

KIC 001434660

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})
001434660-01	OBS	No	3.693374	131.772765	21.1	16.707	9.0	6.5	2.66	7526	1.27	5954.53
001434660-02	OBS	No	155.635464	158.340396	417.1	34.912	17.1	14.6	2.66	7526	10.27	40.61
001434660-03	OBS	No	0.634203	131.574385	70.8	1.005	11.6	15.5	2.66	7526	2.53	62388.98
001434660-05	OBS	No	0.634198	131.786214	57.1	1.173	10.5	13.3	2.66	7526	2.33	62389.61

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
001434660-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
001434660-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—INCONSISTENT_TRANS—CENT_SATURATED
001434660-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
001434660-05	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

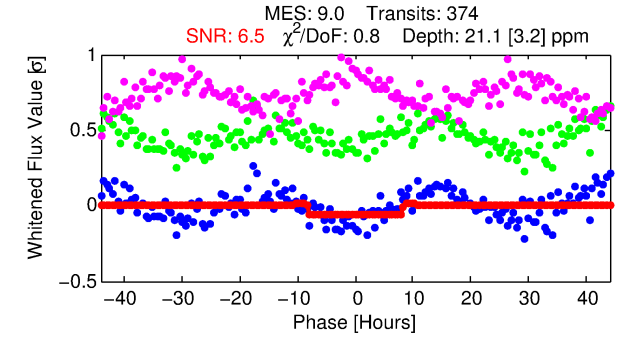
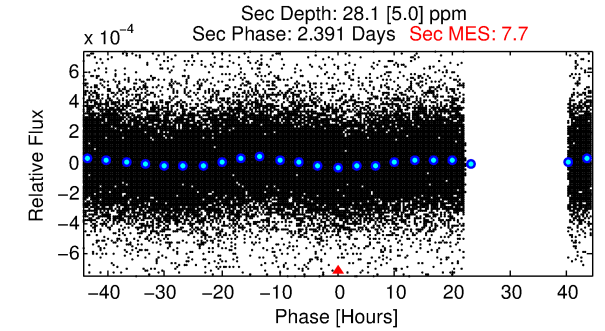
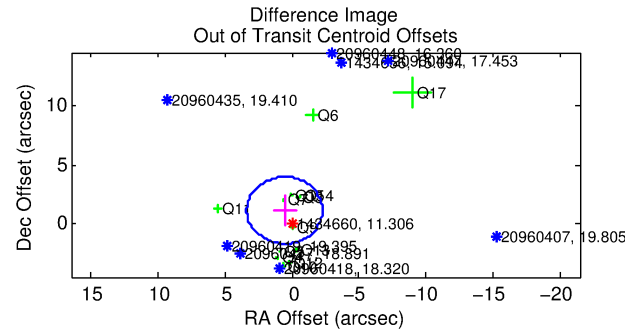
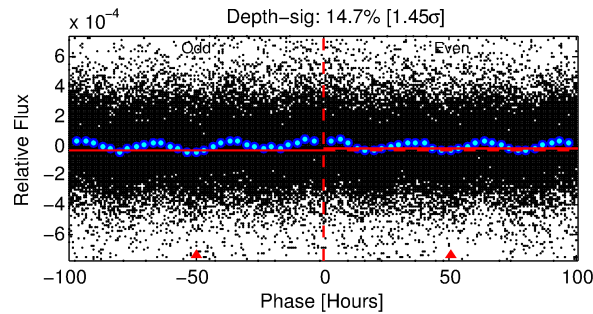
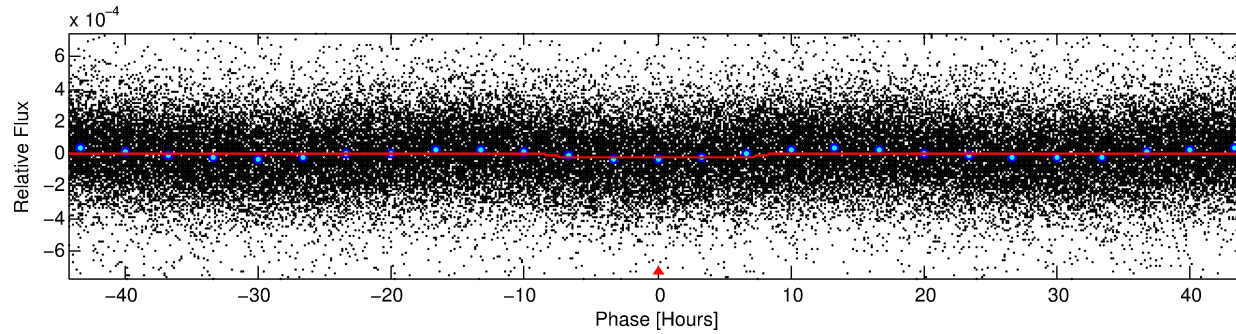
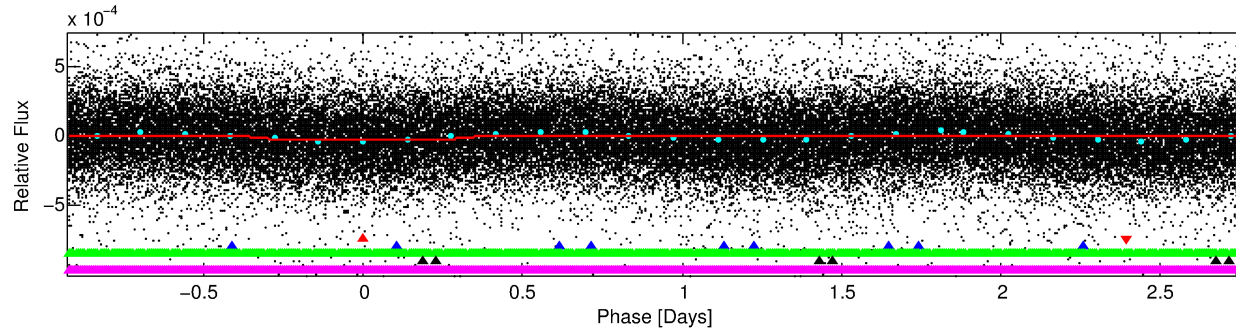
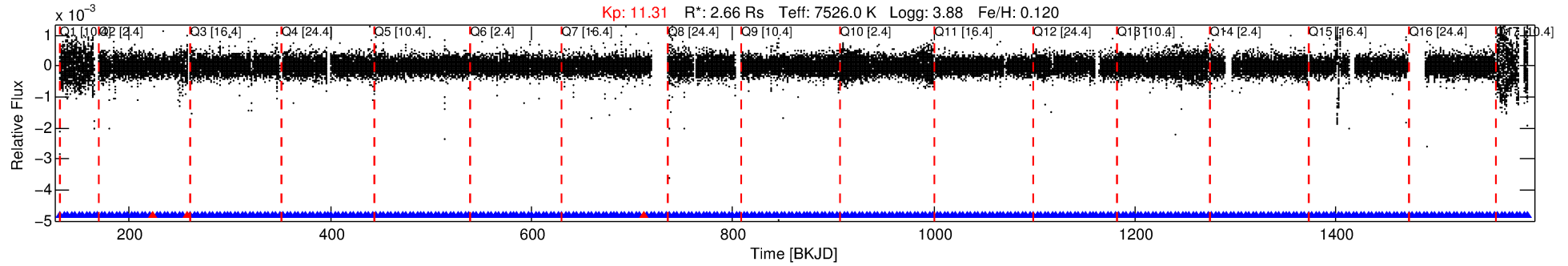
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 001434660-01

No Significant Match Found

DV One-Page Summary

KIC: 1434660 Candidate: 1 of 5 Period: 3.693 d



DV Fit Results:

Period = 3.69337 [0.00007] d
 Epoch = 131.7728 [0.0115] BKJD
 $R_p/R^* = 0.0044$ [0.0016]
 $a/R^* = 1.63$ [2.25]
 $b = 0.51$ [3.20]
 $\text{Seff} = 5954.54$ [2194.57]
 $T_{\text{eq}} = 2240$ [206] K
 $R_p = 1.27$ [0.57] R_e
 $a = 0.0584$ [0.0138] AU
 $A_g = 32.64$ [27.44] [1.15 σ]
 $T_{\text{eff}} = 8278$ [1570] K [3.81 σ]

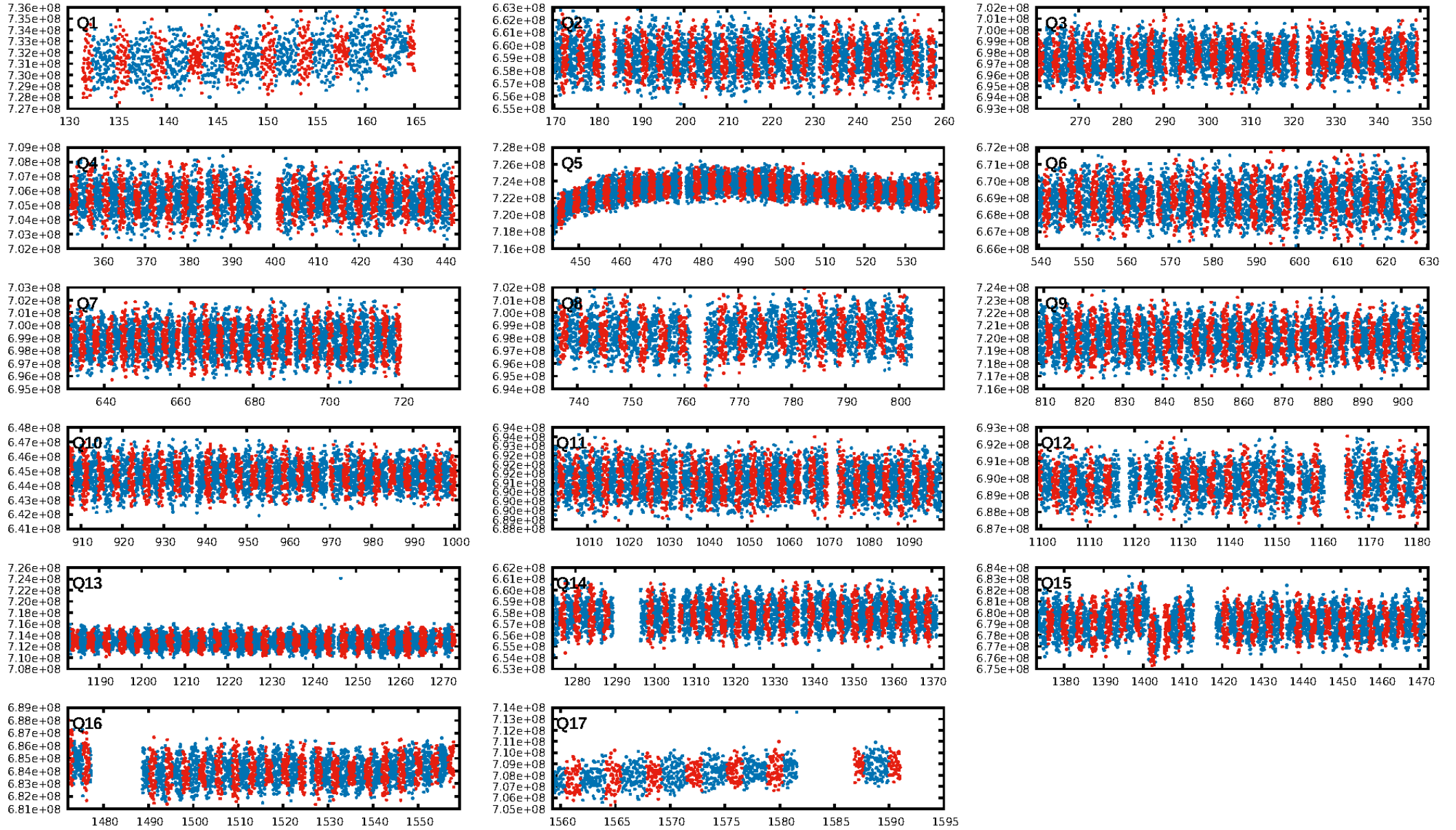
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [4.39 σ]
 LongPeriod-sig: 100.0% [94.22 σ]
 ModelChiSquare2-sig: N/A
 ModelChiSquareGof-sig: N/A
 Bootstrap-pfa: 9.65e-24
 RollingBand-fgt: 0.99 [353/356]
GhostDiagnostic-chr: -3.837
 Centroid-sig: N/A
 Centroid-so: N/A
 OutOffset-rm: 1.265 arcsec [1.35 σ]
 OutOffset-so: 1.355 arcsec [1.64 σ]
 OutOffset-st: 3/4/2/4 [13]
 KicOffset-st: 3/4/2/4 [13]
 DiffImageQuality-fgm: 0.46 [6/13]
 DiffImageOverlap-fno: 0.00 [0/17]

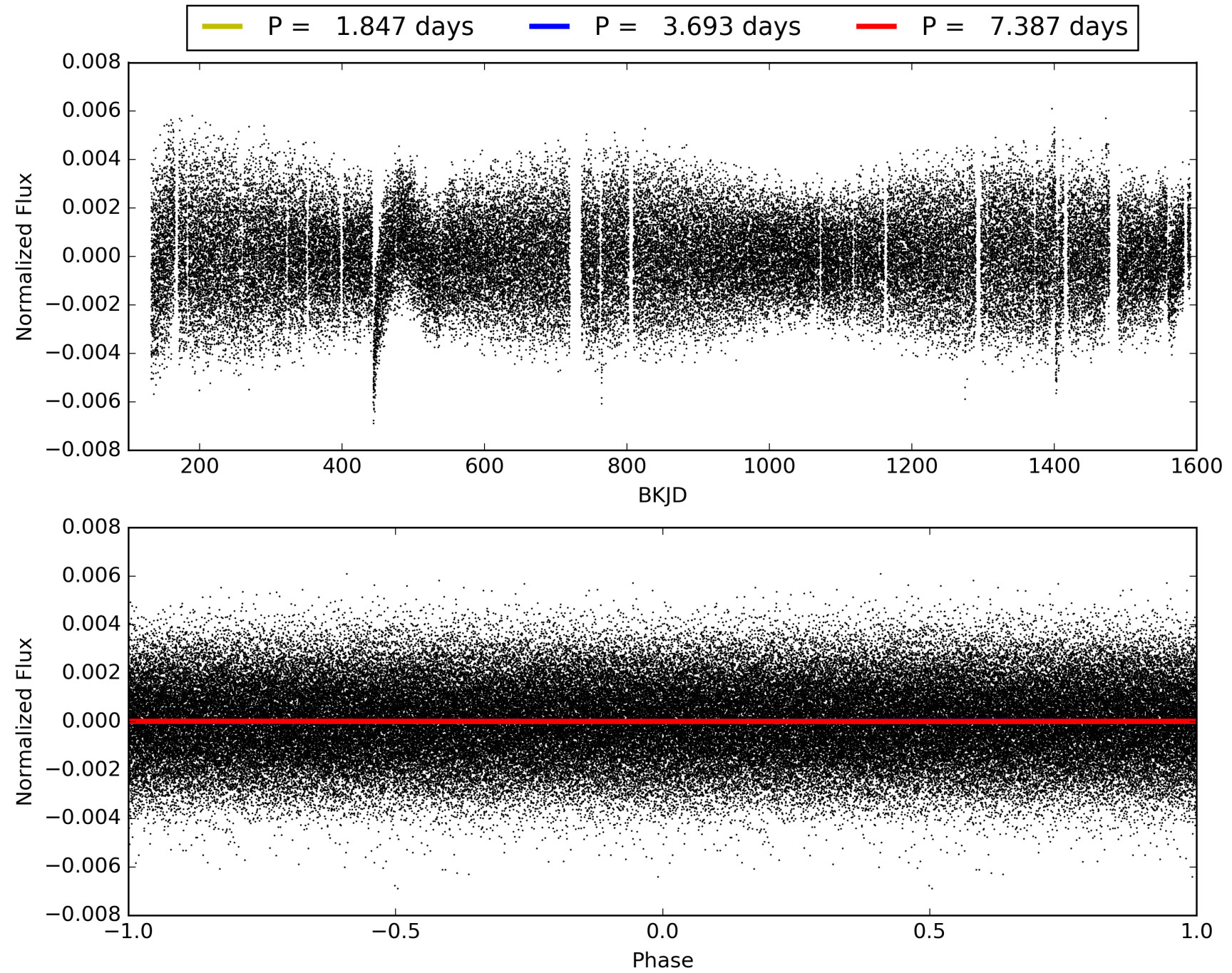
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 01:39:07 Z

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

TCE 001434660-01, PDC Light Curves

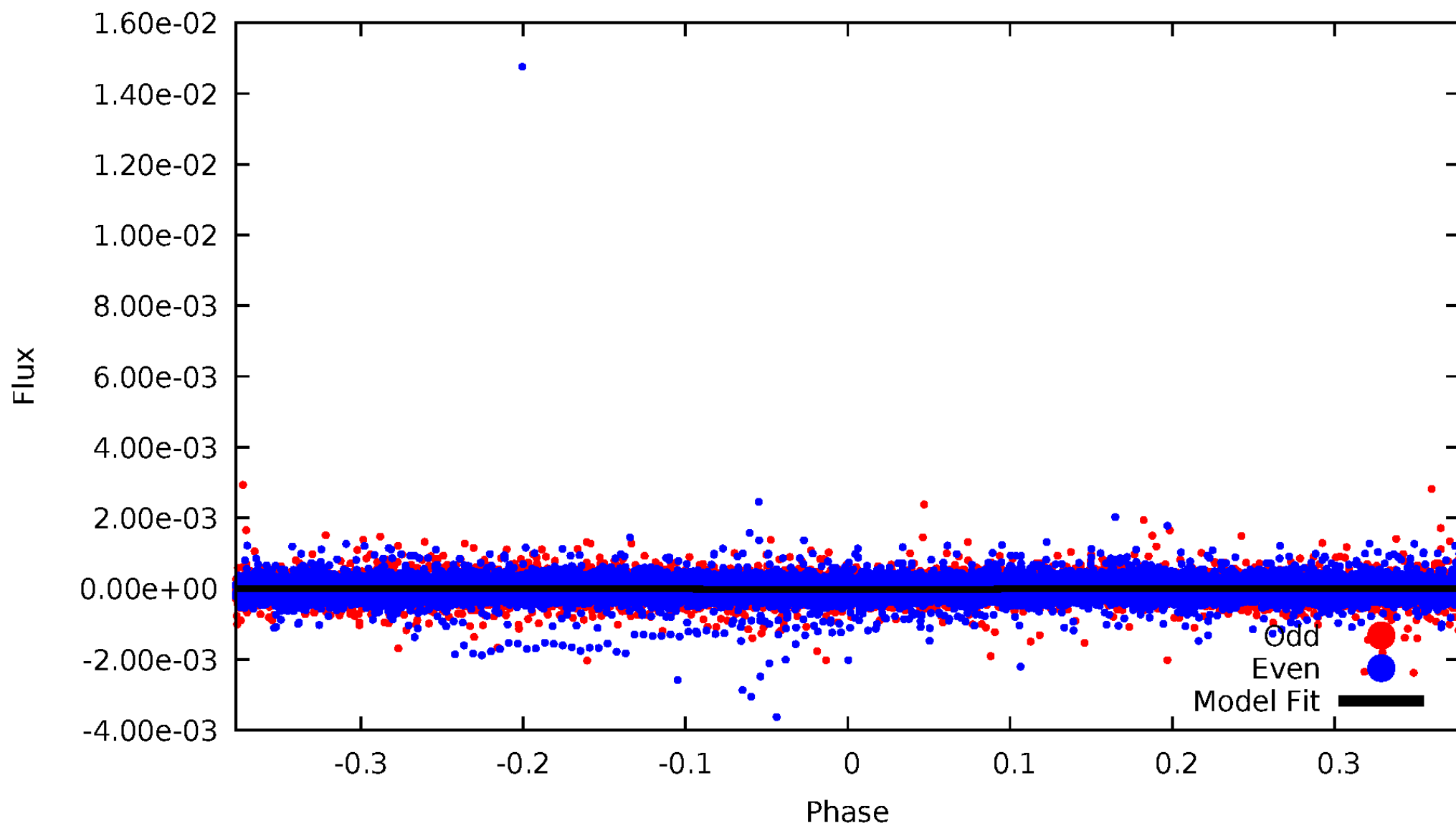


TCE 001434660-01



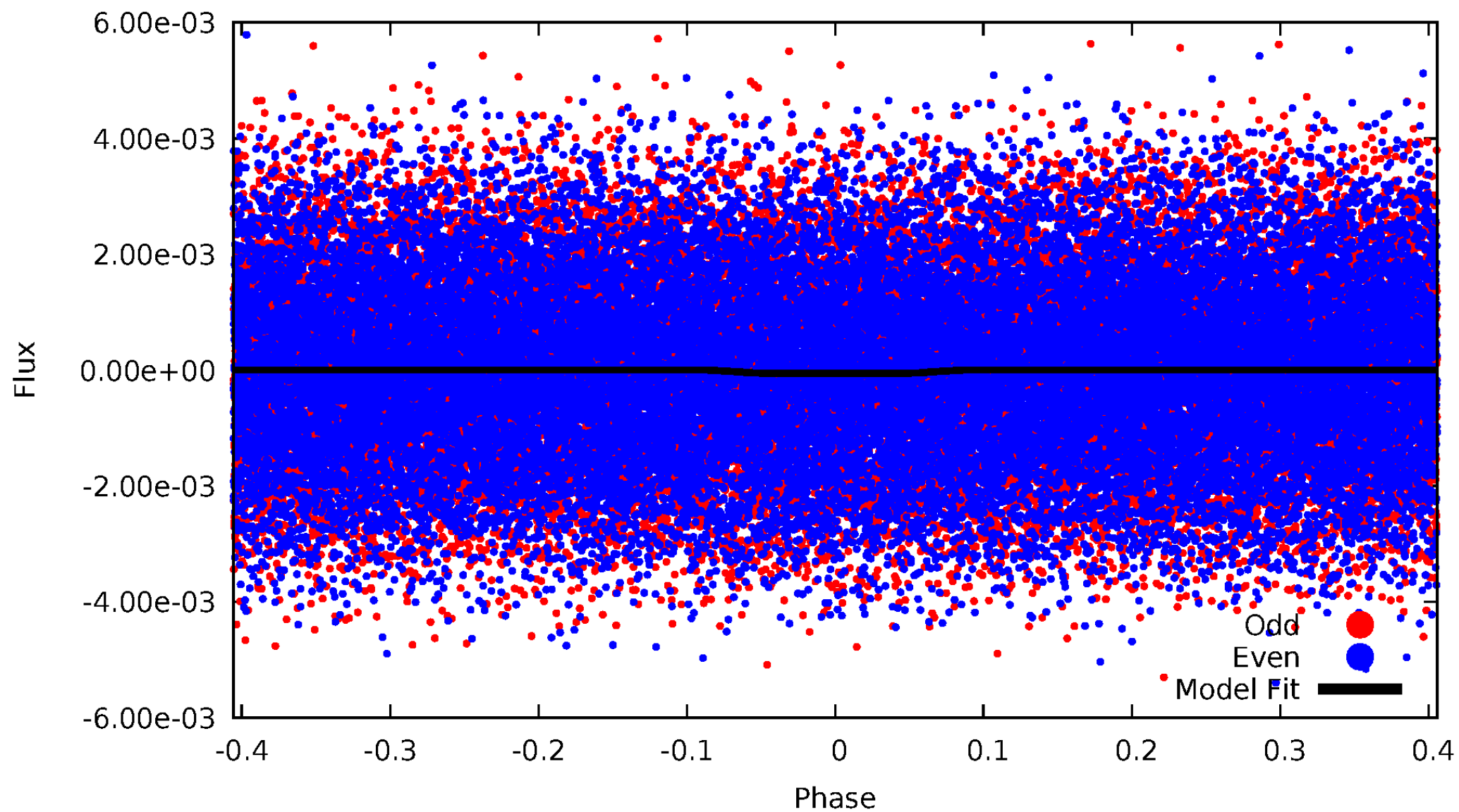
DV Odd/Even

TCE 001434660-01



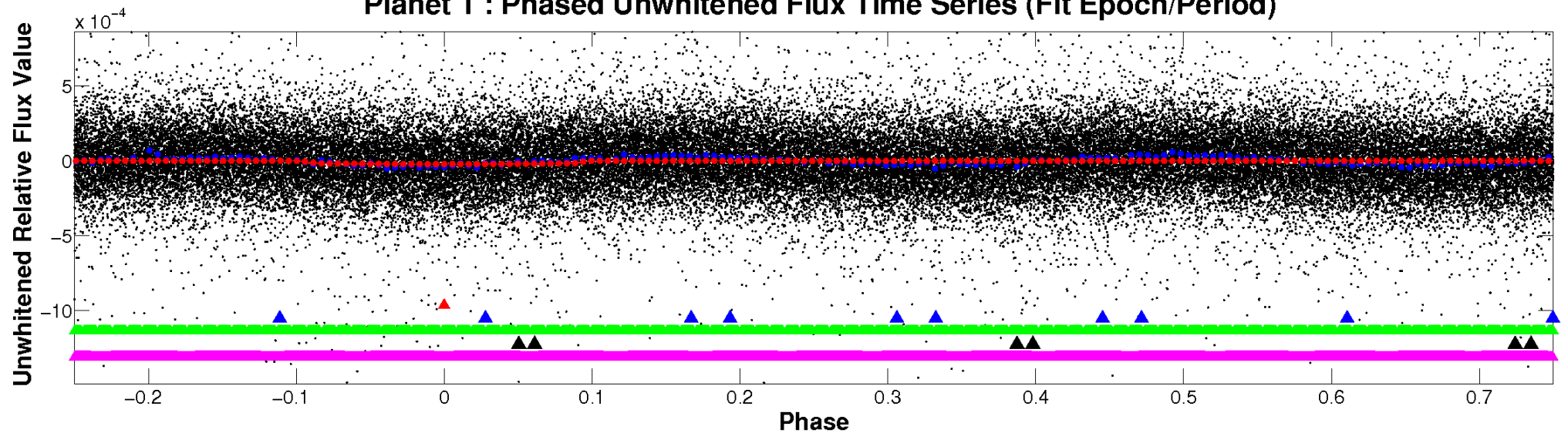
ALT Odd/Even

TCE 001434660-01

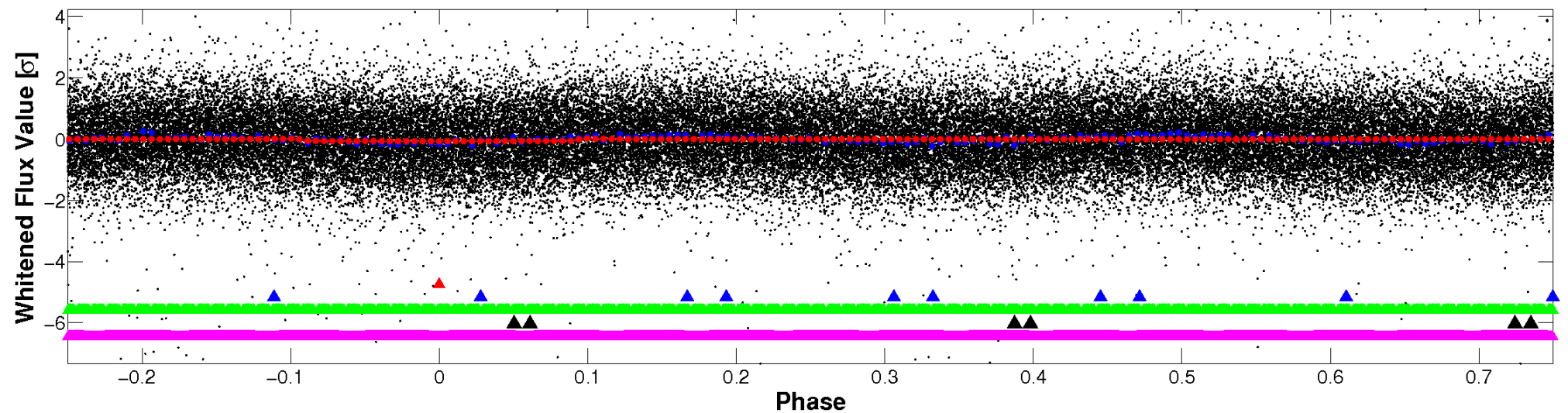


Non-Whitened Vs. Whitened Light Curve

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

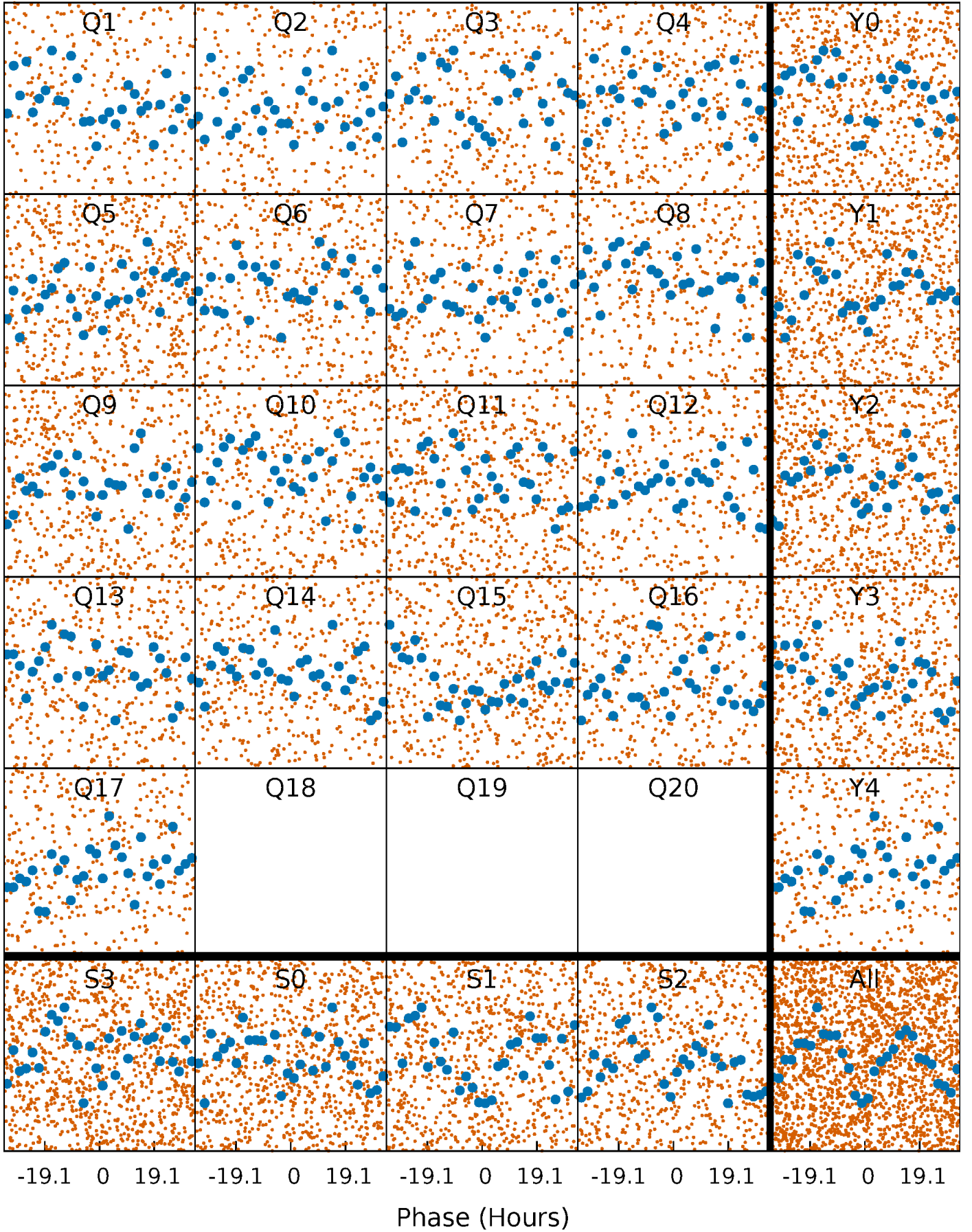


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



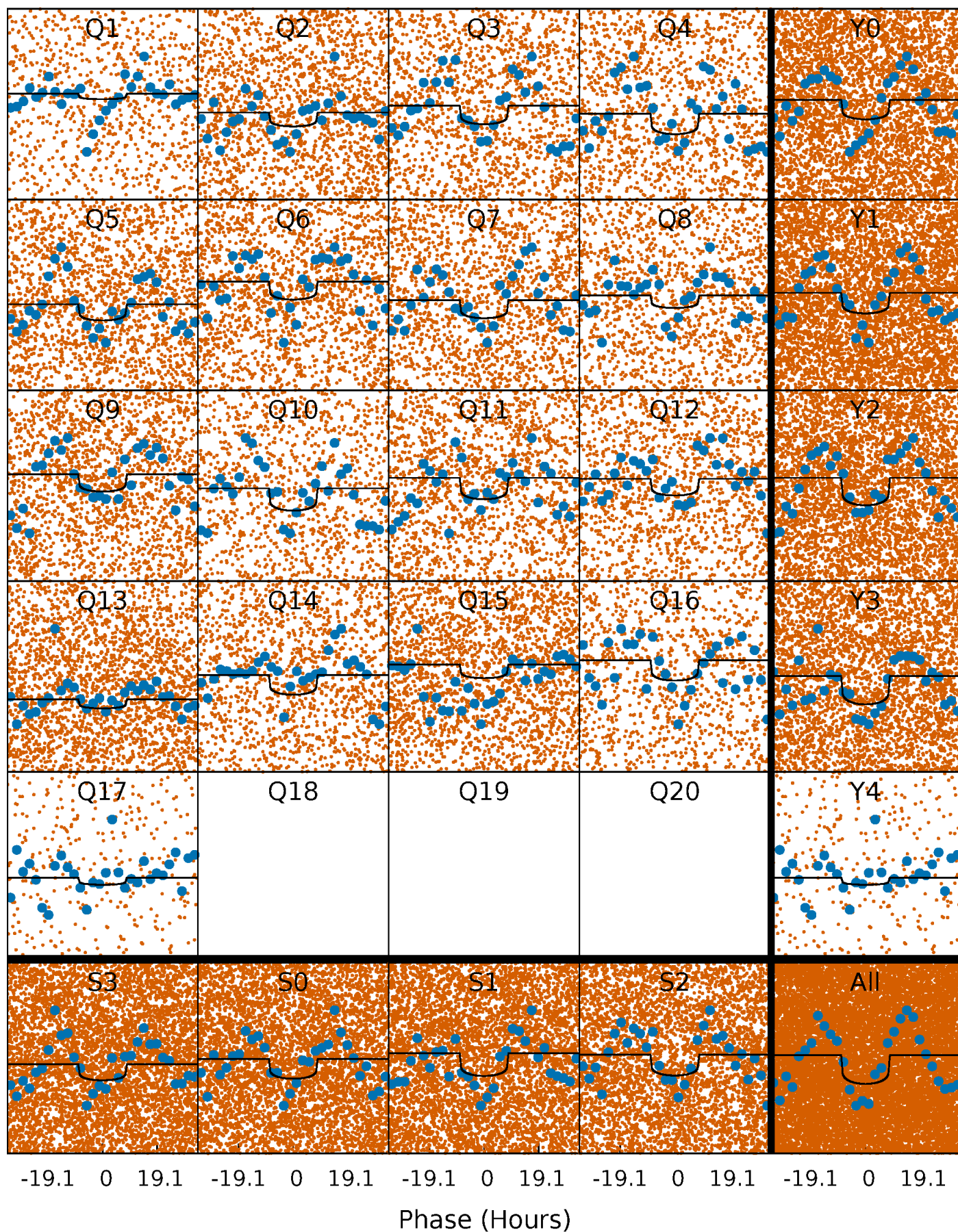
PDC Quarter-Phased Transit Curves

TCE 001434660-01 P= 3.693374 Days $T_0=131.772765$ (BKJD)



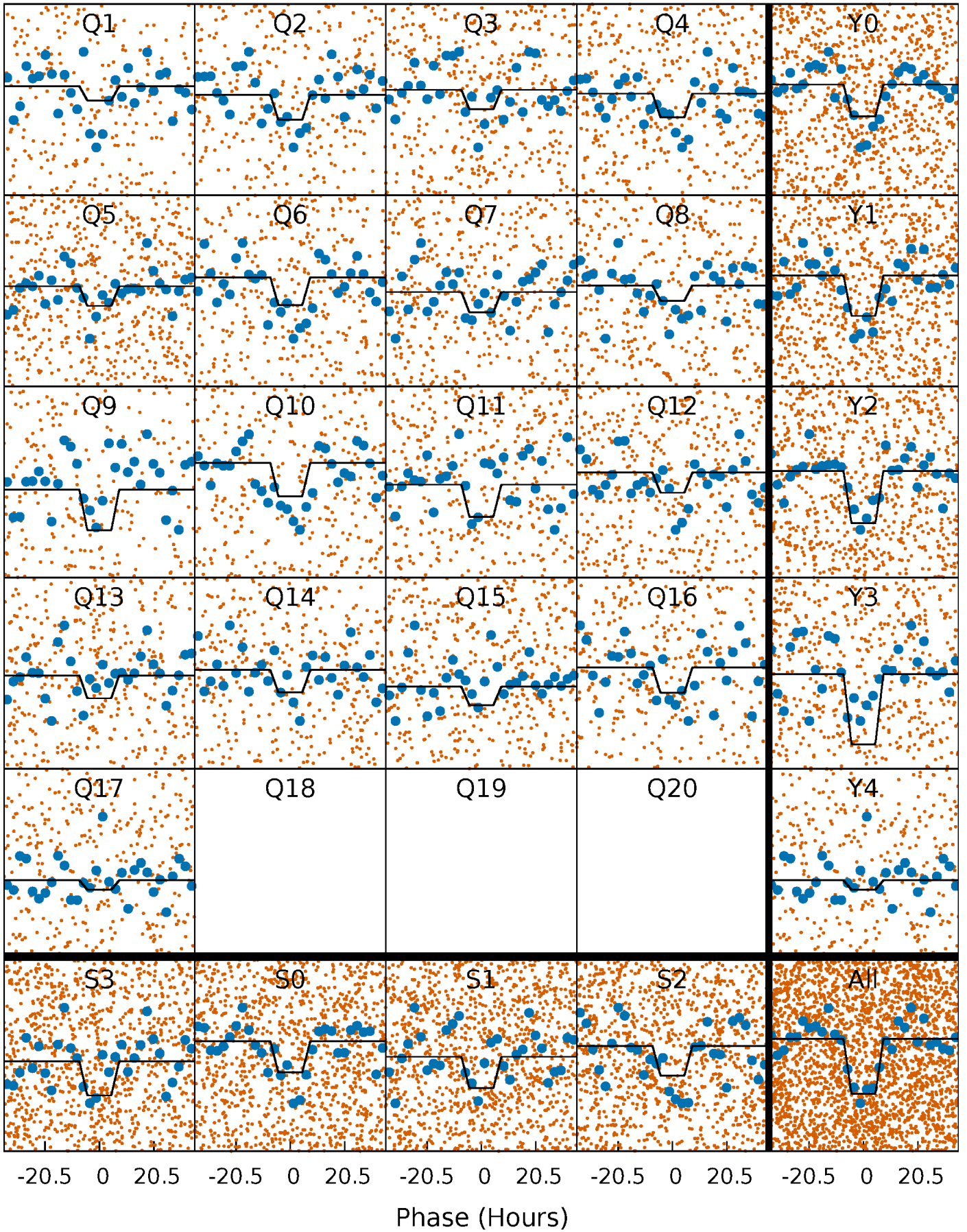
DV Quarter-Phased Transit Curves

TCE 001434660-01 P= 3.693374 Days $T_0=131.772765$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

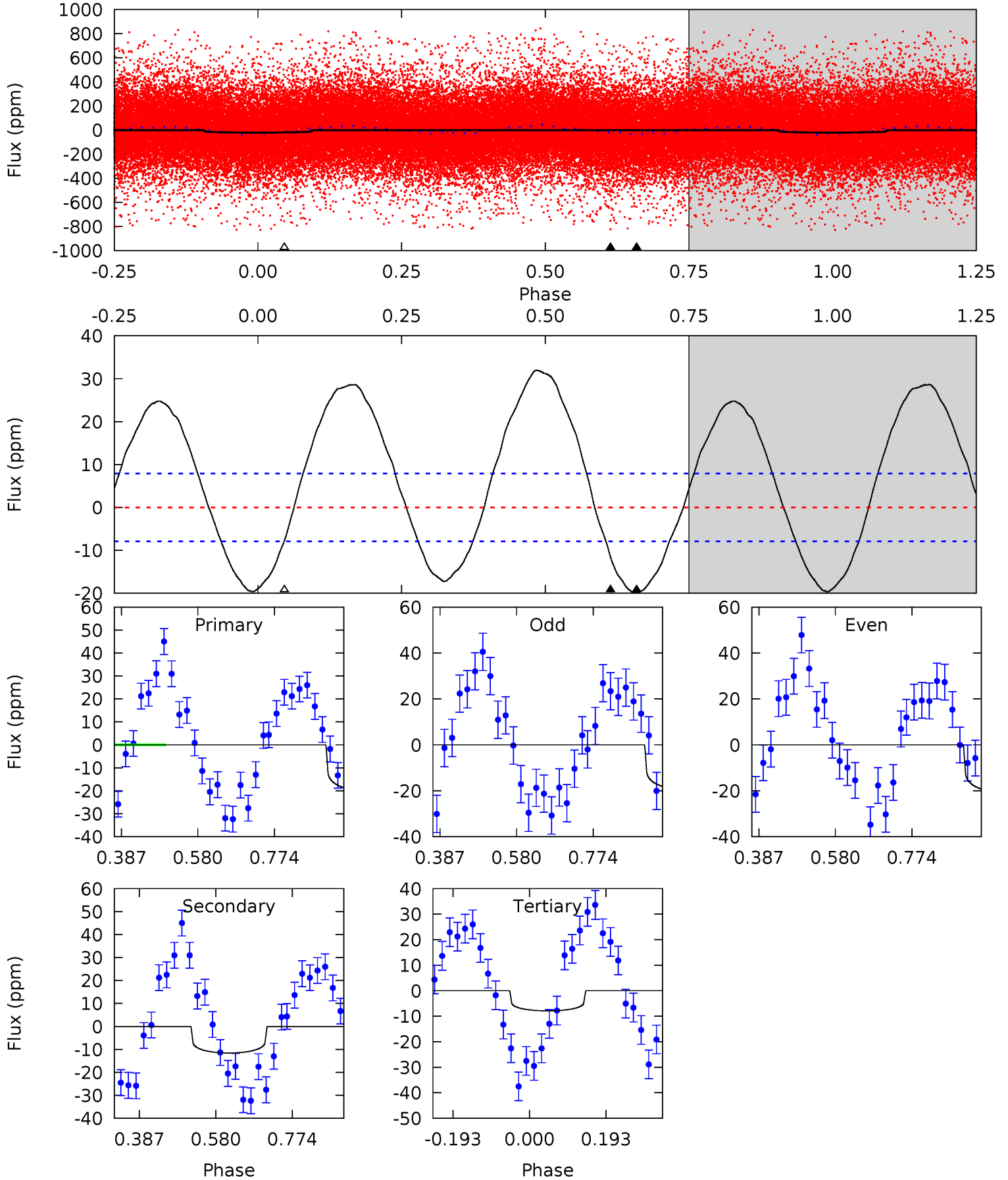
TCE 001434660-01 P= 3.693750 Days $T_0=131.687797$ (BKJD)



DV Model-Shift Uniqueness Test

001434660-01, P = 3.693374 Days, E = 128.079391 Days

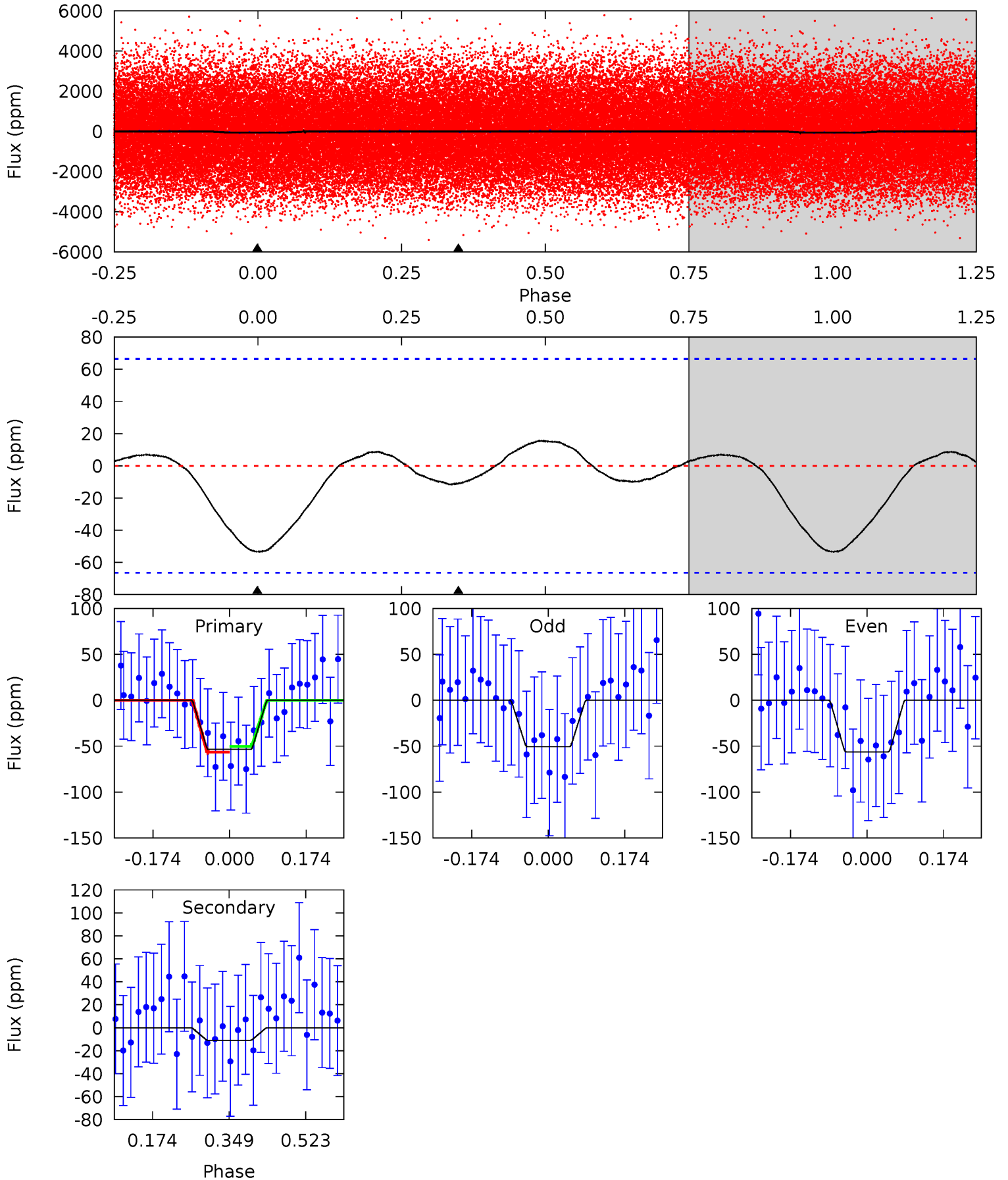
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.1	6.47	4.42	0	4.42	1.30	8.73	6.70	11.1	2.06	6.47	0.33	1.12	0.62	2.37



Alt Model-Shift Uniqueness Test

001434660-01, P = 3.693750 Days, E = 127.994047 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.58	0.73	0	0	4.45	1.36	0.48	3.58	3.58	0.73	0.73	0.18	1.04	0.23	0.21



Stellar Parameters For KIC 001434660

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7526^{+67}_{-90}	$3.878^{+0.210}_{-0.070}$	$0.120^{+0.100}_{-0.200}$	$2.657^{+0.294}_{-0.686}$	$1.943^{+0.034}_{-0.306}$	$0.146^{+0.164}_{-0.035}$
	+1%/-1%	+5%/-2%	+83%/-167%	+11%/-26%	+2%/-16%	+112%/-24%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 001434660-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-12 ± 2	$1.18^{+0.47}_{-0.44}$	3095^{+118}_{-195}	6517^{+1977}_{-983}	15^{+23}_{-7}
Alt.	-11 ± 15	$2.04^{+0.50}_{-0.48}$	3088^{+122}_{-194}	4823^{+1385}_{-9048}	$4.164^{+8.840}_{-5.689}$

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 $A_{obs} \gg 1.0$

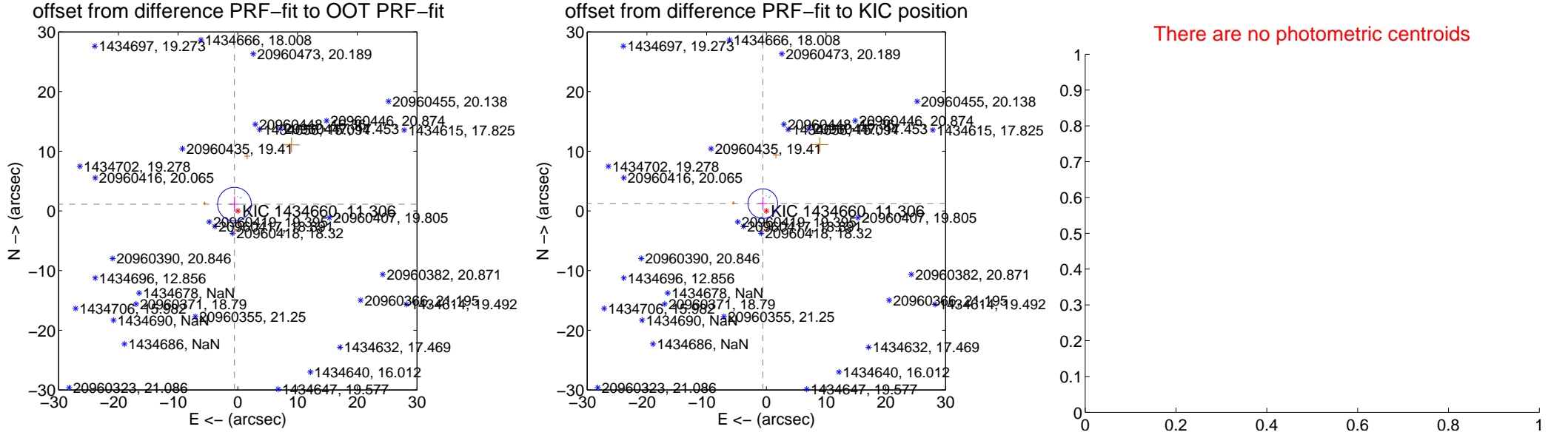
DV Centroid Data

Supplemental centroid analysis for 001434660-01. **Kepler magnitude: 11.31.** Transit SNR 6.51

There are 6 quarters with good PRF difference image offsets

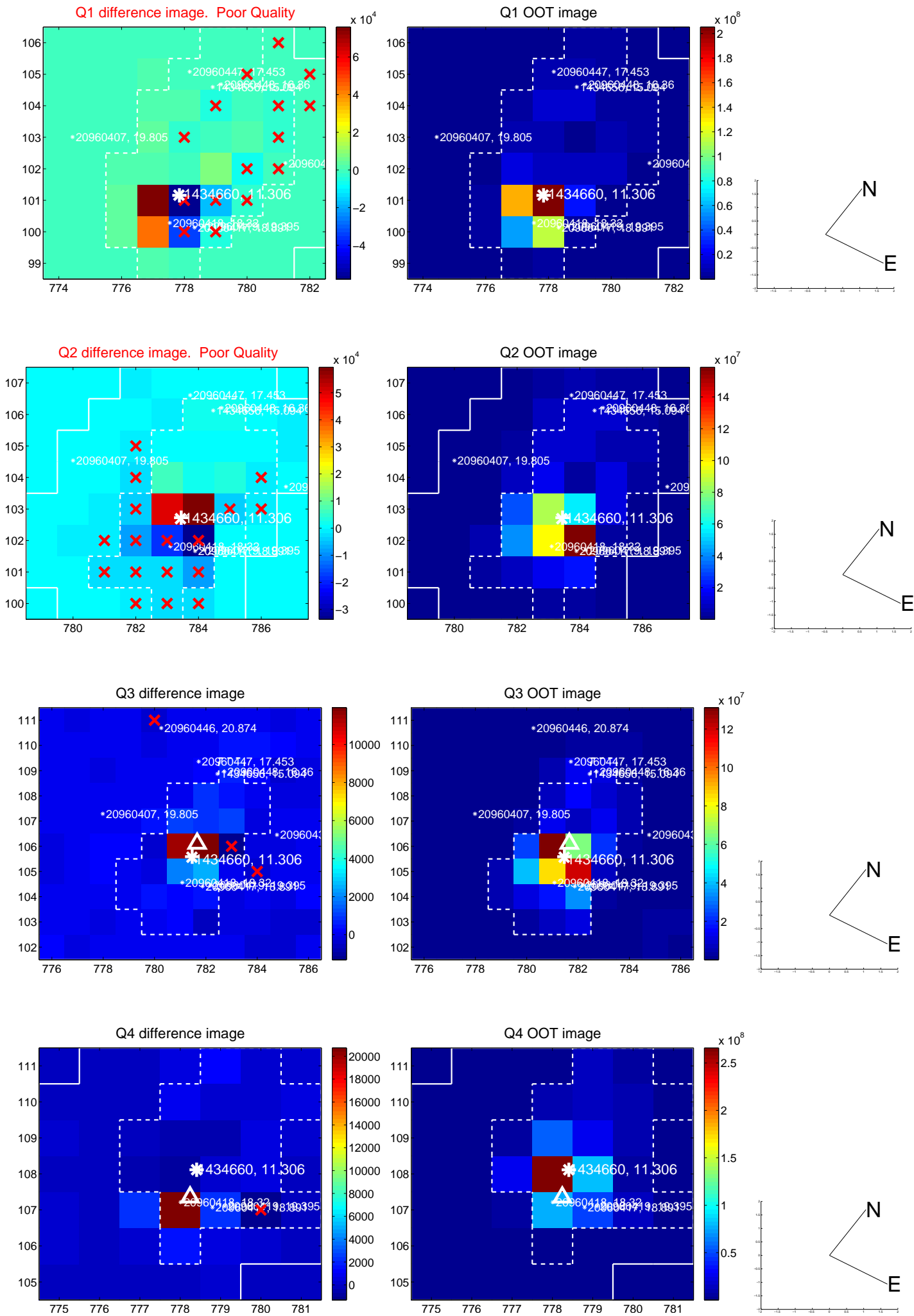
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.265 ± 0.940	1.35	0.559 ± 0.850	1.135 ± 1.283
PRF-fit source offset from KIC position	1.355 ± 0.828	1.64	0.595 ± 0.793	1.217 ± 1.112
photometric centroid source offset	—	—	—	—

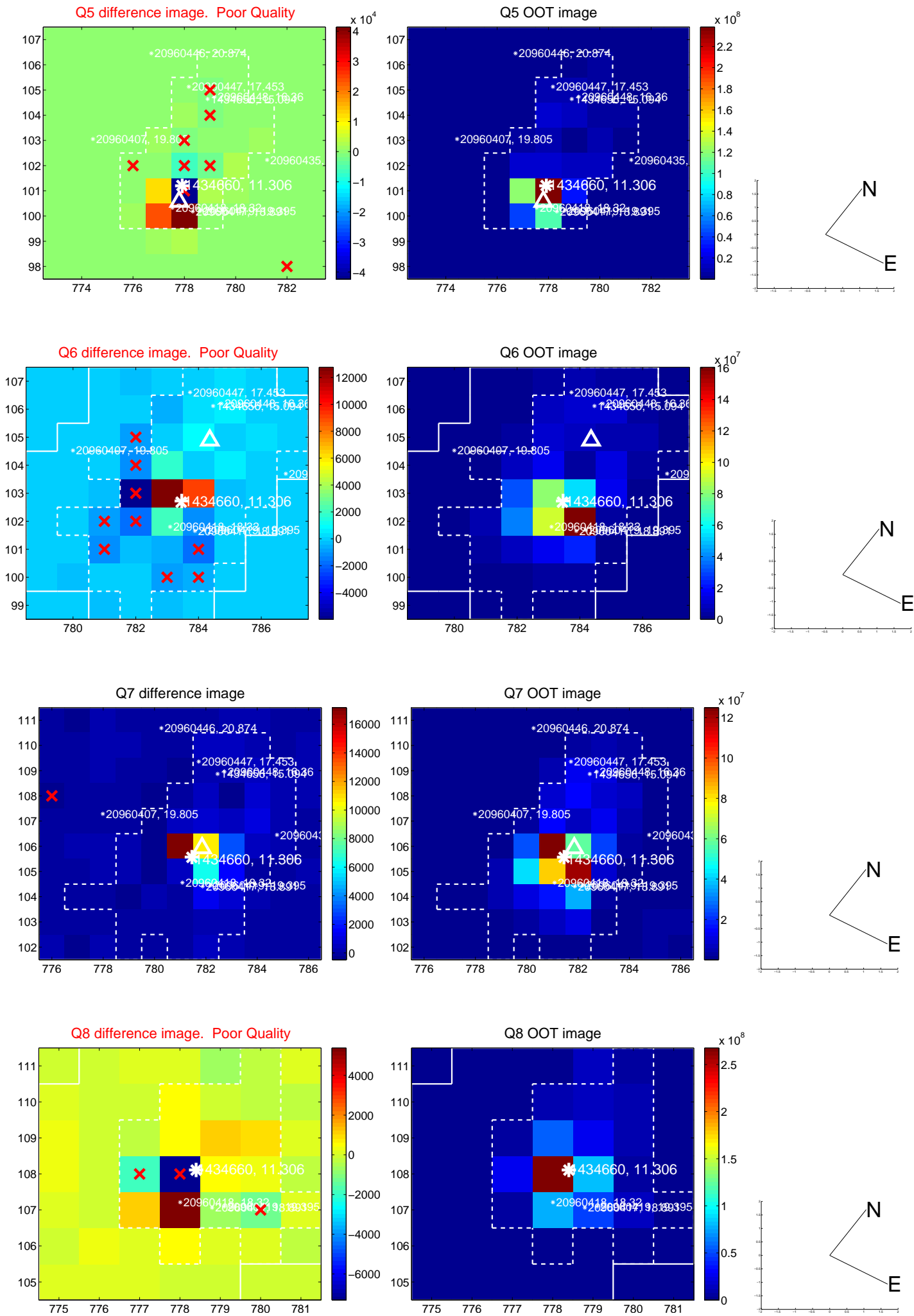


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

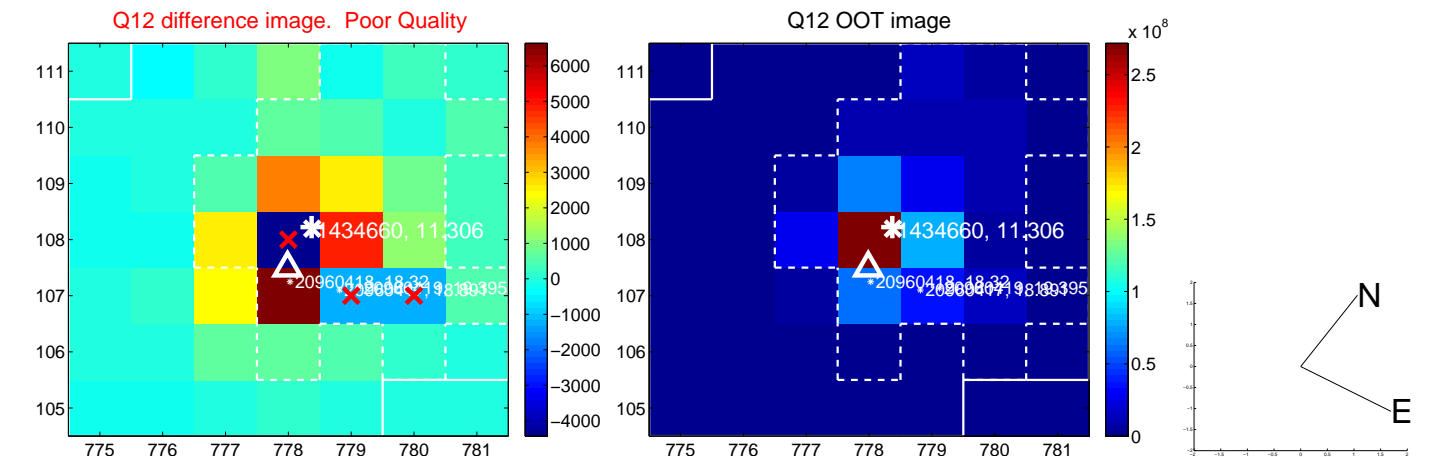
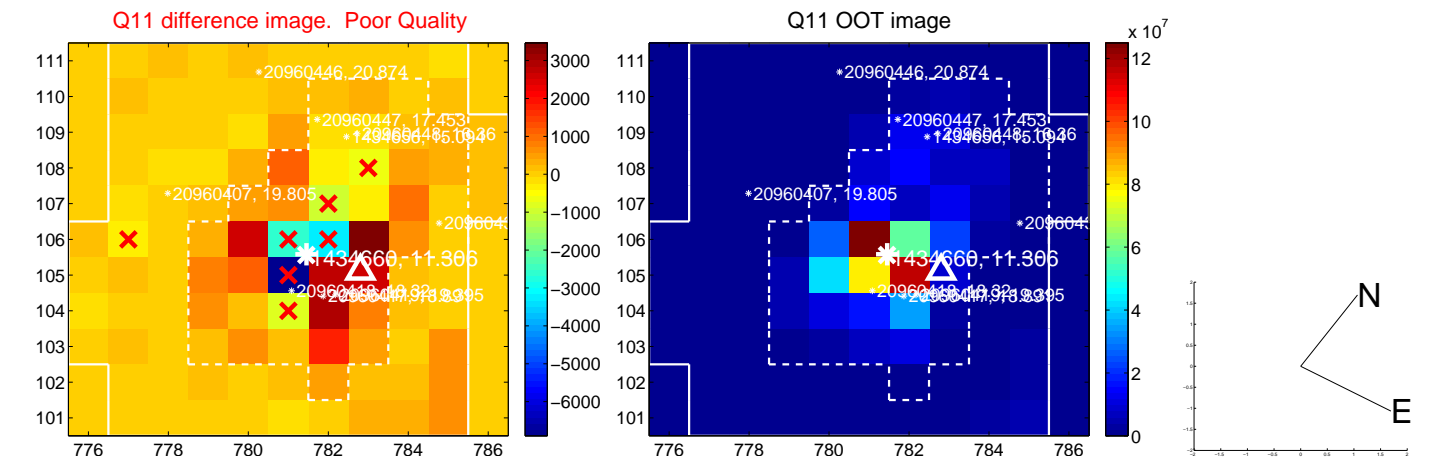
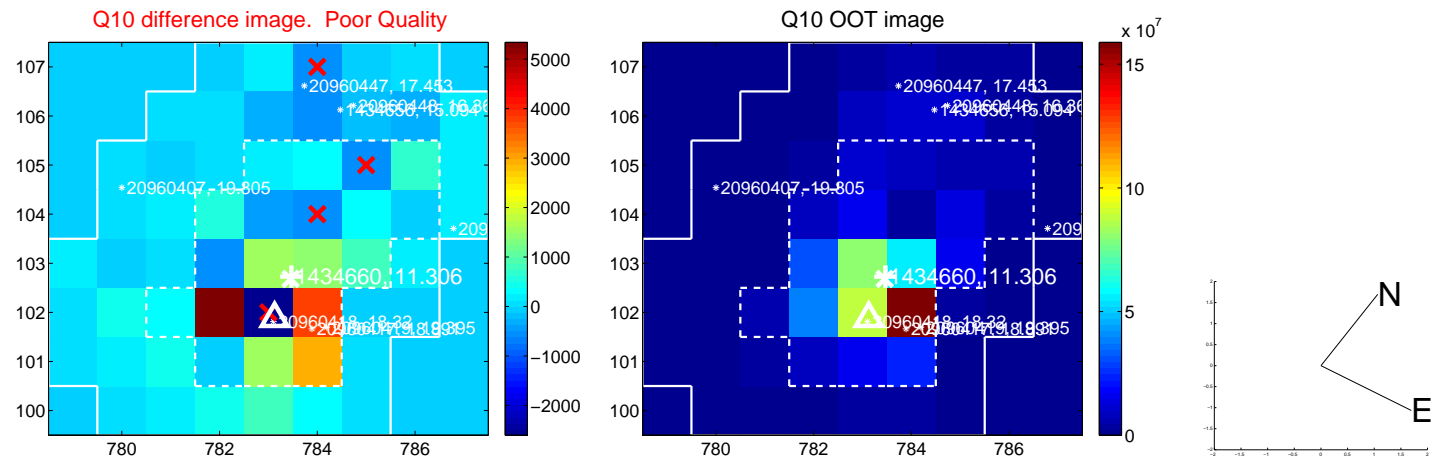
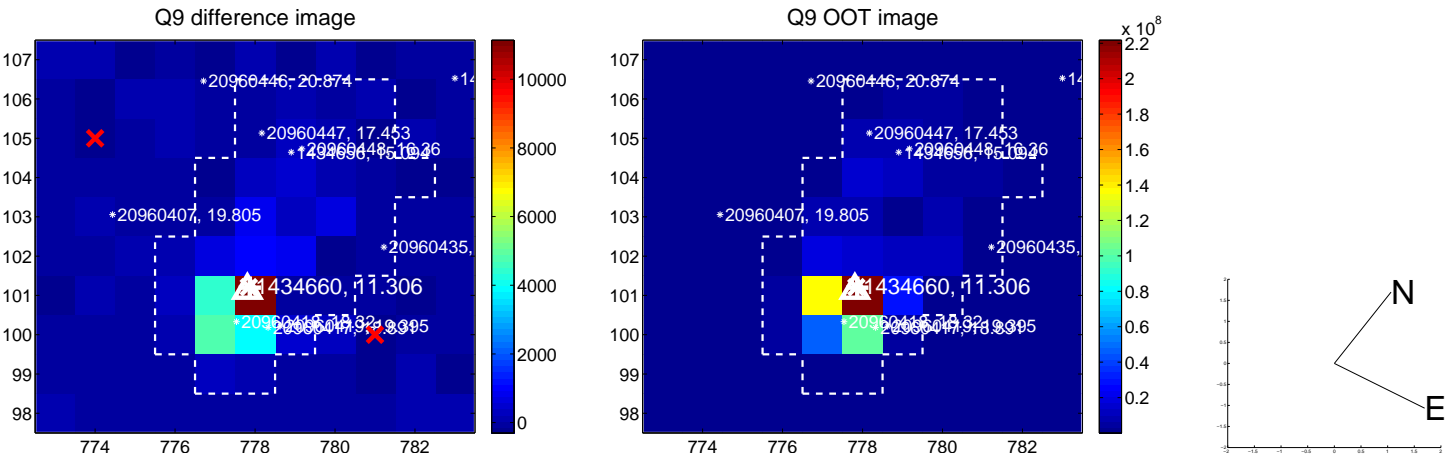
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



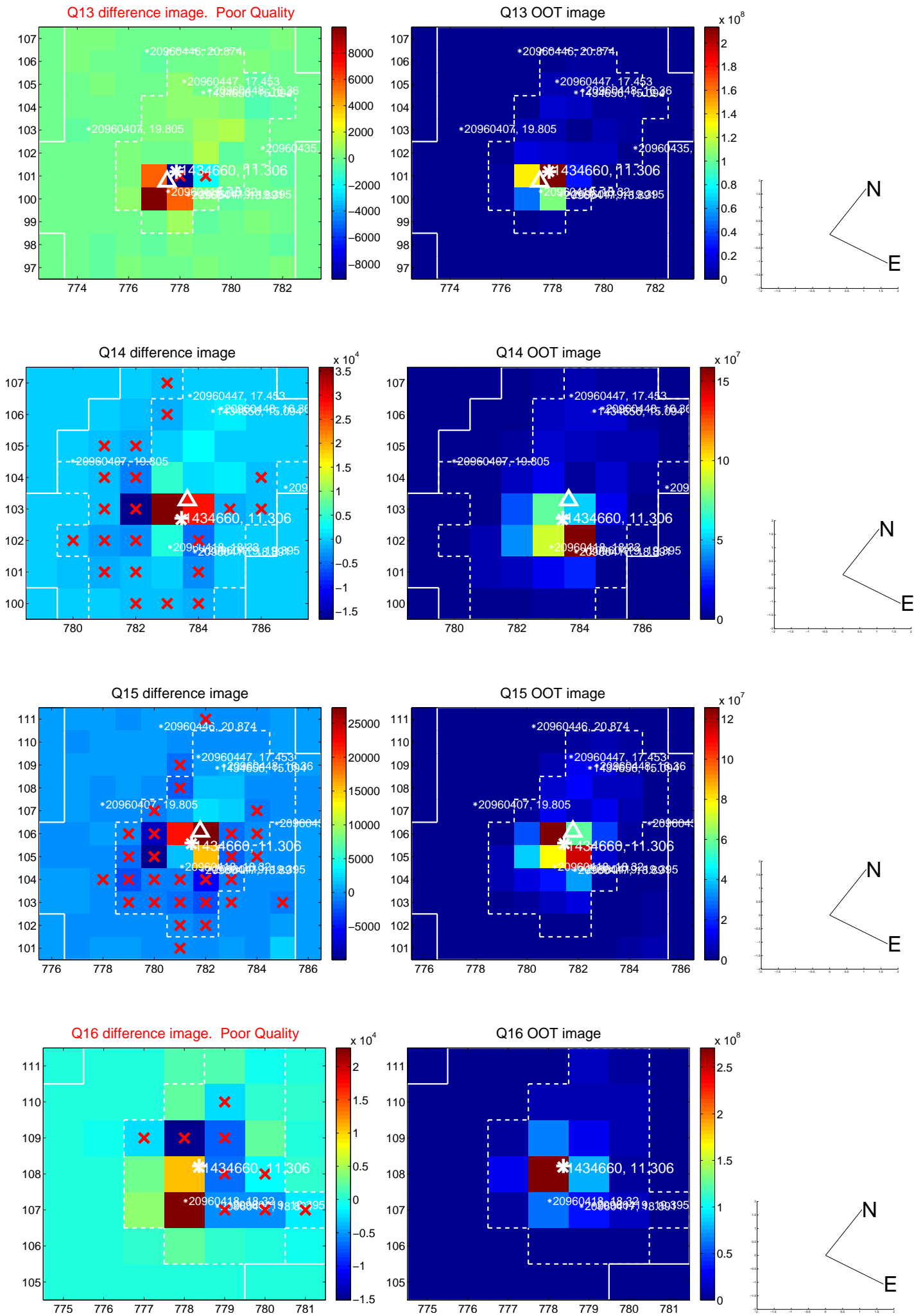
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



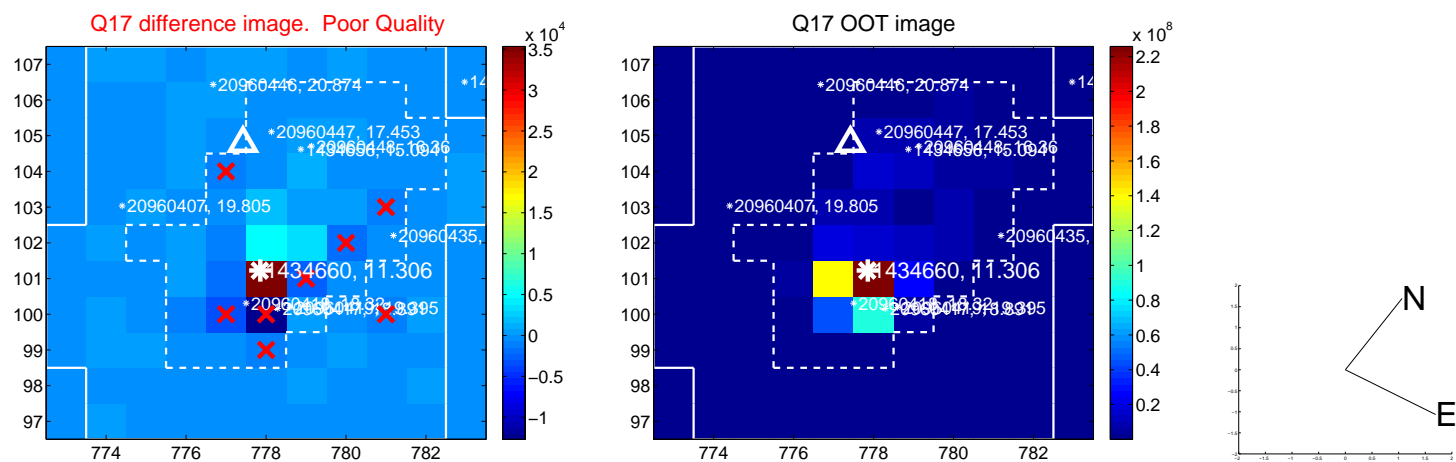
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

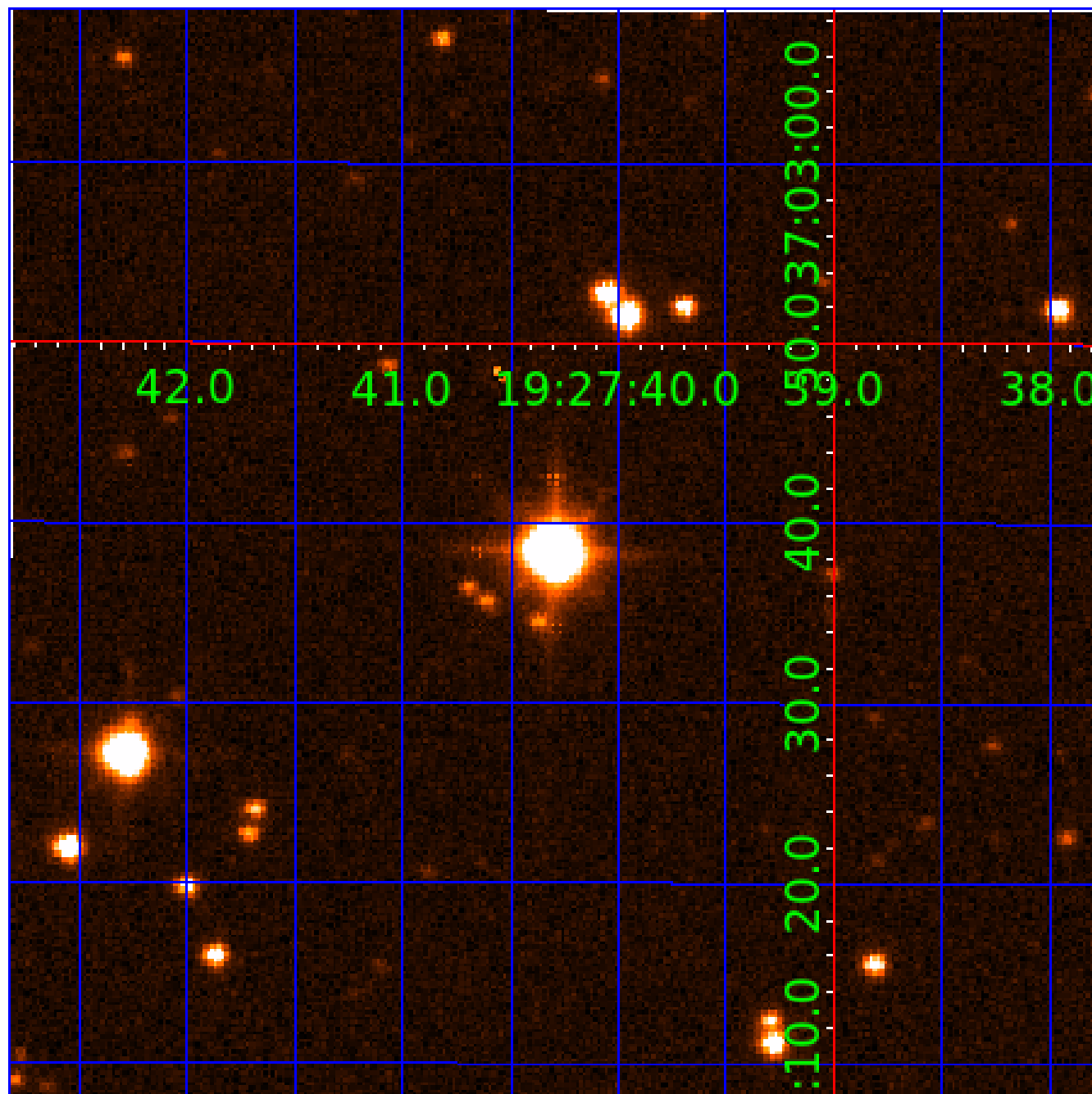


folded centroid time series figure for this object.



UKIRT Image

Declination



KIC 001434660

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})
001434660-01	OBS	No	3.693374	131.772765	21.1	16.707	9.0	6.5	2.66	7526	1.27	5954.53
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
001434660-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
001434660-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—INCONSISTENT_TRANS—CENT_SATURATED
001434660-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
001434660-05	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

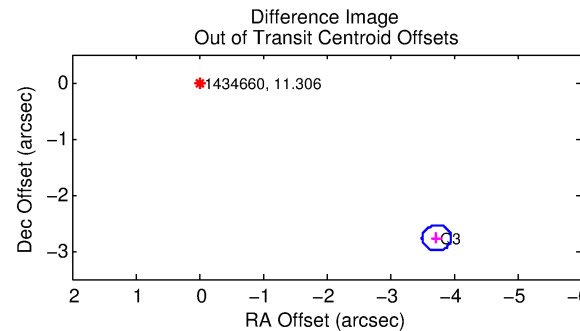
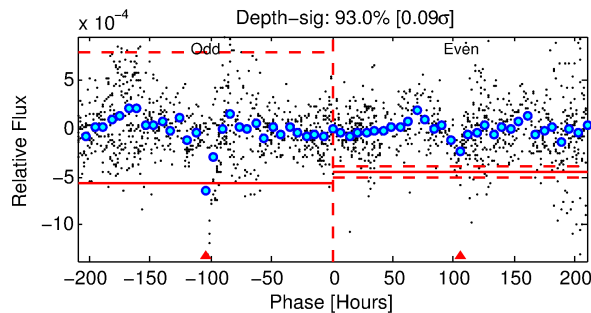
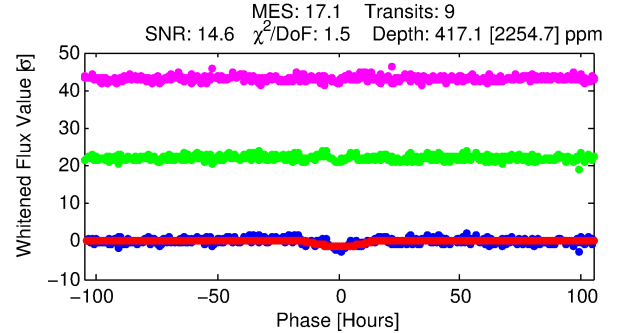
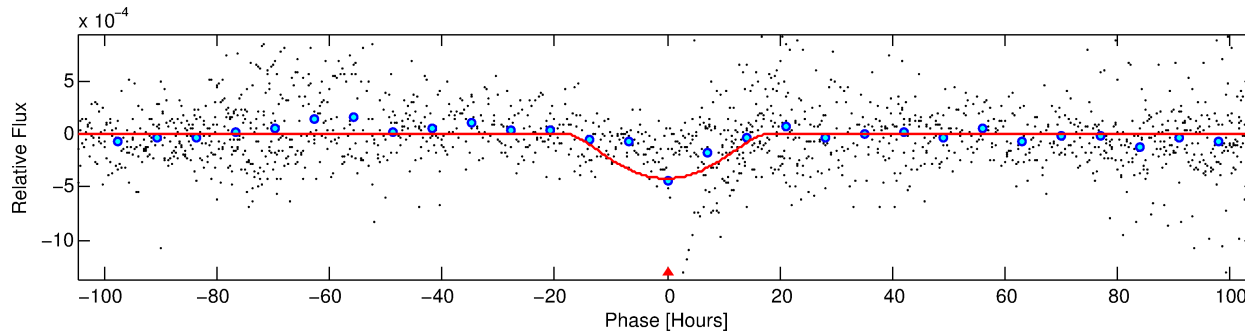
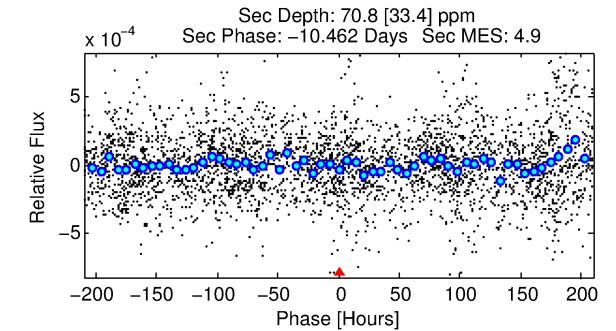
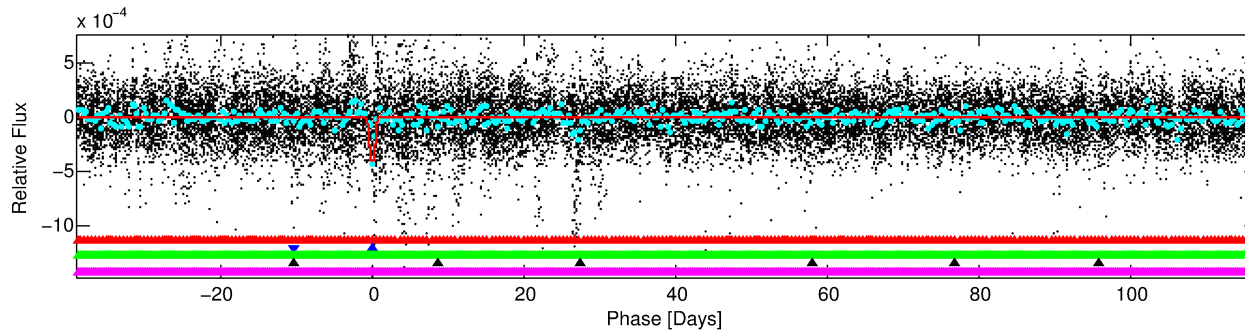
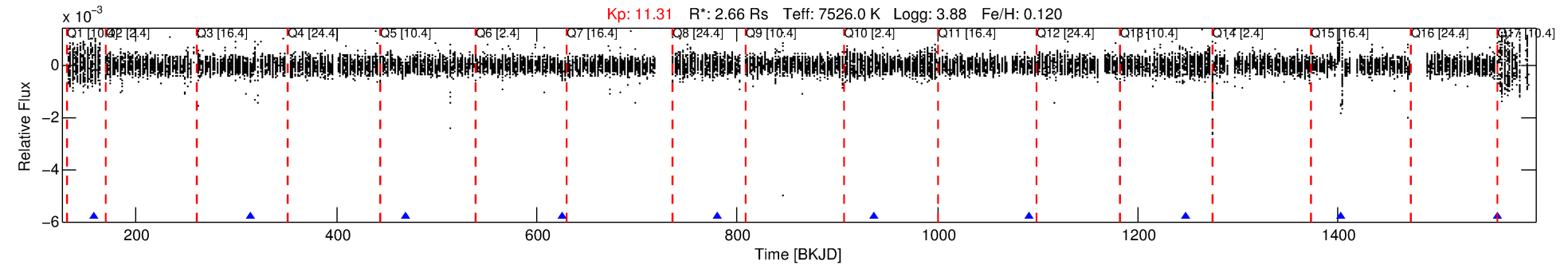
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 001434660-02

No Significant Match Found

DV One-Page Summary

KIC: 1434660 Candidate: 2 of 5 Period: 155.635 d



DV Fit Results:

Period = 155.63546 [0.00998] d
Epoch = 158.3404 [0.0500] BKJD
Rp/R* = 0.0354 [0.0762]
a/R* = 9.20 [5.02]
b = 1.00 [0.02]
Seff = 40.61 [14.97]
Teq = 644 [59] K
Rp = 10.27 [22.24] Re
a = 0.7069 [0.1667] AU
Ag = 184.55 [801.30] [0.23σ]
Teffp = 3668 [3968] K [0.76σ]

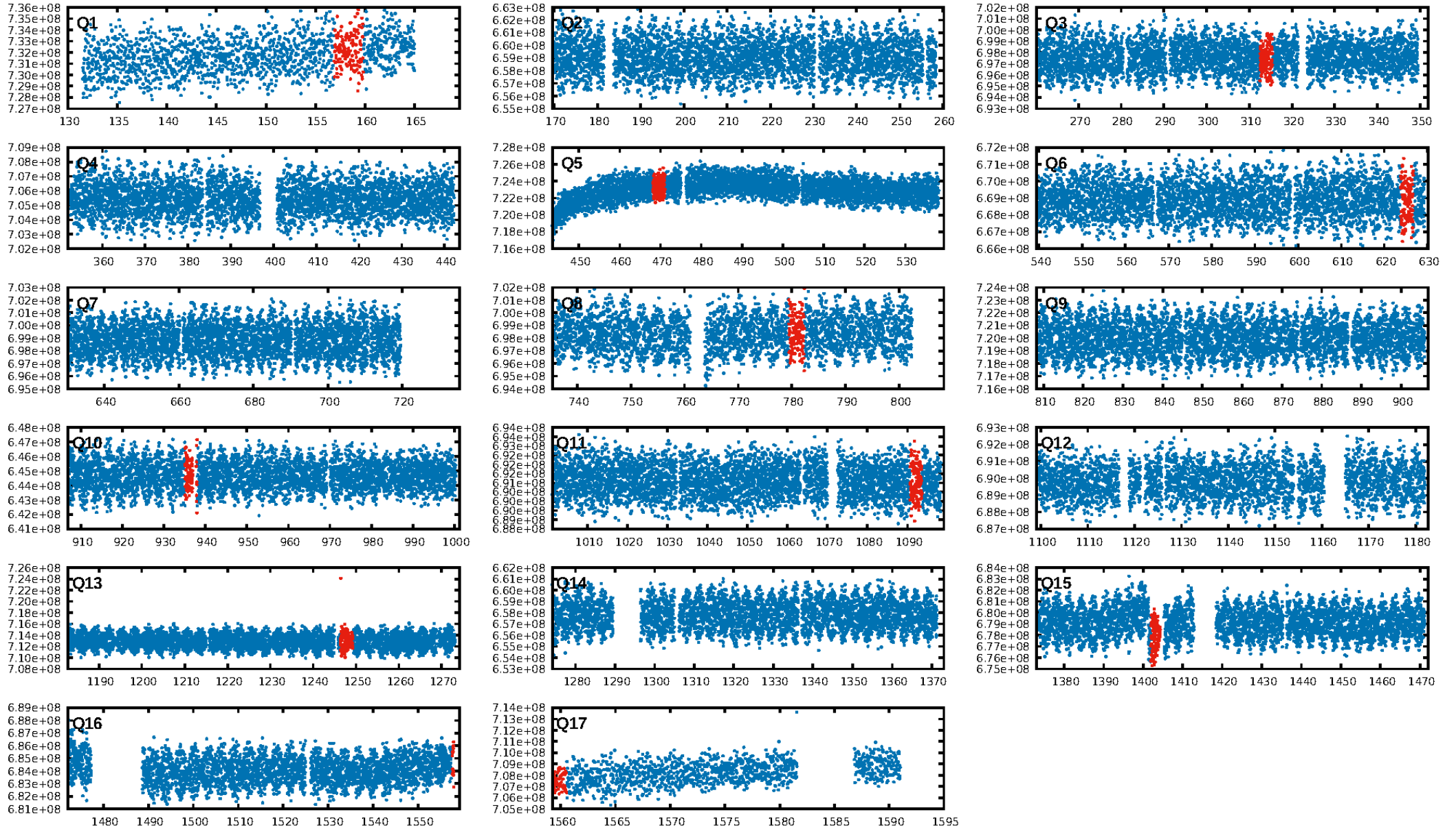
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [94.22σ]
LongPeriod-sig: 100.0% [35.97σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.78e-39
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: -3.871
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 4.644 arcsec [60.91σ]
KicOffset-rm: 4.584 arcsec [60.09σ]
OotOffset-st: 0/1/0/0 [1]
KicOffset-st: 0/1/0/0 [1]
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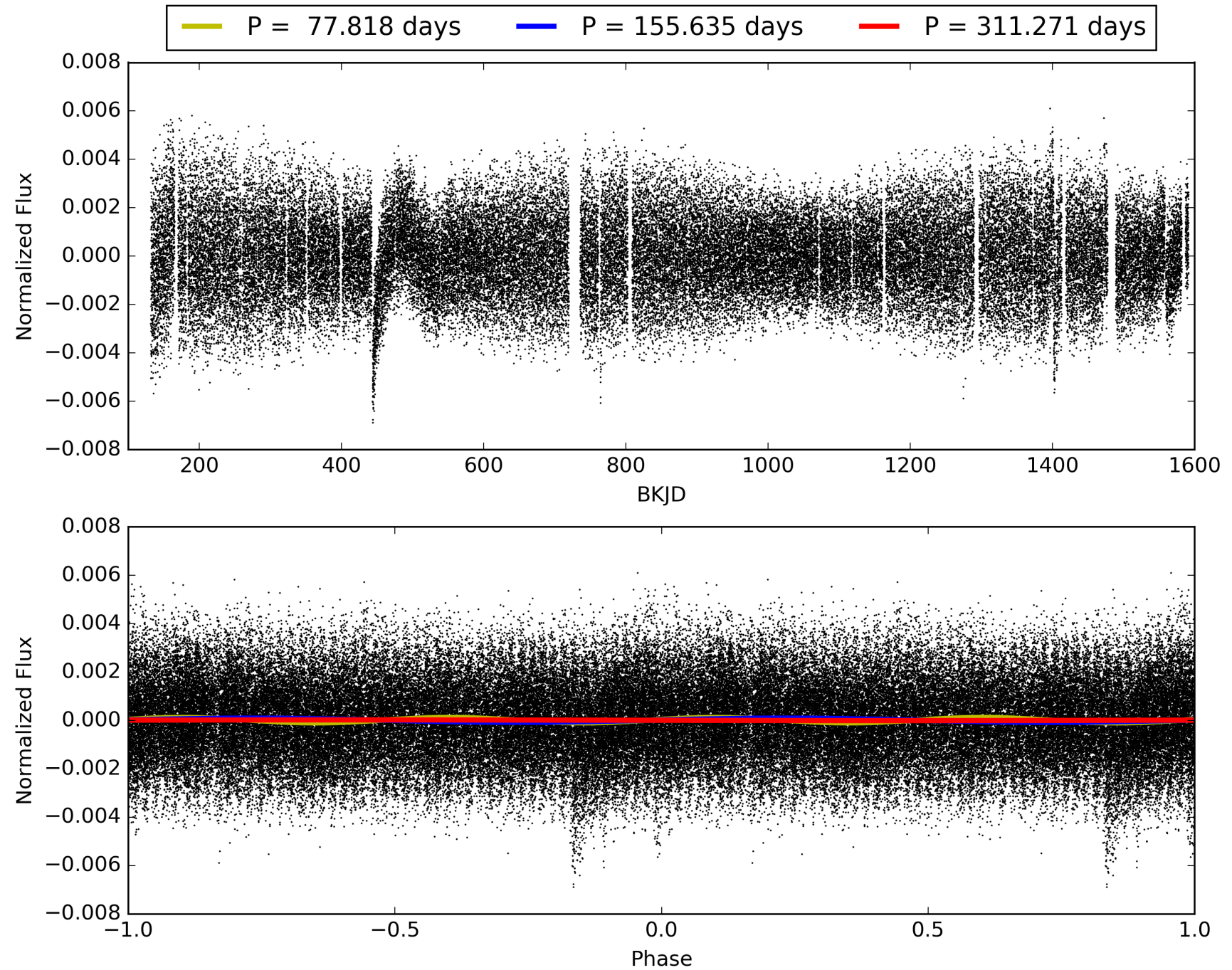
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 01:39:18 Z

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

TCE 001434660-02, PDC Light Curves

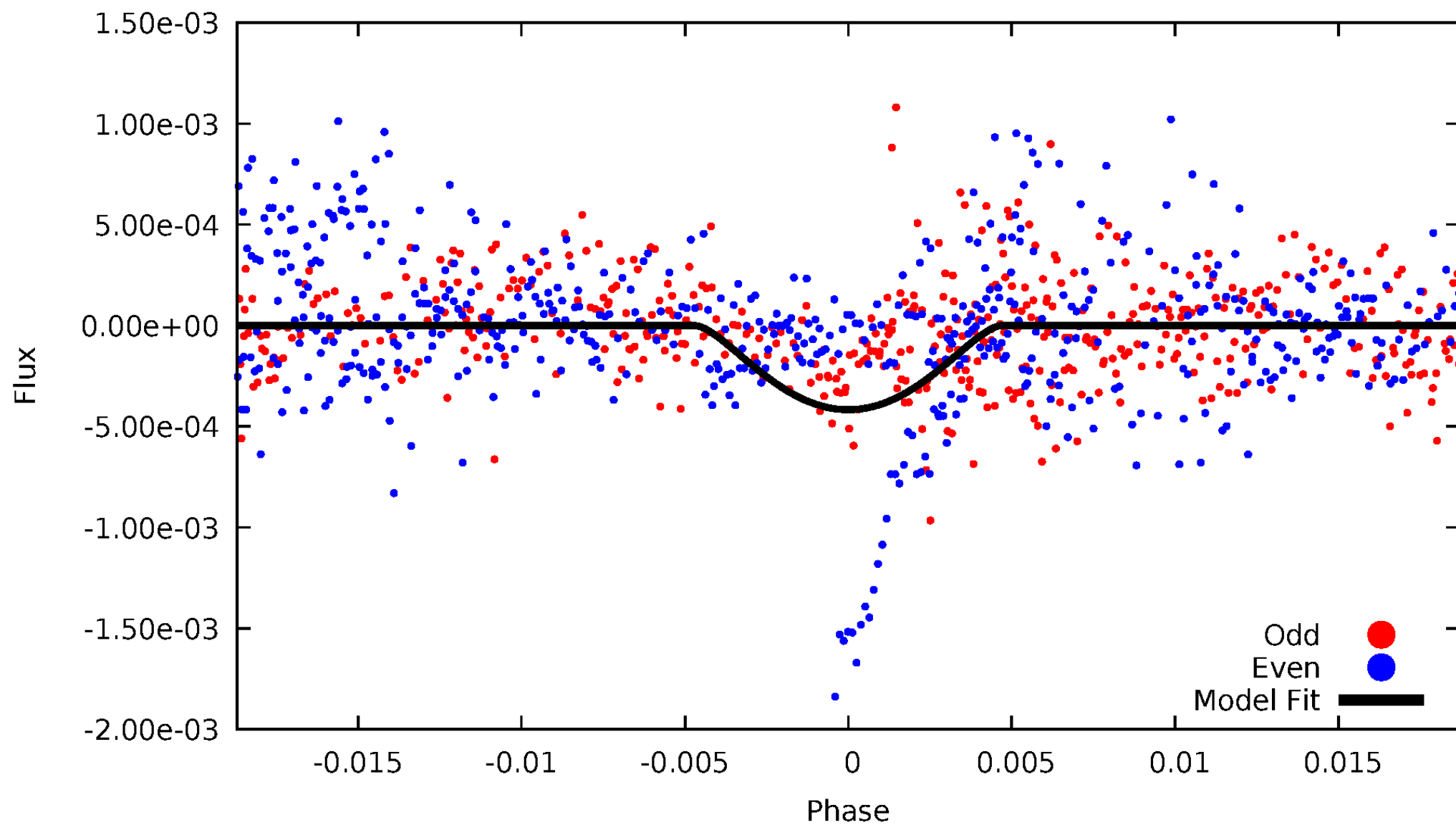


TCE 001434660-02



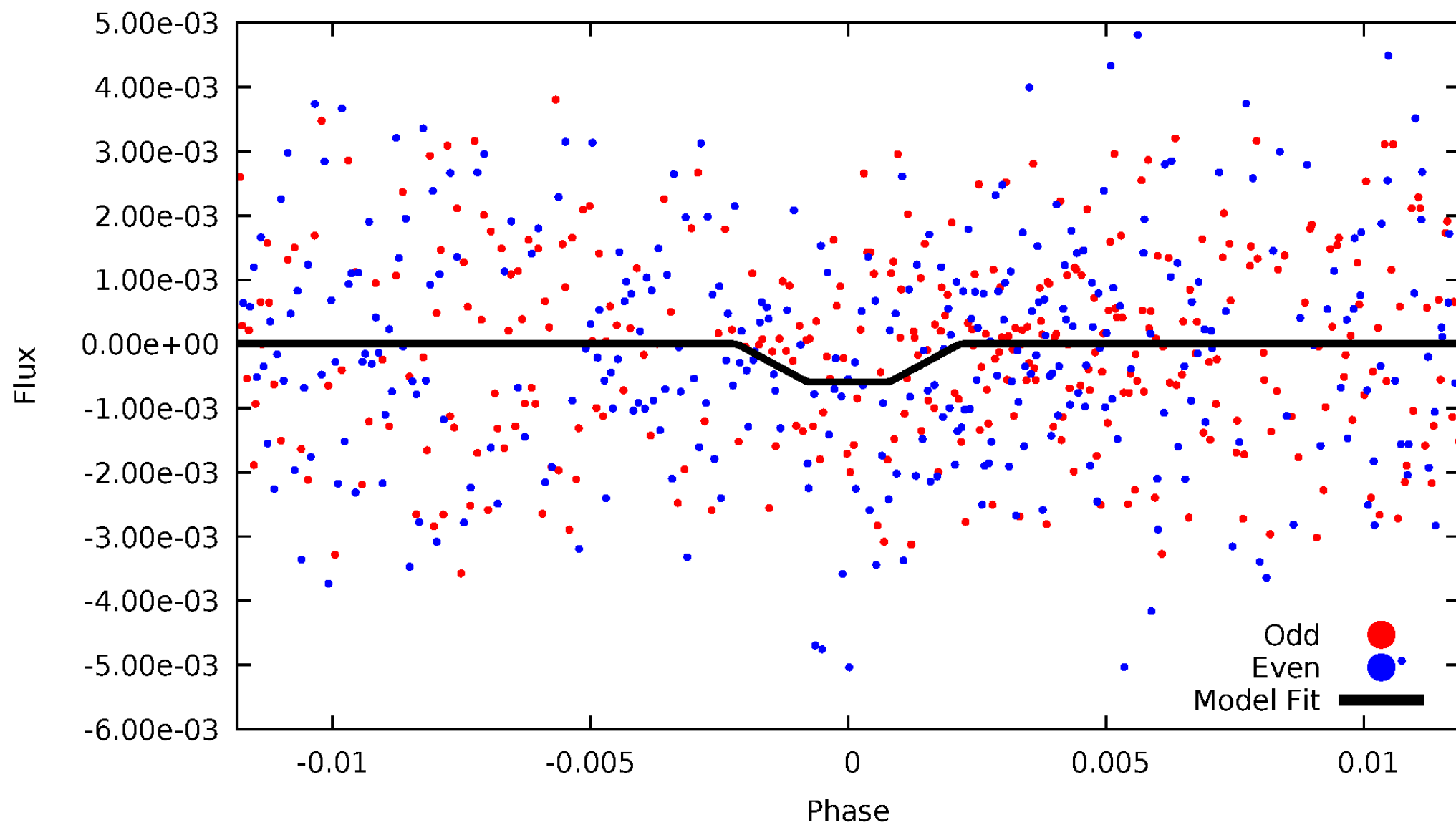
DV Odd/Even

TCE 001434660-02



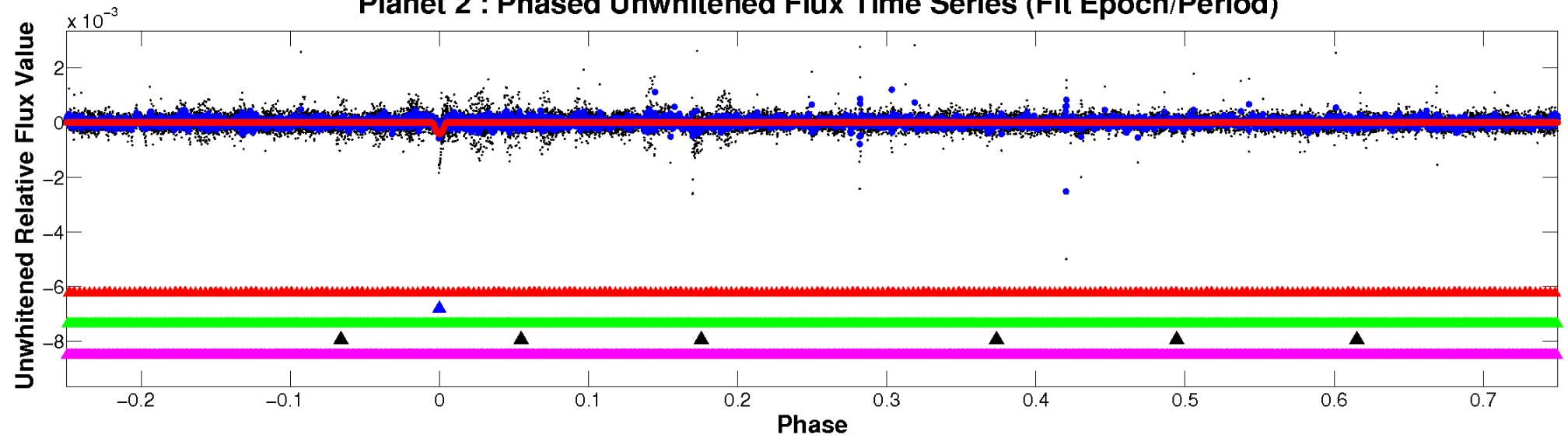
ALT Odd/Even

TCE 001434660-02

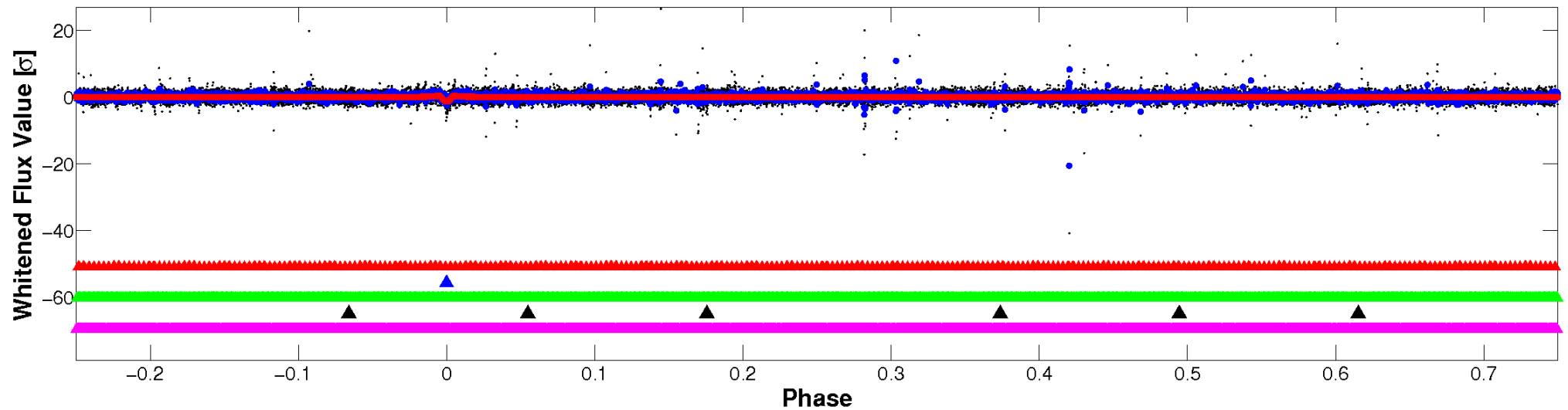


Non-Whitened Vs. Whitened Light Curve

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

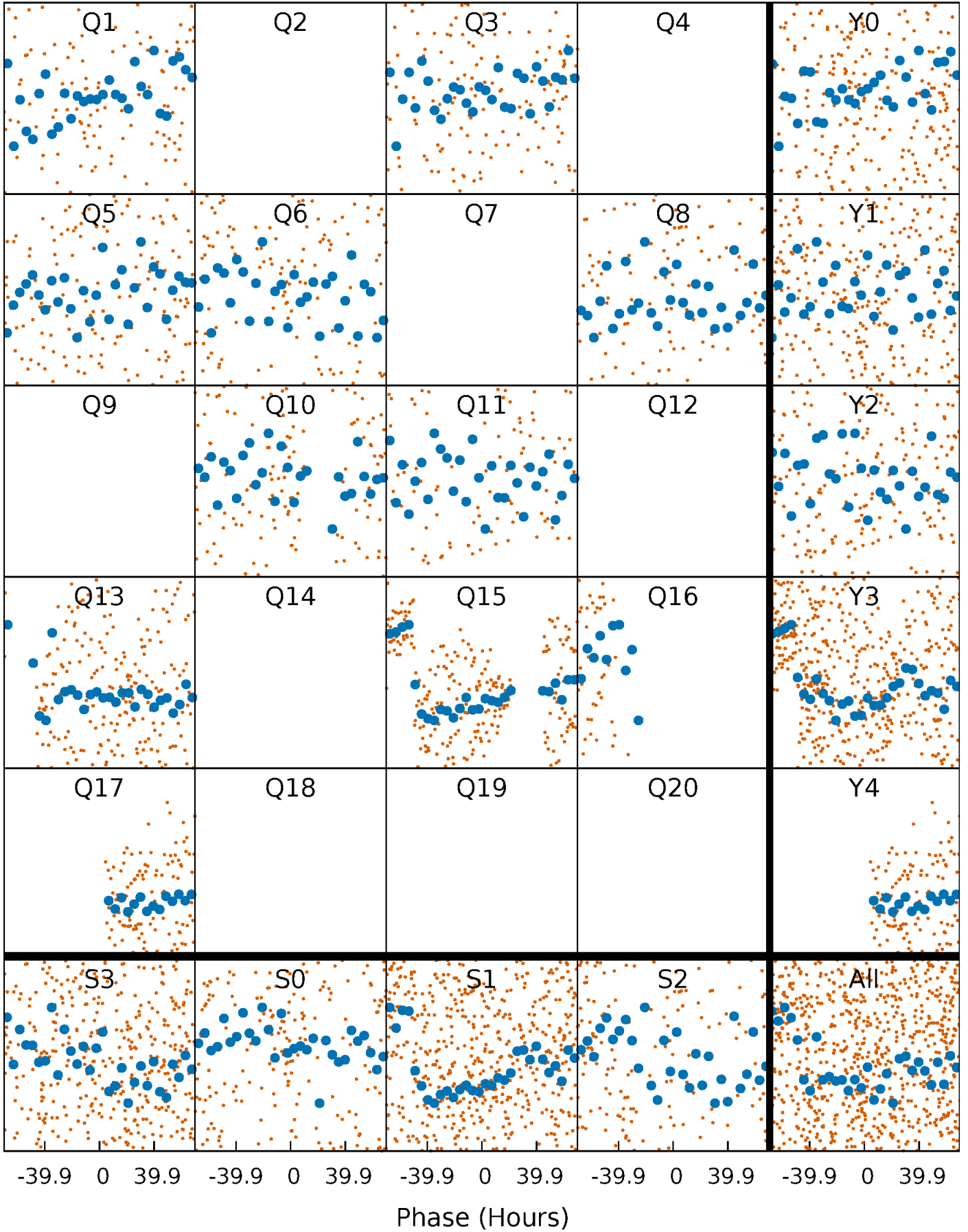


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



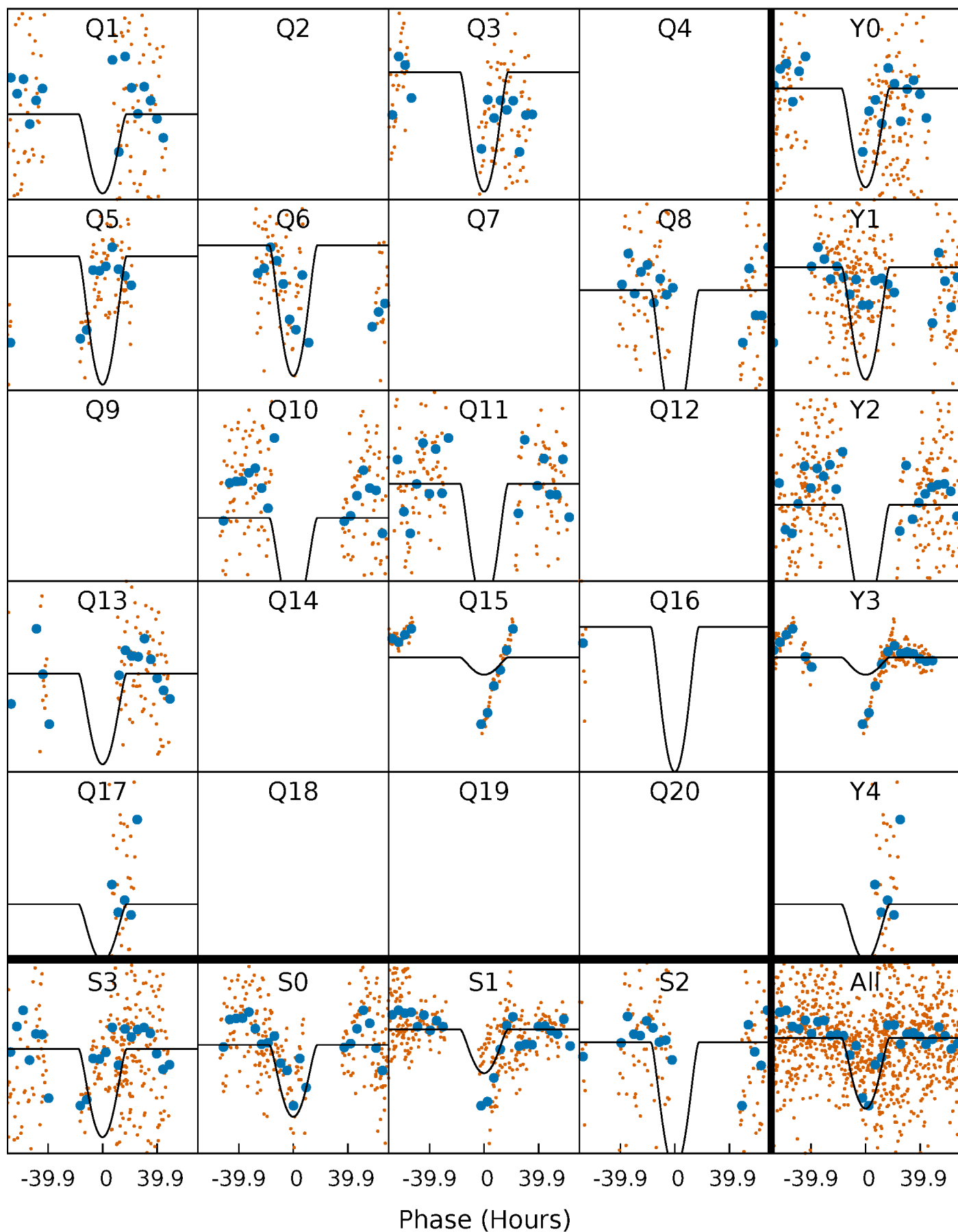
PDC Quarter-Phased Transit Curves

TCE 001434660-02 P=155.635464 Days $T_0=158.340396$ (BKJD)



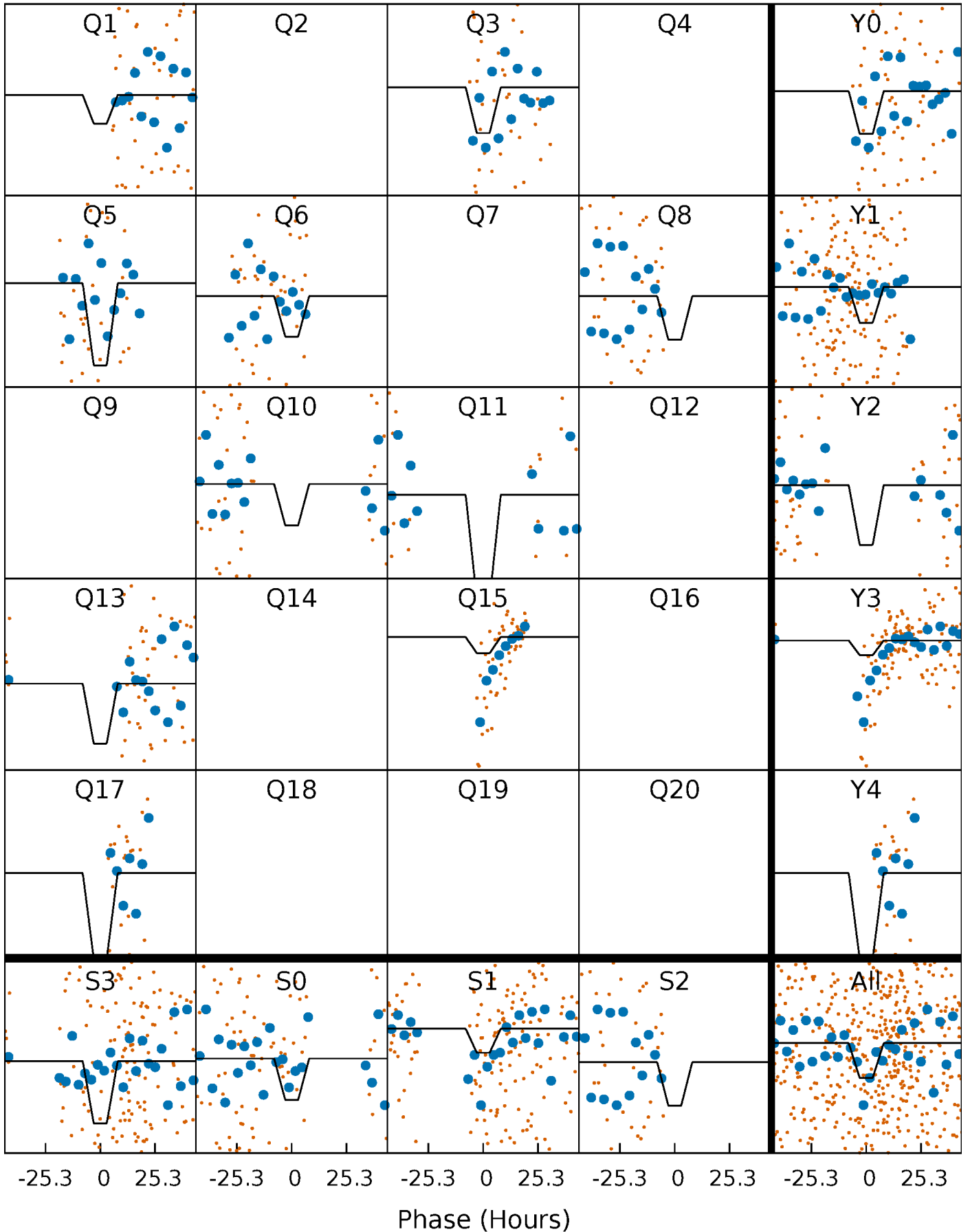
DV Quarter-Phased Transit Curves

TCE 001434660-02 P=155.635464 Days $T_0=158.340396$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

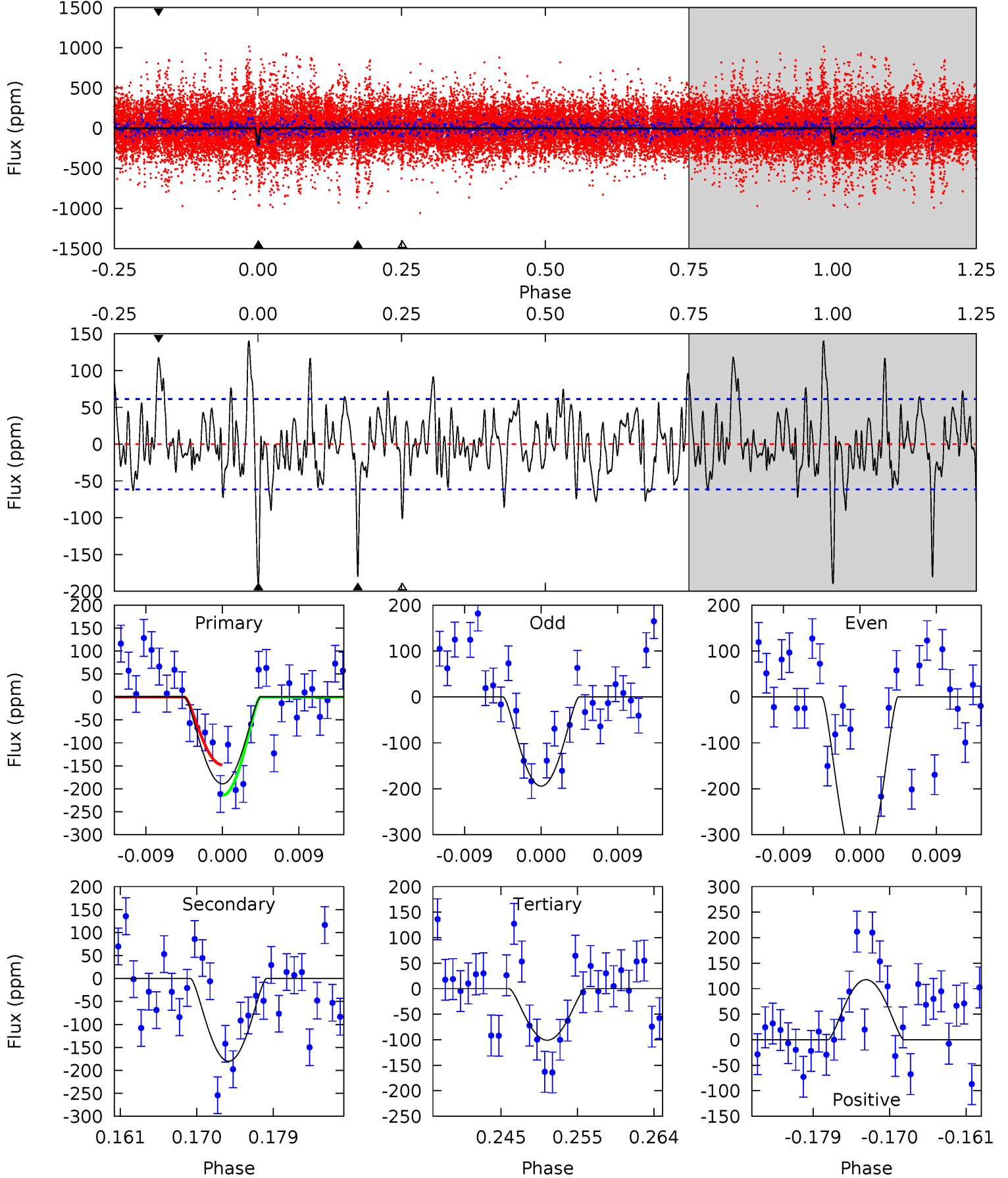
TCE 001434660-02 P=155.628804 Days $T_0=158.450613$ (BKJD)



DV Model-Shift Uniqueness Test

001434660-02, P = 155.635464 Days, E = 2.704932 Days

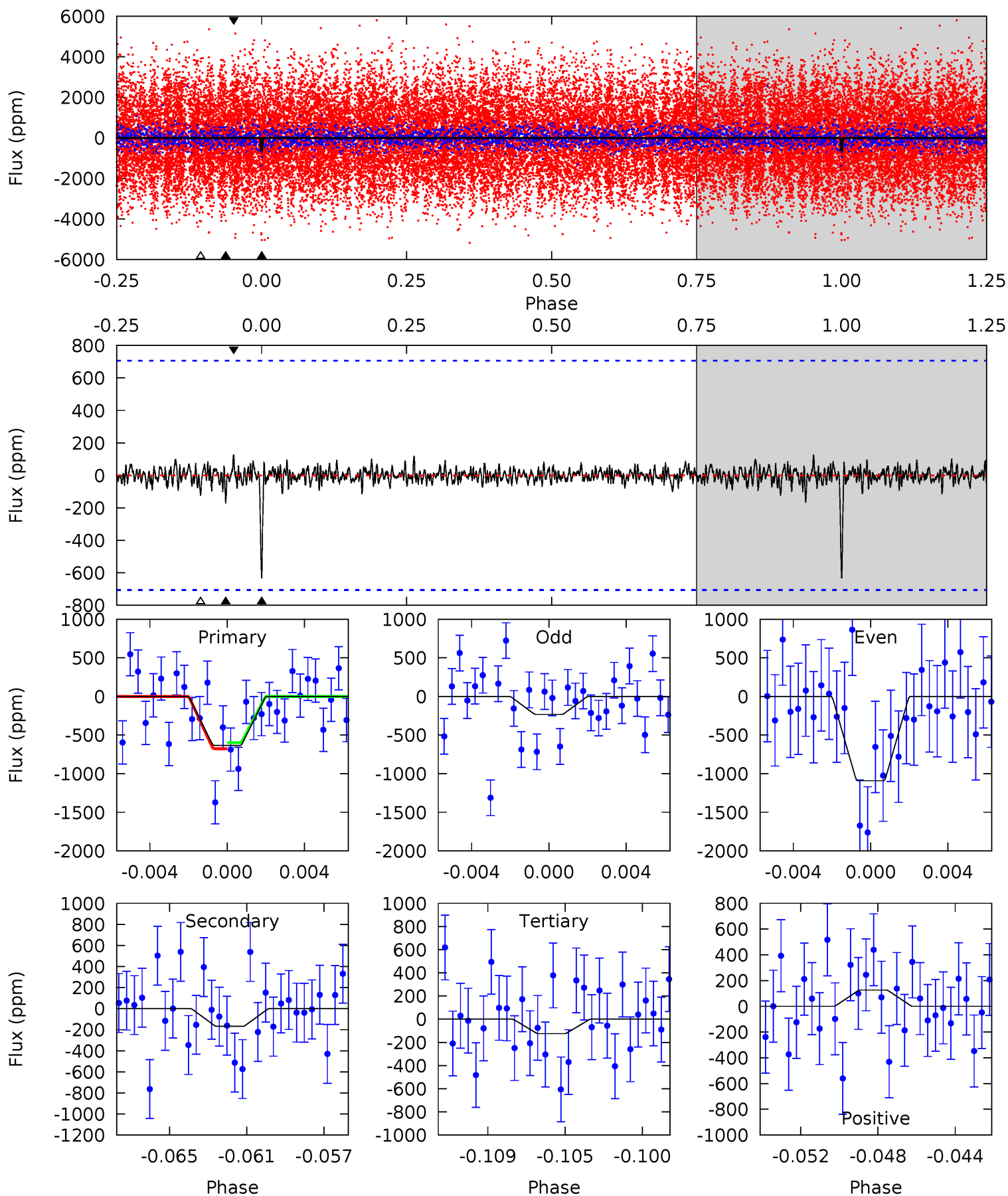
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.5	14.8	8.28	9.66	5.04	2.60	2.94	7.26	5.88	6.50	5.12	8.16	-18.6	0.42	0



Alt Model-Shift Uniqueness Test

001434660-02, P = 155.628804 Days, E = 2.821809 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.65	1.24	0.92	0.93	5.18	2.85	0.25	3.73	3.72	0.32	0.31	3.17	1.74	0.17	0.29



Stellar Parameters For KIC 001434660

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7526^{+67}_{-90}	$3.878^{+0.210}_{-0.070}$	$0.120^{+0.100}_{-0.200}$	$2.657^{+0.294}_{-0.686}$	$1.943^{+0.034}_{-0.306}$	$0.146^{+0.164}_{-0.035}$
	+1%/-1%	+5%/-2%	+83%/-167%	+11%/-26%	+2%/-16%	+112%/-24%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 001434660-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-180 ± 12	$17.89^{+18.96}_{-11.89}$	889^{+34}_{-61}	3731^{+2061}_{-716}	147^{+1245}_{-112}
Alt.	-168 ± 136	$16.98^{+17.98}_{-11.89}$	889^{+34}_{-58}	3660^{+2469}_{-1132}	133^{+1628}_{-123}

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 $A_{obs} \gg 1.0$

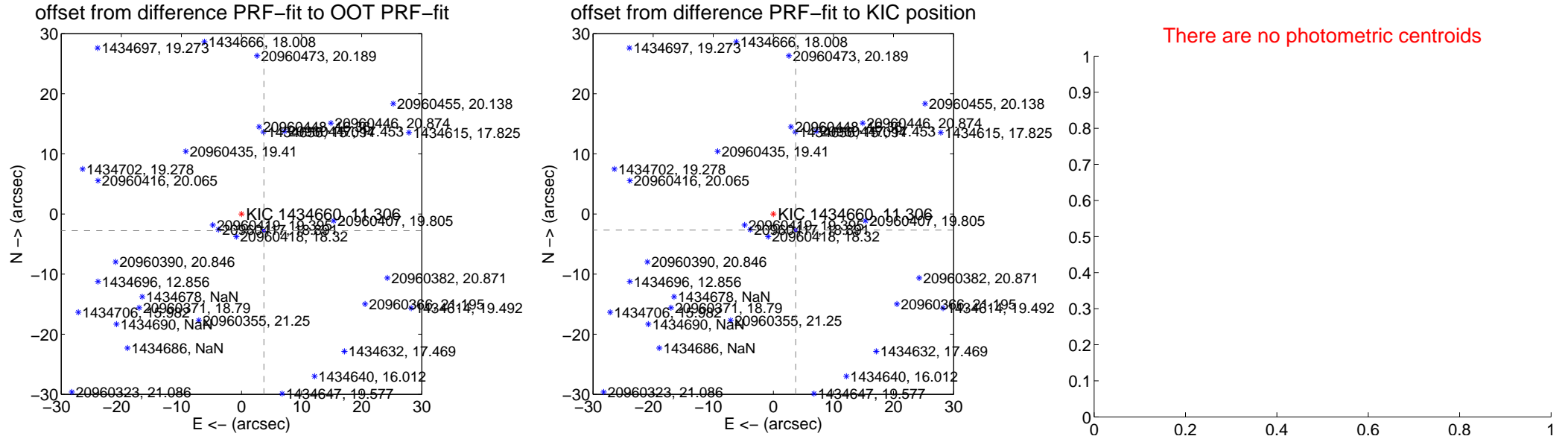
DV Centroid Data

Supplemental centroid analysis for 001434660-02. **Kepler magnitude: 11.31.** Transit SNR 14.59

There are 0 quarters with good PRF difference image offsets

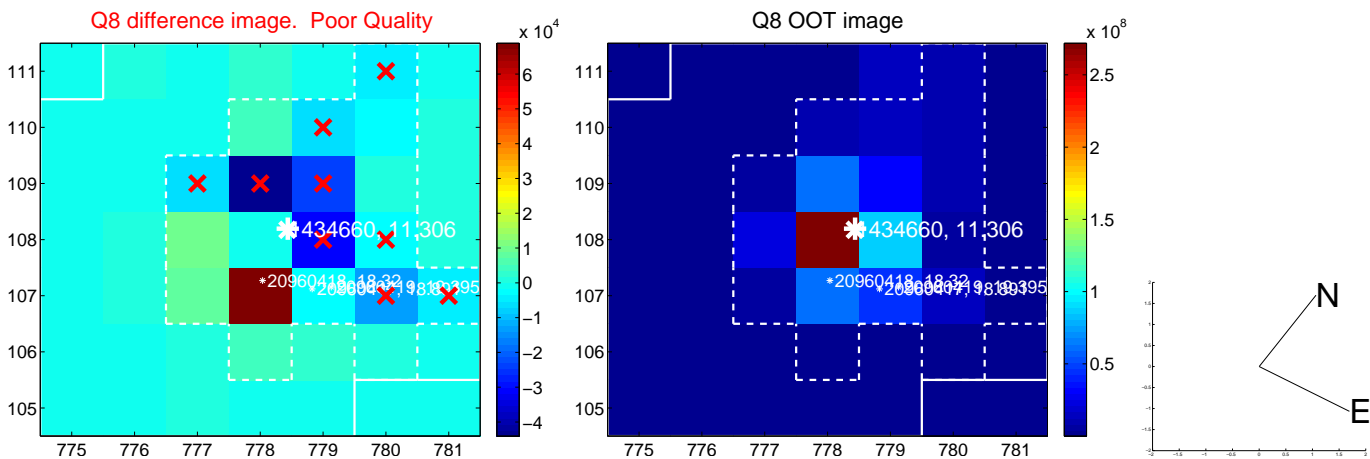
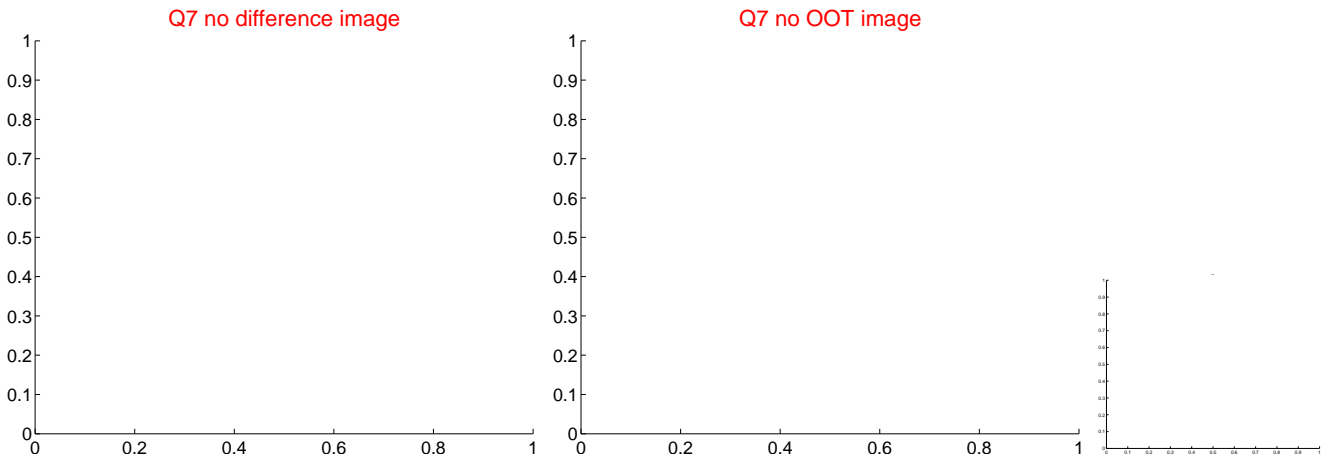
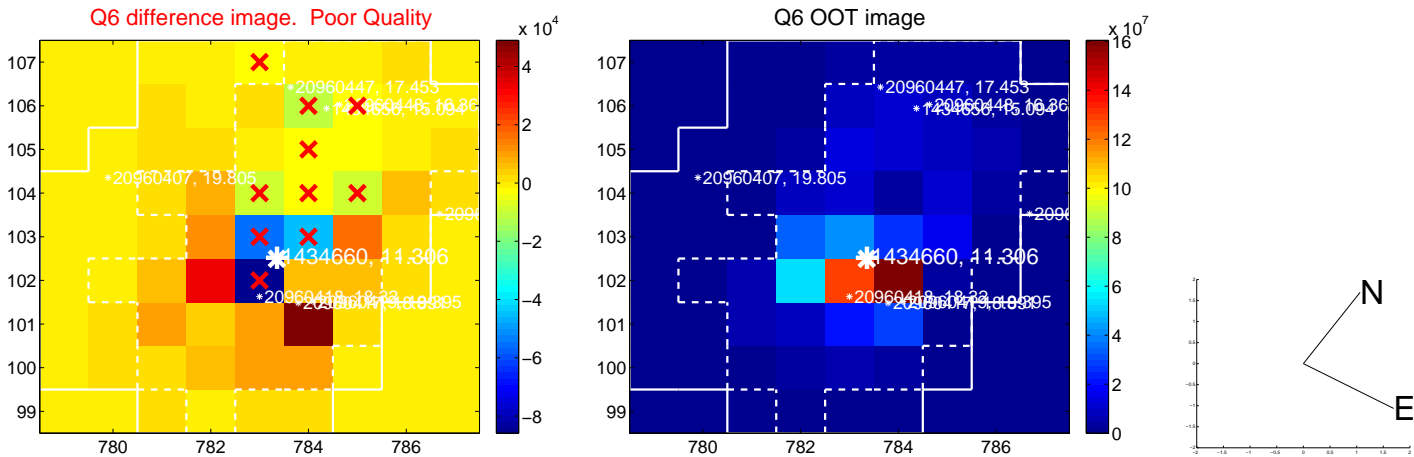
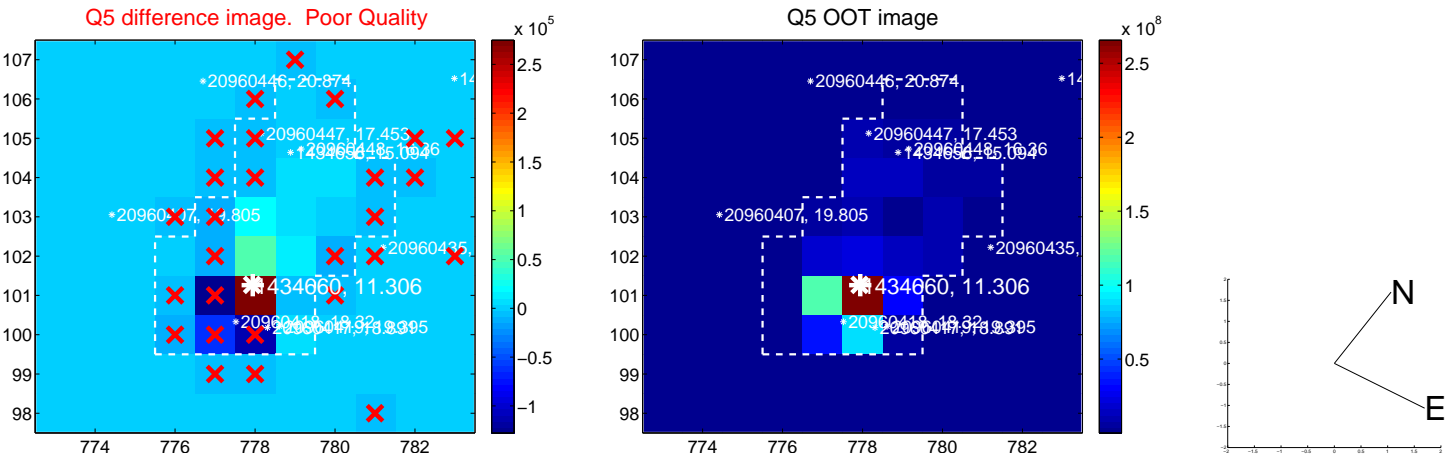
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.644 ± 0.076	60.91	-3.728 ± 0.077	-2.770 ± 0.075
PRF-fit source offset from KIC position	4.584 ± 0.076	60.09	-3.723 ± 0.077	-2.673 ± 0.075
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.



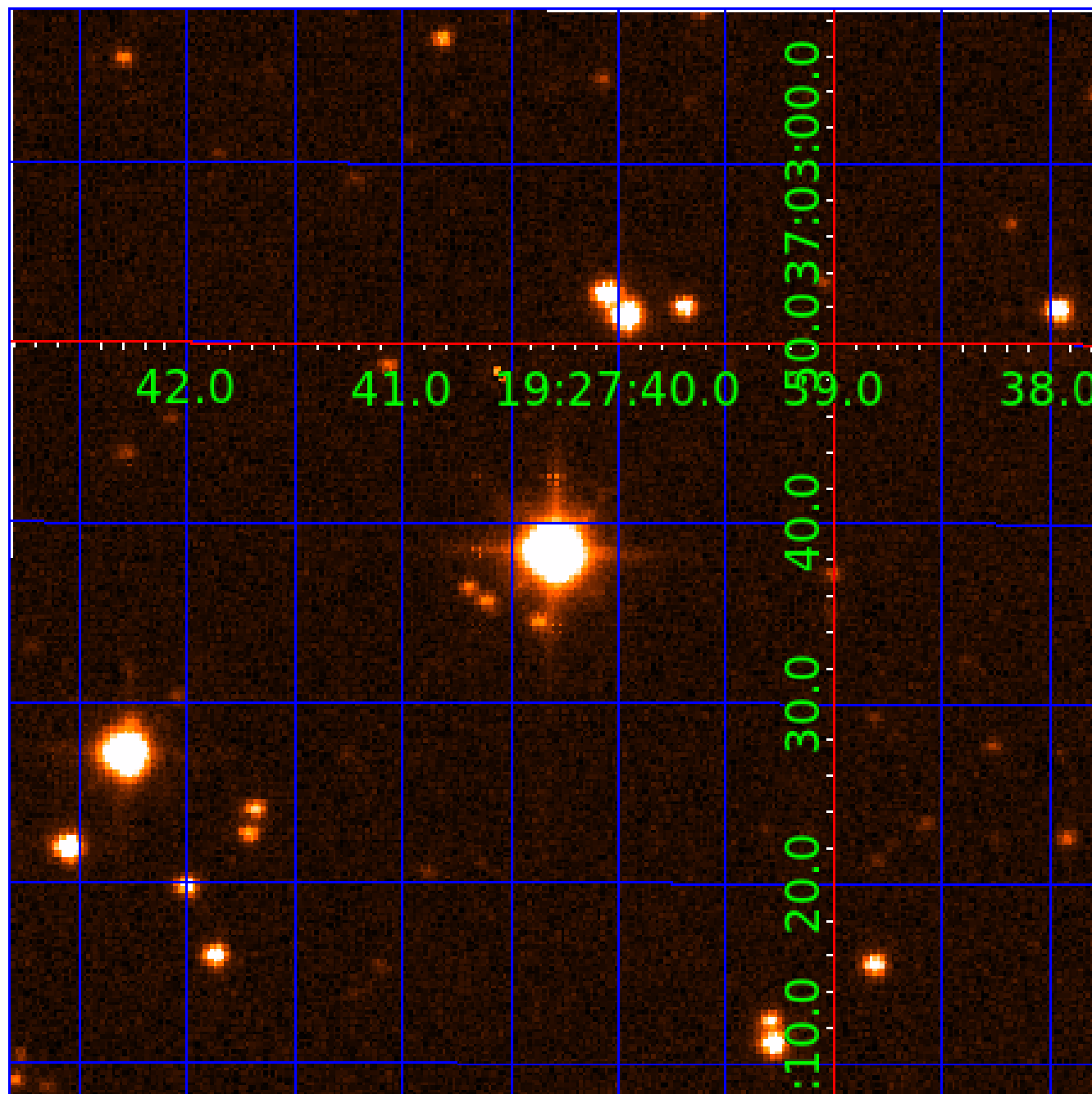
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination



KIC 001434660

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})
001434660-01	OBS	No	3.693374	131.772765	21.1	16.707	9.0	6.5	2.66	7526	1.27	5954.53
001434660-02	OBS	No	155.635464	158.340396	417.1	34.912	17.1	14.6	2.66	7526	10.27	40.61
001434660-03	OBS	No	0.634203	131.574385	70.8	1.005	11.6	15.5	2.66	7526	2.53	62388.98
001434660-05	OBS	No	0.634198	131.786214	57.1	1.173	10.5	13.3	2.66	7526	2.33	62389.61

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
001434660-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
001434660-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—INCONSISTENT_TRANS—CENT_SATURATED
001434660-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
001434660-05	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

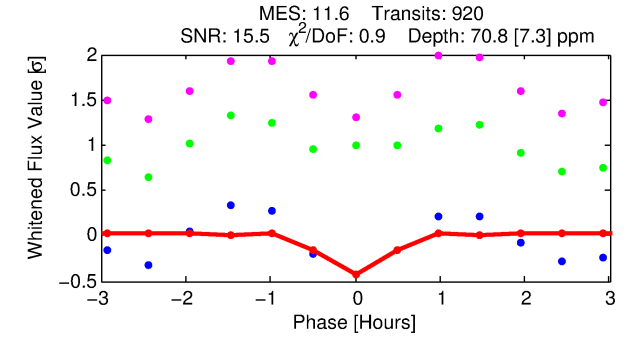
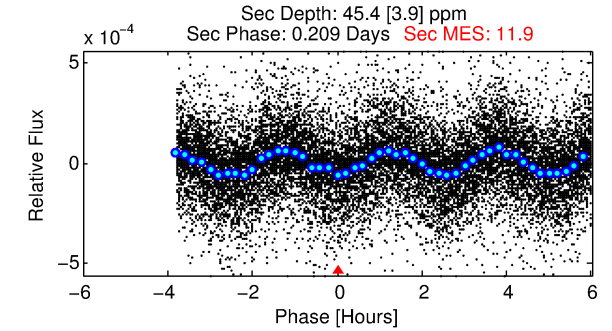
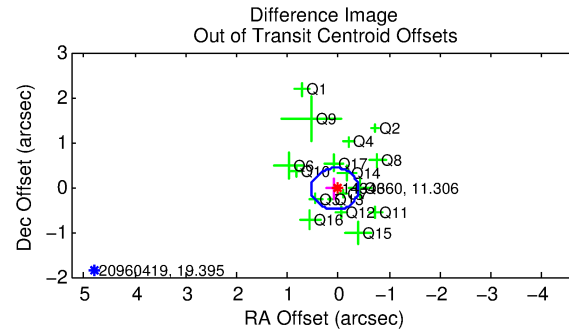
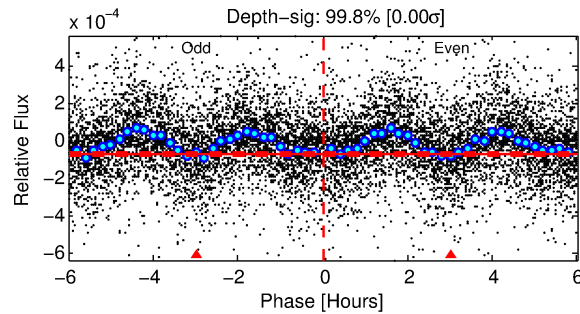
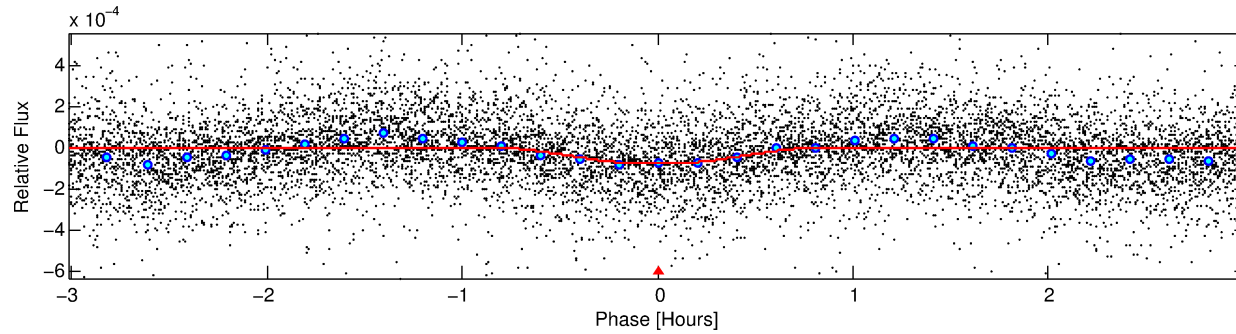
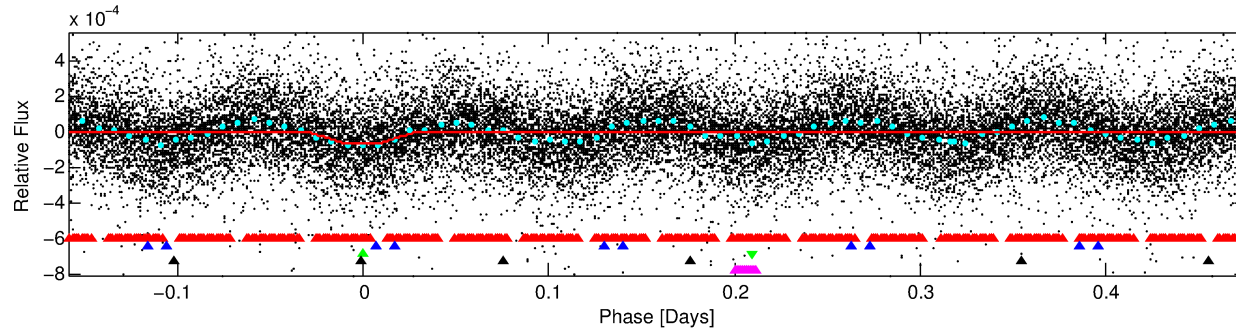
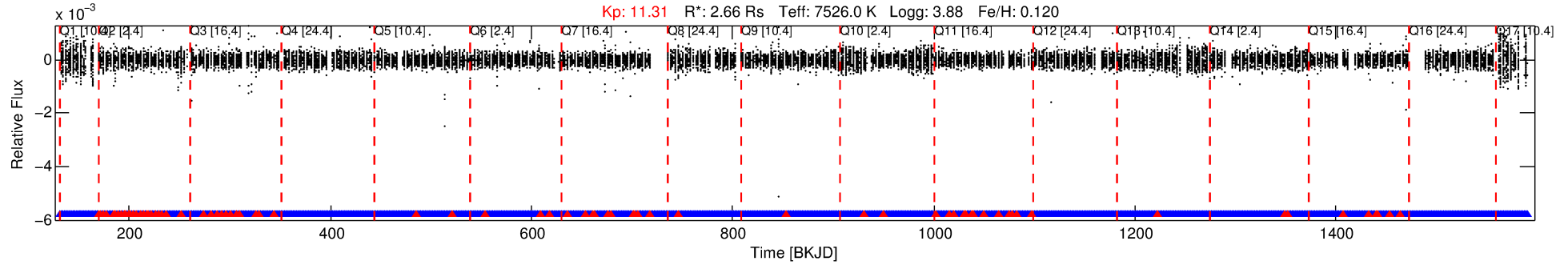
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 001434660-03

No Significant Match Found

DV One-Page Summary

KIC: 1434660 Candidate: 3 of 5 Period: 0.634 d



DV Fit Results:

Period = 0.63420 [0.00001] d
Epoch = 131.5744 [0.0011] BKJD
Rp/R* = 0.0087 [0.0014]
a/R* = 2.81 [2.38]
b = 0.84 [0.33]
Seff = 62388.98 [22993.70]
Teq = 4030 [371] K
Rp = 2.53 [0.77] Re
a = 0.0180 [0.0043] AU
Ag = 1.27 [0.63] [0.44 σ]
Teffp = 6620 [552] K [3.90 σ]

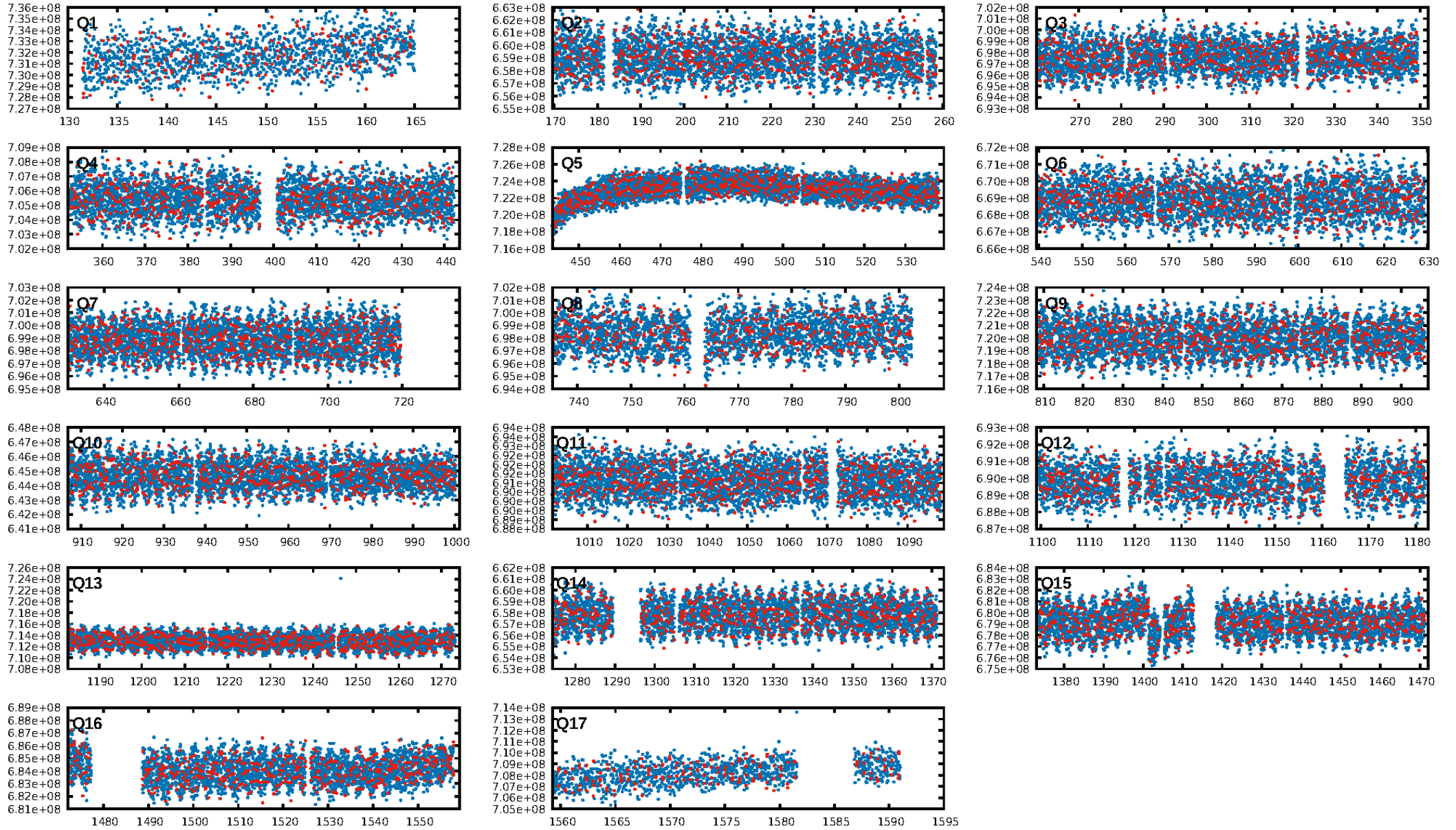
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00 σ]
LongPeriod-sig: 100.0% [4.39 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.34e-30
RollingBand-fgt: 0.90 [795/881]
GhostDiagnostic-chr: 7.877
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.077 arcsec [0.50 σ]
KicOffset-rm: 0.090 arcsec [0.63 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.82 [14/17]
DiffImageOverlap-fno: 0.00 [0/17]

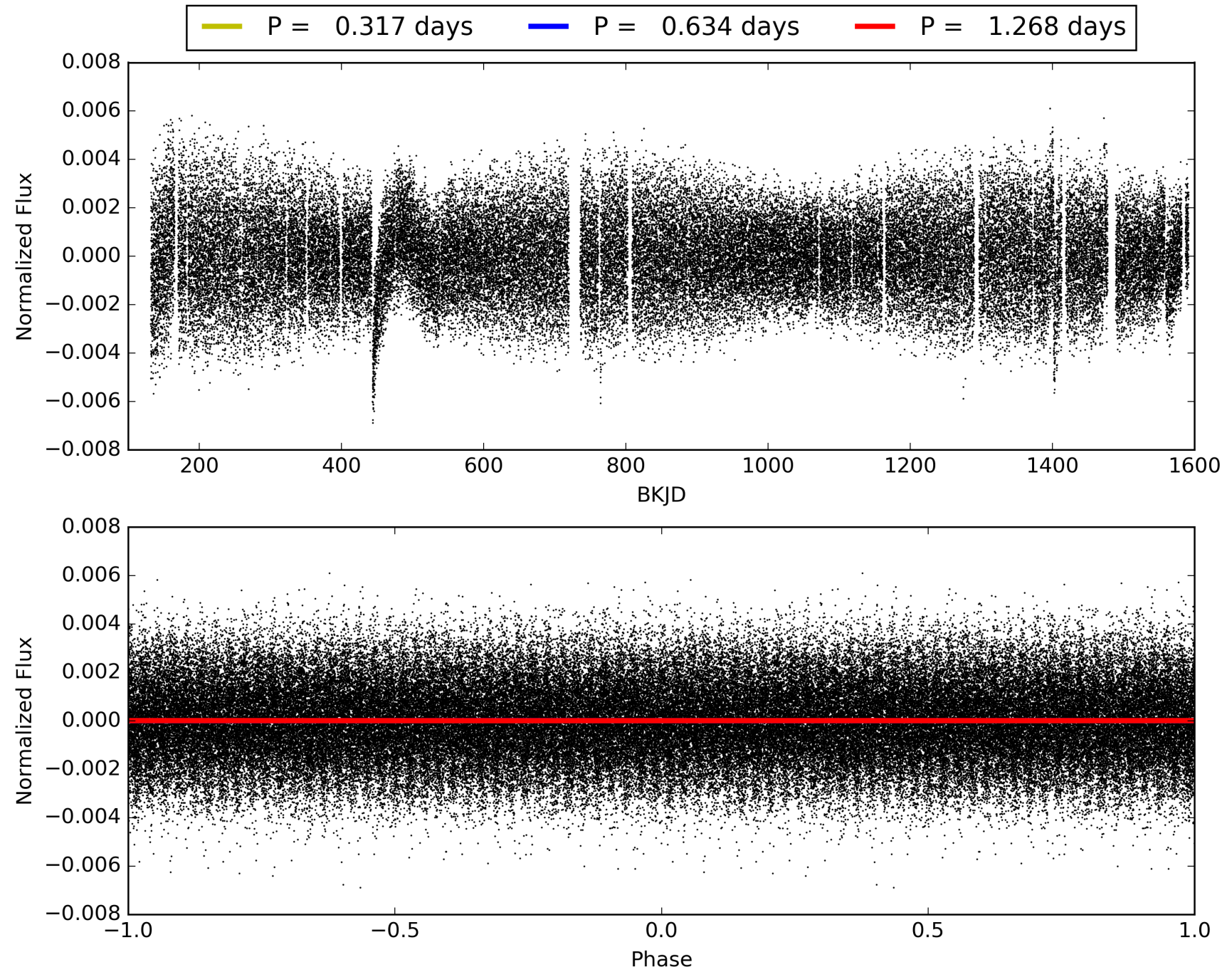
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 01:39:24 Z

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

TCE 001434660-03, PDC Light Curves

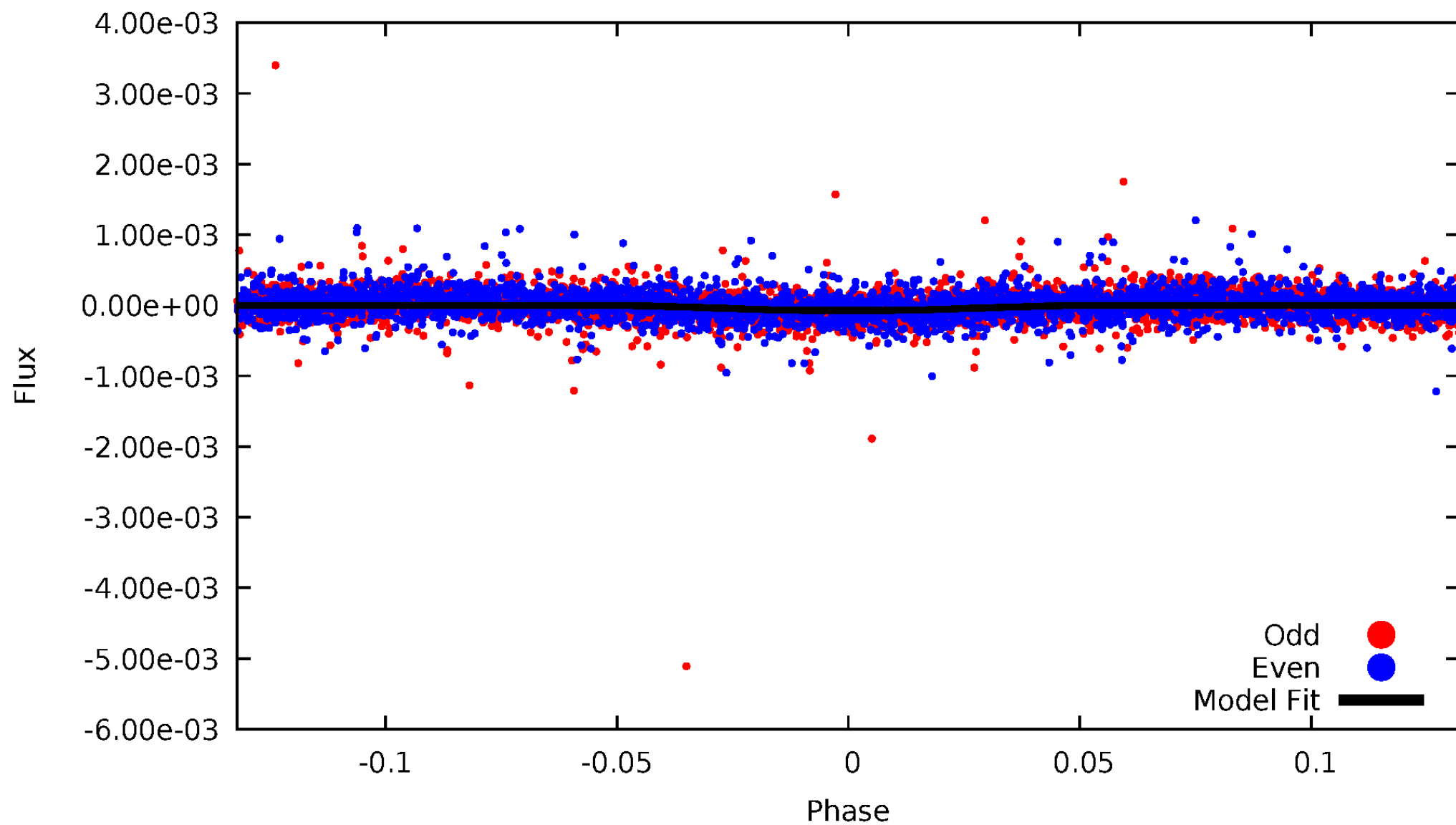


TCE 001434660-03



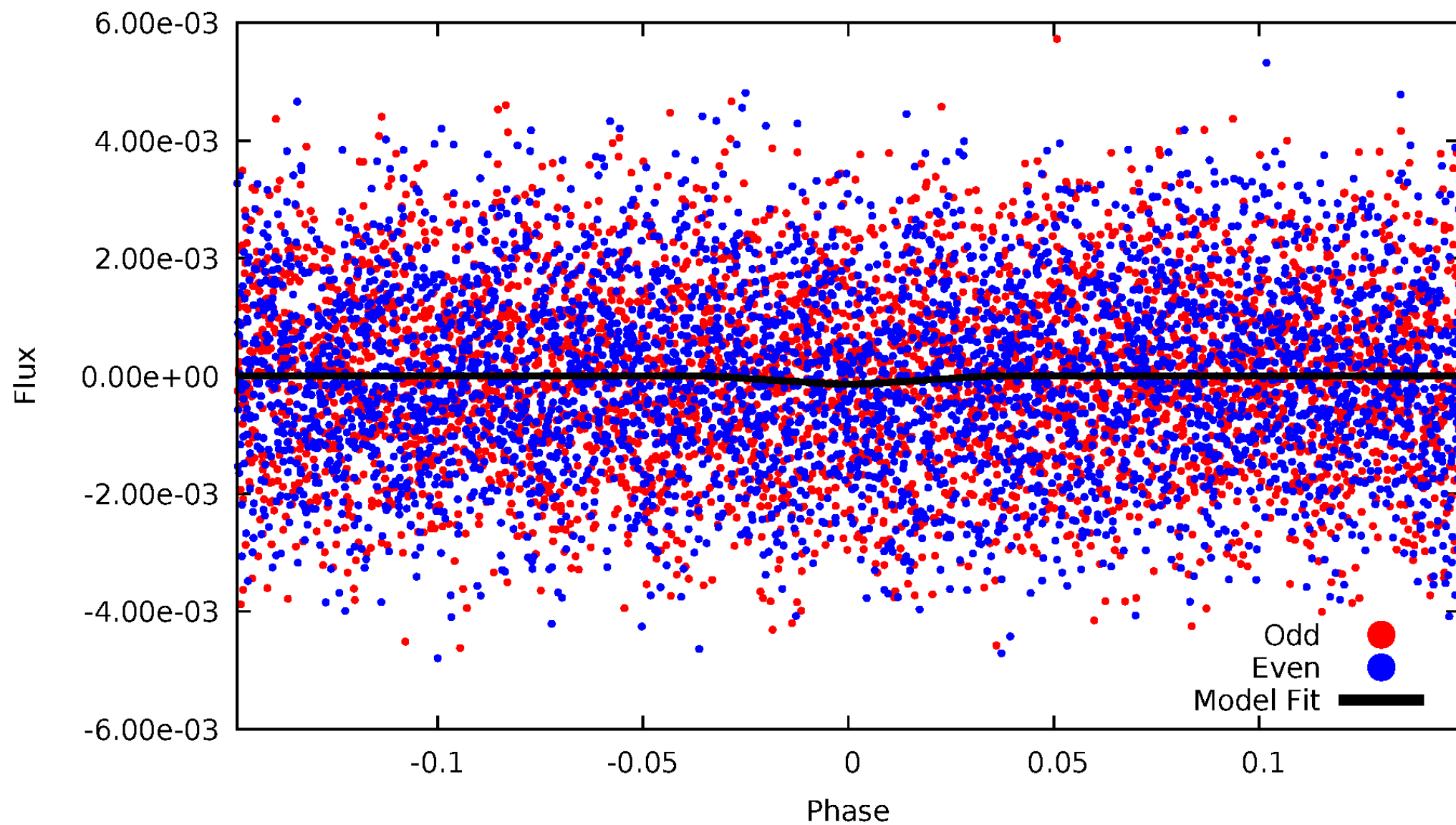
DV Odd/Even

TCE 001434660-03



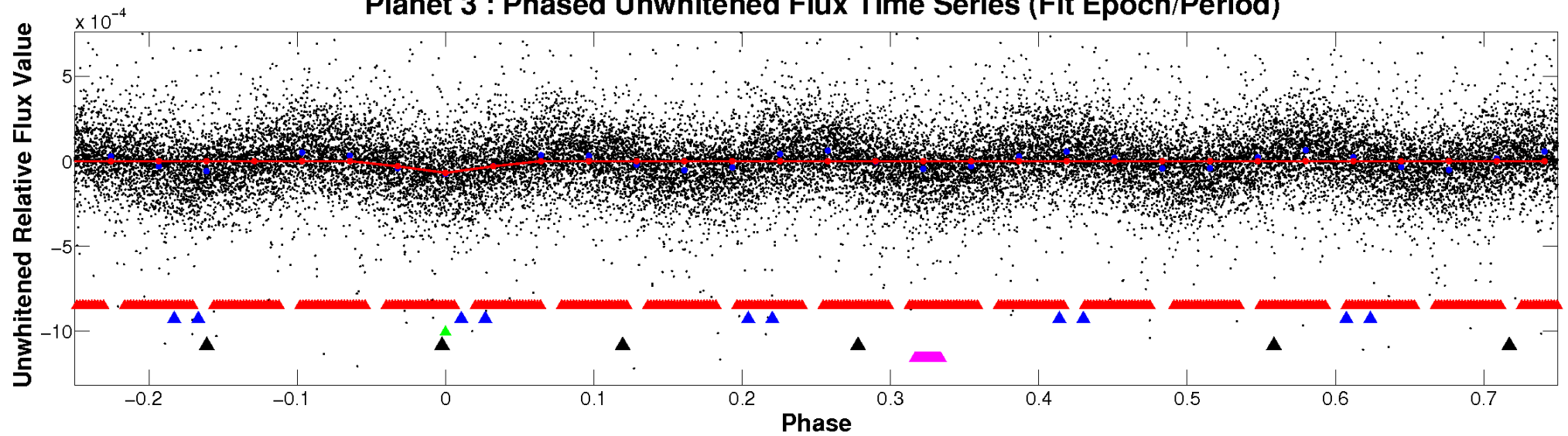
ALT Odd/Even

TCE 001434660-03

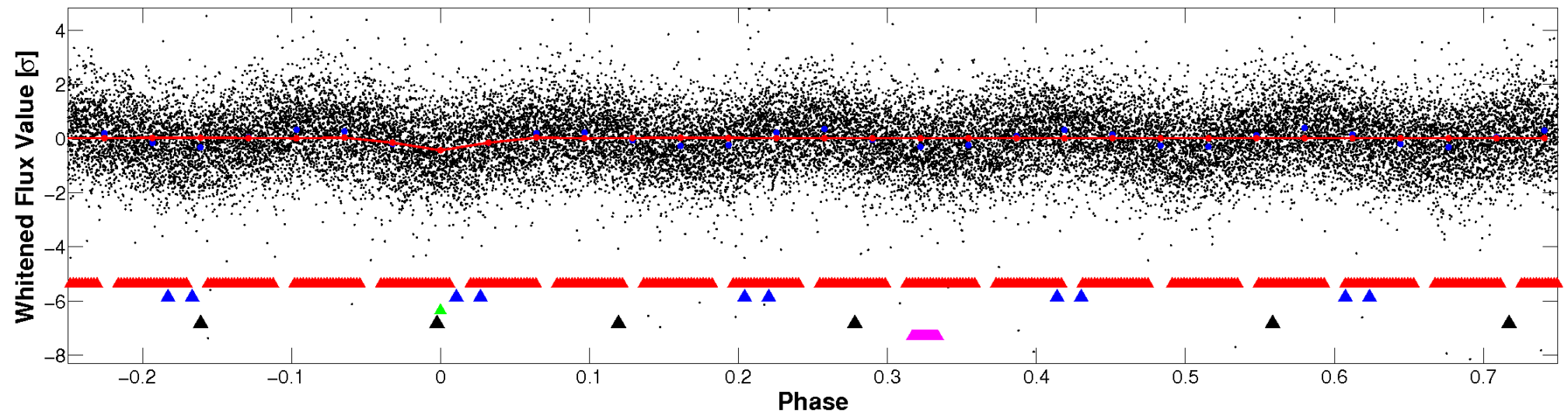


Non-Whitened Vs. Whitened Light Curve

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

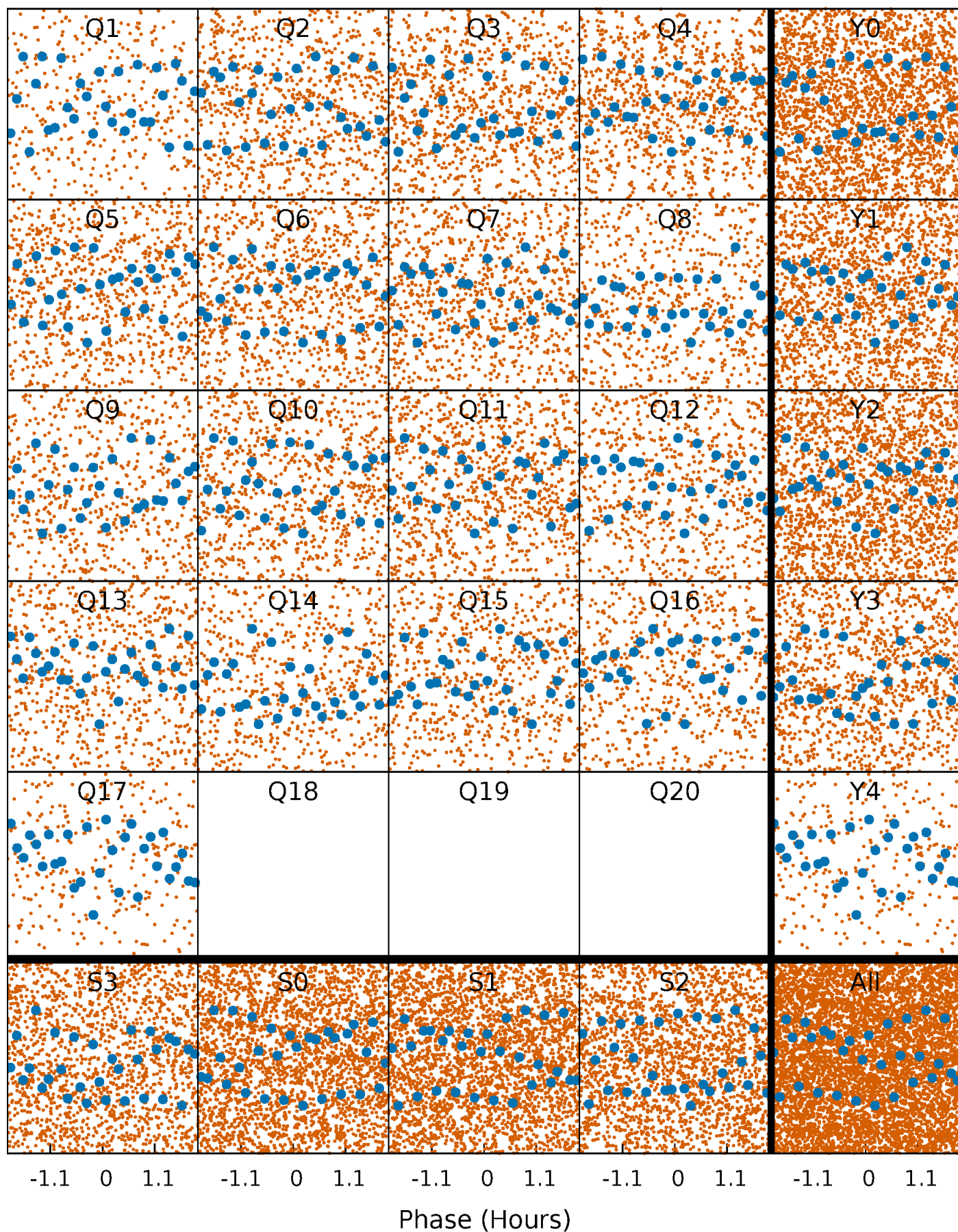


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



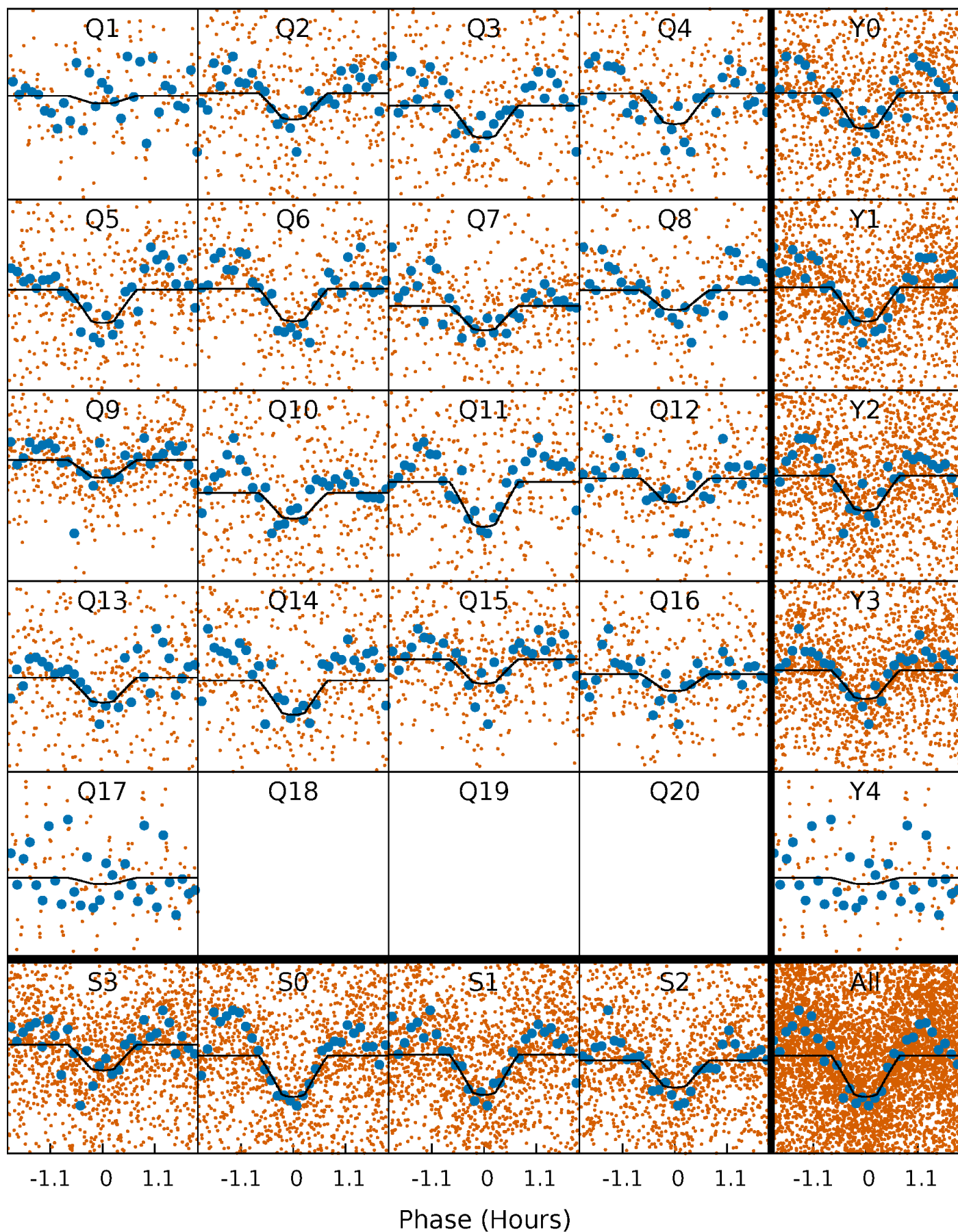
PDC Quarter-Phased Transit Curves

TCE 001434660-03 P= 0.634203 Days $T_0=131.574385$ (BKJD)



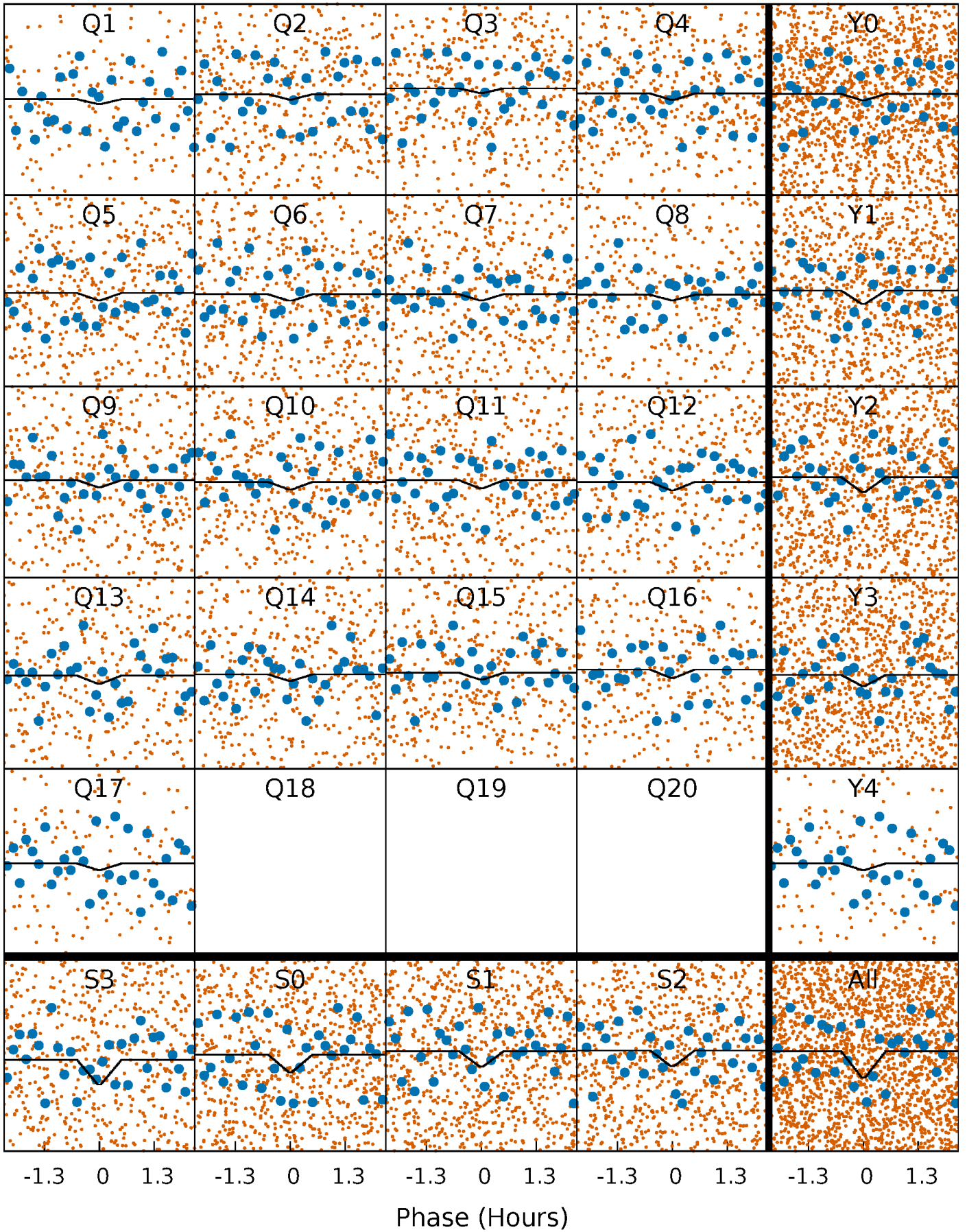
DV Quarter-Phased Transit Curves

TCE 001434660-03 P= 0.634203 Days $T_0=131.574385$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

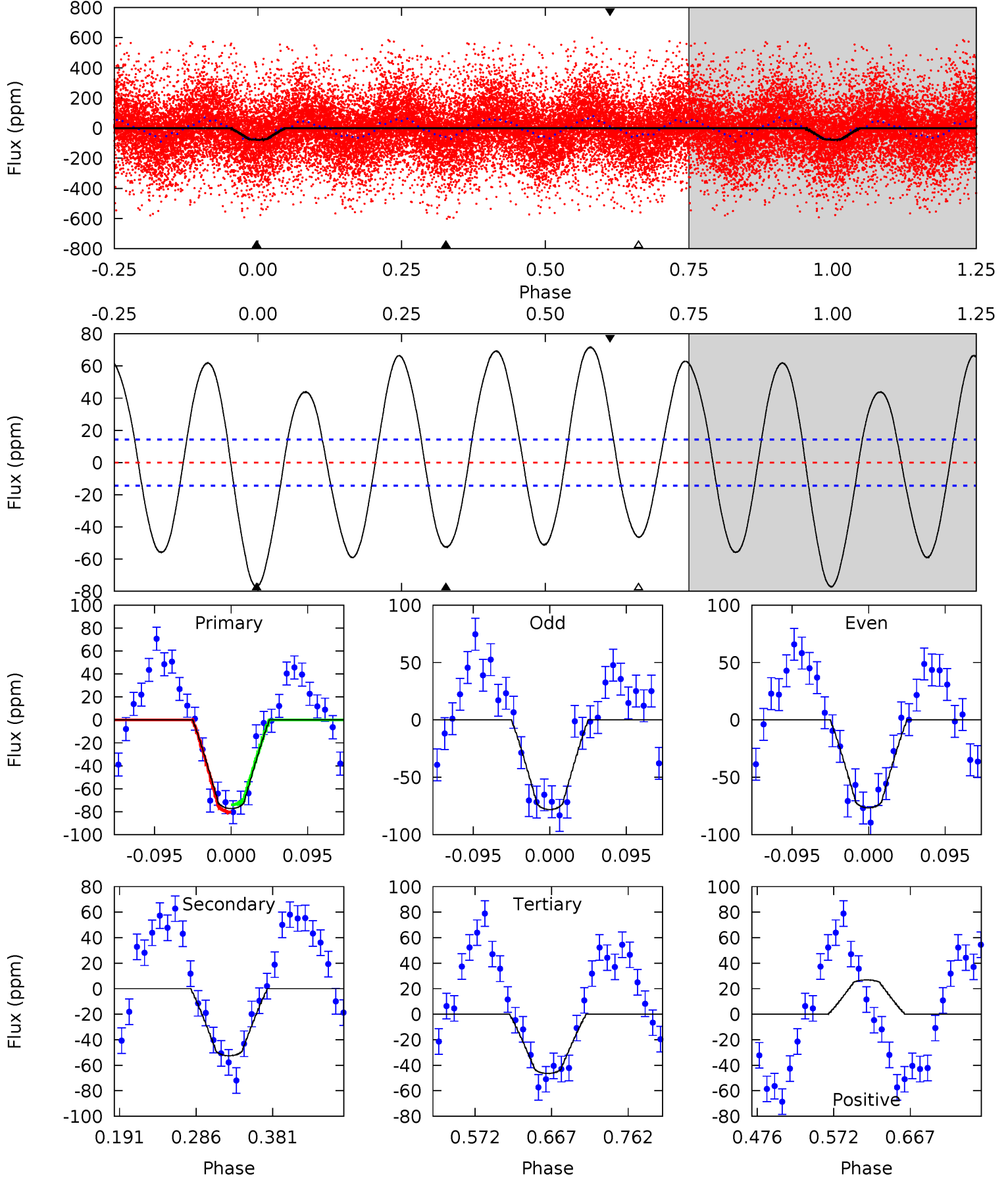
TCE 001434660-03 P= 0.634205 Days $T_0=131.576507$ (BKJD)



DV Model-Shift Uniqueness Test

001434660-03, P = 0.634203 Days, E = 131.574385 Days

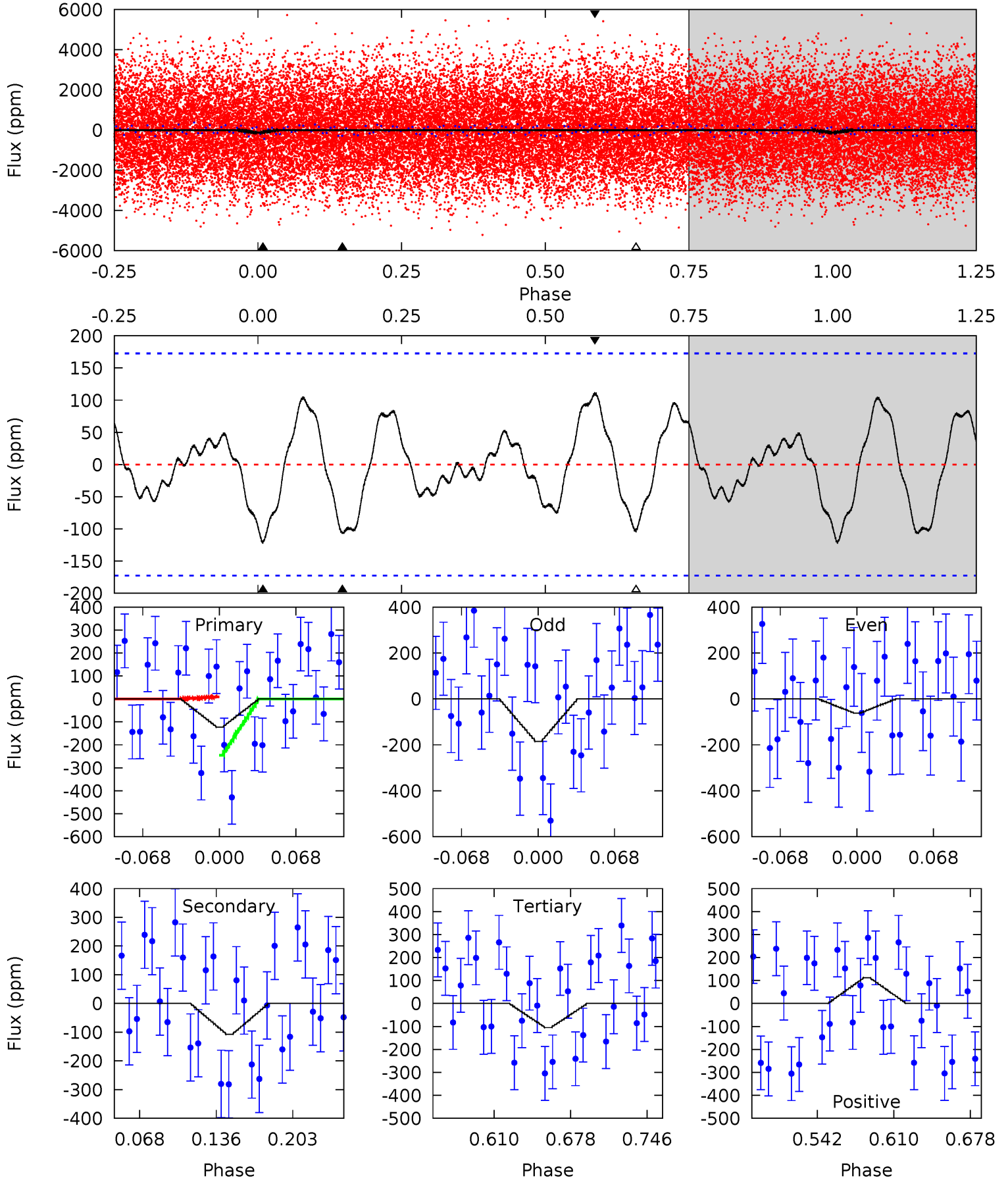
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.6	16.8	14.8	8.57	4.57	1.67	13.0	9.84	16.1	1.97	8.20	0.23	1.01	0.48	1.02



Alt Model-Shift Uniqueness Test

001434660-03, P = 0.634205 Days, E = 131.576507 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.31	2.90	2.83	3.02	4.65	1.83	1.33	0.48	0.28	0.07	-0.13	1.66	3.84	0.48	3.18



Stellar Parameters For KIC 001434660

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7526^{+67}_{-90}	$3.878^{+0.210}_{-0.070}$	$0.120^{+0.100}_{-0.200}$	$2.657^{+0.294}_{-0.686}$	$1.943^{+0.034}_{-0.306}$	$0.146^{+0.164}_{-0.035}$
	+1%/-1%	+5%/-2%	+83%/-167%	+11%/-26%	+2%/-16%	+112%/-24%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 001434660-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-53 ± 3	$2.39^{+0.48}_{-0.45}$	5588^{+198}_{-351}	6424^{+771}_{-589}	$1.610^{+0.848}_{-0.492}$
Alt.	-108 ± 37	$3.30^{+0.50}_{-0.55}$	5594^{+197}_{-374}	6611^{+939}_{-939}	$1.734^{+1.011}_{-0.692}$

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 $A_{obs} \gg 1.0$

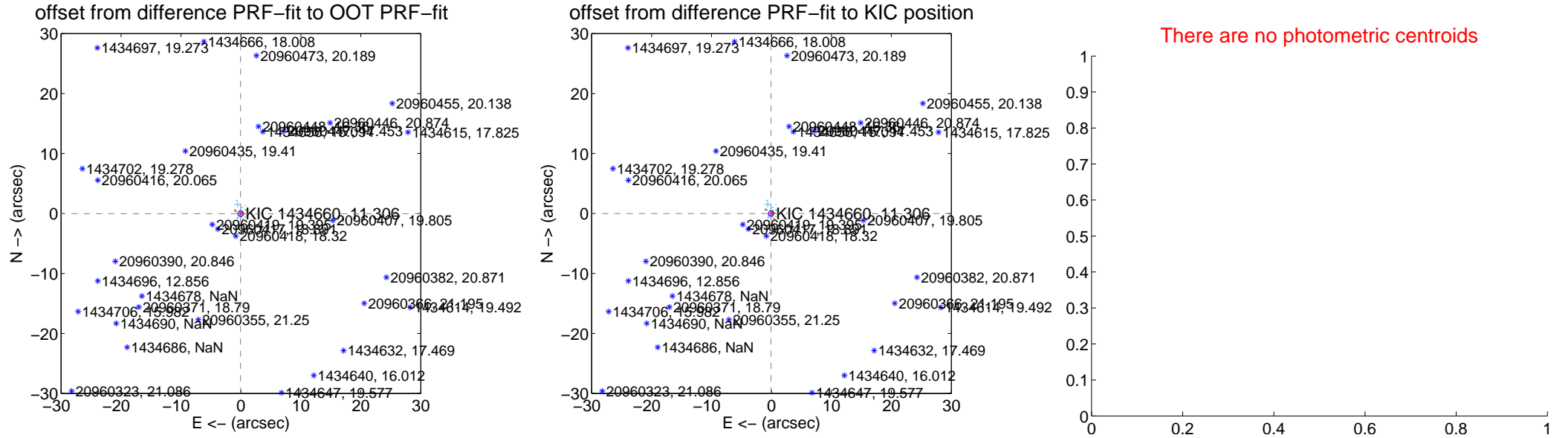
DV Centroid Data

Supplemental centroid analysis for 001434660-03. **Kepler magnitude: 11.31.** Transit SNR 15.45

There are 14 quarters with good PRF difference image offsets

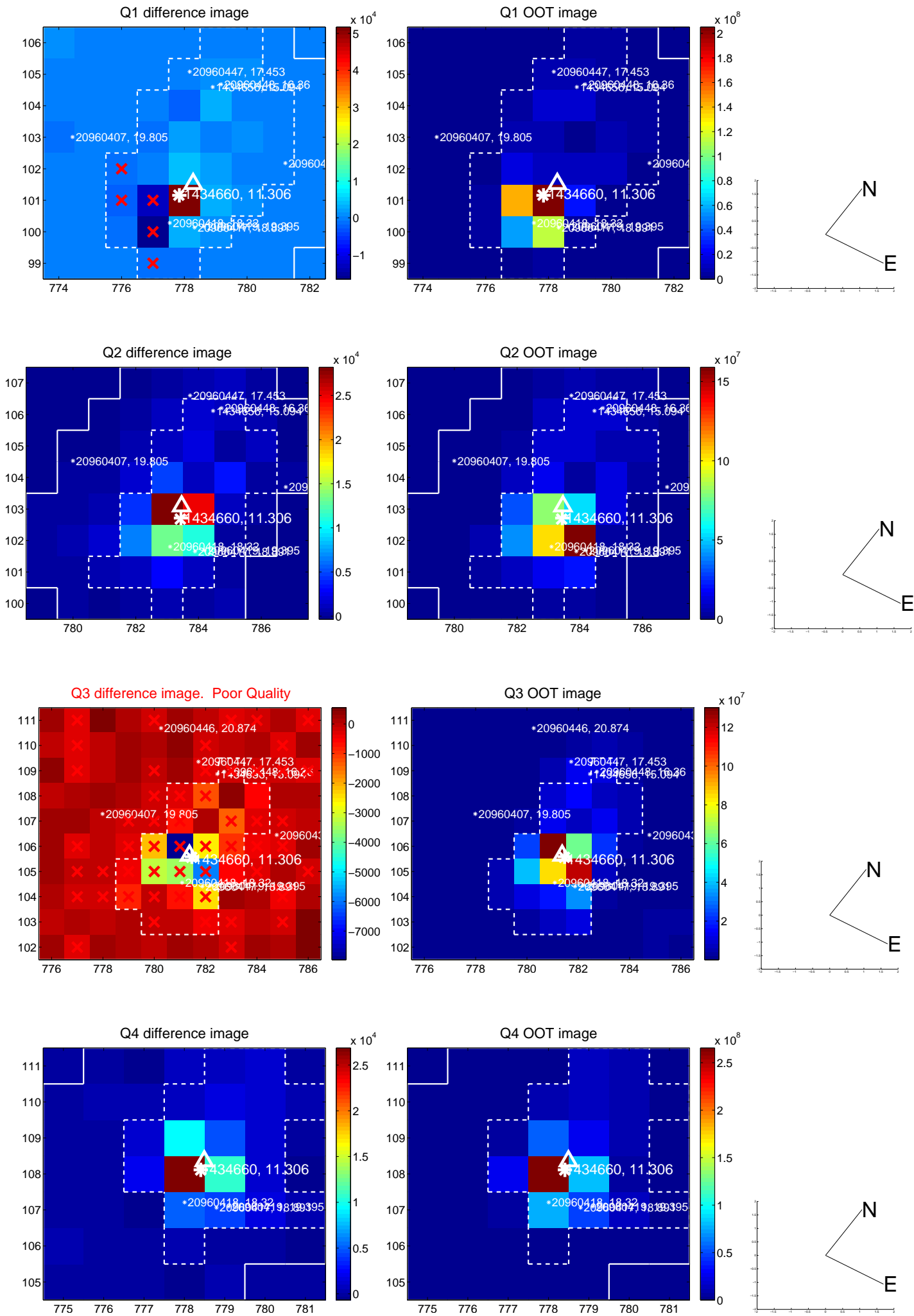
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.077 ± 0.154	0.50	0.068 ± 0.149	-0.035 ± 0.224
PRF-fit source offset from KIC position	0.090 ± 0.143	0.63	0.090 ± 0.148	-0.010 ± 0.200
photometric centroid source offset	—	—	—	—

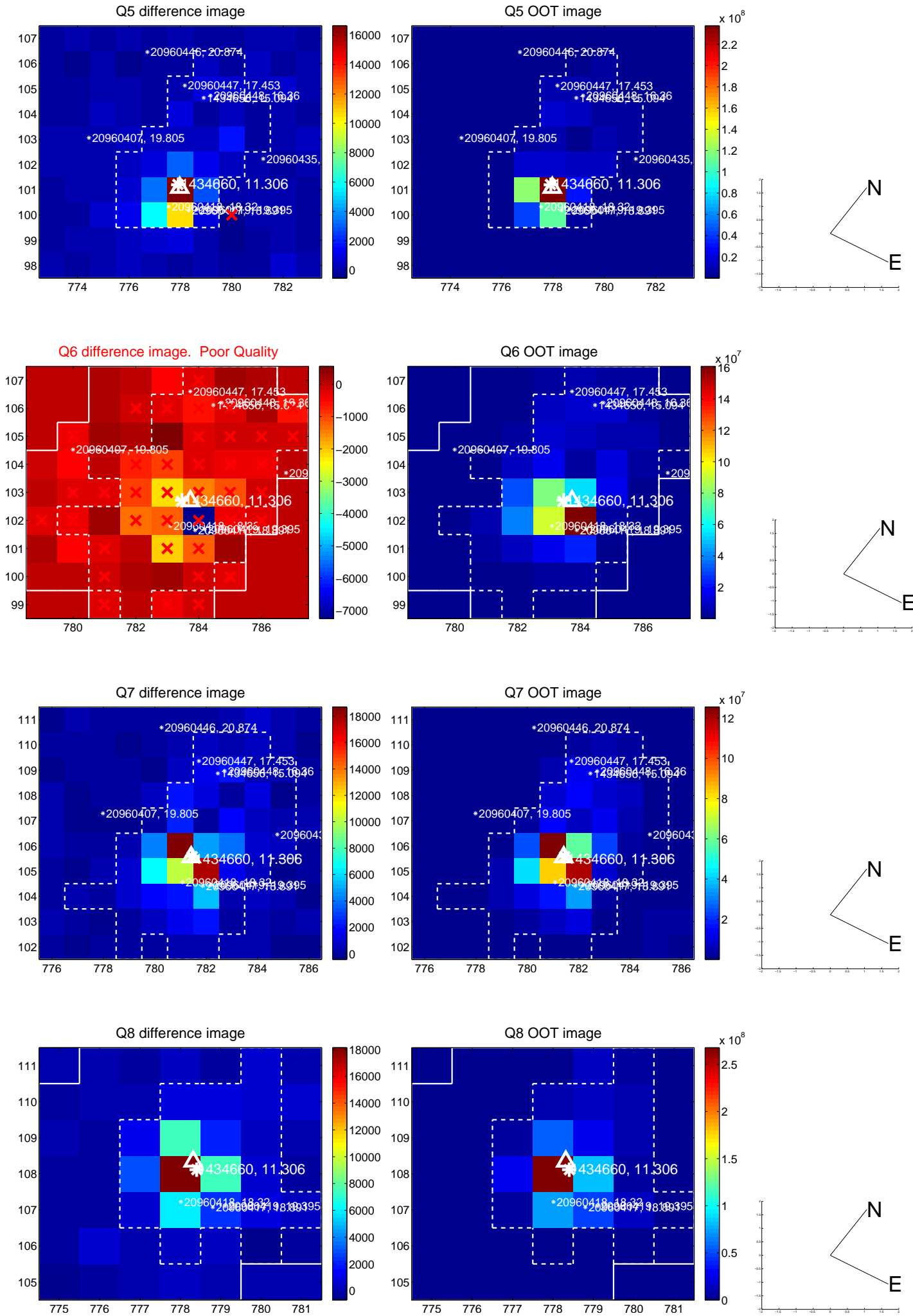


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

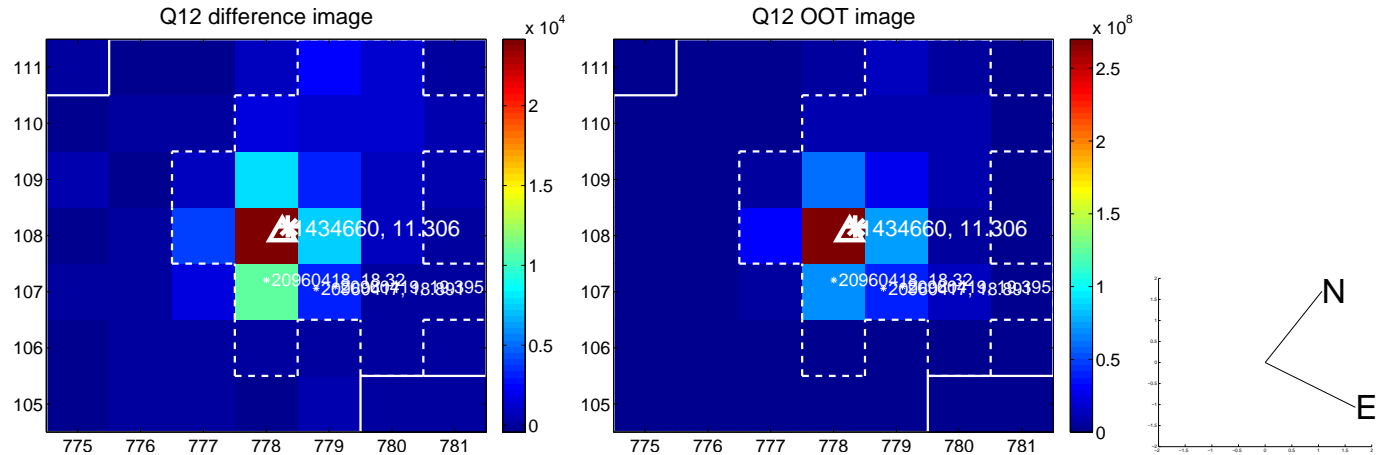
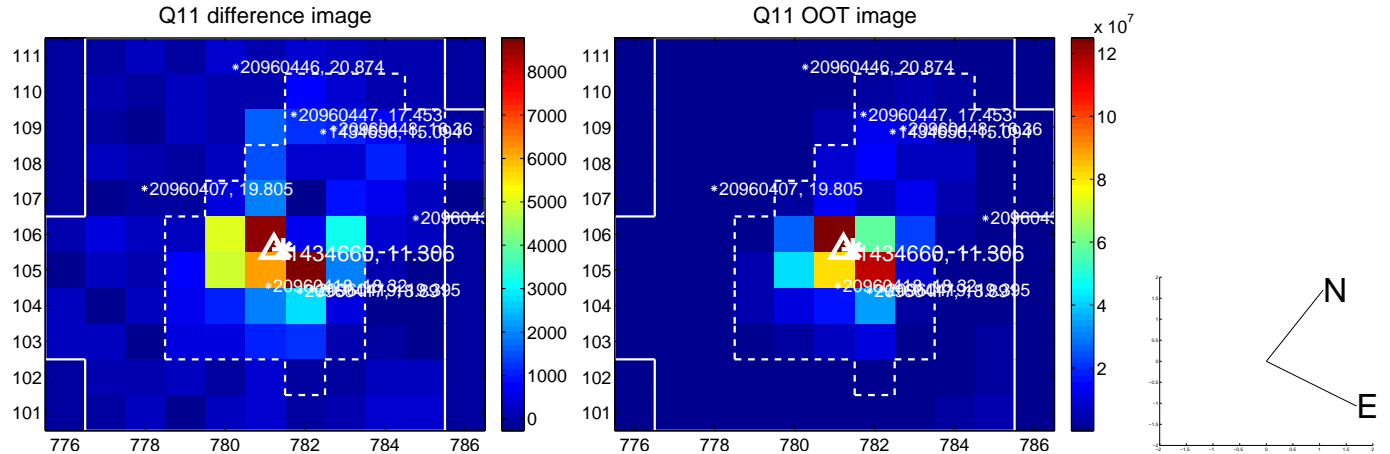
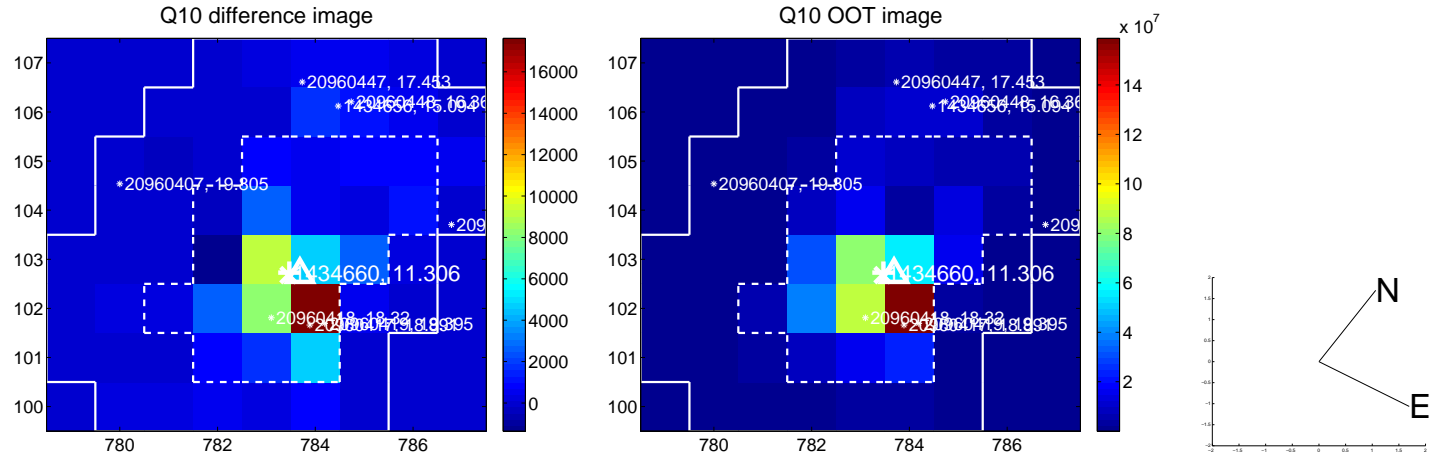
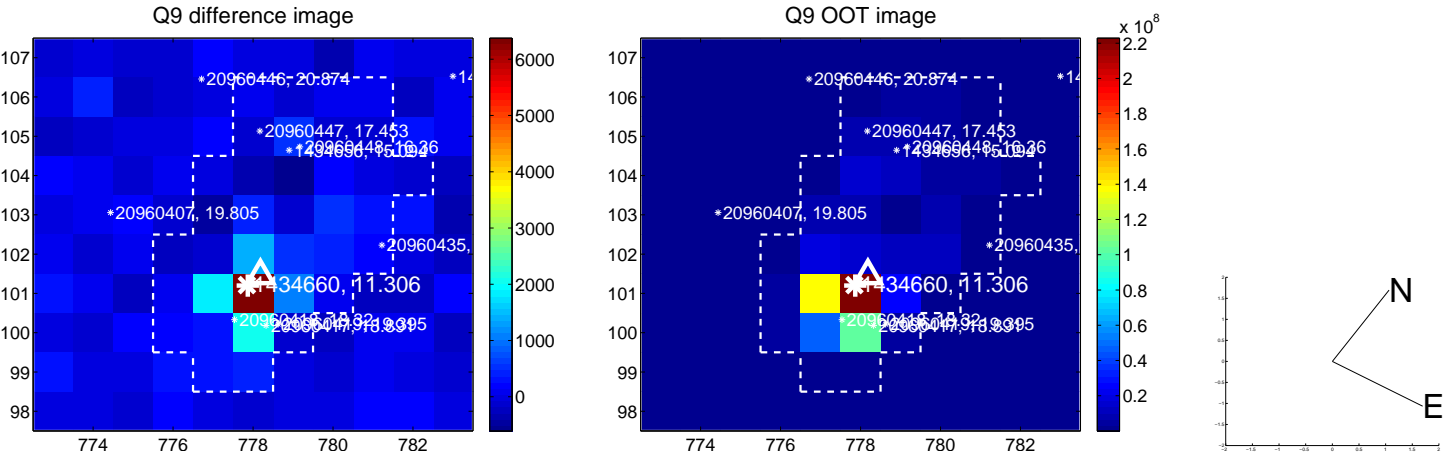
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



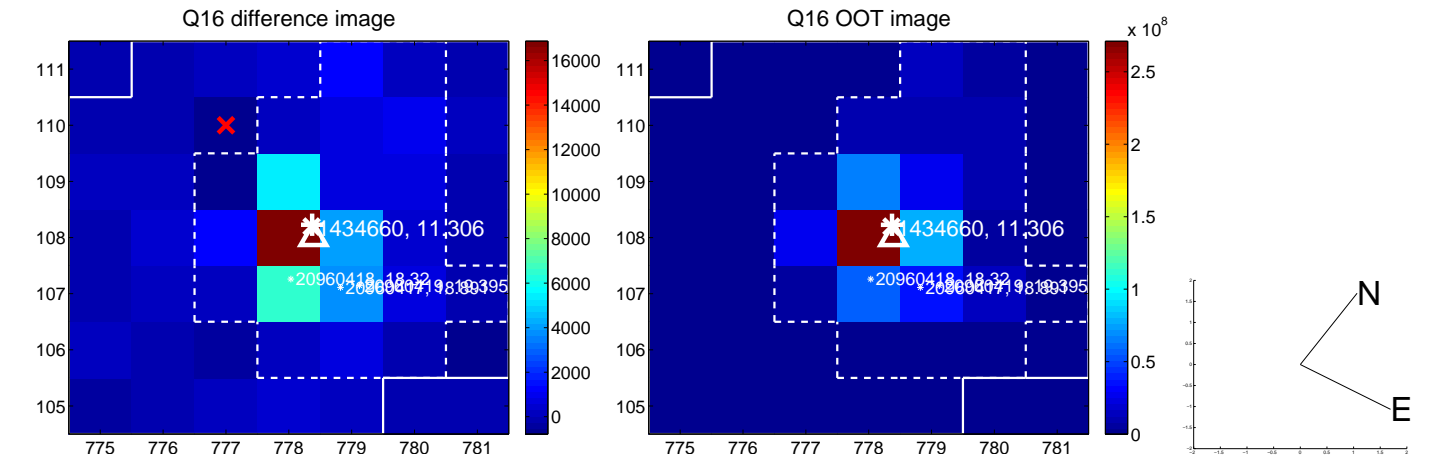
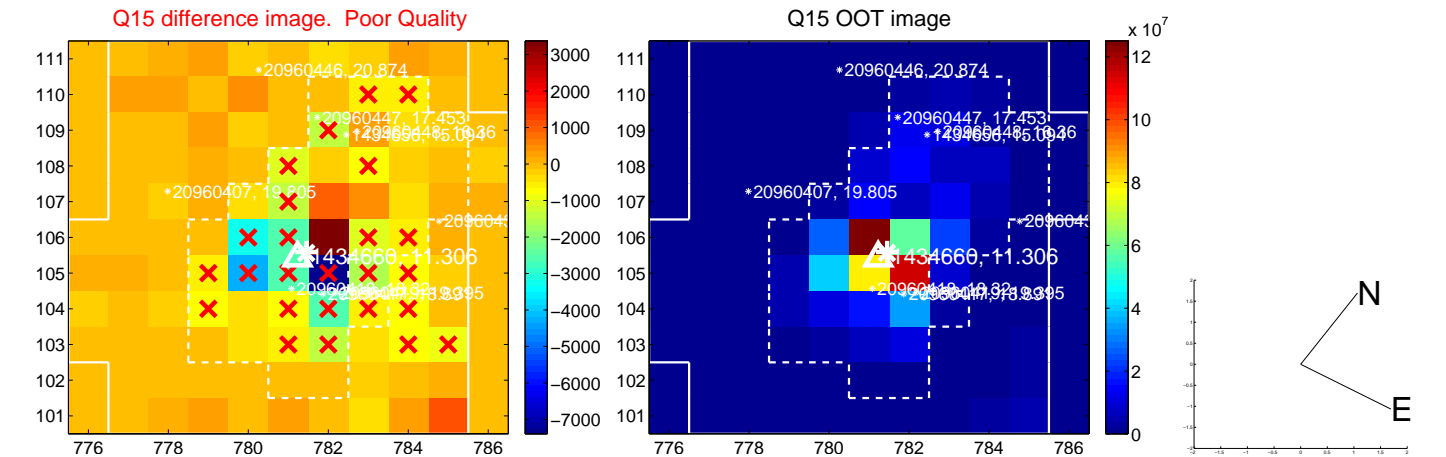
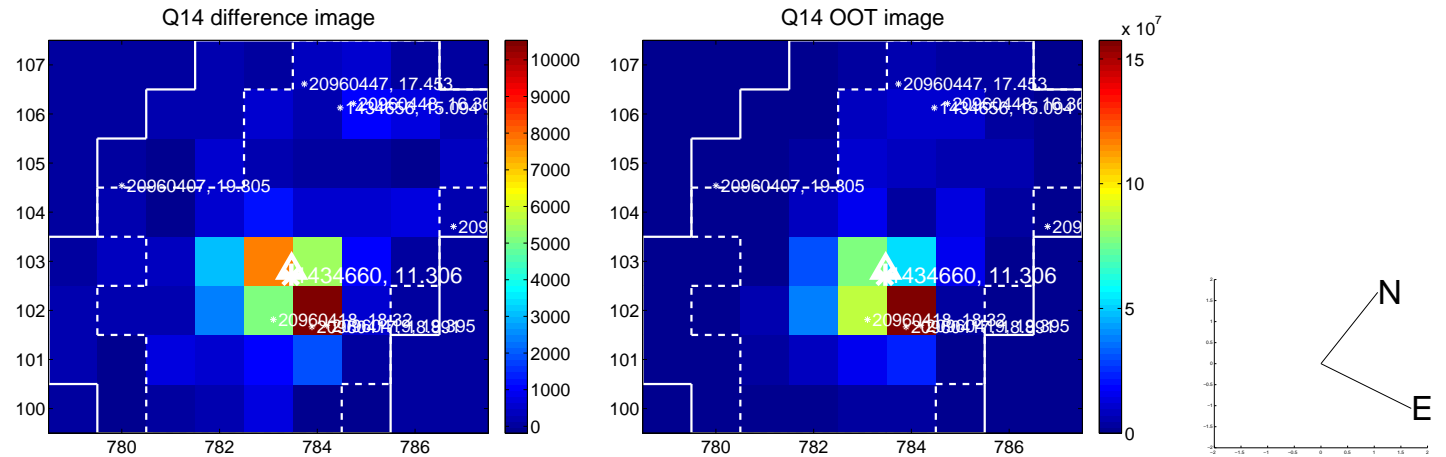
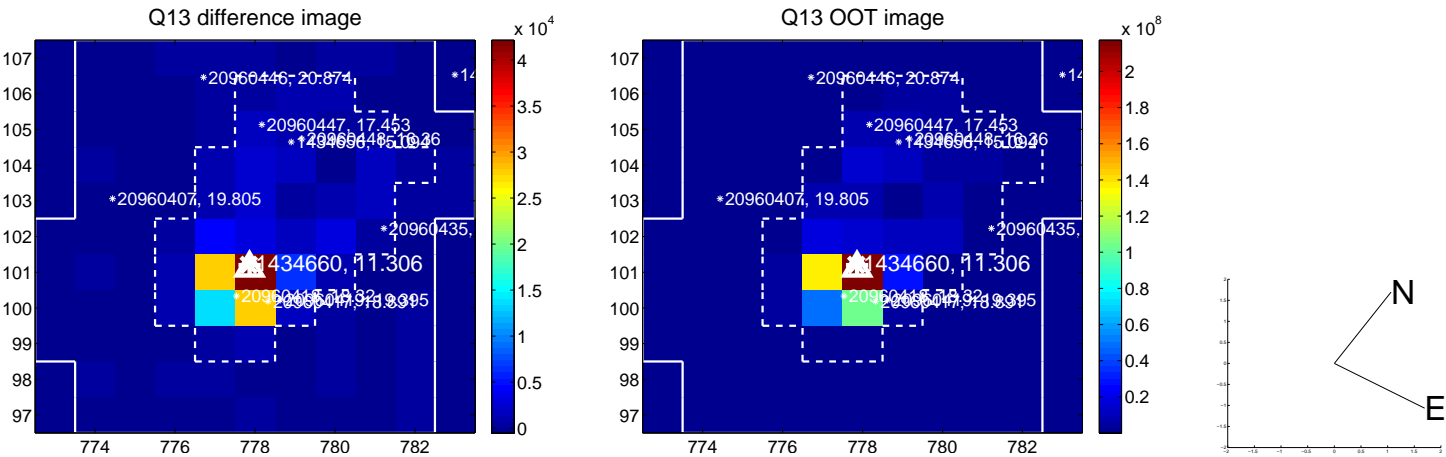
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



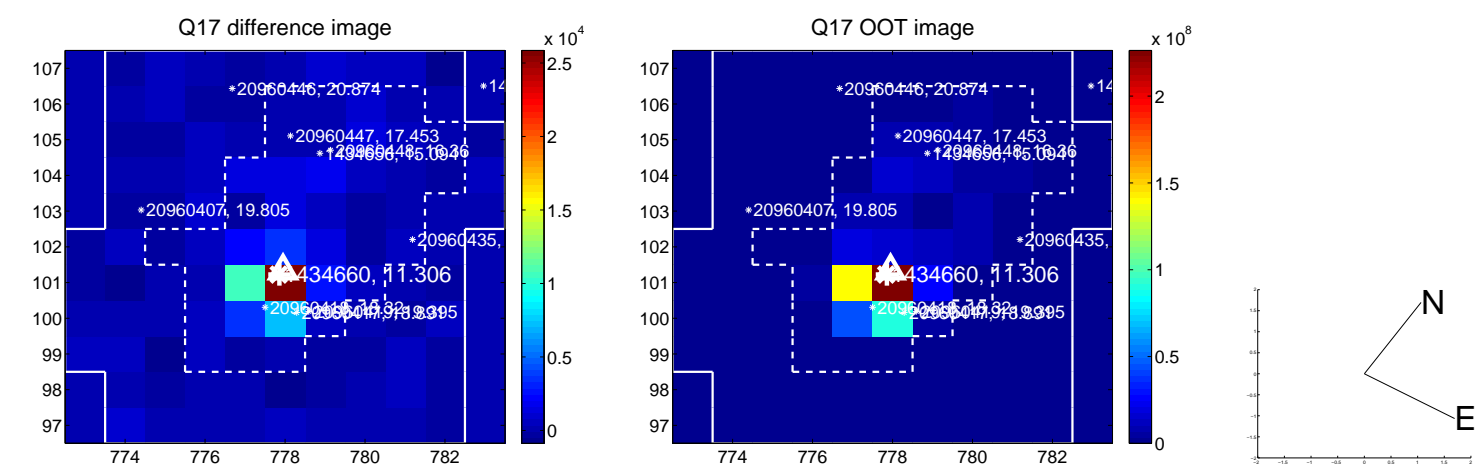
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



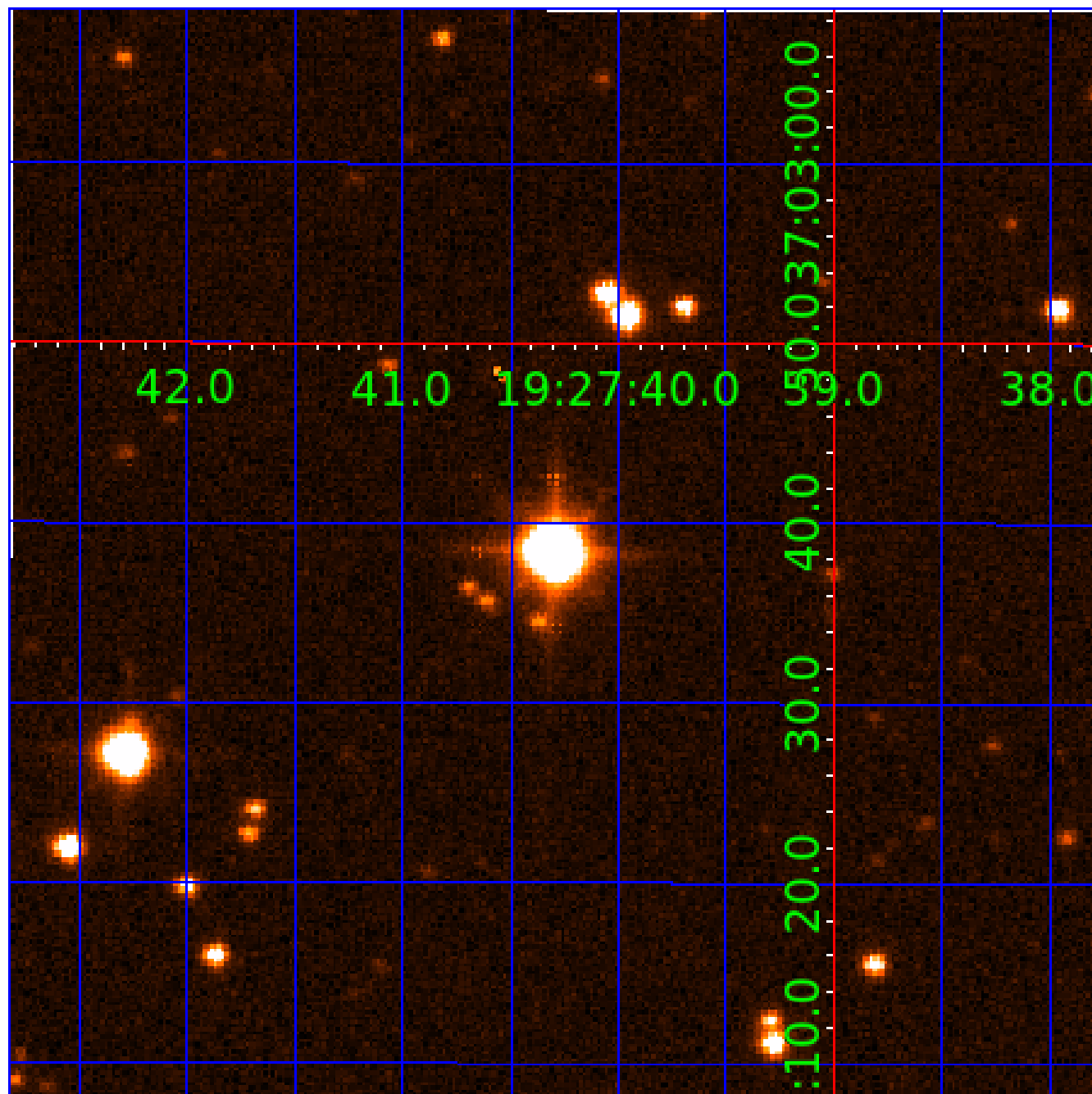
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination



KIC 001434660

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})
001434660-01	OBS	No	3.693374	131.772765	21.1	16.707	9.0	6.5	2.66	7526	1.27	5954.53
001434660-02	OBS	No	155.635464	158.340396	417.1	34.912	17.1	14.6	2.66	7526	10.27	40.61
001434660-03	OBS	No	0.634203	131.574385	70.8	1.005	11.6	15.5	2.66	7526	2.53	62388.98
001434660-05	OBS	No	0.634198	131.786214	57.1	1.173	10.5	13.3	2.66	7526	2.33	62389.61

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
001434660-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
001434660-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—INCONSISTENT_TRANS—CENT_SATURATED
001434660-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
001434660-05	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

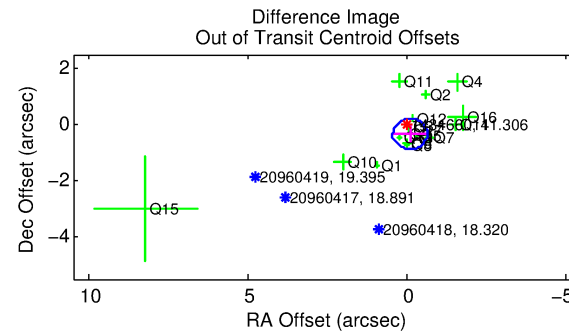
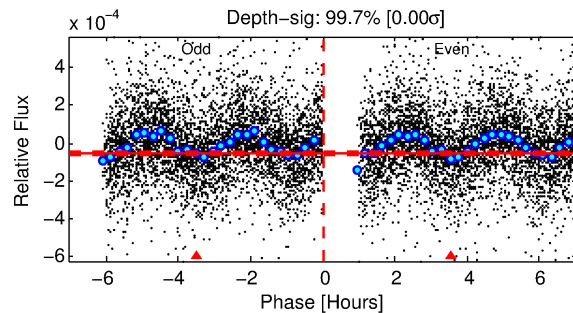
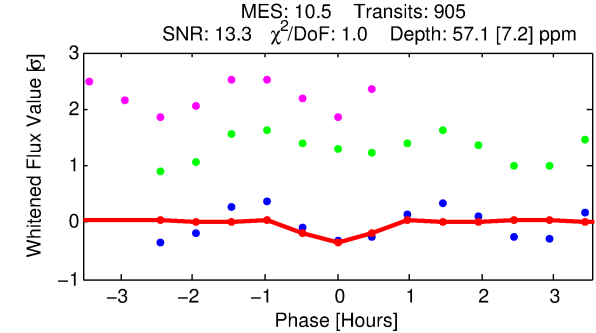
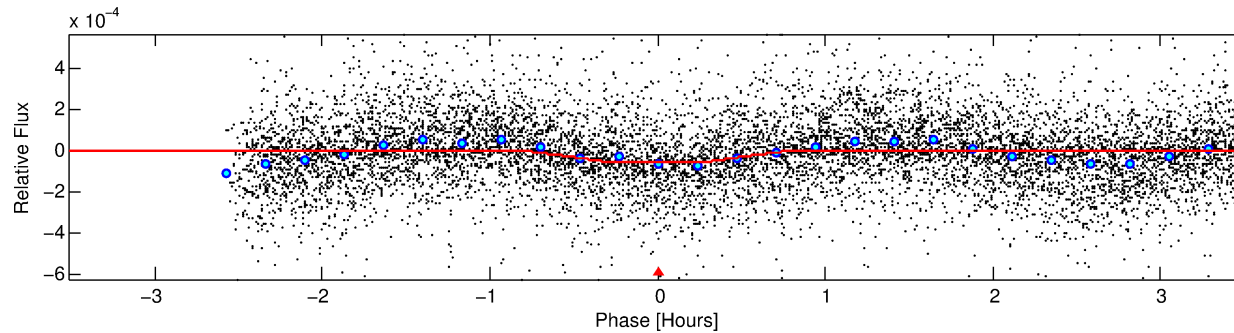
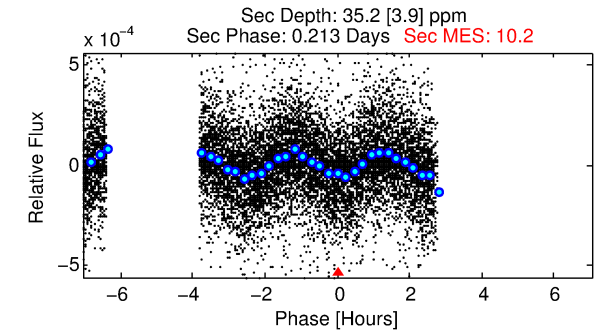
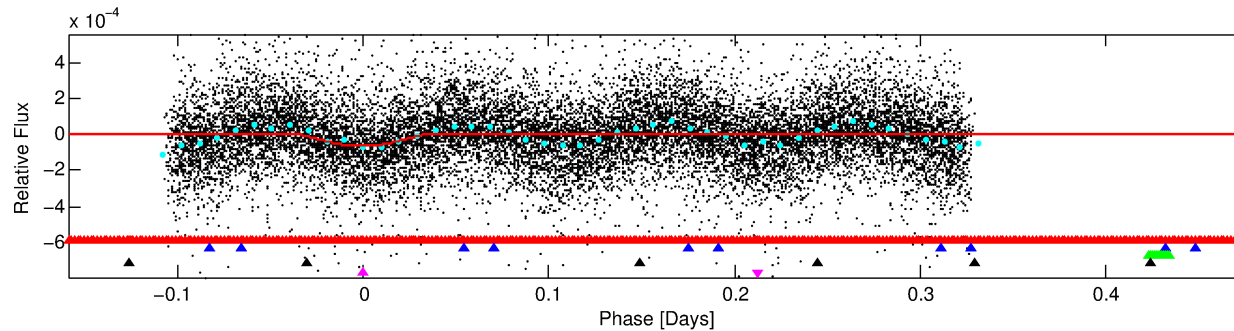
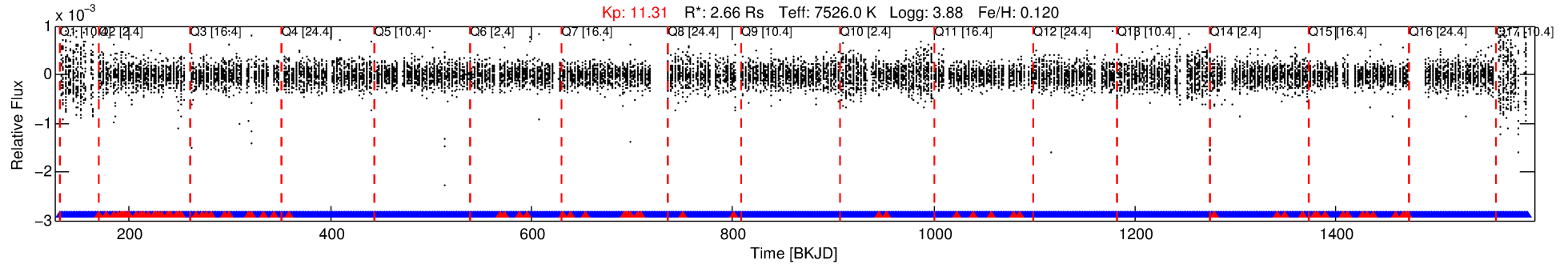
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 001434660-05

No Significant Match Found

DV One-Page Summary

KIC: 1434660 Candidate: 5 of 5 Period: 0.634 d



DV Fit Results:

Period = 0.63420 [0.00001] d
Epoch = 131.7862 [0.0014] BKJD
Rp/R* = 0.0081 [0.0020]
a/R* = 2.10 [2.50]
b = 0.90 [0.33]
Seff = 62389.61 [22993.93]
Teq = 4030 [371] K
Rp = 2.34 [0.83] Re
a = 0.0180 [0.0043] AU
Ag = 1.15 [0.71] [0.22σ]
Teffp = 6459 [806] K [2.74σ]

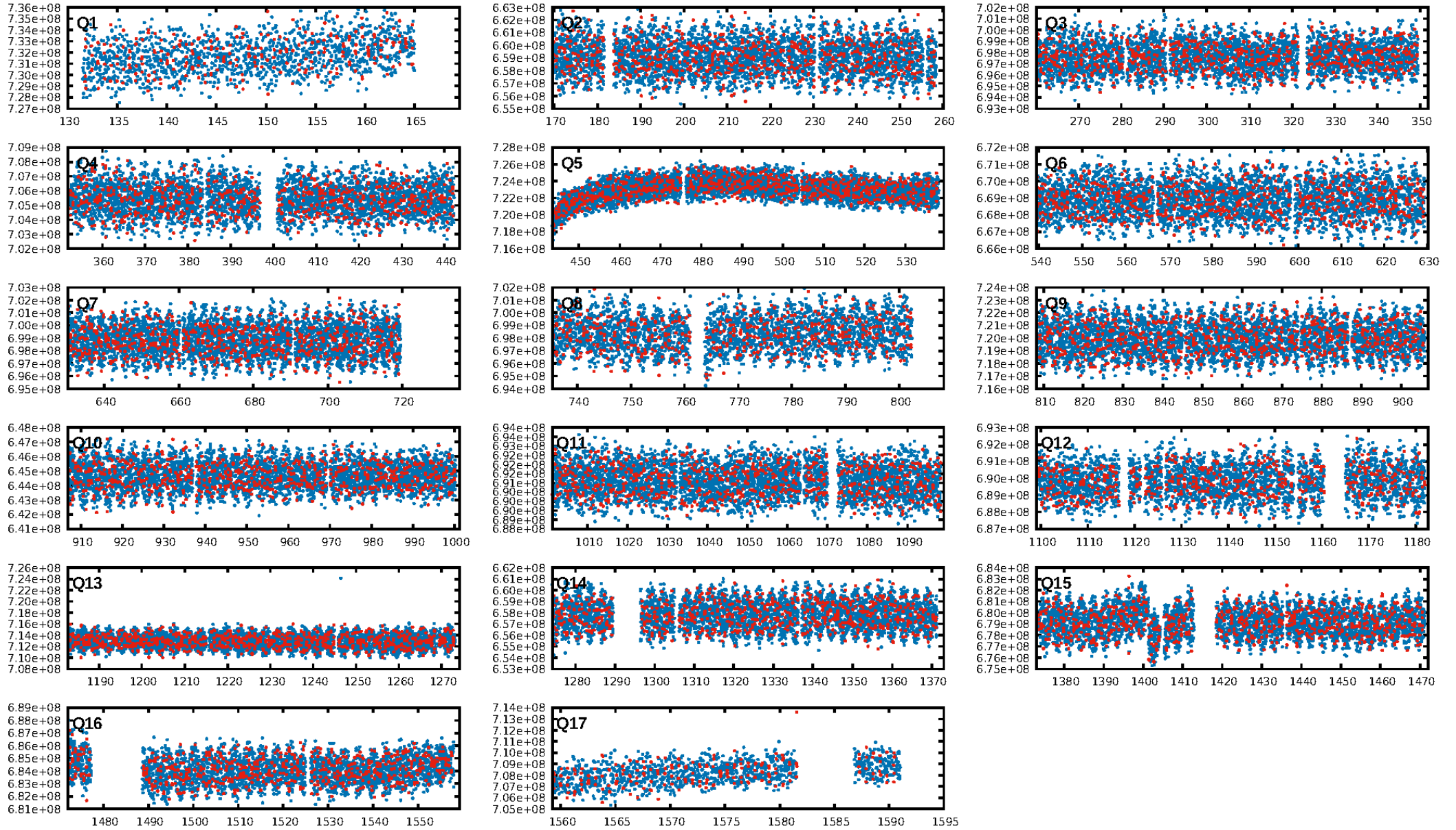
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.61e-26
RollingBand-fgt: 0.91 [790/869]
GhostDiagnostic-chr: -30.05
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.353 arcsec [1.96σ]
KicOffset-rm: 0.328 arcsec [1.56σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.53 [9/17]
DiffImageOverlap-fno: 0.00 [0/17]

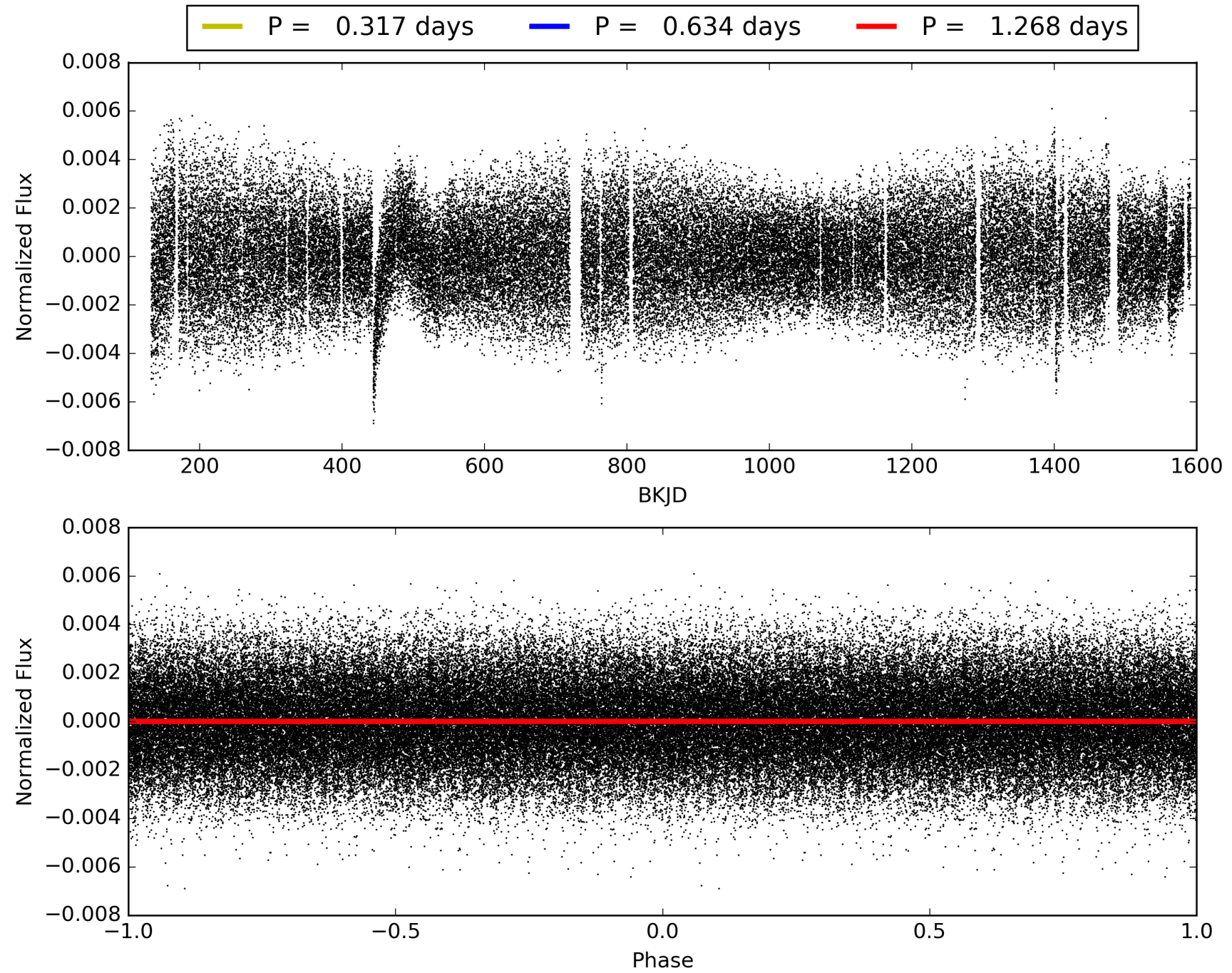
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 01:39:36 Z

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

TCE 001434660-05, PDC Light Curves

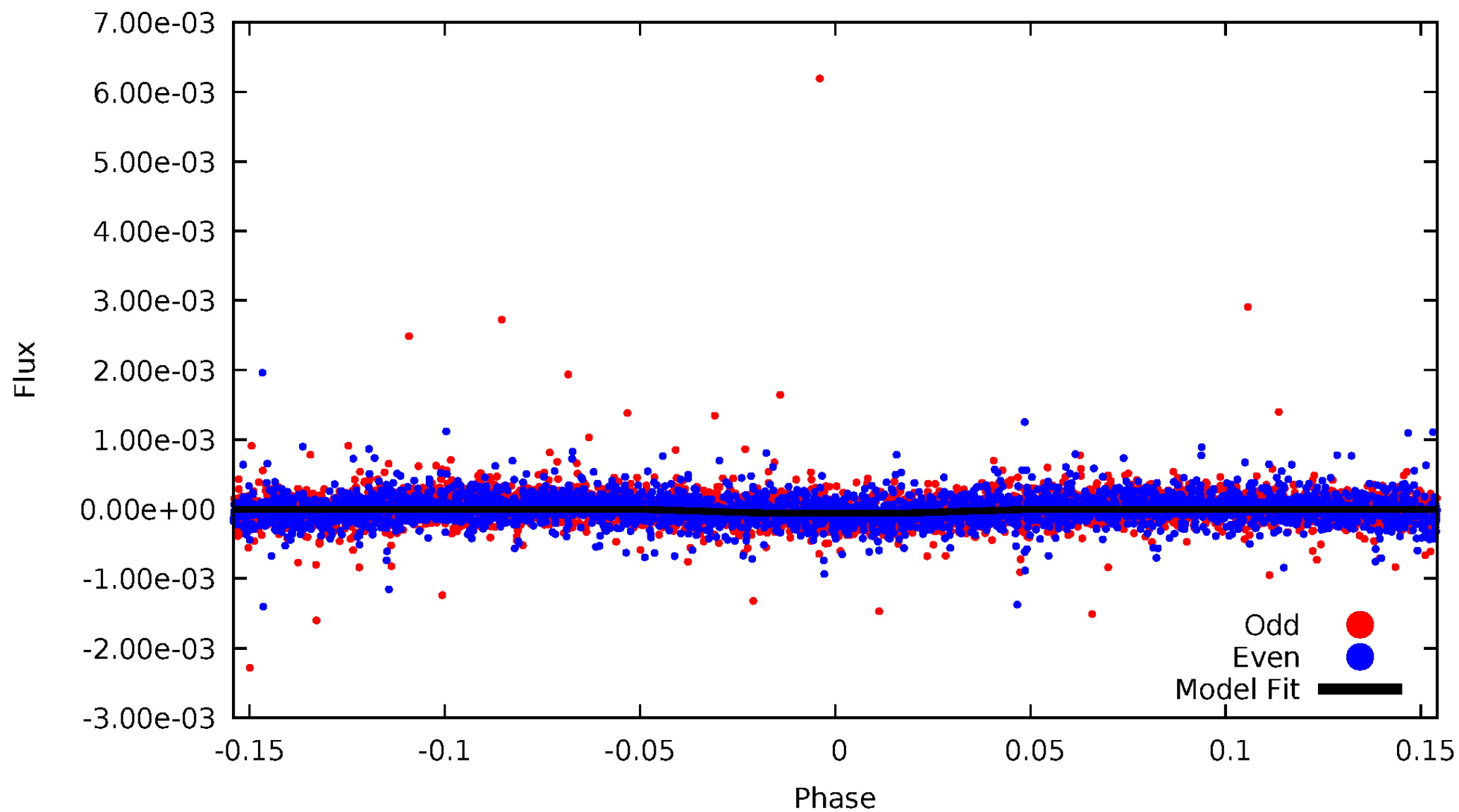


TCE 001434660-05



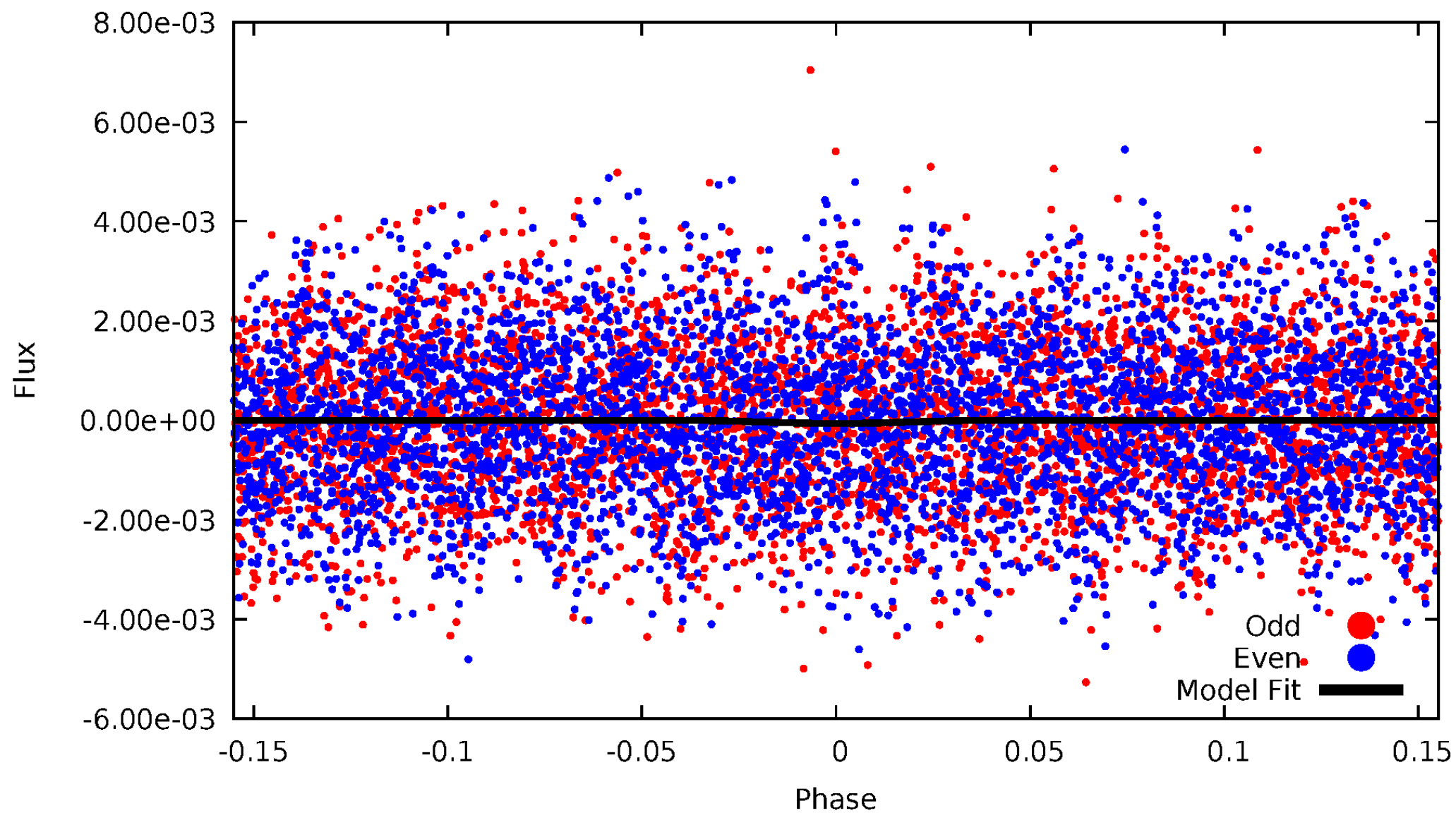
DV Odd/Even

TCE 001434660-05

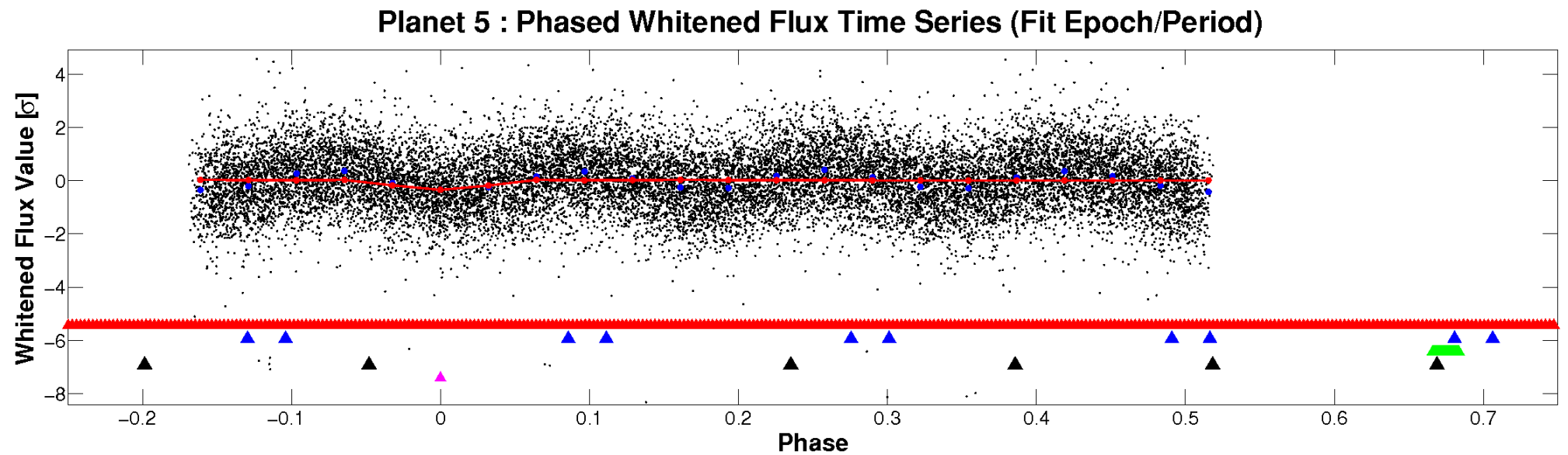
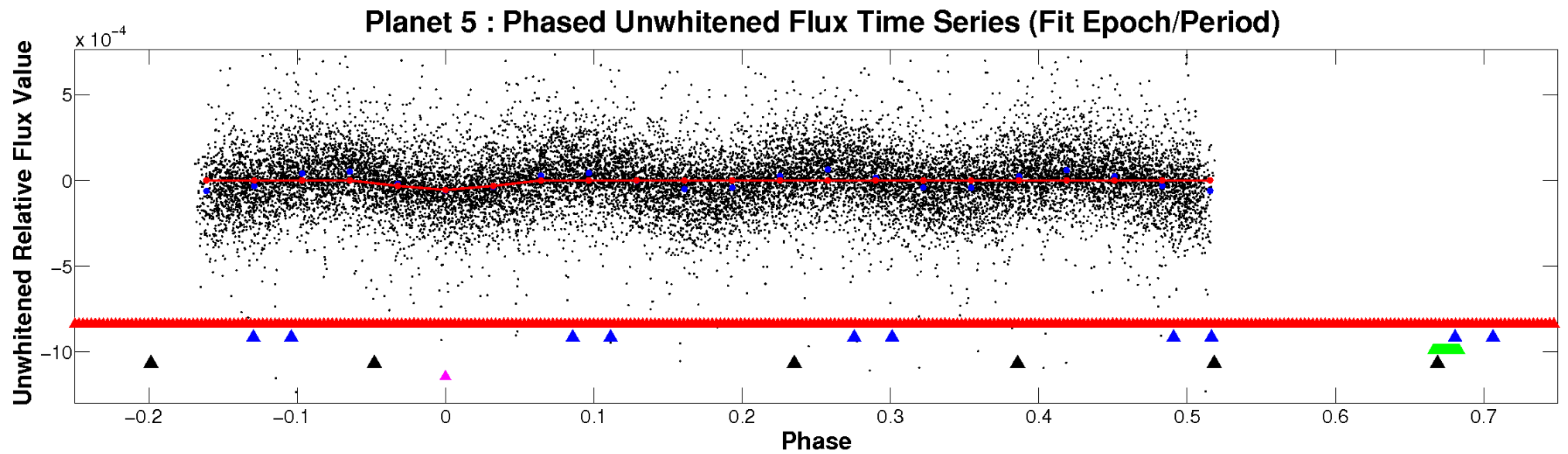


ALT Odd/Even

TCE 001434660-05

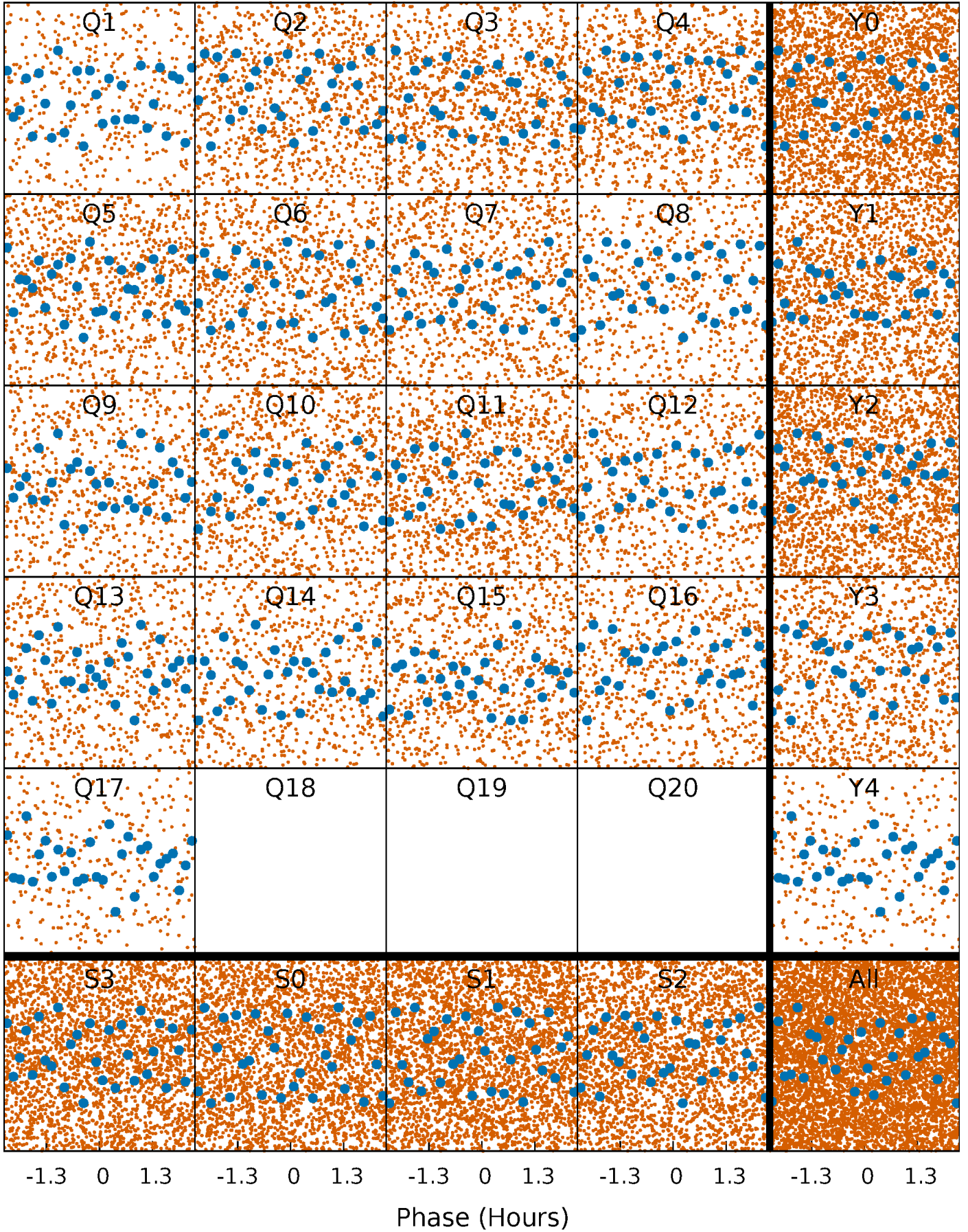


Non-Whitened Vs. Whitened Light Curve



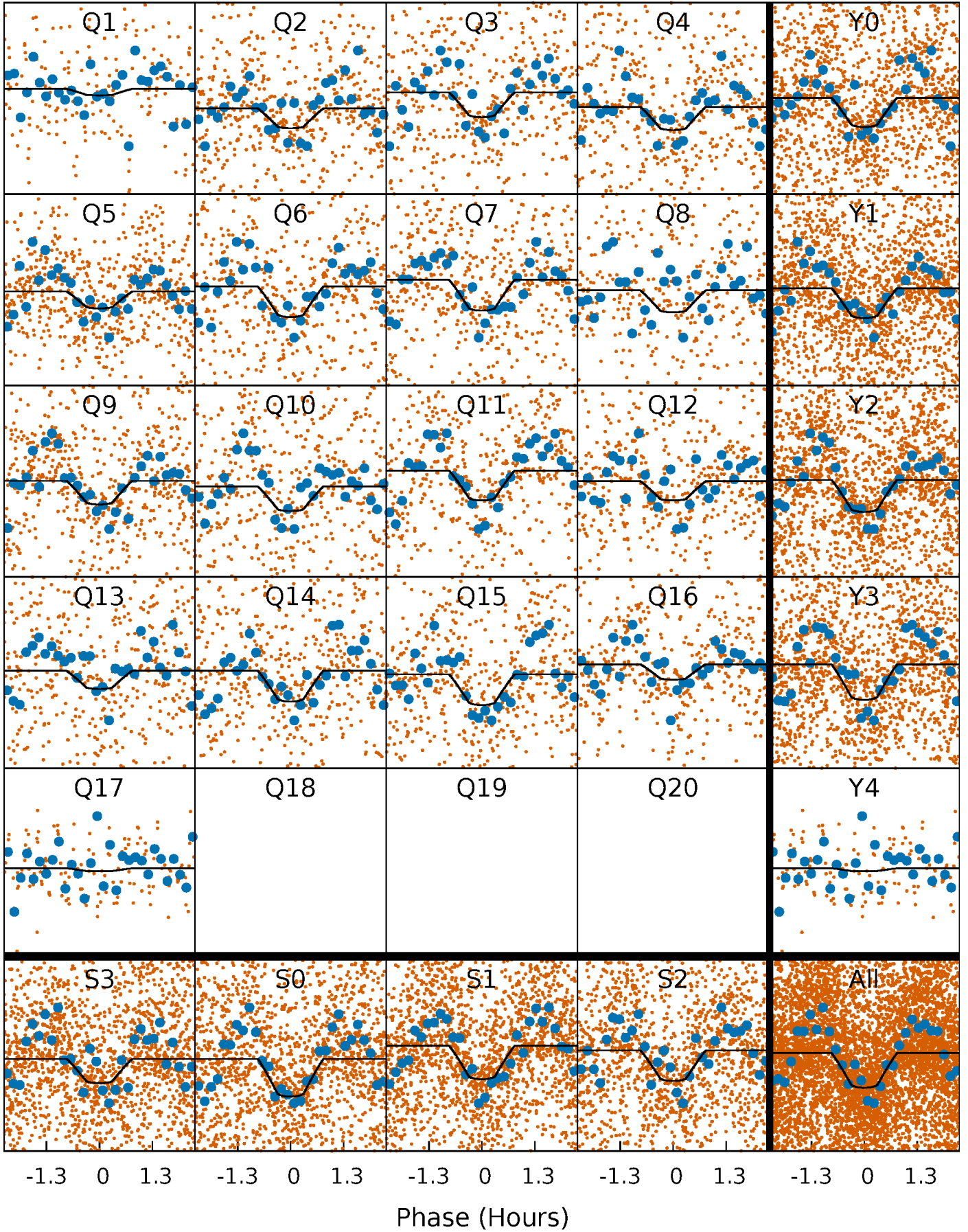
PDC Quarter-Phased Transit Curves

TCE 001434660-05 P= 0.634198 Days $T_0=131.786214$ (BKJD)



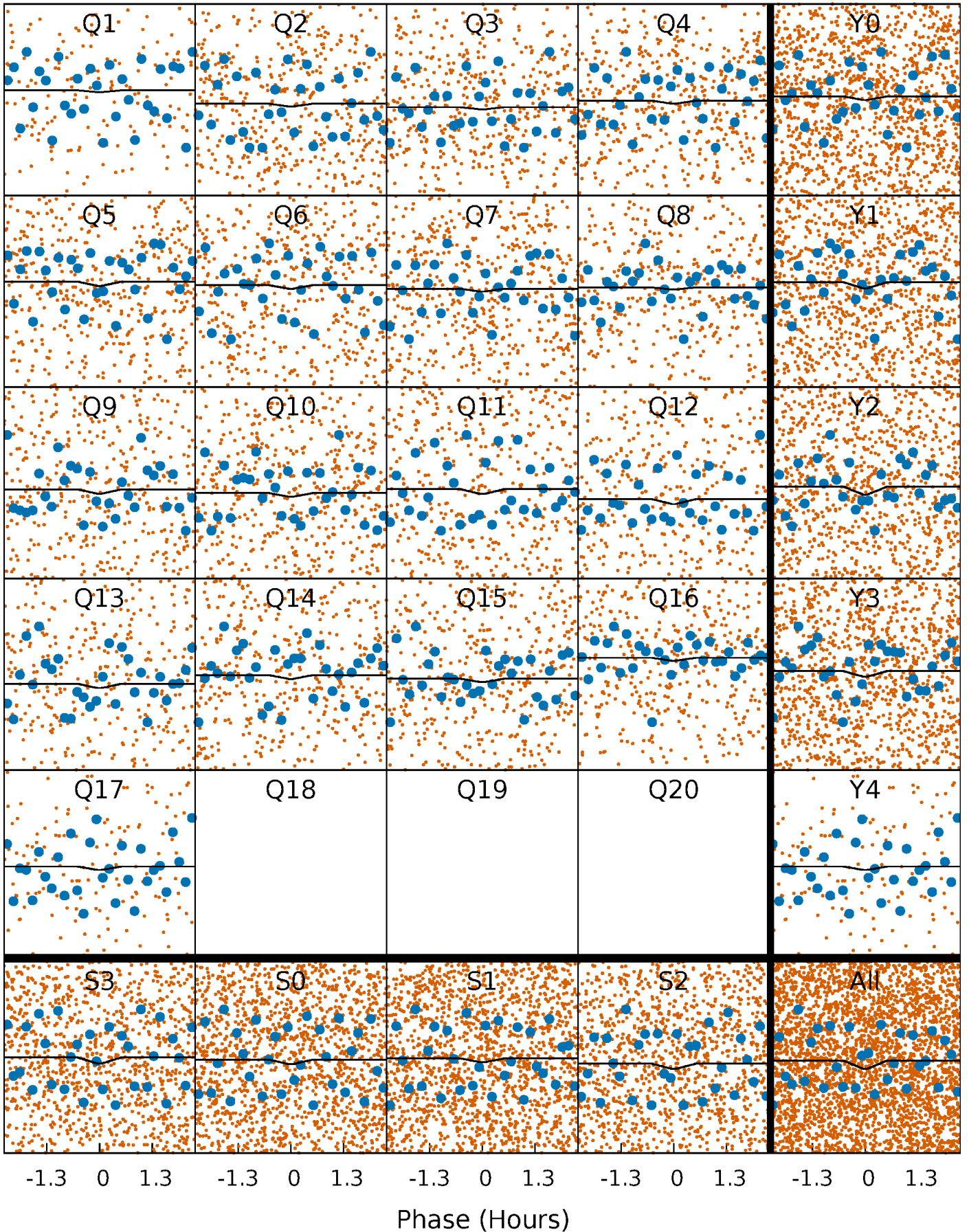
DV Quarter-Phased Transit Curves

TCE 001434660-05 P= 0.634198 Days $T_0=131.786214$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

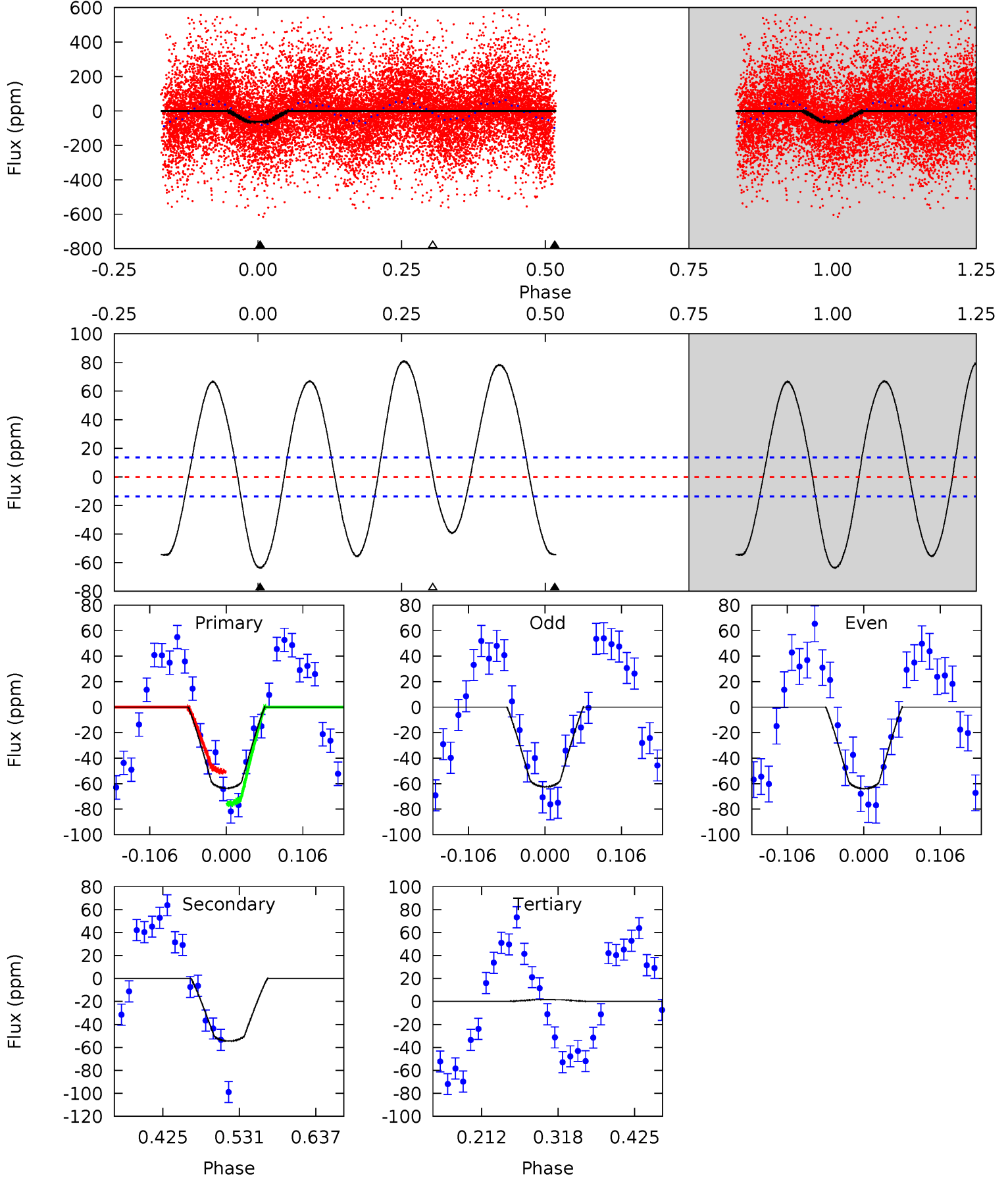
TCE 001434660-05 $P = 0.634200$ Days $T_0 = 131.784207$ (BKJD)



DV Model-Shift Uniqueness Test

001434660-05, P = 0.634198 Days, E = 131.786214 Days

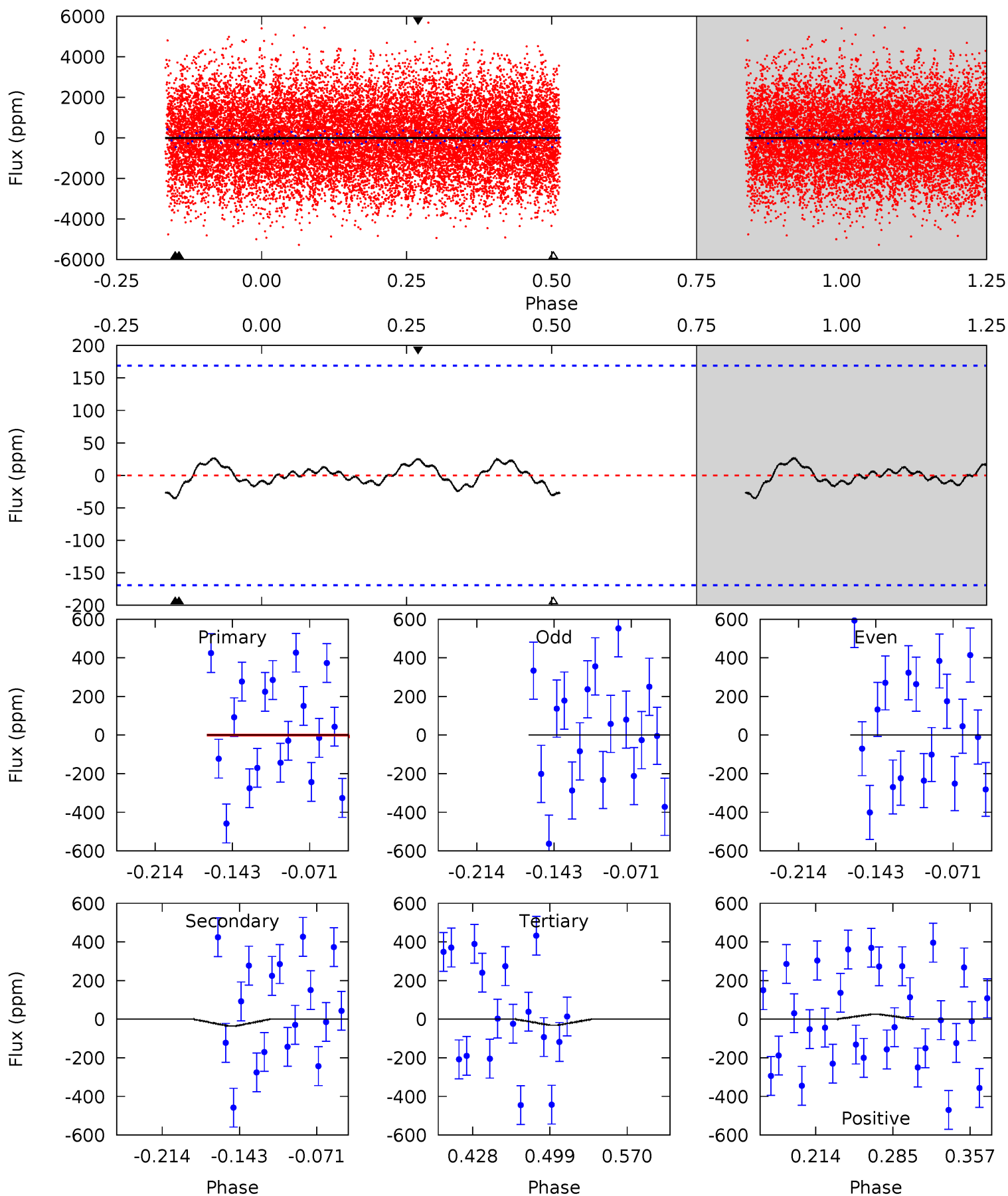
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.2	18.2	-0.52	0	4.55	1.62	14.2	21.7	21.2	18.7	18.2	0.24	0.95	0.56	4.34



Alt Model-Shift Uniqueness Test

001434660-05, P = 0.634200 Days, E = 131.784207 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.74	0.98	0.86	0.70	4.64	1.80	0.35	-0.11	0.04	0.12	0.27	0.09	0.78	0.43	0.47



Stellar Parameters For KIC 001434660

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	7526^{+67}_{-90}	$3.878^{+0.210}_{-0.070}$	$0.120^{+0.100}_{-0.200}$	$2.657^{+0.294}_{-0.686}$	$1.943^{+0.034}_{-0.306}$	$0.146^{+0.164}_{-0.035}$
	+1%/-1%	+5%/-2%	+83%/-167%	+11%/-26%	+2%/-16%	+112%/-24%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 001434660-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-54 ± 3	$2.21^{+0.68}_{-0.63}$	5567^{+217}_{-366}	6786^{+1641}_{-887}	$1.950^{+1.823}_{-0.776}$
Alt.	-36 ± 36	$2.29^{+0.67}_{-0.63}$	5568^{+219}_{-352}	5677^{+2138}_{-10422}	$1.097^{+1.982}_{-1.129}$

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 $A_{obs} \gg 1.0$

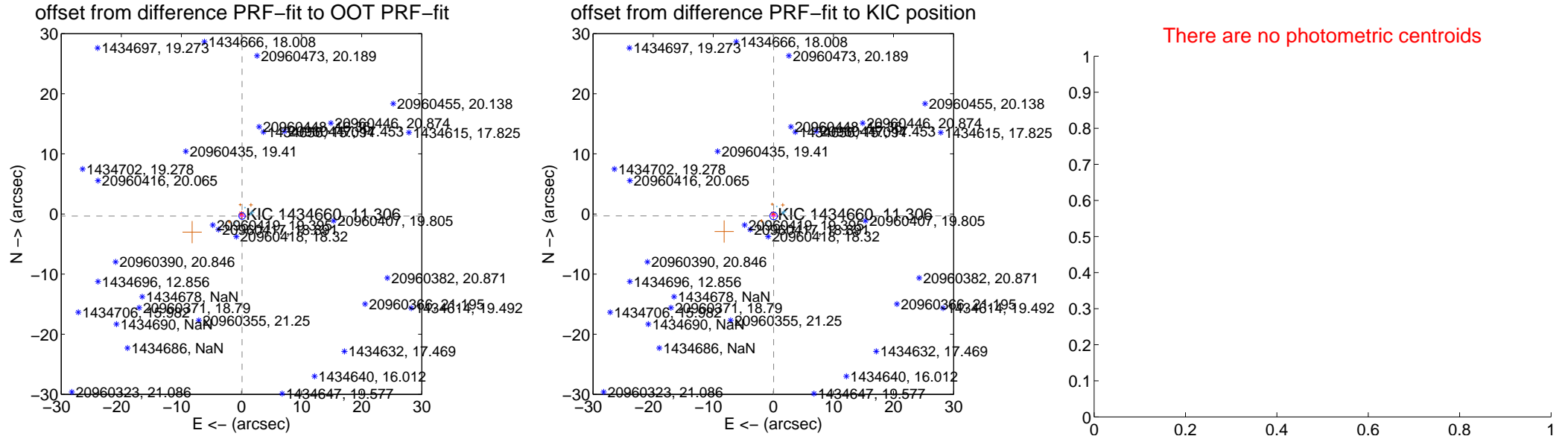
DV Centroid Data

Supplemental centroid analysis for 001434660-05. **Kepler magnitude: 11.31.** Transit SNR 13.27

There are 9 quarters with good PRF difference image offsets

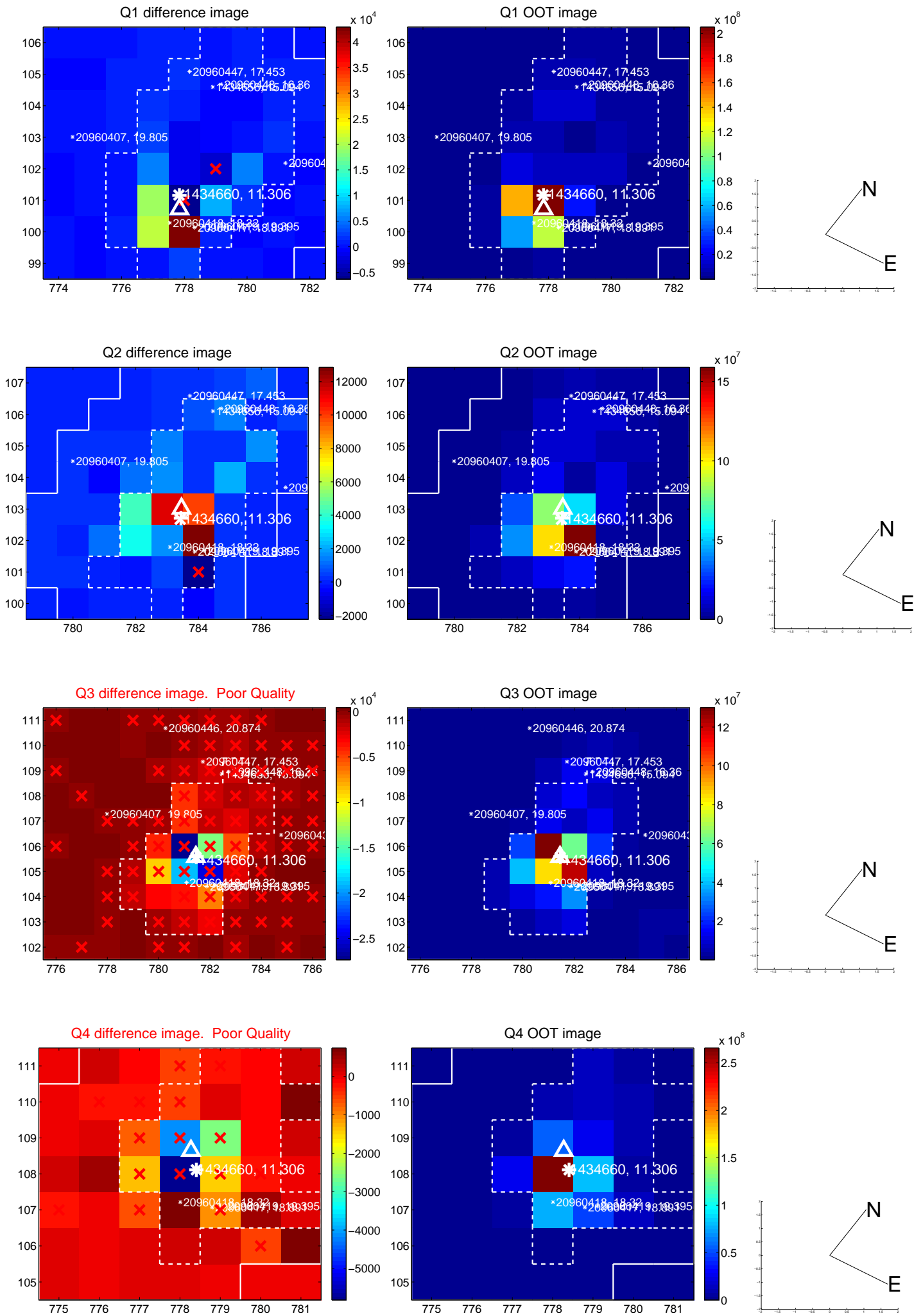
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.353 ± 0.180	1.96	-0.090 ± 0.555	-0.341 ± 0.278
PRF-fit source offset from KIC position	0.328 ± 0.210	1.56	-0.045 ± 0.518	-0.325 ± 0.260
photometric centroid source offset	—	—	—	—

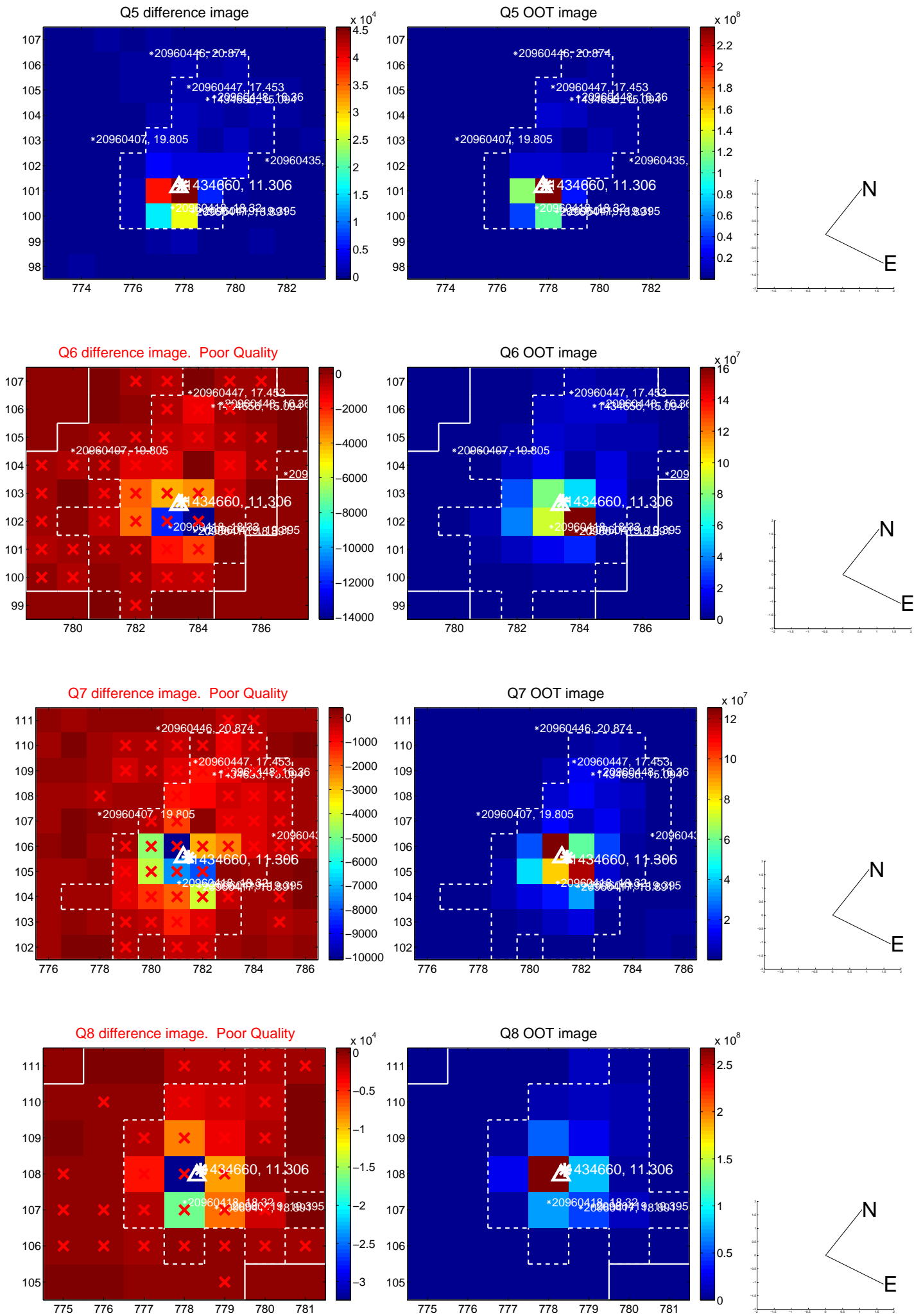


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

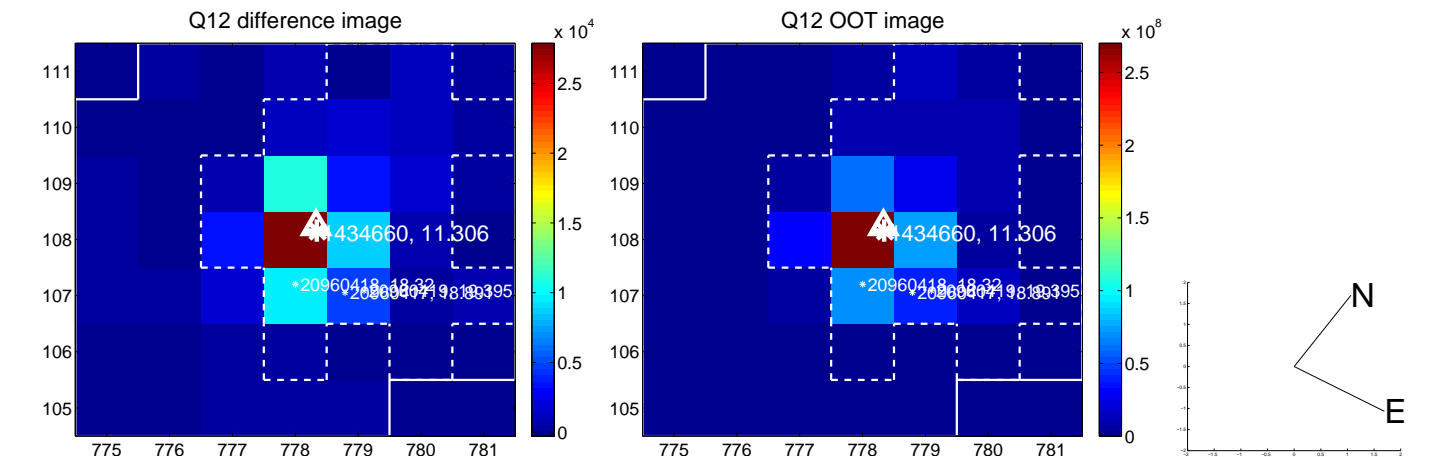
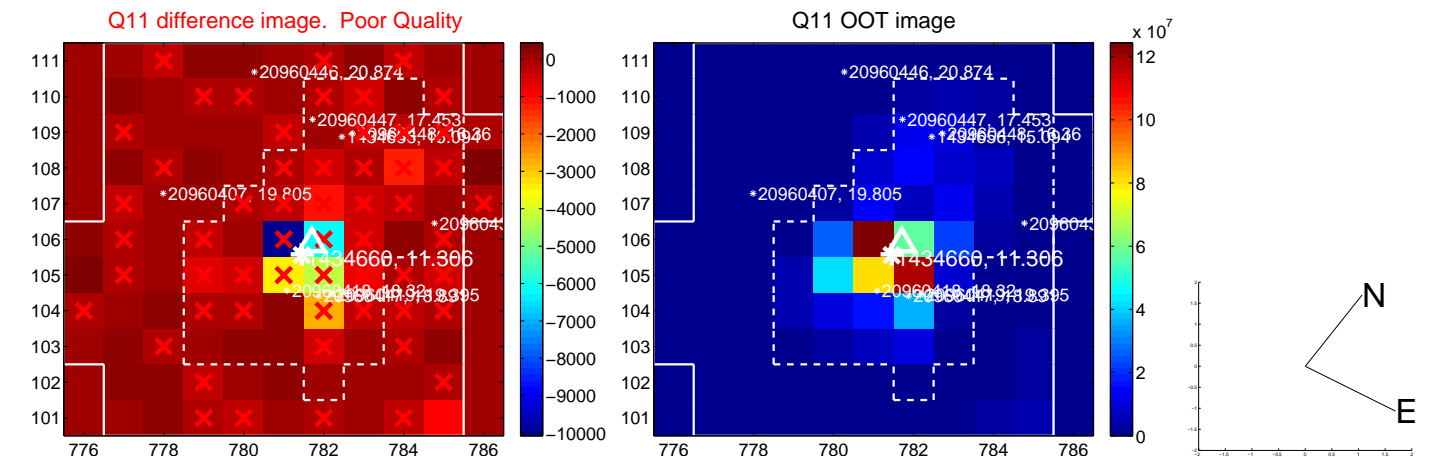
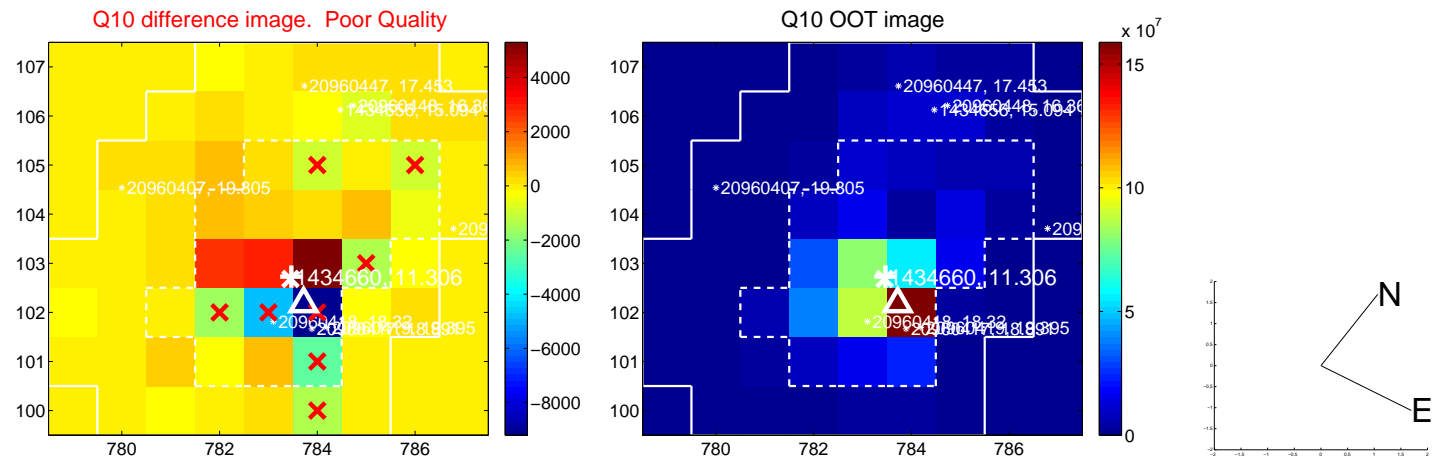
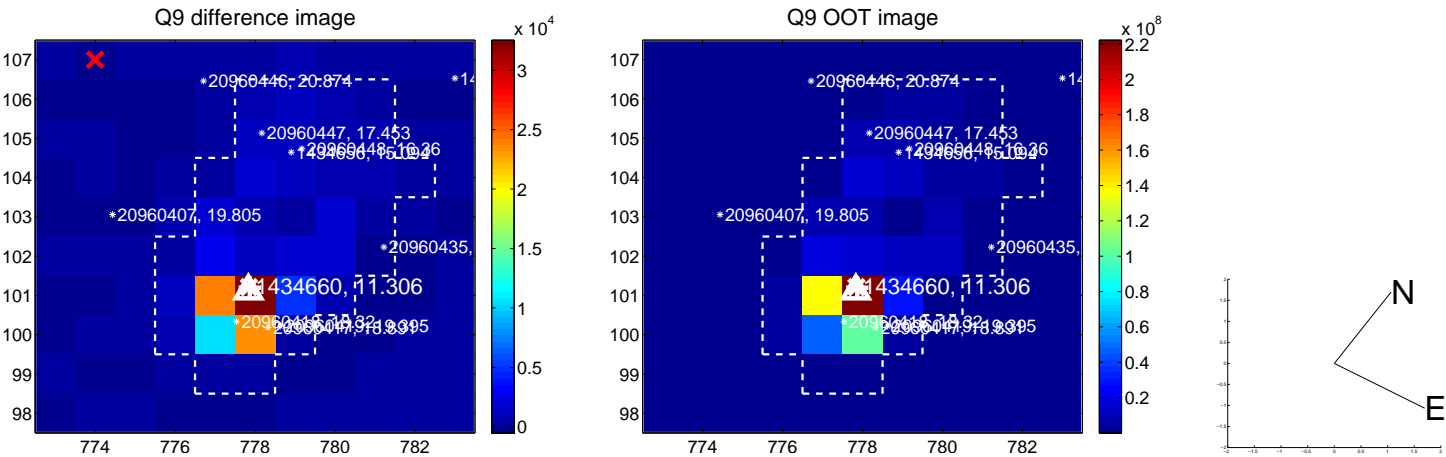
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



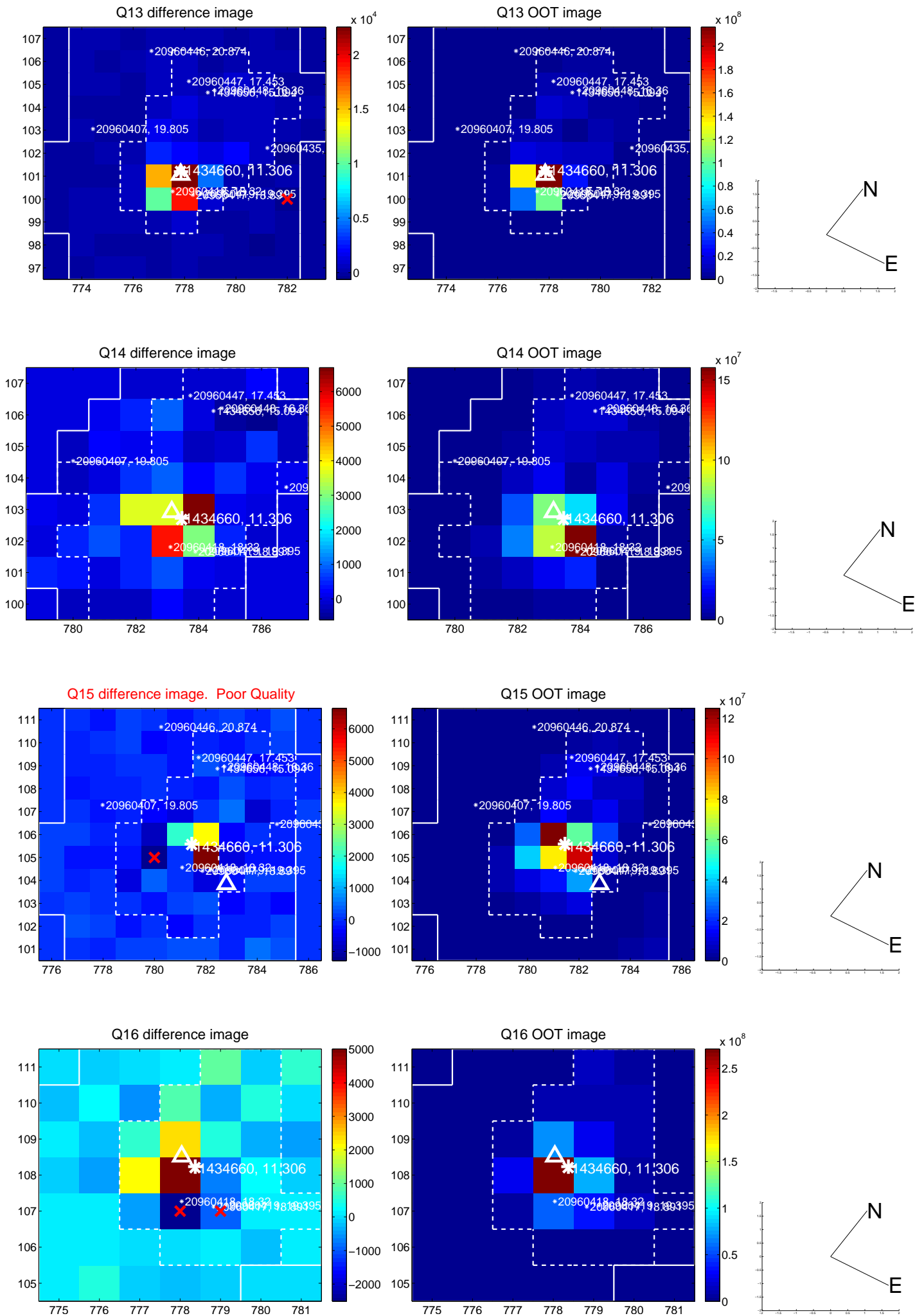
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



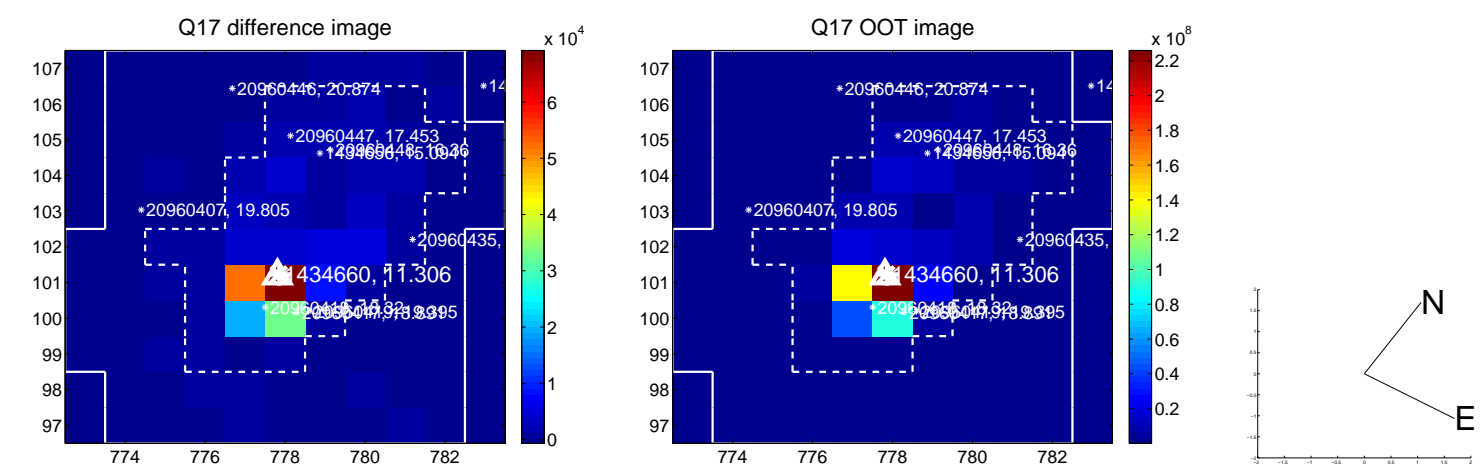
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



folded centroid time series figure for this object.

UKIRT Image

Declination

