

KIC 006359320

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})
006359320-01	OBS	1127.01	5.326613	133.414459	597.9	3.683	27.6	29.6	0.92	5831	2.67	243.65
006359320-02	OBS	1127.02	8.128041	139.226494	272.6	4.104	10.9	11.3	0.92	5831	1.77	138.69
006359320-03	OBS	1127.03	2.836701	132.548196	150.2	3.035	9.0	9.3	0.92	5831	1.30	564.45

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006359320-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006359320-02	OBS	PC	1.00	0	0	0	0	CENT_FEW_MEAS
006359320-03	OBS	PC	1.00	0	0	0	0	CENT_FEW_DIFFS

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

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

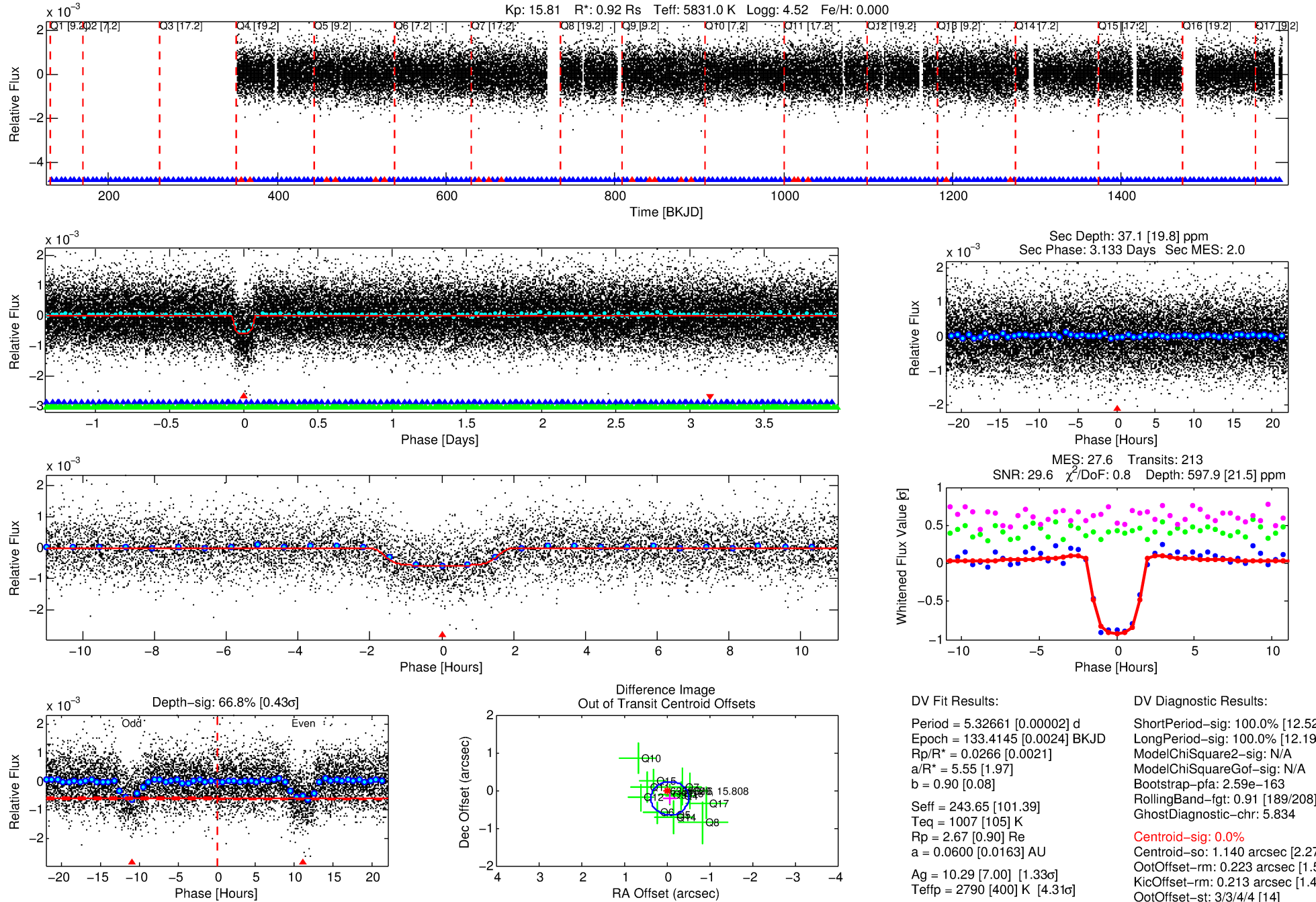
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006359320-01

No Significant Match Found

DV One-Page Summary

KIC: 6359320 Candidate: 1 of 3 Period: 5.327 d
KOI: K01127.01 Name: Kepler-269b Corr: 0.954



DV Fit Results:

Period = 5.32661 [0.00002] d
Epoch = 133.4145 [0.0024] BKJD
Rp/R* = 0.0266 [0.0021]
a/R* = 5.55 [1.97]
b = 0.90 [0.08]
Seff = 243.65 [101.39]
Teq = 1007 [105] K
Rp = 2.67 [0.90] Re
a = 0.0600 [0.0163] AU
Ag = 10.29 [7.00] [1.33 σ]
Teffp = 2790 [400] K [4.31 σ]

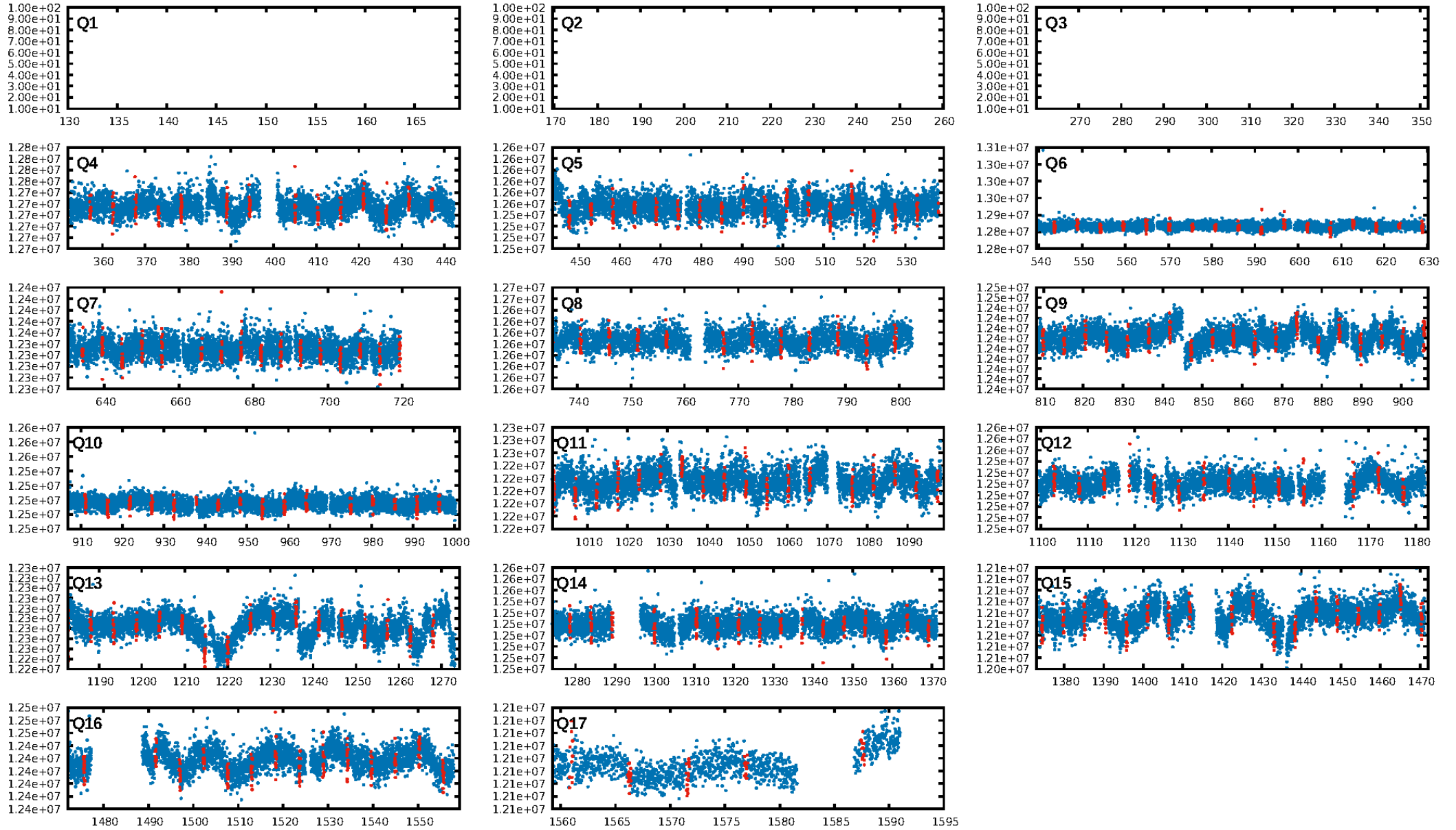
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [12.52 σ]
LongPeriod-sig: 100.0% [12.19 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.59e-163
RollingBand-fgt: 0.91 [189/208]
GhostDiagnostic-chr: 5.834
Centroid-sig: 0.0%
Centroid-so: 1.140 arcsec [2.27 σ]
OotOffset-rm: 0.223 arcsec [1.51 σ]
KicOffset-rm: 0.213 arcsec [1.43 σ]
OotOffset-st: 3/3/4/4 [14]
KicOffset-st: 3/3/4/4 [14]
DiffImageQuality-fgm: 1.00 [14/14]
DiffImageOverlap-fno: 1.00 [14/14]

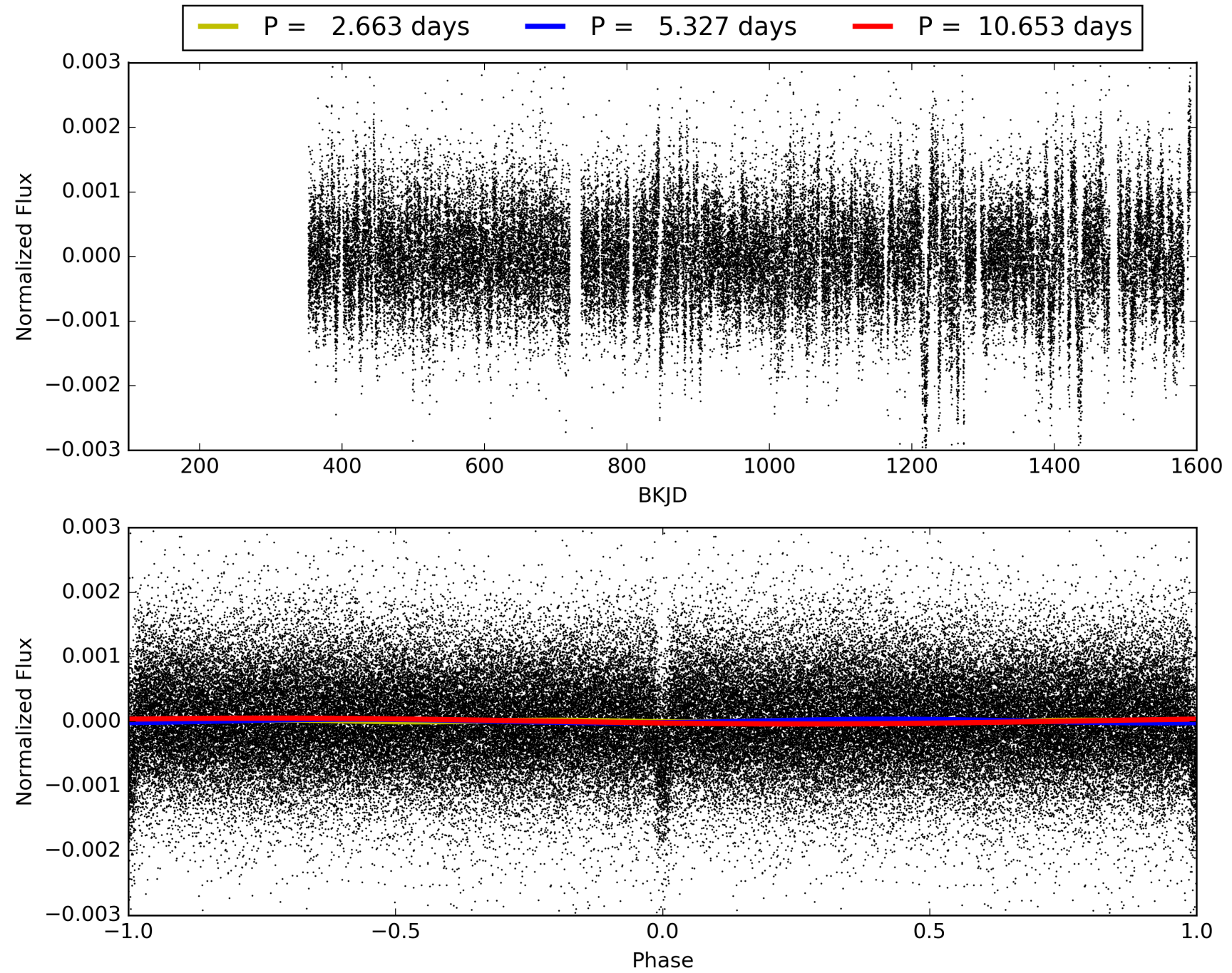
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 04:13:23 Z

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

TCE 006359320-01, PDC Light Curves

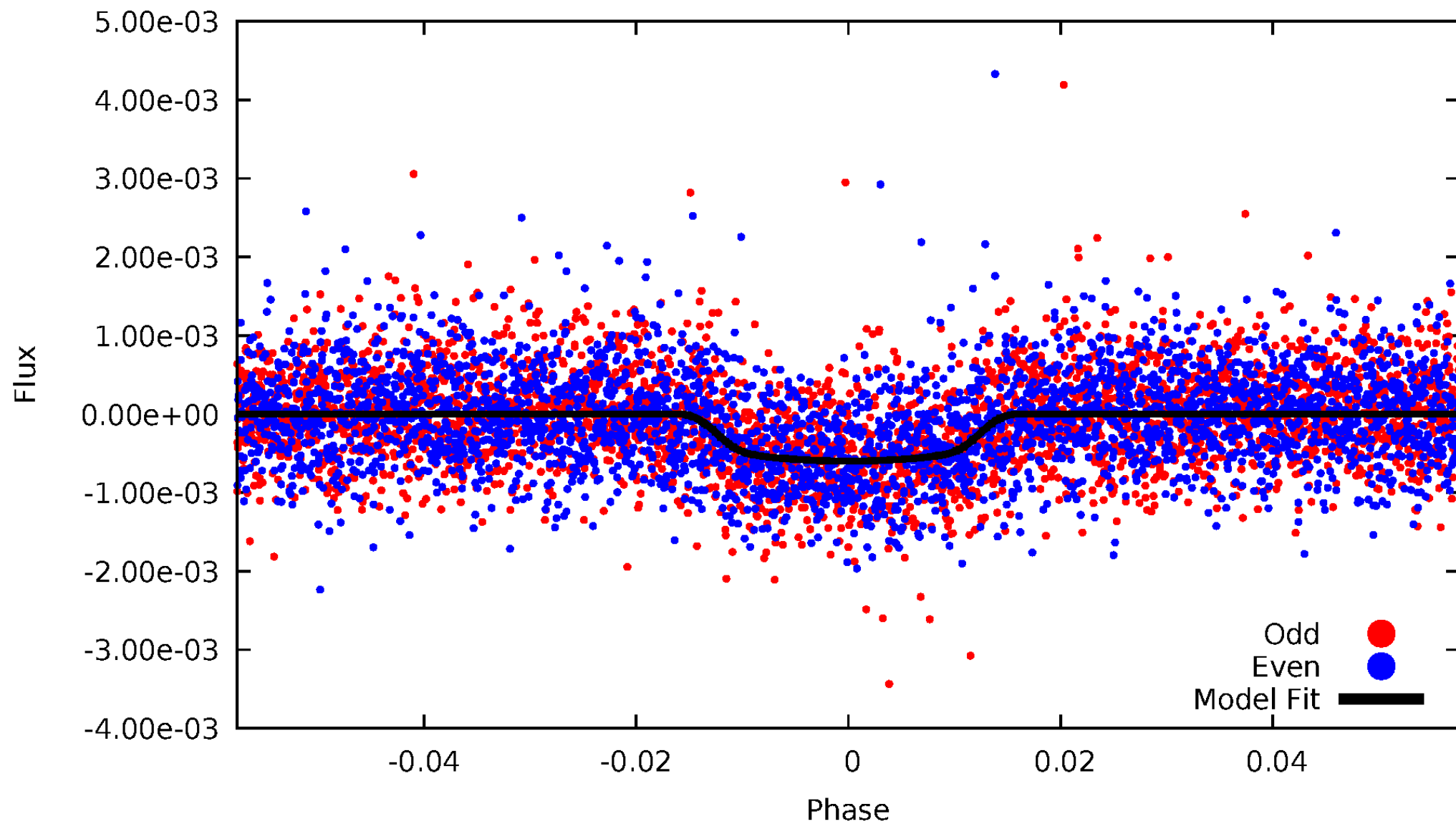


TCE 006359320-01



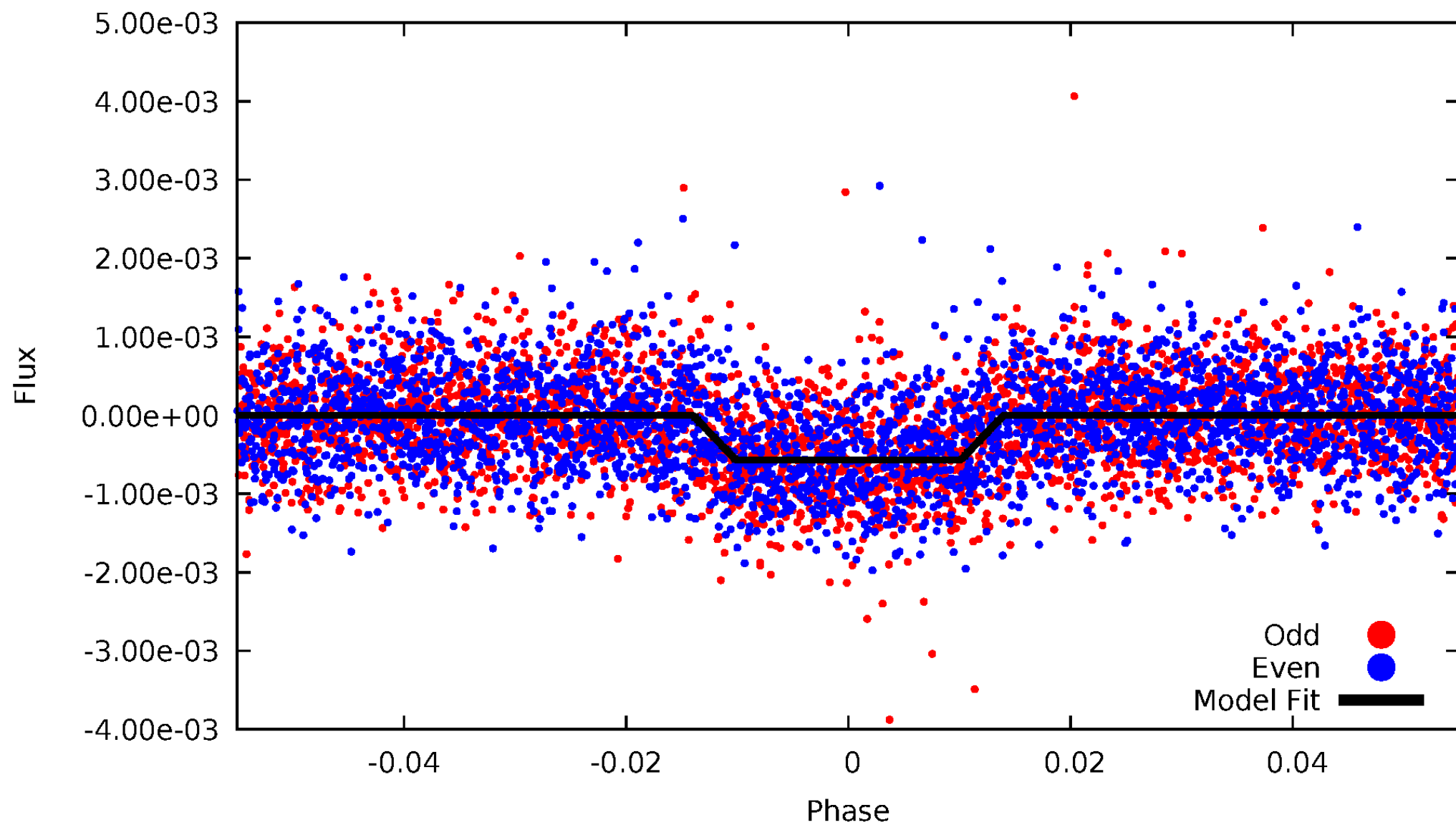
DV Odd/Even

TCE 006359320-01

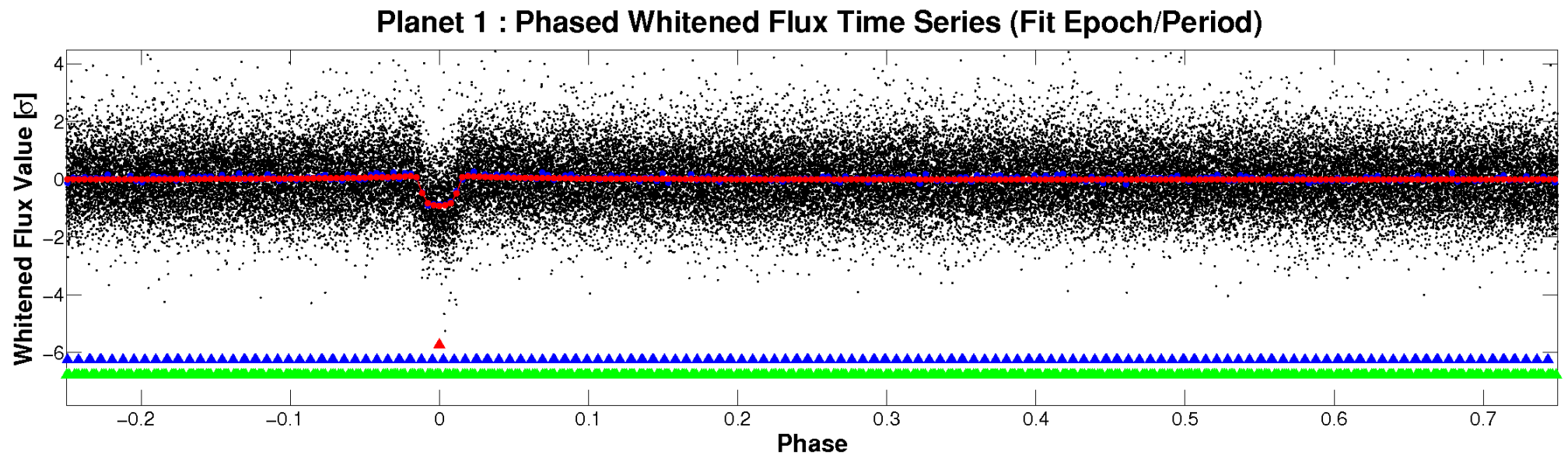
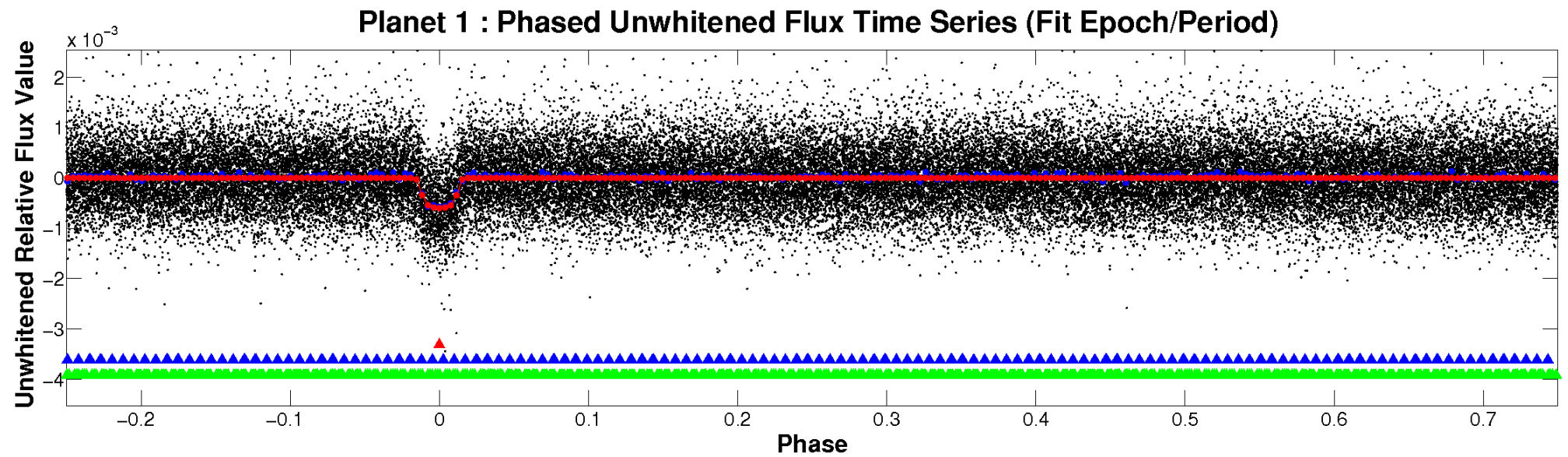


ALT Odd/Even

TCE 006359320-01

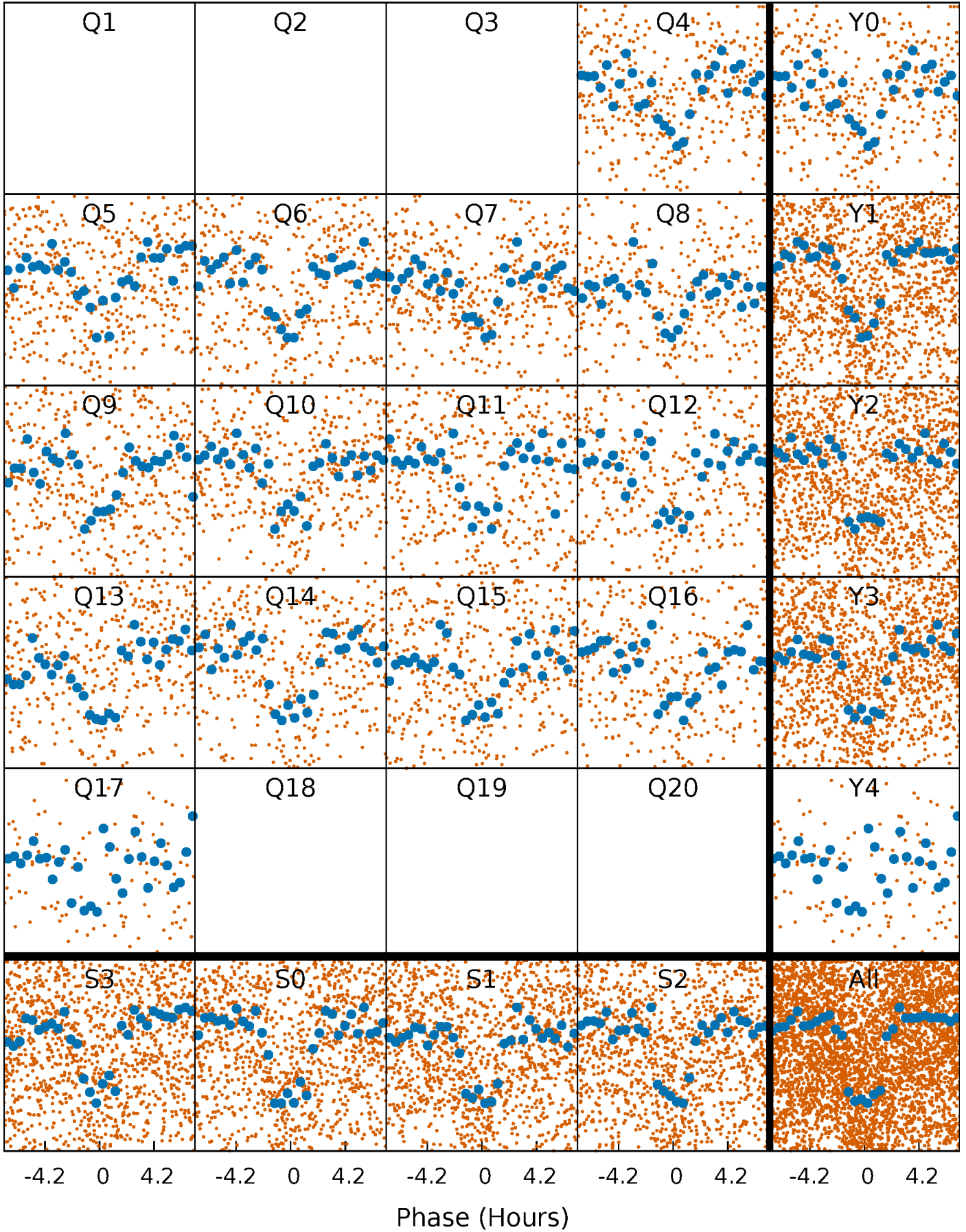


Non-Whitened Vs. Whitened Light Curve



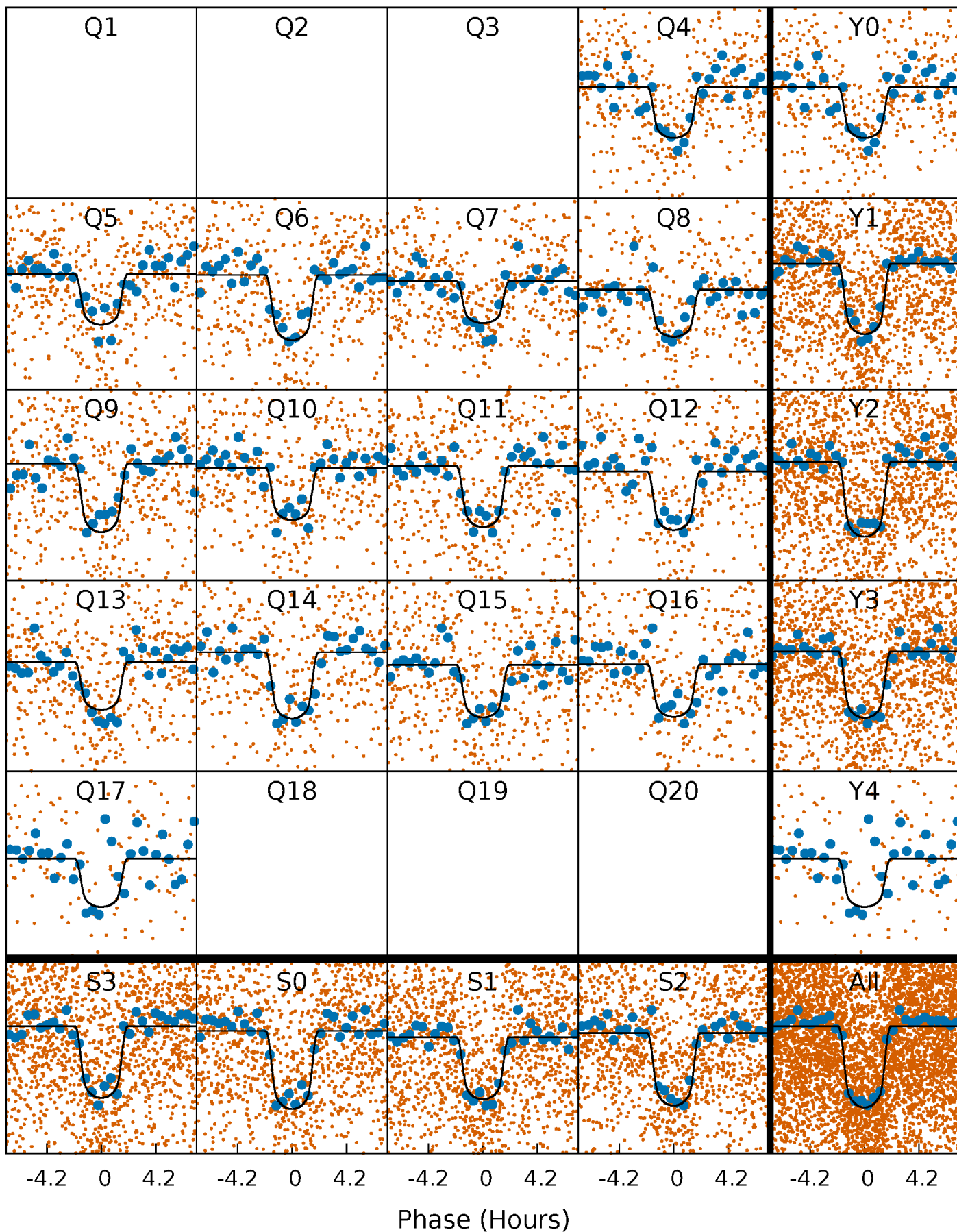
PDC Quarter-Phased Transit Curves

TCE 006359320-01 P= 5.326613 Days $T_0=133.414458$ (BKJD)



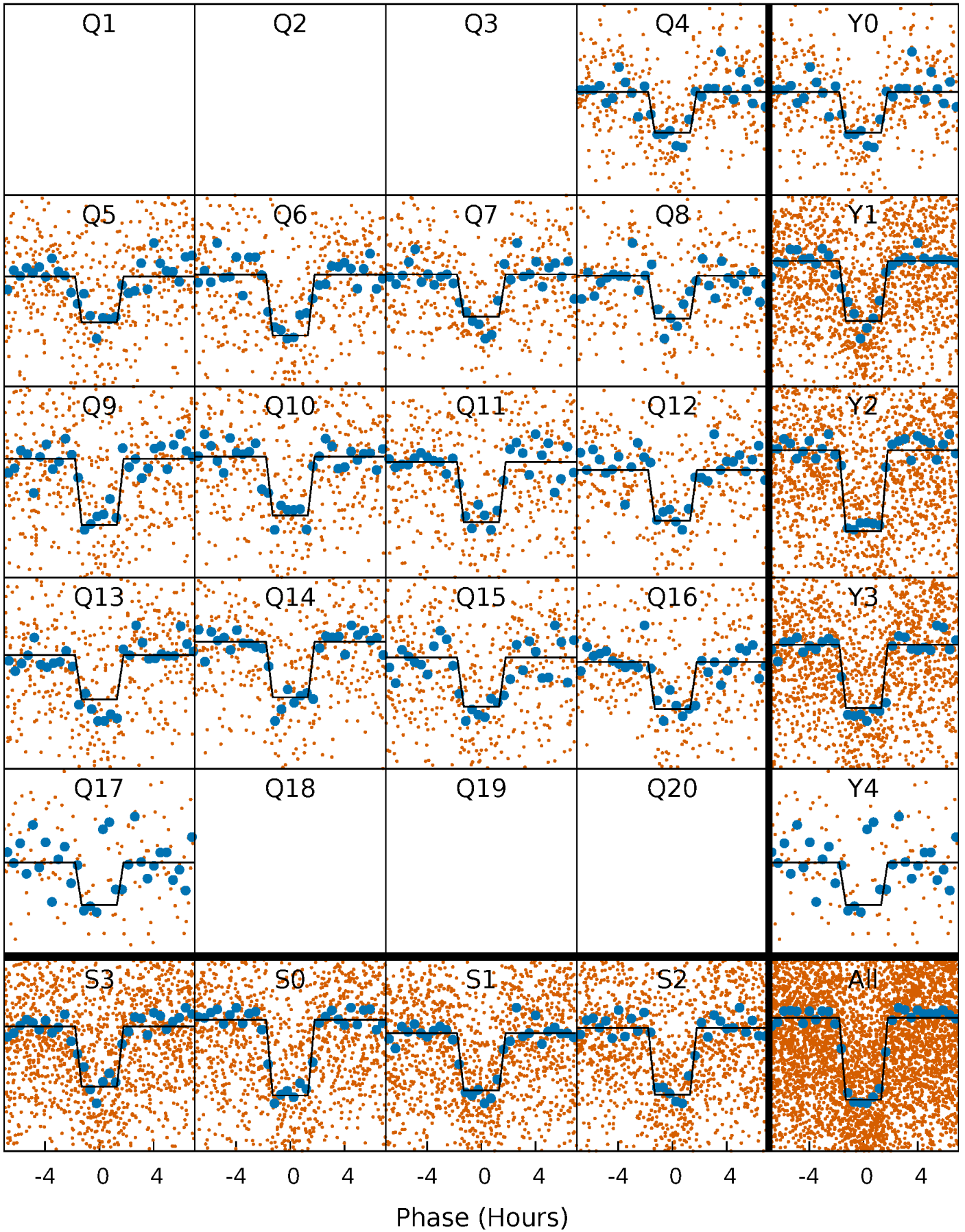
DV Quarter-Phased Transit Curves

TCE 006359320-01 P= 5.326613 Days $T_0=133.414458$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

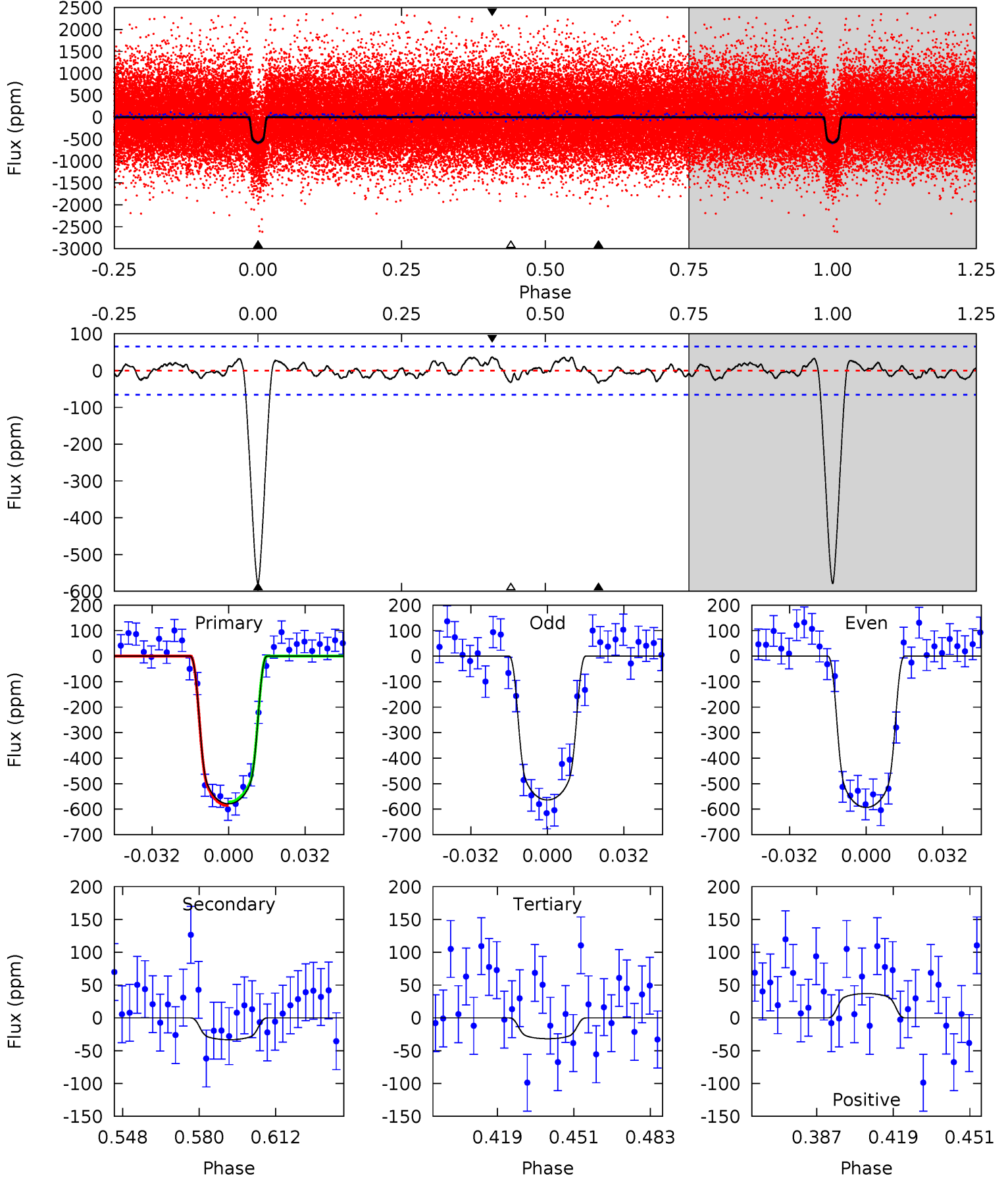
TCE 006359320-01 P= 5.326620 Days $T_0=133.413734$ (BKJD)



DV Model-Shift Uniqueness Test

006359320-01, P = 5.326613 Days, E = 133.414458 Days

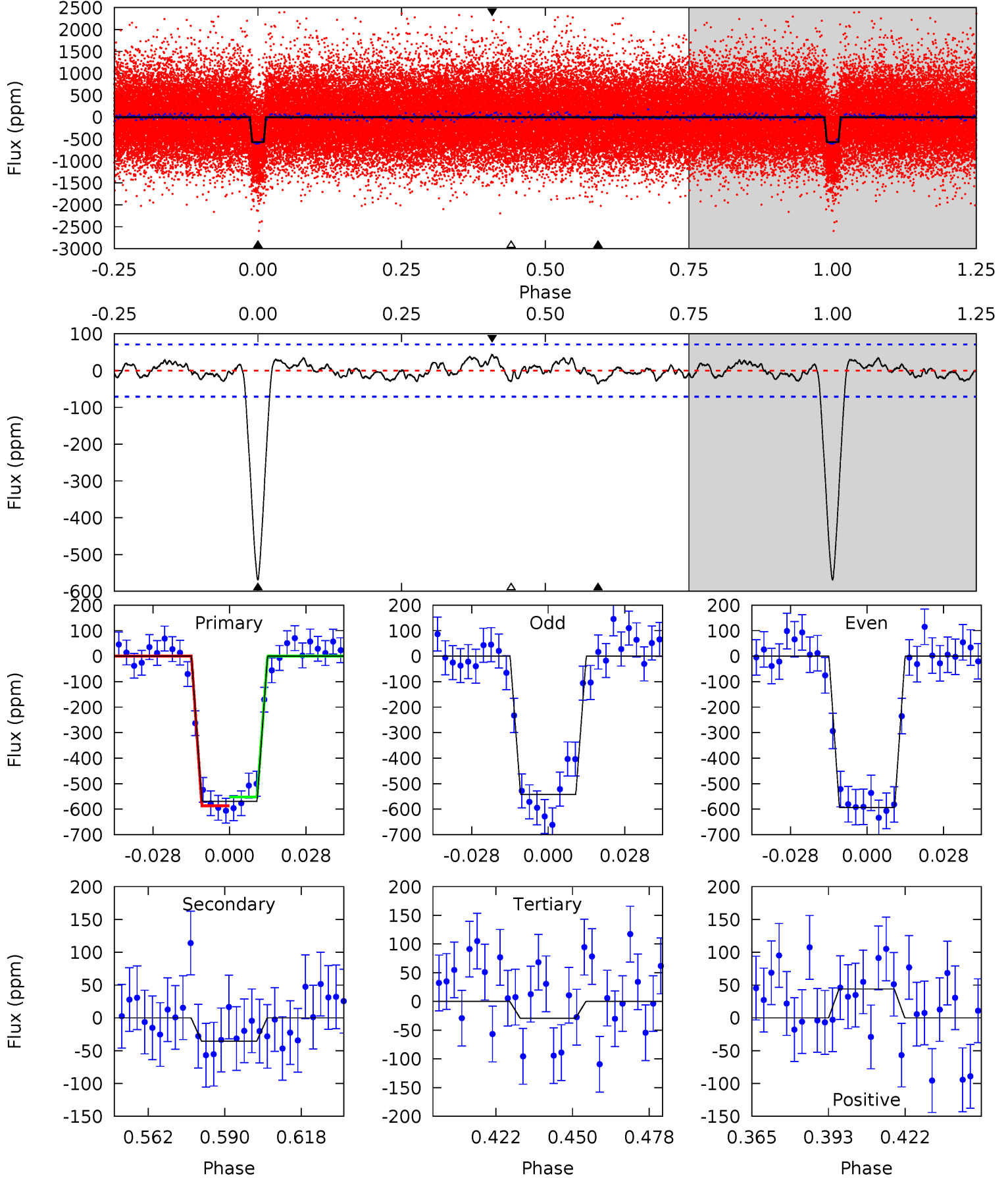
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
42.3	2.43	2.32	2.70	4.80	2.14	1.11	39.9	39.6	0.11	-0.27	1.06	1.01	0.06	0.47



Alt Model-Shift Uniqueness Test

006359320-01, P = 5.326620 Days, E = 133.413734 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
38.7	2.41	2.00	2.99	4.82	2.20	1.09	36.7	35.7	0.41	-0.59	1.76	1.00	0.07	1.17



Stellar Parameters For KIC 006359320

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5831^{+184}_{-205}	$4.517^{+0.038}_{-0.212}$	$0.000^{+0.250}_{-0.300}$	$0.921^{+0.301}_{-0.094}$	$1.016^{+0.115}_{-0.127}$	$1.834^{+0.376}_{-0.958}$
	+3%/-4%	+1%/-5%	+inf%/-inf%	+33%/-10%	+11%/-12%	+20%/-52%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 006359320-01 / KOI 1127.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-33 ± 14	$2.81^{+0.52}_{-0.34}$	1450^{+102}_{-73}	3242^{+225}_{-273}	$7.840^{+4.297}_{-3.590}$
Alt.	-35 ± 15	$2.50^{+0.47}_{-0.31}$	1445^{+112}_{-74}	3399^{+240}_{-281}	11^{+6}_{-5}

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

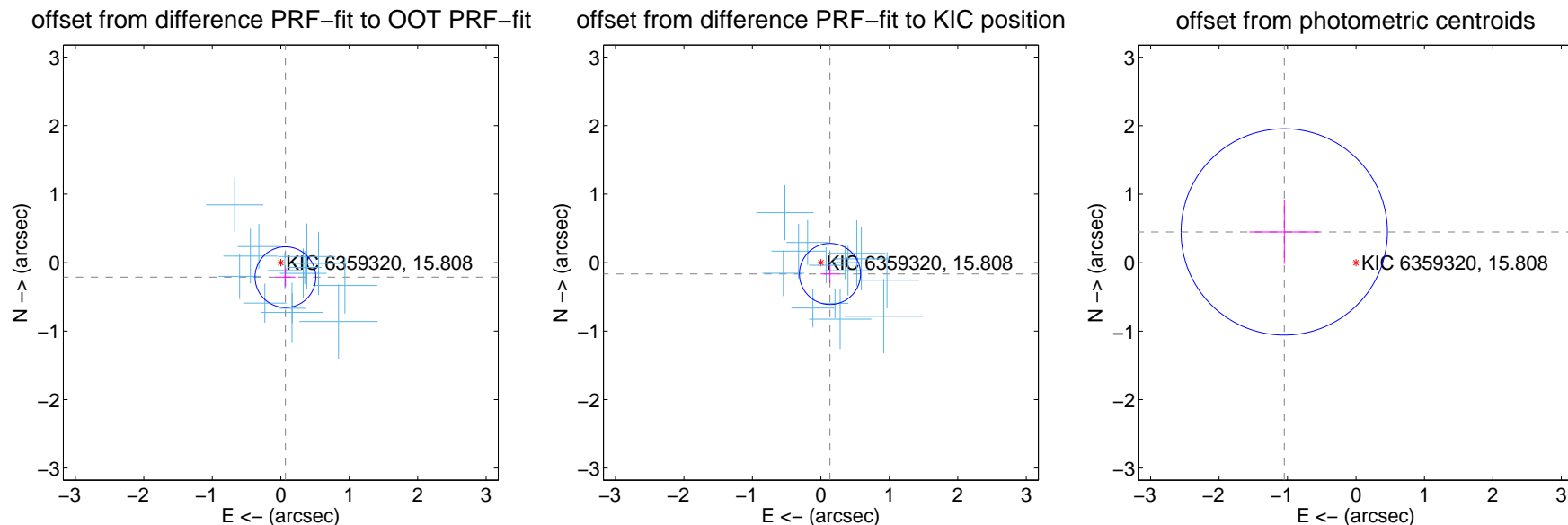
DV Centroid Data

Supplemental centroid analysis for 006359320-01. Kepler magnitude: 15.81. Transit SNR 29.55

There are 14 quarters with good PRF difference image offsets

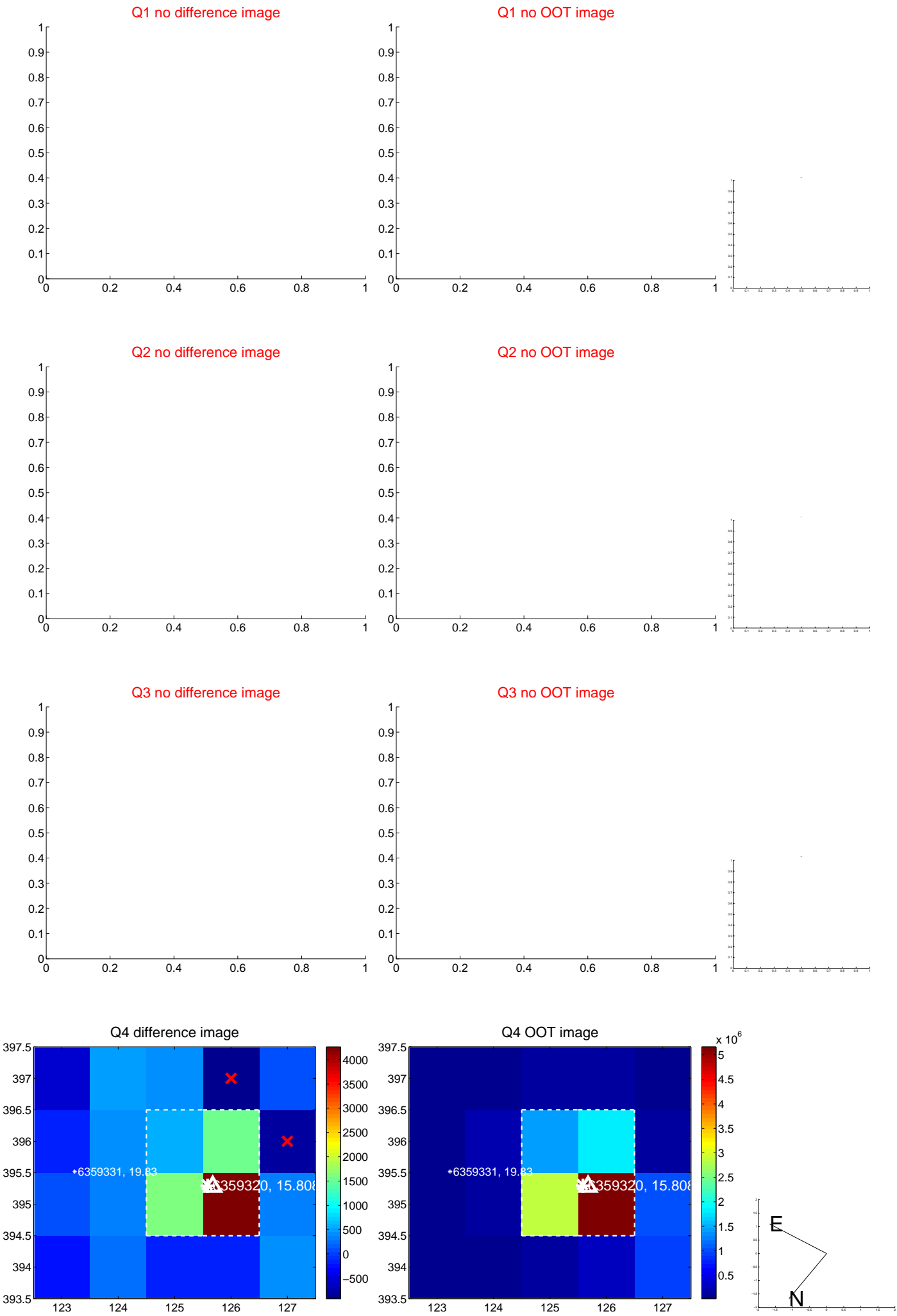
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.223 ± 0.148	1.51	-0.068 ± 0.147	-0.212 ± 0.133
PRF-fit source offset from KIC position	0.213 ± 0.149	1.43	-0.133 ± 0.137	-0.166 ± 0.131
photometric centroid source offset	1.14 ± 0.50	2.27	1.05 ± 0.51	0.45 ± 0.46

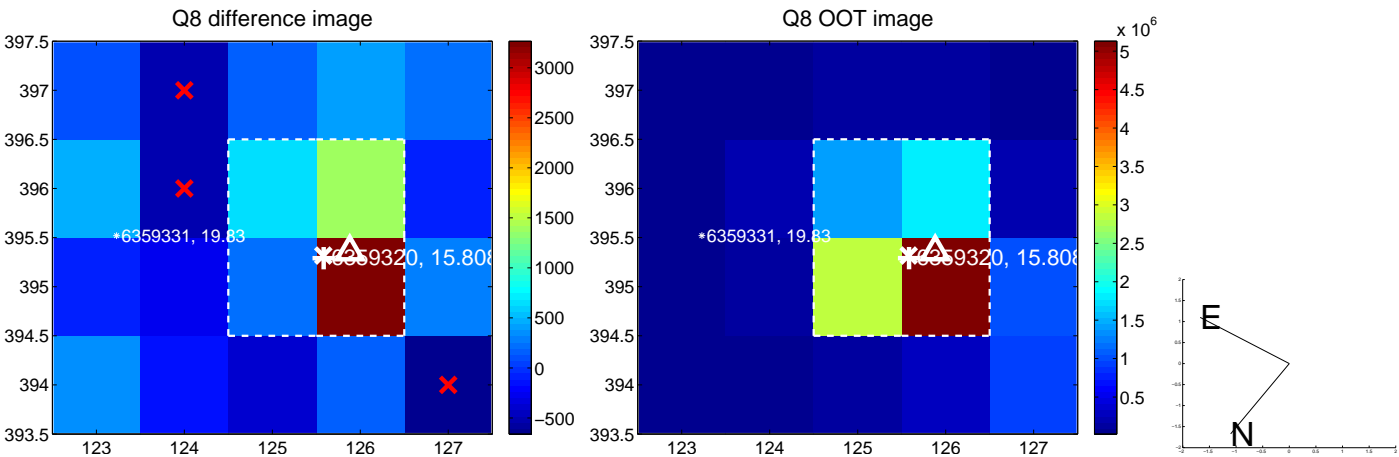
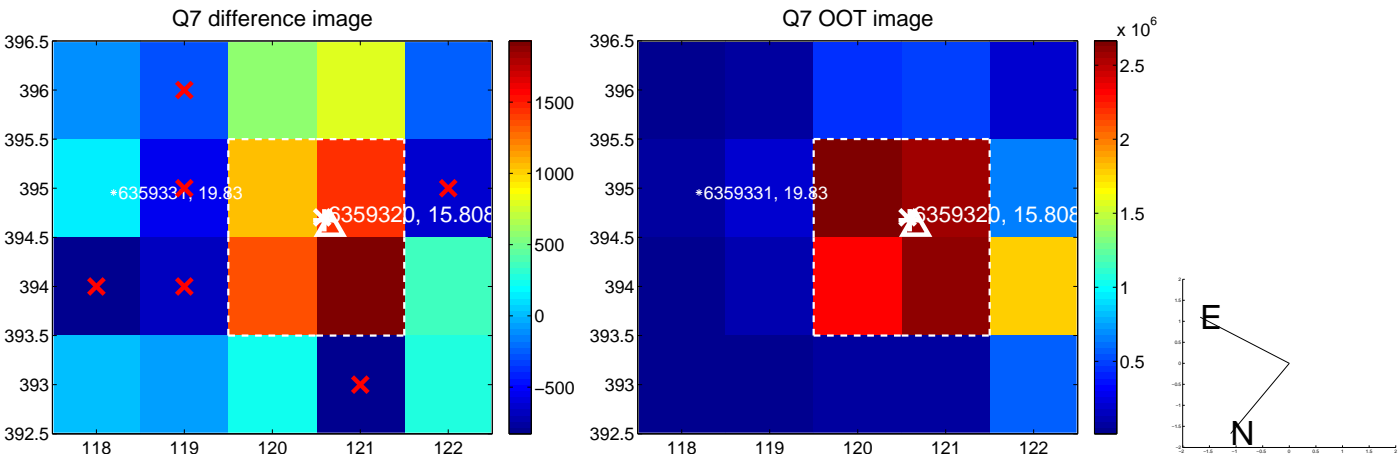
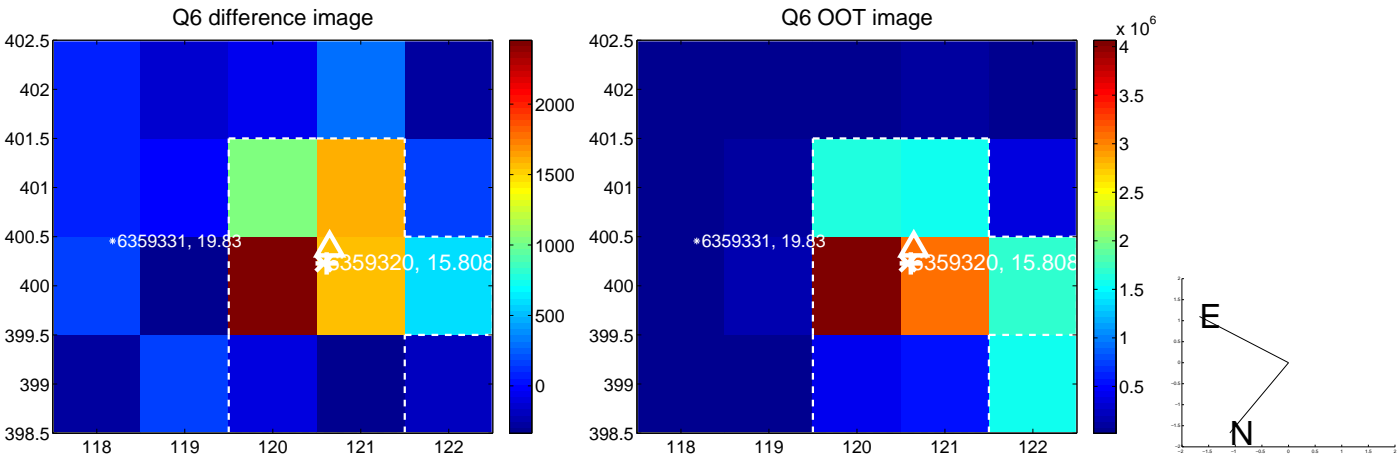
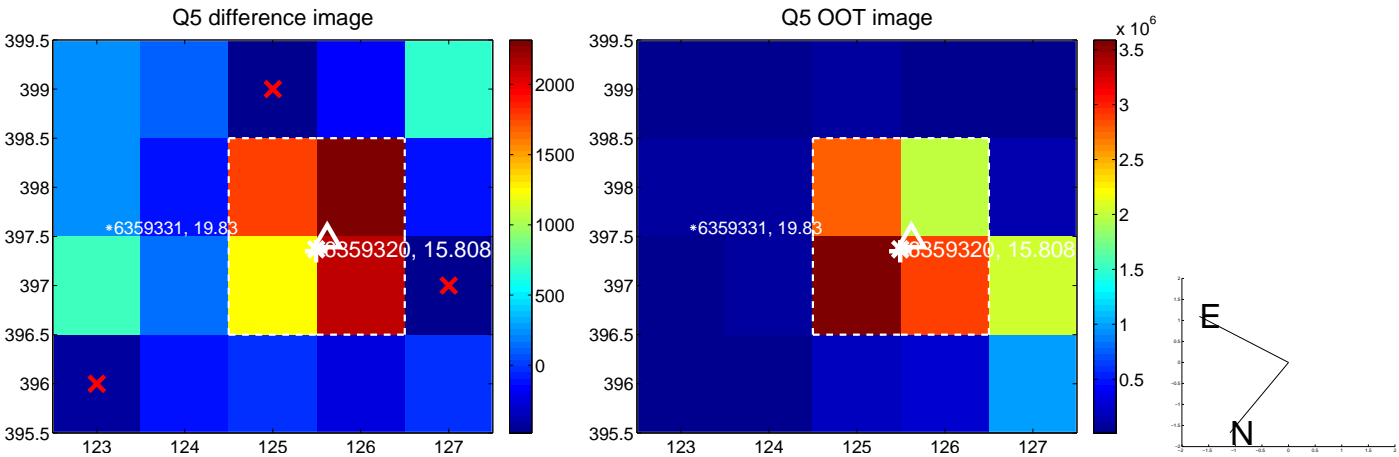


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

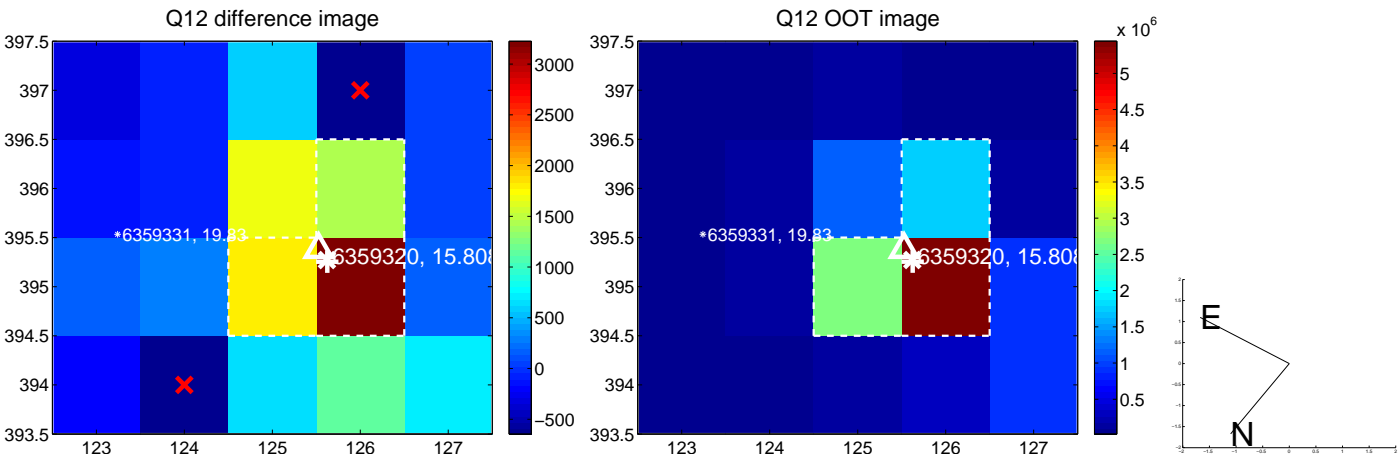
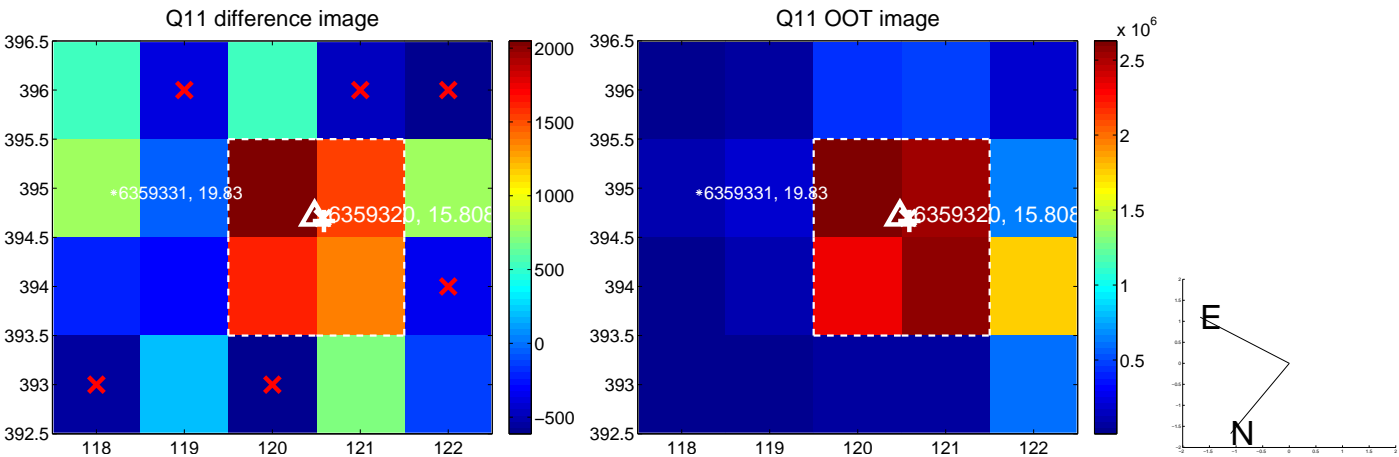
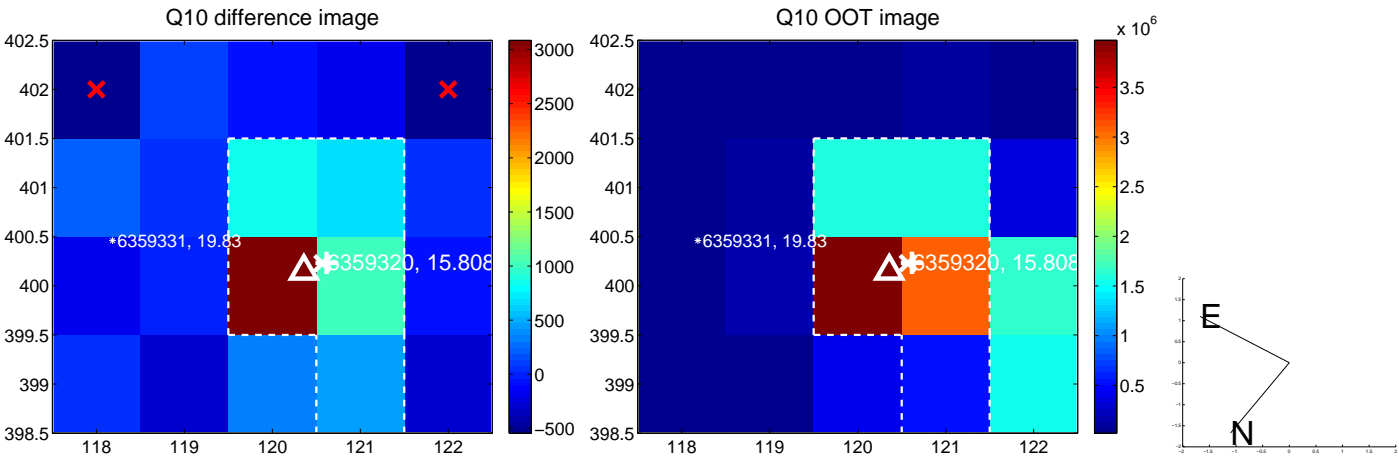
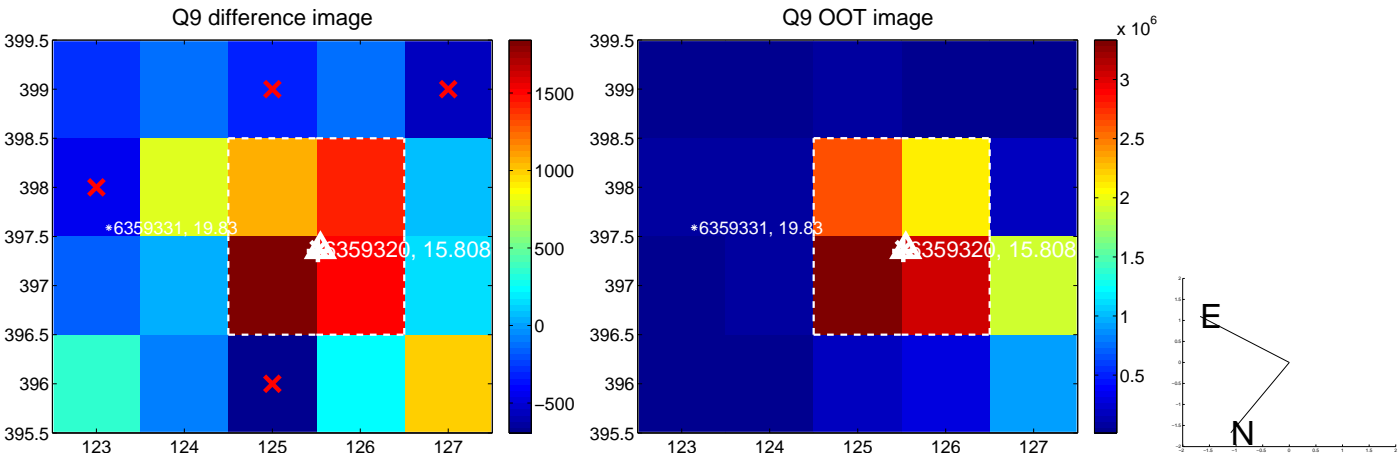
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



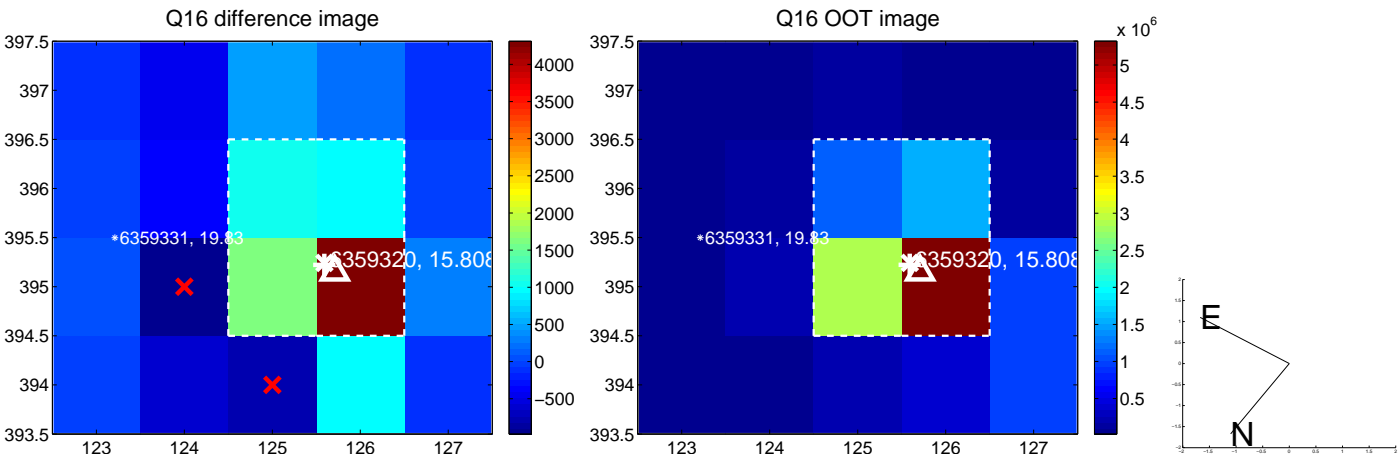
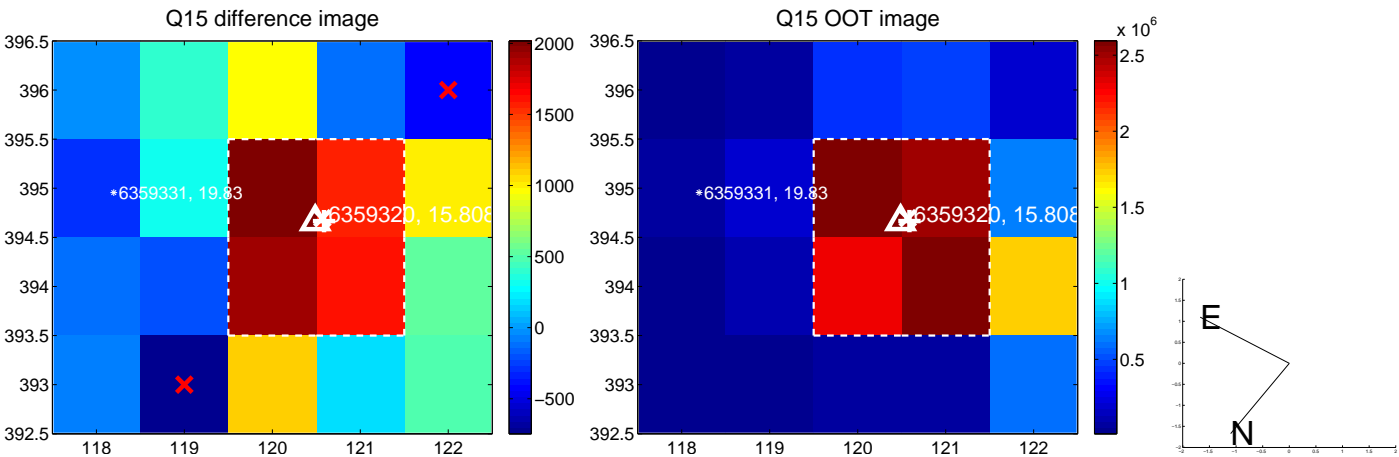
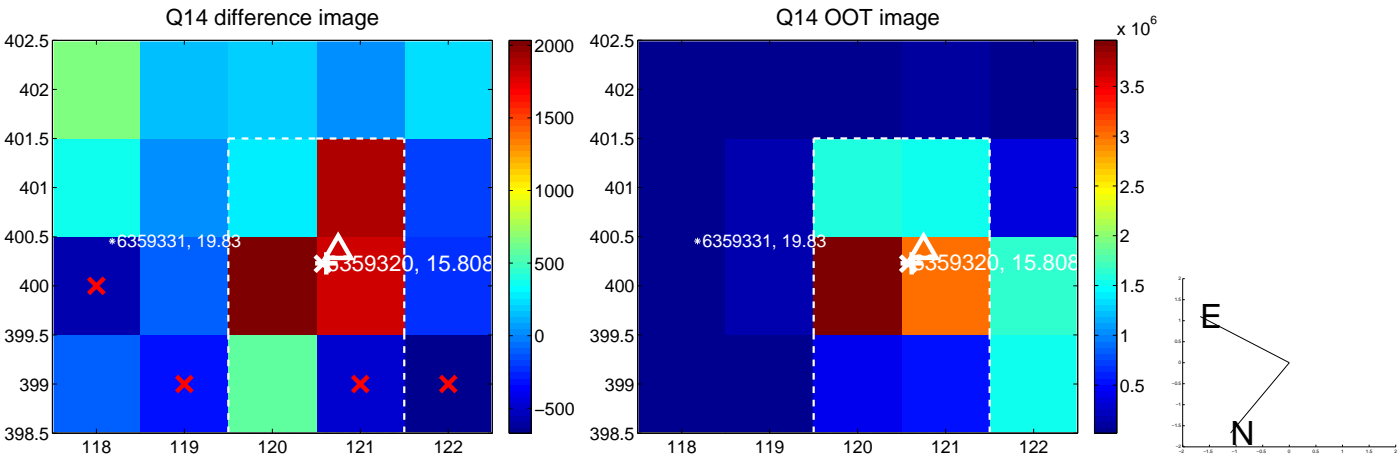
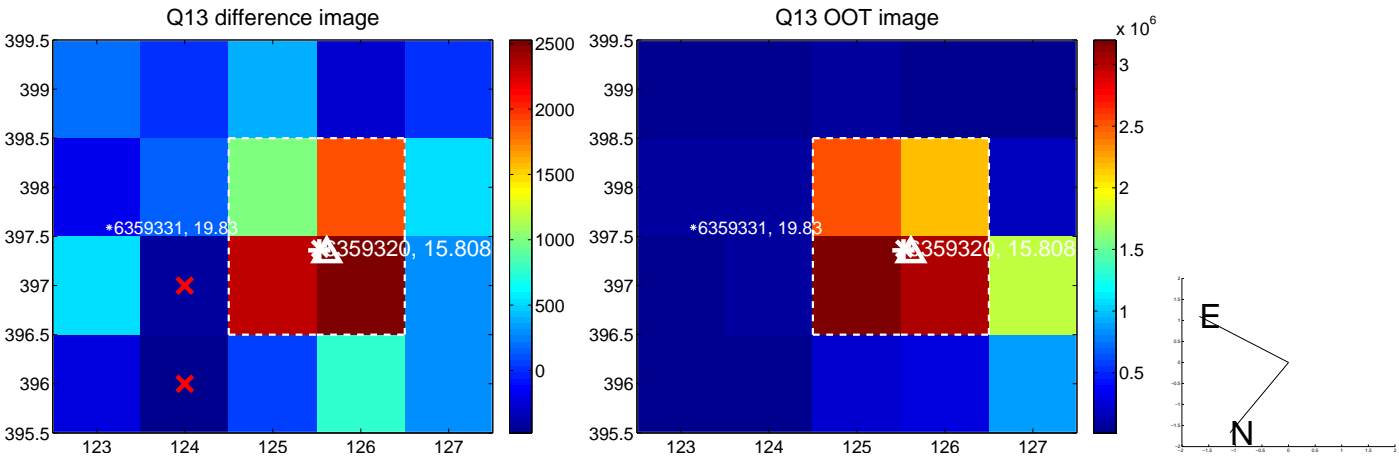
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

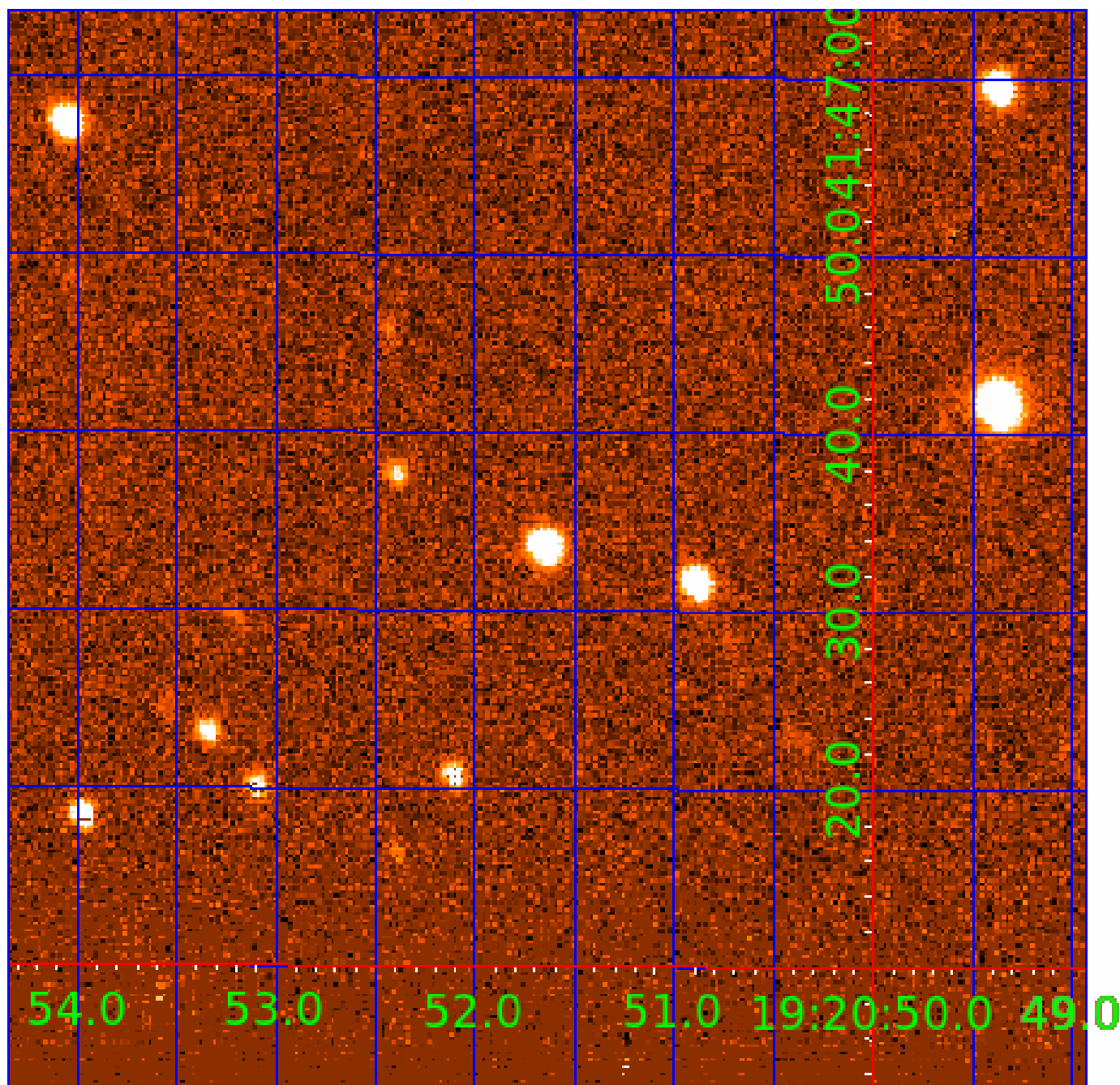


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006359320

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})
006359320-01	OBS	1127.01	5.326613	133.414459	597.9	3.683	27.6	29.6	0.92	5831	2.67	243.65
006359320-02	OBS	1127.02	8.128041	139.226494	272.6	4.104	10.9	11.3	0.92	5831	1.77	138.69
006359320-03	OBS	1127.03	2.836701	132.548196	150.2	3.035	9.0	9.3	0.92	5831	1.30	564.45

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006359320-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006359320-02	OBS	PC	1.00	0	0	0	0	CENT_FEW_MEAS
006359320-03	OBS	PC	1.00	0	0	0	0	CENT_FEW_DIFFS

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

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

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

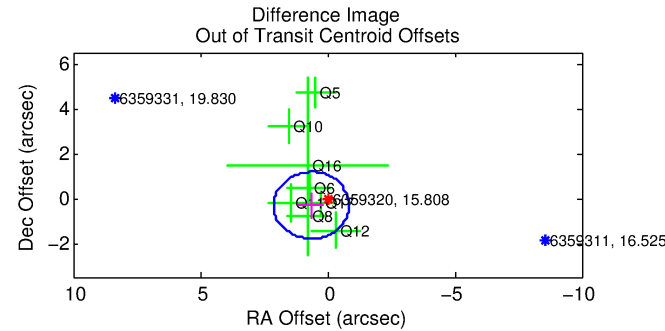
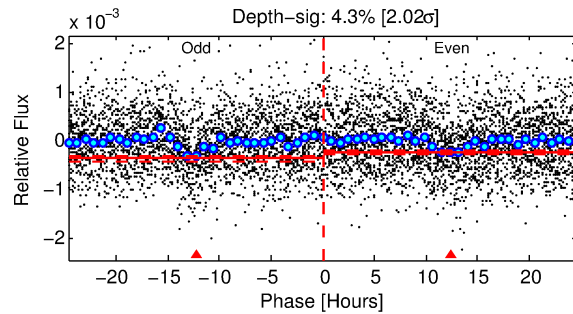
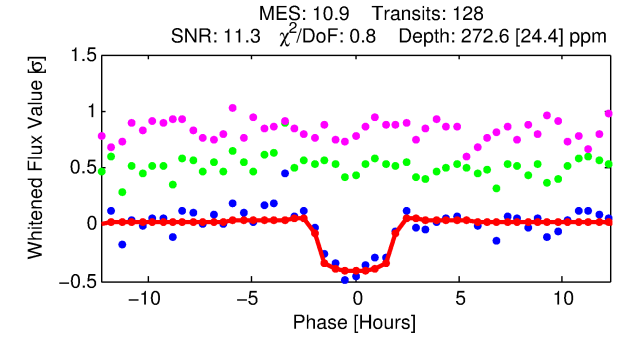
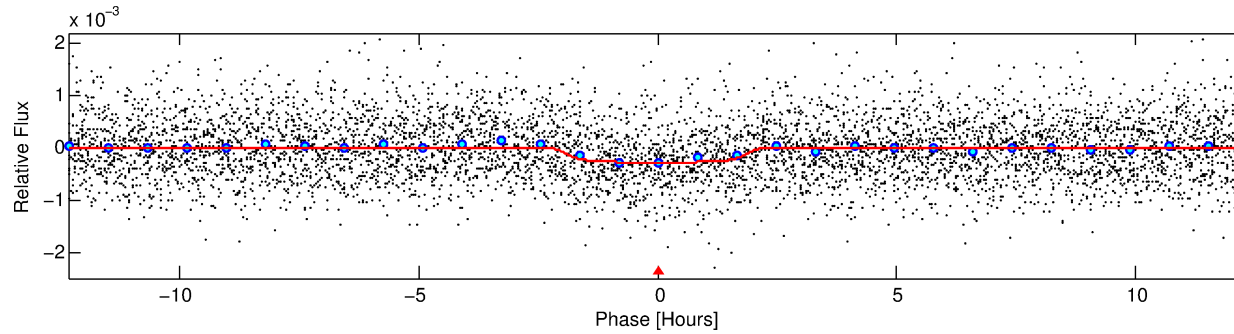
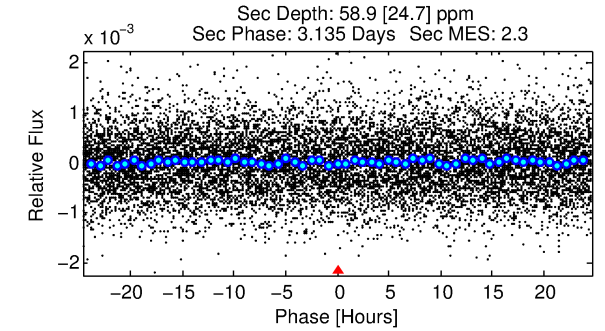
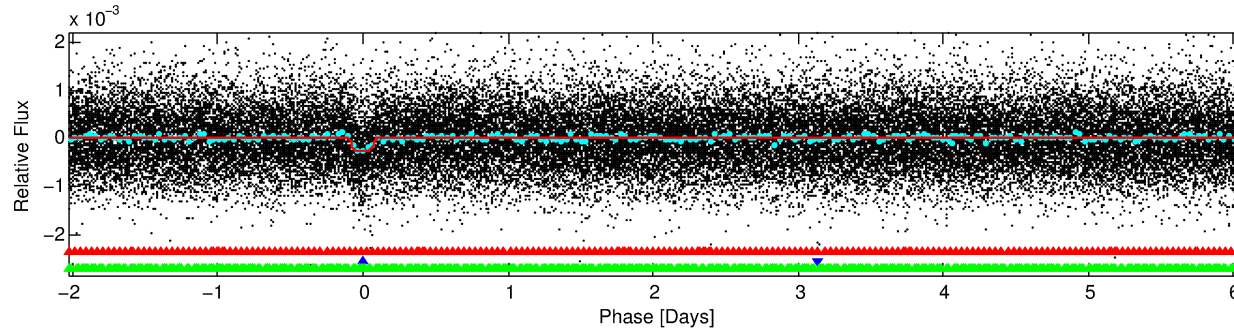
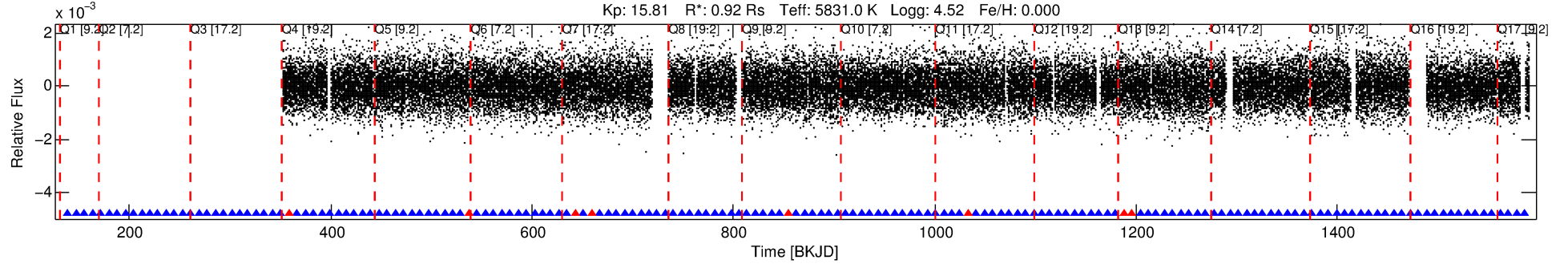
Ephemeris Match Information For 006359320-02

No Significant Match Found

DV One-Page Summary

KIC: 6359320 Candidate: 2 of 3 Period: 8.128 d
KOI: K01127.02 Name: Kepler-269c Corr: 0.973

Kp: 15.81 R*: 0.92 Rs Teff: 5831.0 K Logg: 4.52 Fe/H: 0.000



DV Fit Results:

Period = 8.12804 [0.00008] d
Epoch = 139.2265 [0.0077] BKJD
Rp/R* = 0.0176 [0.0067]
a/R* = 7.80 [13.72]
b = 0.88 [0.47]
Seff = 138.69 [57.71]
Teq = 875 [91] K
Rp = 1.77 [0.89] Re
a = 0.0796 [0.0216] AU
Ag = 65.30 [62.05] [1.04σ]
Teffp = 3846 [843] K [3.50σ]

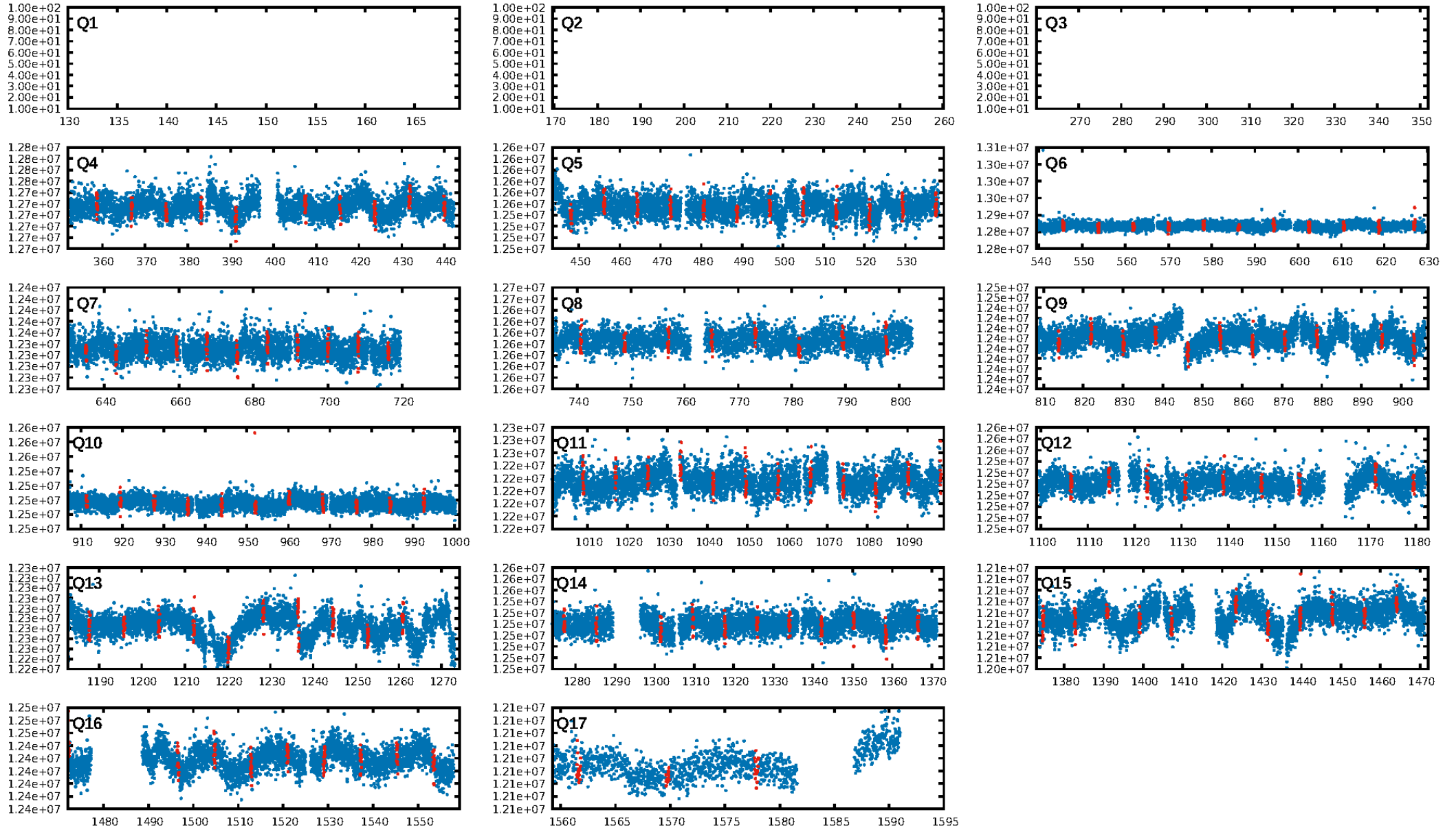
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [12.19σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 97.3%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.15e-27
RollingBand-fgt: 0.94 [117/125]
GhostDiagnostic-chr: 5.671
Centroid-sig: 1.2%
Centroid-so: 1.934 arcsec [1.65σ]
OotOffset-rm: 0.717 arcsec [1.45σ]
KicOffset-rm: 0.646 arcsec [1.30σ]
OotOffset-st: 2/1/3/2 [8]
KicOffset-st: 2/1/3/2 [8]
DiffImageQuality-fgm: 0.12 [1/8]
DiffImageOverlap-fno: 1.00 [14/14]

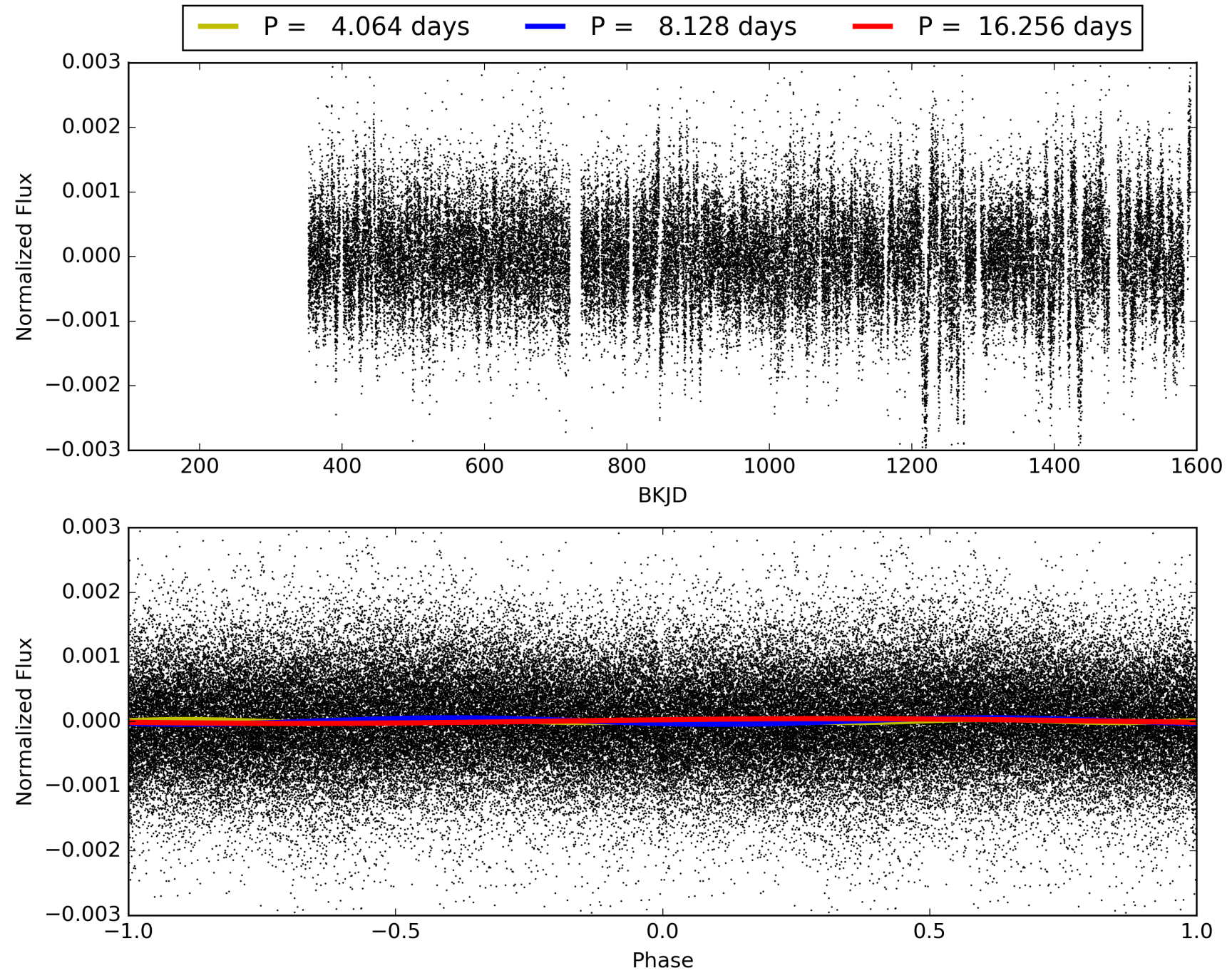
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 04:13:30 Z

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

TCE 006359320-02, PDC Light Curves

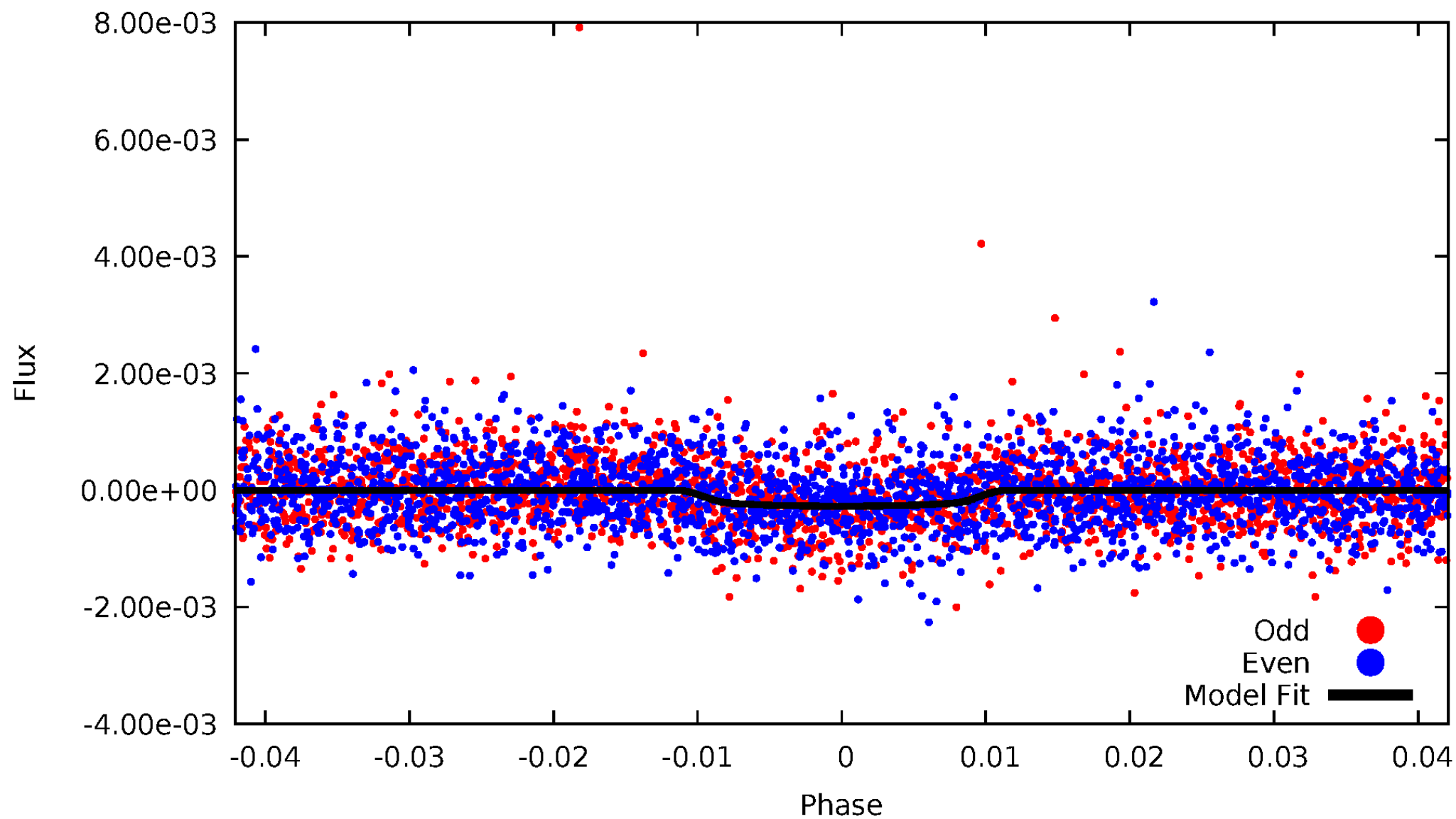


TCE 006359320-02



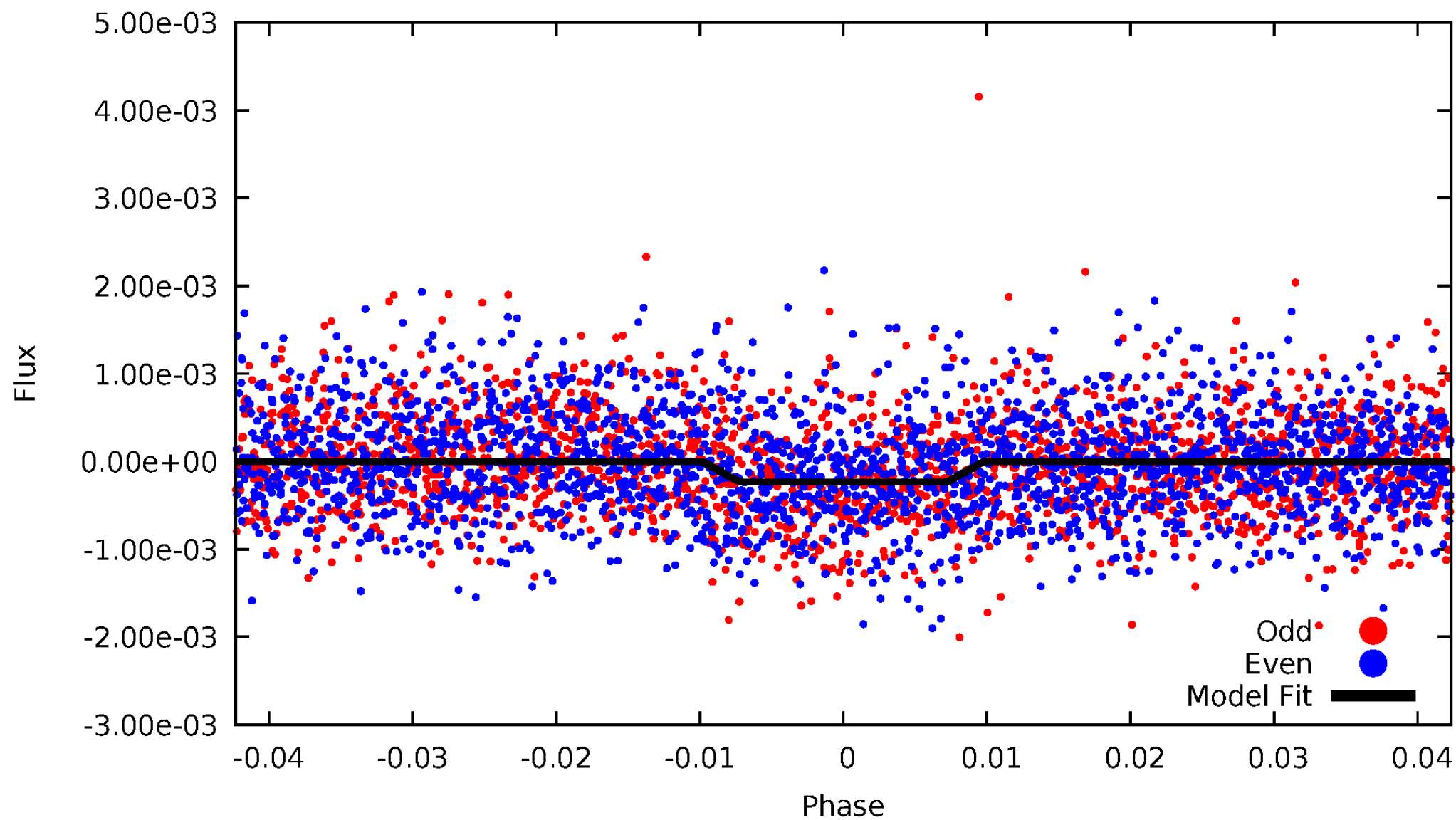
DV Odd/Even

TCE 006359320-02



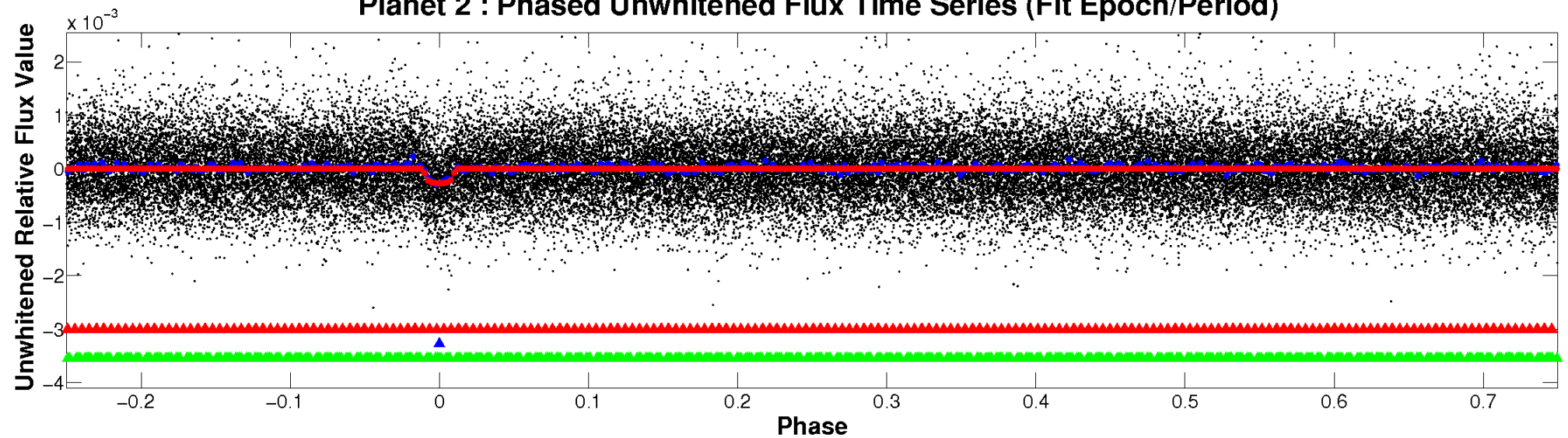
ALT Odd/Even

TCE 006359320-02

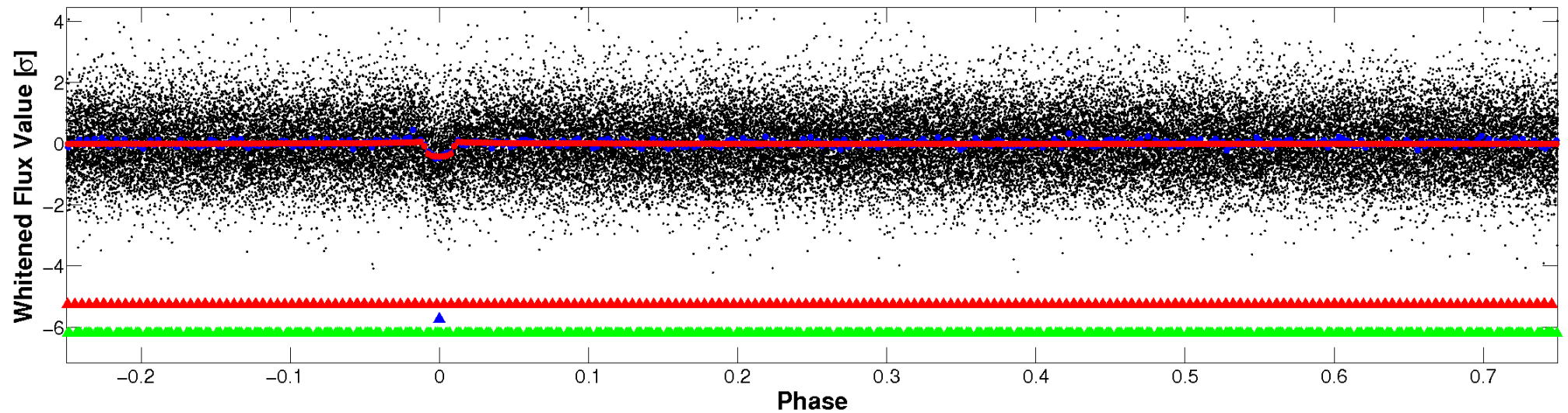


Non-Whitened Vs. Whitened Light Curve

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

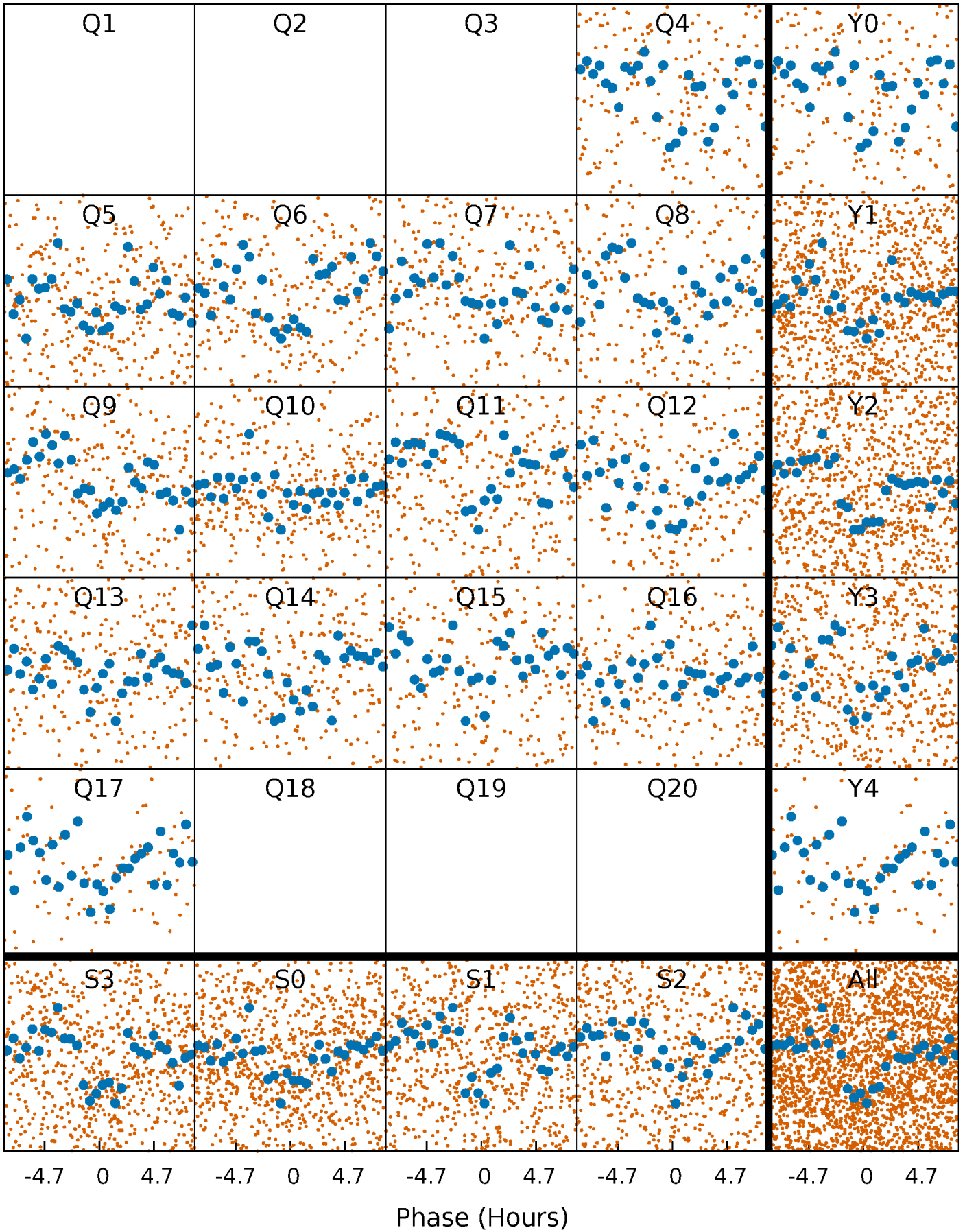


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



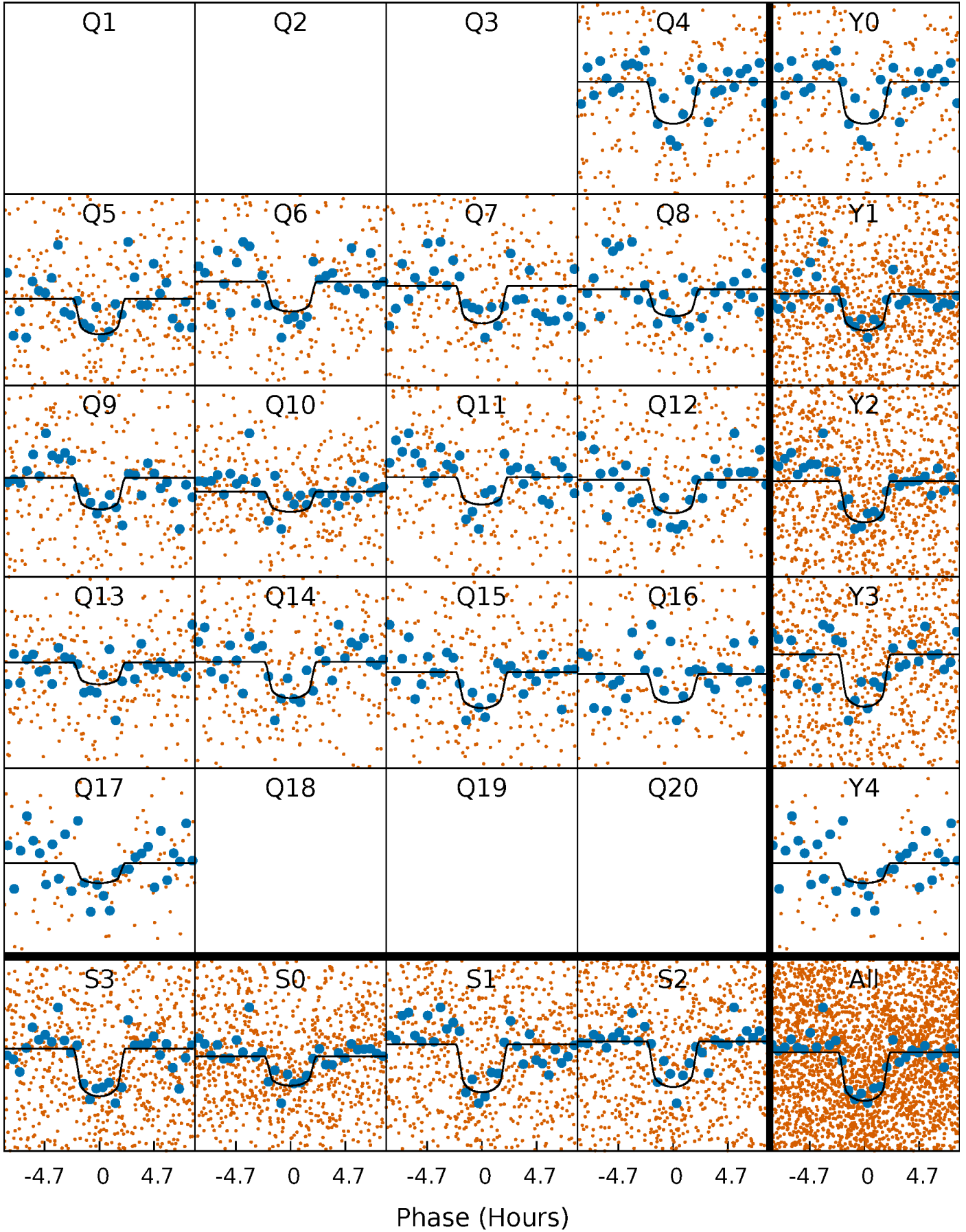
PDC Quarter-Phased Transit Curves

TCE 006359320-02 P= 8.128041 Days $T_0=139.226494$ (BKJD)



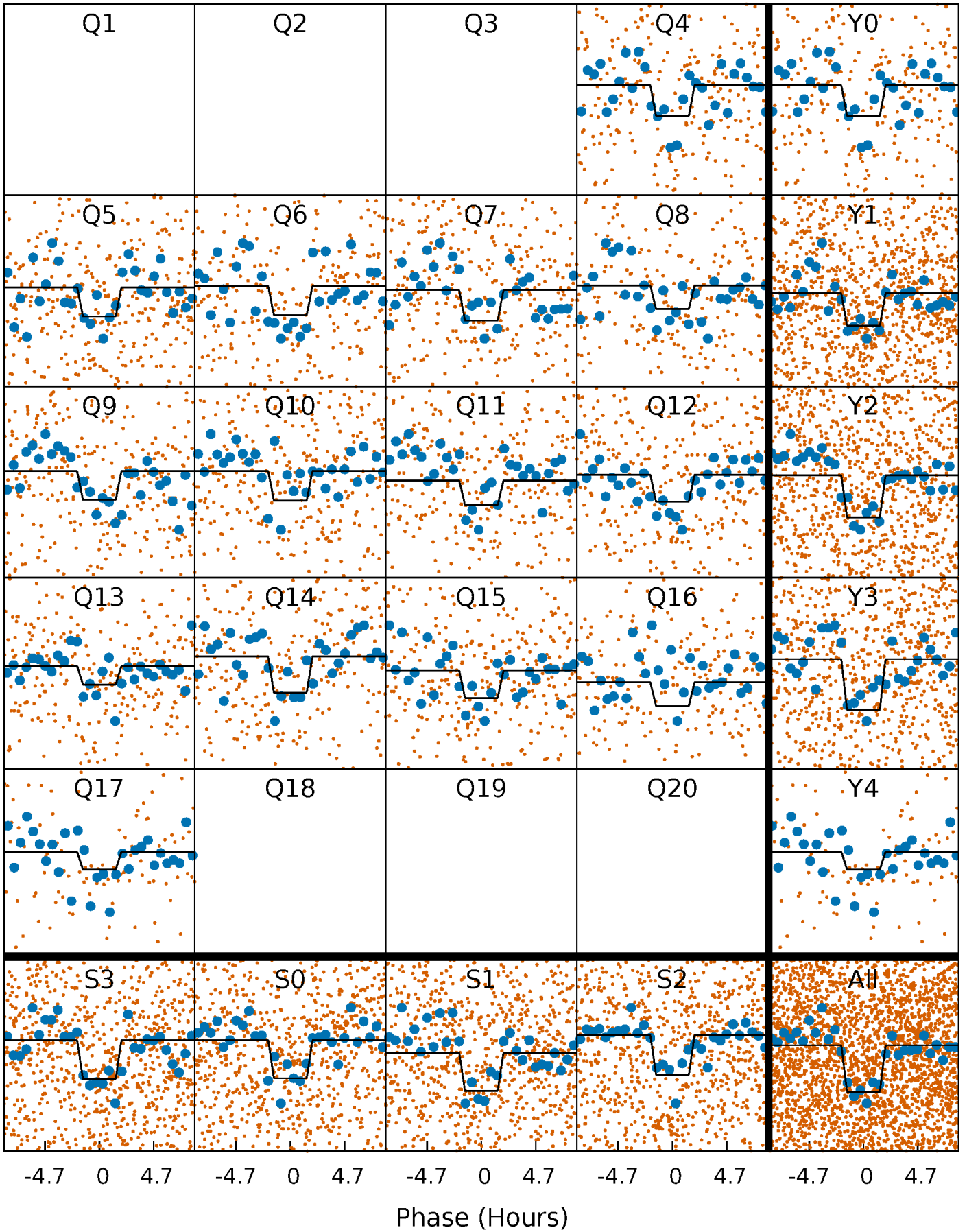
DV Quarter-Phased Transit Curves

TCE 006359320-02 P= 8.128041 Days $T_0=139.226494$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

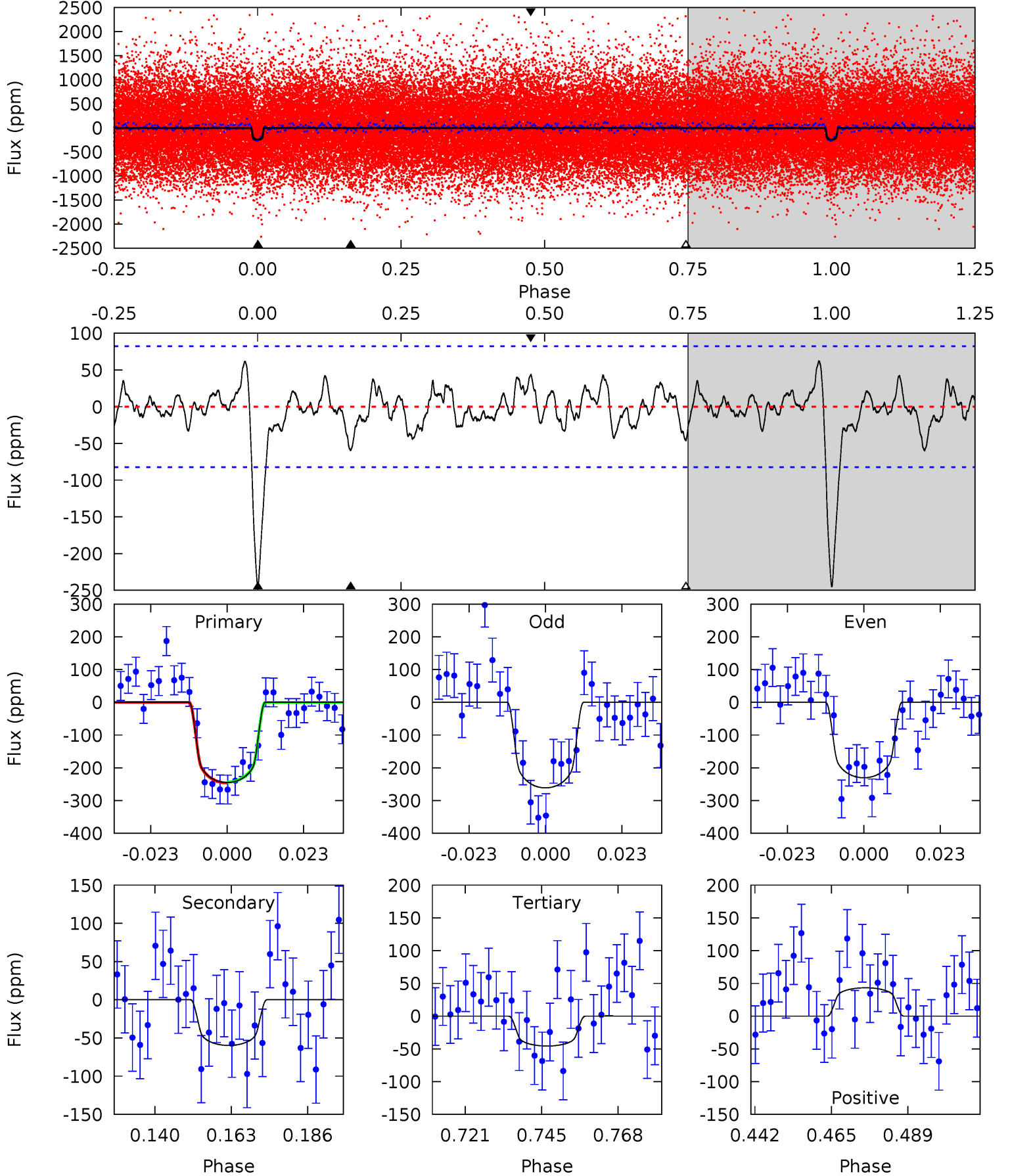
TCE 006359320-02 P= 8.127997 Days $T_0=139.231134$ (BKJD)



DV Model-Shift Uniqueness Test

006359320-02, P = 8.128041 Days, E = 139.226494 Days

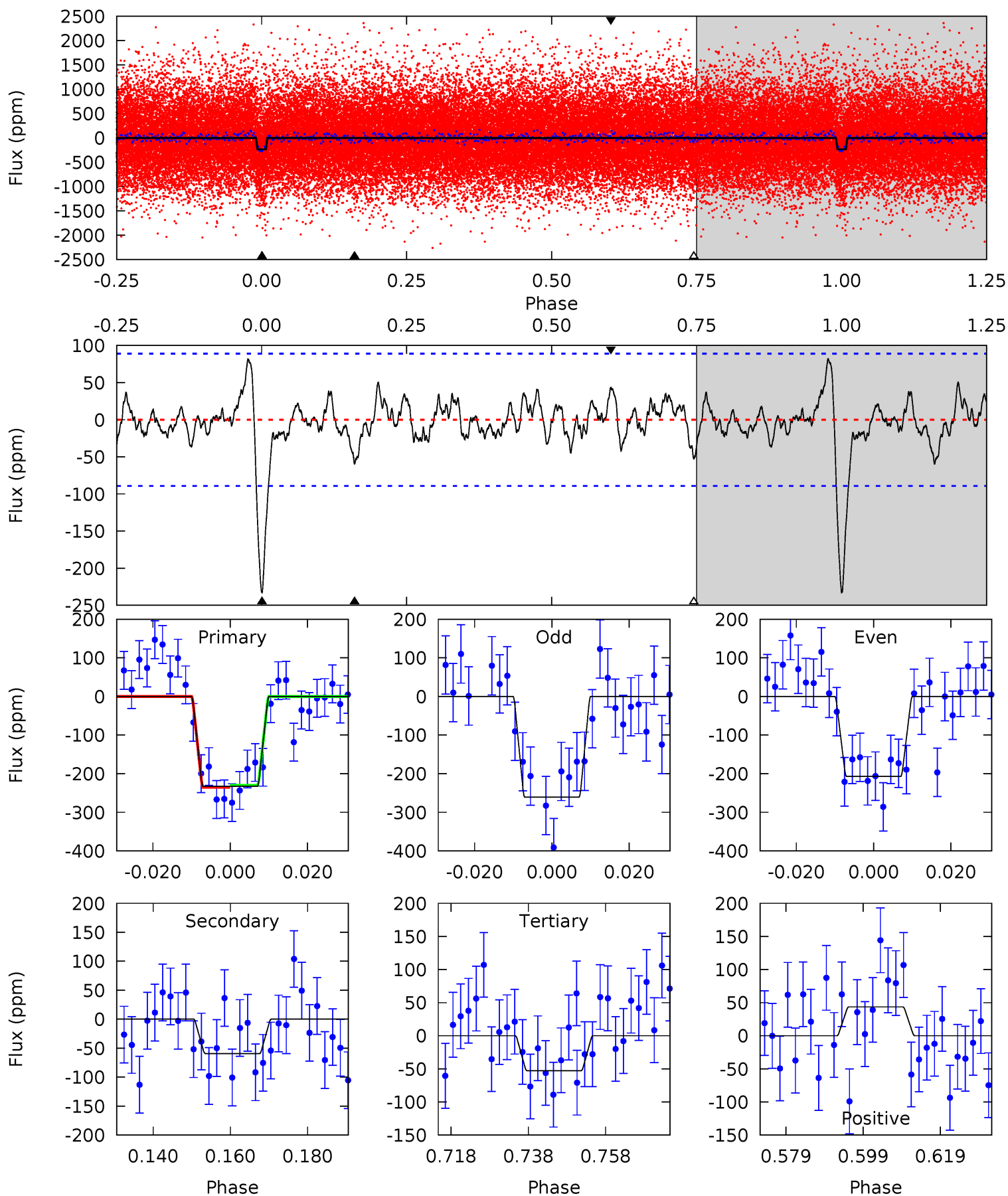
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.5	3.53	2.70	2.56	4.86	2.27	1.15	11.8	11.9	0.83	0.97	0.92	0.95	0.20	0.08



Alt Model-Shift Uniqueness Test

006359320-02, P = 8.127997 Days, E = 139.231134 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.8	3.26	2.89	2.39	4.89	2.33	1.10	9.87	10.4	0.36	0.87	1.48	0.88	0.26	0.15



Stellar Parameters For KIC 006359320

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5831^{+184}_{-205}	$4.517^{+0.038}_{-0.212}$	$0.000^{+0.250}_{-0.300}$	$0.921^{+0.301}_{-0.094}$	$1.016^{+0.115}_{-0.127}$	$1.834^{+0.376}_{-0.958}$
	+3%/-4%	+1%/-5%	+inf%/-inf%	+33%/-10%	+11%/-12%	+20%/-52%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 006359320-02 / KOI 1127.02

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-60 ± 17	$1.82^{+0.74}_{-0.73}$	1255^{+89}_{-60}	4164^{+905}_{-485}	61^{+101}_{-33}
Alt.	-59 ± 18	$1.63^{+0.77}_{-0.68}$	1258^{+96}_{-64}	4337^{+1105}_{-623}	73^{+157}_{-40}

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

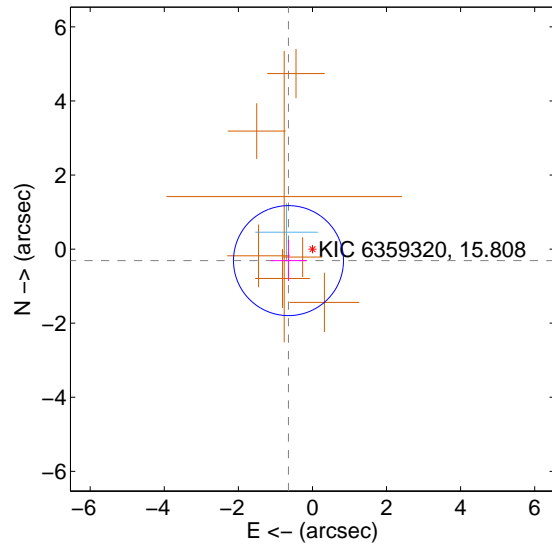
Supplemental centroid analysis for 006359320-02. Kepler magnitude: 15.81. Transit SNR 11.35

There are 1 quarters with good PRF difference image offsets

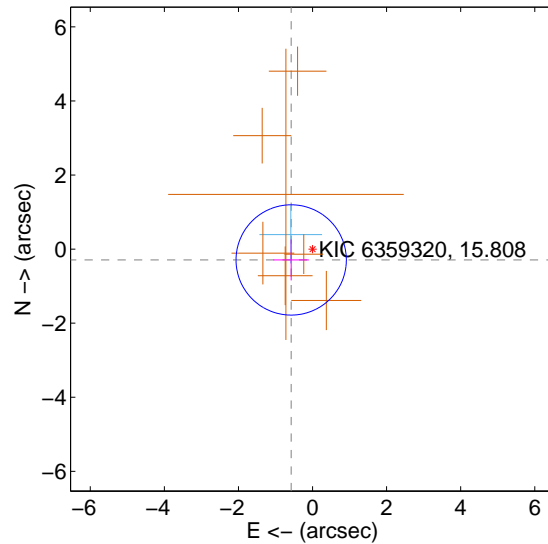
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.717 ± 0.495	1.45	0.646 ± 0.480	-0.311 ± 0.554
PRF-fit source offset from KIC position	0.646 ± 0.496	1.30	0.576 ± 0.480	-0.293 ± 0.554
photometric centroid source offset	1.93 ± 1.17	1.65	-0.74 ± 1.27	-1.79 ± 1.15

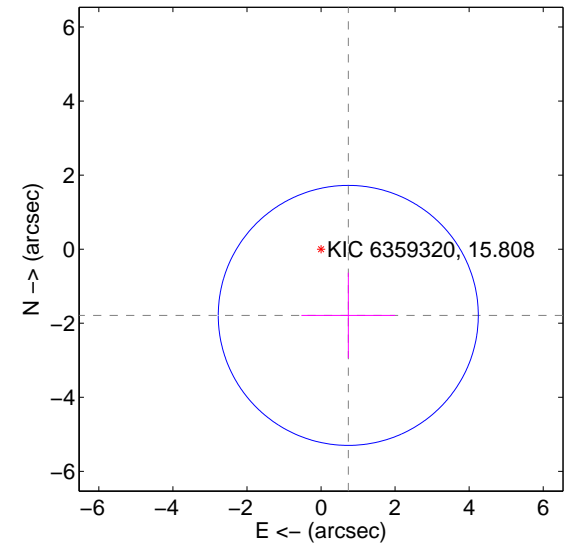
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

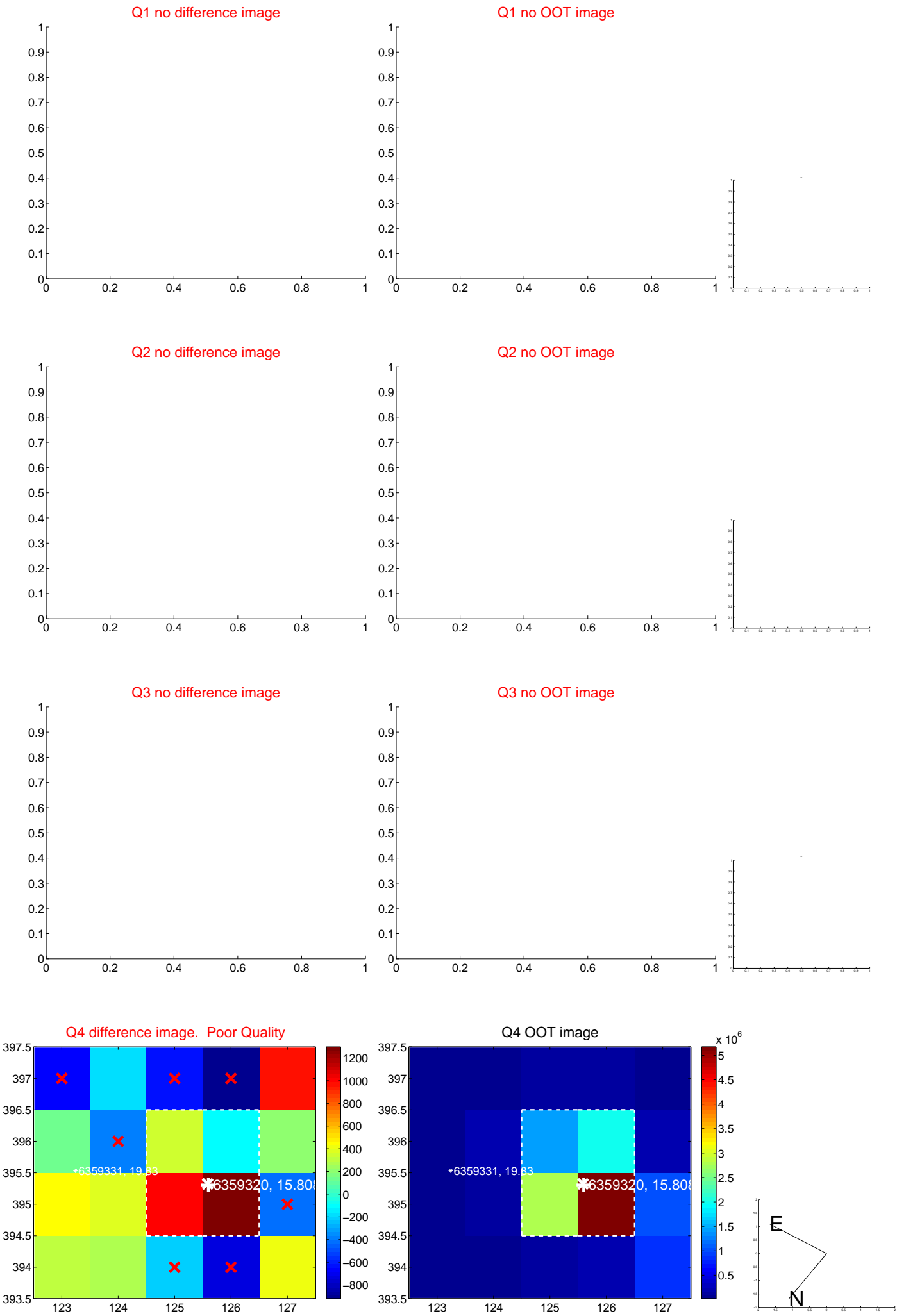


offset from photometric centroids

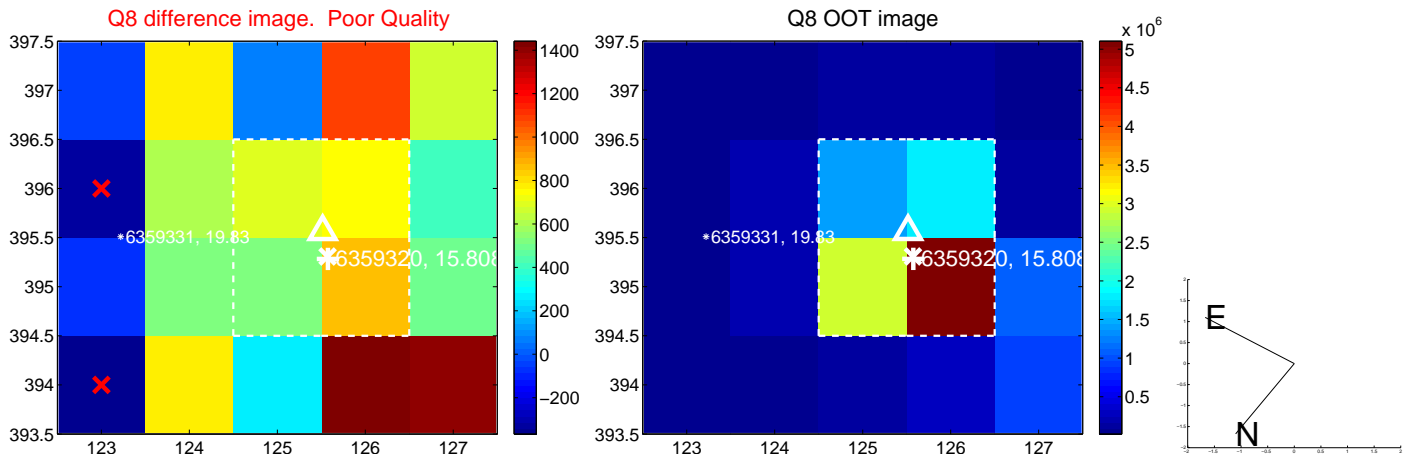
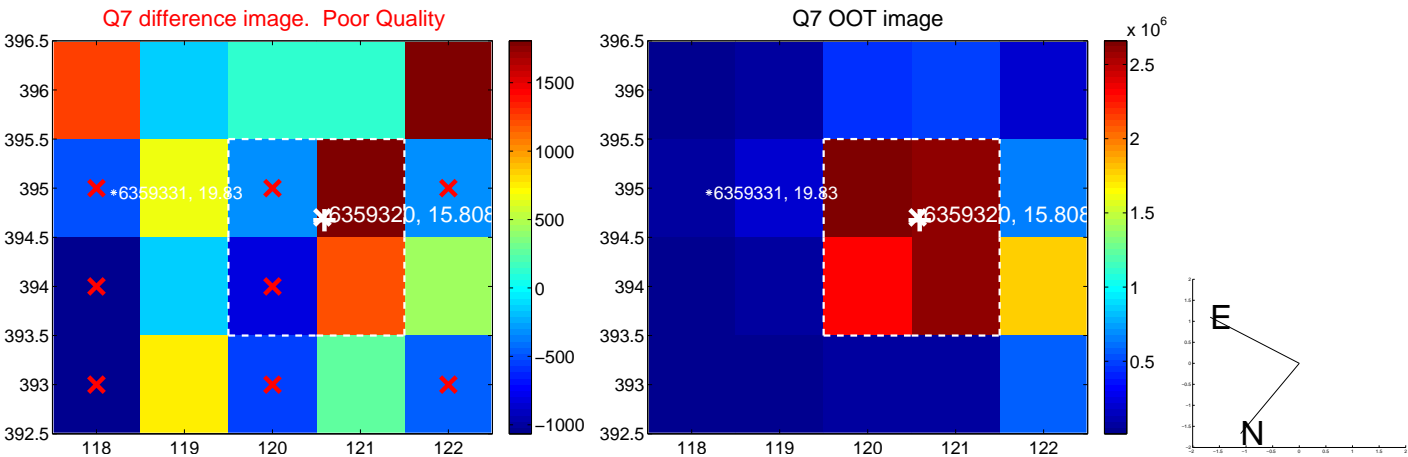
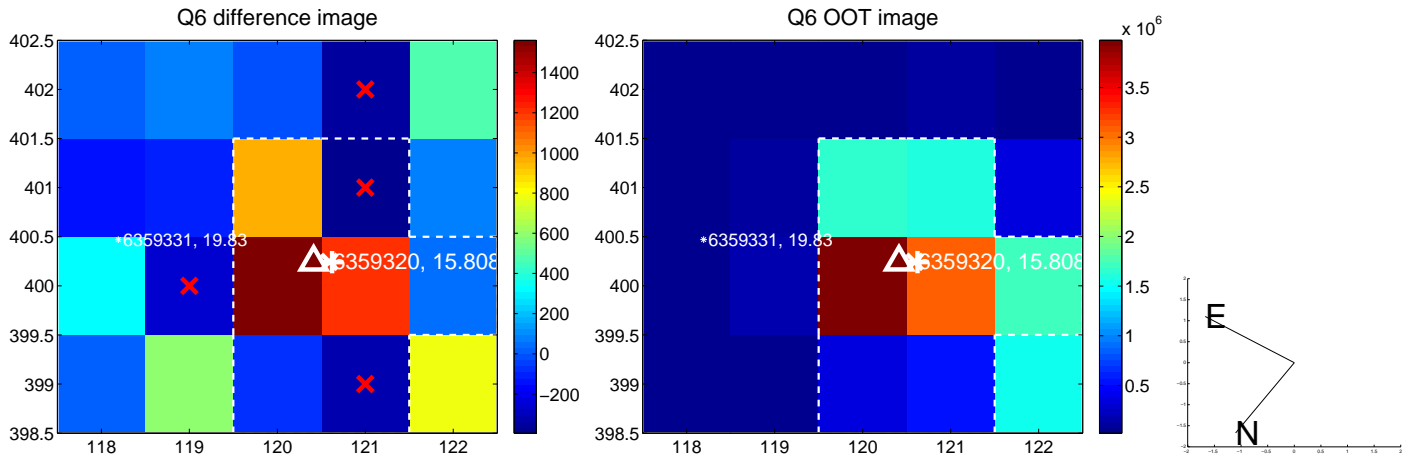
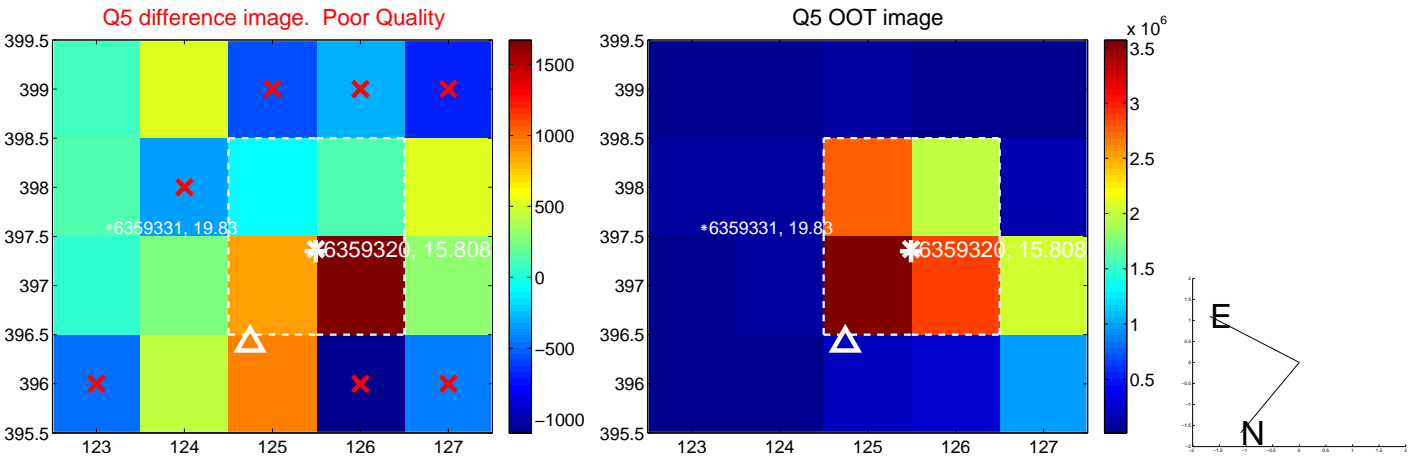


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

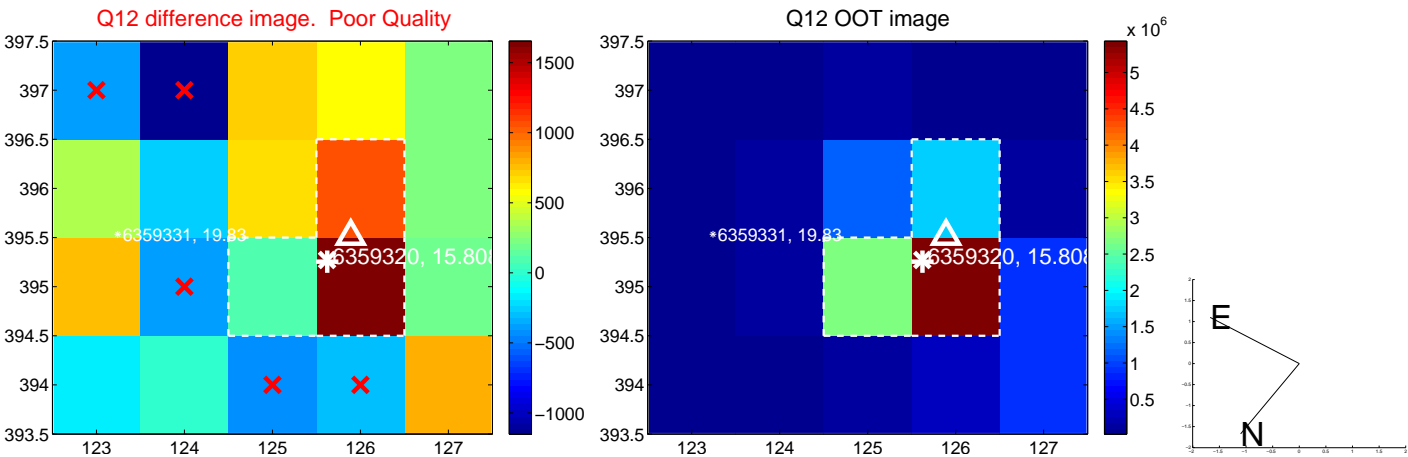
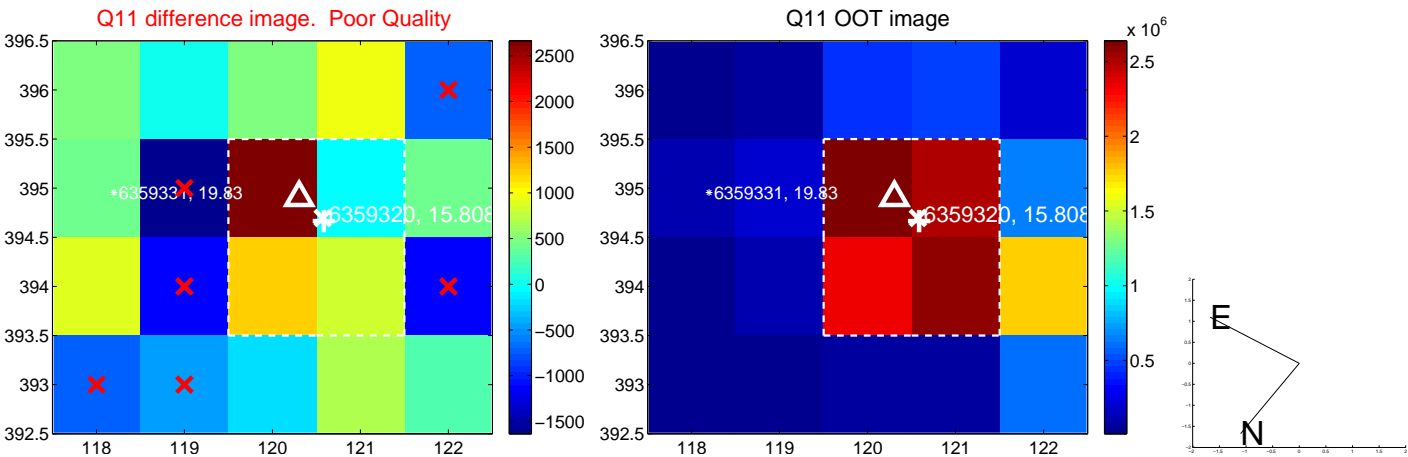
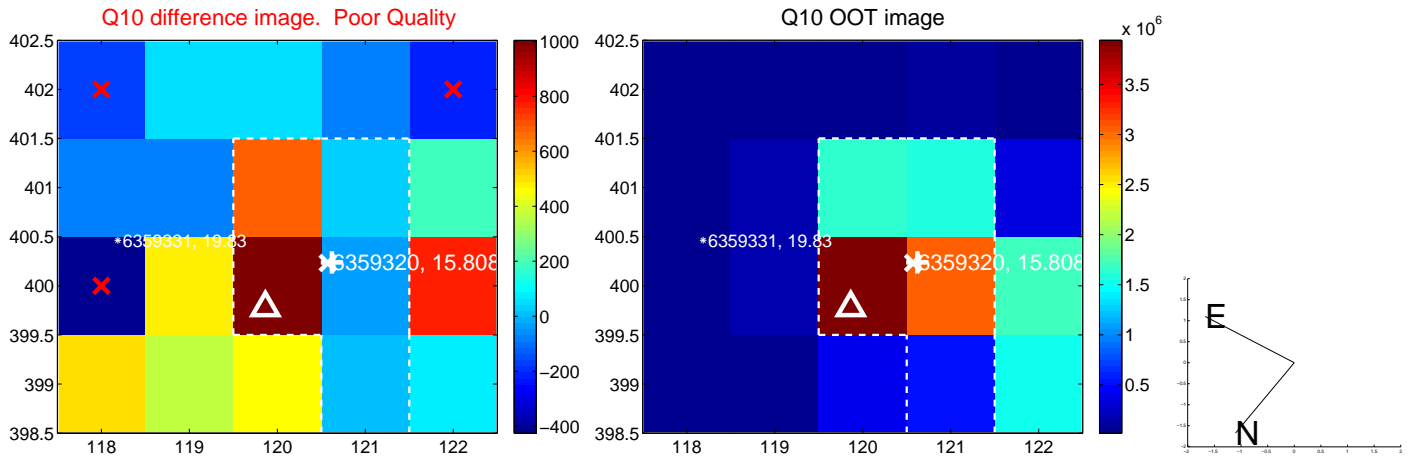
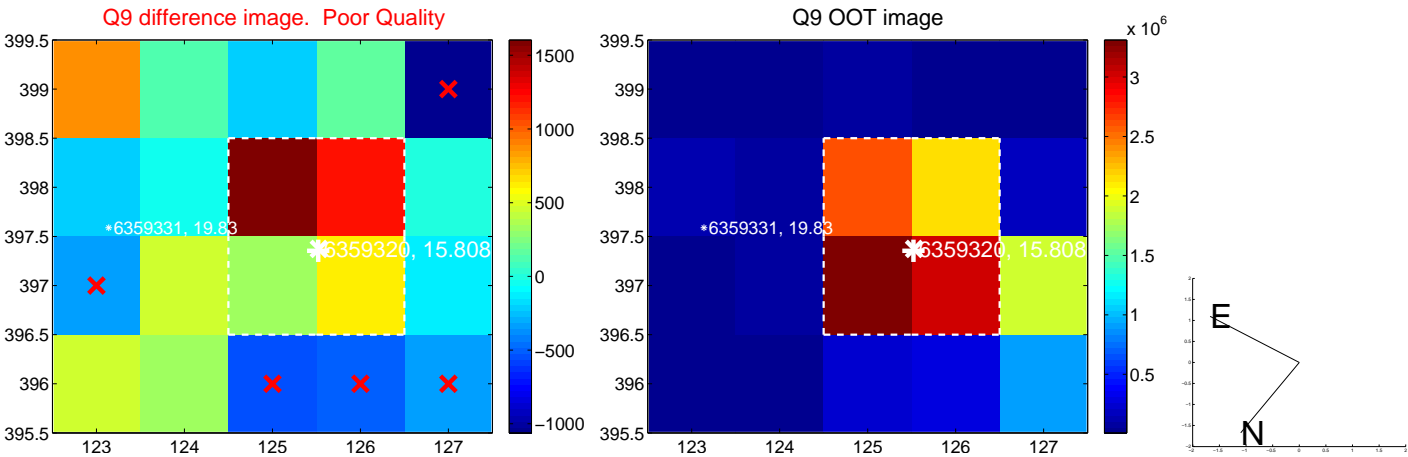
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



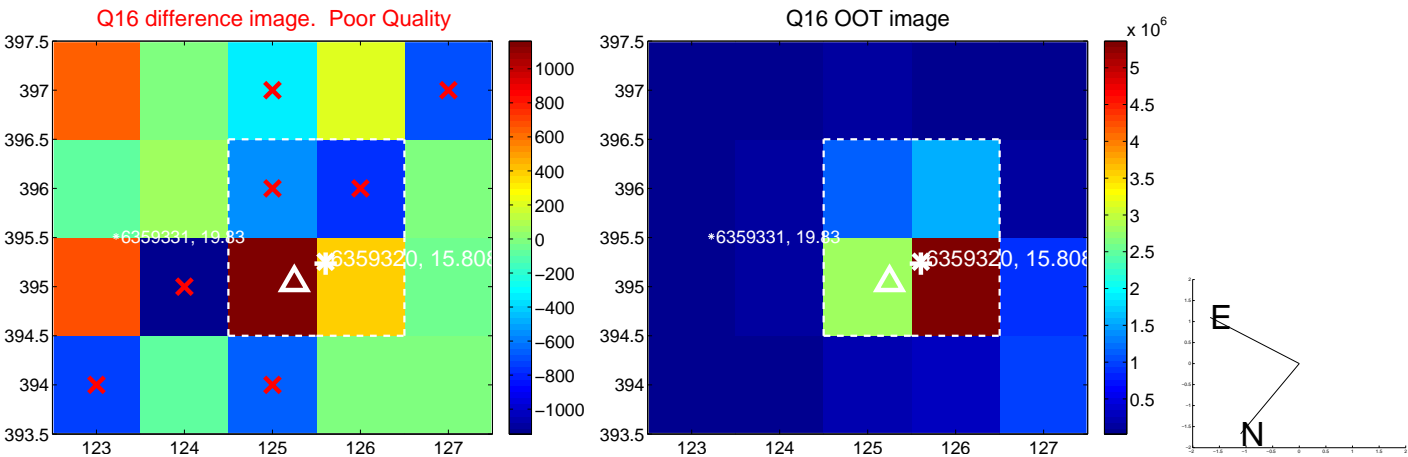
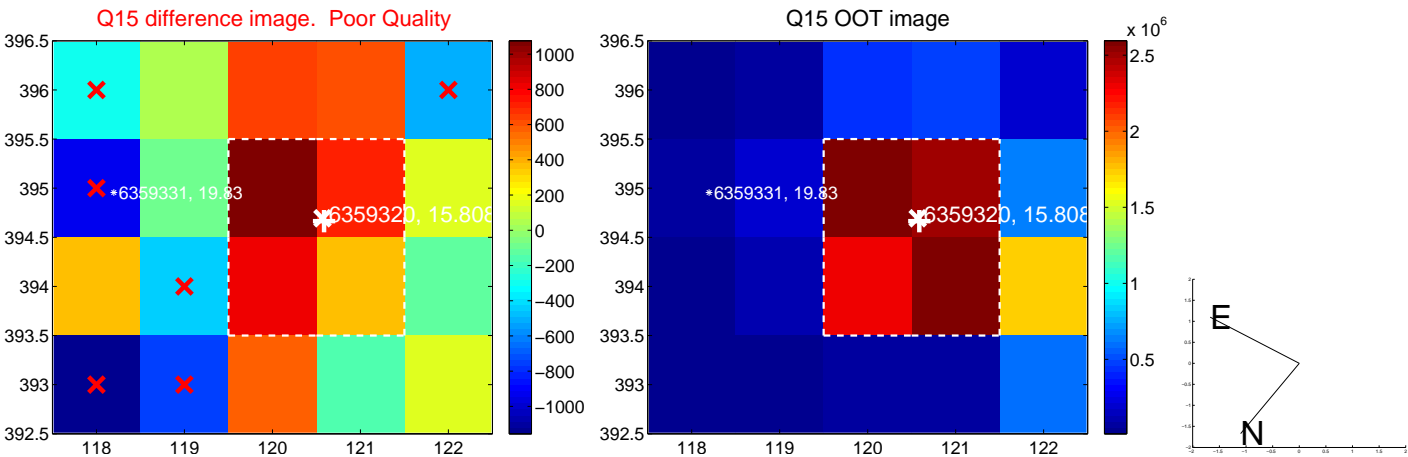
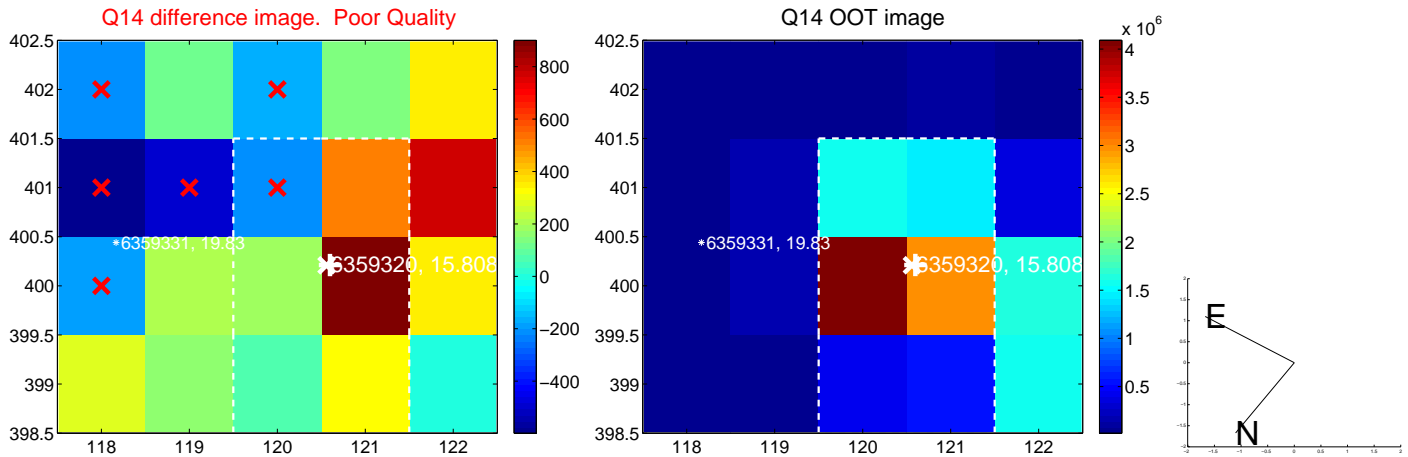
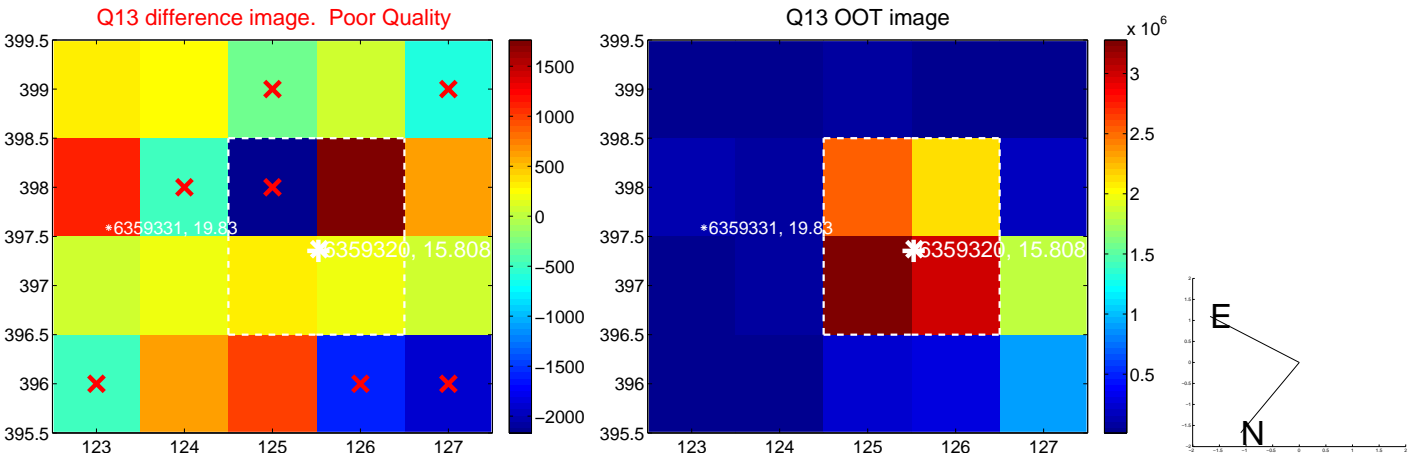
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



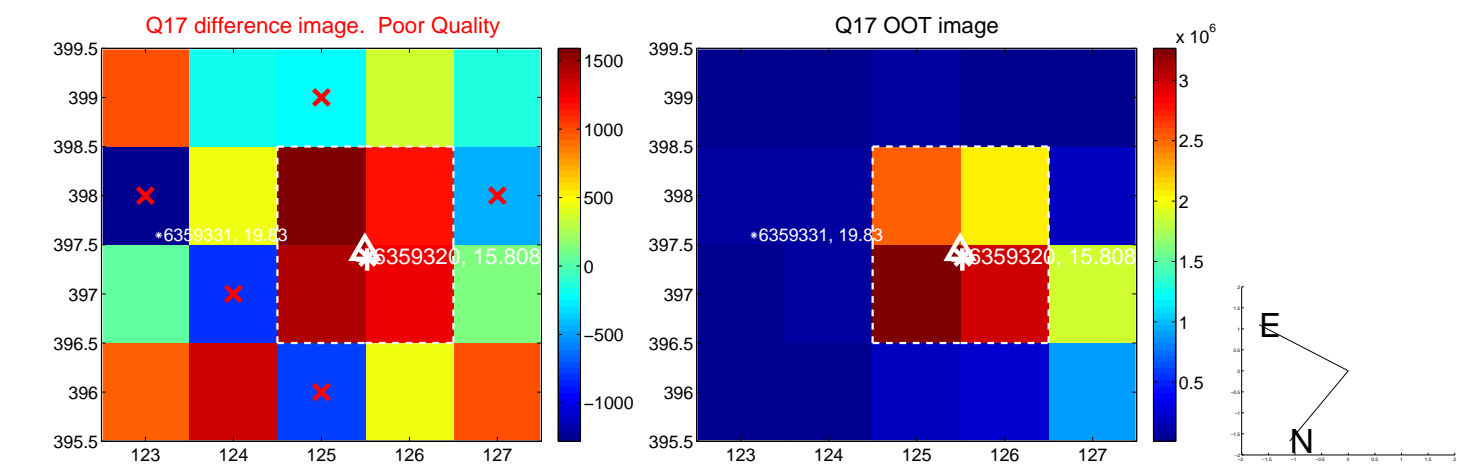
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



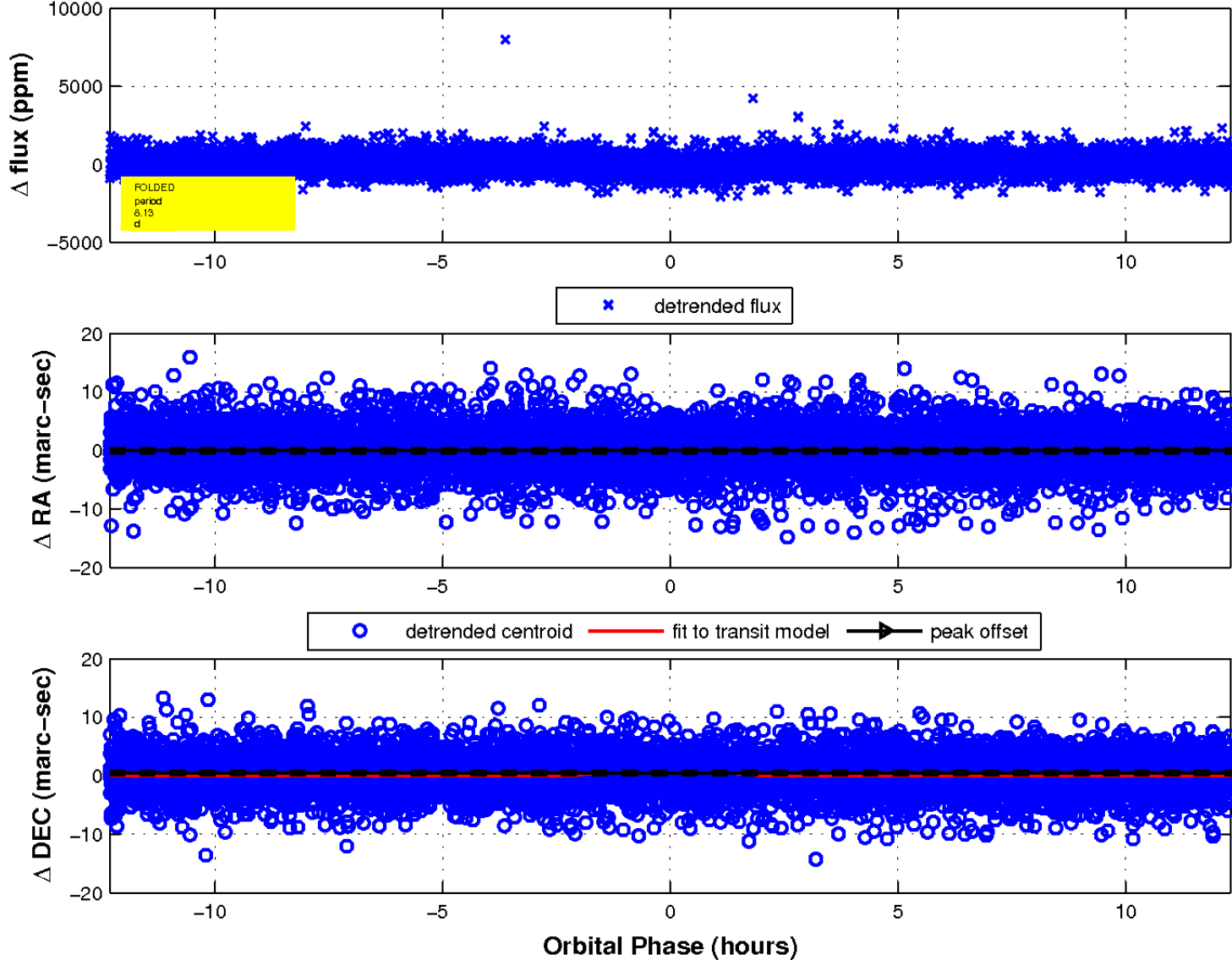
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

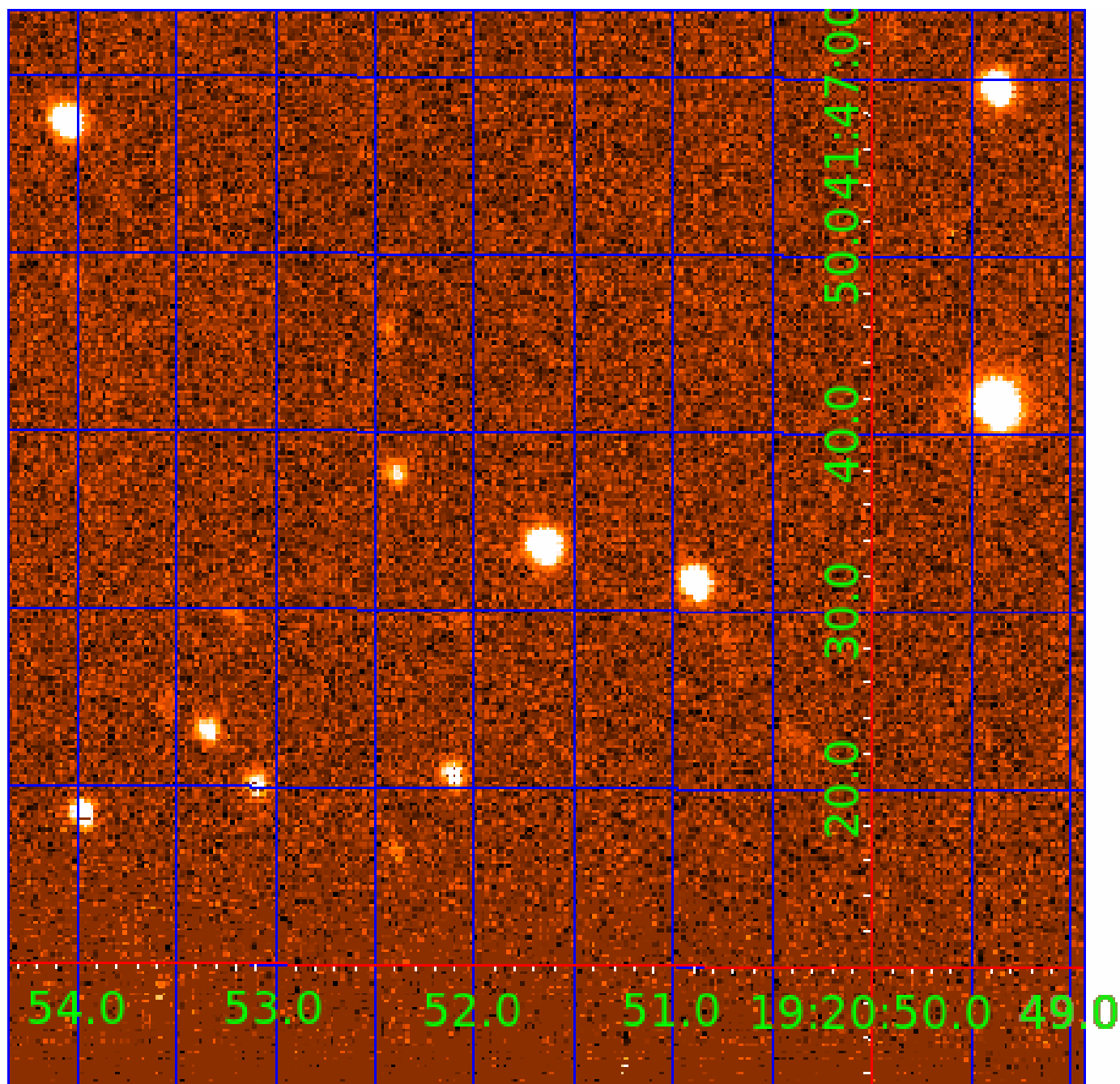


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 006359320

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})
006359320-01	OBS	1127.01	5.326613	133.414459	597.9	3.683	27.6	29.6	0.92	5831	2.67	243.65
006359320-02	OBS	1127.02	8.128041	139.226494	272.6	4.104	10.9	11.3	0.92	5831	1.77	138.69
006359320-03	OBS	1127.03	2.836701	132.548196	150.2	3.035	9.0	9.3	0.92	5831	1.30	564.45

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006359320-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006359320-02	OBS	PC	1.00	0	0	0	0	CENT_FEW_MEAS
006359320-03	OBS	PC	1.00	0	0	0	0	CENT_FEW_DIFFS

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

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

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

Ephemeris Match Information For 006359320-03

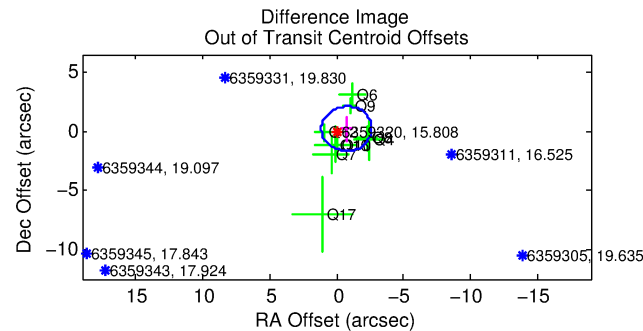
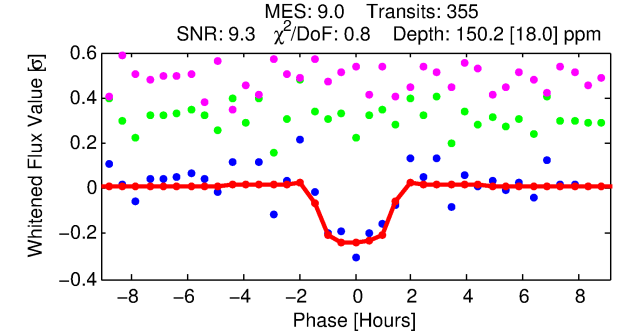
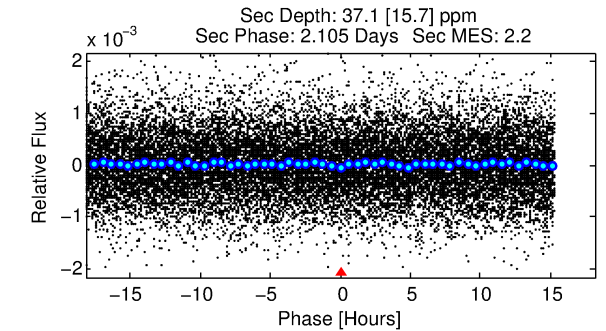
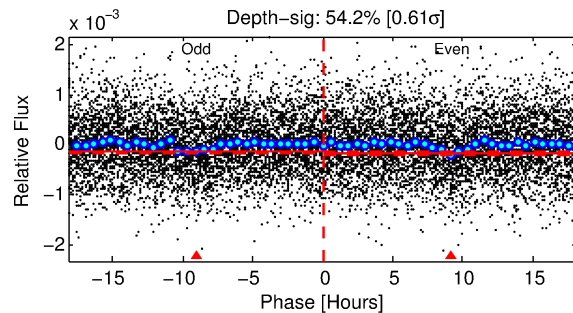
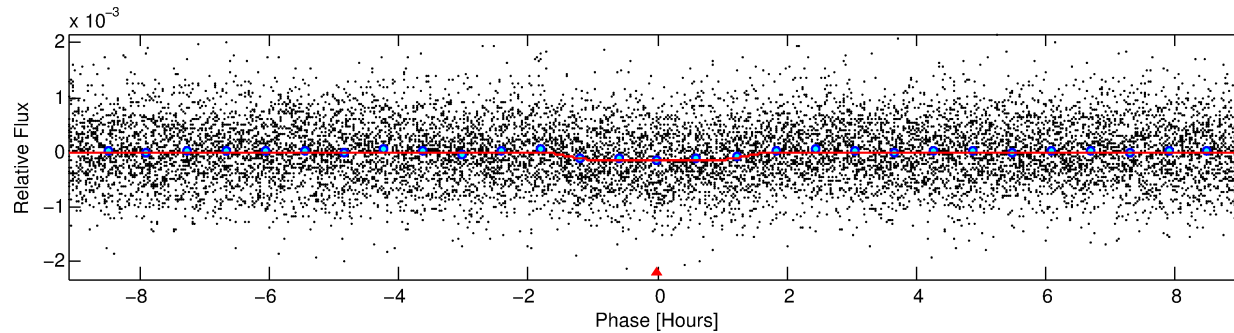
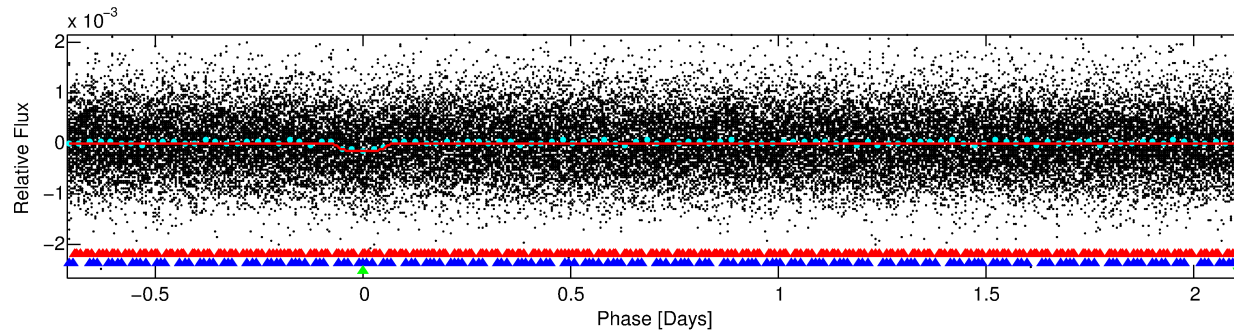
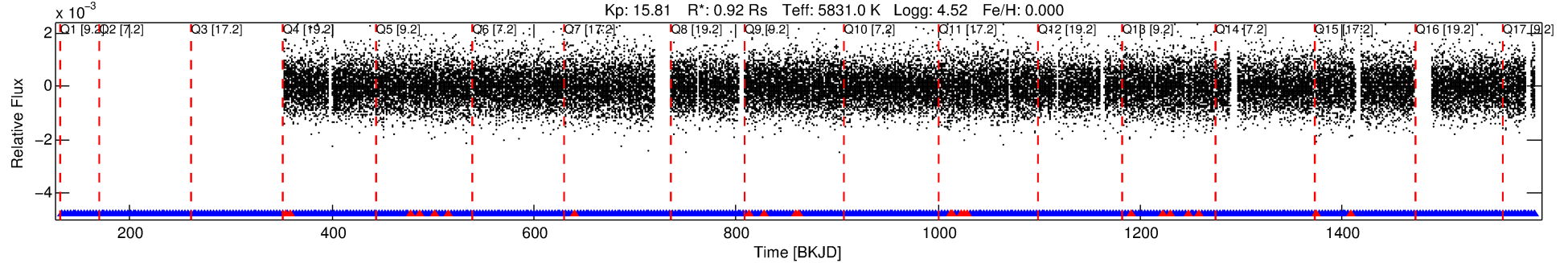
No Significant Match Found

DV One-Page Summary

KIC: 6359320 Candidate: 3 of 3 Period: 2.837 d

KOI: K01127.03 Corr: 0.988

Kp: 15.81 R*: 0.92 Rs Teff: 5831.0 K Logg: 4.52 Fe/H: 0.000



DV Fit Results:

Period = 2.83670 [0.00002] d
Epoch = 132.5482 [0.0049] BKJD
Rp/R* = 0.0129 [0.0110]
a/R* = 3.94 [14.76]
b = 0.86 [1.24]
Seff = 564.44 [234.88]
Teq = 1243 [129] K
Rp = 1.30 [1.18] Re
a = 0.0395 [0.0107] AU
Ag = 18.89 [33.96] [0.53σ]
Teff = 4006 [1762] K [1.56σ]

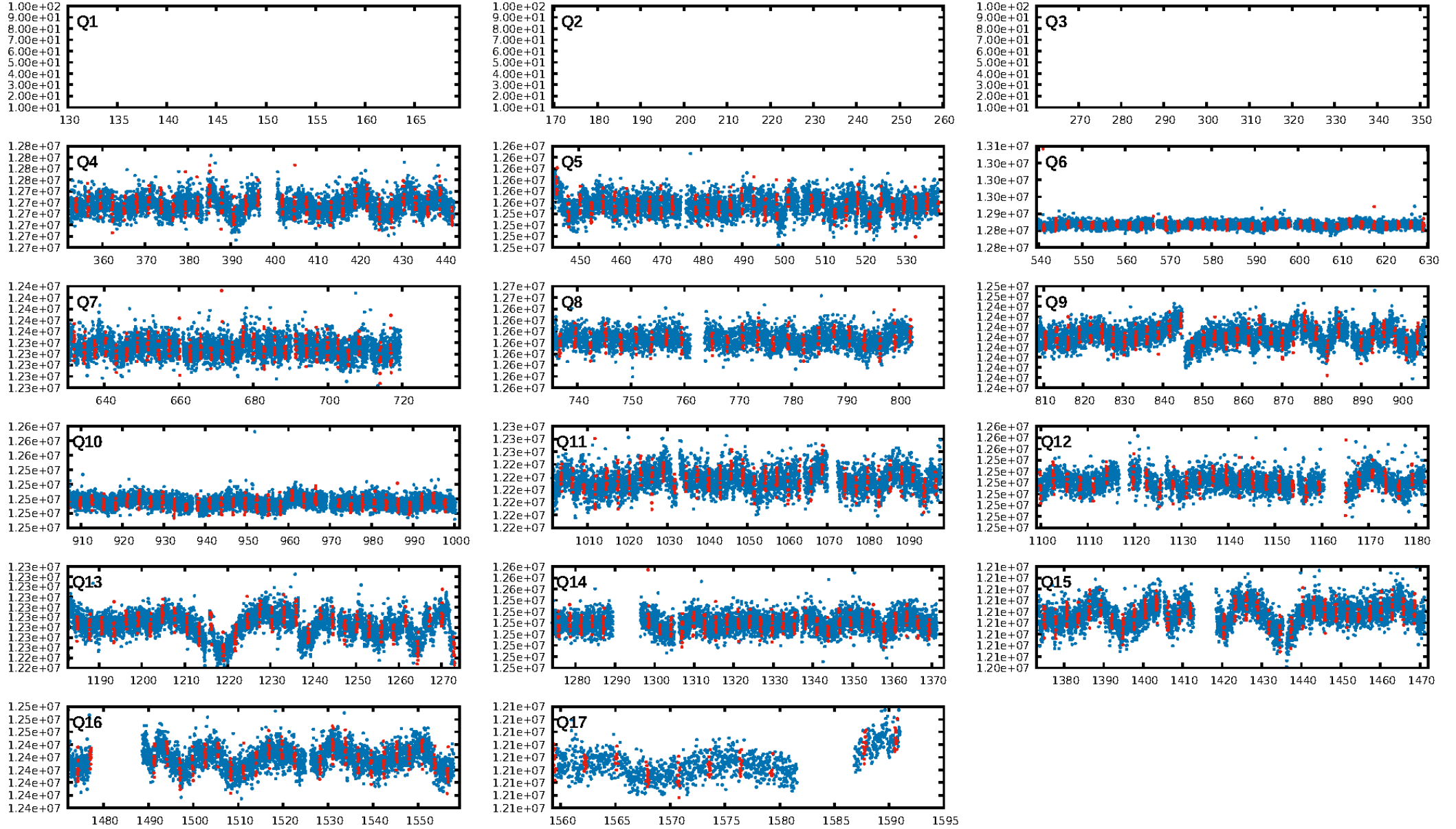
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [12.52σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.04e-19
RollingBand-fgt: 0.93 [322/345]
GhostDiagnostic-chr: 1.298
Centroid-sig: 5.5%
Centroid-so: 3.239 arcsec [2.16σ]
OotOffset-rm: 0.770 arcsec [1.23σ]
KicOffset-rm: 0.855 arcsec [1.52σ]
OotOffset-st: 2/1/4/2 [9]
KicOffset-st: 2/1/4/2 [9]
DiffImageQuality-fgm: 0.22 [2/9]
DiffImageOverlap-fno: 1.00 [14/14]

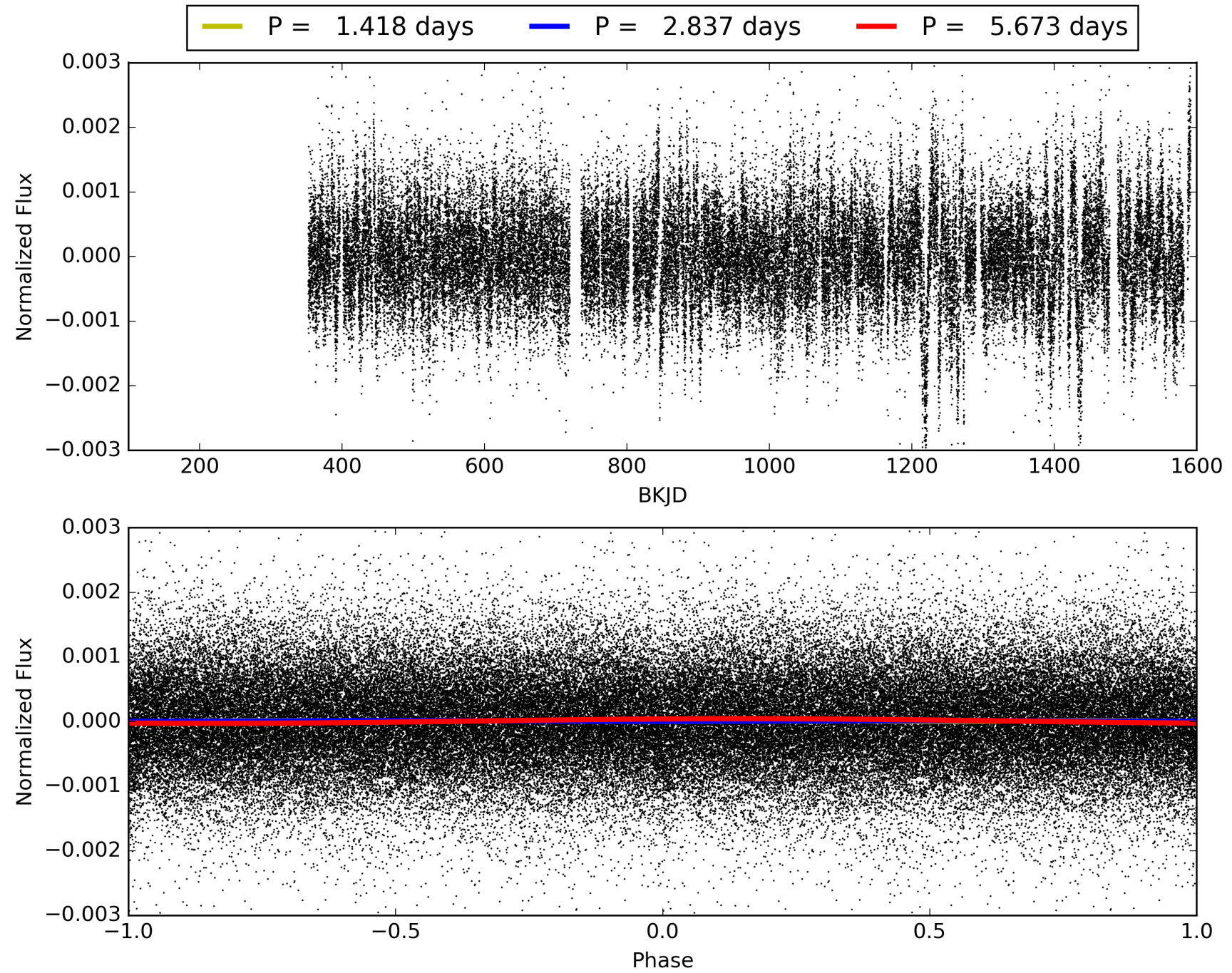
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 04:13:37 Z

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

TCE 006359320-03, PDC Light Curves

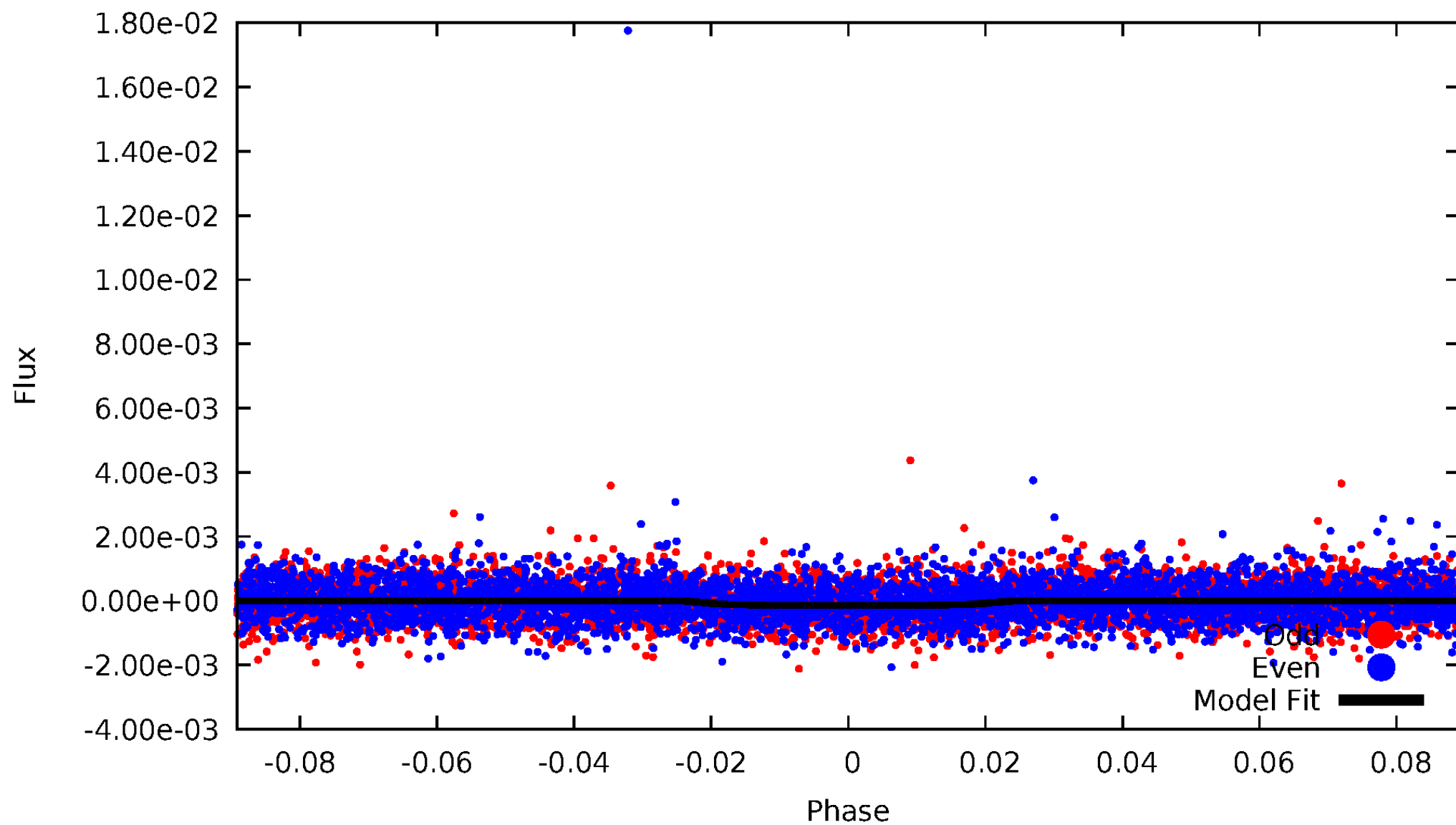


TCE 006359320-03



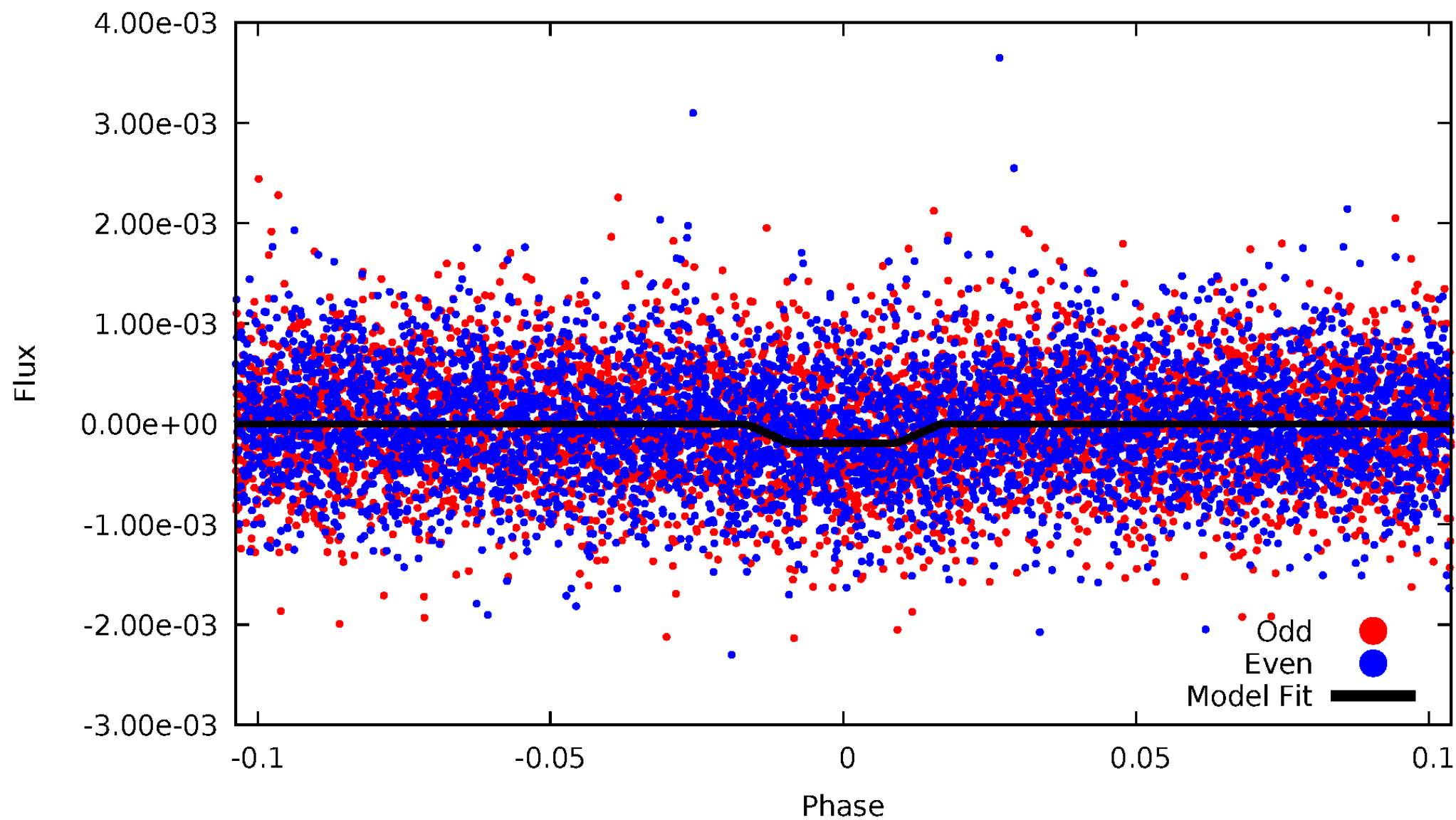
DV Odd/Even

TCE 006359320-03

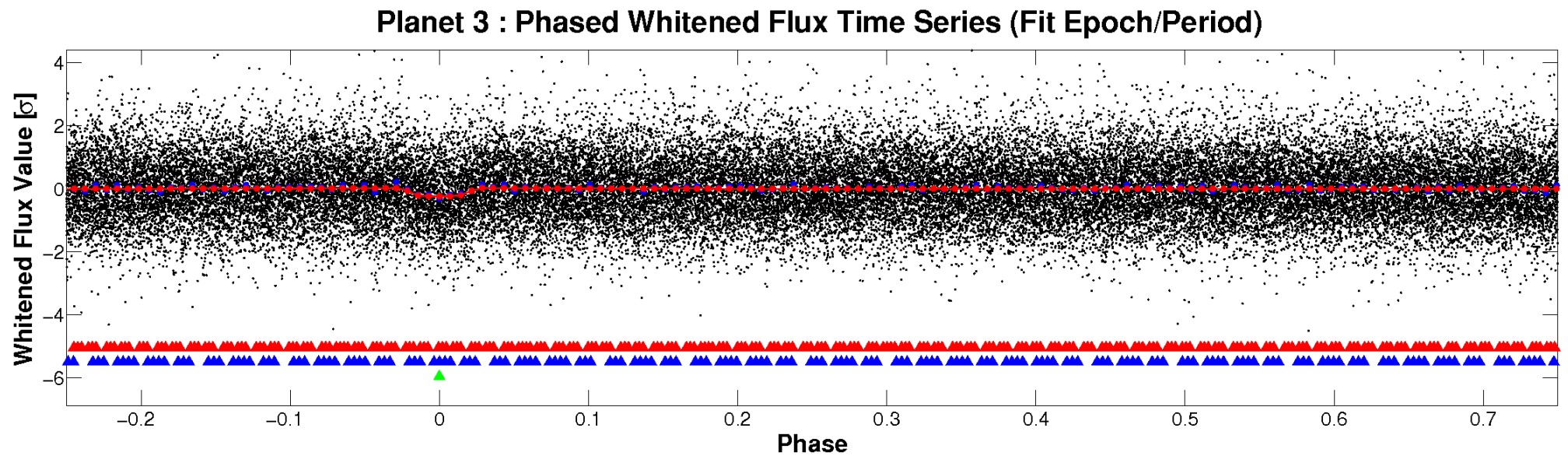
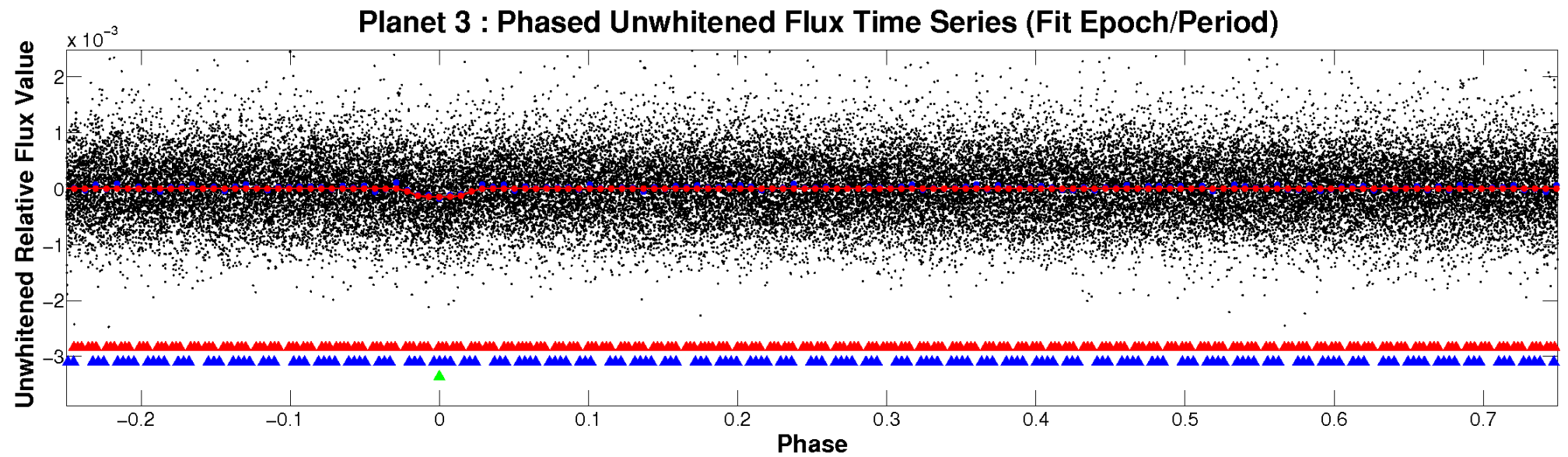


ALT Odd/Even

TCE 006359320-03

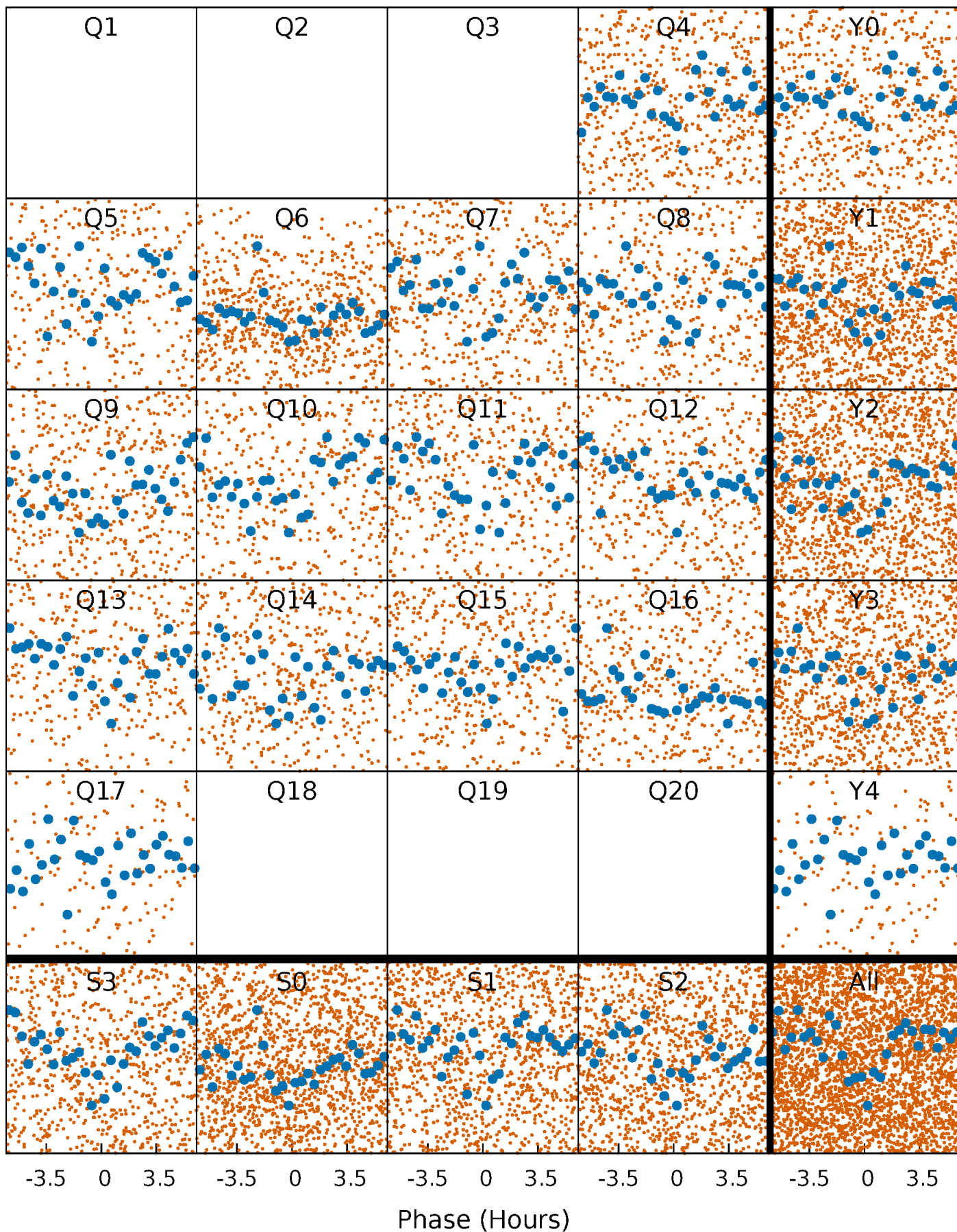


Non-Whitened Vs. Whitened Light Curve



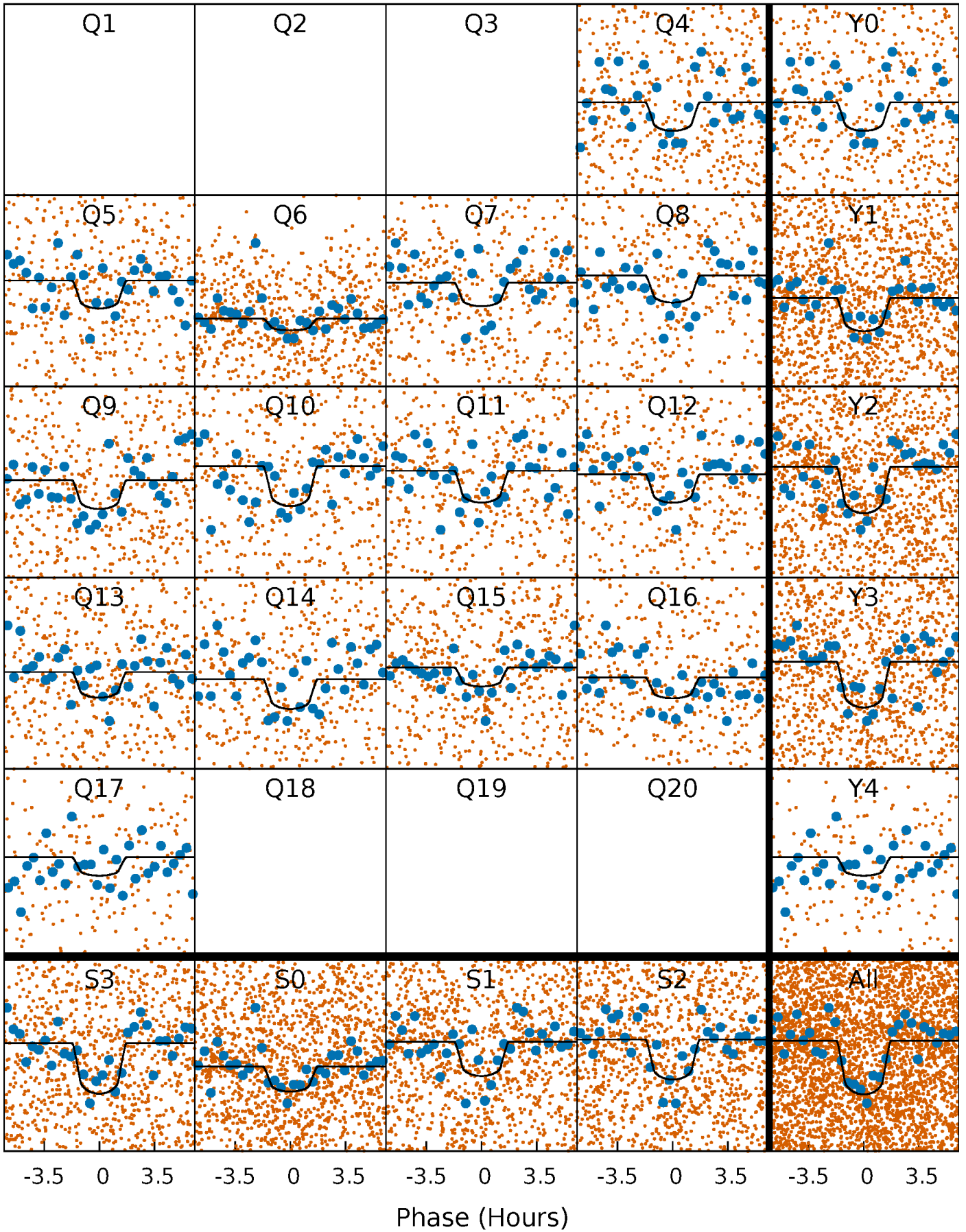
PDC Quarter-Phased Transit Curves

TCE 006359320-03 P= 2.836701 Days $T_0=132.548196$ (BKJD)



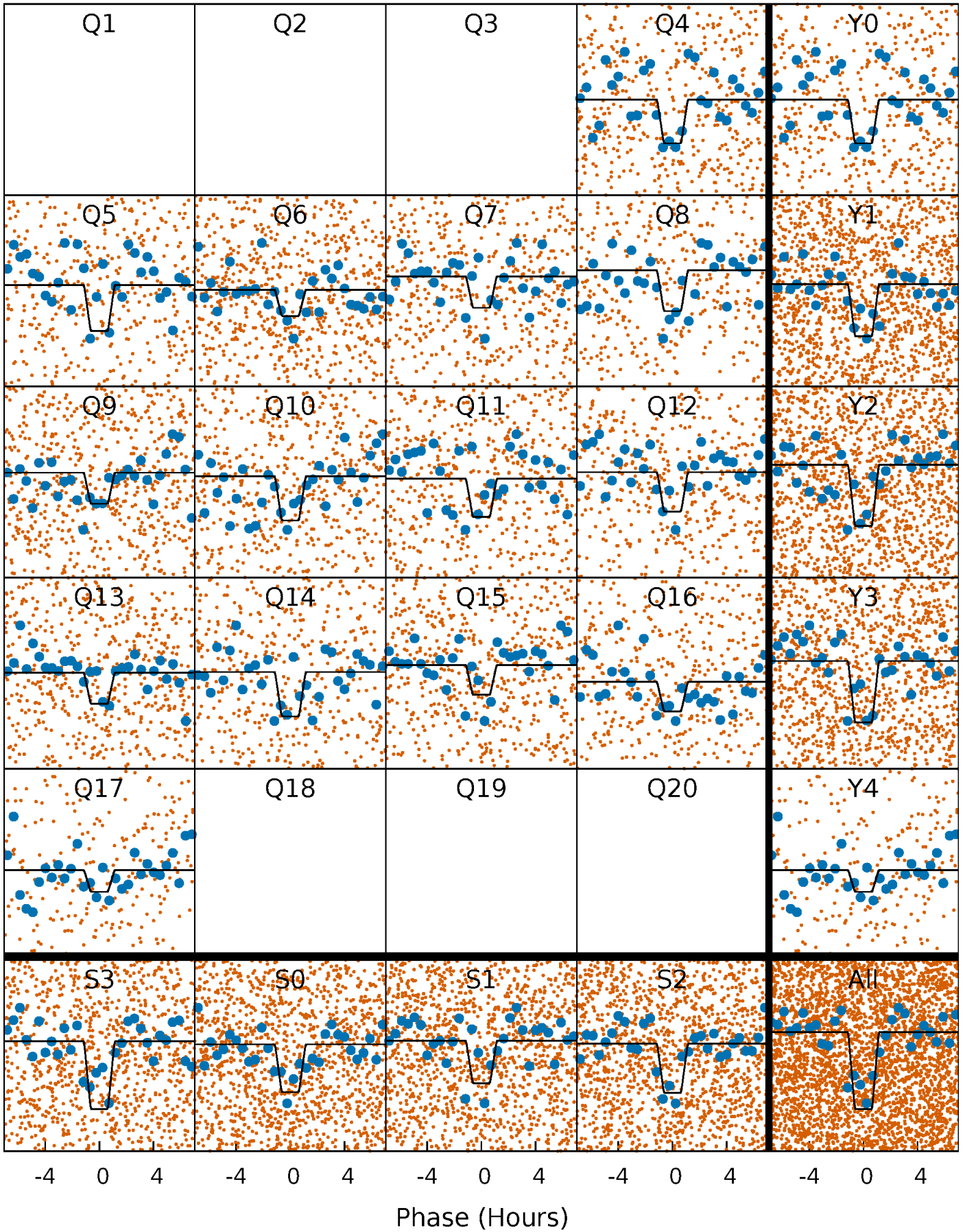
DV Quarter-Phased Transit Curves

TCE 006359320-03 $P = 2.836701$ Days $T_0 = 132.548196$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

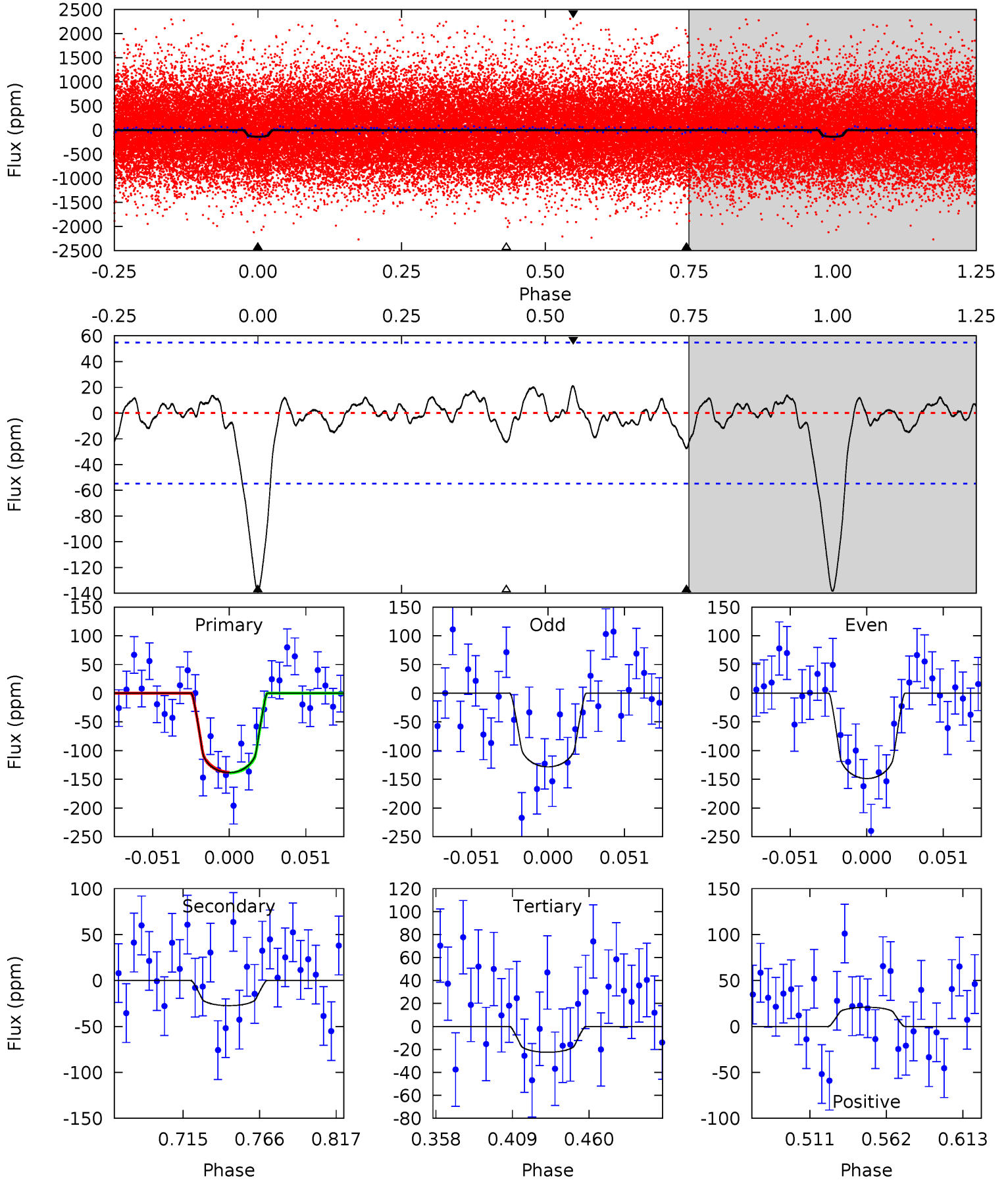
TCE 006359320-03 P= 2.836689 Days $T_0=132.553419$ (BKJD)



DV Model-Shift Uniqueness Test

006359320-03, P = 2.836701 Days, E = 132.548196 Days

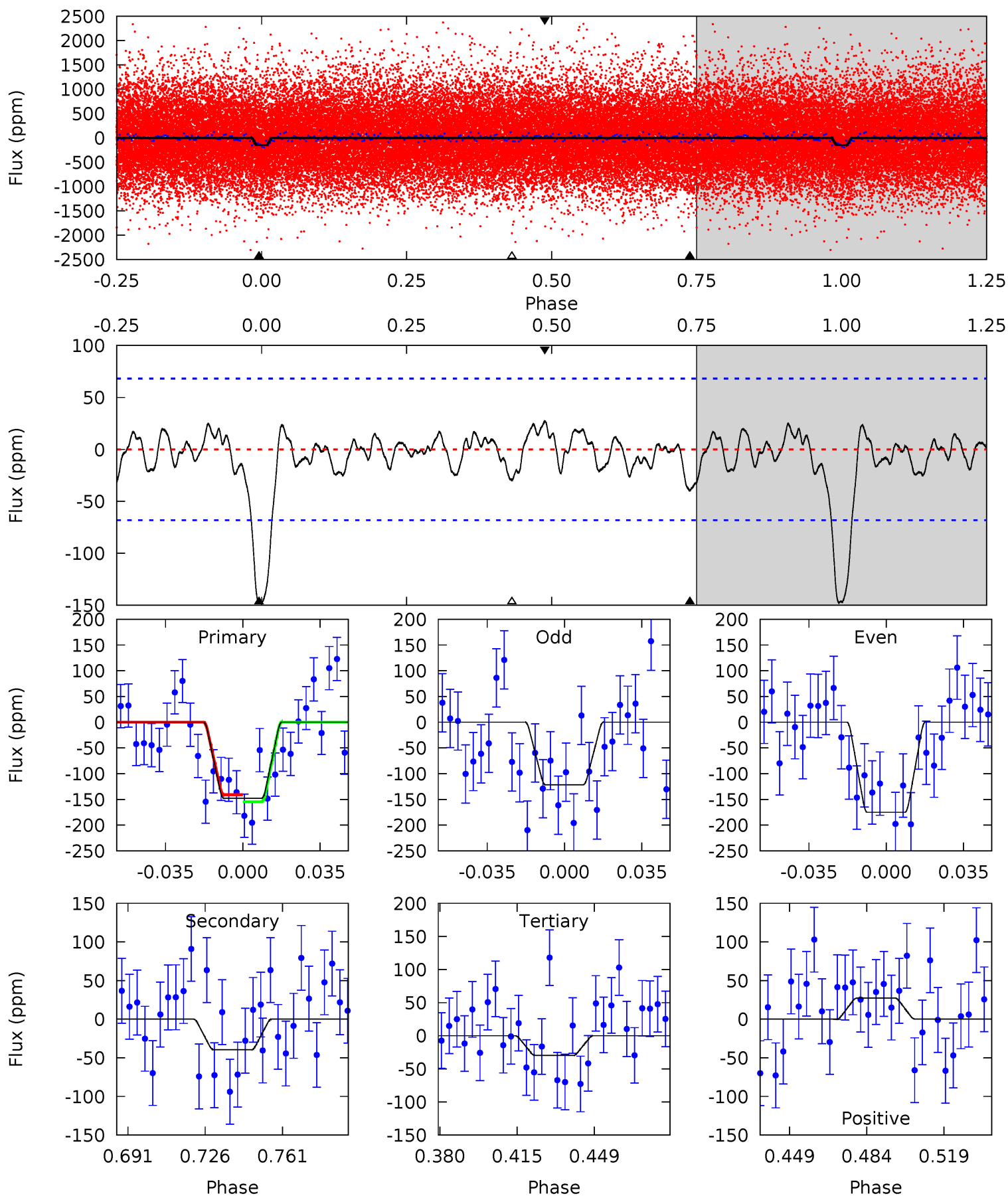
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.9	2.35	1.93	1.79	4.70	1.95	0.73	9.94	10.1	0.42	0.56	0.88	0.92	0.13	0.05



Alt Model-Shift Uniqueness Test

006359320-03, P = 2.836689 Days, E = 132.553419 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.4	2.78	2.09	1.92	4.78	2.11	0.91	8.28	8.46	0.68	0.86	1.88	0.88	0.16	0.48



Stellar Parameters For KIC 006359320

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5831^{+184}_{-205}	$4.517^{+0.038}_{-0.212}$	$0.000^{+0.250}_{-0.300}$	$0.921^{+0.301}_{-0.094}$	$1.016^{+0.115}_{-0.127}$	$1.834^{+0.376}_{-0.958}$
	+3%/-4%	+1%/-5%	+inf%/-inf%	+33%/-10%	+11%/-12%	+20%/-52%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 006359320-03 / KOI 1127.03

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-27 ± 12	$1.59^{+1.11}_{-0.93}$	1788^{+131}_{-99}	3786^{+1508}_{-689}	$9.083^{+39.962}_{-6.571}$
Alt.	-40 ± 14	$1.63^{+1.13}_{-0.99}$	1791^{+118}_{-88}	3953^{+1948}_{-648}	11^{+64}_{-7}

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

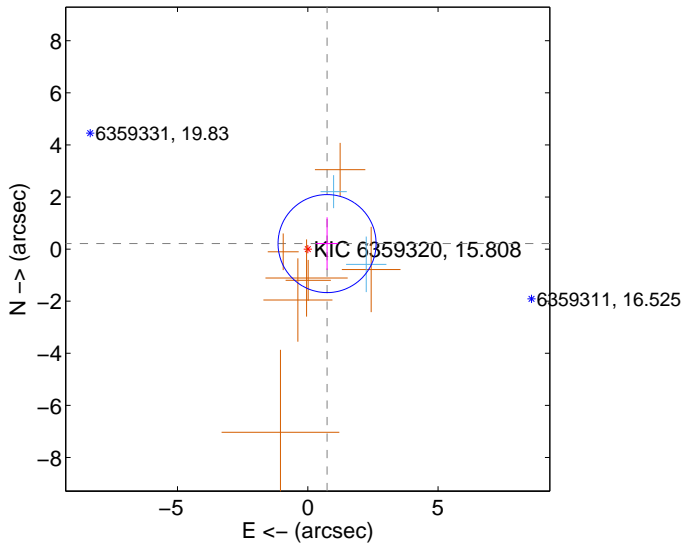
Supplemental centroid analysis for 006359320-03. Kepler magnitude: 15.81. Transit SNR 9.31

There are 2 quarters with good PRF difference image offsets

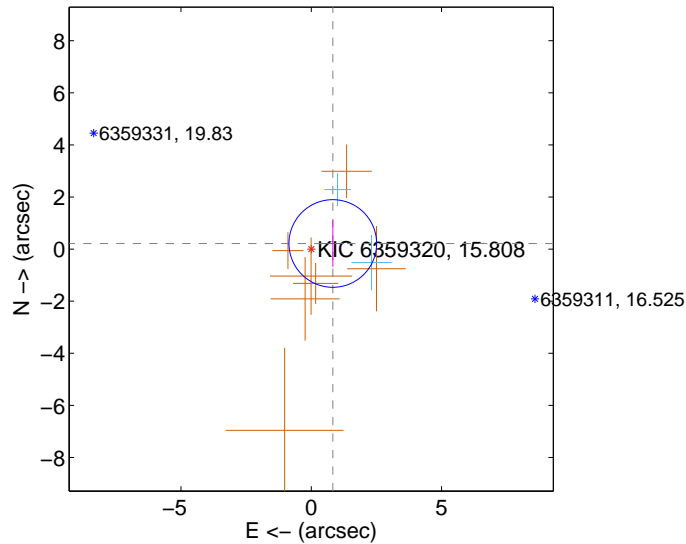
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.770 ± 0.627	1.23	-0.740 ± 0.426	0.211 ± 1.008
PRF-fit source offset from KIC position	0.855 ± 0.561	1.52	-0.827 ± 0.423	0.215 ± 0.892
photometric centroid source offset	3.24 ± 1.50	2.16	-3.04 ± 1.52	-1.12 ± 1.39

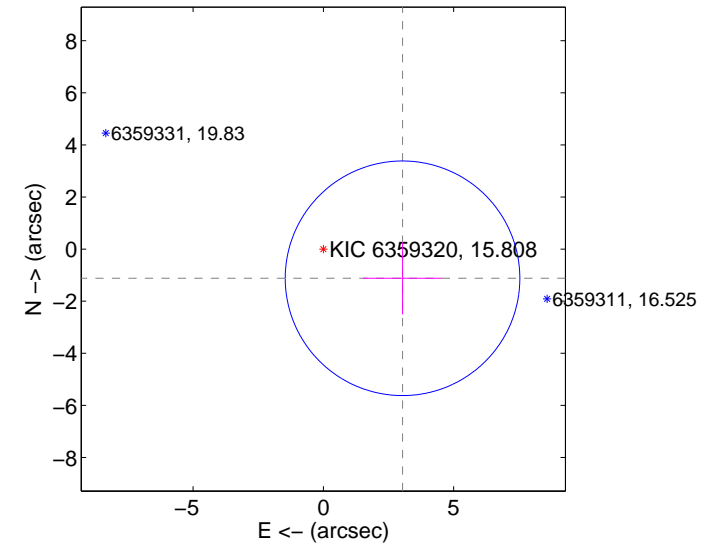
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

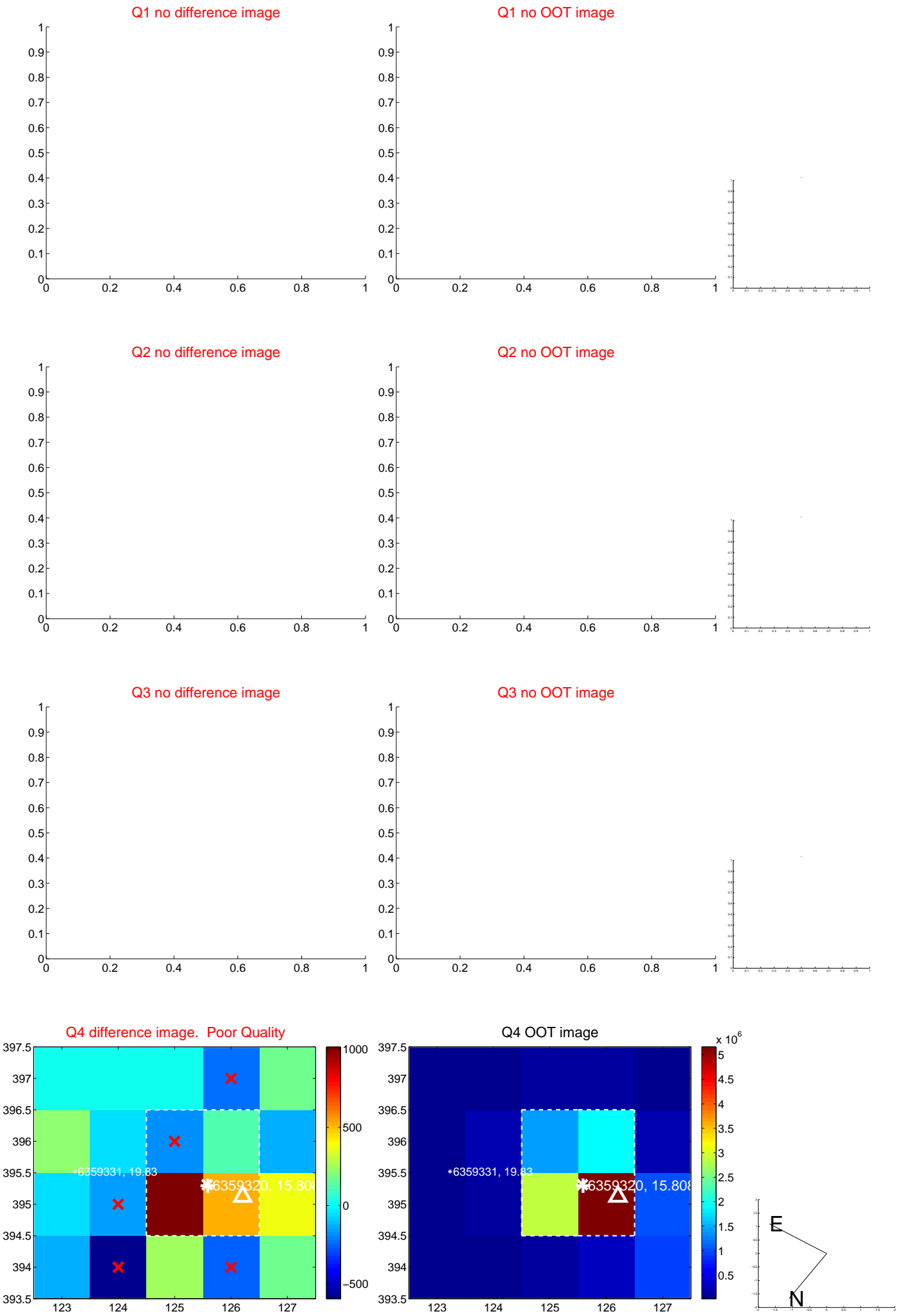


offset from photometric centroids

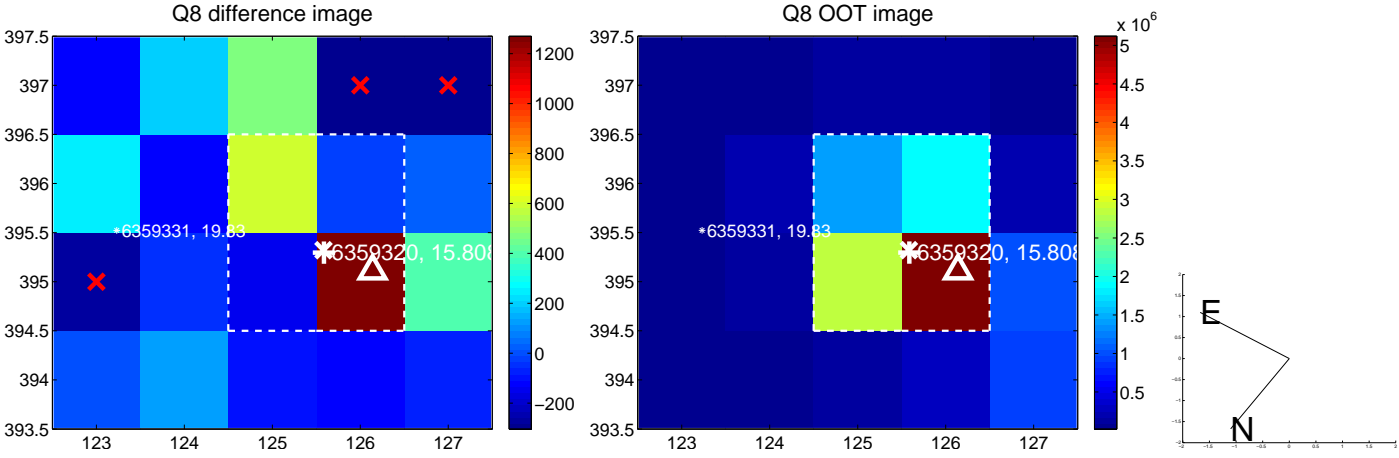
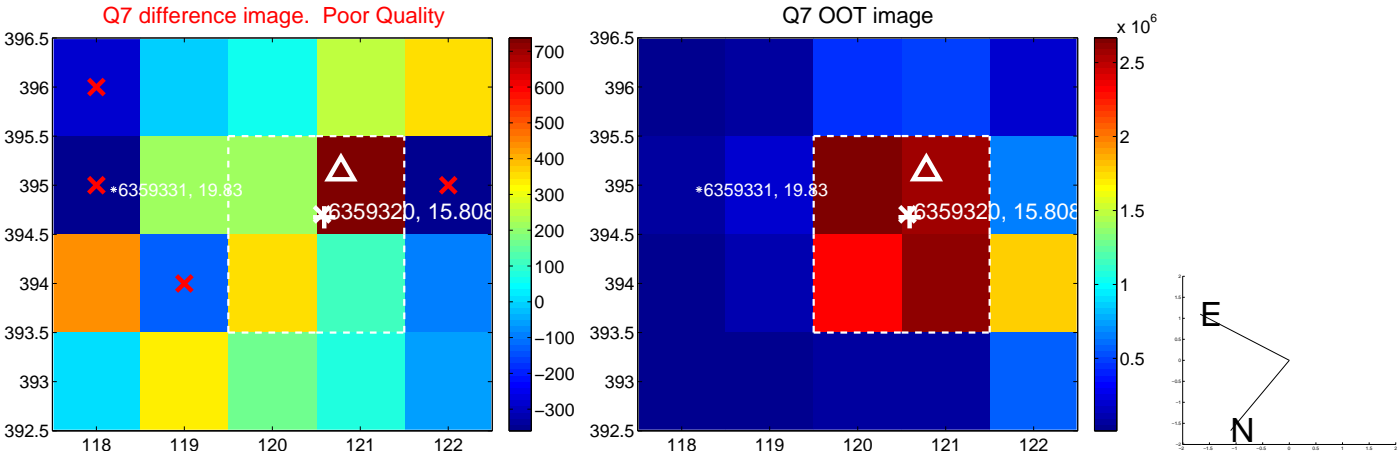
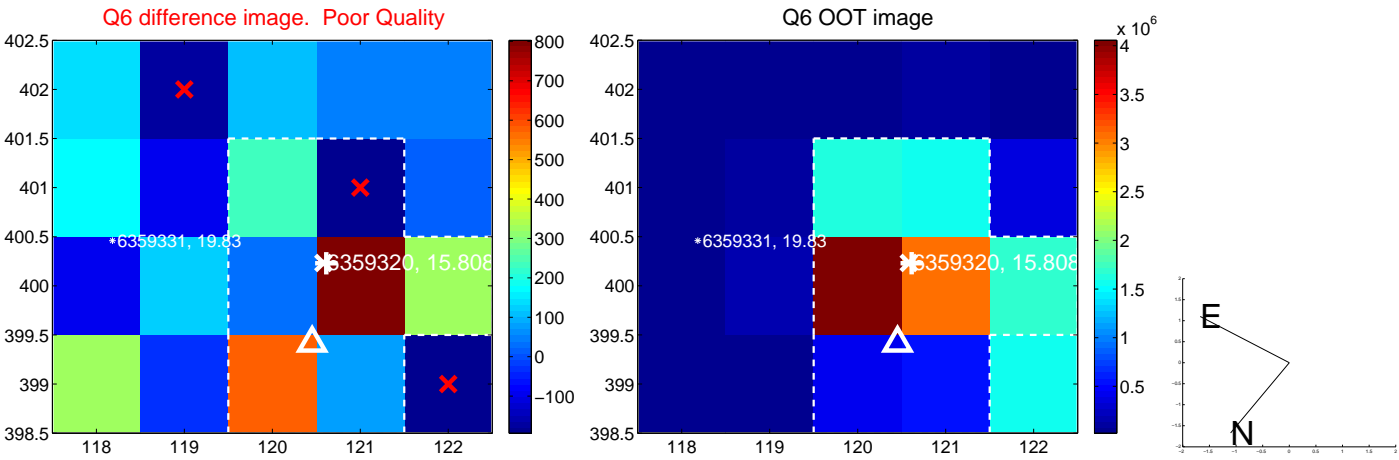
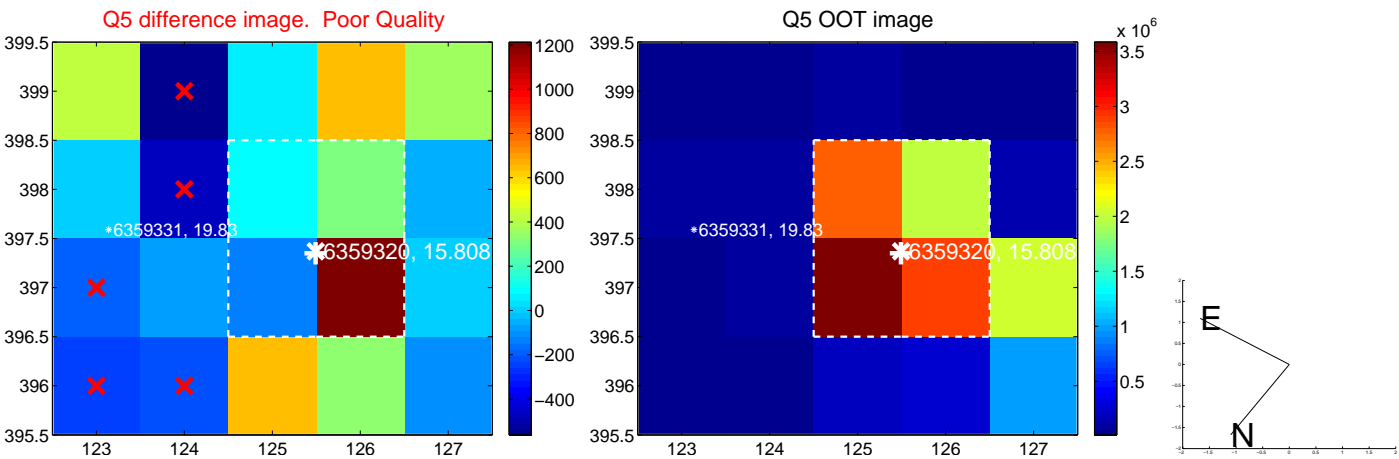


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

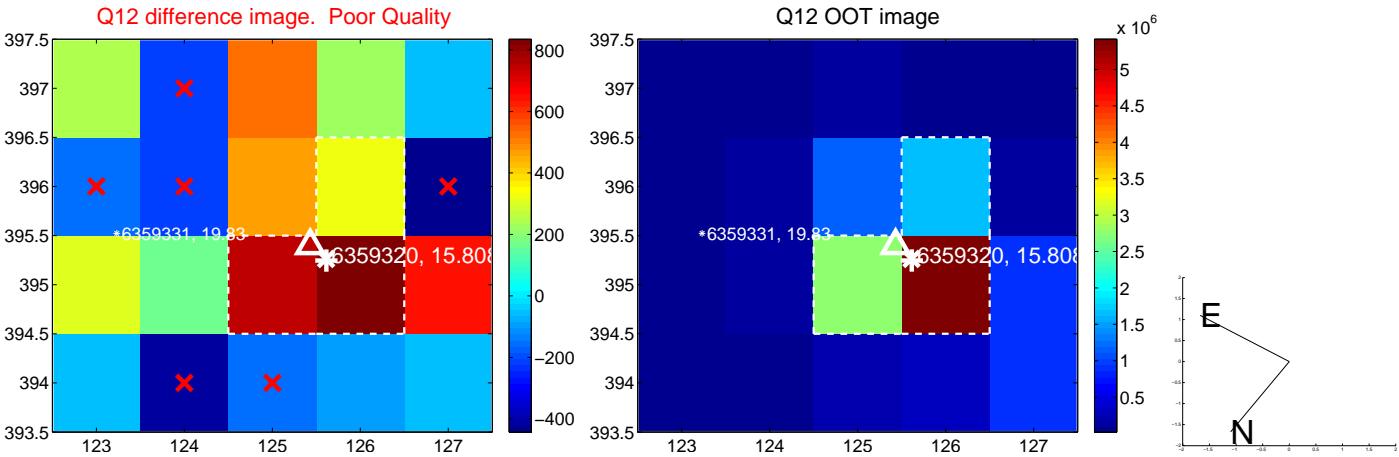
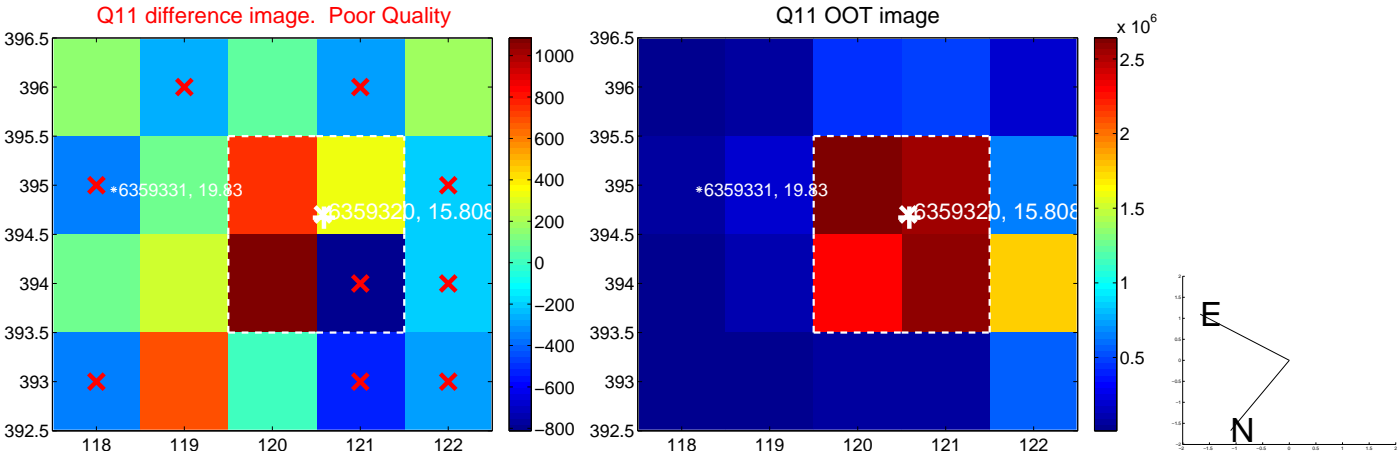
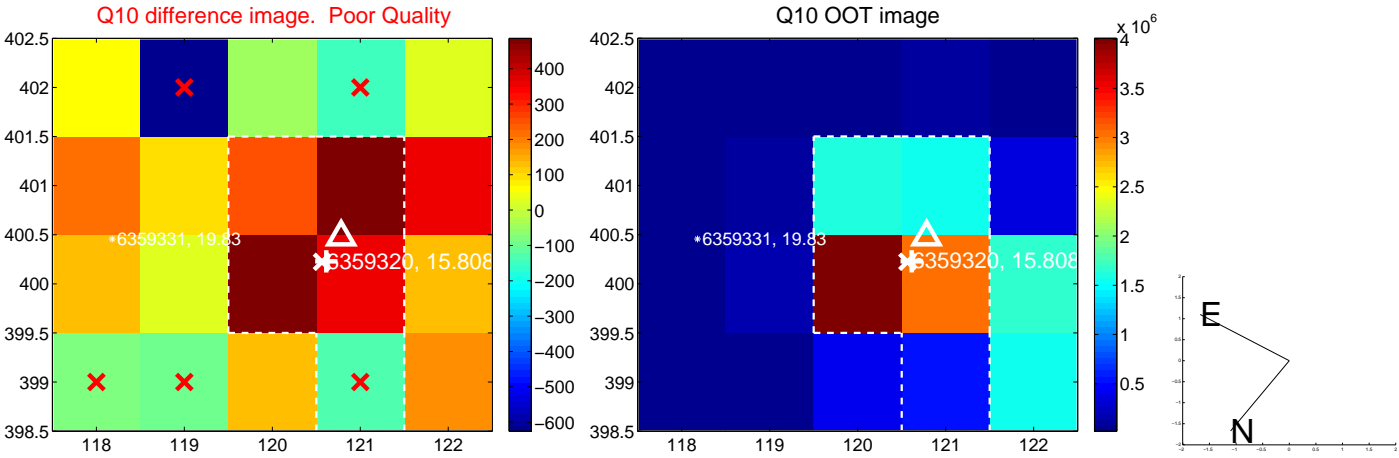
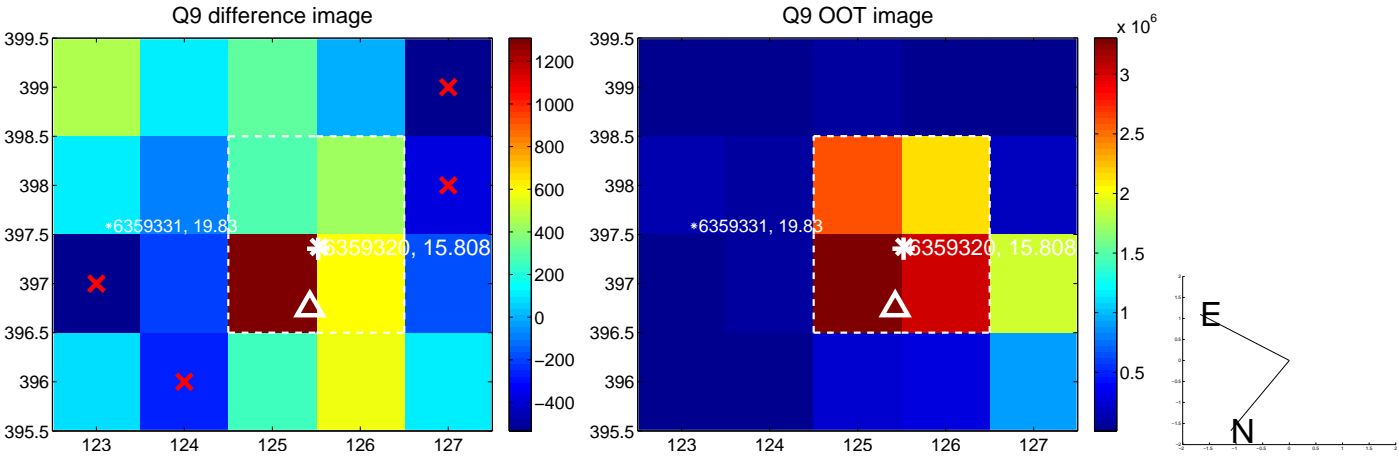
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



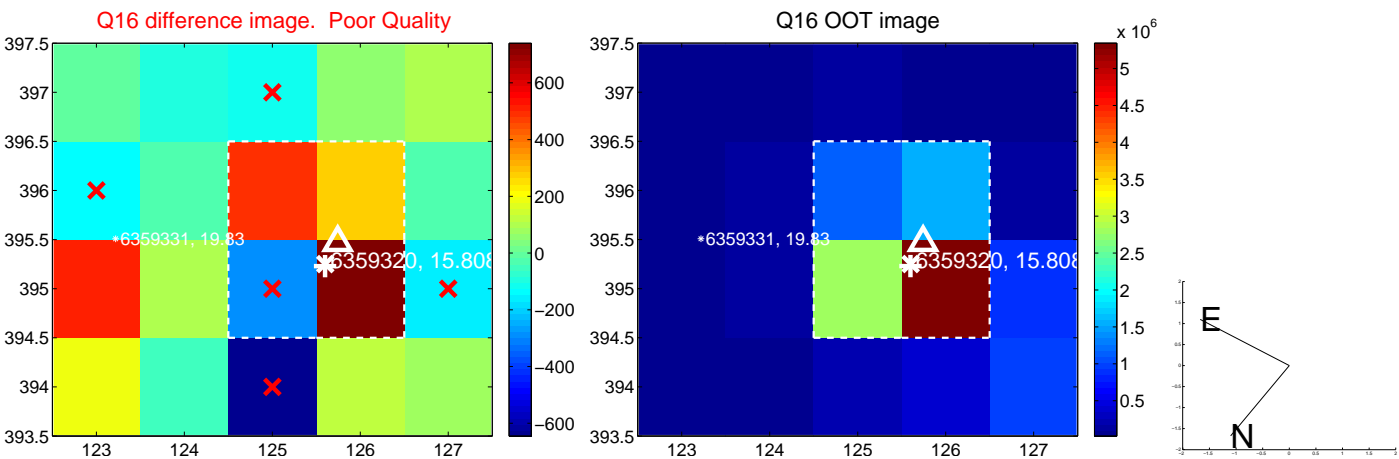
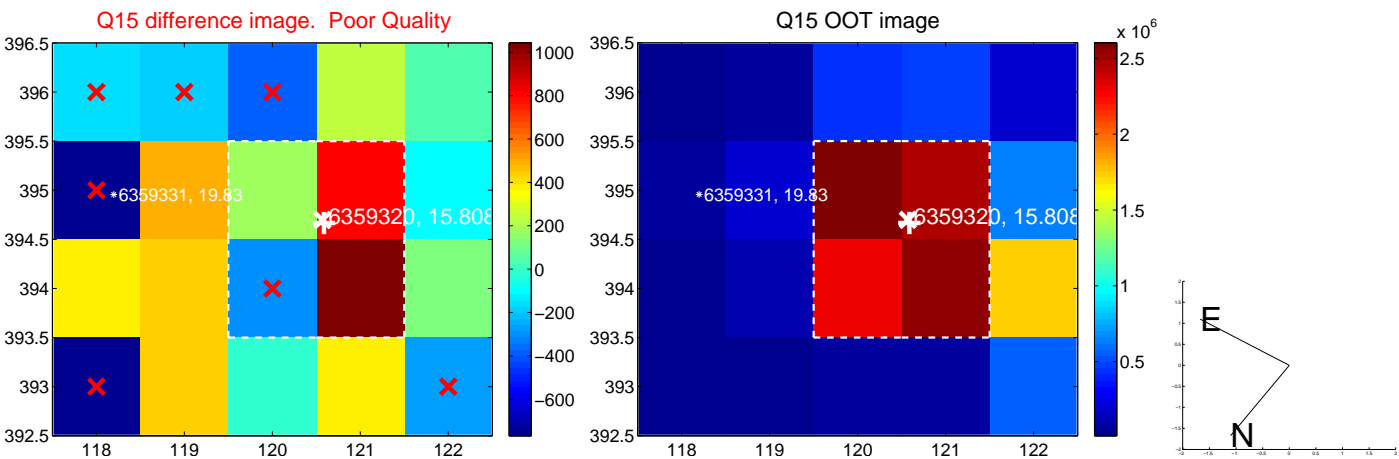
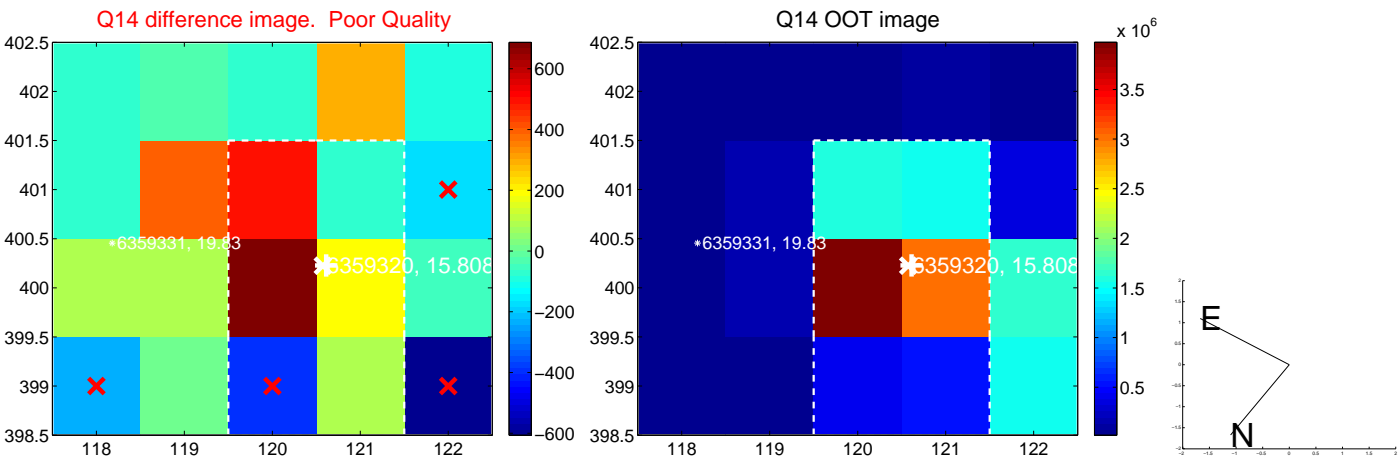
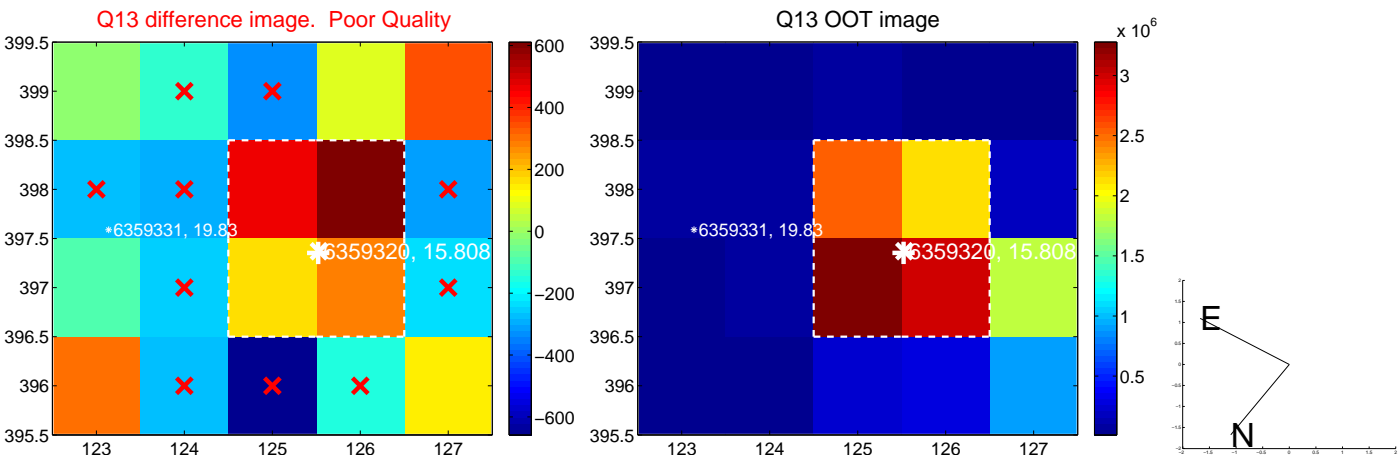
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



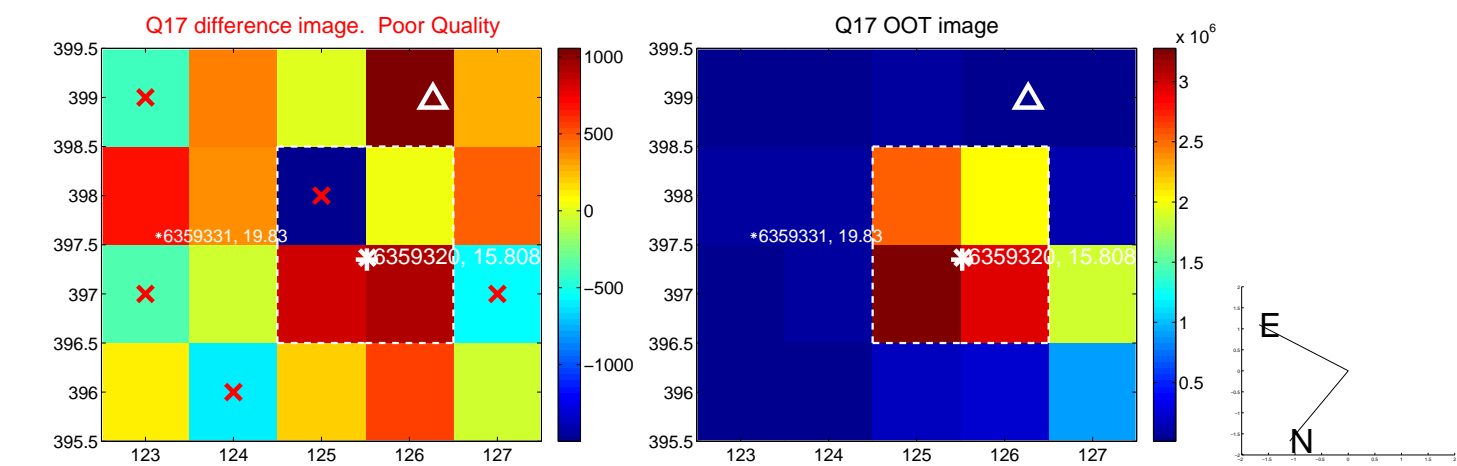
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



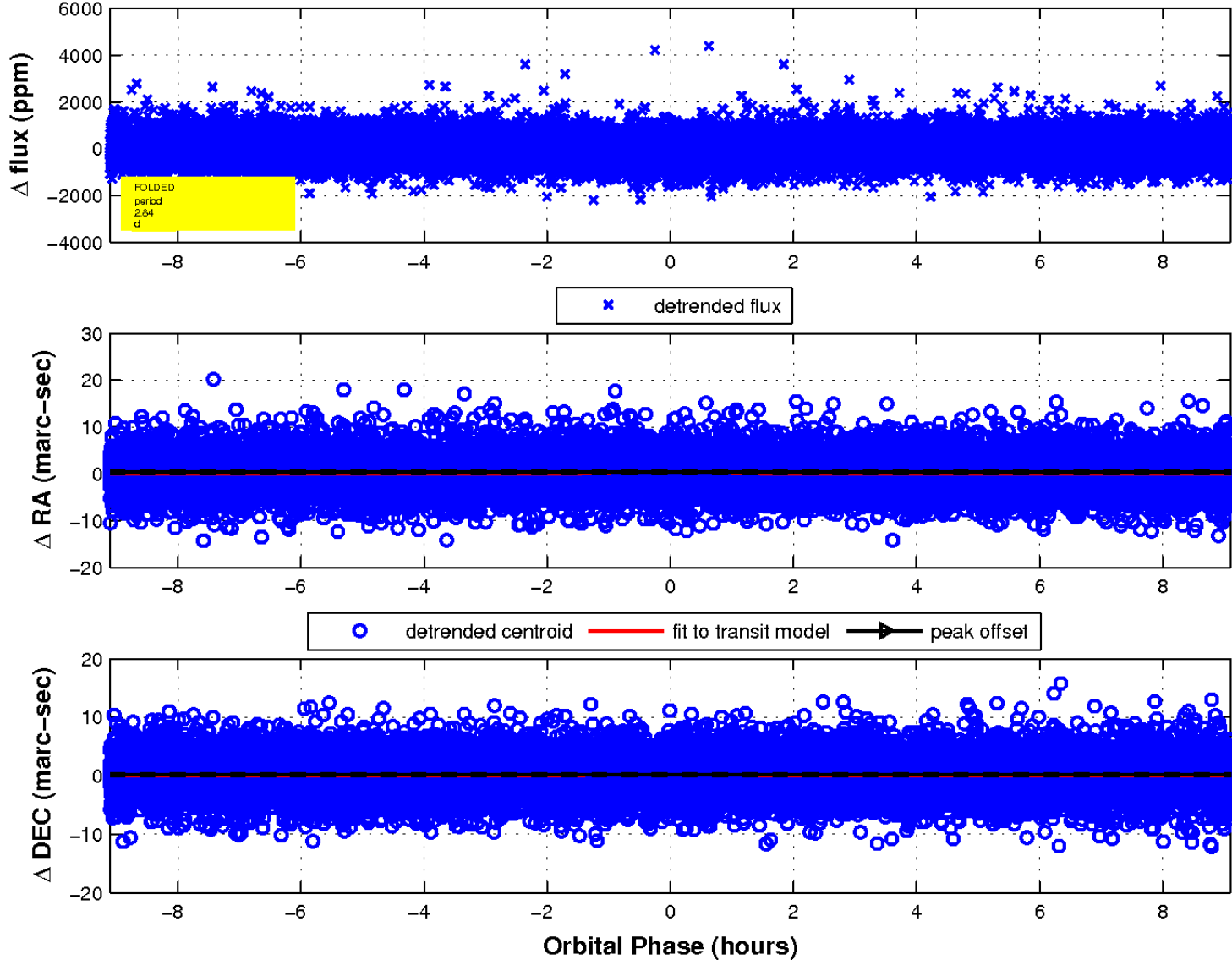
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 3 of 3



UKIRT Image

Declination

