

KIC 006292925

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})
006292925-01	OBS	No	354.164784	237.134344	41.4	8.144	11.8	4.3	3.48	8386	2.60	31.21
006292925-02	OBS	No	13.610895	139.812155	17.4	25.491	10.6	13.4	3.48	8386	1.71	2406.58

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006292925-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—INCONSISTENT_TRANS—CENT_SATURATED
006292925-02	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED

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

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

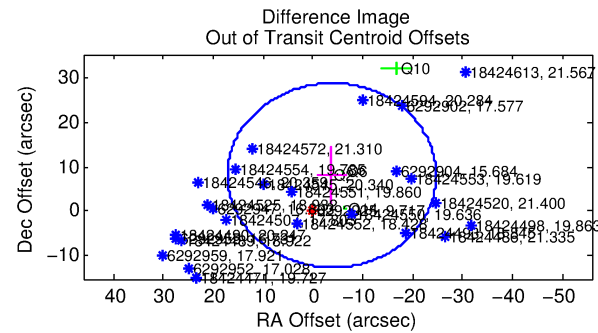
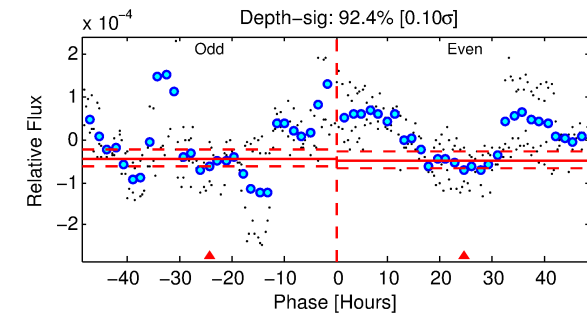
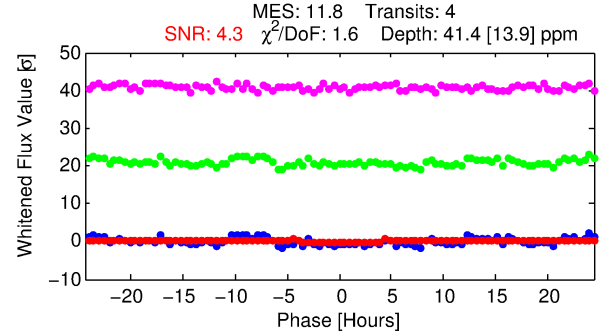
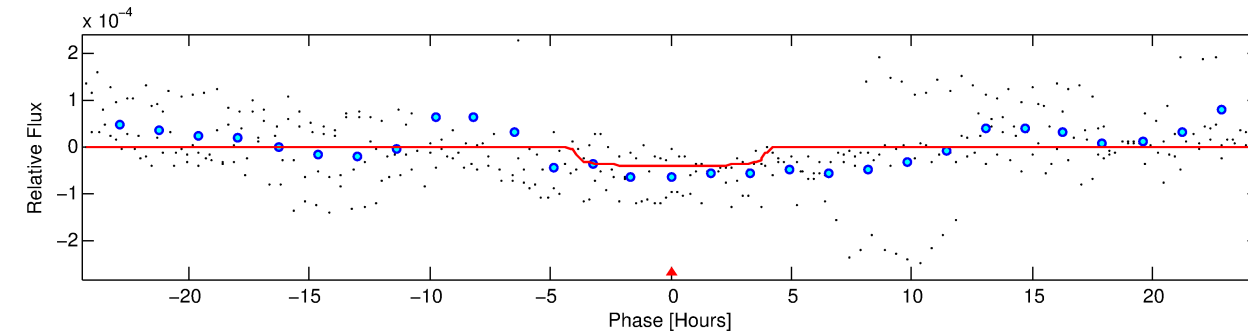
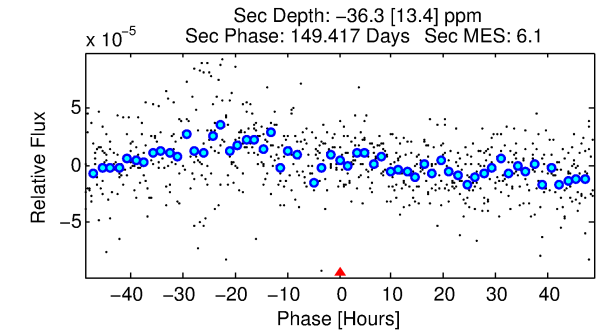
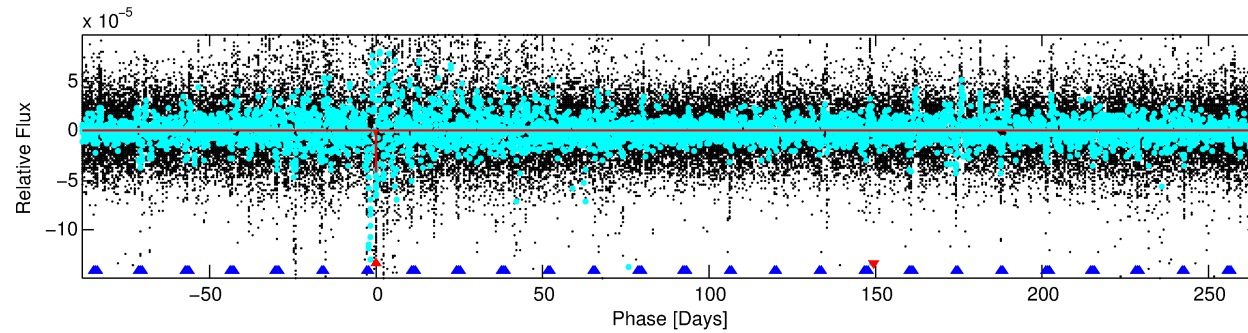
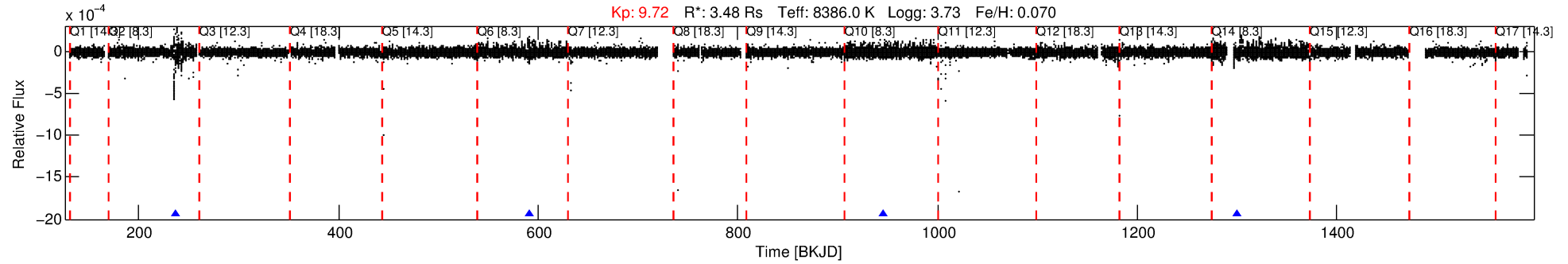
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006292925-01

No Significant Match Found

DV One-Page Summary

KIC: 6292925 Candidate: 1 of 2 Period: 354.165 d



DV Fit Results:

Period = 354.16478 [0.00973] d
Epoch = 237.1343 [0.0179] BKJD
Rp/R* = 0.0068 [0.0023]
a/R* = 150.03 [261.91]
b = 0.90 [0.37]
Seff = 31.21 [22.14]
Teq = 603 [107] K
Rp = 2.60 [1.54] Re
a = 1.3131 [0.5816] AU
Ag = N/A
Teffp = N/A

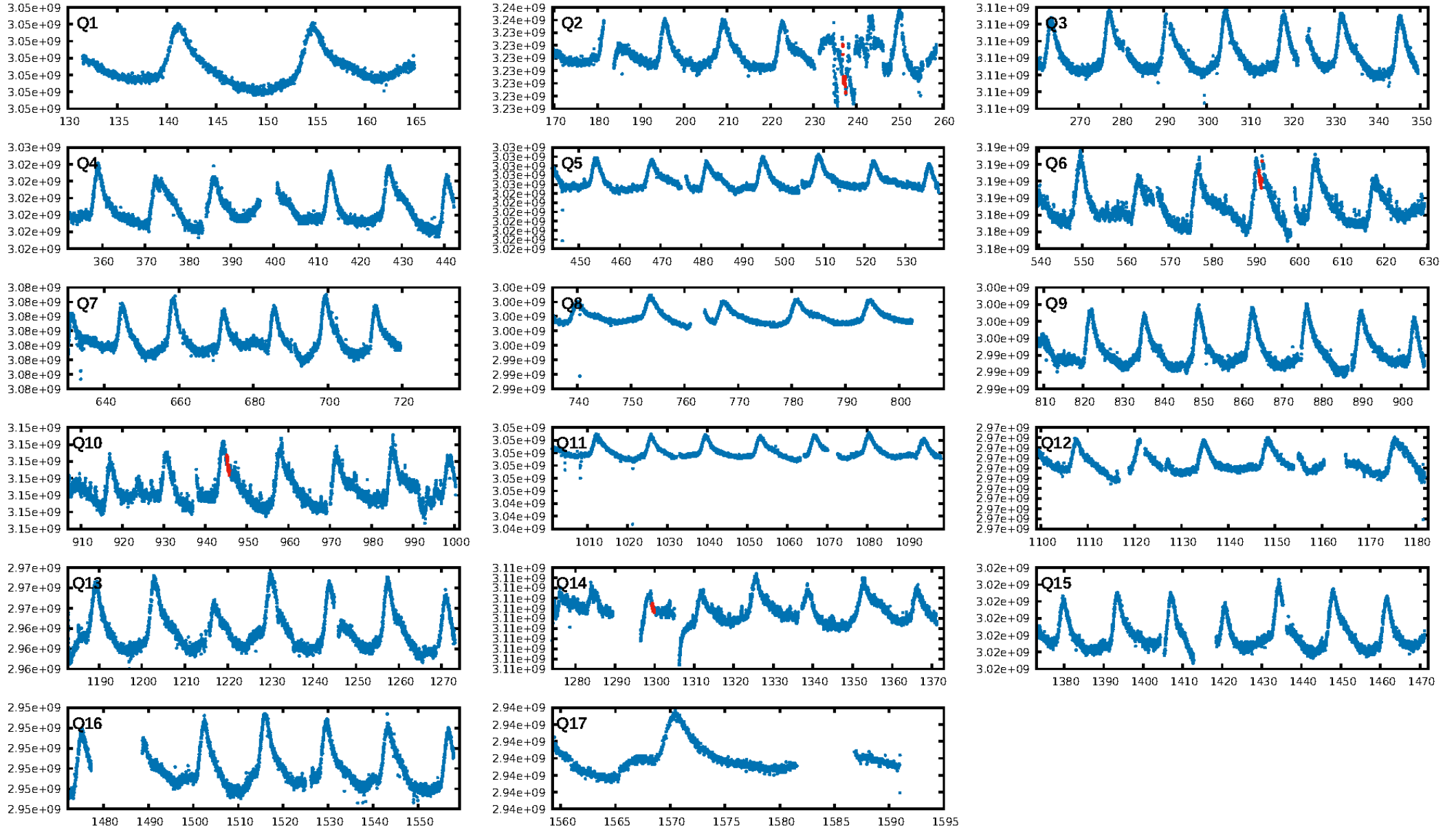
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [305.43 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 4.4%
ModelChiSquareGof-sig: 93.5%
Bootstrap-pfa: 2.90e-12
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: N/A
Centroid-sig: 15.6%
Centroid-so: 3.899 arcsec [1.16 σ]
OotOffset-rm: 8.894 arcsec [1.28 σ]
KicOffset-rm: 8.669 arcsec [1.47 σ]
OotOffset-st: 4/0/0 [4]
KicOffset-st: 4/0/0 [4]
DiffImageQuality-fgm: 0.00 [0/4]
DiffImageOverlap-fno: 1.00 [4/4]

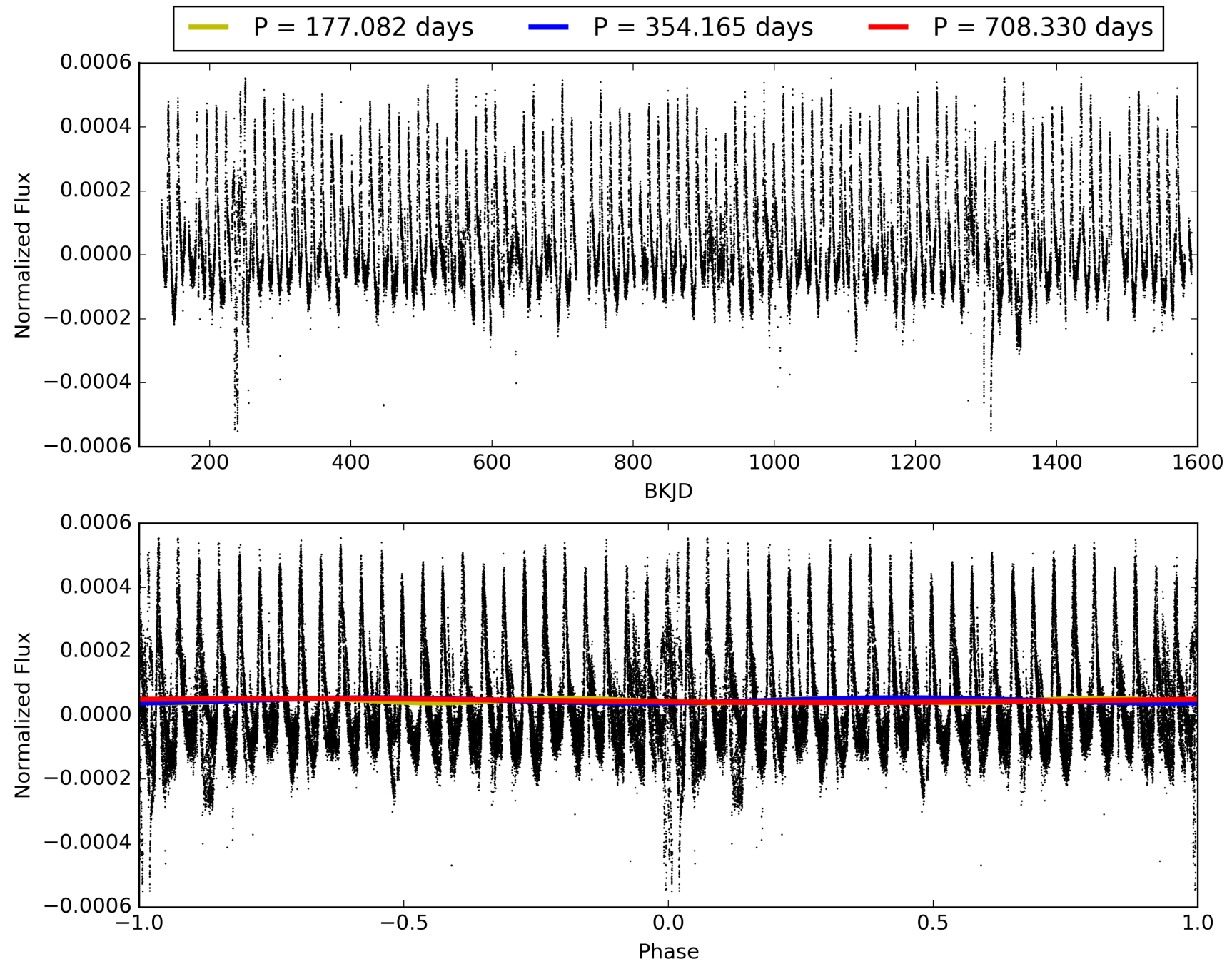
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 03:59:42 Z

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

TCE 006292925-01, PDC Light Curves

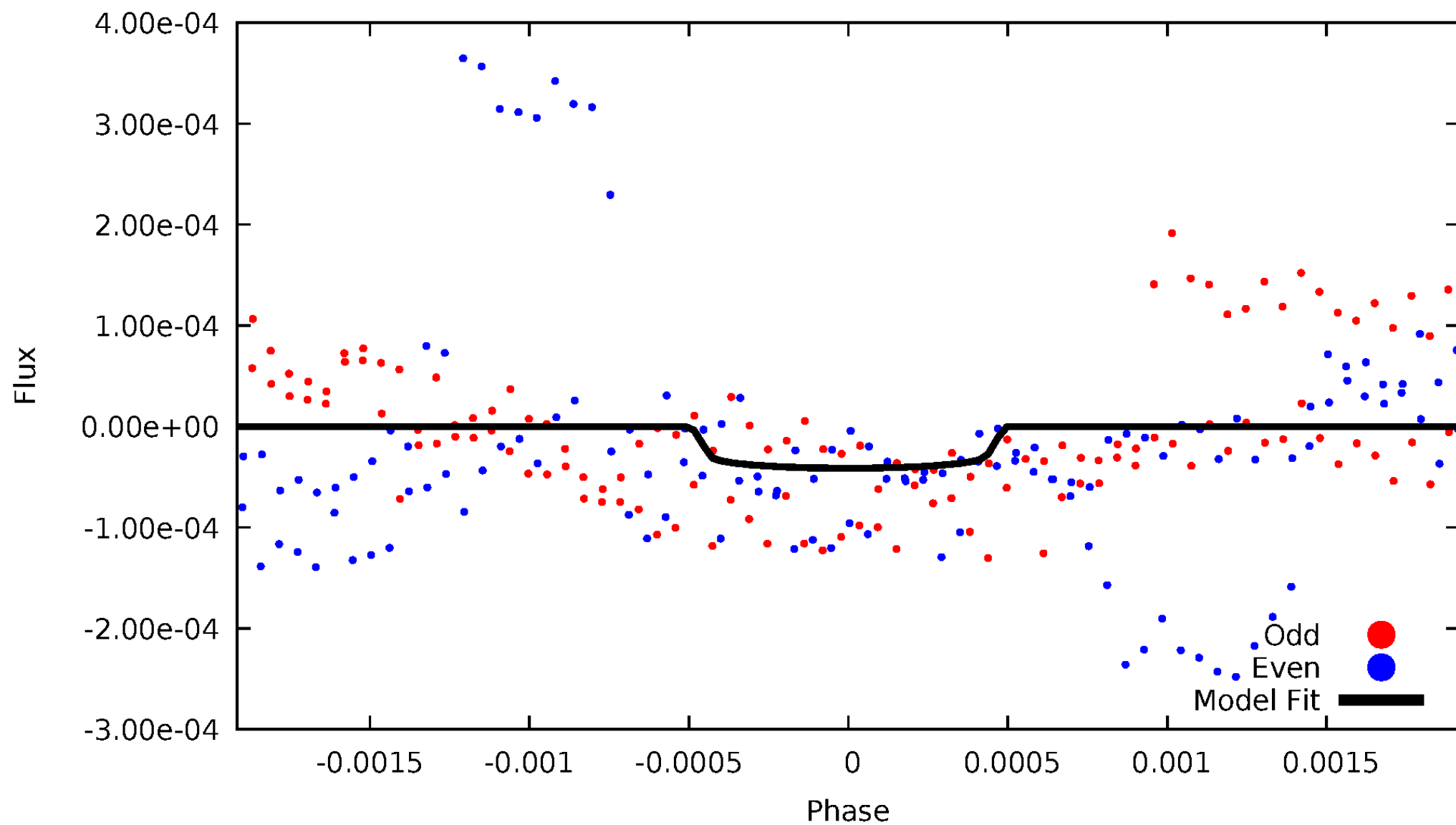


TCE 006292925-01



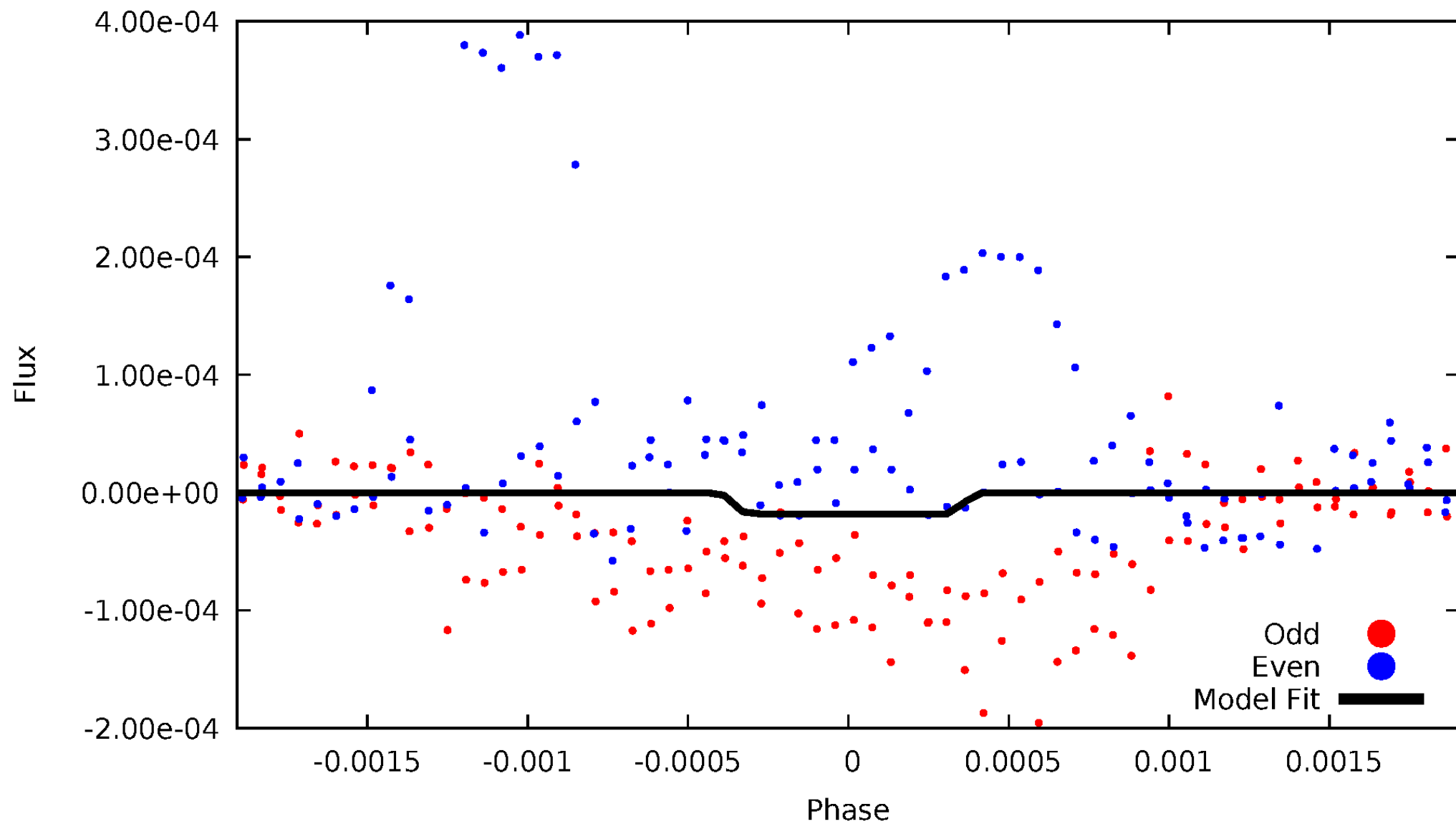
DV Odd/Even

TCE 006292925-01

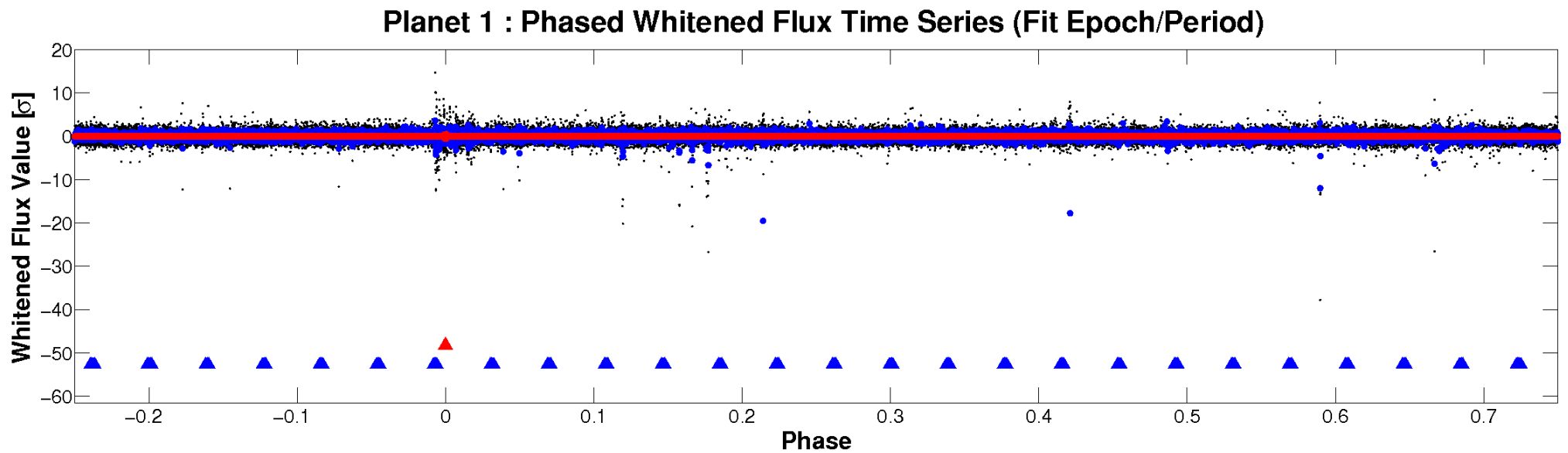
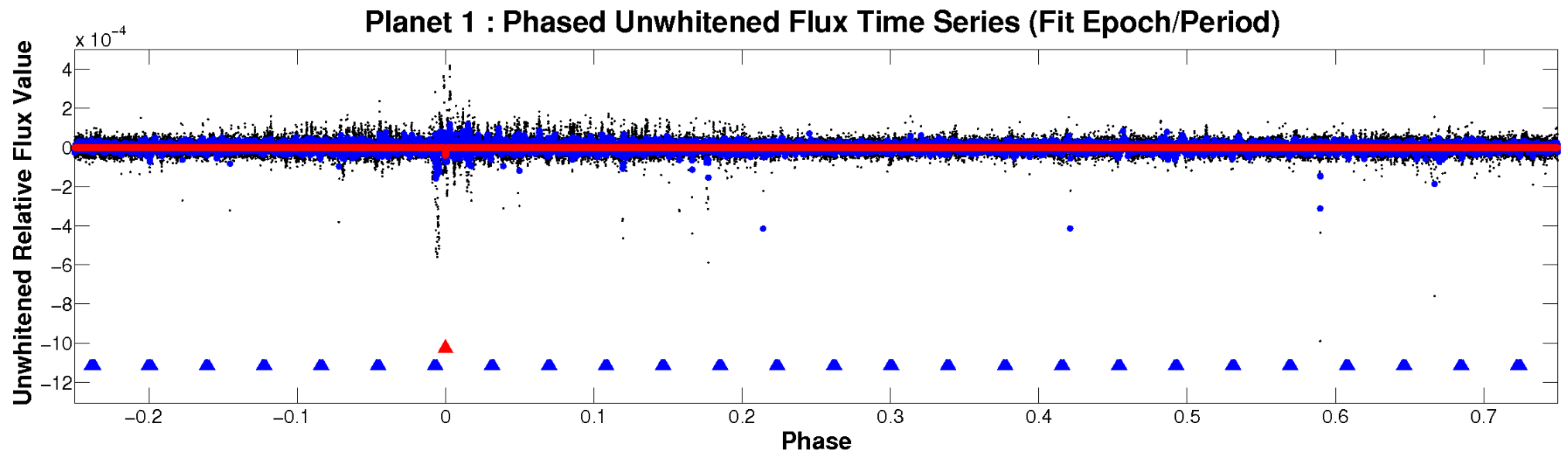


ALT Odd/Even

TCE 006292925-01

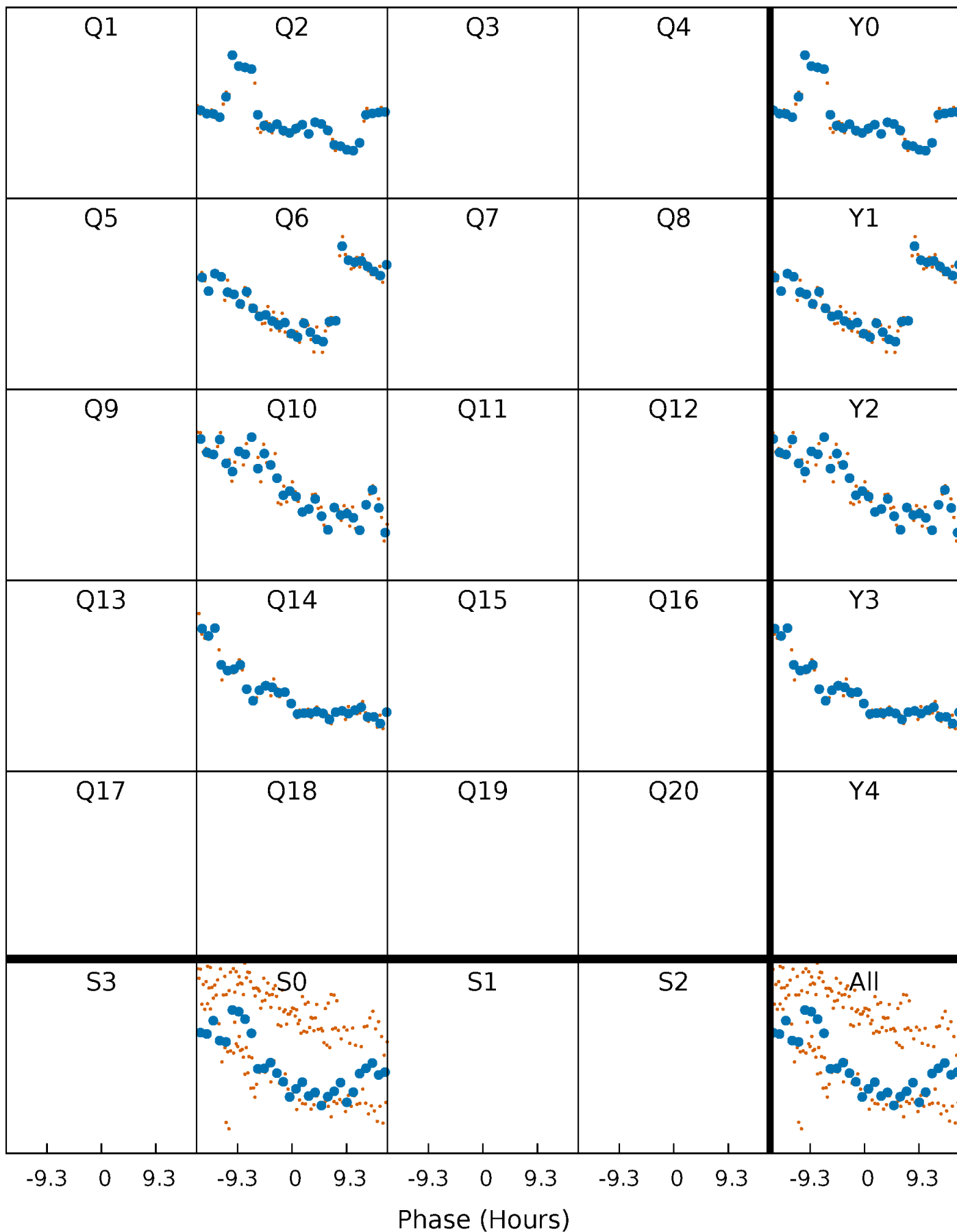


Non-Whitened Vs. Whitened Light Curve



PDC Quarter-Phased Transit Curves

TCE 006292925-01 P=354.164784 Days $T_0=237.134344$ (BKJD)



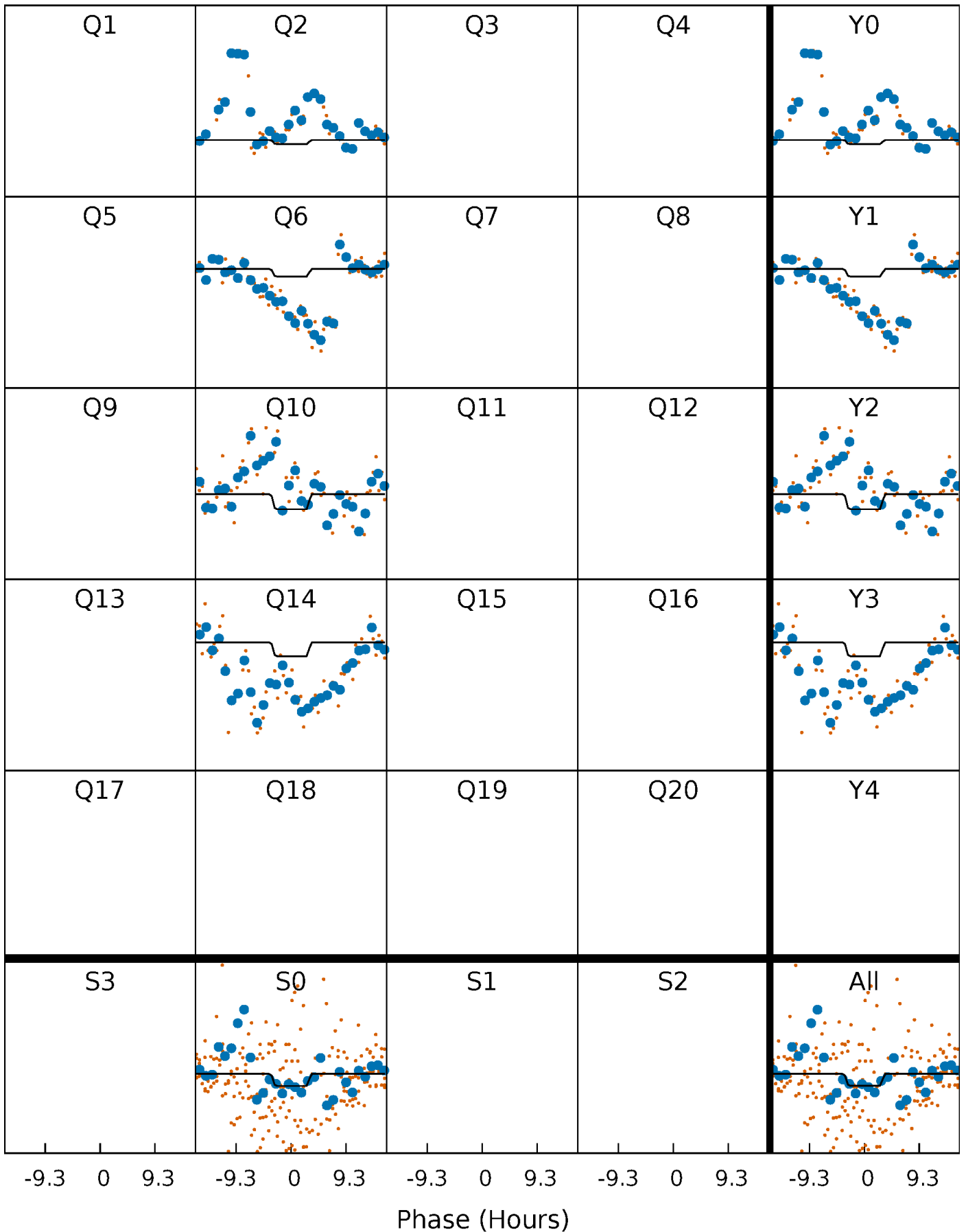
DV Quarter-Phased Transit Curves

TCE 006292925-01 P=354.164784 Days $T_0=237.134344$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

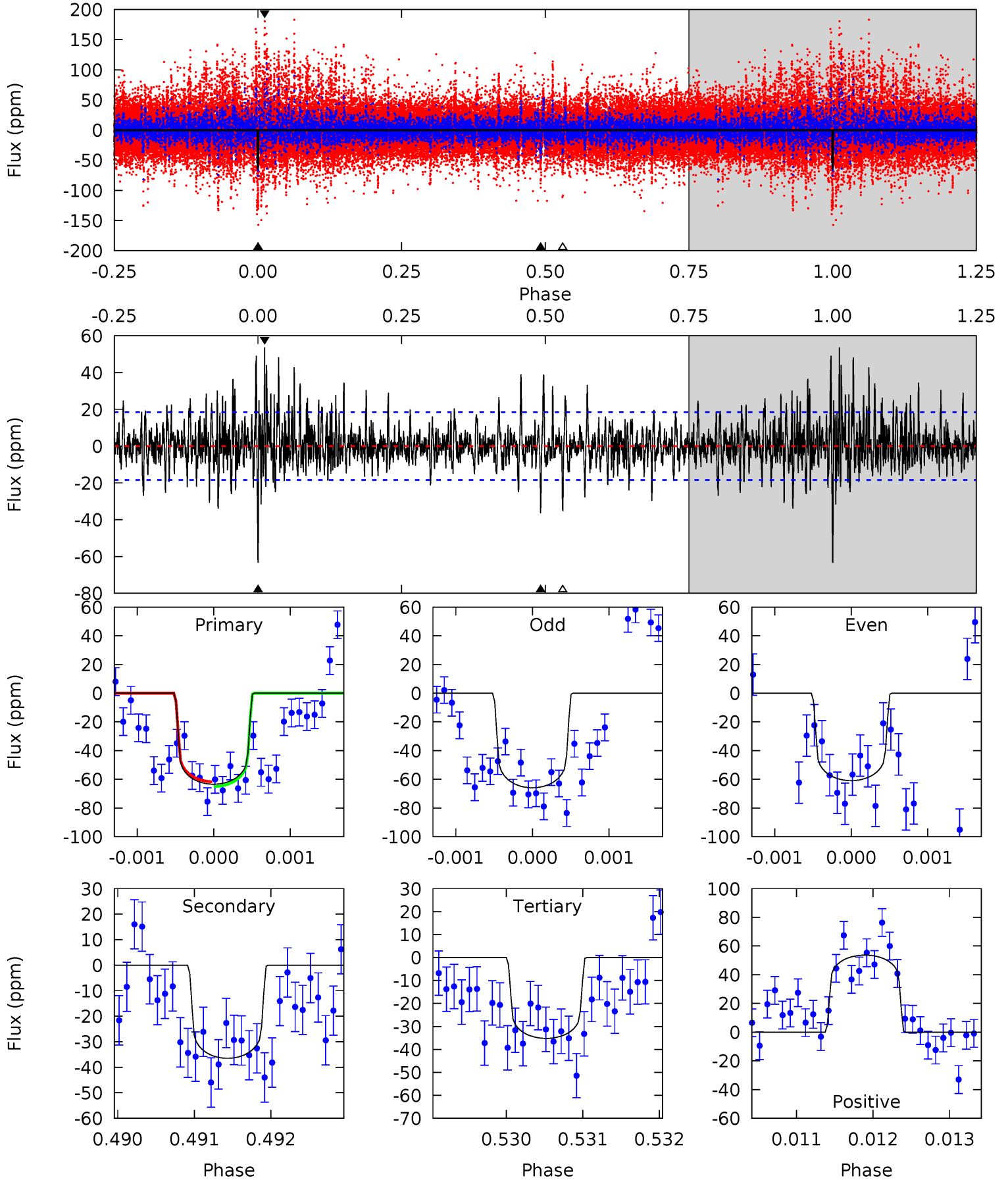
TCE 006292925-01 P=354.134028 Days $T_0=237.171345$ (BKJD)



DV Model-Shift Uniqueness Test

006292925-01, P = 354.164784 Days, E = 237.134344 Days

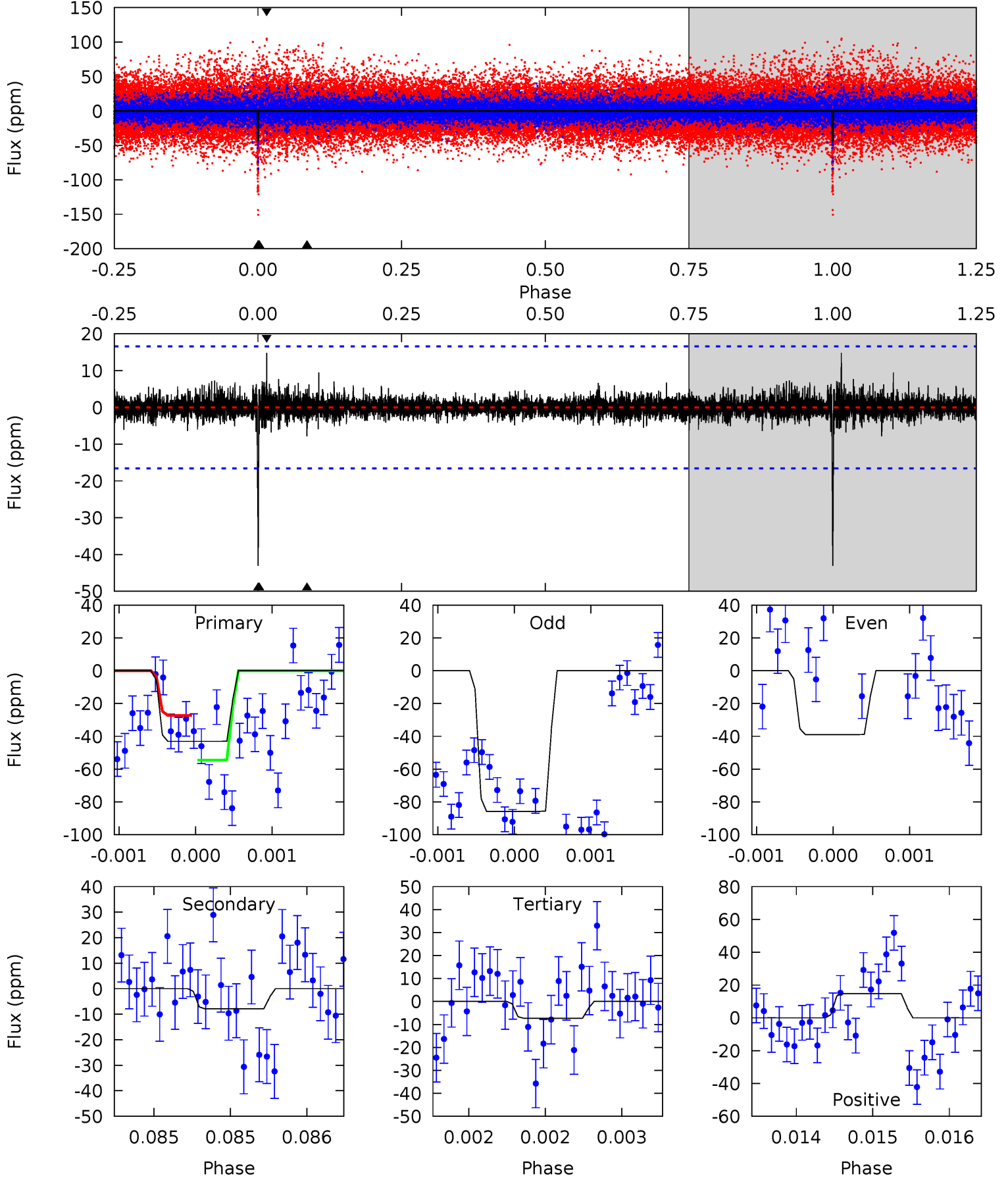
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.7	10.8	10.4	15.9	5.45	3.30	2.78	8.34	2.88	0.38	-5.08	0.70	1.04	0.46	0.50



Alt Model-Shift Uniqueness Test

006292925-01, P = 354.134028 Days, E = 237.171345 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.3	2.61	2.42	4.90	5.50	3.37	0.57	11.9	9.37	0.19	-2.29	8.25	0.76	0.26	4.41



Stellar Parameters For KIC 006292925

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8386^{+230}_{-394}	$3.735^{+0.392}_{-0.168}$	$0.070^{+0.300}_{-0.450}$	$3.485^{+0.915}_{-1.699}$	$2.406^{+0.312}_{-0.779}$	$0.080^{+0.313}_{-0.032}$
	+3%/-5%	+10%/-4%	+429%/-643%	+26%/-49%	+13%/-32%	+391%/-40%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 006292925-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-36 ± 3	$2.42^{+0.99}_{-0.94}$	826^{+72}_{-93}	7706^{+2482}_{-1131}	5824^{+9586}_{-2946}
Alt.	-8 ± 3	$1.52^{+0.98}_{-0.78}$	829^{+72}_{-105}	6368^{+3353}_{-1314}	2977^{+9166}_{-1967}

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

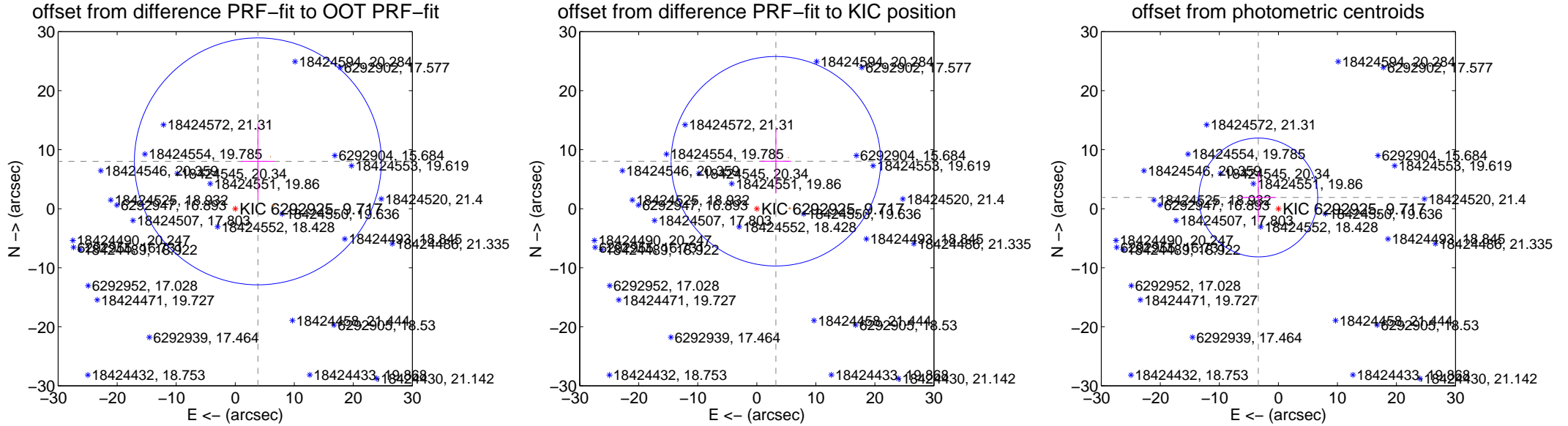
DV Centroid Data

Supplemental centroid analysis for 006292925-01. **Kepler magnitude: 9.72.** Transit SNR 4.31

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.96 arcsec

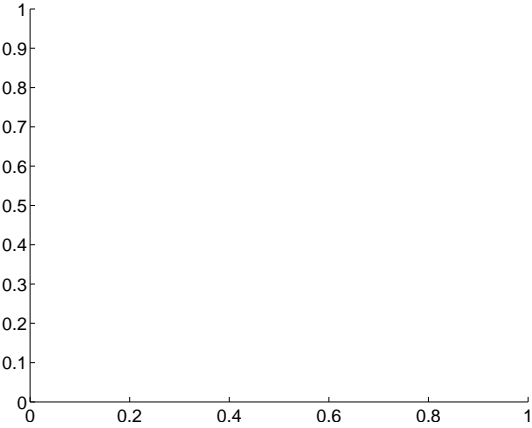
	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.894 ± 6.971	1.28	-3.836 ± 2.844	8.024 ± 6.469
PRF-fit source offset from KIC position	8.669 ± 5.915	1.47	-3.228 ± 2.631	8.046 ± 5.471
photometric centroid source offset	3.90 ± 3.36	1.16	3.40 ± 3.04	1.90 ± 4.20



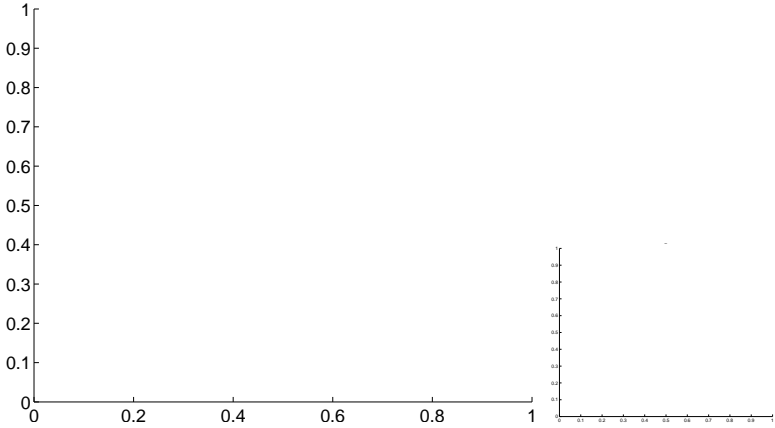
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

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

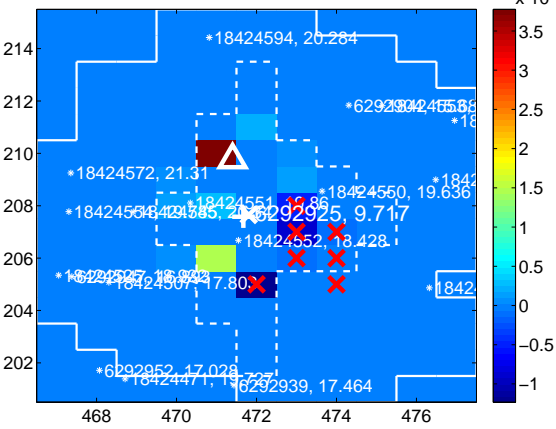
Q1 no difference image



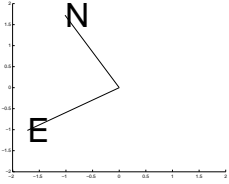
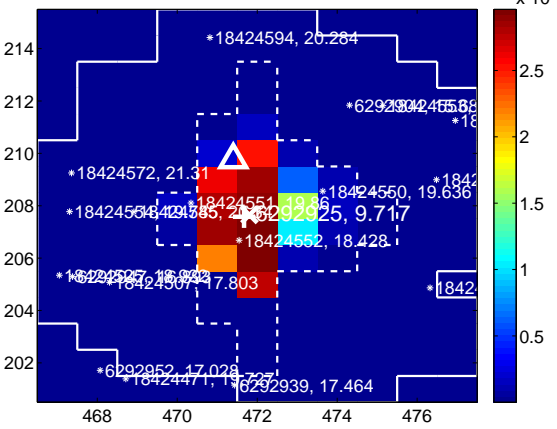
Q1 no OOT image



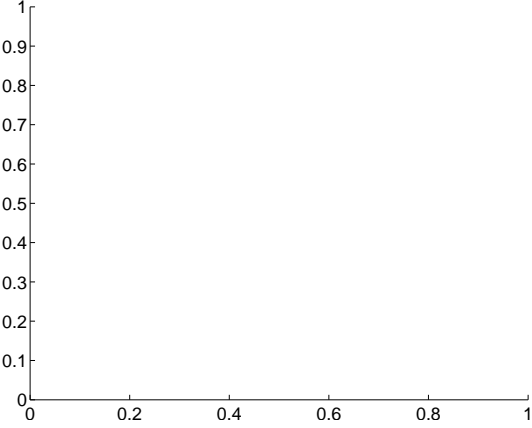
Q2 difference image. Poor Quality



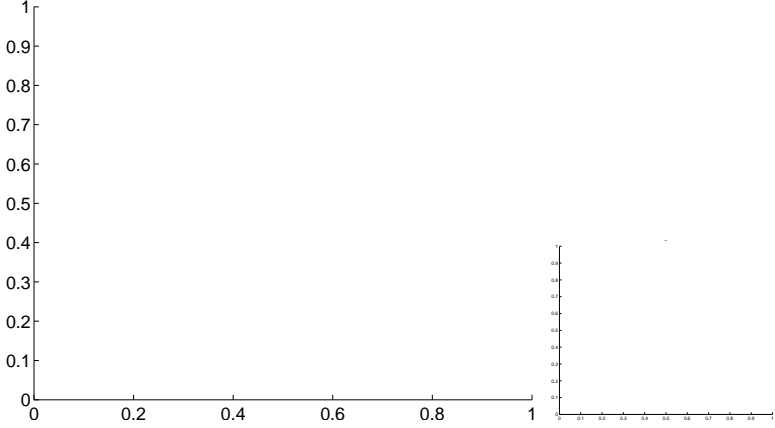
Q2 OOT image



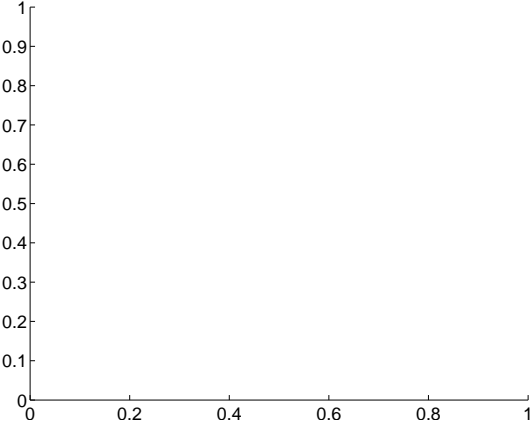
Q3 no difference image



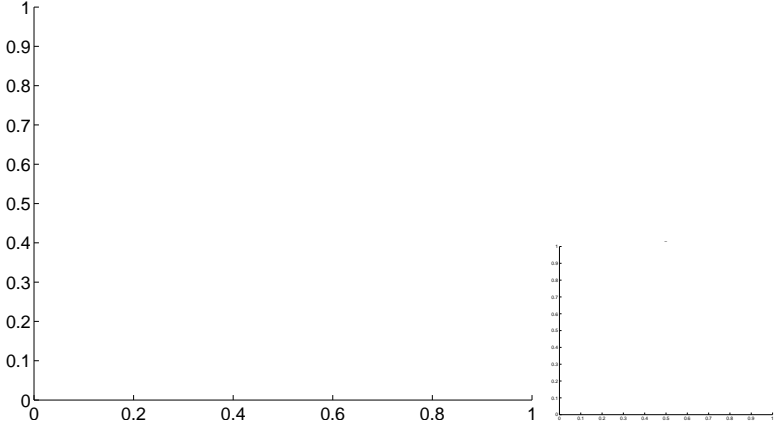
Q3 no OOT image



Q4 no difference image

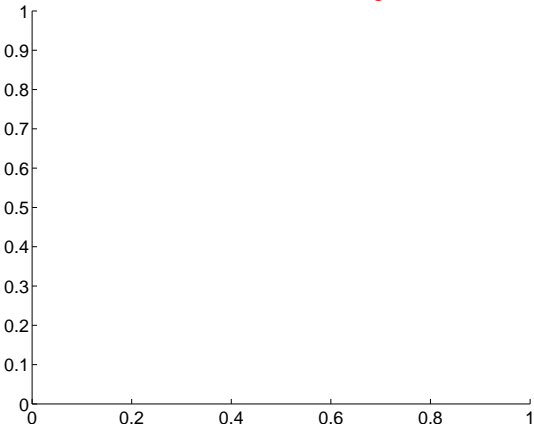


Q4 no OOT image

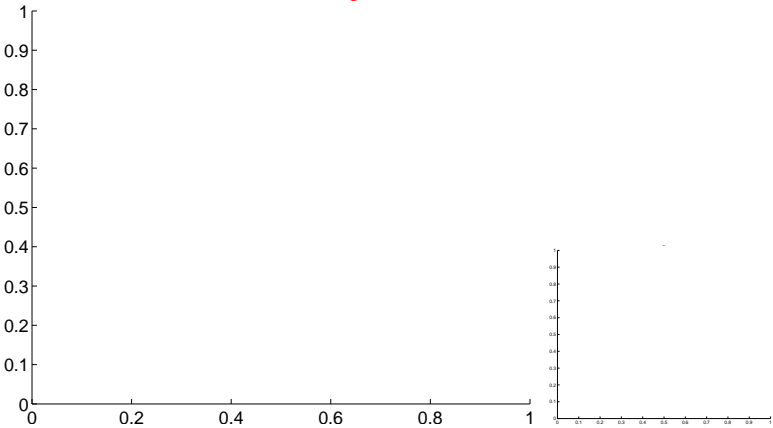


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

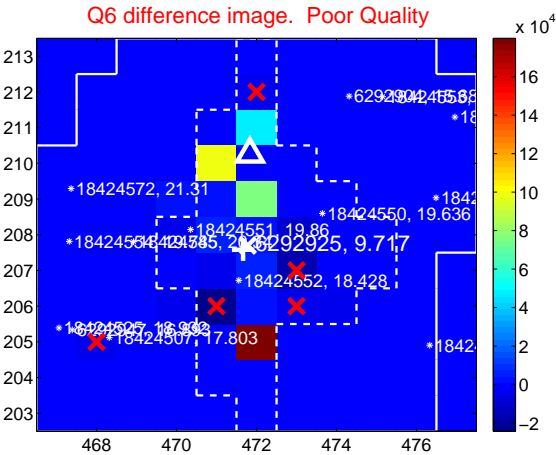
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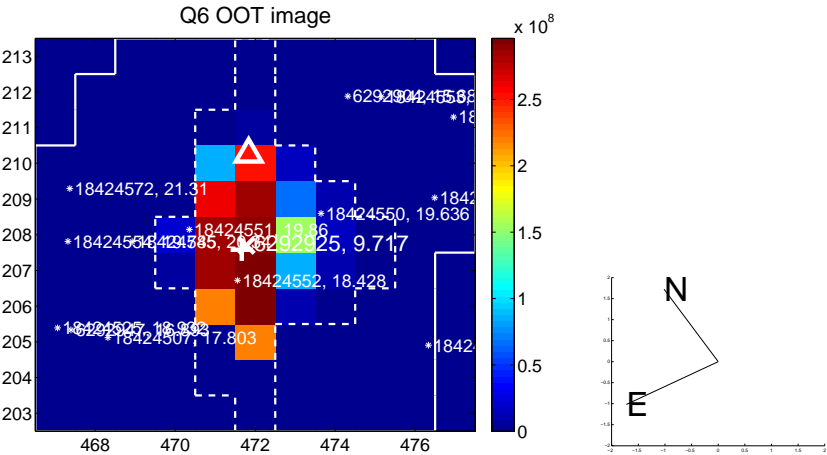
Q5 no OOT image



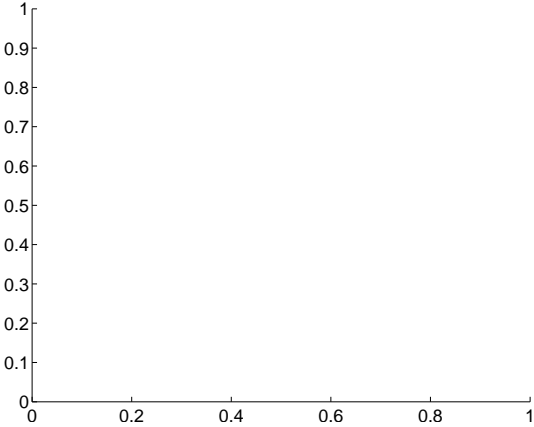
Q6 difference image. Poor Quality



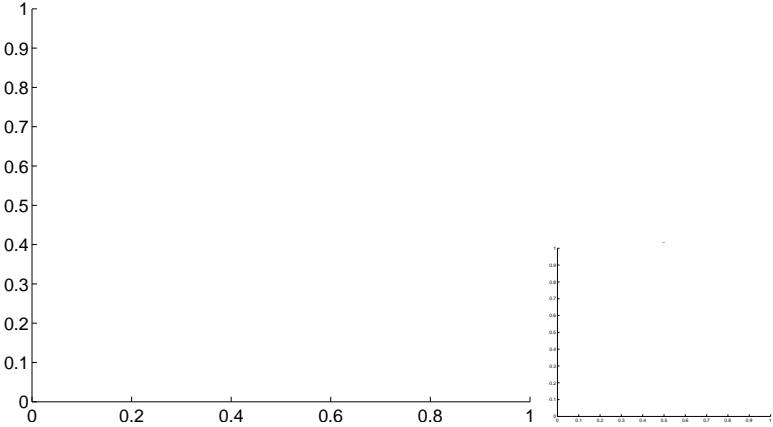
Q6 OOT image



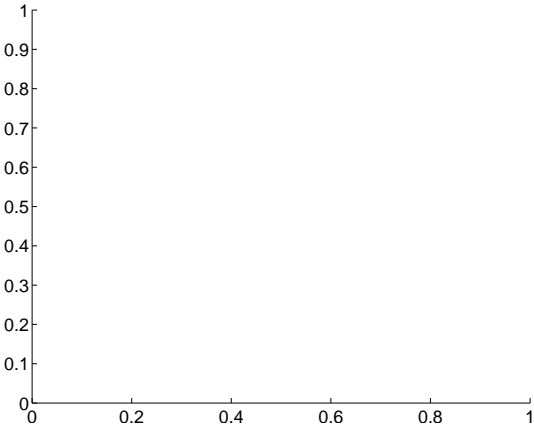
Q7 no difference image



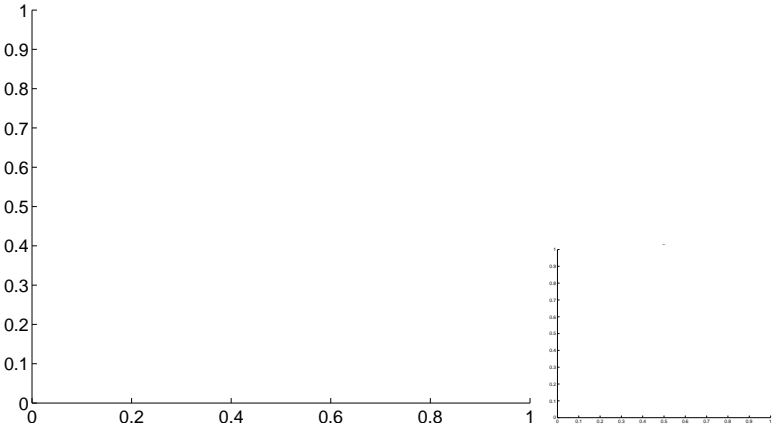
Q7 no OOT image



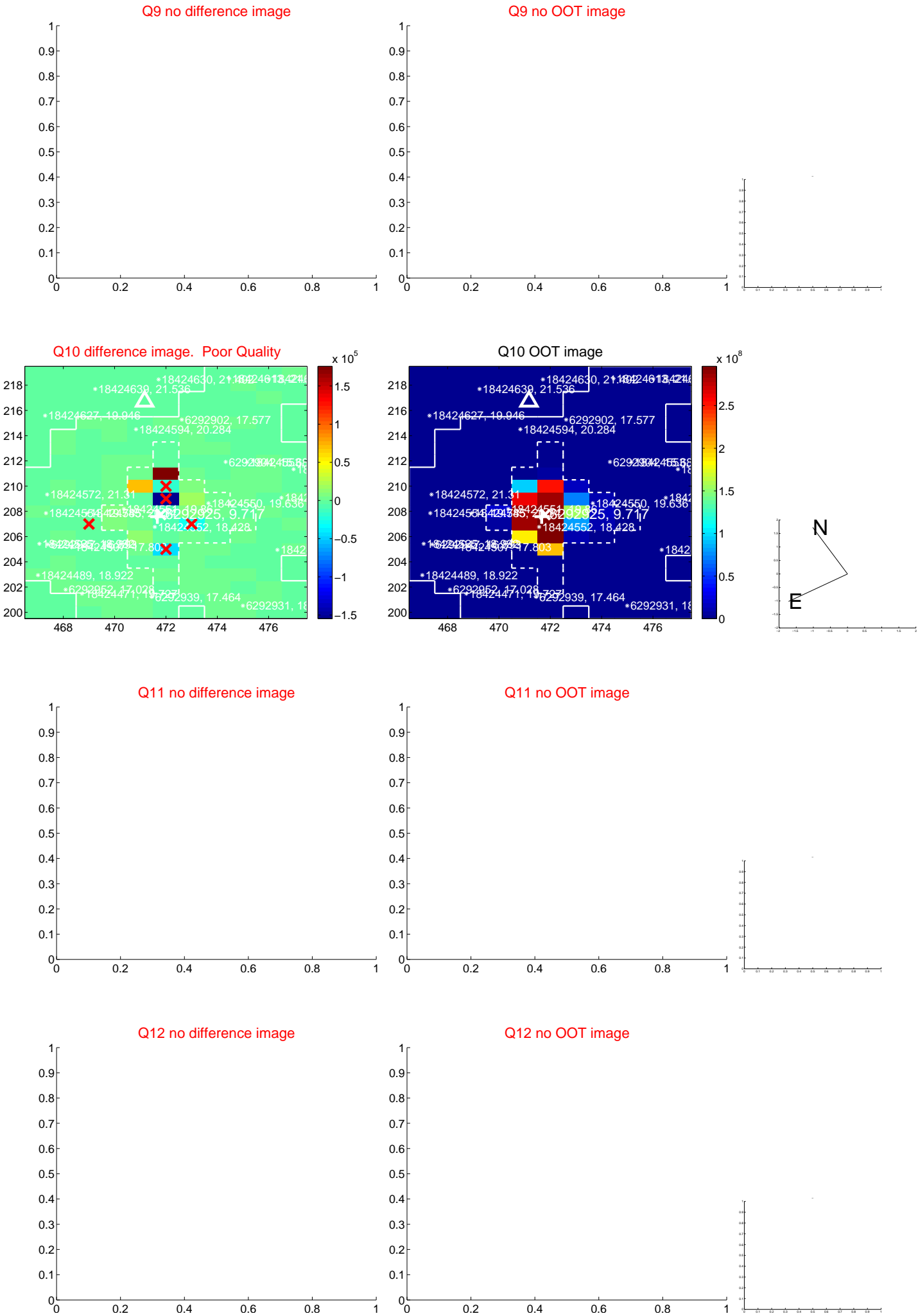
Q8 no difference image



Q8 no OOT image

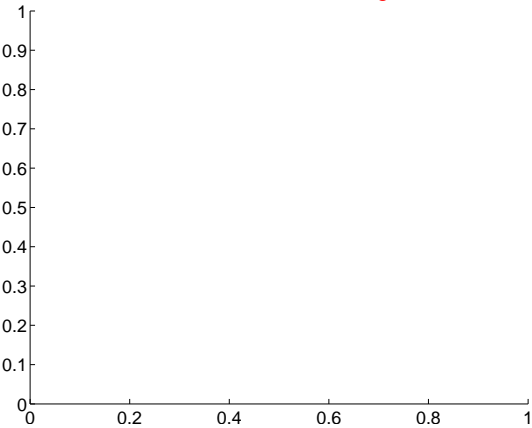


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

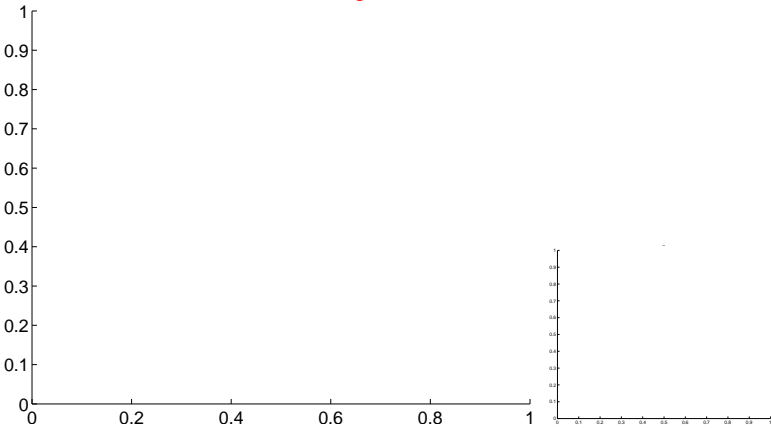


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

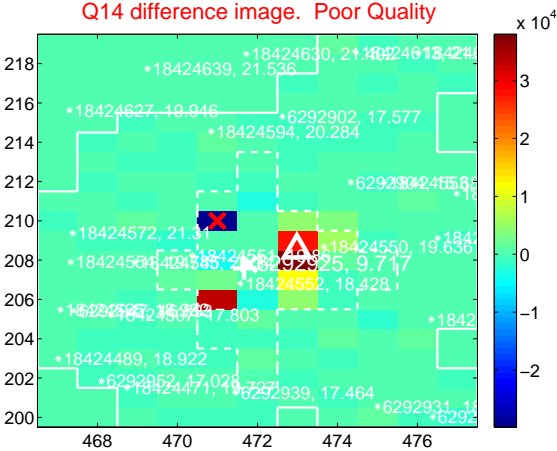
Q13 no difference image



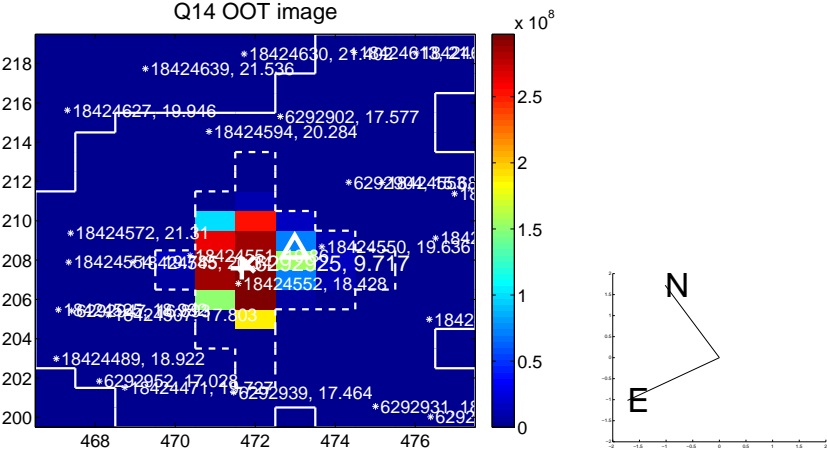
Q13 no OOT image



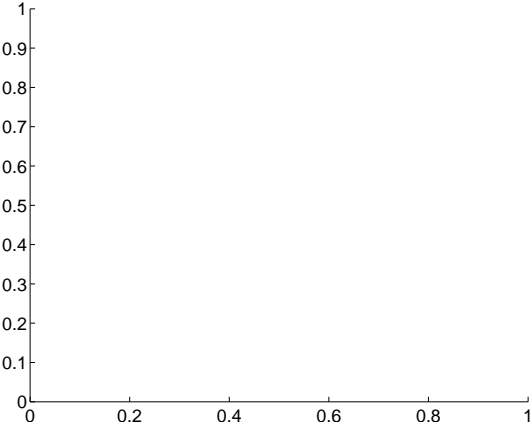
Q14 difference image. Poor Quality



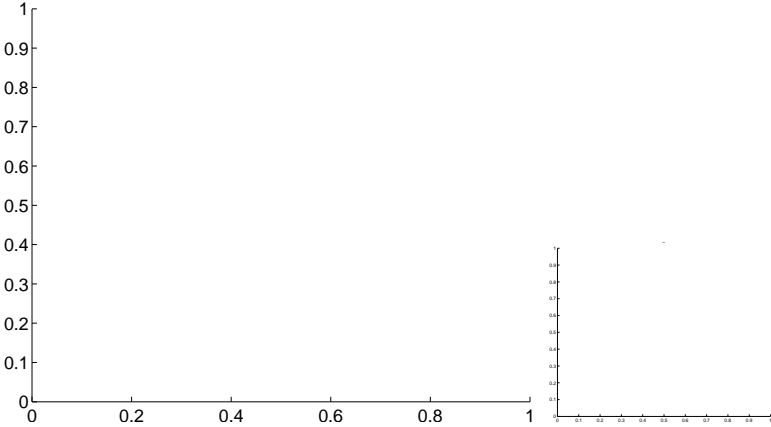
Q14 OOT image



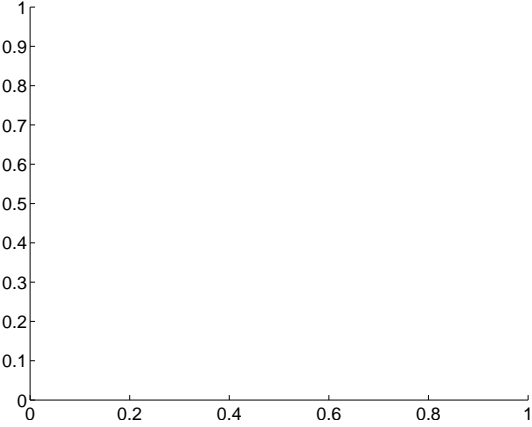
Q15 no difference image



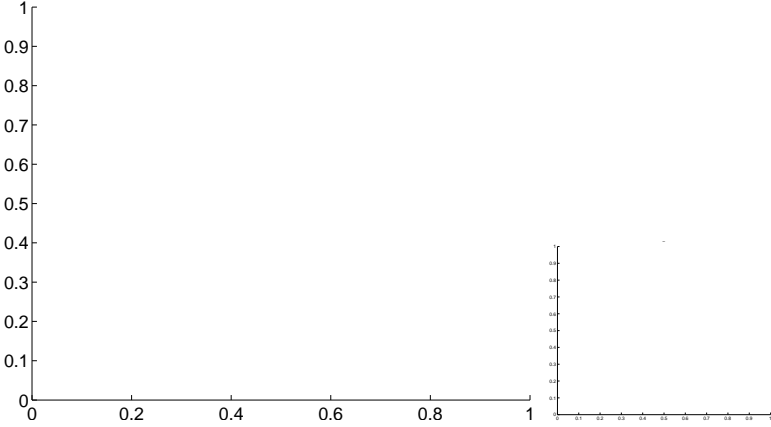
Q15 no OOT image



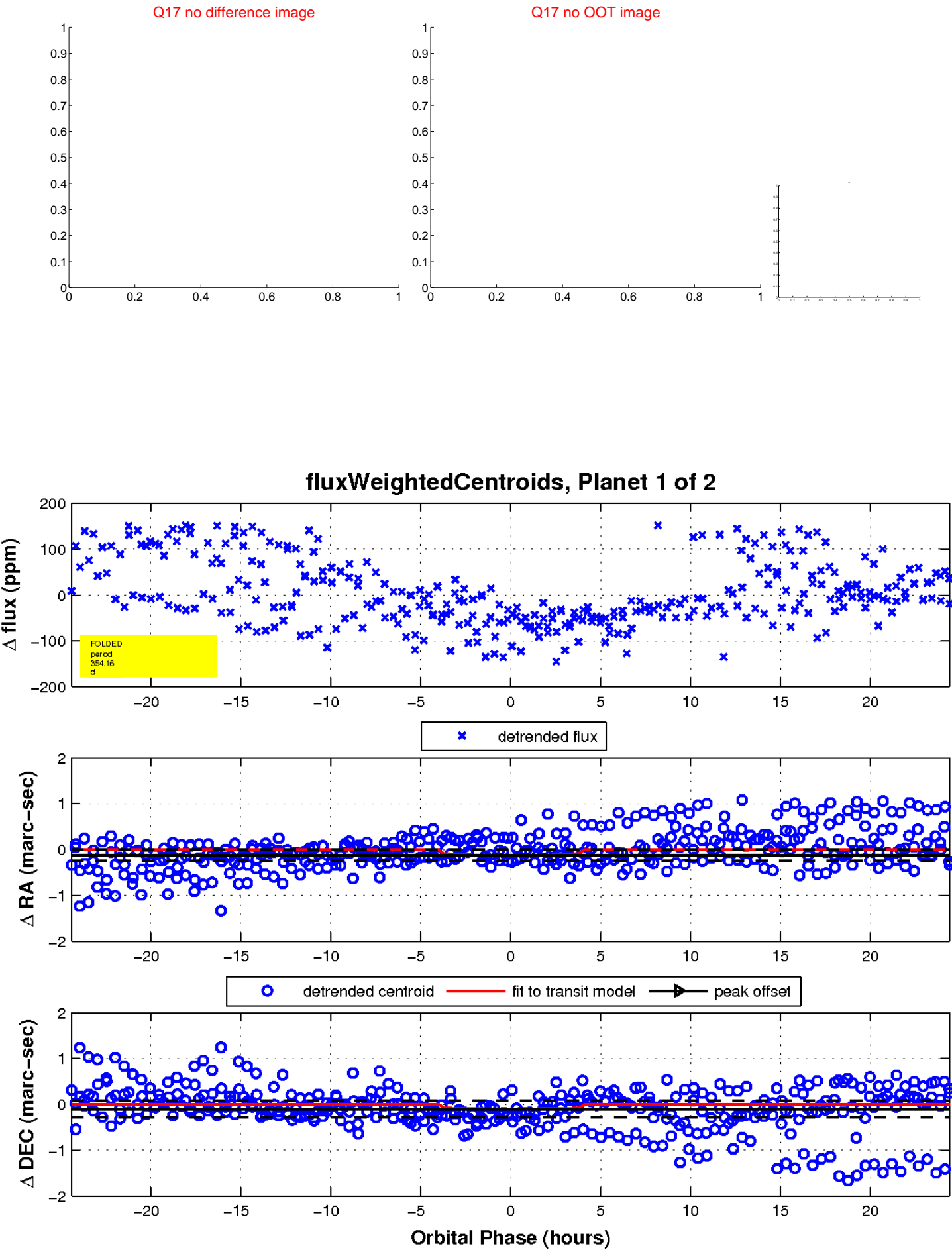
Q16 no difference image



Q16 no OOT image

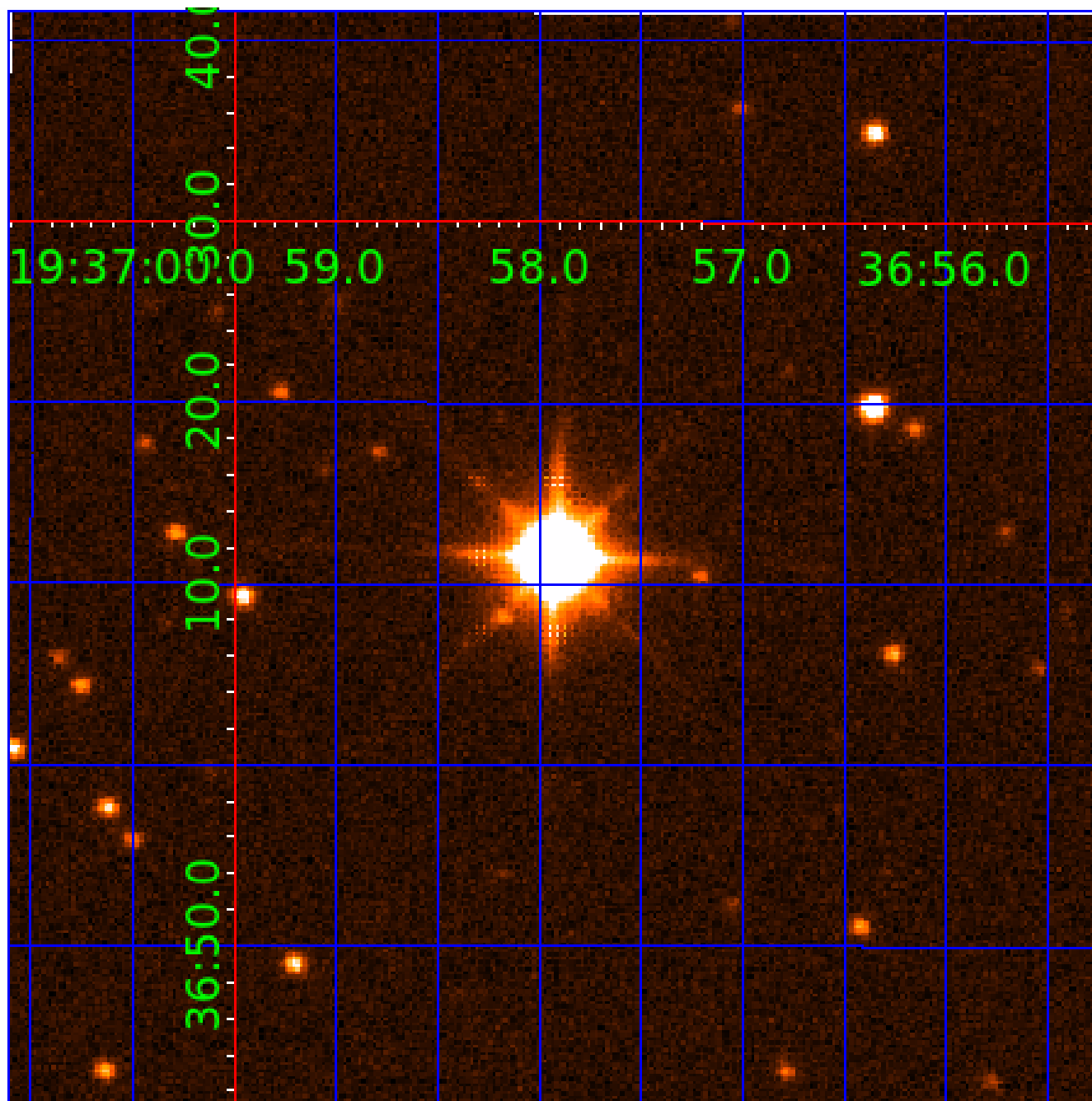


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006292925

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})
006292925-01	OBS	No	354.164784	237.134344	41.4	8.144	11.8	4.3	3.48	8386	2.60	31.21
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006292925-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—INCONSISTENT_TRANS—CENT_SATURATED
006292925-02	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED

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

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

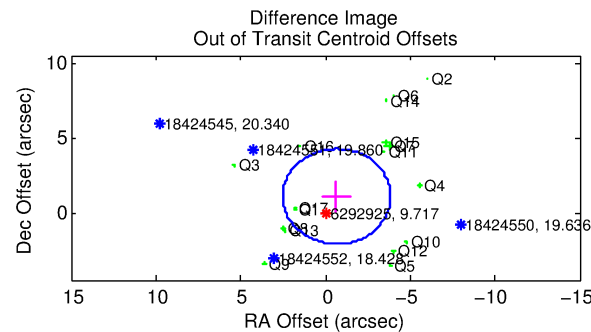
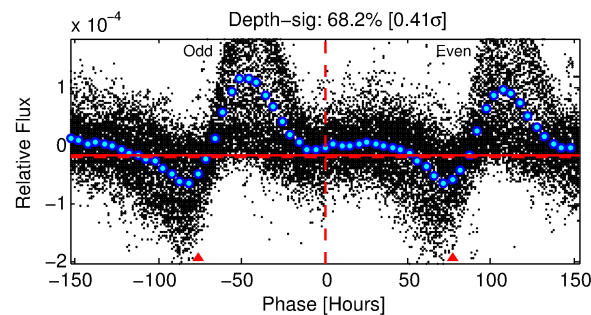
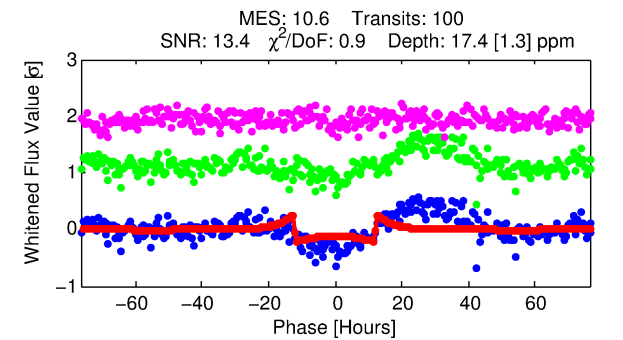
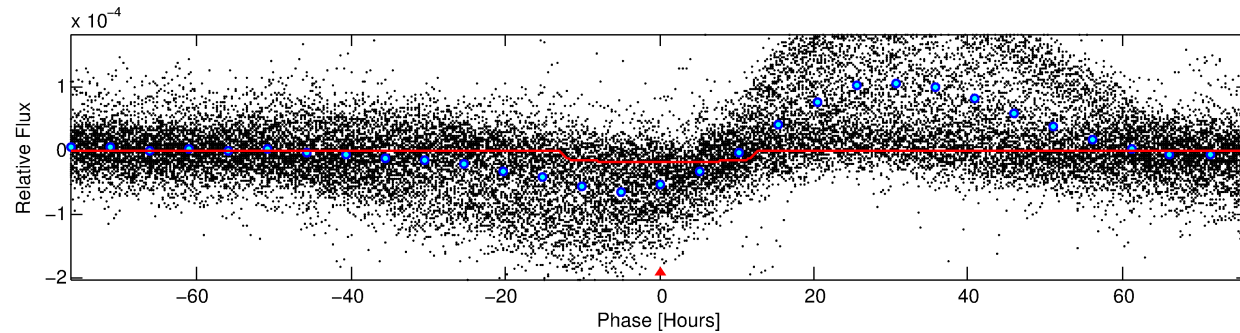
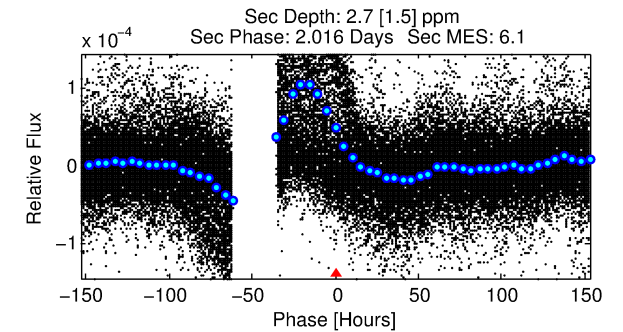
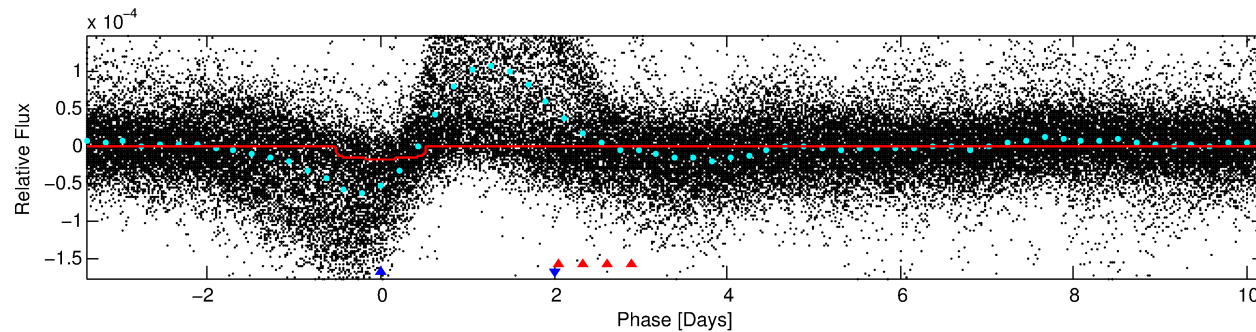
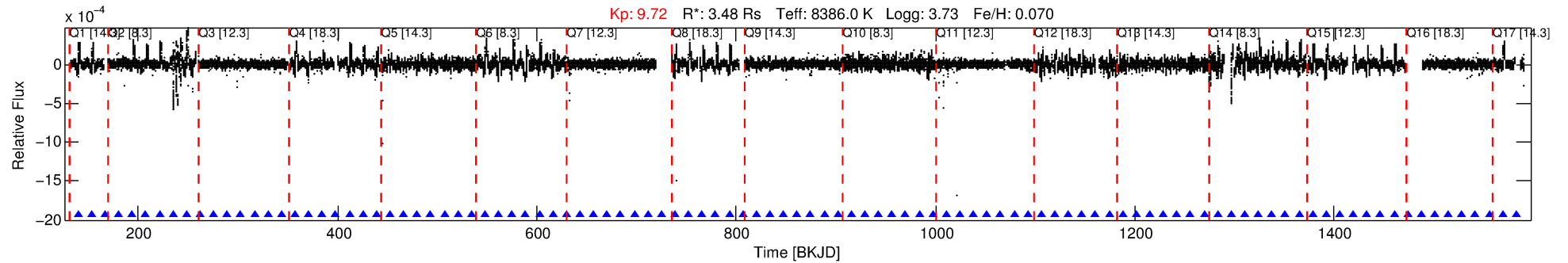
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006292925-02

No Significant Match Found

DV One-Page Summary

KIC: 6292925 Candidate: 2 of 2 Period: 13.611 d



DV Fit Results:

Period = 13.61089 [0.00013] d
Epoch = 139.8122 [0.0075] BKJD
Rp/R* = 0.0045 [0.0002]
a/R* = 1.90 [0.17]
b = 0.92 [0.02]
Seff = 2406.58 [1706.88]
Teq = 1786 [317] K
Rp = 1.71 [0.84] Re
a = 0.1495 [0.0662] AU
Ag = 11.30 [10.09] [1.02σ]
Teffp = 5063 [765] K [3.96σ]

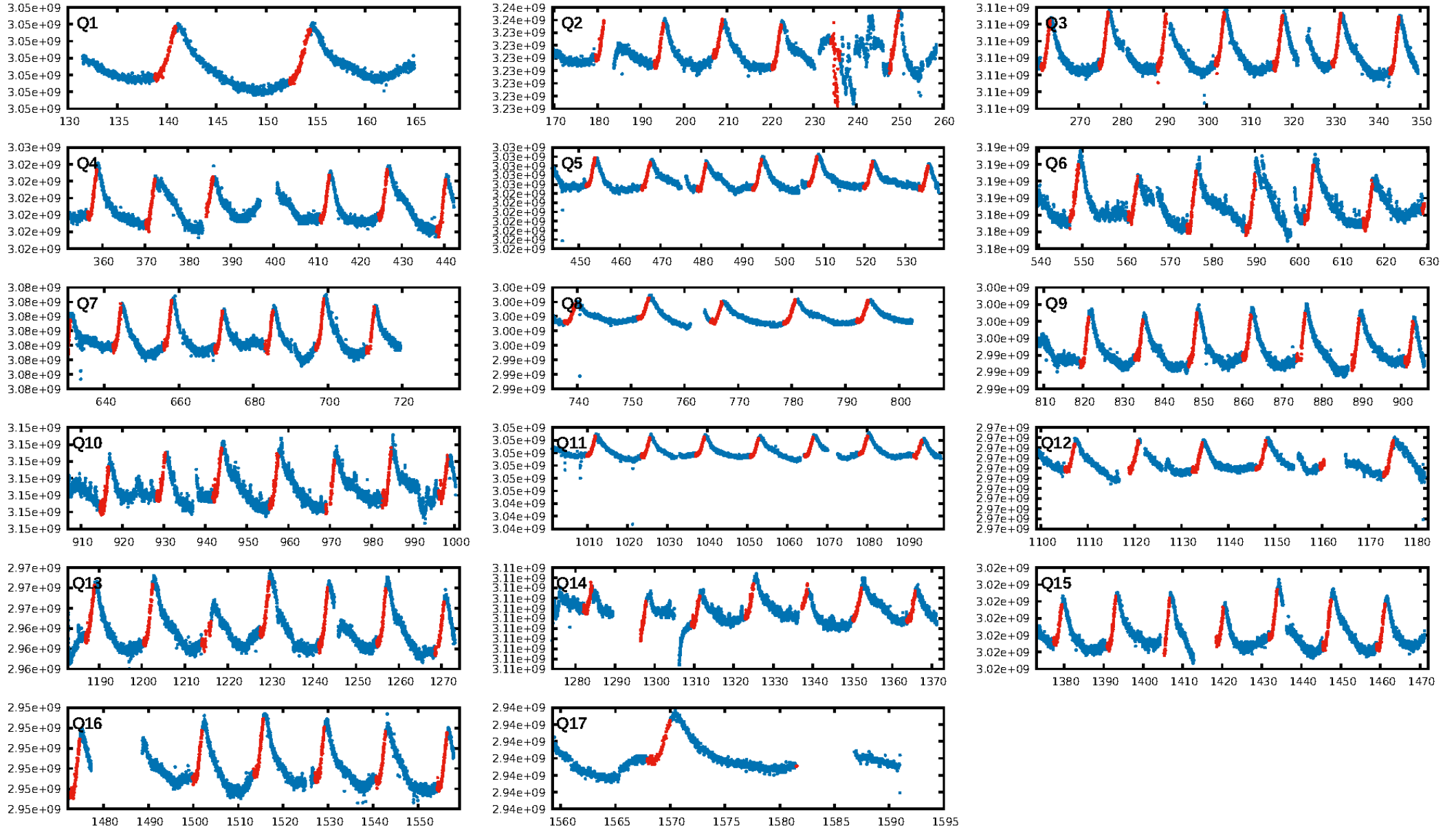
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [305.43σ]
ModelChiSquare2-sig: 39.5%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 4.31e-22
RollingBand-fgt: 1.00 [97/97]
GhostDiagnostic-chr: N/A
Centroid-sig: 77.1%
Centroid-so: 1.376 arcsec [0.87σ]
OotOffset-rm: 1.254 arcsec [1.18σ]
KicOffset-rm: 2.721 arcsec [2.98σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
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DiffImageOverlap-fno: 1.00 [17/17]

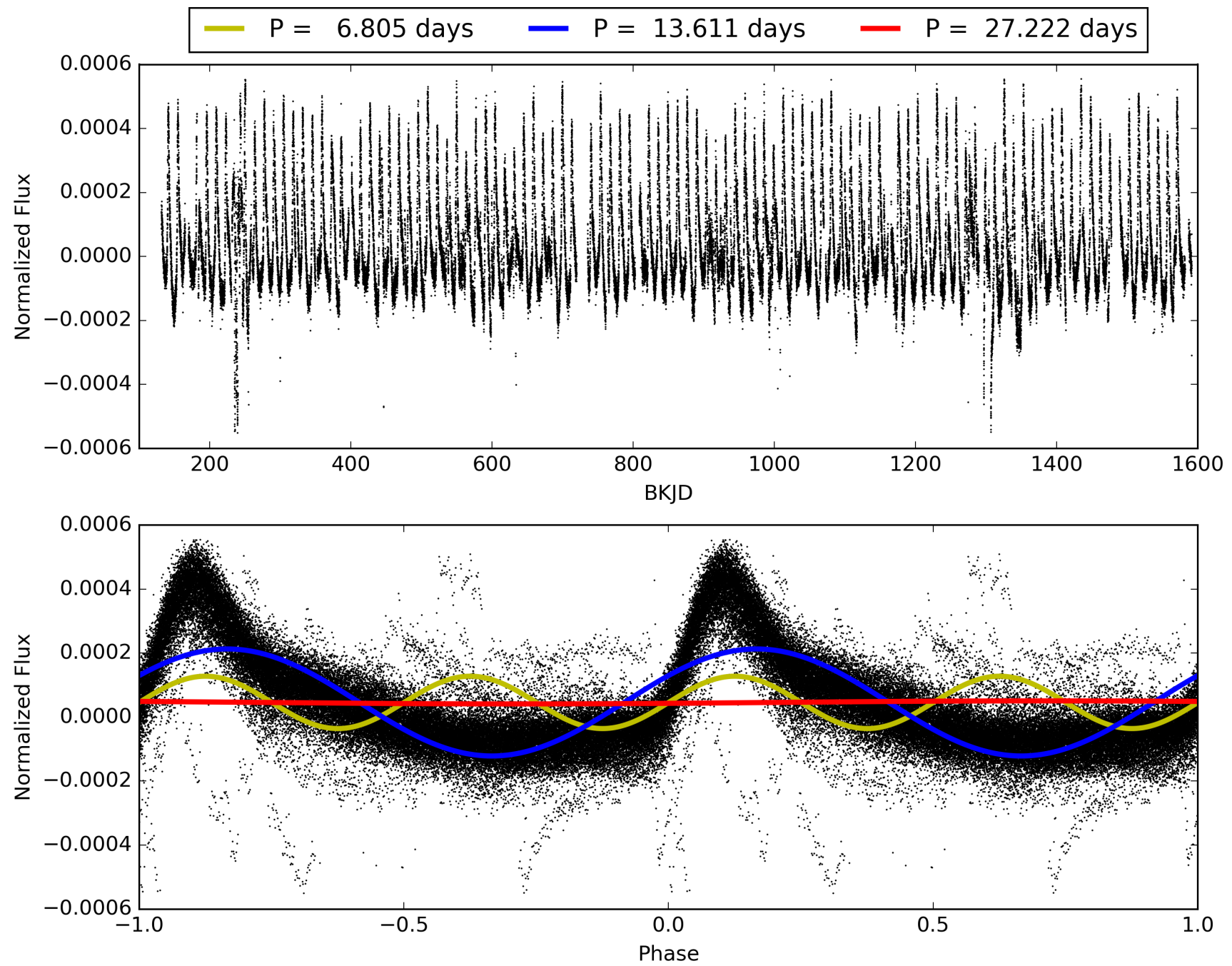
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 03:59:49 Z

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

TCE 006292925-02, PDC Light Curves

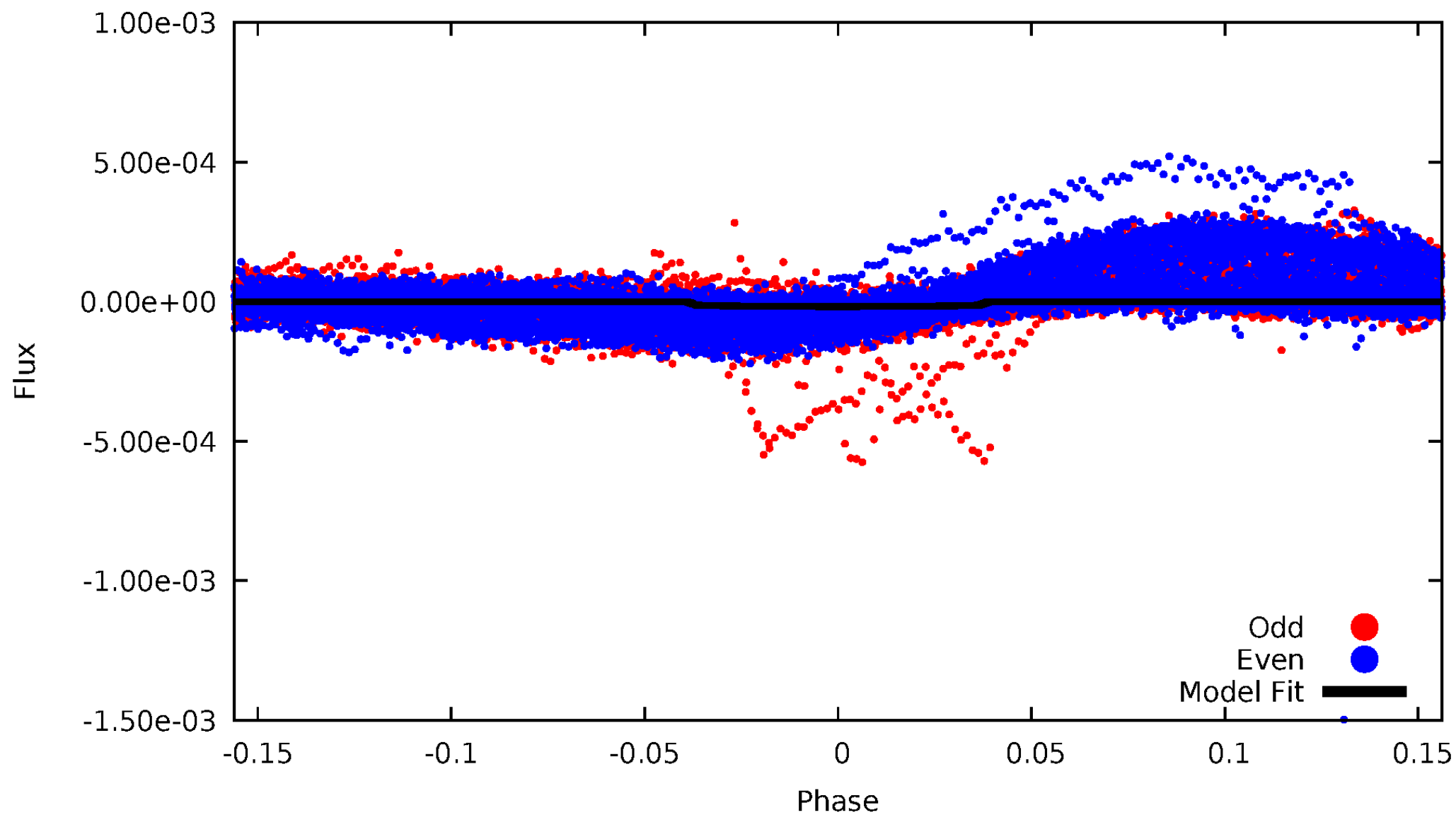


TCE 006292925-02



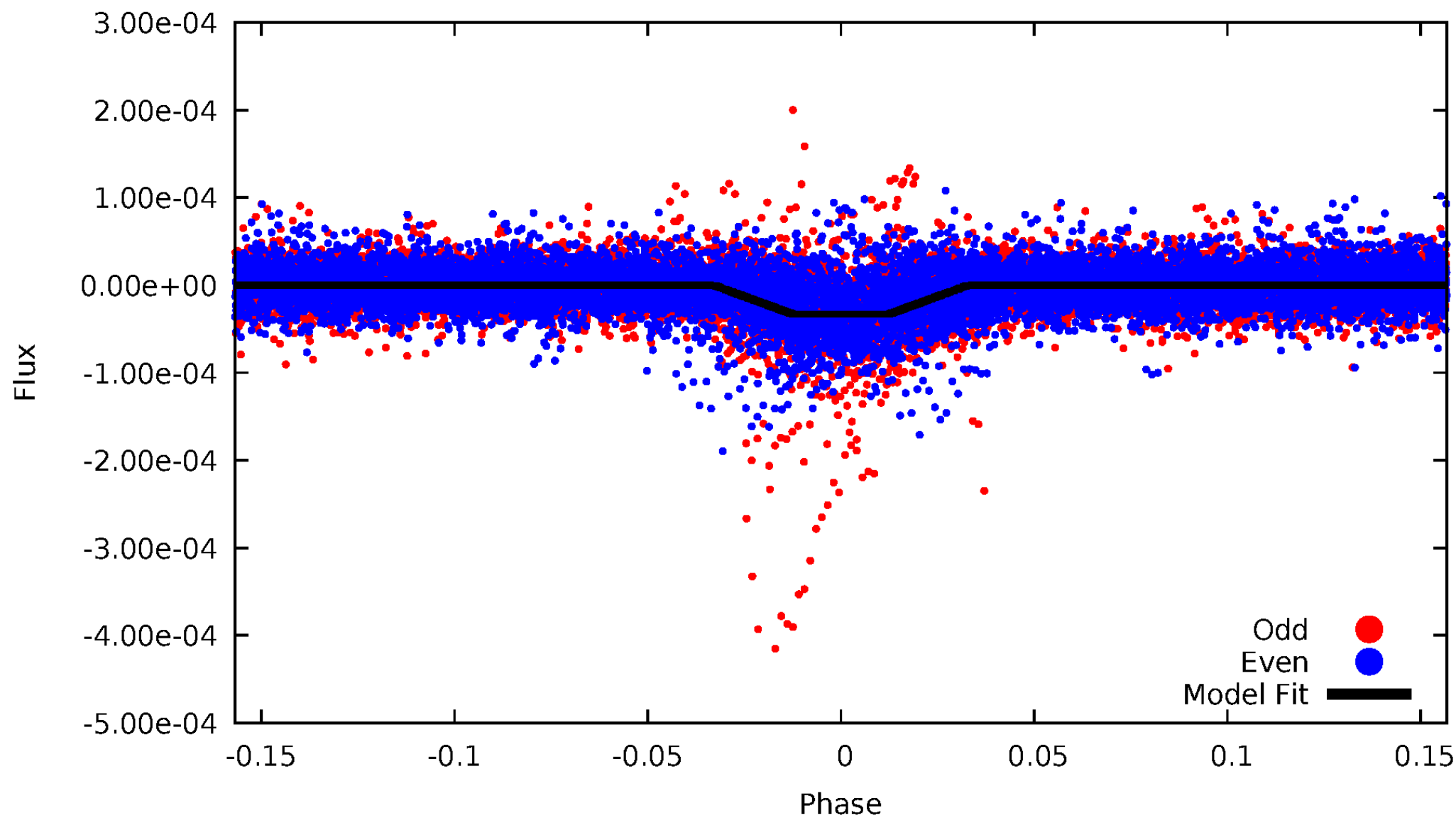
DV Odd/Even

TCE 006292925-02



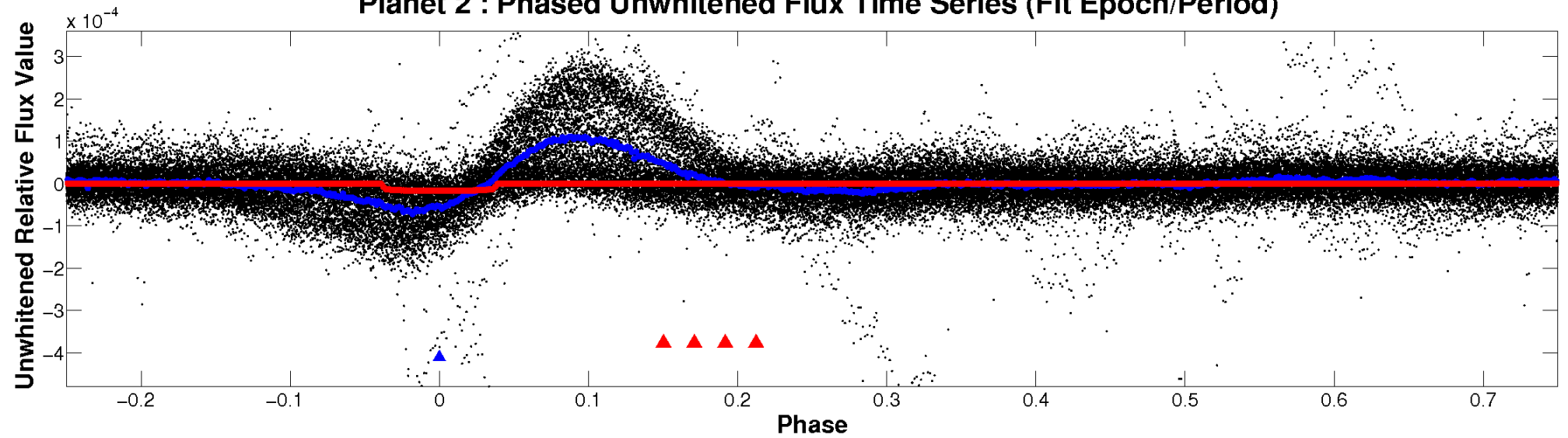
ALT Odd/Even

TCE 006292925-02

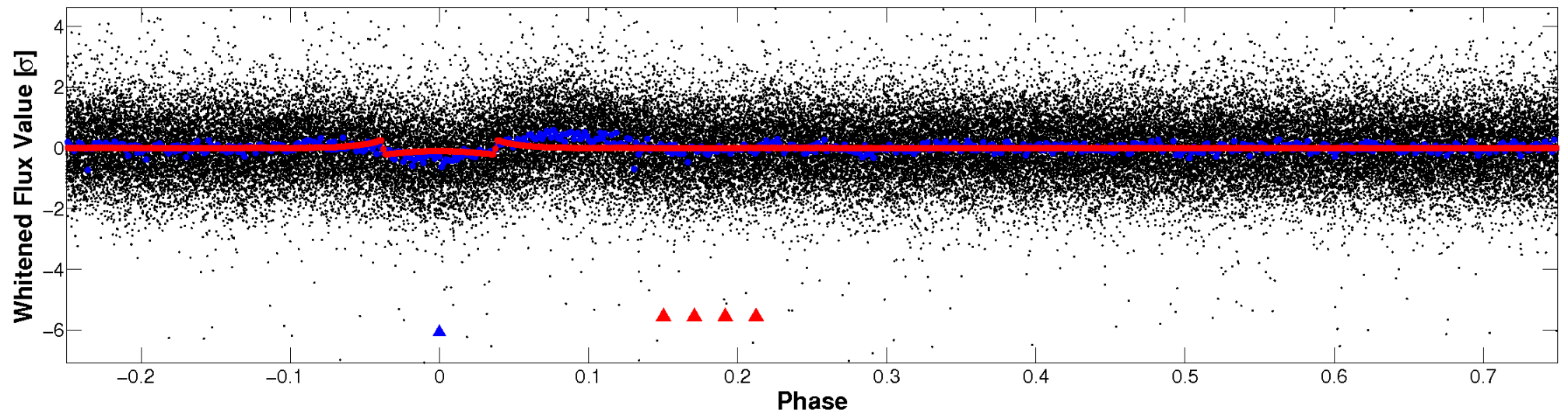


Non-Whitened Vs. Whitened Light Curve

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

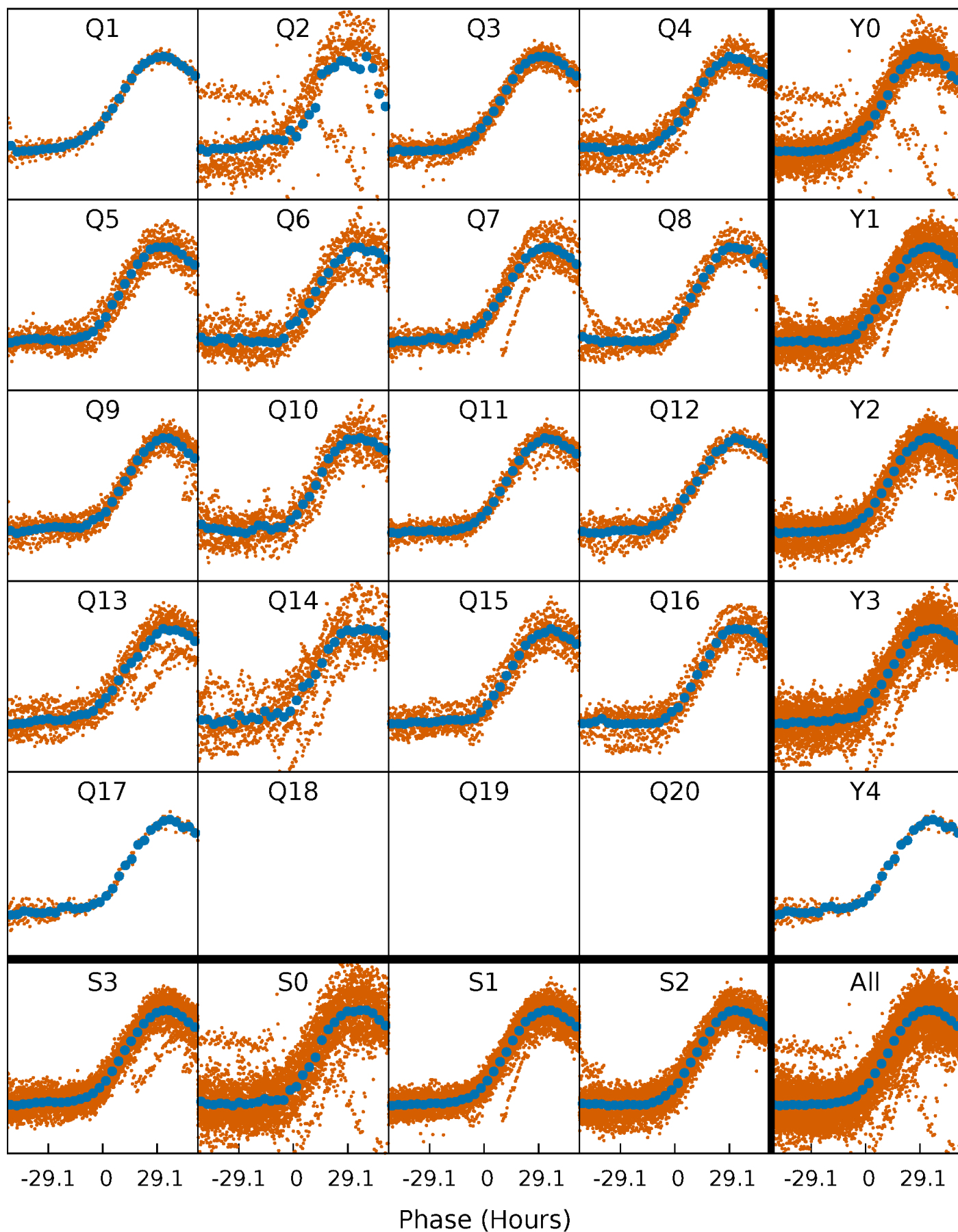


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



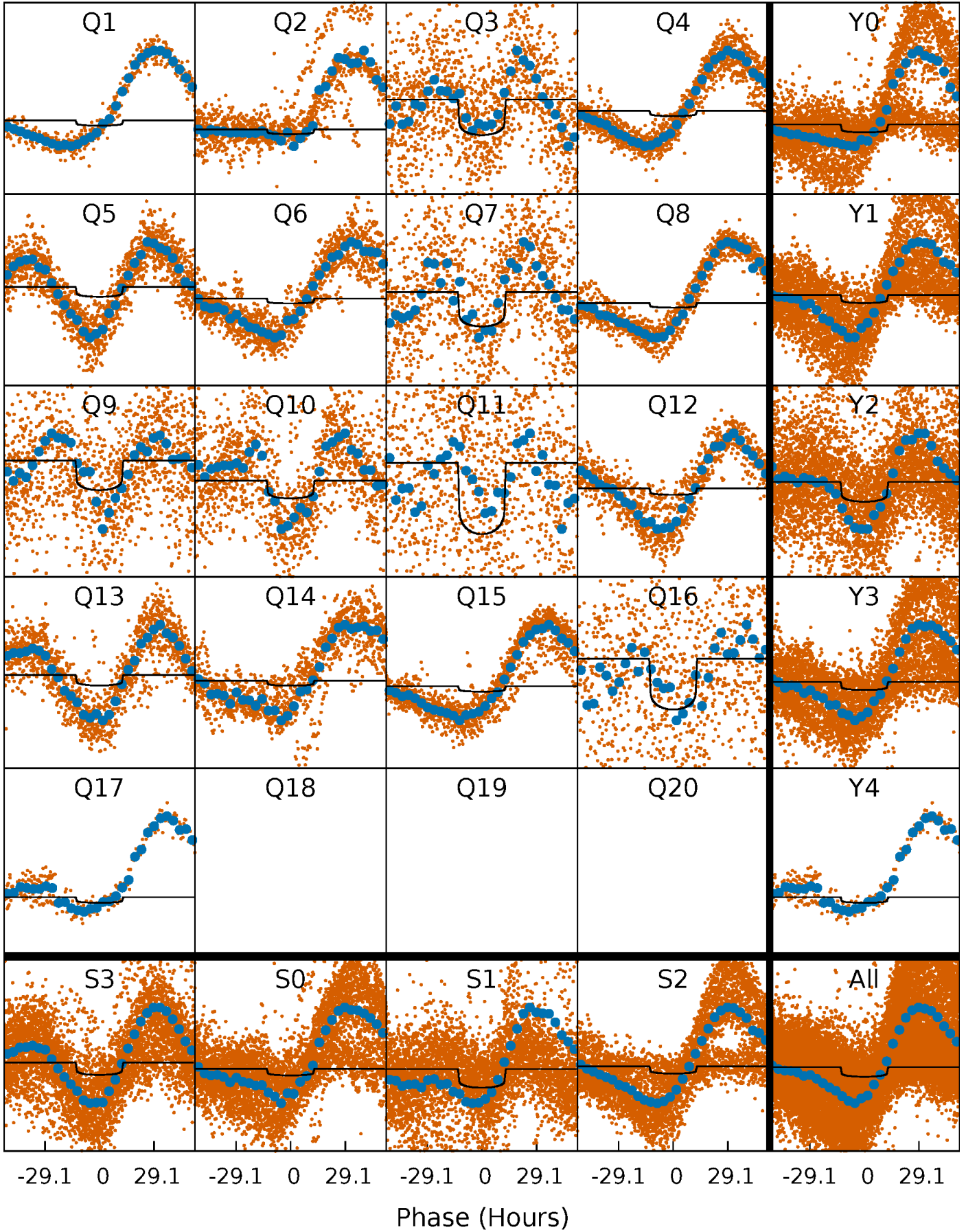
PDC Quarter-Phased Transit Curves

TCE 006292925-02 P= 13.610895 Days $T_0=139.812155$ (BKJD)



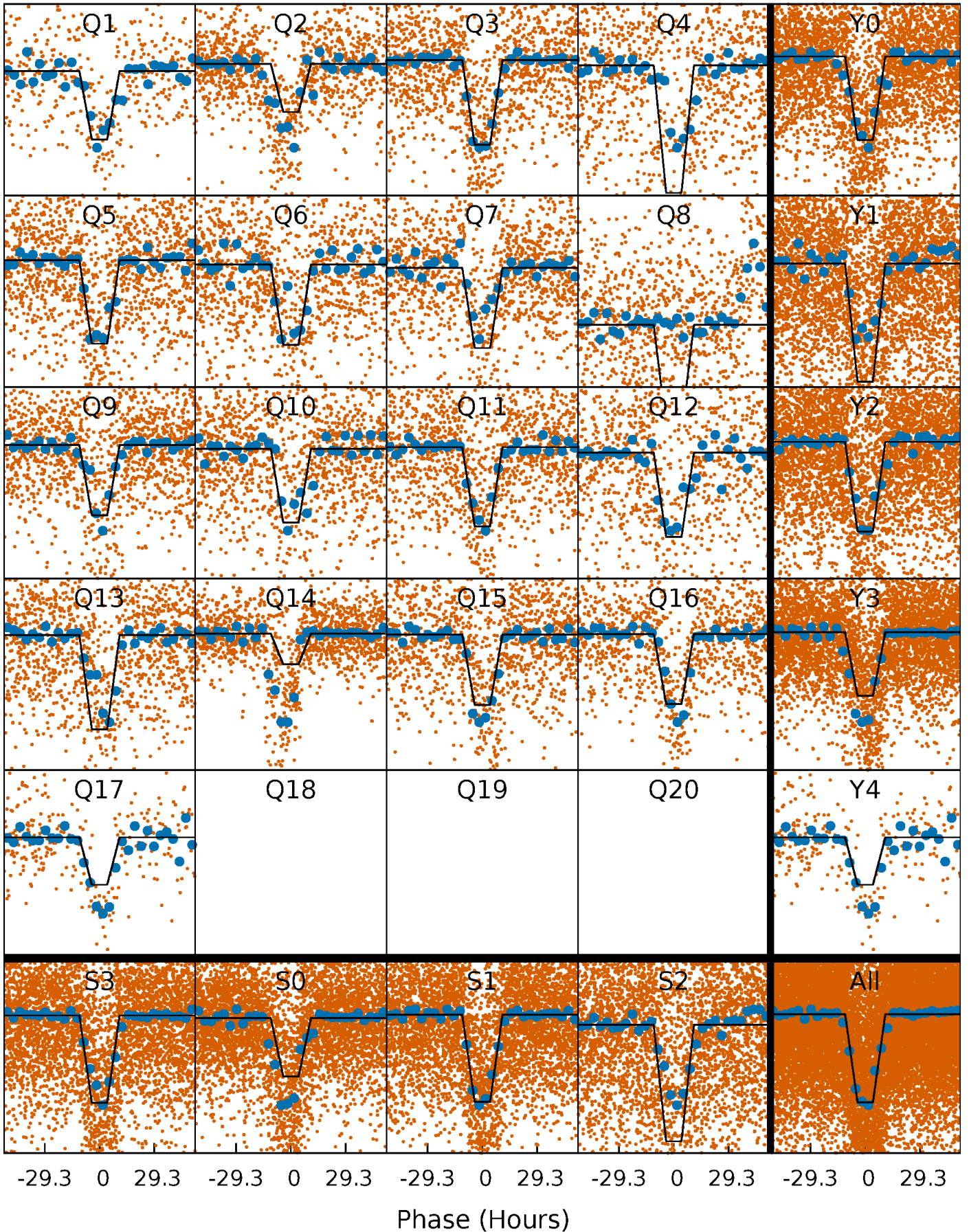
DV Quarter-Phased Transit Curves

TCE 006292925-02 P= 13.610895 Days $T_0=139.812155$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

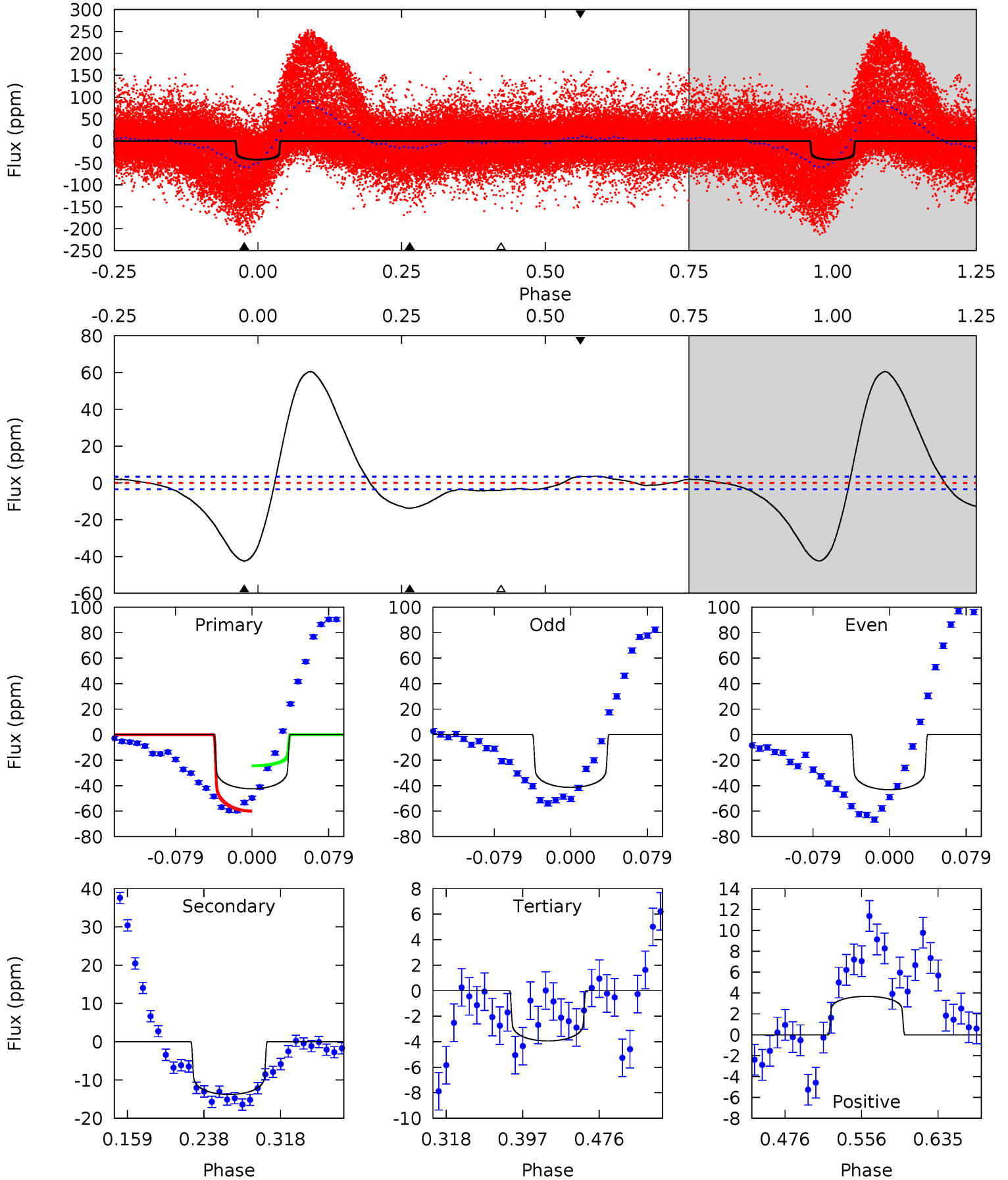
TCE 006292925-02 P= 13.611394 Days $T_0=139.777158$ (BKJD)



DV Model-Shift Uniqueness Test

006292925-02, P = 13.610895 Days, E = 126.201260 Days

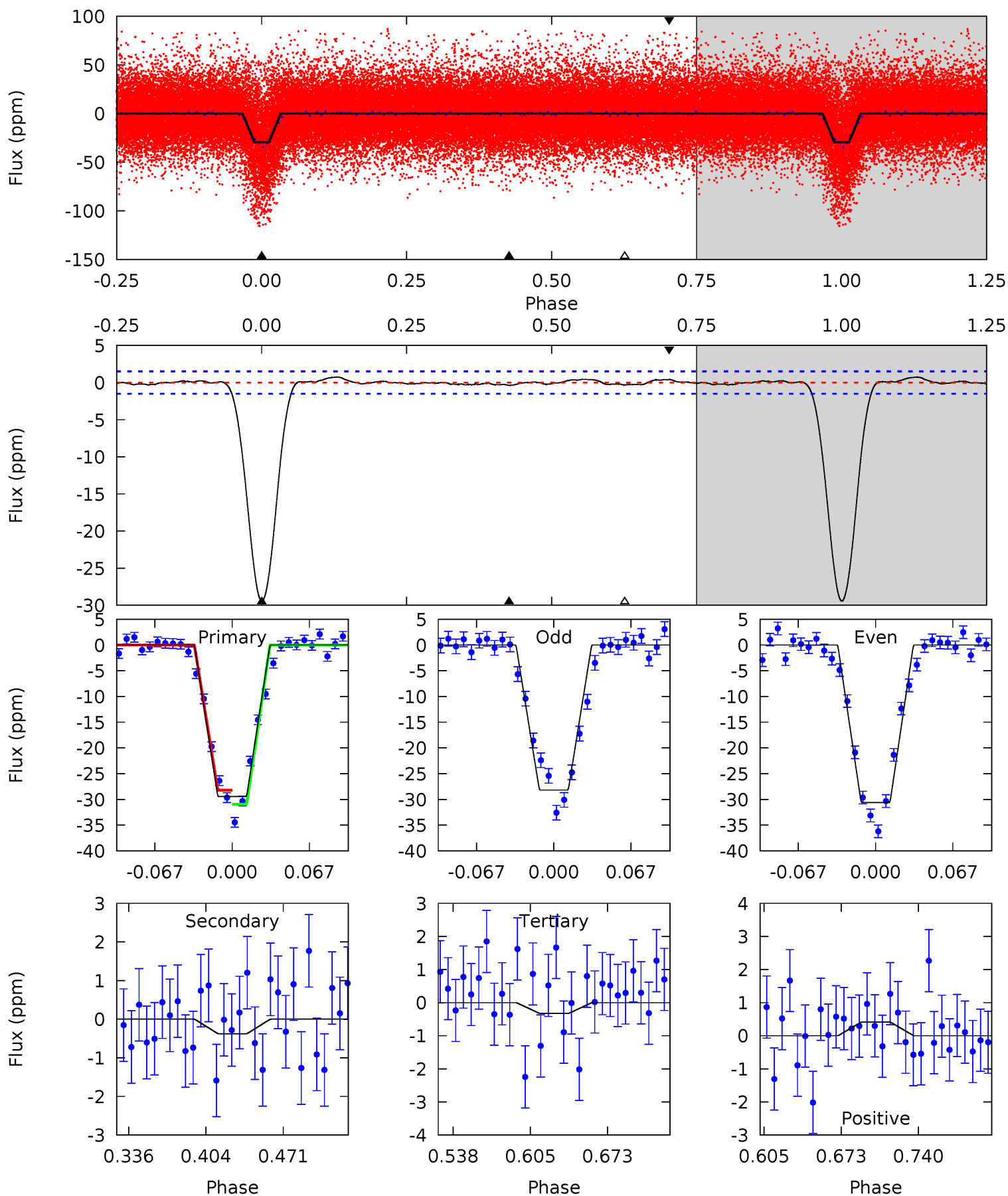
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
57.2	18.6	5.31	4.96	4.61	1.75	23.8	51.9	52.2	13.3	13.6	1.23	1.34	0.59	24.7



Alt Model-Shift Uniqueness Test

006292925-02, $P = 13.611394$ Days, $E = 126.165764$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
90.9	1.16	1.01	1.28	4.65	1.83	0.74	89.9	89.7	0.16	-0.12	3.73	1.07	0.02	4.20



Stellar Parameters For KIC 006292925

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8386^{+230}_{-394}	$3.735^{+0.392}_{-0.168}$	$0.070^{+0.300}_{-0.450}$	$3.485^{+0.915}_{-1.699}$	$2.406^{+0.312}_{-0.779}$	$0.080^{+0.313}_{-0.032}$
	+3%/-5%	+10%/-4%	+429%/-643%	+26%/-49%	+13%/-32%	+391%/-40%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 006292925-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-14 ± 1	$1.68^{+0.30}_{-0.42}$	2449^{+220}_{-267}	7399^{+356}_{-371}	60^{+37}_{-17}
Alt.	-0 ± 0	$2.14^{+0.36}_{-0.49}$	2459^{+197}_{-277}	3069^{+389}_{-5542}	$1.025^{+1.237}_{-0.864}$

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

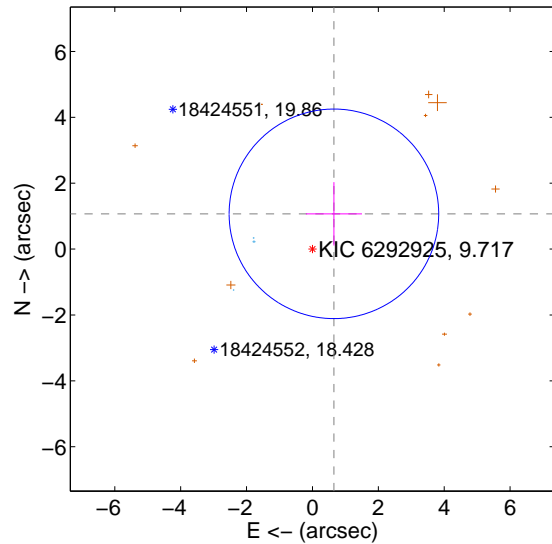
Supplemental centroid analysis for 006292925-02. **Kepler magnitude: 9.72.** Transit SNR 13.44

There are 3 quarters with good PRF difference image offsets

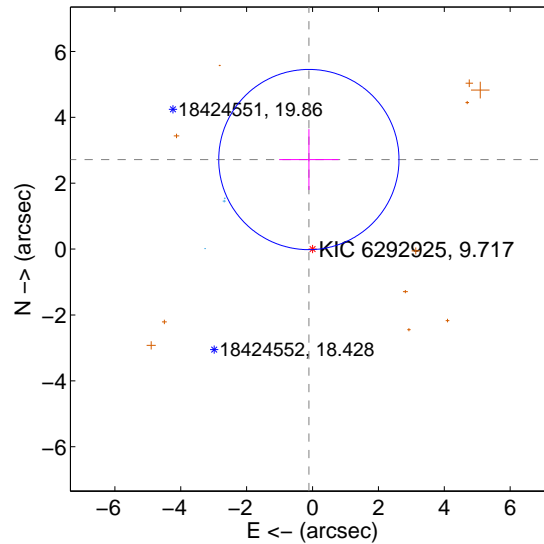
The direct PRF centroid is offset from the target star catalog position by about 1.49 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.254 ± 1.061	1.18	-0.652 ± 0.852	1.071 ± 0.960
PRF-fit source offset from KIC position	2.721 ± 0.912	2.98	0.111 ± 0.903	2.719 ± 0.924
photometric centroid source offset	1.38 ± 1.58	0.87	0.80 ± 1.17	-1.12 ± 1.76

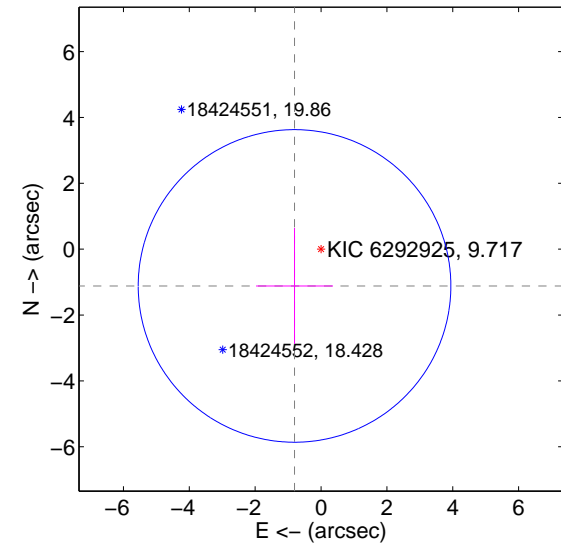
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

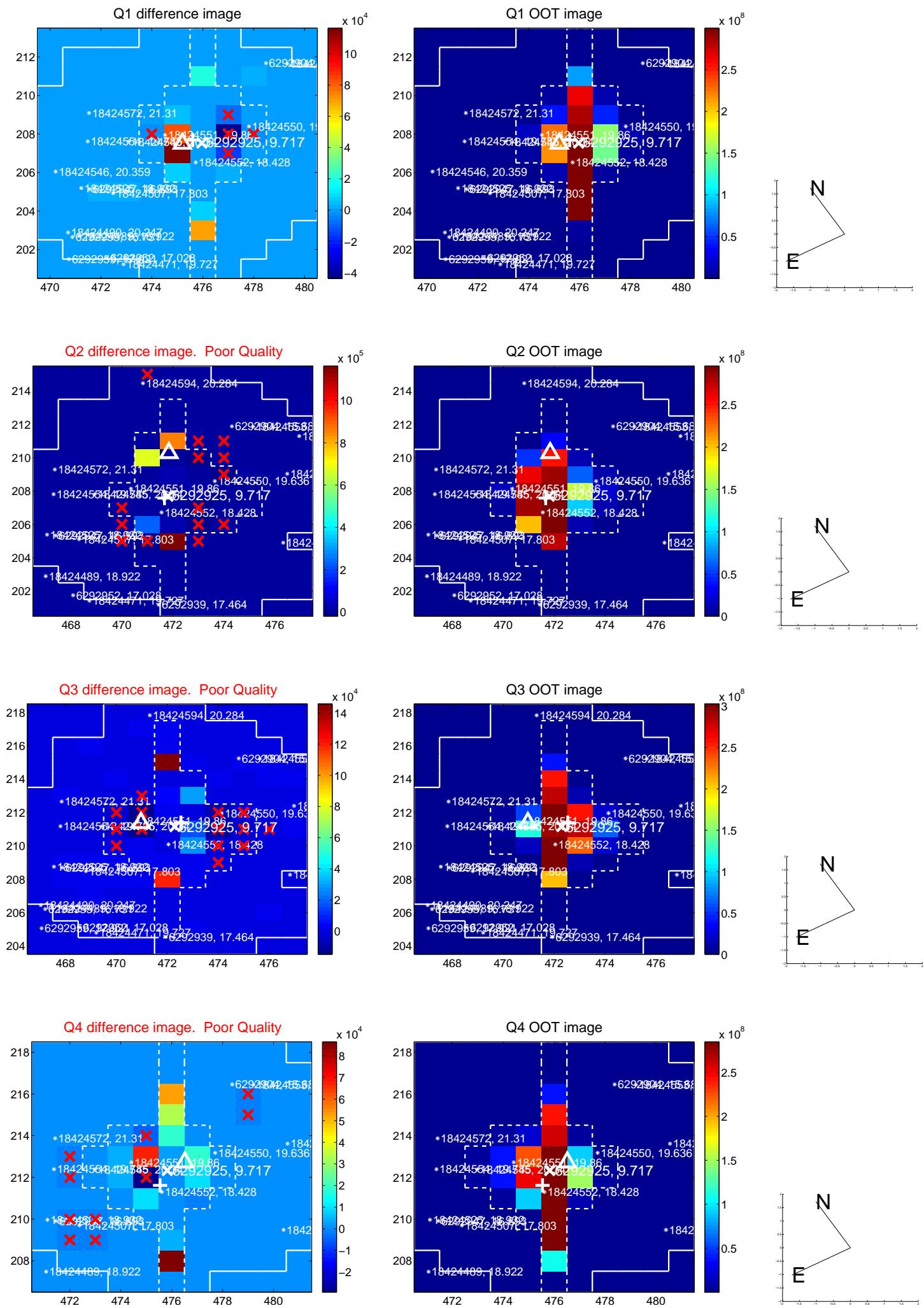


offset from photometric centroids

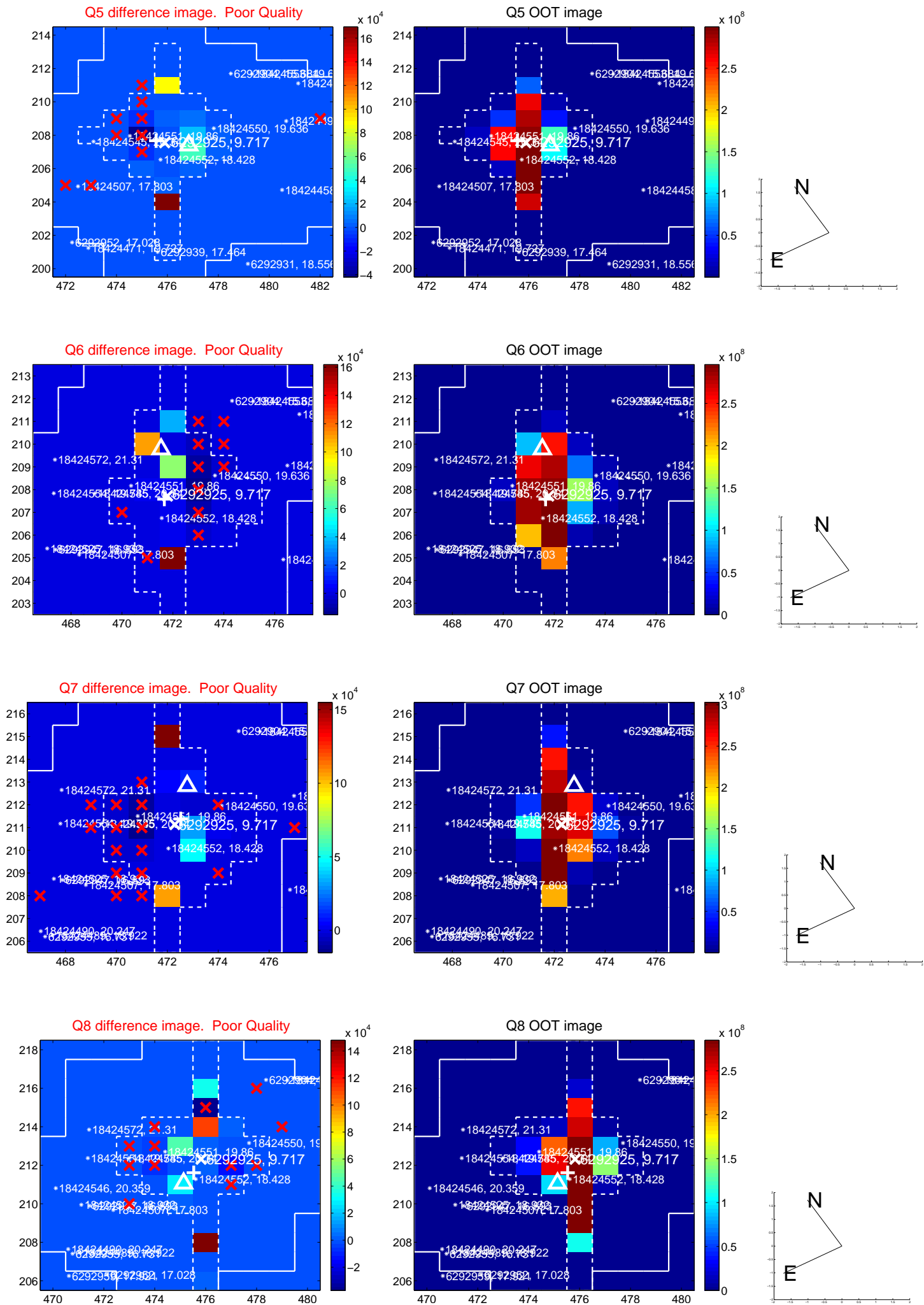


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

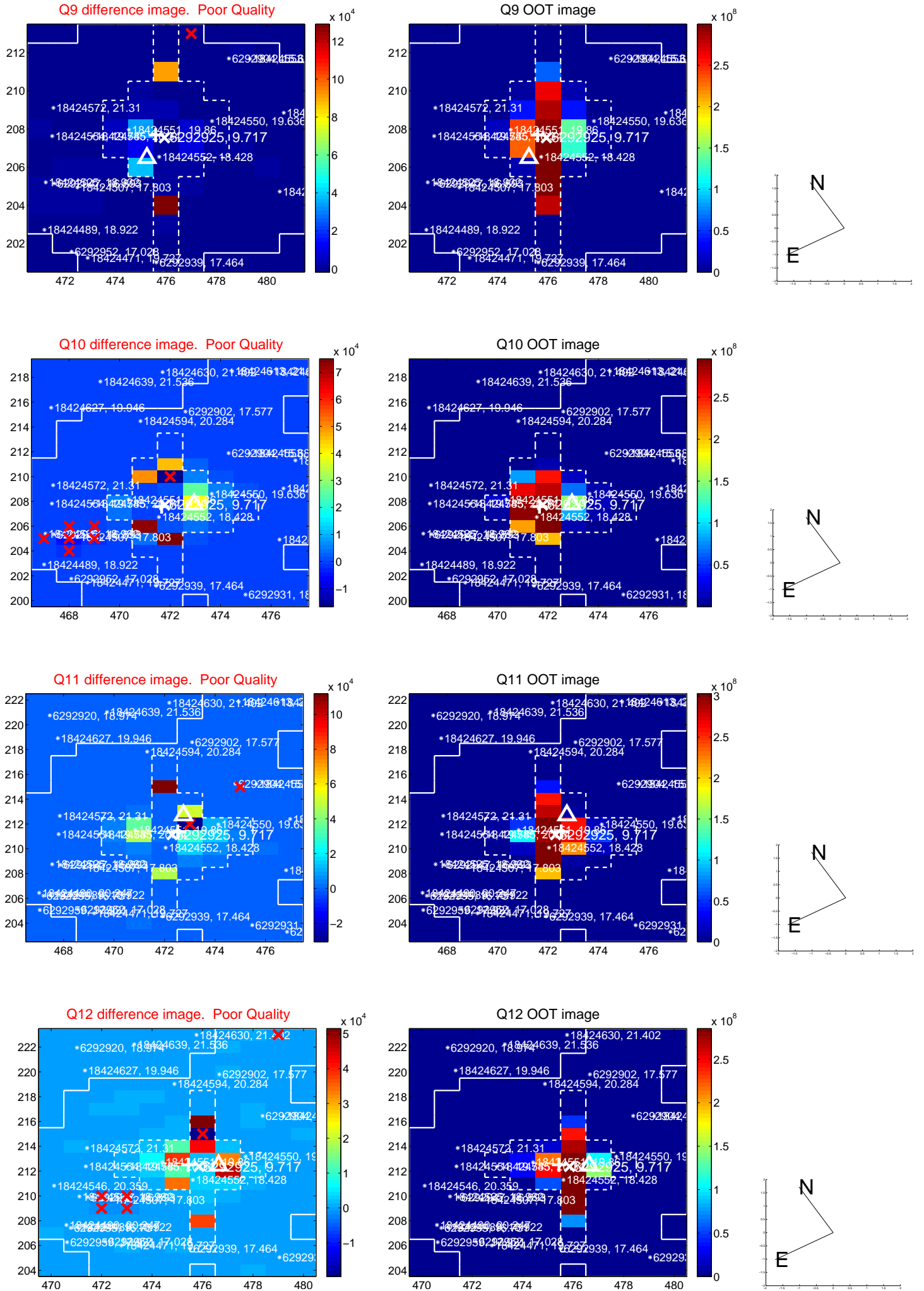
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



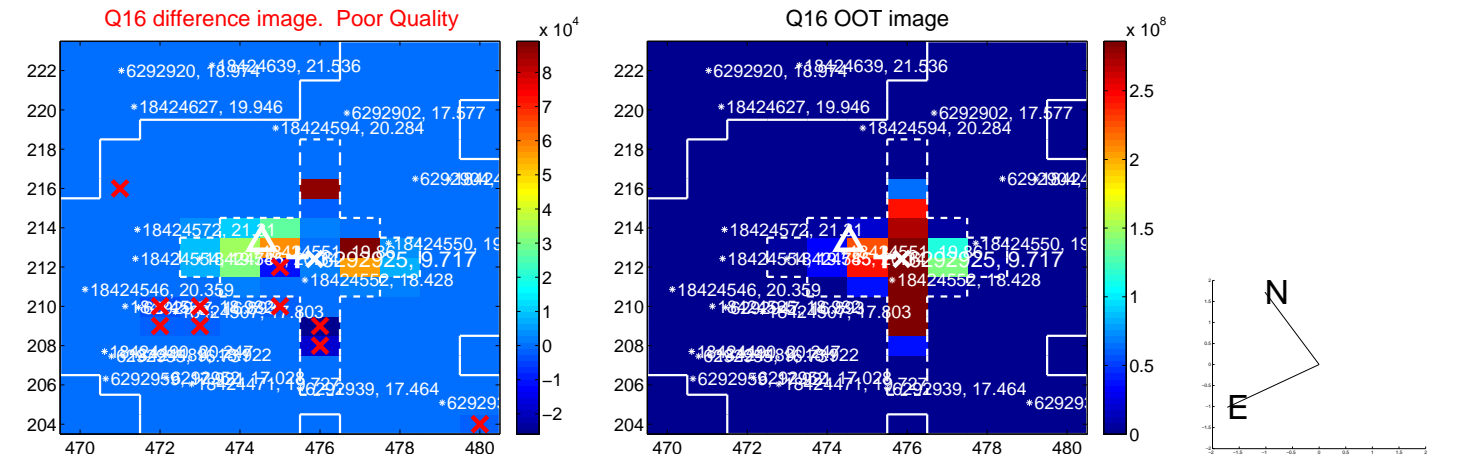
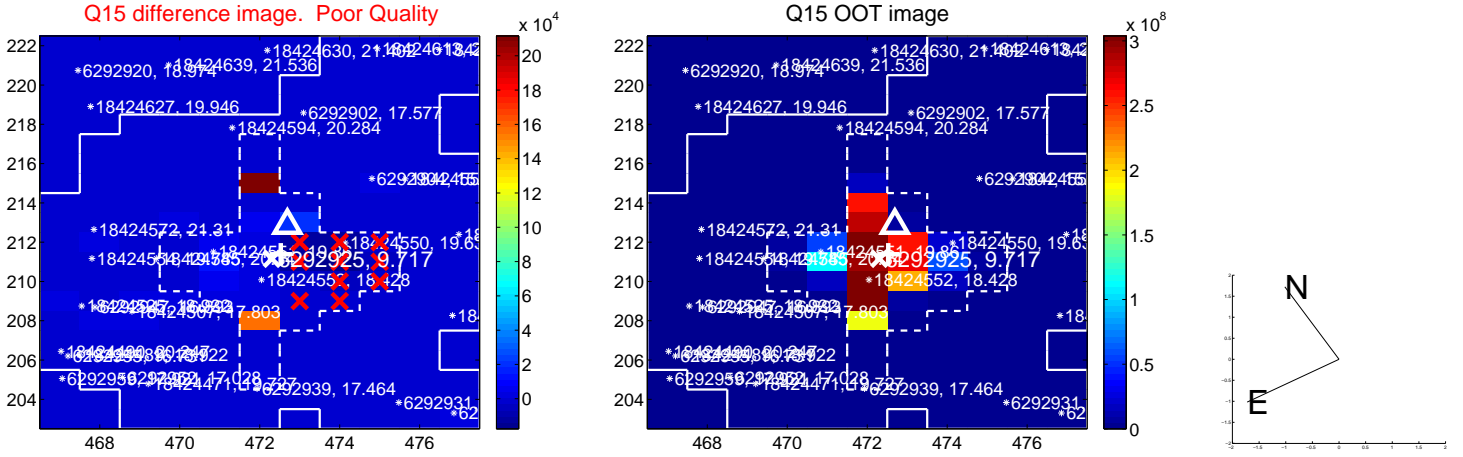
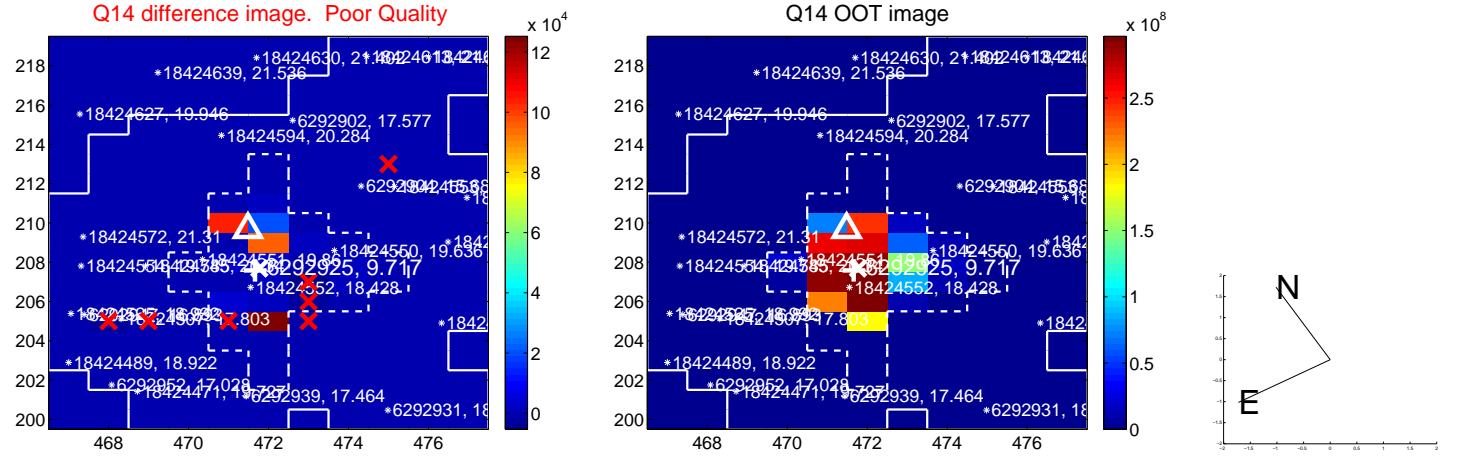
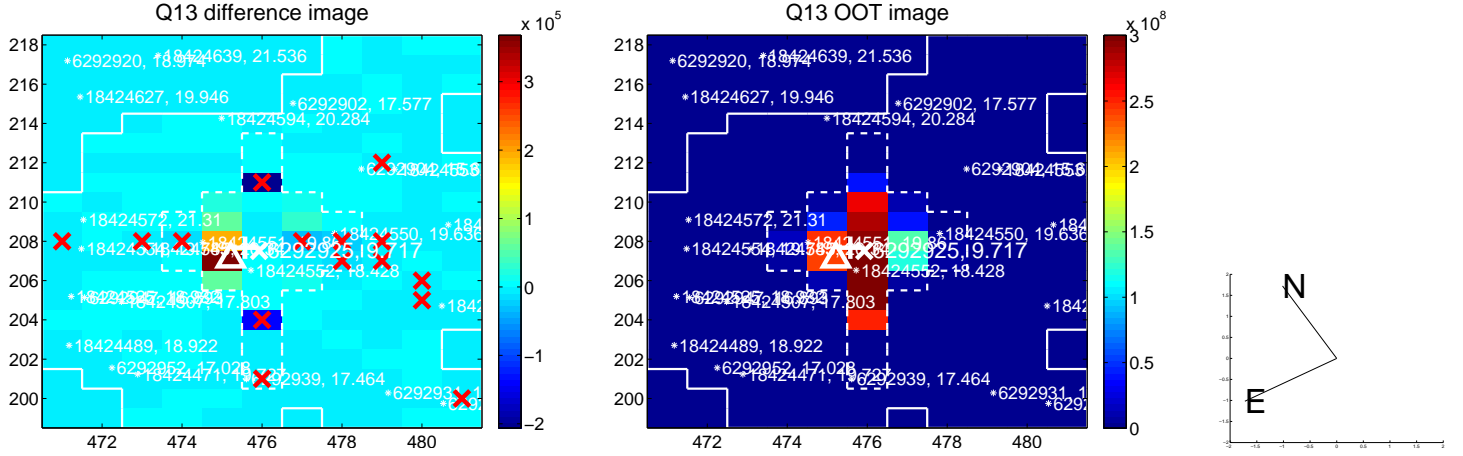
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



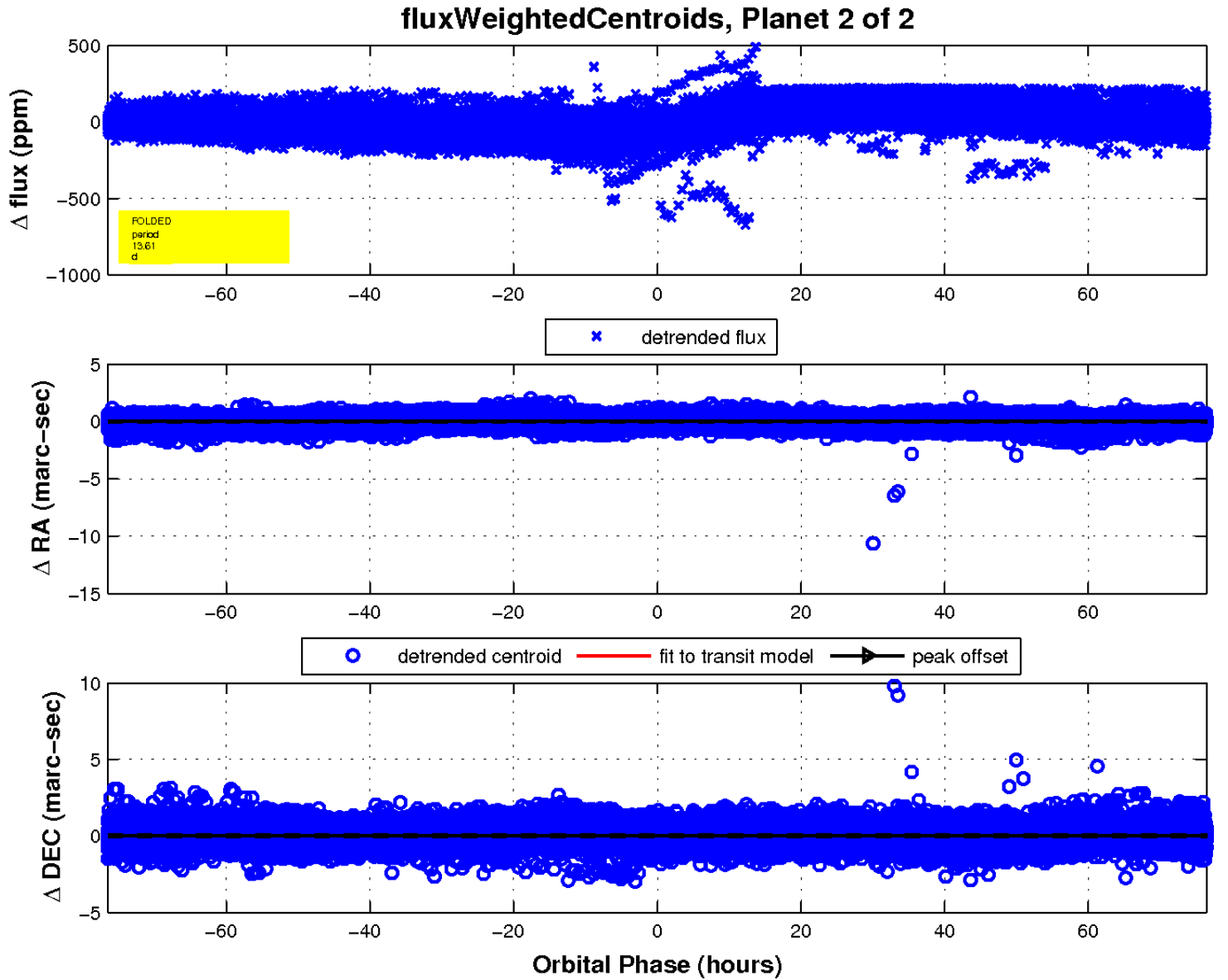
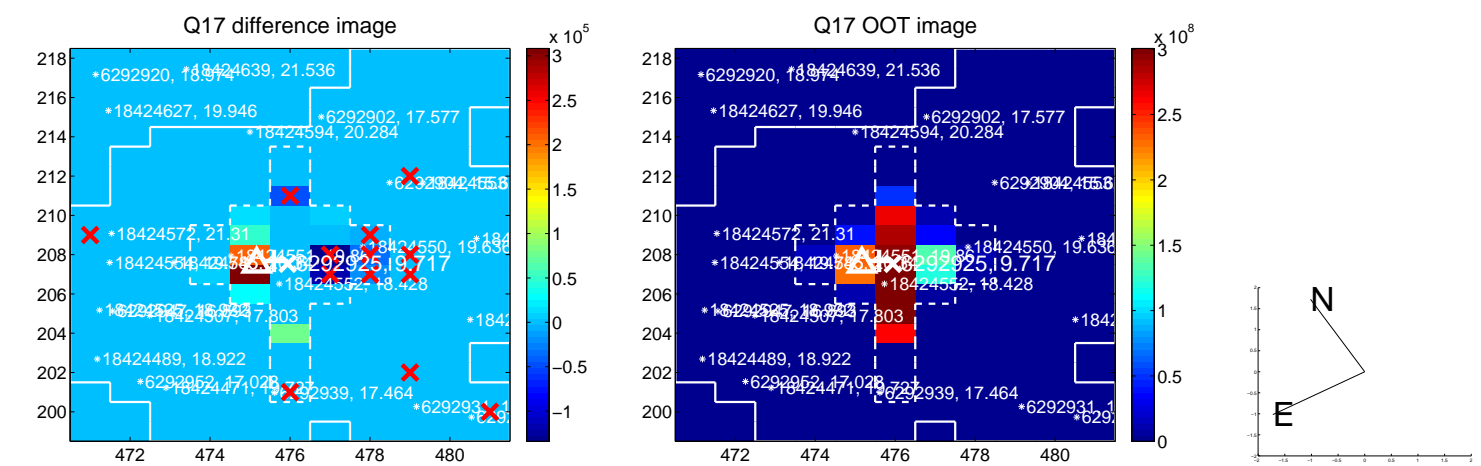
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

