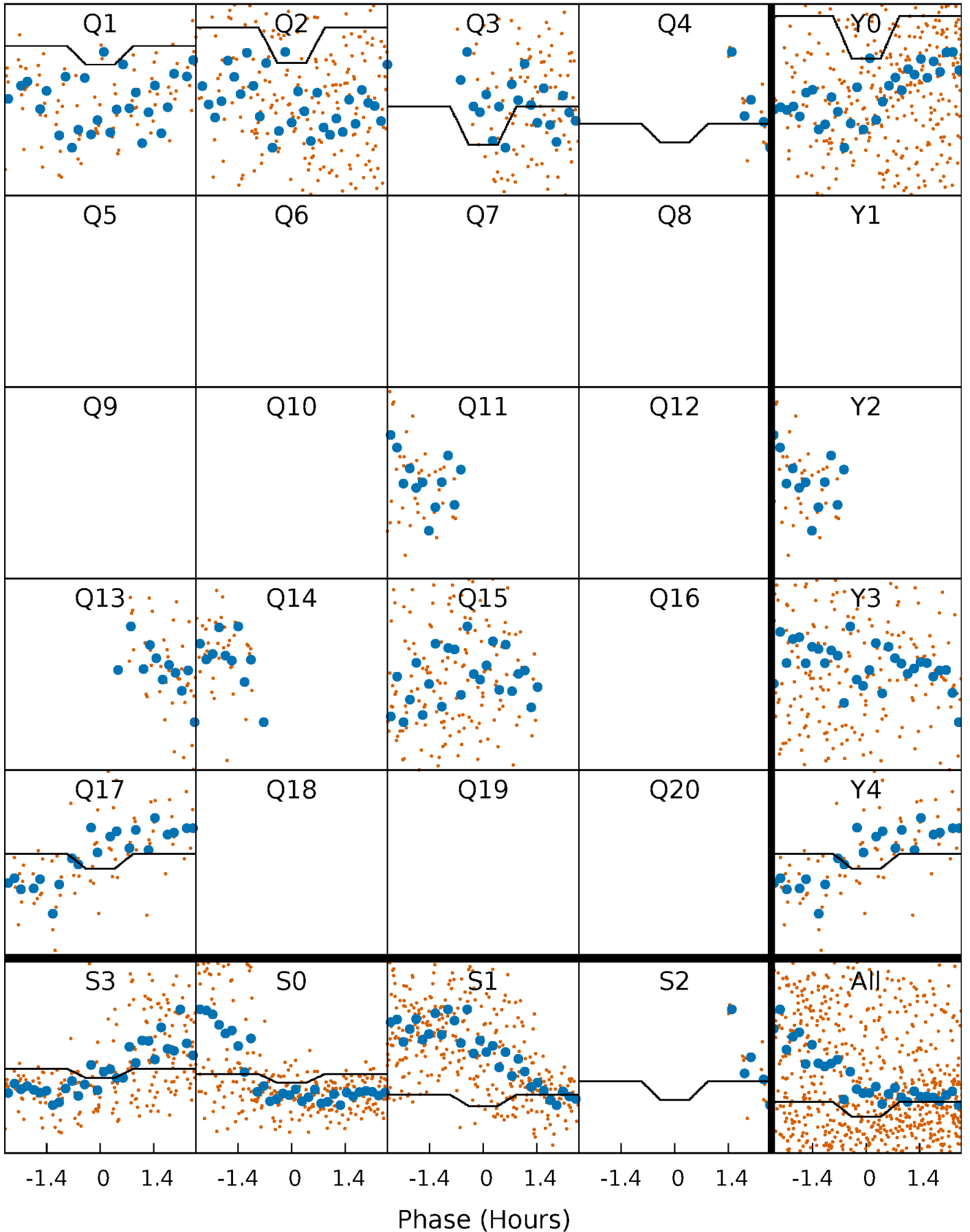
DV Quarter-Phased Transit Curves

TCE 010652379-06 P= 1.656077 Days $T_0=132.257770$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

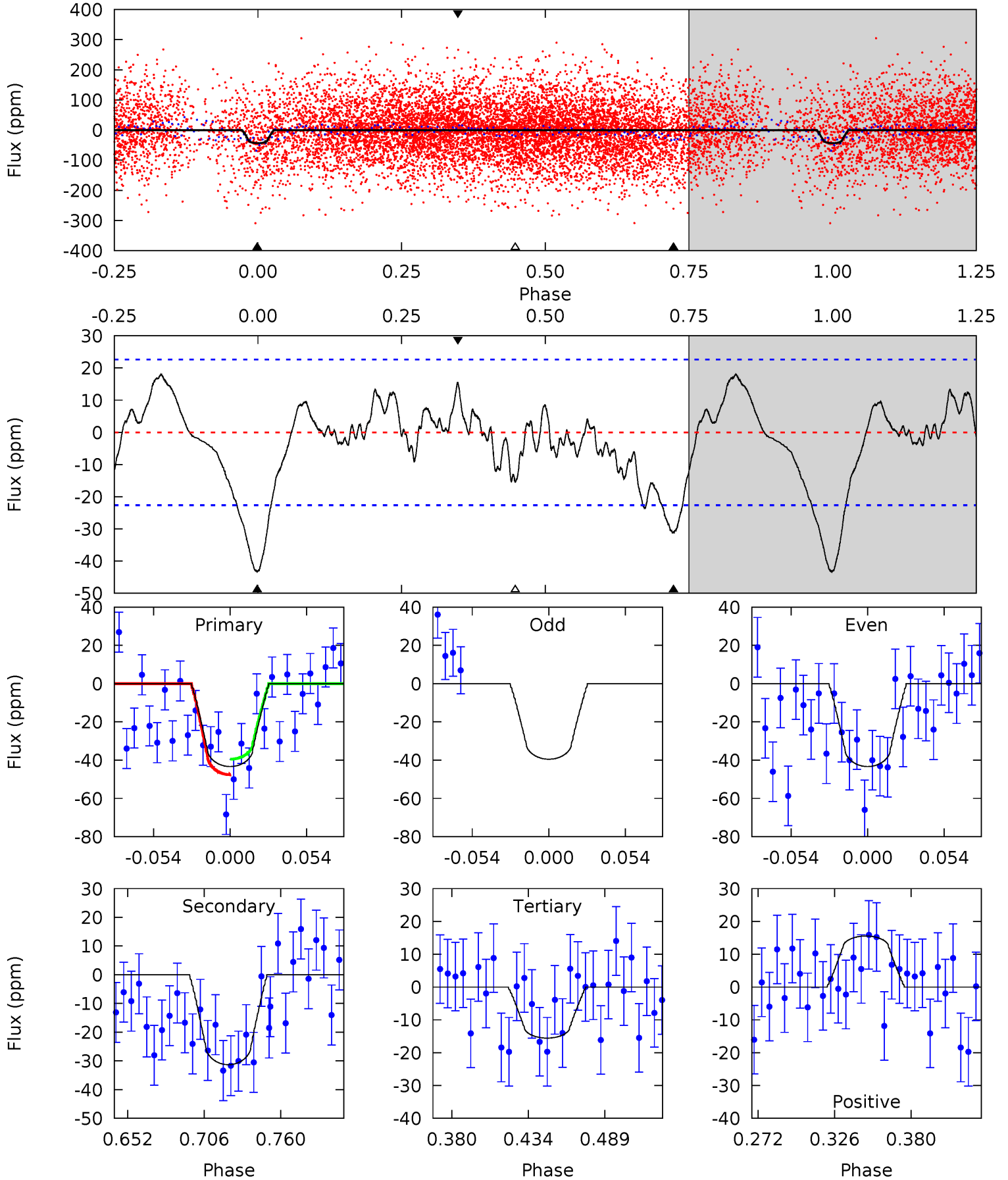
TCE 010652379-06 P= 1.655739 Days $T_0=132.287010$ (BKJD)



DV Model-Shift Uniqueness Test

010652379-06, P = 1.656077 Days, E = 130.601693 Days

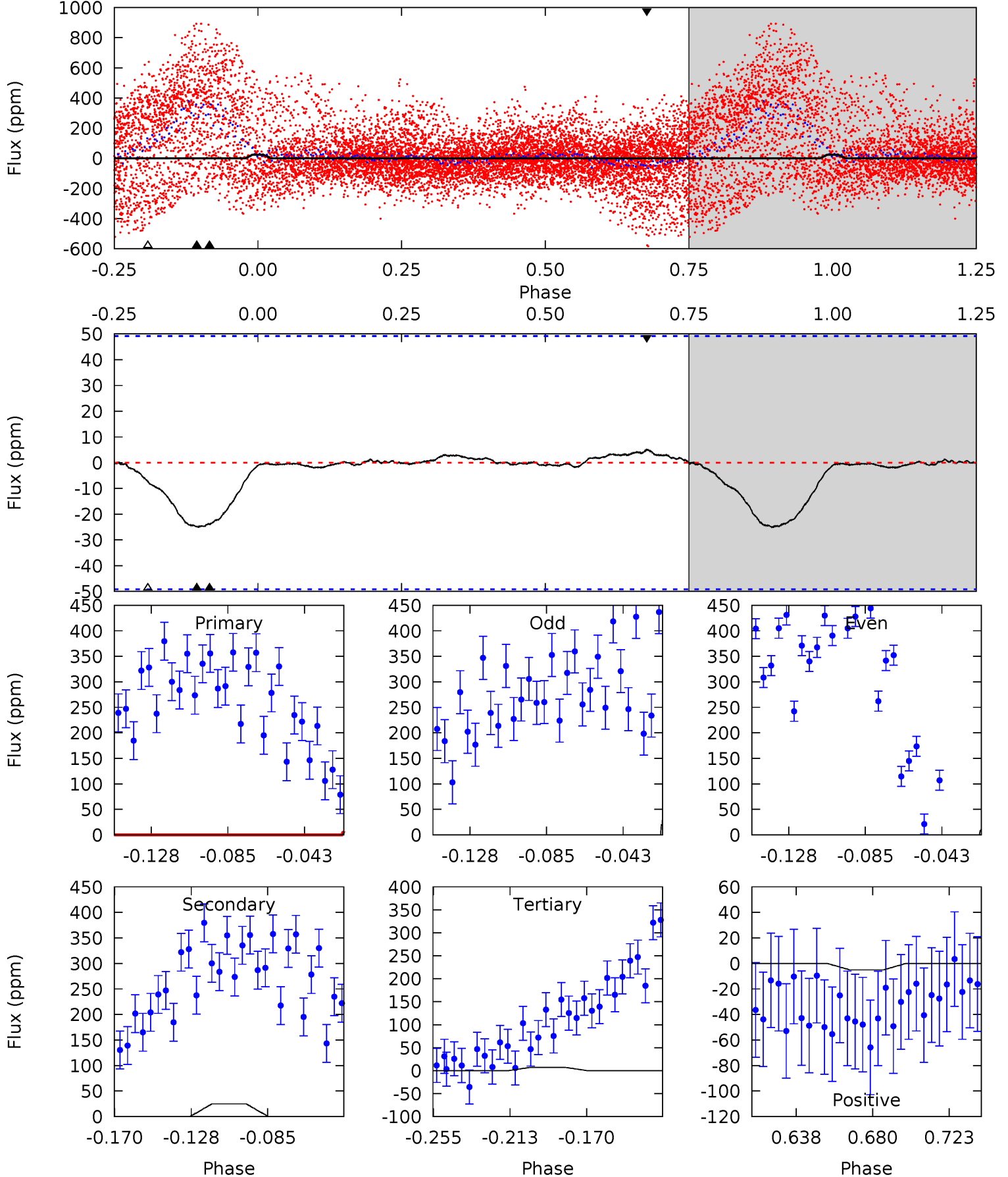
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.98	6.49	3.23	3.22	4.69	1.92	1.49	5.76	5.76	3.27	3.27	0.48	1.42	0.29	0.83



Alt Model-Shift Uniqueness Test

010652379-06, P = 1.655739 Days, E = 130.631271 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.30	2.41	0.70	0.49	4.74	2.03	0.31	1.60	1.81	1.71	1.92	7.50	-1.58	0.17	2.01



Stellar Parameters For KIC 010652379

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6649^{+166}_{-183}	$3.749^{+0.304}_{-0.095}$	$-0.280^{+0.300}_{-0.250}$	$2.654^{+0.489}_{-0.908}$	$1.443^{+0.264}_{-0.264}$	$0.109^{+0.209}_{-0.032}$
	+2%/-3%	+8%/-3%	+107%/-89%	+18%/-34%	+18%/-18%	+192%/-30%
Source	PHO1	FLK73	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 010652379-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-31 ± 5	$2.97^{+3.16}_{-2.05}$	3721^{+221}_{-306}	4583^{+4705}_{-1531}	$1.807^{+19.770}_{-1.388}$
Alt.	-25 ± 10	$3.56^{+3.57}_{-2.46}$	3724^{+219}_{-349}	4051^{+3113}_{-6913}	$1.019^{+8.645}_{-0.798}$

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 $A_{obs} \gg 1.0$

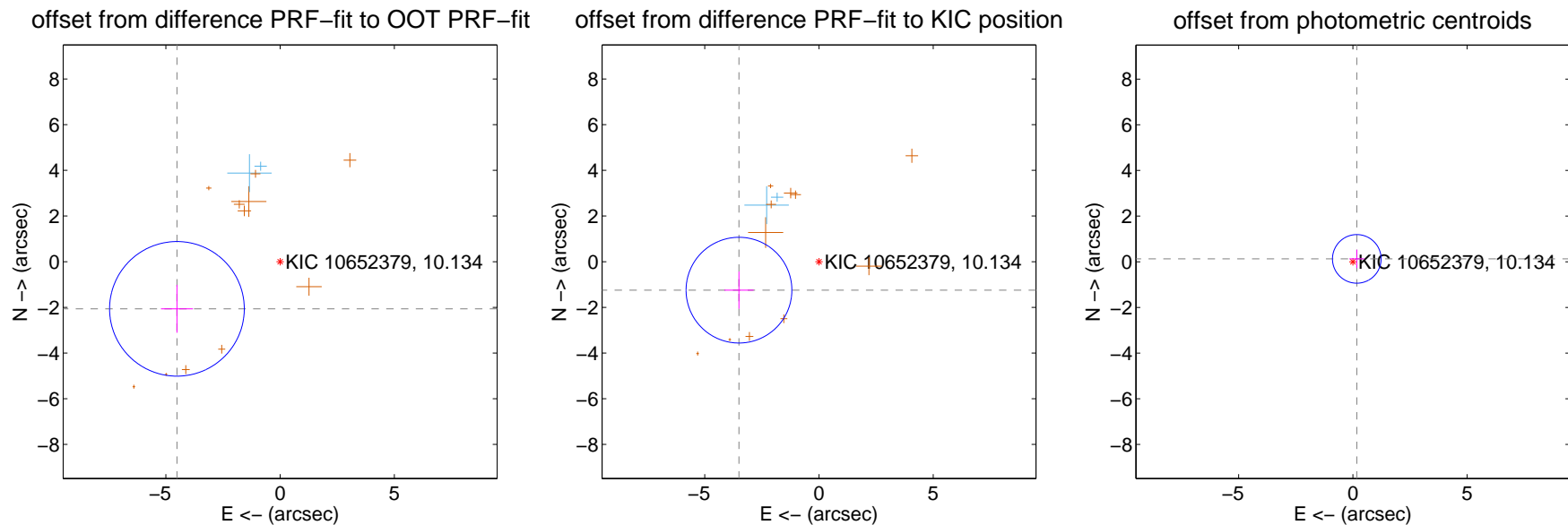
DV Centroid Data

Supplemental centroid analysis for 010652379-06. **Kepler magnitude: 10.13.** Transit SNR 6.98

There are 2 quarters with good PRF difference image offsets

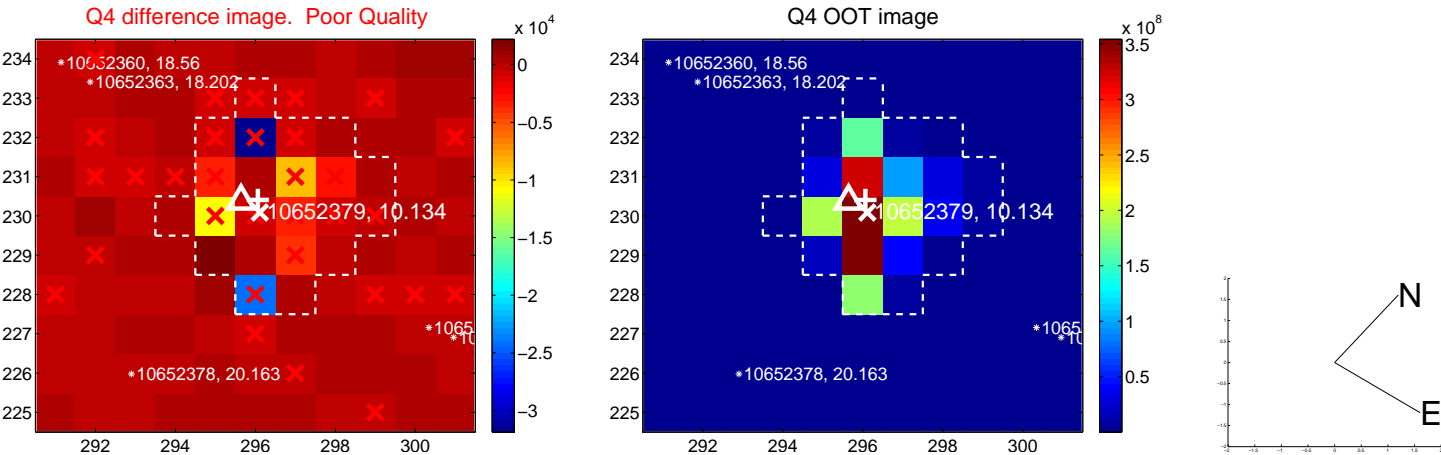
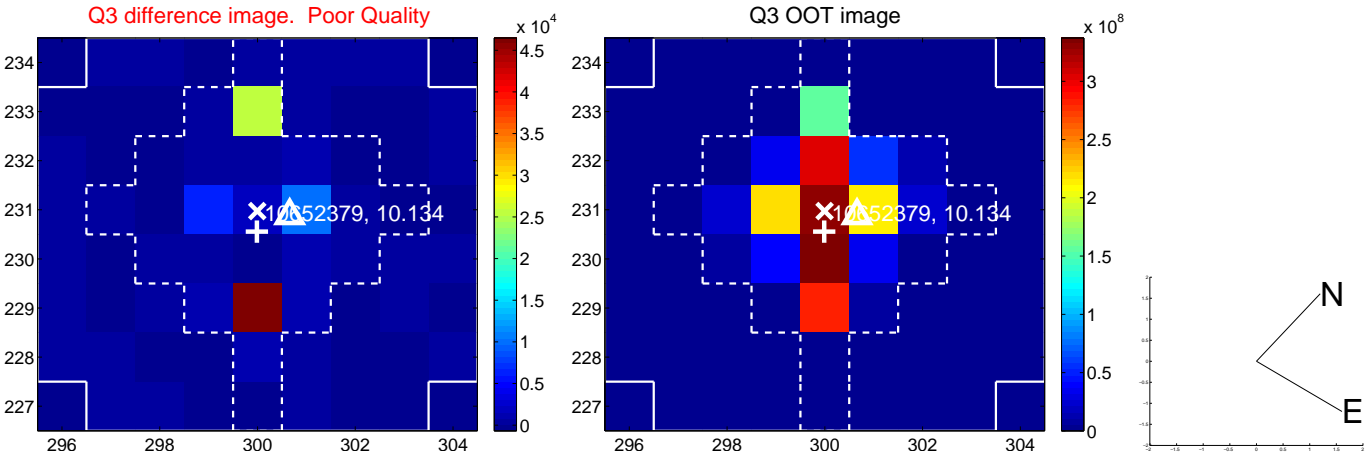
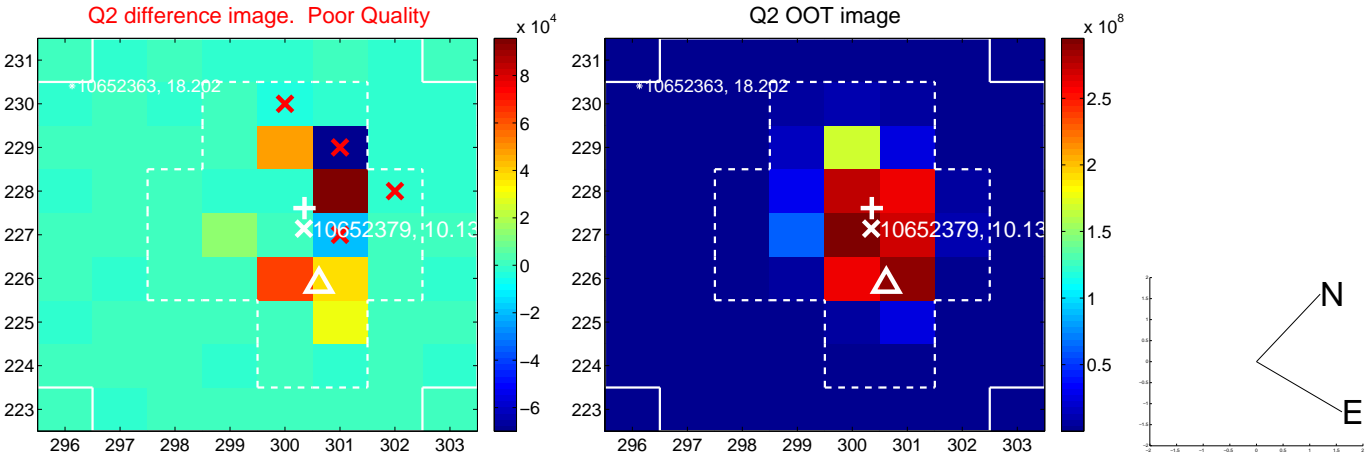
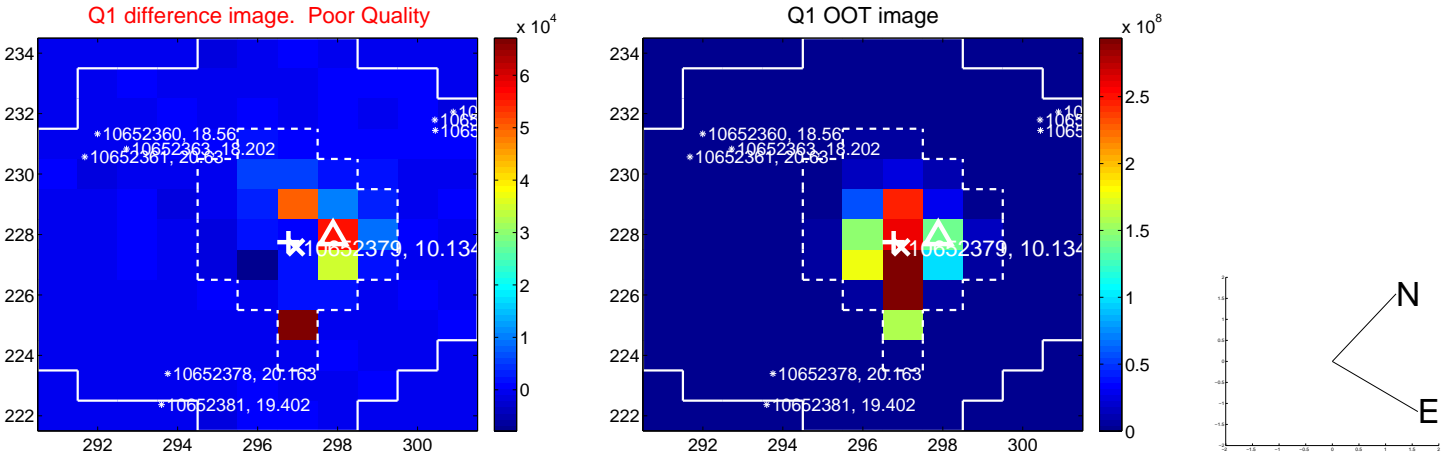
The direct PRF centroid is offset from the target star catalog position by about 1.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.965 ± 0.983	5.05	4.515 ± 0.701	-2.065 ± 1.046
PRF-fit source offset from KIC position	3.717 ± 0.772	4.82	3.502 ± 0.639	-1.247 ± 0.815
photometric centroid source offset	0.21 ± 0.35	0.60	-0.17 ± 0.33	0.13 ± 0.40

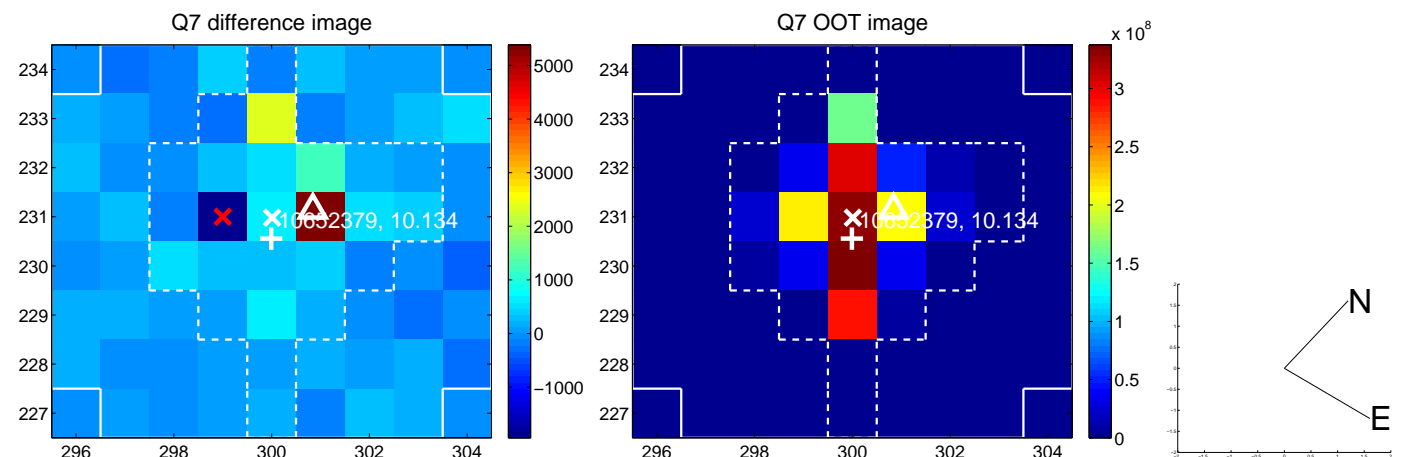
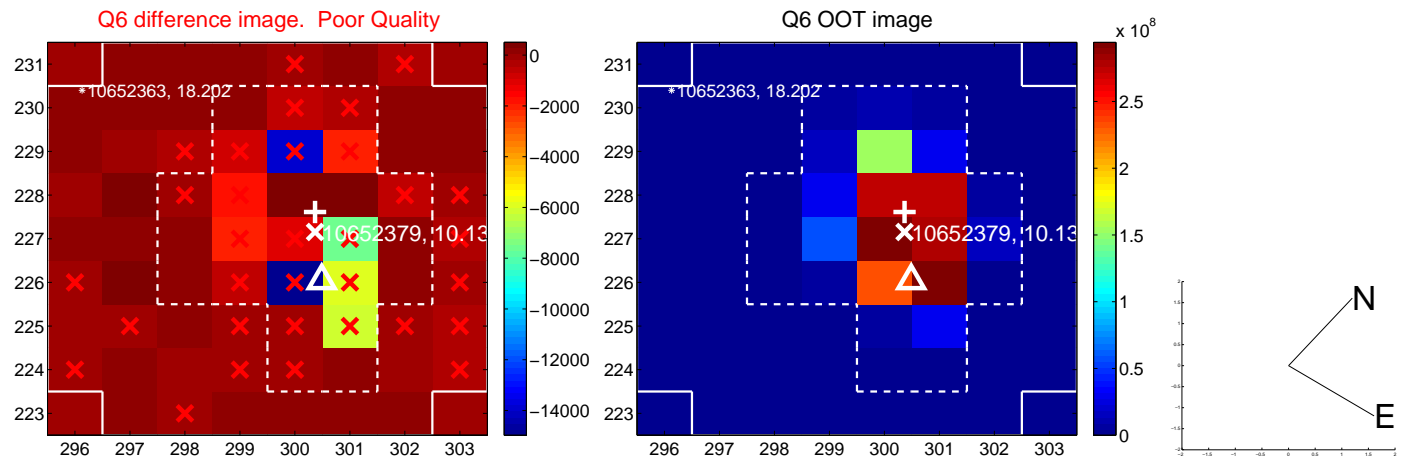
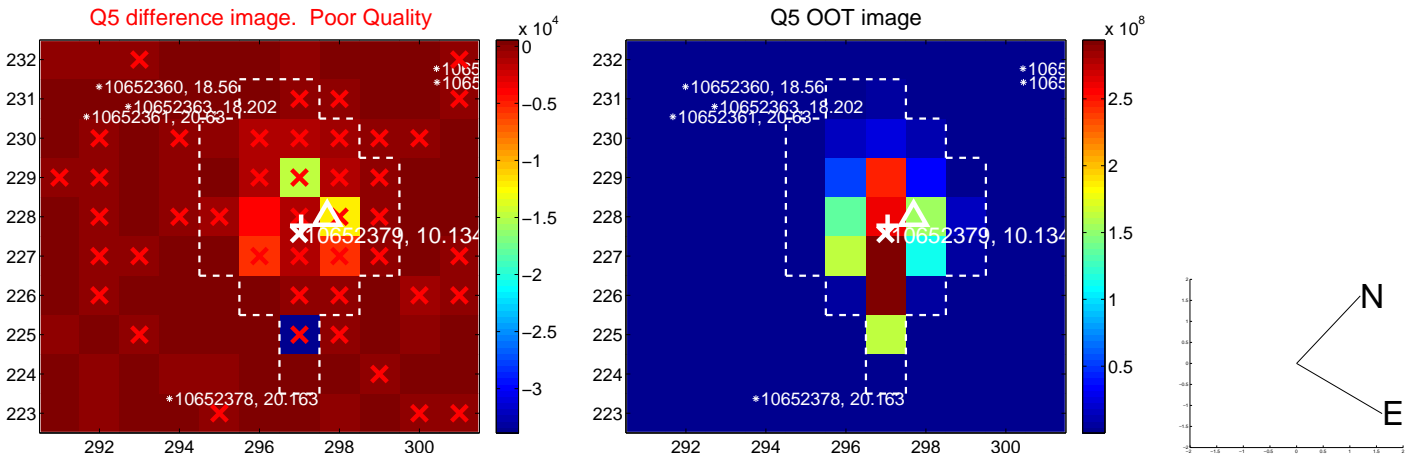


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

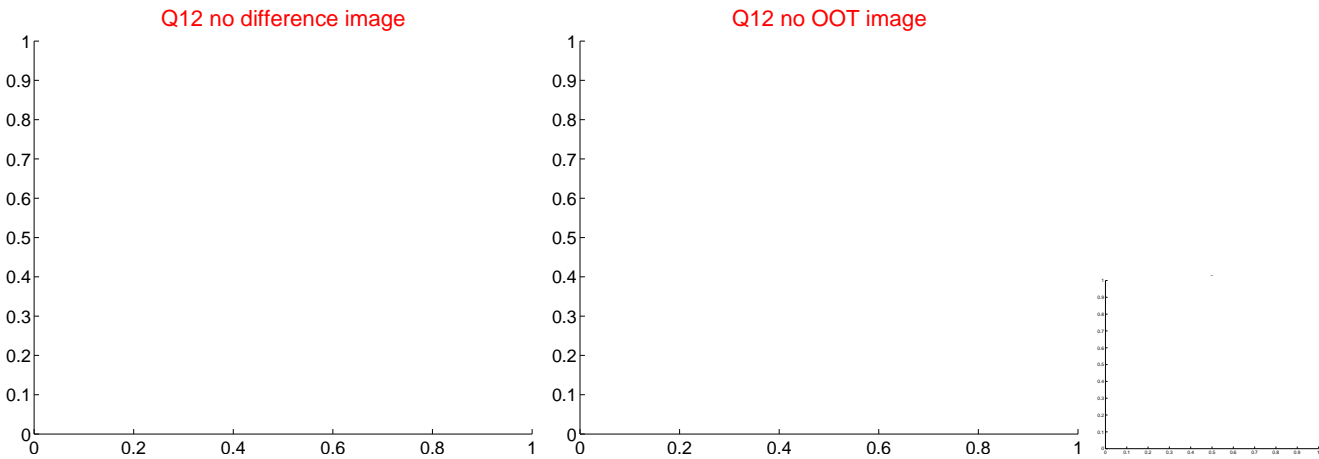
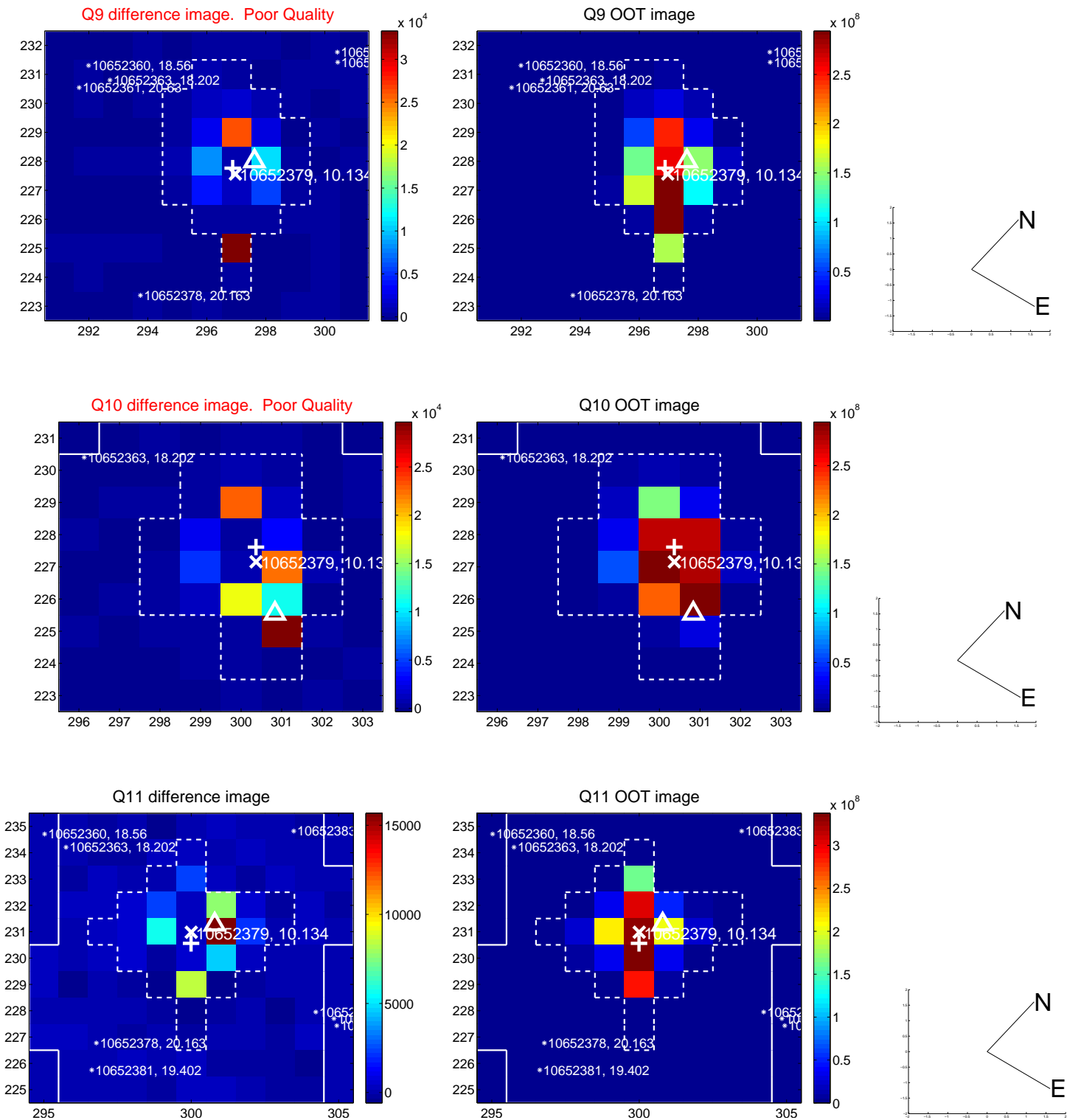
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



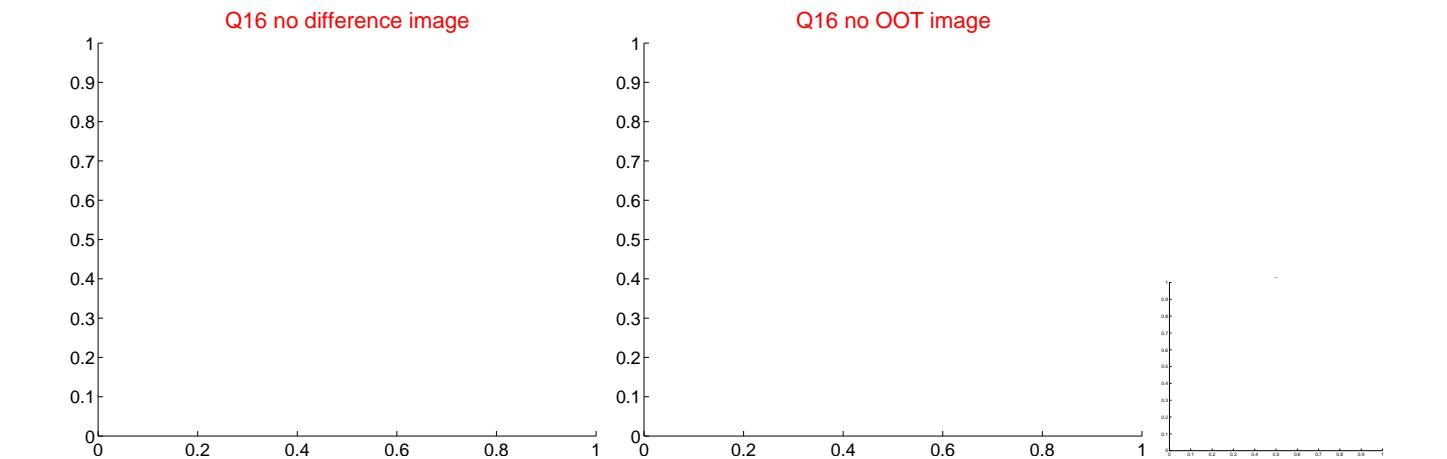
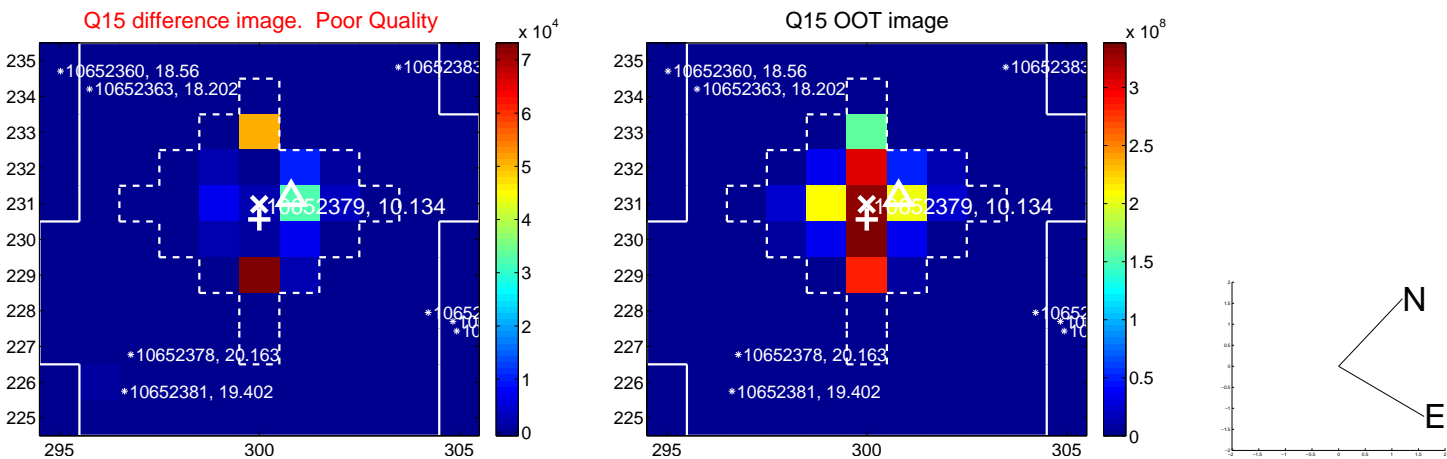
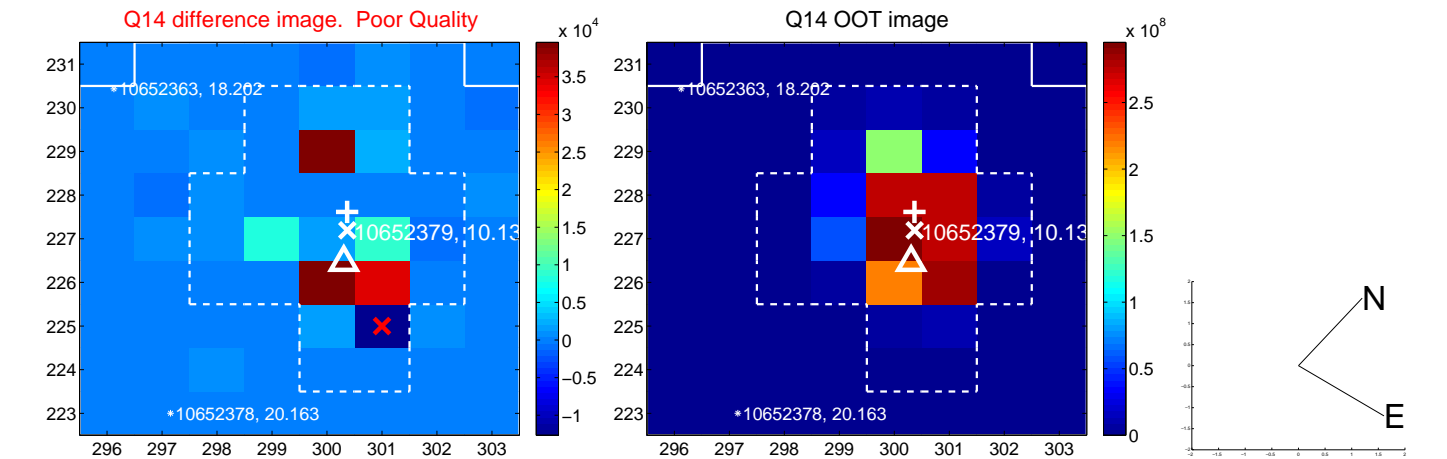
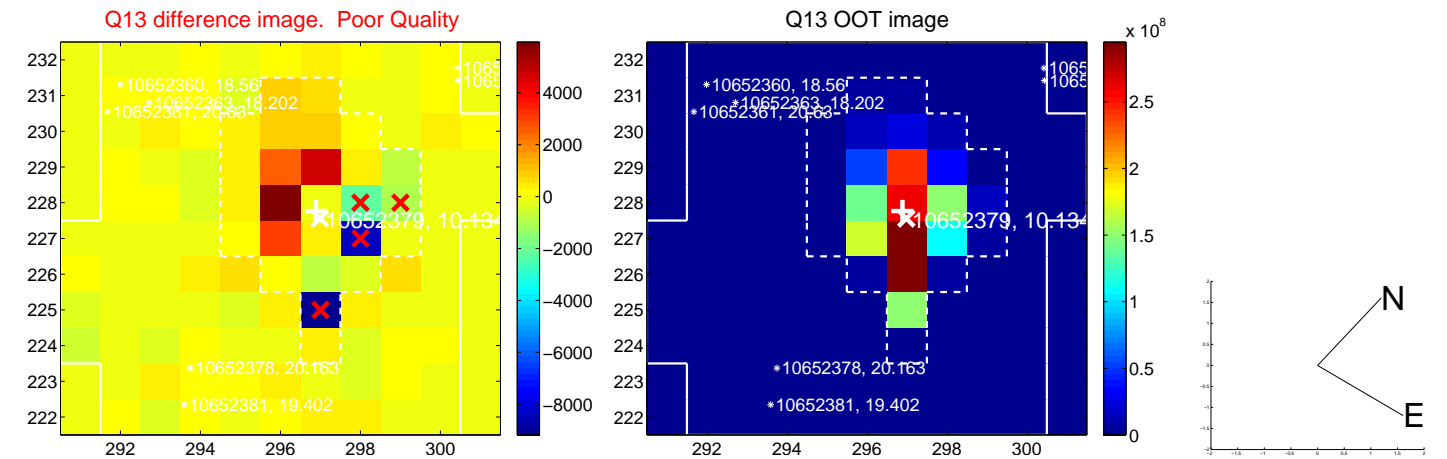
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



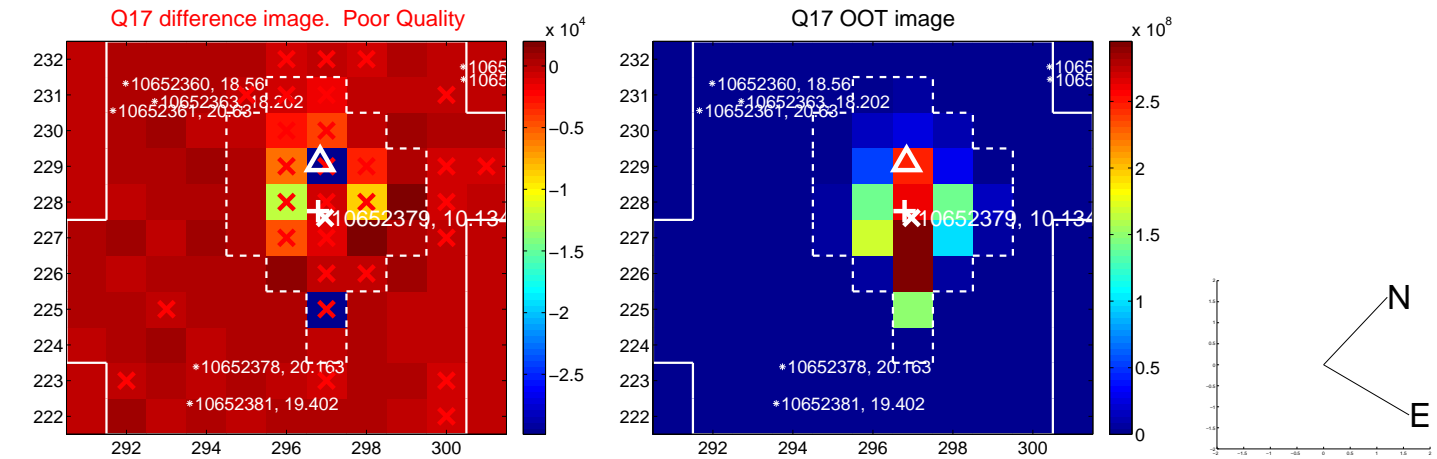
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



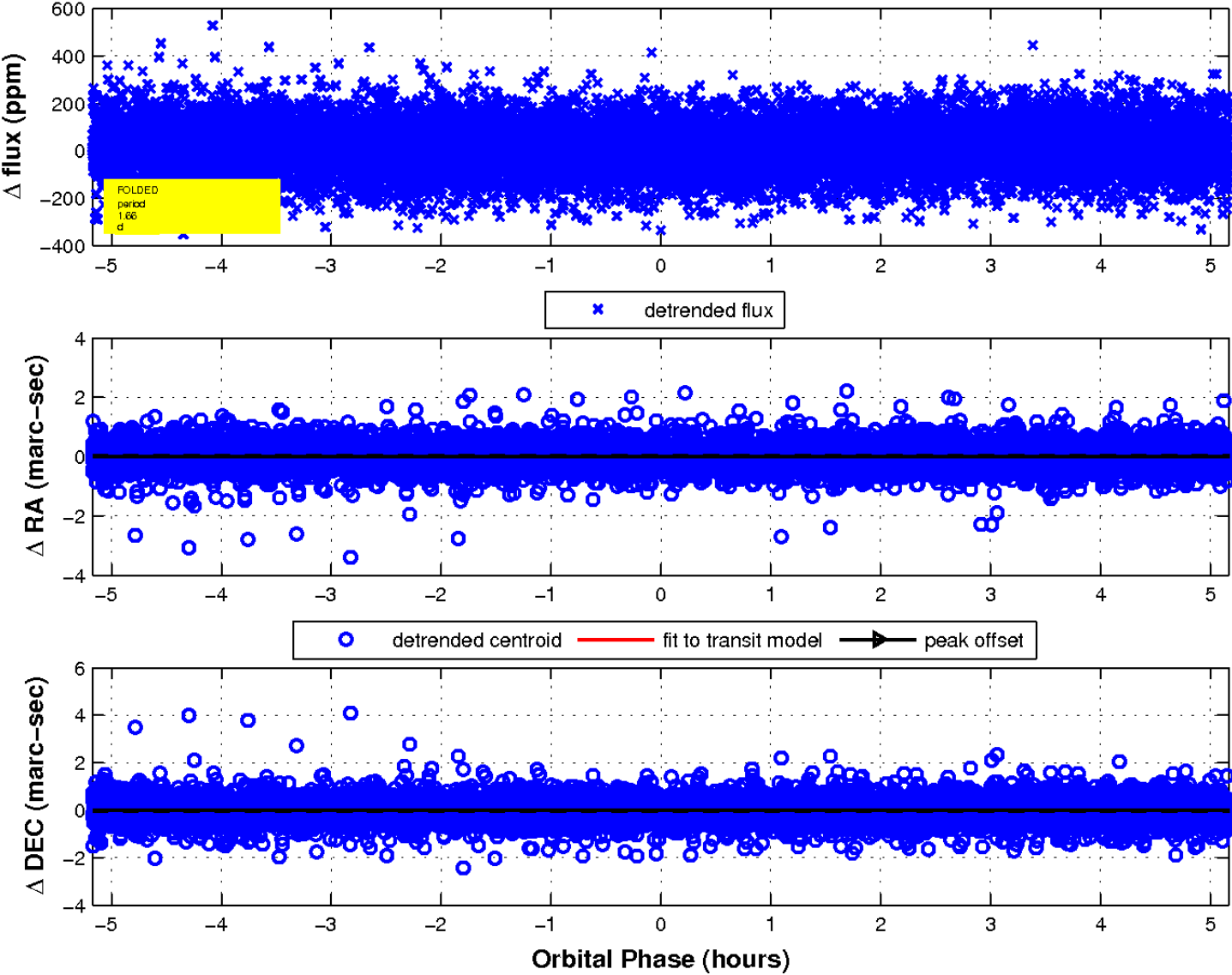
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 6 of 10



This plot does not exist for this TCE.

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})
010652379-01	OBS	No	3.314708	133.196939	56.4	6.019	11.1	12.3	2.65	6649	4.05	5104.19
010652379-02	OBS	No	3.314624	131.743175	34.5	5.989	10.9	10.5	2.65	6649	1.84	5104.36
010652379-03	OBS	No	3.314671	133.663432	19.7	14.851	10.8	6.4	2.65	6649	1.43	5104.26
010652379-04	OBS	No	78.280988	161.932625	205.4	7.495	16.9	9.7	2.65	6649	4.03	75.33
010652379-05	OBS	No	89.406597	199.428664	114.3	6.777	16.6	6.7	2.65	6649	3.33	63.10
010652379-06	OBS	No	1.656077	132.257770	43.0	1.724	11.7	7.0	2.65	6649	1.76	12874.97
010652379-07	OBS	No	88.846588	212.851630	207.0	10.888	8.4	9.1	2.65	6649	4.12	63.63
010652379-08	OBS	No	22.094042	141.525125	82.3	7.323	8.5	8.9	2.65	6649	2.78	406.90
010652379-09	OBS	No	106.495223	202.067155	176.6	6.010	8.2	8.4	2.65	6649	3.99	49.97
010652379-10	OBS	No	73.079893	200.304960	69.2	2.000	7.5	-1.0	2.65	6649	2.23	82.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010652379-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
010652379-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—TRANS_GAPPED—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010652379-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

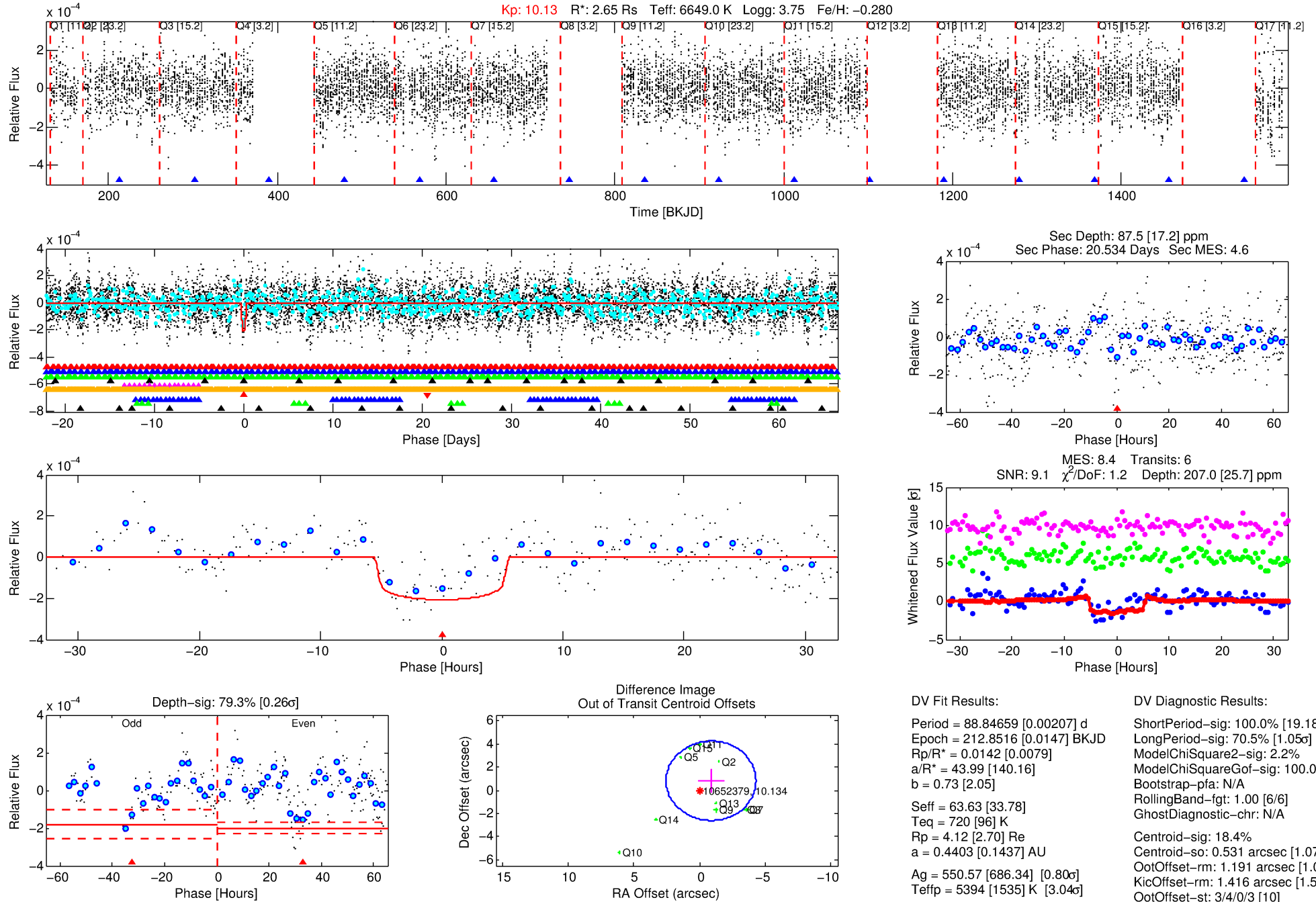
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010652379-07

No Significant Match Found

DV One-Page Summary

KIC: 10652379 Candidate: 7 of 10 Period: 88.847 d



DV Fit Results:

Period = 88.84659 [0.00207] d
 Epoch = 212.8516 [0.0147] BKJD
 Rp/R* = 0.0142 [0.0079]
 a/R* = 43.99 [140.16]
 b = 0.73 [2.05]
 Seff = 63.63 [33.78]
 Teq = 720 [96] K
 Rp = 4.12 [2.70] Re
 a = 0.4403 [0.1437] AU
 Ag = 550.57 [686.34] [0.80 σ]
 Teffp = 5394 [1535] K [3.04 σ]

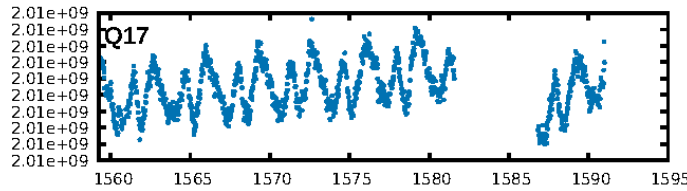
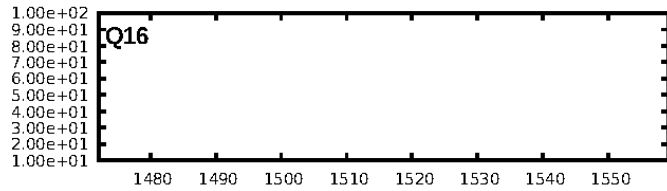
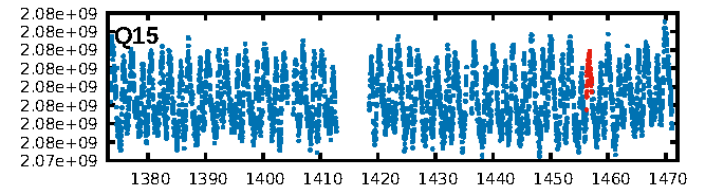
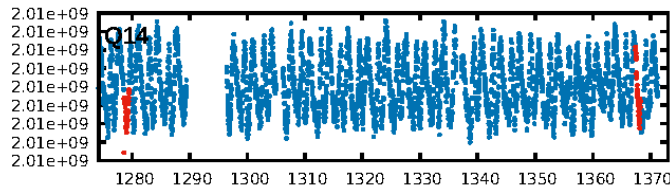
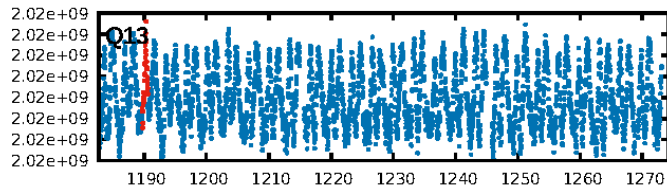
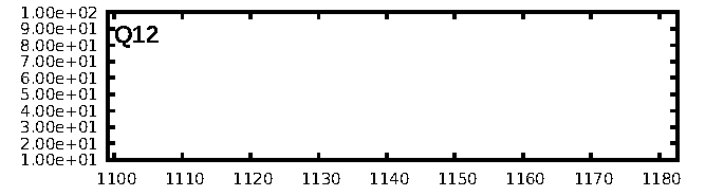
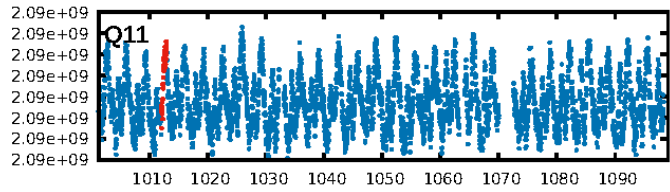
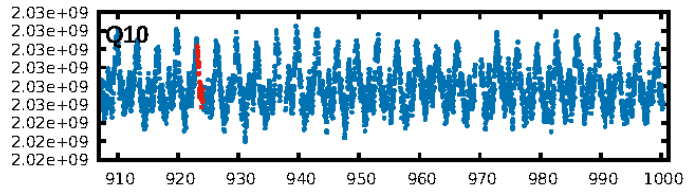
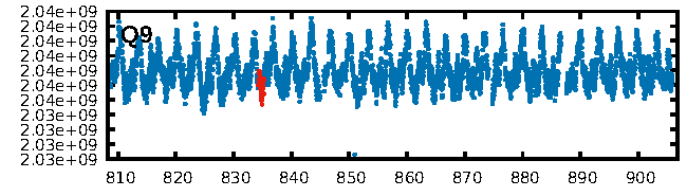
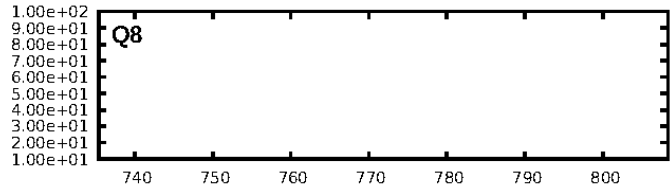
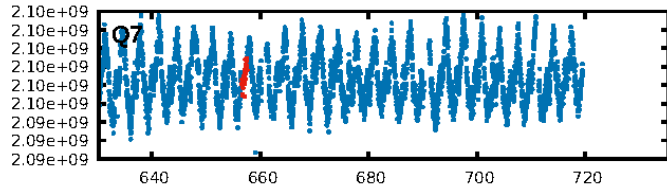
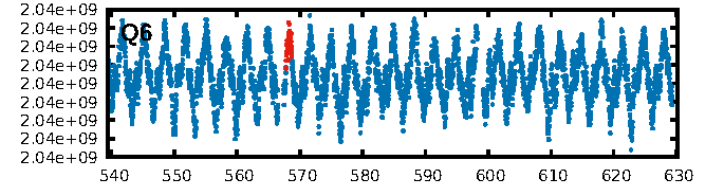
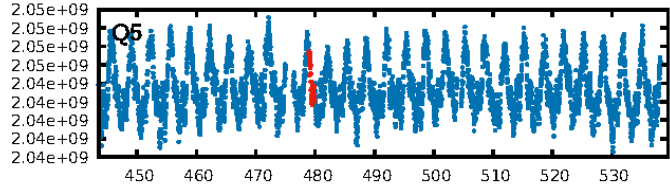
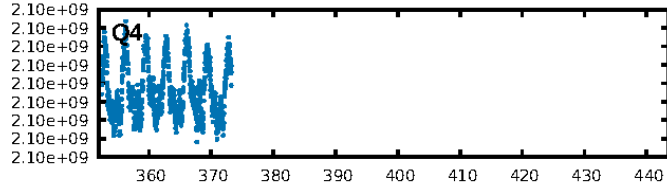
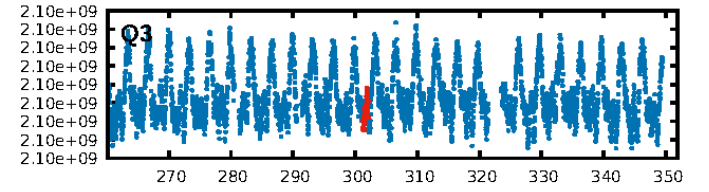
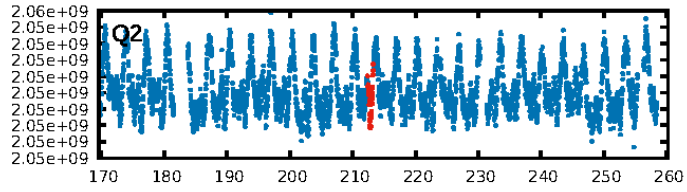
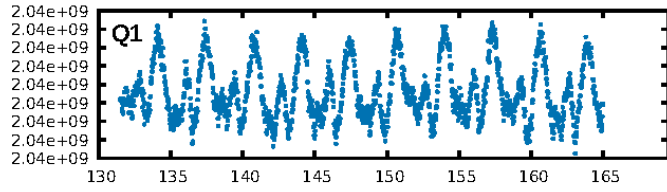
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [19.18 σ]
 LongPeriod-sig: 70.5% [1.05 σ]
 ModelChiSquare2-sig: 2.2%
 ModelChiSquareGof-sig: 100.0%
 Bootstrap-pfa: N/A
 RollingBand-fgt: 1.00 [6/6]
 GhostDiagnostic-chr: N/A
 Centroid-sig: 18.4%
 Centroid-so: 0.531 arcsec [1.07 σ]
 OotOffset-rm: 1.191 arcsec [1.04 σ]
 OotOffset-st: 3/4/0/3 [10]
 KicOffset-rm: 1.416 arcsec [1.50 σ]
 KicOffset-st: 3/4/0/3 [10]
 DiffImageQuality-fgm: 0.20 [2/10]
 DiffImageOverlap-fno: 0.00 [0/10]

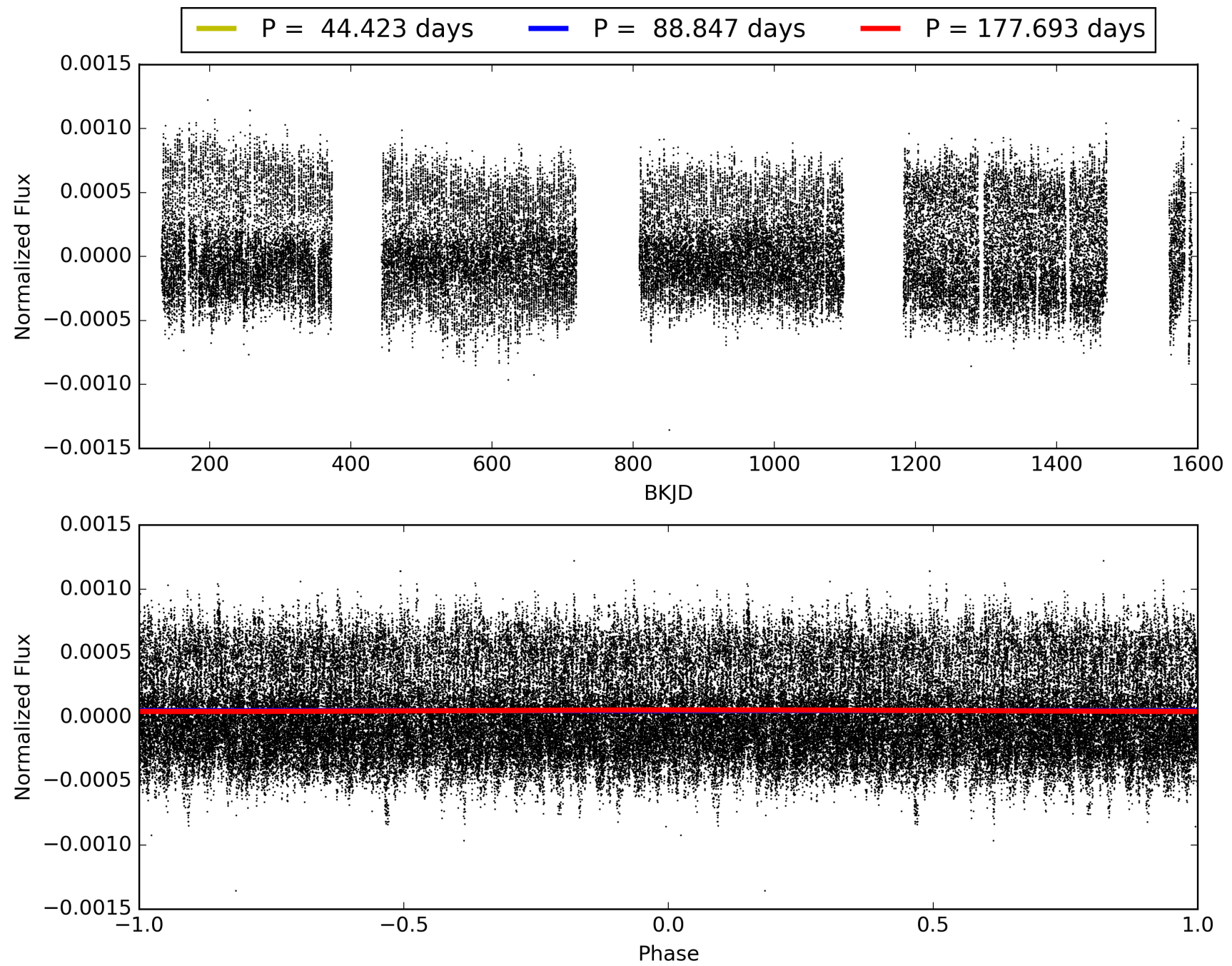
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:14:41 Z

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

TCE 010652379-07, PDC Light Curves

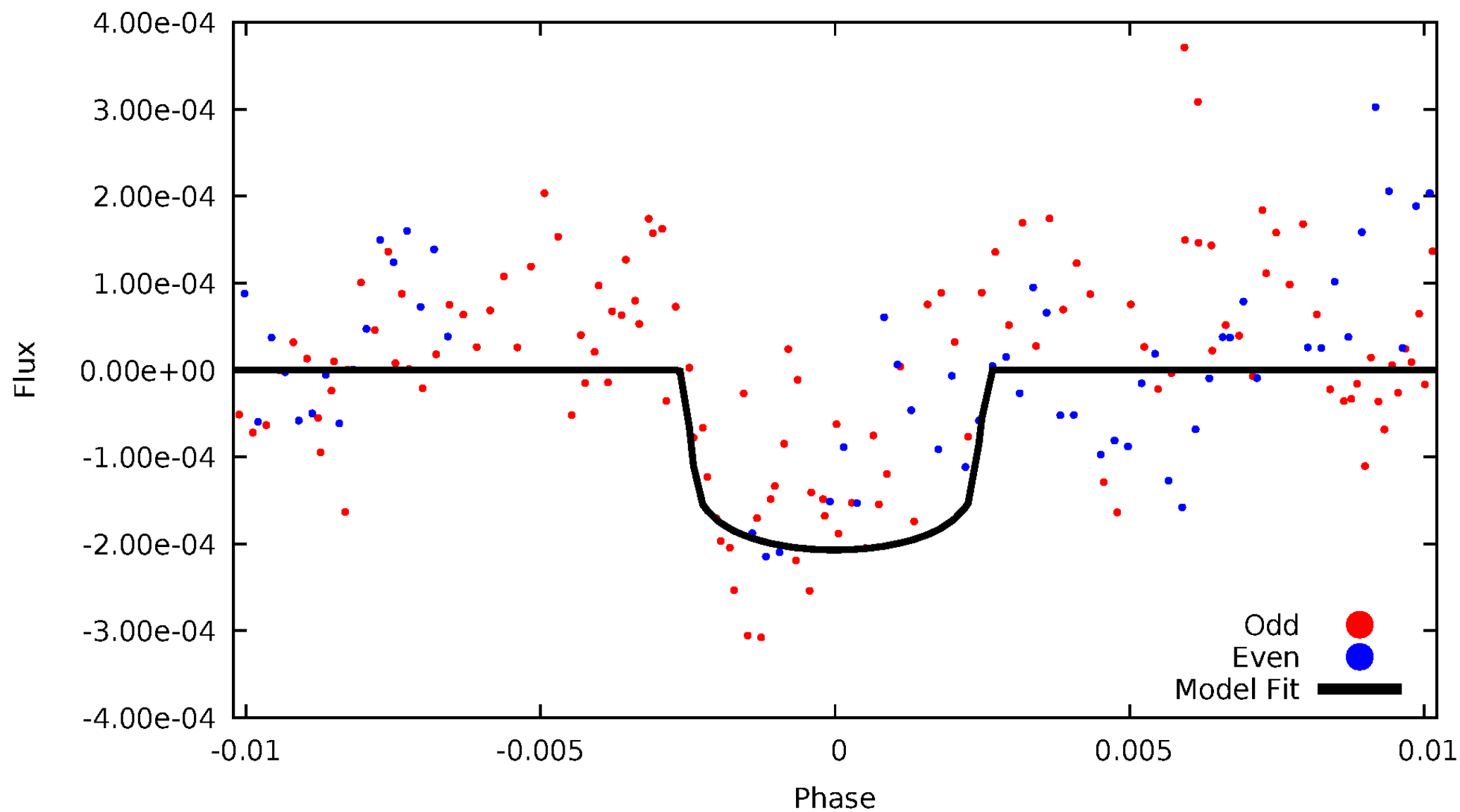


TCE 010652379-07



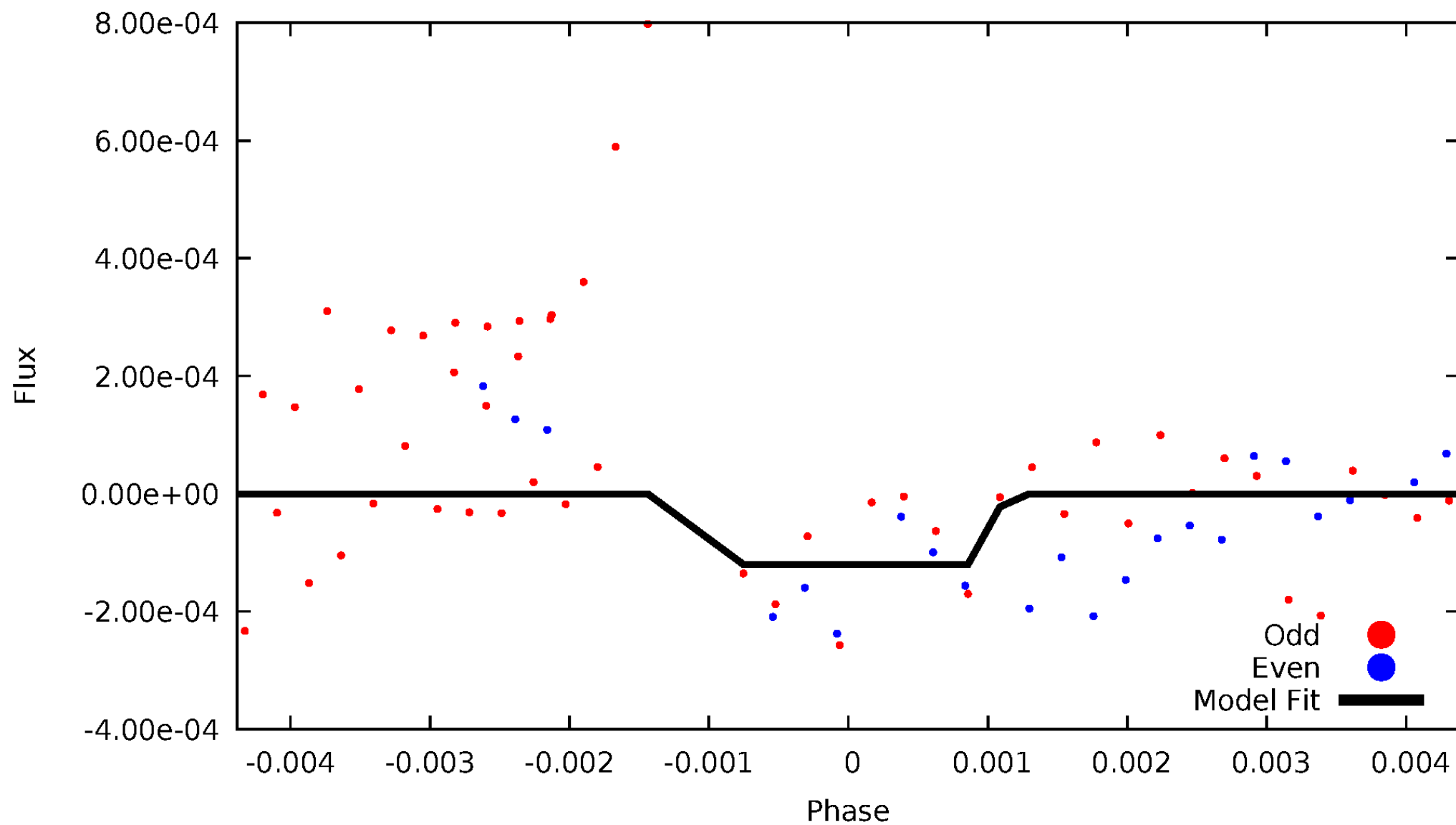
DV Odd/Even

TCE 010652379-07



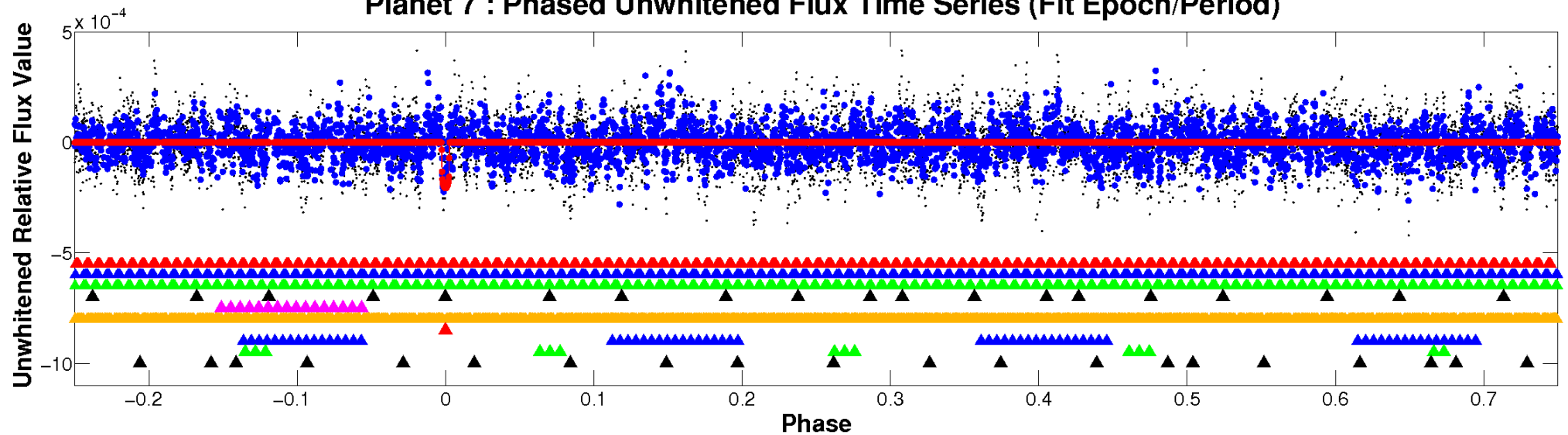
ALT Odd/Even

TCE 010652379-07

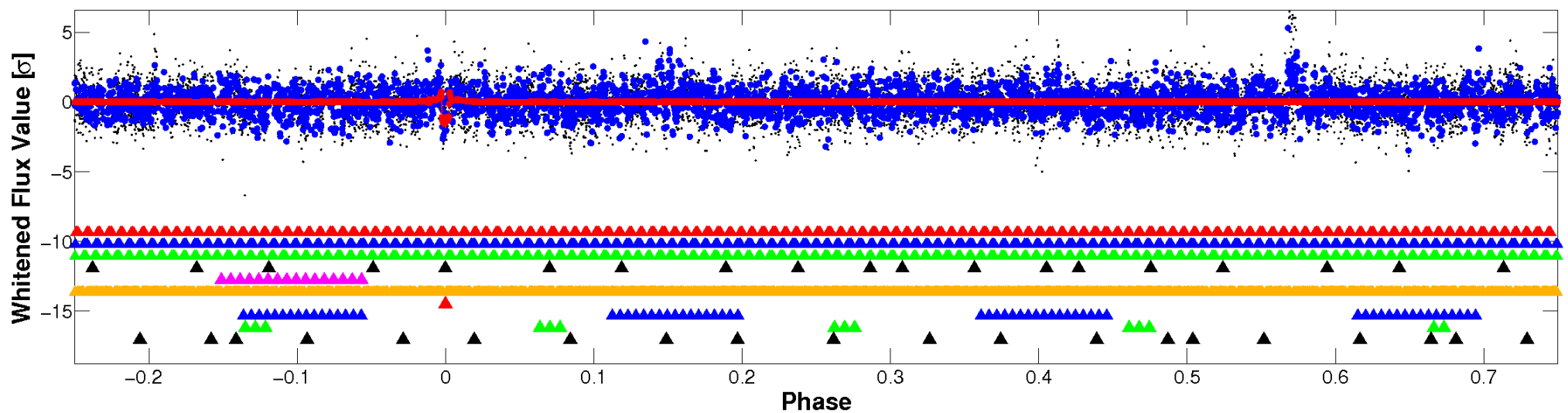


Non-Whitened Vs. Whitened Light Curve

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

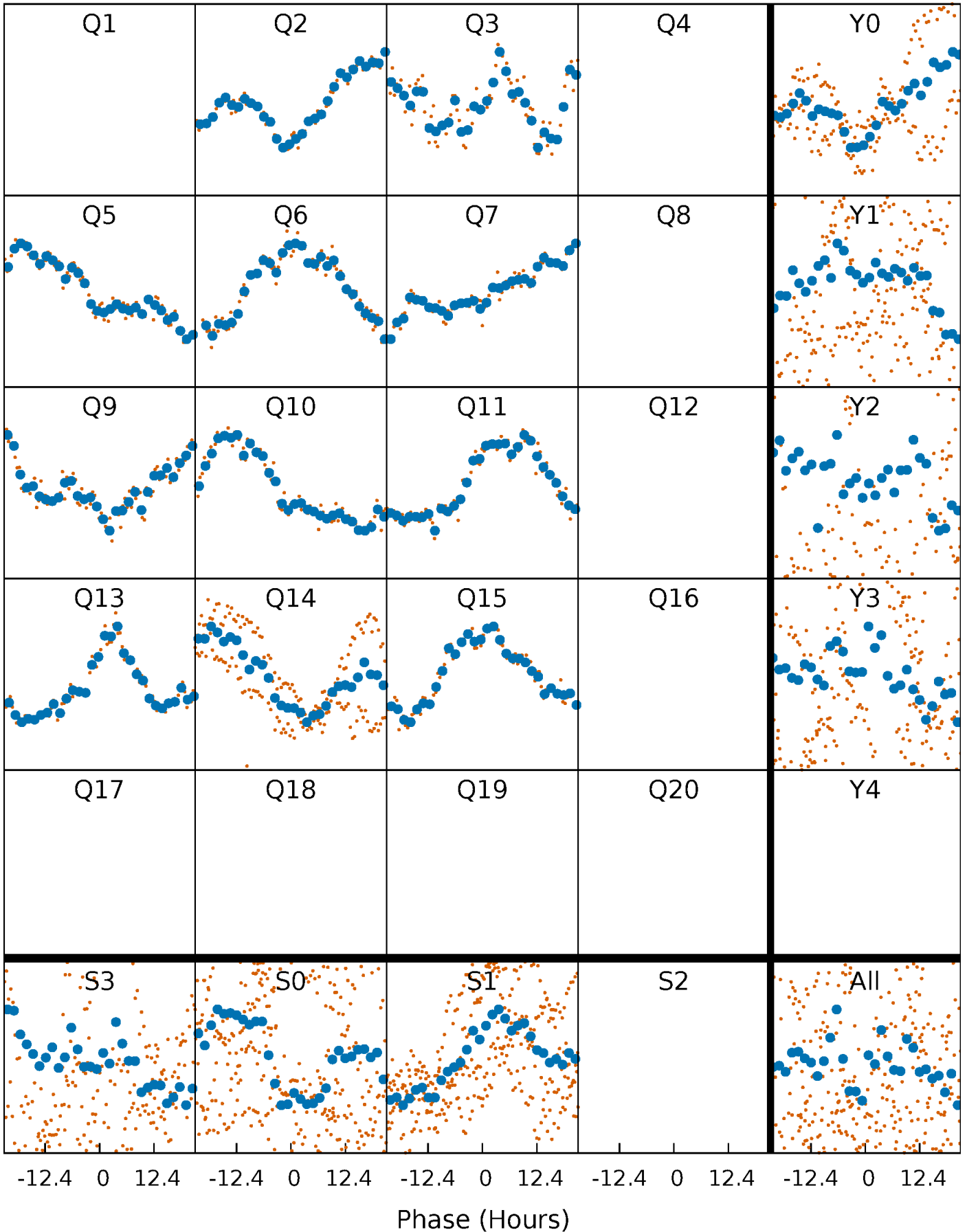


Planet 7 : Phased Whitened Flux Time Series (Fit Epoch/Period)



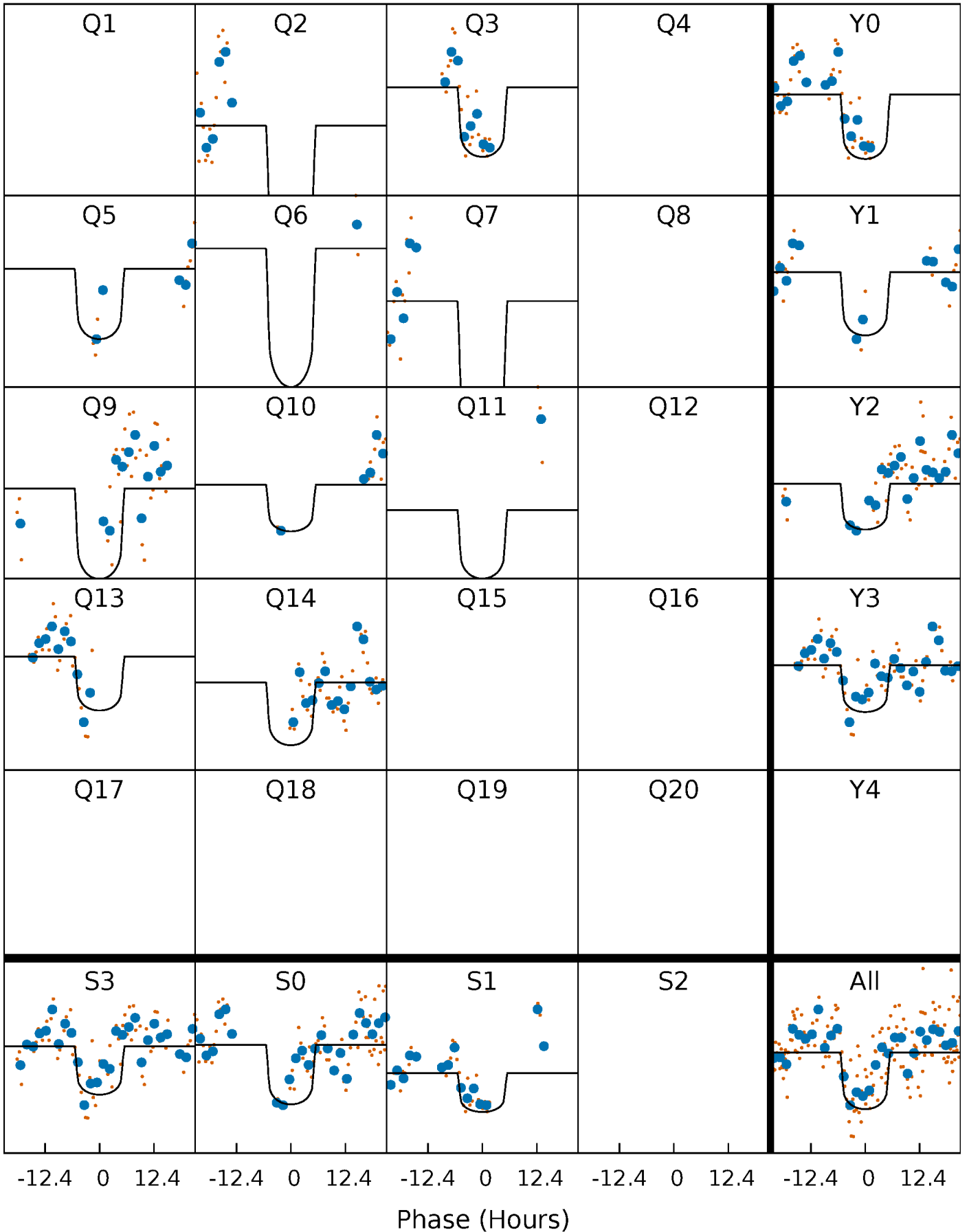
PDC Quarter-Phased Transit Curves

TCE 010652379-07 $P = 88.846588$ Days $T_0 = 212.851630$ (BKJD)



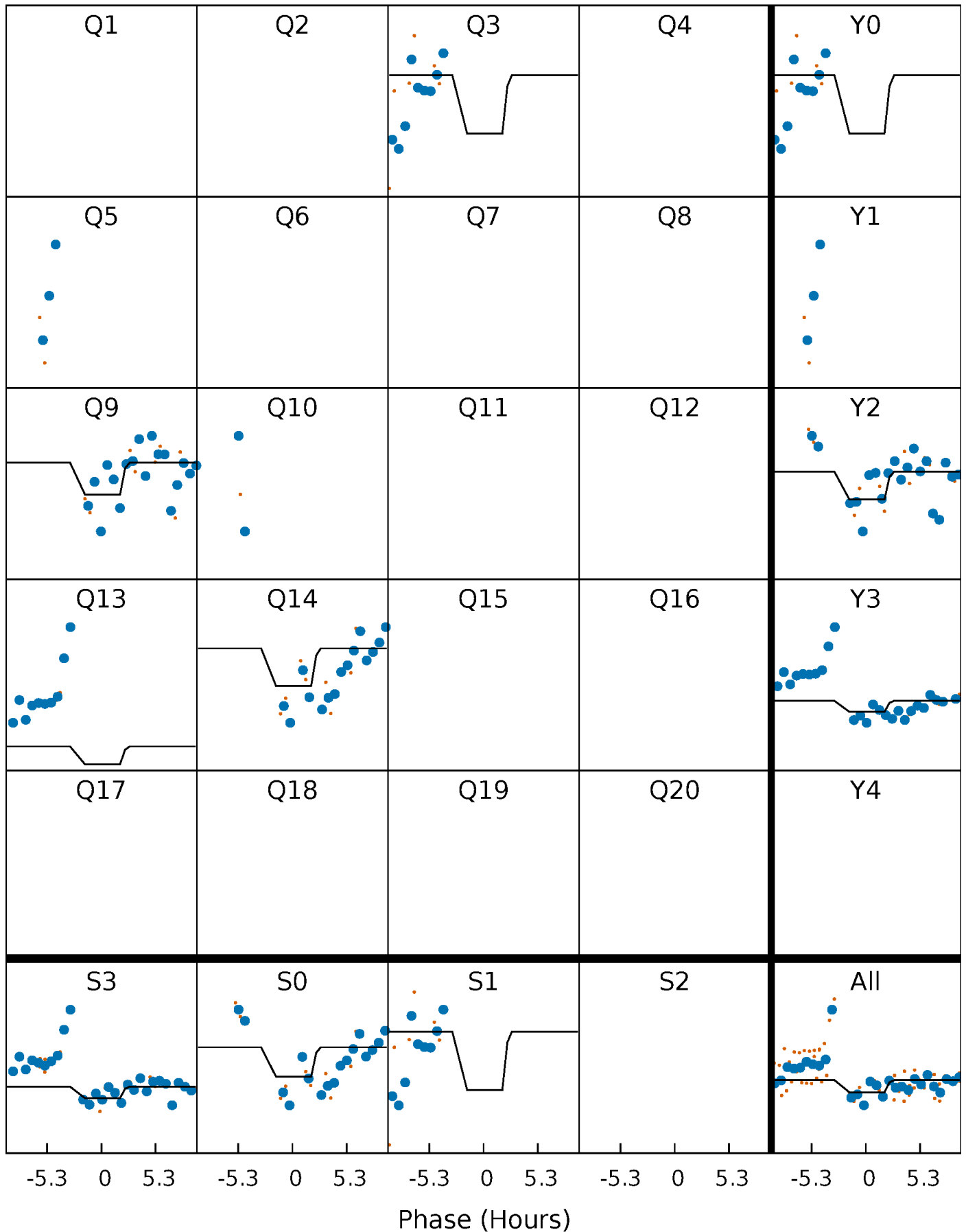
DV Quarter-Phased Transit Curves

TCE 010652379-07 $P = 88.846588$ Days $T_0 = 212.851630$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

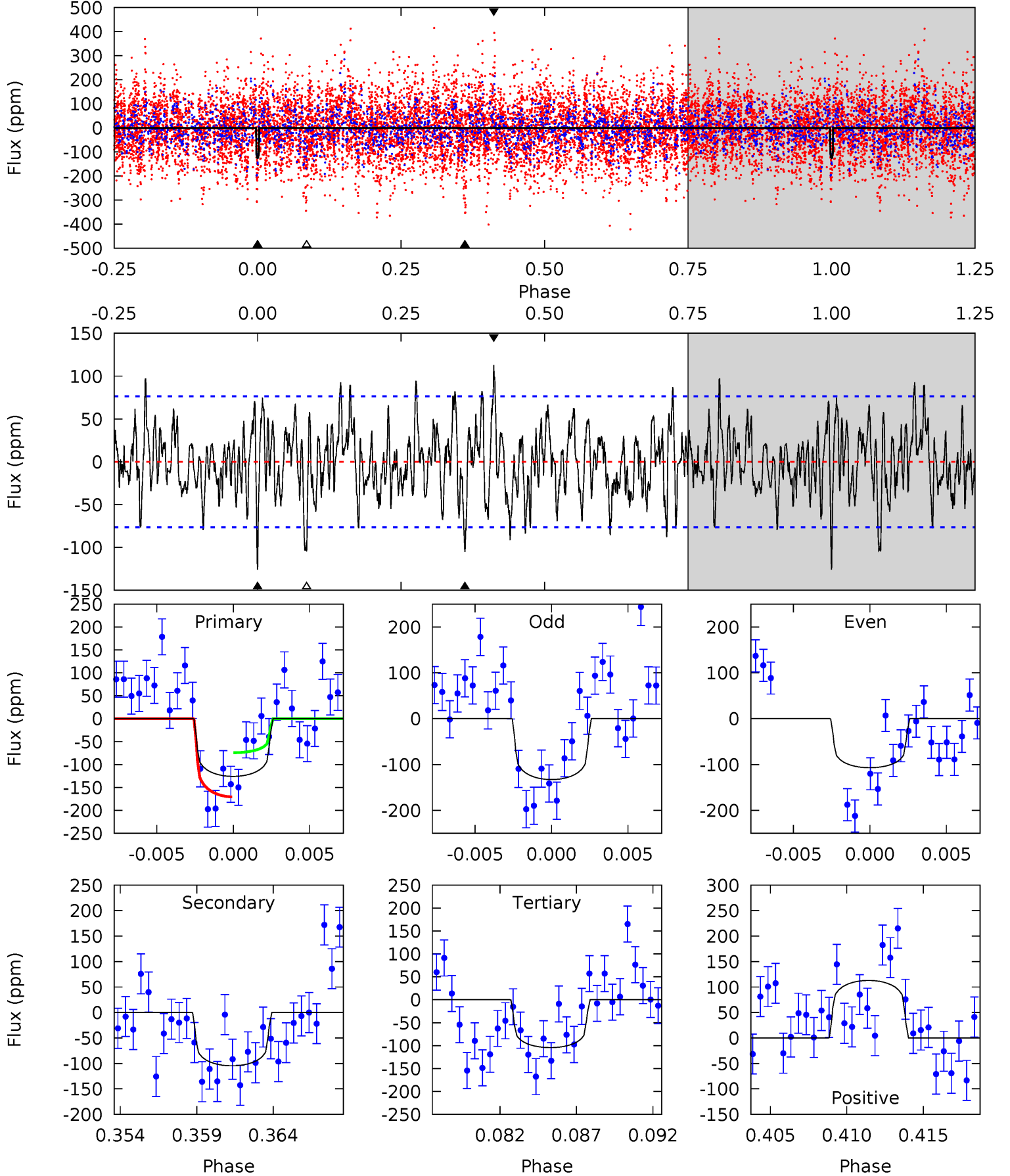
TCE 010652379-07 $P = 88.829730$ Days $T_0 = 213.094336$ (BKJD)



DV Model-Shift Uniqueness Test

010652379-07, P = 88.846588 Days, E = 124.005042 Days

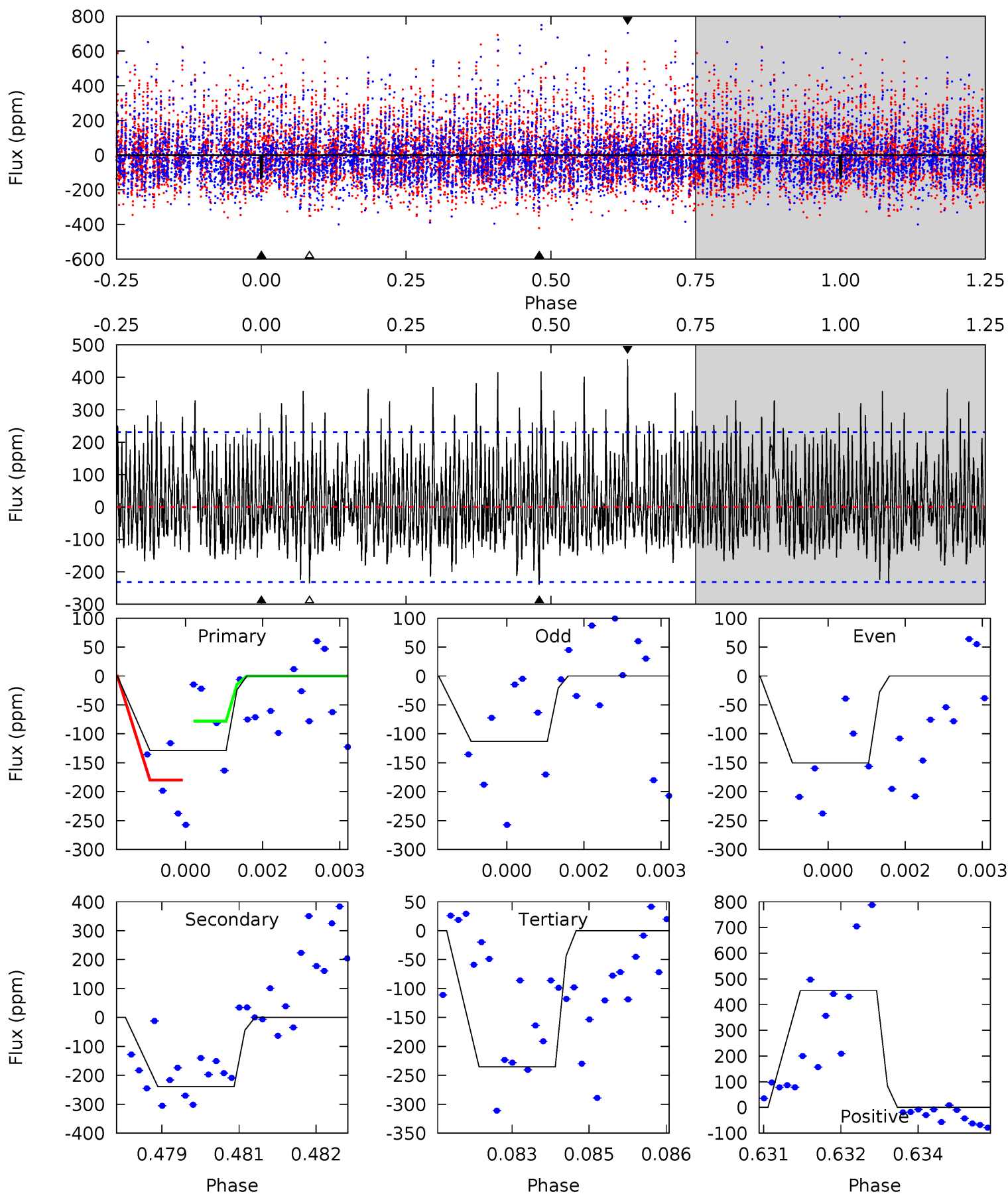
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.48	7.05	7.03	7.61	5.15	2.80	2.39	1.45	0.88	0.02	-0.56	0.78	0.88	0.47	3.23



Alt Model-Shift Uniqueness Test

010652379-07, P = 88.829730 Days, E = 124.264606 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.99	5.55	5.46	10.6	5.36	3.15	2.42	-2.47	-7.57	0.09	-5.01	0.43	1.00	0.66	1.16



Stellar Parameters For KIC 010652379

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6649^{+166}_{-183}	$3.749^{+0.304}_{-0.095}$	$-0.280^{+0.300}_{-0.250}$	$2.654^{+0.489}_{-0.908}$	$1.443^{+0.264}_{-0.264}$	$0.109^{+0.209}_{-0.032}$
	+2%/-3%	+8%/-3%	+107%/-89%	+18%/-34%	+18%/-18%	+192%/-30%
Source	PHO1	FLK73	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 010652379-07 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-105 ± 15	$4.10^{+2.36}_{-2.10}$	989^{+58}_{-83}	5488^{+2506}_{-913}	670^{+2260}_{-397}
Alt.	-239 ± 43	$3.17^{+2.29}_{-1.82}$	986^{+64}_{-83}	7867^{+6398}_{-2048}	2597^{+11513}_{-1777}

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 $A_{obs} \gg 1.0$

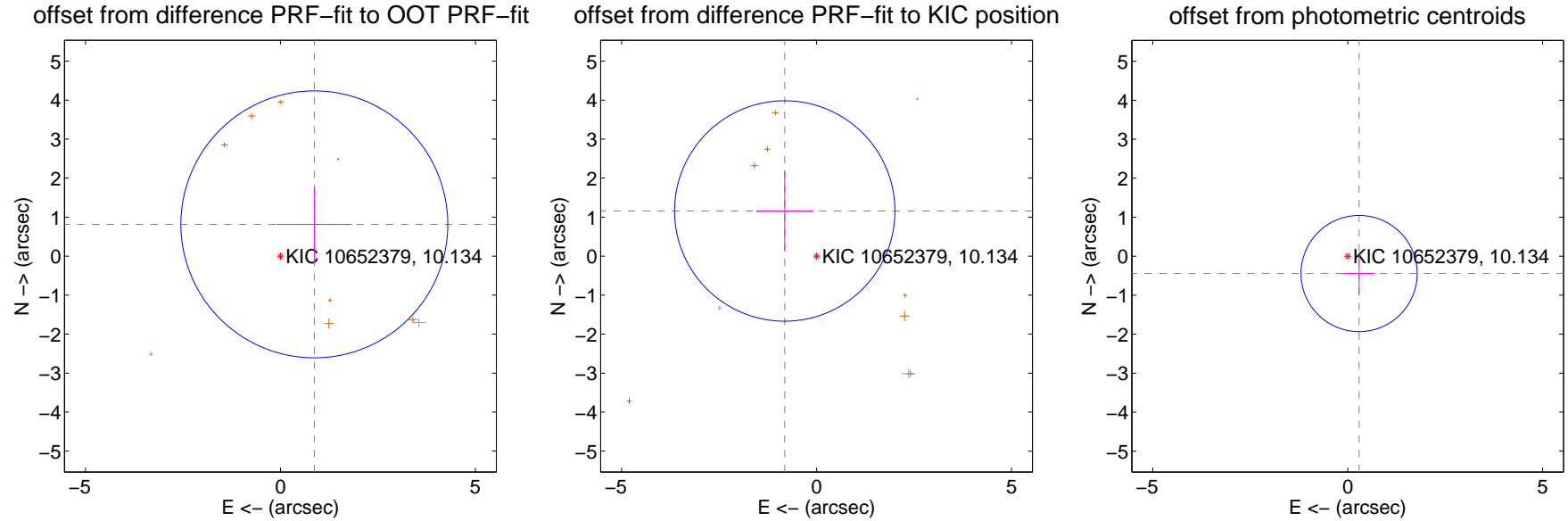
DV Centroid Data

Supplemental centroid analysis for 010652379-07. **Kepler magnitude: 10.13.** Transit SNR 9.15

There are 2 quarters with good PRF difference image offsets

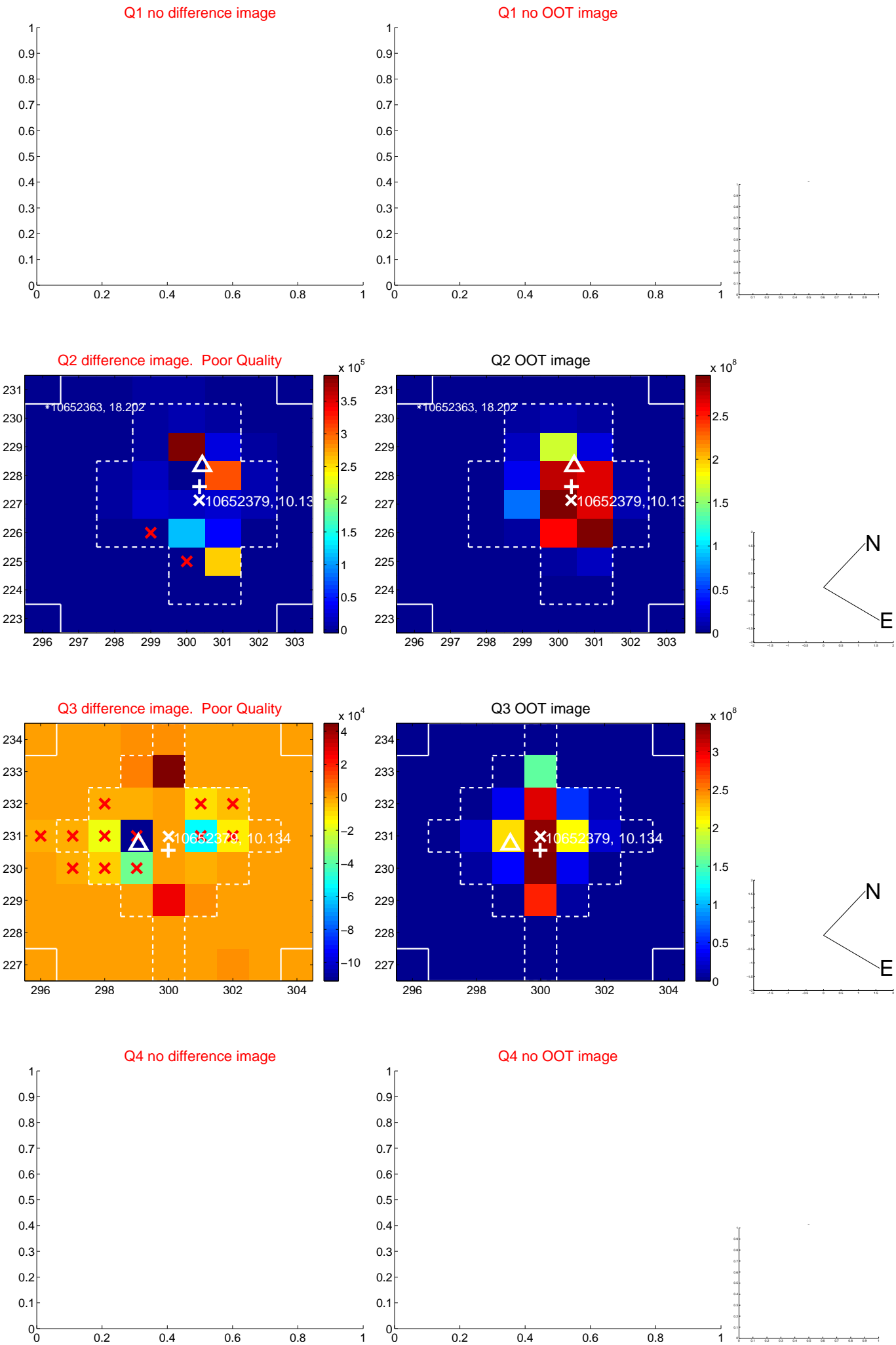
The direct PRF centroid is offset from the target star catalog position by about 1.53 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.191 ± 1.141	1.04	-0.869 ± 0.962	0.814 ± 0.945
PRF-fit source offset from KIC position	1.416 ± 0.942	1.50	0.816 ± 0.739	1.157 ± 1.028
photometric centroid source offset	0.53 ± 0.50	1.07	-0.29 ± 0.41	-0.44 ± 0.53

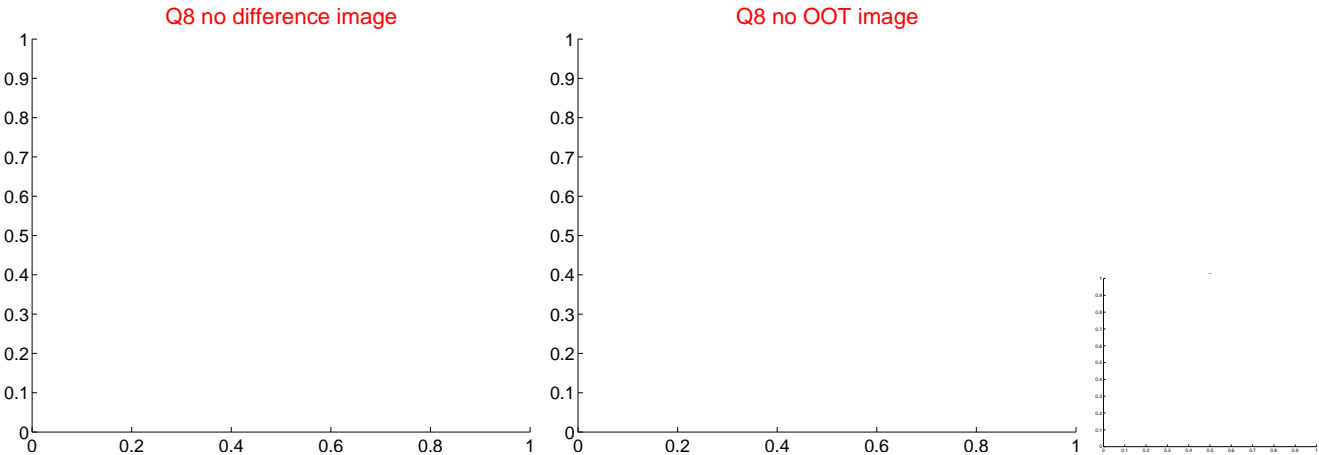
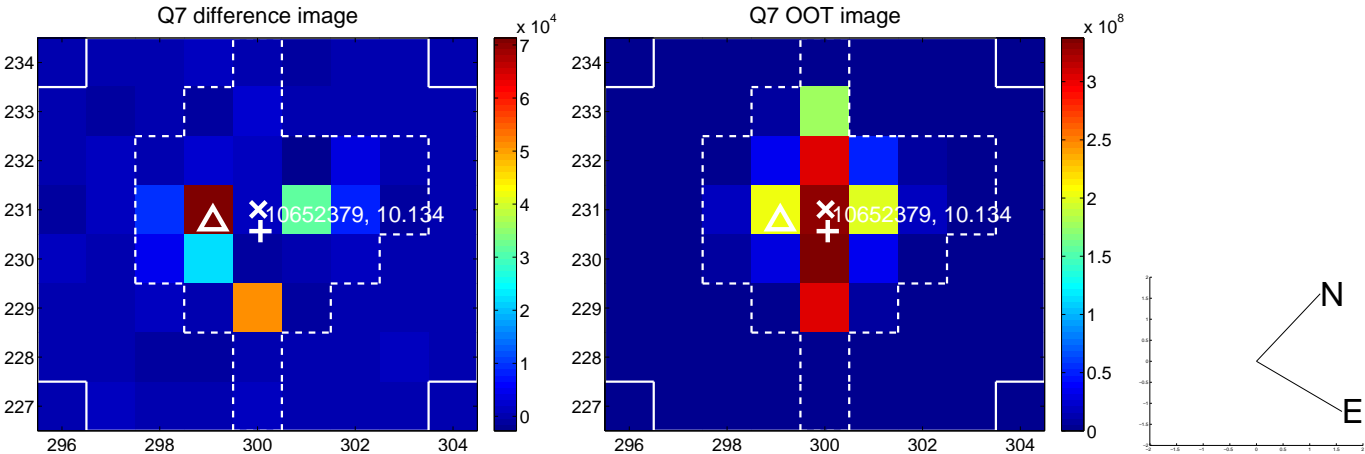
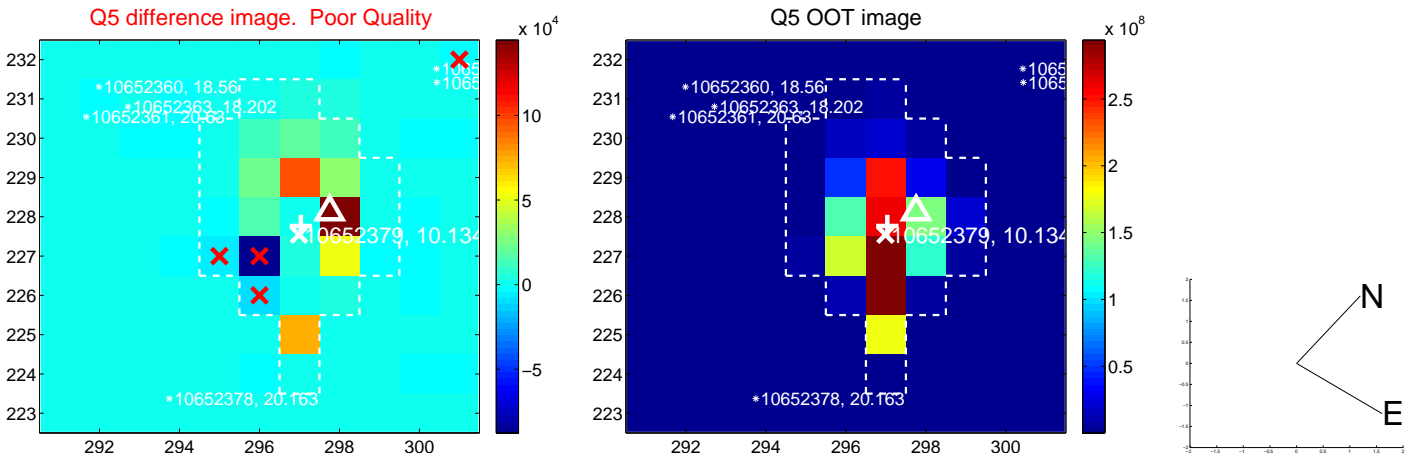


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

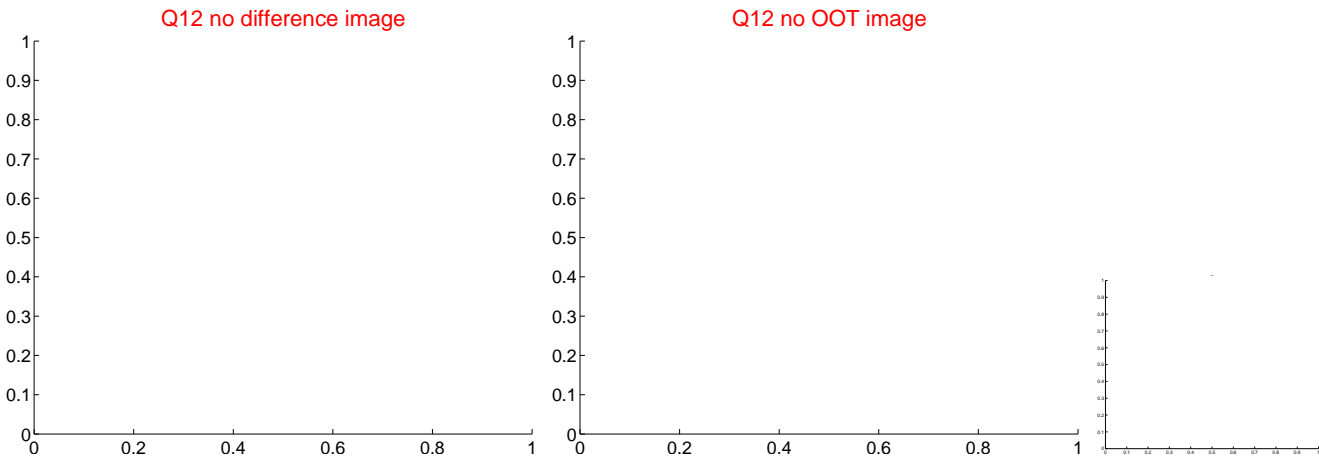
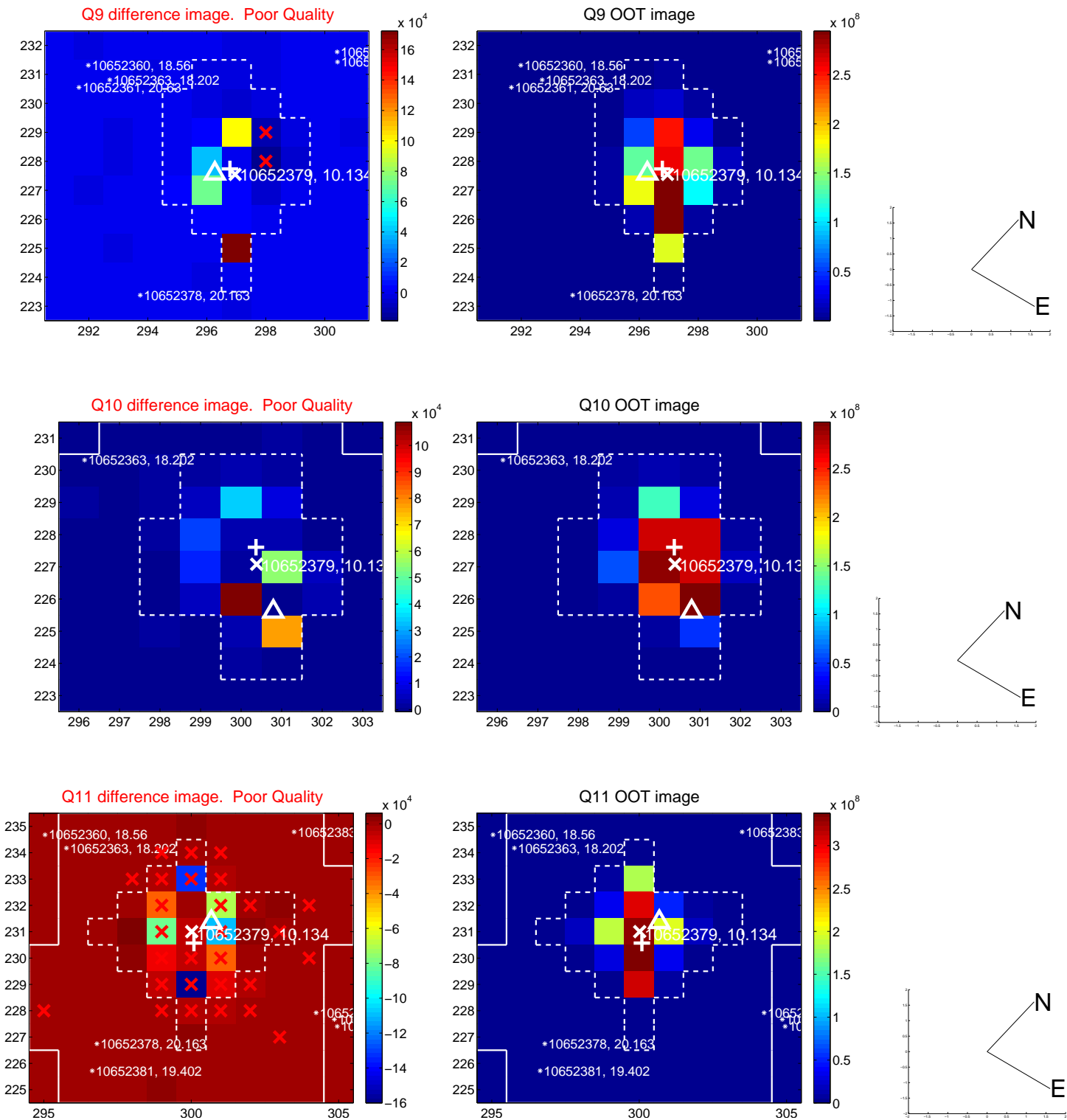
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



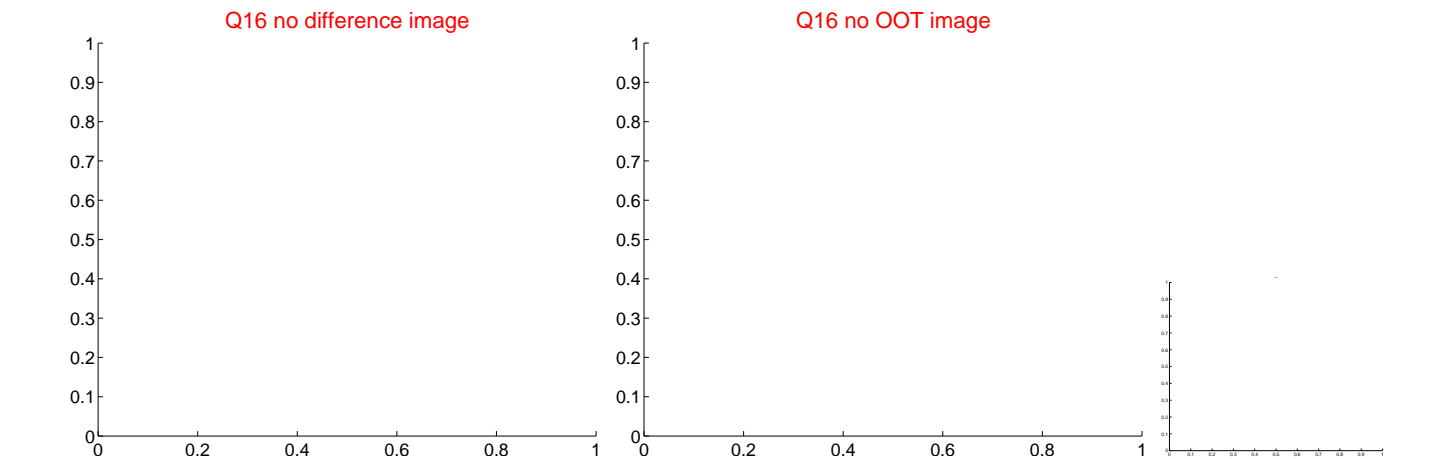
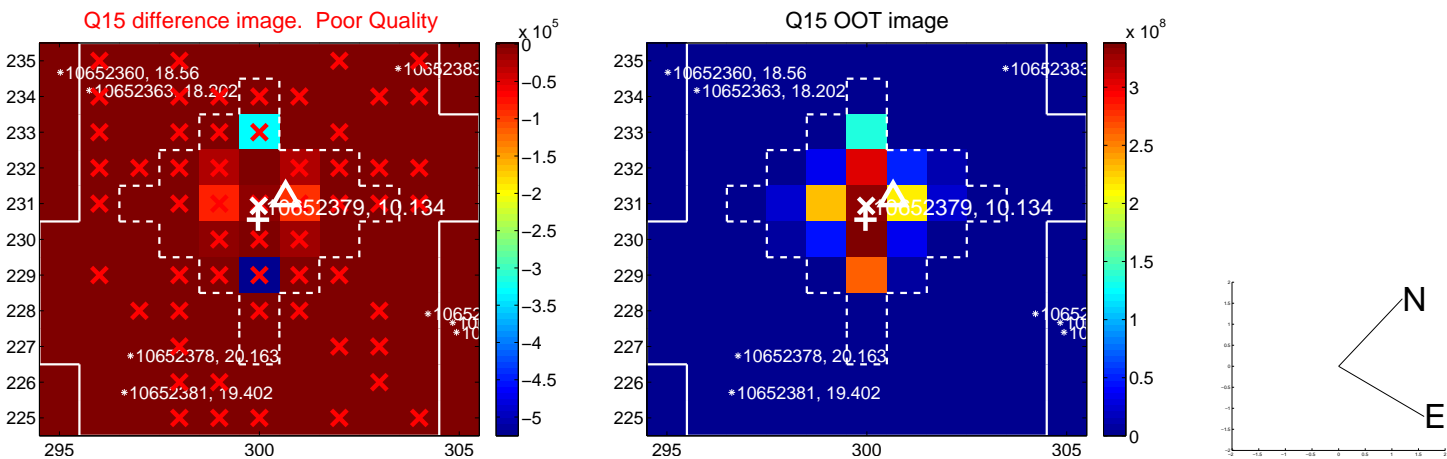
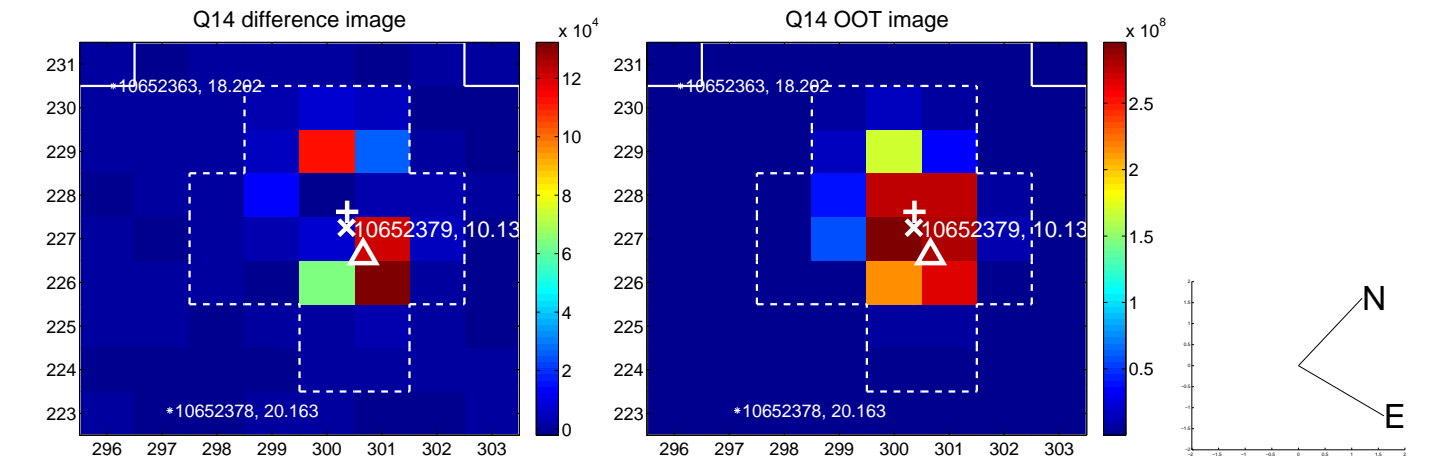
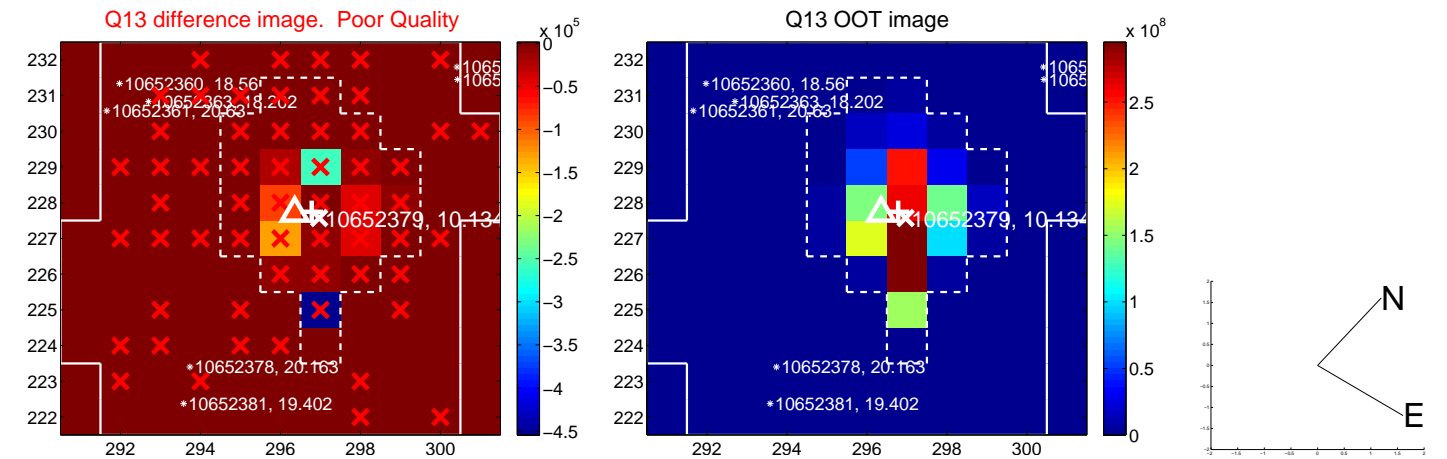
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



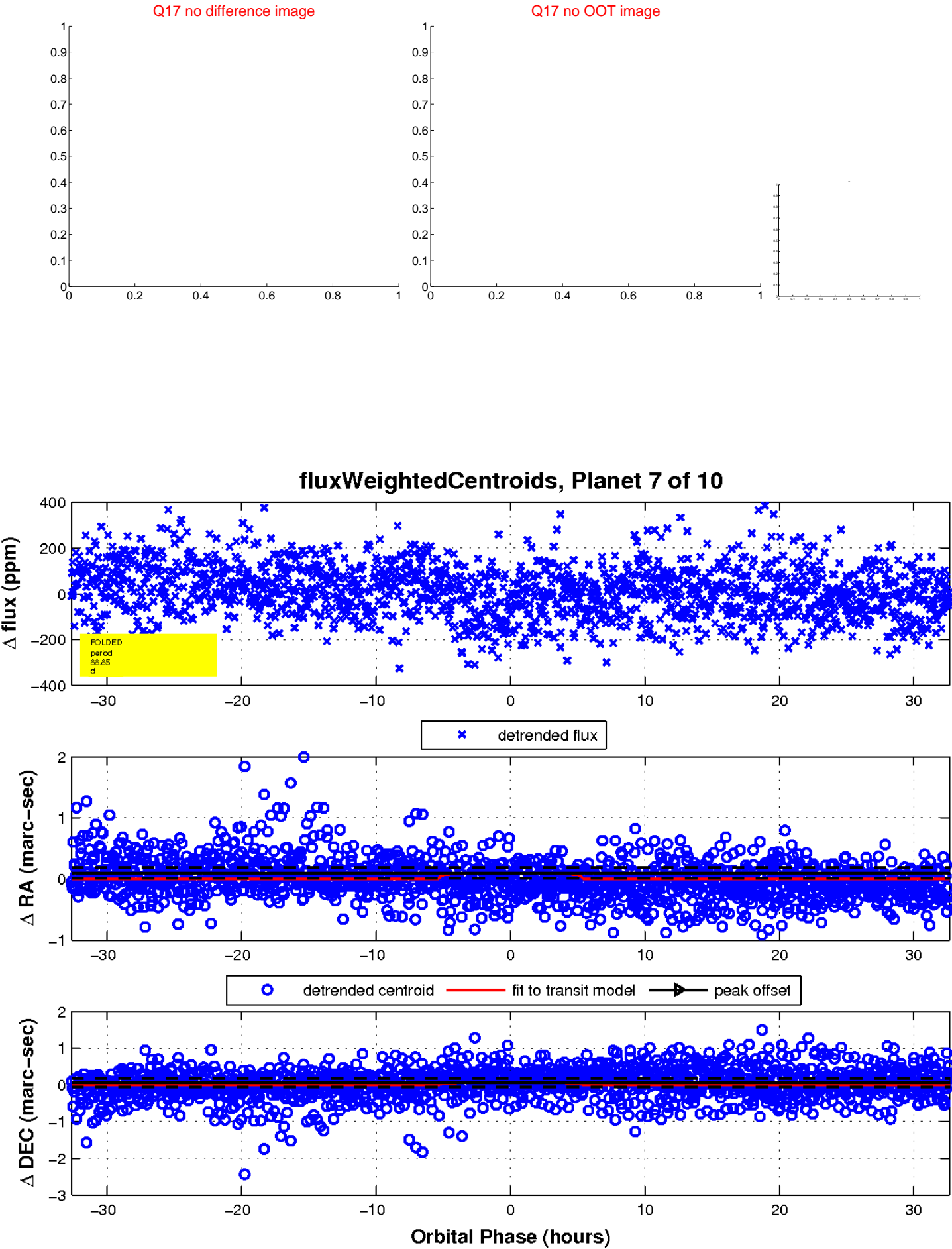
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



This plot does not exist for this TCE.

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})
010652379-01	OBS	No	3.314708	133.196939	56.4	6.019	11.1	12.3	2.65	6649	4.05	5104.19
010652379-02	OBS	No	3.314624	131.743175	34.5	5.989	10.9	10.5	2.65	6649	1.84	5104.36
010652379-03	OBS	No	3.314671	133.663432	19.7	14.851	10.8	6.4	2.65	6649	1.43	5104.26
010652379-04	OBS	No	78.280988	161.932625	205.4	7.495	16.9	9.7	2.65	6649	4.03	75.33
010652379-05	OBS	No	89.406597	199.428664	114.3	6.777	16.6	6.7	2.65	6649	3.33	63.10
010652379-06	OBS	No	1.656077	132.257770	43.0	1.724	11.7	7.0	2.65	6649	1.76	12874.97
010652379-07	OBS	No	88.846588	212.851630	207.0	10.888	8.4	9.1	2.65	6649	4.12	63.63
010652379-08	OBS	No	22.094042	141.525125	82.3	7.323	8.5	8.9	2.65	6649	2.78	406.90
010652379-09	OBS	No	106.495223	202.067155	176.6	6.010	8.2	8.4	2.65	6649	3.99	49.97
010652379-10	OBS	No	73.079893	200.304960	69.2	2.000	7.5	-1.0	2.65	6649	2.23	82.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010652379-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
010652379-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—TRANS_GAPPED—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010652379-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

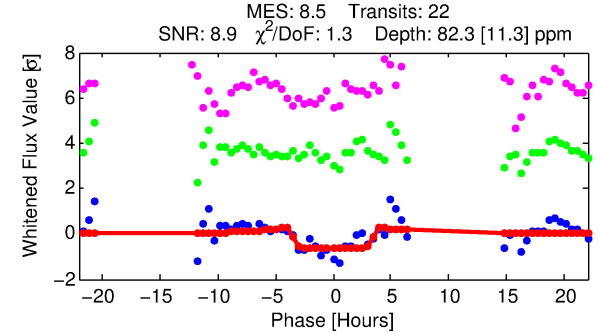
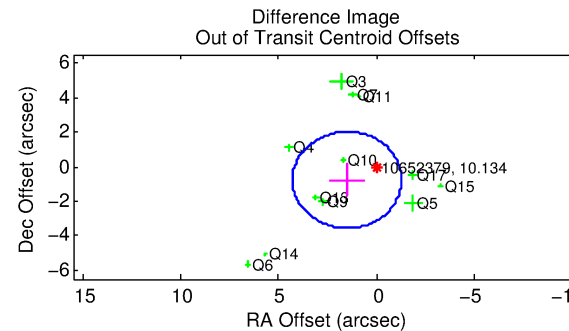
N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

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

Ephemeris Match Information For 010652379-08

No Significant Match Found

KIC: 10652379 Candidate: 8 of 10 Period: 22.094 d

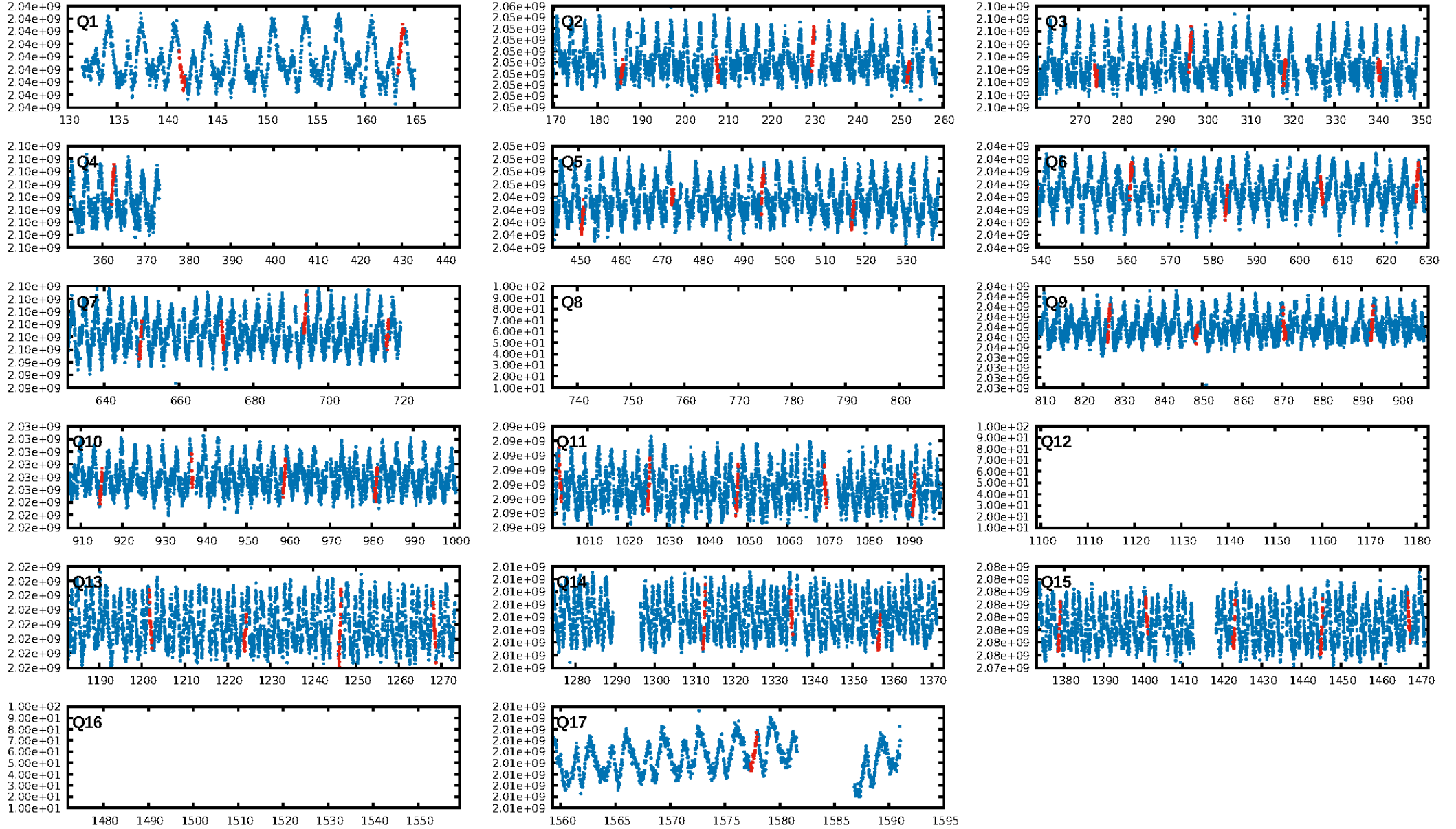


ShortPeriod-sig: 100.0% [47.55σ]
 LongPeriod-sig: 100.0% [161.19σ]
 ModelChiSquare2-sig: 10.8%
 ModelChiSquareGof-sig: 100.0%
 Bootstrap-pfa: N/A
 RollingBand-fgt: 1.00 [21/21]
 GhostDiagnostic-chr: N/A

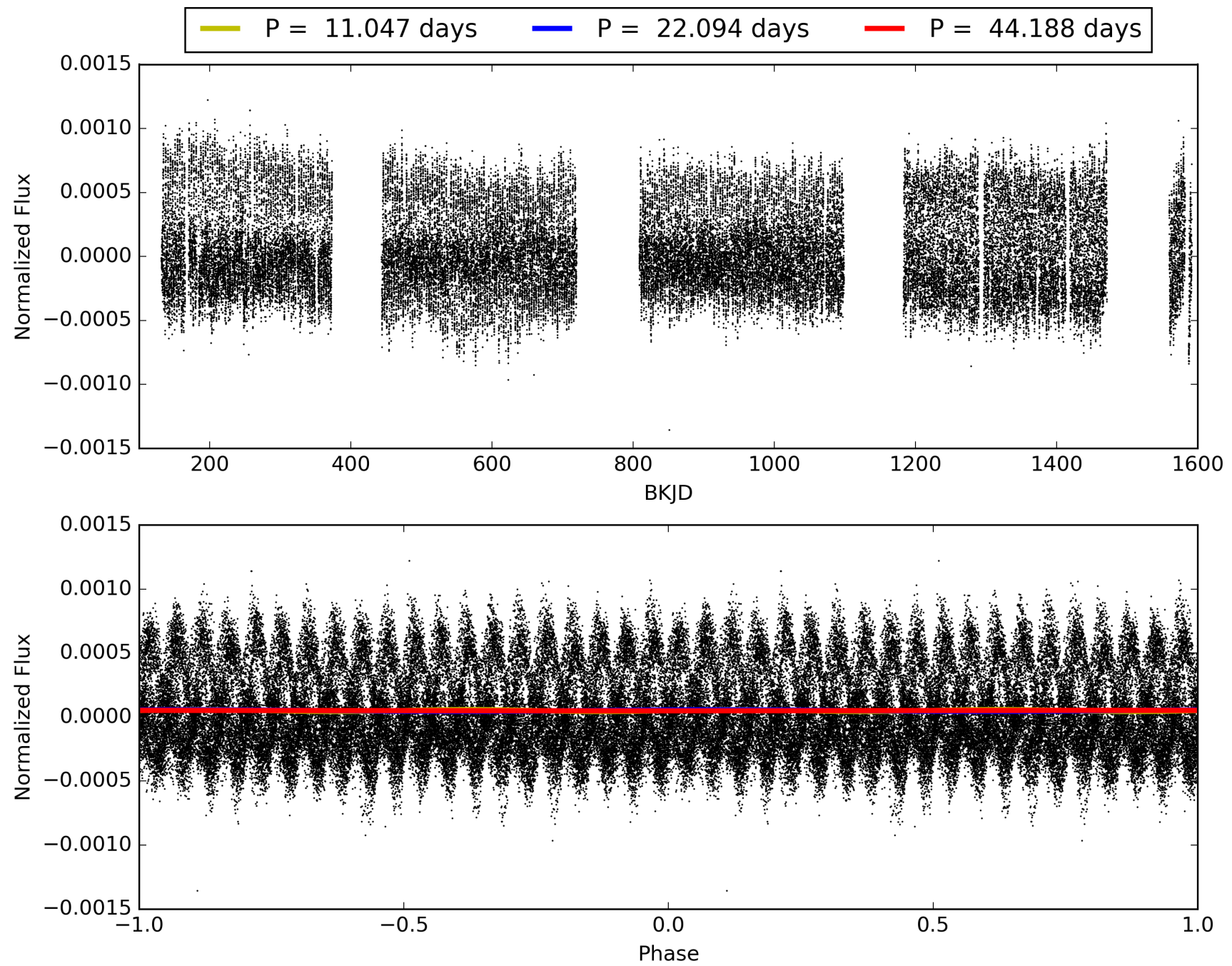
 Centroid-sig: 2.3%
 Centroid-so: 0.970 arcsec [1.89σ]
 OotOffset-rm: 1.698 arcsec [1.83σ]
 KicOffset-rm: 1.616 arcsec [2.00σ]
 OotOffset-st: 3/4/1/4 [12]
 KicOffset-st: 3/4/1/4 [12]
 DiffImageQuality-fgm: 0.00 [0/12]
 DiffImageOverlap-fno: 0.00 [0/14]

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

TCE 010652379-08, PDC Light Curves

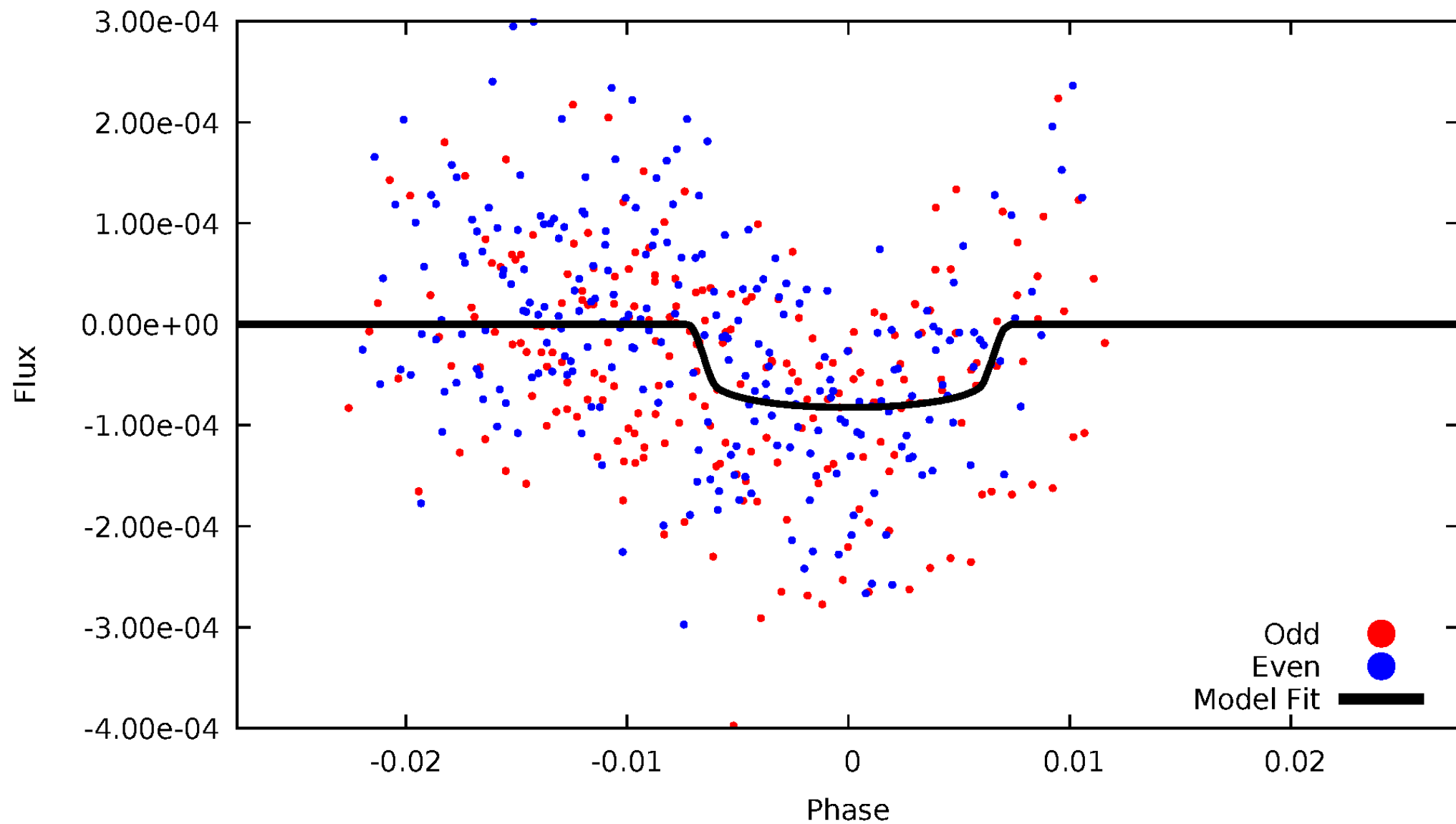


TCE 010652379-08



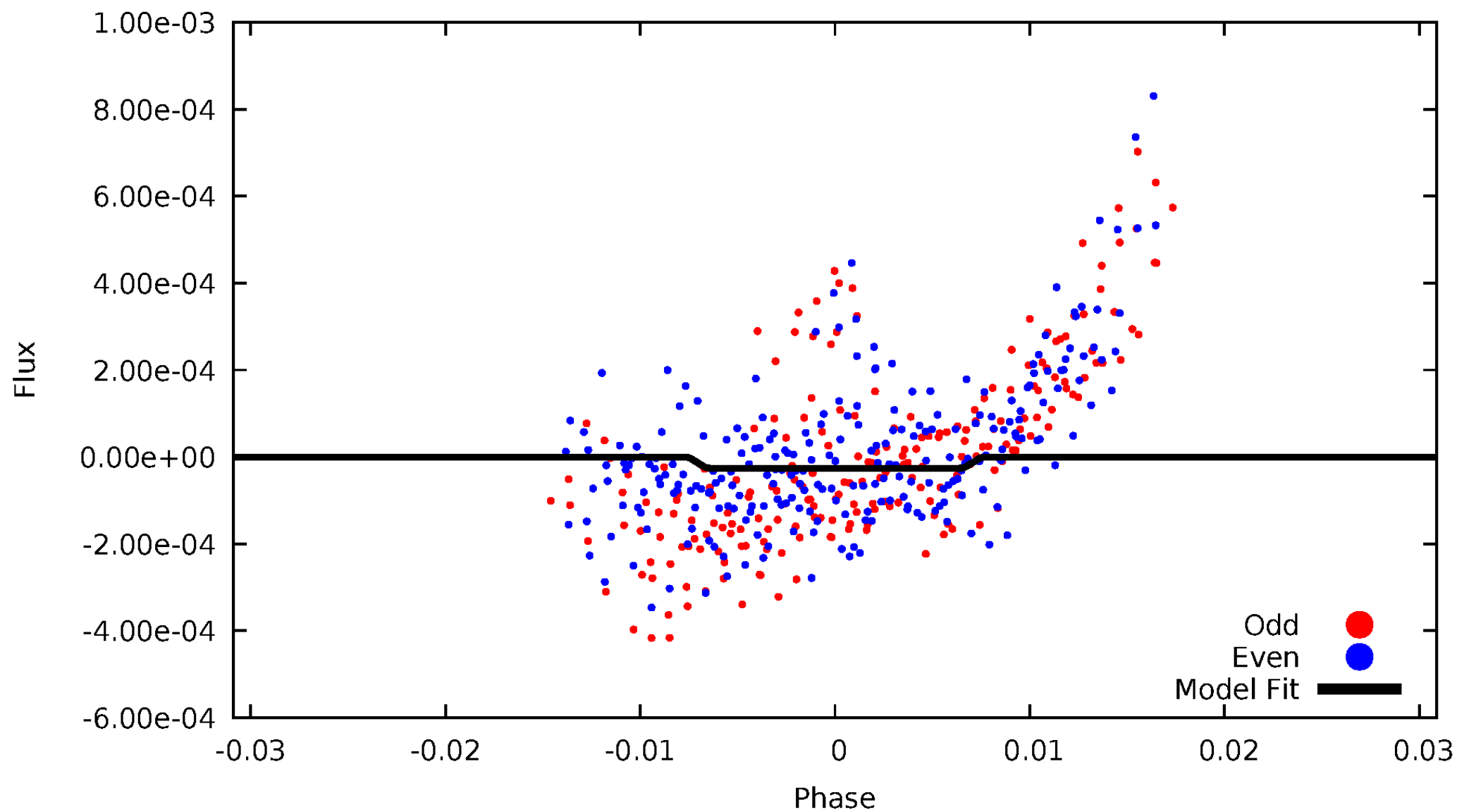
DV Odd/Even

TCE 010652379-08



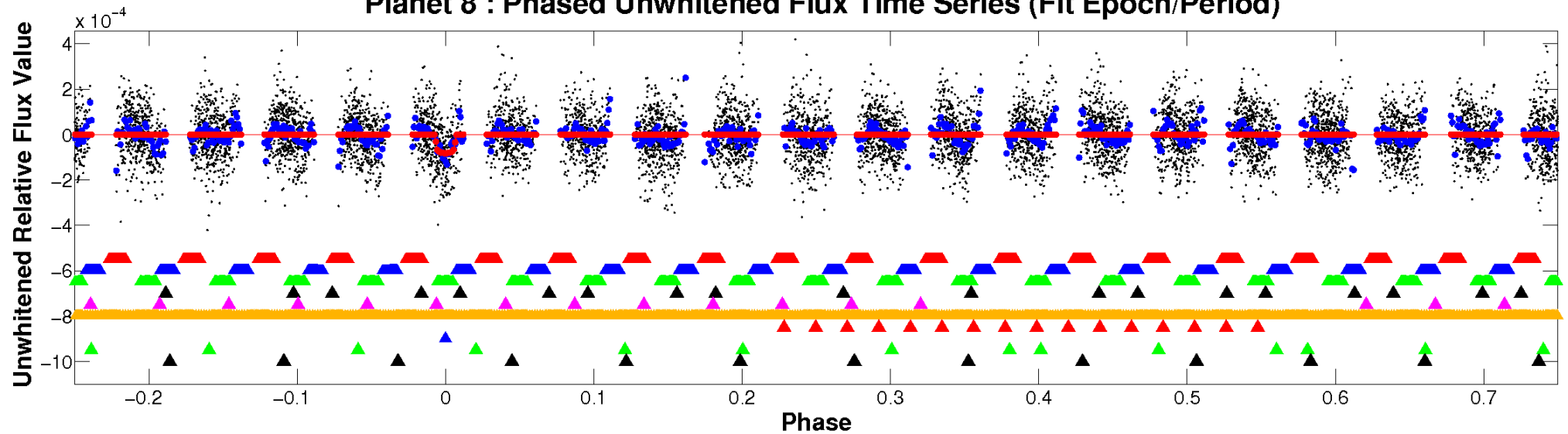
ALT Odd/Even

TCE 010652379-08

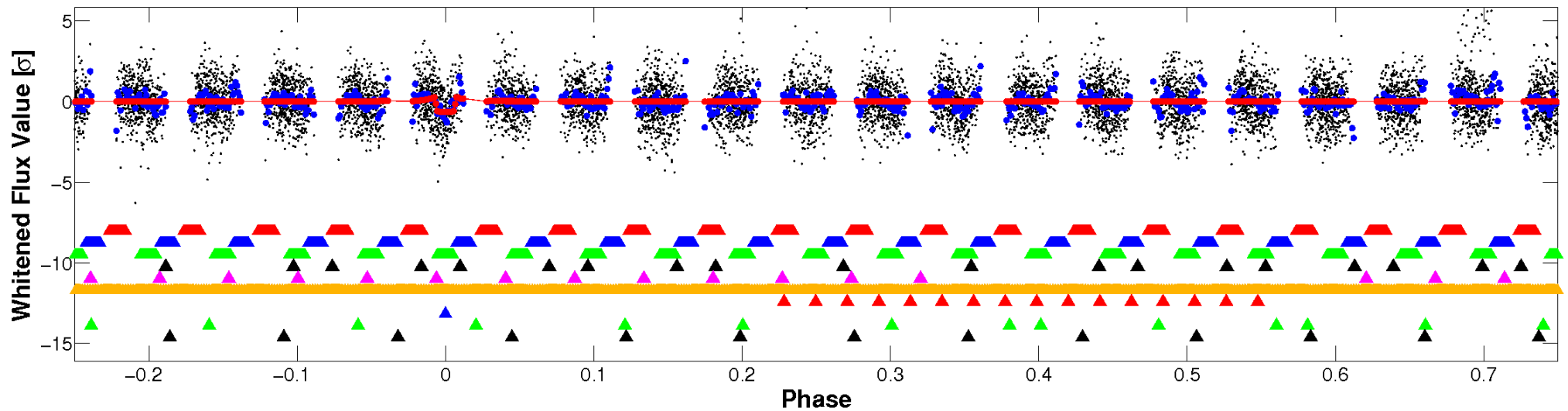


Non-Whitened Vs. Whitened Light Curve

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

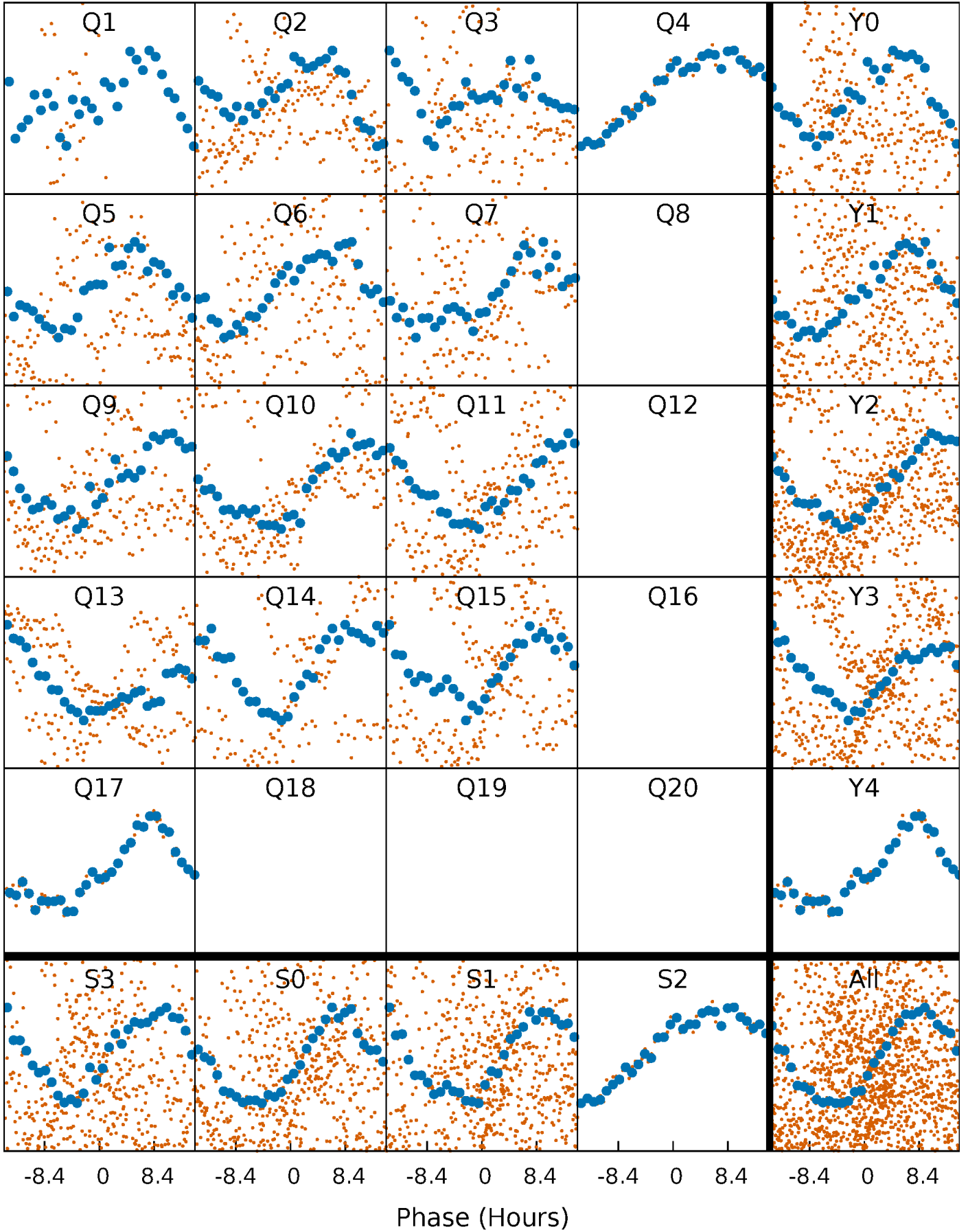


Planet 8 : Phased Whitened Flux Time Series (Fit Epoch/Period)



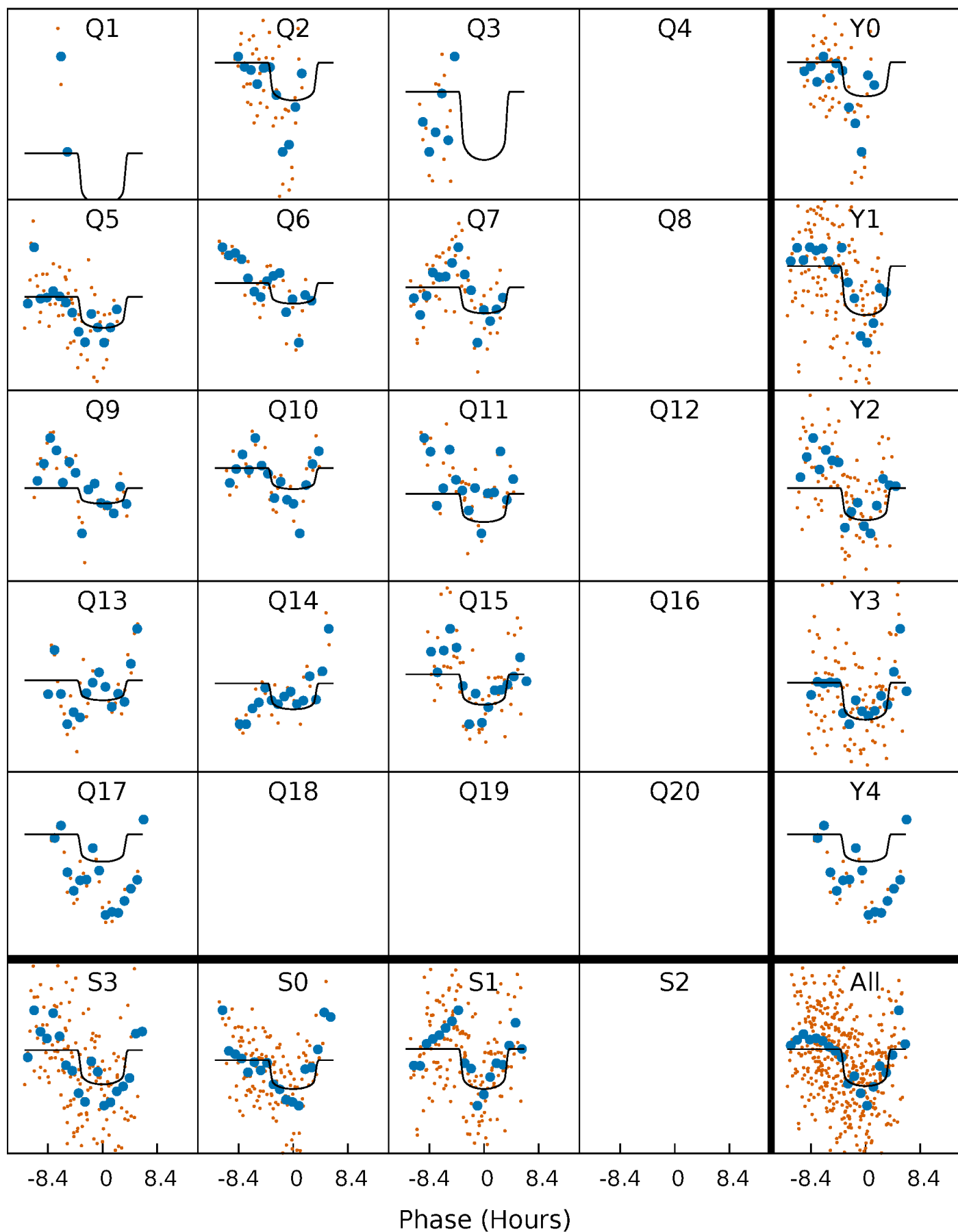
PDC Quarter-Phased Transit Curves

TCE 010652379-08 P= 22.094042 Days $T_0=141.525125$ (BKJD)



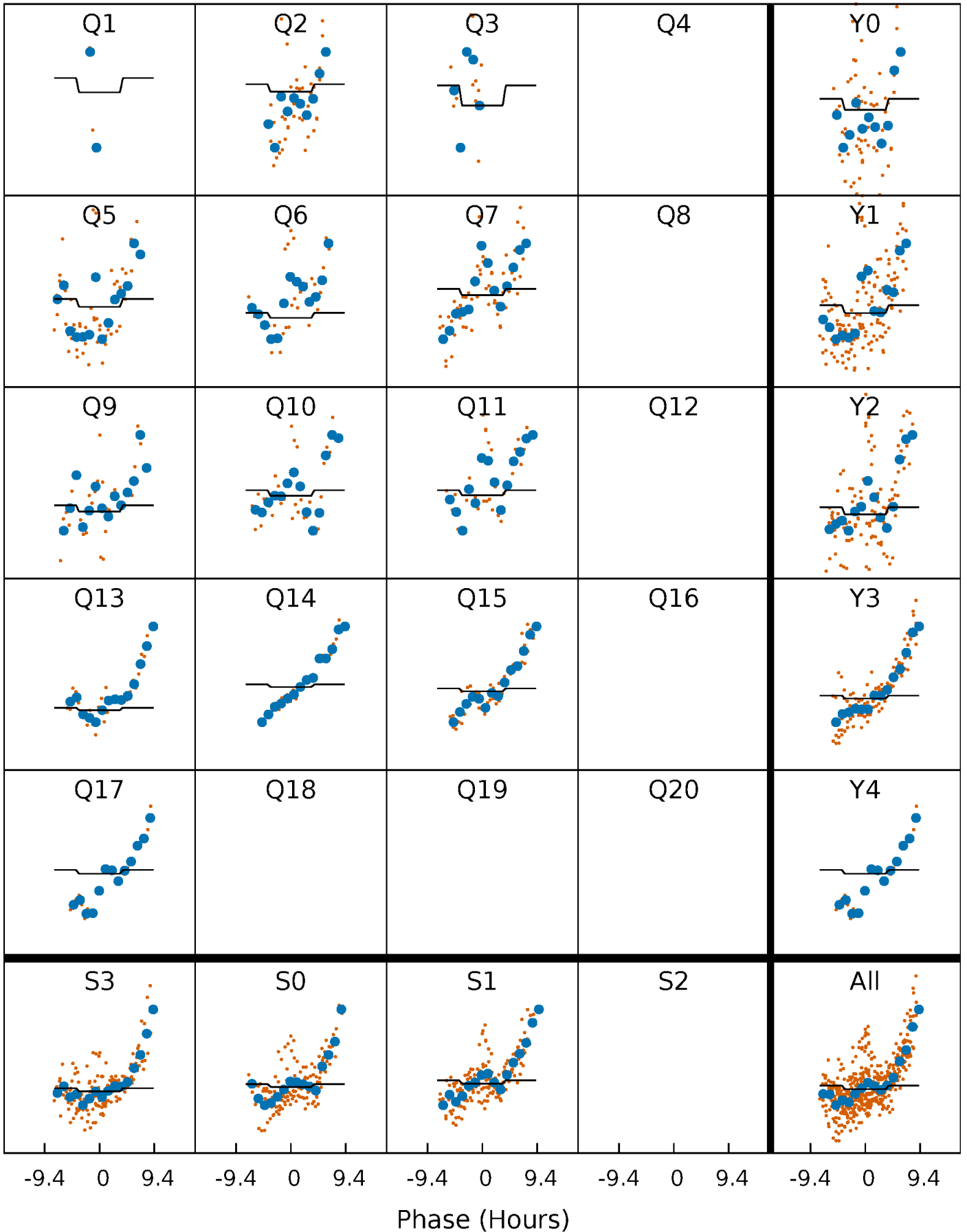
DV Quarter-Phased Transit Curves

TCE 010652379-08 P= 22.094042 Days $T_0=141.525125$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

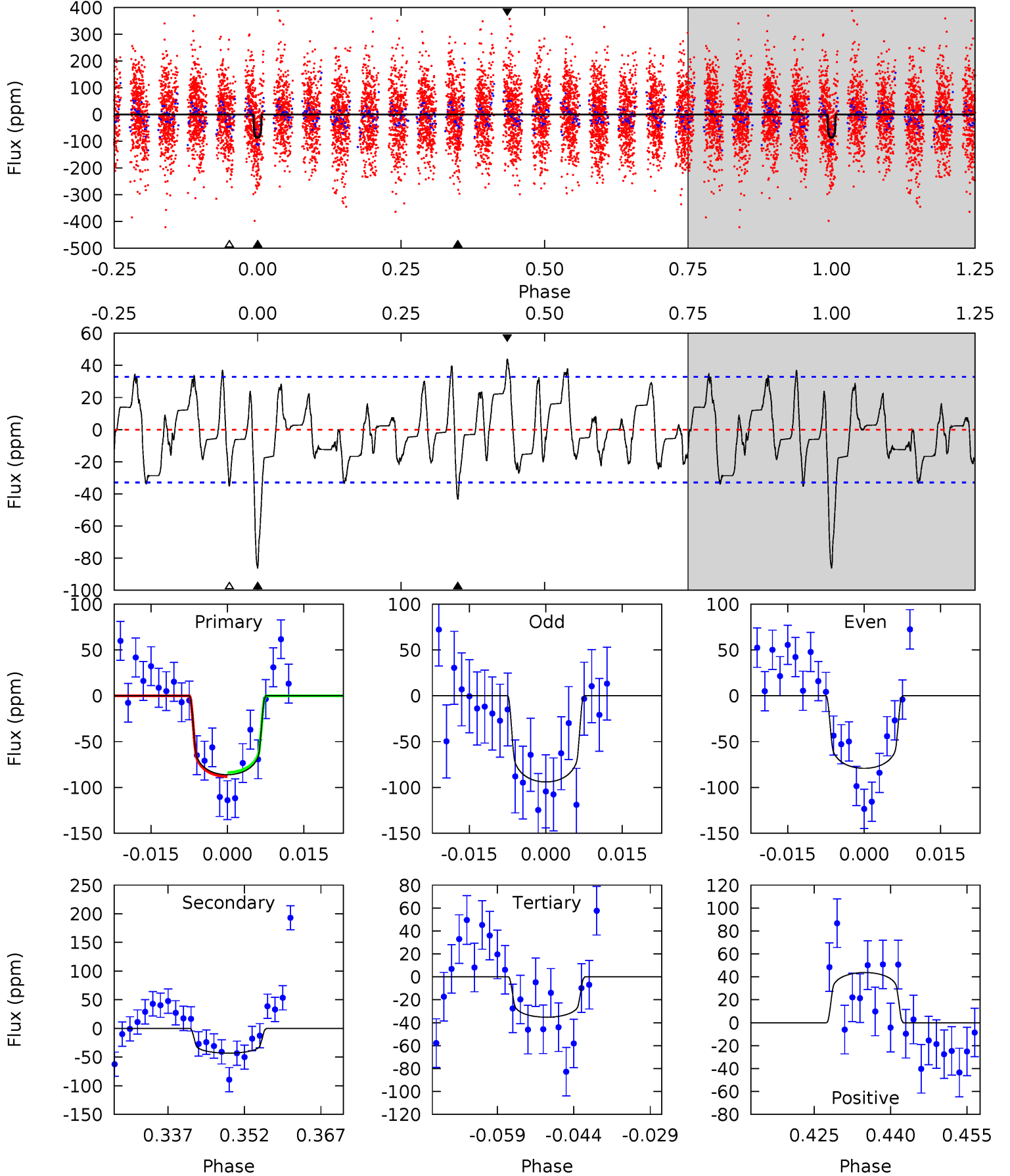
TCE 010652379-08 P= 22.095215 Days $T_0=141.328914$ (BKJD)



DV Model-Shift Uniqueness Test

010652379-08, P = 22.094042 Days, E = 119.431083 Days

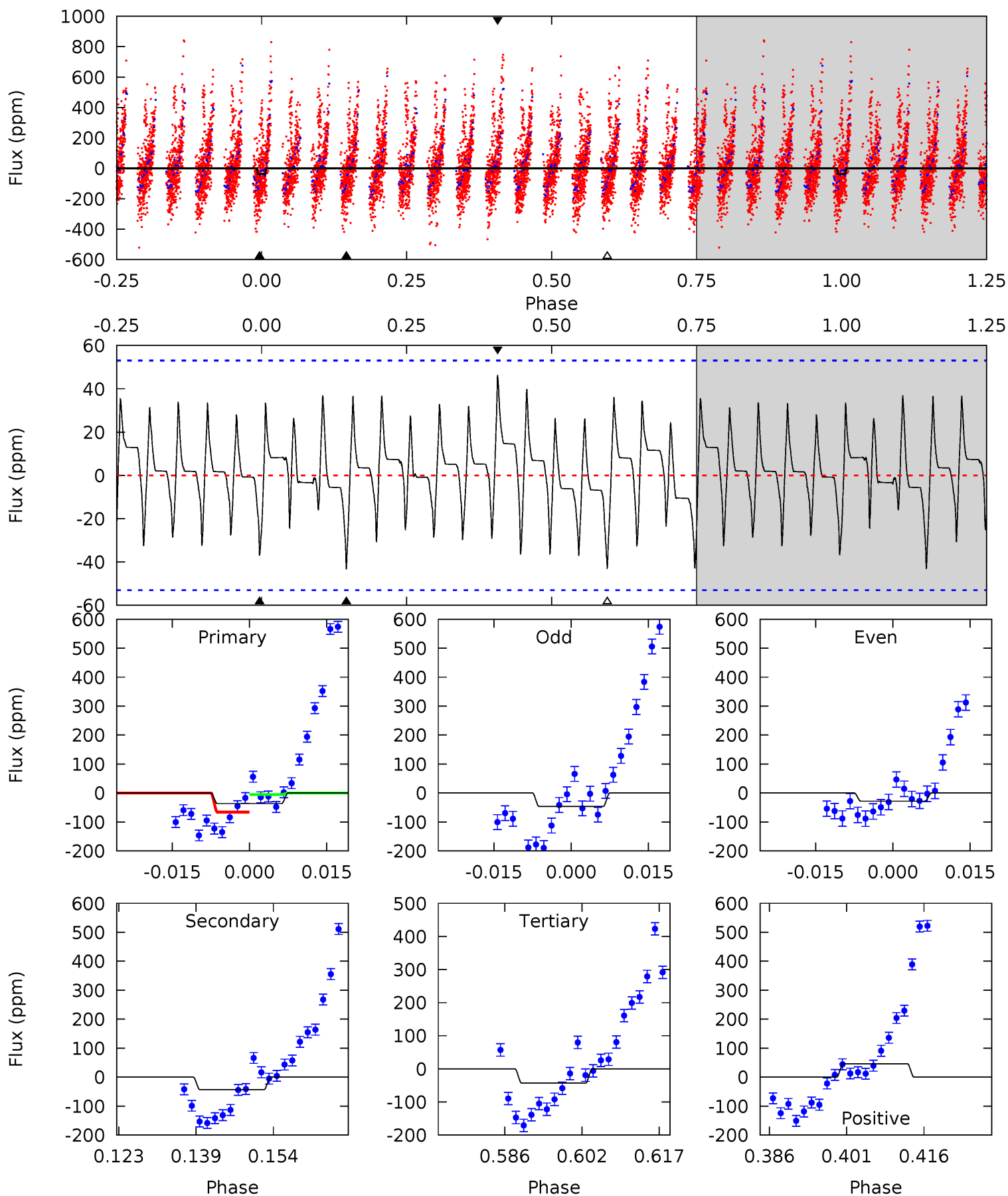
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.0	6.50	5.31	6.59	4.95	2.44	2.67	7.68	6.39	1.19	-0.10	1.12	1.30	0.34	0.33



Alt Model-Shift Uniqueness Test

010652379-08, P = 22.095215 Days, E = 119.233699 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.42	4.03	3.99	4.32	4.94	2.42	1.71	-0.57	-0.89	0.04	-0.29	0.85	-2.21	0.52	2.84



Stellar Parameters For KIC 010652379

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6649^{+166}_{-183}	$3.749^{+0.304}_{-0.095}$	$-0.280^{+0.300}_{-0.250}$	$2.654^{+0.489}_{-0.908}$	$1.443^{+0.264}_{-0.264}$	$0.109^{+0.209}_{-0.032}$
	+2%/-3%	+8%/-3%	+107%/-89%	+18%/-34%	+18%/-18%	+192%/-30%
Source	PHO1	FLK73	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 010652379-08 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-43 ± 7	$2.59^{+0.93}_{-0.83}$	1571^{+93}_{-131}	5515^{+1101}_{-614}	105^{+137}_{-48}
Alt.	-43 ± 11	$1.37^{+0.86}_{-0.66}$	1557^{+104}_{-142}	7654^{+4262}_{-1721}	373^{+1089}_{-232}

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 $A_{obs} \gg 1.0$

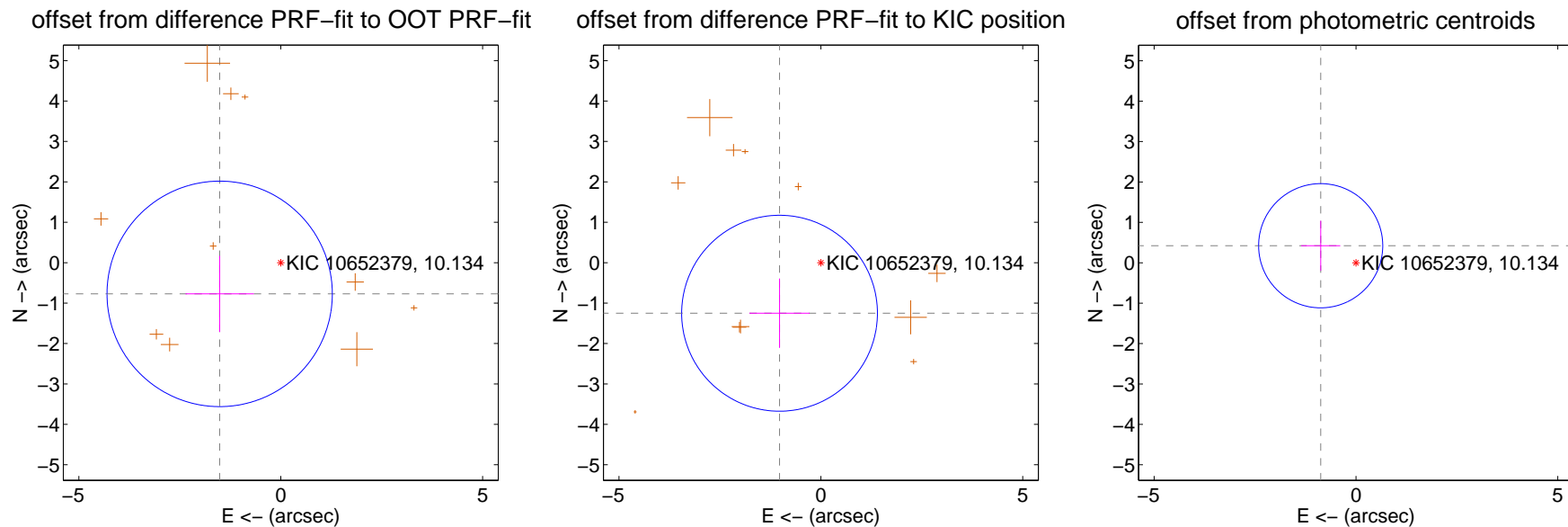
DV Centroid Data

Supplemental centroid analysis for 010652379-08. **Kepler magnitude: 10.13.** Transit SNR 8.94

There are 0 quarters with good PRF difference image offsets

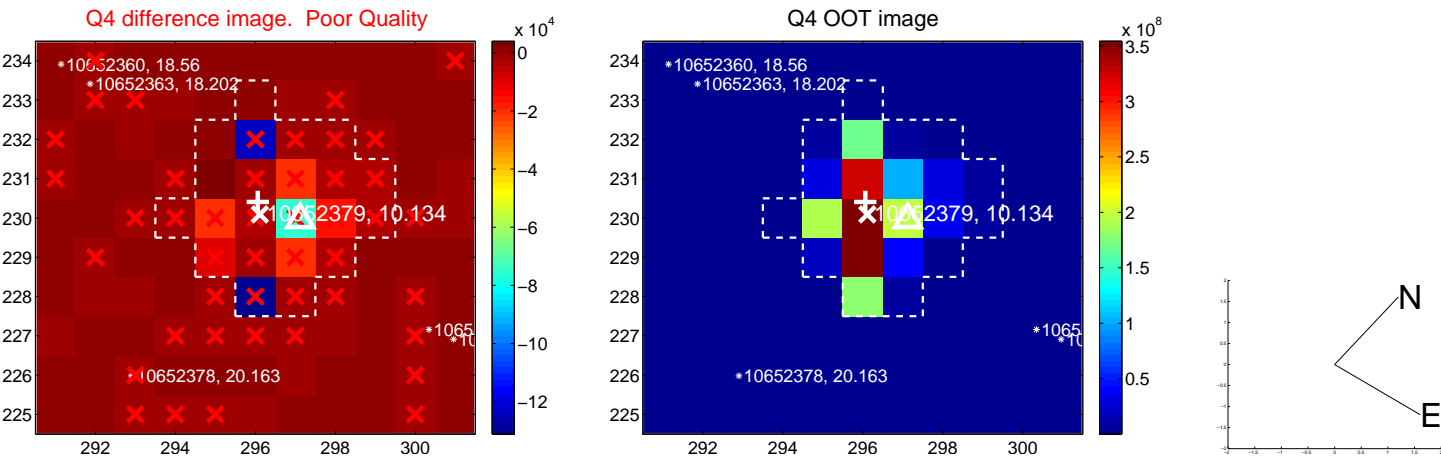
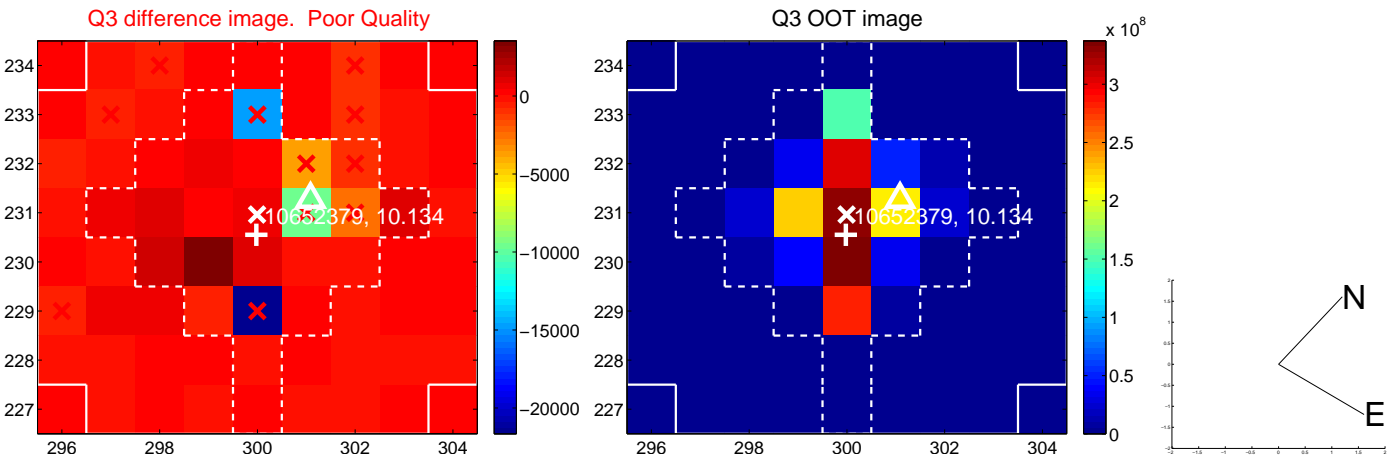
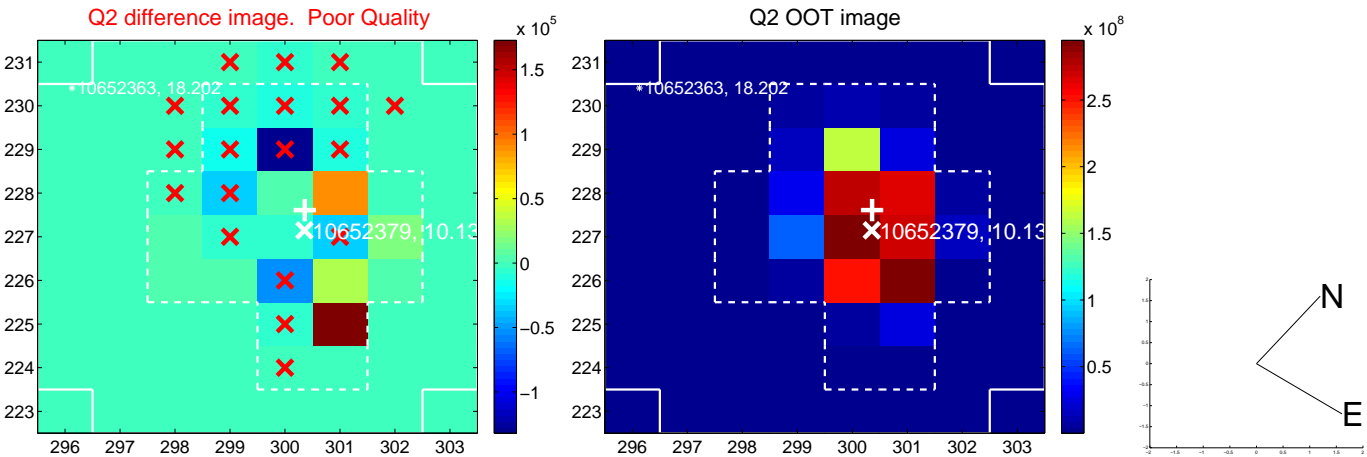
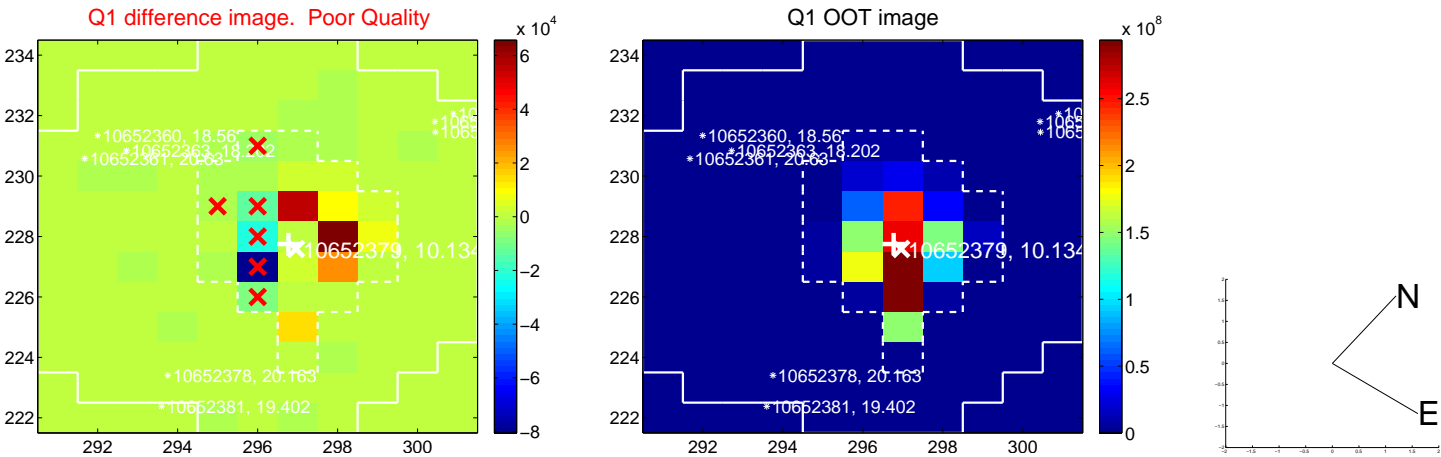
The direct PRF centroid is offset from the target star catalog position by about 1.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.698 ± 0.930	1.83	1.513 ± 0.846	-0.772 ± 0.941
PRF-fit source offset from KIC position	1.616 ± 0.808	2.00	1.023 ± 0.746	-1.251 ± 0.859
photometric centroid source offset	0.97 ± 0.51	1.89	0.87 ± 0.48	0.42 ± 0.62

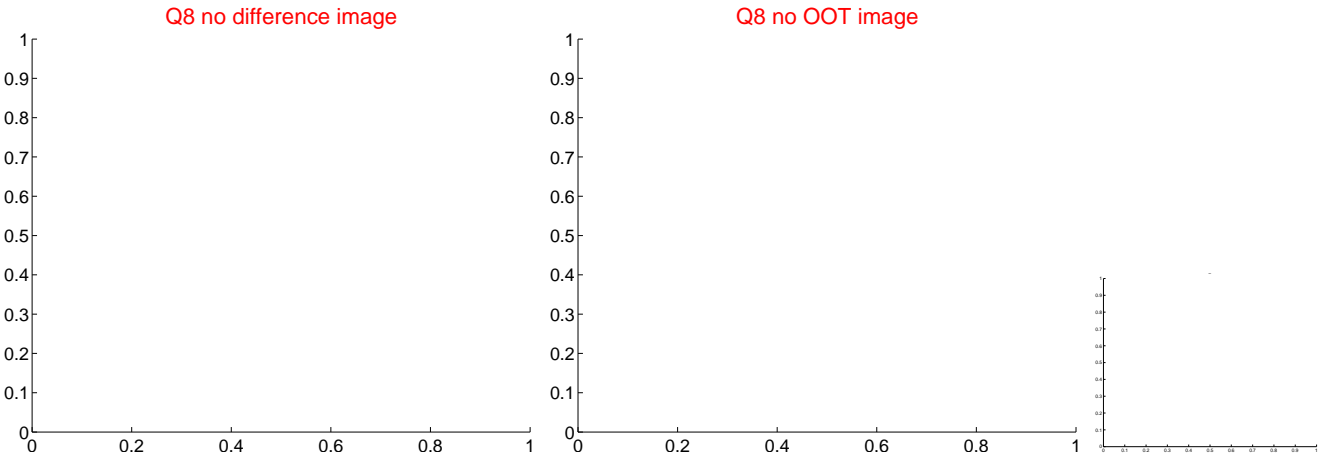
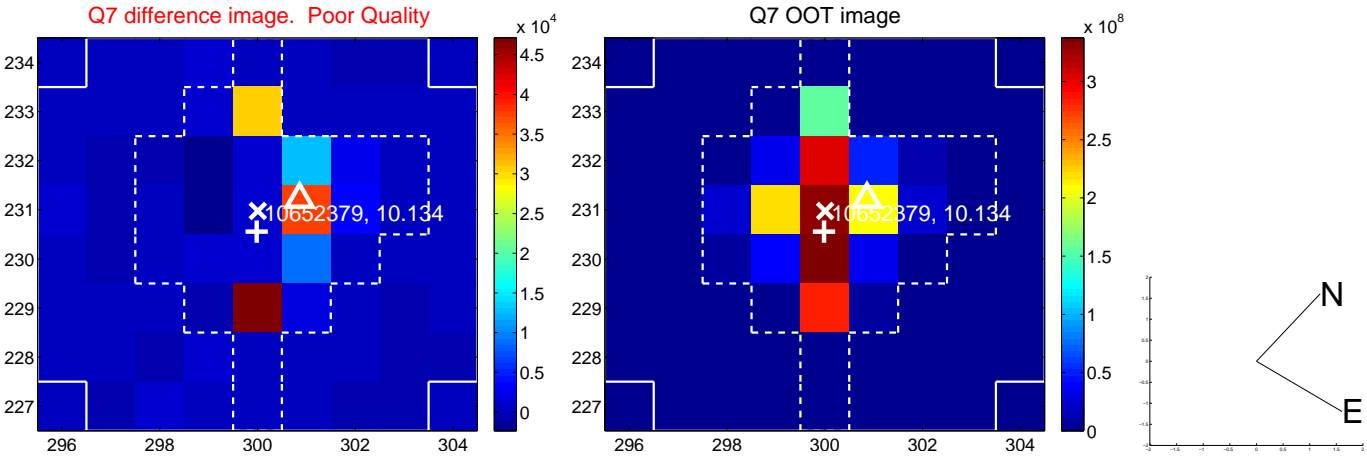
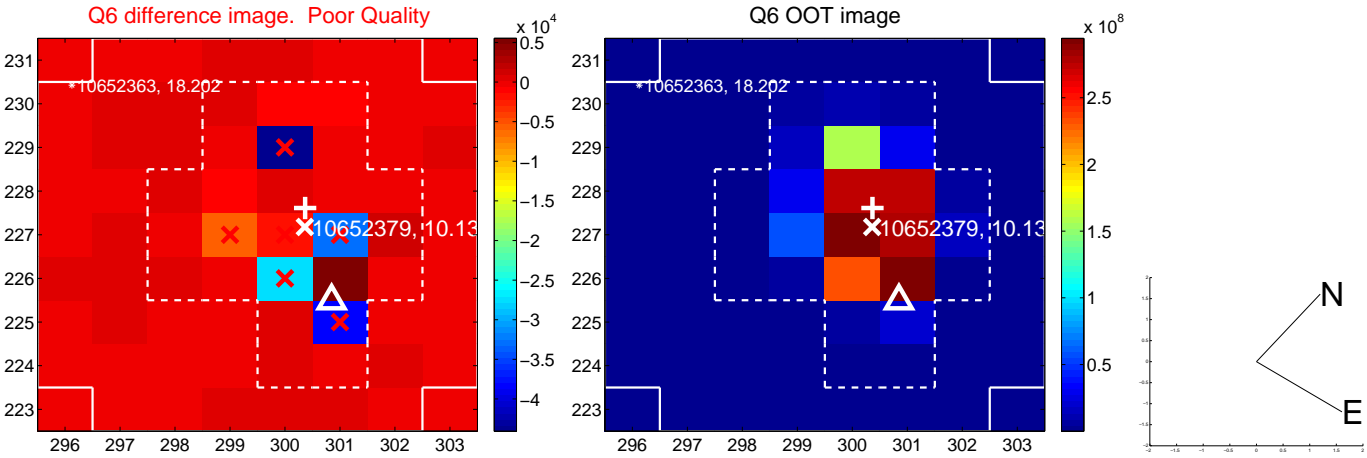
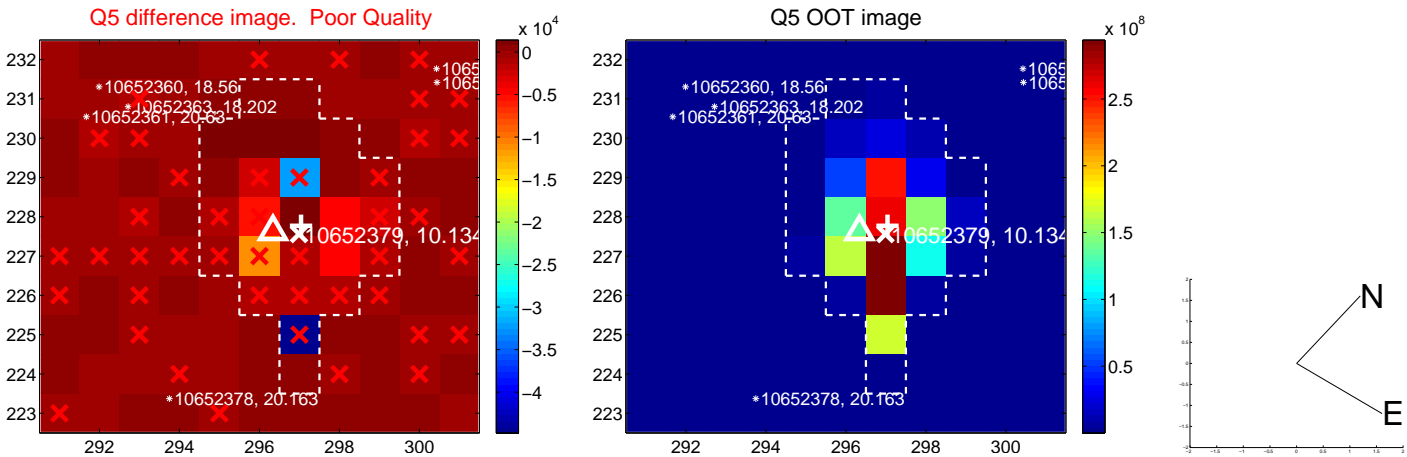


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

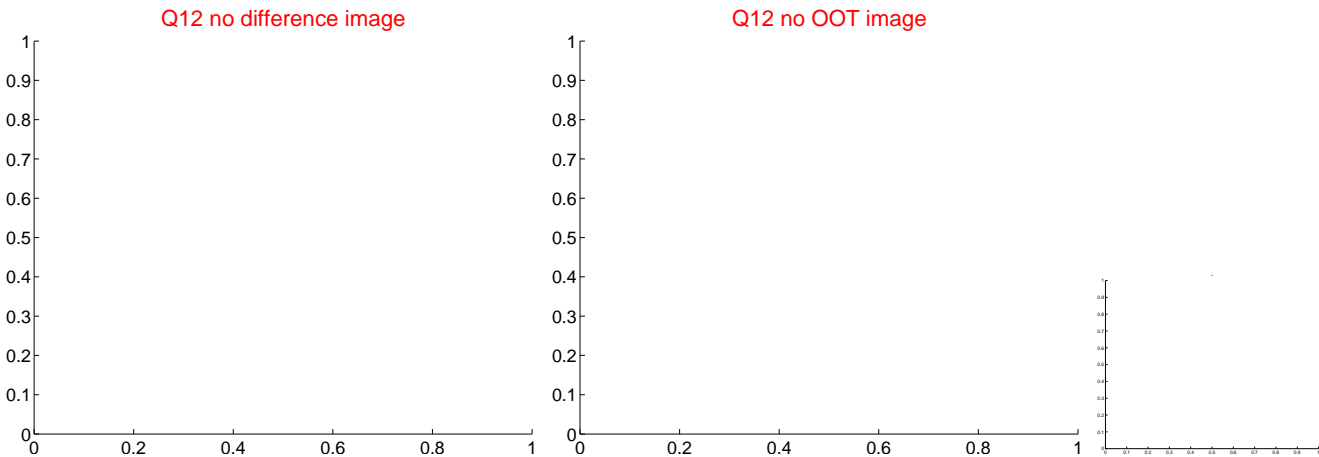
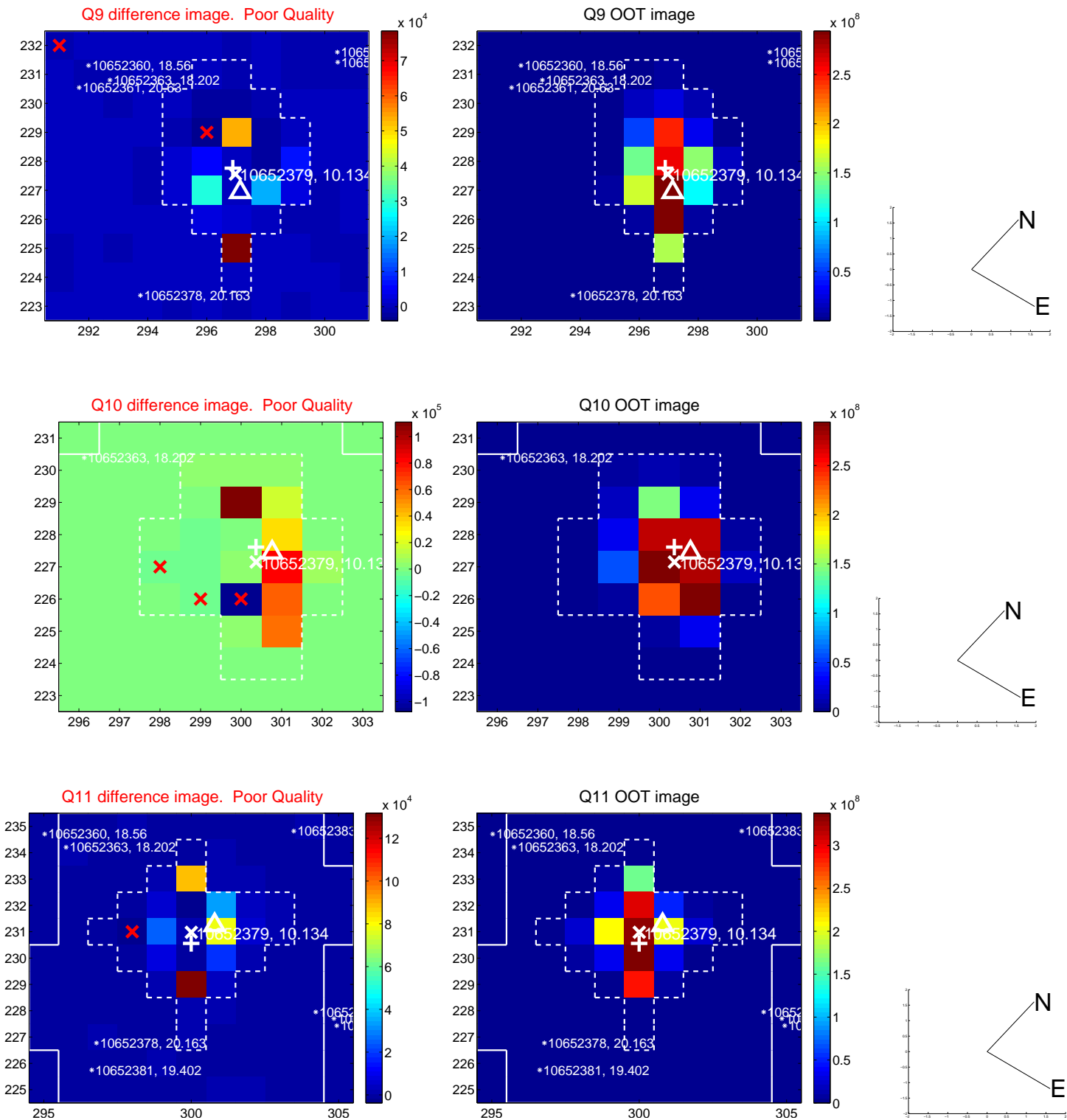
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



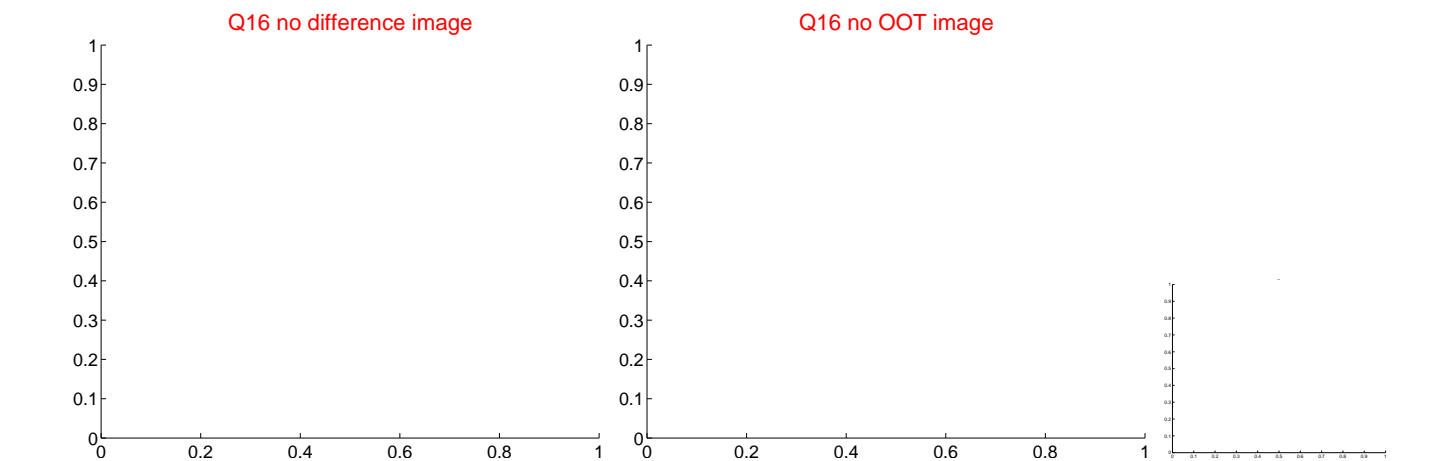
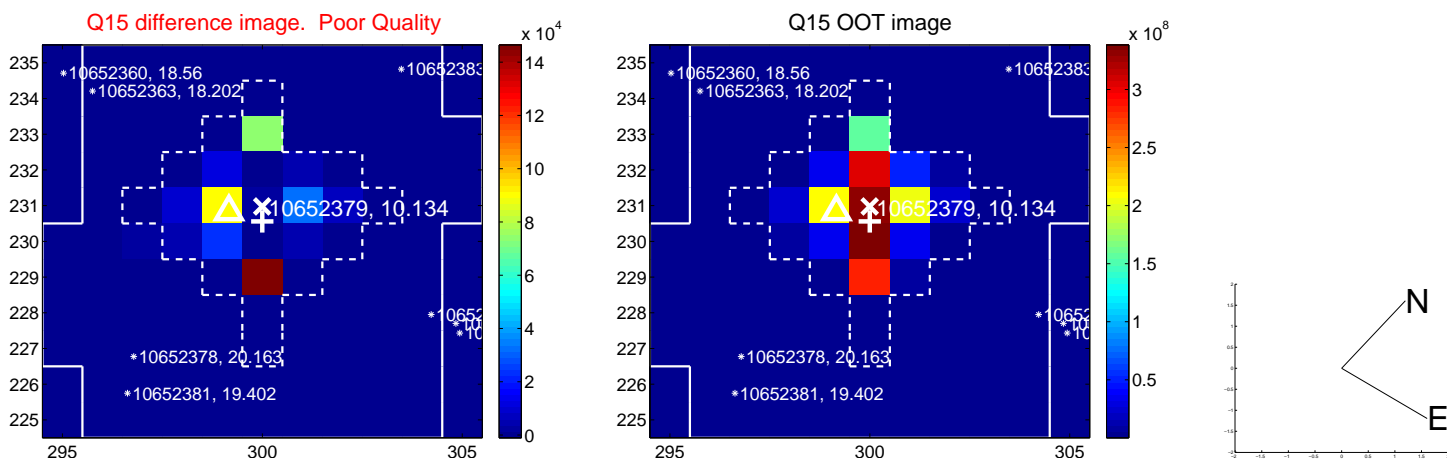
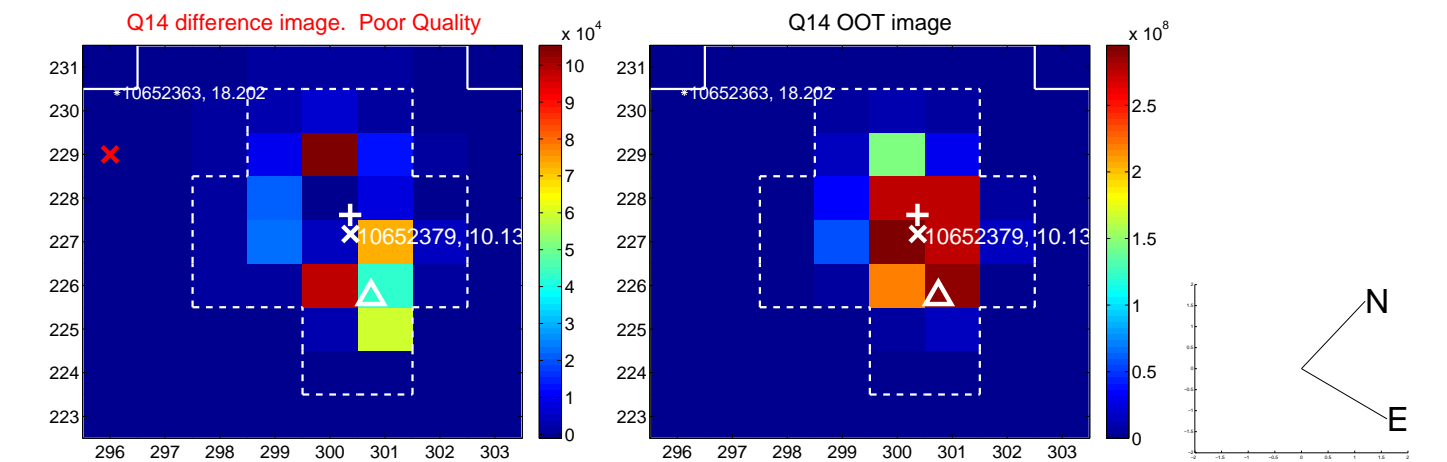
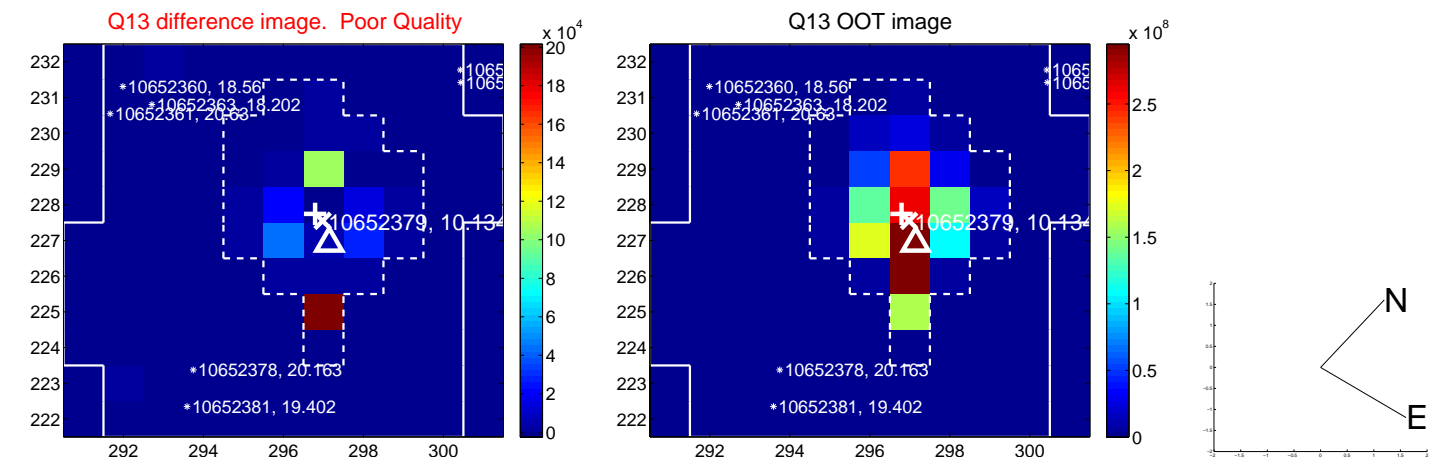
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



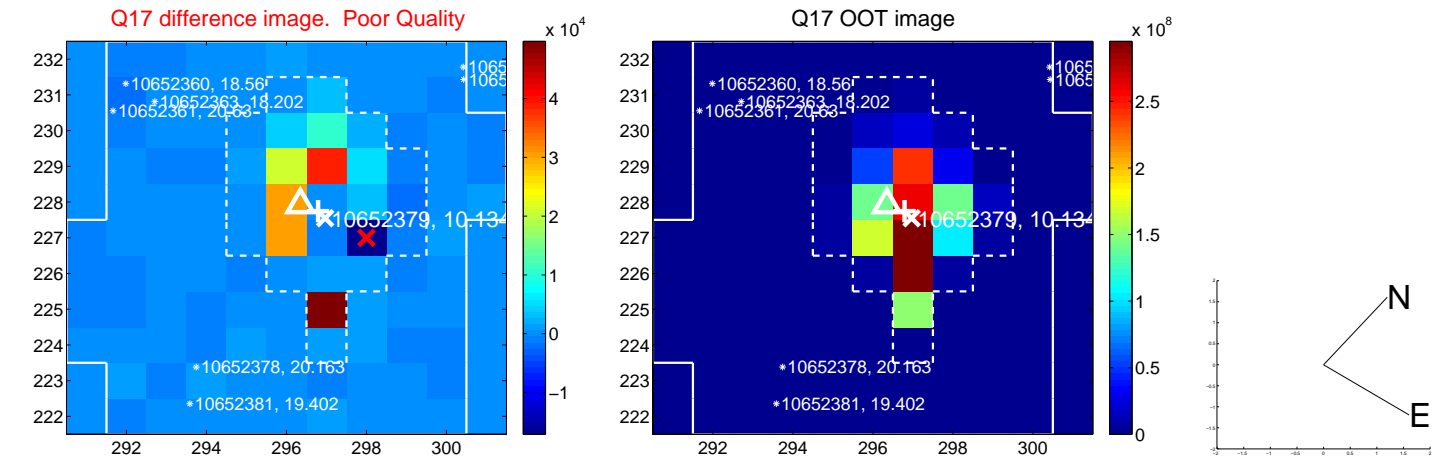
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



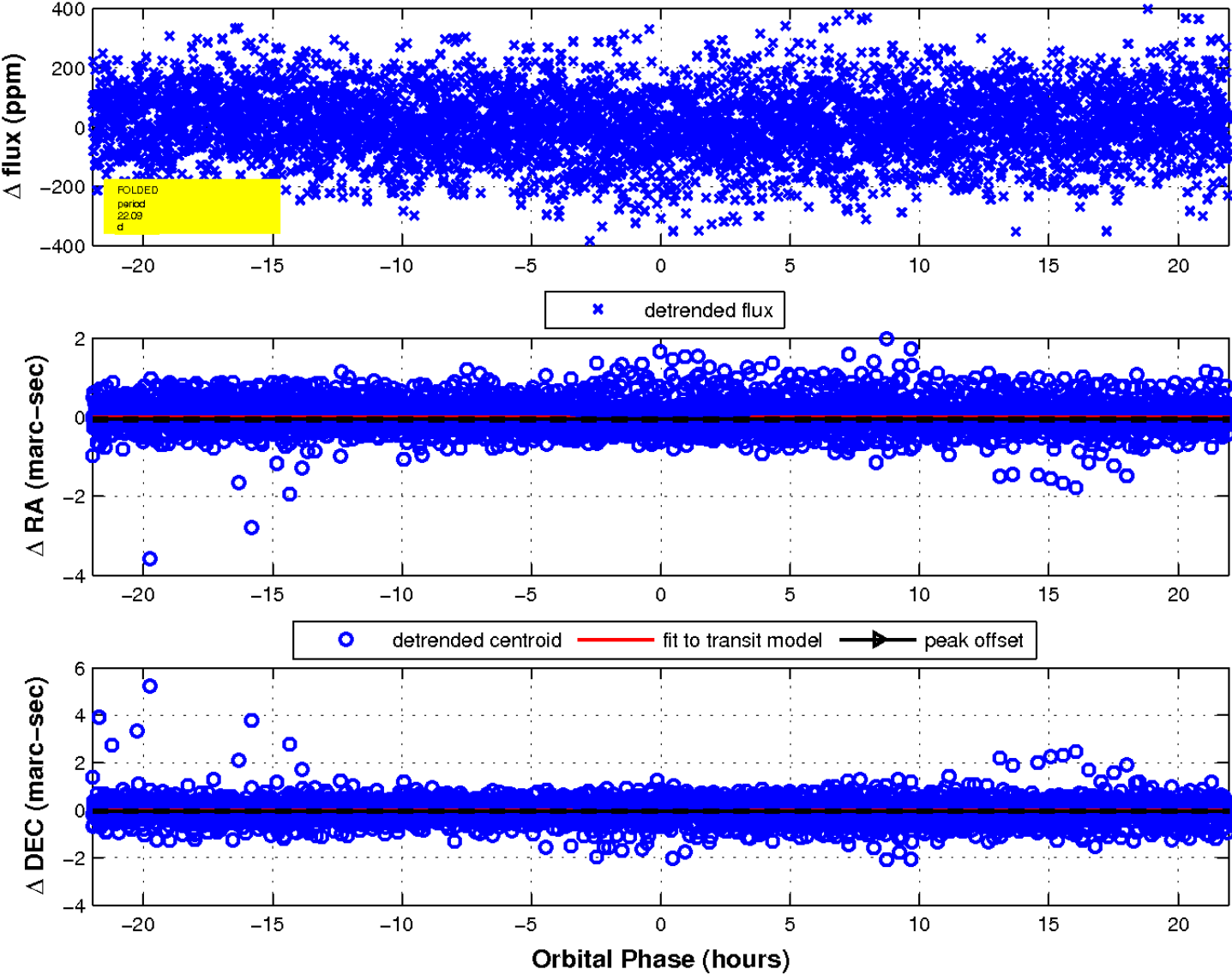
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 8 of 10



This plot does not exist for this TCE.

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})
010652379-01	OBS	No	3.314708	133.196939	56.4	6.019	11.1	12.3	2.65	6649	4.05	5104.19
010652379-02	OBS	No	3.314624	131.743175	34.5	5.989	10.9	10.5	2.65	6649	1.84	5104.36
010652379-03	OBS	No	3.314671	133.663432	19.7	14.851	10.8	6.4	2.65	6649	1.43	5104.26
010652379-04	OBS	No	78.280988	161.932625	205.4	7.495	16.9	9.7	2.65	6649	4.03	75.33
010652379-05	OBS	No	89.406597	199.428664	114.3	6.777	16.6	6.7	2.65	6649	3.33	63.10
010652379-06	OBS	No	1.656077	132.257770	43.0	1.724	11.7	7.0	2.65	6649	1.76	12874.97
010652379-07	OBS	No	88.846588	212.851630	207.0	10.888	8.4	9.1	2.65	6649	4.12	63.63
010652379-08	OBS	No	22.094042	141.525125	82.3	7.323	8.5	8.9	2.65	6649	2.78	406.90
010652379-09	OBS	No	106.495223	202.067155	176.6	6.010	8.2	8.4	2.65	6649	3.99	49.97
010652379-10	OBS	No	73.079893	200.304960	69.2	2.000	7.5	-1.0	2.65	6649	2.23	82.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010652379-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
010652379-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—TRANS_GAPPED—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010652379-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

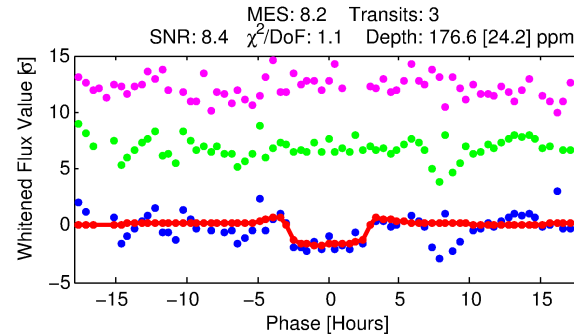
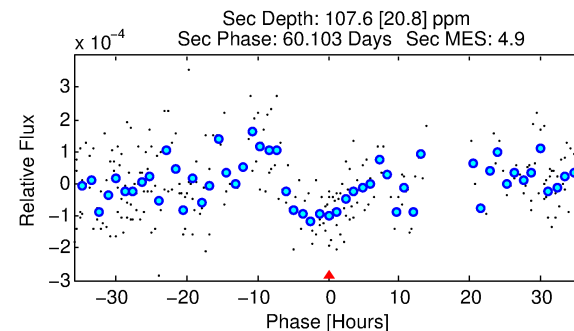
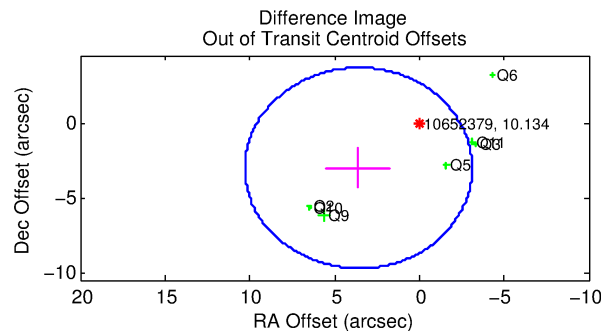
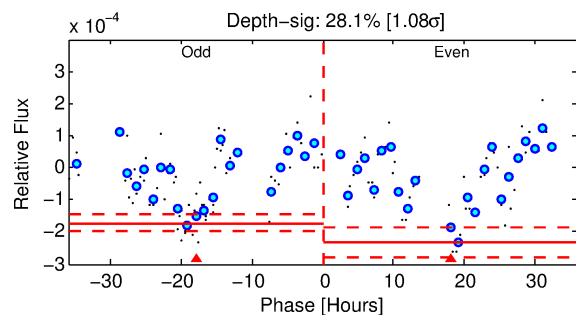
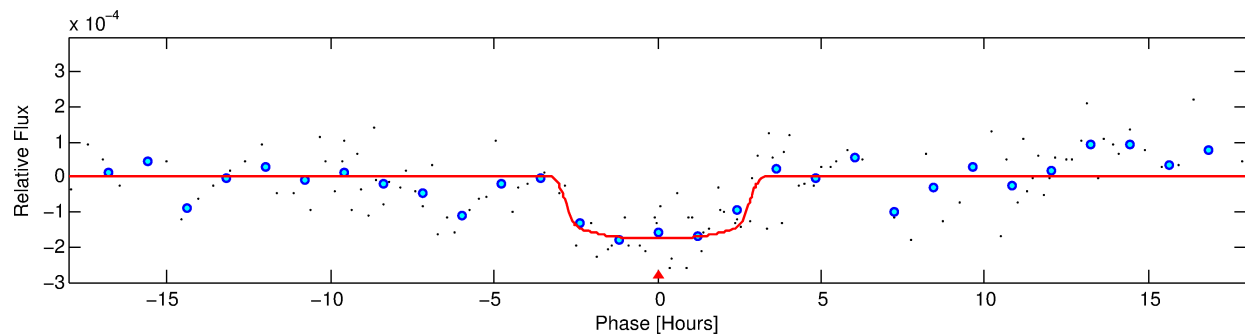
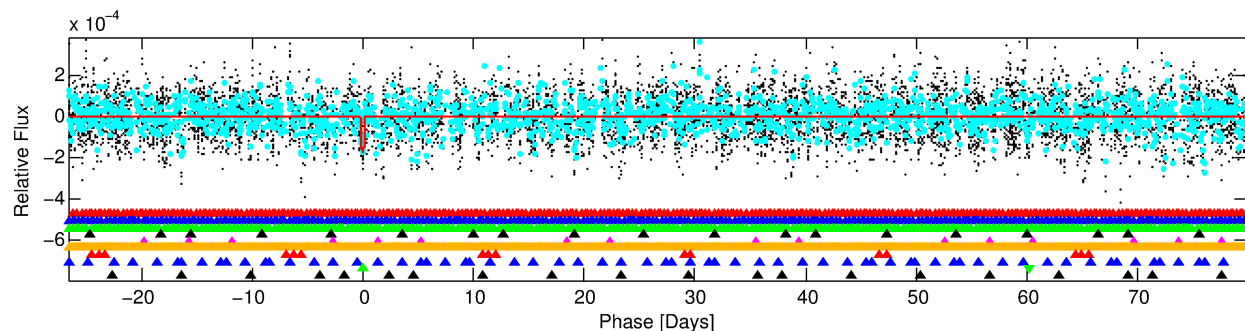
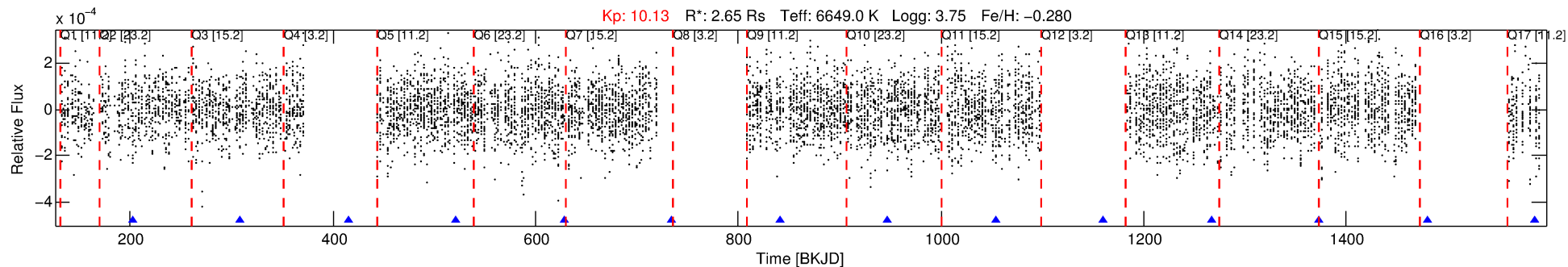
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010652379-09

No Significant Match Found

DV One-Page Summary

KIC: 10652379 Candidate: 9 of 10 Period: 106.495 d



DV Fit Results:

Period = 106.49522 [0.00174] d
Epoch = 202.0672 [0.0106] BKJD
Rp/R* = 0.0138 [0.0076]
a/R* = 74.29 [237.27]
b = 0.85 [1.04]
Seff = 49.97 [26.53]
Teq = 678 [90] K
Rp = 3.99 [2.60] Re
a = 0.4968 [0.1621] AU
Ag = 919.65 [1141.20] [0.80 σ]
Teffp = 5772 [1634] K [3.11 σ]

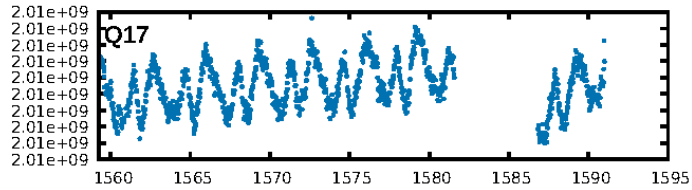
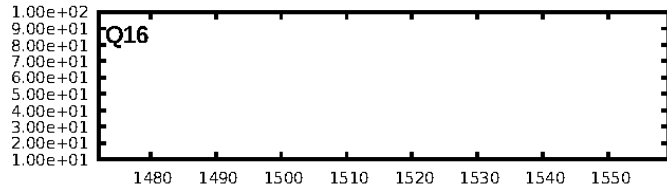
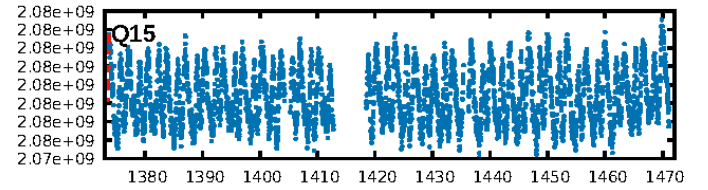
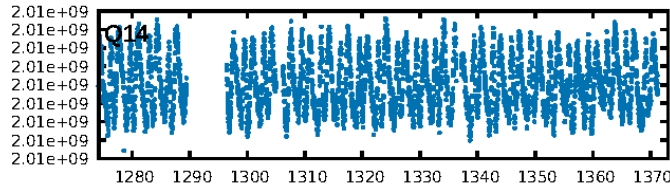
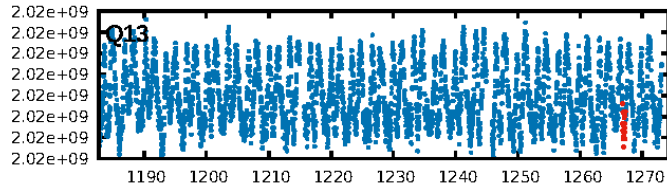
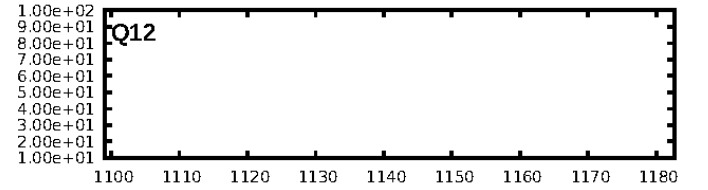
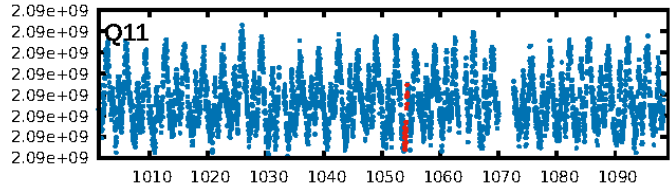
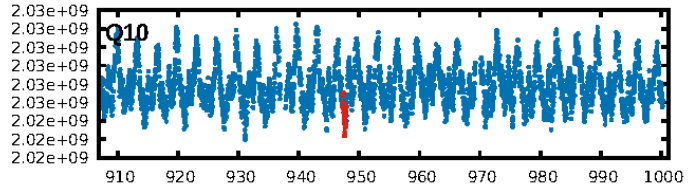
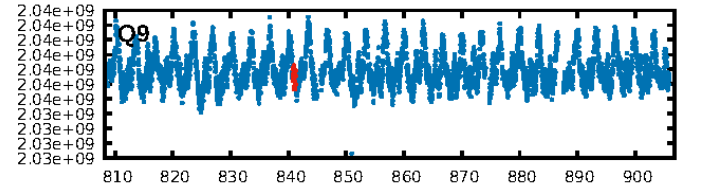
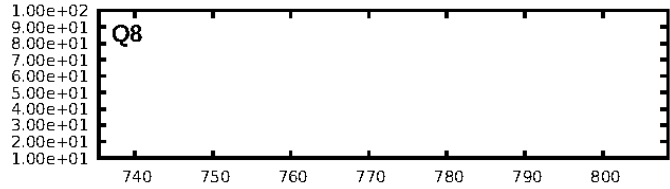
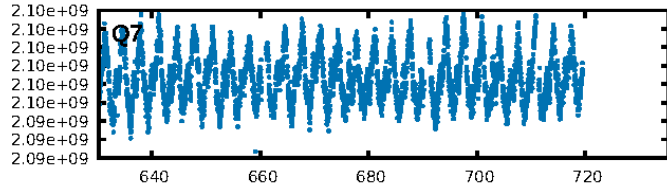
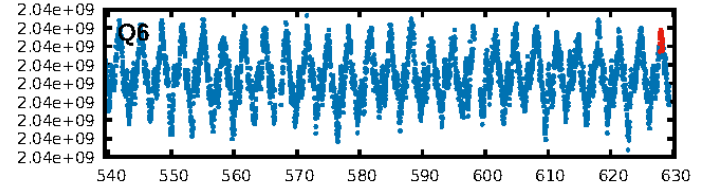
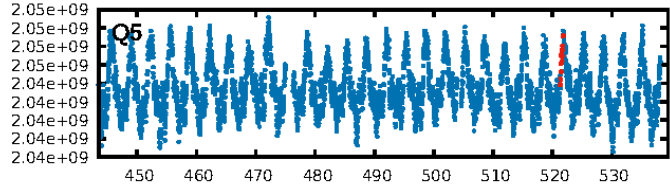
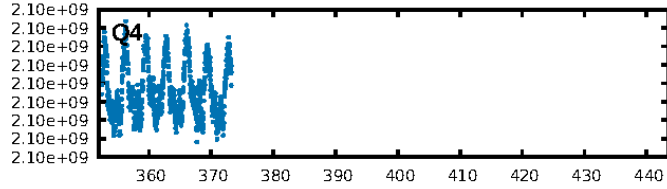
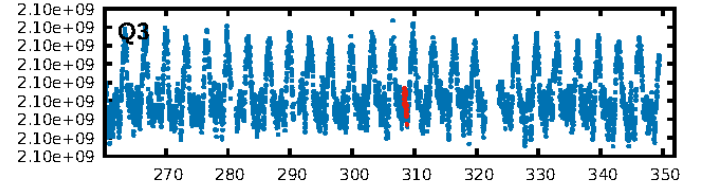
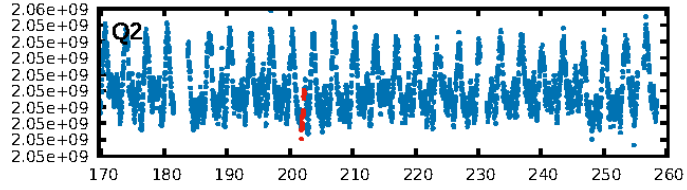
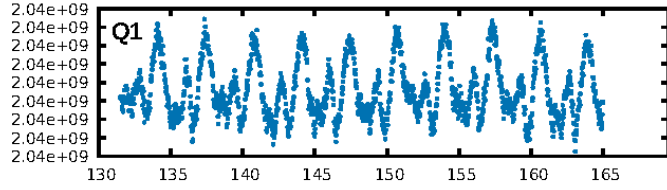
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [45.28 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 42.9%
ModelChiSquareGof-sig: 99.5%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: N/A
Centroid-sig: 73.0%
Centroid-so: 0.400 arcsec [0.60 σ]
OotOffset-rm: 4.693 arcsec [2.10 σ]
KicOffset-rm: 4.468 arcsec [2.36 σ]
OotOffset-st: 3/2/0/2 [7]
KicOffset-st: 3/2/0/2 [7]
DiffImageQuality-fgm: 0.00 [0/7]
DiffImageOverlap-fno: 0.14 [1/7]

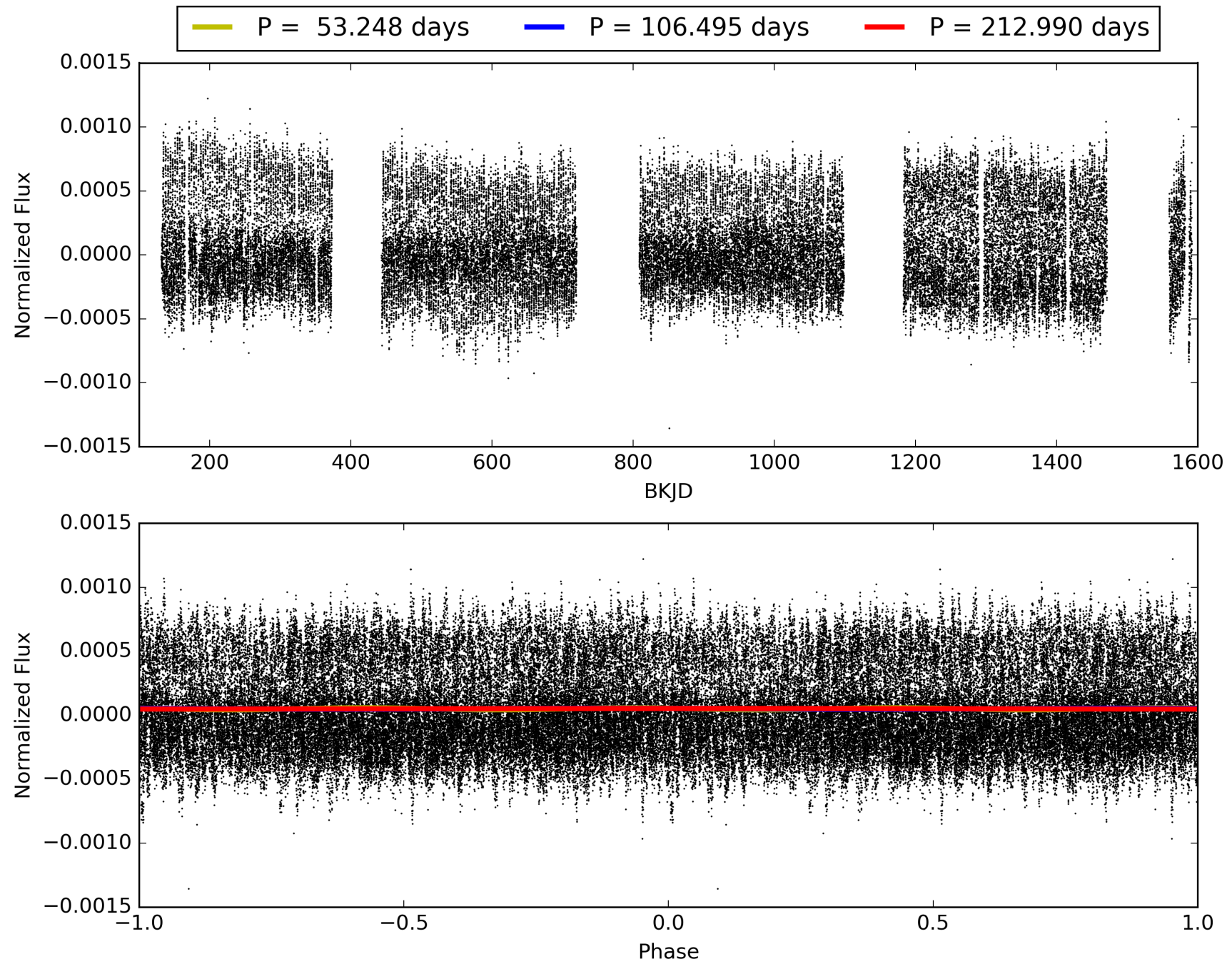
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:14:48 Z

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

TCE 010652379-09, PDC Light Curves

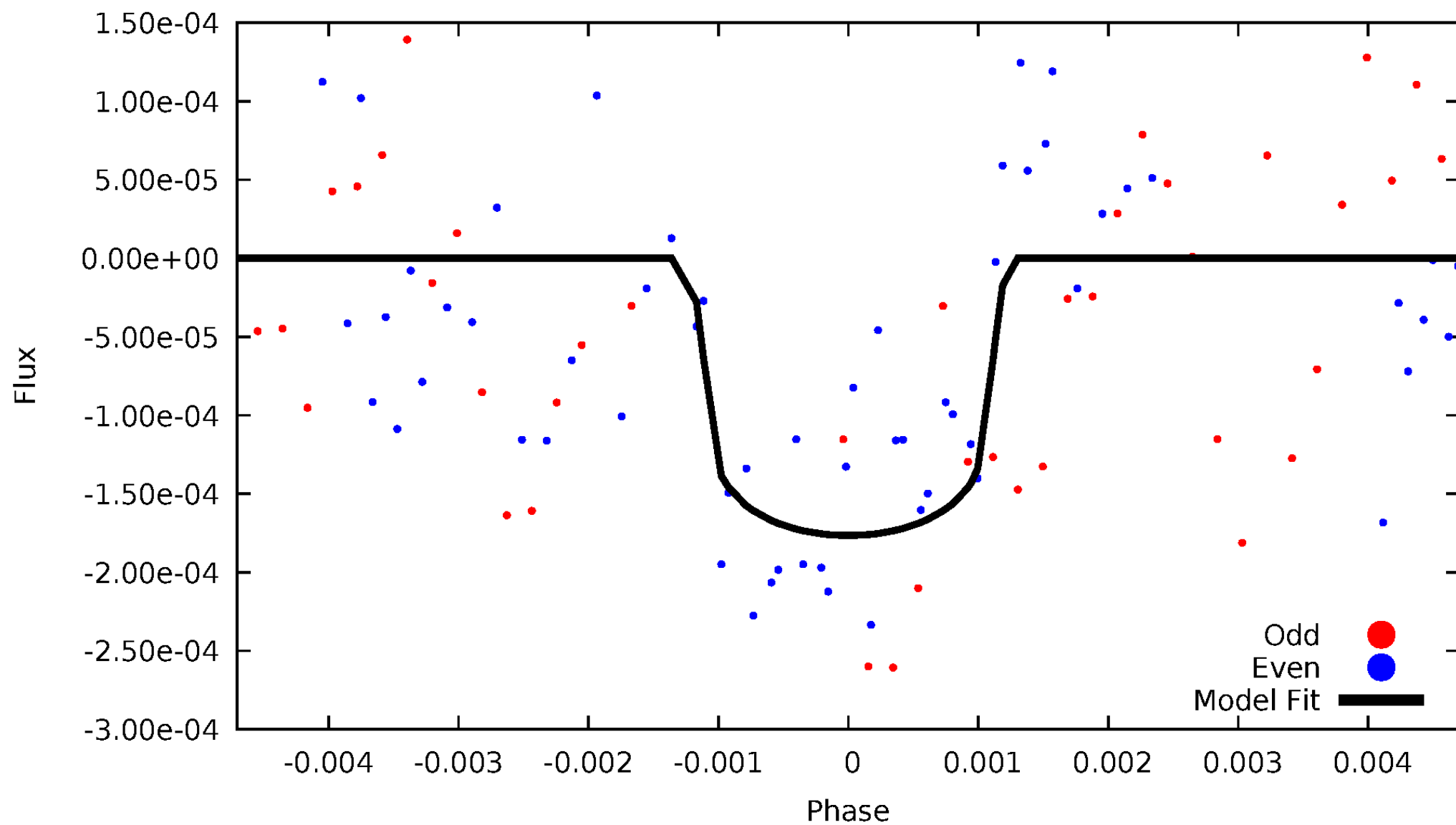


TCE 010652379-09



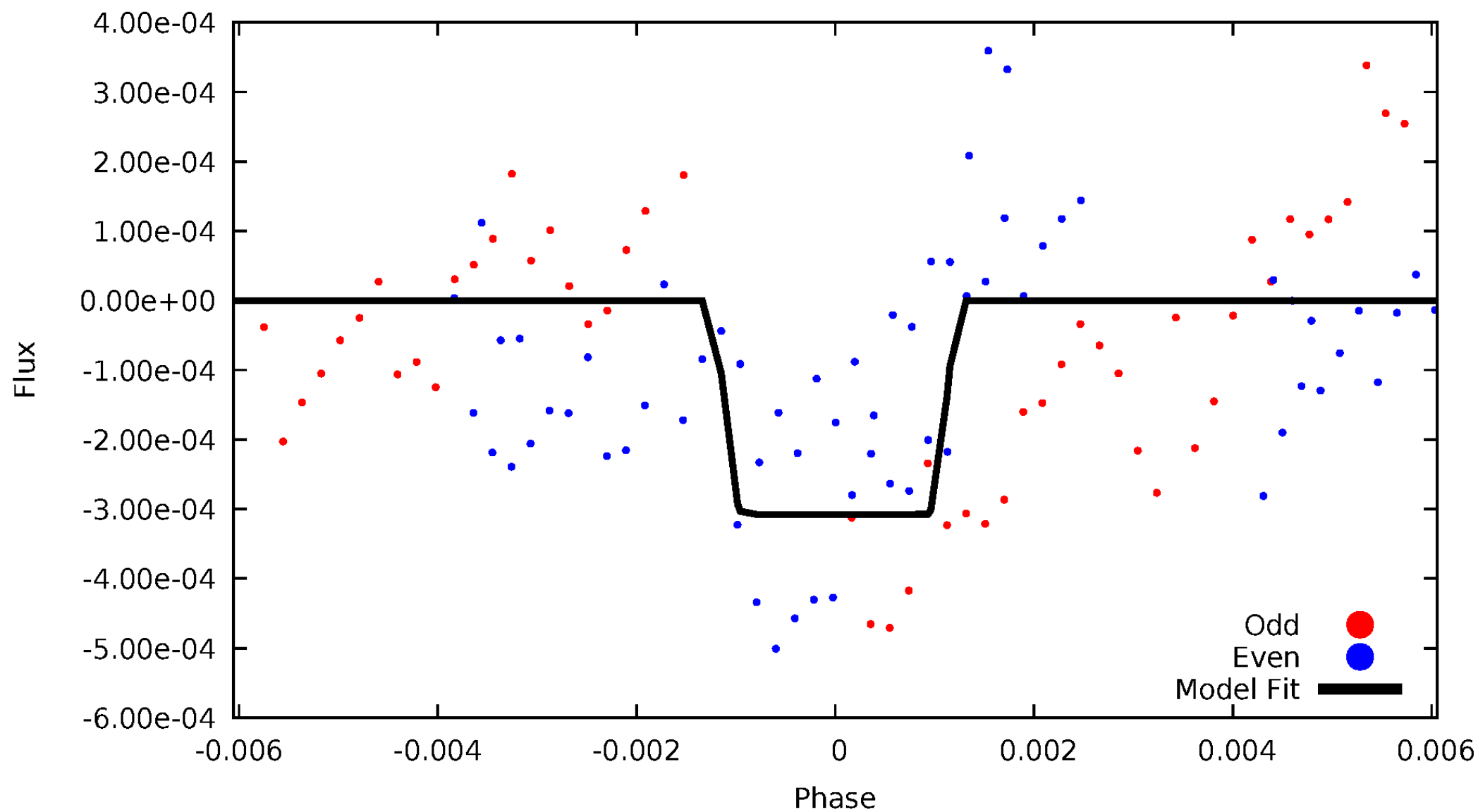
DV Odd/Even

TCE 010652379-09



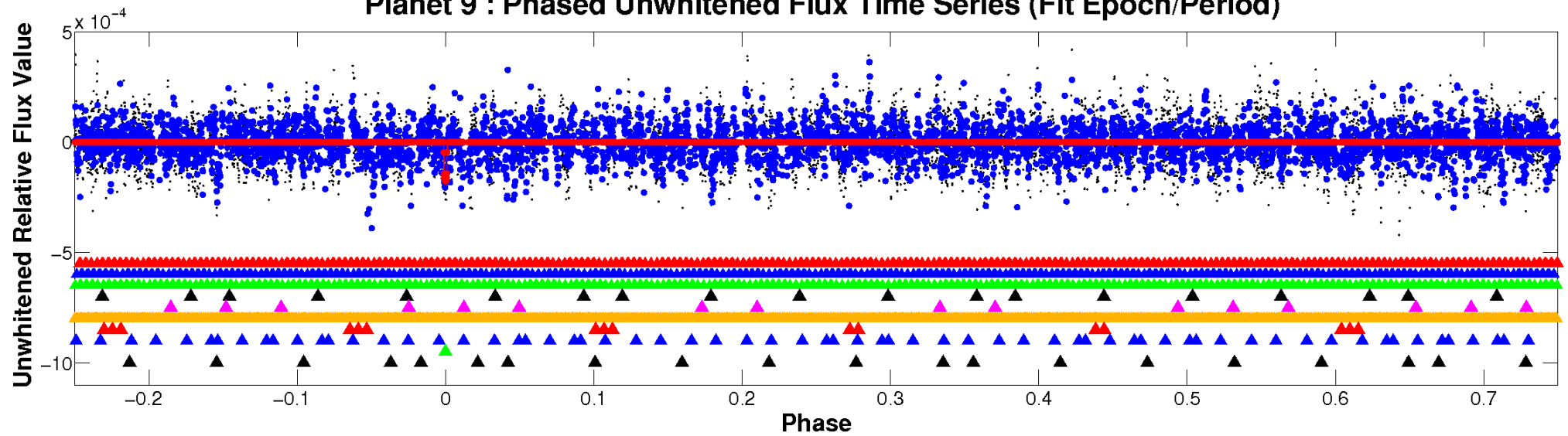
ALT Odd/Even

TCE 010652379-09

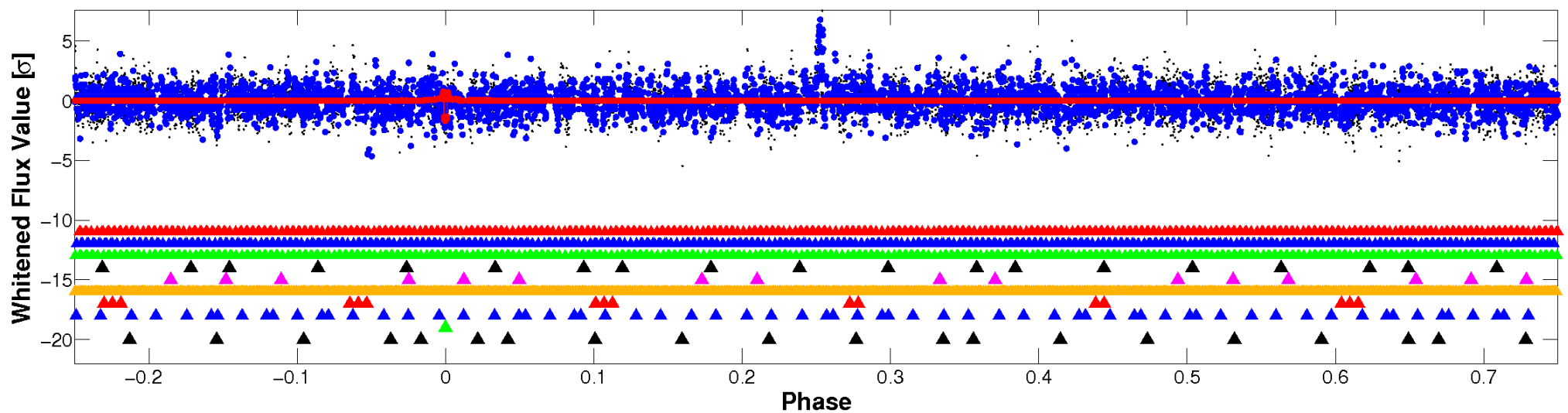


Non-Whitened Vs. Whitened Light Curve

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

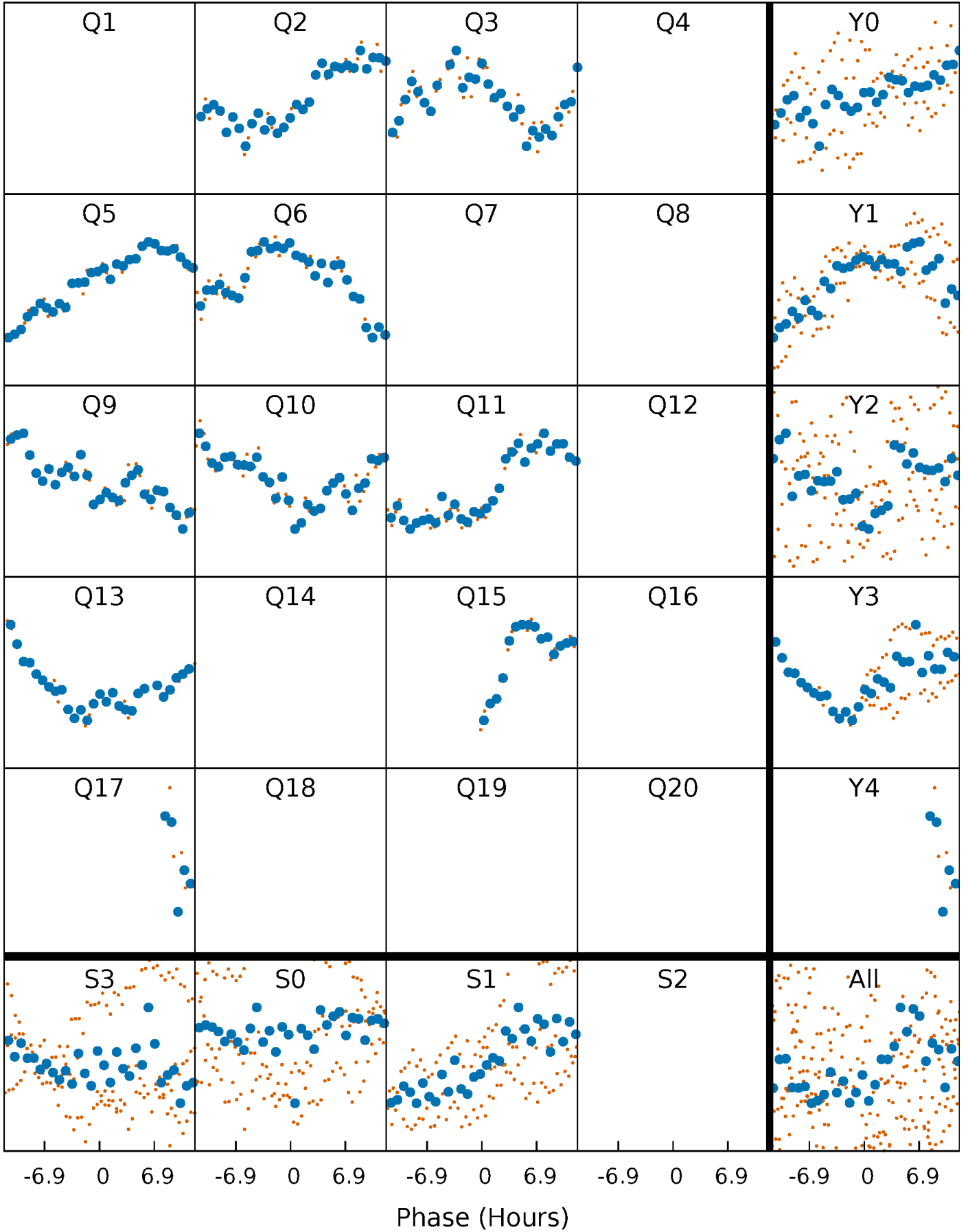


Planet 9 : Phased Whitened Flux Time Series (Fit Epoch/Period)



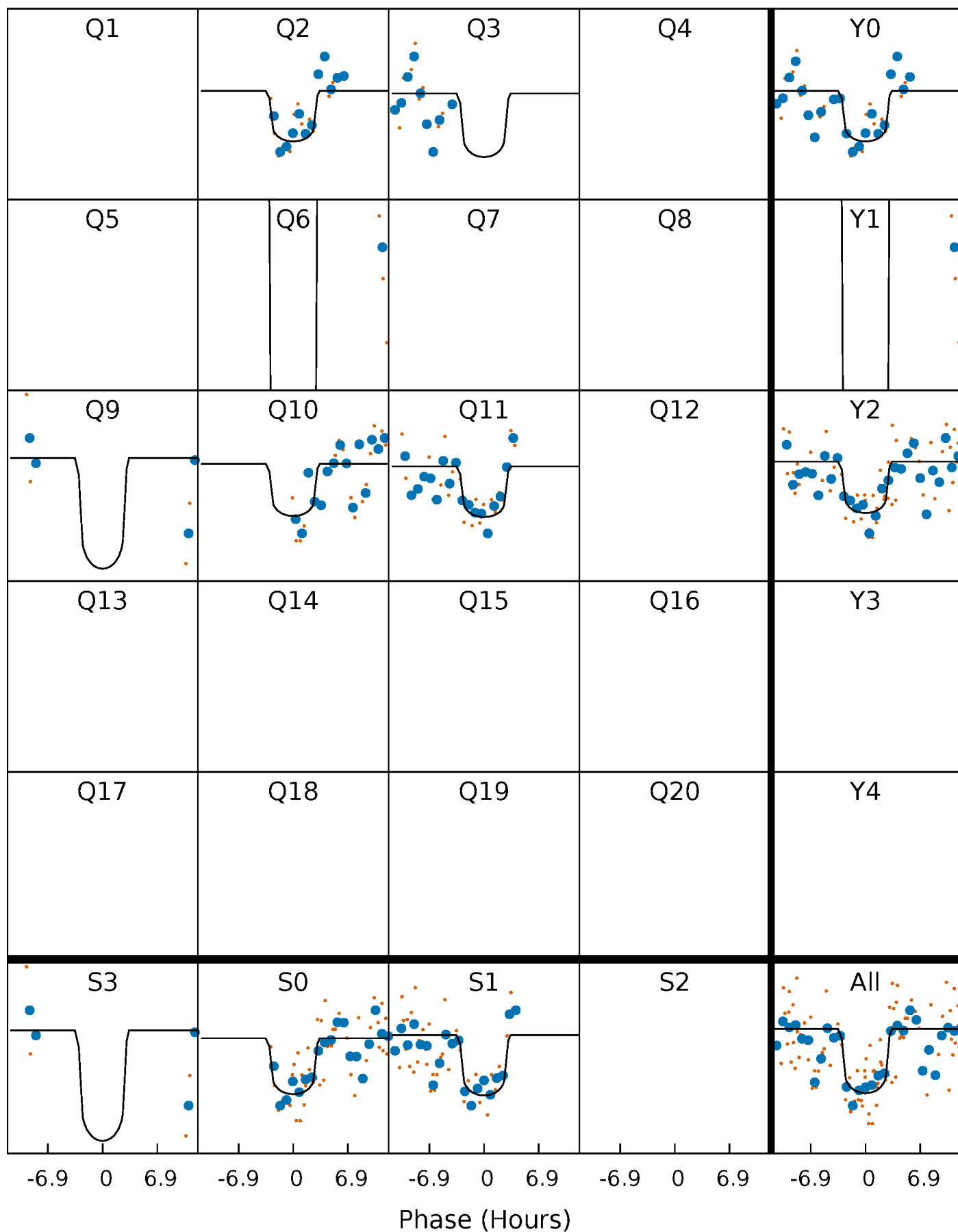
PDC Quarter-Phased Transit Curves

TCE 010652379-09 $P=106.495223$ Days $T_0=202.067155$ (BKJD)



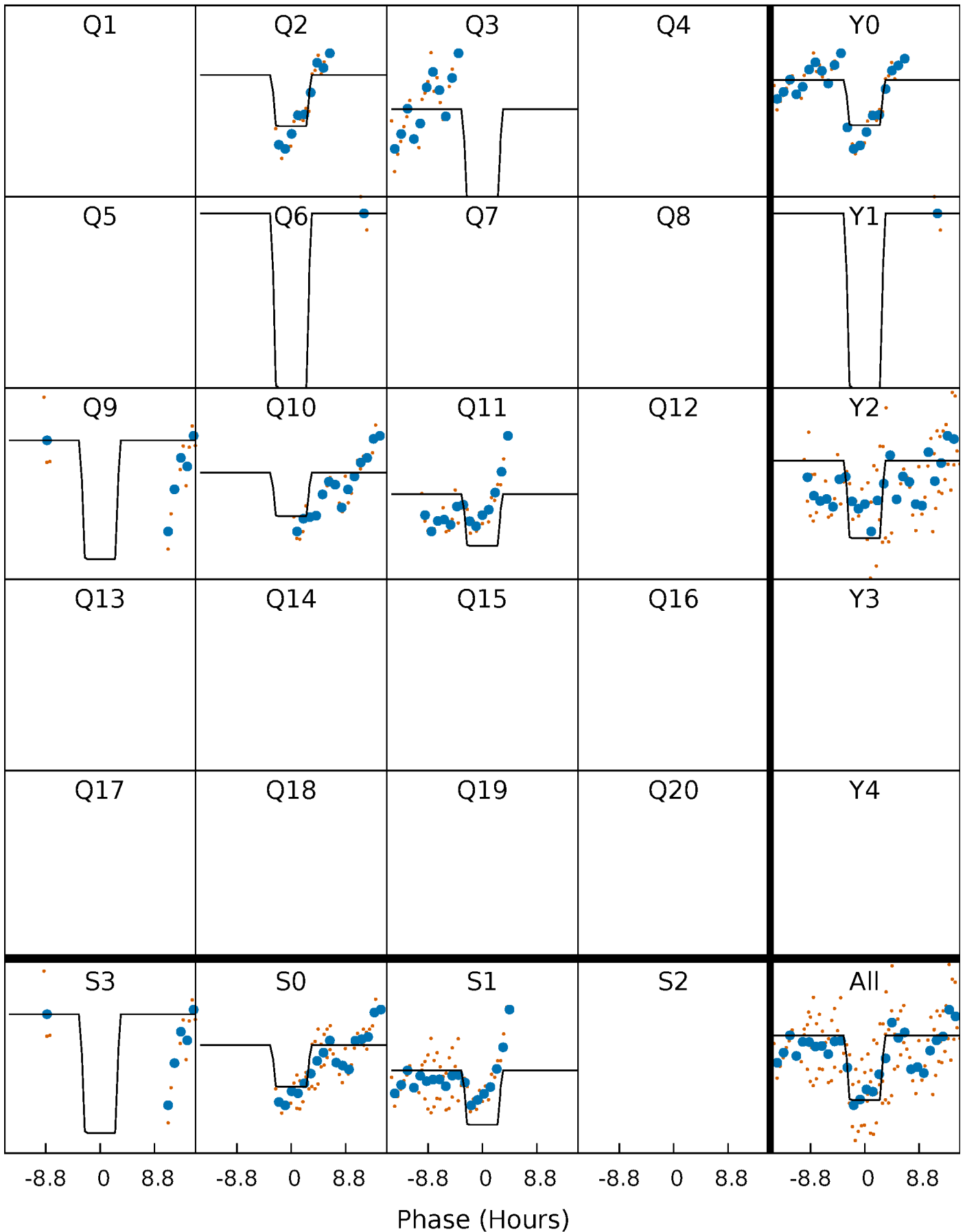
DV Quarter-Phased Transit Curves

TCE 010652379-09 $P=106.495223$ Days $T_0=202.067155$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

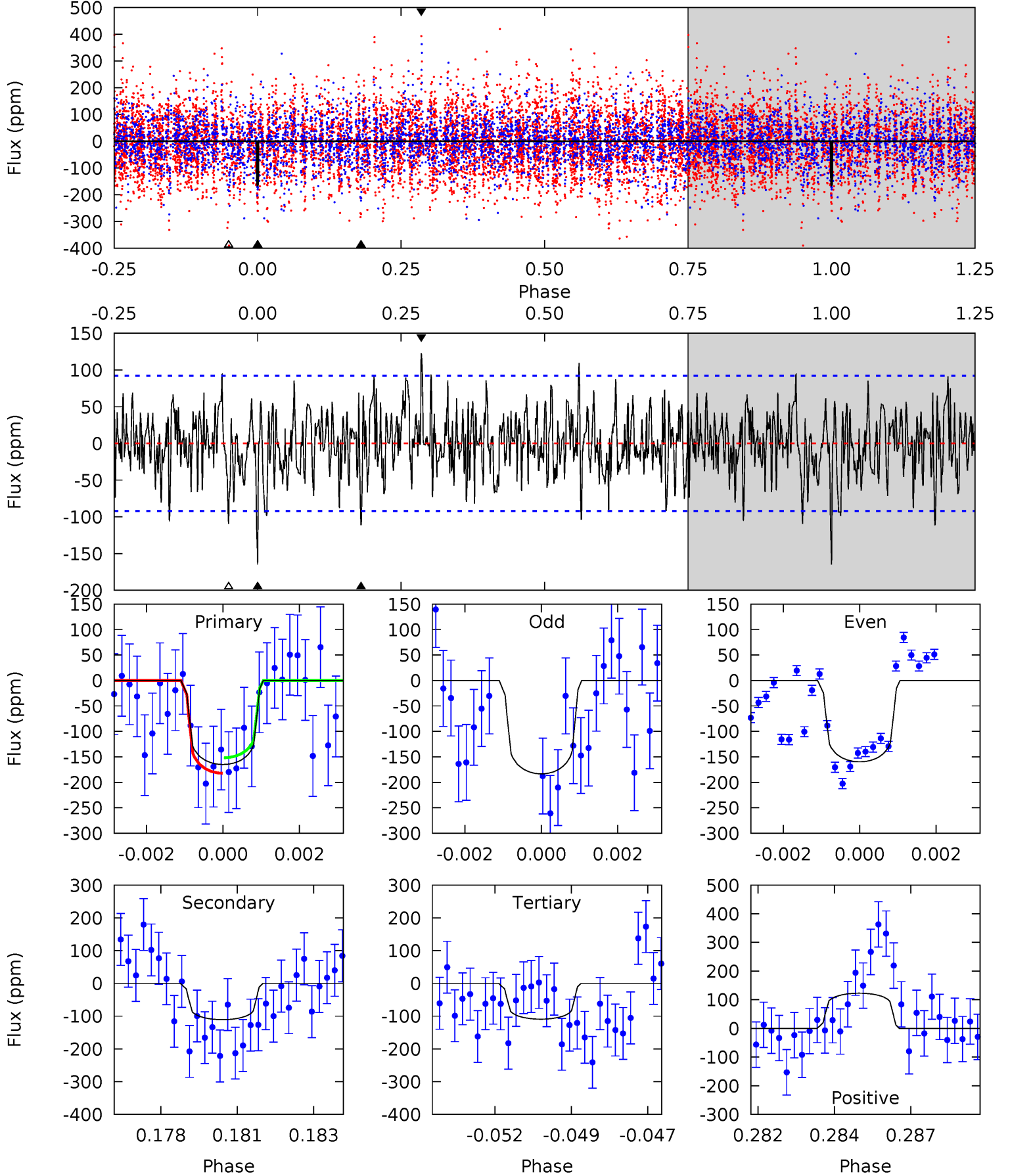
TCE 010652379-09 P=106.494144 Days $T_0=202.053089$ (BKJD)



DV Model-Shift Uniqueness Test

010652379-09, P = 106.495223 Days, E = 95.571932 Days

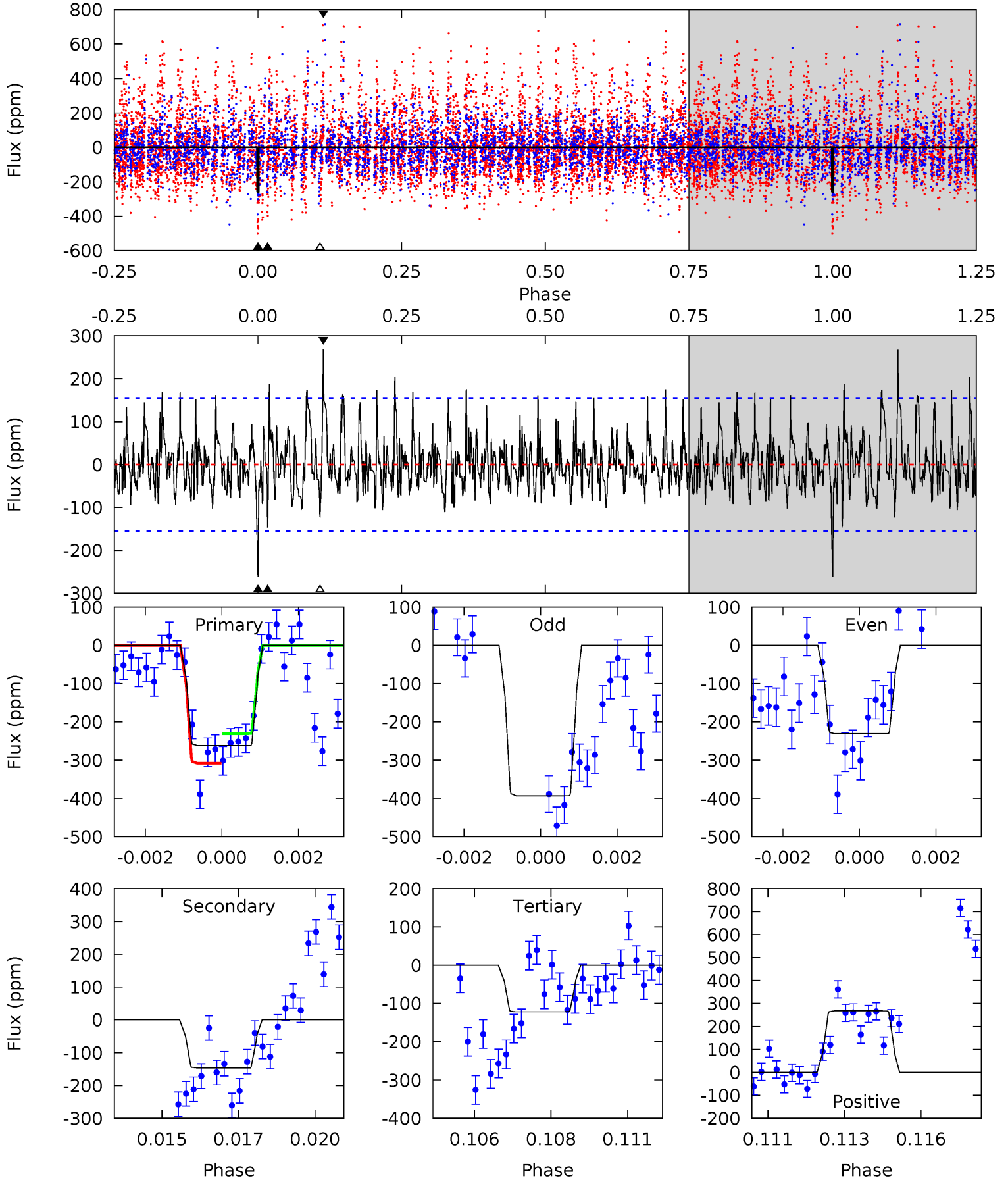
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.47	6.36	6.28	7.06	5.29	3.03	1.99	3.20	2.42	0.08	-0.70	0.57	1.02	0.43	0.86



Alt Model-Shift Uniqueness Test

010652379-09, P = 106.494144 Days, E = 95.558945 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.92	4.99	4.15	9.12	5.29	3.03	1.90	4.77	-0.20	0.84	-4.13	2.19	0.81	0.51	1.28



Stellar Parameters For KIC 010652379

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6649^{+166}_{-183}	$3.749^{+0.304}_{-0.095}$	$-0.280^{+0.300}_{-0.250}$	$2.654^{+0.489}_{-0.908}$	$1.443^{+0.264}_{-0.264}$	$0.109^{+0.209}_{-0.032}$
	+2%/-3%	+8%/-3%	+107%/-89%	+18%/-34%	+18%/-18%	+192%/-30%
Source	PHO1	FLK73	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 010652379-09 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-111 ± 17	$3.77^{+2.16}_{-1.95}$	925^{+56}_{-80}	5699^{+2750}_{-917}	1044^{+3371}_{-603}
Alt.	-146 ± 29	$4.84^{+2.24}_{-2.26}$	927^{+56}_{-85}	5555^{+1699}_{-867}	881^{+2146}_{-486}

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 $A_{obs} \gg 1.0$

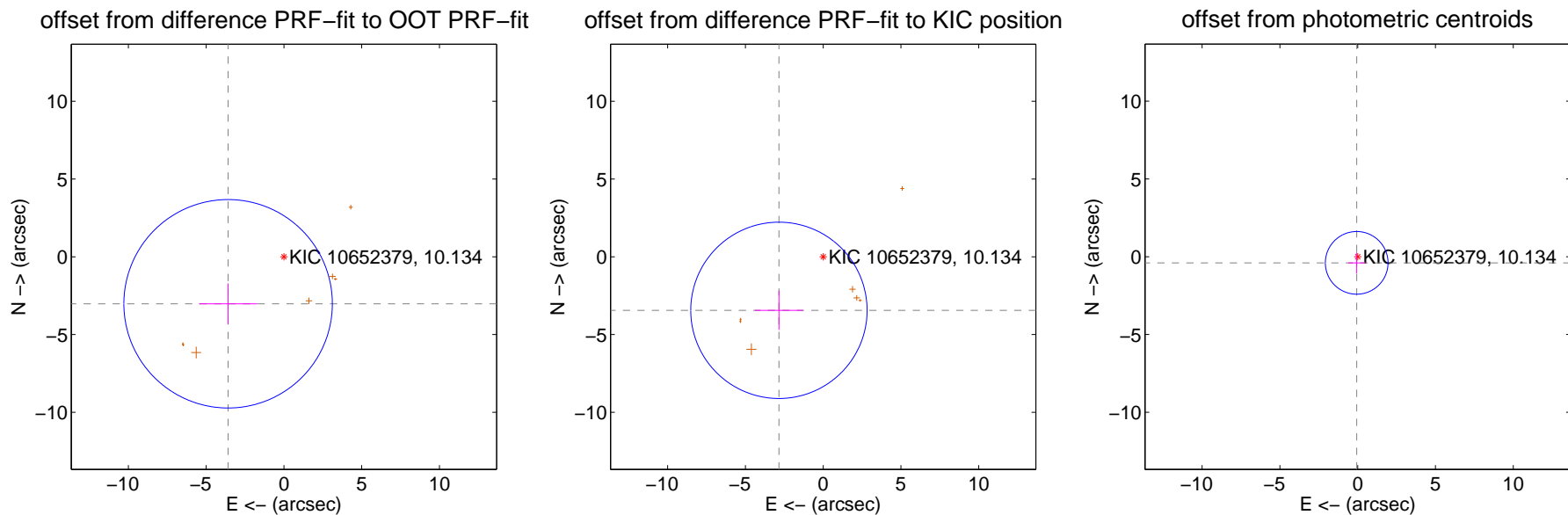
DV Centroid Data

Supplemental centroid analysis for 010652379-09. **Kepler magnitude: 10.13.** Transit SNR 8.38

There are 0 quarters with good PRF difference image offsets

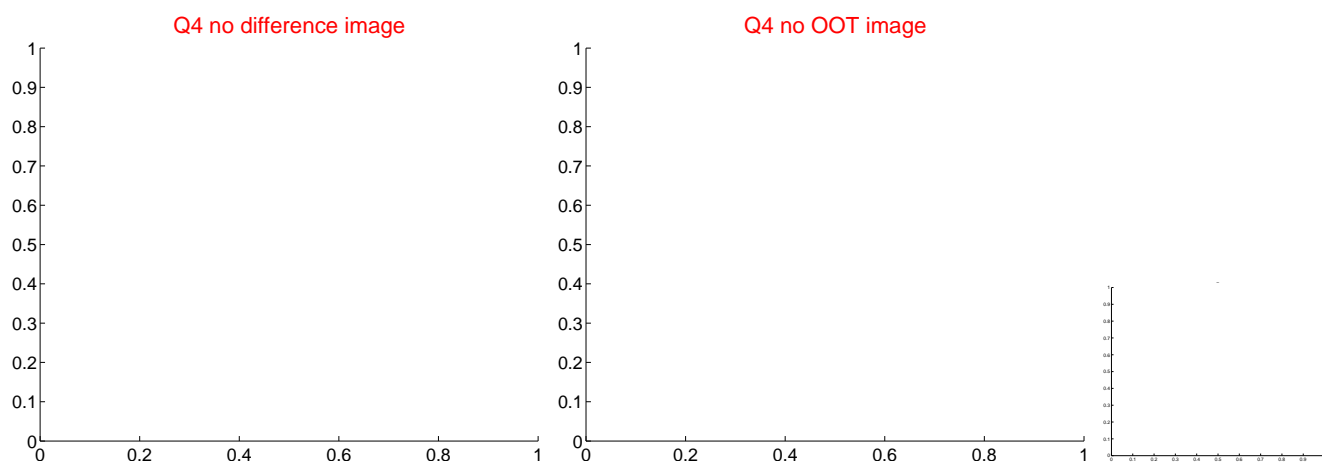
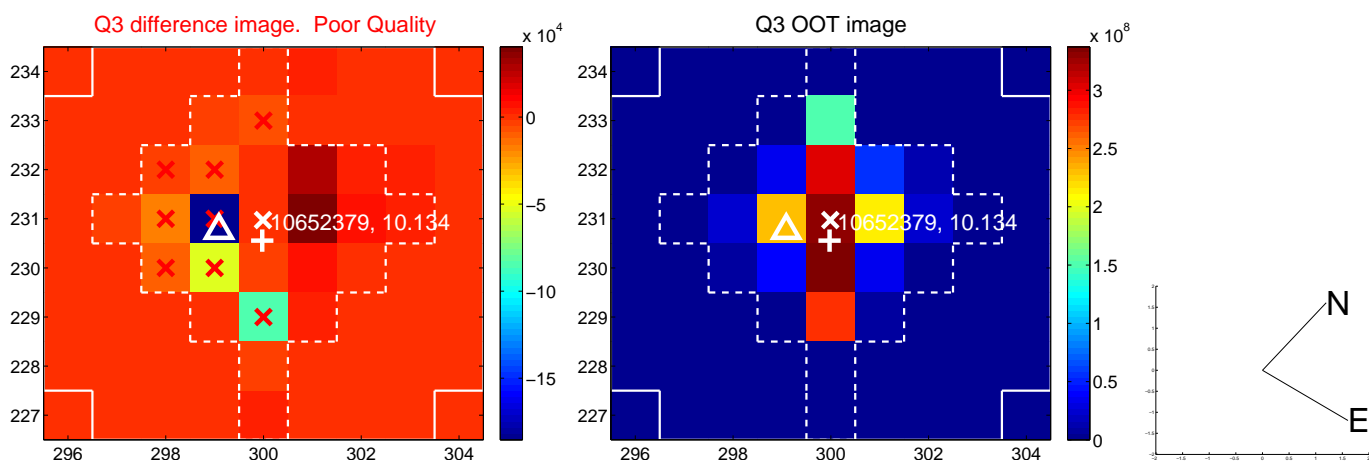
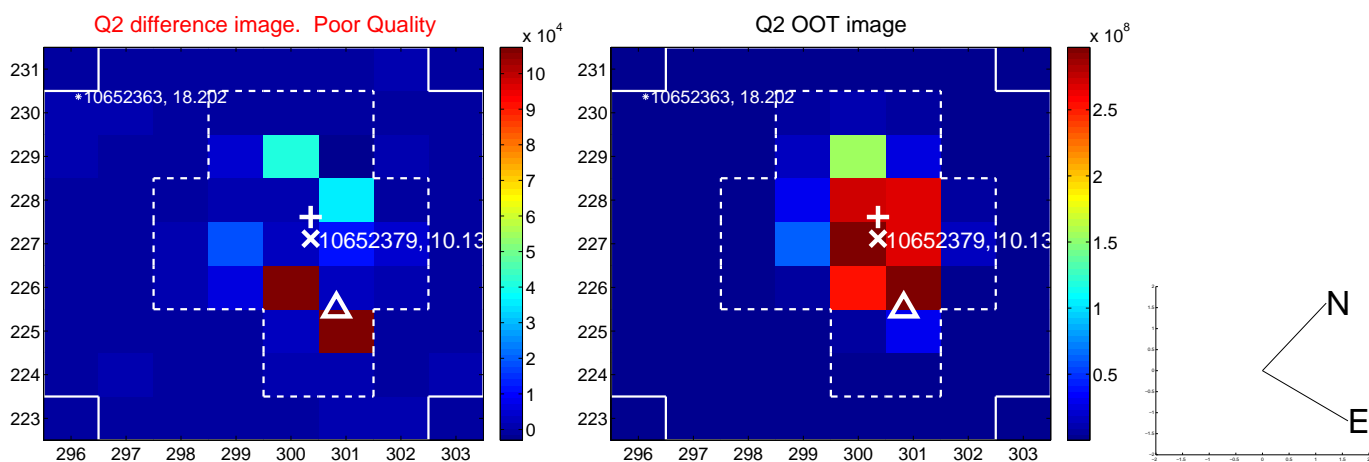
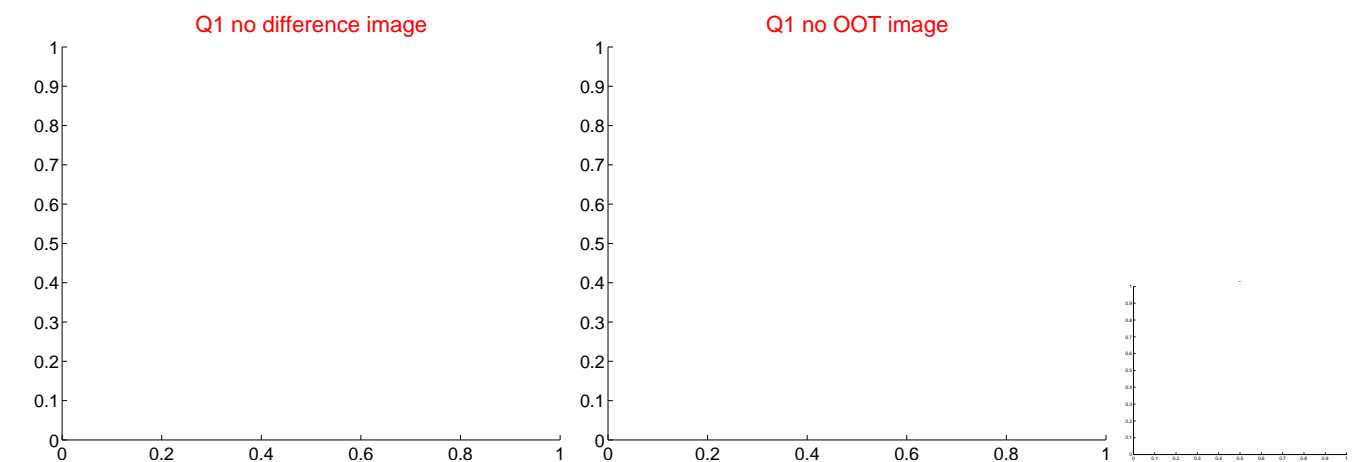
The direct PRF centroid is offset from the target star catalog position by about 1.69 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.693 ± 2.234	2.10	3.590 ± 1.878	-3.024 ± 1.313
PRF-fit source offset from KIC position	4.468 ± 1.890	2.36	2.846 ± 1.551	-3.444 ± 1.258
photometric centroid source offset	0.40 ± 0.67	0.60	0.06 ± 0.54	-0.40 ± 0.67

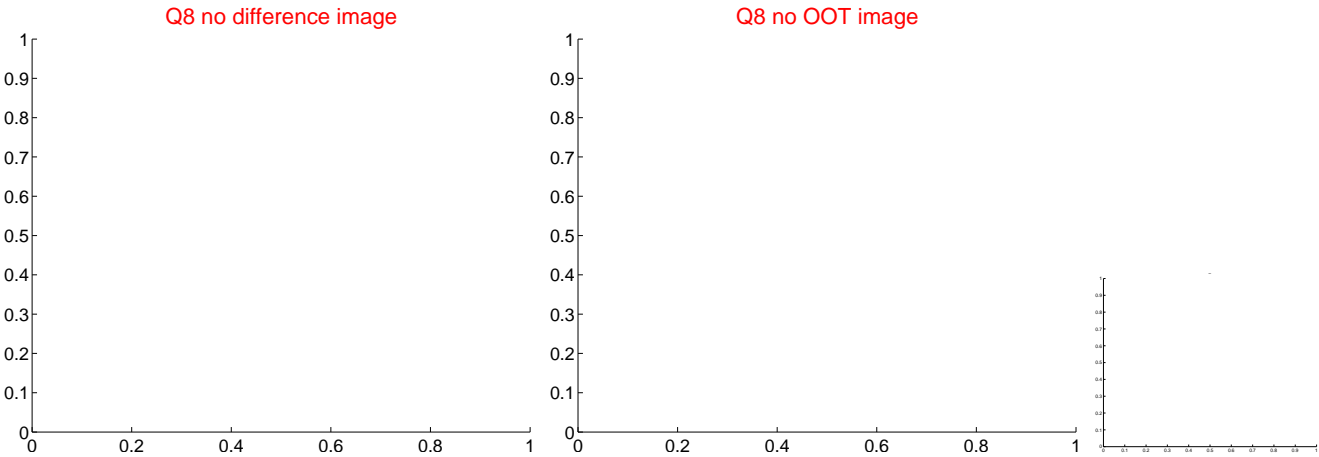
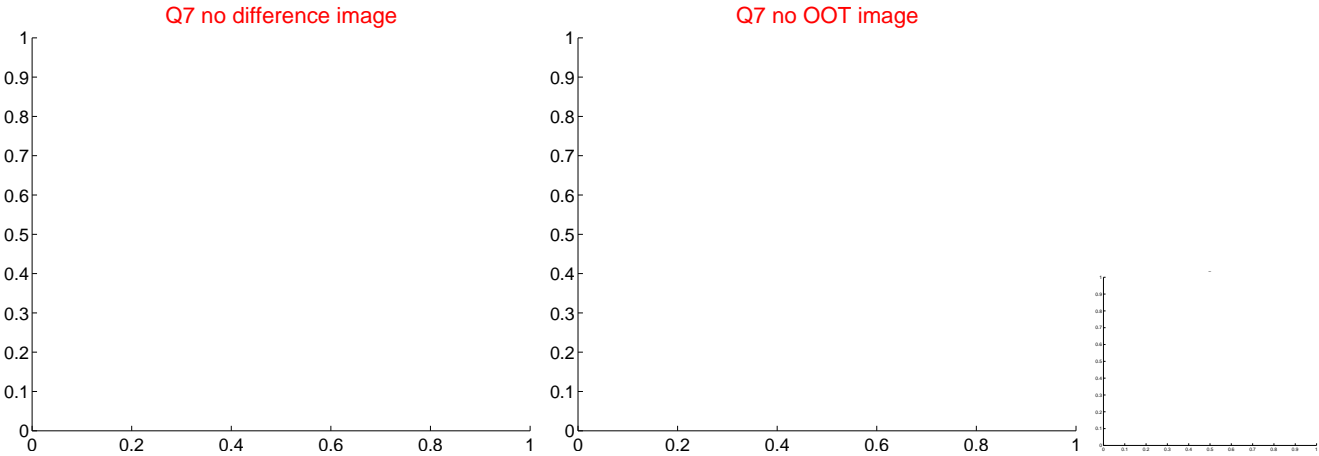
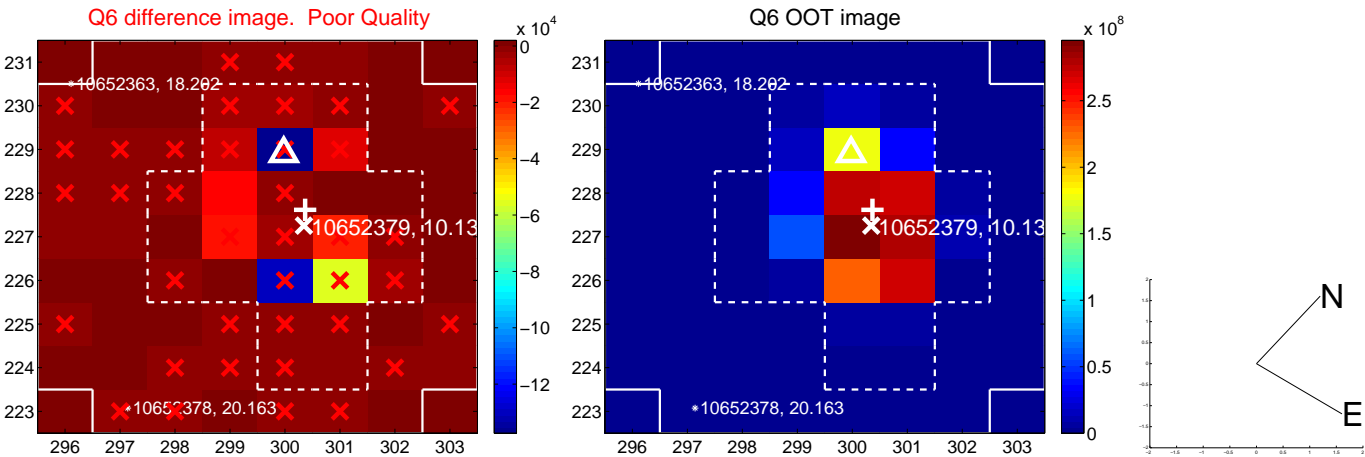
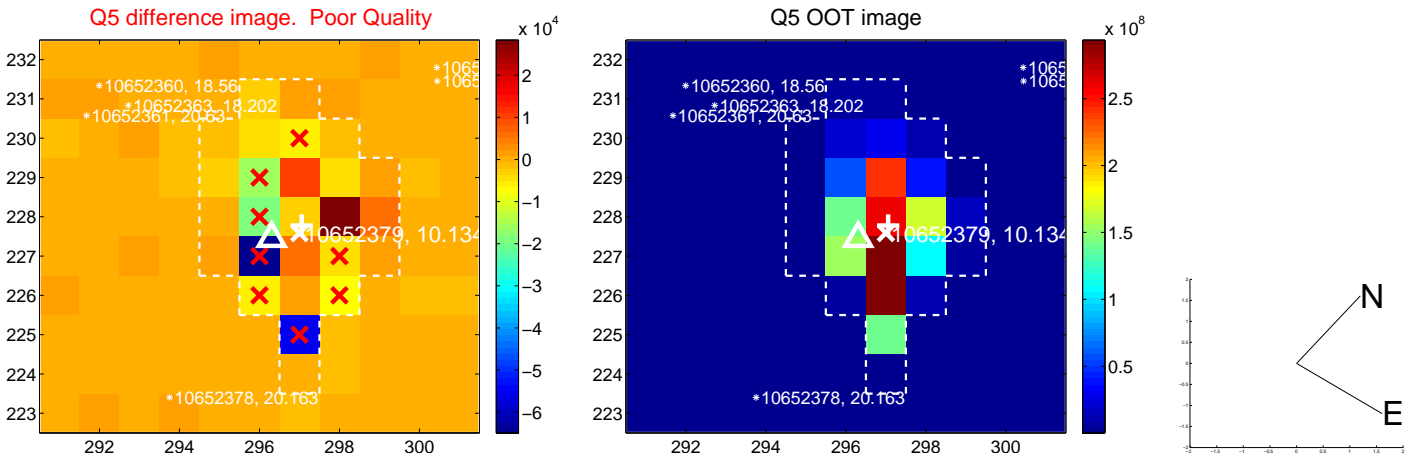


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

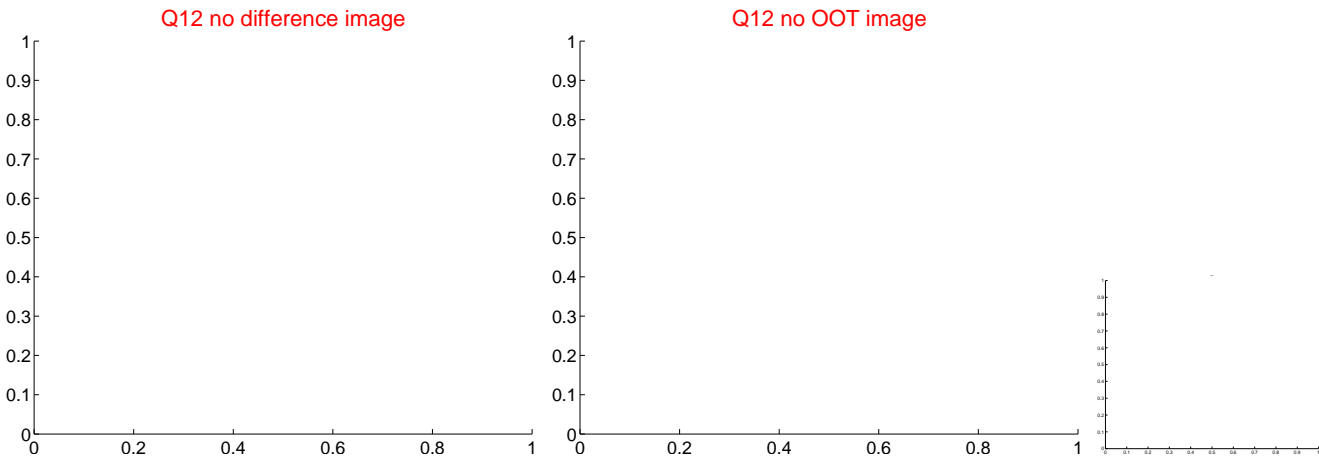
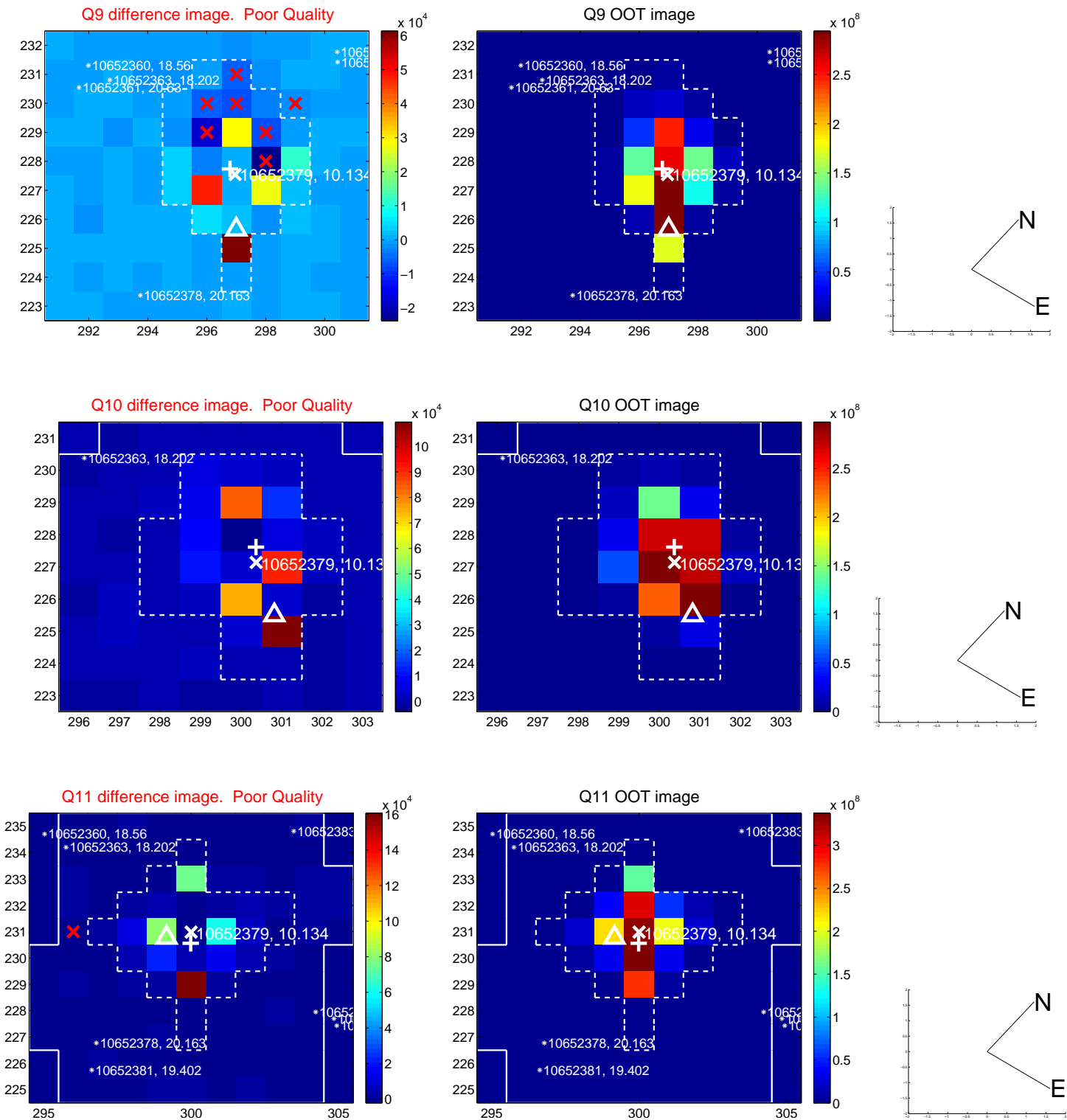
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



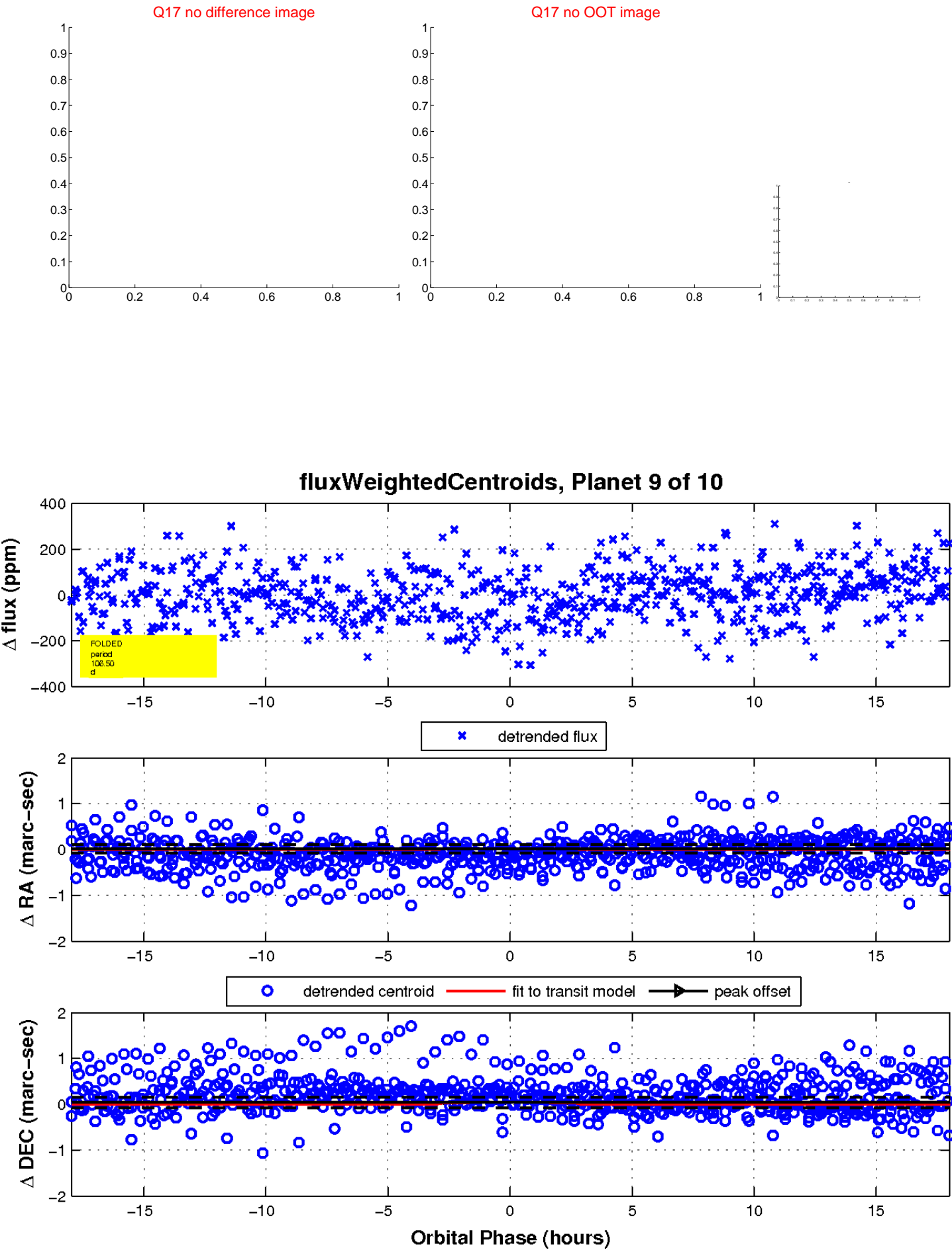
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



This plot does not exist for this TCE.

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})
010652379-01	OBS	No	3.314708	133.196939	56.4	6.019	11.1	12.3	2.65	6649	4.05	5104.19
010652379-02	OBS	No	3.314624	131.743175	34.5	5.989	10.9	10.5	2.65	6649	1.84	5104.36
010652379-03	OBS	No	3.314671	133.663432	19.7	14.851	10.8	6.4	2.65	6649	1.43	5104.26
010652379-04	OBS	No	78.280988	161.932625	205.4	7.495	16.9	9.7	2.65	6649	4.03	75.33
010652379-05	OBS	No	89.406597	199.428664	114.3	6.777	16.6	6.7	2.65	6649	3.33	63.10
010652379-06	OBS	No	1.656077	132.257770	43.0	1.724	11.7	7.0	2.65	6649	1.76	12874.97
010652379-07	OBS	No	88.846588	212.851630	207.0	10.888	8.4	9.1	2.65	6649	4.12	63.63
010652379-08	OBS	No	22.094042	141.525125	82.3	7.323	8.5	8.9	2.65	6649	2.78	406.90
010652379-09	OBS	No	106.495223	202.067155	176.6	6.010	8.2	8.4	2.65	6649	3.99	49.97
010652379-10	OBS	No	73.079893	200.304960	69.2	2.000	7.5	-1.0	2.65	6649	2.23	82.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010652379-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
010652379-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
010652379-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—TRANS_GAPPED—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010652379-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_SATURATED
010652379-10	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

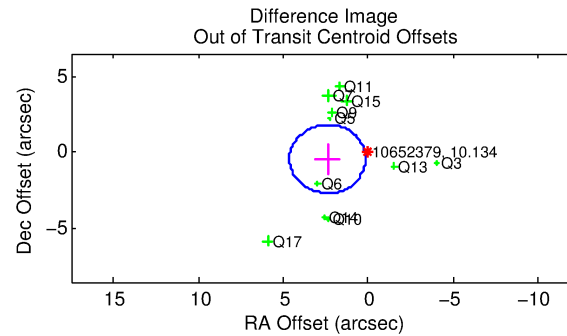
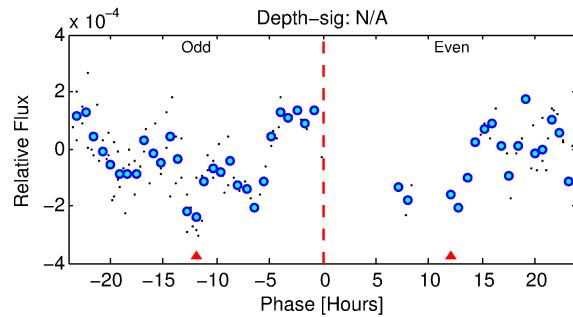
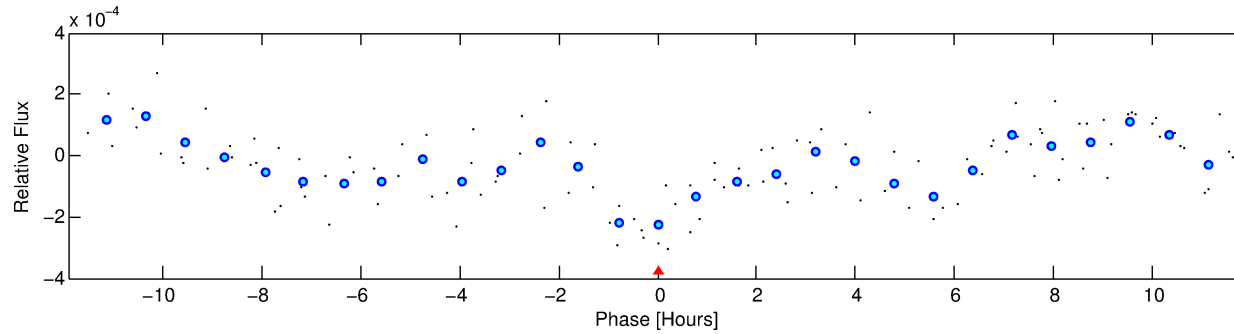
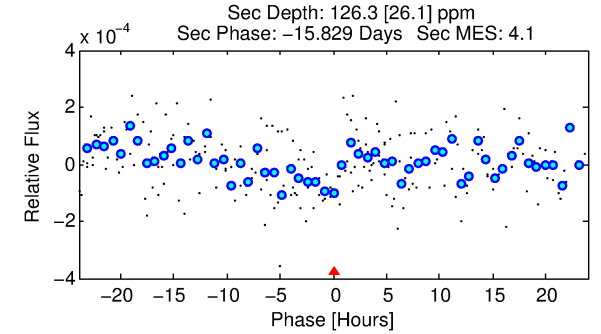
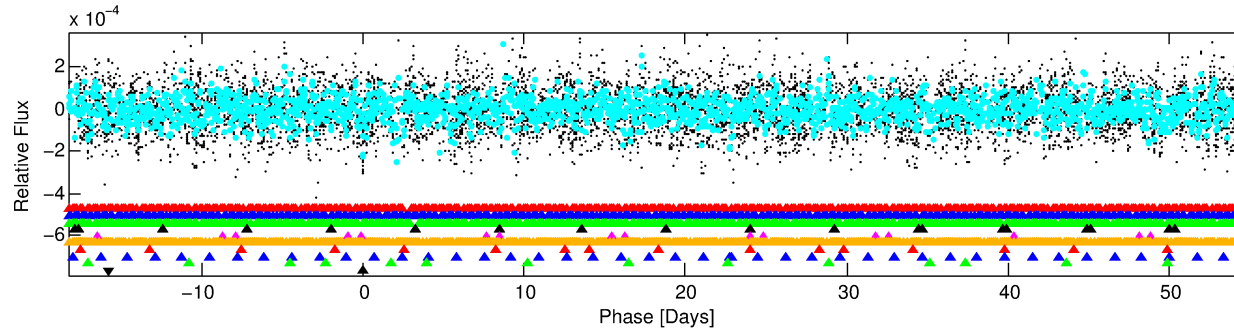
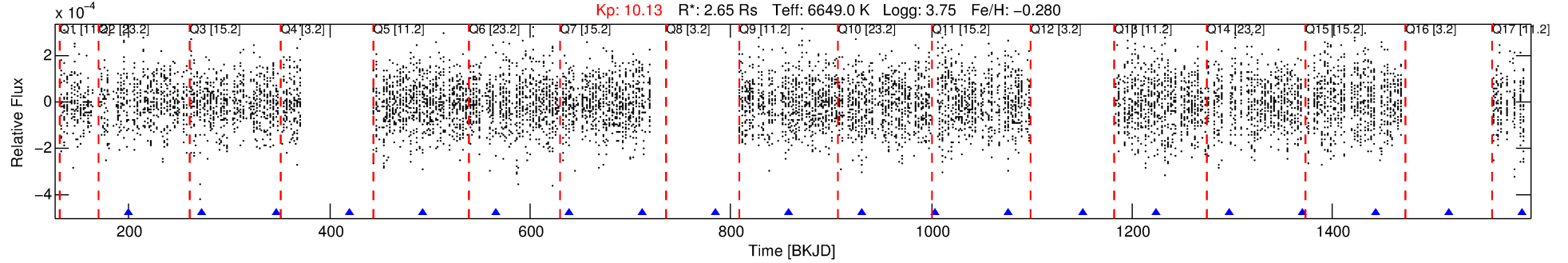
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010652379-10

No Significant Match Found

DV One-Page Summary

KIC: 10652379 Candidate: 10 of 10 Period: 73.080 d



TPS TCE Results:

Period = 73.07989 d
Epoch = 200.3050 BKJD

DV fit results are unavailable

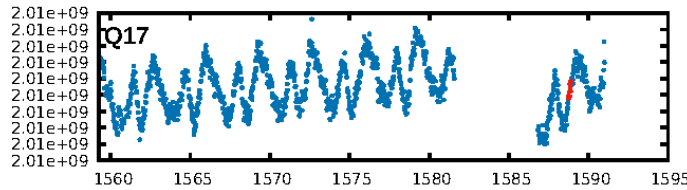
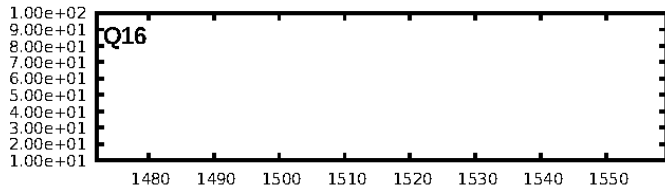
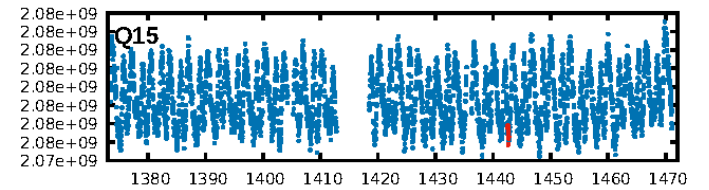
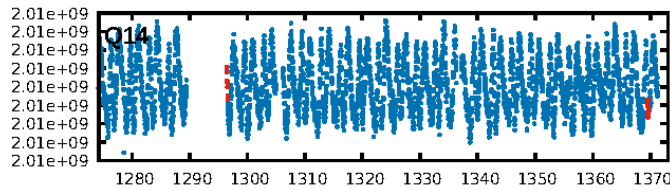
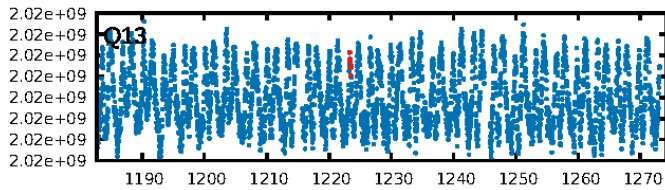
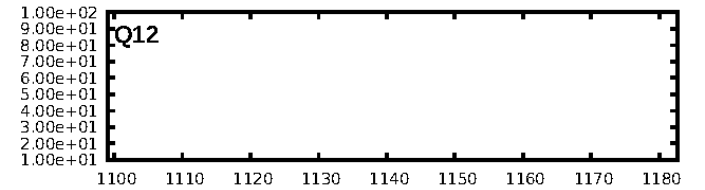
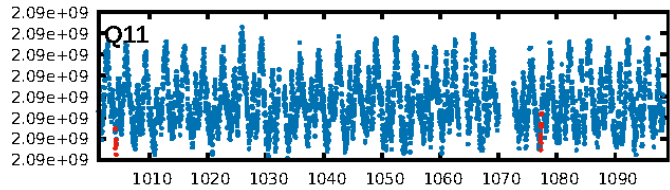
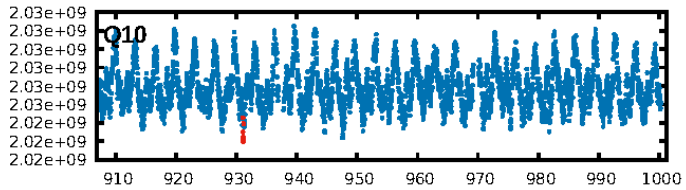
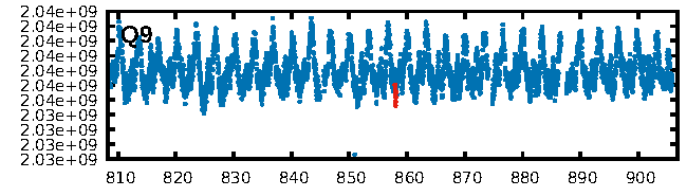
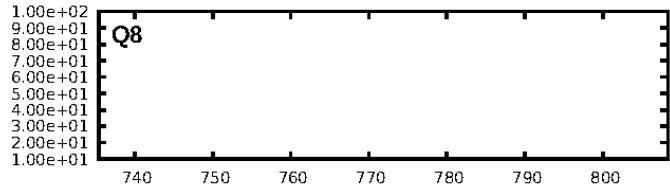
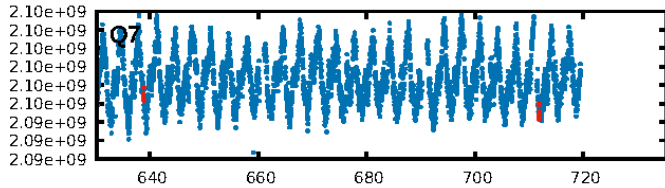
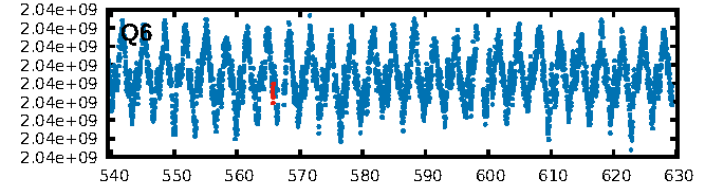
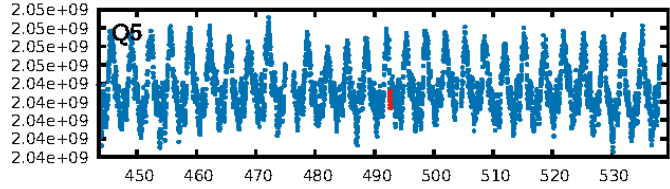
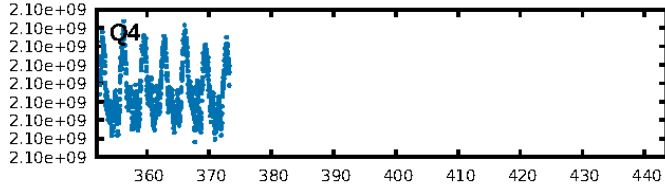
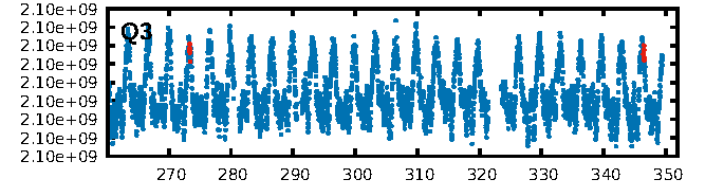
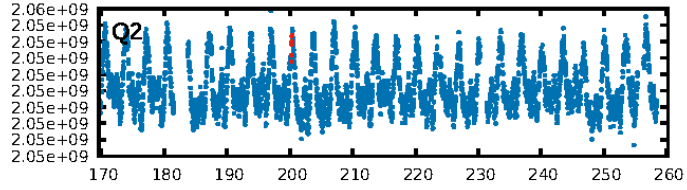
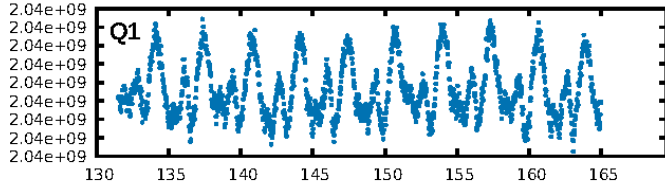
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [161.19 σ]
LongPeriod-sig: 100.0% [16.09 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: N/A
Centroid-sig: 86.2%
Centroid-so: 0.071 arcsec [0.12 σ]
OotOffset-rm: 2.419 arcsec [3.23 σ]
KicOffset-rm: 2.126 arcsec [2.62 σ]
OotOffset-st: 3/4/0/4 [11]
KicOffset-st: 3/4/0/4 [11]
DiffImageQuality-fgm: 0.00 [0/11]
DiffImageOverlap-fno: 0.18 [2/11]

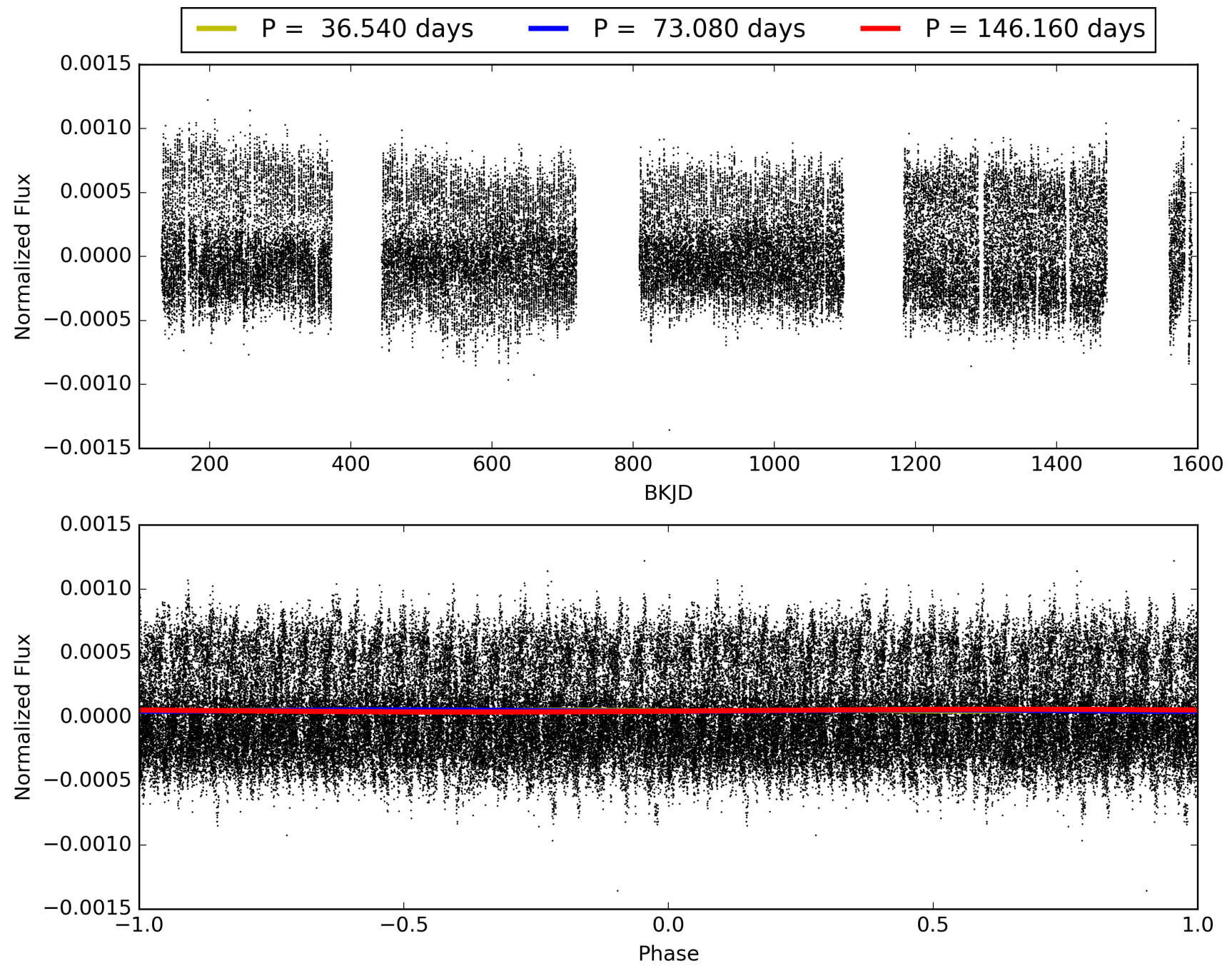
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:14:51 Z

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

TCE 010652379-10, PDC Light Curves

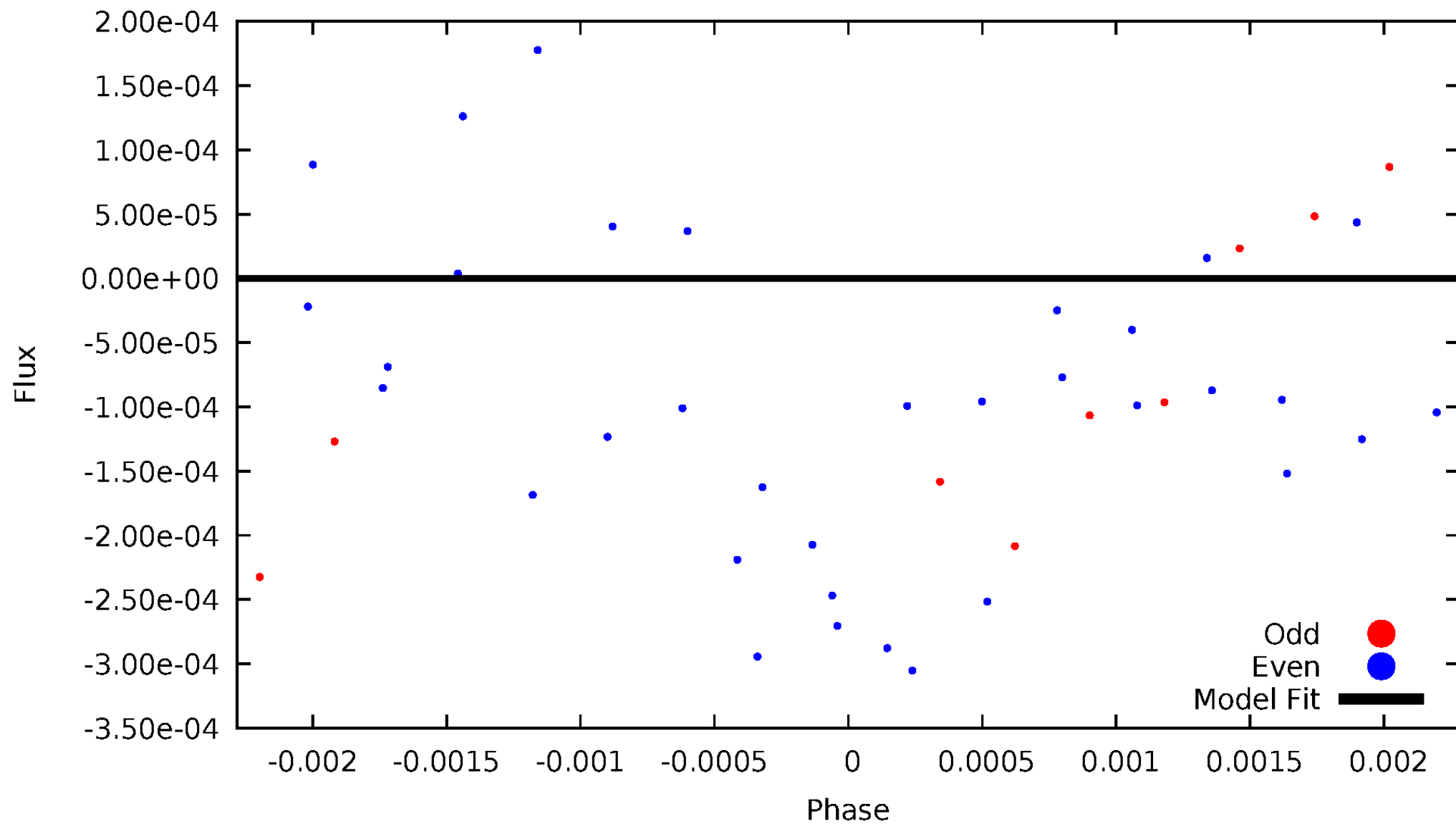


TCE 010652379-10



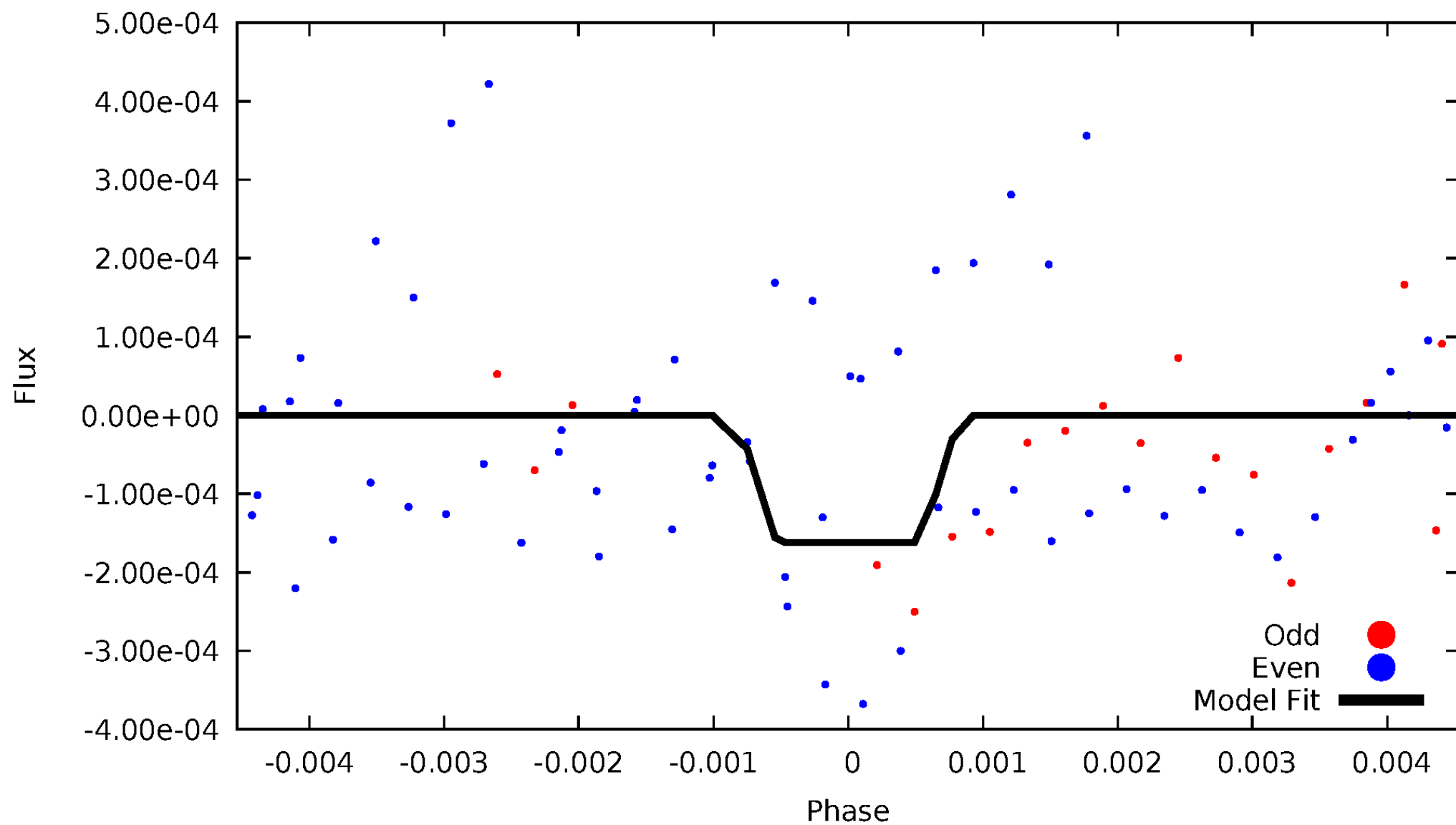
DV Odd/Even

TCE 010652379-10



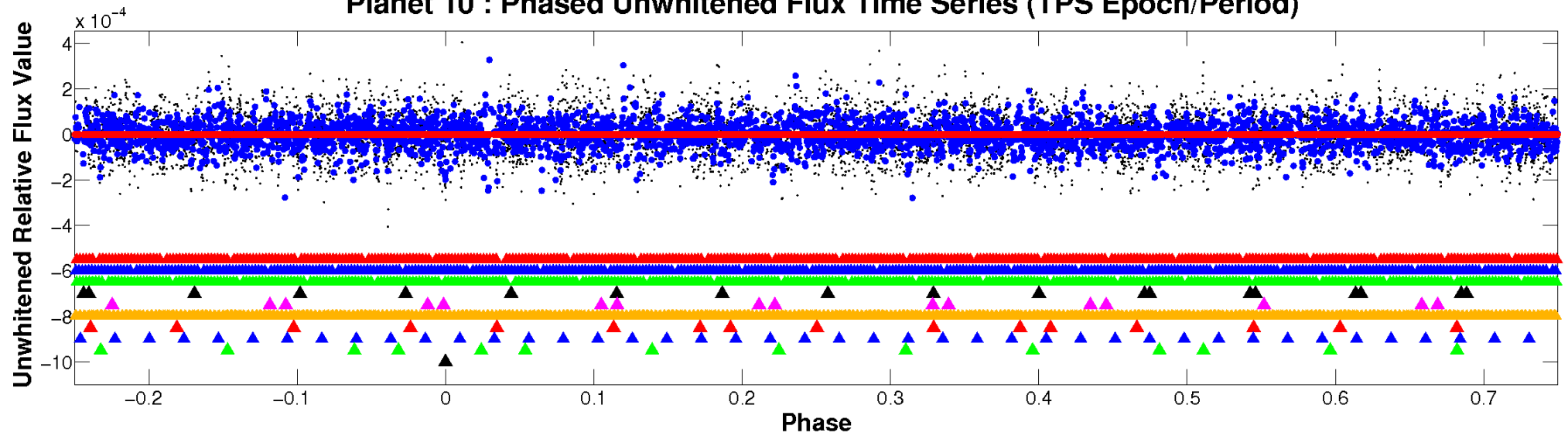
ALT Odd/Even

TCE 010652379-10

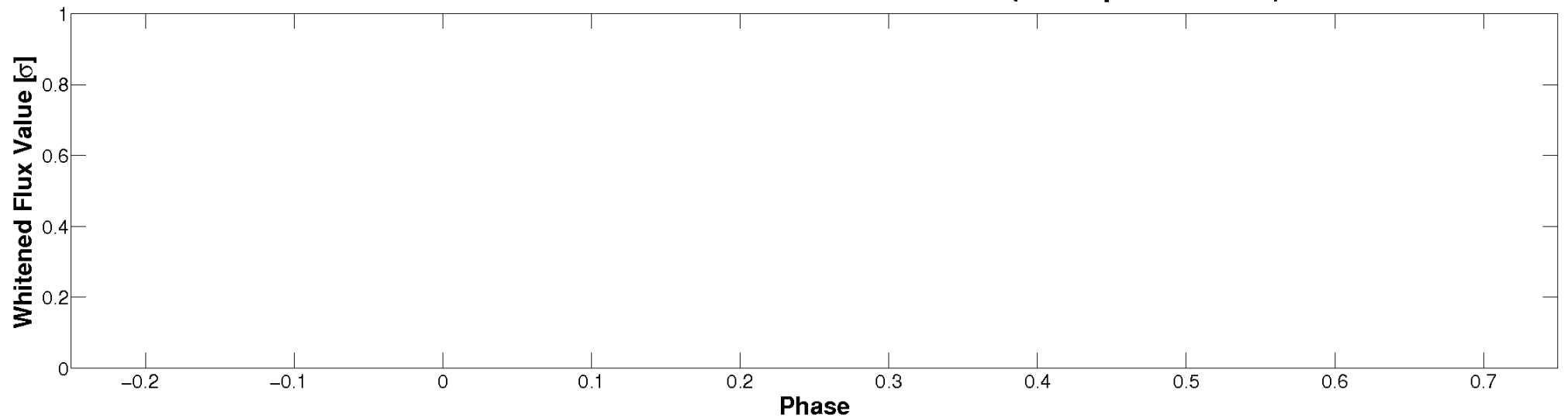


Non-Whitened Vs. Whitened Light Curve

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

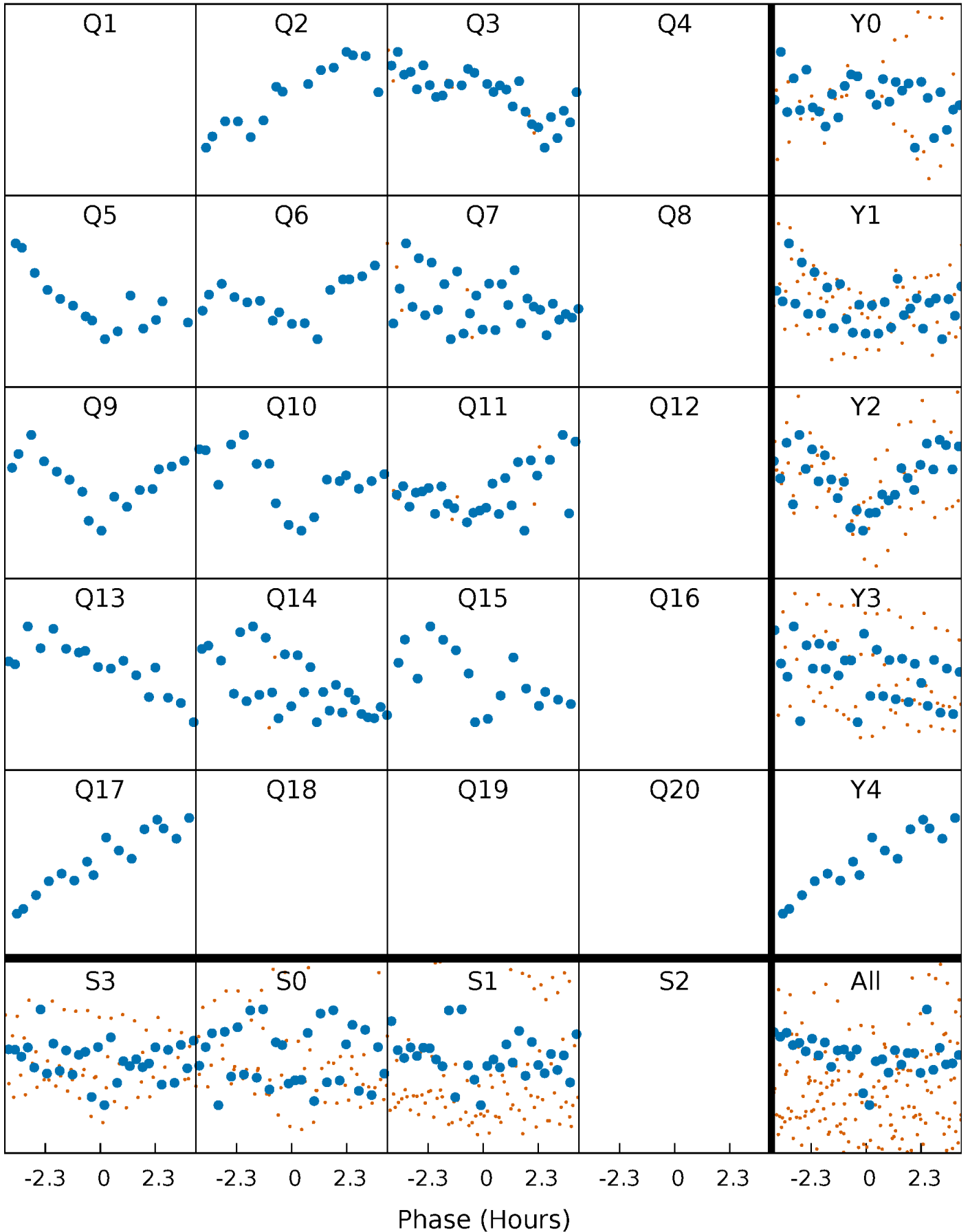


Planet 10 : Phased Whitened Flux Time Series (TPS Epoch/Period)



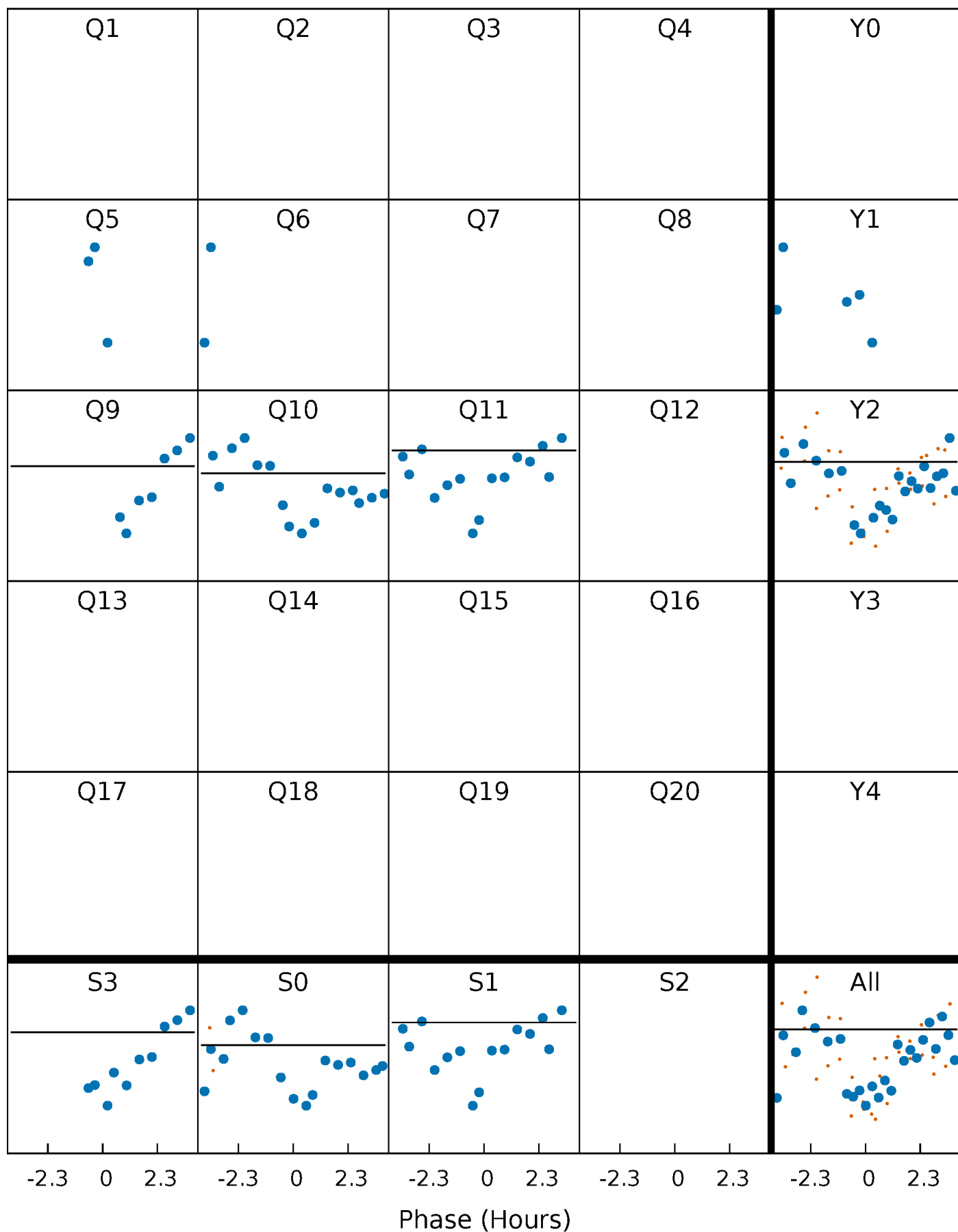
PDC Quarter-Phased Transit Curves

TCE 010652379-10 P= 73.079893 Days $T_0=200.304960$ (BKJD)



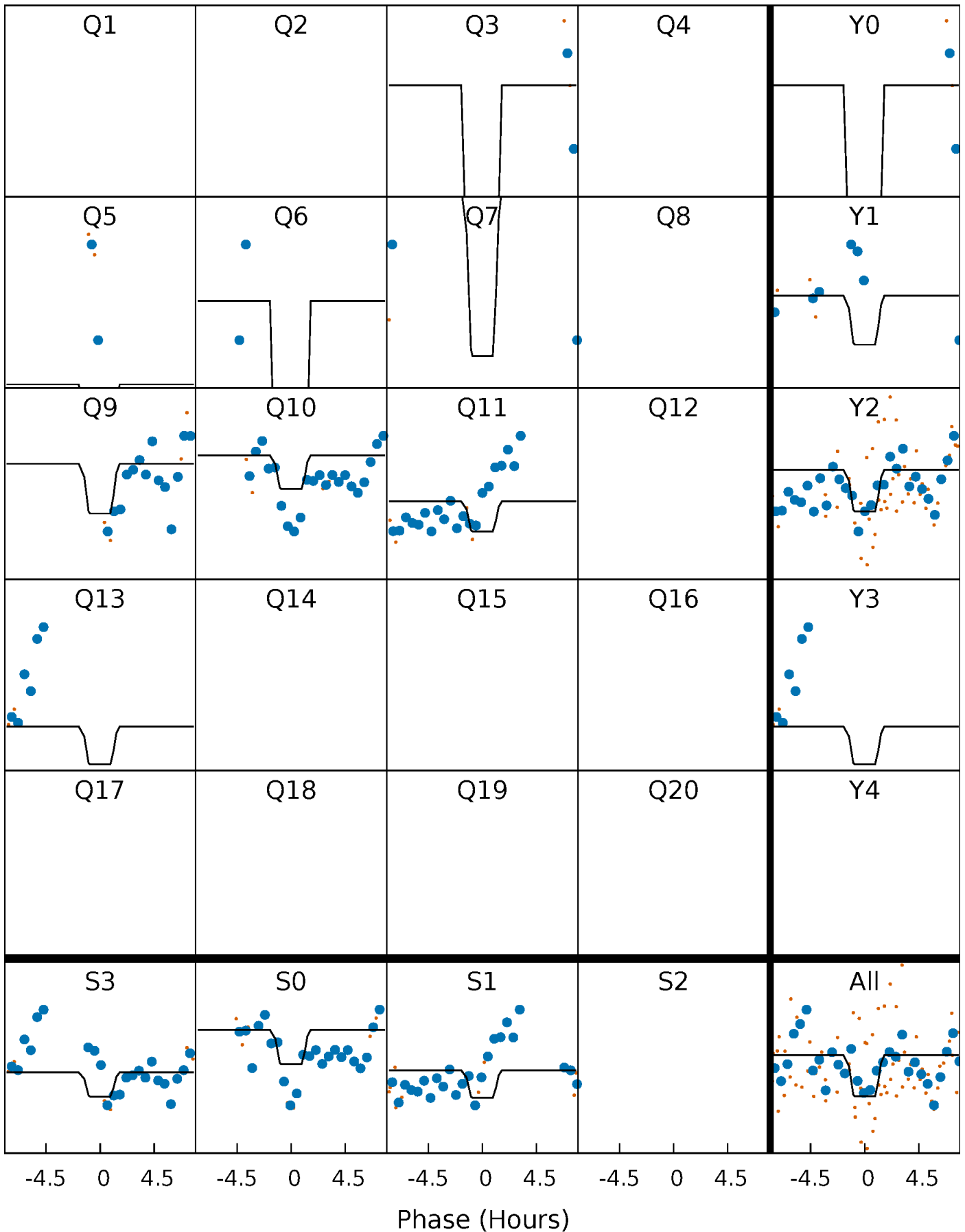
DV Quarter-Phased Transit Curves

TCE 010652379-10 $P = 73.079893$ Days $T_0 = 200.304960$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

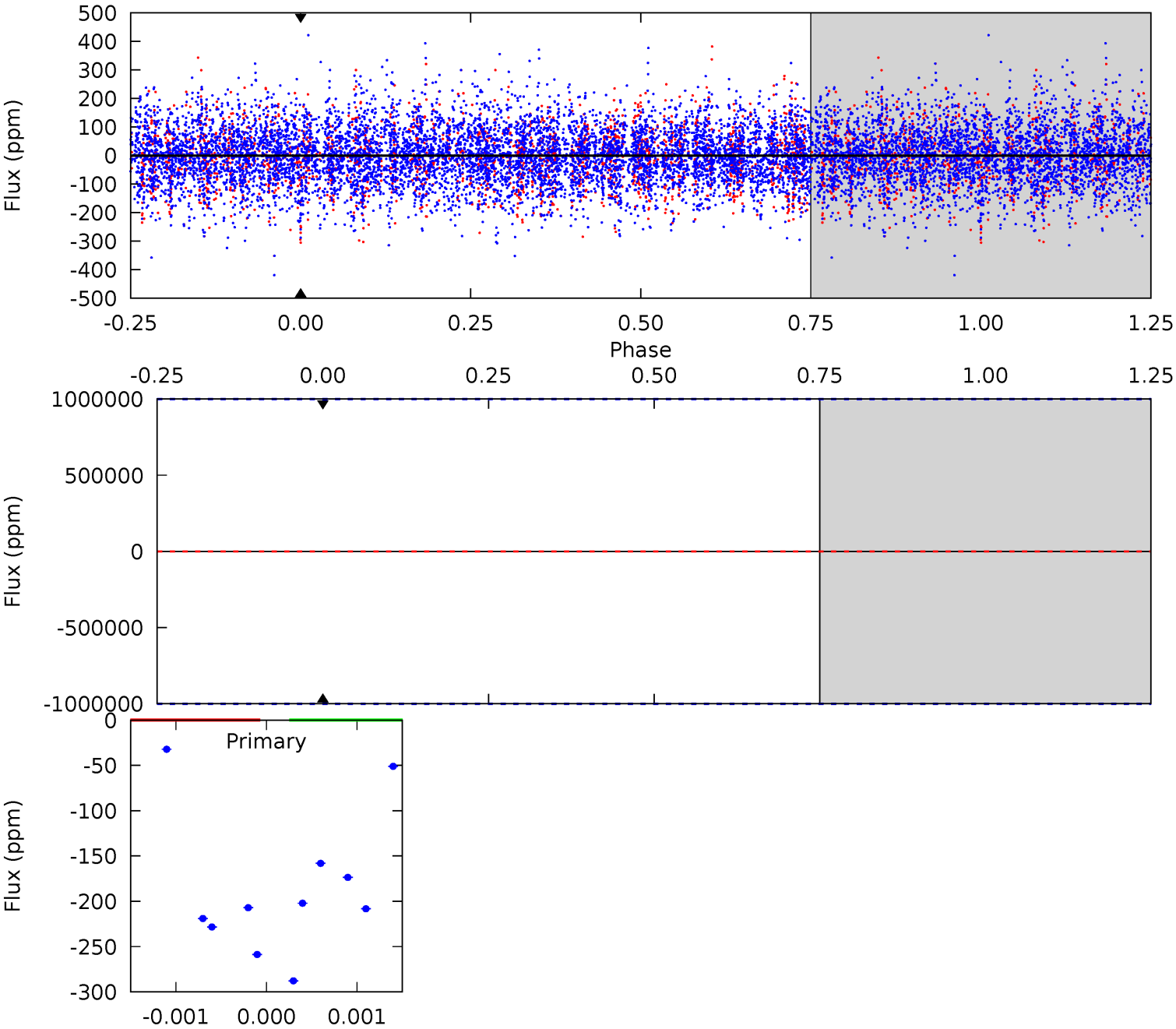
TCE 010652379-10 $P = 73.079893$ Days $T_0 = 200.314461$ (BKJD)



DV Model-Shift Uniqueness Test

010652379-10, P = 73.079893 Days, E = 127.225067 Days

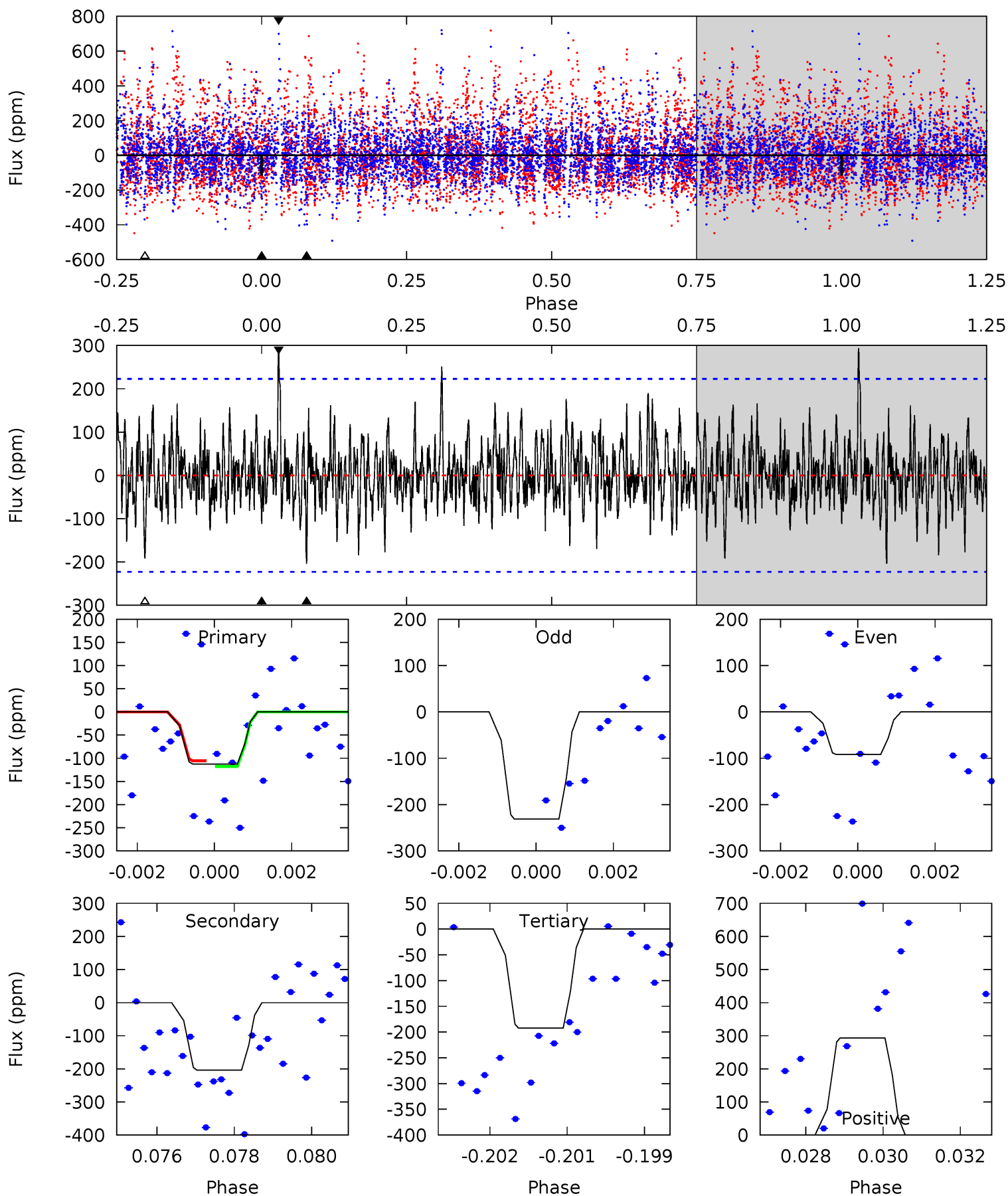
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

010652379-10, P = 73.079893 Days, E = 127.234568 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.70	4.90	4.62	7.05	5.36	3.15	1.42	-1.92	-4.35	0.28	-2.15	1.29	0.86	0.59	0.14



Stellar Parameters For KIC 010652379

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6649^{+166}_{-183}	$3.749^{+0.304}_{-0.095}$	$-0.280^{+0.300}_{-0.250}$	$2.654^{+0.489}_{-0.908}$	$1.443^{+0.264}_{-0.264}$	$0.109^{+0.209}_{-0.032}$
	+2%/-3%	+8%/-3%	+107%/-89%	+18%/-34%	+18%/-18%	+192%/-30%
Source	PHO1	FLK73	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 010652379-10 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$19.46^{+21.29}_{-14.82}$	1045^{+67}_{-98}	4914^{+33574}_{-31106}	236^{+55822}_{-33207}
Alt.	-204 ± 42	$19.36^{+23.19}_{-13.42}$	1051^{+64}_{-97}	3461^{+1913}_{-714}	46^{+435}_{-36}

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 $A_{obs} \gg 1.0$

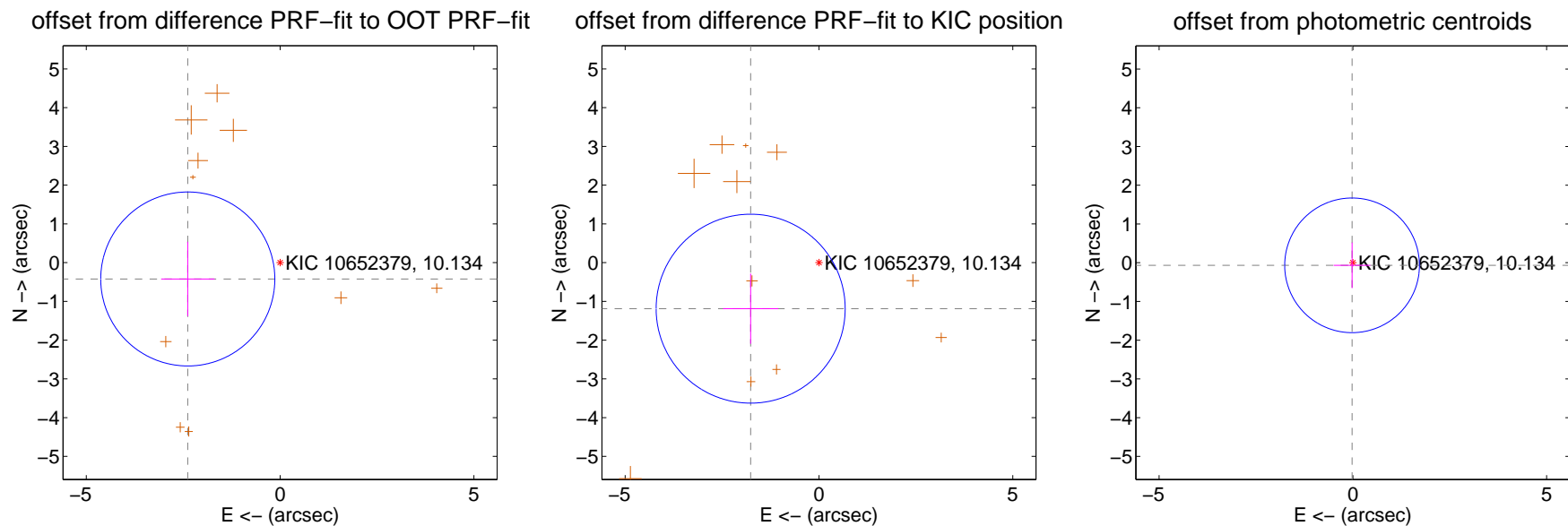
DV Centroid Data

Supplemental centroid analysis for 010652379-10. **Kepler magnitude: 10.13.** Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

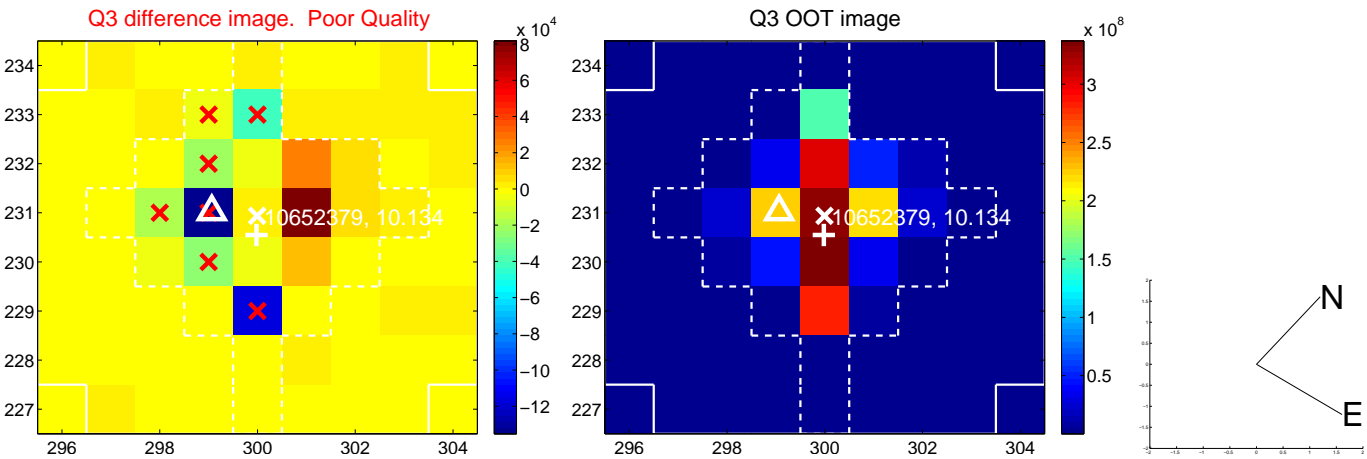
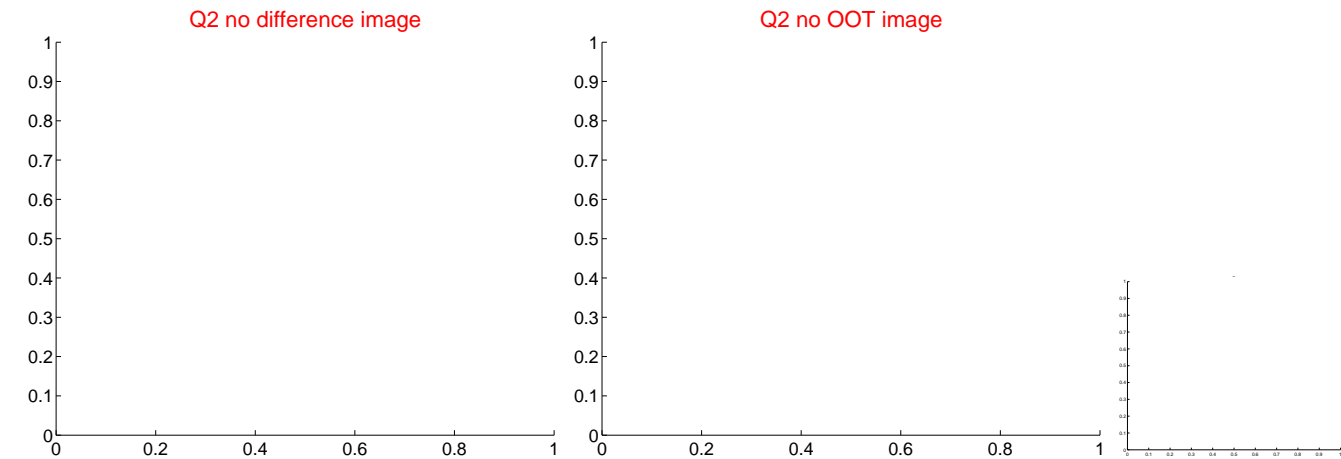
The direct PRF centroid is offset from the target star catalog position by about 1.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.419 ± 0.748	3.23	2.382 ± 0.687	-0.422 ± 0.960
PRF-fit source offset from KIC position	2.126 ± 0.813	2.62	1.763 ± 0.714	-1.188 ± 0.907
photometric centroid source offset	0.07 ± 0.58	0.12	0.02 ± 0.47	-0.07 ± 0.59

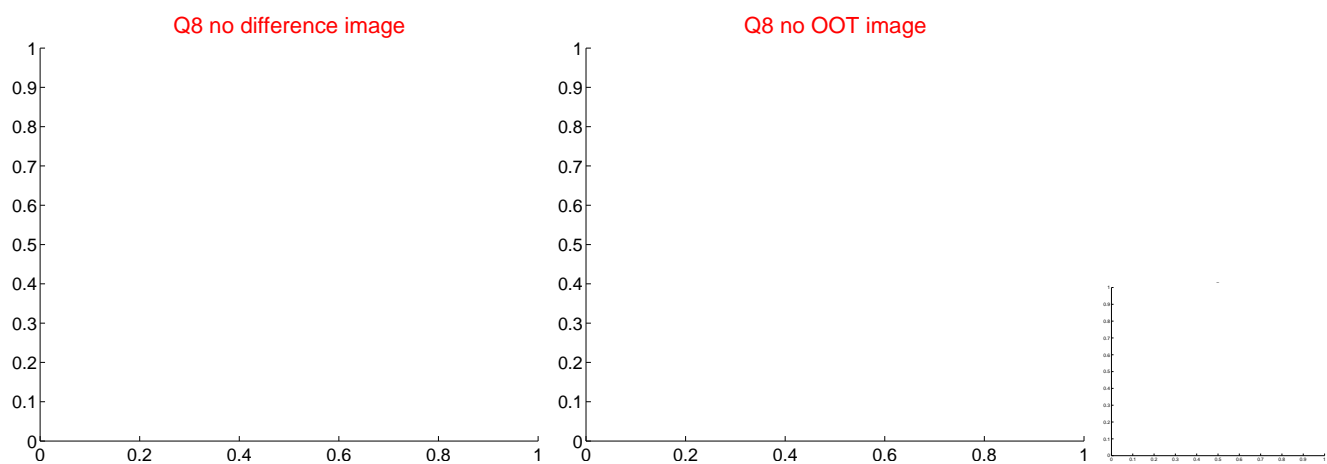
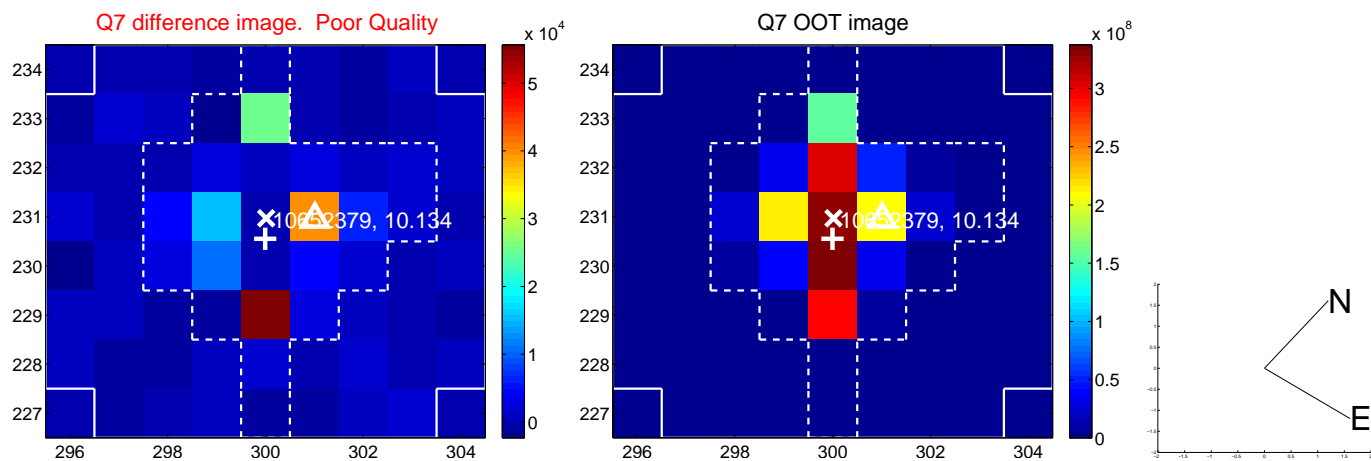
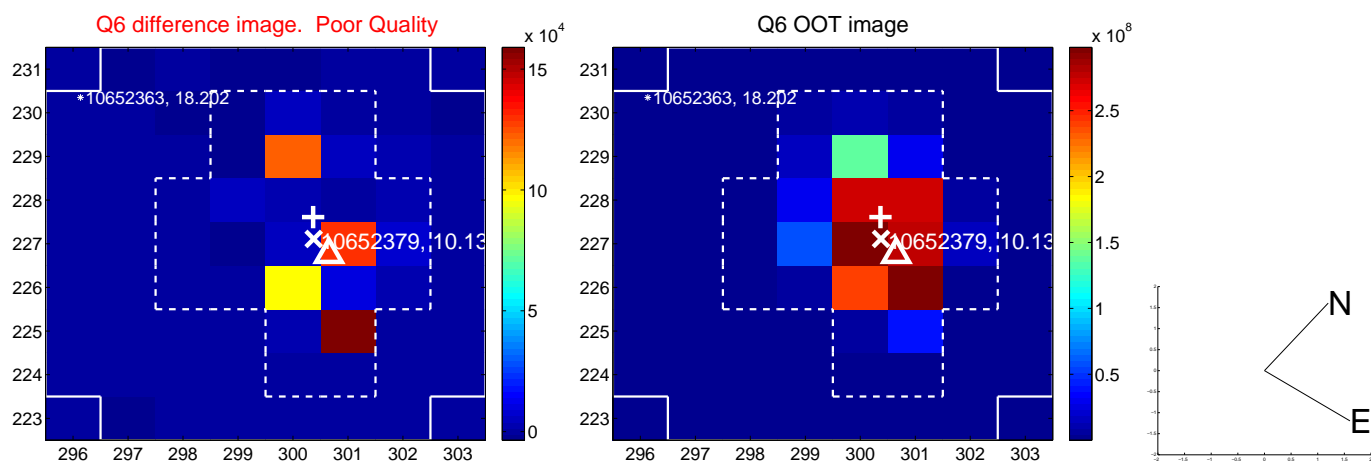
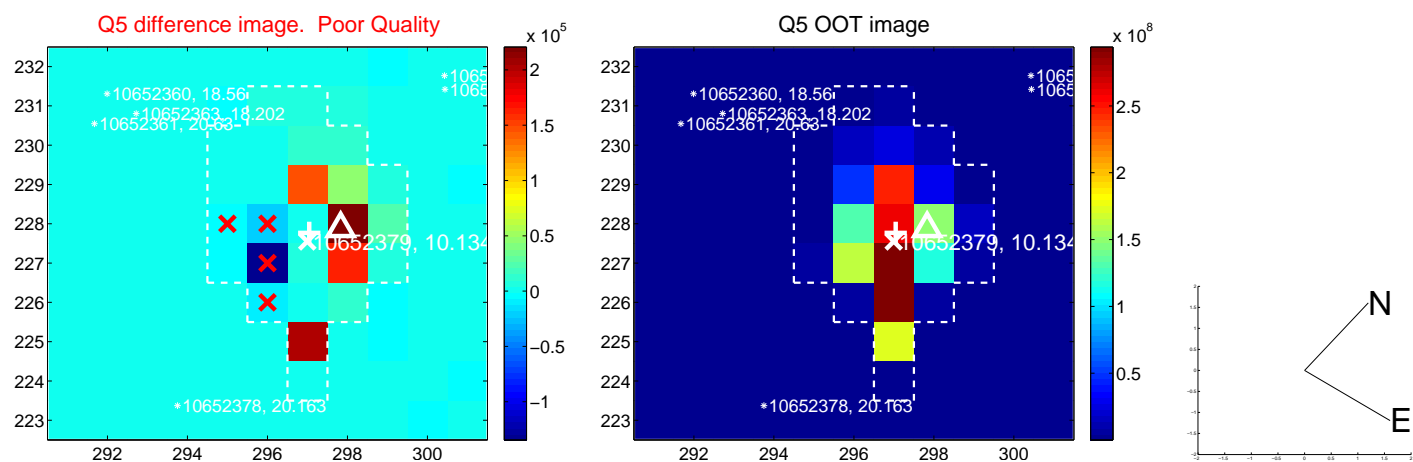


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

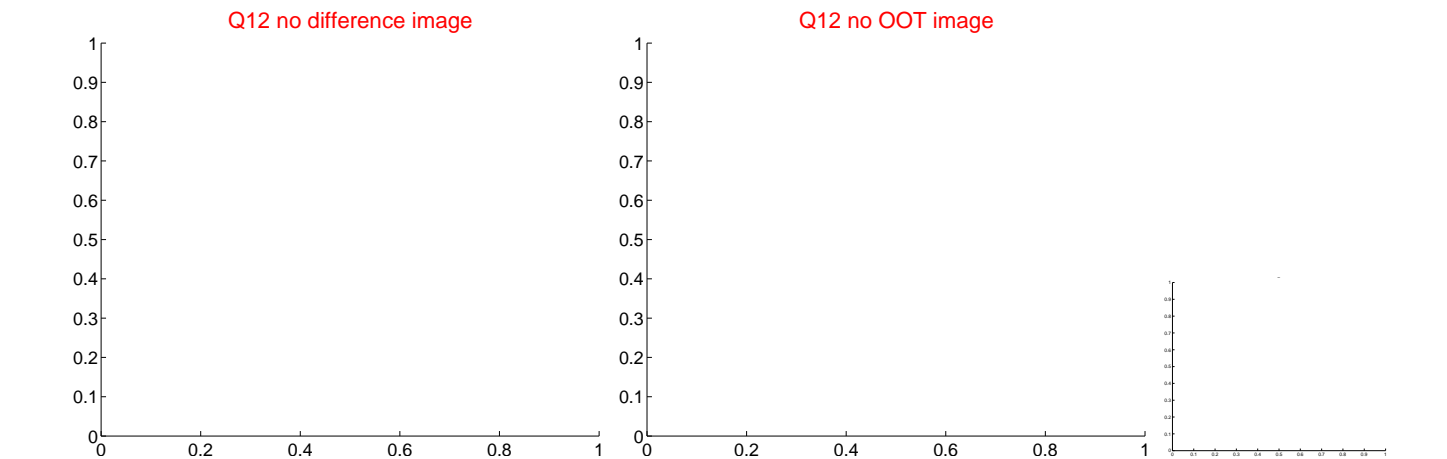
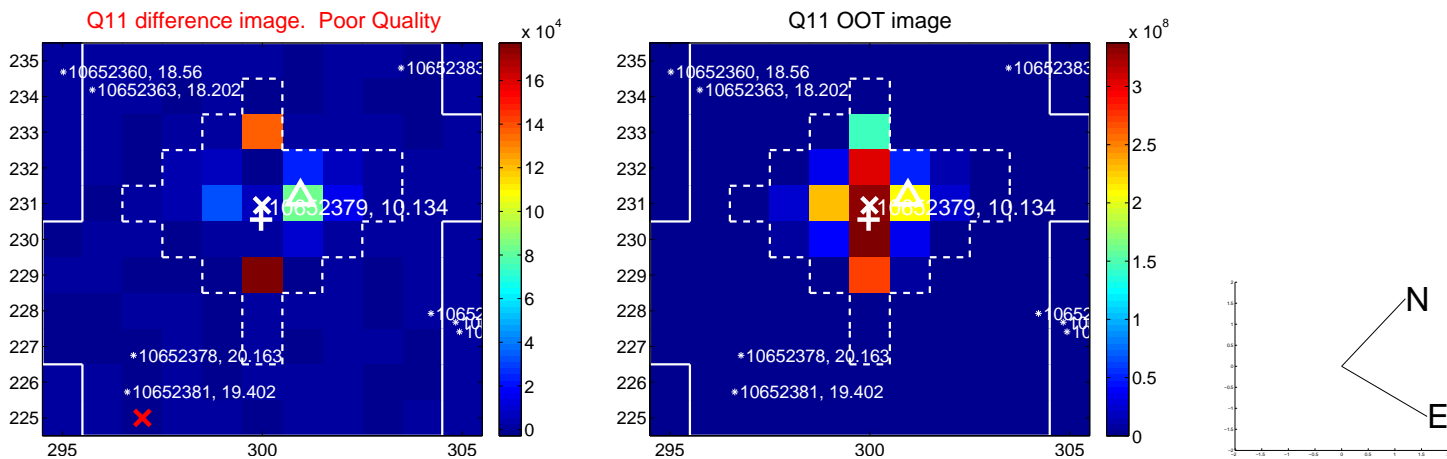
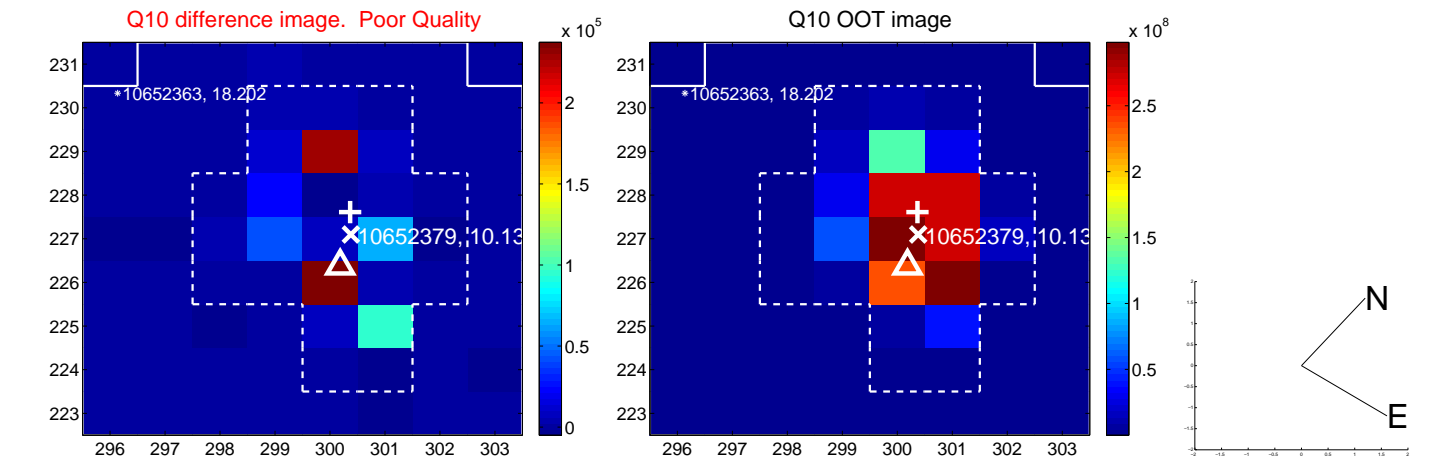
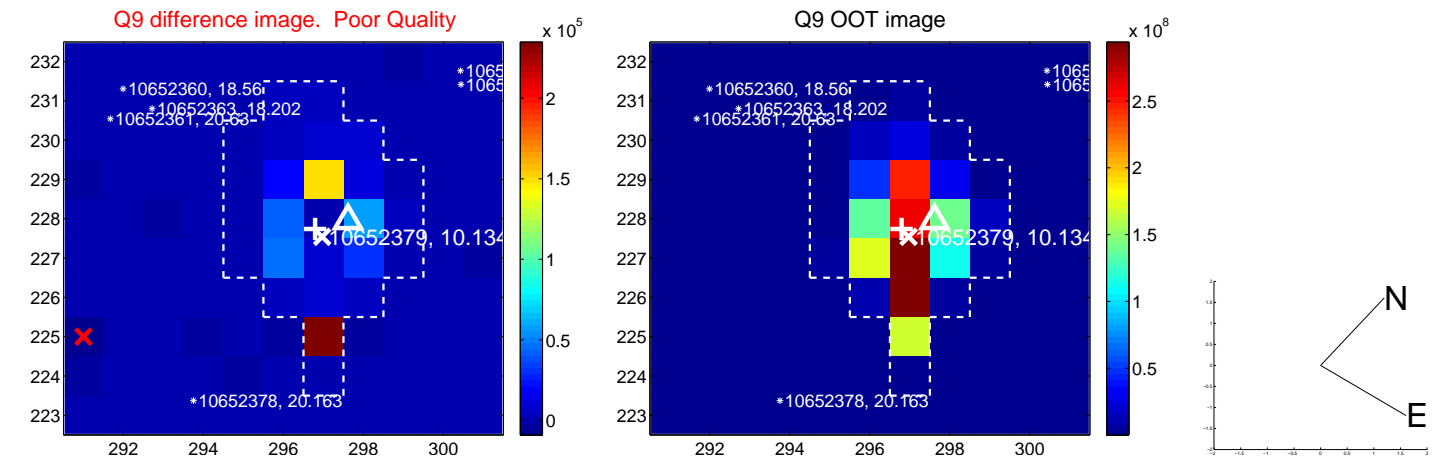
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



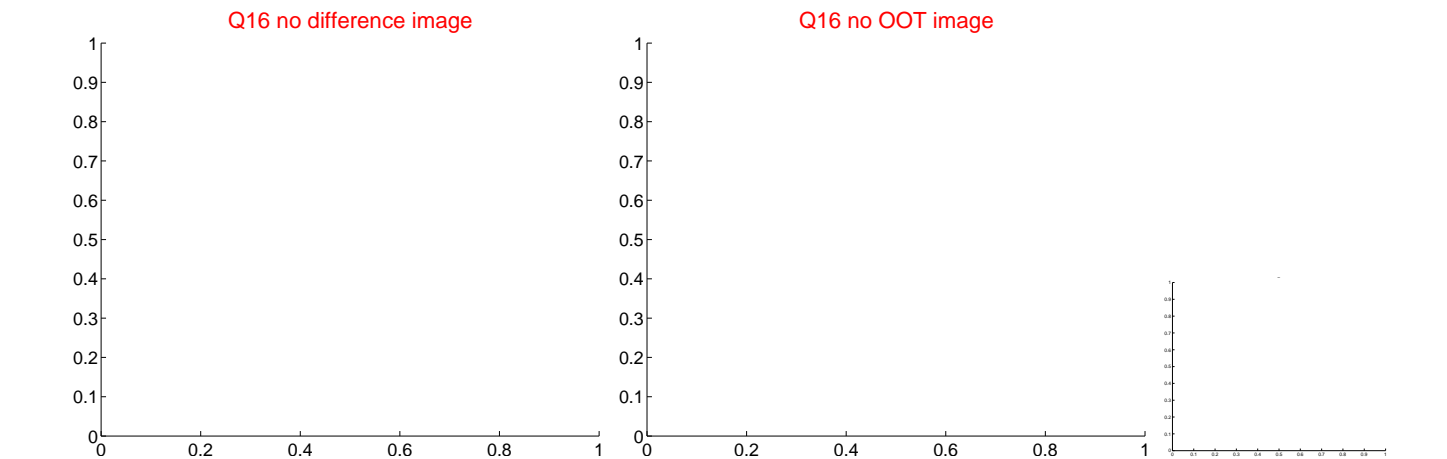
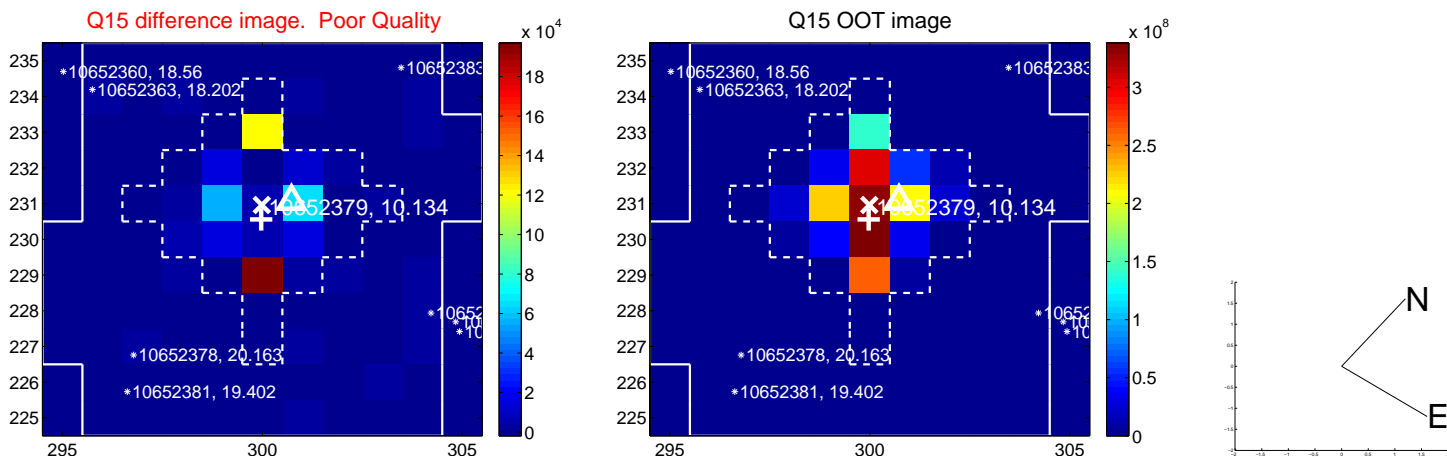
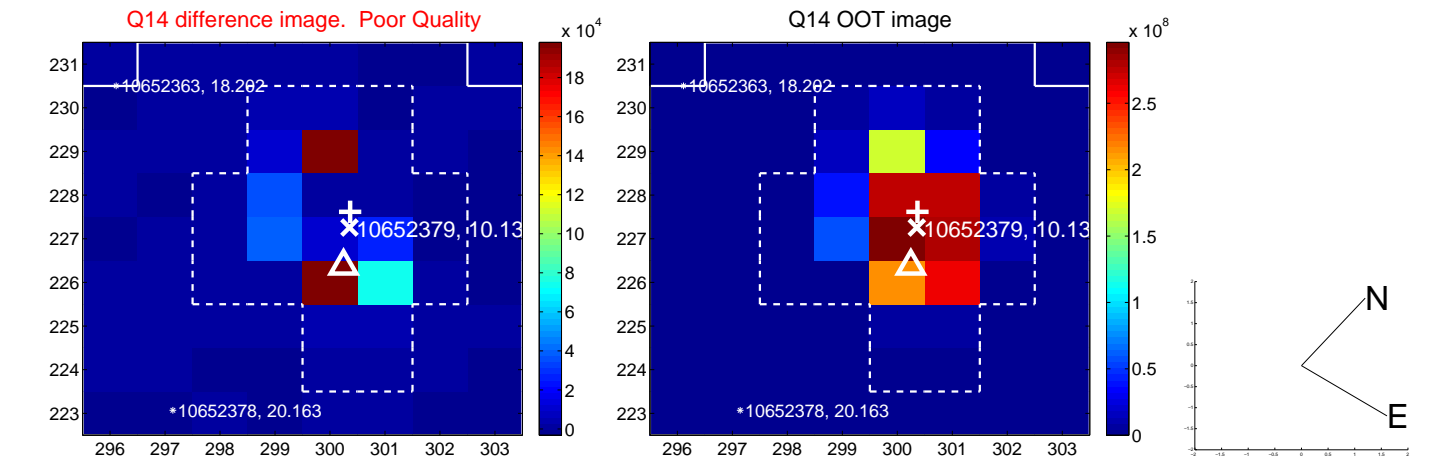
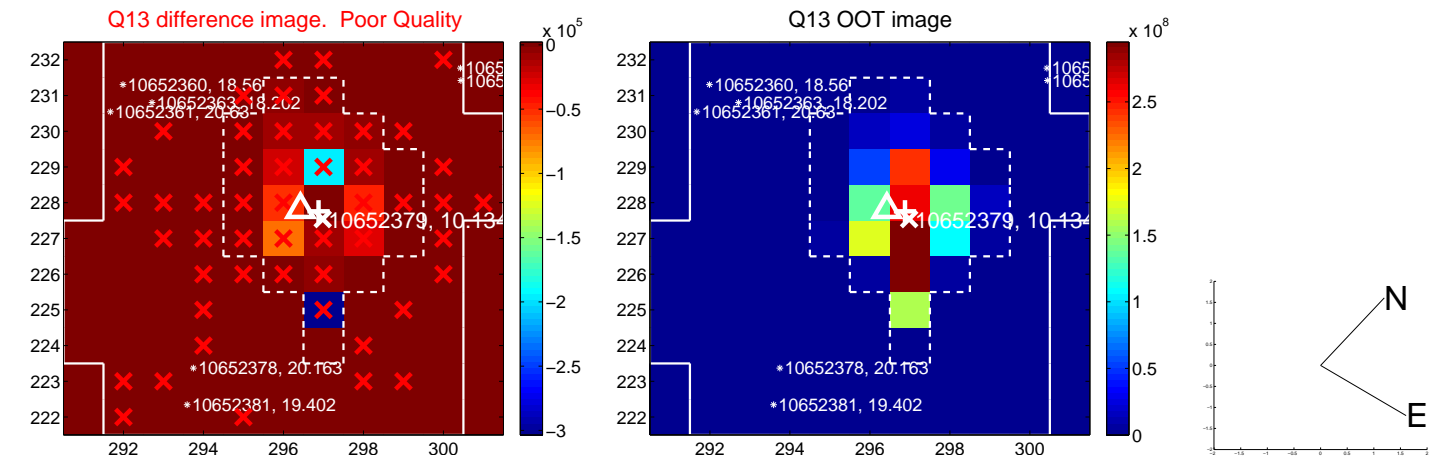
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



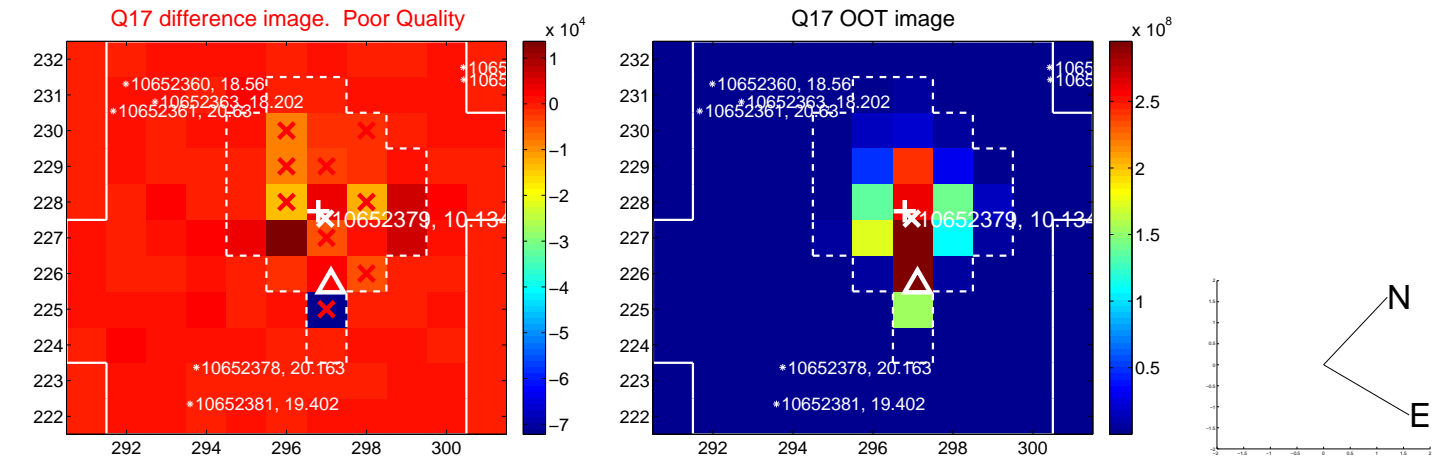
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



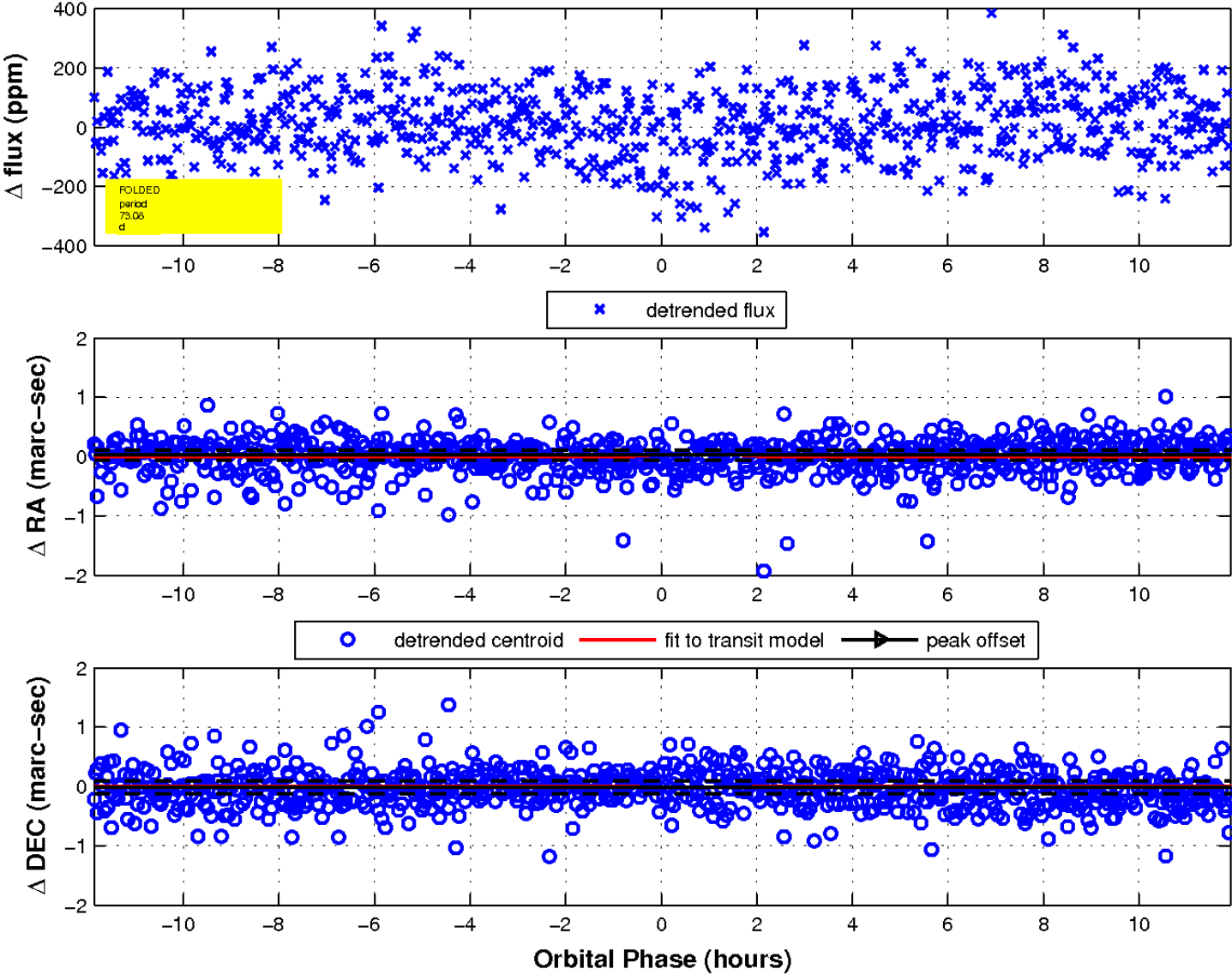
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 10 of 10



This plot does not exist for this TCE.