

KIC 005266937

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})
005266937-01	OBS	6547.01	5.917070	132.873231	507477.8	12.500	3825.2	-1.0	0.99	5661	23.62	242.03
005266937-02	OBS	No	5.910040	133.540727	8261.9	15.000	403.6	-1.0	0.99	5661	8.88	242.41

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005266937-01	OBS	FP	0.00	0	1	0	0	SWEET_EB—MOD_SEC_ALT—MOD_ODDEVEN_ALT—CENT_NOFITS
005266937-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

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

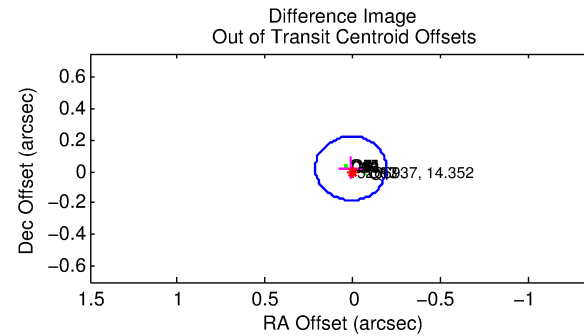
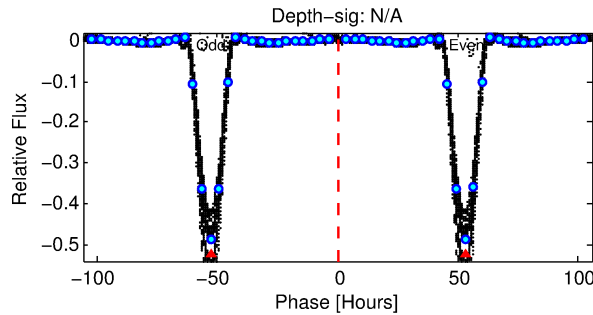
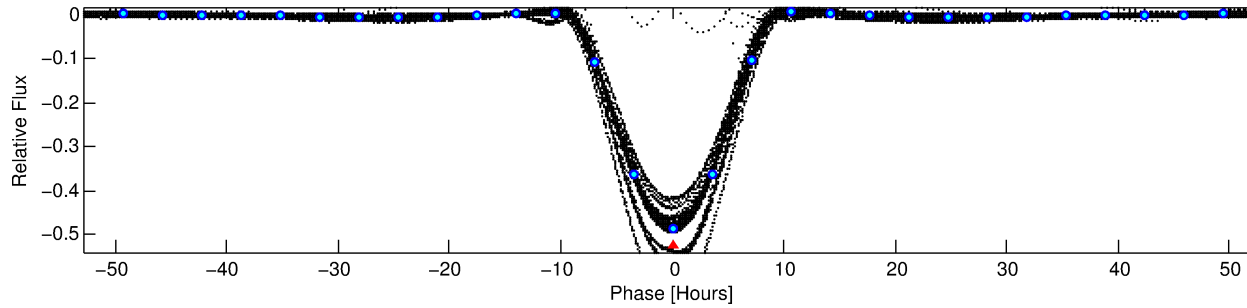
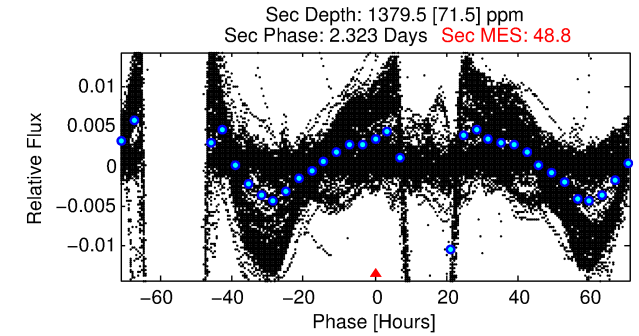
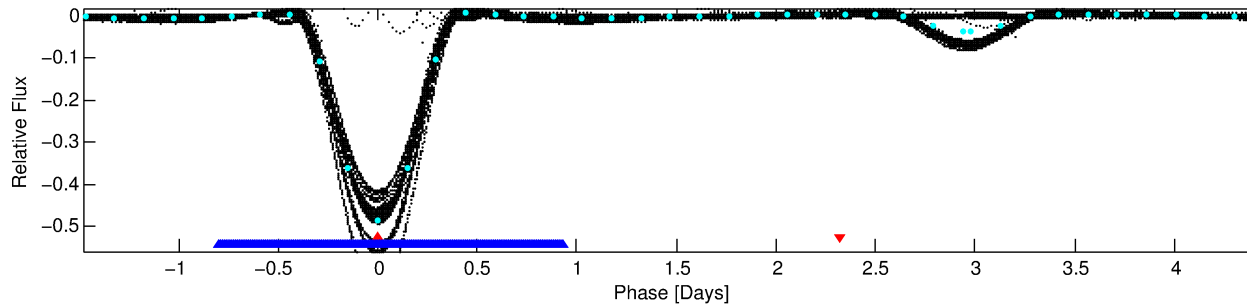
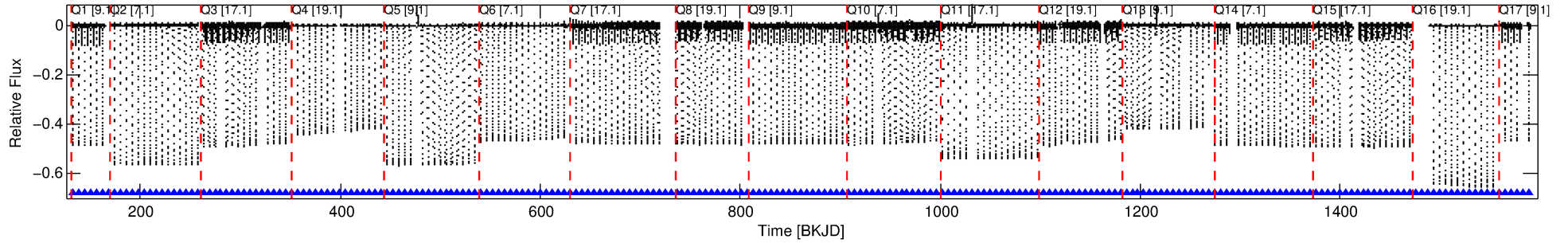
Ephemeris Match Information For 005266937-01

No Significant Match Found

DV One-Page Summary

KIC: 5266937 Candidate: 1 of 2 Period: 5.917 d
KOI: K06547 Corr: No Ephemeris Match

Kp: 14.35 R*: 0.99 Rs Teff: 5661.0 K Logg: 4.38 Fe/H: -0.180



TPS TCE Results:

Period = 5.91707 d
Epoch = 132.8732 BKJD

DV fit results are unavailable

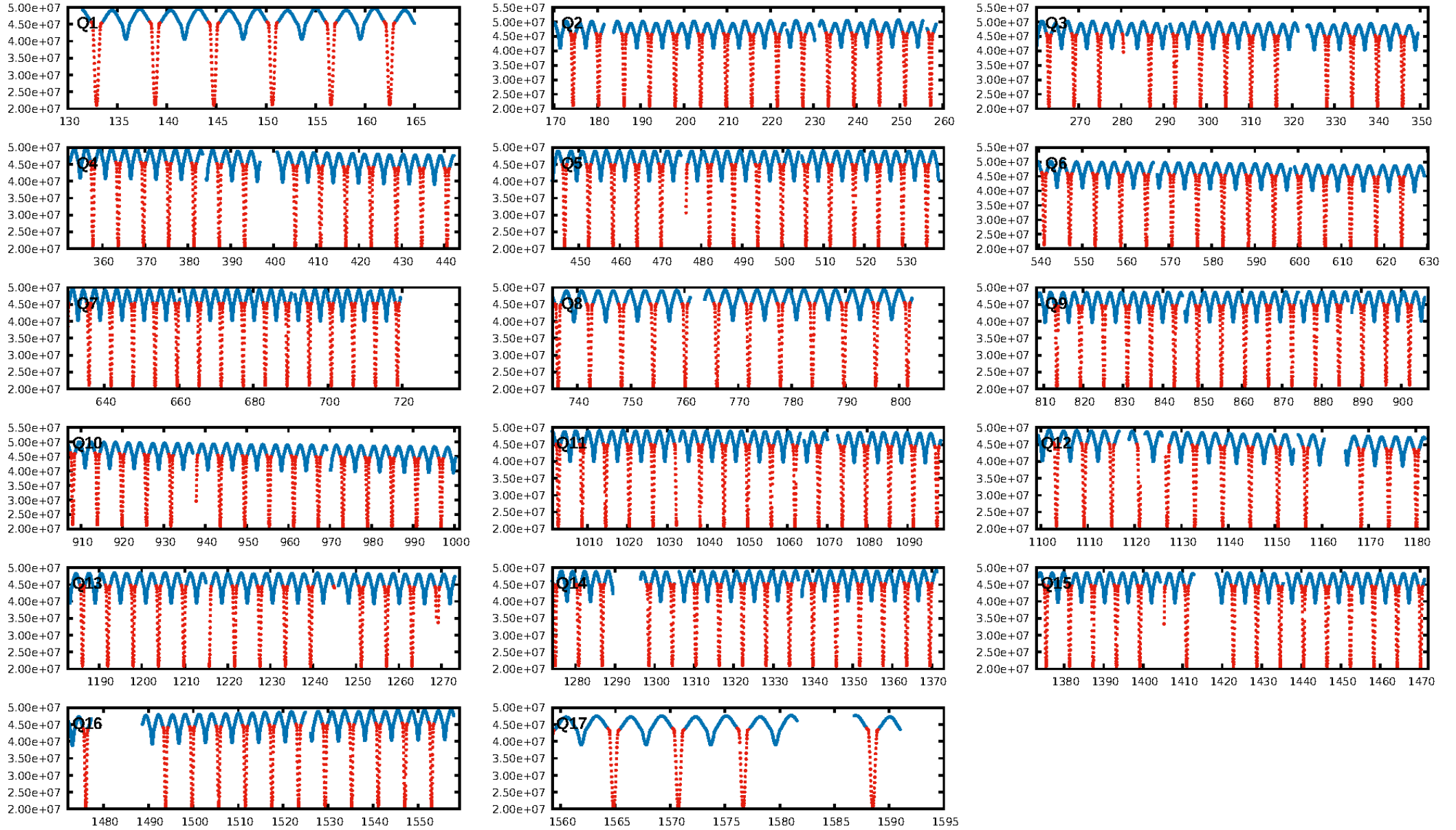
DV Diagnostic Results:

ShortPeriod-sig: 0.7% [0.01 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [221/221]
GhostDiagnostic-chr: 1.1
Centroid-sig: N/A
Centroid-so: 0.129 arcsec [418.54 σ]
OotOffset-rm: 0.025 arcsec [0.37 σ]
KicOffset-rm: 0.149 arcsec [2.12 σ]
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]

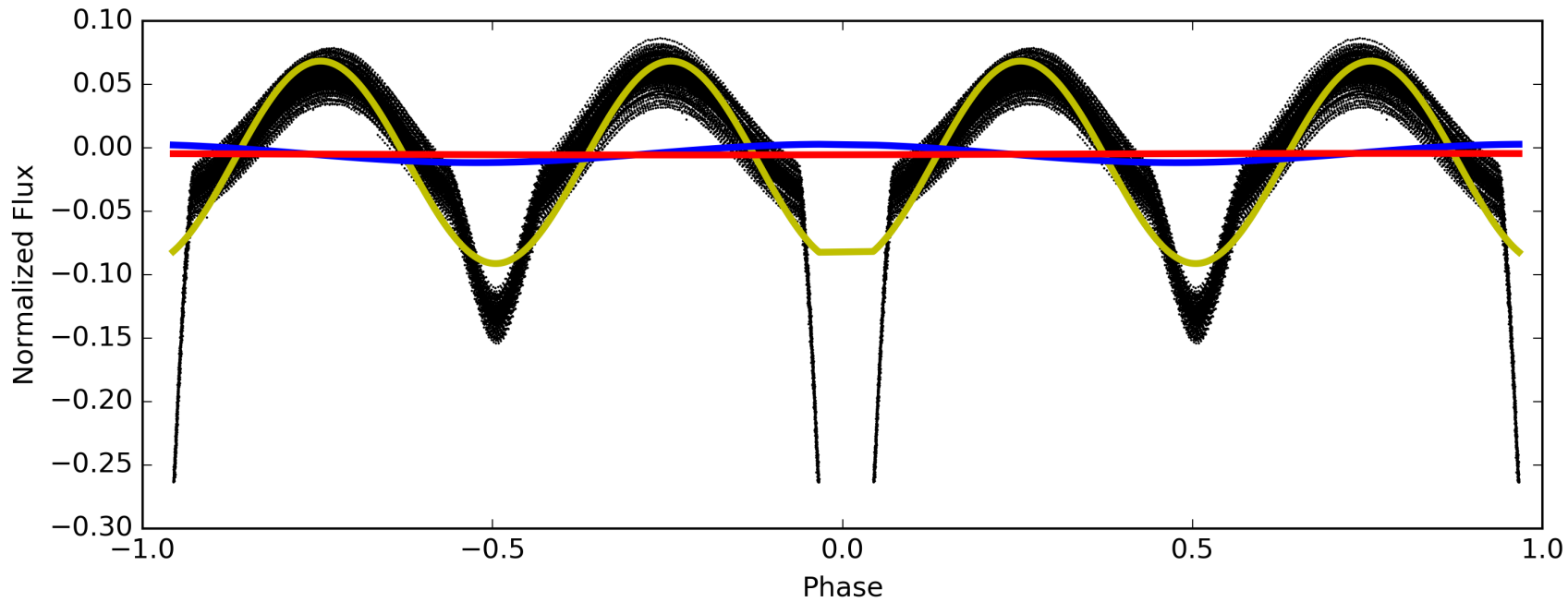
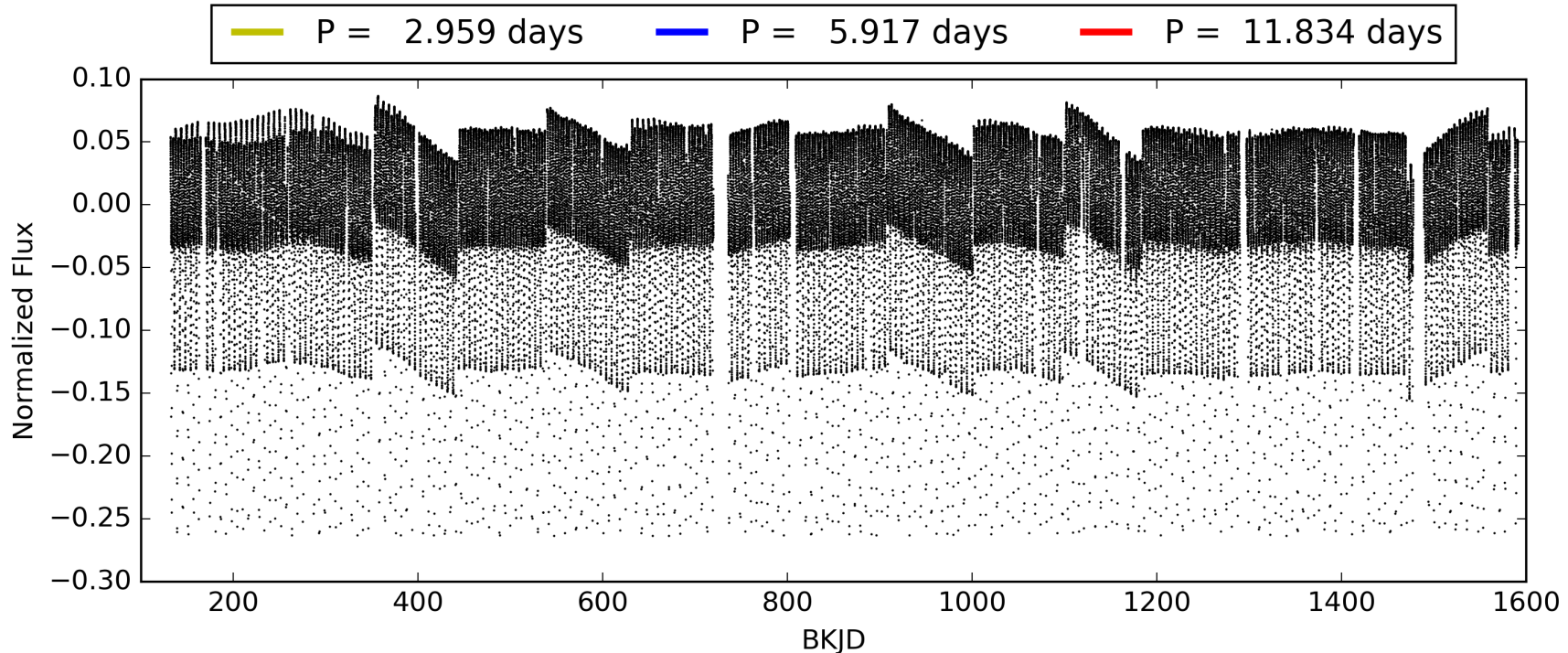
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 01:26:45 Z

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

TCE 005266937-01, PDC Light Curves

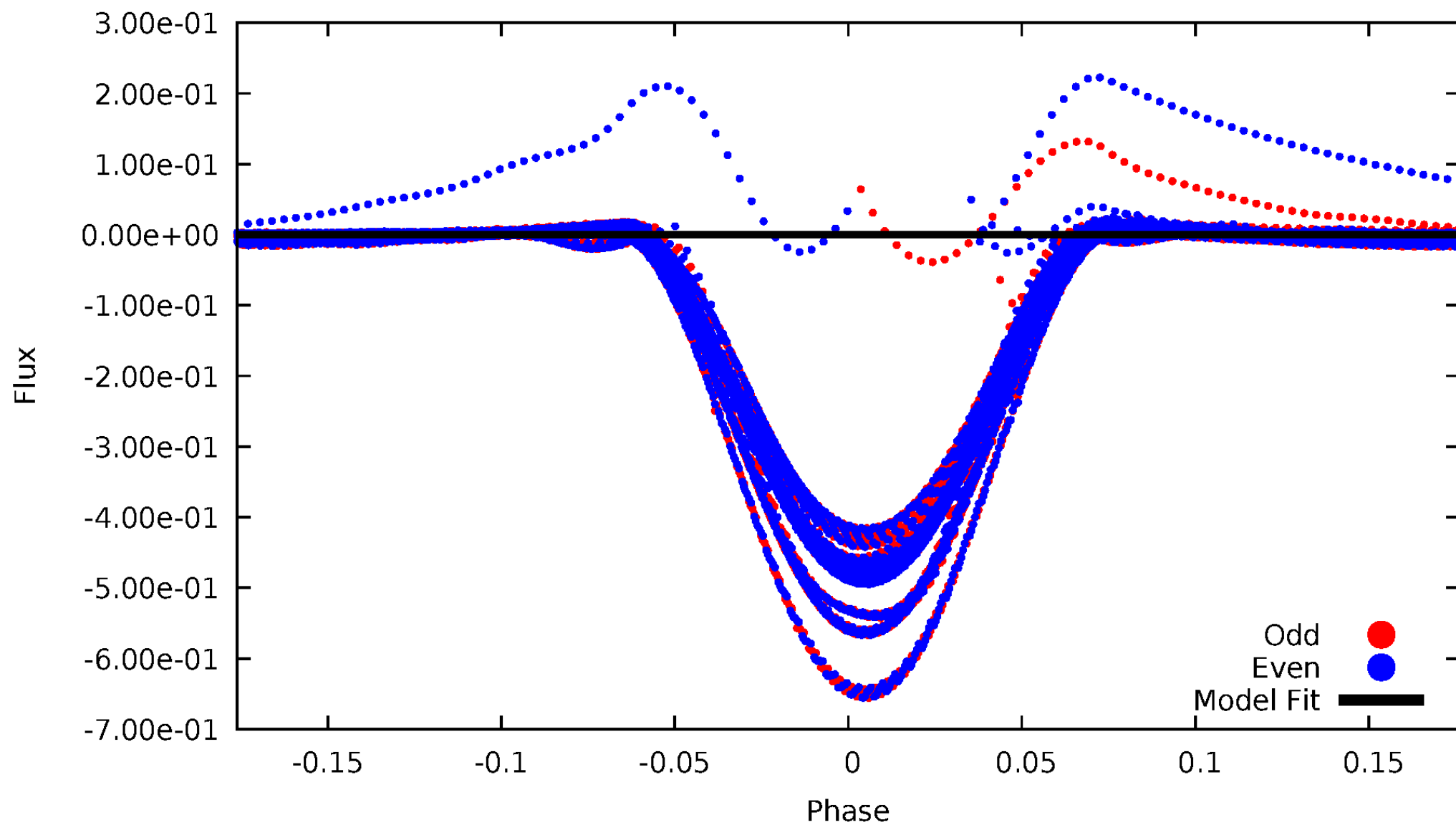


TCE 005266937-01



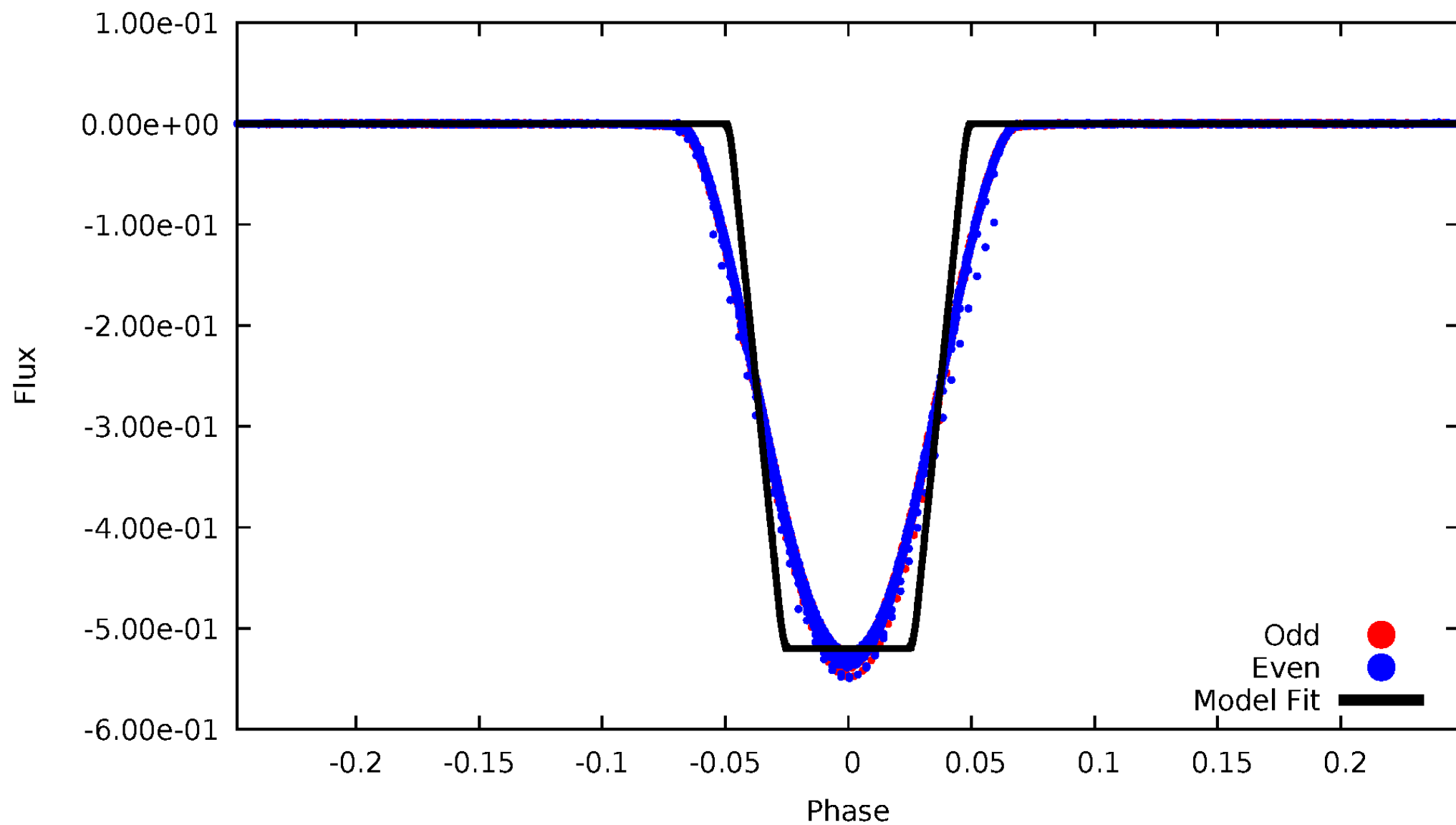
DV Odd/Even

TCE 005266937-01



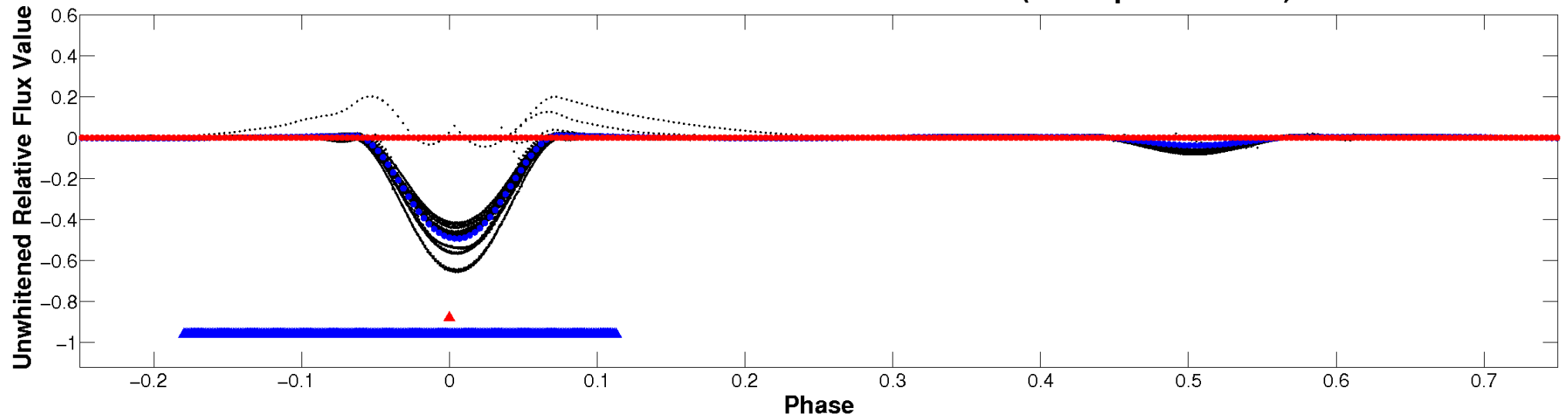
ALT Odd/Even

TCE 005266937-01



Non-Whitened Vs. Whitened Light Curve

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

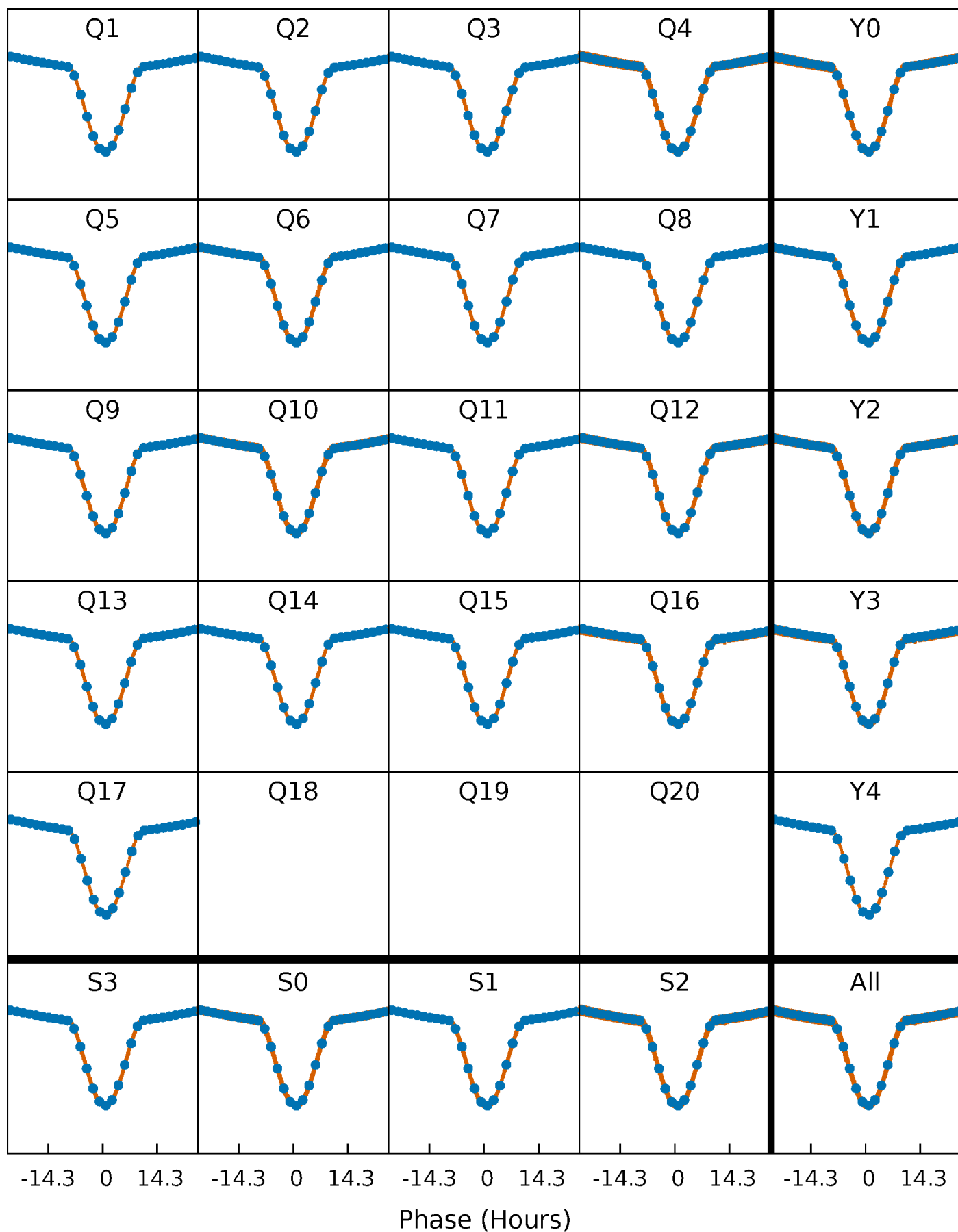


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



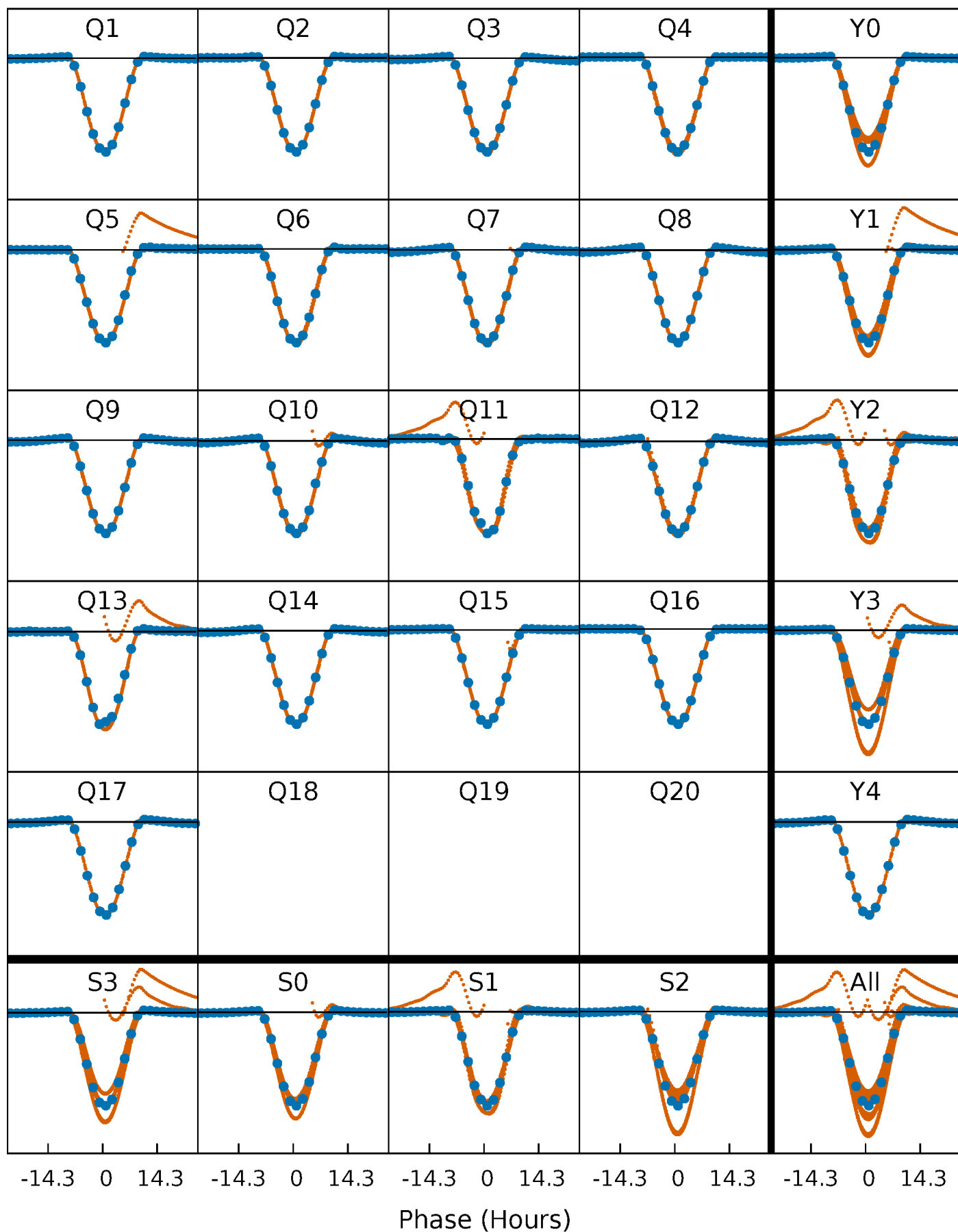
PDC Quarter-Phased Transit Curves

TCE 005266937-01 P= 5.917070 Days $T_0=132.873231$ (BKJD)



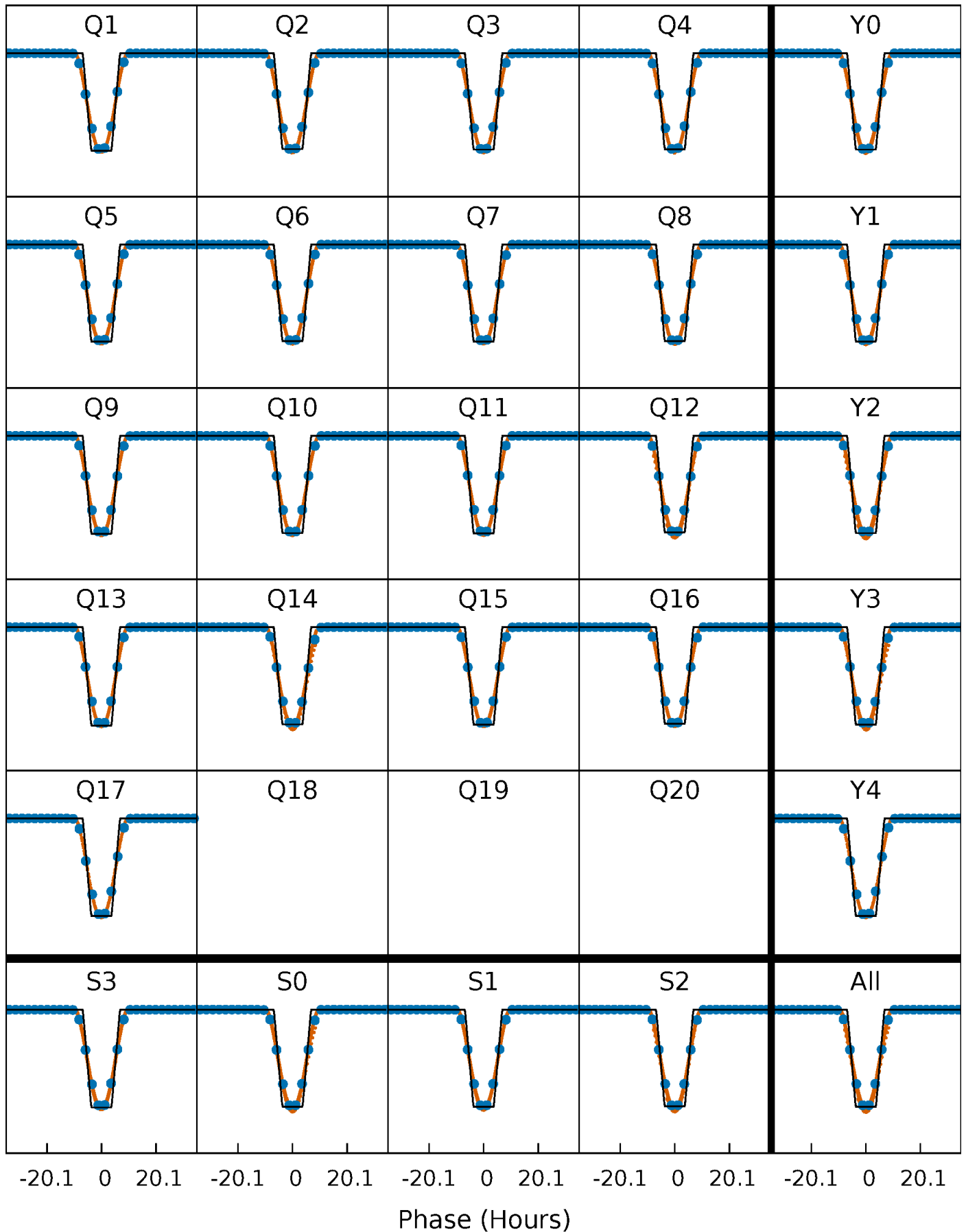
DV Quarter-Phased Transit Curves

TCE 005266937-01 P= 5.917070 Days $T_0=132.873231$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

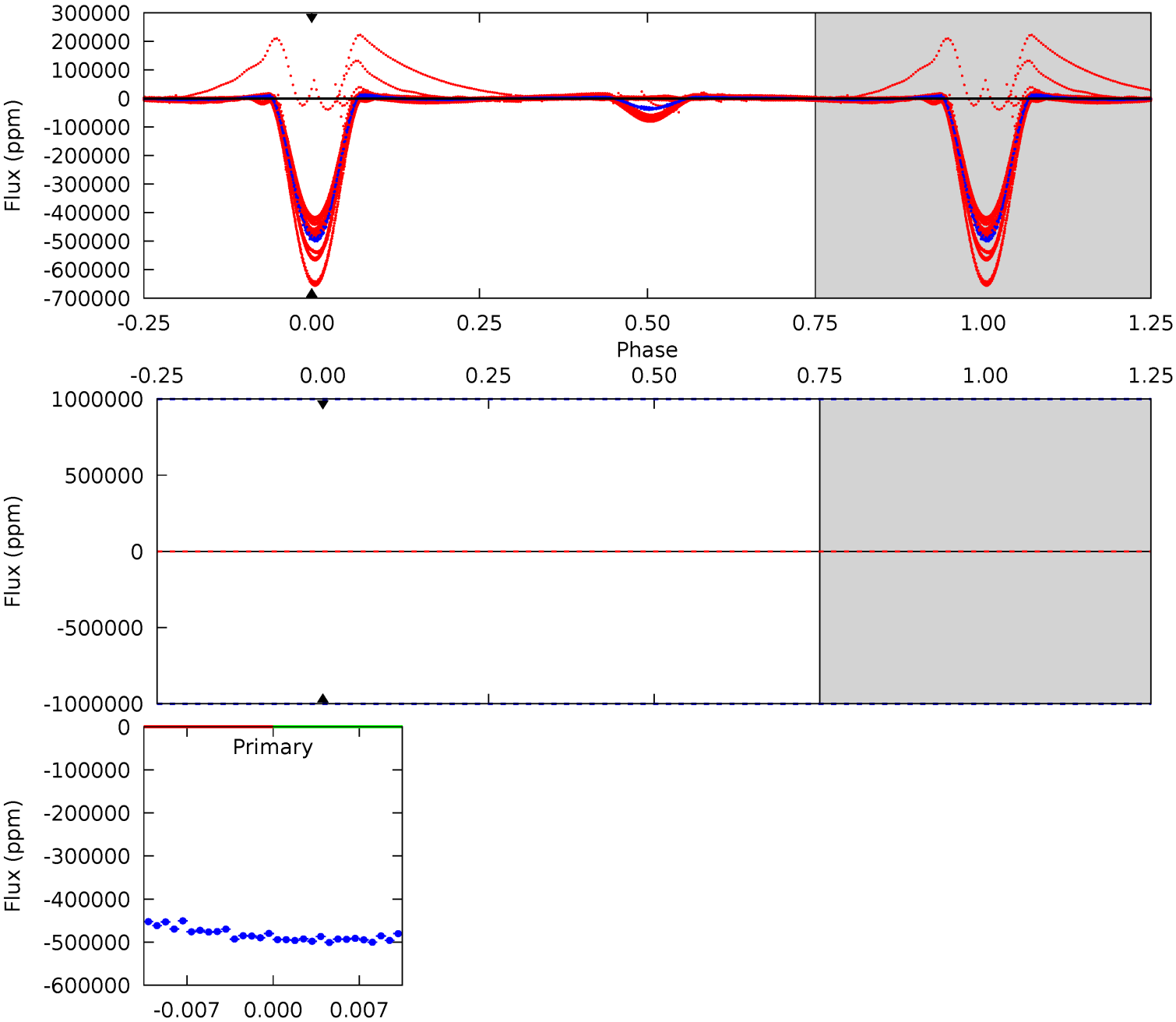
TCE 005266937-01 P= 5.917070 Days $T_0=132.902267$ (BKJD)



DV Model-Shift Uniqueness Test

005266937-01, P = 5.917070 Days, E = 126.956161 Days

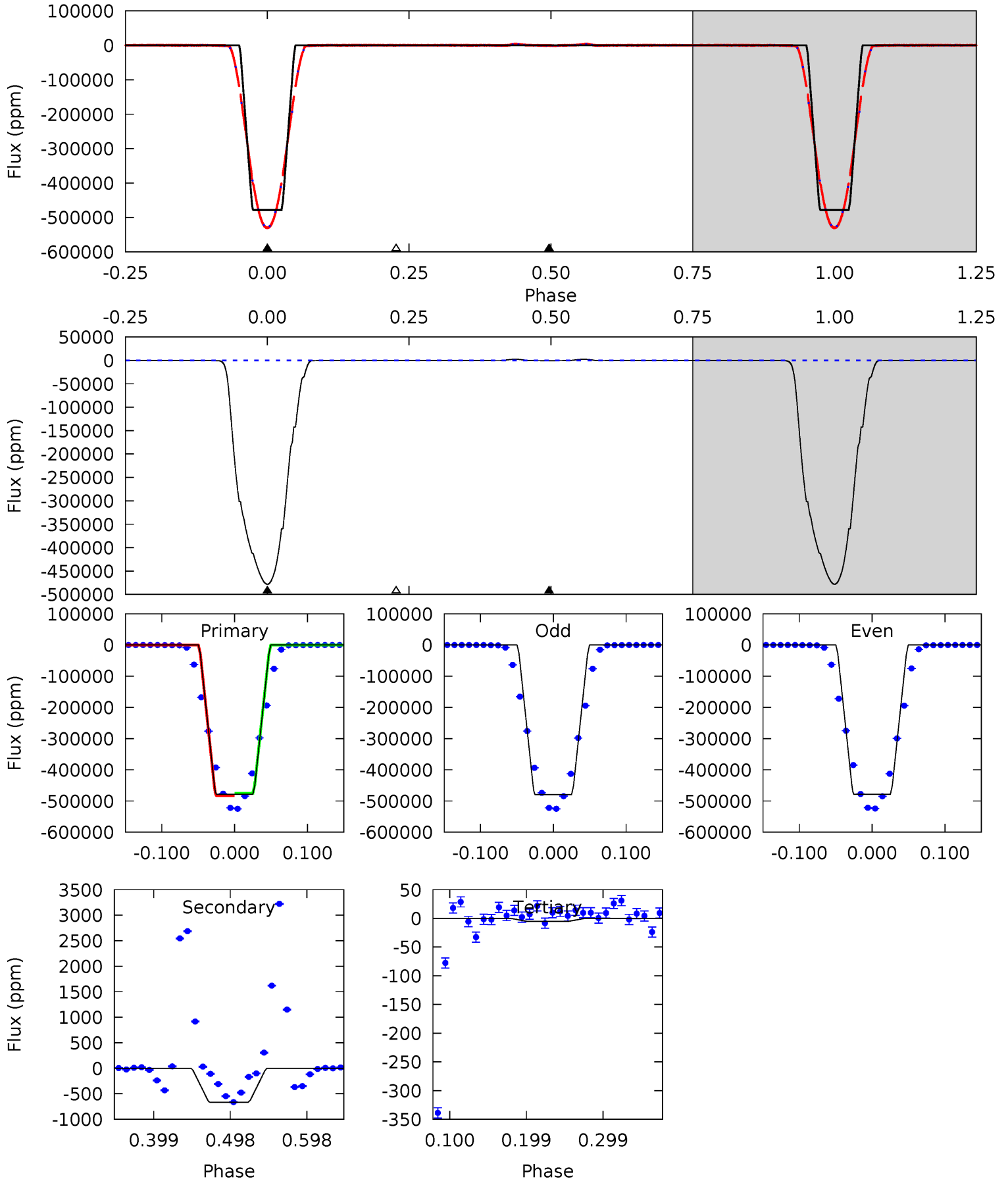
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005266937-01, P = 5.917070 Days, E = 126.985197 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
85405	118.8	0.94	0	4.57	1.65	4.97	85404	85405	117.9	118.8	62.3	1.01	0.01	0



Stellar Parameters For KIC 005266937

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5661^{+152}_{-152}	$4.383^{+0.149}_{-0.182}$	$-0.180^{+0.300}_{-0.300}$	$0.987^{+0.269}_{-0.157}$	$0.859^{+0.125}_{-0.073}$	$1.261^{+0.908}_{-0.614}$
	+3%/-3%	+3%/-4%	+167%/-167%	+27%/-16%	+15%/-8%	+72%/-49%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 005266937-01 / KOI 6547.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$24.43^{+12.07}_{-10.24}$	1411^{+104}_{-83}	-2479^{+9819}_{-4455}	$-1.071^{+451.109}_{-381.242}$
Alt.	-666 ± 6	$78.04^{+17.91}_{-12.49}$	1412^{+98}_{-88}	-1850^{+3481}_{-172}	$0.222^{+0.101}_{-0.067}$

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 $A_{obs} \gg 1.0$

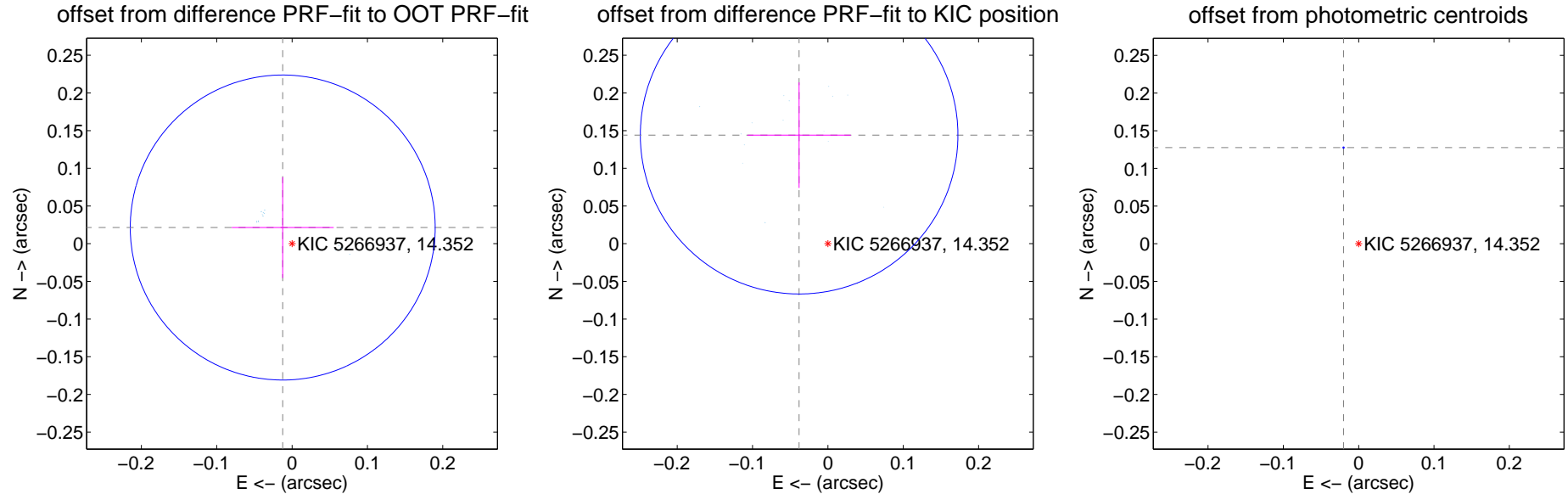
DV Centroid Data

Supplemental centroid analysis for 005266937-01. Kepler magnitude: 14.35. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

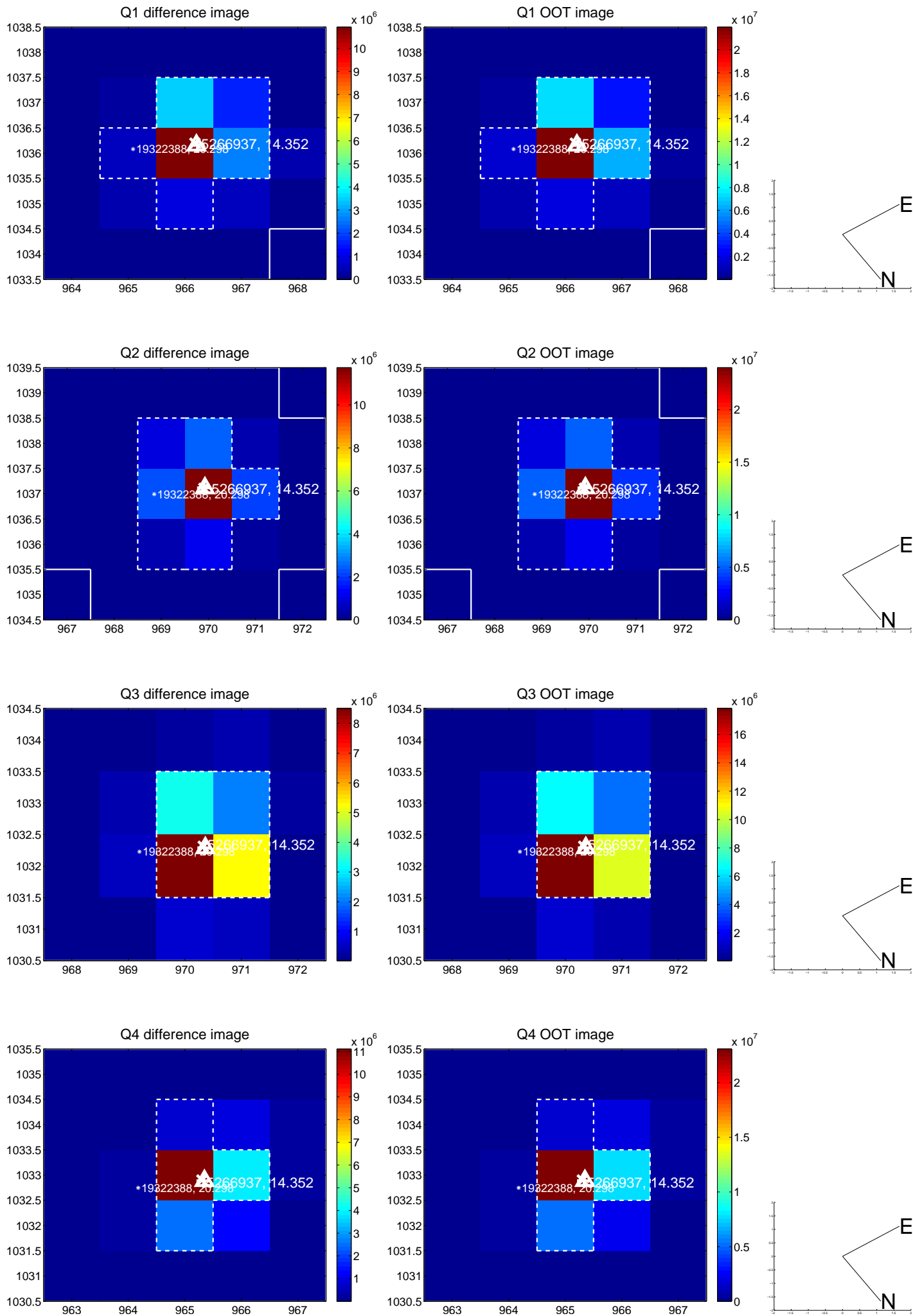
The direct PRF centroid is offset from the target star catalog position by about 0.20 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.025 ± 0.067	0.37	0.012 ± 0.068	0.021 ± 0.067
PRF-fit source offset from KIC position	0.149 ± 0.070	2.12	0.038 ± 0.069	0.144 ± 0.070
photometric centroid source offset	0.13 ± 0.00	418.54	0.02 ± 0.00	0.13 ± 0.00

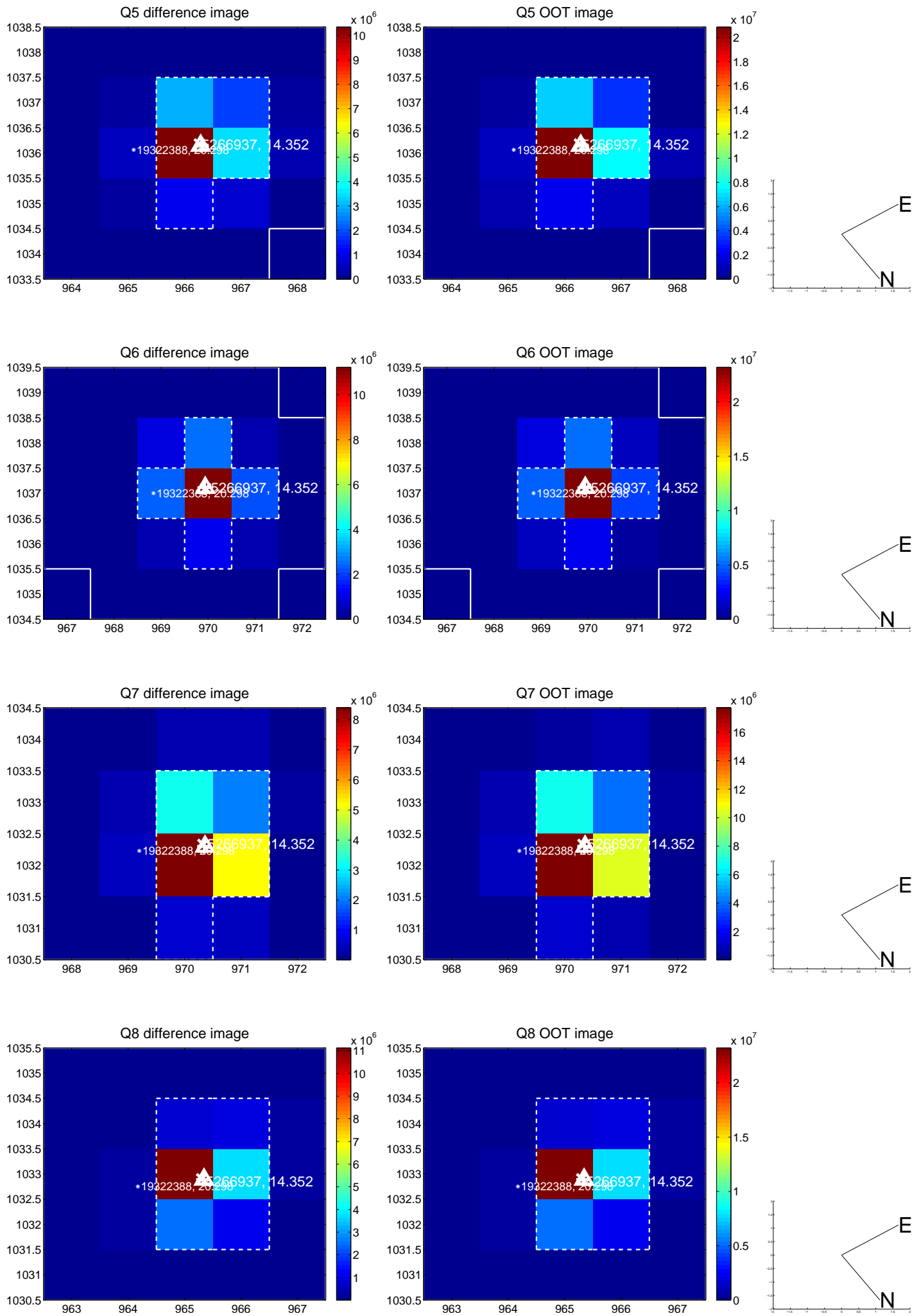


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

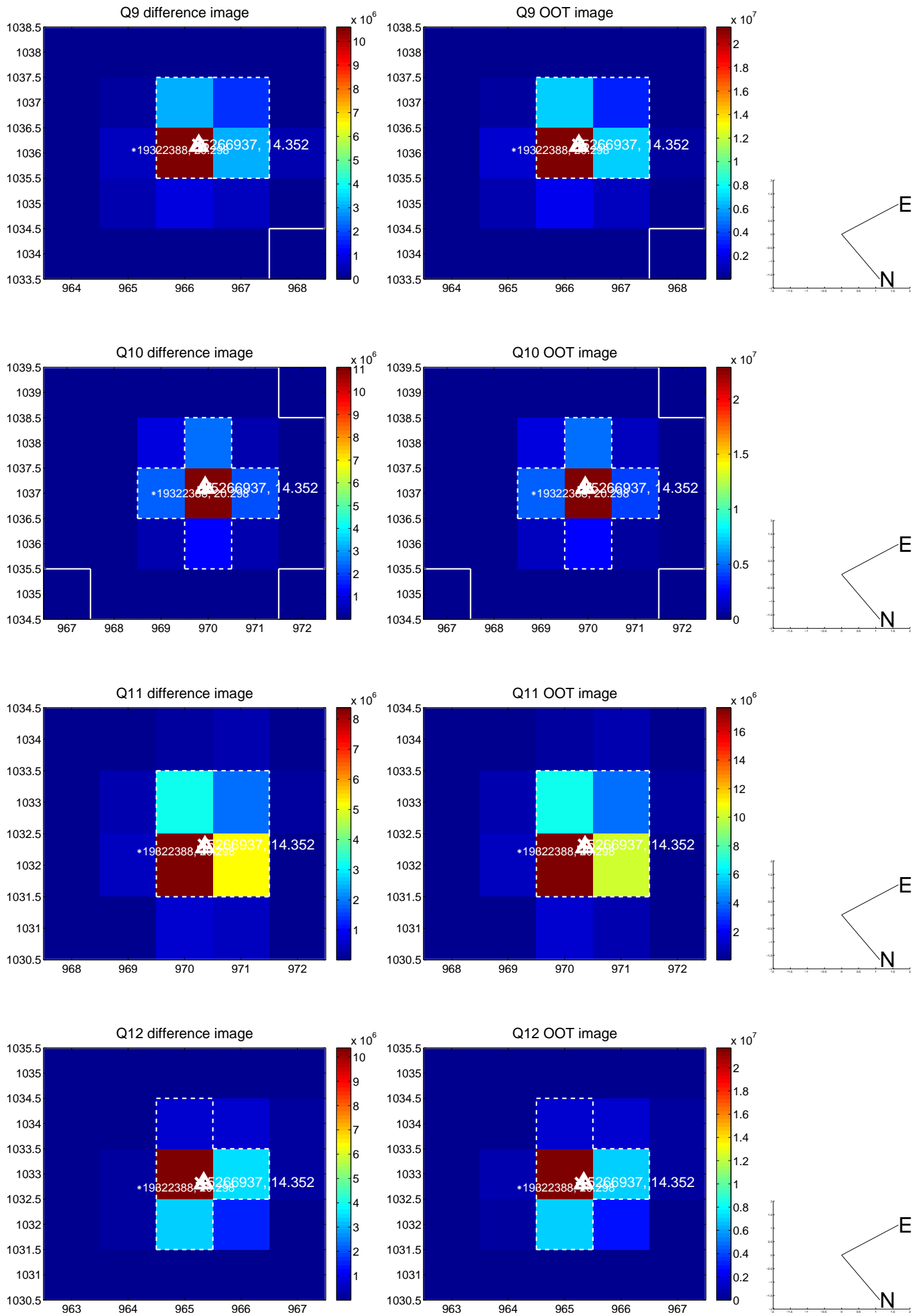
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



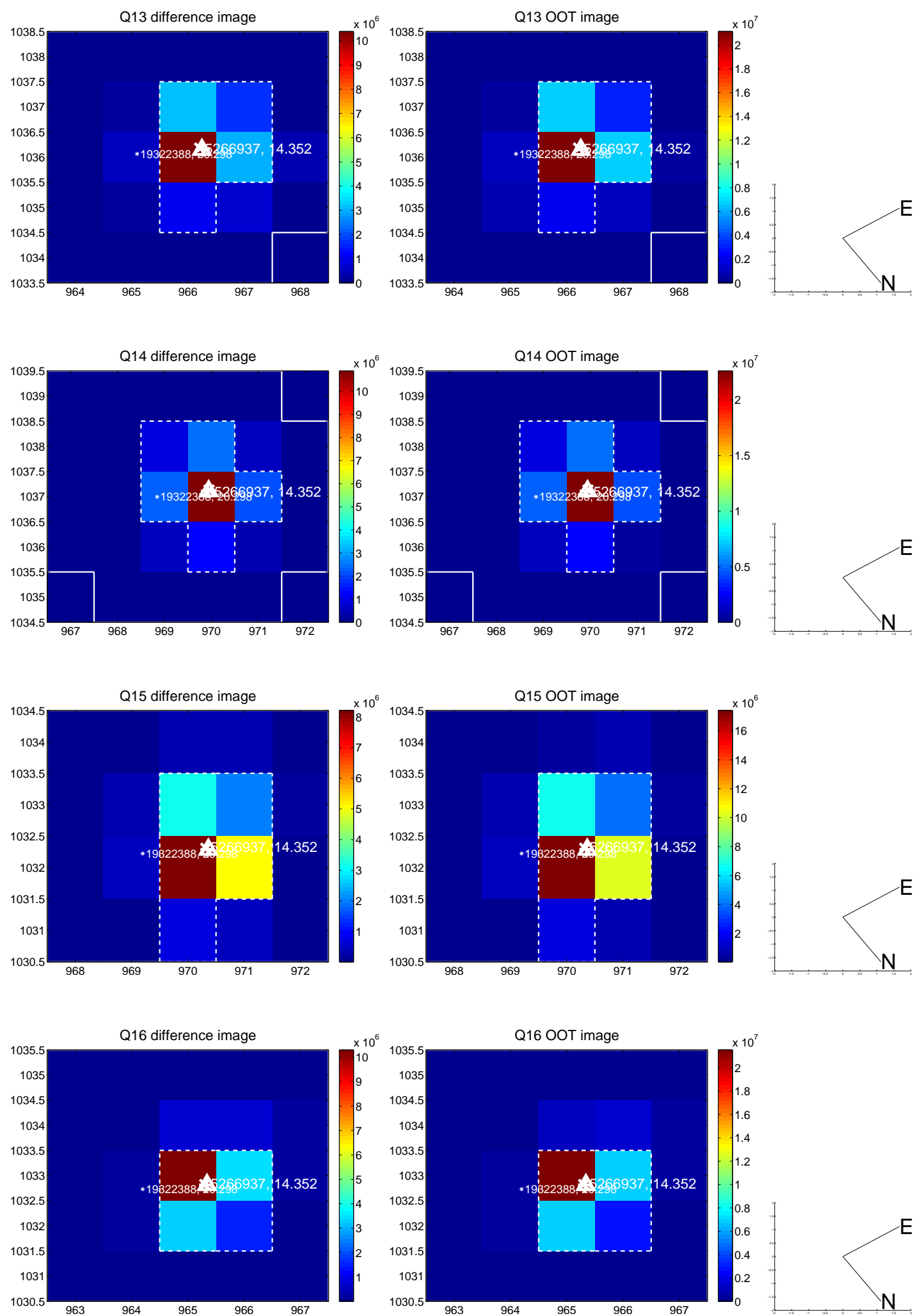
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

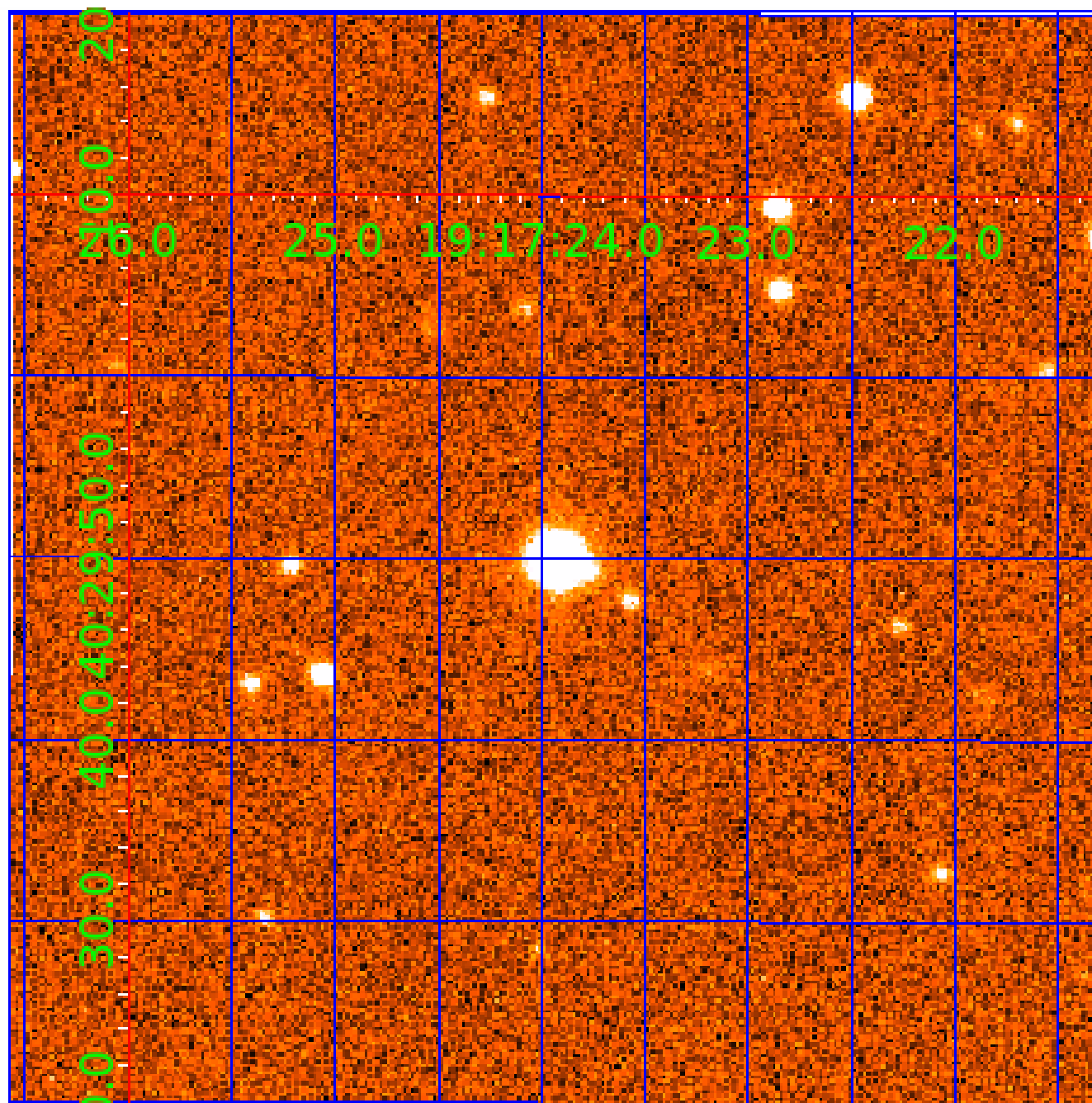


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005266937

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})
005266937-01	OBS	6547.01	5.917070	132.873231	507477.8	12.500	3825.2	-1.0	0.99	5661	23.62	242.03
005266937-02	OBS	No	5.910040	133.540727	8261.9	15.000	403.6	-1.0	0.99	5661	8.88	242.41

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005266937-01	OBS	FP	0.00	0	1	0	0	SWEET_EB—MOD_SEC_ALT—MOD_ODDEVEN_ALT—CENT_NOFITS
005266937-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

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

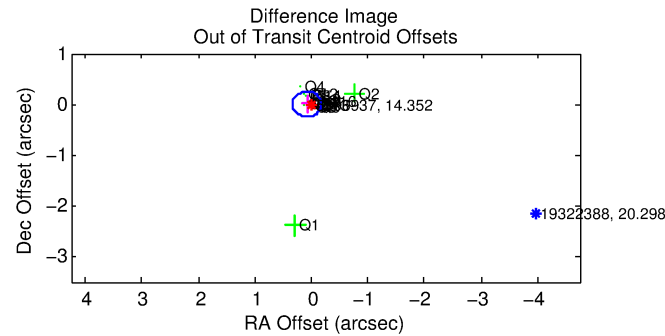
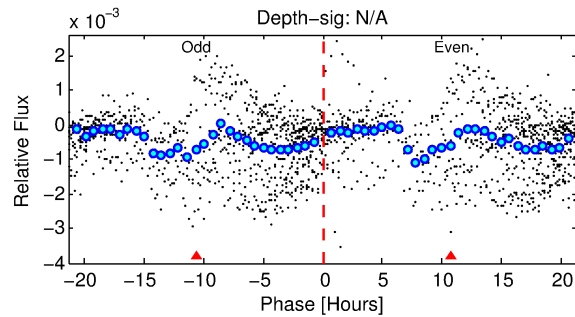
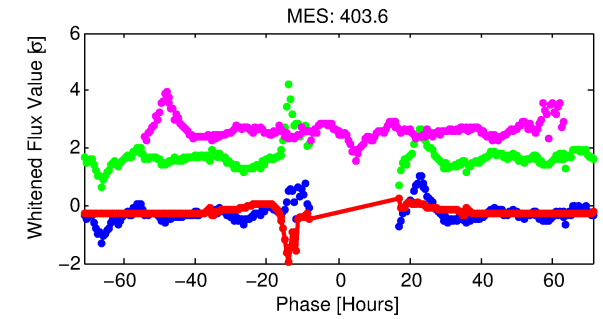
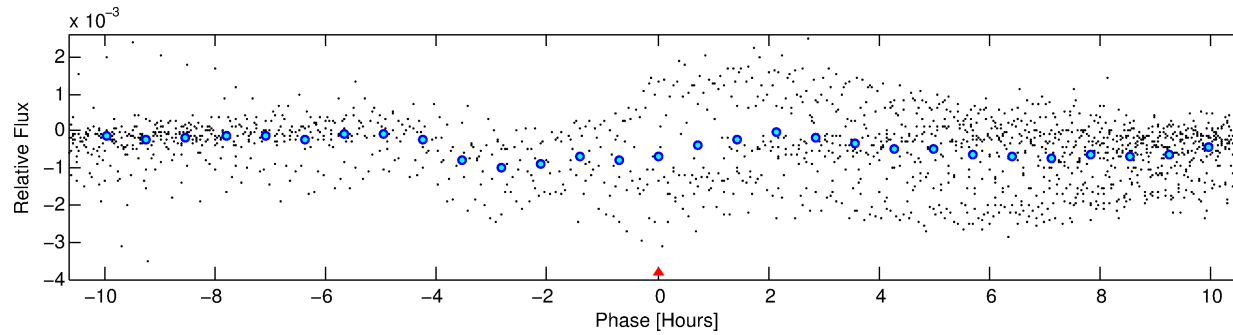
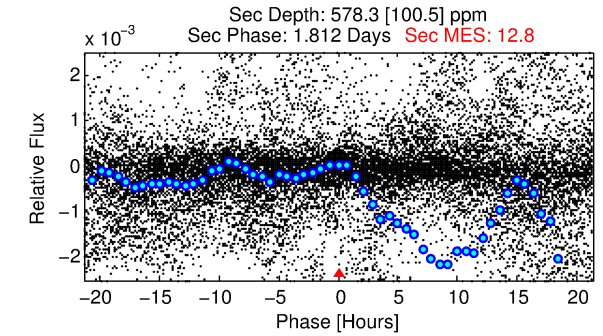
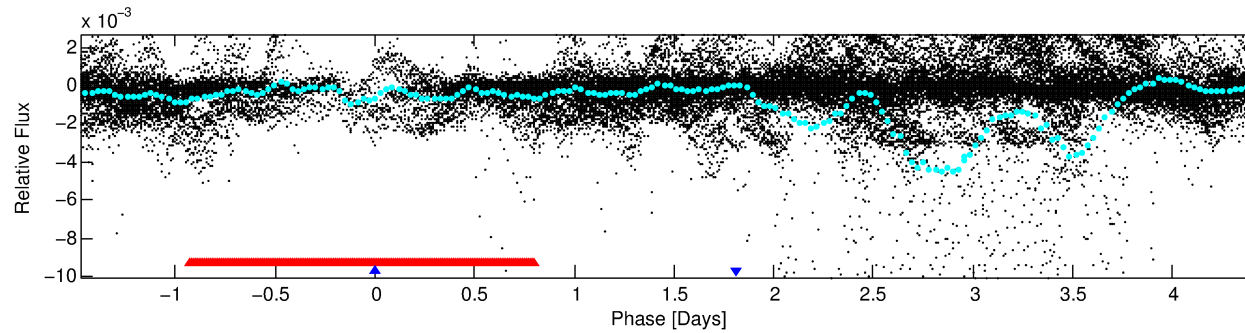
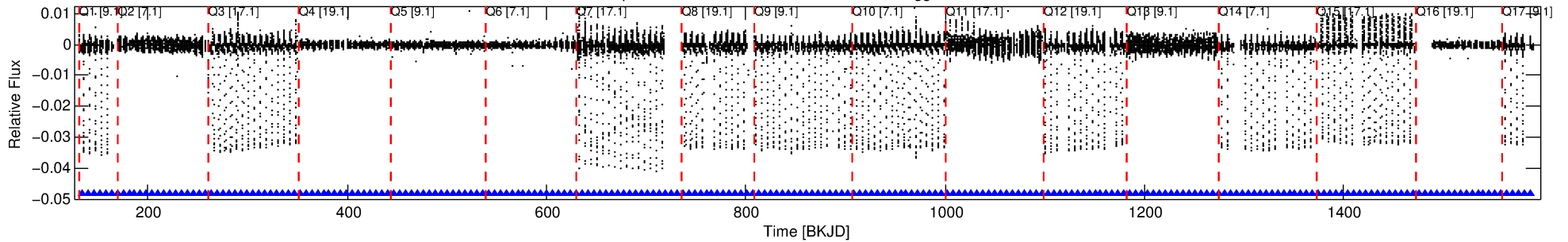
Ephemeris Match Information For 005266937-02

No Significant Match Found

DV One-Page Summary

KIC: 5266937 Candidate: 2 of 2 Period: 5.910 d
KOI: K06547 Corr: No Ephemeris Match

Kp: 14.35 R*: 0.99 Rs Teff: 5661.0 K Logg: 4.38 Fe/H: -0.180



TPS TCE Results:

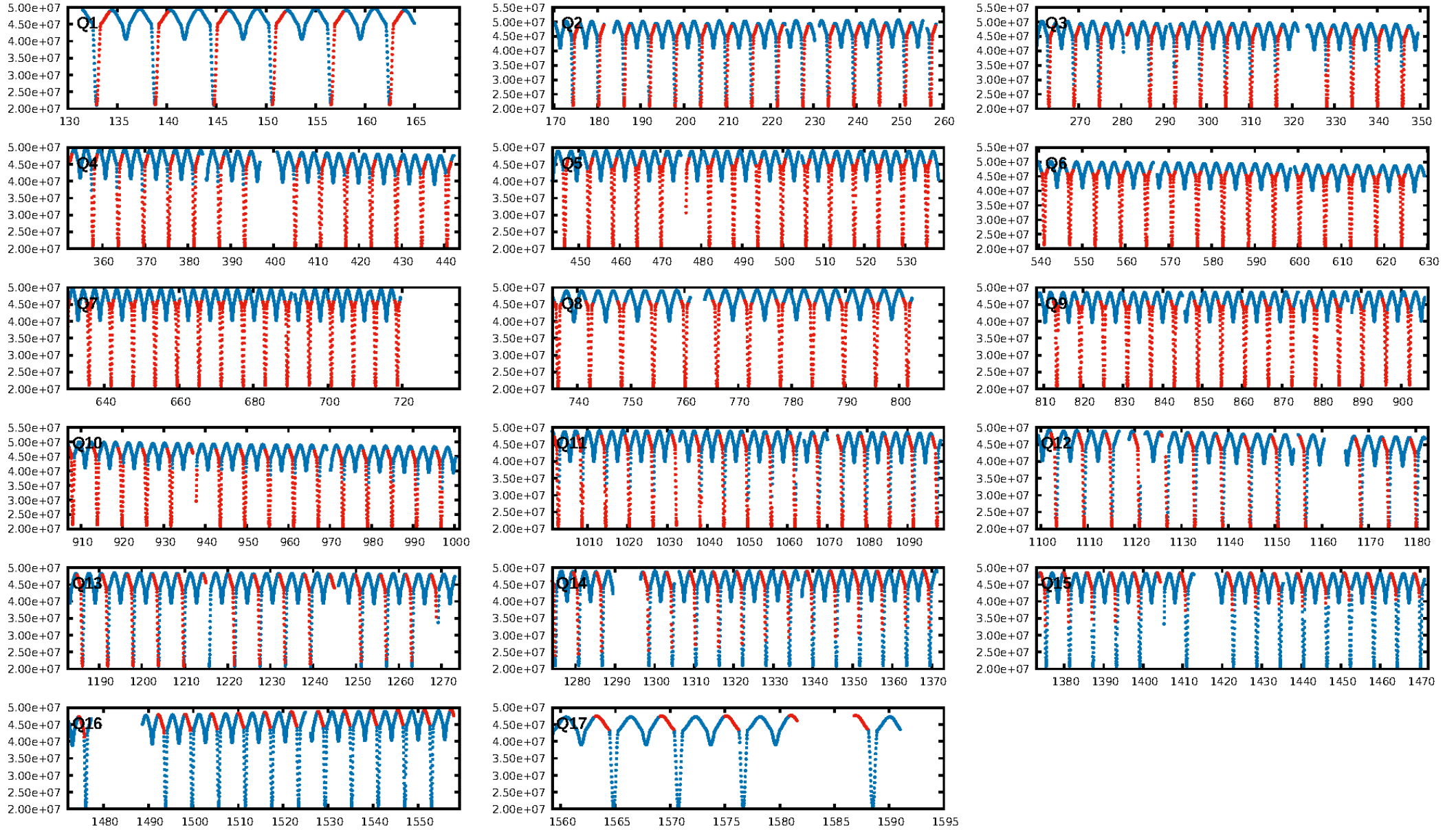
Period = 5.91004 d
Epoch = 133.5407 BKJD

DV fit results are unavailable

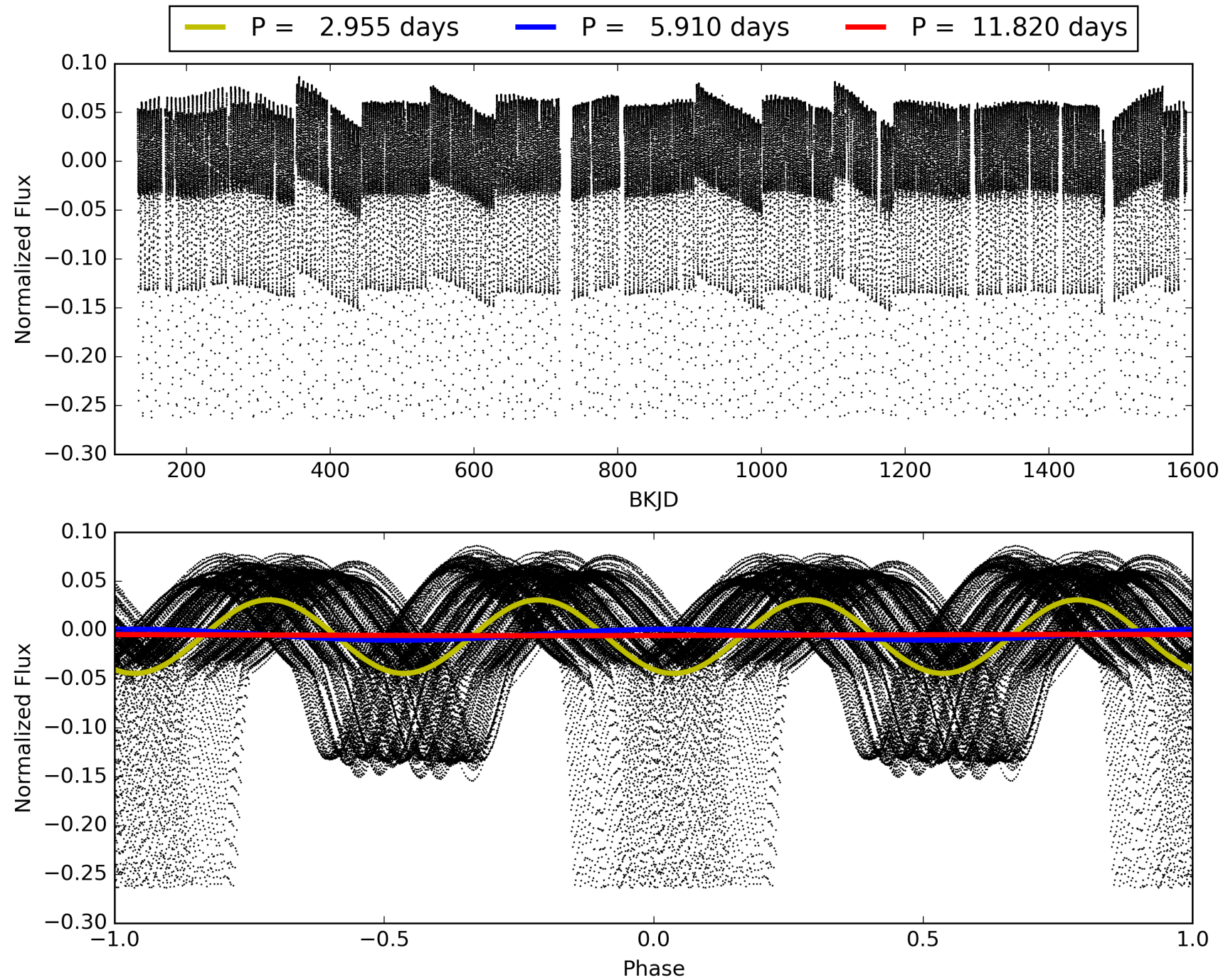
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.7% [0.01σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [28/28]
GhostDiagnostic-chr: -0.8309
Centroid-sig: N/A
Centroid-so: 0.094 arcsec [6.00σ]
OotOffset-rm: 0.077 arcsec [0.92σ]
KicOffset-rm: 0.166 arcsec [1.15σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.44 [7/16]
DiffImageOverlap-fno: 0.29 [5/17]

TCE 005266937-02, PDC Light Curves

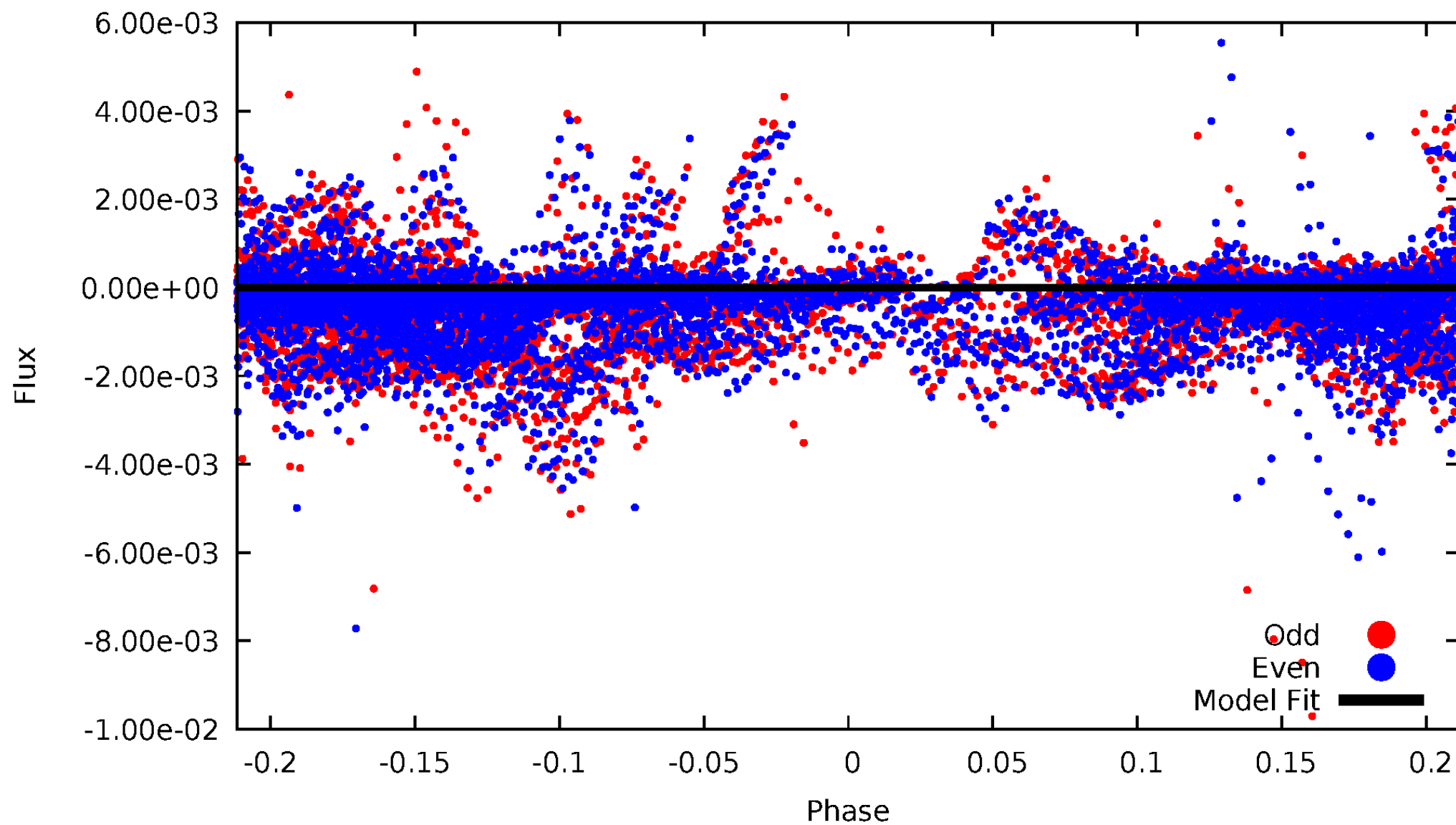


TCE 005266937-02



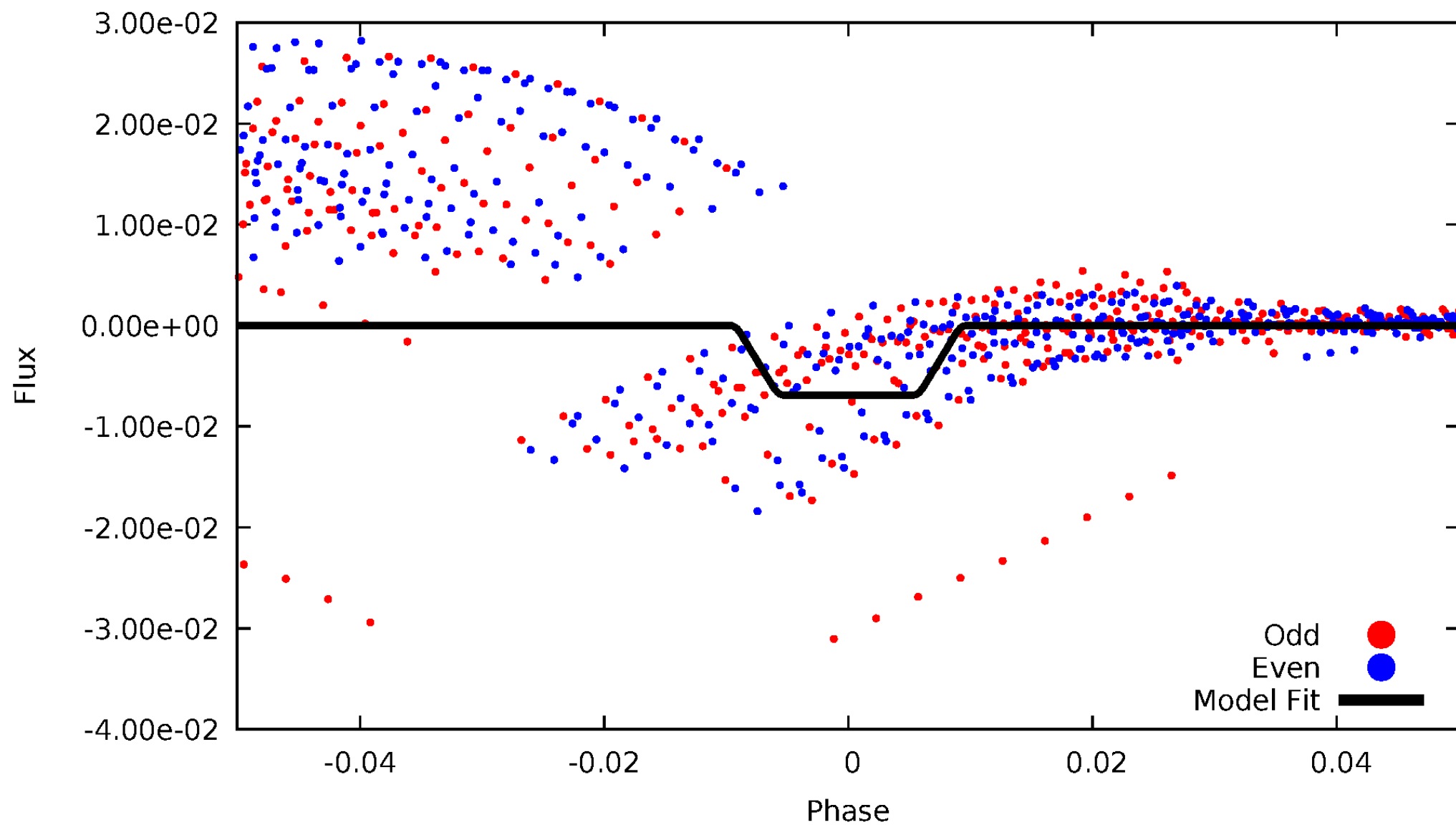
DV Odd/Even

TCE 005266937-02



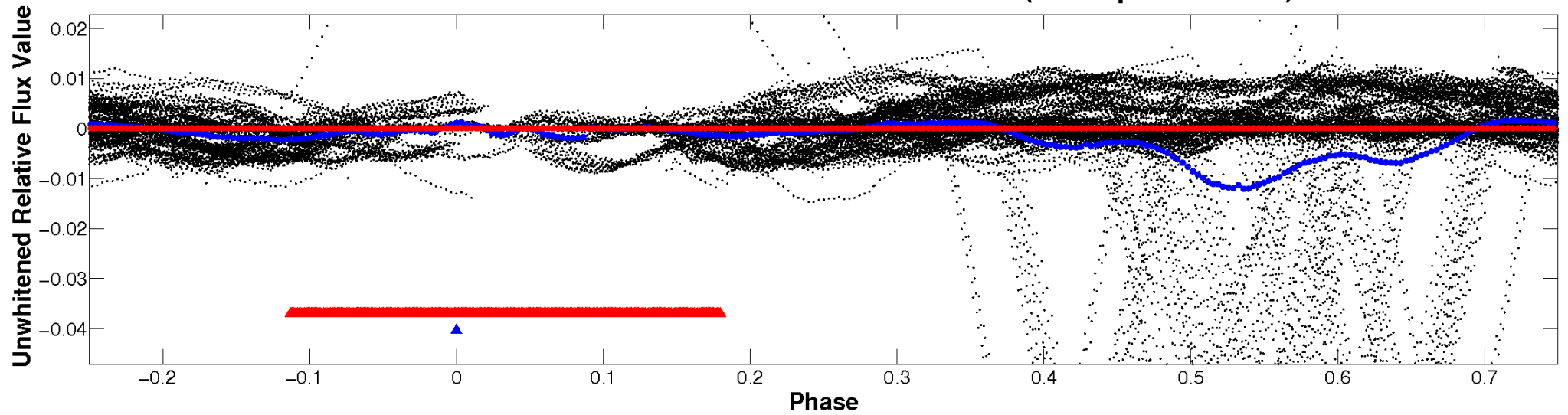
ALT Odd/Even

TCE 005266937-02



Non-Whitened Vs. Whitened Light Curve

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

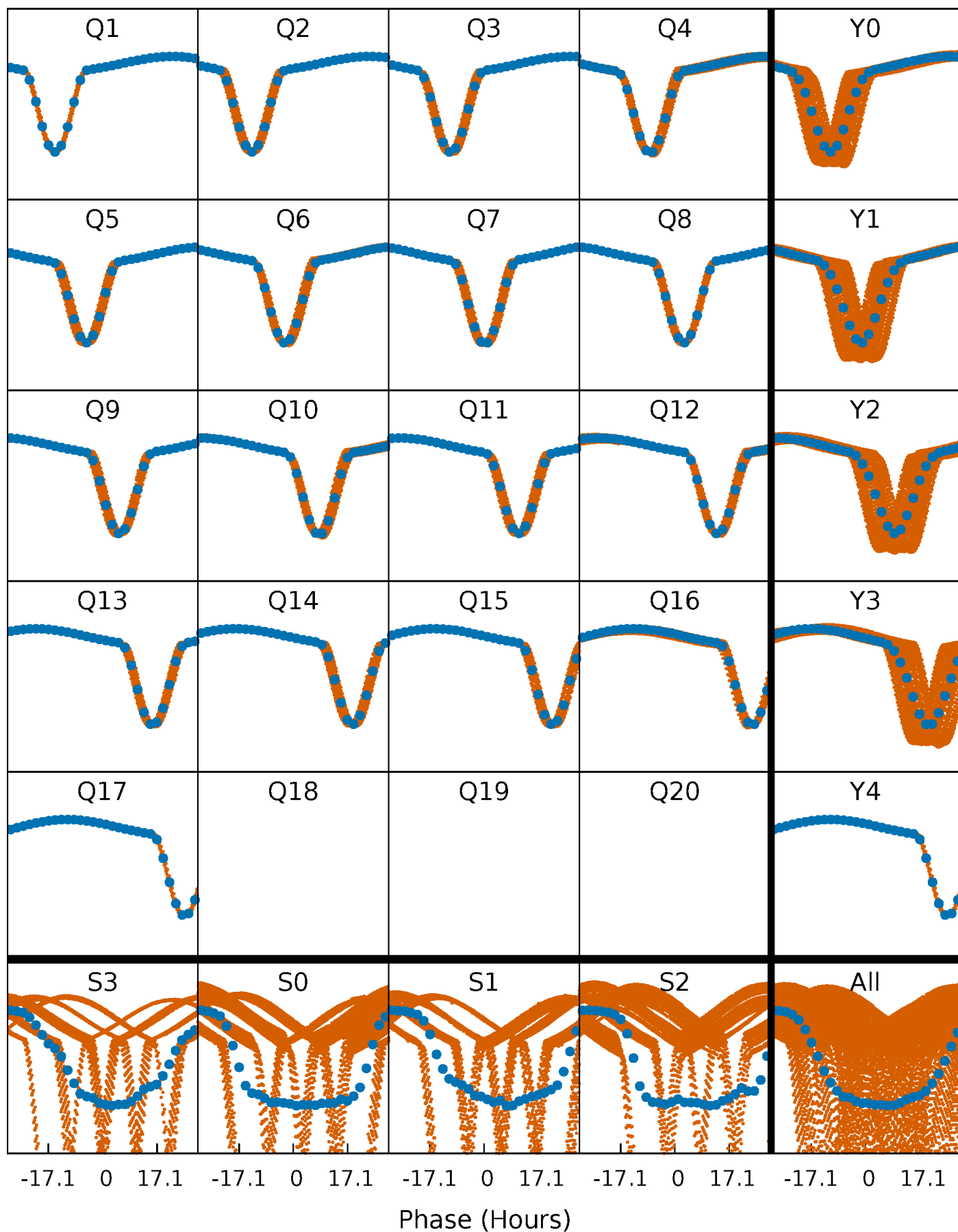


Planet 2 : Phased Whitened Flux Time Series (TPS Epoch/Period)



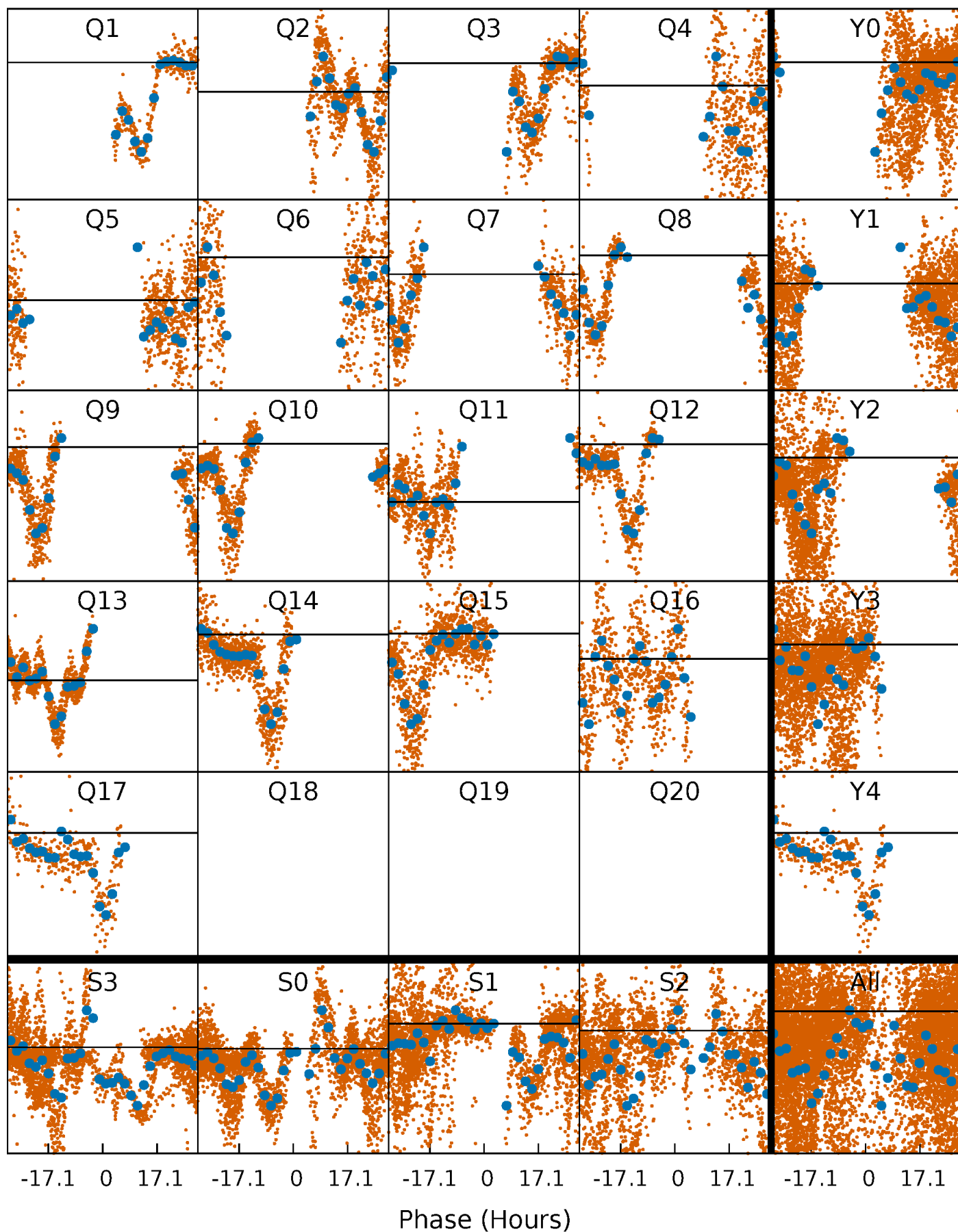
PDC Quarter-Phased Transit Curves

TCE 005266937-02 P= 5.910040 Days $T_0=133.540727$ (BKJD)



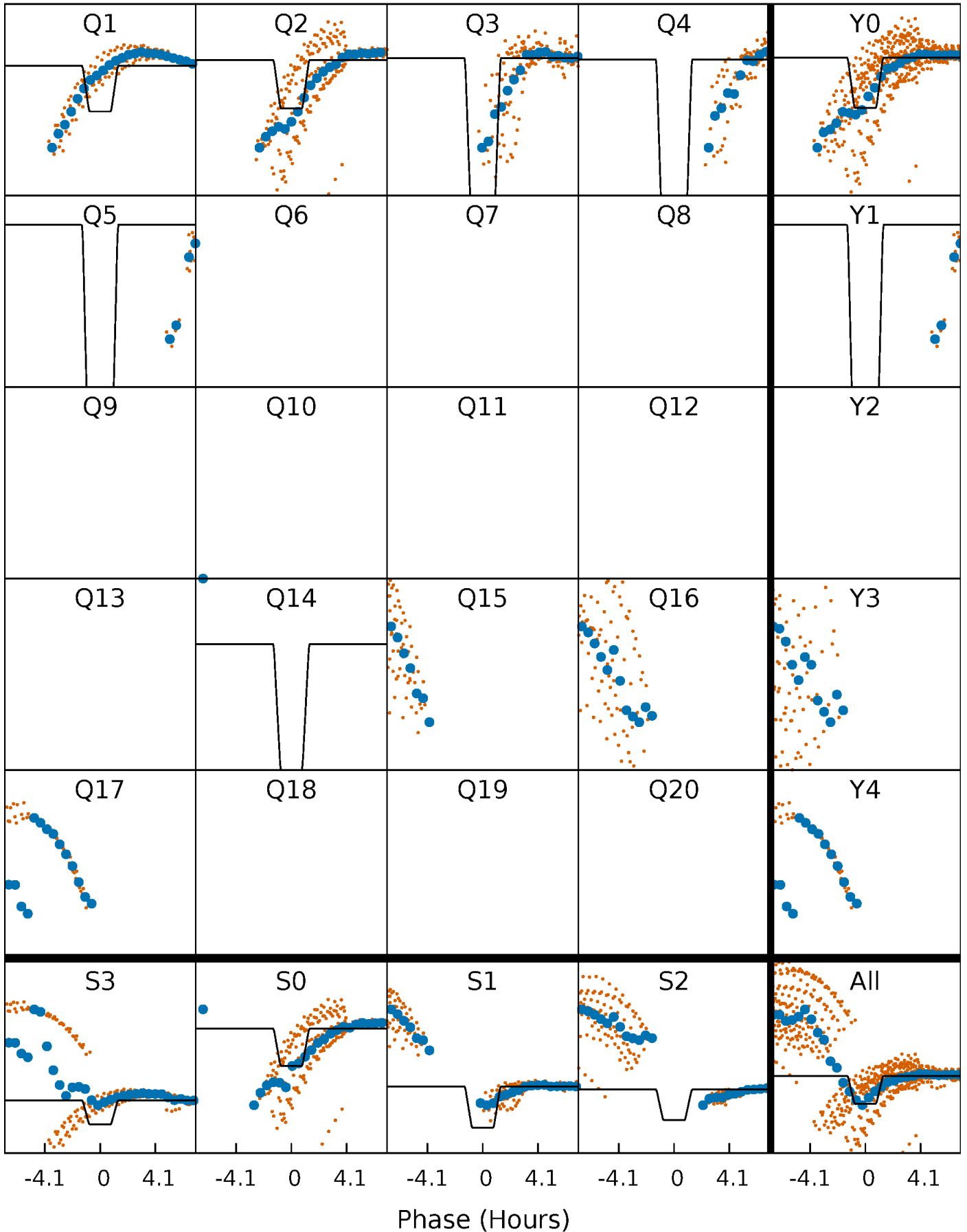
DV Quarter-Phased Transit Curves

TCE 005266937-02 P= 5.910040 Days $T_0=133.540727$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

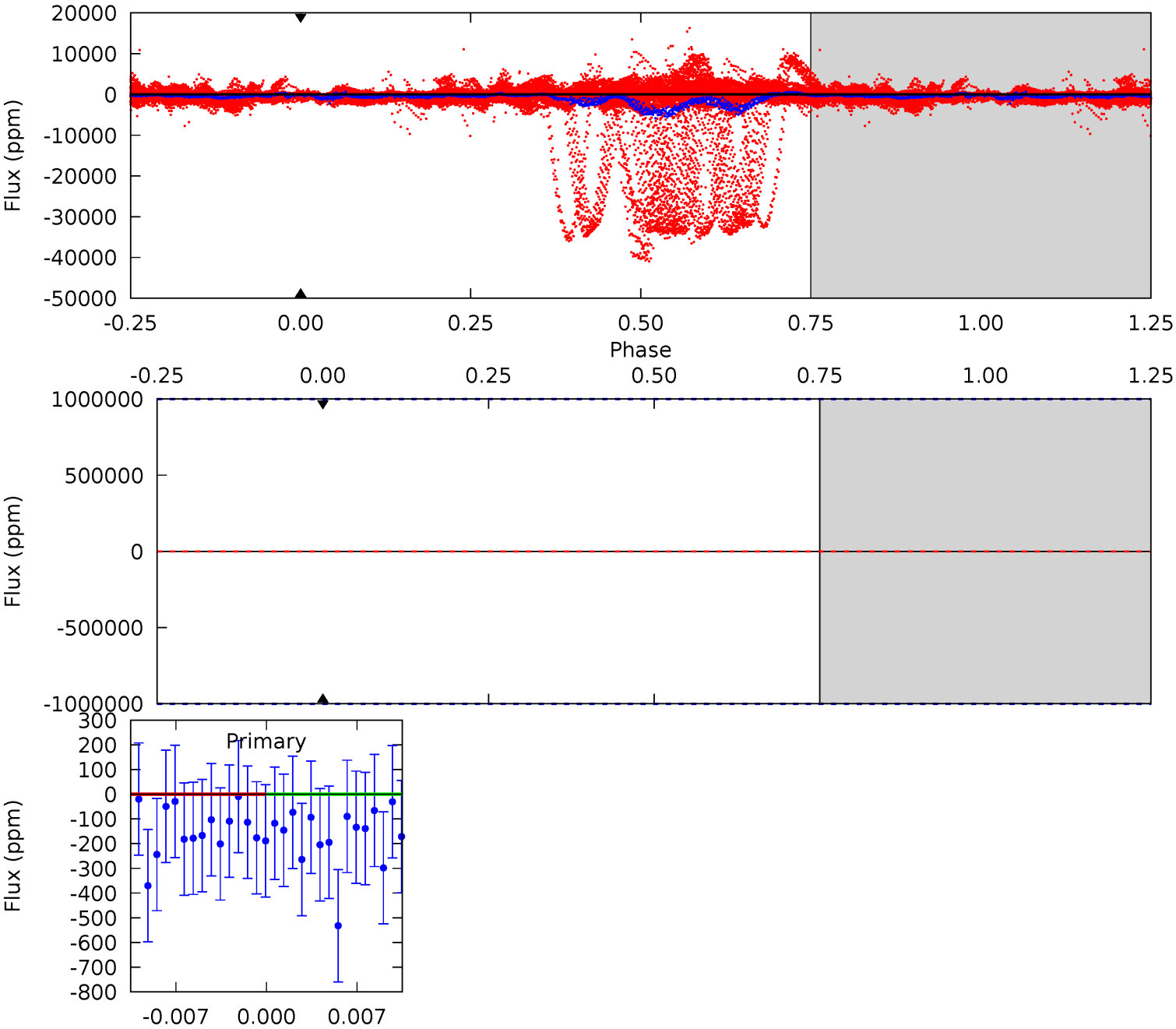
TCE 005266937-02 P= 5.910040 Days $T_0=133.832557$ (BKJD)



DV Model-Shift Uniqueness Test

005266937-02, P = 5.910040 Days, E = 127.630687 Days

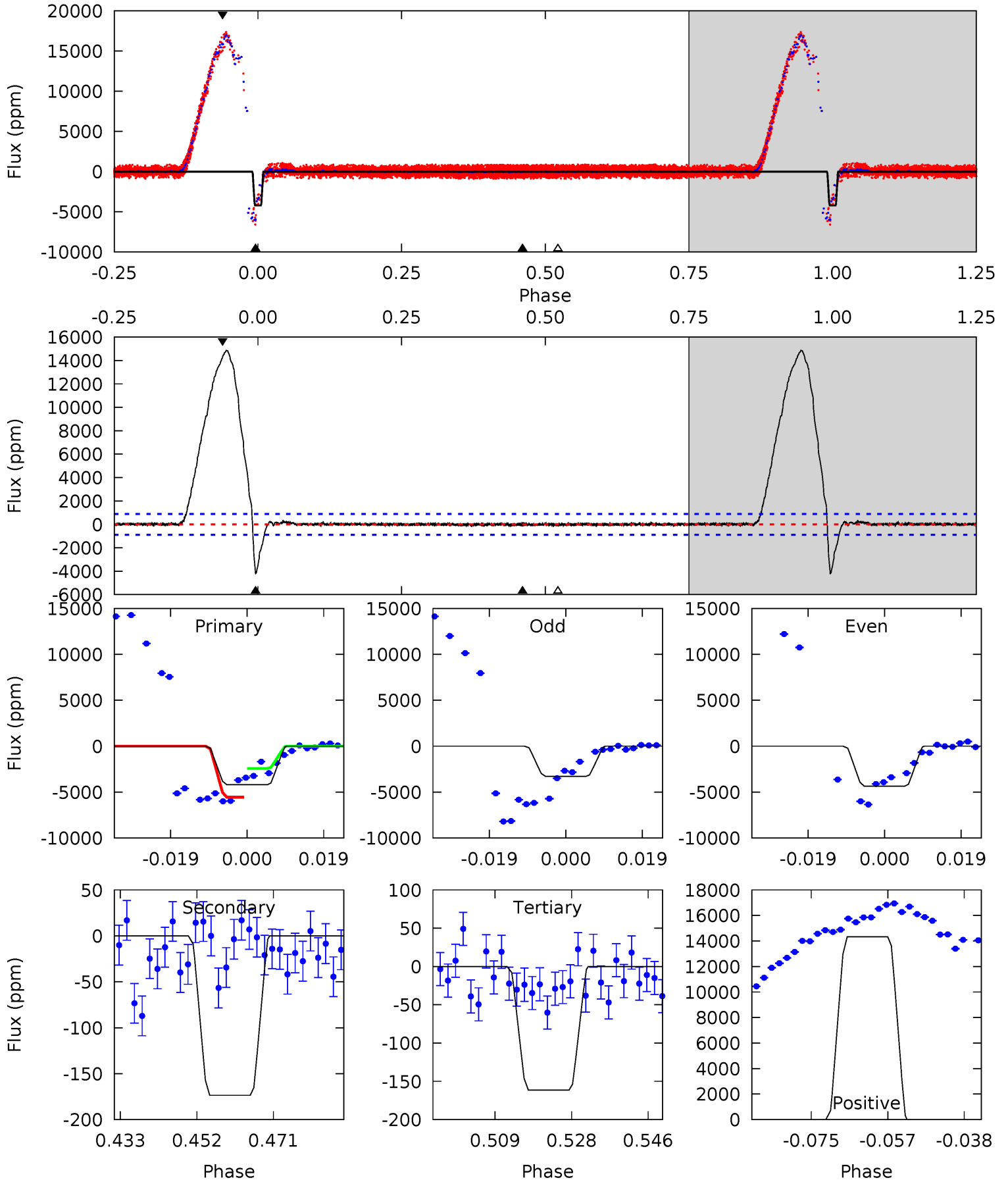
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005266937-02, P = 5.910040 Days, E = 127.922517 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.0	0.95	0.88	78.4	4.90	2.35	4.27	22.1	-55.4	0.07	-77.5	2.78	1.65	0.78	0



Stellar Parameters For KIC 005266937

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5661^{+152}_{-152}	$4.383^{+0.149}_{-0.182}$	$-0.180^{+0.300}_{-0.300}$	$0.987^{+0.269}_{-0.157}$	$0.859^{+0.125}_{-0.073}$	$1.261^{+0.908}_{-0.614}$
	+3%/-3%	+3%/-4%	+167%/-167%	+27%/-16%	+15%/-8%	+72%/-49%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 005266937-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$11.44^{+10.13}_{-7.55}$	1407^{+90}_{-81}	3090^{+10605}_{-15674}	$6.279^{+2582.217}_{-2113.078}$
Alt.	-174 ± 183	$11.77^{+10.77}_{-7.56}$	1407^{+100}_{-80}	2586^{+921}_{-4766}	$1.913^{+13.185}_{-2.008}$

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 $A_{obs} \gg 1.0$

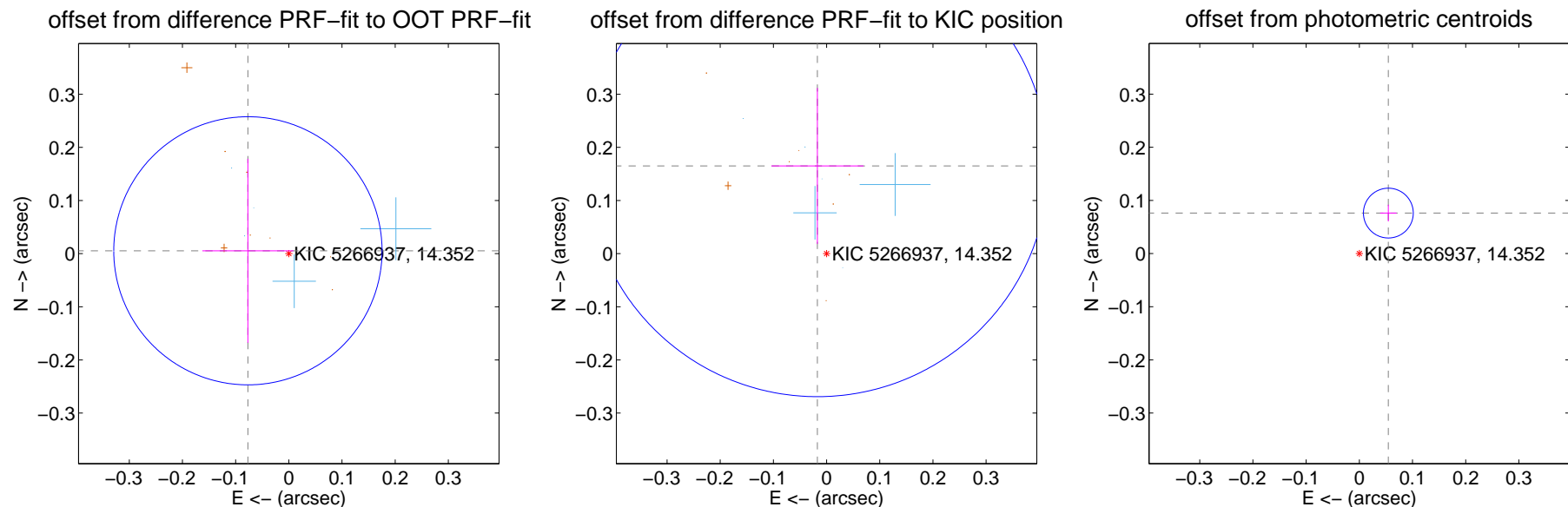
DV Centroid Data

Supplemental centroid analysis for 005266937-02. Kepler magnitude: 14.35. Transit SNR -1.00

There are 7 quarters with good PRF difference image offsets

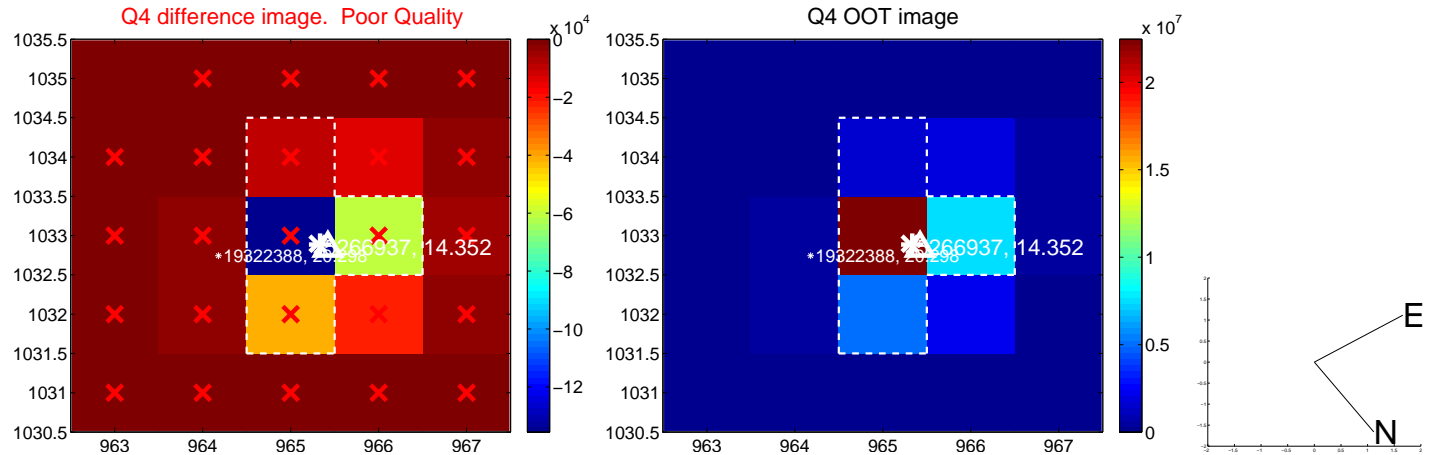
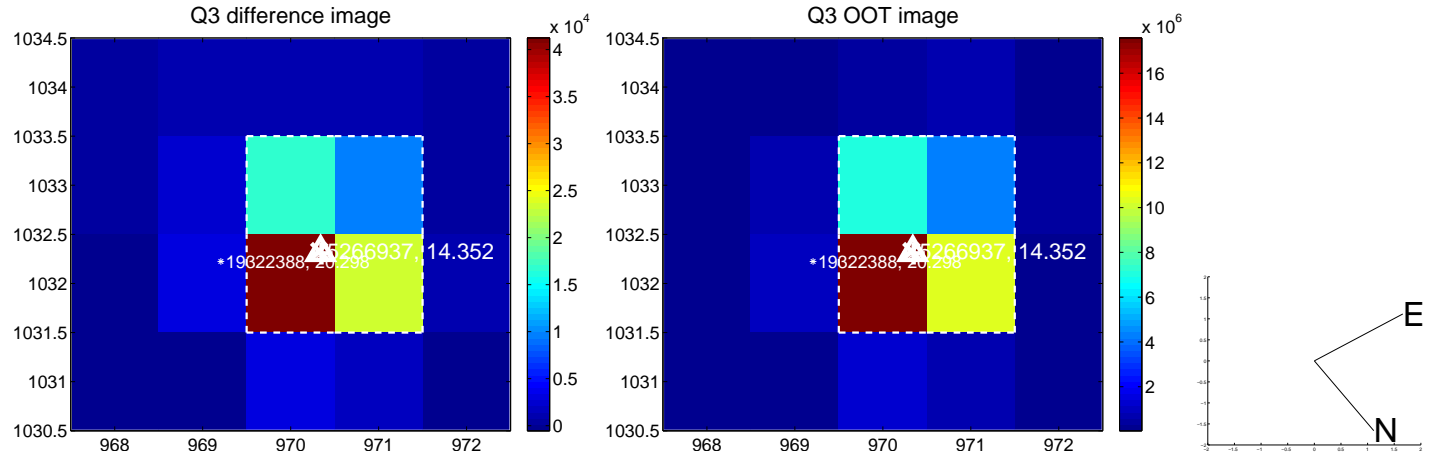
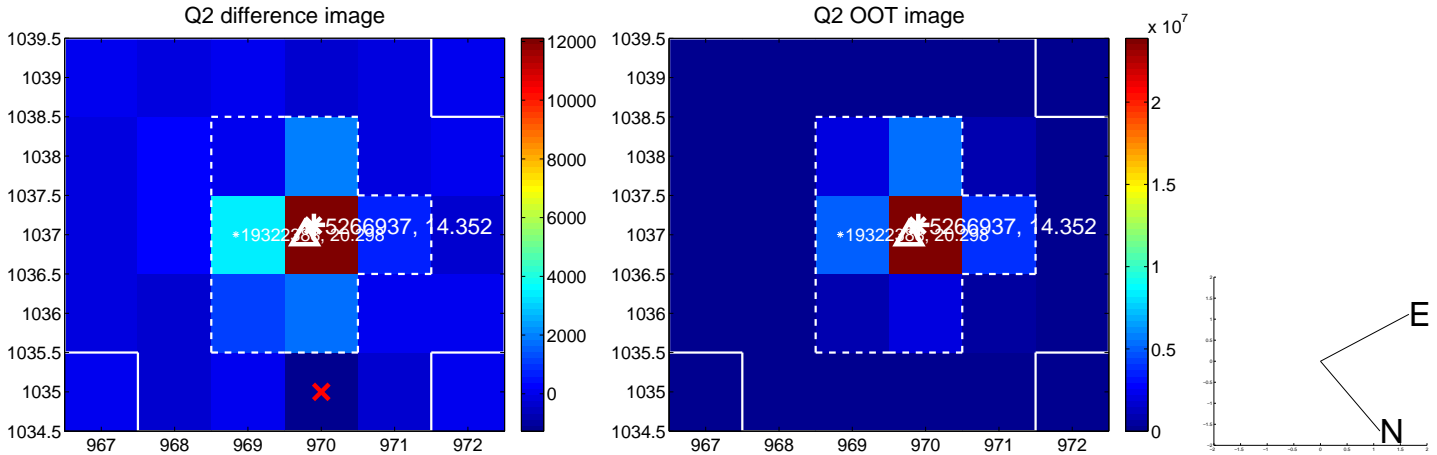
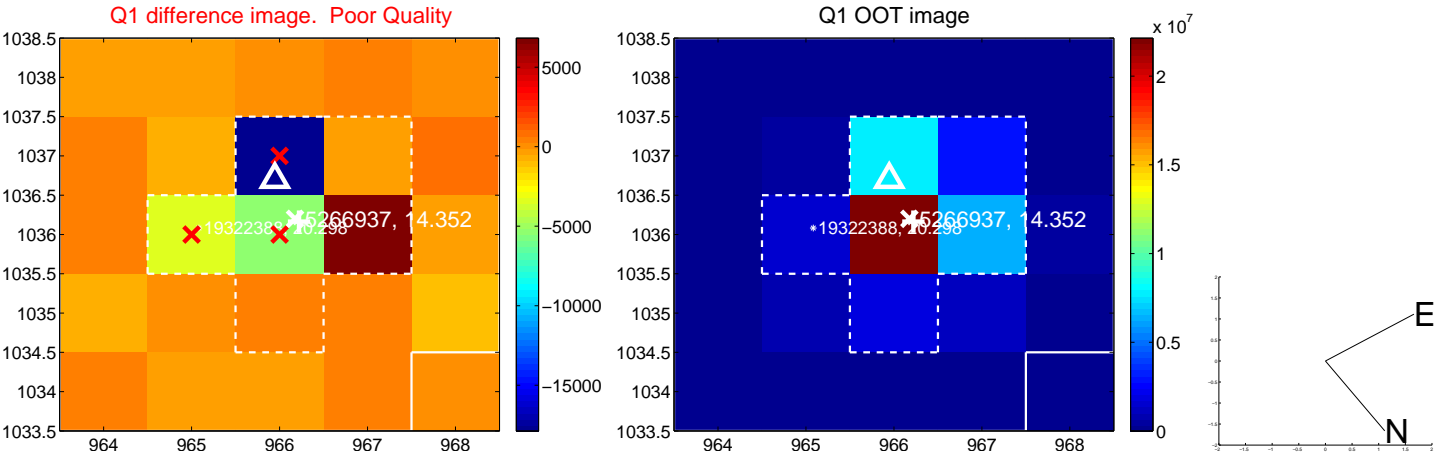
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.077 ± 0.084	0.92	0.077 ± 0.086	0.005 ± 0.173
PRF-fit source offset from KIC position	0.166 ± 0.145	1.15	0.017 ± 0.087	0.165 ± 0.147
photometric centroid source offset	0.09 ± 0.02	6.00	-0.05 ± 0.02	0.08 ± 0.02

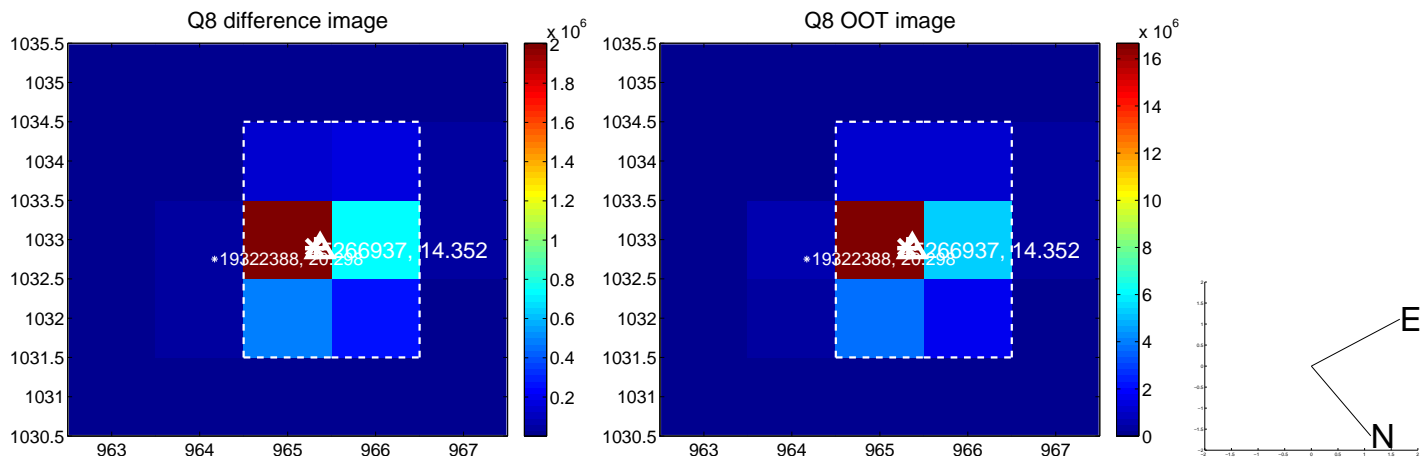
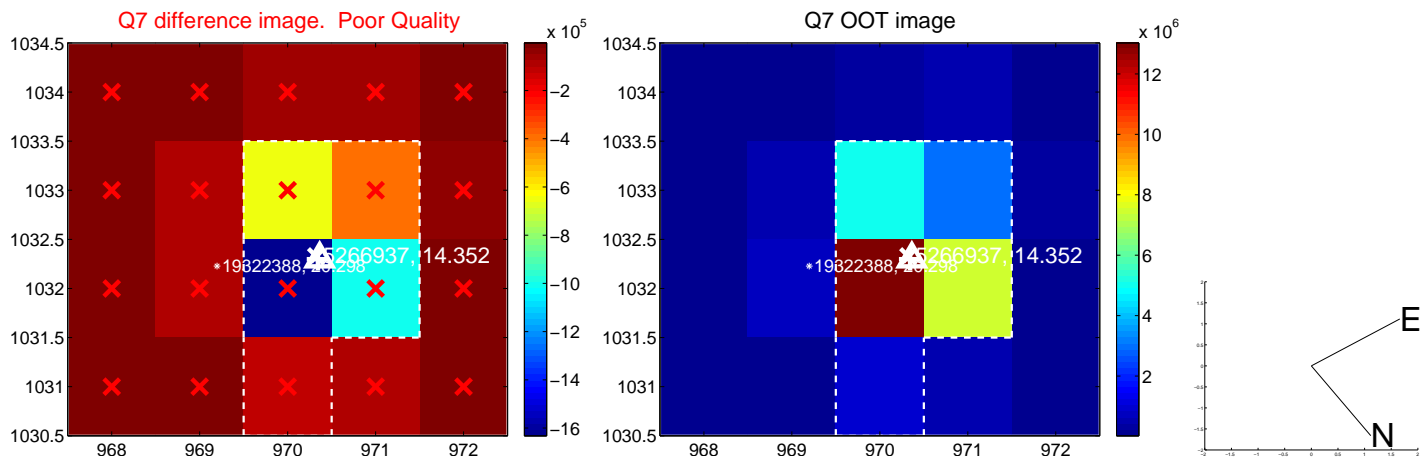
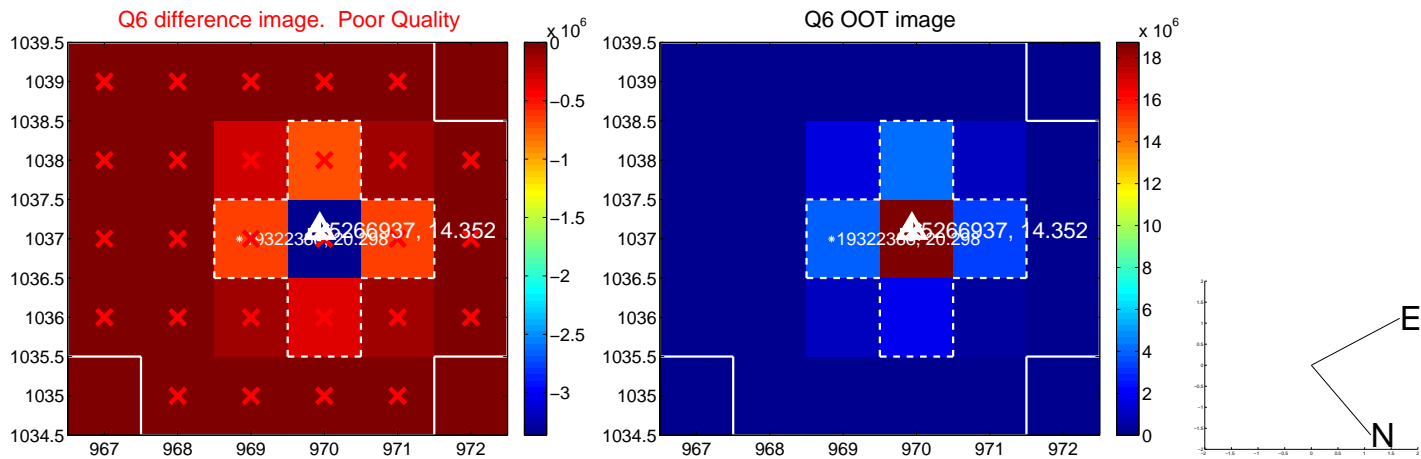
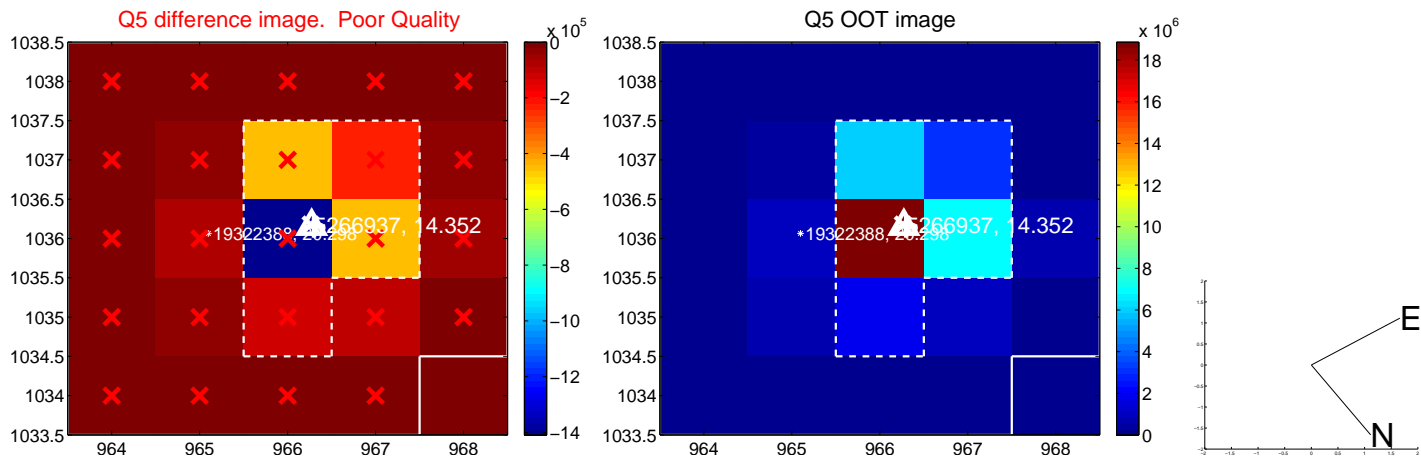


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

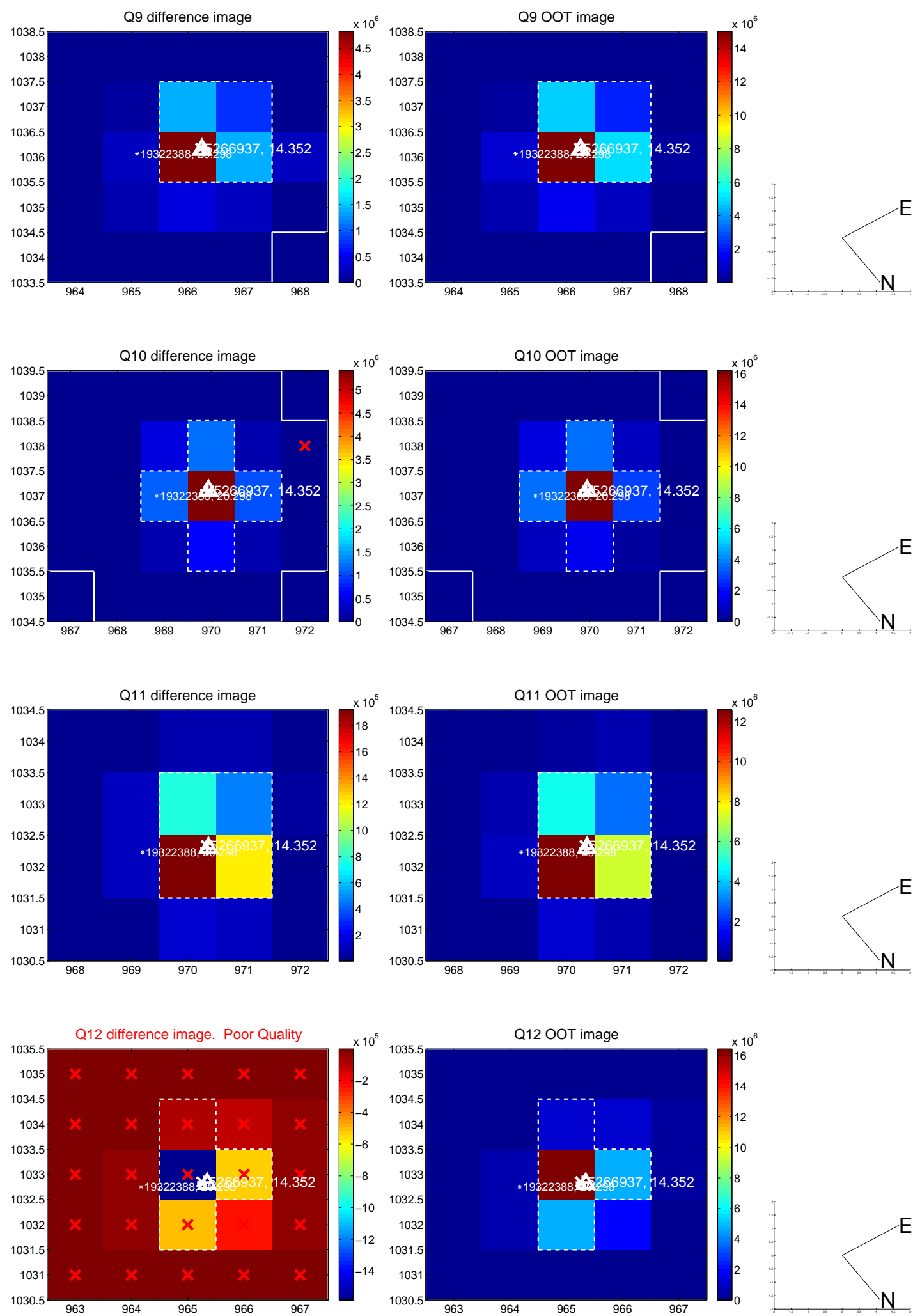
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



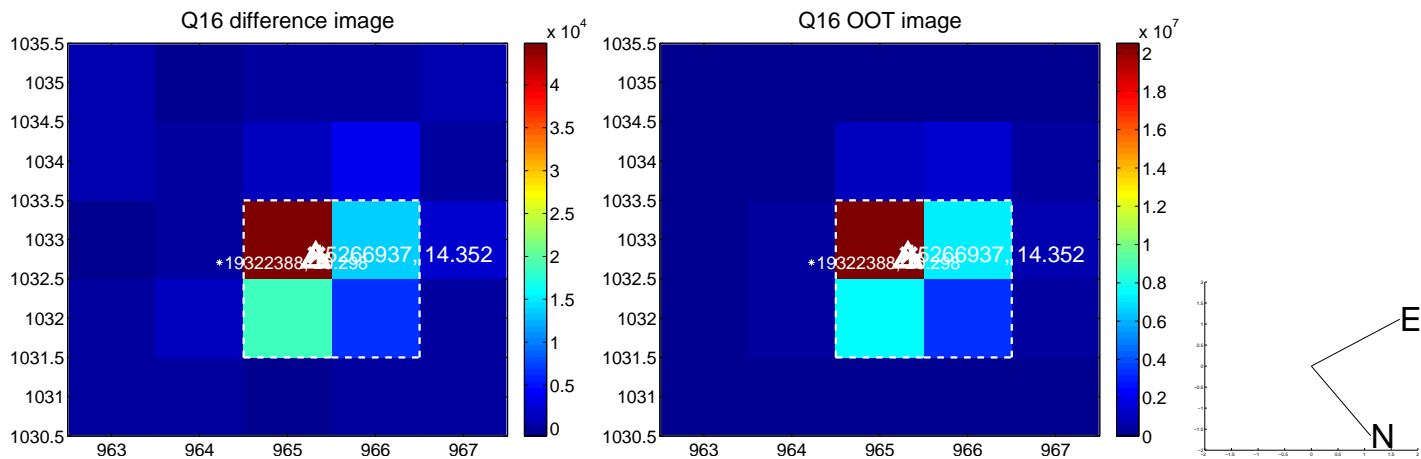
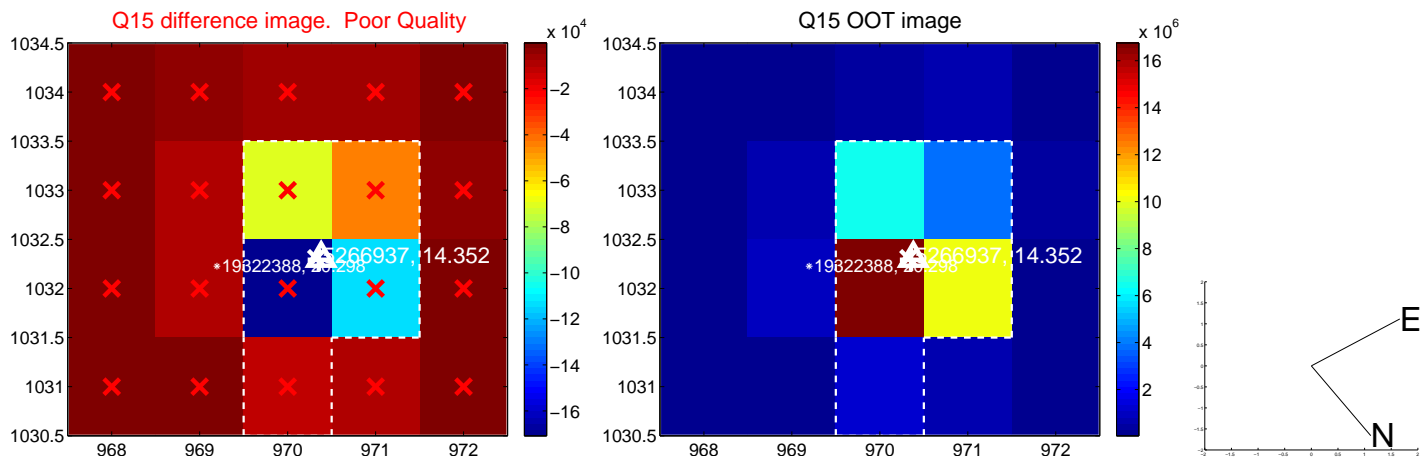
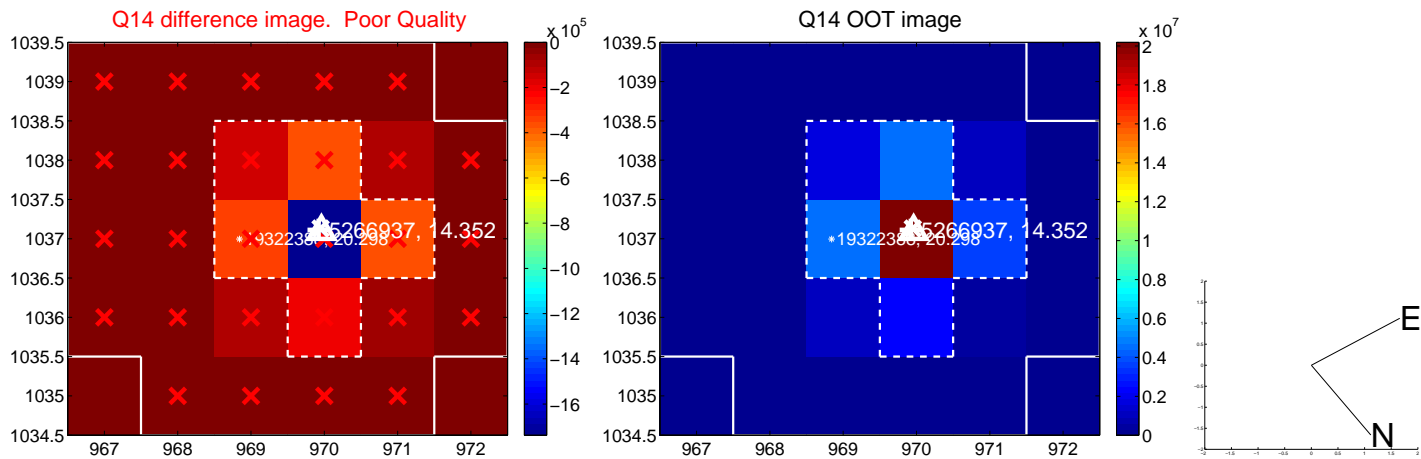
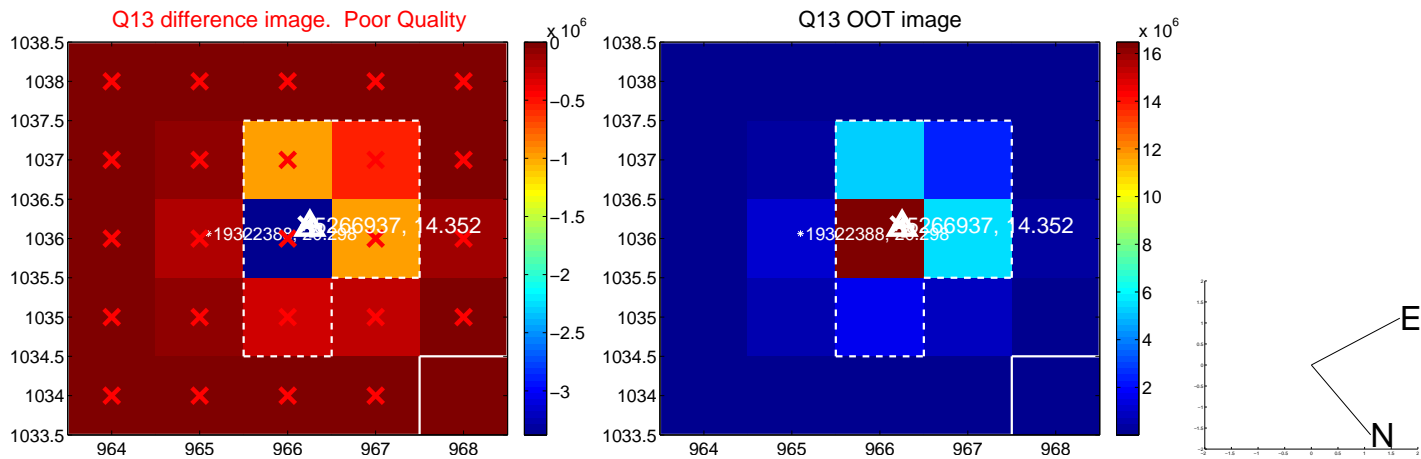
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



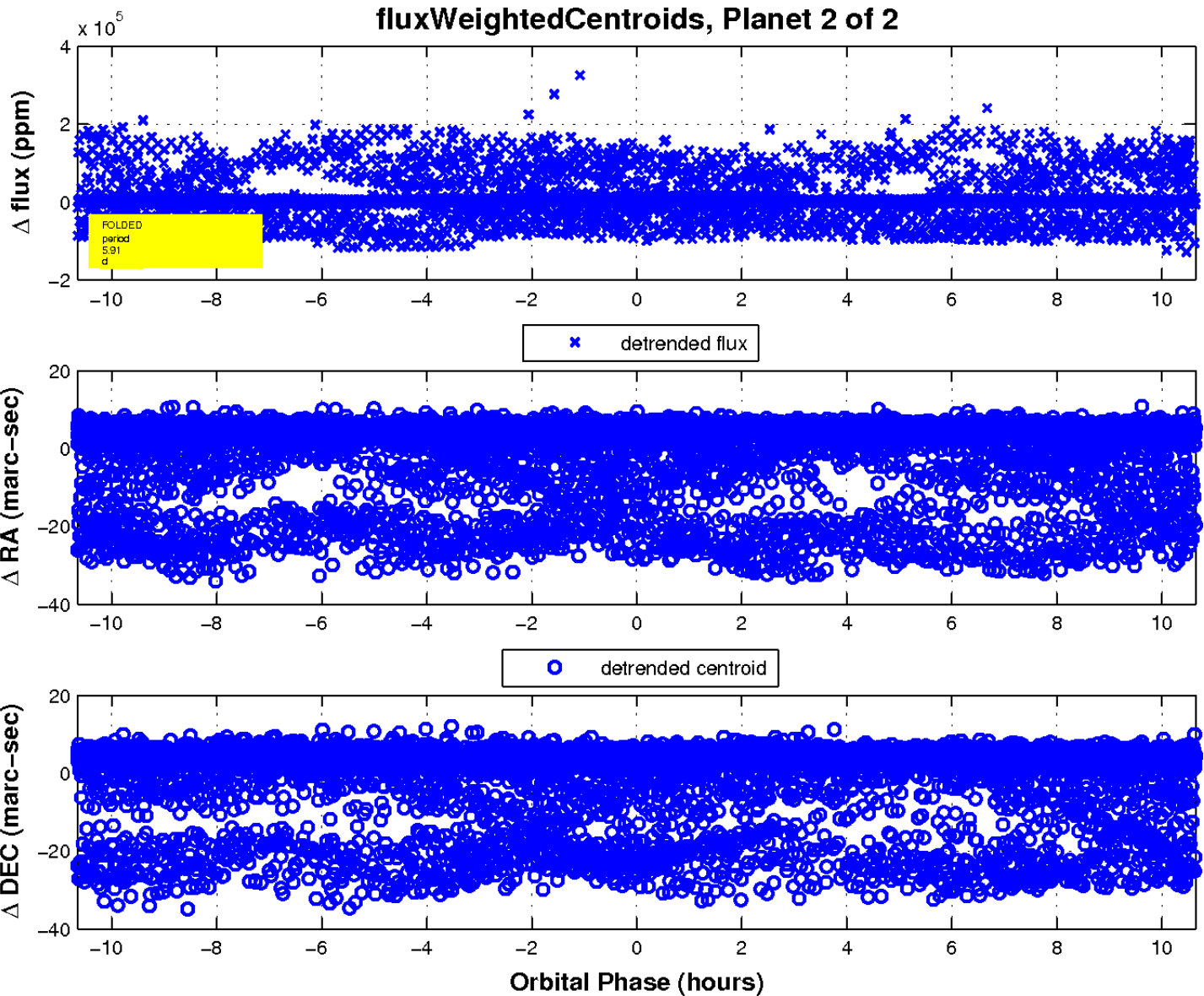
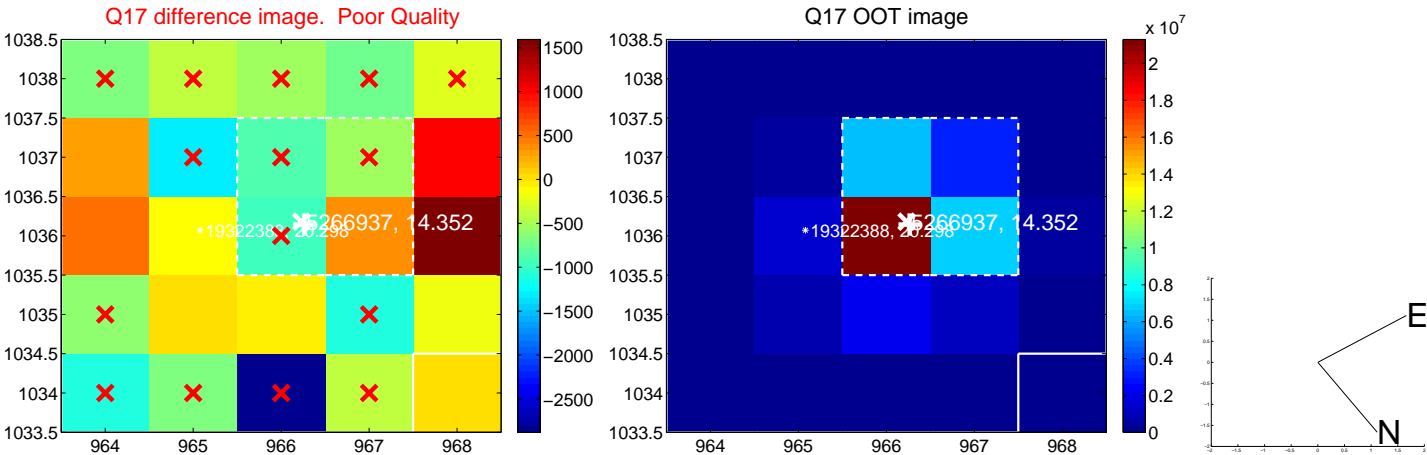
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

