

KIC 007362364

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})
007362364-01	OBS	No	0.566754	131.864789	18.9	4.071	13.6	8.2	0.87	5743	0.38	4701.85
007362364-02	OBS	No	37.552986	155.393391	721.9	1.136	13.2	15.3	0.87	5743	2.56	17.54
007362364-03	OBS	No	17.634593	145.493816	484.1	1.749	13.1	14.9	0.87	5743	2.20	48.04
007362364-04	OBS	No	17.136345	134.003121	404.0	9.953	11.3	11.6	0.87	5743	1.97	49.92
007362364-05	OBS	No	54.148503	135.670308	483.8	4.492	9.6	13.9	0.87	5743	2.08	10.77
007362364-06	OBS	No	15.825305	140.636258	173.9	0.877	10.7	4.4	0.87	5743	1.35	55.50

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007362364-01	OBS	FP	0.00	1	0	1	1	LPP_DV—CENT_KIC_POS—HALO_GHOST—EPHEM_MATCH
007362364-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS—HALO_GHOST
007362364-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—CENT_KIC_POS—CENT_UNCERTAIN
007362364-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_KIC_POS
007362364-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
007362364-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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.

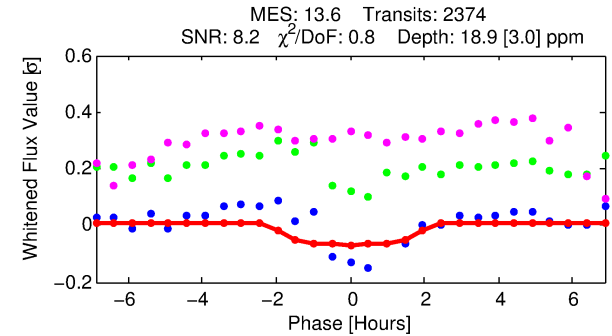
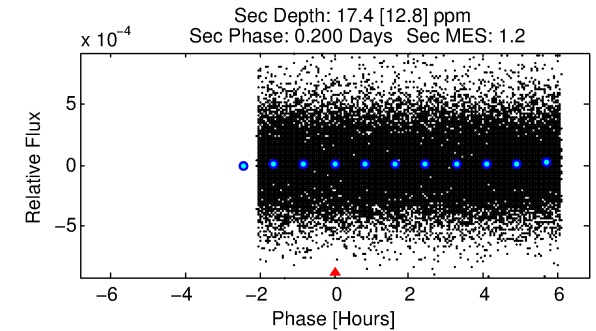
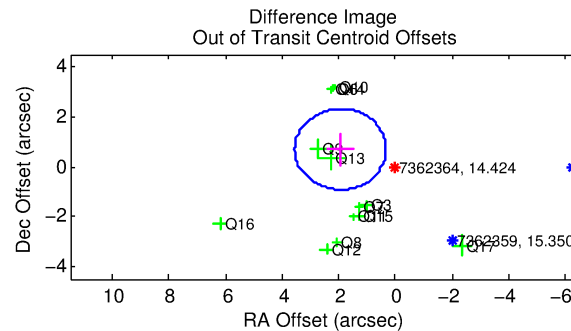
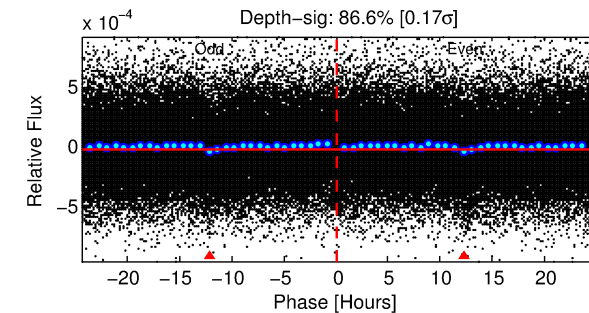
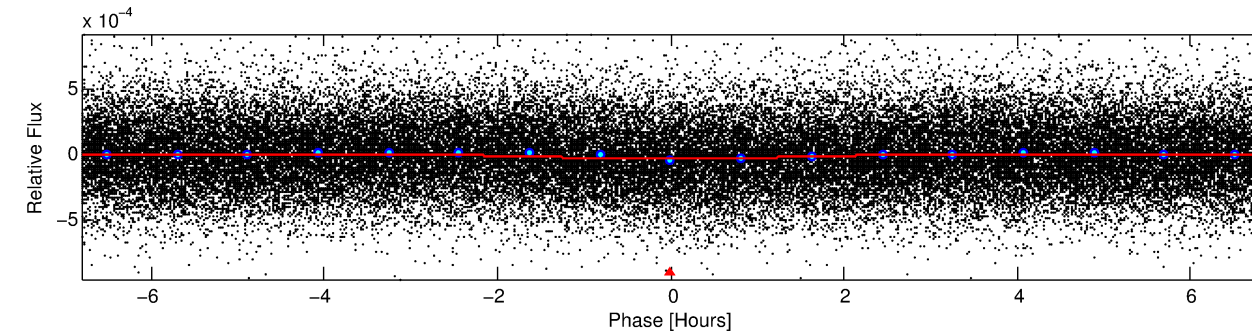
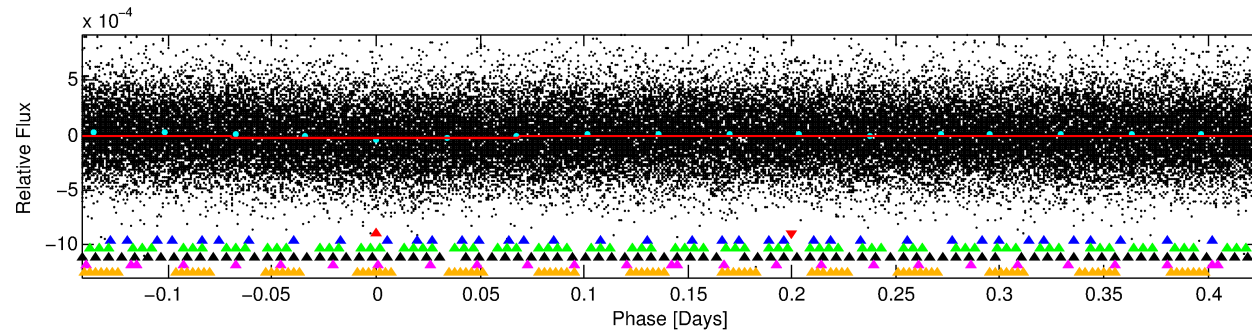
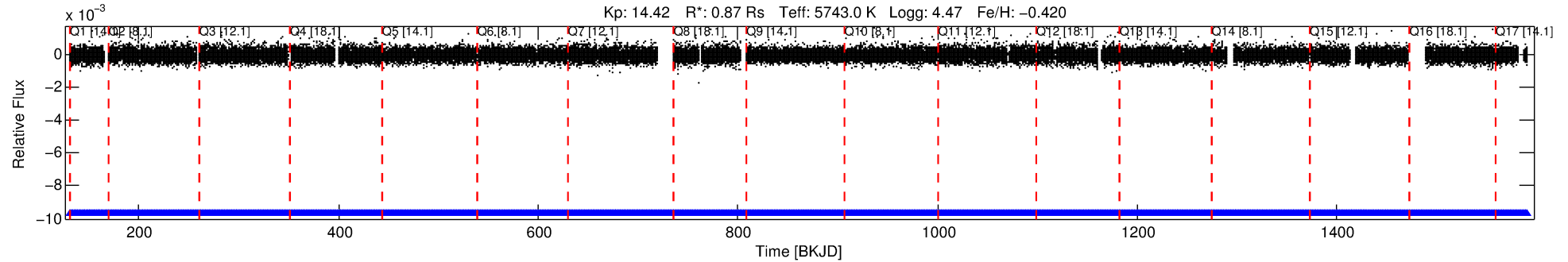
Ephemeris Match Information For 007362364-01

TCE (1)	KIC	Parent (2)	Parent KIC	$P_1:P_2$	Dist ($''$)	Δ Row	Δ Col	m_2	m_1	D_2/D_1	Mechanism	Flag	σ_P	σ_T
007362364-01	7362364	RR-Lyr-pri	7198959	1:1	873.8	11	219	7.86	14.42	32805.00	Direct-PRF	0	1.25	21.95

Notes: $P_1:P_2$ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m_2 and m_1 are the magnitudes of the parent and child. D_2/D_1 is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

KIC: 7362364 Candidate: 1 of 6 Period: 0.567 d



DV Fit Results:

Period = 0.56675 [0.00001] d
Epoch = 131.8648 [0.0054] BKJD
Rp/R* = 0.0040 [0.0054]
a/R* = 1.21 [2.40]
b = 0.38 [14.16]
Seff = 4701.85 [1480.05]
Teq = 2112 [166] K
Rp = 0.38 [0.52] Re
a = 0.0125 [0.0025] AU
Ag = 10.27 [28.63] [0.32 σ]
Teffp = 5844 [4054] K [0.92 σ]

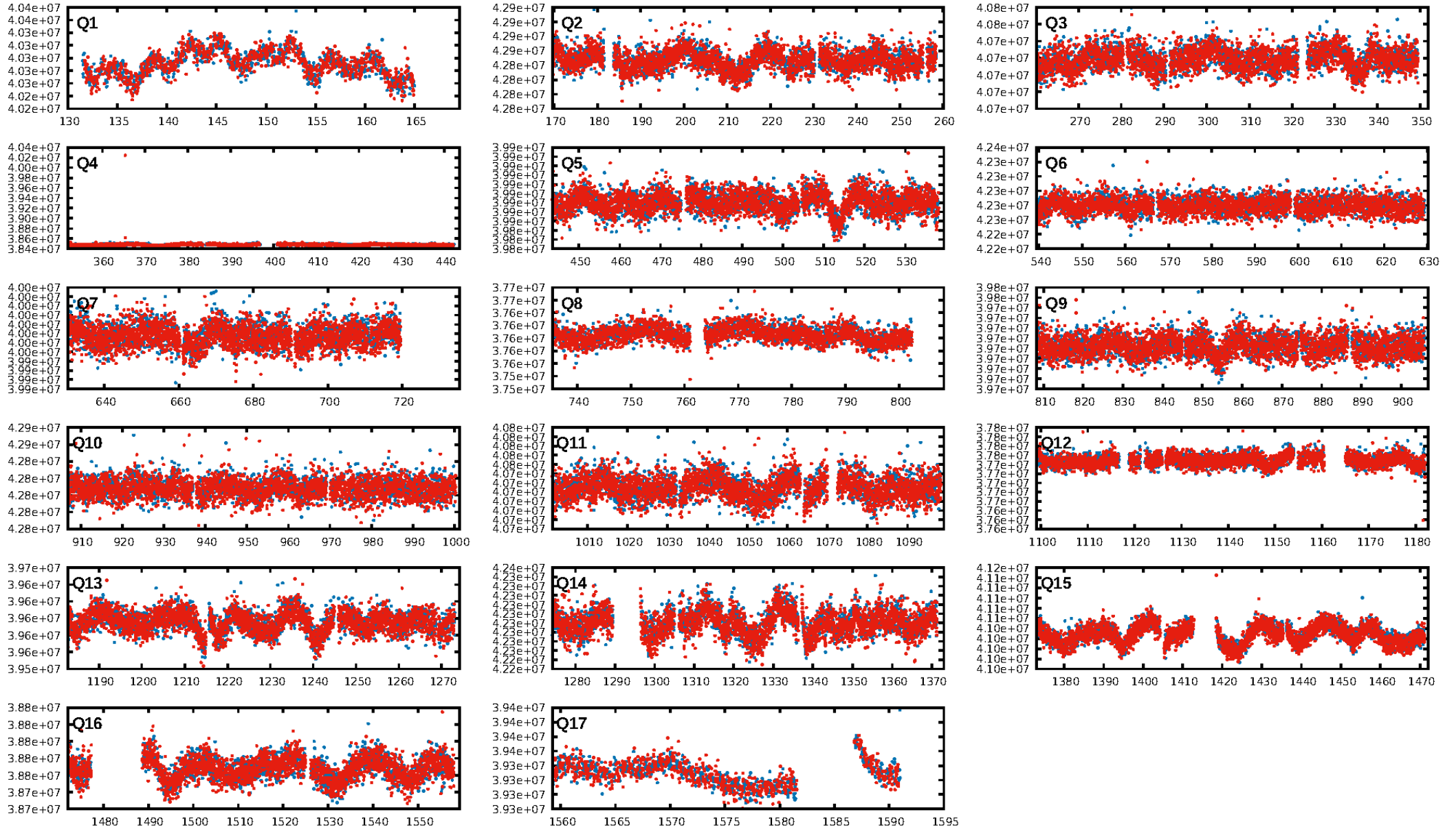
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [87.95 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.02e-20
RollingBand-fgt: 1.00 [2268/2268]
GhostDiagnostic-chr: 0.1298
Centroid-sig: 0.0%
Centroid-so: 2.029 arcsec [2.14 σ]
OotOffset-rm: 2.063 arcsec [3.83 σ]
KicOffset-rm: 1.202 arcsec [2.09 σ]
OotOffset-st: 3/4/3/3 [13]
KicOffset-st: 3/4/3/3 [13]
DiffImageQuality-fgm: 0.38 [5/13]
DiffImageOverlap-fno: 1.00 [17/17]

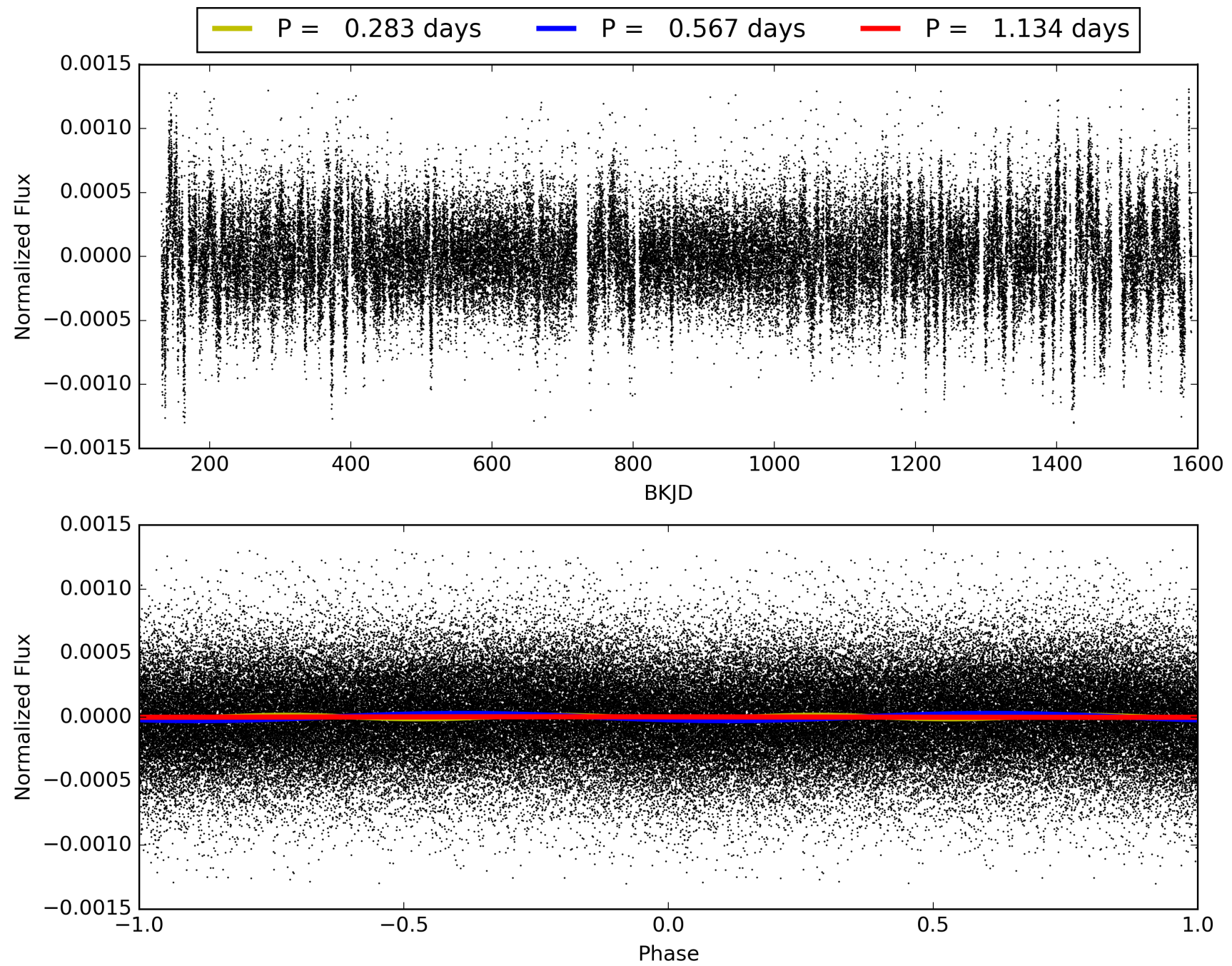
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 07:37:58 Z

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

TCE 007362364-01, PDC Light Curves

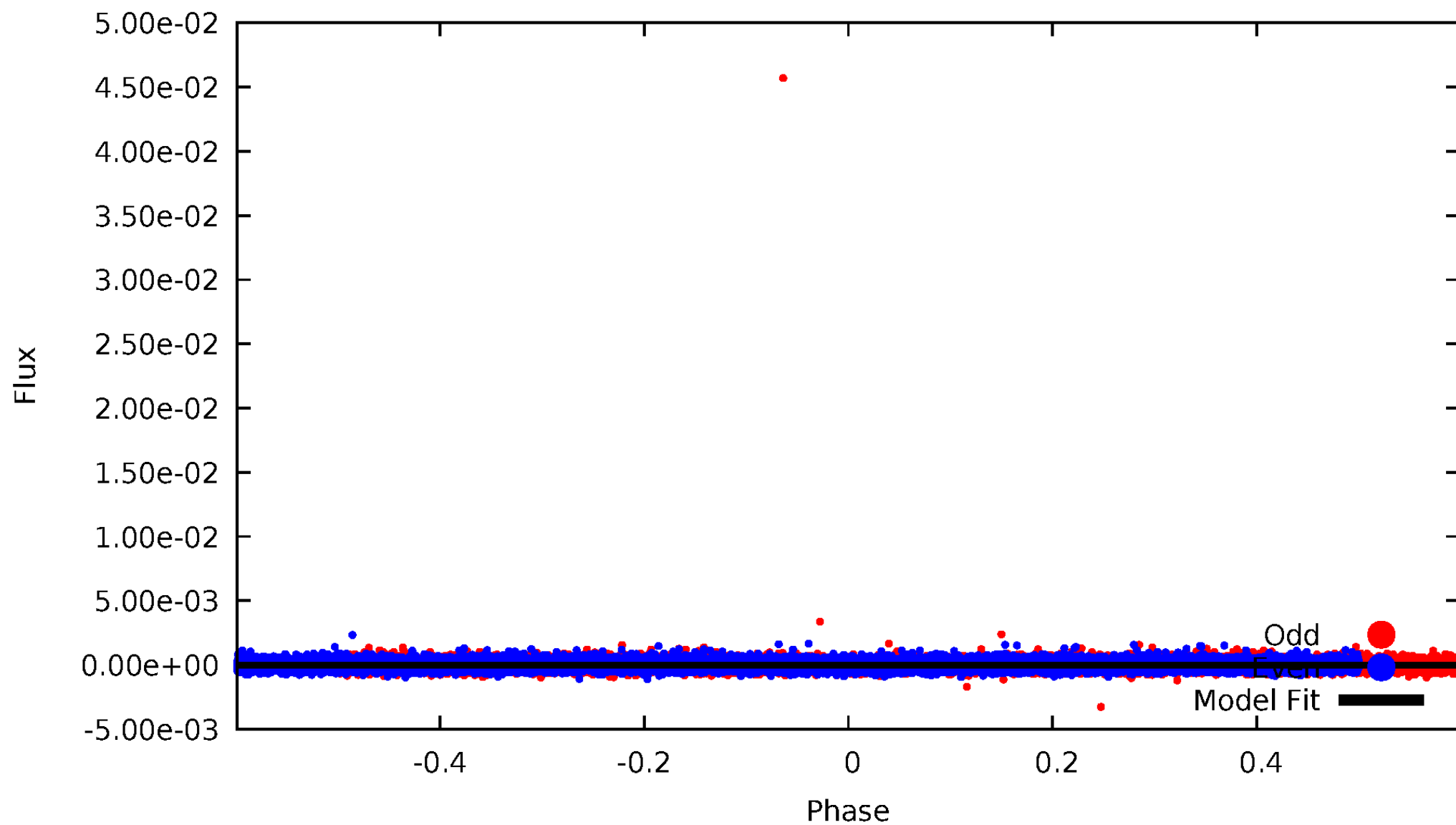


TCE 007362364-01



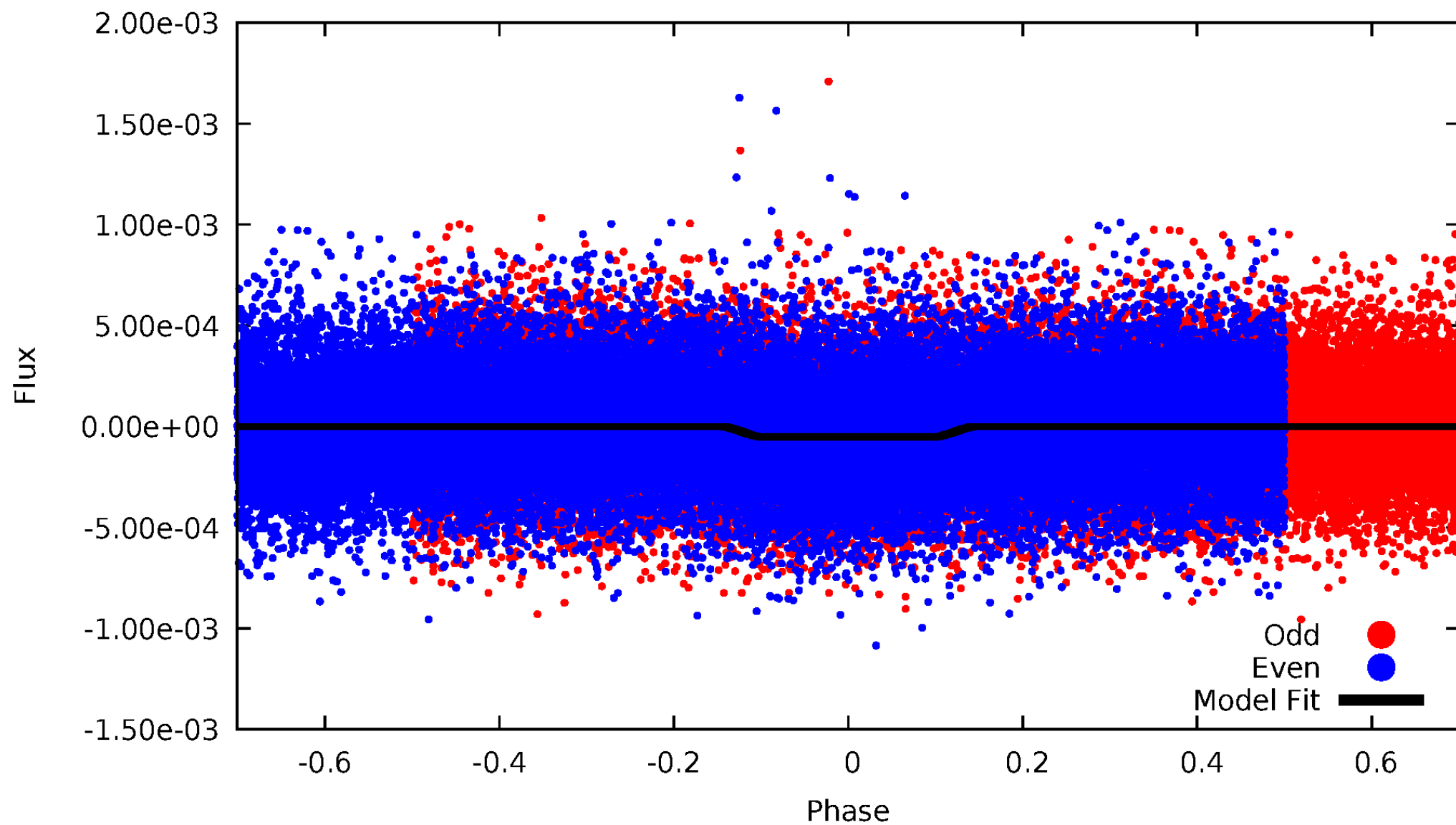
DV Odd/Even

TCE 007362364-01



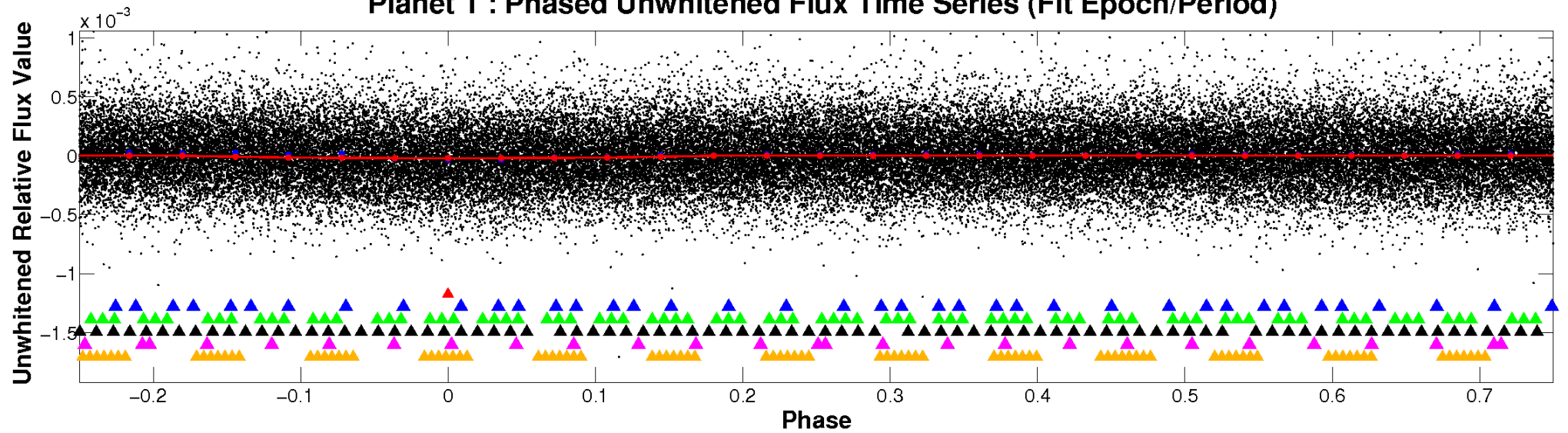
ALT Odd/Even

TCE 007362364-01

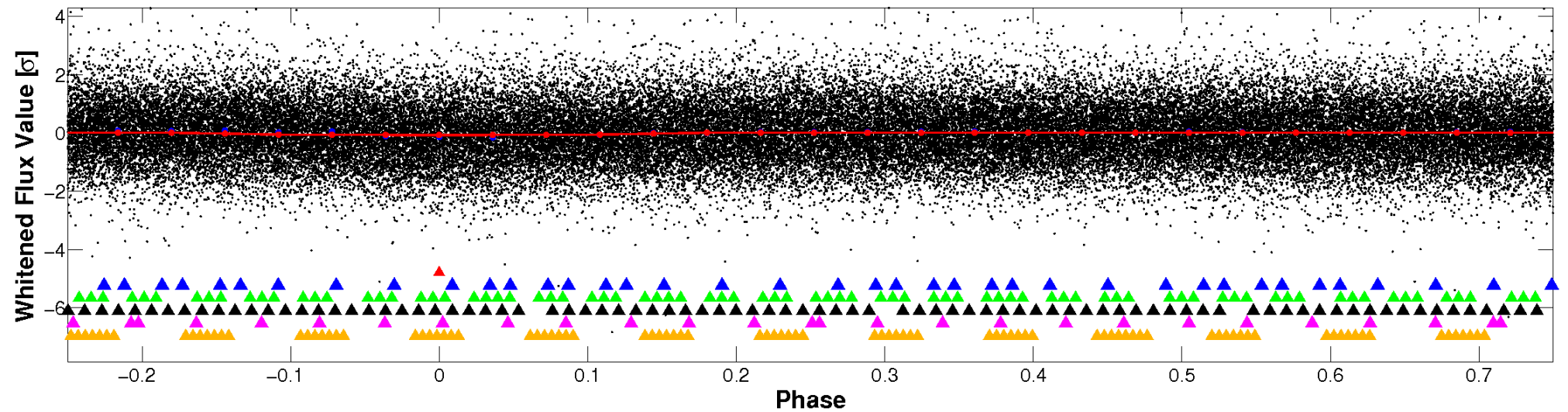


Non-Whitened Vs. Whitened Light Curve

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

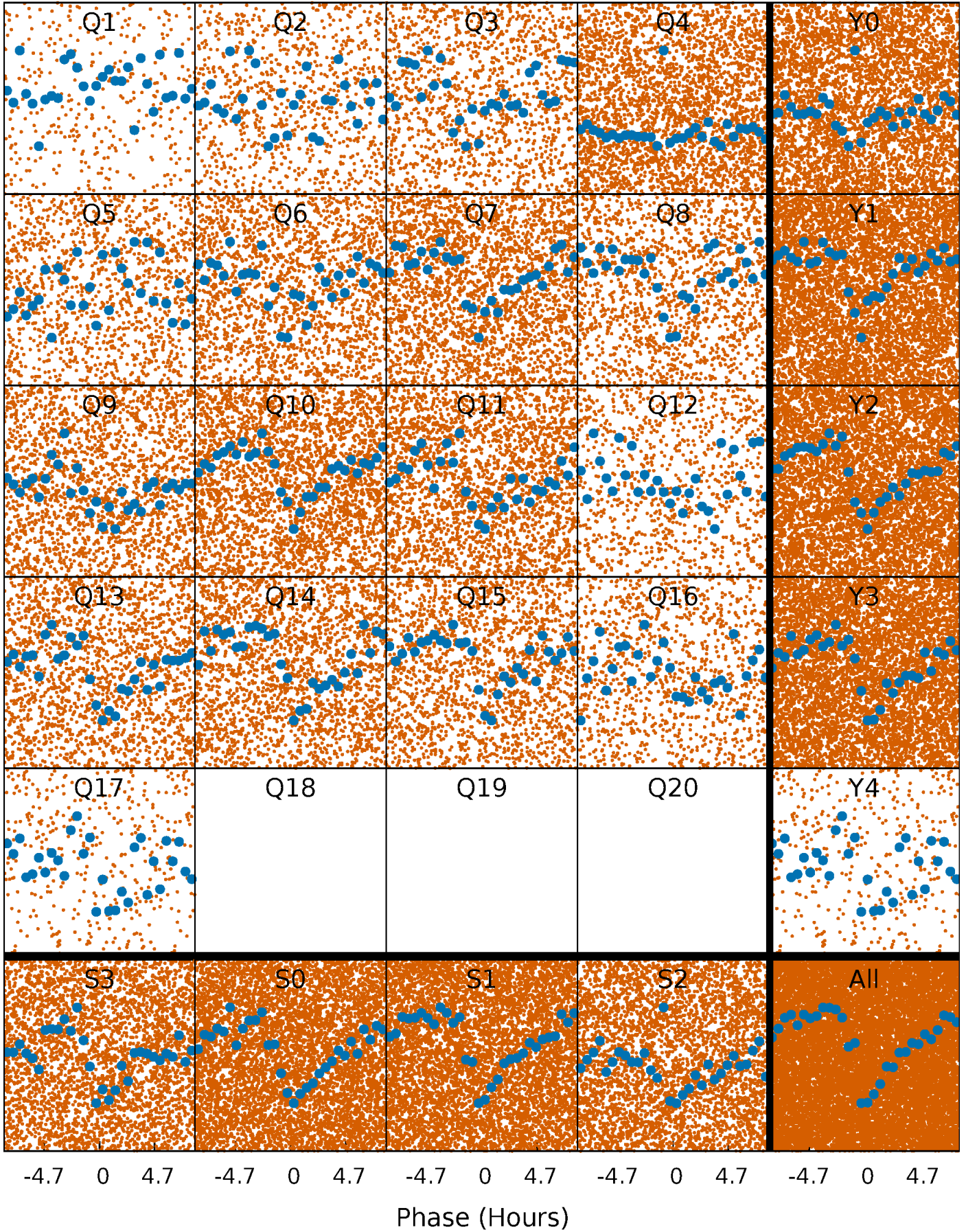


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



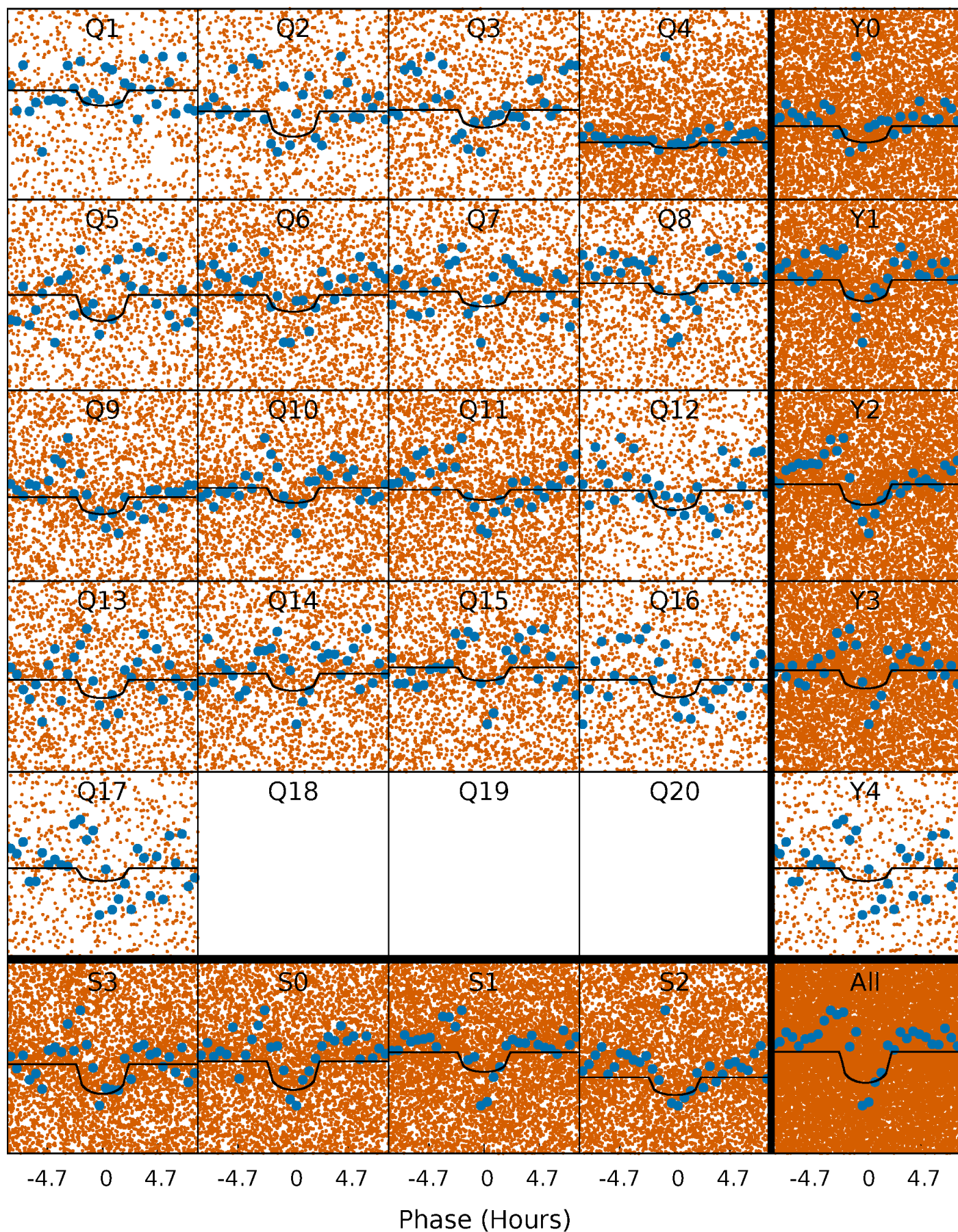
PDC Quarter-Phased Transit Curves

TCE 007362364-01 P= 0.566754 Days $T_0=131.864789$ (BKJD)



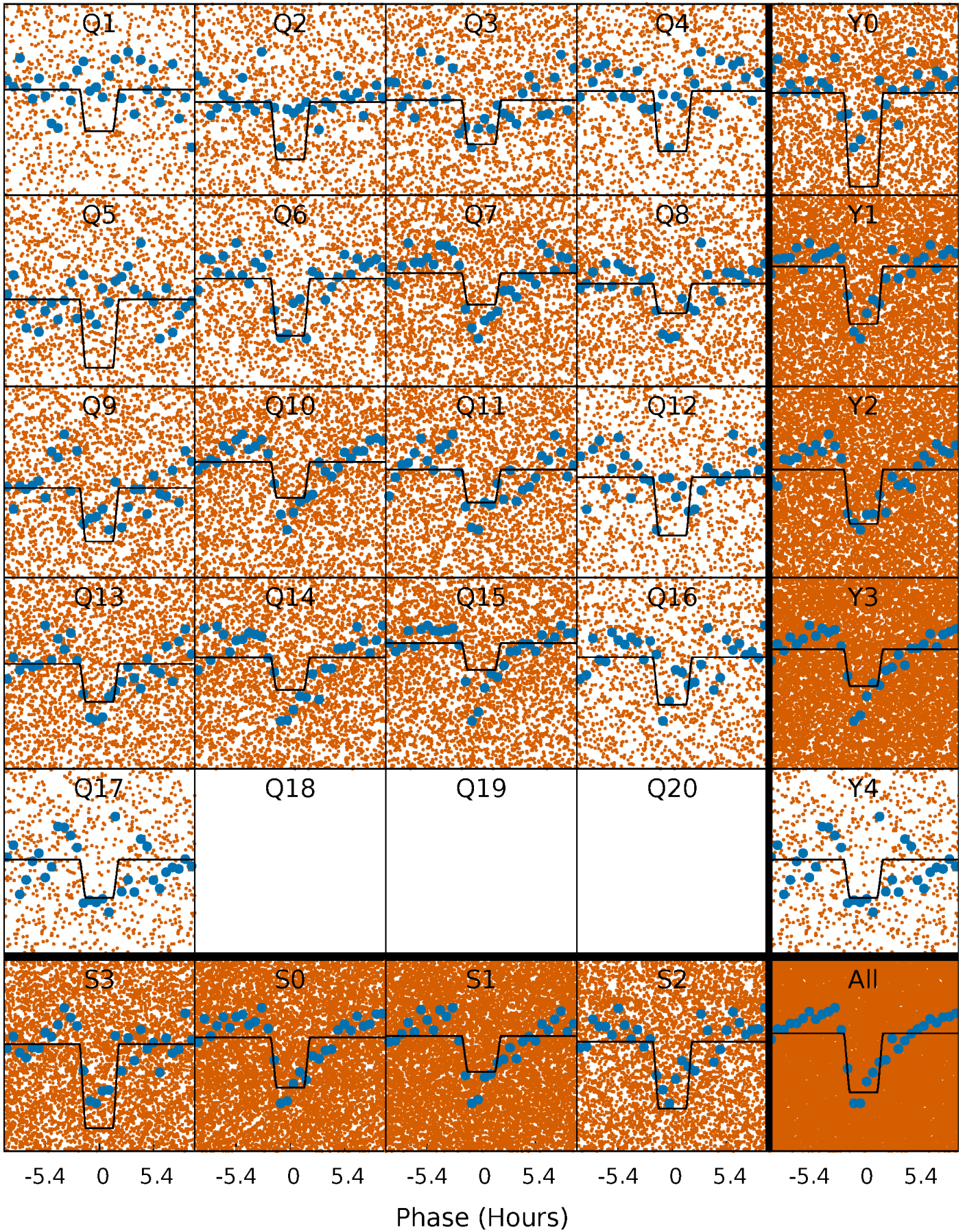
DV Quarter-Phased Transit Curves

TCE 007362364-01 P= 0.566754 Days $T_0=131.864789$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

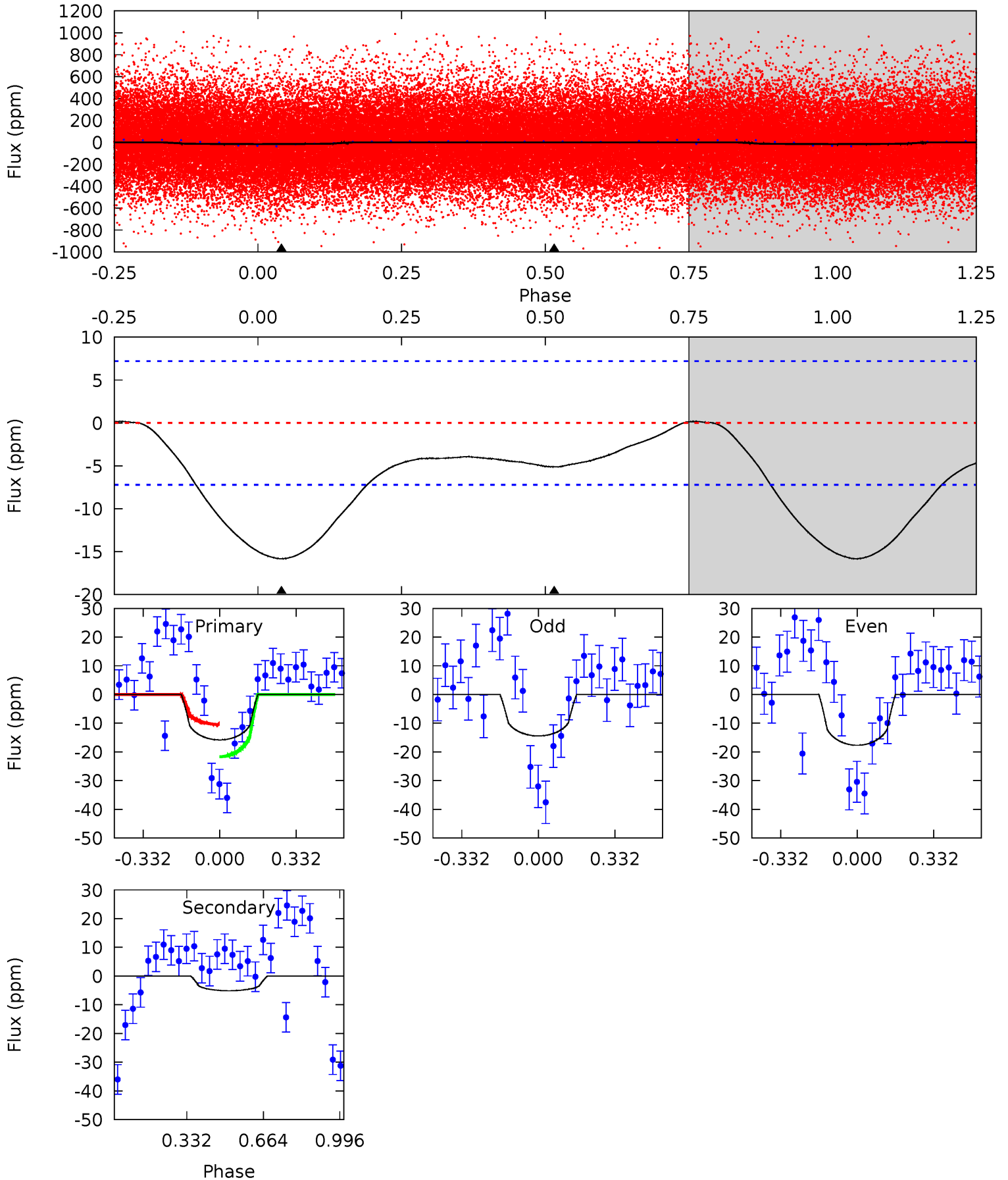
TCE 007362364-01 P= 0.566788 Days $T_0=131.841109$ (BKJD)



DV Model-Shift Uniqueness Test

007362364-01, P = 0.566754 Days, E = 131.298035 Days

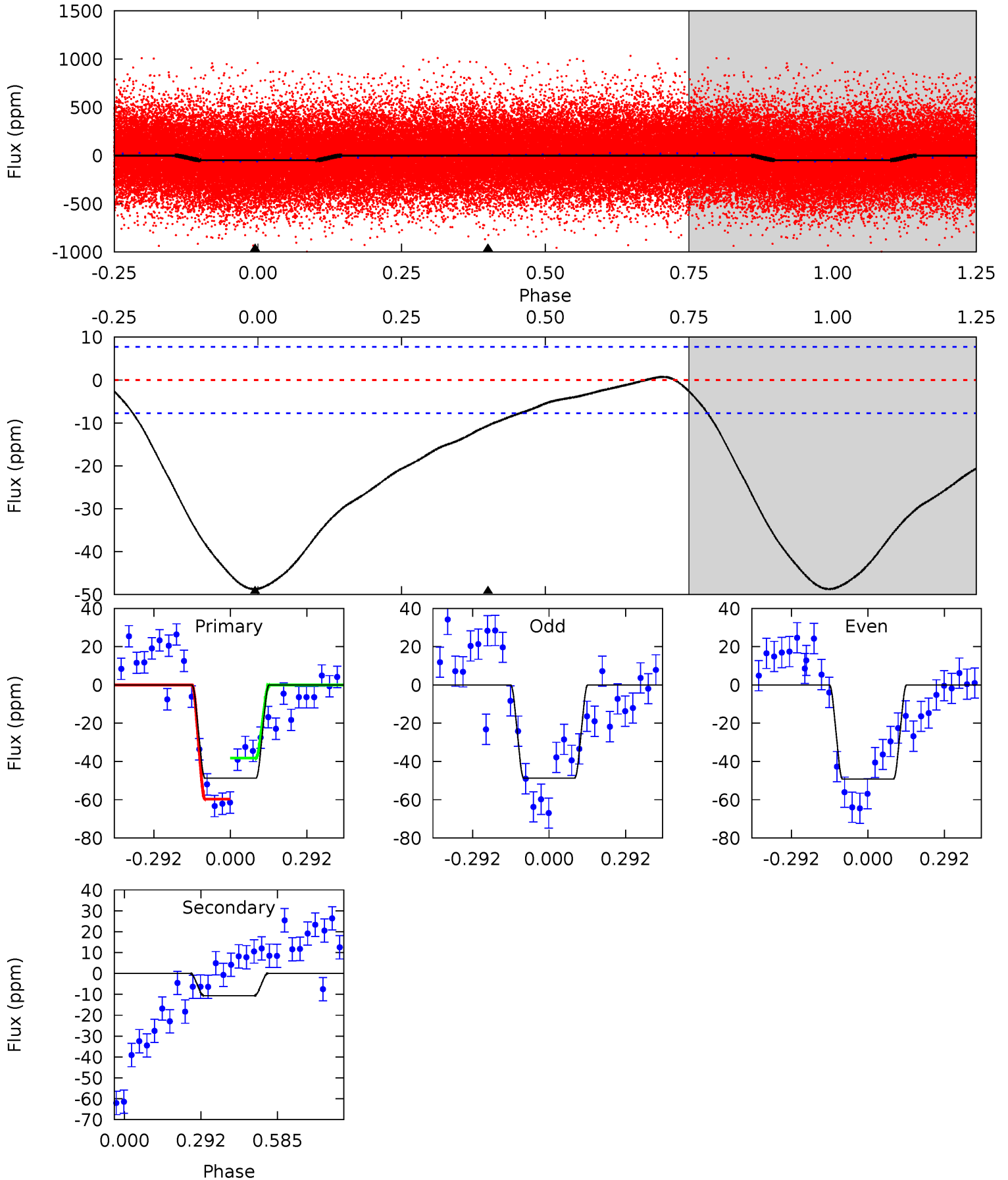
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.45	3.06	0	0	4.31	0.97	1.10	9.45	9.45	3.06	3.06	0.97	0.67	0.01	3.35



Alt Model-Shift Uniqueness Test

007362364-01, P = 0.566788 Days, E = 131.274321 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.3	5.95	0	0	4.33	1.05	0.42	27.3	27.3	5.95	5.95	0.14	0.94	0.02	6.05



Stellar Parameters For KIC 007362364

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5743^{+155}_{-155}	$4.471^{+0.108}_{-0.162}$	$-0.420^{+0.300}_{-0.300}$	$0.871^{+0.209}_{-0.112}$	$0.820^{+0.114}_{-0.061}$	$1.746^{+0.712}_{-0.778}$
	+3%/-3%	+2%/-4%	+71%/-71%	+24%/-13%	+14%/-7%	+41%/-45%
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 007362364-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-5 ± 2	$0.54^{+0.47}_{-0.36}$	2972^{+192}_{-154}	3814^{+2534}_{-1246}	$1.490^{+13.729}_{-1.115}$
Alt.	-11 ± 2	$0.76^{+0.50}_{-0.42}$	2964^{+192}_{-147}	3861^{+1603}_{-788}	$1.640^{+6.037}_{-1.068}$

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

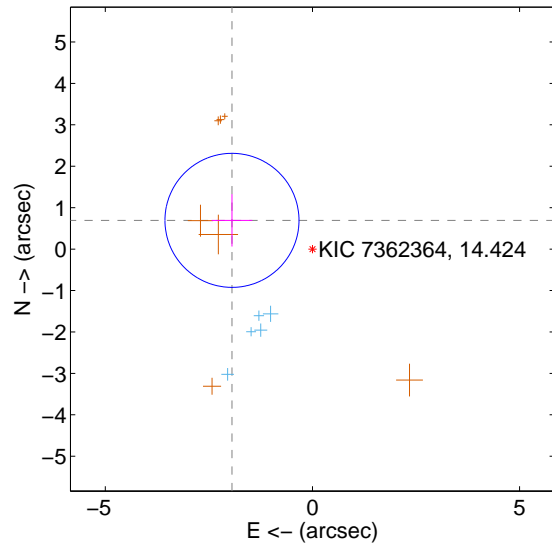
Supplemental centroid analysis for 007362364-01. Kepler magnitude: 14.42. Transit SNR 8.22

There are 5 quarters with good PRF difference image offsets

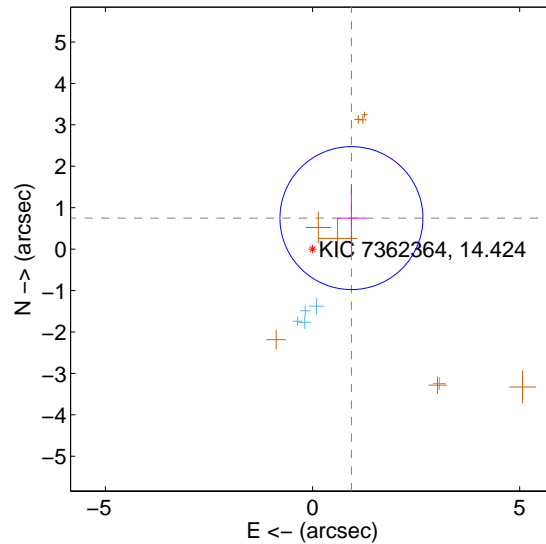
The OOT PRF centroid is offset from the target star catalog position by about 2.73 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.063 ± 0.539	3.83	1.942 ± 0.491	0.694 ± 0.631
PRF-fit source offset from KIC position	1.202 ± 0.575	2.09	-0.940 ± 0.335	0.749 ± 0.822
photometric centroid source offset	2.03 ± 0.95	2.14	1.33 ± 1.11	-1.54 ± 0.80

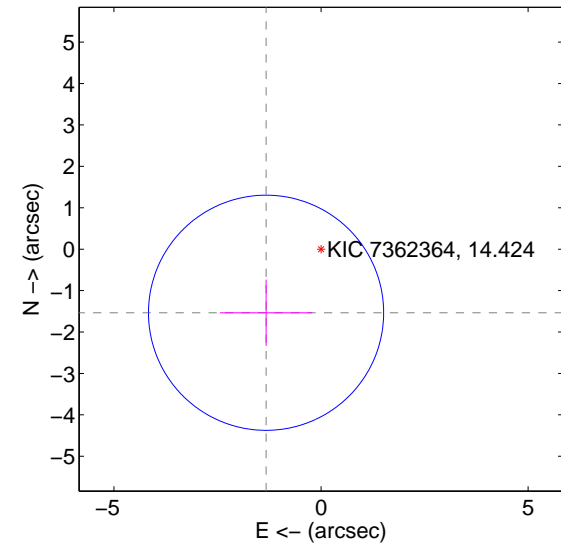
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

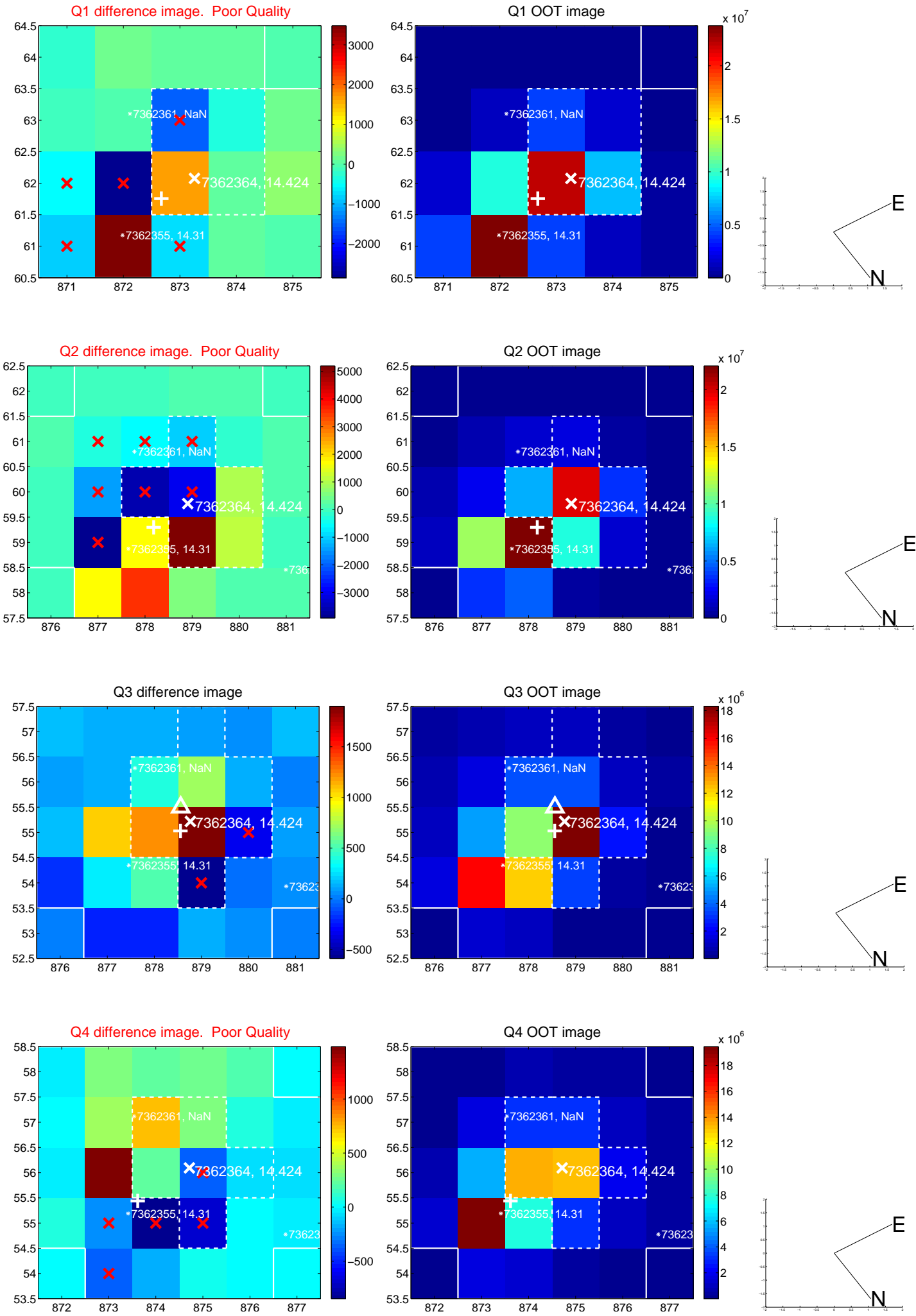


offset from photometric centroids

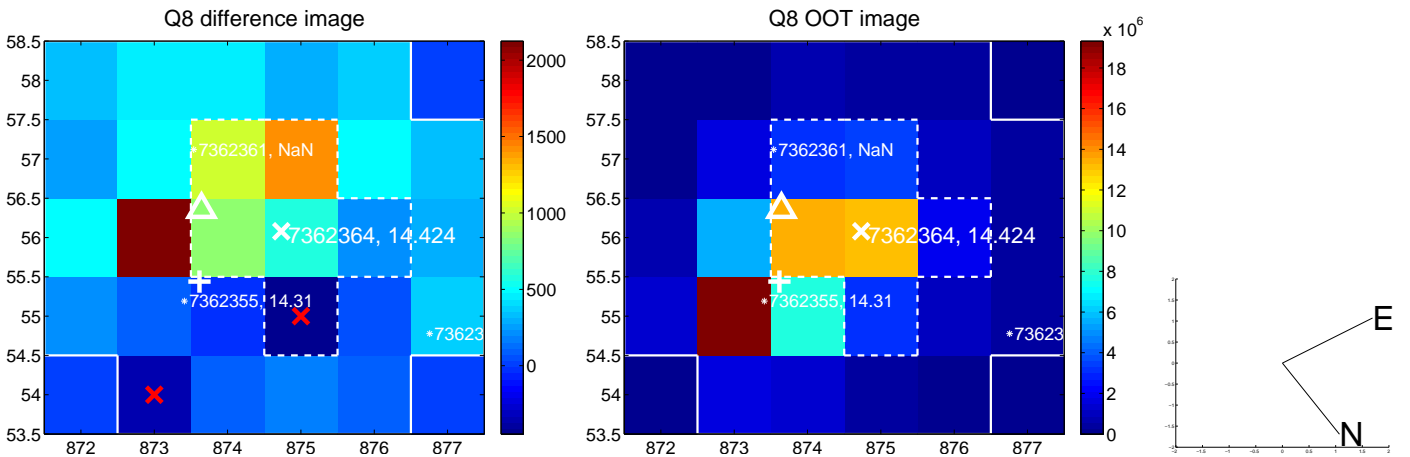
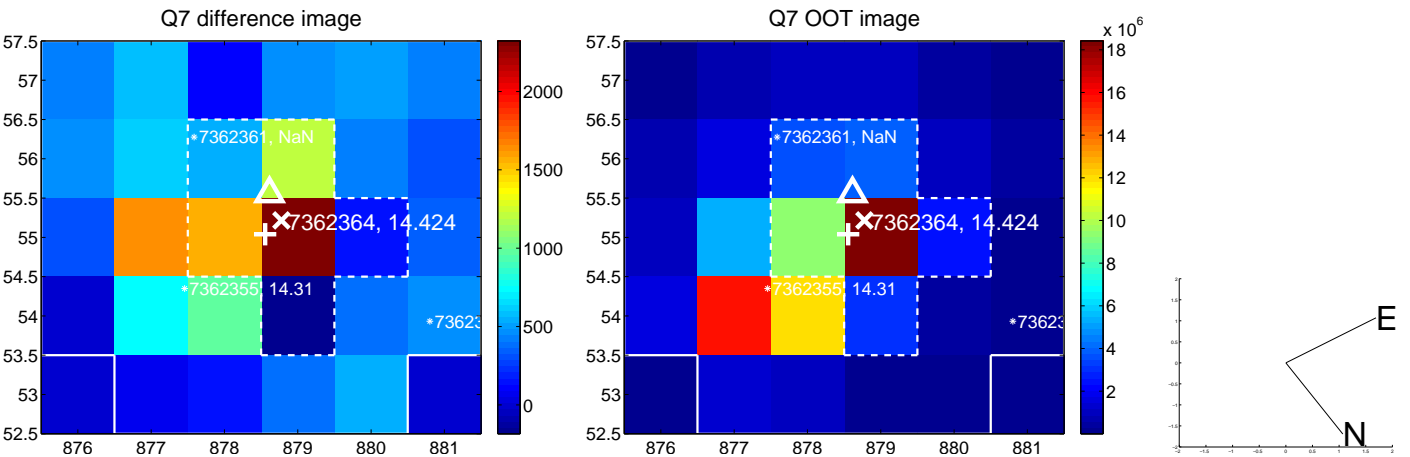
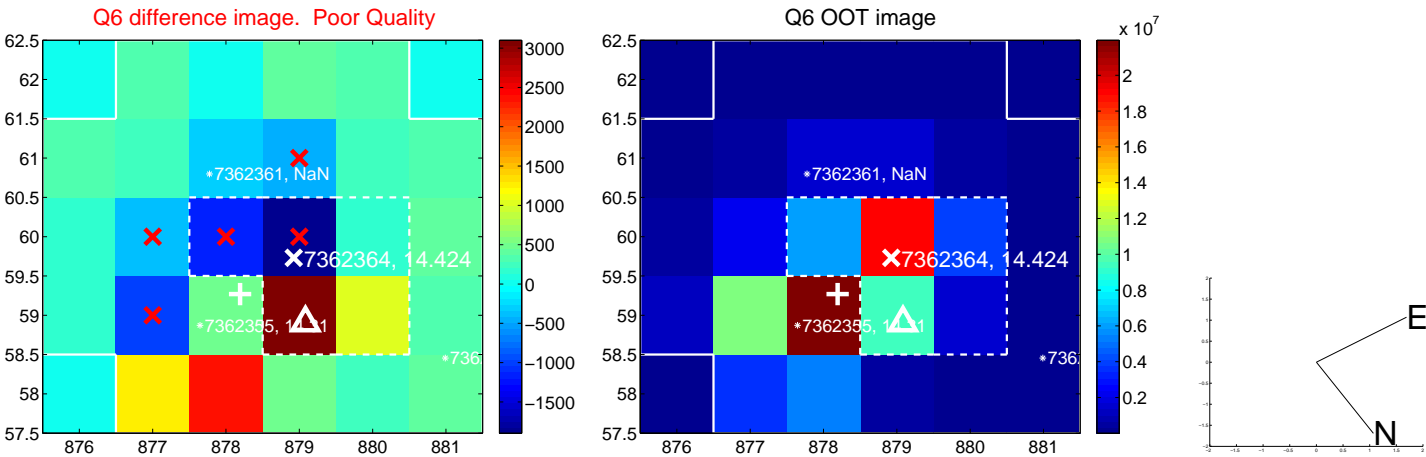
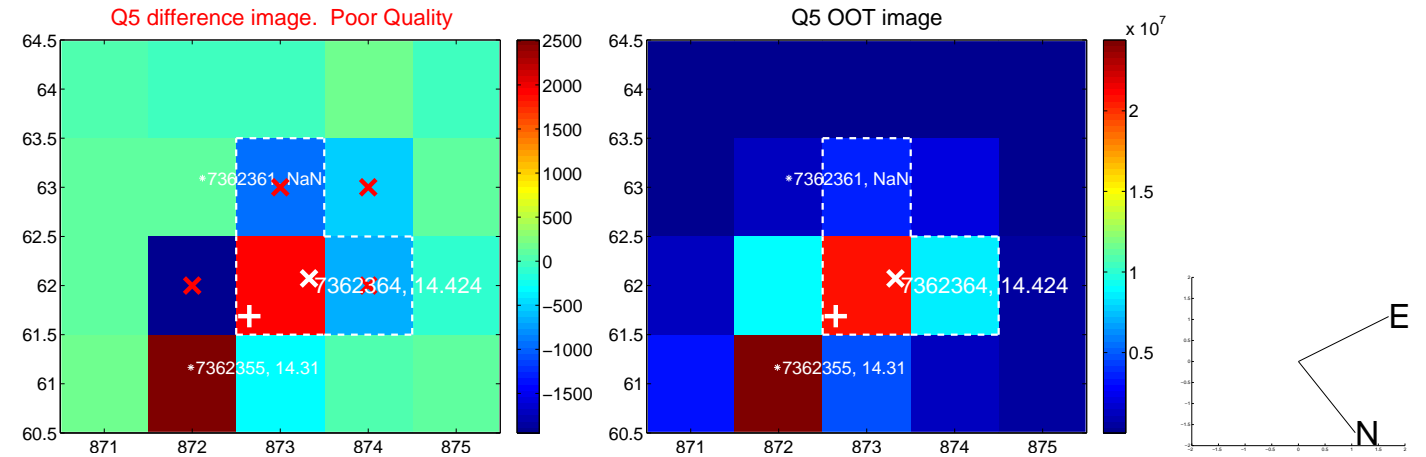


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

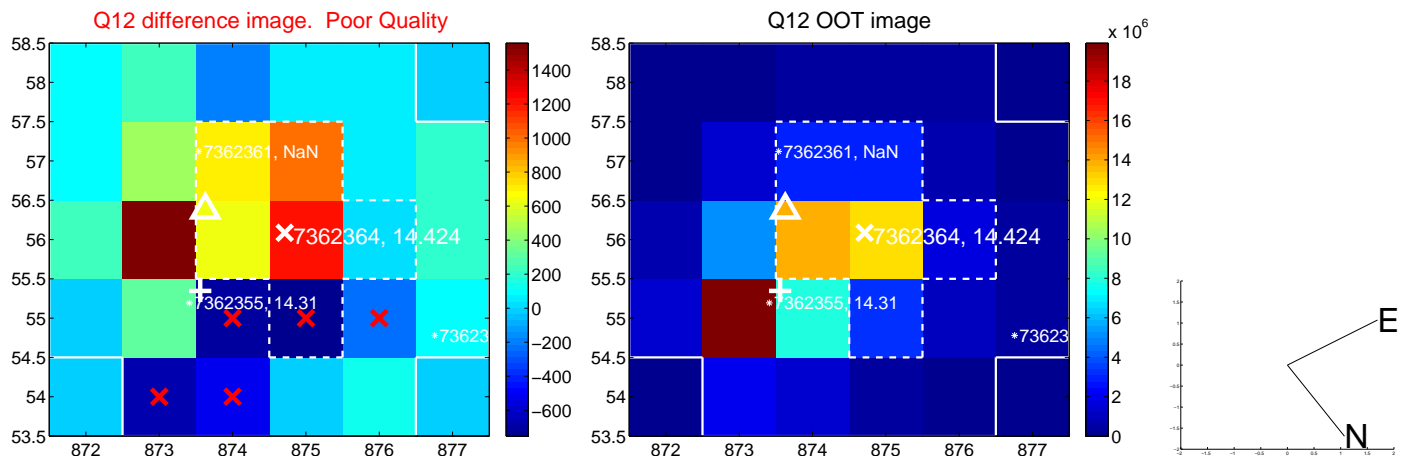
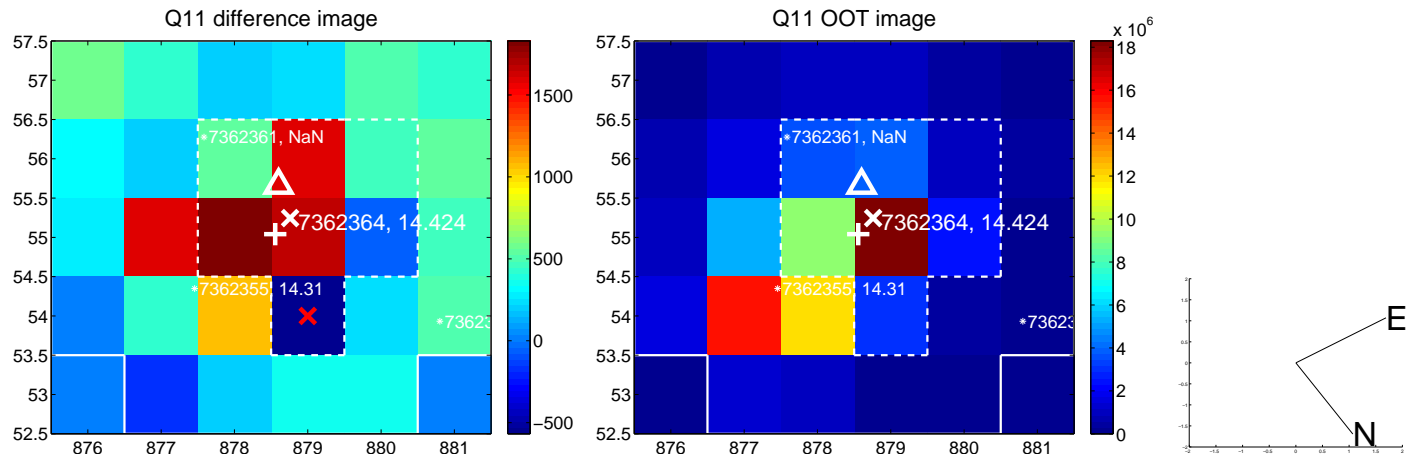
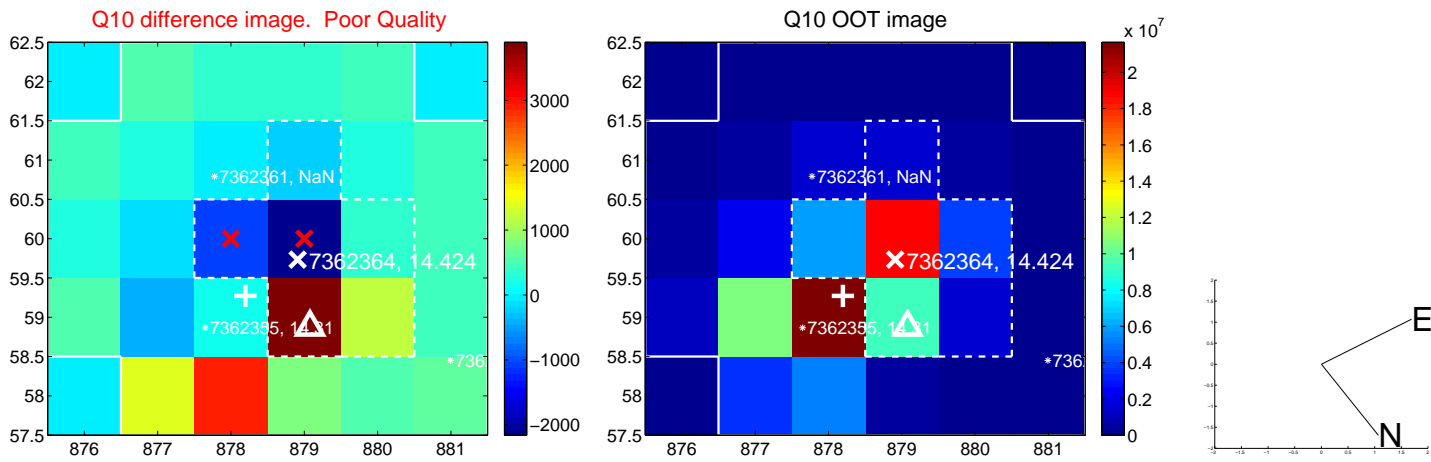
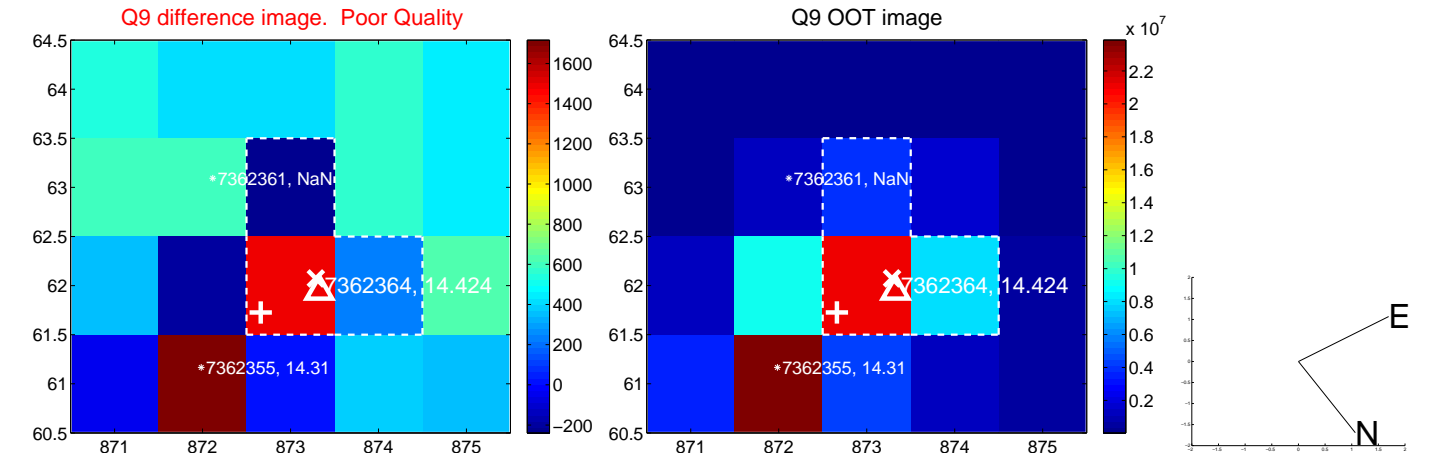
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



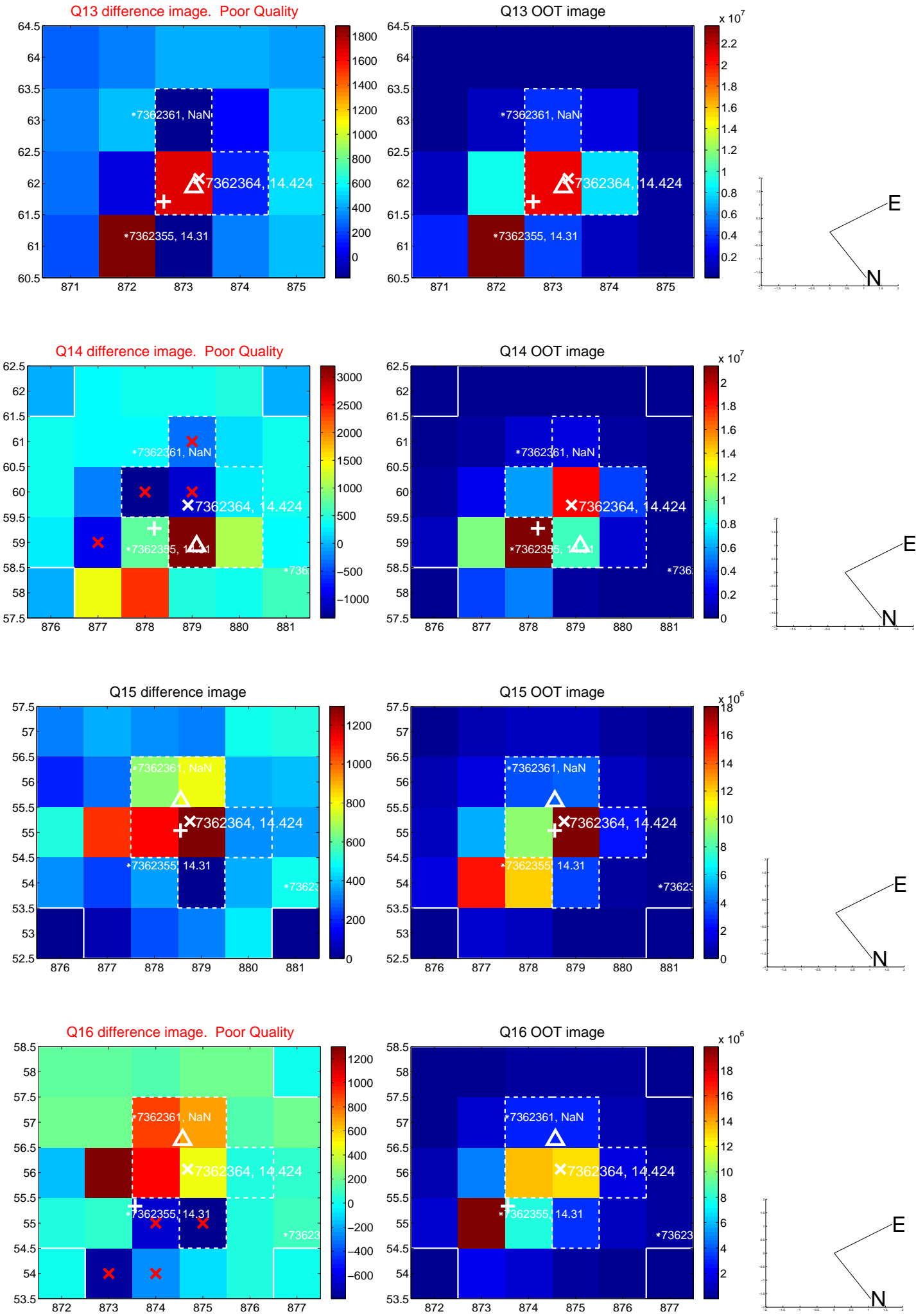
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



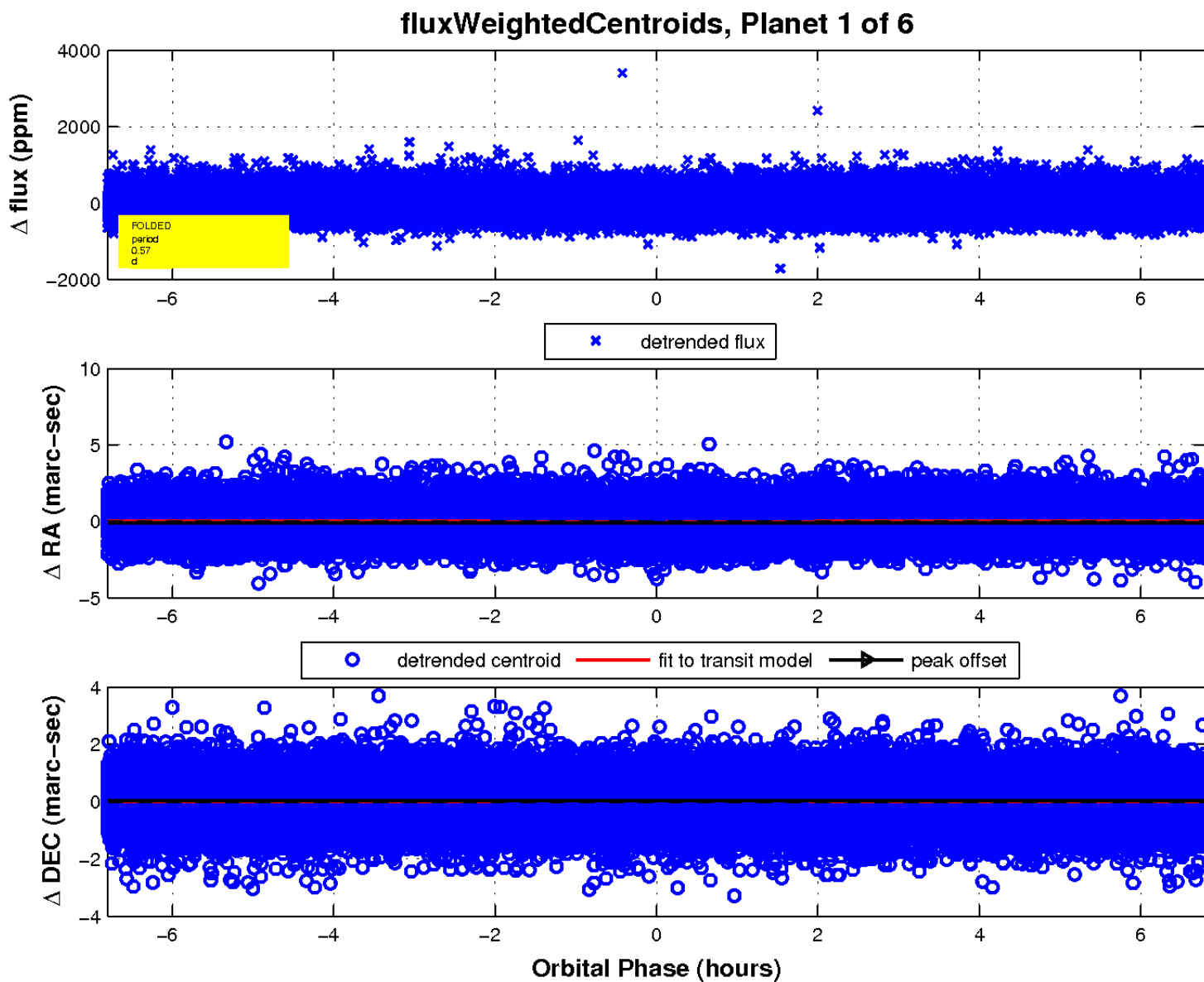
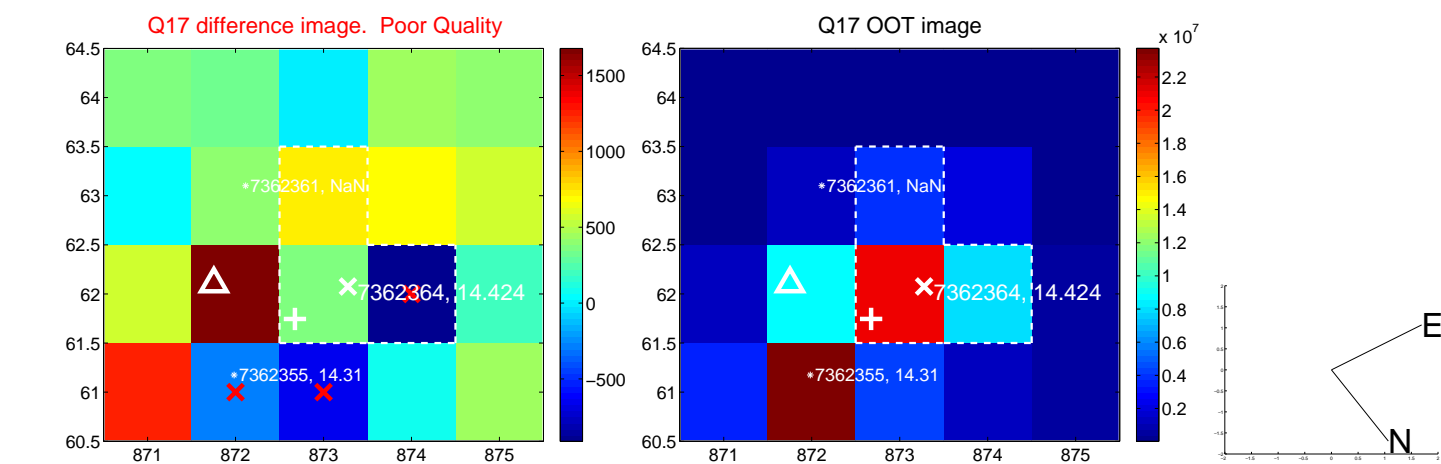
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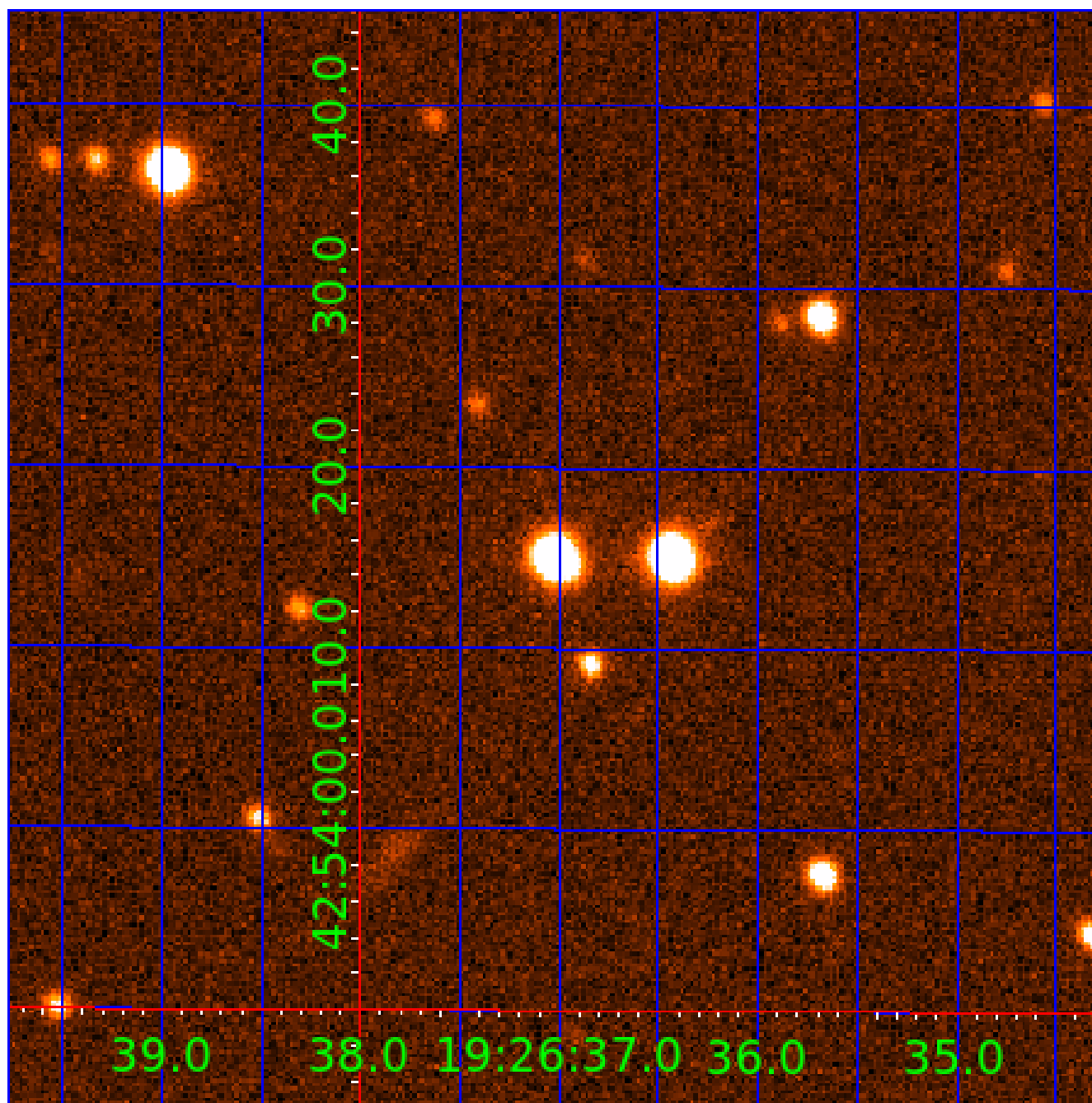


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007362364

Q1-17 DR25 TCE Parameters

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007362364-04	OBS	No	17.136345	134.003121	404.0	9.953	11.3	11.6	0.87	5743	1.97	49.92
007362364-05	OBS	No	54.148503	135.670308	483.8	4.492	9.6	13.9	0.87	5743	2.08	10.77
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Robovetter Results

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007362364-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS—HALO_GHOST
007362364-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—CENT_KIC_POS—CENT_UNCERTAIN
007362364-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_KIC_POS
007362364-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
007362364-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

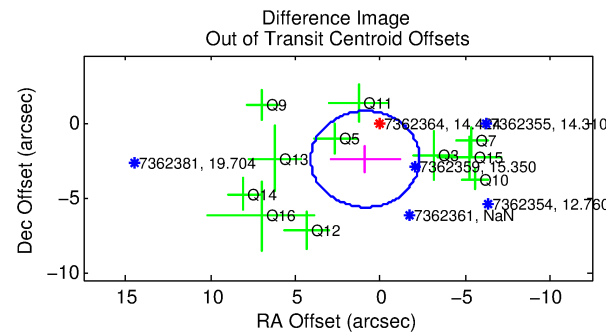
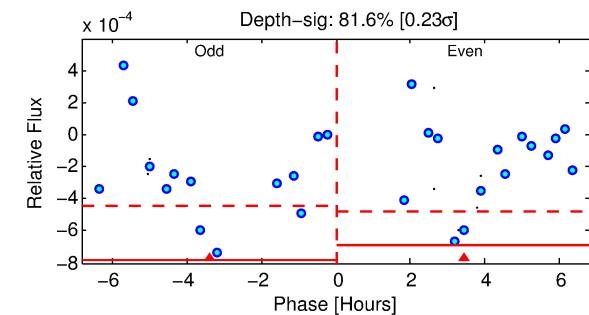
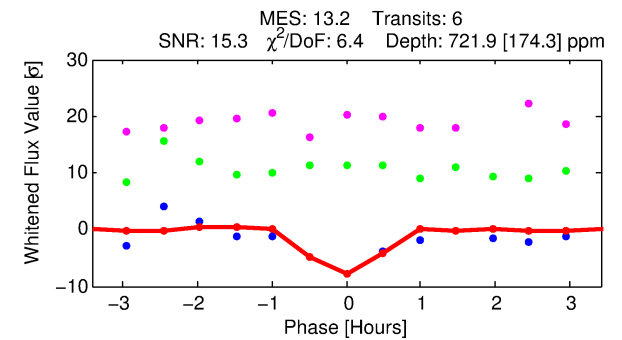
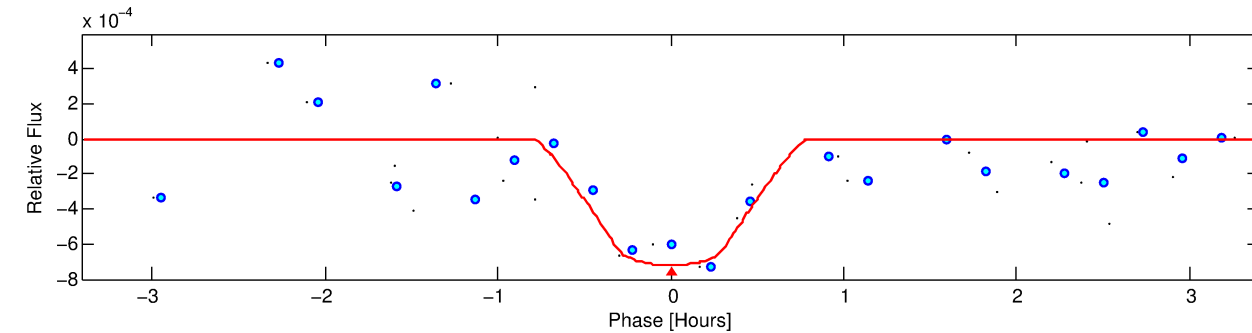
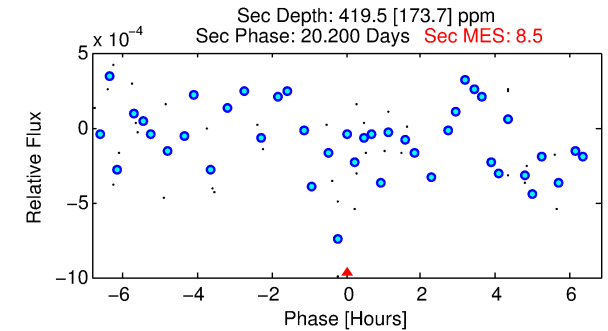
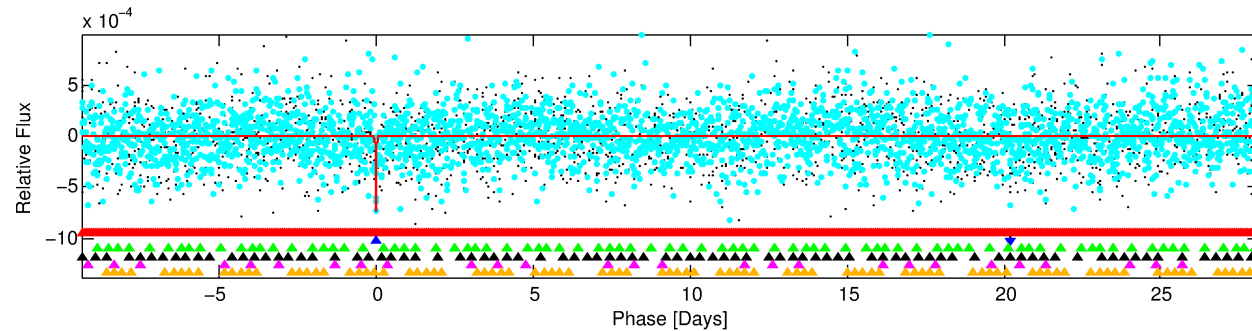
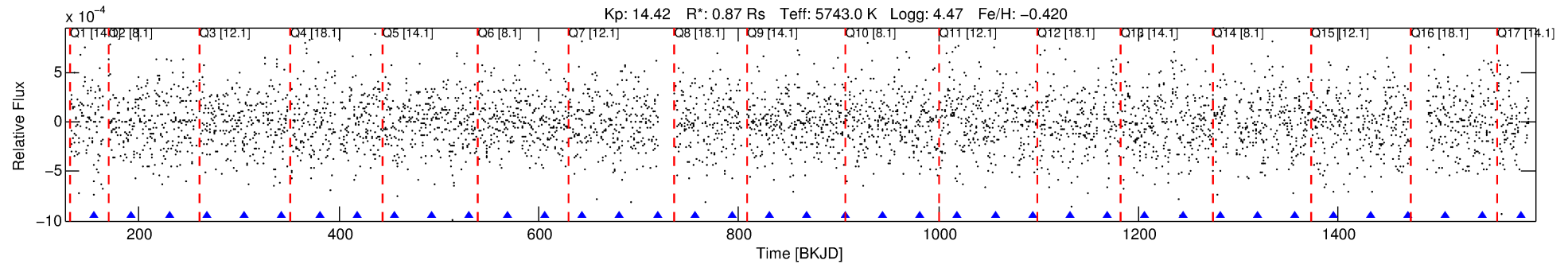
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007362364-02

No Significant Match Found

DV One-Page Summary

KIC: 7362364 Candidate: 2 of 6 Period: 37.553 d



DV Fit Results:

Period = 37.55299 [0.00043] d
Epoch = 155.3934 [0.0075] BKJD
Rp/R* = 0.0269 [0.0533]
a/R* = 177.60 [1626.28]
b = 0.75 [5.47]
Seff = 17.54 [5.52]
Teq = 522 [41] K
Rp = 2.56 [5.10] Re
a = 0.2053 [0.0416] AU
Ag = 1486.72 [5937.31] [0.25 σ]
Teffp = 5010 [4990] K [0.90 σ]

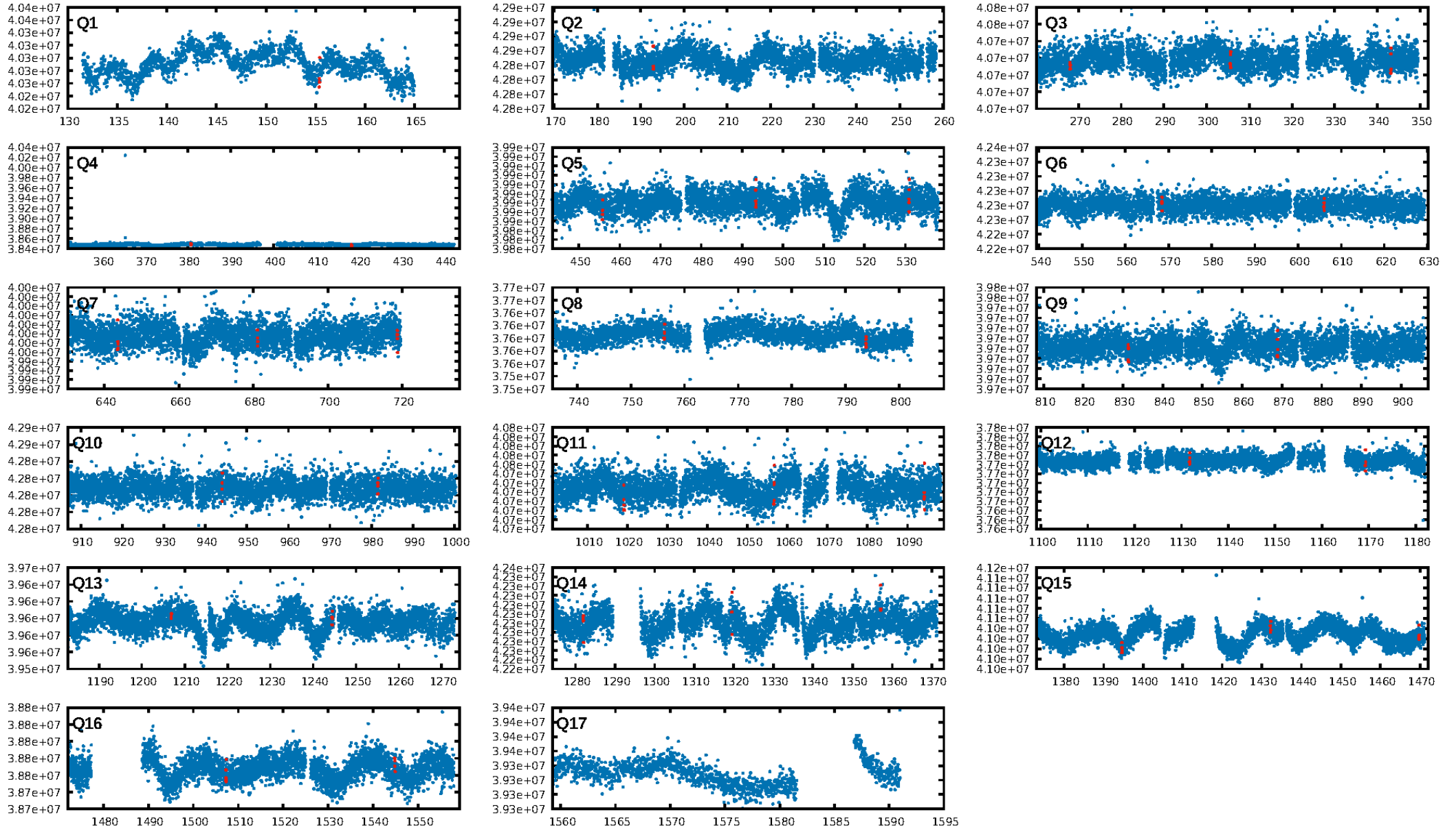
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [229.22 σ]
LongPeriod-sig: 100.0% [85.97 σ]
ModelChiSquare2-sig: 4.4%
ModelChiSquareGof-sig: 63.2%
Bootstrap-pfa: 5.37e-13
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: -0.04976
Centroid-sig: 3.1%
Centroid-so: 2.893 arcsec [6.28 σ]
OotOffset-rm: 2.585 arcsec [2.42 σ]
KicOffset-rm: 2.758 arcsec [2.33 σ]
OotOffset-st: 2/4/2/3 [11]
KicOffset-st: 2/4/2/3 [11]
DiffImageQuality-fgm: 0.09 [1/11]
DiffImageOverlap-fno: 0.00 [0/16]

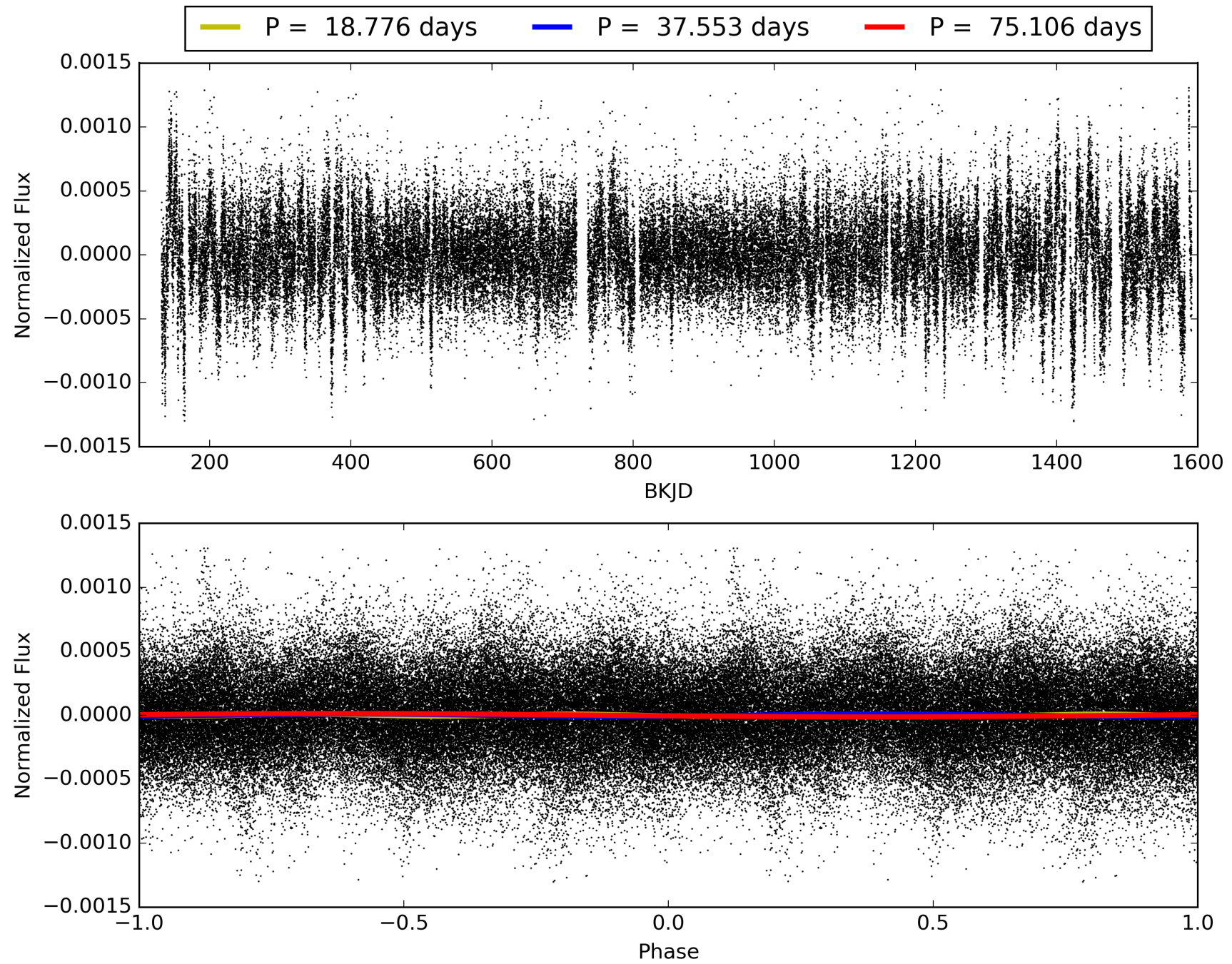
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 07:38:09 Z

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

TCE 007362364-02, PDC Light Curves

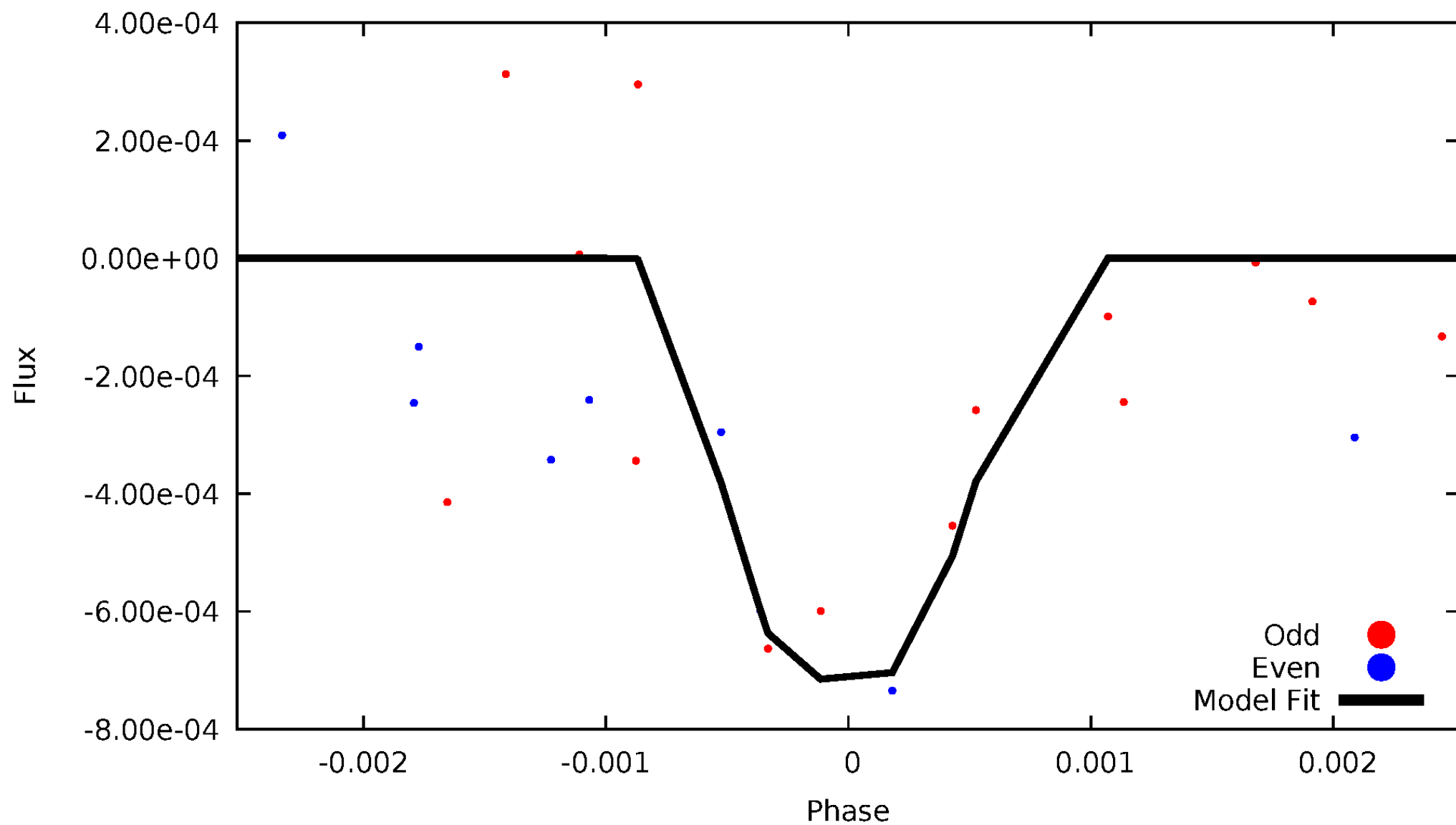


TCE 007362364-02



DV Odd/Even

TCE 007362364-02

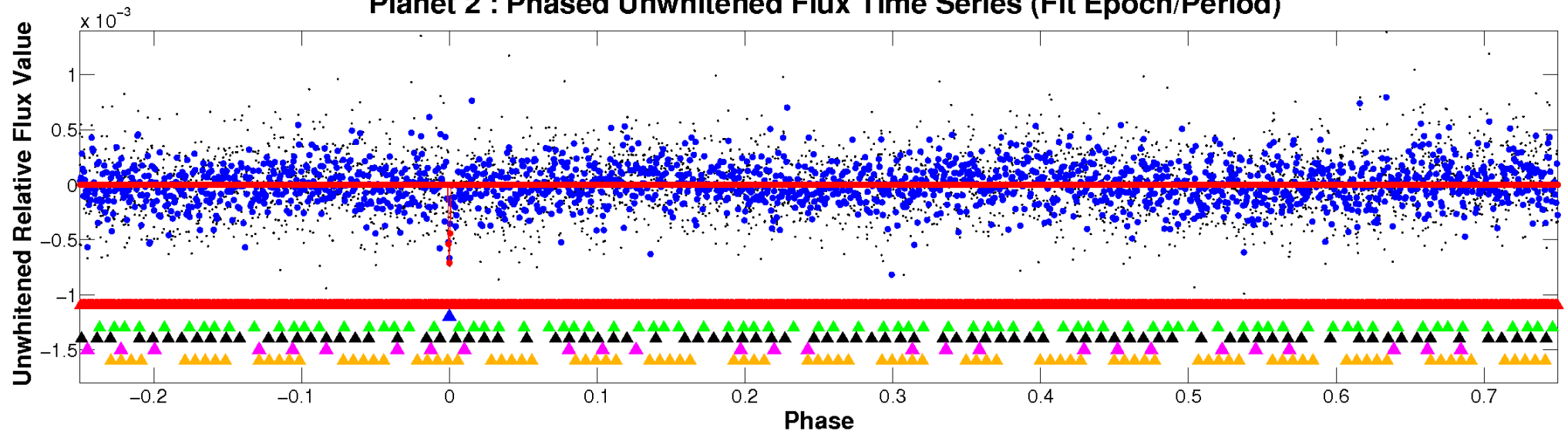


ALT Odd/Even

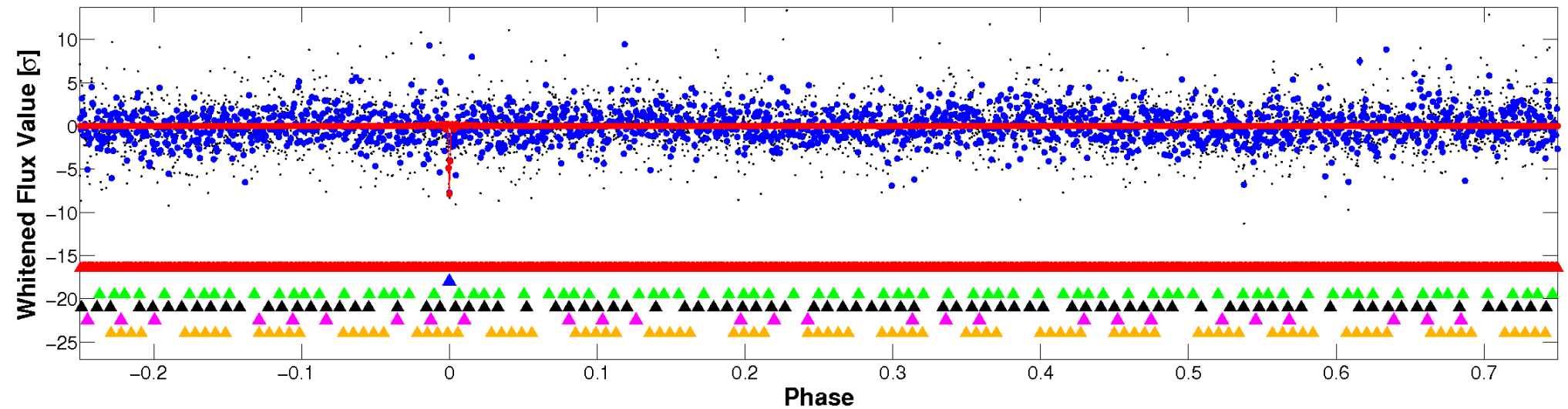
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

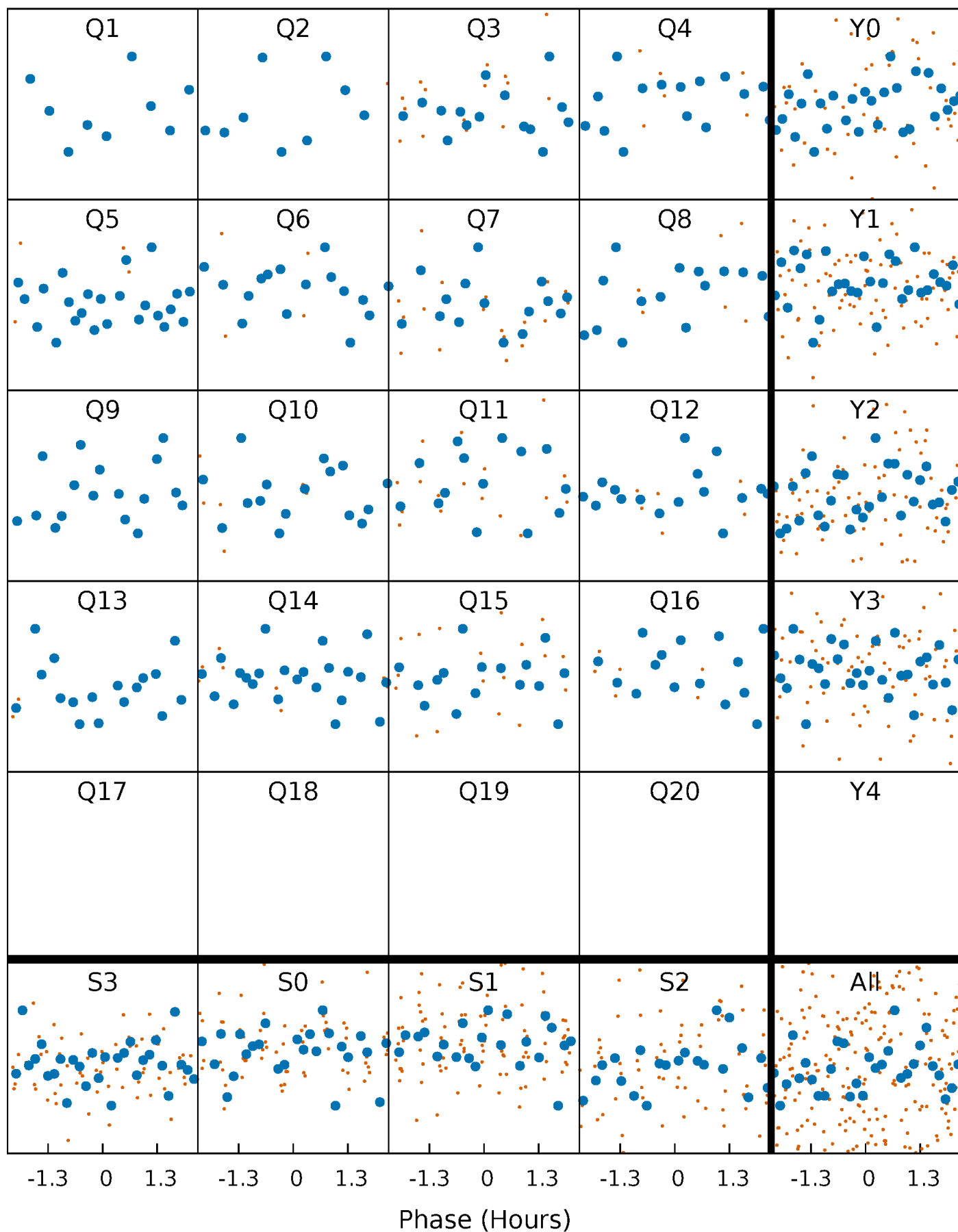


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



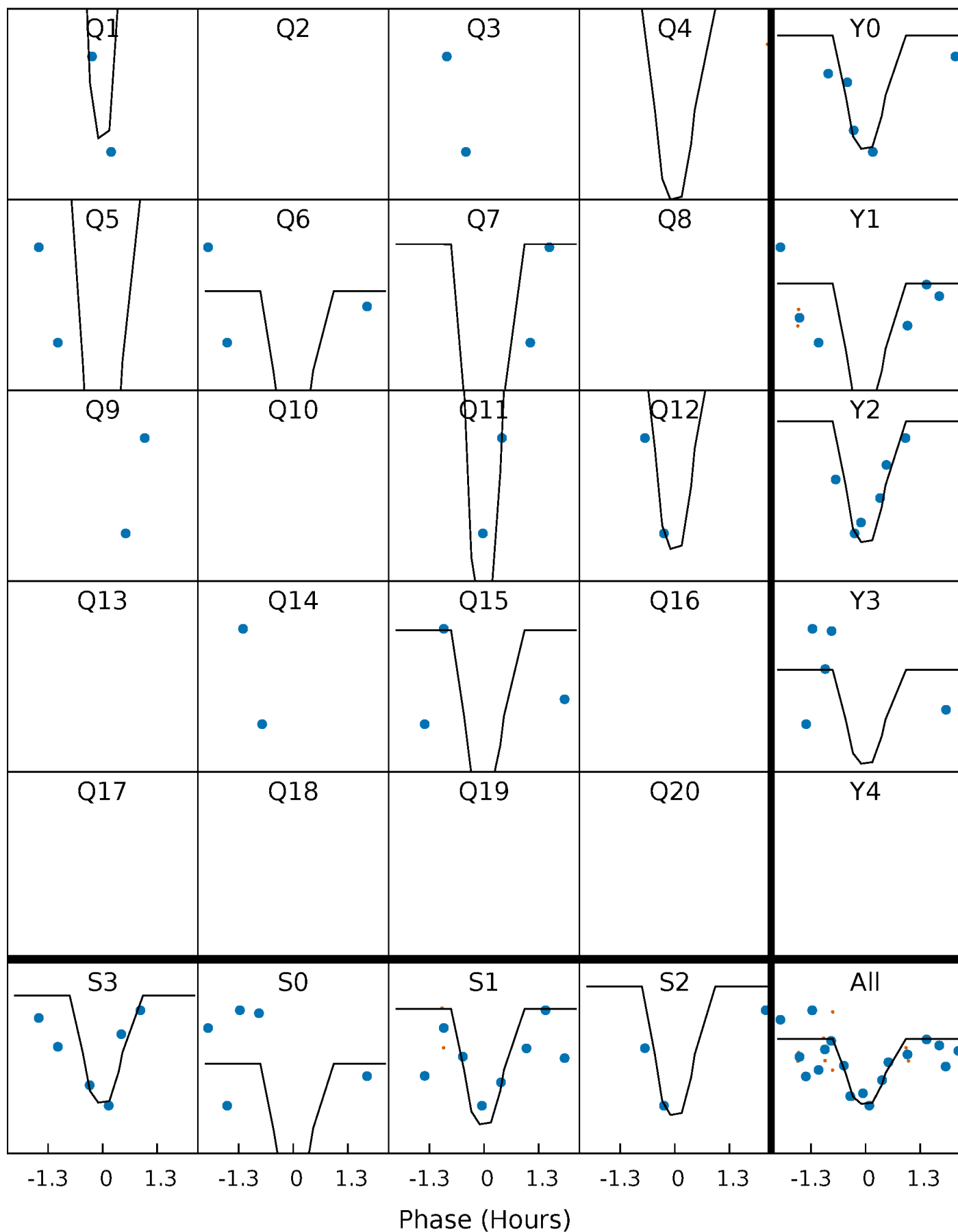
PDC Quarter-Phased Transit Curves

TCE 007362364-02 P= 37.552986 Days $T_0=155.393391$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 007362364-02 $P = 37.552986$ Days $T_0 = 155.393391$ (BKJD)

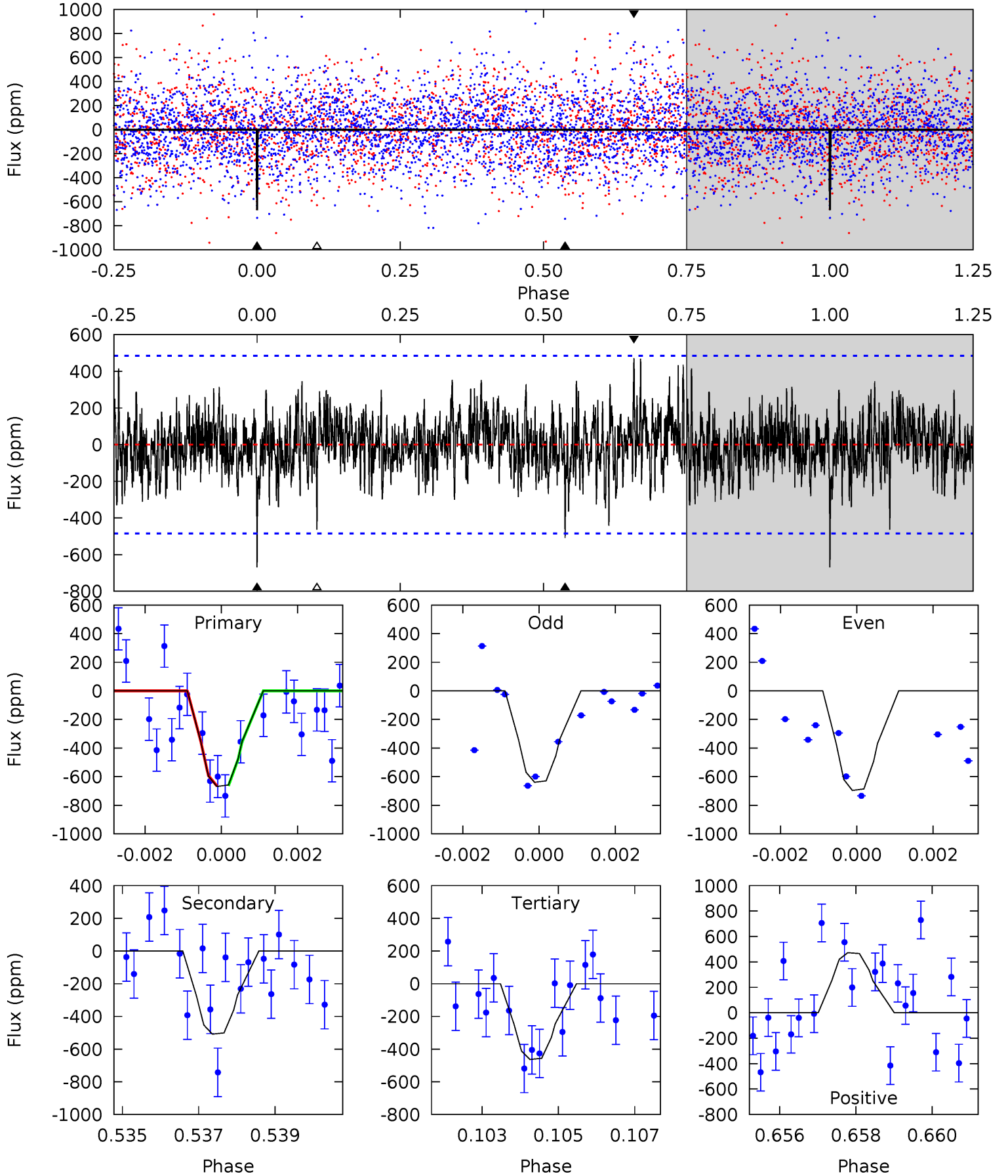


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

007362364-02, P = 37.552986 Days, E = 117.840405 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.36	5.60	5.10	5.20	5.33	3.10	1.42	2.26	2.16	0.50	0.40	0.30	0.95	0.41	0.01



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 007362364

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5743^{+155}_{-155}	$4.471^{+0.108}_{-0.162}$	$-0.420^{+0.300}_{-0.300}$	$0.871^{+0.209}_{-0.112}$	$0.820^{+0.114}_{-0.061}$	$1.746^{+0.712}_{-0.778}$
	+3%/-3%	+2%/-4%	+71%/-71%	+24%/-13%	+14%/-7%	+41%/-45%
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 007362364-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-509 ± 91	$4.50^{+4.59}_{-3.04}$	733^{+45}_{-37}	4214^{+2848}_{-849}	578^{+5329}_{-436}
Alt.	N/A	N/A	N/A	N/A	N/A

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)

A_{obs} = Observed Albedo (Assuming $T=0$)

If a secondary eclipse is present, the system is likely an EB if $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

DV Centroid Data

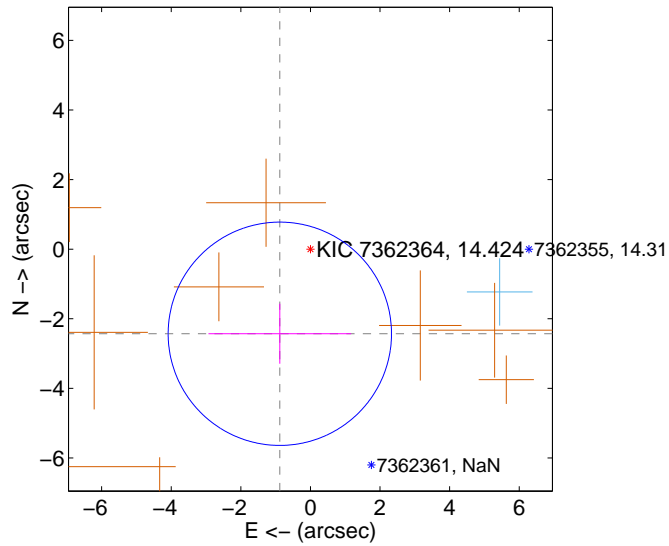
Supplemental centroid analysis for 007362364-02. Kepler magnitude: 14.42. Transit SNR 15.27

There are 1 quarters with good PRF difference image offsets

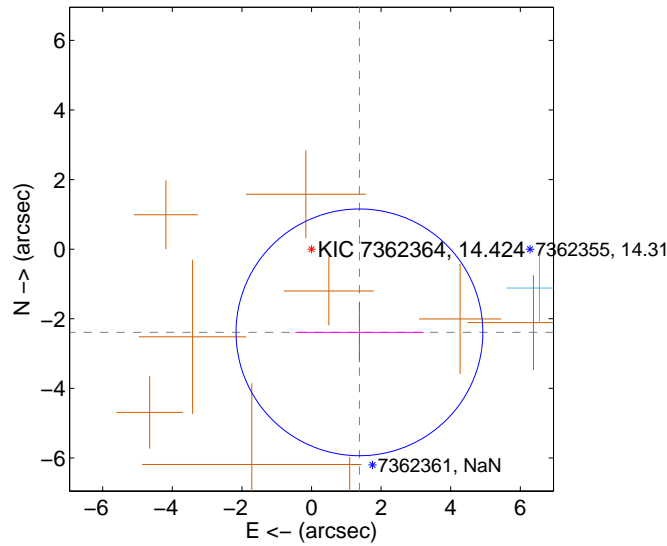
The OOT PRF centroid is offset from the target star catalog position by about 5.30 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.585 ± 1.069	2.42	0.879 ± 2.050	-2.431 ± 0.862
PRF-fit source offset from KIC position	2.758 ± 1.182	2.33	-1.377 ± 1.842	-2.390 ± 0.857
photometric centroid source offset	2.89 ± 0.46	6.28	-2.85 ± 0.46	0.51 ± 0.33

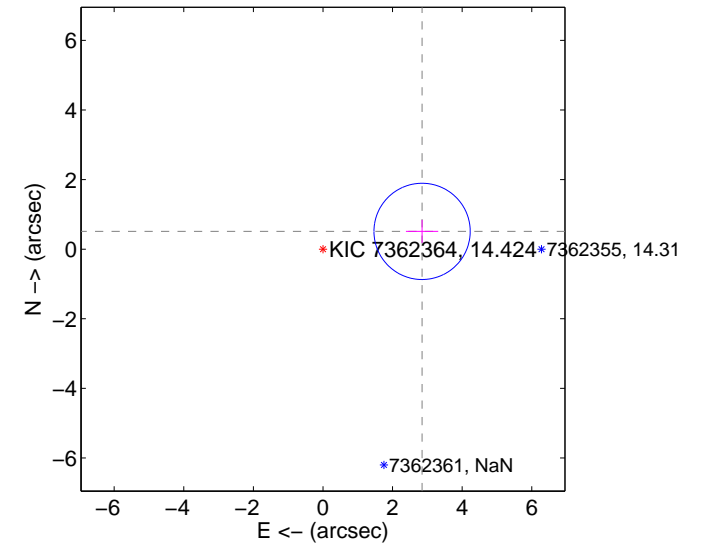
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

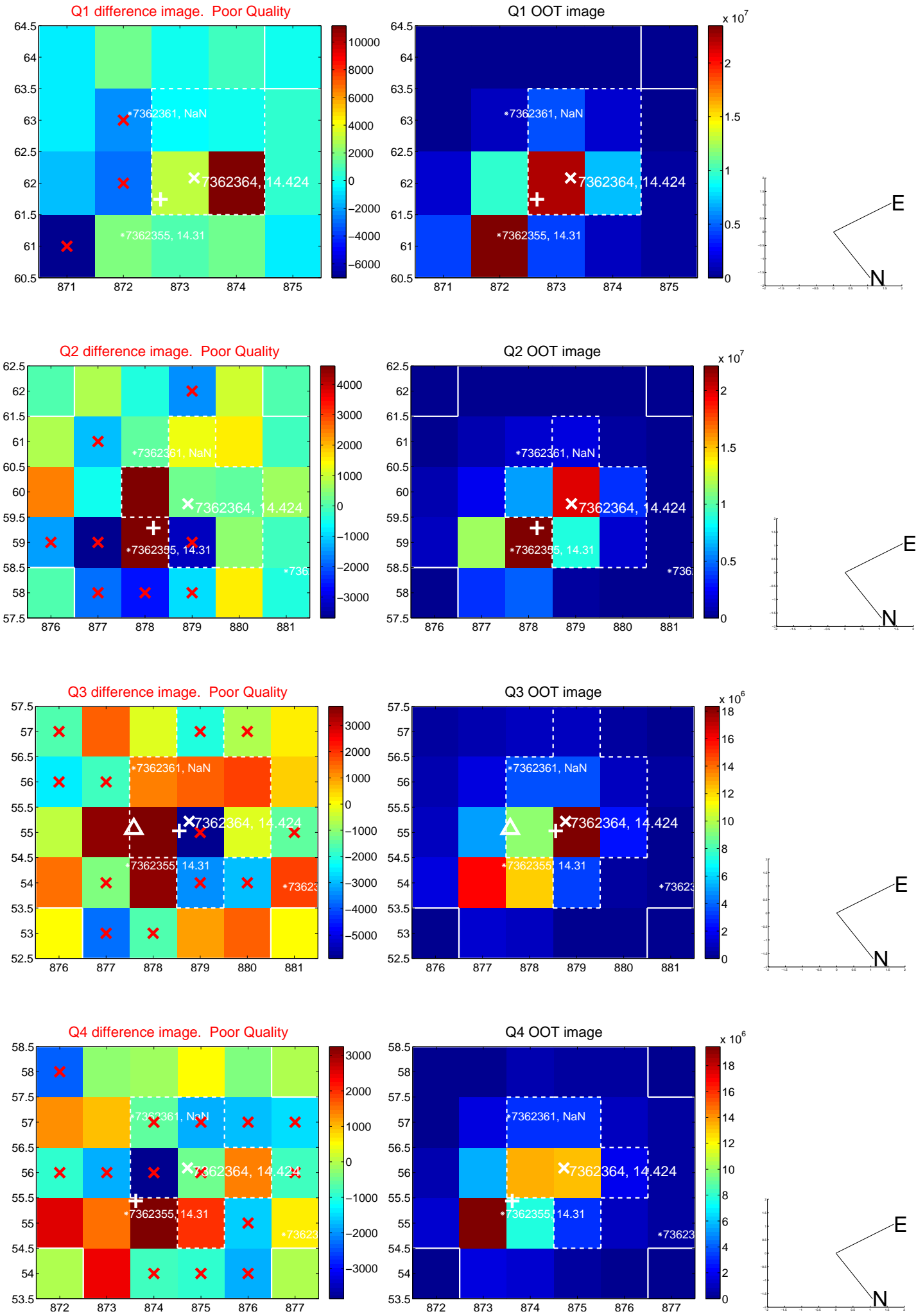


offset from photometric centroids

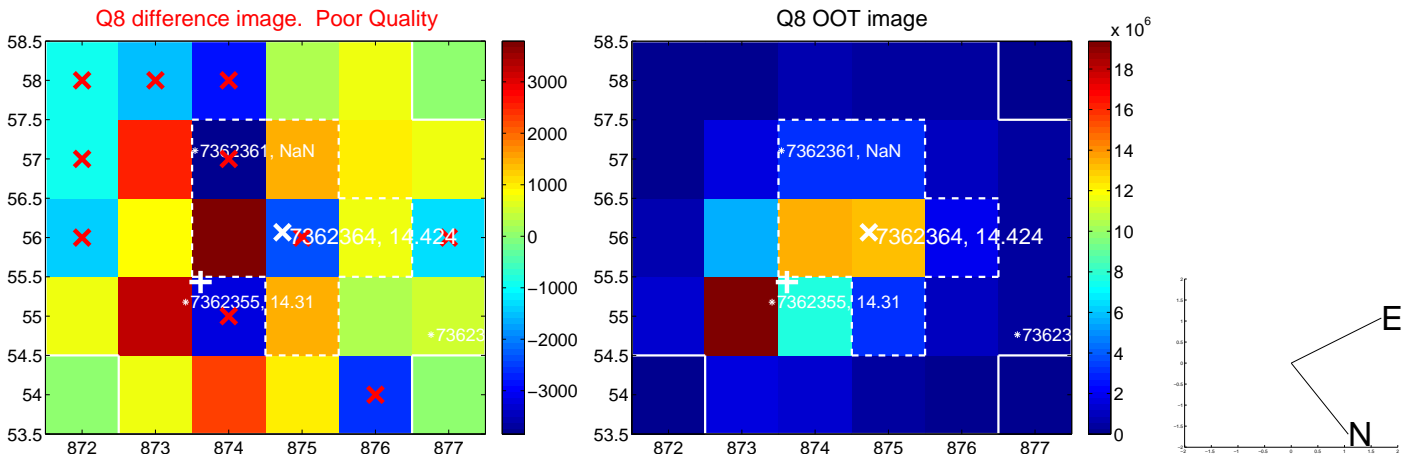
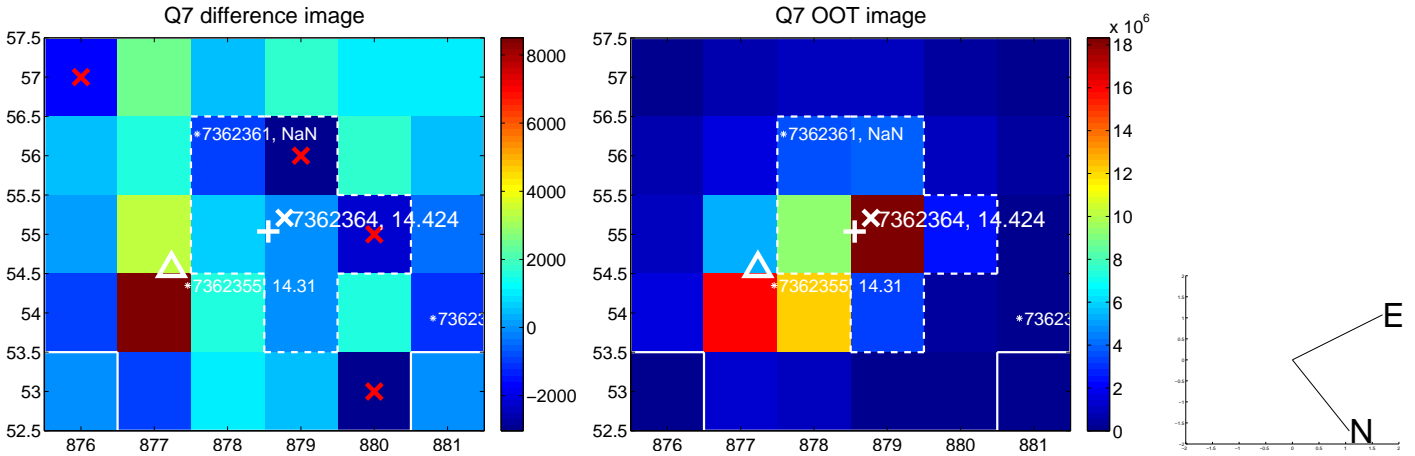
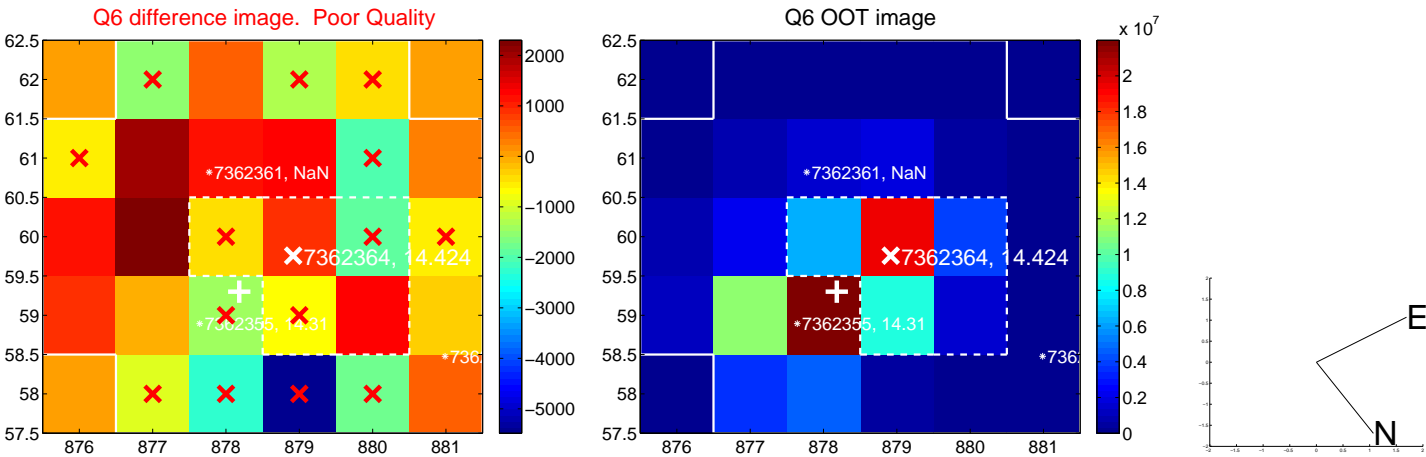
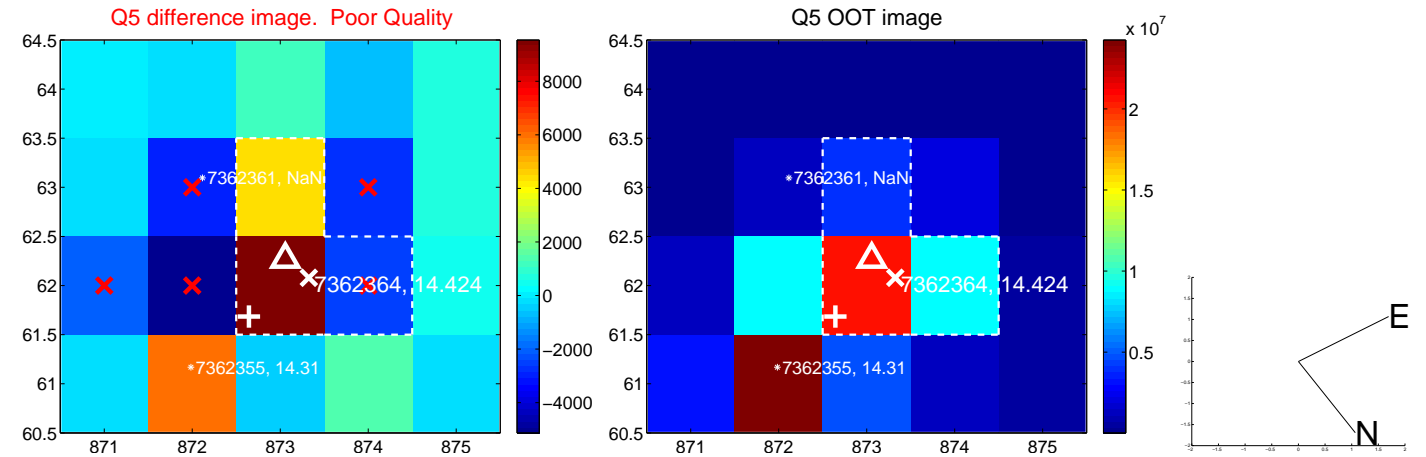


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

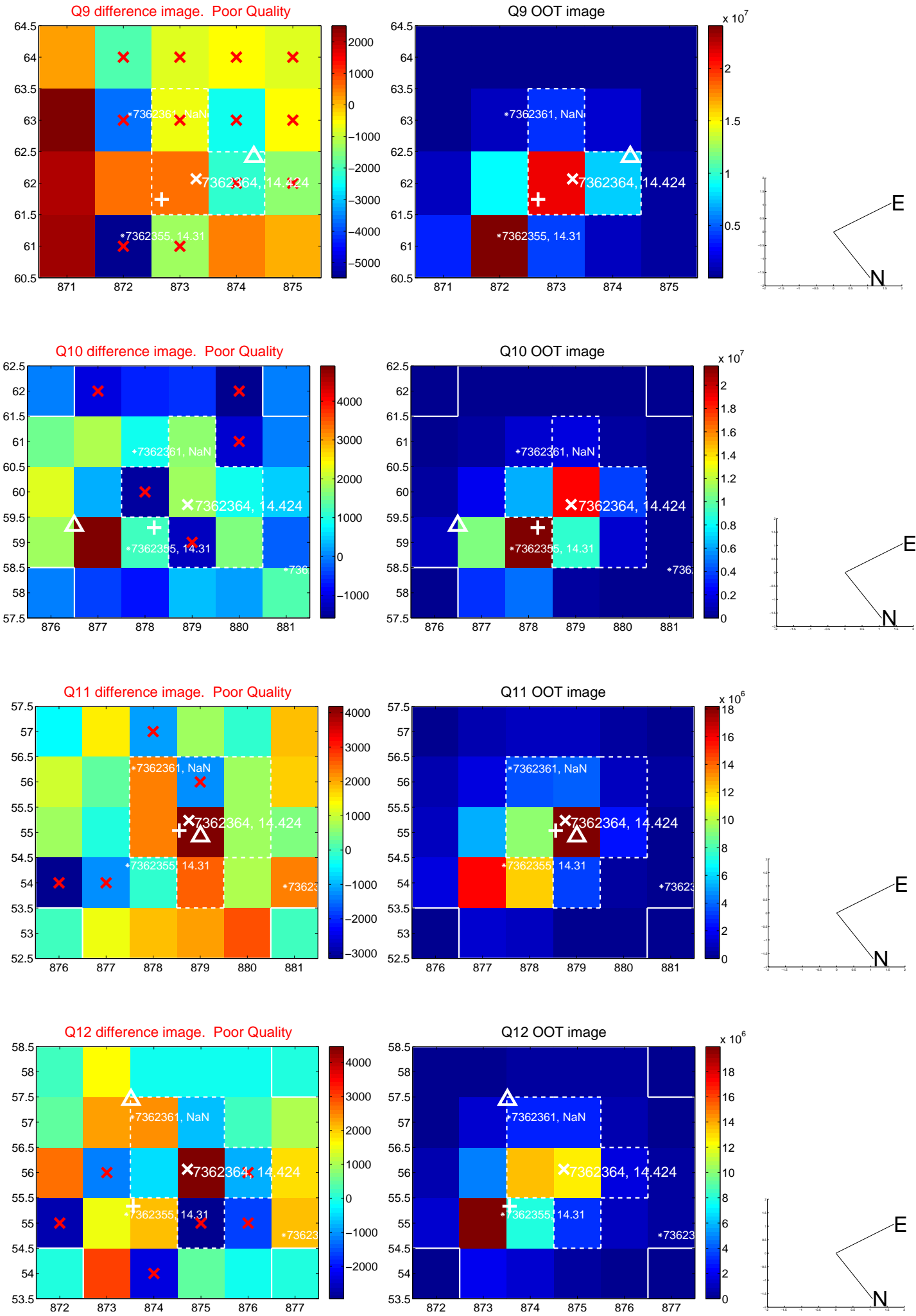
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



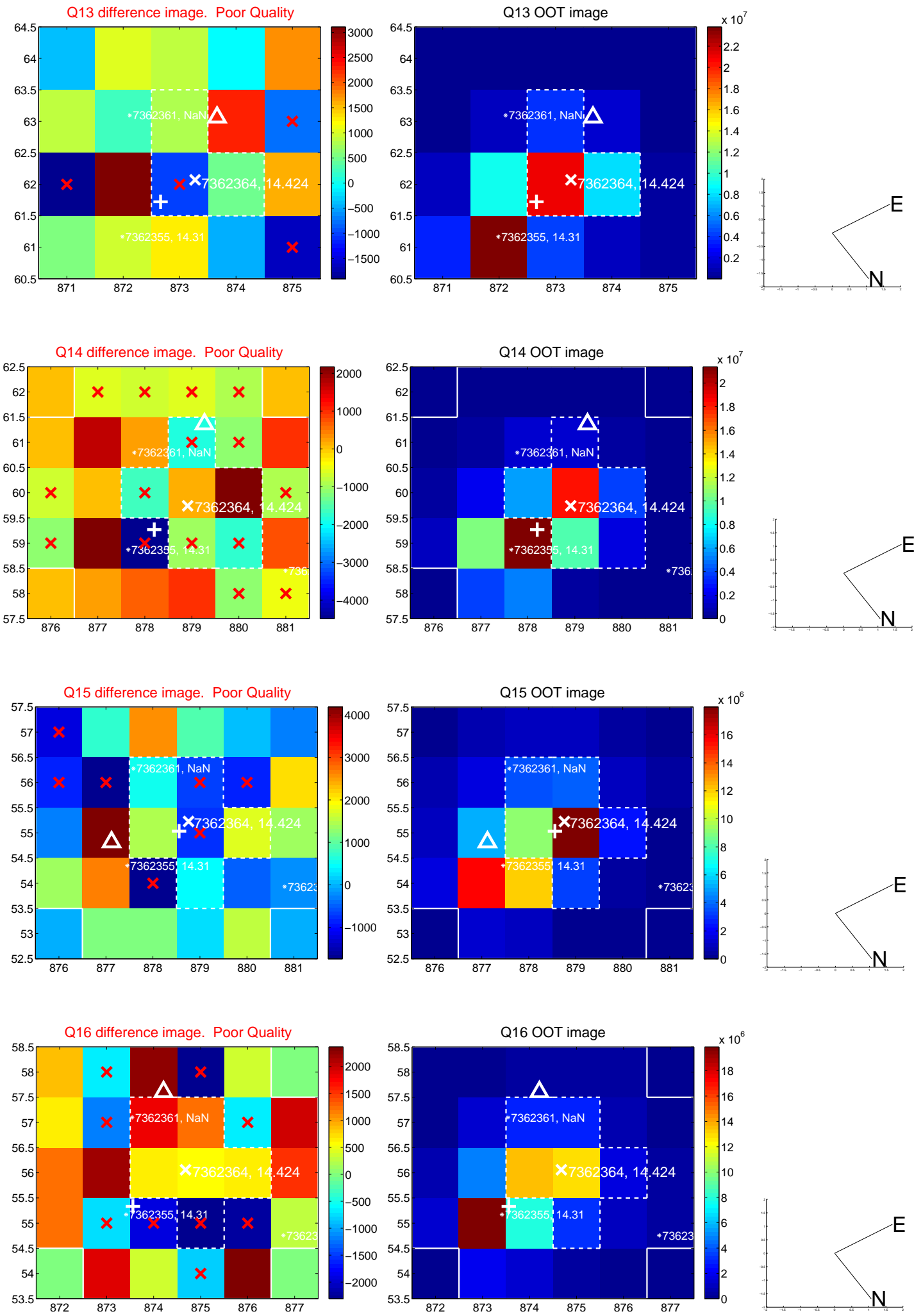
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



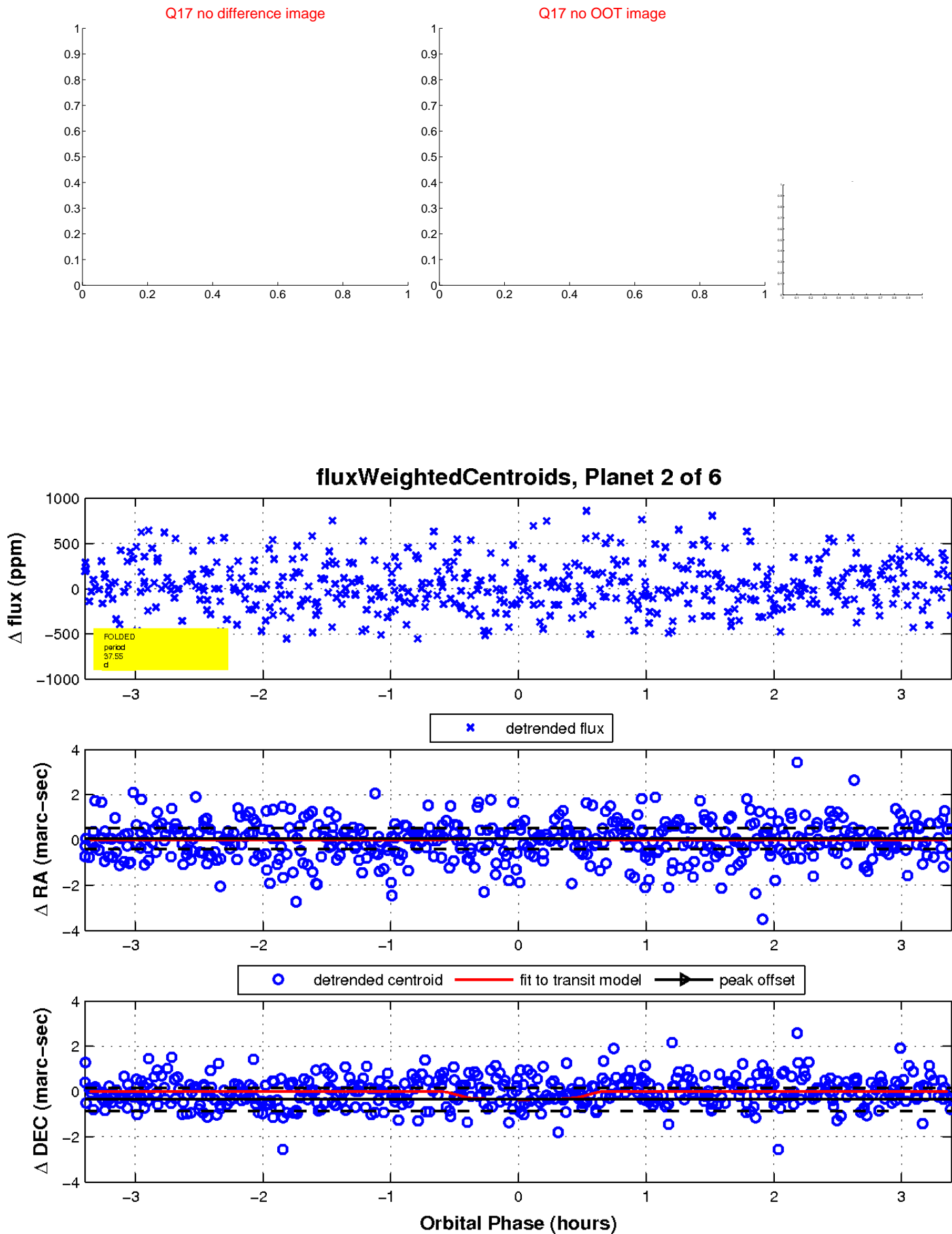
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

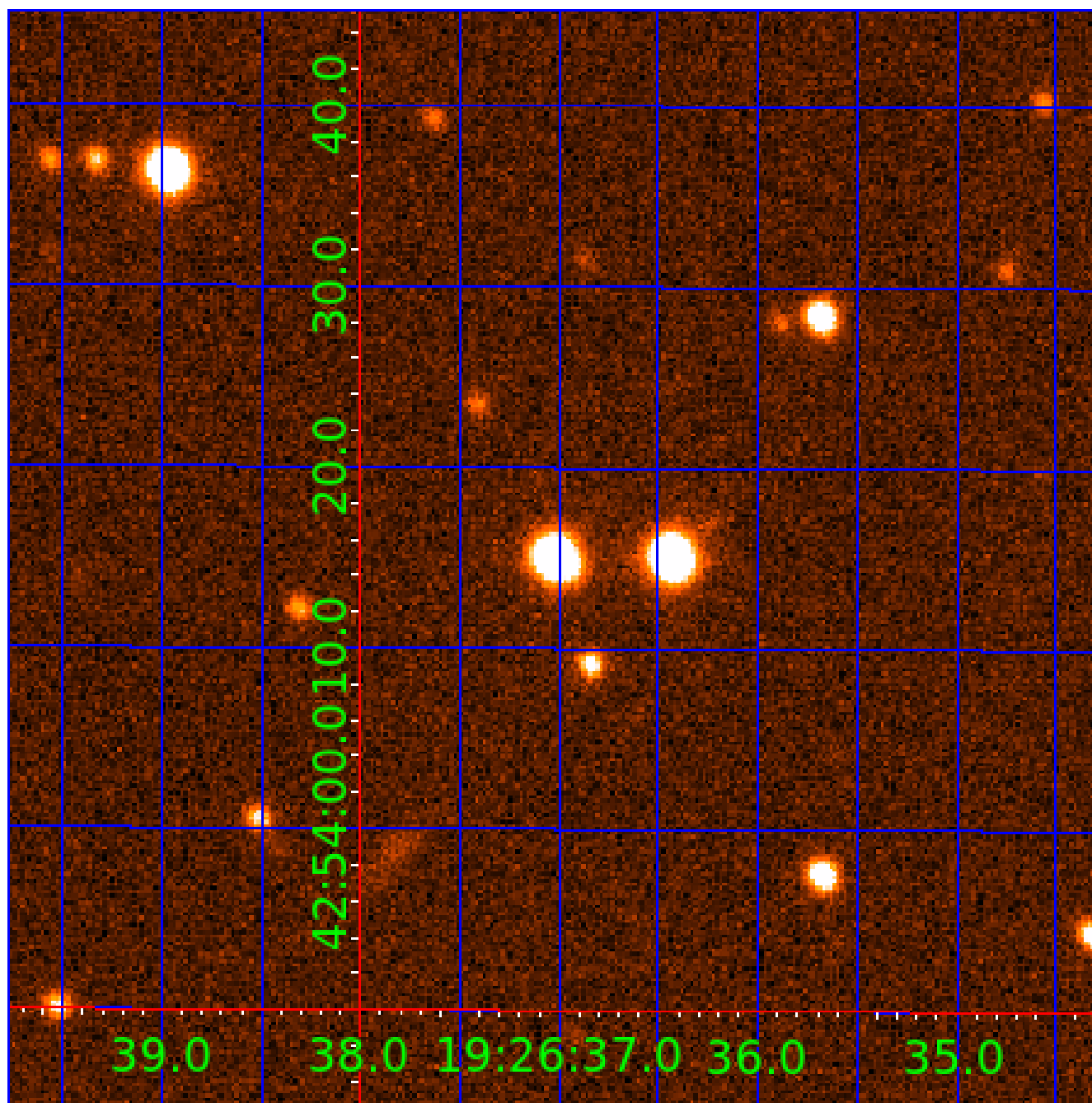


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007362364

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})
007362364-01	OBS	No	0.566754	131.864789	18.9	4.071	13.6	8.2	0.87	5743	0.38	4701.85
007362364-02	OBS	No	37.552986	155.393391	721.9	1.136	13.2	15.3	0.87	5743	2.56	17.54
007362364-03	OBS	No	17.634593	145.493816	484.1	1.749	13.1	14.9	0.87	5743	2.20	48.04
007362364-04	OBS	No	17.136345	134.003121	404.0	9.953	11.3	11.6	0.87	5743	1.97	49.92
007362364-05	OBS	No	54.148503	135.670308	483.8	4.492	9.6	13.9	0.87	5743	2.08	10.77
007362364-06	OBS	No	15.825305	140.636258	173.9	0.877	10.7	4.4	0.87	5743	1.35	55.50

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007362364-01	OBS	FP	0.00	1	0	1	1	LPP_DV—CENT_KIC_POS—HALO_GHOST—EPHEM_MATCH
007362364-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS—HALO_GHOST
007362364-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—CENT_KIC_POS—CENT_UNCERTAIN
007362364-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_KIC_POS
007362364-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
007362364-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

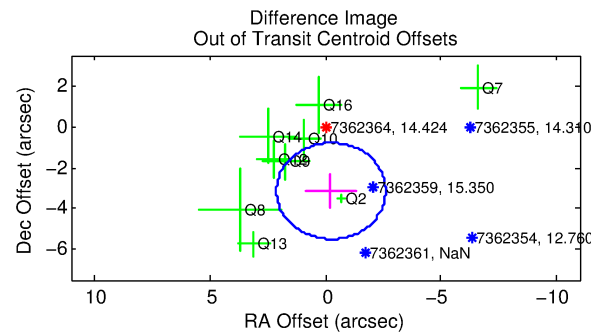
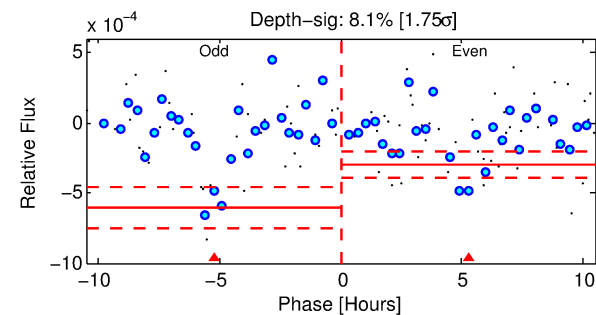
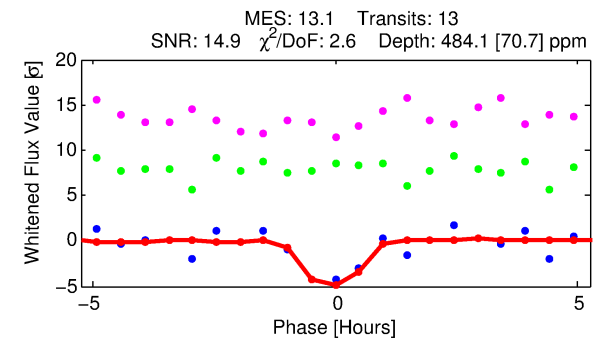
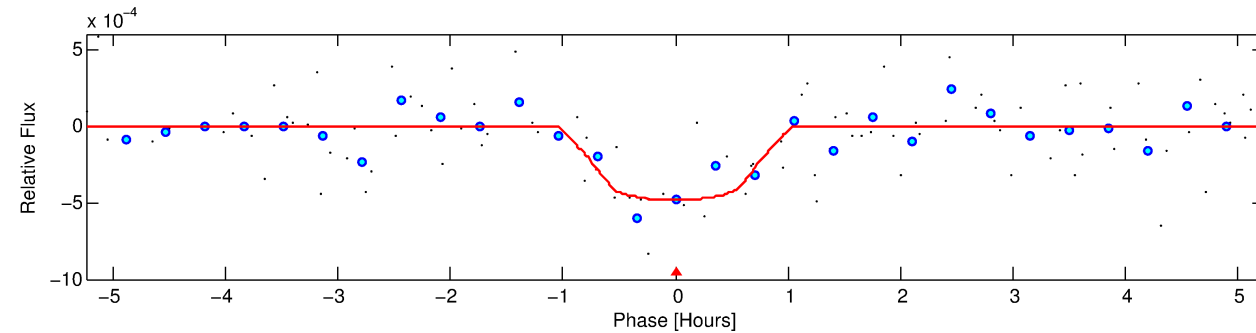
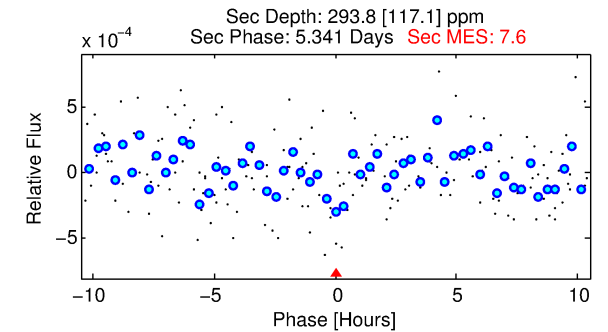
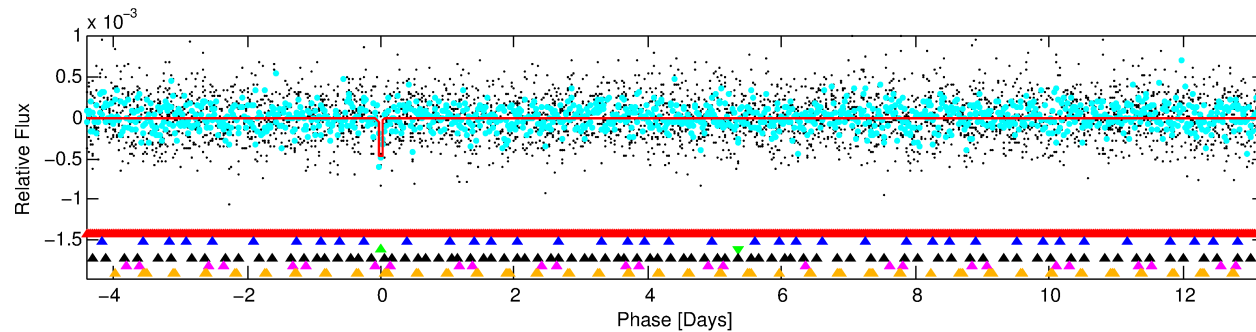
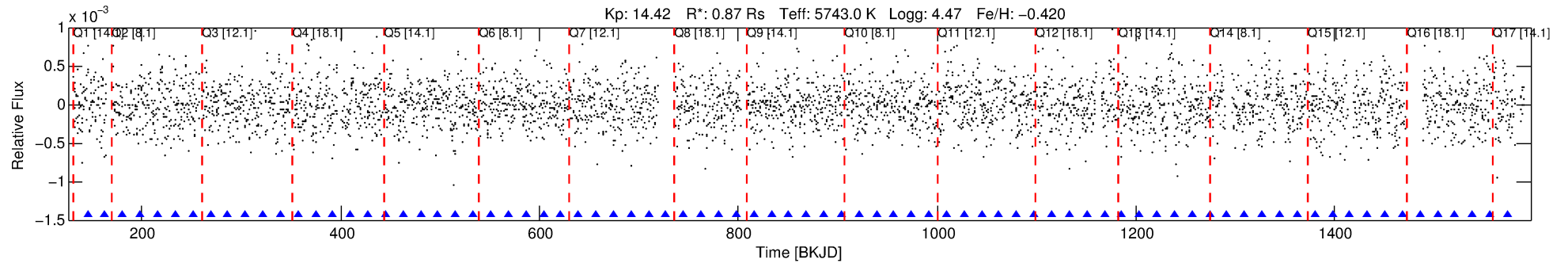
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007362364-03

No Significant Match Found

DV One-Page Summary

KIC: 7362364 Candidate: 3 of 6 Period: 17.635 d



DV Fit Results:

Period = 17.63459 [0.00017] d
Epoch = 145.4938 [0.0067] BKJD
Rp/R* = 0.0232 [0.0261]
a/R* = 42.84 [229.96]
b = 0.86 [1.68]
Seff = 48.04 [15.12]
Teq = 671 [53] K
Rp = 2.20 [2.54] Re
a = 0.1241 [0.0251] AU
Ag = 513.86 [1188.33] [0.43 σ]
Teff = 4942 [2837] K [1.51 σ]

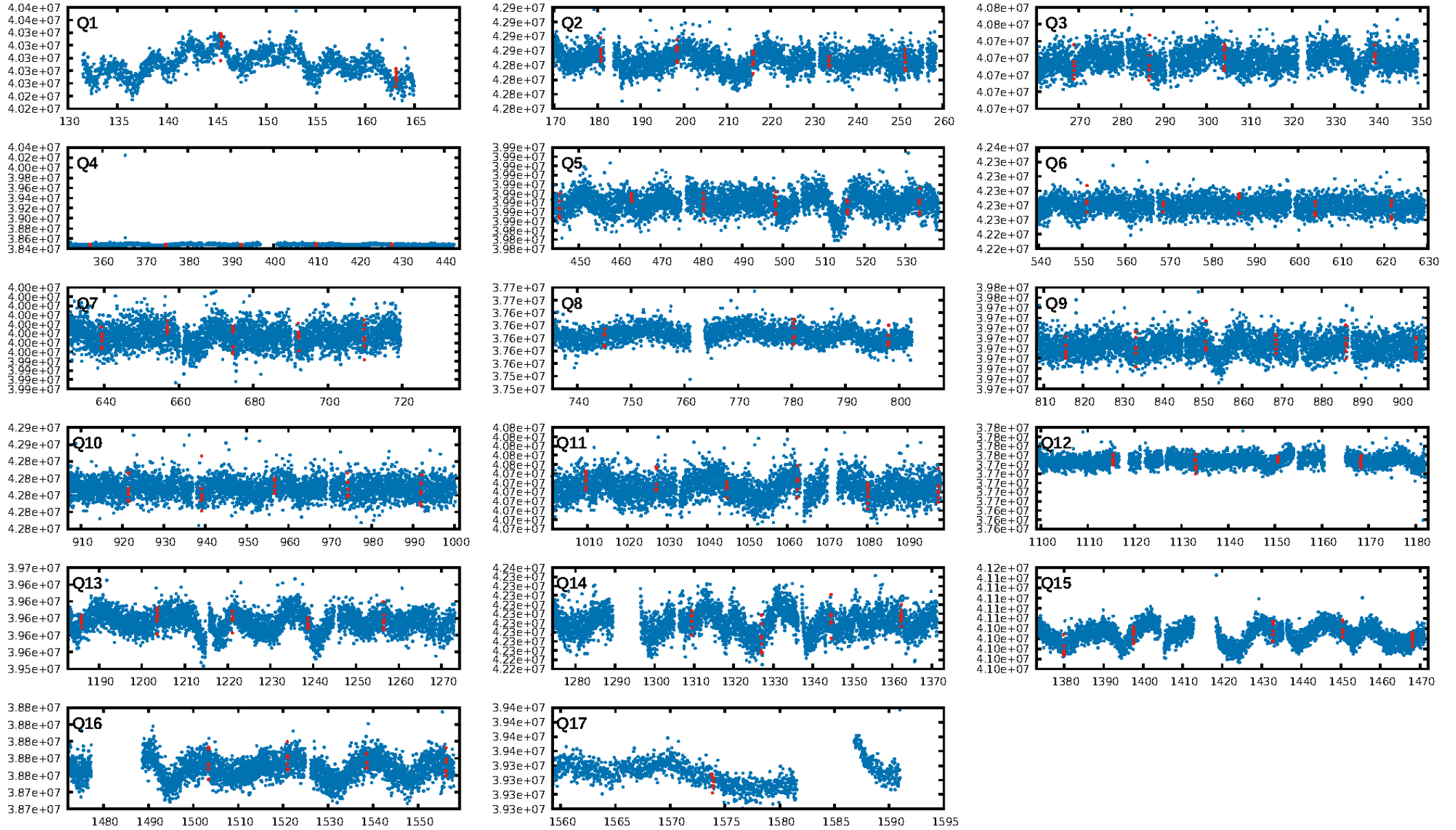
DV Diagnostic Results:

ShortPeriod-sig: 76.3% [1.18 σ]
LongPeriod-sig: 100.0% [229.22 σ]
ModelChiSquare2-sig: 32.3%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 4.09e-13
RollingBand-fgt: 1.00 [13/13]
GhostDiagnostic-chr: 1.212
Centroid-sig: 1.2%
Centroid-so: 2.741 arcsec [7.32 σ]
OotOffset-rm: 3.154 arcsec [4.01 σ]
KicOffset-rm: 4.958 arcsec [9.17 σ]
OotOffset-st: 3/1/3/2 [9]
KicOffset-st: 3/1/3/2 [9]
DiffImageQuality-fgm: 0.11 [1/9]
DiffImageOverlap-fno: 0.00 [0/17]

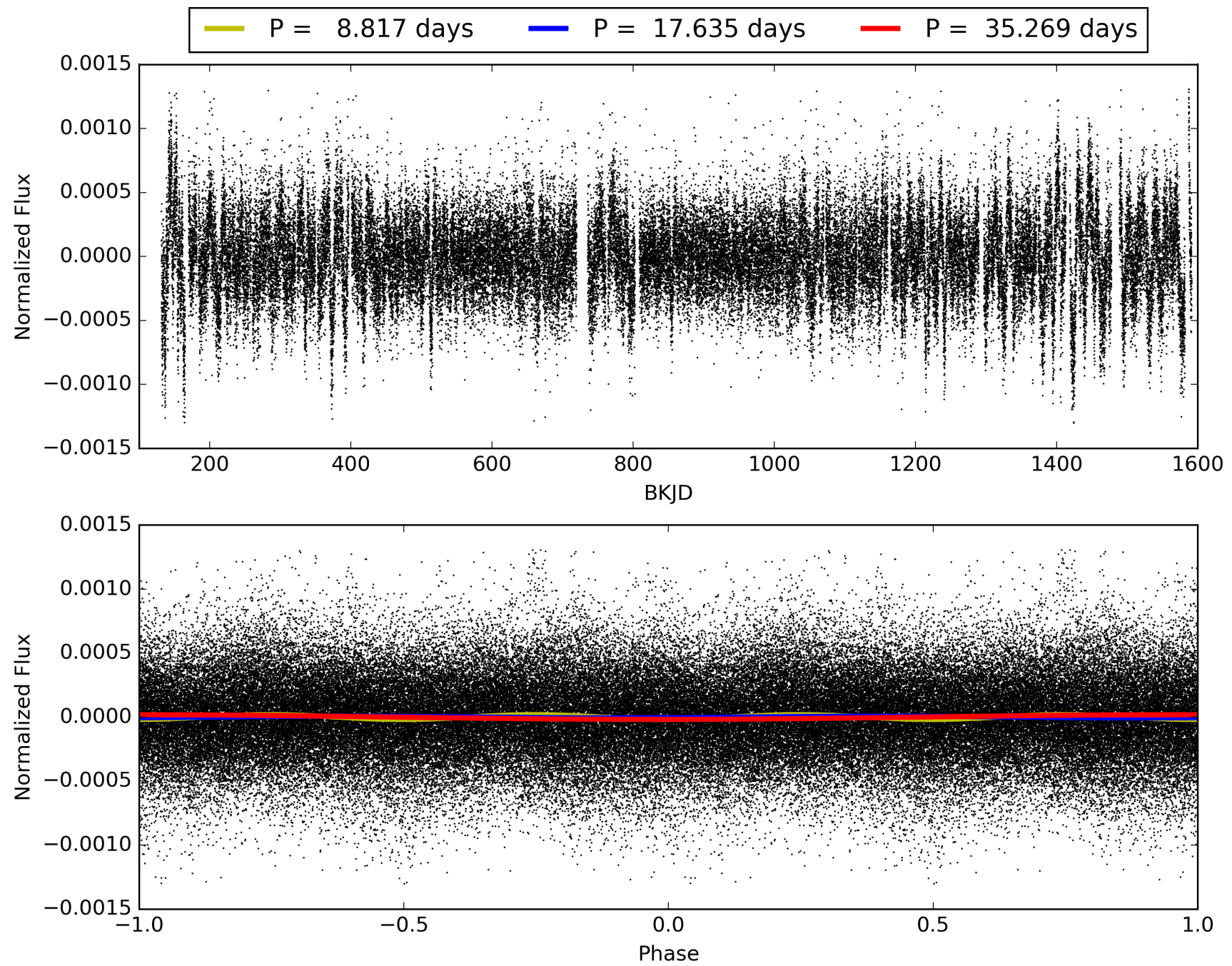
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 07:38:12 Z

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

TCE 007362364-03, PDC Light Curves

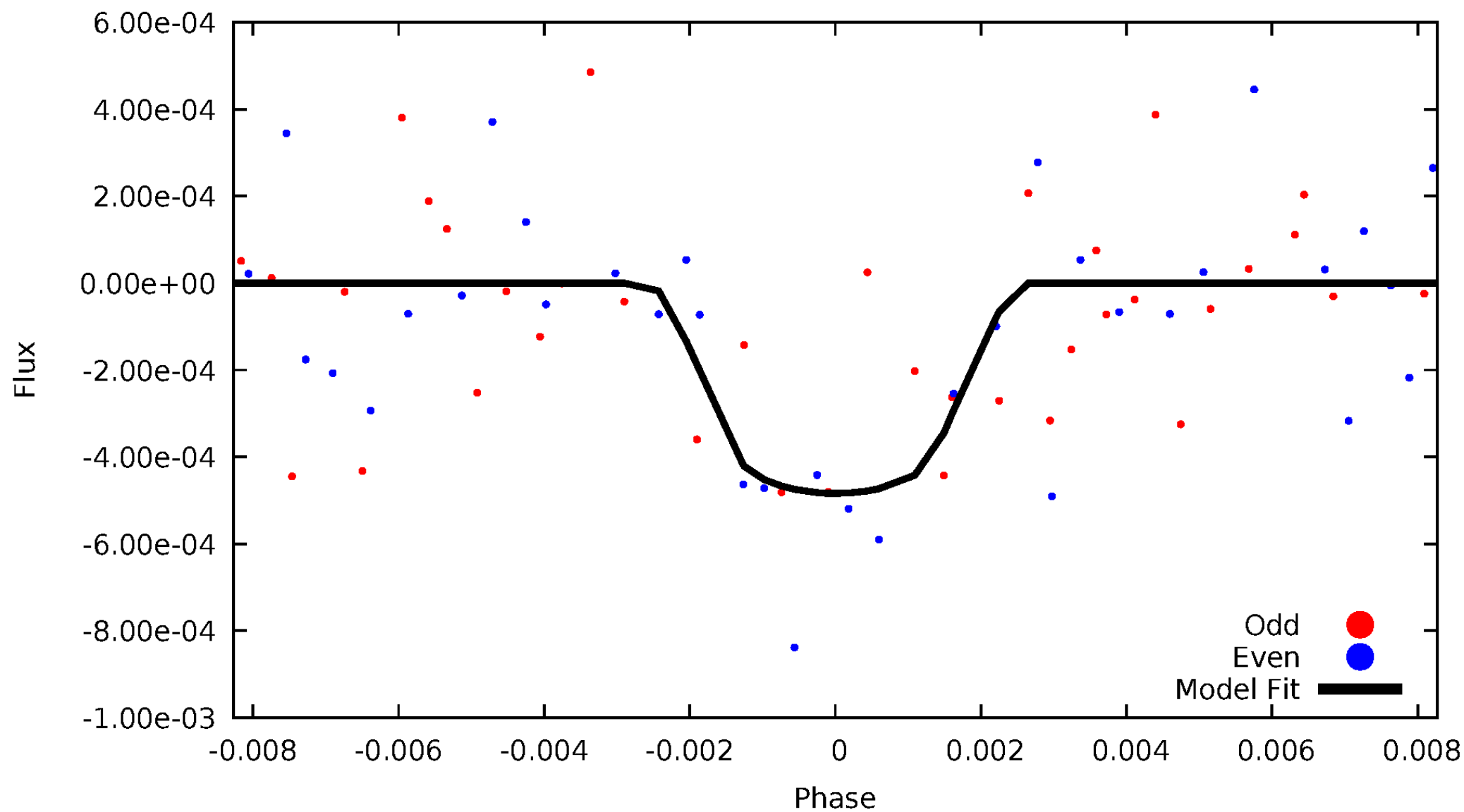


TCE 007362364-03



DV Odd/Even

TCE 007362364-03

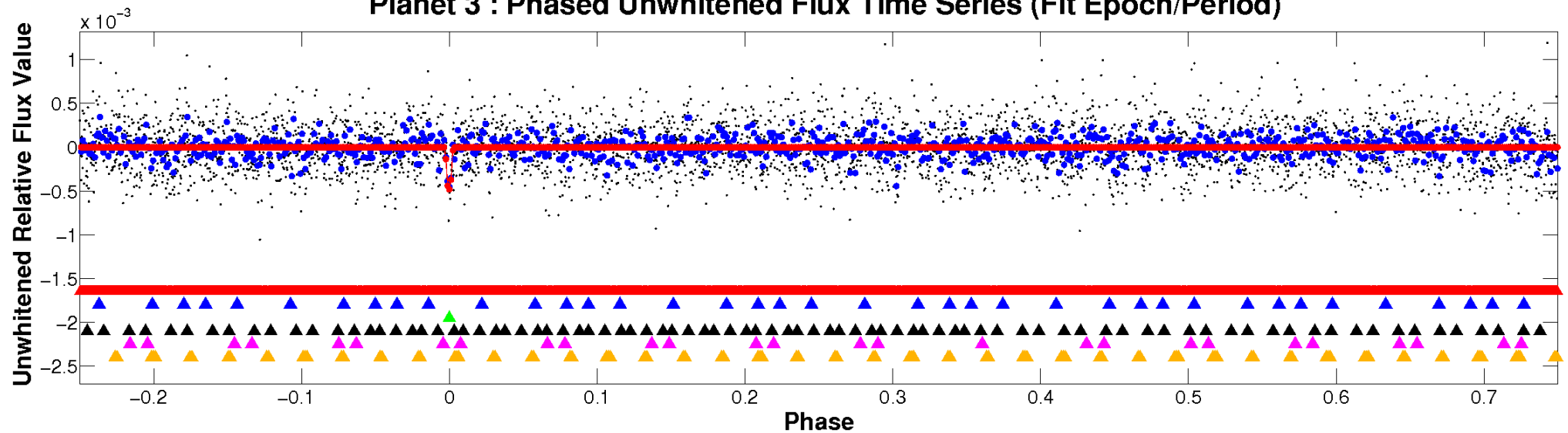


ALT Odd/Even

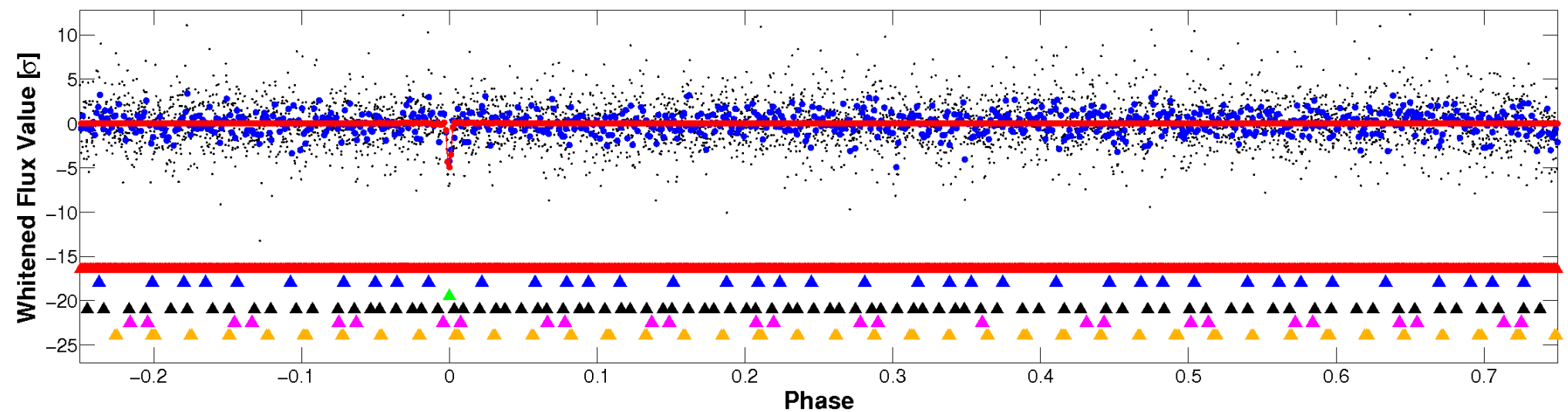
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

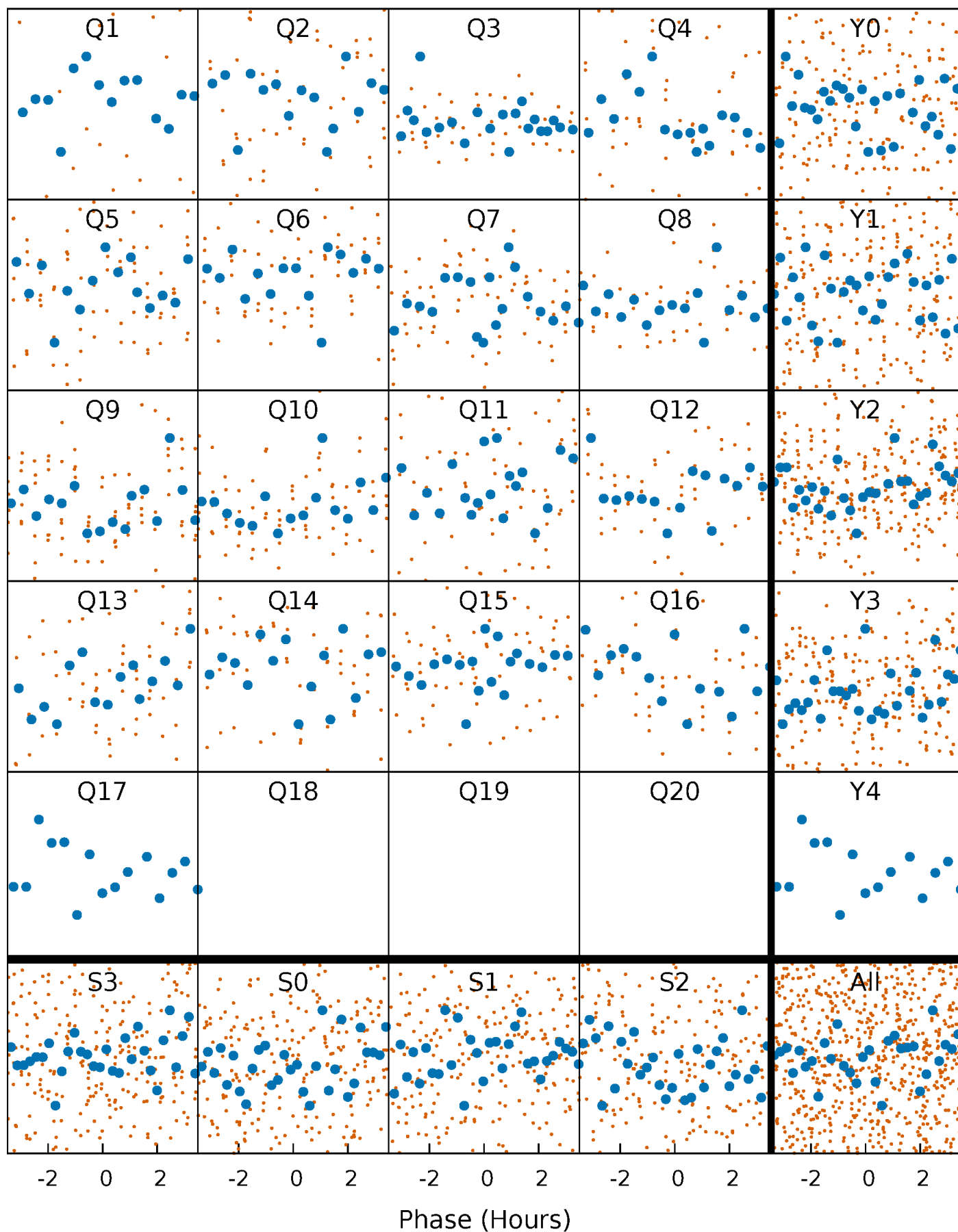


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



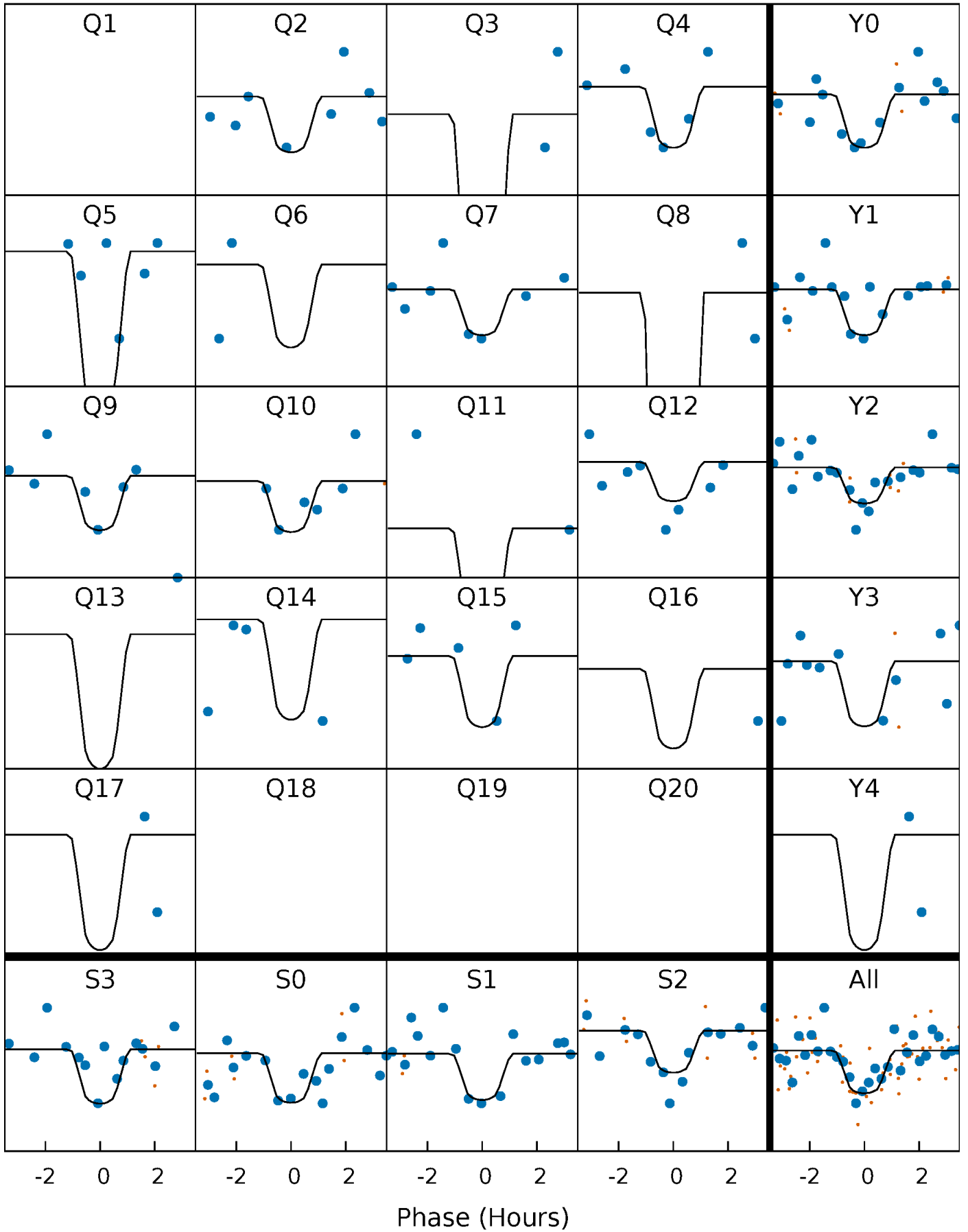
PDC Quarter-Phased Transit Curves

TCE 007362364-03 P= 17.634593 Days $T_0=145.493816$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 007362364-03 P= 17.634593 Days $T_0=145.493816$ (BKJD)

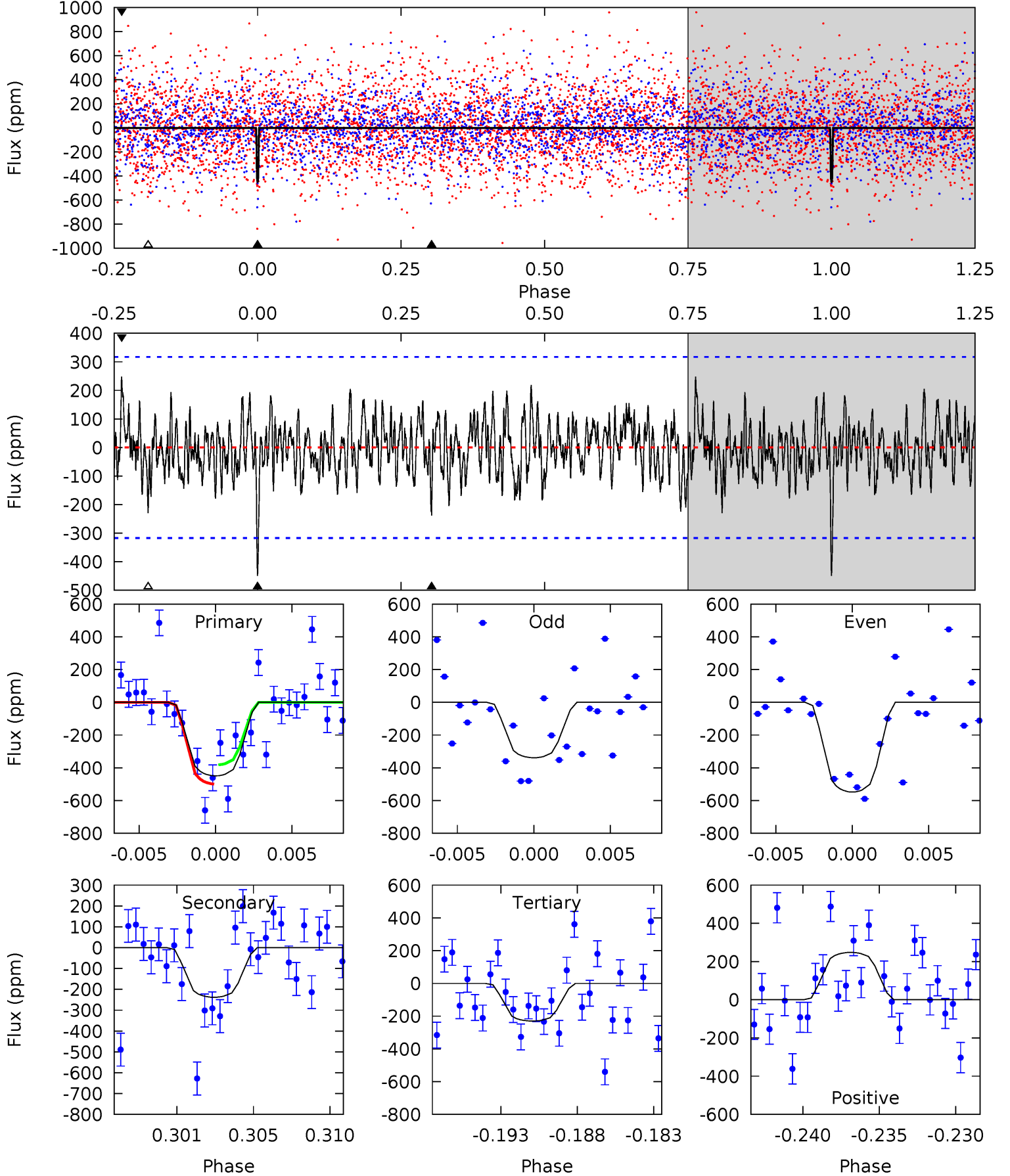


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

007362364-03, P = 17.634593 Days, E = 127.859223 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.32	3.88	3.75	4.04	5.17	2.83	1.30	3.57	3.28	0.13	-0.16	1.71	0.85	0.36	0.96



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 007362364

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5743^{+155}_{-155}	$4.471^{+0.108}_{-0.162}$	$-0.420^{+0.300}_{-0.300}$	$0.871^{+0.209}_{-0.112}$	$0.820^{+0.114}_{-0.061}$	$1.746^{+0.712}_{-0.778}$
	+3%/-3%	+2%/-4%	+71%/-71%	+24%/-13%	+14%/-7%	+41%/-45%
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 007362364-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-238 ± 61	$2.88^{+2.34}_{-1.87}$	947^{+53}_{-48}	4417^{+2687}_{-909}	263^{+1784}_{-190}
Alt.	N/A	N/A	N/A	N/A	N/A

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)

A_{obs} = Observed Albedo (Assuming $T=0$)

If a secondary eclipse is present, the system is likely an EB if $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

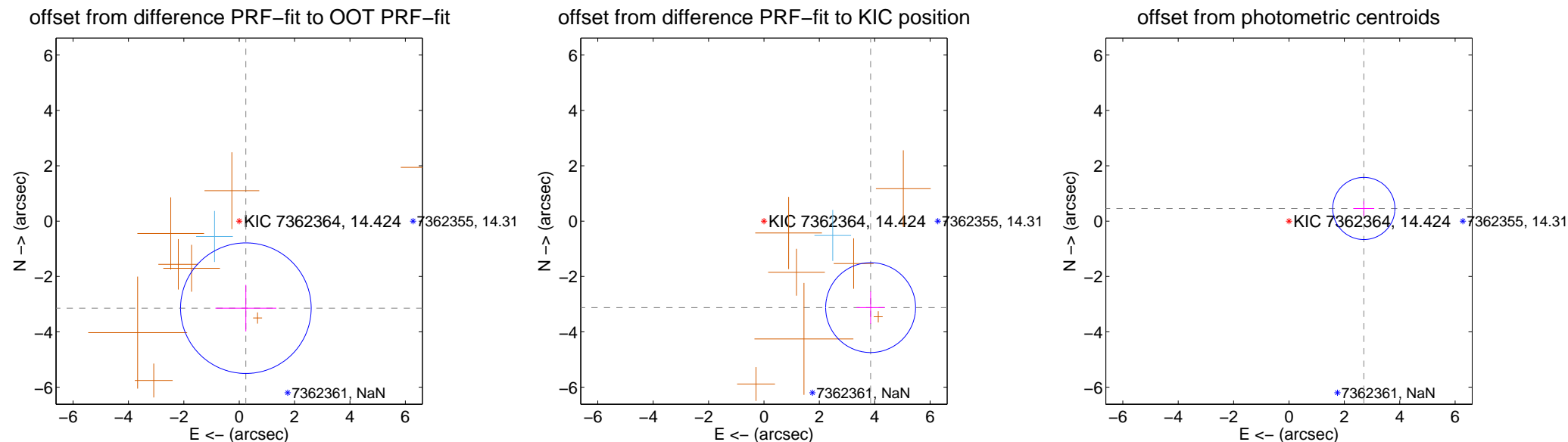
DV Centroid Data

Supplemental centroid analysis for 007362364-03. Kepler magnitude: 14.42. Transit SNR 14.88

There are 1 quarters with good PRF difference image offsets

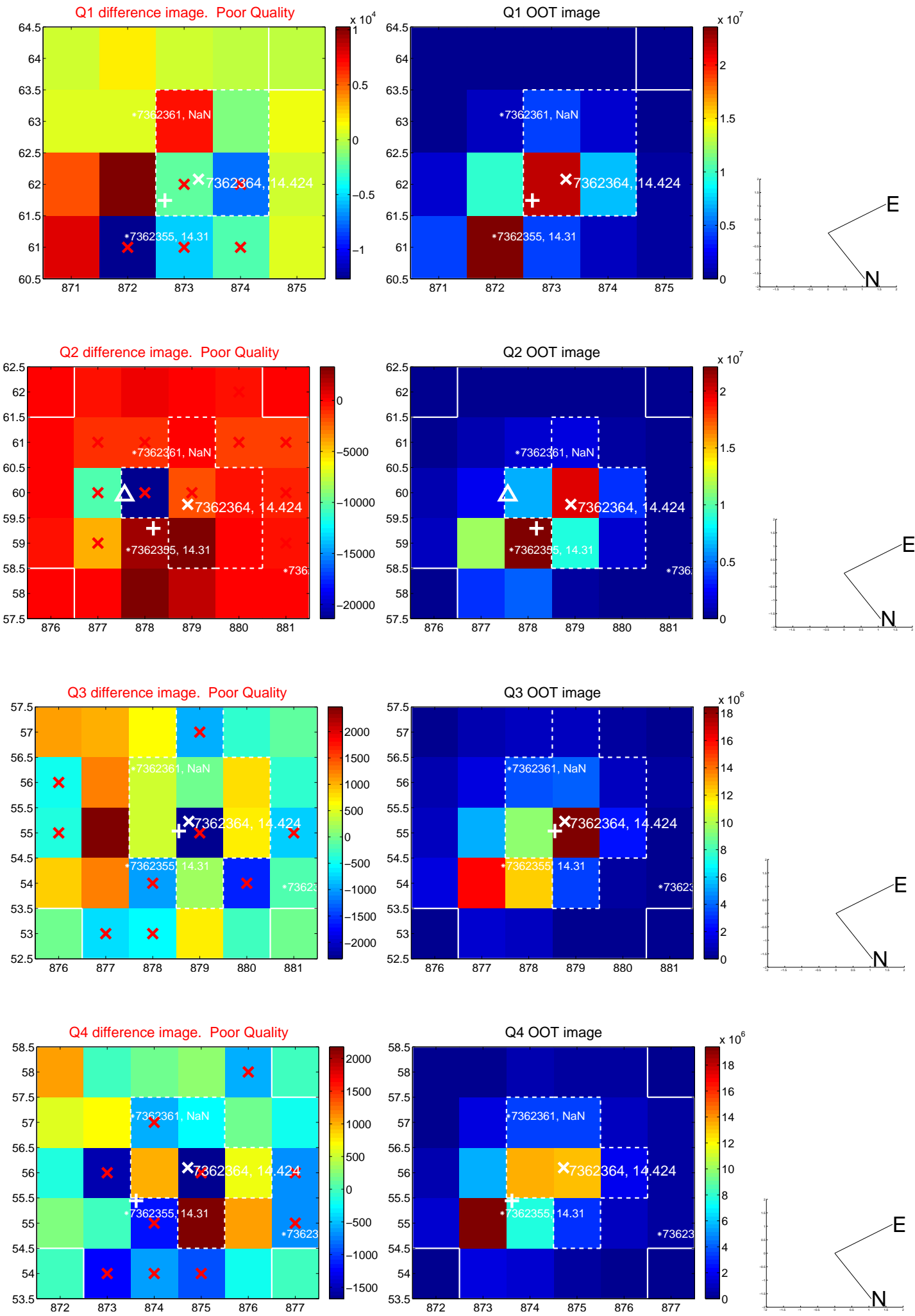
The OOT PRF centroid is offset from the target star catalog position by about 5.30 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.154 ± 0.786	4.01	-0.241 ± 1.100	-3.144 ± 0.843
PRF-fit source offset from KIC position	4.958 ± 0.541	9.17	-3.851 ± 0.511	-3.123 ± 0.584
photometric centroid source offset	2.74 ± 0.37	7.32	-2.70 ± 0.38	0.46 ± 0.27

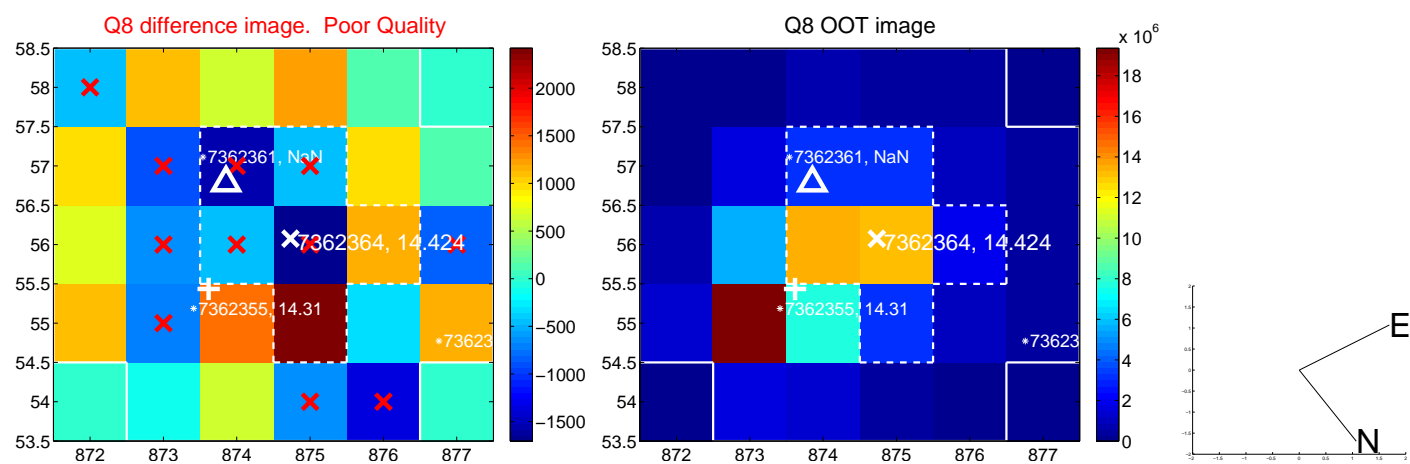
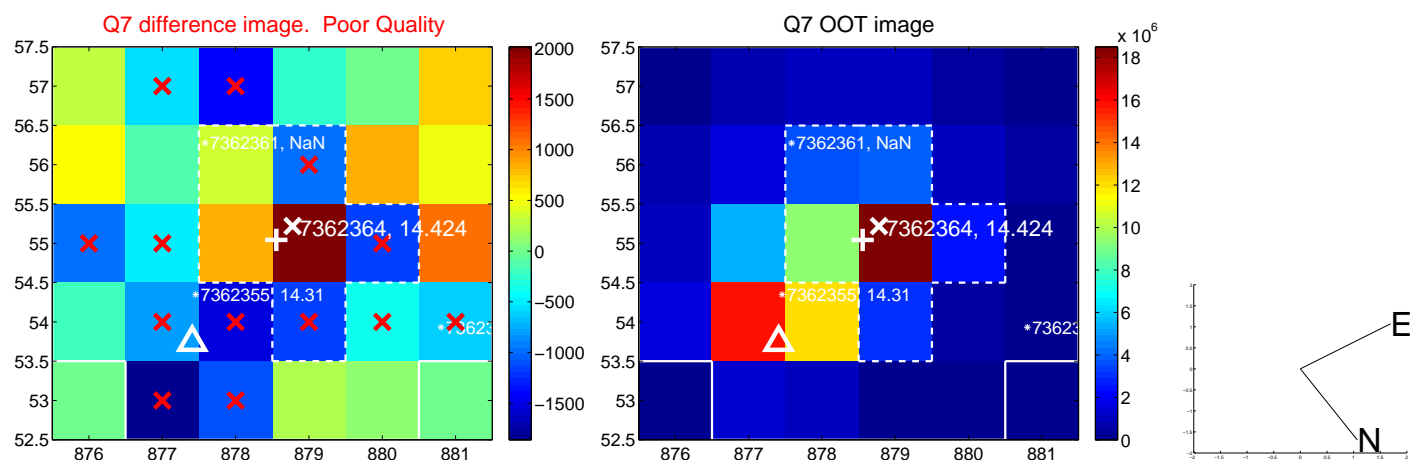
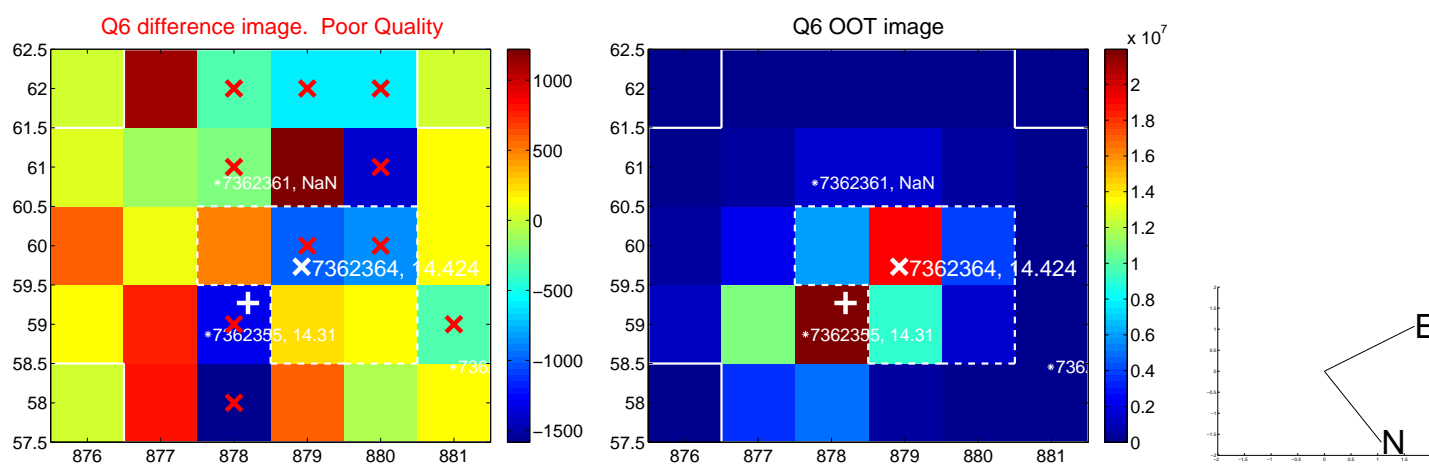
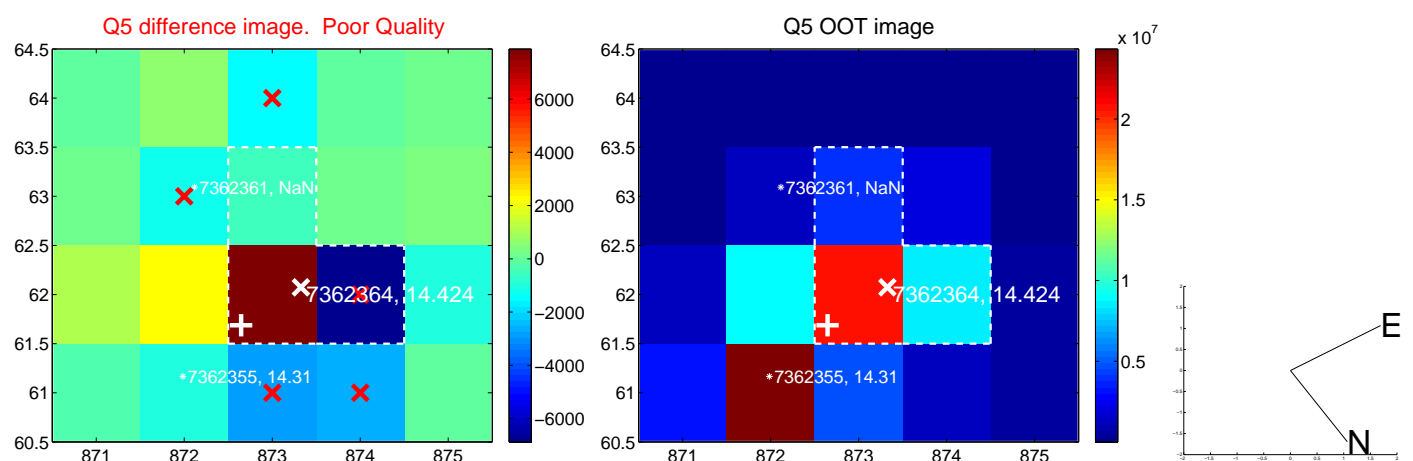


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

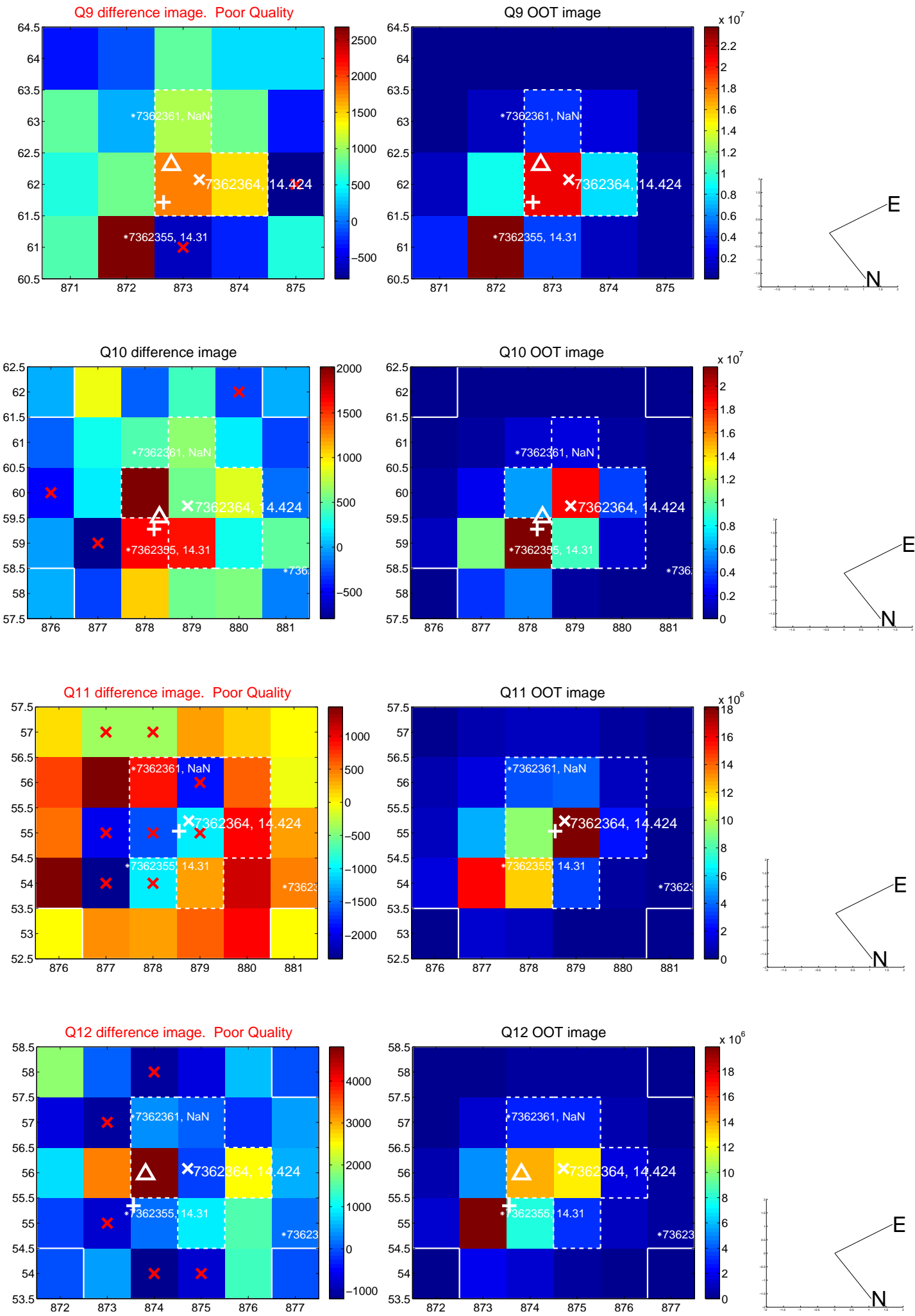
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



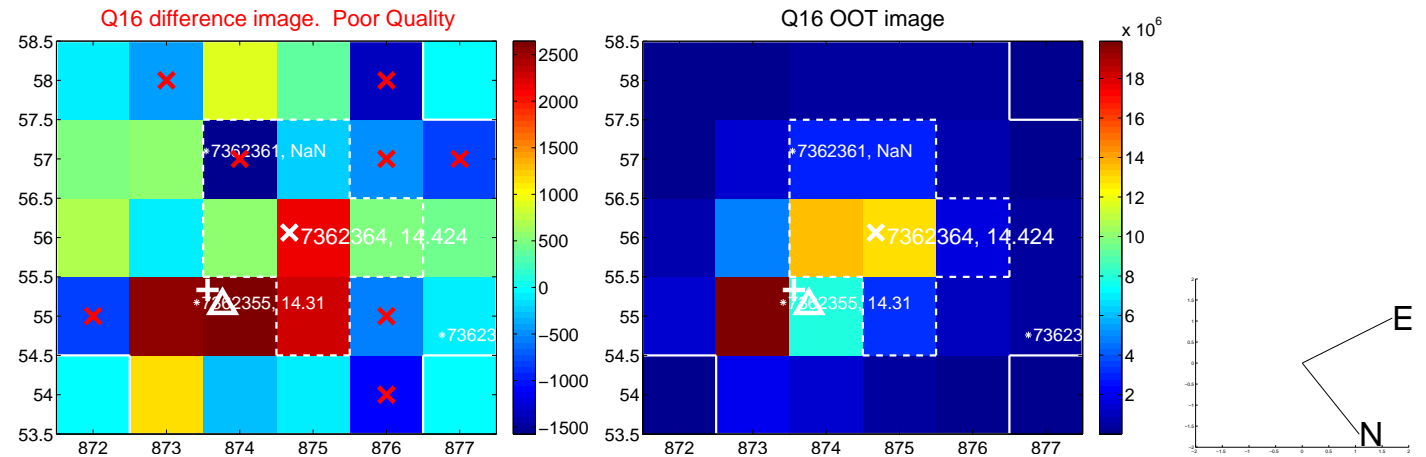
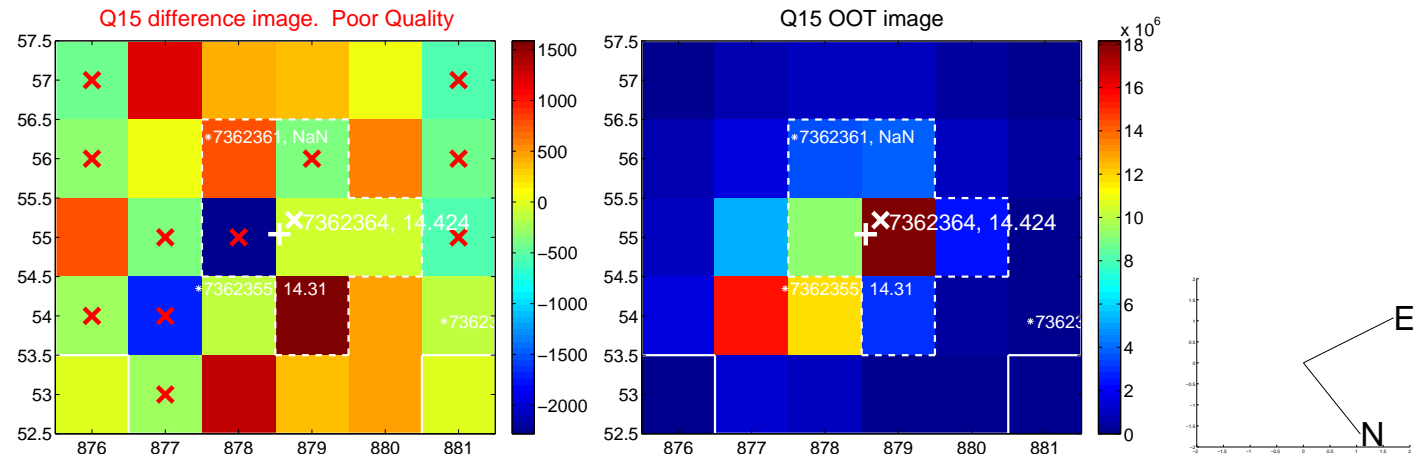
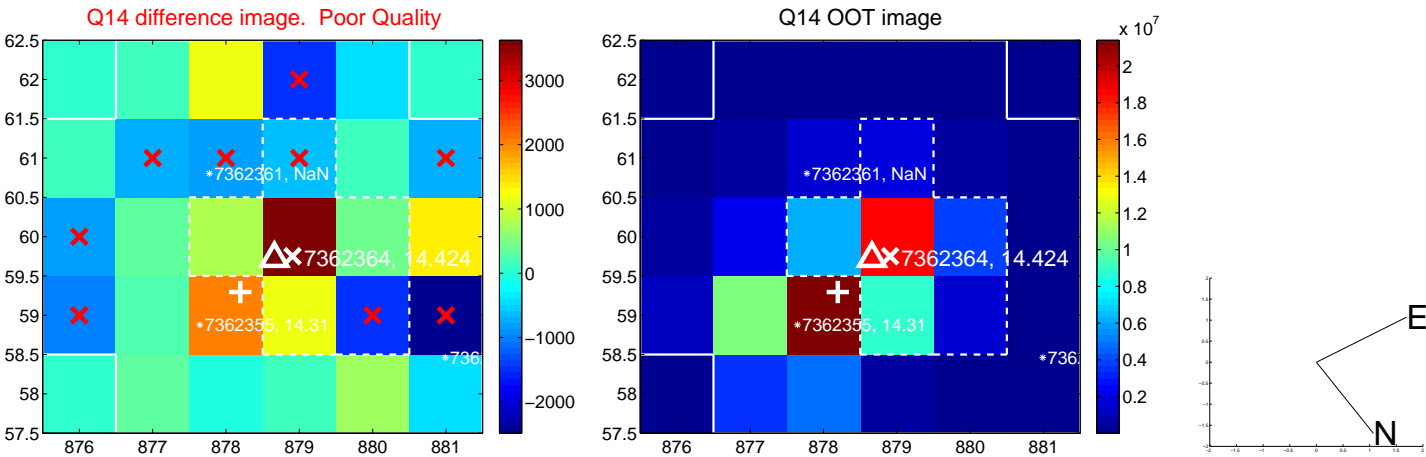
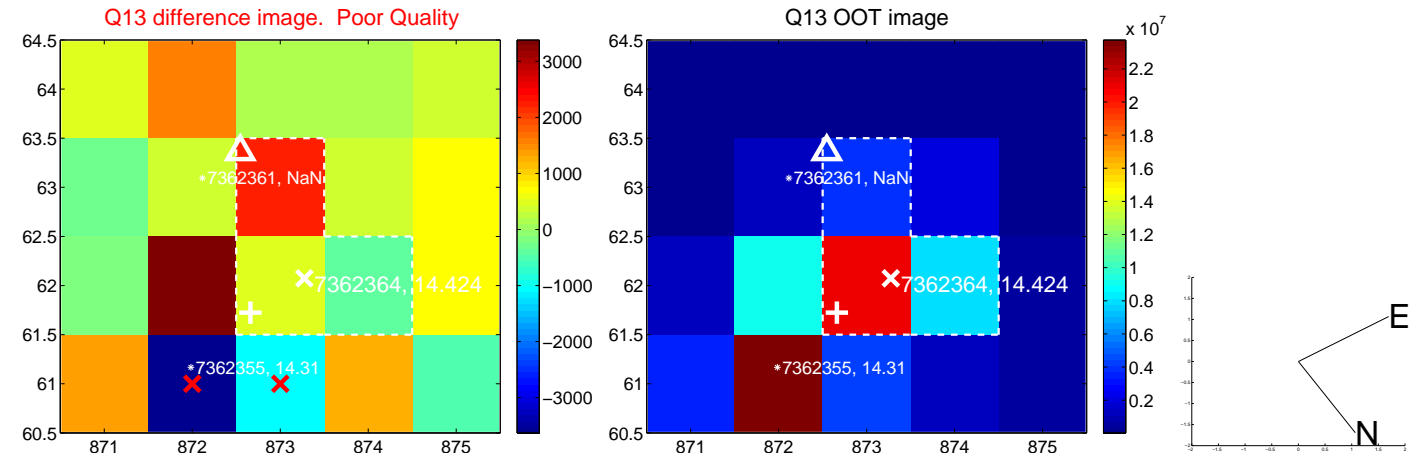
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



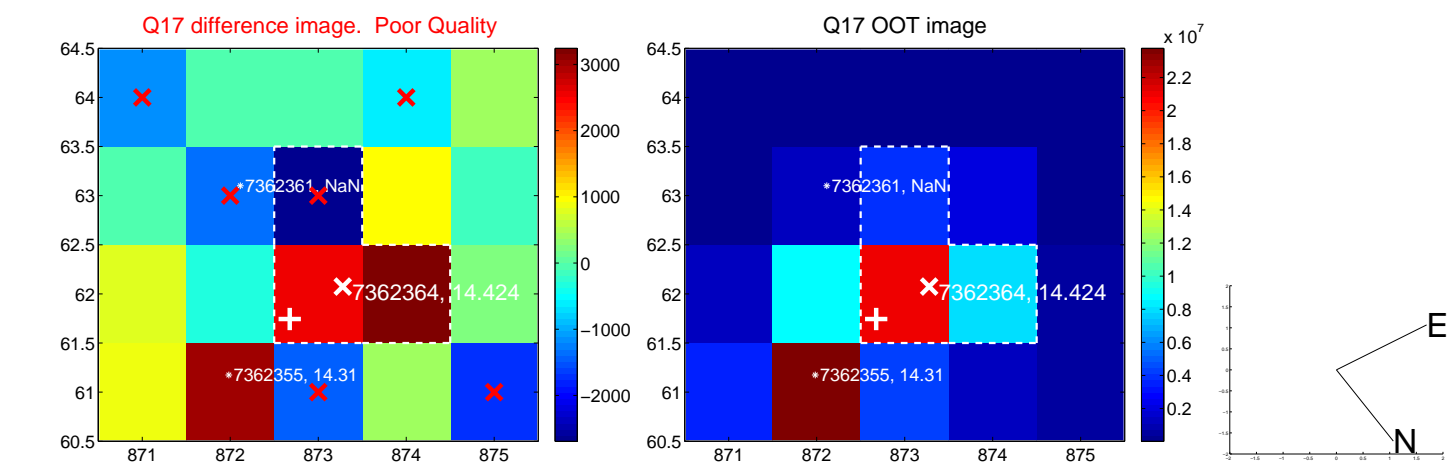
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



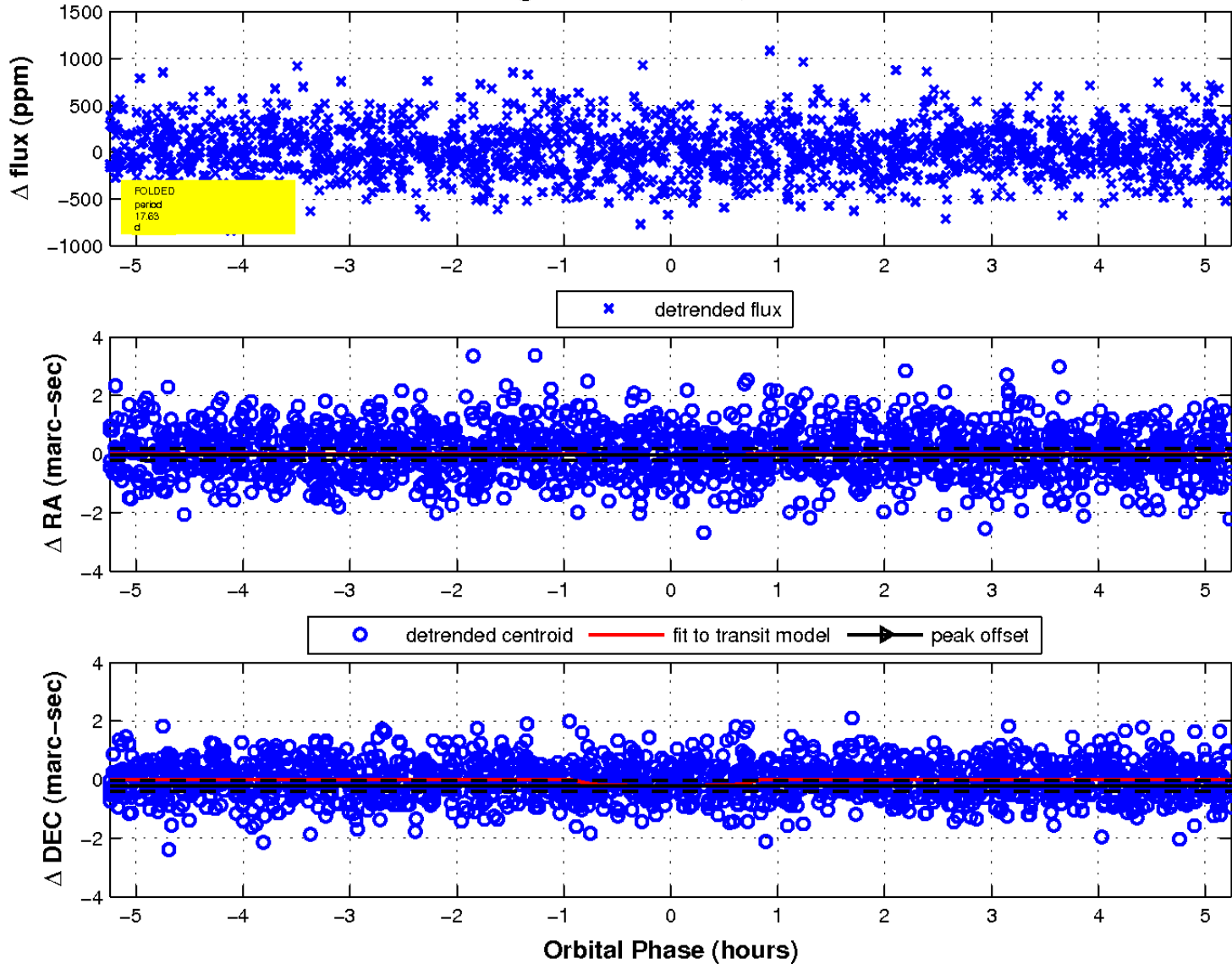
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

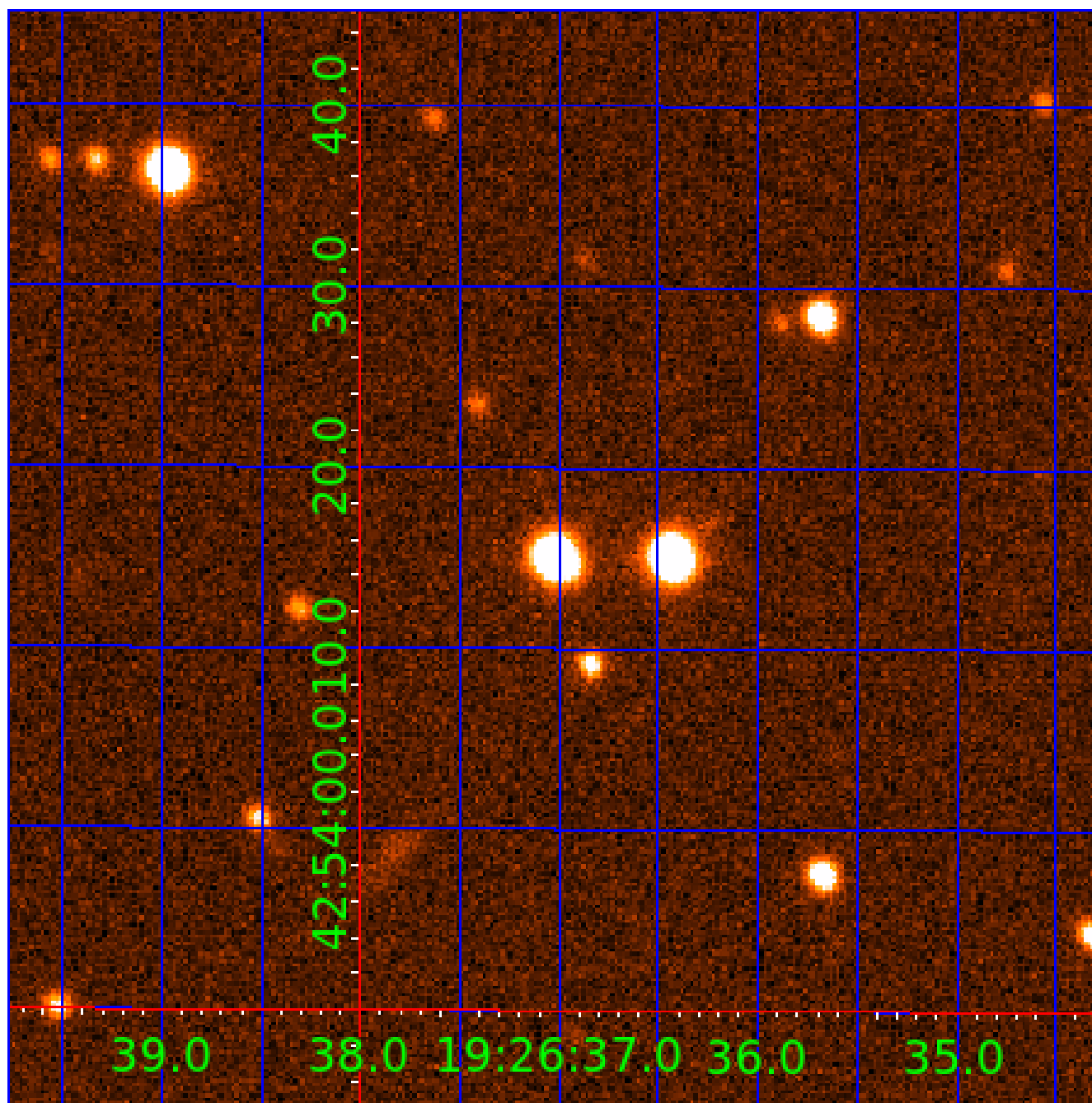


fluxWeightedCentroids, Planet 3 of 6



UKIRT Image

Declination



KIC 007362364

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})
007362364-01	OBS	No	0.566754	131.864789	18.9	4.071	13.6	8.2	0.87	5743	0.38	4701.85
007362364-02	OBS	No	37.552986	155.393391	721.9	1.136	13.2	15.3	0.87	5743	2.56	17.54
007362364-03	OBS	No	17.634593	145.493816	484.1	1.749	13.1	14.9	0.87	5743	2.20	48.04
007362364-04	OBS	No	17.136345	134.003121	404.0	9.953	11.3	11.6	0.87	5743	1.97	49.92
007362364-05	OBS	No	54.148503	135.670308	483.8	4.492	9.6	13.9	0.87	5743	2.08	10.77
007362364-06	OBS	No	15.825305	140.636258	173.9	0.877	10.7	4.4	0.87	5743	1.35	55.50

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007362364-01	OBS	FP	0.00	1	0	1	1	LPP_DV—CENT_KIC_POS—HALO_GHOST—EPHEM_MATCH
007362364-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS—HALO_GHOST
007362364-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—CENT_KIC_POS—CENT_UNCERTAIN
007362364-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_KIC_POS
007362364-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
007362364-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

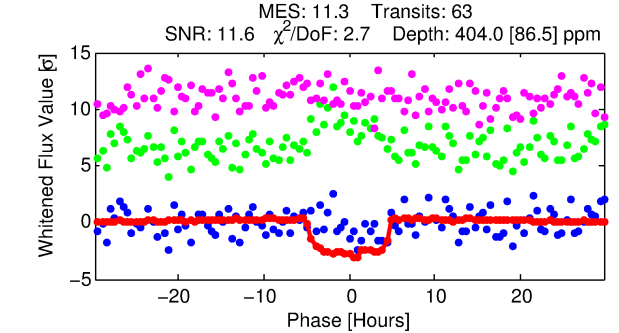
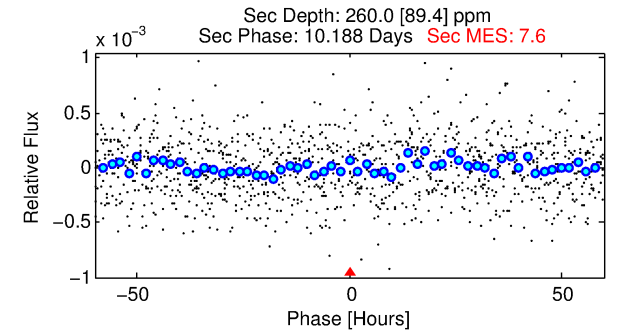
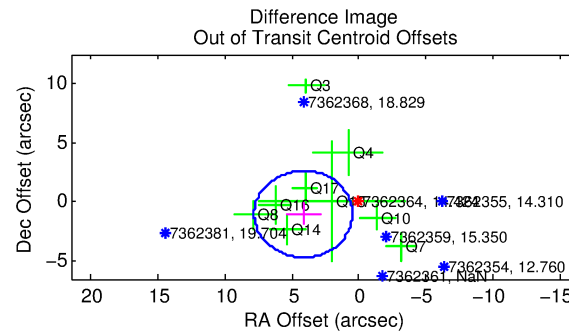
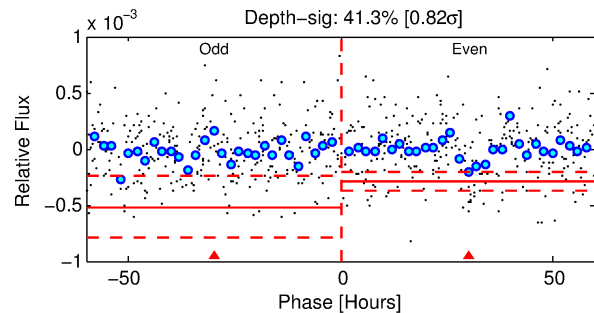
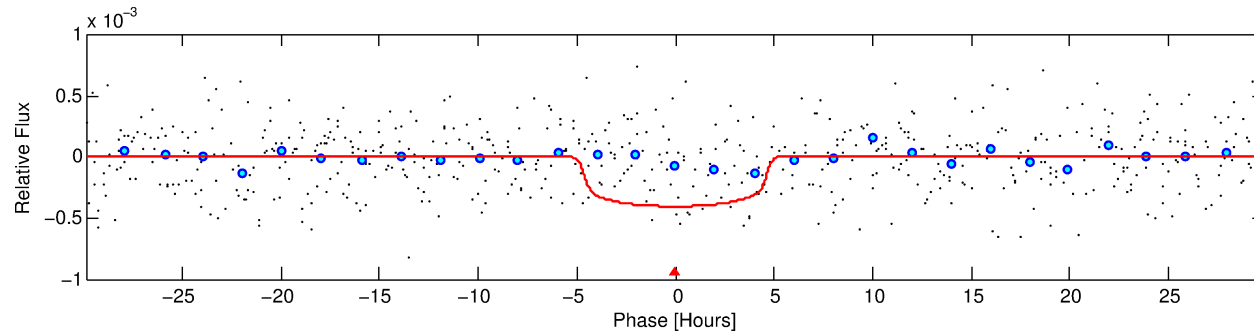
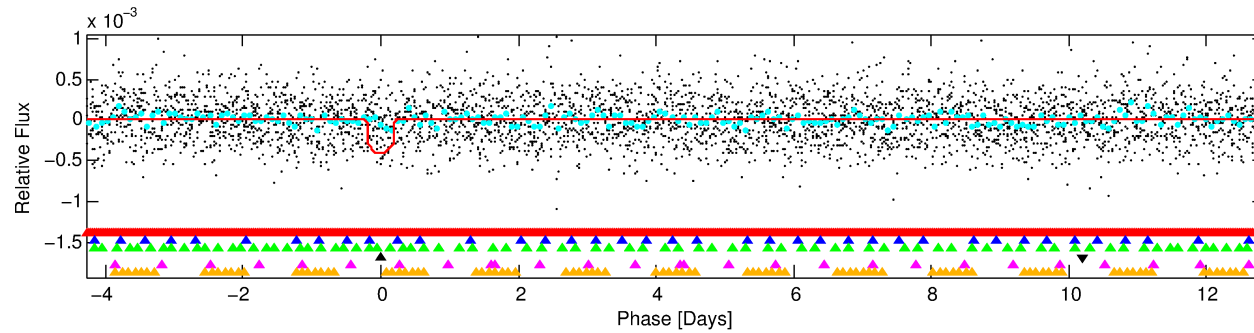
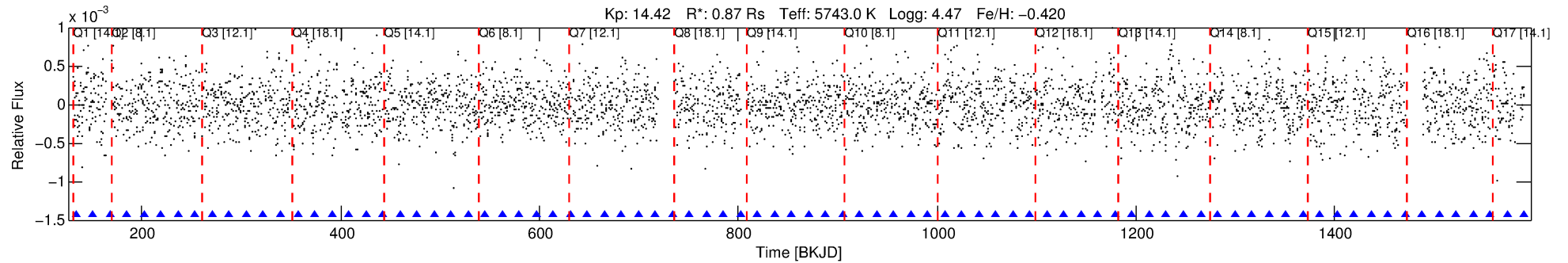
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007362364-04

No Significant Match Found

DV One-Page Summary

KIC: 7362364 Candidate: 4 of 6 Period: 17.136 d



DV Fit Results:

Period = 17.13634 [0.00062] d
Epoch = 134.0031 [0.1291] BKJD
Rp/R* = 0.0207 [0.0102]
a/R* = 7.83 [20.20]
b = 0.83 [0.78]
Seff = 49.92 [15.71]
Teq = 678 [53] K
Rp = 1.97 [1.08] Re
a = 0.1217 [0.0247] AU
Ag = 545.30 [590.31] [0.92σ]
Teffp = 5064 [1325] K [3.31σ]

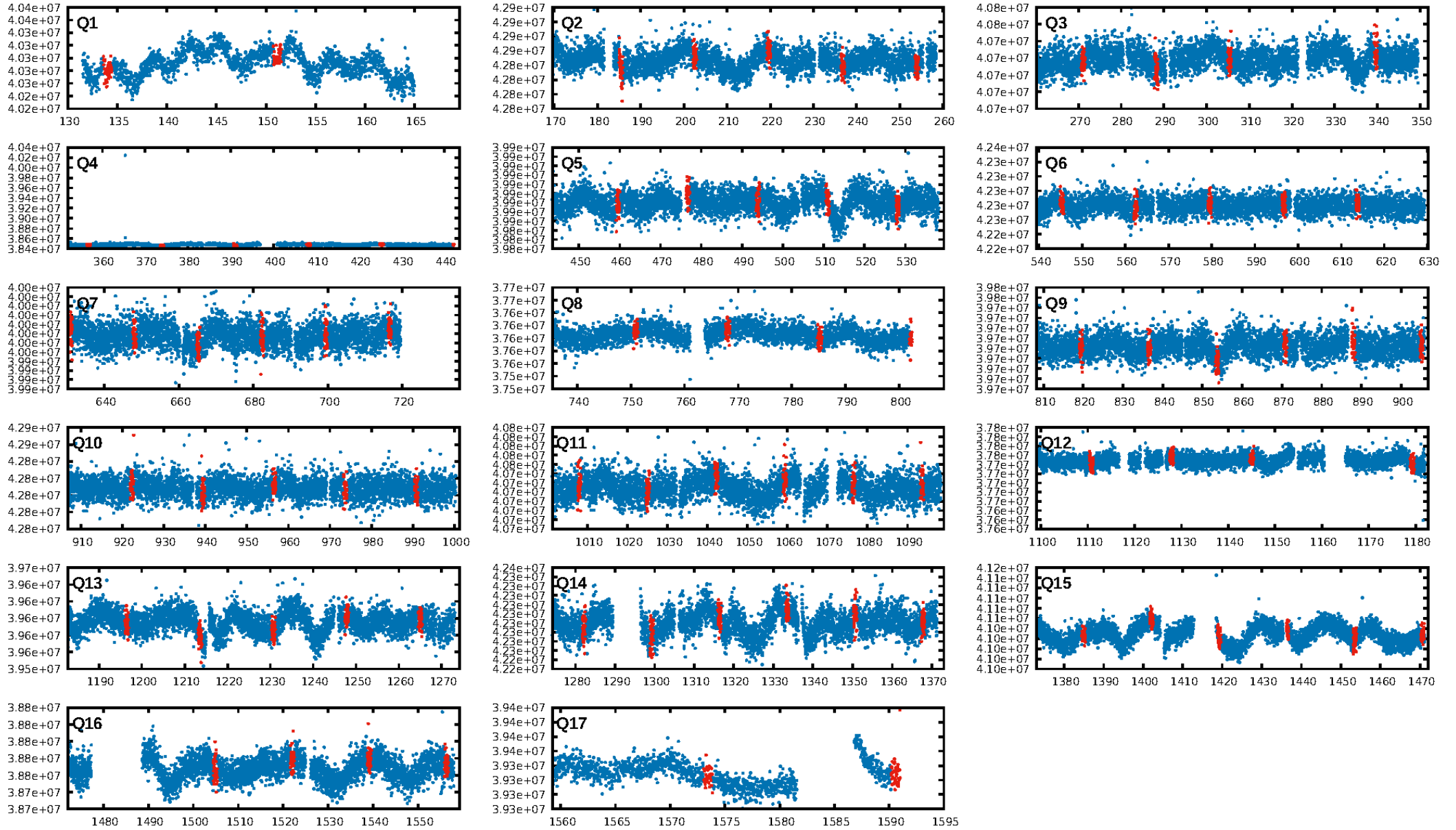
DV Diagnostic Results:

ShortPeriod-sig: 99.8% [3.15σ]
LongPeriod-sig: 76.3% [1.18σ]
ModelChiSquare2-sig: 44.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.06e-13
RollingBand-fgt: 1.00 [60/60]
GhostDiagnostic-chr: 2.05
Centroid-sig: 0.0%
Centroid-so: 3.460 arcsec [17.30σ]
OotOffset-rm: 4.280 arcsec [3.51σ]
KicOffset-rm: 1.069 arcsec [0.86σ]
OotOffset-st: 2/2/3/2 [9]
KicOffset-st: 2/2/3/2 [9]
DiffImageQuality-fgm: 0.11 [1/9]
DiffImageOverlap-fno: 0.00 [0/17]

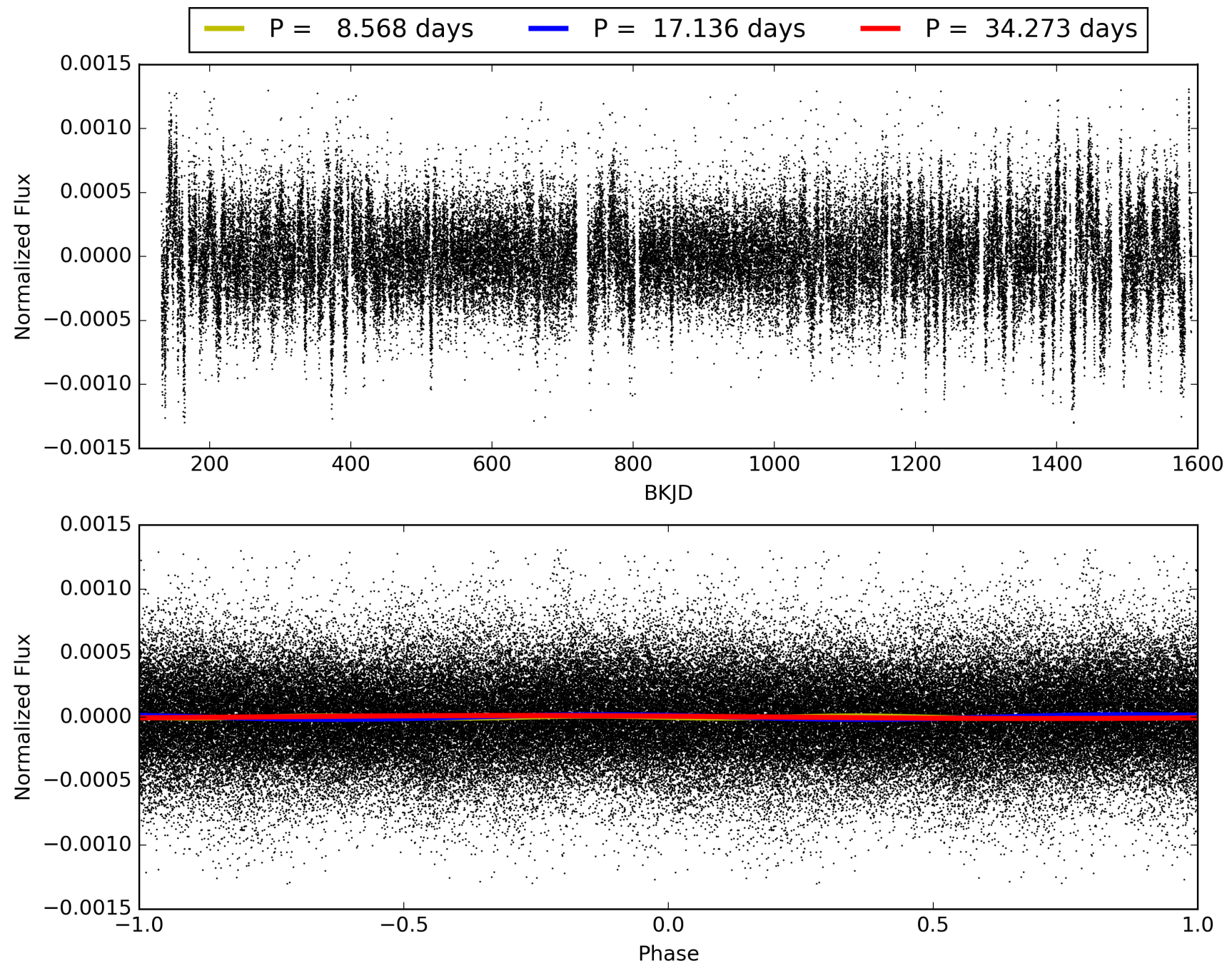
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 07:38:15 Z

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

TCE 007362364-04, PDC Light Curves

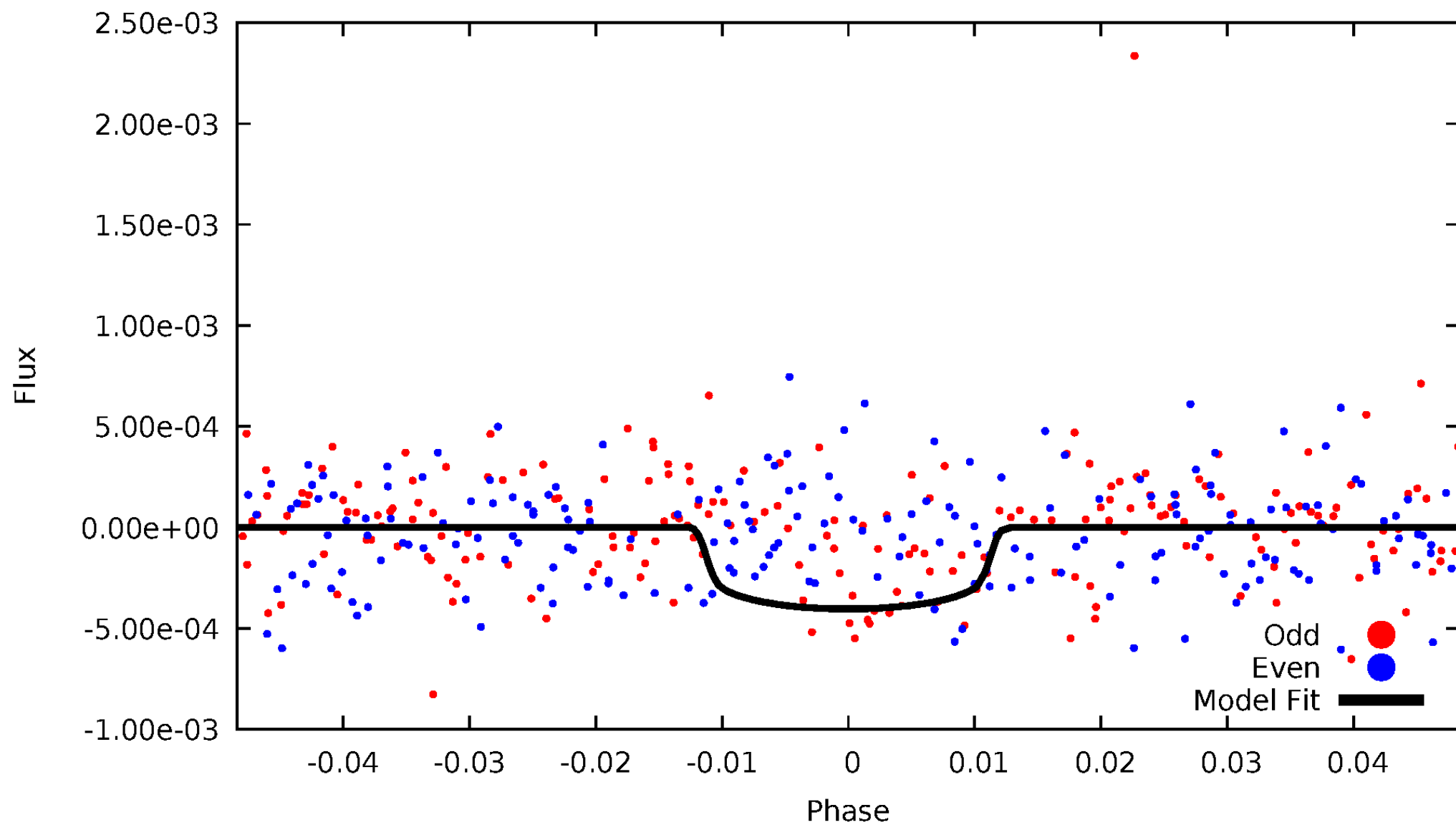


TCE 007362364-04



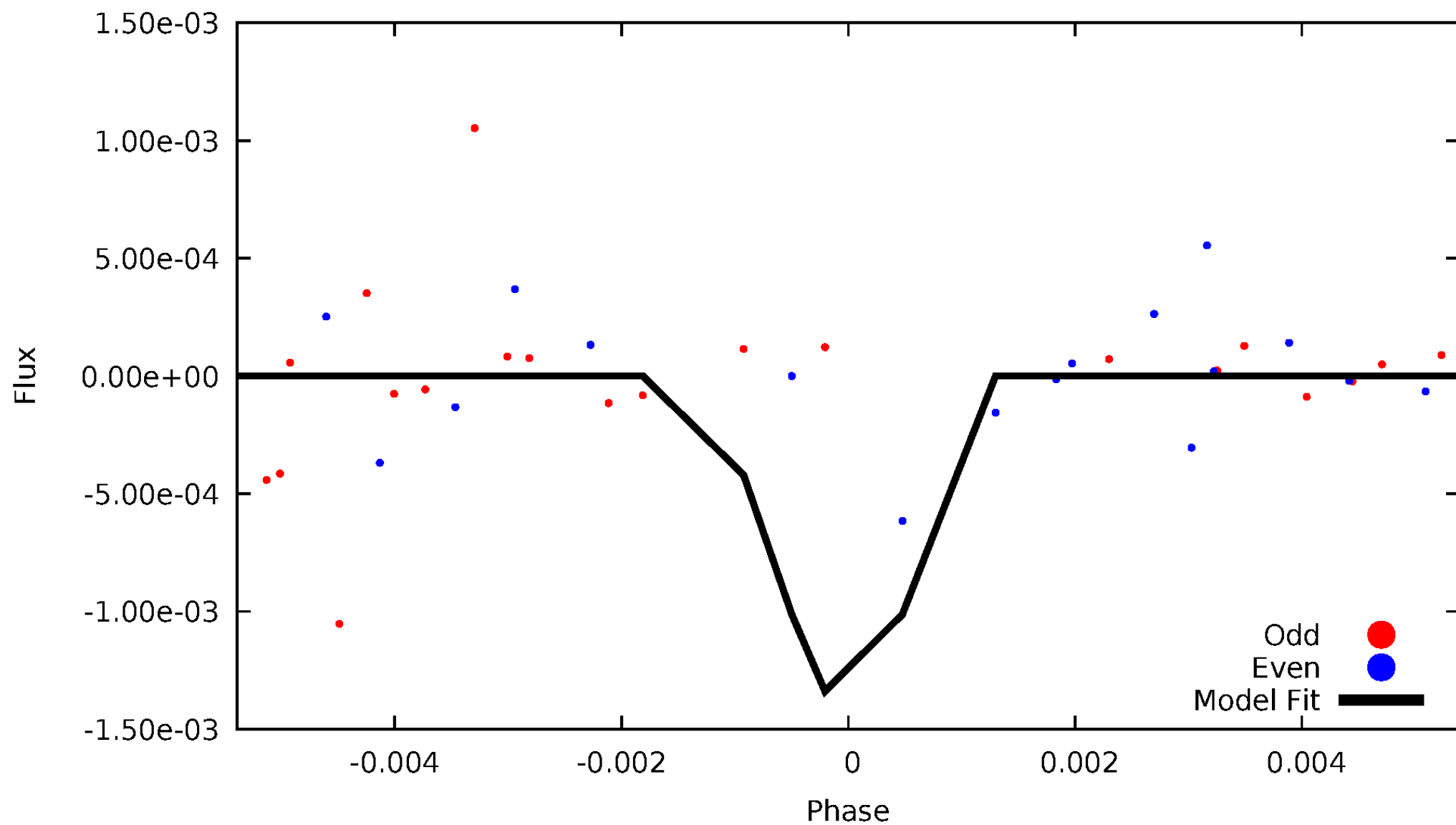
DV Odd/Even

TCE 007362364-04



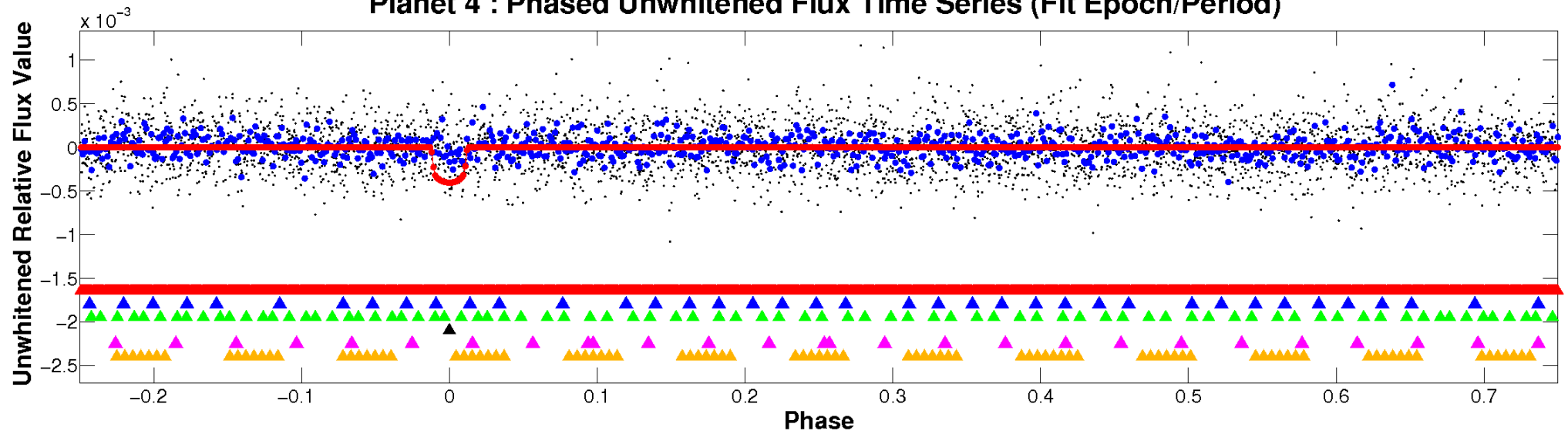
ALT Odd/Even

TCE 007362364-04

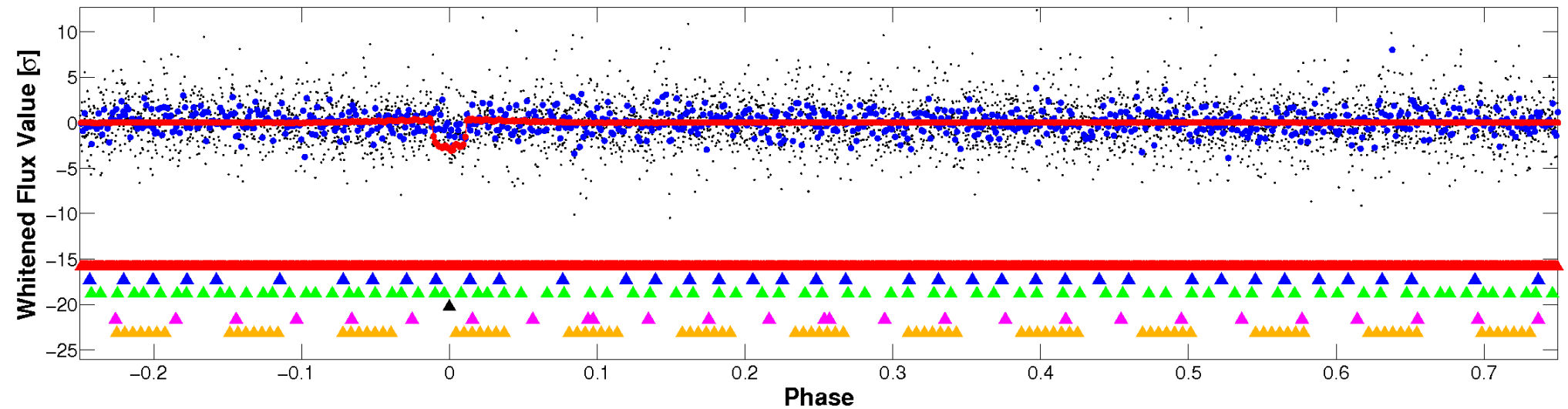


Non-Whitened Vs. Whitened Light Curve

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

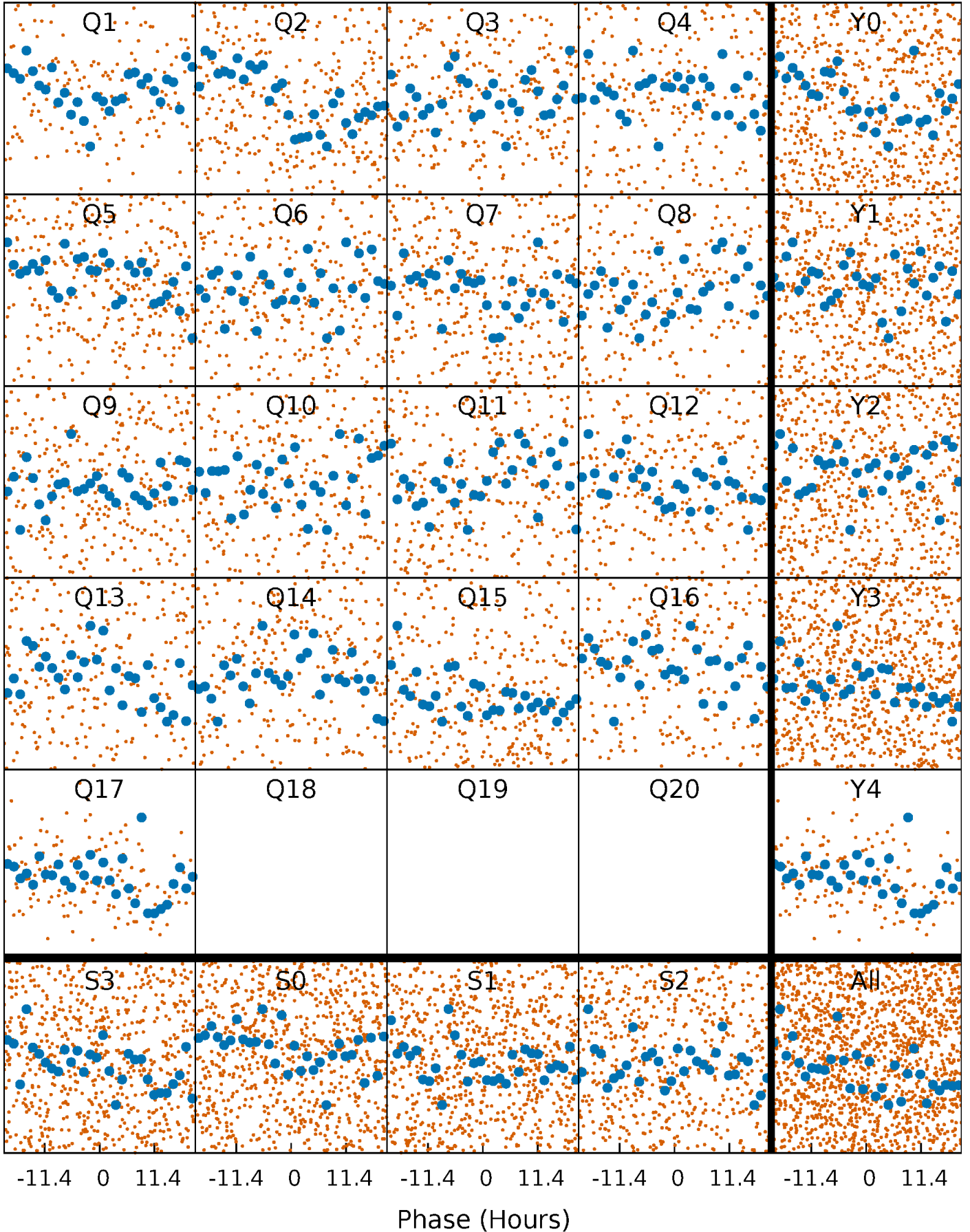


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



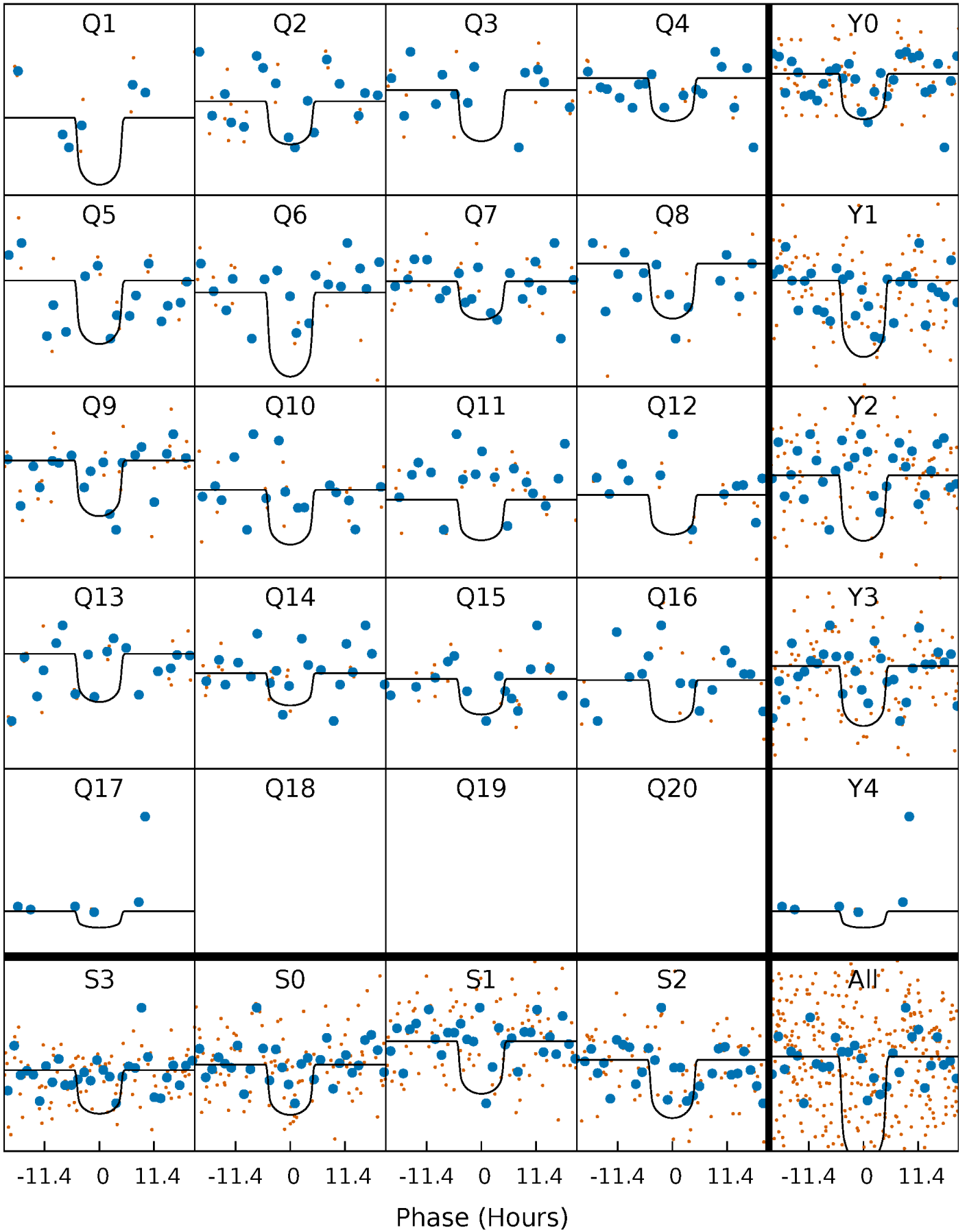
PDC Quarter-Phased Transit Curves

TCE 007362364-04 P= 17.136345 Days $T_0=134.003121$ (BKJD)



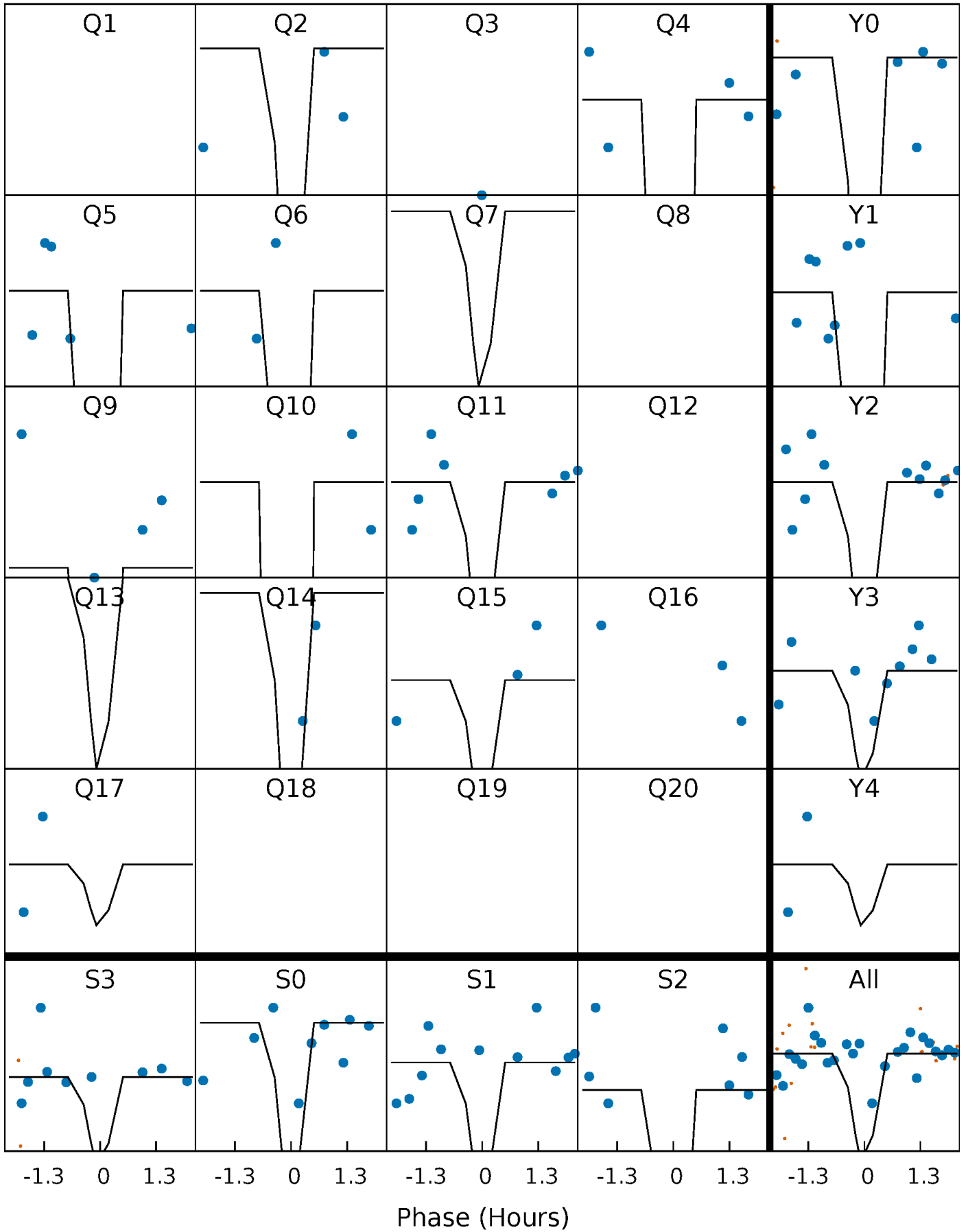
DV Quarter-Phased Transit Curves

TCE 007362364-04 P= 17.136345 Days $T_0=134.003121$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

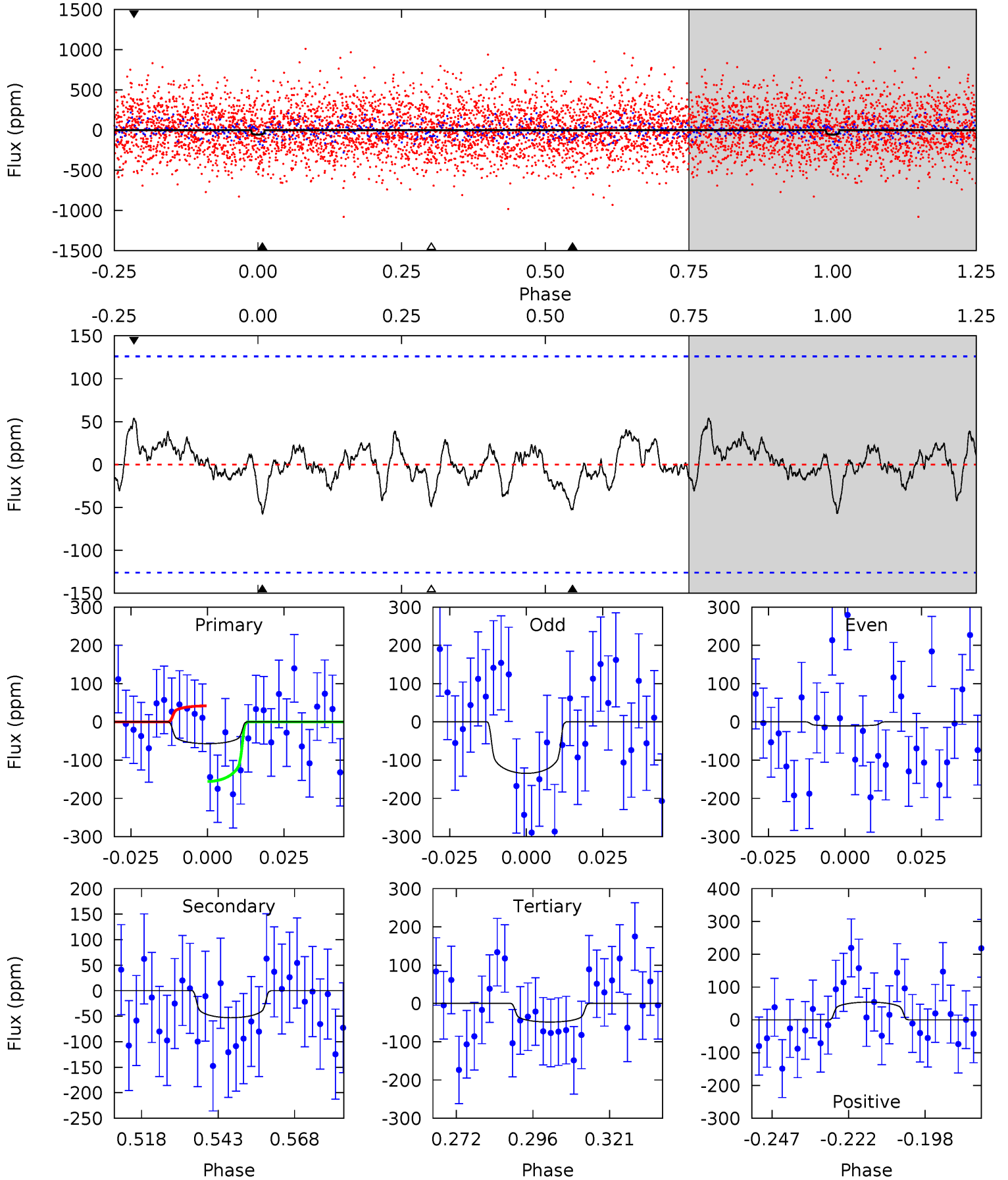
TCE 007362364-04 P= 17.140208 Days $T_0=134.119752$ (BKJD)



DV Model-Shift Uniqueness Test

007362364-04, P = 17.136345 Days, E = 116.866776 Days

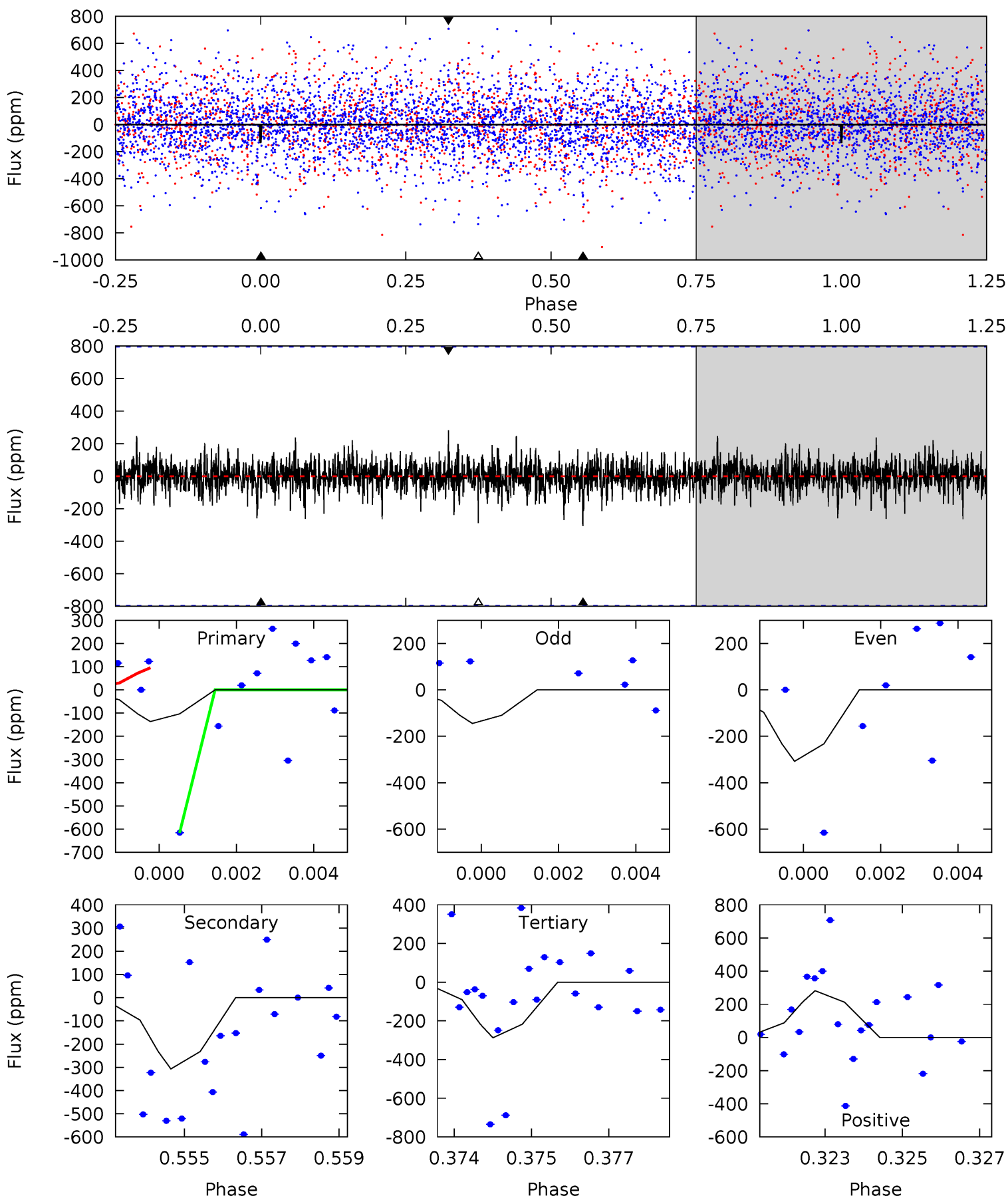
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.19	2.04	1.87	2.07	4.85	2.25	0.69	0.32	0.12	0.17	-0.04	2.40	0.86	0.49	2.20



Alt Model-Shift Uniqueness Test

007362364-04, P = 17.140208 Days, E = 116.979544 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.92	2.06	1.92	1.89	5.35	3.12	0.47	-1.01	-0.97	0.13	0.17	0.55	0	0.48	1.77



Stellar Parameters For KIC 007362364

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5743^{+155}_{-155}	$4.471^{+0.108}_{-0.162}$	$-0.420^{+0.300}_{-0.300}$	$0.871^{+0.209}_{-0.112}$	$0.820^{+0.114}_{-0.061}$	$1.746^{+0.712}_{-0.778}$
	+3%/-3%	+2%/-4%	+71%/-71%	+24%/-13%	+14%/-7%	+41%/-45%
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 007362364-04 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-53 ± 26	$2.10^{+0.97}_{-0.95}$	952^{+53}_{-44}	3707^{+960}_{-559}	94^{+241}_{-60}
Alt.	-307 ± 149	$3.76^{+1.15}_{-0.97}$	953^{+54}_{-46}	4099^{+584}_{-549}	164^{+188}_{-92}

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

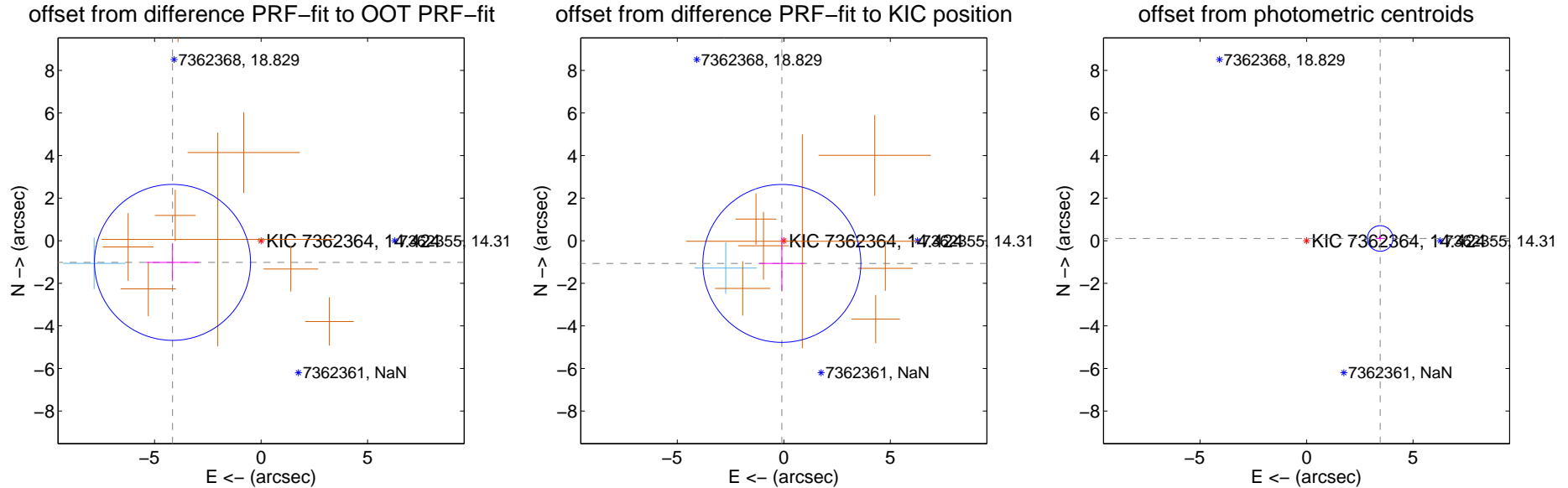
DV Centroid Data

Supplemental centroid analysis for 007362364-04. Kepler magnitude: 14.42. Transit SNR 11.64

There are 1 quarters with good PRF difference image offsets

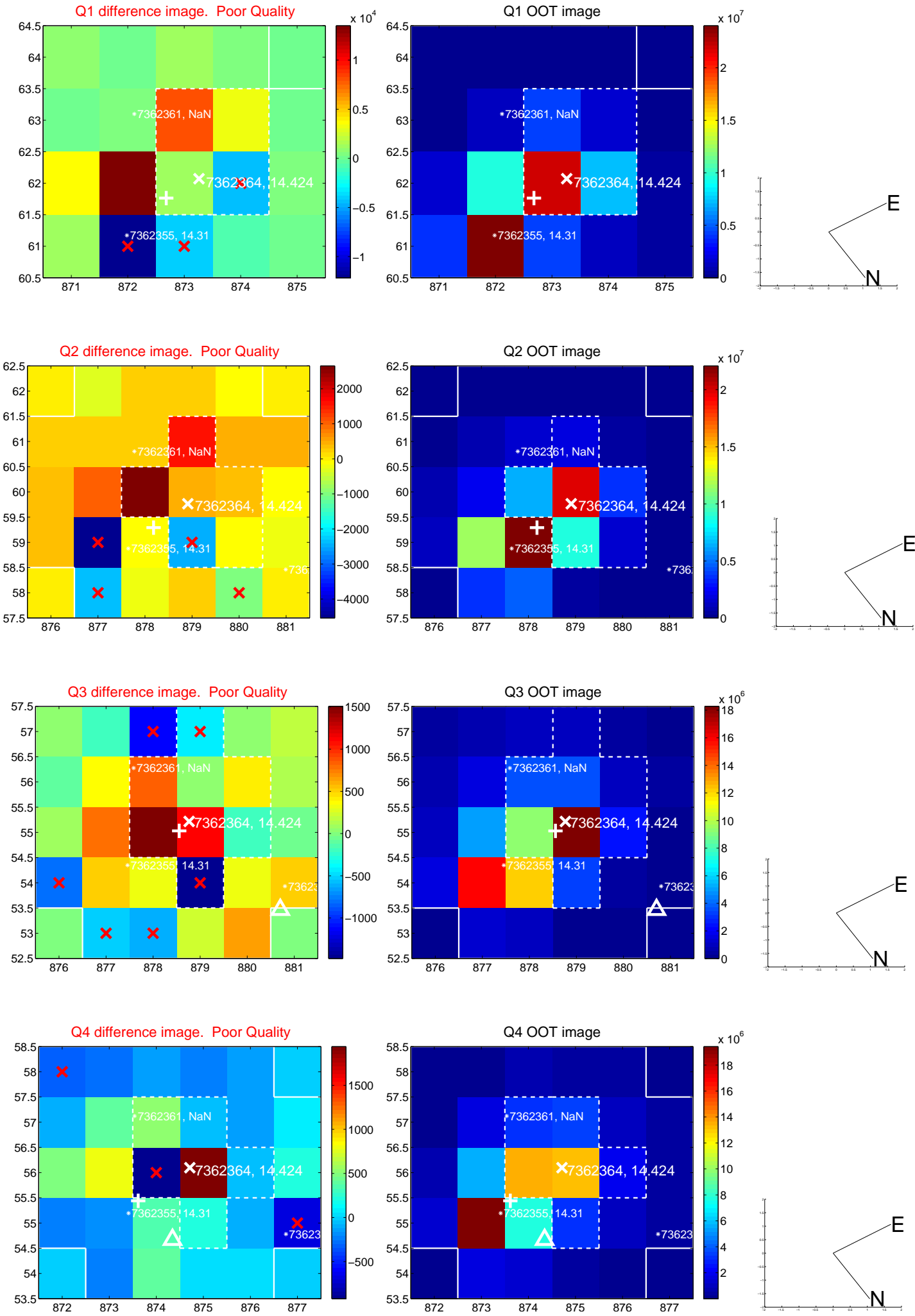
The OOT PRF centroid is offset from the target star catalog position by about 2.73 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.280 ± 1.221	3.51	4.157 ± 1.238	-1.017 ± 0.880
PRF-fit source offset from KIC position	1.069 ± 1.236	0.86	0.091 ± 1.058	-1.065 ± 1.272
photometric centroid source offset	3.46 ± 0.20	17.30	-3.46 ± 0.20	0.11 ± 0.13

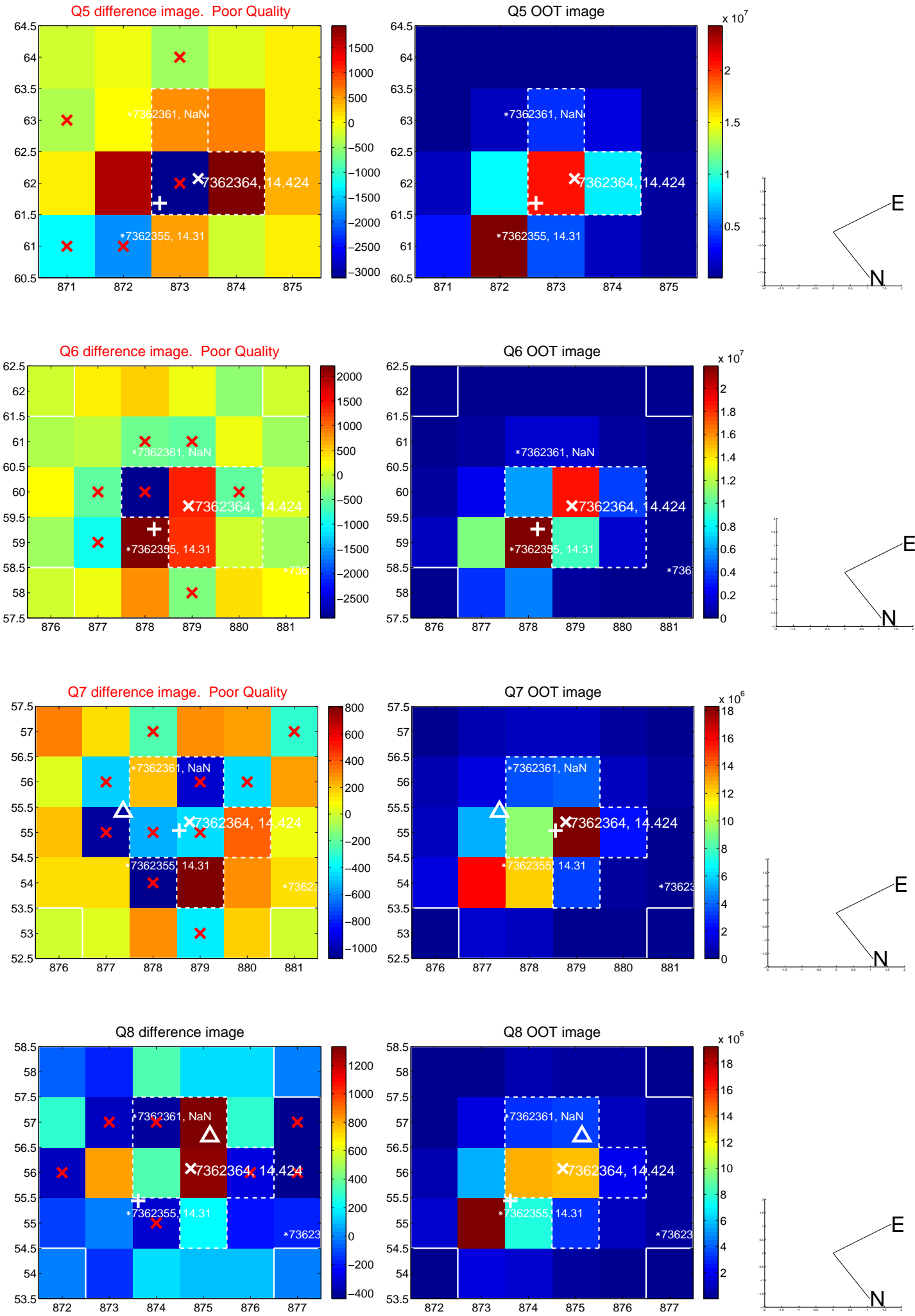


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

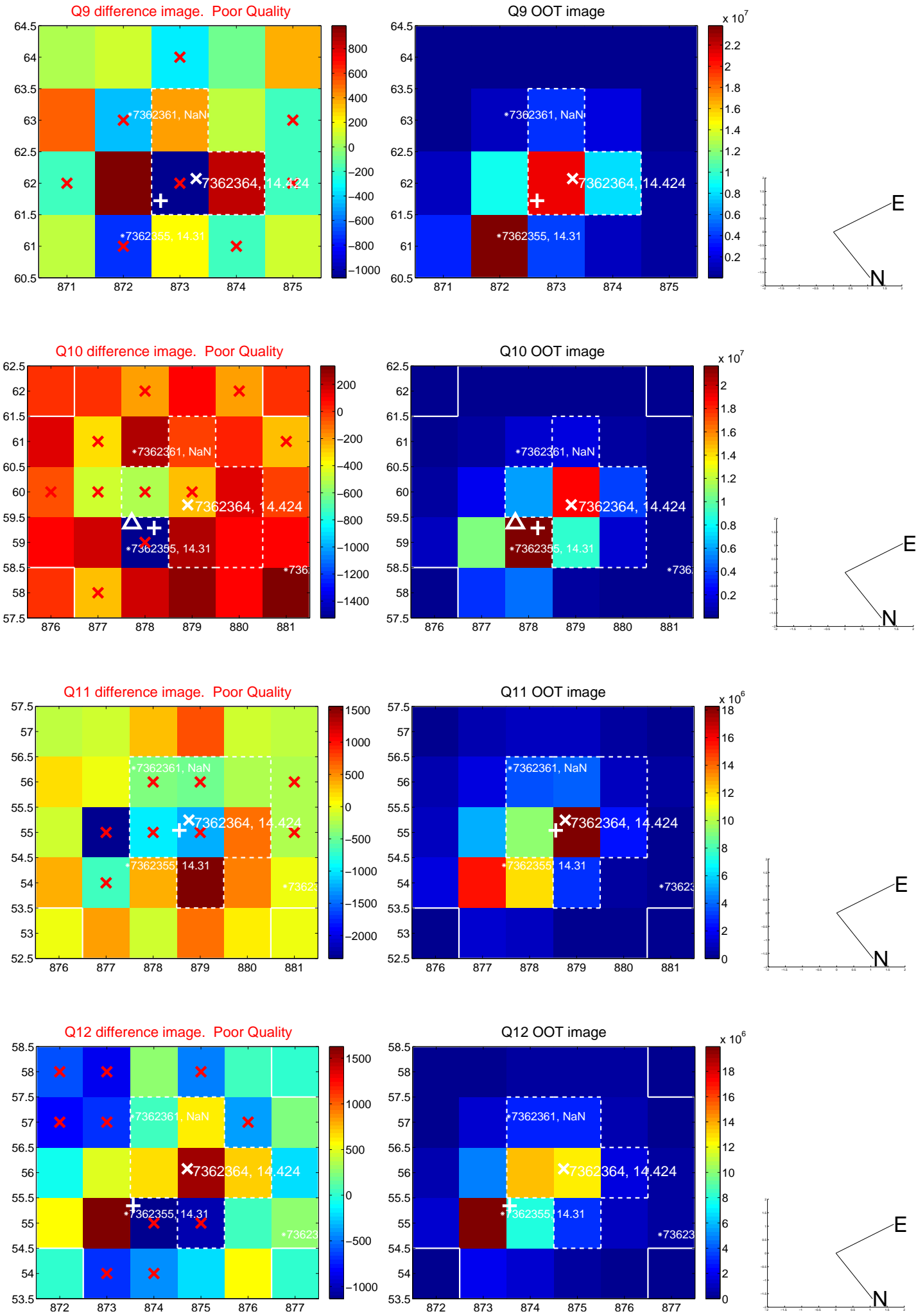
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



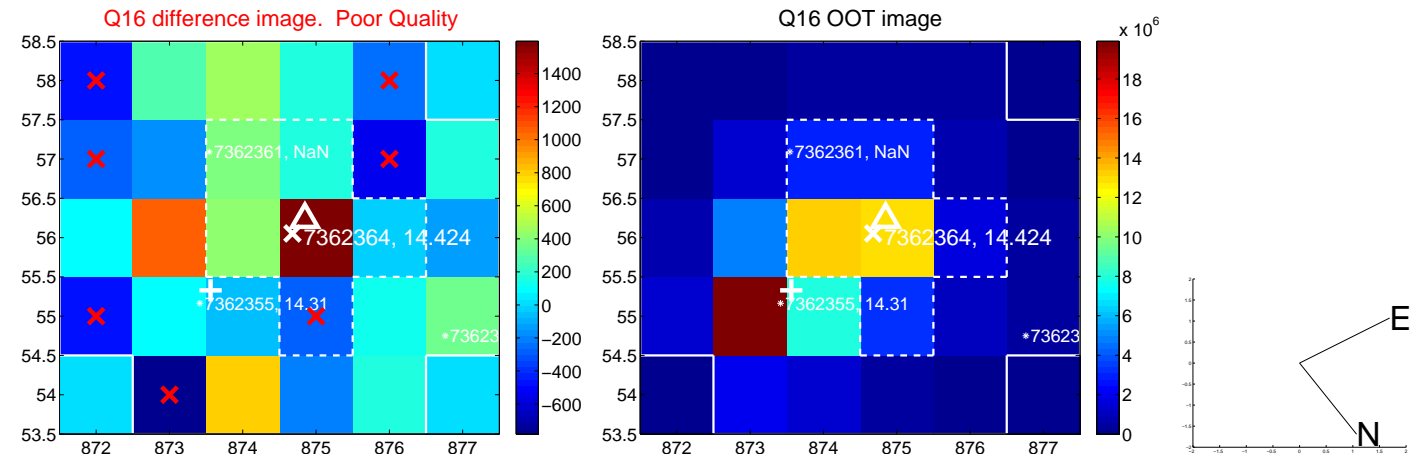
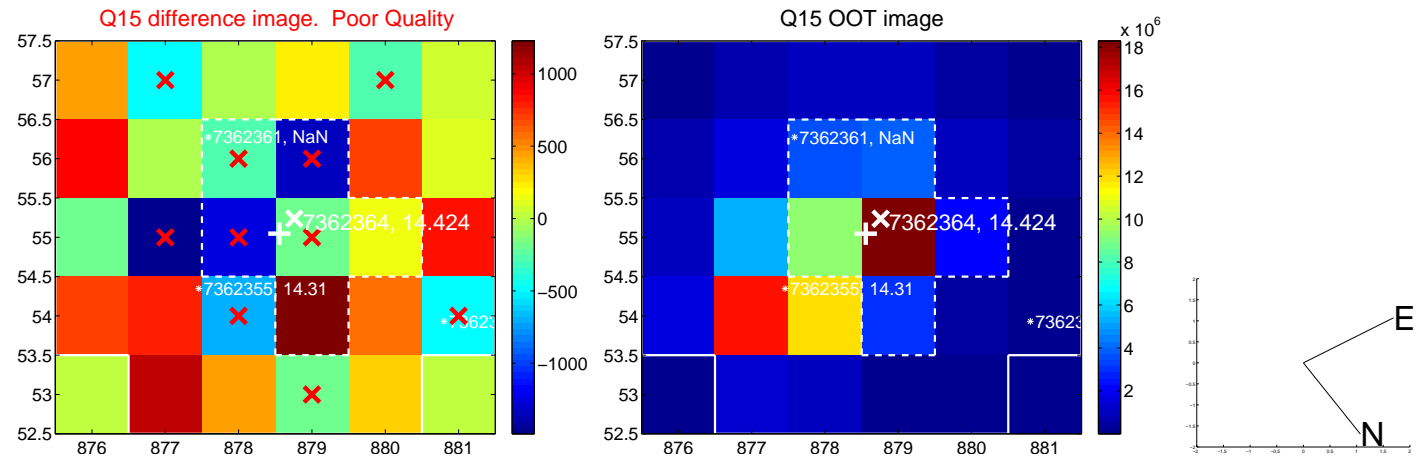
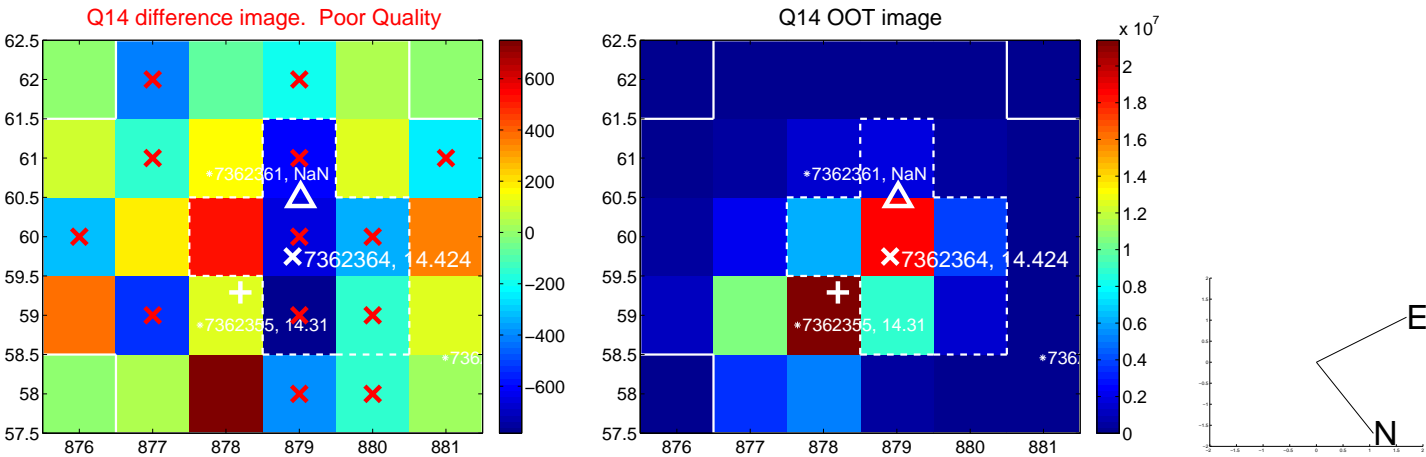
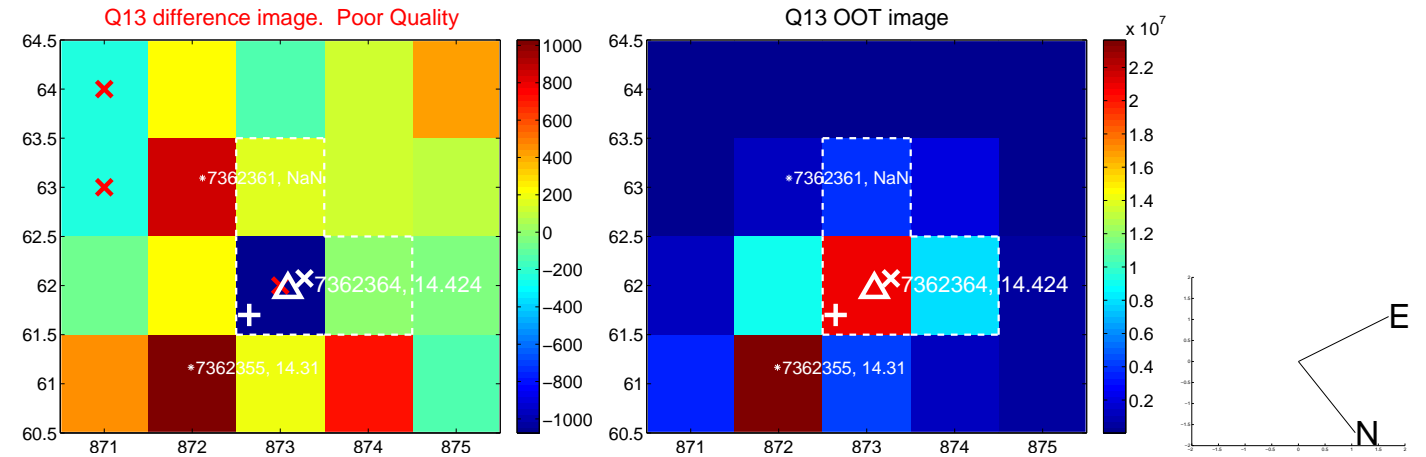
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



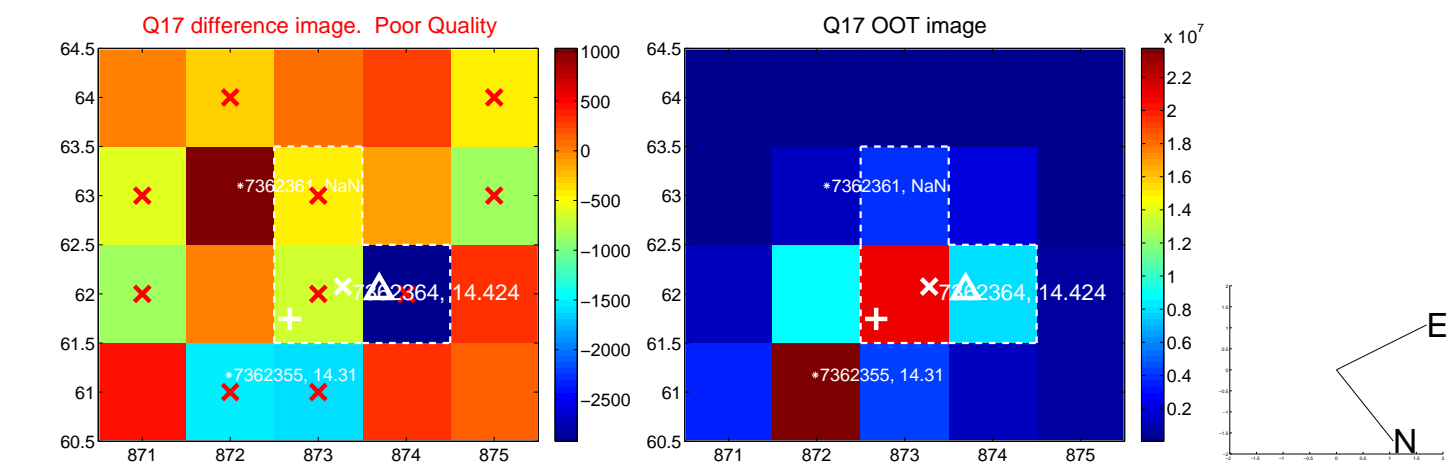
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



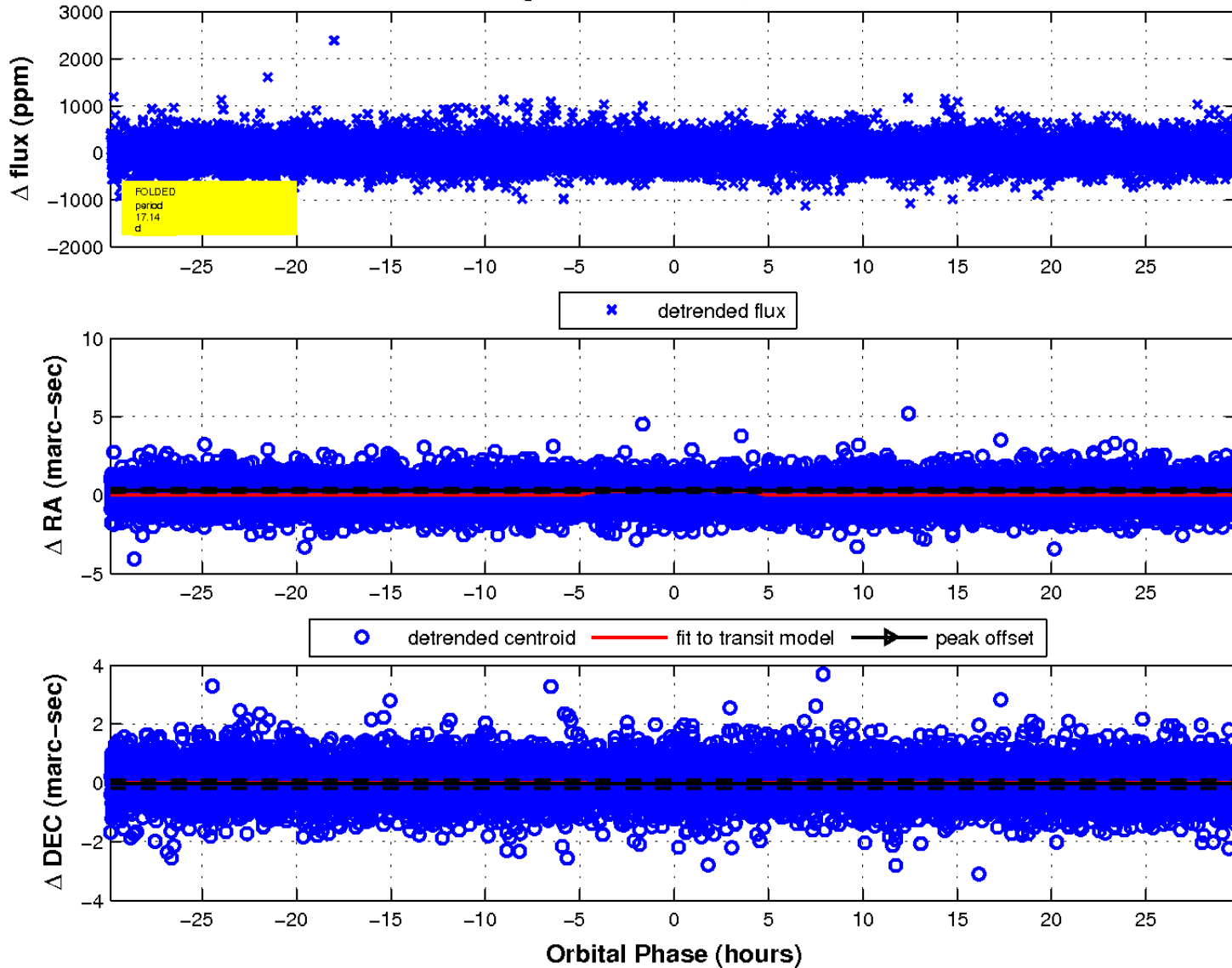
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

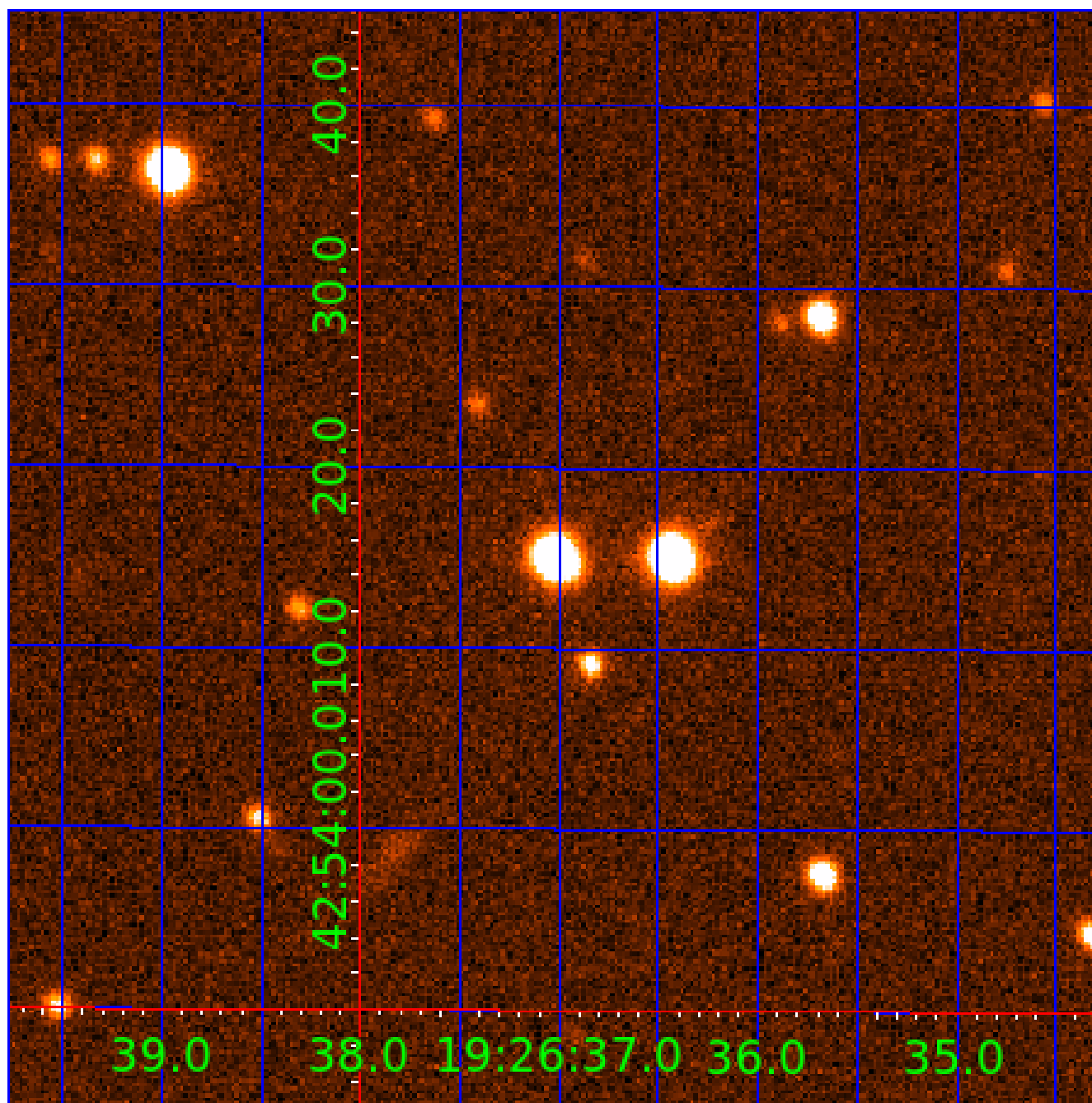


fluxWeightedCentroids, Planet 4 of 6



UKIRT Image

Declination



KIC 007362364

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})
007362364-01	OBS	No	0.566754	131.864789	18.9	4.071	13.6	8.2	0.87	5743	0.38	4701.85
007362364-02	OBS	No	37.552986	155.393391	721.9	1.136	13.2	15.3	0.87	5743	2.56	17.54
007362364-03	OBS	No	17.634593	145.493816	484.1	1.749	13.1	14.9	0.87	5743	2.20	48.04
007362364-04	OBS	No	17.136345	134.003121	404.0	9.953	11.3	11.6	0.87	5743	1.97	49.92
007362364-05	OBS	No	54.148503	135.670308	483.8	4.492	9.6	13.9	0.87	5743	2.08	10.77
007362364-06	OBS	No	15.825305	140.636258	173.9	0.877	10.7	4.4	0.87	5743	1.35	55.50

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007362364-01	OBS	FP	0.00	1	0	1	1	LPP_DV—CENT_KIC_POS—HALO_GHOST—EPHEM_MATCH
007362364-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS—HALO_GHOST
007362364-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—CENT_KIC_POS—CENT_UNCERTAIN
007362364-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_KIC_POS
007362364-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
007362364-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

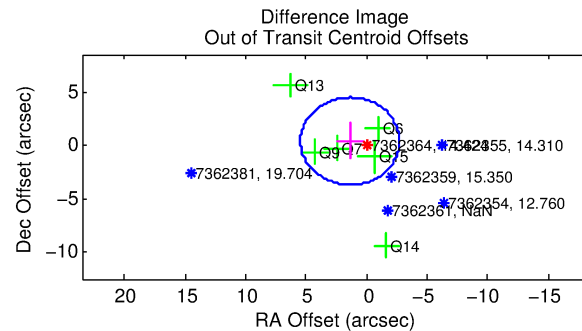
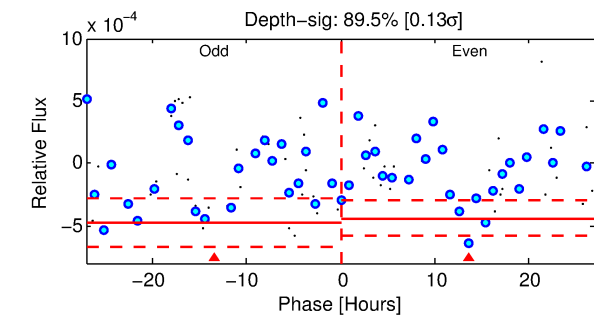
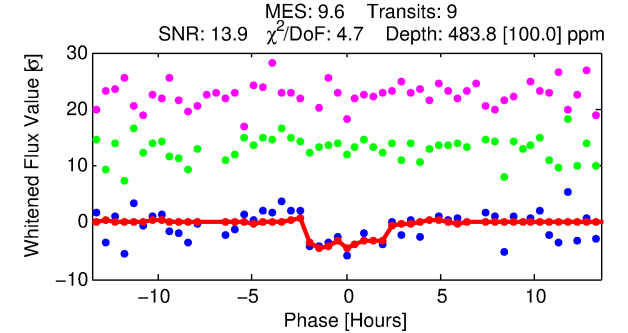
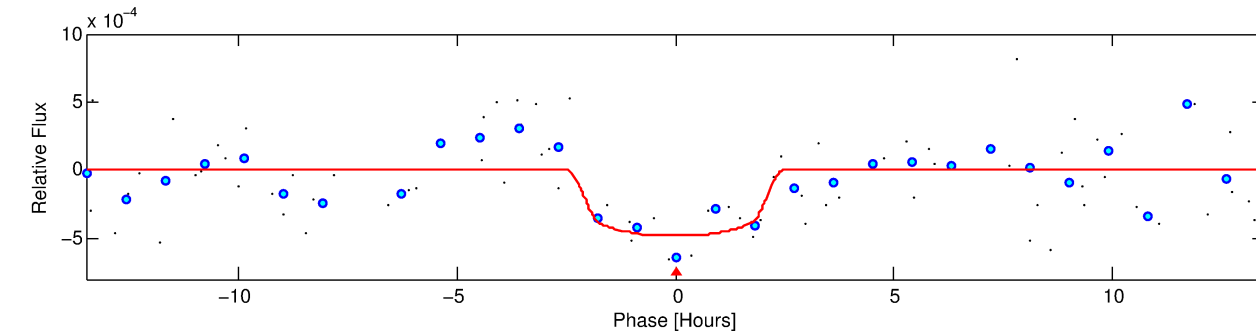
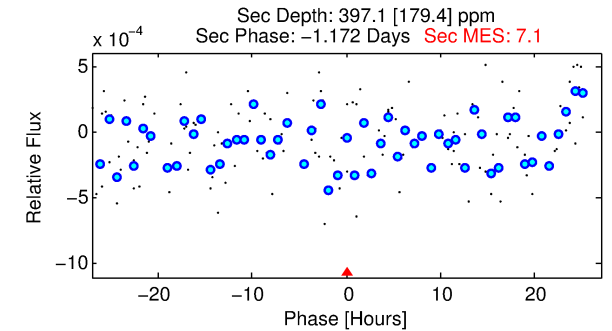
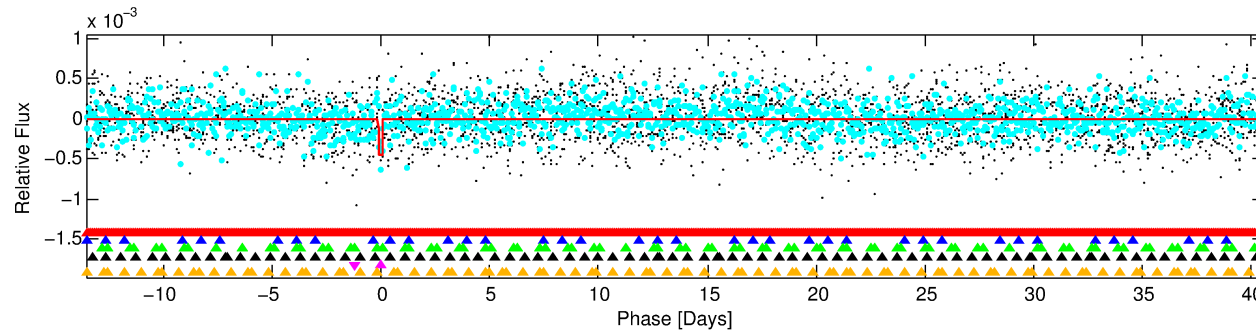
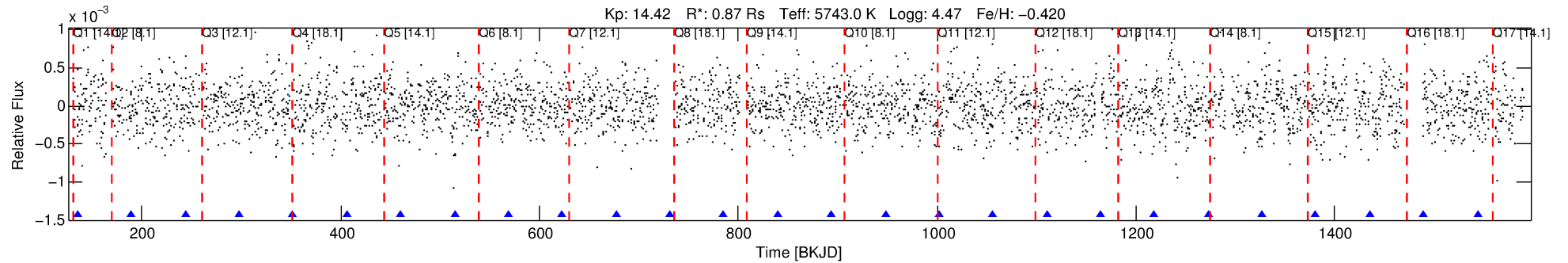
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007362364-05

No Significant Match Found

DV One-Page Summary

KIC: 7362364 Candidate: 5 of 6 Period: 54.149 d



DV Fit Results:

Period = 54.14850 [0.00124] d
Epoch = 135.6703 [0.0200] BKJD
Rp/R* = 0.0219 [0.0217]
a/R* = 63.28 [302.82]
b = 0.76 [2.71]
Seff = 10.76 [3.39]
Teq = 462 [36] K
Rp = 2.09 [2.12] Re
a = 0.2621 [0.0531] AU
Ag = 3451.21 [7072.93] [0.49σ]
Teffp = 5473 [2779] K [1.80σ]

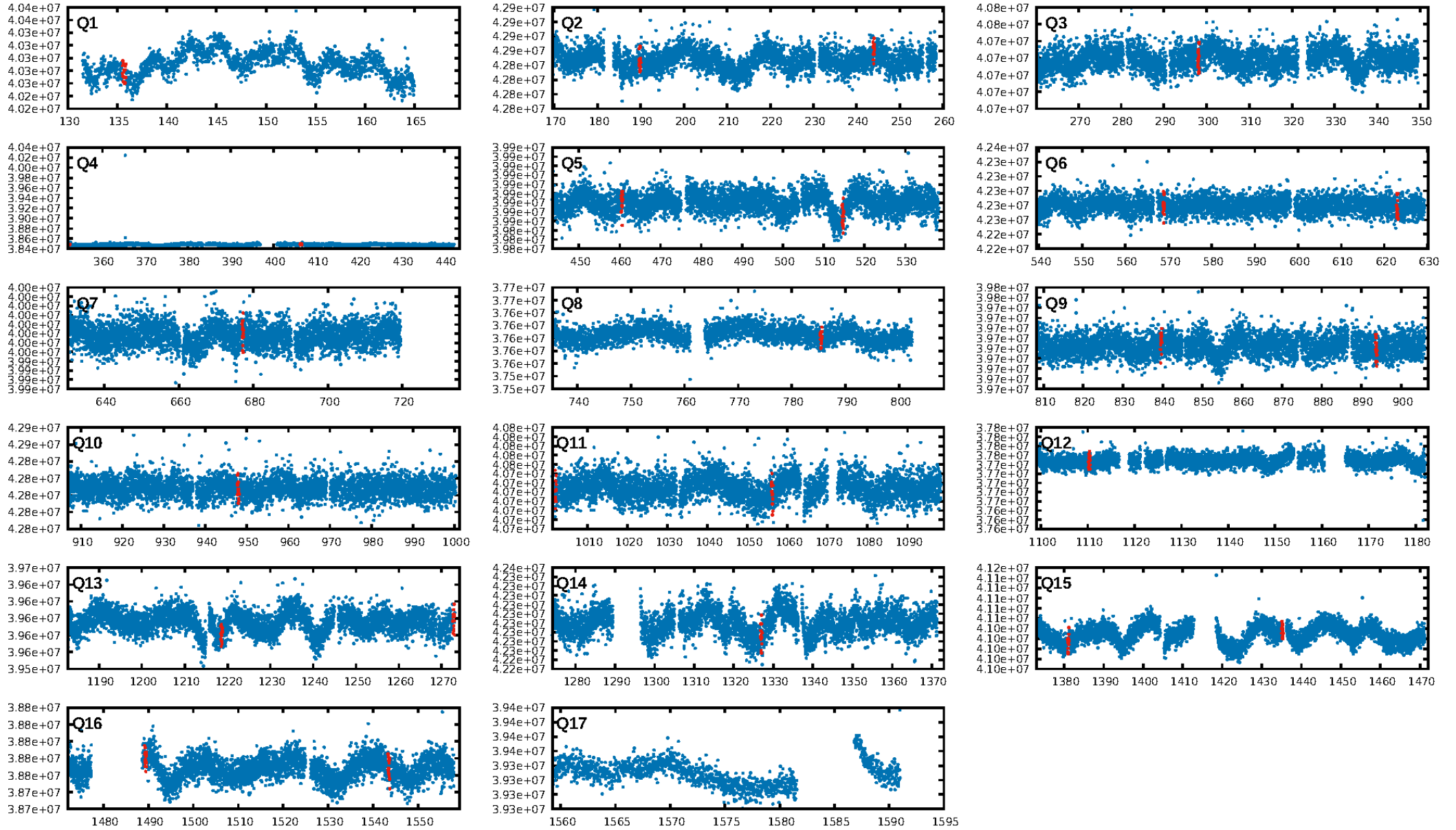
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [85.97σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.1%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 4.52e-11
RollingBand-fgt: 1.00 [9/9]
GhostDiagnostic-chr: 10.19
Centroid-sig: 65.0%
Centroid-so: 2.717 arcsec [6.48σ]
OotOffset-rm: 1.443 arcsec [1.06σ]
KicOffset-rm: 1.421 arcsec [0.88σ]
OotOffset-st: 2/2/0/2 [6]
KicOffset-st: 2/2/0/2 [6]
DiffImageQuality-fgm: 0.00 [0/6]
DiffImageOverlap-fno: 0.00 [0/15]

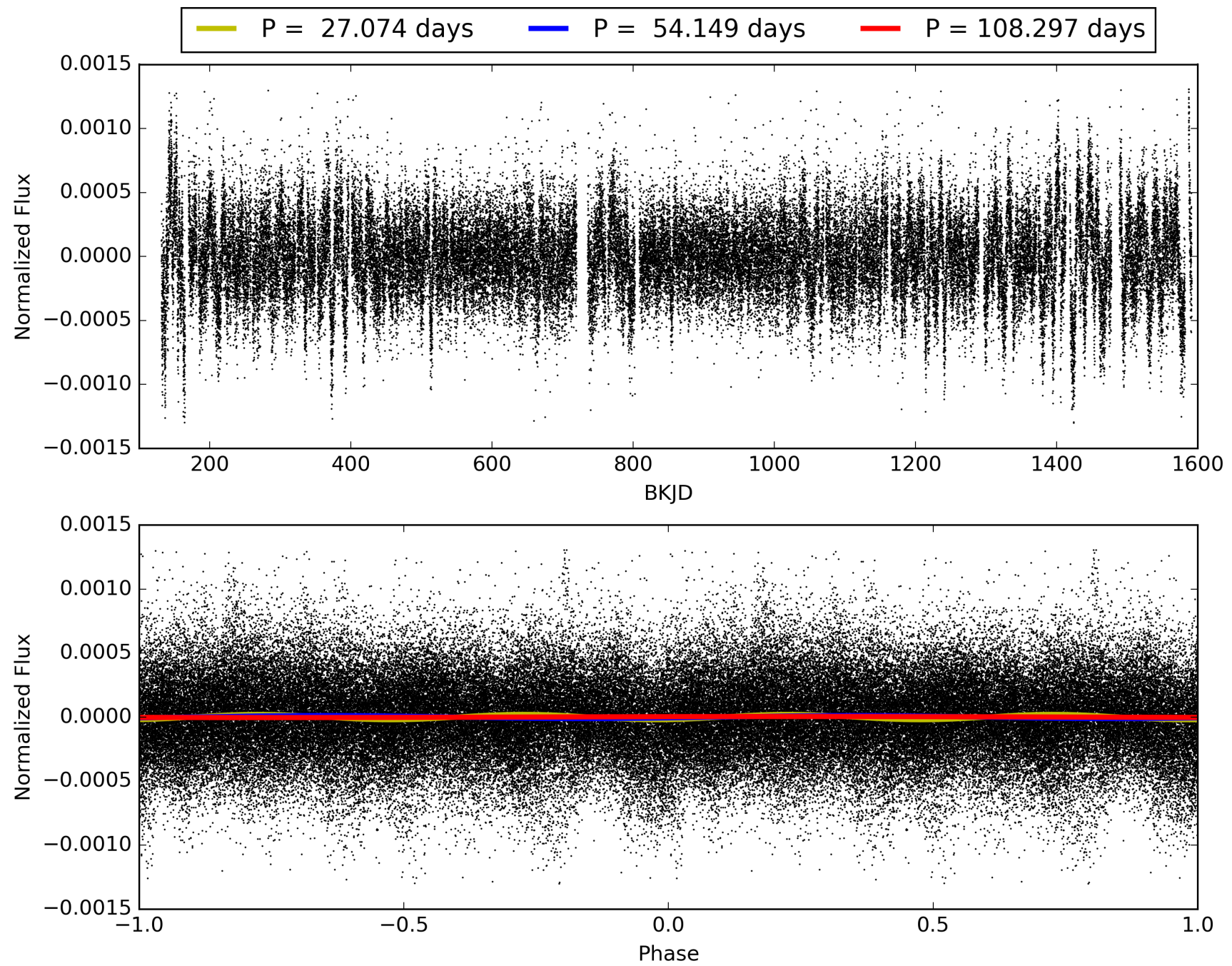
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 07:38:18 Z

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

TCE 007362364-05, PDC Light Curves

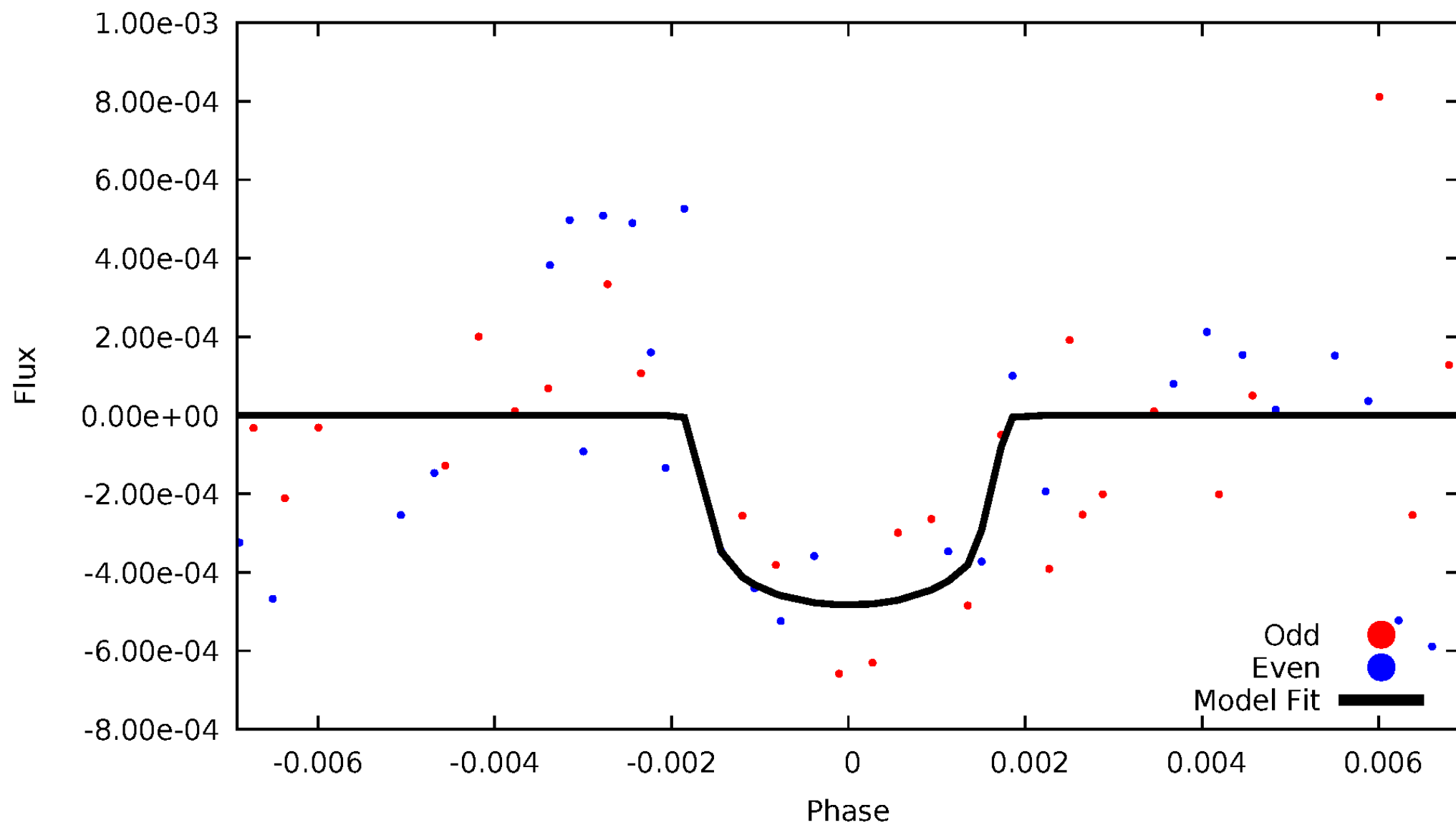


TCE 007362364-05



DV Odd/Even

TCE 007362364-05

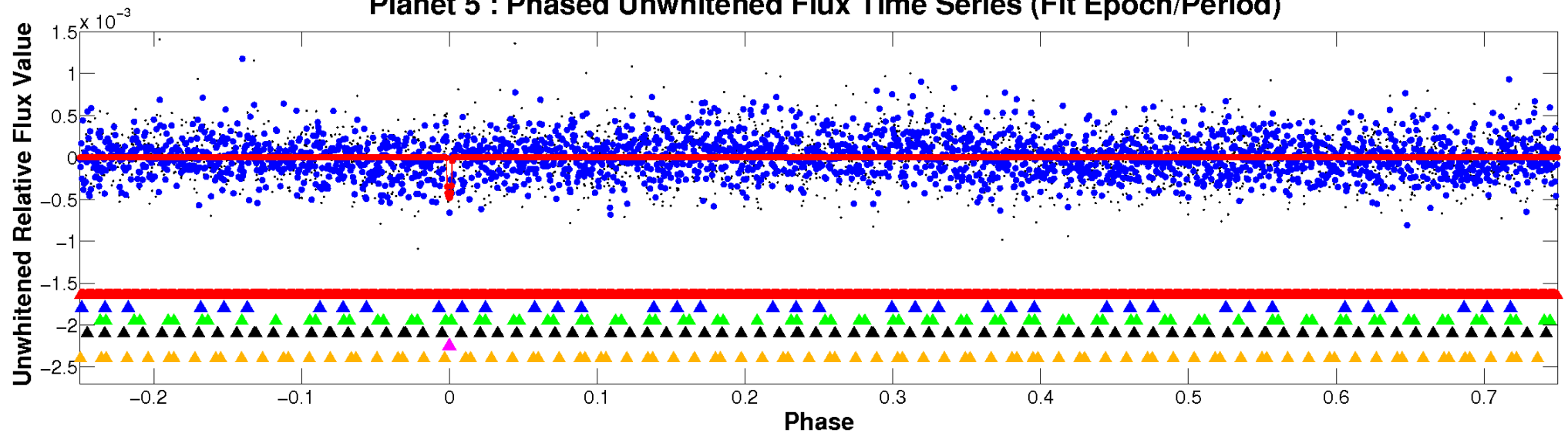


ALT Odd/Even

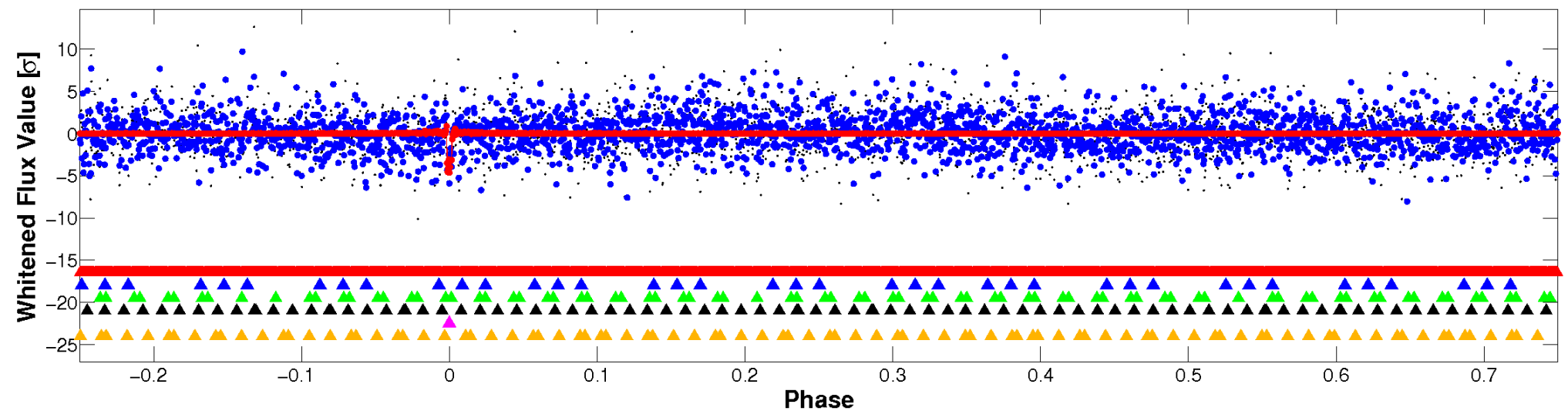
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

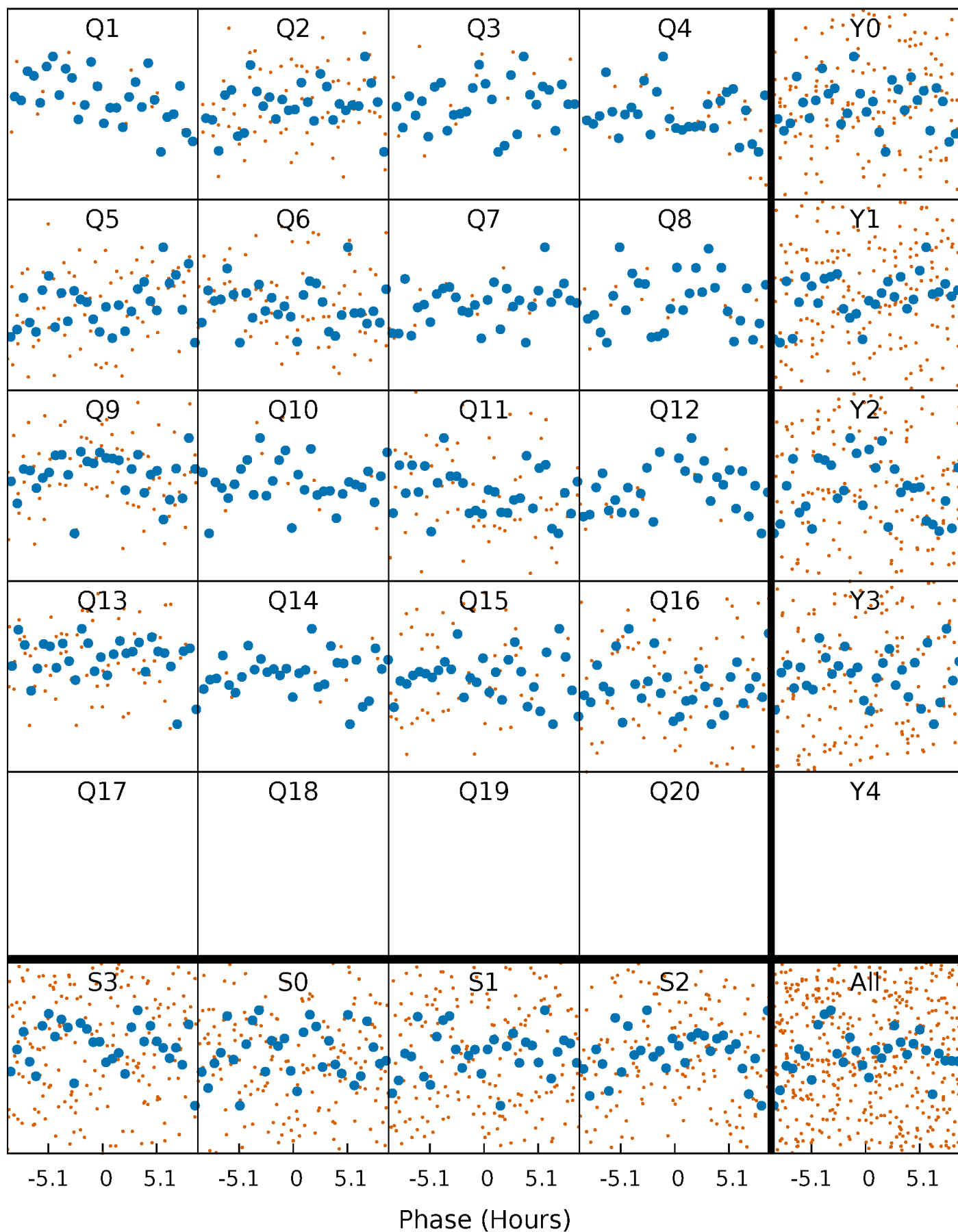


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



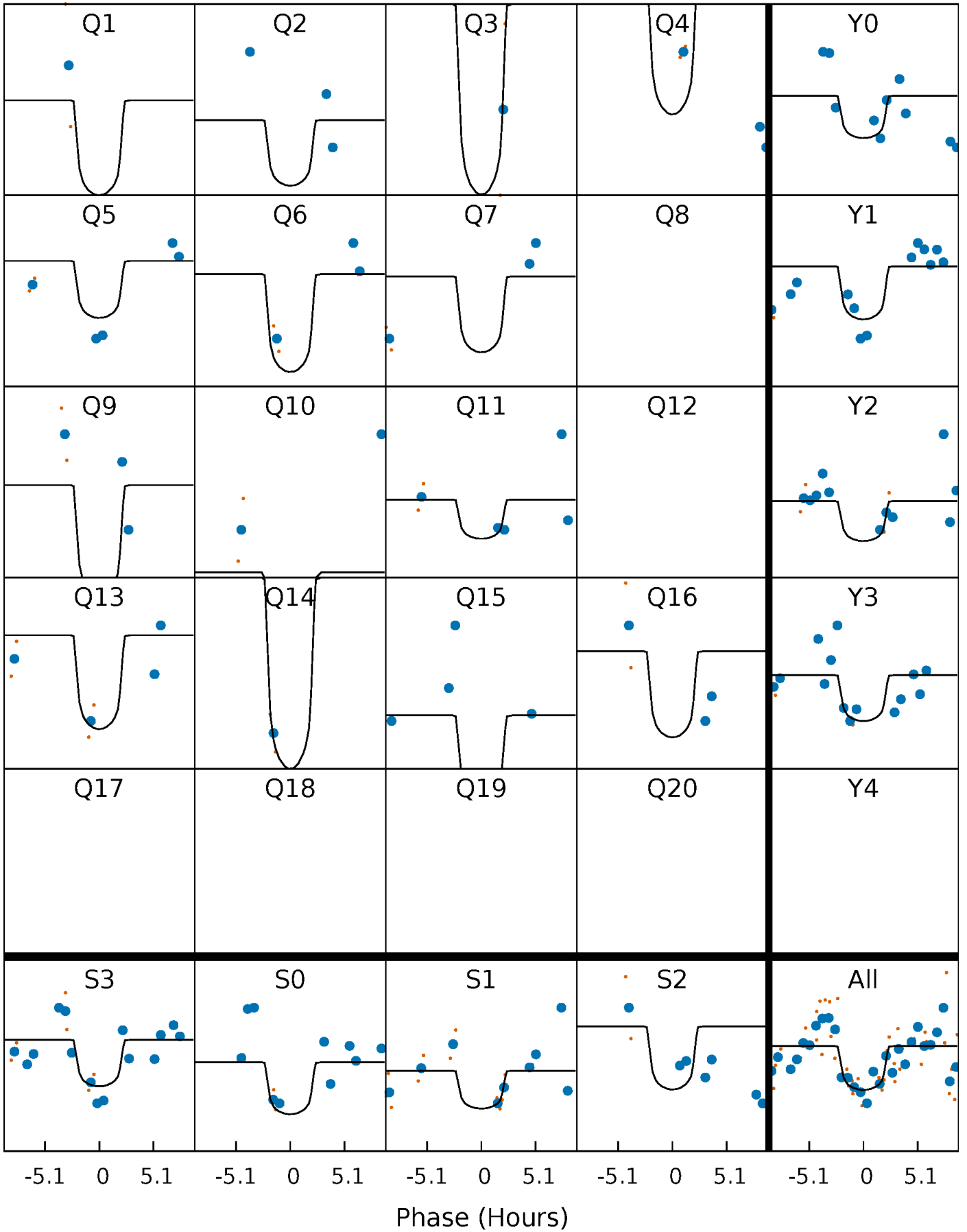
PDC Quarter-Phased Transit Curves

TCE 007362364-05 P= 54.148503 Days $T_0=135.670308$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 007362364-05 P= 54.148503 Days $T_0=135.670308$ (BKJD)

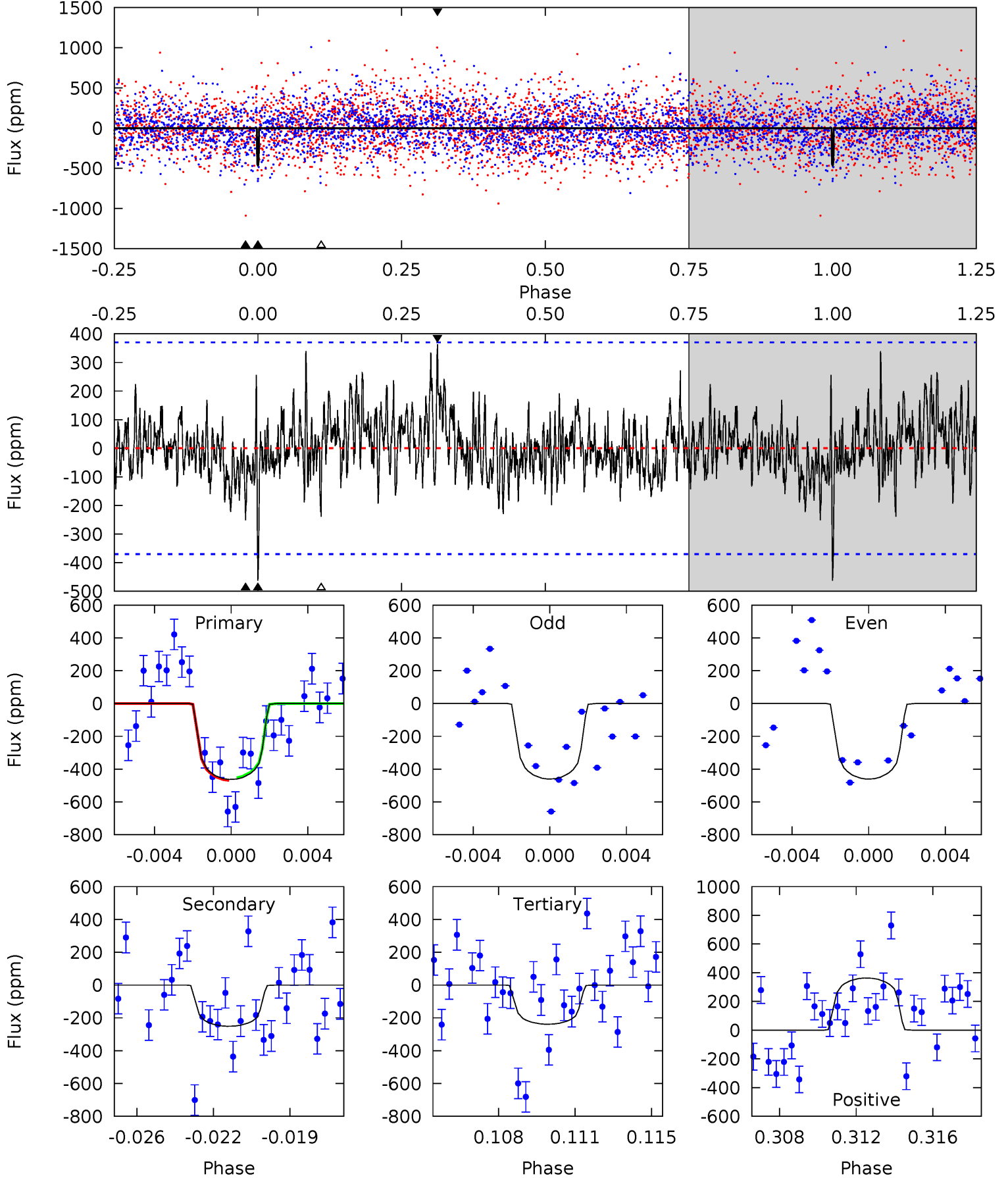


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

007362364-05, P = 54.148503 Days, E = 81.521805 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.52	3.54	3.37	5.12	5.21	2.90	1.24	3.16	1.40	0.17	-1.58	0.00	1.01	0.44	0.11



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 007362364

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5743^{+155}_{-155}	$4.471^{+0.108}_{-0.162}$	$-0.420^{+0.300}_{-0.300}$	$0.871^{+0.209}_{-0.112}$	$0.820^{+0.114}_{-0.061}$	$1.746^{+0.712}_{-0.778}$
	+3%/-3%	+2%/-4%	+71%/-71%	+24%/-13%	+14%/-7%	+41%/-45%
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 007362364-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-251 ± 71	$2.52^{+1.99}_{-1.58}$	647^{+39}_{-31}	4613^{+2697}_{-908}	1448^{+9402}_{-1011}
Alt.	N/A	N/A	N/A	N/A	N/A

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)

A_{obs} = Observed Albedo (Assuming $T=0$)

If a secondary eclipse is present, the system is likely an EB if $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

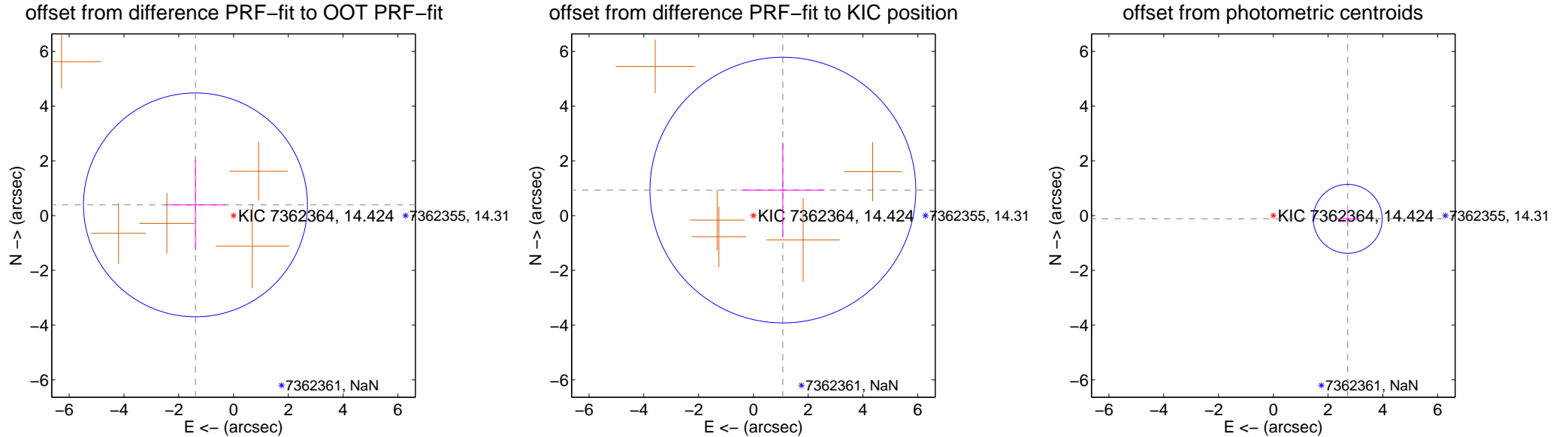
DV Centroid Data

Supplemental centroid analysis for 007362364-05. Kepler magnitude: 14.42. Transit SNR 13.92

There are 0 quarters with good PRF difference image offsets

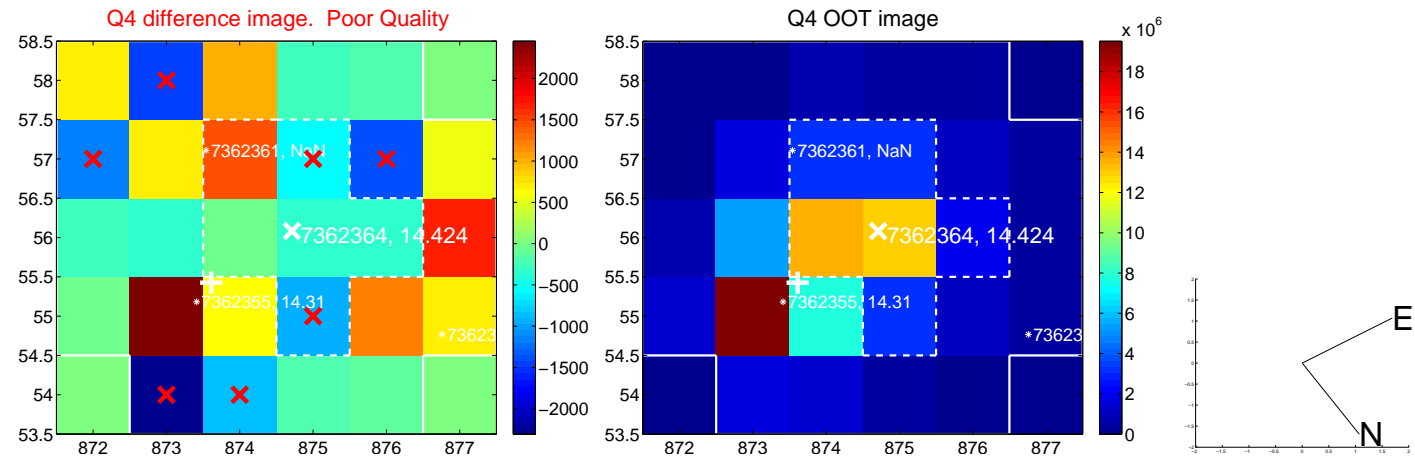
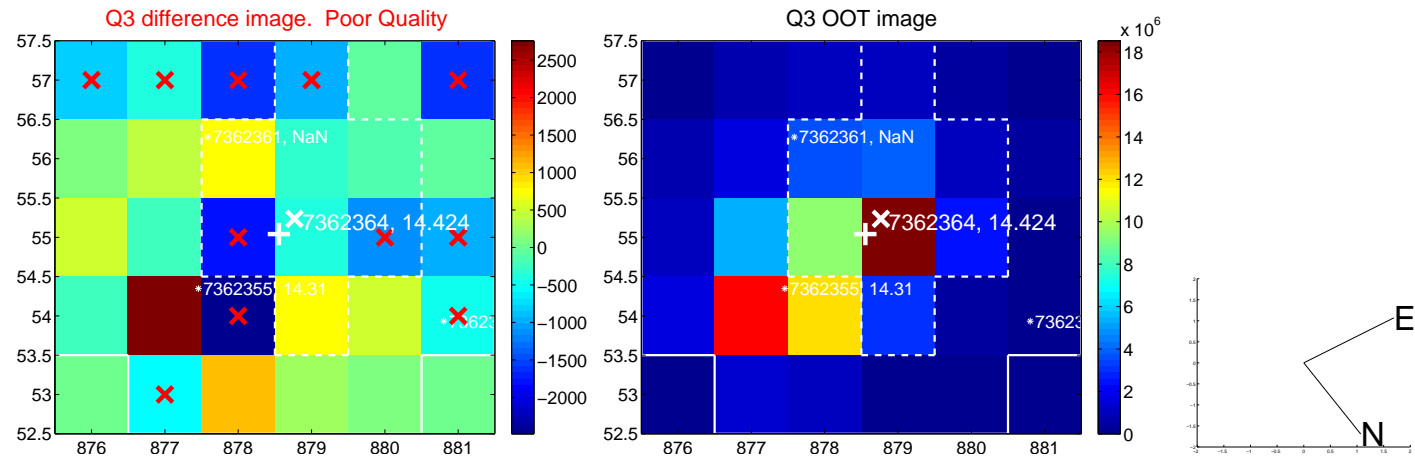
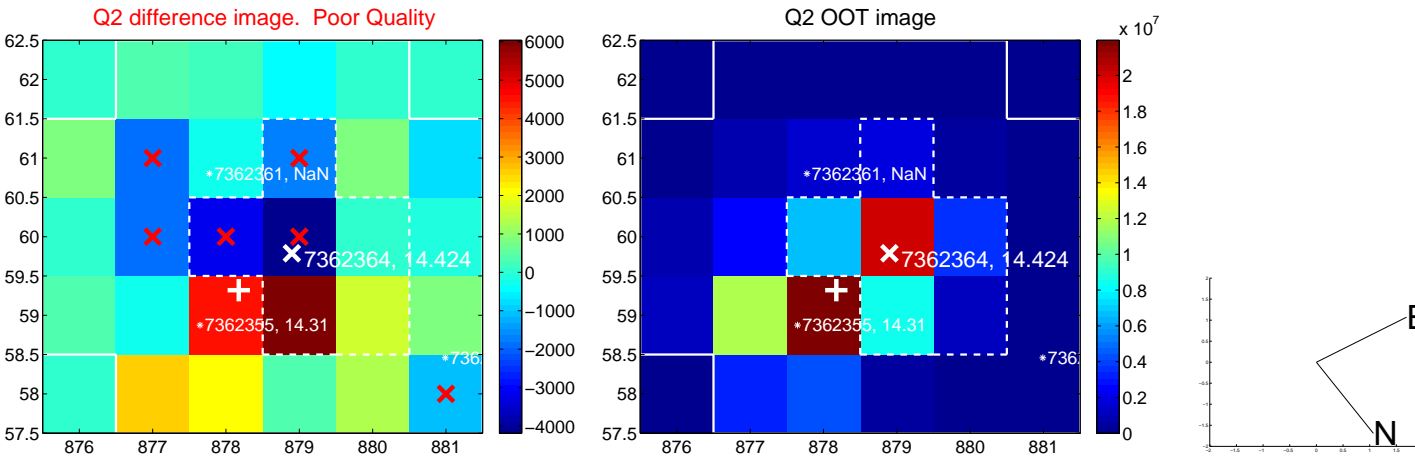
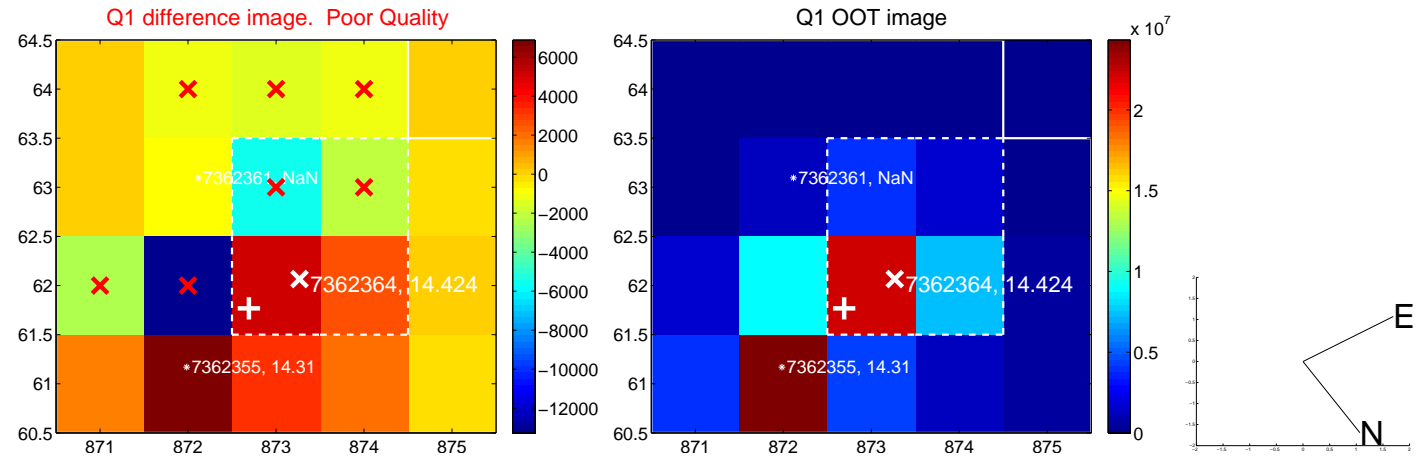
The direct PRF centroid is offset from the target star catalog position by about 1.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.443 ± 1.362	1.06	1.389 ± 1.100	0.390 ± 1.653
PRF-fit source offset from KIC position	1.421 ± 1.617	0.88	-1.074 ± 1.524	0.931 ± 1.733
photometric centroid source offset	2.72 ± 0.42	6.48	-2.71 ± 0.42	-0.12 ± 0.29

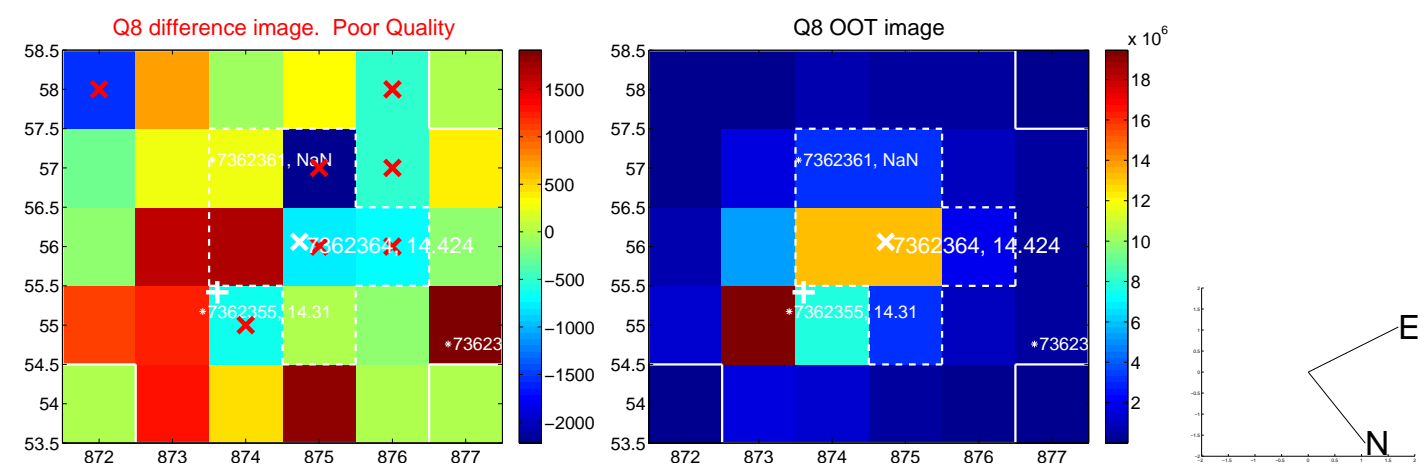
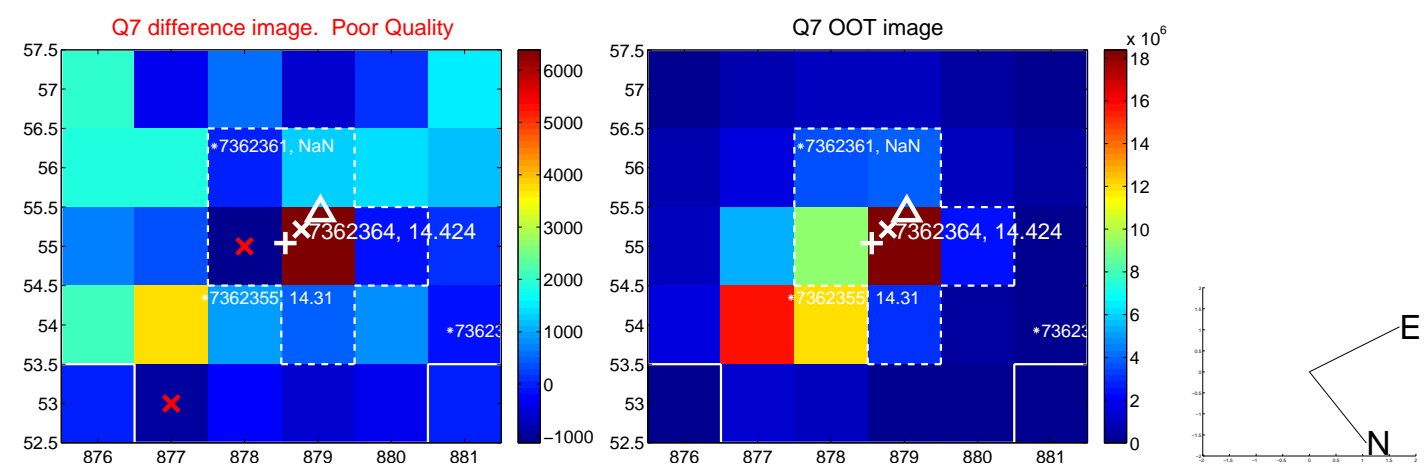
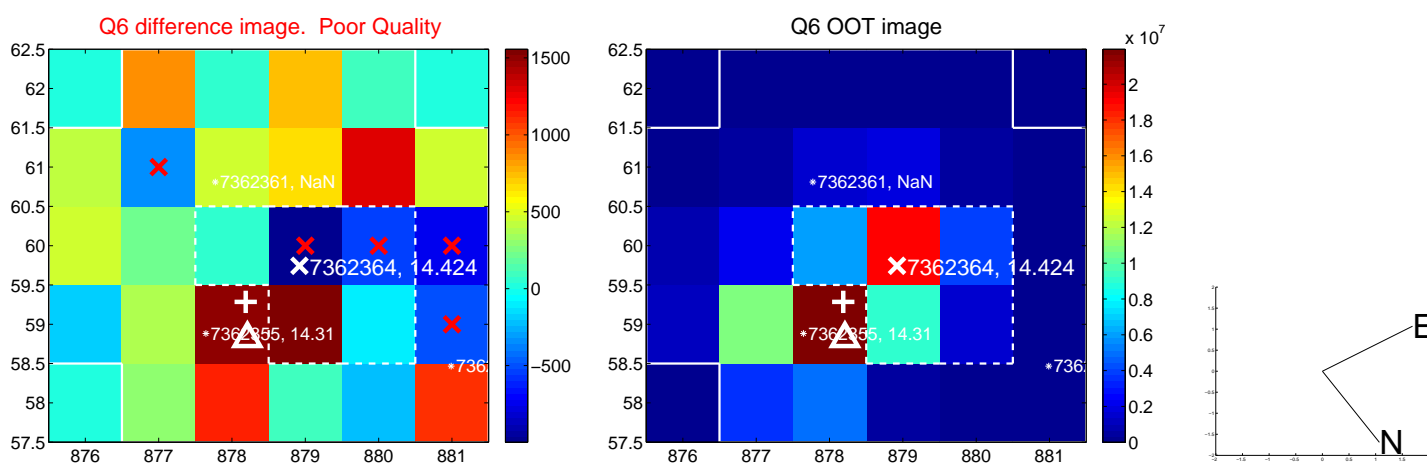
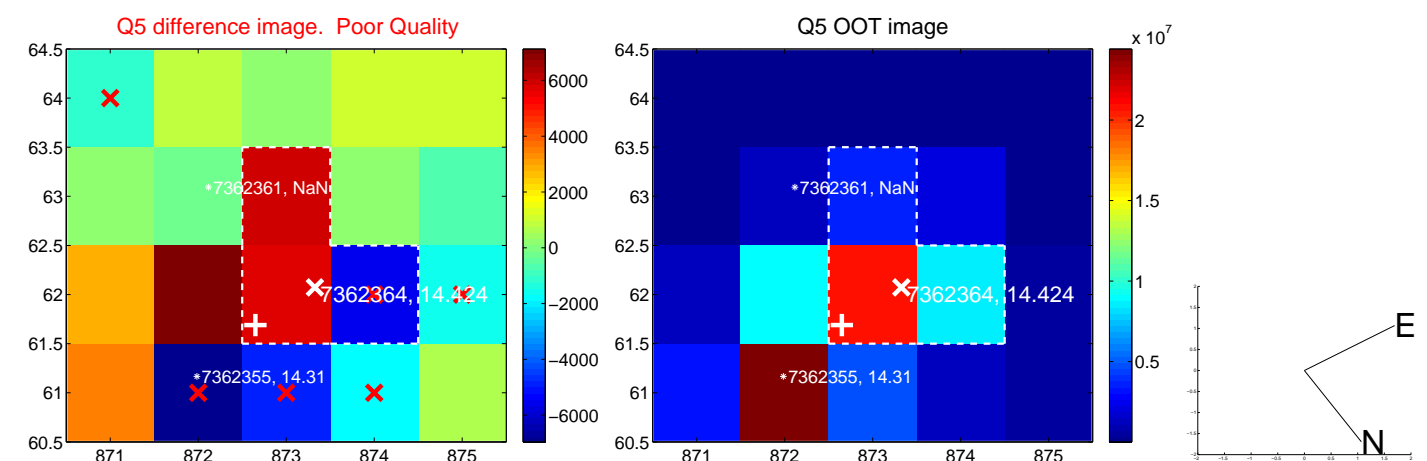


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

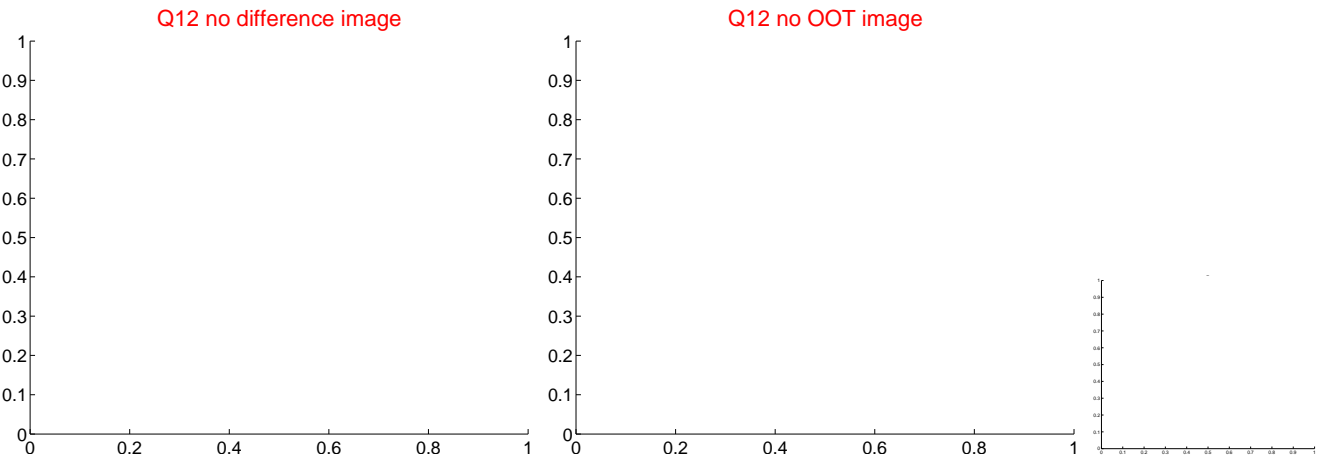
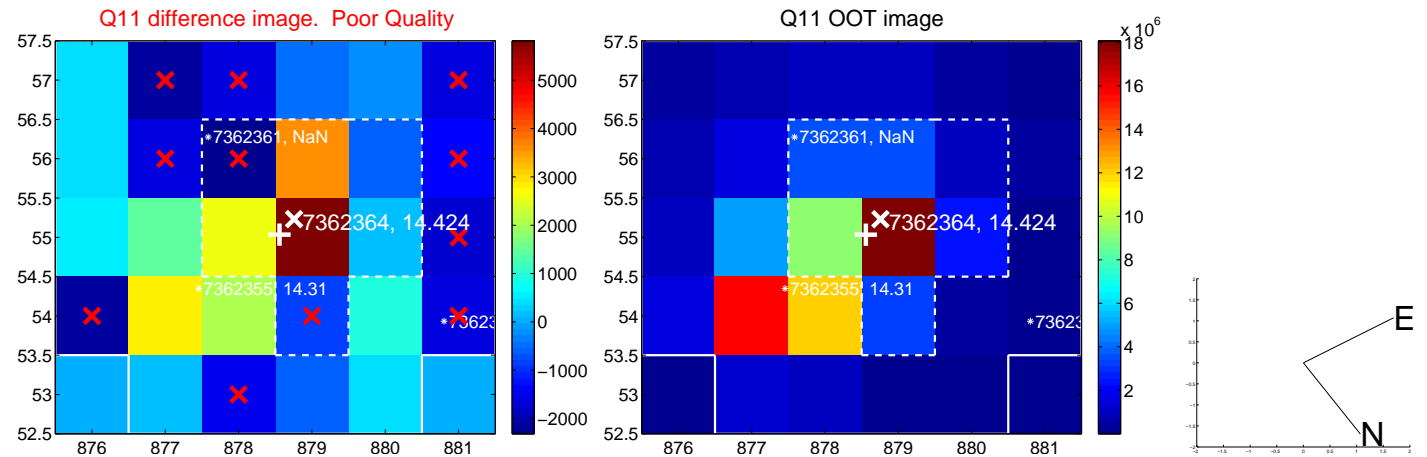
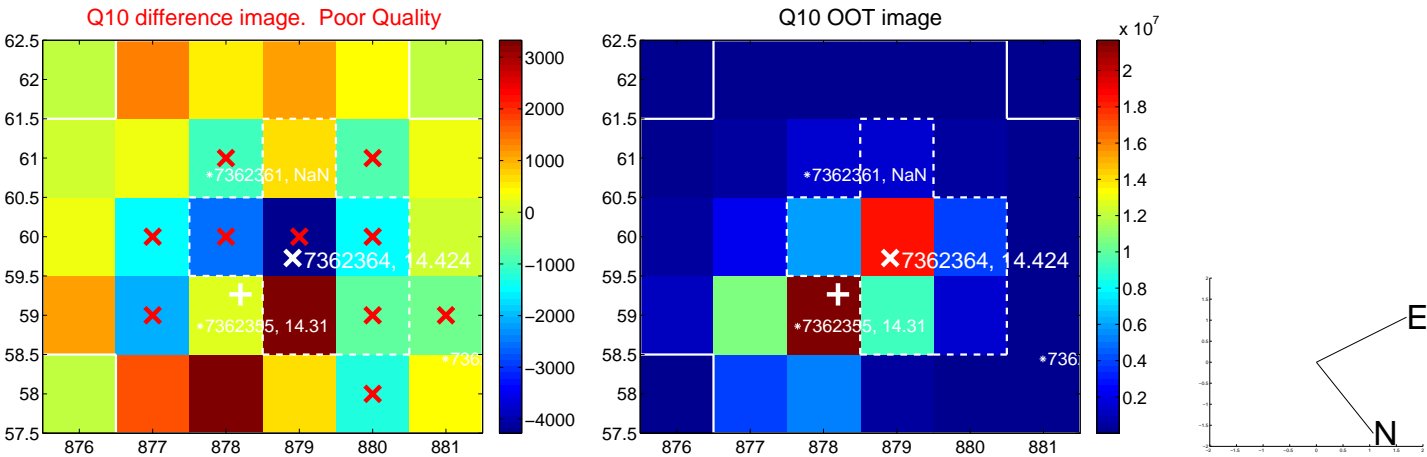
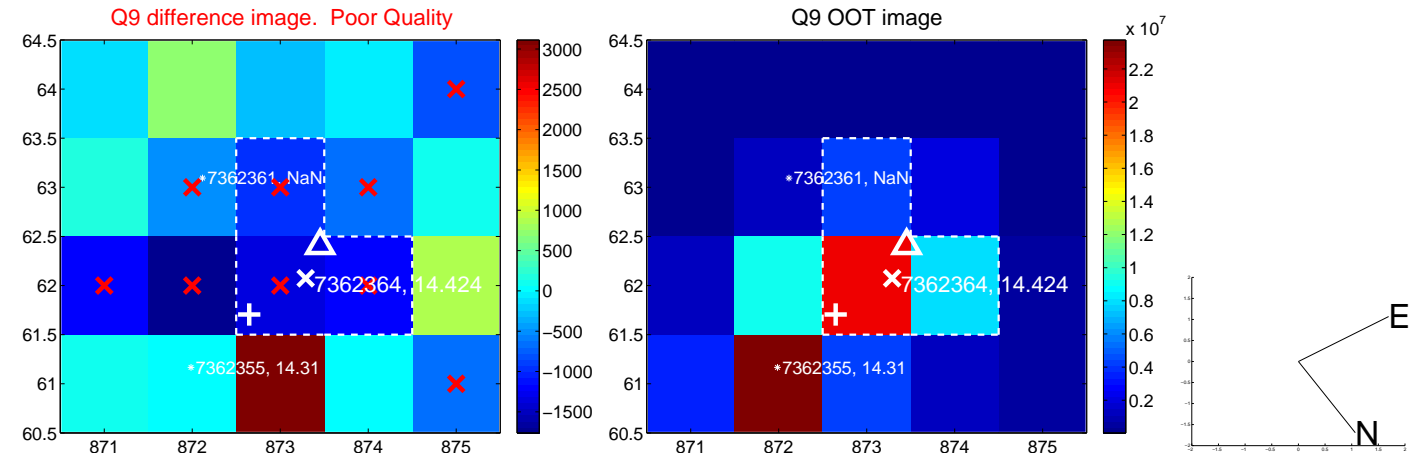
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



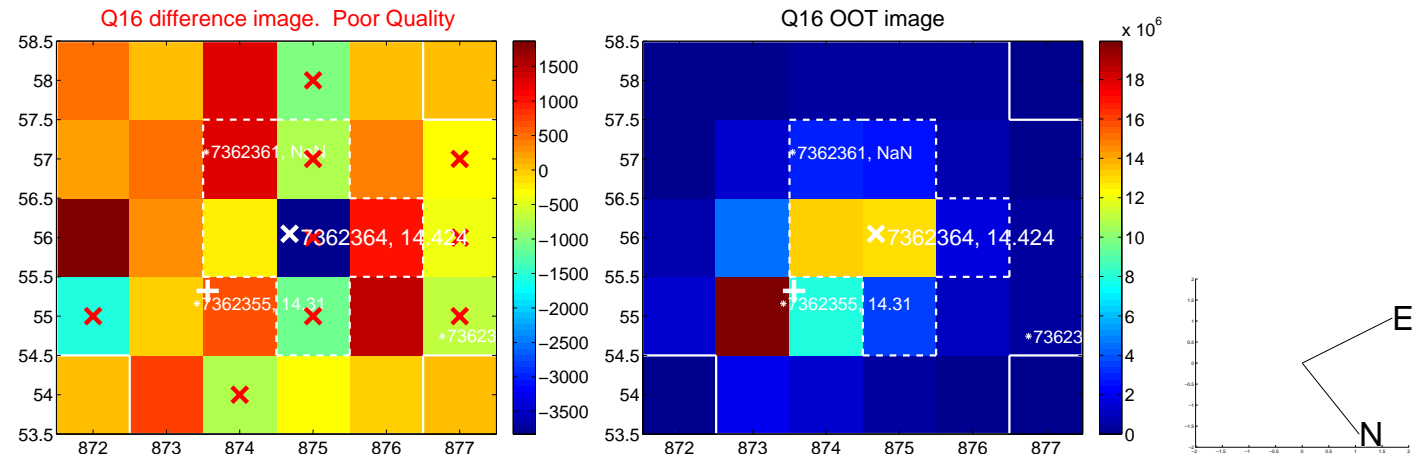
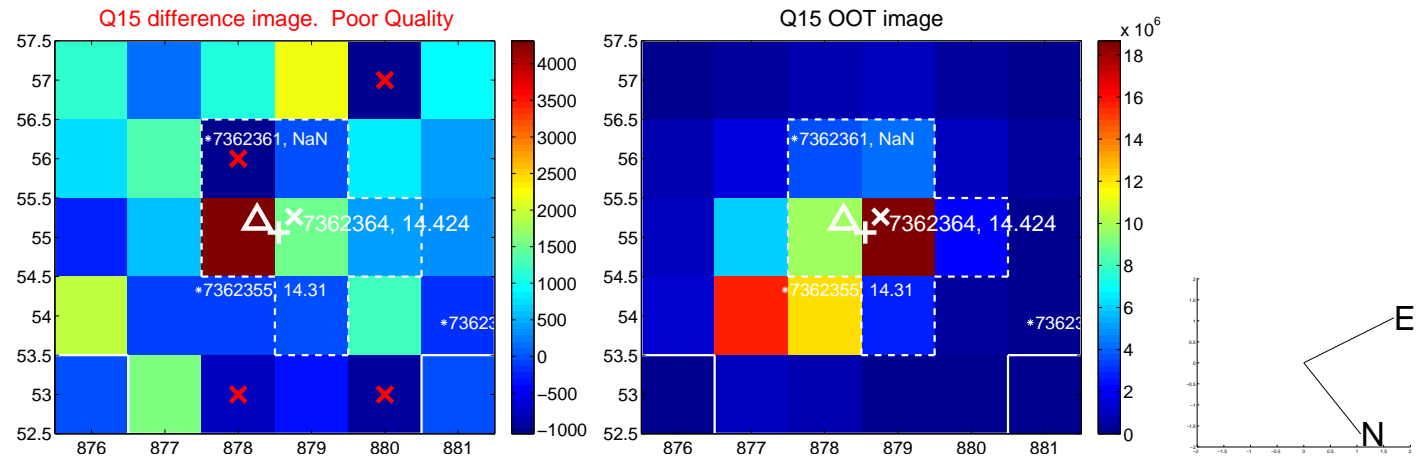
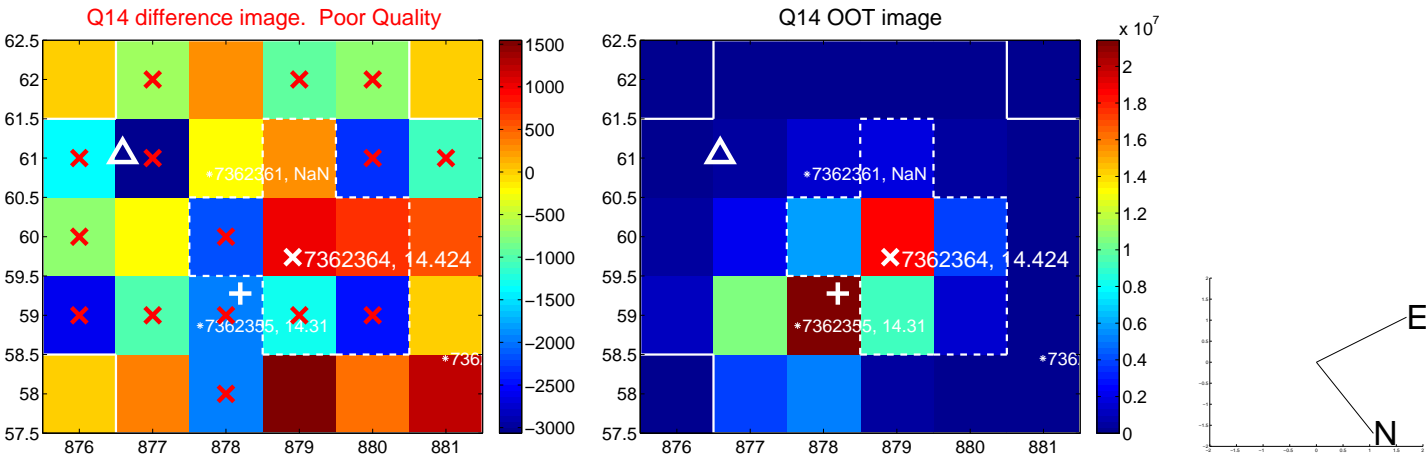
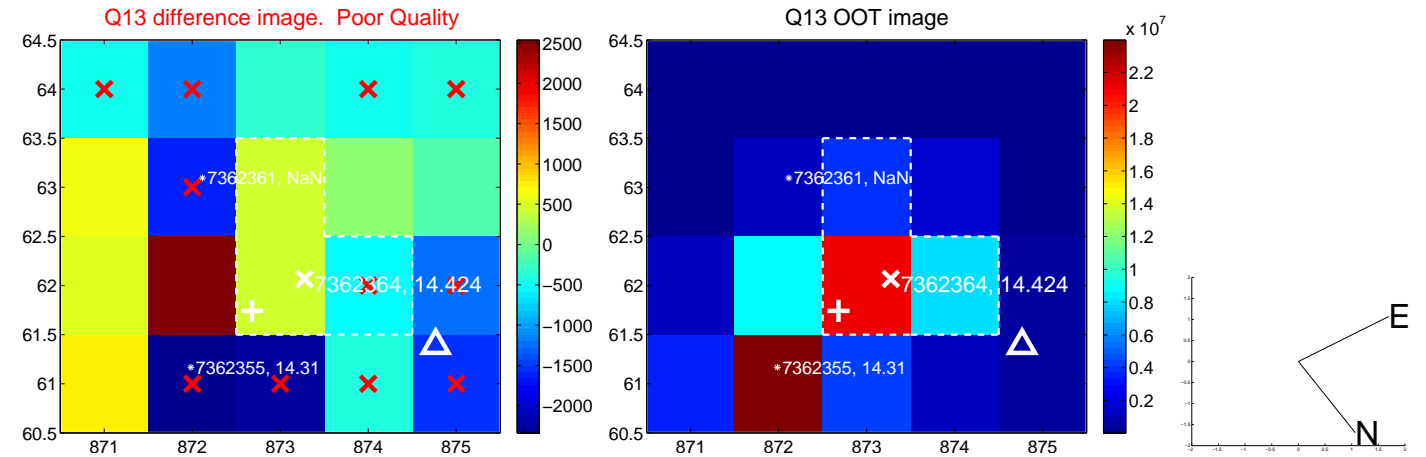
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



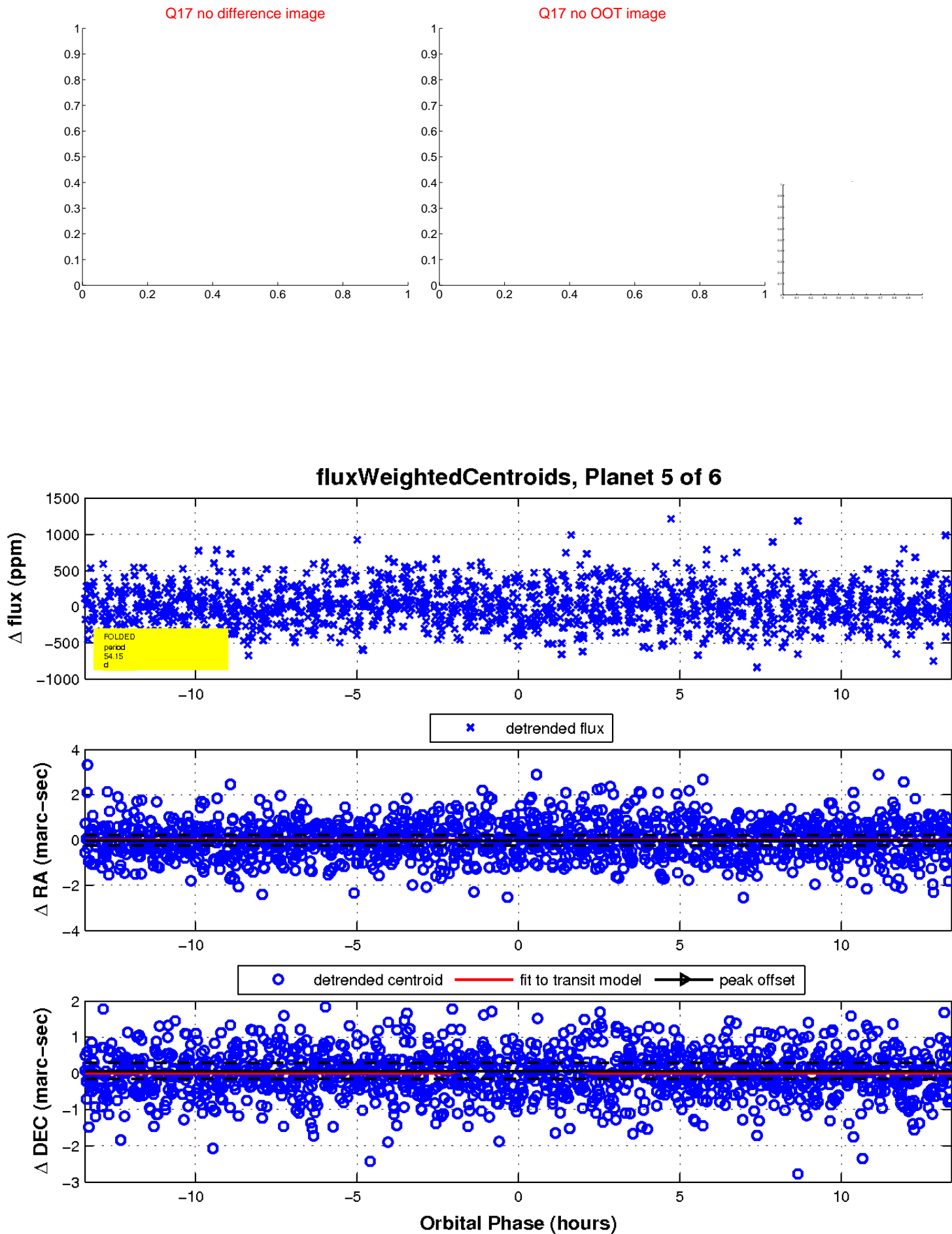
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

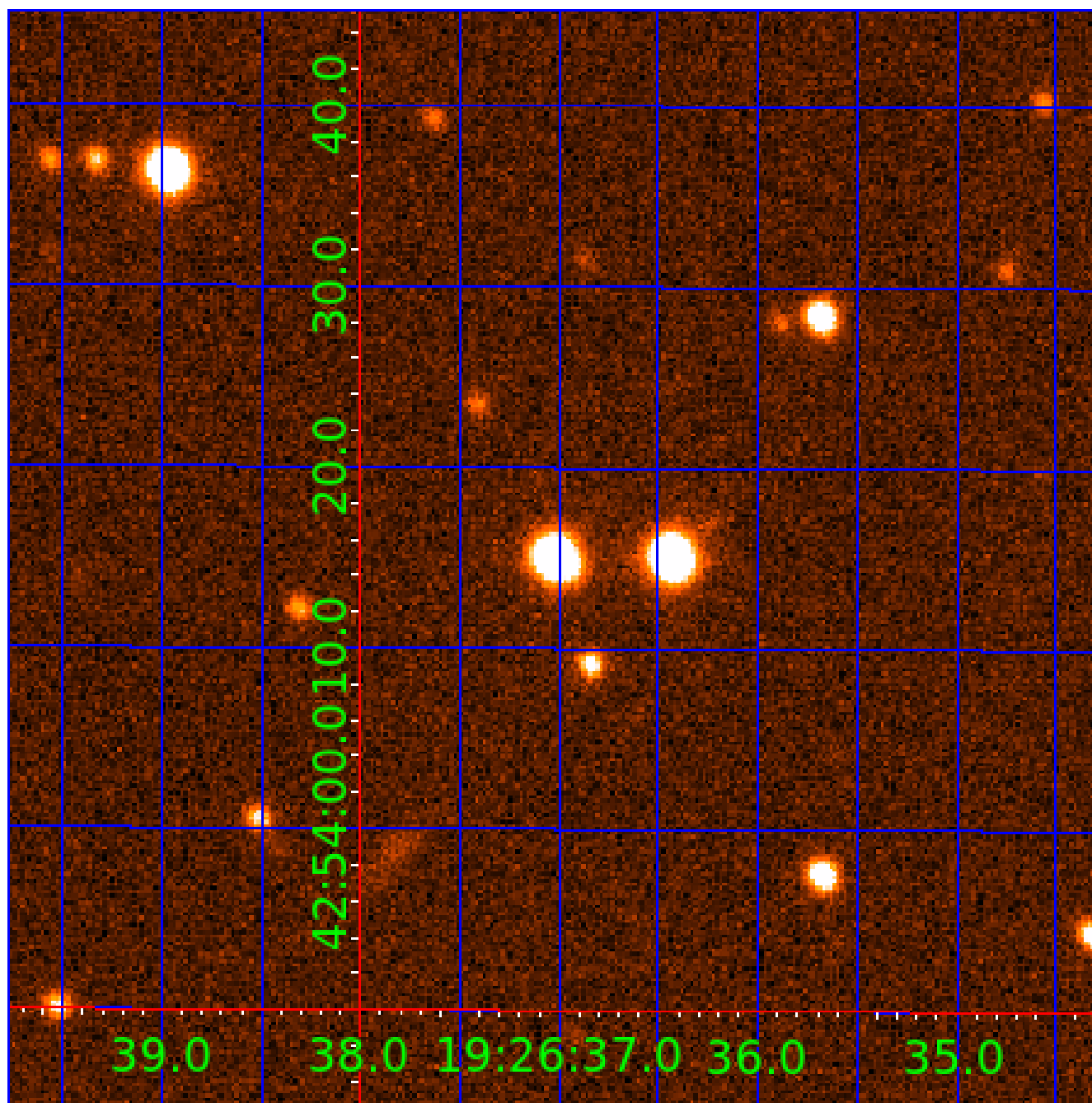


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007362364

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})
007362364-01	OBS	No	0.566754	131.864789	18.9	4.071	13.6	8.2	0.87	5743	0.38	4701.85
007362364-02	OBS	No	37.552986	155.393391	721.9	1.136	13.2	15.3	0.87	5743	2.56	17.54
007362364-03	OBS	No	17.634593	145.493816	484.1	1.749	13.1	14.9	0.87	5743	2.20	48.04
007362364-04	OBS	No	17.136345	134.003121	404.0	9.953	11.3	11.6	0.87	5743	1.97	49.92
007362364-05	OBS	No	54.148503	135.670308	483.8	4.492	9.6	13.9	0.87	5743	2.08	10.77
007362364-06	OBS	No	15.825305	140.636258	173.9	0.877	10.7	4.4	0.87	5743	1.35	55.50

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007362364-01	OBS	FP	0.00	1	0	1	1	LPP_DV—CENT_KIC_POS—HALO_GHOST—EPHEM_MATCH
007362364-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS—HALO_GHOST
007362364-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—CENT_KIC_POS—CENT_UNCERTAIN
007362364-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_KIC_POS
007362364-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
007362364-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

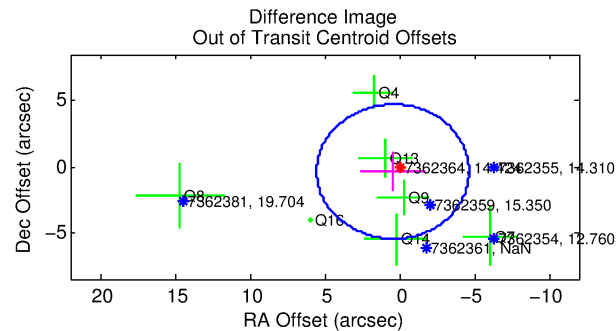
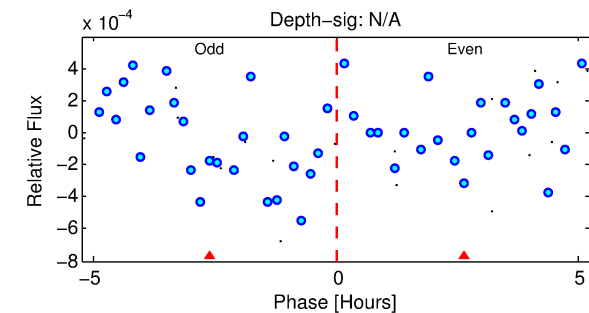
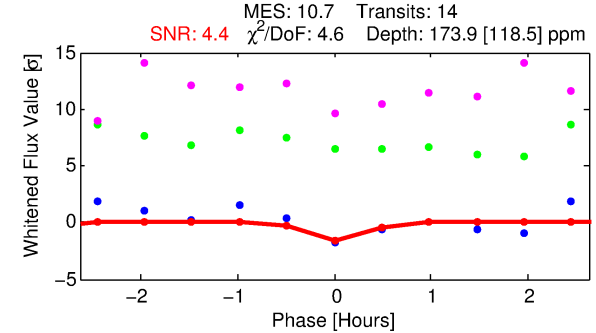
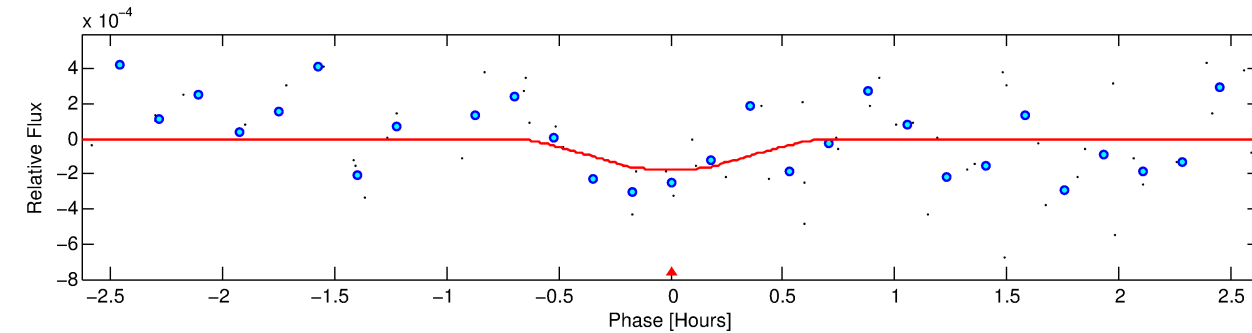
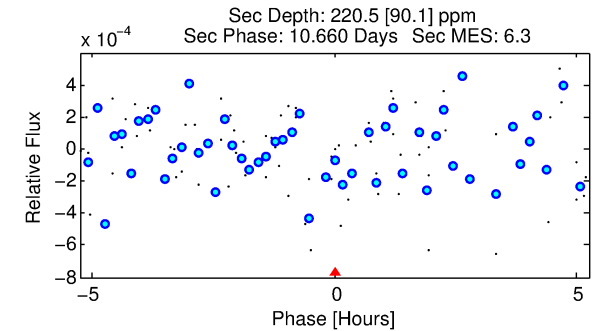
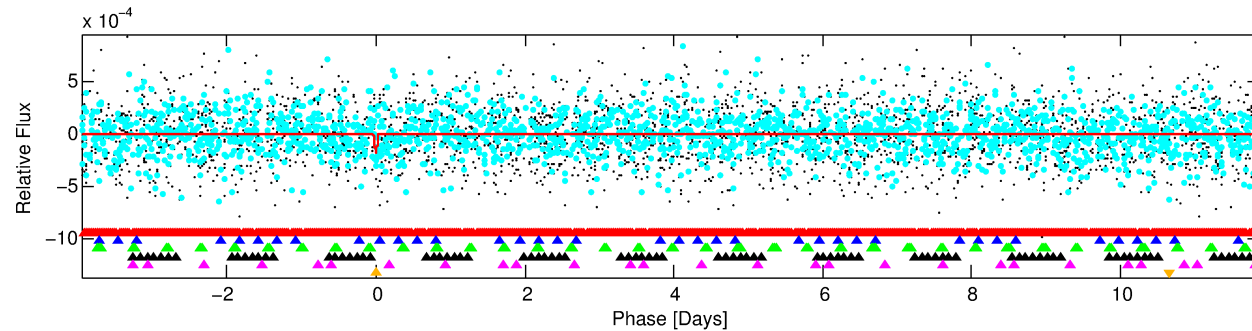
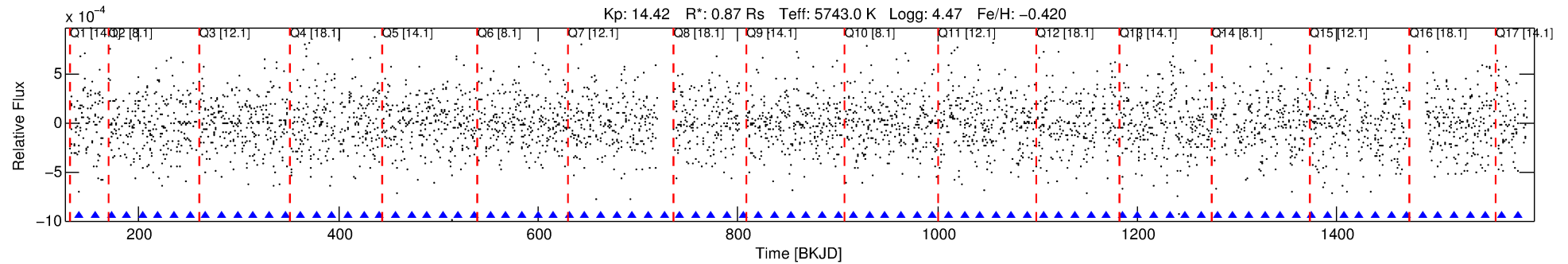
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007362364-06

No Significant Match Found

DV One-Page Summary

KIC: 7362364 Candidate: 6 of 6 Period: 15.825 d



DV Fit Results:

Period = 15.82530 [0.00041] d
Epoch = 140.6363 [0.0203] BKJD
Rp/R* = 0.0142 [0.0440]
a/R* = 70.62 [1059.67]
b = 0.88 [4.13]
Seff = 55.50 [17.47]
Teq = 696 [55] K
Rp = 1.35 [4.20] Re
a = 0.1154 [0.0234] AU
Ag = 891.25 [5555.30] [0.16σ]
Teffp = 5880 [9153] K [0.57σ]

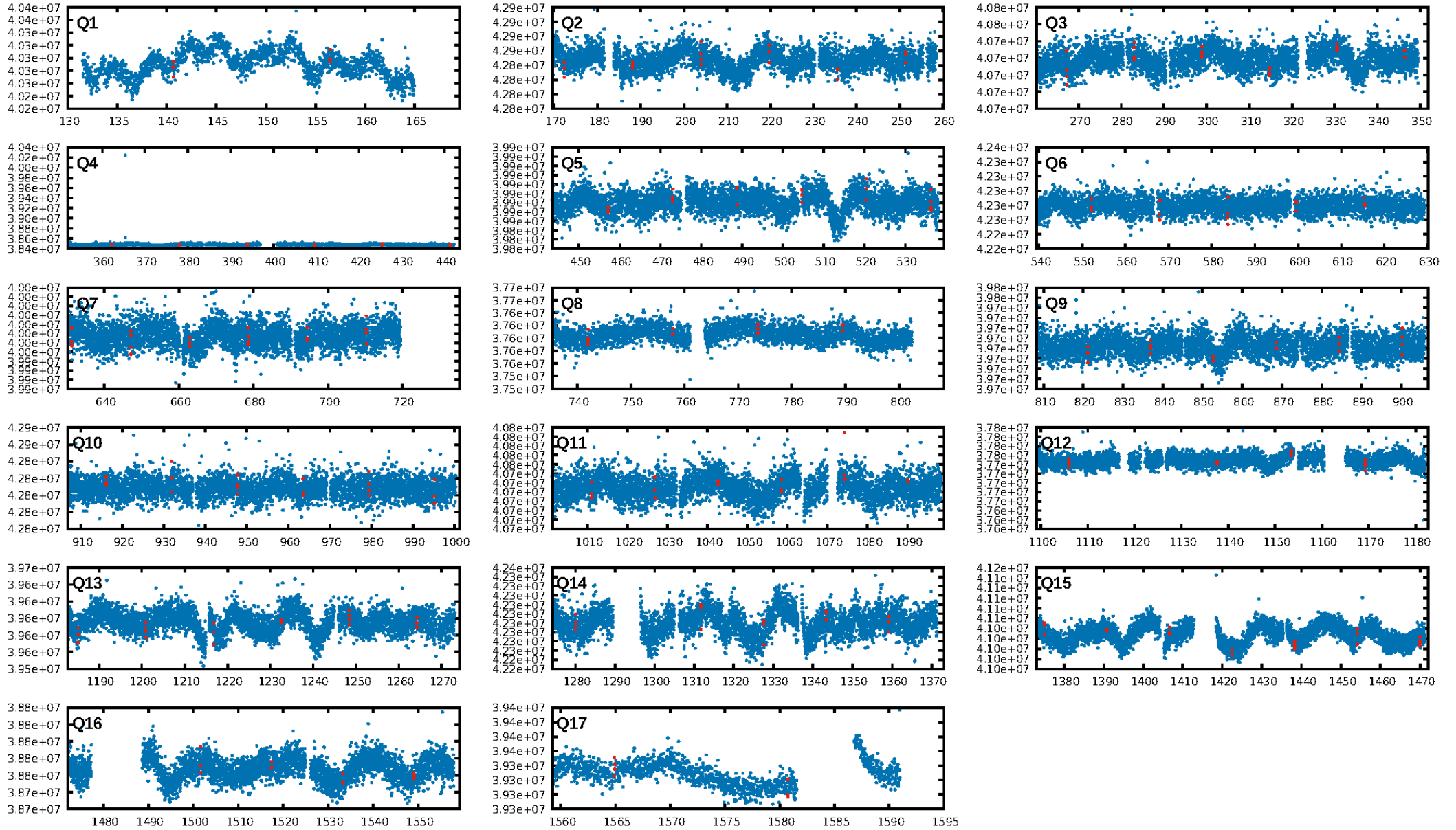
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [87.95σ]
LongPeriod-sig: 99.8% [3.15σ]
ModelChiSquare2-sig: 0.9%
ModelChiSquareGof-sig: 34.4%
Bootstrap-pfa: 2.42e-09
RollingBand-fgt: 1.00 [11/11]
GhostDiagnostic-chr: -2.962
Centroid-sig: 79.1%
Centroid-so: 3.392 arcsec [2.46σ]
OotOffset-rm: 0.571 arcsec [0.34σ]
KicOffset-rm: 0.699 arcsec [0.41σ]
OotOffset-st: 1/1/3/2 [7]
KicOffset-st: 1/1/3/2 [7]
DiffImageQuality-fgm: 0.00 [0/7]
DiffImageOverlap-fno: 0.00 [0/17]

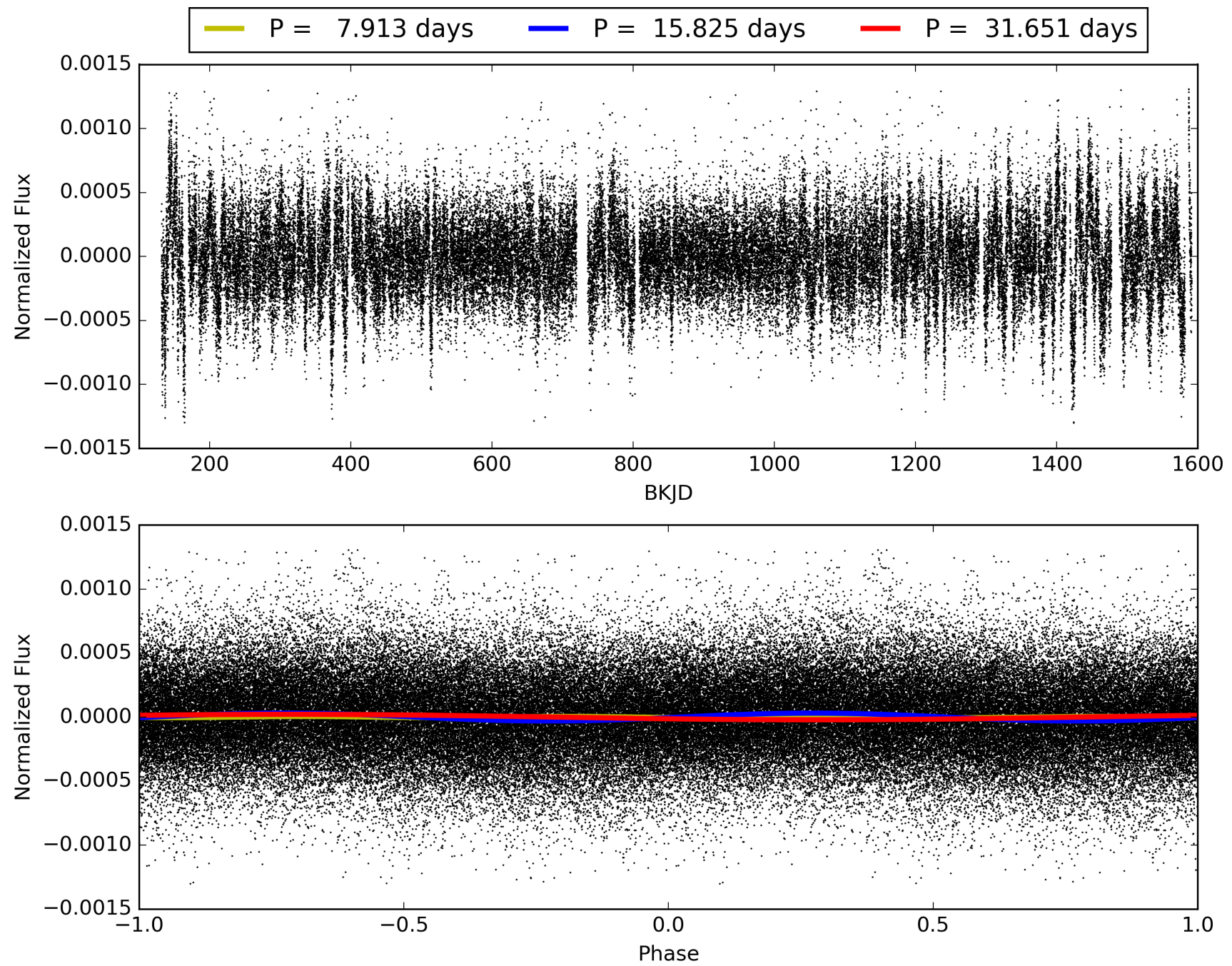
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 07:38:21 Z

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

TCE 007362364-06, PDC Light Curves

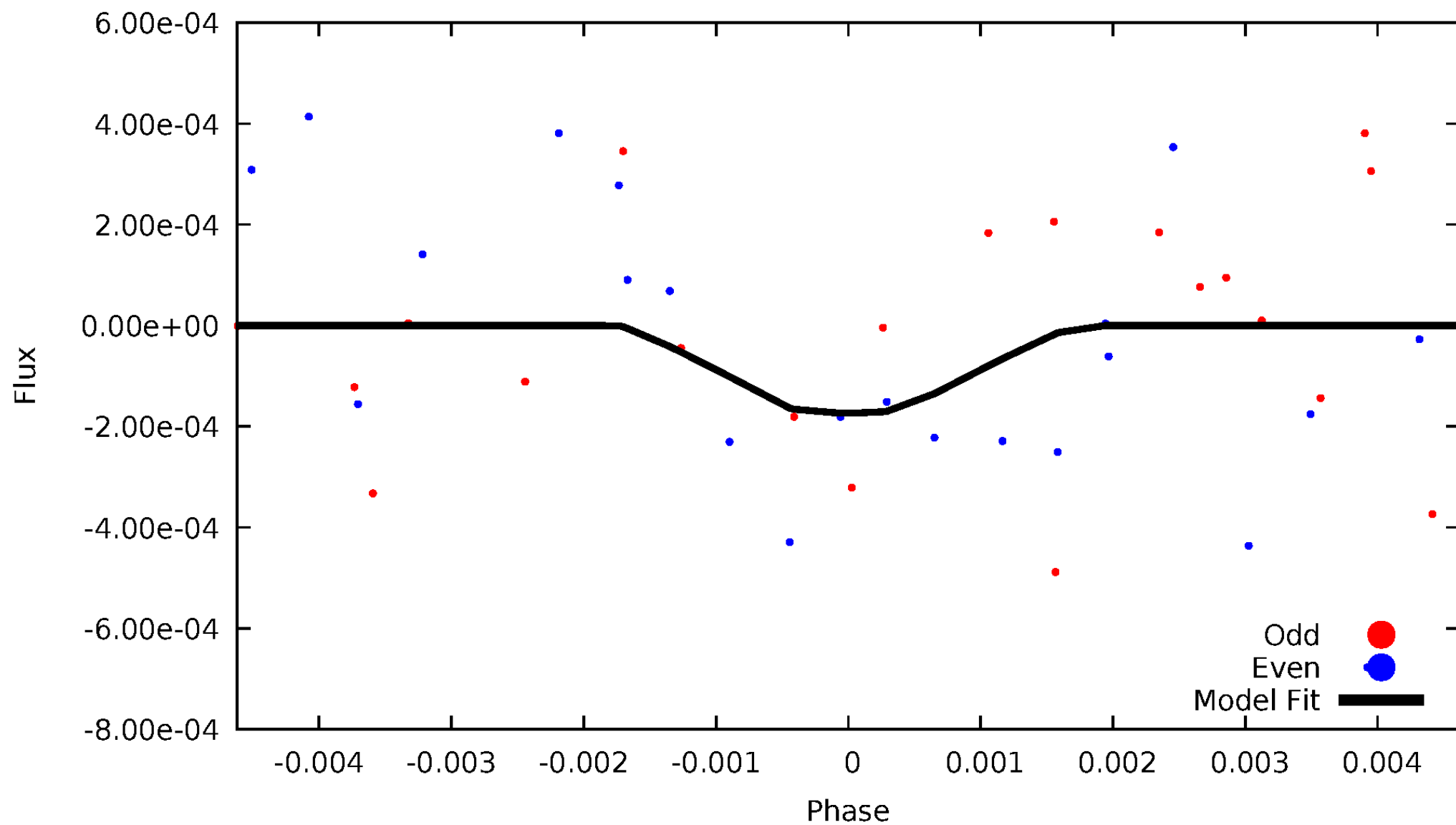


TCE 007362364-06



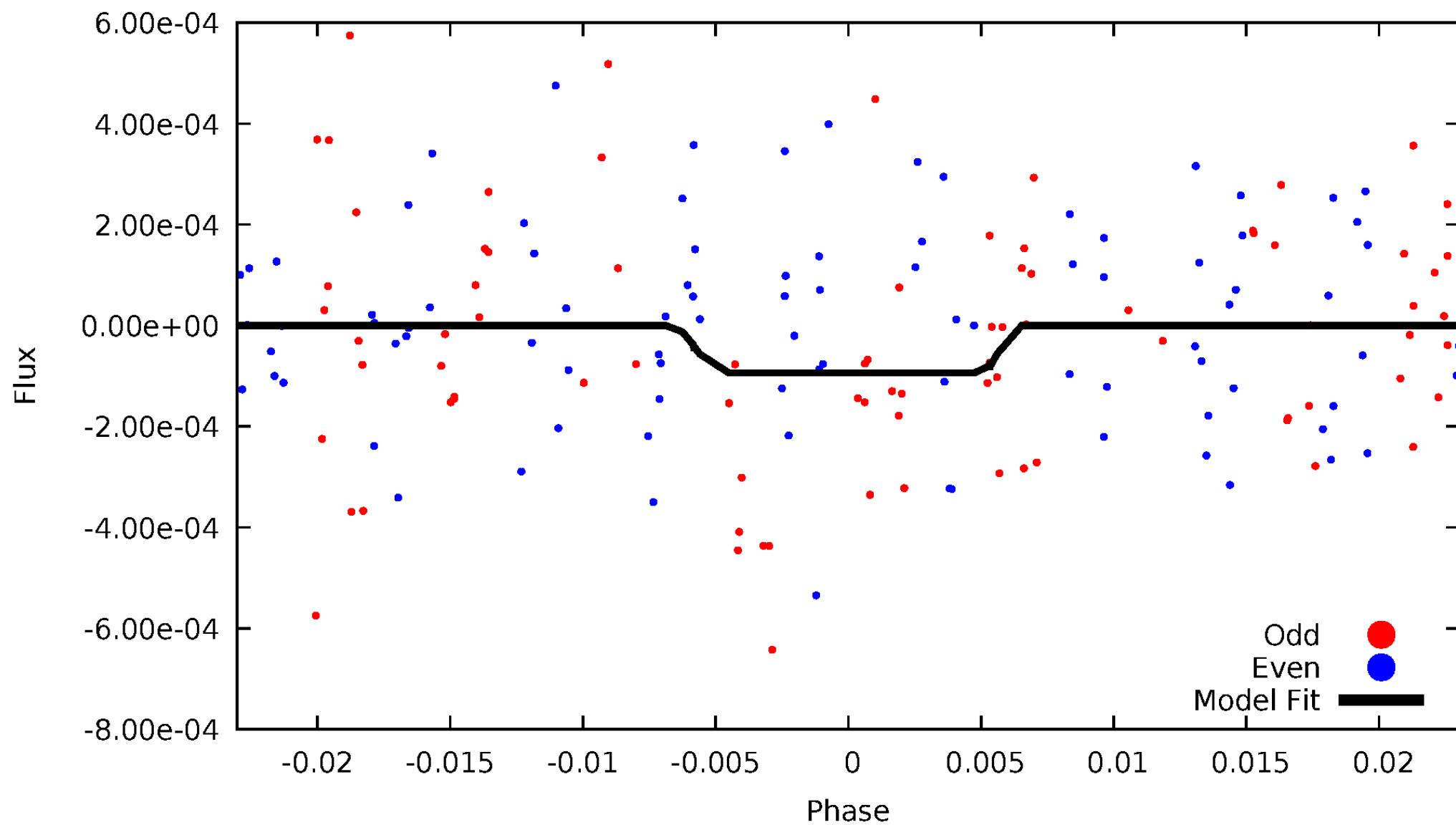
DV Odd/Even

TCE 007362364-06



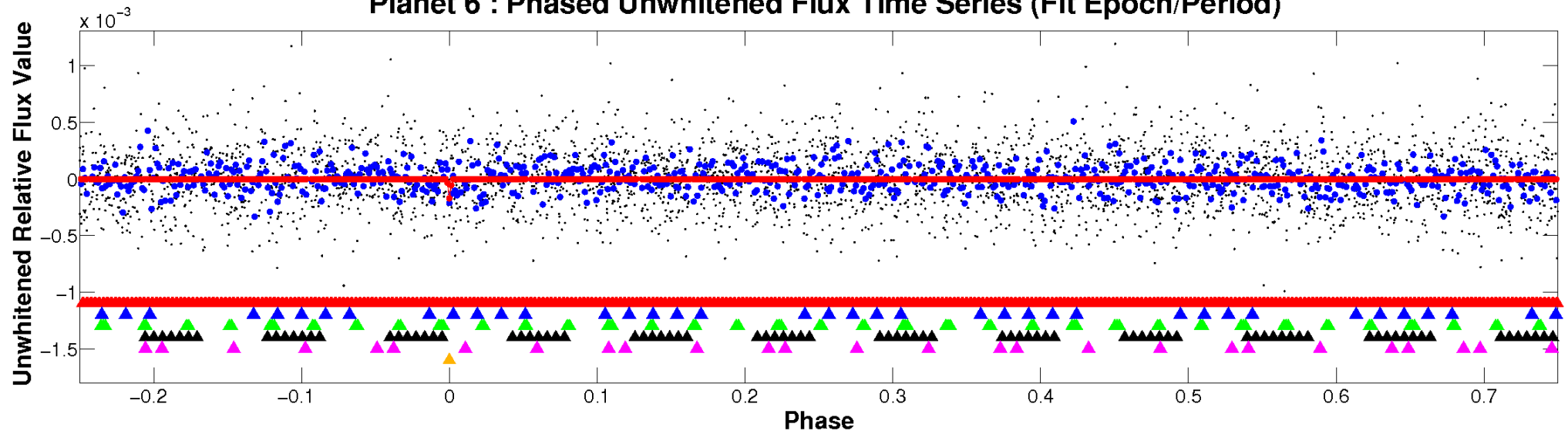
ALT Odd/Even

TCE 007362364-06

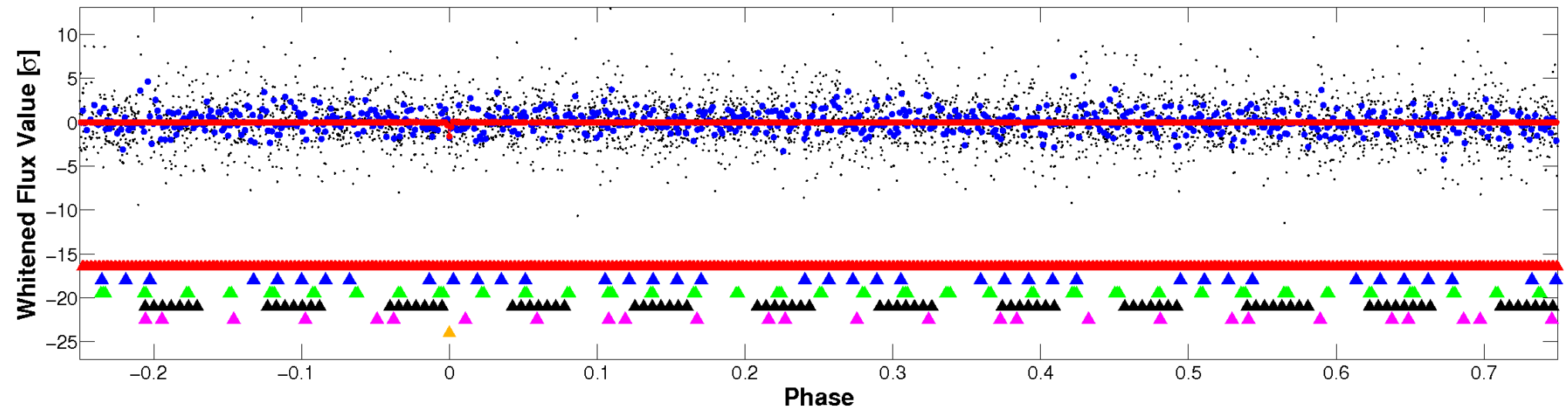


Non-Whitened Vs. Whitened Light Curve

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

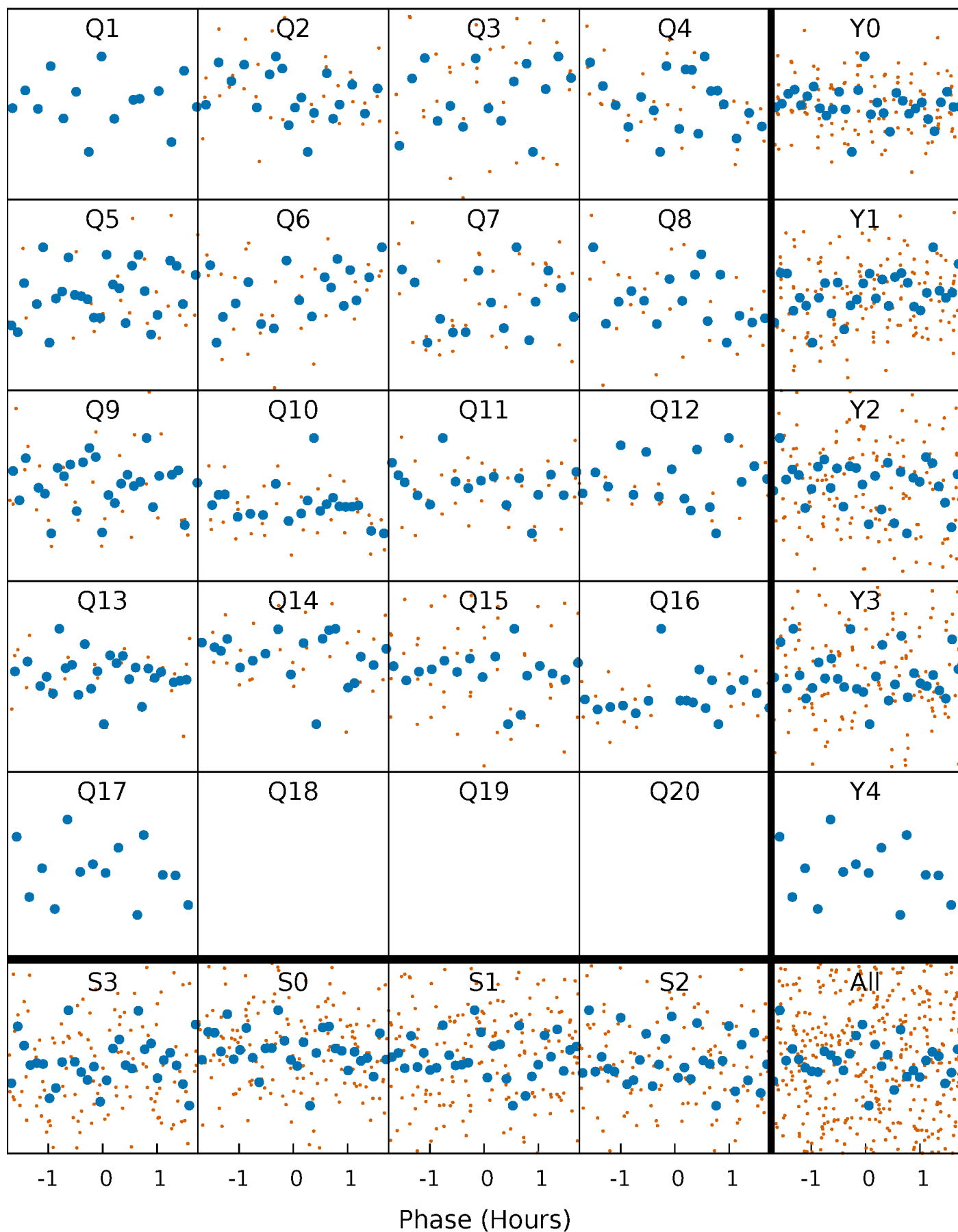


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



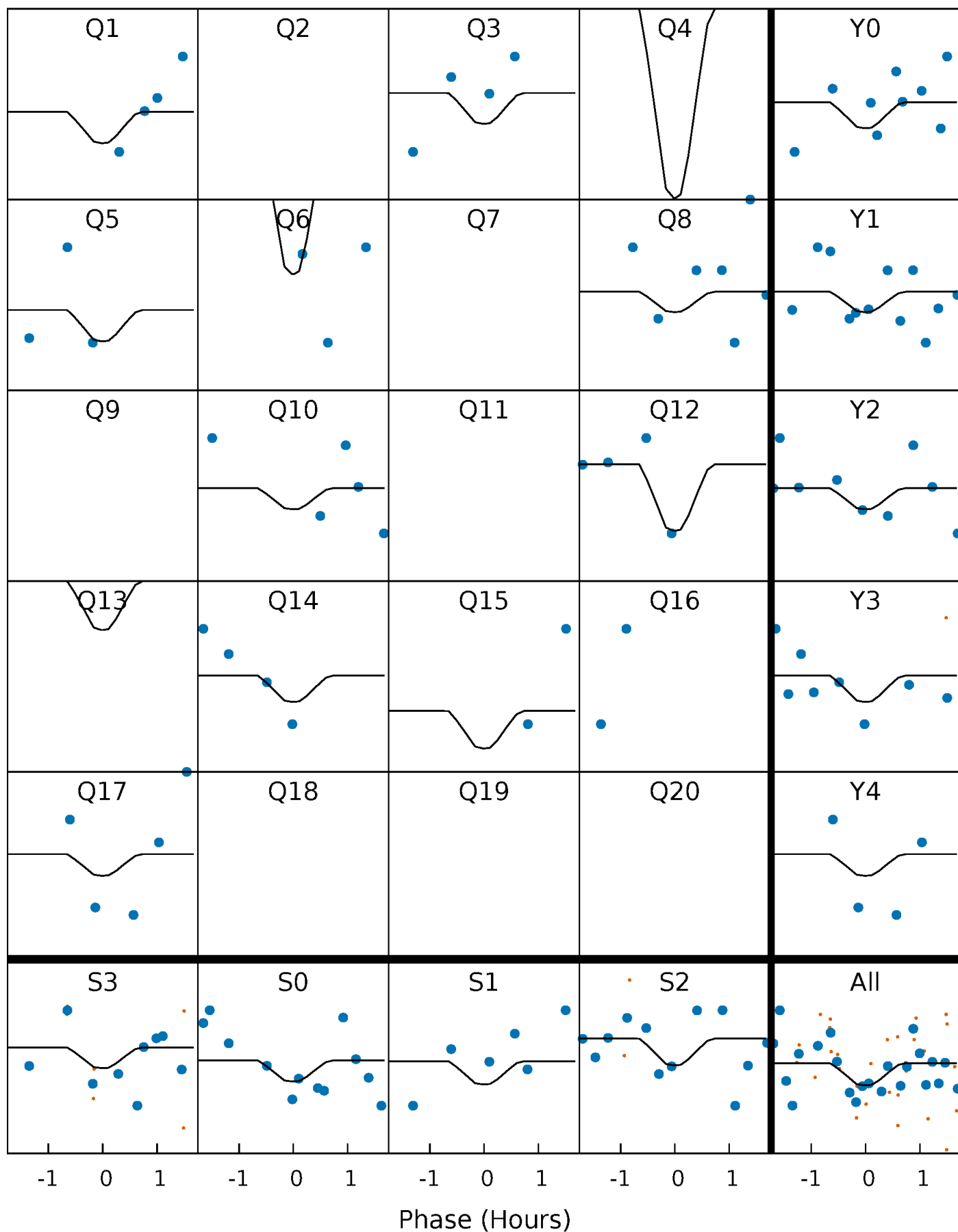
PDC Quarter-Phased Transit Curves

TCE 007362364-06 P= 15.825305 Days $T_0=140.636258$ (BKJD)



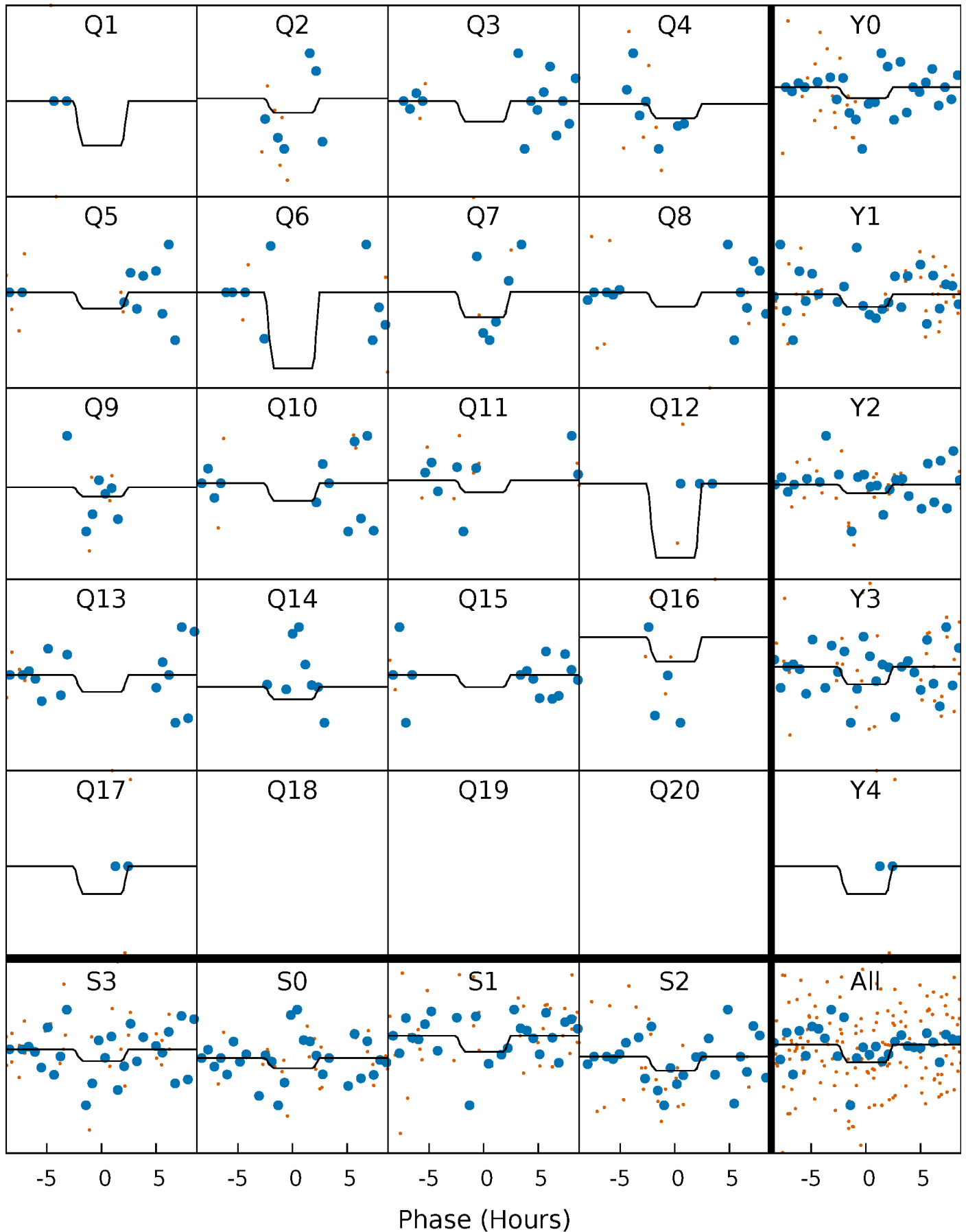
DV Quarter-Phased Transit Curves

TCE 007362364-06 P= 15.825305 Days $T_0=140.636258$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

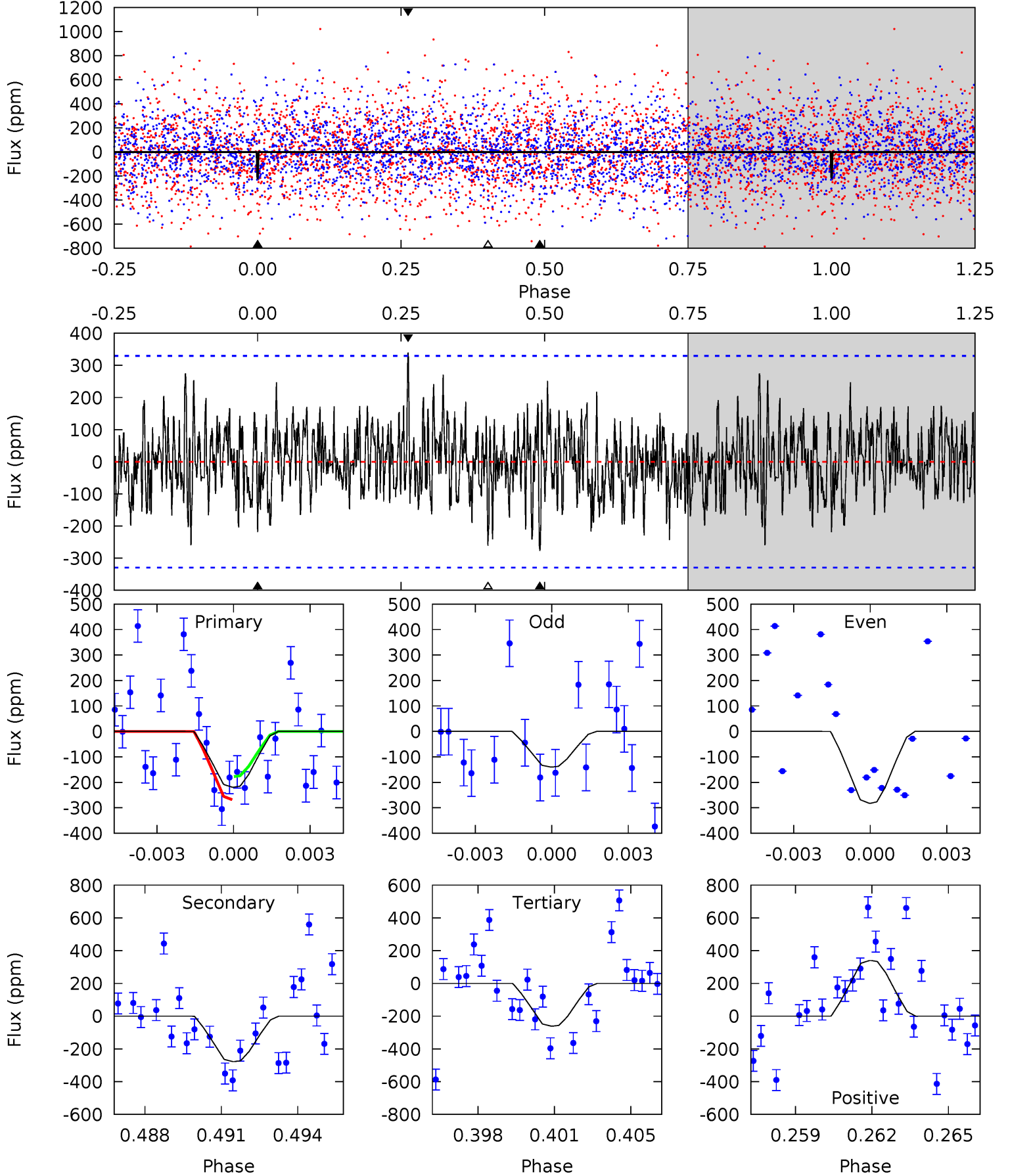
TCE 007362364-06 P= 15.828634 Days $T_0=140.267880$ (BKJD)



DV Model-Shift Uniqueness Test

007362364-06, P = 15.825305 Days, E = 124.810953 Days

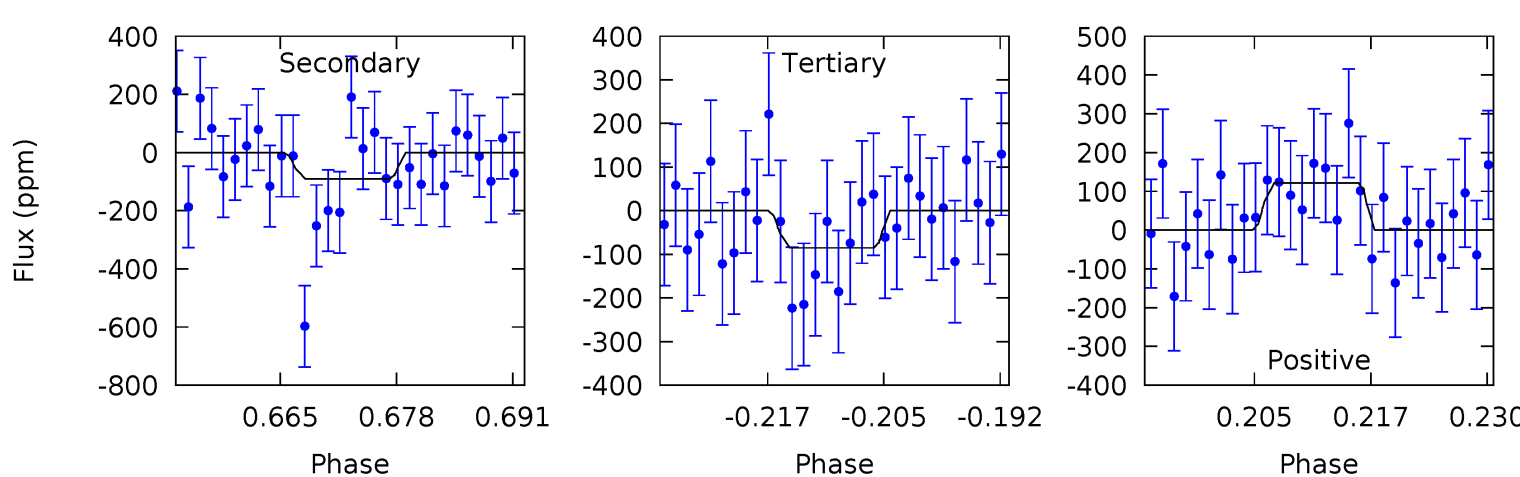
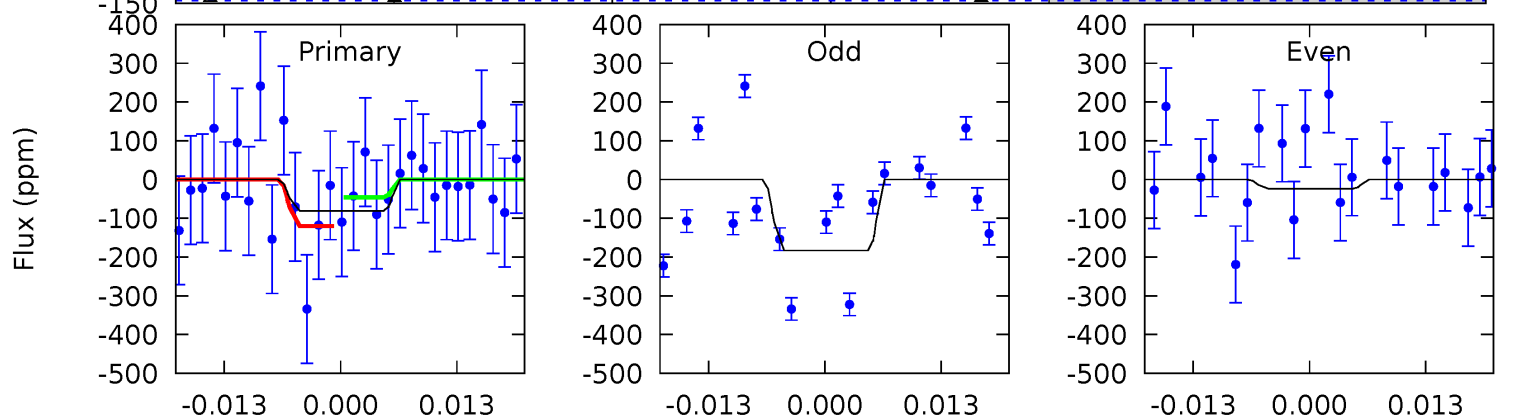
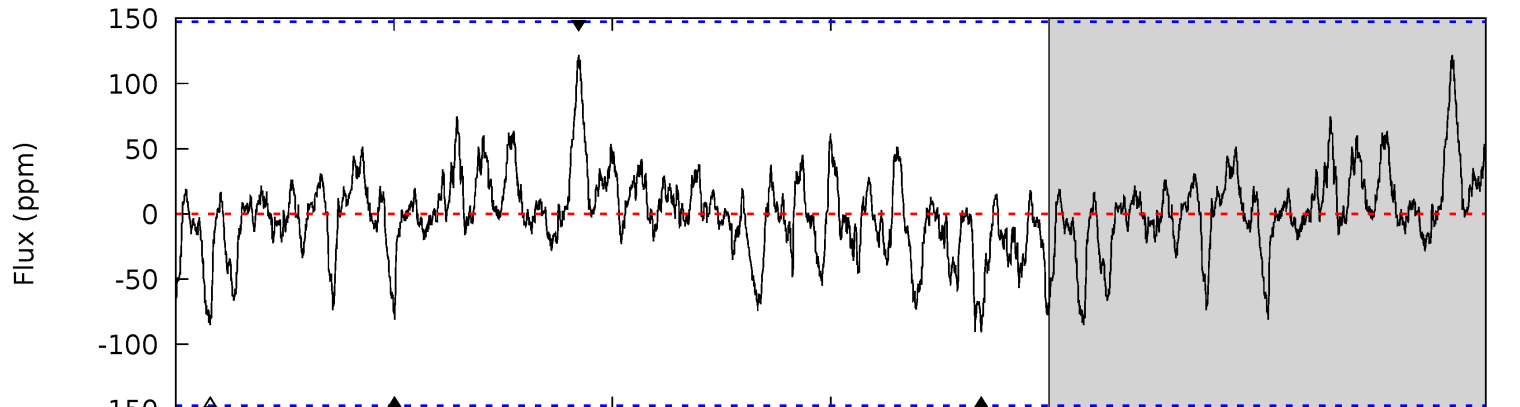
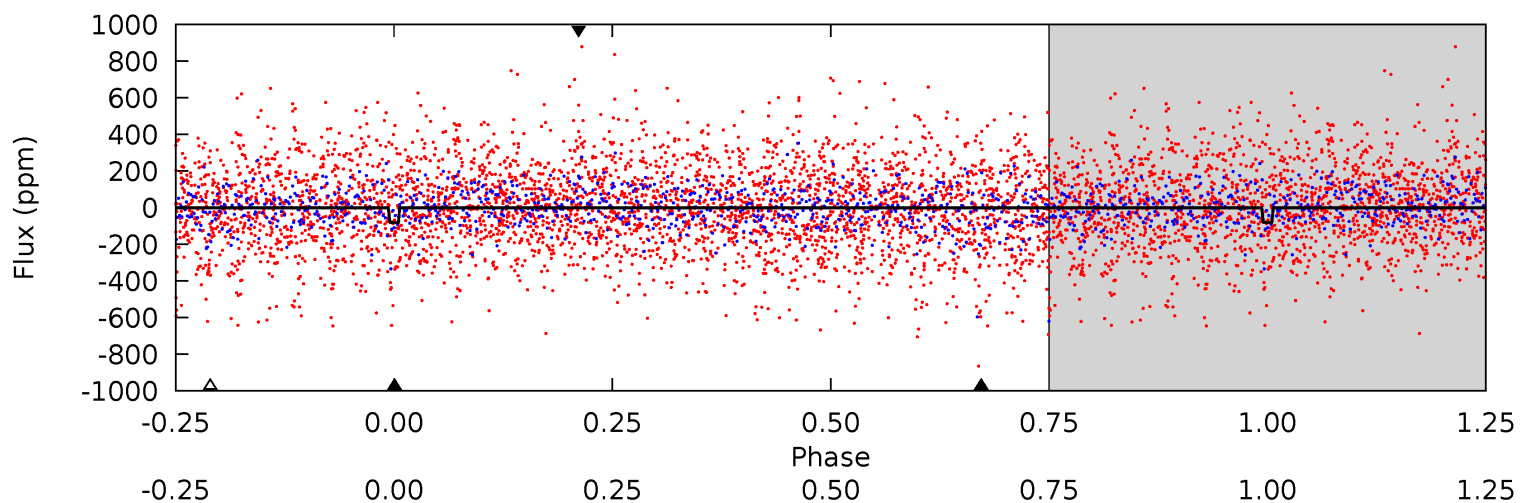
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.48	4.41	4.15	5.39	5.23	2.94	1.43	-0.67	-1.92	0.26	-0.99	1.14	1.17	0.55	0.72



Alt Model-Shift Uniqueness Test

007362364-06, P = 15.828634 Days, E = 124.439246 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.74	3.06	2.88	4.12	4.98	2.49	1.00	-0.14	-1.38	0.18	-1.06	2.71	1.03	0.57	1.25



Stellar Parameters For KIC 007362364

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5743^{+155}_{-155}	$4.471^{+0.108}_{-0.162}$	$-0.420^{+0.300}_{-0.300}$	$0.871^{+0.209}_{-0.112}$	$0.820^{+0.114}_{-0.061}$	$1.746^{+0.712}_{-0.778}$
	+3%/-3%	+2%/-4%	+71%/-71%	+24%/-13%	+14%/-7%	+41%/-45%
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 007362364-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-277 ± 63	$3.53^{+3.33}_{-2.53}$	980^{+57}_{-55}	4159^{+3384}_{-851}	163^{+2062}_{-121}
Alt.	-91 ± 30	$3.14^{+3.40}_{-2.20}$	976^{+64}_{-48}	3518^{+2022}_{-678}	63^{+658}_{-49}

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 $A_{obs} \gg 1.0$

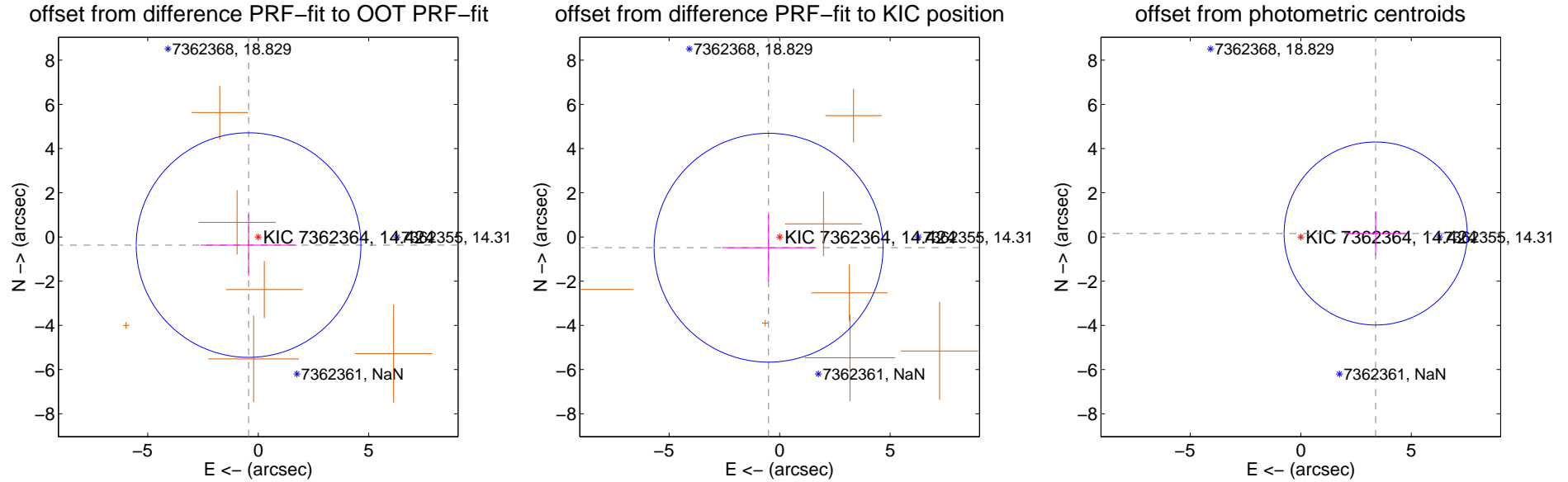
DV Centroid Data

Supplemental centroid analysis for 007362364-06. Kepler magnitude: 14.42. Transit SNR 4.42

There are 0 quarters with good PRF difference image offsets

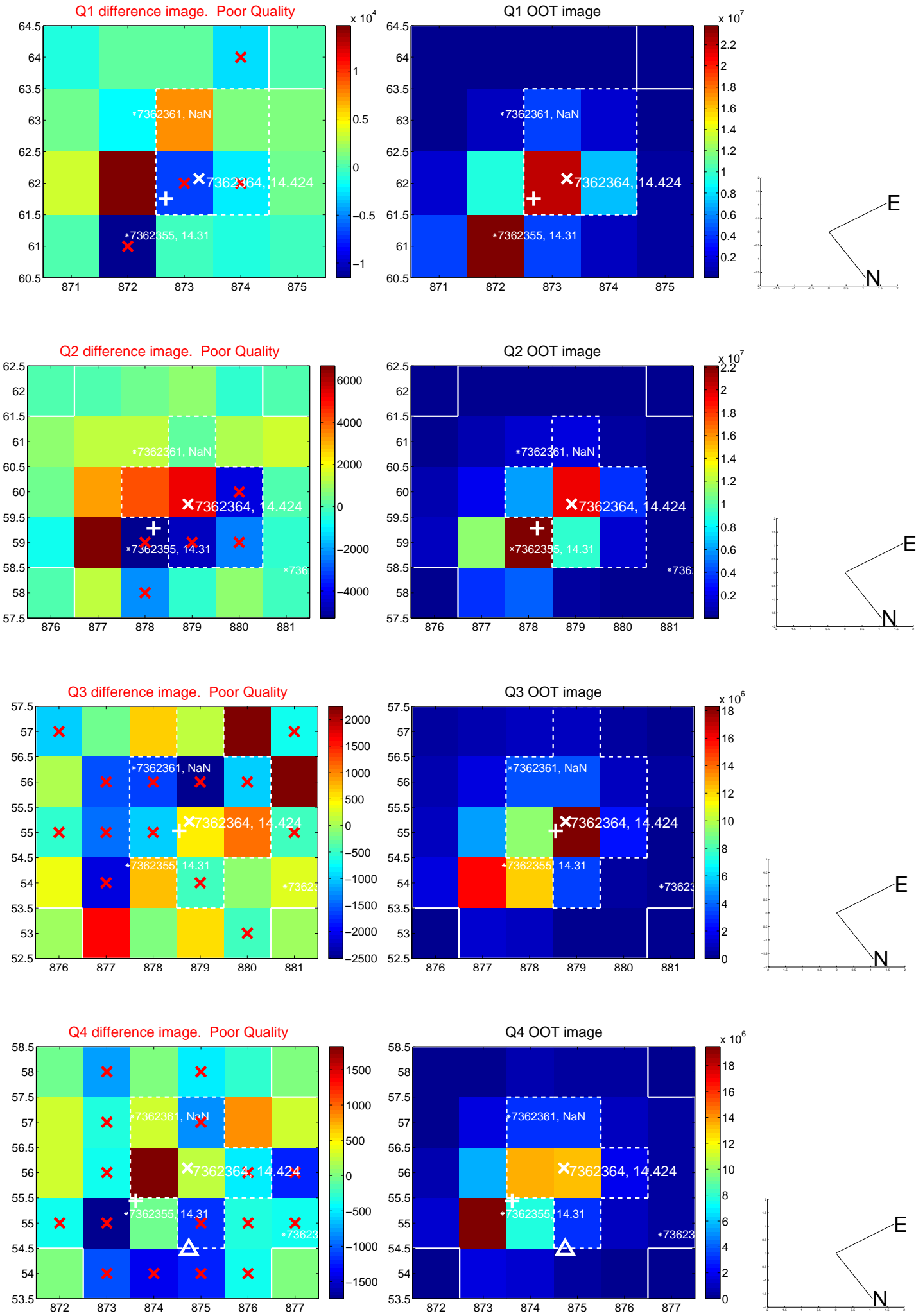
The OOT PRF centroid is offset from the target star catalog position by about 5.33 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.571 ± 1.694	0.34	0.436 ± 2.177	-0.368 ± 1.396
PRF-fit source offset from KIC position	0.699 ± 1.726	0.41	0.502 ± 2.112	-0.487 ± 1.516
photometric centroid source offset	3.39 ± 1.38	2.46	-3.39 ± 1.38	0.16 ± 0.99

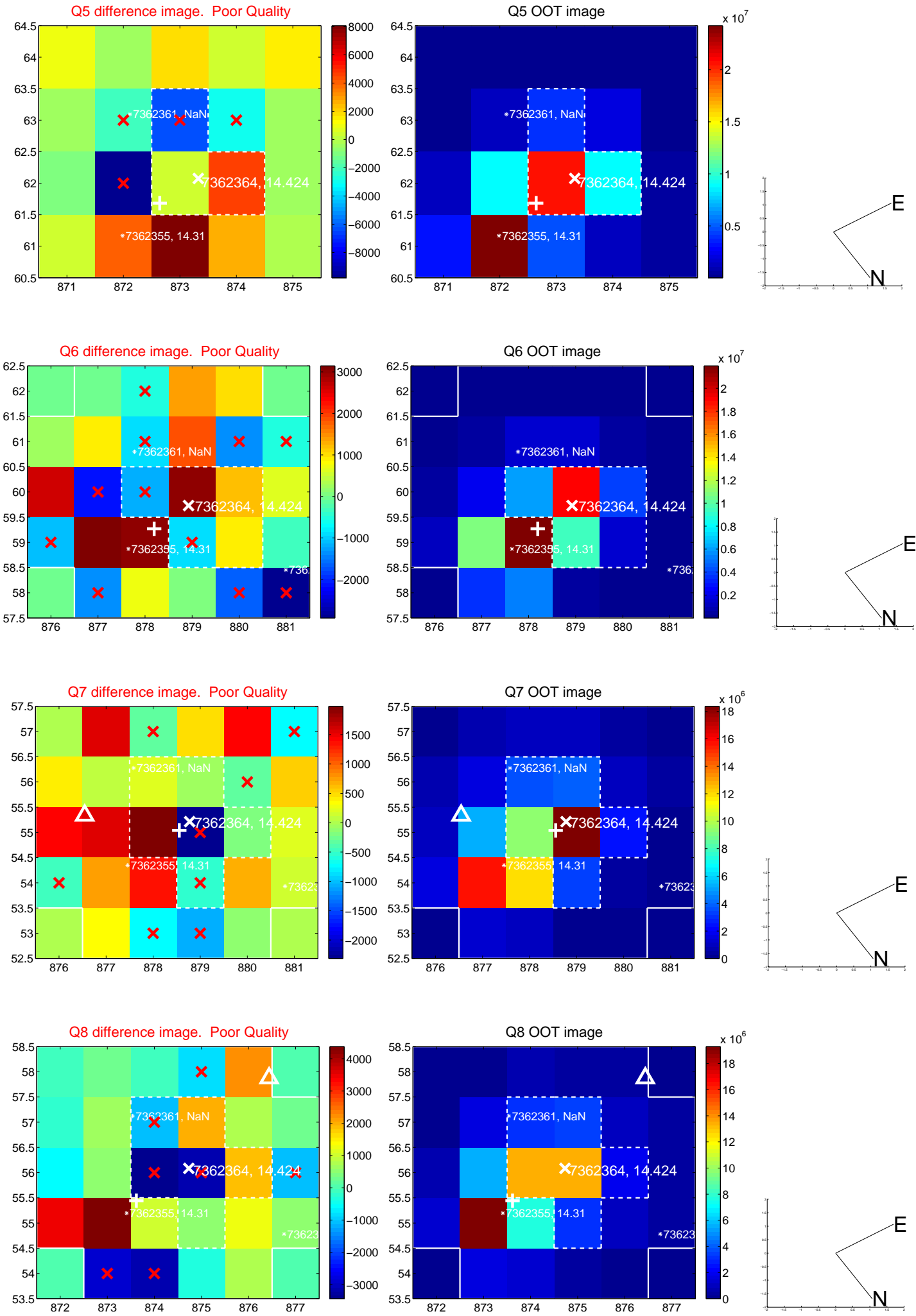


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

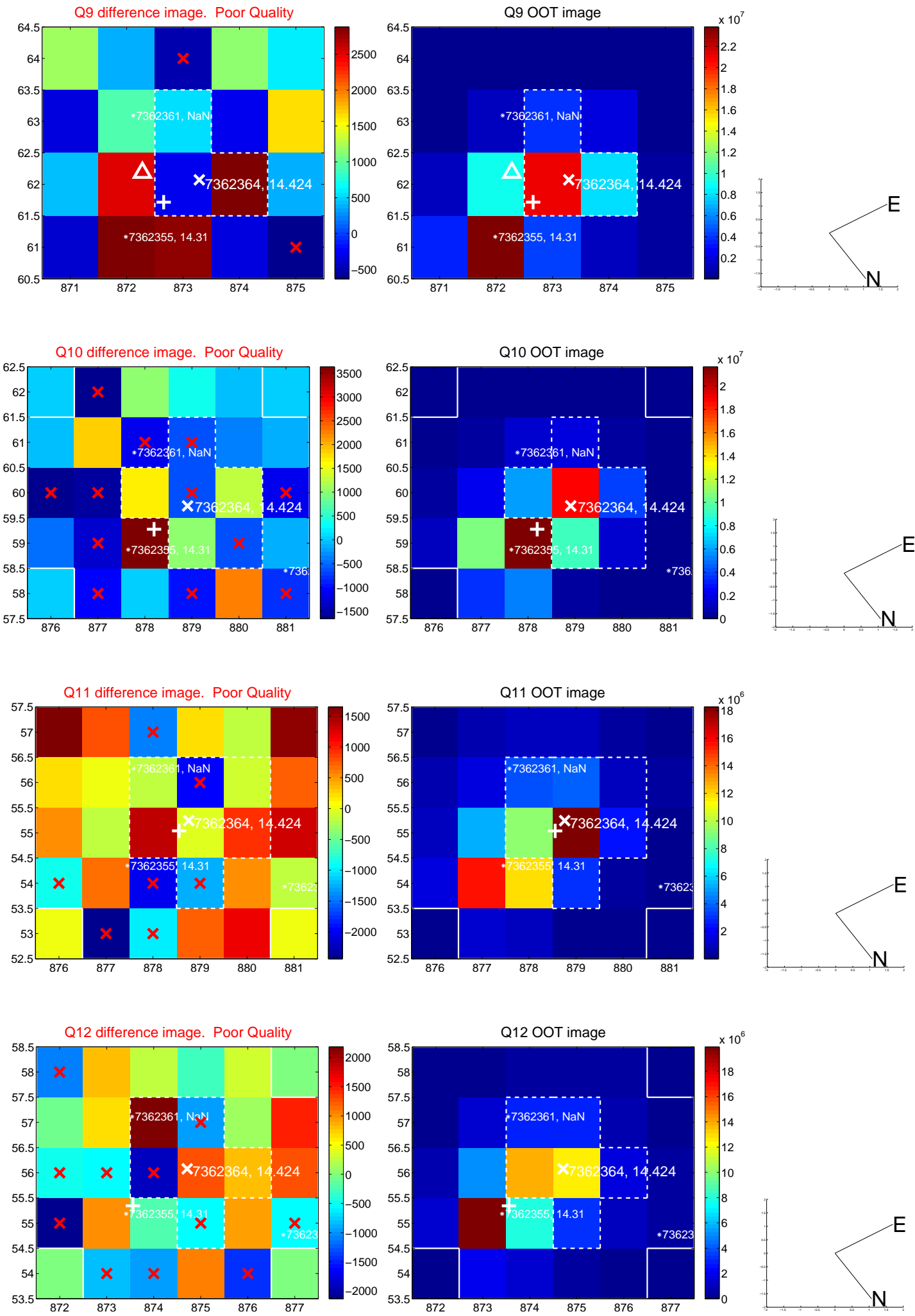
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



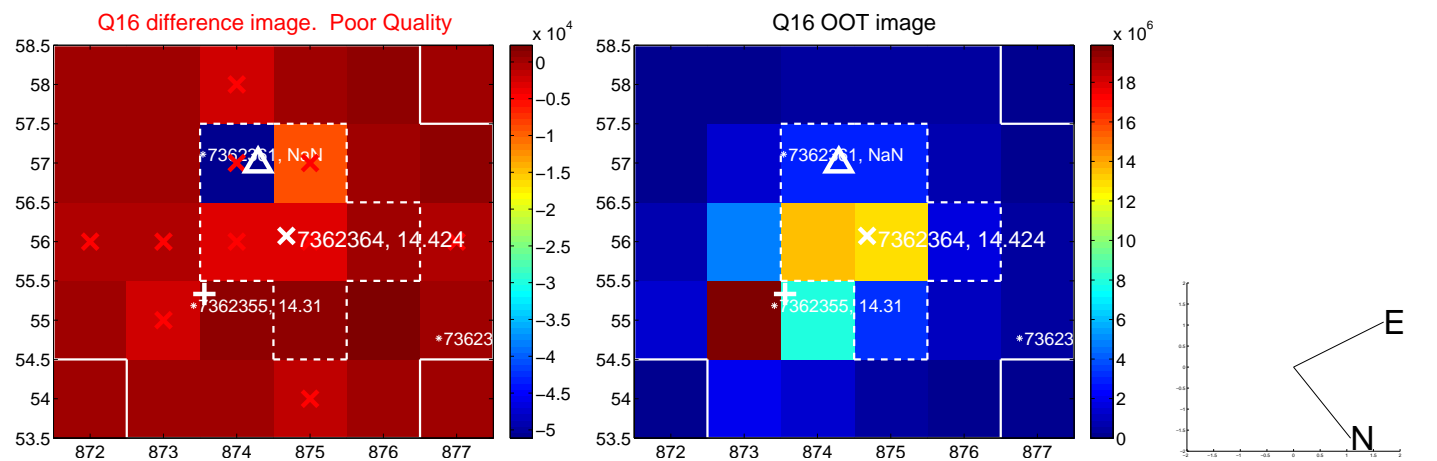
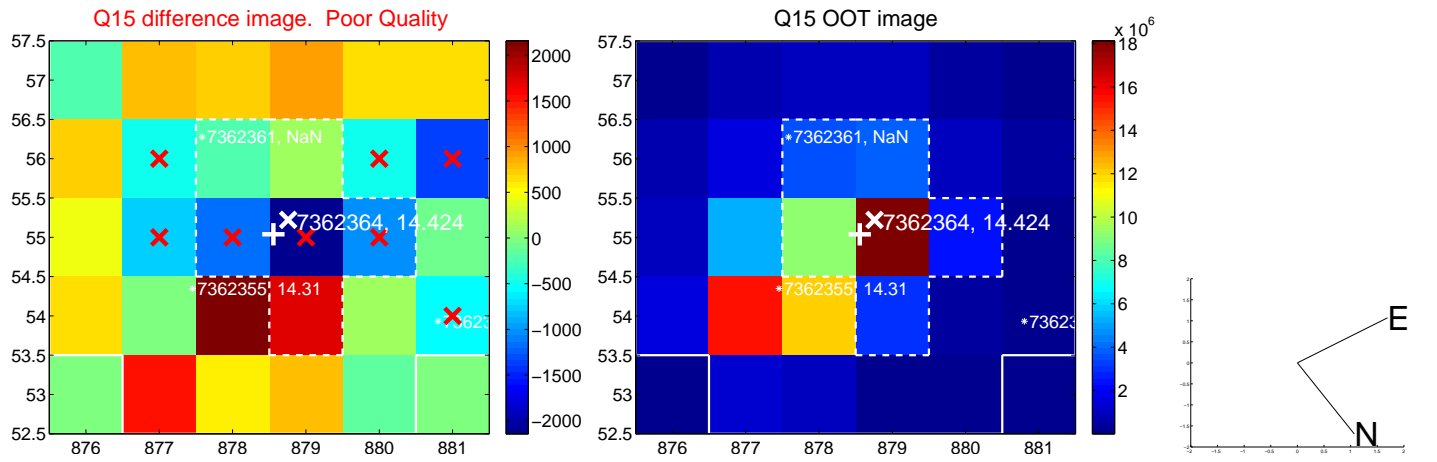
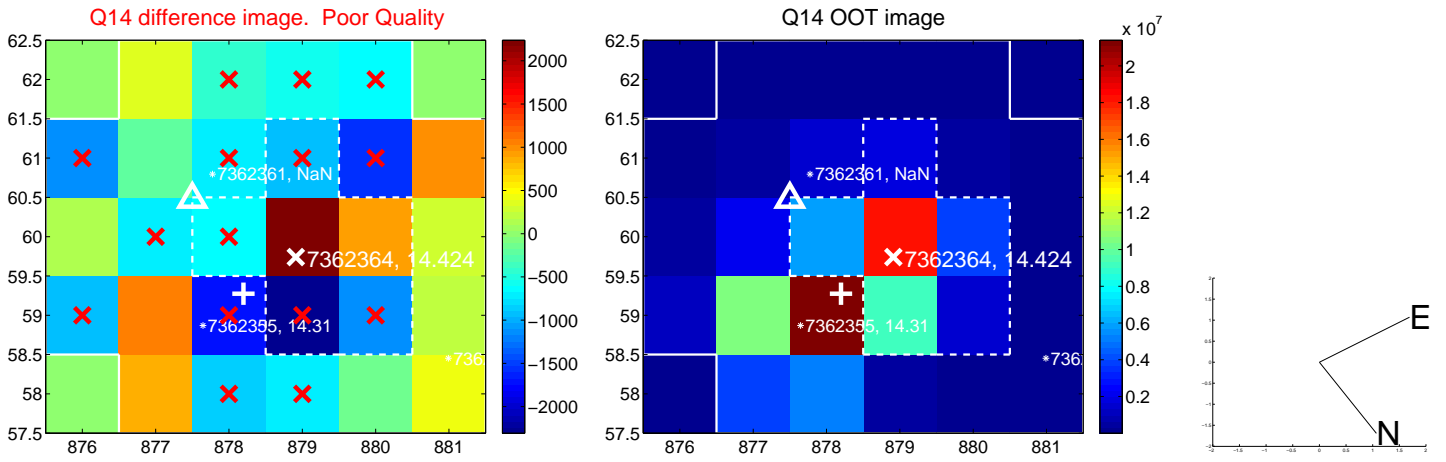
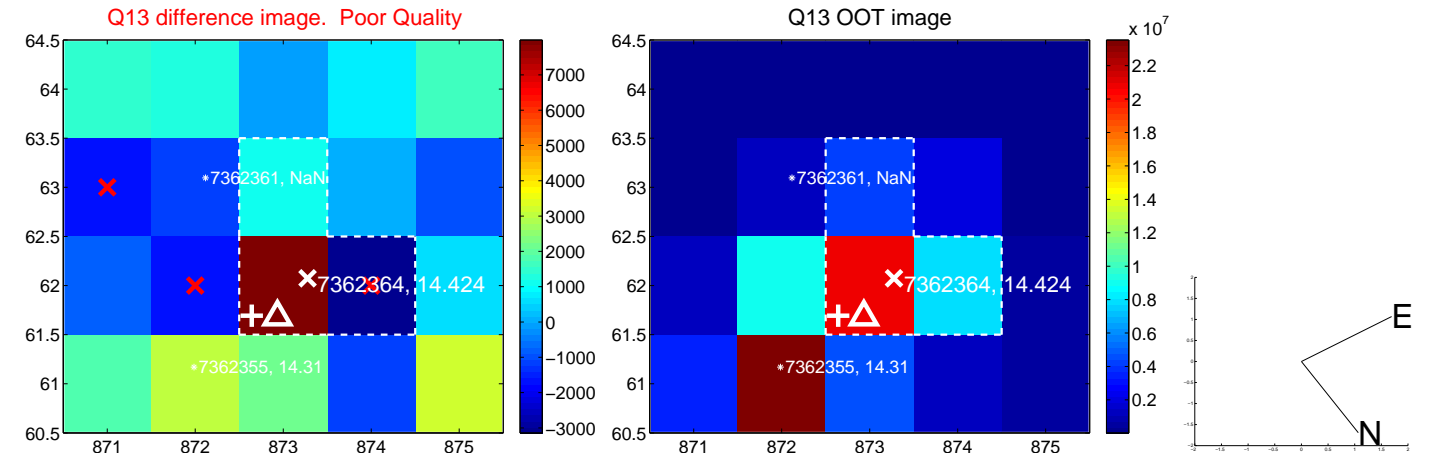
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



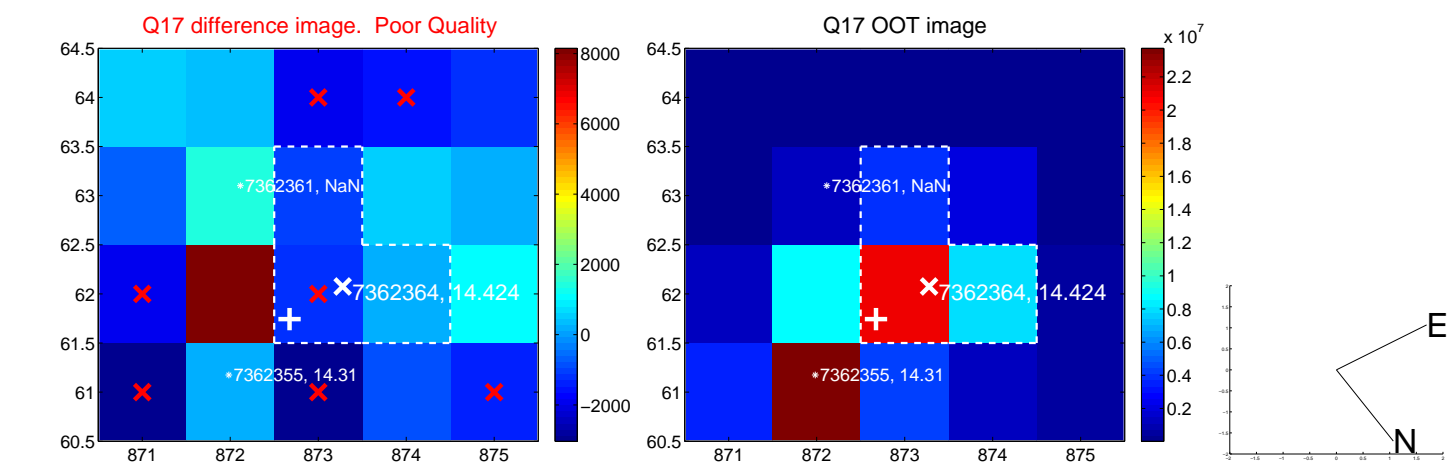
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



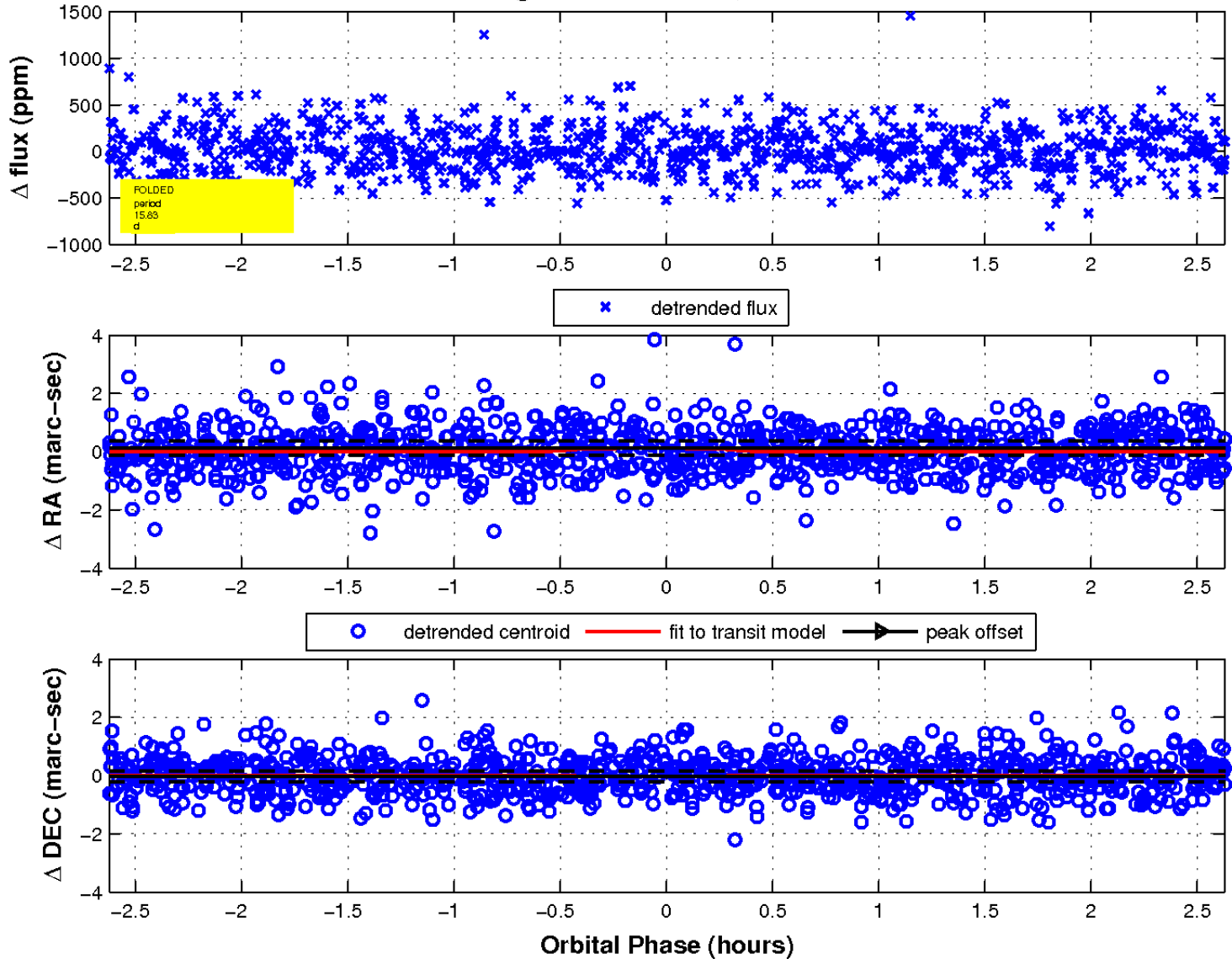
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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UKIRT Image

Declination

