

KIC 006762829

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})
006762829-01	OBS	1740.01	18.795269	138.668637	28299.8	9.992	3019.4	2759.0	1.84	5623	30.82	154.43
006762829-02	OBS	No	18.795261	148.038098	964.2	8.024	97.2	97.6	1.84	5623	6.47	154.43
006762829-03	OBS	No	649.166720	151.093040	610.5	11.299	17.3	15.9	1.84	5623	4.74	1.37
006762829-04	OBS	No	207.303991	307.435059	468.4	8.777	13.0	12.9	1.84	5623	4.25	6.29
006762829-05	OBS	No	207.828345	203.146314	330.1	20.621	11.4	11.8	1.84	5623	3.52	6.27

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006762829-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—HAS_SEC_TCE
006762829-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
006762829-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS
006762829-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—ALL_TRANS_CHASES
006762829-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—ALL_TRANS_CHASES

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.

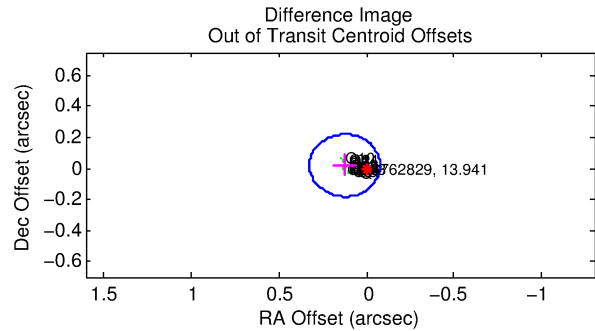
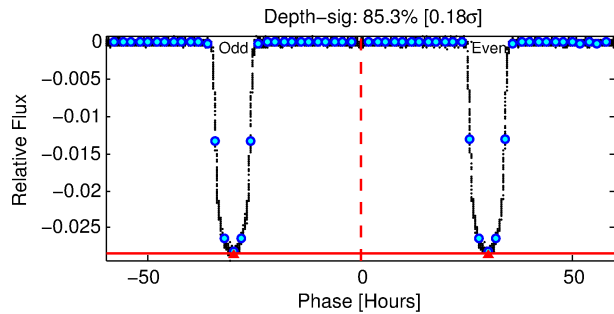
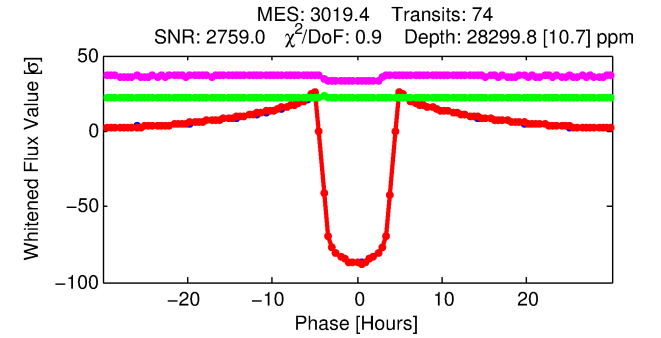
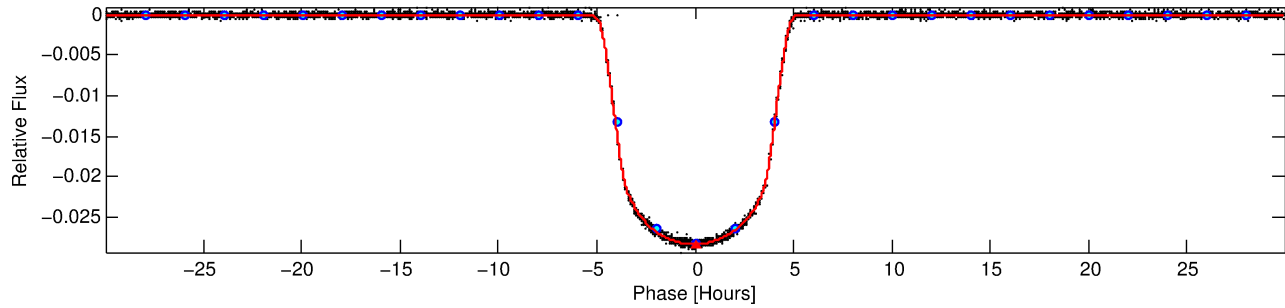
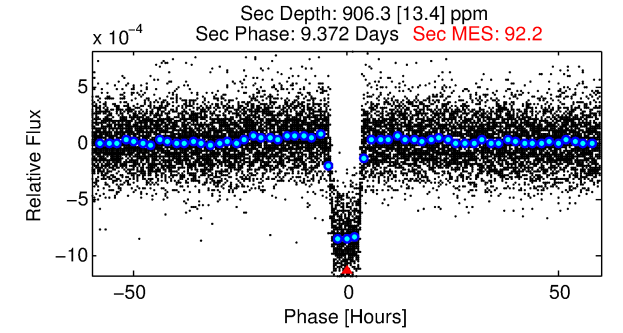
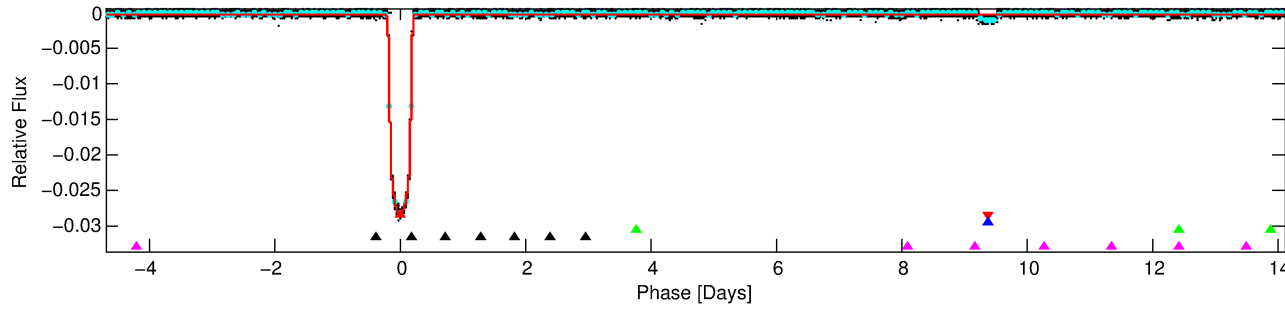
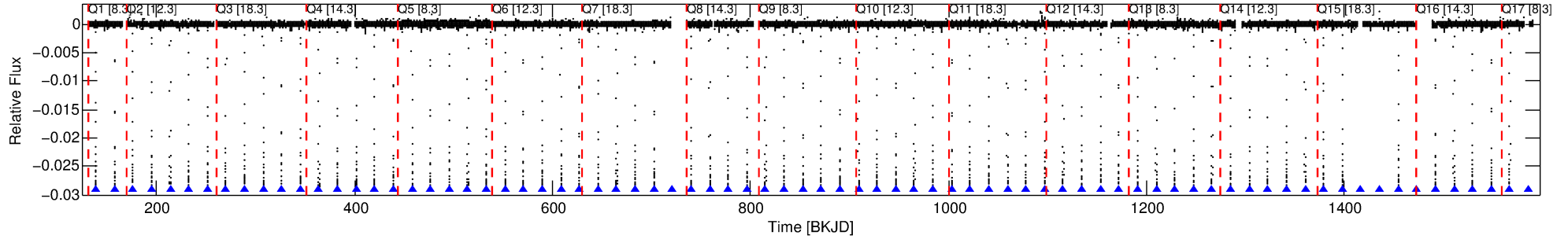
Ephemeris Match Information For 006762829-01

No Significant Match Found

DV One-Page Summary

KIC: 6762829 Candidate: 1 of 5 Period: 18.795 d
KOI: K01740.01 Corr: 0.999

Kp: 13.94 R*: 1.84 Rs Teff: 5623.0 K Logg: 3.92 Fe/H: -0.120



DV Fit Results:

Period = 18.79527 [0.00000] d
Epoch = 138.6686 [0.0001] BKJD
Rp/R* = 0.1534 [0.0001]
a/R* = 16.25 [0.02]
b = 0.23 [0.01]
Seff = 154.43 [20.15]
Teq = 899 [29] K
Rp = 30.82 [2.71] Re
a = 0.1402 [0.0101] AU
Ag = 10.32 [1.07] [8.69σ]
Teffp = 2491 [51] K [27.10σ]

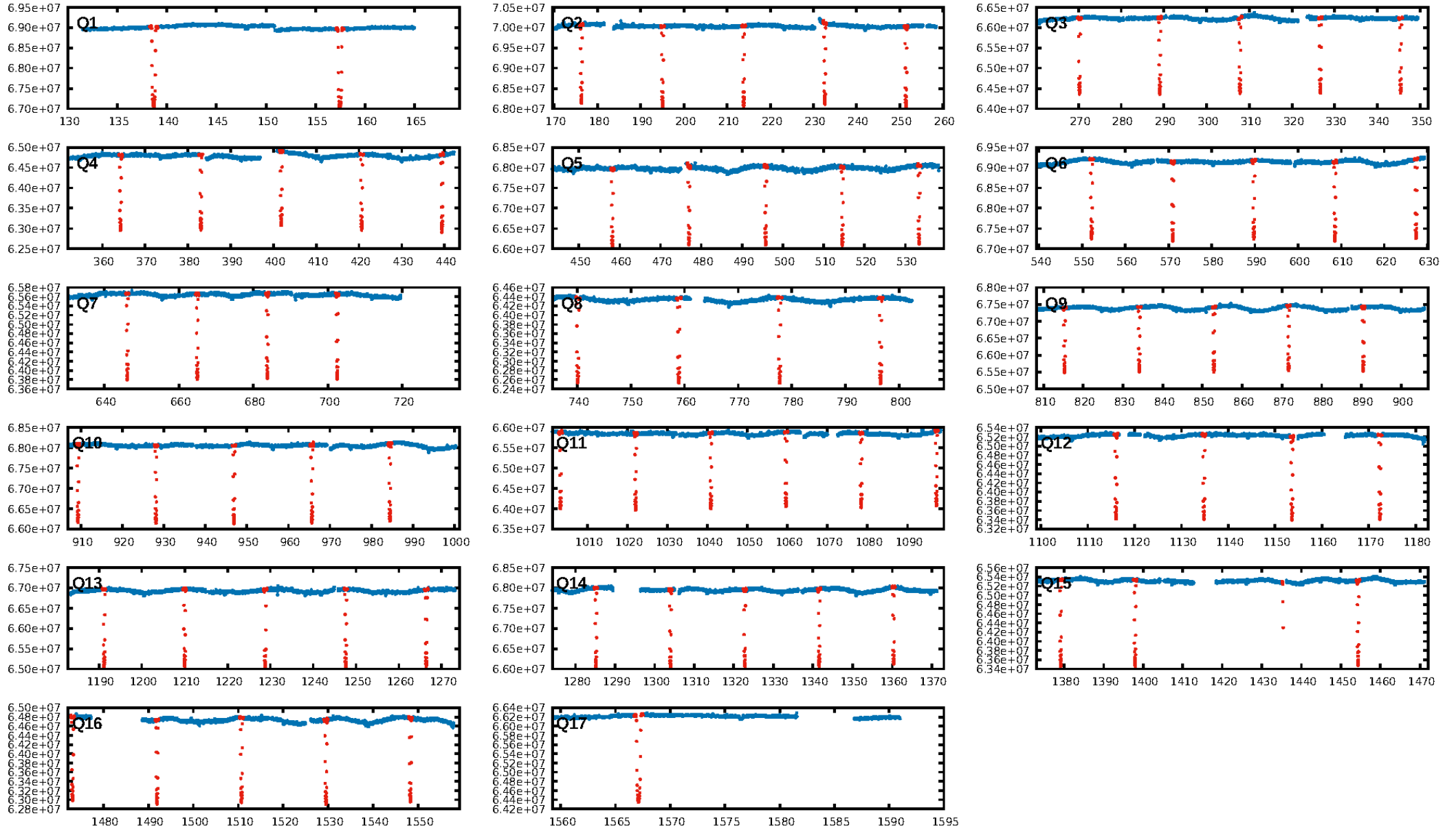
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 100.0% [340.18σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [71/71]
GhostDiagnostic-chr: 6.553
Centroid-sig: 0.0%
Centroid-so: 0.136 arcsec [43.74σ]
OotOffset-rm: 0.126 arcsec [1.88σ]
KicOffset-rm: 0.167 arcsec [2.48σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

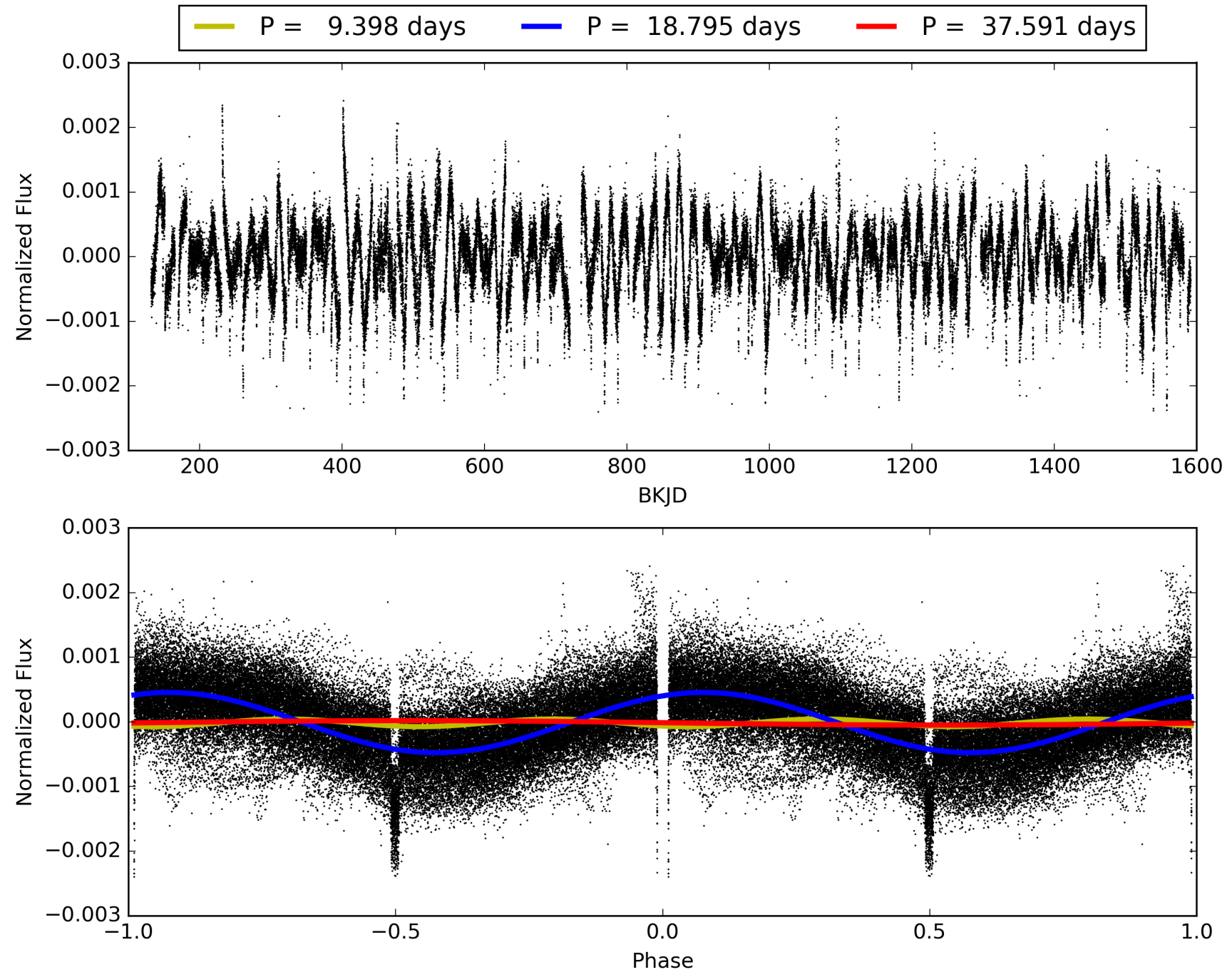
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 09:56:35 Z

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

TCE 006762829-01, PDC Light Curves

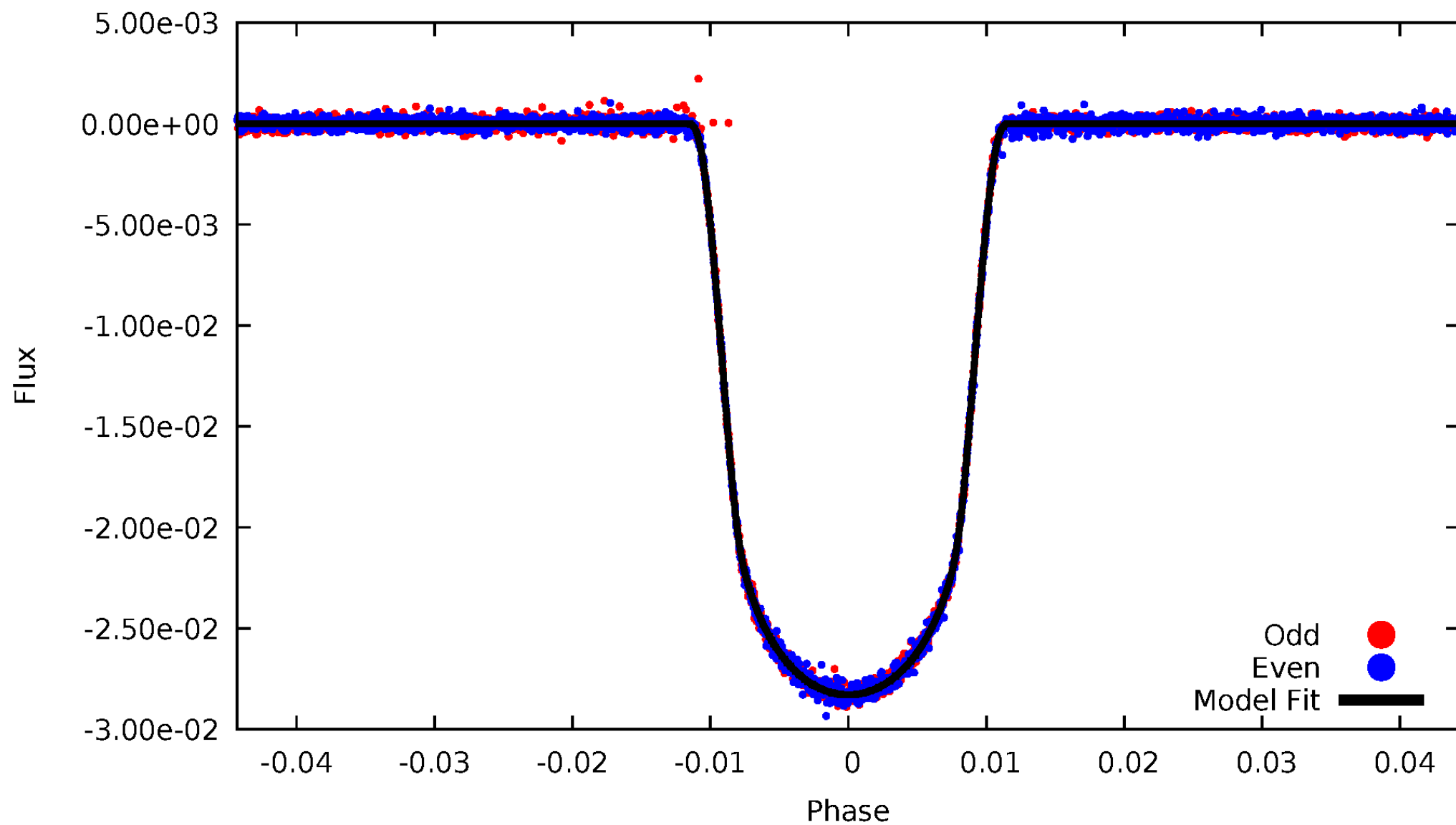


TCE 006762829-01



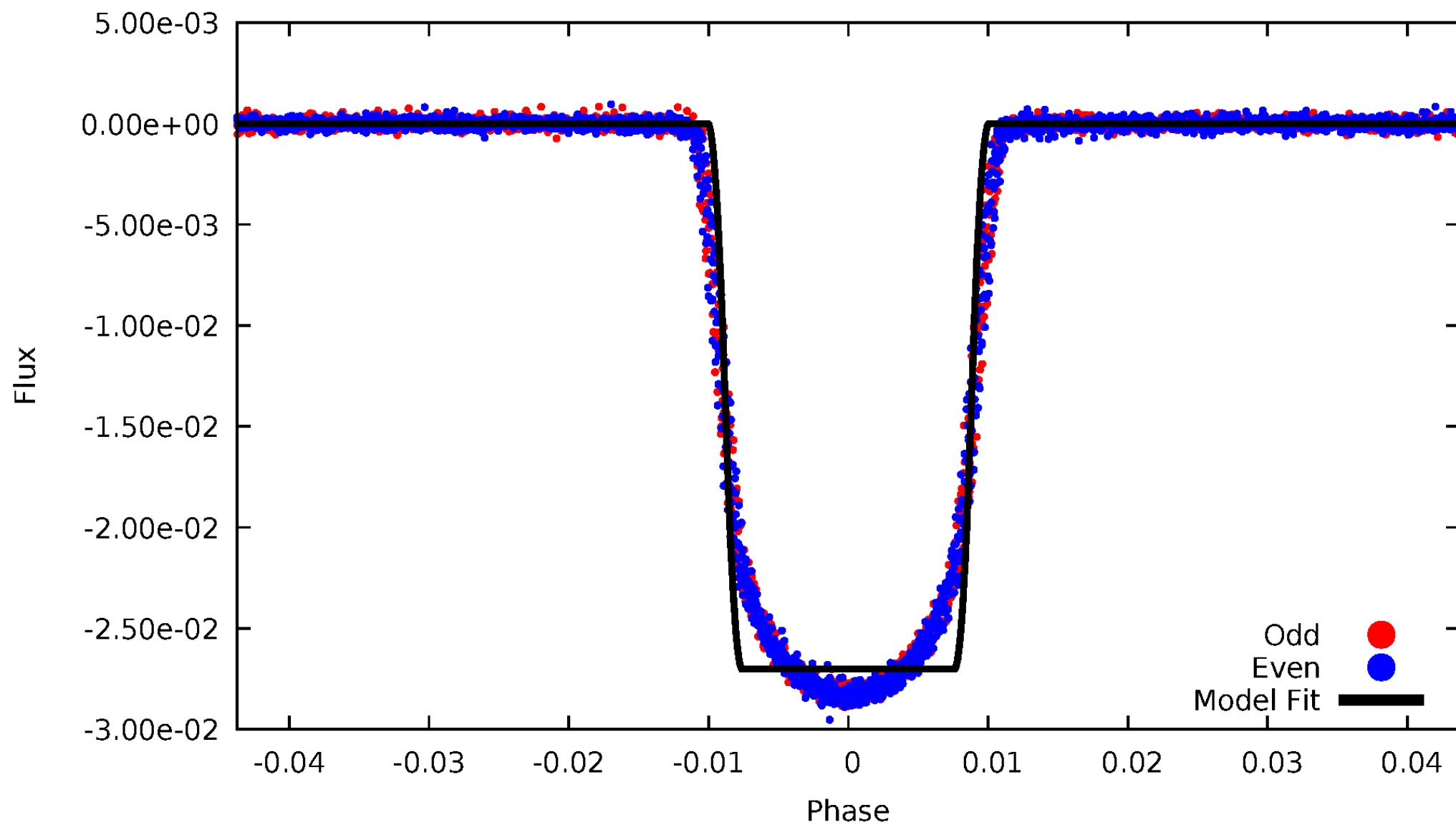
DV Odd/Even

TCE 006762829-01



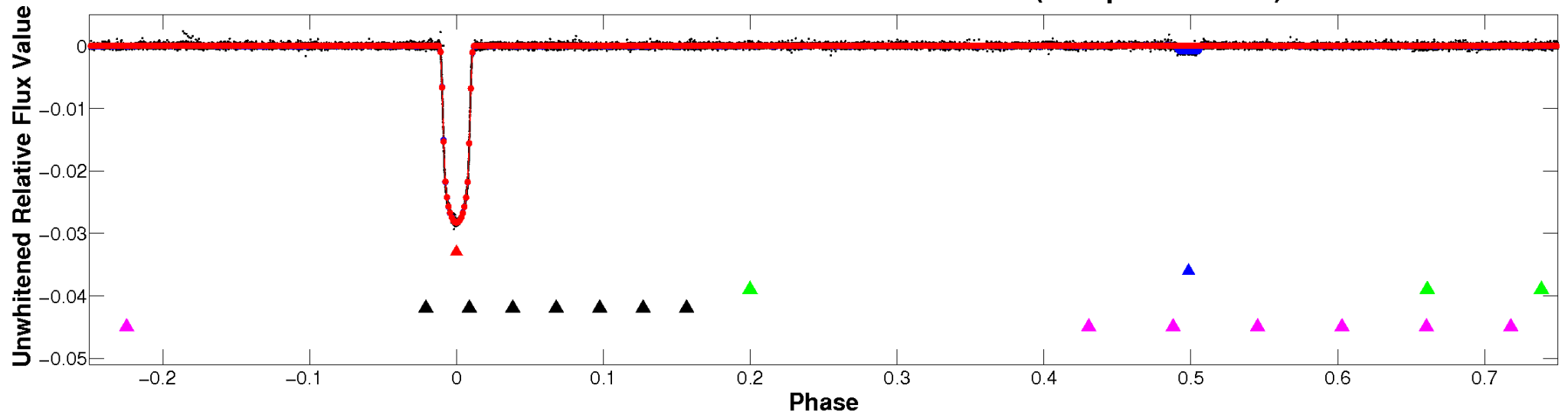
ALT Odd/Even

TCE 006762829-01

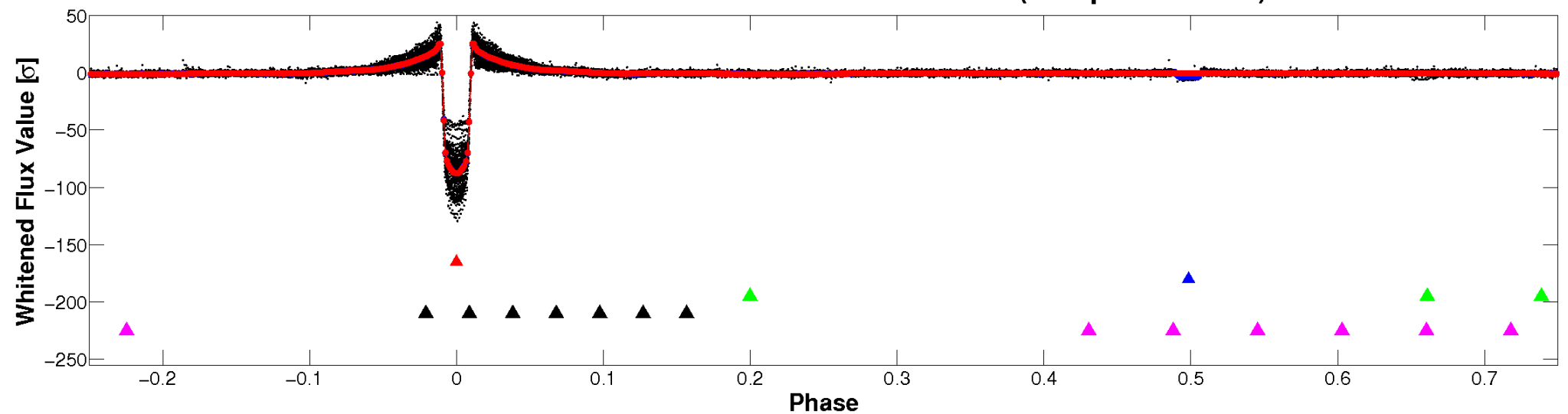


Non-Whitened Vs. Whitened Light Curve

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

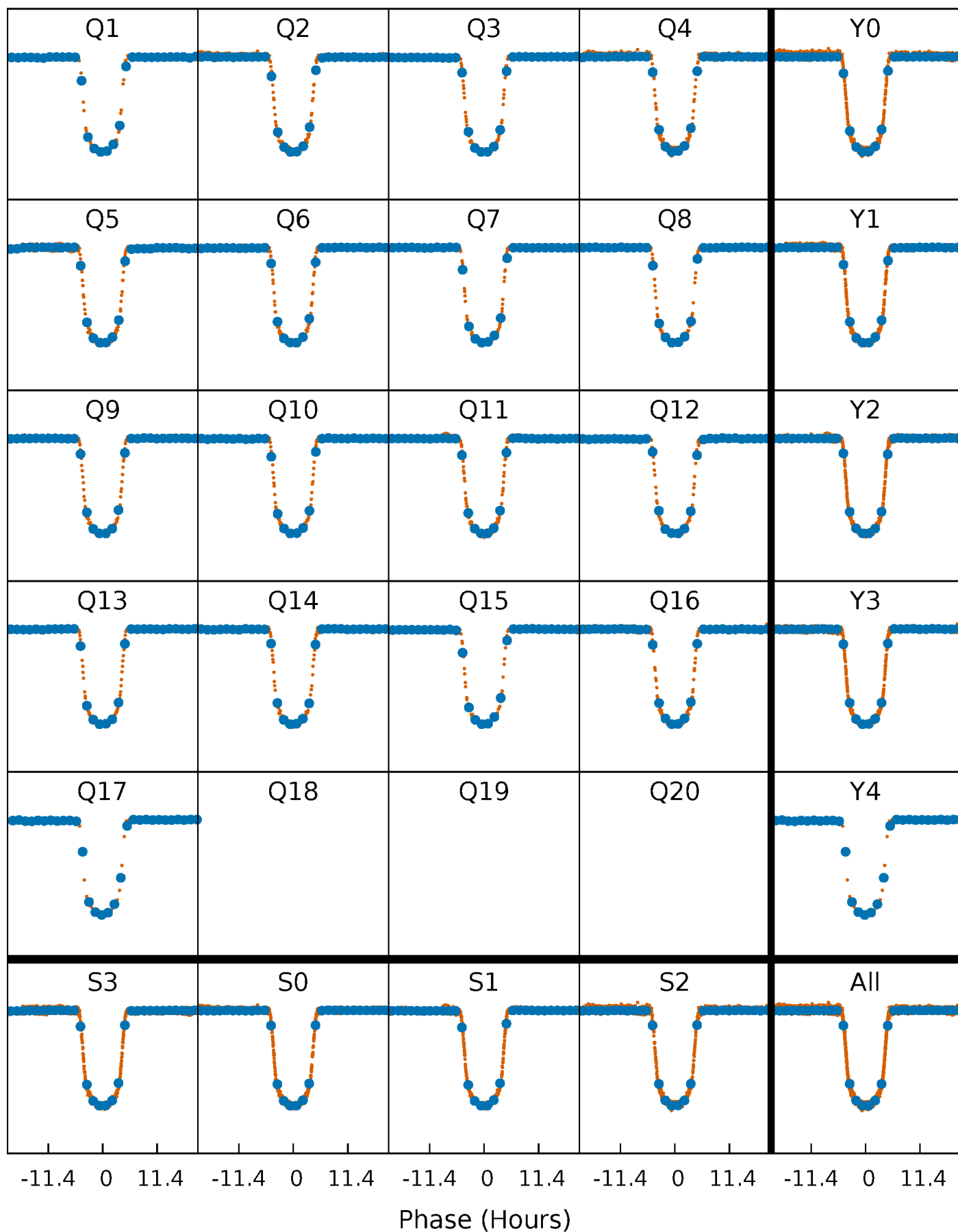


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



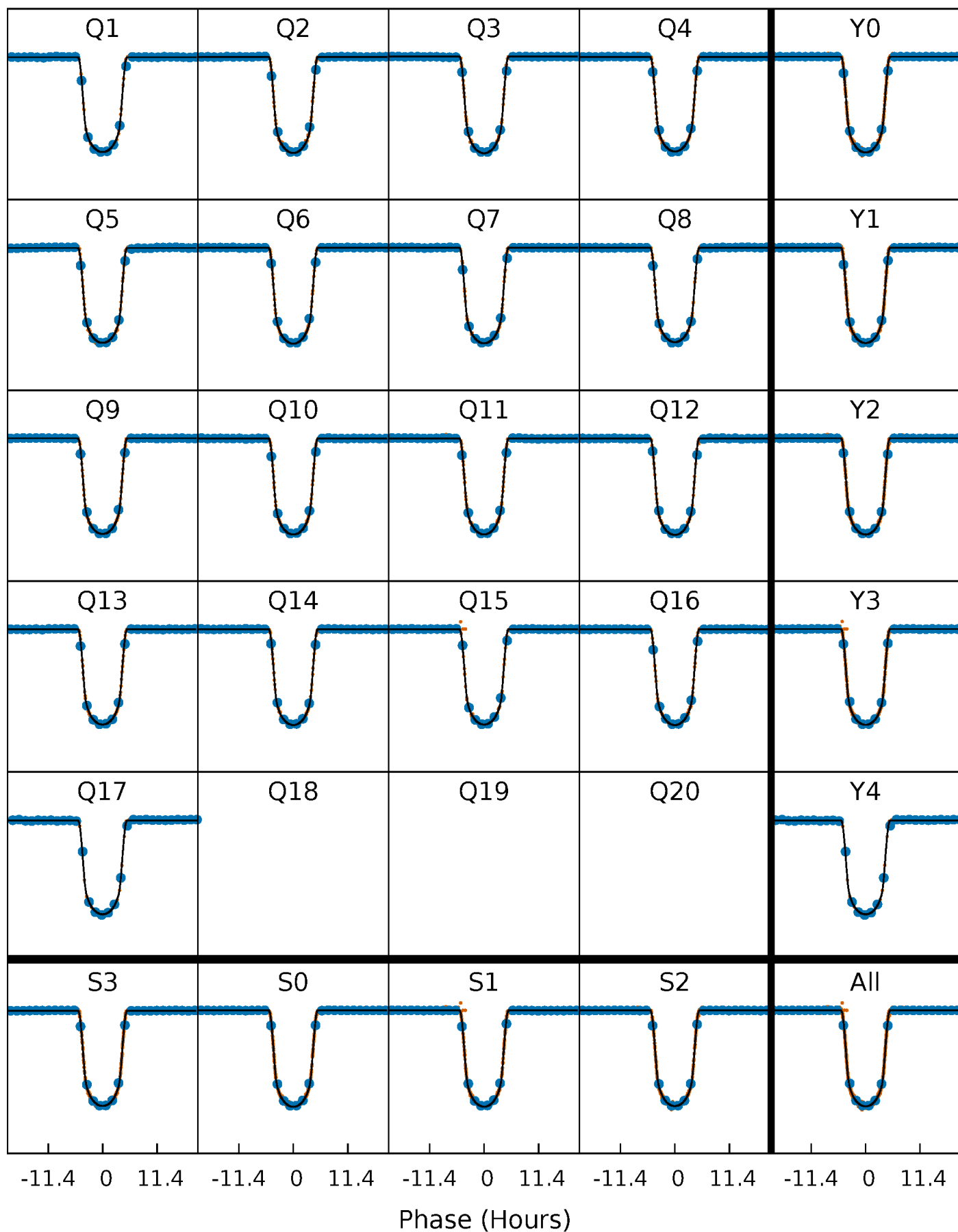
PDC Quarter-Phased Transit Curves

TCE 006762829-01 P= 18.795269 Days $T_0=138.668637$ (BKJD)



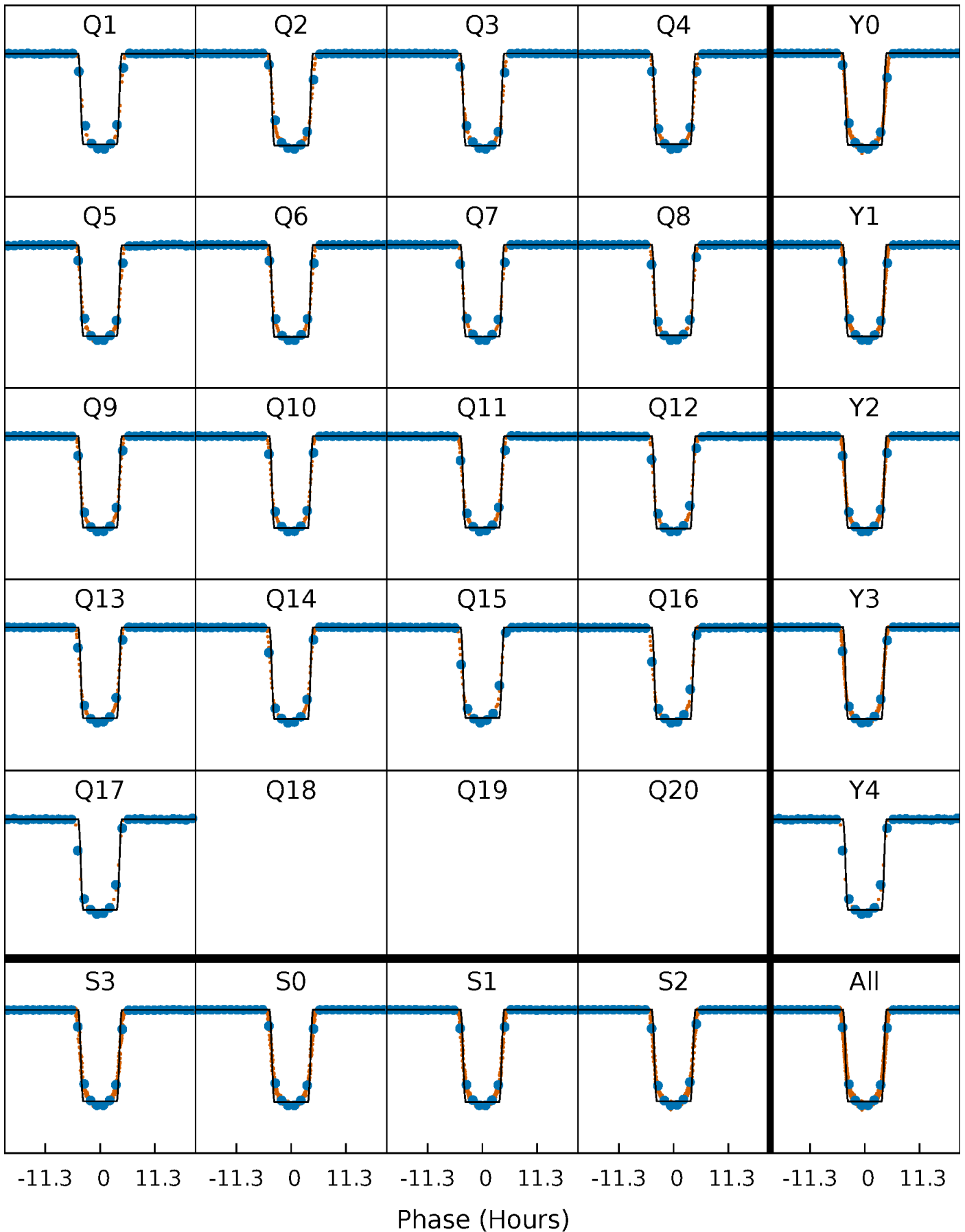
DV Quarter-Phased Transit Curves

TCE 006762829-01 P= 18.795269 Days $T_0=138.668637$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

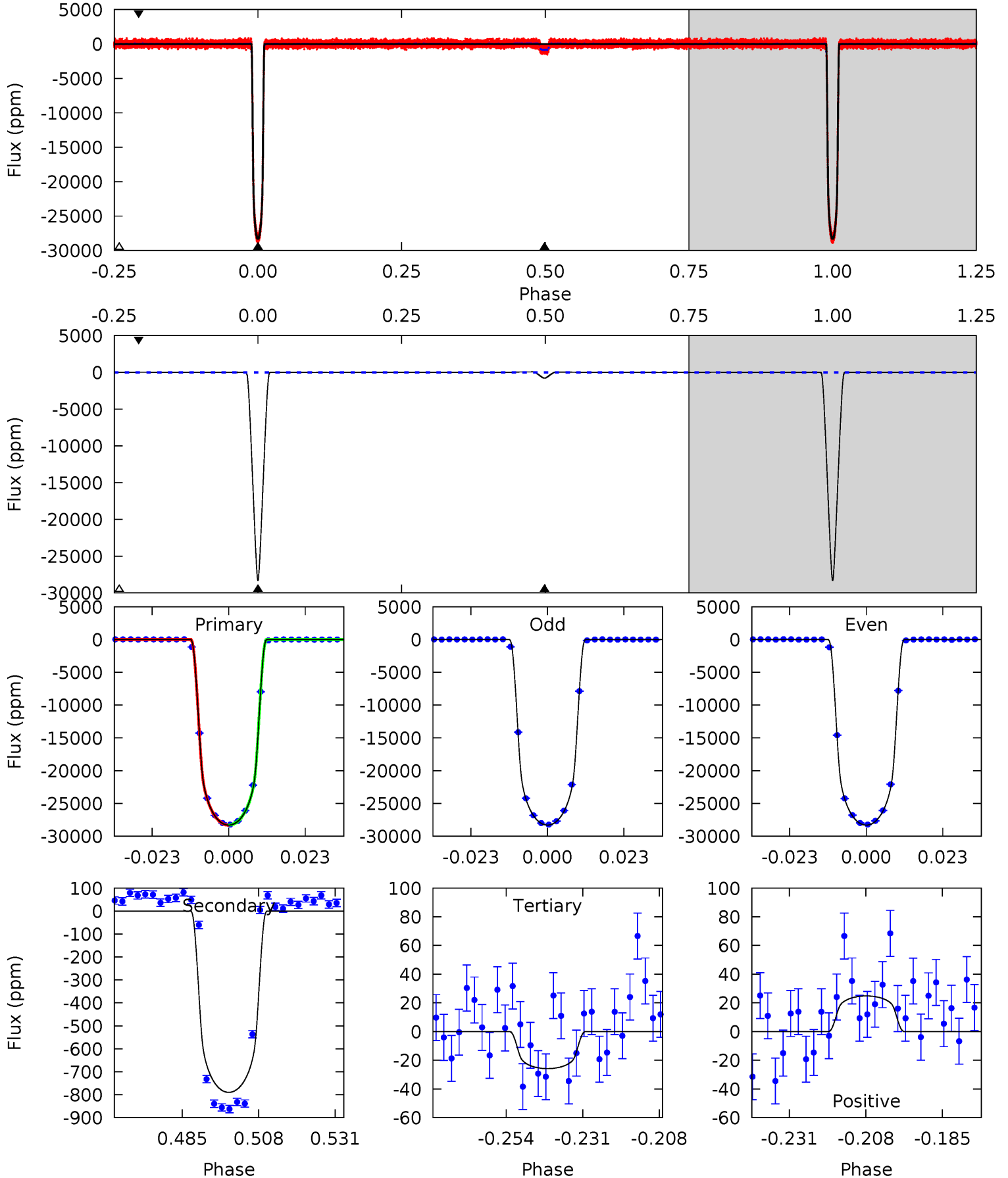
TCE 006762829-01 P= 18.795503 Days $T_0=138.659792$ (BKJD)



DV Model-Shift Uniqueness Test

006762829-01, P = 18.795269 Days, E = 119.873368 Days

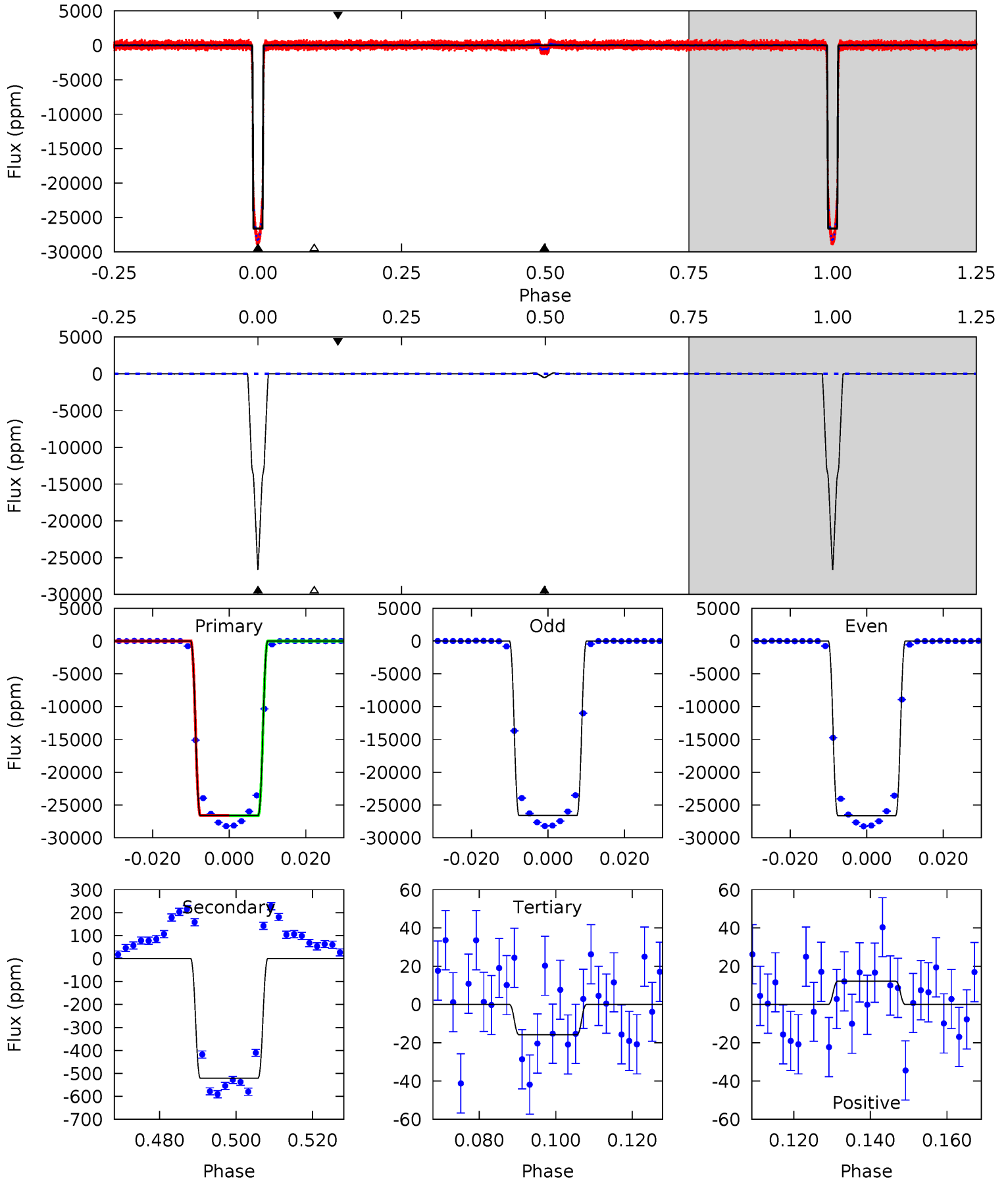
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5564	155.3	5.08	4.88	4.86	2.27	2.64	5559	5559	150.2	150.4	0.35	0.99	0.00	2.71



Alt Model-Shift Uniqueness Test

006762829-01, P = 18.795503 Days, E = 119.864289 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4592	89.9	2.73	2.10	4.89	2.33	1.72	4589	4590	87.2	87.8	1.15	1.00	0.01	3.91



Stellar Parameters For KIC 006762829

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5623^{+113}_{-113}	$3.925^{+0.055}_{-0.045}$	$-0.120^{+0.150}_{-0.150}$	$1.841^{+0.162}_{-0.162}$	$1.038^{+0.092}_{-0.084}$	$0.234^{+0.060}_{-0.036}$
	+2%/-2%	+1%/-1%	+125%/-125%	+9%/-9%	+9%/-8%	+25%/-15%
Source	SPE37	TRA37	SPE37	DSEP		

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

Secondary Eclipse Parameters for KIC 006762829-01 / KOI 1740.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-790 ± 5	$30.74^{+1.58}_{-1.50}$	1255^{+33}_{-34}	3042^{+34}_{-41}	$9.077^{+0.741}_{-0.655}$
Alt.	-521 ± 6	$32.99^{+1.73}_{-1.65}$	1254^{+38}_{-32}	2805^{+35}_{-34}	$5.183^{+0.438}_{-0.360}$

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

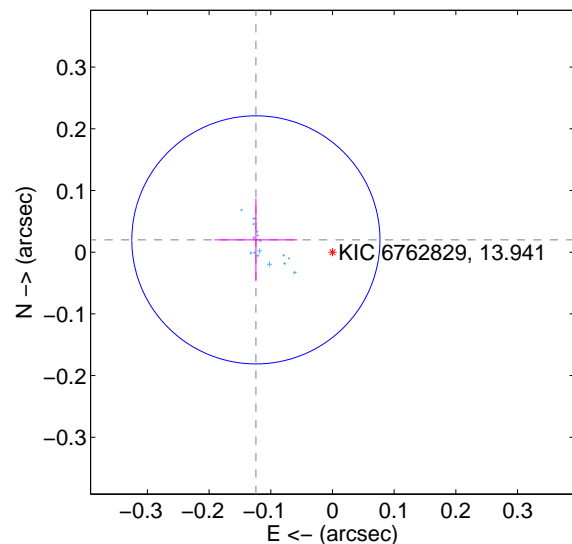
Supplemental centroid analysis for 006762829-01. Kepler magnitude: 13.94. Transit SNR 2758.95

There are 17 quarters with good PRF difference image offsets

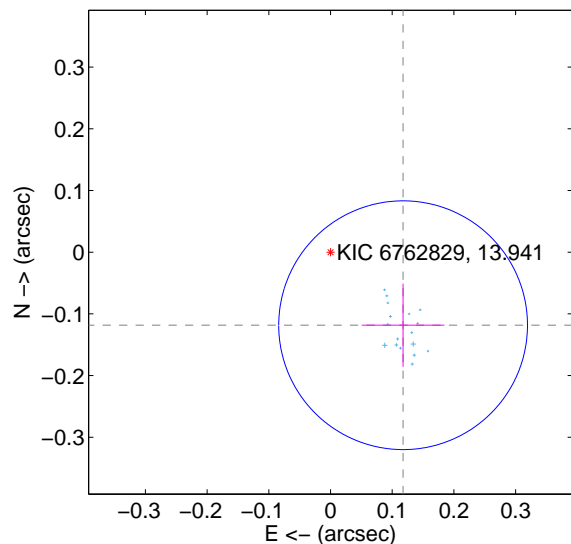
The direct PRF centroid is offset from the target star catalog position by about 0.23 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.126 ± 0.067	1.88	0.124 ± 0.067	0.020 ± 0.067
PRF-fit source offset from KIC position	0.167 ± 0.067	2.48	-0.118 ± 0.067	-0.118 ± 0.067
photometric centroid source offset	0.14 ± 0.00	43.74	-0.01 ± 0.00	-0.14 ± 0.00

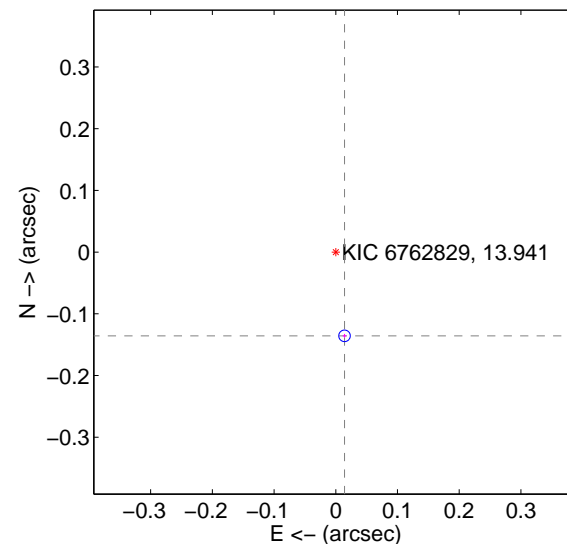
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

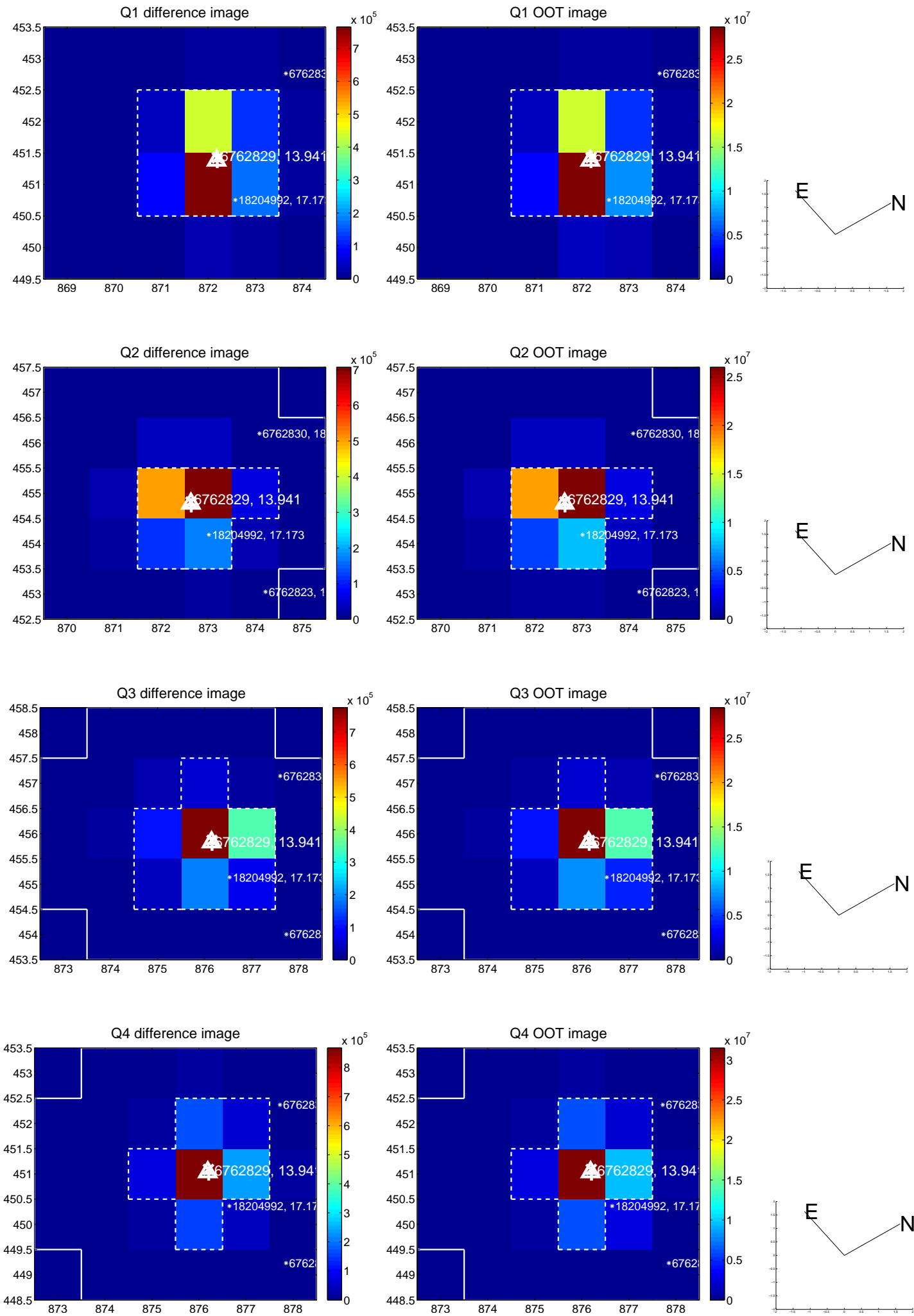


offset from photometric centroids

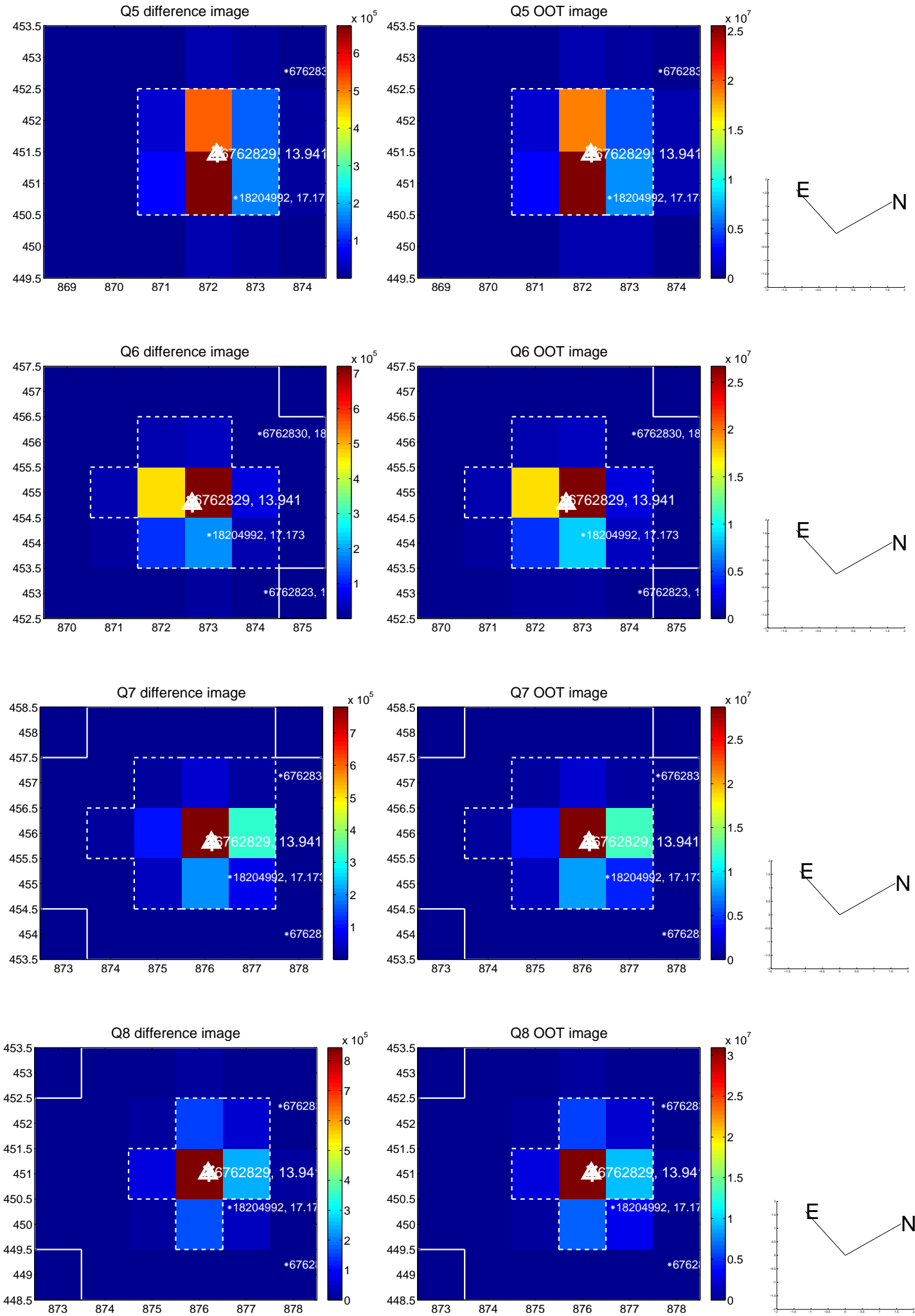


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

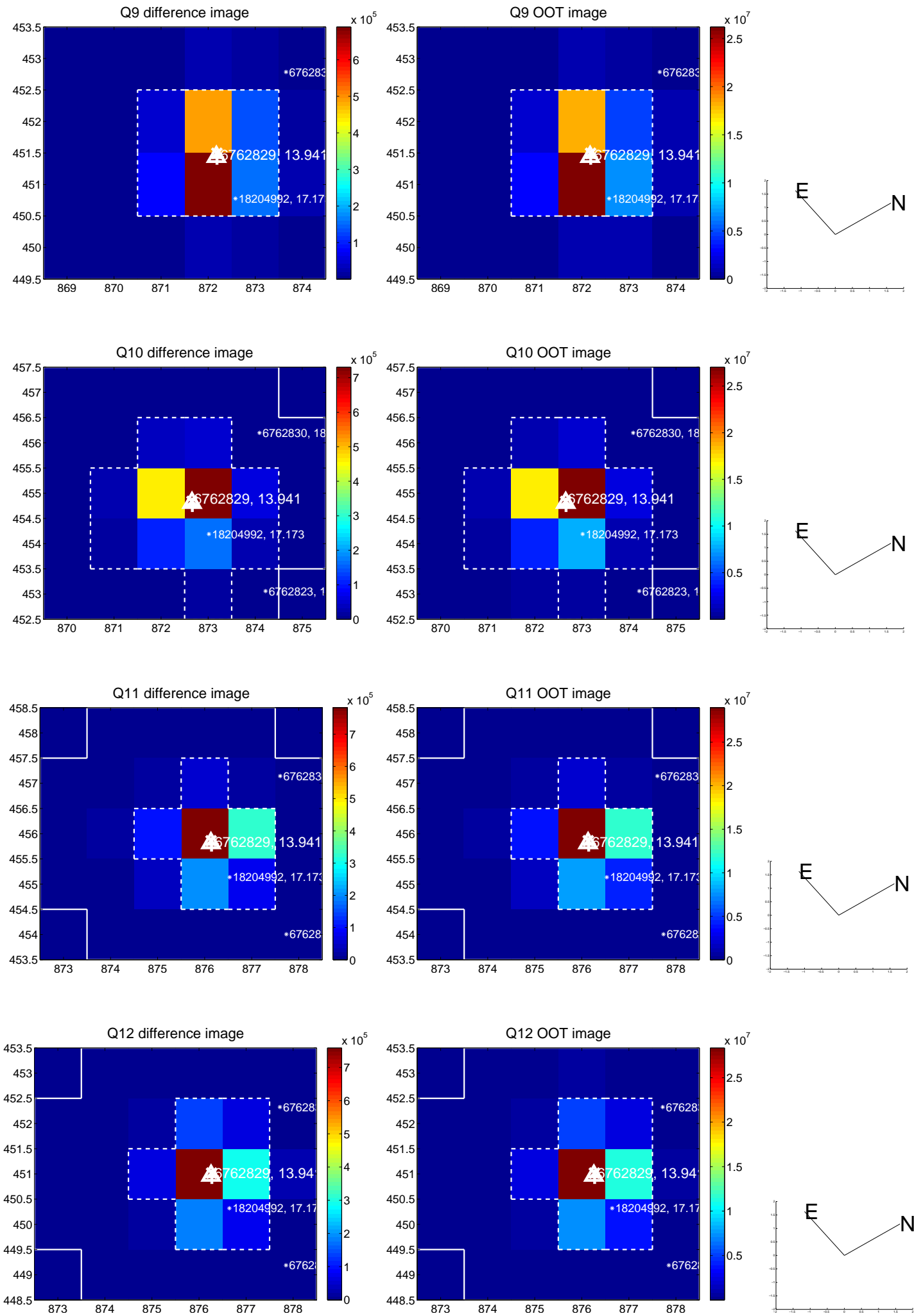
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



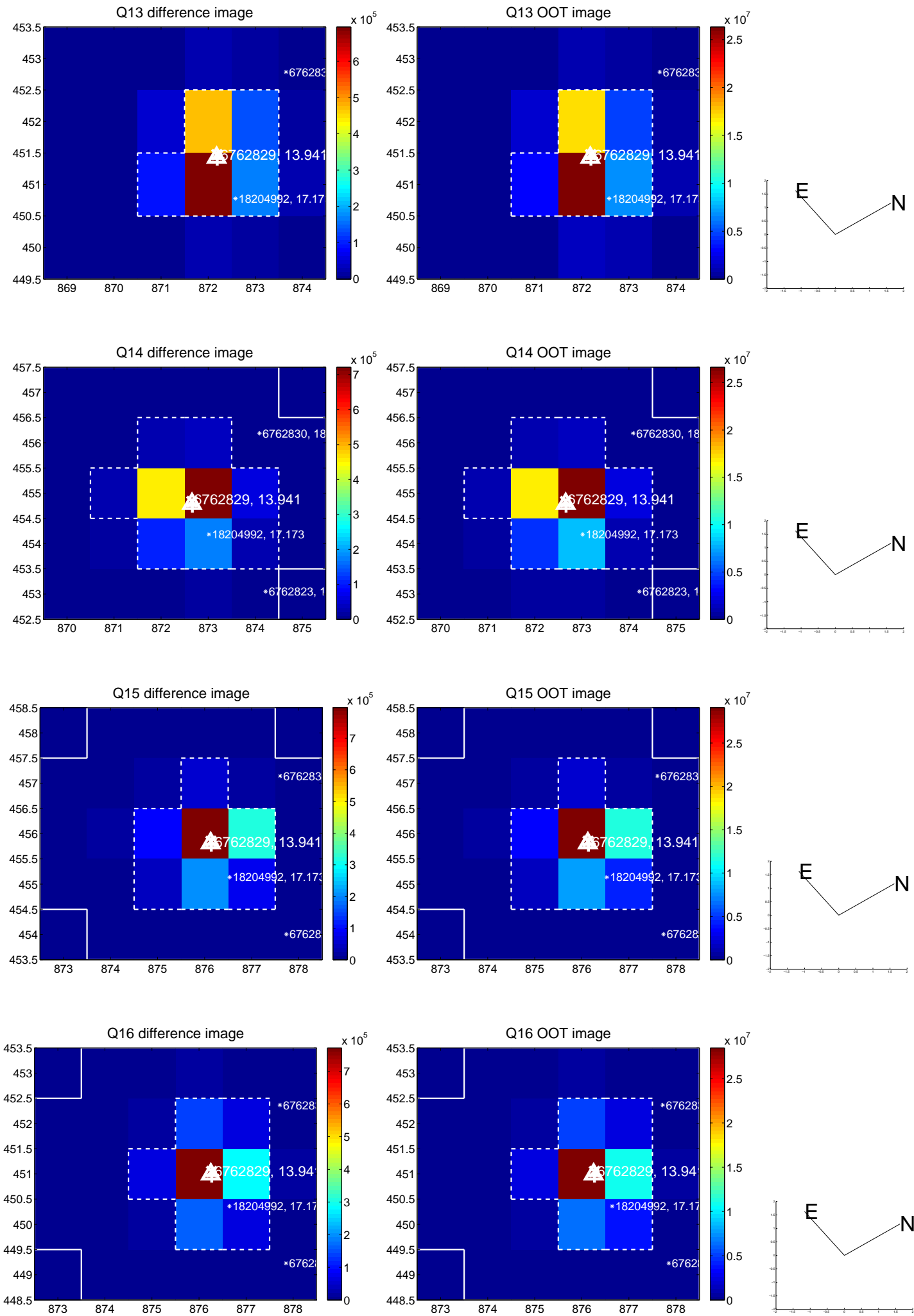
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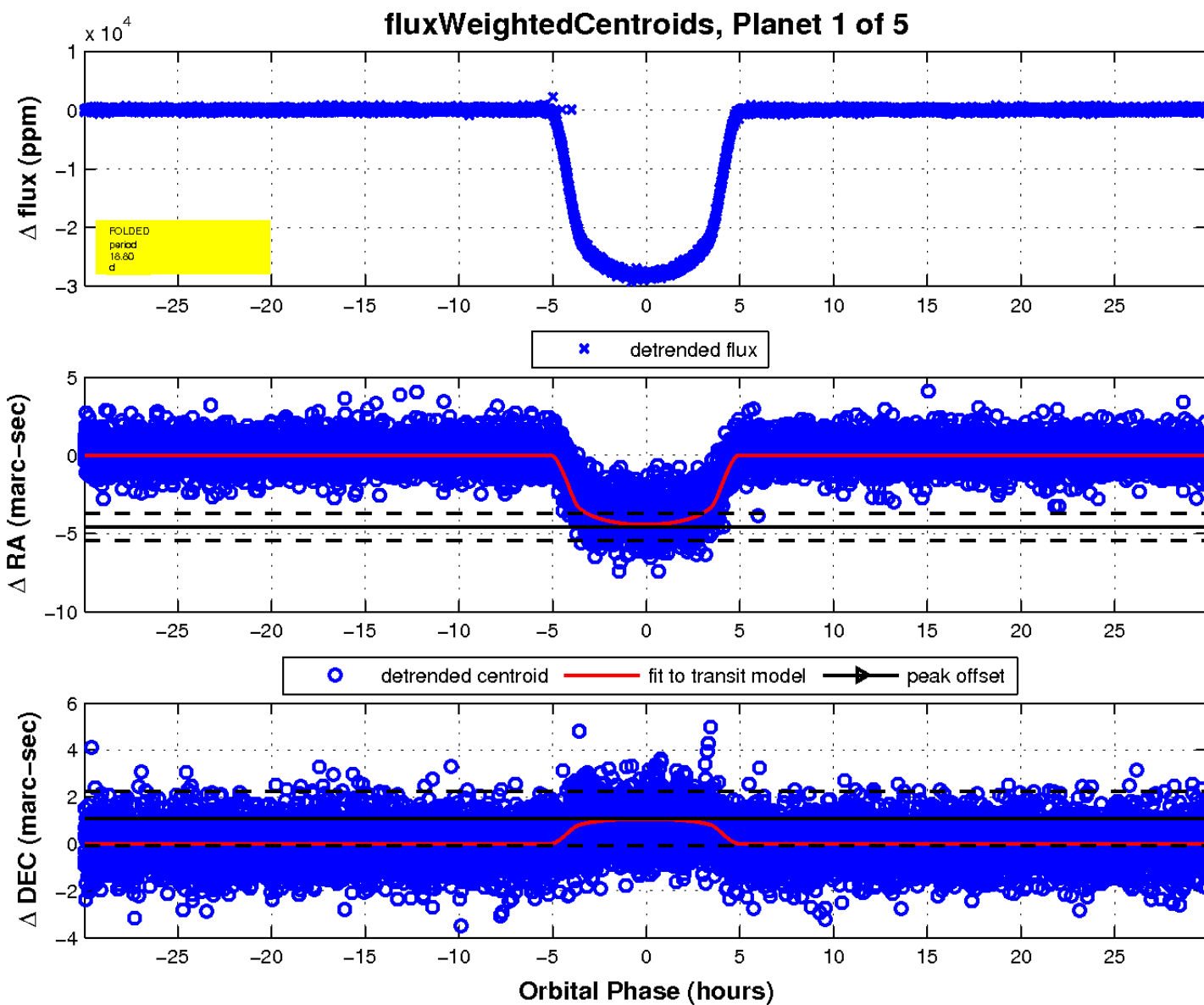
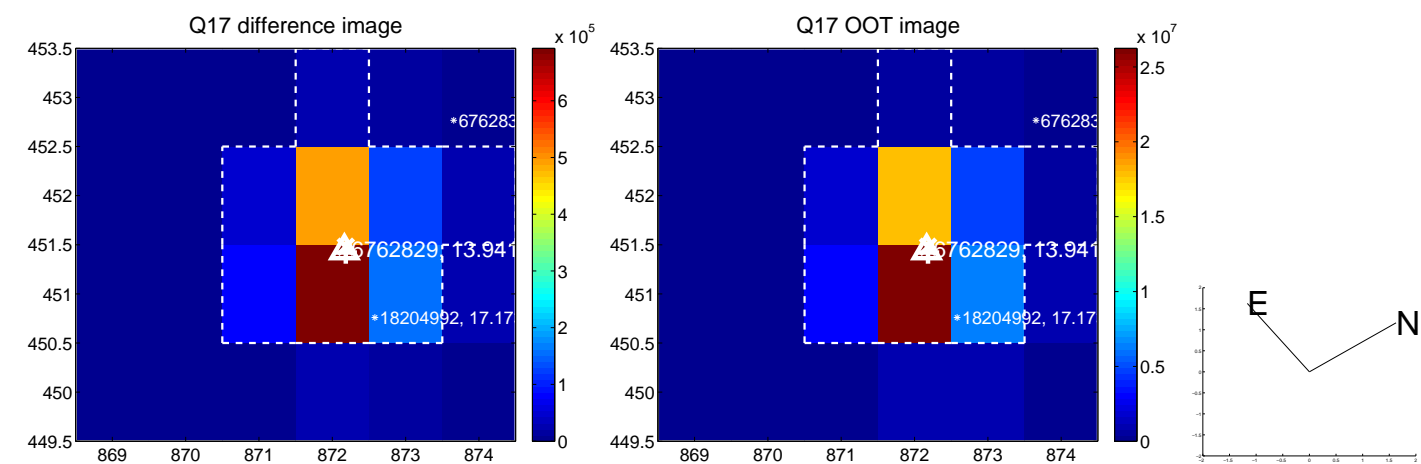
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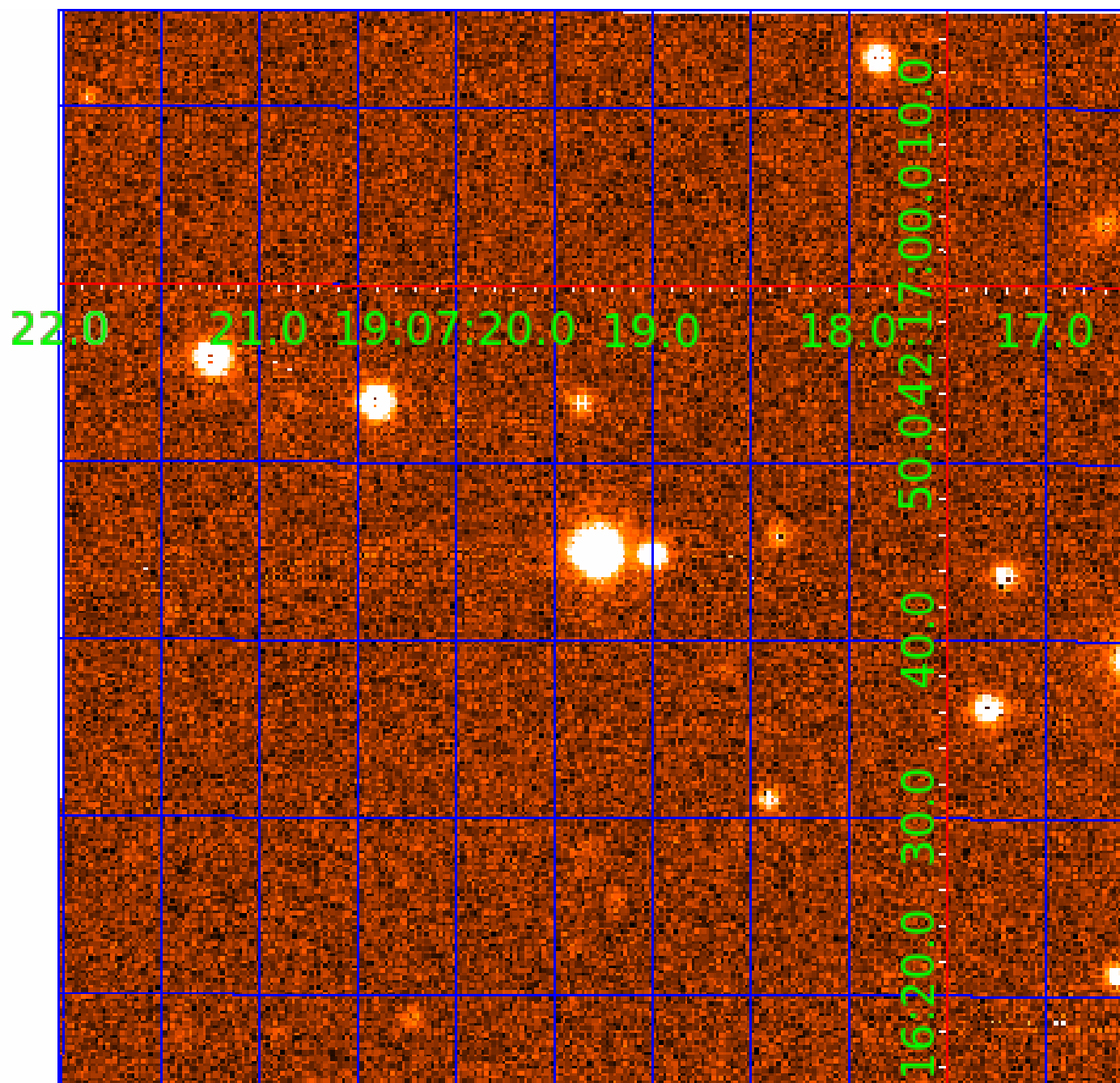


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006762829

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
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Robovetter Results

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006762829-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
006762829-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS
006762829-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—ALL_TRANS_CHASES
006762829-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—ALL_TRANS_CHASES

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.

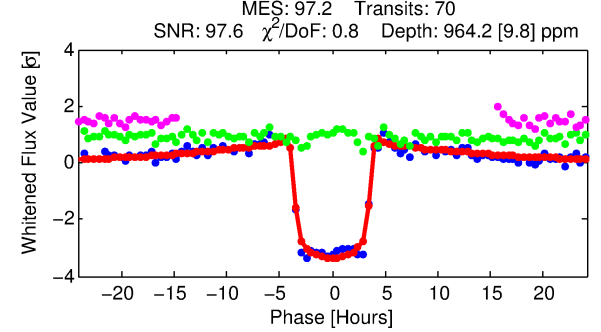
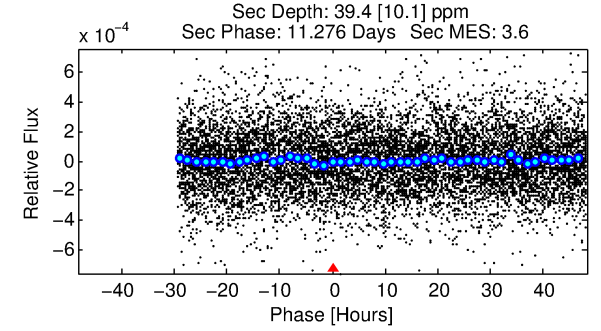
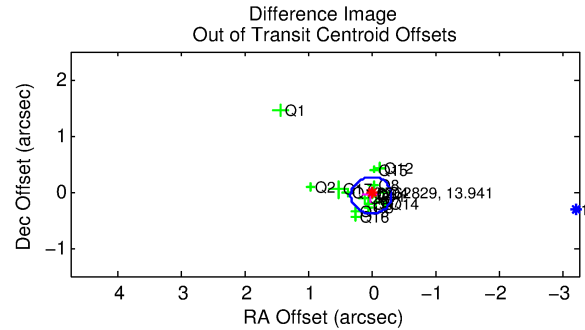
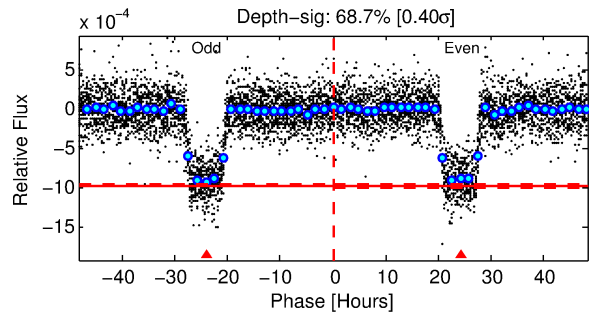
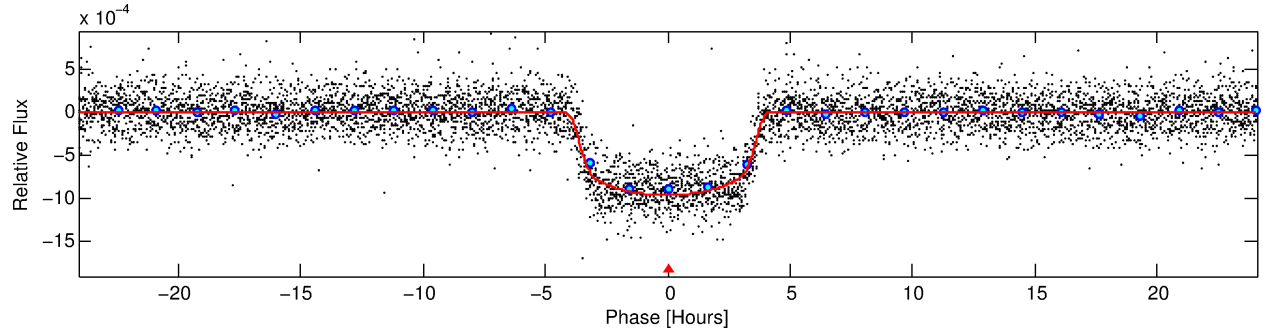
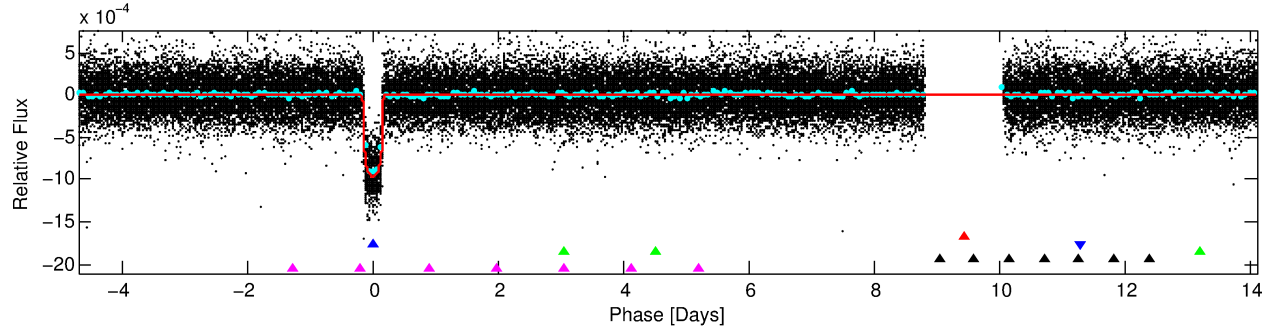
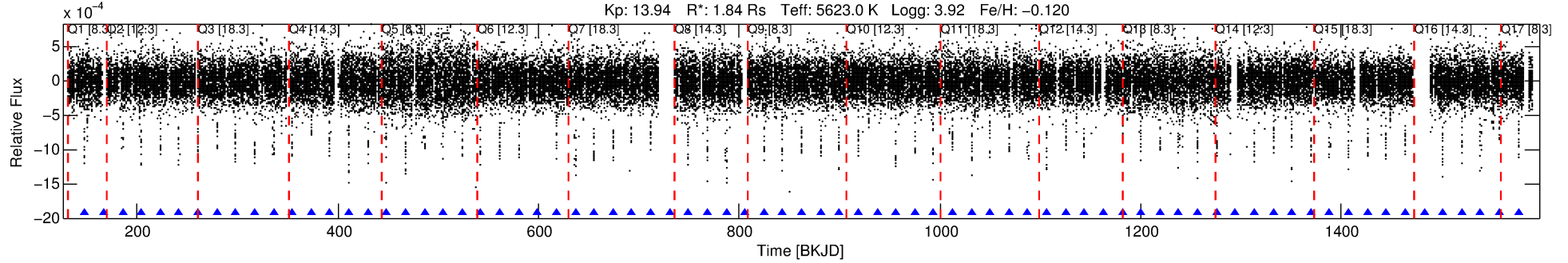
Ephemeris Match Information For 006762829-02

No Significant Match Found

DV One-Page Summary

KIC: 6762829 Candidate: 2 of 5 Period: 18.795 d

KOI: K01740 Corr: No Ephemeris Match



DV Fit Results:

Period = 18.79526 [0.00003] d
Epoch = 148.0381 [0.0013] BKJD
Rp/R* = 0.0322 [0.0005]
a/R* = 10.92 [0.65]
b = 0.83 [0.02]
Seff = 154.43 [20.15]
Teff = 899 [29] K
Rp = 6.47 [0.58] Re
a = 0.1402 [0.0101] AU
Ag = 10.18 [2.83] [3.24 σ]
Teffp = 2482 [168] K [9.29 σ]

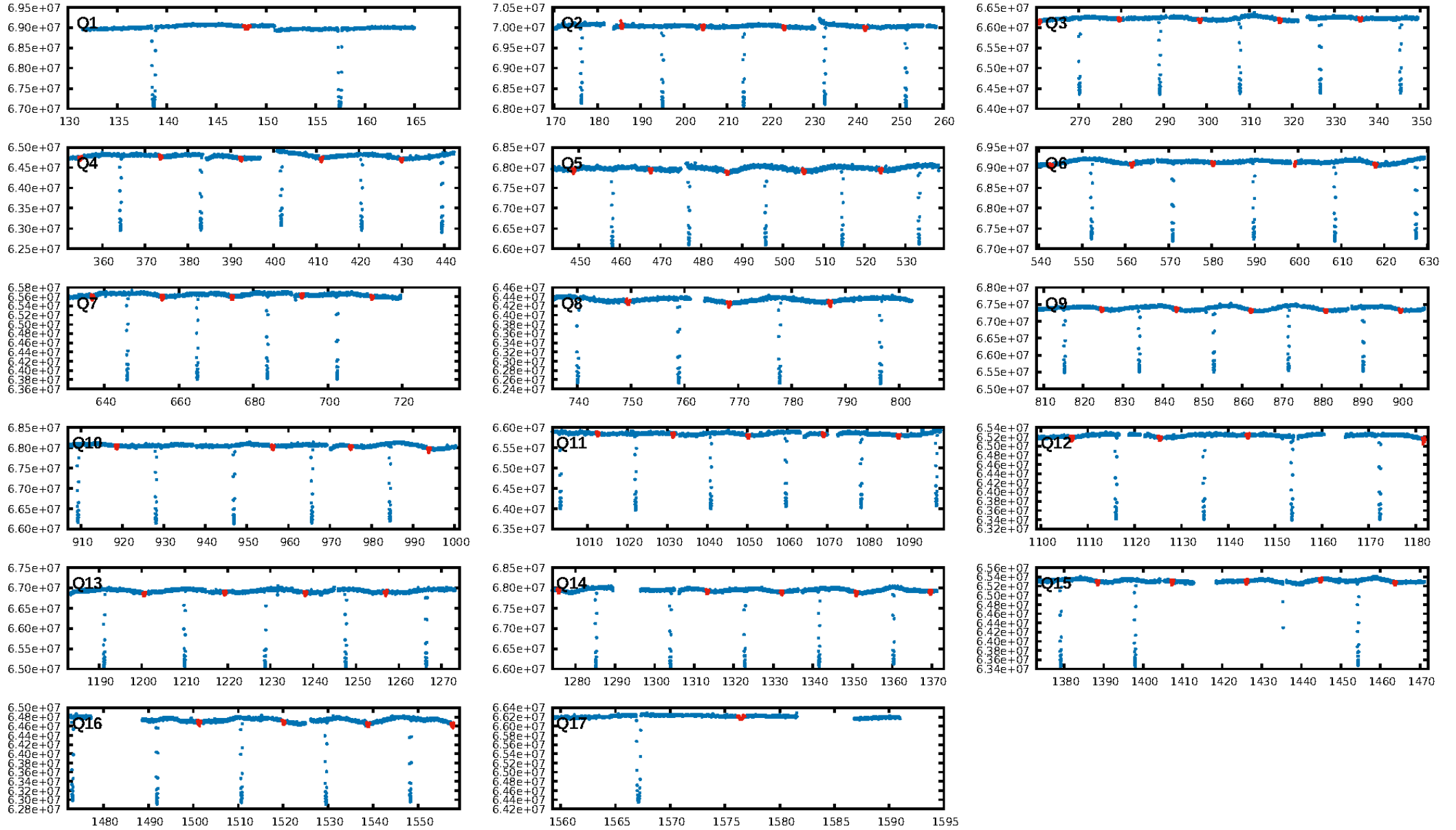
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00 σ]
ModelChiSquare2-sig: 1.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [68/68]
GhostDiagnostic-chr: 6.441
Centroid-sig: 20.7%
Centroid-so: 0.228 arcsec [2.32 σ]
OotOffset-rm: 0.067 arcsec [0.63 σ]
KicOffset-rm: 0.288 arcsec [1.80 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

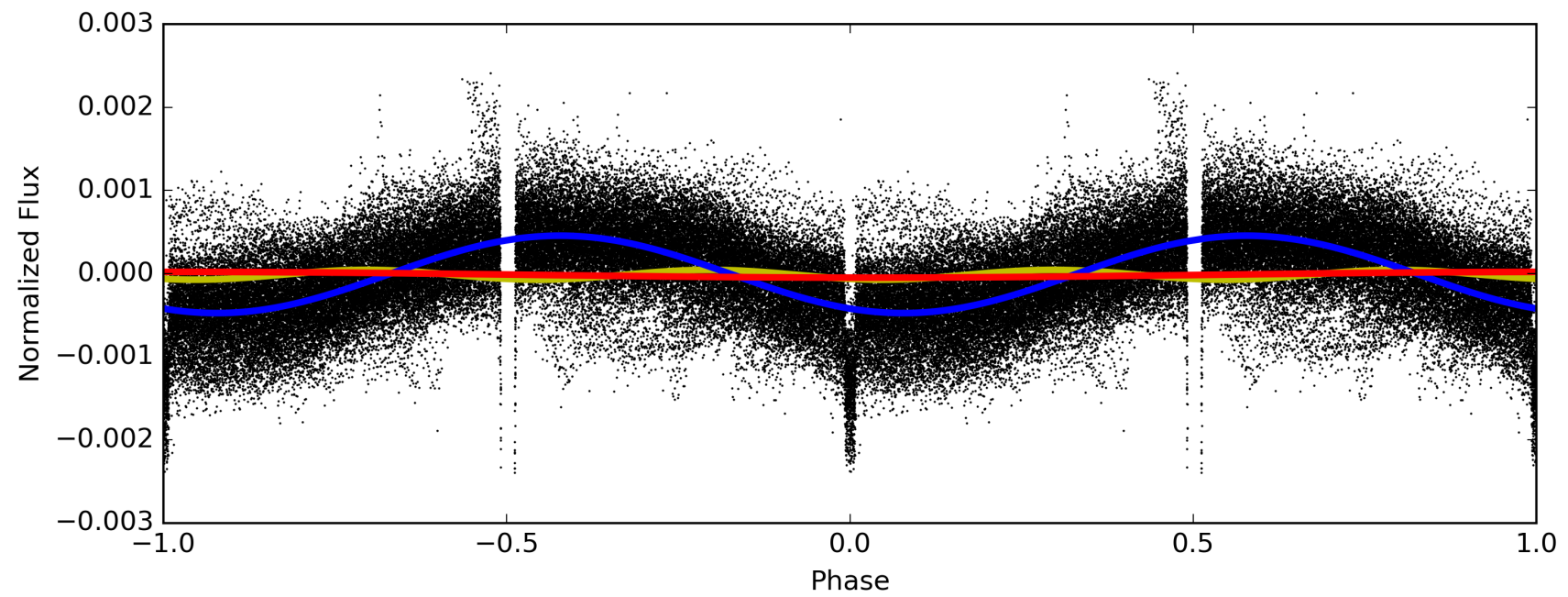
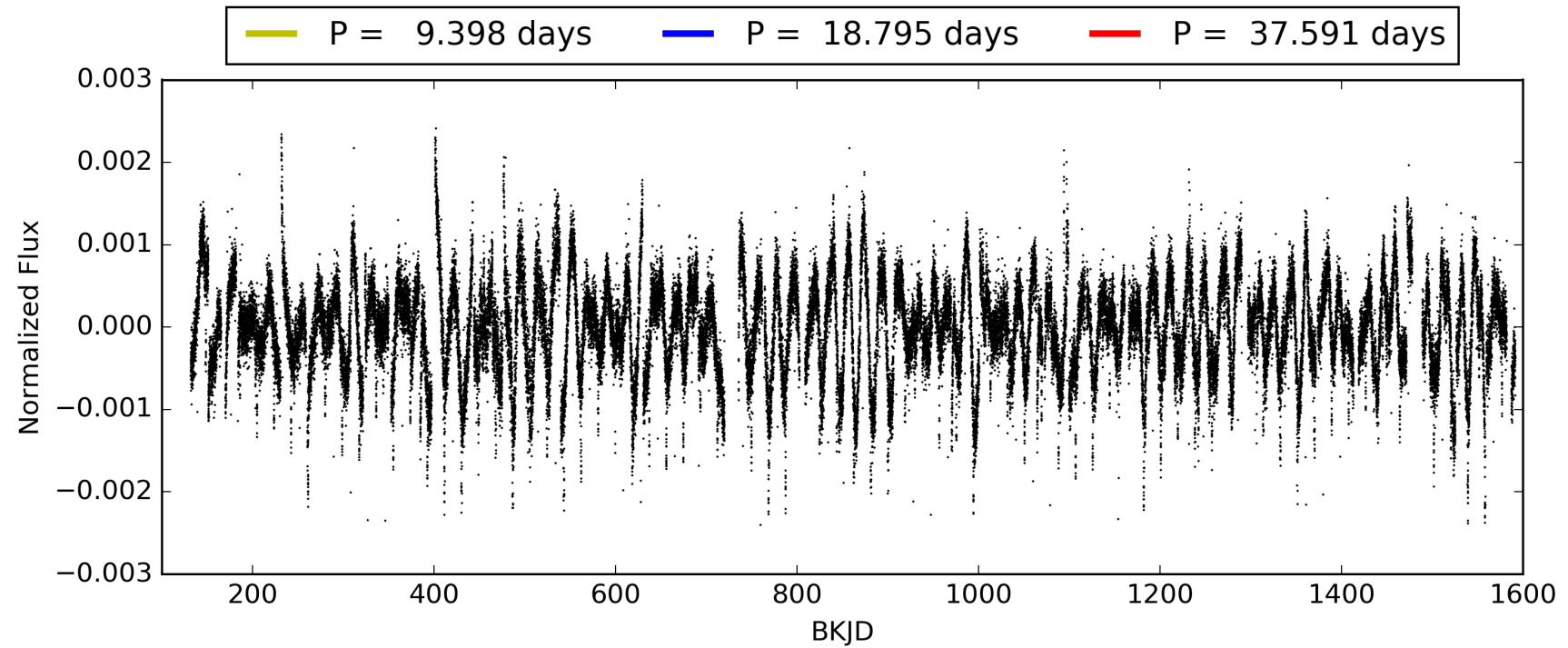
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 006762829-02, PDC Light Curves

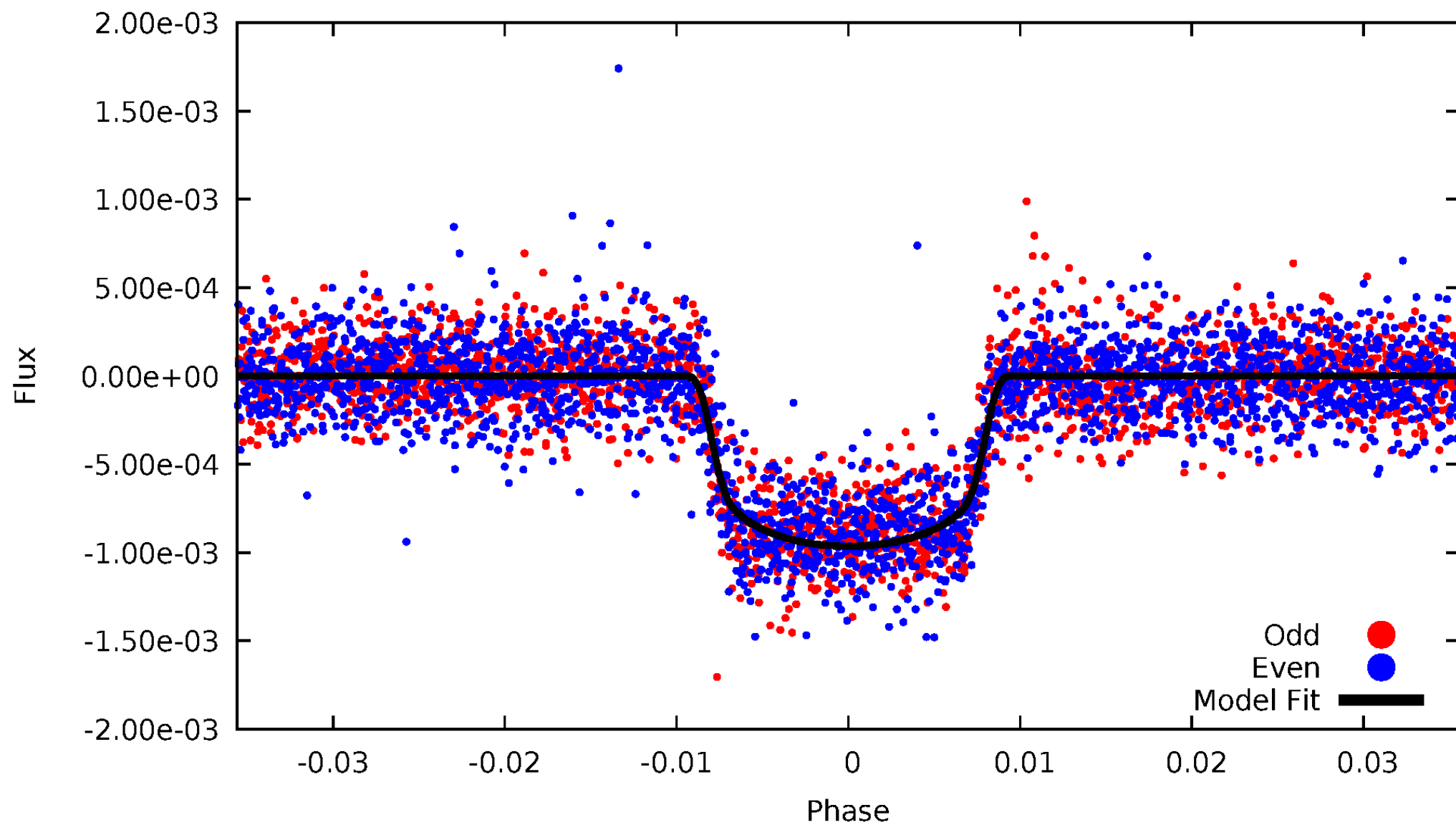


TCE 006762829-02



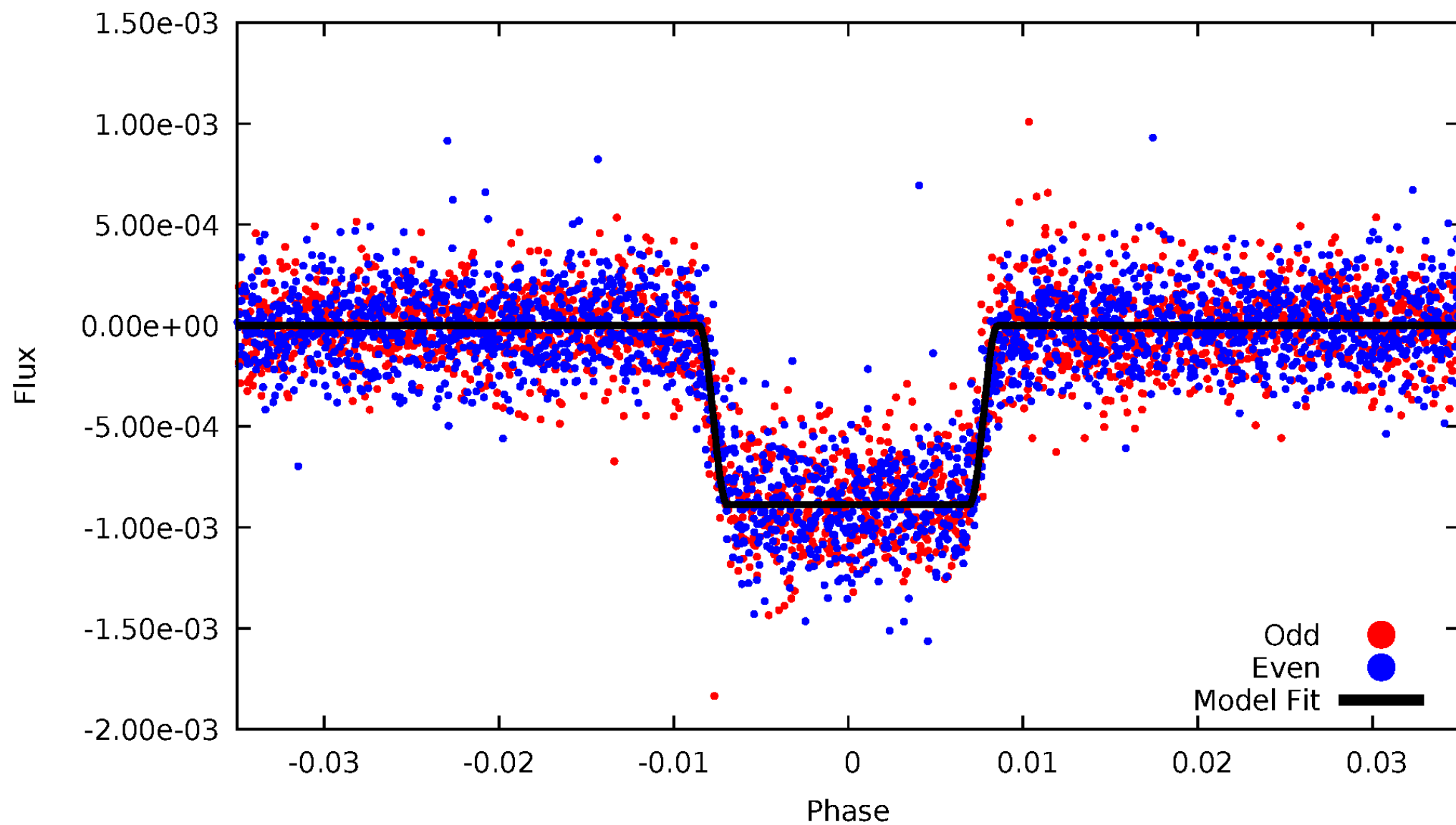
DV Odd/Even

TCE 006762829-02



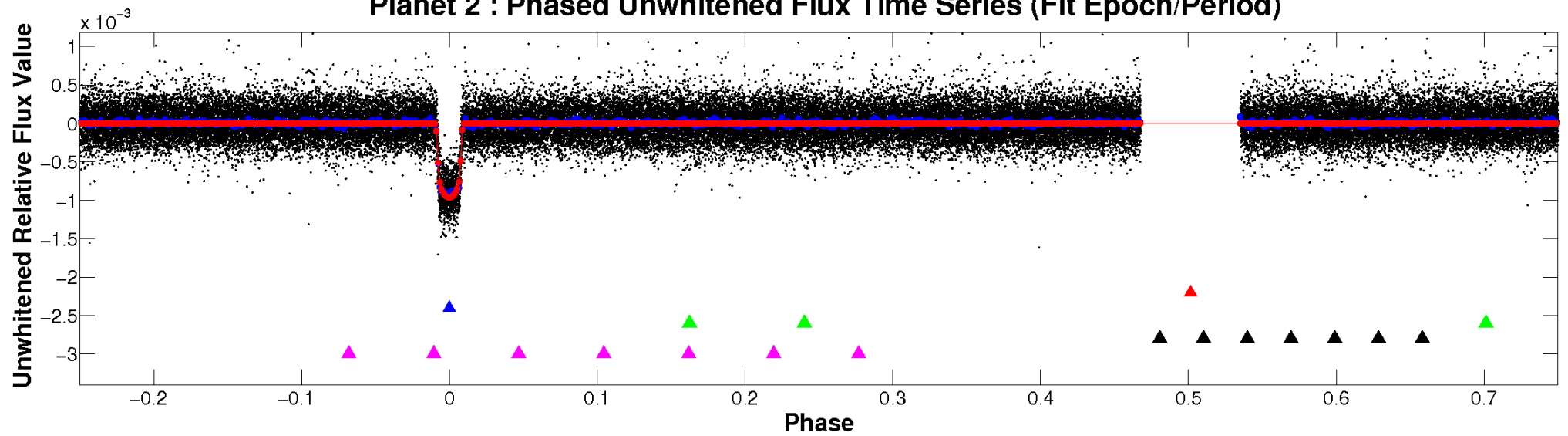
ALT Odd/Even

TCE 006762829-02

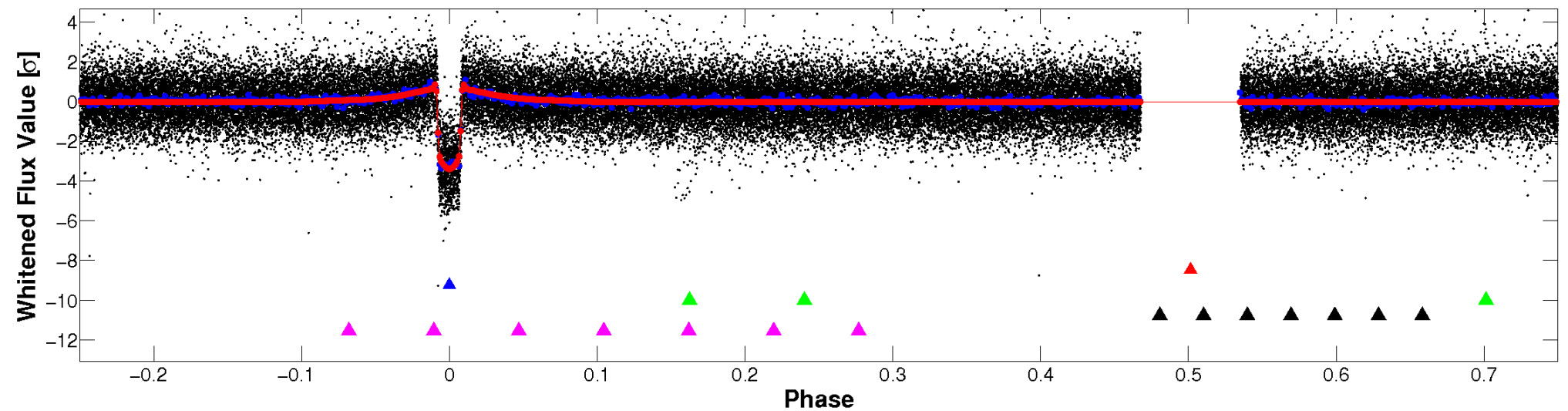


Non-Whitened Vs. Whitened Light Curve

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

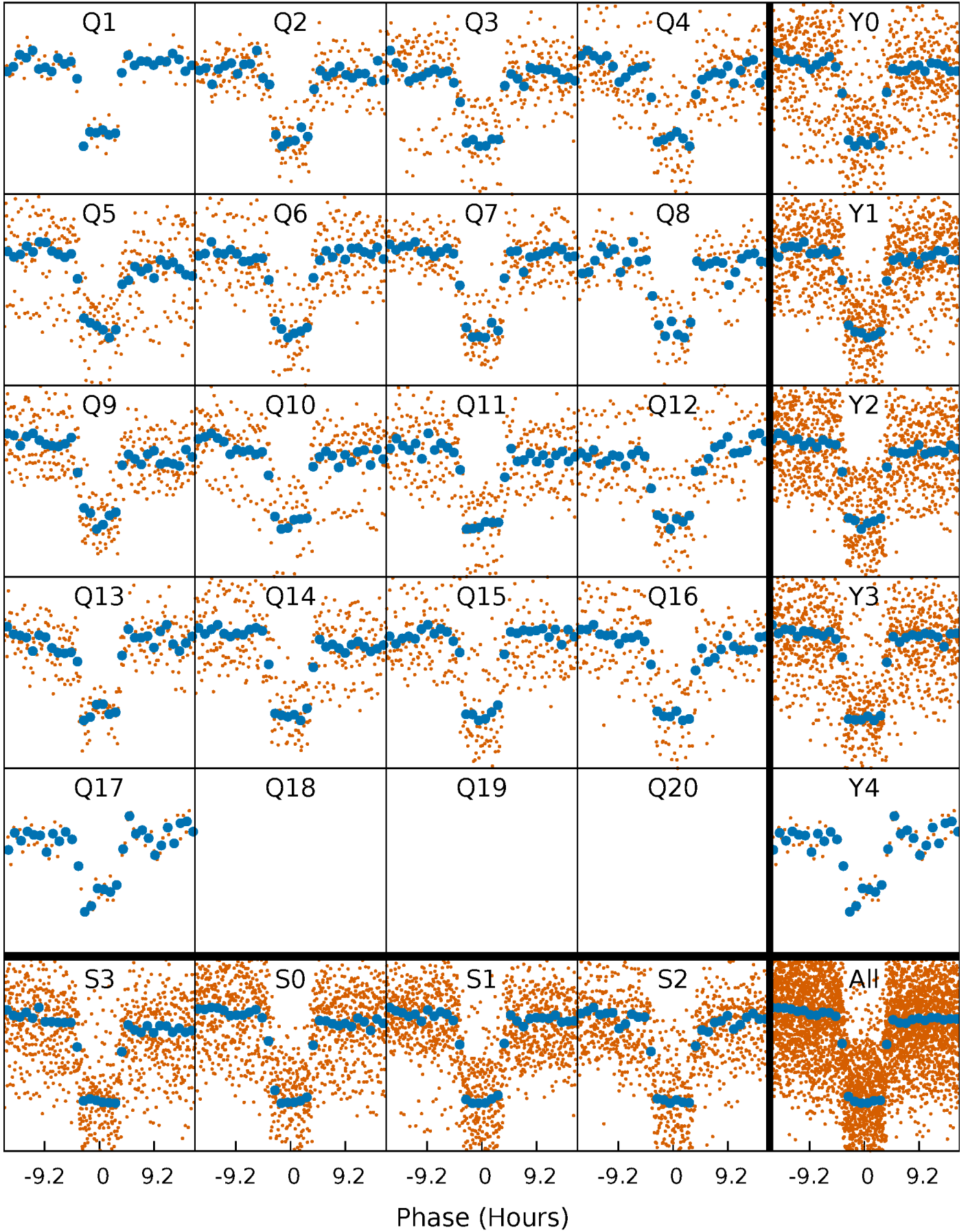


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



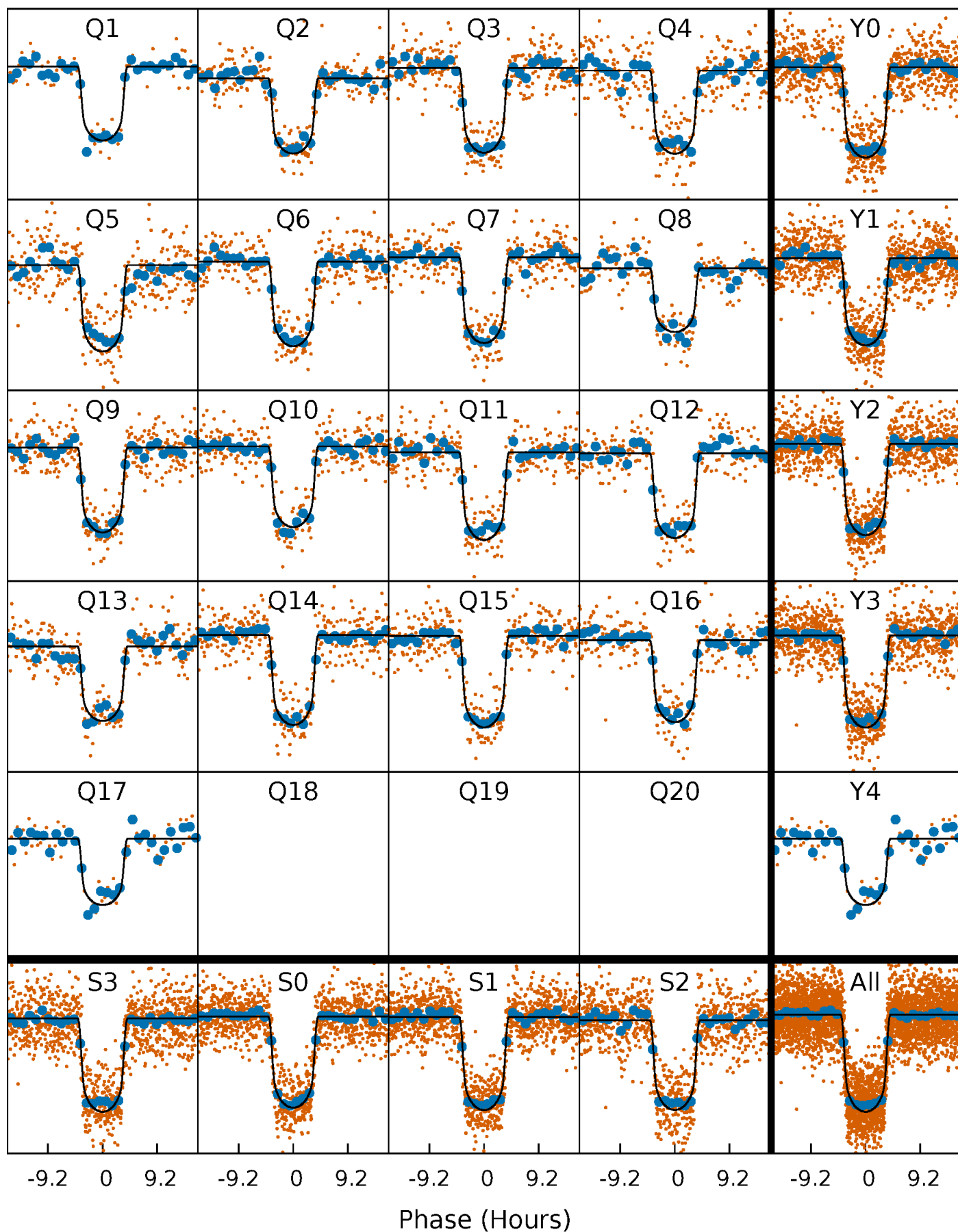
PDC Quarter-Phased Transit Curves

TCE 006762829-02 P= 18.795261 Days $T_0=148.038098$ (BKJD)



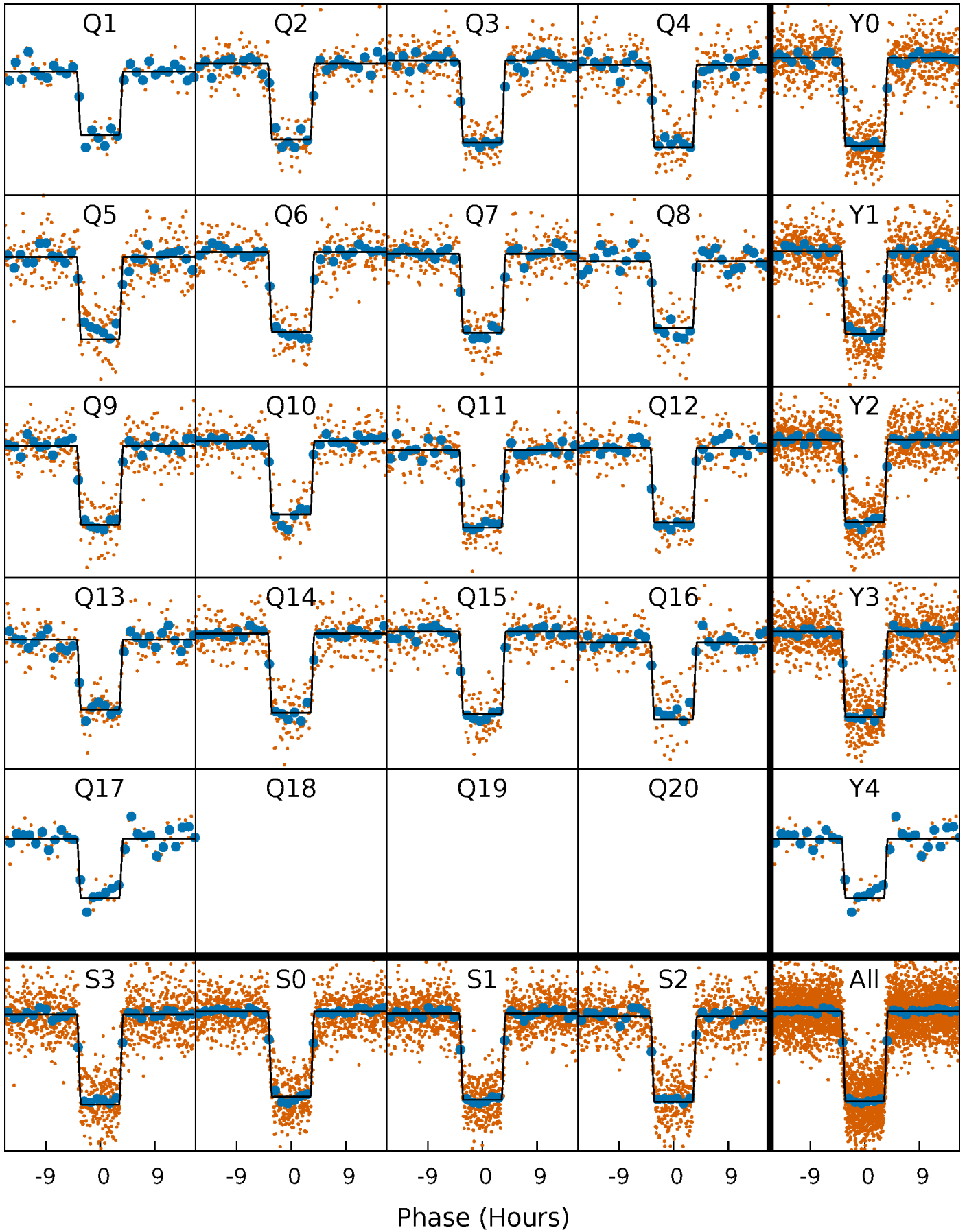
DV Quarter-Phased Transit Curves

TCE 006762829-02 P= 18.795261 Days $T_0=148.038098$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

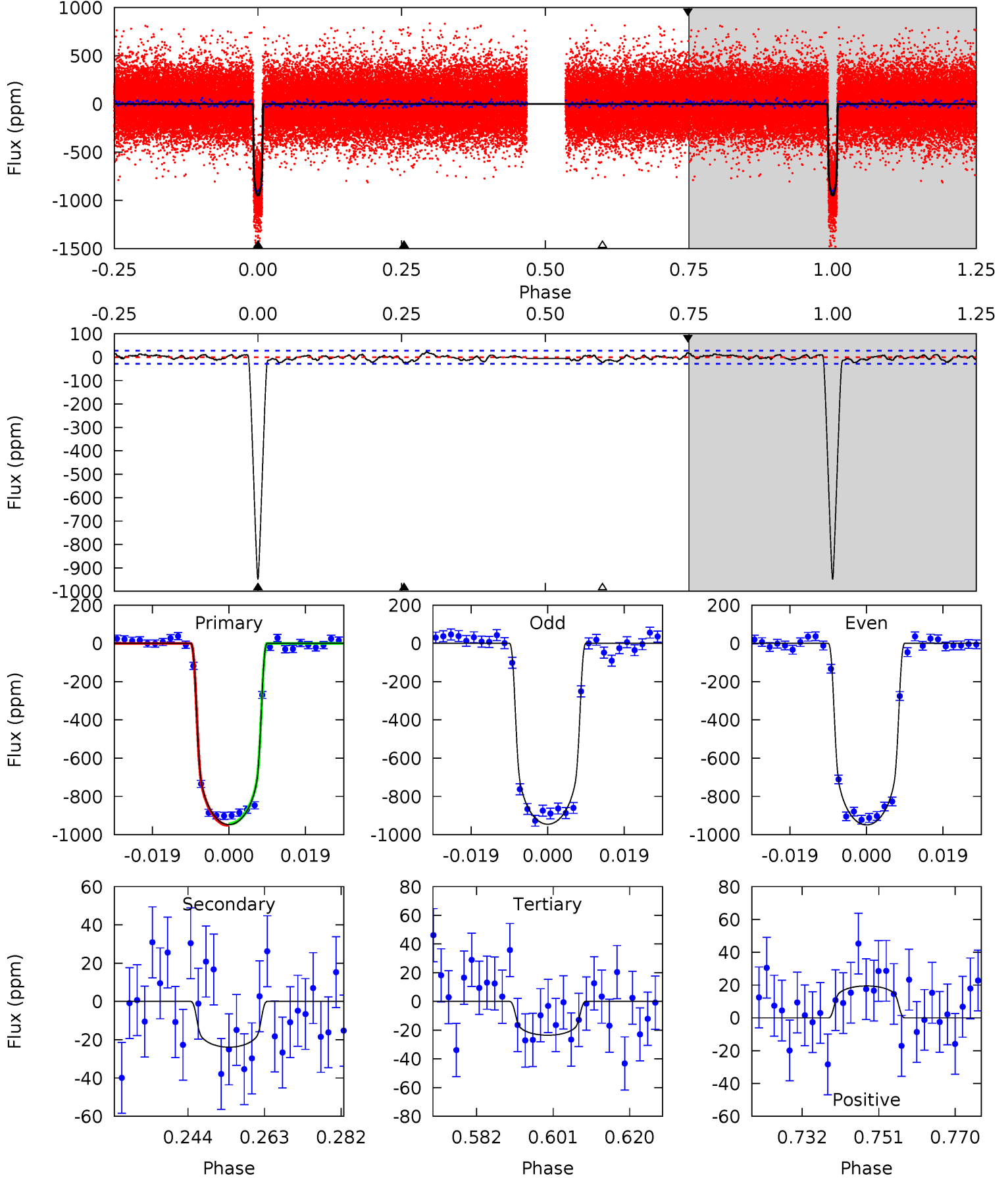
TCE 006762829-02 P= 18.795279 Days $T_0=148.037371$ (BKJD)



DV Model-Shift Uniqueness Test

006762829-02, P = 18.795261 Days, E = 129.242837 Days

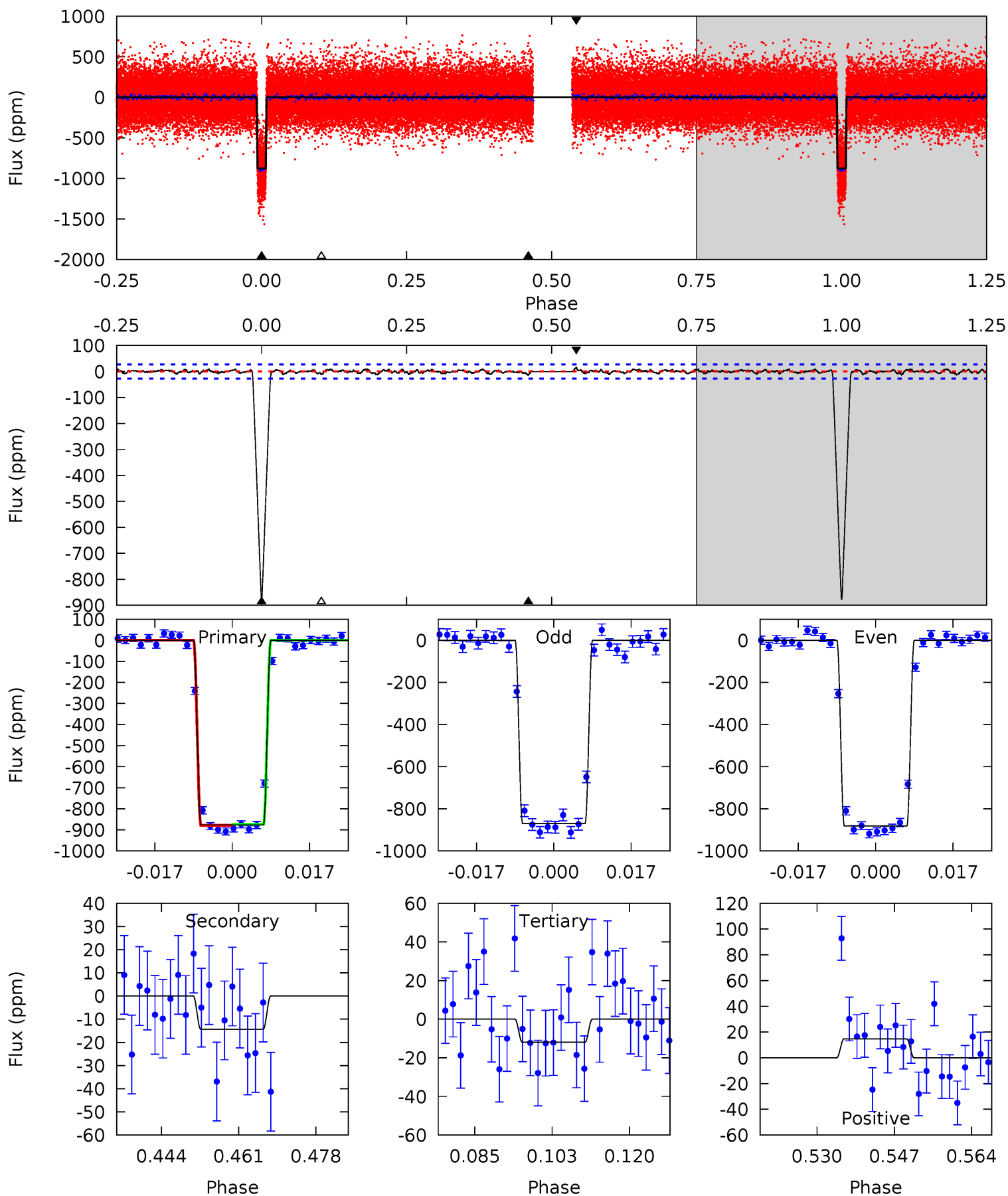
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
166.5	4.20	4.14	3.42	4.90	2.35	1.47	162.4	163.1	0.06	0.78	0.33	0.98	0.02	0.71



Alt Model-Shift Uniqueness Test

006762829-02, P = 18.795279 Days, E = 129.242092 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
158.9	2.59	2.17	2.68	4.92	2.38	0.80	156.7	156.2	0.42	-0.08	1.03	1.00	0.02	0.45



Stellar Parameters For KIC 006762829

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5623^{+113}_{-113}	$3.925^{+0.055}_{-0.045}$	$-0.120^{+0.150}_{-0.150}$	$1.841^{+0.162}_{-0.162}$	$1.038^{+0.092}_{-0.084}$	$0.234^{+0.060}_{-0.036}$
	+2%/-2%	+1%/-1%	+125%/-125%	+9%/-9%	+9%/-8%	+25%/-15%
Source	SPE37	TRA37	SPE37	DSEP		

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

Secondary Eclipse Parameters for KIC 006762829-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-24 ± 6	$6.46^{+0.34}_{-0.34}$	1255^{+34}_{-36}	2872^{+102}_{-107}	$6.163^{+1.710}_{-1.607}$
Alt.	-14 ± 6	$5.97^{+0.30}_{-0.30}$	1253^{+35}_{-34}	2738^{+128}_{-182}	$4.441^{+1.614}_{-1.709}$

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

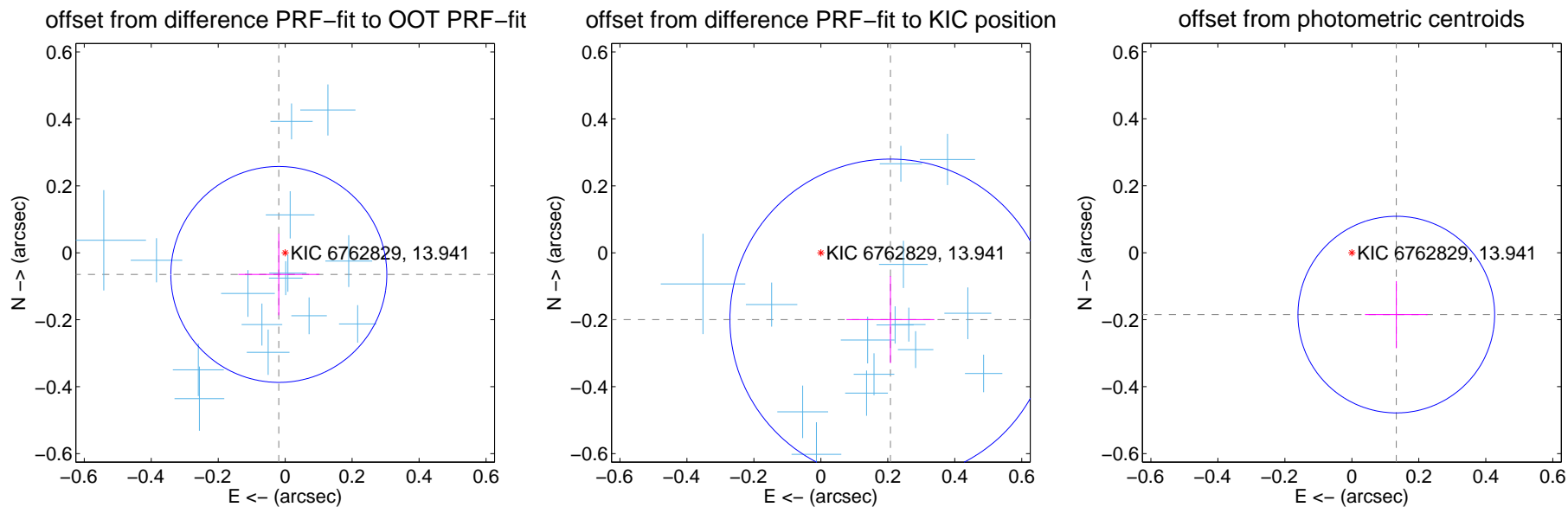
DV Centroid Data

Supplemental centroid analysis for 006762829-02. Kepler magnitude: 13.94. Transit SNR 97.56

There are 17 quarters with good PRF difference image offsets

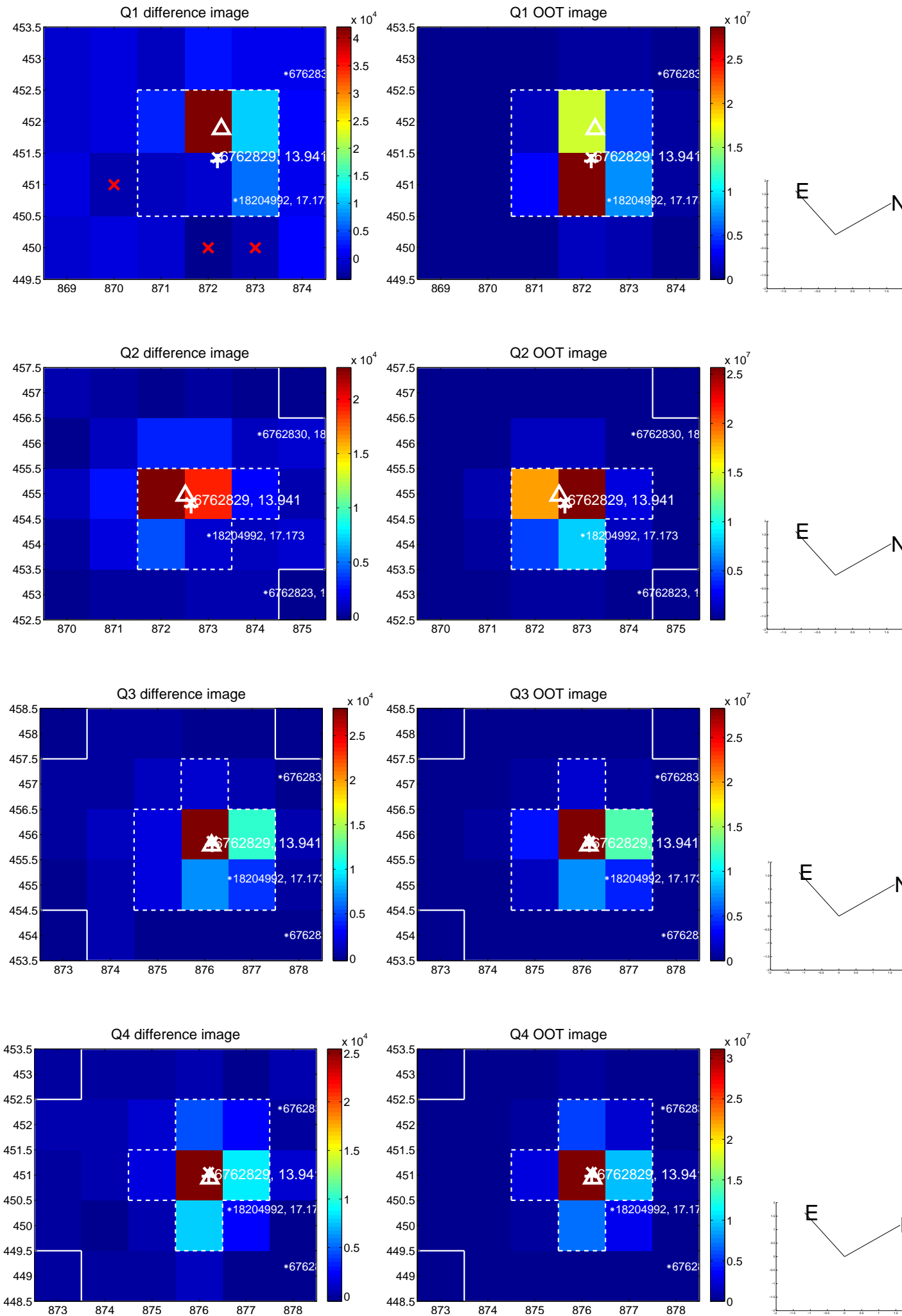
The direct PRF centroid is offset from the target star catalog position by about 0.23 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.067 ± 0.108	0.63	0.019 ± 0.121	-0.065 ± 0.122
PRF-fit source offset from KIC position	0.288 ± 0.160	1.80	-0.208 ± 0.131	-0.200 ± 0.130
photometric centroid source offset	0.23 ± 0.10	2.32	-0.13 ± 0.09	-0.18 ± 0.10

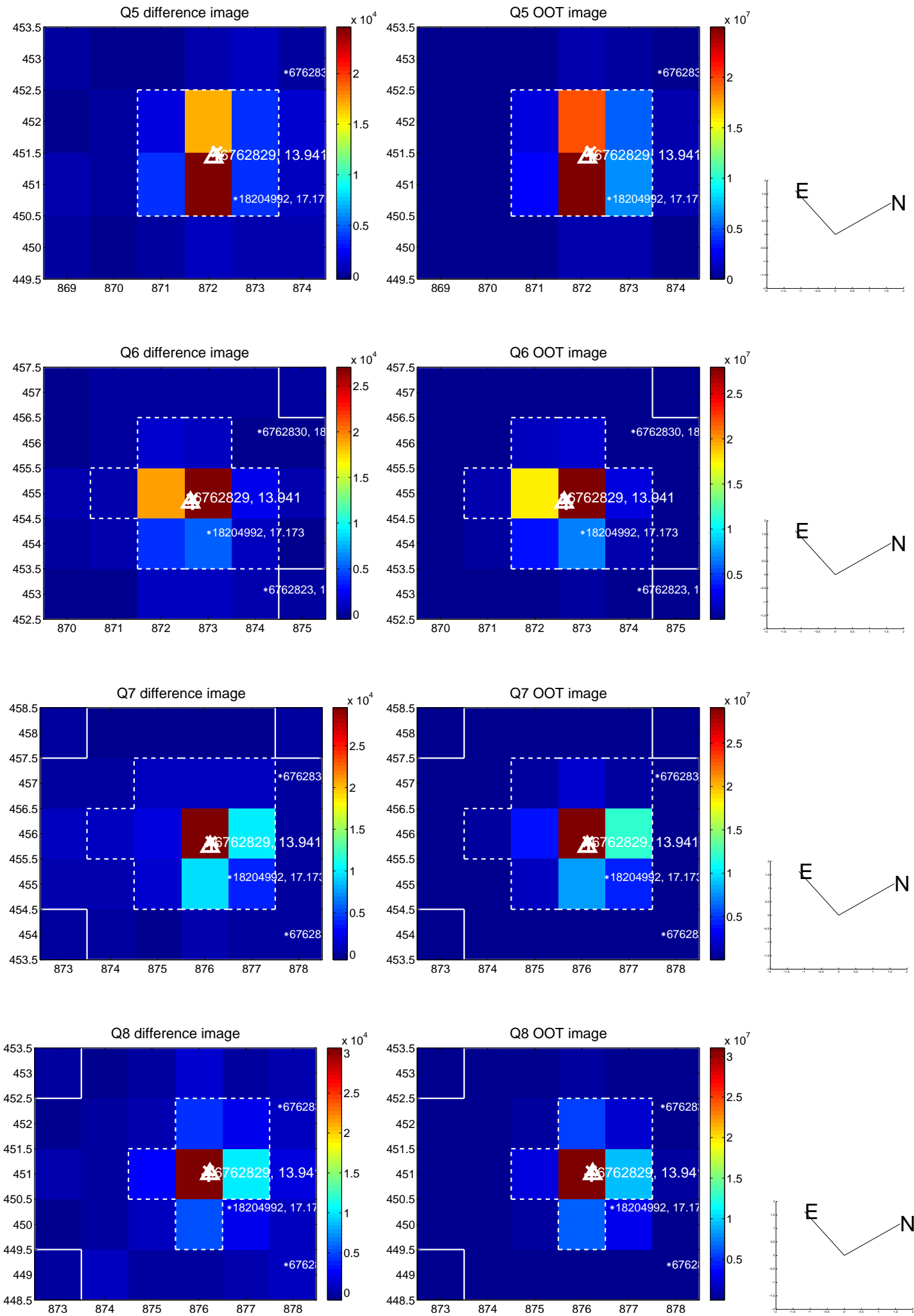


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

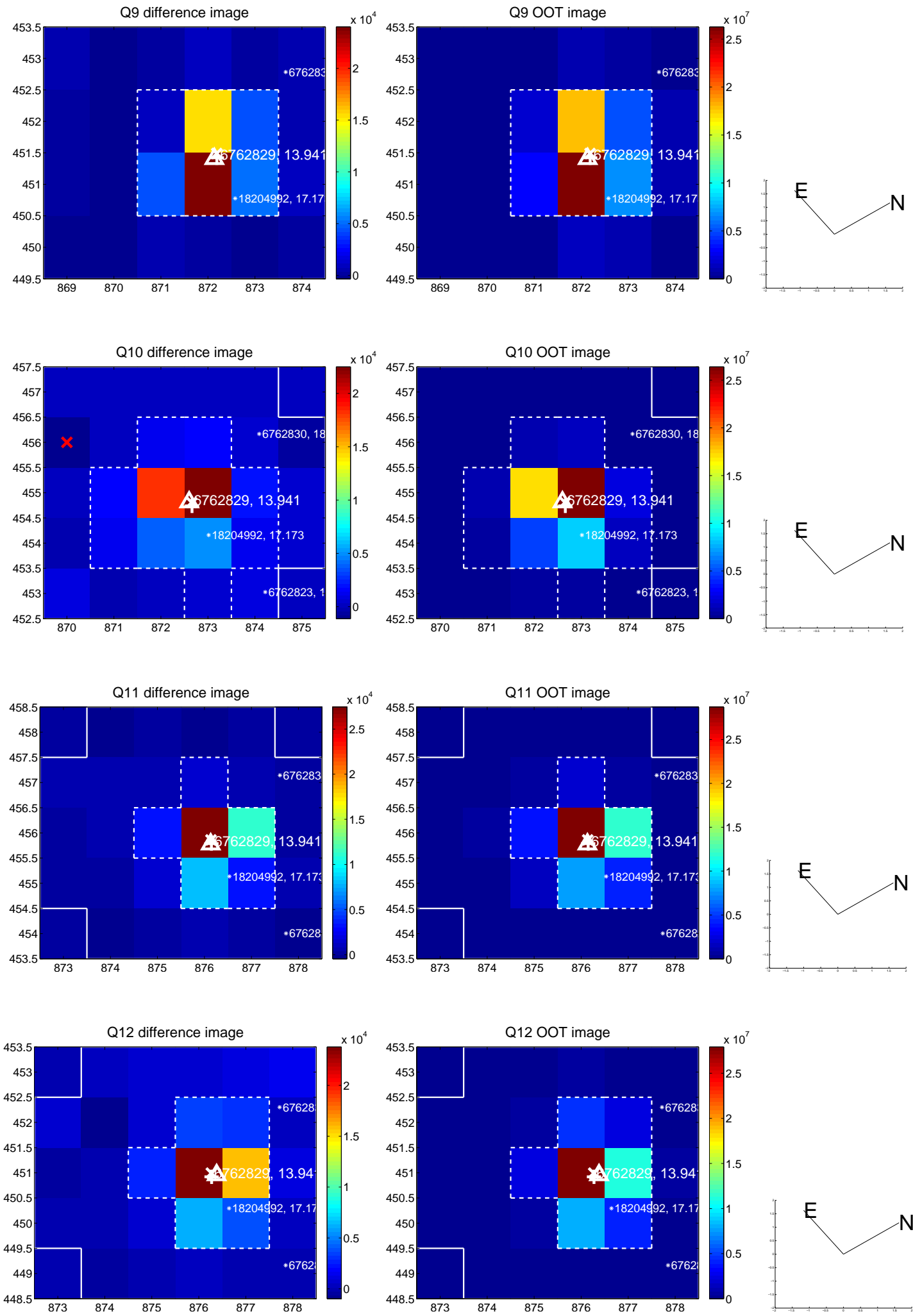
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



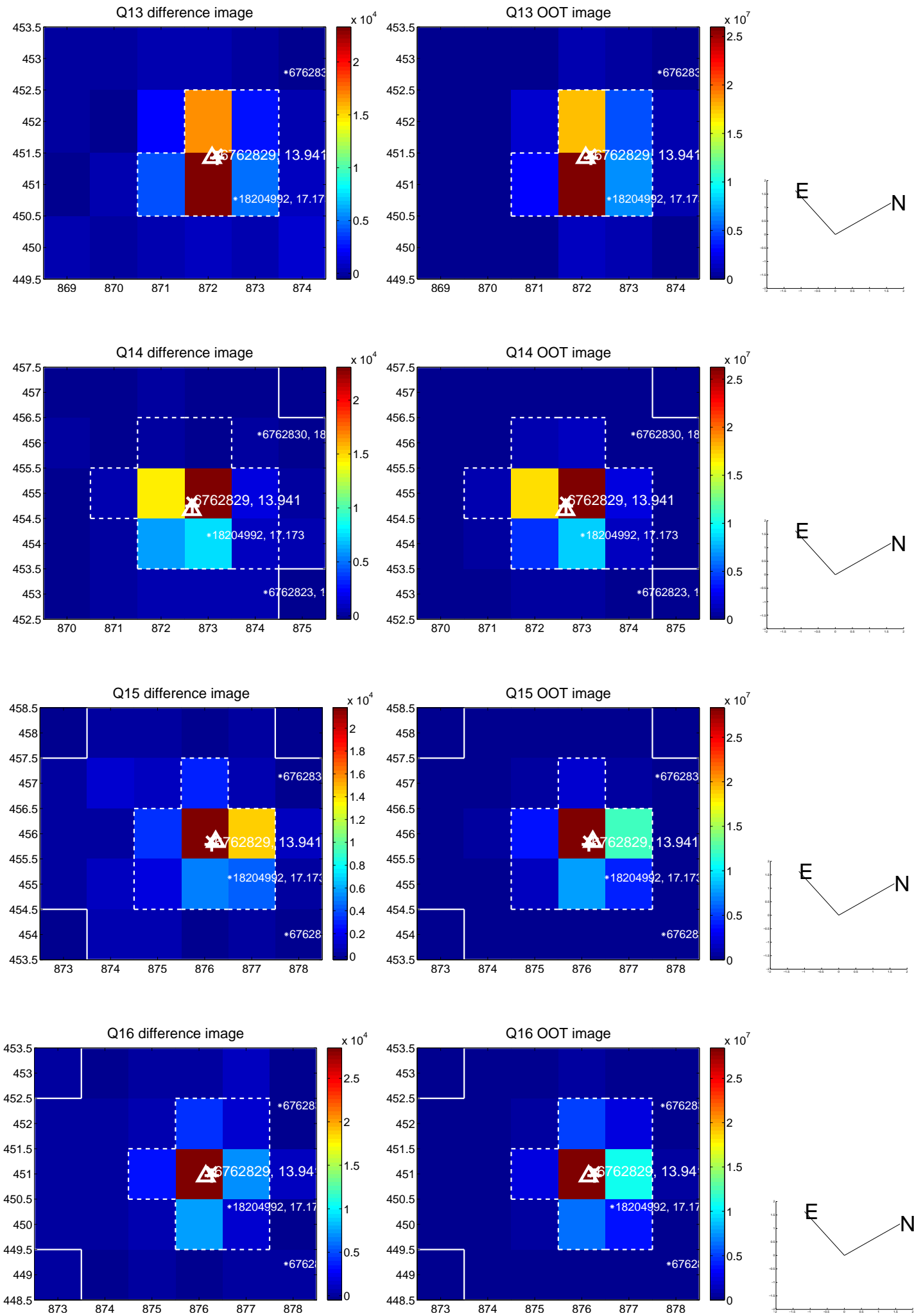
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



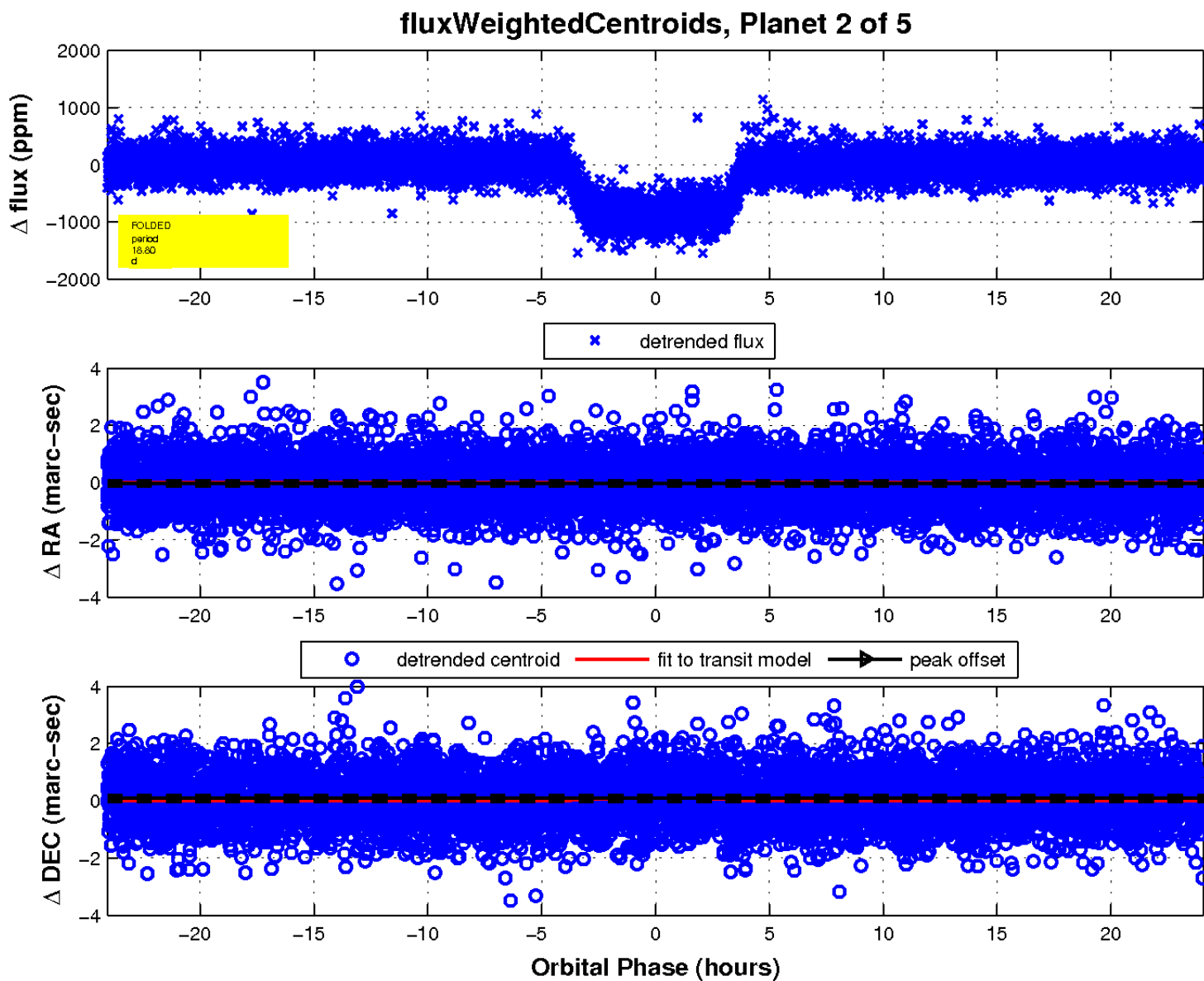
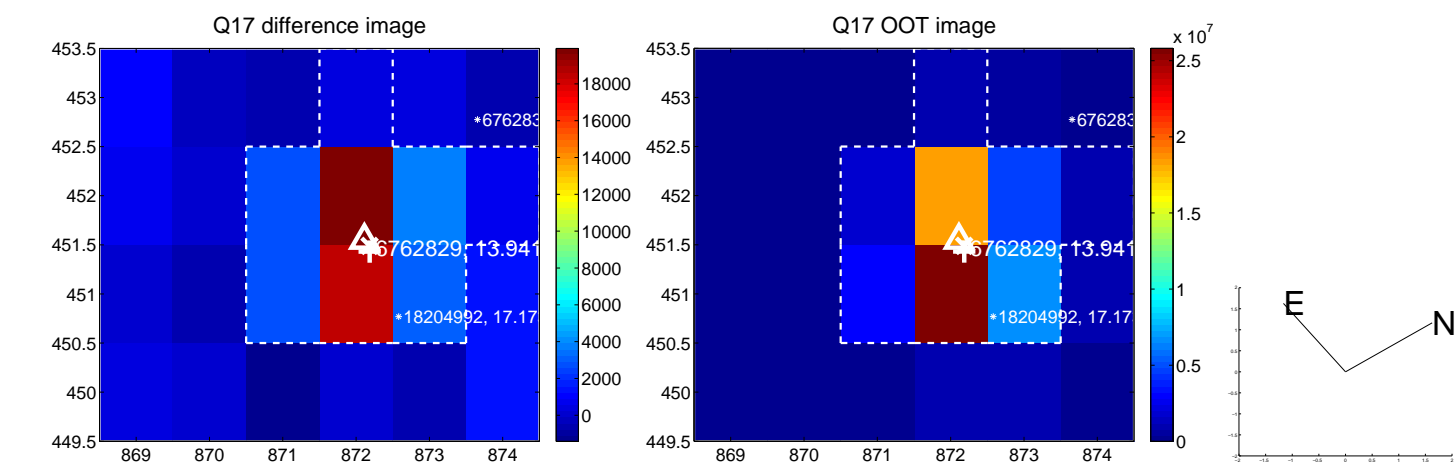
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

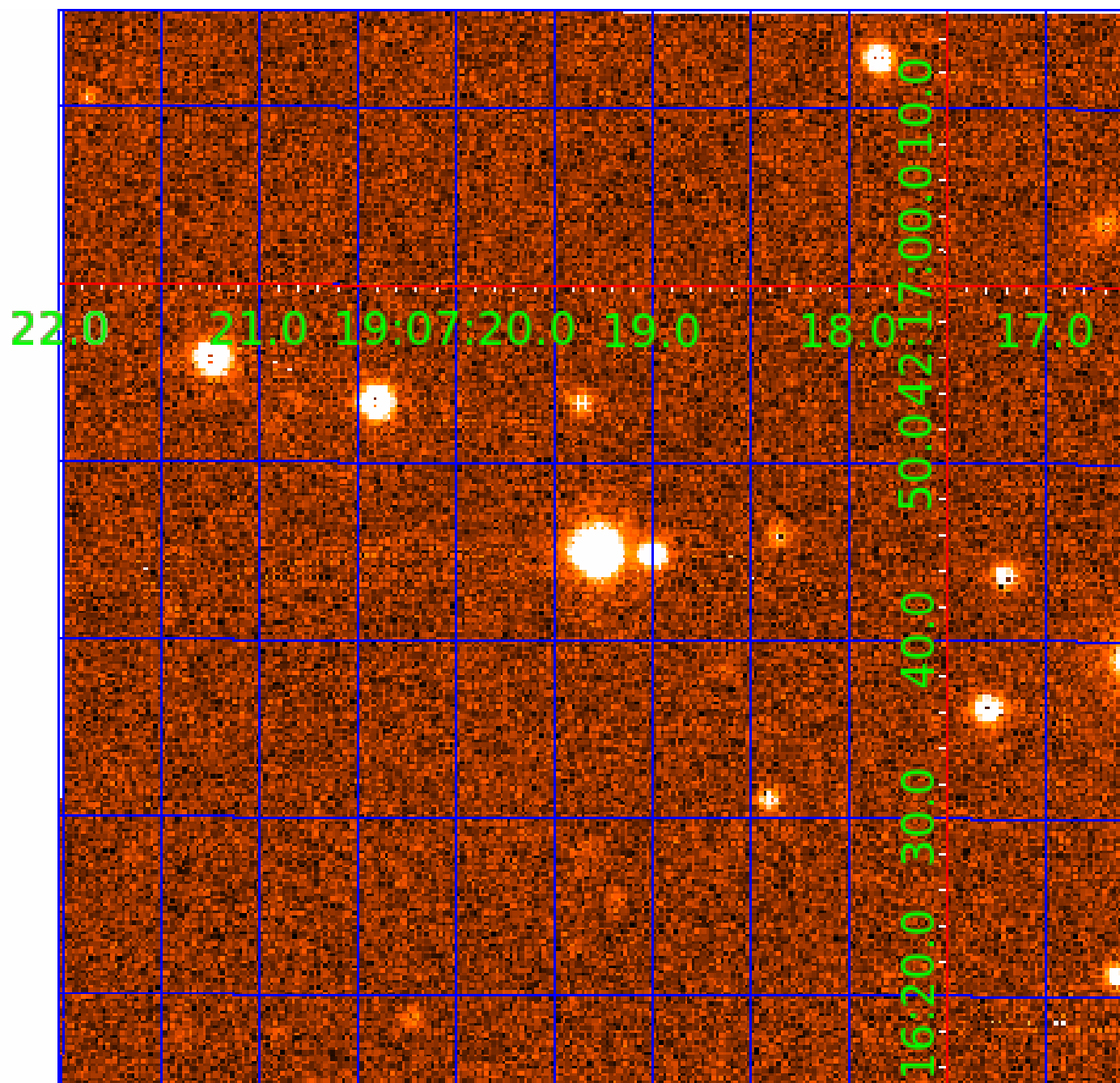


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006762829

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})
006762829-01	OBS	1740.01	18.795269	138.668637	28299.8	9.992	3019.4	2759.0	1.84	5623	30.82	154.43
006762829-02	OBS	No	18.795261	148.038098	964.2	8.024	97.2	97.6	1.84	5623	6.47	154.43
006762829-03	OBS	No	649.166720	151.093040	610.5	11.299	17.3	15.9	1.84	5623	4.74	1.37
006762829-04	OBS	No	207.303991	307.435059	468.4	8.777	13.0	12.9	1.84	5623	4.25	6.29
006762829-05	OBS	No	207.828345	203.146314	330.1	20.621	11.4	11.8	1.84	5623	3.52	6.27

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006762829-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—HAS_SEC_TCE
006762829-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
006762829-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS
006762829-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—ALL_TRANS_CHASES
006762829-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—ALL_TRANS_CHASES

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

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

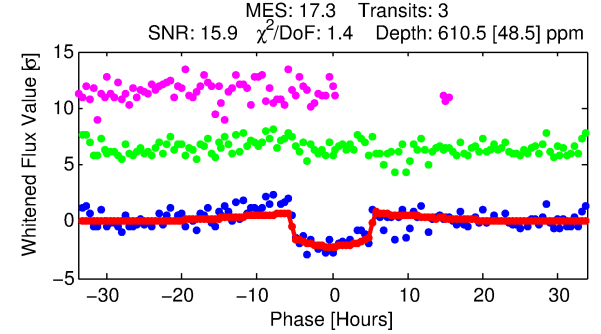
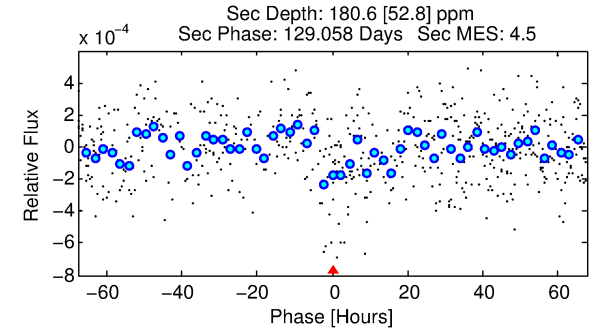
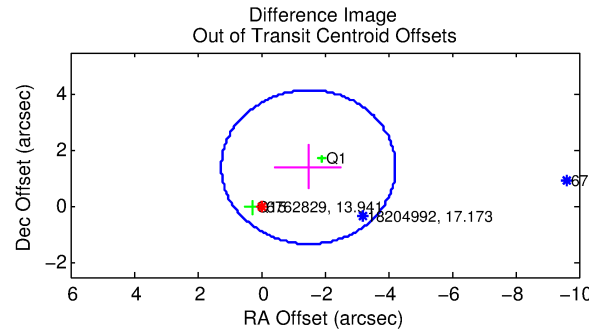
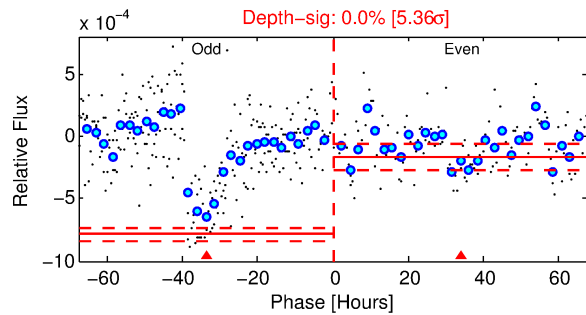
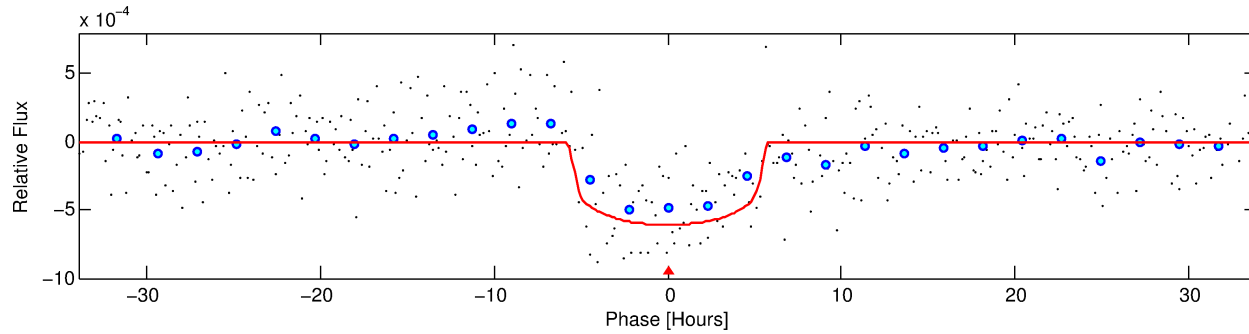
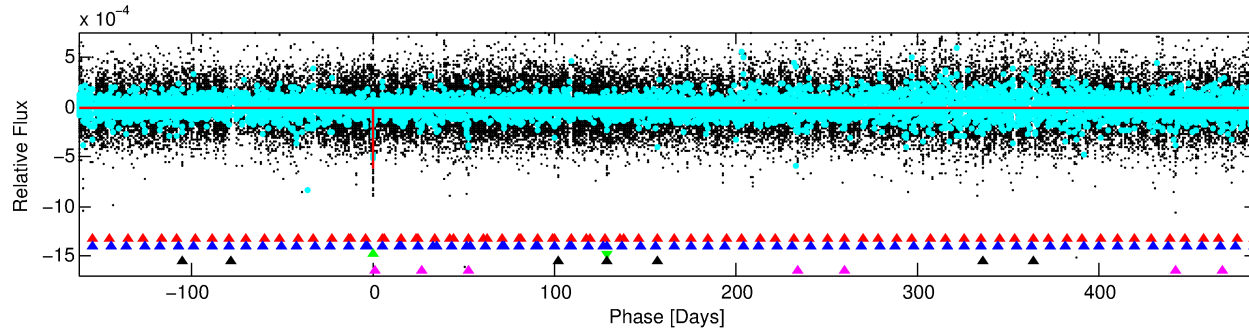
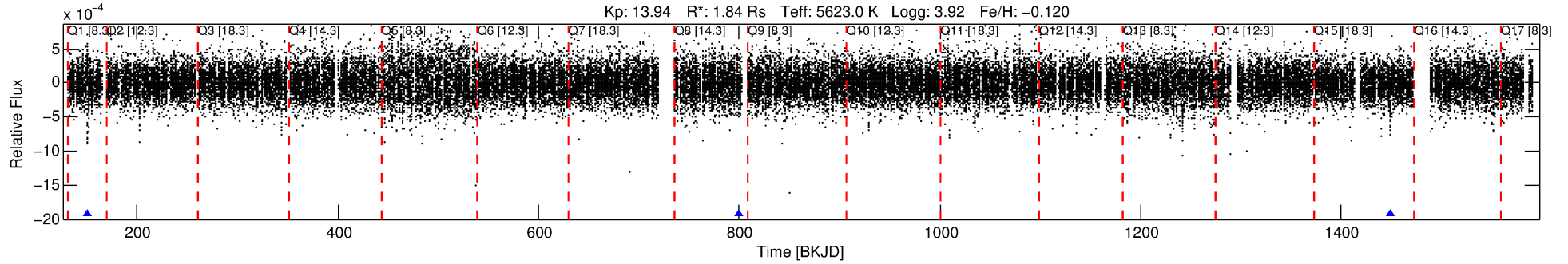
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006762829-03

No Significant Match Found

DV One-Page Summary

KIC: 6762829 Candidate: 3 of 5 Period: 649.167 d
KOI: K01740 Corr: No Ephemeris Match



DV Fit Results:

Period = 649.16672 [0.00755] d
Epoch = 151.0930 [0.0093] BKJD
Rp/R* = 0.0236 [0.0082]
a/R* = 359.32 [530.83]
b = 0.61 [1.51]
Seff = 1.37 [0.18]
Teq = 276 [9] K
Rp = 4.74 [1.70] Re
a = 1.4870 [0.1075] AU
Ag = 9759.93 [7420.97] [1.32 σ]
Teffp = 4242 [803] K [4.94 σ]

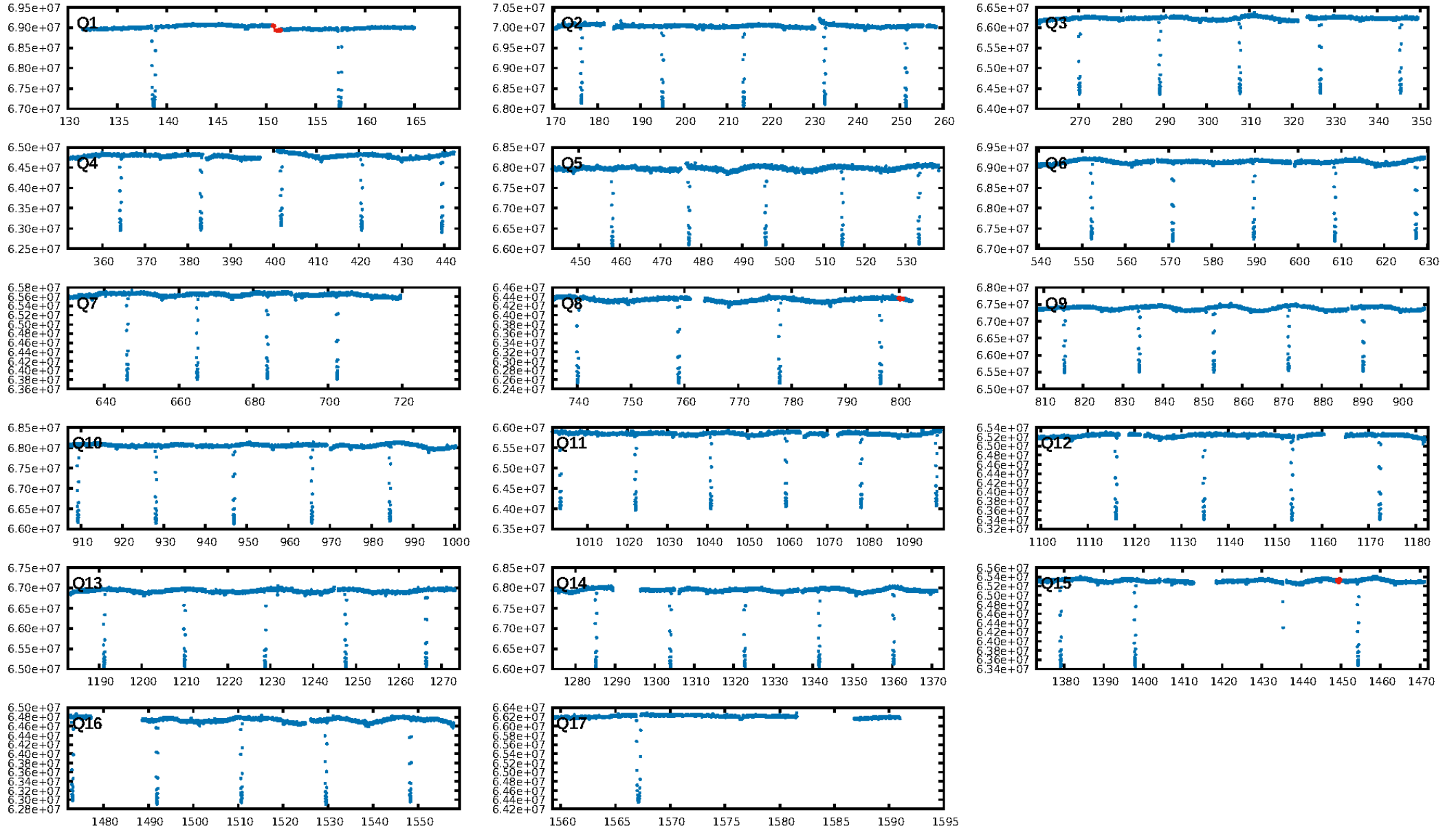
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [450.47 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 18.5%
Bootstrap-pfa: 4.45e-30
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: -9.008
Centroid-sig: 0.1%
Centroid-so: 1.156 arcsec [1.94 σ]
OotOffset-rm: 2.052 arcsec [2.25 σ]
KicOffset-rm: 2.108 arcsec [2.27 σ]
OotOffset-st: 0/1/0/1 [2]
KicOffset-st: 0/1/0/1 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 0.67 [2/3]

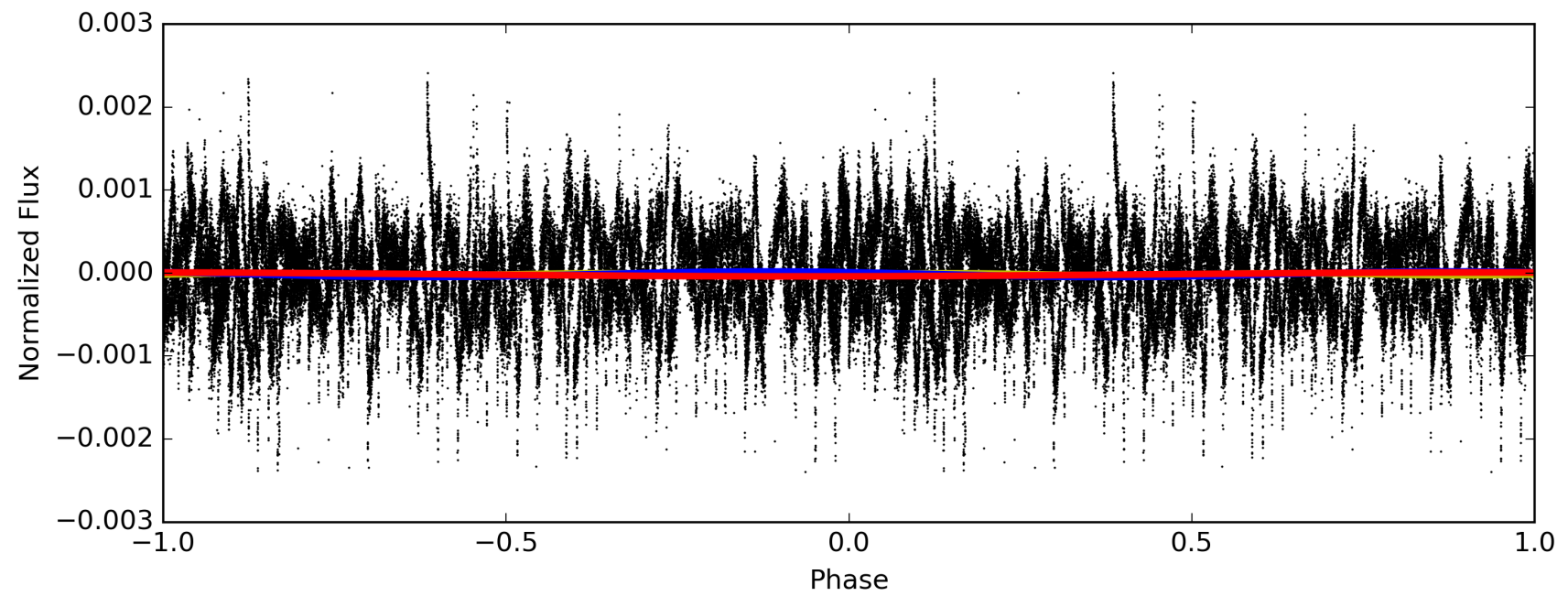
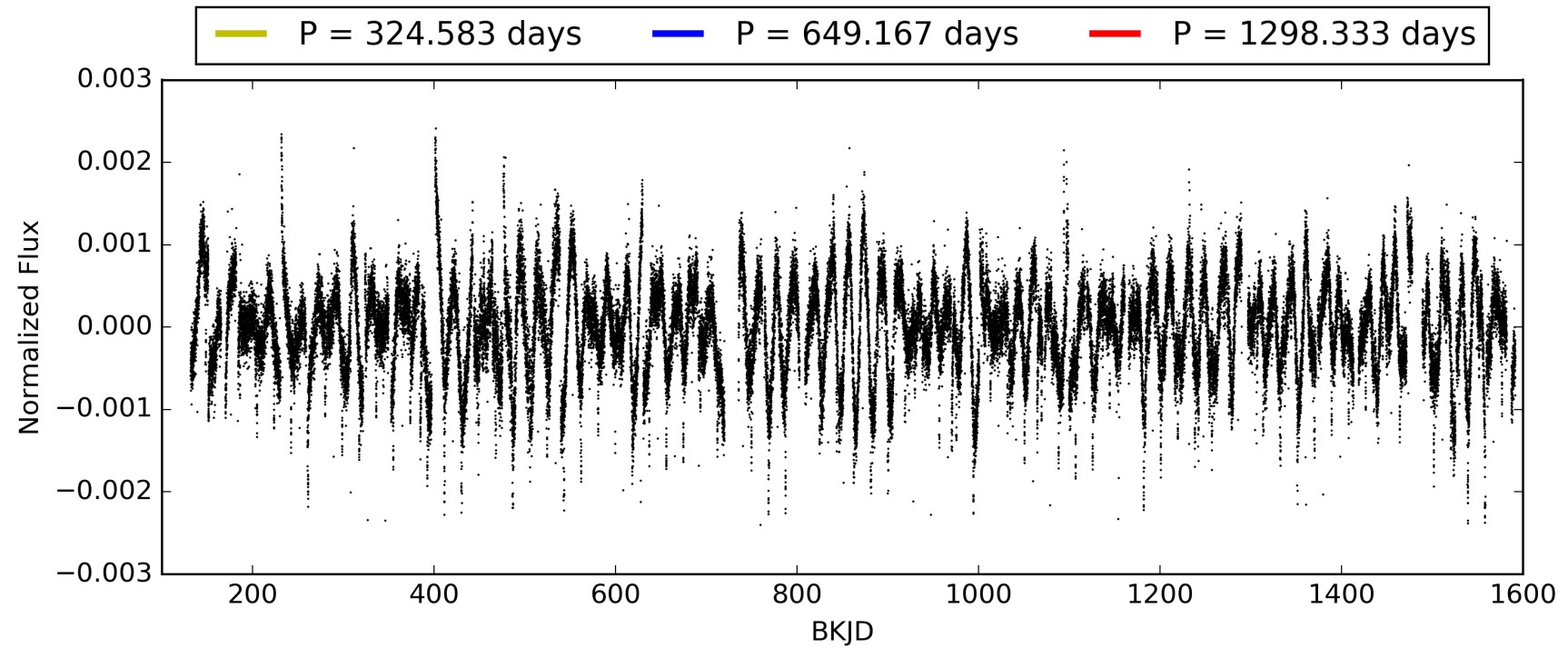
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 09:56:52 Z

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

TCE 006762829-03, PDC Light Curves

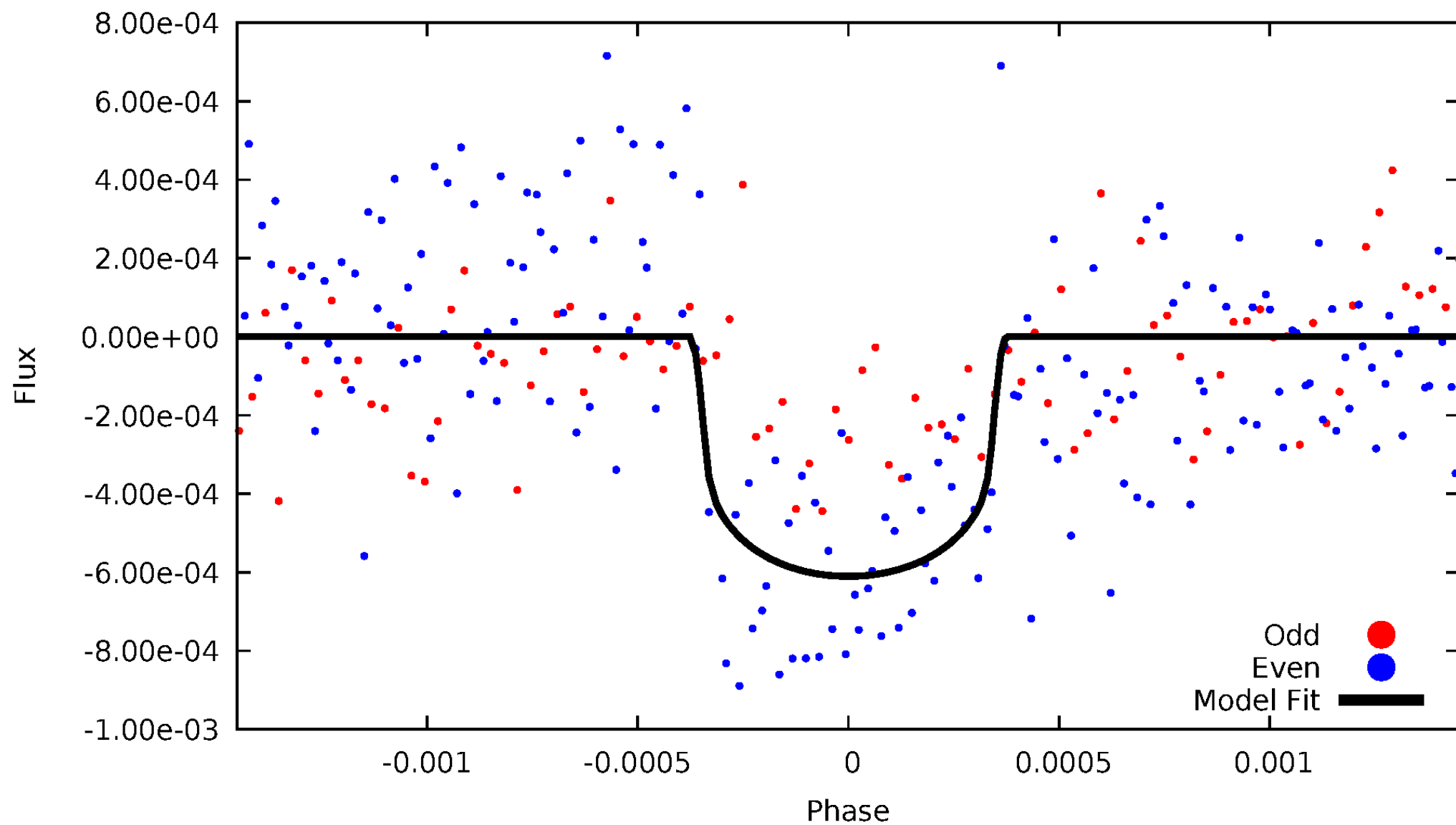


TCE 006762829-03



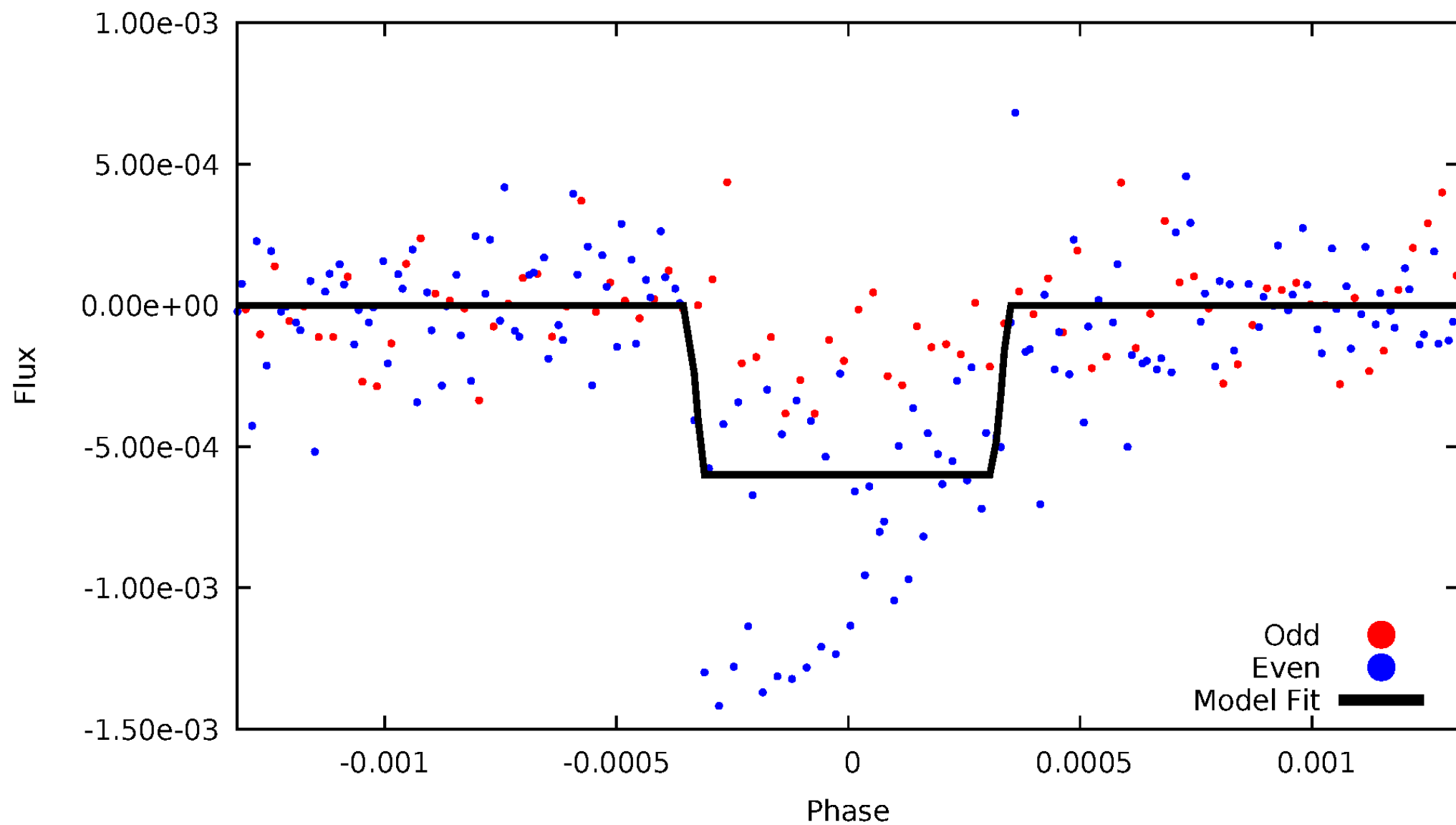
DV Odd/Even

TCE 006762829-03



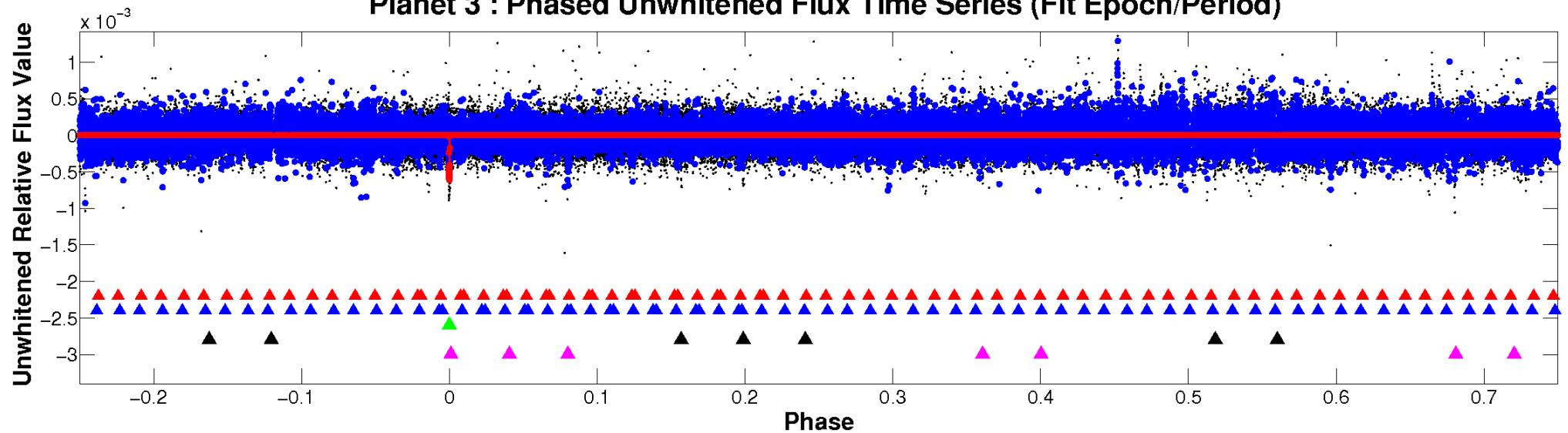
ALT Odd/Even

TCE 006762829-03

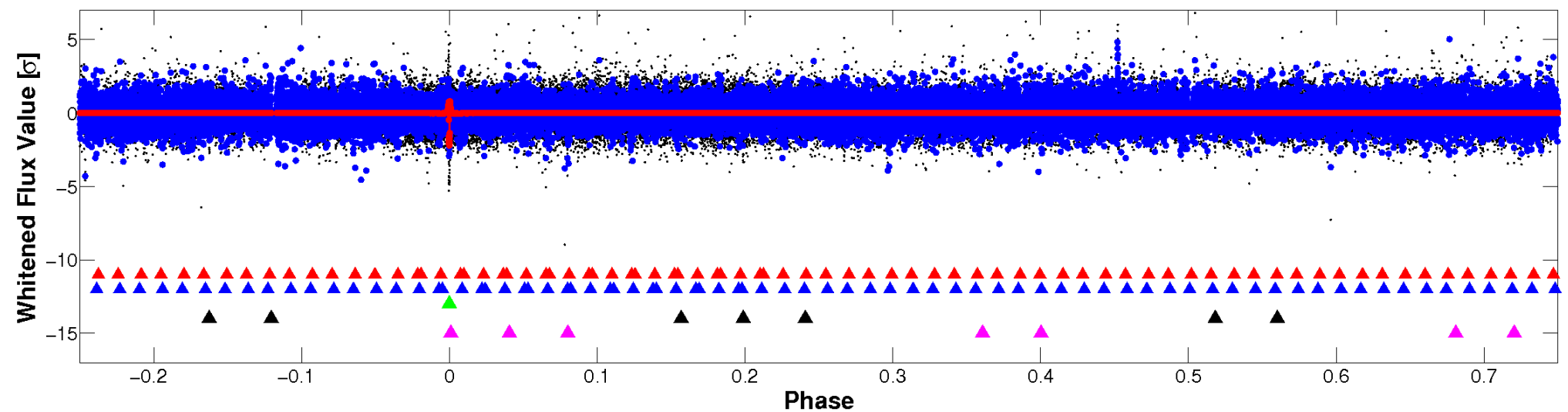


Non-Whitened Vs. Whitened Light Curve

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

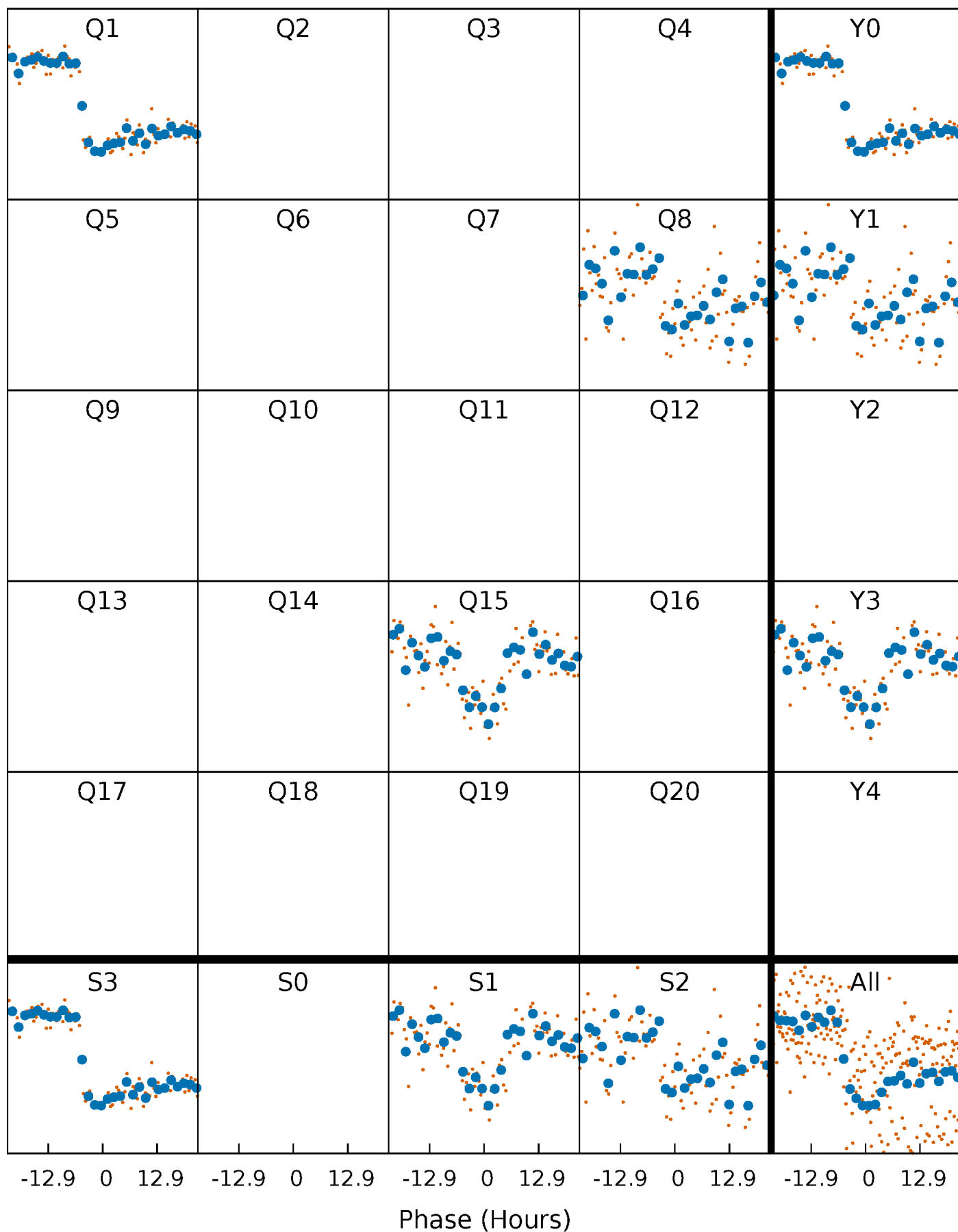


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



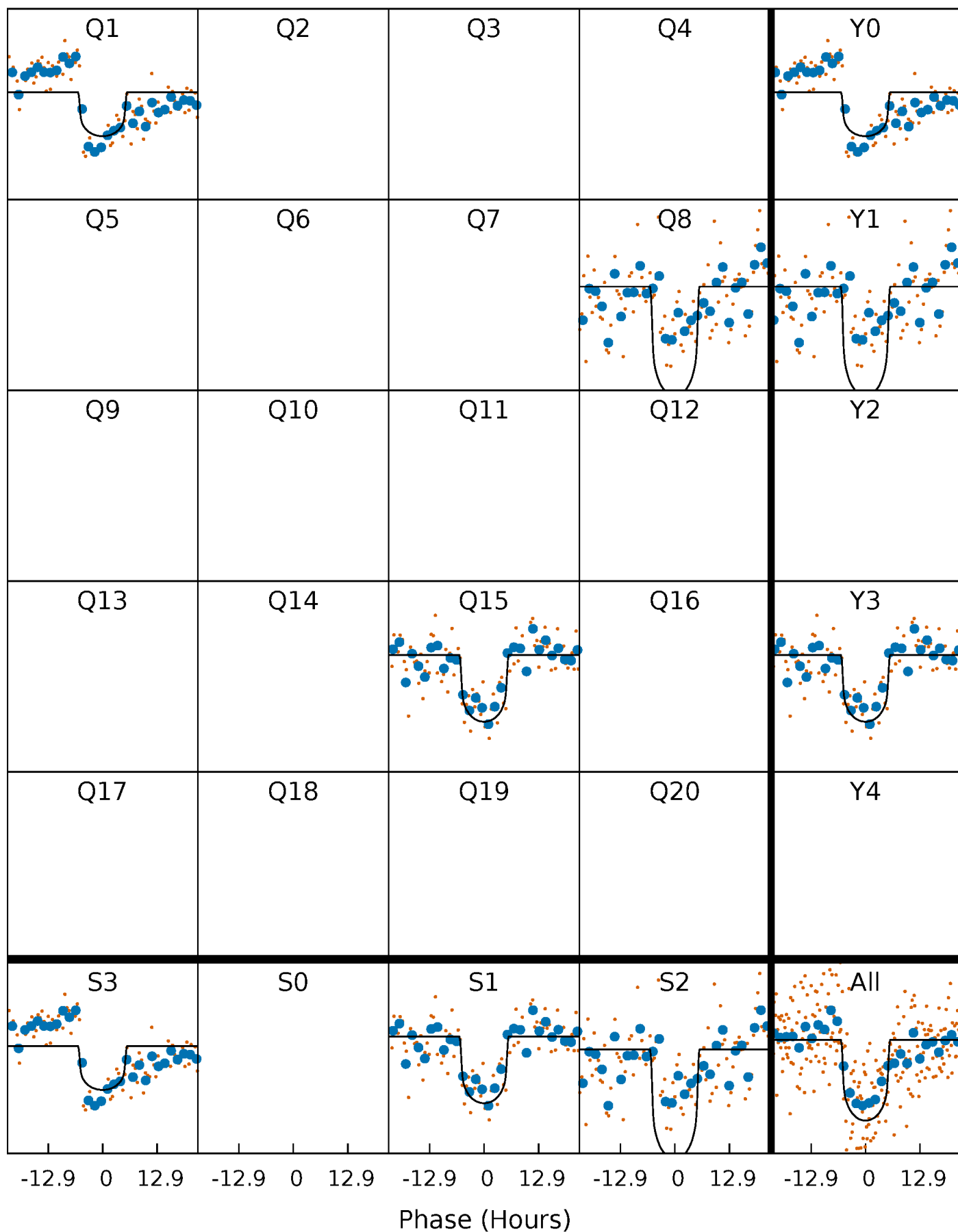
PDC Quarter-Phased Transit Curves

TCE 006762829-03 $P=649.166719$ Days $T_0=151.093040$ (BKJD)



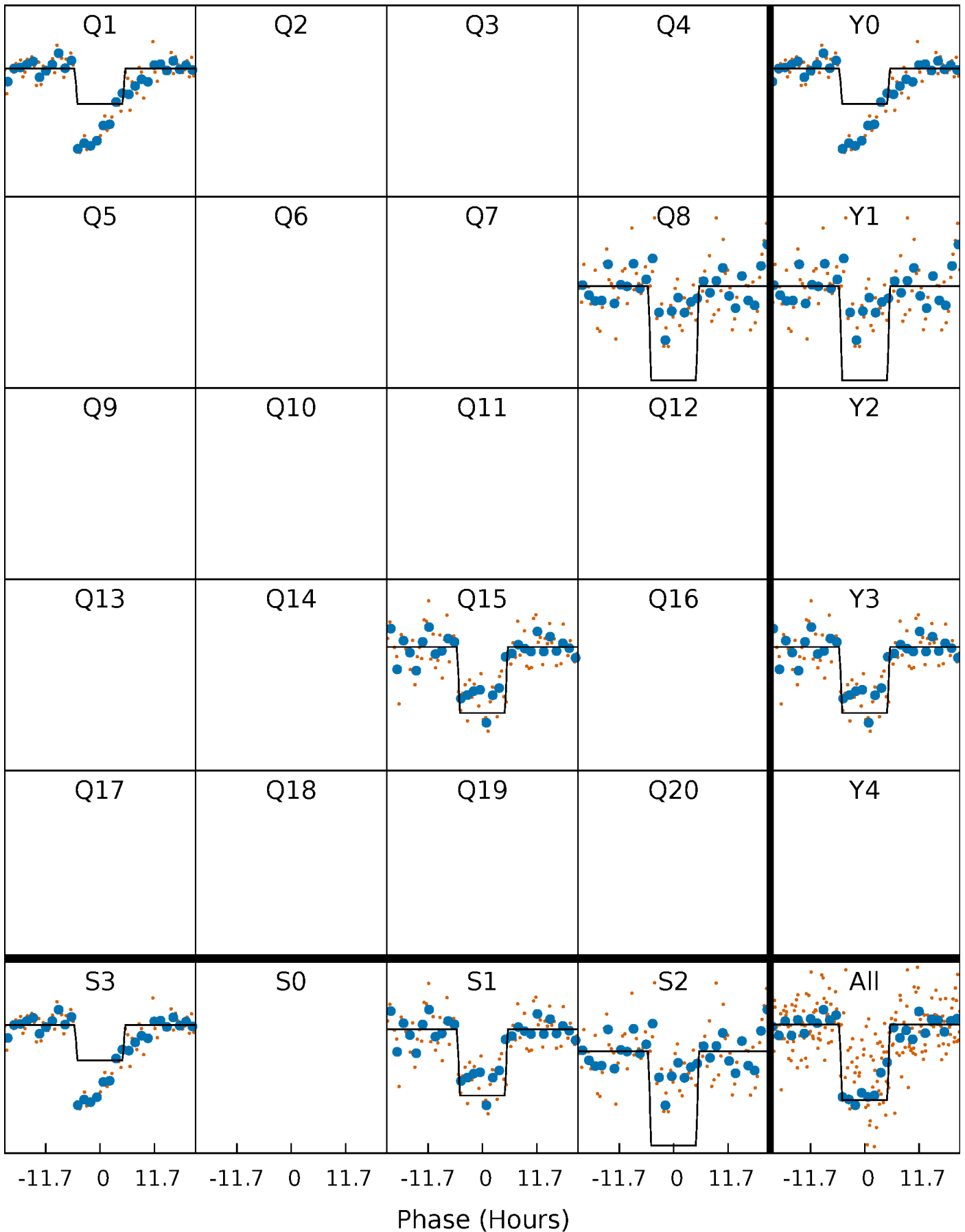
DV Quarter-Phased Transit Curves

TCE 006762829-03 P=649.166719 Days $T_0=151.093040$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

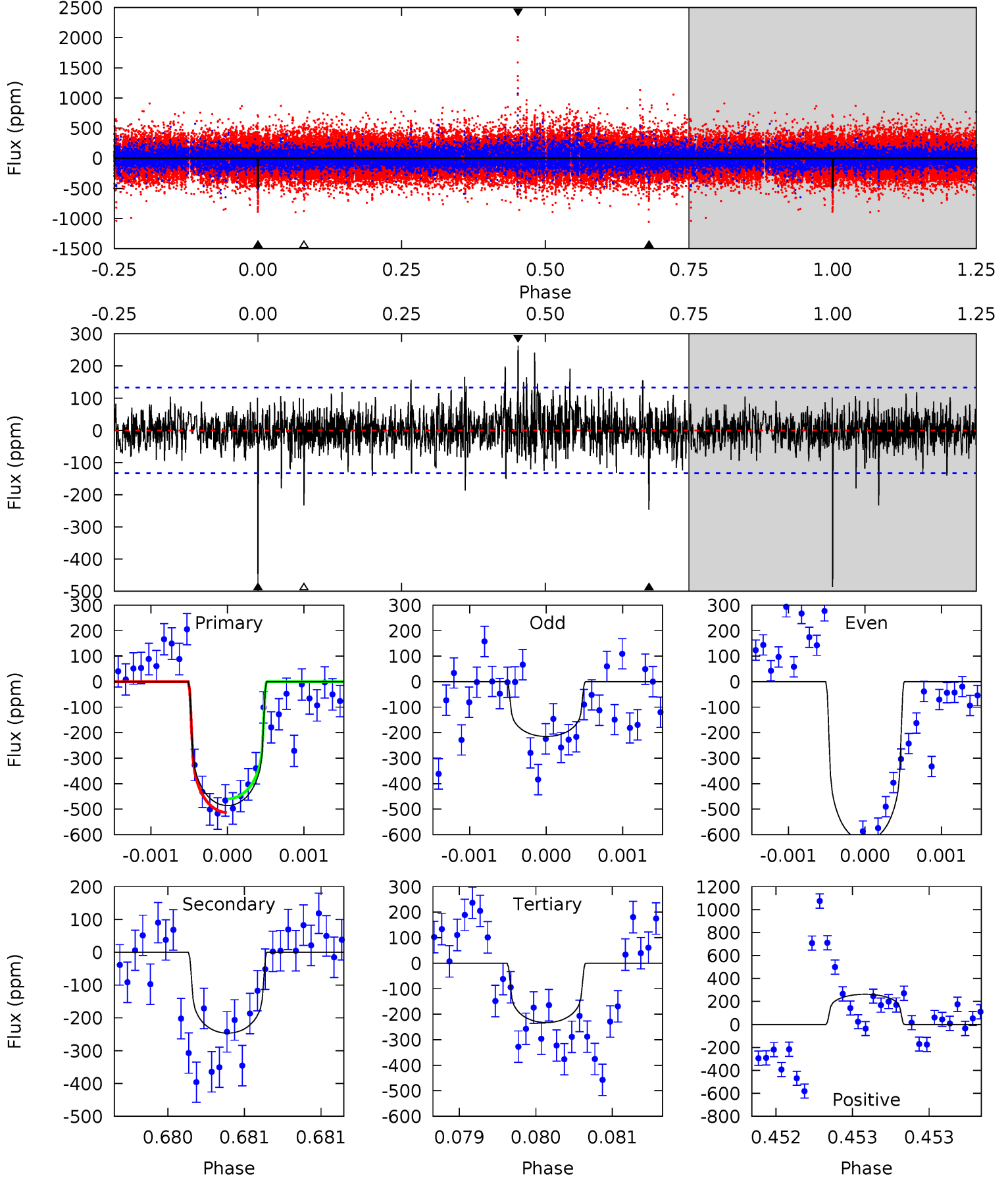
TCE 006762829-03 P=649.160579 Days $T_0=151.106336$ (BKJD)



DV Model-Shift Uniqueness Test

006762829-03, P = 649.166719 Days, E = 151.093040 Days

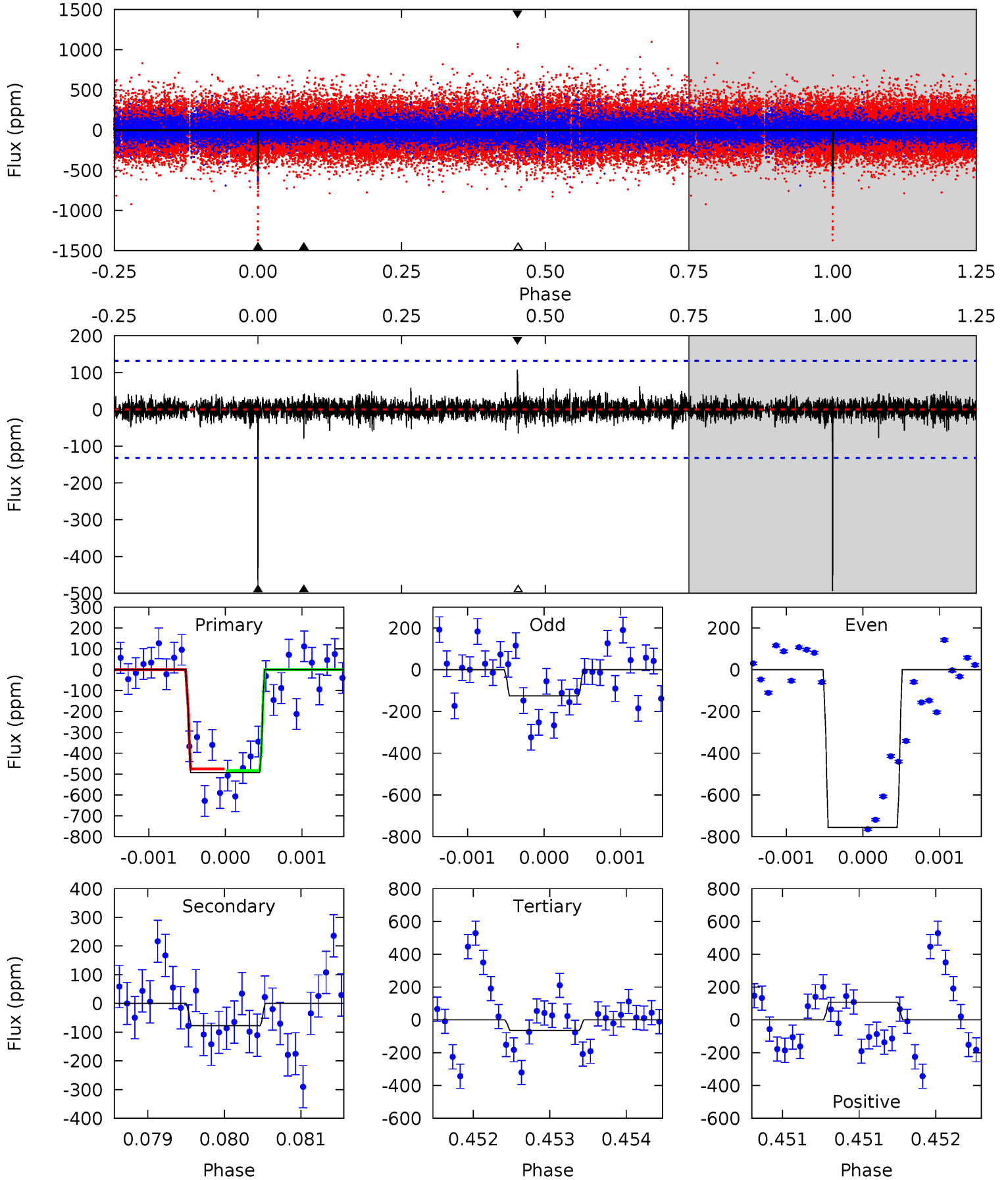
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.2	10.2	9.66	10.9	5.51	3.38	1.75	10.5	9.27	0.58	-0.66	7.93	0.94	0.35	1.11



Alt Model-Shift Uniqueness Test

006762829-03, P = 649.160579 Days, E = 151.106336 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.7	3.24	2.72	4.49	5.52	3.40	0.59	18.0	16.2	0.52	-1.25	13.1	1.15	0.18	0.17



Stellar Parameters For KIC 006762829

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5623^{+113}_{-113}	$3.925^{+0.055}_{-0.045}$	$-0.120^{+0.150}_{-0.150}$	$1.841^{+0.162}_{-0.162}$	$1.038^{+0.092}_{-0.084}$	$0.234^{+0.060}_{-0.036}$
	+2%/-2%	+1%/-1%	+125%/-125%	+9%/-9%	+9%/-8%	+25%/-15%
Source	SPE37	TRA37	SPE37	DSEP		

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

Secondary Eclipse Parameters for KIC 006762829-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-247 ± 24	$4.71^{+1.67}_{-1.66}$	385^{+11}_{-11}	4722^{+980}_{-523}	13598^{+19027}_{-6290}
Alt.	-77 ± 24	$4.86^{+1.63}_{-1.62}$	385^{+10}_{-11}	3728^{+627}_{-387}	3866^{+5416}_{-1934}

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

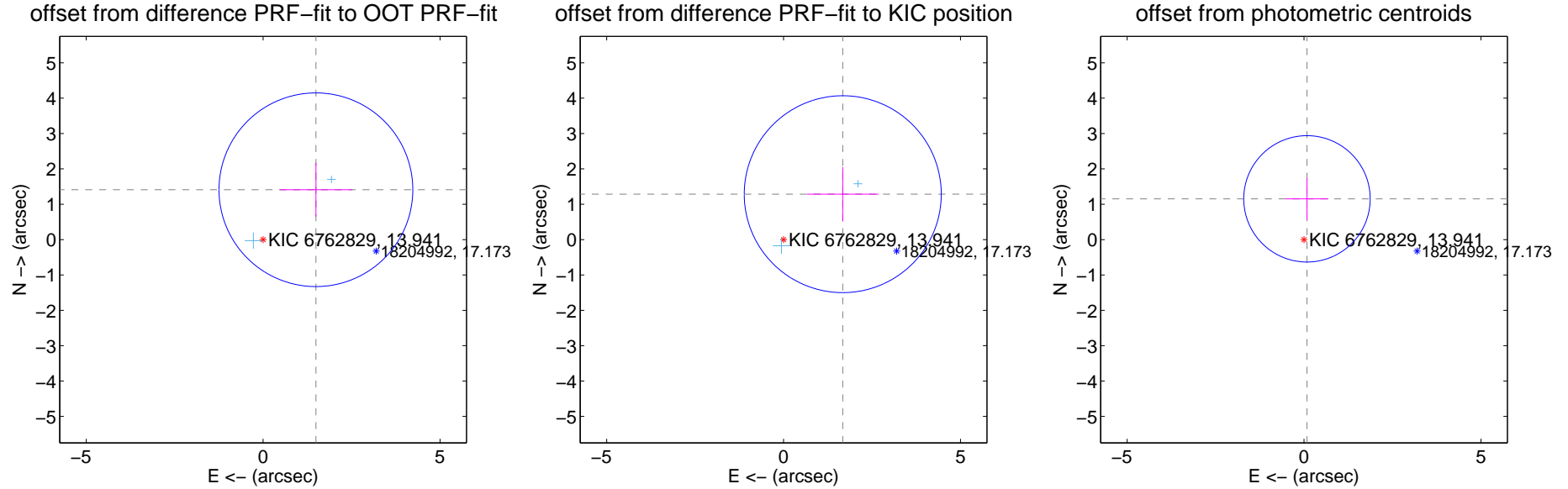
DV Centroid Data

Supplemental centroid analysis for 006762829-03. Kepler magnitude: 13.94. Transit SNR 15.89

There are 2 quarters with good PRF difference image offsets

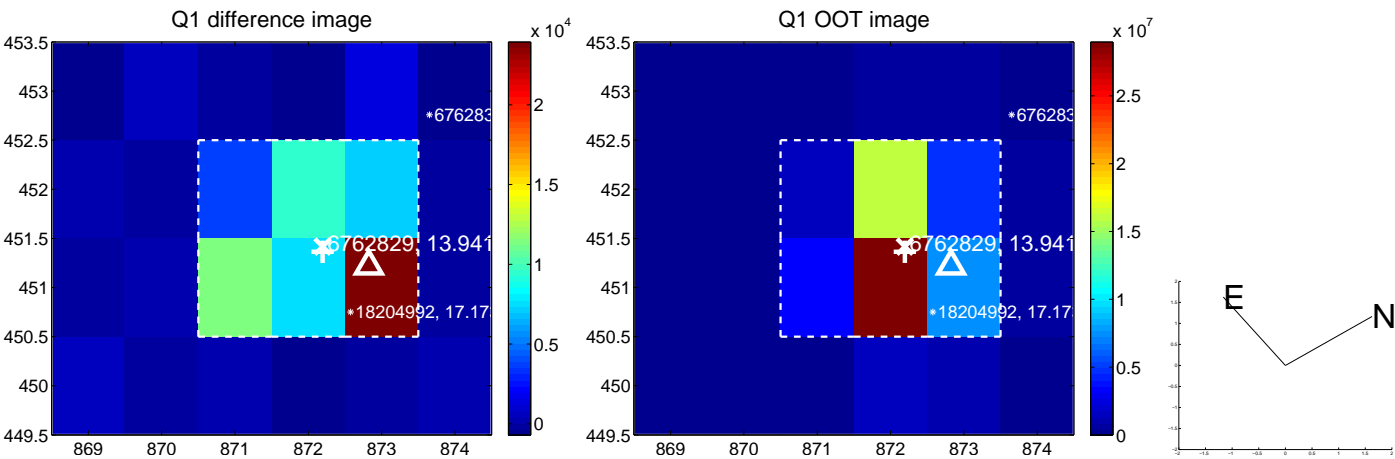
The direct PRF centroid is offset from the target star catalog position by about 0.26 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.052 ± 0.913	2.25	-1.491 ± 1.031	1.410 ± 0.759
PRF-fit source offset from KIC position	2.108 ± 0.928	2.27	-1.672 ± 1.010	1.285 ± 0.769
photometric centroid source offset	1.16 ± 0.60	1.94	-0.08 ± 0.60	1.15 ± 0.60

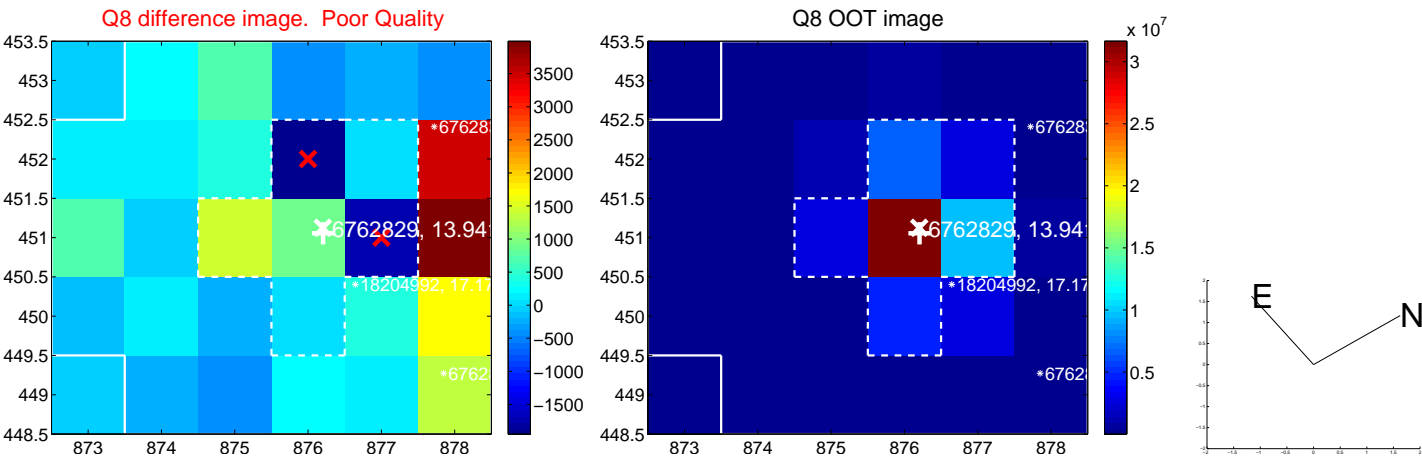


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

Q13 no difference image



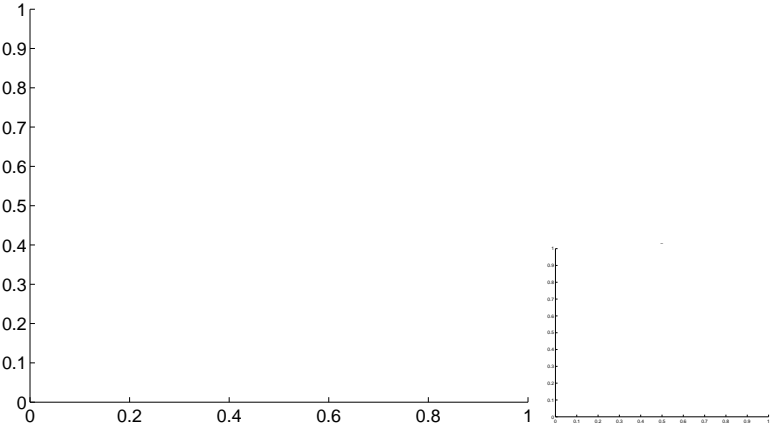
Q13 no OOT image



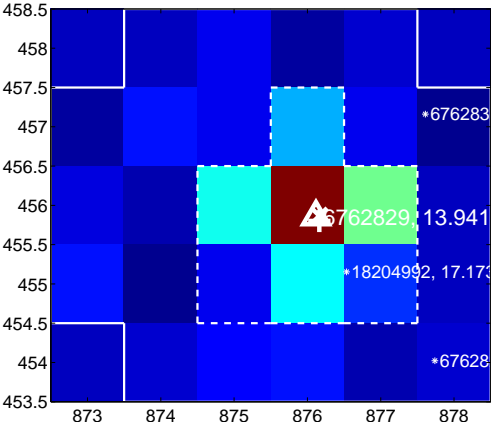
Q14 no difference image



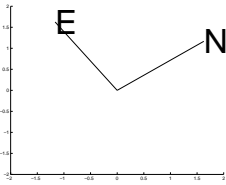
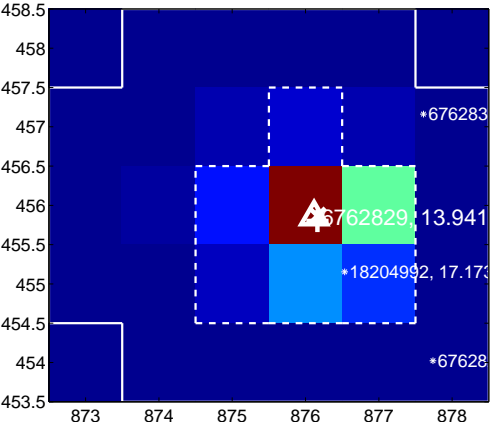
Q14 no OOT image



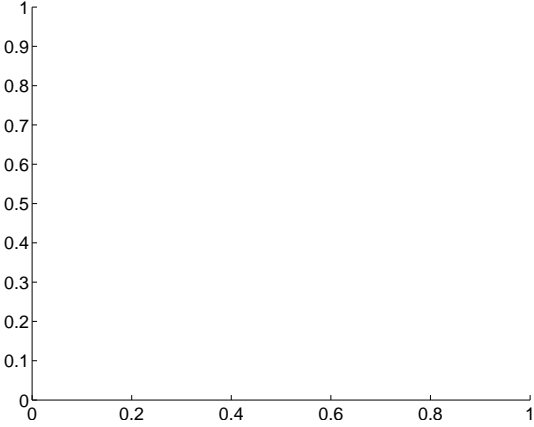
Q15 difference image



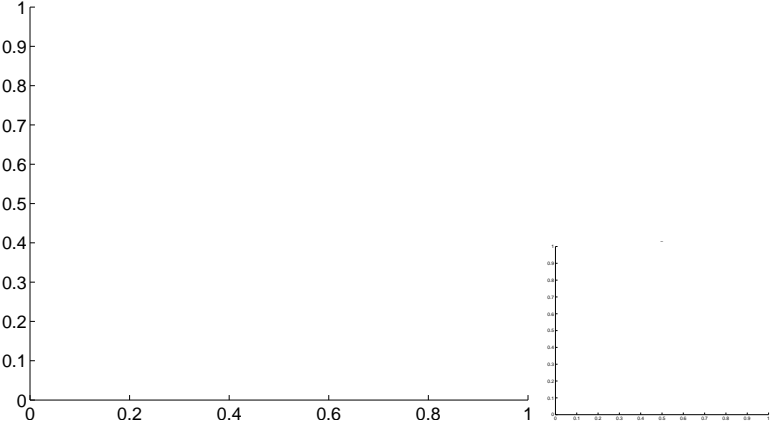
Q15 OOT image



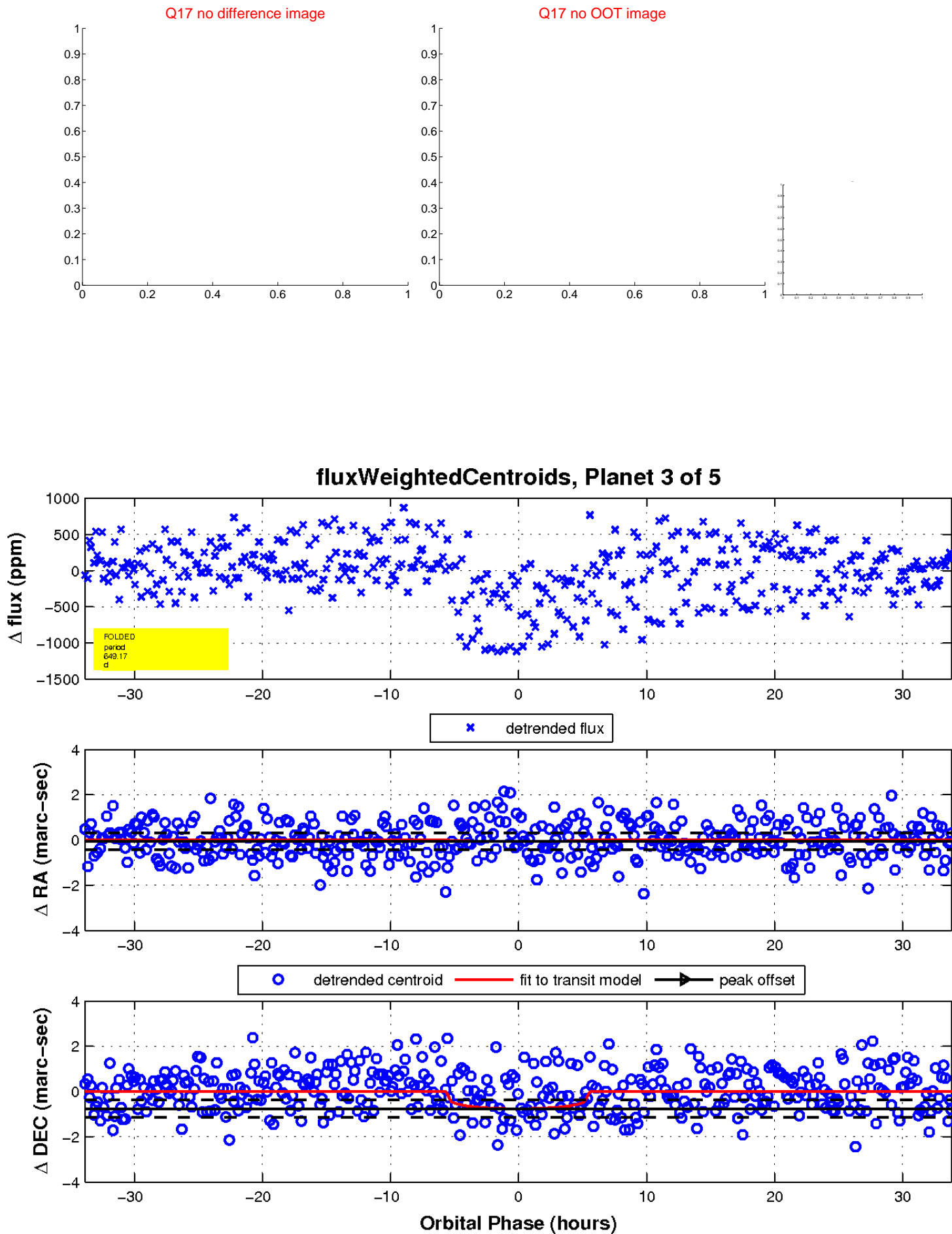
Q16 no difference image



Q16 no OOT image

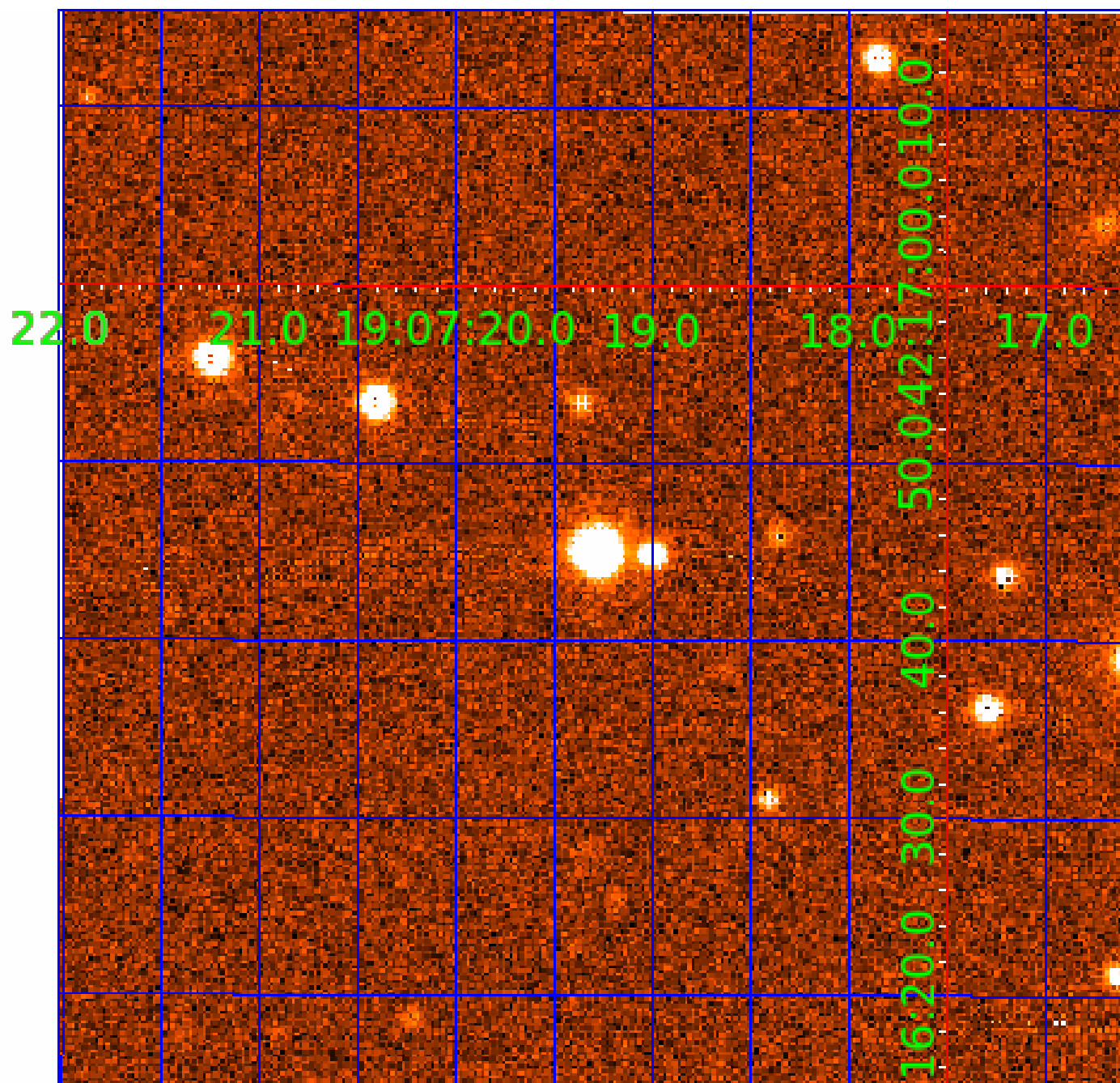


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006762829

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})
006762829-01	OBS	1740.01	18.795269	138.668637	28299.8	9.992	3019.4	2759.0	1.84	5623	30.82	154.43
006762829-02	OBS	No	18.795261	148.038098	964.2	8.024	97.2	97.6	1.84	5623	6.47	154.43
006762829-03	OBS	No	649.166720	151.093040	610.5	11.299	17.3	15.9	1.84	5623	4.74	1.37
006762829-04	OBS	No	207.303991	307.435059	468.4	8.777	13.0	12.9	1.84	5623	4.25	6.29
006762829-05	OBS	No	207.828345	203.146314	330.1	20.621	11.4	11.8	1.84	5623	3.52	6.27

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006762829-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—HAS_SEC_TCE
006762829-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
006762829-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS
006762829-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—ALL_TRANS_CHASES
006762829-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—ALL_TRANS_CHASES

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.

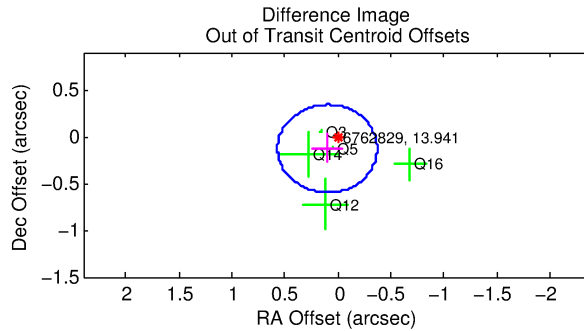
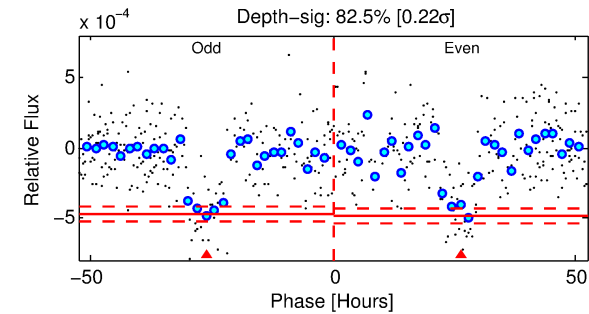
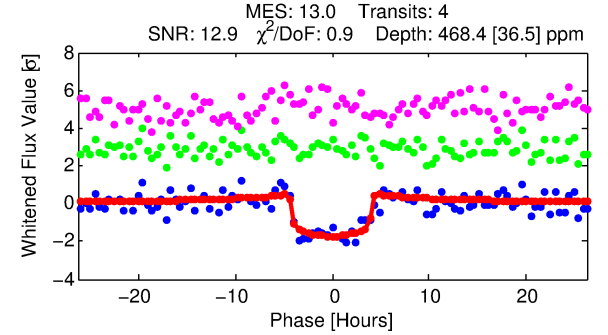
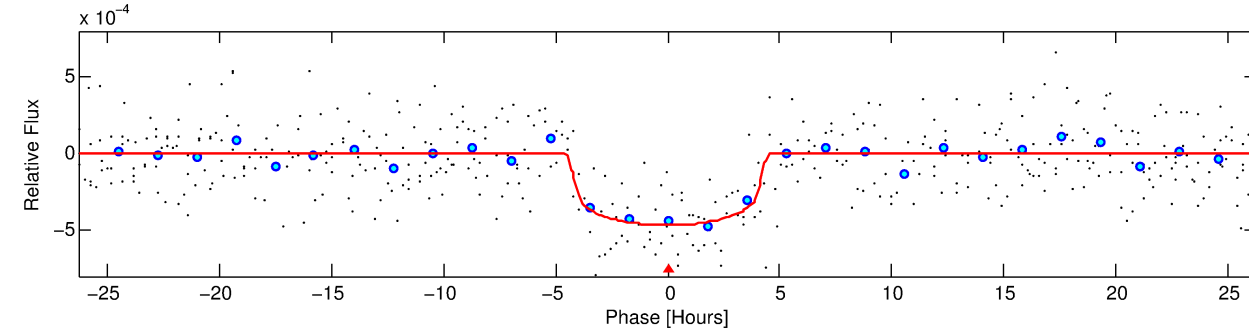
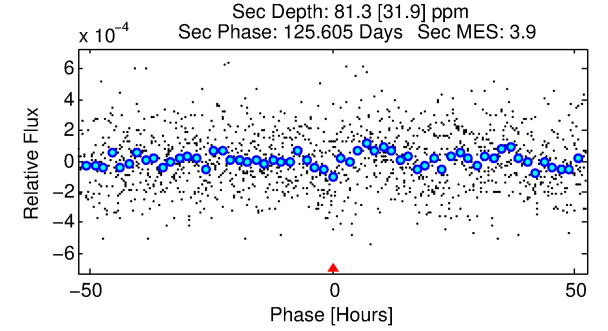
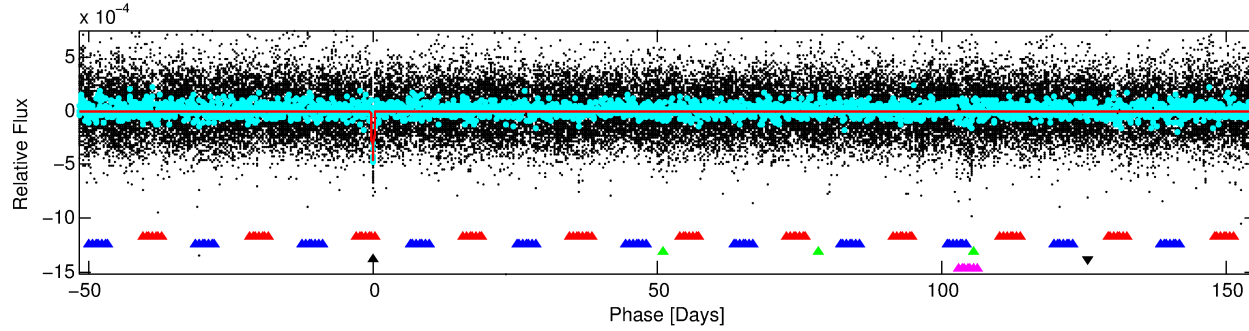
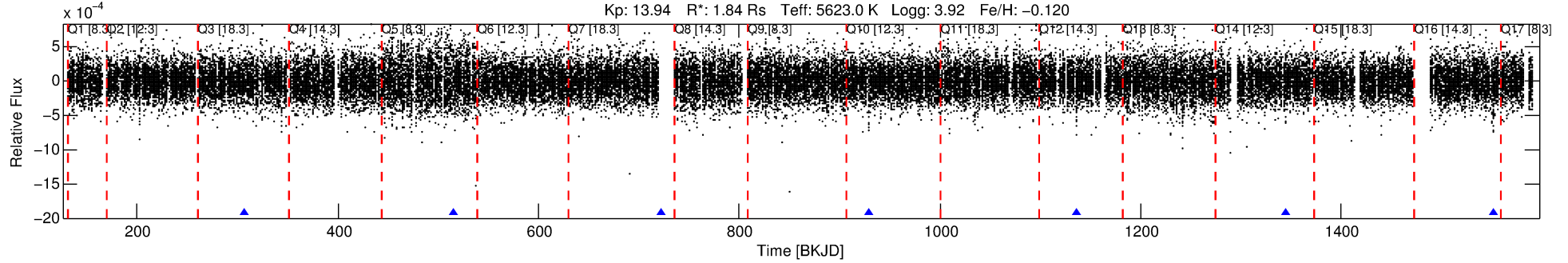
Ephemeris Match Information For 006762829-04

No Significant Match Found

DV One-Page Summary

KIC: 6762829 Candidate: 4 of 5 Period: 207.304 d
KOI: K01740 Corr: No Ephemeris Match

Kp: 13.94 R*: 1.84 Rs Teff: 5623.0 K Logg: 3.92 Fe/H: -0.120



DV Fit Results:

Period = 207.30399 [0.00470] d
Epoch = 307.4351 [0.0219] BKJD
Rp/R* = 0.0211 [0.0097]
a/R* = 134.92 [269.09]
b = 0.70 [1.50]
Seff = 6.29 [0.82]
Teq = 404 [13] K
Rp = 4.25 [1.99] Re
a = 0.6947 [0.0502] AU
Ag = 1197.12 [1205.60] [0.99σ]
Teffp = 3673 [923] K [3.54σ]

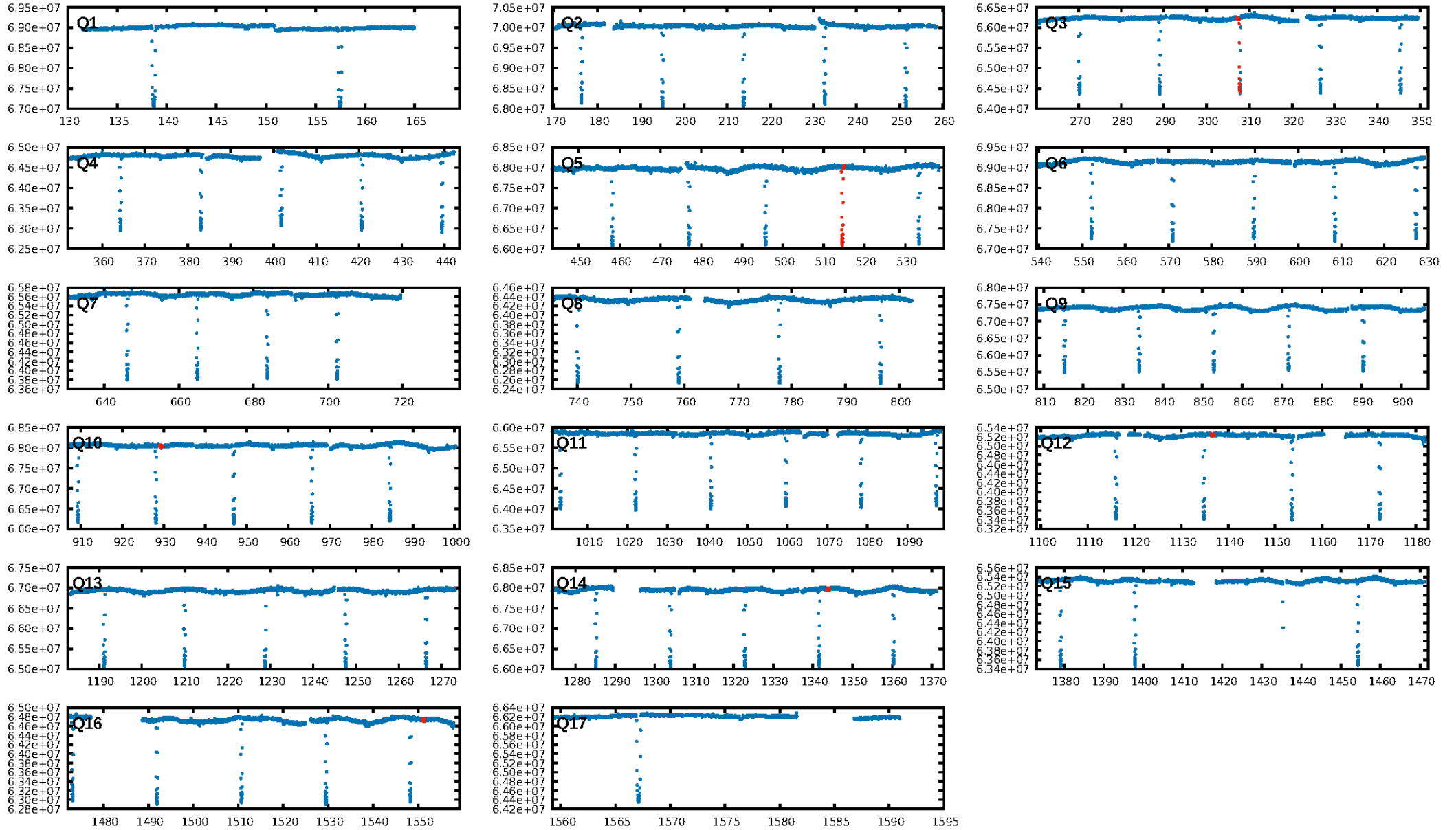
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [340.18σ]
LongPeriod-sig: 42.6% [0.56σ]
ModelChiSquare2-sig: 88.9%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 5.92e-23
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 9.086
Centroid-sig: 2.1%
Centroid-so: 1.284 arcsec [1.94σ]
OotOffset-rm: 0.161 arcsec [1.03σ]
KicOffset-rm: 0.285 arcsec [1.83σ]
OotOffset-st: 1/1/2/1 [5]
KicOffset-st: 1/1/2/1 [5]
DiffImageQuality-fgm: 0.80 [4/5]
DiffImageOverlap-fno: 0.60 [3/5]

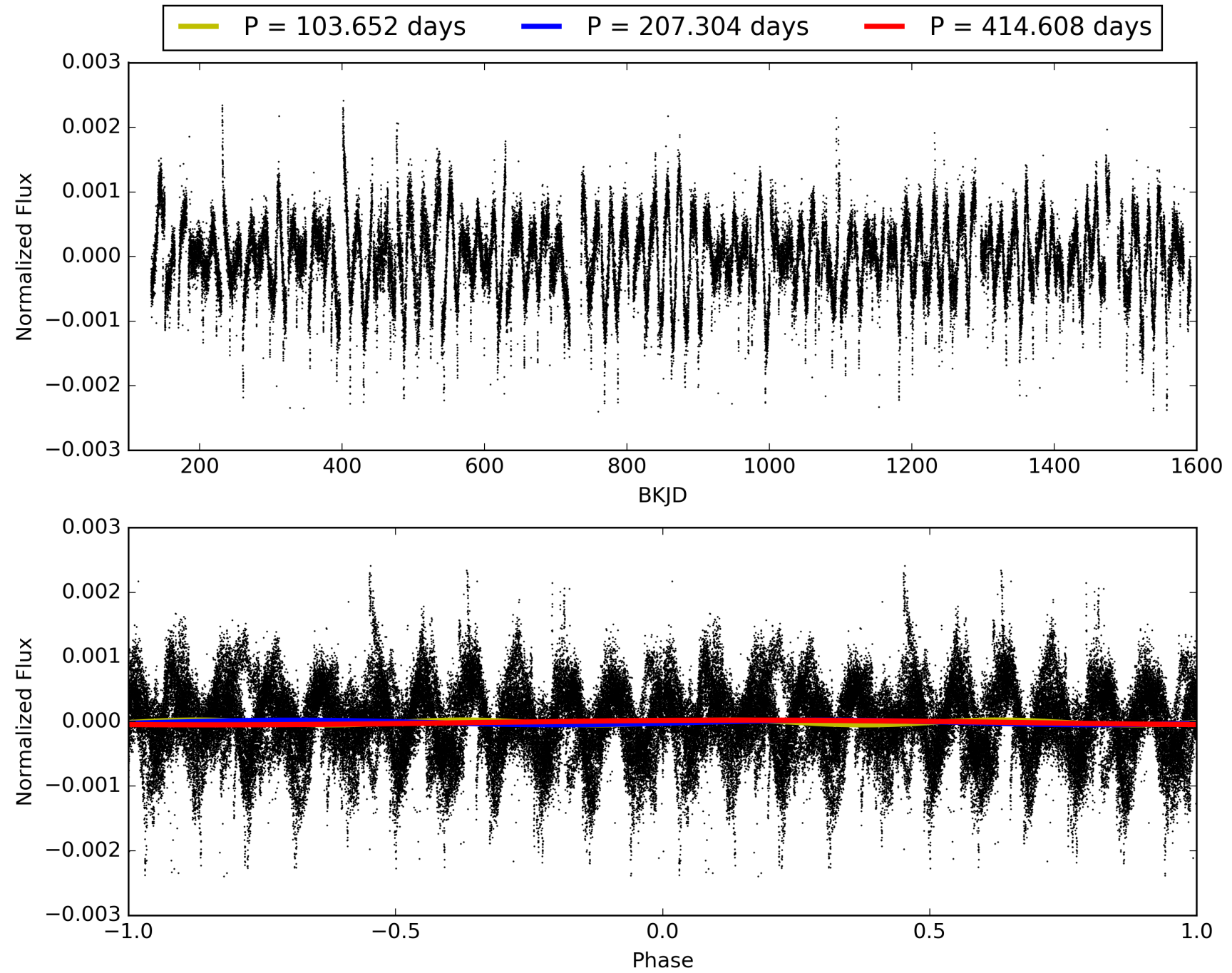
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 09:57:00 Z

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

TCE 006762829-04, PDC Light Curves

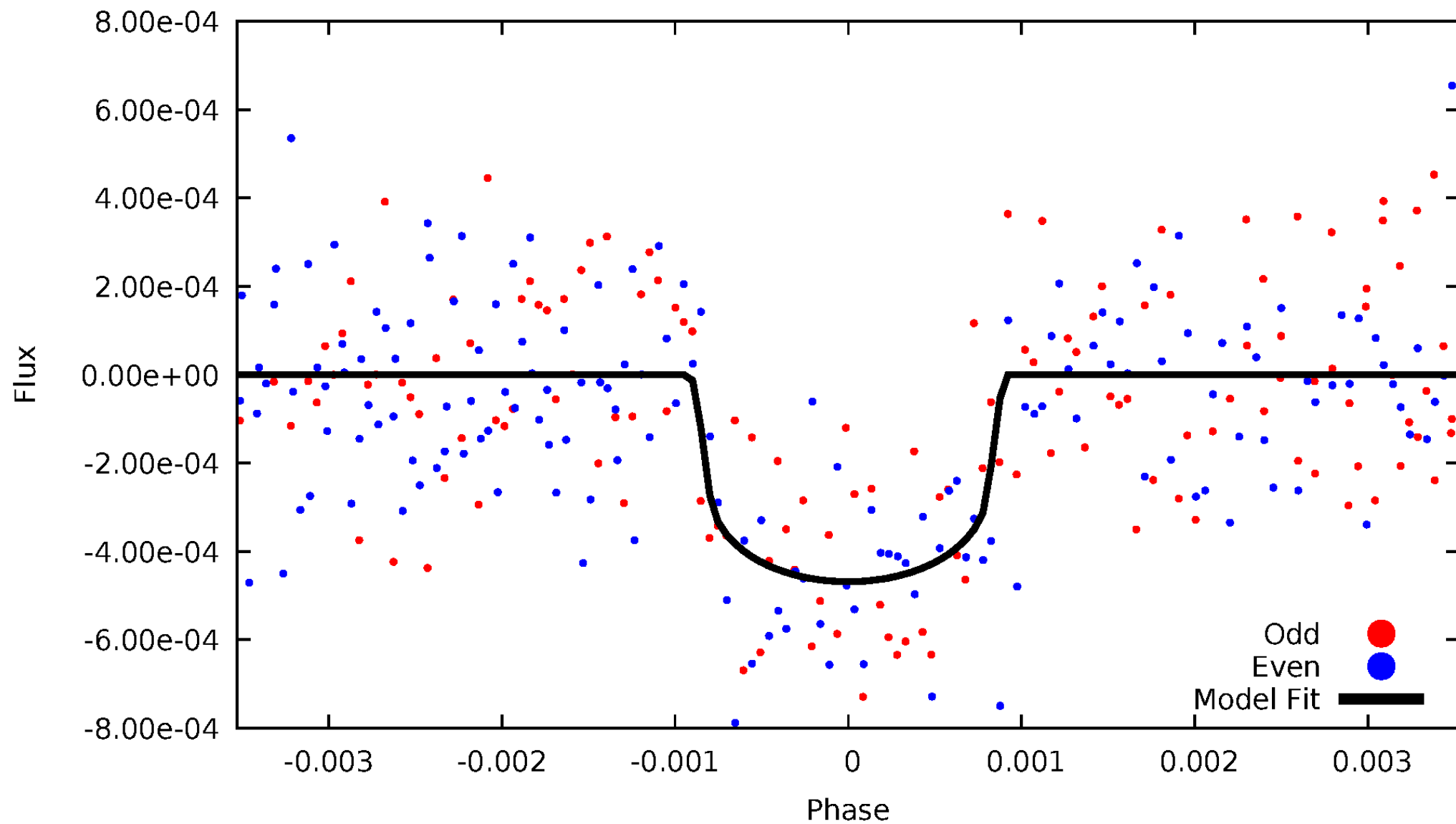


TCE 006762829-04



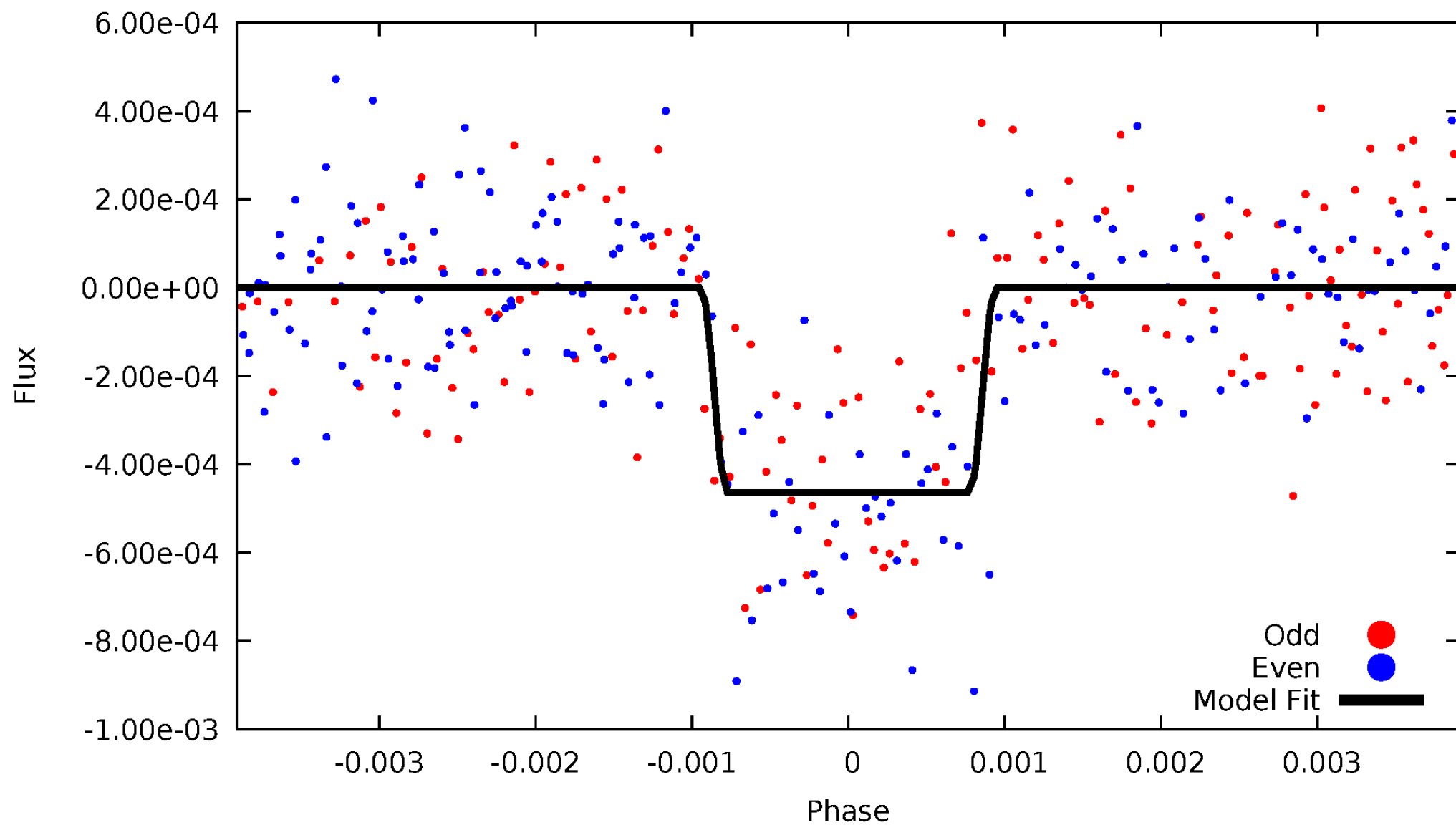
DV Odd/Even

TCE 006762829-04



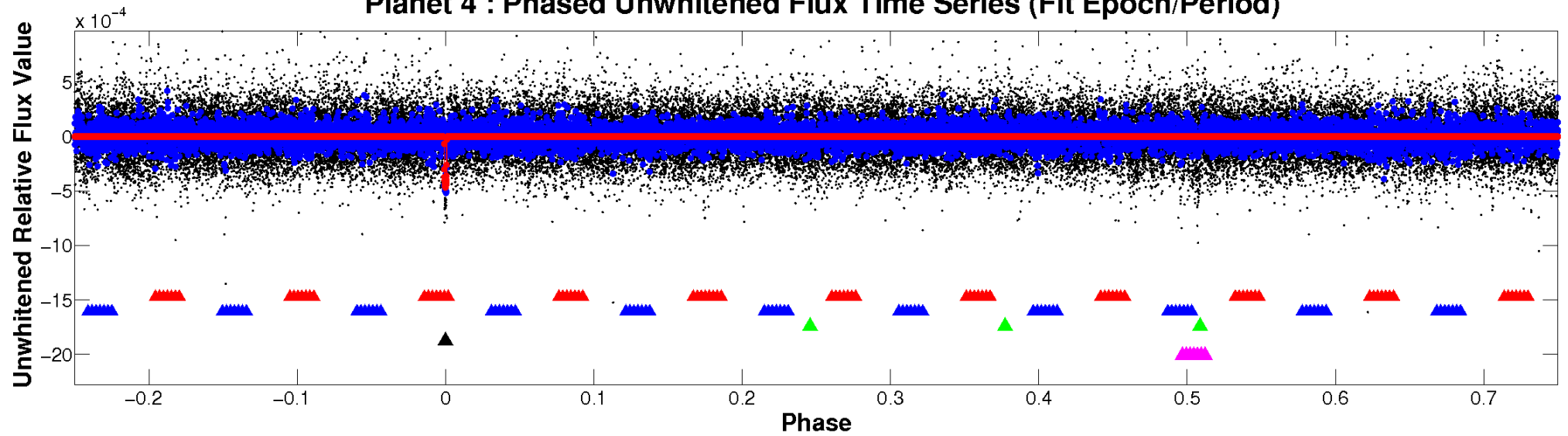
ALT Odd/Even

TCE 006762829-04

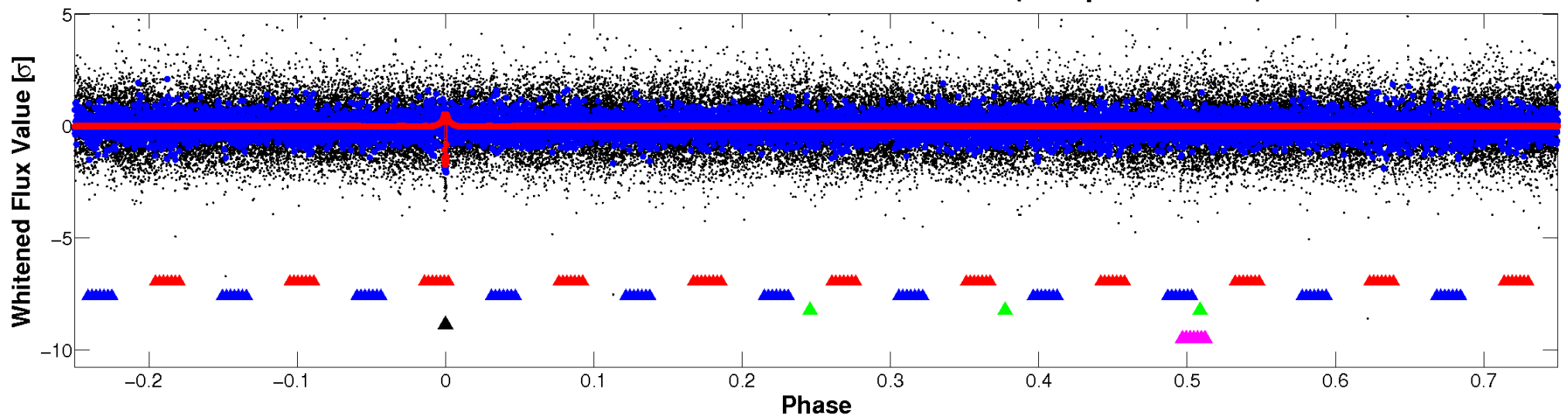


Non-Whitened Vs. Whitened Light Curve

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

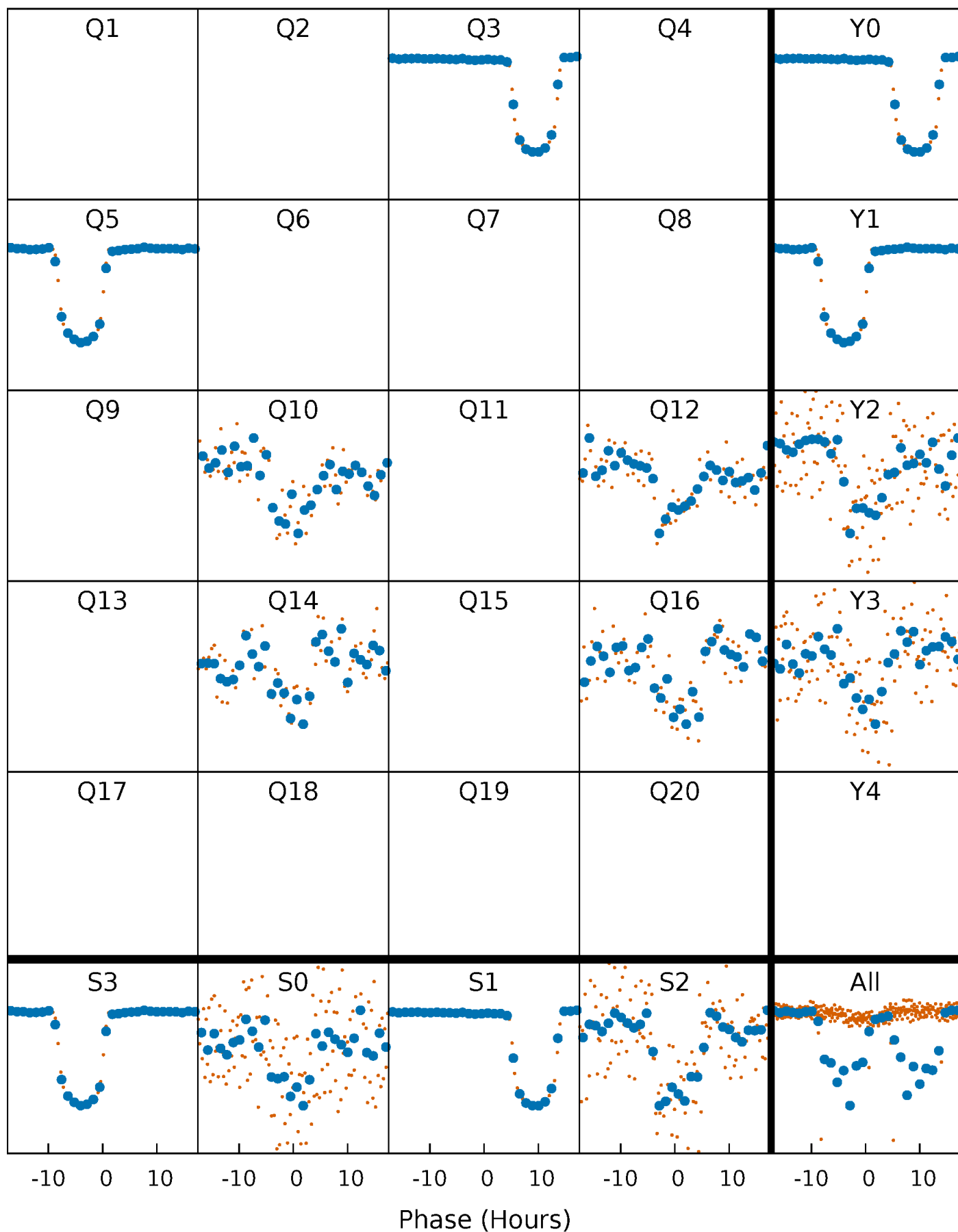


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



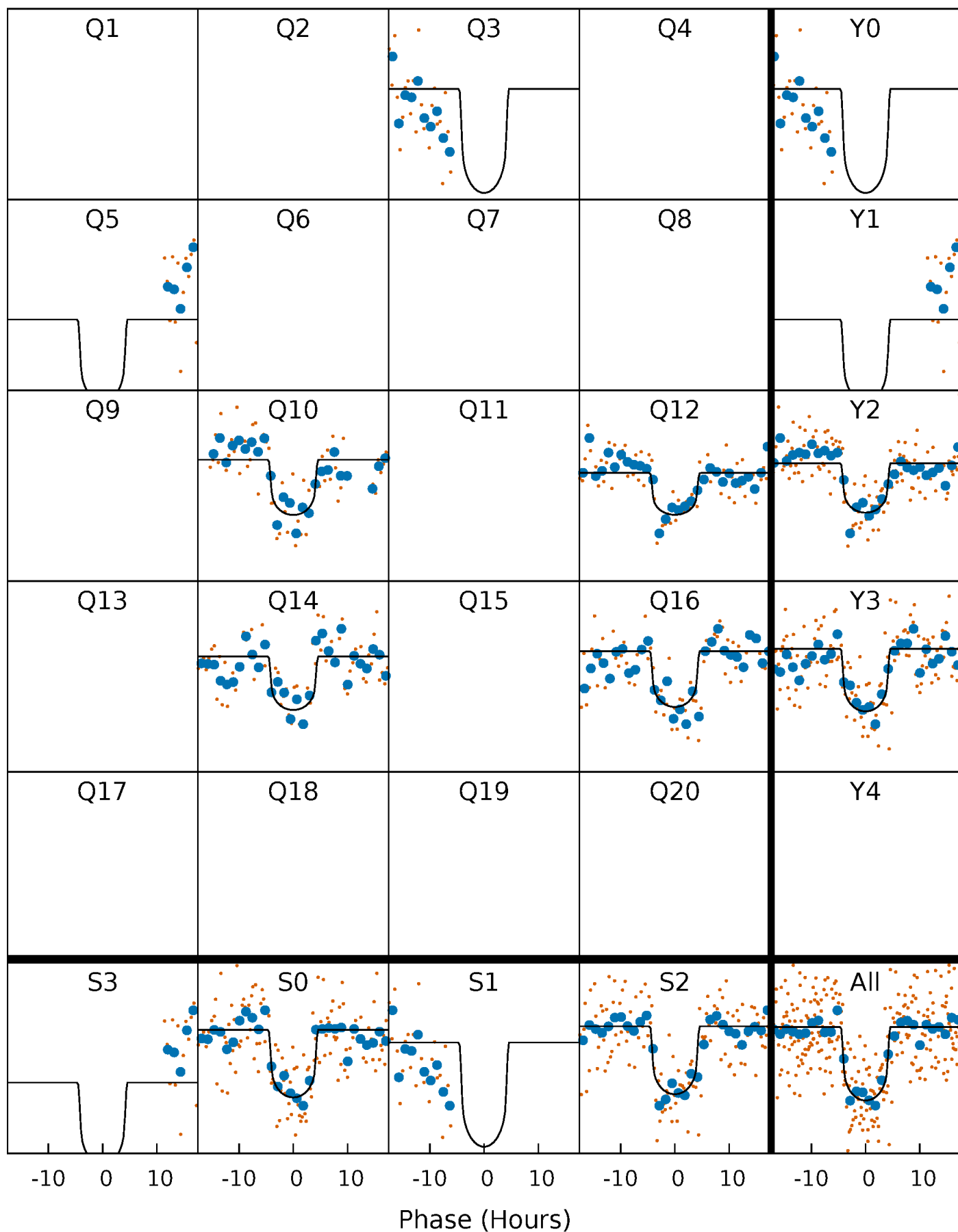
PDC Quarter-Phased Transit Curves

TCE 006762829-04 P=207.303991 Days $T_0=307.435059$ (BKJD)



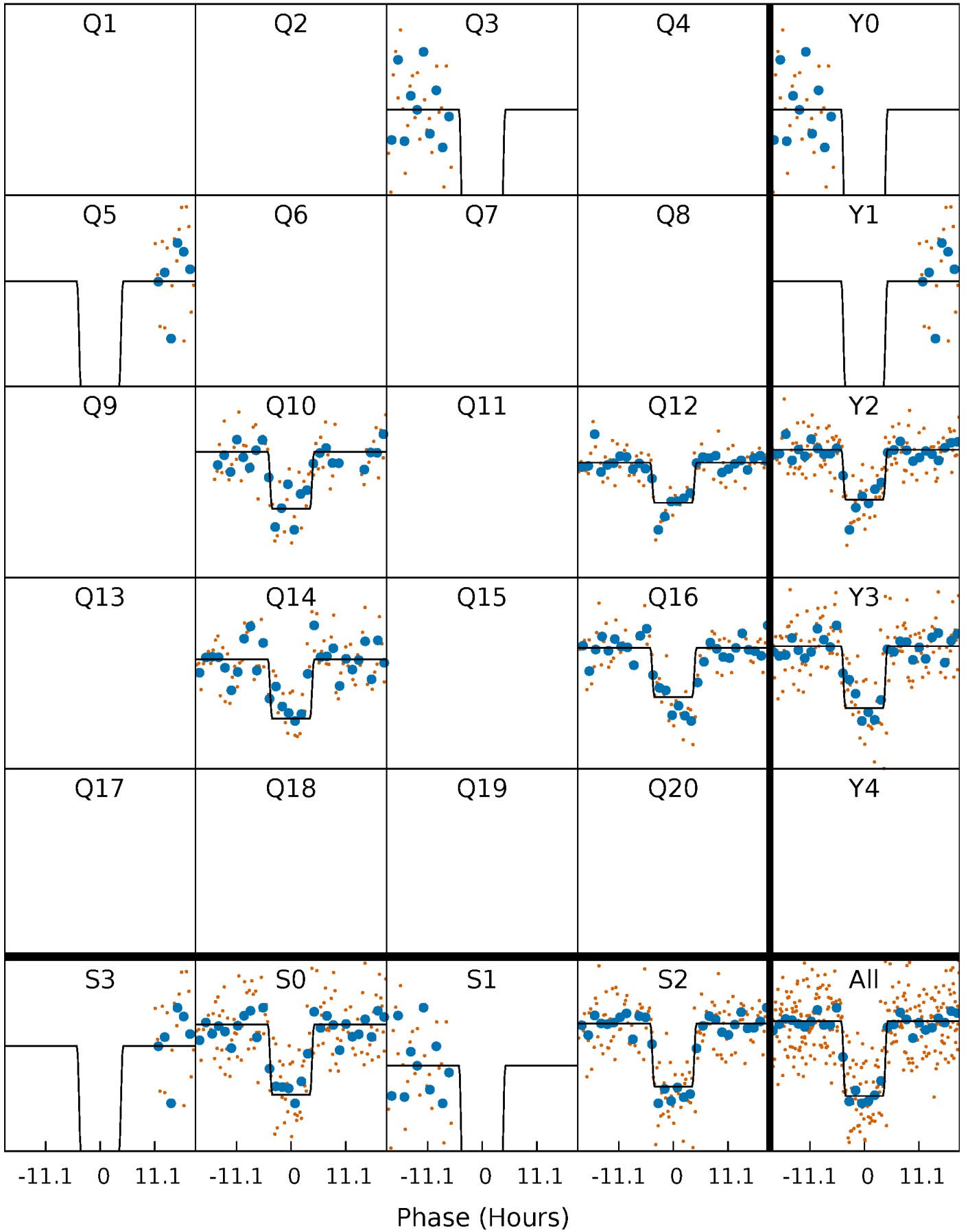
DV Quarter-Phased Transit Curves

TCE 006762829-04 P=207.303991 Days $T_0=307.435059$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

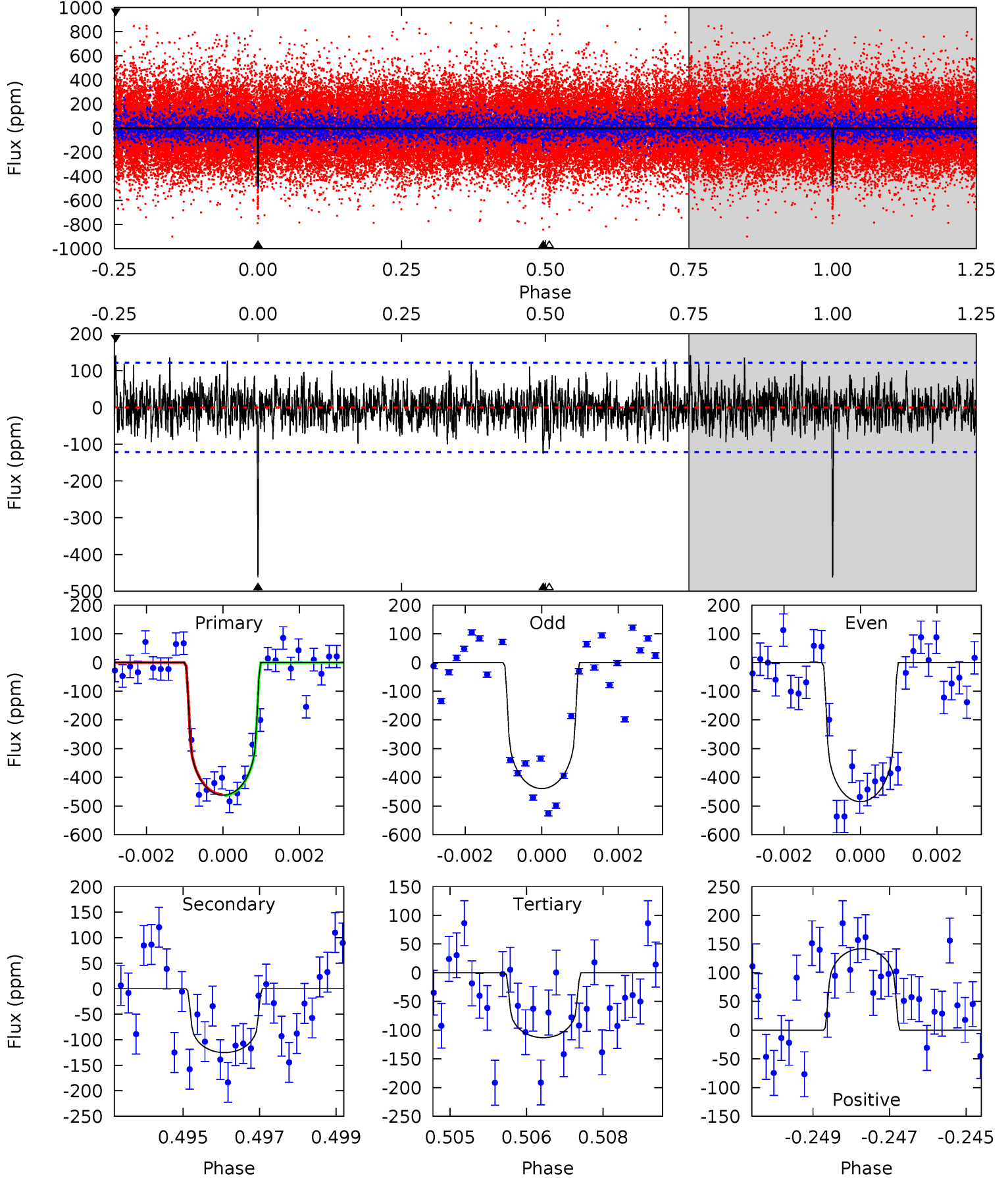
TCE 006762829-04 P=207.305277 Days $T_0=307.442529$ (BKJD)



DV Model-Shift Uniqueness Test

006762829-04, P = 207.303991 Days, E = 100.131068 Days

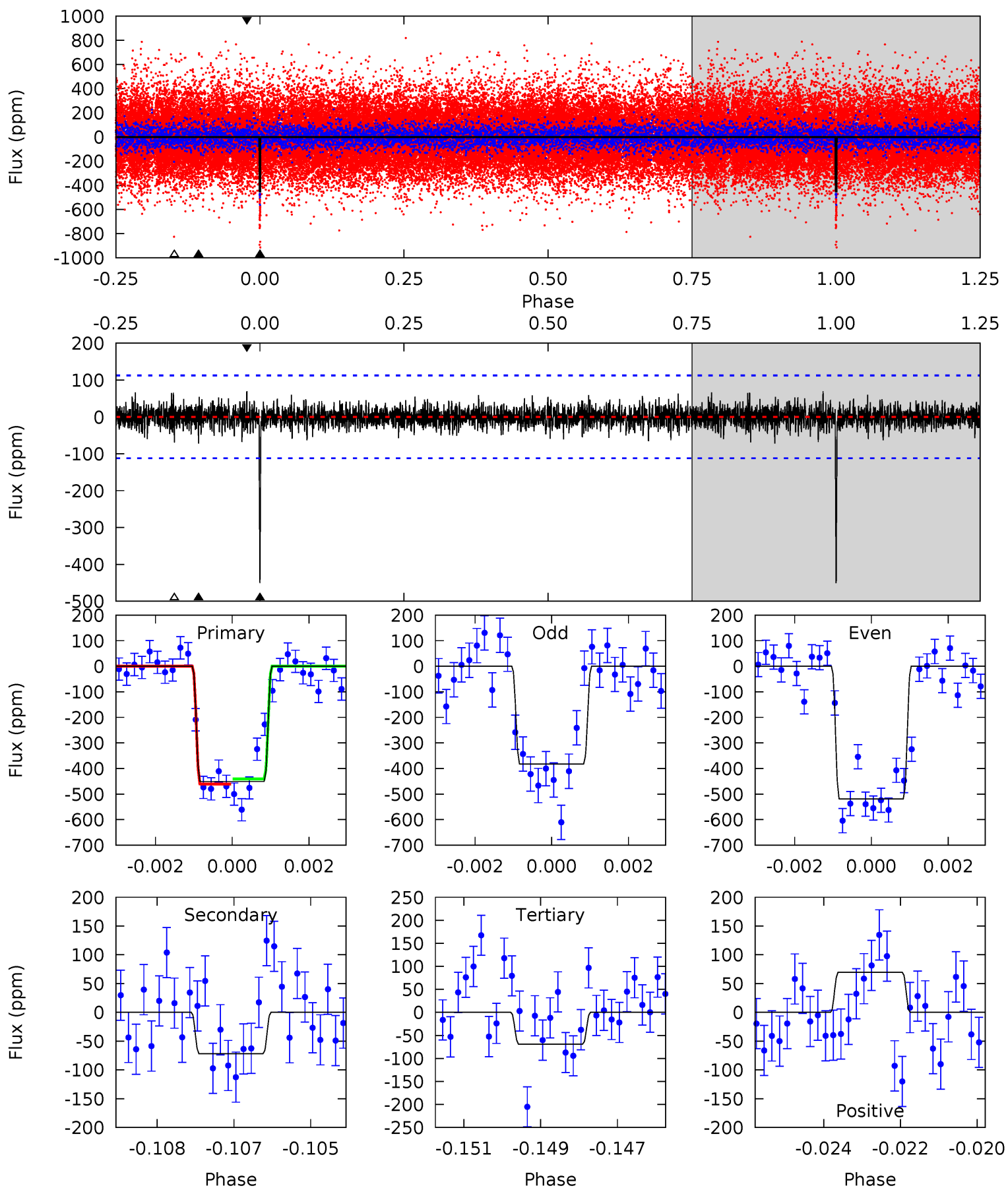
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.3	5.51	4.98	6.25	5.34	3.11	1.57	15.4	14.1	0.54	-0.73	1.01	0.96	0.23	0.08



Alt Model-Shift Uniqueness Test

006762829-04, P = 207.305277 Days, E = 100.137252 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.4	3.42	3.28	3.32	5.34	3.12	0.88	18.2	18.1	0.14	0.10	3.25	0.94	0.13	0.48



Stellar Parameters For KIC 006762829

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5623^{+113}_{-113}	$3.925^{+0.055}_{-0.045}$	$-0.120^{+0.150}_{-0.150}$	$1.841^{+0.162}_{-0.162}$	$1.038^{+0.092}_{-0.084}$	$0.234^{+0.060}_{-0.036}$
	+2%/-2%	+1%/-1%	+125%/-125%	+9%/-9%	+9%/-8%	+25%/-15%
Source	SPE37	TRA37	SPE37	DSEP		

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

Secondary Eclipse Parameters for KIC 006762829-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-125 ± 23	$4.24^{+1.96}_{-1.95}$	564^{+15}_{-16}	4319^{+1271}_{-578}	1928^{+4592}_{-1063}
Alt.	-72 ± 21	$4.20^{+2.01}_{-1.88}$	563^{+17}_{-17}	3899^{+943}_{-543}	1056^{+2432}_{-626}

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

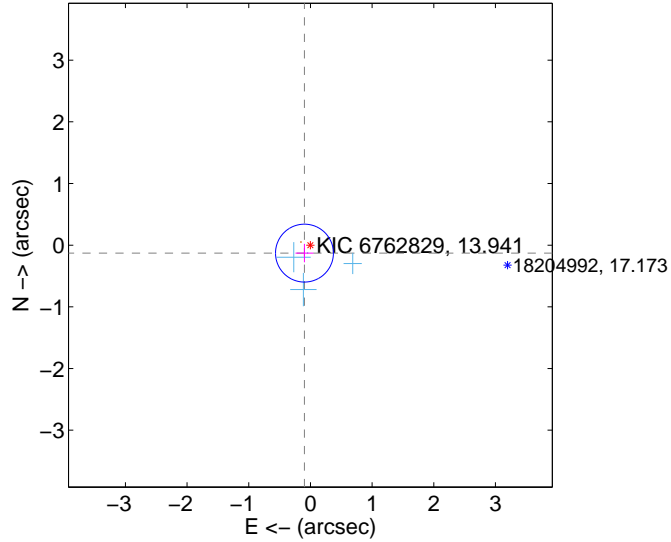
Supplemental centroid analysis for 006762829-04. Kepler magnitude: 13.94. Transit SNR 12.93

There are 4 quarters with good PRF difference image offsets

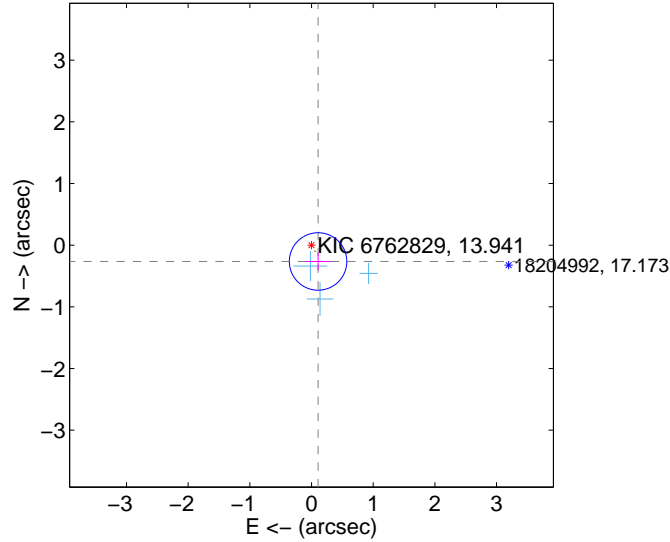
The direct PRF centroid is offset from the target star catalog position by about 0.29 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.161 ± 0.156	1.03	0.097 ± 0.145	-0.129 ± 0.149
PRF-fit source offset from KIC position	0.285 ± 0.155	1.83	-0.106 ± 0.207	-0.264 ± 0.142
photometric centroid source offset	1.28 ± 0.66	1.94	-0.81 ± 0.63	-0.99 ± 0.68

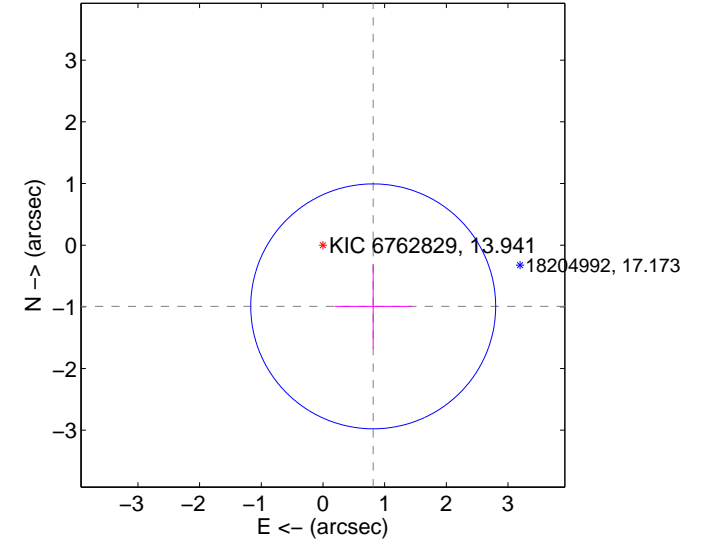
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

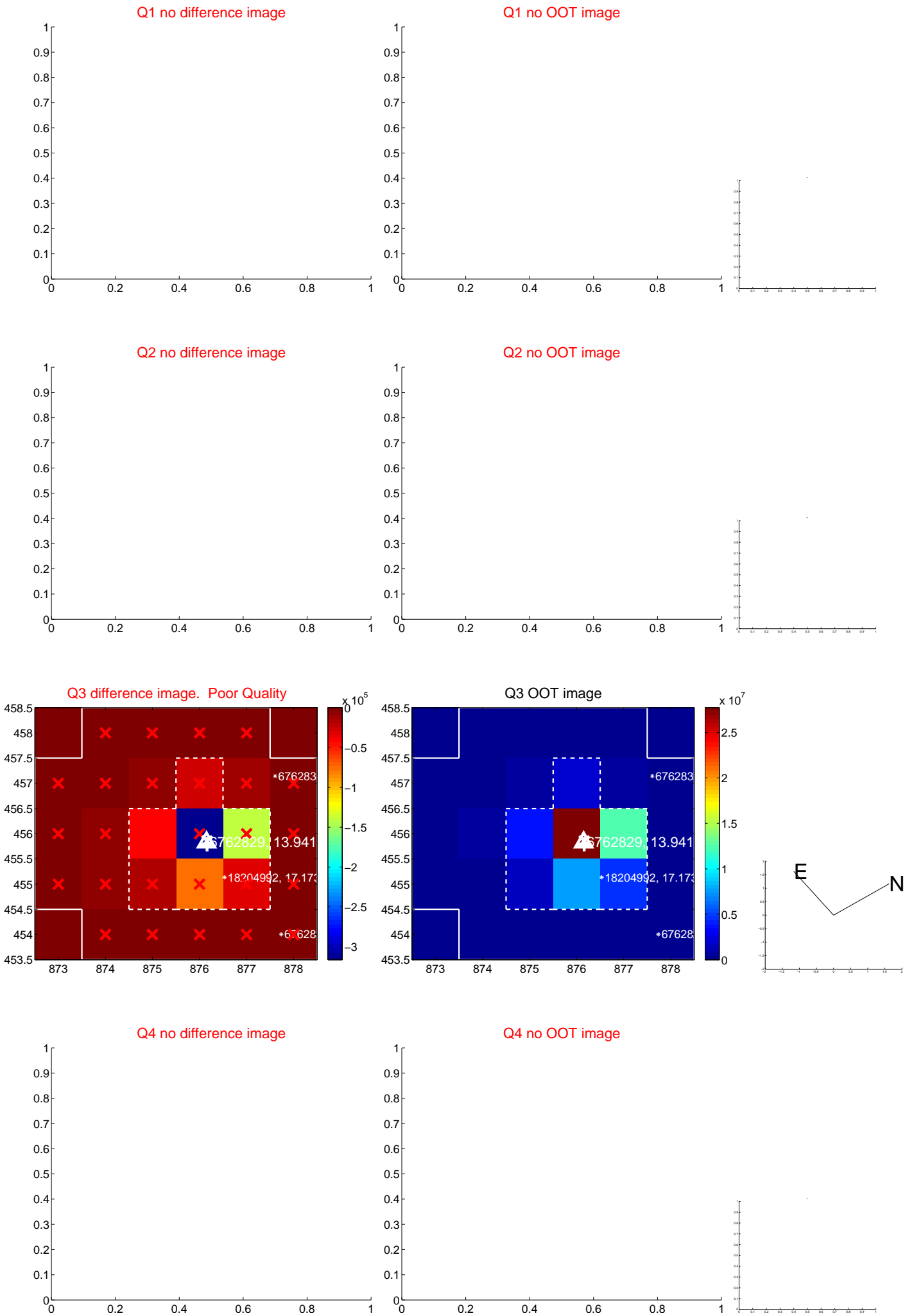


offset from photometric centroids

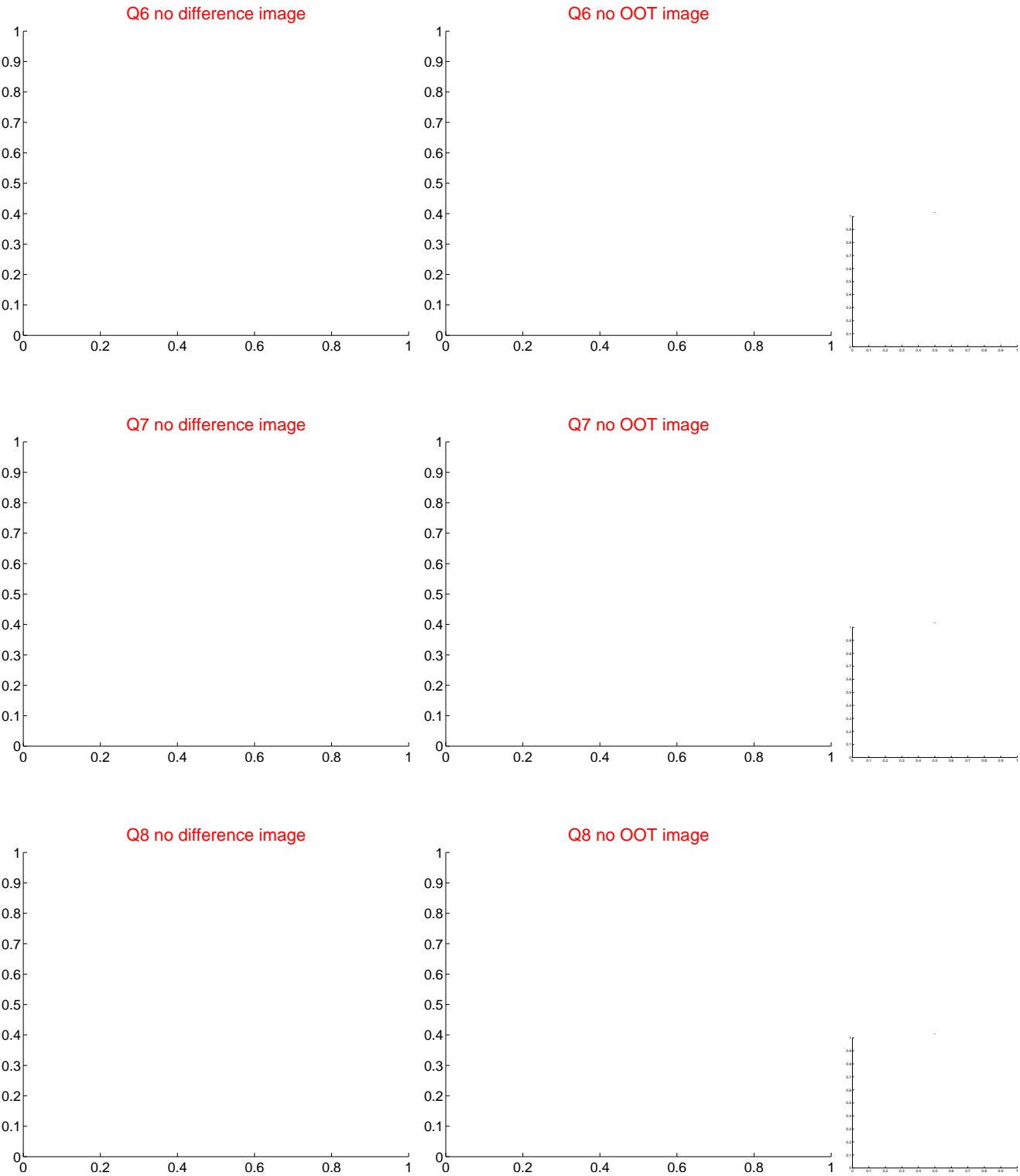
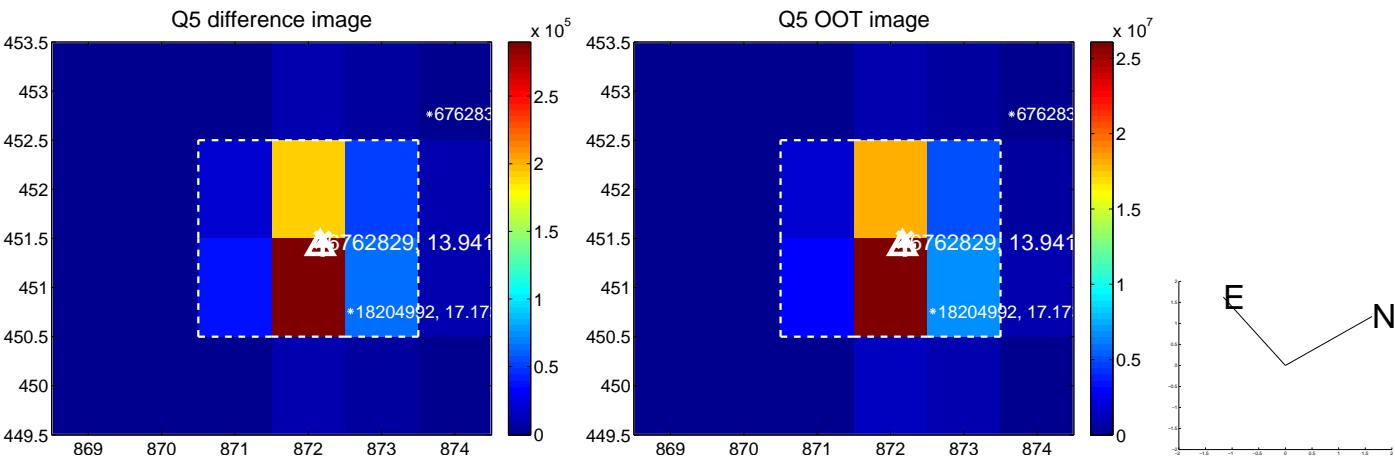


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

Q9 no difference image



Q9 no OOT image



Q10 no difference image



Q10 no OOT image



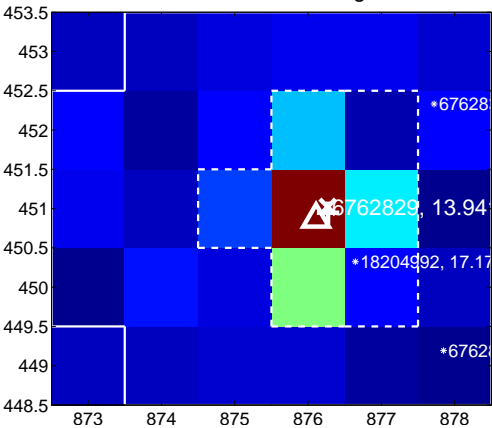
Q11 no difference image



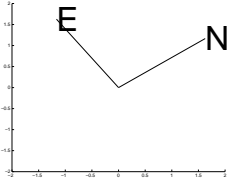
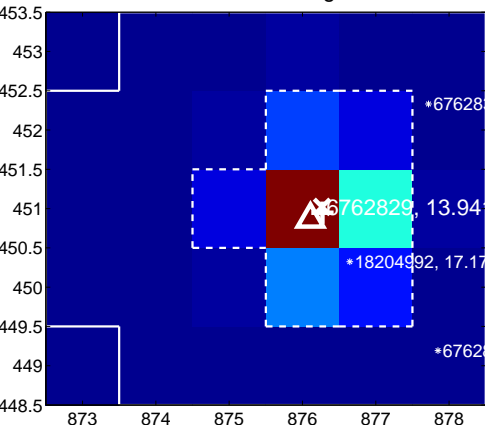
Q11 no OOT image



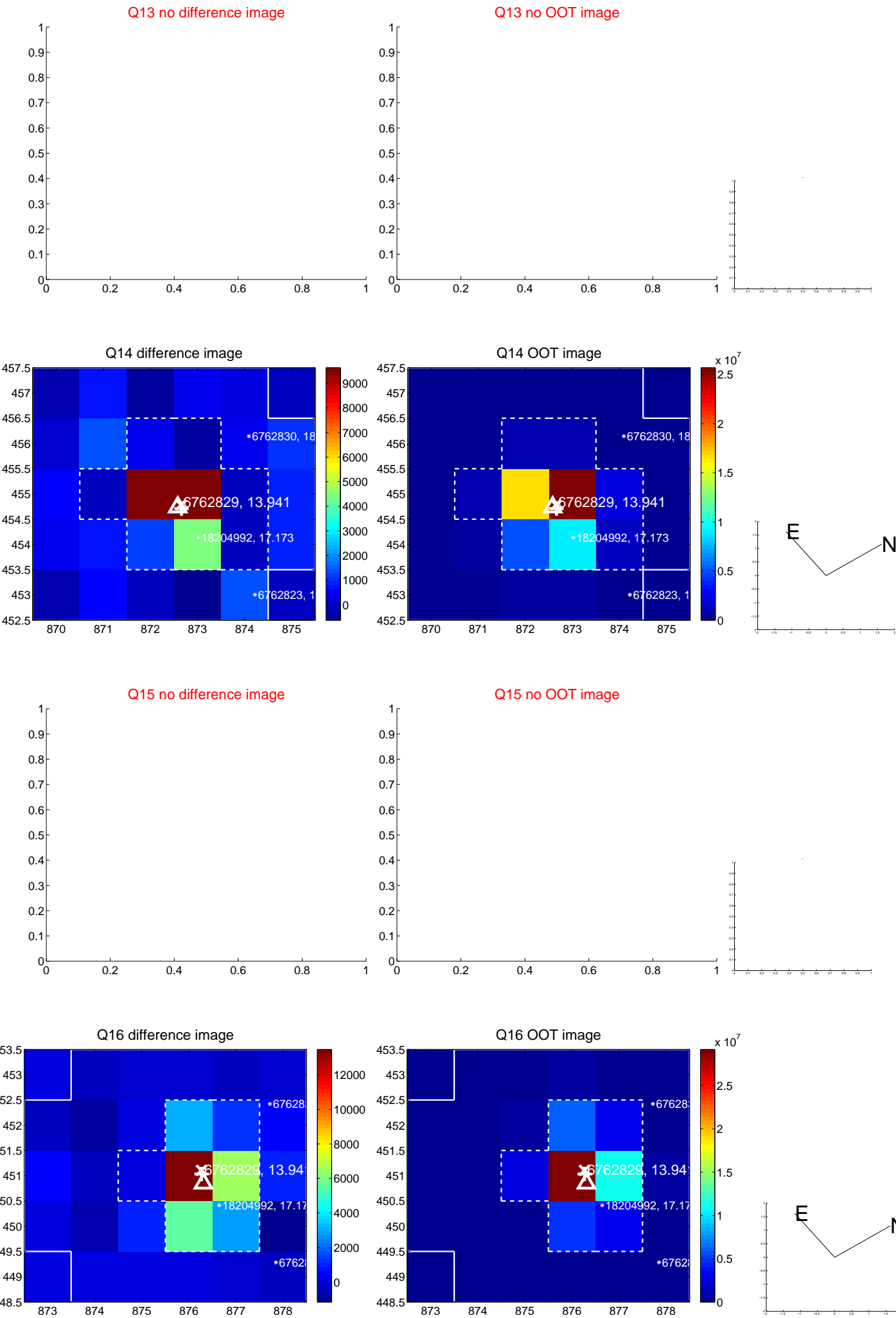
Q12 difference image



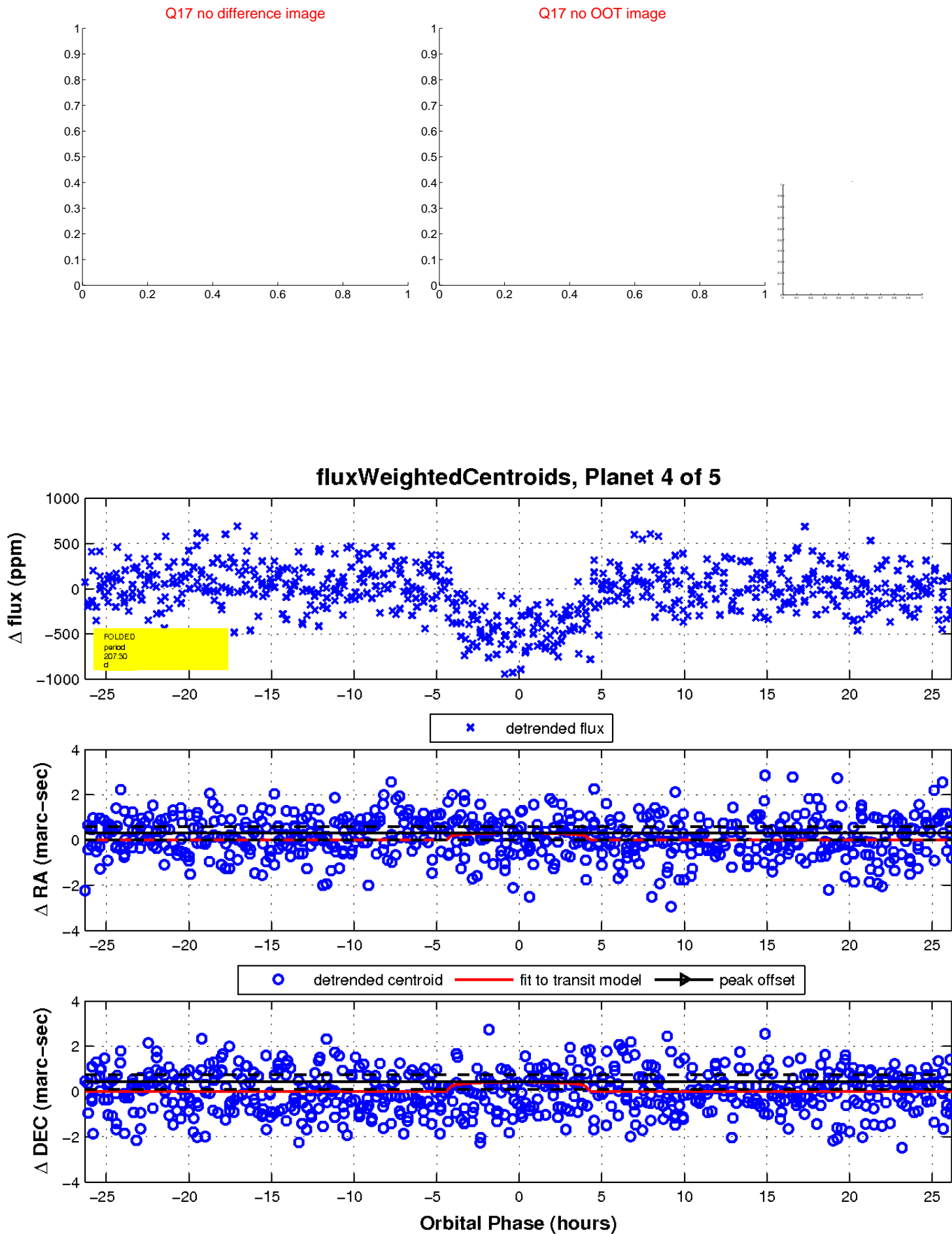
Q12 OOT image



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

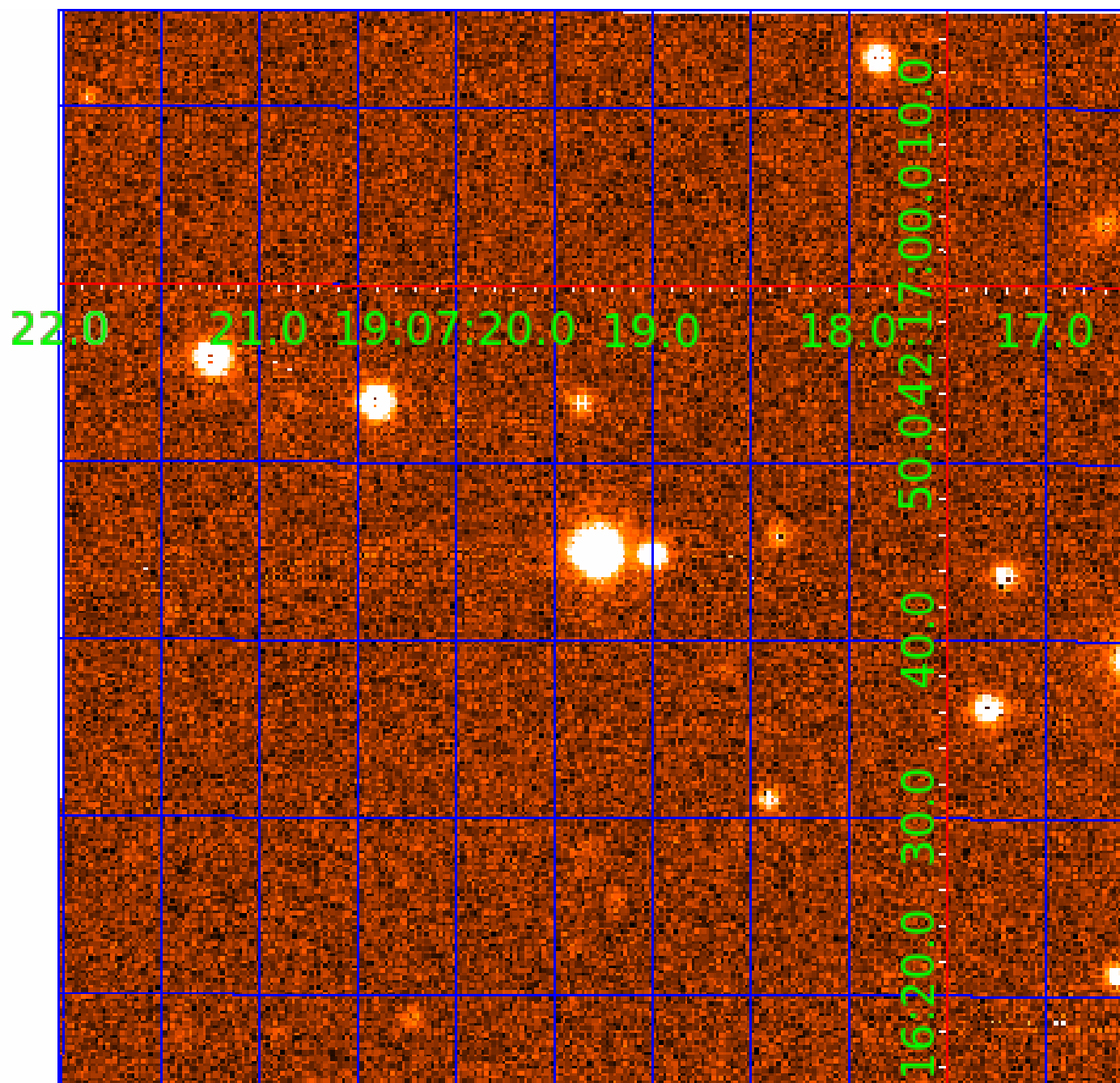


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006762829

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})
006762829-01	OBS	1740.01	18.795269	138.668637	28299.8	9.992	3019.4	2759.0	1.84	5623	30.82	154.43
006762829-02	OBS	No	18.795261	148.038098	964.2	8.024	97.2	97.6	1.84	5623	6.47	154.43
006762829-03	OBS	No	649.166720	151.093040	610.5	11.299	17.3	15.9	1.84	5623	4.74	1.37
006762829-04	OBS	No	207.303991	307.435059	468.4	8.777	13.0	12.9	1.84	5623	4.25	6.29
006762829-05	OBS	No	207.828345	203.146314	330.1	20.621	11.4	11.8	1.84	5623	3.52	6.27

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006762829-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—HAS_SEC_TCE
006762829-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
006762829-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS
006762829-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—ALL_TRANS_CHASES
006762829-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—ALL_TRANS_CHASES

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

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

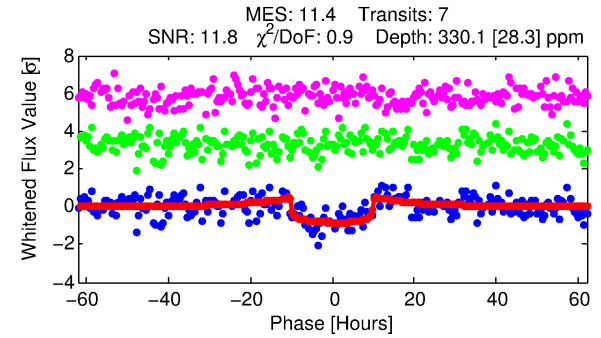
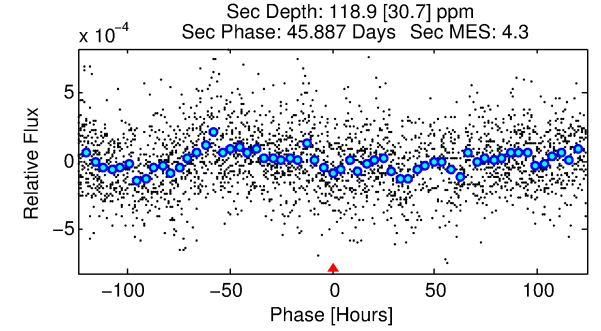
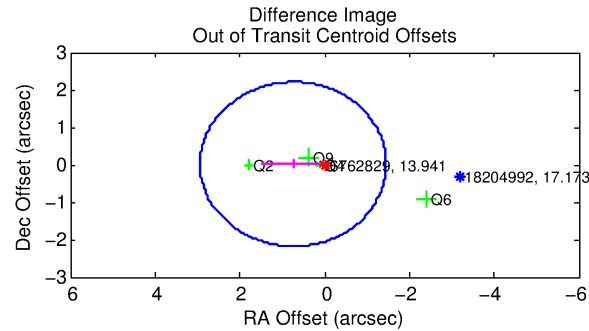
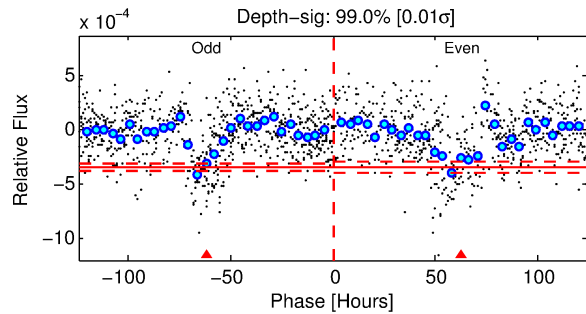
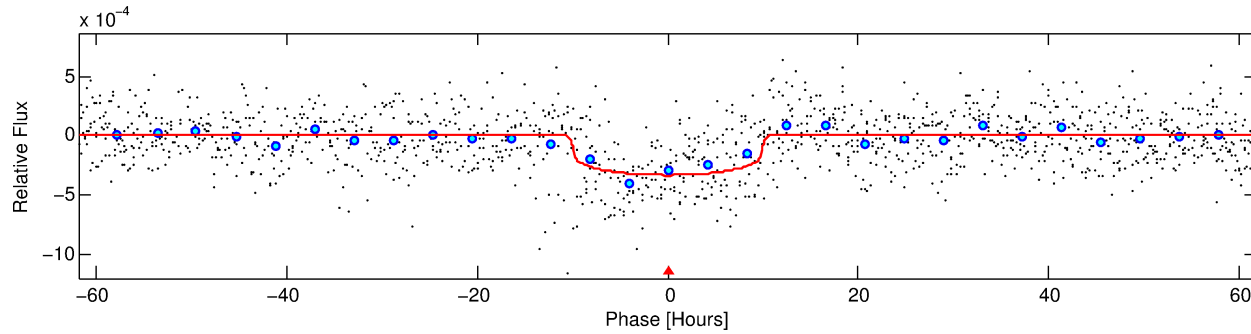
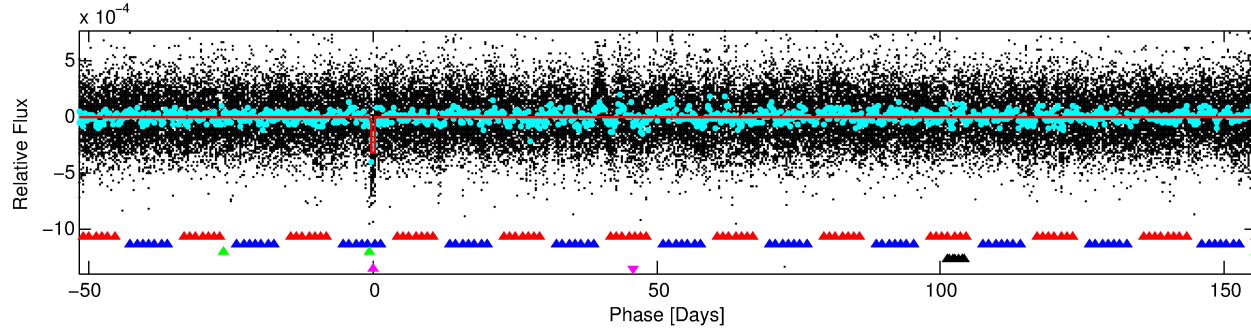
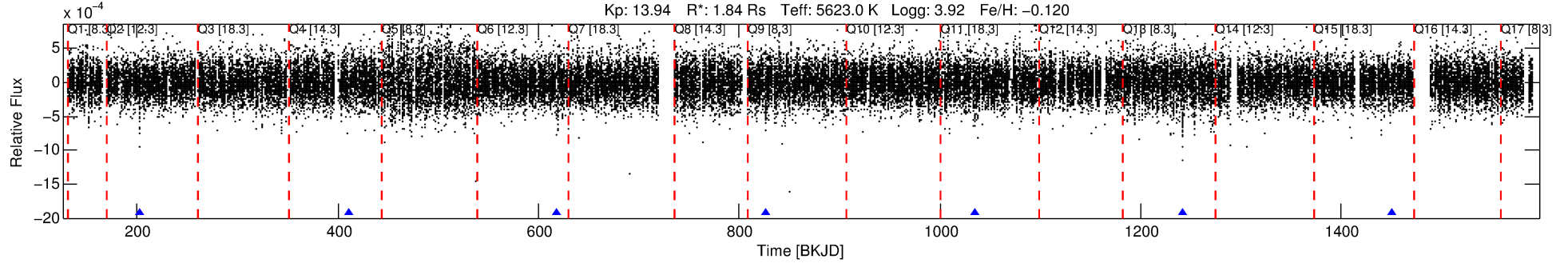
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006762829-05

No Significant Match Found

DV One-Page Summary

KIC: 6762829 Candidate: 5 of 5 Period: 207.828 d
KOI: K01740 Corr: No Ephemeris Match



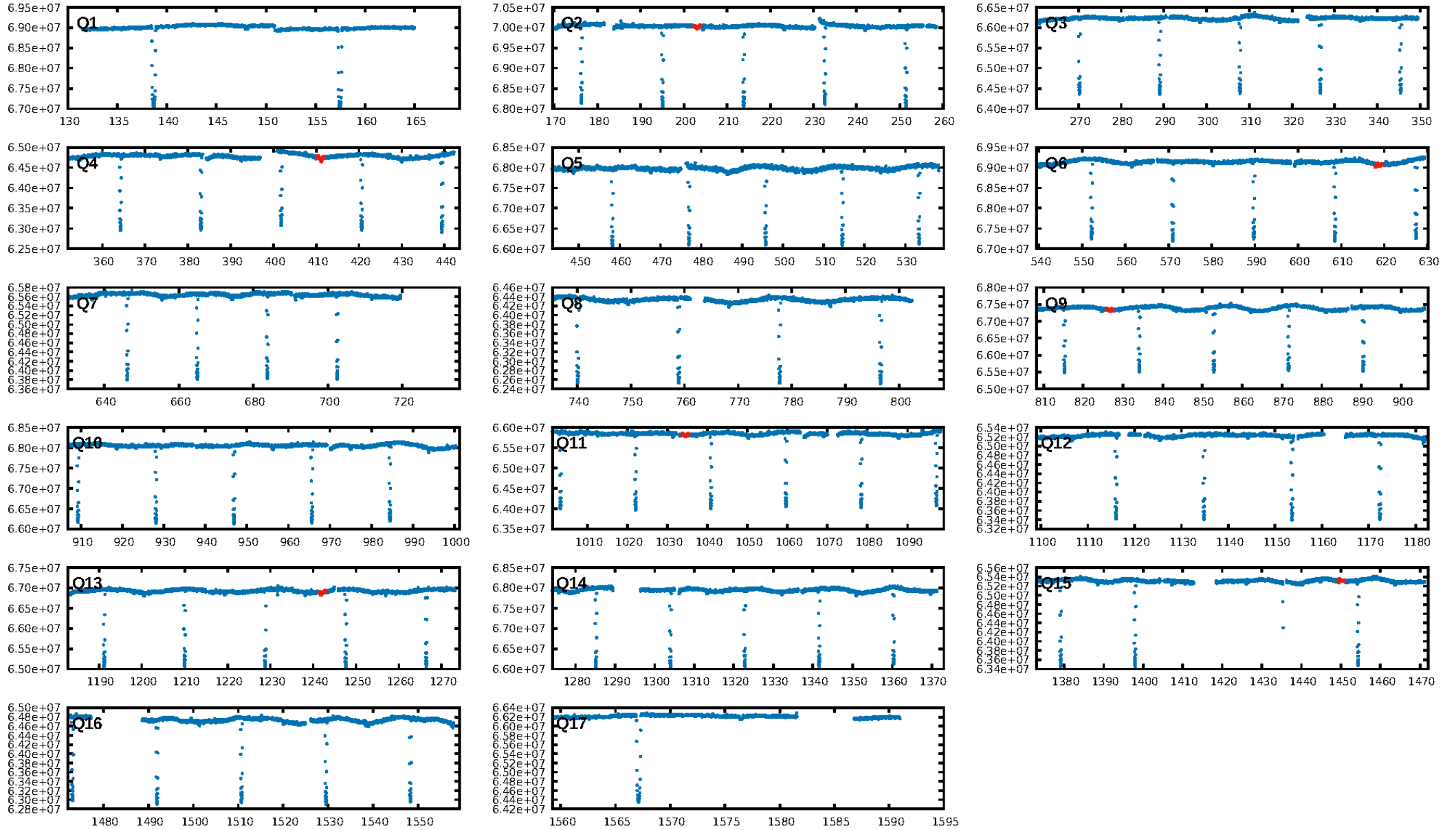
DV Fit Results:

Period = 207.82835 [0.00394] d
Epoch = 203.1463 [0.0141] BKJD
Rp/R* = 0.0175 [0.0038]
a/R* = 60.29 [54.30]
b = 0.65 [0.81]
Seff = 6.27 [0.82]
Teq = 403 [13] K
Rp = 3.52 [0.82] Re
a = 0.6959 [0.0503] AU
Ag = 2558.89 [1311.17] [1.95 σ]
Teffp = 4437 [564] K [7.15 σ]

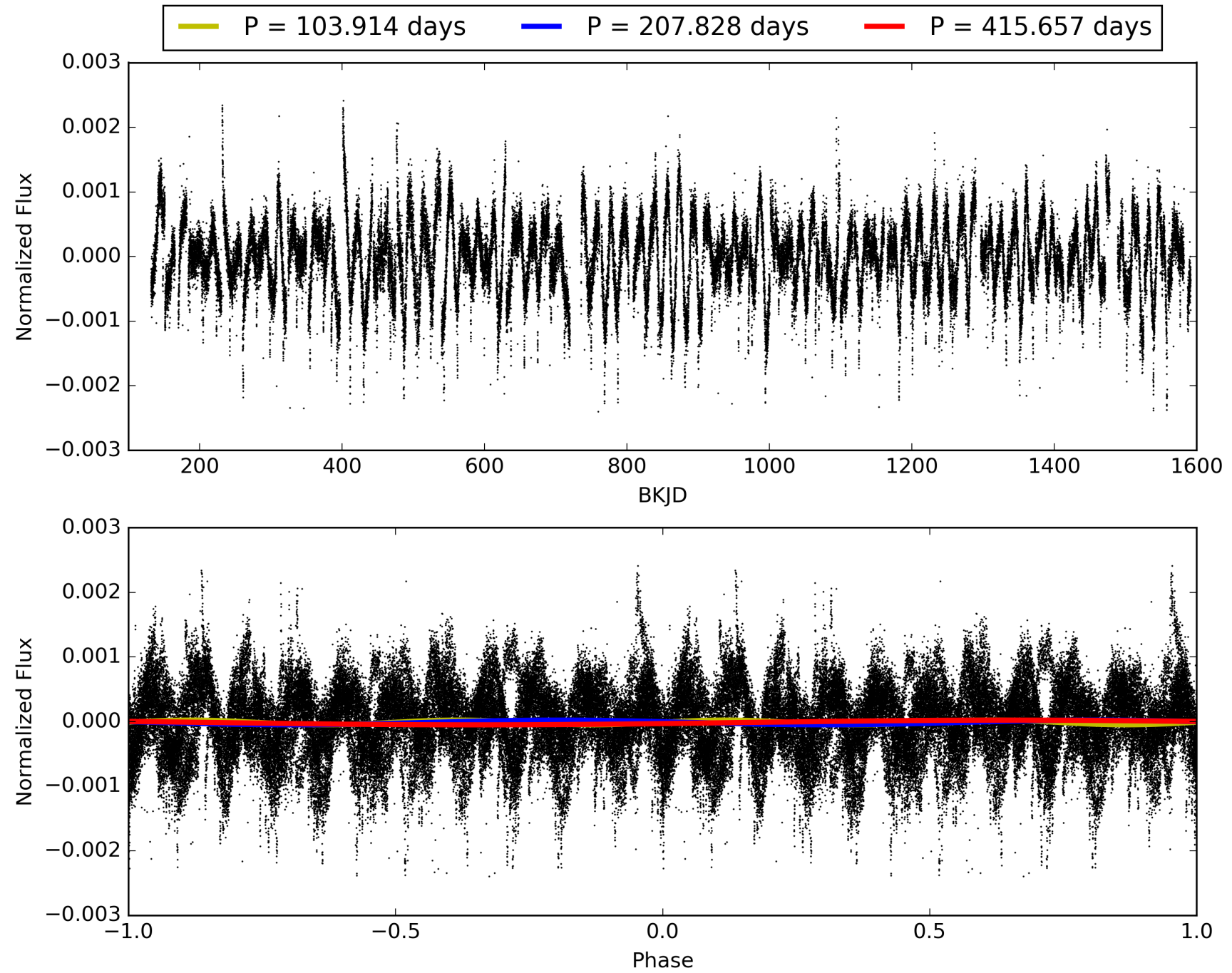
DV Diagnostic Results:

ShortPeriod-sig: 42.6% [0.56 σ]
LongPeriod-sig: 100.0% [450.47 σ]
ModelChiSquare2-sig: 0.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 9.29e-17
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: 2.836
Centroid-sig: 40.9%
Centroid-so: 0.319 arcsec [0.55 σ]
OotOffset-rm: 0.742 arcsec [1.01 σ]
OotOffset-st: 2/0/1/1 [4]
KicOffset-rm: 0.520 arcsec [0.71 σ]
KicOffset-st: 2/0/1/1 [4]
DiffImageQuality-fgm: 1.00 [4/4]
DiffImageOverlap-fno: 0.25 [1/4]

TCE 006762829-05, PDC Light Curves

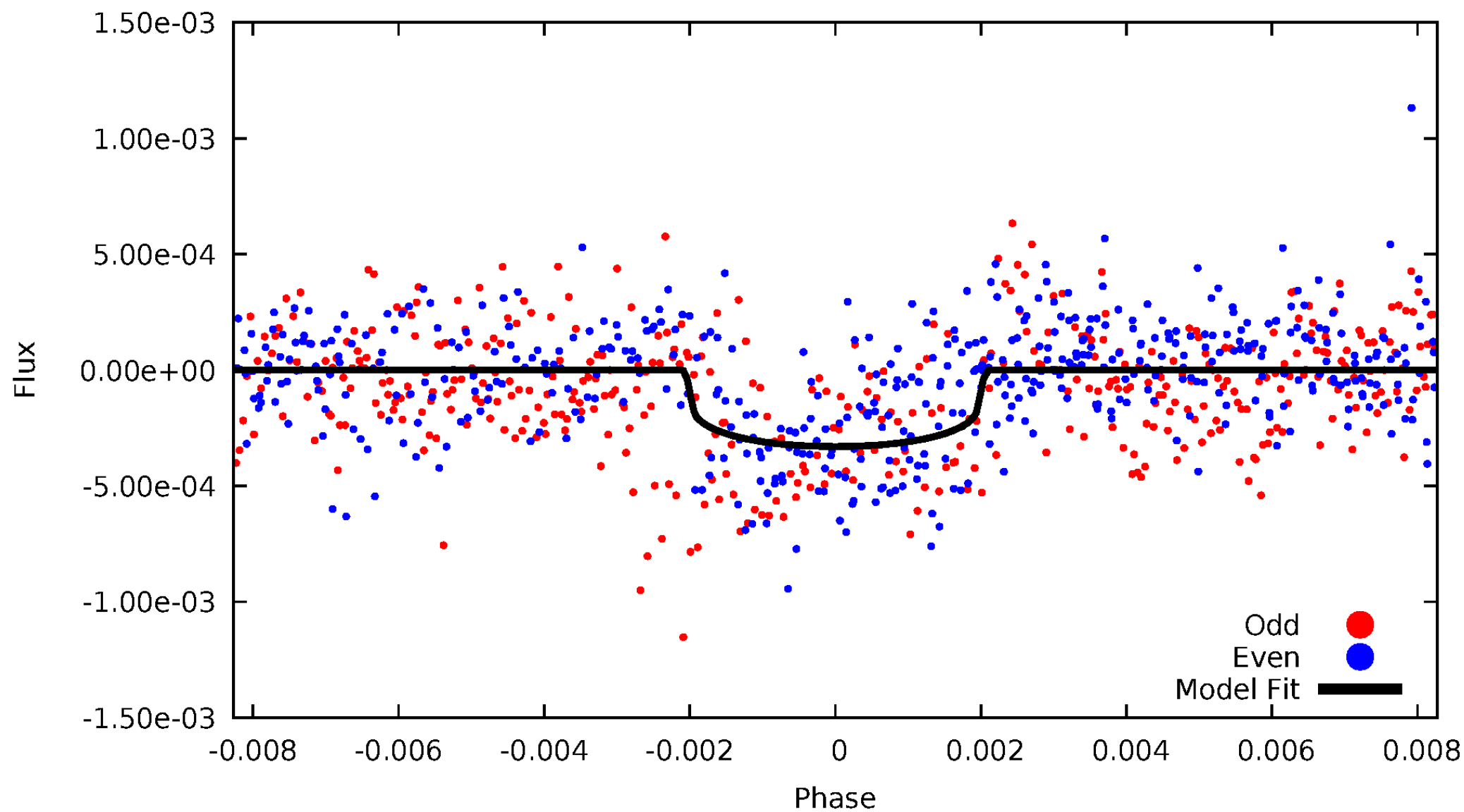


TCE 006762829-05



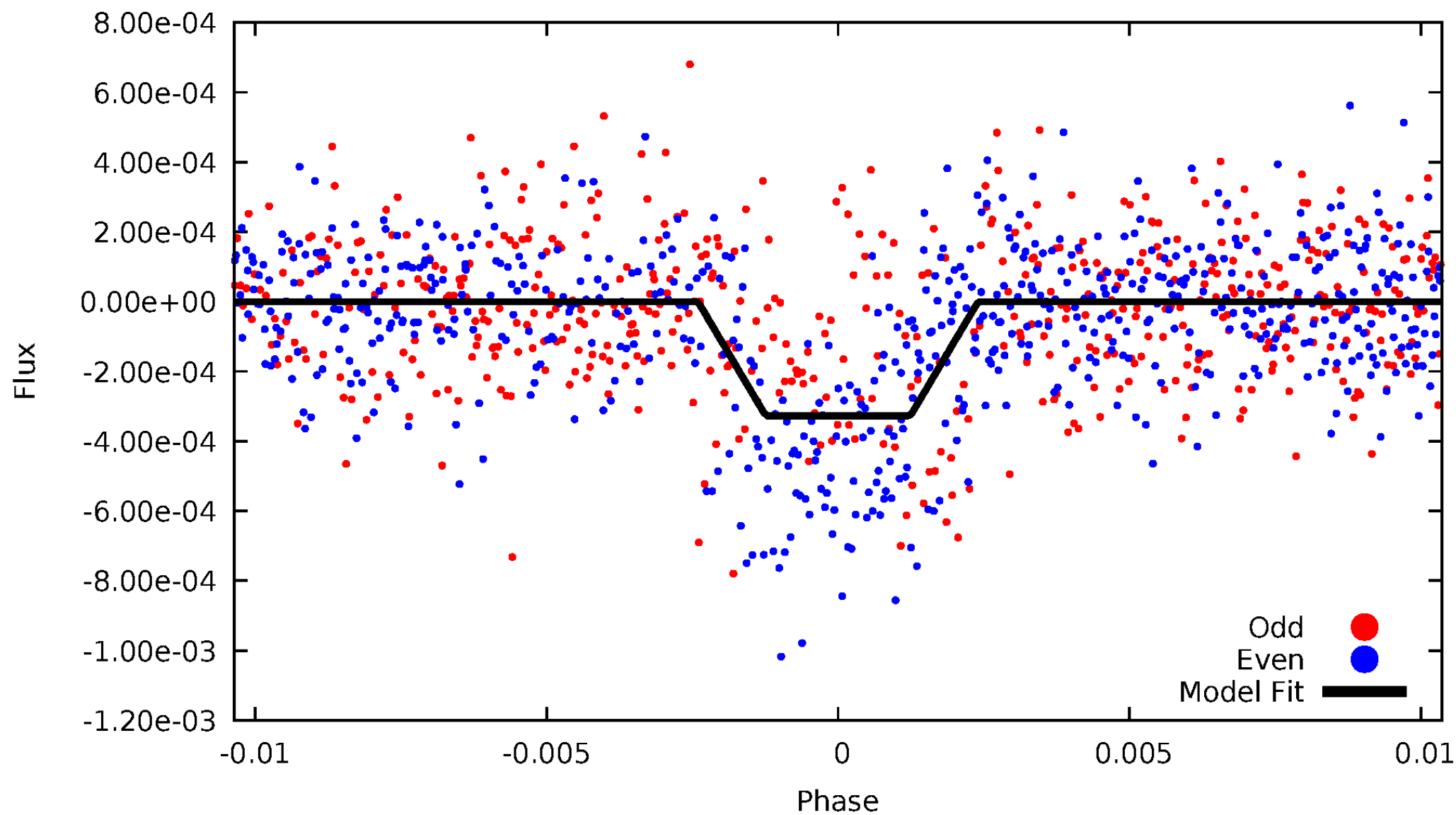
DV Odd/Even

TCE 006762829-05



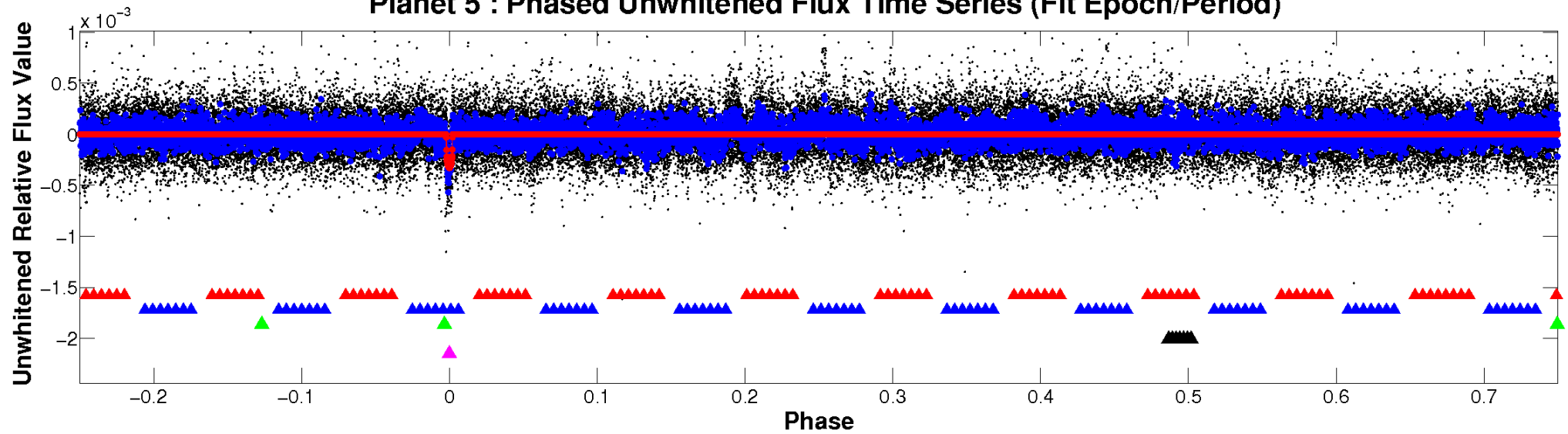
ALT Odd/Even

TCE 006762829-05

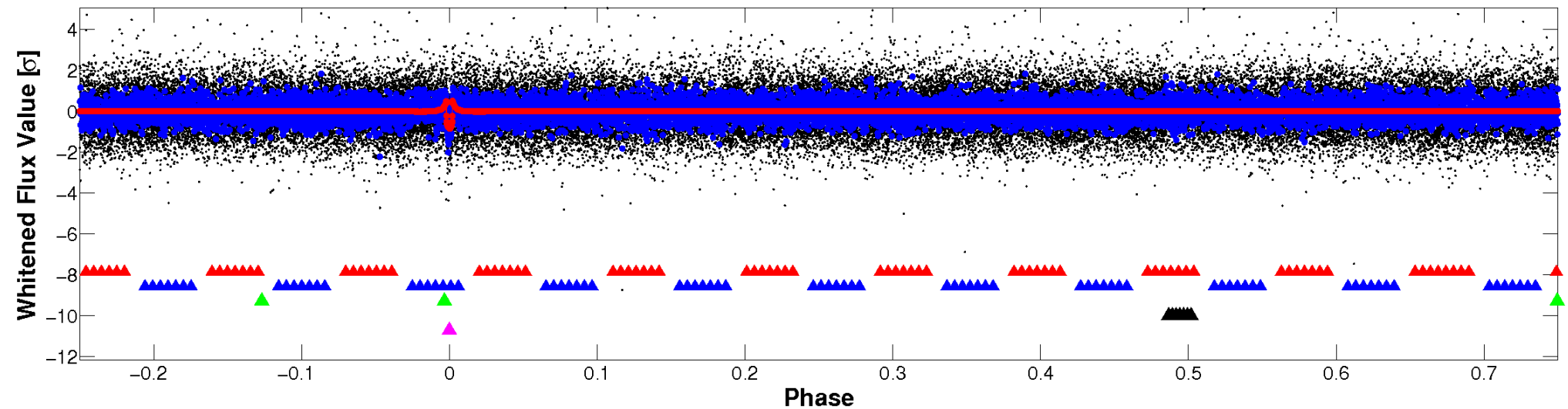


Non-Whitened Vs. Whitened Light Curve

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

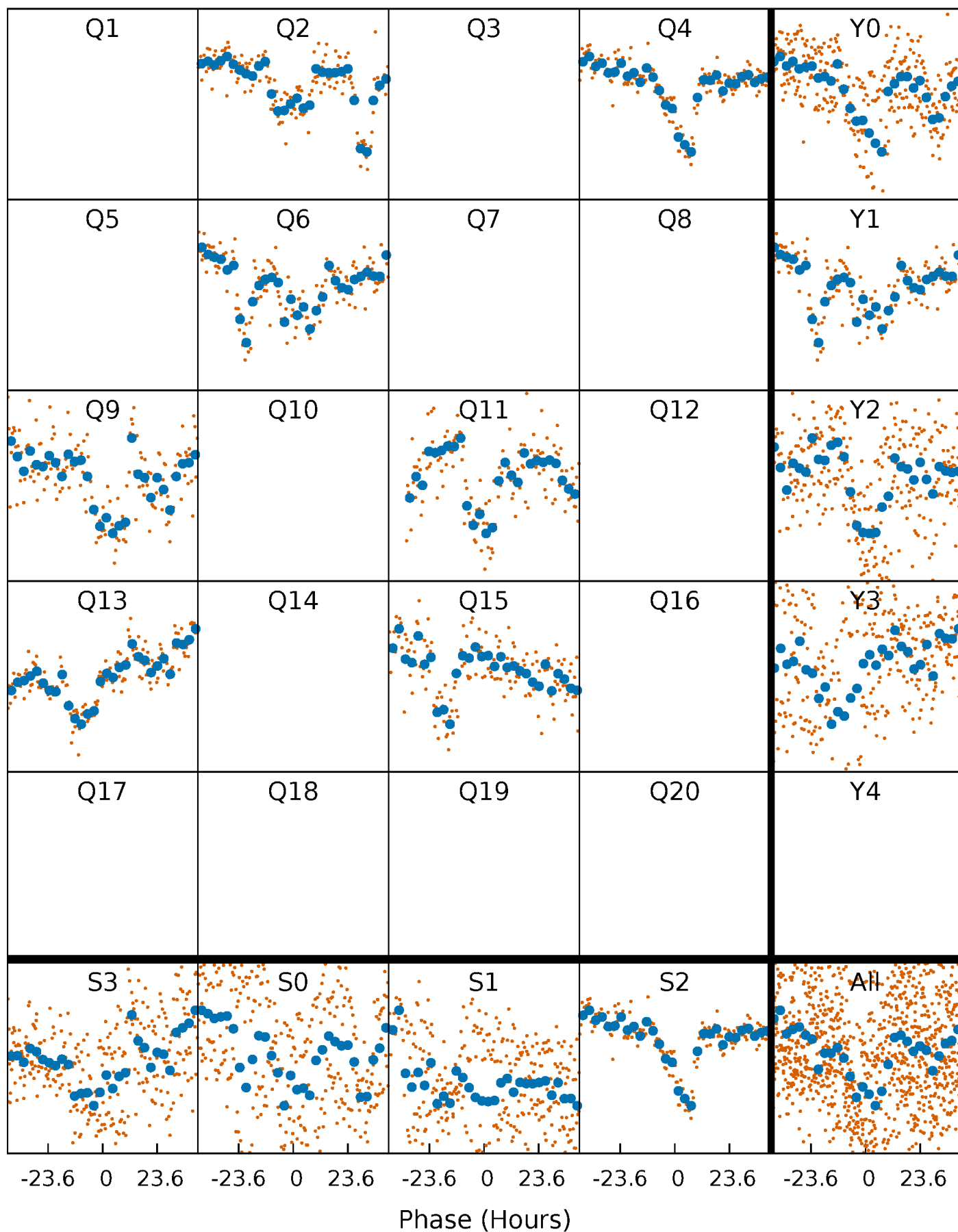


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



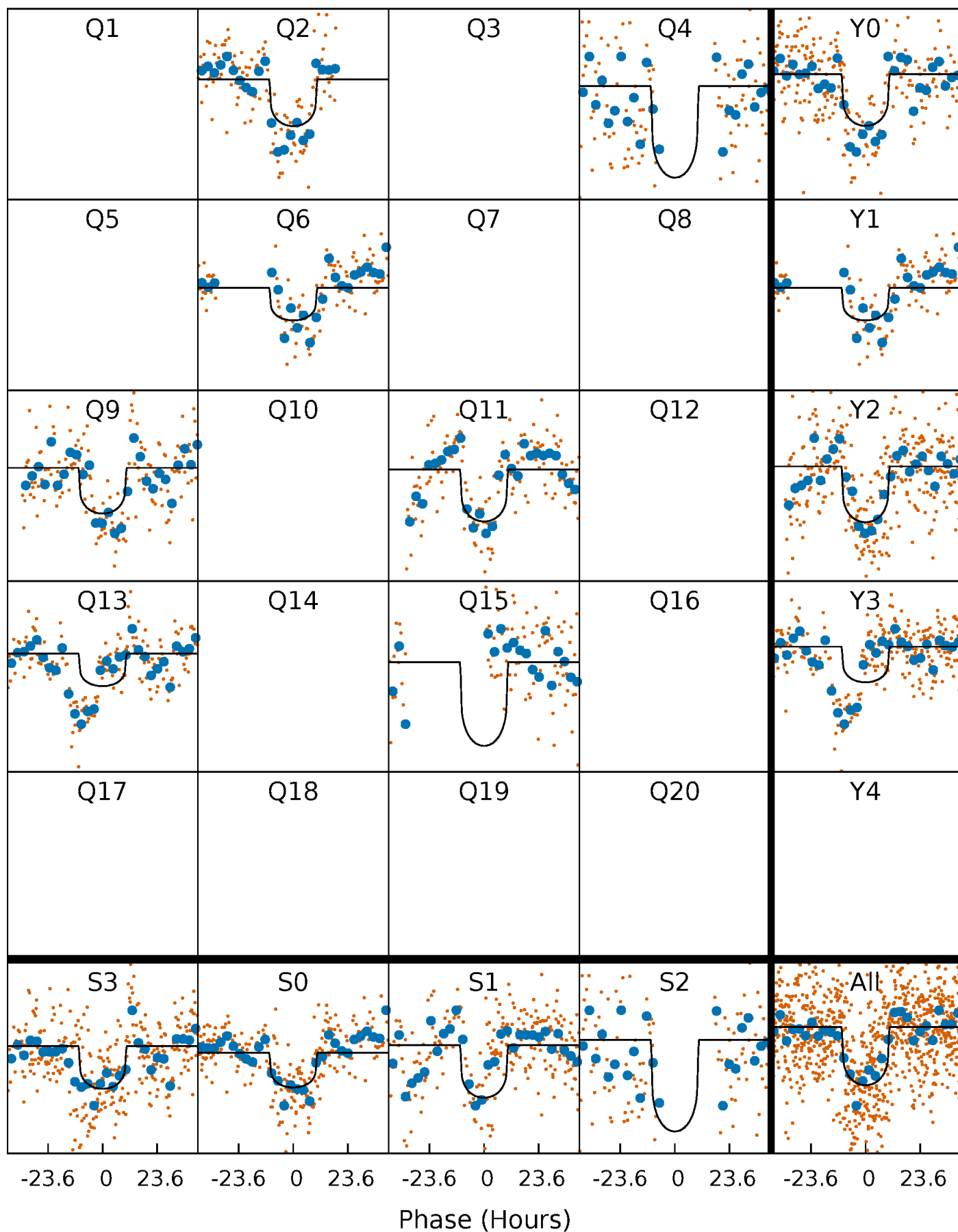
PDC Quarter-Phased Transit Curves

TCE 006762829-05 $P=207.828345$ Days $T_0=203.146314$ (BKJD)



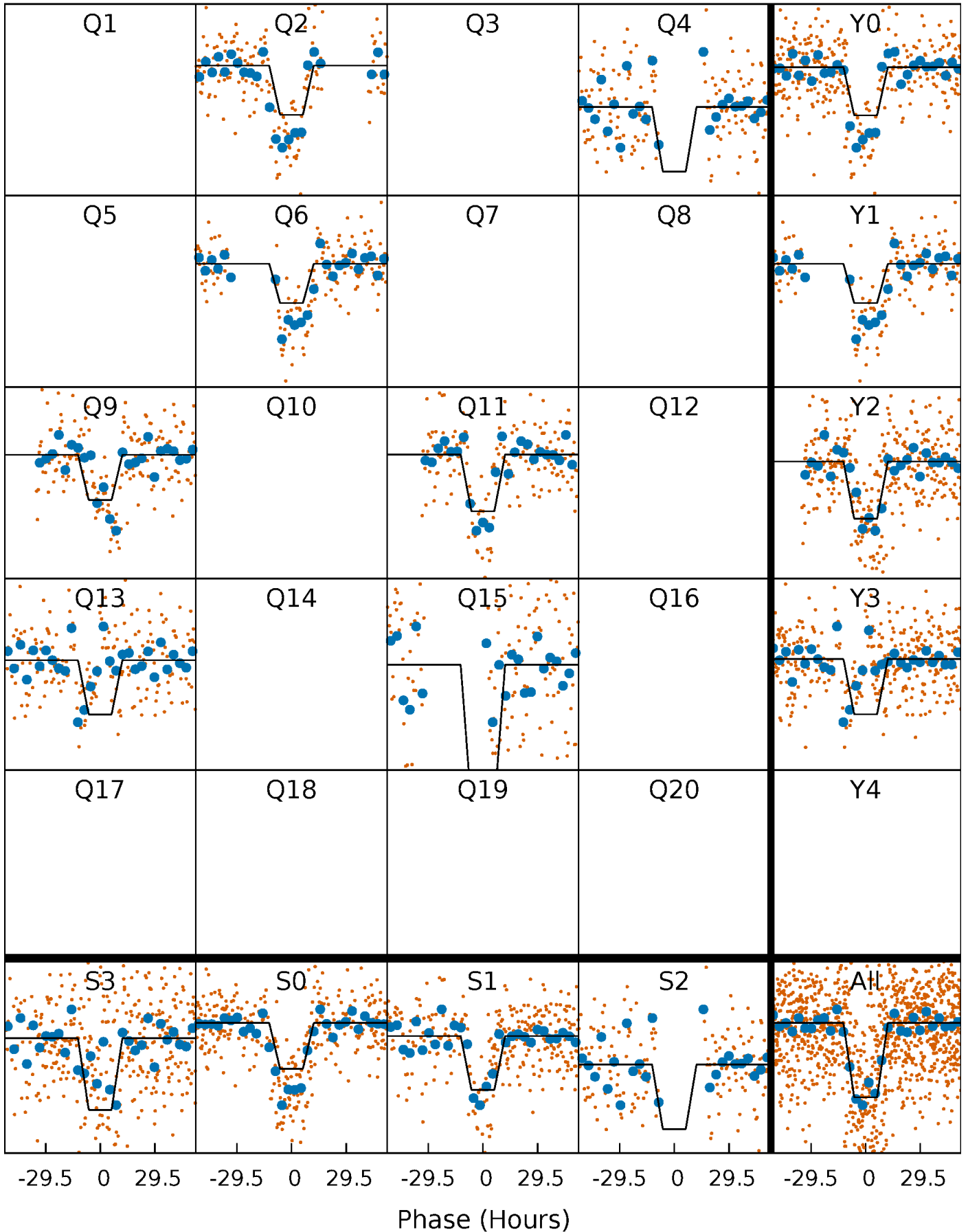
DV Quarter-Phased Transit Curves

TCE 006762829-05 $P=207.828345$ Days $T_0=203.146314$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

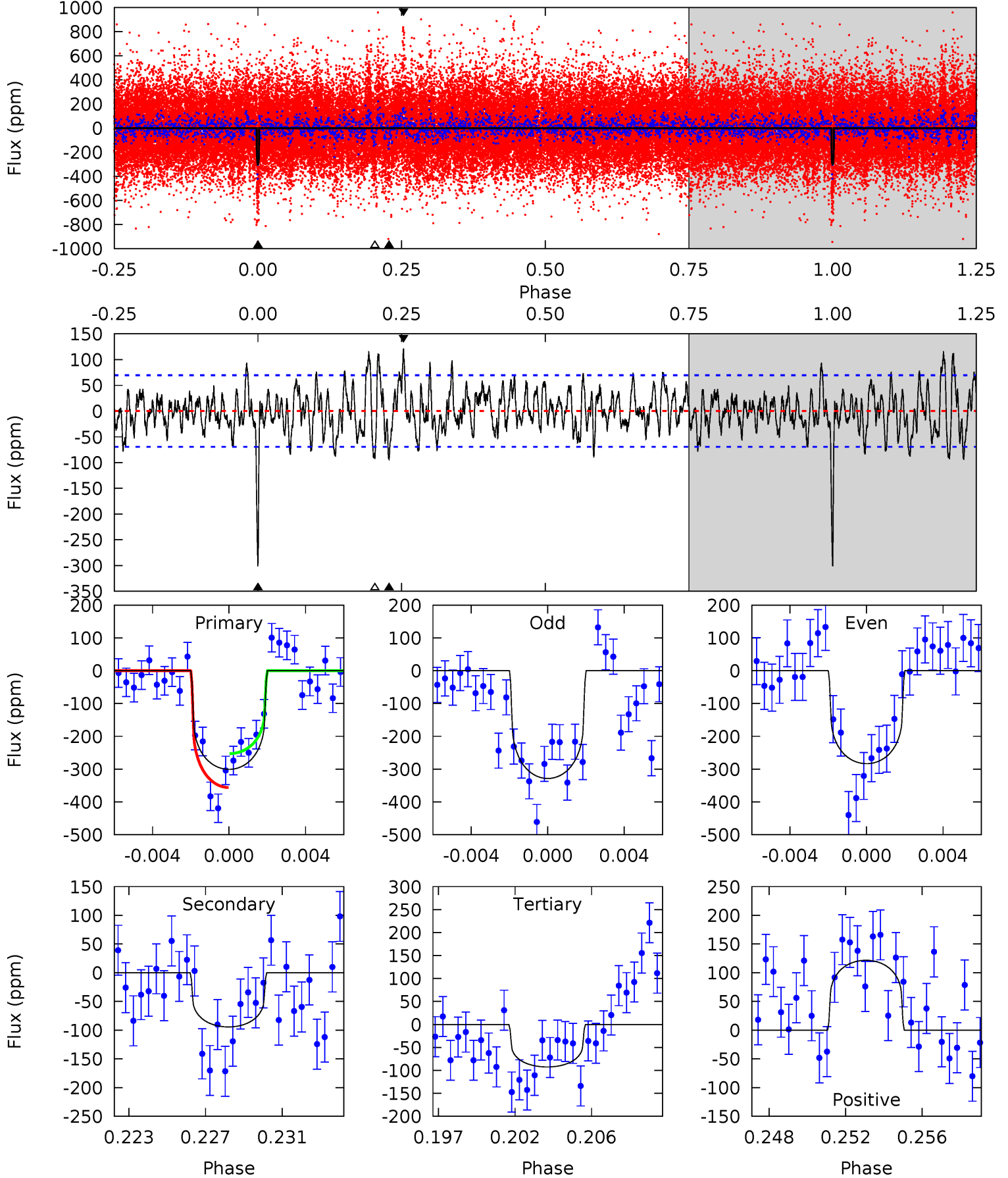
TCE 006762829-05 $P=207.802494$ Days $T_0=203.214785$ (BKJD)



DV Model-Shift Uniqueness Test

006762829-05, P = 207.828345 Days, E = 203.146314 Days

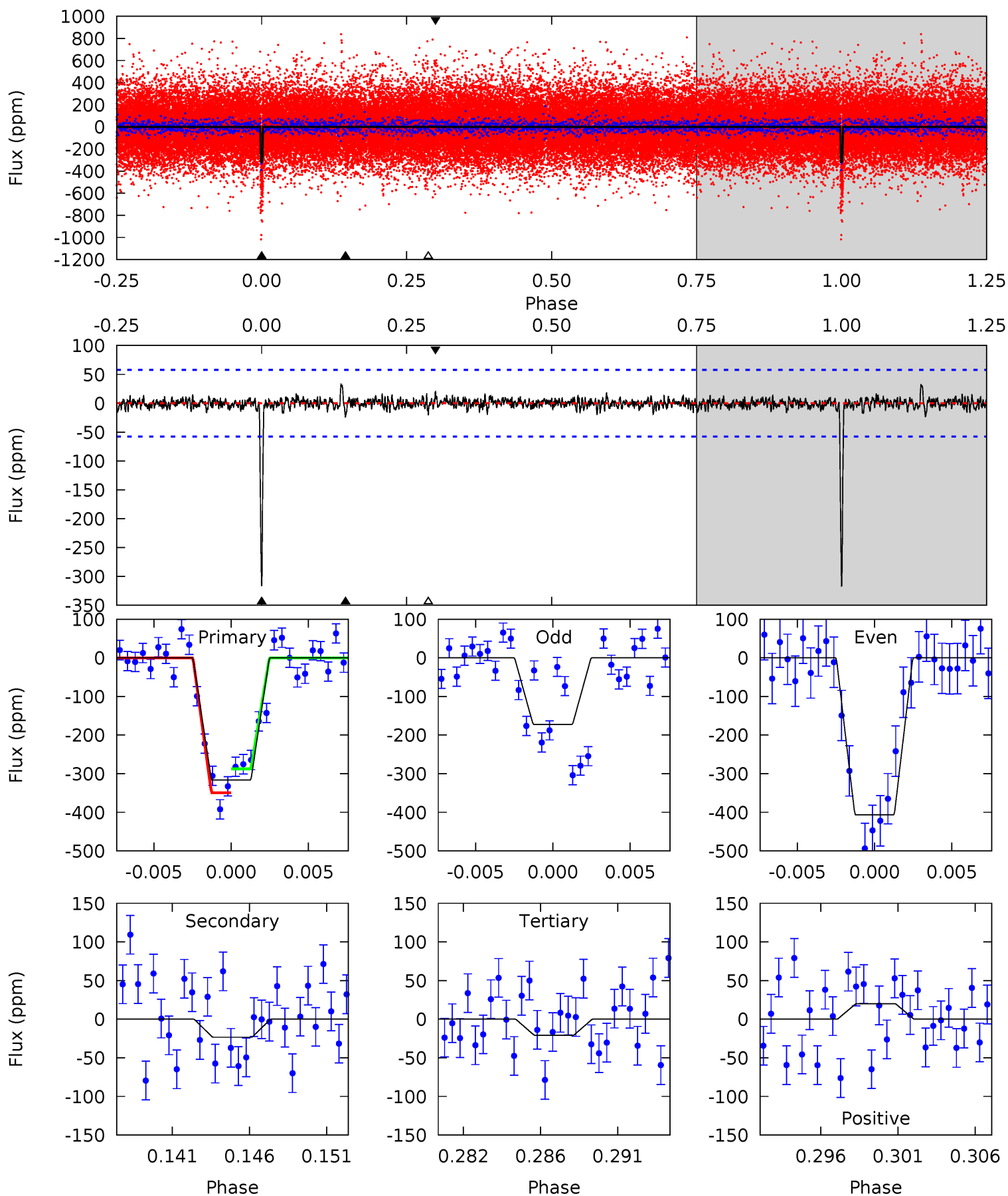
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.4	7.04	6.91	9.08	5.19	2.86	2.59	15.5	13.4	0.13	-2.04	1.61	0.81	0.29	3.85



Alt Model-Shift Uniqueness Test

006762829-05, P = 207.802494 Days, E = 203.214785 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
28.3	2.09	1.86	1.80	5.16	2.82	0.54	26.5	26.5	0.22	0.29	10.1	0.96	0.09	2.77



Stellar Parameters For KIC 006762829

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5623^{+113}_{-113}	$3.925^{+0.055}_{-0.045}$	$-0.120^{+0.150}_{-0.150}$	$1.841^{+0.162}_{-0.162}$	$1.038^{+0.092}_{-0.084}$	$0.234^{+0.060}_{-0.036}$
	+2%/-2%	+1%/-1%	+125%/-125%	+9%/-9%	+9%/-8%	+25%/-15%
Source	SPE37	TRA37	SPE37	DSEP		

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

Secondary Eclipse Parameters for KIC 006762829-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-94 ± 13	$3.51^{+0.84}_{-0.76}$	564^{+15}_{-17}	4383^{+468}_{-356}	1994^{+1434}_{-707}
Alt.	-23 ± 11	$3.64^{+0.77}_{-0.75}$	563^{+16}_{-16}	3383^{+371}_{-353}	447^{+397}_{-236}

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 $A_{obs} \gg 1.0$

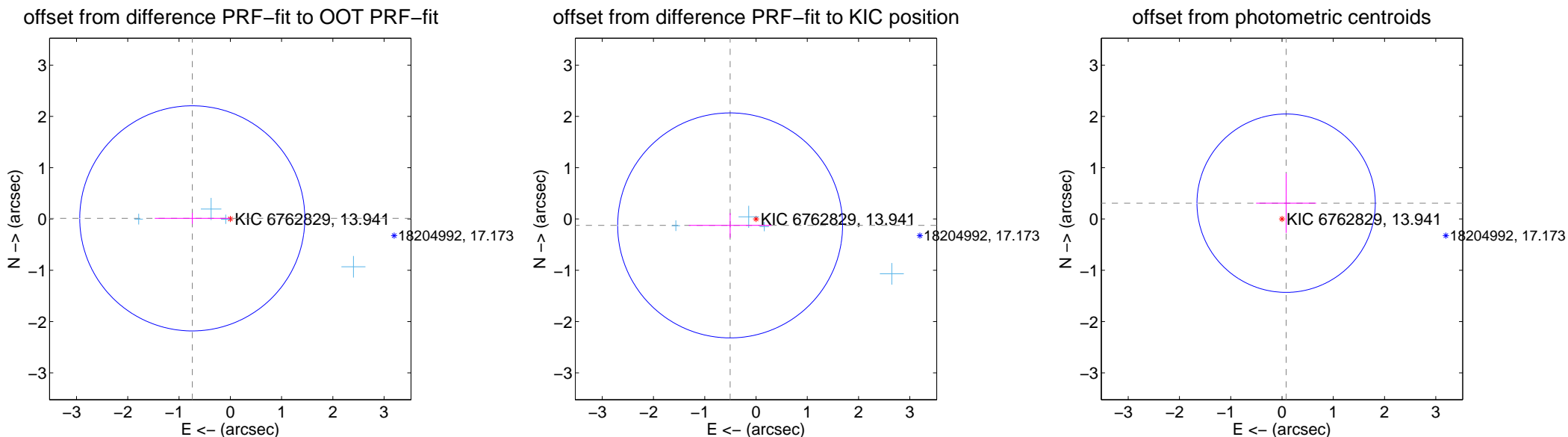
DV Centroid Data

Supplemental centroid analysis for 006762829-05. Kepler magnitude: 13.94. Transit SNR 11.80

There are 4 quarters with good PRF difference image offsets

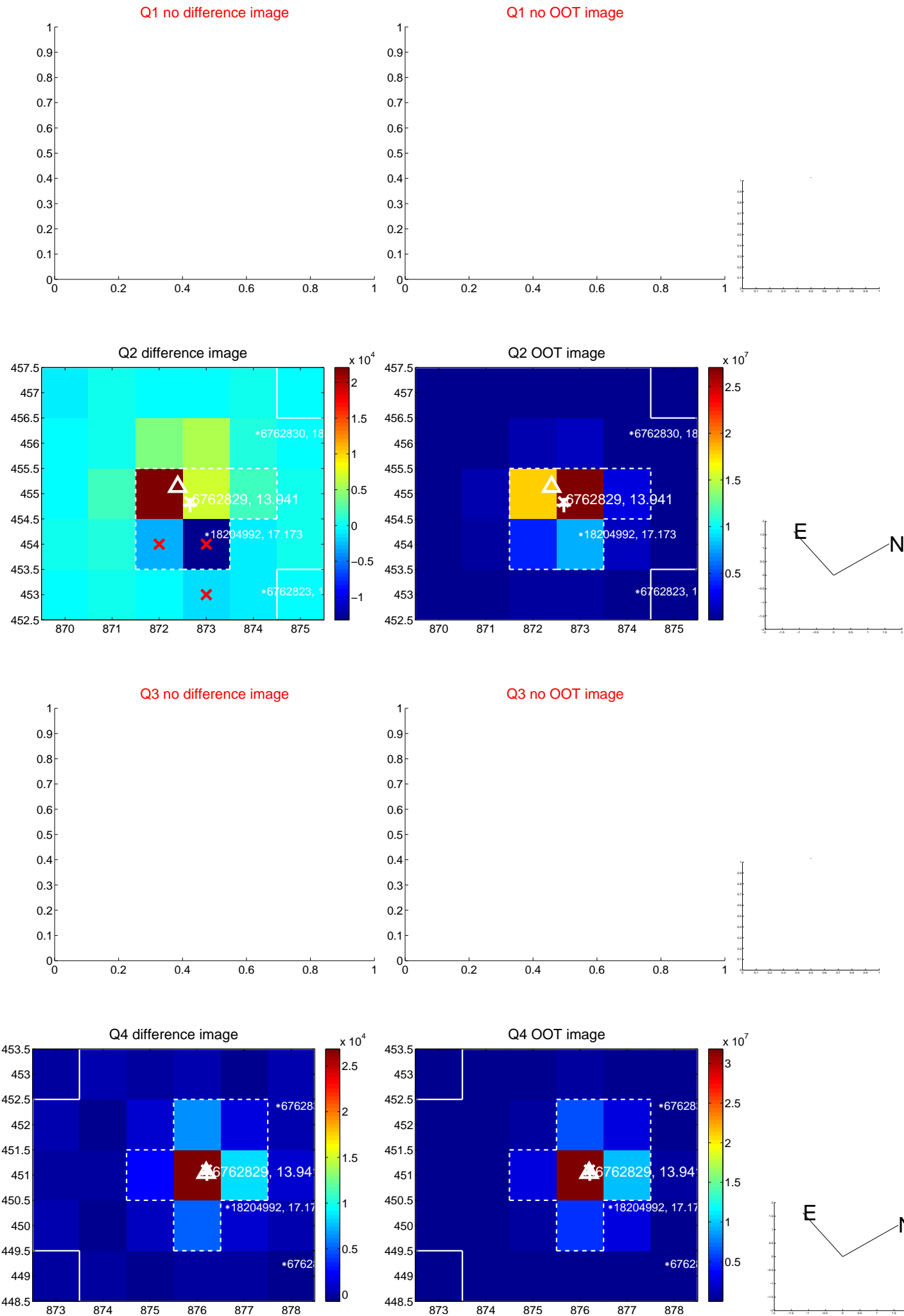
The direct PRF centroid is offset from the target star catalog position by about 0.28 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.742 ± 0.732	1.01	0.742 ± 0.732	0.012 ± 0.106
PRF-fit source offset from KIC position	0.520 ± 0.731	0.71	0.505 ± 0.806	-0.125 ± 0.239
photometric centroid source offset	0.32 ± 0.58	0.55	-0.08 ± 0.59	0.31 ± 0.58

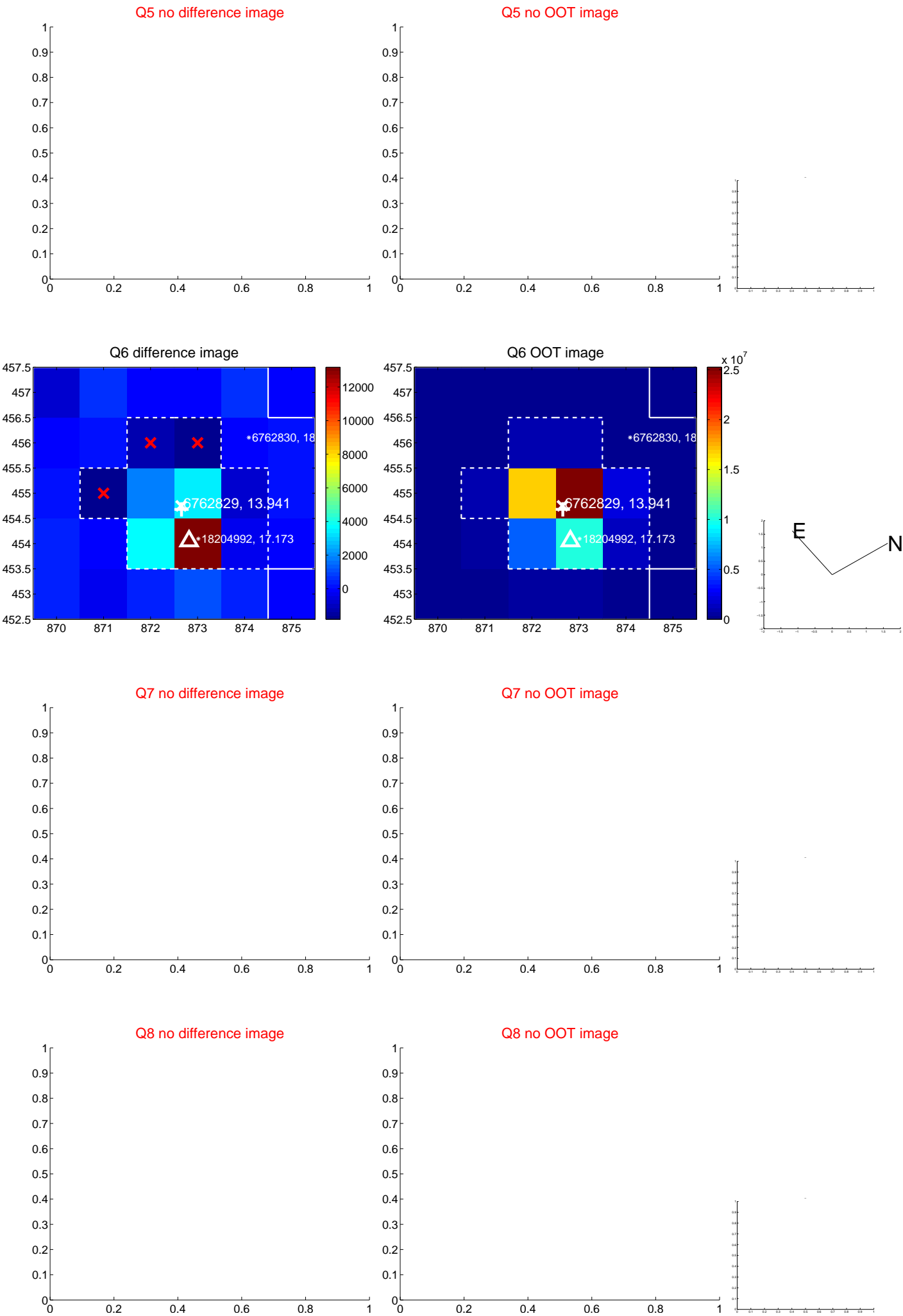


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

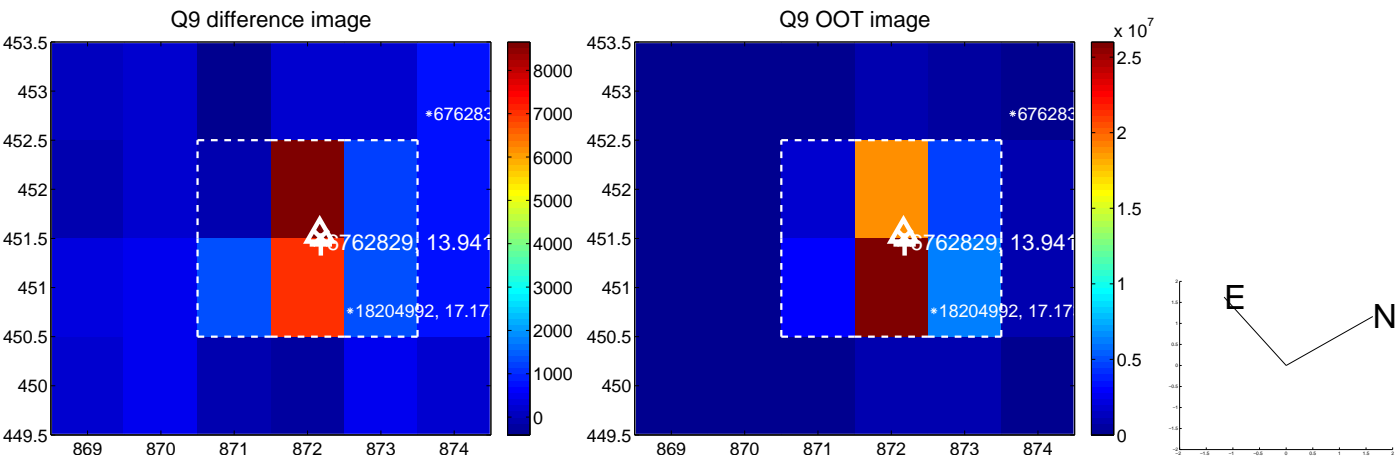
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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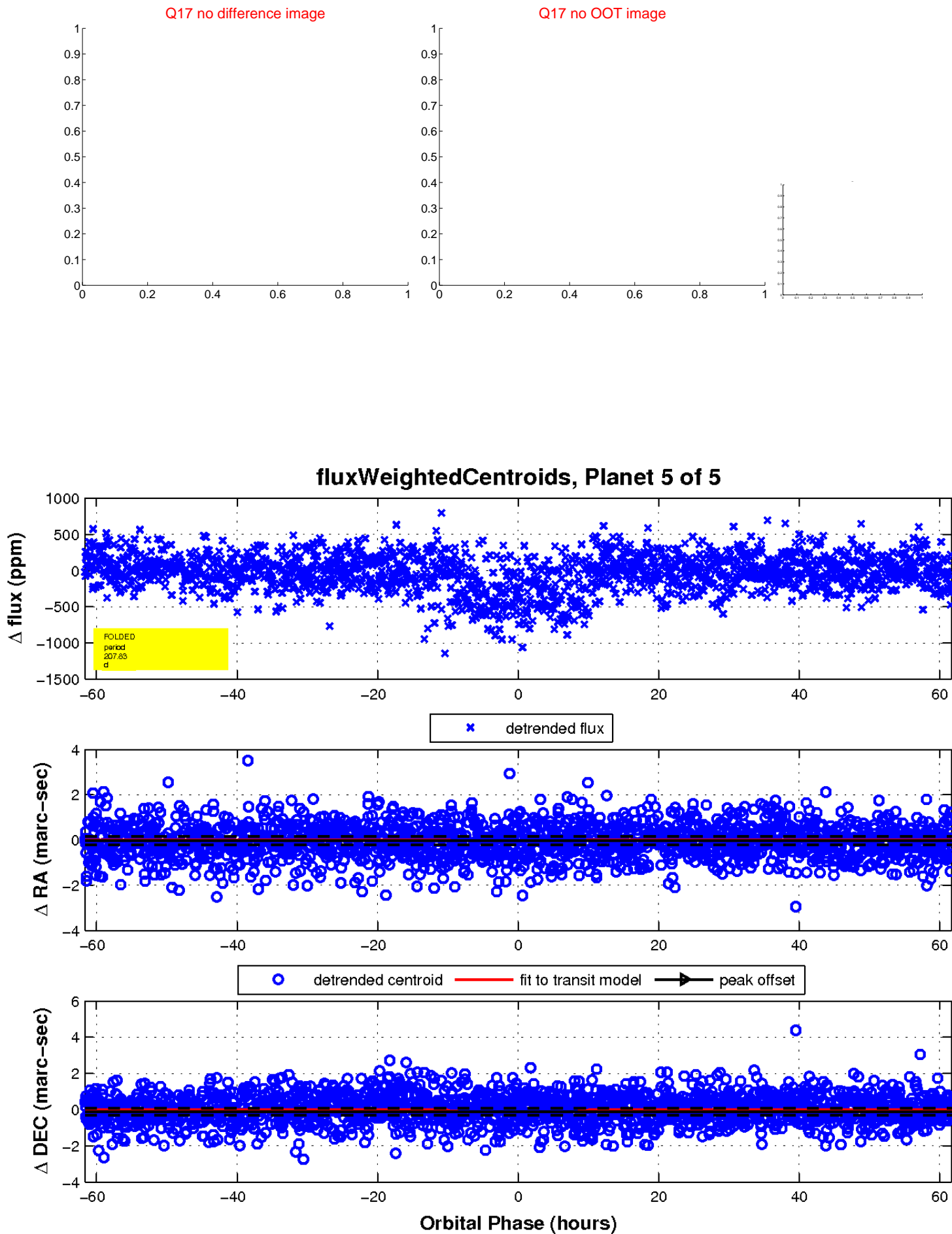
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UKIRT Image

Declination

