

KIC 010537528

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})
010537528-01	OBS	No	1.276249	132.033438	37.6	4.682	10.0	10.8	2.57	8120	1.81	30102.73
010537528-02	OBS	No	1.276243	131.596393	41.2	3.845	10.5	11.7	2.57	8120	1.95	30102.92
010537528-03	OBS	No	3.832343	133.643986	118.1	9.045	11.4	14.3	2.57	8120	3.24	6948.65

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010537528-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
010537528-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD
010537528-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

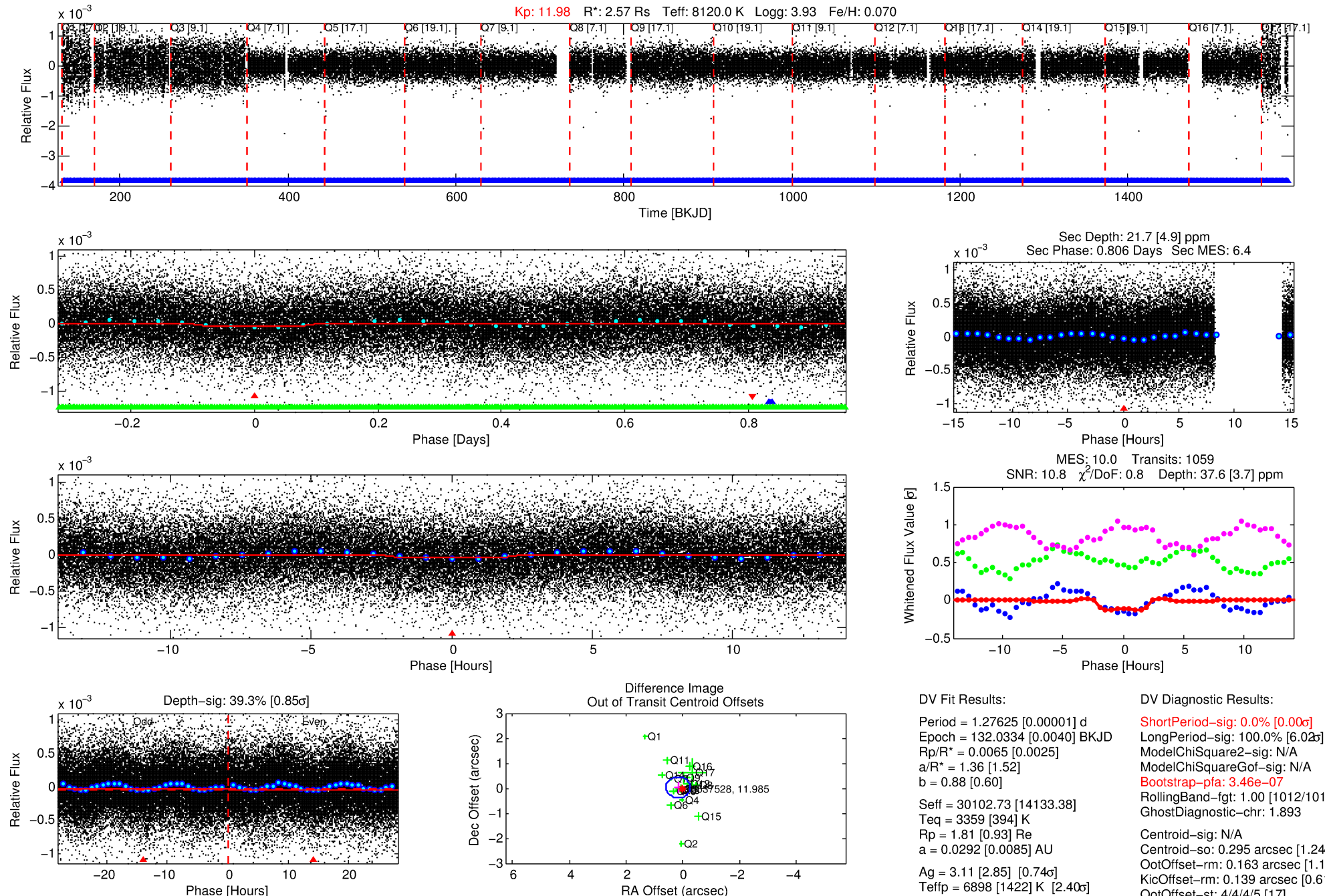
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010537528-01

No Significant Match Found

DV One-Page Summary

KIC: 10537528 Candidate: 1 of 3 Period: 1.276 d



DV Fit Results:

Period = 1.27625 [0.00001] d
Epoch = 132.0334 [0.0040] BKJD
Rp/R* = 0.0065 [0.0025]
a/R* = 1.36 [1.52]
b = 0.88 [0.60]
Seff = 30102.73 [14133.38]
Teq = 3359 [394] K
Rp = 1.81 [0.93] Re
a = 0.0292 [0.0085] AU
Ag = 3.11 [2.85] [0.74σ]
Teffp = 6898 [1422] K [2.40σ]

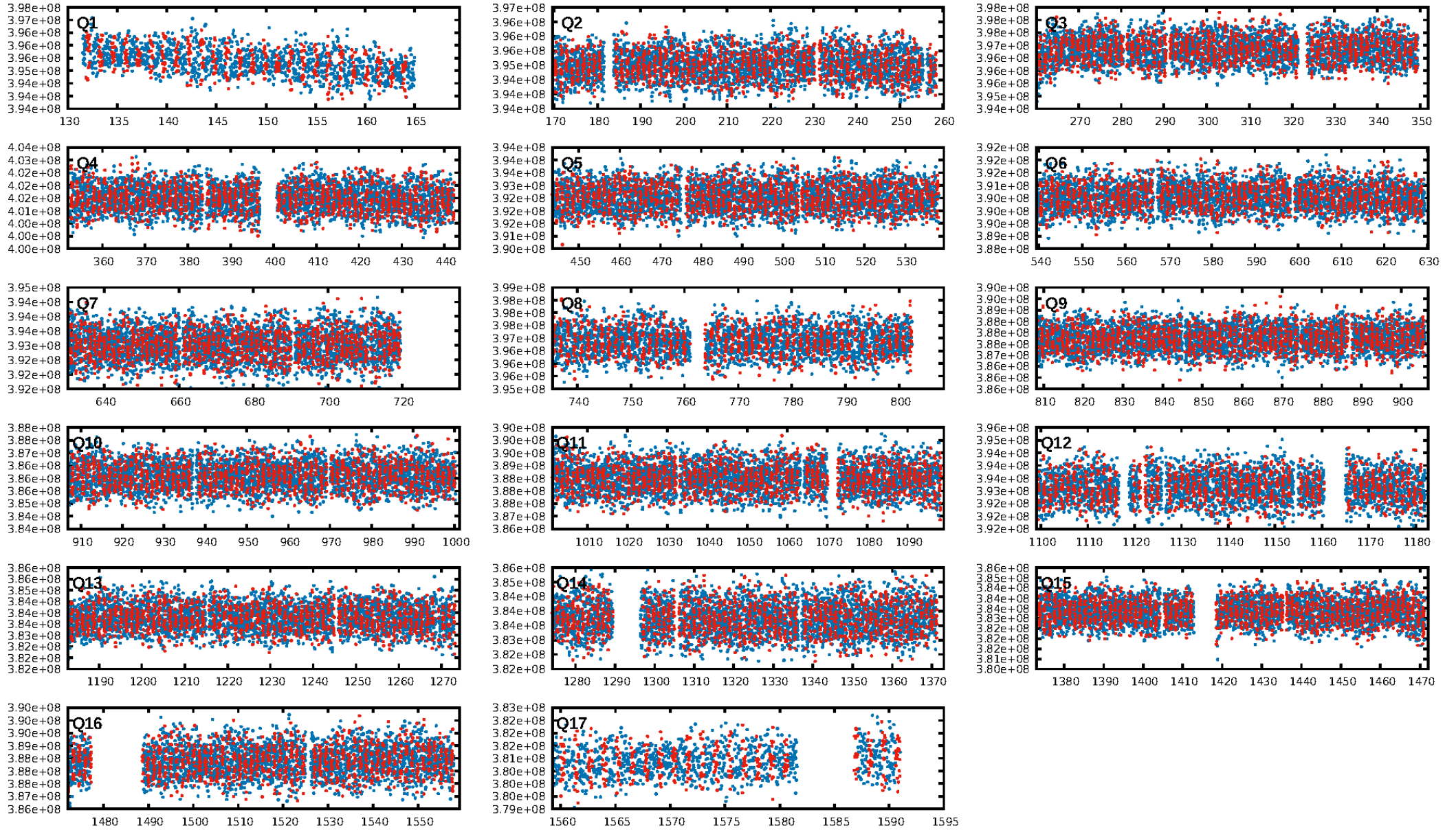
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 100.0% [6.0σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.46e-07
RollingBand-fgt: 1.00 [1012/1012]
GhostDiagnostic-chr: 1.893
Centroid-sig: N/A
Centroid-so: 0.295 arcsec [1.24σ]
OotOffset-rm: 0.163 arcsec [1.17σ]
KicOffset-rm: 0.139 arcsec [0.61σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

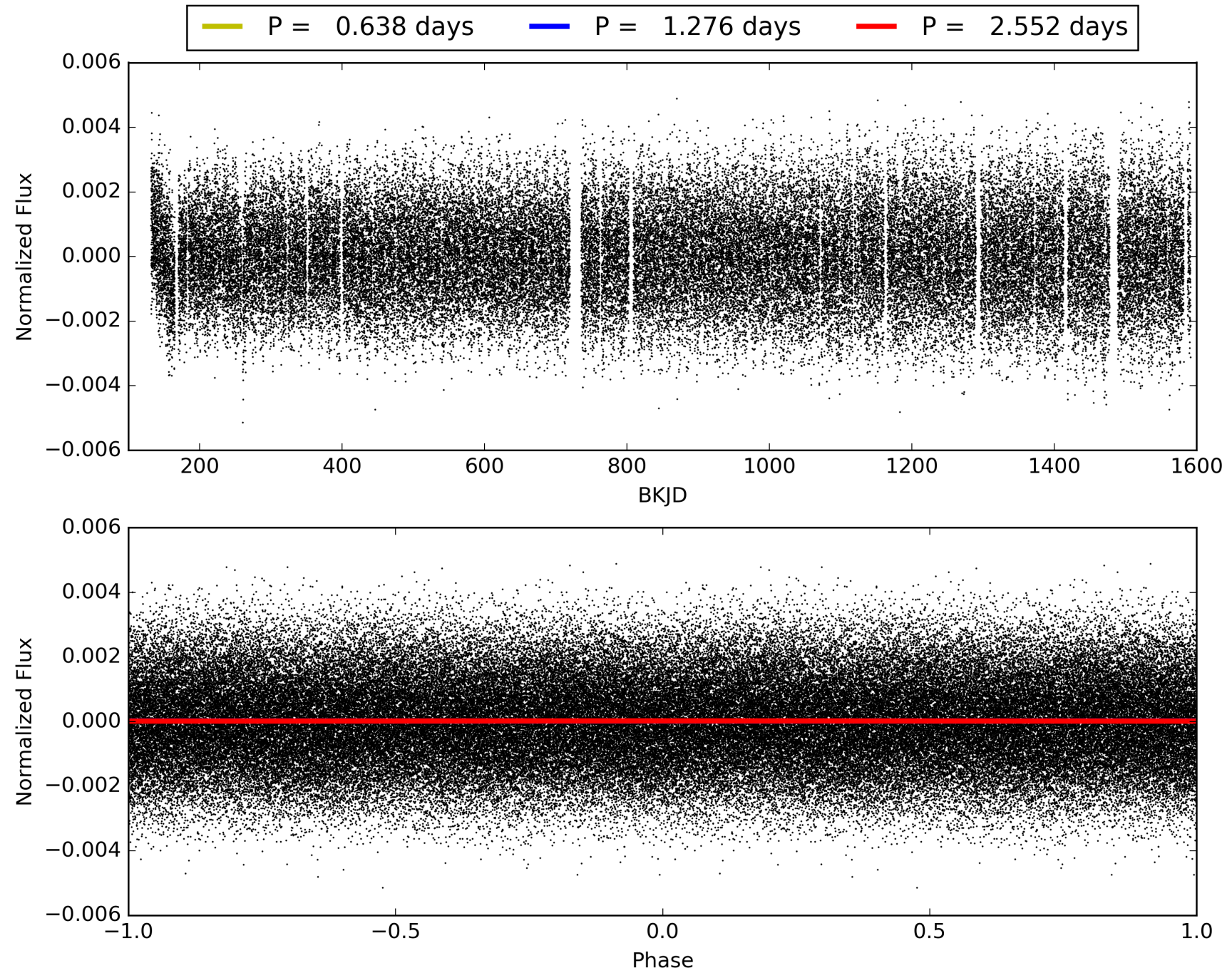
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 18:29:11 Z

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

TCE 010537528-01, PDC Light Curves

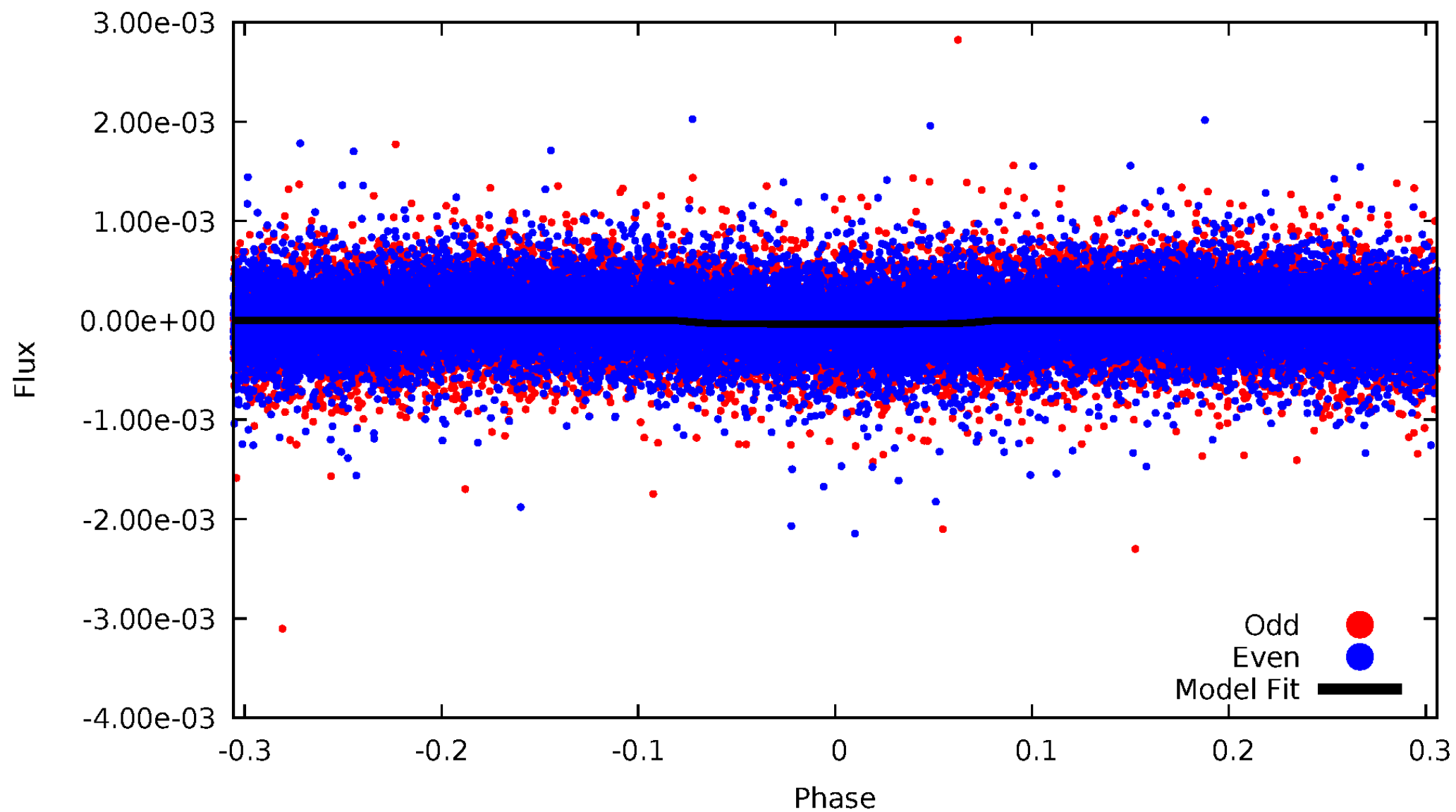


TCE 010537528-01



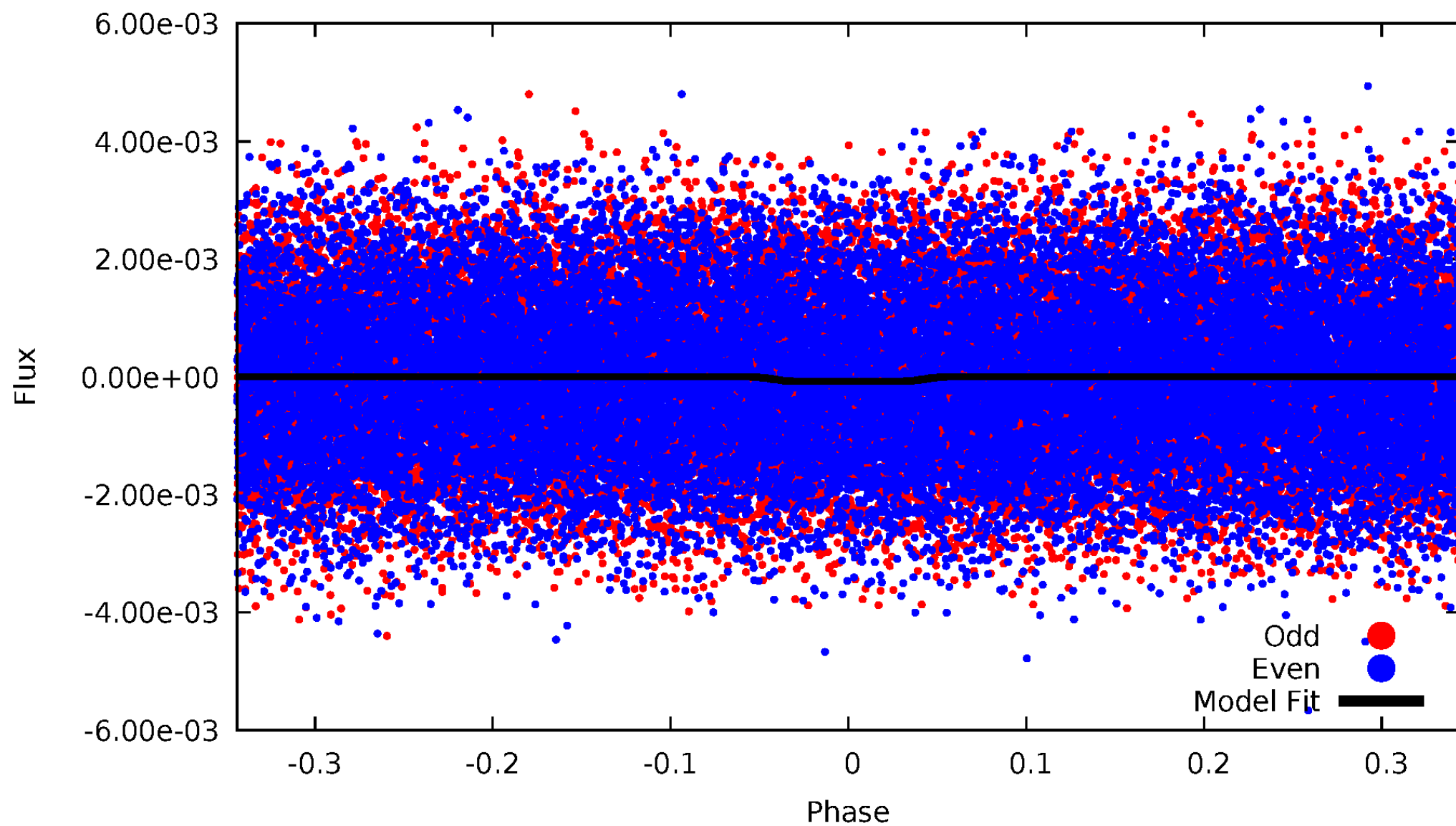
DV Odd/Even

TCE 010537528-01

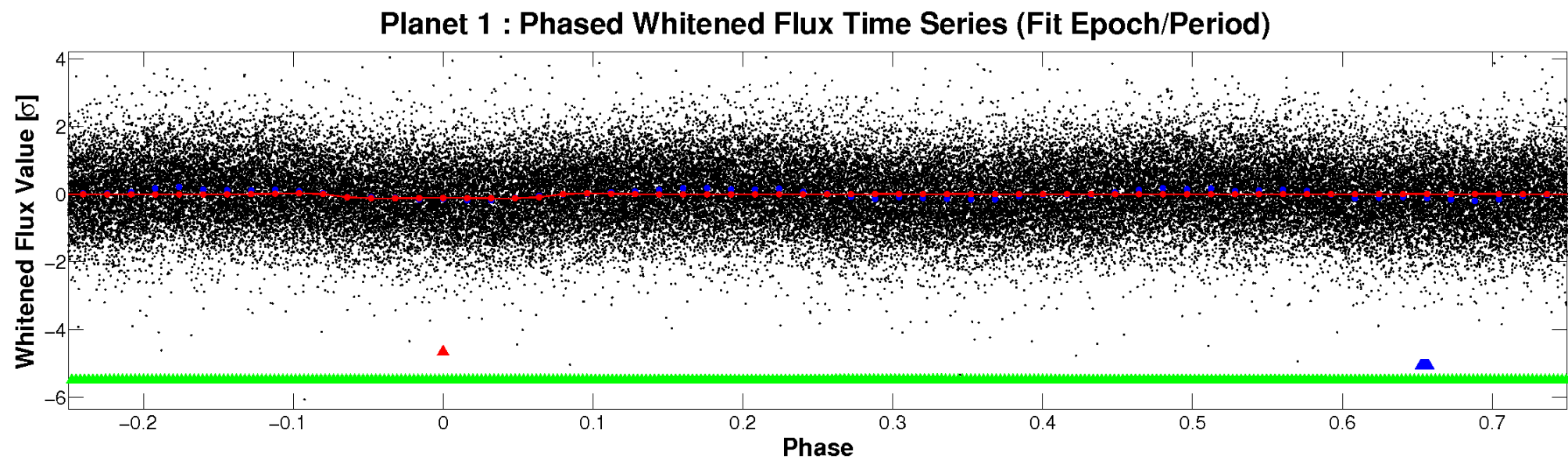
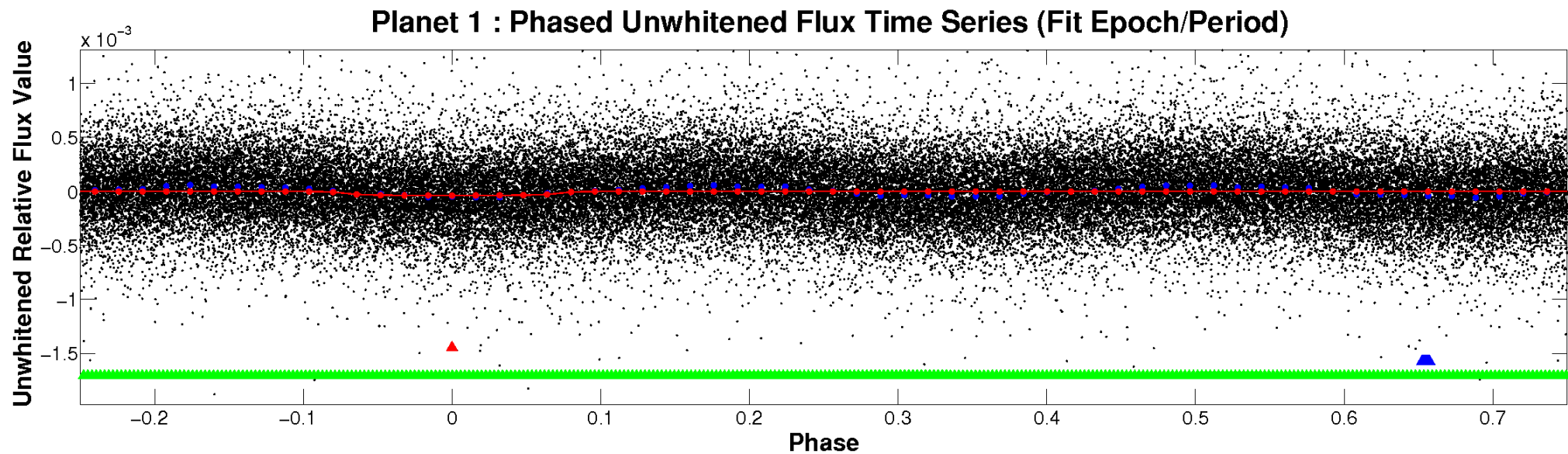


ALT Odd/Even

TCE 010537528-01

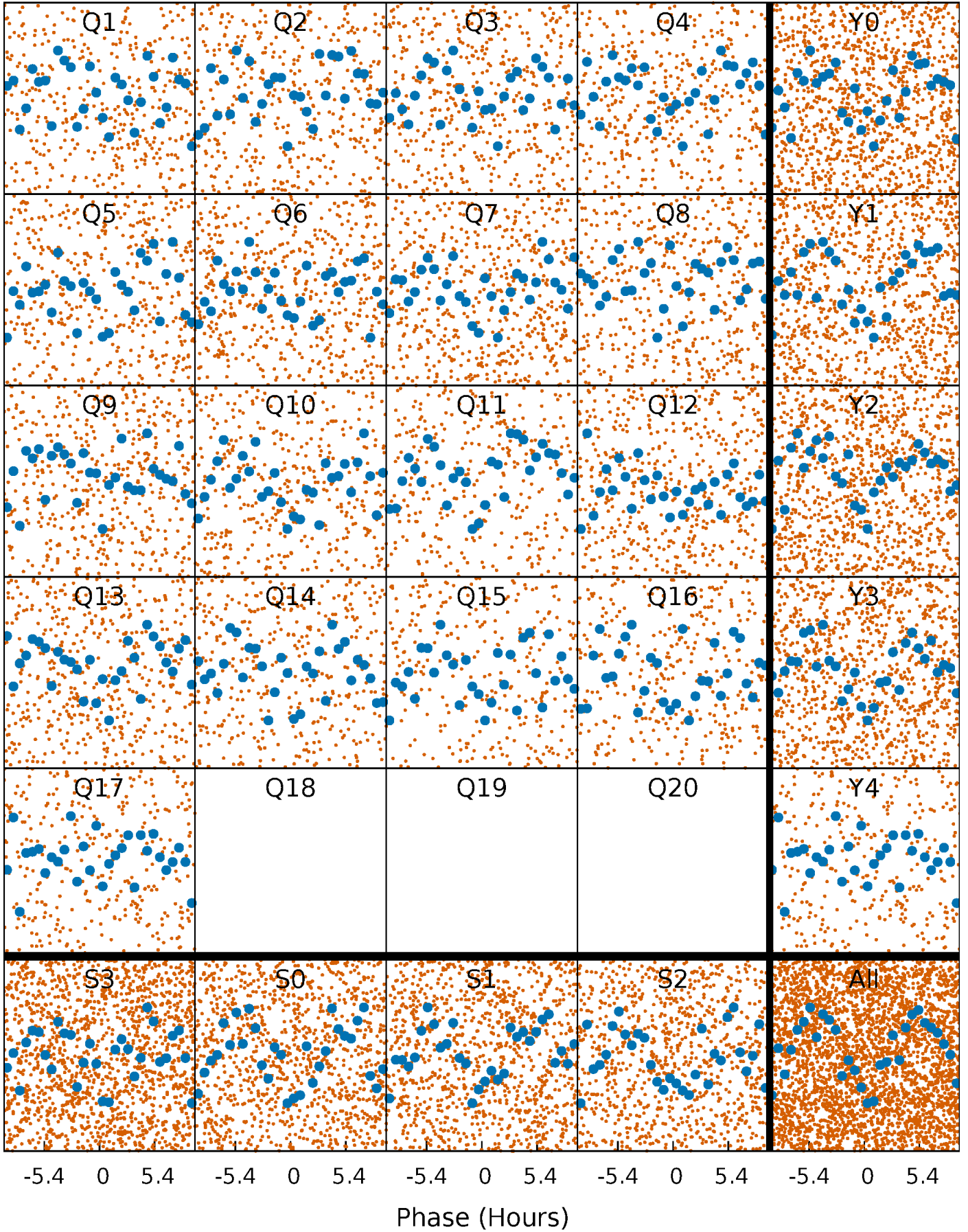


Non-Whitened Vs. Whitened Light Curve



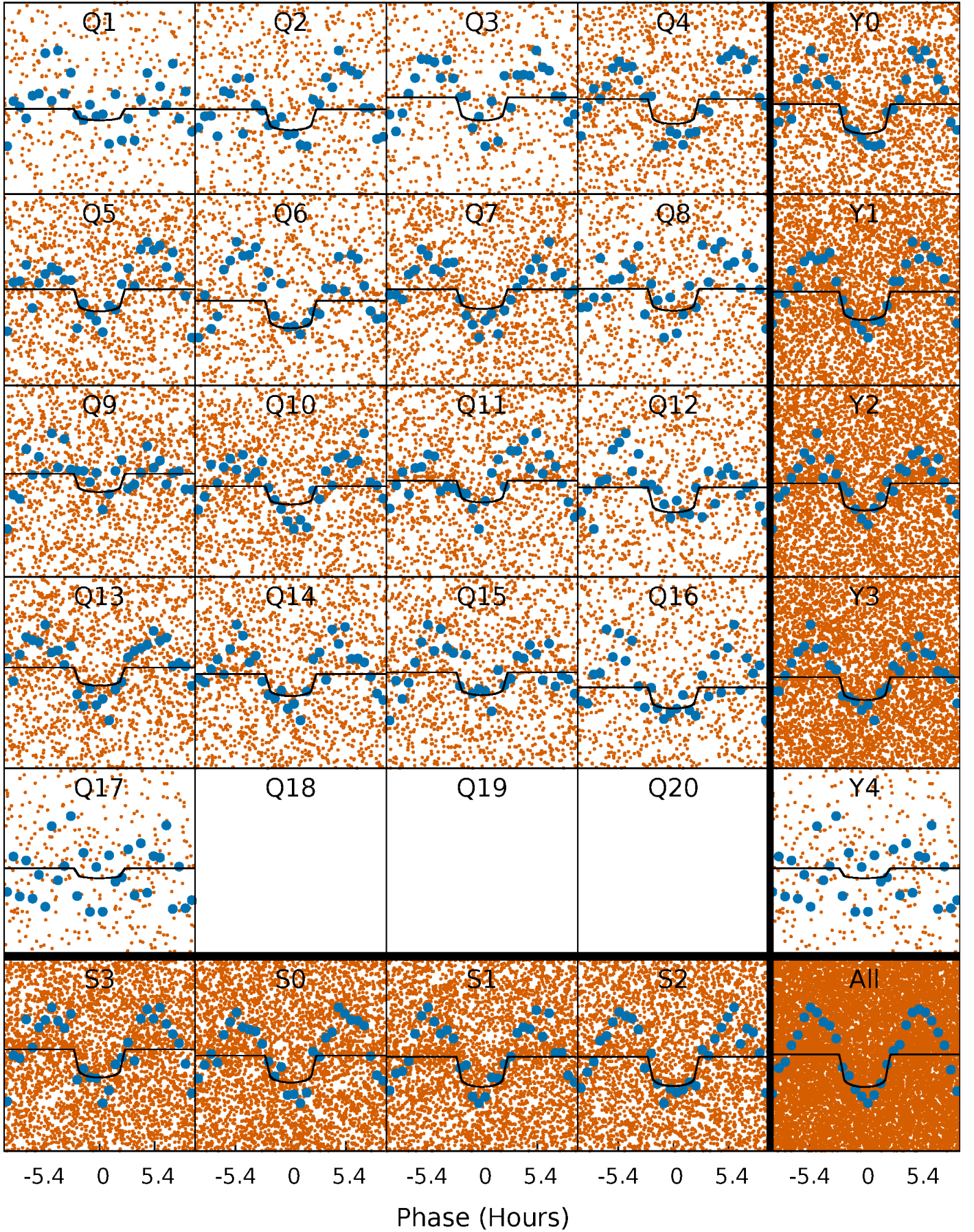
PDC Quarter-Phased Transit Curves

TCE 010537528-01 P= 1.276249 Days $T_0=132.033438$ (BKJD)



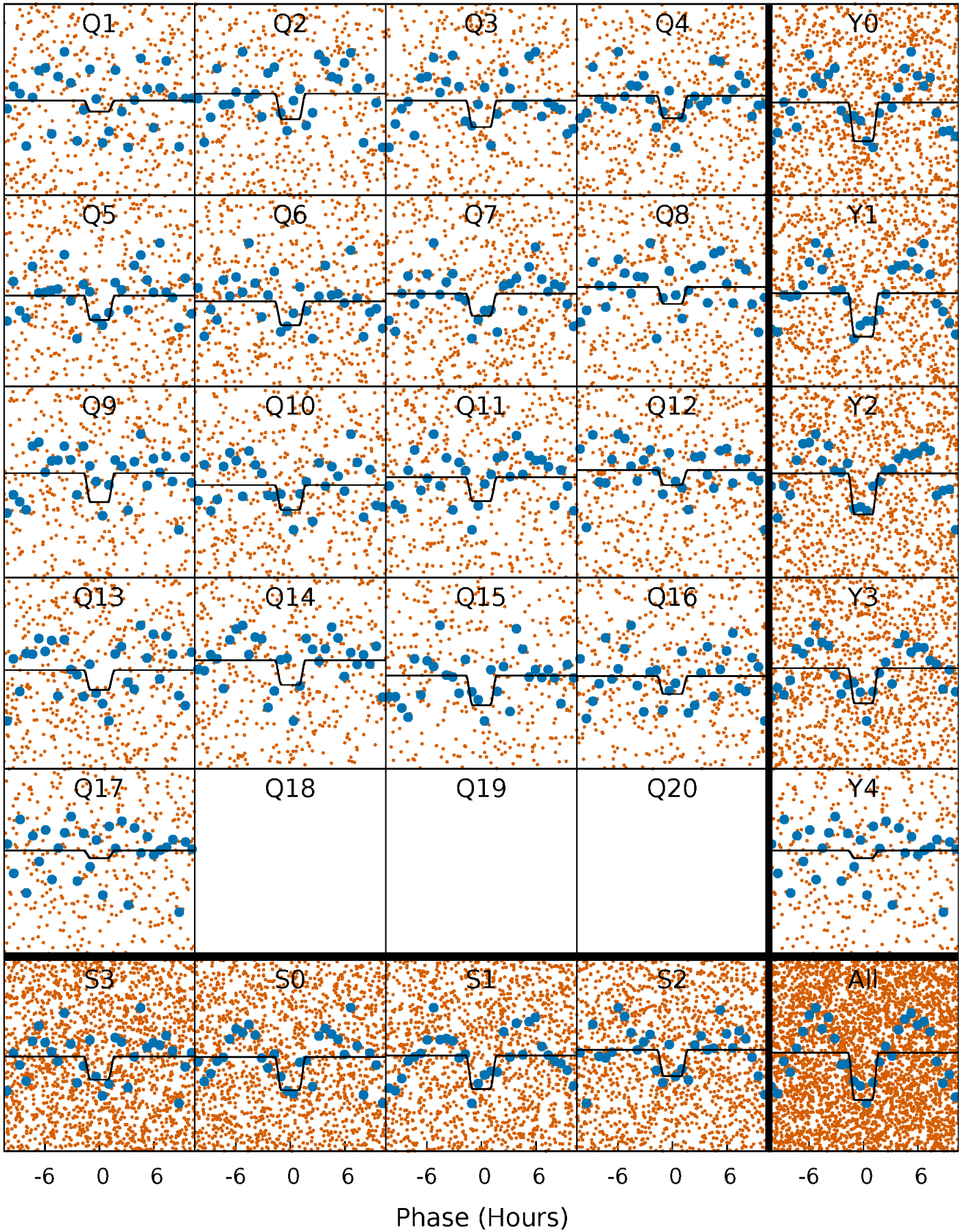
DV Quarter-Phased Transit Curves

TCE 010537528-01 P= 1.276249 Days $T_0=132.033438$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

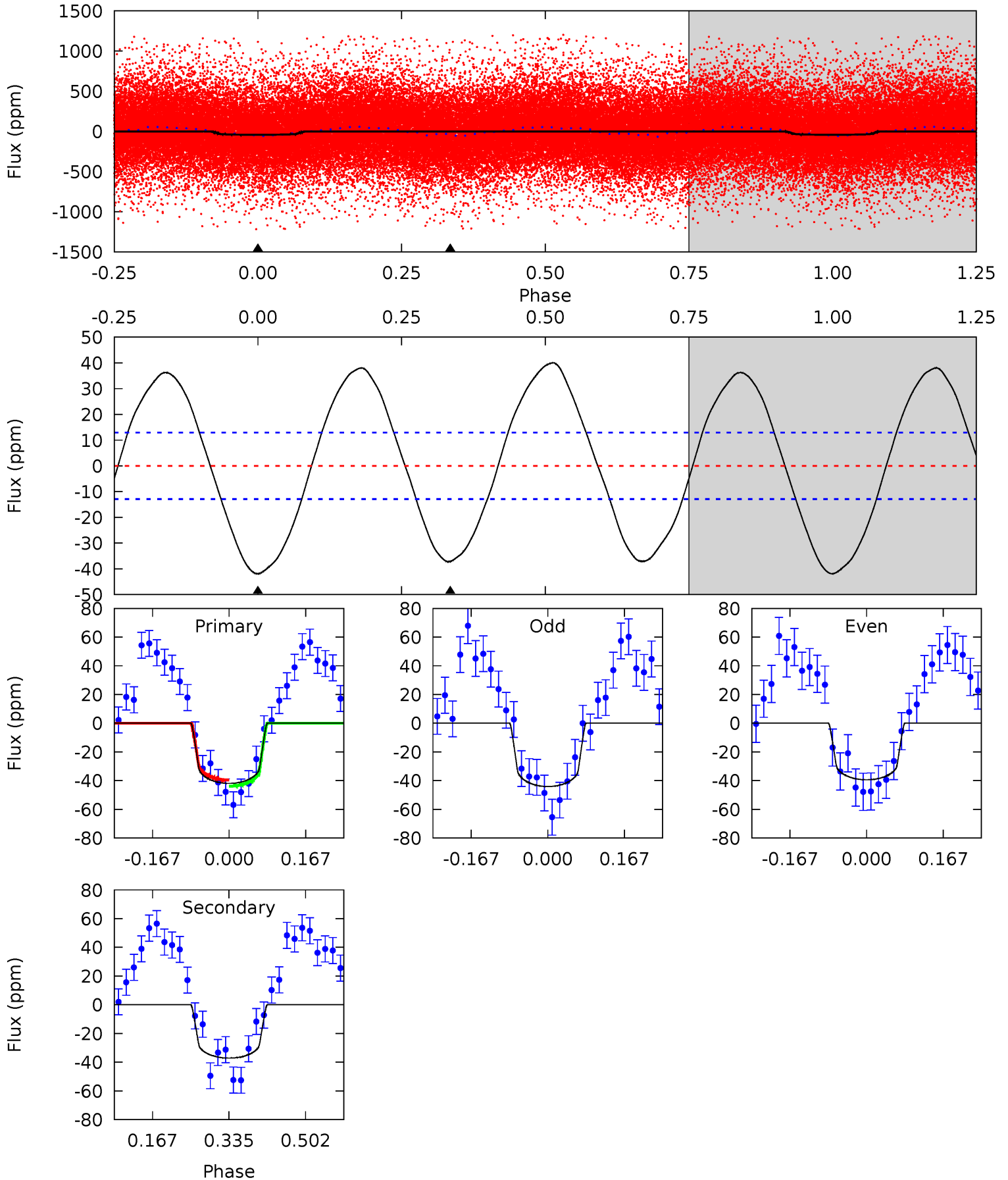
TCE 010537528-01 P= 1.276245 Days $T_0=132.043555$ (BKJD)



DV Model-Shift Uniqueness Test

010537528-01, P = 1.276249 Days, E = 130.757189 Days

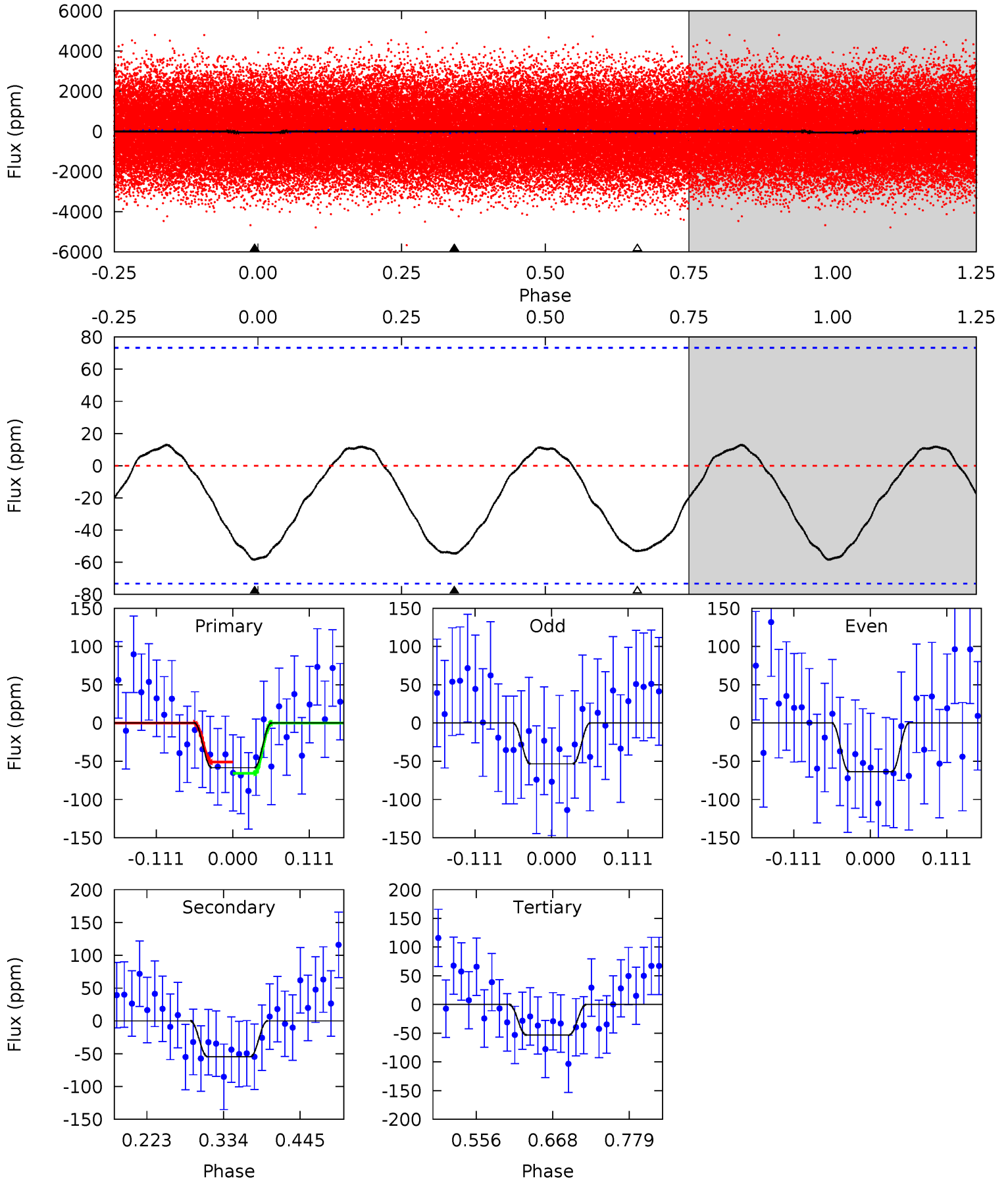
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.4	12.8	0	0	4.46	1.38	9.06	14.4	14.4	12.8	12.8	0.81	1.06	0.49	0.75



Alt Model-Shift Uniqueness Test

010537528-01, P = 1.276245 Days, E = 130.767310 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.62	3.38	3.29	0	4.54	1.59	1.38	0.33	3.62	0.10	3.38	0.32	1.07	0.18	0.46



Stellar Parameters For KIC 010537528

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8120^{+224}_{-365}	$3.929^{+0.241}_{-0.130}$	$0.070^{+0.250}_{-0.450}$	$2.571^{+0.470}_{-0.873}$	$2.047^{+0.304}_{-0.494}$	$0.170^{+0.288}_{-0.059}$
	+3%/-4%	+6%/-3%	+357%/-643%	+18%/-34%	+15%/-24%	+170%/-35%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 010537528-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-37 ± 3	$1.76^{+0.74}_{-0.73}$	4640^{+312}_{-411}	7568^{+3268}_{-1284}	$5.542^{+10.513}_{-2.805}$
Alt.	-55 ± 16	$2.26^{+0.84}_{-0.72}$	4640^{+286}_{-398}	7270^{+2165}_{-1185}	$4.875^{+6.142}_{-2.424}$

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 $A_{obs} \gg 1.0$

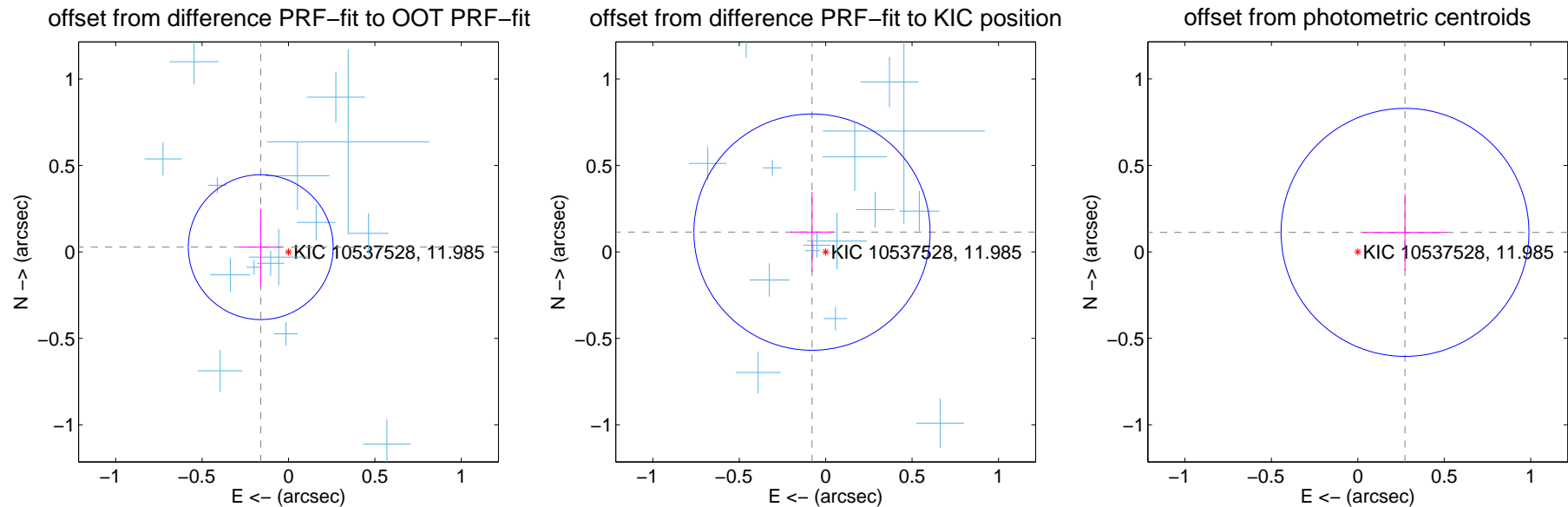
DV Centroid Data

Supplemental centroid analysis for 010537528-01. **Kepler magnitude: 11.98.** Transit SNR 10.78

There are 17 quarters with good PRF difference image offsets

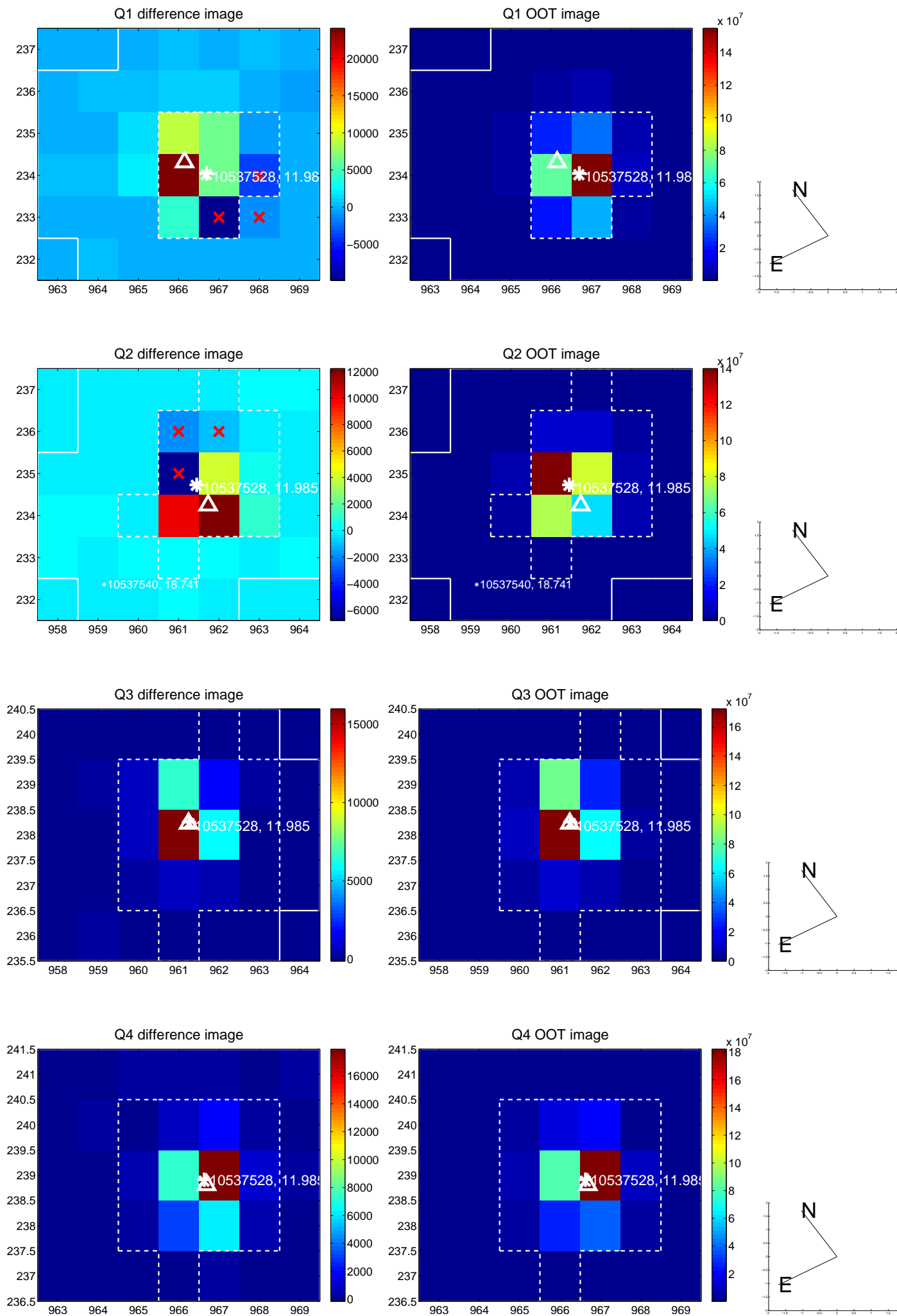
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.163 ± 0.140	1.17	0.161 ± 0.123	0.028 ± 0.220
PRF-fit source offset from KIC position	0.139 ± 0.228	0.61	0.079 ± 0.126	0.114 ± 0.232
photometric centroid source offset	0.30 ± 0.24	1.24	-0.27 ± 0.24	0.11 ± 0.22

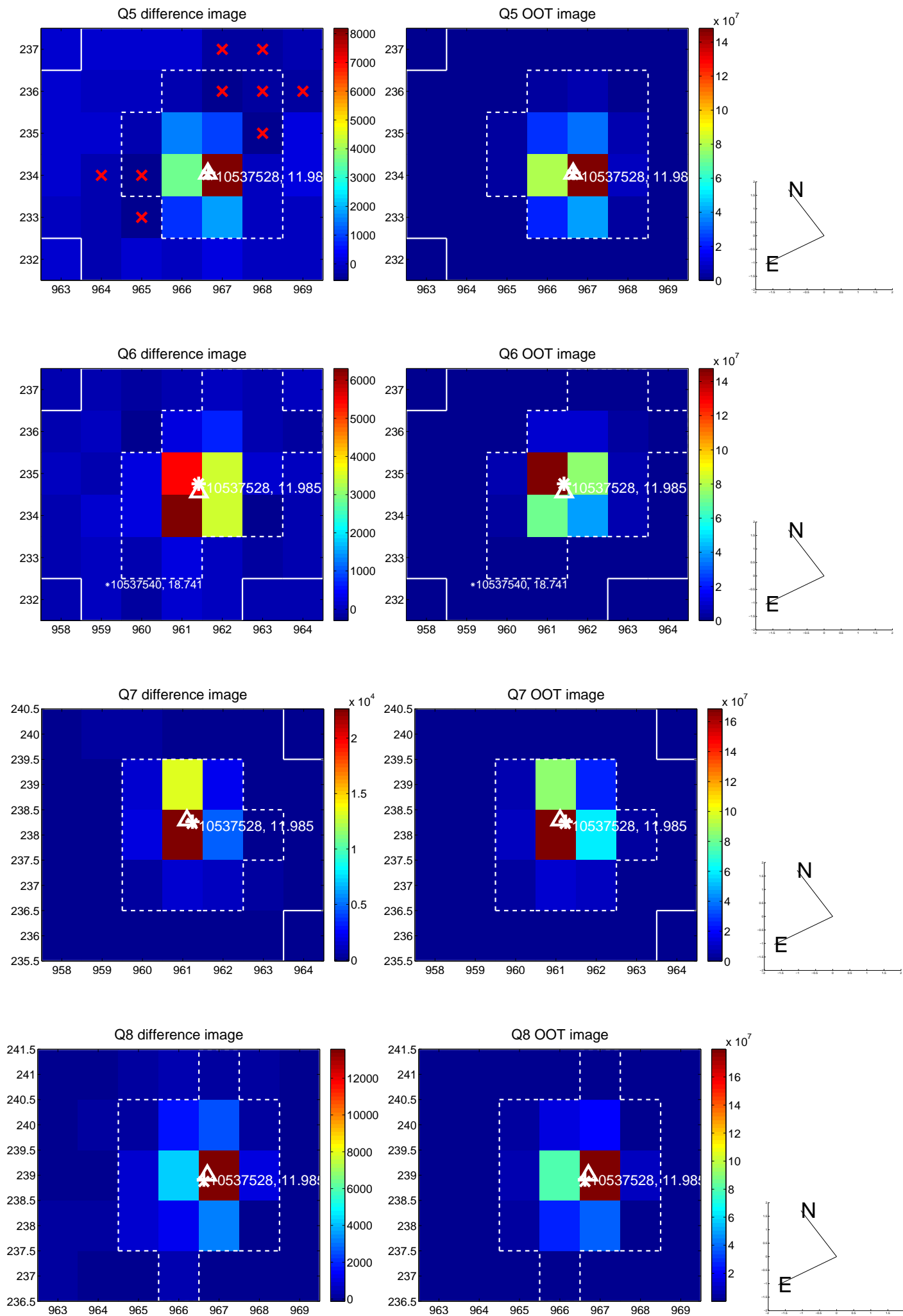


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

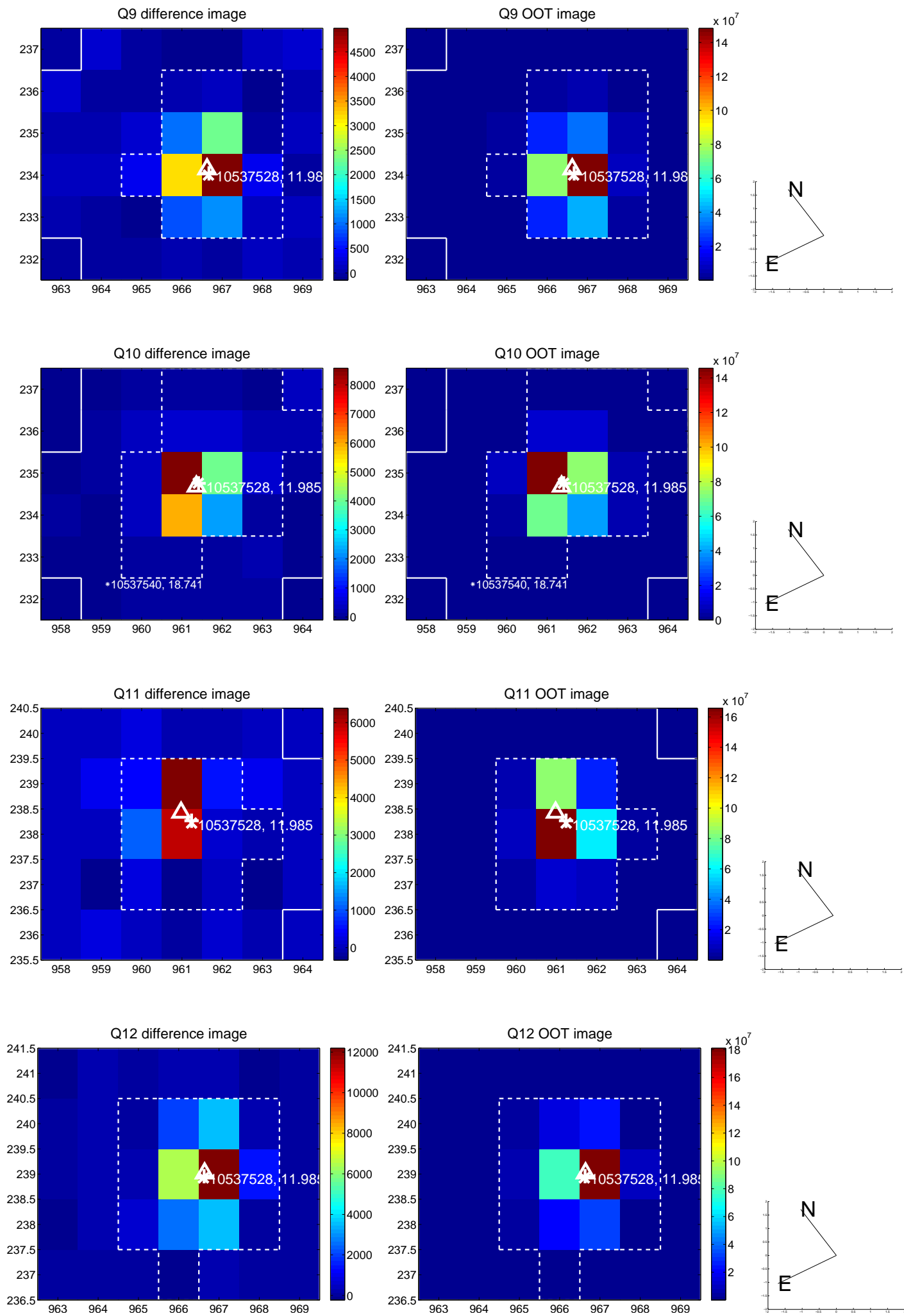
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



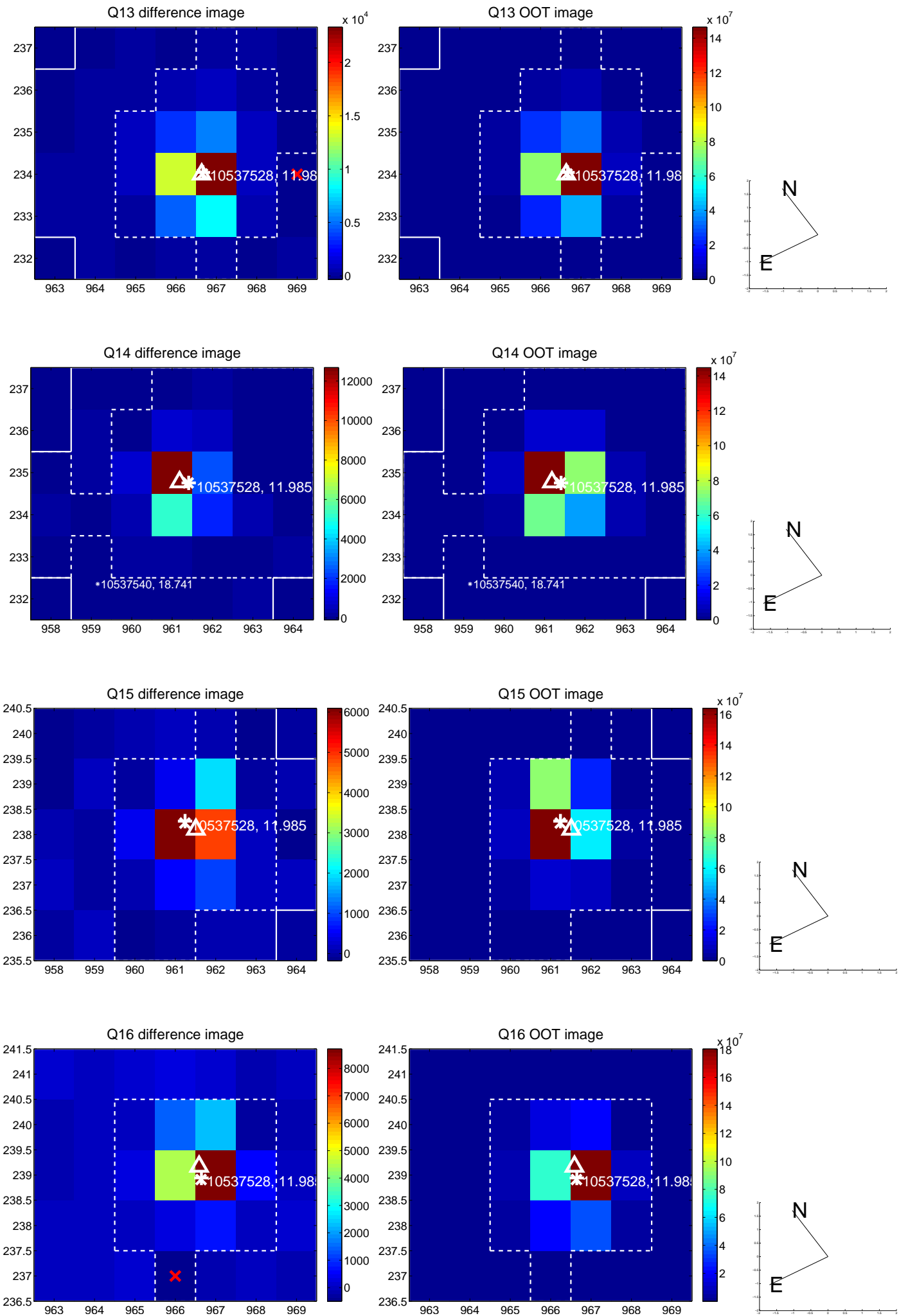
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



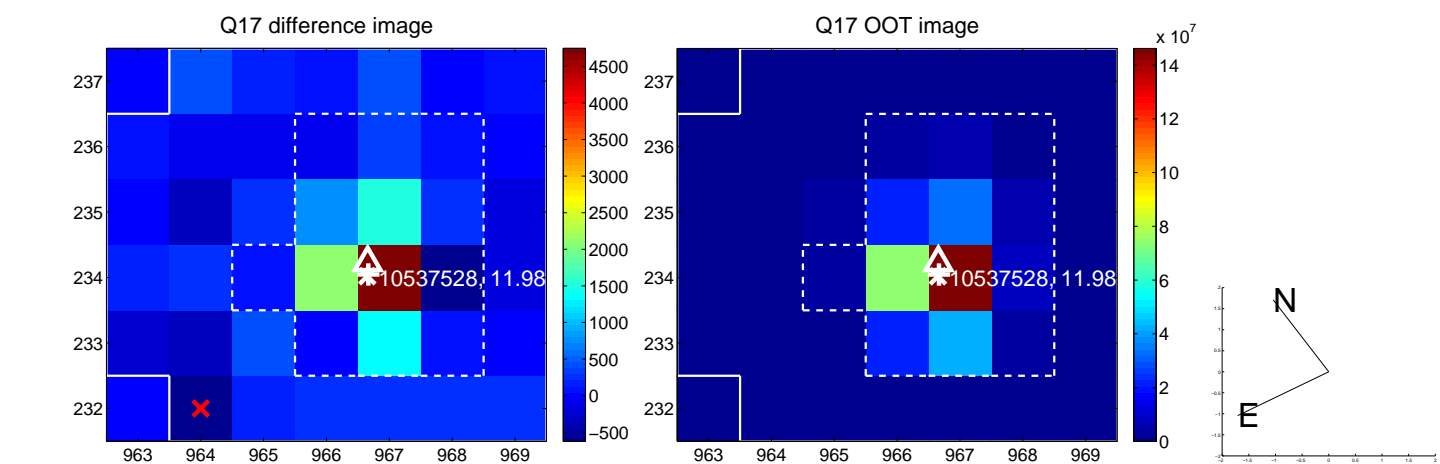
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



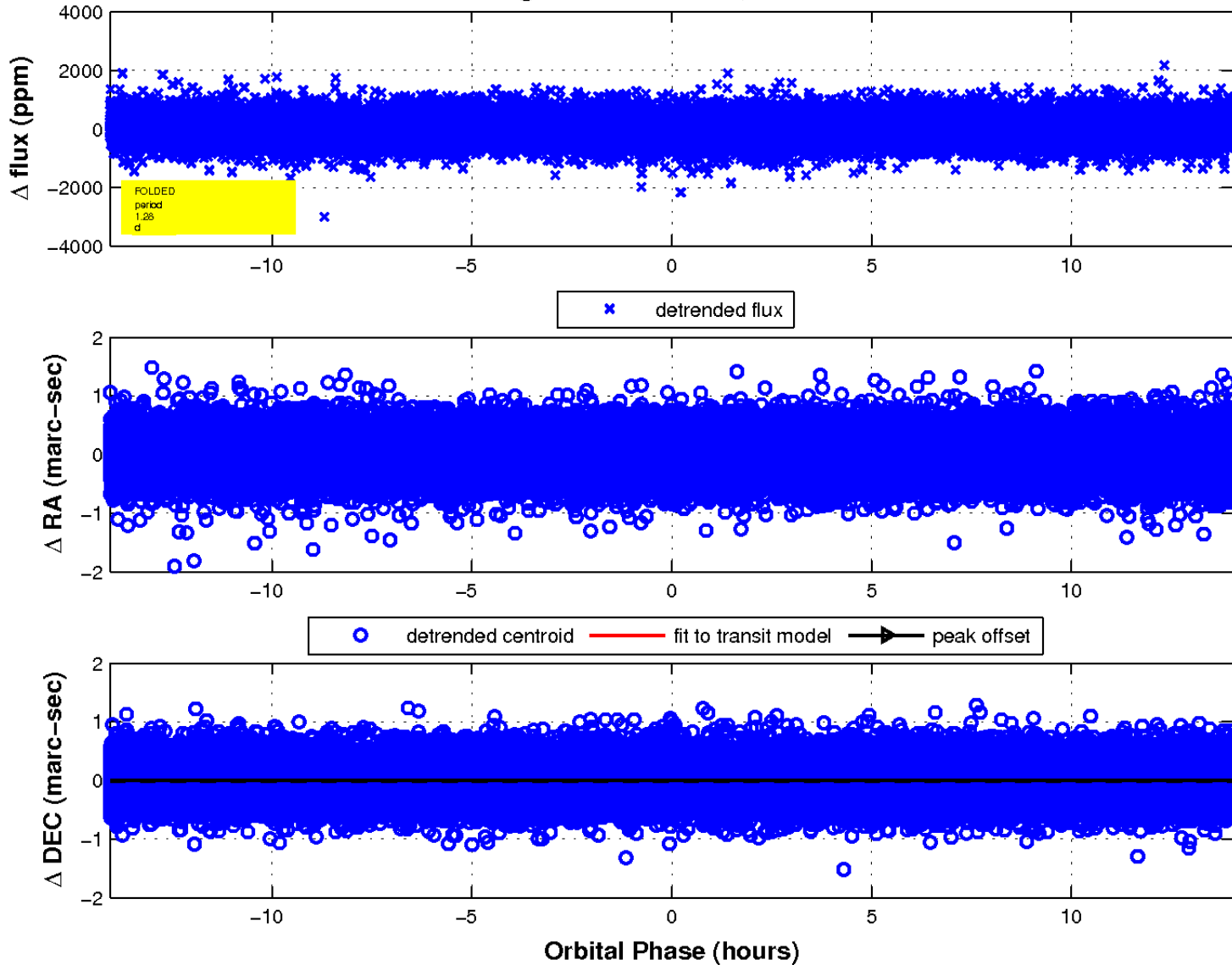
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

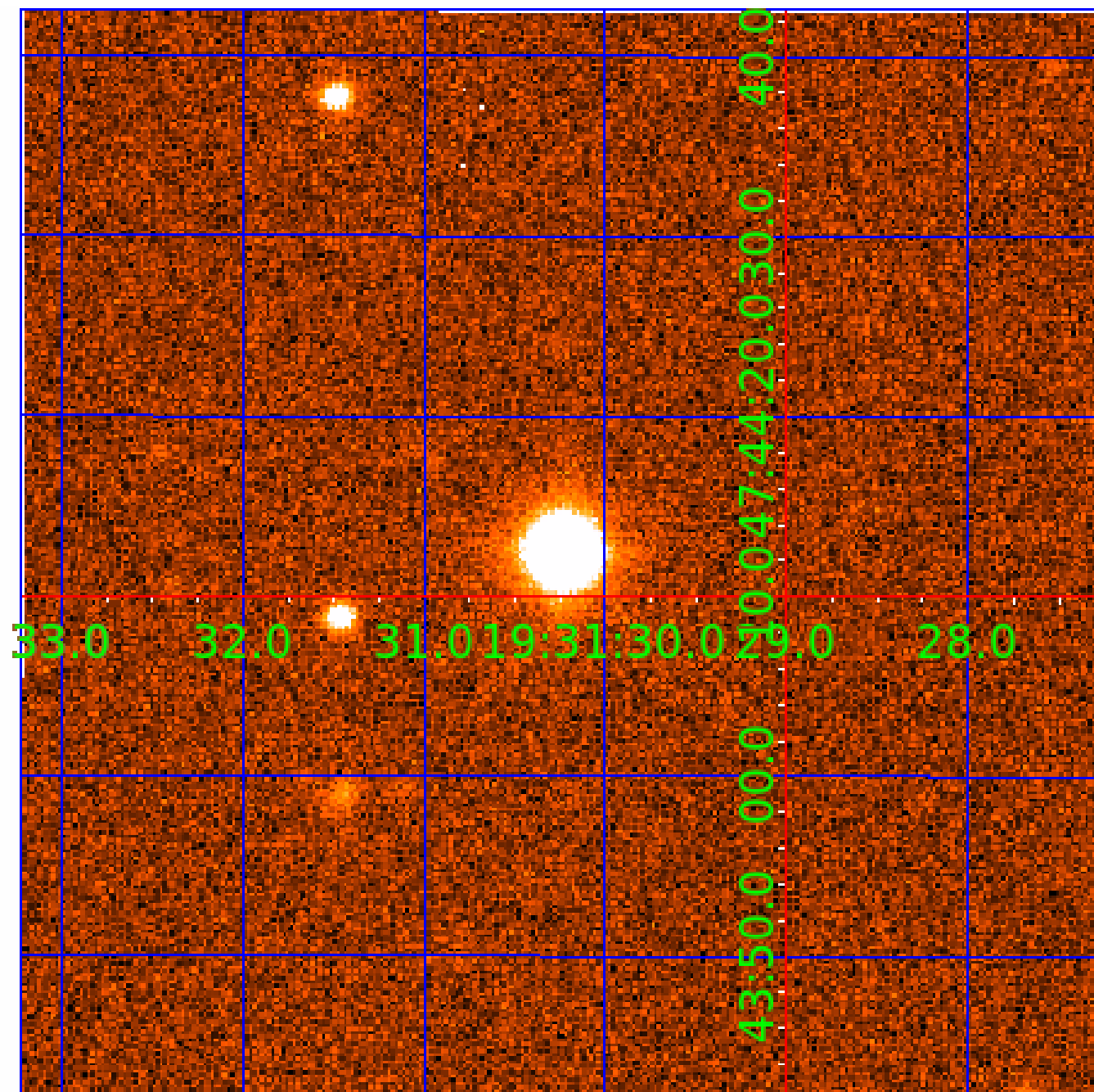


fluxWeightedCentroids, Planet 1 of 3



UKIRT Image

Declination



KIC 010537528

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})
010537528-01	OBS	No	1.276249	132.033438	37.6	4.682	10.0	10.8	2.57	8120	1.81	30102.73
010537528-02	OBS	No	1.276243	131.596393	41.2	3.845	10.5	11.7	2.57	8120	1.95	30102.92
010537528-03	OBS	No	3.832343	133.643986	118.1	9.045	11.4	14.3	2.57	8120	3.24	6948.65

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010537528-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
010537528-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD
010537528-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

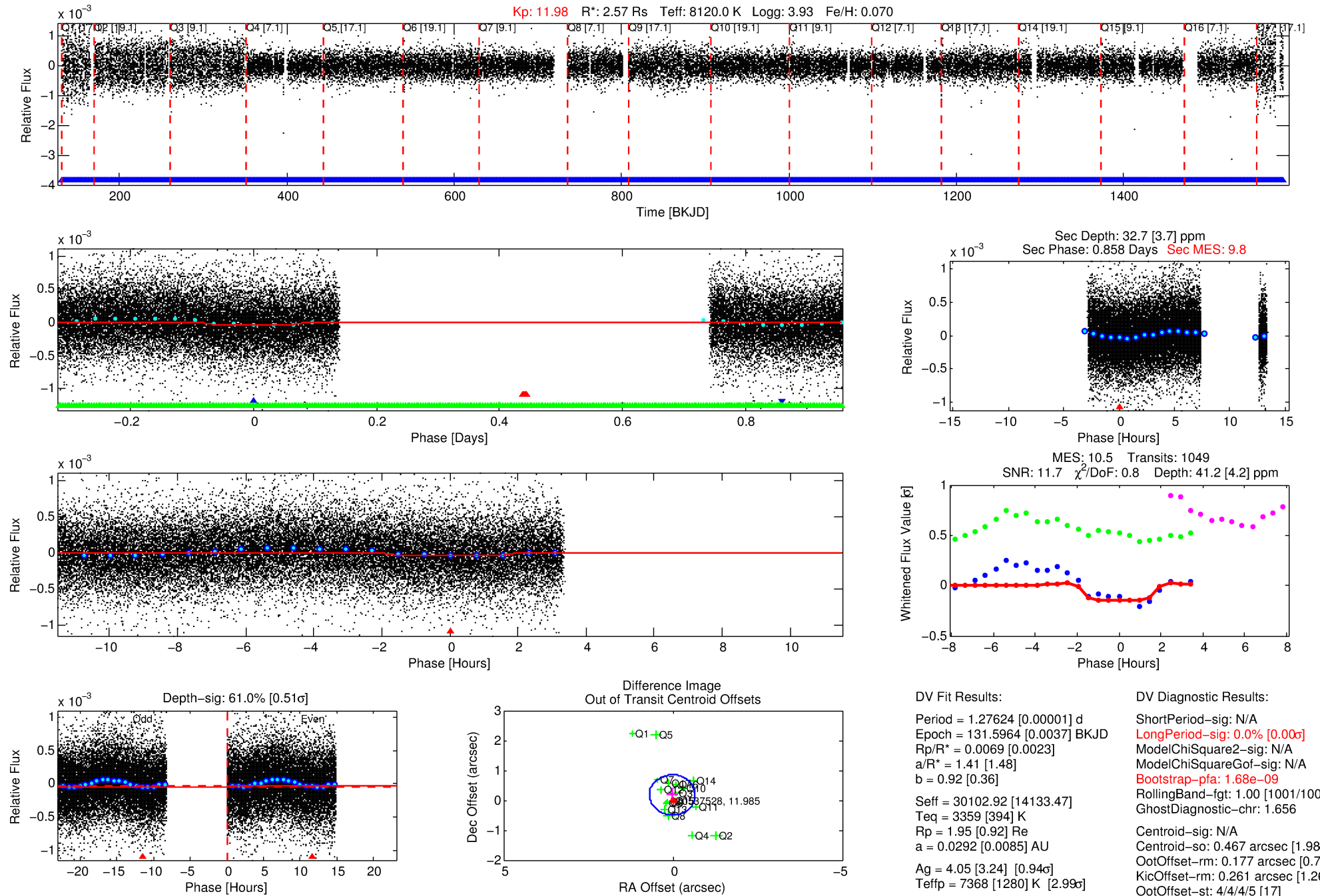
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010537528-02

No Significant Match Found

DV One-Page Summary

KIC: 10537528 Candidate: 2 of 3 Period: 1.276 d



DV Fit Results:

Period = 1.27624 [0.00001] d
Epoch = 131.5964 [0.0037] BKJD
Rp/R* = 0.0069 [0.0023]
a/R* = 1.41 [1.48]
b = 0.92 [0.36]
Seff = 30102.92 [14133.47]
Teff = 3359 [394] K
Rp = 1.95 [0.92] Re
a = 0.0292 [0.0085] AU
Ag = 4.05 [3.24] [0.94]
Teffp = 7368 [1280] K [2.99]

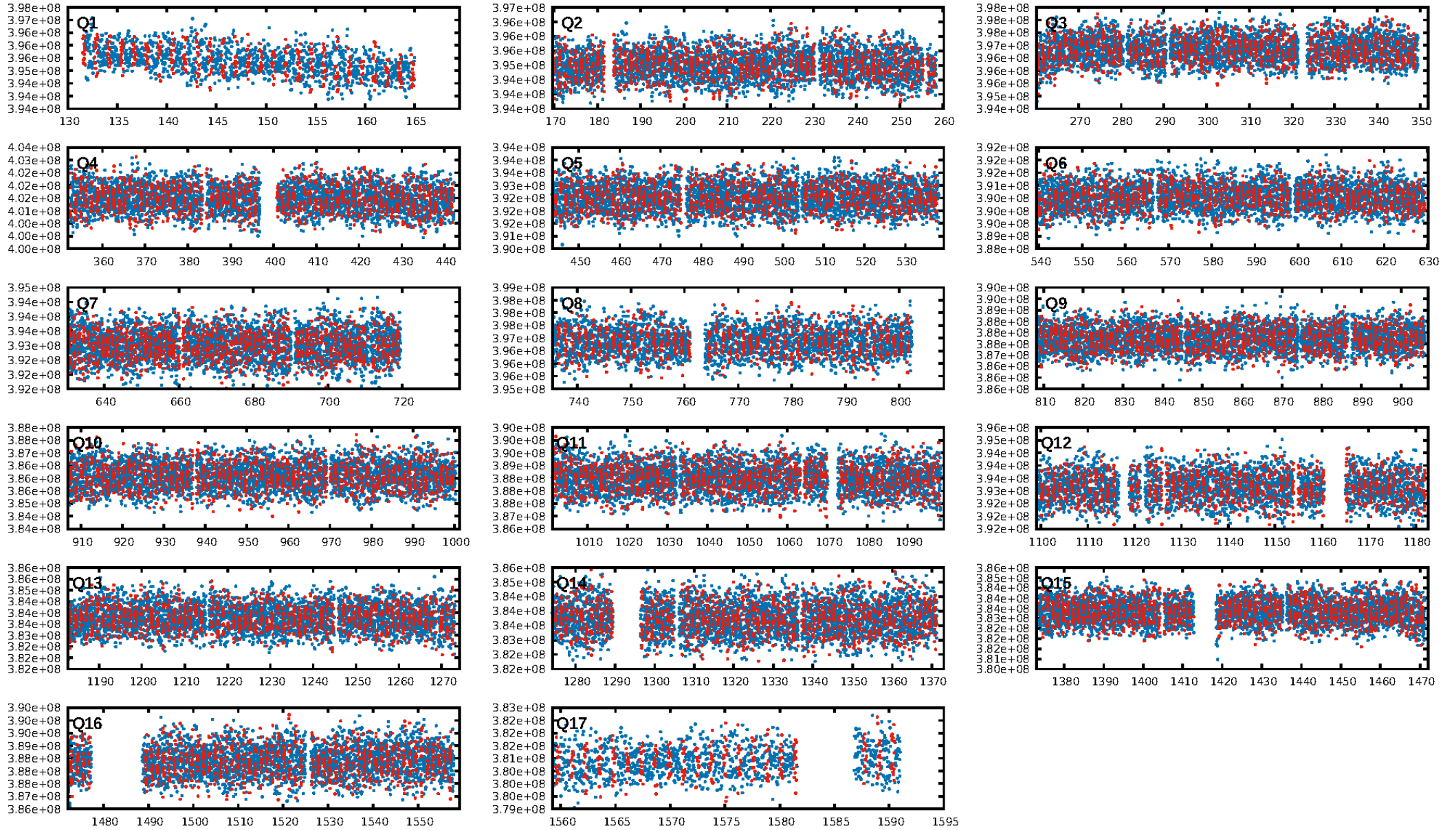
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.68e-09
RollingBand-fgt: 1.00 [1001/1001]
GhostDiagnostic-chr: 1.656
Centroid-sig: N/A
Centroid-so: 0.467 arcsec [1.98]
OotOffset-rm: 0.177 arcsec [0.79]
KicOffset-rm: 0.261 arcsec [1.26]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

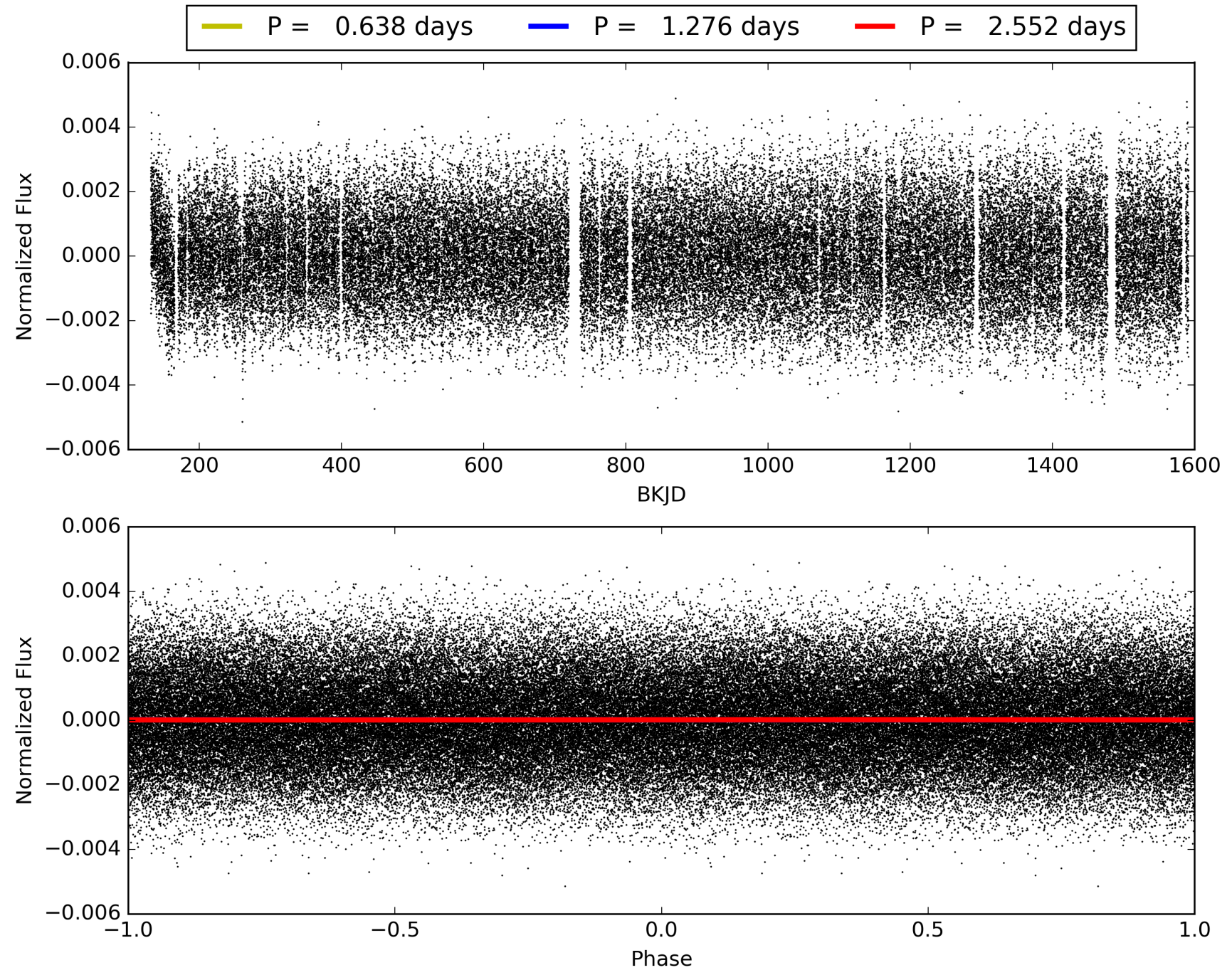
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 18:29:23 Z

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

TCE 010537528-02, PDC Light Curves

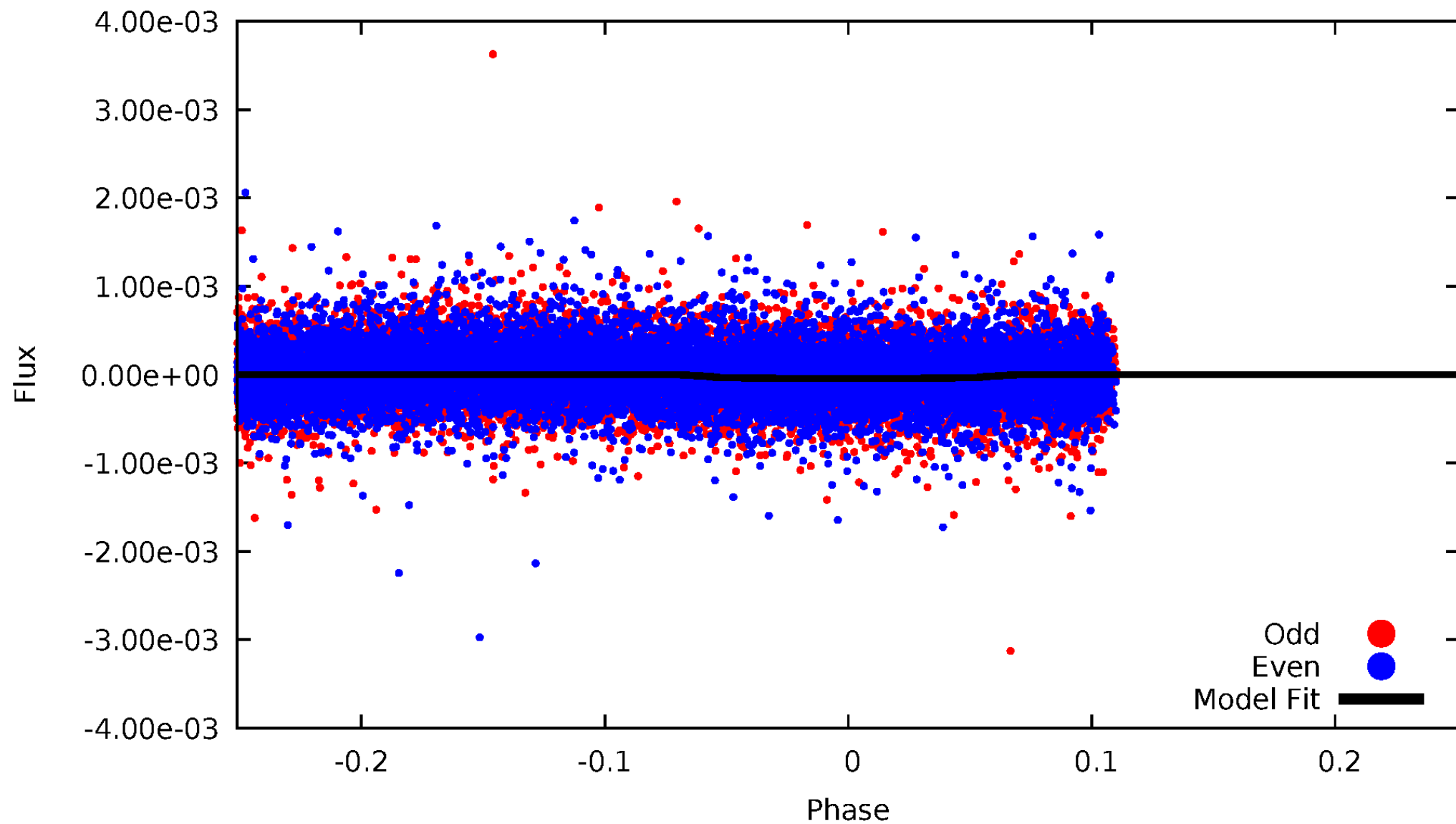


TCE 010537528-02



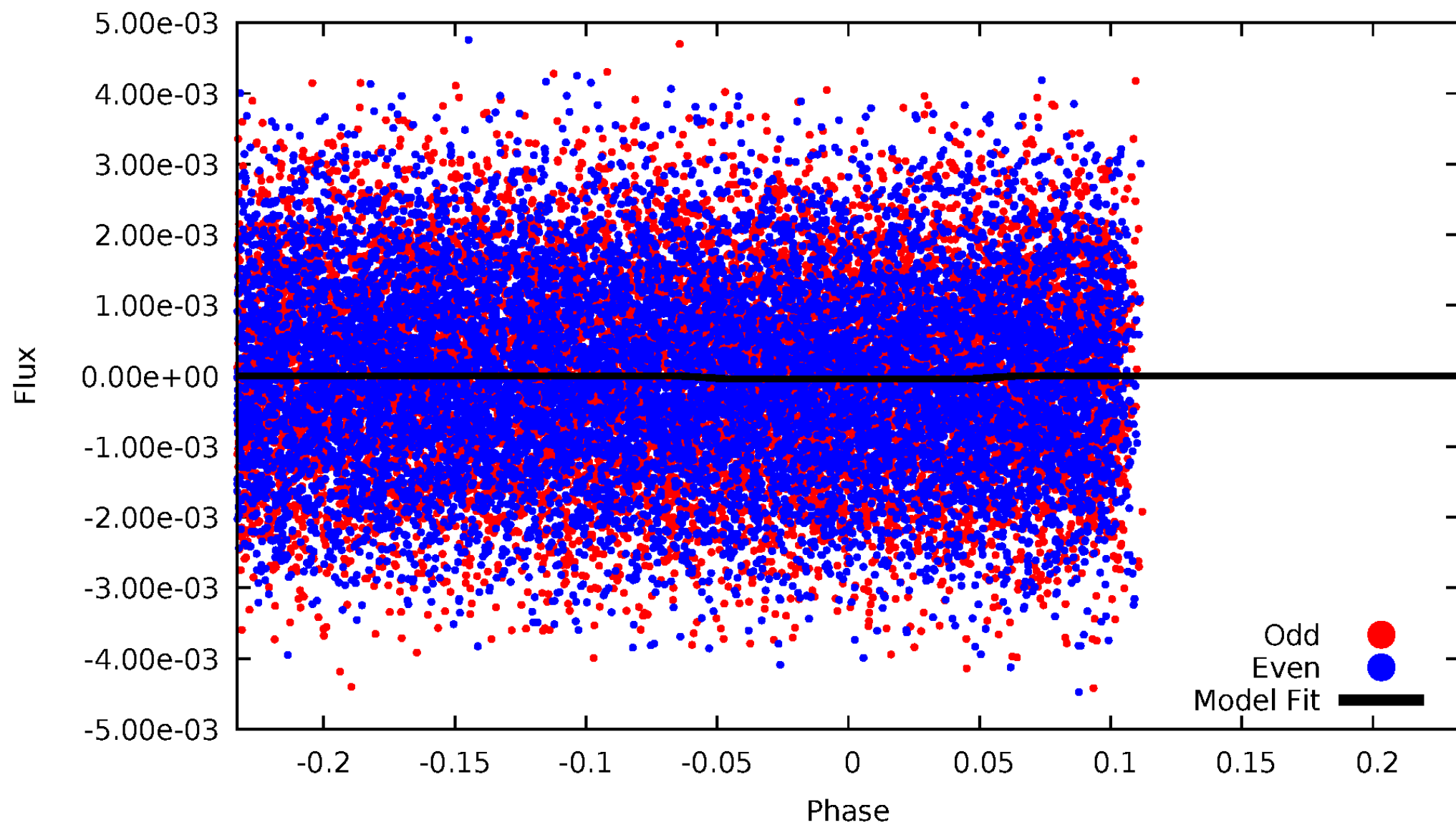
DV Odd/Even

TCE 010537528-02



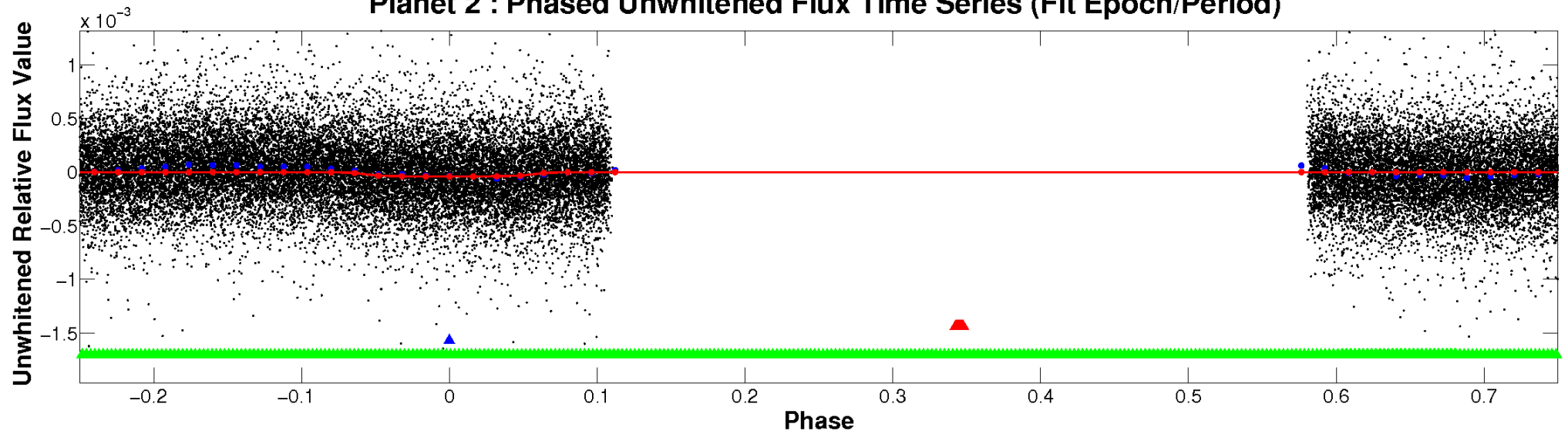
ALT Odd/Even

TCE 010537528-02

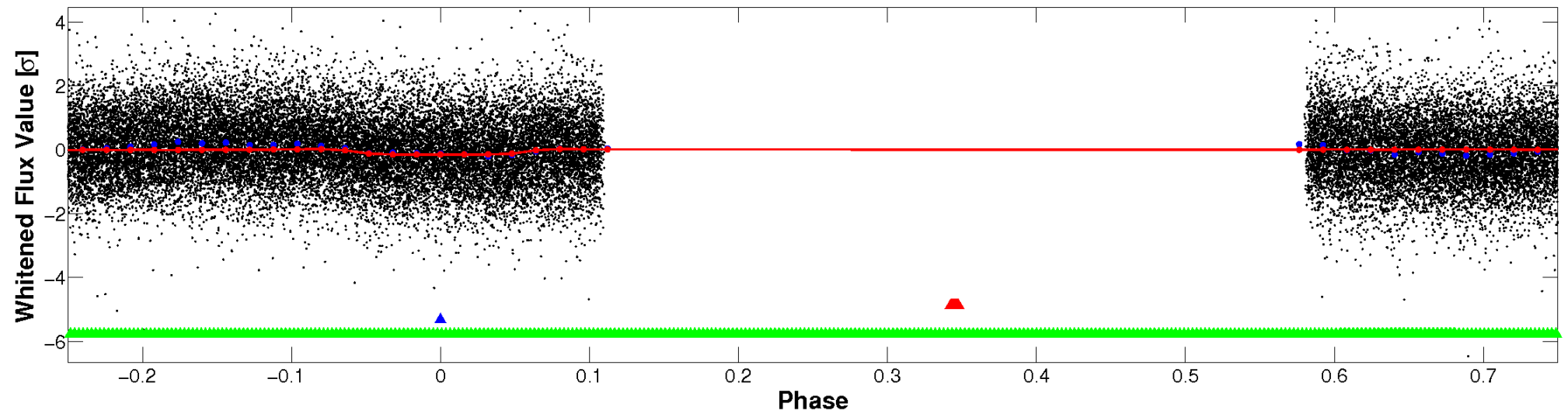


Non-Whitened Vs. Whitened Light Curve

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

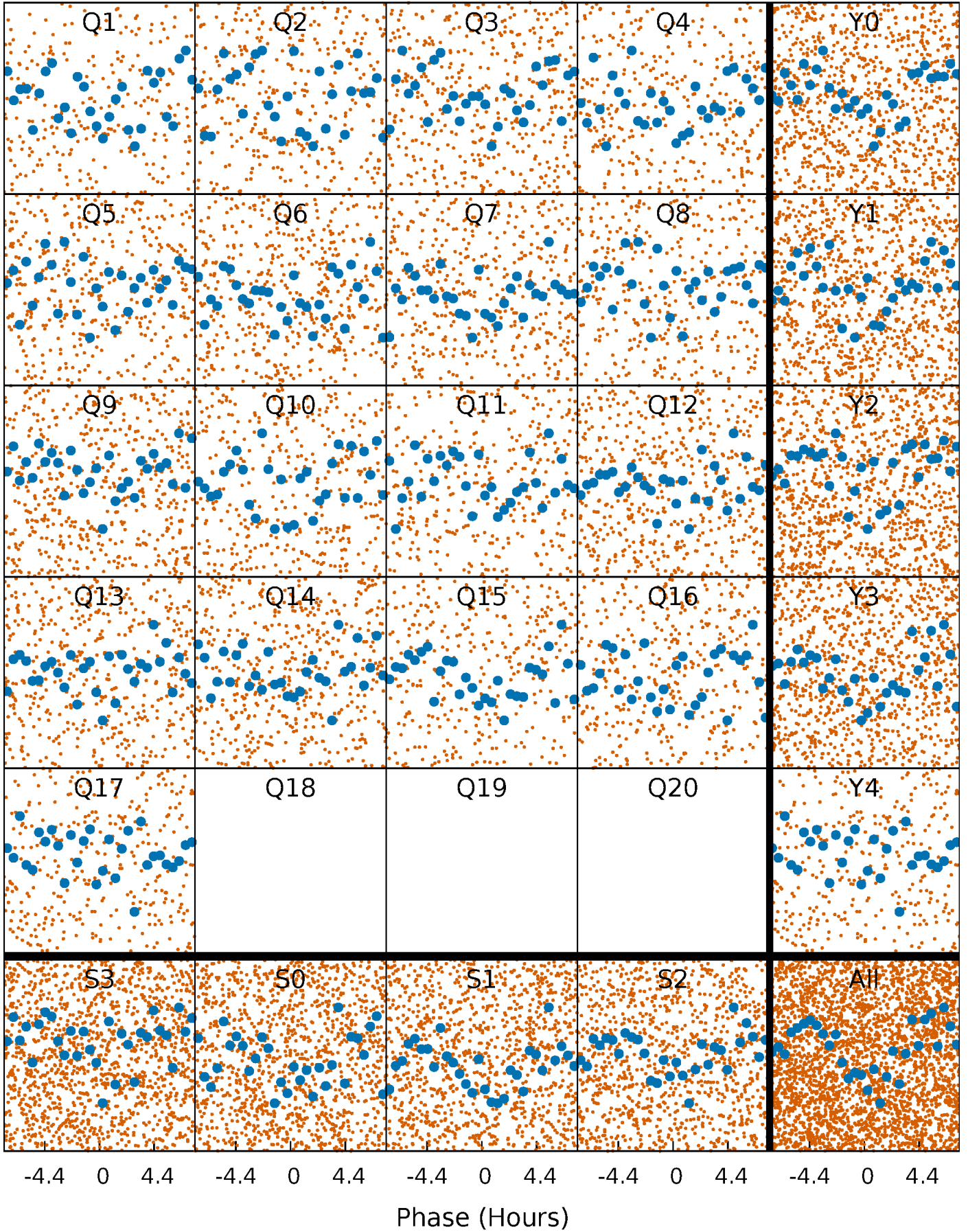


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



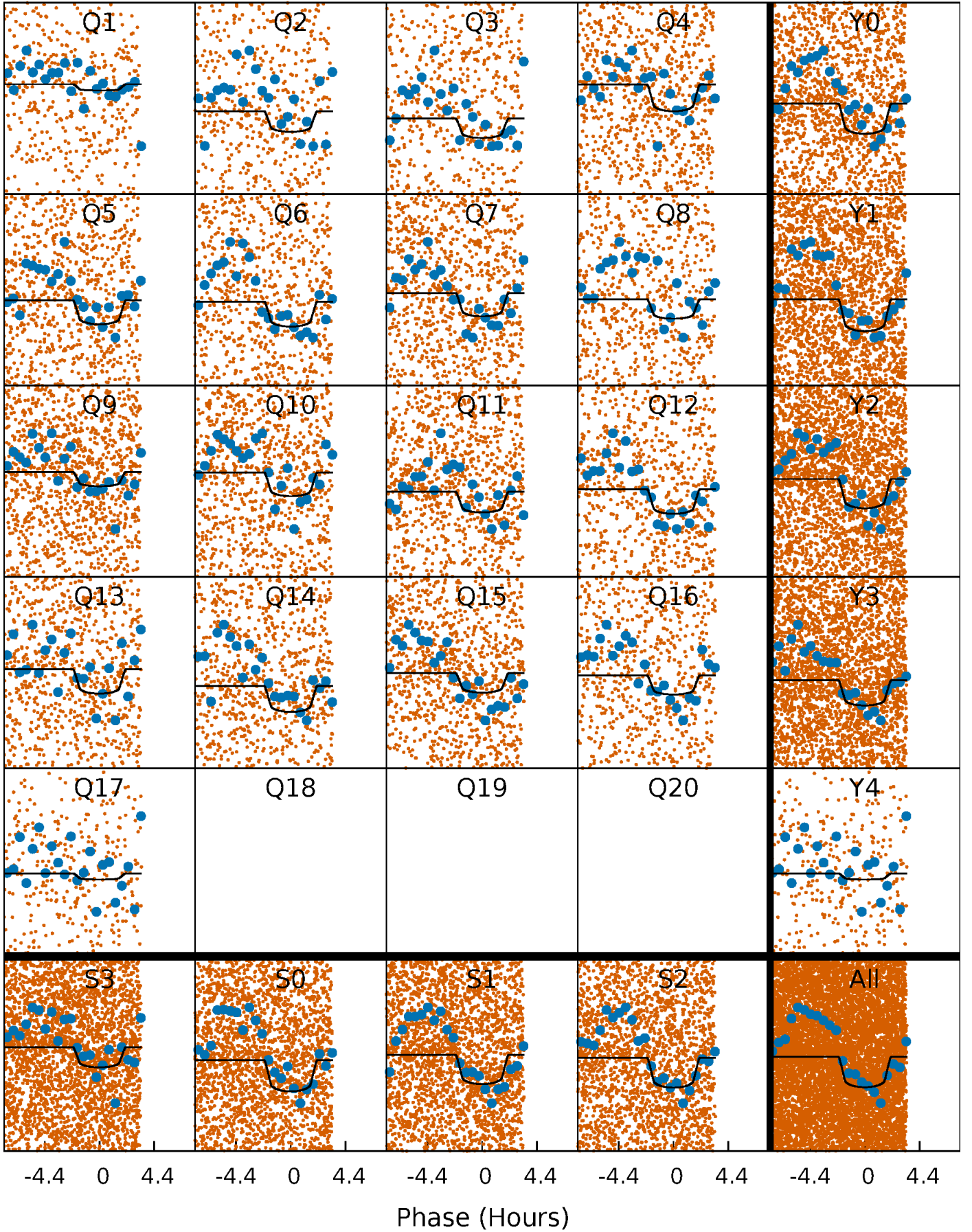
PDC Quarter-Phased Transit Curves

TCE 010537528-02 P= 1.276243 Days $T_0=131.596393$ (BKJD)



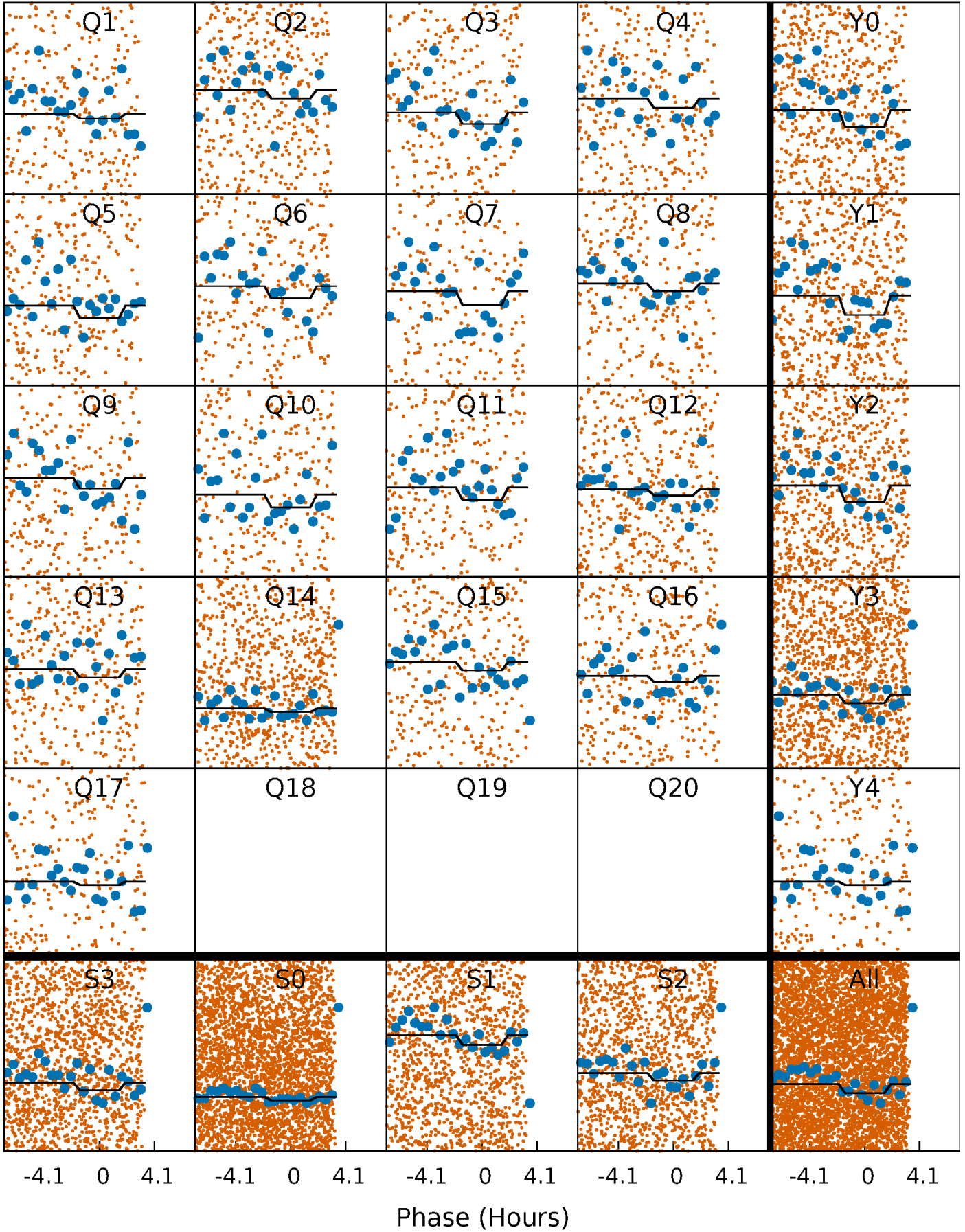
DV Quarter-Phased Transit Curves

TCE 010537528-02 P= 1.276243 Days $T_0=131.596393$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

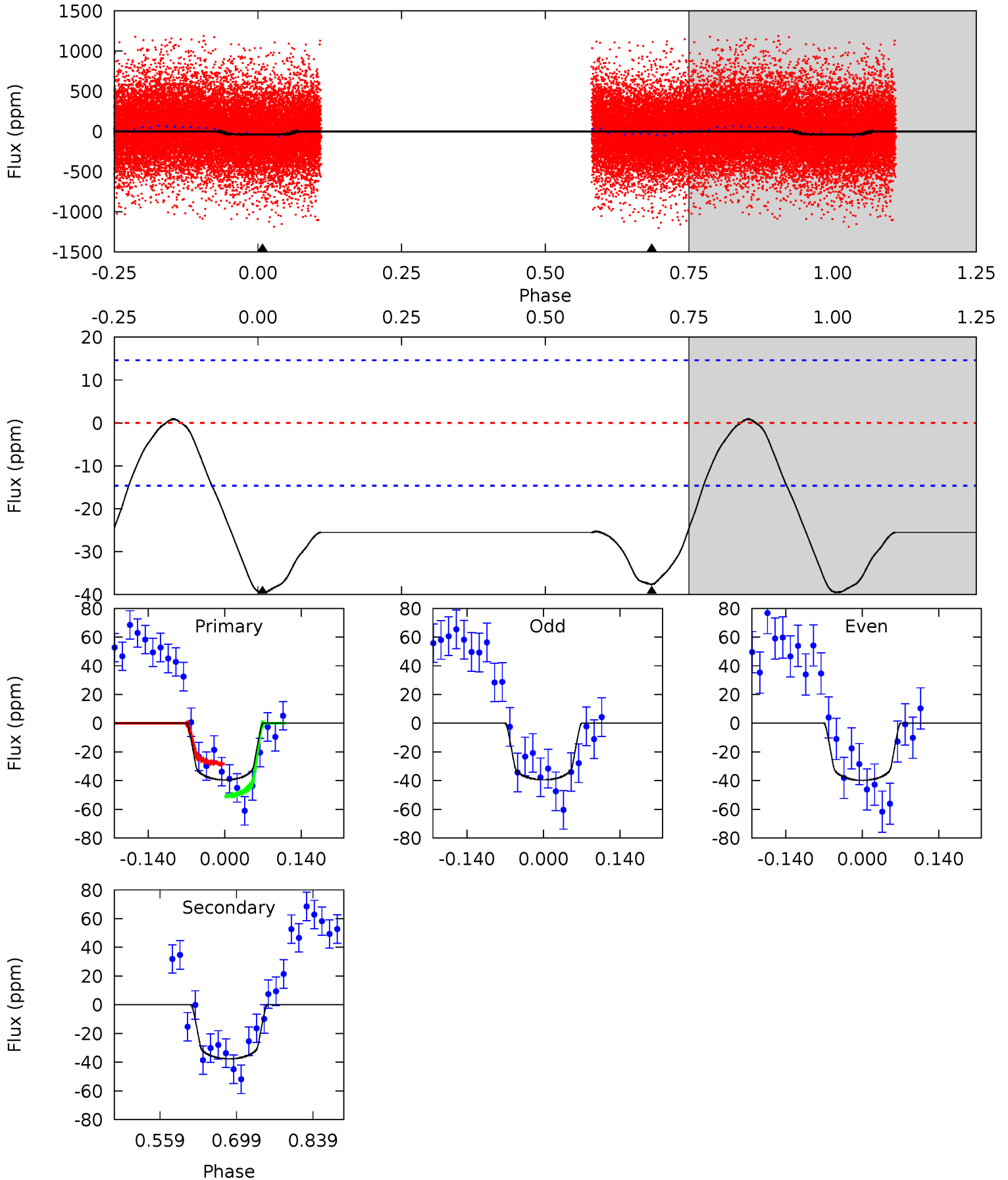
TCE 010537528-02 P= 1.276231 Days $T_0=131.608140$ (BKJD)



DV Model-Shift Uniqueness Test

010537528-02, P = 1.276243 Days, E = 130.320150 Days

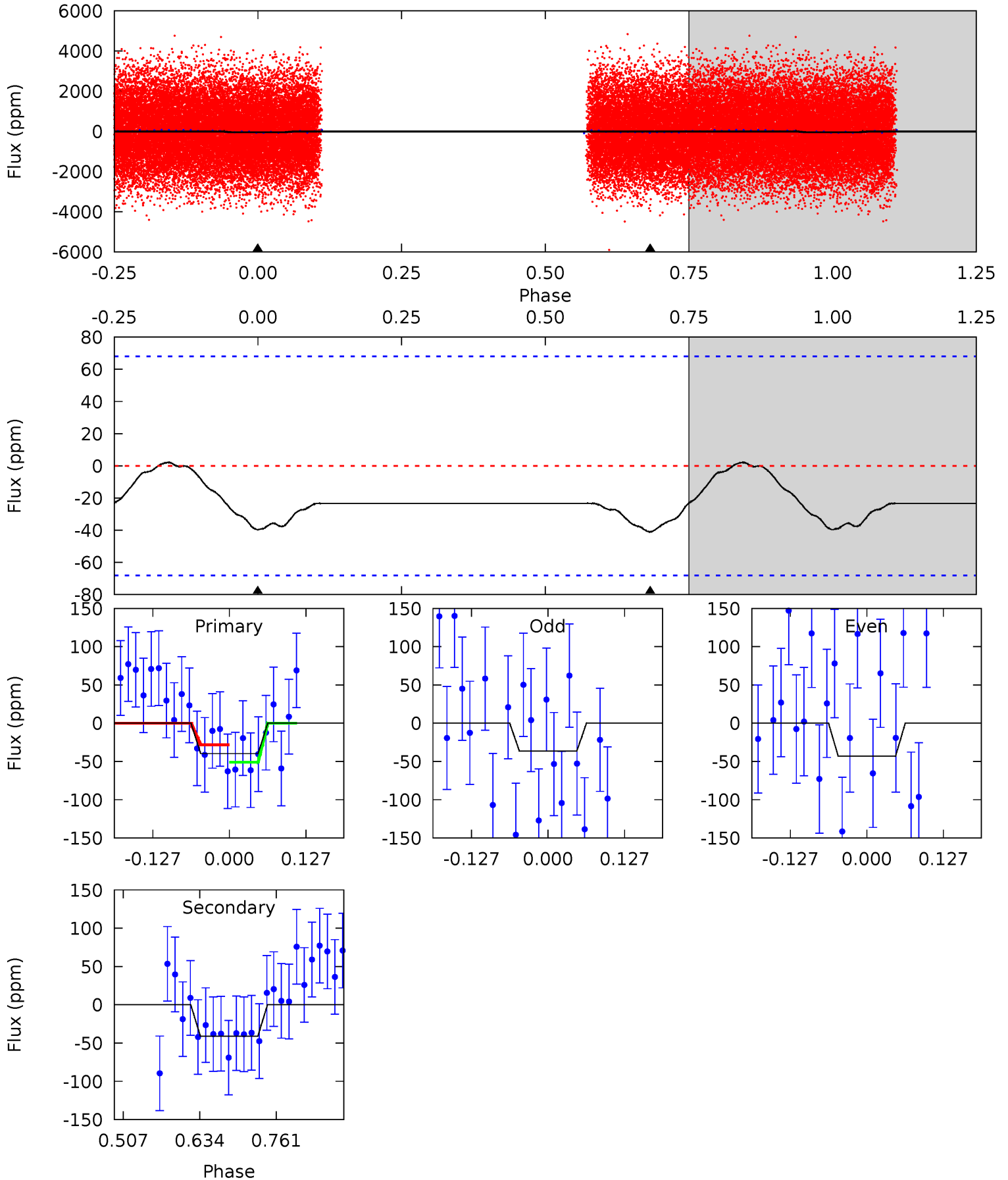
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.1	11.6	0	0	4.49	1.48	0.29	12.1	12.1	11.6	11.6	0.06	0.90	0.02	3.71



Alt Model-Shift Uniqueness Test

010537528-02, P = 1.276231 Days, E = 130.331909 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.63	2.72	0	0	4.51	1.53	0.11	2.63	2.63	2.72	2.72	0.21	1.04	0.05	0.74



Stellar Parameters For KIC 010537528

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8120^{+224}_{-365}	$3.929^{+0.241}_{-0.130}$	$0.070^{+0.250}_{-0.450}$	$2.571^{+0.470}_{-0.873}$	$2.047^{+0.304}_{-0.494}$	$0.170^{+0.288}_{-0.059}$
	+3%/-4%	+6%/-3%	+357%/-643%	+18%/-34%	+15%/-24%	+170%/-35%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 010537528-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-38 ± 3	$1.84^{+0.78}_{-0.63}$	4636^{+308}_{-441}	7341^{+2338}_{-1141}	$5.094^{+6.982}_{-2.470}$
Alt.	-41 ± 15	$1.70^{+0.68}_{-0.60}$	4658^{+281}_{-396}	7916^{+3054}_{-1578}	$6.303^{+10.523}_{-3.577}$

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

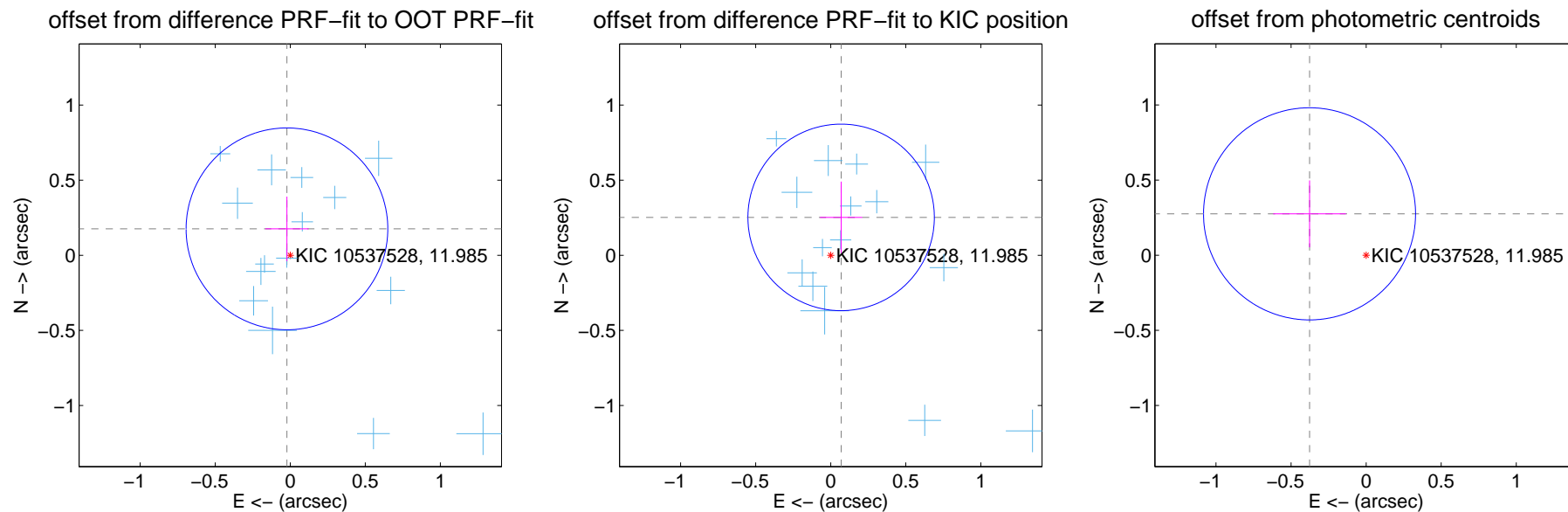
DV Centroid Data

Supplemental centroid analysis for 010537528-02. **Kepler magnitude: 11.98.** Transit SNR 11.68

There are 17 quarters with good PRF difference image offsets

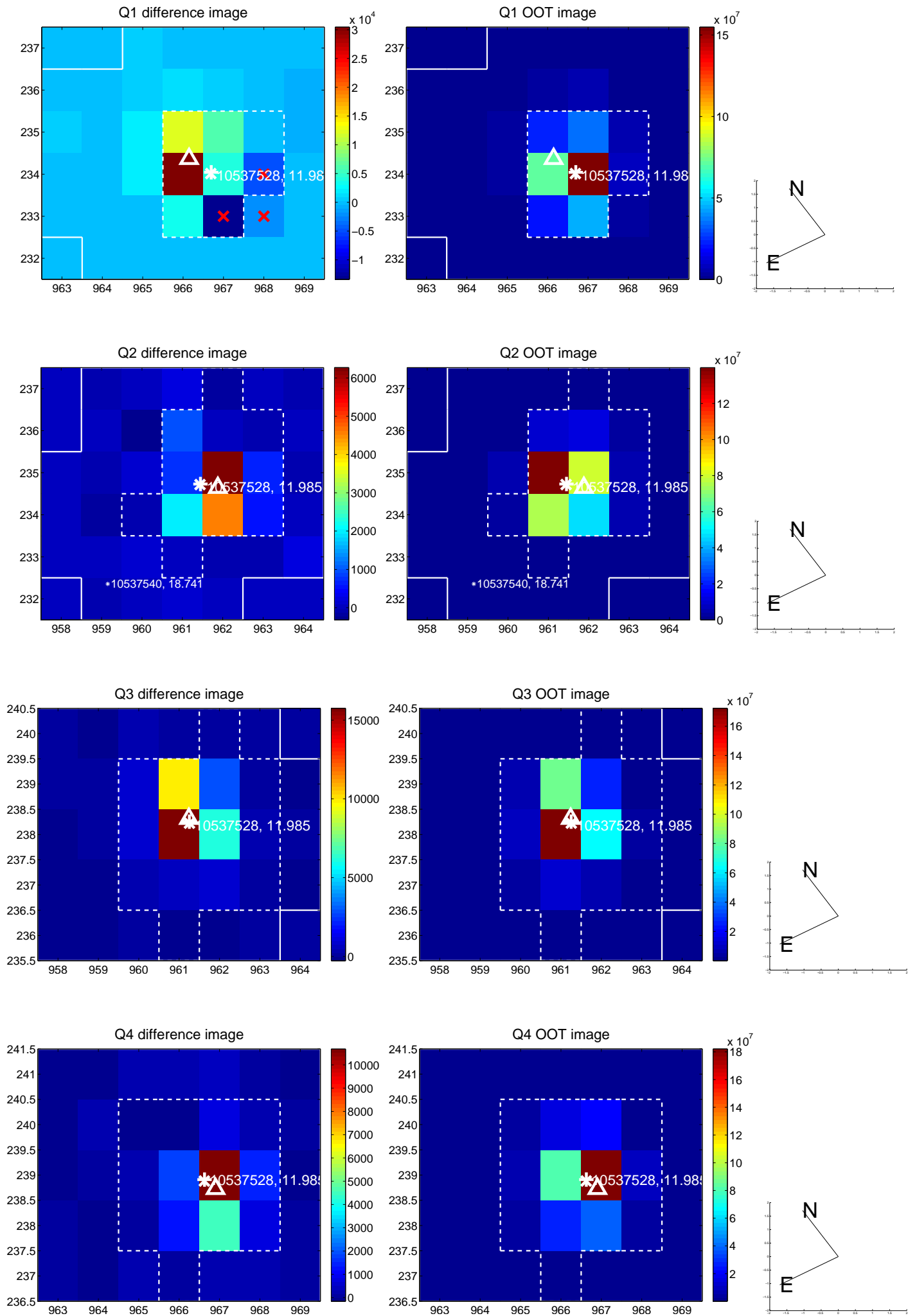
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.177 ± 0.224	0.79	0.022 ± 0.144	0.176 ± 0.215
PRF-fit source offset from KIC position	0.261 ± 0.207	1.26	-0.069 ± 0.141	0.252 ± 0.238
photometric centroid source offset	0.47 ± 0.24	1.98	0.38 ± 0.24	0.28 ± 0.22

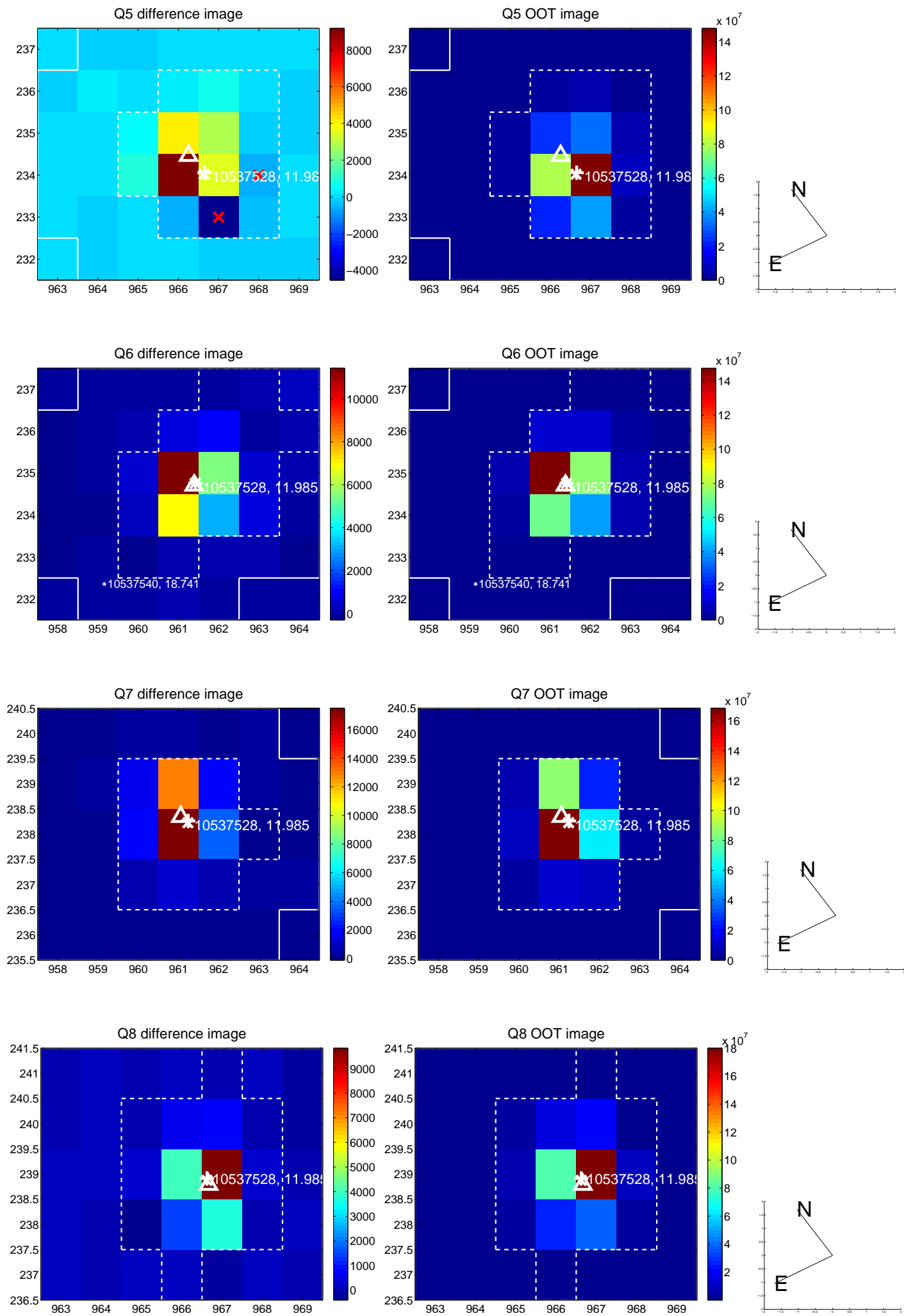


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

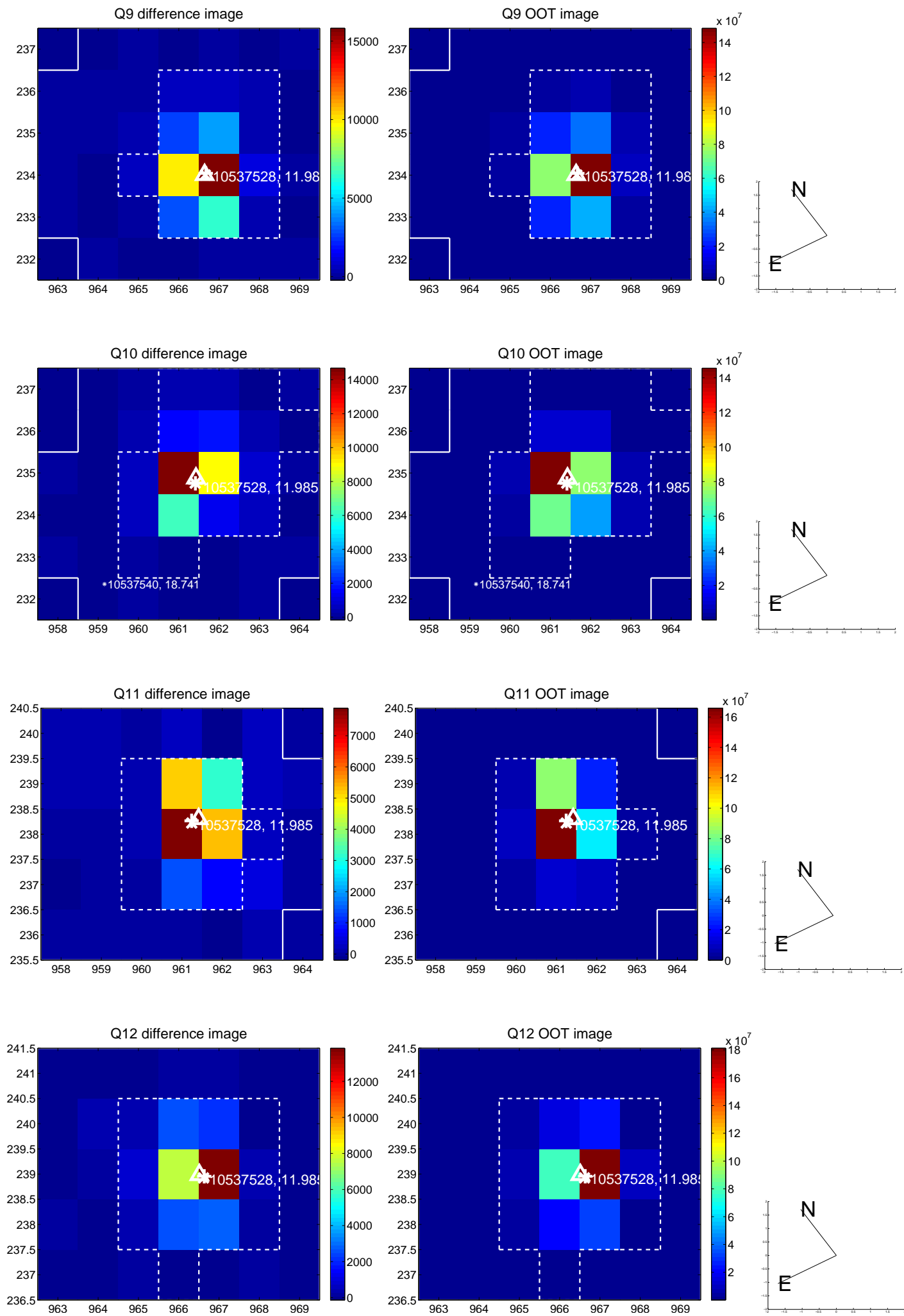
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



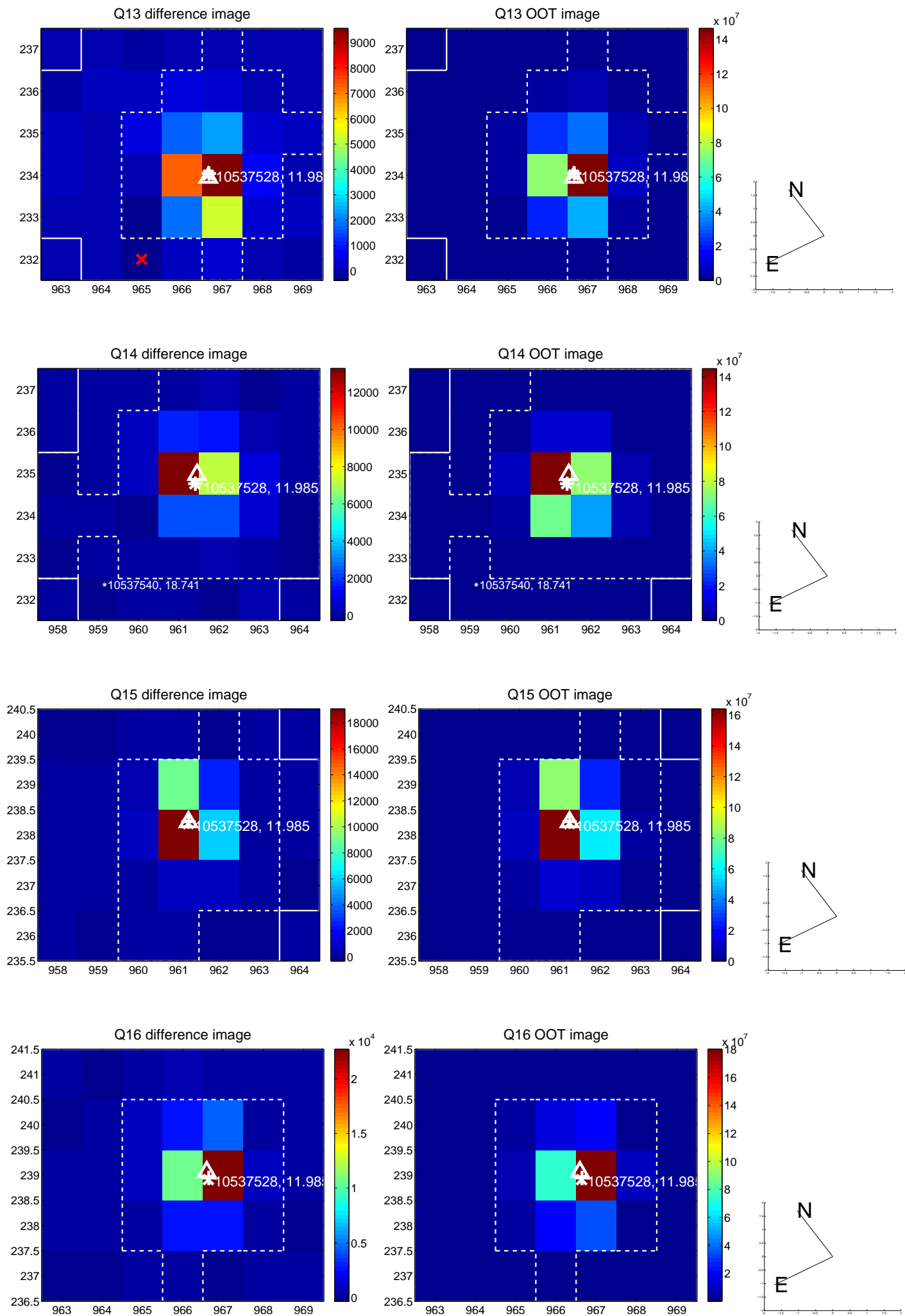
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



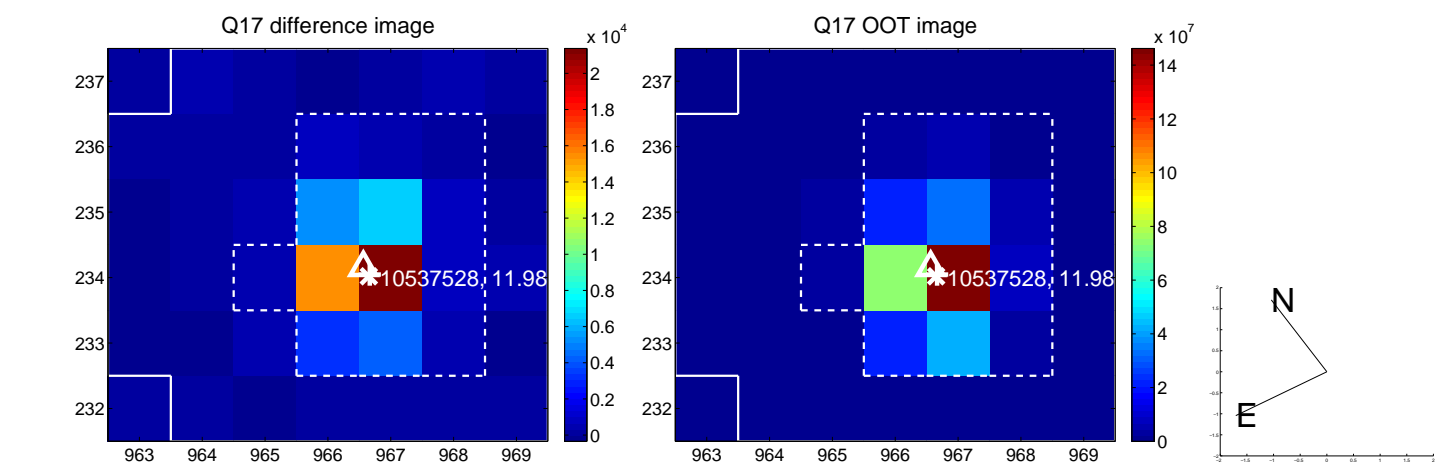
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



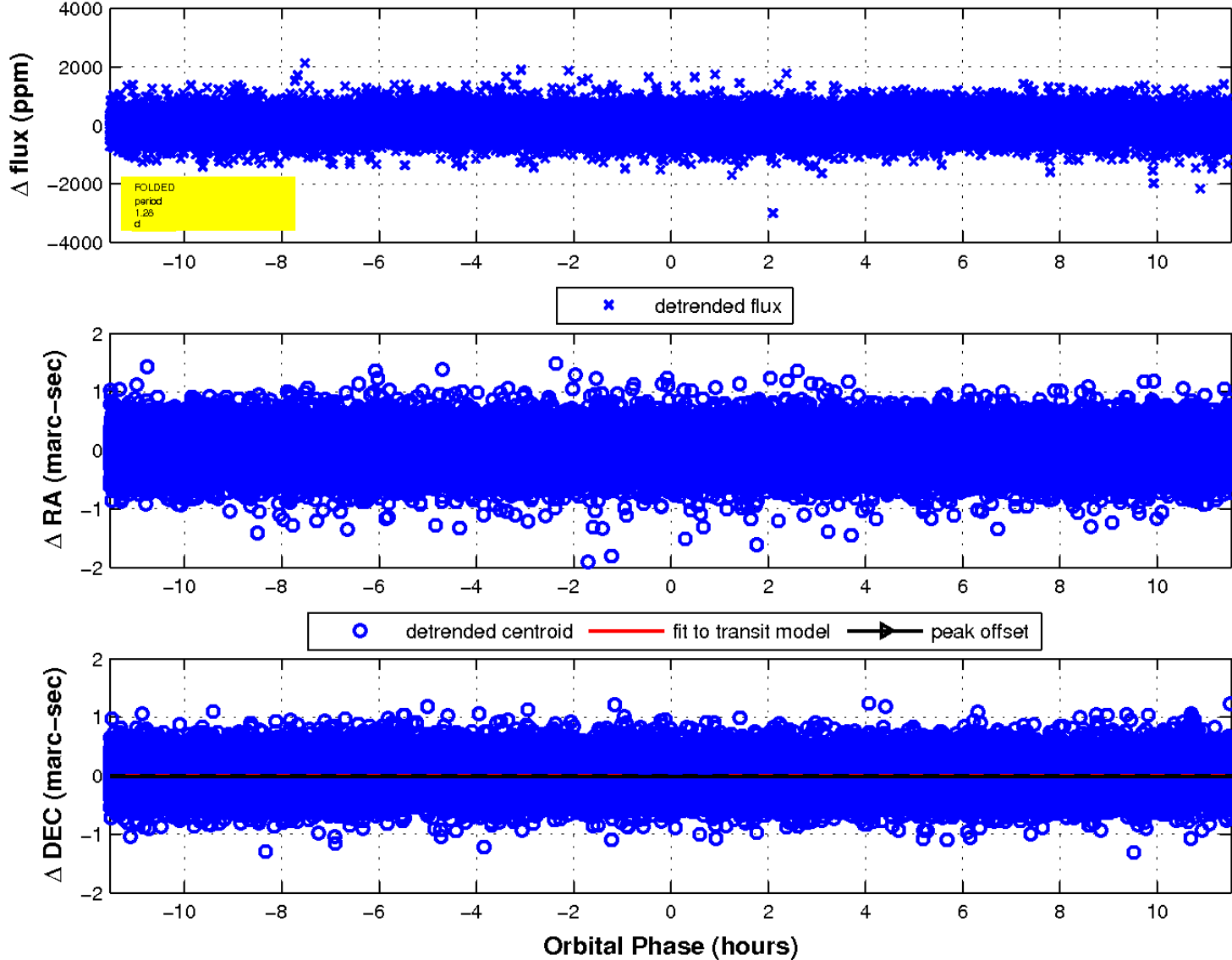
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

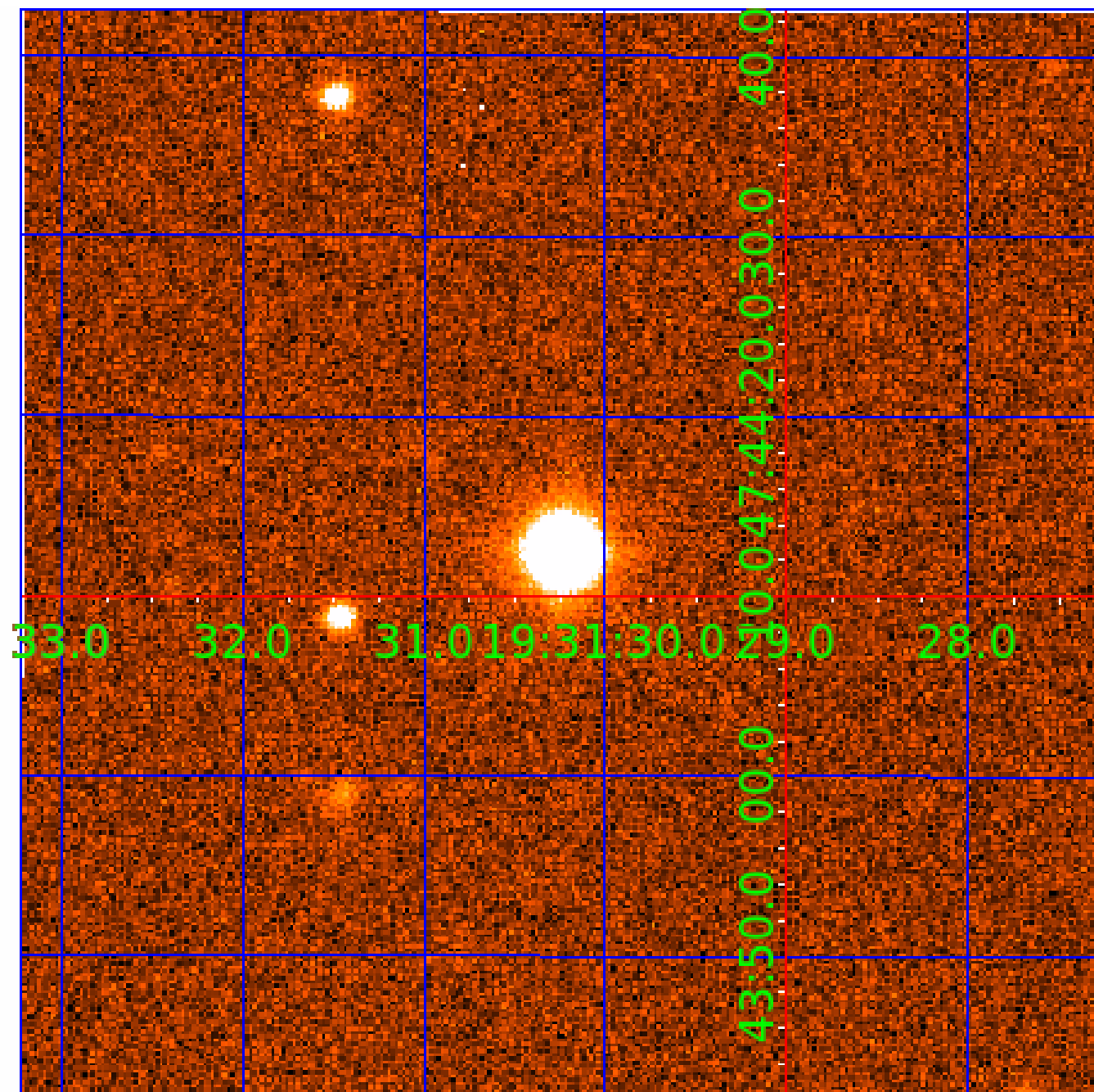


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 010537528

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})
010537528-01	OBS	No	1.276249	132.033438	37.6	4.682	10.0	10.8	2.57	8120	1.81	30102.73
010537528-02	OBS	No	1.276243	131.596393	41.2	3.845	10.5	11.7	2.57	8120	1.95	30102.92
010537528-03	OBS	No	3.832343	133.643986	118.1	9.045	11.4	14.3	2.57	8120	3.24	6948.65

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010537528-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
010537528-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD
010537528-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

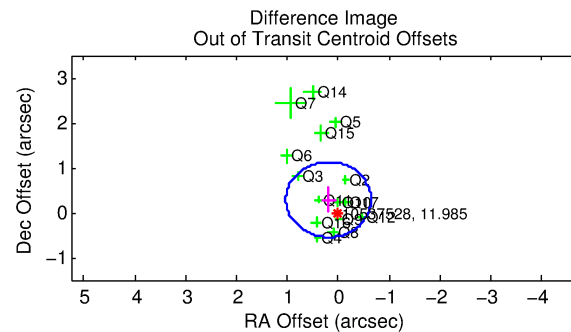
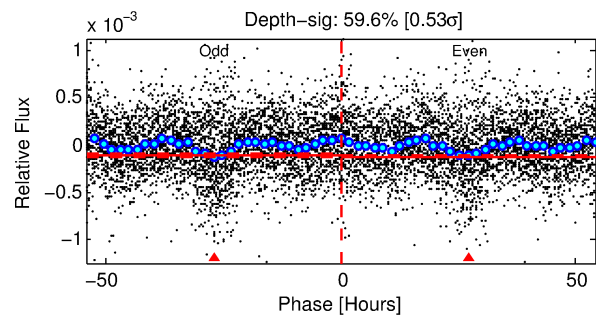
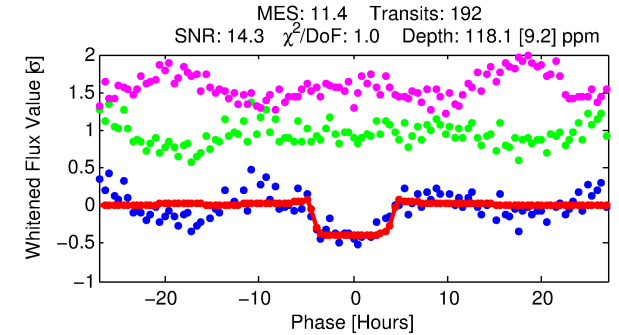
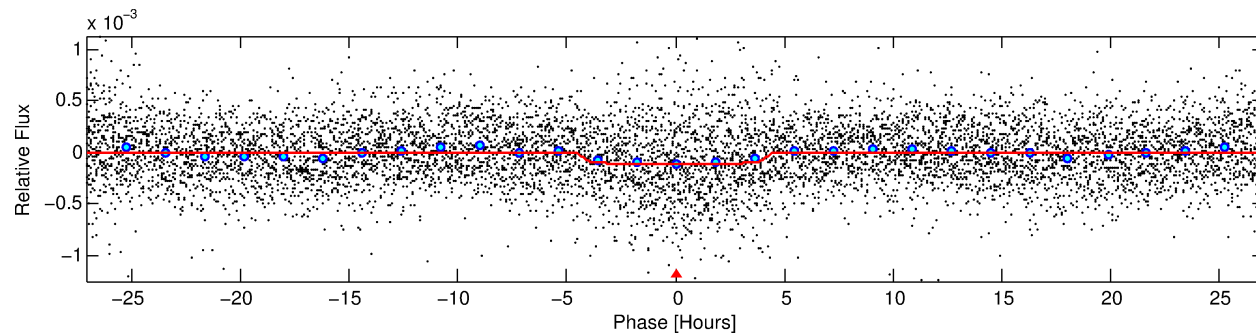
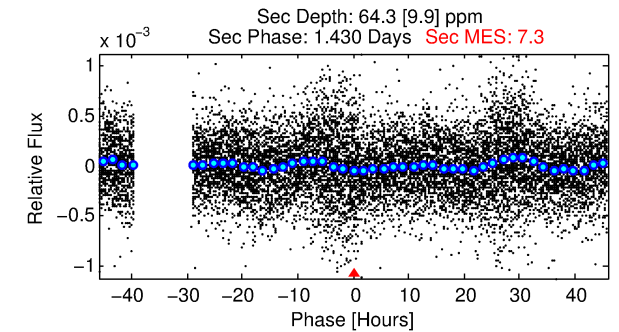
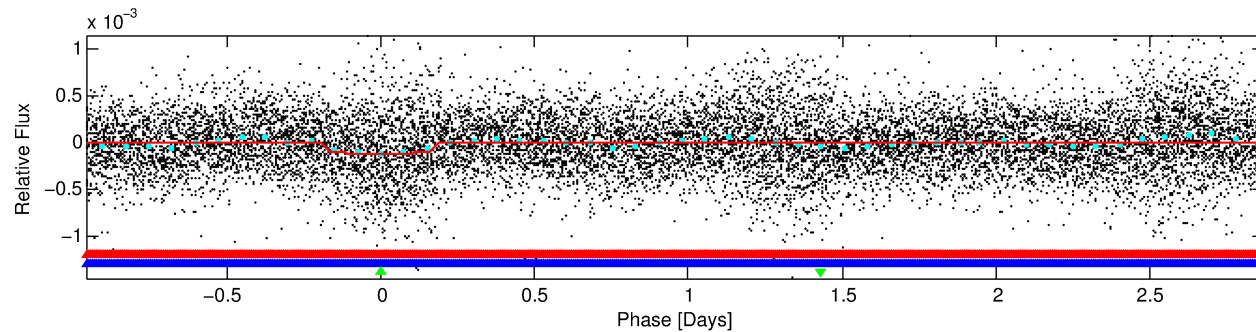
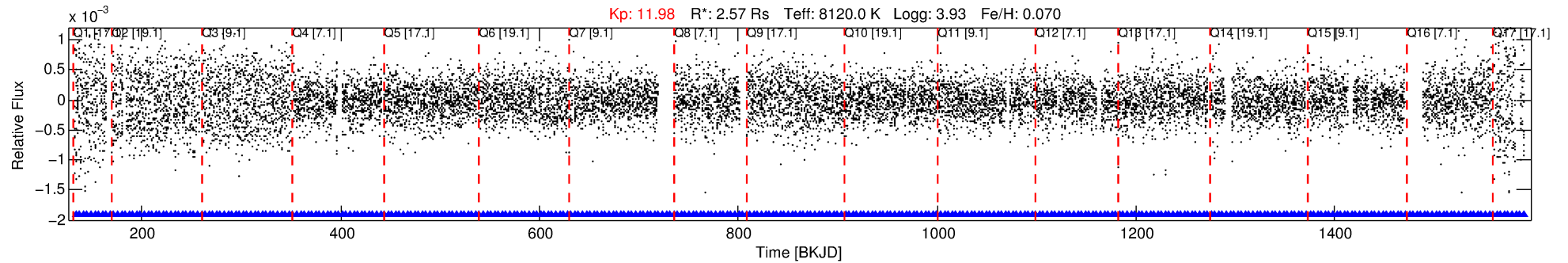
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010537528-03

No Significant Match Found

DV One-Page Summary

KIC: 10537528 Candidate: 3 of 3 Period: 3.832 d



DV Fit Results:

Period = 3.83234 [0.00004] d
Epoch = 133.6440 [0.0073] BKJD
 $R_p/R^* = 0.0116$ [0.0017]
 $a/R^* = 1.78$ [1.07]
 $b = 0.90$ [0.19]
 $\text{Seff} = 6948.65$ [3262.43]
 $\text{Teq} = 2328$ [273] K
 $R_p = 3.24$ [1.20] R_e
 $a = 0.0609$ [0.0178] AU
 $\text{Ag} = 12.47$ [6.80] [1.69σ]
Teffp = 6764 [636] K [6.41σ]

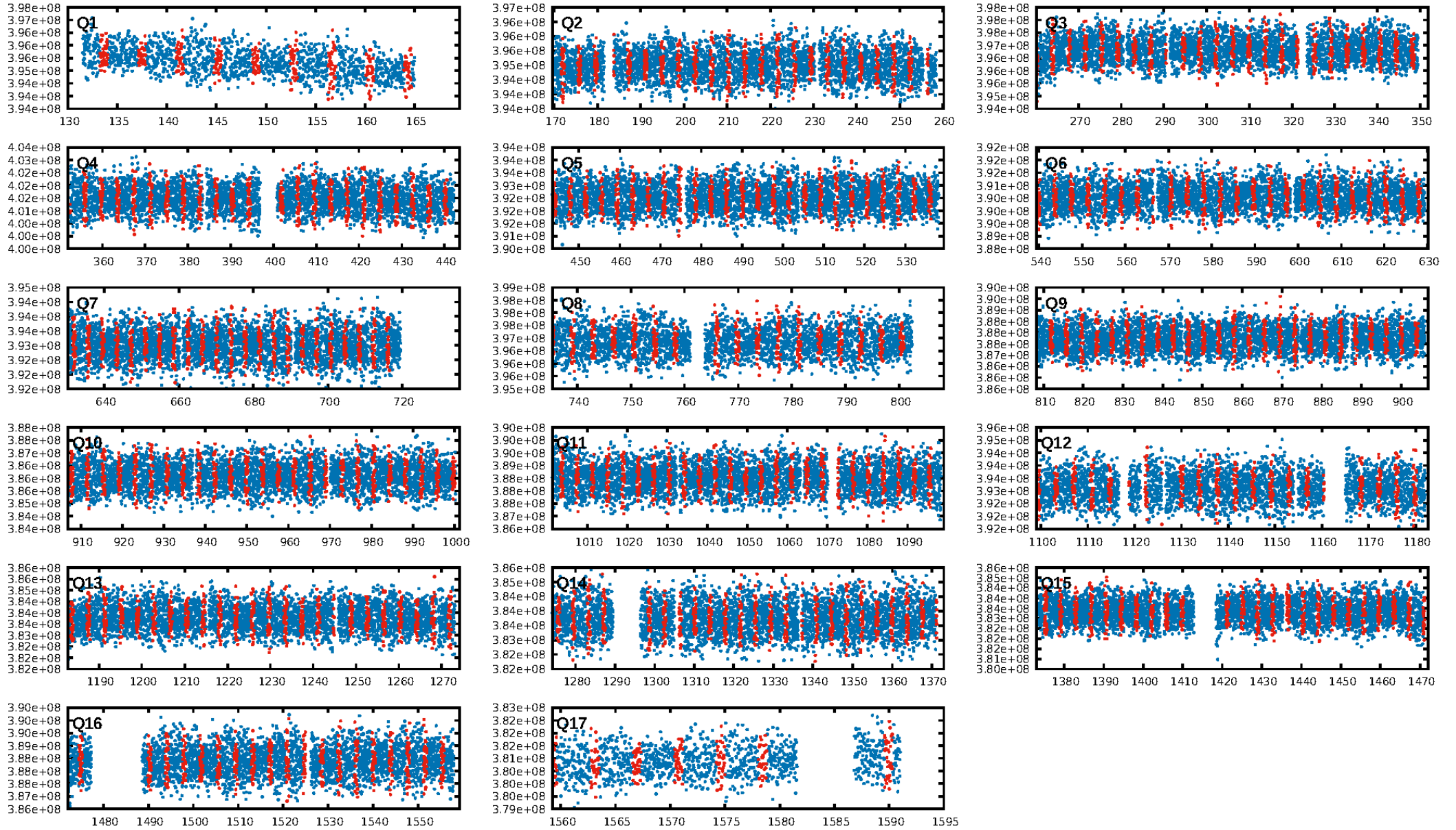
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [6.02σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 62.1%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.00e-26
RollingBand-fgt: 1.00 [176/176]
GhostDiagnostic-chr: 87.03
Centroid-sig: N/A
Centroid-so: 0.171 arcsec [1.64σ]
OotOffset-rm: 0.345 arcsec [1.24σ]
KicOffset-rm: 0.386 arcsec [1.34σ]
OotOffset-st: 4/4/4/3 [15]
KicOffset-st: 4/4/4/3 [15]
DiffImageQuality-fgm: 0.53 [8/15]
DiffImageOverlap-fno: 0.00 [0/17]

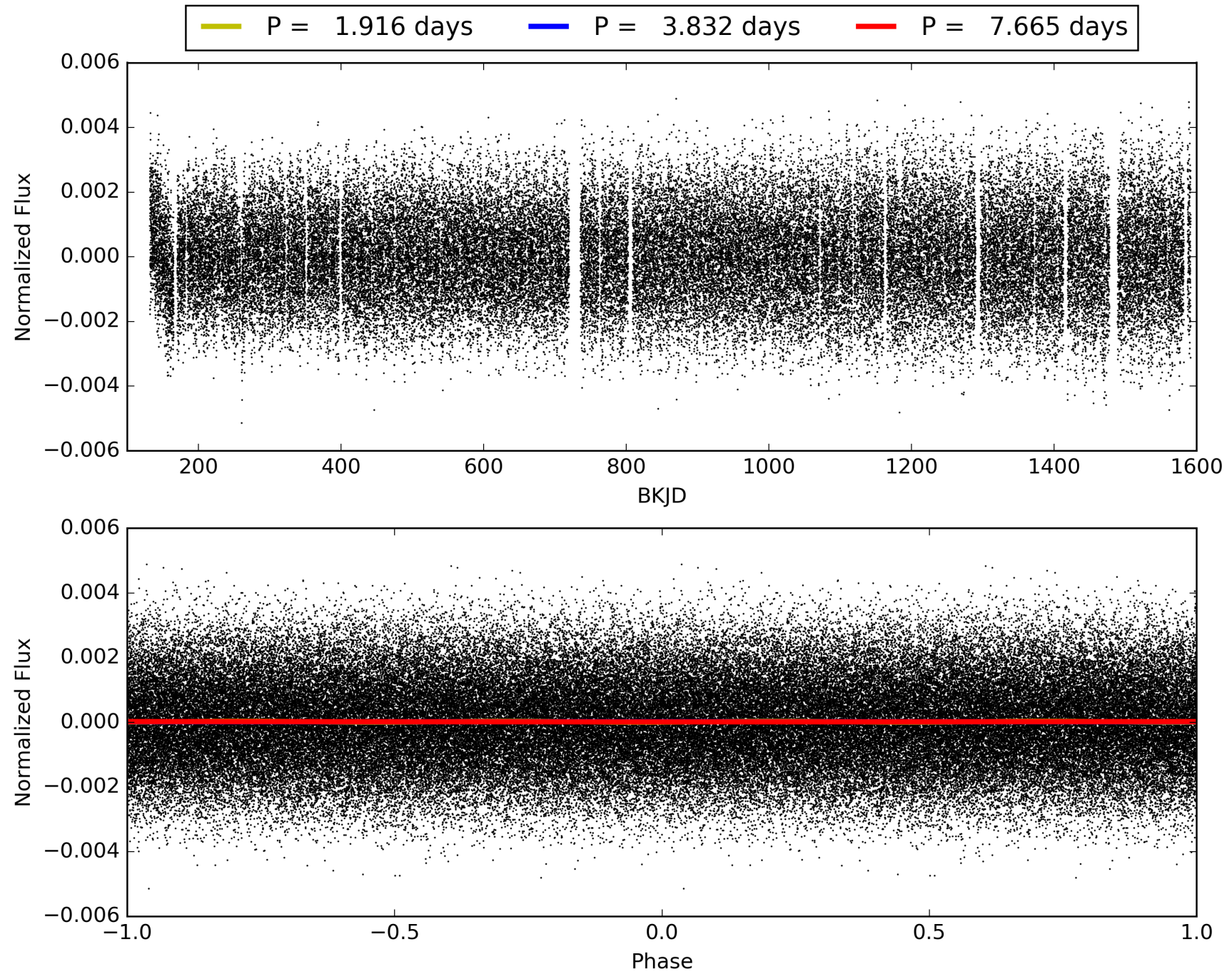
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 18:29:31 Z

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

TCE 010537528-03, PDC Light Curves

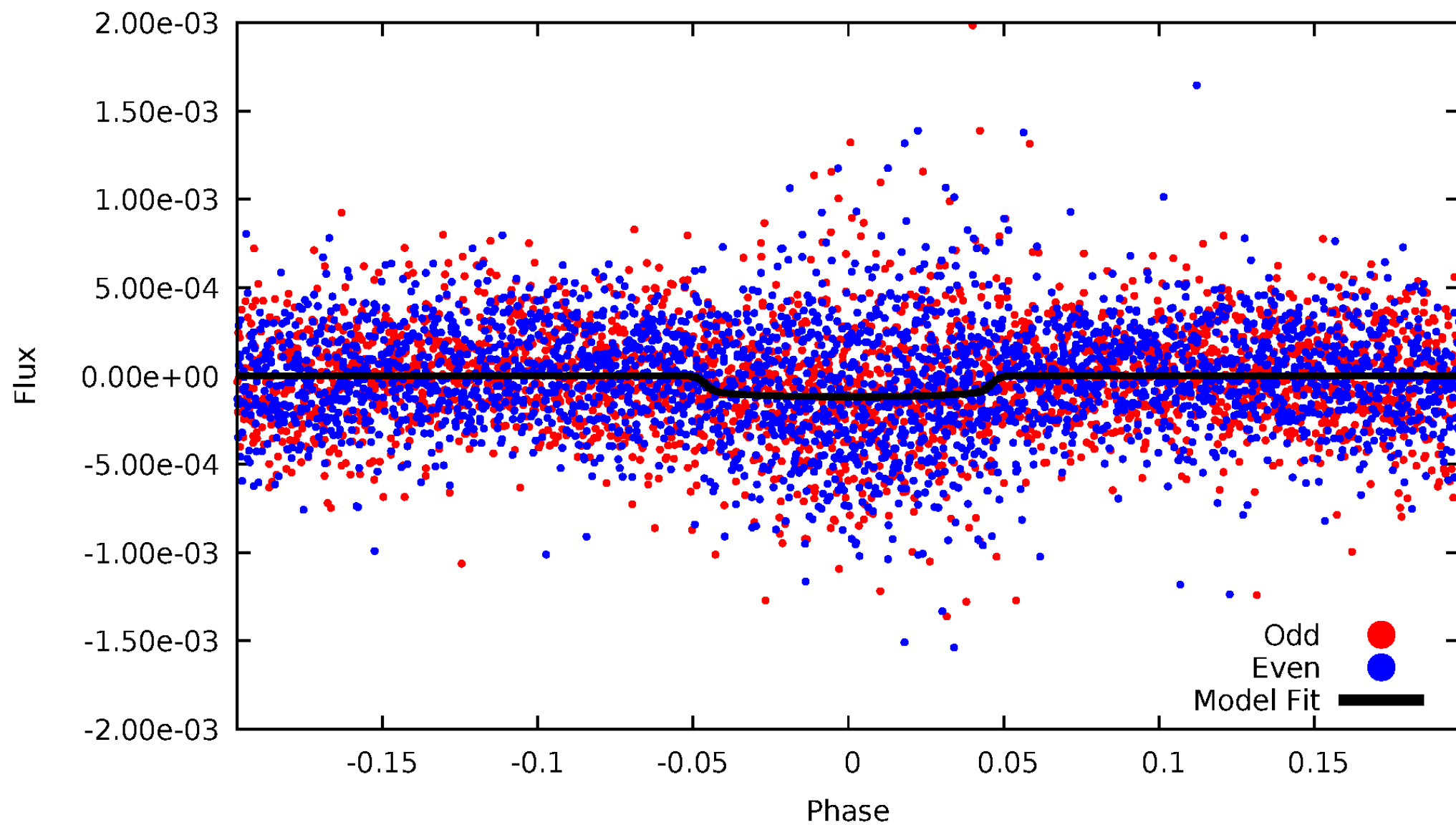


TCE 010537528-03



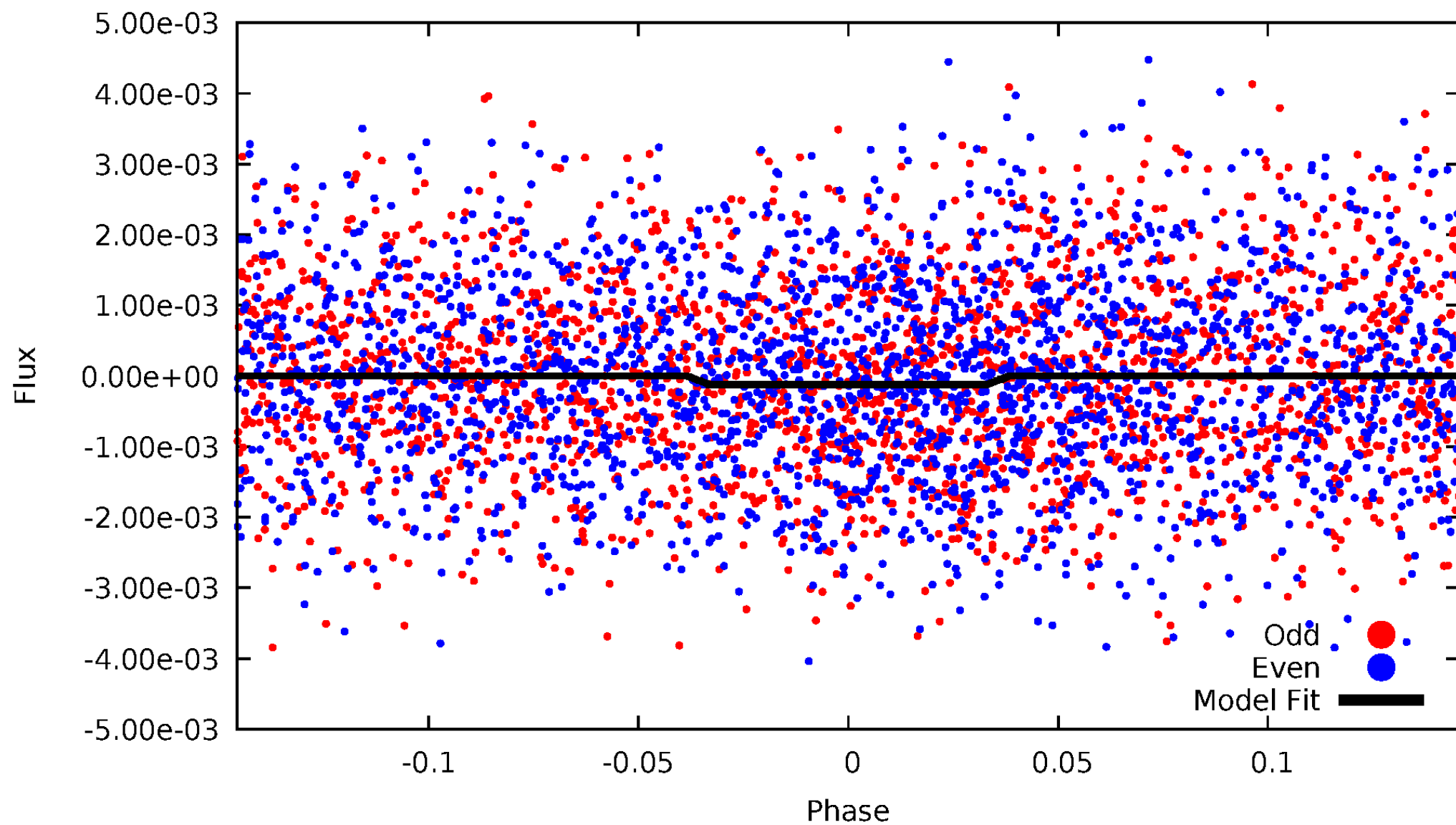
DV Odd/Even

TCE 010537528-03



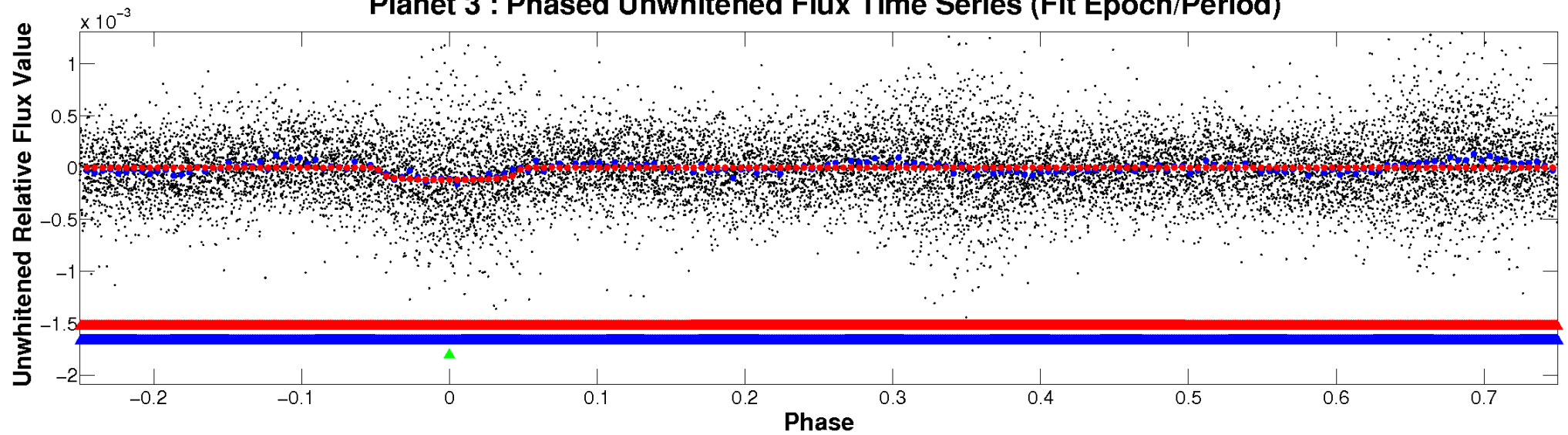
ALT Odd/Even

TCE 010537528-03

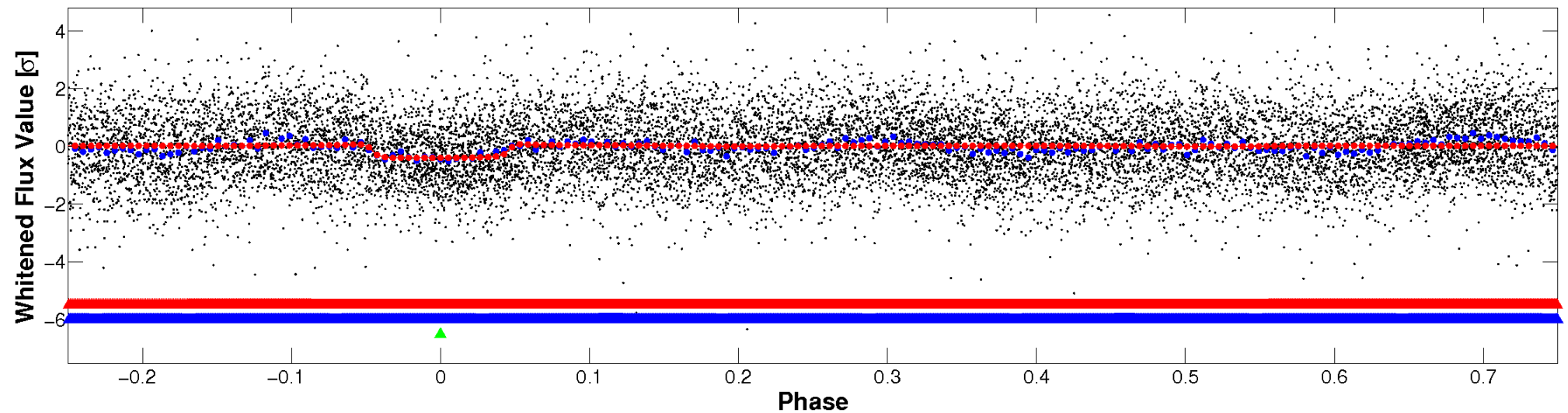


Non-Whitened Vs. Whitened Light Curve

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

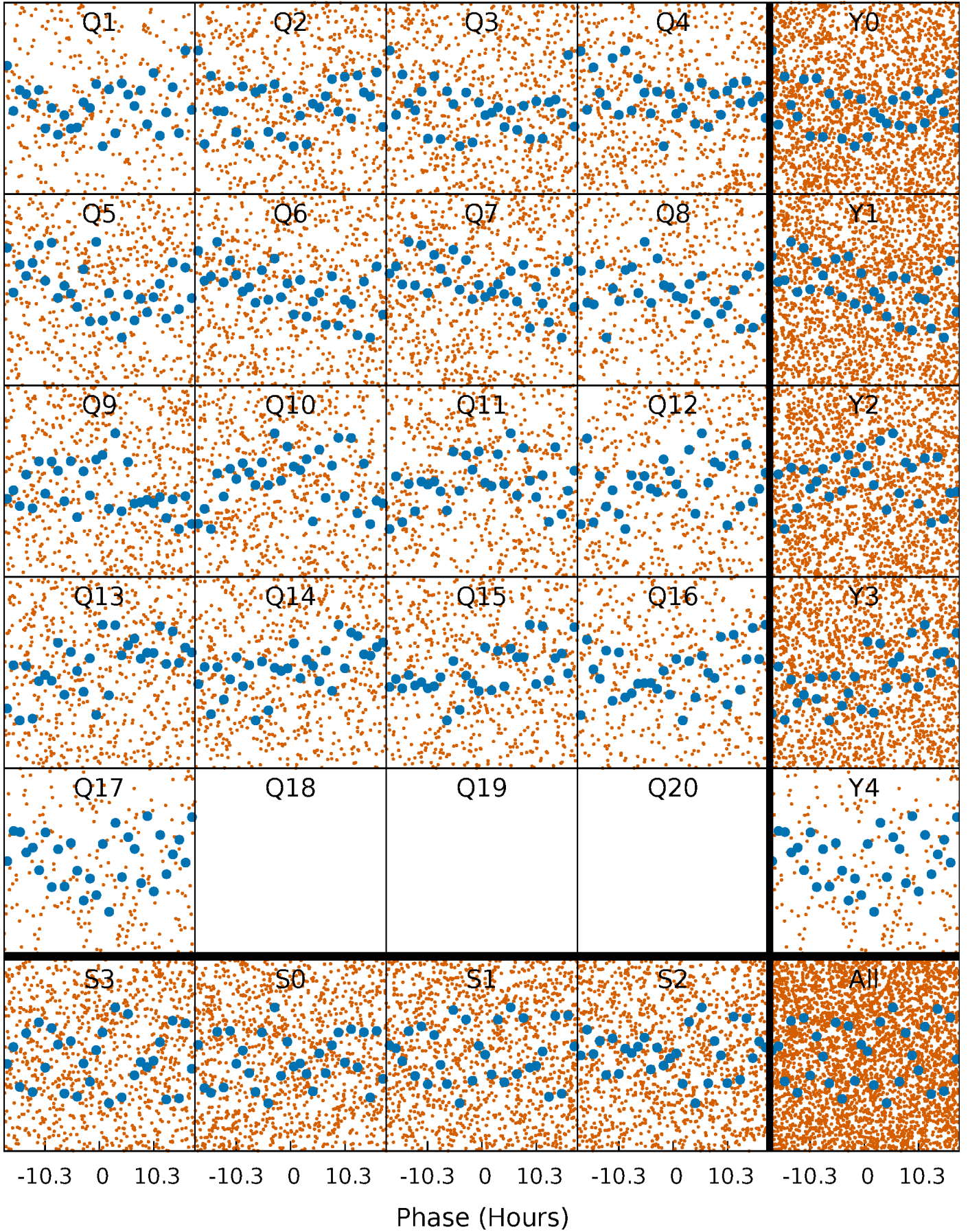


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



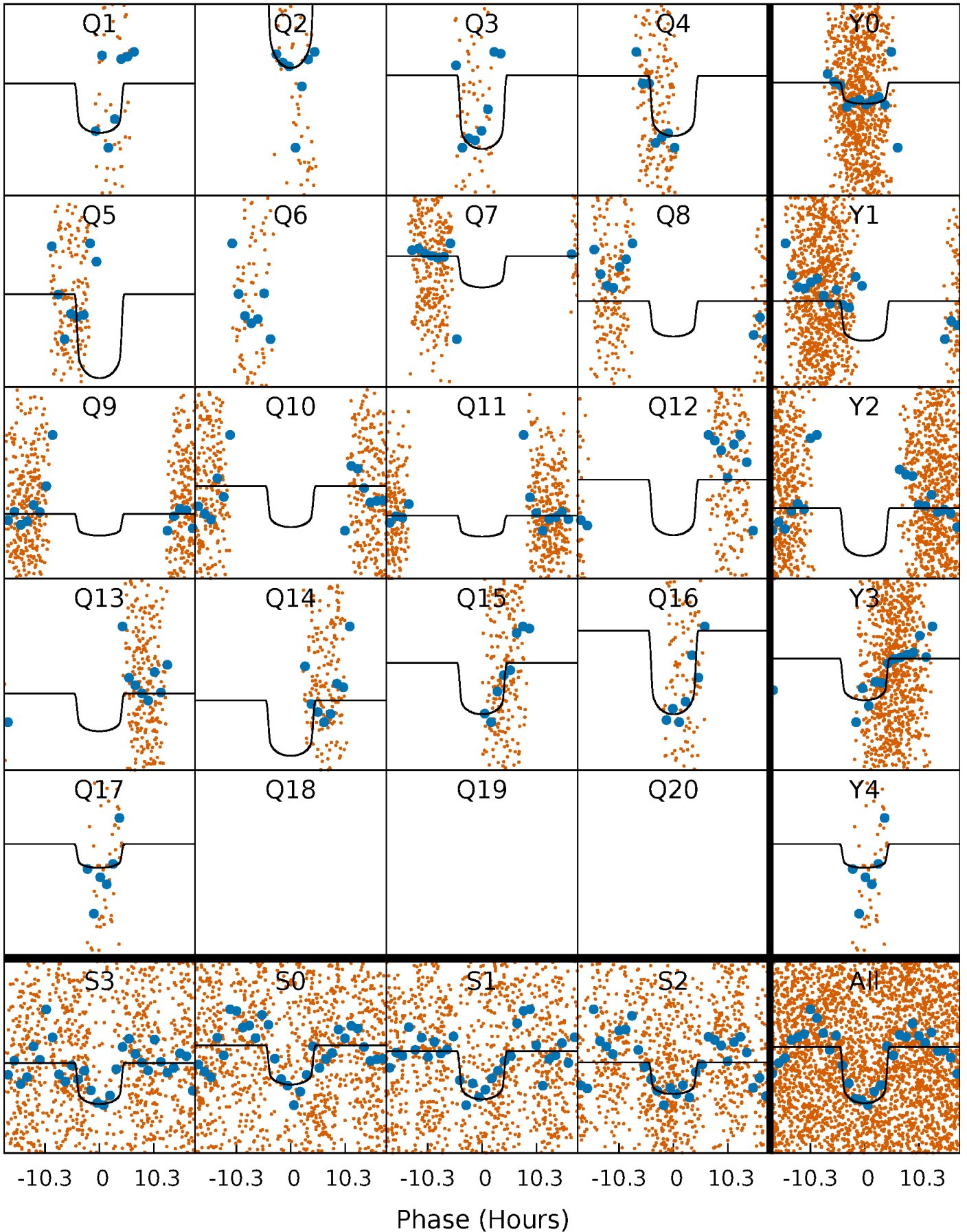
PDC Quarter-Phased Transit Curves

TCE 010537528-03 P= 3.832343 Days $T_0=133.643986$ (BKJD)



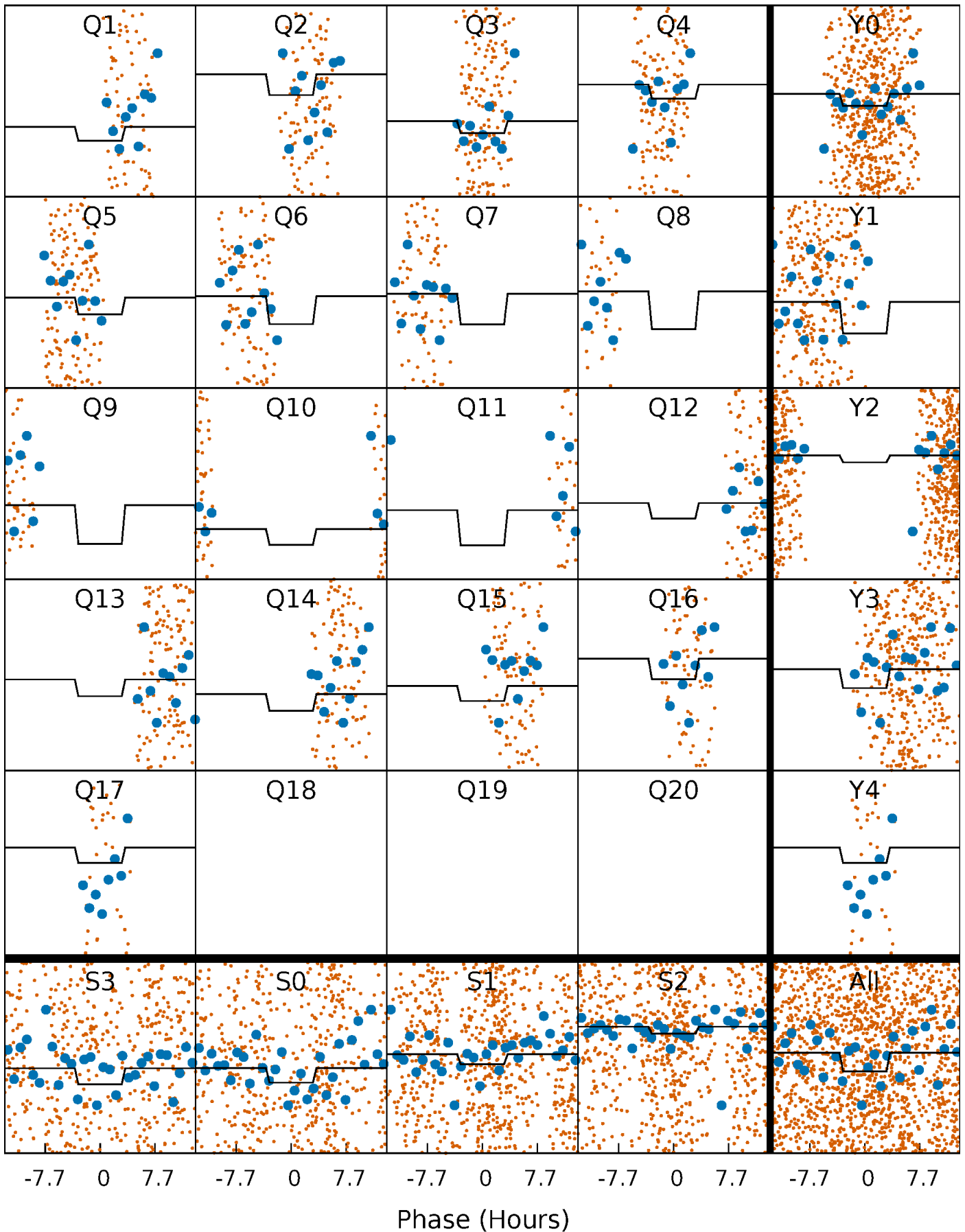
DV Quarter-Phased Transit Curves

TCE 010537528-03 P= 3.832343 Days $T_0=133.643986$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

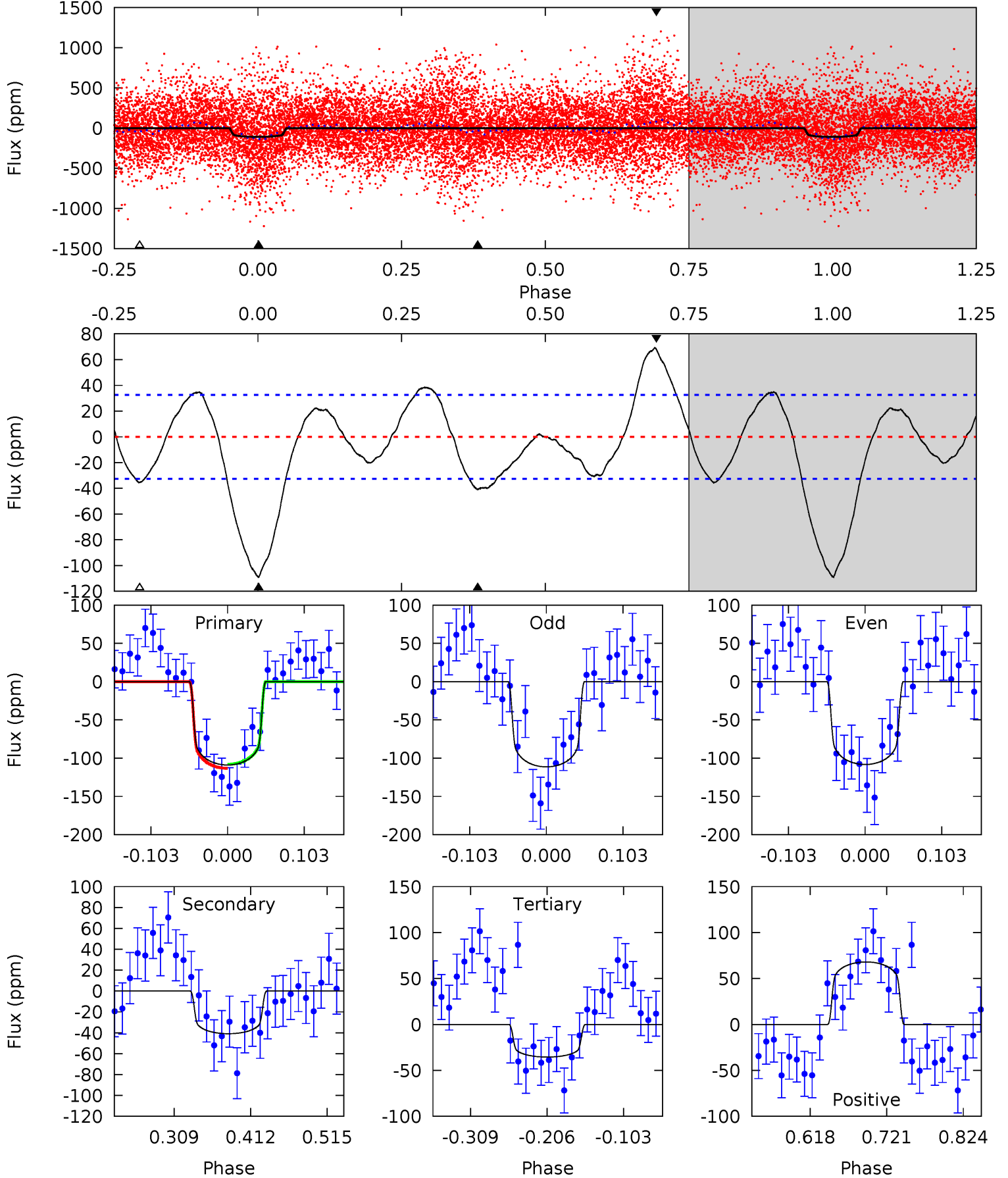
TCE 010537528-03 P= 3.832545 Days $T_0=133.567271$ (BKJD)



DV Model-Shift Uniqueness Test

010537528-03, P = 3.832343 Days, E = 129.811643 Days

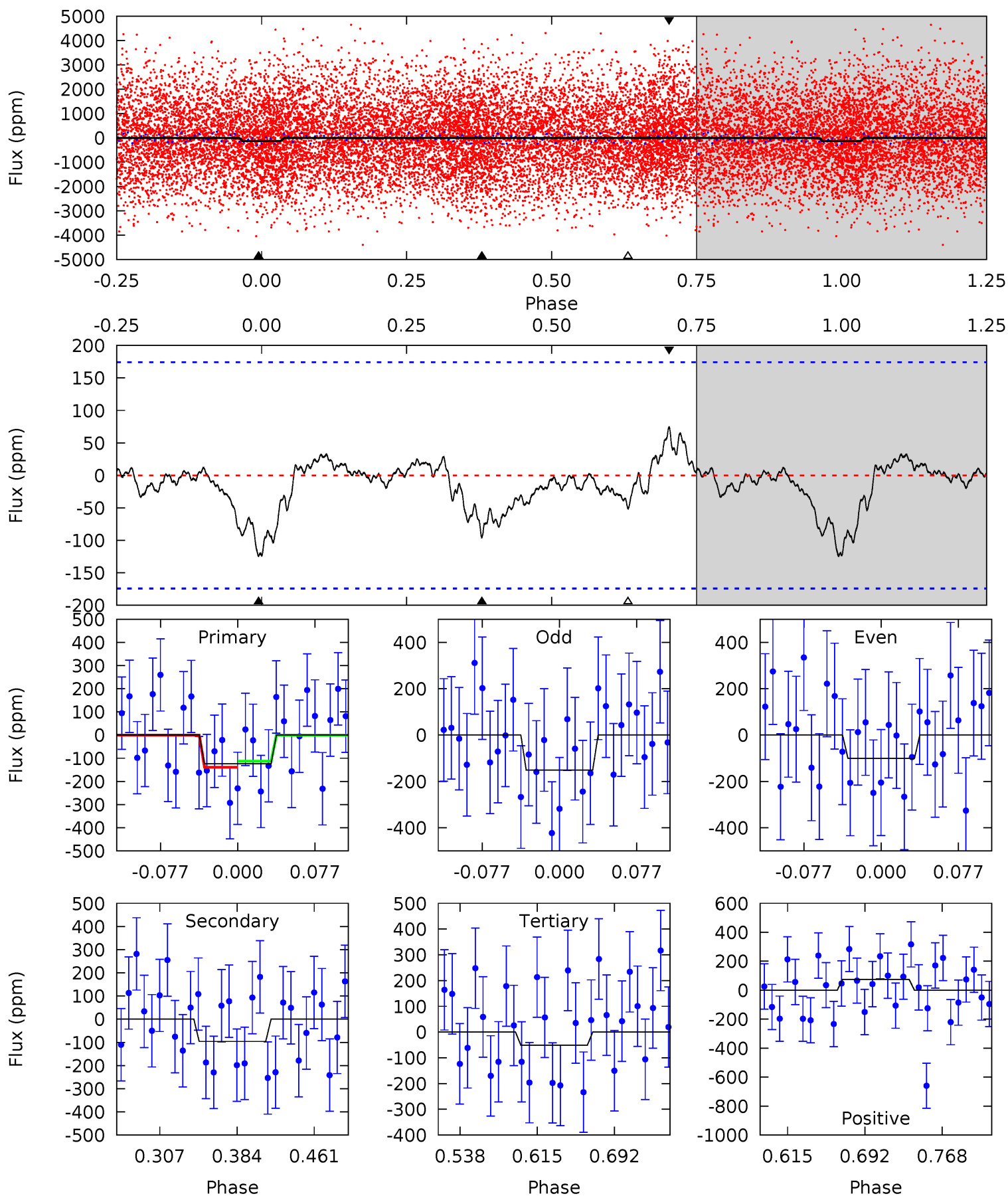
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.2	5.72	4.97	9.51	4.56	1.63	3.83	10.3	5.72	0.75	-3.80	0.22	0.74	0.39	0.35



Alt Model-Shift Uniqueness Test

010537528-03, P = 3.832545 Days, E = 129.734726 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.30	2.55	1.35	1.98	4.62	1.77	0.61	1.95	1.32	1.20	0.57	0.67	0.83	0.38	0.34



Stellar Parameters For KIC 010537528

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8120^{+224}_{-365}	$3.929^{+0.241}_{-0.130}$	$0.070^{+0.250}_{-0.450}$	$2.571^{+0.470}_{-0.873}$	$2.047^{+0.304}_{-0.494}$	$0.170^{+0.288}_{-0.059}$
	+3%/-4%	+6%/-3%	+357%/-643%	+18%/-34%	+15%/-24%	+170%/-35%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 010537528-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-41 ± 7	$3.18^{+0.66}_{-0.68}$	3208^{+225}_{-273}	5826^{+501}_{-497}	$8.429^{+4.980}_{-2.848}$
Alt.	-96 ± 38	$2.95^{+0.68}_{-0.60}$	3197^{+226}_{-264}	7455^{+1263}_{-1129}	21^{+15}_{-10}

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

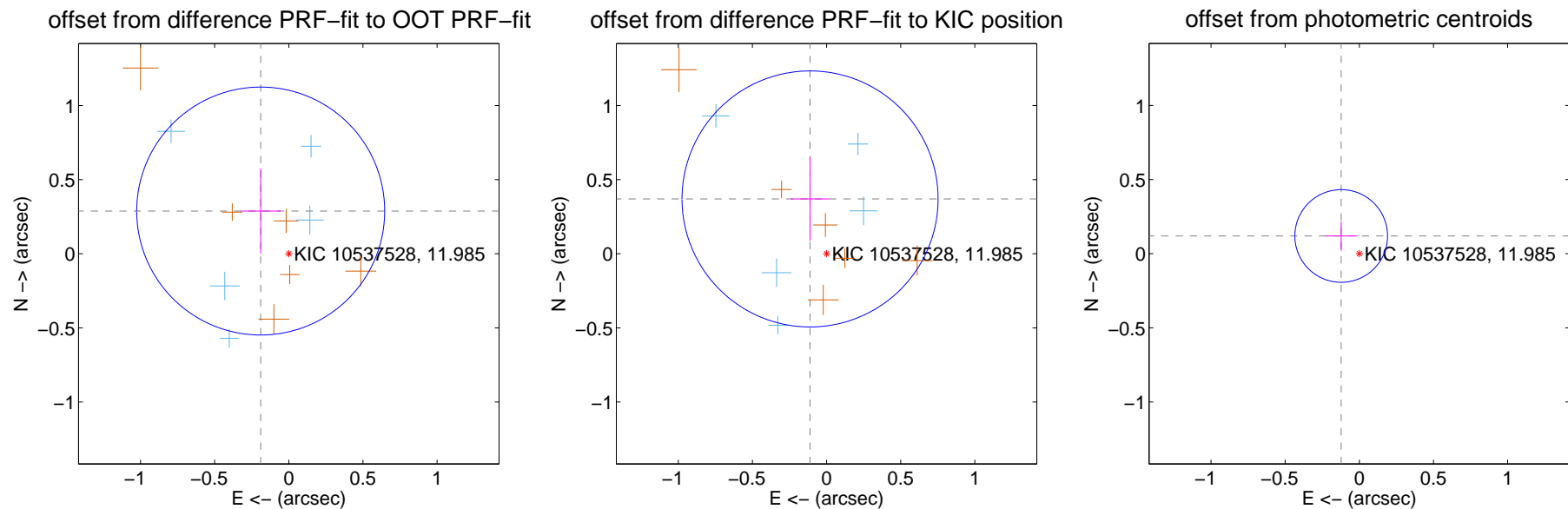
DV Centroid Data

Supplemental centroid analysis for 010537528-03. **Kepler magnitude: 11.98.** Transit SNR 14.26

There are 8 quarters with good PRF difference image offsets

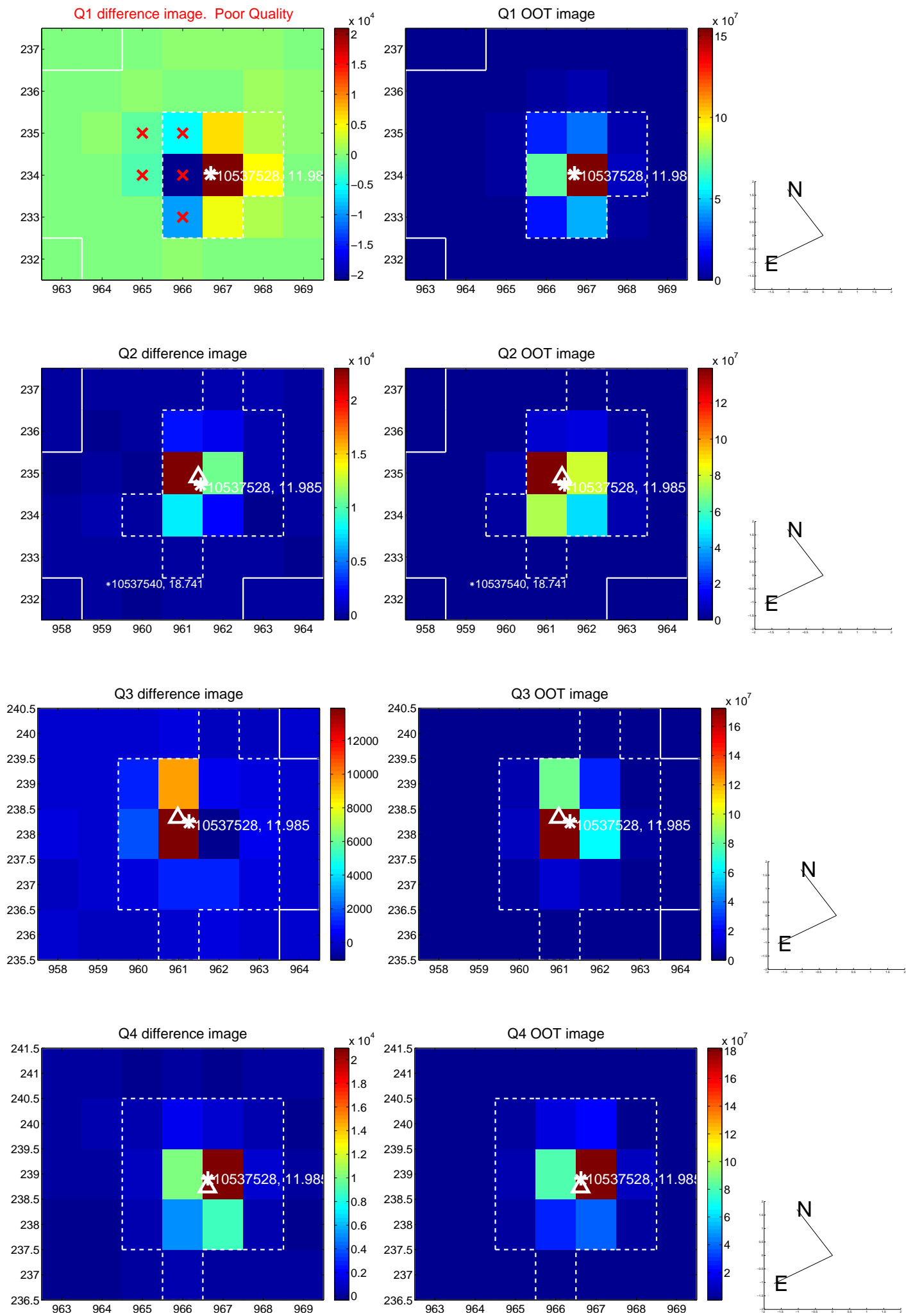
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.345 ± 0.279	1.24	0.190 ± 0.134	0.288 ± 0.286
PRF-fit source offset from KIC position	0.386 ± 0.288	1.34	0.111 ± 0.130	0.370 ± 0.282
photometric centroid source offset	0.17 ± 0.10	1.64	0.12 ± 0.11	0.12 ± 0.10

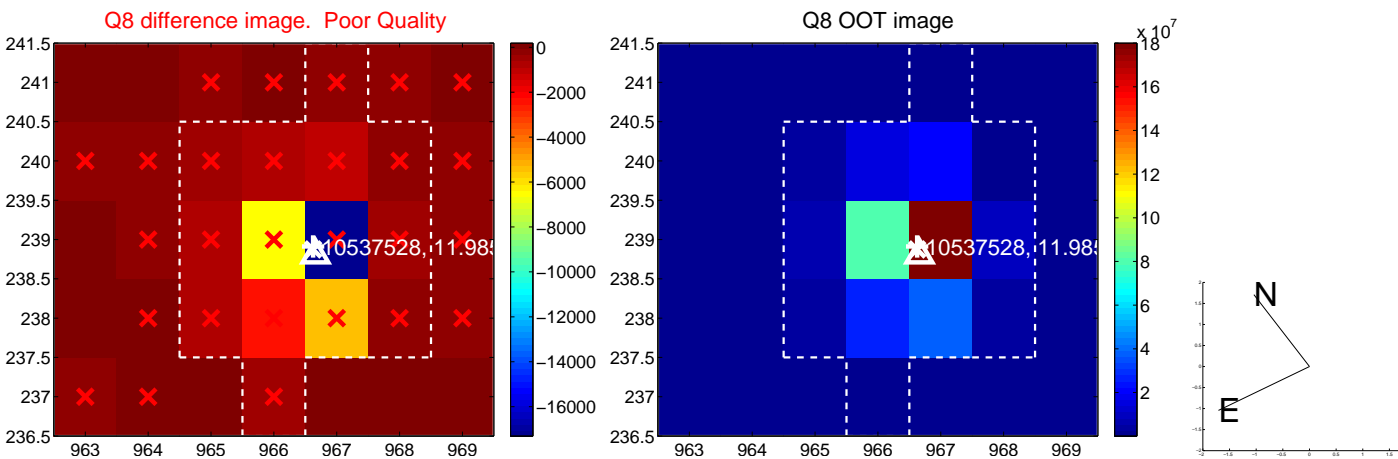
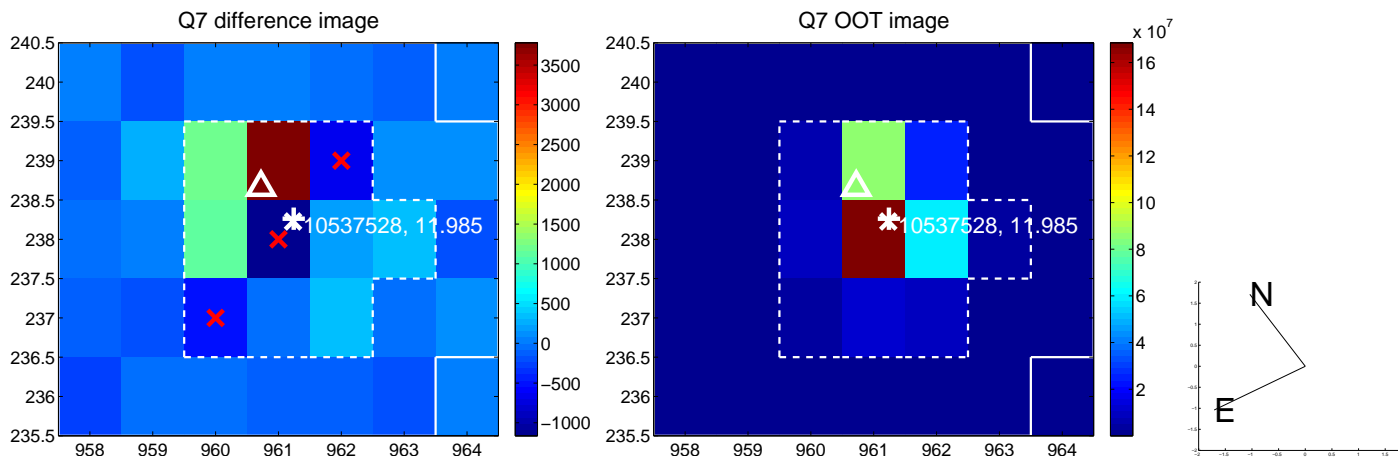
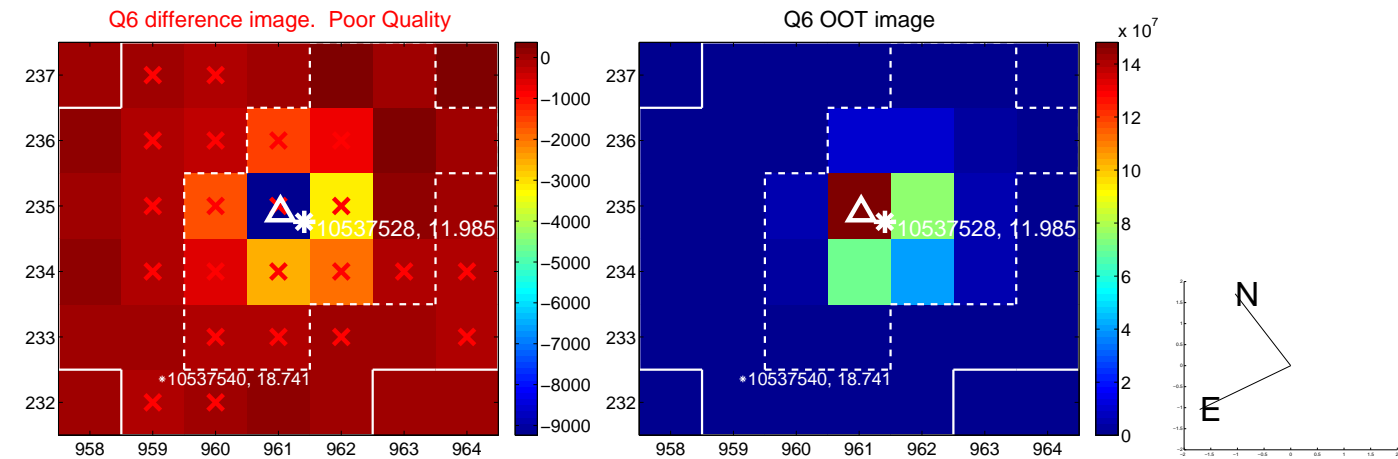
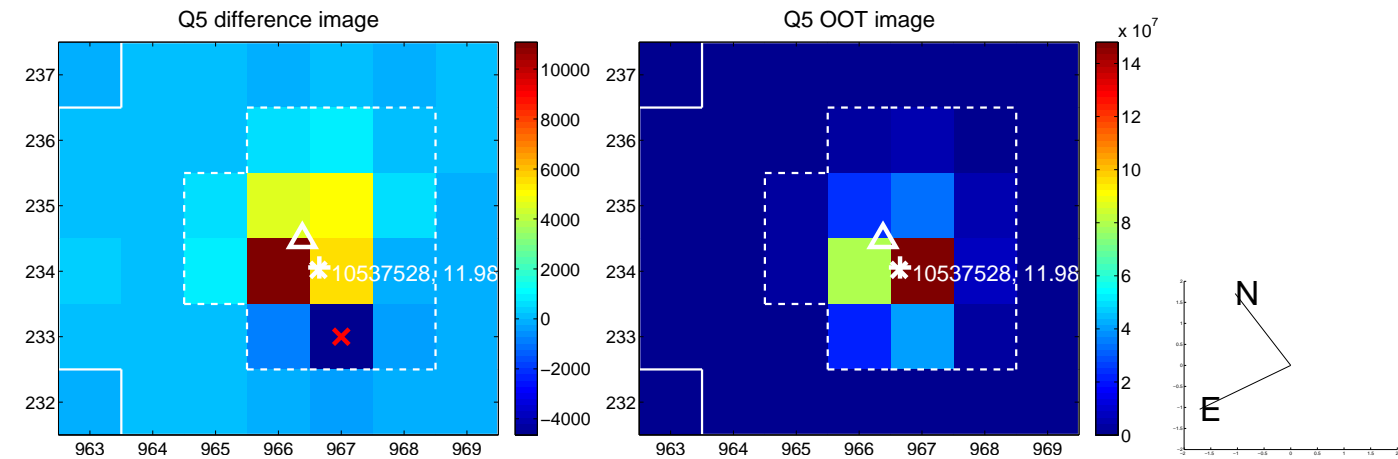


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

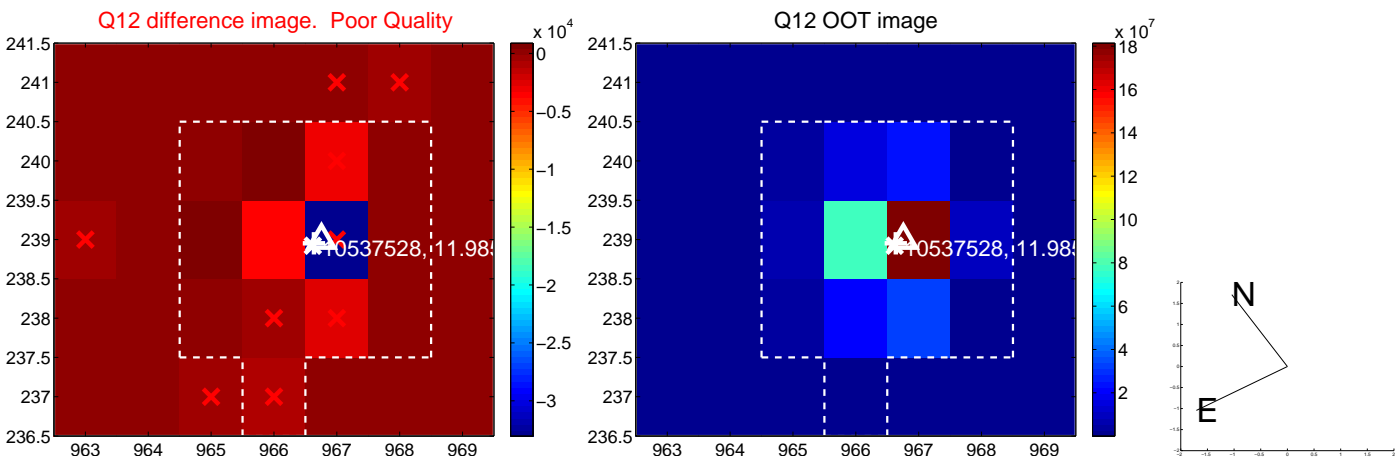
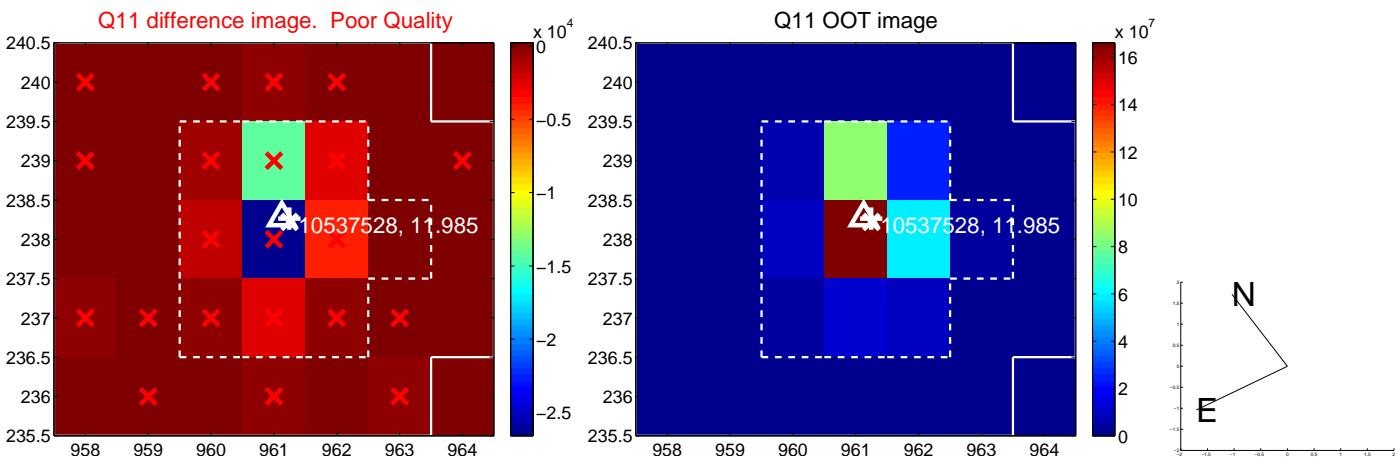
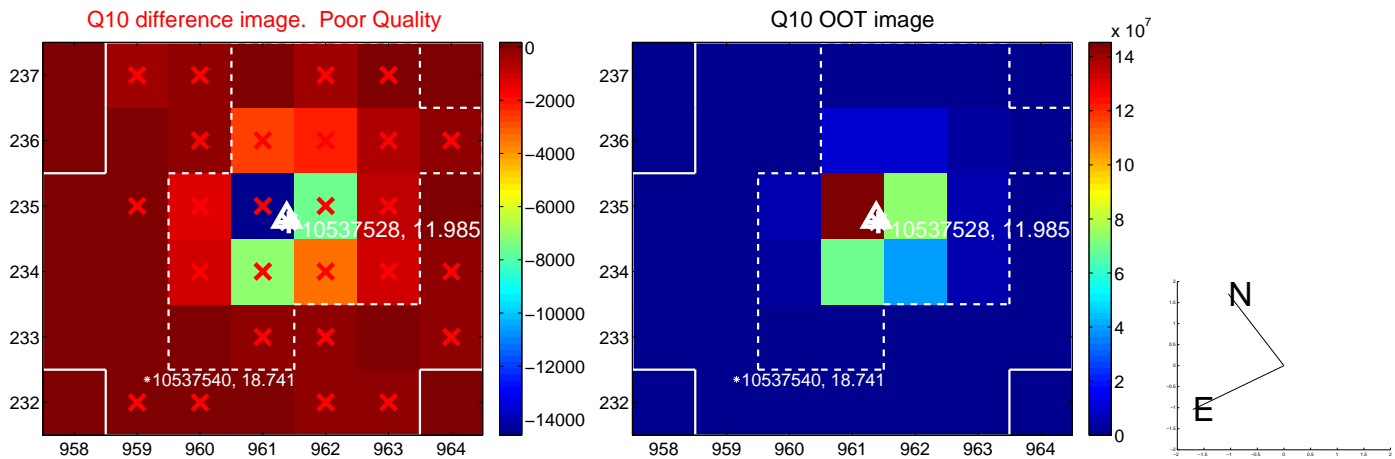
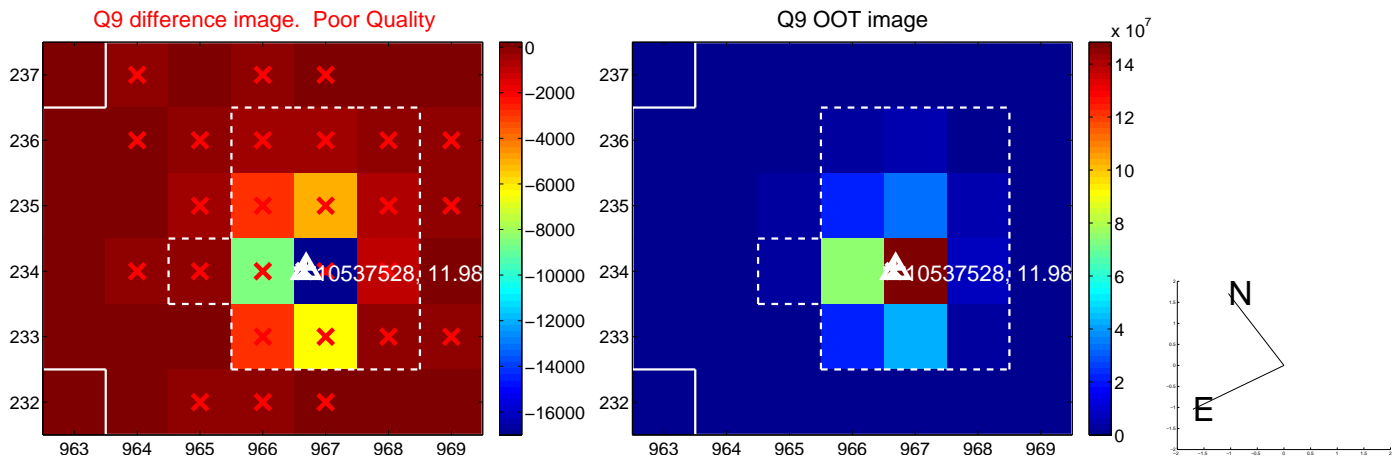
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



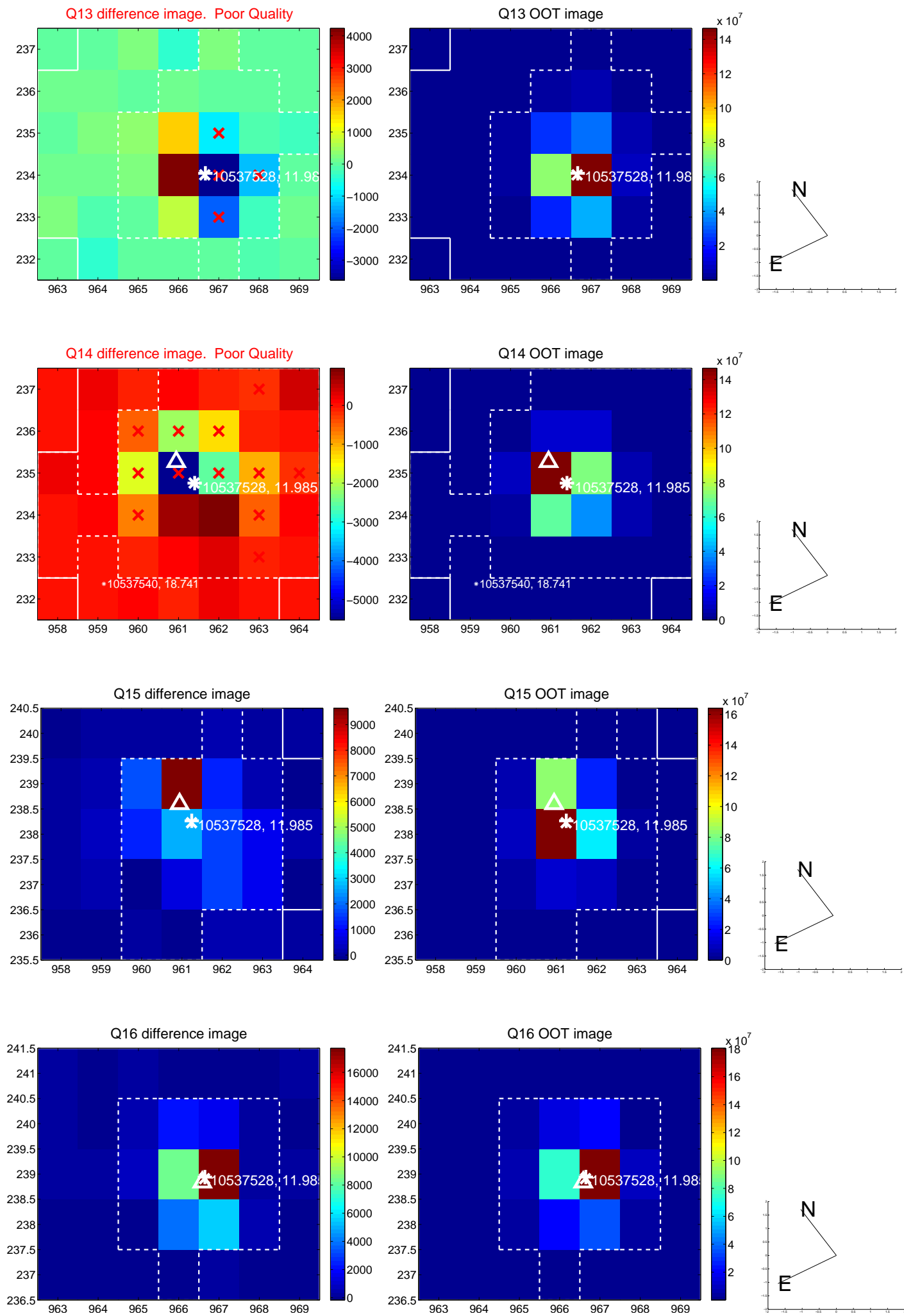
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



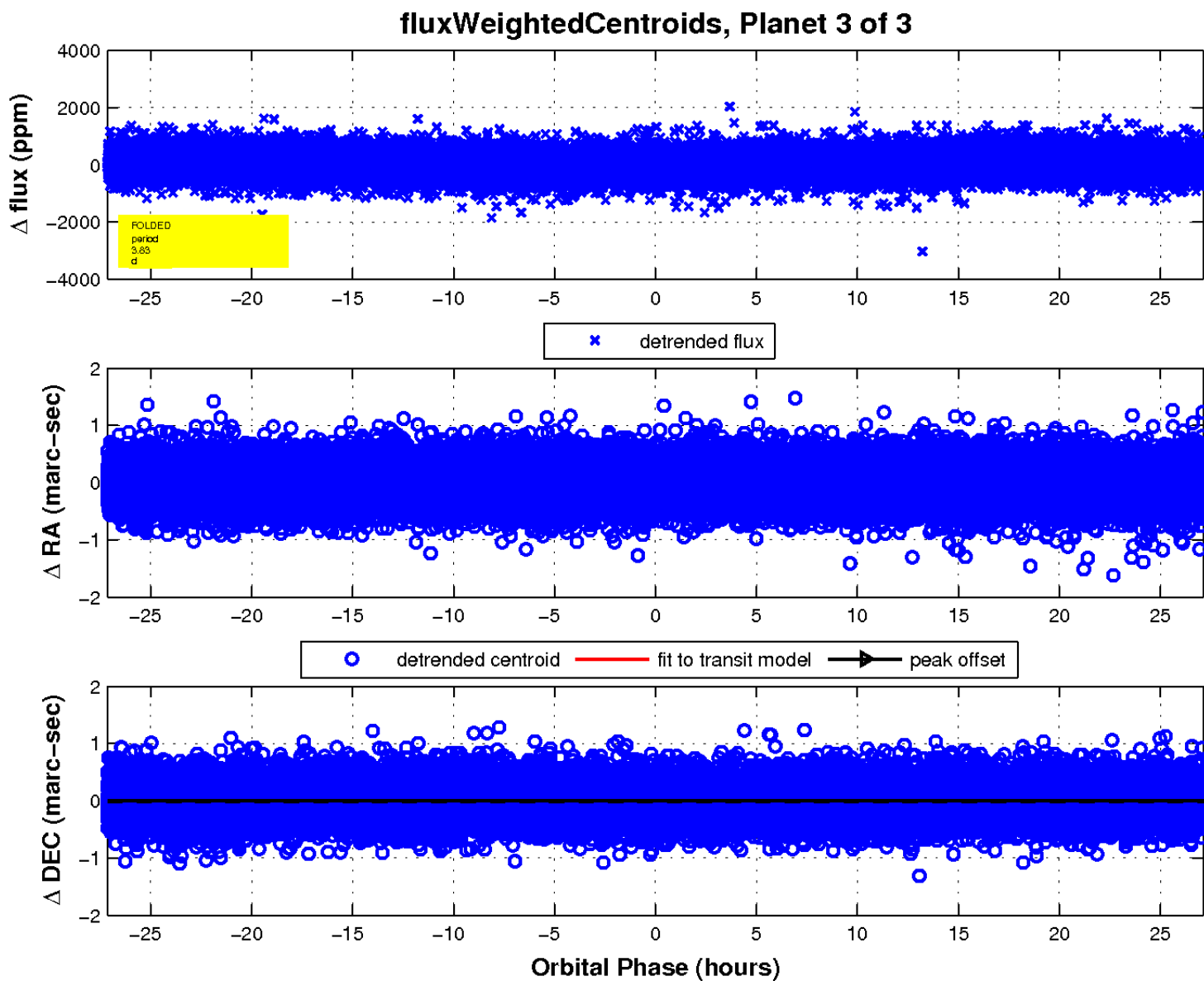
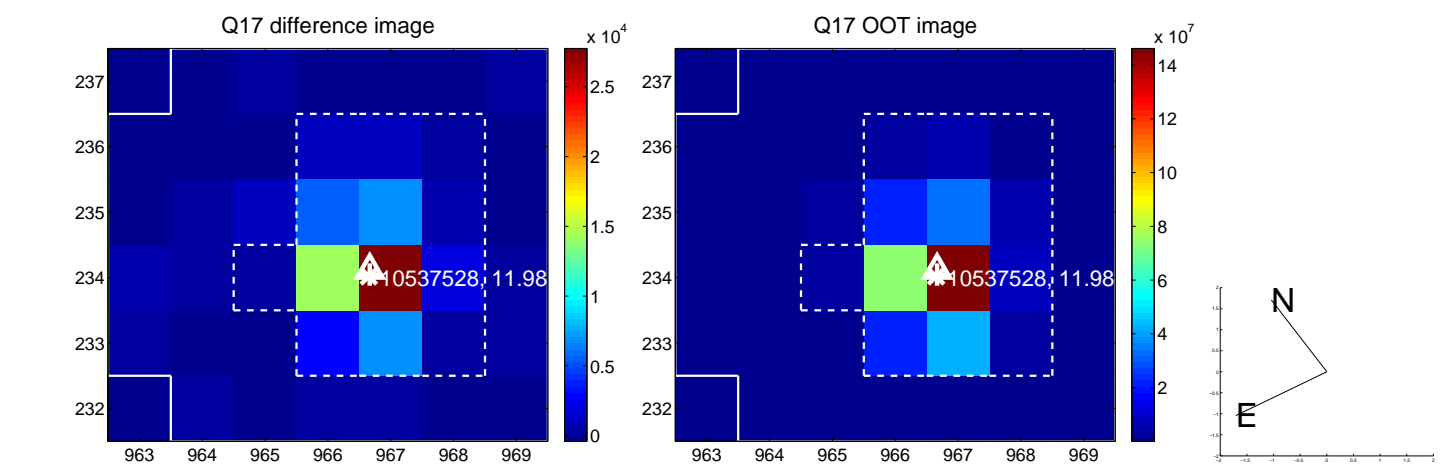
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

