

KIC 009175346

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})
009175346-01	OBS	No	0.924851	132.301020	11.4	1.433	12.5	0.7	2.53	6356	0.96	21941.75
009175346-02	OBS	No	0.924895	131.925055	62.5	1.359	9.4	3.5	2.53	6356	2.35	21940.35
009175346-03	OBS	No	0.924821	131.682073	316.5	6.841	10.6	8.7	2.53	6356	6.01	21942.69

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009175346-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
009175346-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD
009175346-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—LPP_ALT—SAME_NTL_PERIOD

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

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

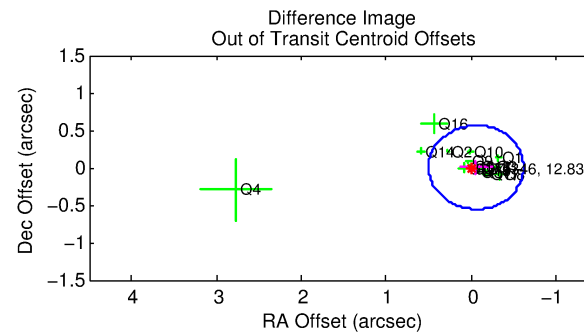
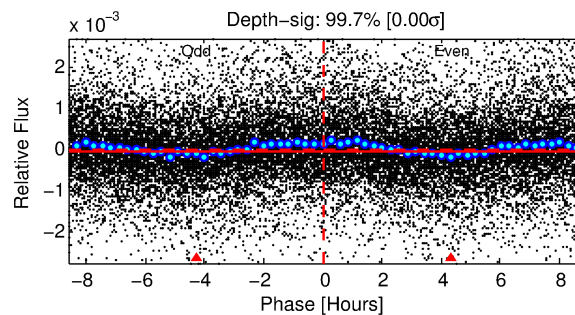
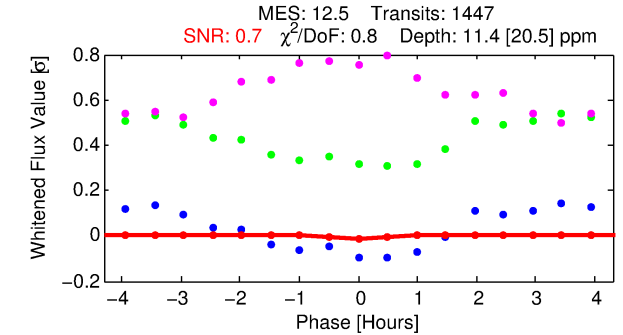
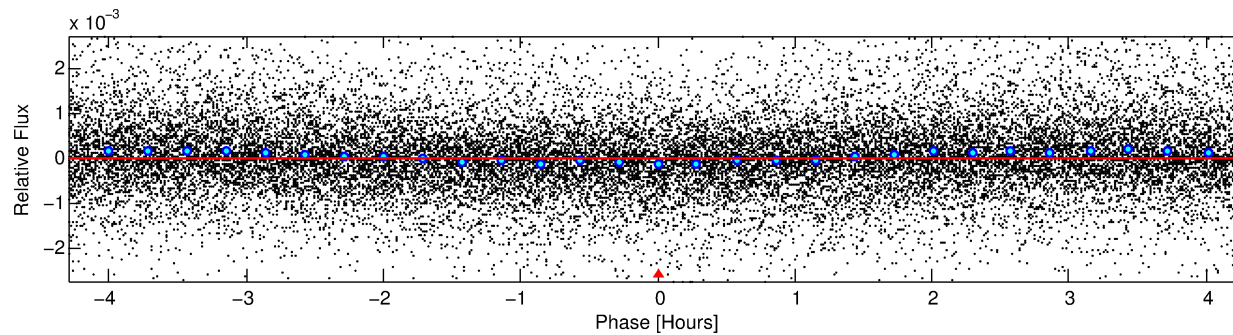
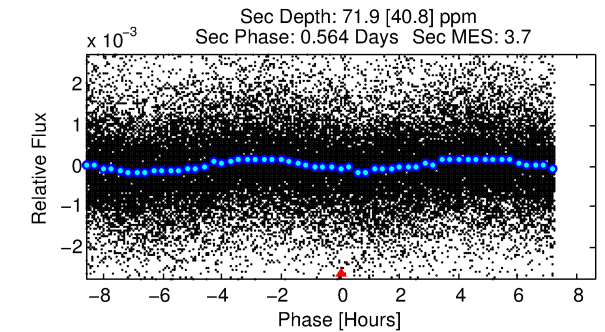
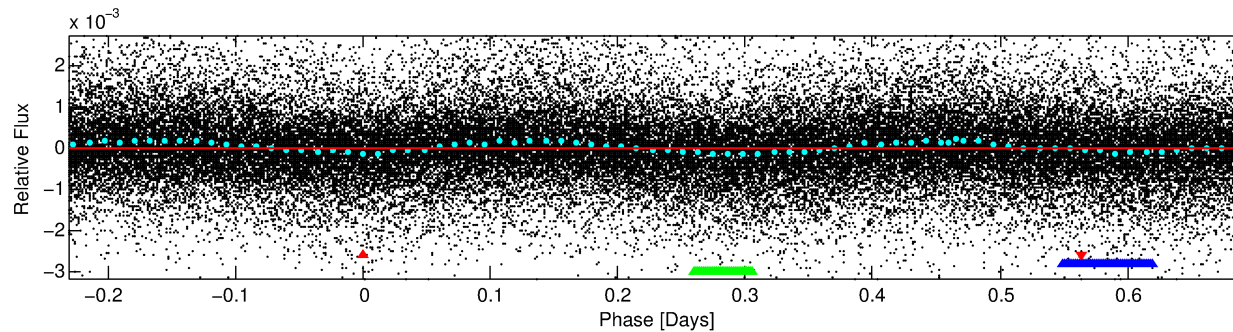
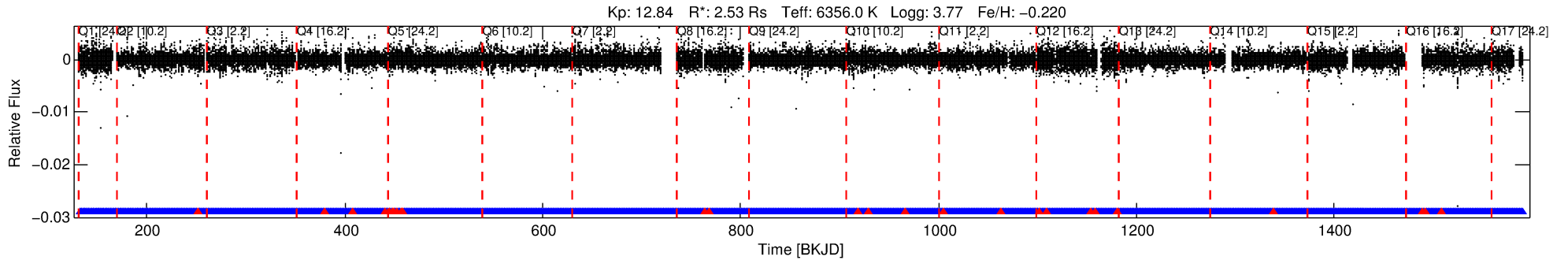
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009175346-01

No Significant Match Found

DV One-Page Summary

KIC: 9175346 Candidate: 1 of 3 Period: 0.925 d



DV Fit Results:

Period = 0.92485 [0.00013] d
Epoch = 132.3010 [0.0193] BKJD
Rp/R* = 0.0035 [0.0050]
a/R* = 2.92 [15.69]
b = 0.83 [2.30]
Seff = 21941.75 [19597.75]
Teq = 3103 [693] K
Rp = 0.96 [1.46] Re
a = 0.0206 [0.0111] AU
Ag = 18.32 [55.74] [0.31σ]
Teffp = 9927 [7233] K [0.94σ]

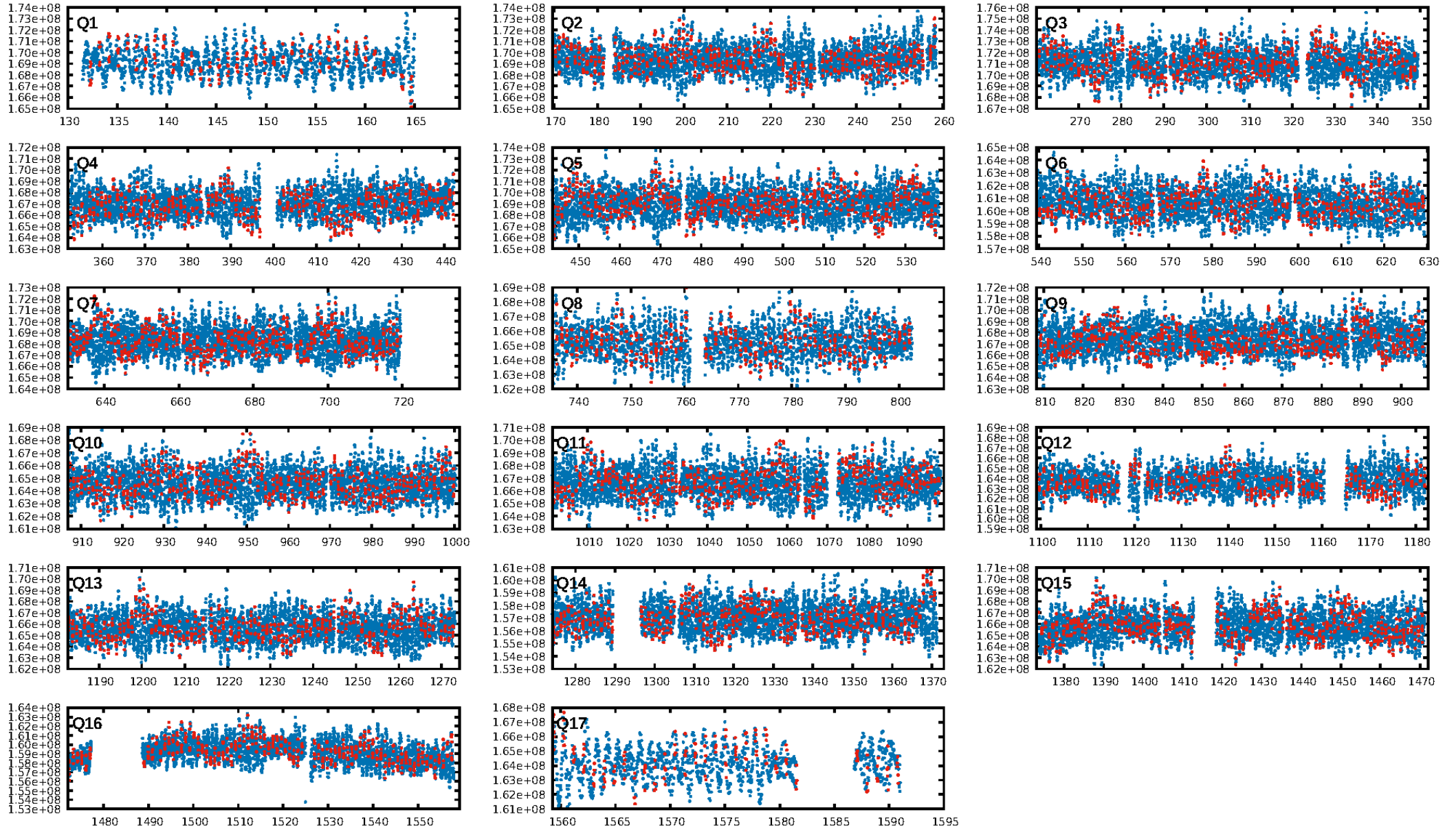
DV Diagnostic Results:

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: 0.98 [1352/1381]
GhostDiagnostic-chr: 1.307
Centroid-sig: 5.0%
Centroid-so: 3.712 arcsec [1.41σ]
OotOffset-rm: 0.062 arcsec [0.33σ]
KicOffset-rm: 0.101 arcsec [0.53σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.65 [11/17]
DiffImageOverlap-fno: 0.00 [0/17]

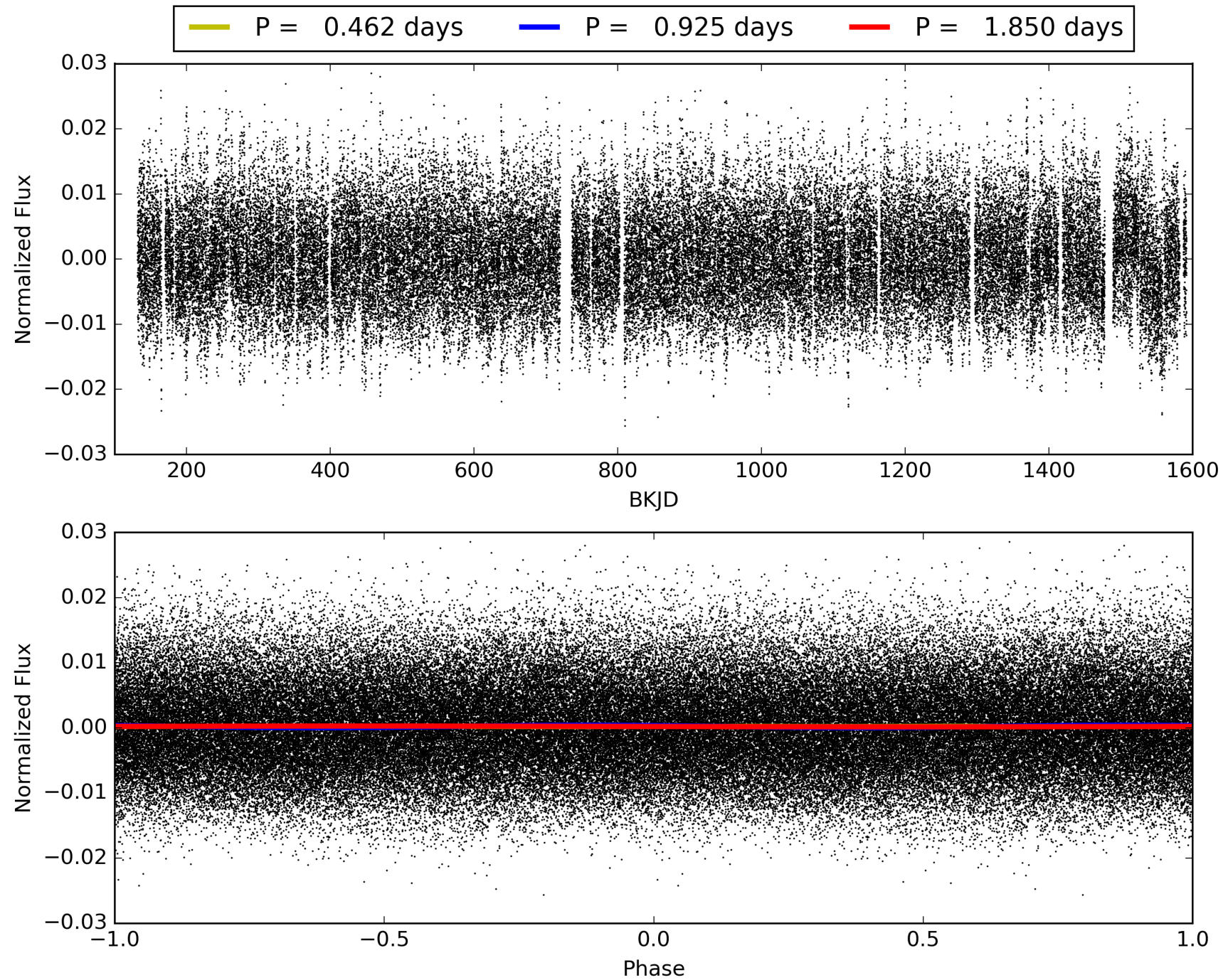
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 23:43:44 Z

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

TCE 009175346-01, PDC Light Curves

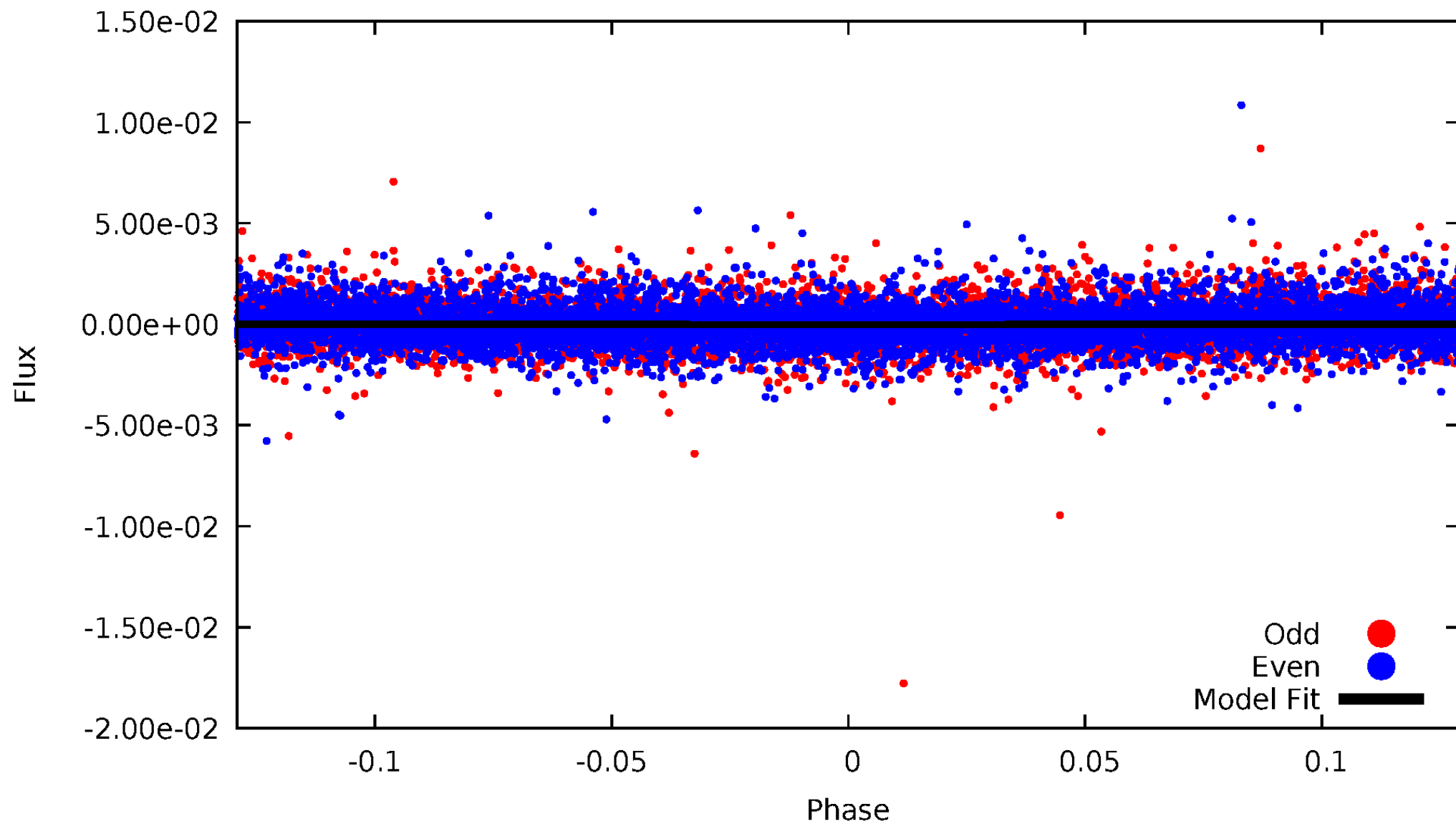


TCE 009175346-01



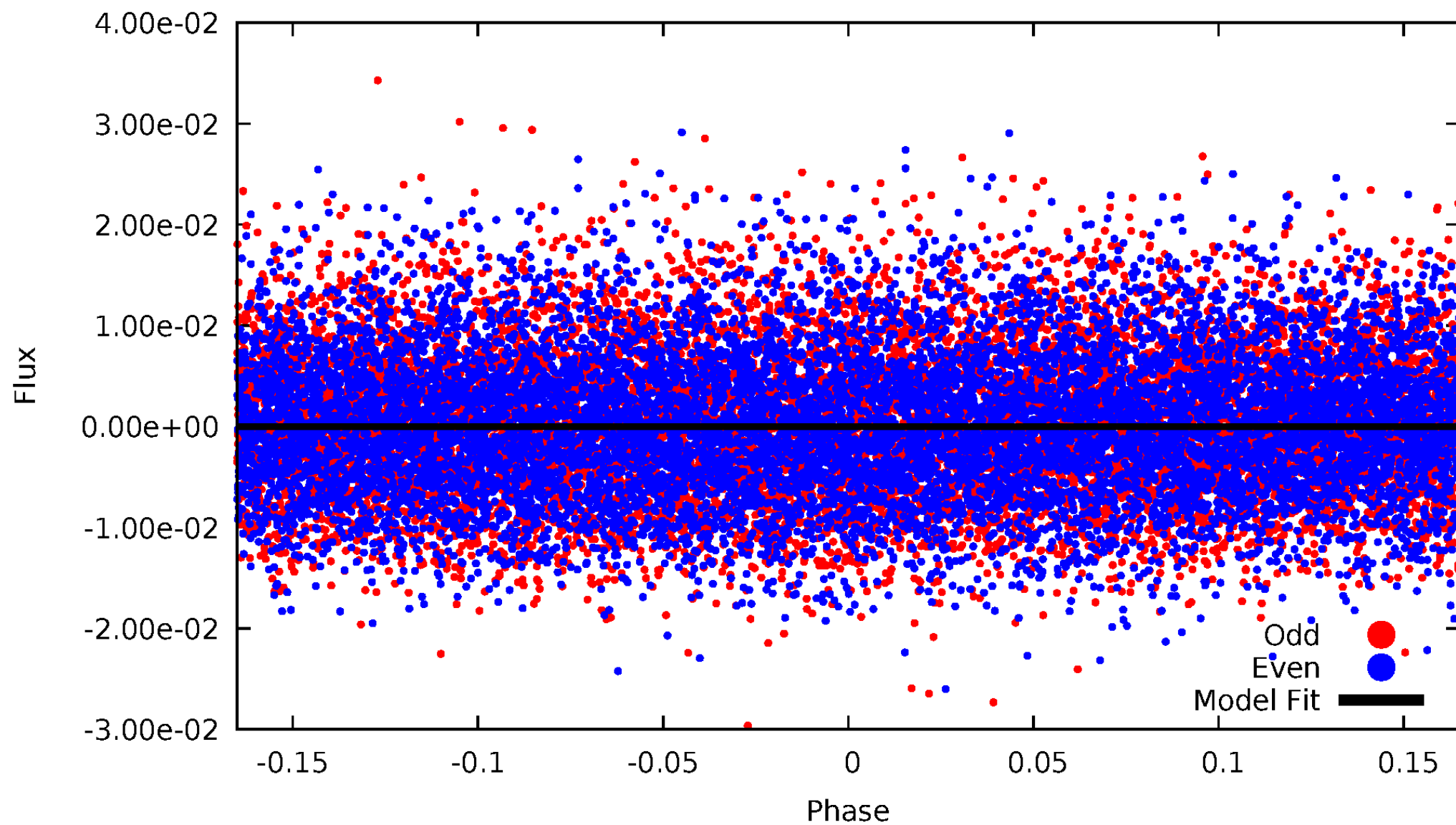
DV Odd/Even

TCE 009175346-01



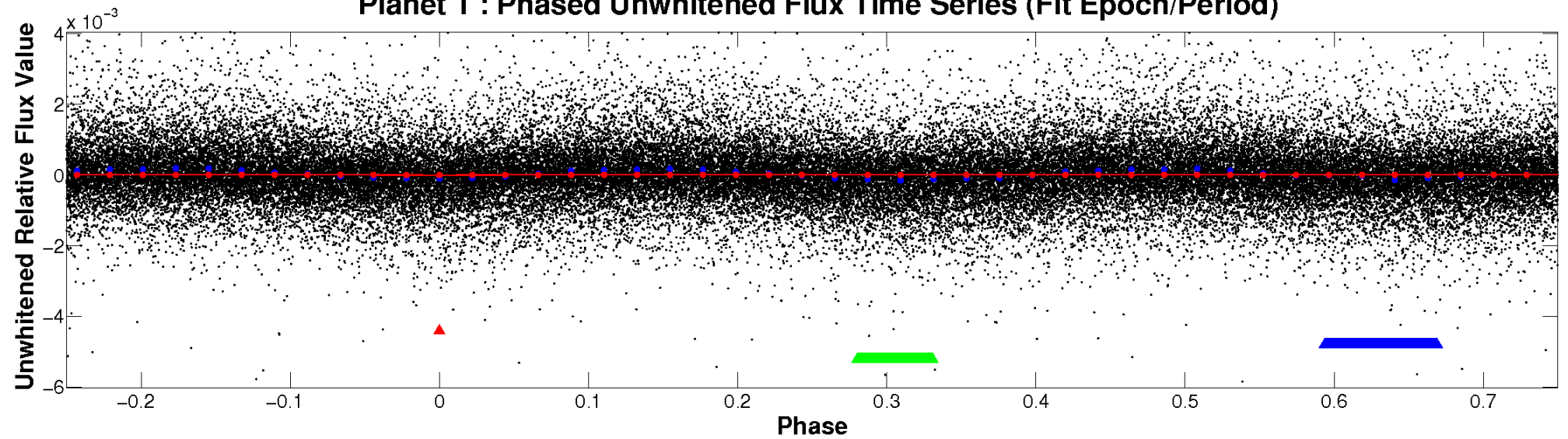
ALT Odd/Even

TCE 009175346-01

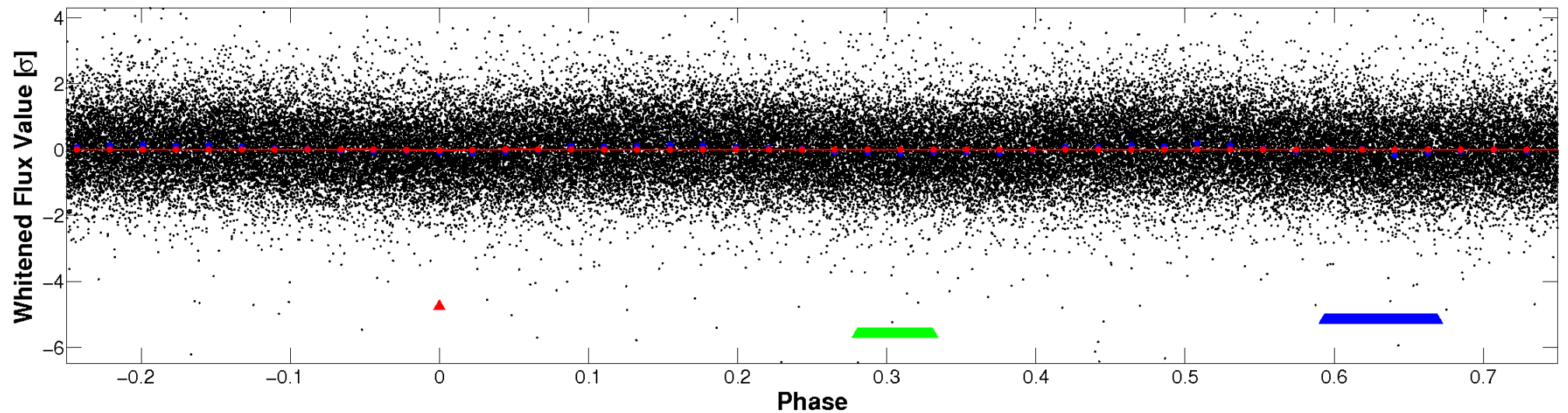


Non-Whitened Vs. Whitened Light Curve

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

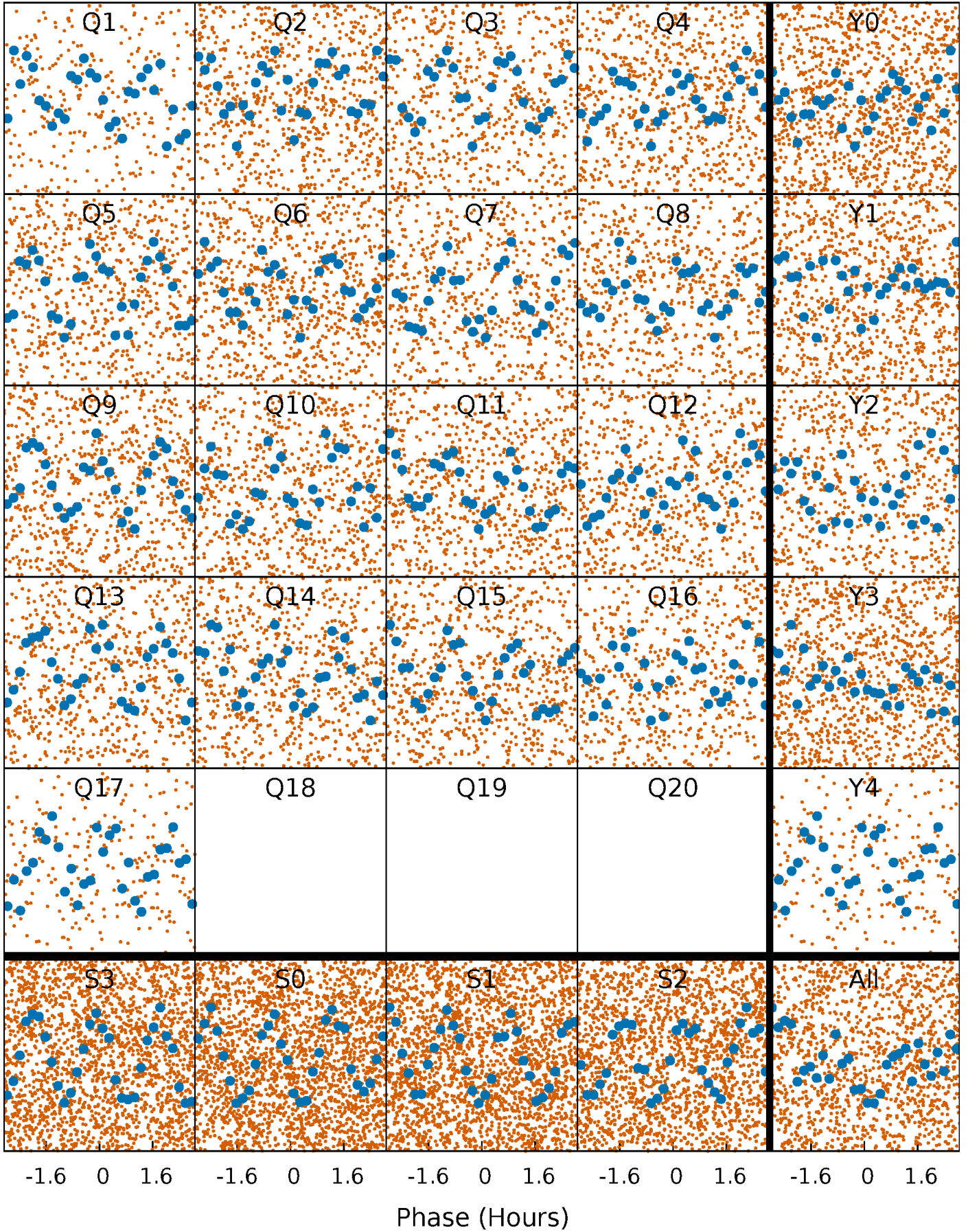


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



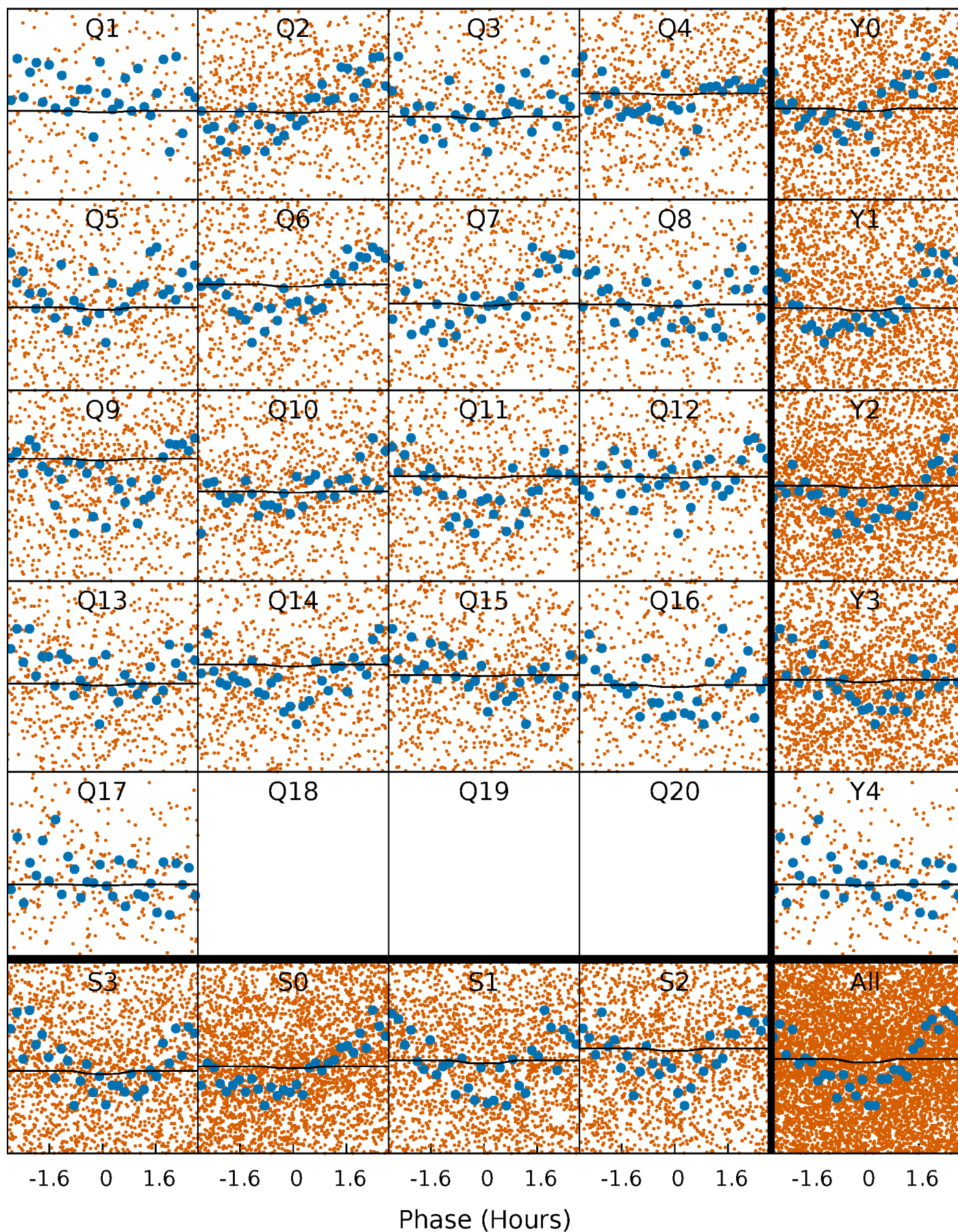
PDC Quarter-Phased Transit Curves

TCE 009175346-01 P= 0.924851 Days $T_0=132.301020$ (BKJD)



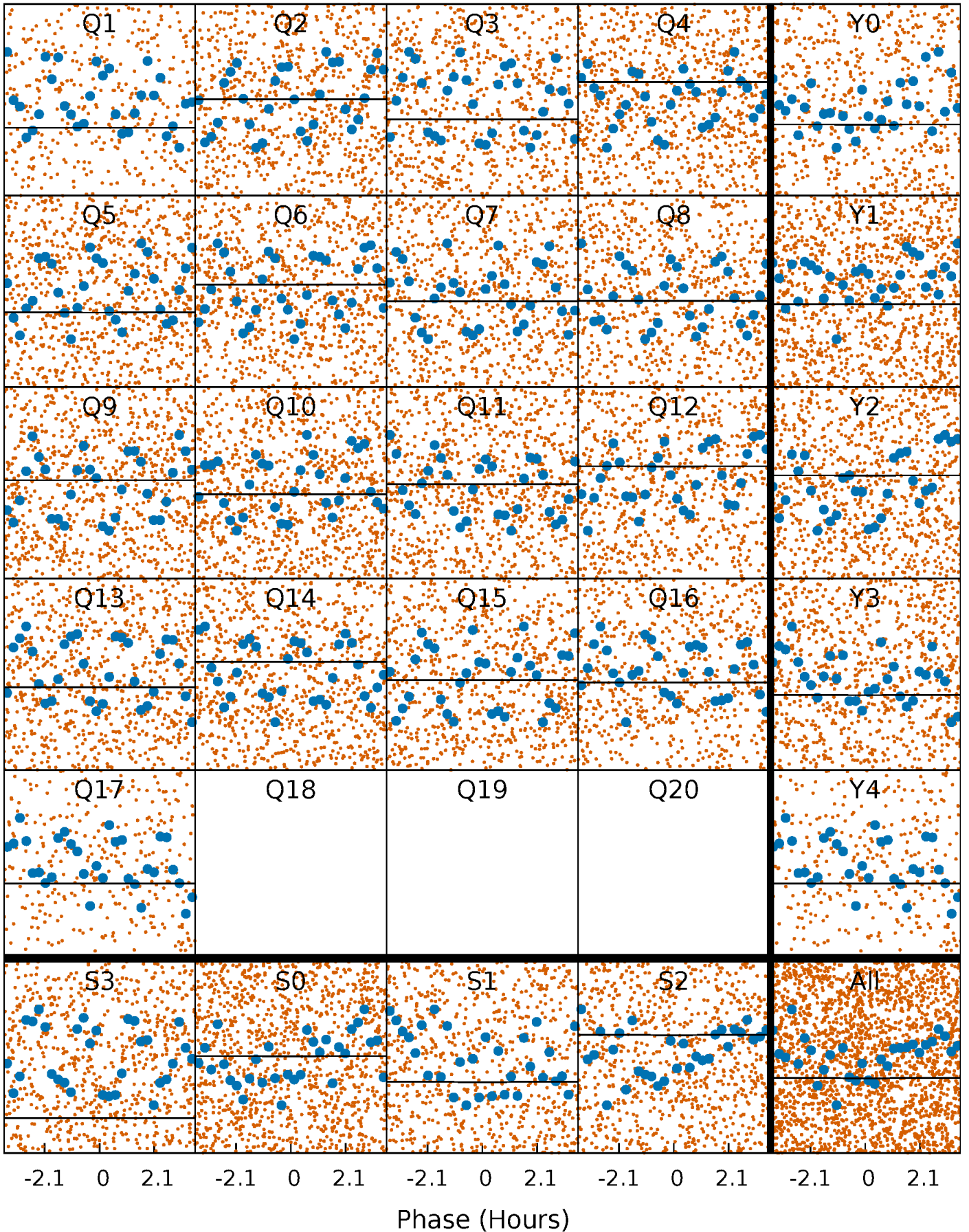
DV Quarter-Phased Transit Curves

TCE 009175346-01 P= 0.924851 Days $T_0=132.301020$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

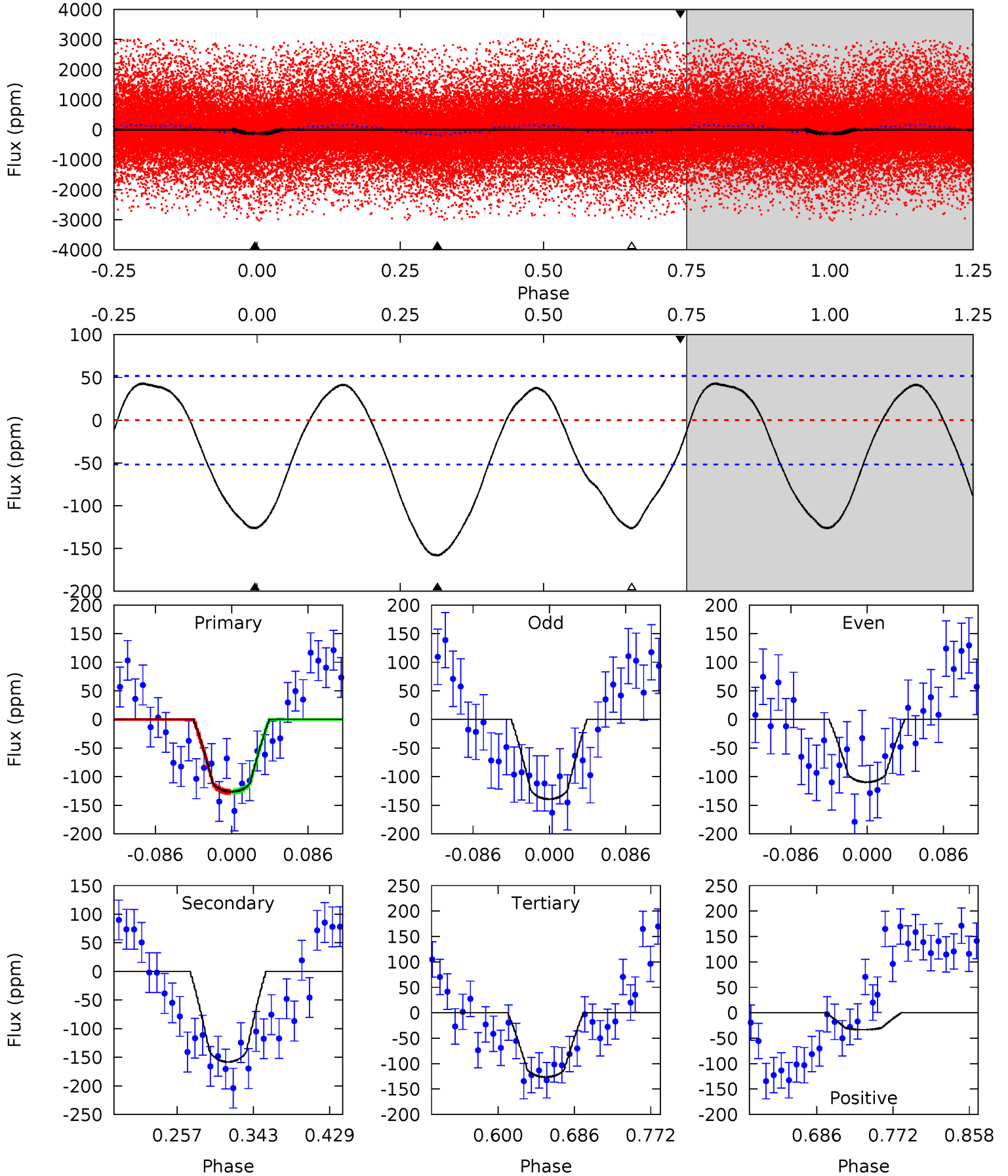
TCE 009175346-01 P= 0.924903 Days $T_0=132.280950$ (BKJD)



DV Model-Shift Uniqueness Test

009175346-01, P = 0.924851 Days, E = 131.376169 Days

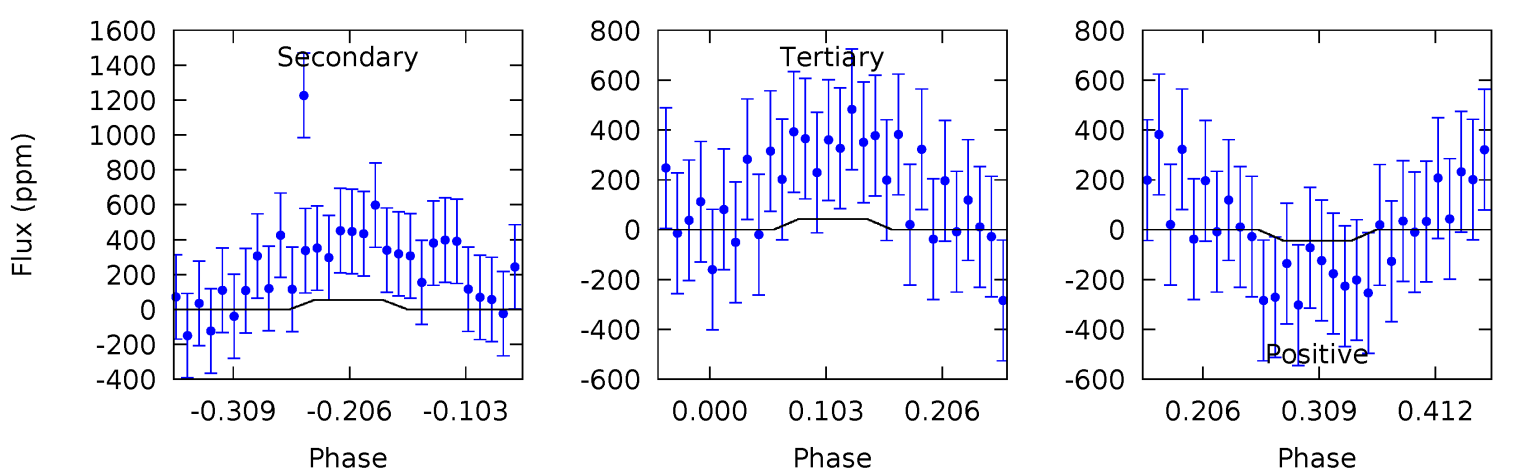
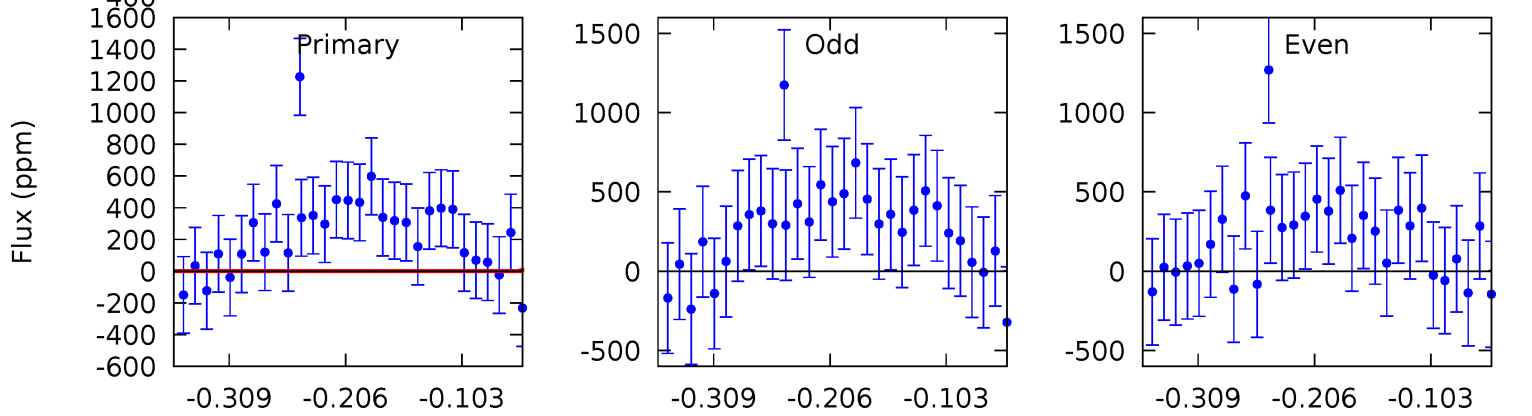
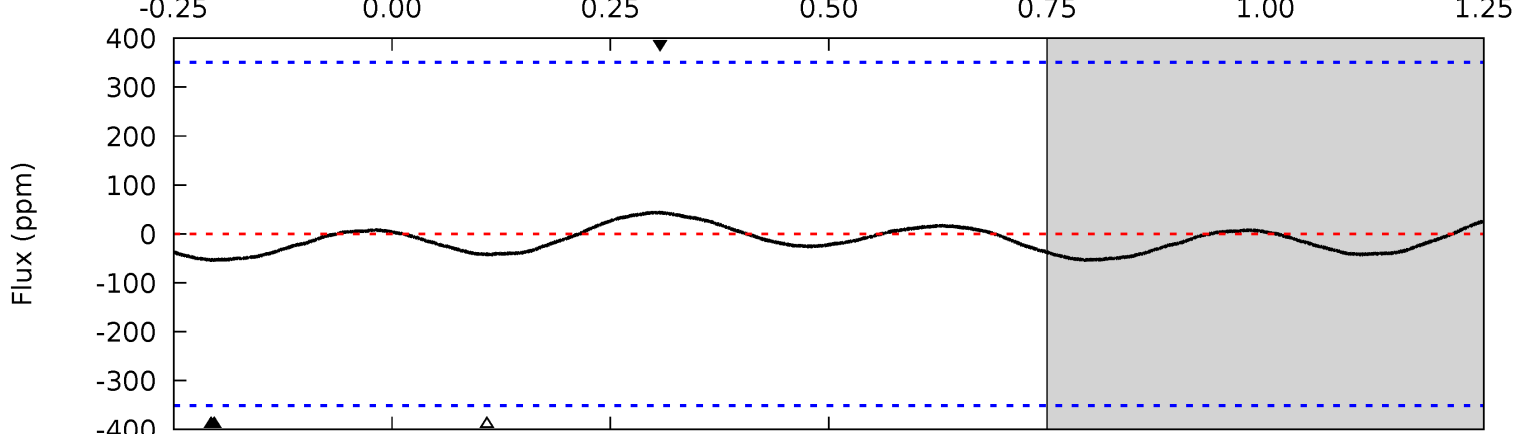
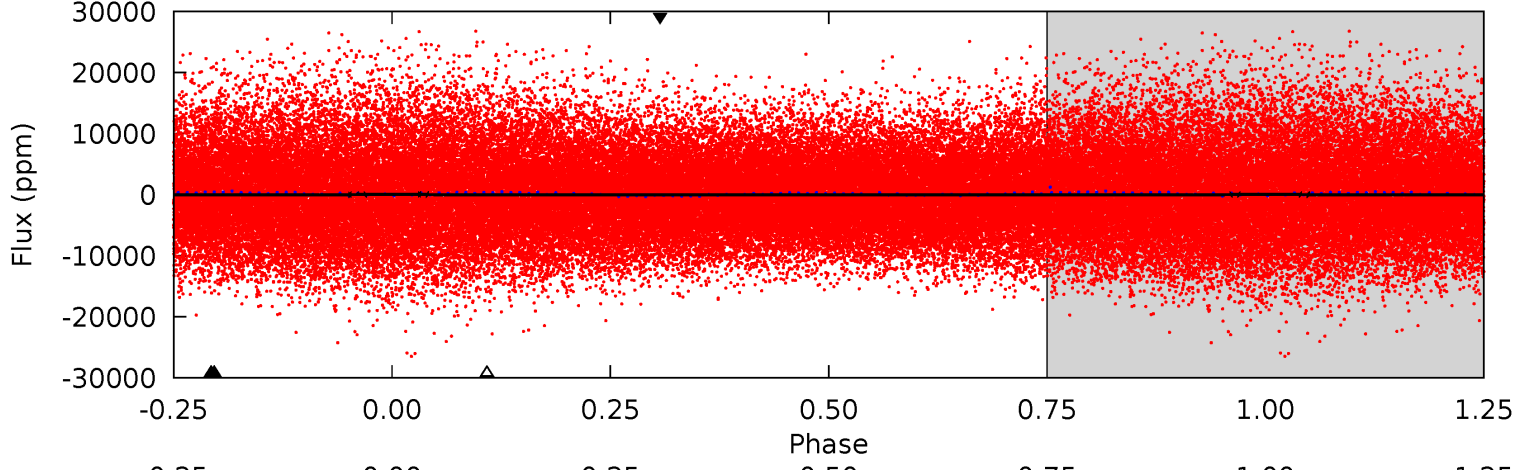
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.2	14.0	11.2	-2.95	4.60	1.72	4.61	-0.02	14.2	2.81	17.0	1.33	1.05	0.21	0.03



Alt Model-Shift Uniqueness Test

009175346-01, P = 0.924903 Days, E = 131.356047 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.70	0.70	0.56	0.57	4.56	1.63	0.30	0.14	0.13	0.14	0.13	0.07	-0.40	0.45	0.12



Stellar Parameters For KIC 009175346

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6356^{+174}_{-213}	$3.769^{+0.527}_{-0.093}$	$-0.220^{+0.250}_{-0.300}$	$2.527^{+0.537}_{-1.342}$	$1.370^{+0.216}_{-0.324}$	$0.120^{+0.714}_{-0.043}$
	+3%/-3%	+14%/-2%	+114%/-136%	+21%/-53%	+16%/-24%	+597%/-36%
Source	PHO1	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 009175346-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-158 ± 11	$1.18^{+1.19}_{-0.77}$	4169^{+335}_{-630}	11206^{+25195}_{-3783}	27^{+203}_{-20}
Alt.	-54 ± 77	$0.99^{+1.16}_{-0.71}$	4183^{+332}_{-617}	7382^{+13702}_{-13900}	$6.981^{+87.785}_{-11.450}$

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

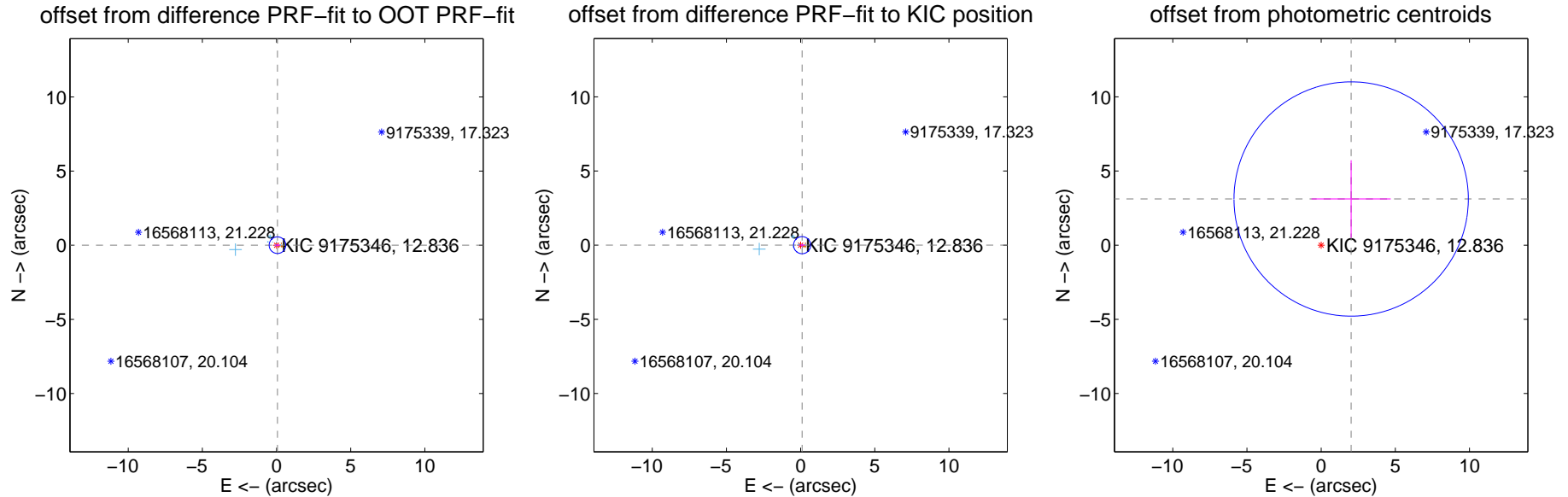
DV Centroid Data

Supplemental centroid analysis for 009175346-01. Kepler magnitude: 12.84. Transit SNR 0.75

There are 11 quarters with good PRF difference image offsets

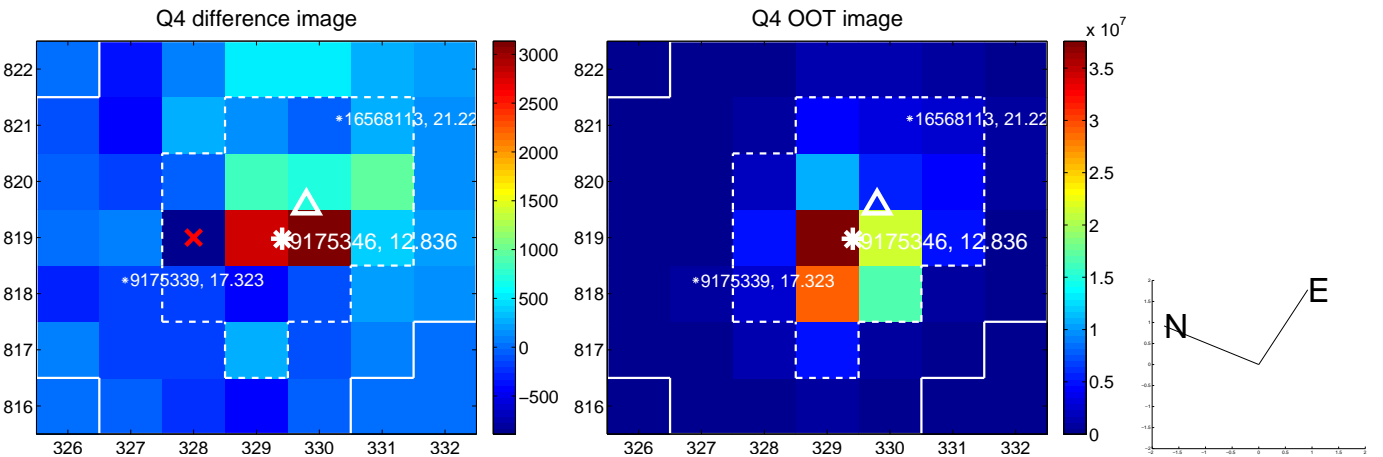
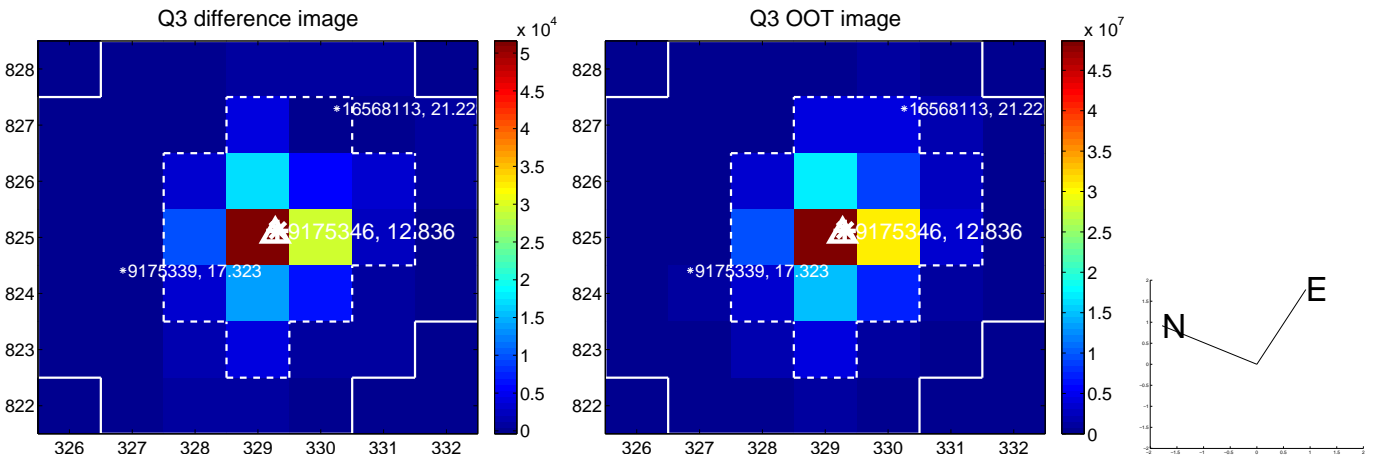
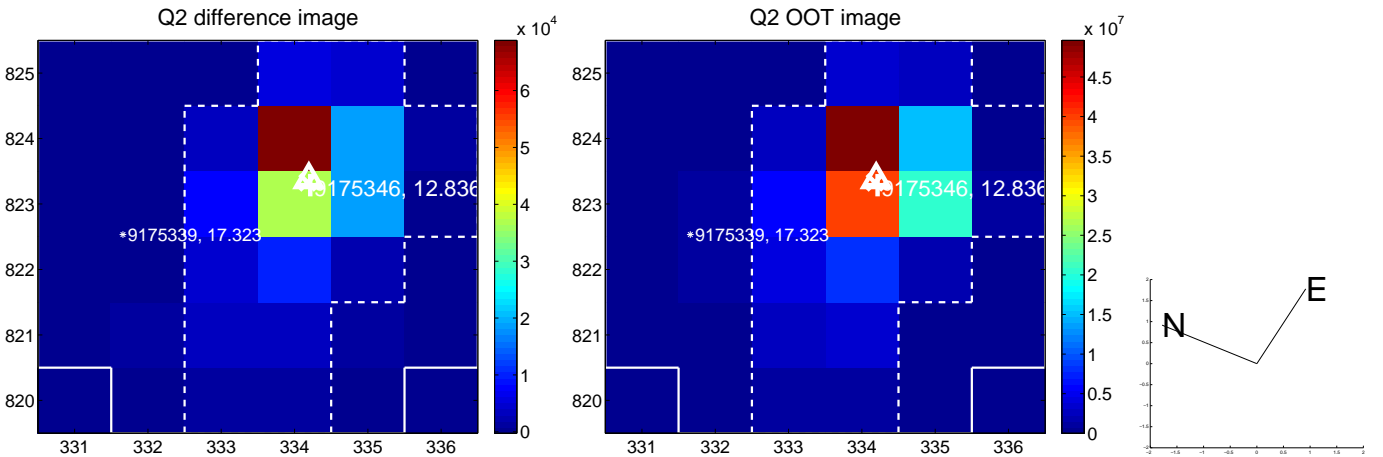
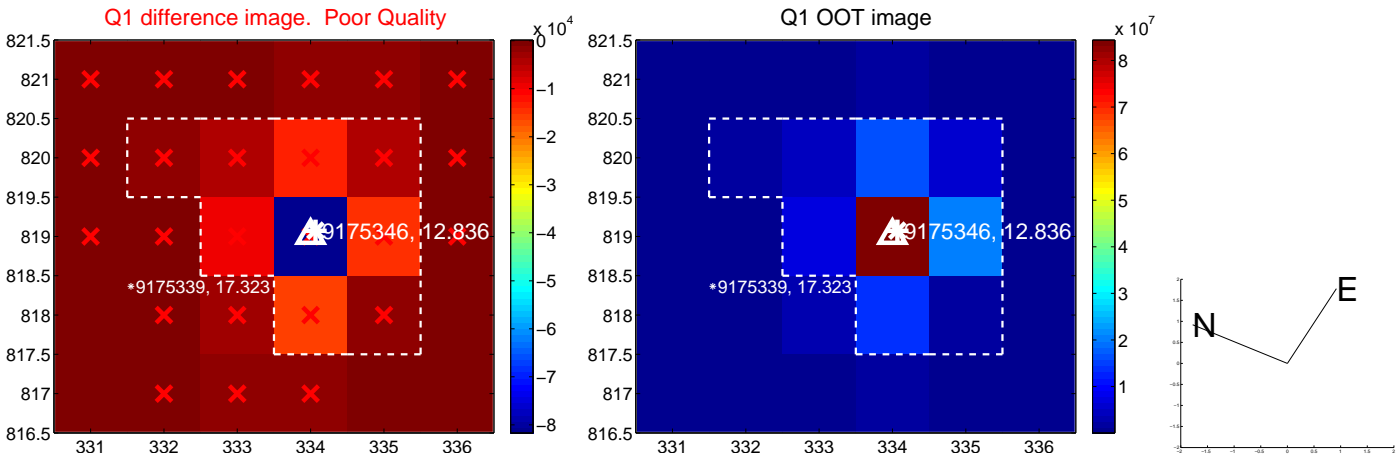
The direct PRF centroid is offset from the target star catalog position by about 0.02 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.062 ± 0.187	0.33	-0.062 ± 0.186	0.004 ± 0.080
PRF-fit source offset from KIC position	0.101 ± 0.192	0.53	-0.101 ± 0.192	0.000 ± 0.080
photometric centroid source offset	3.71 ± 2.63	1.41	-2.02 ± 2.67	3.11 ± 2.62

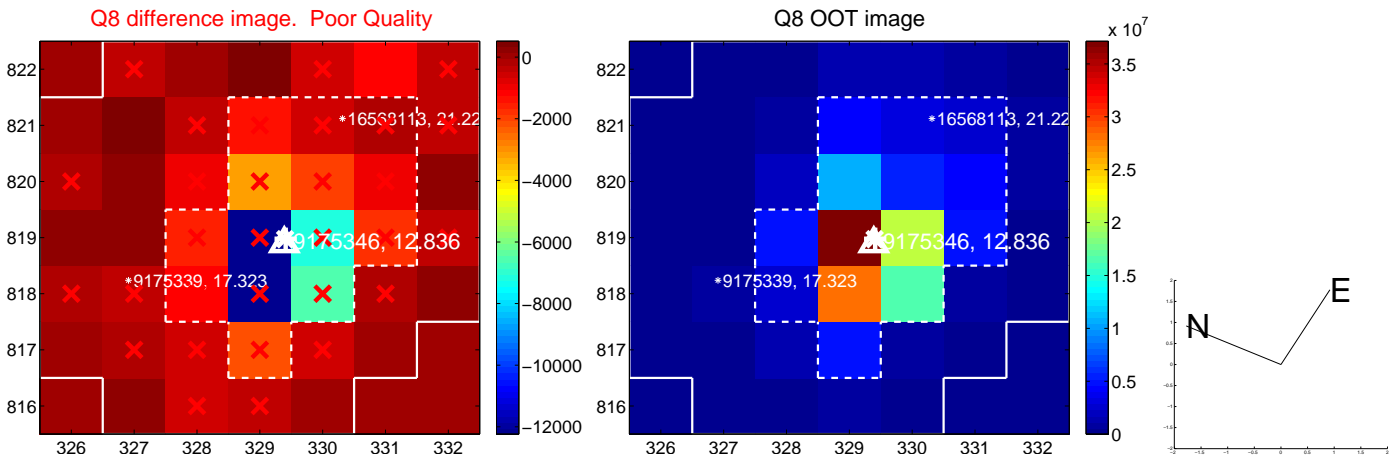
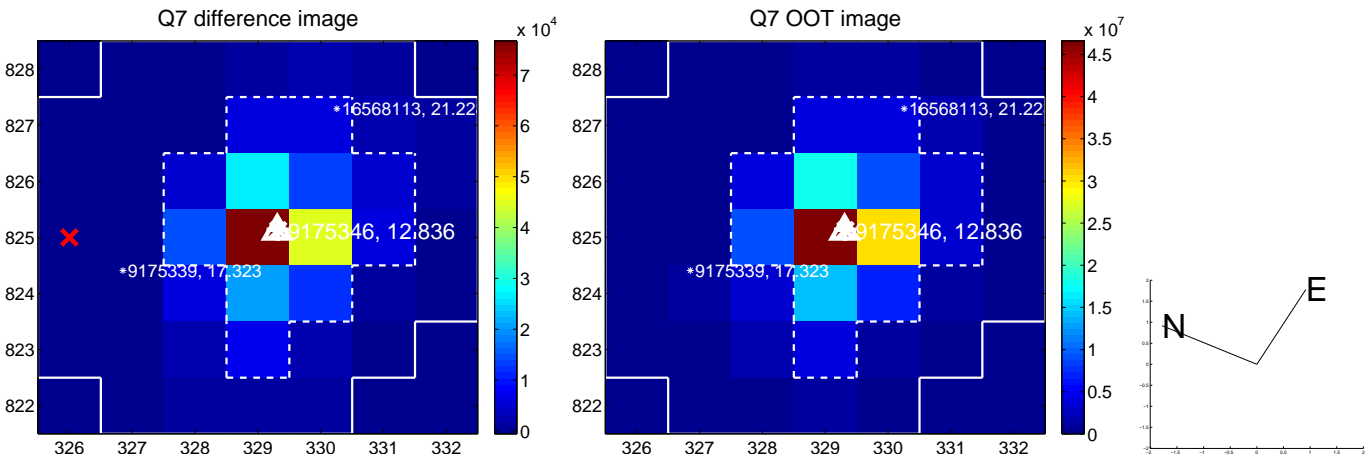
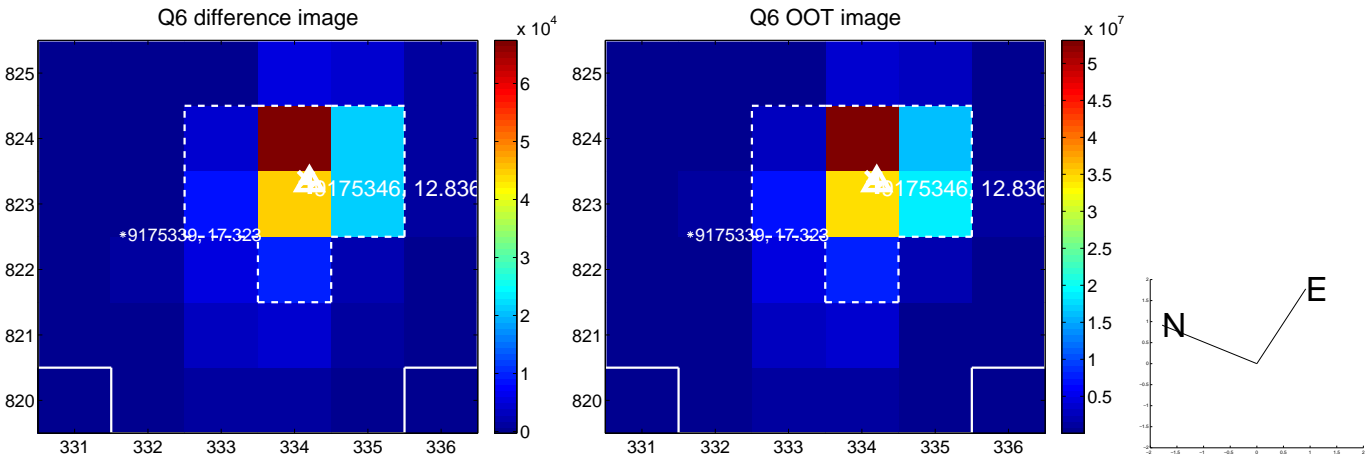
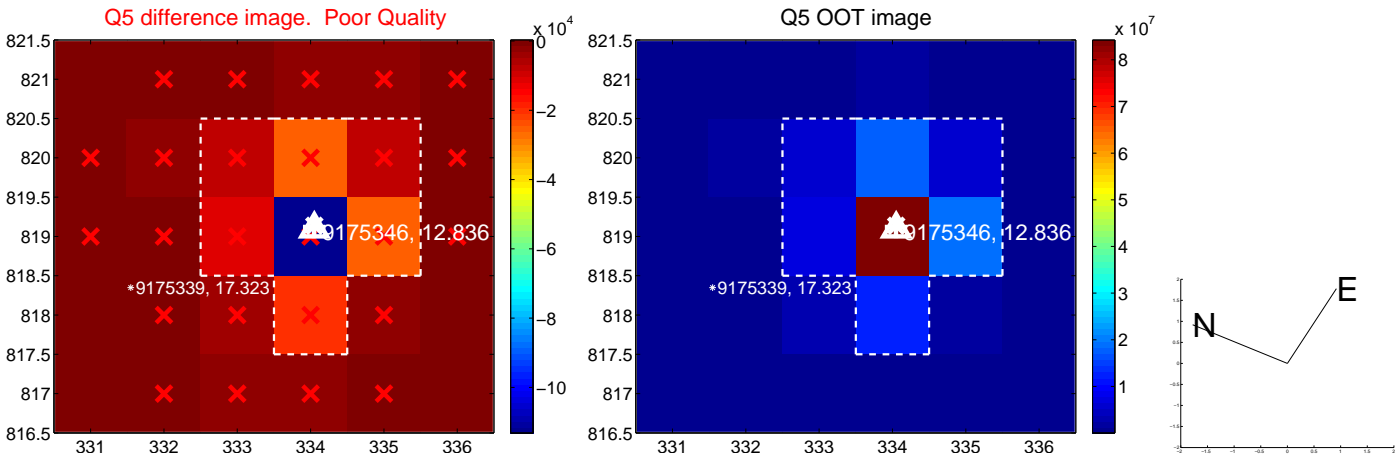


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

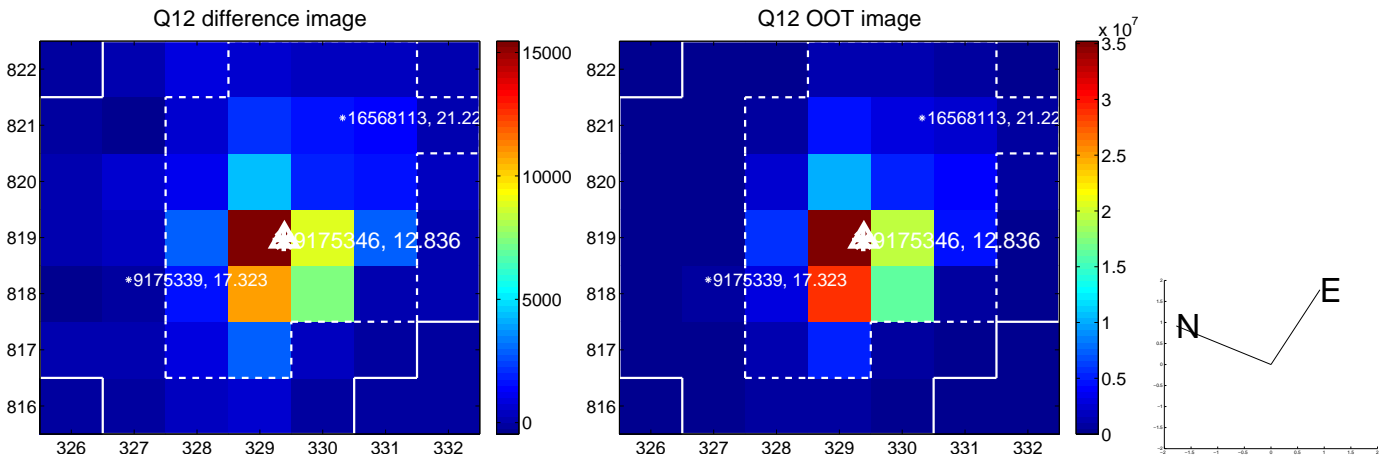
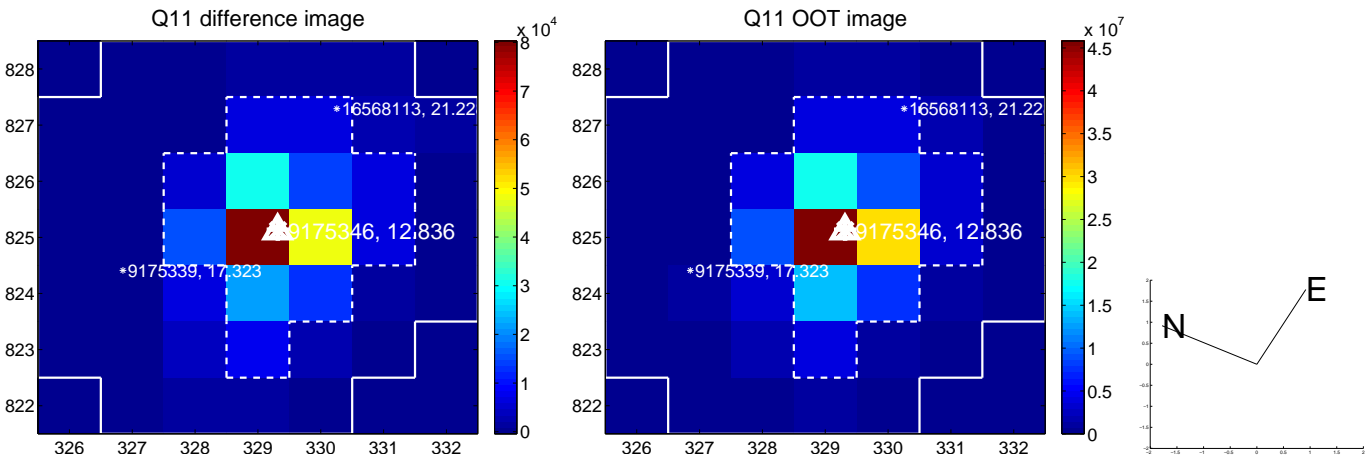
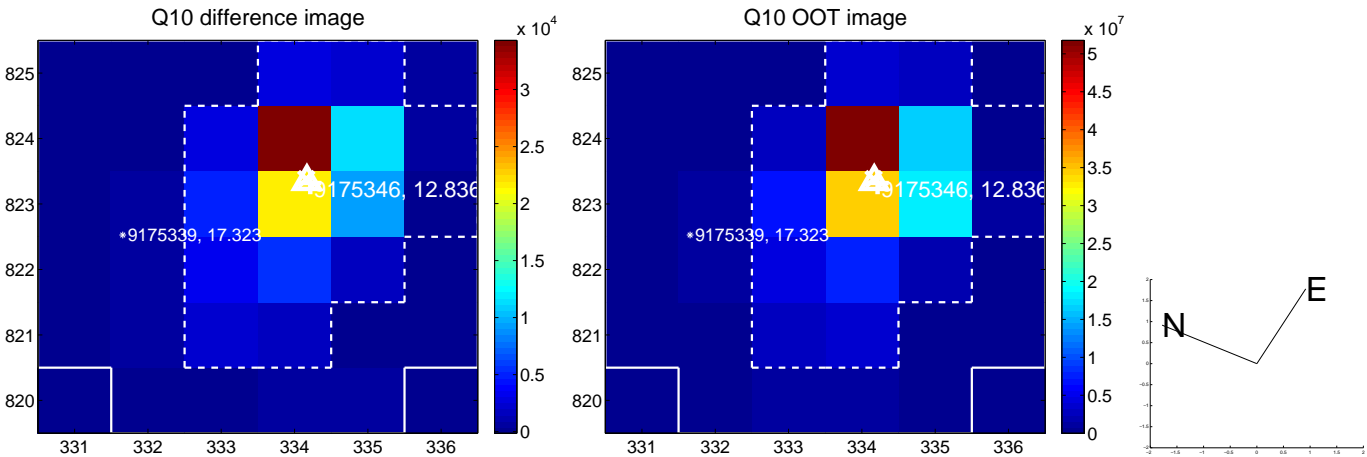
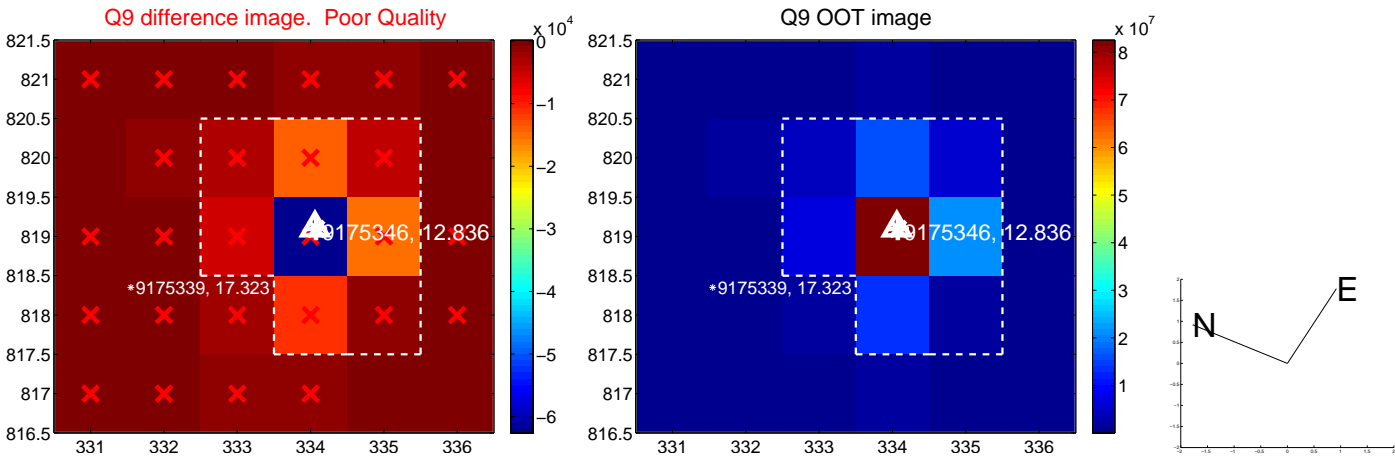
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



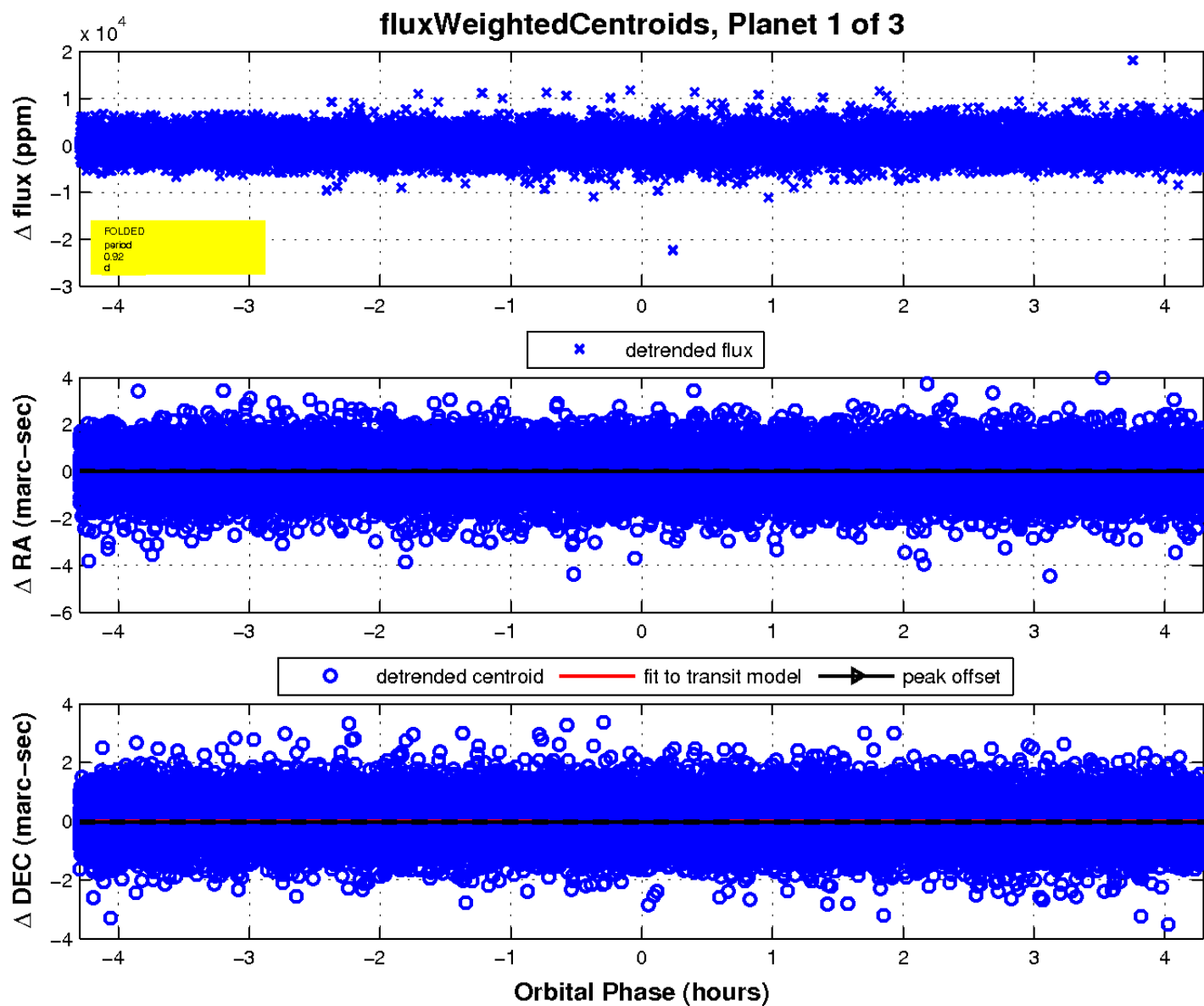
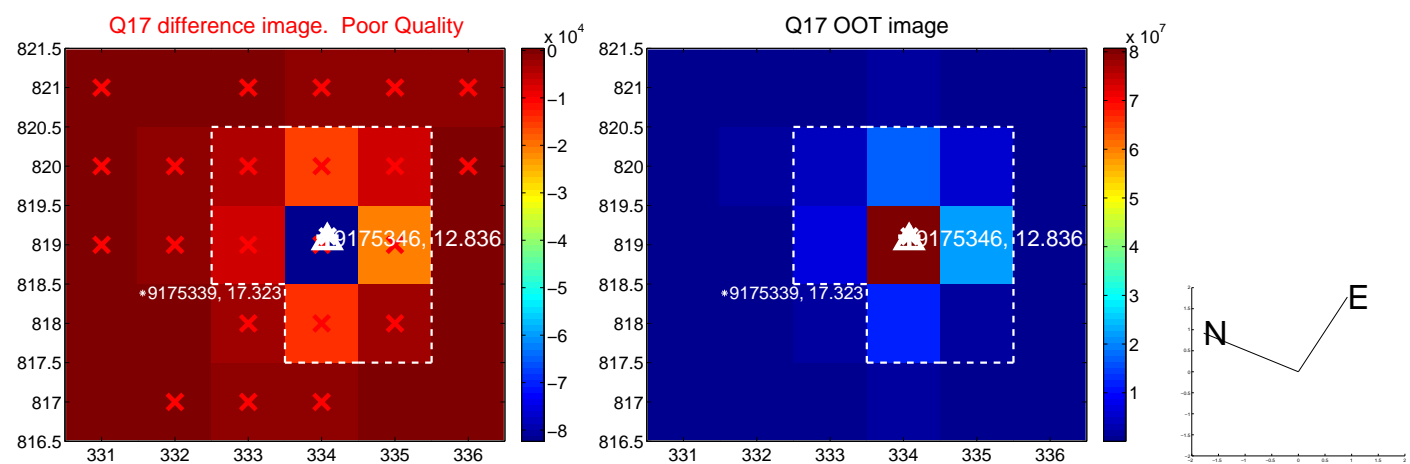
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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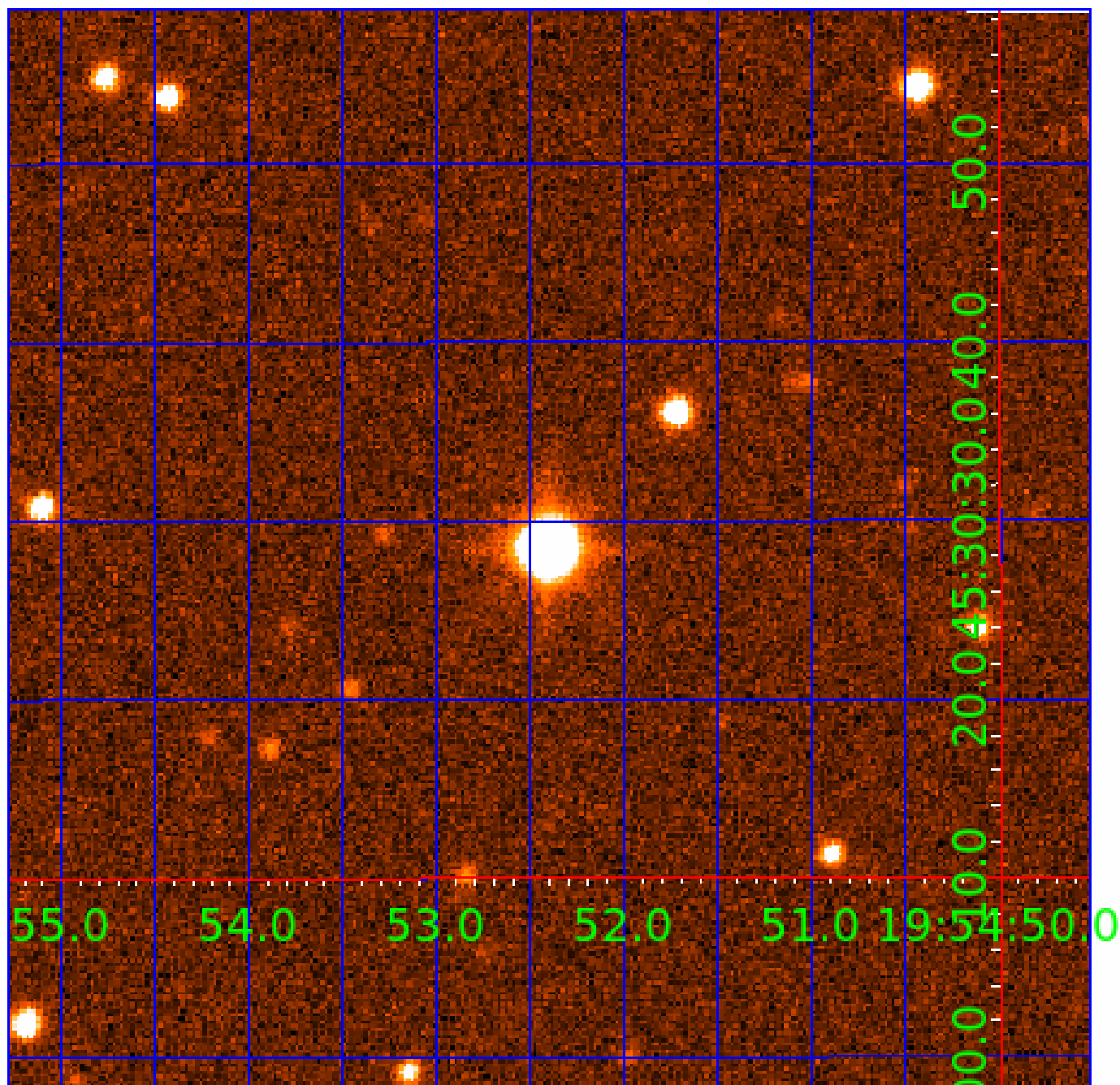


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 009175346

Q1-17 DR25 TCE Parameters

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

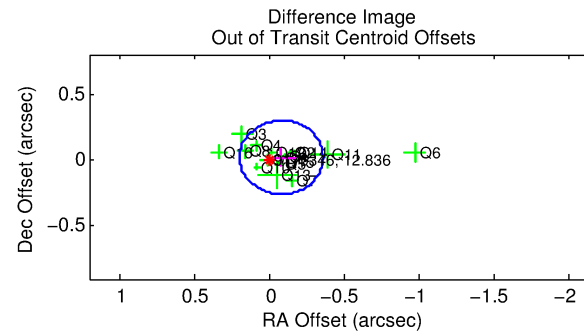
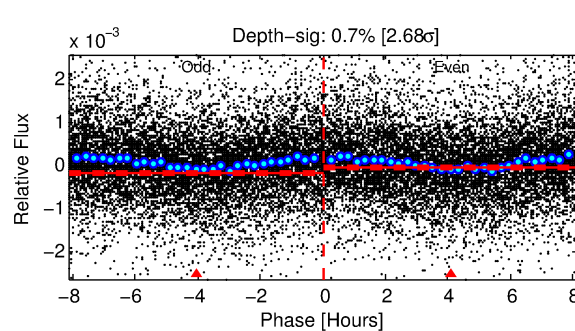
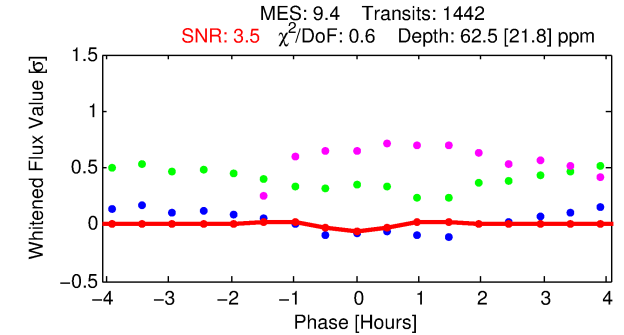
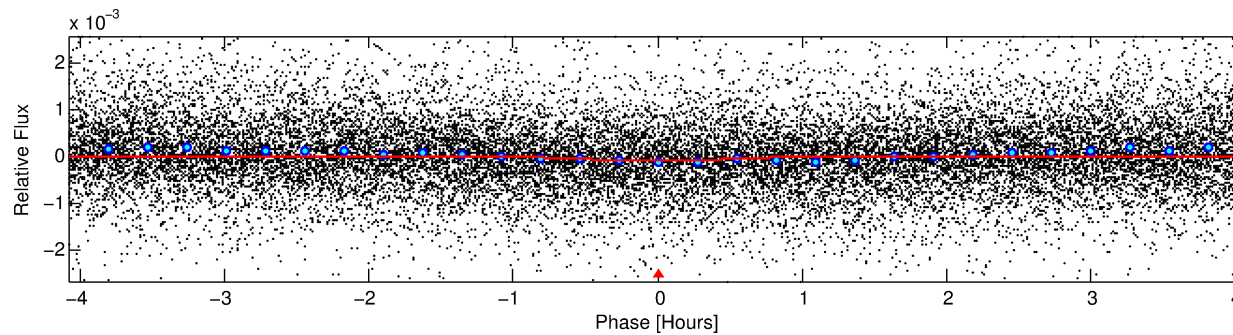
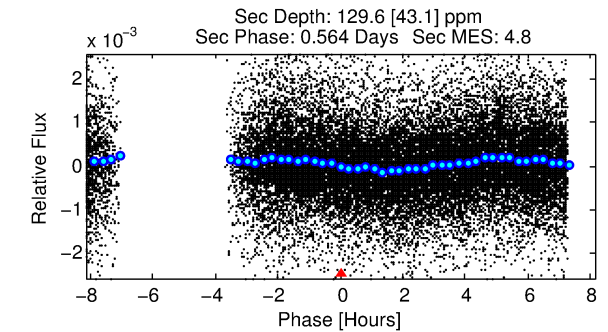
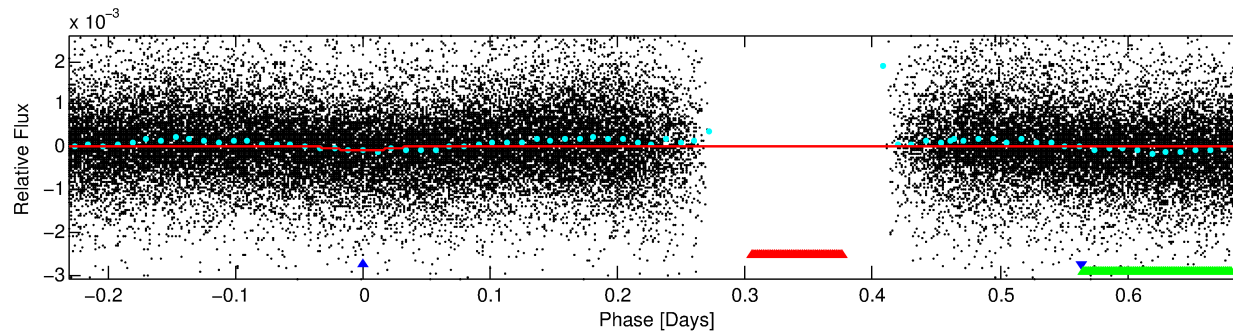
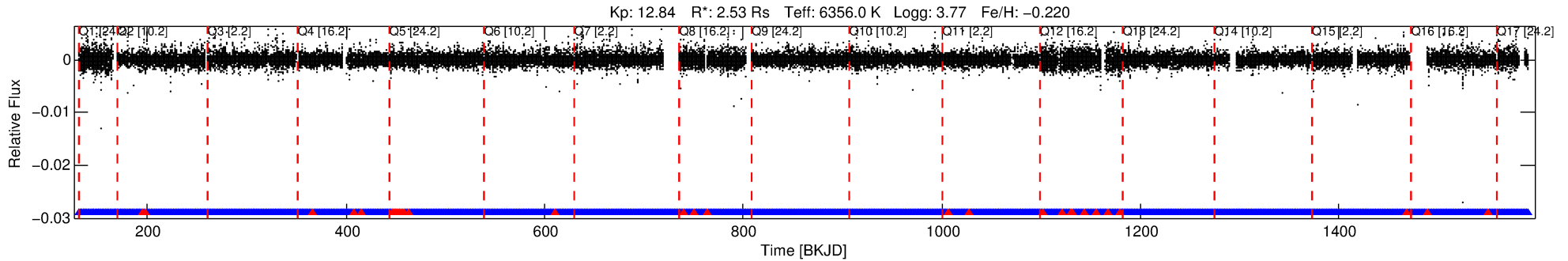
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009175346-02

No Significant Match Found

DV One-Page Summary

KIC: 9175346 Candidate: 2 of 3 Period: 0.925 d



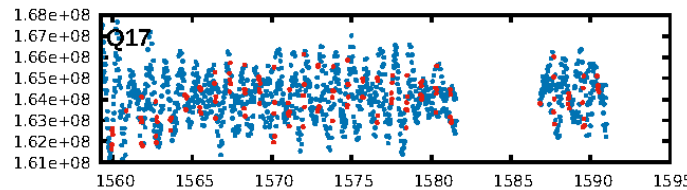
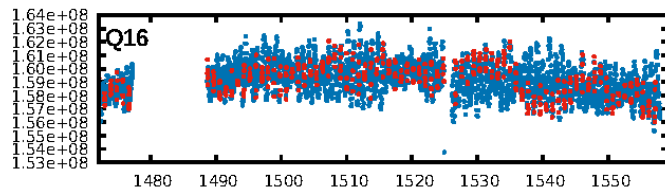
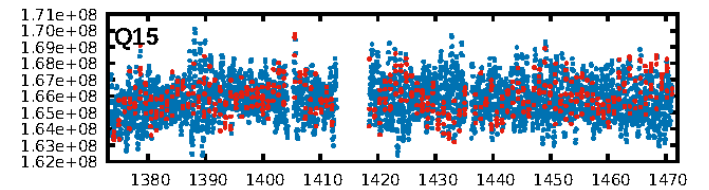
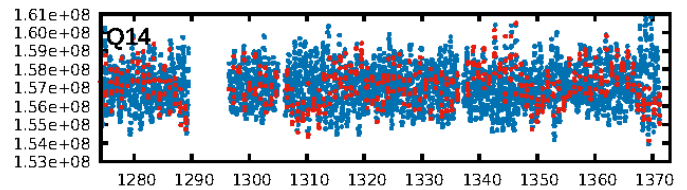
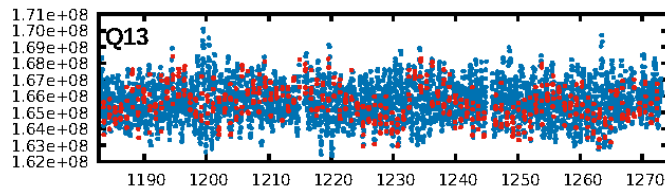
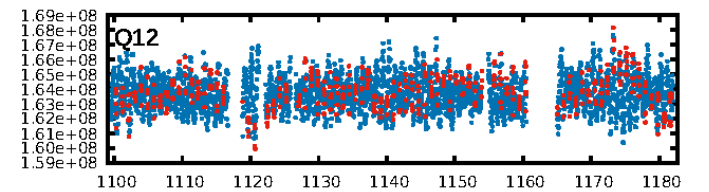
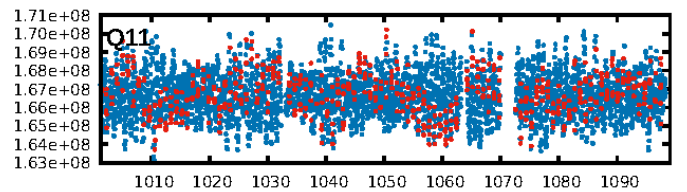
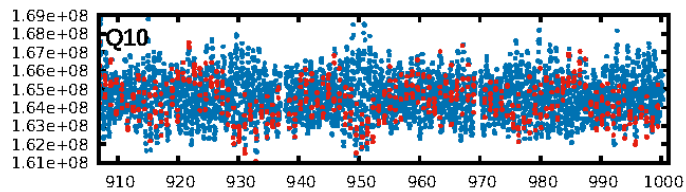
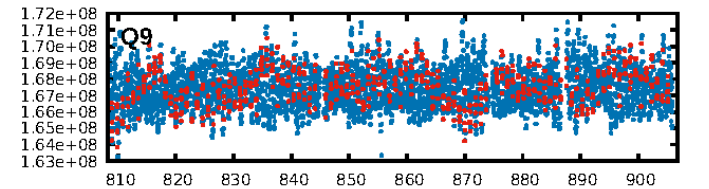
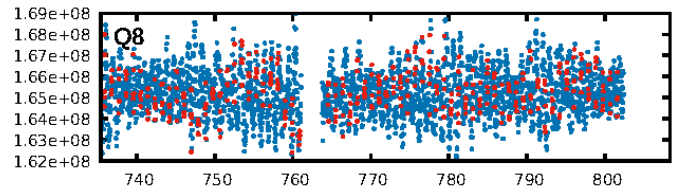
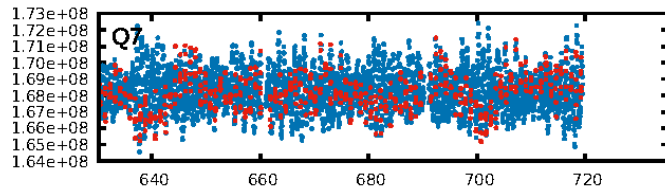
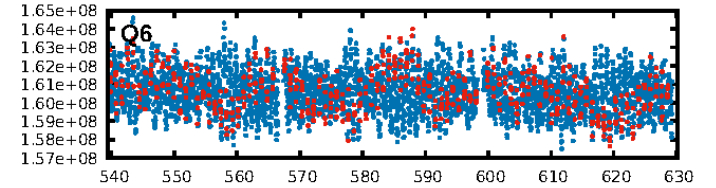
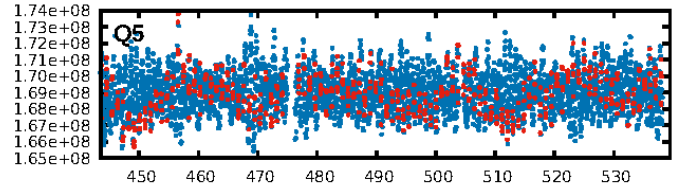
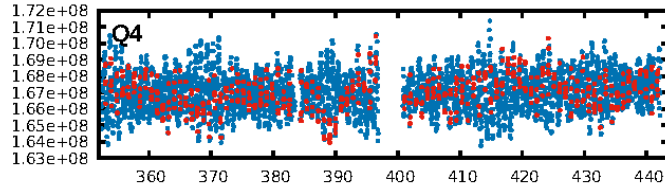
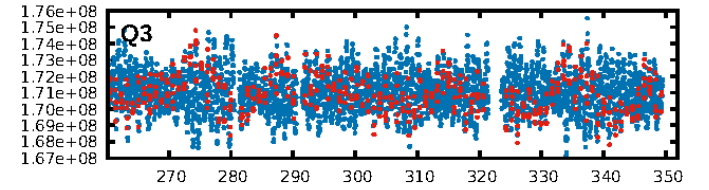
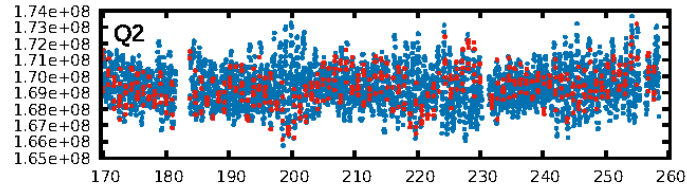
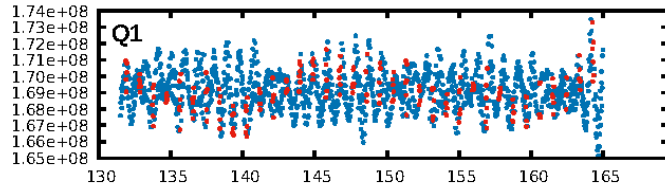
DV Fit Results:

Period = 0.92489 [0.00002] d
Epoch = 131.9251 [0.0037] BKJD
Rp/R* = 0.0085 [0.0084]
a/R* = 2.54 [11.86]
b = 0.90 [1.18]
Seff = 21940.35 [19596.49]
Teff = 3103 [693] K
Rp = 2.35 [2.63] Re
a = 0.0206 [0.0111] AU
Ag = 5.52 [12.06] [0.37σ]
Teffp = 7353 [3687] K [1.13σ]

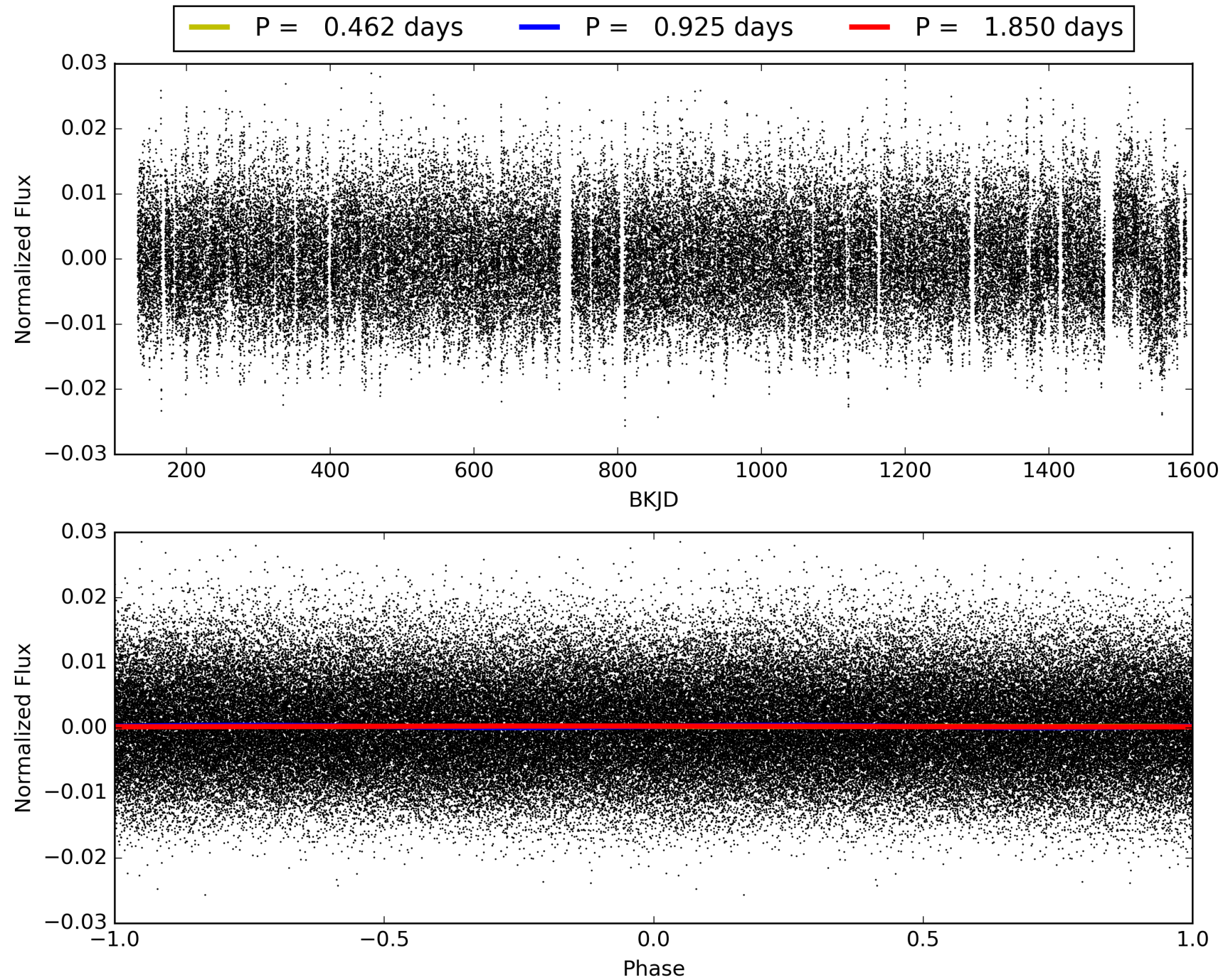
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.97 [1343/1379]
GhostDiagnostic-chr: 1.735
Centroid-sig: 0.0%
Centroid-so: 1.165 arcsec [2.35σ]
OotOffset-rm: 0.086 arcsec [0.92σ]
KicOffset-rm: 0.140 arcsec [1.41σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.65 [11/17]
DiffImageOverlap-fno: 0.00 [0/17]

TCE 009175346-02, PDC Light Curves

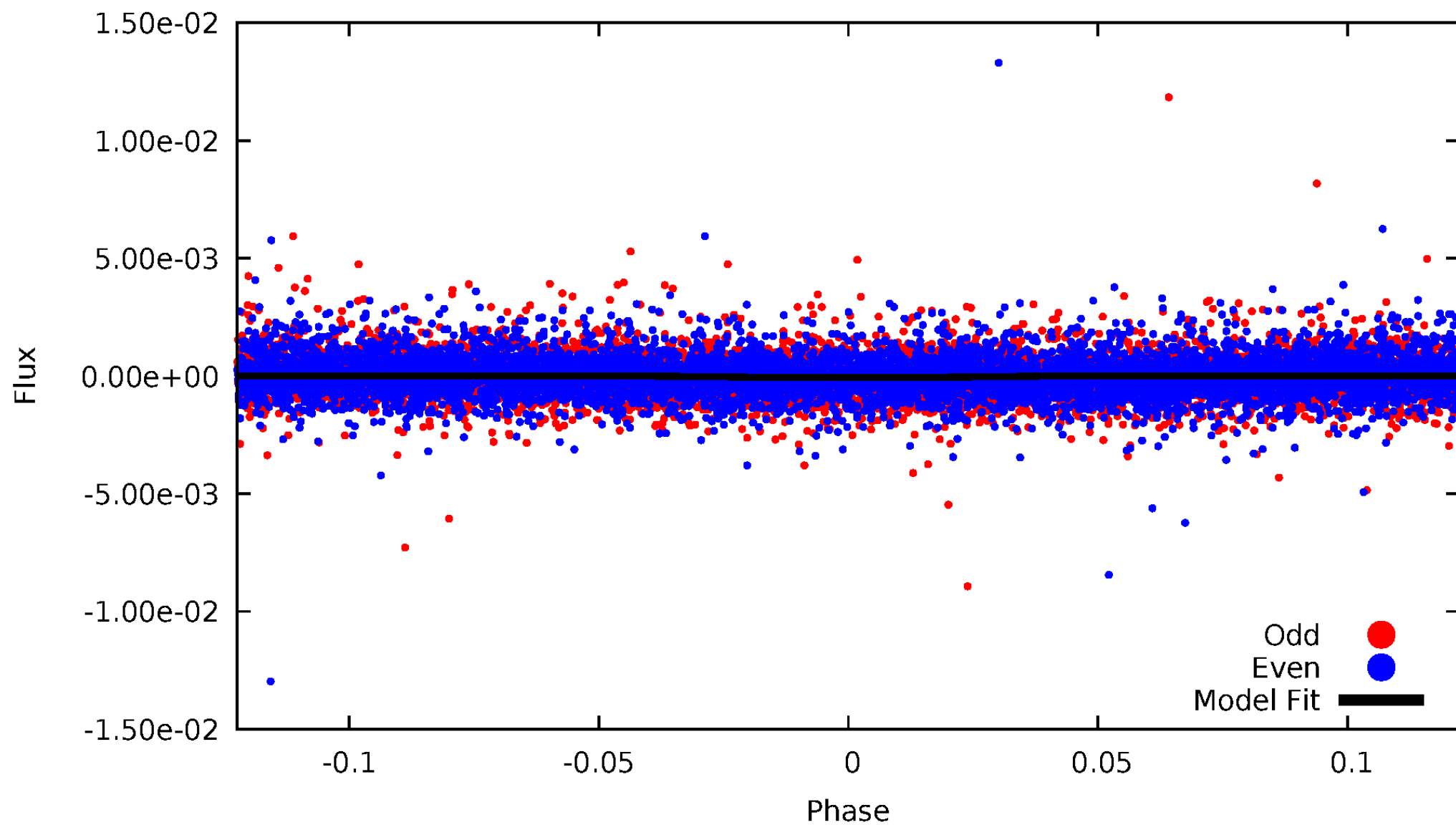


TCE 009175346-02



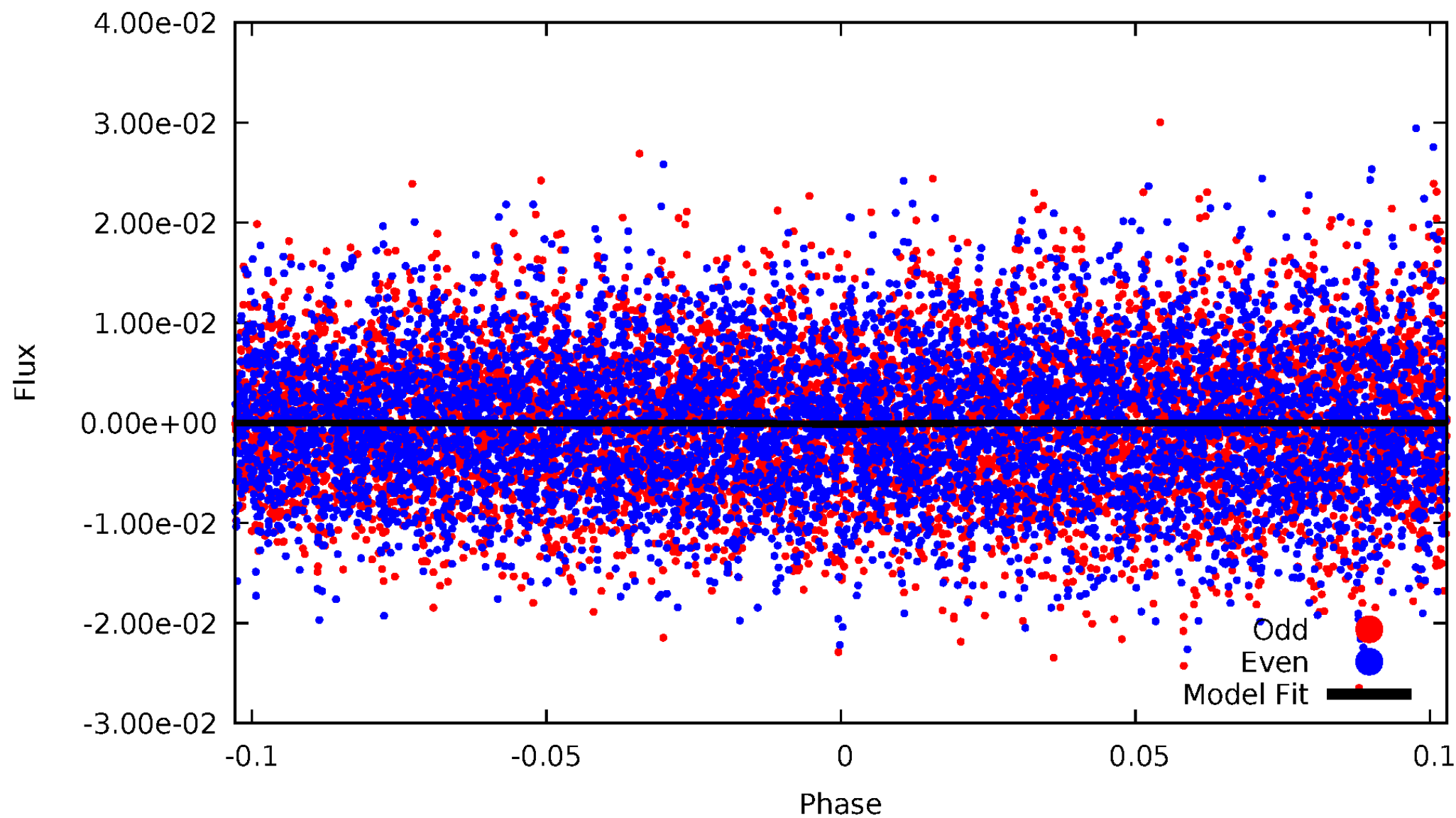
DV Odd/Even

TCE 009175346-02



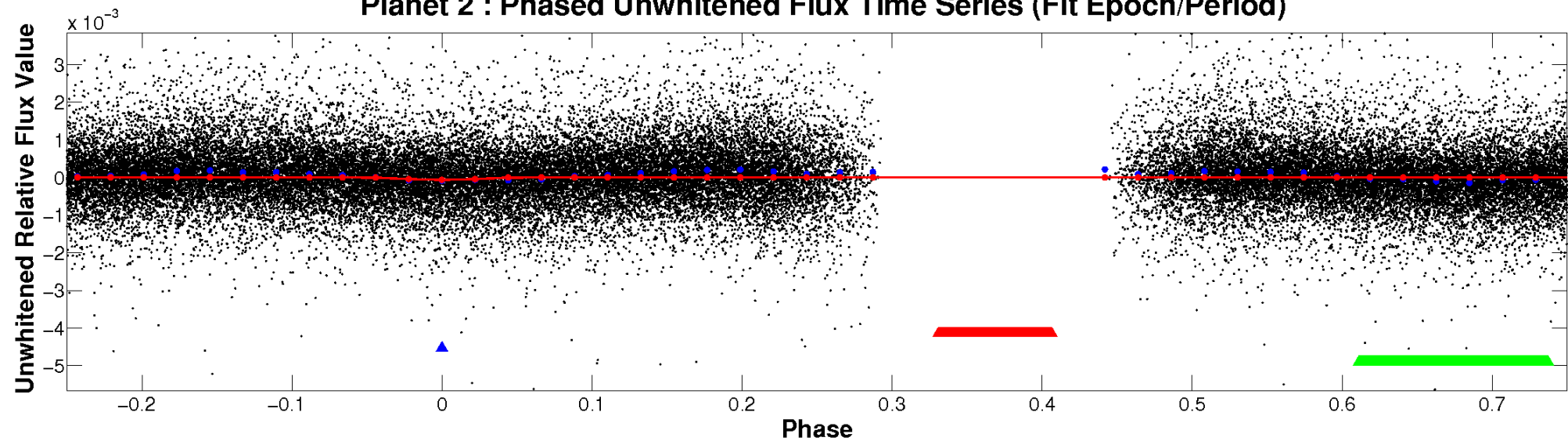
ALT Odd/Even

TCE 009175346-02

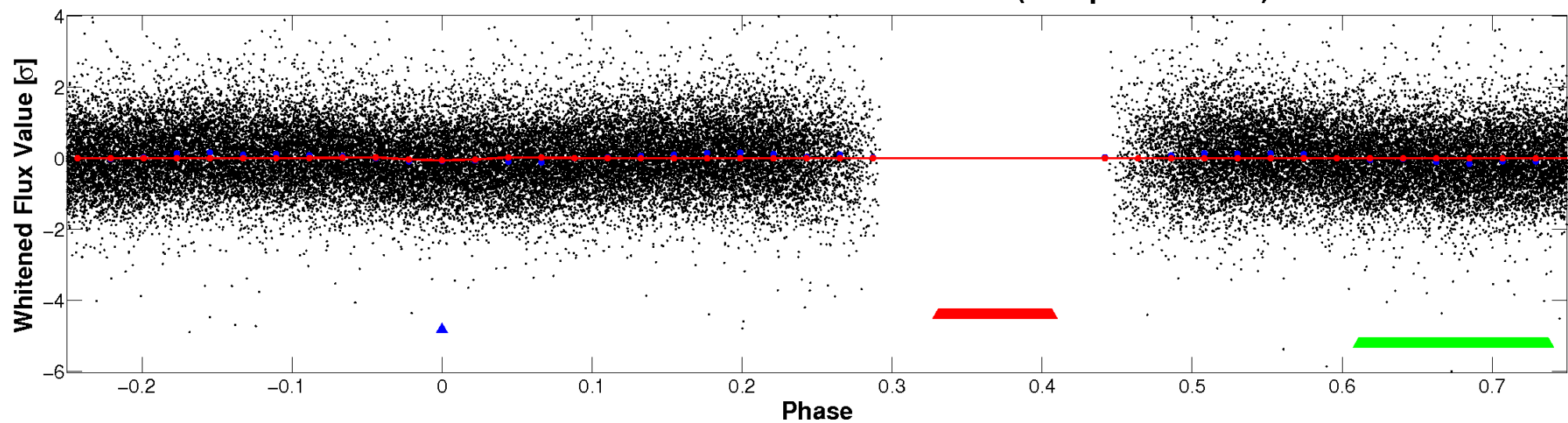


Non-Whitened Vs. Whitened Light Curve

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

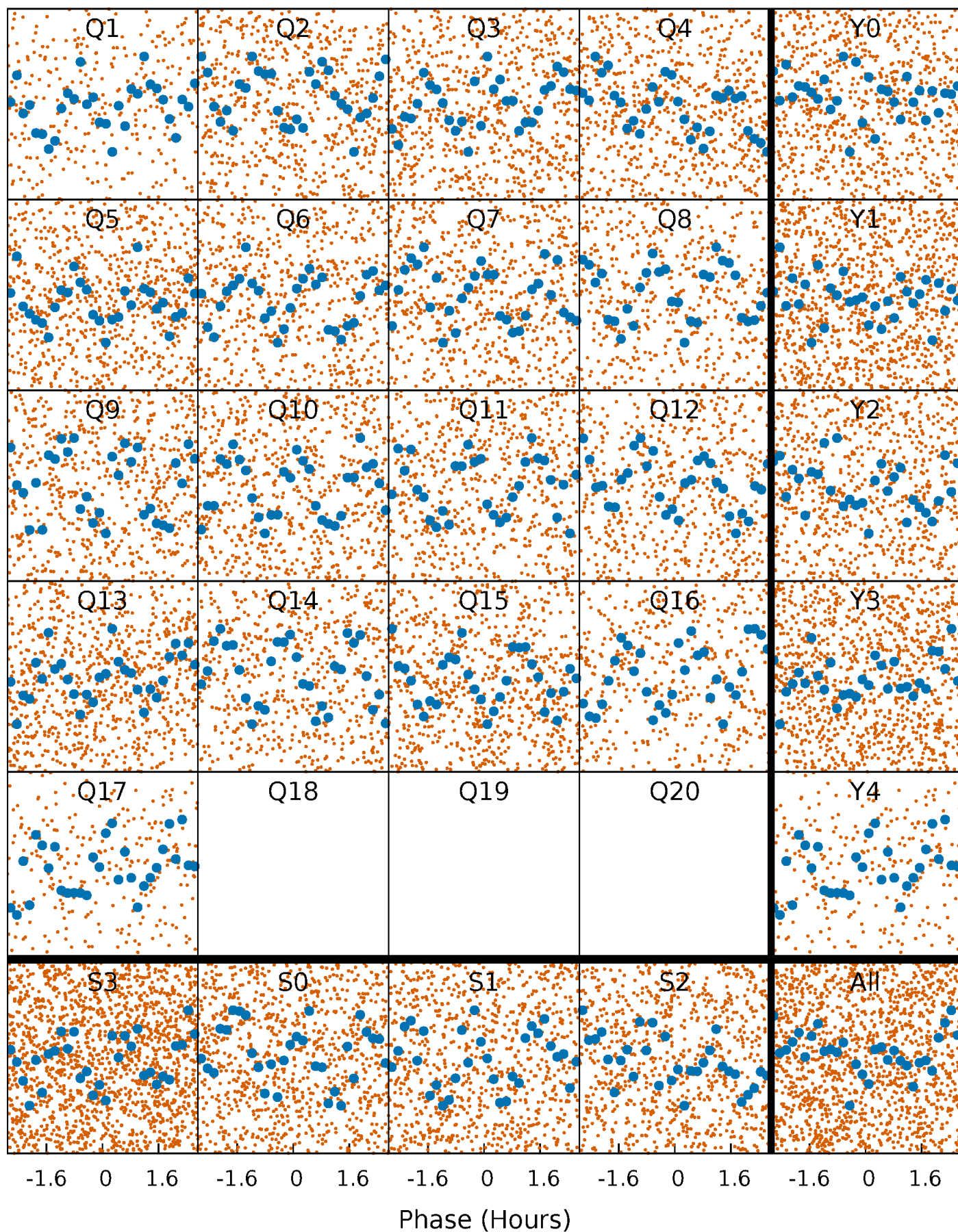


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



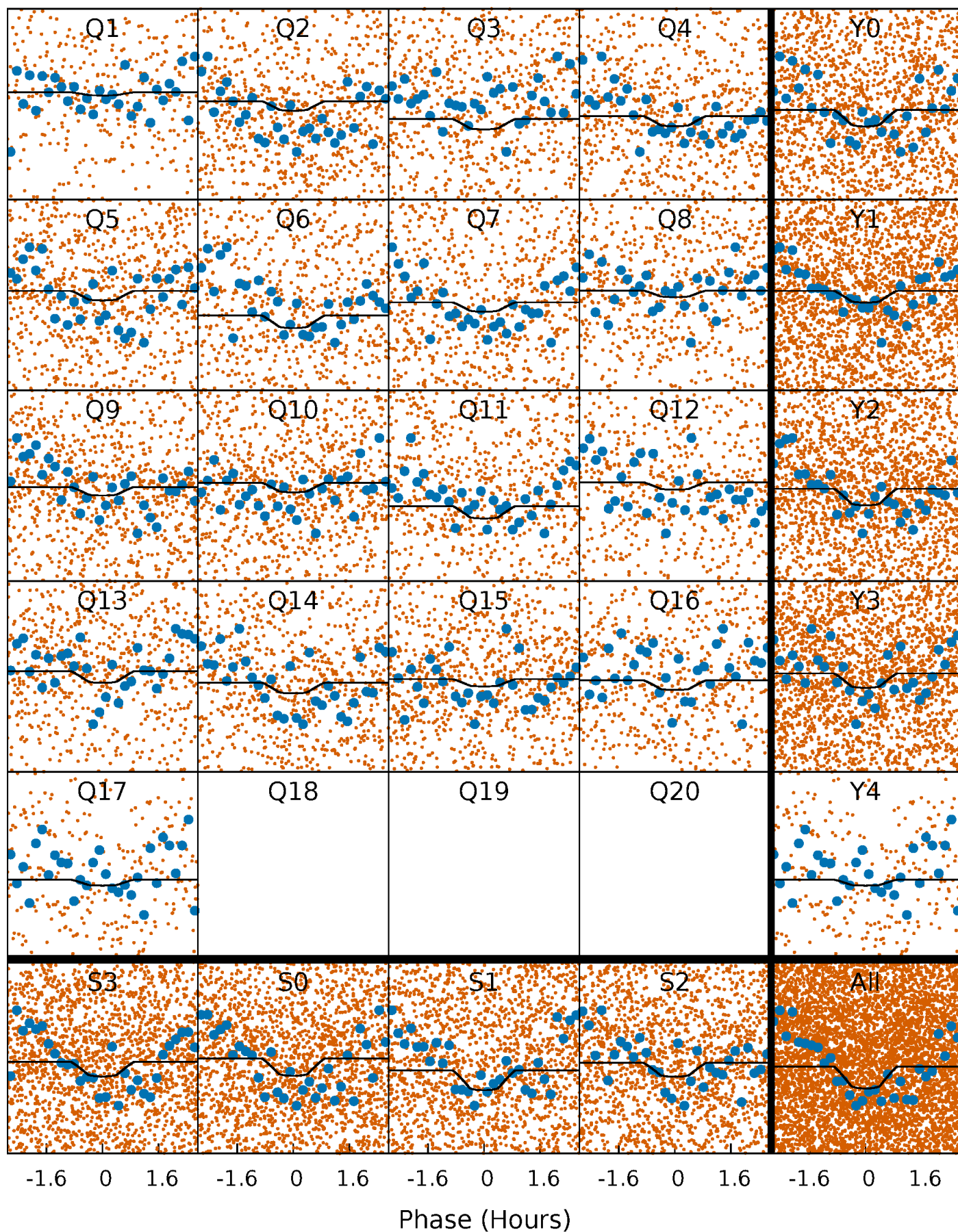
PDC Quarter-Phased Transit Curves

TCE 009175346-02 P= 0.924895 Days $T_0=131.925055$ (BKJD)



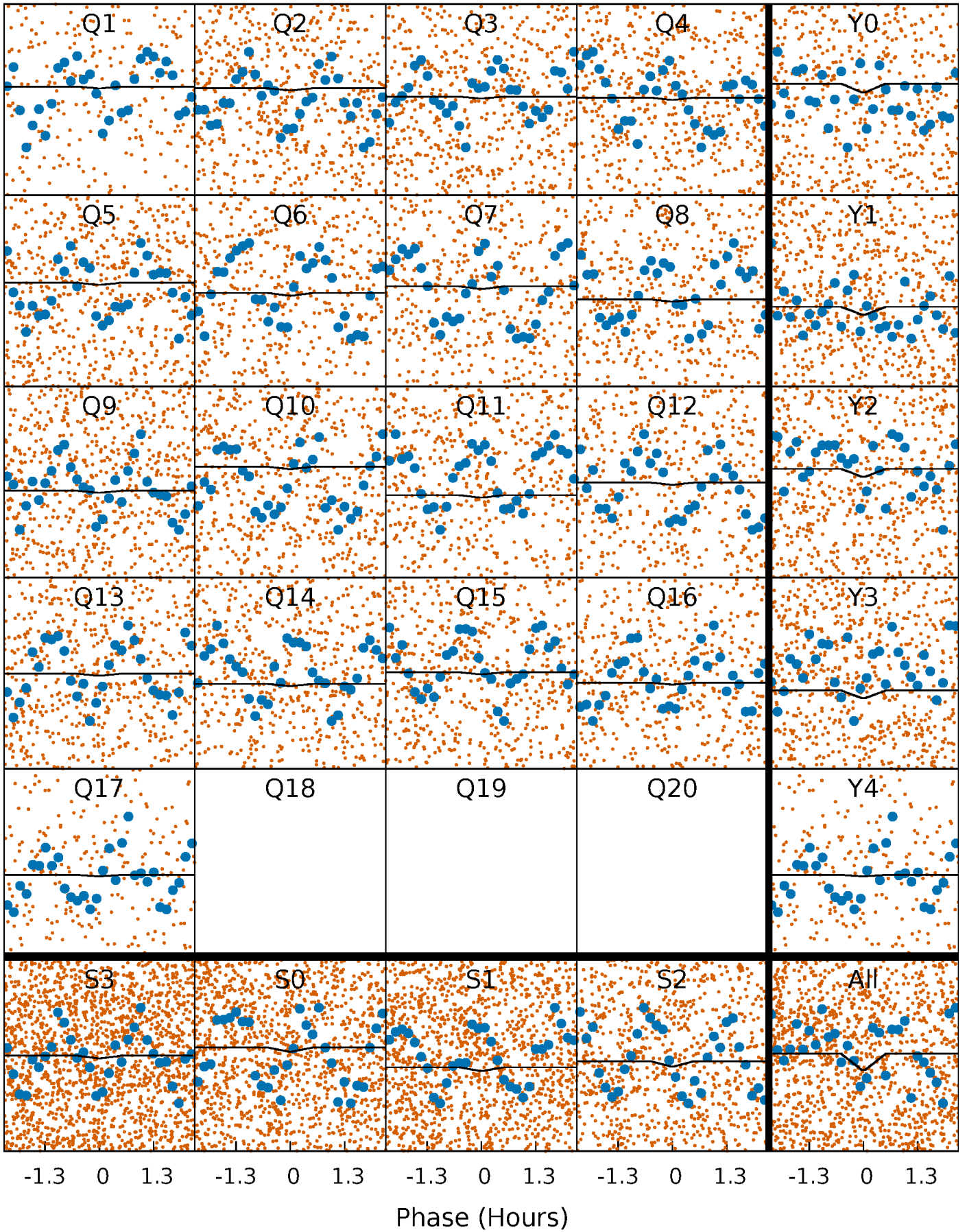
DV Quarter-Phased Transit Curves

TCE 009175346-02 P= 0.924895 Days $T_0=131.925055$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

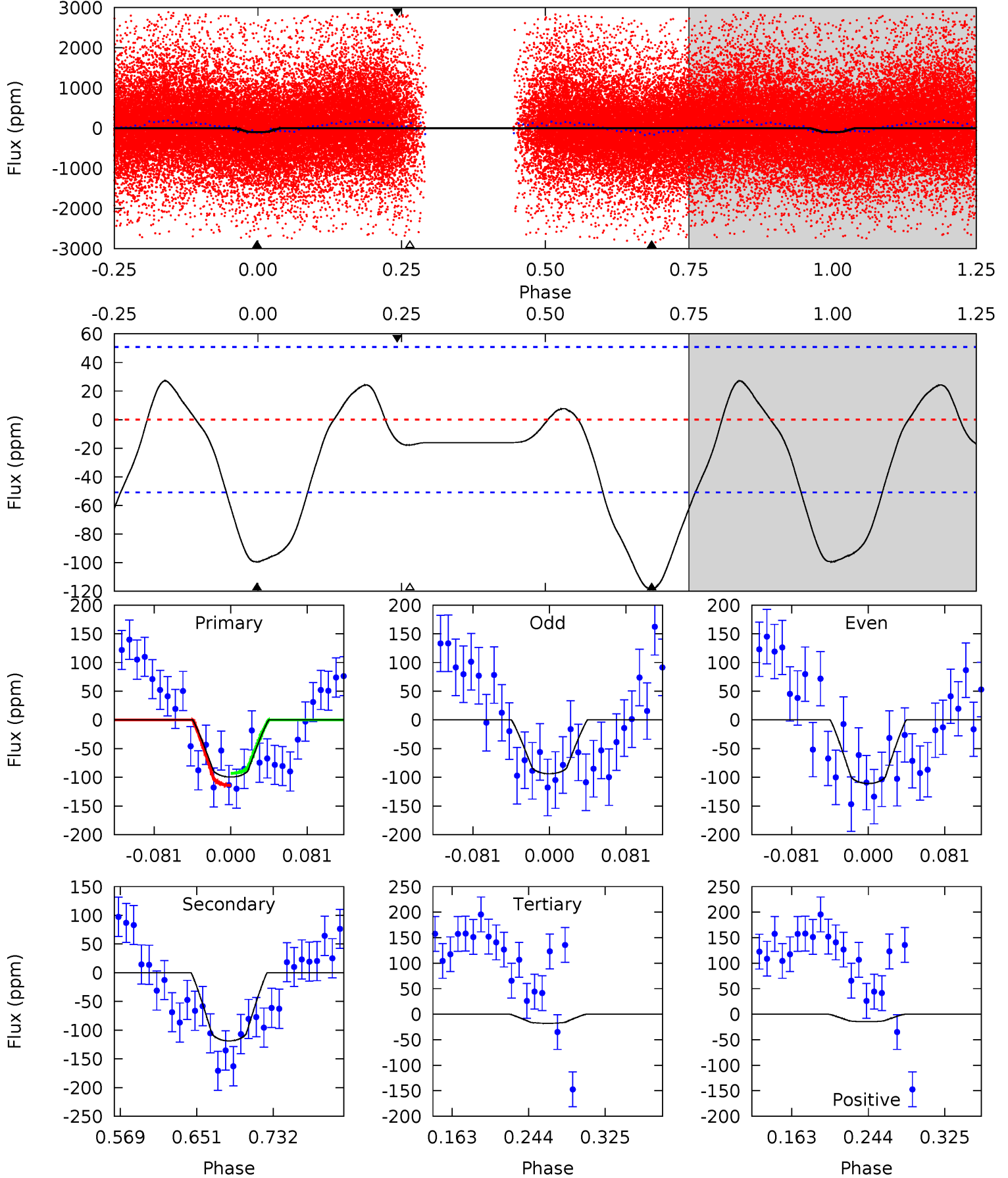
TCE 009175346-02 P= 0.924885 Days $T_0=131.923821$ (BKJD)



DV Model-Shift Uniqueness Test

009175346-02, P = 0.924895 Days, E = 131.000160 Days

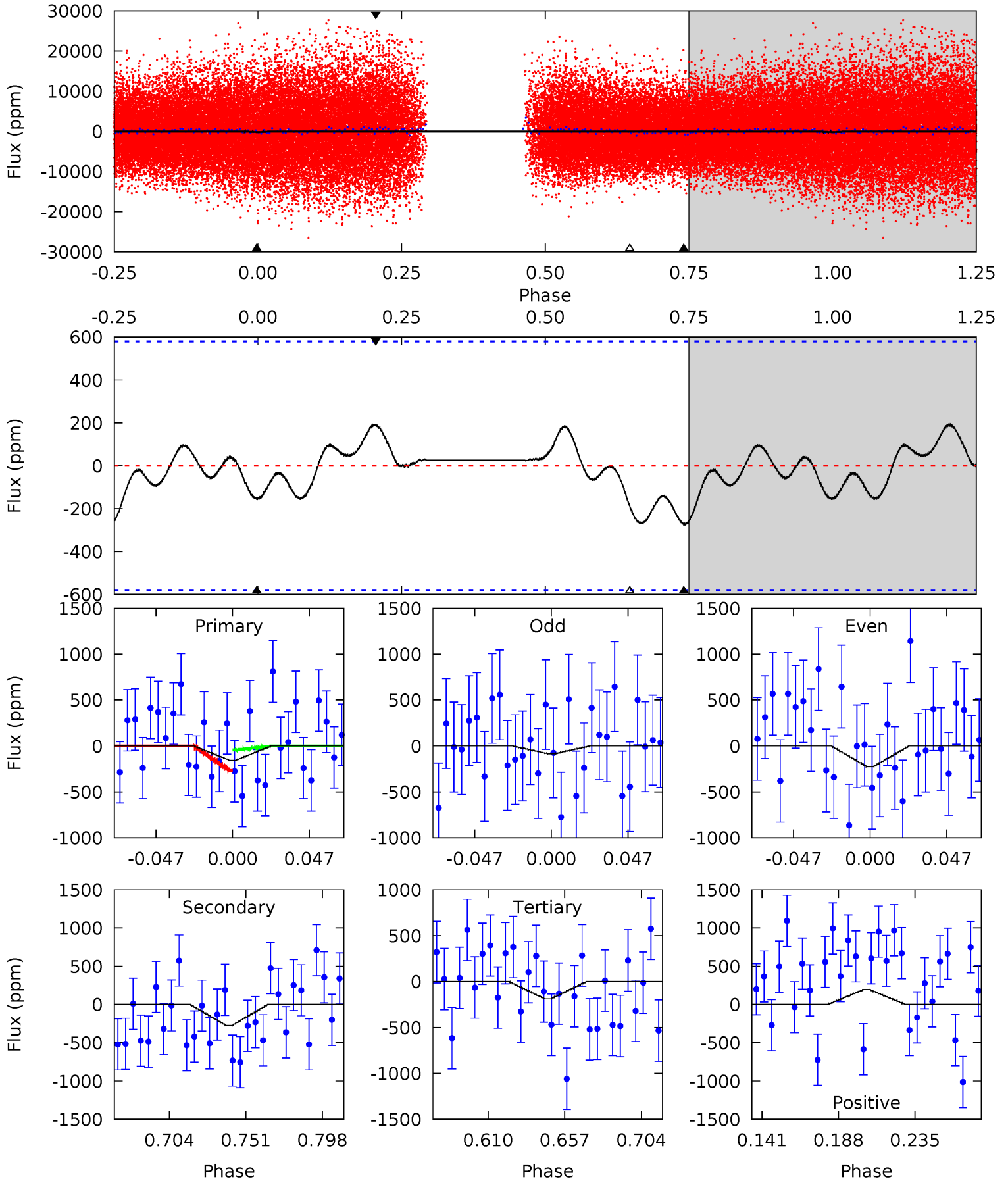
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.02	10.8	1.61	-1.32	4.61	1.74	1.86	7.41	10.3	9.15	12.1	0.79	0.77	0.19	0.96



Alt Model-Shift Uniqueness Test

009175346-02, P = 0.924885 Days, E = 130.998936 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.27	2.23	1.54	1.58	4.72	1.99	0.88	-0.26	-0.31	0.70	0.65	0.58	0.36	0.41	0.89



Stellar Parameters For KIC 009175346

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6356^{+174}_{-213}	$3.769^{+0.527}_{-0.093}$	$-0.220^{+0.250}_{-0.300}$	$2.527^{+0.537}_{-1.342}$	$1.370^{+0.216}_{-0.324}$	$0.120^{+0.714}_{-0.043}$
	+3%/-3%	+14%/-2%	+114%/-136%	+21%/-53%	+16%/-24%	+597%/-36%
Source	PHO1	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 009175346-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-119±11	$2.46^{+2.13}_{-1.54}$	4177^{+305}_{-591}	6437^{+5939}_{-1647}	$4.632^{+29.597}_{-3.238}$
Alt.	-274±123	$2.98^{+2.30}_{-1.62}$	4173^{+327}_{-572}	7107^{+5768}_{-1989}	$6.250^{+32.088}_{-4.331}$

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

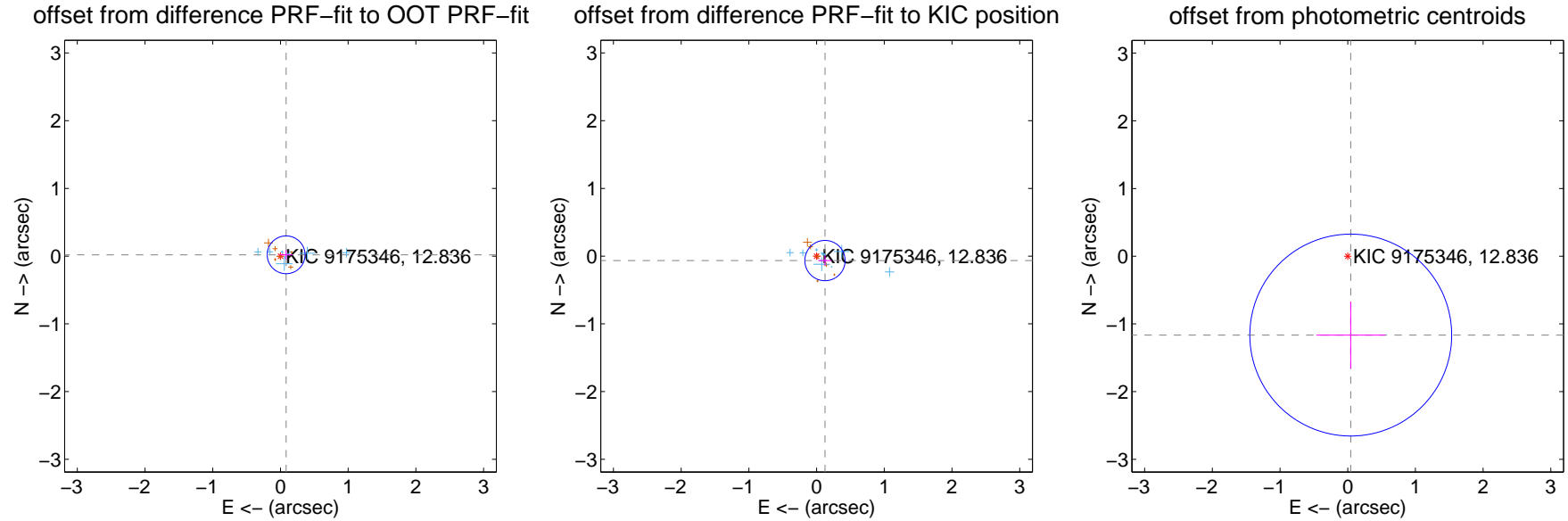
DV Centroid Data

Supplemental centroid analysis for 009175346-02. Kepler magnitude: 12.84. Transit SNR 3.54

There are 11 quarters with good PRF difference image offsets

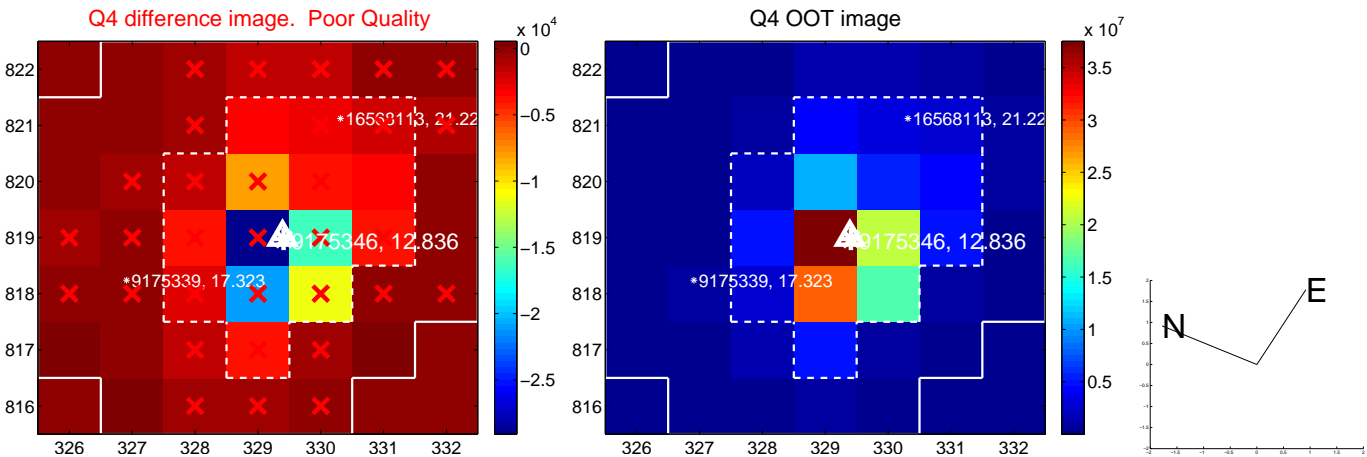
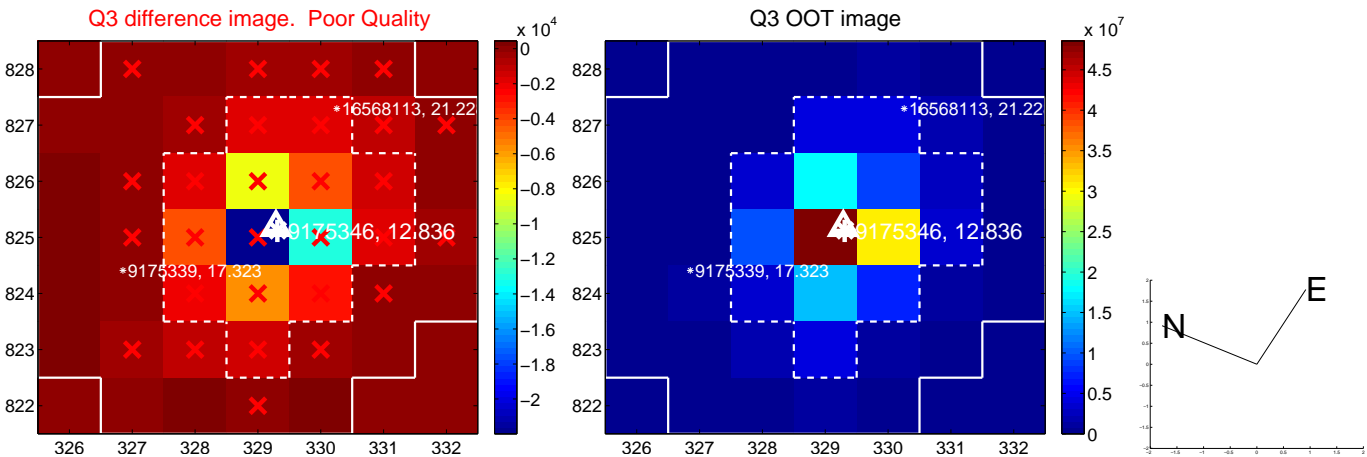
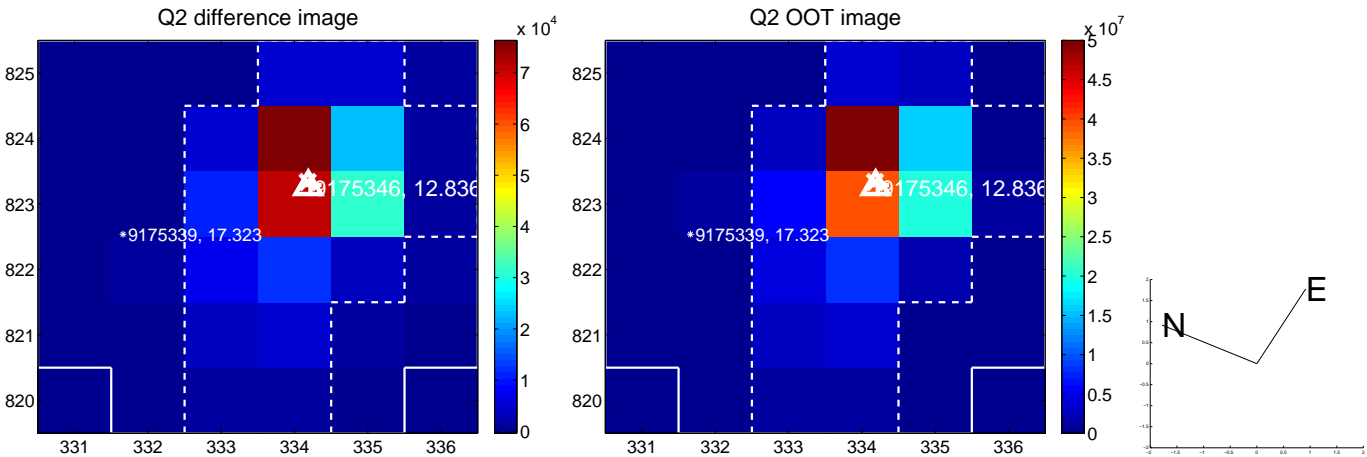
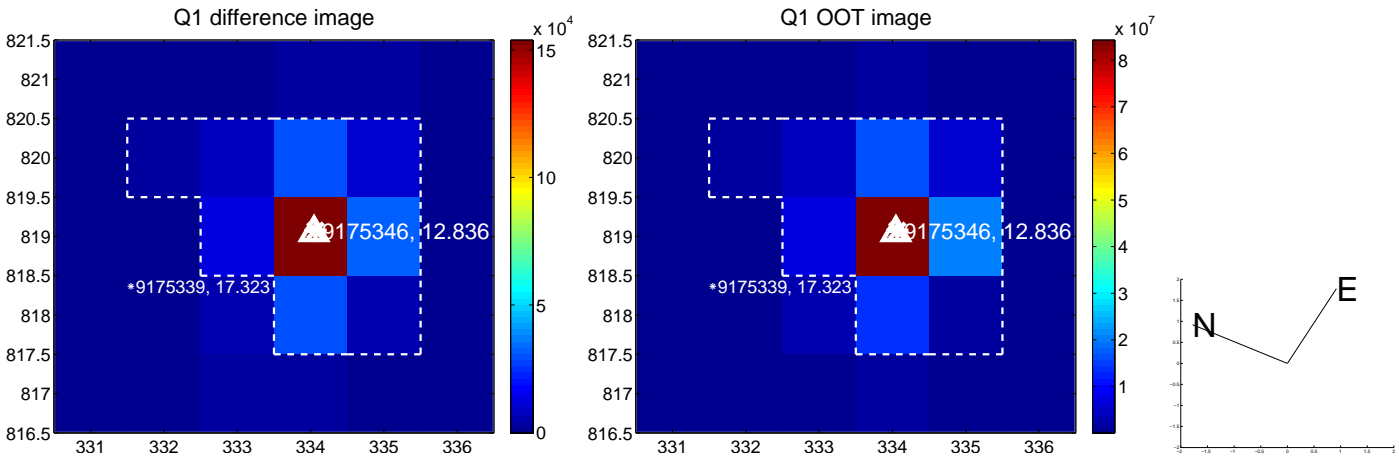
The direct PRF centroid is offset from the target star catalog position by about 0.02 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.086 ± 0.093	0.92	-0.084 ± 0.095	0.020 ± 0.069
PRF-fit source offset from KIC position	0.140 ± 0.099	1.41	-0.124 ± 0.099	-0.065 ± 0.076
photometric centroid source offset	1.17 ± 0.50	2.35	-0.04 ± 0.51	-1.16 ± 0.50

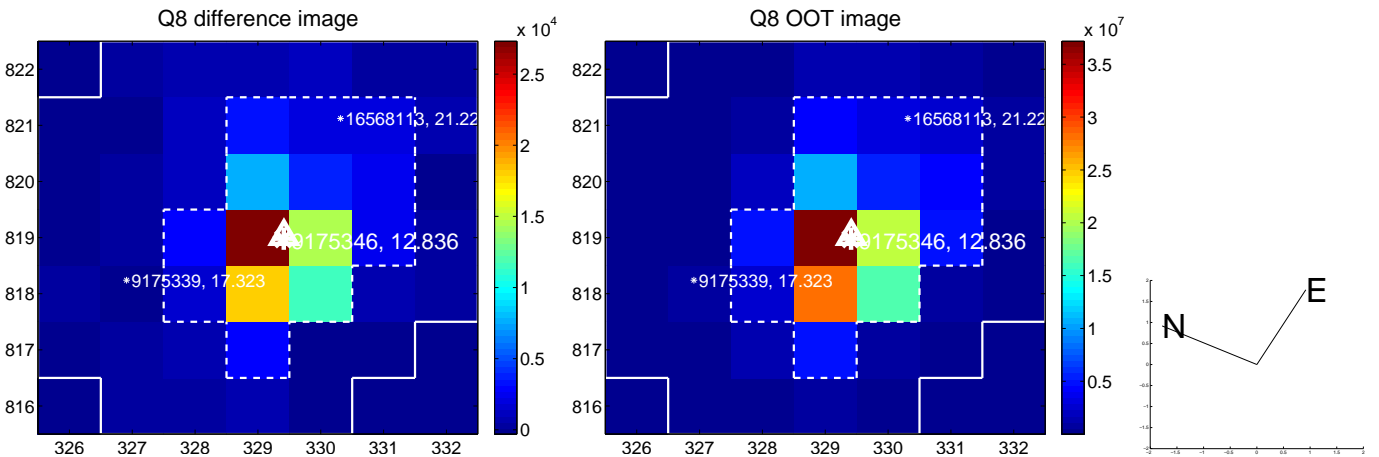
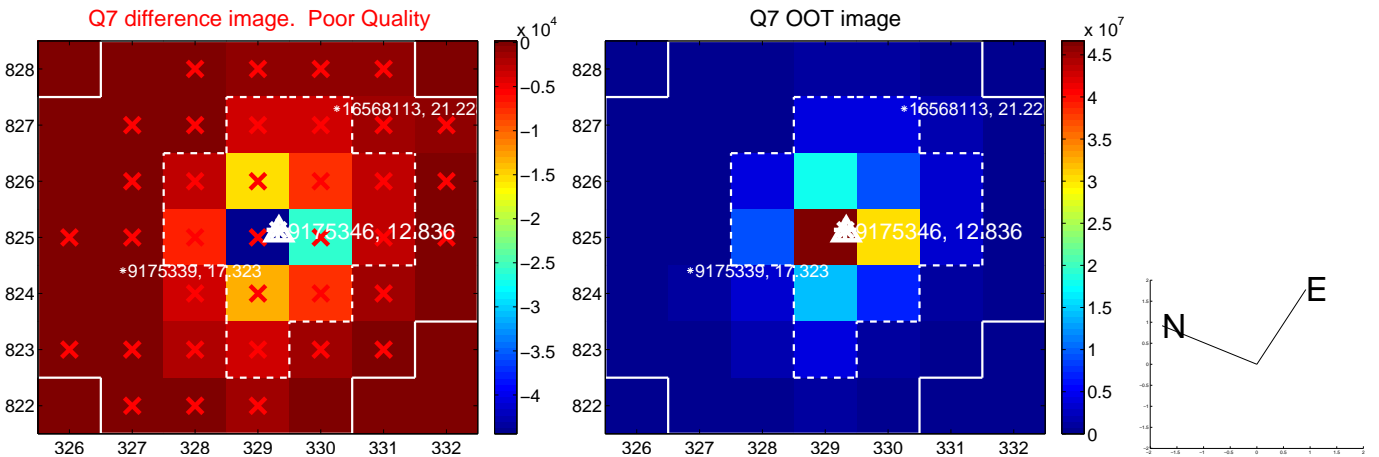
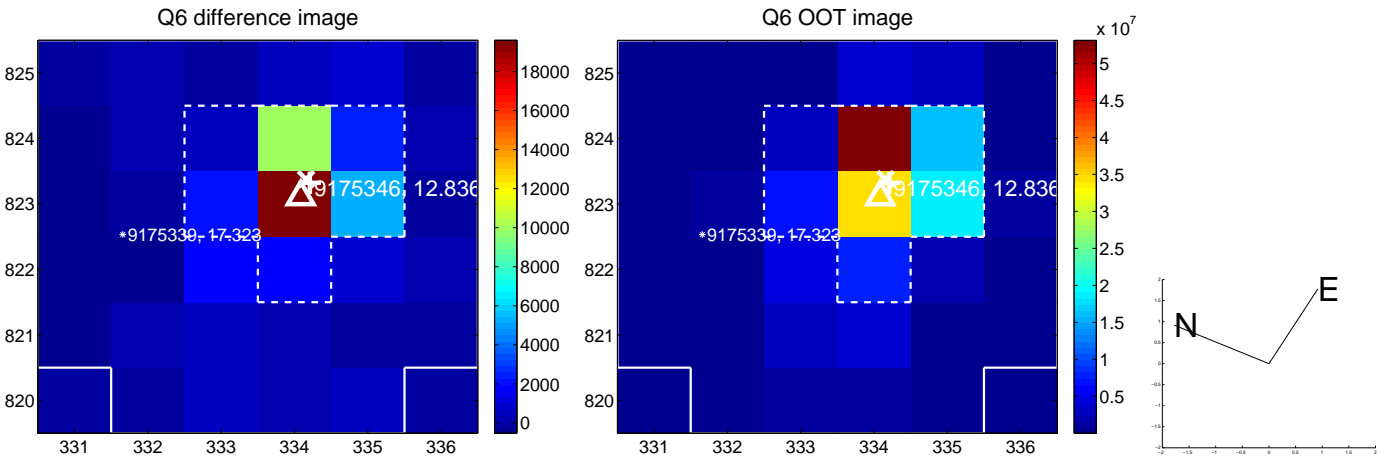
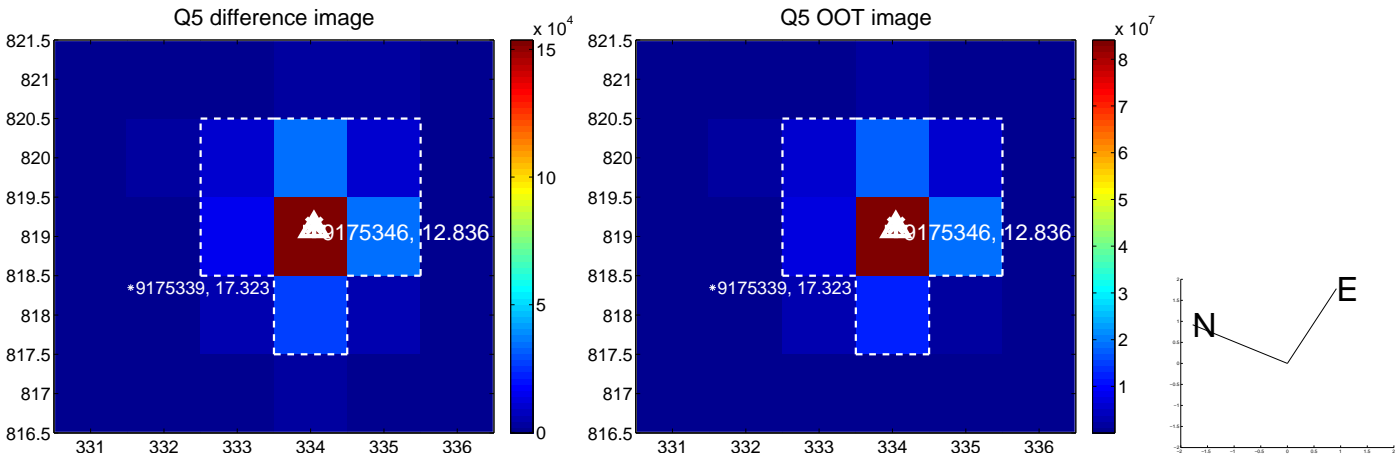


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

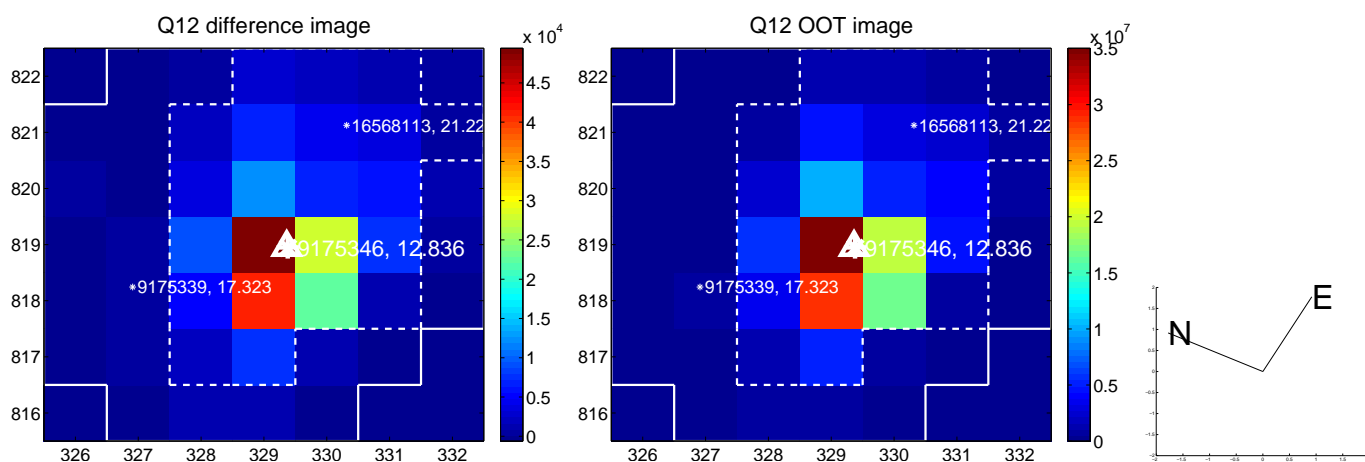
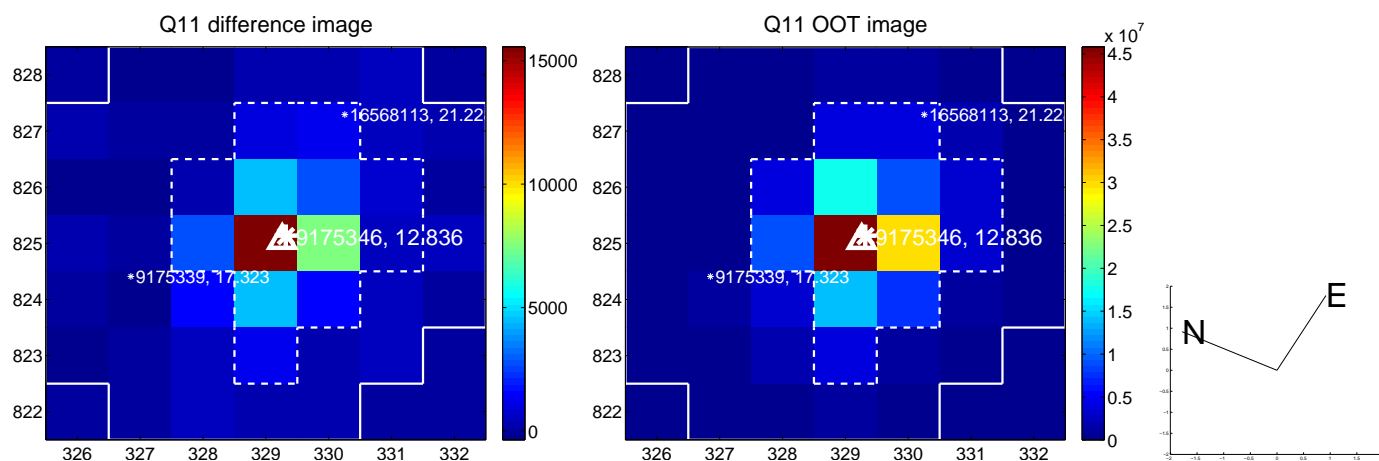
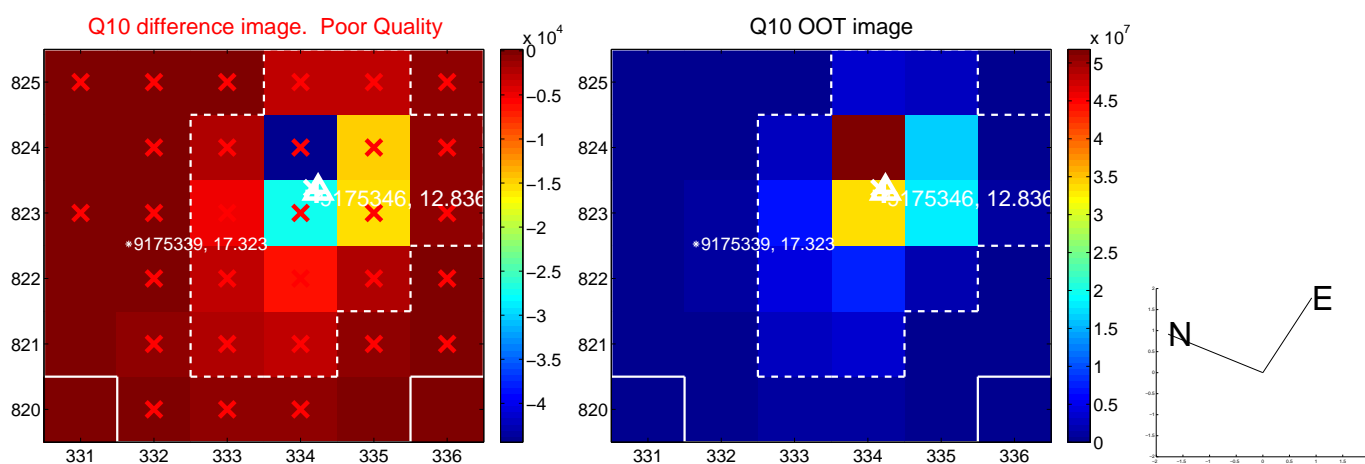
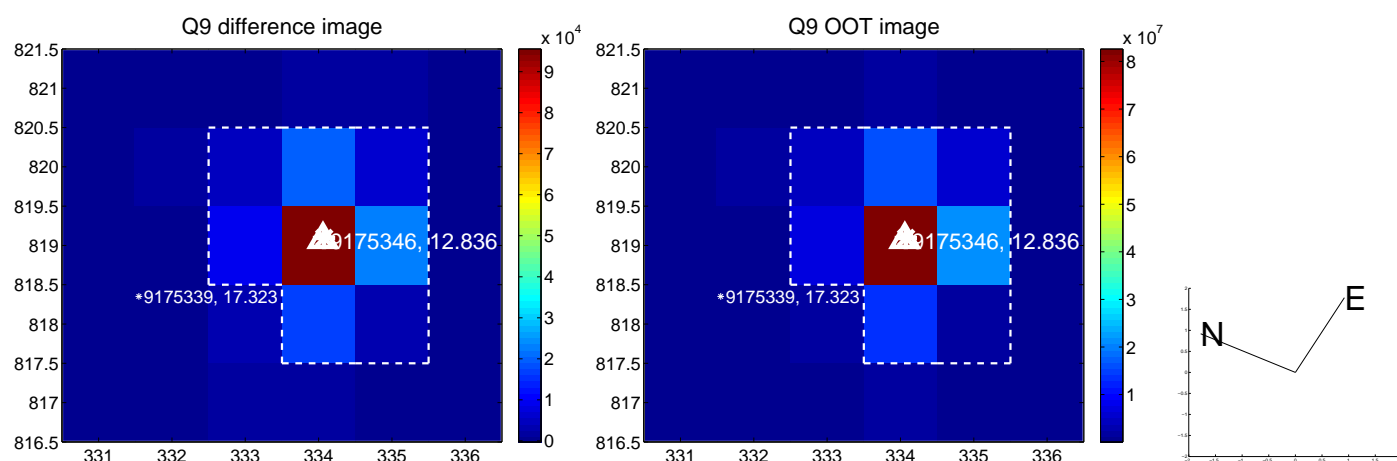
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



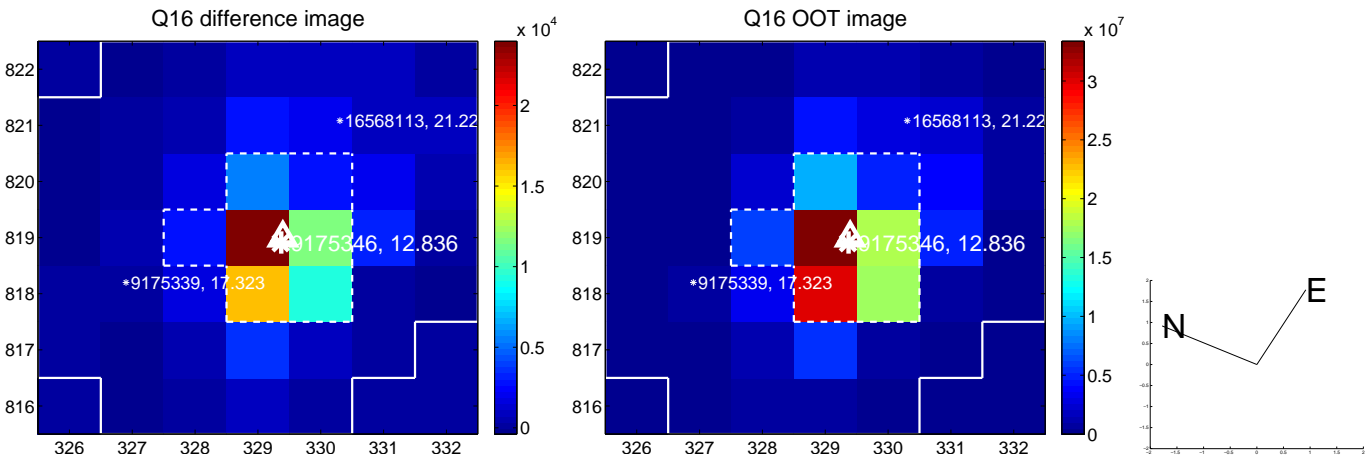
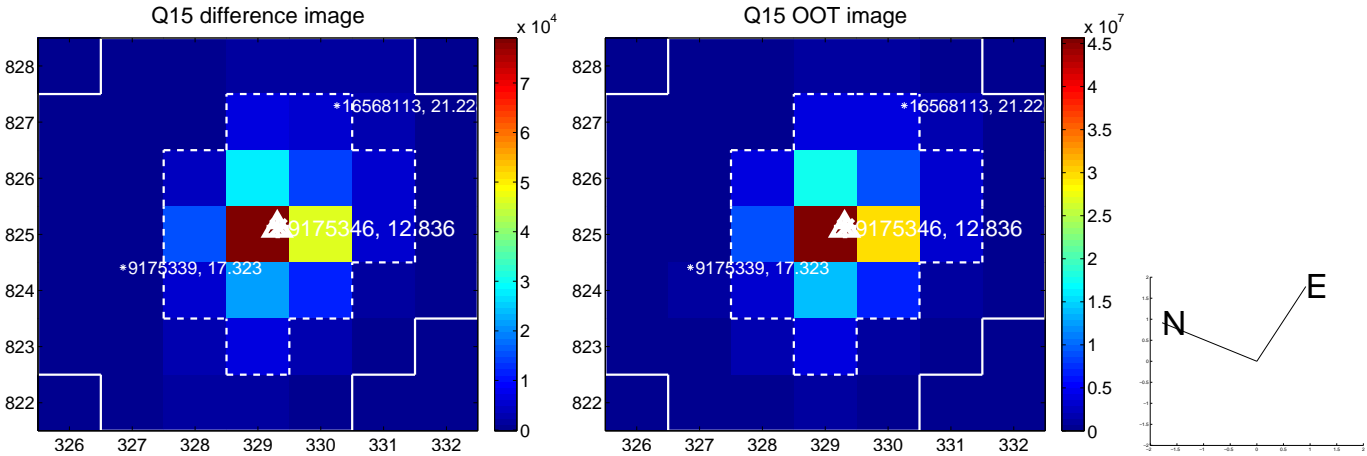
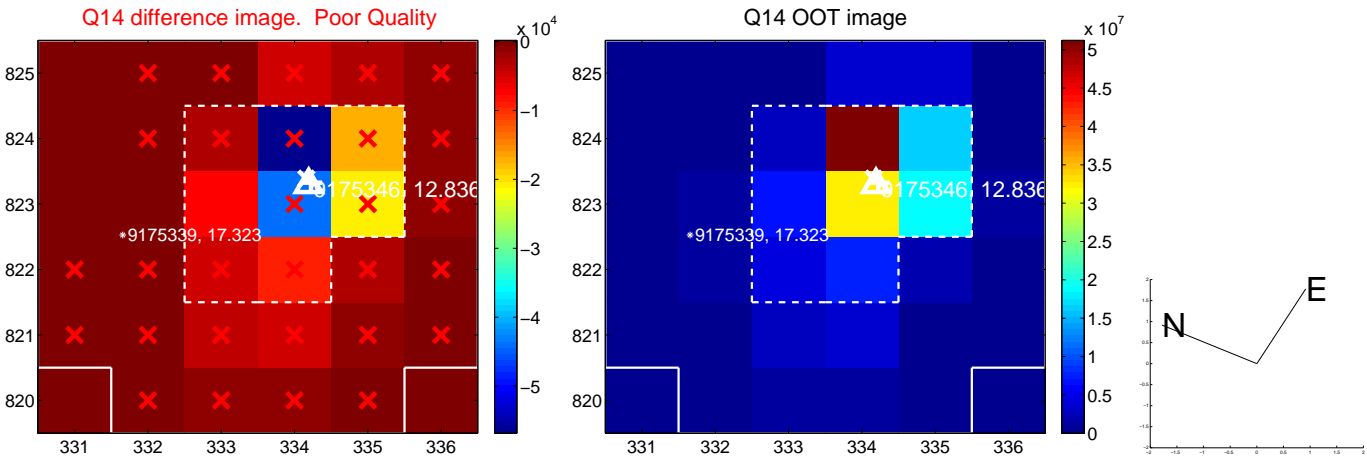
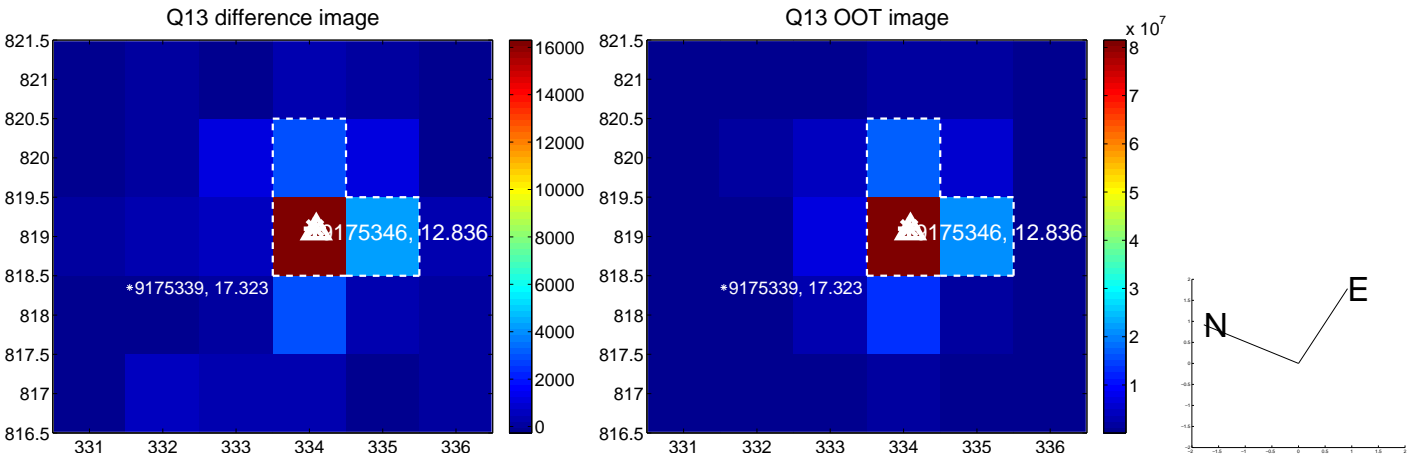
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



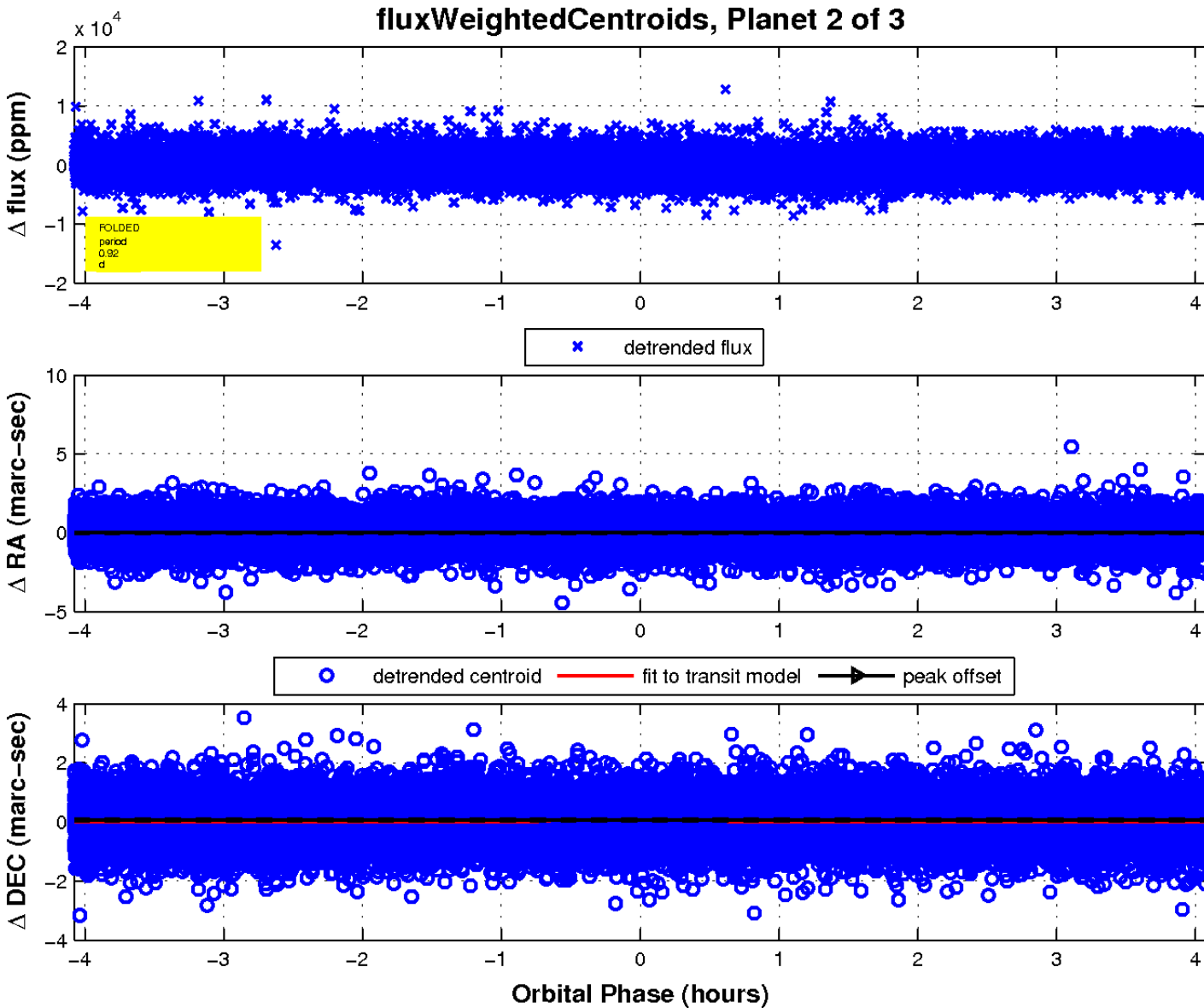
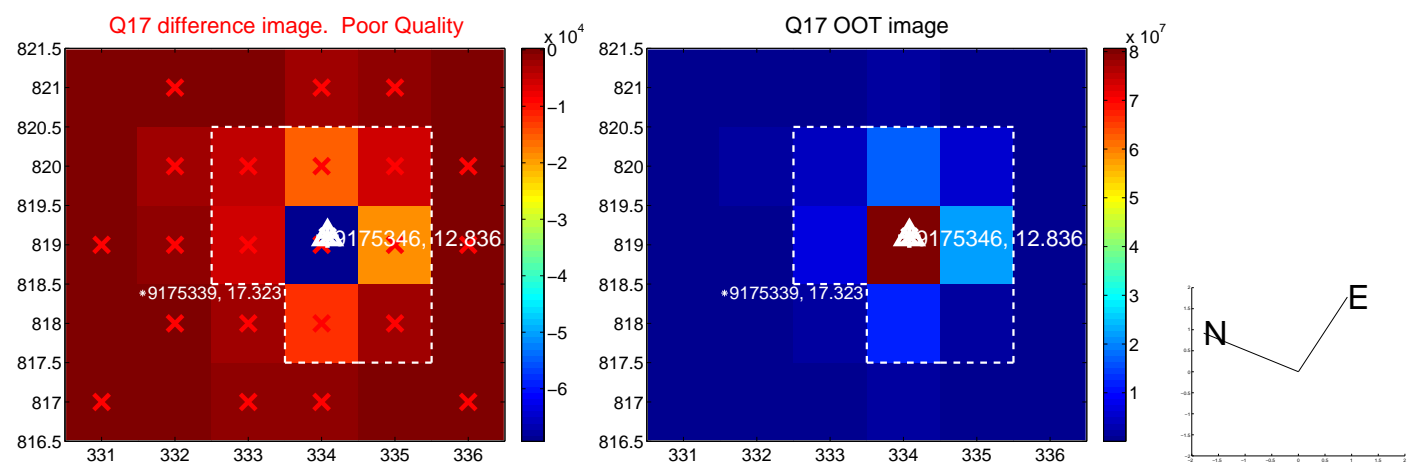
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

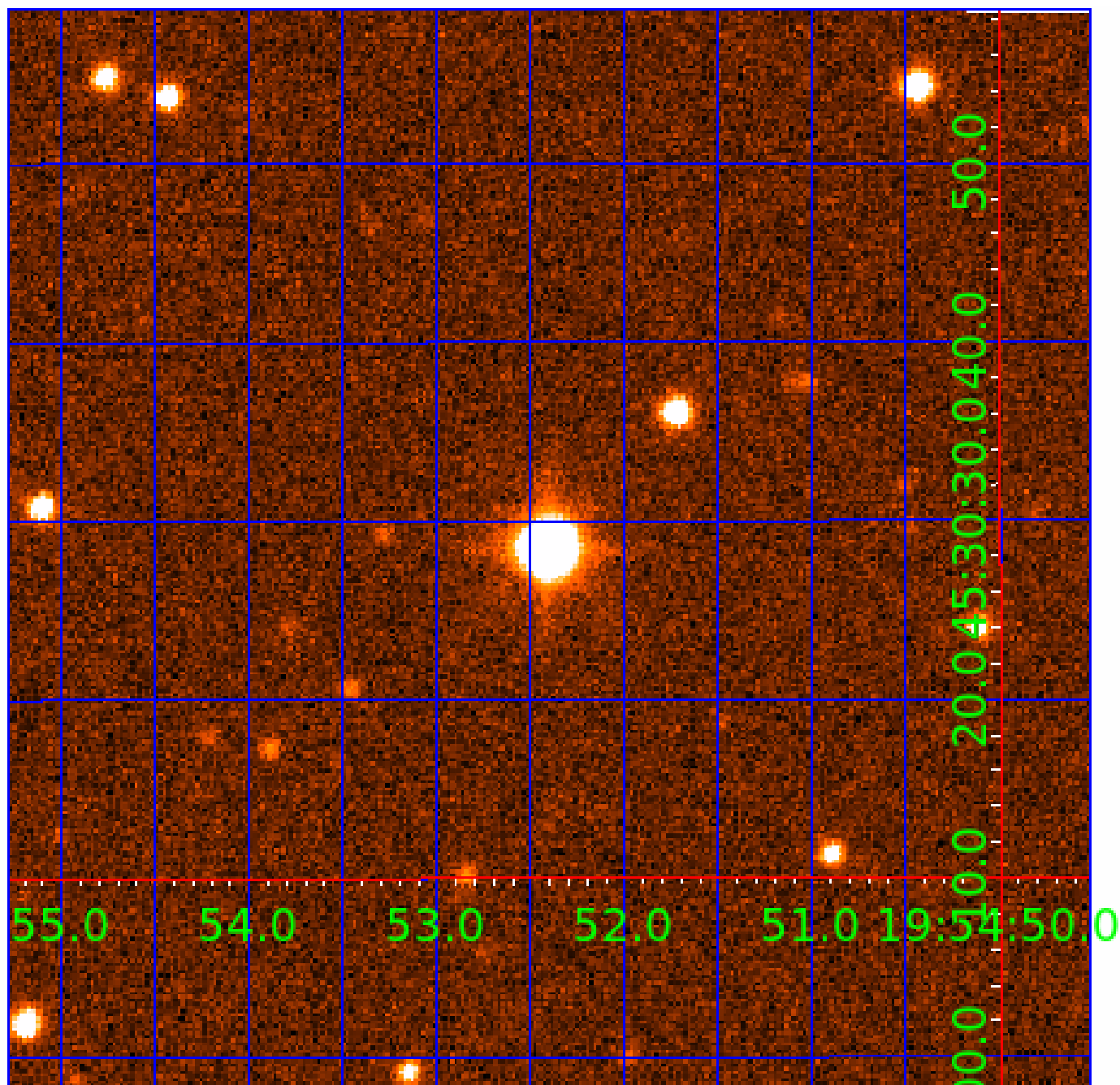


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 009175346

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})
009175346-01	OBS	No	0.924851	132.301020	11.4	1.433	12.5	0.7	2.53	6356	0.96	21941.75
009175346-02	OBS	No	0.924895	131.925055	62.5	1.359	9.4	3.5	2.53	6356	2.35	21940.35
009175346-03	OBS	No	0.924821	131.682073	316.5	6.841	10.6	8.7	2.53	6356	6.01	21942.69

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009175346-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
009175346-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD
009175346-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—LPP_ALT—SAME_NTL_PERIOD

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

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

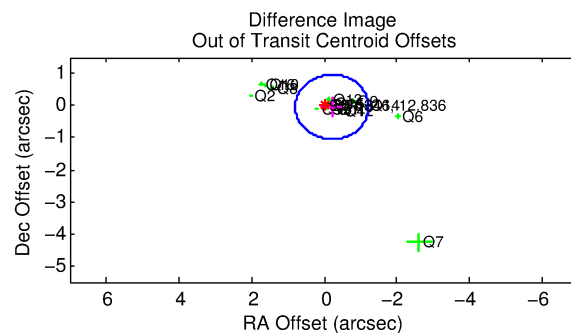
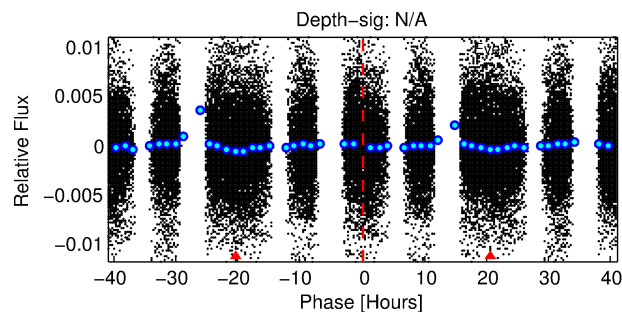
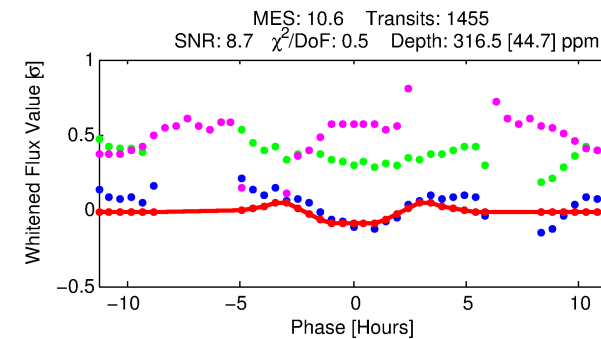
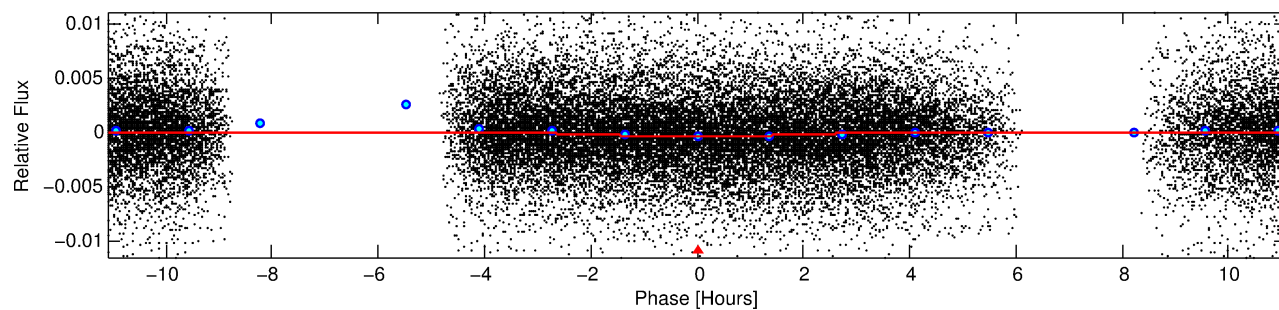
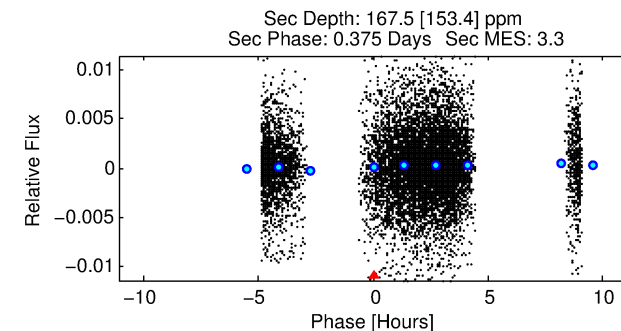
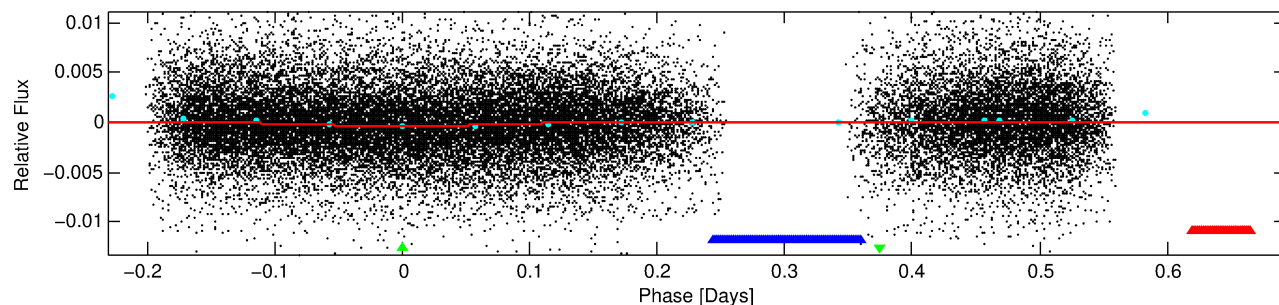
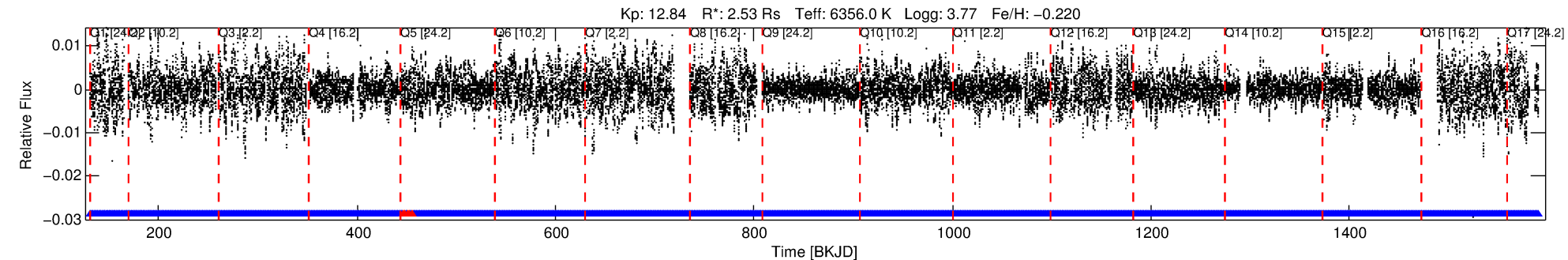
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009175346-03

No Significant Match Found

DV One-Page Summary

KIC: 9175346 Candidate: 3 of 3 Period: 0.925 d



DV Fit Results:

Period = 0.92482 [0.00001] d
Epoch = 131.6821 [0.0045] BKJD
Rp/R* = 0.0218 [0.0018]
a/R* = 1.04 [0.00]
b = 0.98 [0.00]
Seff = 21942.69 [19598.58]
Teq = 3103 [693] K
Rp = 6.01 [3.23] Re
a = 0.0206 [0.0111] AU
Ag = 1.09 [1.39] [0.06σ]
Teff = 4899 [1152] K [1.34σ]

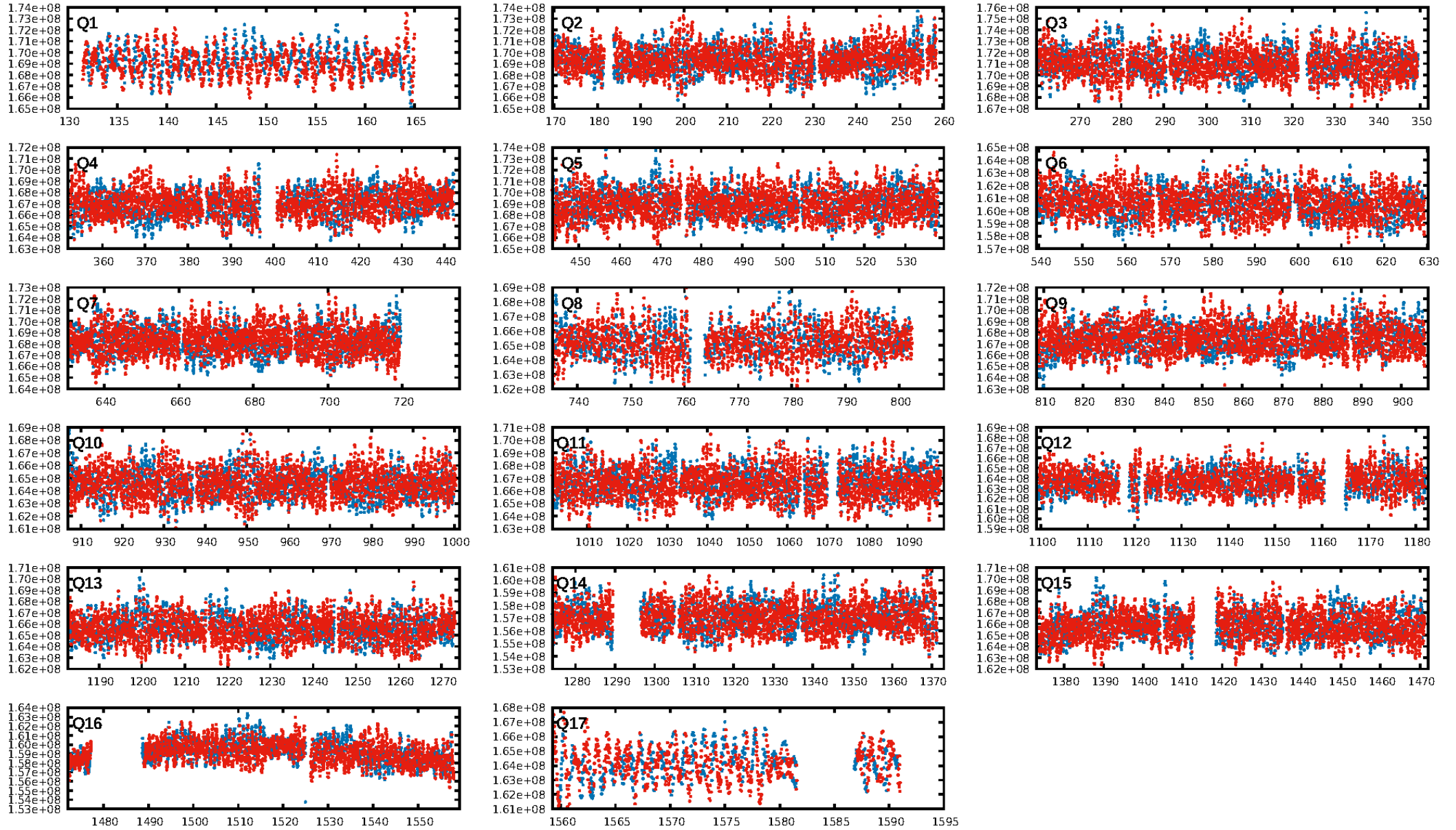
DV Diagnostic Results:

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 [1383/1389]
GhostDiagnostic-chr: 0.6453
Centroid-sig: 0.0%
Centroid-so: 0.131 arcsec [1.96σ]
OotOffset-rm: 0.215 arcsec [0.64σ]
KicOffset-rm: 0.209 arcsec [0.65σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.59 [10/17]
DiffImageOverlap-fno: 0.00 [0/17]

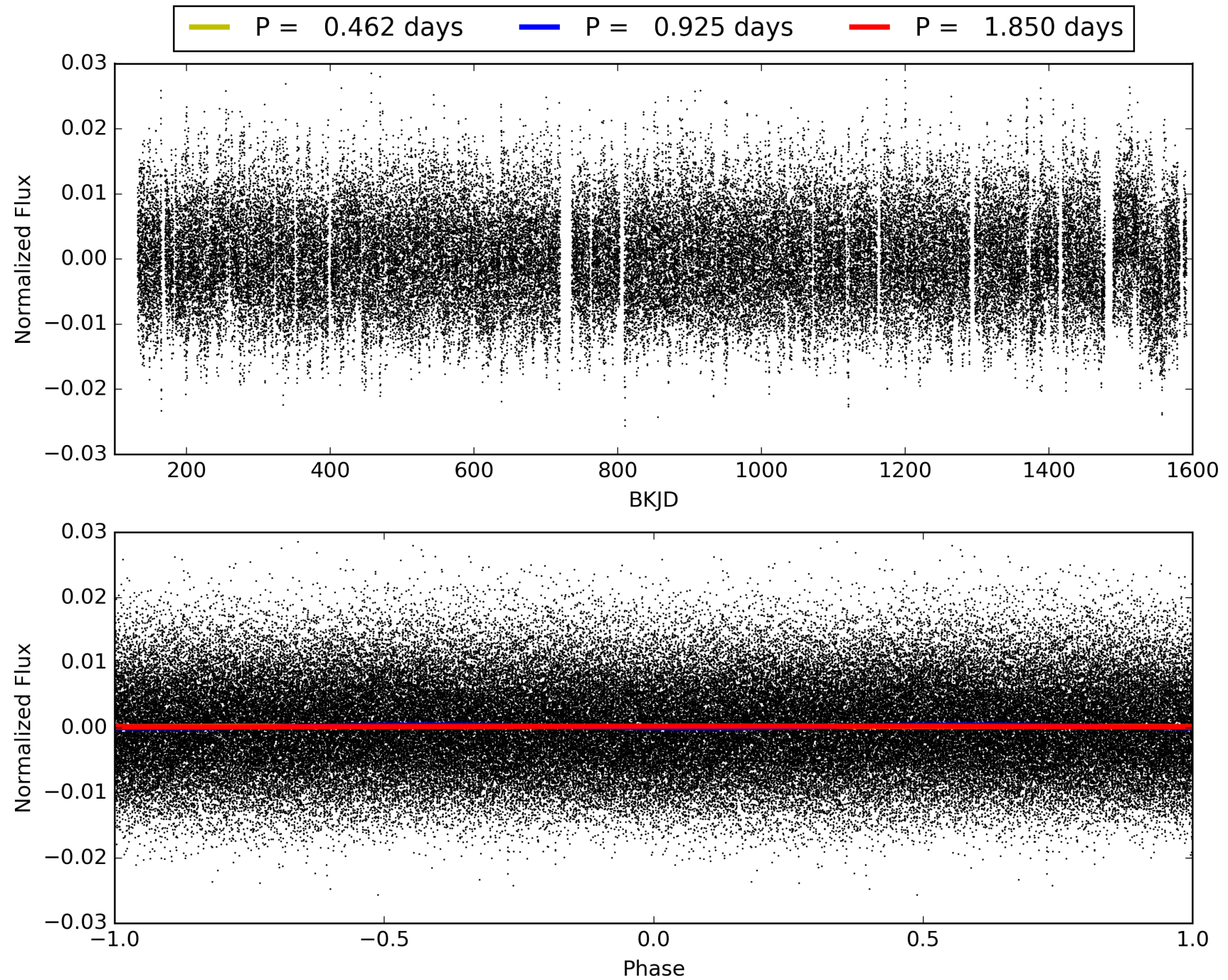
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 23:44:04 Z

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

TCE 009175346-03, PDC Light Curves

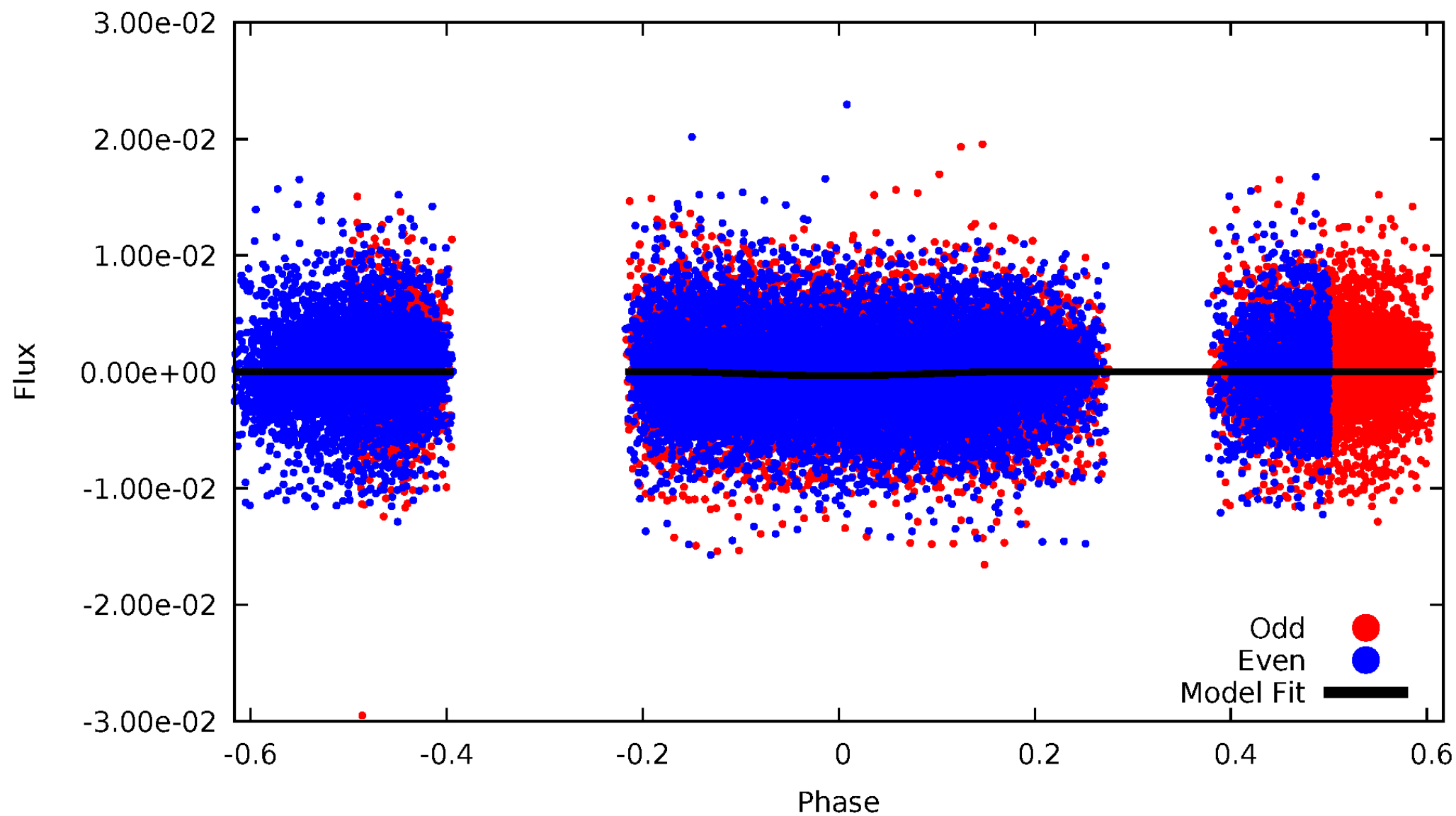


TCE 009175346-03



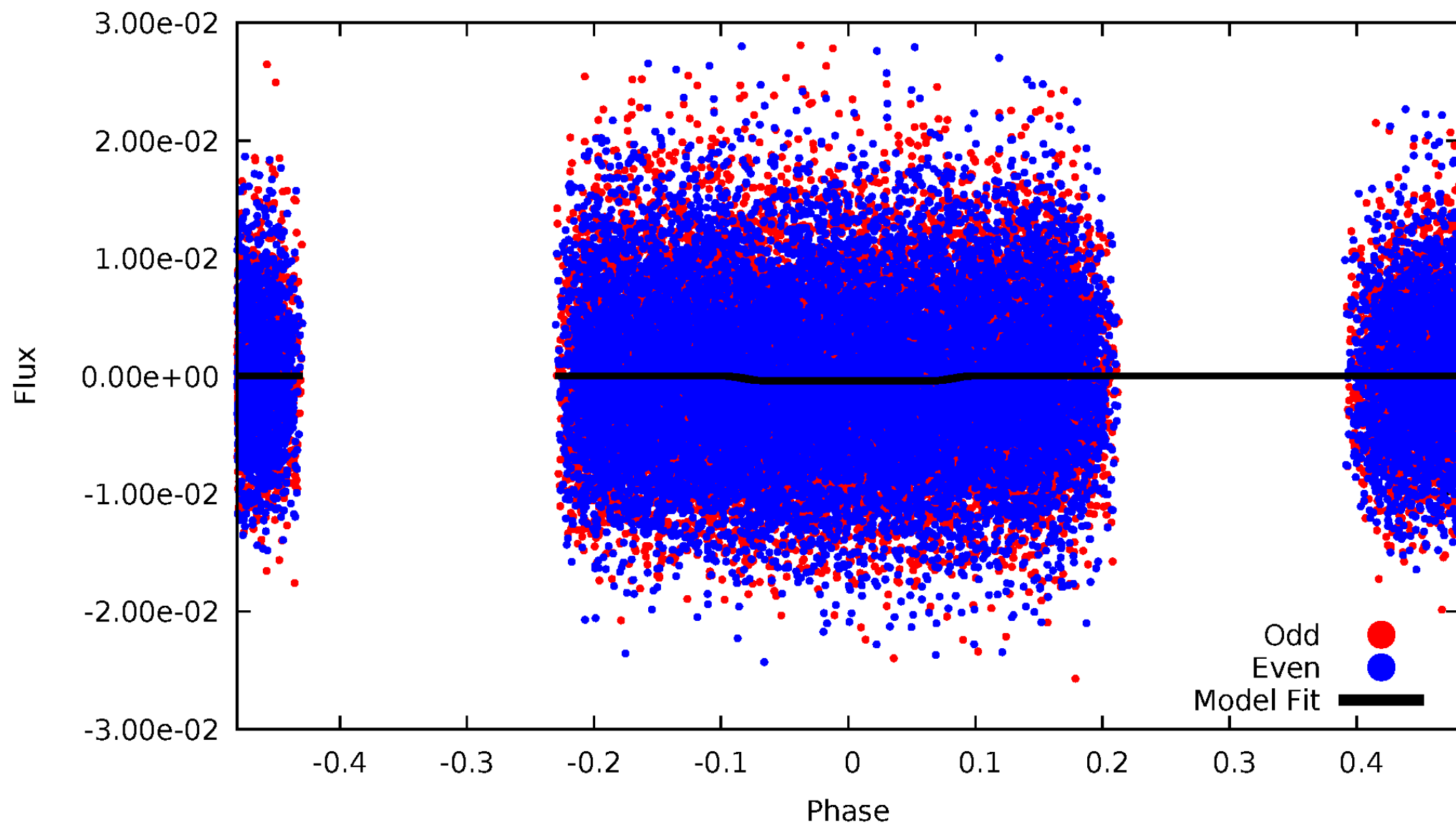
DV Odd/Even

TCE 009175346-03



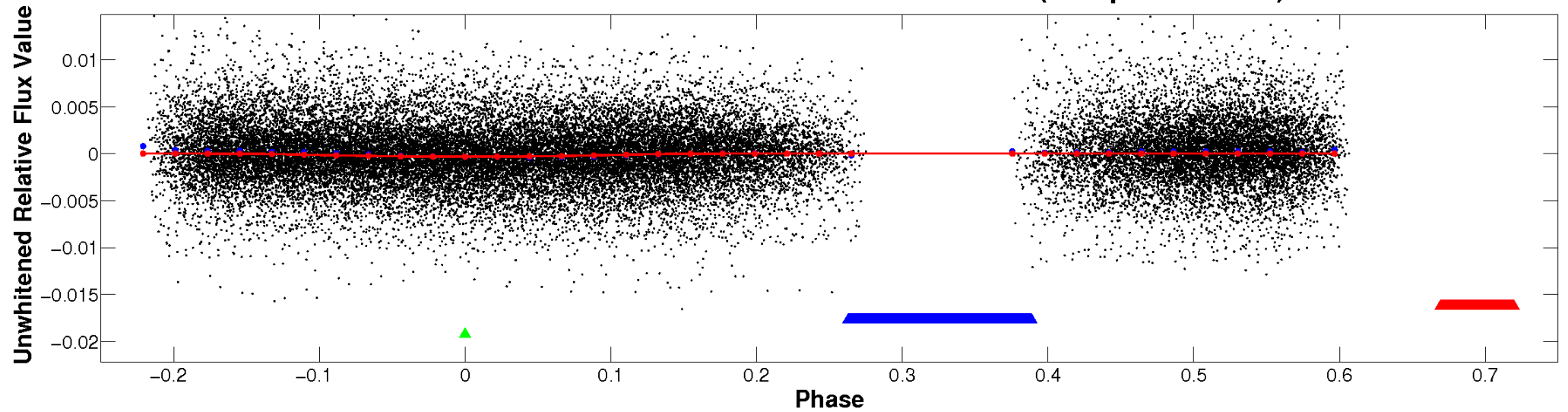
ALT Odd/Even

TCE 009175346-03

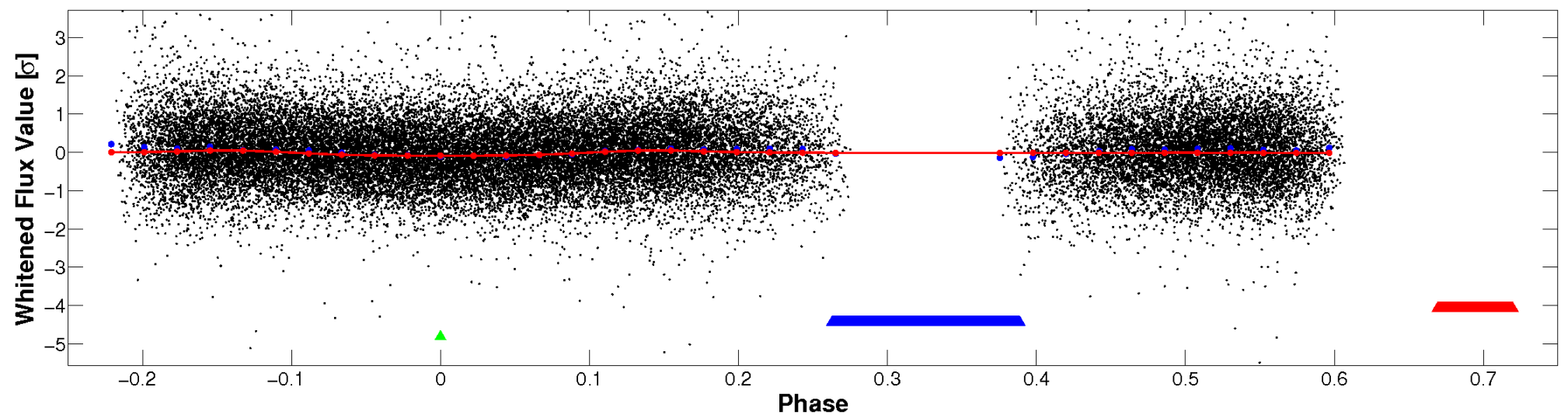


Non-Whitened Vs. Whitened Light Curve

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

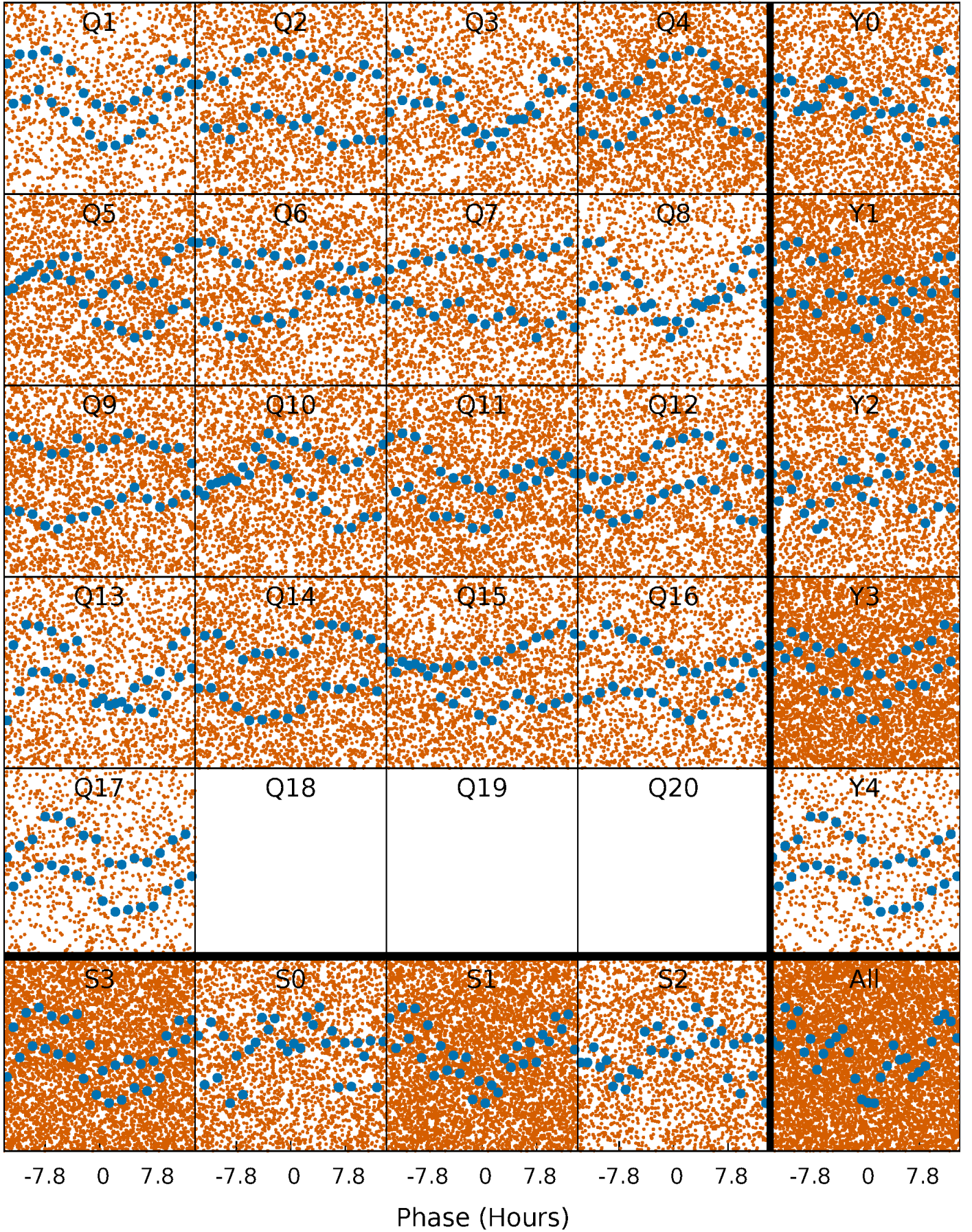


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



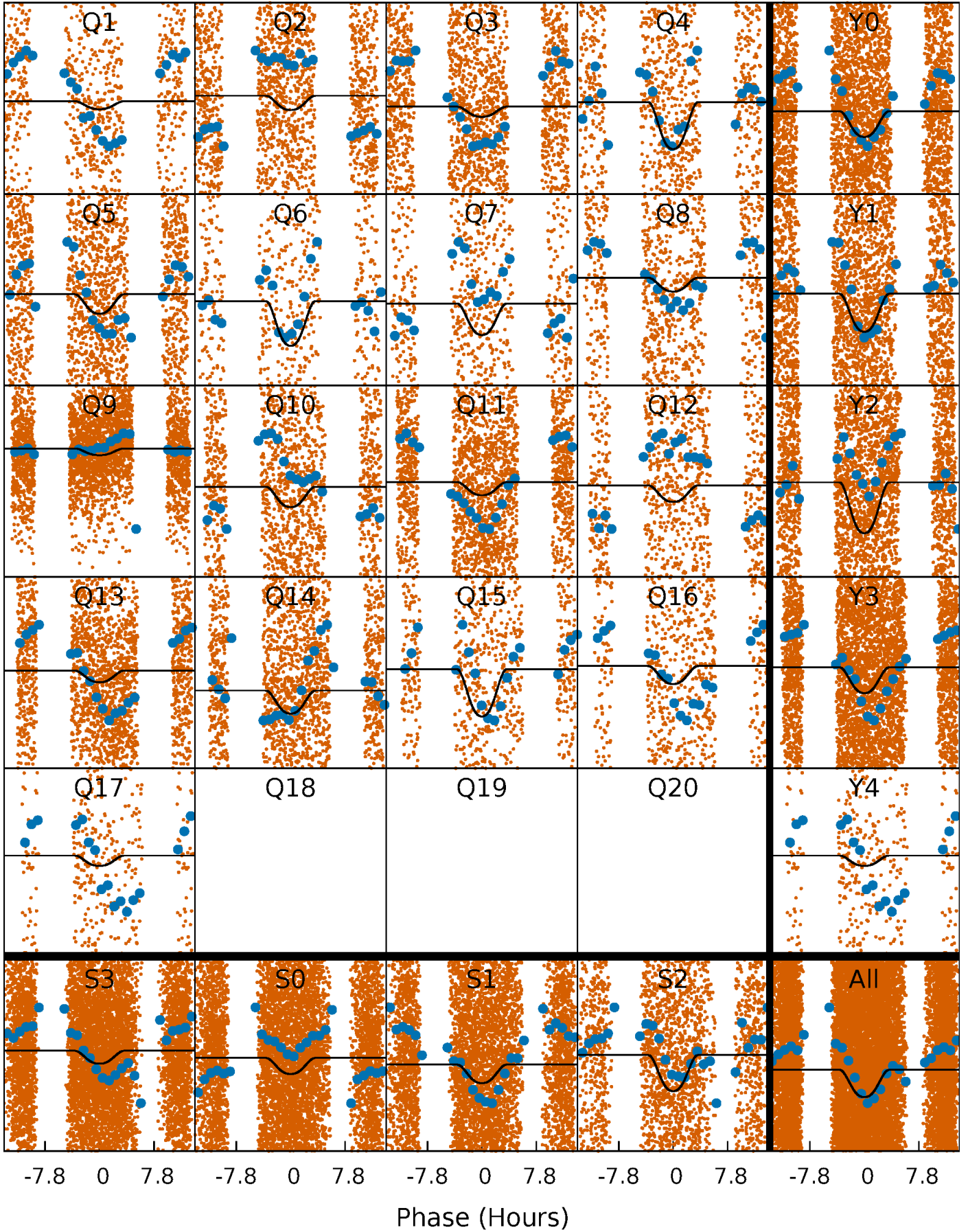
PDC Quarter-Phased Transit Curves

TCE 009175346-03 P= 0.924821 Days $T_0=131.682073$ (BKJD)



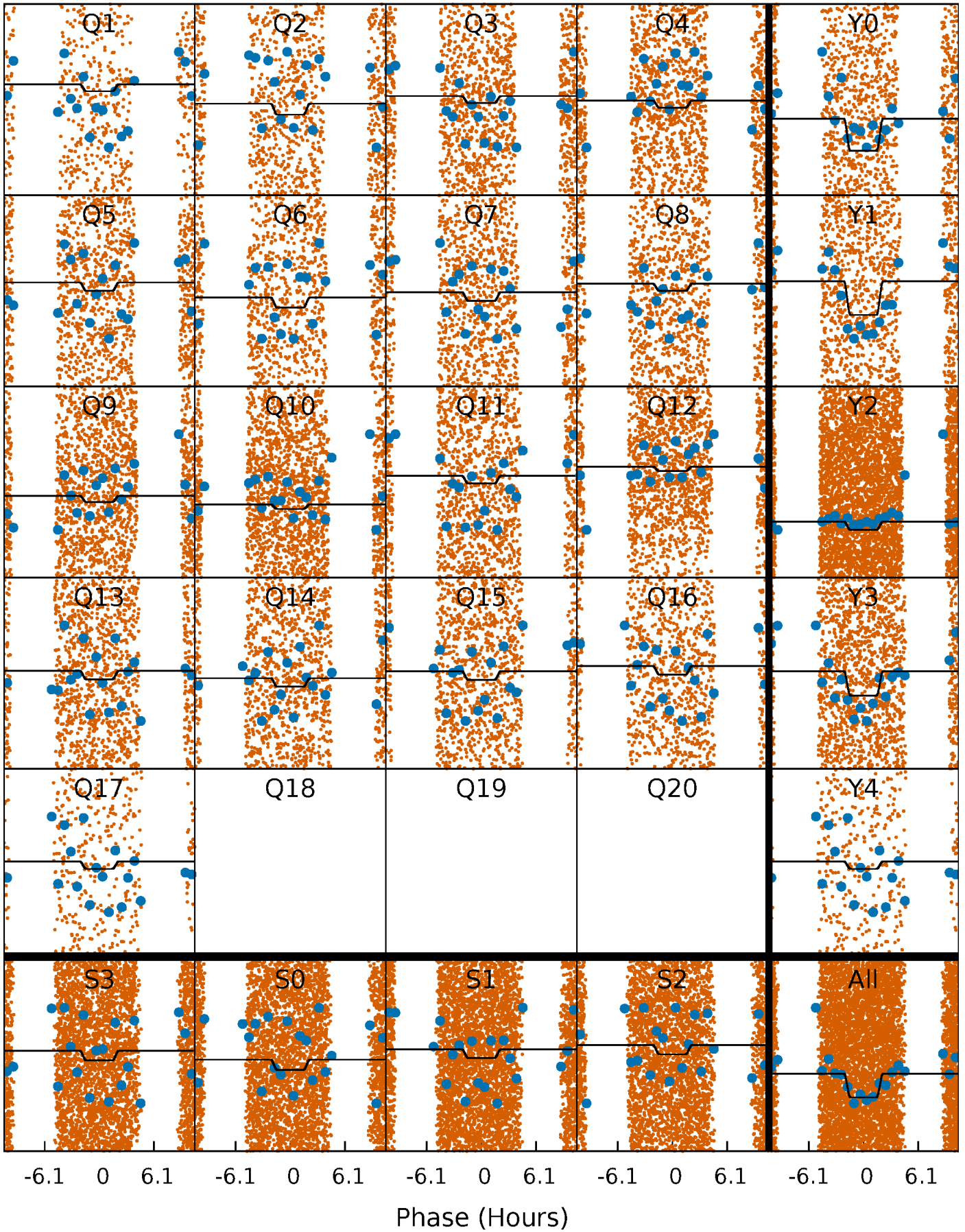
DV Quarter-Phased Transit Curves

TCE 009175346-03 P= 0.924821 Days $T_0=131.682073$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

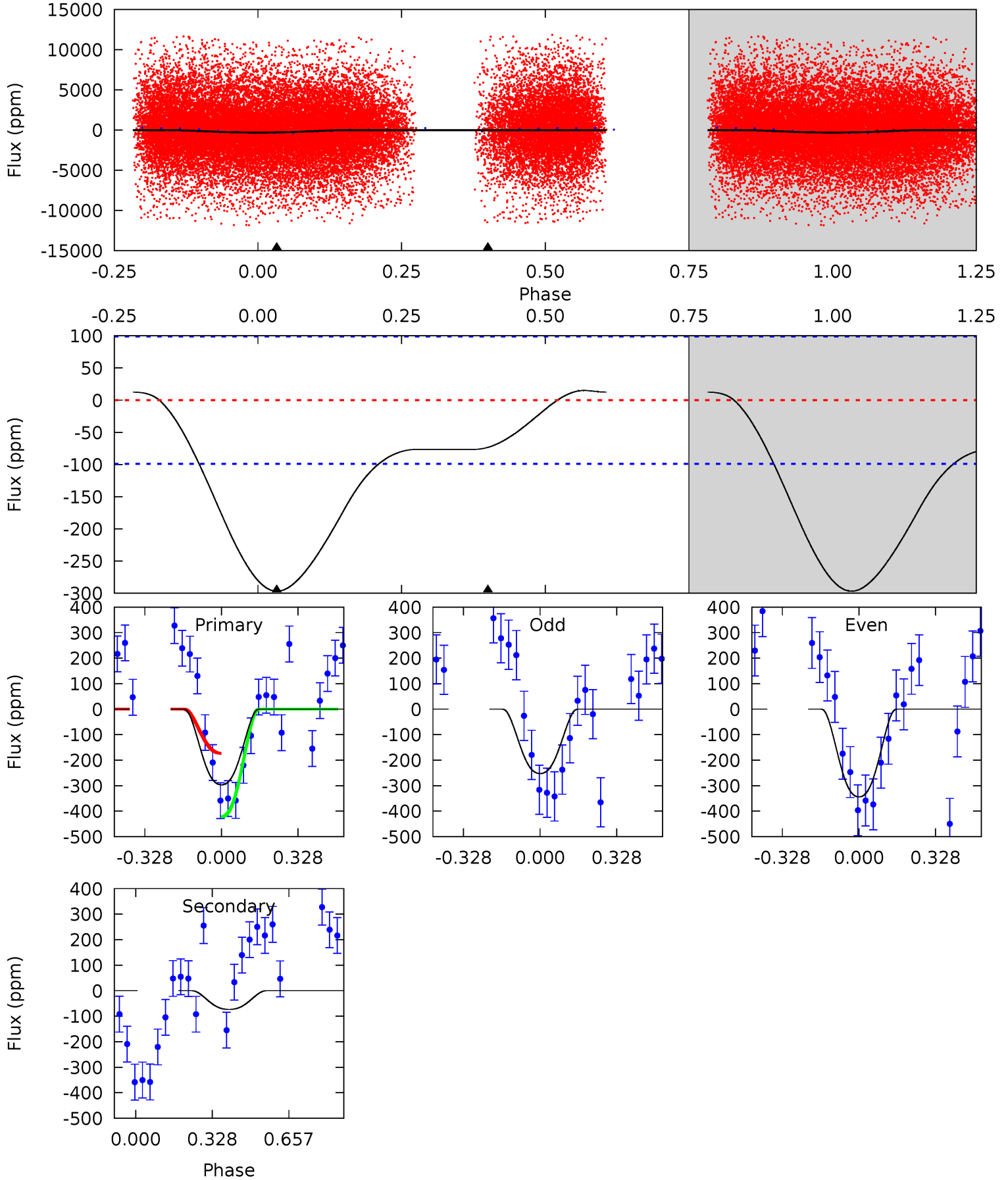
TCE 009175346-03 P= 0.924866 Days $T_0=131.668544$ (BKJD)



DV Model-Shift Uniqueness Test

009175346-03, P = 0.924821 Days, E = 130.757252 Days

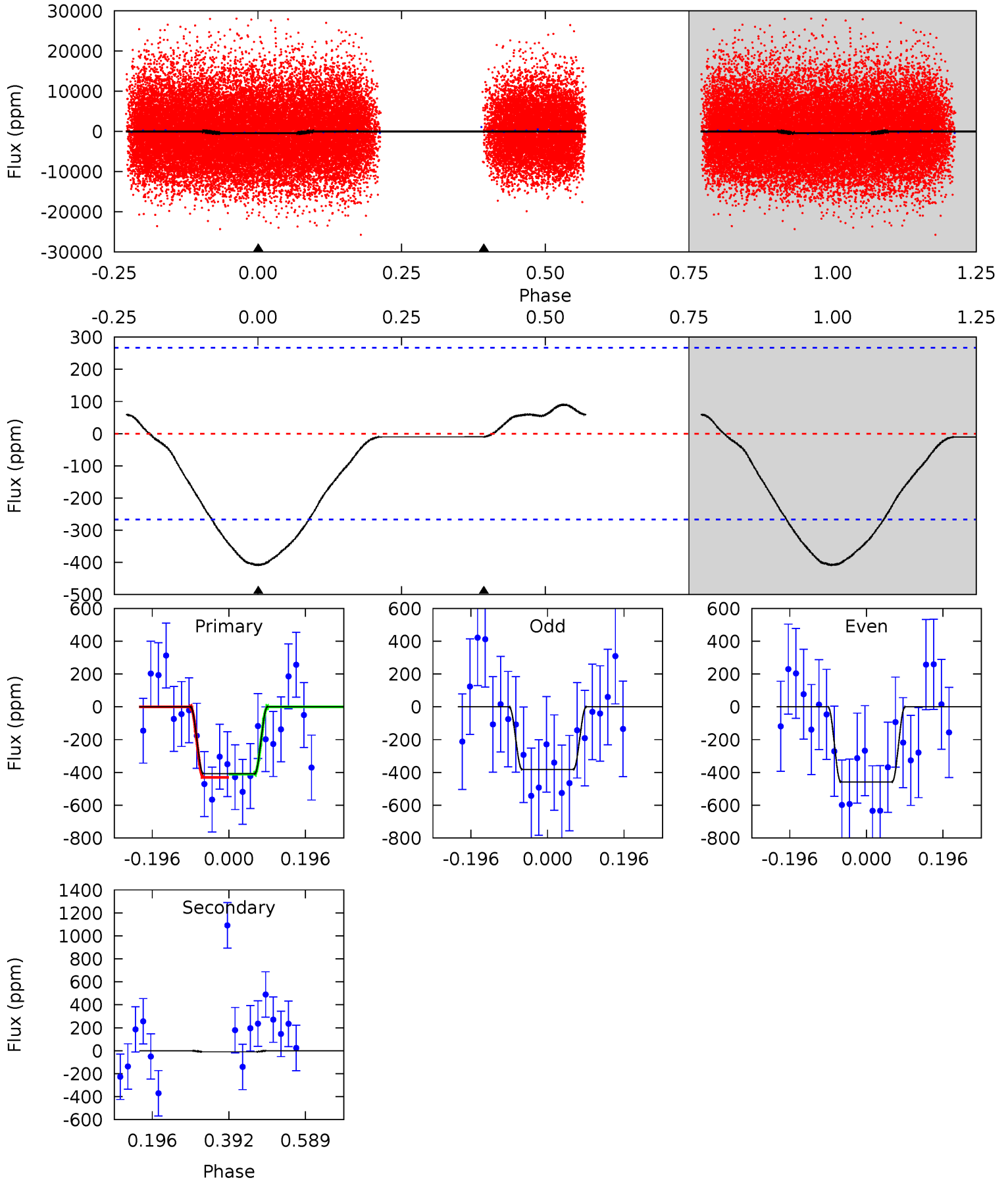
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.9	3.20	0	0	4.31	0.98	1.20	12.9	12.9	3.20	3.20	2.01	0.93	0.05	5.56



Alt Model-Shift Uniqueness Test

009175346-03, P = 0.924866 Days, E = 130.743678 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.77	0.16	0	0	4.42	1.29	0.48	6.77	6.77	0.16	0.16	0.62	0.49	0.18	0.17



Stellar Parameters For KIC 009175346

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6356^{+174}_{-213}	$3.769^{+0.527}_{-0.093}$	$-0.220^{+0.250}_{-0.300}$	$2.527^{+0.537}_{-1.342}$	$1.370^{+0.216}_{-0.324}$	$0.120^{+0.714}_{-0.043}$
	+3%/-3%	+14%/-2%	+114%/-136%	+21%/-53%	+16%/-24%	+597%/-36%
Source	PHO1	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 009175346-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-73 ± 23	$5.53^{+1.12}_{-1.43}$	4167^{+345}_{-568}	3752^{+432}_{-831}	$0.586^{+0.504}_{-0.241}$
Alt.	-10 ± 60	$5.20^{+1.12}_{-1.26}$	4170^{+338}_{-464}	-3550^{+7440}_{-963}	$0.095^{+0.634}_{-0.557}$

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

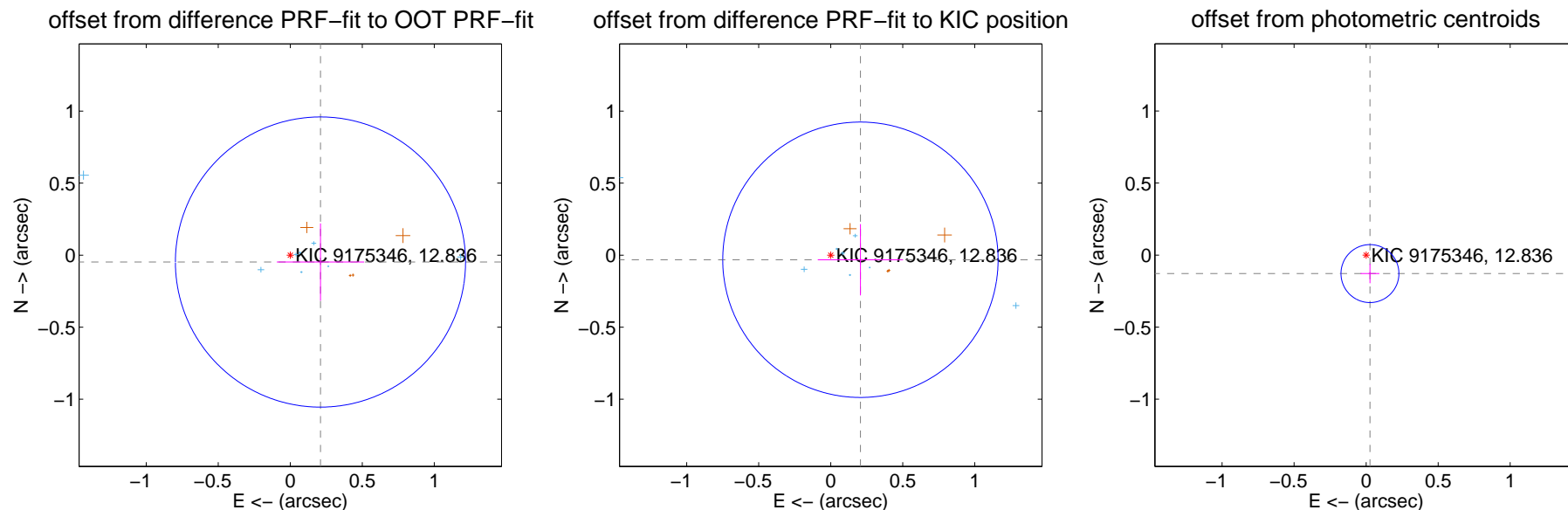
DV Centroid Data

Supplemental centroid analysis for 009175346-03. Kepler magnitude: 12.84. Transit SNR 8.70

There are 10 quarters with good PRF difference image offsets

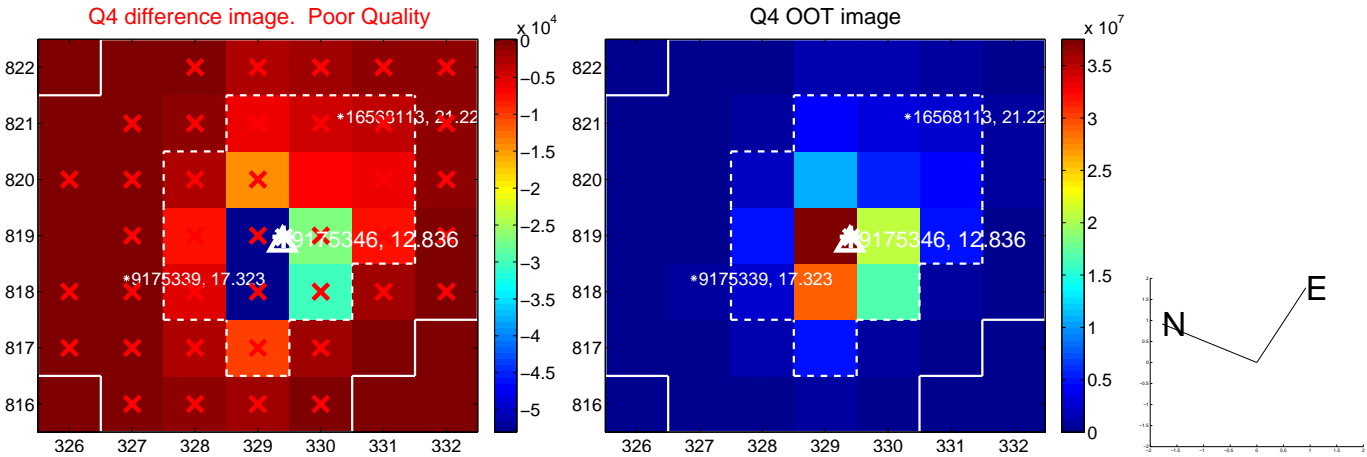
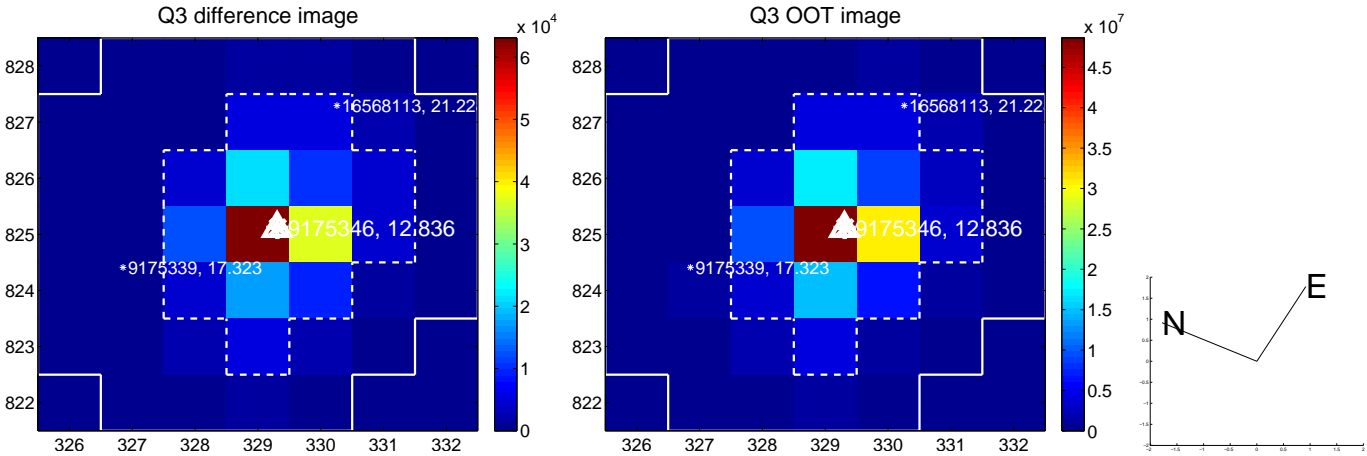
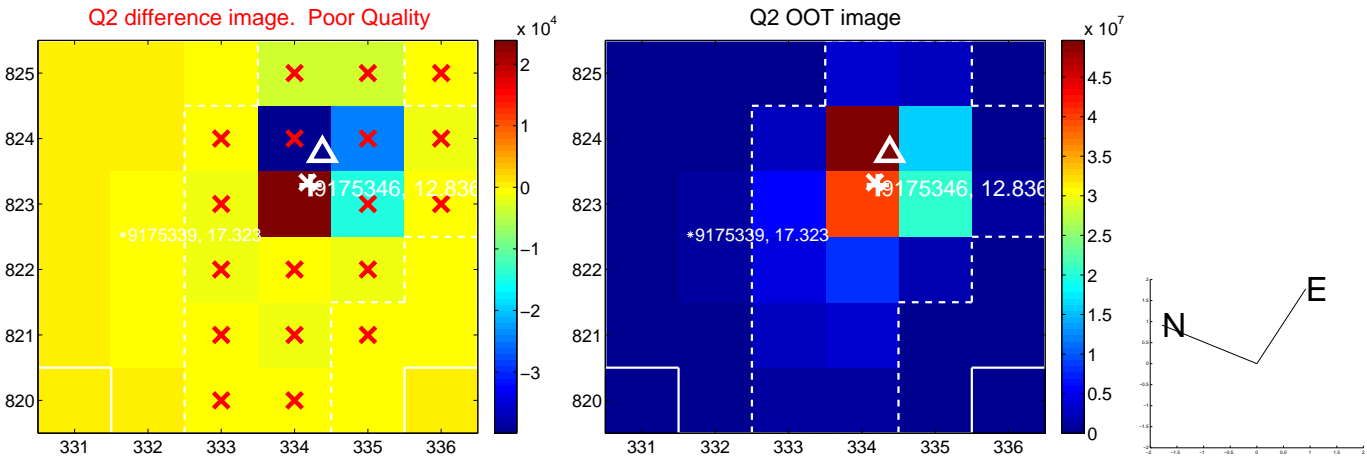
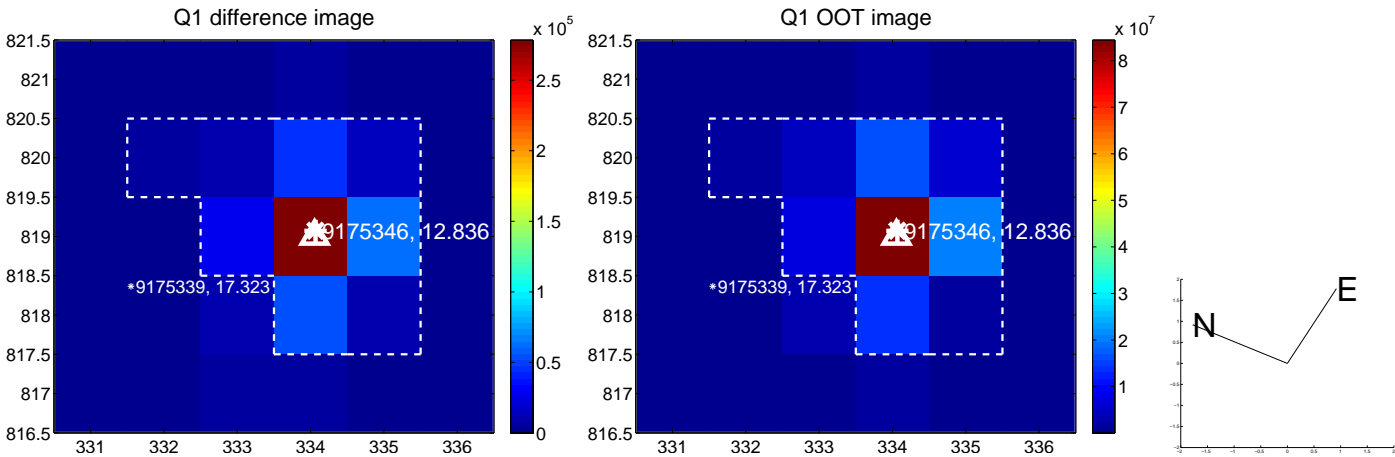
The direct PRF centroid is offset from the target star catalog position by about 0.02 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.215 ± 0.336	0.64	-0.210 ± 0.303	-0.048 ± 0.268
PRF-fit source offset from KIC position	0.209 ± 0.319	0.65	-0.206 ± 0.296	-0.032 ± 0.247
photometric centroid source offset	0.13 ± 0.07	1.96	-0.03 ± 0.07	-0.13 ± 0.07

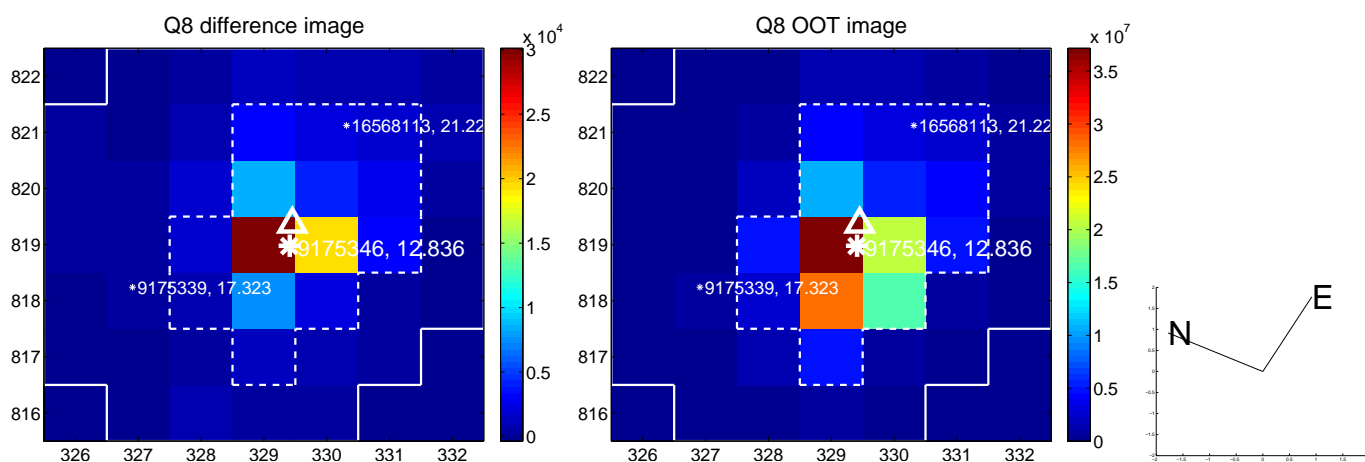
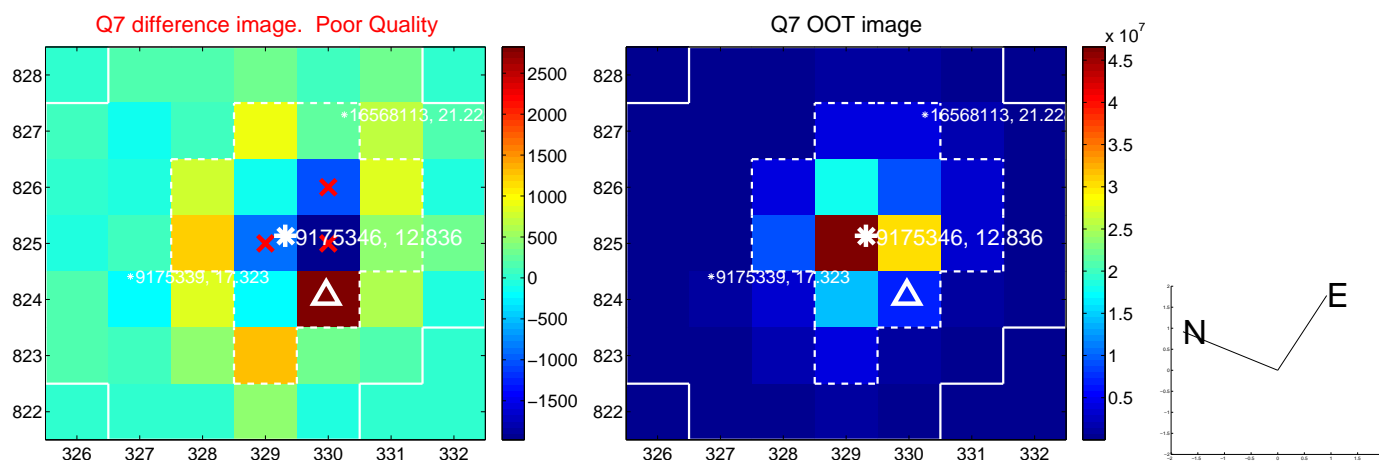
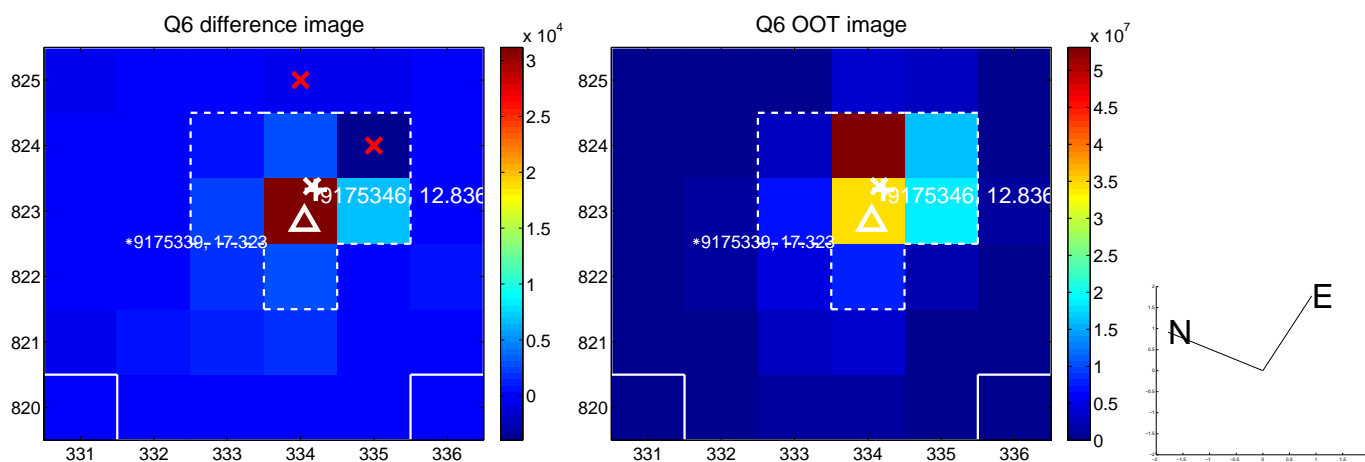
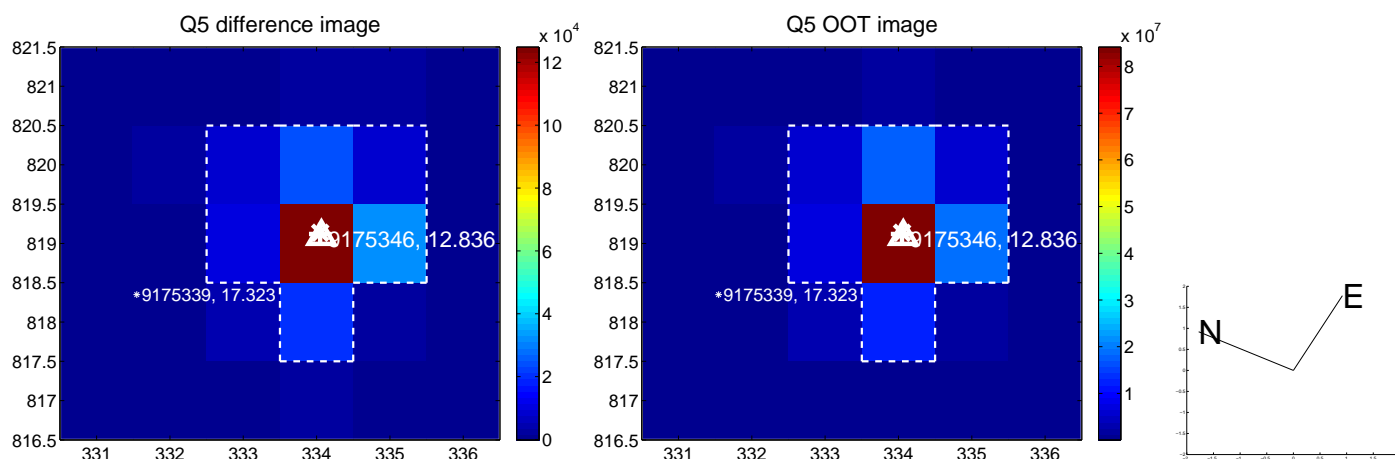


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

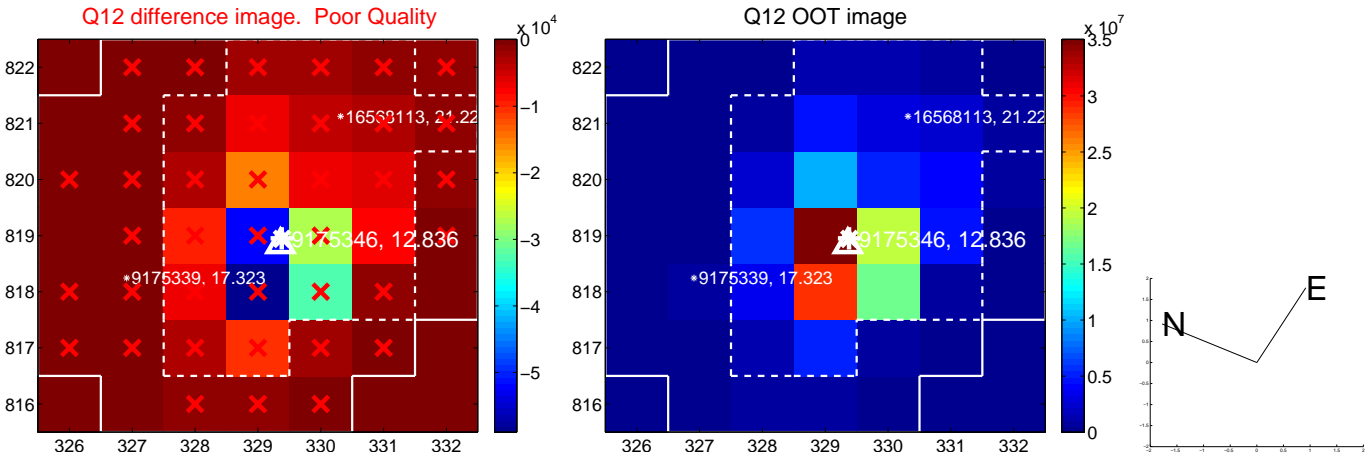
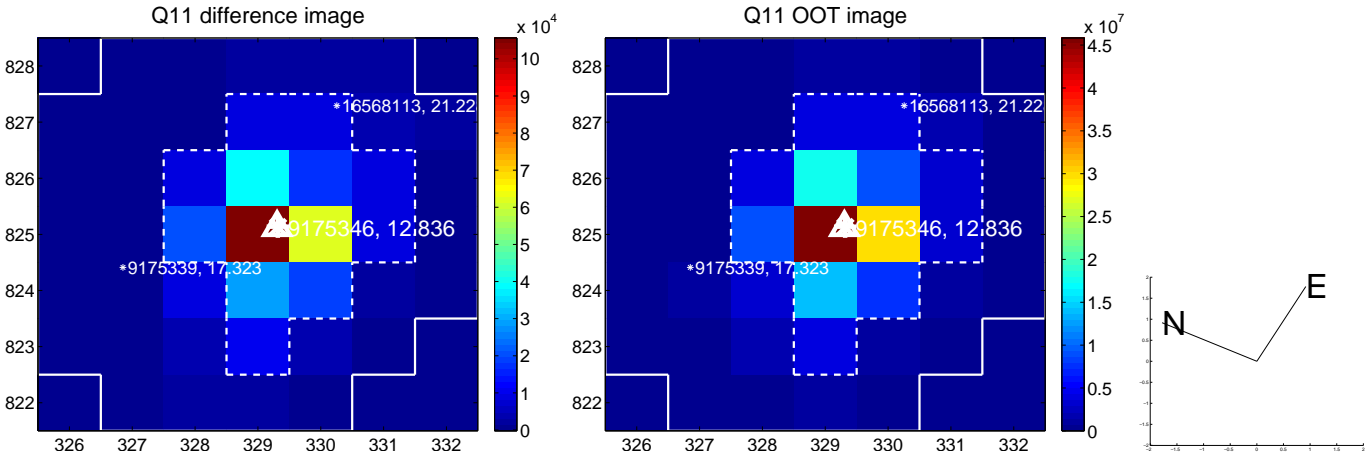
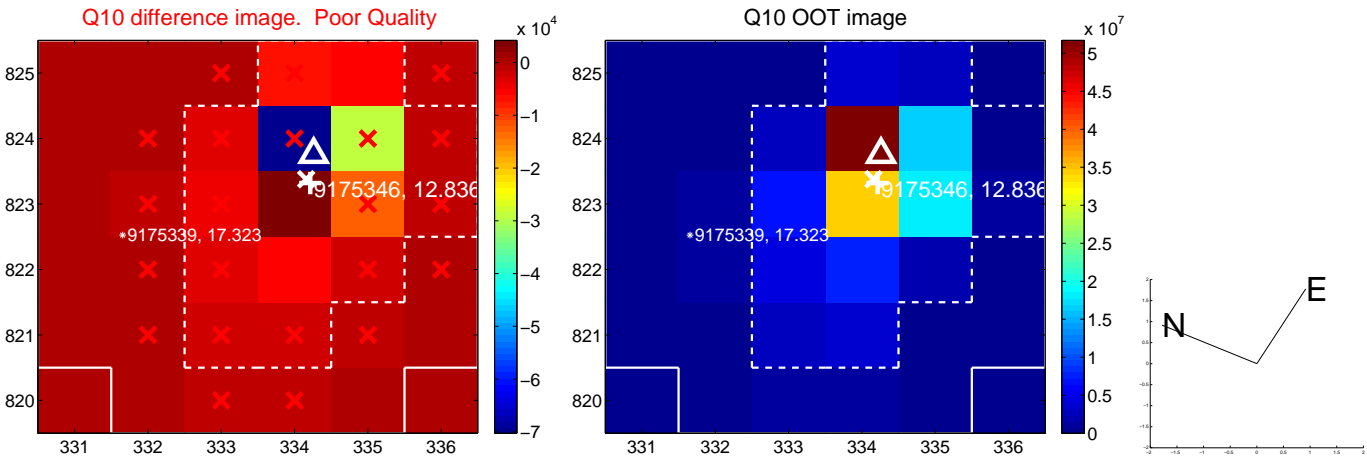
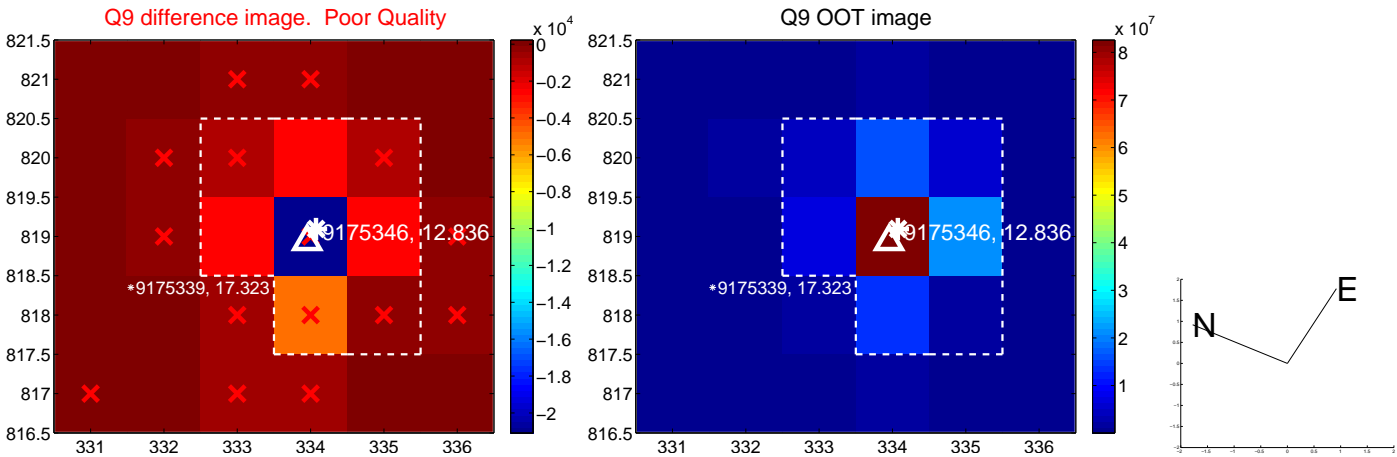
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



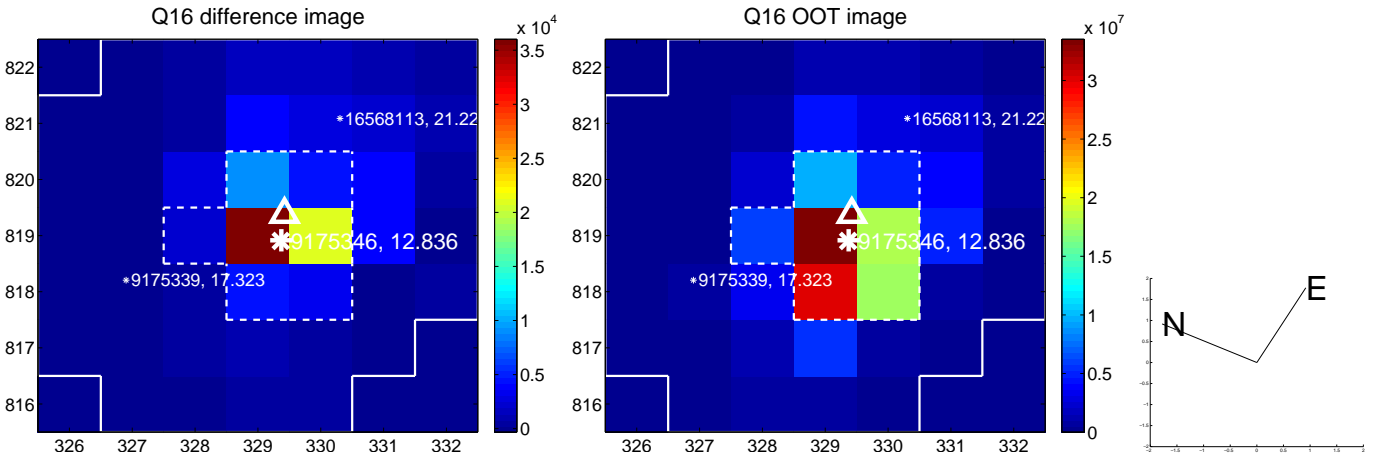
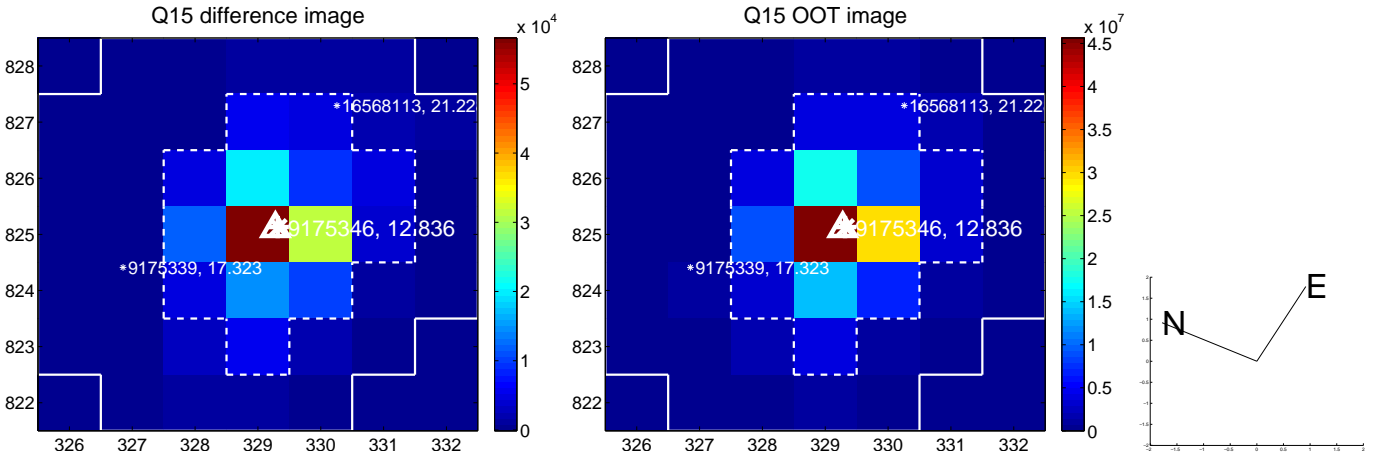
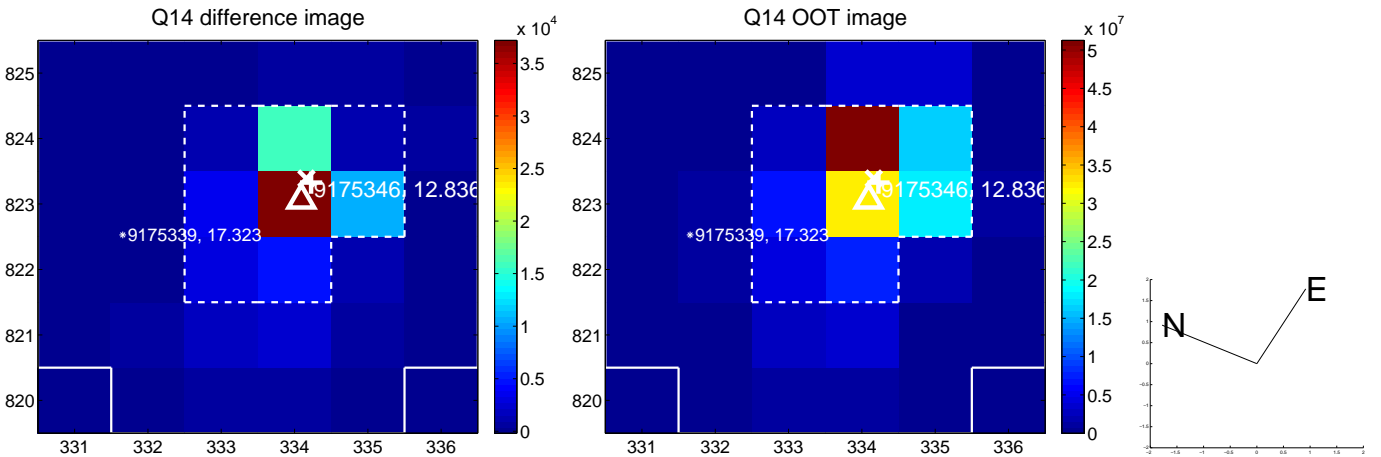
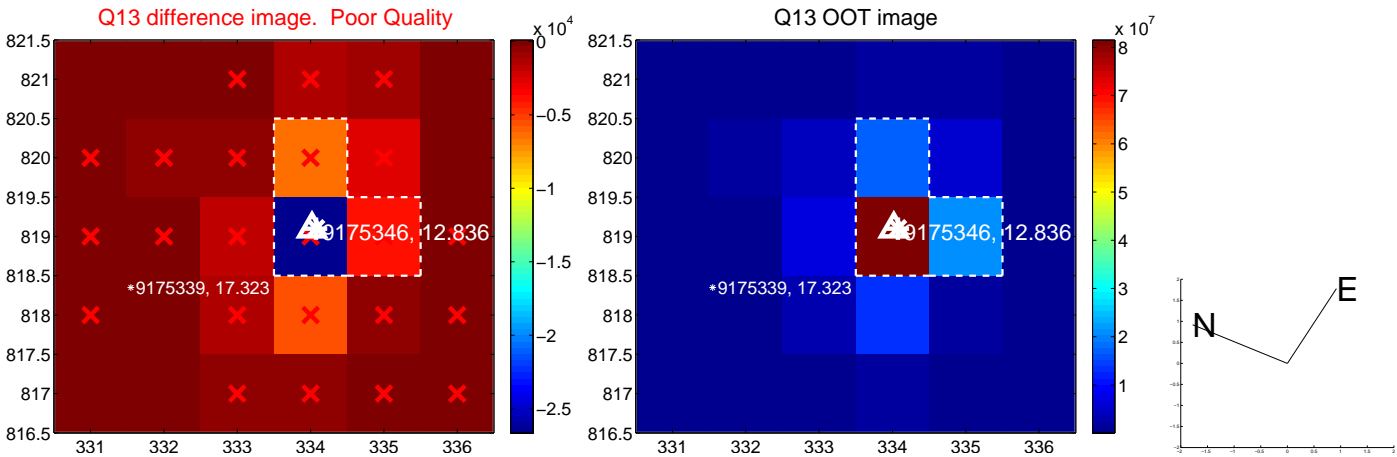
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



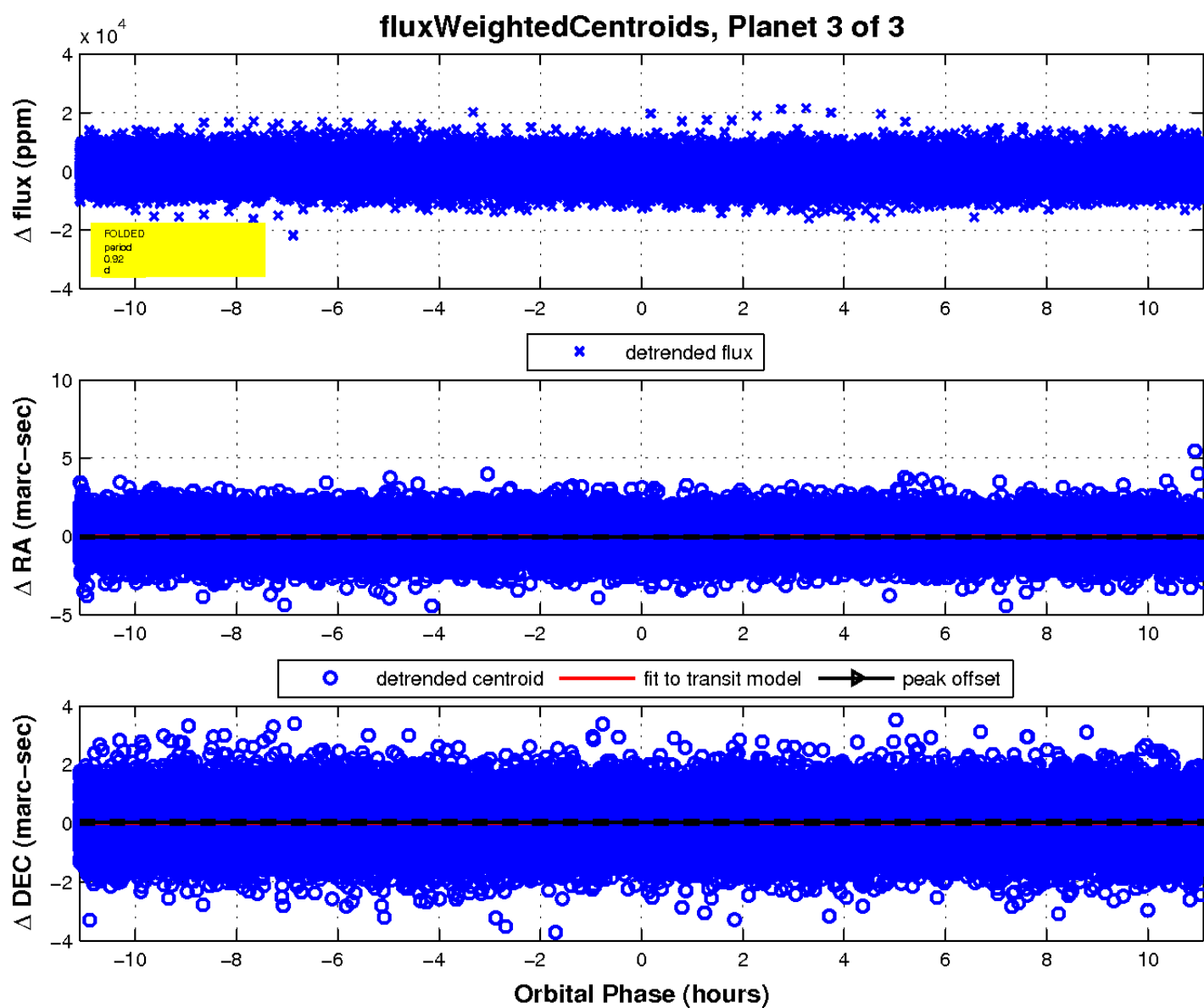
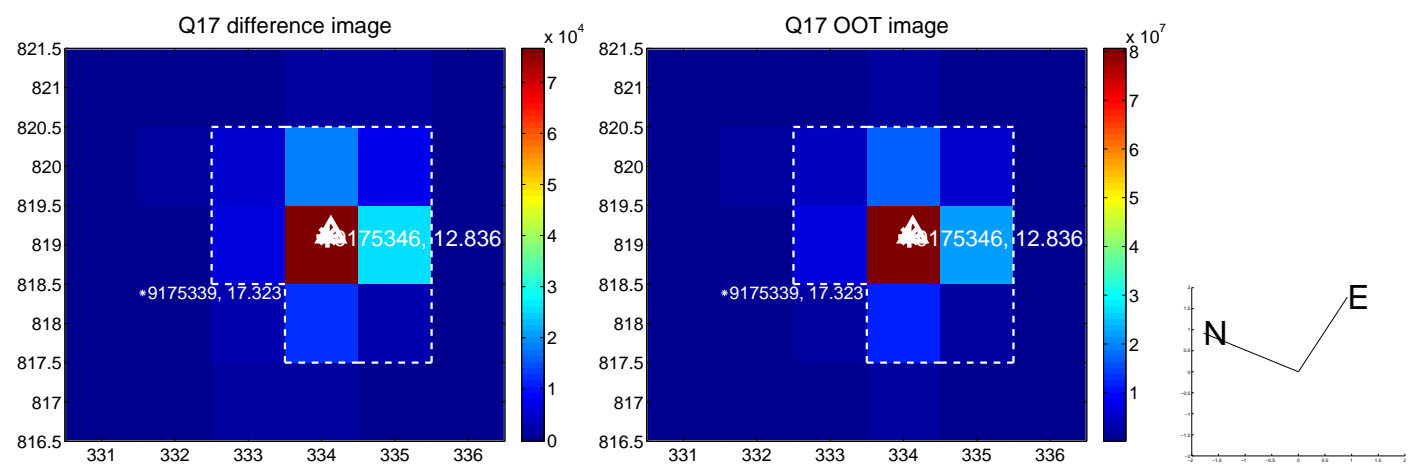
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

