

KIC 003454731

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})
003454731-01	OBS	No	1.602582	131.874494	209.6	8.405	10.6	10.8	2.16	7074	4.63	11780.45
003454731-02	OBS	No	1.602518	132.387714	227.6	7.427	10.4	9.9	2.16	7074	3.45	11781.08
003454731-03	OBS	No	1.602568	132.927721	39.5	4.500	12.2	-1.0	2.16	7074	1.37	11780.59

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003454731-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
003454731-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—SAME_NTL_PERIOD—CENT_SATURATED
003454731-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—NO_FITS—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.

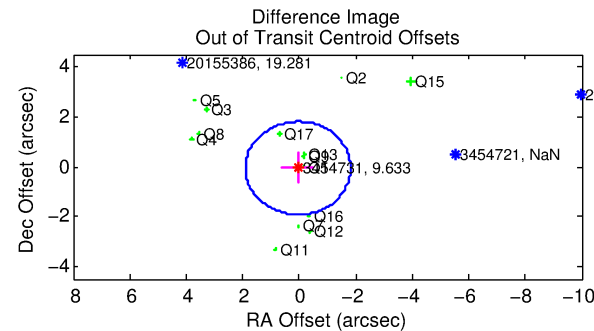
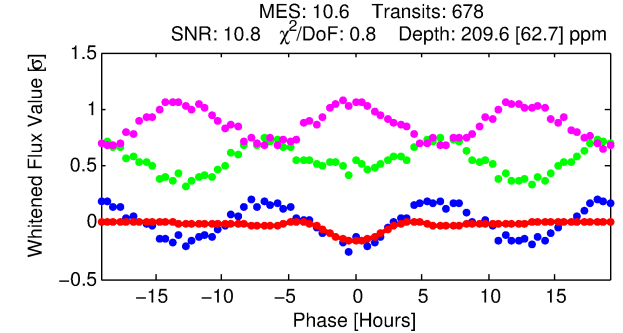
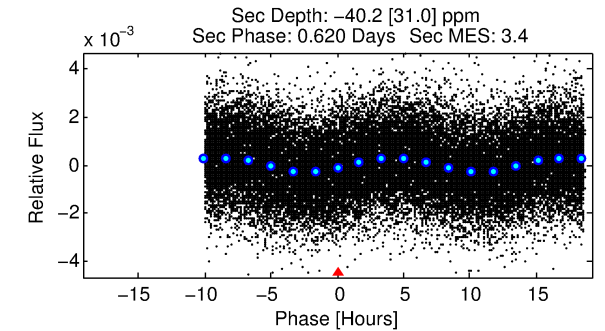
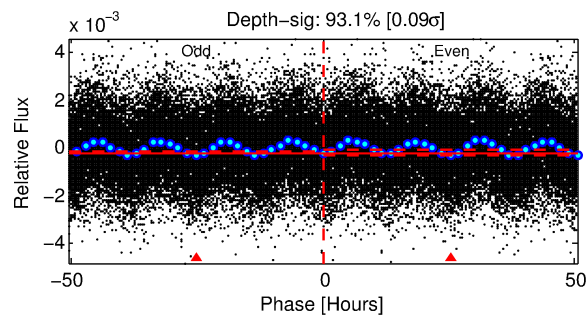
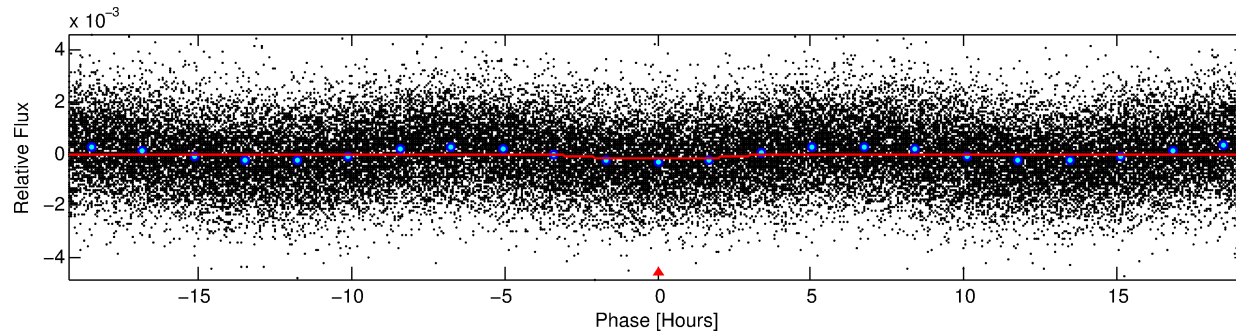
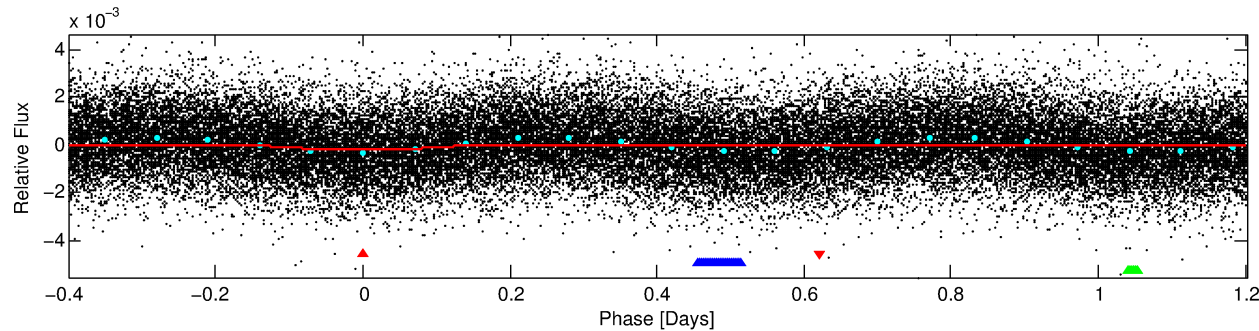
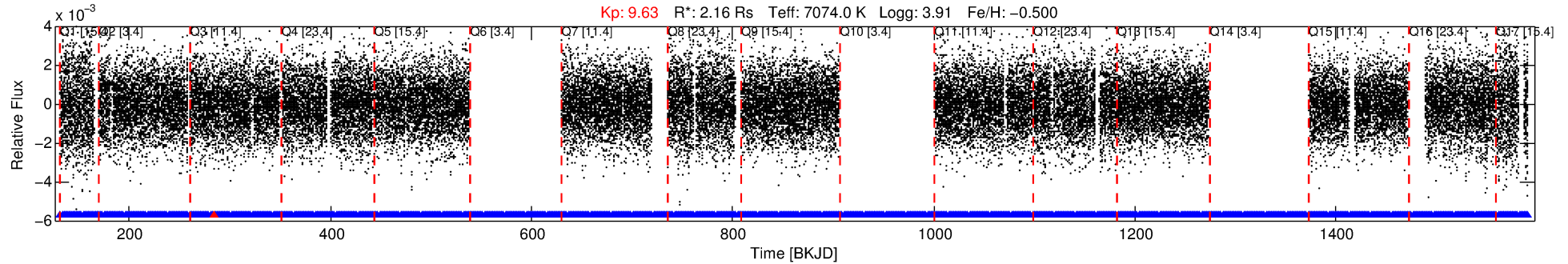
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003454731-01

No Significant Match Found

DV One-Page Summary

KIC: 3454731 Candidate: 1 of 3 Period: 1.603 d



DV Fit Results:

Period = 1.60258 [0.00003] d
Epoch = 131.8745 [0.0122] BKJD
 R_p/R^* = 0.0197 [0.0117]
 a/R^* = 1.06 [0.02]
 b = 0.99 [0.03]
 Seff = 11780.45 [7810.03]
 T_{eq} = 2657 [440] K
 R_p = 4.63 [3.37] R_e
 a = 0.0298 [0.0120] AU
 Ag = N/A
 T_{effp} = N/A

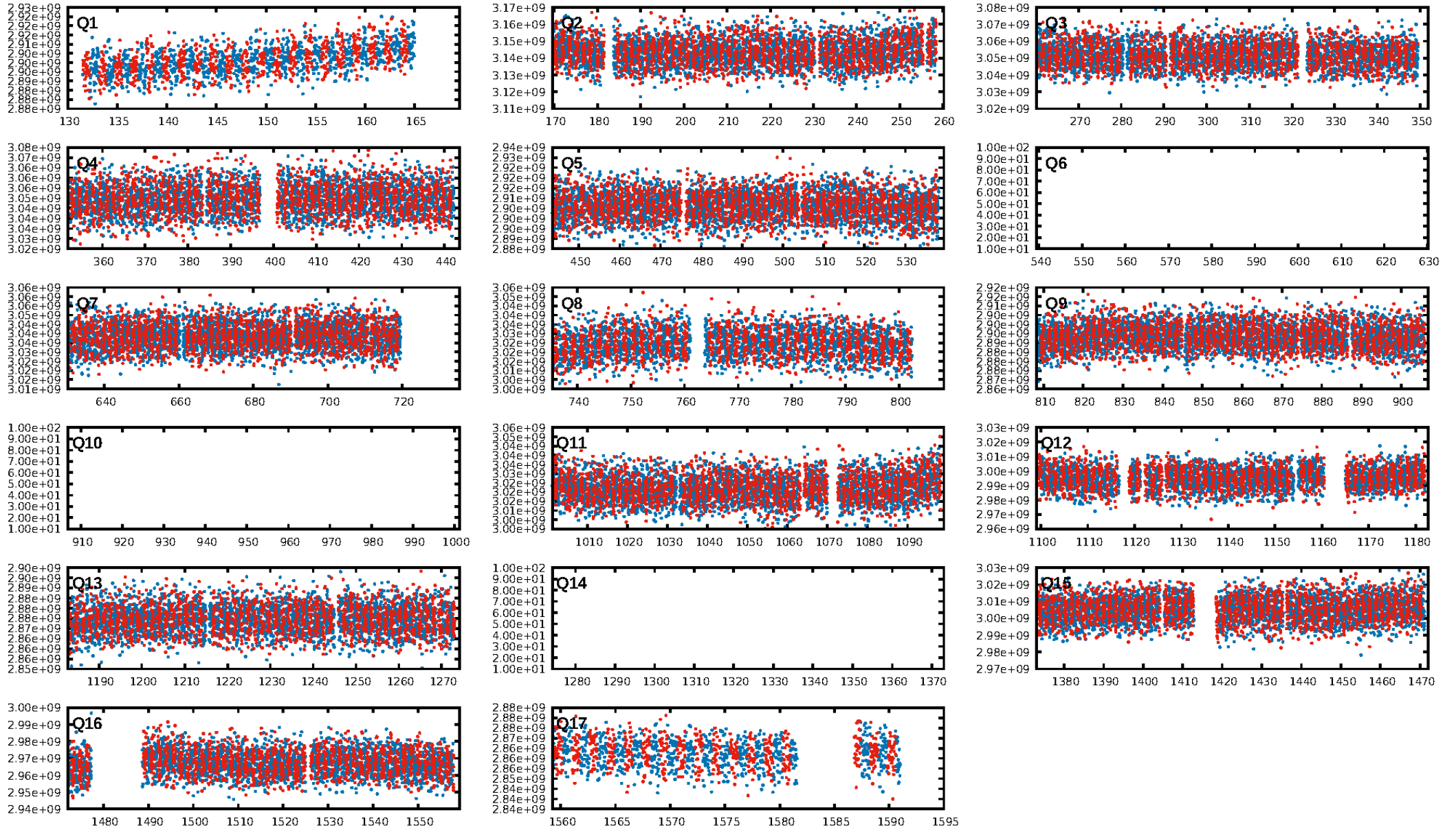
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [639/640]
GhostDiagnostic-chr: N/A
Centroid-sig: 0.0%
Centroid-so: 0.585 arcsec [3.21 σ]
OotOffset-rm: 0.075 arcsec [0.12 σ]
KicOffset-rm: 0.188 arcsec [0.30 σ]
OotOffset-st: 1/4/4/5 [14]
KicOffset-st: 1/4/4/5 [14]
DiffImageQuality-fgm: 0.00 [0/14]
DiffImageOverlap-fno: 0.00 [0/14]

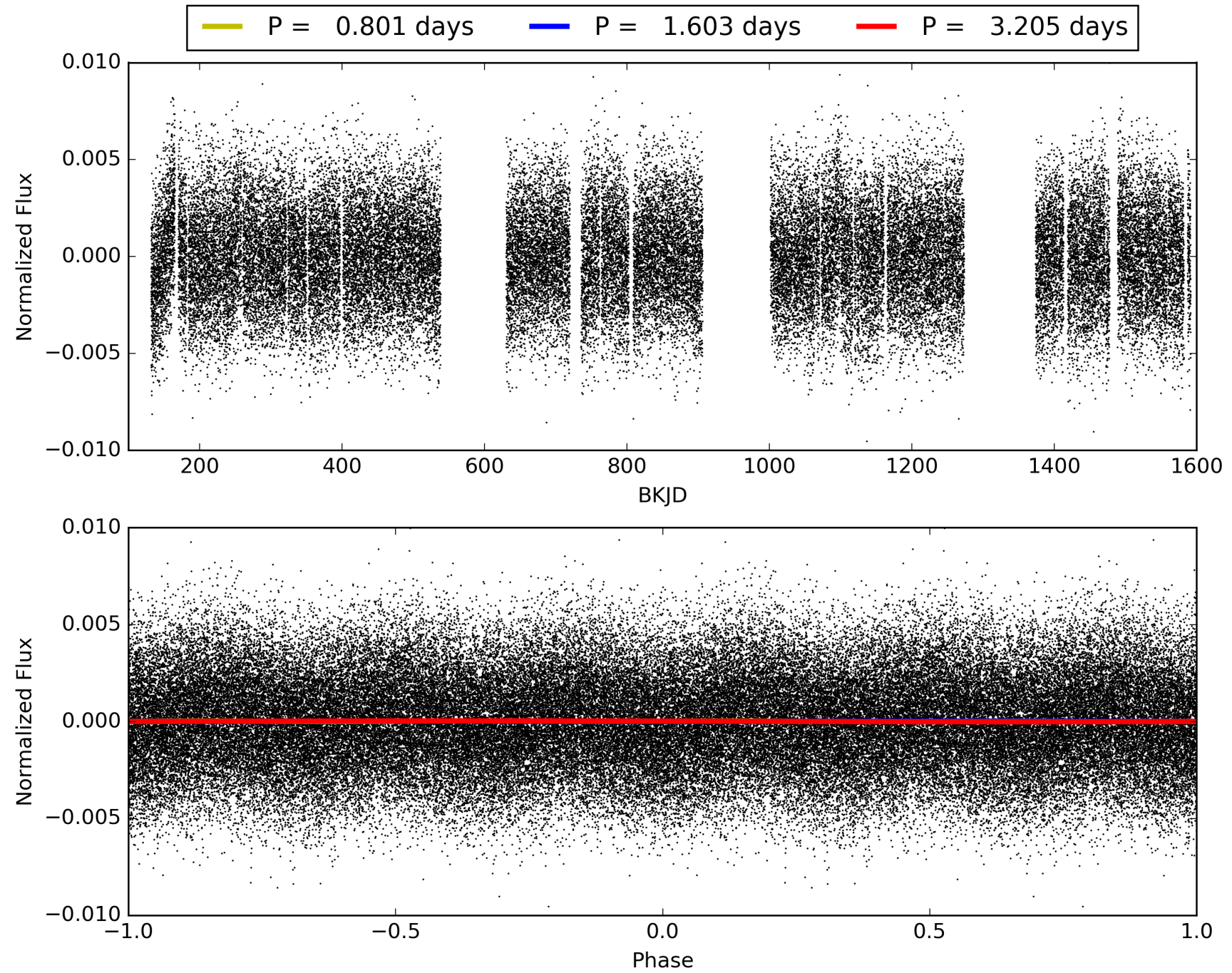
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:45:46 Z

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

TCE 003454731-01, PDC Light Curves

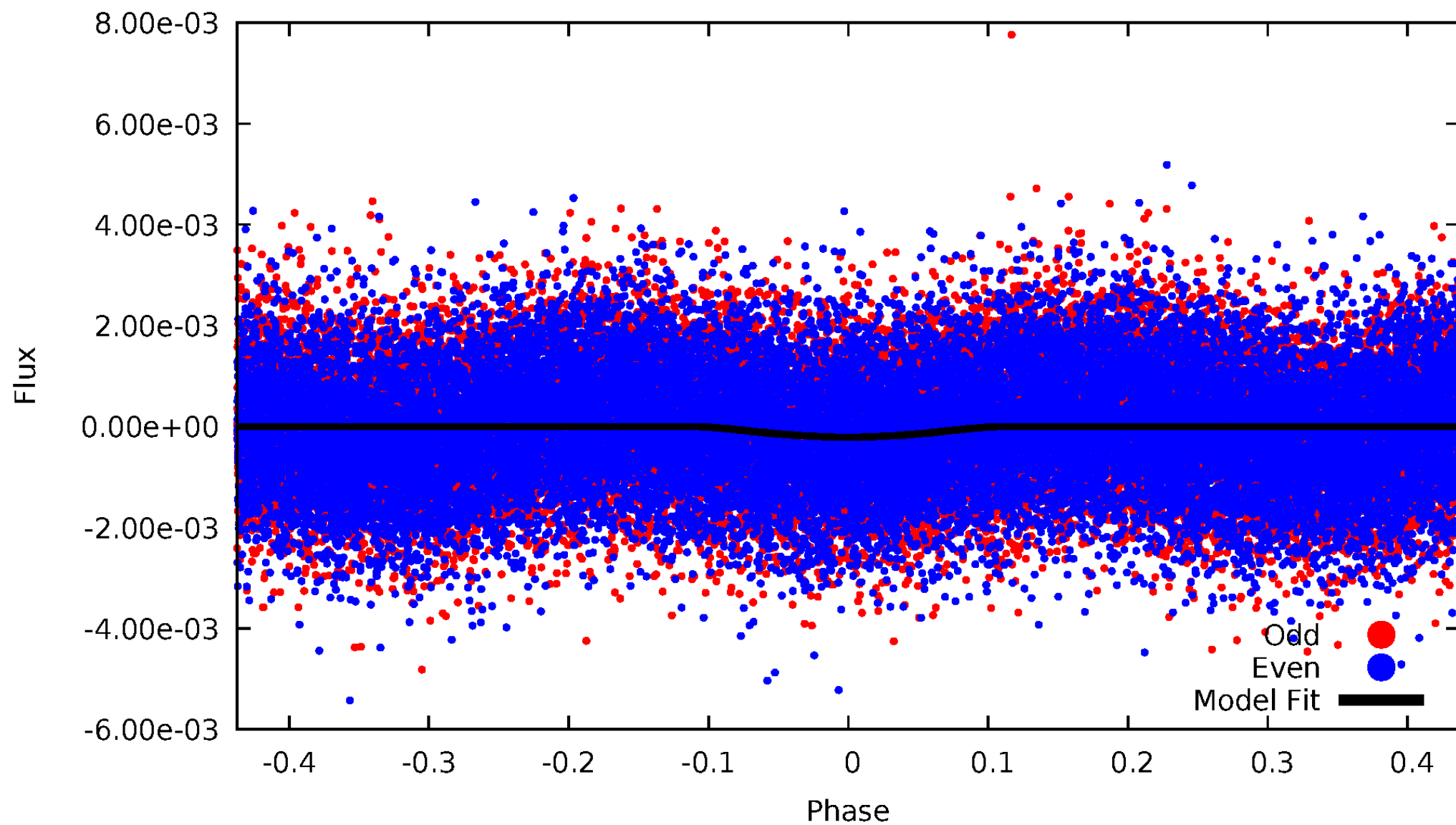


TCE 003454731-01



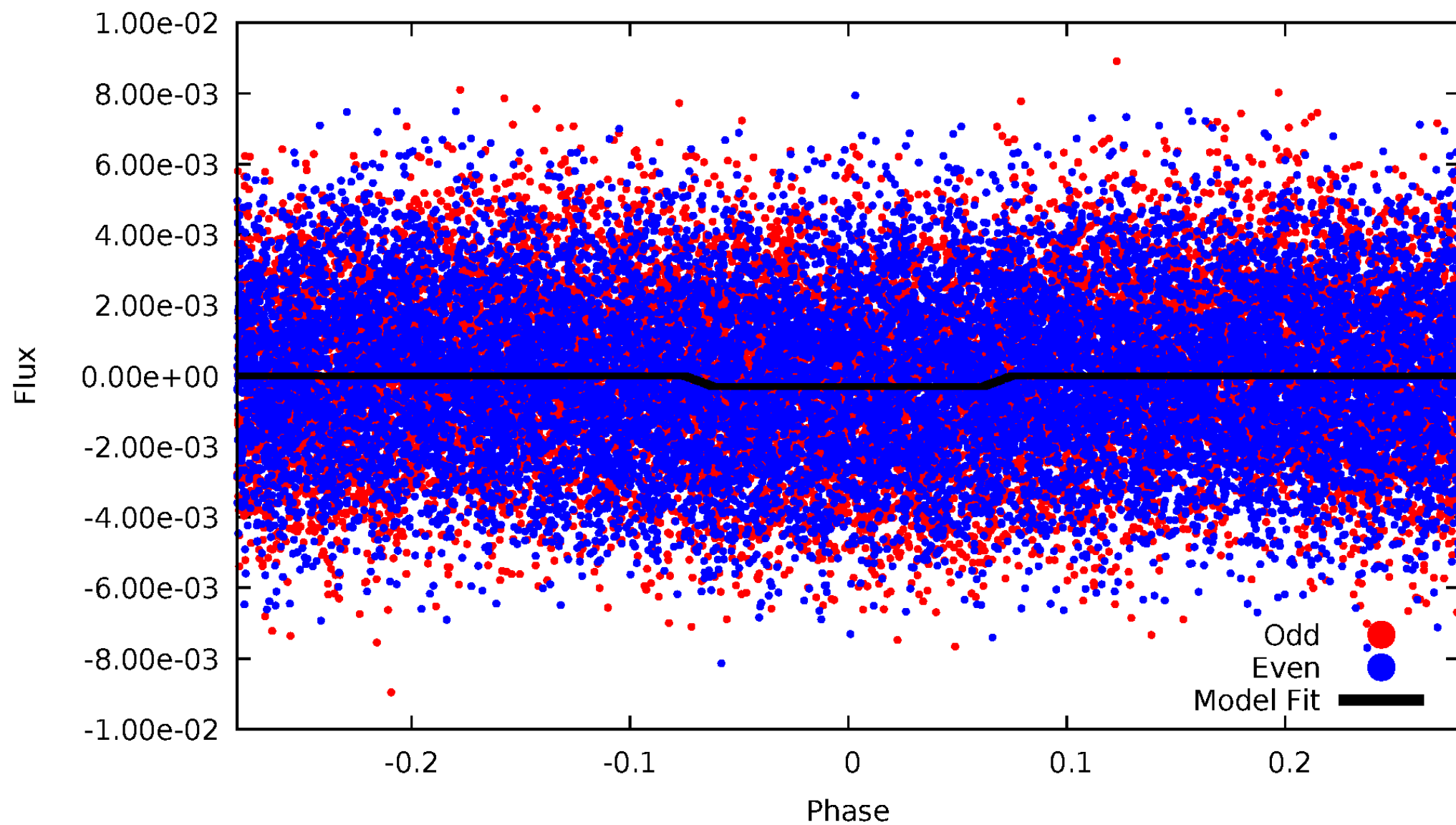
DV Odd/Even

TCE 003454731-01



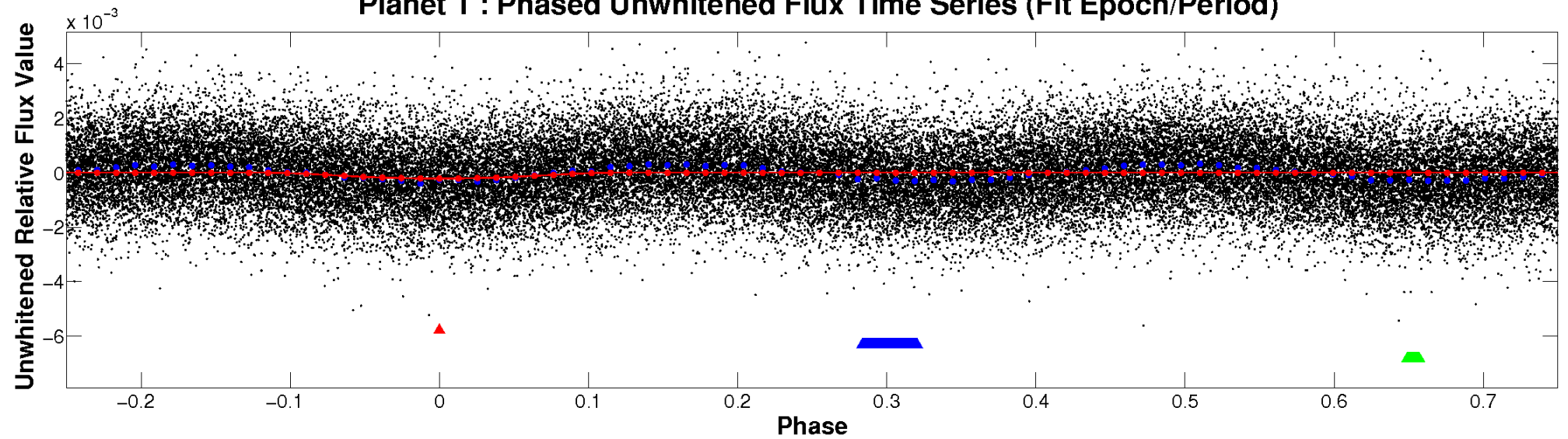
ALT Odd/Even

TCE 003454731-01

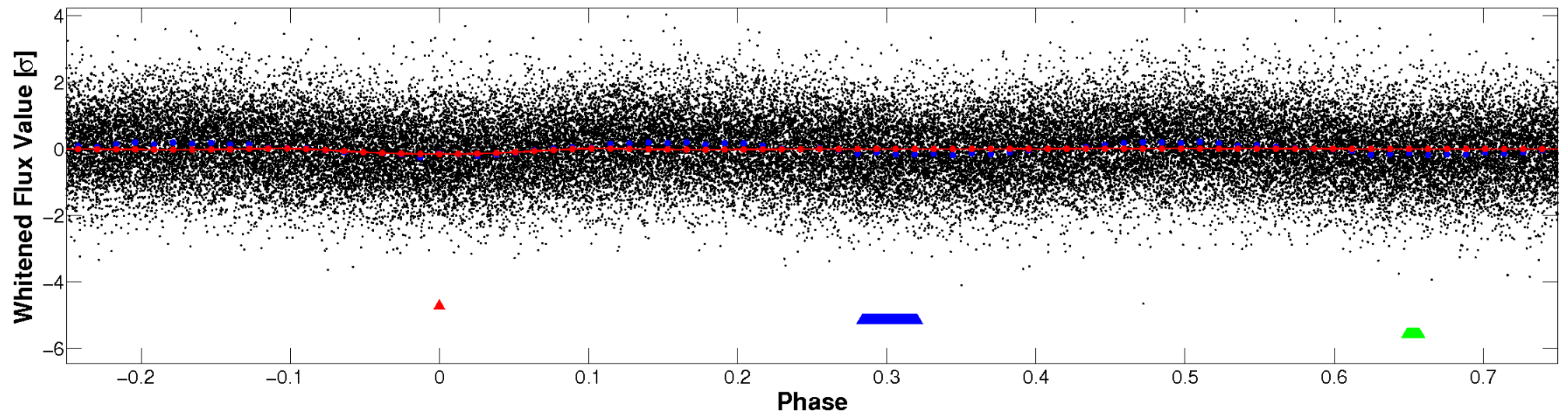


Non-Whitened Vs. Whitened Light Curve

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

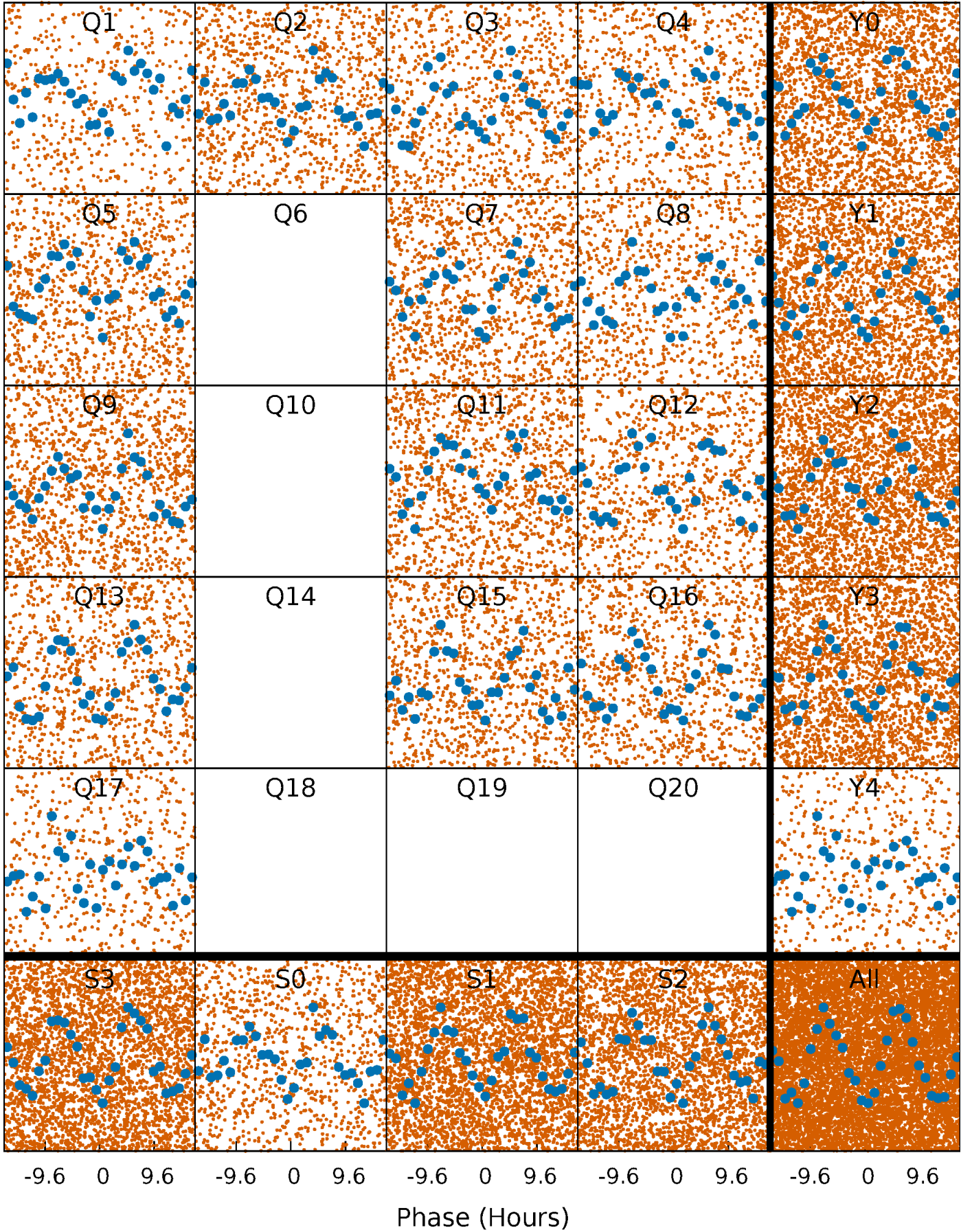


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



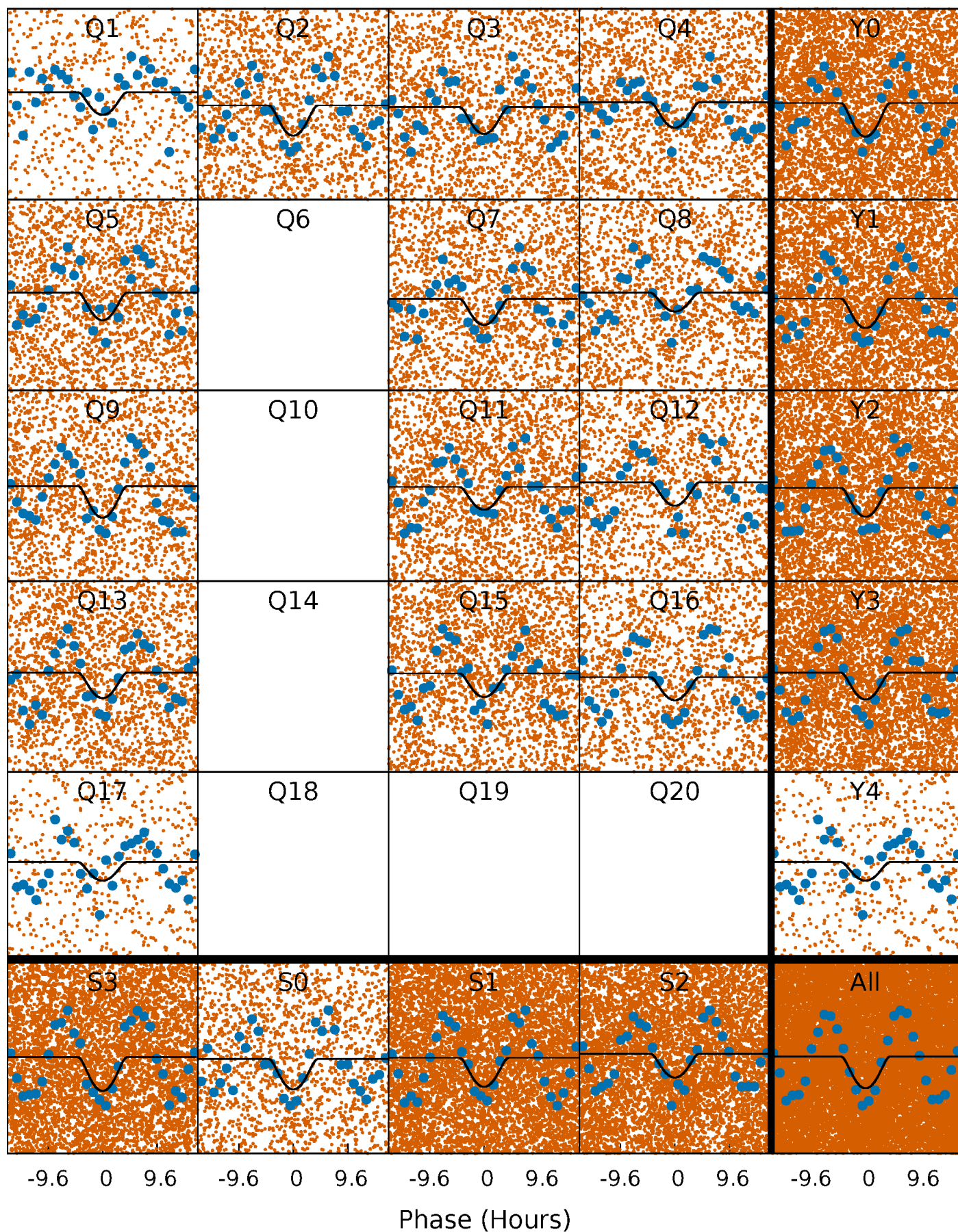
PDC Quarter-Phased Transit Curves

TCE 003454731-01 P= 1.602582 Days $T_0=131.874494$ (BKJD)



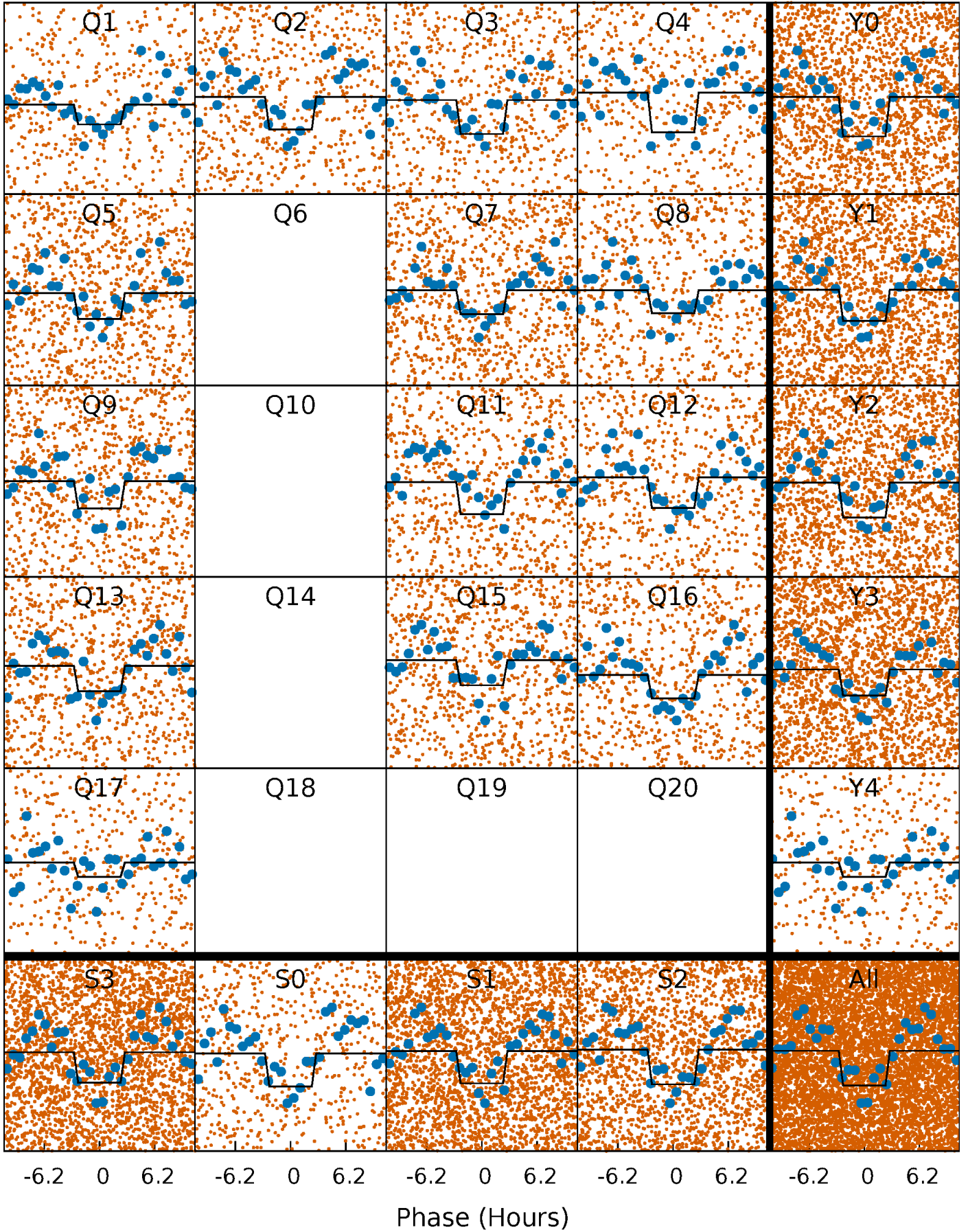
DV Quarter-Phased Transit Curves

TCE 003454731-01 P= 1.602582 Days $T_0=131.874494$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

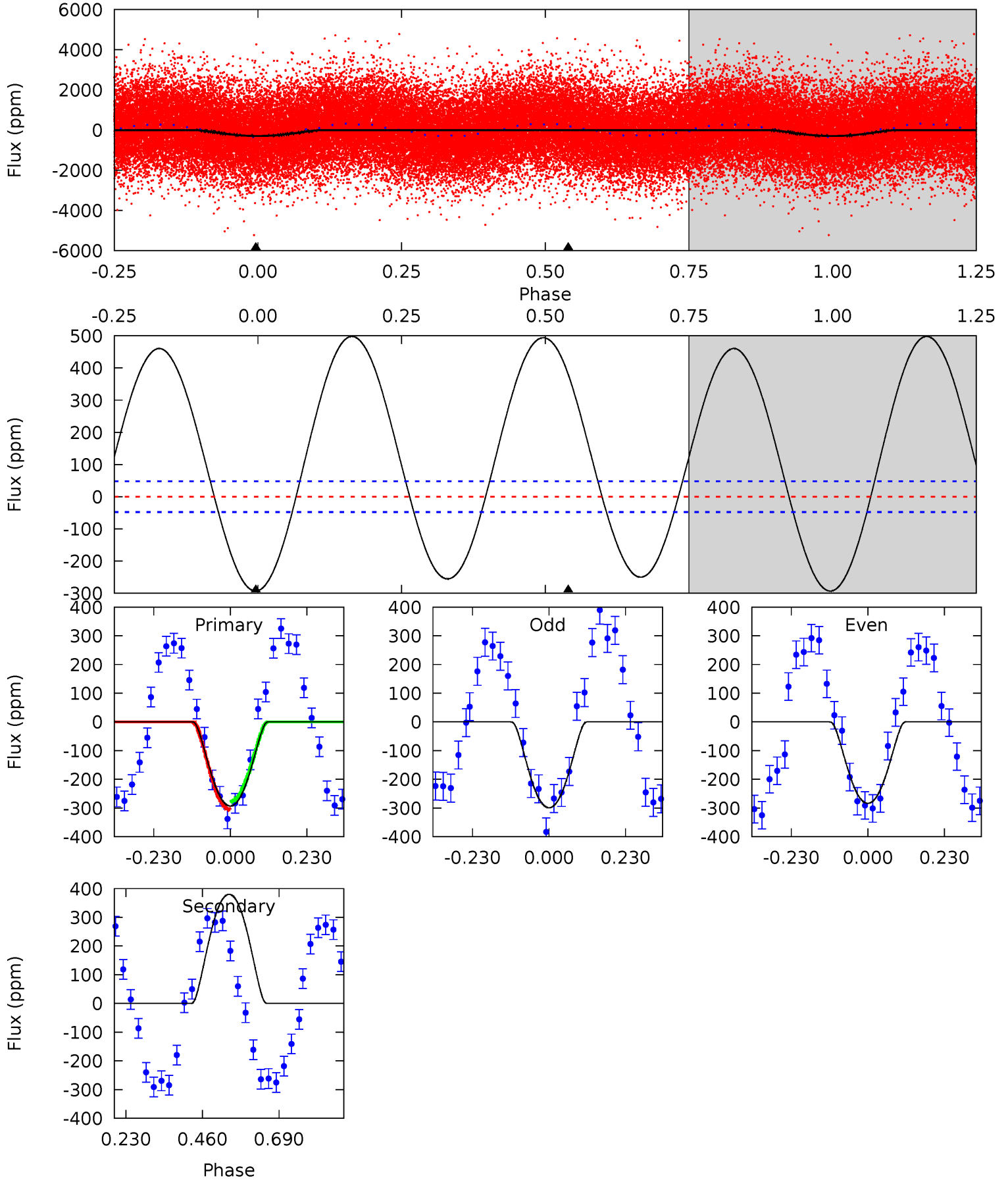
TCE 003454731-01 P= 1.602595 Days $T_0=131.859950$ (BKJD)



DV Model-Shift Uniqueness Test

003454731-01, P = 1.602582 Days, E = 130.271912 Days

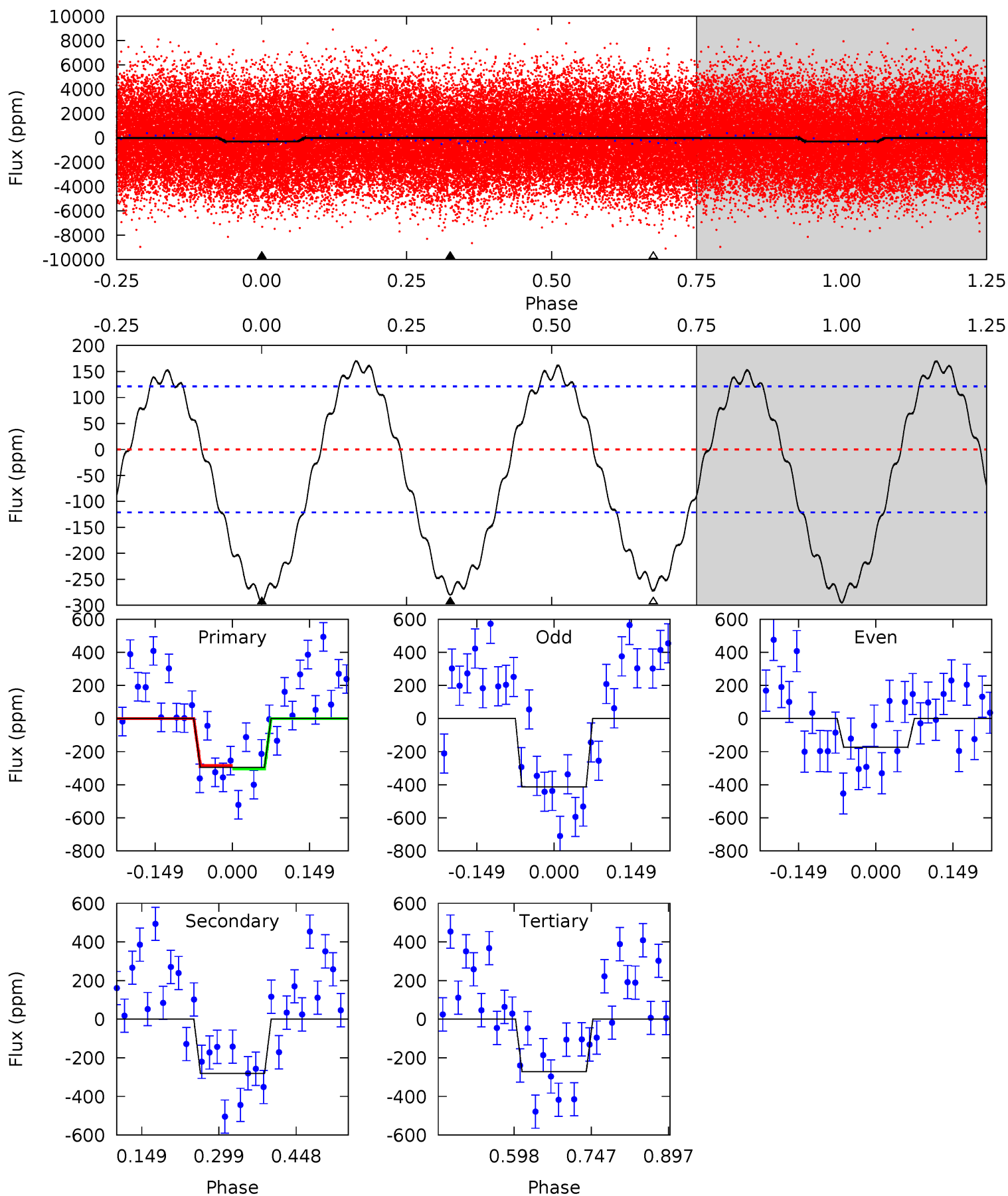
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
26.9	-34.9	0	0	4.39	1.20	15.9	26.9	26.9	-34.9	-34.9	0.73	1.03	0.63	1.33



Alt Model-Shift Uniqueness Test

003454731-01, P = 1.602595 Days, E = 130.257355 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.9	10.4	10.1	0	4.48	1.44	5.58	0.83	10.9	0.29	10.4	4.44	0.99	0.37	0.39



Stellar Parameters For KIC 003454731

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7074^{+225}_{-300}	$3.907^{+0.375}_{-0.125}$	$-0.500^{+0.250}_{-0.300}$	$2.158^{+0.491}_{-0.912}$	$1.372^{+0.205}_{-0.273}$	$0.192^{+0.603}_{-0.073}$
	+3%/-4%	+10%/-3%	+50%/-60%	+23%/-42%	+15%/-20%	+313%/-38%
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 003454731-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	380 ± 11	$4.18^{+2.94}_{-2.32}$	3618^{+286}_{-399}	-6946^{+1319}_{-4805}	$-10.596^{+6.917}_{-40.892}$
Alt.	-280 ± 27	$4.16^{+2.69}_{-2.31}$	3626^{+265}_{-367}	6448^{+4544}_{-1390}	$8.004^{+32.397}_{-5.107}$

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

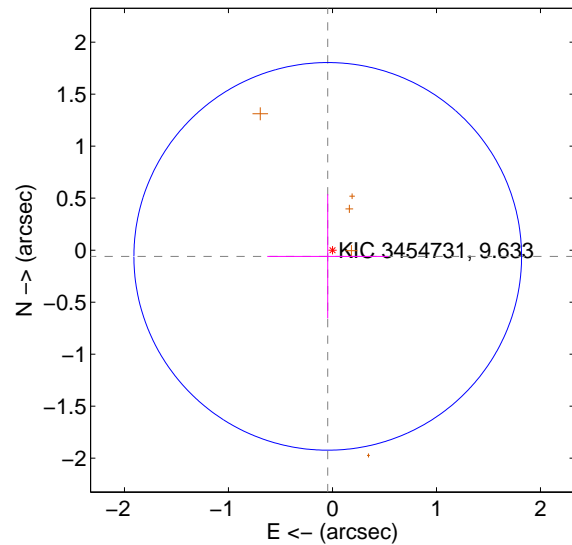
Supplemental centroid analysis for 003454731-01. **Kepler magnitude: 9.63.** Transit SNR 10.79

There are 0 quarters with good PRF difference image offsets

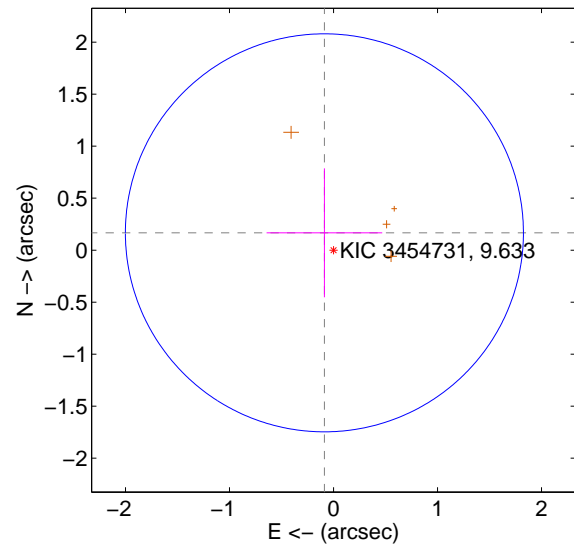
The direct PRF centroid is offset from the target star catalog position by about 0.34 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.075 ± 0.621	0.12	0.046 ± 0.582	-0.060 ± 0.597
PRF-fit source offset from KIC position	0.188 ± 0.638	0.30	0.088 ± 0.556	0.167 ± 0.620
photometric centroid source offset	0.59 ± 0.18	3.21	0.53 ± 0.17	-0.24 ± 0.23

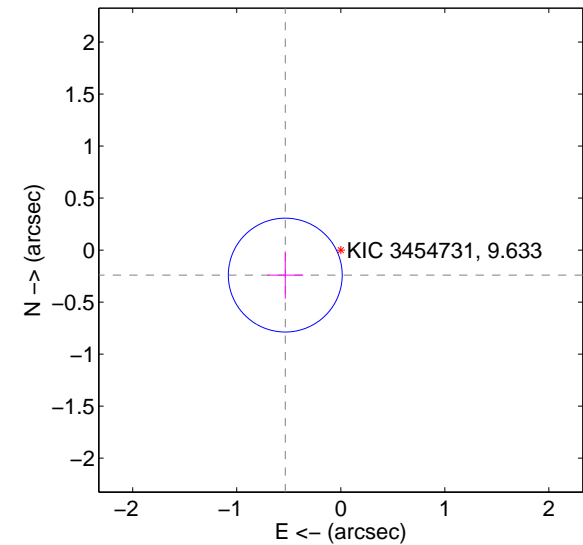
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

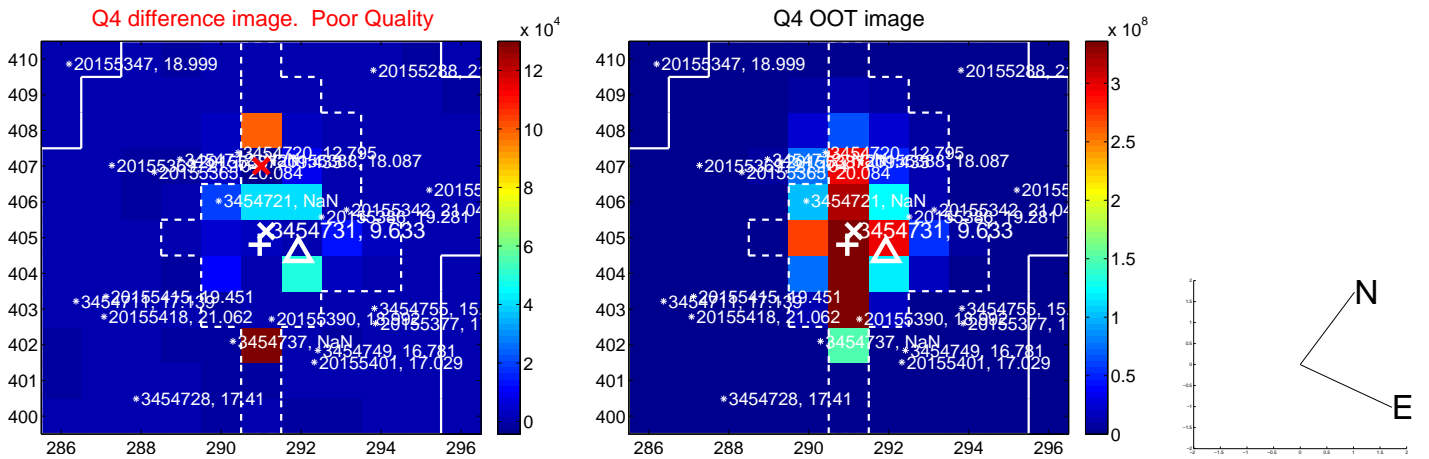
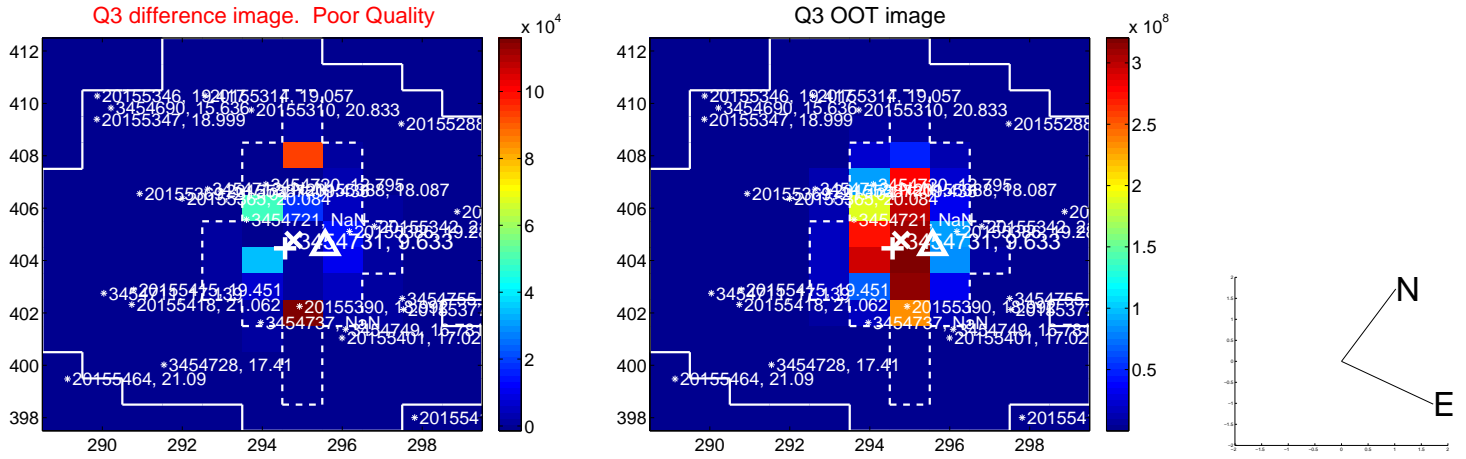
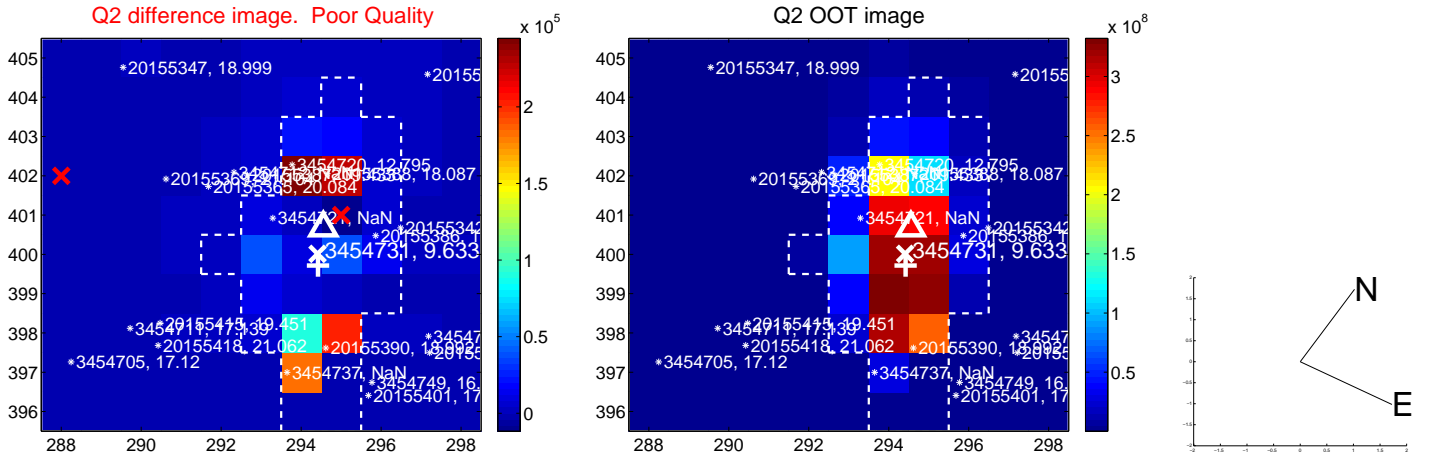
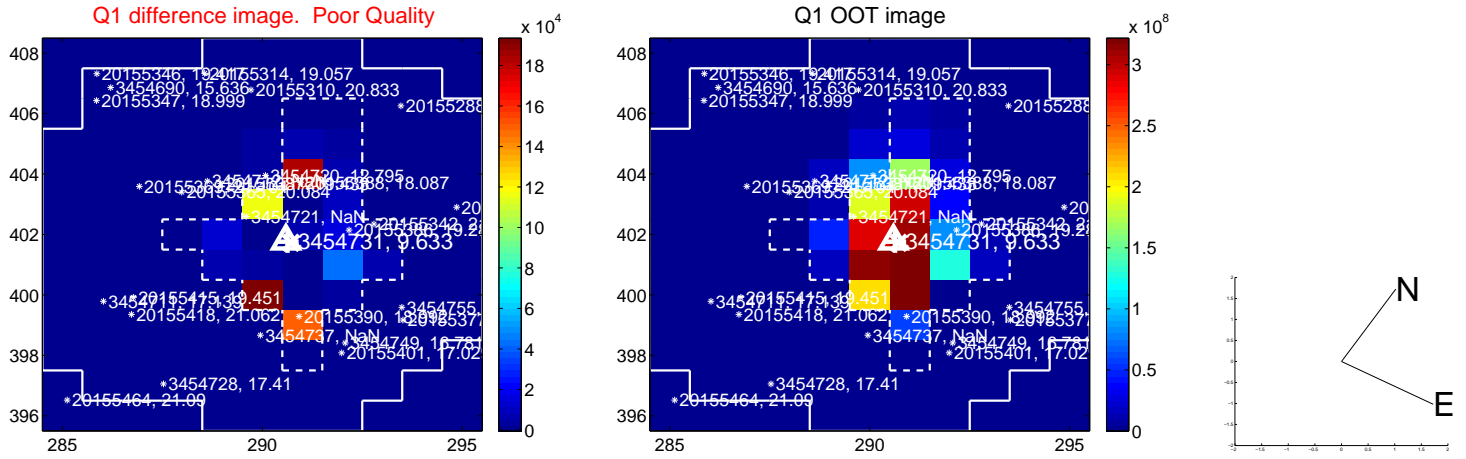


offset from photometric centroids

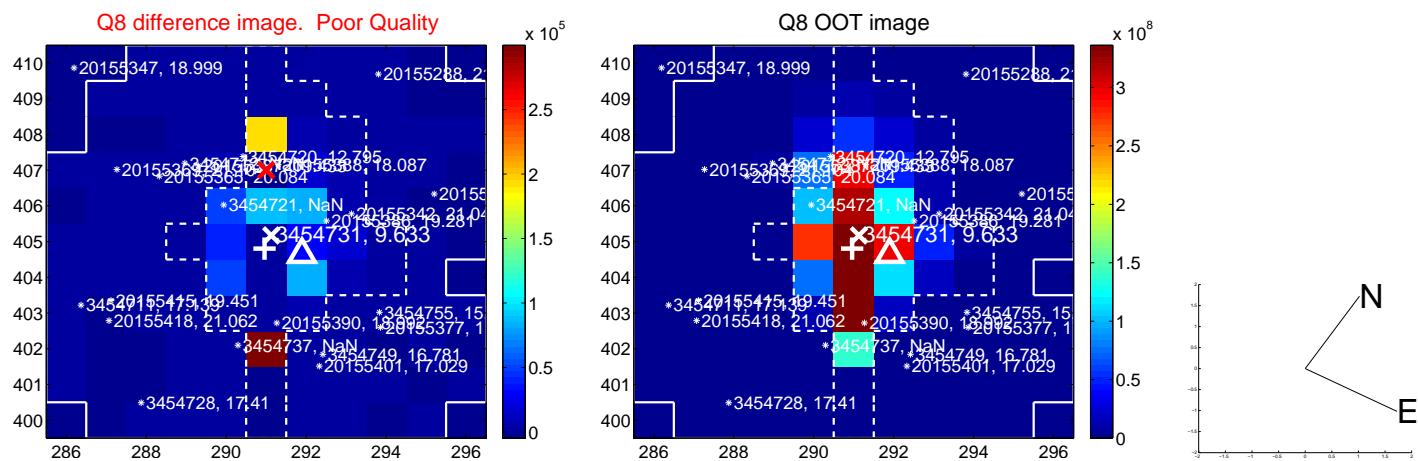
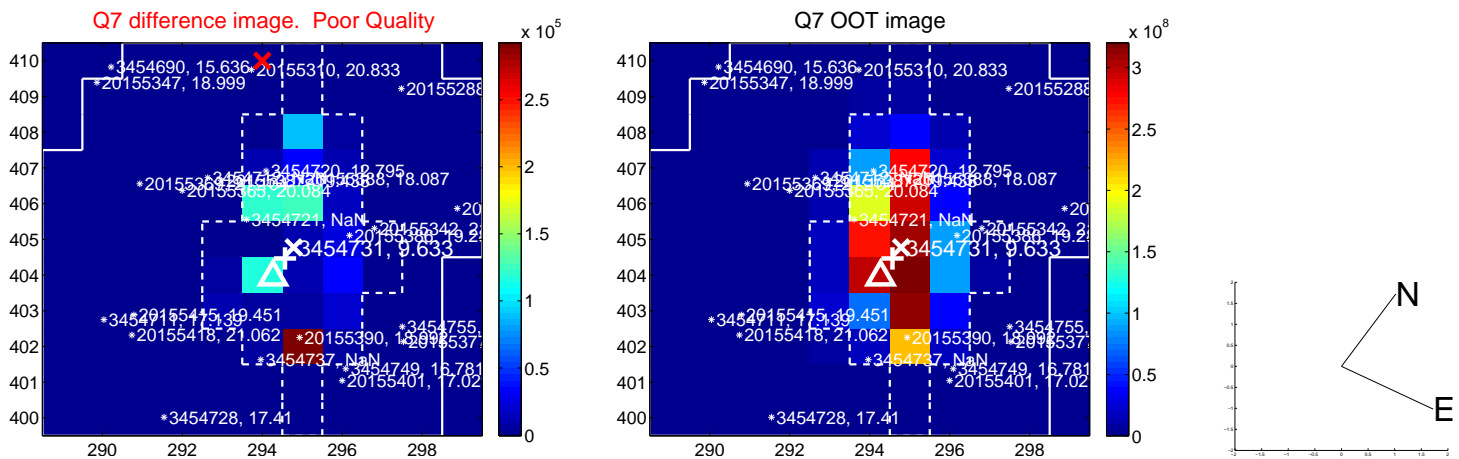
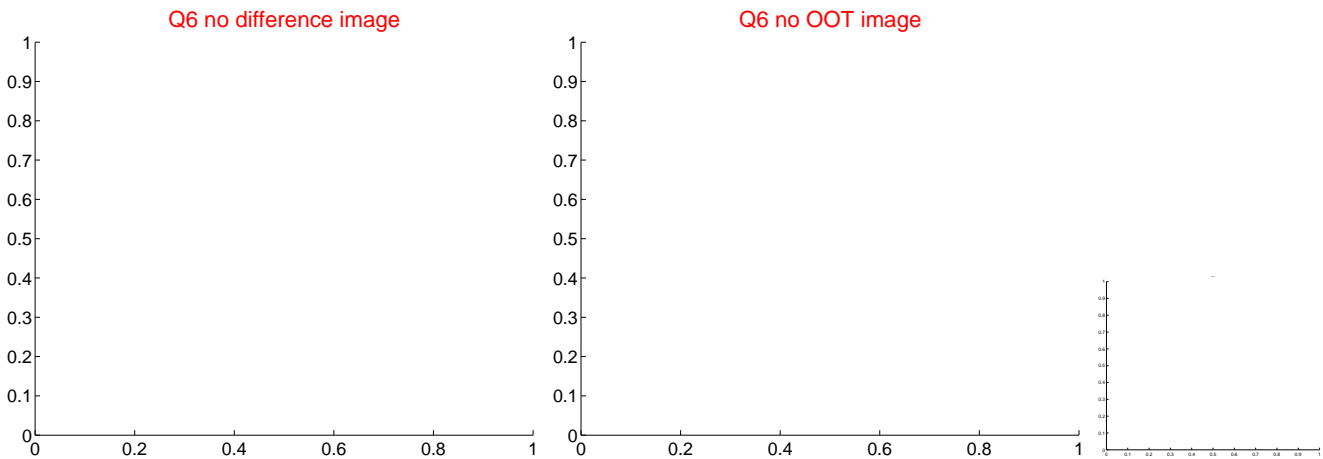
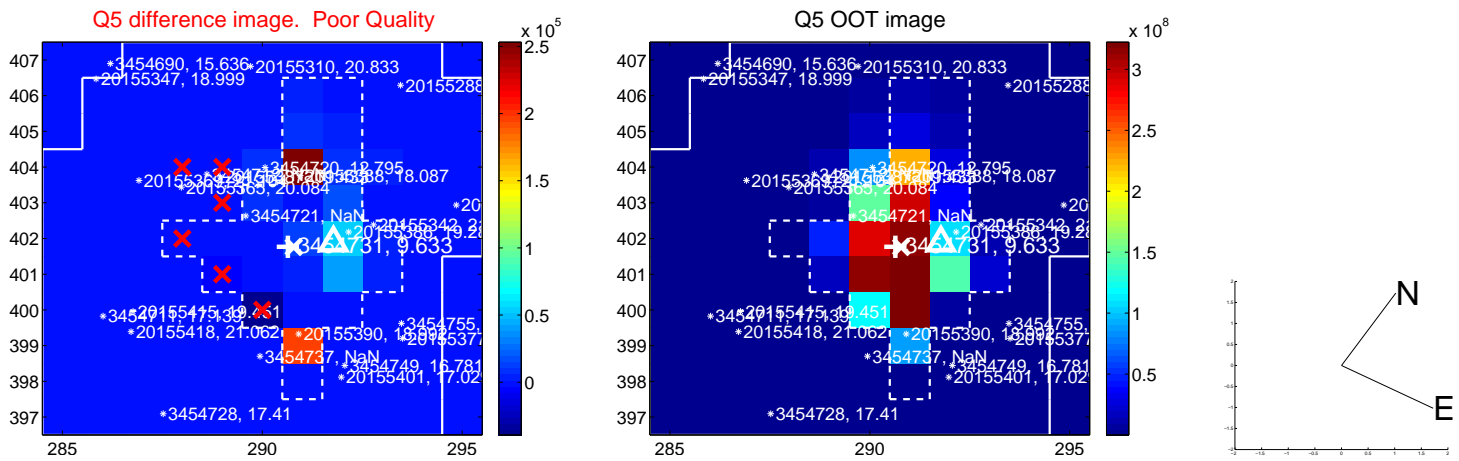


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

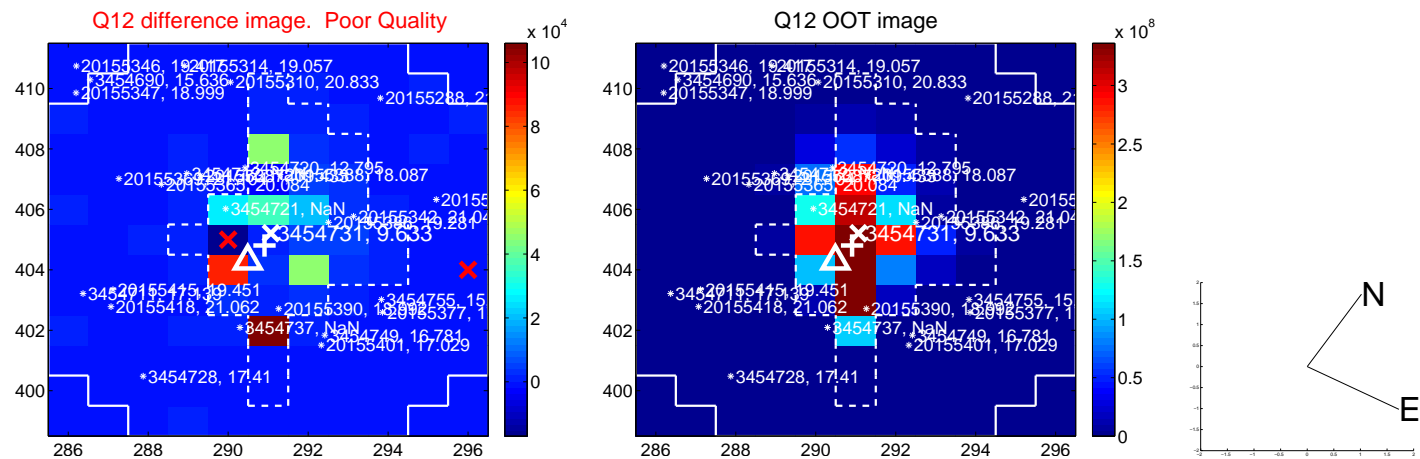
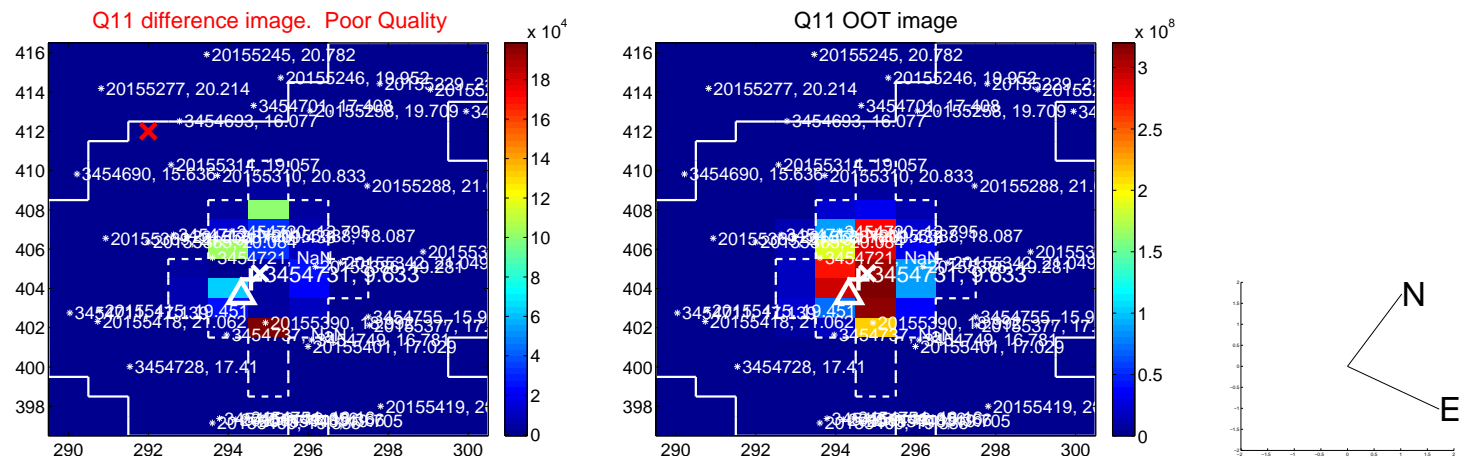
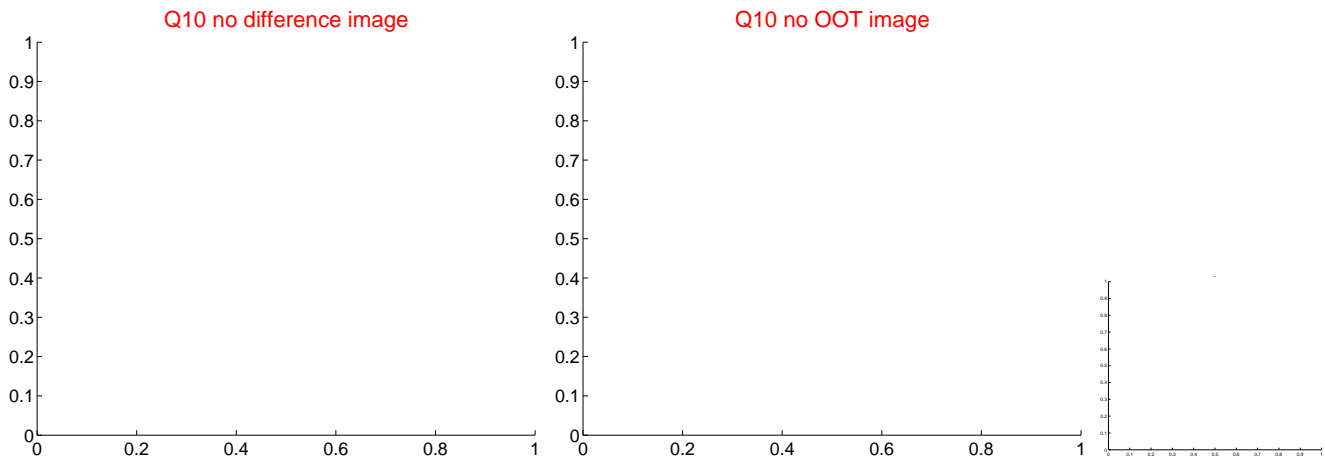
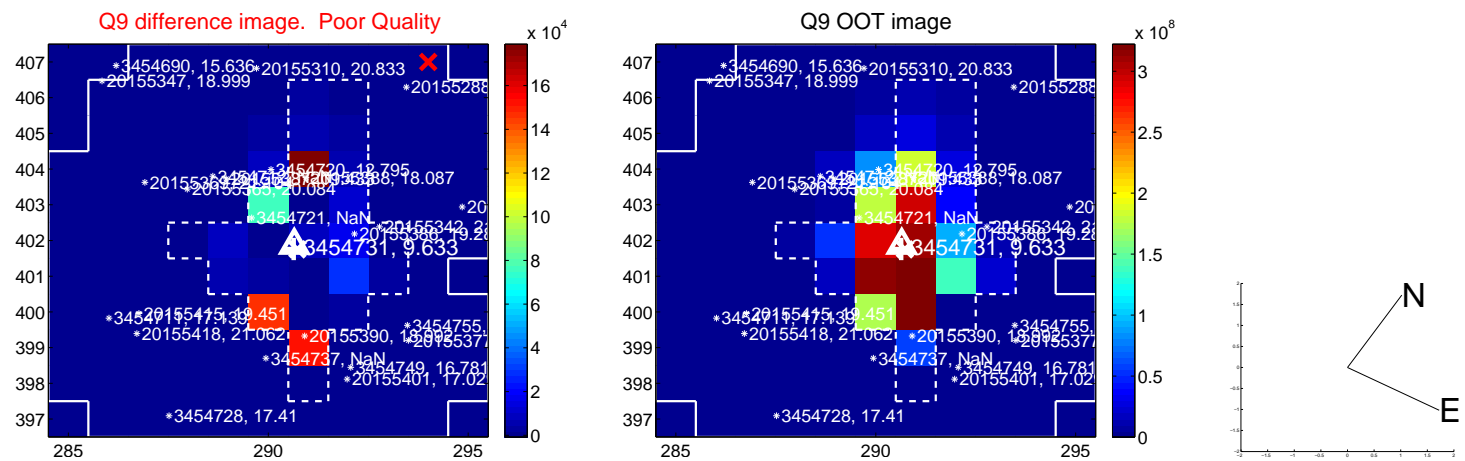
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



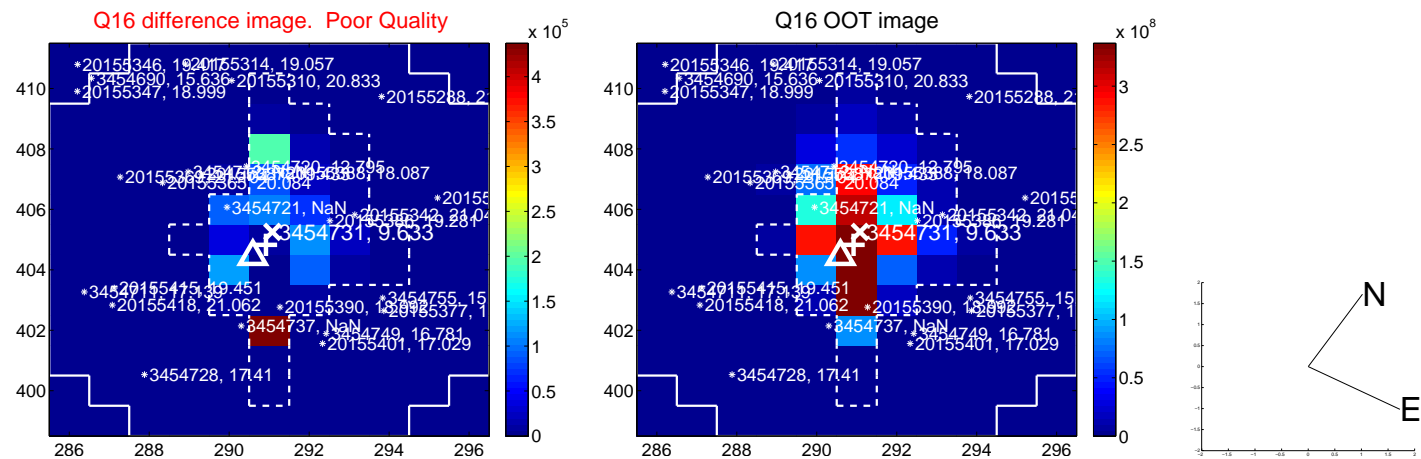
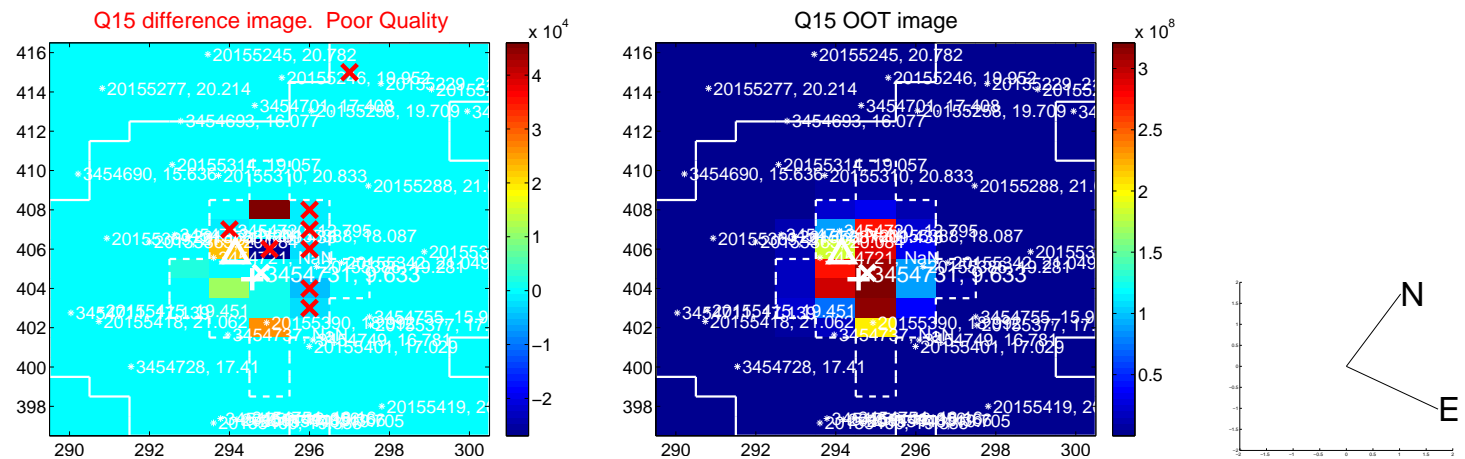
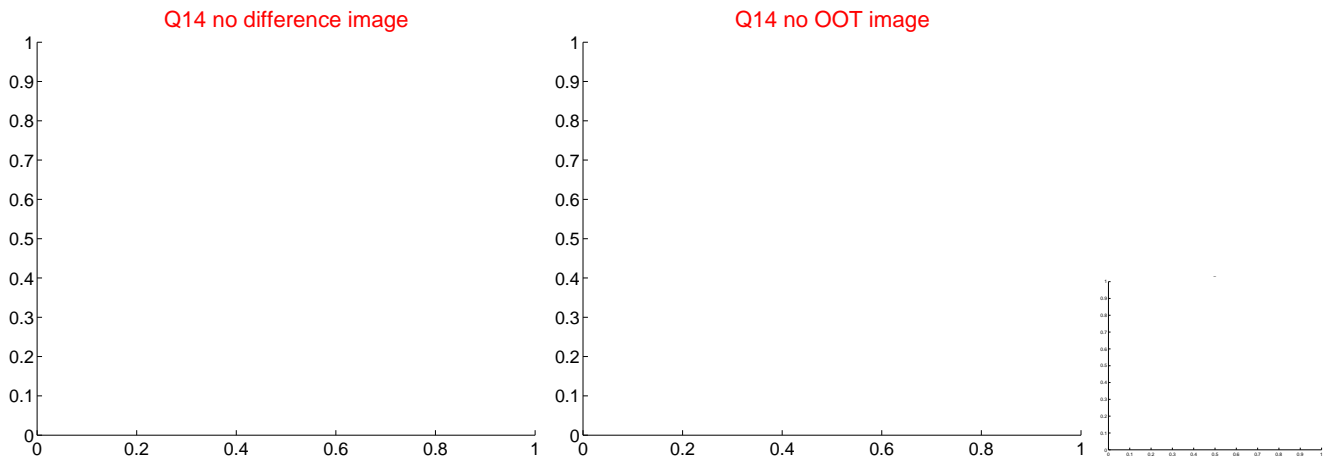
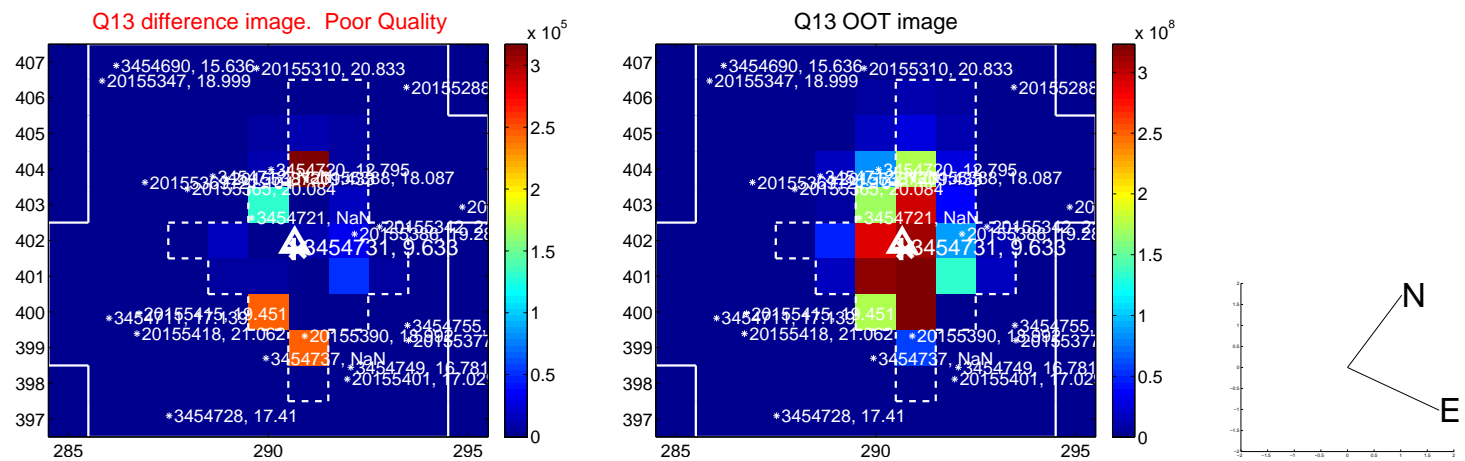
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



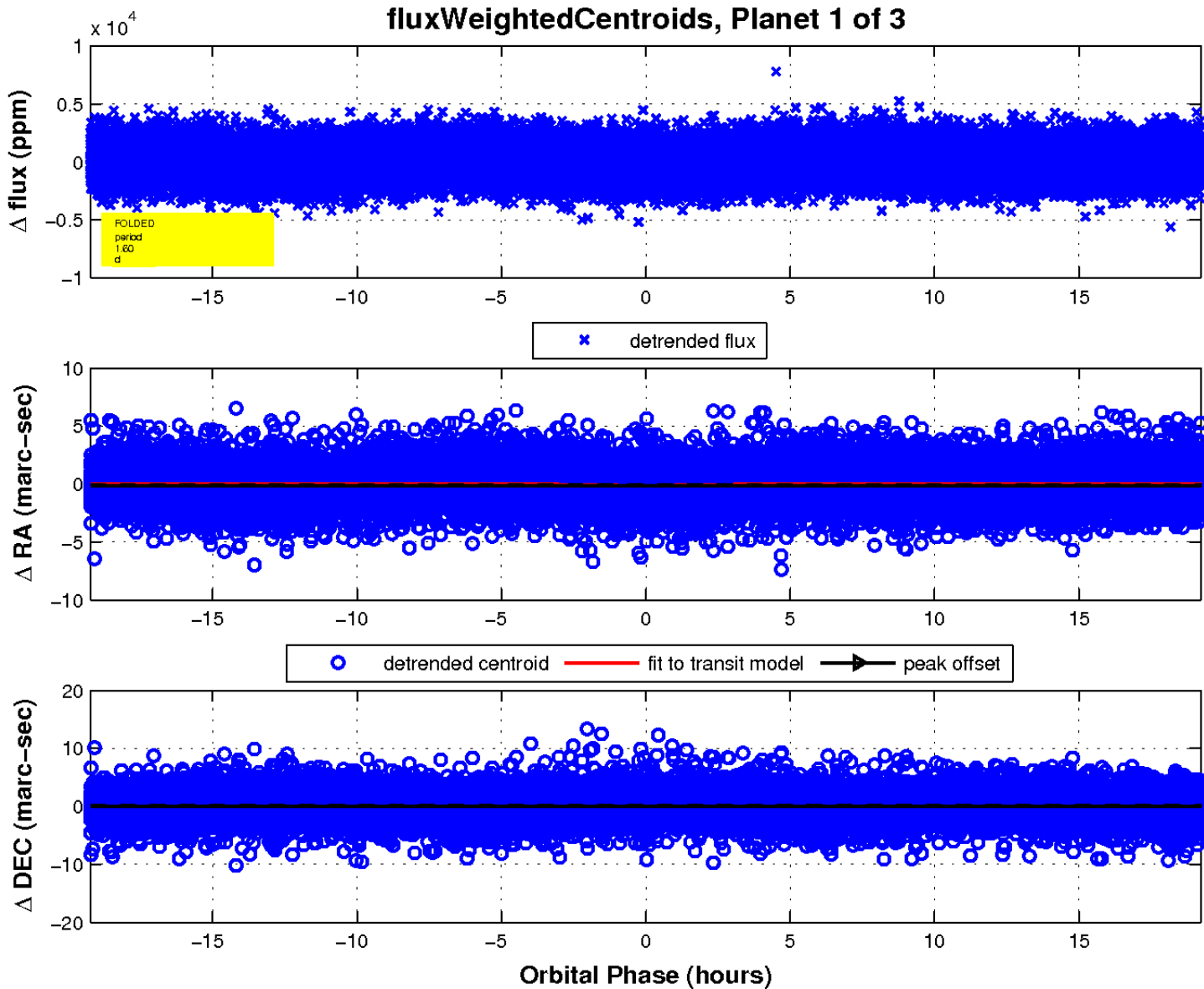
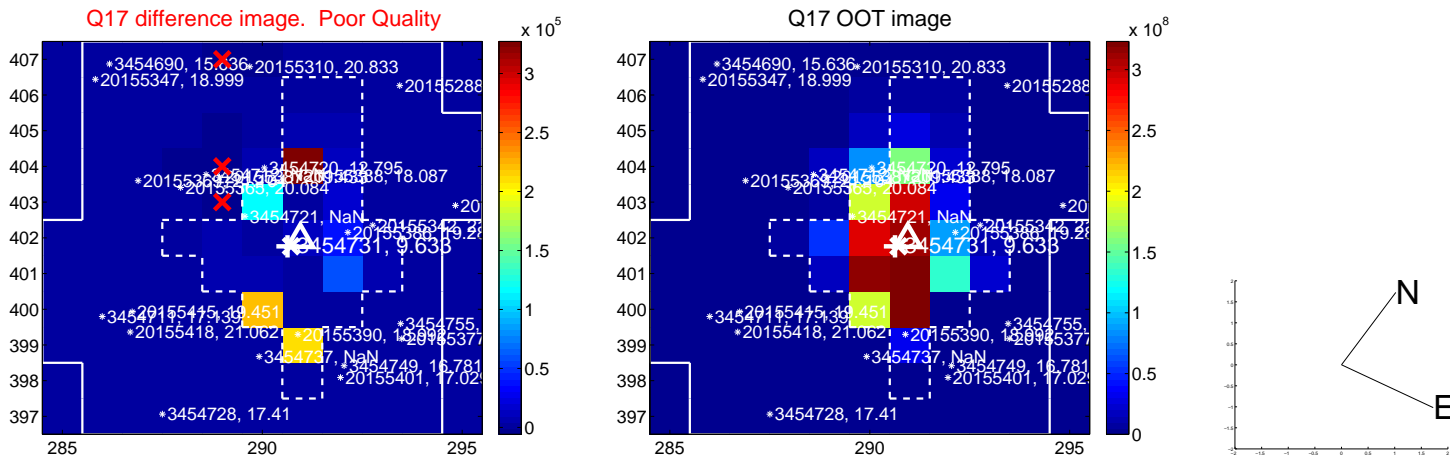
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

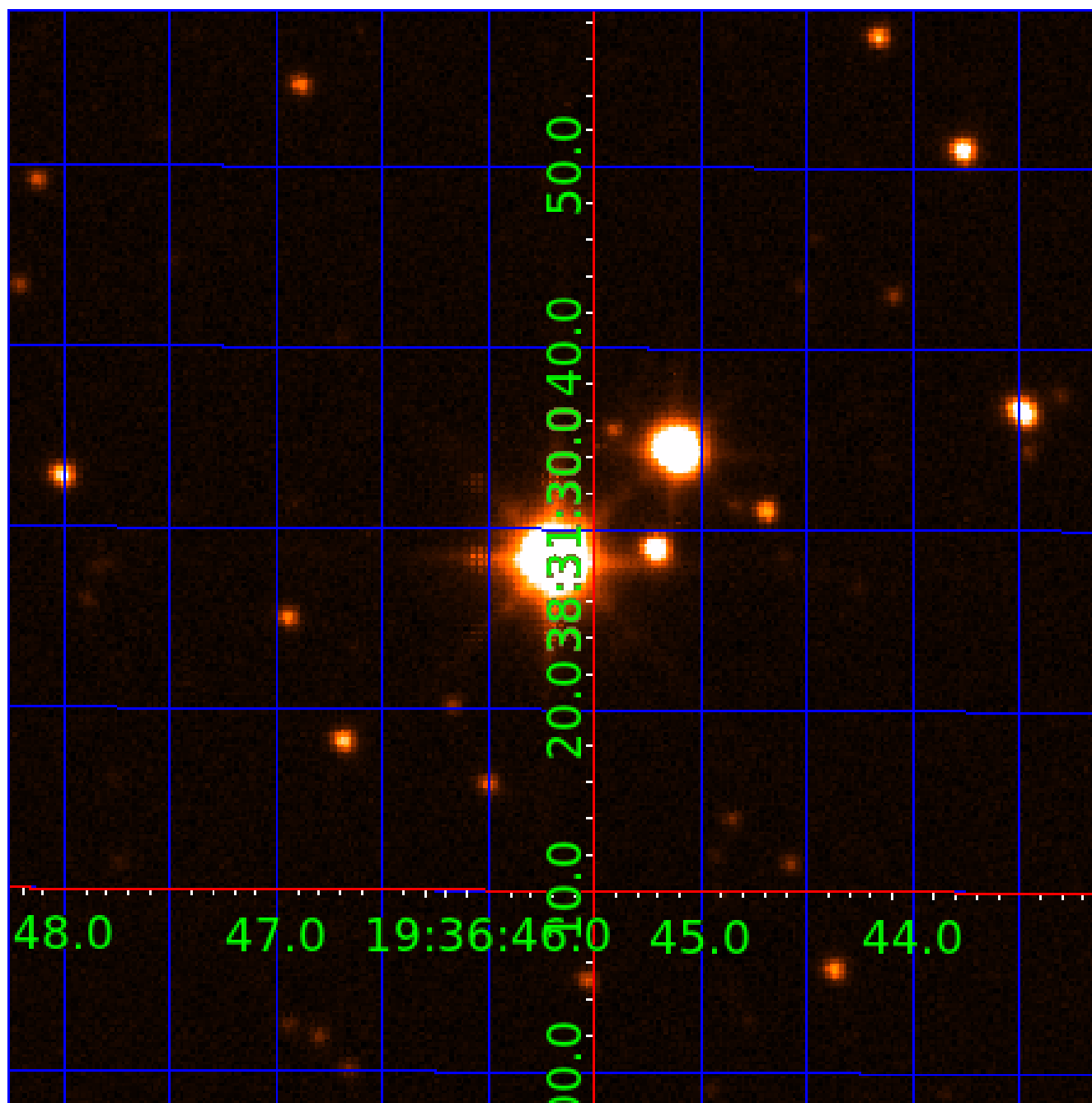


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 003454731

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})
003454731-01	OBS	No	1.602582	131.874494	209.6	8.405	10.6	10.8	2.16	7074	4.63	11780.45
003454731-02	OBS	No	1.602518	132.387714	227.6	7.427	10.4	9.9	2.16	7074	3.45	11781.08
003454731-03	OBS	No	1.602568	132.927721	39.5	4.500	12.2	-1.0	2.16	7074	1.37	11780.59

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003454731-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
003454731-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—SAME_NTL_PERIOD—CENT_SATURATED
003454731-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—NO_FITS—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.

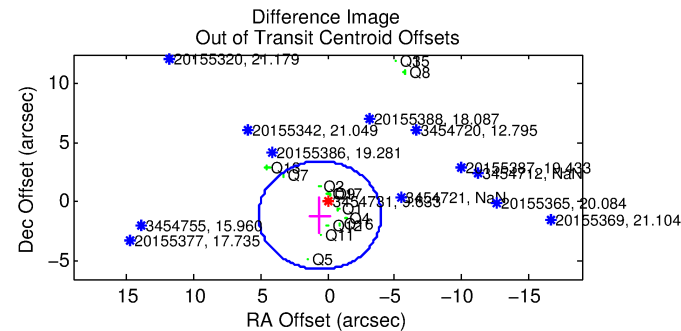
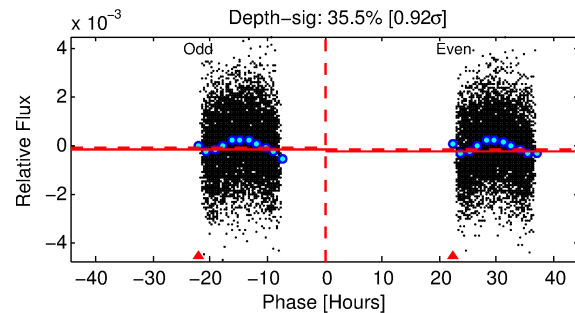
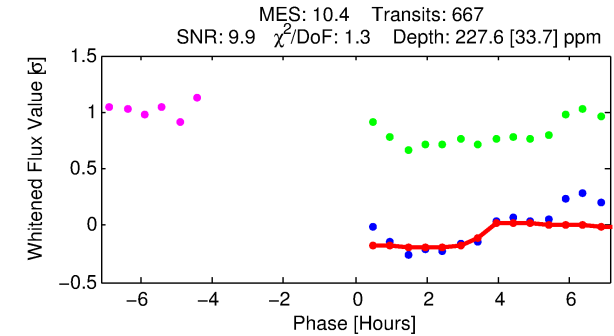
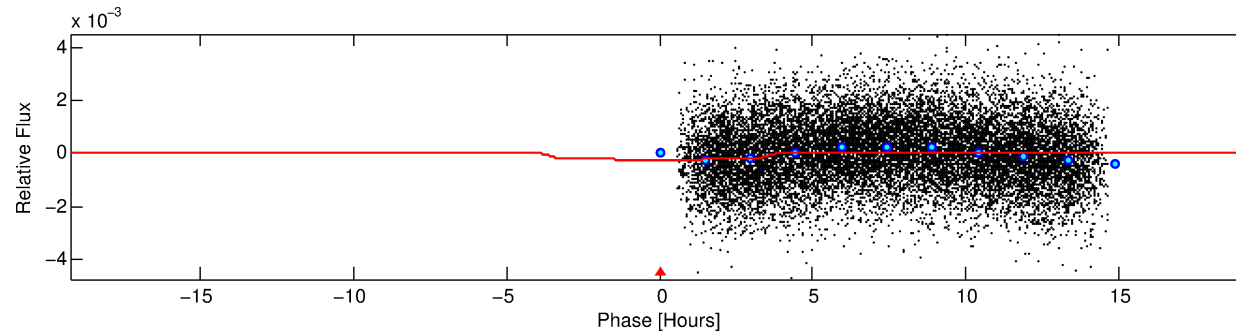
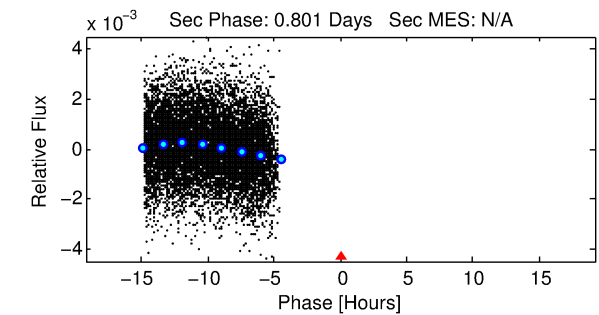
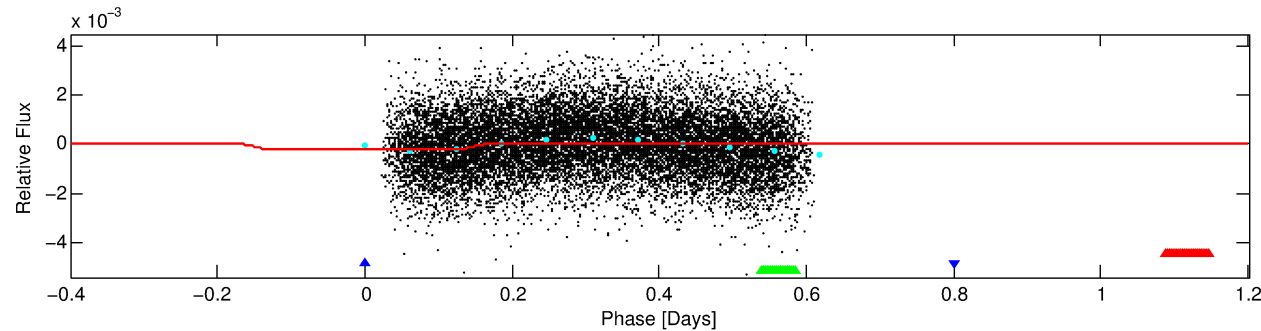
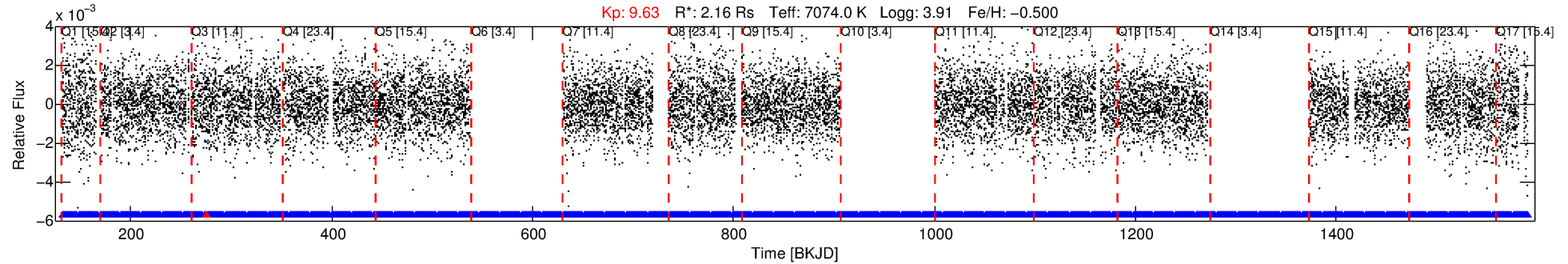
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003454731-02

No Significant Match Found

DV One-Page Summary

KIC: 3454731 Candidate: 2 of 3 Period: 1.603 d



DV Fit Results:

Period = 1.60252 [0.00002] d
Epoch = 132.3877 [0.0431] BKJD
 $R_p/R^* = 0.0147$ [0.0146]
 $a/R^* = 1.51$ [5.43]
 $b = 0.65$ [5.46]
 $\text{Seff} = 11781.08$ [7810.45]
 $T_{\text{eq}} = 2657$ [440] K
 $R_p = 3.45$ [3.73] R_{e}
 $a = 0.0298$ [0.0120] AU

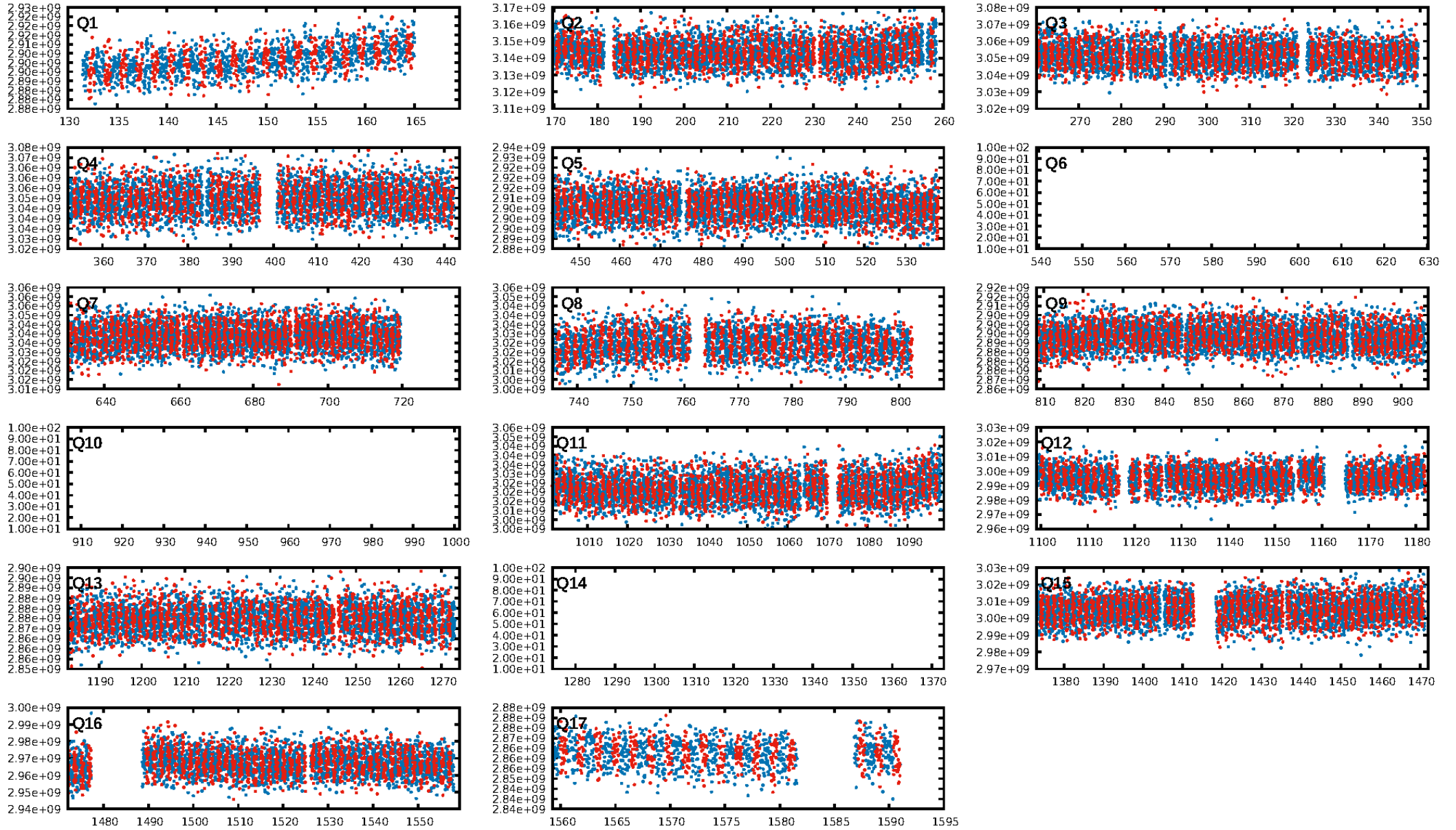
DV Diagnostic Results:

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 [628/629]
GhostDiagnostic-chr: N/A
Centroid-sig: 12.8%
Centroid-so: 0.109 arcsec [0.81σ]
OotOffset-rm: 1.263 arcsec [0.83σ]
KicOffset-rm: 2.494 arcsec [1.63σ]
OotOffset-st: 1/4/4/5 [14]
KicOffset-st: 1/4/4/5 [14]
DiffImageQuality-fgm: 0.07 [1/14]
DiffImageOverlap-fno: 0.00 [0/14]

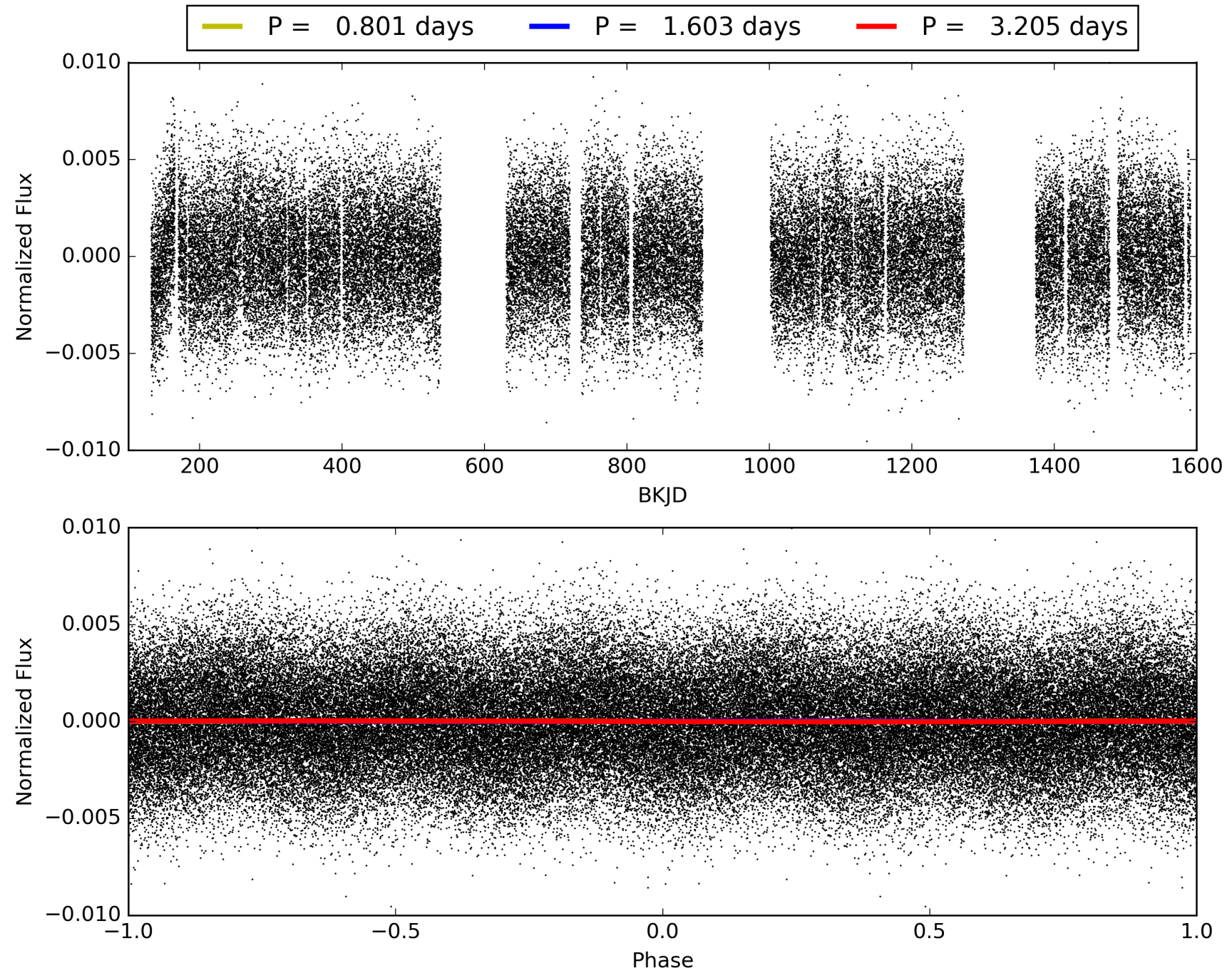
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:45:58 Z

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

TCE 003454731-02, PDC Light Curves

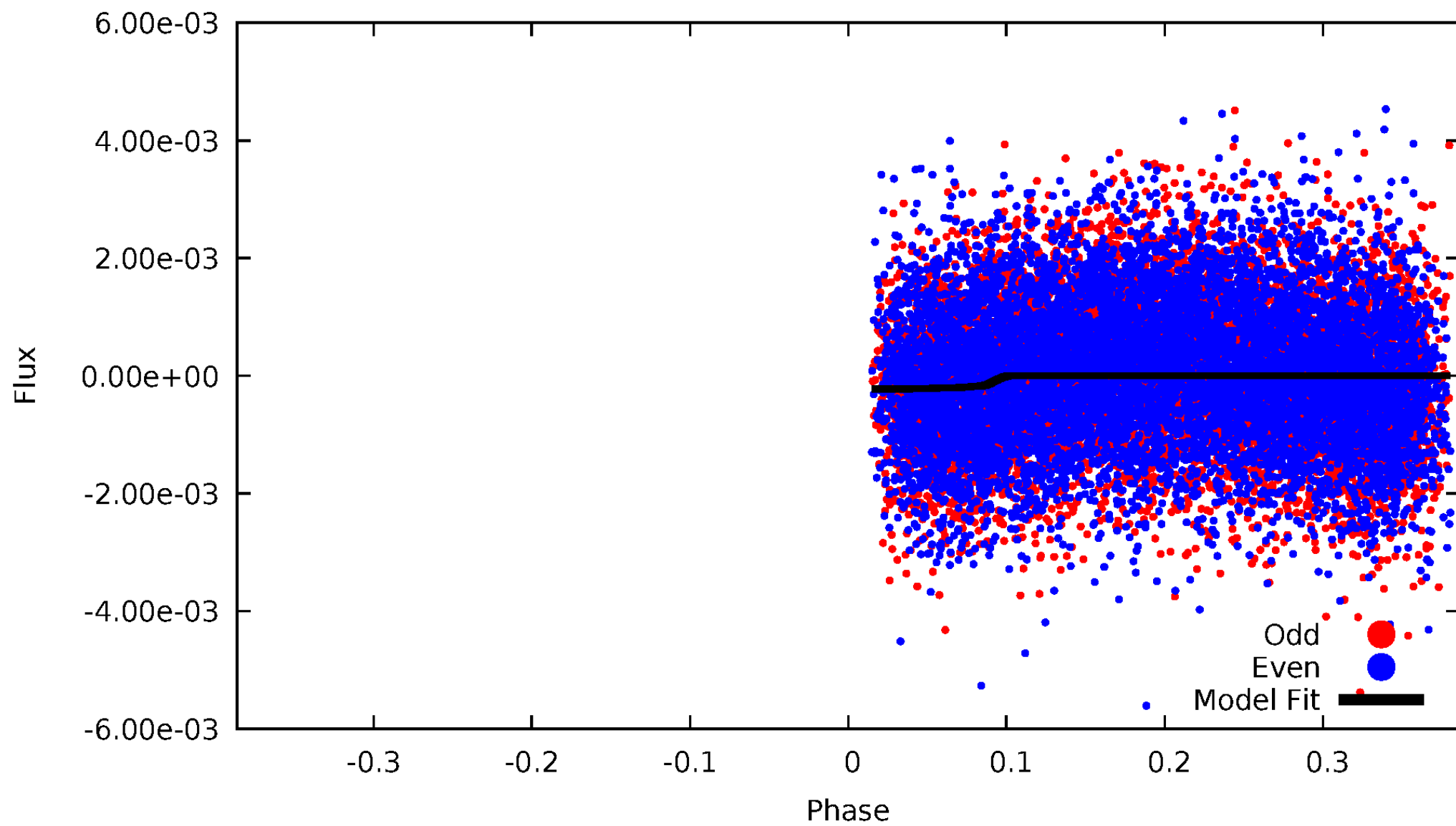


TCE 003454731-02



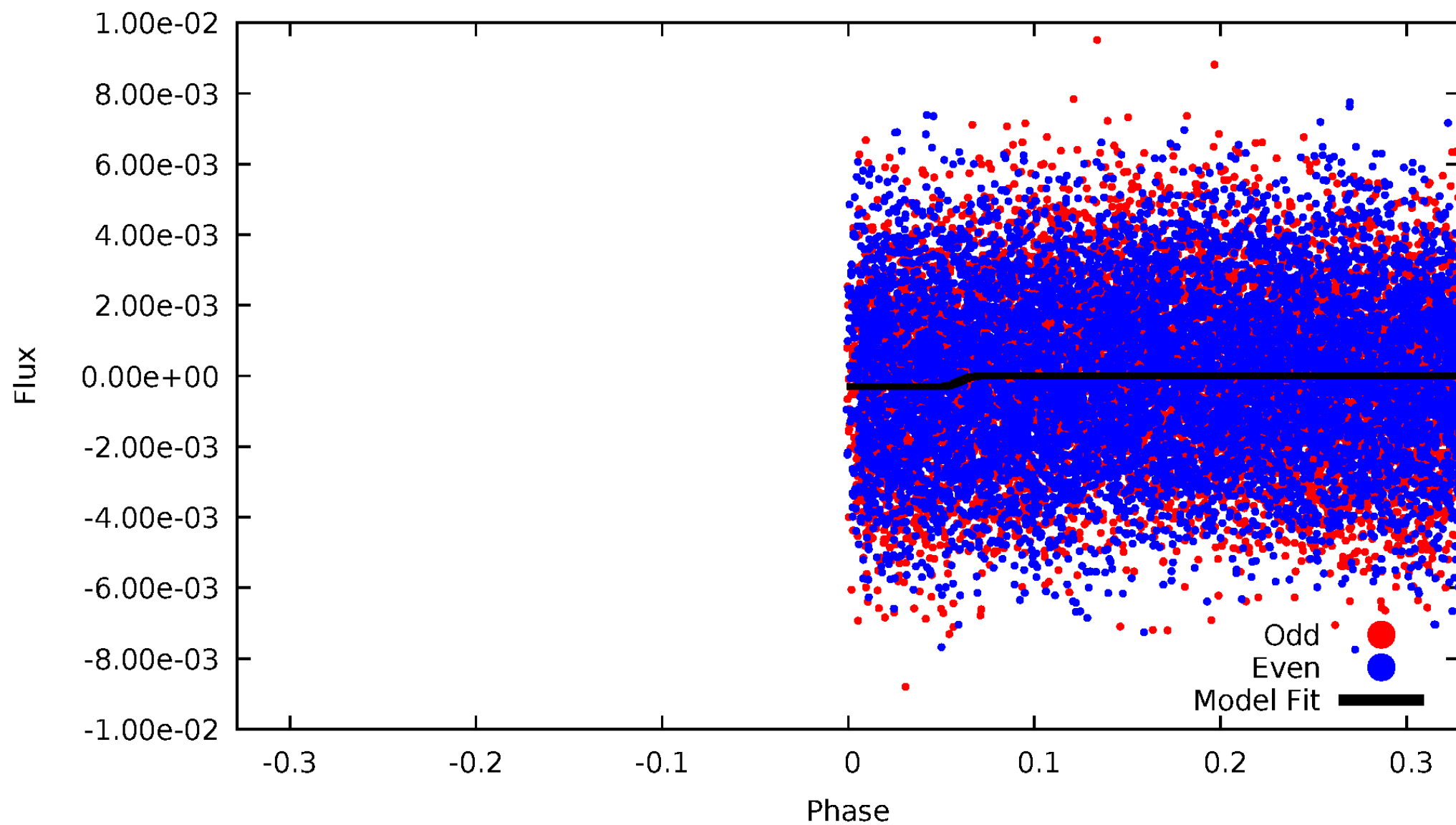
DV Odd/Even

TCE 003454731-02



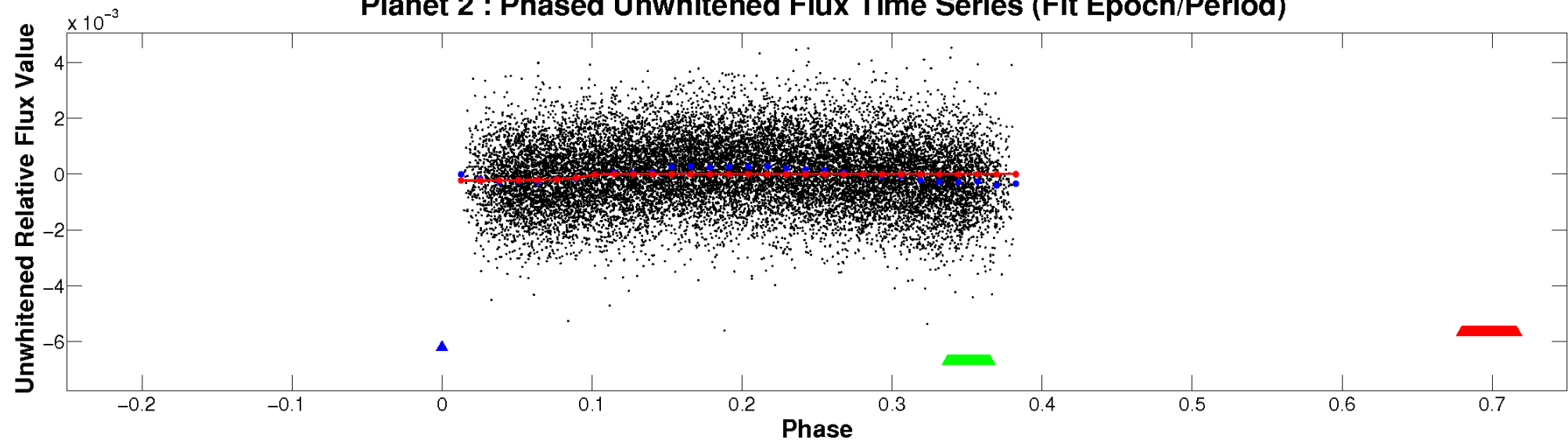
ALT Odd/Even

TCE 003454731-02

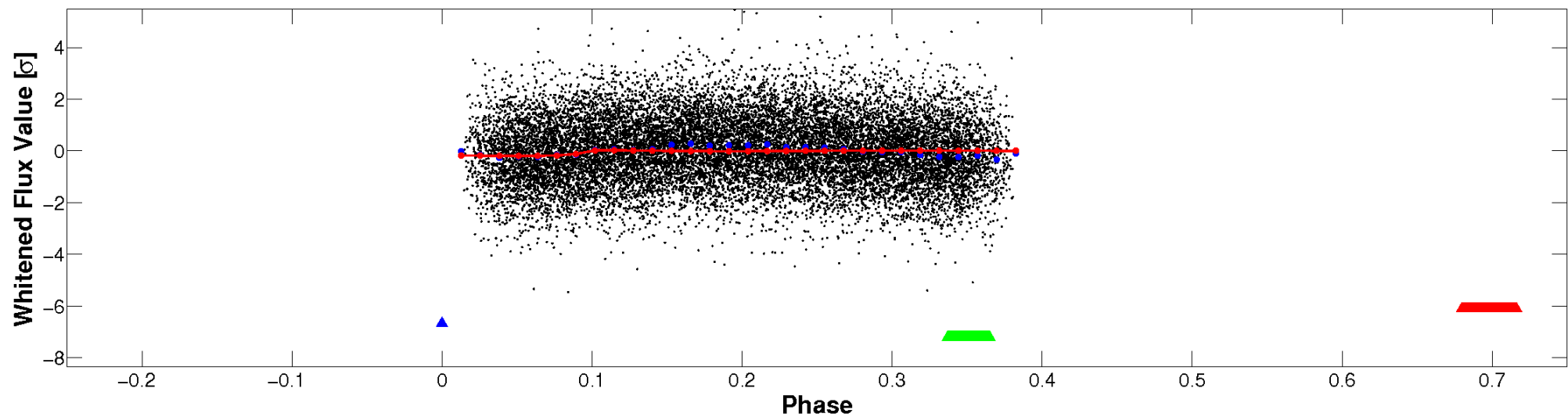


Non-Whitened Vs. Whitened Light Curve

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

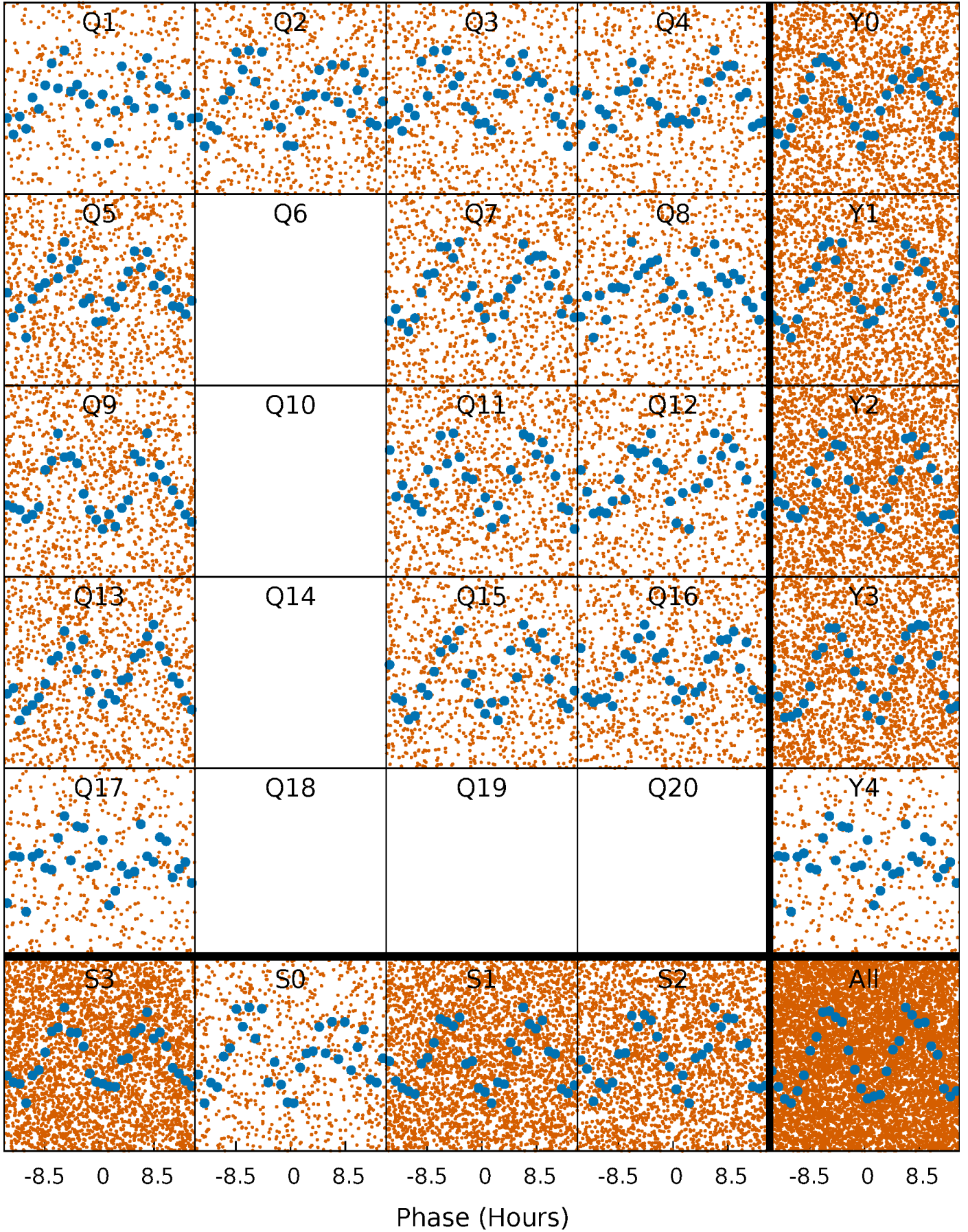


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



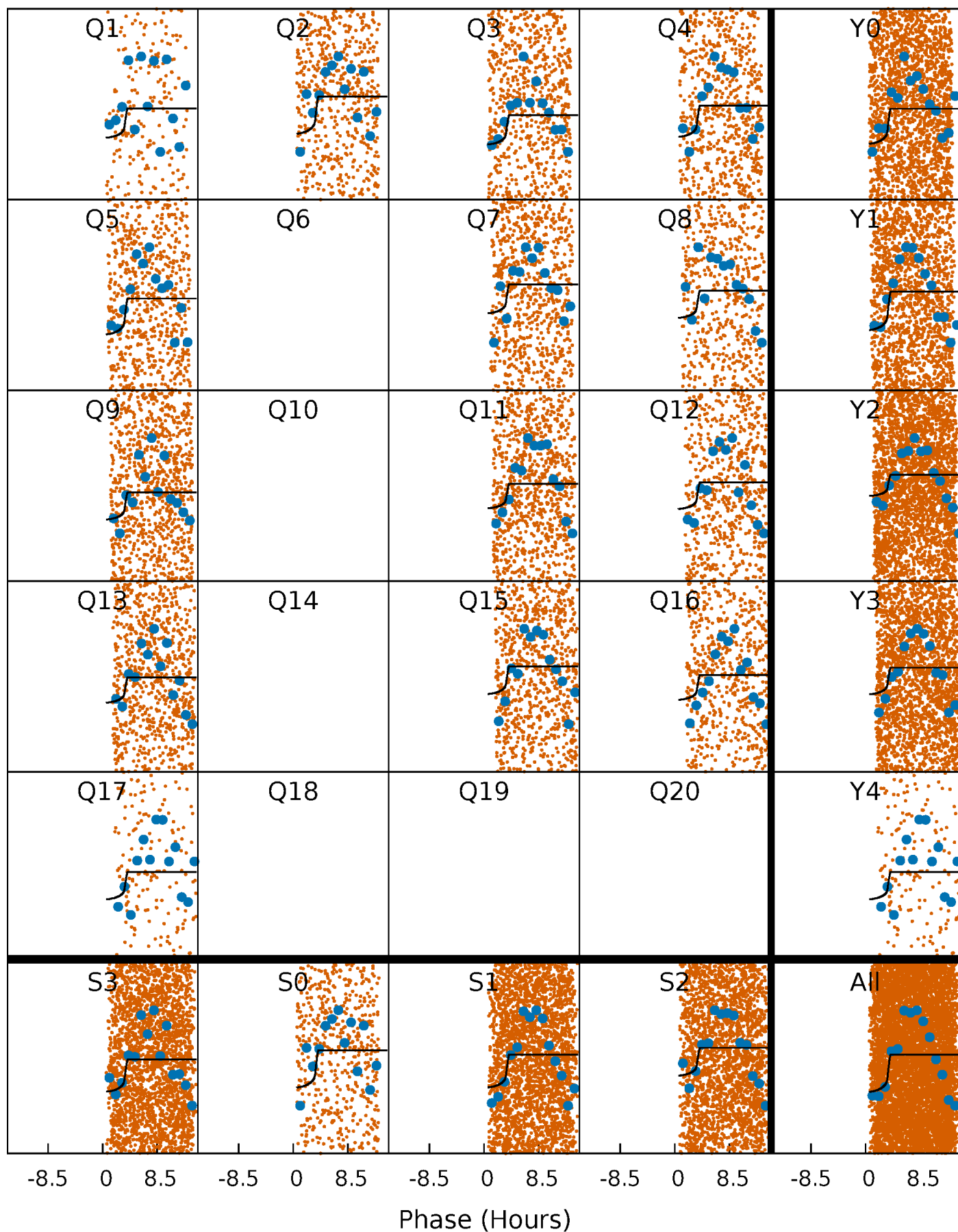
PDC Quarter-Phased Transit Curves

TCE 003454731-02 P= 1.602518 Days $T_0=132.387714$ (BKJD)



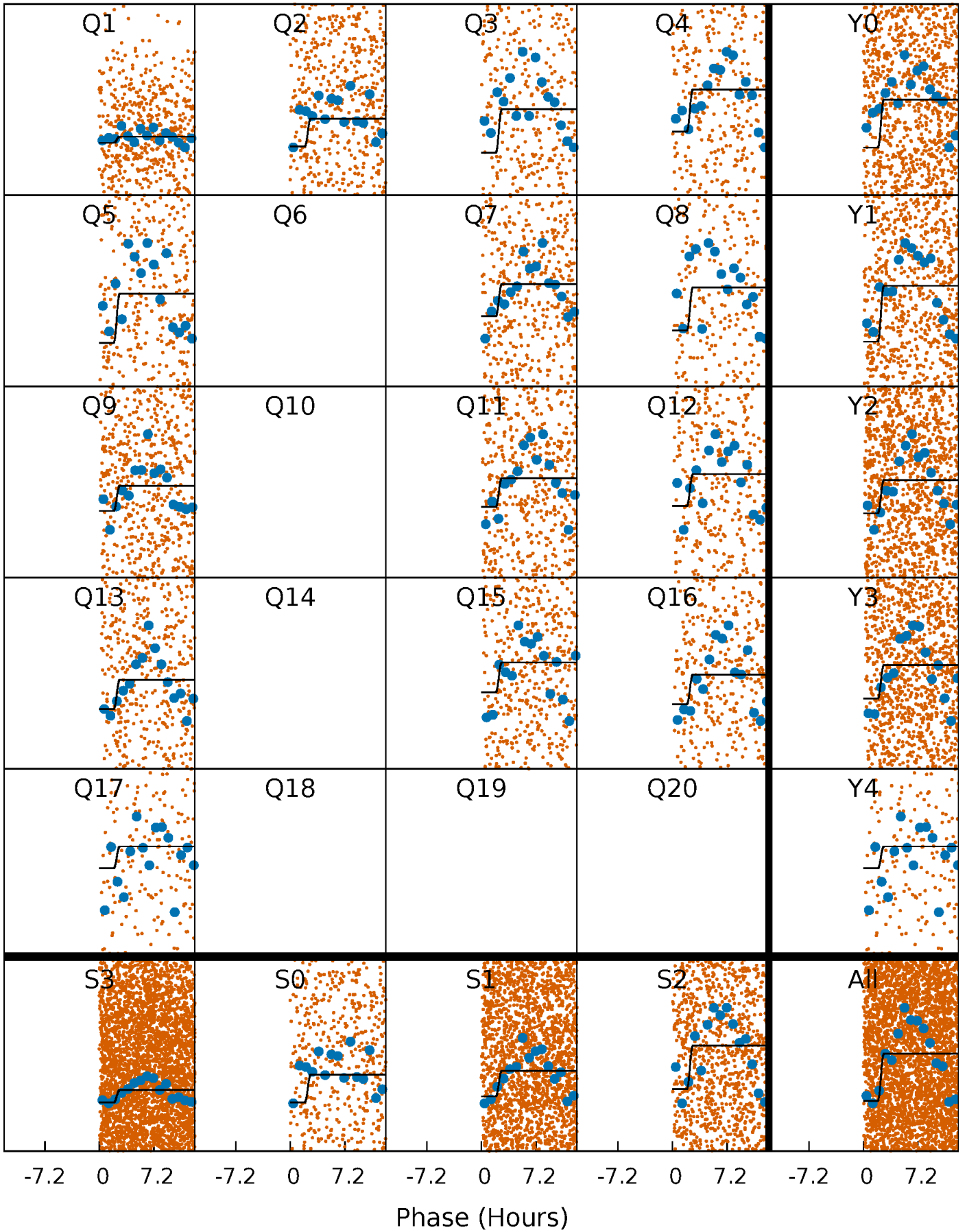
DV Quarter-Phased Transit Curves

TCE 003454731-02 $P = 1.602518$ Days $T_0 = 132.387714$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

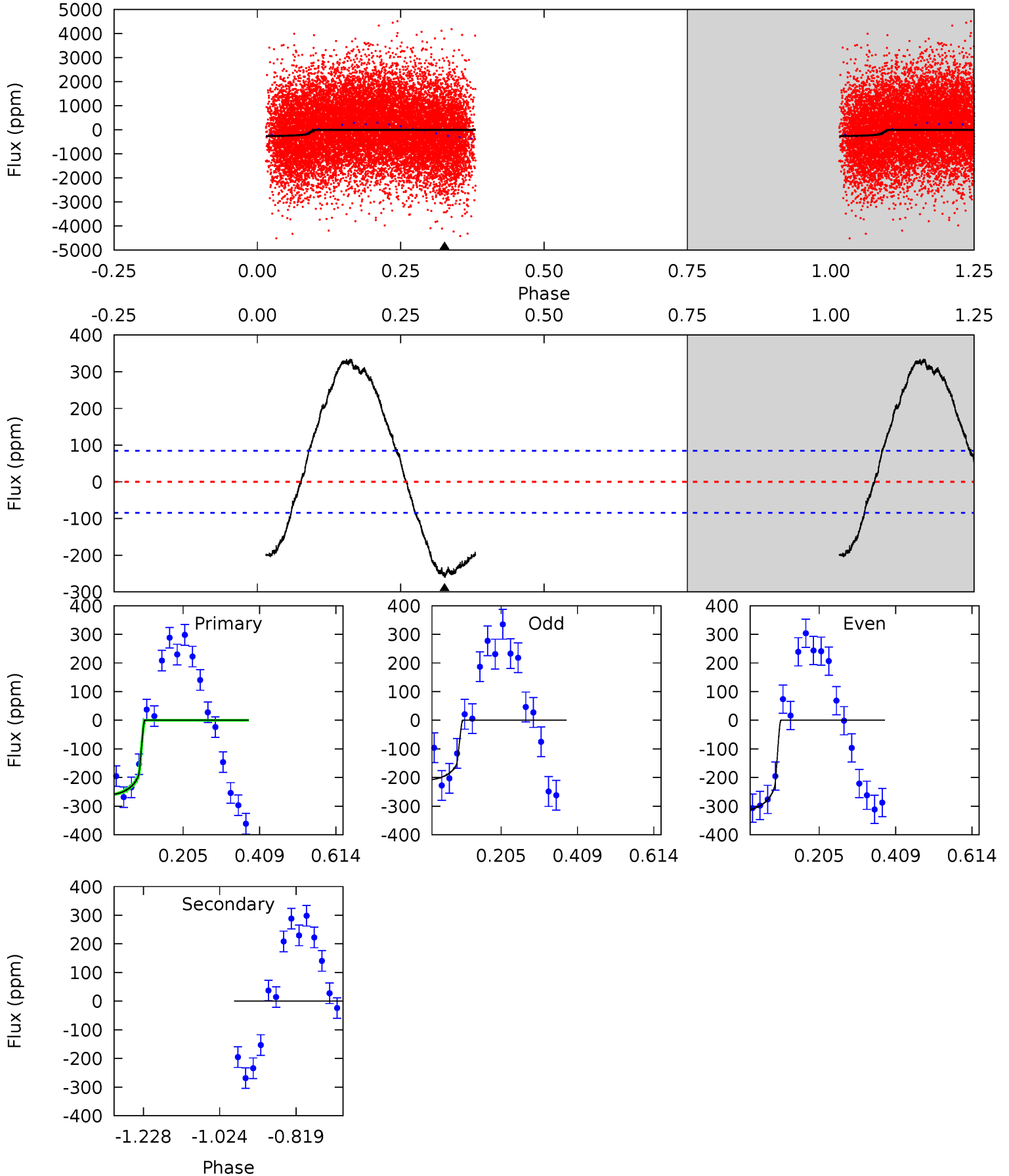
TCE 003454731-02 $P = 1.602567$ Days $T_0 = 132.412001$ (BKJD)



DV Model-Shift Uniqueness Test

003454731-02, P = 1.602518 Days, E = 132.387714 Days

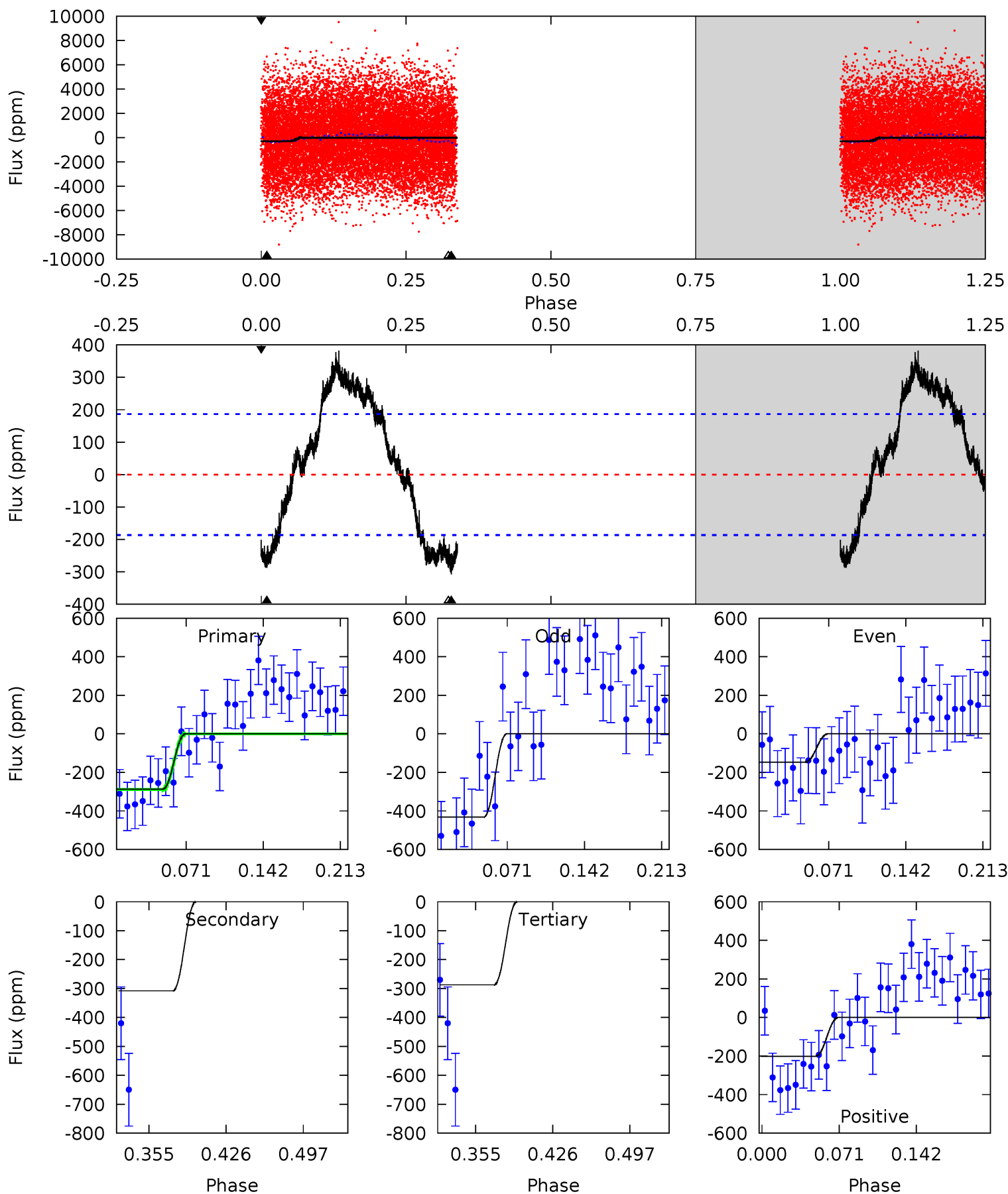
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.5	0	0	0	4.41	1.27	6.85	13.5	13.5	0	0	2.74	0.97	0.56	0



Alt Model-Shift Uniqueness Test

003454731-02, P = 1.602567 Days, E = 130.809434 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.15	7.66	7.14	-5.00	4.64	1.81	4.95	0.01	12.2	0.52	12.7	3.53	1.09	0.55	0.67



Stellar Parameters For KIC 003454731

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7074^{+225}_{-300}	$3.907^{+0.375}_{-0.125}$	$-0.500^{+0.250}_{-0.300}$	$2.158^{+0.491}_{-0.912}$	$1.372^{+0.205}_{-0.273}$	$0.192^{+0.603}_{-0.073}$
	+3%/-4%	+10%/-3%	+50%/-60%	+23%/-42%	+15%/-20%	+313%/-38%
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 003454731-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 19	$3.82^{+3.19}_{-2.35}$	3629^{+308}_{-389}	-3444^{+7300}_{-912}	$0.009^{+1.027}_{-0.860}$
Alt.	-308 ± 40	$4.30^{+3.17}_{-2.57}$	3605^{+313}_{-364}	6495^{+5447}_{-1504}	$7.897^{+44.445}_{-5.249}$

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 $A_{obs} \gg 1.0$

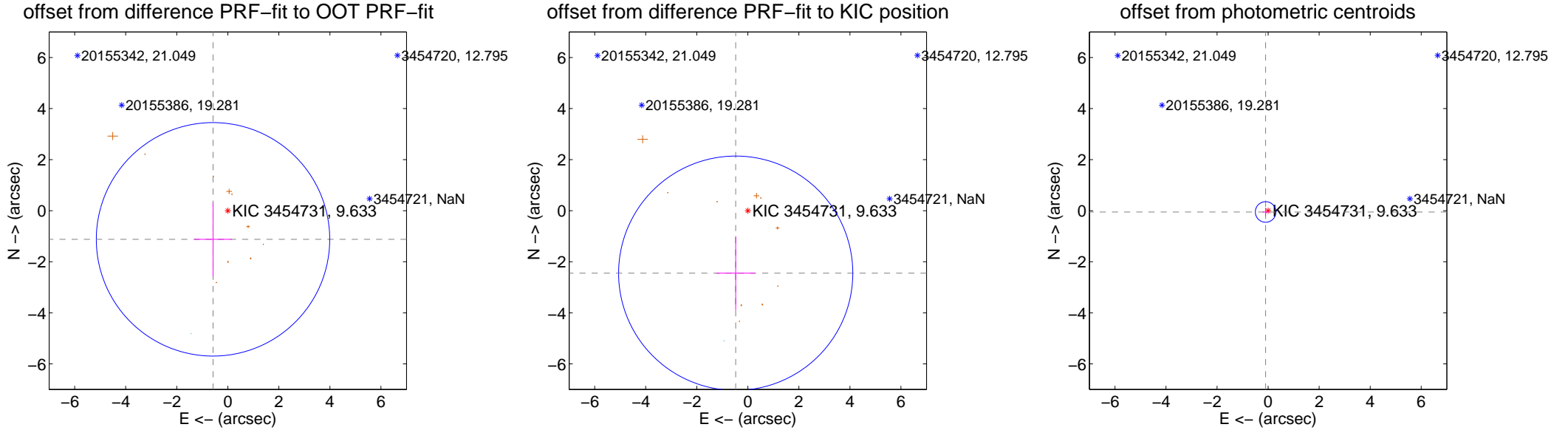
DV Centroid Data

Supplemental centroid analysis for 003454731-02. **Kepler magnitude: 9.63.** Transit SNR 9.87

There are 1 quarters with good PRF difference image offsets

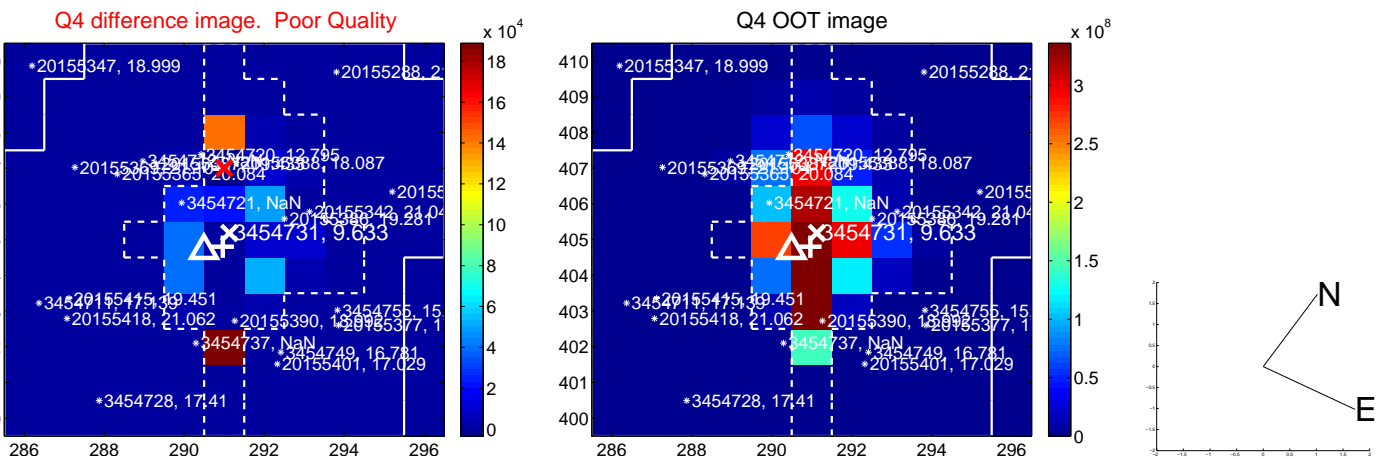
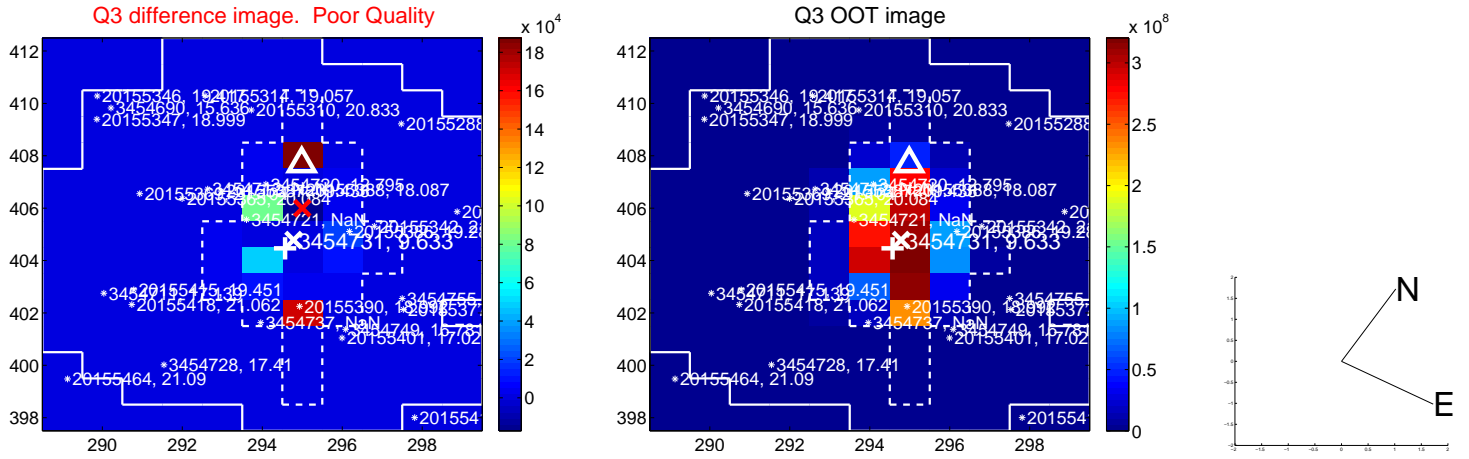
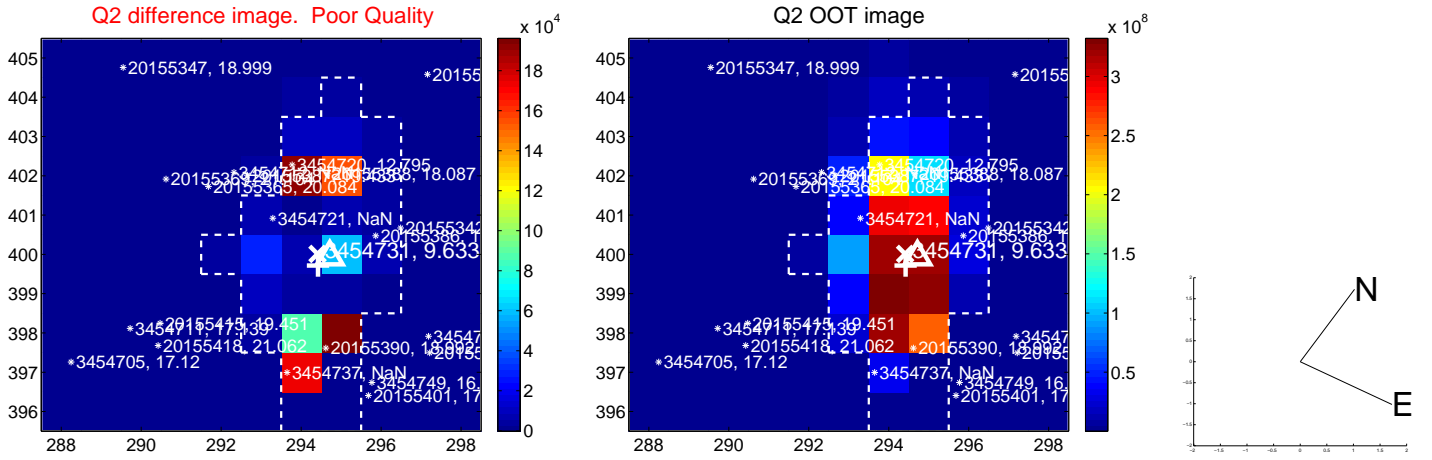
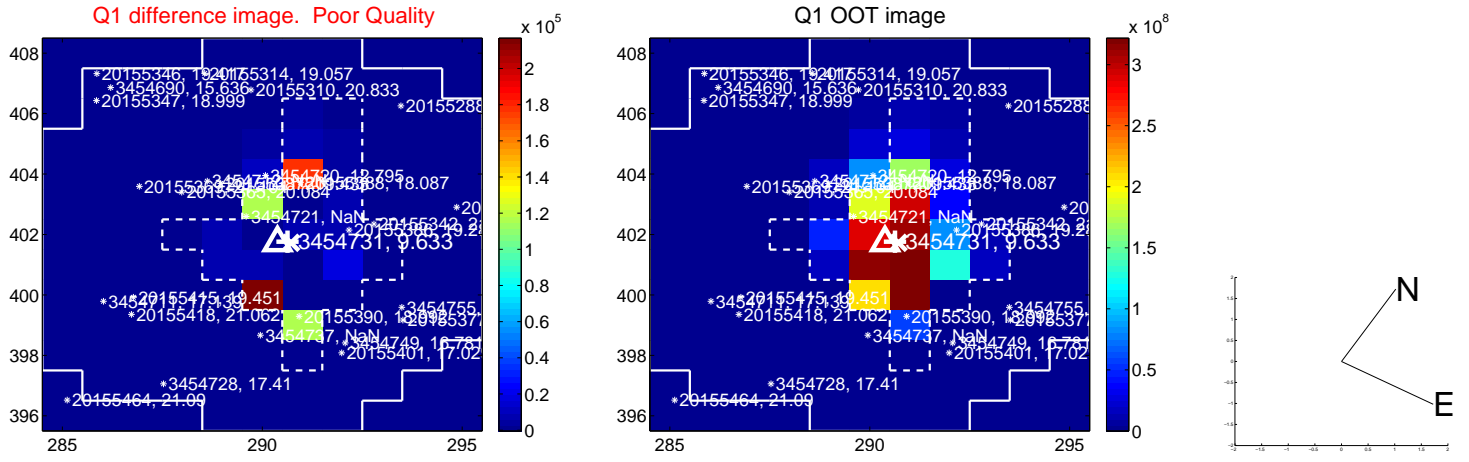
The direct PRF centroid is offset from the target star catalog position by about 0.33 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.263 ± 1.524	0.83	0.580 ± 0.733	-1.122 ± 1.436
PRF-fit source offset from KIC position	2.494 ± 1.529	1.63	0.475 ± 0.760	-2.448 ± 1.448
photometric centroid source offset	0.11 ± 0.13	0.81	0.10 ± 0.12	-0.05 ± 0.17

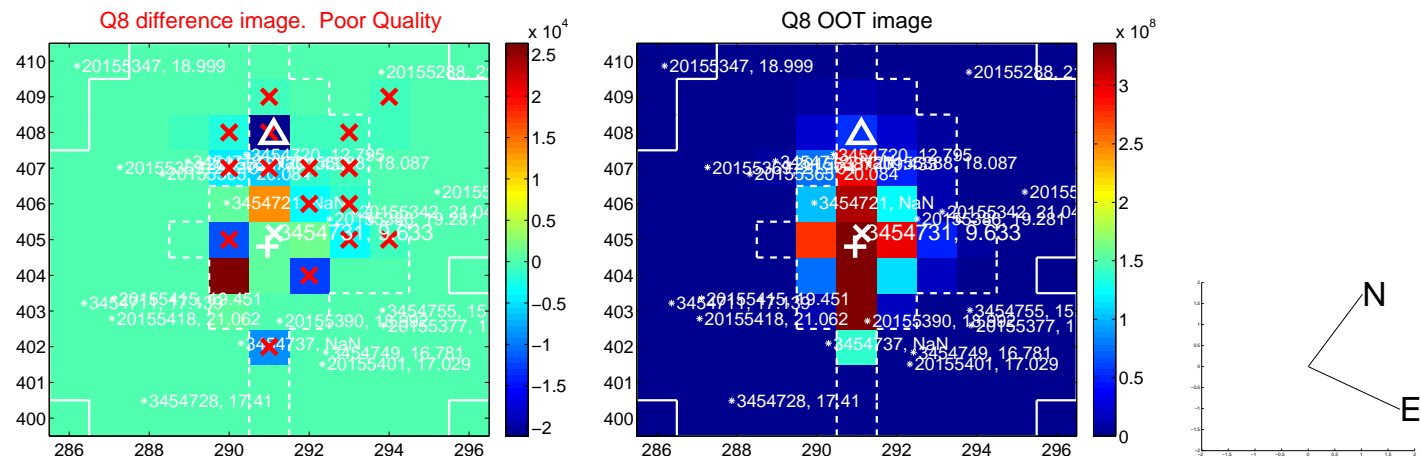
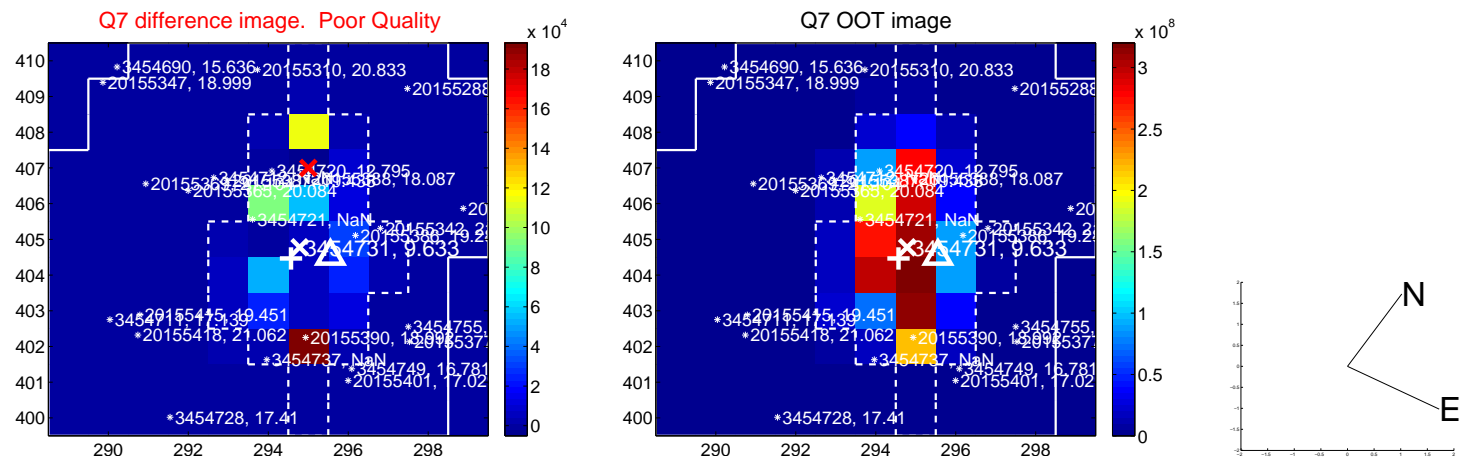
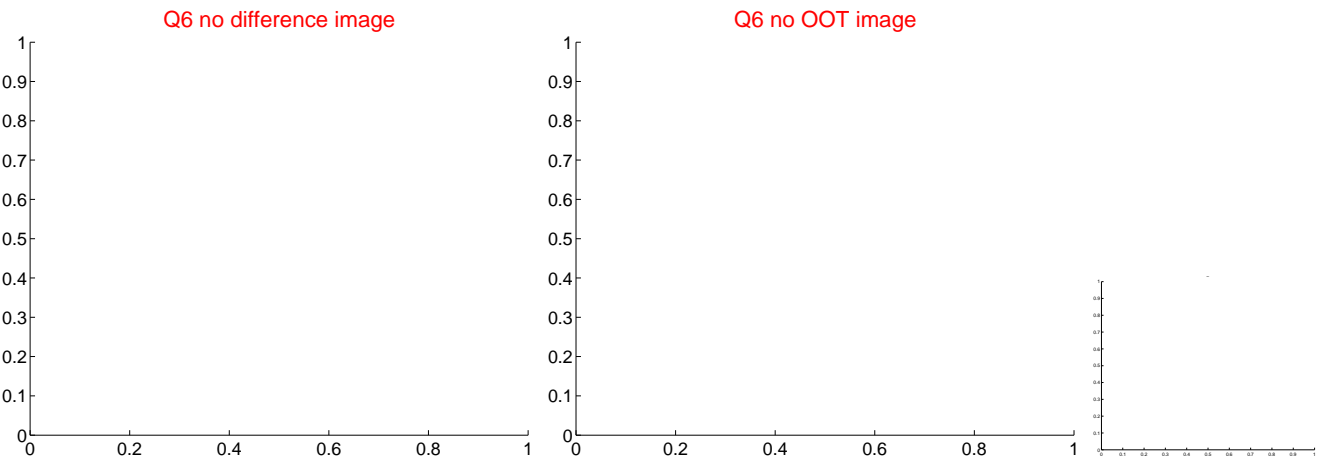
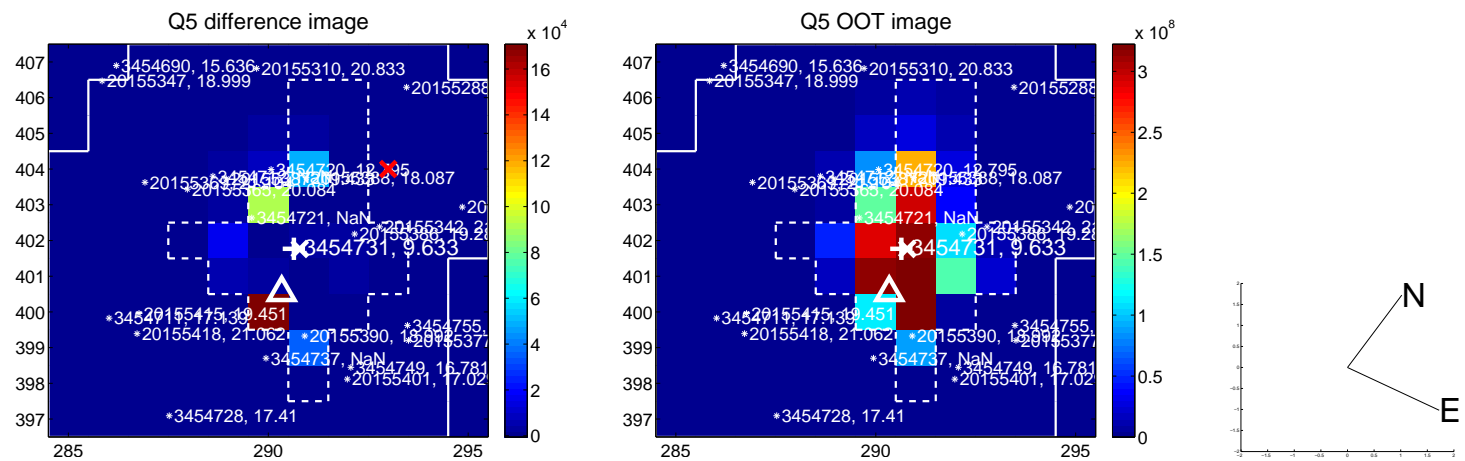


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

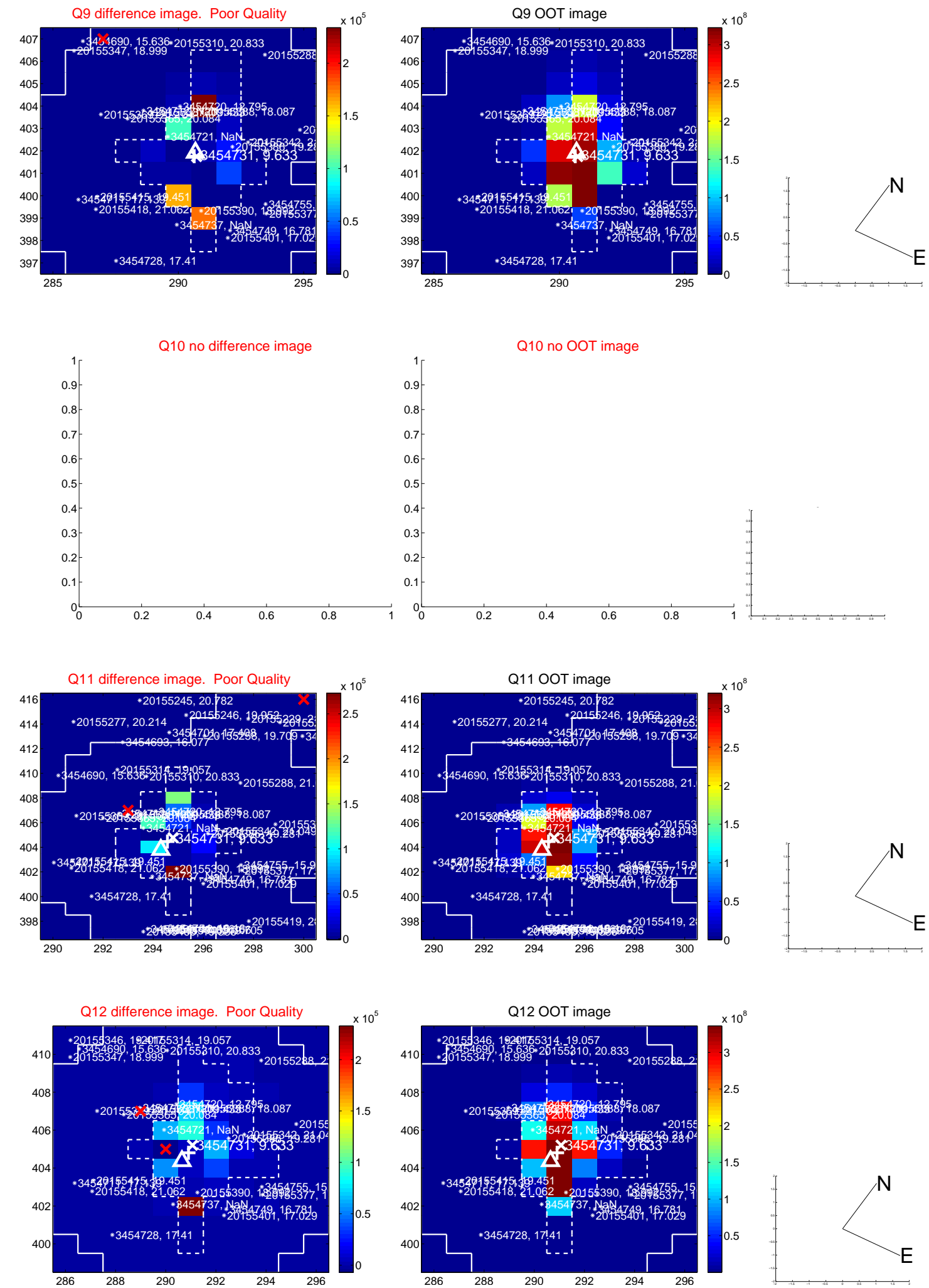
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



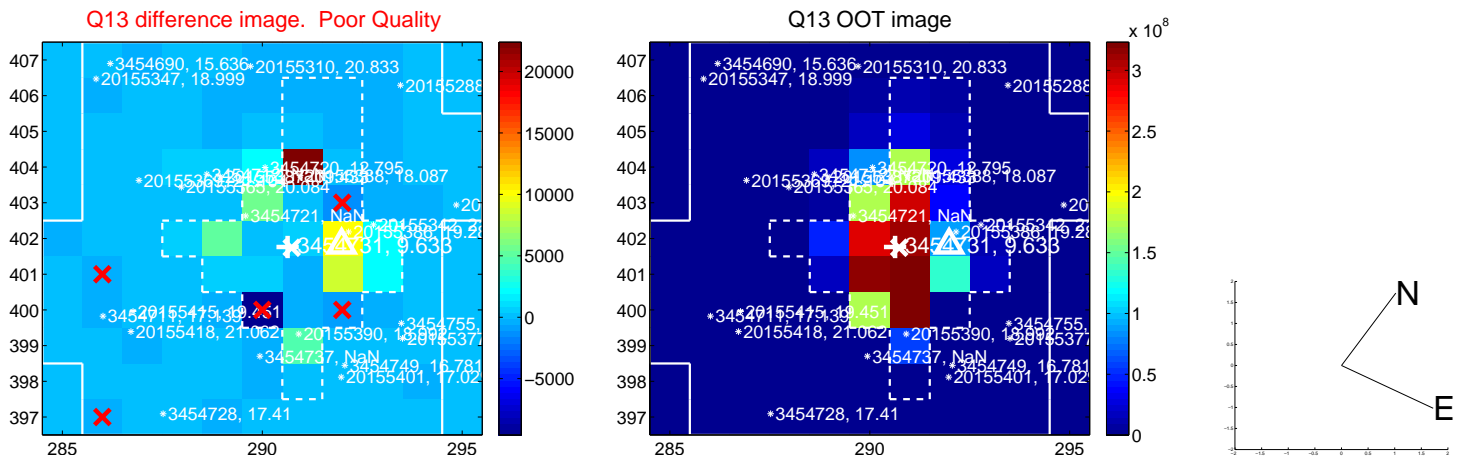
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



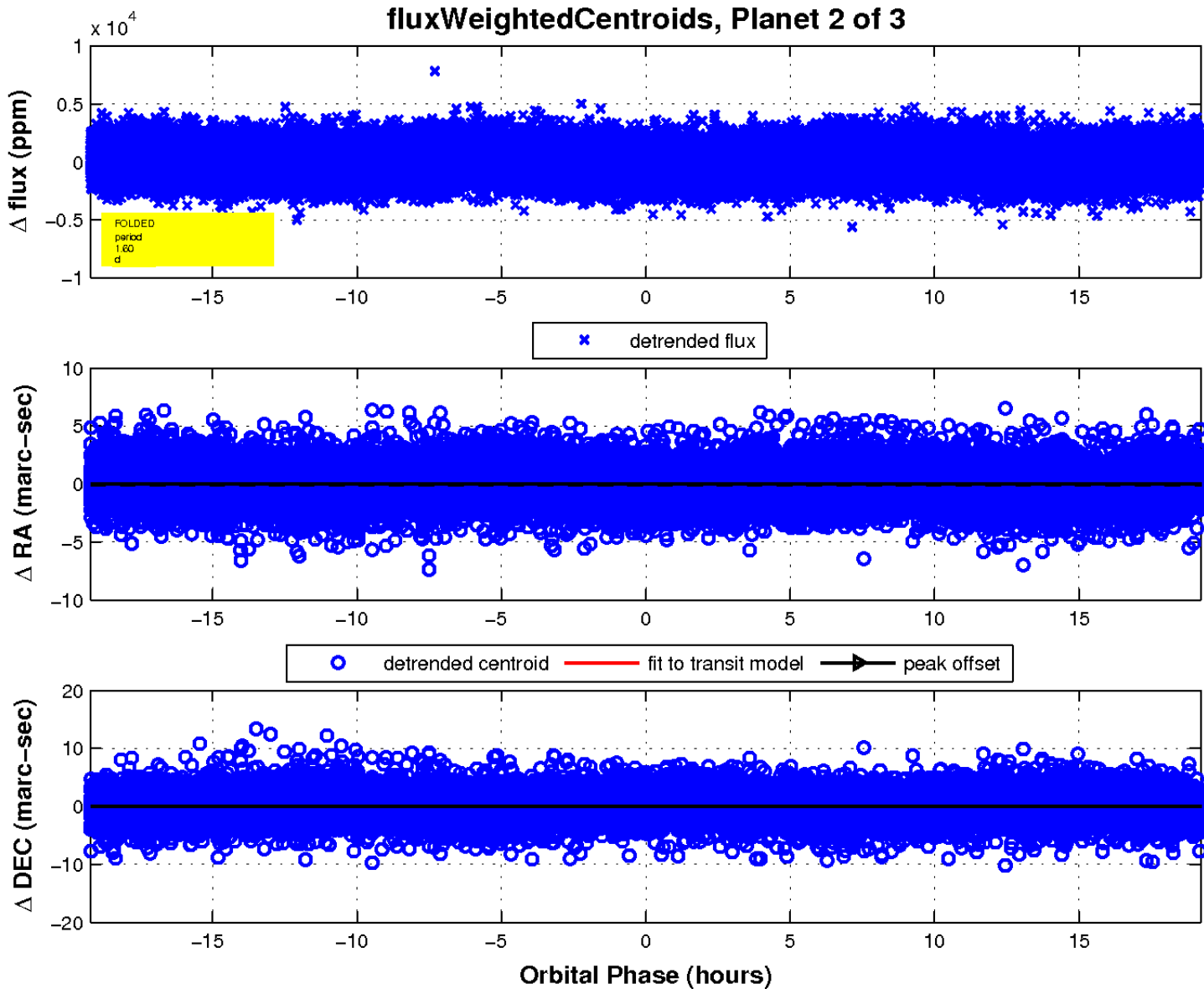
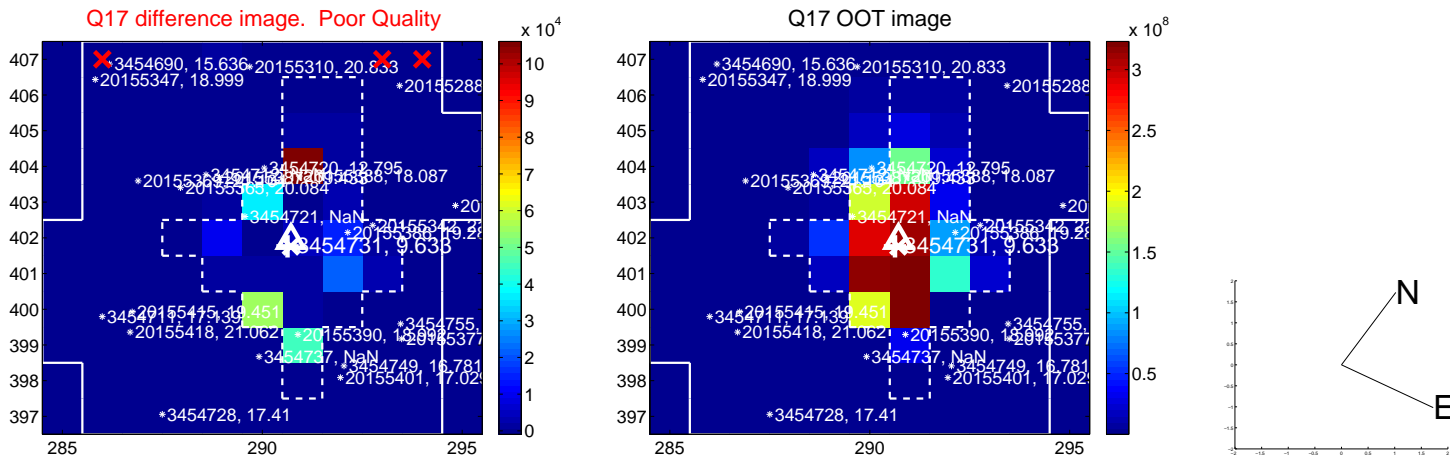
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



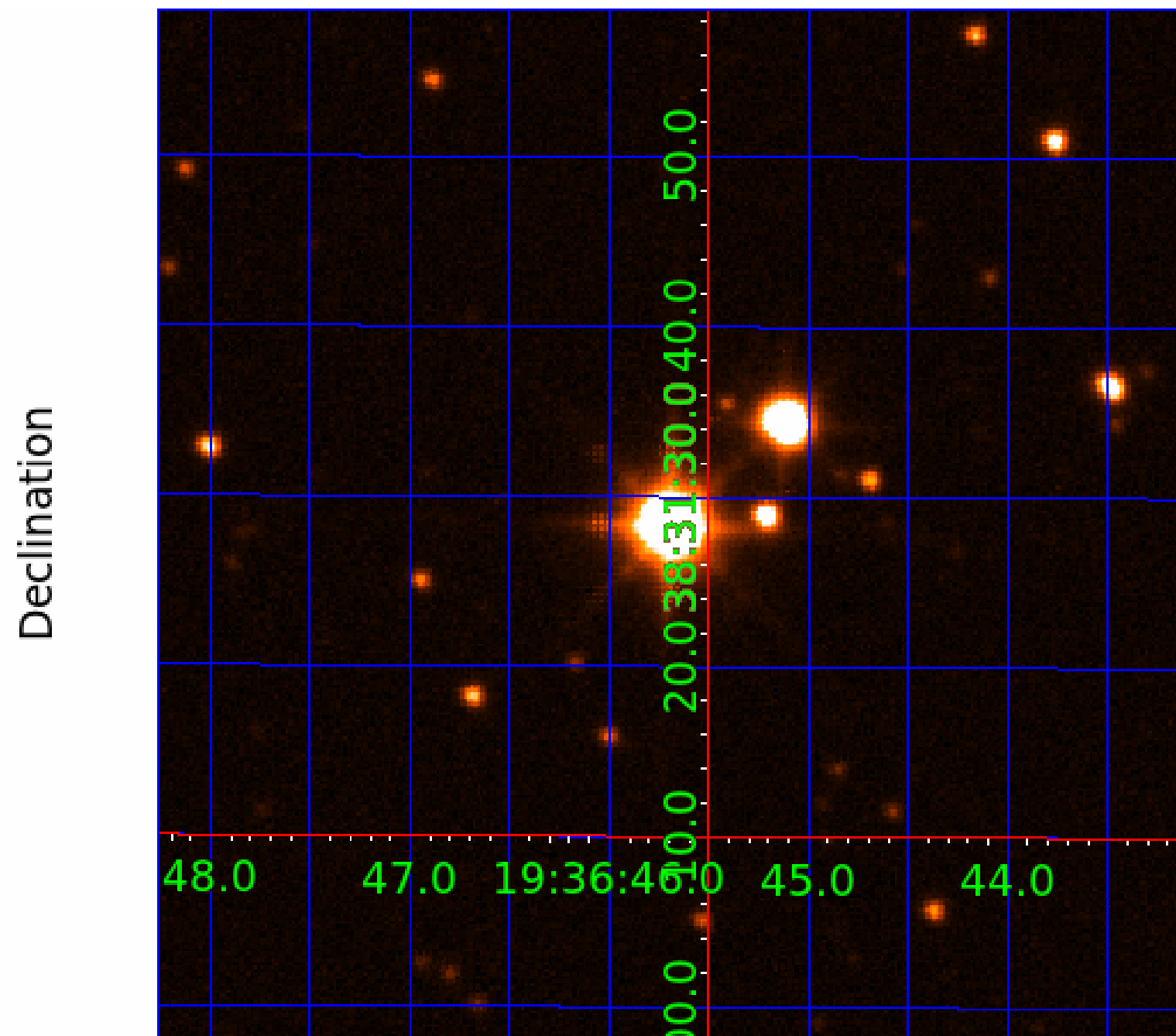
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 003454731

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})
003454731-01	OBS	No	1.602582	131.874494	209.6	8.405	10.6	10.8	2.16	7074	4.63	11780.45
003454731-02	OBS	No	1.602518	132.387714	227.6	7.427	10.4	9.9	2.16	7074	3.45	11781.08
003454731-03	OBS	No	1.602568	132.927721	39.5	4.500	12.2	-1.0	2.16	7074	1.37	11780.59

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003454731-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
003454731-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—SAME_NTL_PERIOD—CENT_SATURATED
003454731-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—NO_FITS—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.

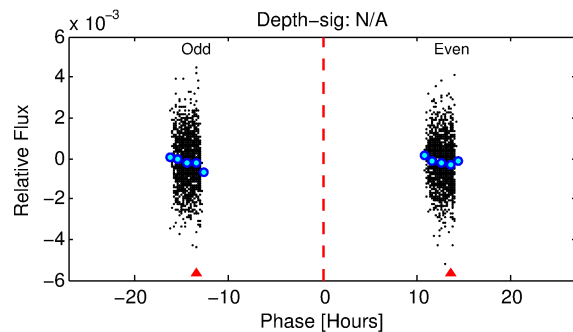
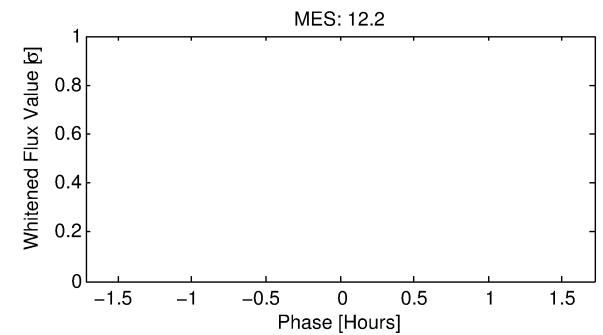
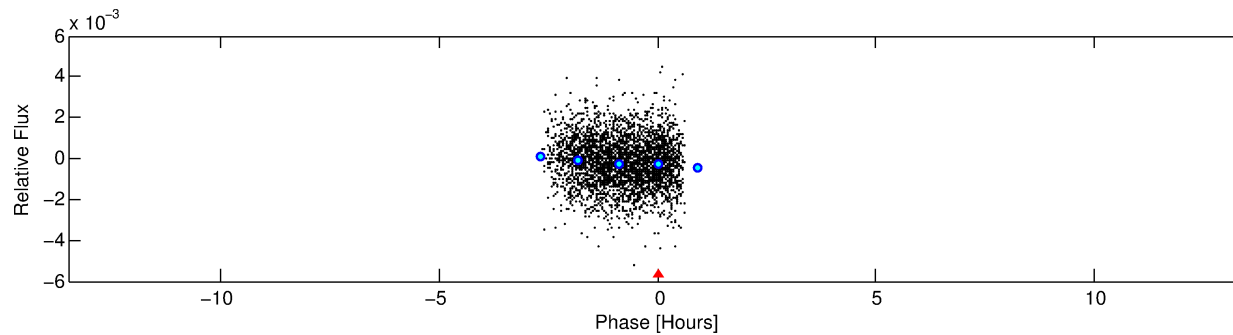
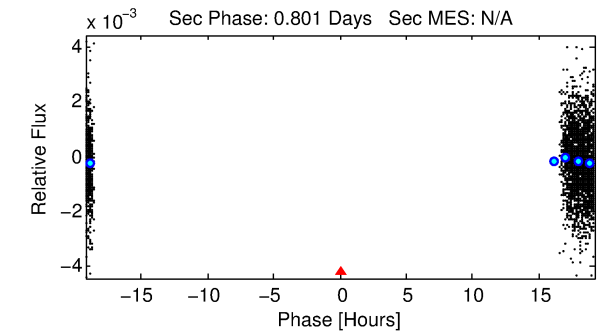
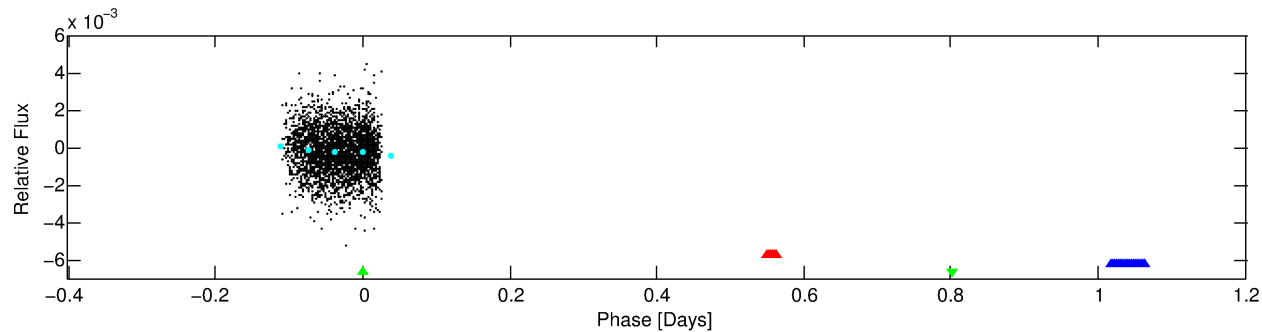
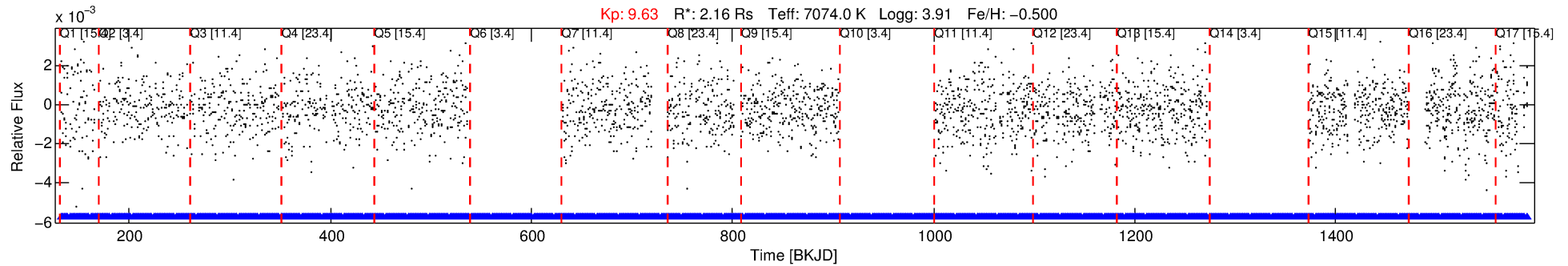
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003454731-03

No Significant Match Found

DV One-Page Summary

KIC: 3454731 Candidate: 3 of 3 Period: 1.603 d



TPS TCE Results:

Period = 1.60257 d
Epoch = 132.9277 BKJD

DV fit results are unavailable

DV Diagnostic Results:

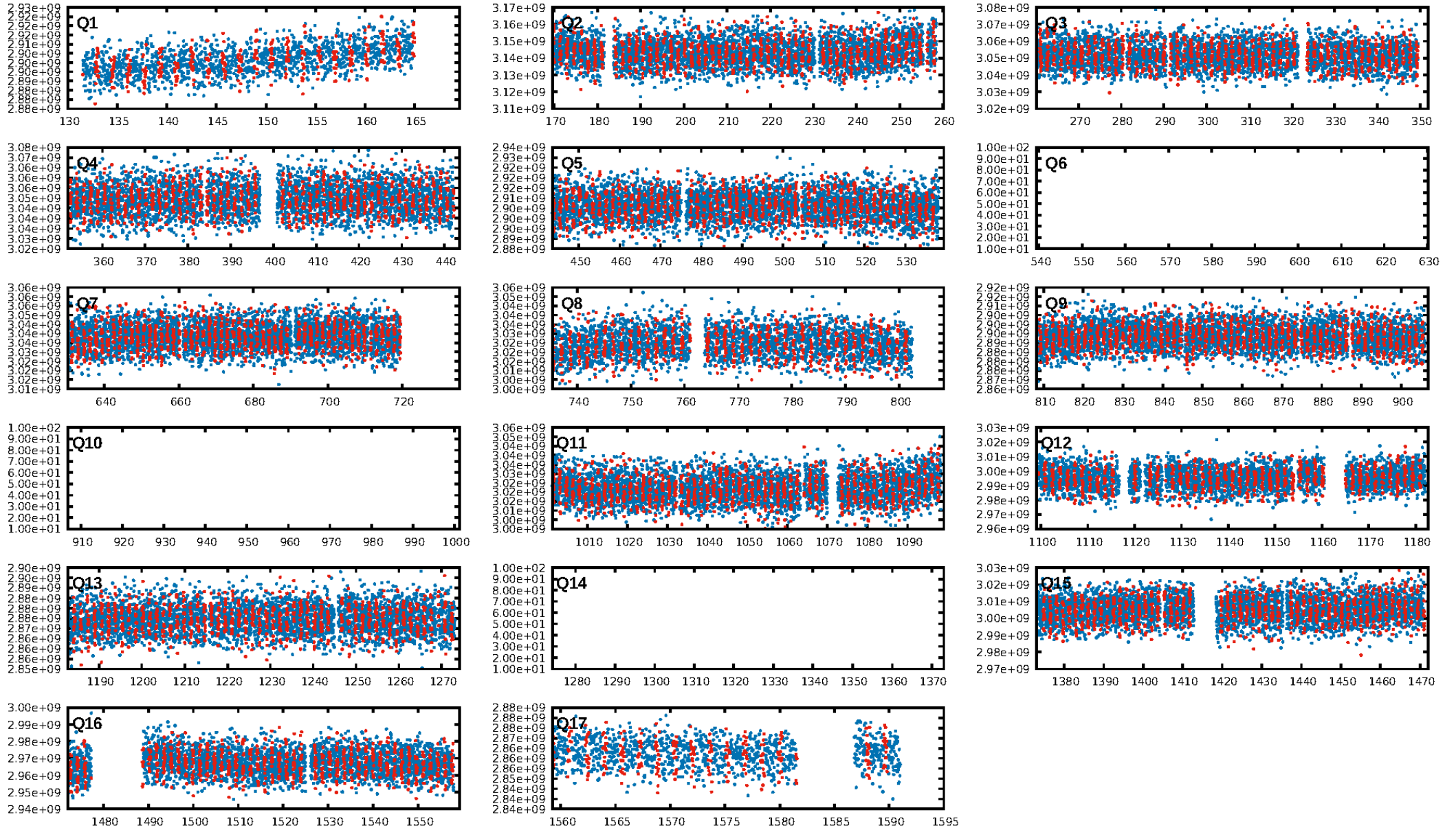
ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: N/A
GhostDiagnostic-chr: N/A

Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: N/A

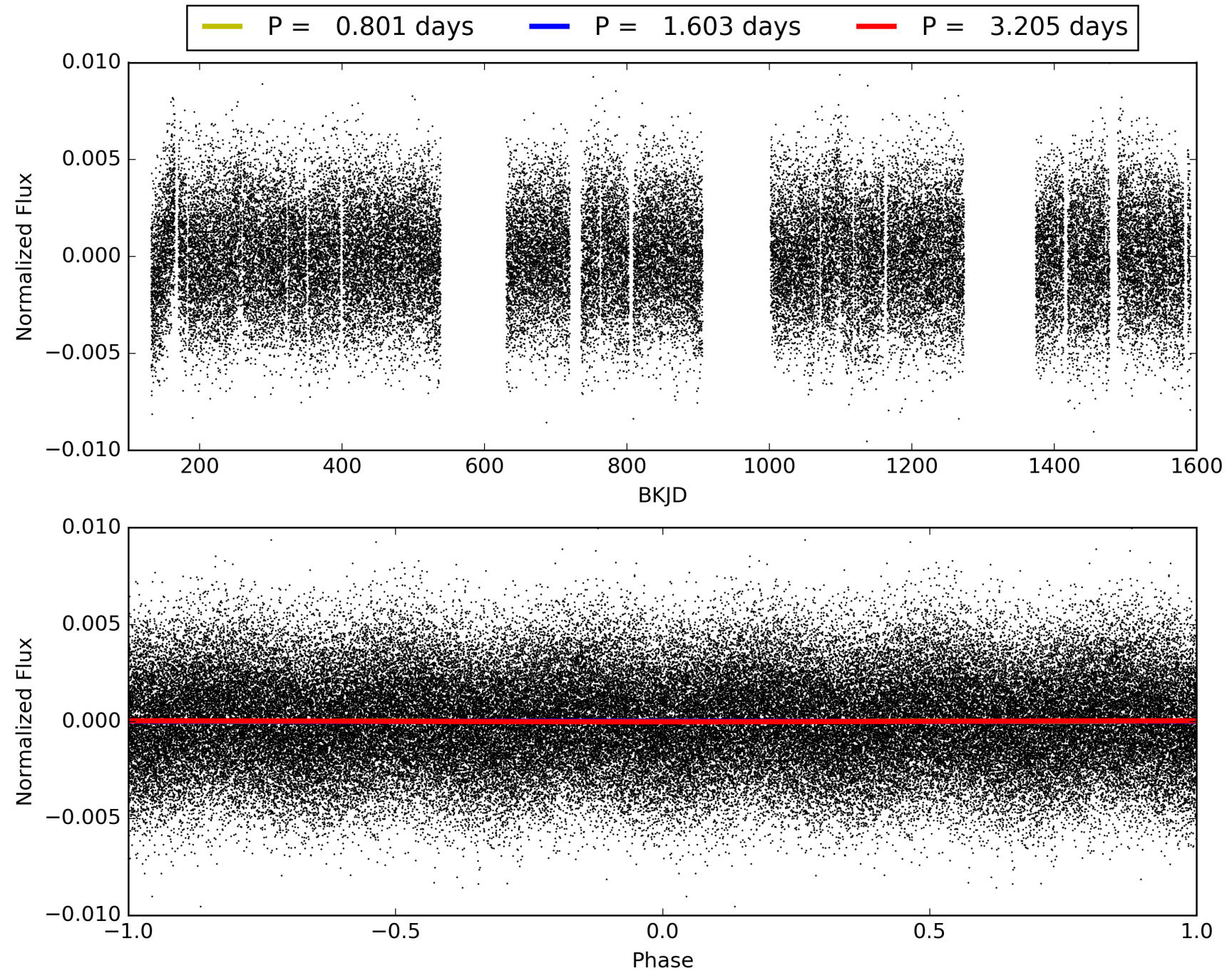
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:46:03 Z

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

TCE 003454731-03, PDC Light Curves

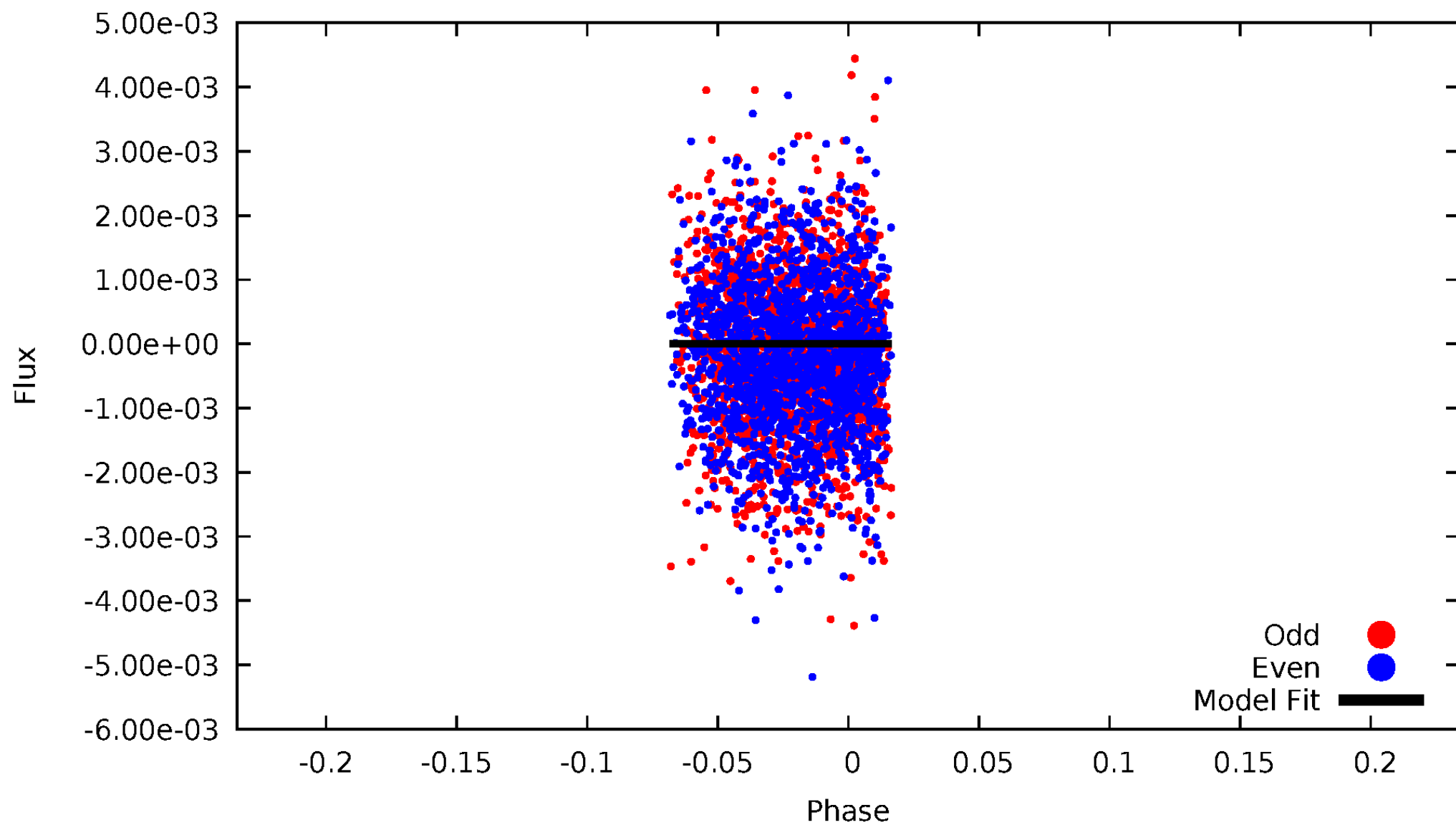


TCE 003454731-03



DV Odd/Even

TCE 003454731-03

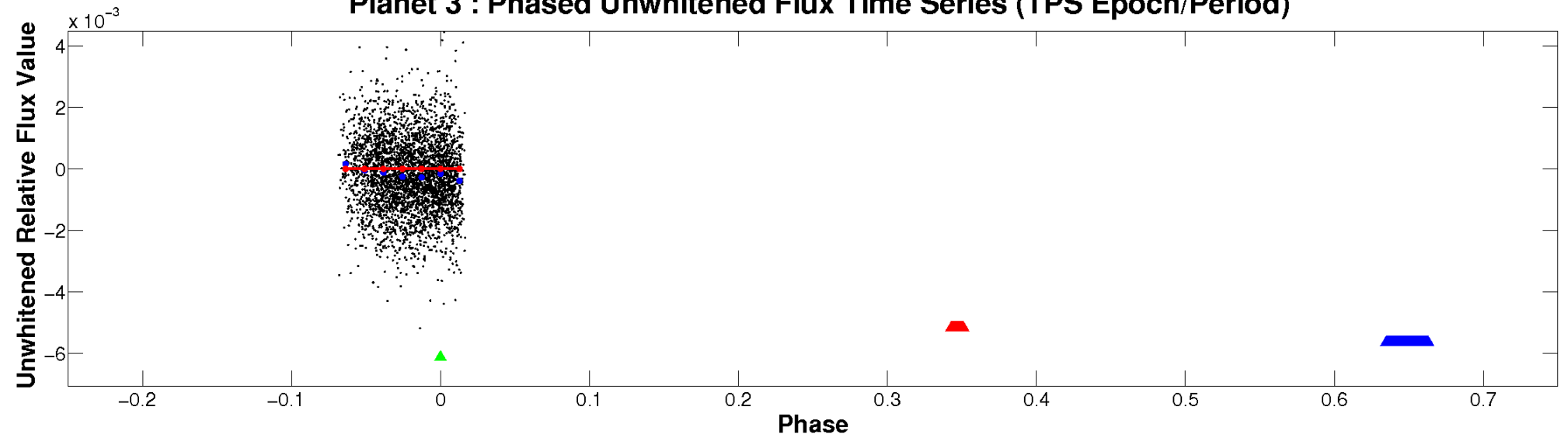


ALT Odd/Even

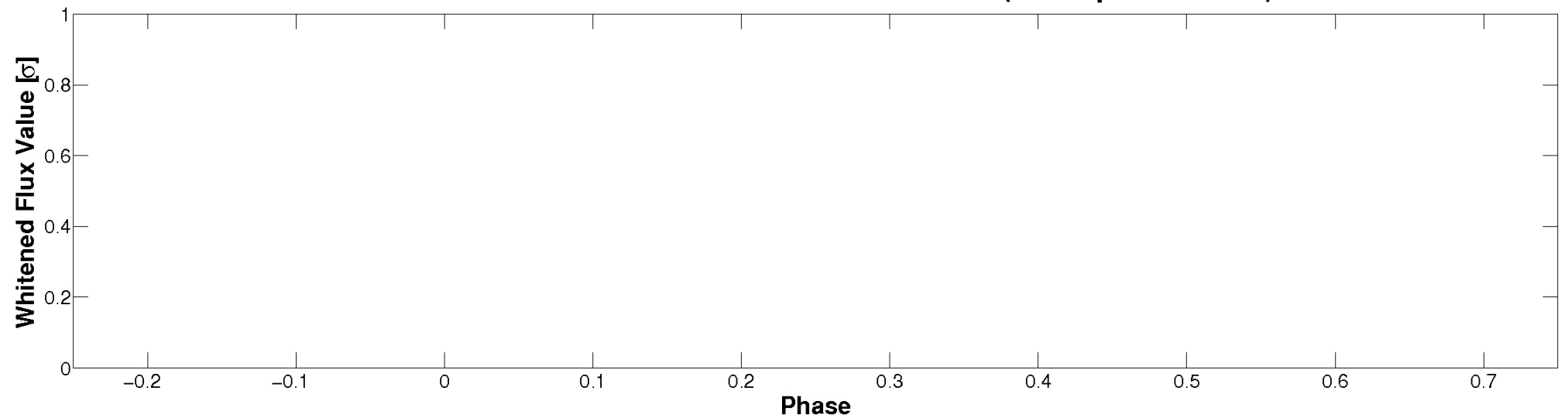
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

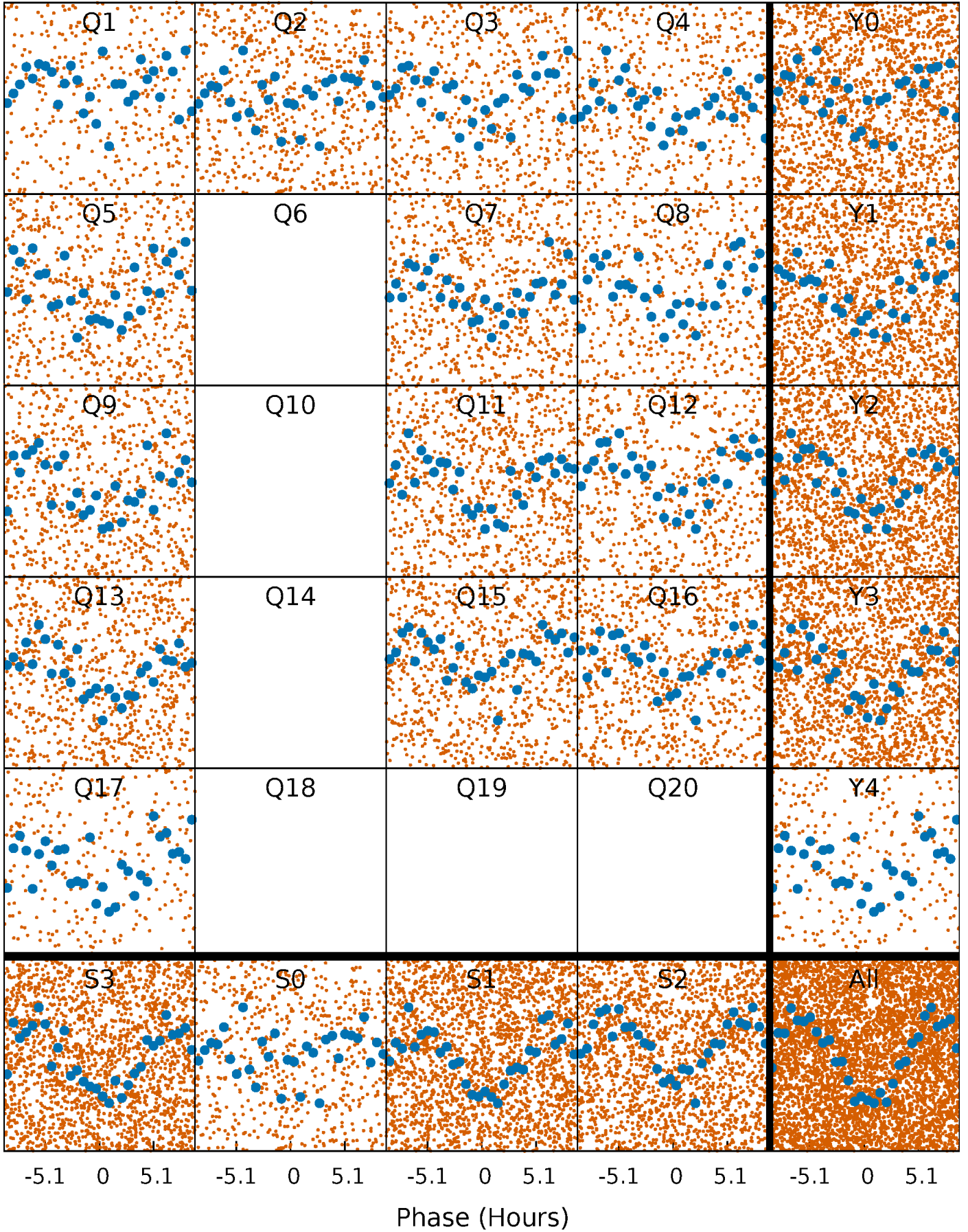


Planet 3 : Phased Whitened Flux Time Series (TPS Epoch/Period)



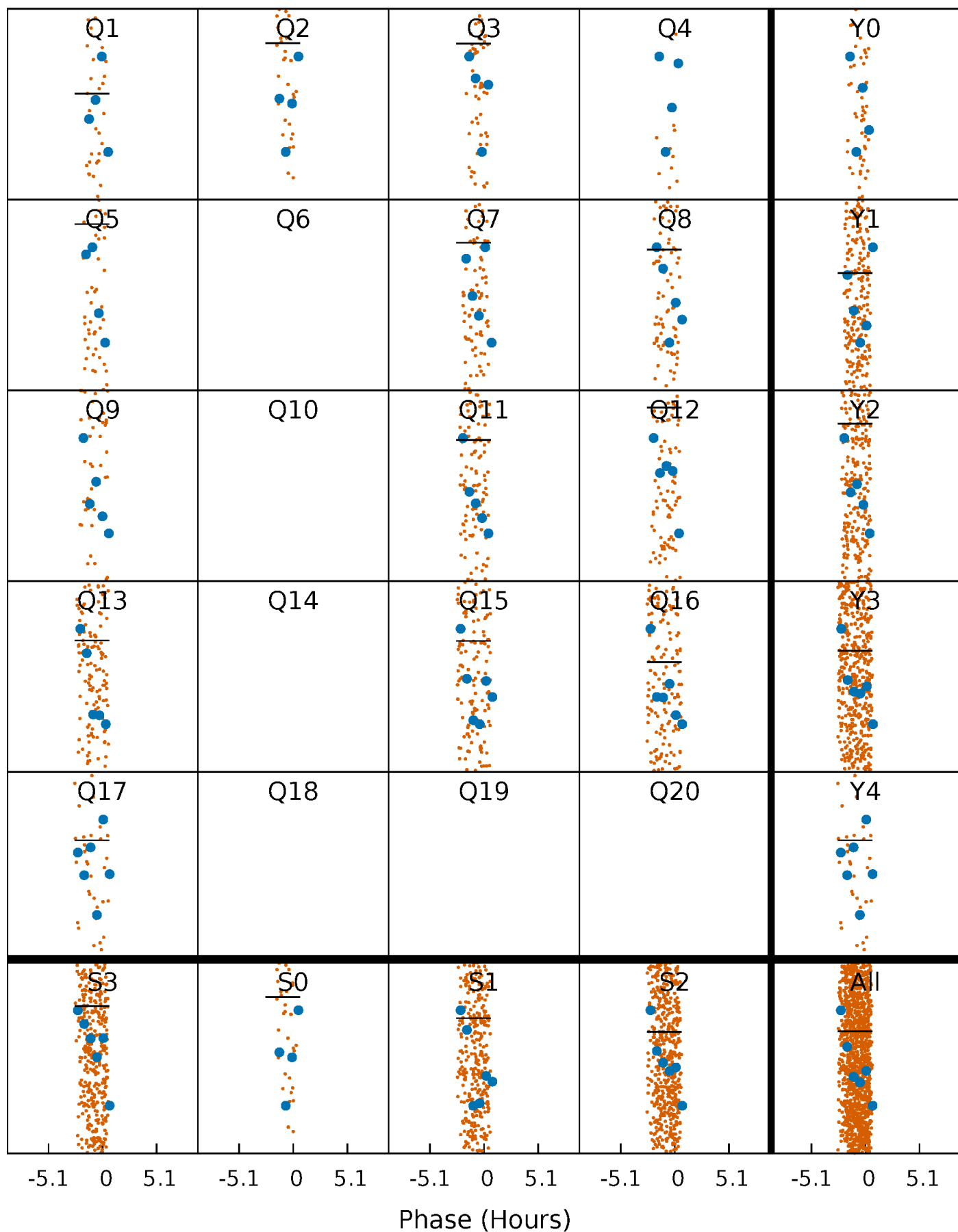
PDC Quarter-Phased Transit Curves

TCE 003454731-03 $P = 1.602568$ Days $T_0 = 132.927721$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 003454731-03 P= 1.602568 Days $T_0=132.927721$ (BKJD)

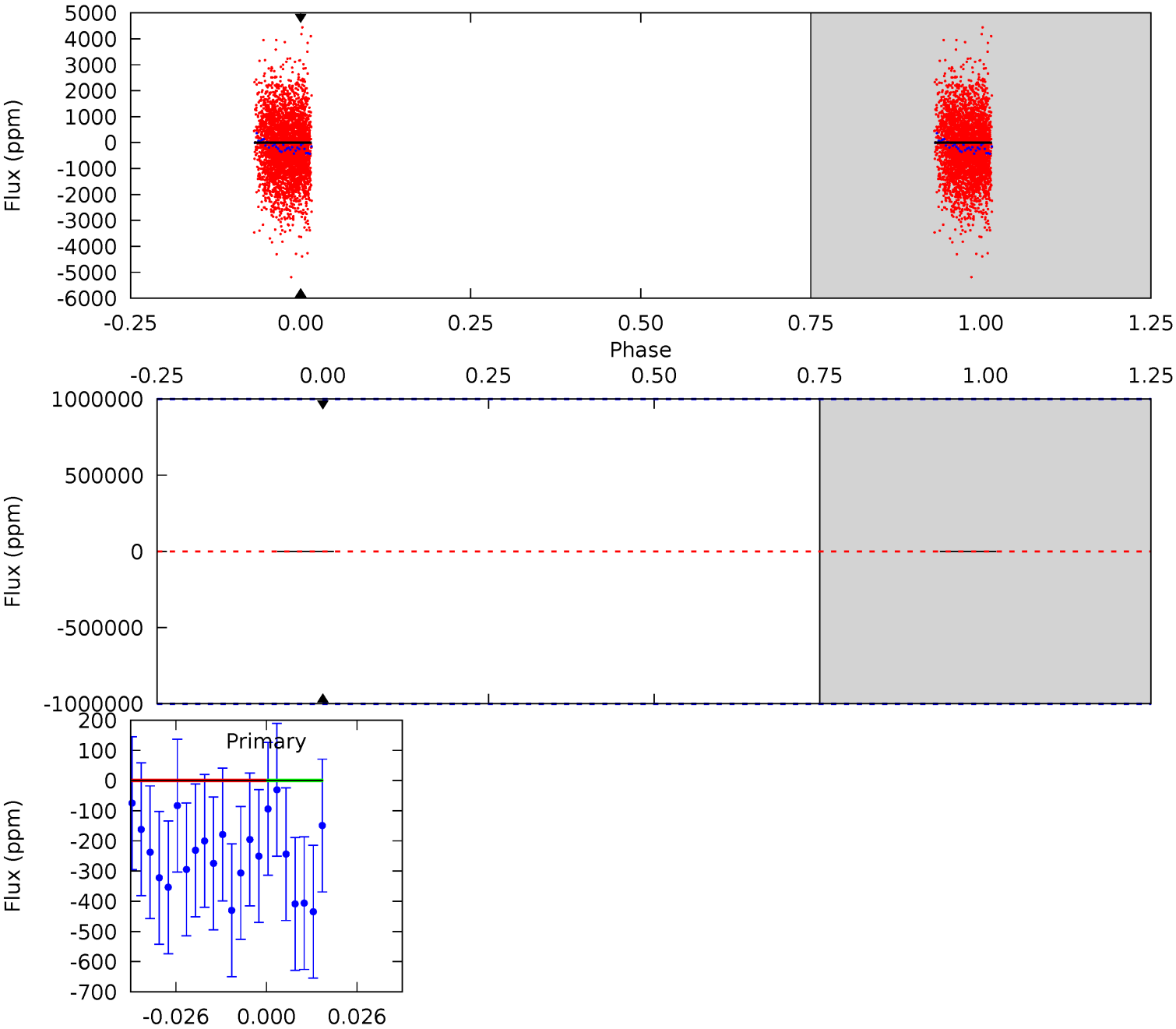


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

003454731-03, P = 1.602568 Days, E = 131.325153 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	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 003454731

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7074^{+225}_{-300}	$3.907^{+0.375}_{-0.125}$	$-0.500^{+0.250}_{-0.300}$	$2.158^{+0.491}_{-0.912}$	$1.372^{+0.205}_{-0.273}$	$0.192^{+0.603}_{-0.073}$
	+3%/-4%	+10%/-3%	+50%/-60%	+23%/-42%	+15%/-20%	+313%/-38%
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 003454731-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$15.11^{+18.55}_{-10.92}$	3620^{+292}_{-383}	4136^{+38189}_{-45174}	$1.029^{+405.712}_{-393.616}$
Alt.	N/A	N/A	N/A	N/A	N/A

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 $A_{obs} \gg 1.0$

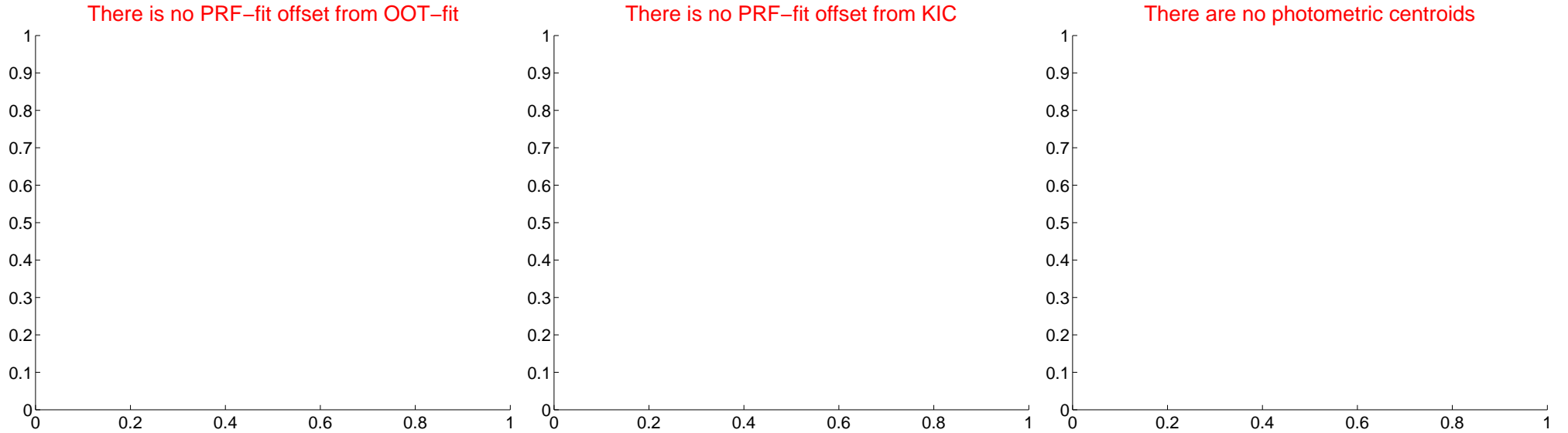
DV Centroid Data

Supplemental centroid analysis for 003454731-03. **Kepler magnitude: 9.63.** Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
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

