

KIC 006372268

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})
006372268-01	OBS	6698.01	5.219912	133.611858	2686.1	4.766	75.9	97.1	0.54	4014	5.37	29.56
006372268-02	OBS	No	5.220087	133.871832	2639.7	4.018	58.3	58.9	0.54	4014	4.99	29.56
006372268-03	OBS	No	5.219955	136.354595	1030.5	11.382	29.5	38.4	0.54	4014	2.04	29.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006372268-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_SATURATED
006372268-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—SAME_NTL_PERIOD—CENT_SATURATED
006372268-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

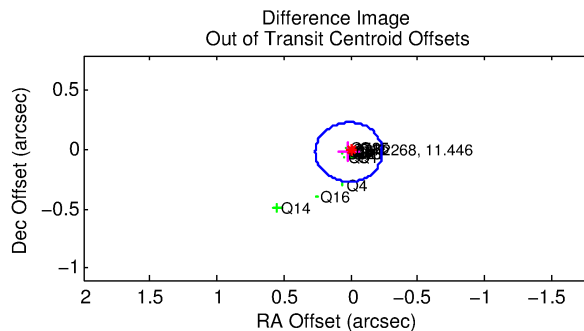
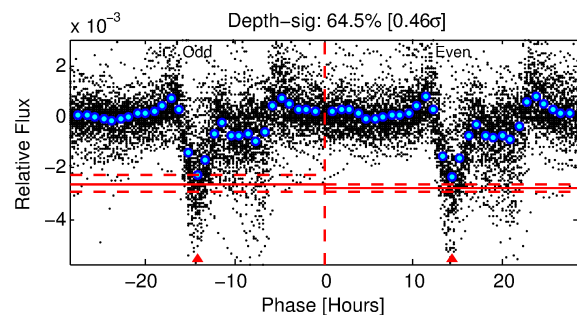
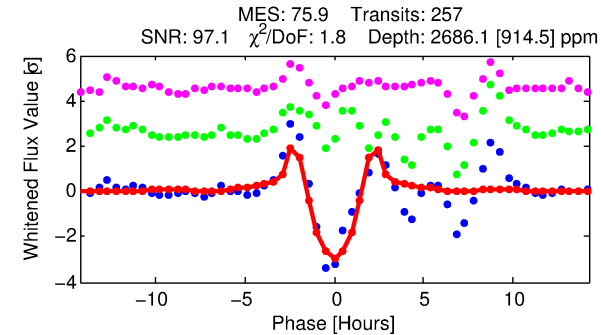
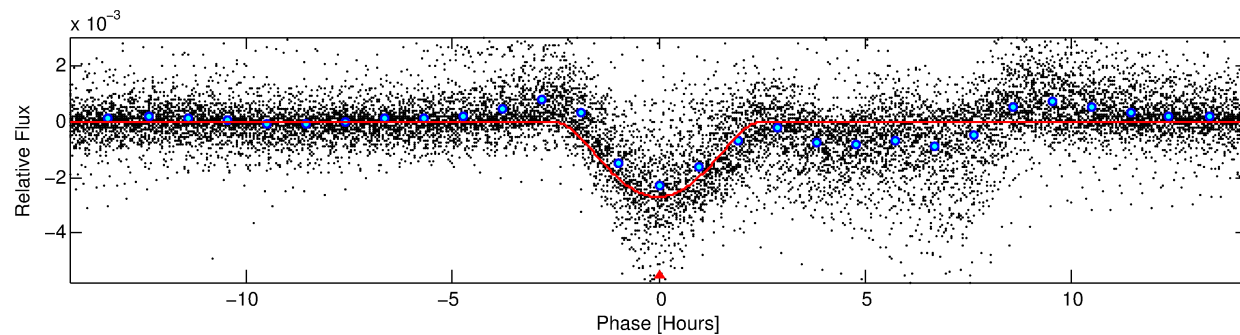
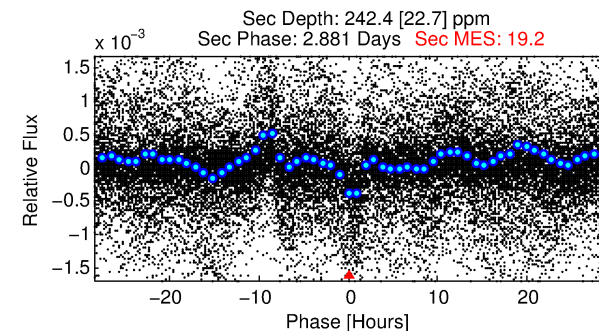
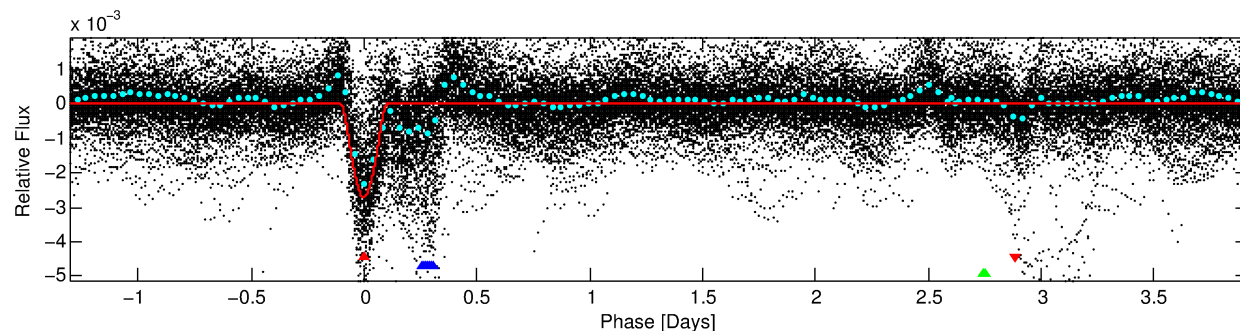
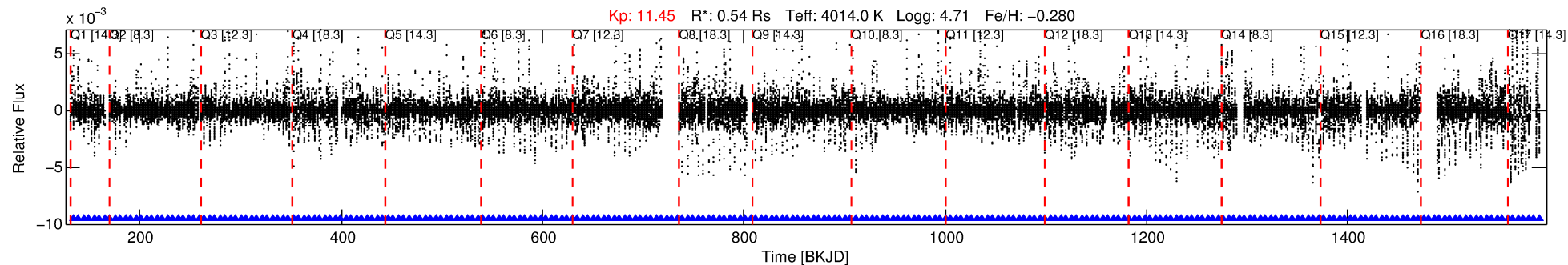
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006372268-01

No Significant Match Found

DV One-Page Summary

KIC: 6372268 Candidate: 1 of 3 Period: 5.220 d
KOI: K06698 Corr: No Ephemeris Match



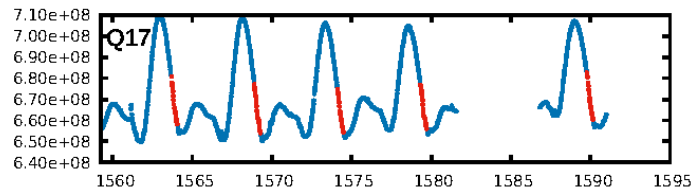
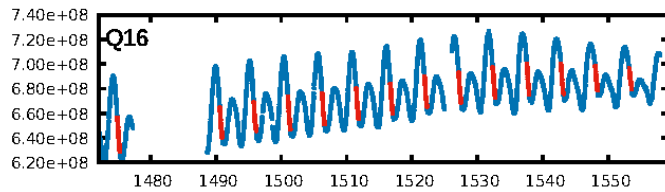
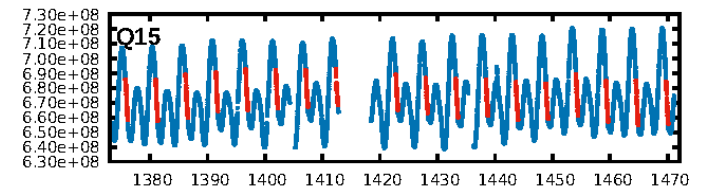
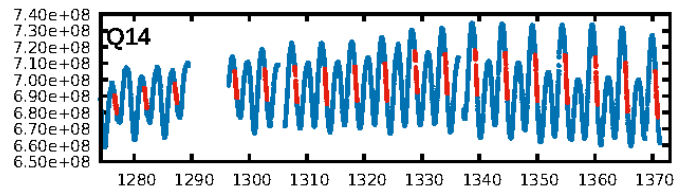
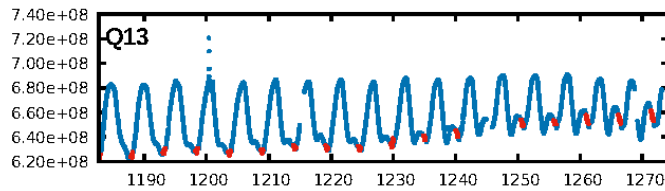
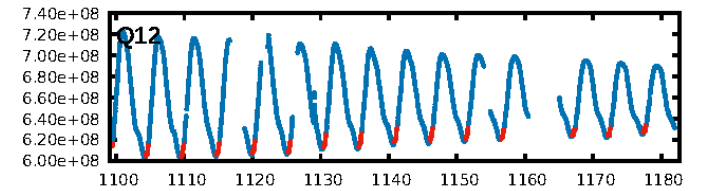
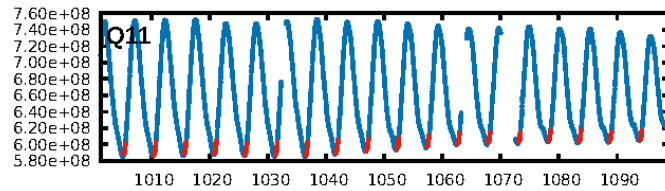
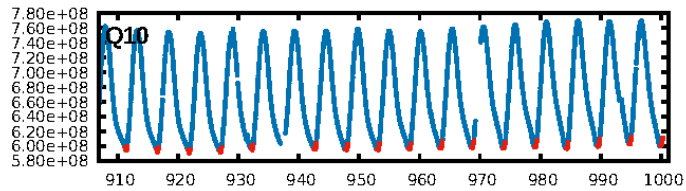
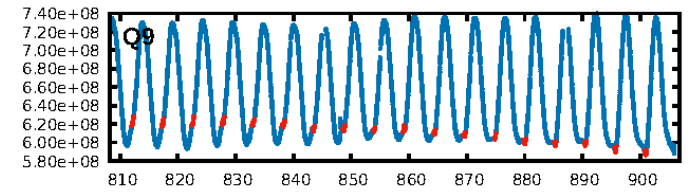
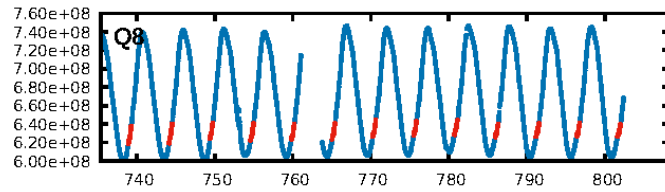
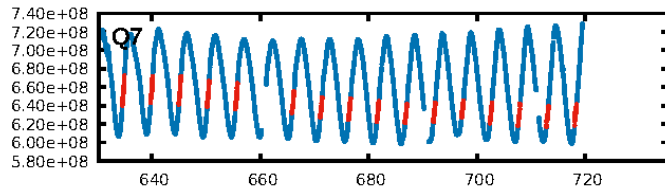
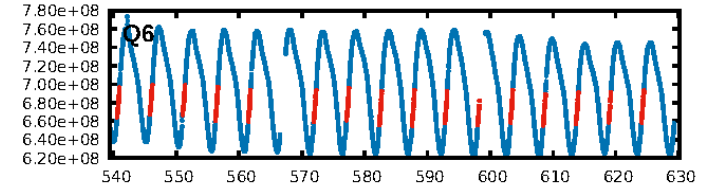
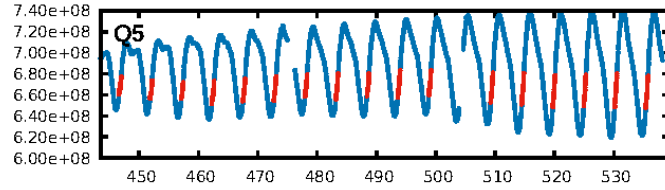
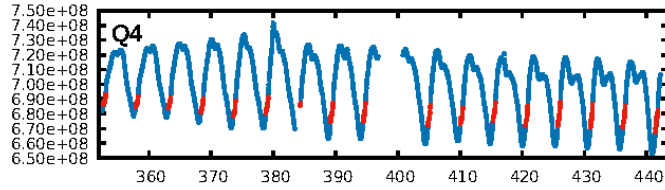
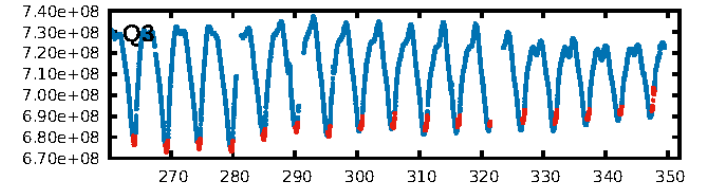
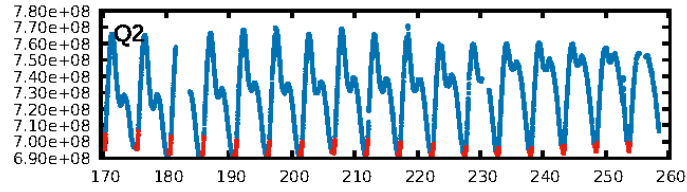
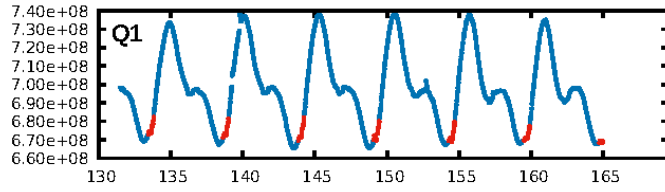
DV Fit Results:

Period = 5.21991 [0.00001] d
Epoch = 133.6119 [0.0007] BKJD
Rp/R* = 0.0905 [0.0150]
a/R* = 3.78 [0.11]
b = 1.00 [0.00]
Seff = 29.56 [6.25]
Teq = 595 [31] K
Rp = 5.37 [1.19] Re
a = 0.0483 [0.0054] AU
Ag = 10.75 [4.04] [2.42σ]
Teffp = 1665 [157] K [6.69σ]

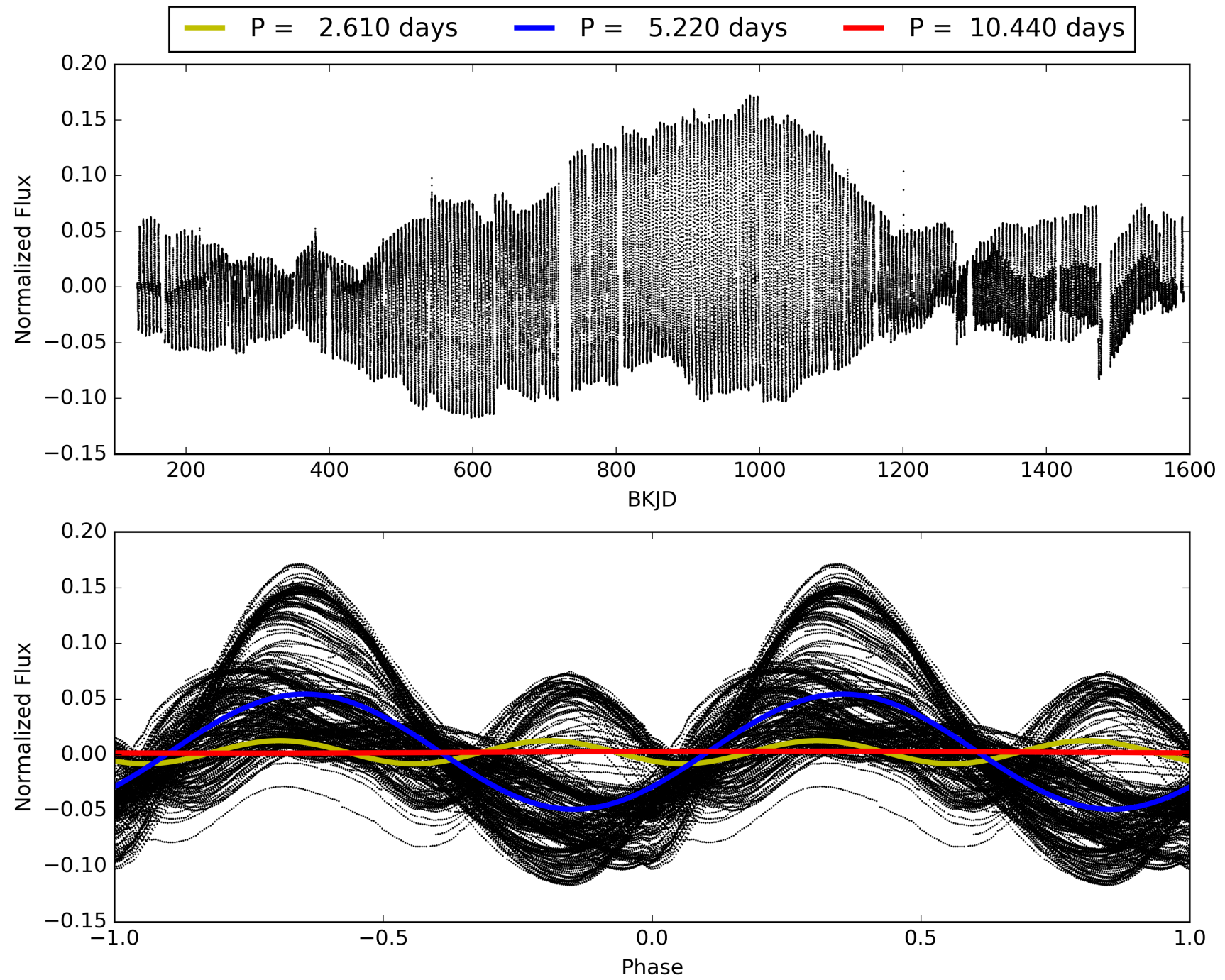
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [245/245]
GhostDiagnostic-chr: 0.7879
Centroid-sig: 0.0%
Centroid-so: 0.065 arcsec [2.93σ]
OotOffset-rm: 0.025 arcsec [0.30σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.109 arcsec [1.33σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

TCE 006372268-01, PDC Light Curves

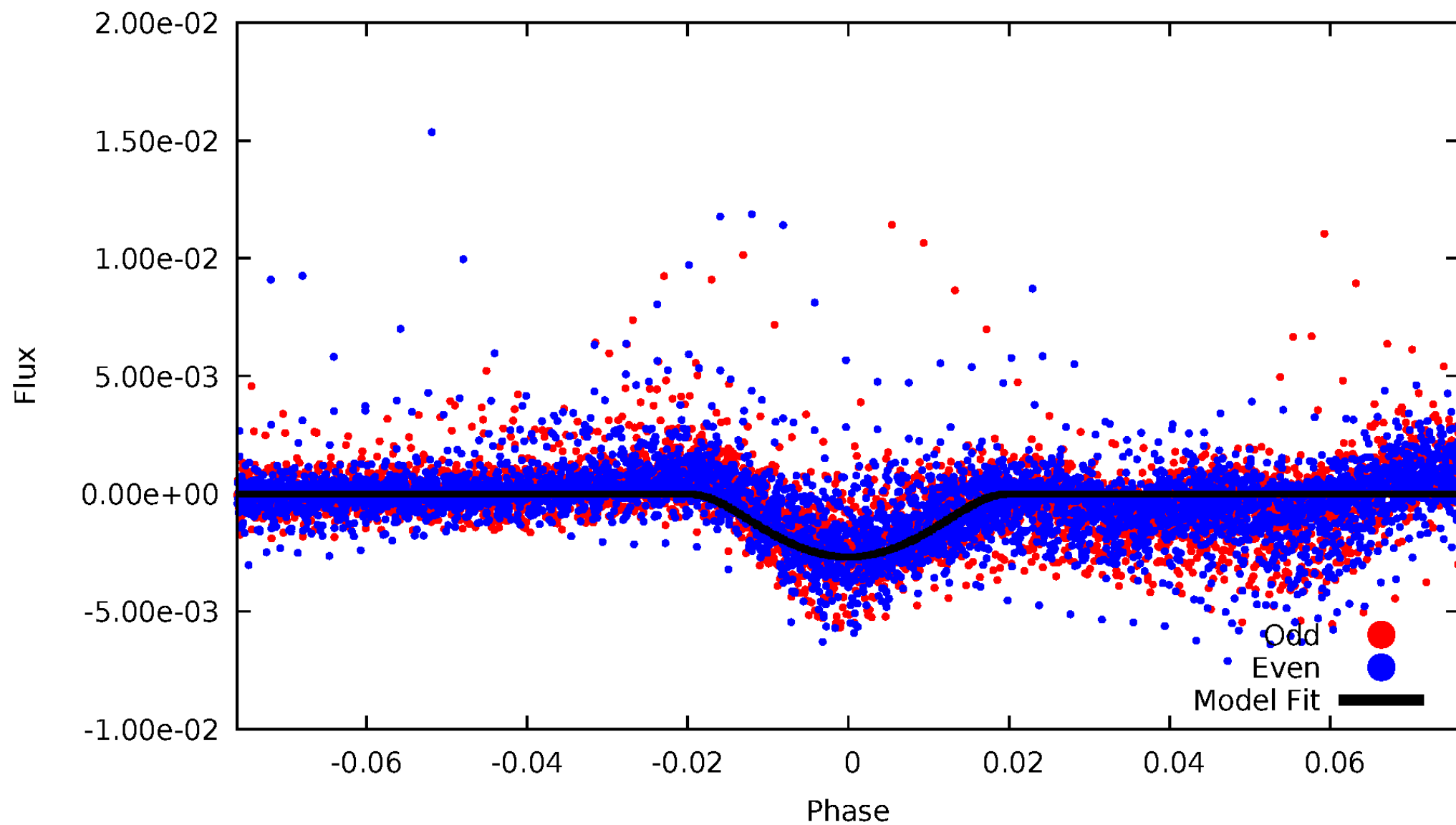


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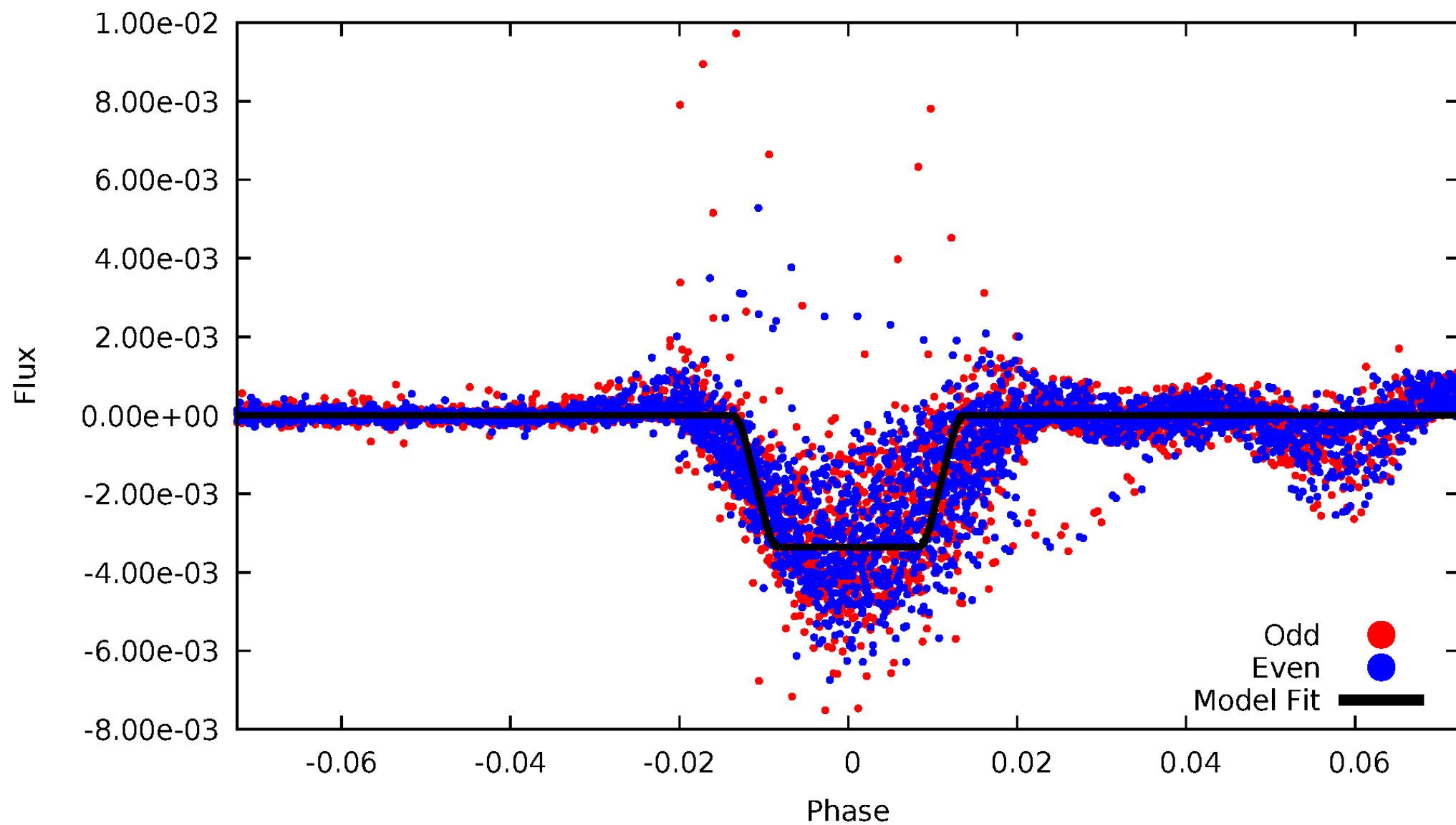
DV Odd/Even

TCE 006372268-01



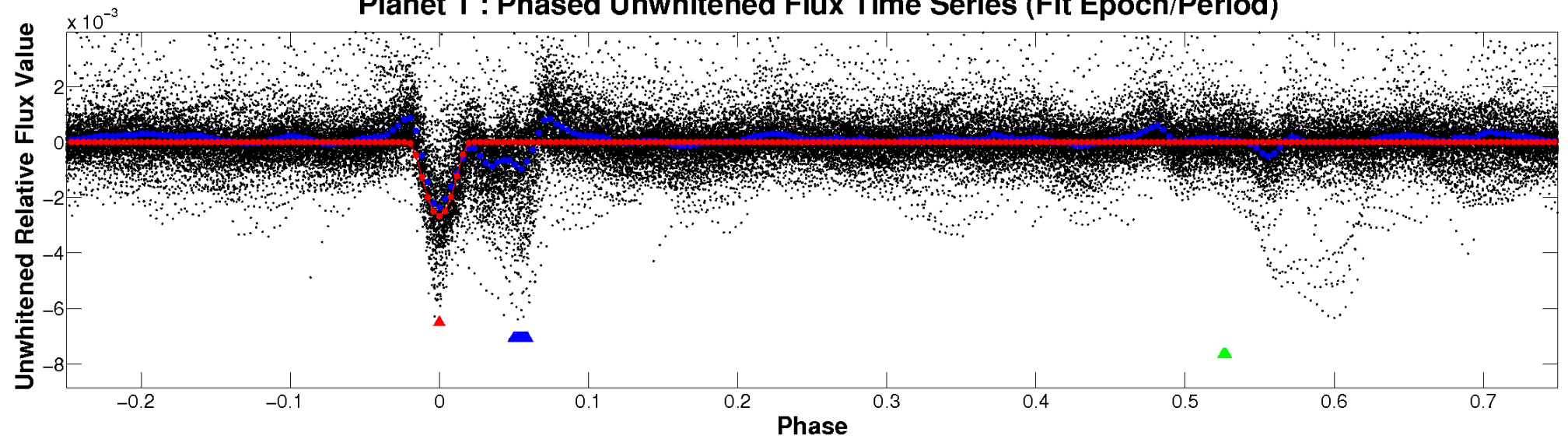
ALT Odd/Even

TCE 006372268-01

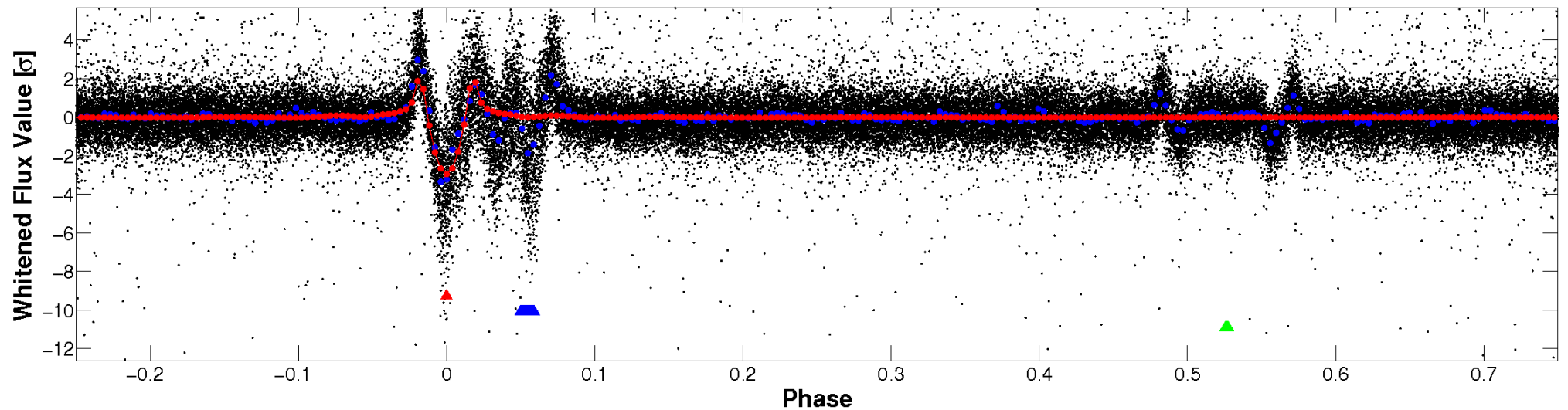


Non-Whitened Vs. Whitened Light Curve

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

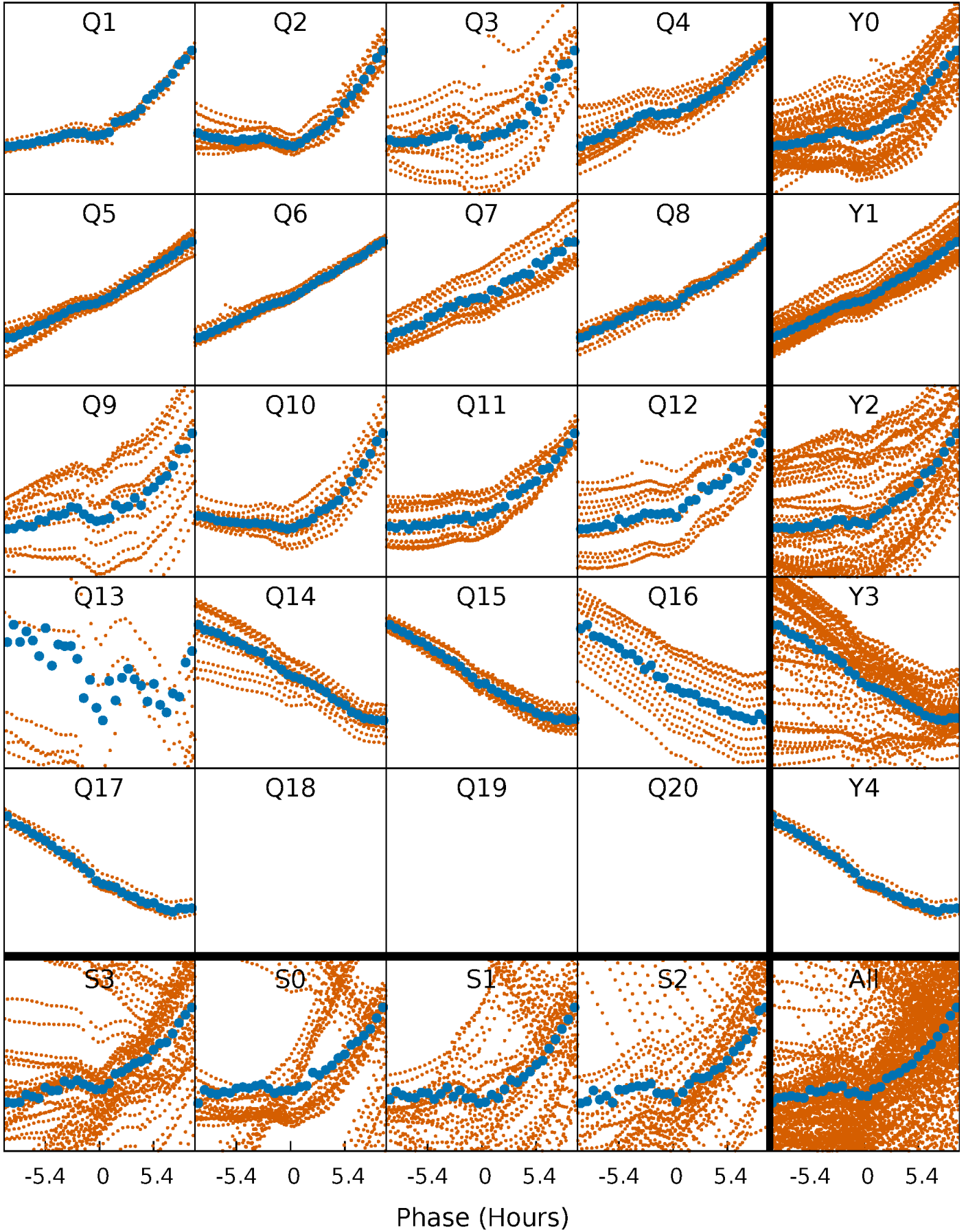


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



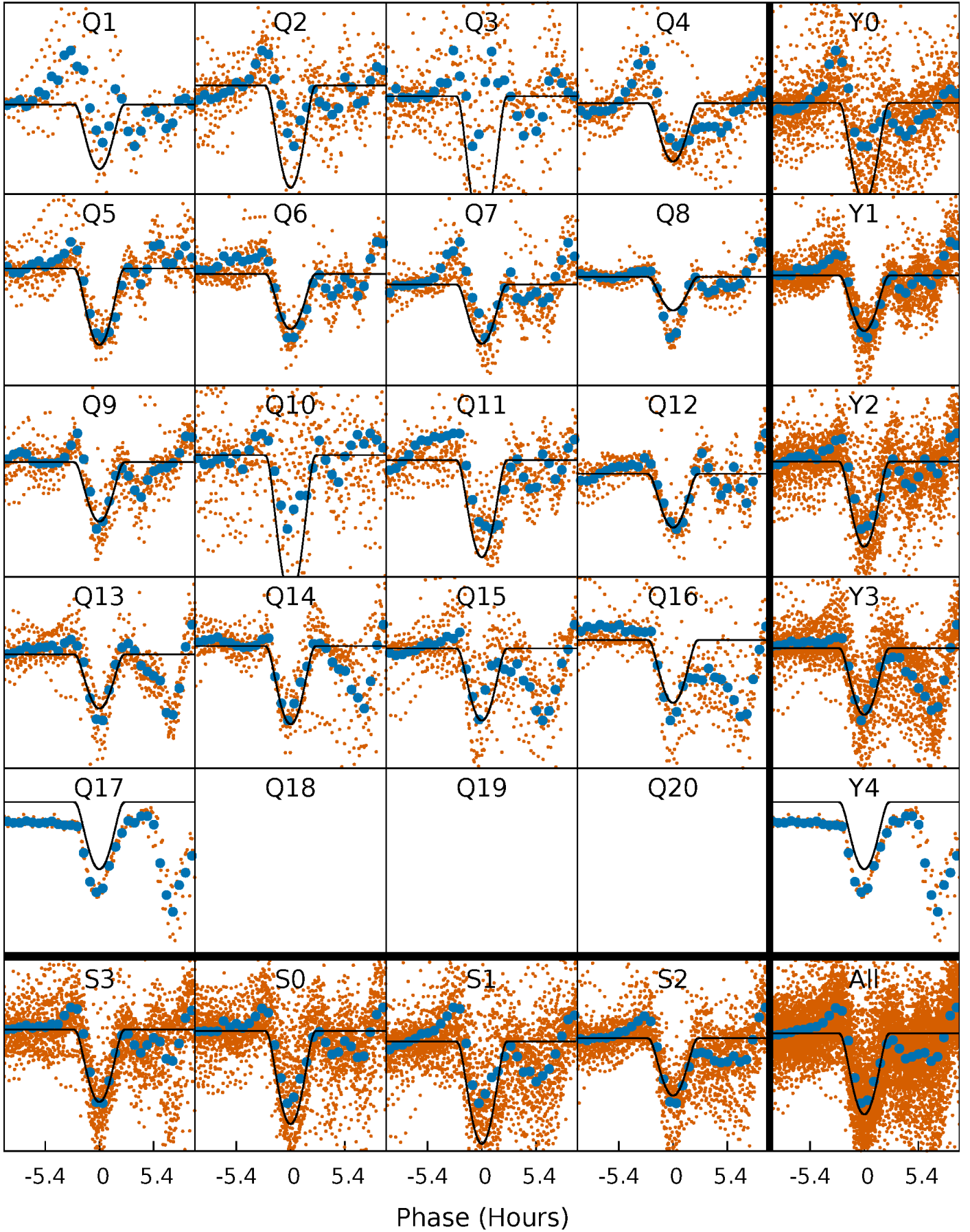
PDC Quarter-Phased Transit Curves

TCE 006372268-01 P= 5.219912 Days $T_0=133.611858$ (BKJD)



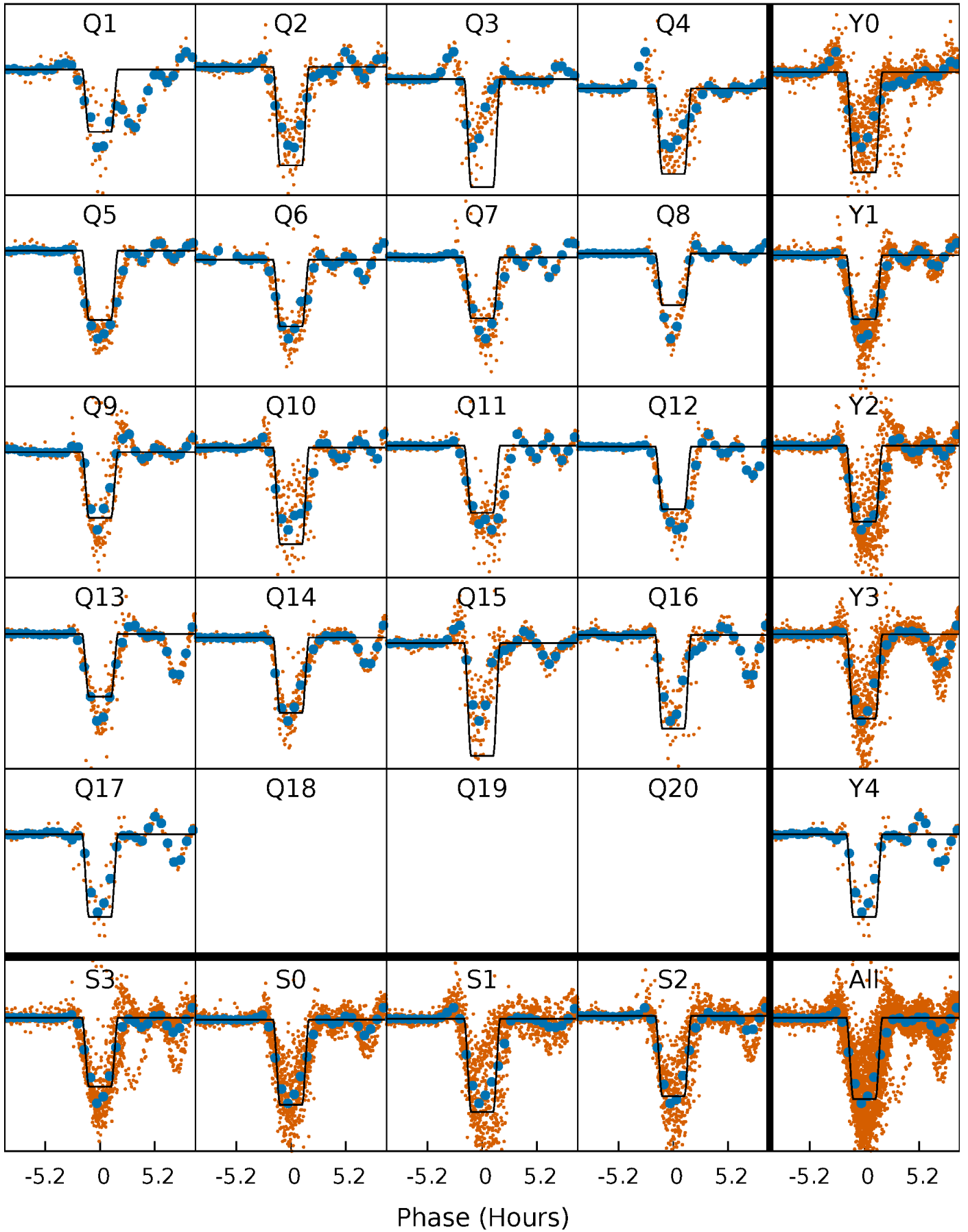
DV Quarter-Phased Transit Curves

TCE 006372268-01 P= 5.219912 Days $T_0=133.611858$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

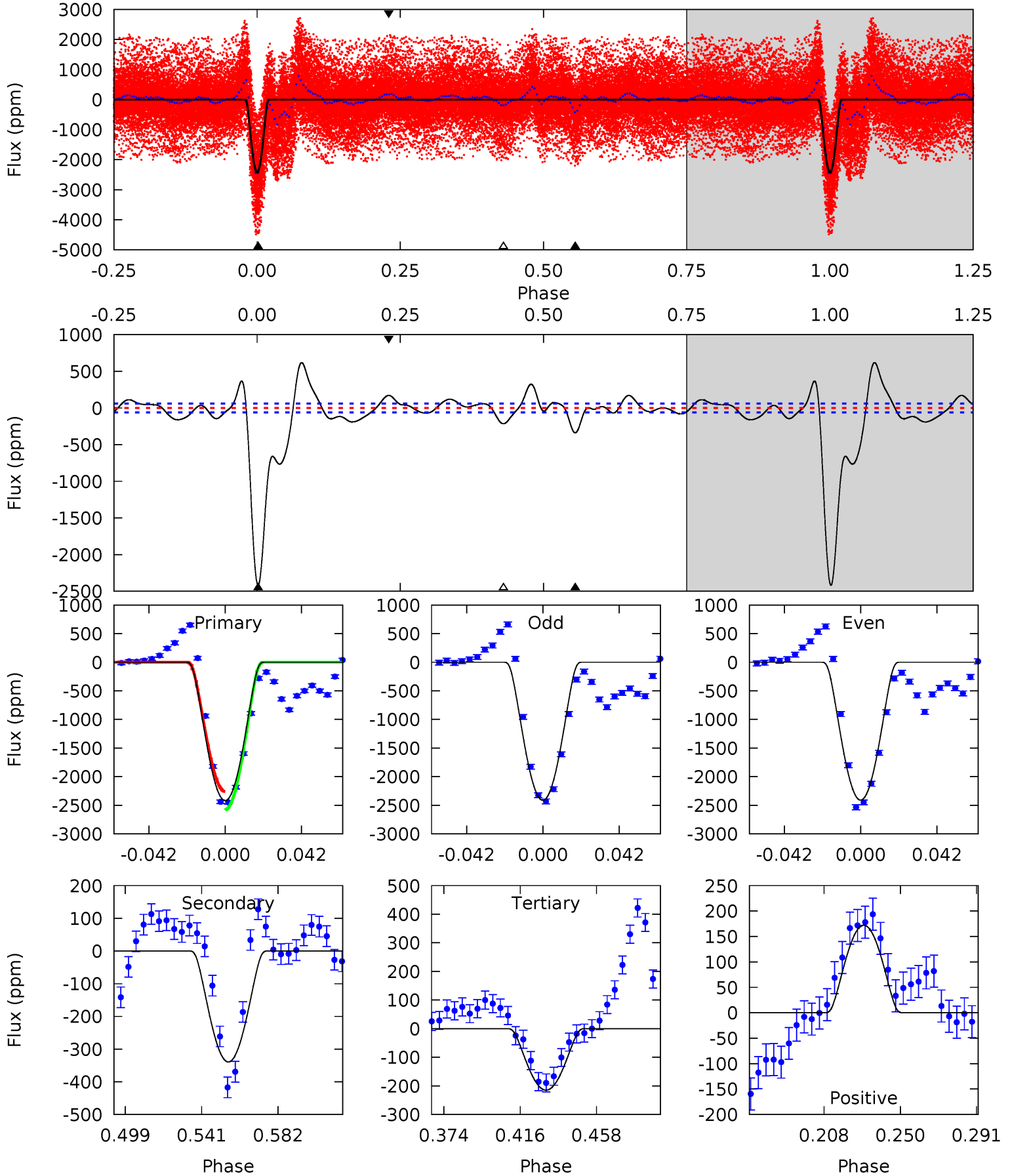
TCE 006372268-01 P= 5.219864 Days $T_0=133.619410$ (BKJD)



DV Model-Shift Uniqueness Test

006372268-01, P = 5.219912 Days, E = 128.391946 Days

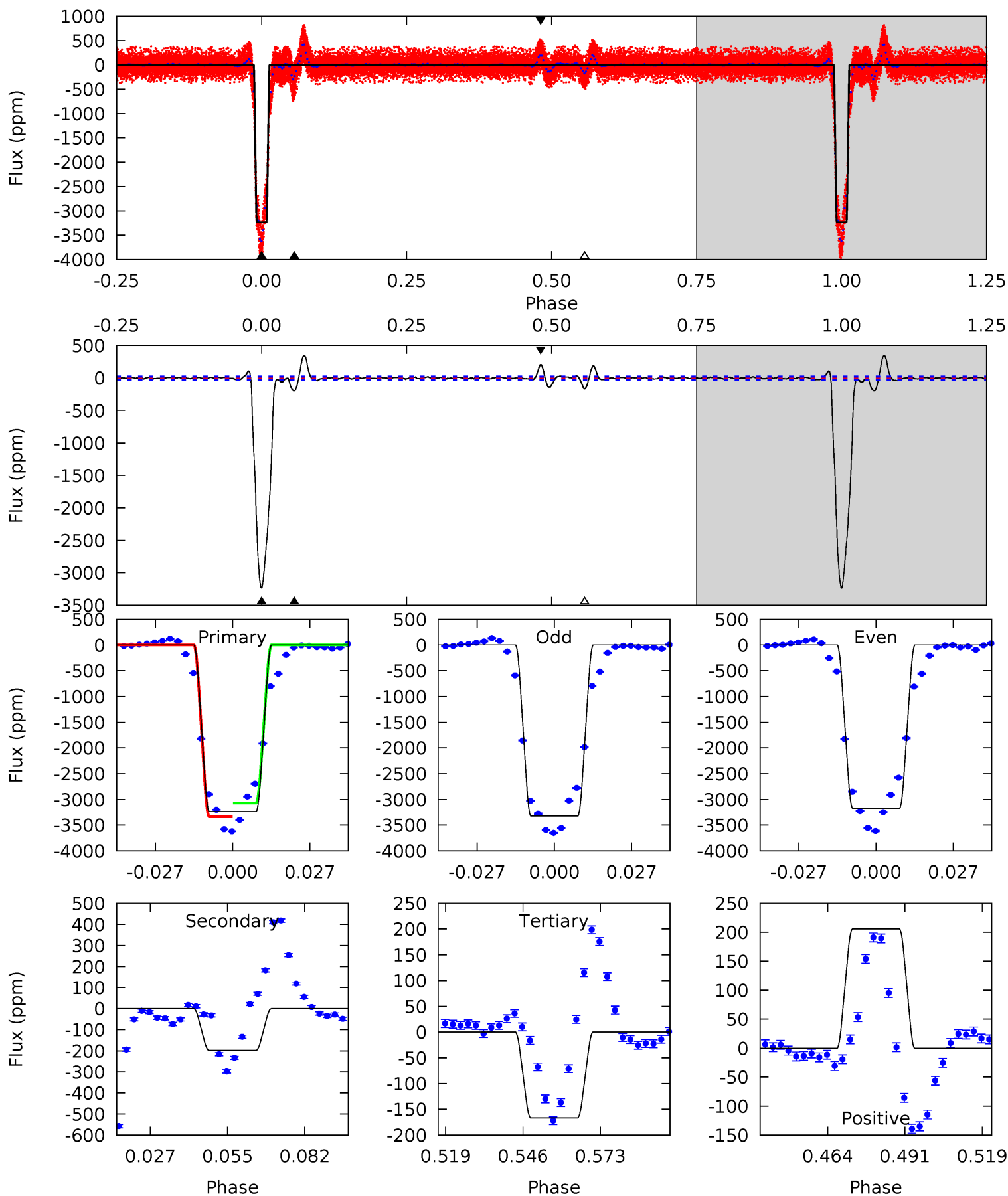
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
187.7	26.3	16.7	13.4	4.75	2.04	11.8	171.0	174.3	9.66	13.0	0.09	0.88	0.20	12.4



Alt Model-Shift Uniqueness Test

006372268-01, P = 5.219864 Days, E = 128.399546 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
662.2	40.5	34.1	42.1	4.83	2.21	6.67	628.1	620.1	6.40	-1.59	15.6	0.94	0.10	0



Stellar Parameters For KIC 006372268

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4014^{+138}_{-152}	$4.707^{+0.072}_{-0.036}$	$-0.280^{+0.300}_{-0.300}$	$0.544^{+0.053}_{-0.080}$	$0.549^{+0.058}_{-0.070}$	$4.809^{+1.892}_{-0.788}$
	+3%/-4%	+2%/-1%	+107%/-107%	+10%/-15%	+11%/-13%	+39%/-16%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 006372268-01 / KOI 6698.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-339 ± 13	$5.21^{+1.07}_{-0.92}$	824^{+33}_{-35}	2516^{+151}_{-118}	16^{+7}_{-5}
Alt.	-198 ± 5	$3.44^{+0.95}_{-0.93}$	825^{+35}_{-37}	2616^{+232}_{-173}	22^{+19}_{-9}

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

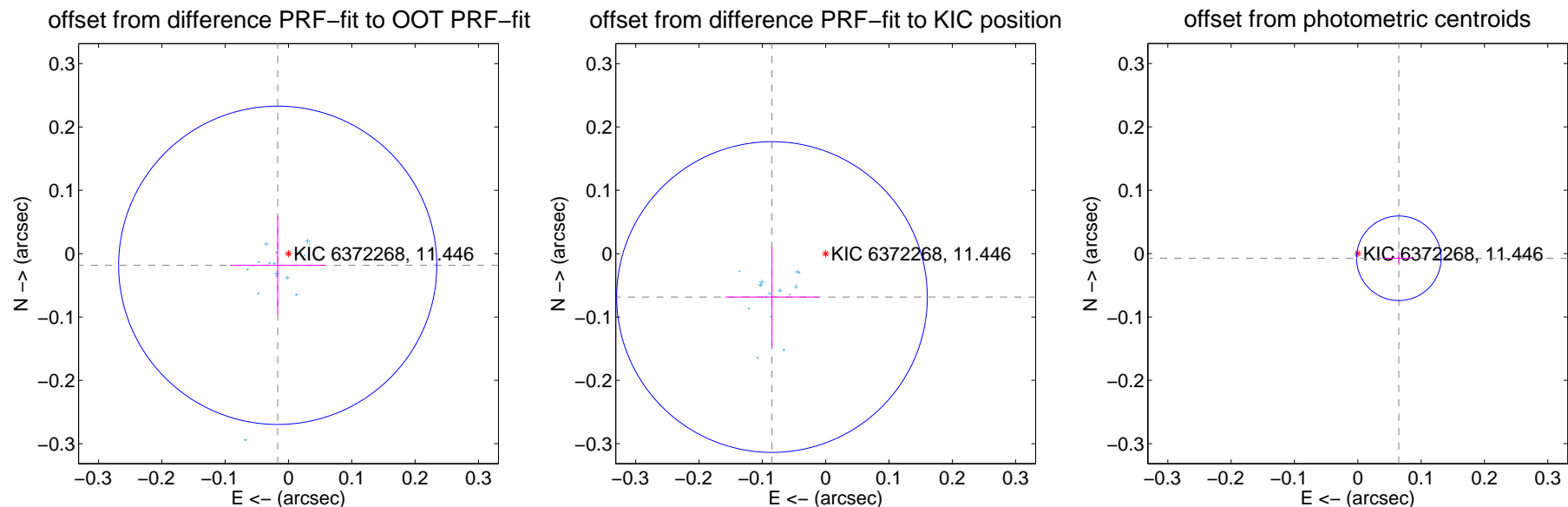
DV Centroid Data

Supplemental centroid analysis for 006372268-01. **Kepler magnitude: 11.45.** Transit SNR 97.14

There are 17 quarters with good PRF difference image offsets

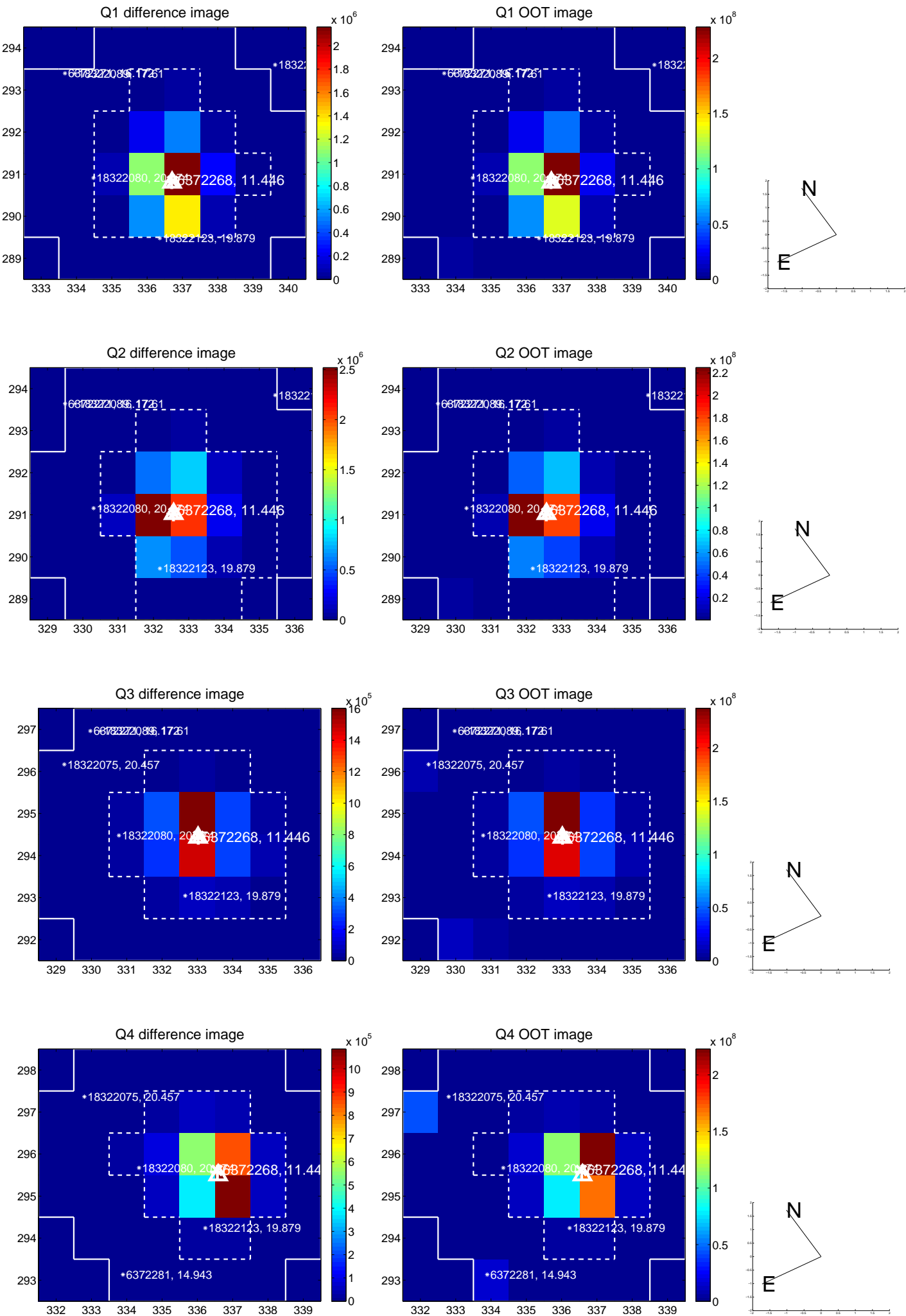
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.025 ± 0.084	0.30	0.017 ± 0.075	-0.018 ± 0.077
PRF-fit source offset from KIC position	0.109 ± 0.082	1.33	0.085 ± 0.074	-0.069 ± 0.079
photometric centroid source offset	0.07 ± 0.02	2.93	-0.06 ± 0.02	-0.01 ± 0.01

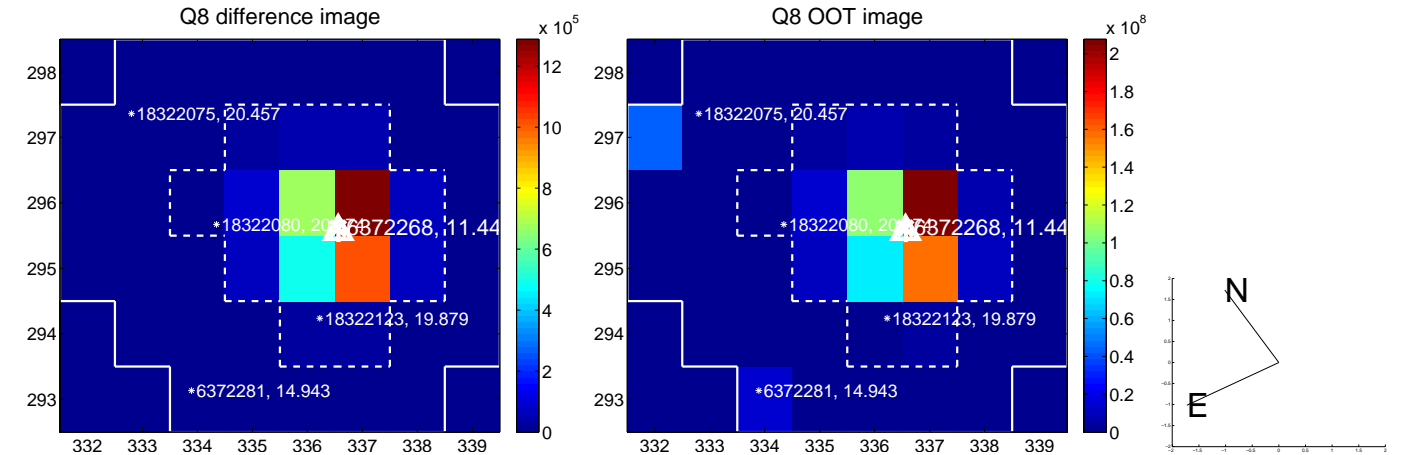
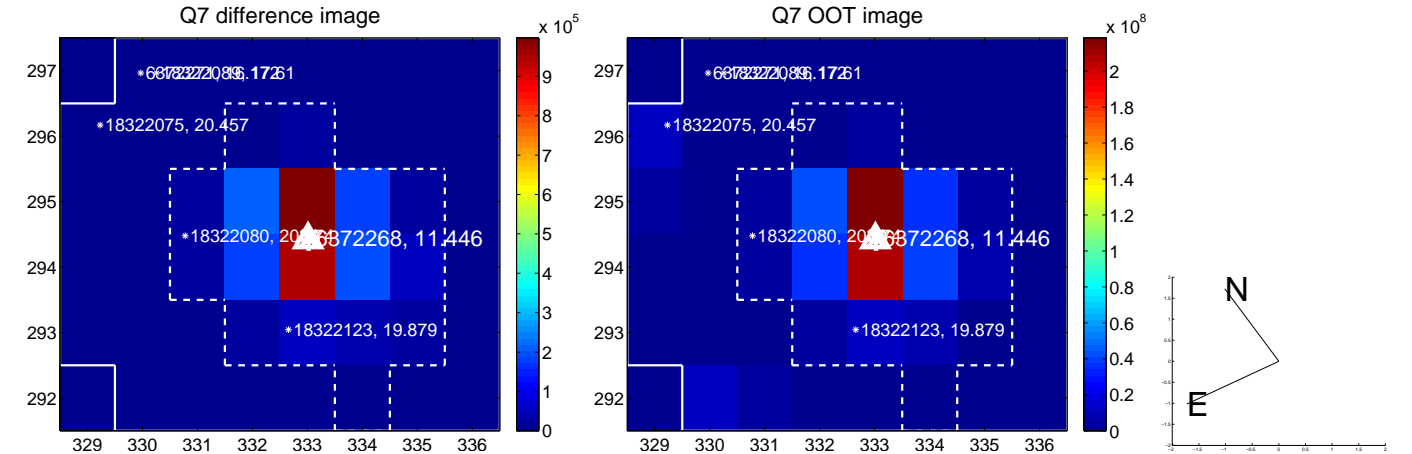
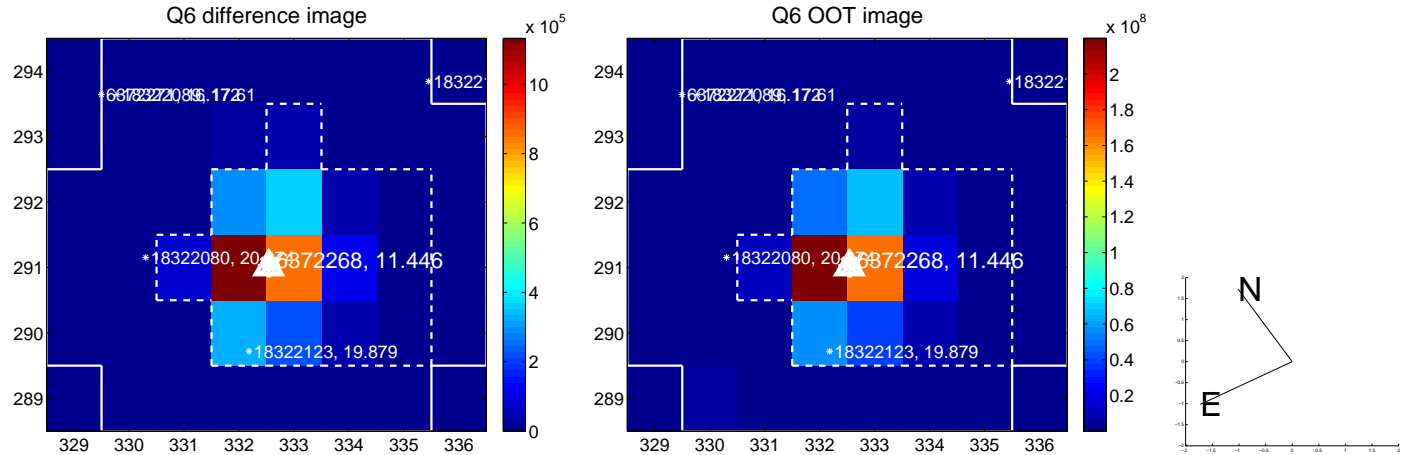
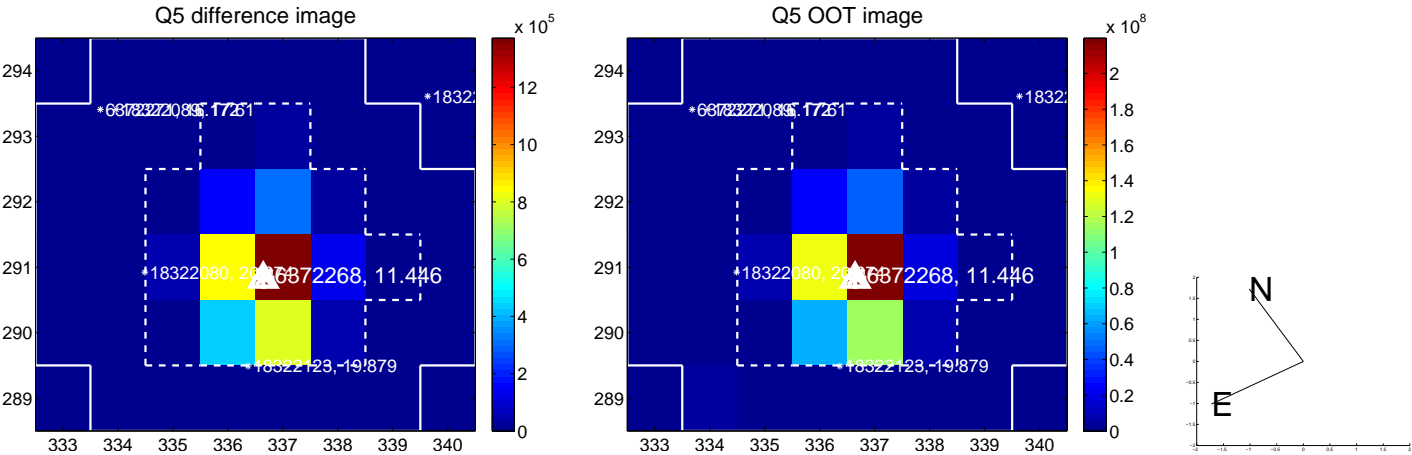


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

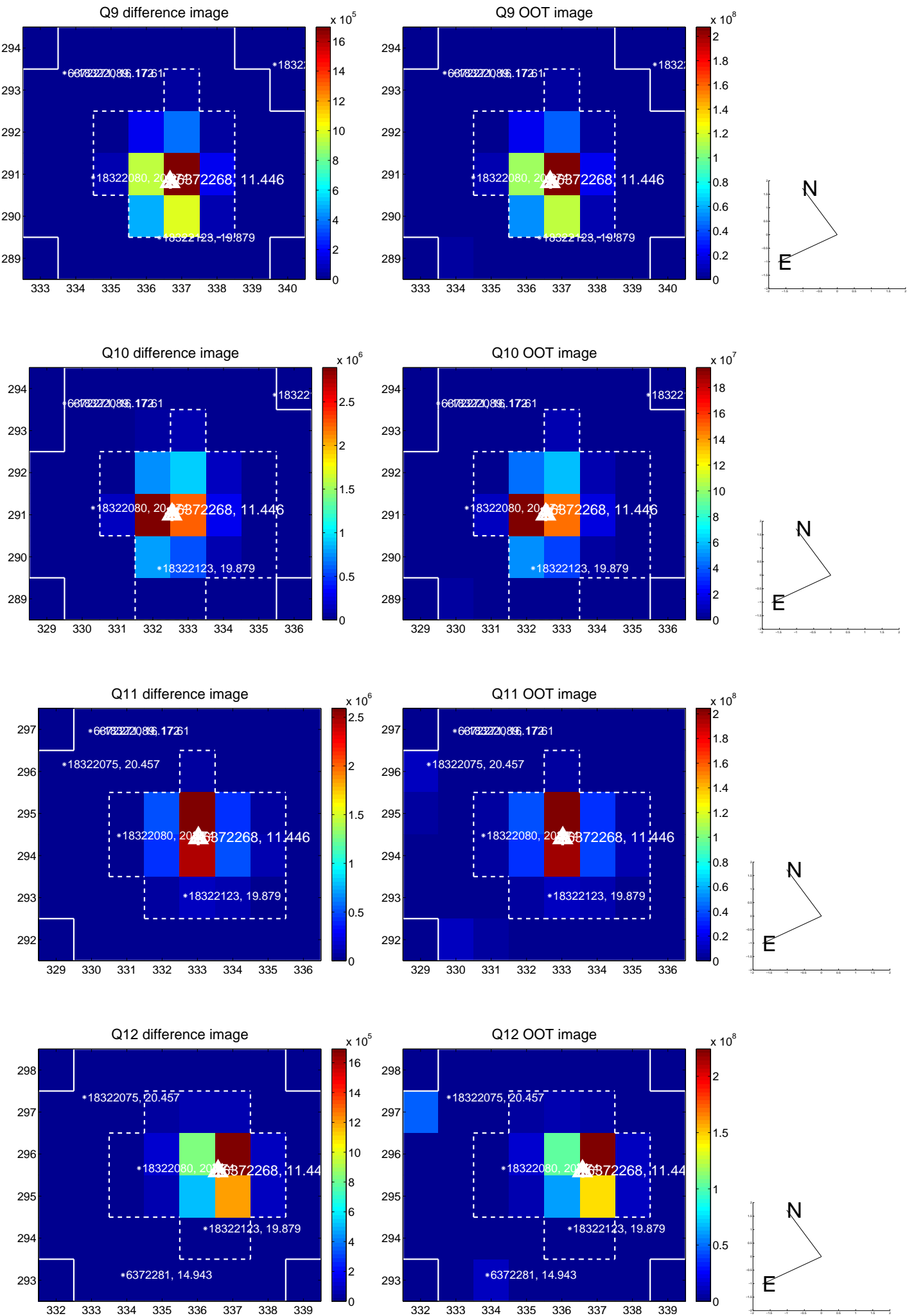
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



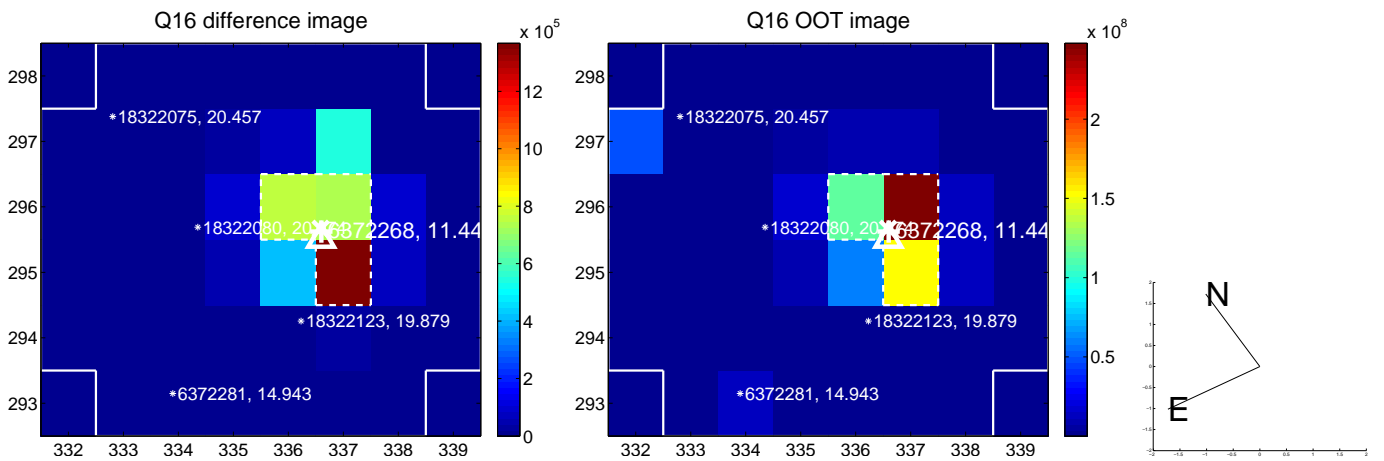
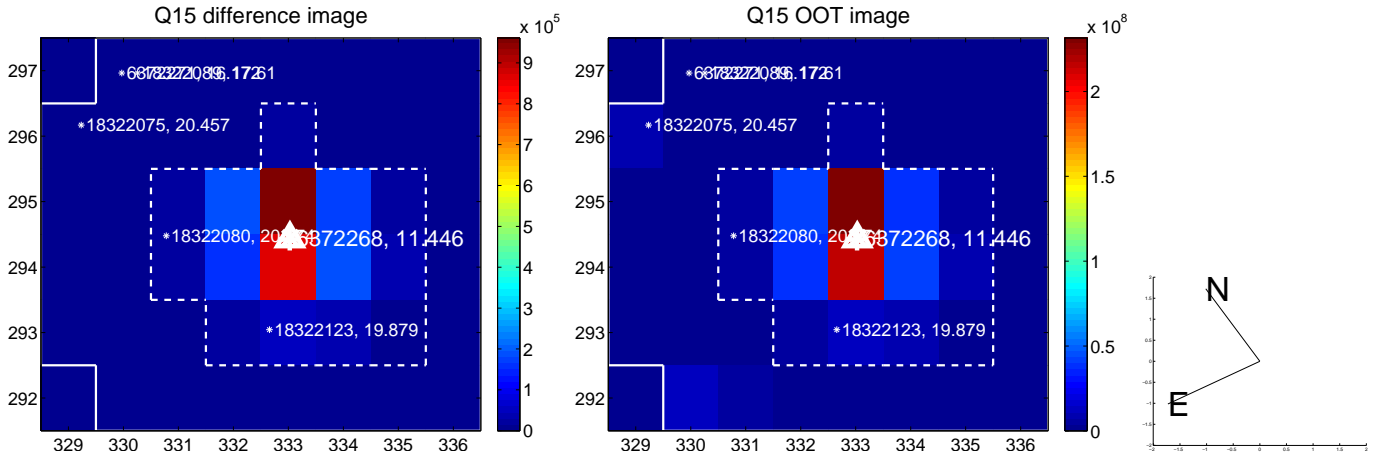
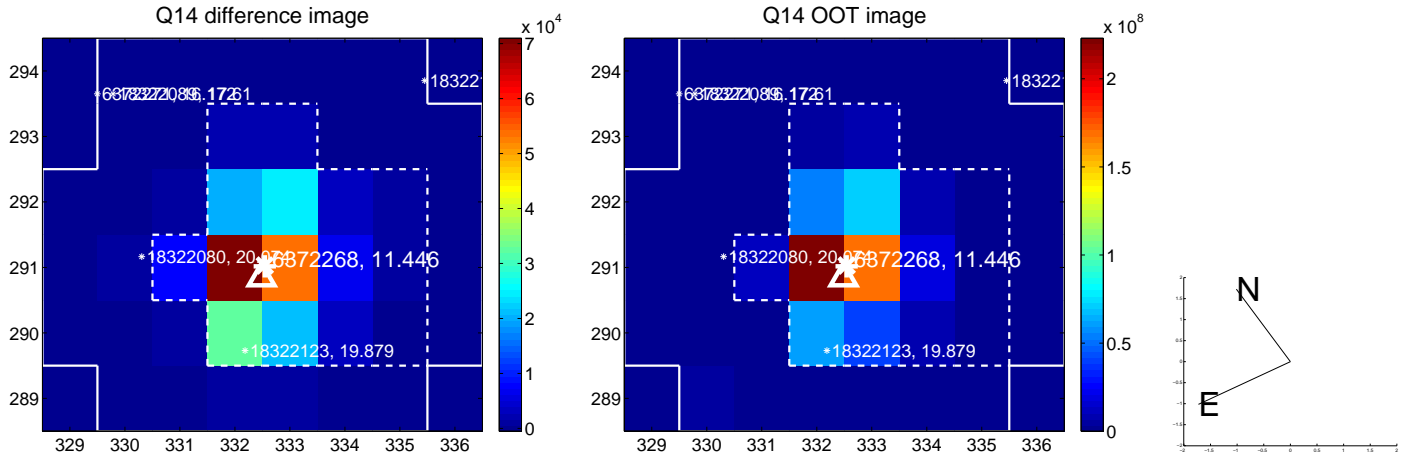
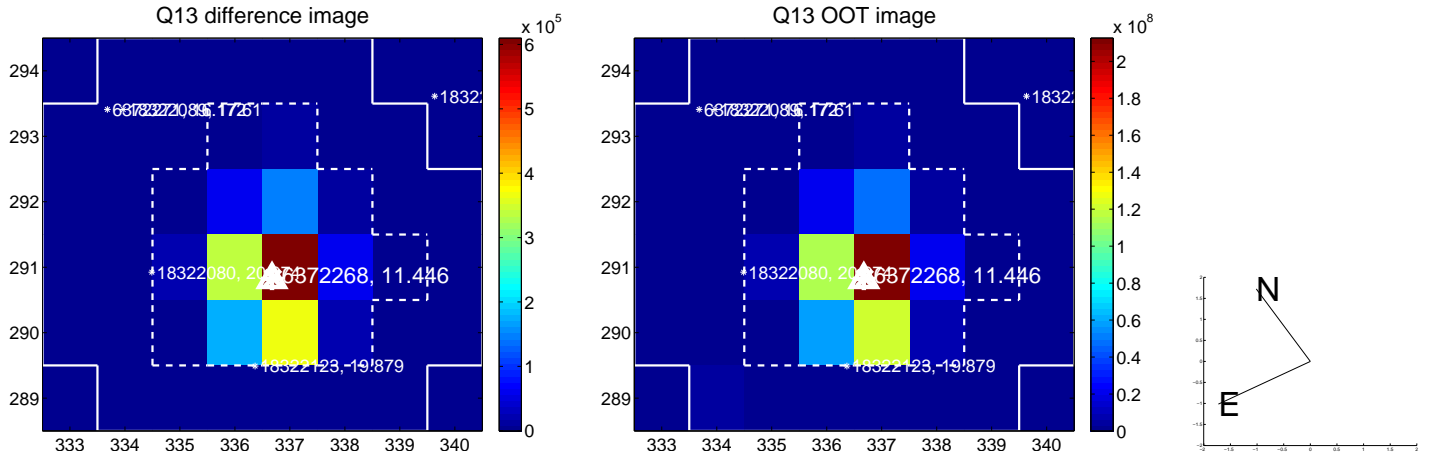
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



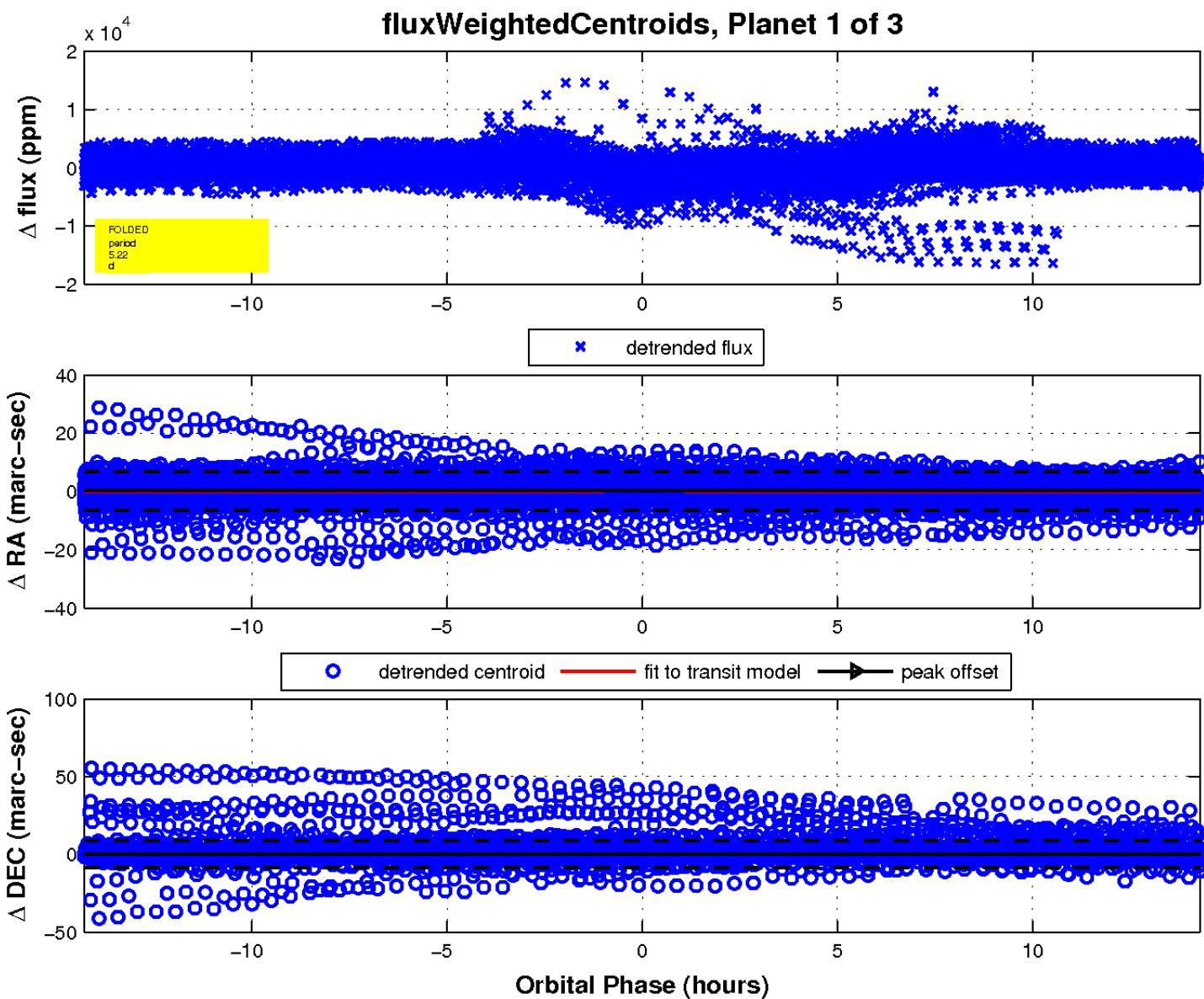
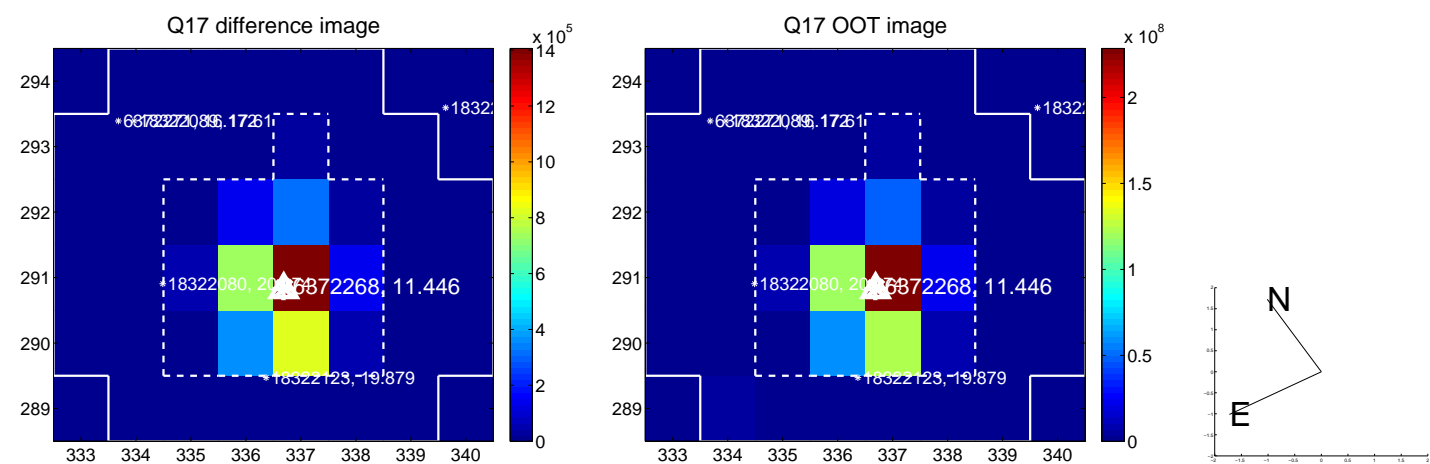
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

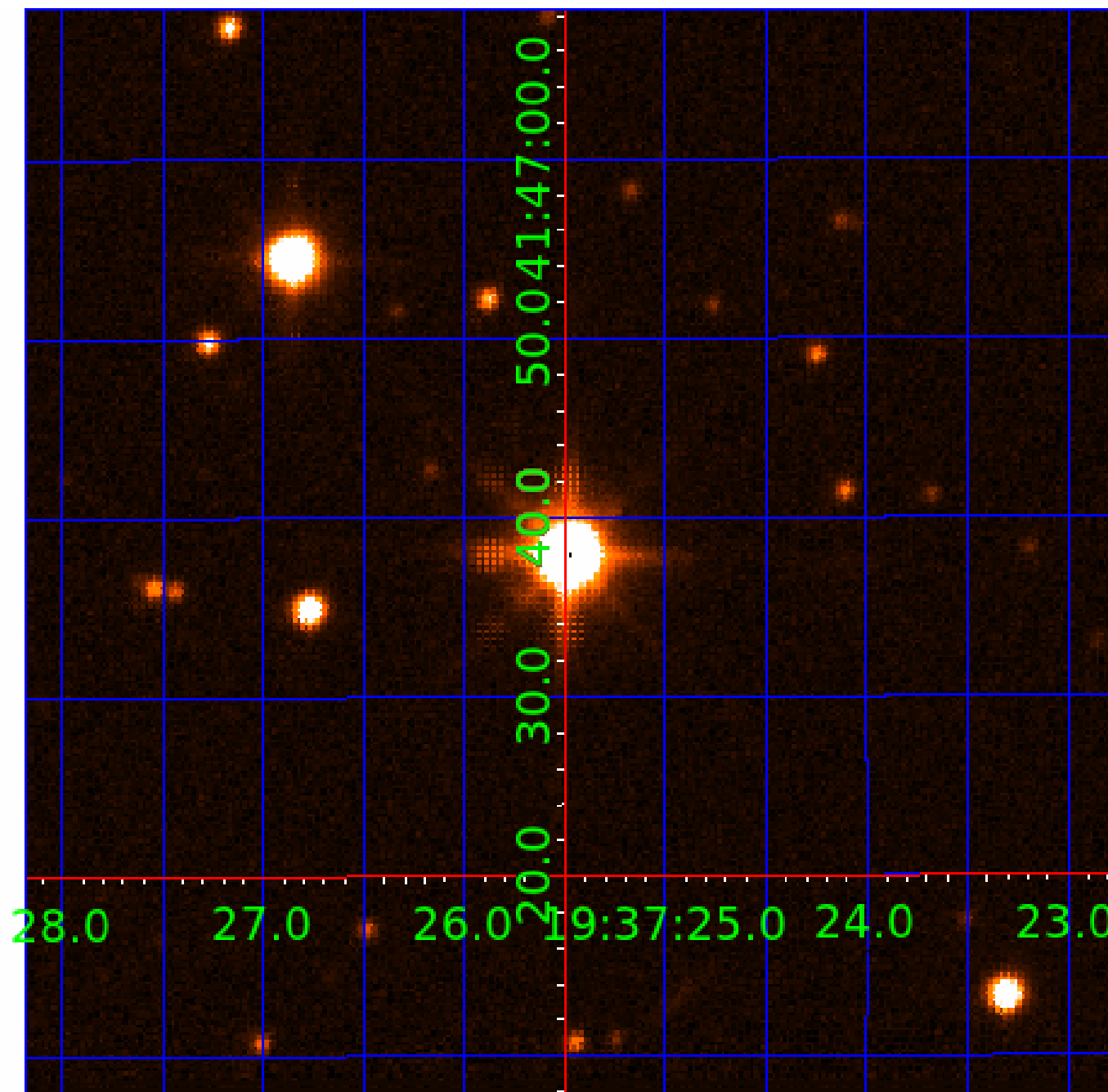


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006372268

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
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006372268-03	OBS	No	5.219955	136.354595	1030.5	11.382	29.5	38.4	0.54	4014	2.04	29.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006372268-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_SATURATED
006372268-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—SAME_NTL_PERIOD—CENT_SATURATED
006372268-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD—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 006372268-02

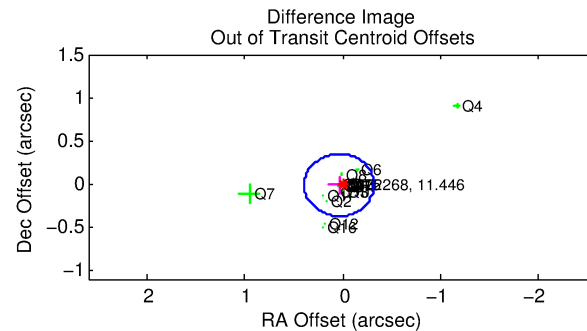
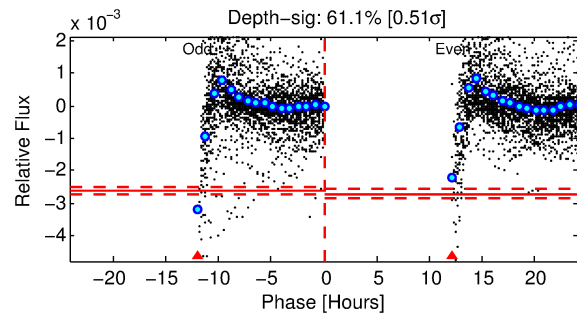
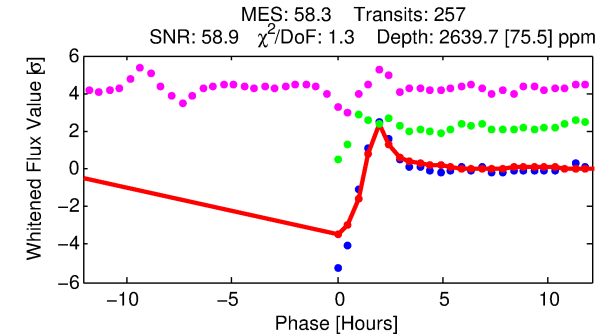
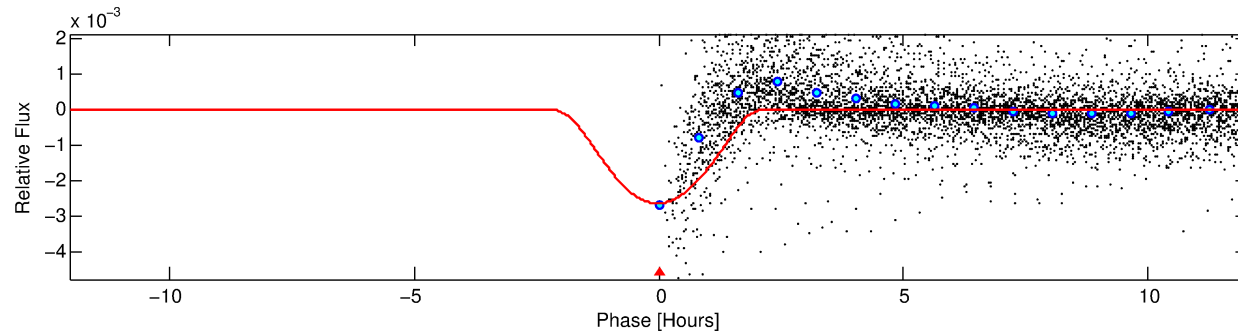
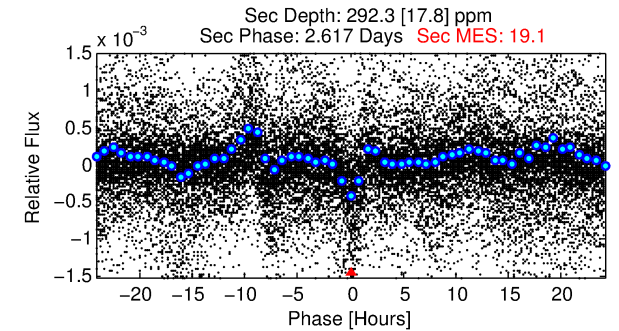
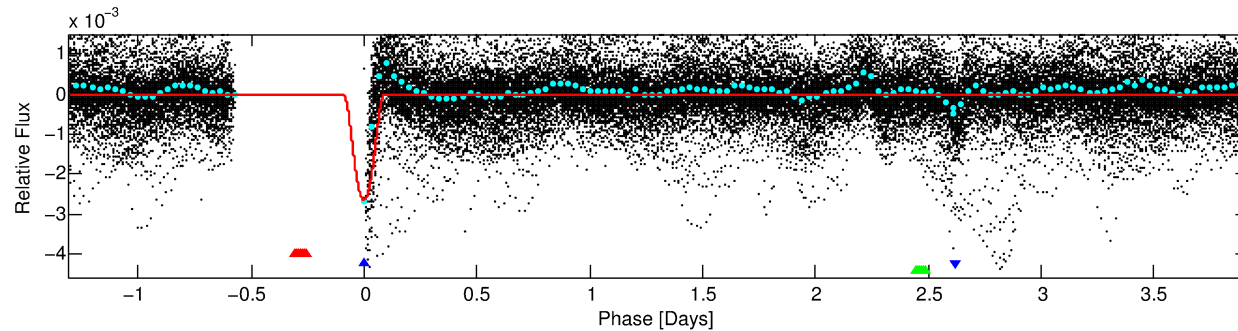
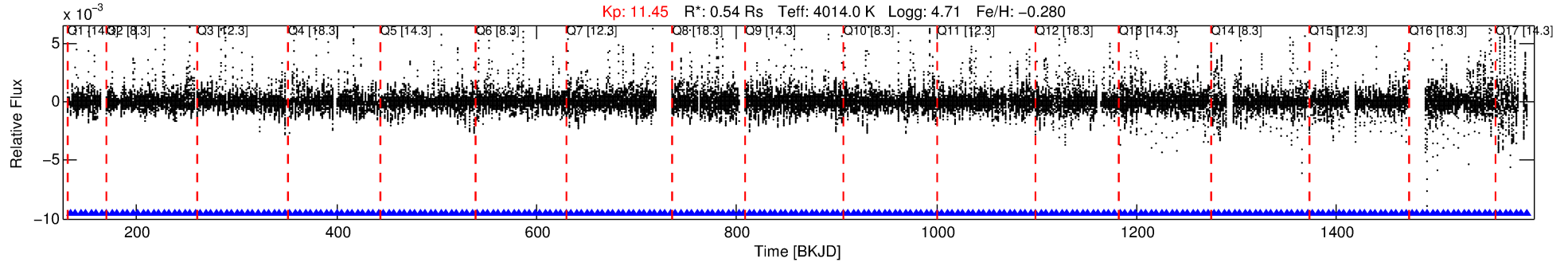
No Significant Match Found

DV One-Page Summary

KIC: 6372268 Candidate: 2 of 3 Period: 5.220 d

KOI: K06698 Corr: No Ephemeris Match

Kp: 11.45 R*: 0.54 Rs Teff: 4014.0 K Logg: 4.71 Fe/H: -0.280



DV Fit Results:

Period = 5.22009 [0.00000] d
Epoch = 133.8718 [0.0016] BKJD
Rp/R* = 0.0841 [0.0185]
a/R* = 4.47 [0.18]
b = 0.99 [0.03]
Seff = 29.56 [6.25]
Teq = 595 [31] K
Rp = 4.99 [1.32] Re
a = 0.0483 [0.0054] AU
Ag = 15.04 [7.05] [1.99σ]
Teffp = 1810 [213] K [5.65σ]

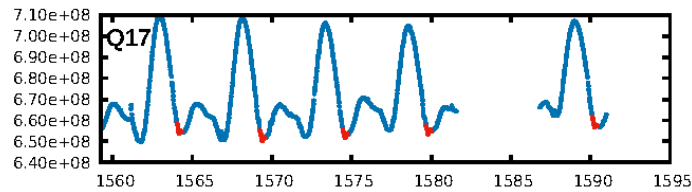
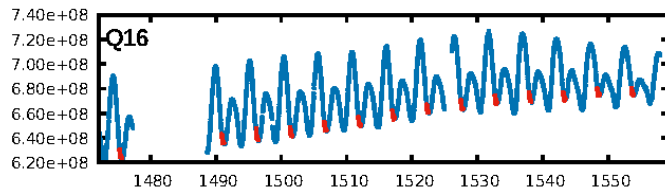
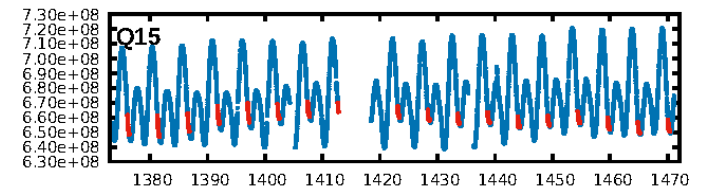
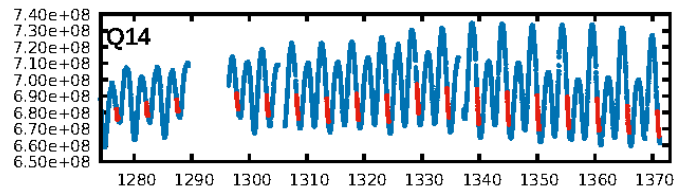
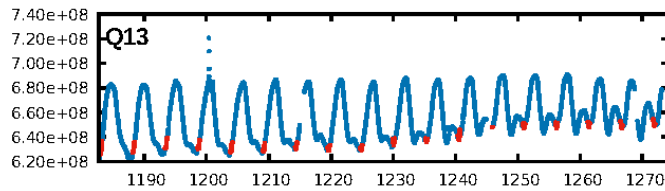
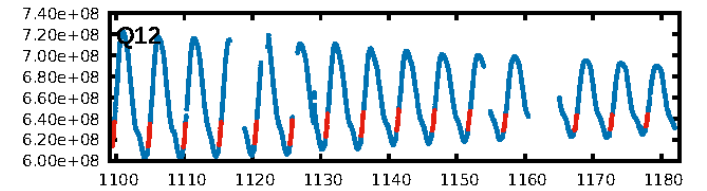
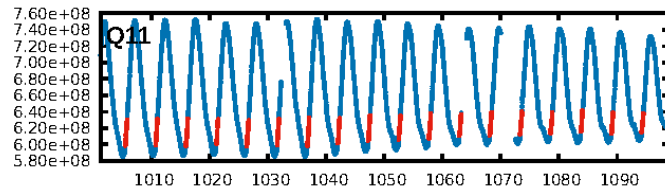
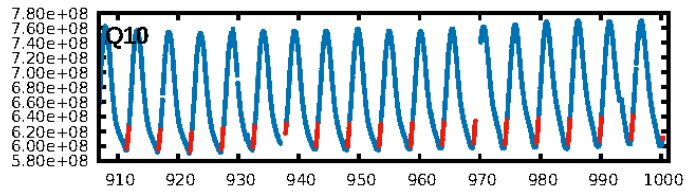
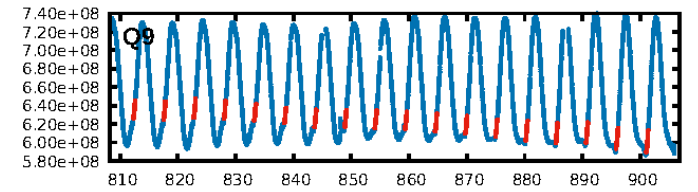
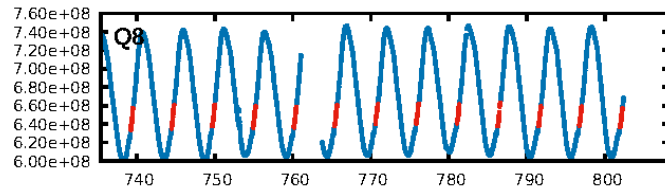
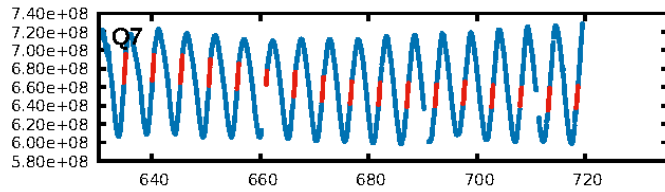
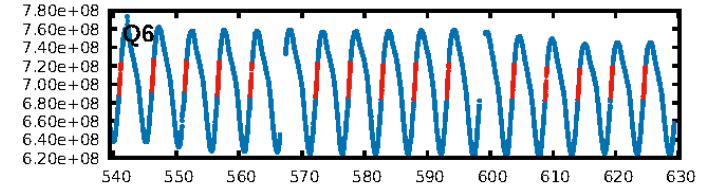
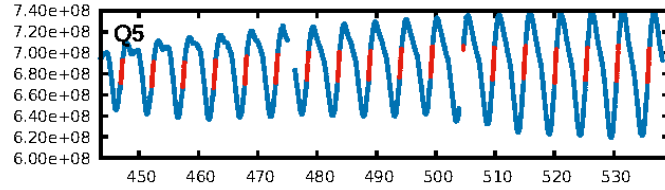
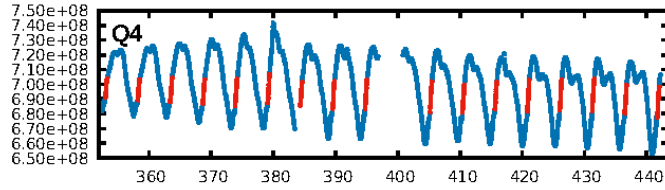
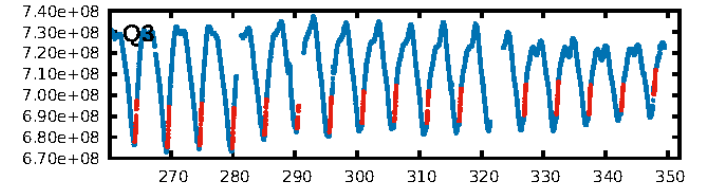
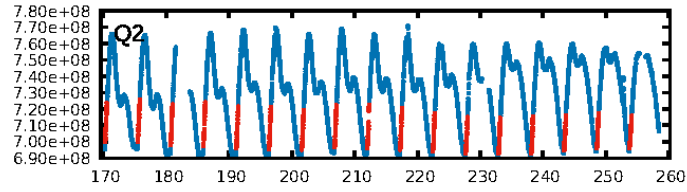
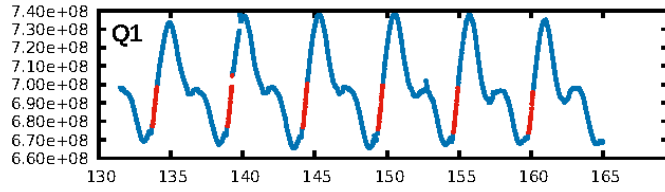
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [246/246]
GhostDiagnostic-chr: 1.127
Centroid-sig: 2.4%
Centroid-so: 0.022 arcsec [1.06σ]
OotOffset-rm: 0.040 arcsec [0.33σ]
KicOffset-rm: 0.142 arcsec [1.10σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.76 [13/17]
DiffImageOverlap-fno: 0.00 [0/17]

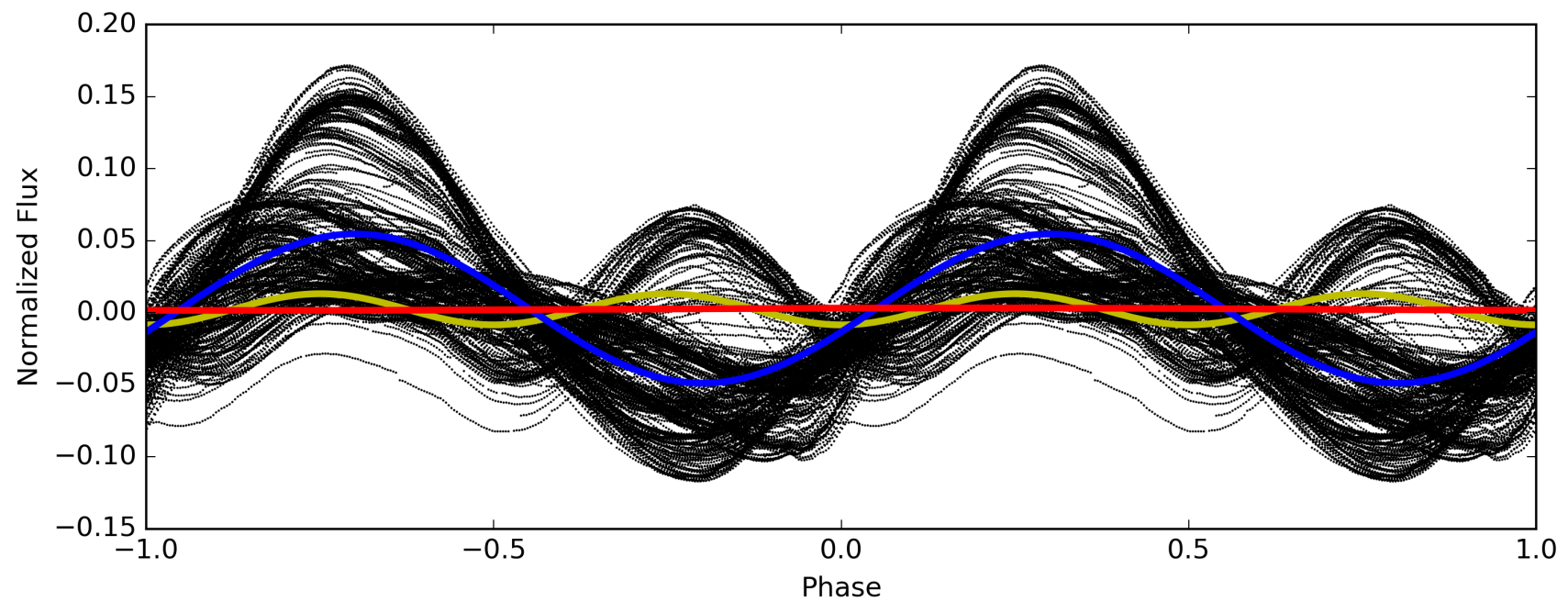
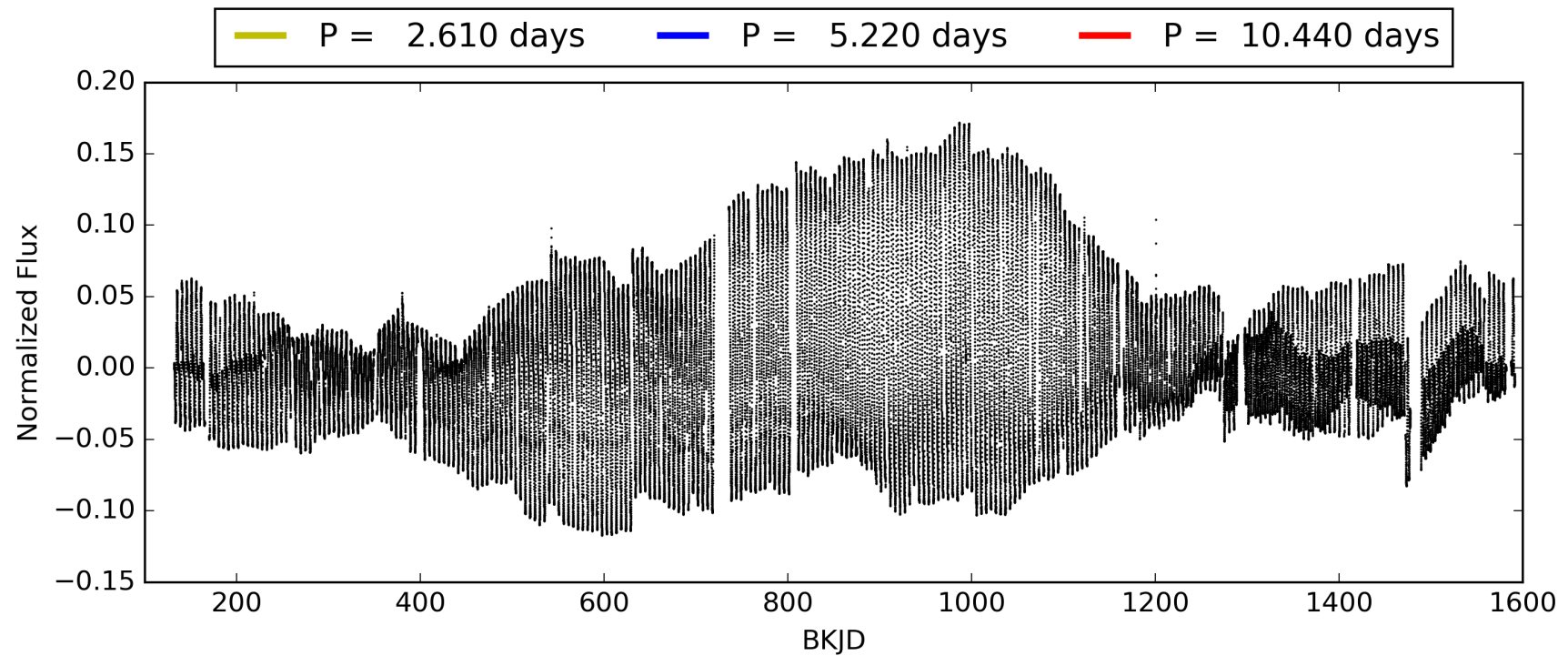
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:37:24 Z

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

TCE 006372268-02, PDC Light Curves

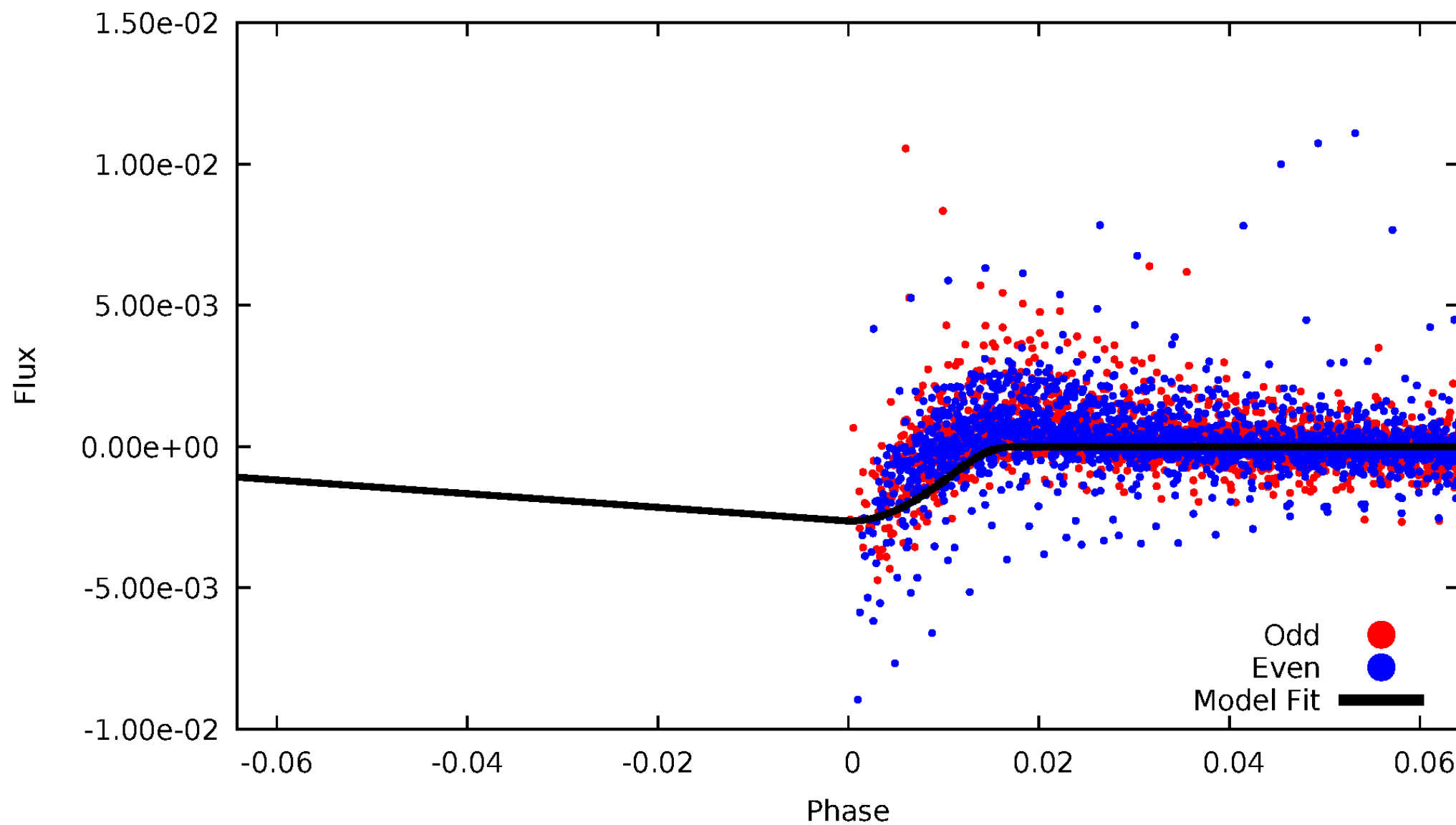


TCE 006372268-02



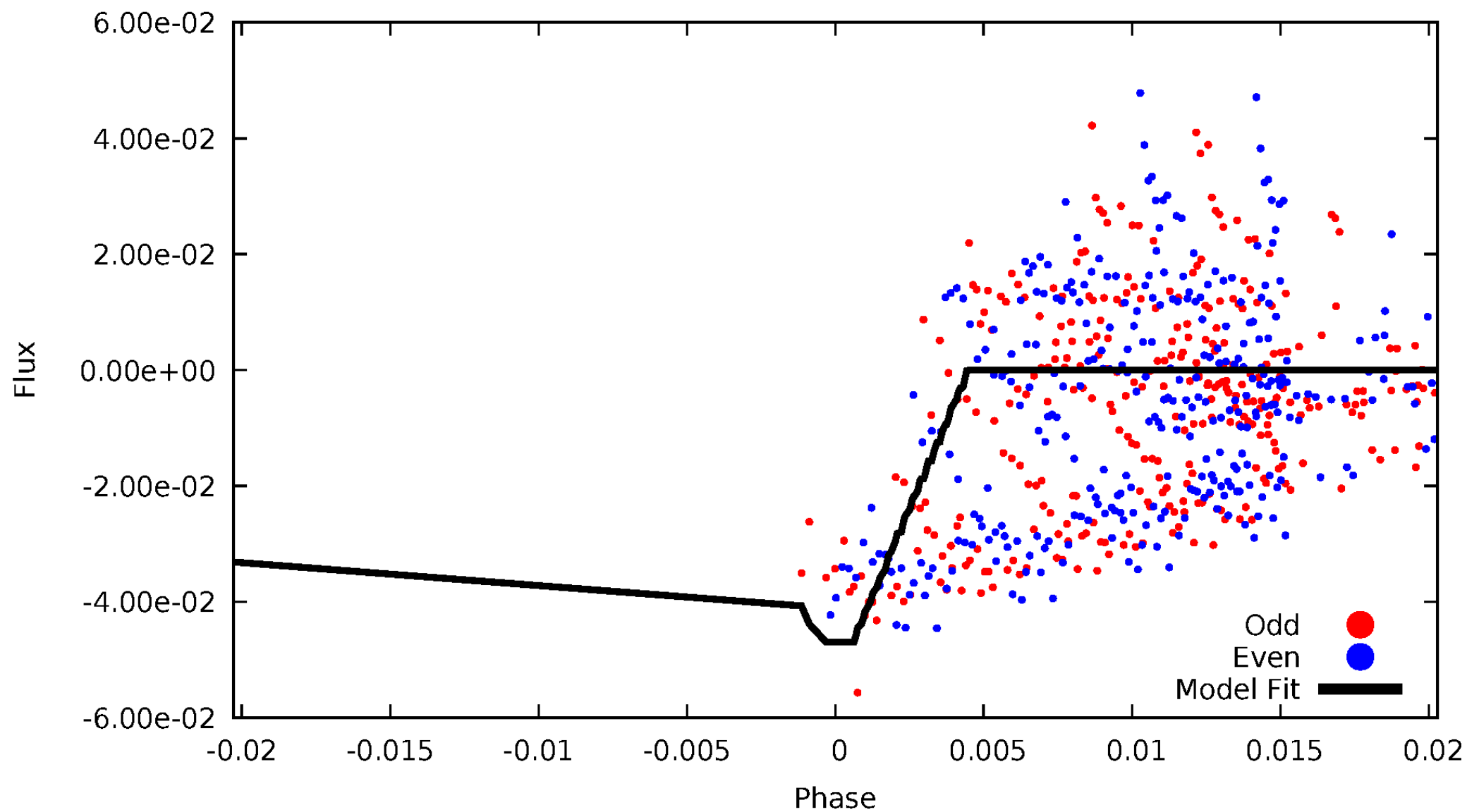
DV Odd/Even

TCE 006372268-02



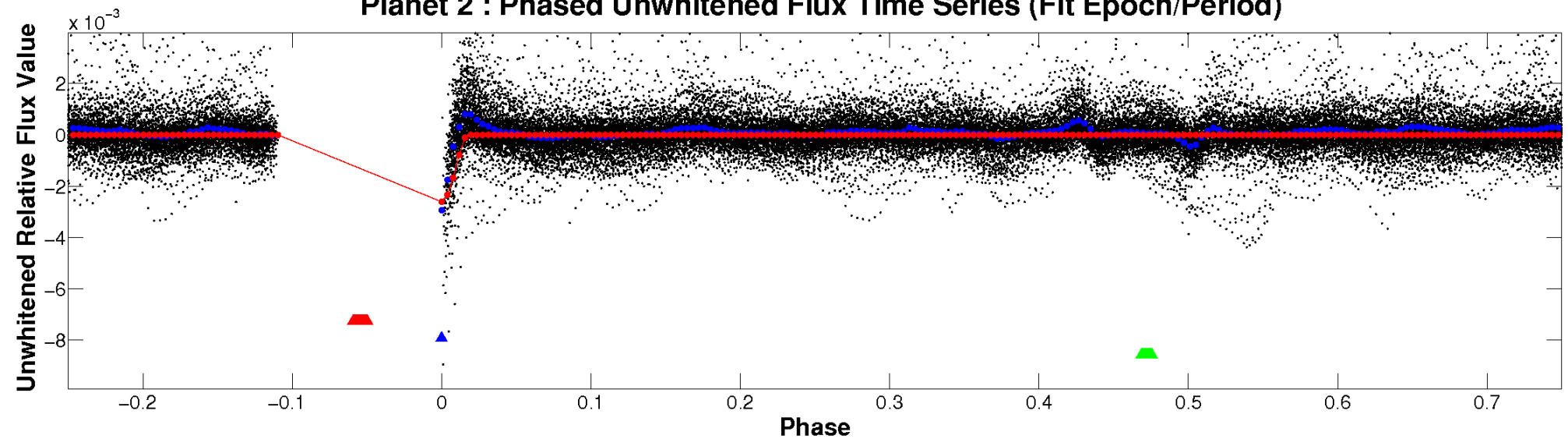
ALT Odd/Even

TCE 006372268-02

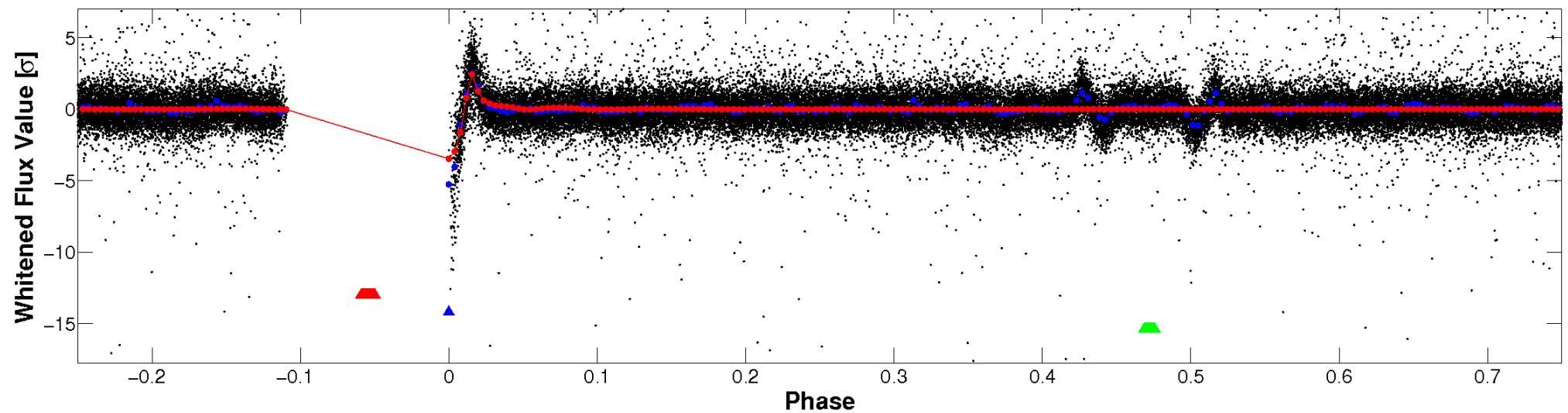


Non-Whitened Vs. Whitened Light Curve

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

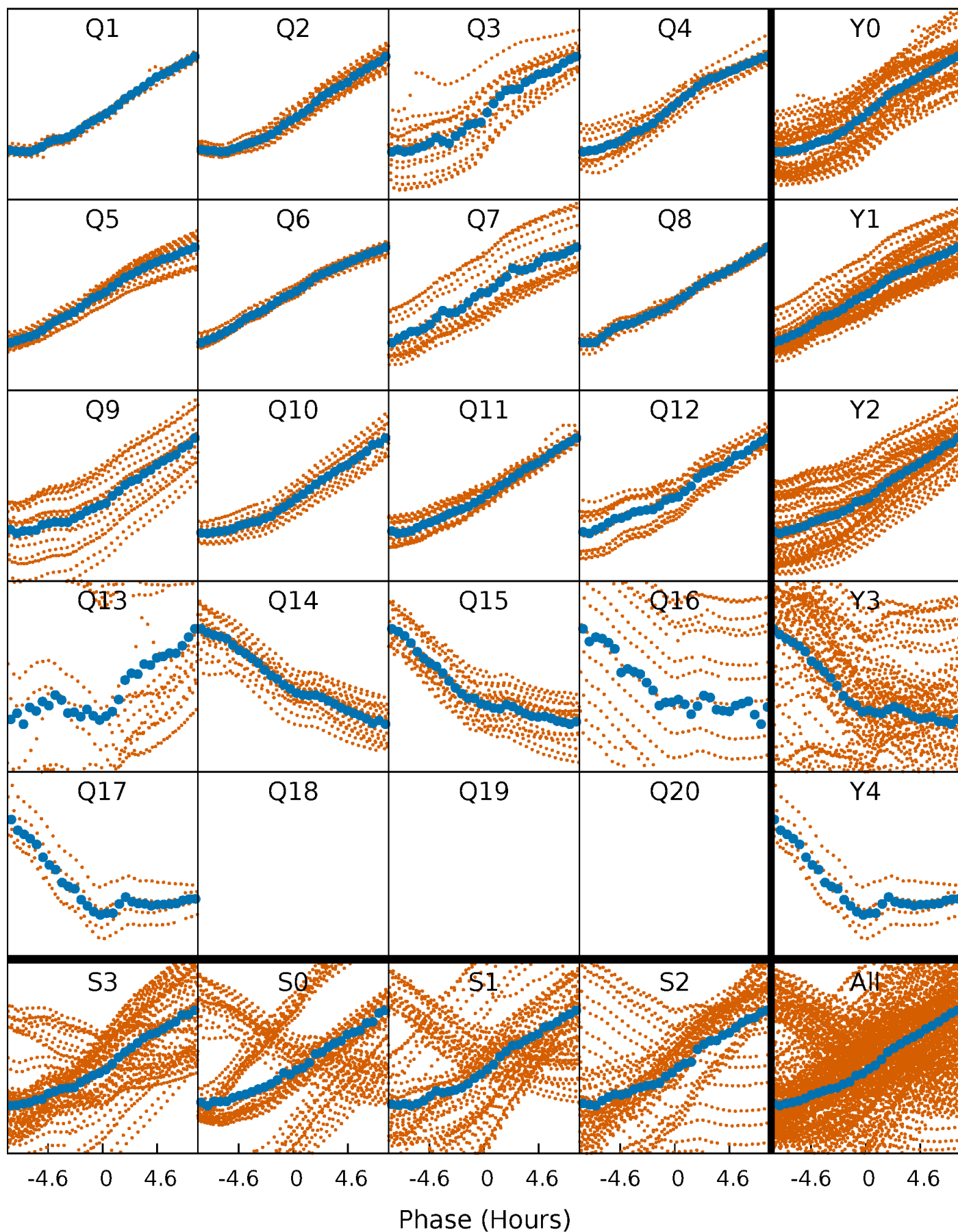


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



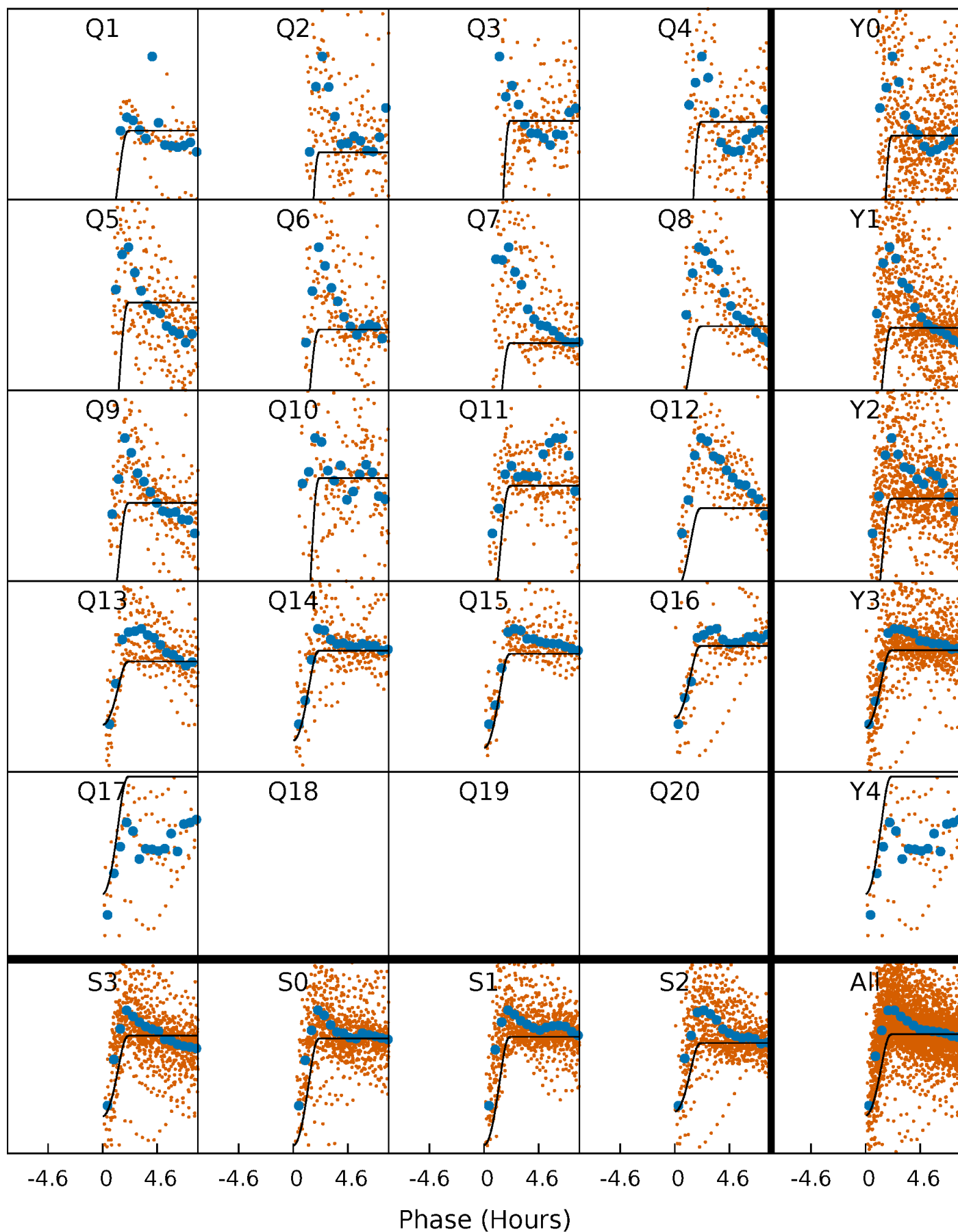
PDC Quarter-Phased Transit Curves

TCE 006372268-02 P= 5.220087 Days $T_0=133.871832$ (BKJD)



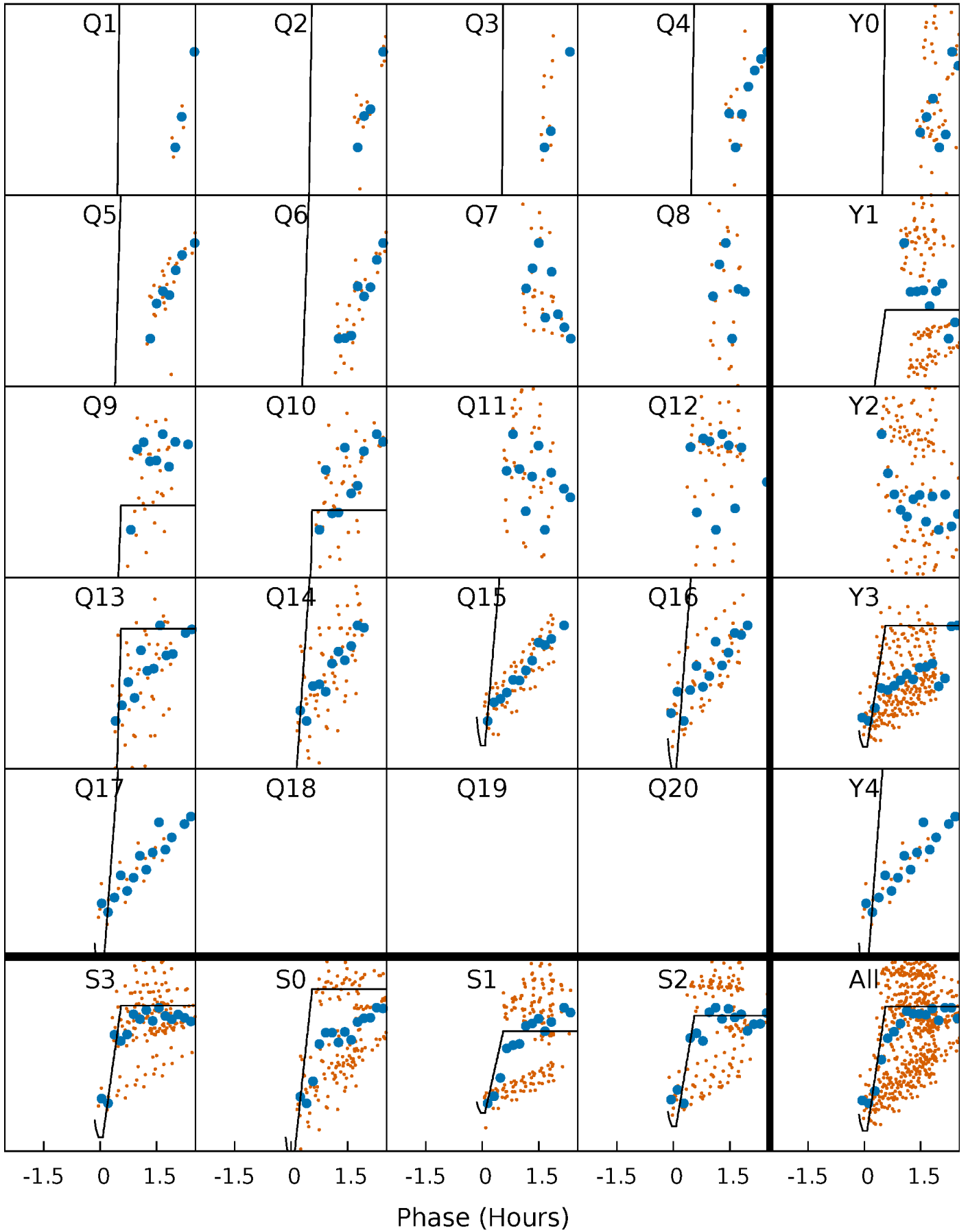
DV Quarter-Phased Transit Curves

TCE 006372268-02 P= 5.220087 Days $T_0=133.871832$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

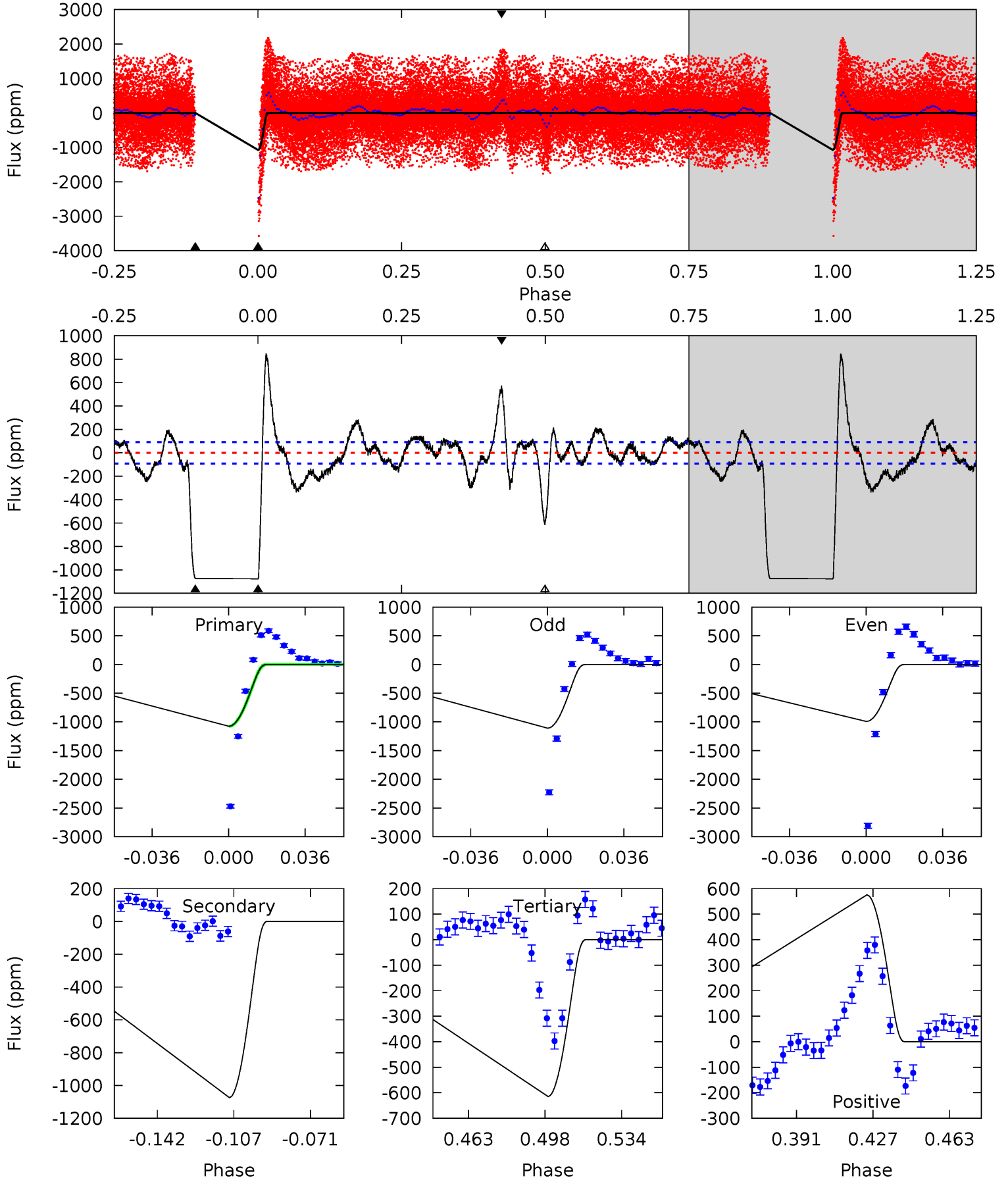
TCE 006372268-02 P= 5.220213 Days $T_0=133.845192$ (BKJD)



DV Model-Shift Uniqueness Test

006372268-02, P = 5.220087 Days, E = 128.651745 Days

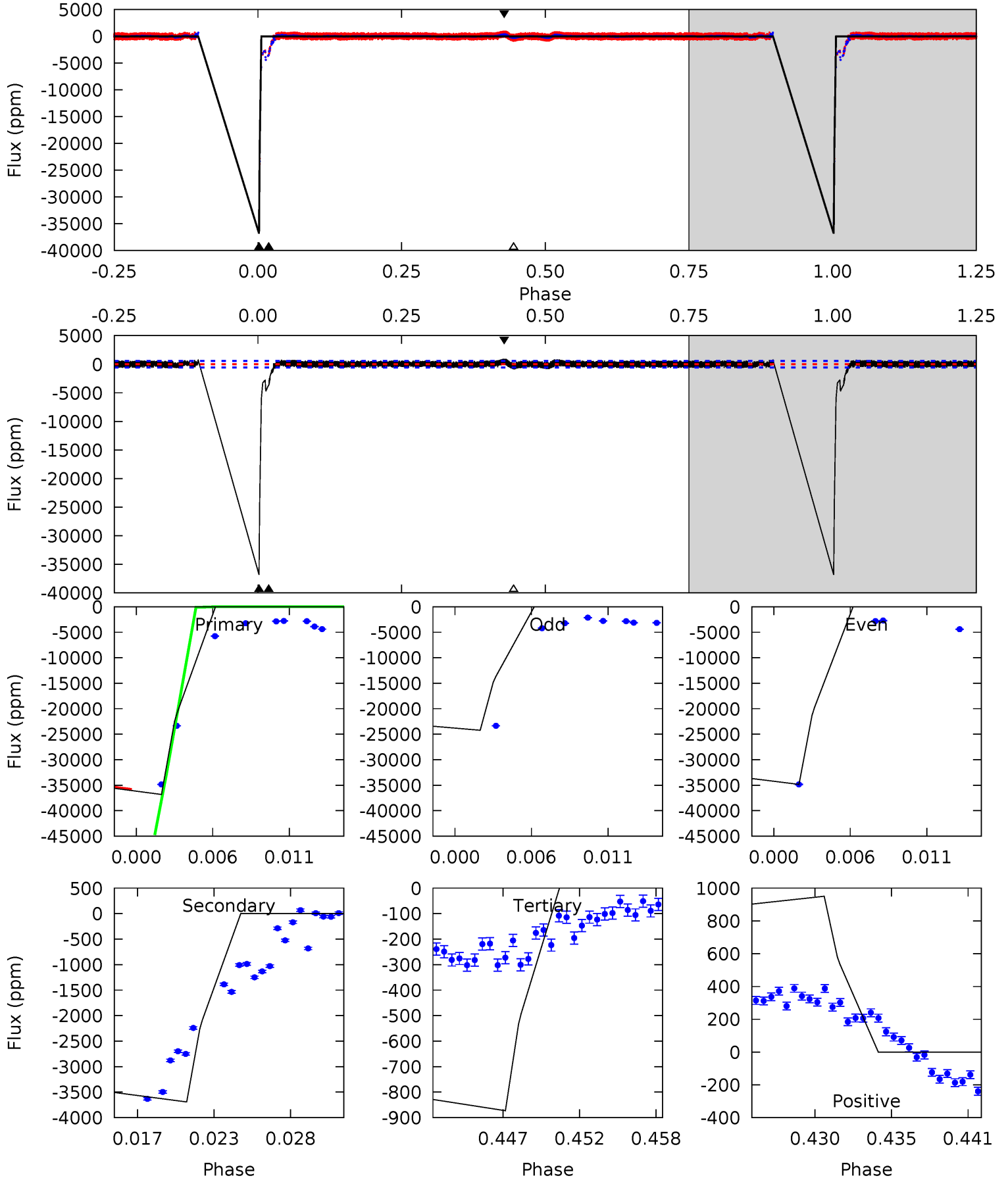
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
56.2	56.1	32.1	30.0	4.78	2.10	7.64	24.1	26.1	24.0	26.0	3.10	0.77	0.44	0



Alt Model-Shift Uniqueness Test

006372268-02, P = 5.220213 Days, E = 128.624979 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
332.9	33.4	7.89	8.59	5.13	2.77	1.83	325.0	324.3	25.5	24.8	44.7	1.02	0.03	0



Stellar Parameters For KIC 006372268

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4014^{+138}_{-152}	$4.707^{+0.072}_{-0.036}$	$-0.280^{+0.300}_{-0.300}$	$0.544^{+0.053}_{-0.080}$	$0.549^{+0.058}_{-0.070}$	$4.809^{+1.892}_{-0.788}$
	+3%/-4%	+2%/-1%	+107%/-107%	+10%/-15%	+11%/-13%	+39%/-16%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 006372268-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1075 ± 19	$4.93^{+1.11}_{-1.22}$	824^{+35}_{-36}	2993^{+225}_{-173}	57^{+40}_{-18}
Alt.	-3693 ± 111	$12.67^{+1.39}_{-1.43}$	824^{+36}_{-38}	2728^{+100}_{-91}	30^{+7}_{-6}

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

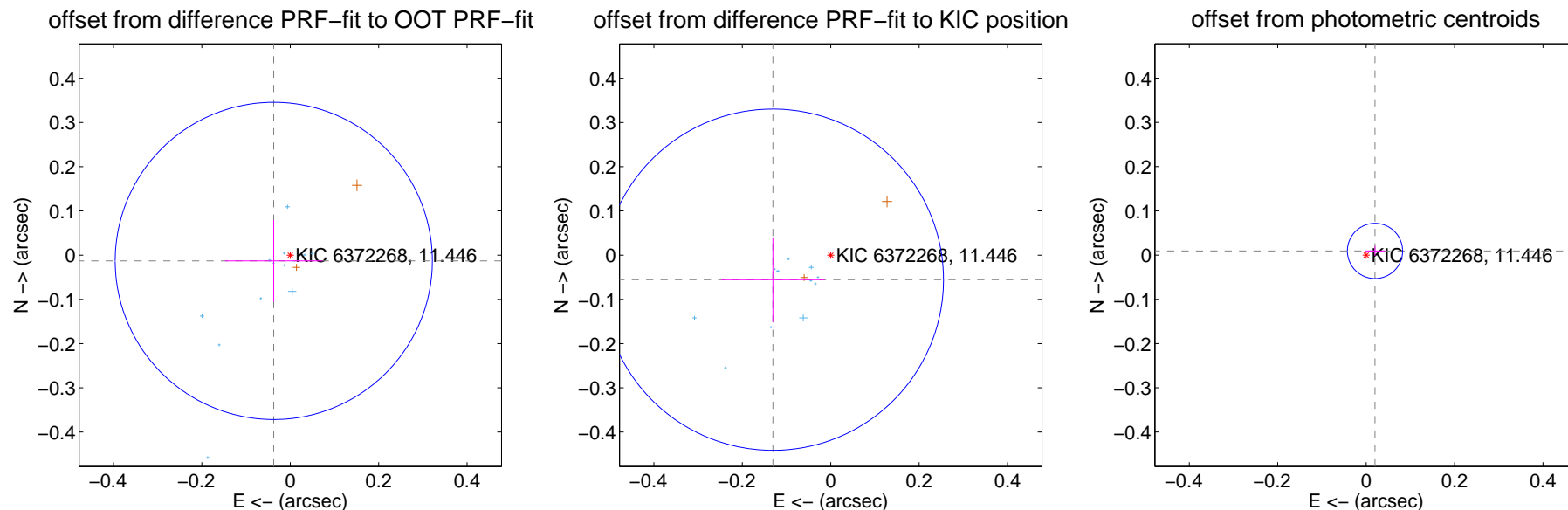
DV Centroid Data

Supplemental centroid analysis for 006372268-02. **Kepler magnitude: 11.45.** Transit SNR 58.89

There are 13 quarters with good PRF difference image offsets

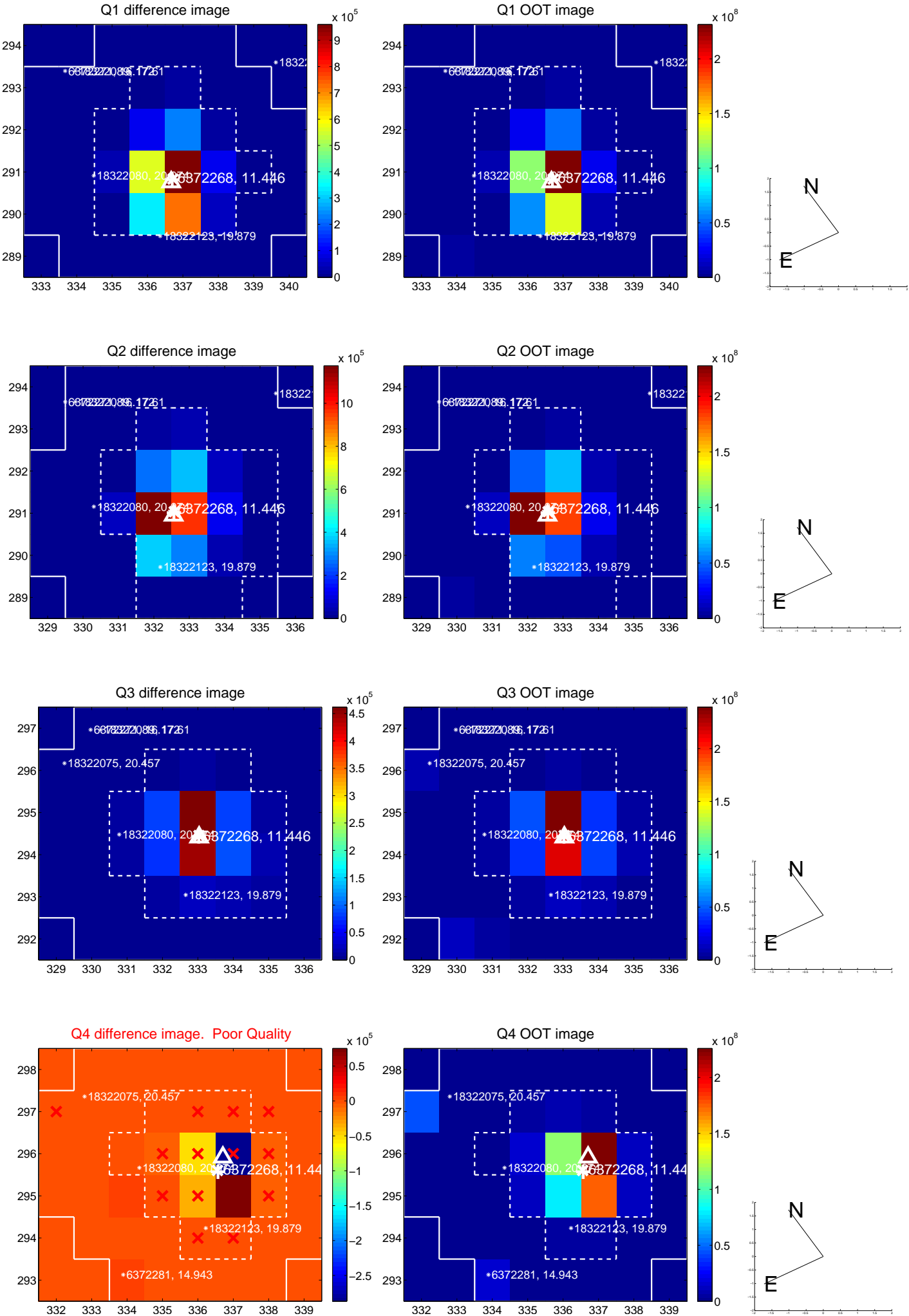
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.040 ± 0.120	0.33	0.037 ± 0.110	-0.013 ± 0.093
PRF-fit source offset from KIC position	0.142 ± 0.129	1.10	0.131 ± 0.117	-0.055 ± 0.096
photometric centroid source offset	0.02 ± 0.02	1.06	-0.02 ± 0.02	0.01 ± 0.01

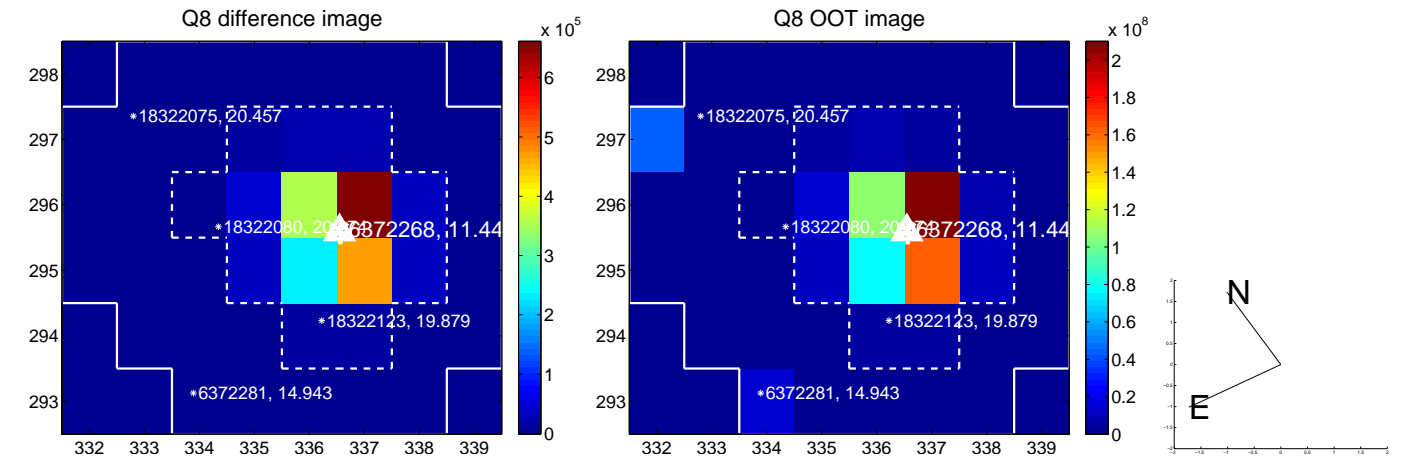
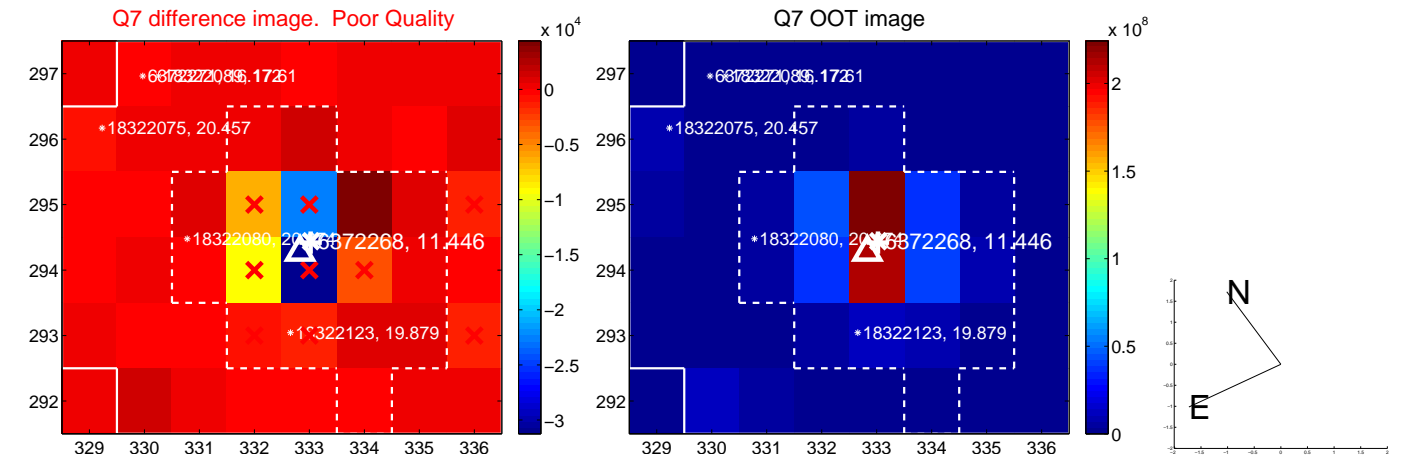
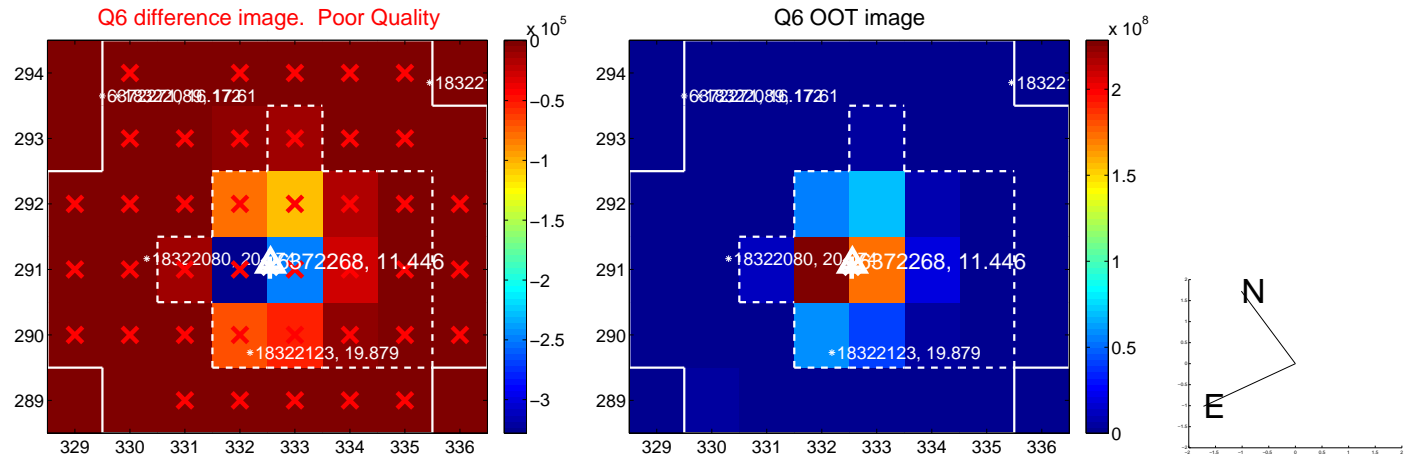
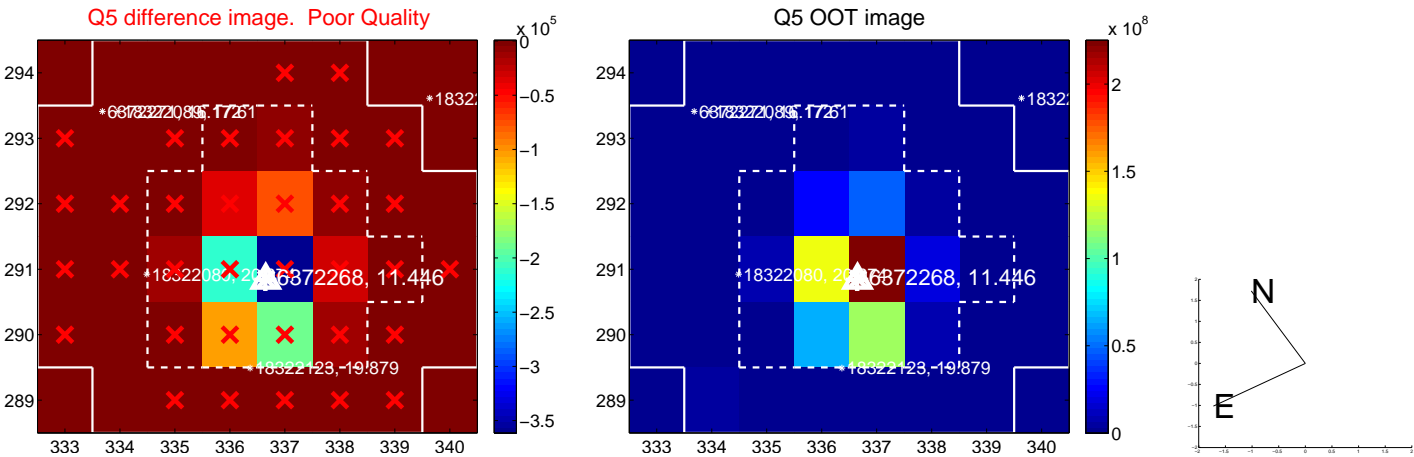


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

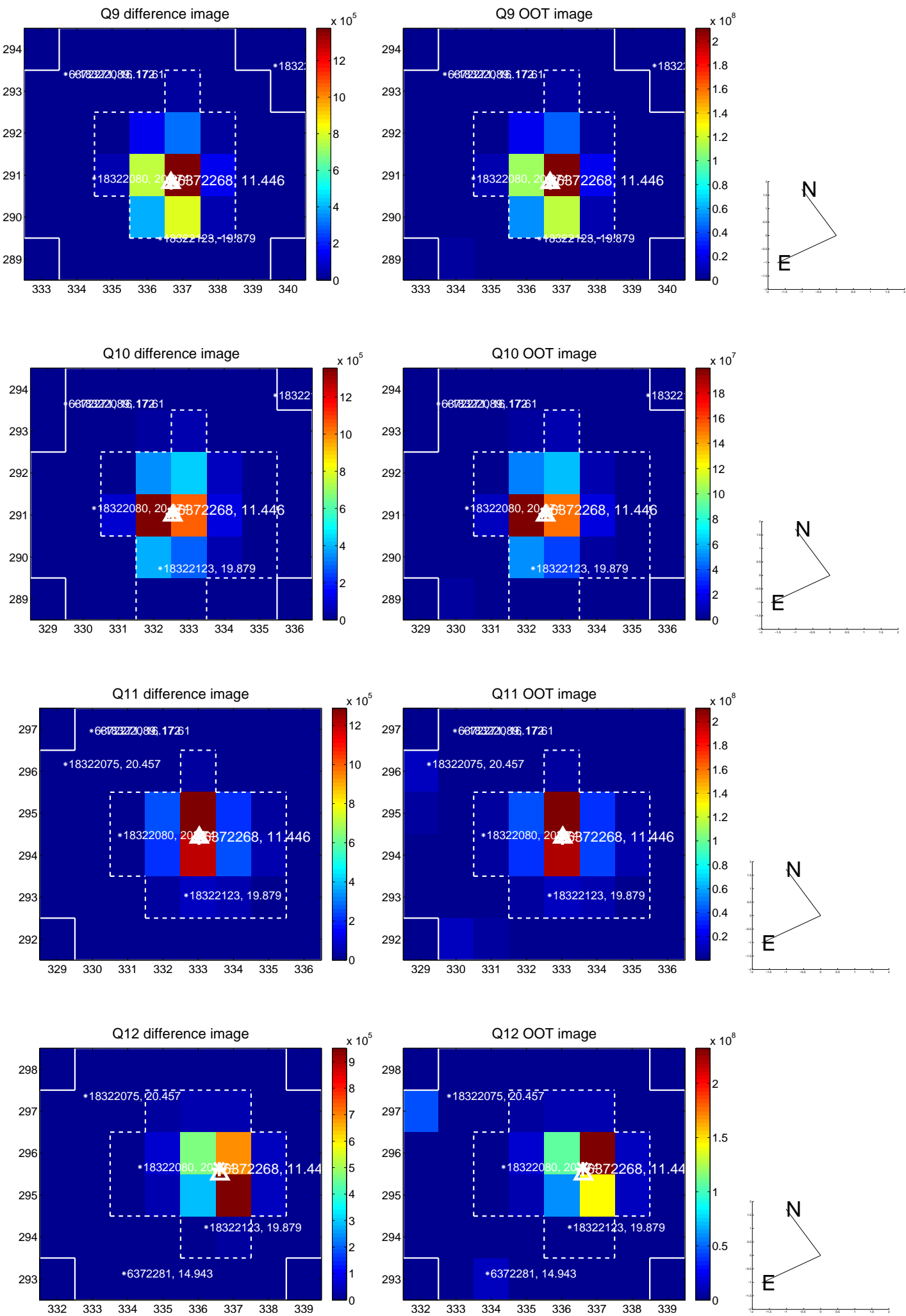
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



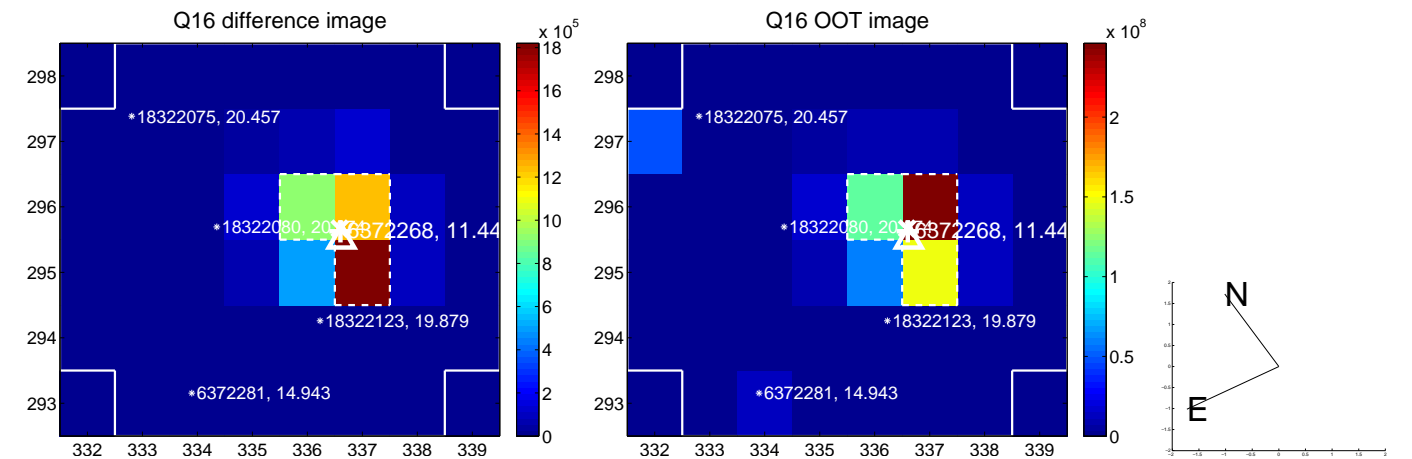
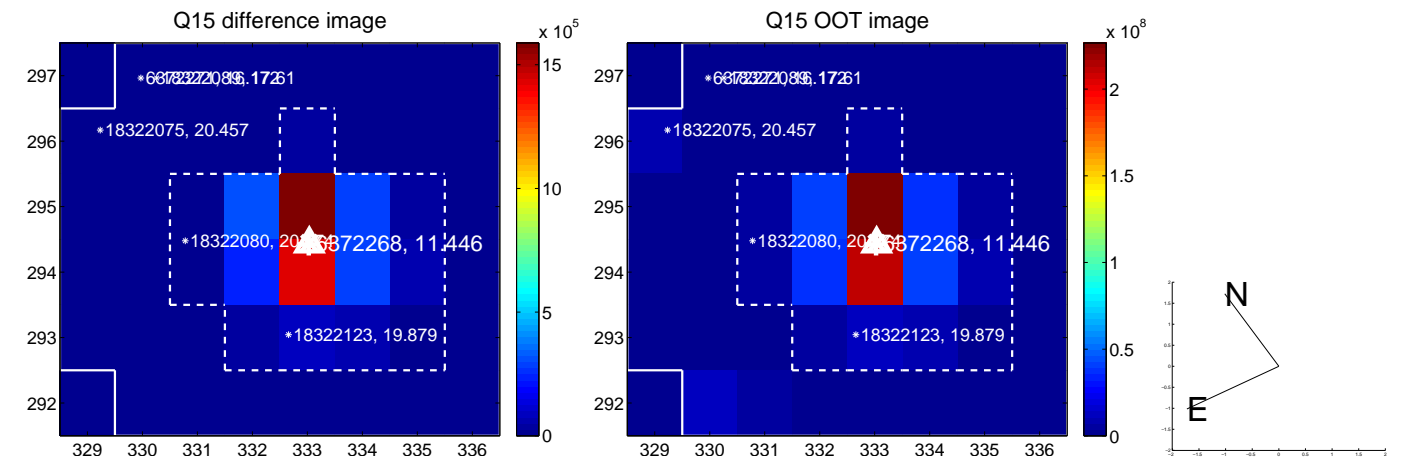
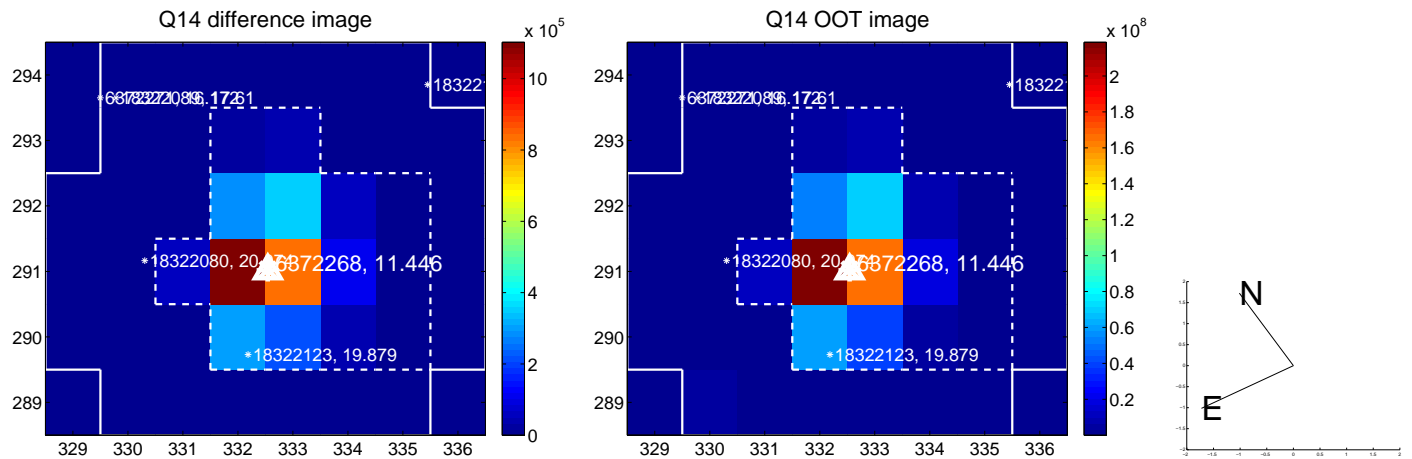
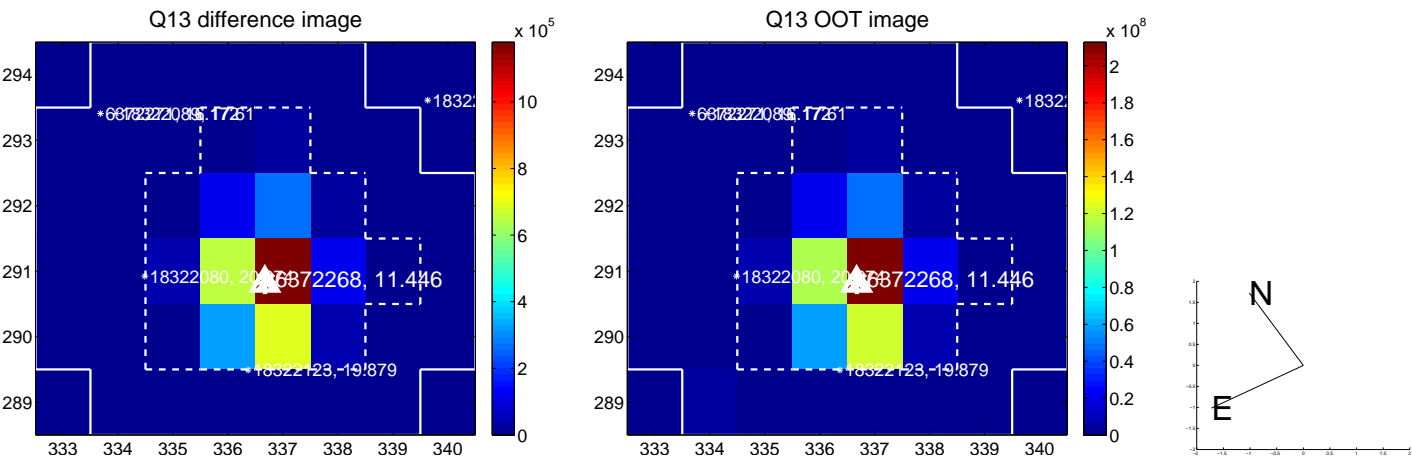
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



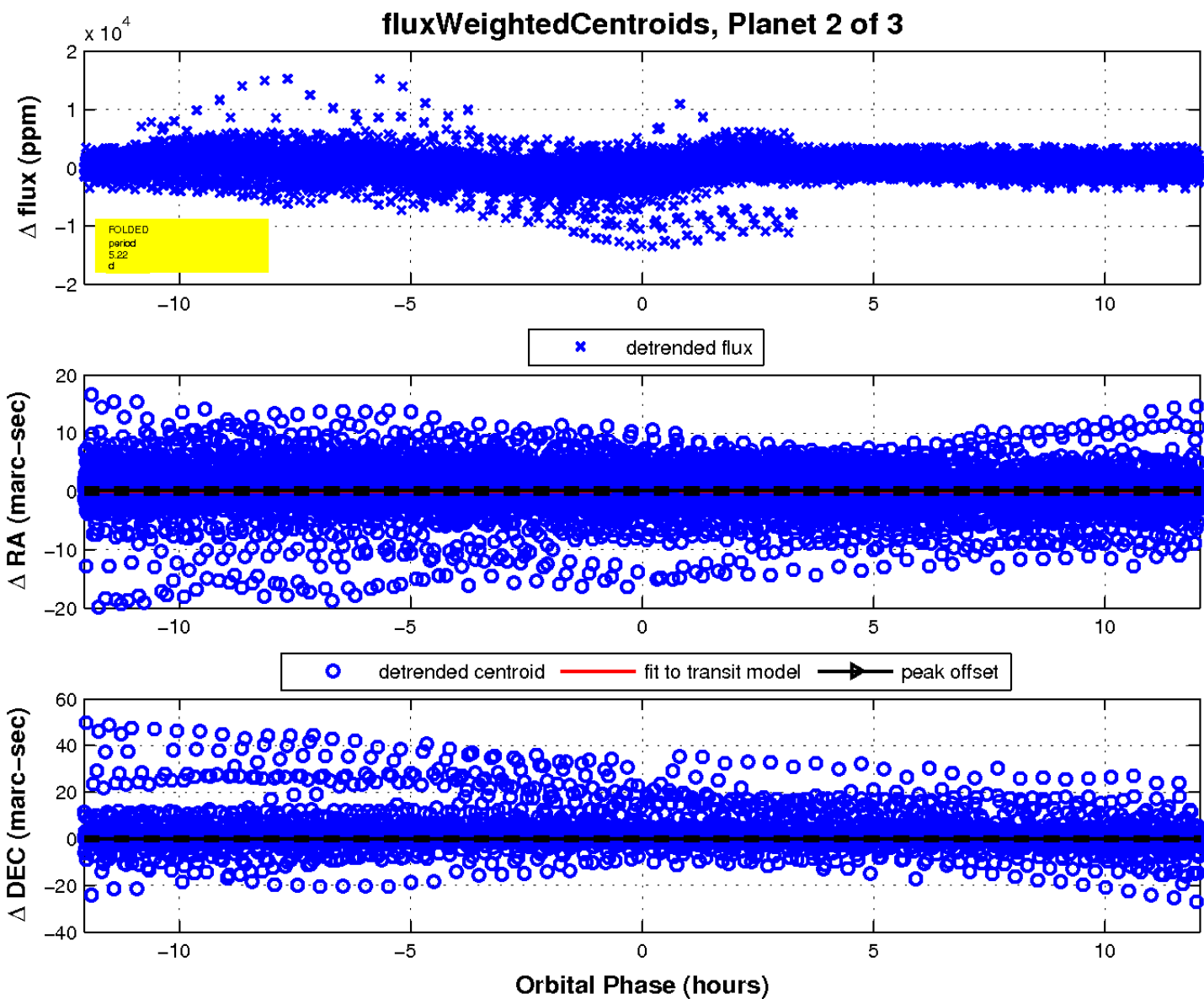
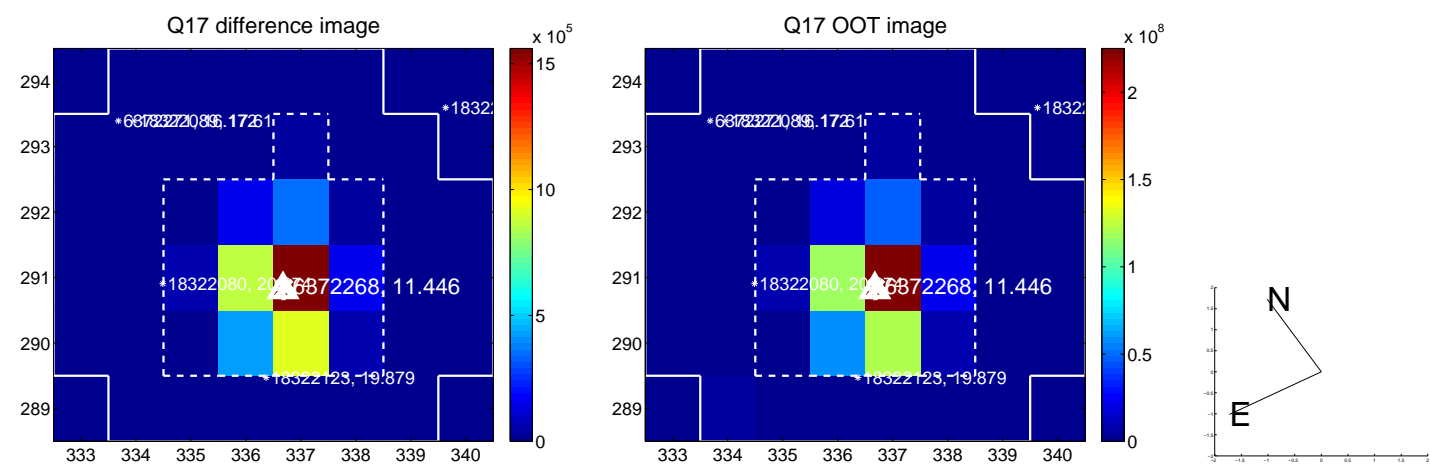
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

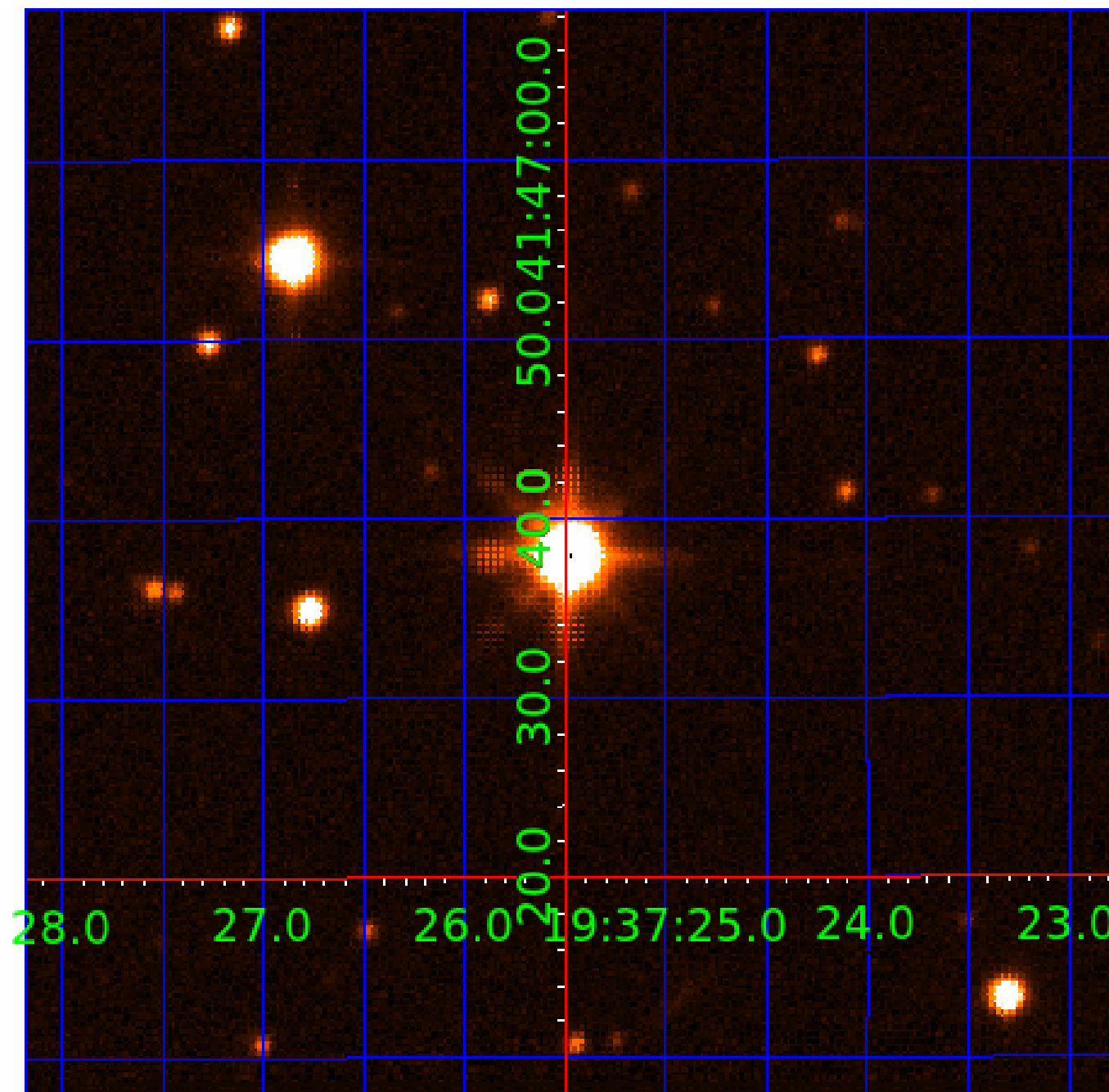


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006372268

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})
006372268-01	OBS	6698.01	5.219912	133.611858	2686.1	4.766	75.9	97.1	0.54	4014	5.37	29.56
006372268-02	OBS	No	5.220087	133.871832	2639.7	4.018	58.3	58.9	0.54	4014	4.99	29.56
006372268-03	OBS	No	5.219955	136.354595	1030.5	11.382	29.5	38.4	0.54	4014	2.04	29.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006372268-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_SATURATED
006372268-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—SAME_NTL_PERIOD—CENT_SATURATED
006372268-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD—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.

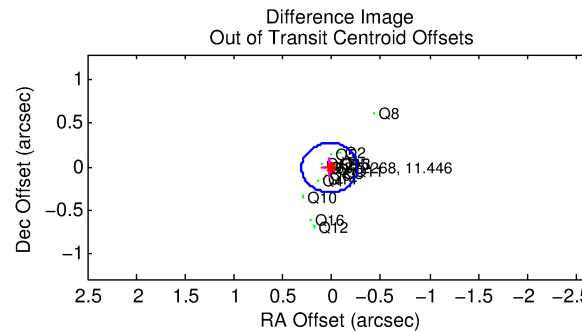
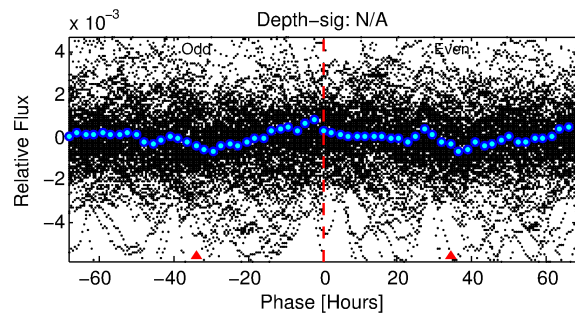
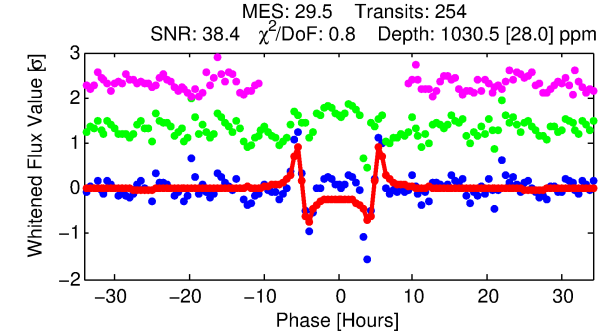
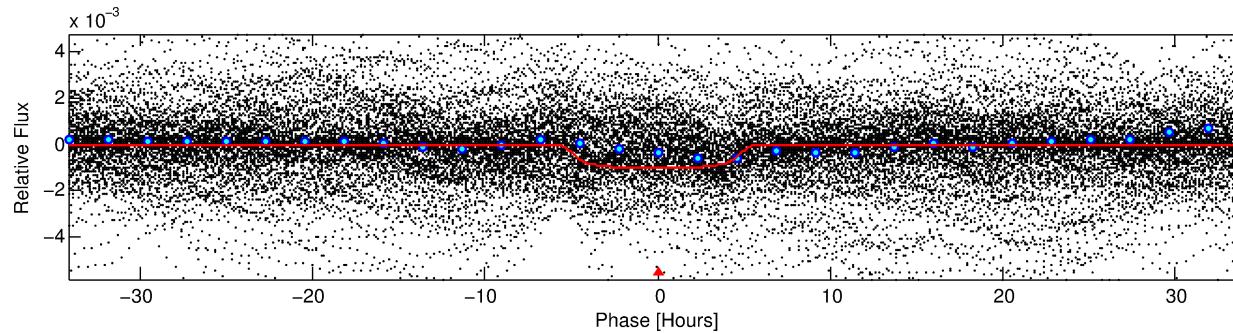
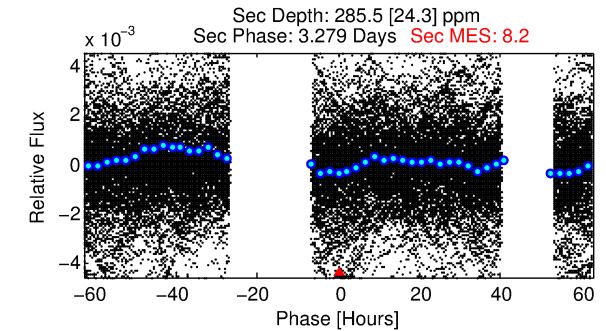
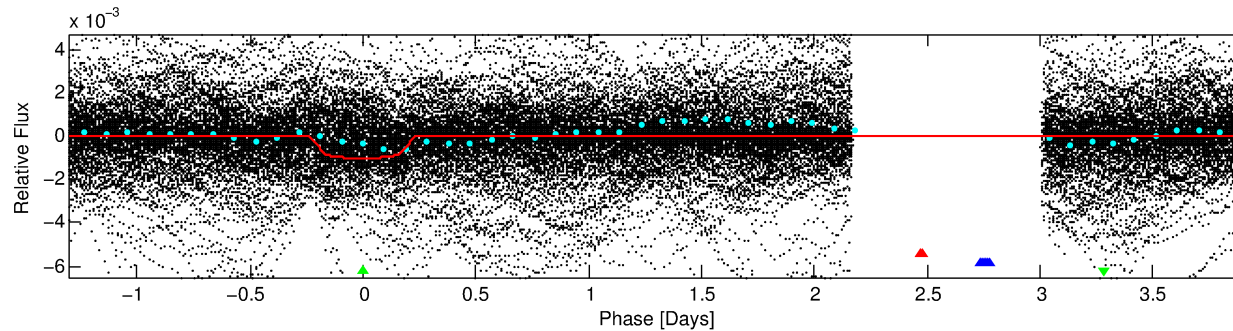
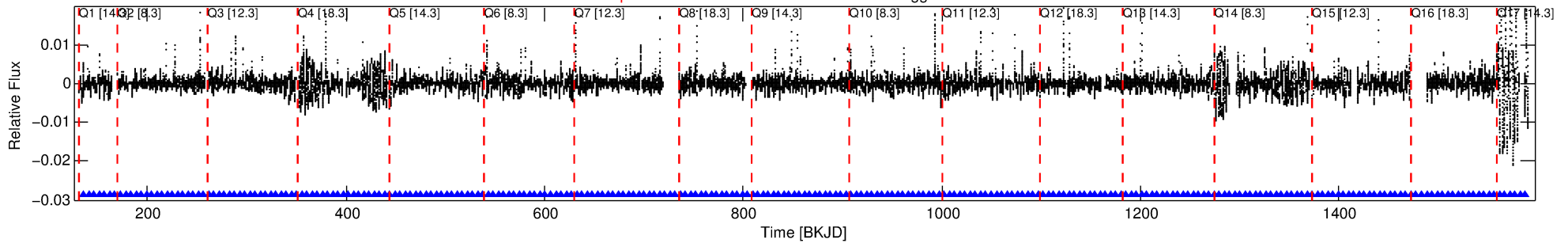
Ephemeris Match Information For 006372268-03

No Significant Match Found

DV One-Page Summary

KIC: 6372268 Candidate: 3 of 3 Period: 5.220 d
KOI: K06698 Corr: No Ephemeris Match

Kp: 11.45 R*: 0.54 Rs Teff: 4014.0 K Logg: 4.71 Fe/H: -0.280



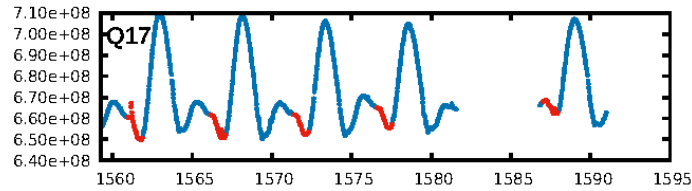
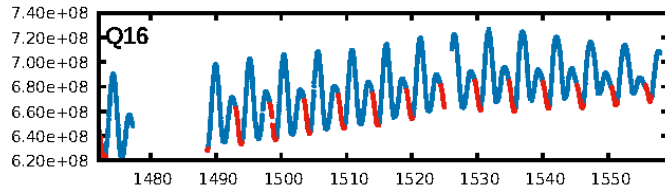
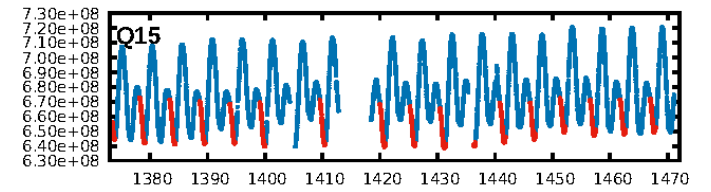
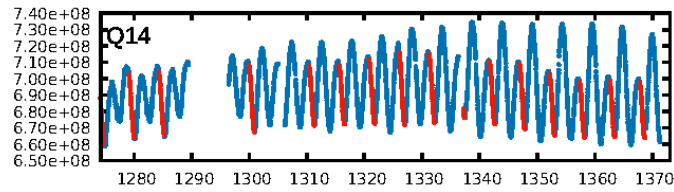
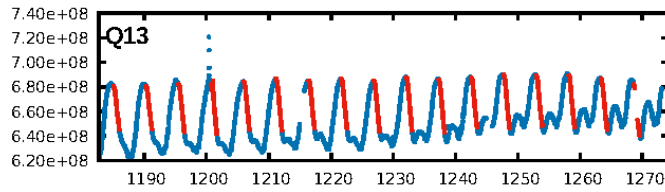
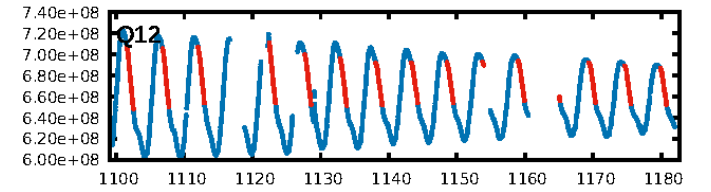
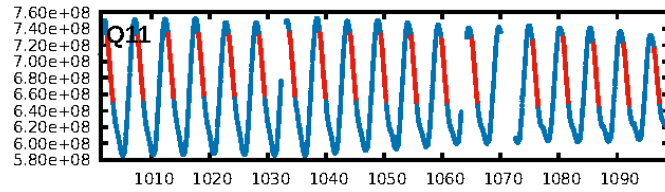
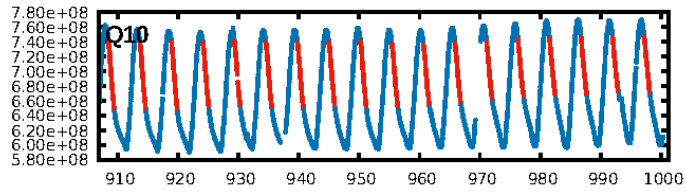
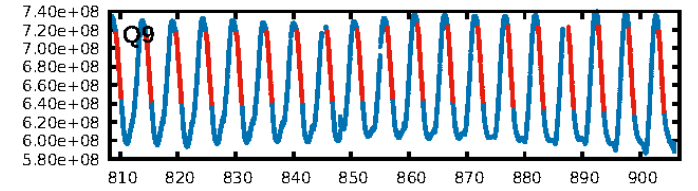
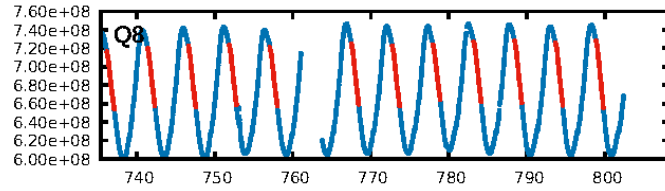
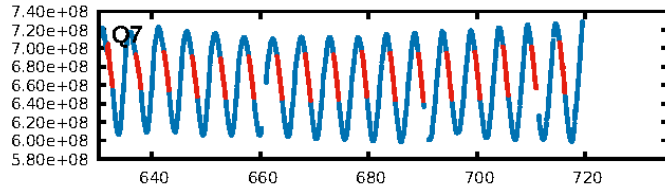
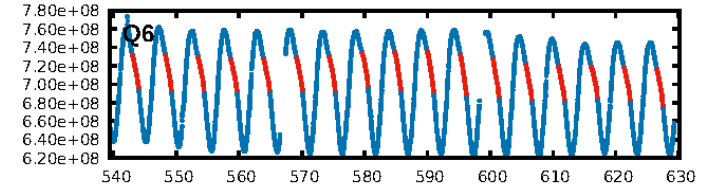
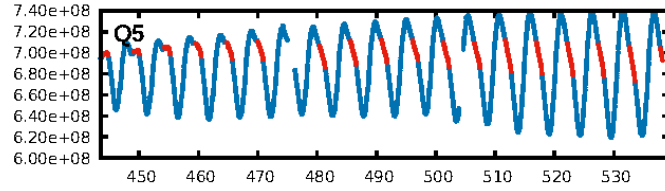
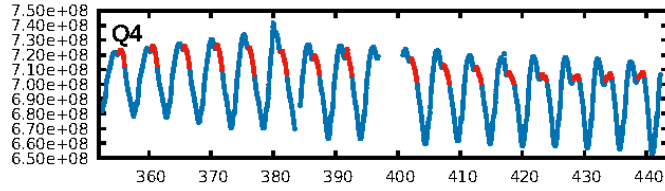
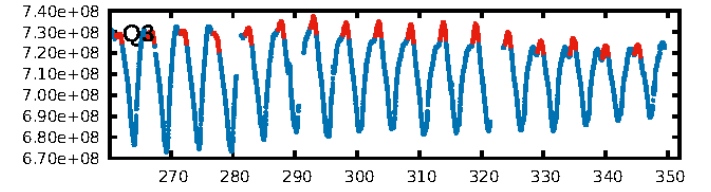
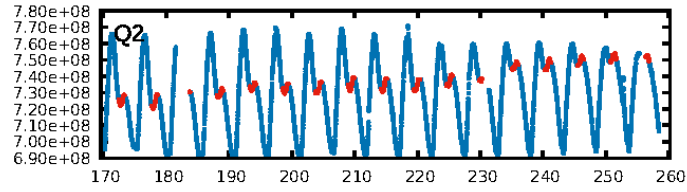
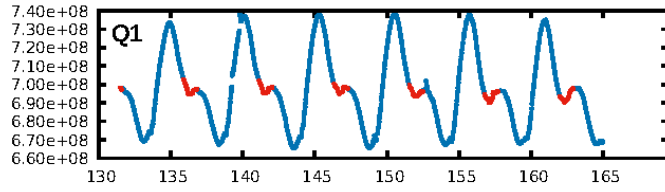
DV Fit Results:

Period = 5.21995 [0.00001] d
Epoch = 136.3546 [0.0010] BKJD
Rp/R* = 0.0344 [0.0005]
a/R* = 2.11 [0.02]
b = 0.88 [0.00]
Seff = 29.56 [6.25]
Teq = 595 [31] K
Rp = 2.04 [0.30] Re
a = 0.0483 [0.0054] AU
Ag = 87.55 [15.11] [5.73σ]
Teffp = 2812 [124] K [17.39σ]

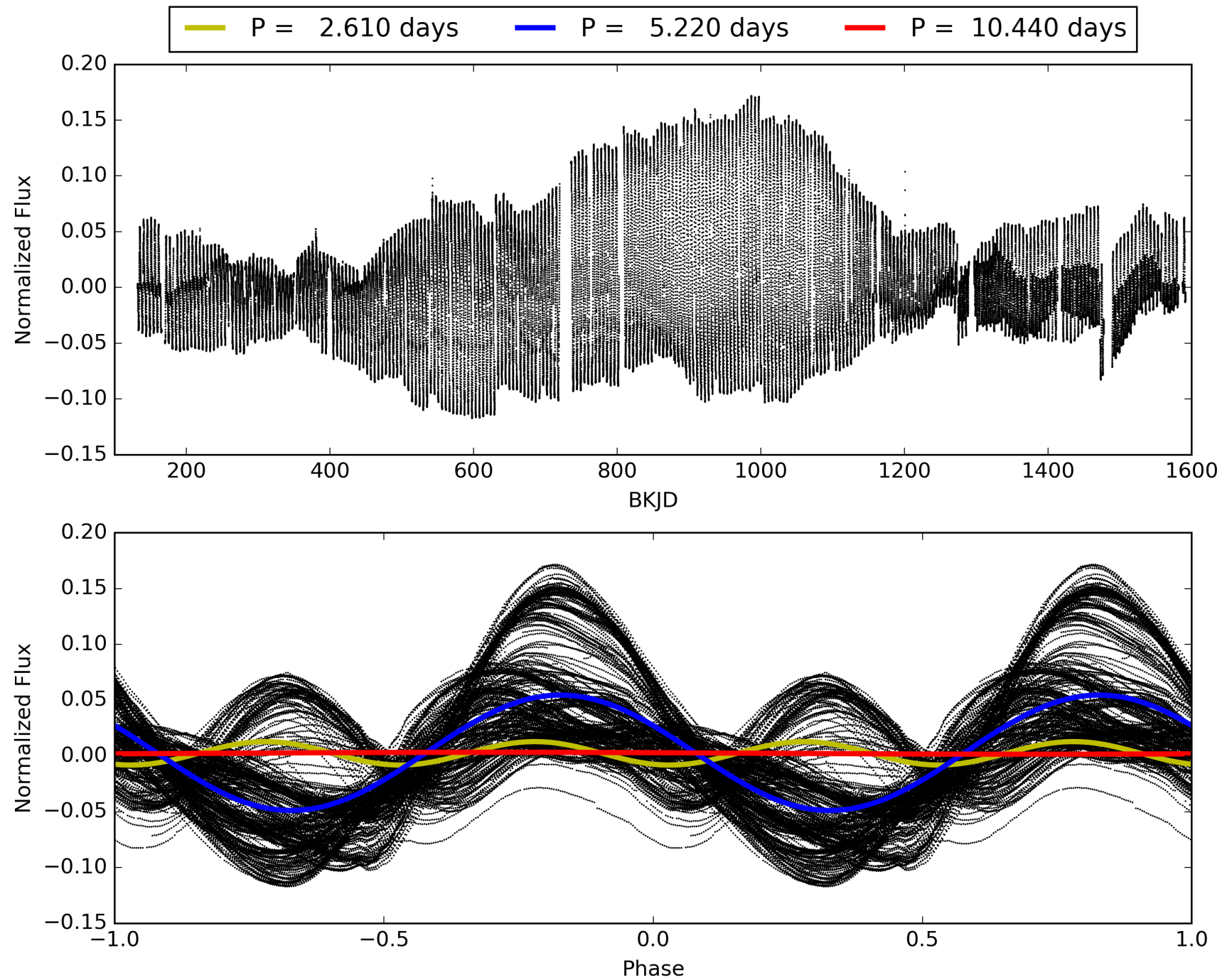
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [243/243]
GhostDiagnostic-chr: 0.5771
Centroid-sig: 0.0%
Centroid-so: 0.069 arcsec [2.60σ]
OotOffset-rm: 0.027 arcsec [0.28σ]
KicOffset-rm: 0.101 arcsec [1.13σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.41 [7/17]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 006372268-03, PDC Light Curves

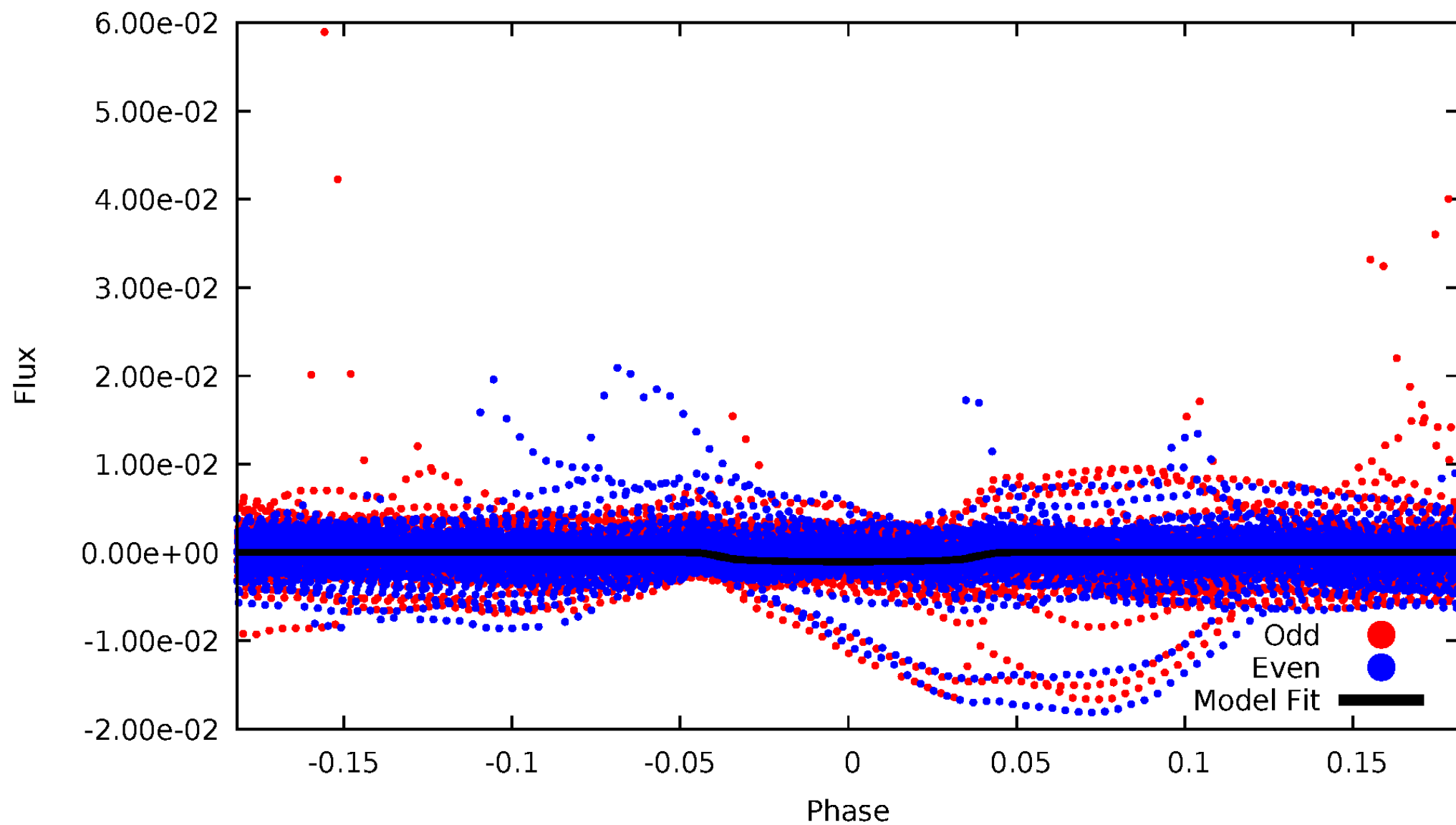


TCE 006372268-03



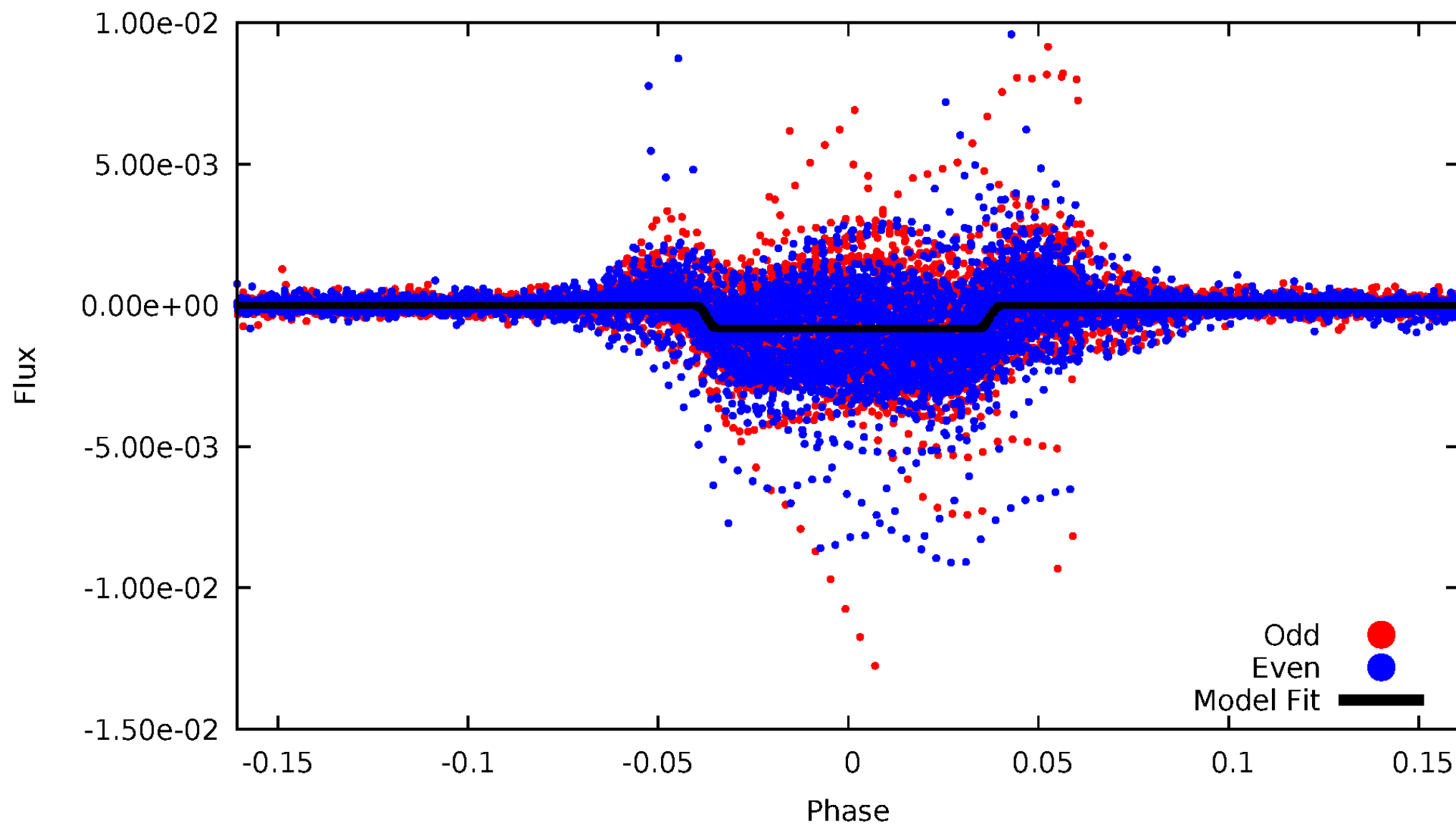
DV Odd/Even

TCE 006372268-03



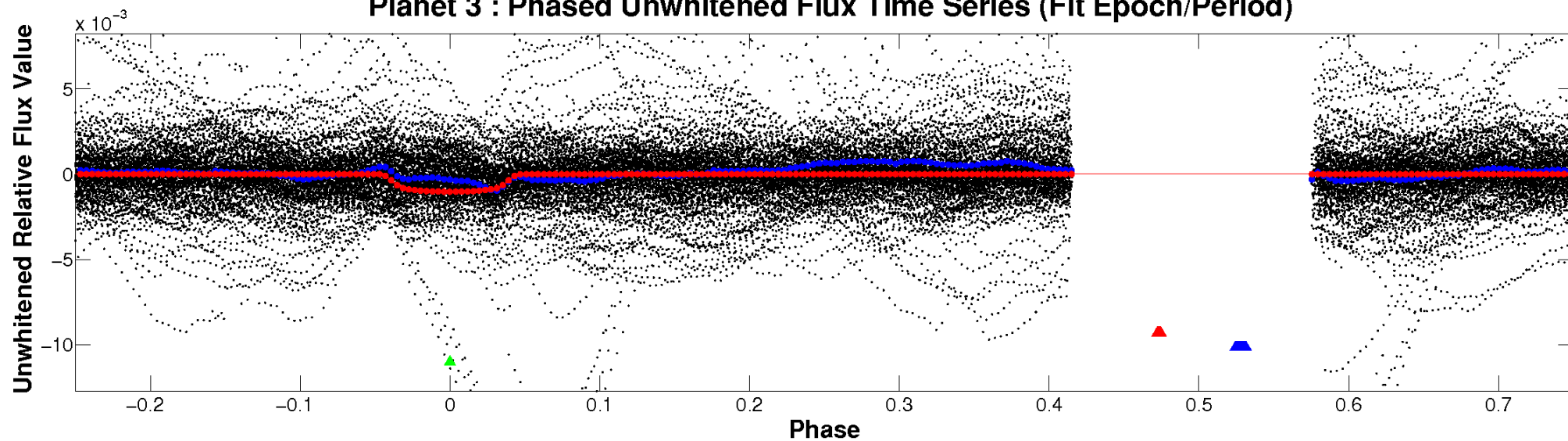
ALT Odd/Even

TCE 006372268-03

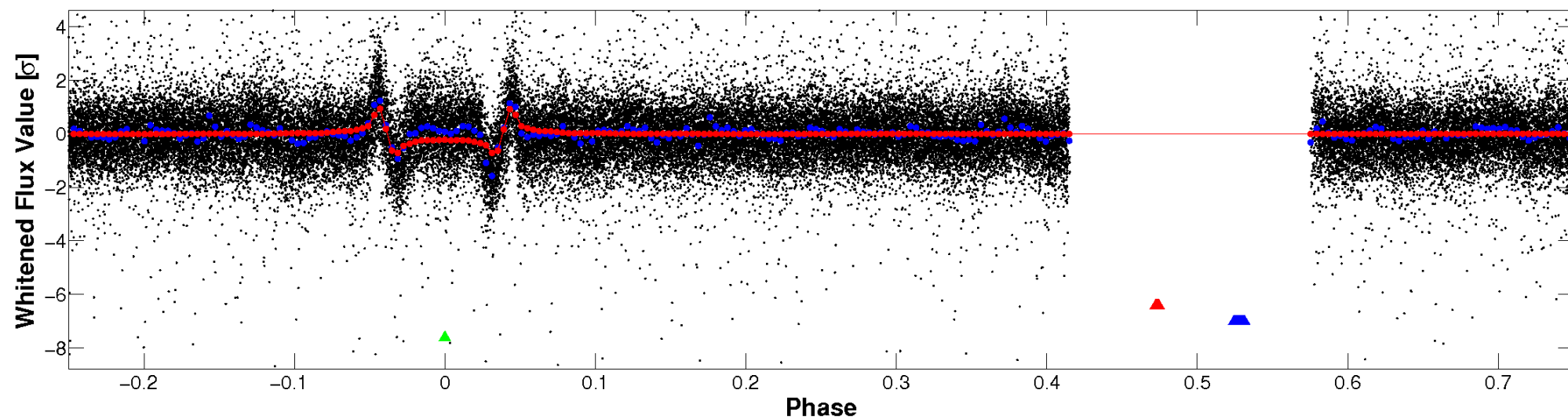


Non-Whitened Vs. Whitened Light Curve

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

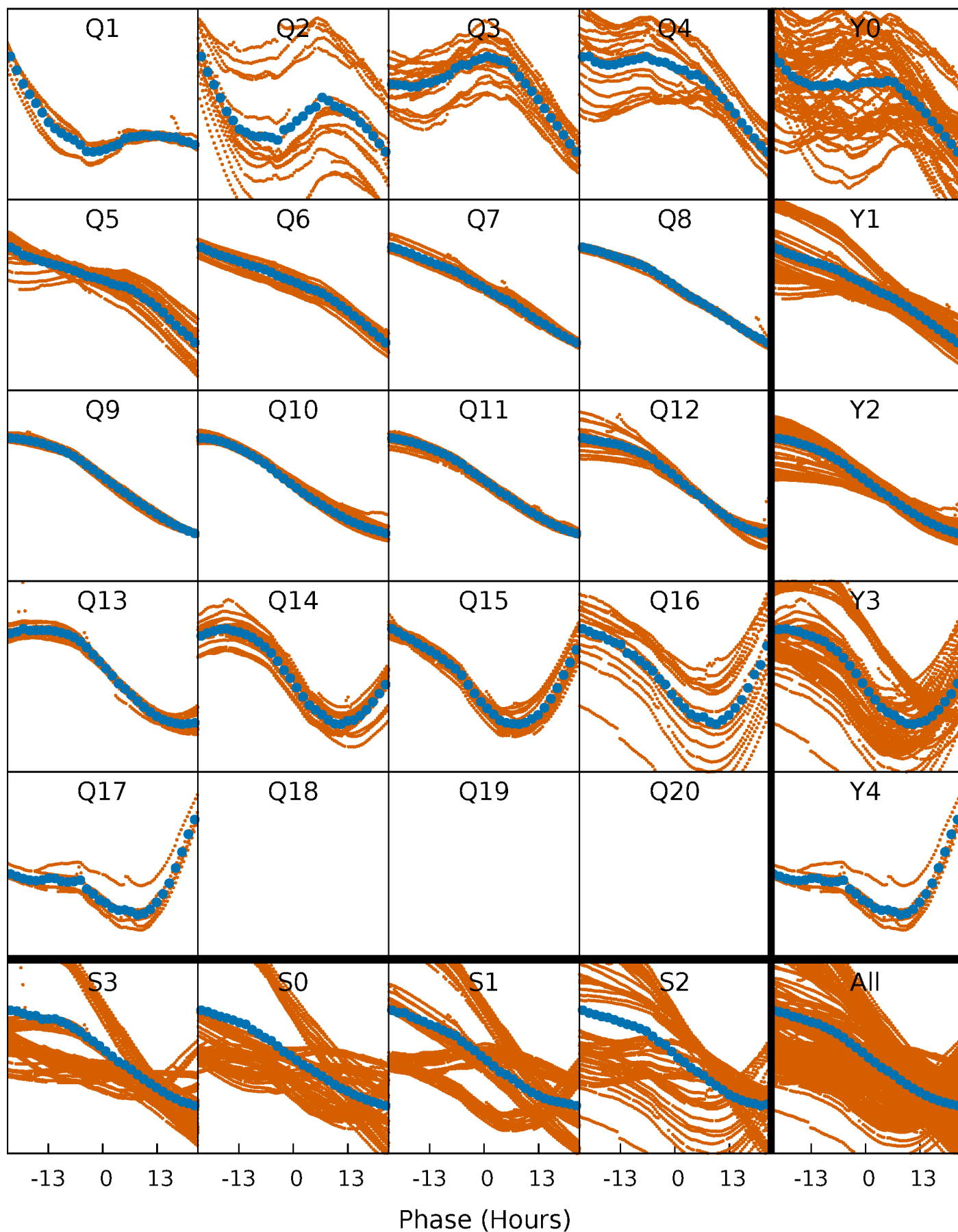


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



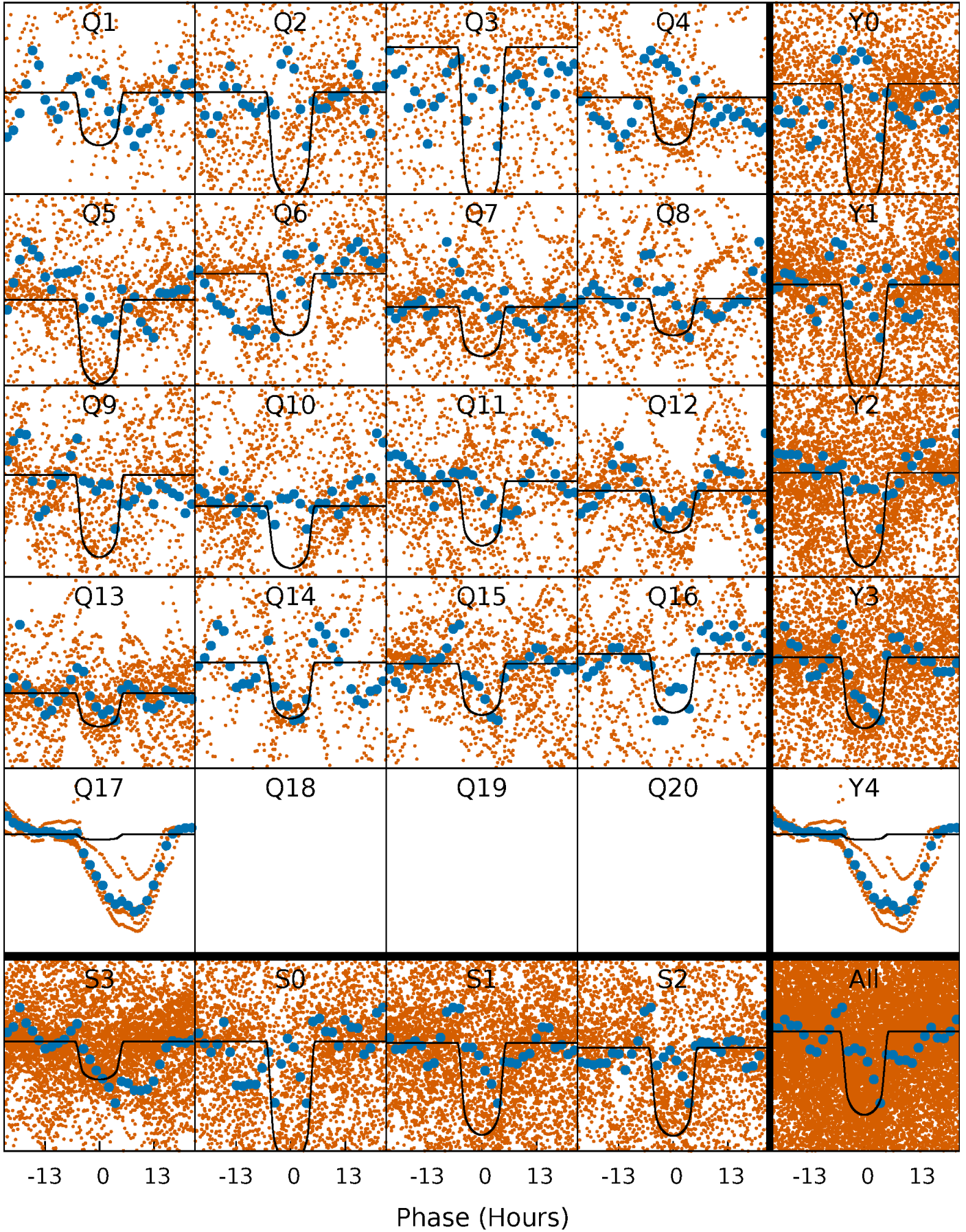
PDC Quarter-Phased Transit Curves

TCE 006372268-03 P= 5.219955 Days $T_0=136.354595$ (BKJD)



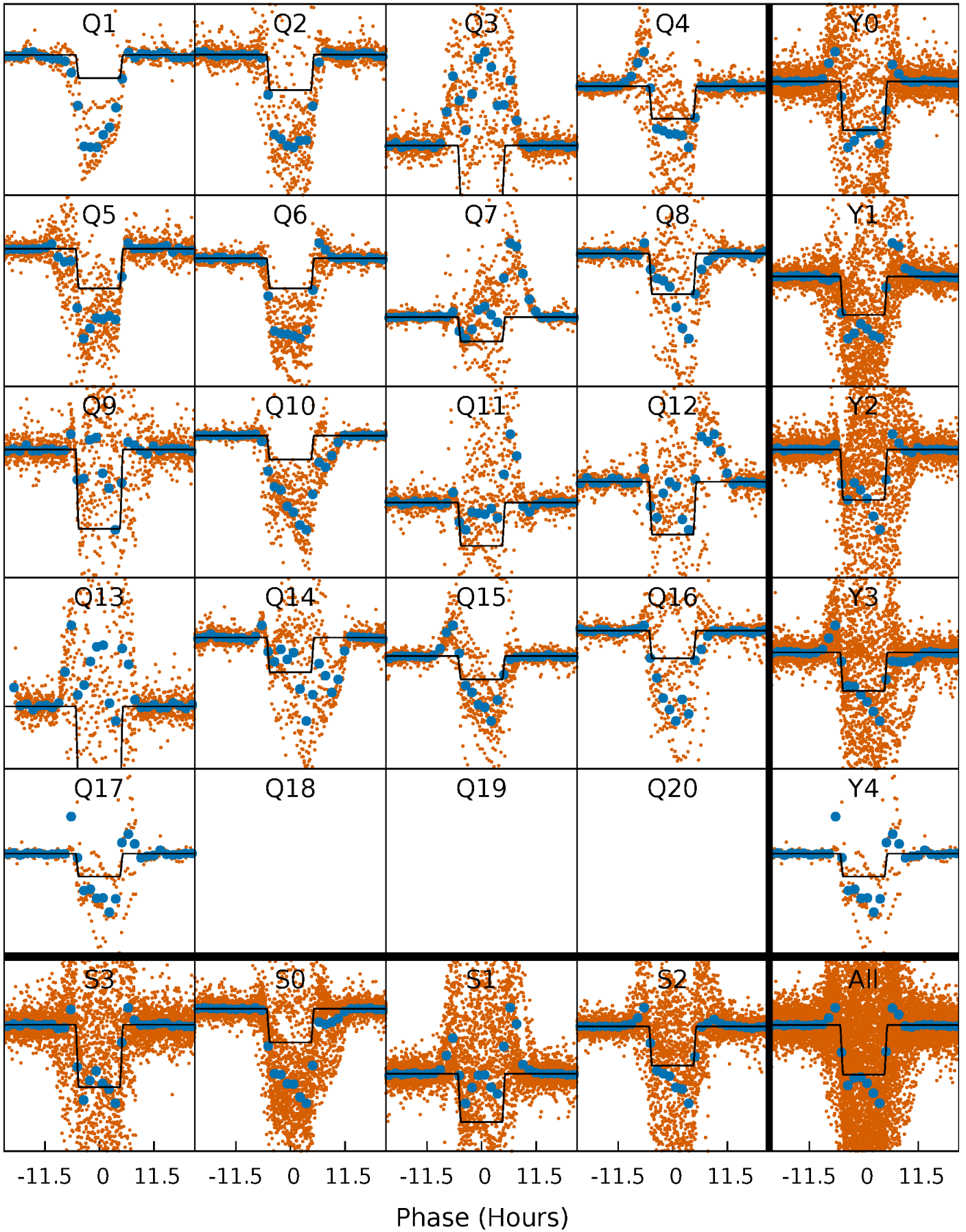
DV Quarter-Phased Transit Curves

TCE 006372268-03 P= 5.219955 Days $T_0=136.354595$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

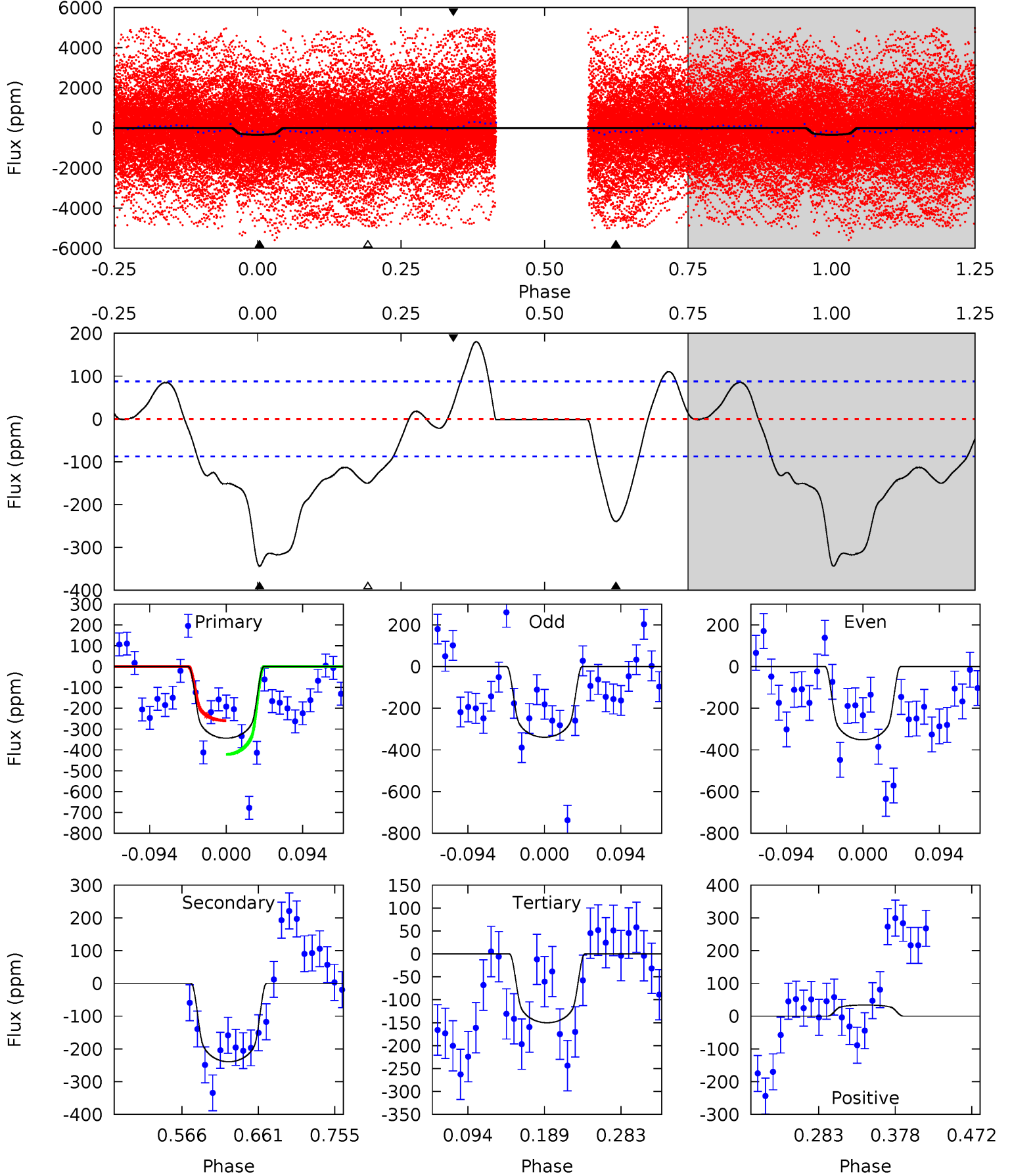
TCE 006372268-03 P= 5.220072 Days $T_0=136.341148$ (BKJD)



DV Model-Shift Uniqueness Test

006372268-03, P = 5.219955 Days, E = 131.134640 Days

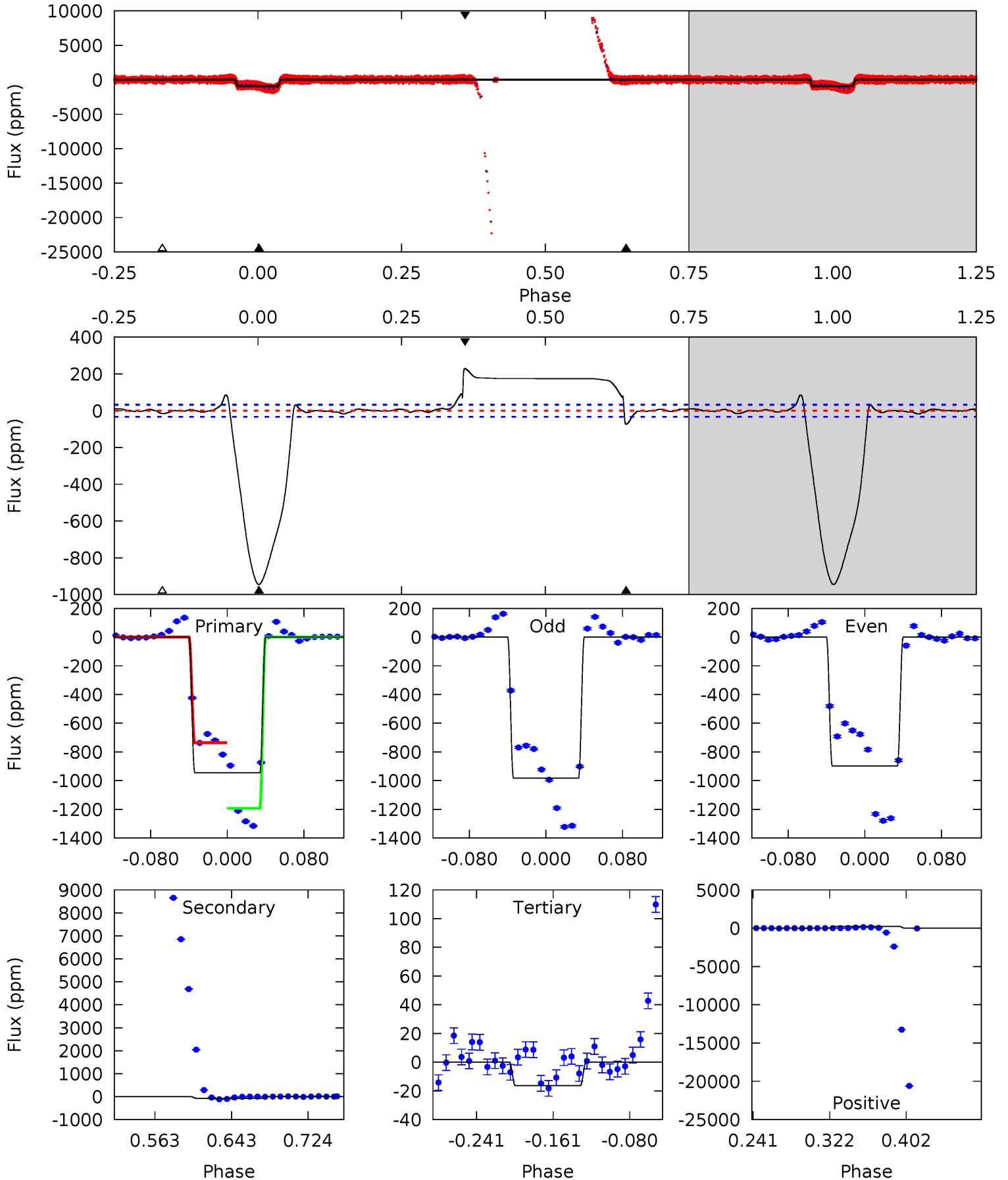
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.0	12.5	7.85	1.78	4.58	1.67	4.74	10.1	16.2	4.66	10.7	0.32	1.15	0.34	4.31



Alt Model-Shift Uniqueness Test

006372268-03, P = 5.220072 Days, E = 131.121076 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
132.7	10.3	2.28	32.2	4.61	1.75	4.56	130.4	100.5	8.05	-21.9	6.45	0.99	0.20	0



Stellar Parameters For KIC 006372268

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4014^{+138}_{-152}	$4.707^{+0.072}_{-0.036}$	$-0.280^{+0.300}_{-0.300}$	$0.544^{+0.053}_{-0.080}$	$0.549^{+0.058}_{-0.070}$	$4.809^{+1.892}_{-0.788}$
	+3%/-4%	+2%/-1%	+107%/-107%	+10%/-15%	+11%/-13%	+39%/-16%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 006372268-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-239 ± 19	$2.04^{+0.11}_{-0.15}$	825^{+33}_{-35}	3109^{+91}_{-97}	76^{+10}_{-8}
Alt.	-74 ± 7	$1.70^{+0.10}_{-0.13}$	824^{+33}_{-38}	2766^{+87}_{-87}	33^{+5}_{-4}

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

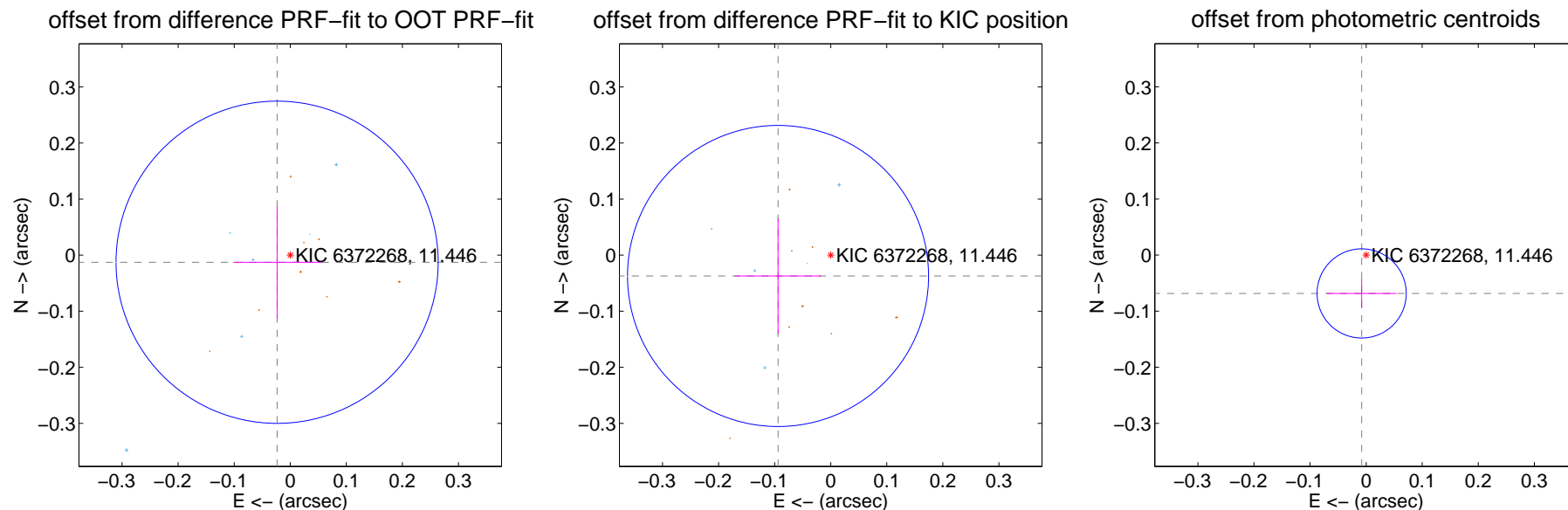
DV Centroid Data

Supplemental centroid analysis for 006372268-03. **Kepler magnitude: 11.45.** Transit SNR 38.41

There are 7 quarters with good PRF difference image offsets

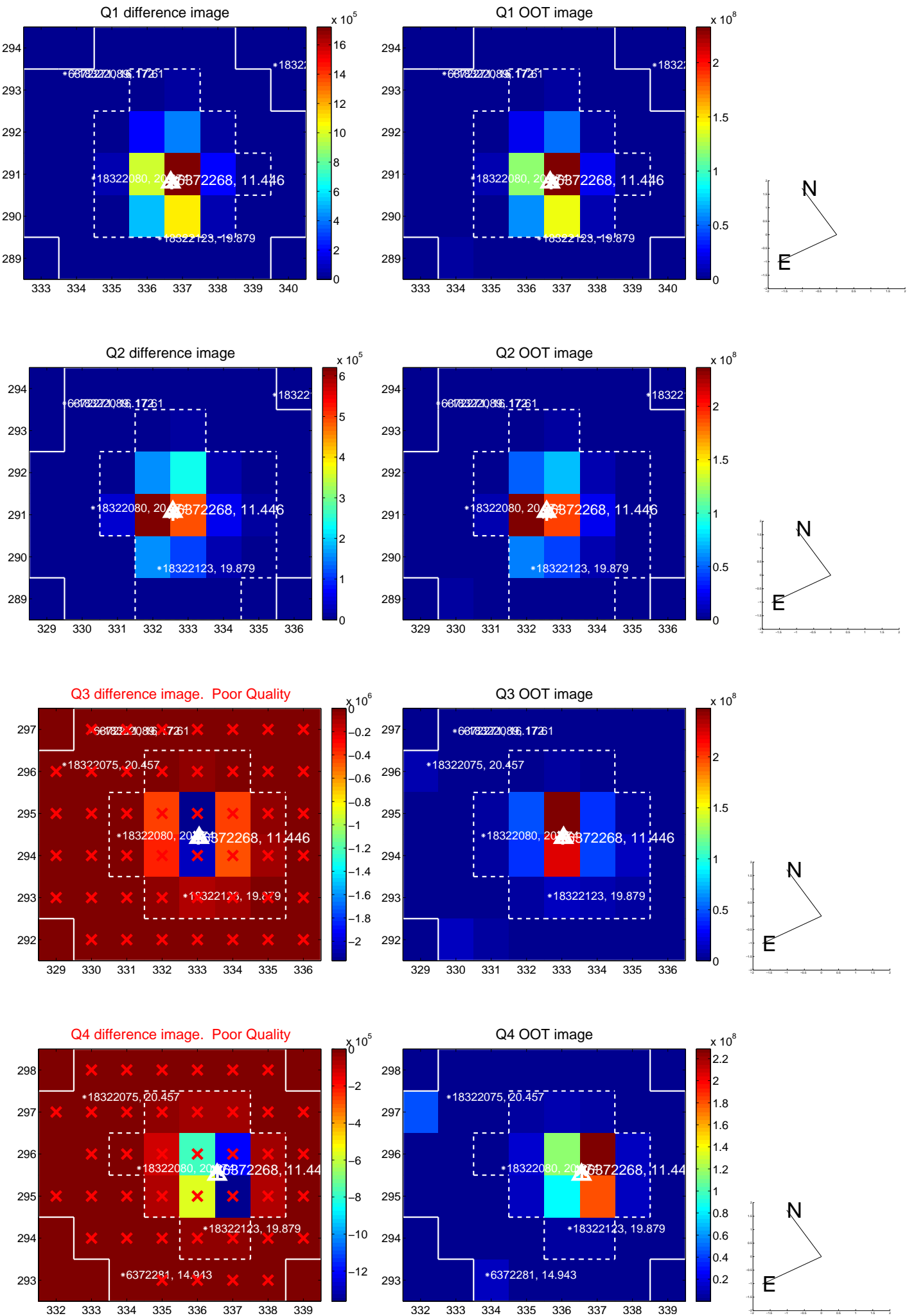
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.027 ± 0.096	0.28	0.023 ± 0.078	-0.013 ± 0.100
PRF-fit source offset from KIC position	0.101 ± 0.089	1.13	0.094 ± 0.077	-0.037 ± 0.103
photometric centroid source offset	0.07 ± 0.03	2.60	0.01 ± 0.06	-0.07 ± 0.03

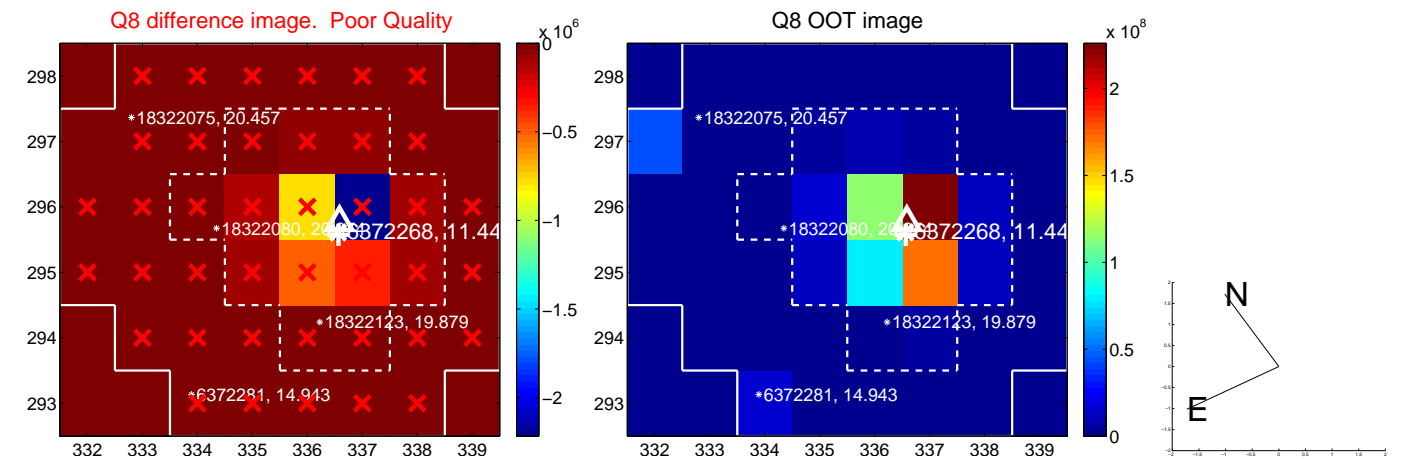
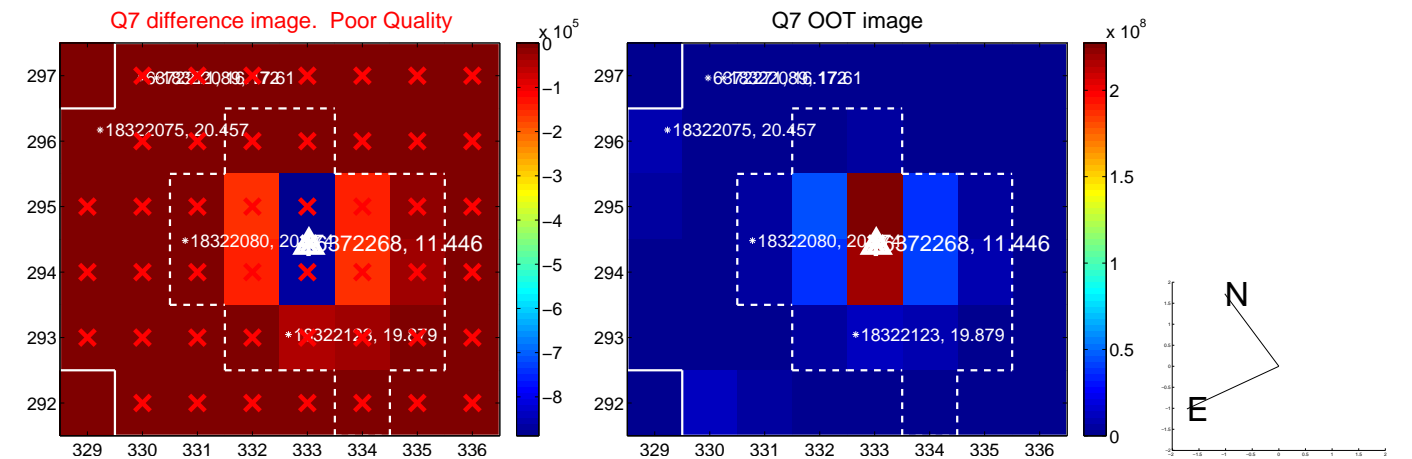
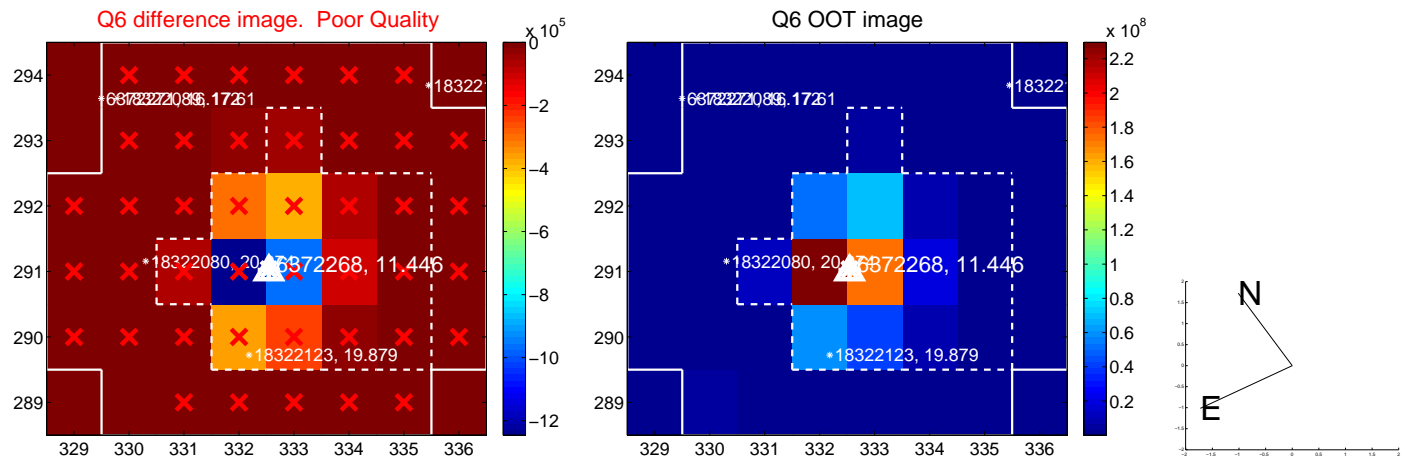
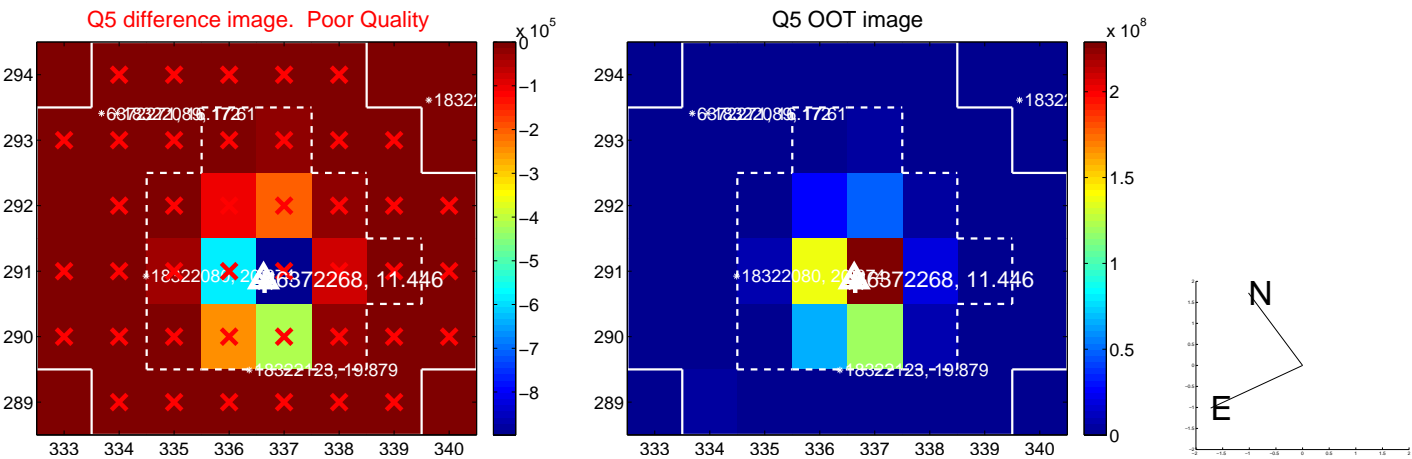


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

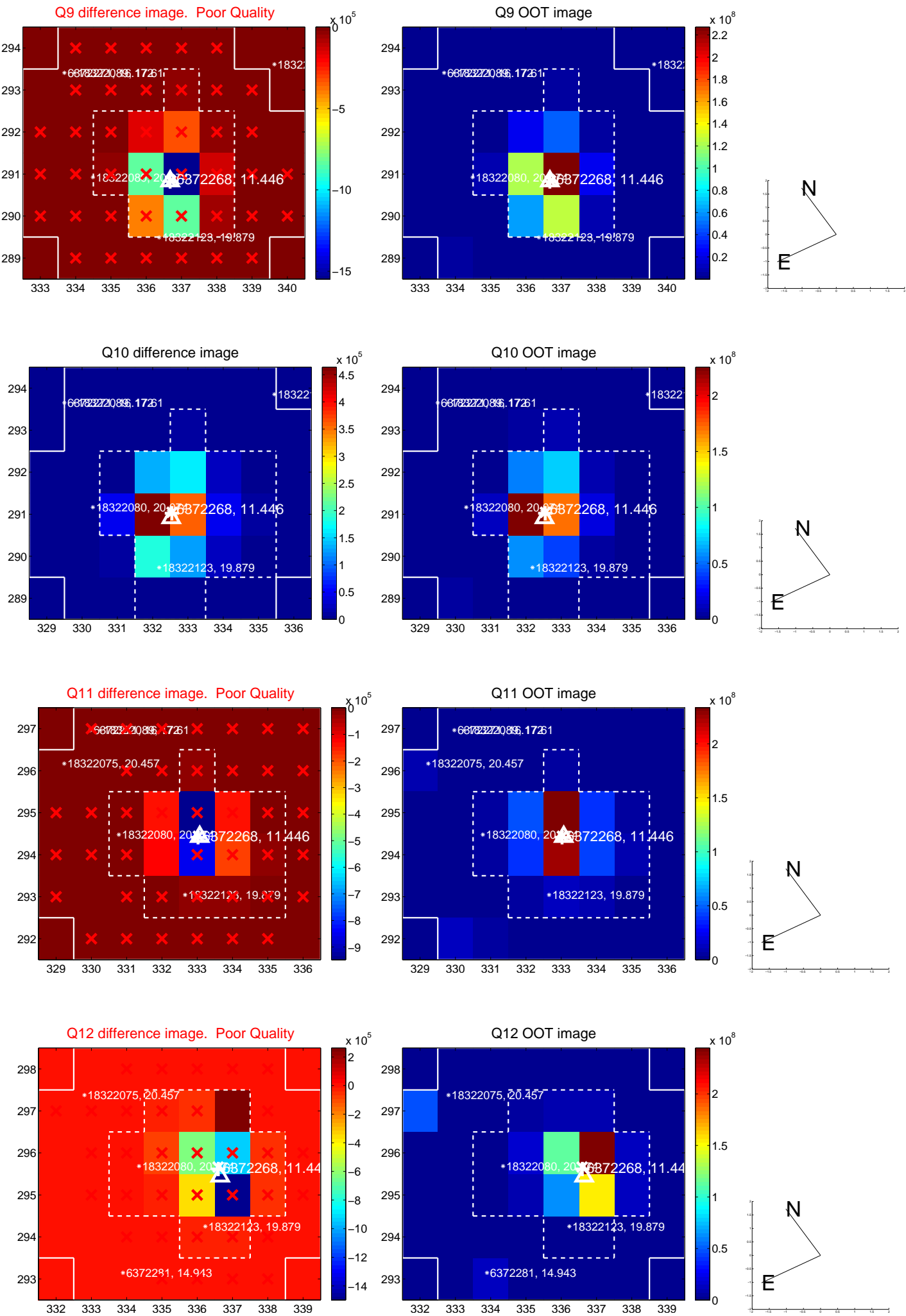
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



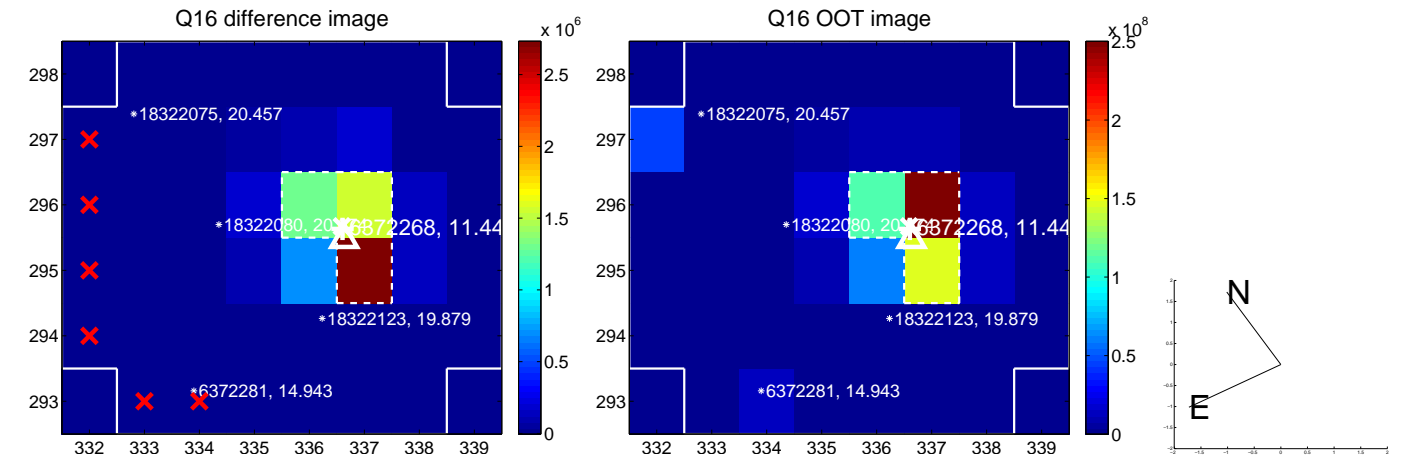
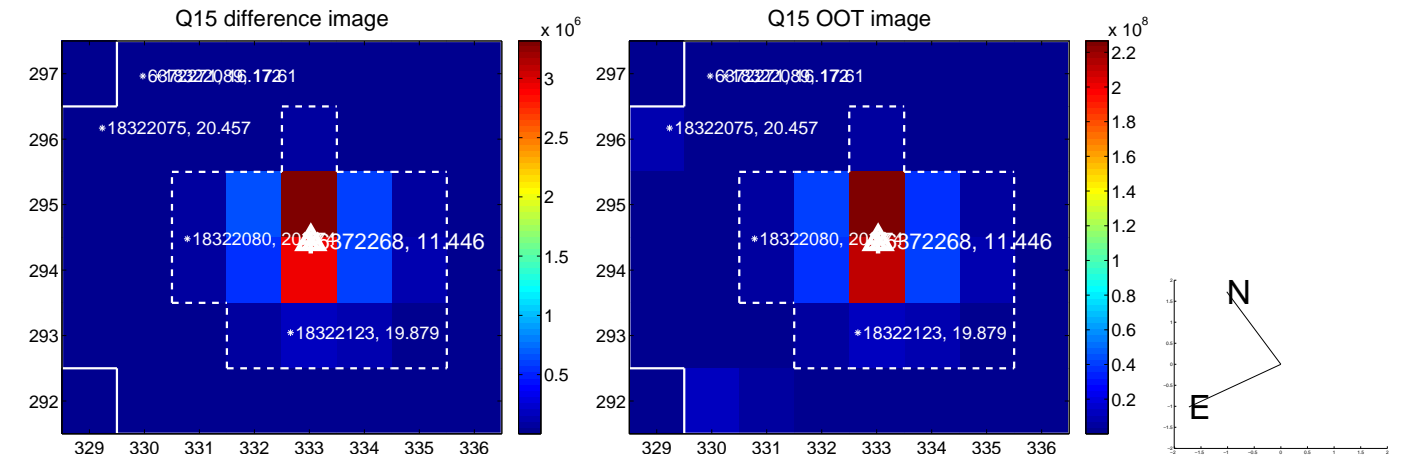
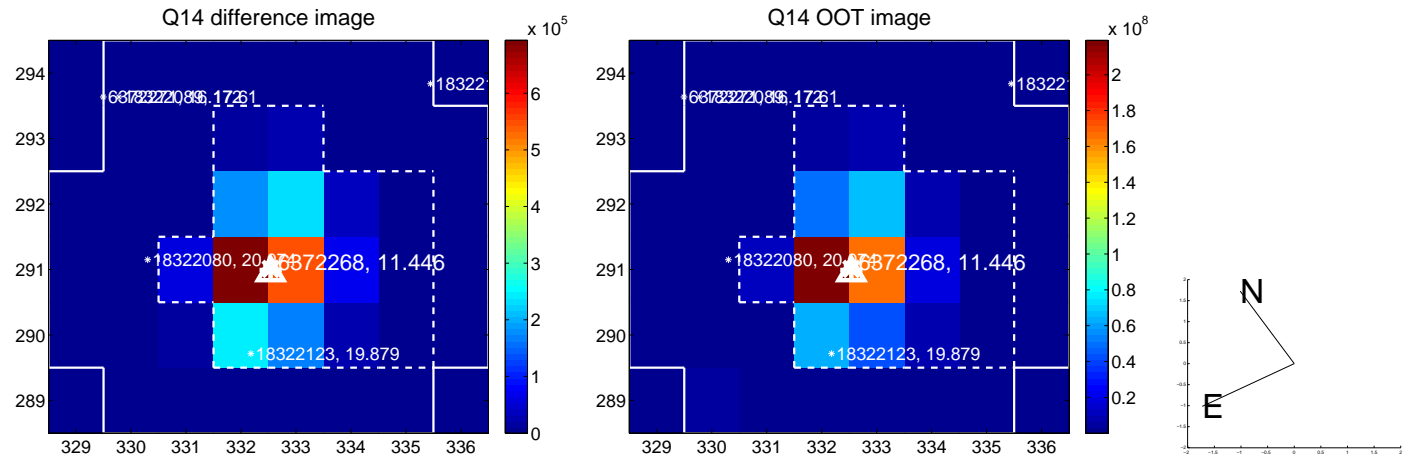
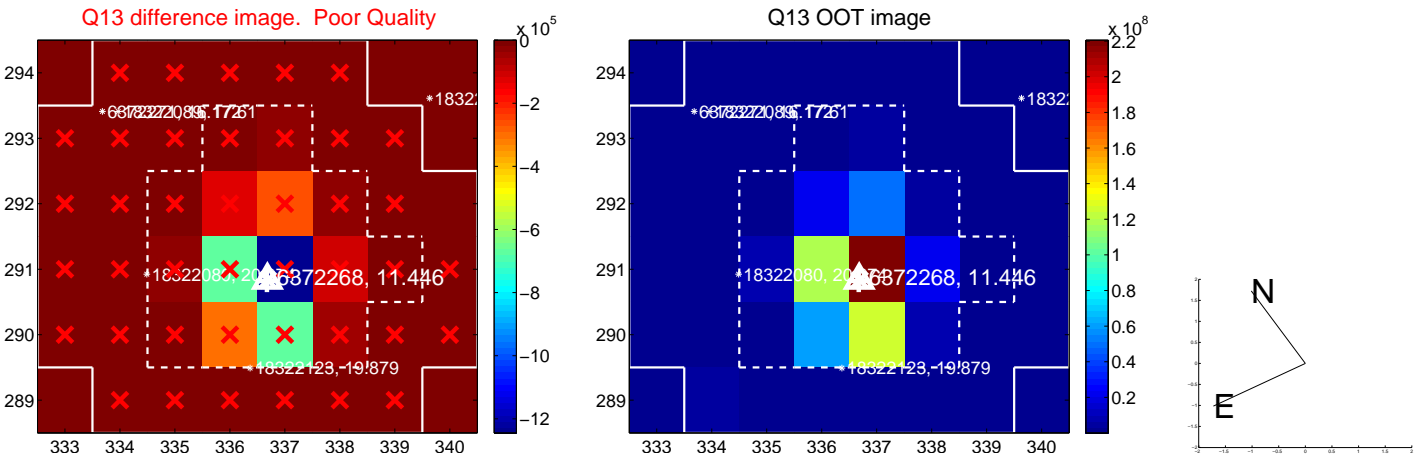
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



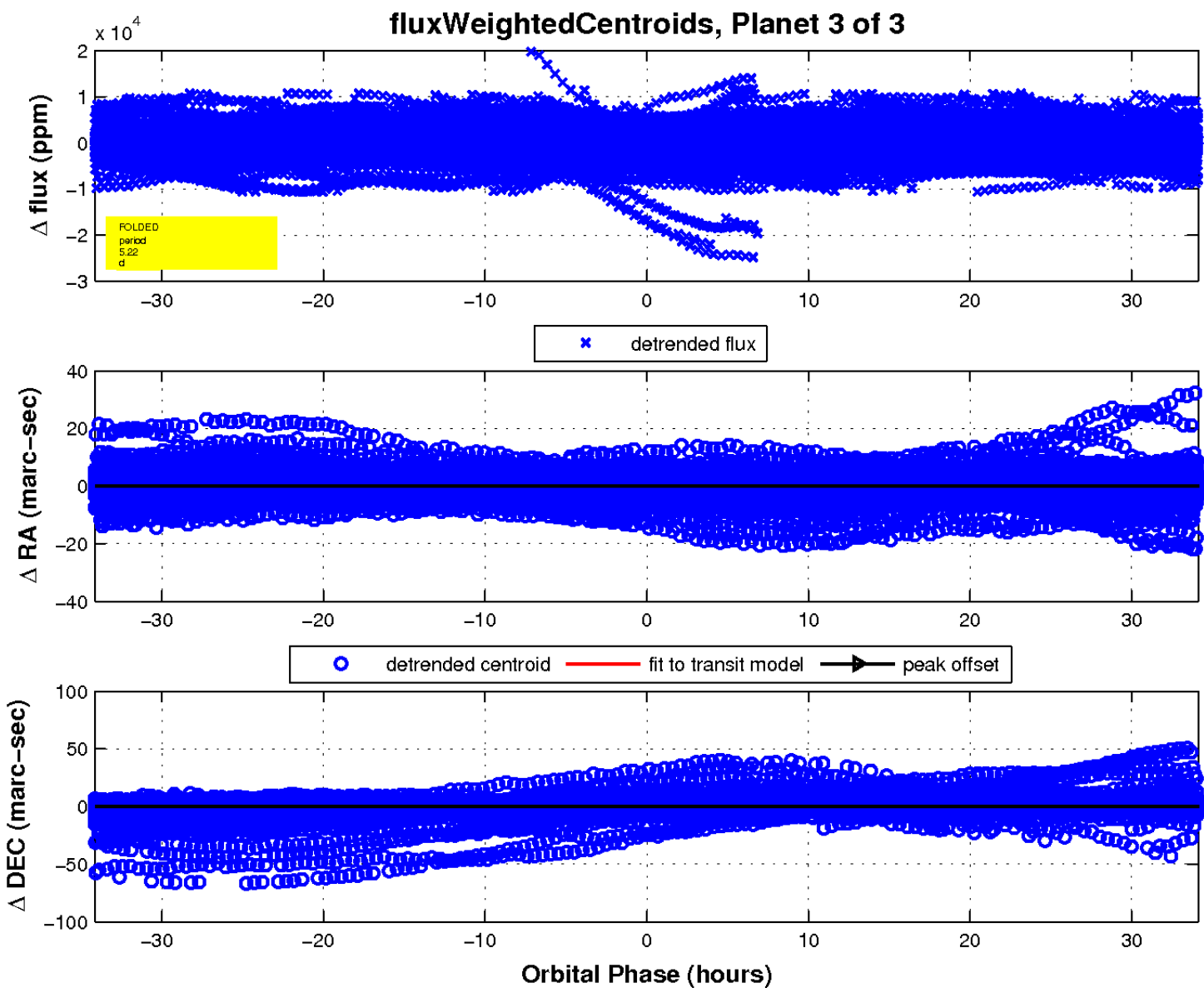
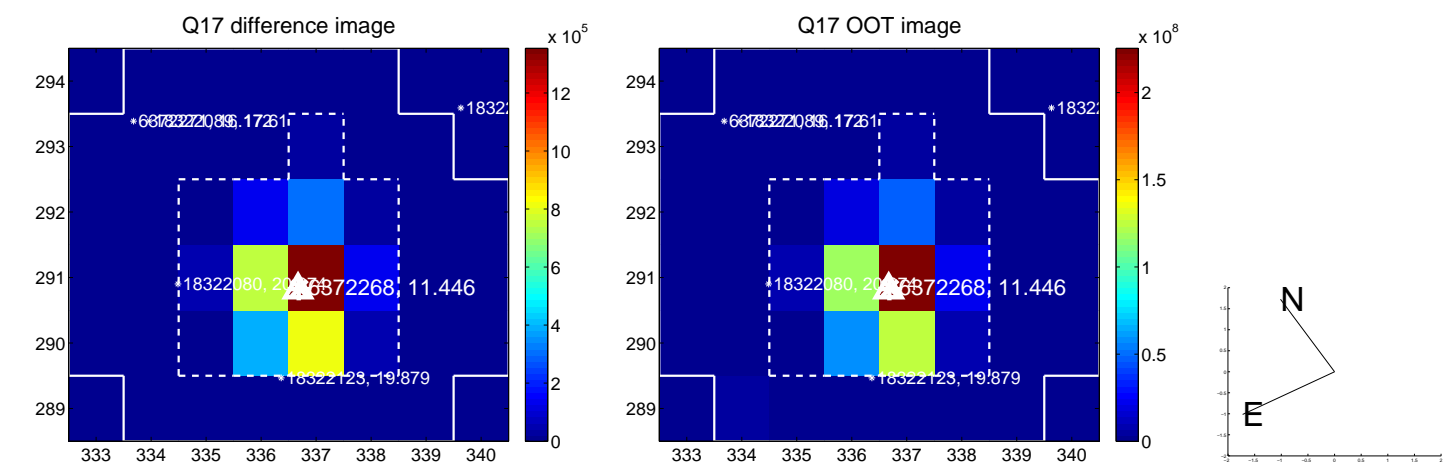
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

