

KIC 007622486

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})
007622486-01	OBS	1447.01	40.246490	161.306714	159574.9	6.057	1974.4	1675.8	1.69	6594	98.24	82.40
007622486-02	OBS	1447.02	2.279997	133.640885	10856.7	5.290	738.1	746.2	1.69	6594	18.75	3787.39
007622486-03	OBS	No	2.279978	132.480494	0.2	16.966	18.8	0.0	1.69	6594	0.07	3787.43

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007622486-01	OBS	FP	0.00	0	1	0	0	DEEP_V_SHAPED—CENT_KIC_POS
007622486-02	OBS	FP	0.96	0	1	0	0	HAS_SEC_TCE—CENT_KIC_POS
007622486-03	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE—CENT_KIC_POS

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.

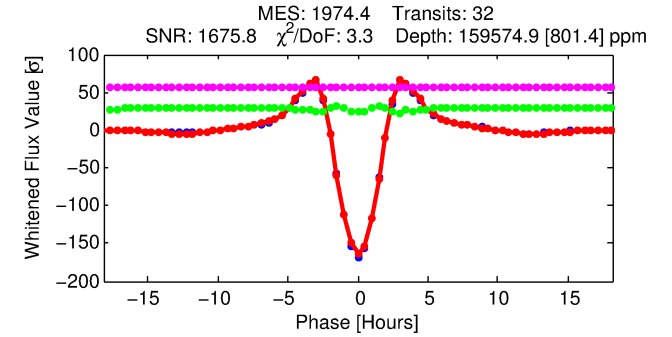
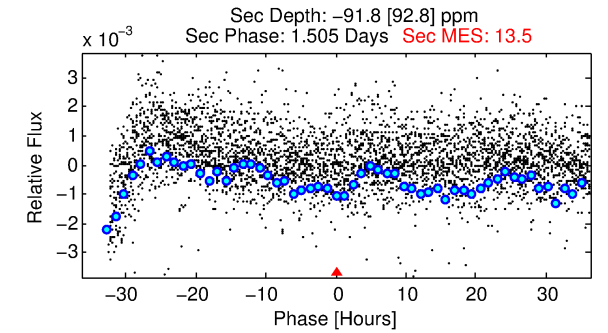
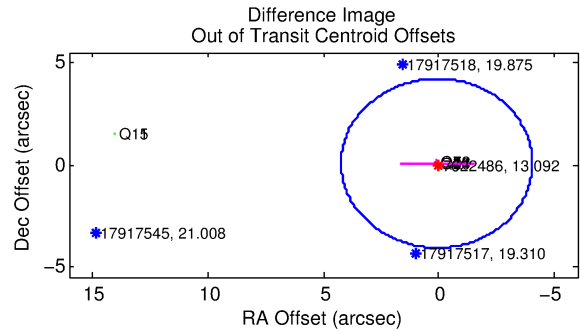
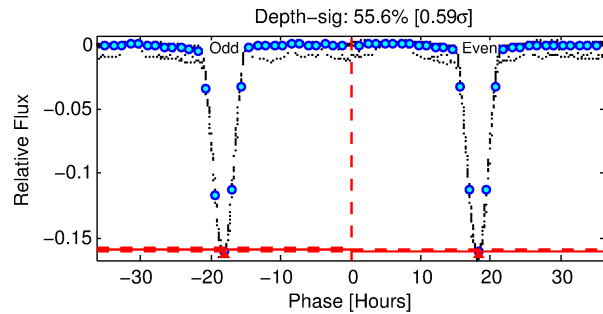
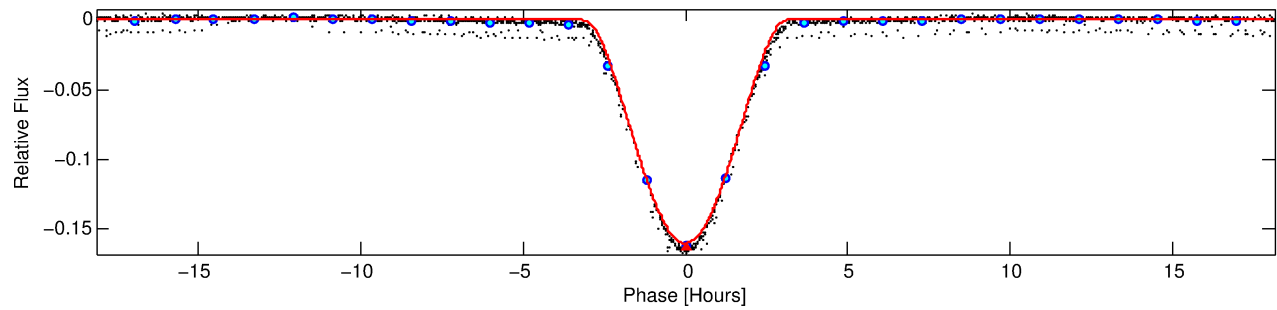
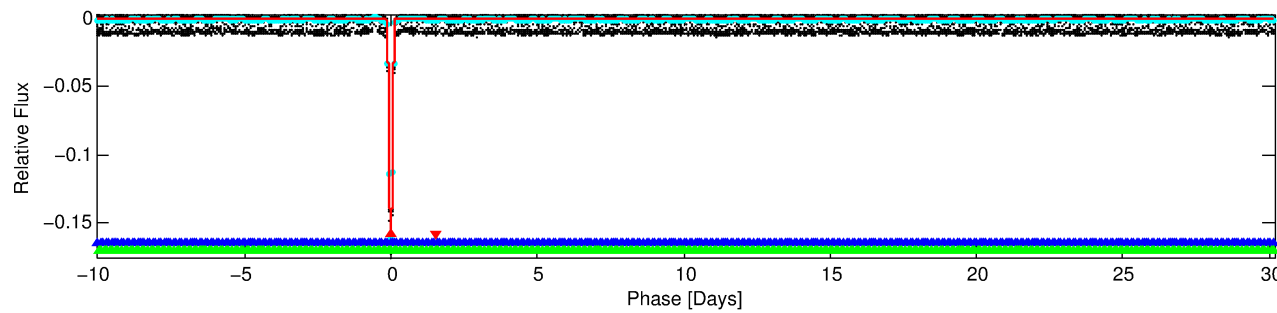
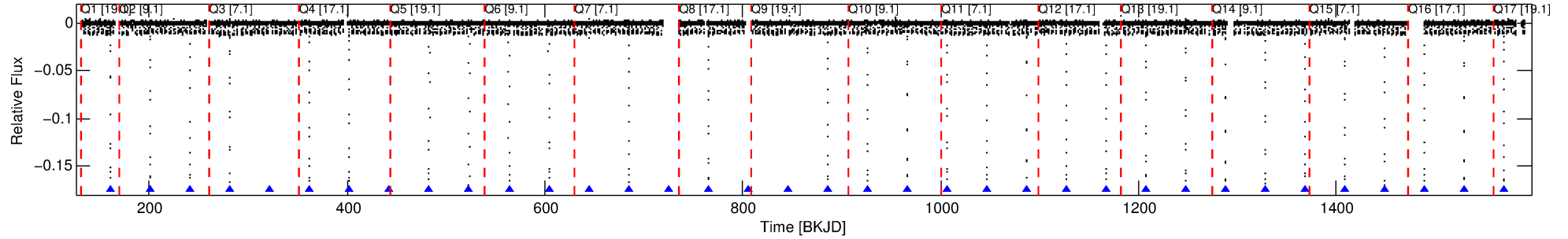
Ephemeris Match Information For 007622486-01

No Significant Match Found

DV One-Page Summary

KIC: 7622486 Candidate: 1 of 3 Period: 40.246 d
KOI: K01447.01 Corr: 0.986

Kp: 13.09 R*: 1.69 Rs Teff: 6594.0 K Logg: 4.05 Fe/H: -0.340



DV Fit Results:

Period = 40.24649 [0.00001] d
Epoch = 161.3067 [0.0001] BKJD
Rp/R* = 0.5324 [0.2409]
a/R* = 63.59 [2.81]
b = 0.88 [0.35]
Seff = 82.40 [42.78]
Teq = 768 [100] K
Rp = 98.24 [54.74] Re
a = 0.2424 [0.0757] AU
Ag = N/A
Teffp = N/A

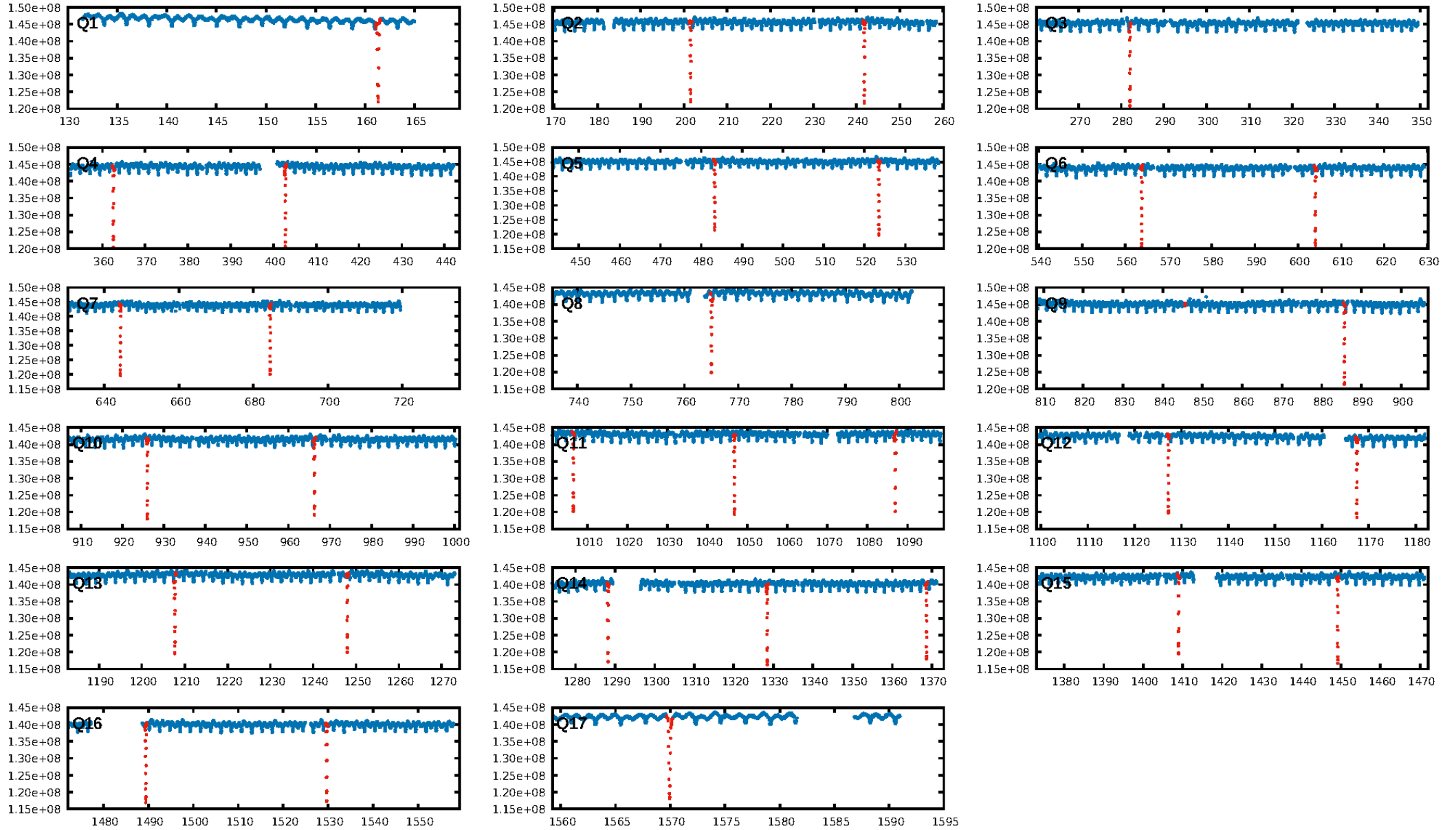
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [113.31σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [30/30]
GhostDiagnostic-chr: 3.981
Centroid-sig: 0.0%
Centroid-so: 0.575 arcsec [264.09σ]
OotOffset-rm: 0.112 arcsec [0.08σ]
KicOffset-rm: 0.312 arcsec [4.62σ]
OotOffset-st: 4/4/3/0 [11]
KicOffset-st: 4/4/3/5 [16]
DiffImageQuality-fgm: 1.00 [16/16]
DiffImageOverlap-fno: 0.00 [0/16]

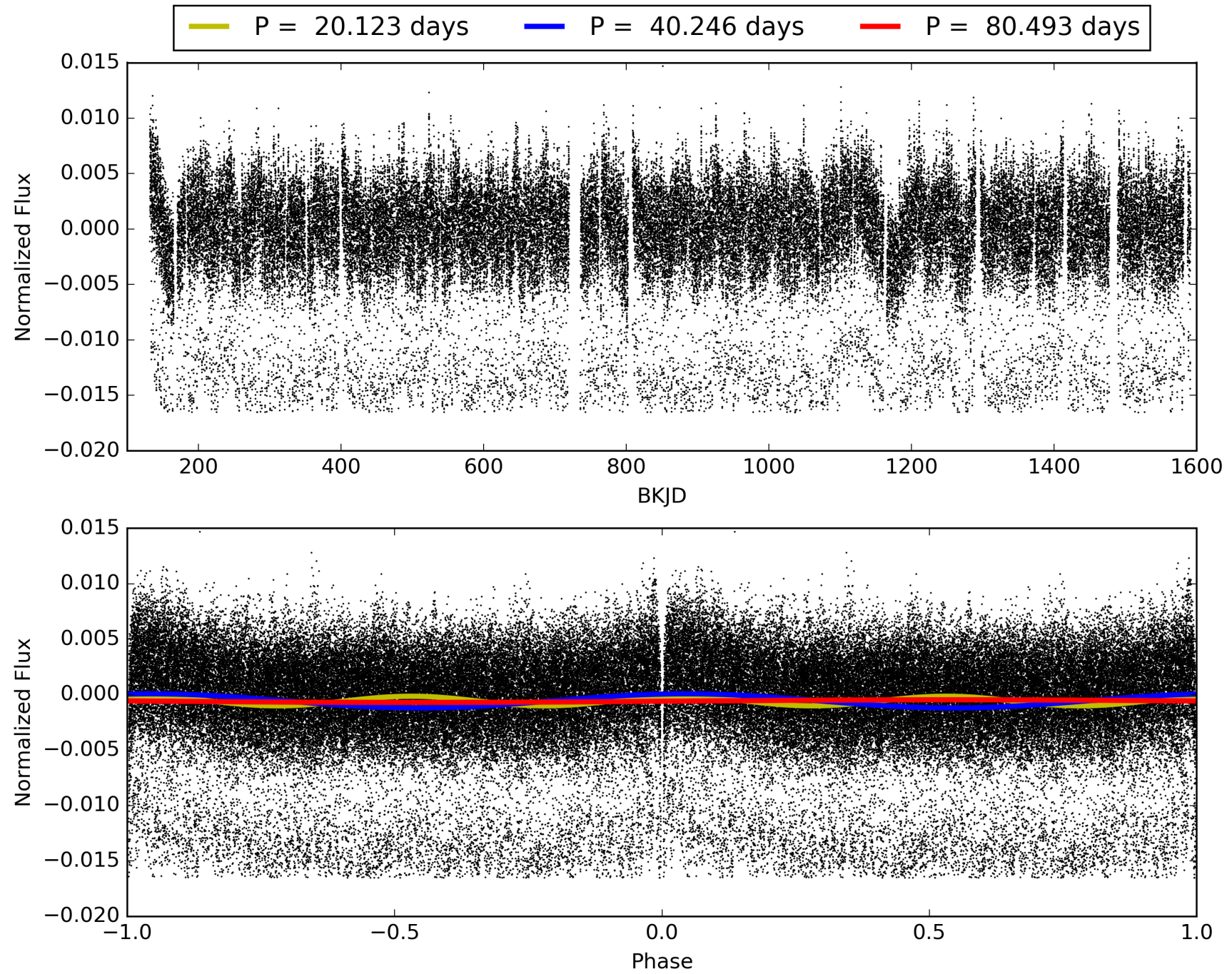
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:20:19 Z

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

TCE 007622486-01, PDC Light Curves

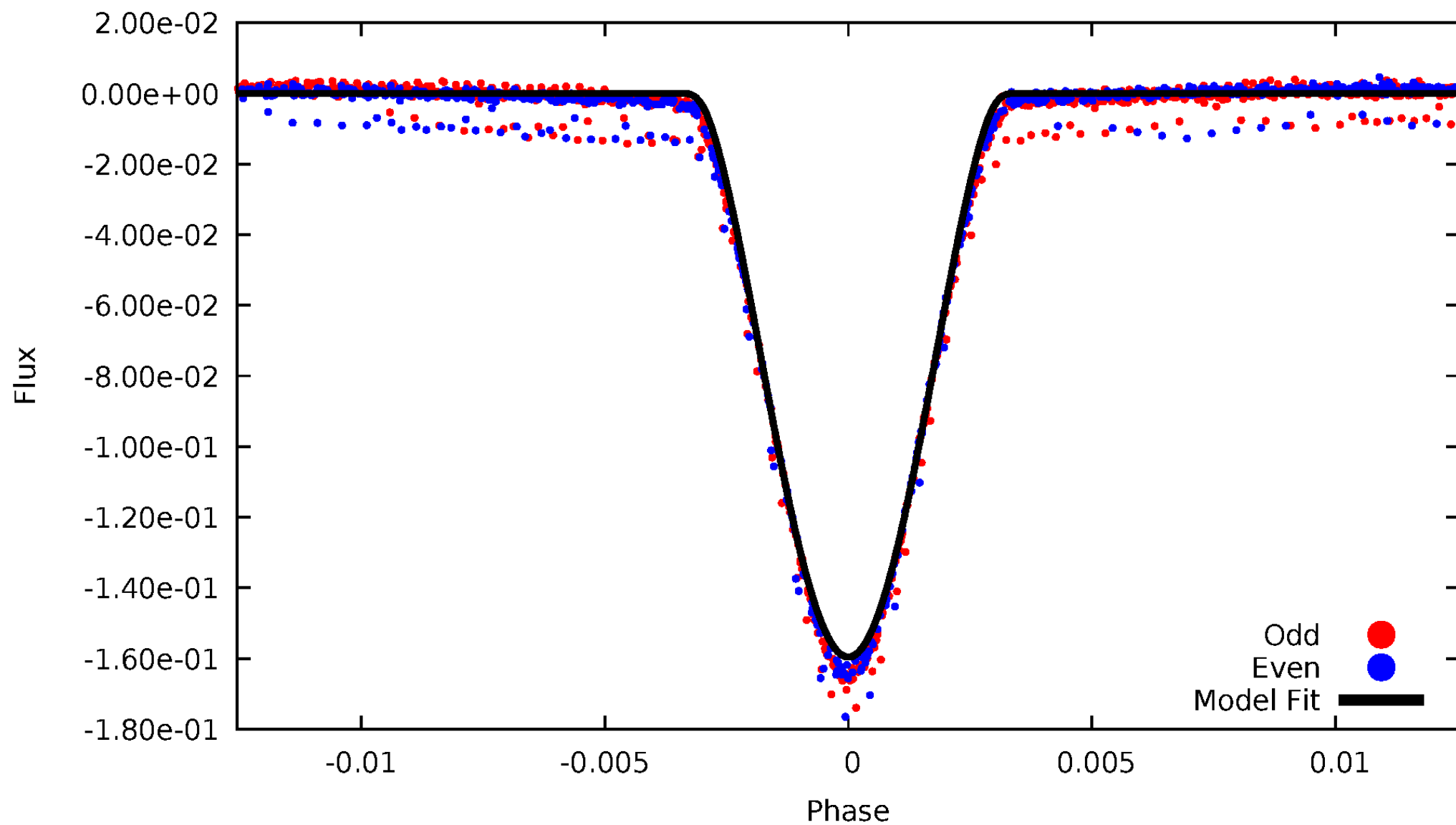


TCE 007622486-01



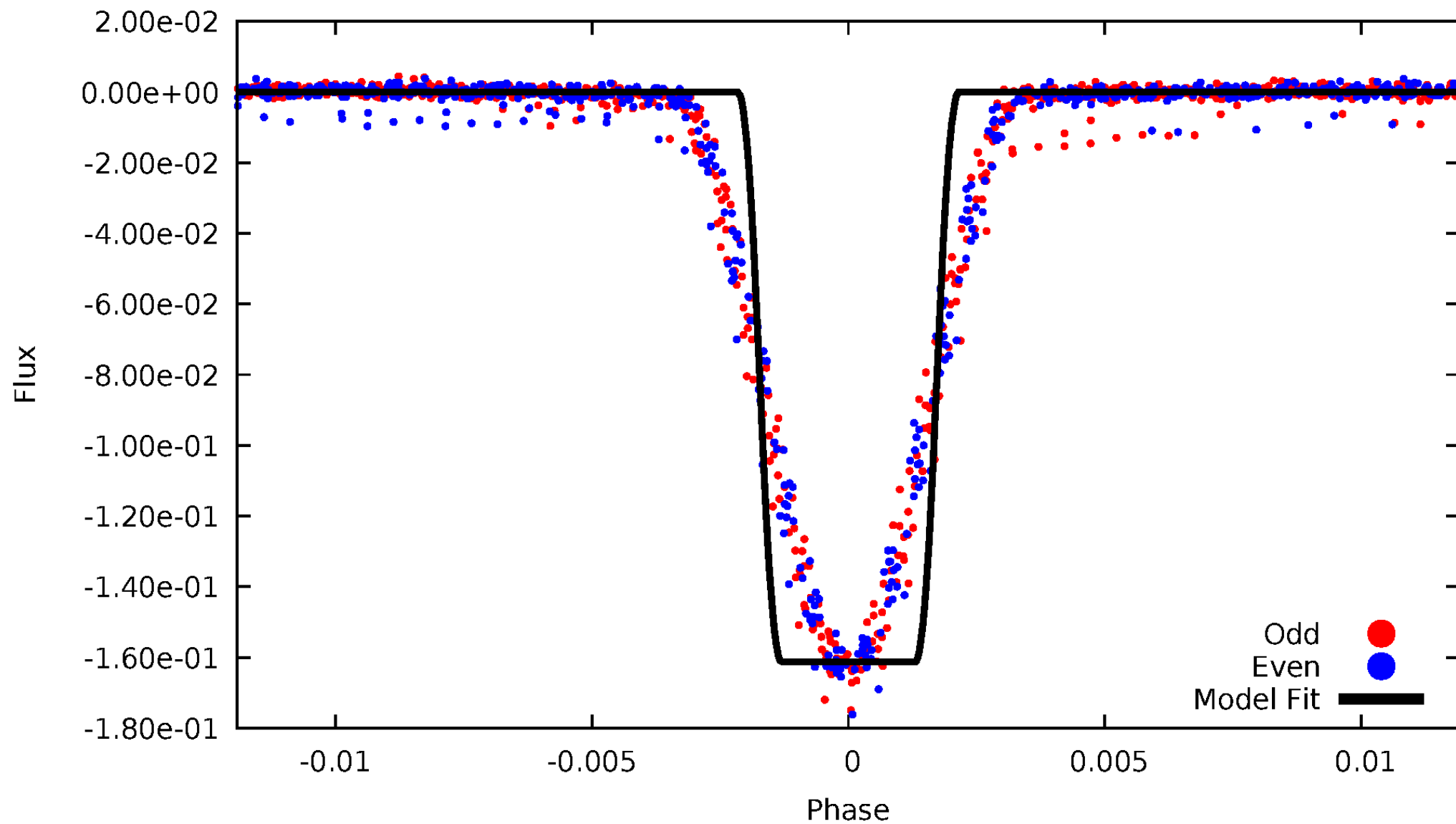
DV Odd/Even

TCE 007622486-01



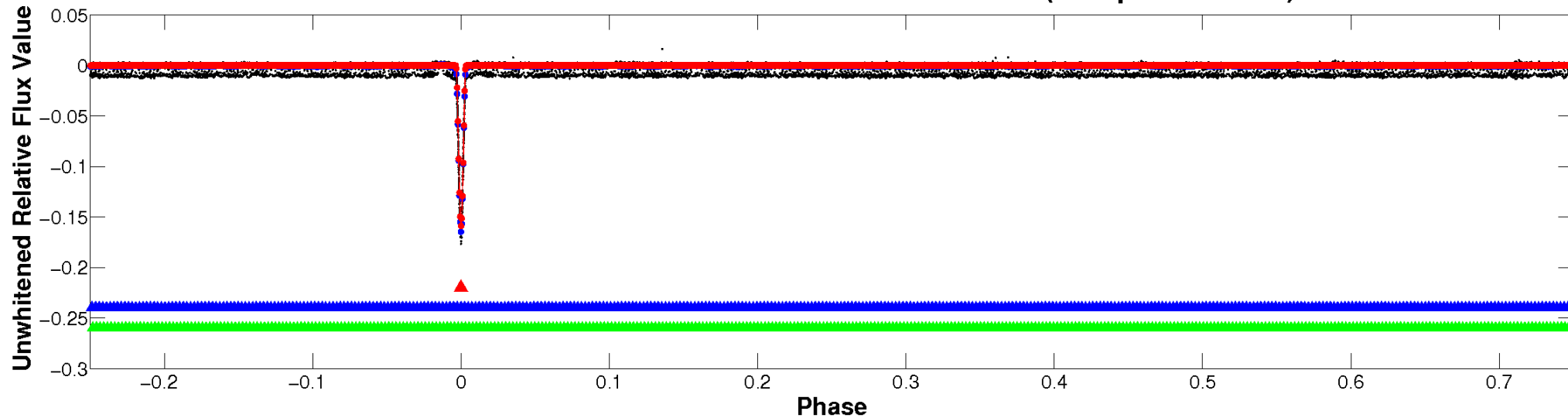
ALT Odd/Even

TCE 007622486-01

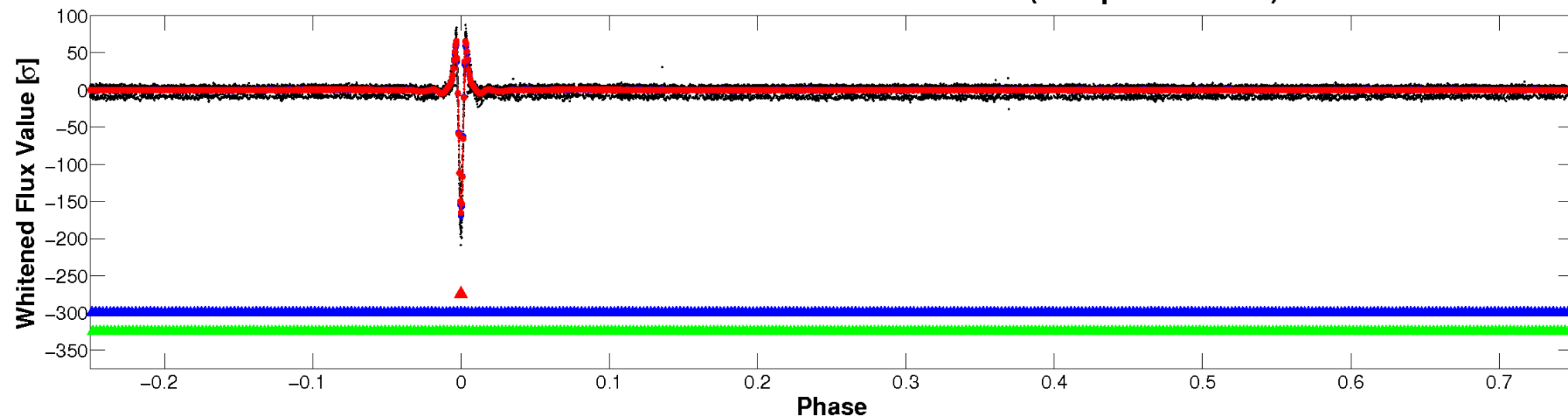


Non-Whitened Vs. Whitened Light Curve

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

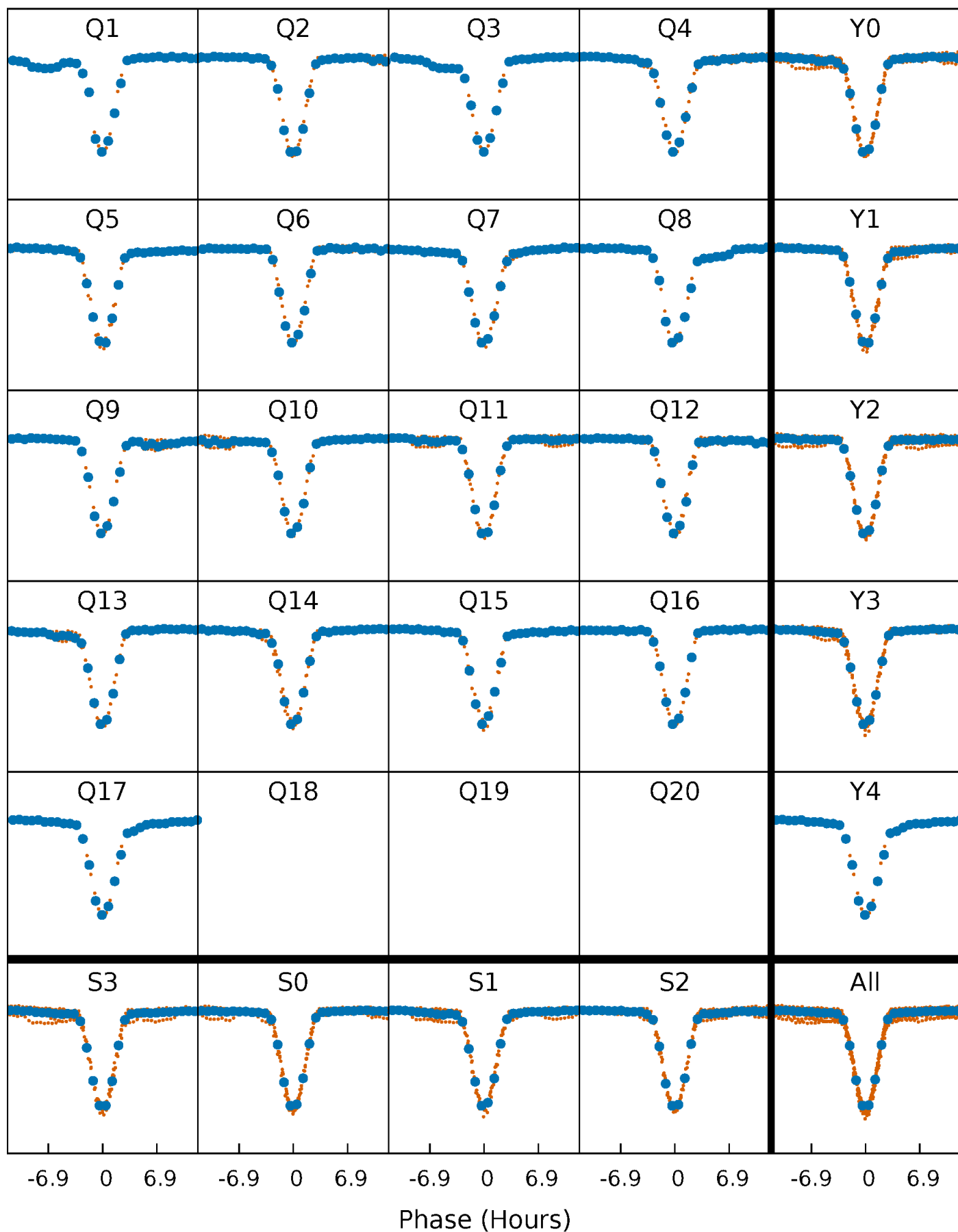


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



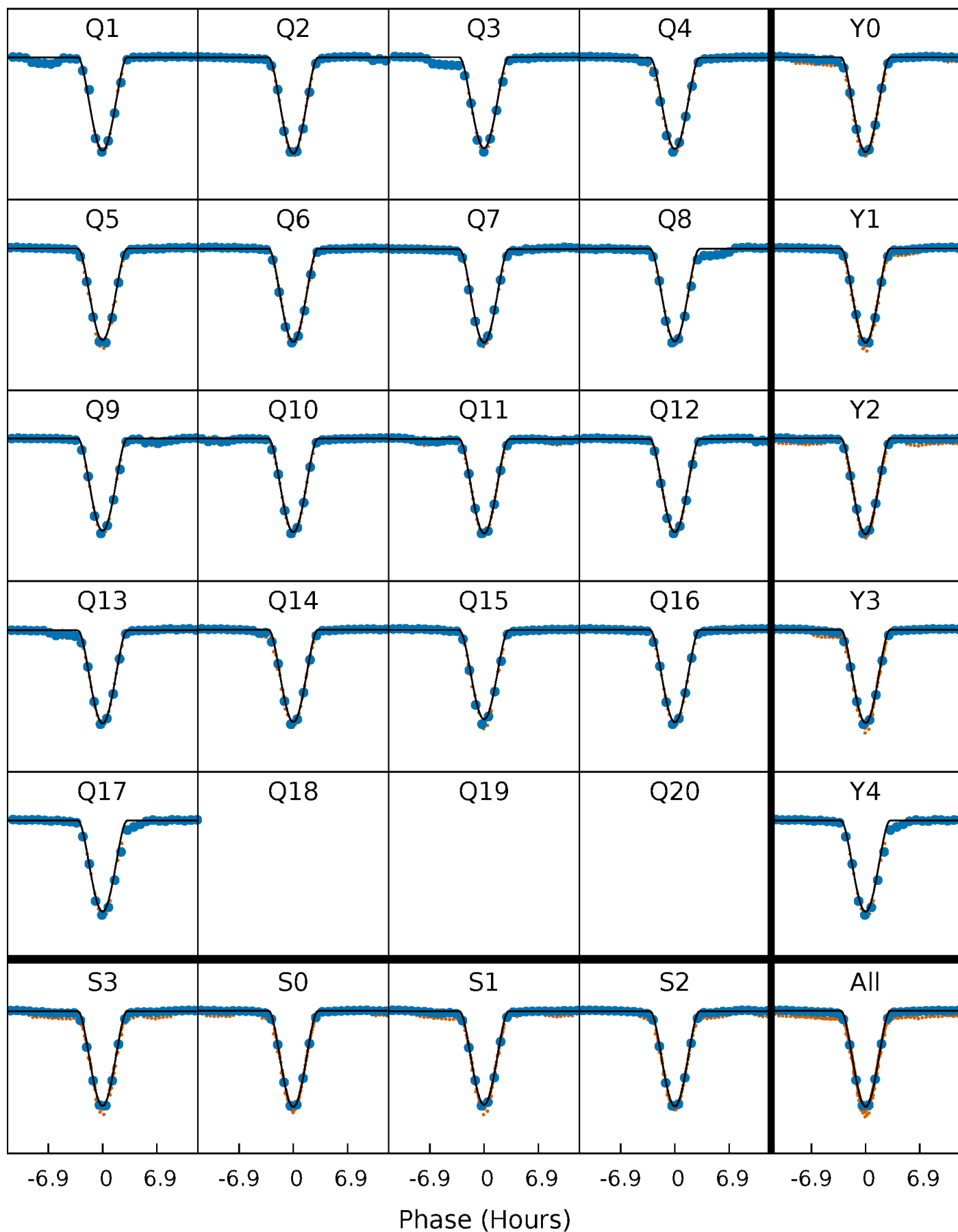
PDC Quarter-Phased Transit Curves

TCE 007622486-01 P= 40.246490 Days $T_0=161.306714$ (BKJD)



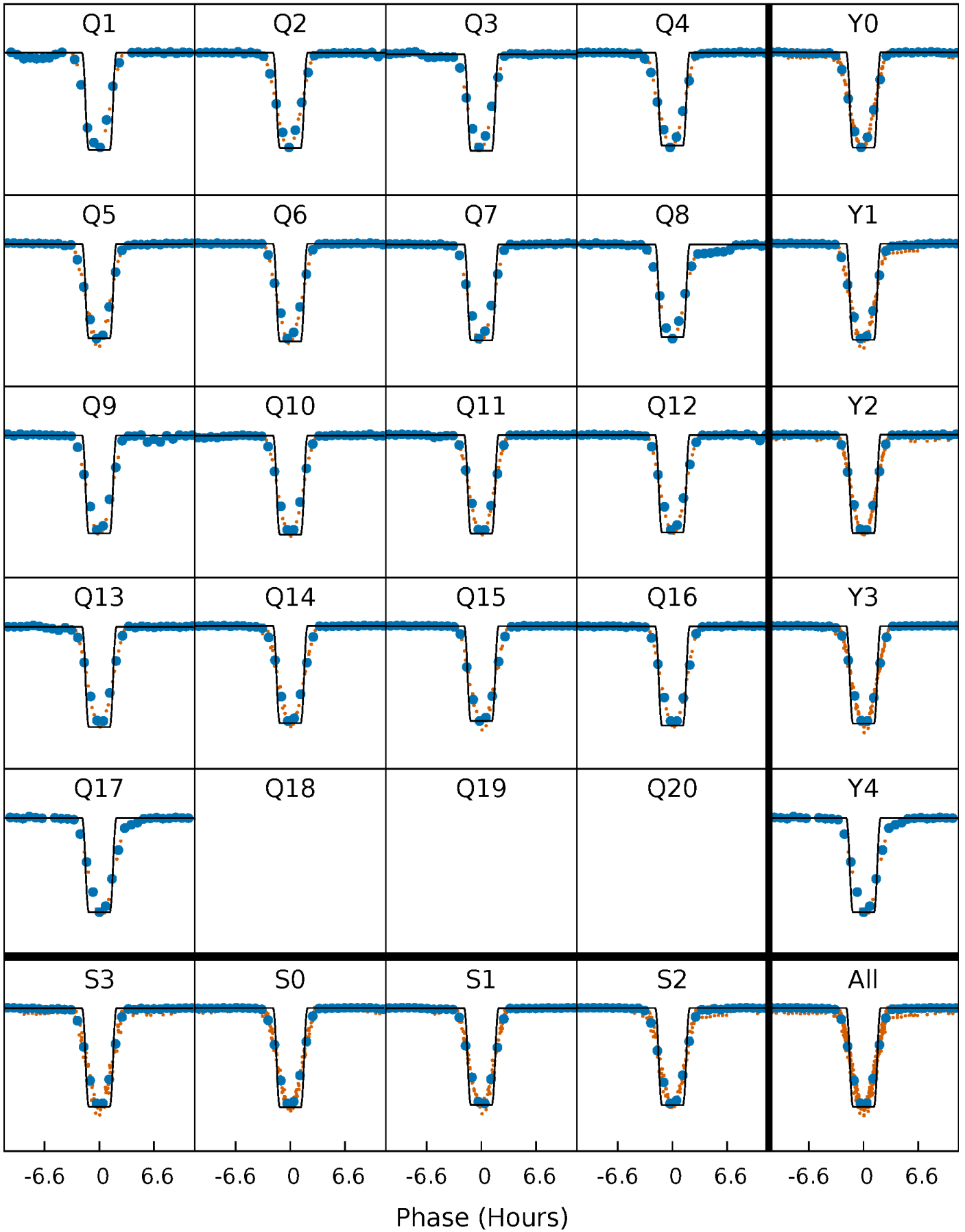
DV Quarter-Phased Transit Curves

TCE 007622486-01 P= 40.246490 Days $T_0=161.306714$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

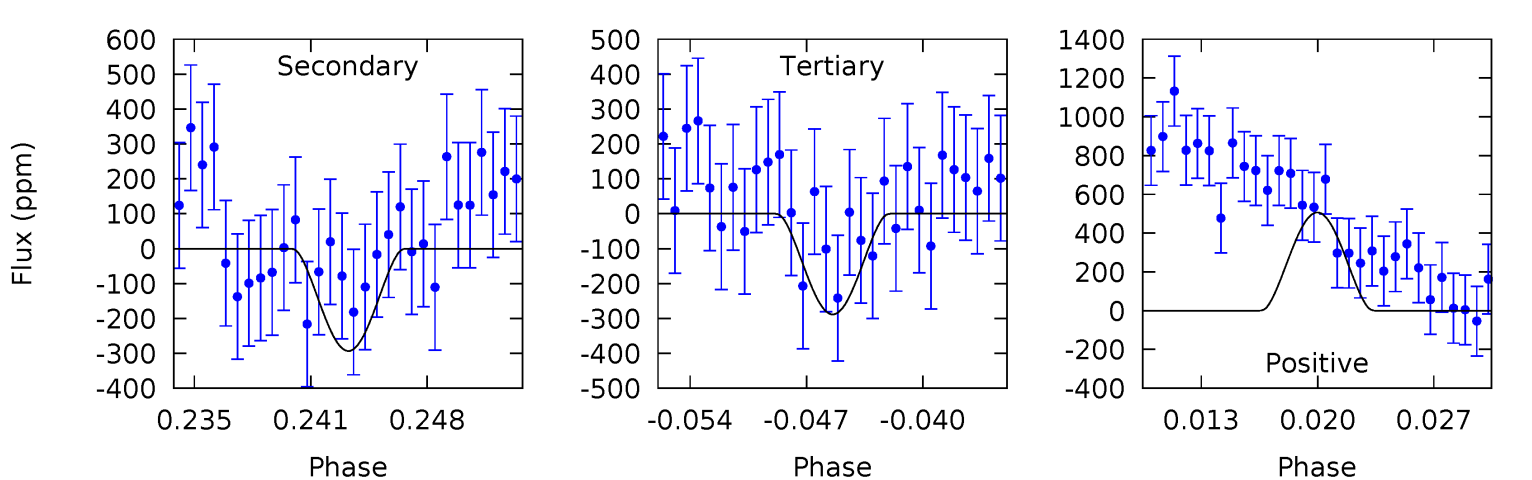
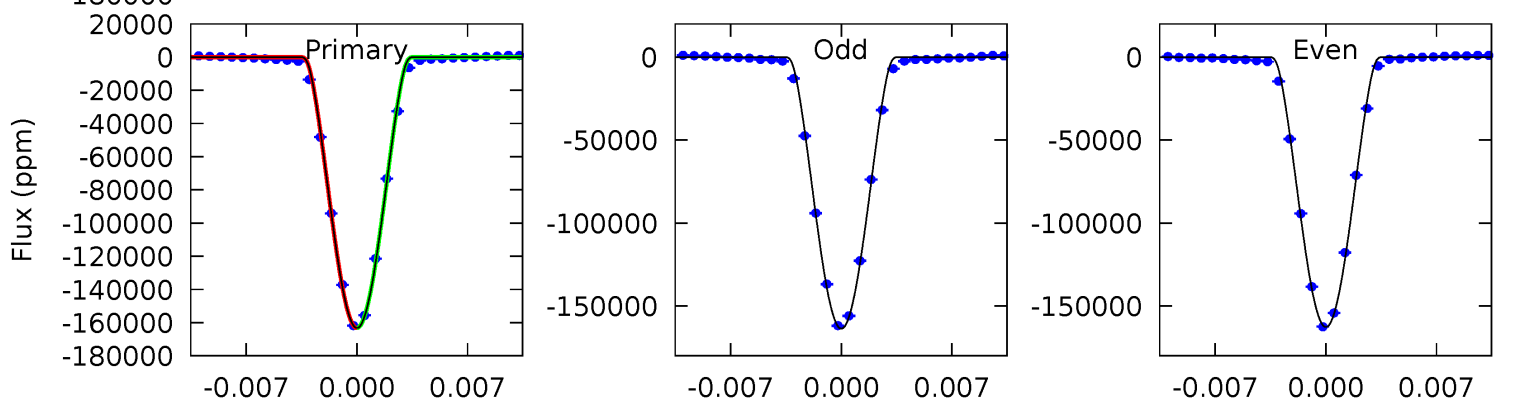
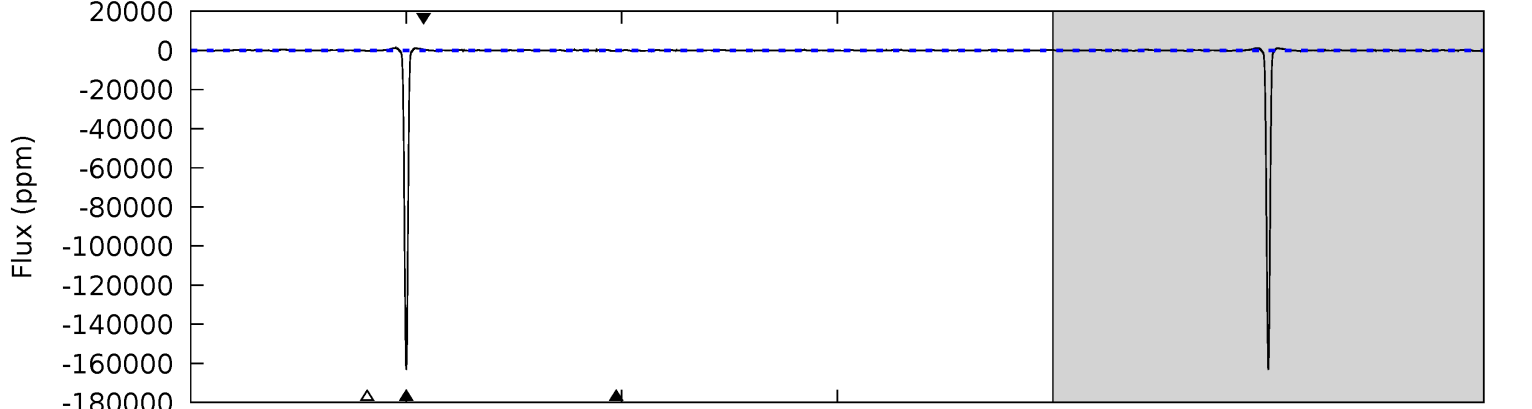
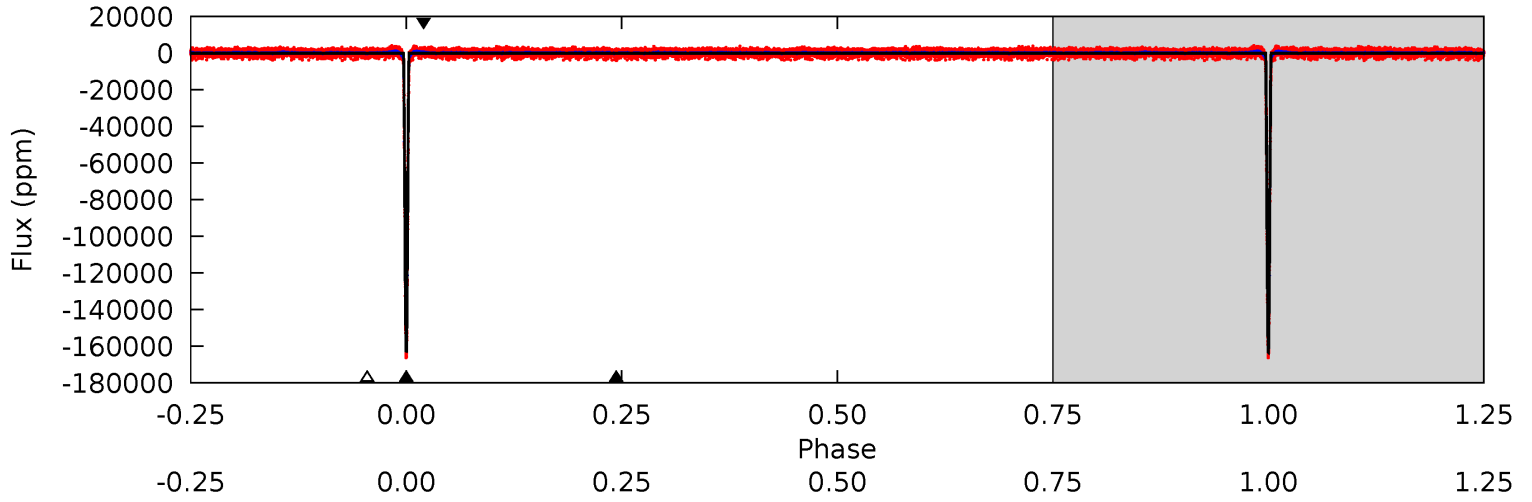
TCE 007622486-01 P= 40.246049 Days $T_0=161.315074$ (BKJD)



DV Model-Shift Uniqueness Test

007622486-01, P = 40.246490 Days, E = 121.060224 Days

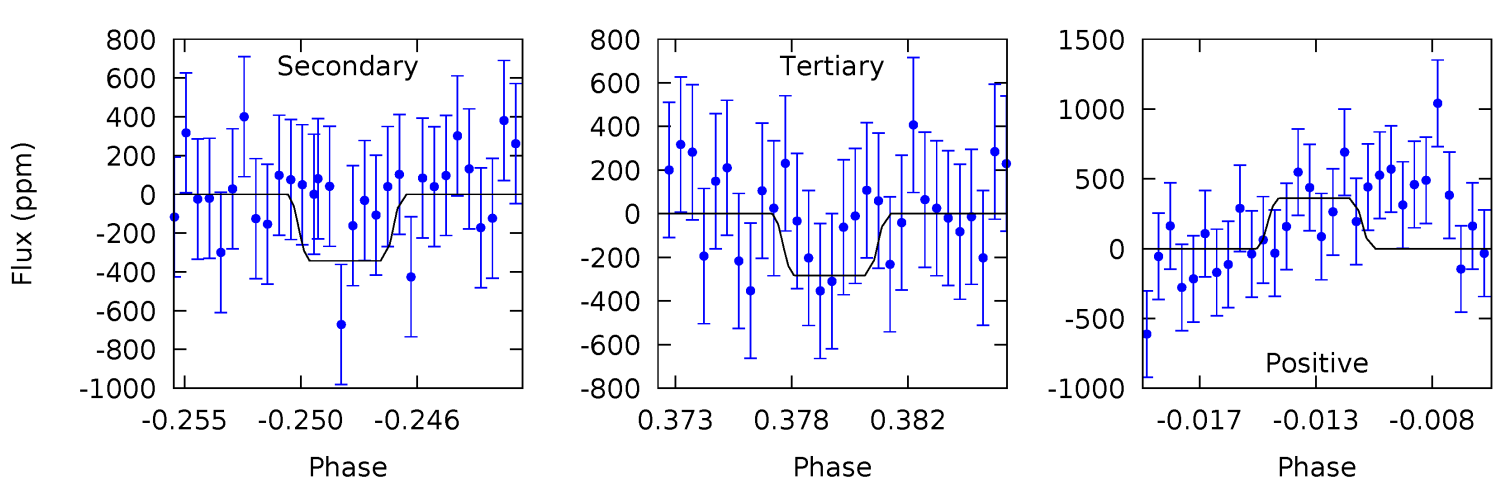
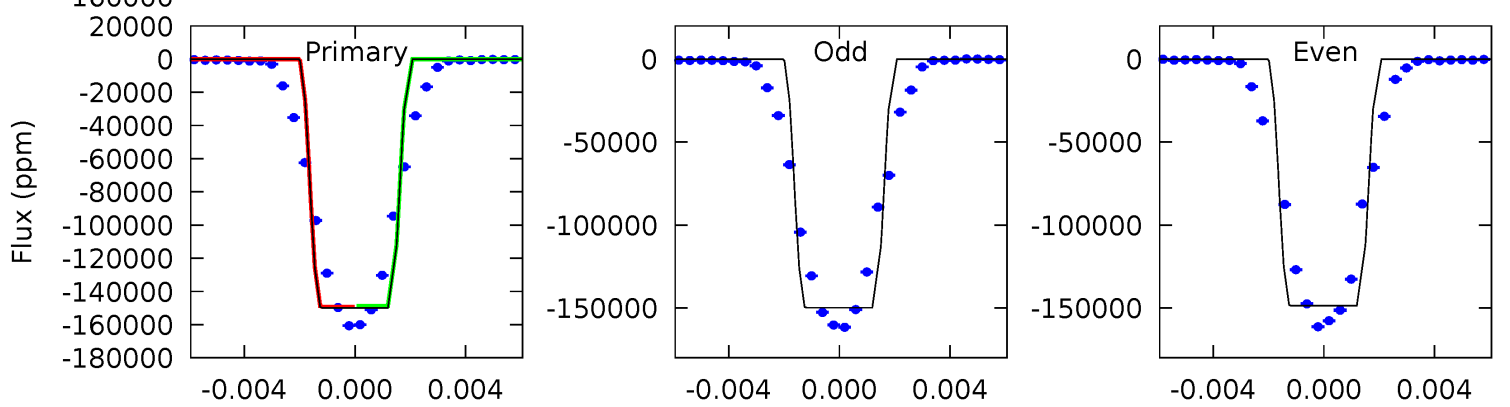
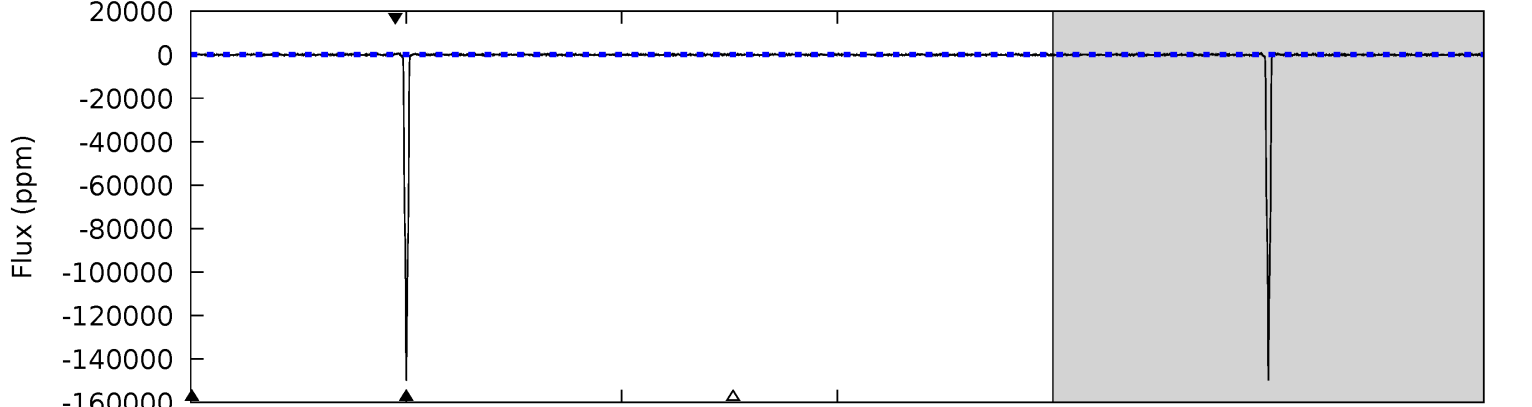
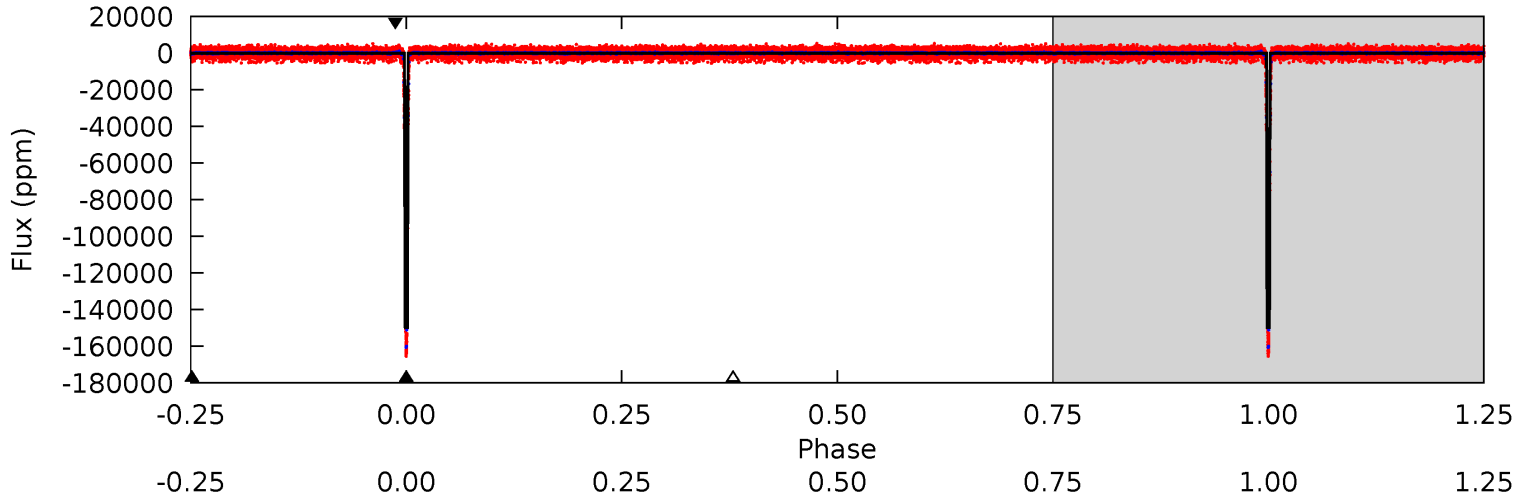
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3466	6.23	6.13	10.8	5.10	2.71	3.76	3460	3455	0.10	-4.53	10.4	1.03	0.01	1.59



Alt Model-Shift Uniqueness Test

007622486-01, P = 40.246049 Days, E = 121.069025 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1292	2.96	2.44	3.11	5.19	2.86	0.85	1289	1288	0.52	-0.15	5.07	1.00	0.00	1.53



Stellar Parameters For KIC 007622486

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6594^{+187}_{-234}	$4.051^{+0.293}_{-0.158}$	$-0.340^{+0.250}_{-0.300}$	$1.691^{+0.450}_{-0.550}$	$1.174^{+0.196}_{-0.178}$	$0.342^{+0.656}_{-0.149}$
	+3%/-4%	+7%/-4%	+74%/-88%	+27%/-33%	+17%/-15%	+192%/-44%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 007622486-01 / KOI 1447.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-293 ± 47	$94.88^{+46.58}_{-43.47}$	1063^{+81}_{-92}	2062^{+371}_{-266}	$1.058^{+2.602}_{-0.590}$
Alt.	-343 ± 116	$73.68^{+49.74}_{-36.91}$	1067^{+72}_{-104}	2240^{+465}_{-306}	$1.806^{+6.247}_{-1.154}$

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 $A_{obs} \gg 1.0$

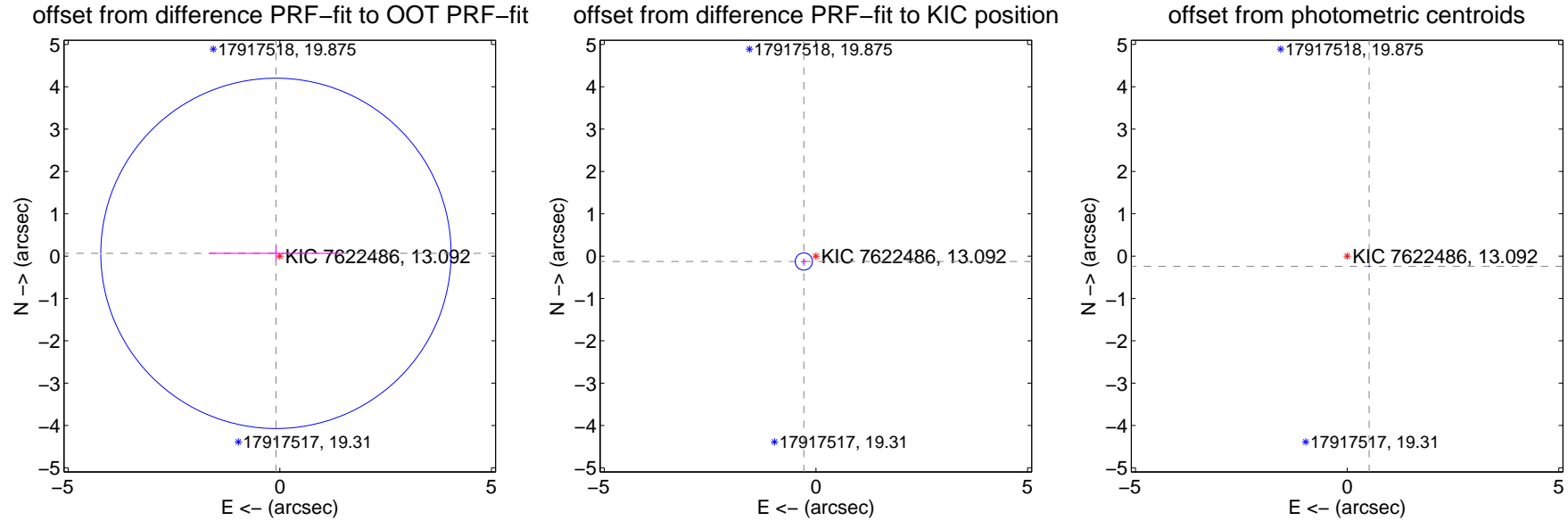
DV Centroid Data

Supplemental centroid analysis for 007622486-01. Kepler magnitude: 13.09. Transit SNR 1675.80

There are 16 quarters with good PRF difference image offsets

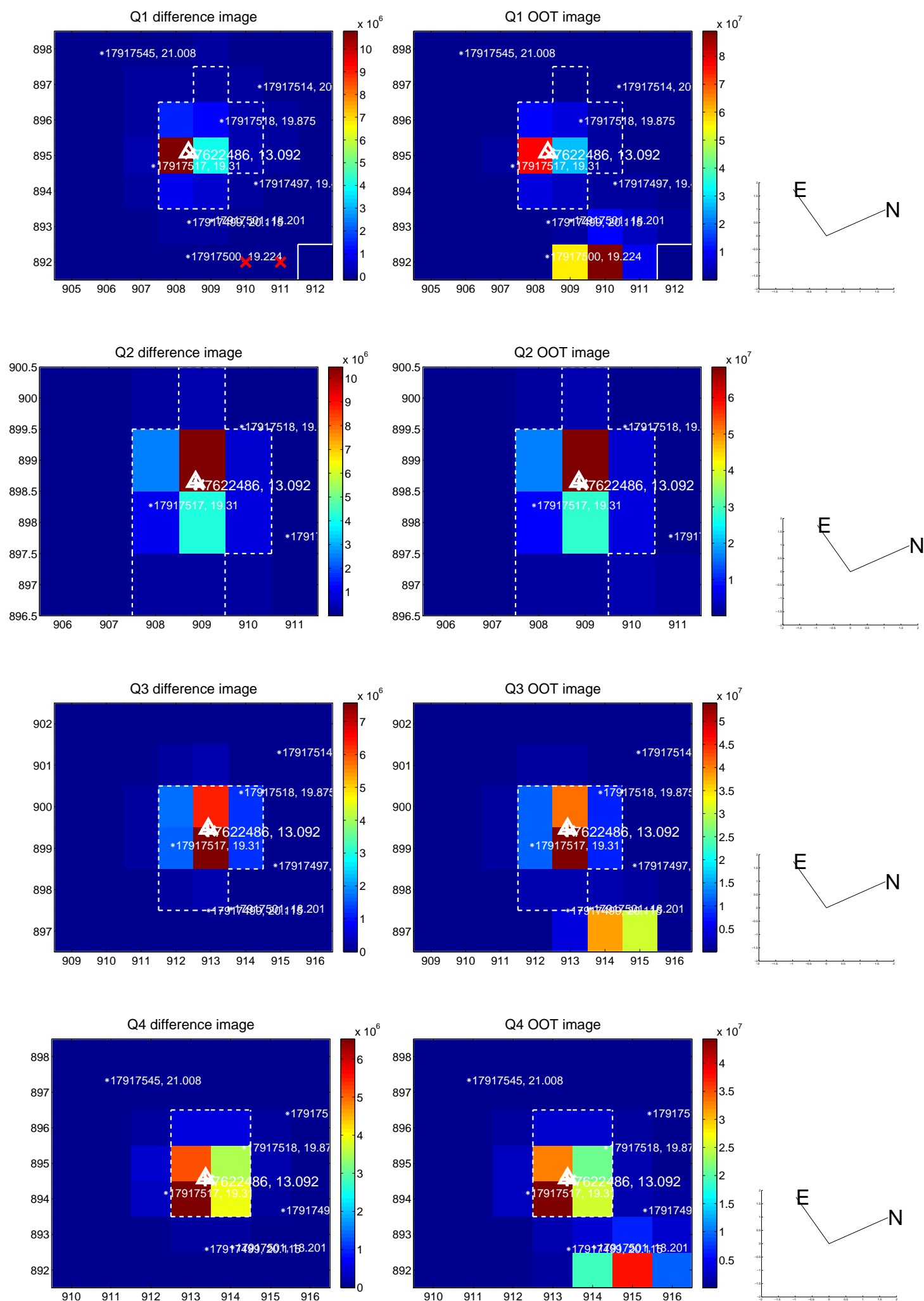
The direct PRF centroid is offset from the target star catalog position by about 0.28 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.112 ± 1.379	0.08	0.091 ± 1.579	0.066 ± 0.176
PRF-fit source offset from KIC position	0.312 ± 0.068	4.62	0.286 ± 0.067	-0.127 ± 0.068
photometric centroid source offset	0.57 ± 0.00	264.09	-0.52 ± 0.00	-0.24 ± 0.00

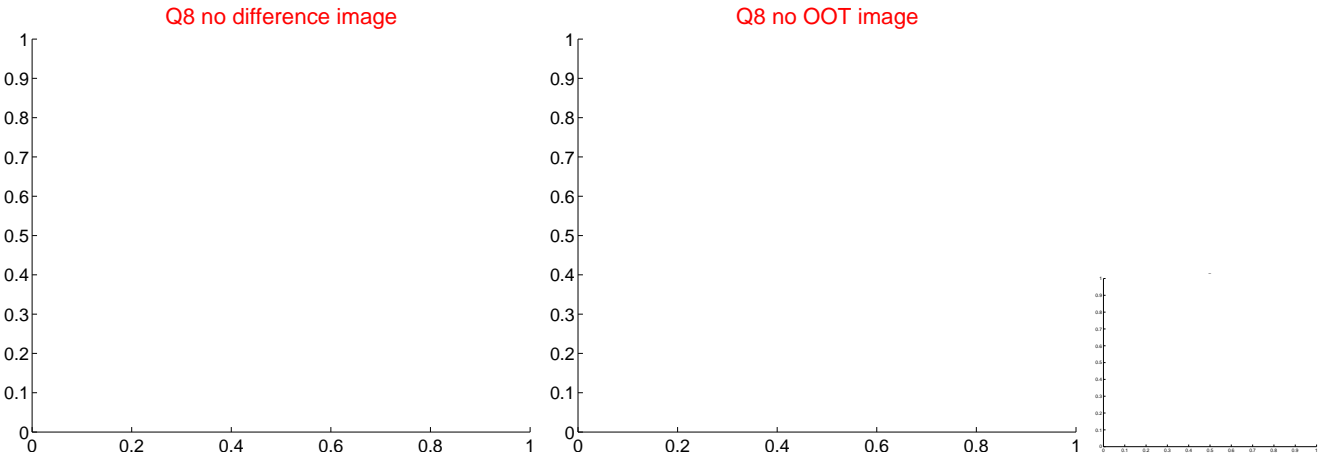
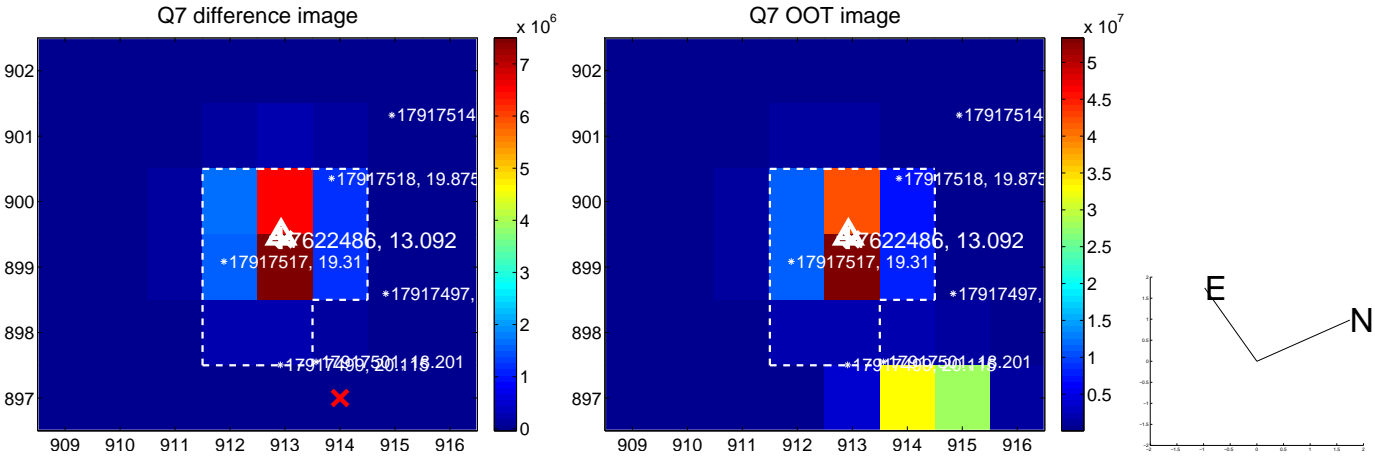
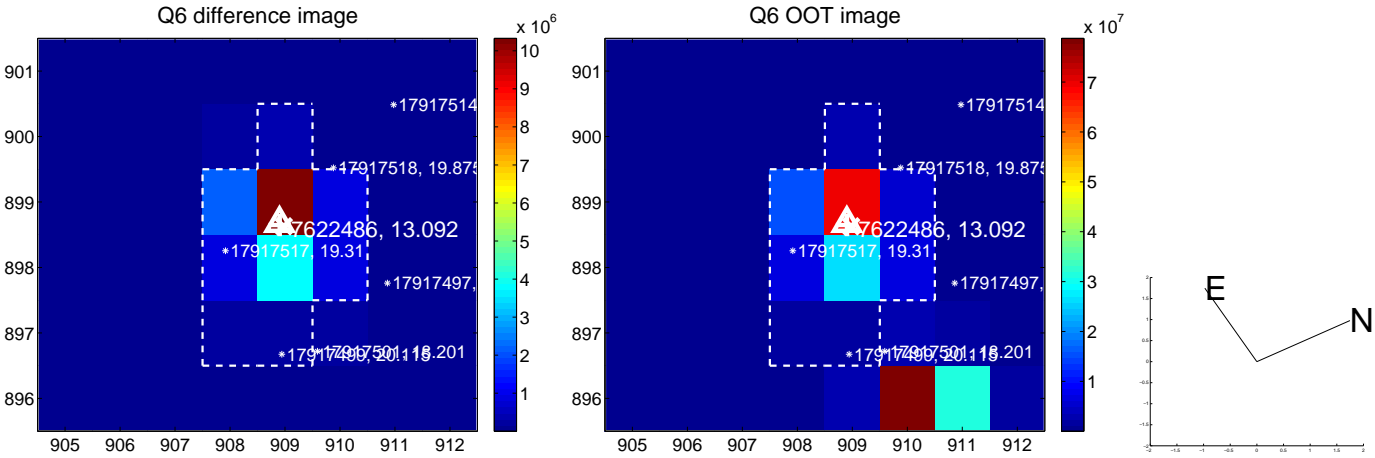
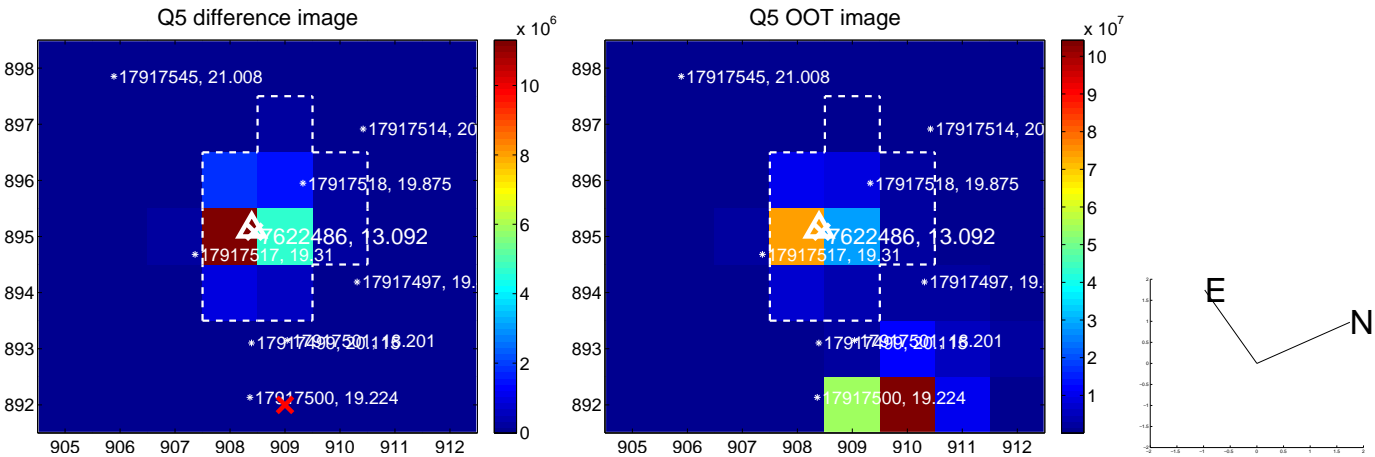


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

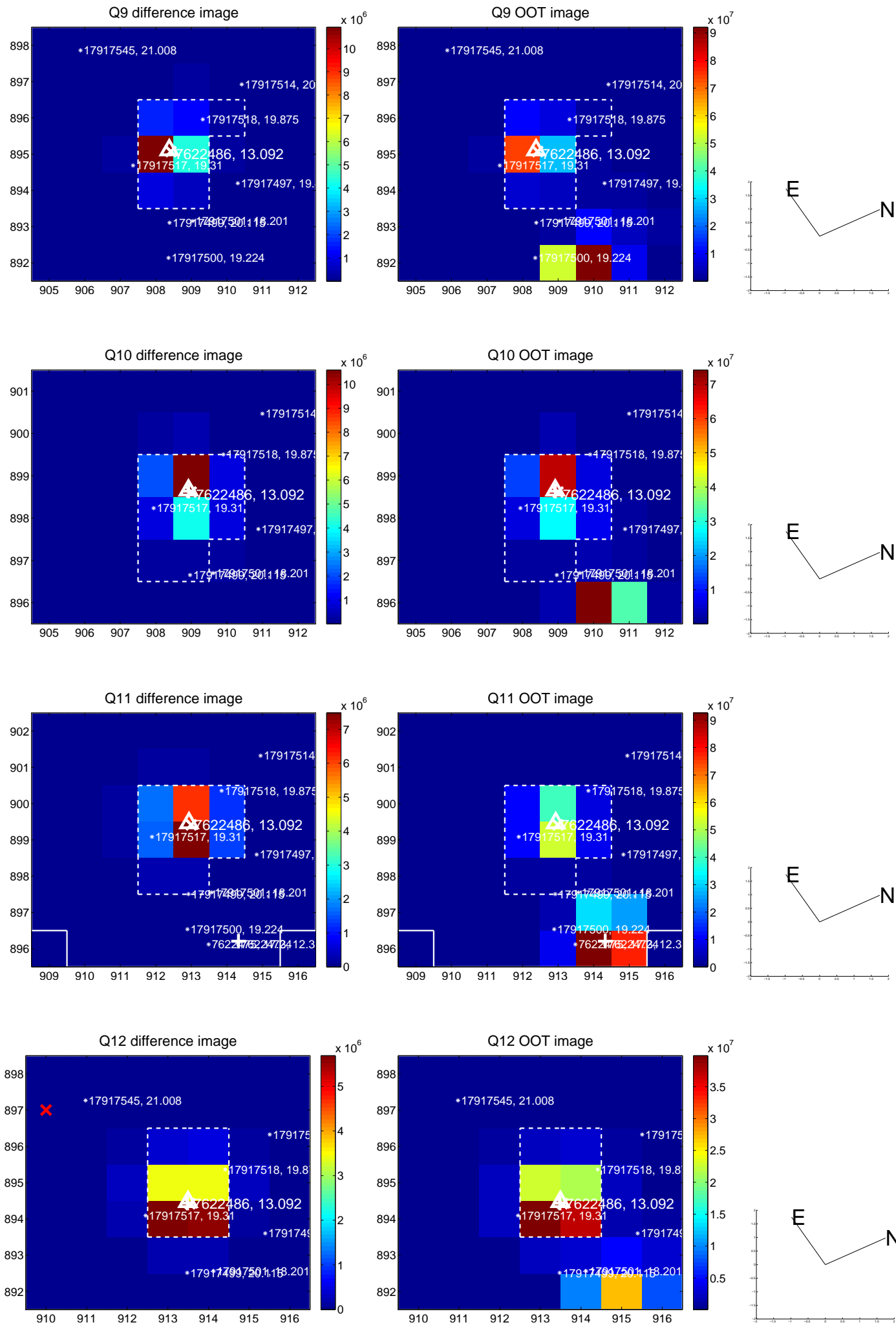
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



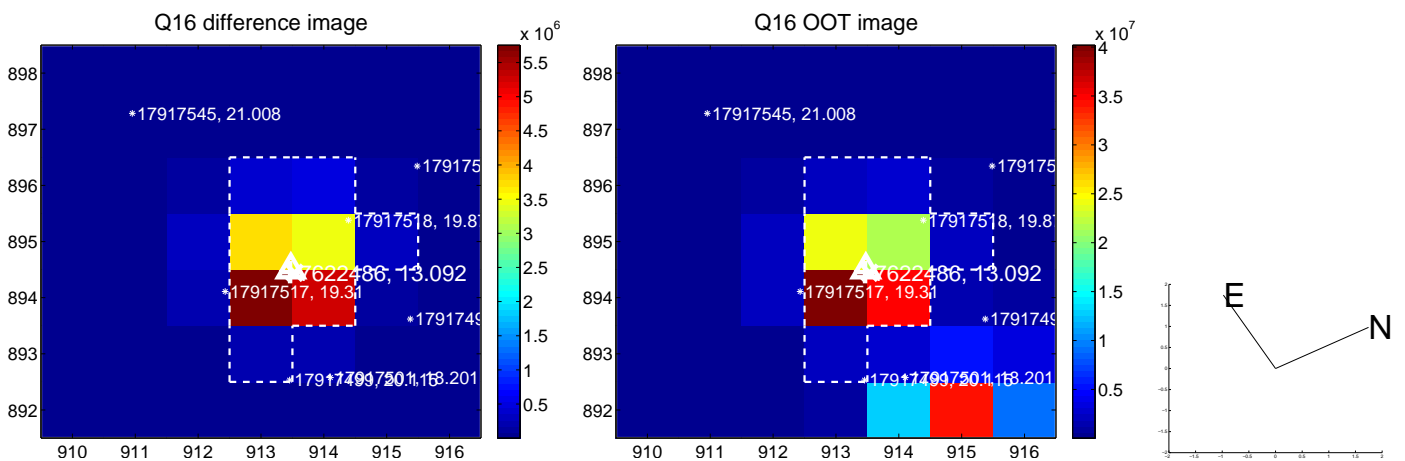
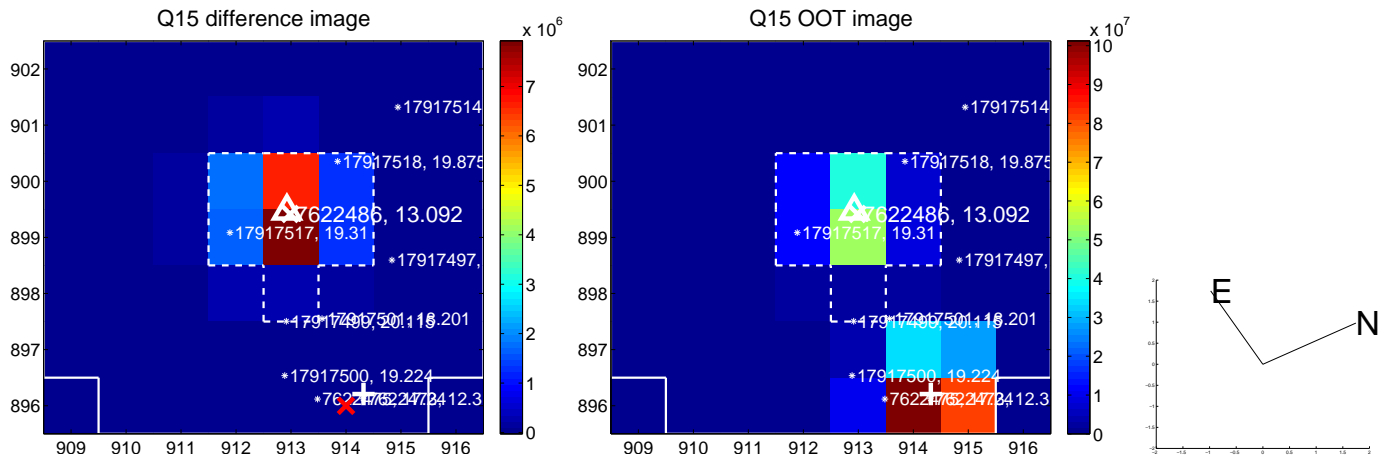
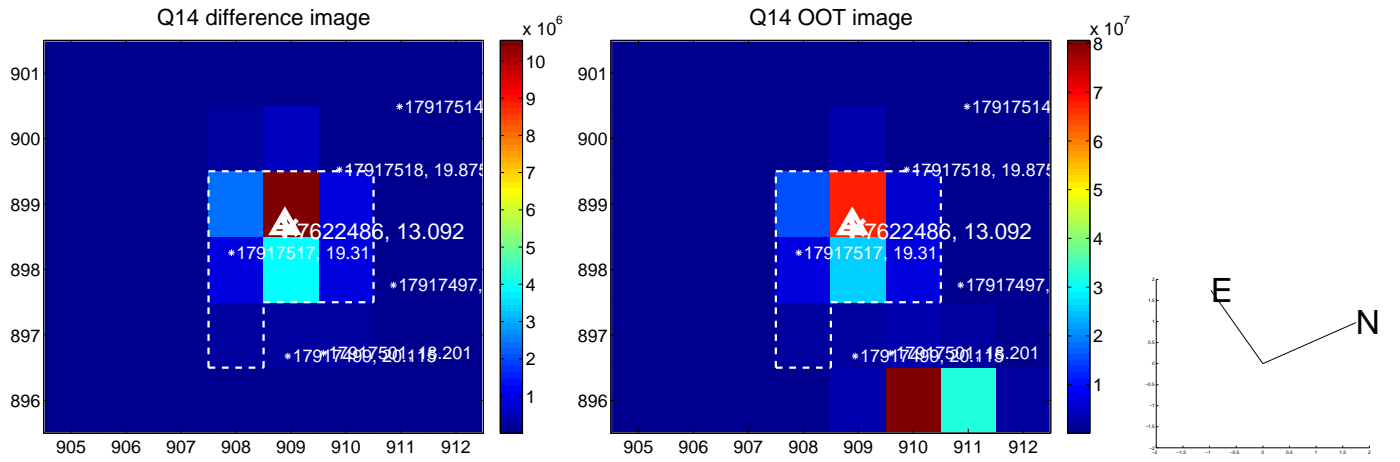
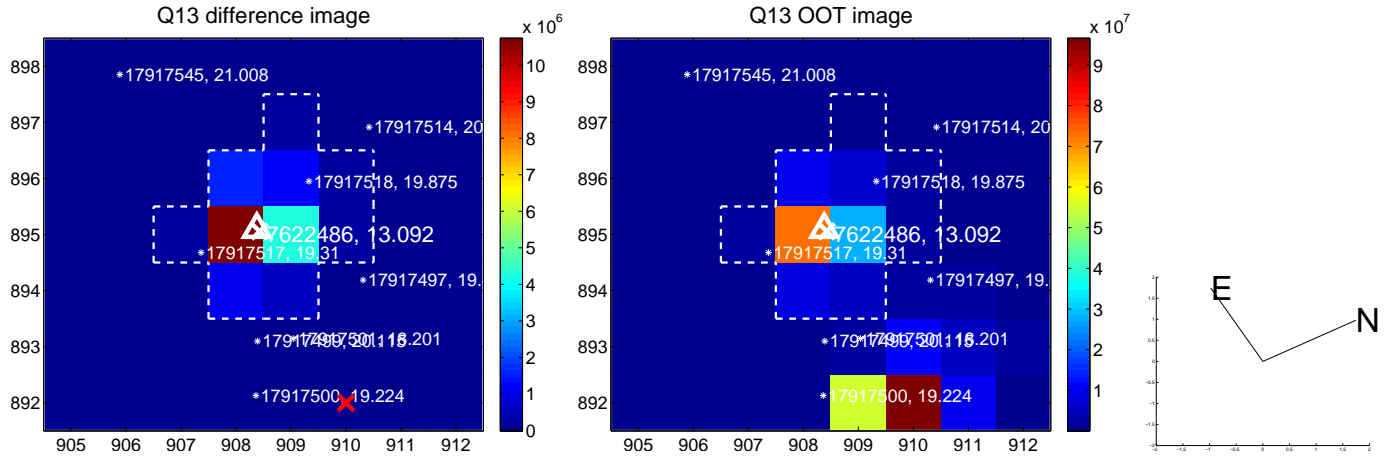
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



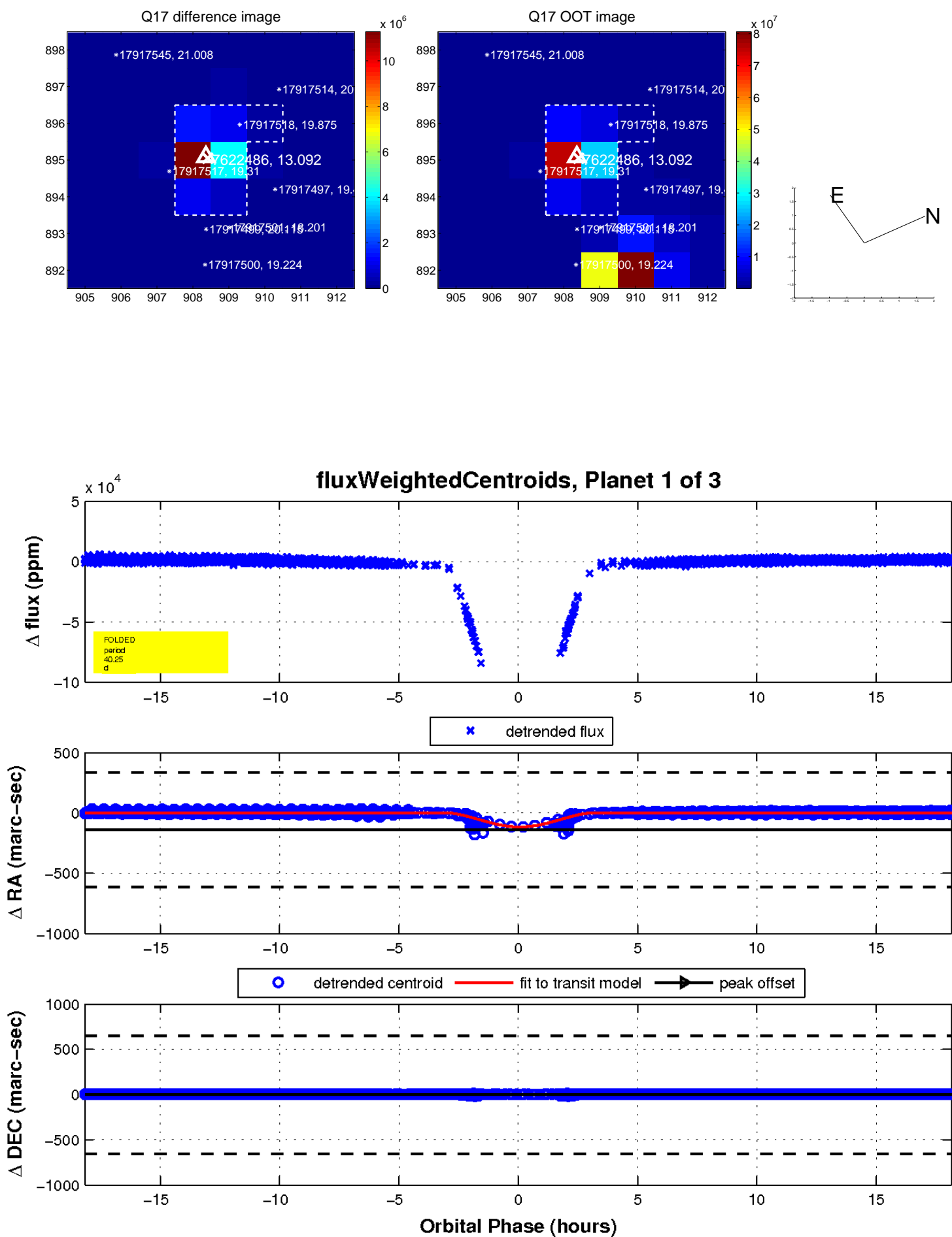
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

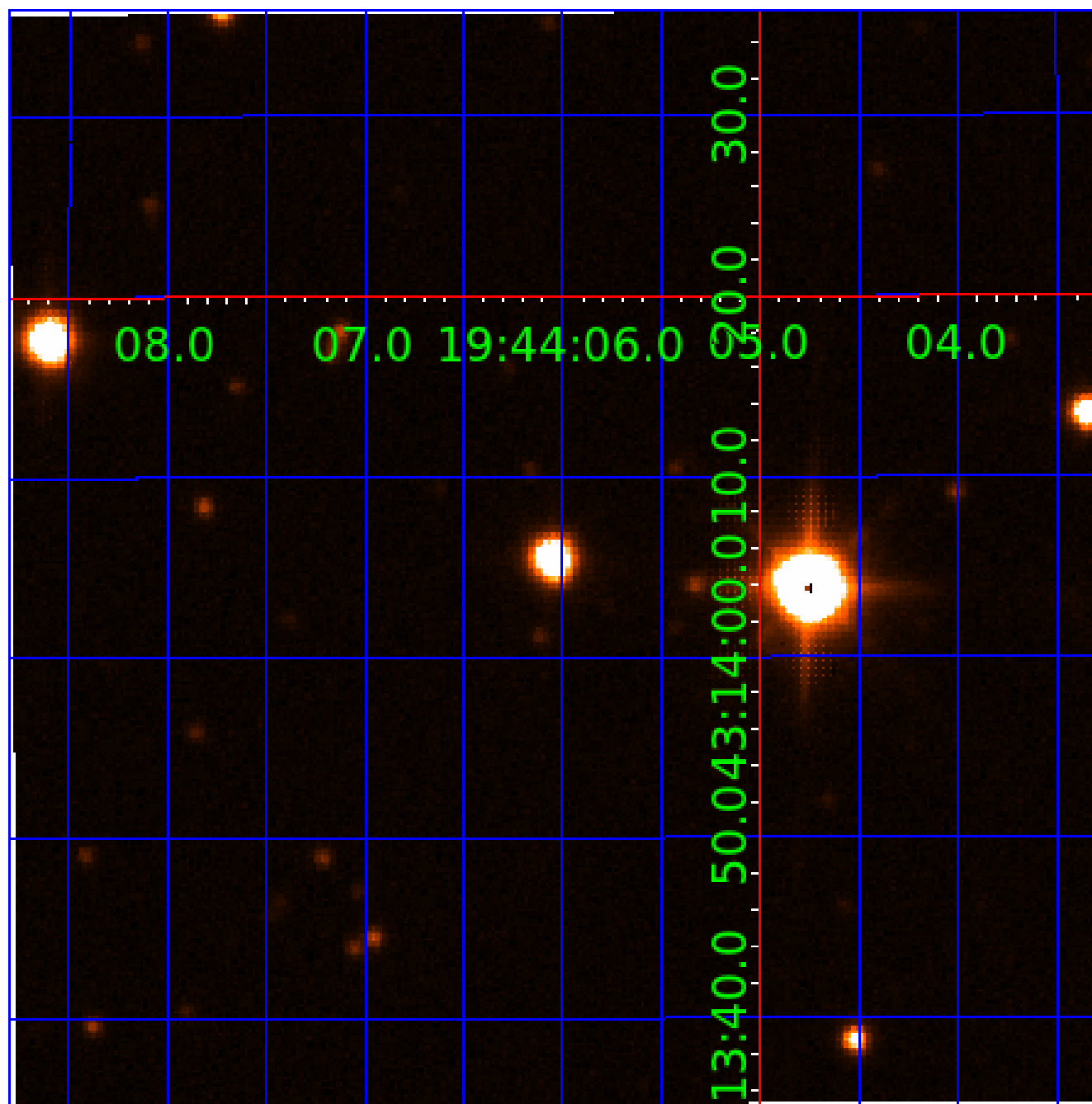


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007622486

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})
007622486-01	OBS	1447.01	40.246490	161.306714	159574.9	6.057	1974.4	1675.8	1.69	6594	98.24	82.40
007622486-02	OBS	1447.02	2.279997	133.640885	10856.7	5.290	738.1	746.2	1.69	6594	18.75	3787.39
007622486-03	OBS	No	2.279978	132.480494	0.2	16.966	18.8	0.0	1.69	6594	0.07	3787.43

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007622486-01	OBS	FP	0.00	0	1	0	0	DEEP_V_SHAPED—CENT_KIC_POS
007622486-02	OBS	FP	0.96	0	1	0	0	HAS_SEC_TCE—CENT_KIC_POS
007622486-03	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE—CENT_KIC_POS

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.

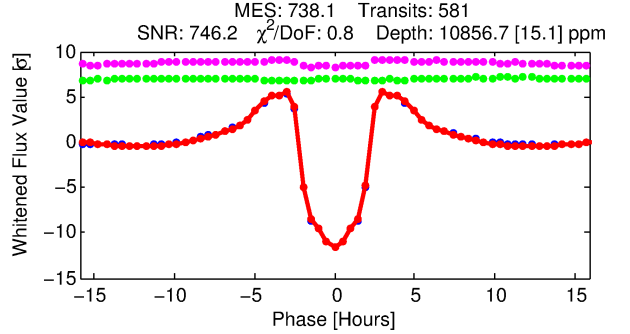
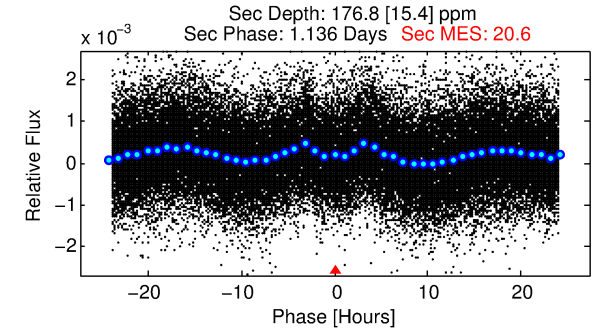
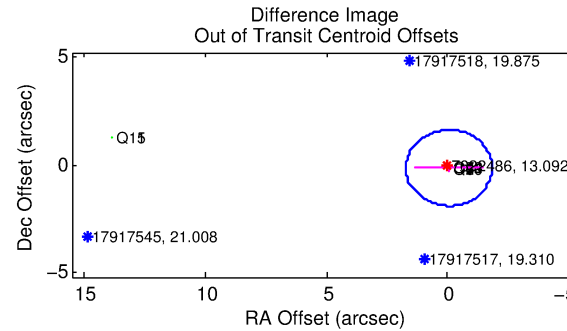
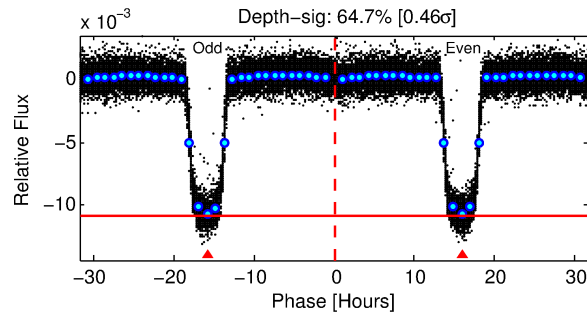
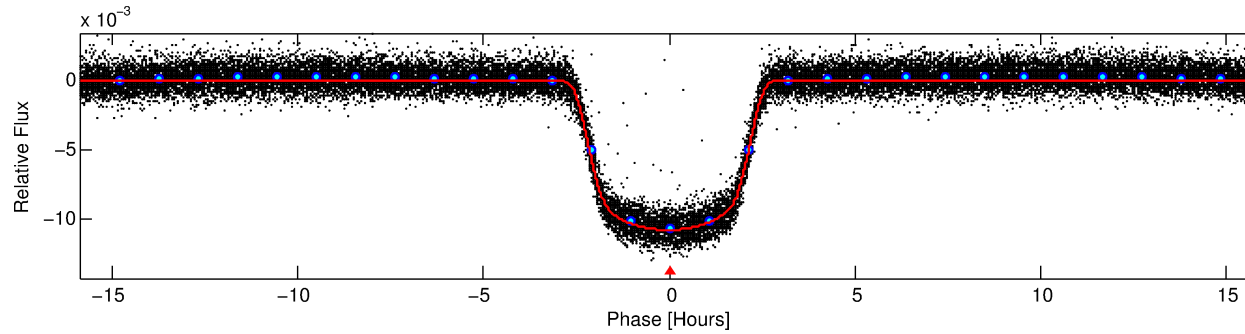
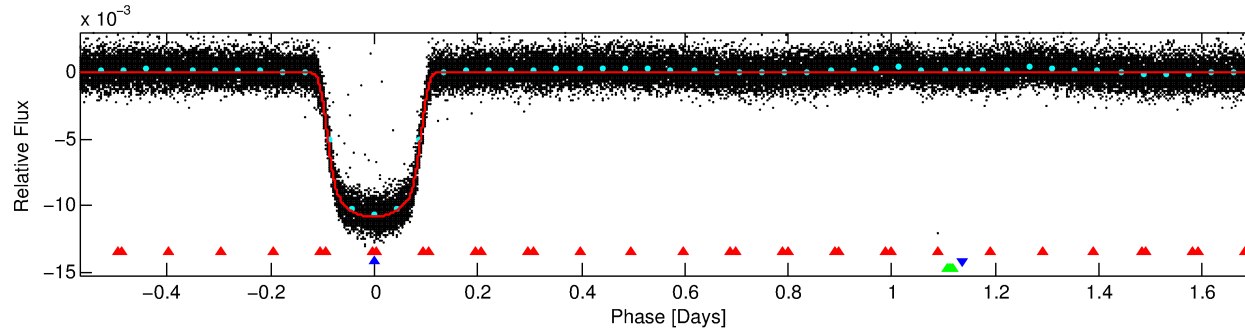
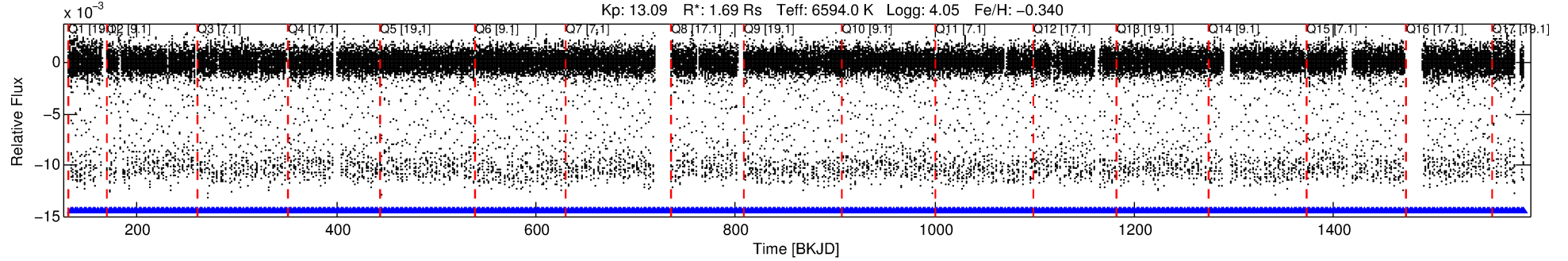
Ephemeris Match Information For 007622486-02

No Significant Match Found

DV One-Page Summary

KIC: 7622486 Candidate: 2 of 3 Period: 2.280 d
KOI: K01447.02 Corr: 1.000

Kp: 13.09 R*: 1.69 Rs Teff: 6594.0 K Logg: 4.05 Fe/H: -0.340



DV Fit Results:

Period = 2.28000 [0.00000] d
Epoch = 133.6409 [0.0001] BKJD
Rp/R* = 0.1016 [0.0001]
a/R* = 3.01 [0.01]
b = 0.67 [0.00]
Seff = 3787.39 [1966.02]
Teq = 2000 [260] K
Rp = 18.75 [6.10] Re
a = 0.0358 [0.0112] AU
Ag = 0.35 [0.18] [-3.60σ]
Teffp = 2385 [99] K [1.39σ]

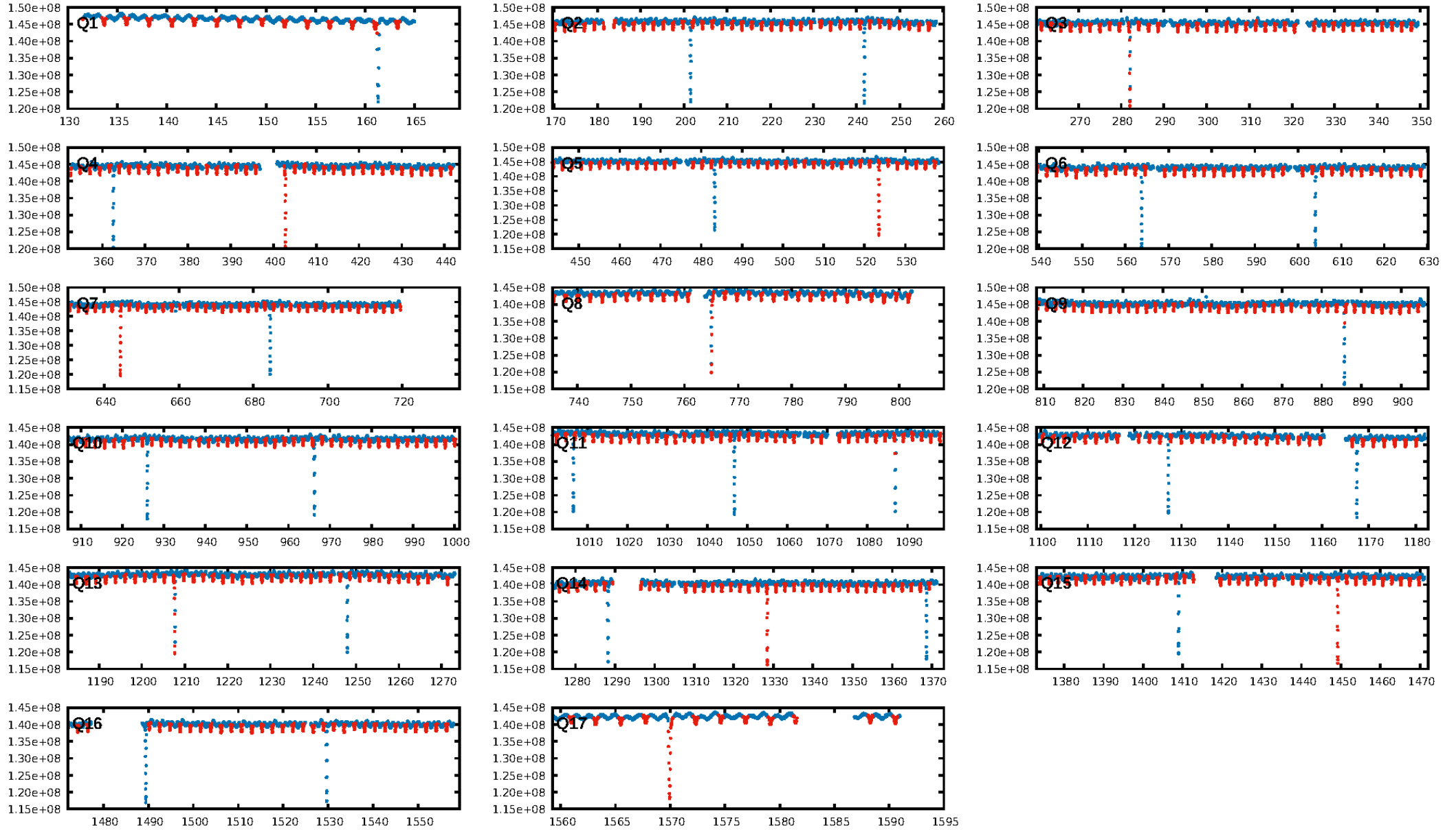
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 100.0% [113.31σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [556/556]
GhostDiagnostic-chr: 9.246
Centroid-sig: 0.0%
Centroid-so: 1.178 arcsec [180.72σ]
OotOffset-rm: 0.163 arcsec [0.28σ]
OotOffset-st: 4/4/4/0 [12]
KicOffset-rm: 0.379 arcsec [5.60σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

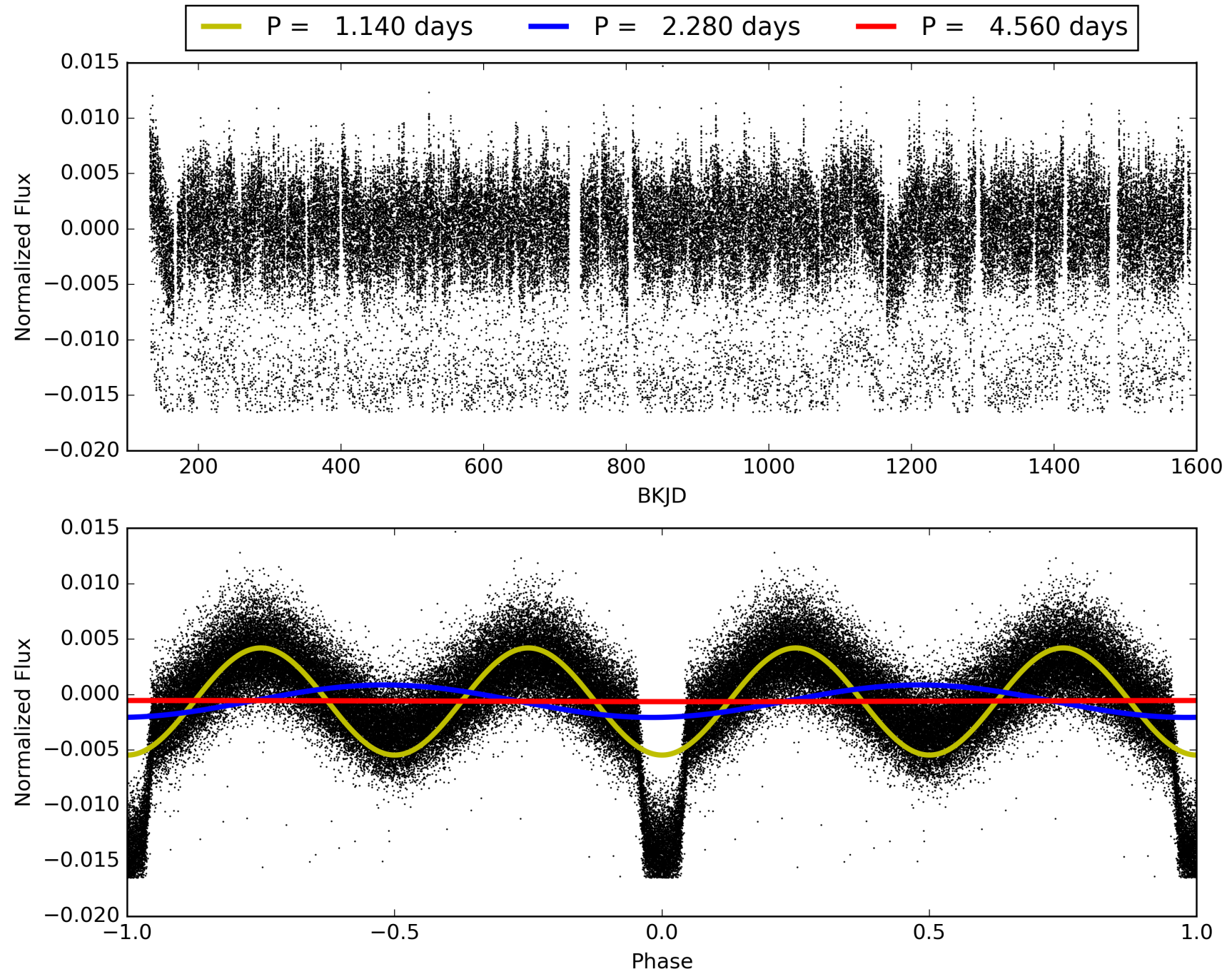
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:20:25 Z

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

TCE 007622486-02, PDC Light Curves

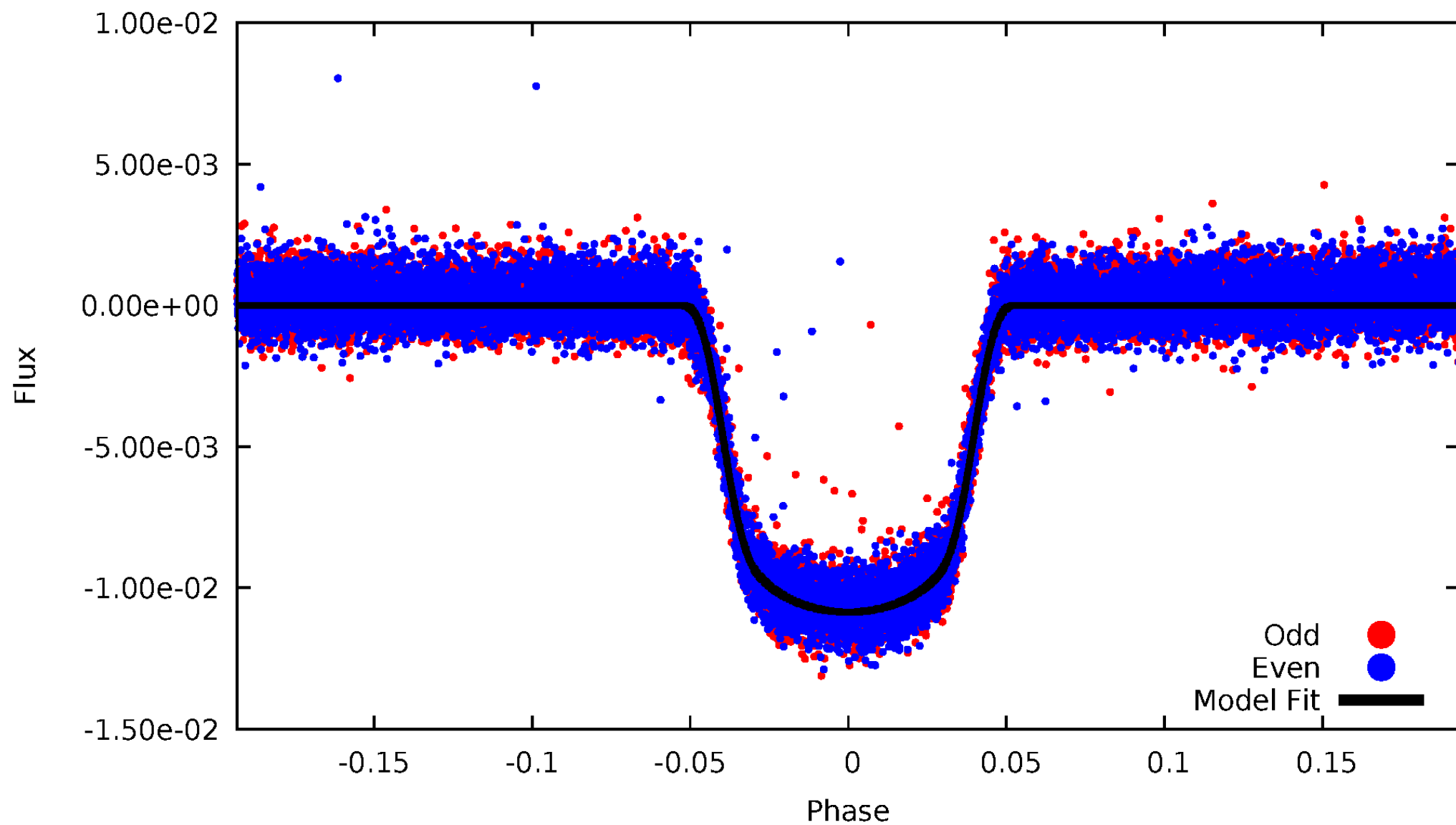


TCE 007622486-02



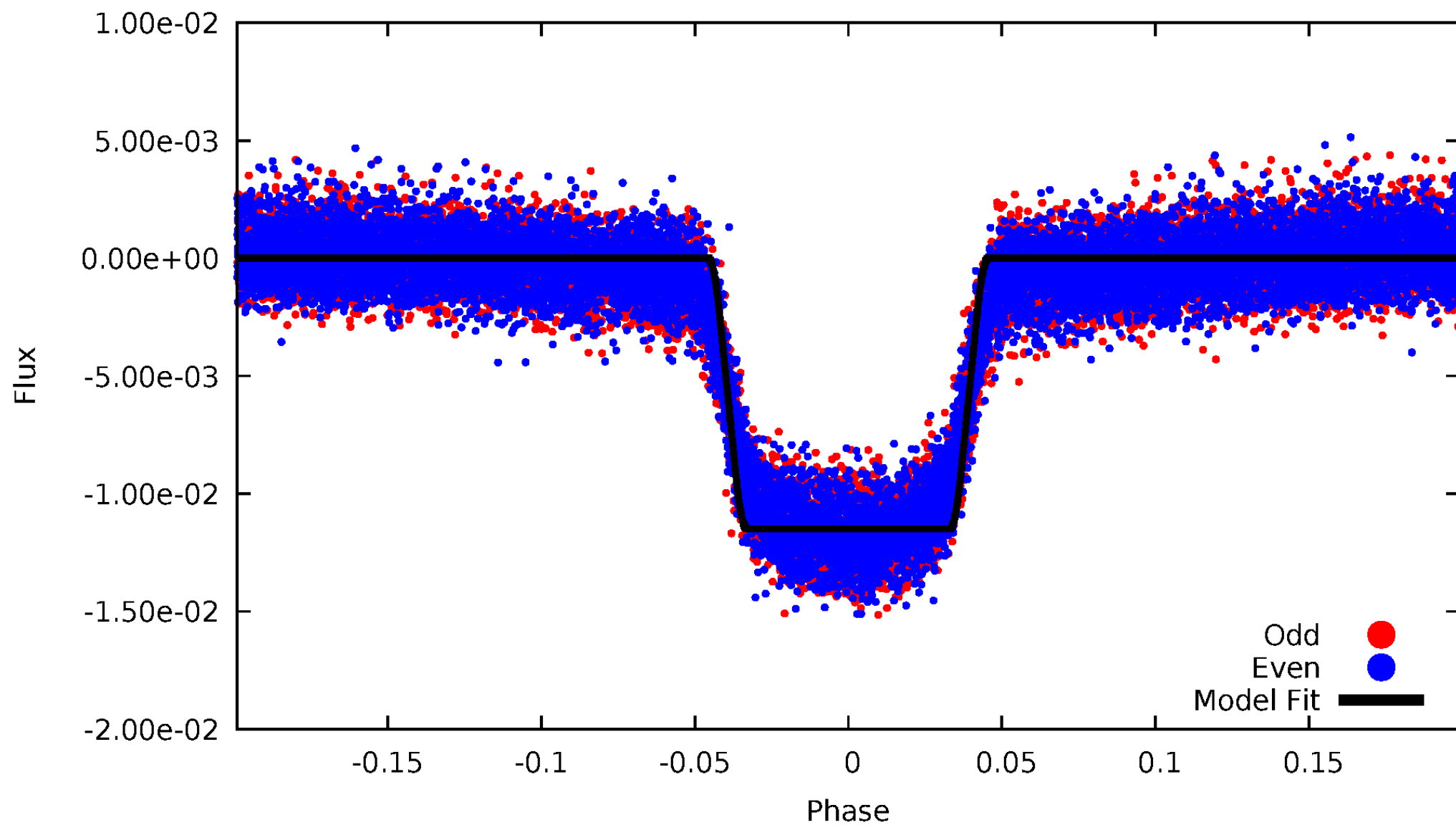
DV Odd/Even

TCE 007622486-02



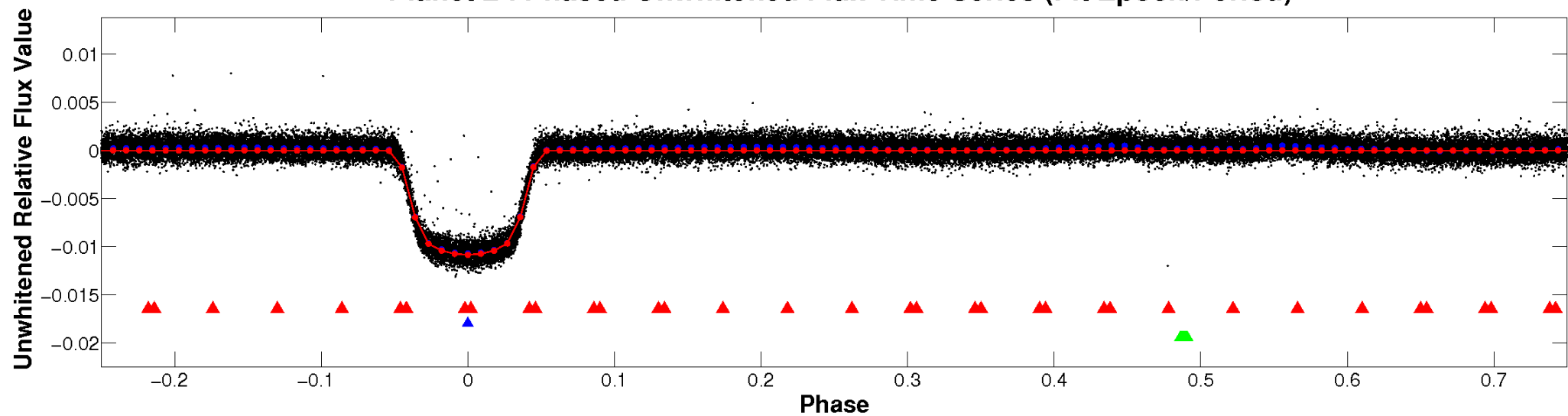
ALT Odd/Even

TCE 007622486-02

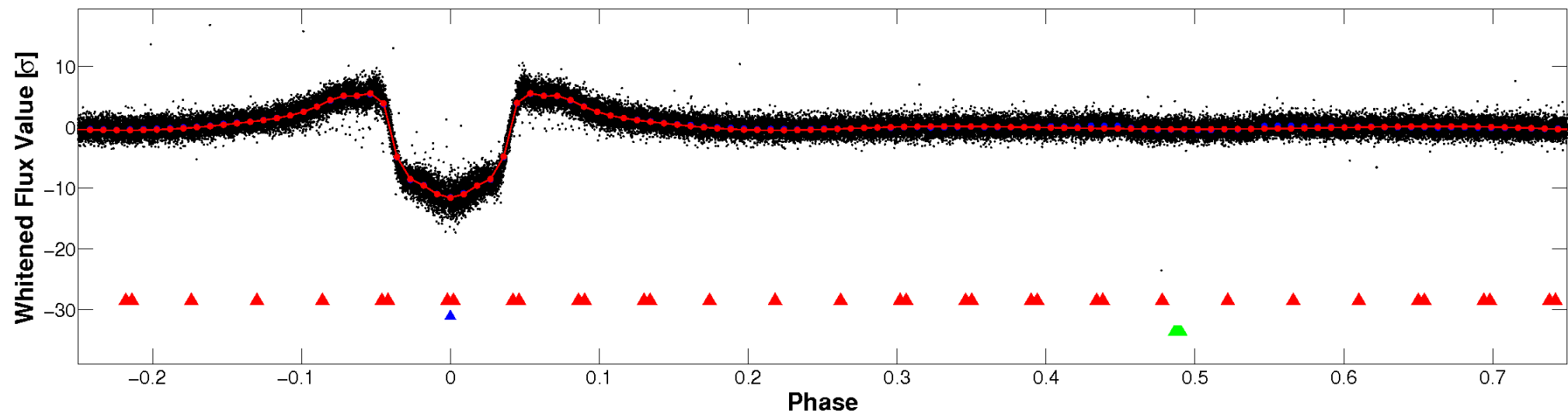


Non-Whitened Vs. Whitened Light Curve

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

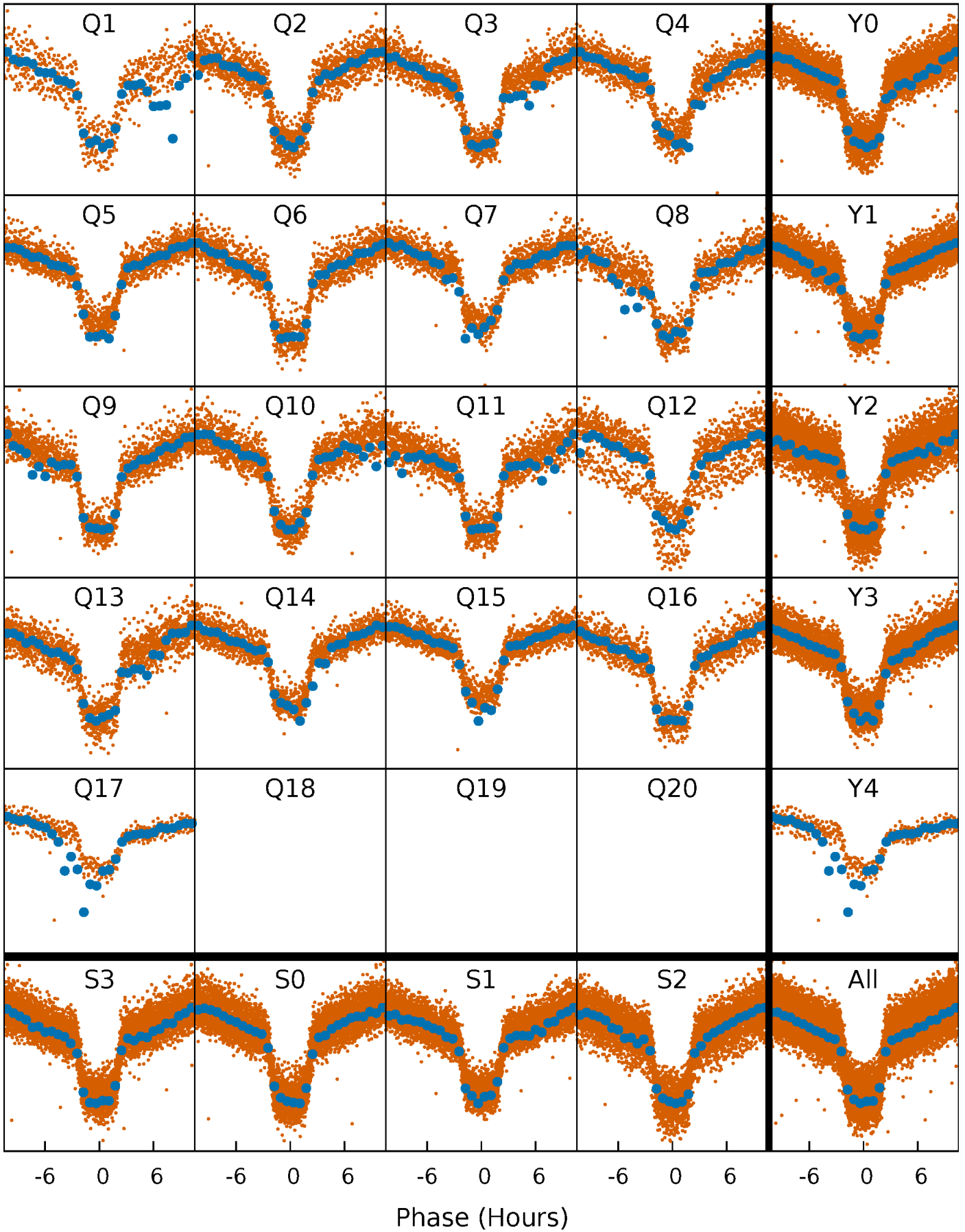


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



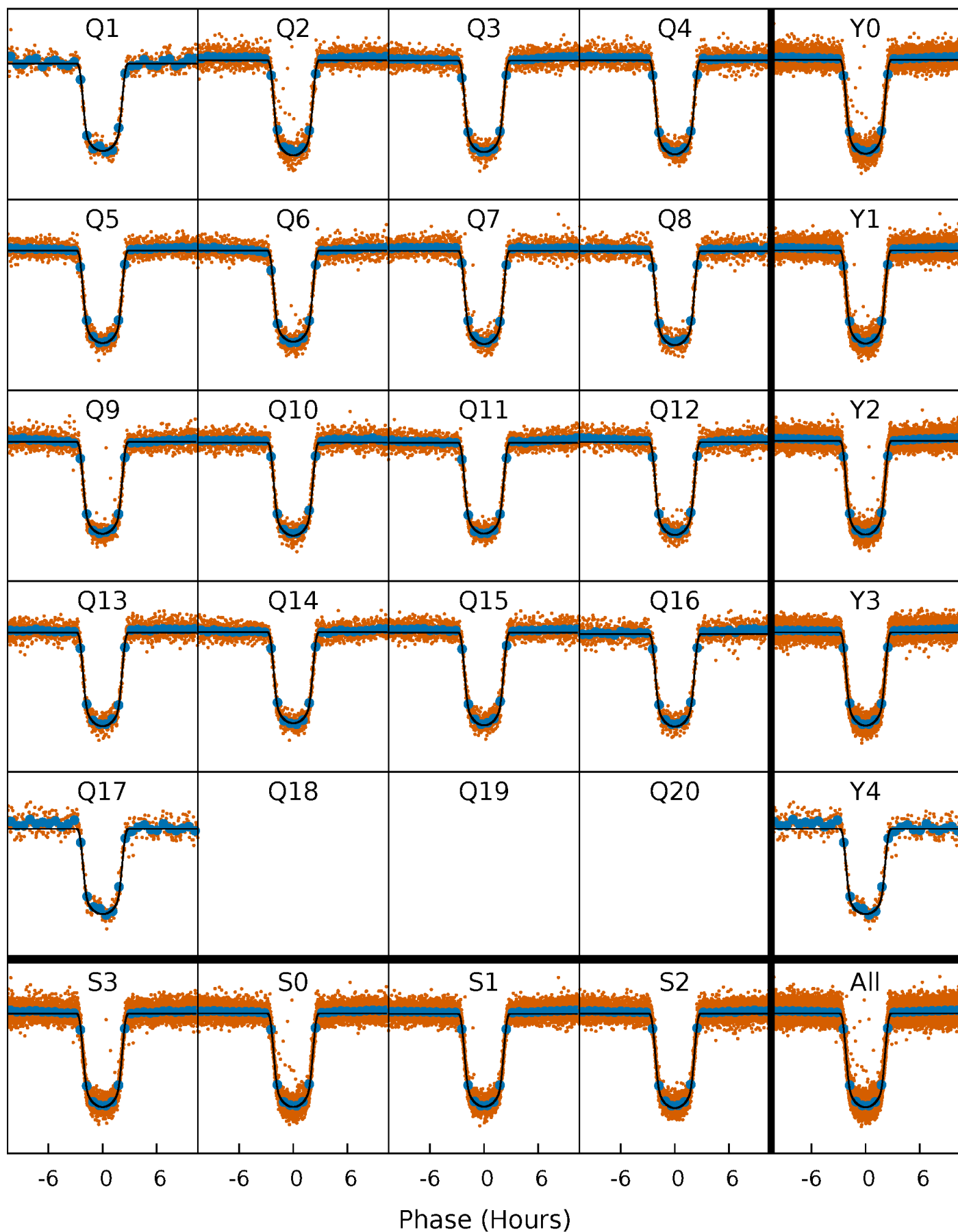
PDC Quarter-Phased Transit Curves

TCE 007622486-02 P= 2.279997 Days $T_0=133.640885$ (BKJD)



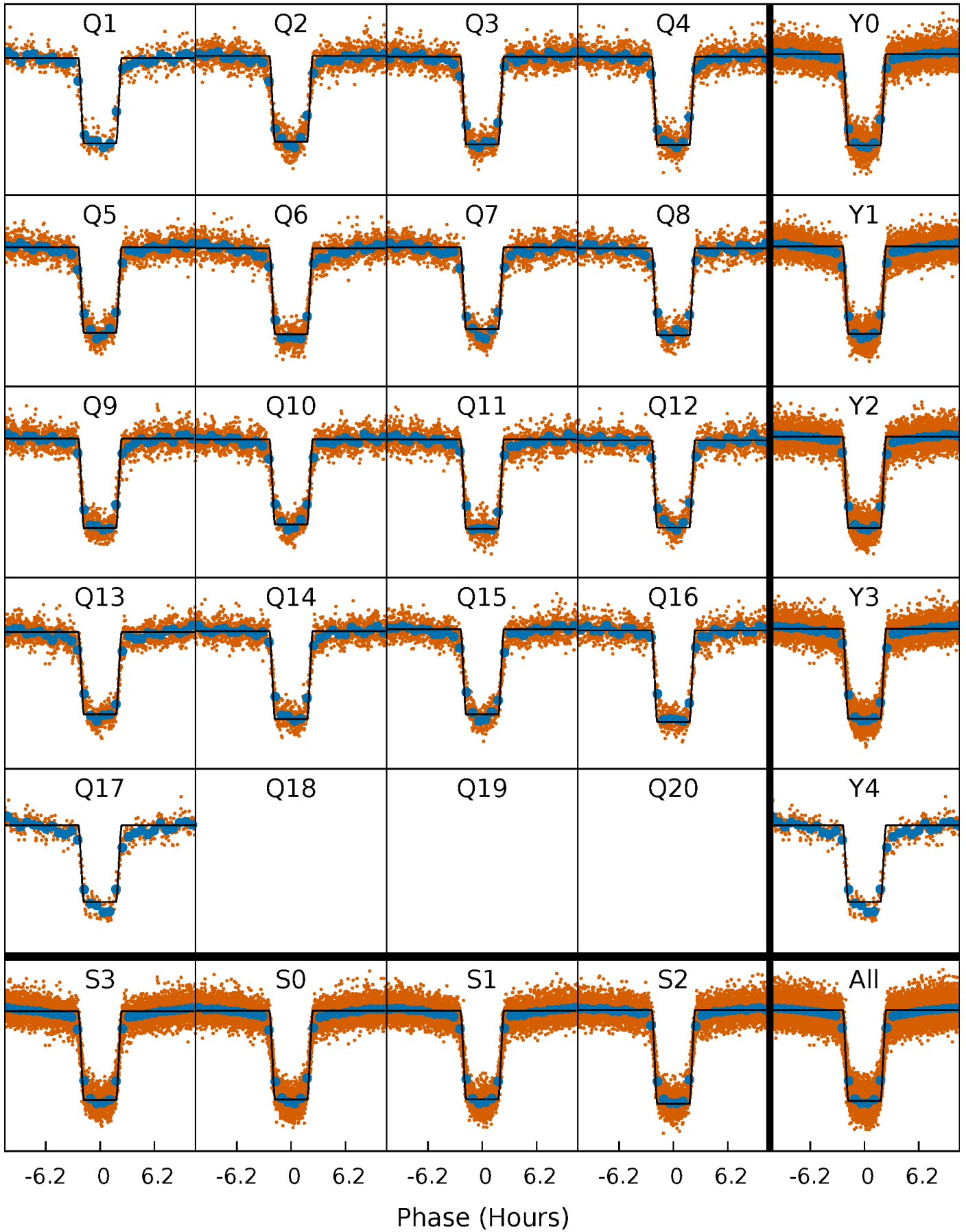
DV Quarter-Phased Transit Curves

TCE 007622486-02 P= 2.279997 Days $T_0=133.640885$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

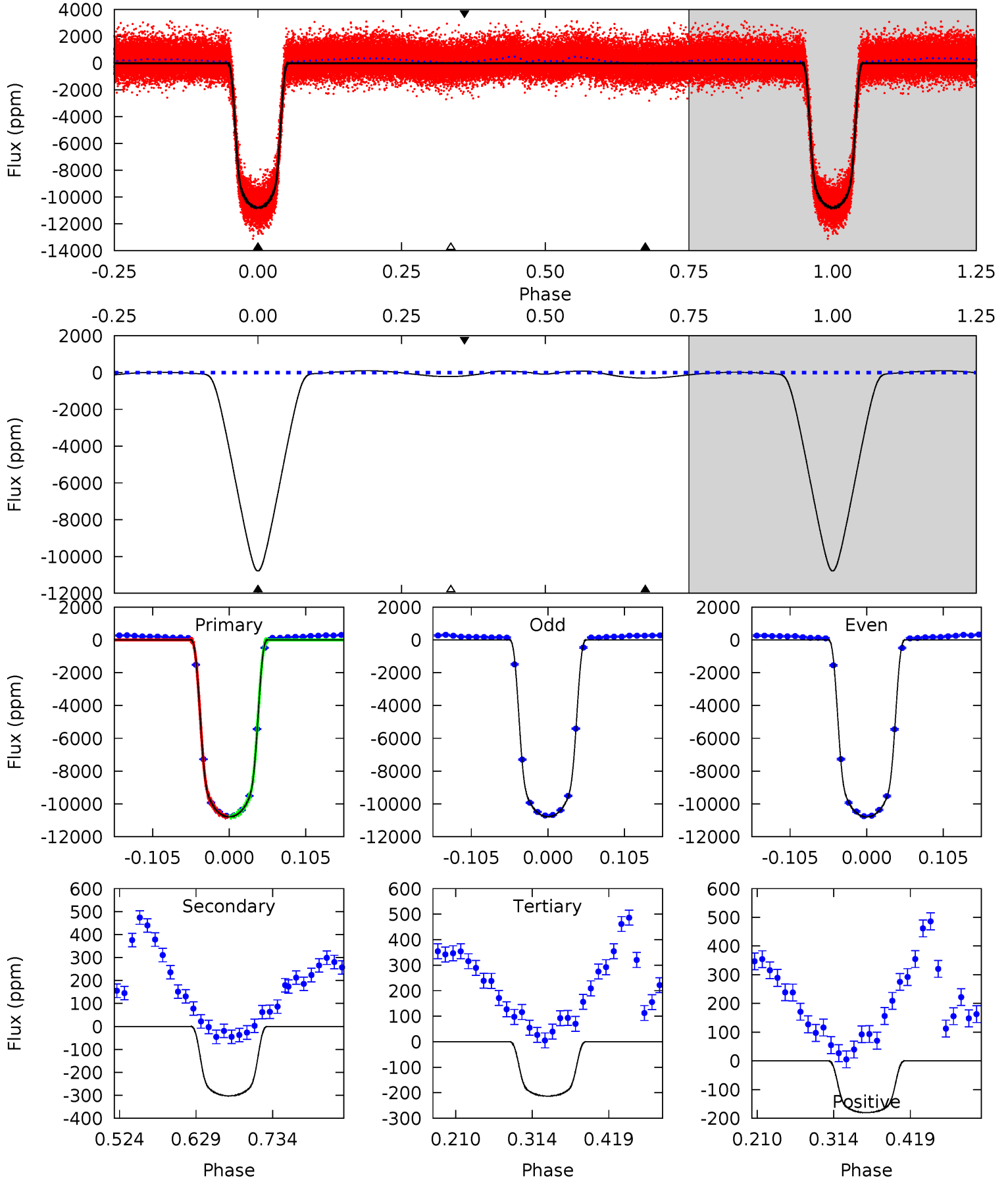
TCE 007622486-02 P= 2.279986 Days $T_0=133.644193$ (BKJD)



DV Model-Shift Uniqueness Test

007622486-02, P = 2.279997 Days, E = 131.360888 Days

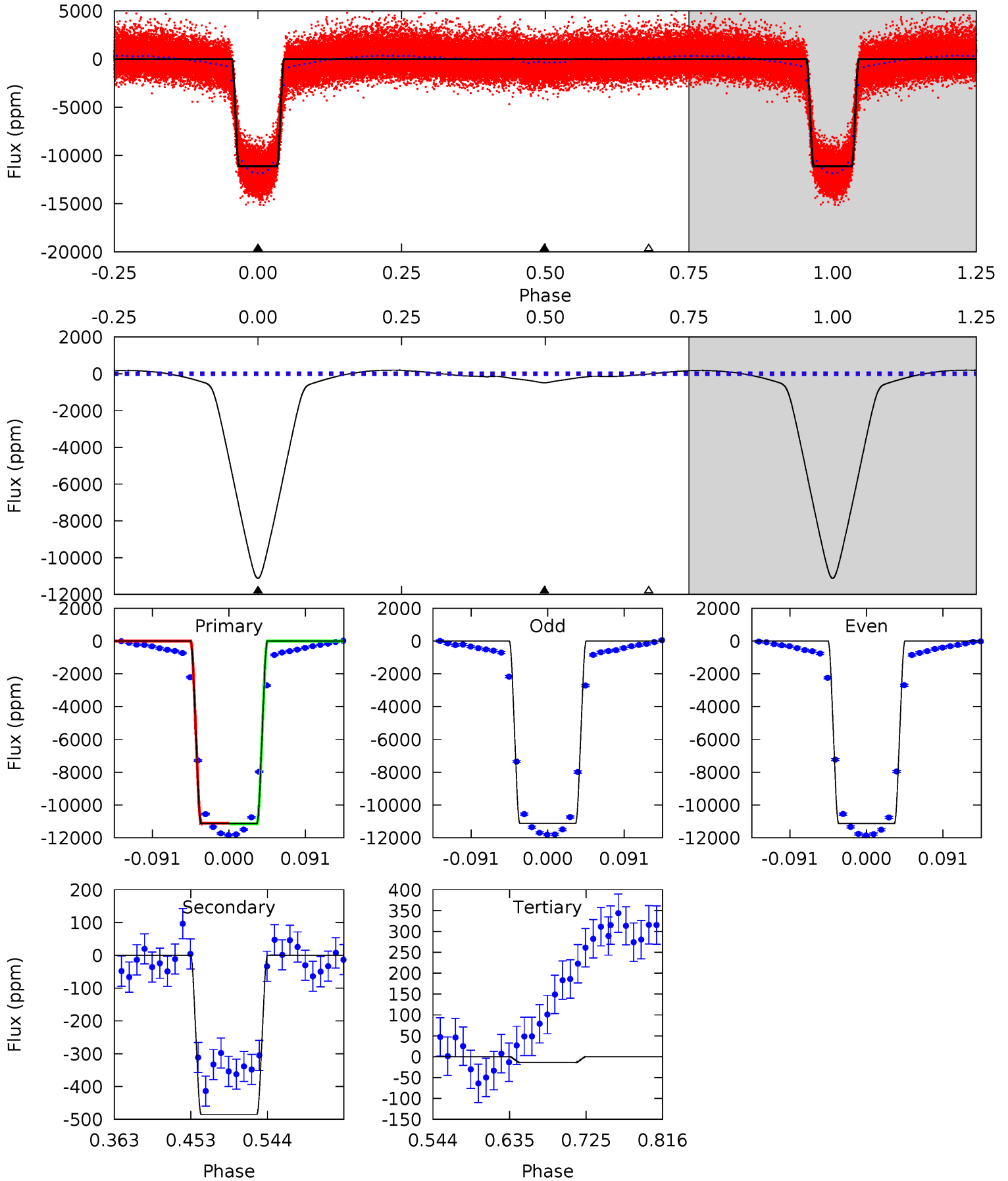
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1164	32.6	23.0	-19.4	4.55	1.62	9.72	1141	1184	9.63	52.1	0.52	0.99	0.01	0.27



Alt Model-Shift Uniqueness Test

007622486-02, P = 2.279986 Days, E = 131.364207 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
736.5	32.1	0.92	0	4.59	1.69	11.5	735.6	736.5	31.2	32.1	0.47	1.00	0.02	1.27



Stellar Parameters For KIC 007622486

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6594^{+187}_{-234}	$4.051^{+0.293}_{-0.158}$	$-0.340^{+0.250}_{-0.300}$	$1.691^{+0.450}_{-0.550}$	$1.174^{+0.196}_{-0.178}$	$0.342^{+0.656}_{-0.149}$
	+3%/-4%	+7%/-4%	+74%/-88%	+27%/-33%	+17%/-15%	+192%/-44%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 007622486-02 / KOI 1447.02

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-302 ± 9	$18.78^{+2.63}_{-3.65}$	2765^{+212}_{-264}	2973^{+131}_{-150}	$0.620^{+0.282}_{-0.147}$
Alt.	-485 ± 15	$19.40^{+2.92}_{-3.29}$	2744^{+219}_{-246}	3262^{+92}_{-102}	$0.913^{+0.409}_{-0.206}$

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

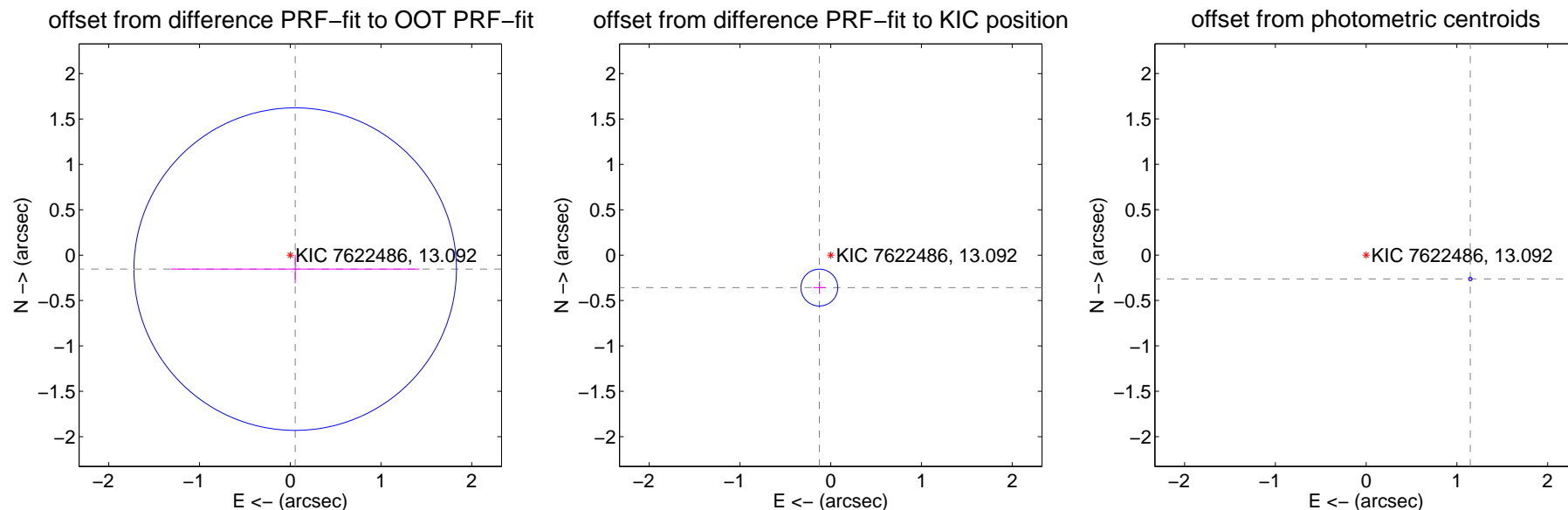
DV Centroid Data

Supplemental centroid analysis for 007622486-02. Kepler magnitude: 13.09. Transit SNR 746.21

There are 17 quarters with good PRF difference image offsets

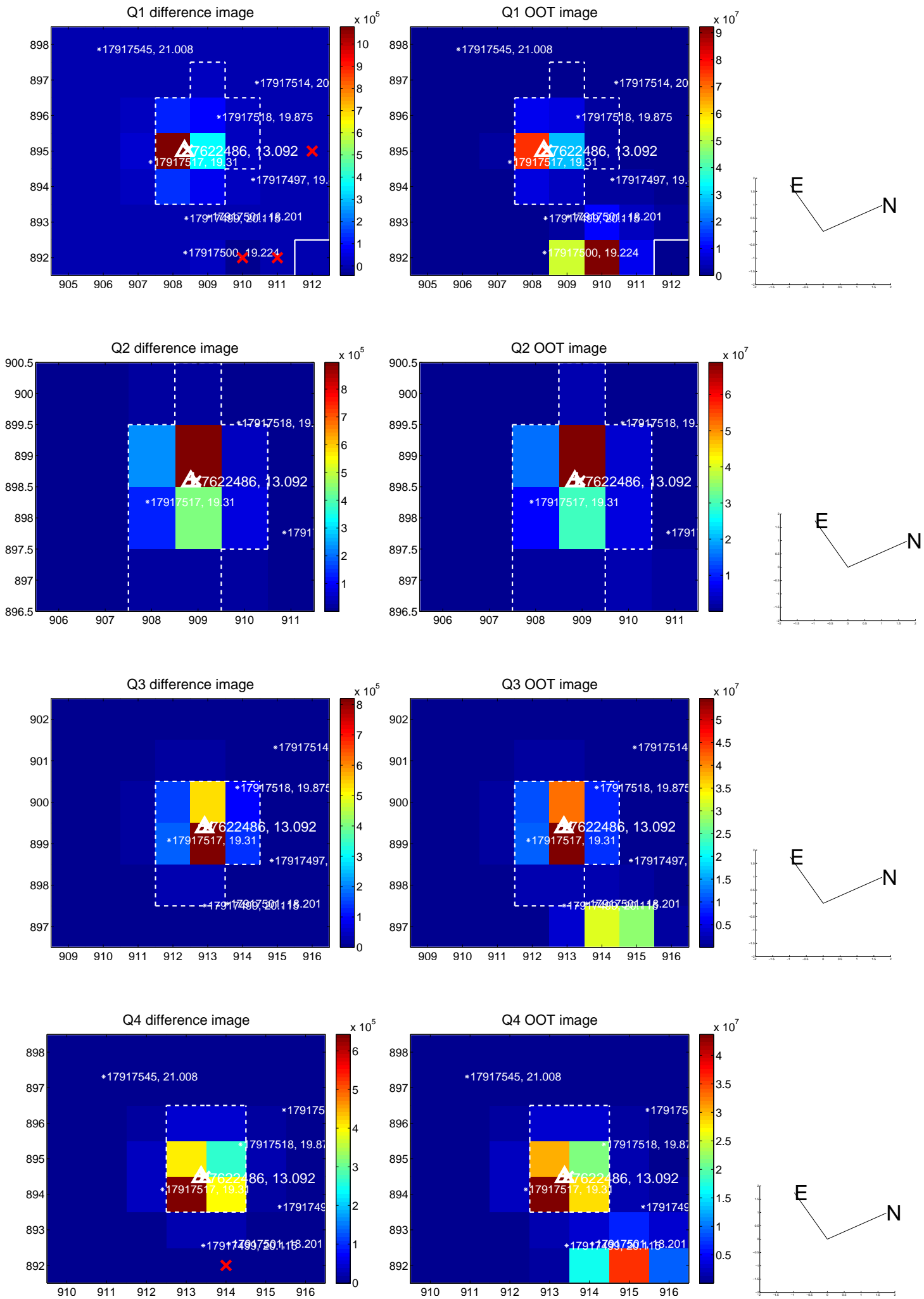
The direct PRF centroid is offset from the target star catalog position by about 0.28 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.163 ± 0.592	0.28	-0.054 ± 1.369	-0.154 ± 0.157
PRF-fit source offset from KIC position	0.379 ± 0.068	5.60	0.125 ± 0.067	-0.357 ± 0.067
photometric centroid source offset	1.18 ± 0.01	180.72	-1.15 ± 0.01	-0.26 ± 0.00

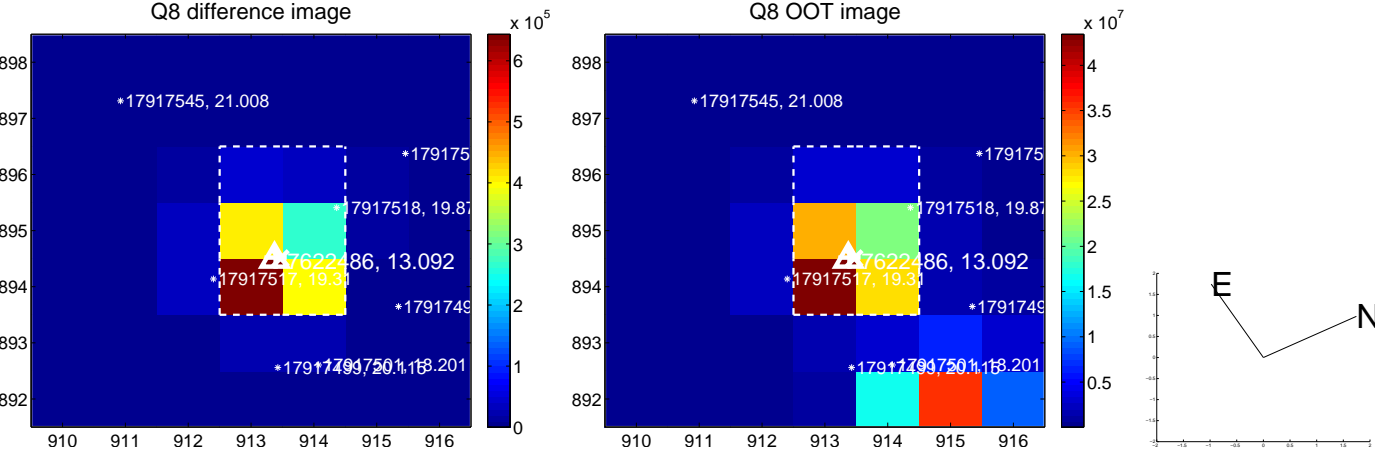
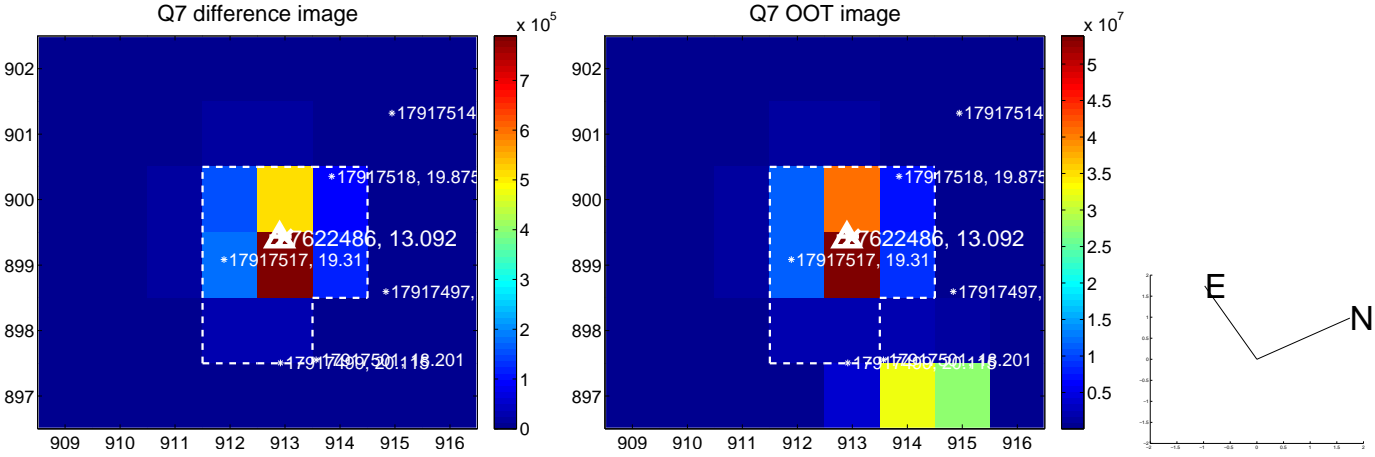
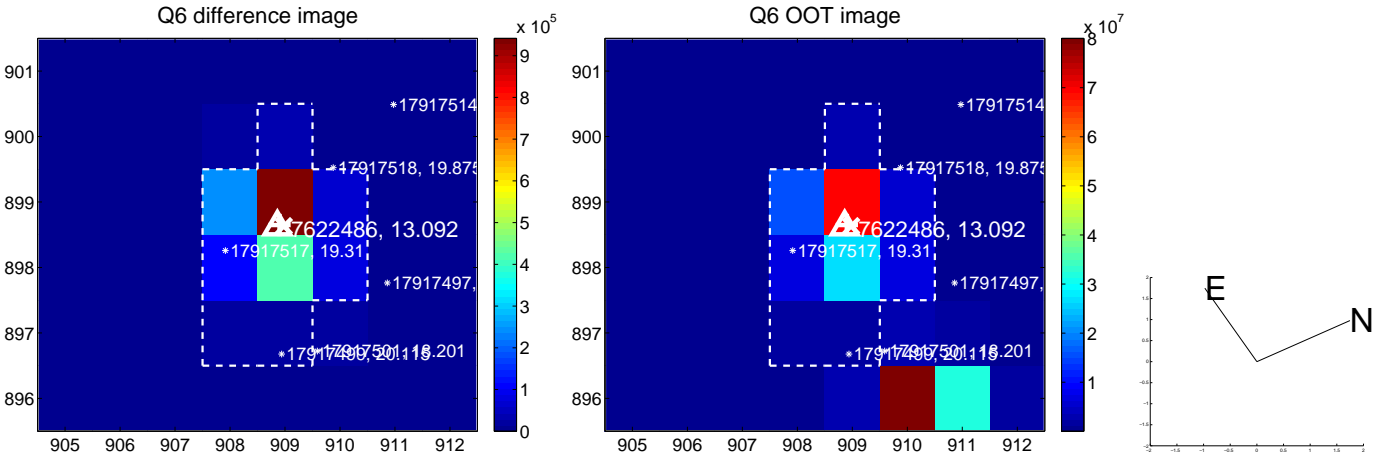
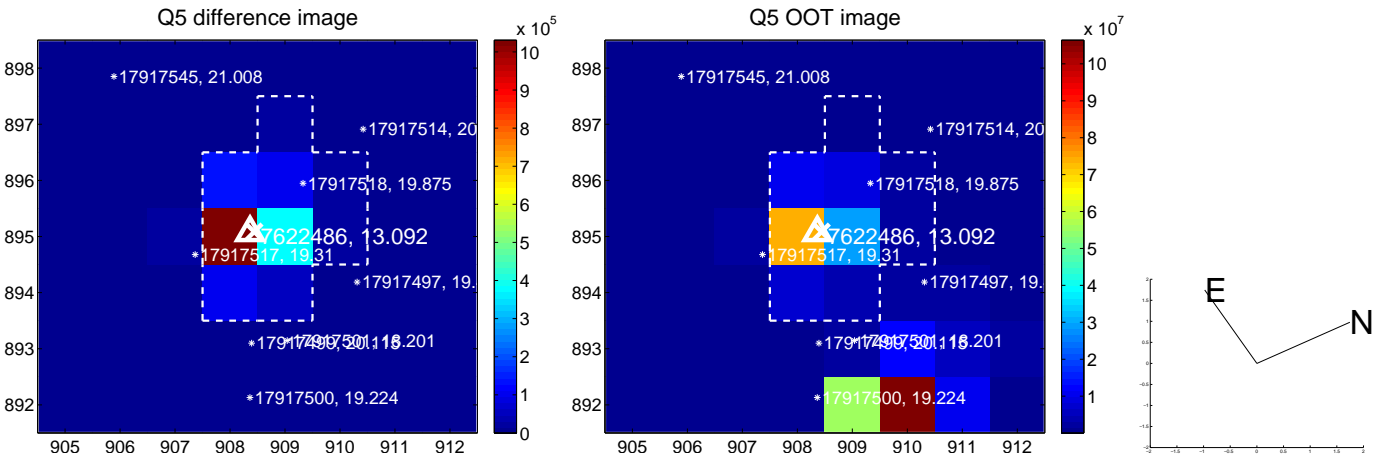


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

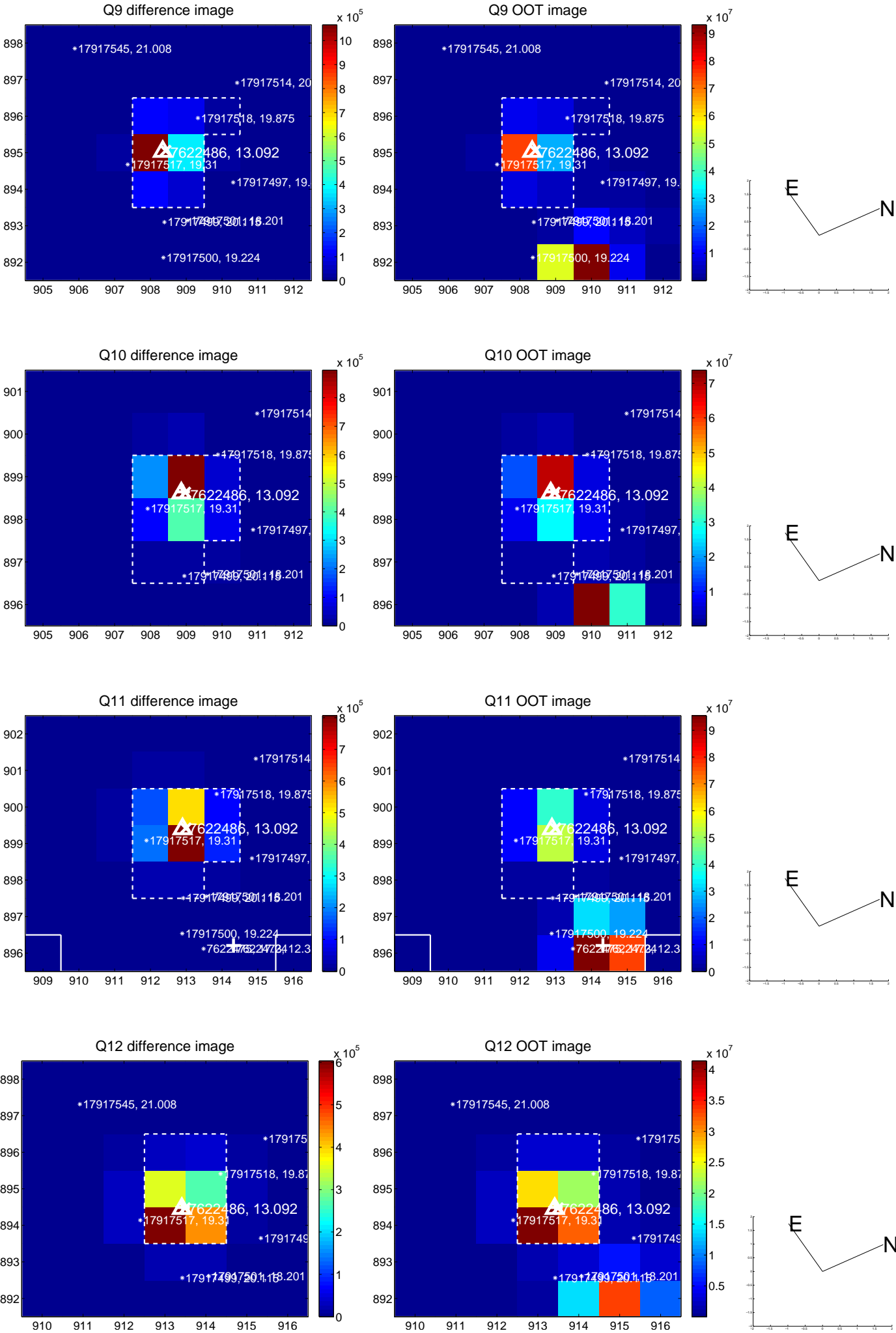
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



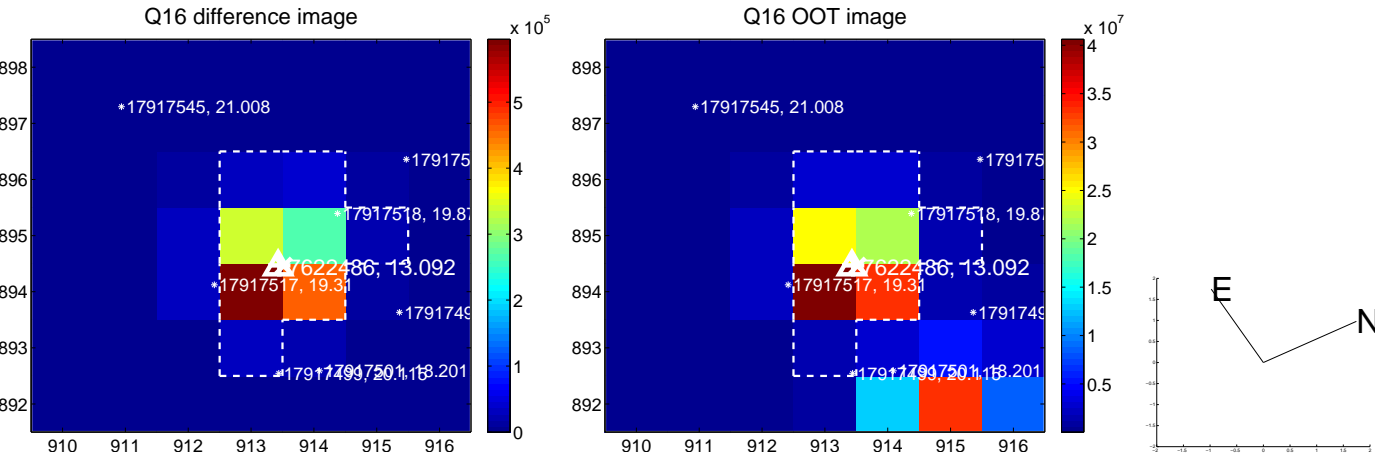
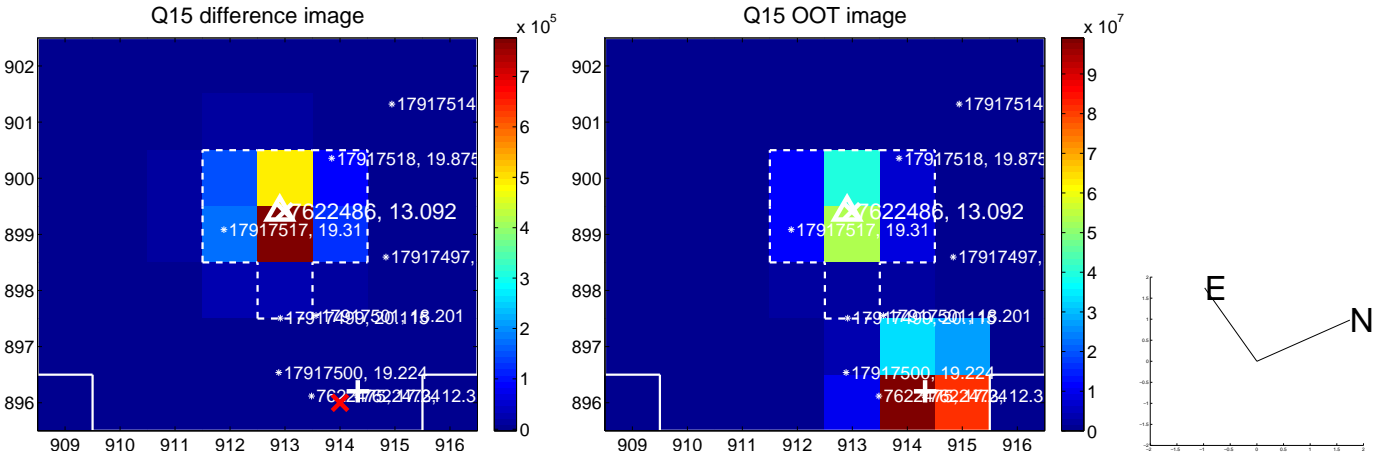
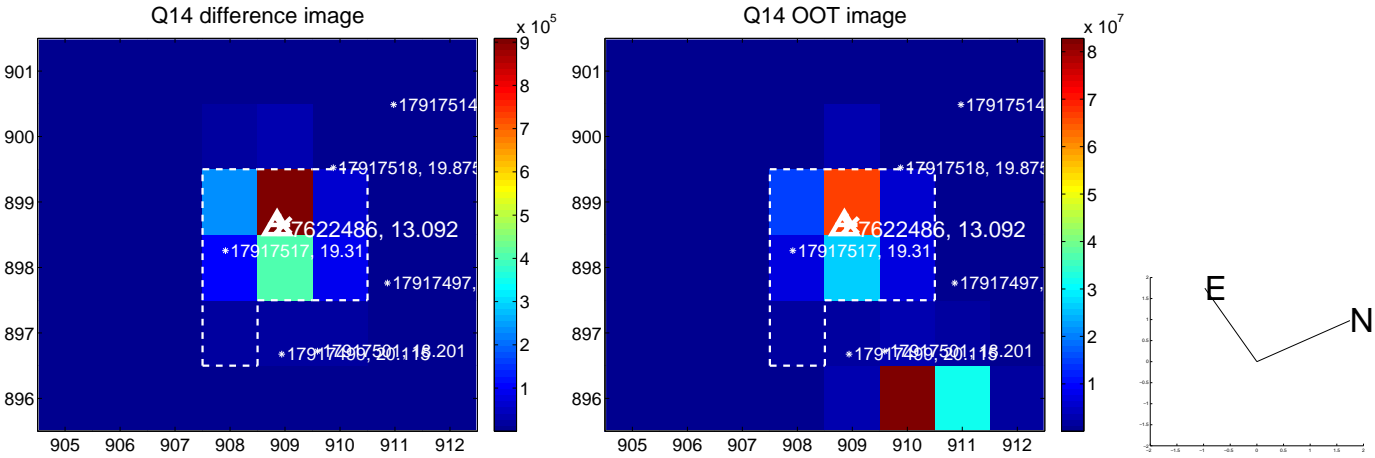
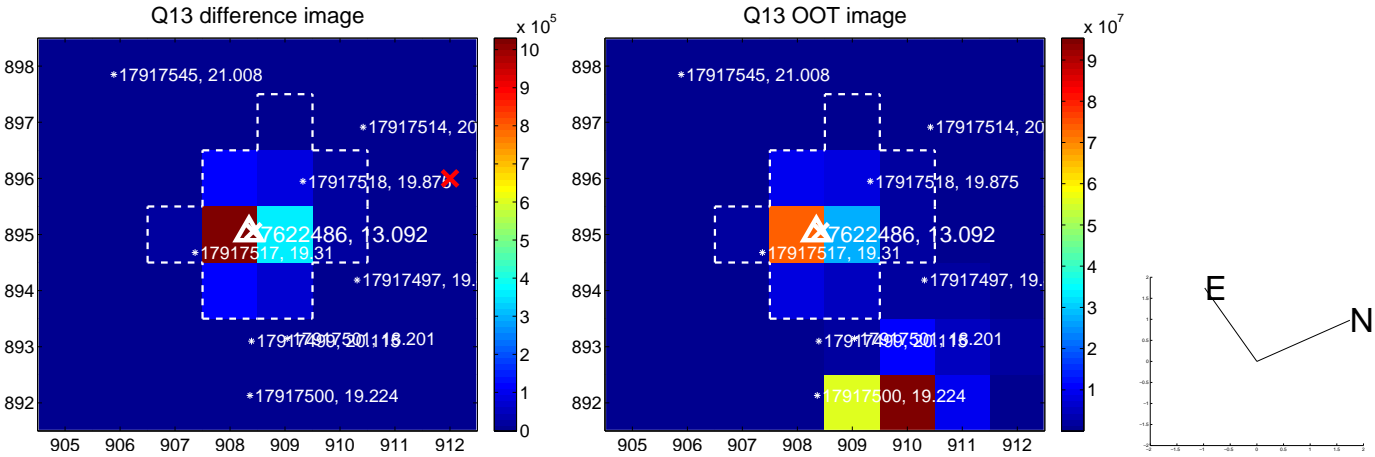
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



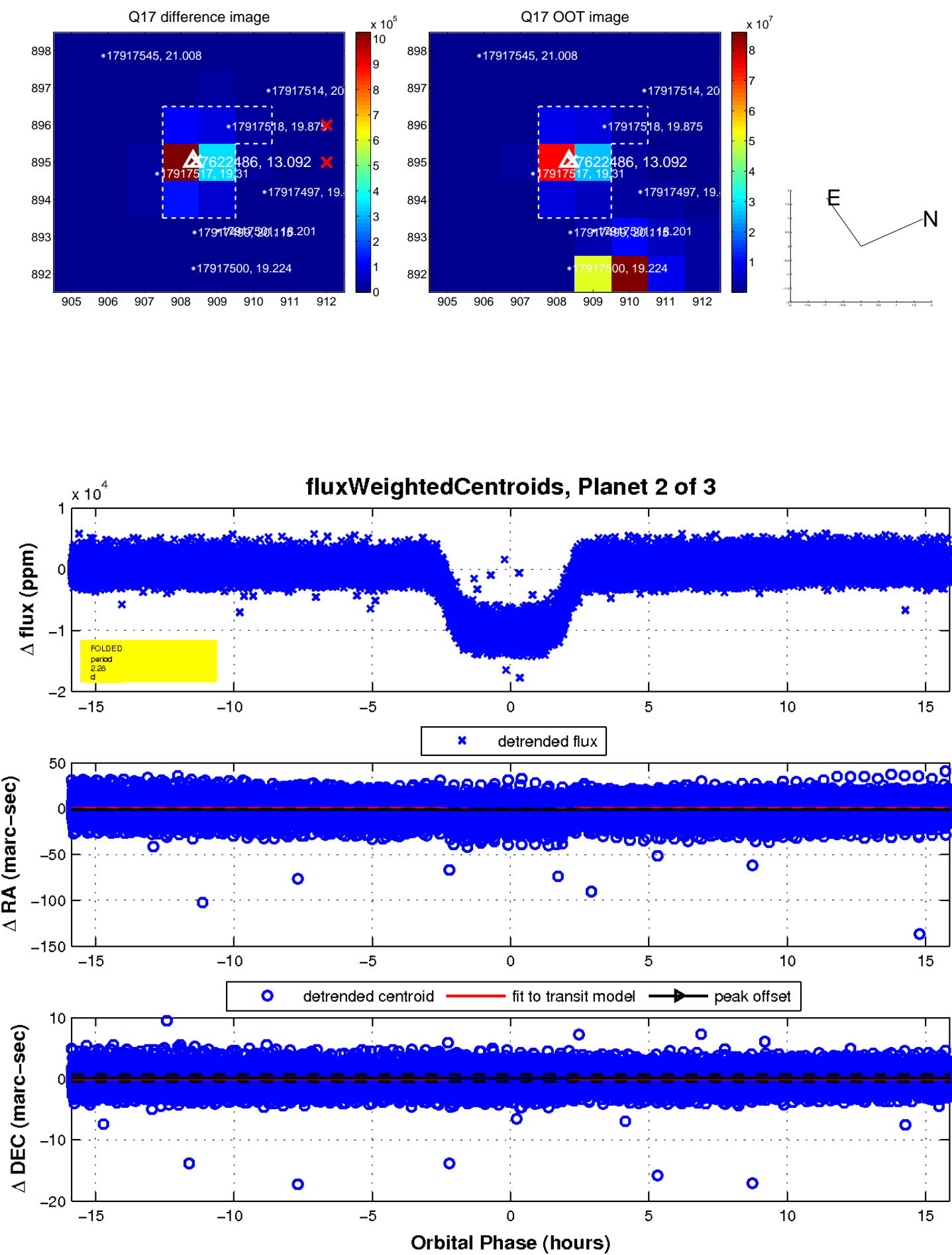
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

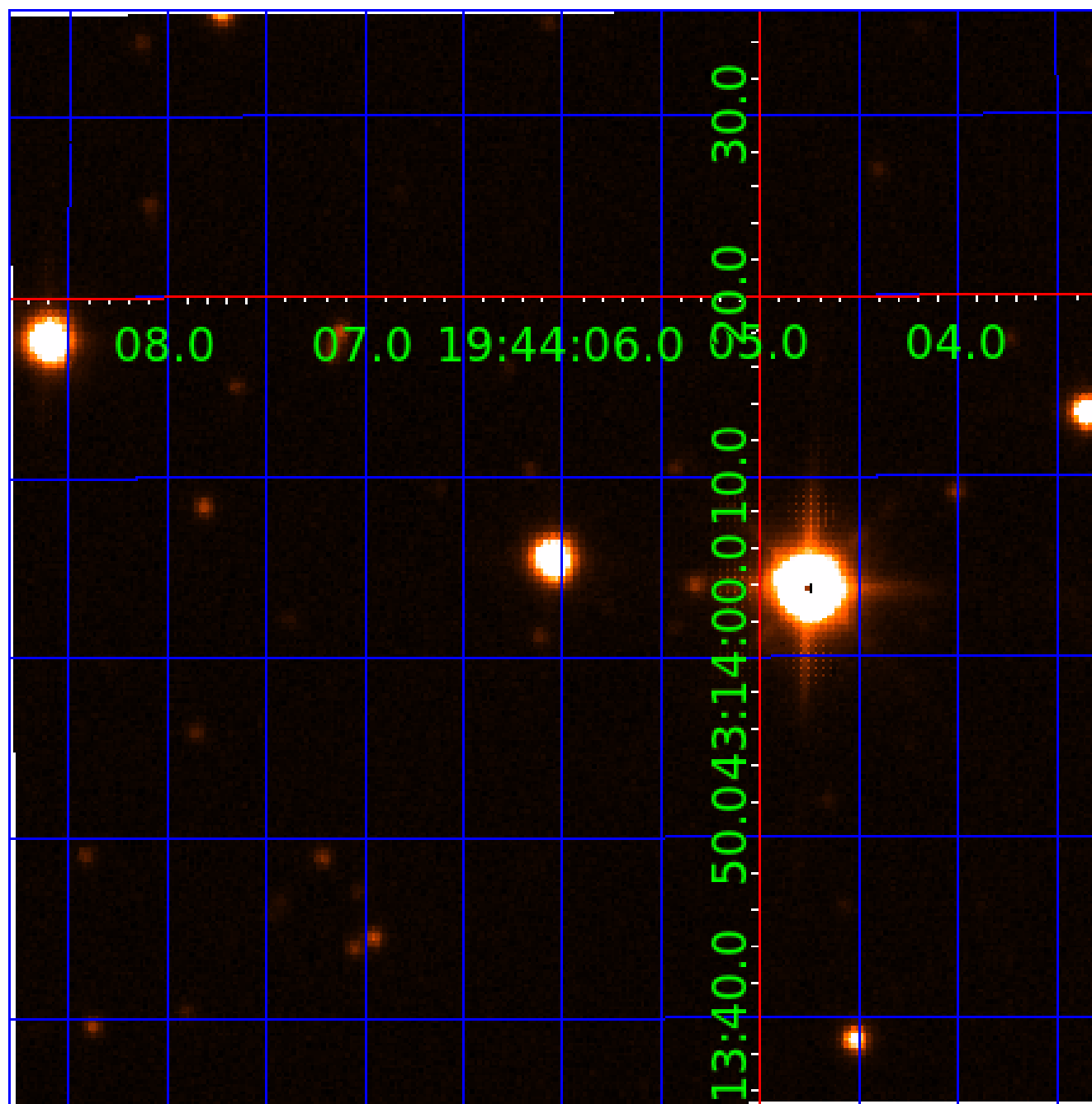


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007622486

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})
007622486-01	OBS	1447.01	40.246490	161.306714	159574.9	6.057	1974.4	1675.8	1.69	6594	98.24	82.40
007622486-02	OBS	1447.02	2.279997	133.640885	10856.7	5.290	738.1	746.2	1.69	6594	18.75	3787.39
007622486-03	OBS	No	2.279978	132.480494	0.2	16.966	18.8	0.0	1.69	6594	0.07	3787.43

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007622486-01	OBS	FP	0.00	0	1	0	0	DEEP_V_SHAPED—CENT_KIC_POS
007622486-02	OBS	FP	0.96	0	1	0	0	HAS_SEC_TCE—CENT_KIC_POS
007622486-03	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE—CENT_KIC_POS

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 007622486-03

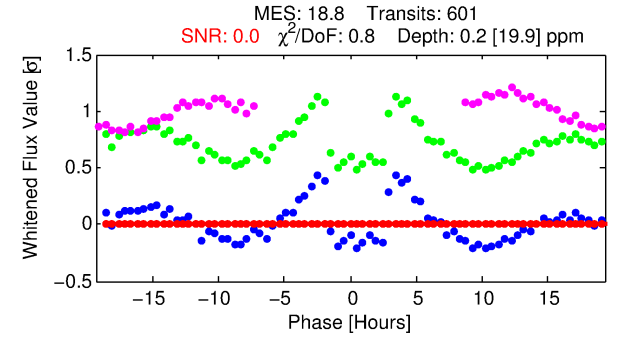
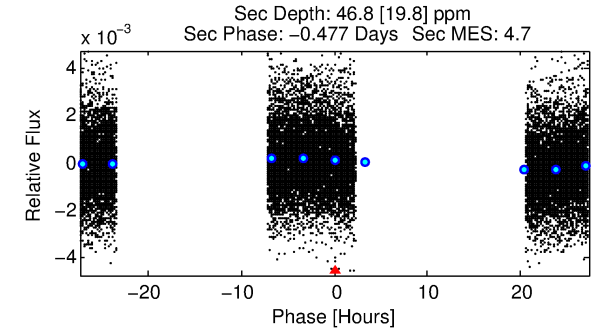
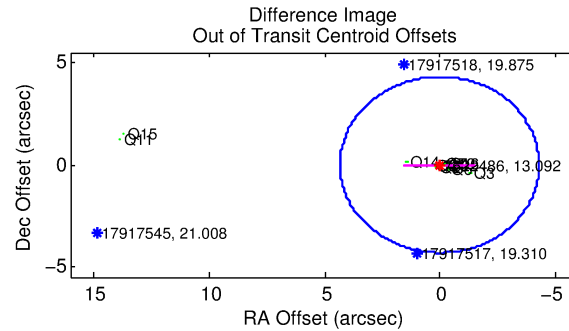
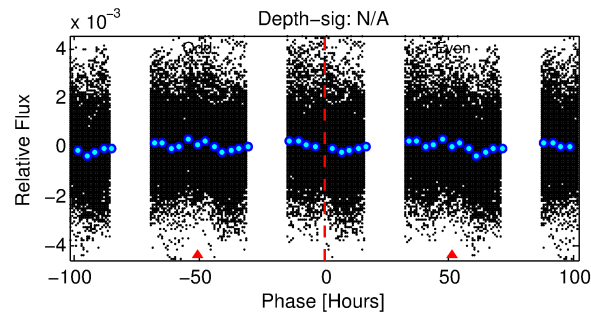
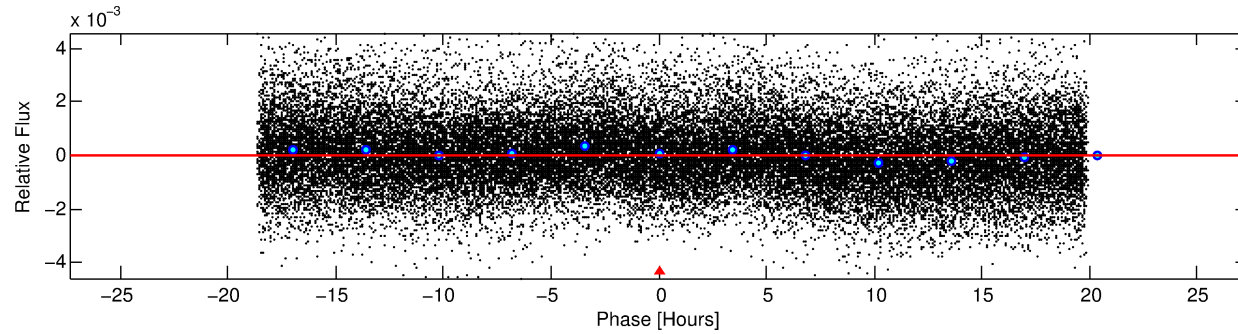
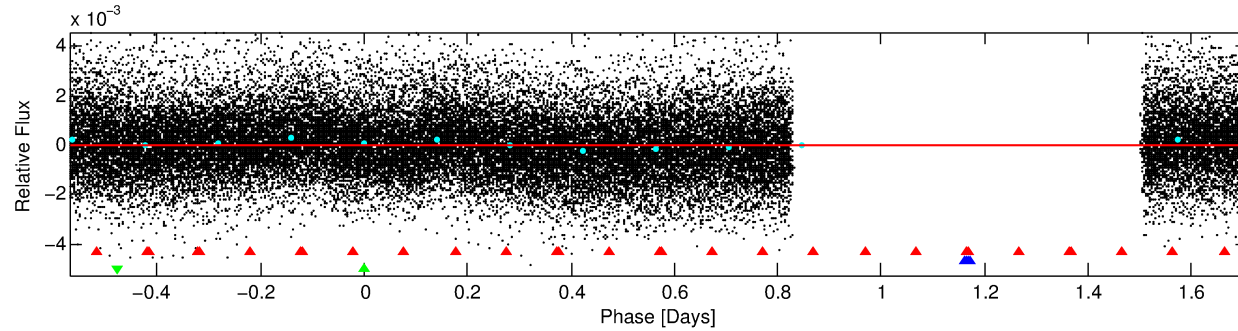
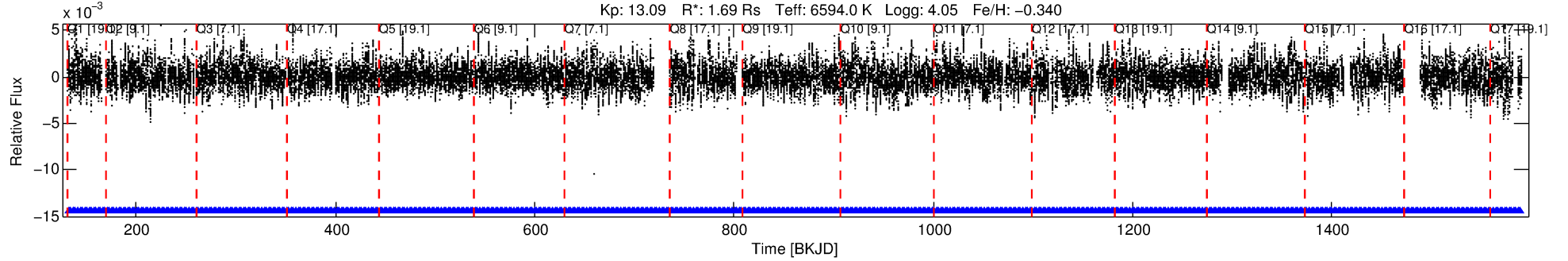
No Significant Match Found

DV One-Page Summary

KIC: 7622486 Candidate: 3 of 3 Period: 2.280 d

KOI: K01447 Corr: No Ephemeris Match

Kp: 13.09 R*: 1.69 Rs Teff: 6594.0 K Logg: 4.05 Fe/H: -0.340



DV Fit Results:

Period = 2.27998 [0.01887] d
Epoch = 132.4805 [3.7282] BKJD
Rp/R* = 0.0004 [0.0423]
a/R* = 1.21 [216.56]
b = 0.03 [18024.59]
Seff = 3787.43 [1966.49]
Teq = 2000 [260] K
Rp = 0.07 [7.80] Re
a = 0.0358 [0.0112] AU
Ag = 6870.61 [1546945.58] [0.00σ]
Teffp = 28158 [1584985] K [0.02σ]

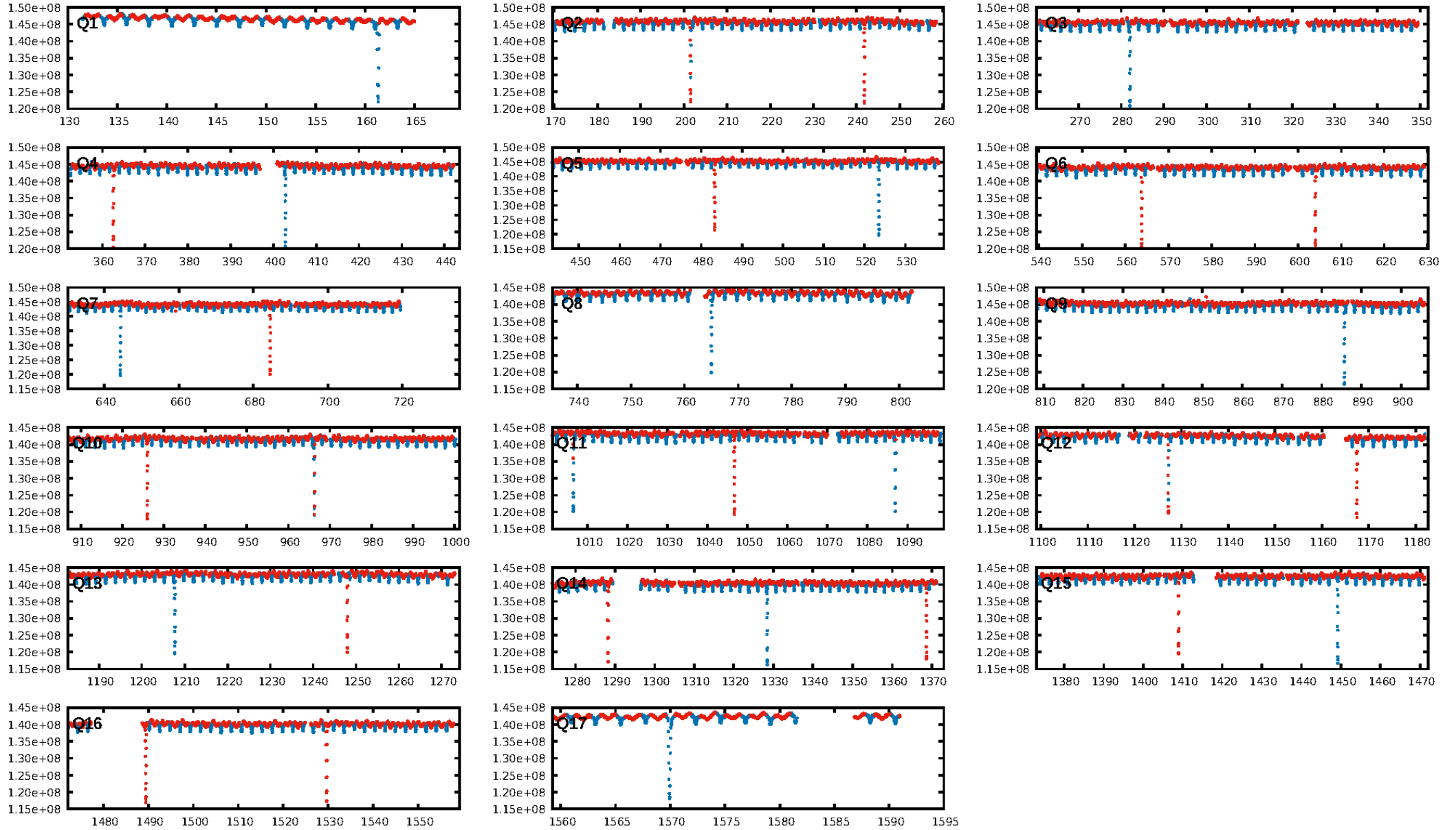
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [574/574]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.028 arcsec [0.02σ]
KicOffset-rm: 0.279 arcsec [2.86σ]
OotOffset-st: 4/4/4/0 [12]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.94 [15/16]
DiffImageOverlap-fno: 0.00 [0/17]

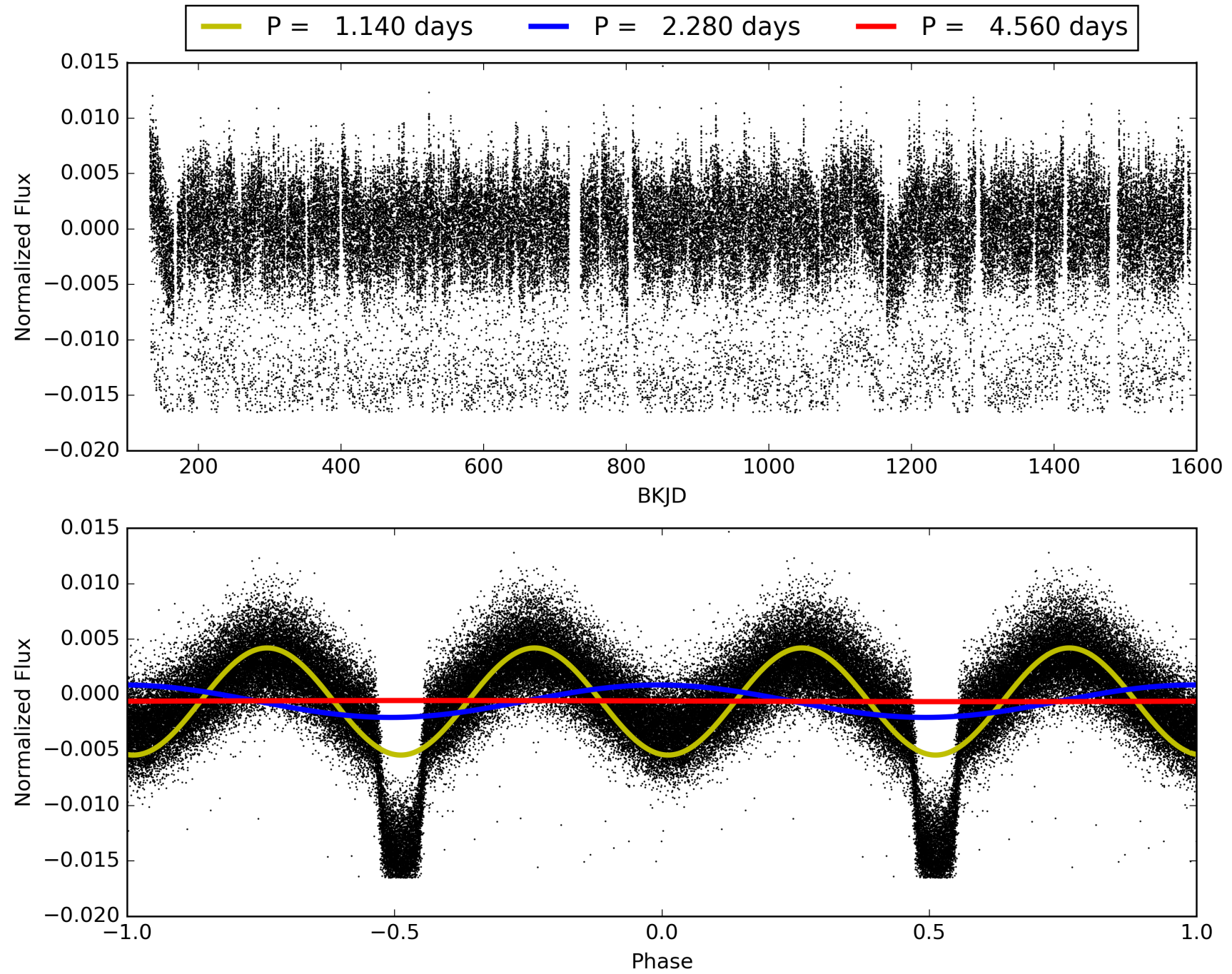
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:20:38 Z

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

TCE 007622486-03, PDC Light Curves

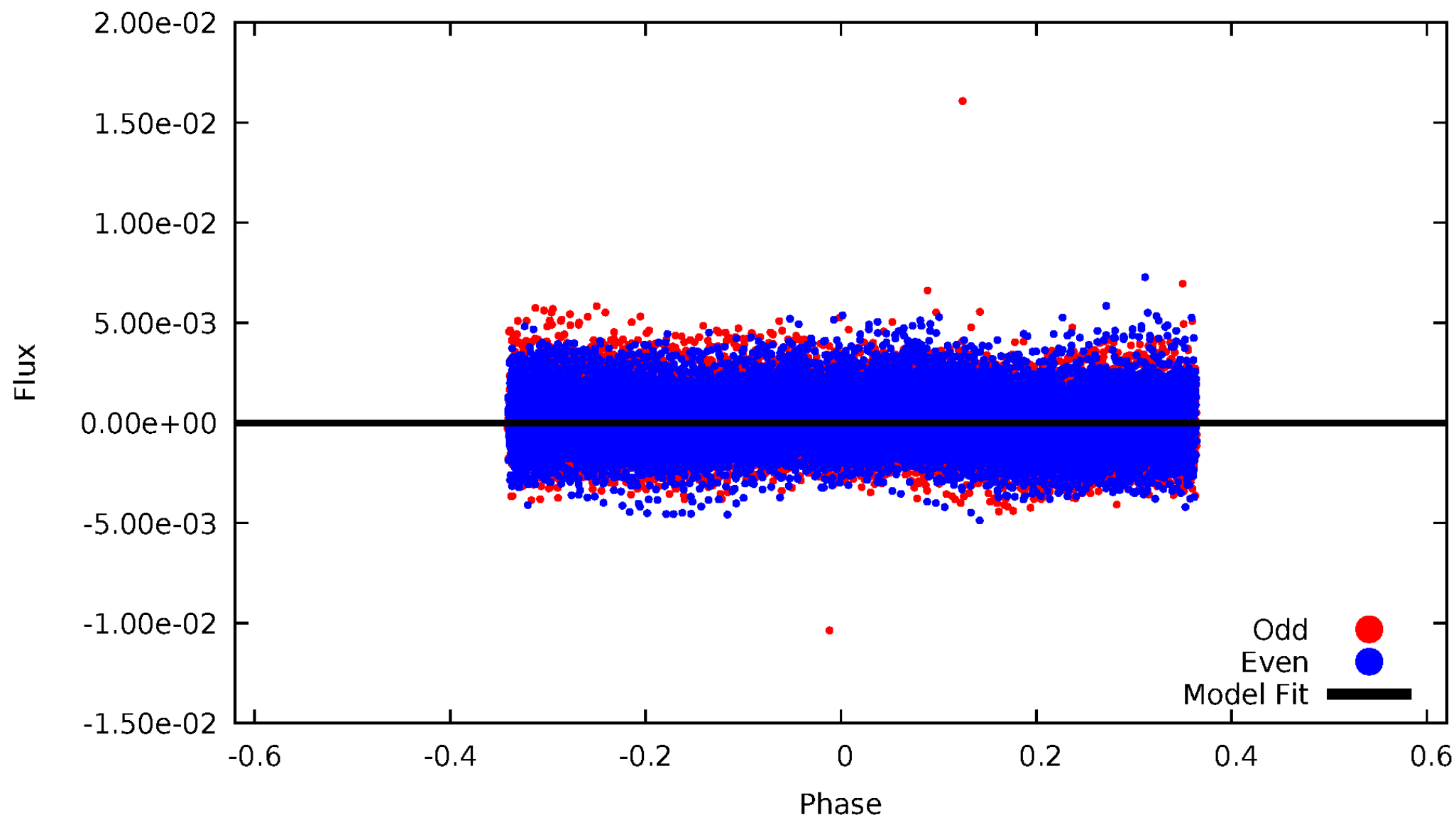


TCE 007622486-03



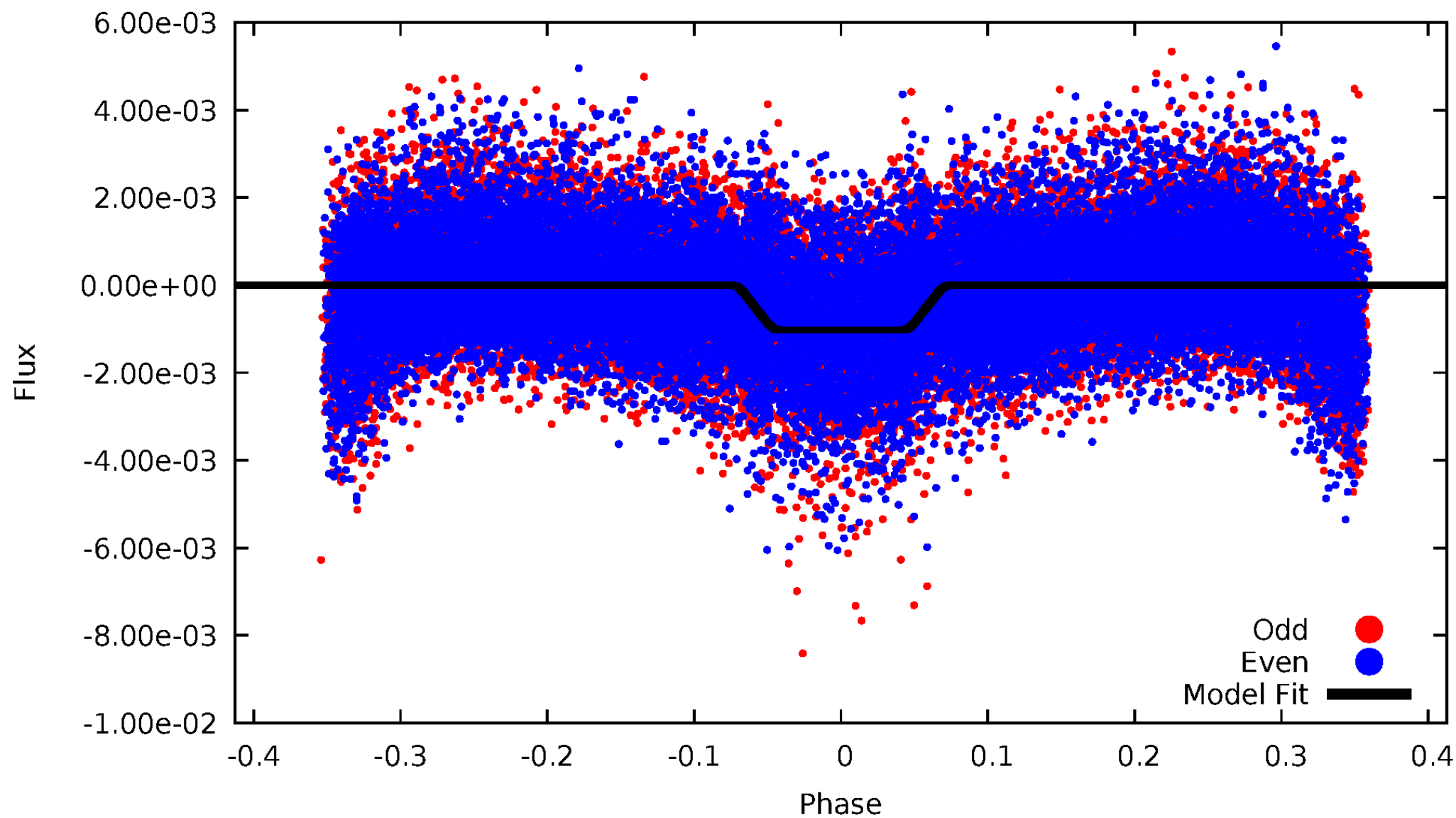
DV Odd/Even

TCE 007622486-03

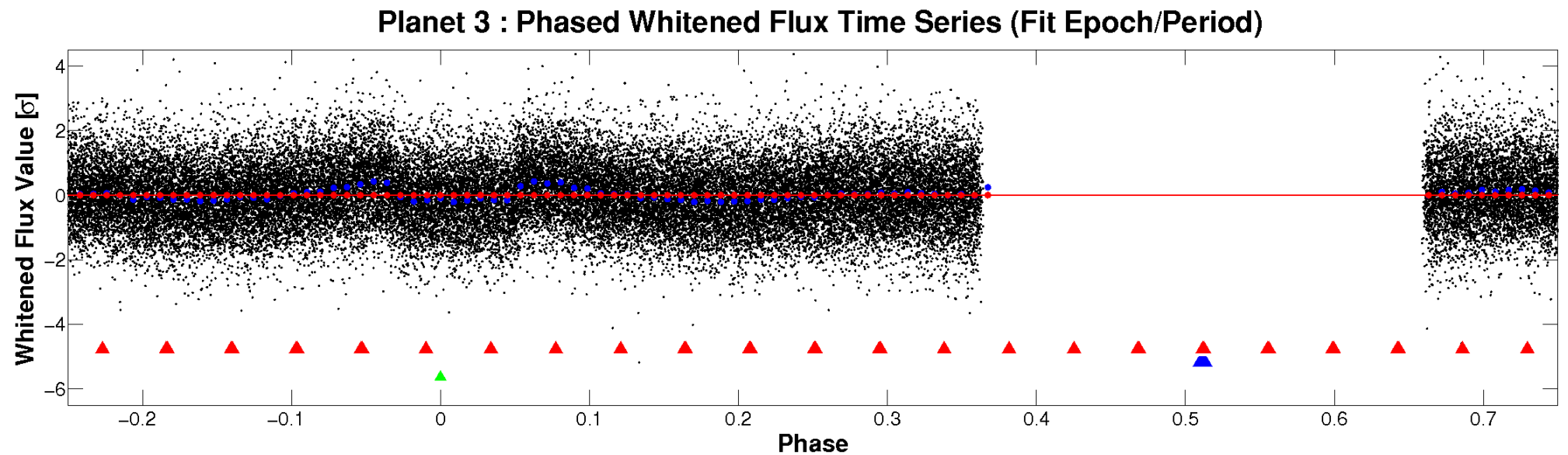
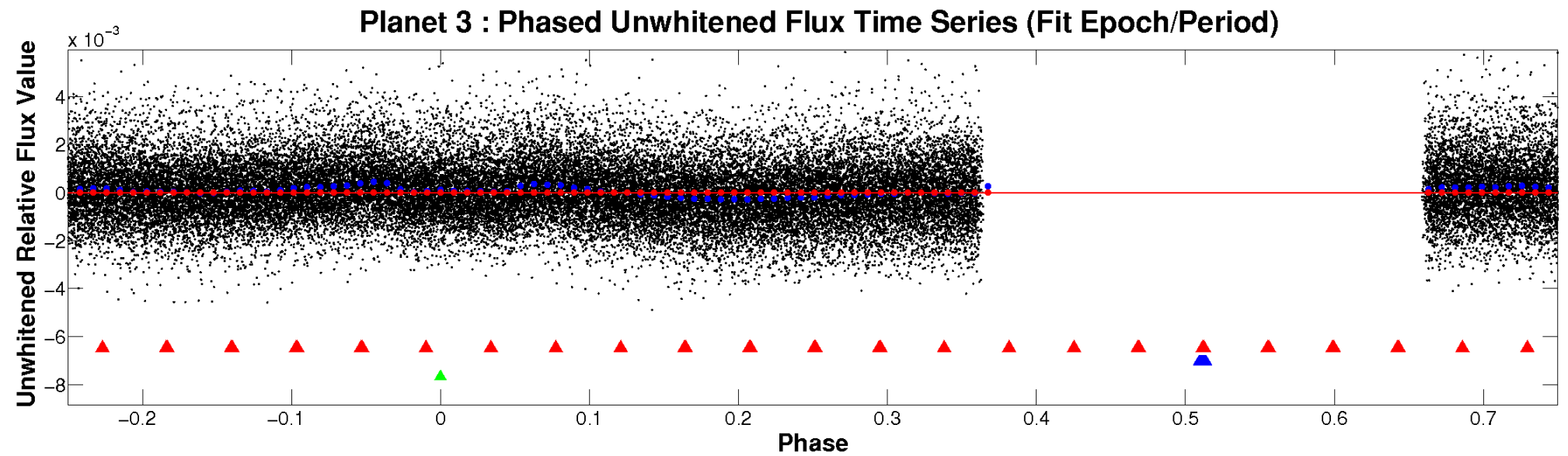


ALT Odd/Even

TCE 007622486-03

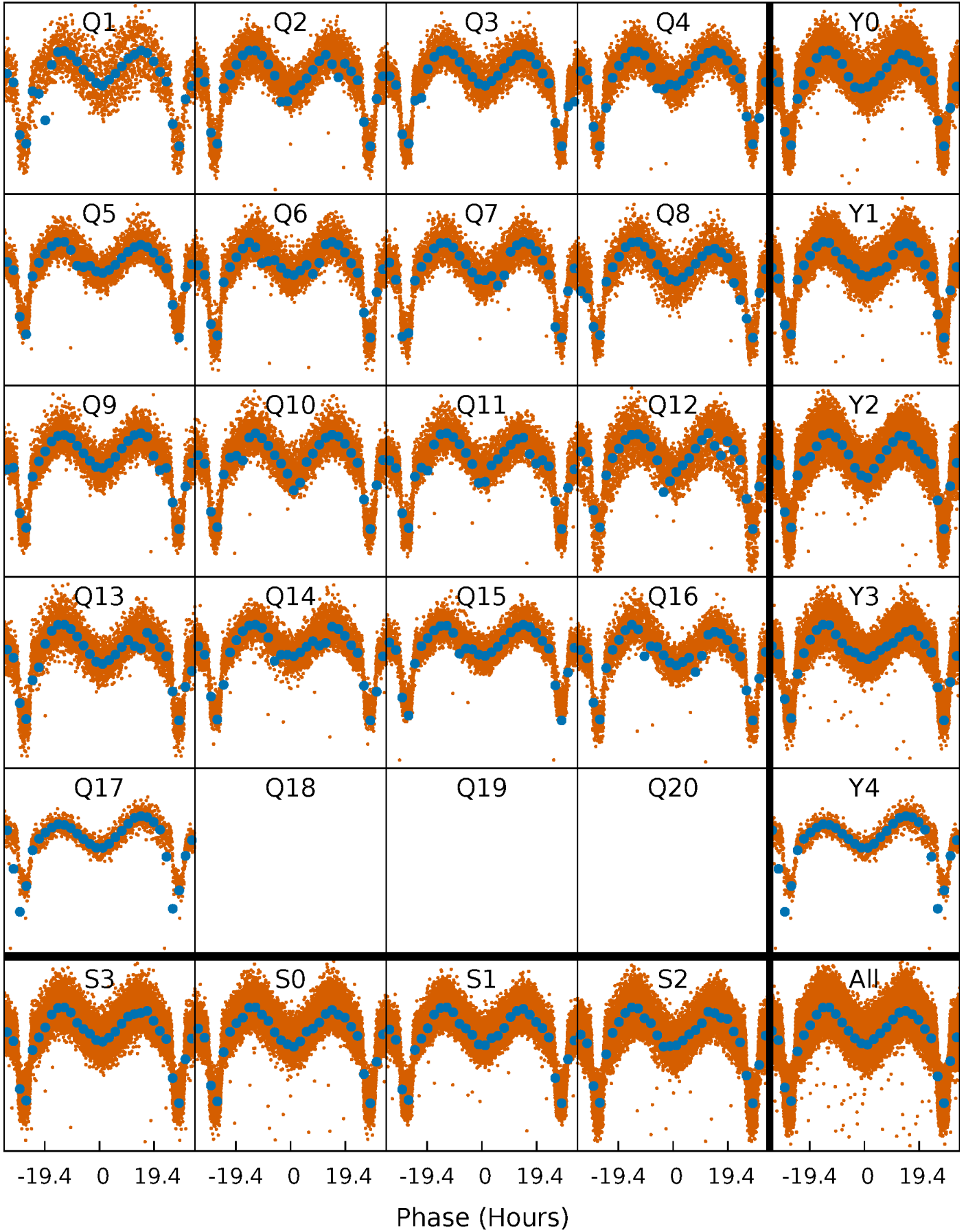


Non-Whitened Vs. Whitened Light Curve



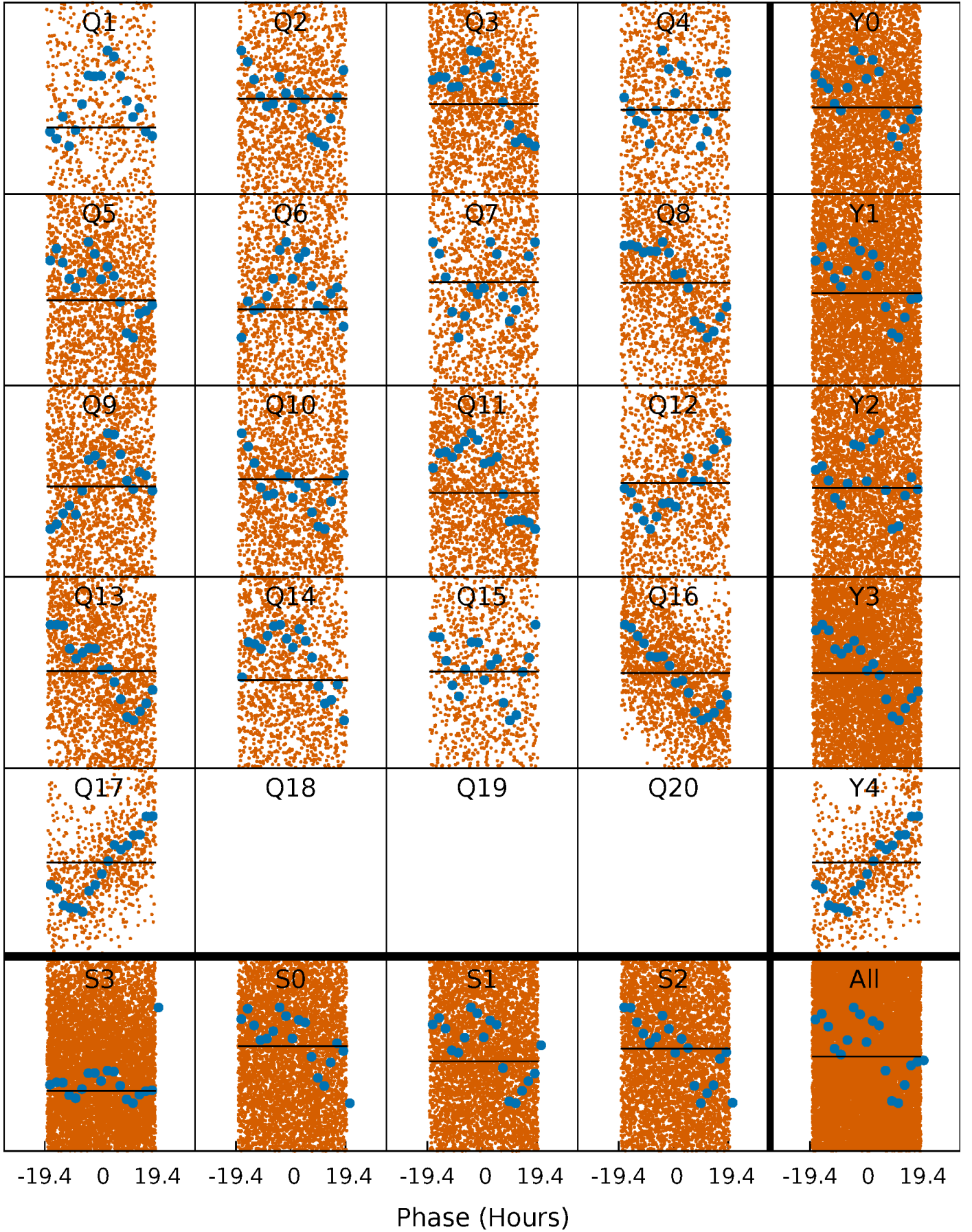
PDC Quarter-Phased Transit Curves

TCE 007622486-03 P= 2.279978 Days $T_0=132.480494$ (BKJD)



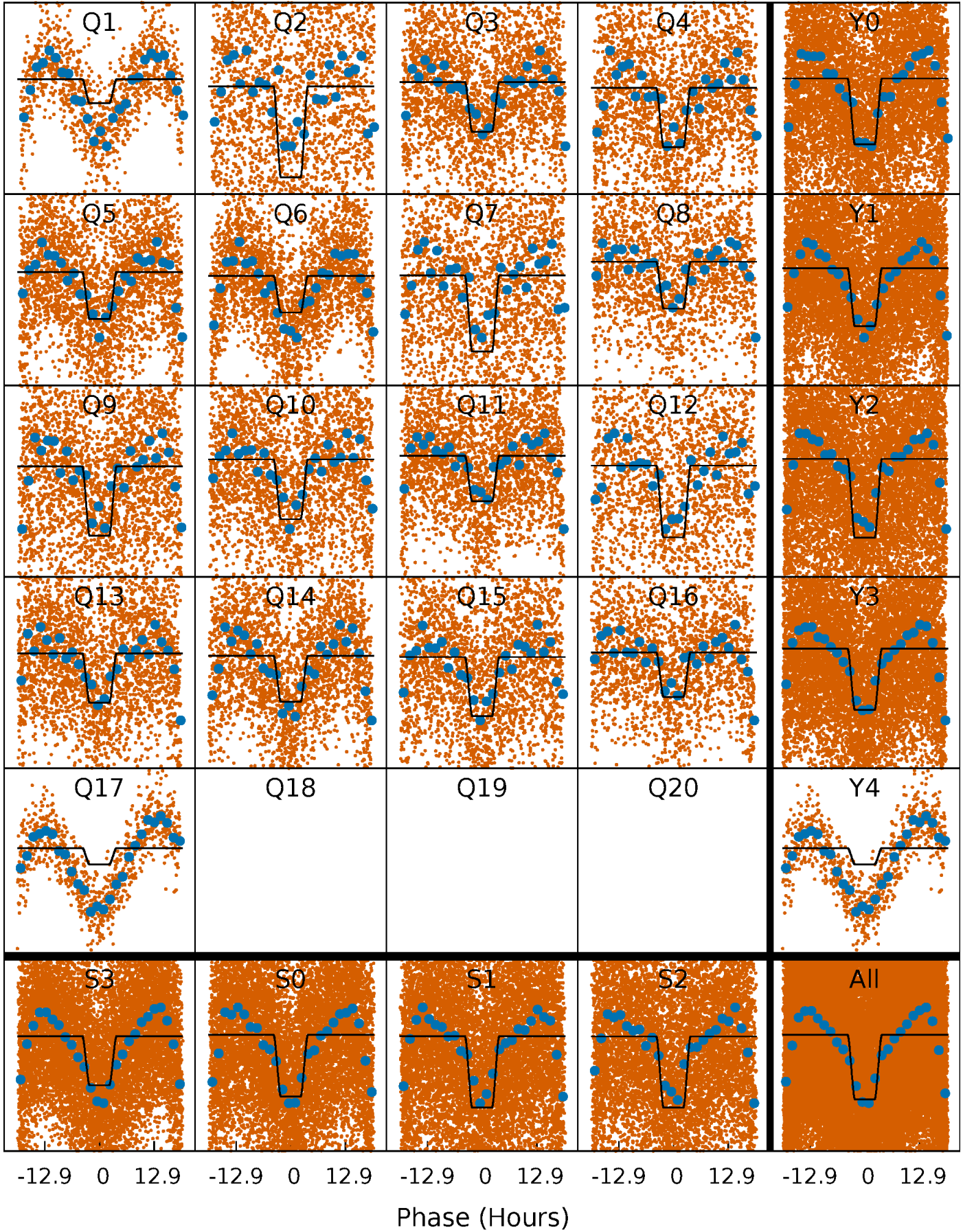
DV Quarter-Phased Transit Curves

TCE 007622486-03 $P = 2.279978$ Days $T_0 = 132.480494$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

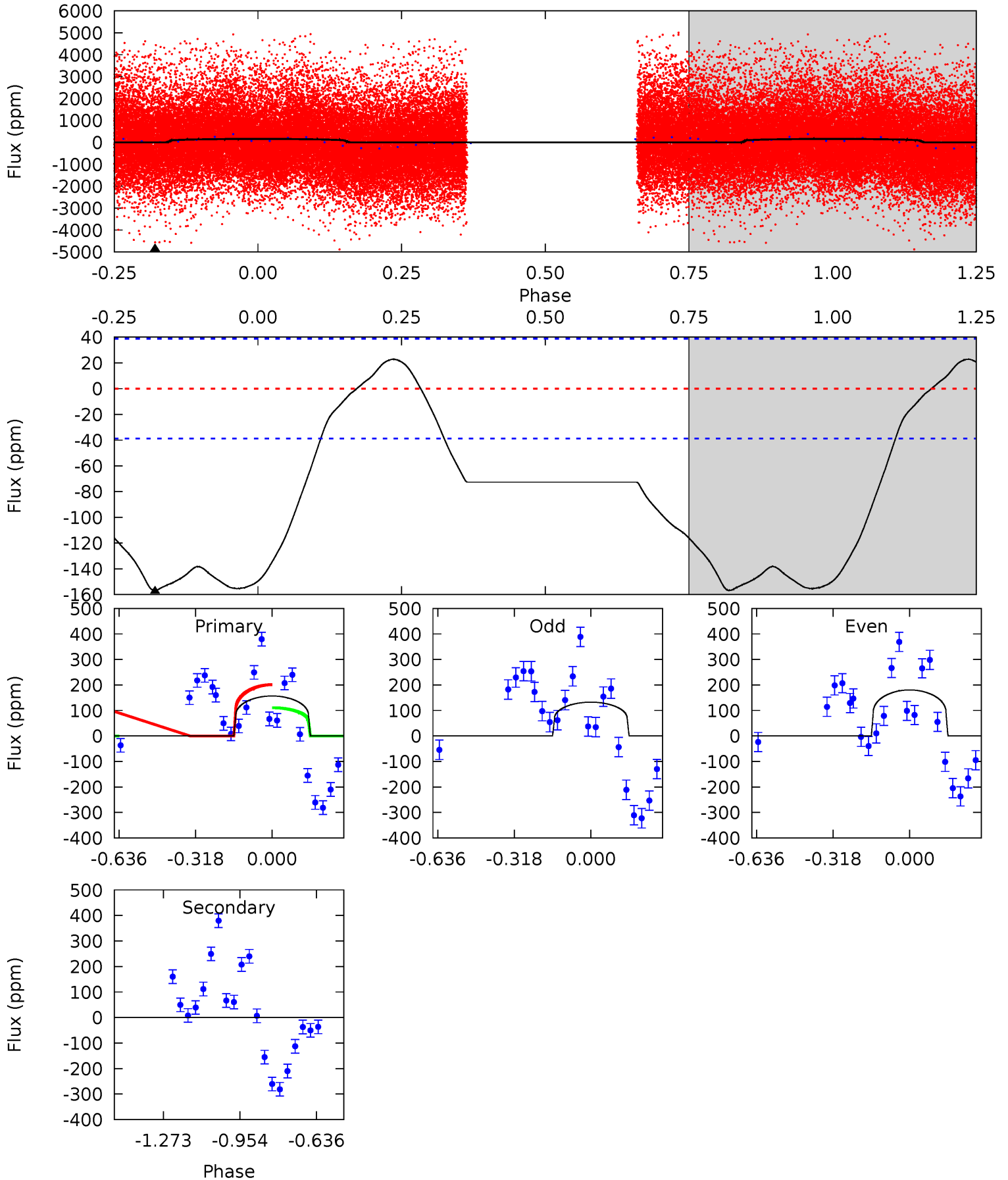
TCE 007622486-03 P= 2.280045 Days $T_0=132.478418$ (BKJD)



DV Model-Shift Uniqueness Test

007622486-03, P = 2.279978 Days, E = 130.200516 Days

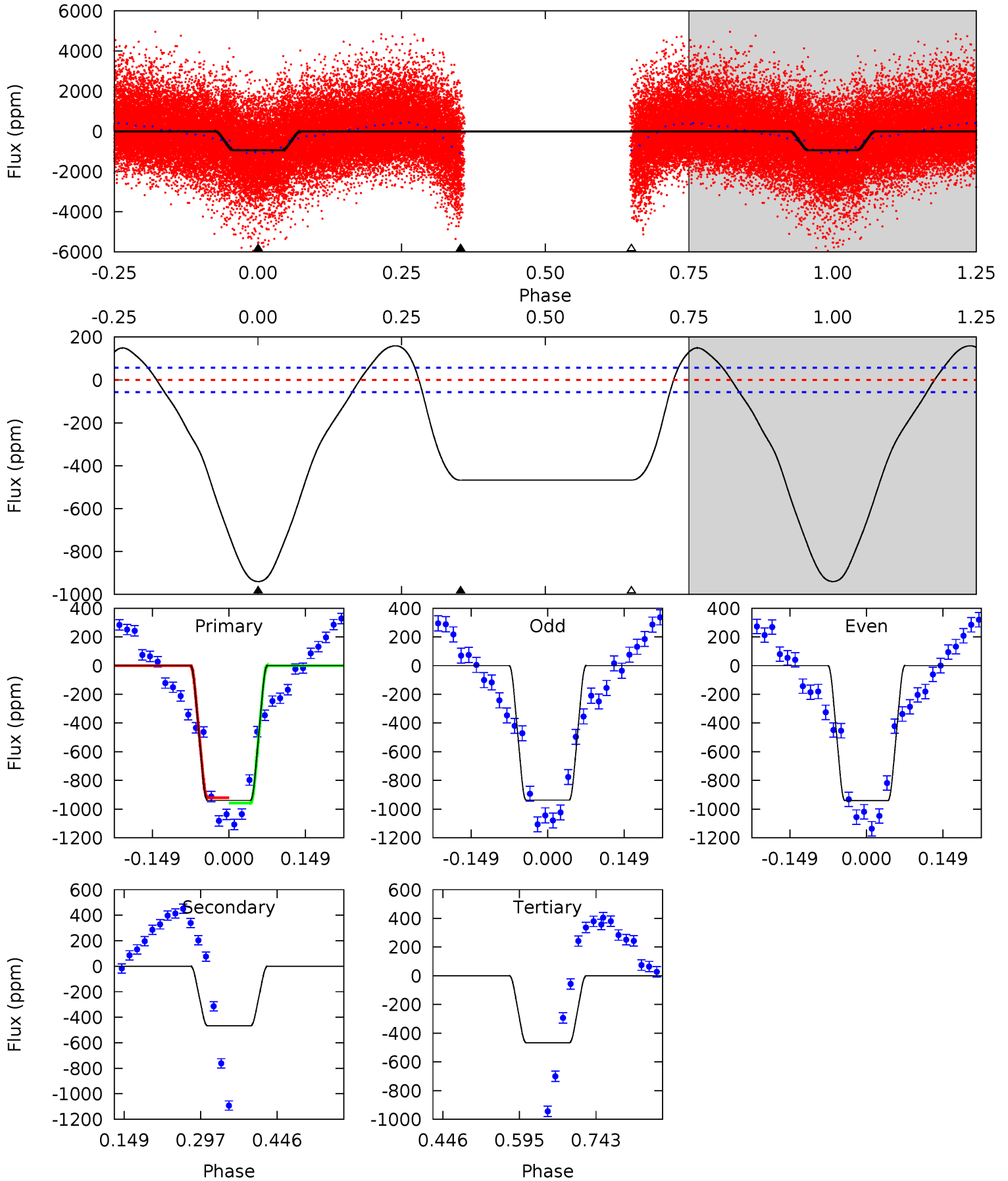
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.4	0	0	0	4.32	1.00	2.98	17.4	17.4	0	0	2.65	6.90	0.13	5.39



Alt Model-Shift Uniqueness Test

007622486-03, P = 2.280045 Days, E = 130.198373 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
74.5	37.1	37.0	0	4.48	1.44	14.5	37.5	74.5	0.05	37.1	0.12	1.12	0.14	1.58



Stellar Parameters For KIC 007622486

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6594^{+187}_{-234}	$4.051^{+0.293}_{-0.158}$	$-0.340^{+0.250}_{-0.300}$	$1.691^{+0.450}_{-0.550}$	$1.174^{+0.196}_{-0.178}$	$0.342^{+0.656}_{-0.149}$
	+3%/-4%	+7%/-4%	+74%/-88%	+27%/-33%	+17%/-15%	+192%/-44%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 007622486-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 9	$5.03^{+5.70}_{-3.66}$	2745^{+218}_{-260}	-2935^{+5933}_{-421}	$0.008^{+0.656}_{-0.439}$
Alt.	-467 ± 13	$7.94^{+7.18}_{-5.19}$	2765^{+212}_{-263}	4600^{+3125}_{-980}	$5.241^{+36.430}_{-3.769}$

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 $A_{obs} \gg 1.0$

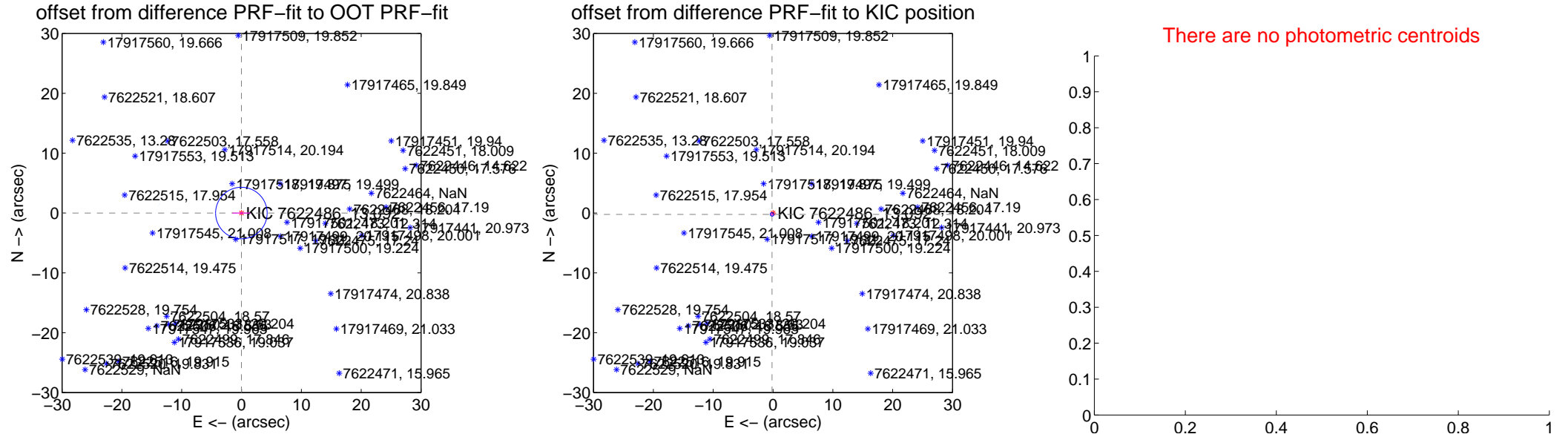
DV Centroid Data

Supplemental centroid analysis for 007622486-03. Kepler magnitude: 13.09. Transit SNR 0.01

There are 15 quarters with good PRF difference image offsets

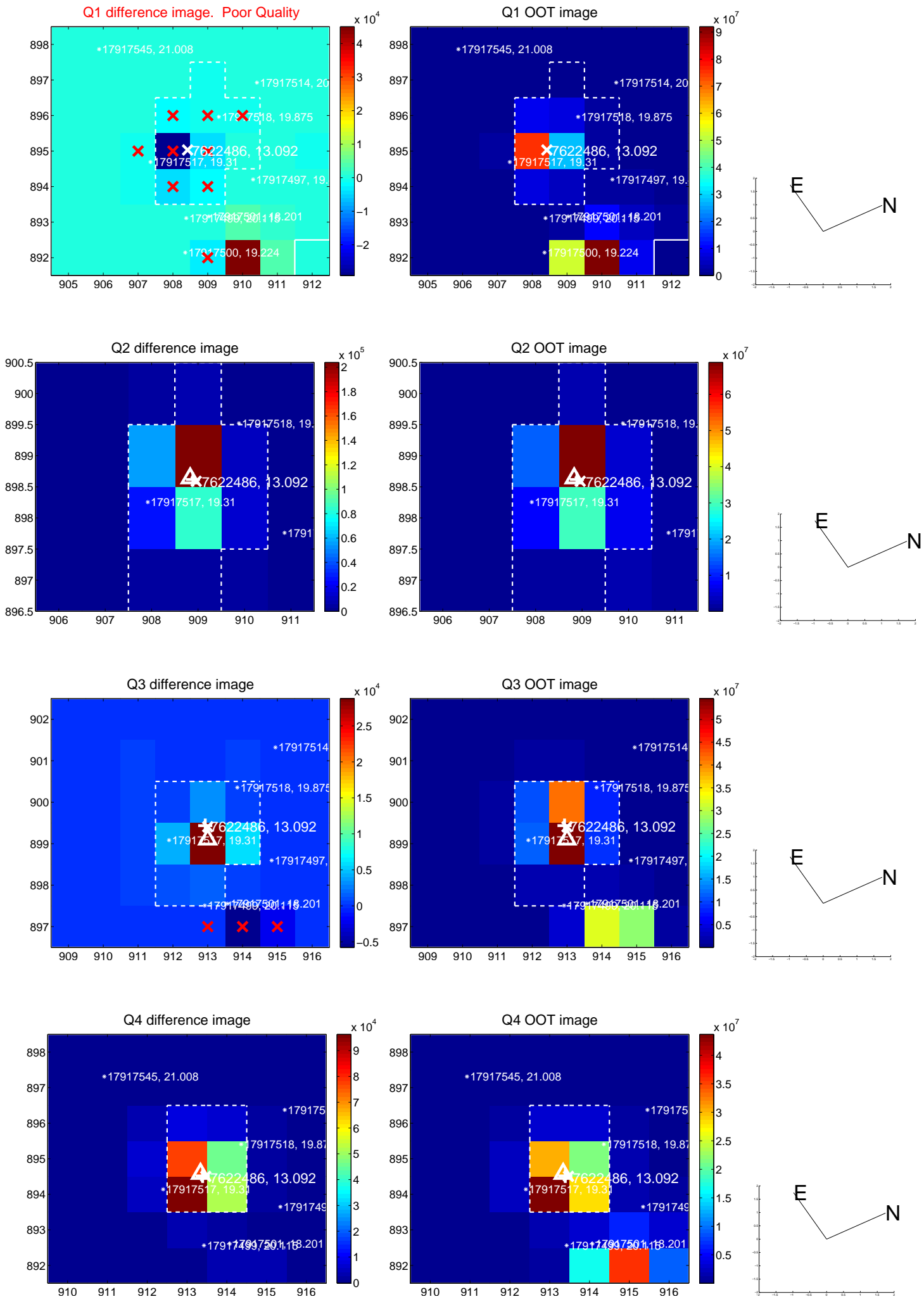
The direct PRF centroid is offset from the target star catalog position by about 0.28 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.028 ± 1.436	0.02	0.027 ± 1.503	-0.006 ± 0.174
PRF-fit source offset from KIC position	0.279 ± 0.098	2.86	0.158 ± 0.156	-0.230 ± 0.079
photometric centroid source offset	—	—	—	—

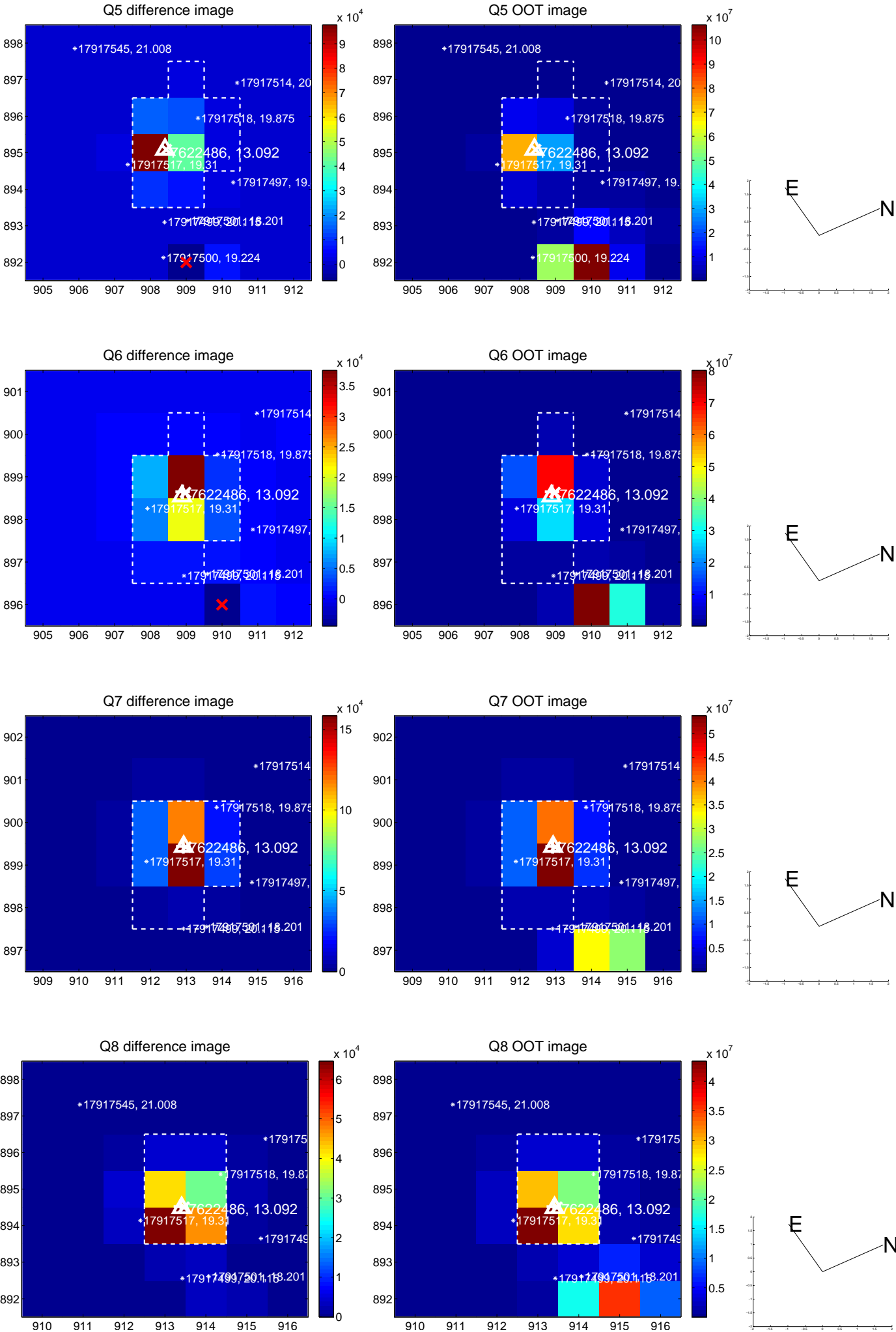


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

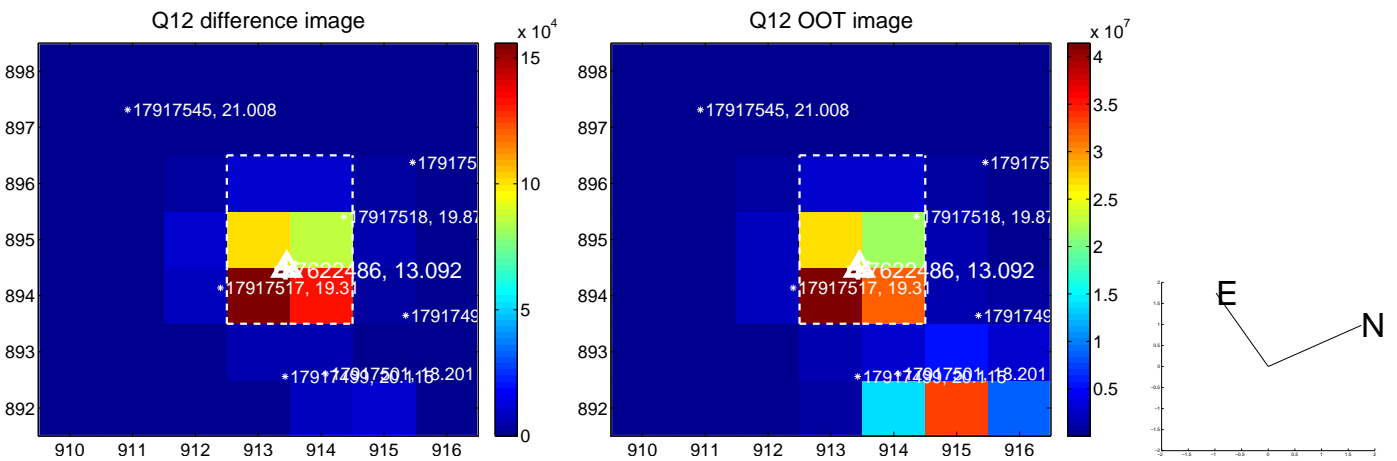
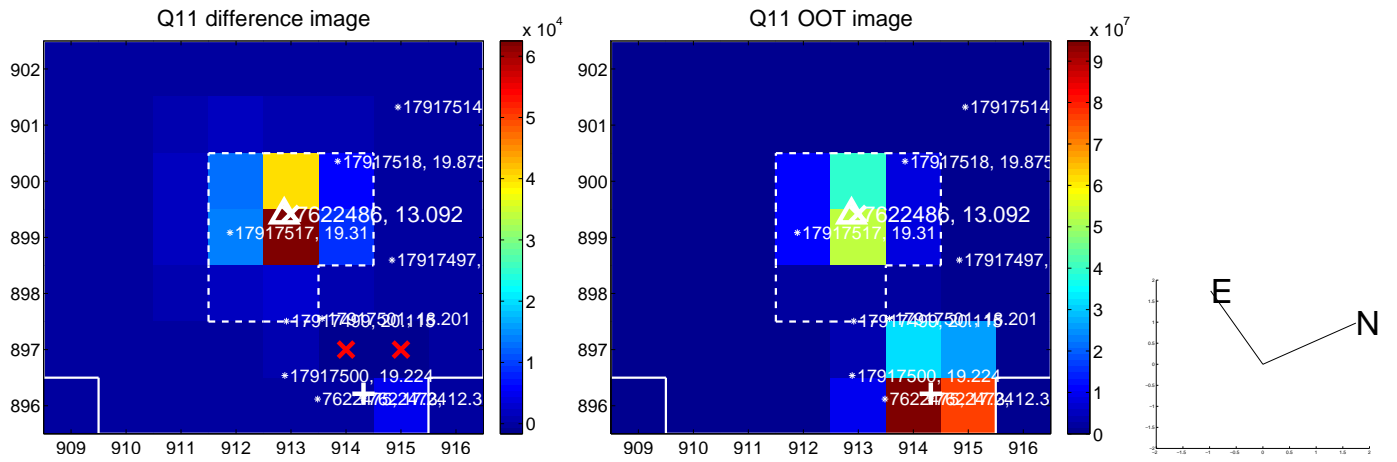
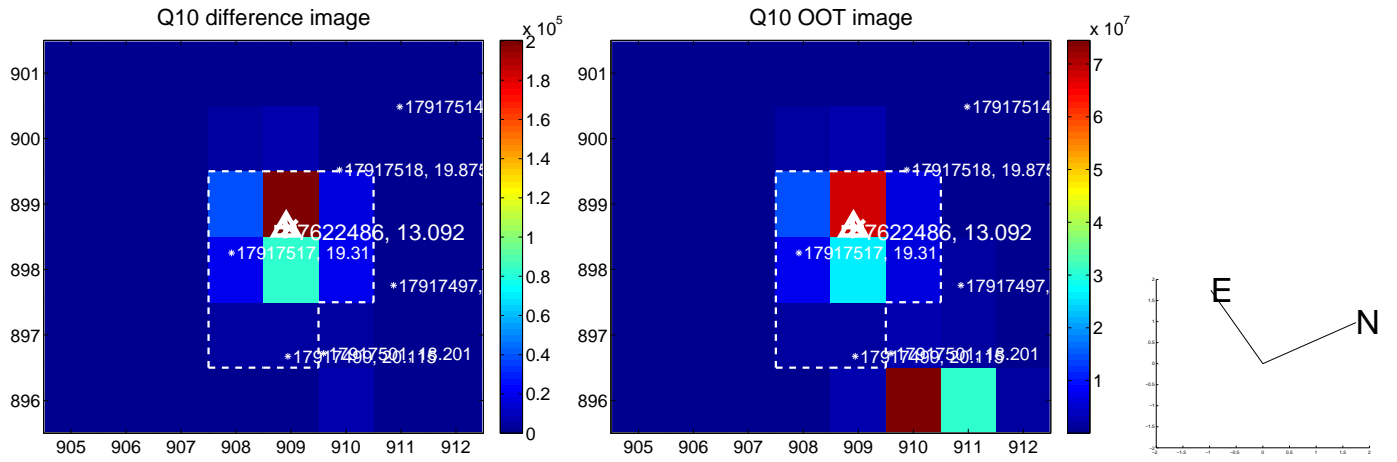
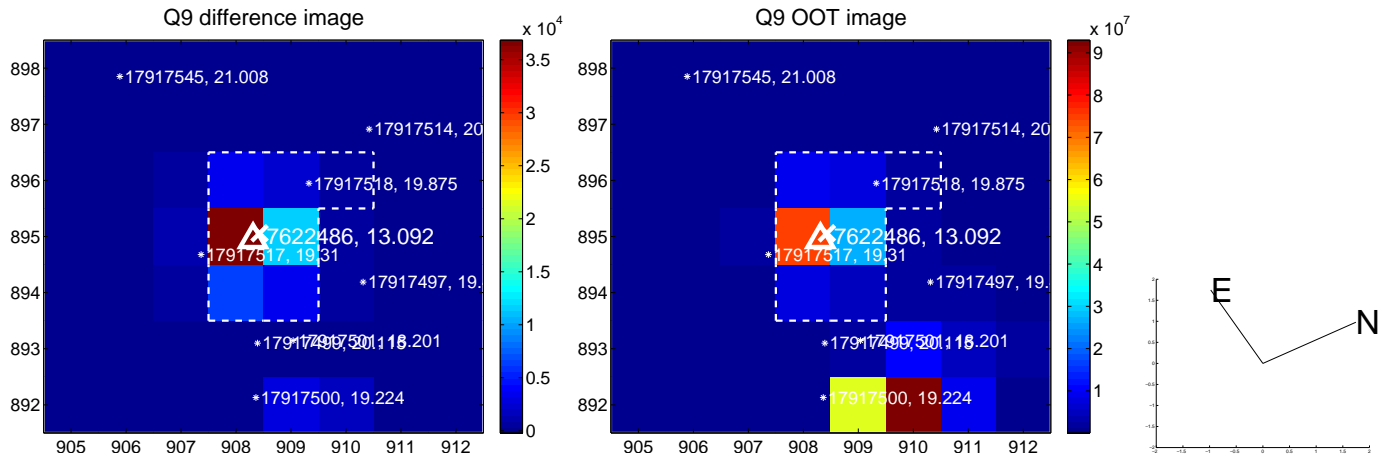
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



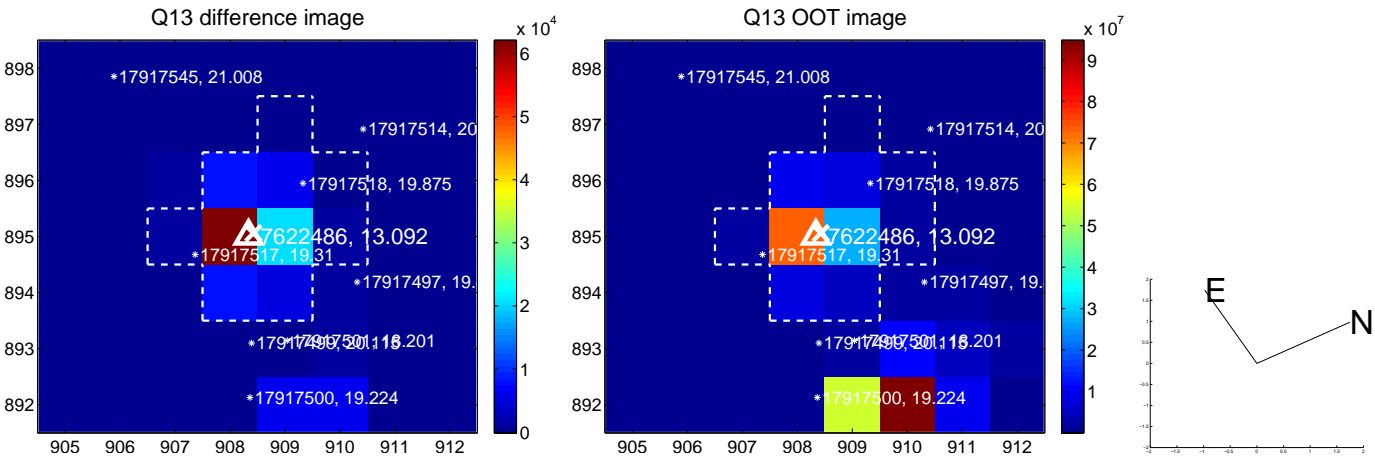
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



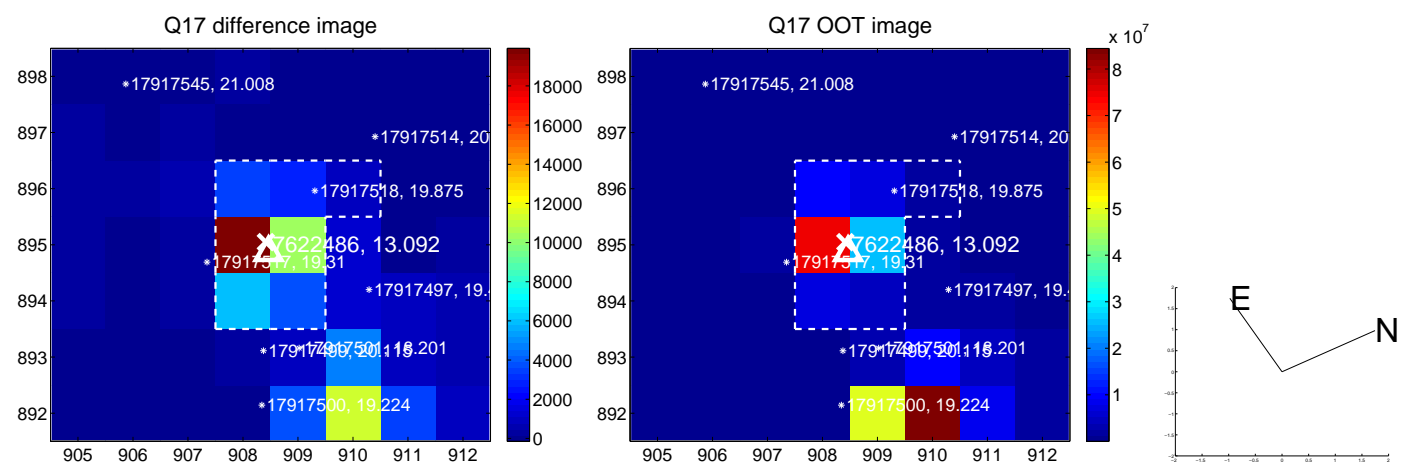
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



folded centroid time series figure for this object.

UKIRT Image

Declination

