

KIC 007758029

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})
007758029-01	OBS	No	0.669040	131.884506	43.7	2.257	11.2	9.8	10.80	6732	8.31	0.00
007758029-02	OBS	No	0.669051	131.537362	61.4	1.665	10.1	9.1	10.80	6732	8.70	0.00
007758029-03	OBS	No	55.456648	180.540271	1354.2	1.724	7.3	6.5	10.80	6732	42.99	1205.52

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007758029-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_KIC_POS
007758029-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—SAME_NTL_PERIOD—CENT_KIC_POS
007758029-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—ALL_TRANS_CHASES—CENT_KIC_POS

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

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

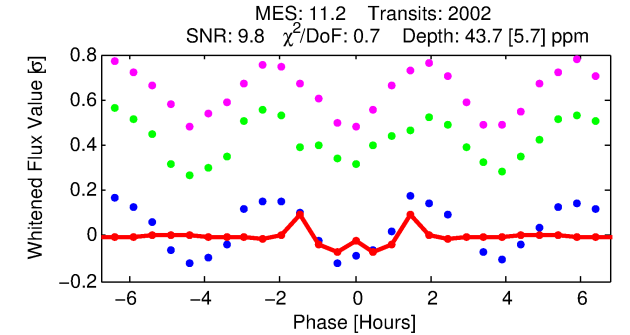
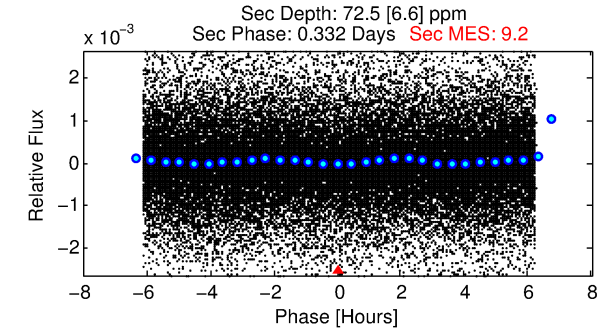
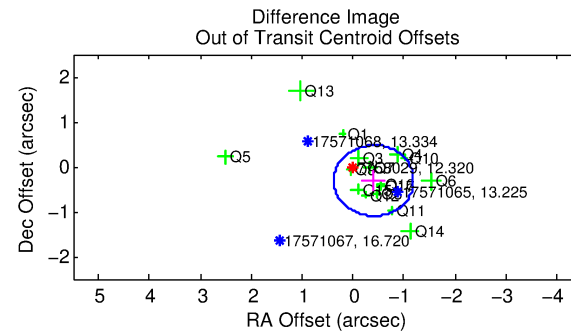
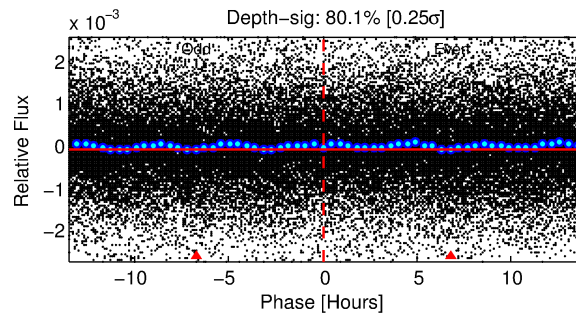
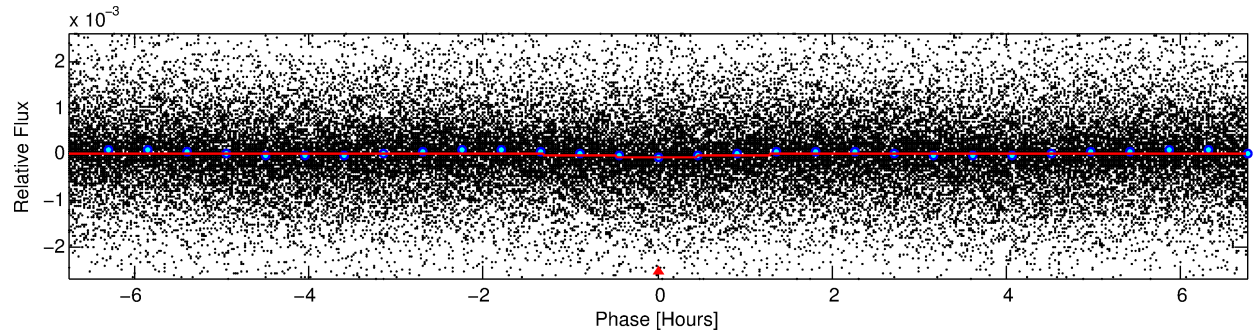
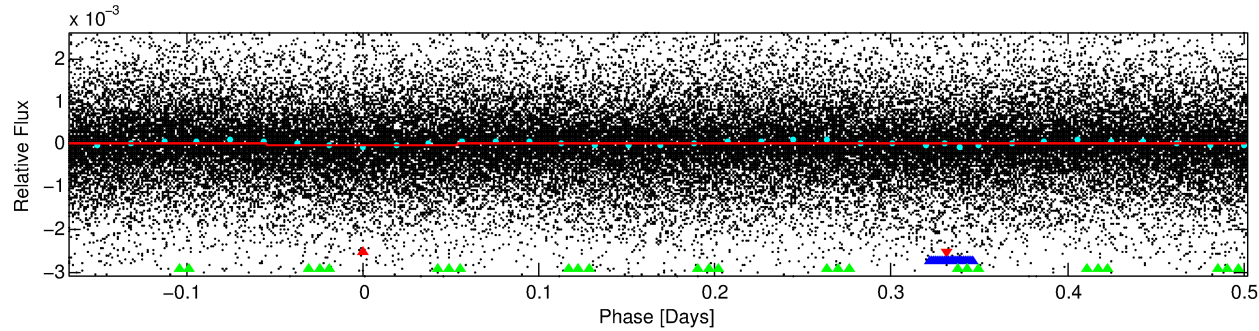
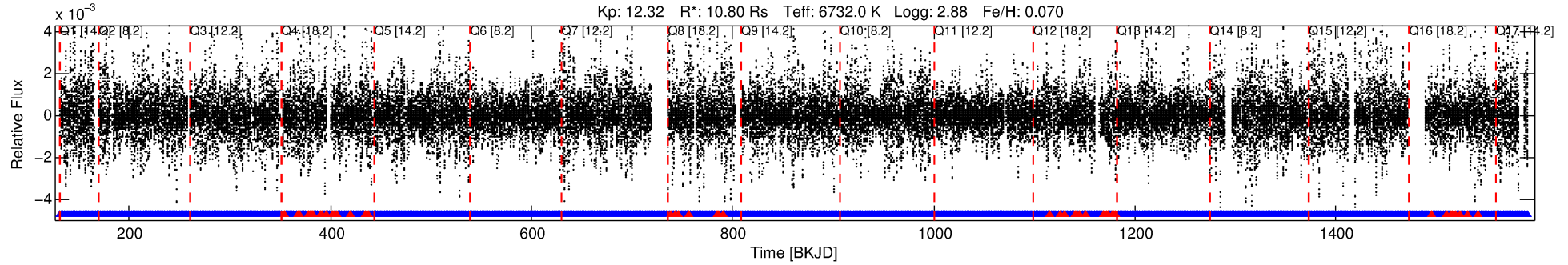
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007758029-01

No Significant Match Found

DV One-Page Summary

KIC: 7758029 Candidate: 1 of 3 Period: 0.669 d



DV Fit Results:

Period = 0.66904 [0.00001] d
Epoch = 131.8845 [0.0010] BKJD
Rp/R* = 0.0070 [0.0010]
a/R* = 1.40 [0.53]
b = 0.90 [0.17]
Seff = N/A
Teq = N/A
Rp = 8.31 [5.39] Re
a = N/A
Ag = N/A
Teffp = N/A

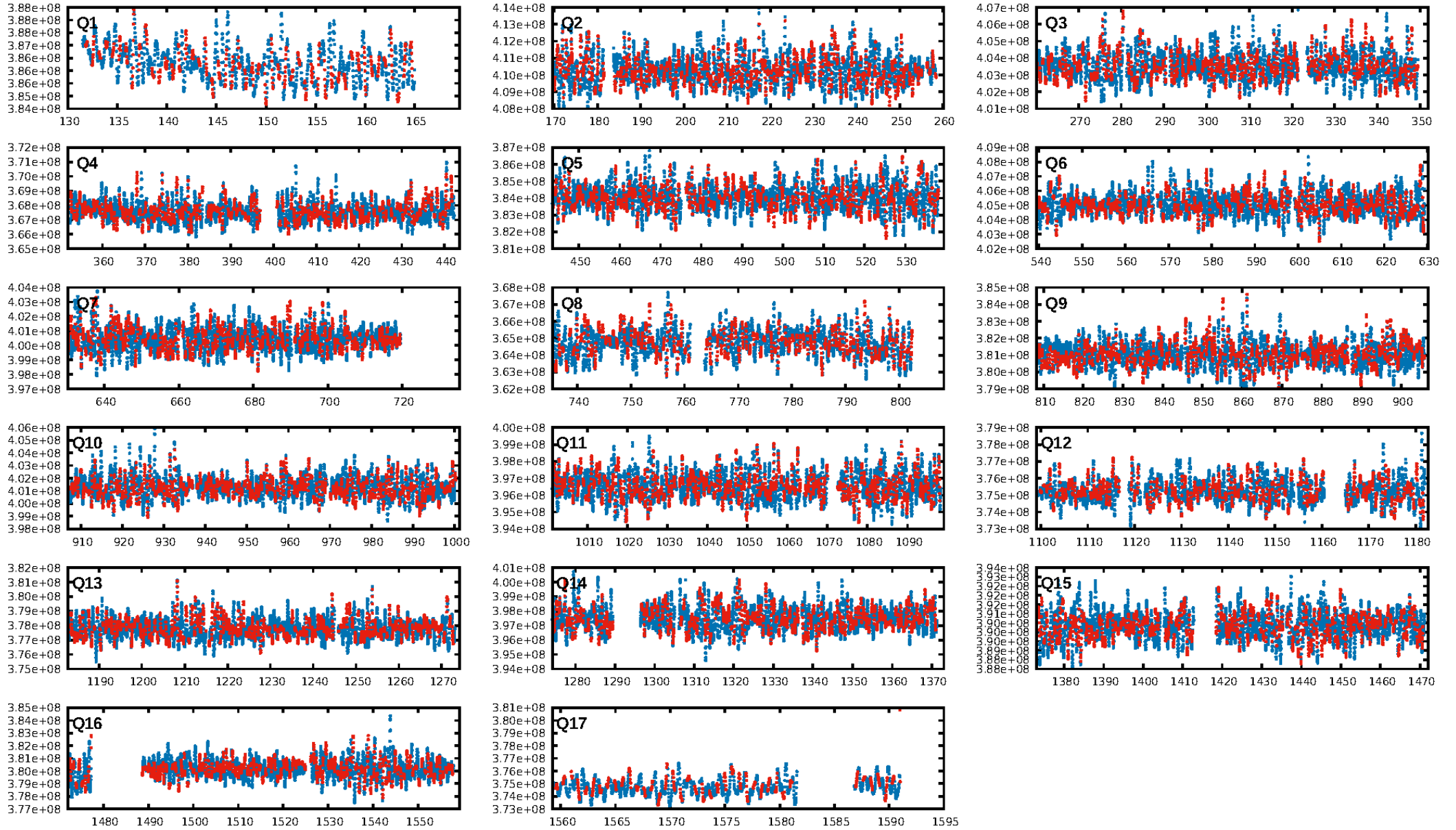
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.41e-22
RollingBand-fgt: 0.97 [1863/1913]
GhostDiagnostic-chr: -4.526
Centroid-sig: 32.0%
Centroid-so: 0.938 arcsec [2.09 σ]
OotOffset-rm: 0.510 arcsec [1.94 σ]
KicOffset-rm: 1.170 arcsec [4.76 σ]
OotOffset-st: 3/4/4/5 [16]
KicOffset-st: 3/4/4/5 [16]
DiffImageQuality-fgm: 0.62 [10/16]
DiffImageOverlap-fno: 1.00 [17/17]

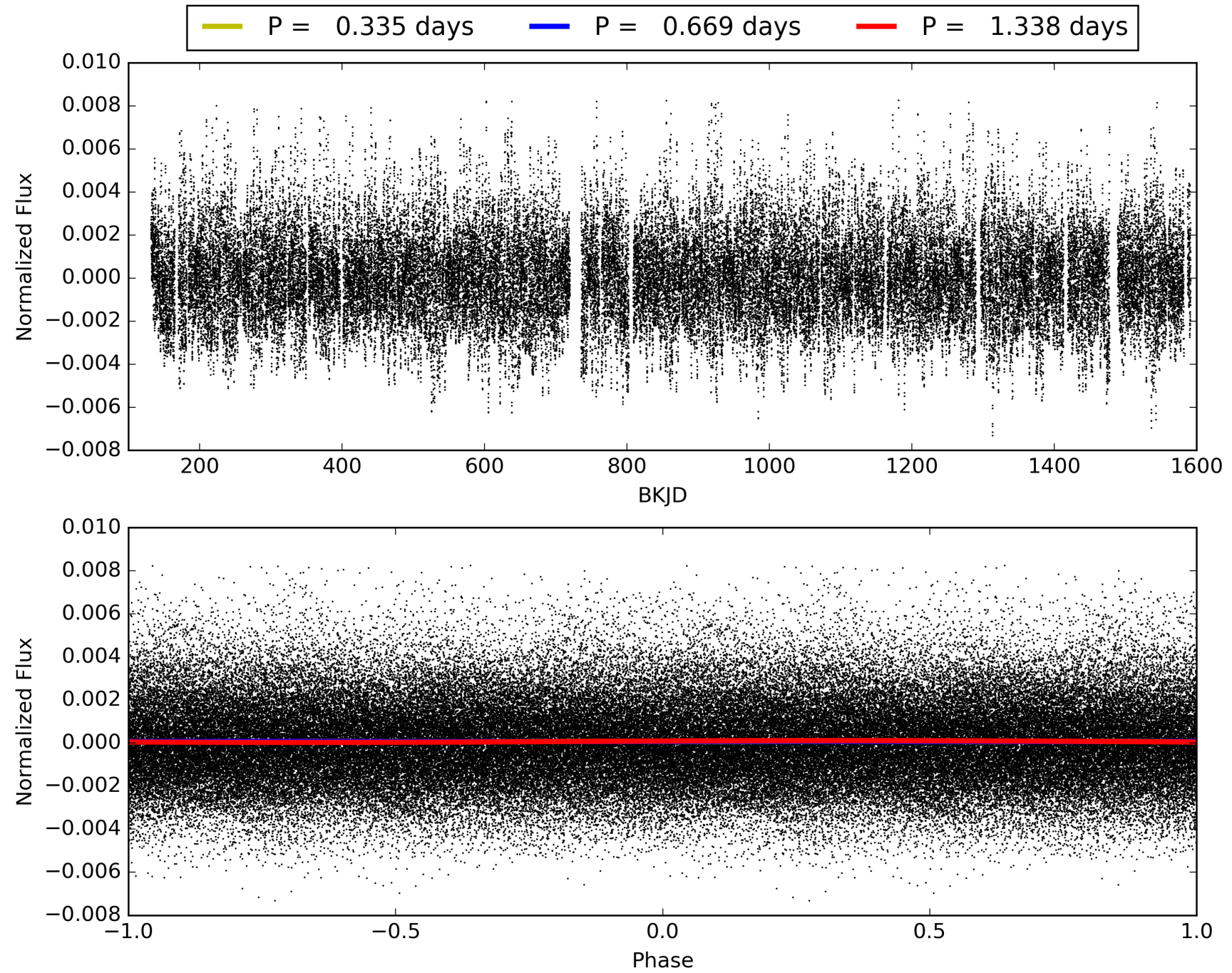
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 007758029-01, PDC Light Curves

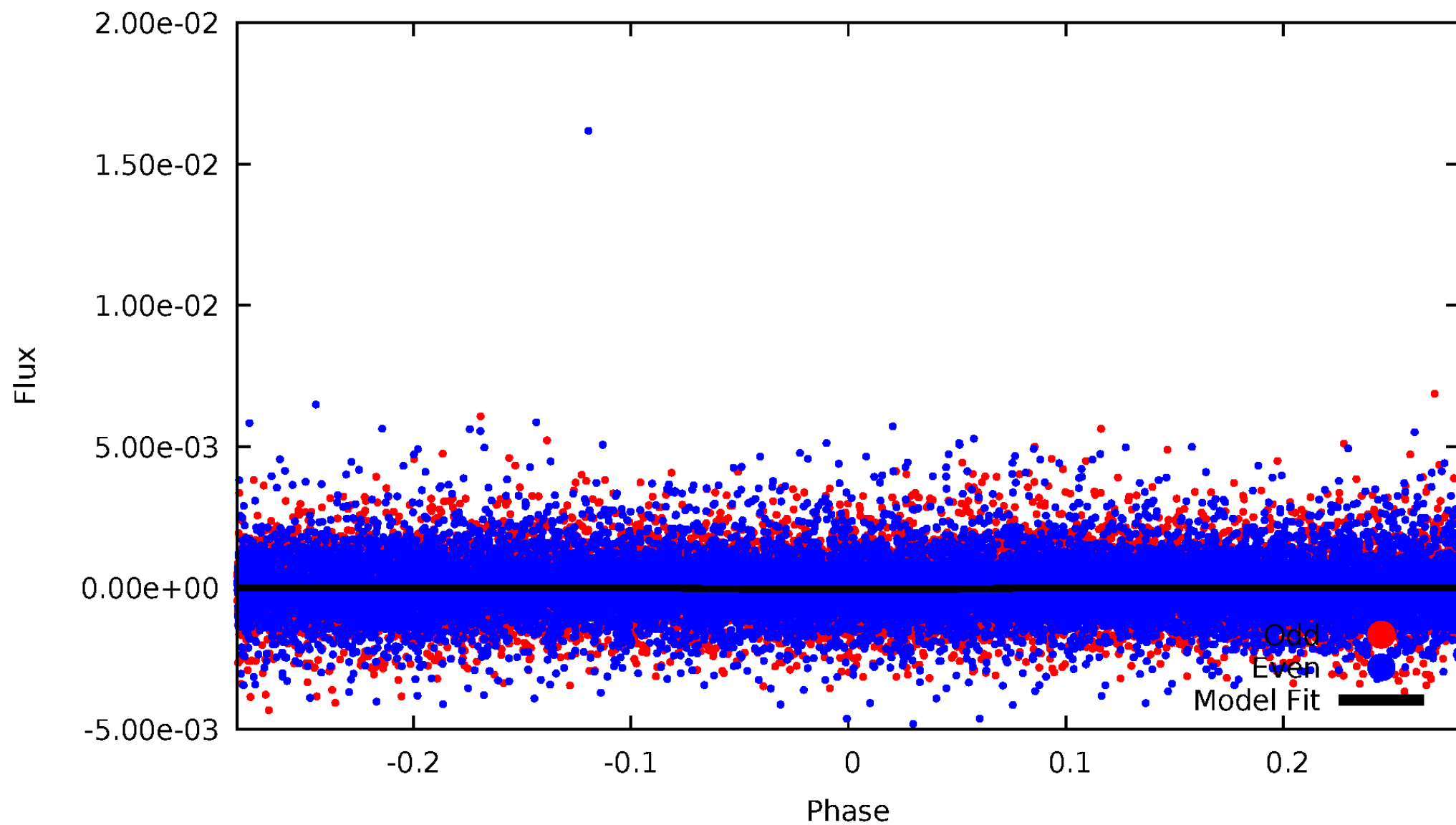


TCE 007758029-01



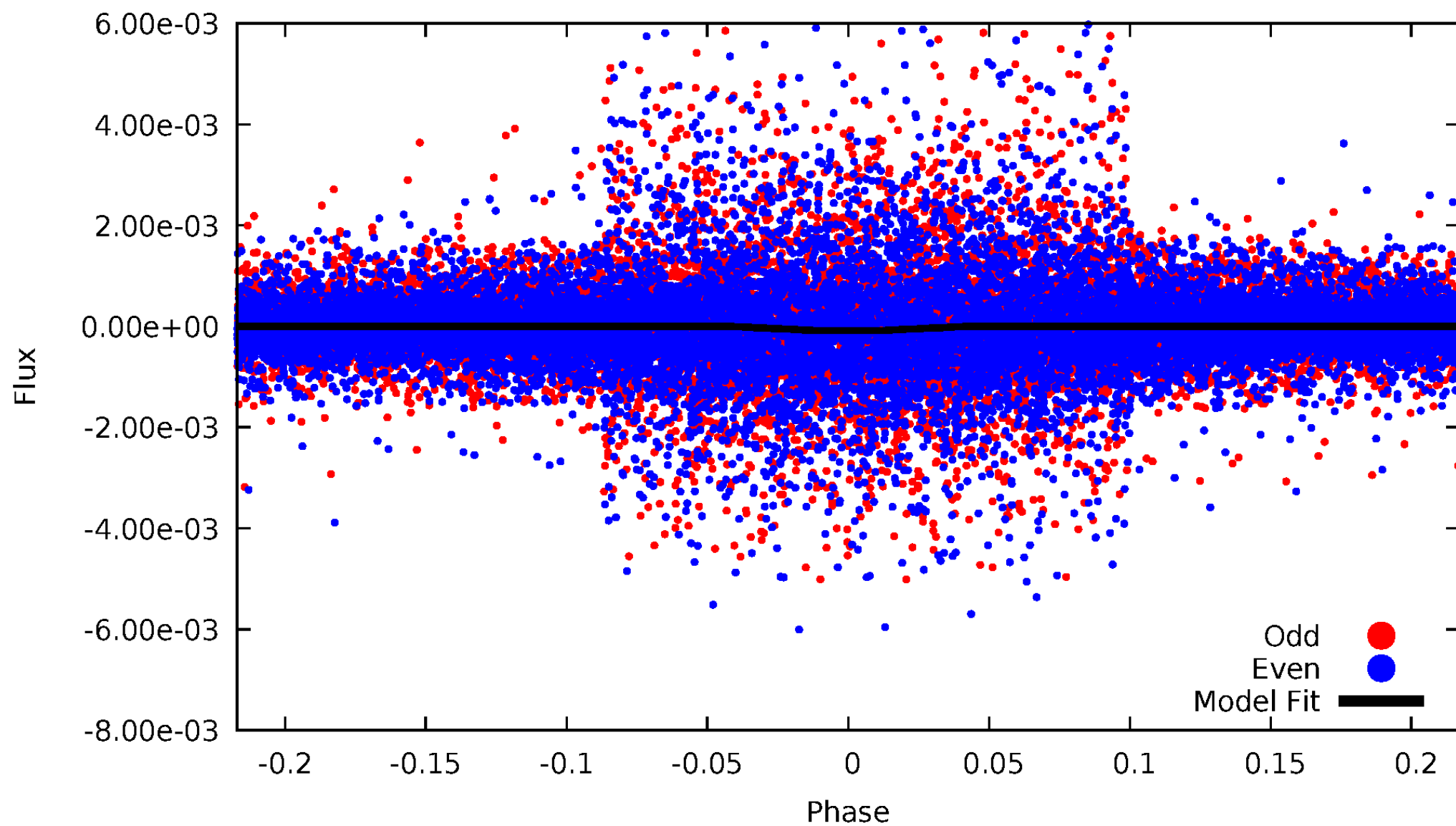
DV Odd/Even

TCE 007758029-01



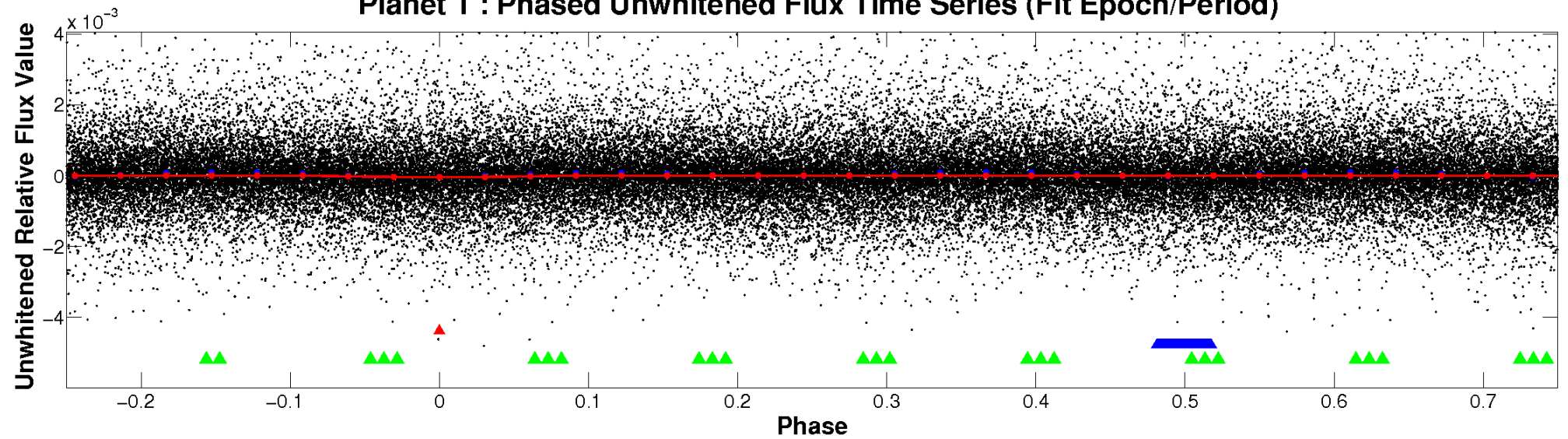
ALT Odd/Even

TCE 007758029-01

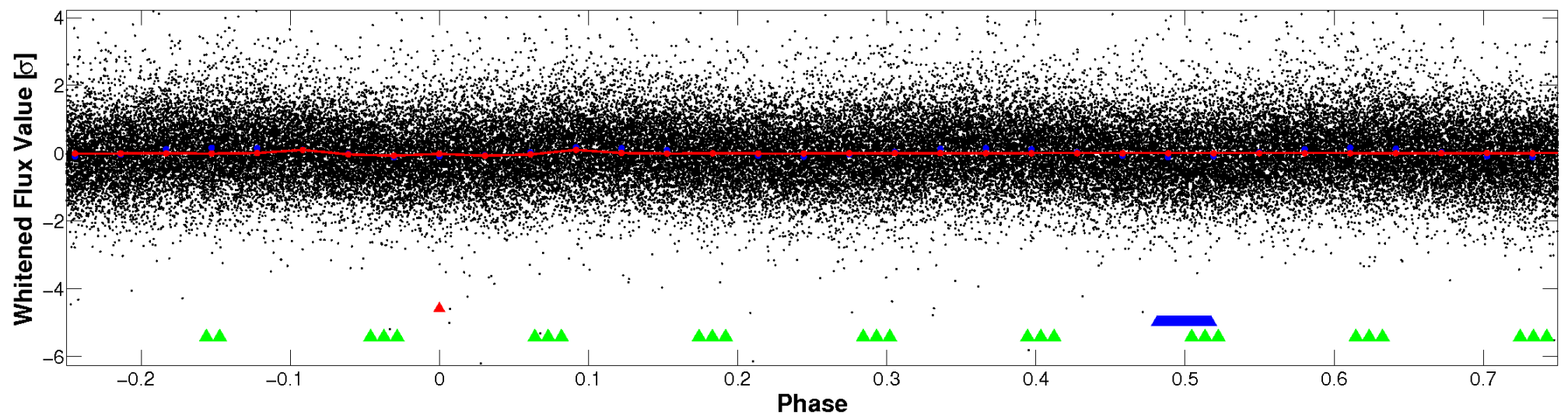


Non-Whitened Vs. Whitened Light Curve

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

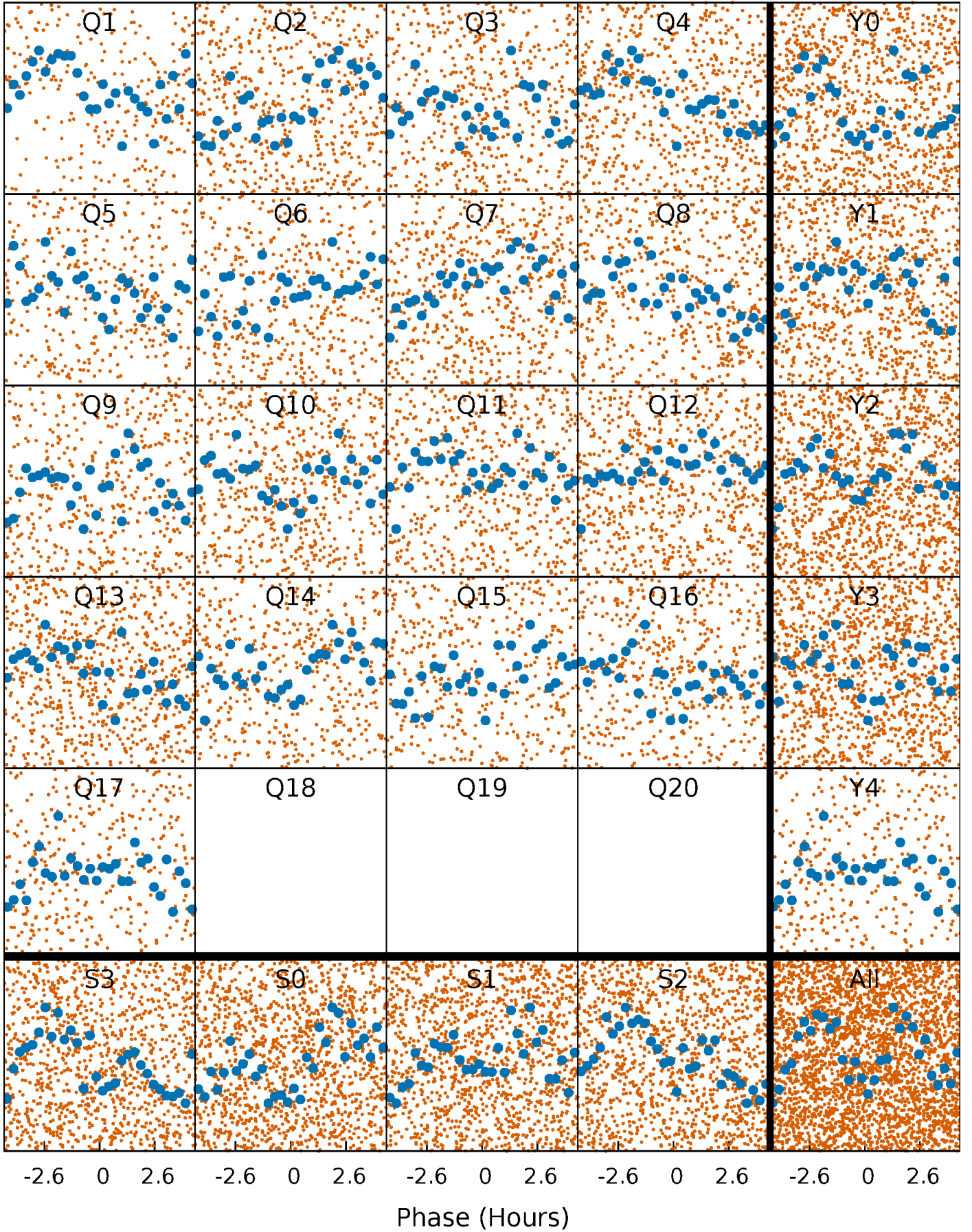


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



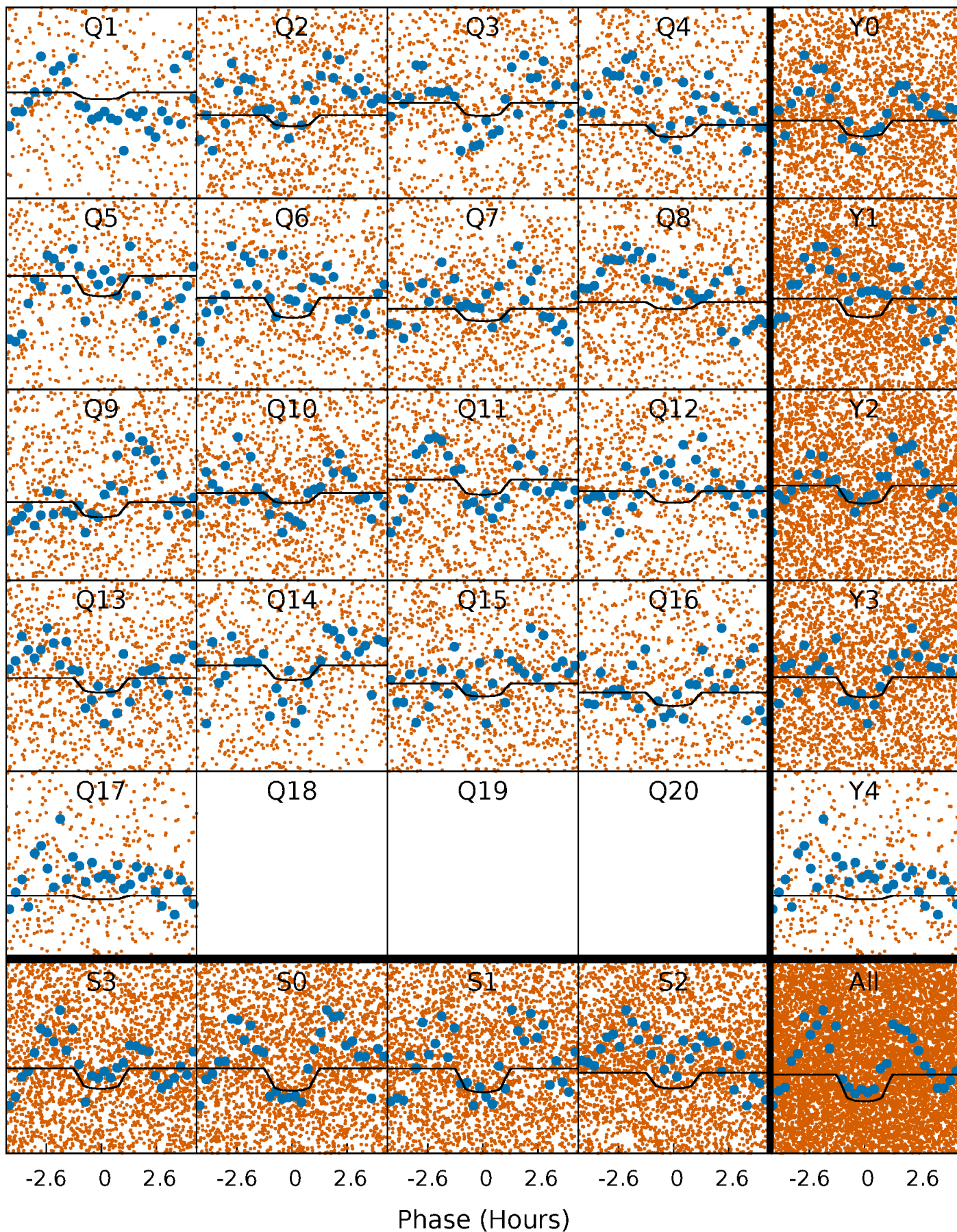
PDC Quarter-Phased Transit Curves

TCE 007758029-01 P= 0.669040 Days $T_0=131.884506$ (BKJD)



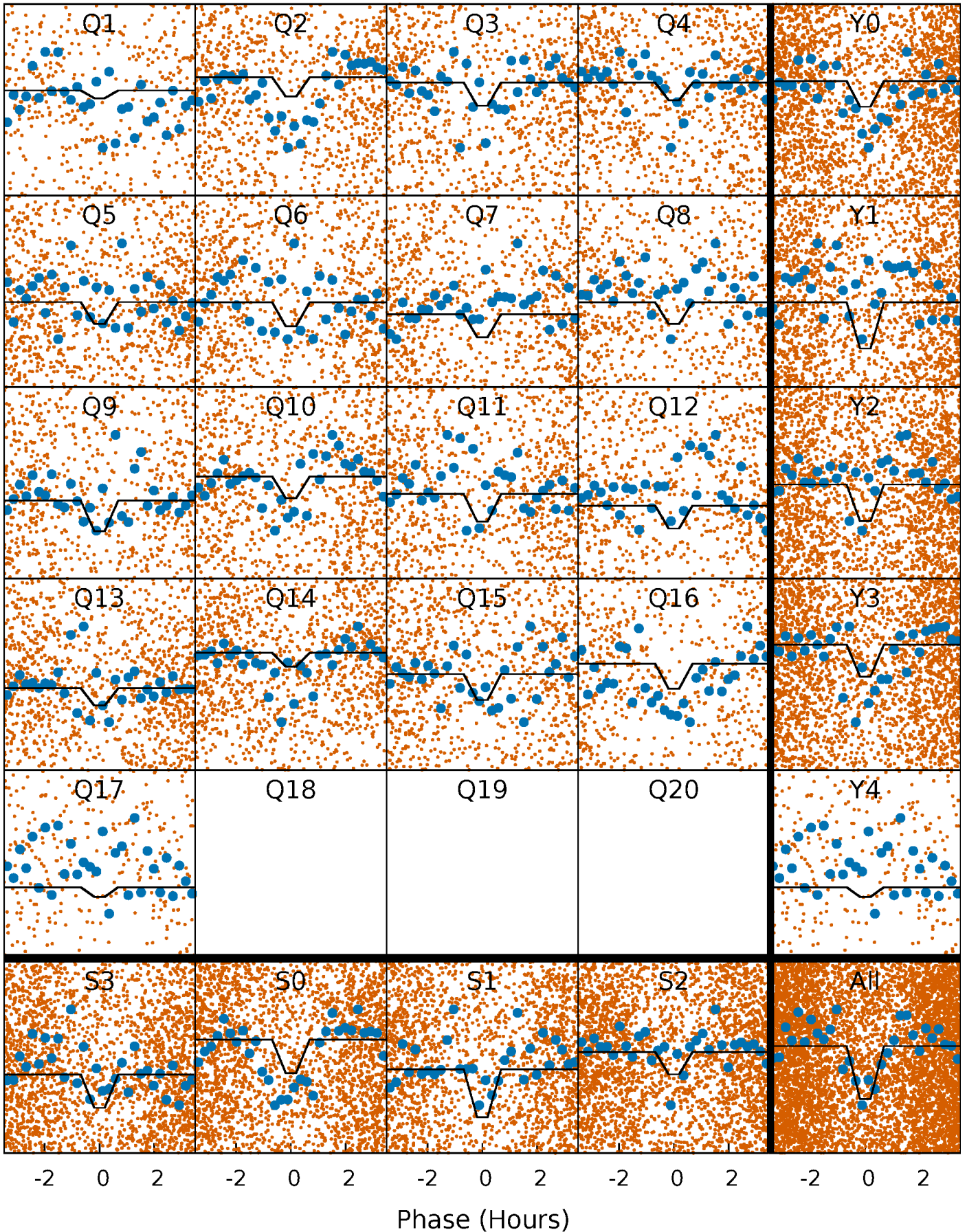
DV Quarter-Phased Transit Curves

TCE 007758029-01 P= 0.669040 Days $T_0=131.884506$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

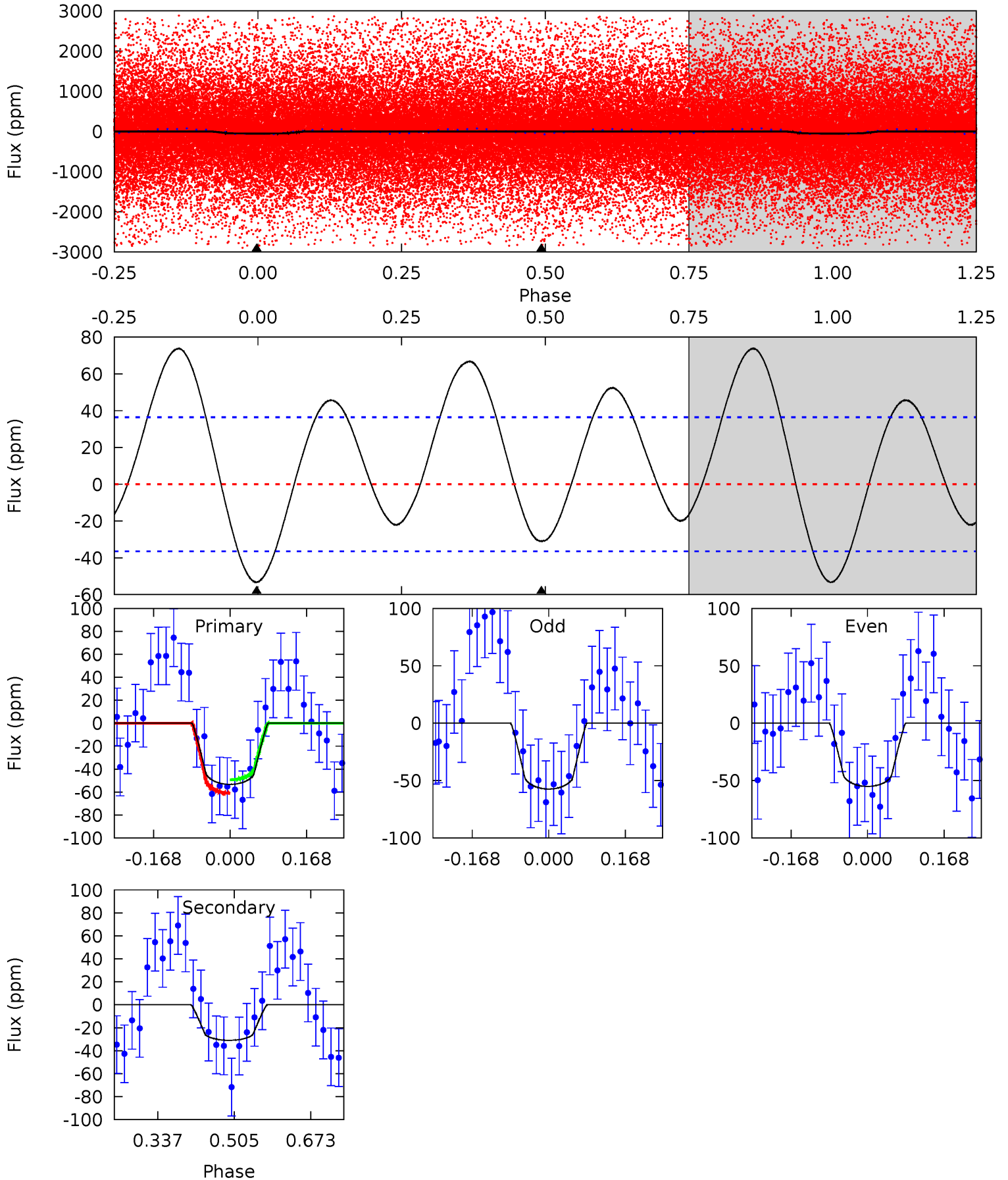
TCE 007758029-01 P= 0.669044 Days $T_0=131.875651$ (BKJD)



DV Model-Shift Uniqueness Test

007758029-01, P = 0.669040 Days, E = 131.215466 Days

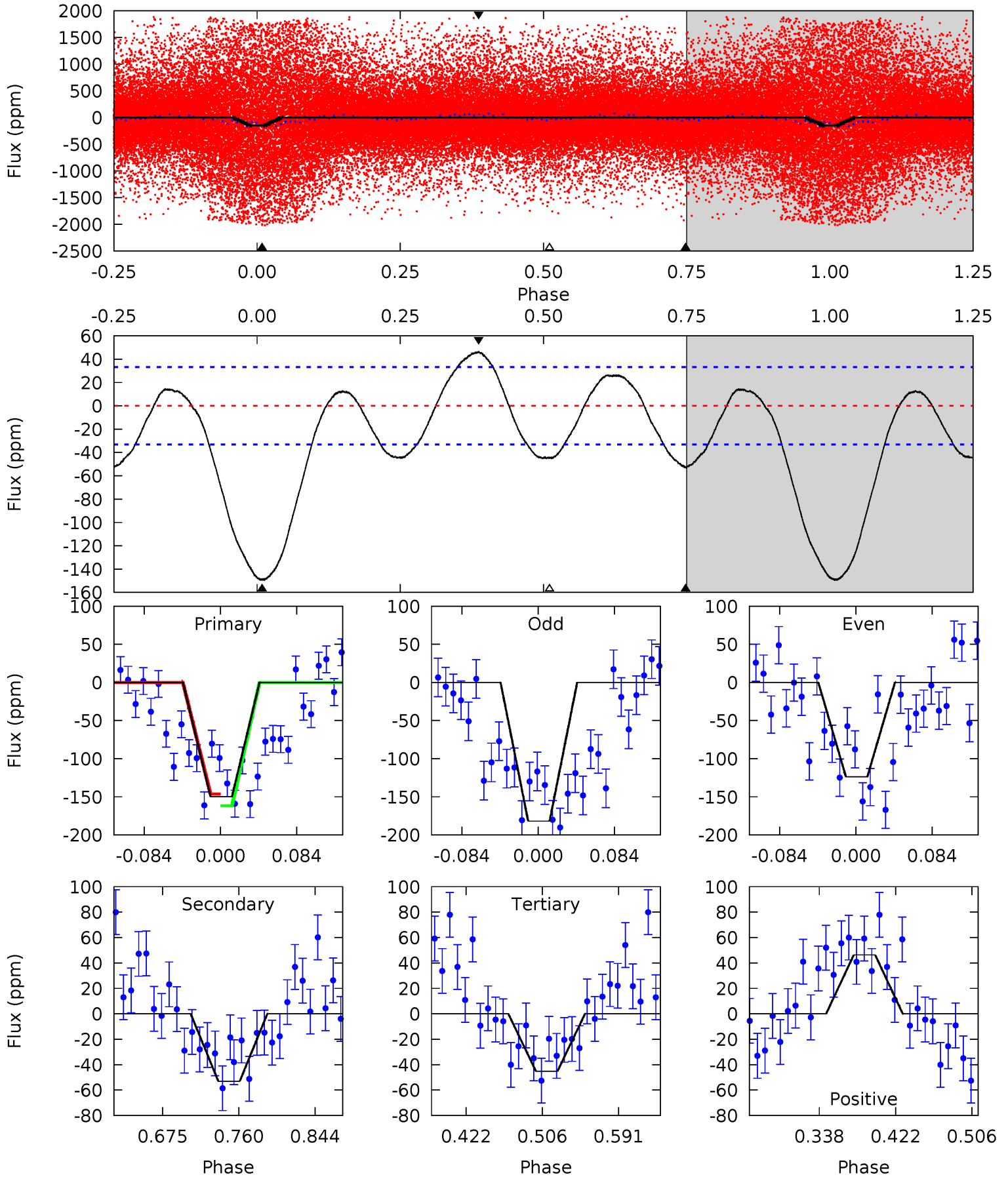
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.51	3.78	0	0	4.45	1.38	2.54	6.51	6.51	3.78	3.78	0.14	0.24	0.58	0.73



Alt Model-Shift Uniqueness Test

007758029-01, P = 0.669044 Days, E = 131.206607 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.8	7.35	6.27	6.42	4.60	1.73	3.76	14.5	14.3	1.08	0.93	4.04	0.58	0.24	1.07



Stellar Parameters For KIC 007758029

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6732^{+162}_{-348}	$2.884^{+0.535}_{-0.094}$	$0.070^{+0.250}_{-0.550}$	$10.801^{+1.138}_{-6.828}$	$3.255^{+0.080}_{-1.359}$	$0.004^{+0.029}_{-0.001}$
	+2%/-5%	+19%/-3%	+357%/-786%	+11%/-63%	+2%/-42%	+785%/-21%
Source	KIC0	FLK73	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 007758029-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-31 ± 8	$7.60^{+1.82}_{-2.41}$	8841^{+641}_{-1231}	-6173^{+2730}_{-879}	$0.139^{+0.147}_{-0.055}$
Alt.	-53 ± 7	$9.90^{+1.90}_{-3.09}$	8879^{+606}_{-1264}	-6155^{+2131}_{-796}	$0.144^{+0.117}_{-0.047}$

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

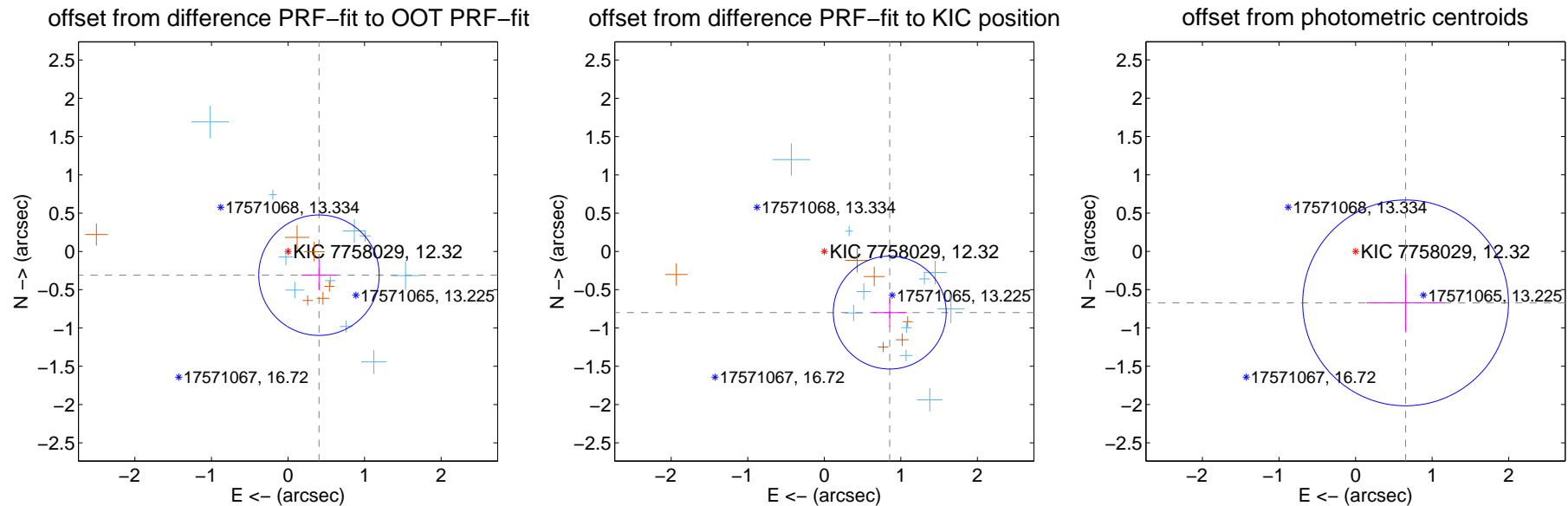
DV Centroid Data

Supplemental centroid analysis for 007758029-01. Kepler magnitude: 12.32. Transit SNR 9.77

There are 10 quarters with good PRF difference image offsets

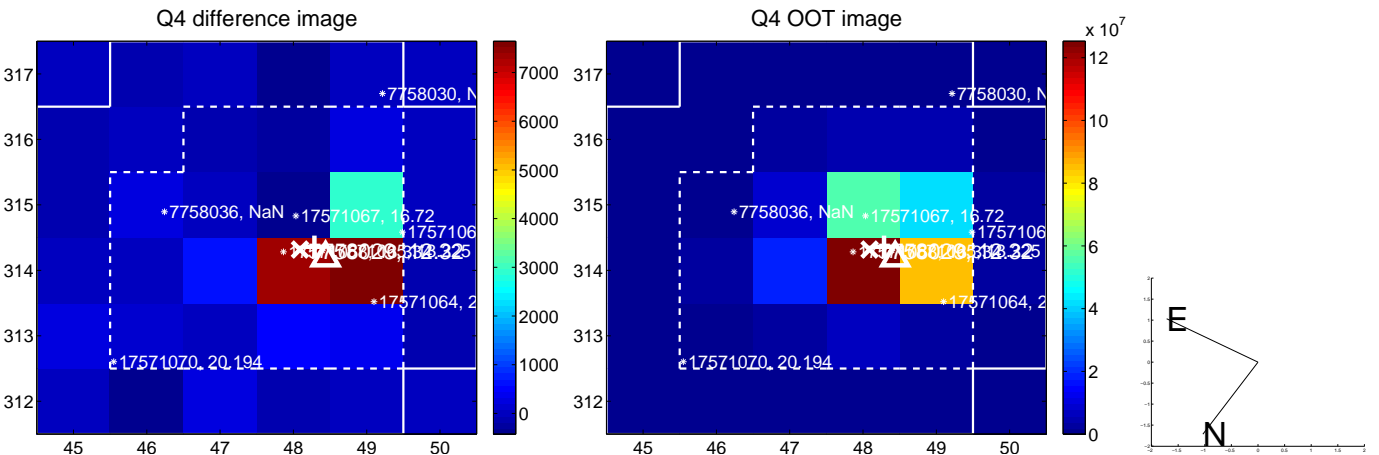
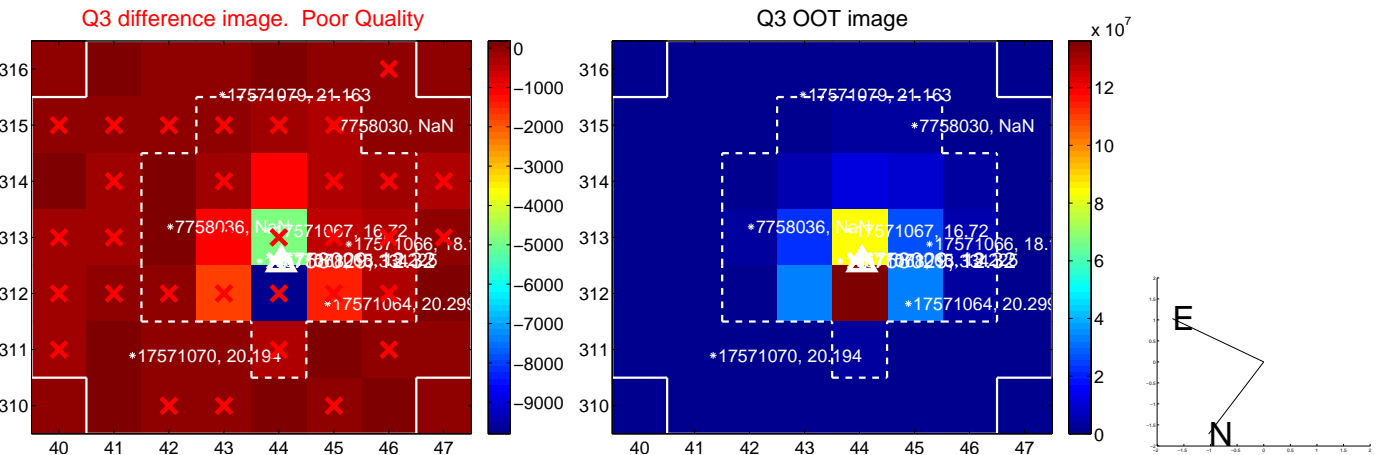
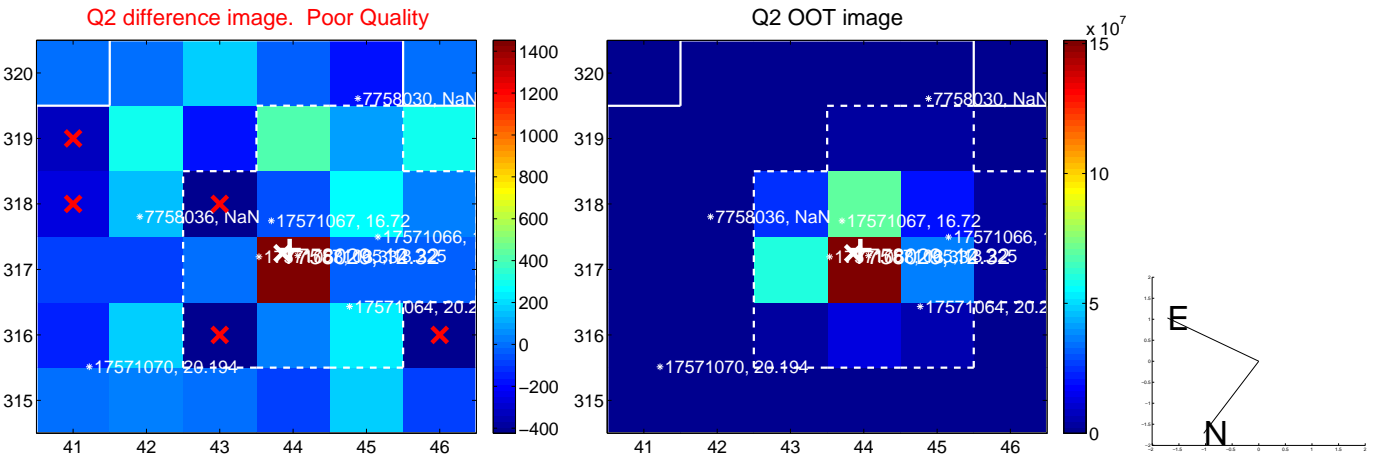
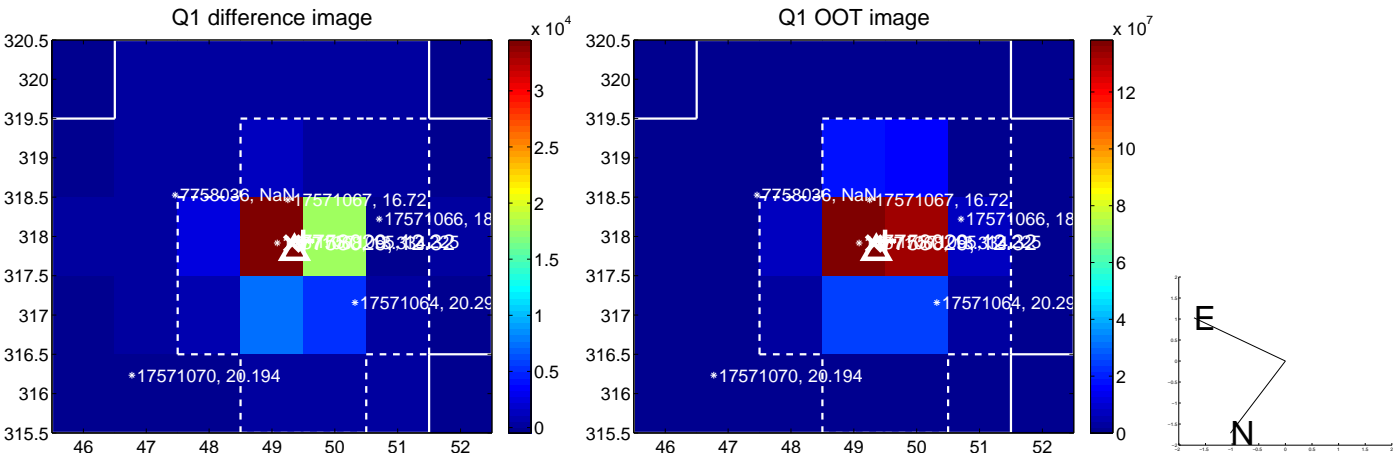
The direct PRF centroid is offset from the target star catalog position by about 0.72 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.510 ± 0.262	1.94	-0.404 ± 0.233	-0.310 ± 0.196
PRF-fit source offset from KIC position	1.170 ± 0.246	4.76	-0.855 ± 0.222	-0.799 ± 0.186
photometric centroid source offset	0.94 ± 0.45	2.09	-0.65 ± 0.51	-0.67 ± 0.37

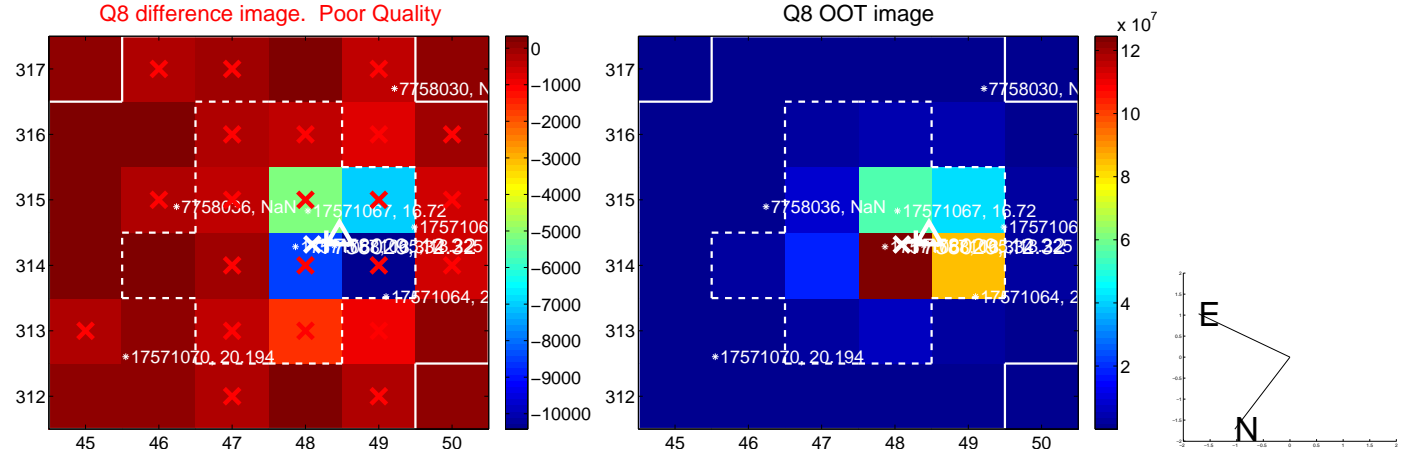
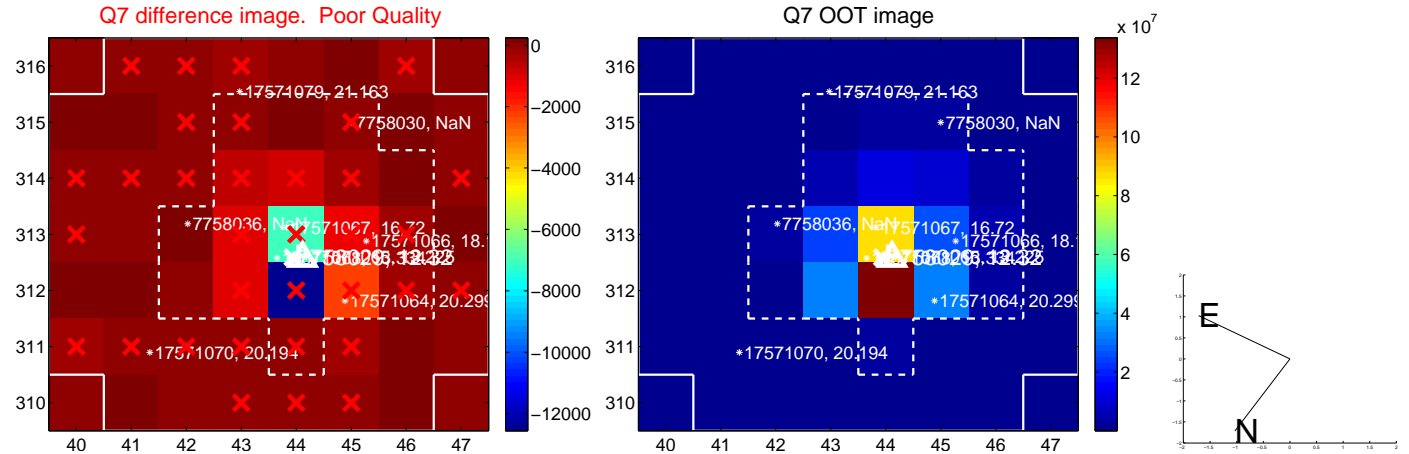
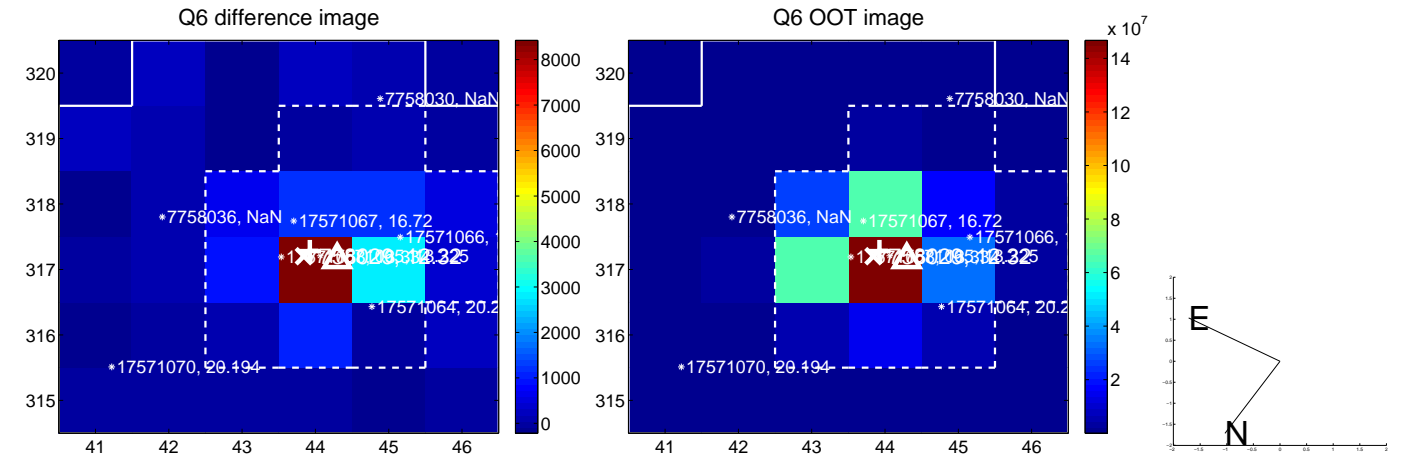
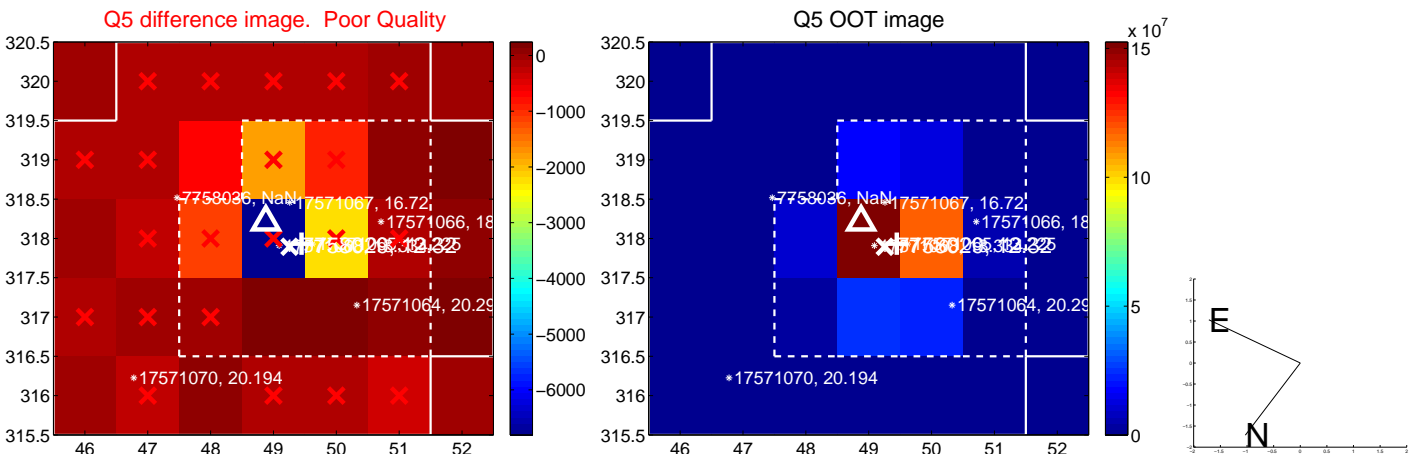


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

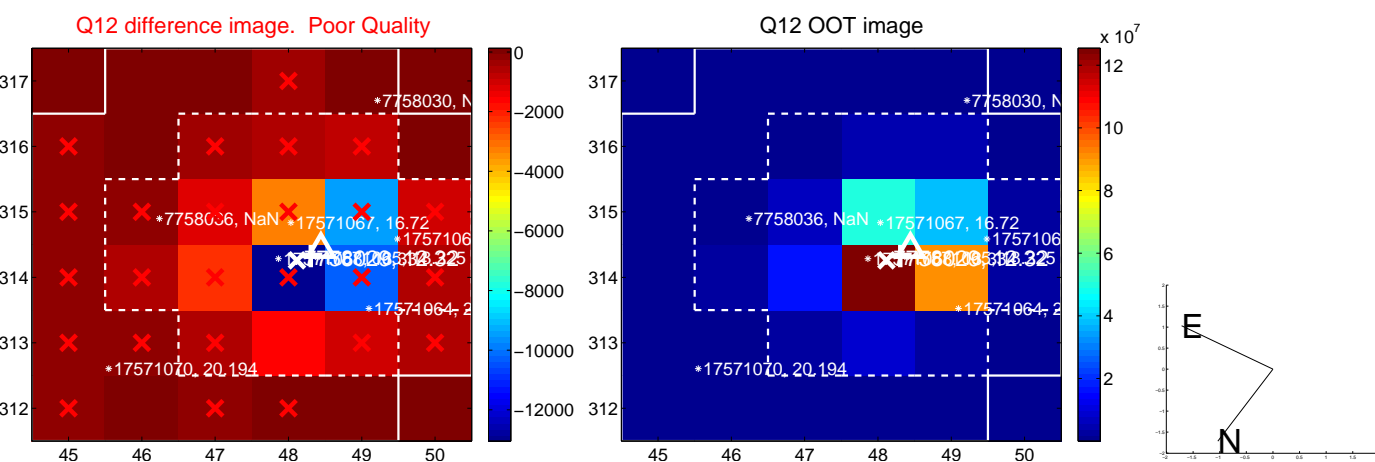
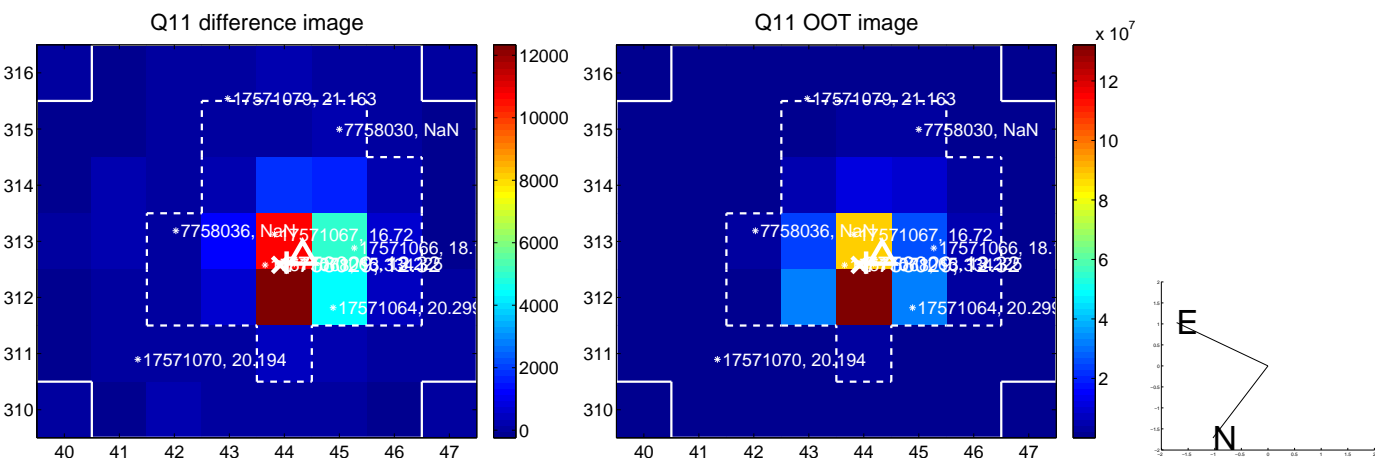
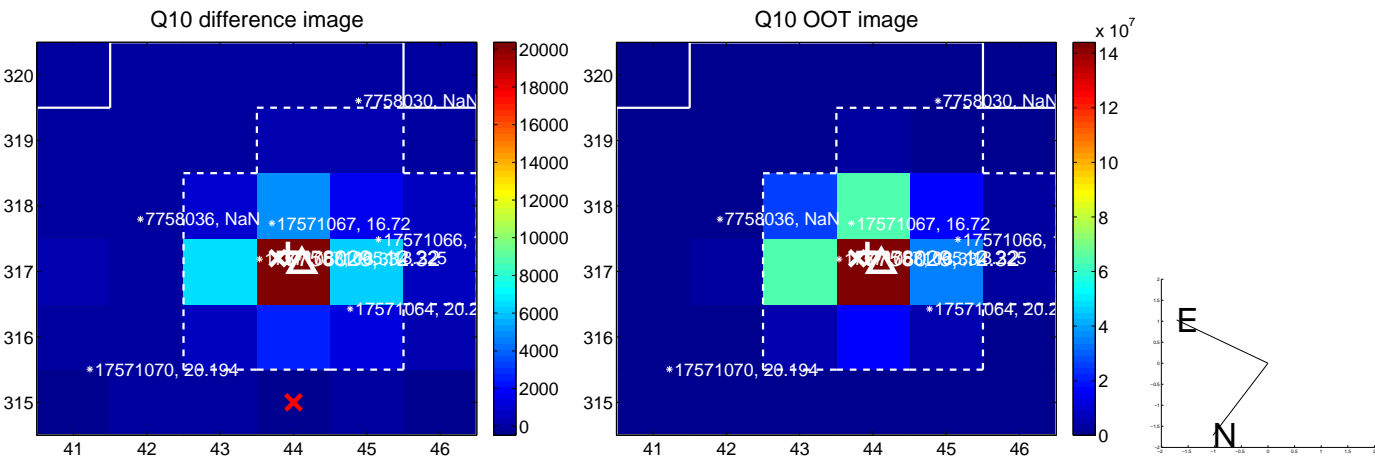
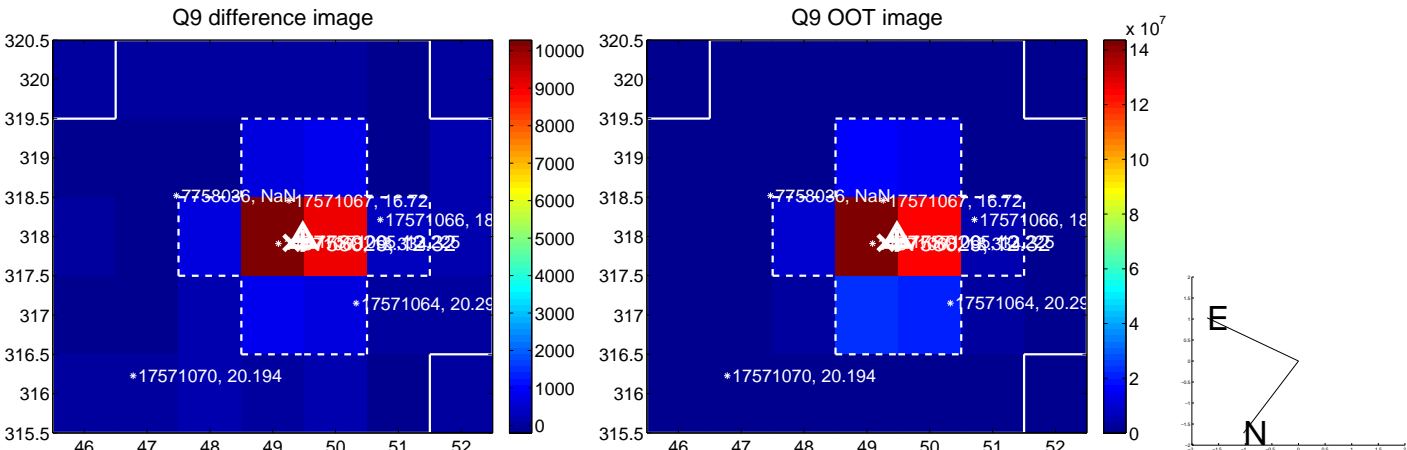
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



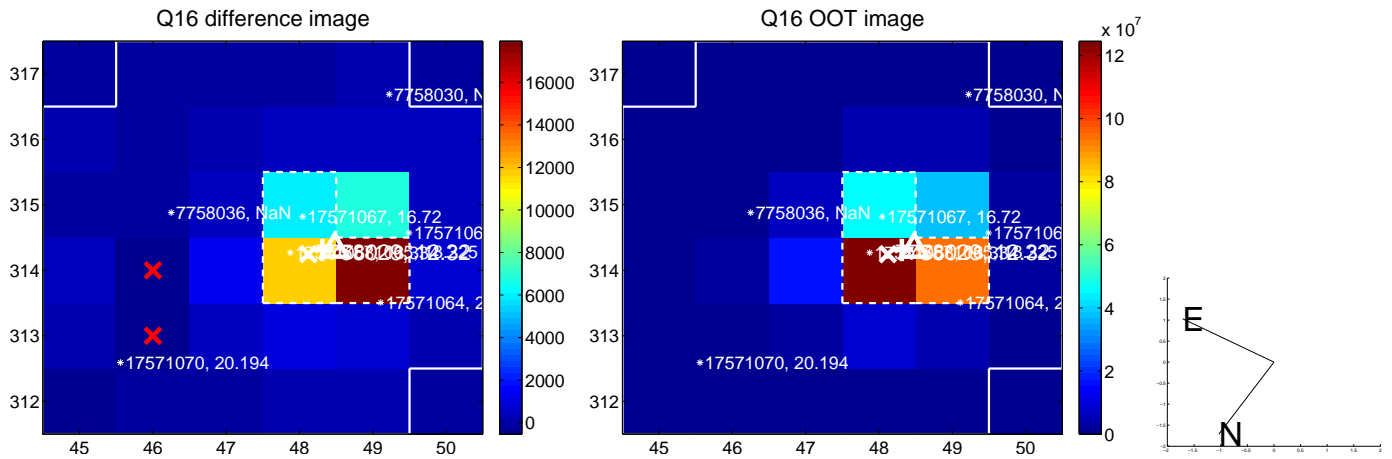
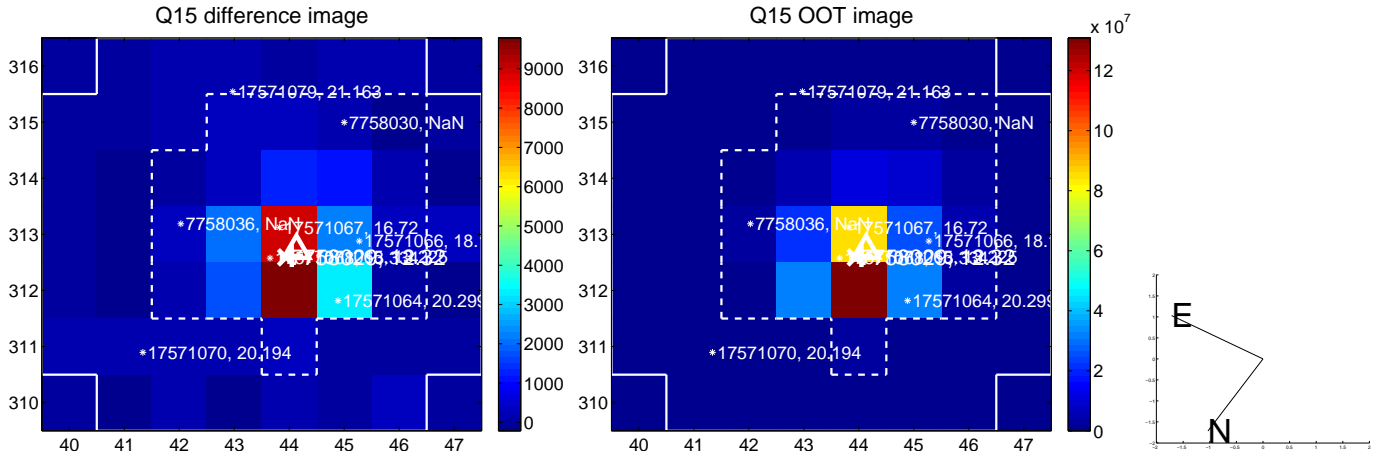
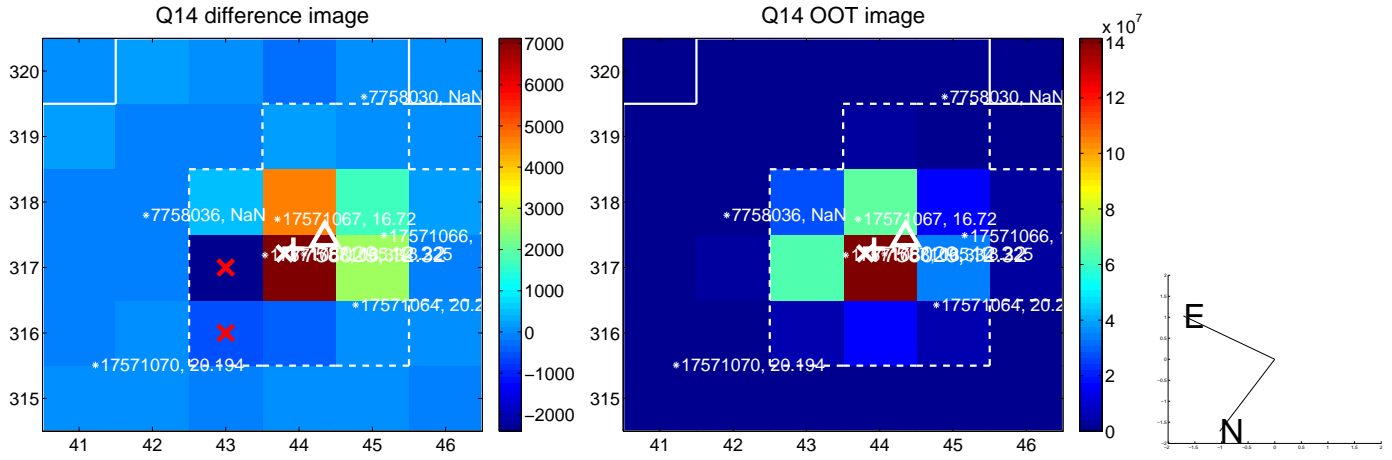
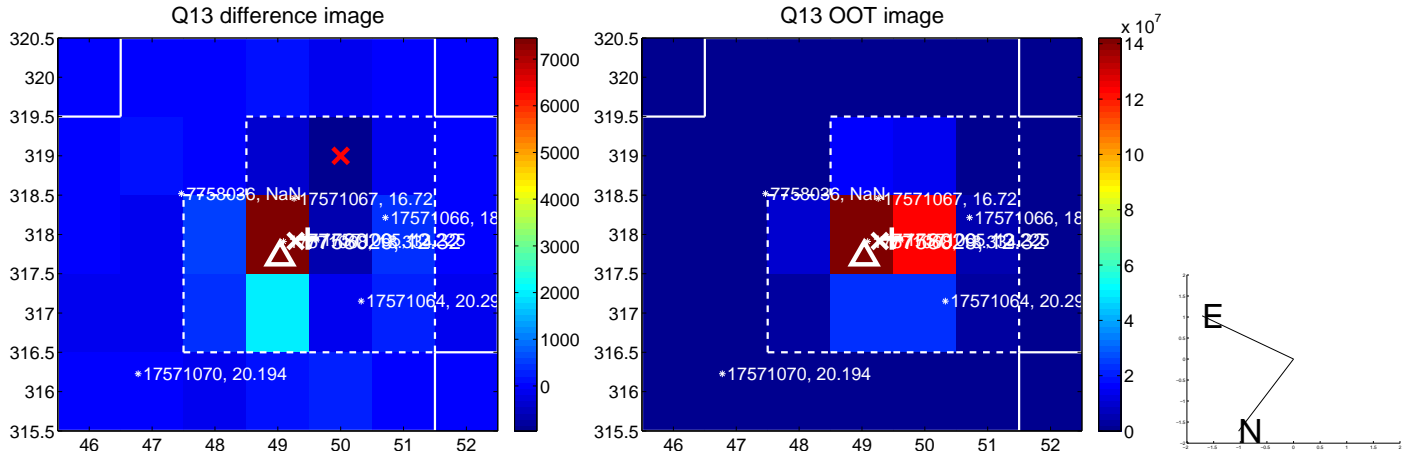
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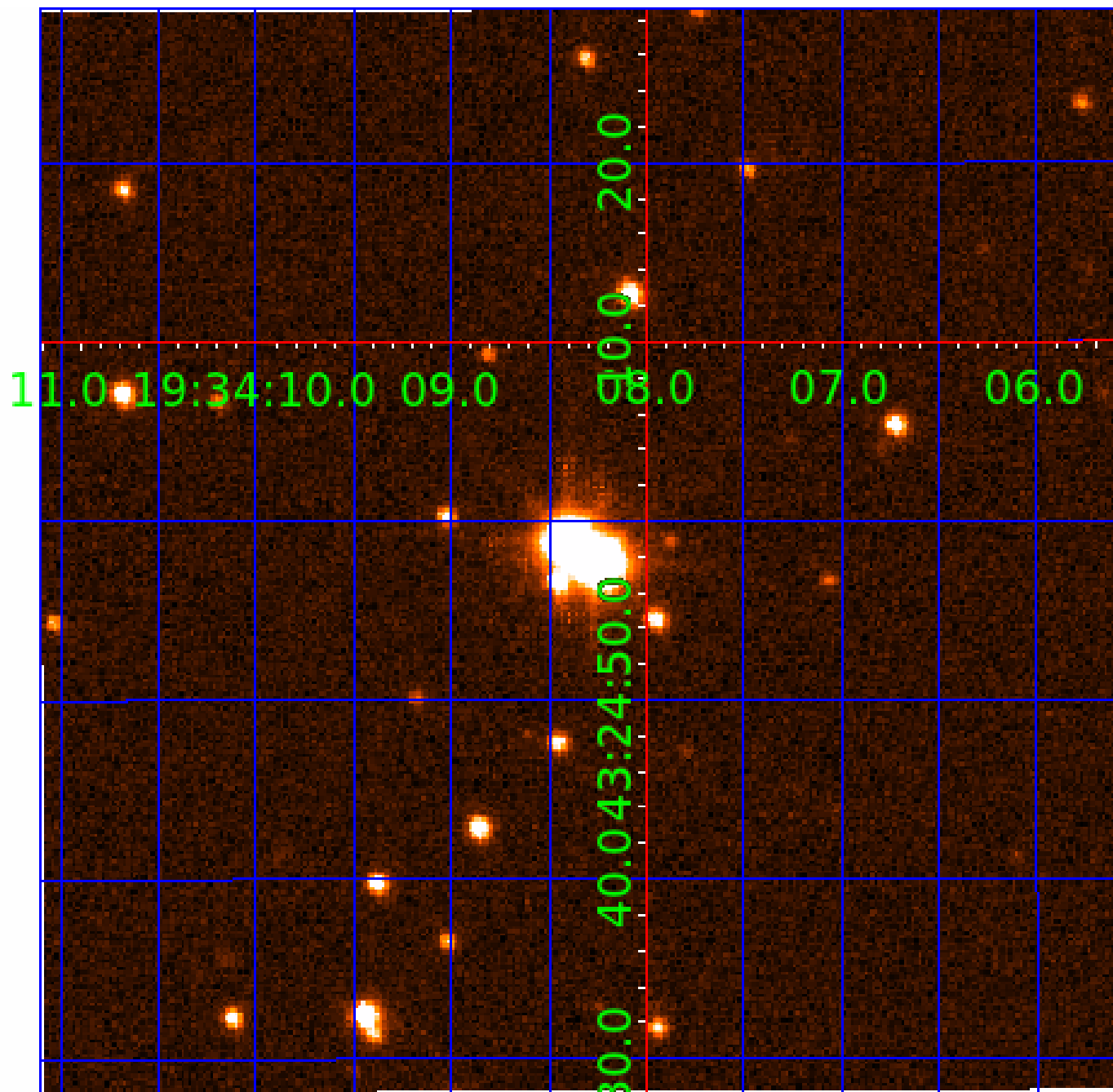


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007758029

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})
007758029-01	OBS	No	0.669040	131.884506	43.7	2.257	11.2	9.8	10.80	6732	8.31	0.00
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007758029-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_KIC_POS
007758029-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—SAME_NTL_PERIOD—CENT_KIC_POS
007758029-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—ALL_TRANS_CHASES—CENT_KIC_POS

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

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

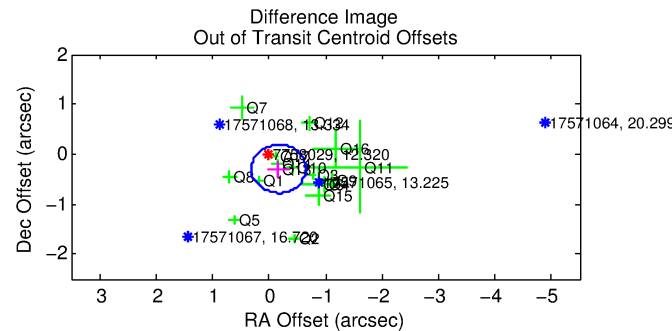
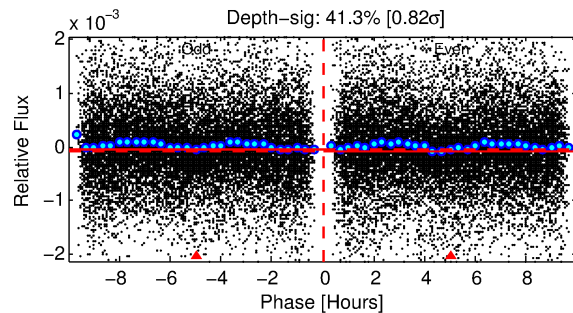
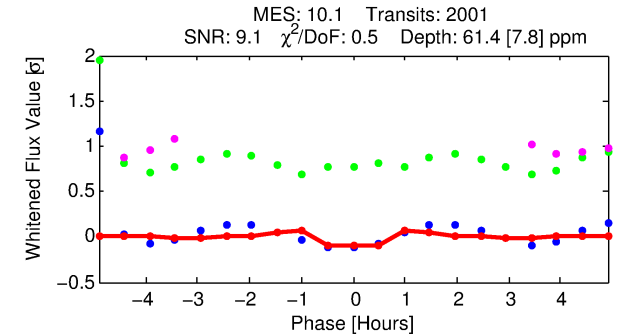
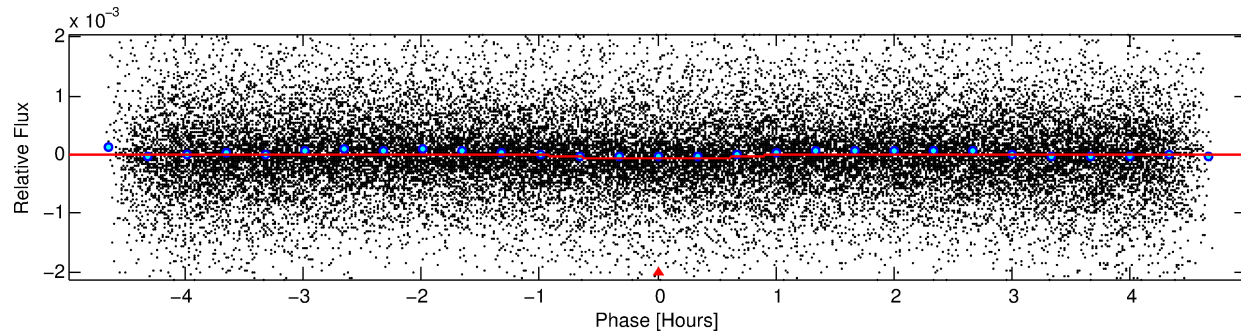
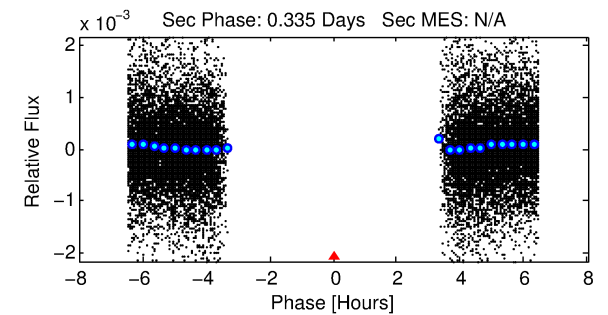
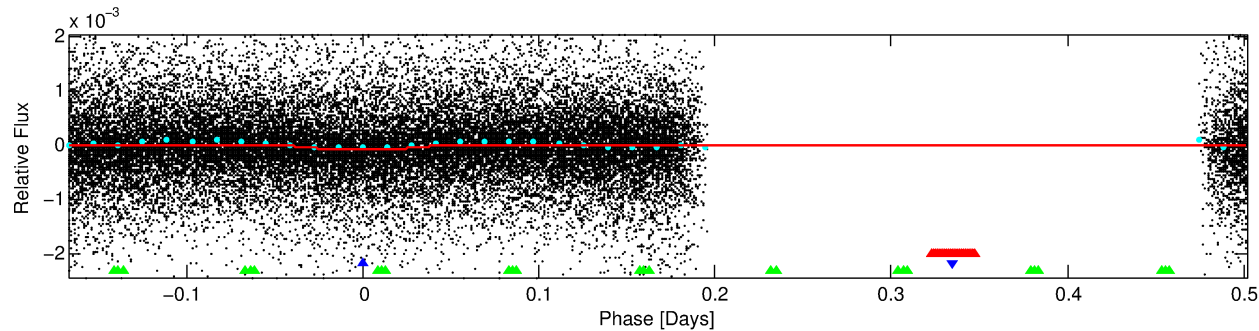
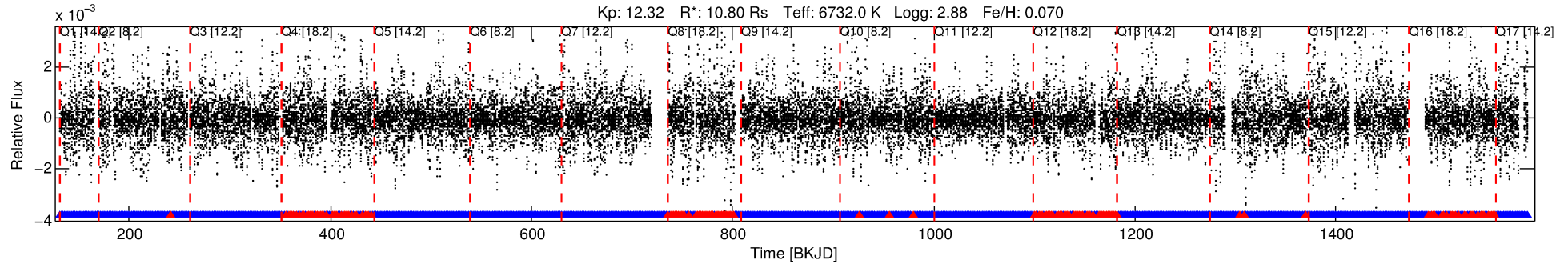
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007758029-02

No Significant Match Found

DV One-Page Summary

KIC: 7758029 Candidate: 2 of 3 Period: 0.669 d



DV Fit Results:

Period = 0.66905 [0.00001] d
Epoch = 131.5374 [0.0011] BKJD
Rp/R* = 0.0074 [0.0016]
a/R* = 2.90 [2.85]
b = 0.41 [2.25]
Seff = N/A
Teq = N/A
Rp = 8.70 [5.80] Re
a = N/A

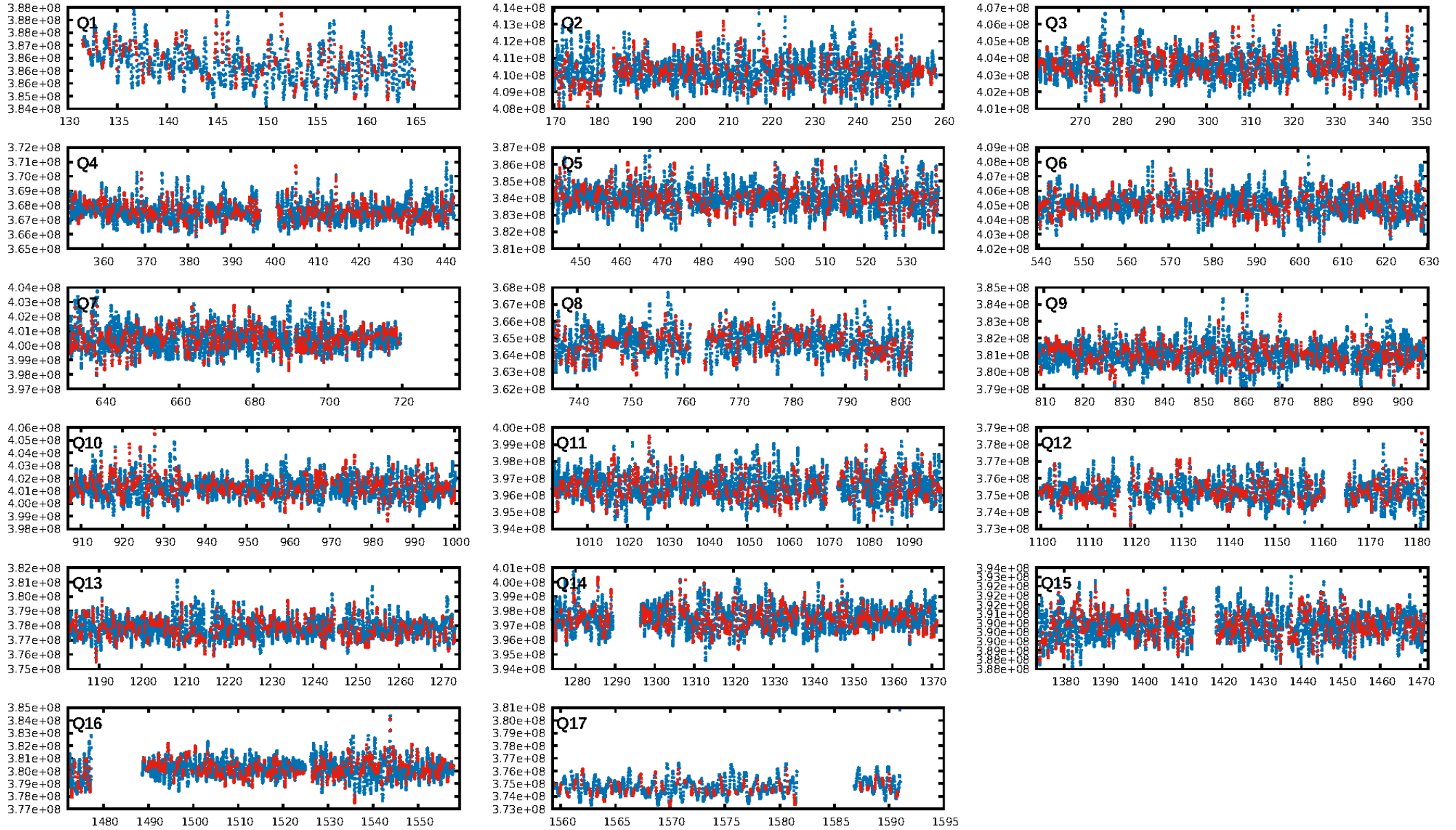
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 100.0% [548.60σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.82e-17
RollingBand-fgt: 0.89 [1704/1910]
GhostDiagnostic-chr: 1.04
Centroid-sig: 1.1%
Centroid-so: 0.859 arcsec [2.37σ]
OotOffset-rm: 0.339 arcsec [2.11σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 1.014 arcsec [6.74σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.53 [9/17]
DiffImageOverlap-fno: 1.00 [17/17]

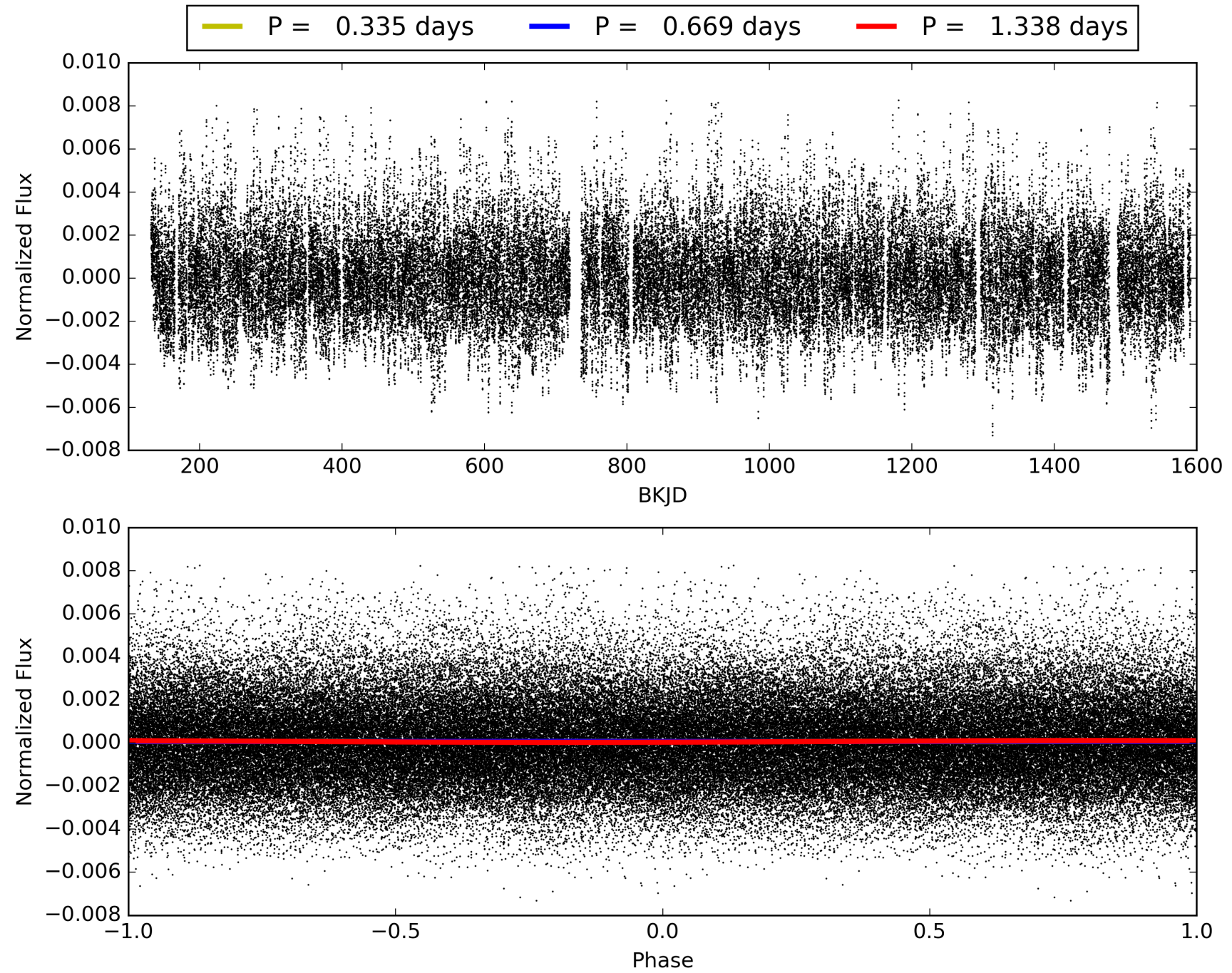
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 007758029-02, PDC Light Curves

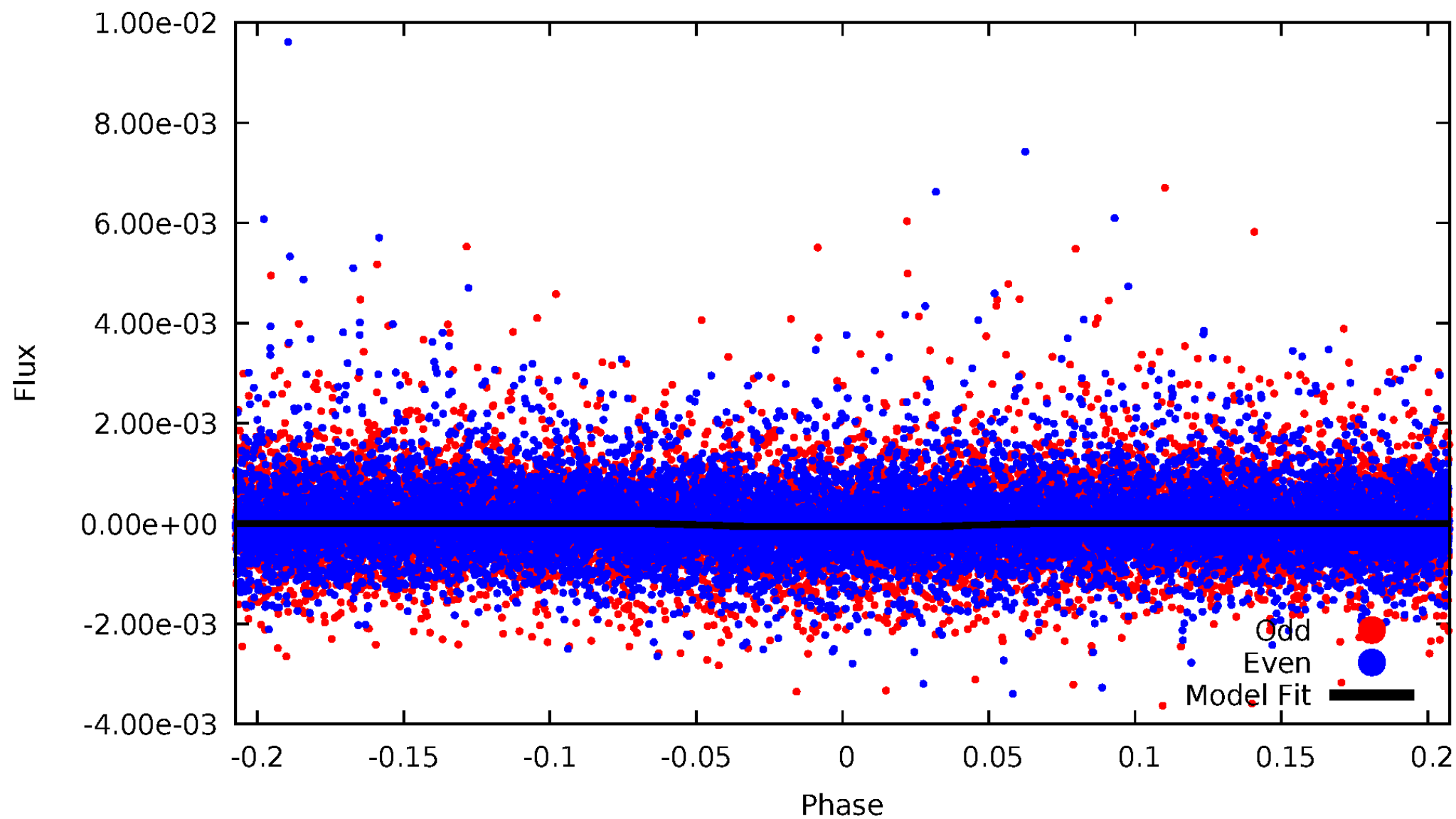


TCE 007758029-02



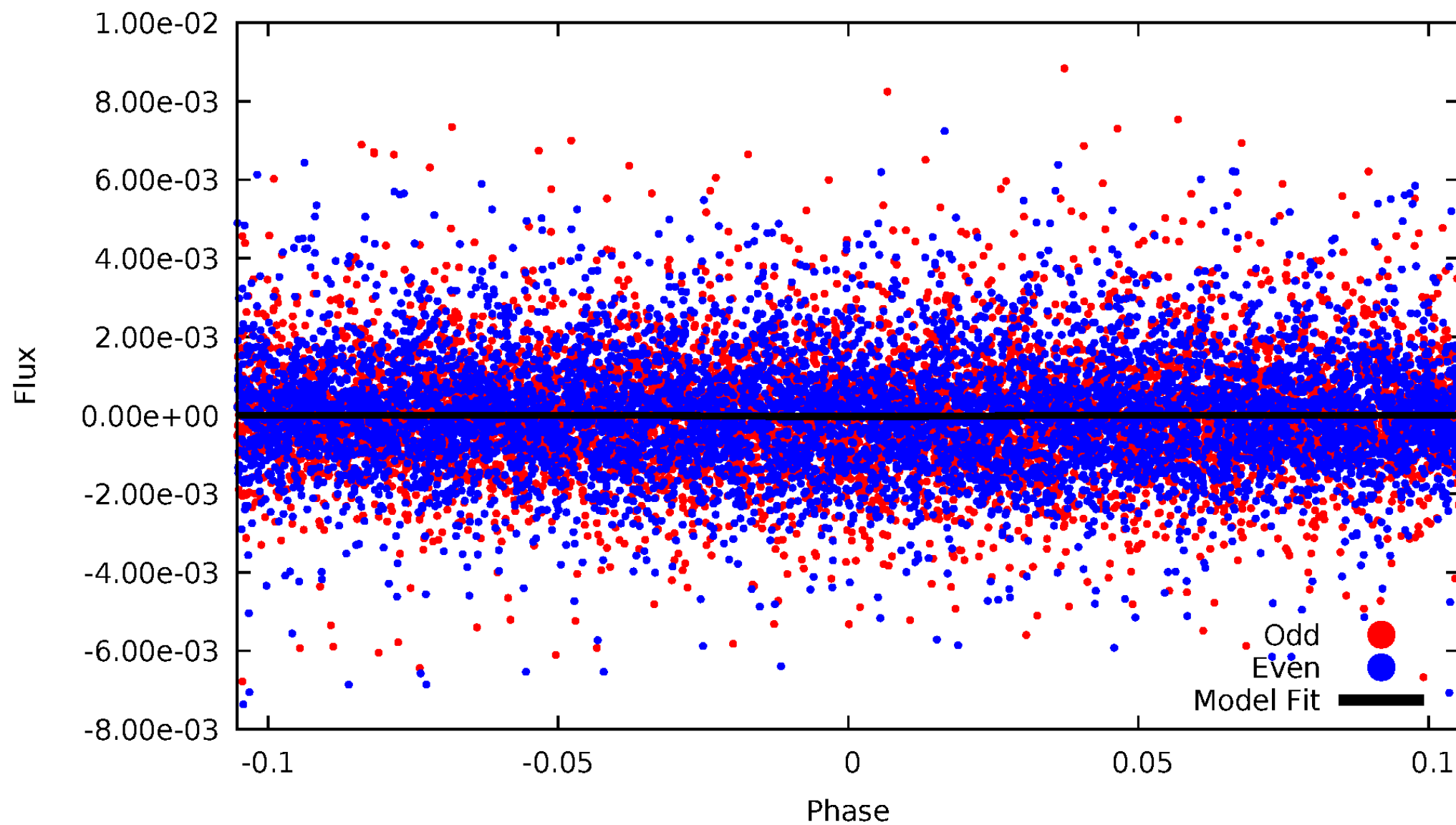
DV Odd/Even

TCE 007758029-02



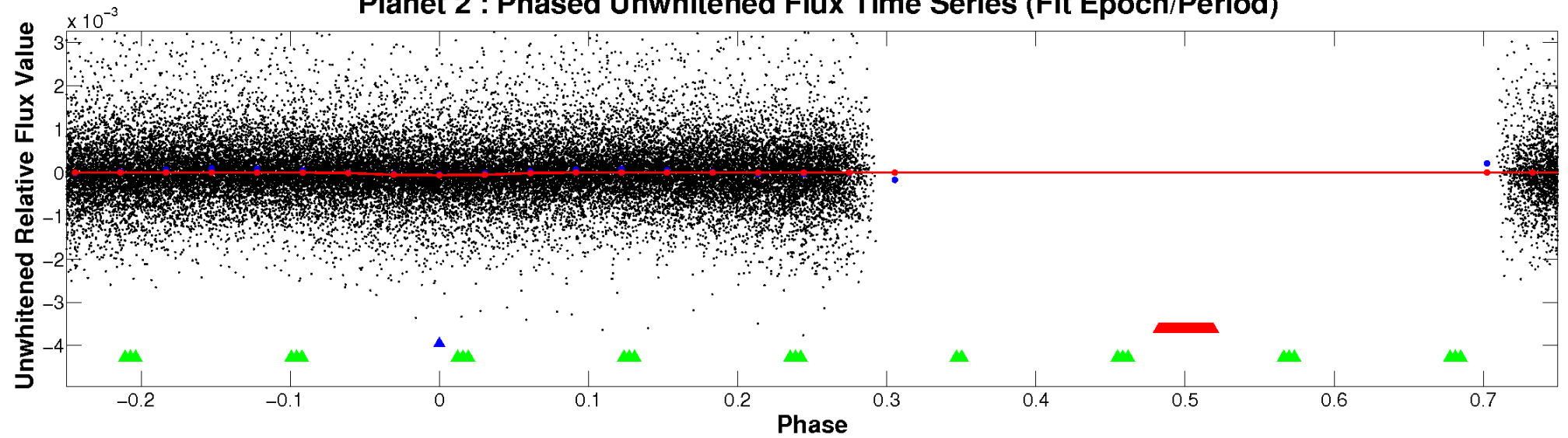
ALT Odd/Even

TCE 007758029-02

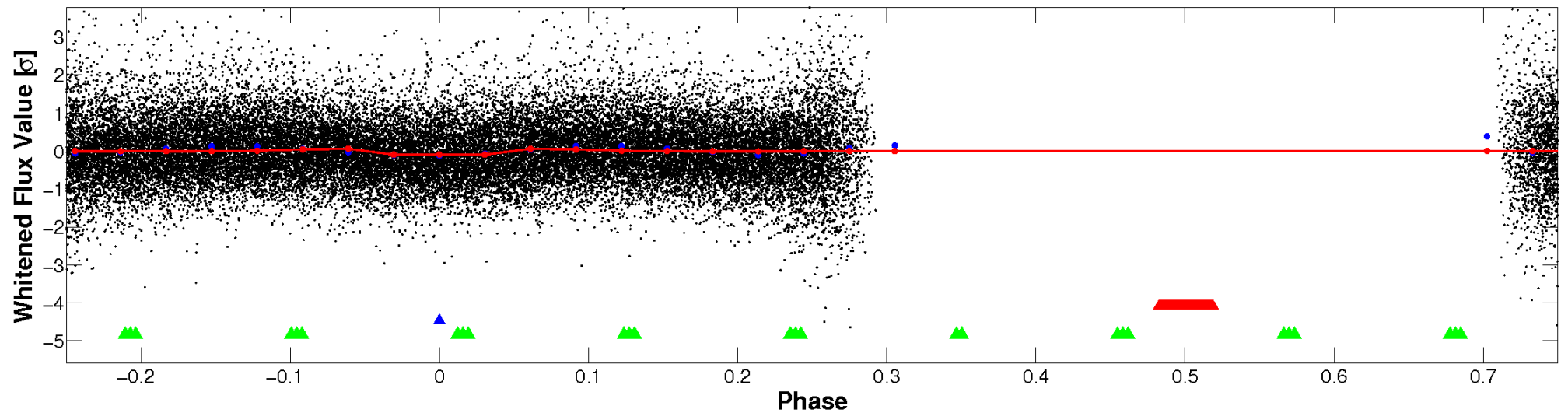


Non-Whitened Vs. Whitened Light Curve

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

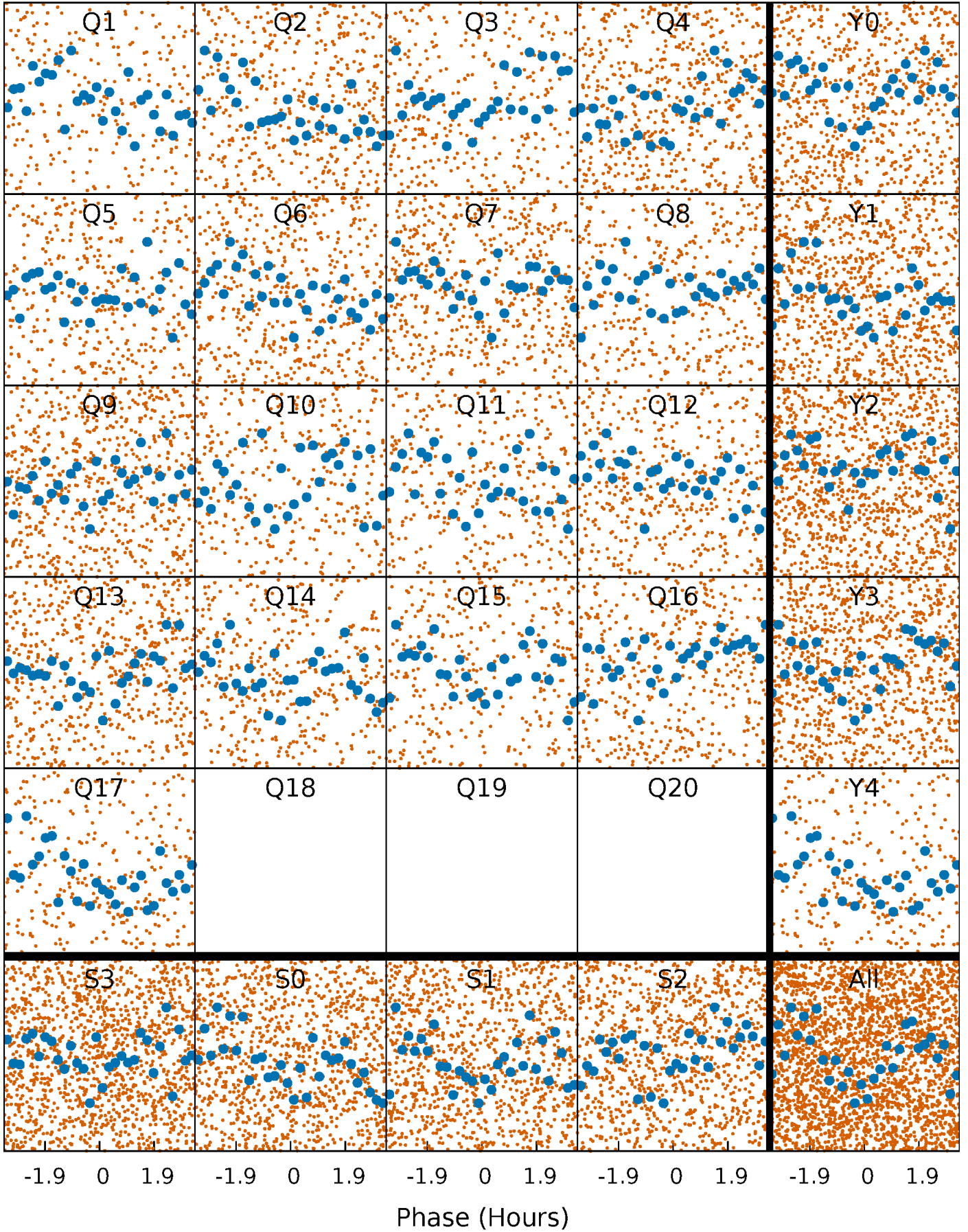


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



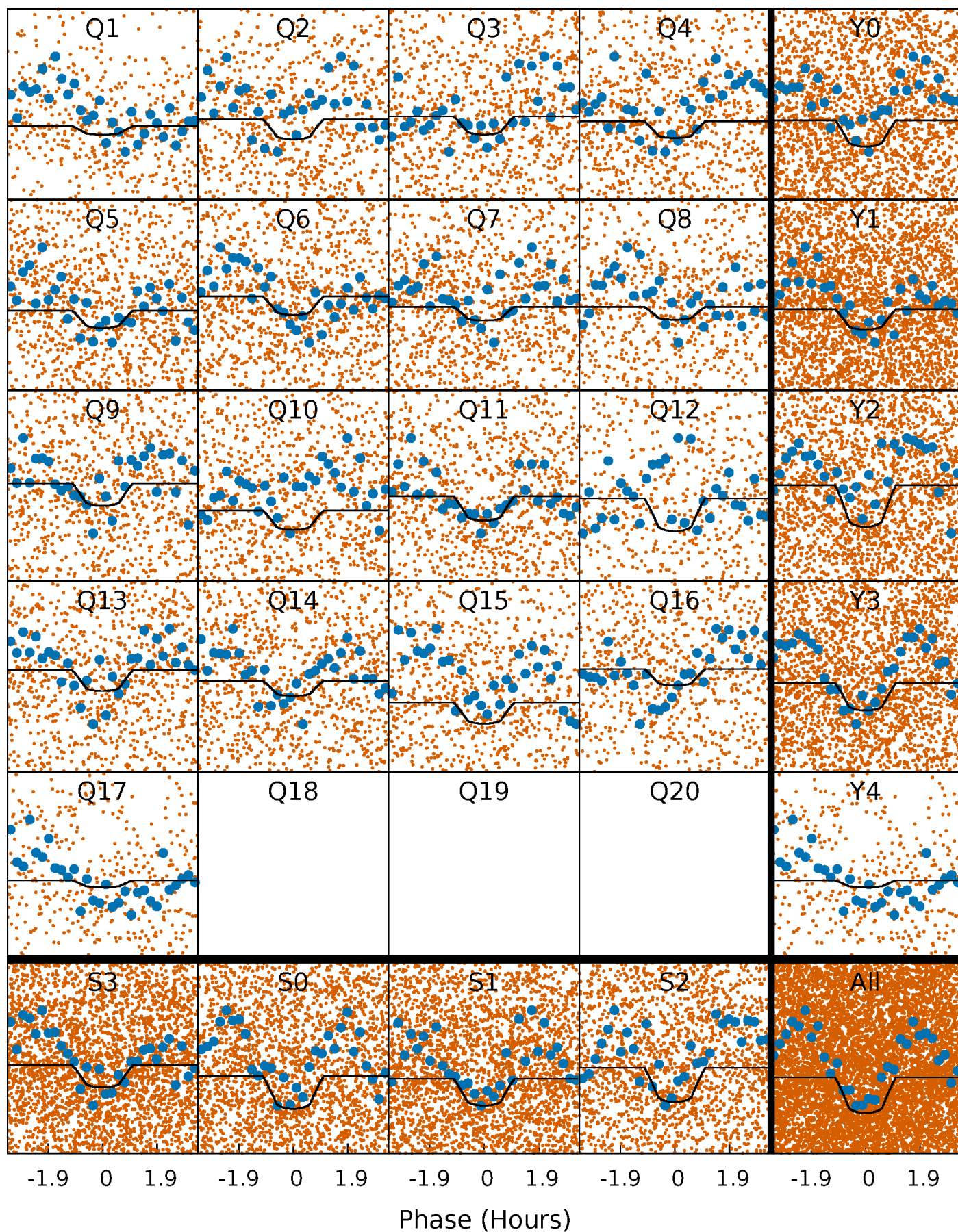
PDC Quarter-Phased Transit Curves

TCE 007758029-02 P= 0.669051 Days $T_0=131.537362$ (BKJD)



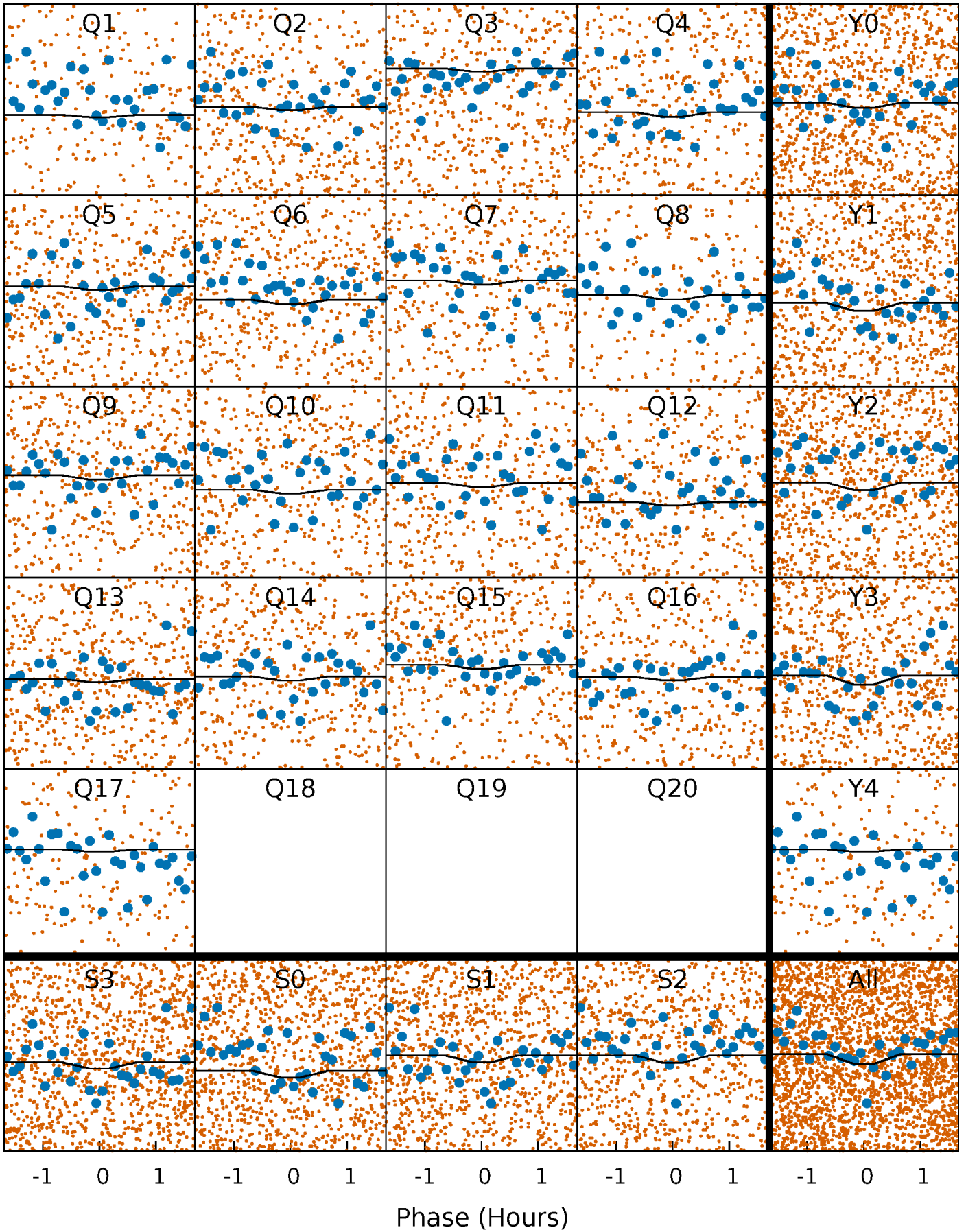
DV Quarter-Phased Transit Curves

TCE 007758029-02 P= 0.669051 Days $T_0=131.537362$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

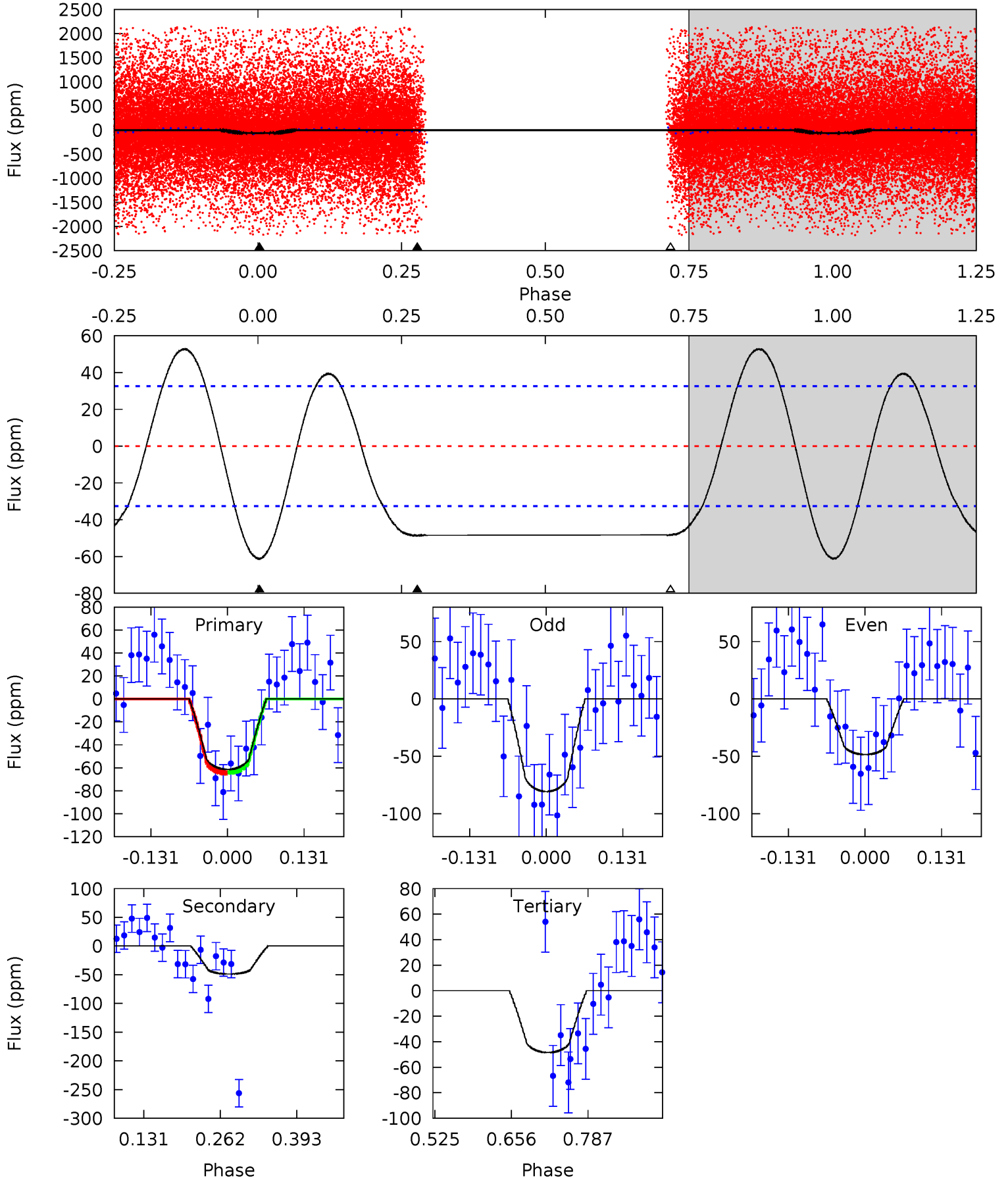
TCE 007758029-02 P= 0.669051 Days $T_0=131.527965$ (BKJD)



DV Model-Shift Uniqueness Test

007758029-02, P = 0.669051 Days, E = 130.868311 Days

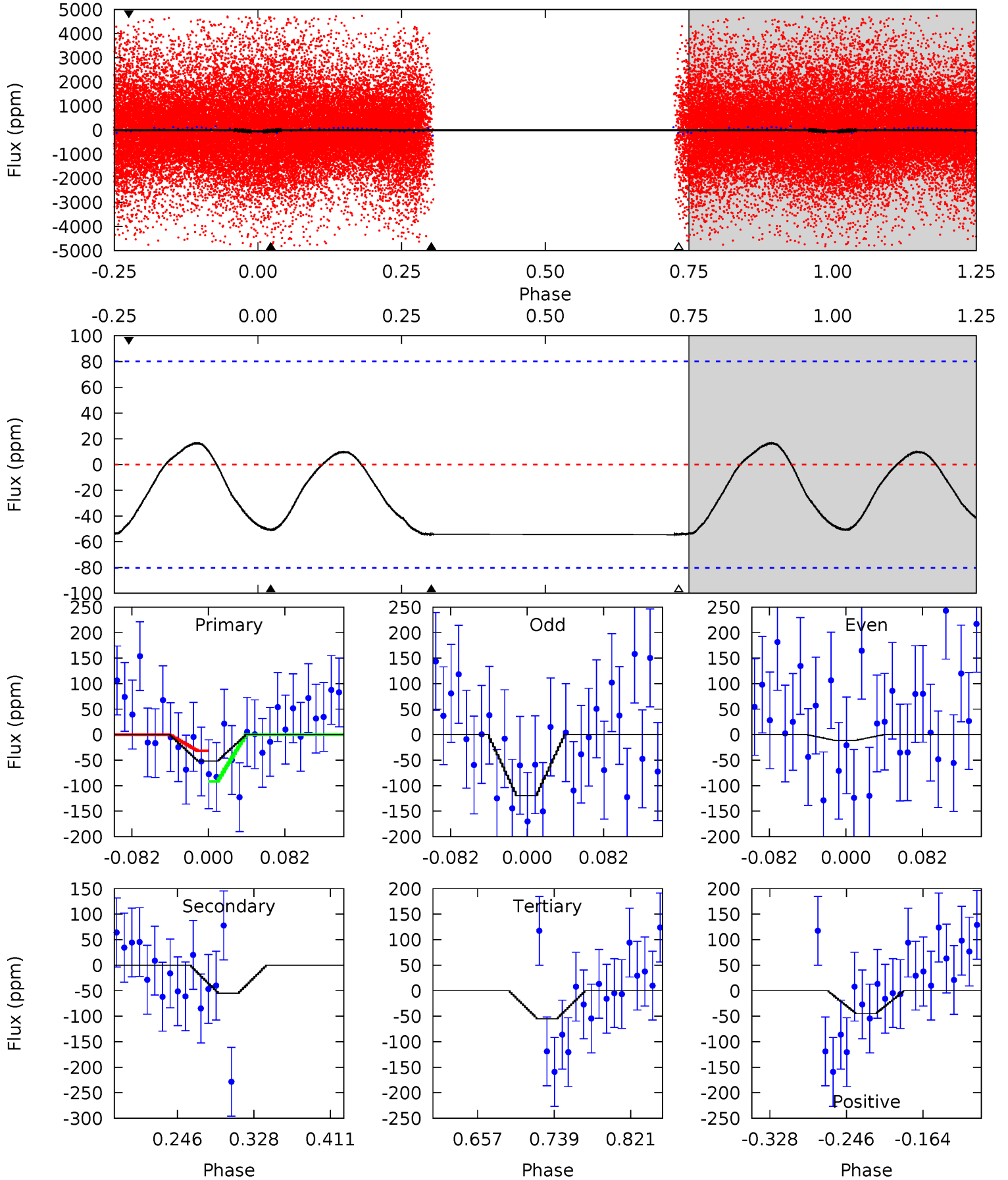
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.48	6.74	6.70	0	4.51	1.51	4.96	1.79	8.48	0.05	6.74	2.28	0.44	0.46	0.06



Alt Model-Shift Uniqueness Test

007758029-02, P = 0.669051 Days, E = 130.858914 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.96	3.16	3.15	-2.58	4.61	1.74	1.21	-0.19	5.54	0.01	5.74	3.16	0.54	0.24	1.79



Stellar Parameters For KIC 007758029

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6732^{+162}_{-348}	$2.884^{+0.535}_{-0.094}$	$0.070^{+0.250}_{-0.550}$	$10.801^{+1.138}_{-6.828}$	$3.255^{+0.080}_{-1.359}$	$0.004^{+0.029}_{-0.001}$
	+2%/-5%	+19%/-3%	+357%/-786%	+11%/-63%	+2%/-42%	+785%/-21%
Source	KIC0	FLK73	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 007758029-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-49 ± 7	$7.86^{+2.47}_{-2.44}$	8920^{+608}_{-1212}	-5352^{+10459}_{-1307}	$0.205^{+0.207}_{-0.084}$
Alt.	-55 ± 17	$5.66^{+2.22}_{-2.15}$	8773^{+681}_{-1241}	5779^{+2939}_{-11212}	$0.445^{+0.723}_{-0.233}$

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 $A_{obs} \gg 1.0$

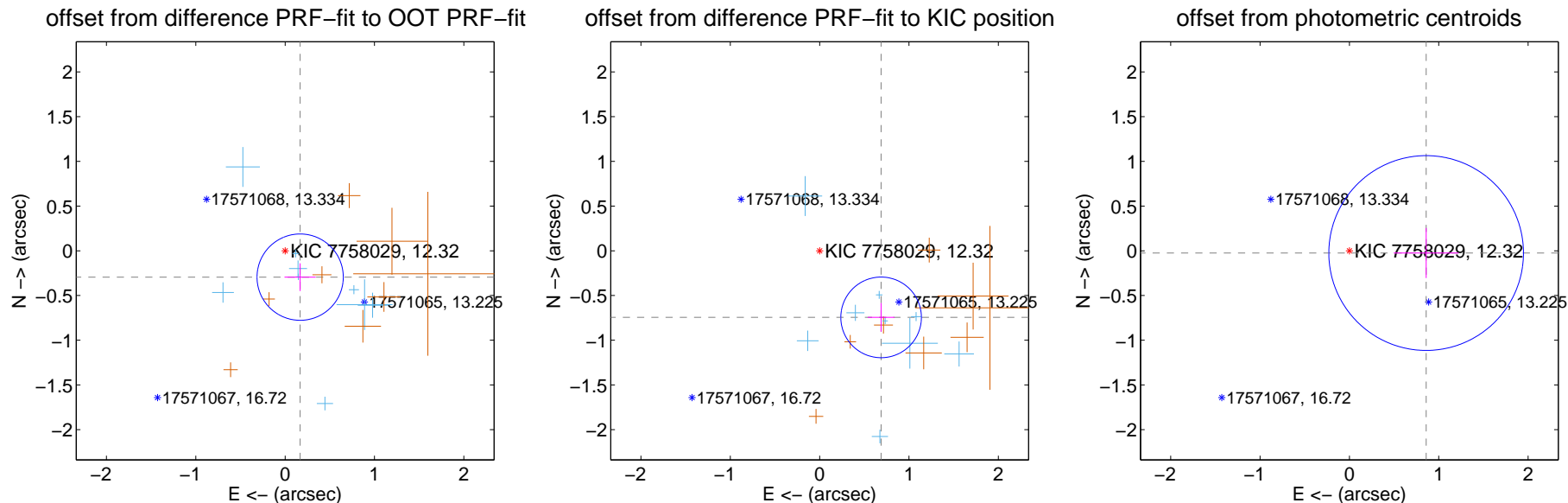
DV Centroid Data

Supplemental centroid analysis for 007758029-02. Kepler magnitude: 12.32. Transit SNR 9.11

There are 9 quarters with good PRF difference image offsets

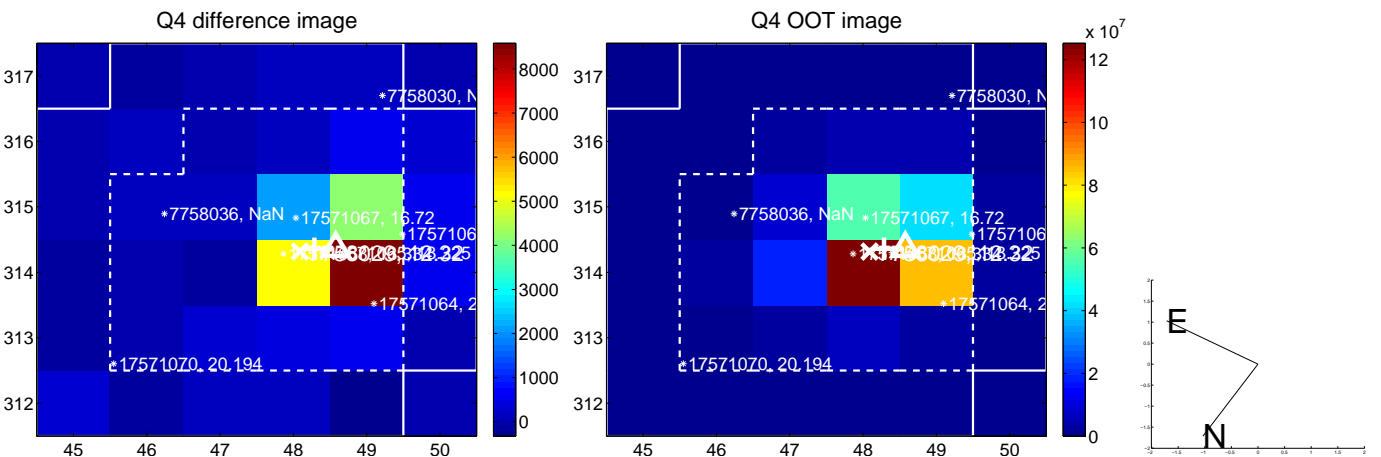
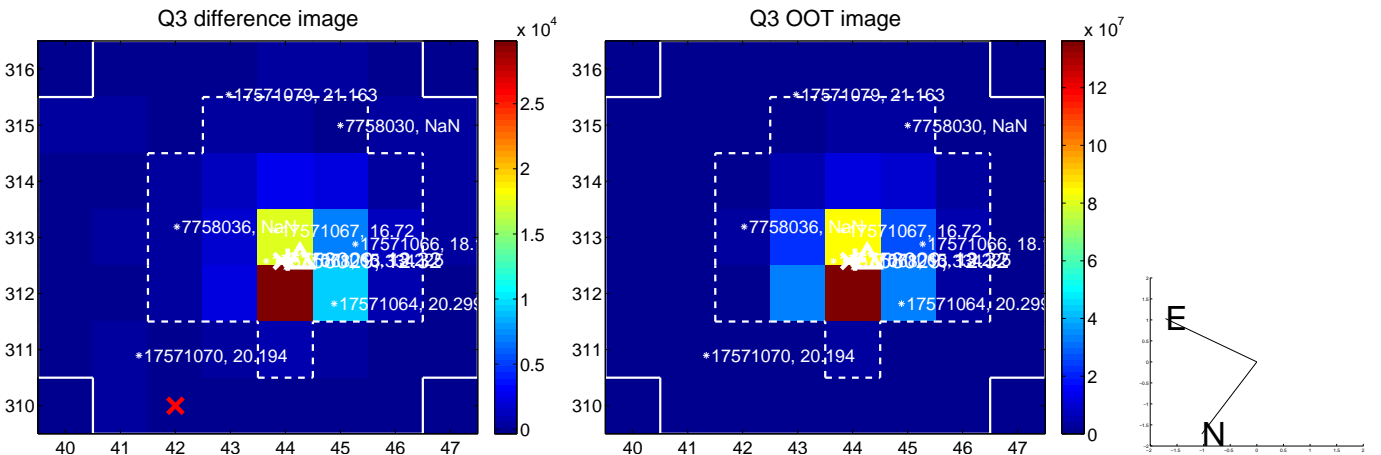
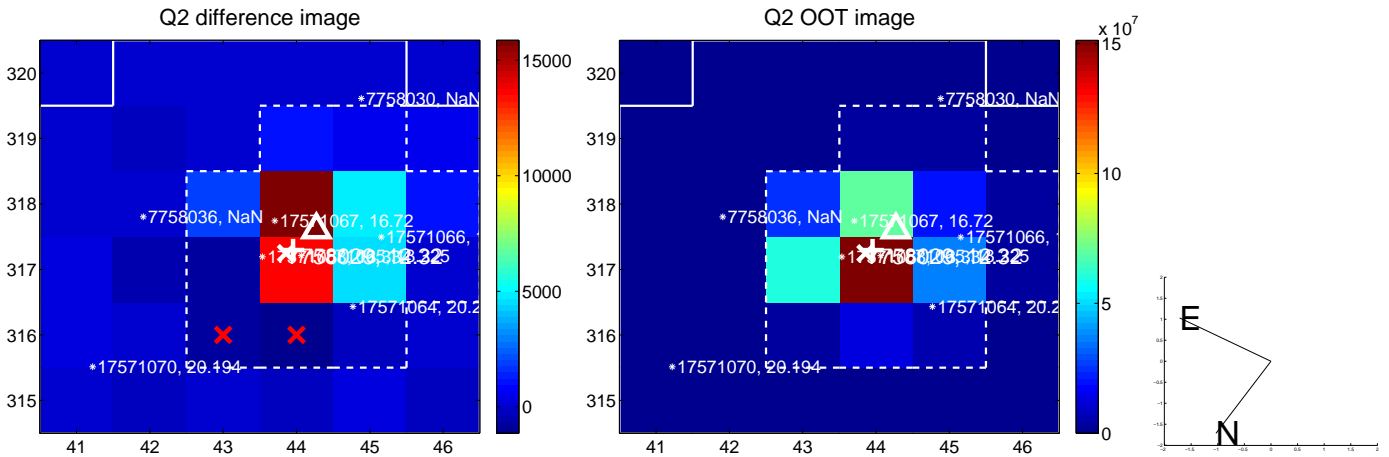
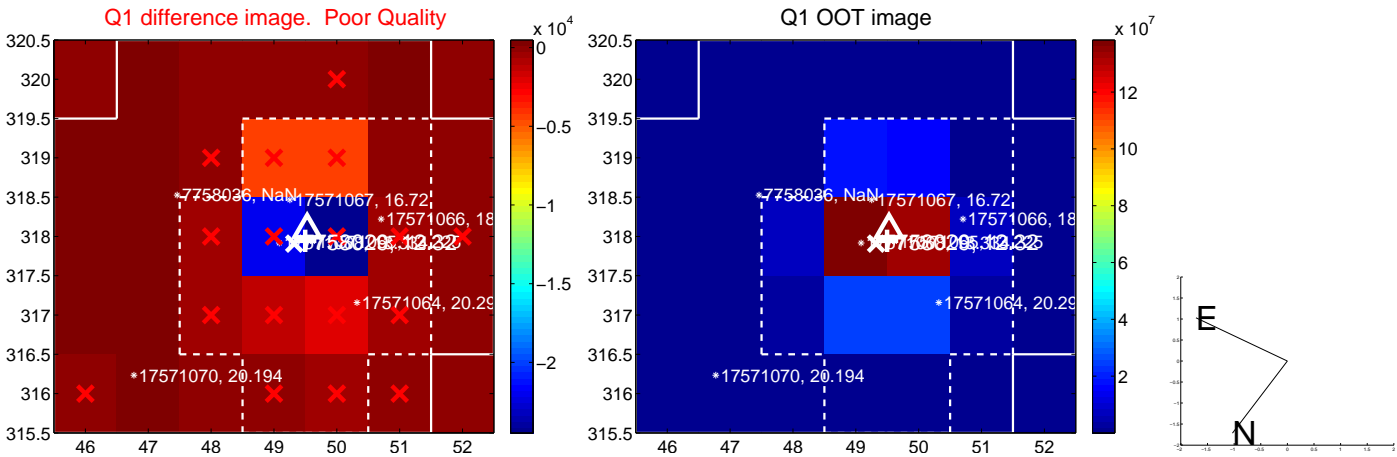
The direct PRF centroid is offset from the target star catalog position by about 0.72 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.339 ± 0.161	2.11	-0.168 ± 0.175	-0.295 ± 0.155
PRF-fit source offset from KIC position	1.014 ± 0.150	6.74	-0.688 ± 0.150	-0.745 ± 0.160
photometric centroid source offset	0.86 ± 0.36	2.37	-0.86 ± 0.36	-0.03 ± 0.28

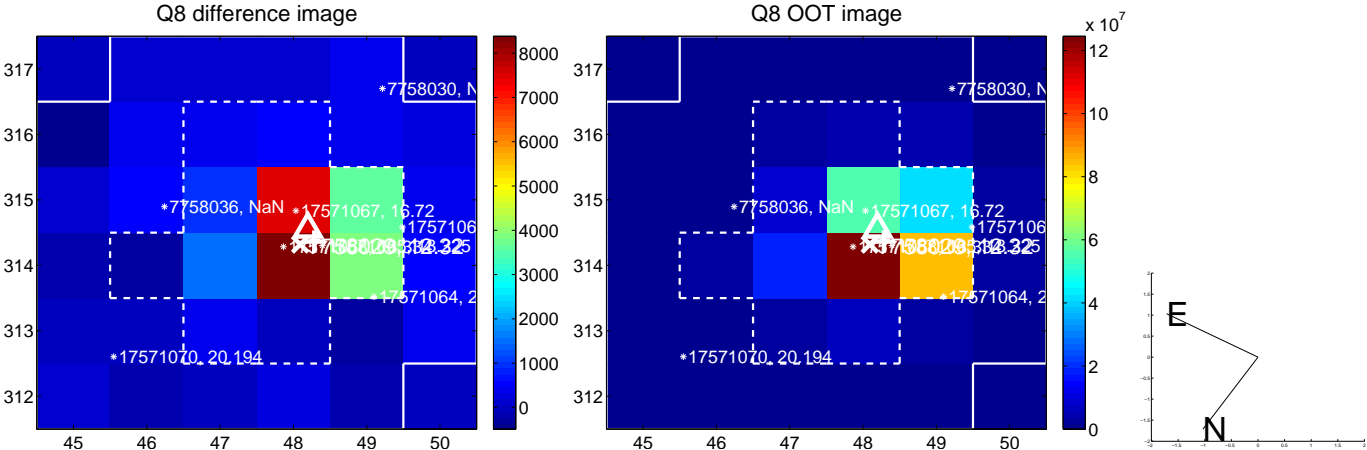
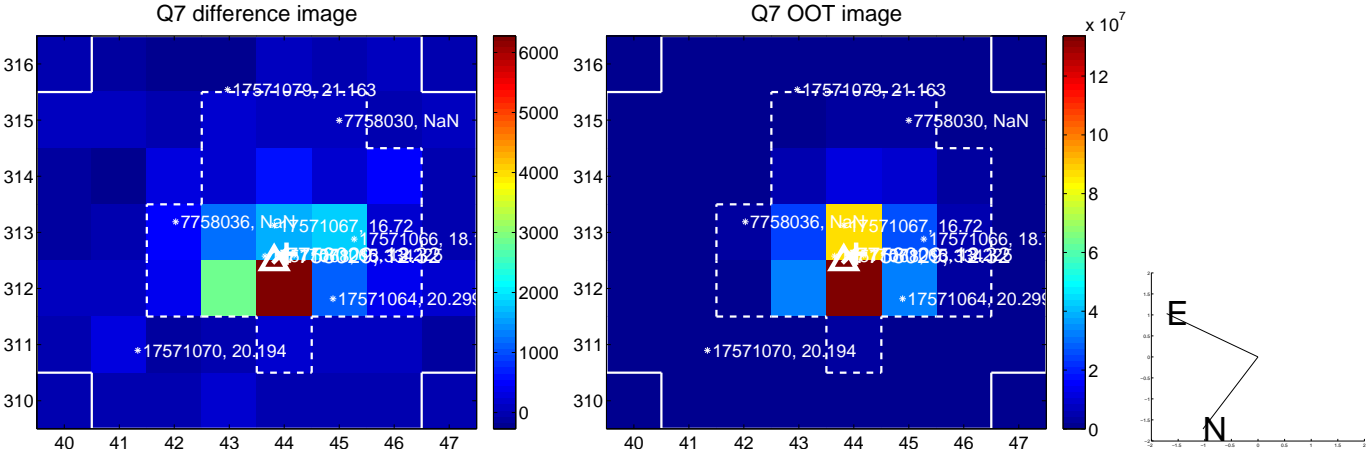
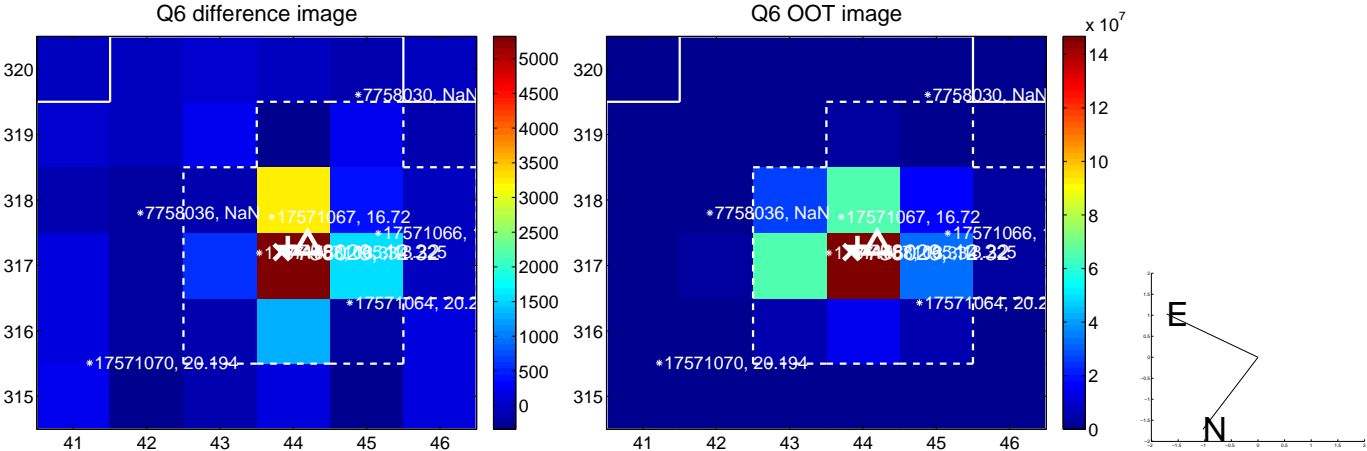
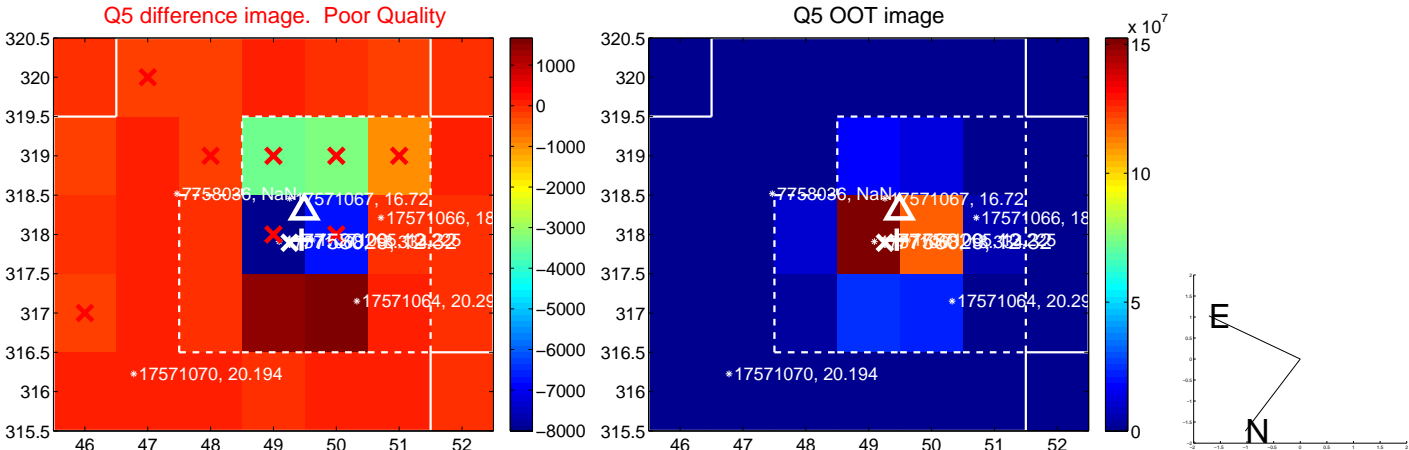


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

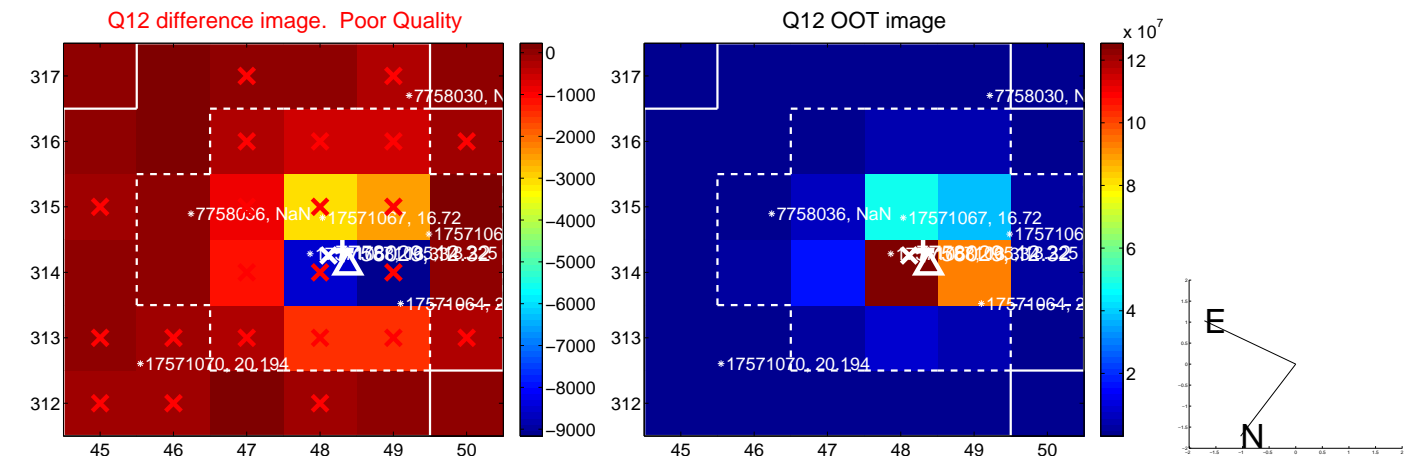
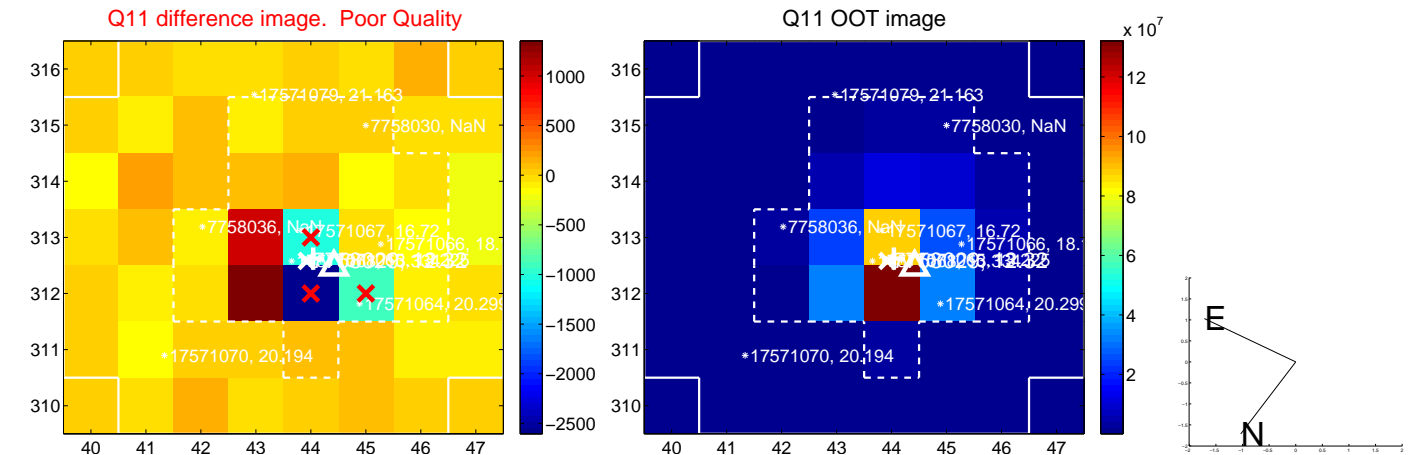
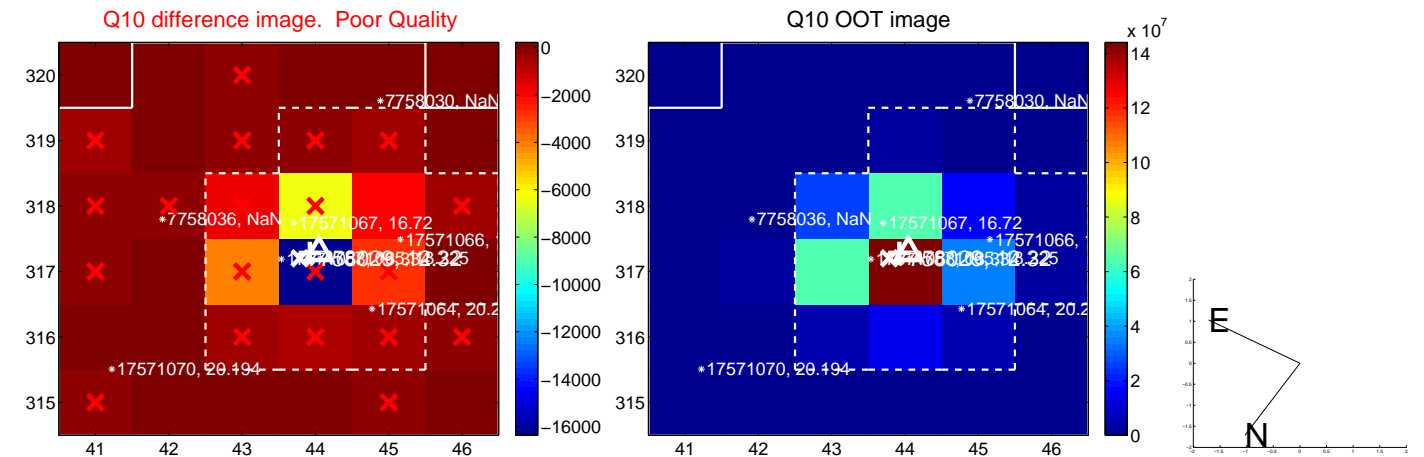
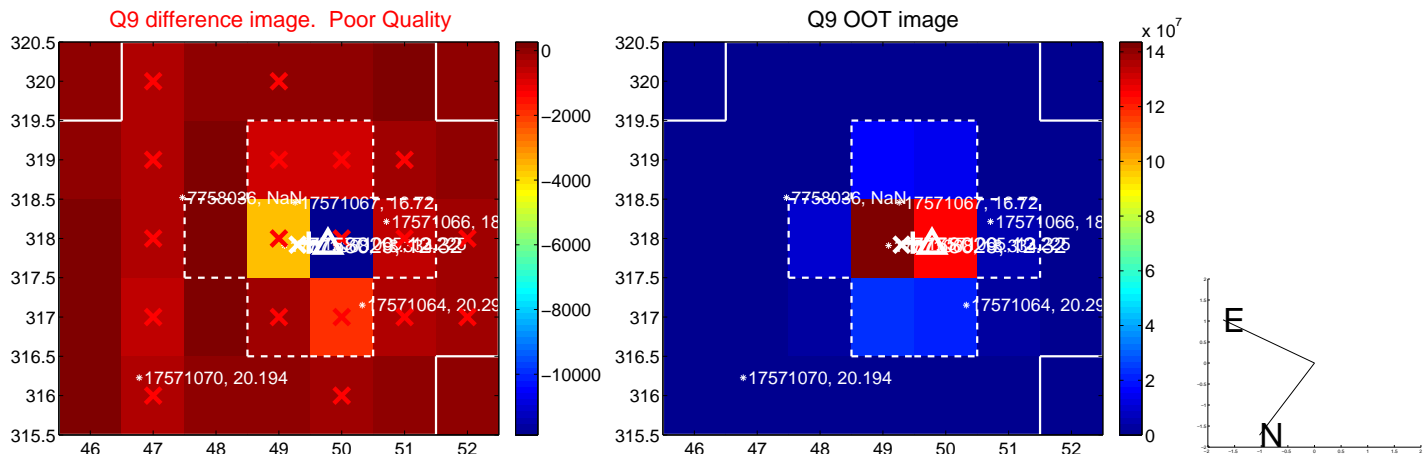
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



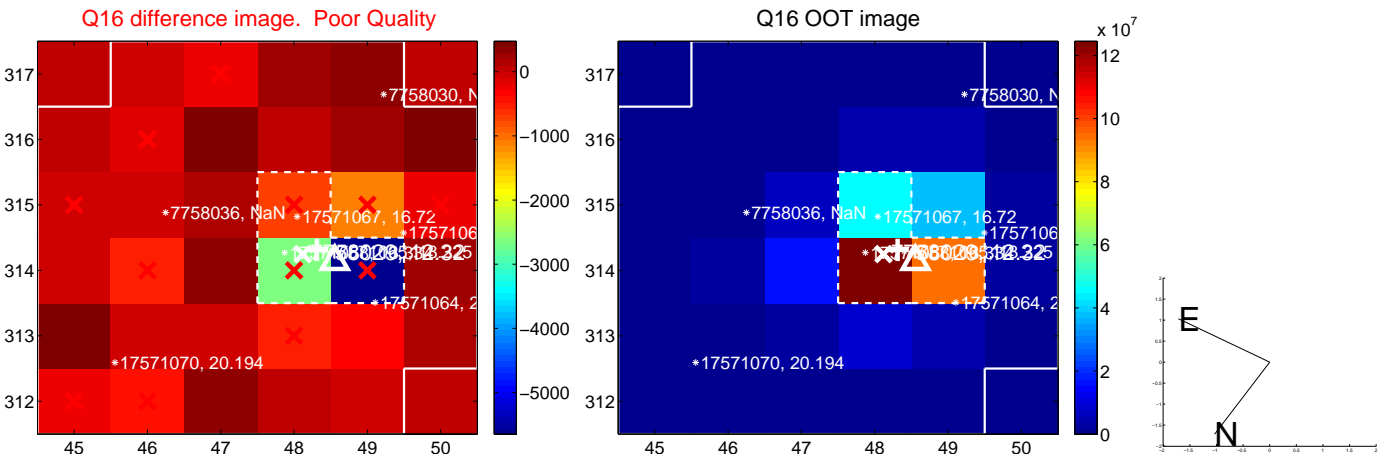
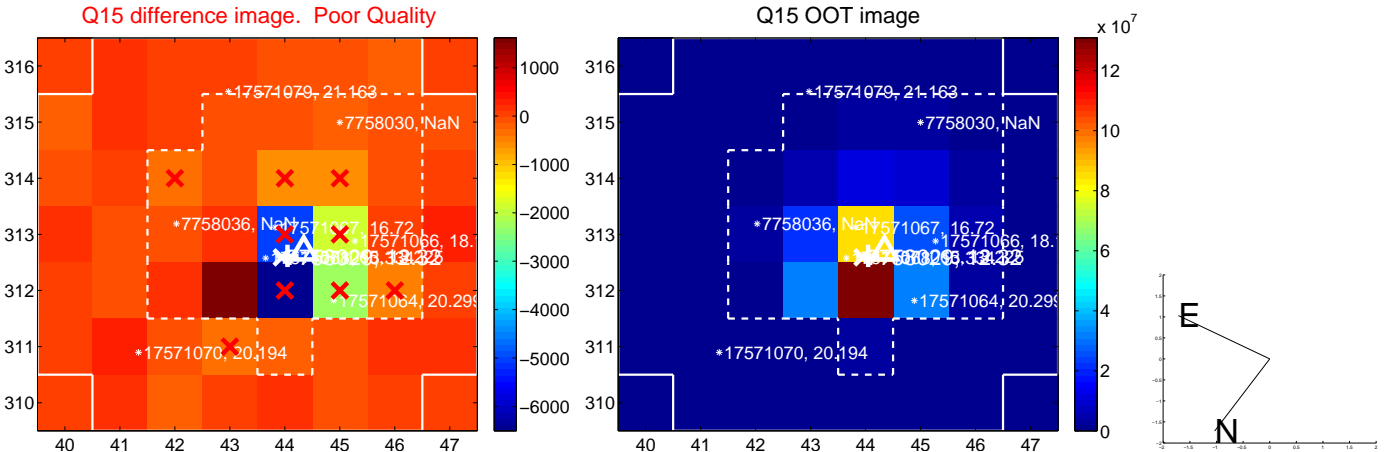
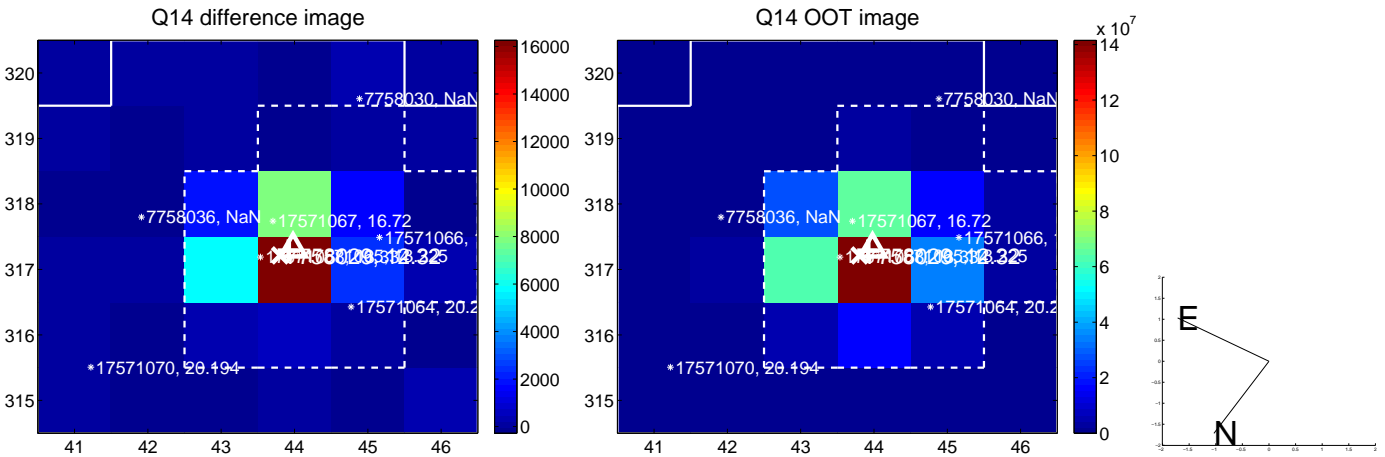
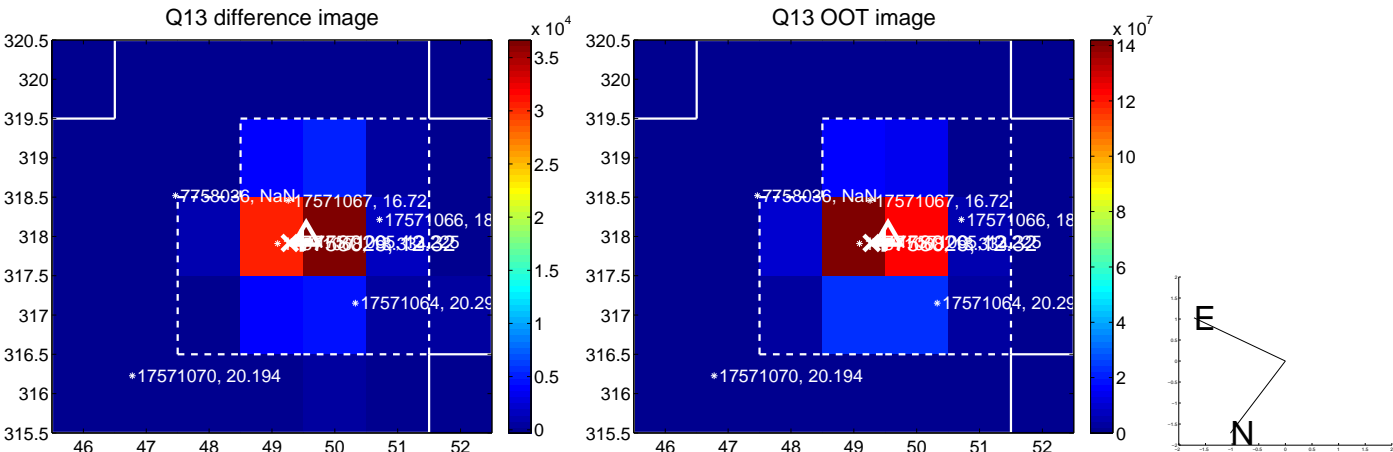
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



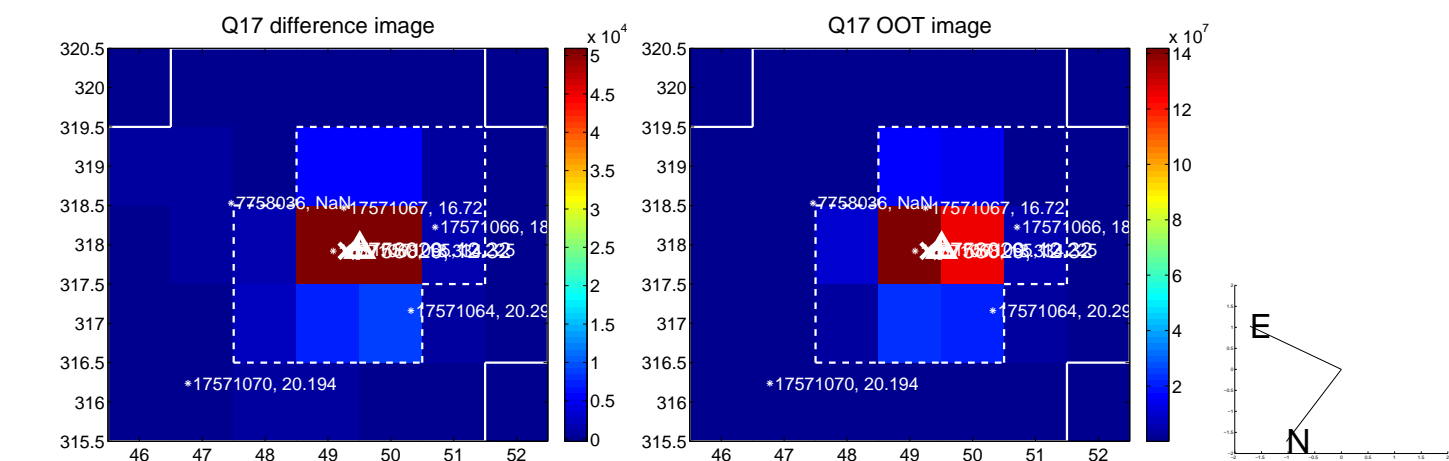
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



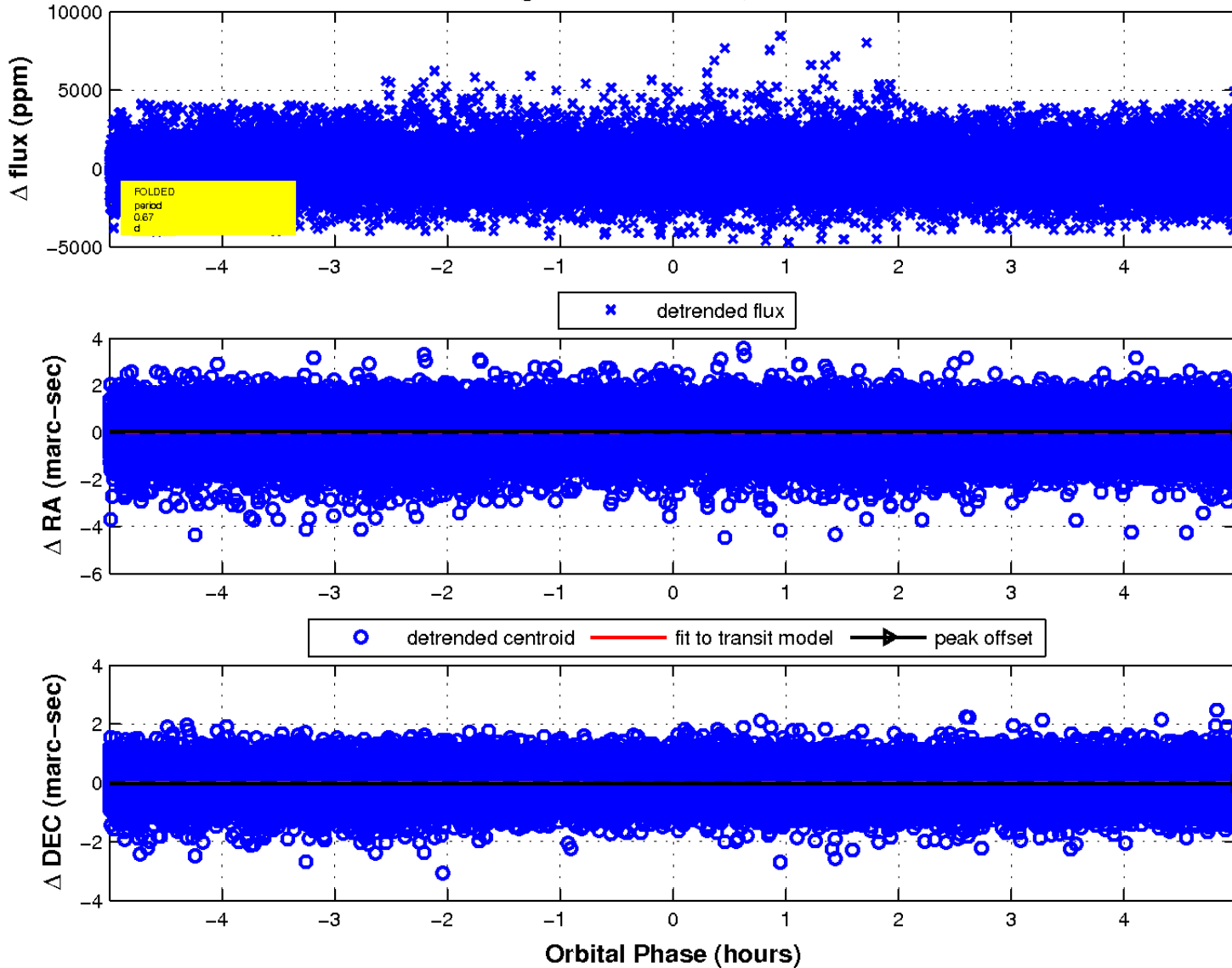
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

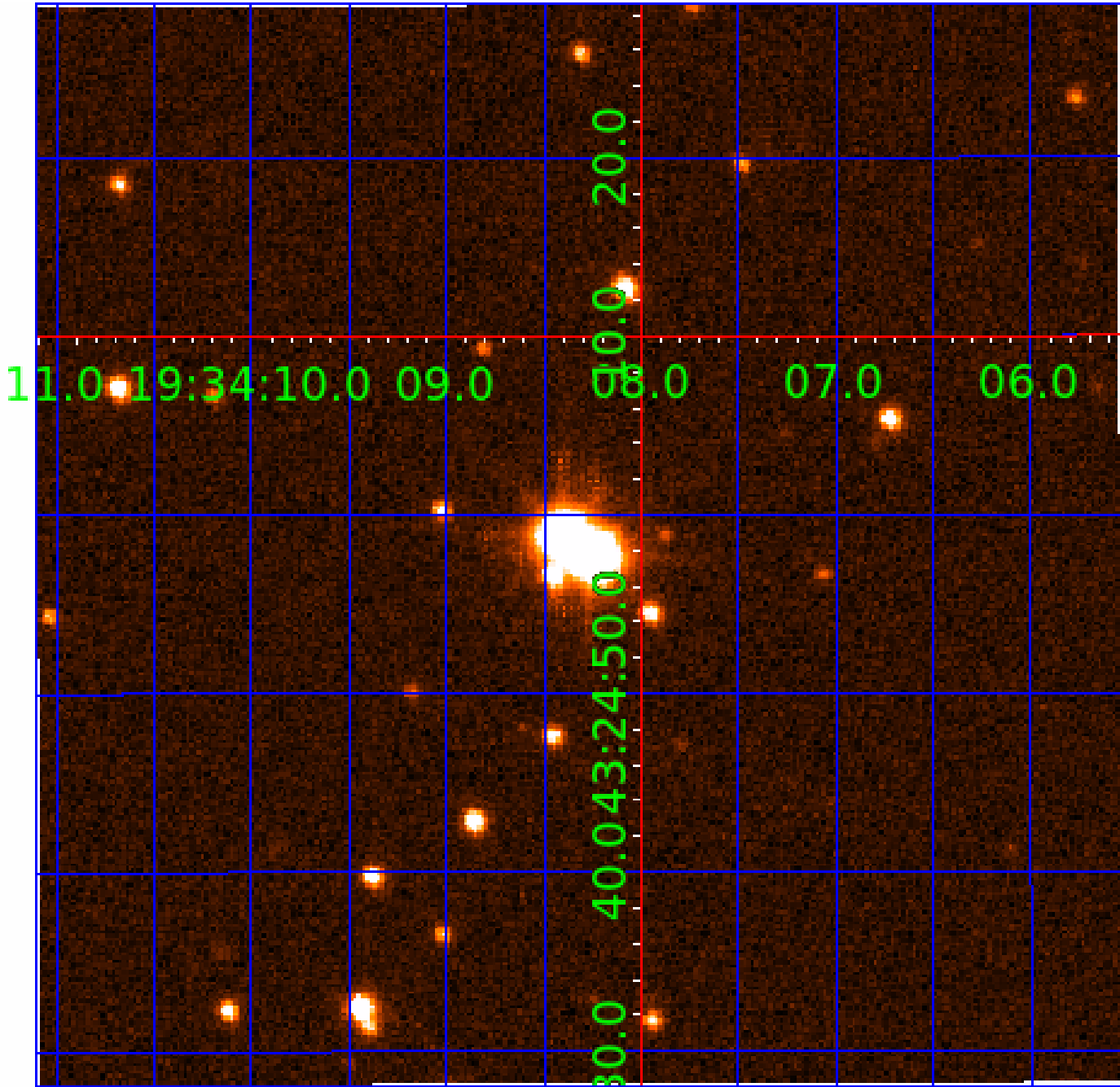


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 007758029

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})
007758029-01	OBS	No	0.669040	131.884506	43.7	2.257	11.2	9.8	10.80	6732	8.31	0.00
007758029-02	OBS	No	0.669051	131.537362	61.4	1.665	10.1	9.1	10.80	6732	8.70	0.00
007758029-03	OBS	No	55.456648	180.540271	1354.2	1.724	7.3	6.5	10.80	6732	42.99	1205.52

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007758029-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_KIC_POS
007758029-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—SAME_NTL_PERIOD—CENT_KIC_POS
007758029-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—ALL_TRANS_CHASES—CENT_KIC_POS

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

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

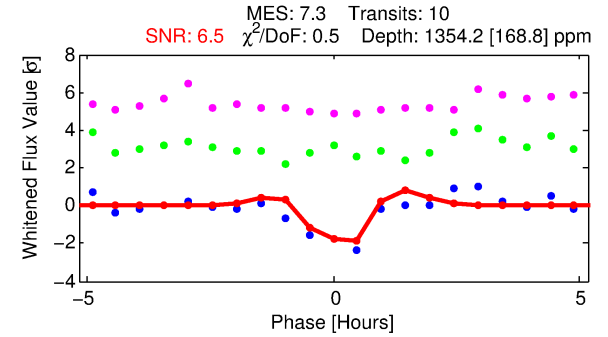
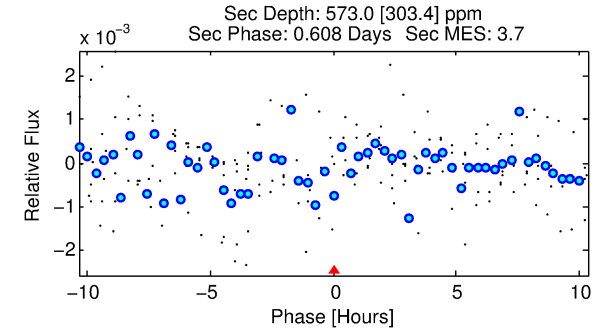
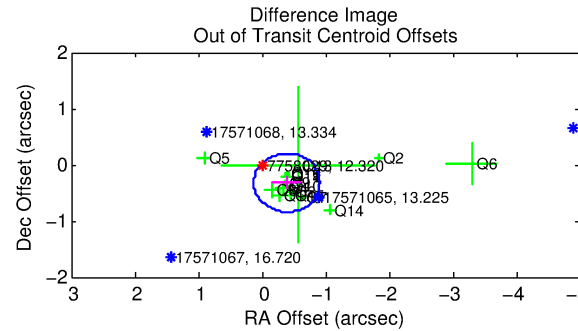
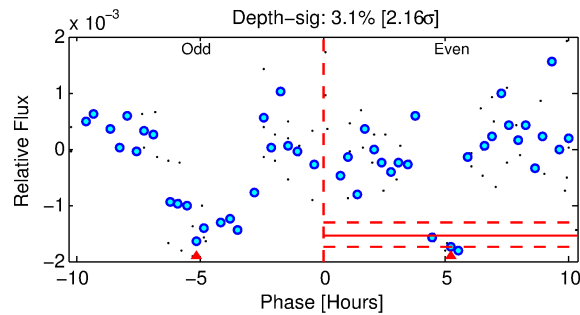
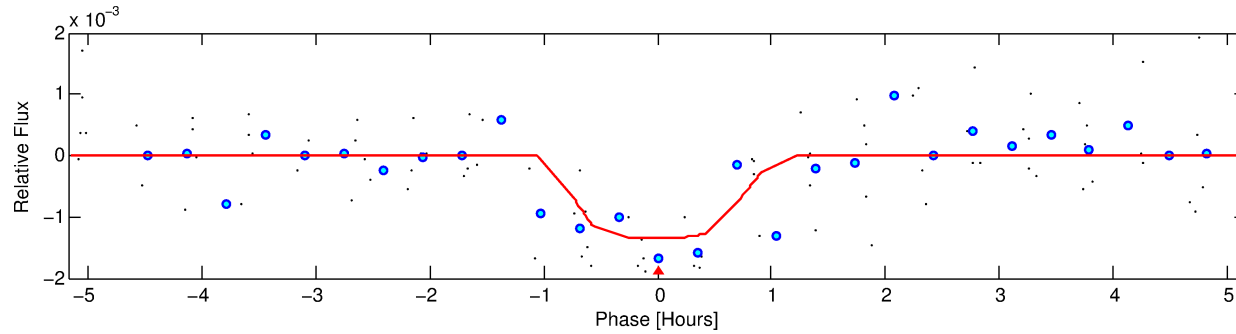
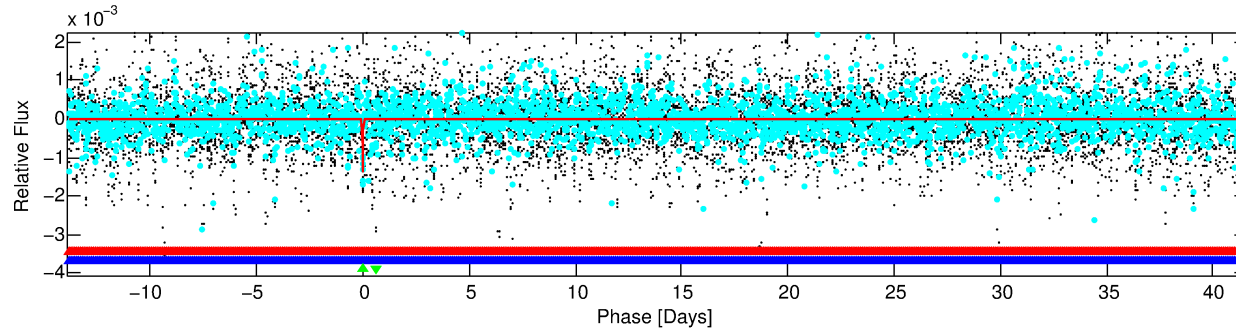
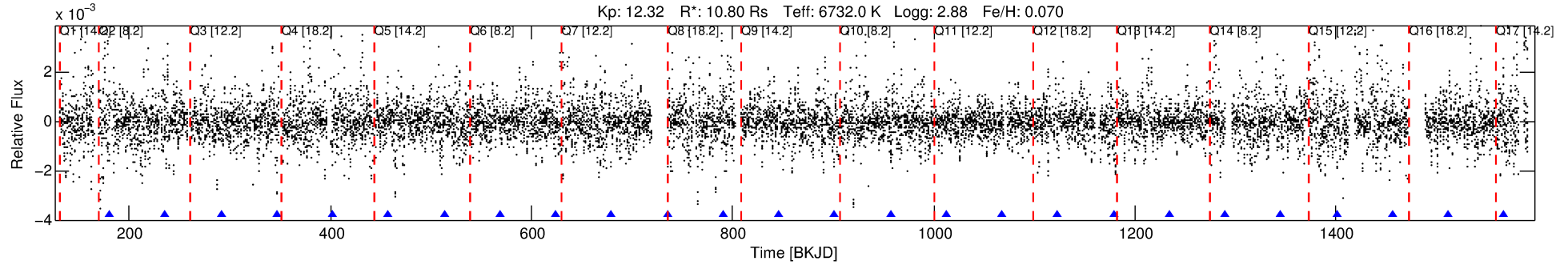
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007758029-03

No Significant Match Found

DV One-Page Summary

KIC: 7758029 Candidate: 3 of 3 Period: 55.457 d



DV Fit Results:

Period = 55.45665 [0.00023] d
Epoch = 180.5403 [0.0034] BKJD
Rp/R* = 0.0365 [0.0485]
b = 0.72 [4.97]
Seff = 1205.52 [1140.37]
Teq = 1503 [355] K
Rp = 42.99 [63.34] Re
a = 0.4220 [0.2483] AU
Ag = 30.37 [87.05] [0.34σ]
Teffp = 5454 [3710] K [1.06σ]

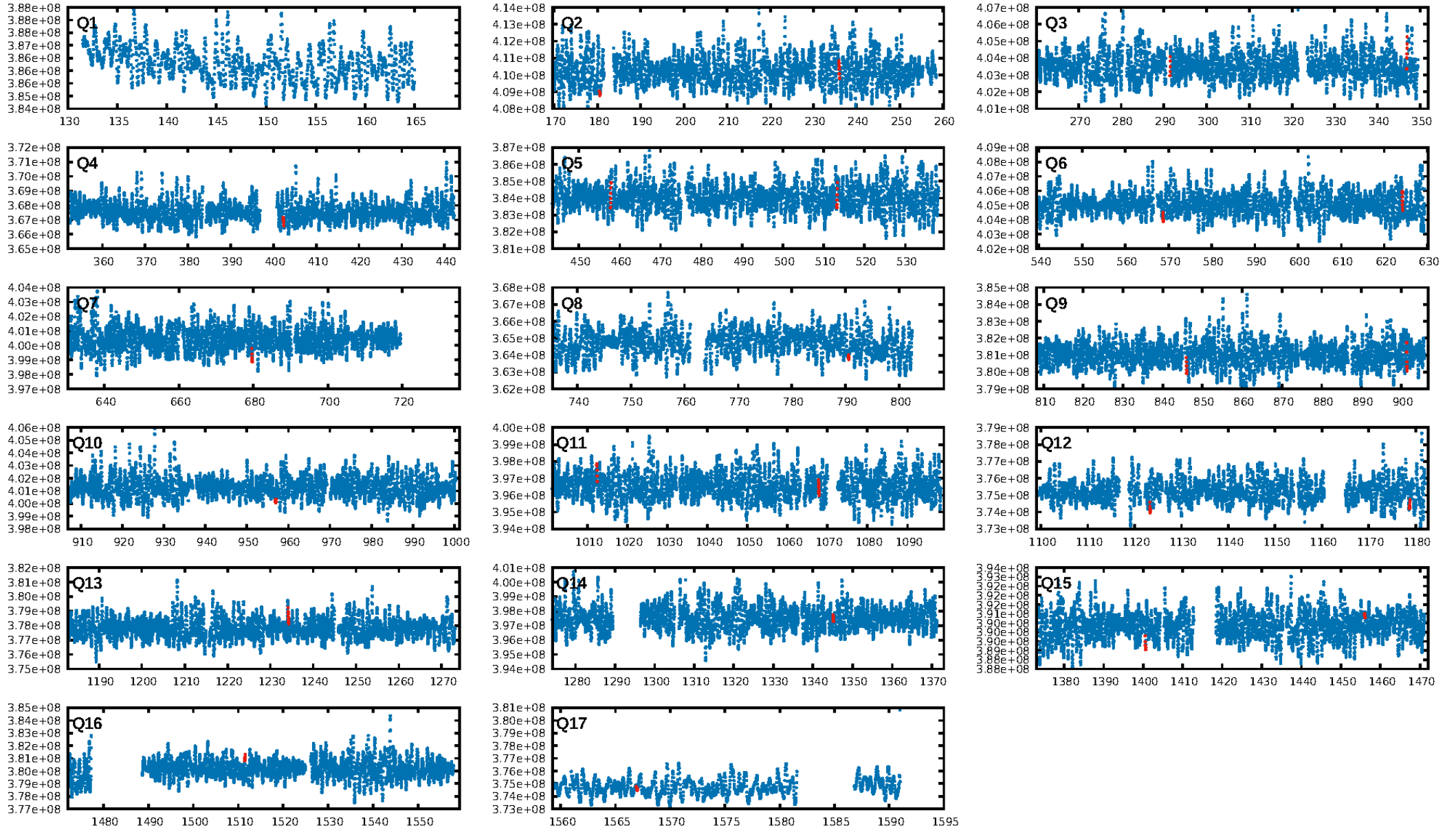
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [548.60σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 97.1%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.55e-10
RollingBand-fgt: 1.00 [10/10]
GhostDiagnostic-chr: 3.43
Centroid-sig: 0.2%
Centroid-so: 0.727 arcsec [5.37σ]
OotOffset-rm: 0.507 arcsec [2.92σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-rm: 1.198 arcsec [8.51σ]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.69 [11/16]
DiffImageOverlap-fno: 0.00 [0/16]

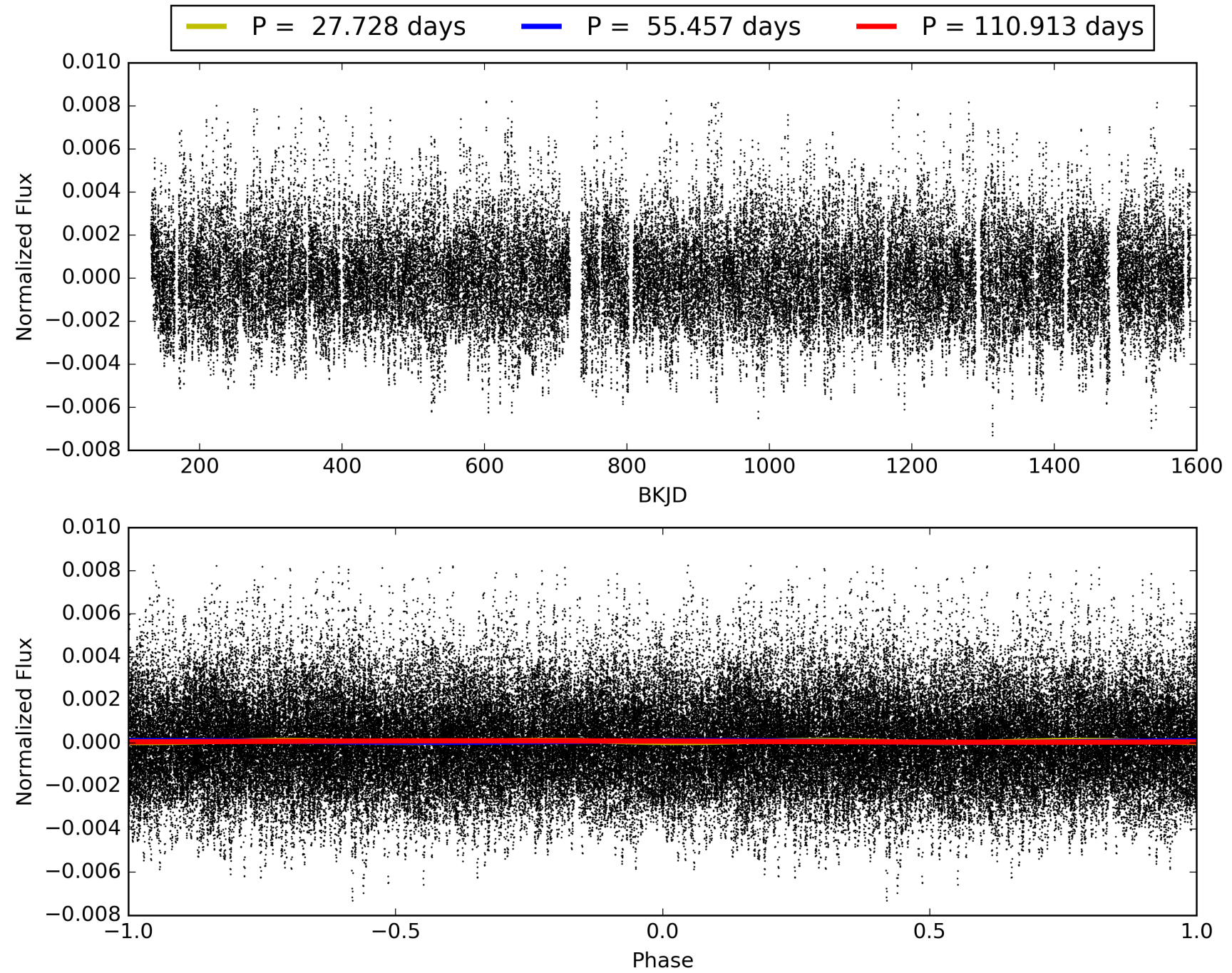
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 00:06:38 Z

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

TCE 007758029-03, PDC Light Curves

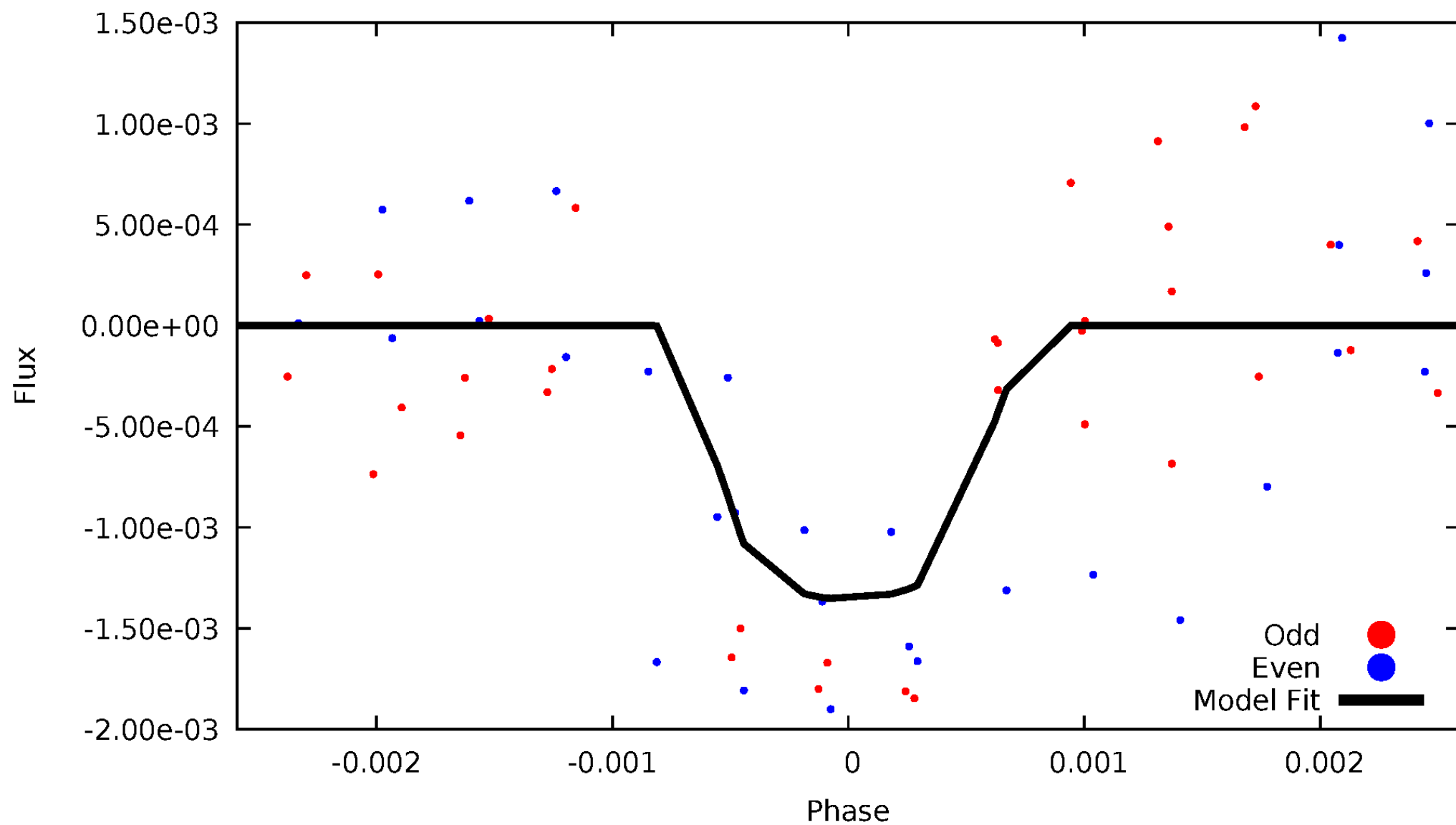


TCE 007758029-03



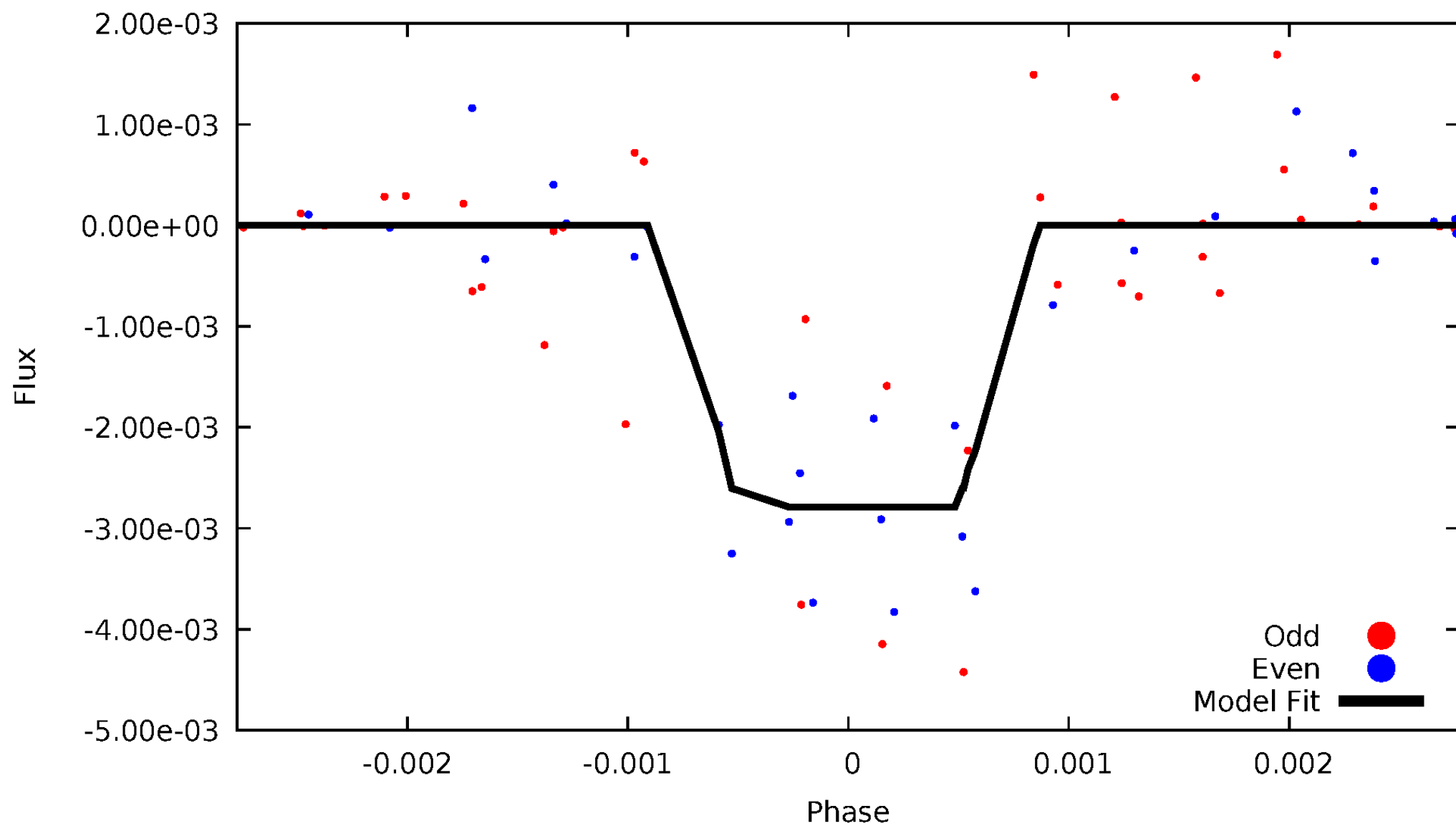
DV Odd/Even

TCE 007758029-03



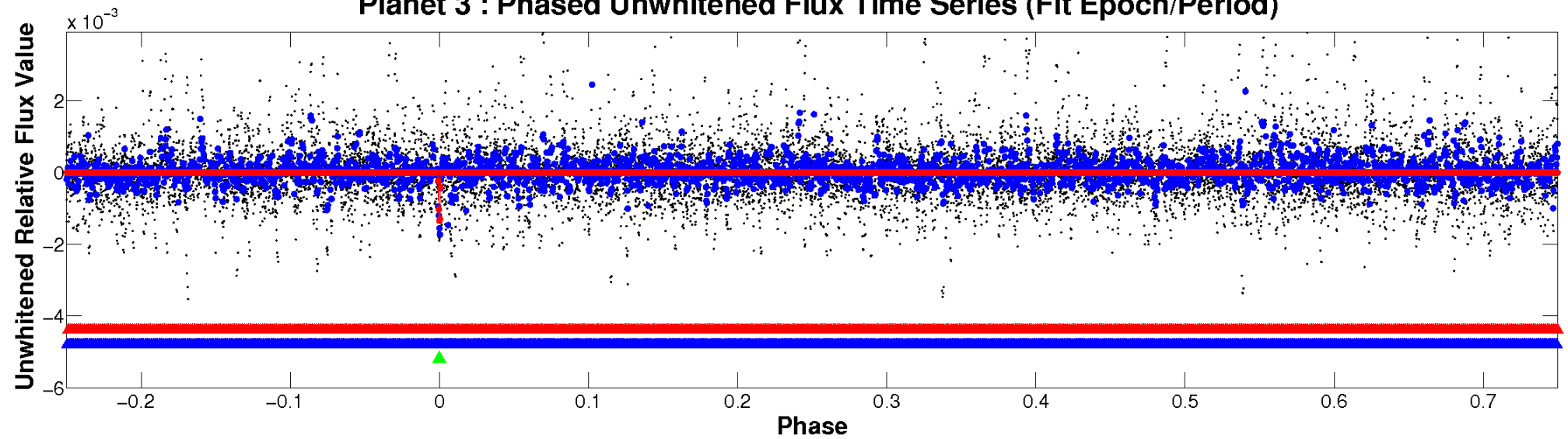
ALT Odd/Even

TCE 007758029-03

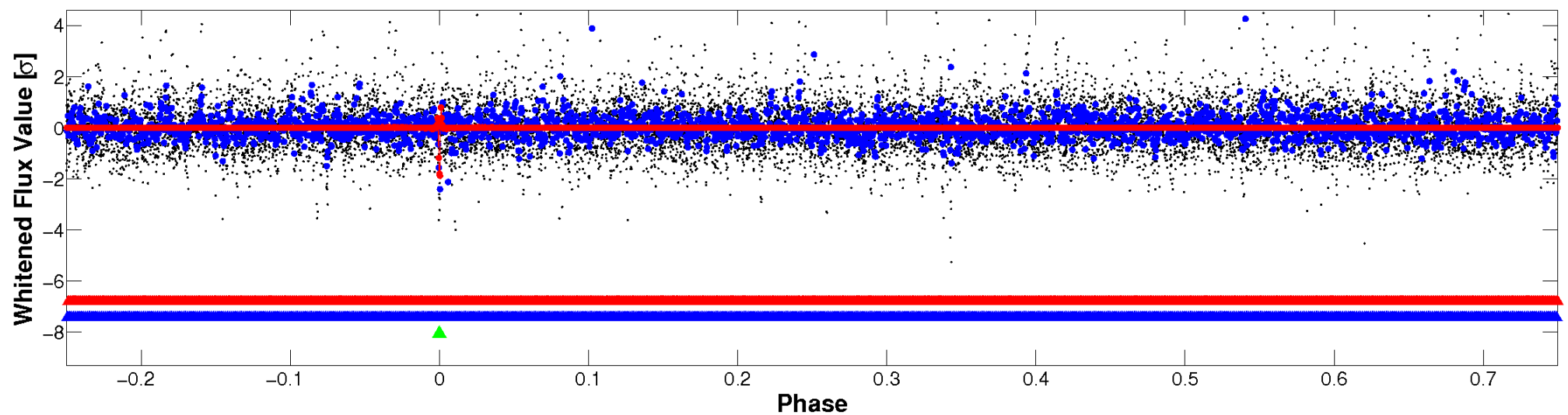


Non-Whitened Vs. Whitened Light Curve

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

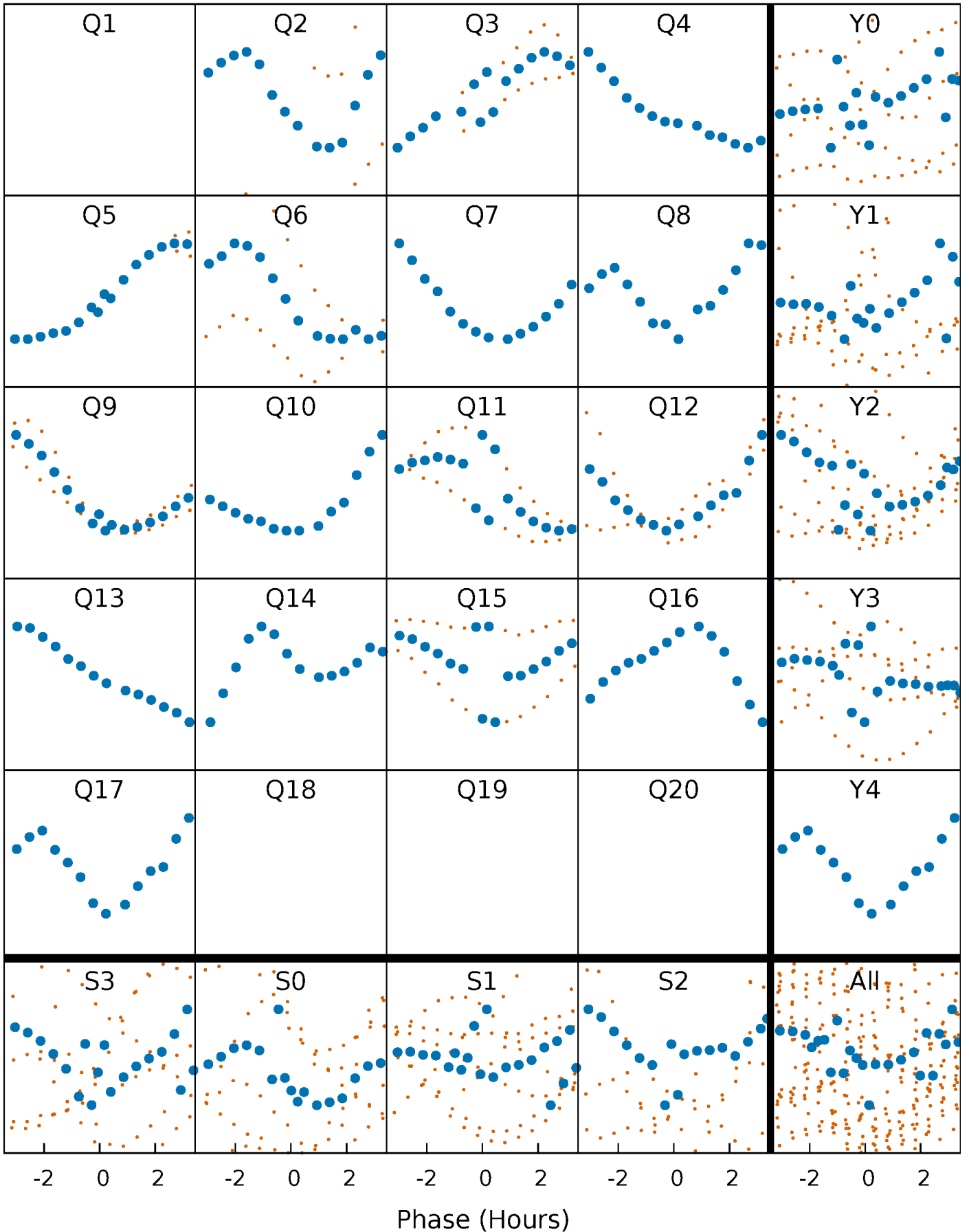


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



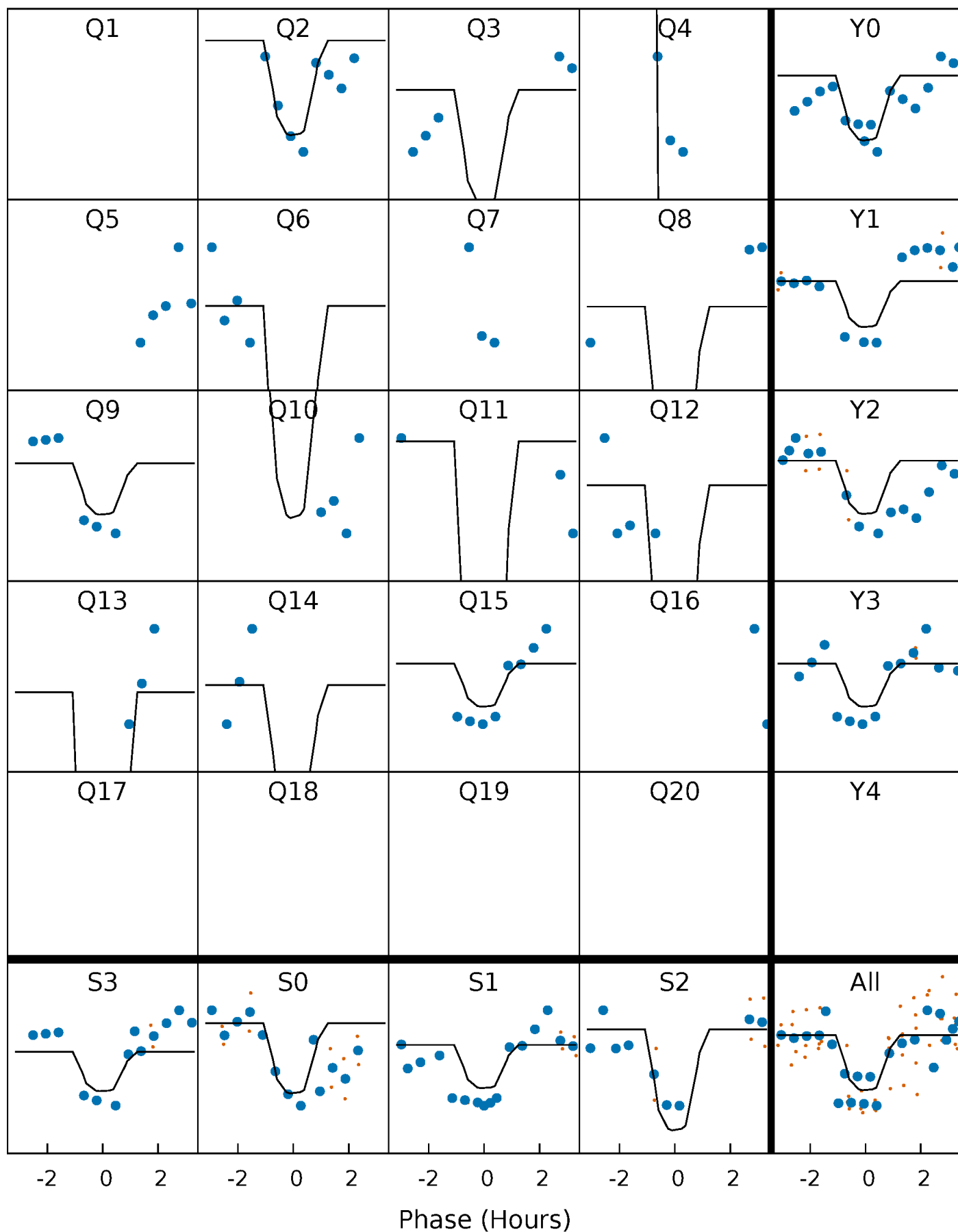
PDC Quarter-Phased Transit Curves

TCE 007758029-03 $P = 55.456648$ Days $T_0 = 180.540271$ (BKJD)



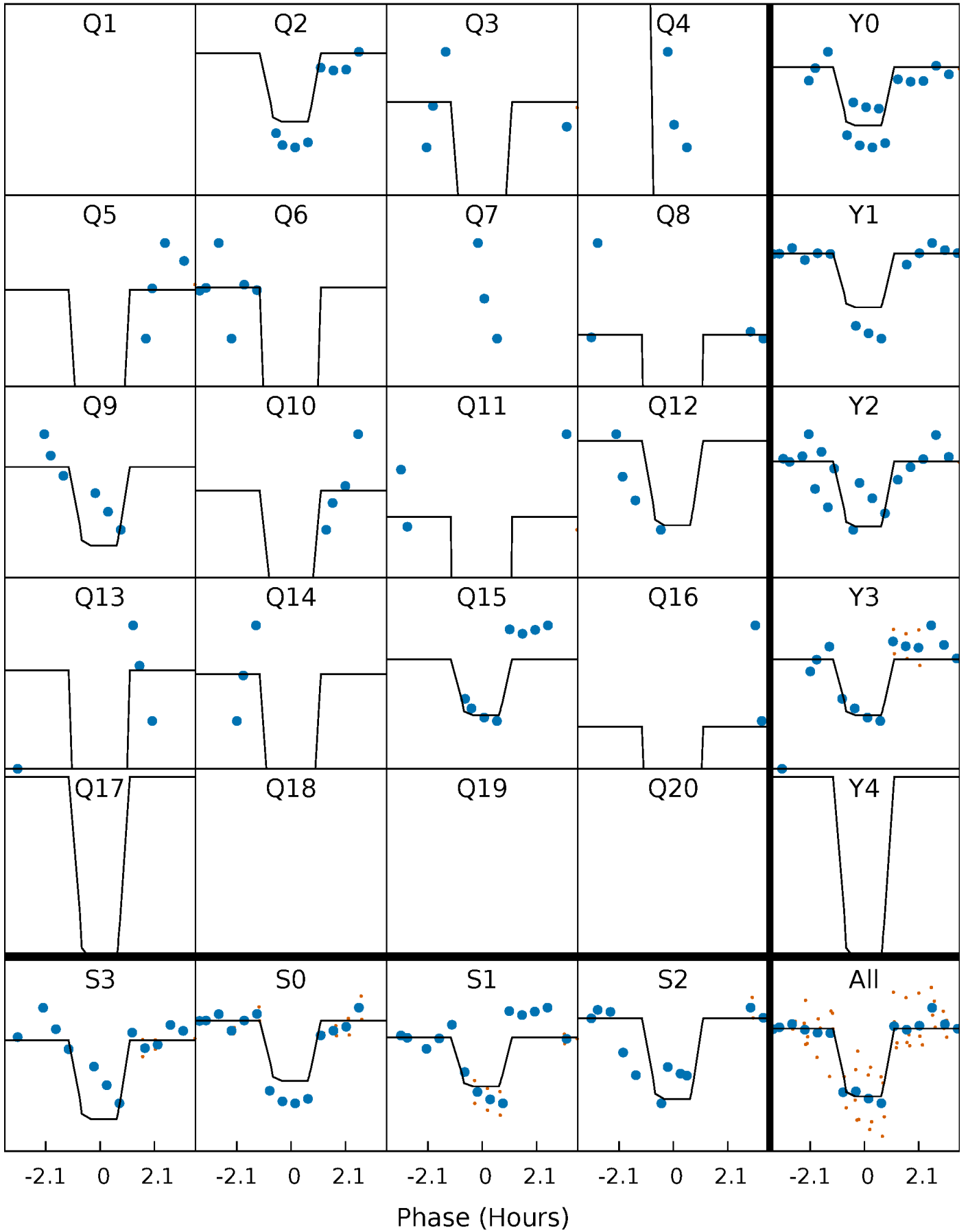
DV Quarter-Phased Transit Curves

TCE 007758029-03 P= 55.456648 Days $T_0=180.540271$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

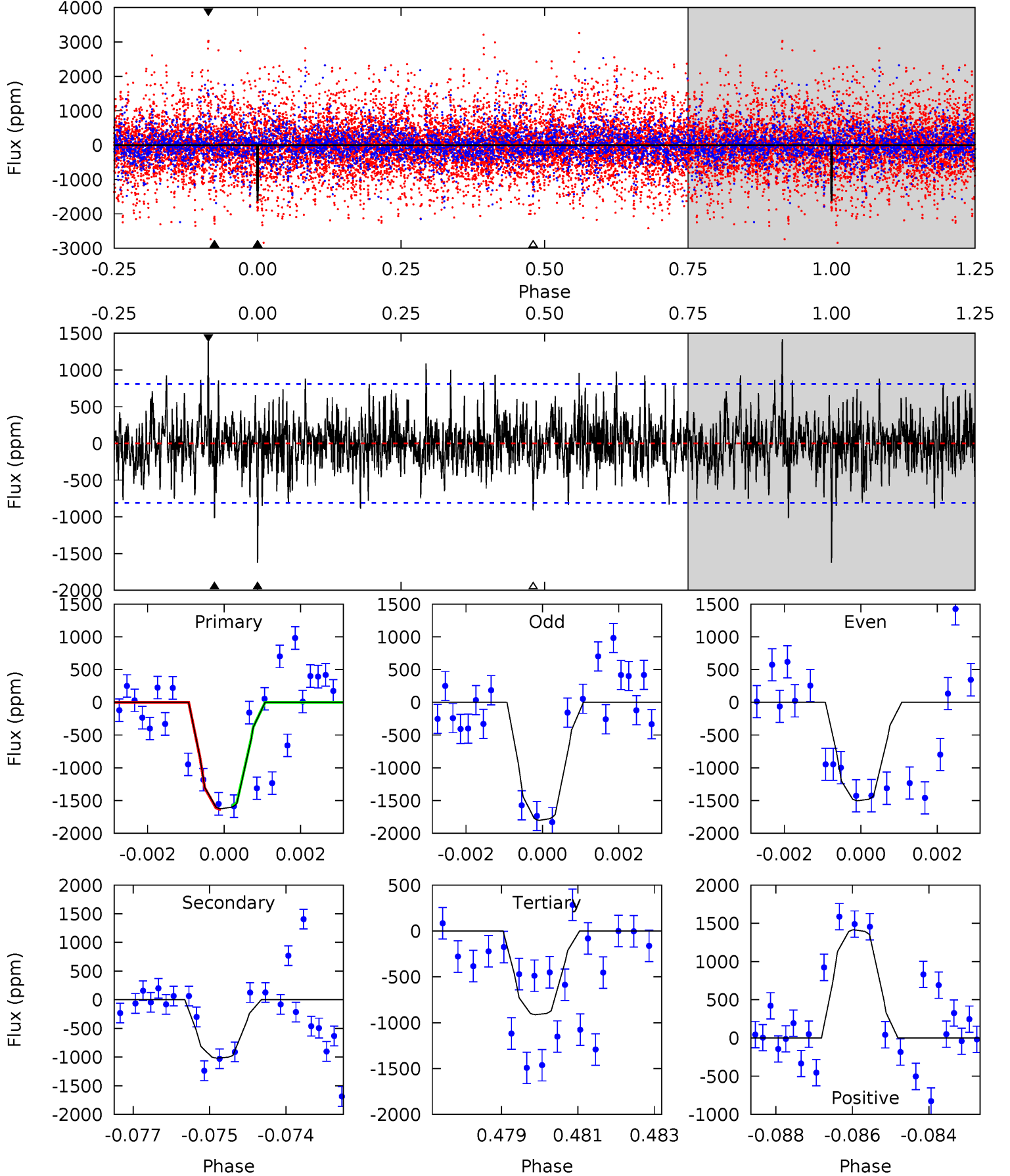
TCE 007758029-03 P= 55.456888 Days $T_0=180.522566$ (BKJD)



DV Model-Shift Uniqueness Test

007758029-03, P = 55.456648 Days, E = 125.083623 Days

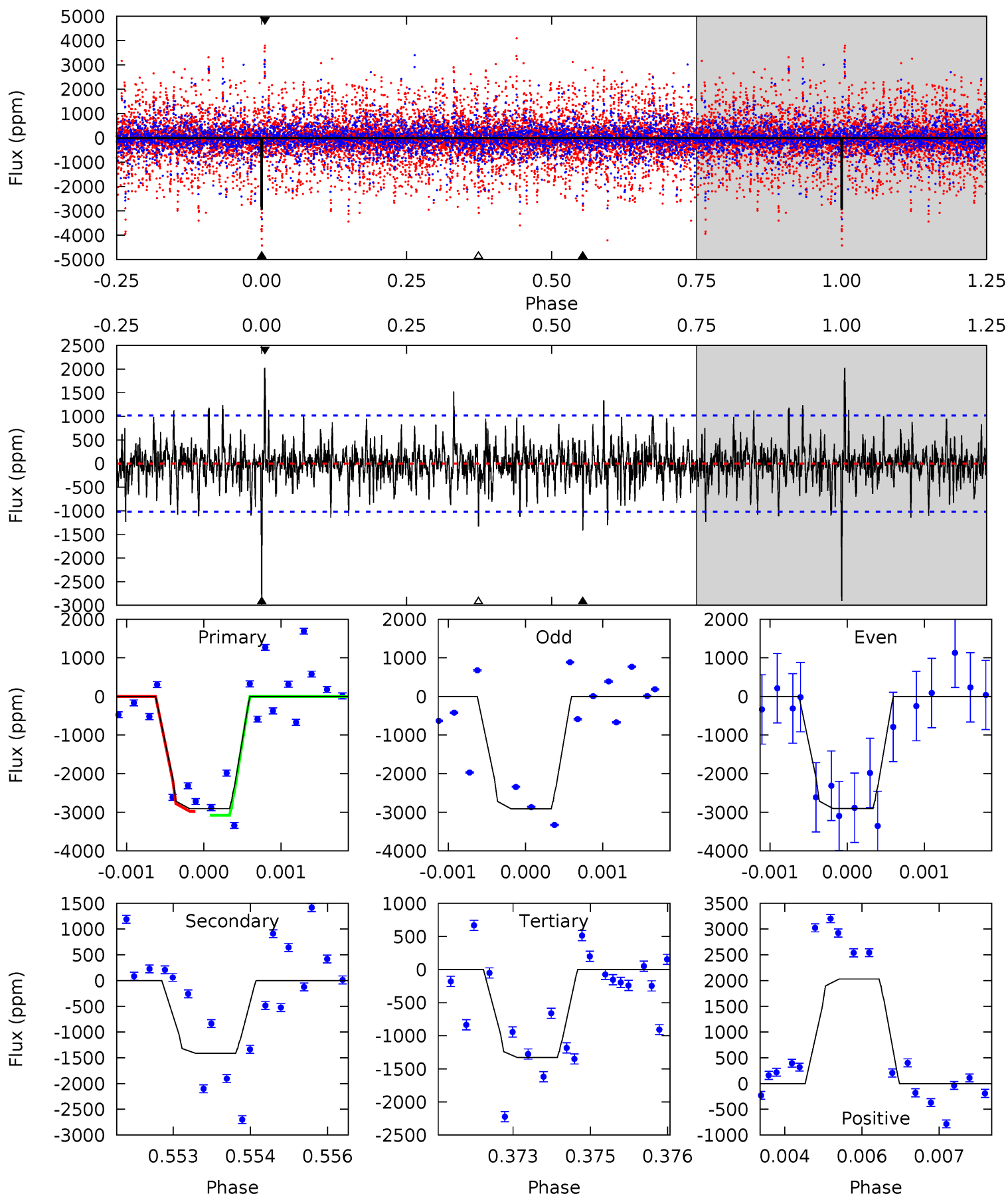
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.7	6.73	6.03	9.36	5.35	3.13	1.79	4.71	1.38	0.70	-2.63	0.95	0.91	0.47	0.17



Alt Model-Shift Uniqueness Test

007758029-03, P = 55.456888 Days, E = 125.065678 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.4	7.49	7.04	10.8	5.38	3.18	1.71	8.35	4.64	0.45	-3.26	0.02	1.01	0.41	0.26



Stellar Parameters For KIC 007758029

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6732^{+162}_{-348}	$2.884^{+0.535}_{-0.094}$	$0.070^{+0.250}_{-0.550}$	$10.801^{+1.138}_{-6.828}$	$3.255^{+0.080}_{-1.359}$	$0.004^{+0.029}_{-0.001}$
	+2%/-5%	+19%/-3%	+357%/-786%	+11%/-63%	+2%/-42%	+785%/-21%
Source	KIC0	FLK73	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 007758029-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1018 ± 151	$52.59^{+47.70}_{-35.58}$	2024^{+157}_{-295}	5237^{+4415}_{-1097}	34^{+300}_{-24}
Alt.	-1415 ± 189	$63.61^{+52.62}_{-38.98}$	2044^{+135}_{-307}	5248^{+3292}_{-1087}	32^{+193}_{-22}

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 $A_{obs} \gg 1.0$

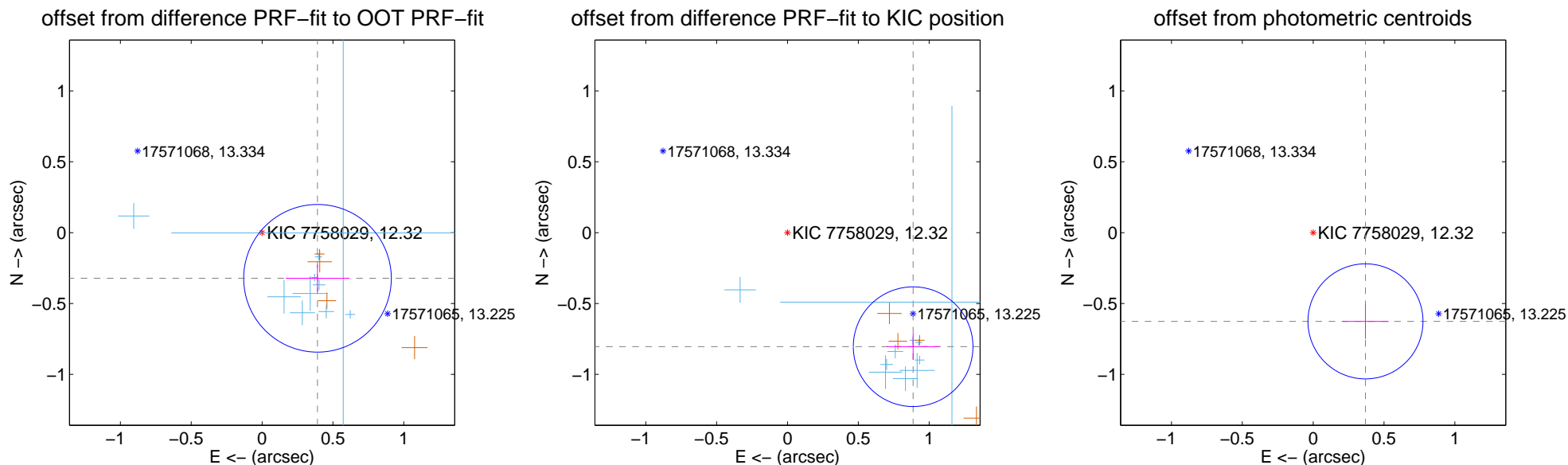
DV Centroid Data

Supplemental centroid analysis for 007758029-03. Kepler magnitude: 12.32. Transit SNR 6.54

There are 11 quarters with good PRF difference image offsets

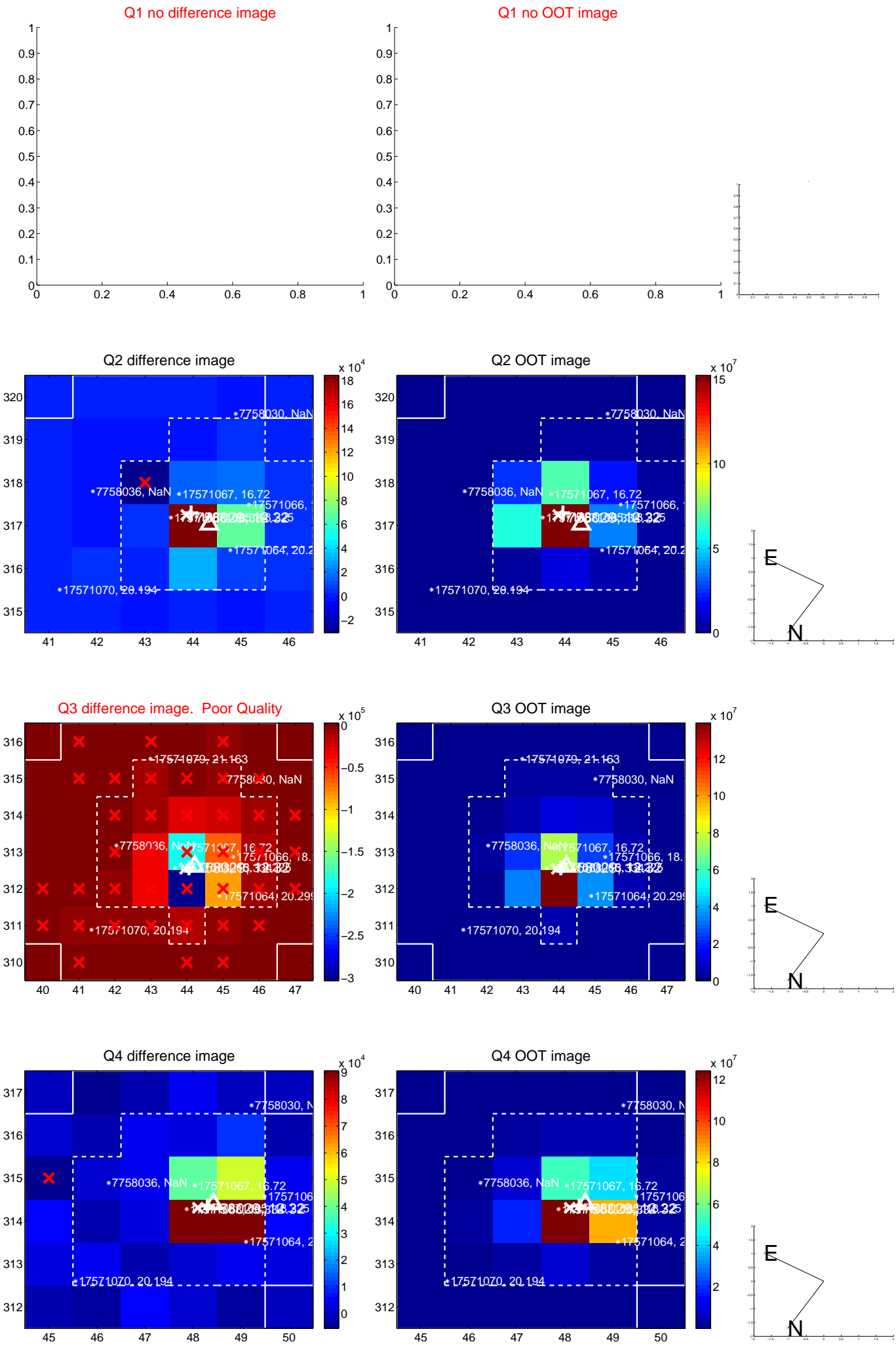
The direct PRF centroid is offset from the target star catalog position by about 0.72 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.507 ± 0.174	2.92	-0.391 ± 0.224	-0.322 ± 0.096
PRF-fit source offset from KIC position	1.198 ± 0.141	8.51	-0.887 ± 0.187	-0.805 ± 0.094
photometric centroid source offset	0.73 ± 0.14	5.37	-0.37 ± 0.16	-0.63 ± 0.12

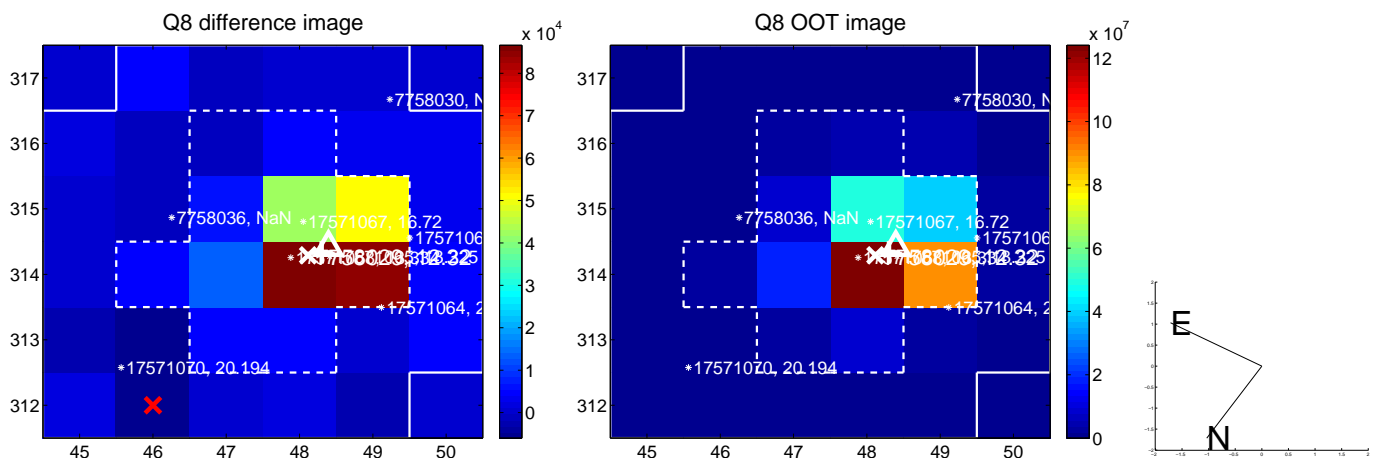
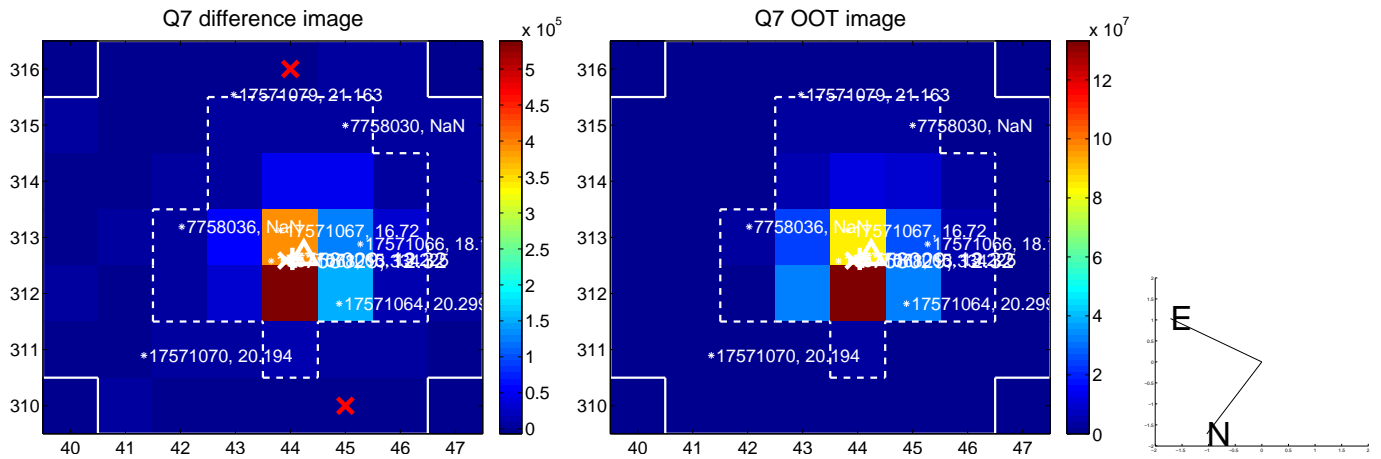
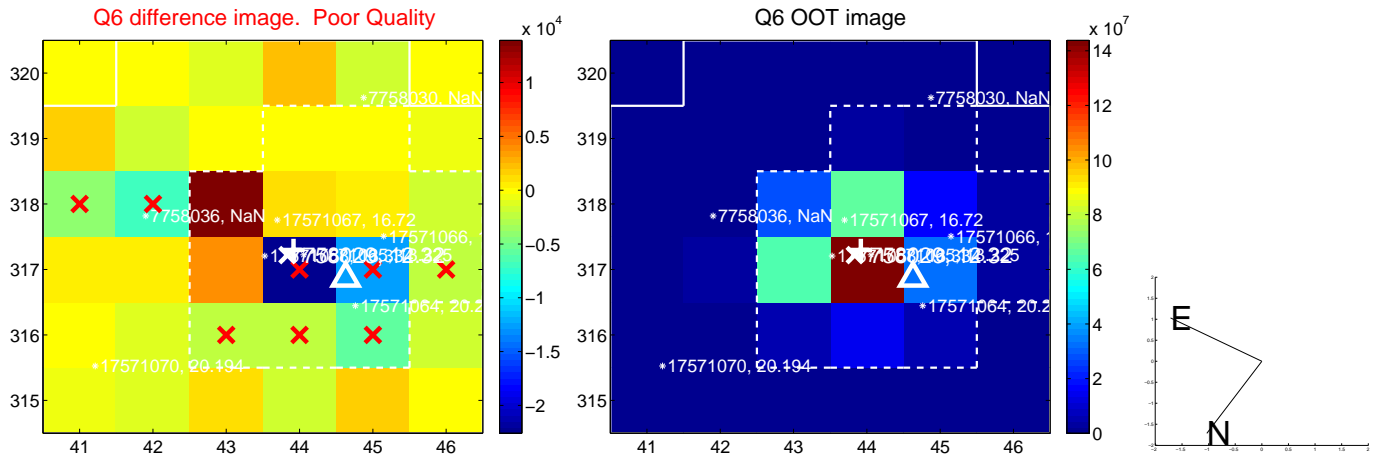
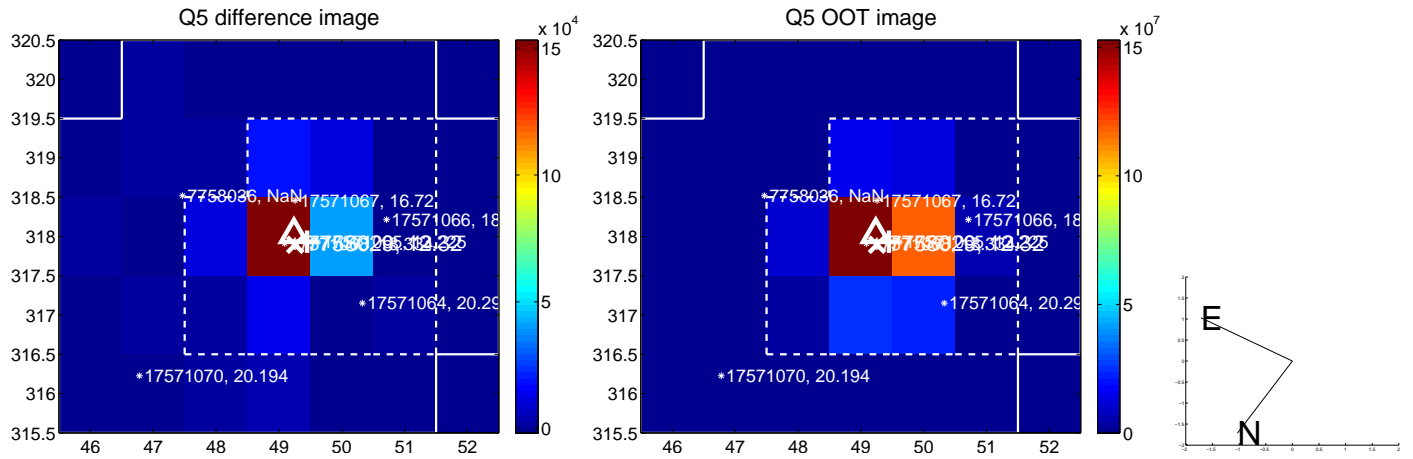


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

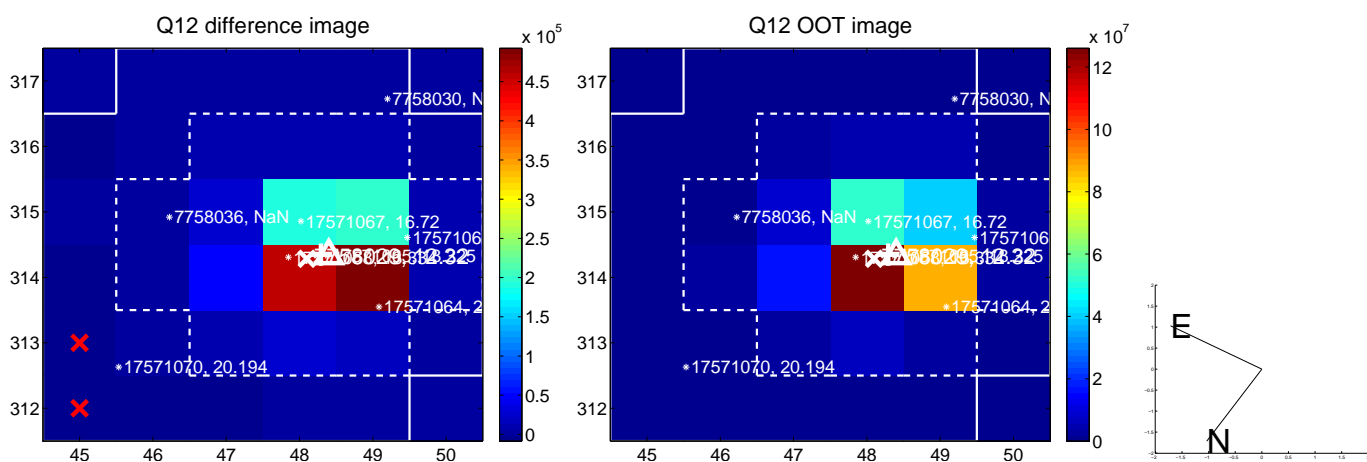
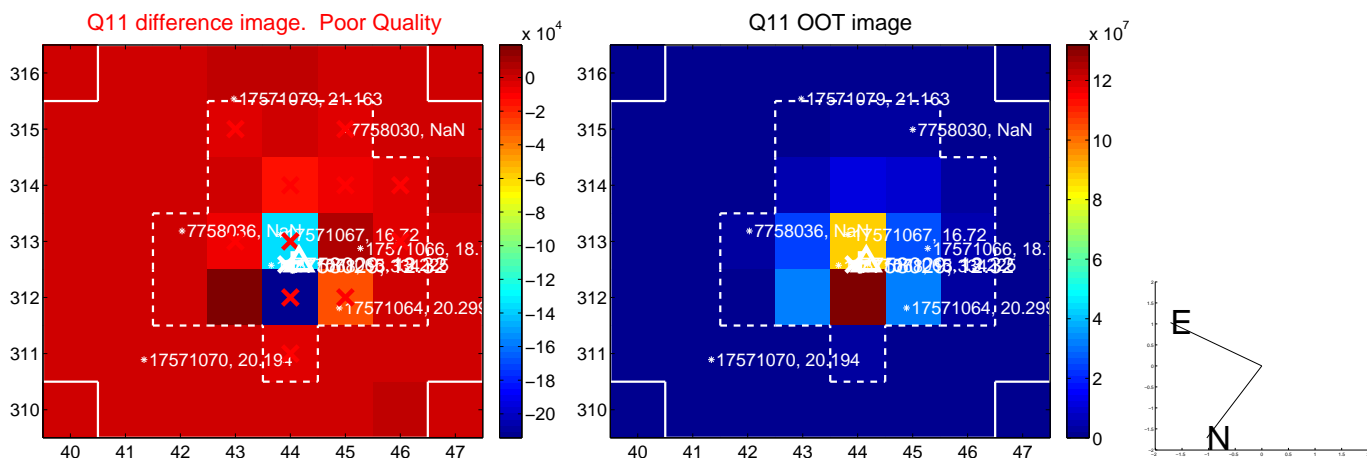
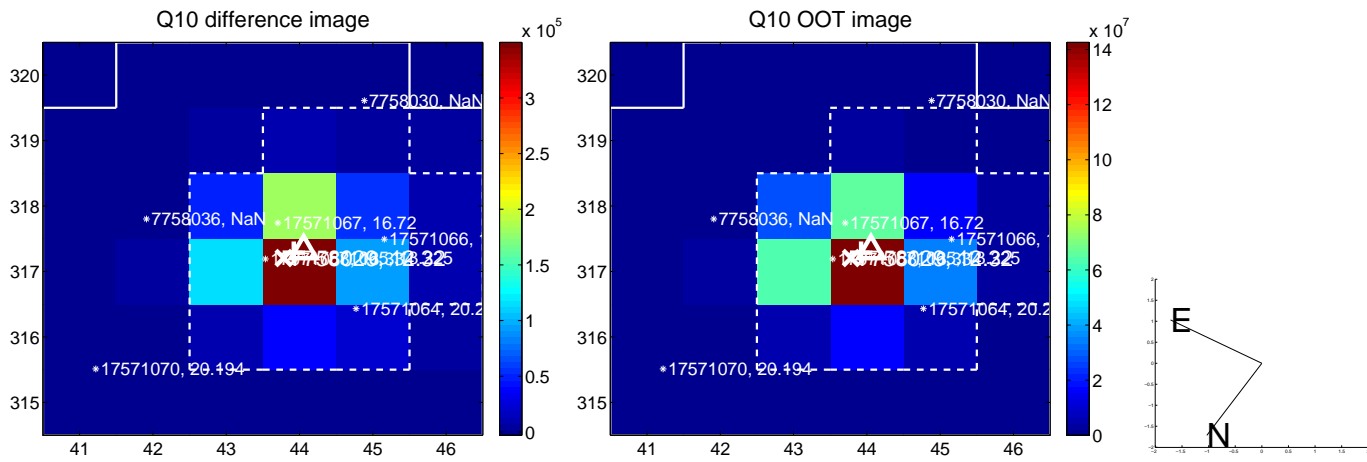
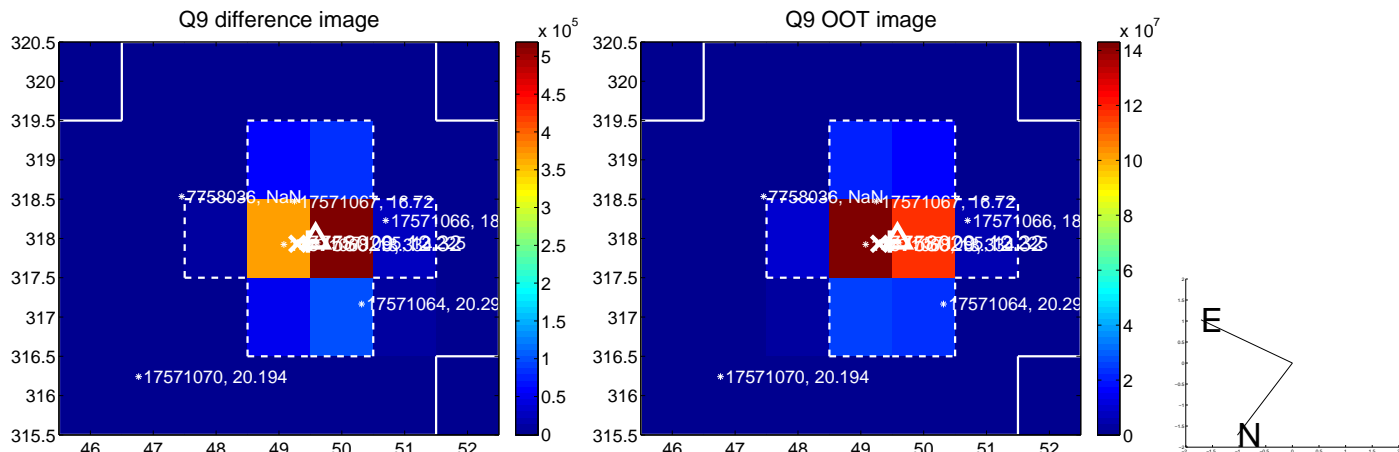
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



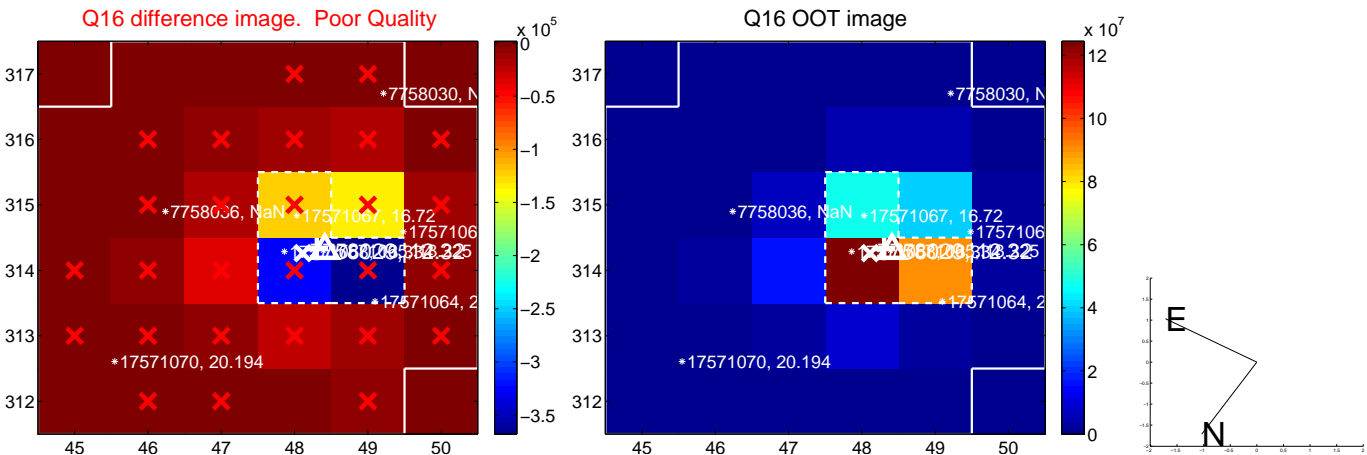
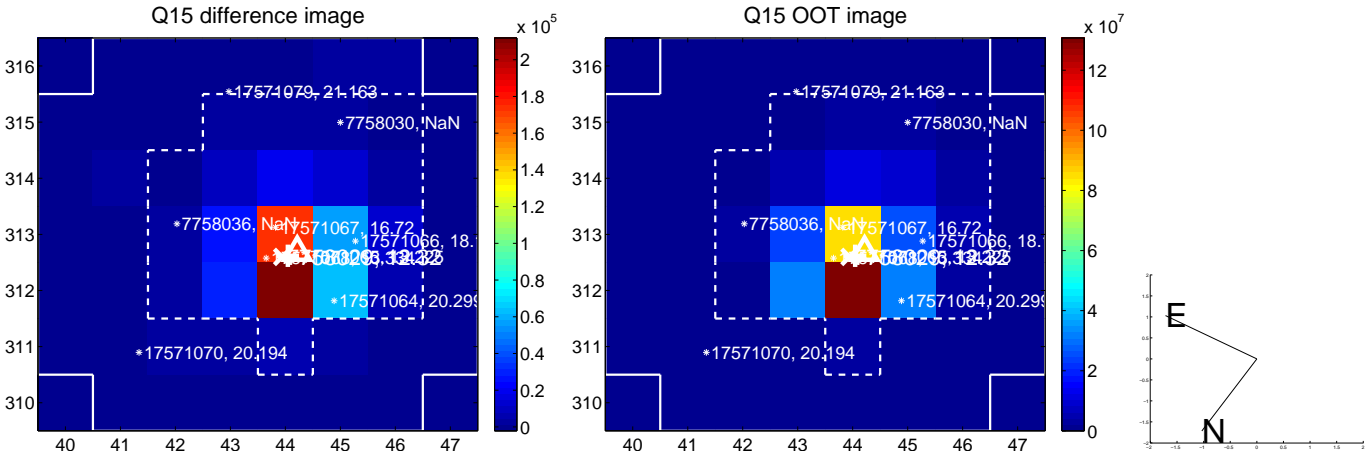
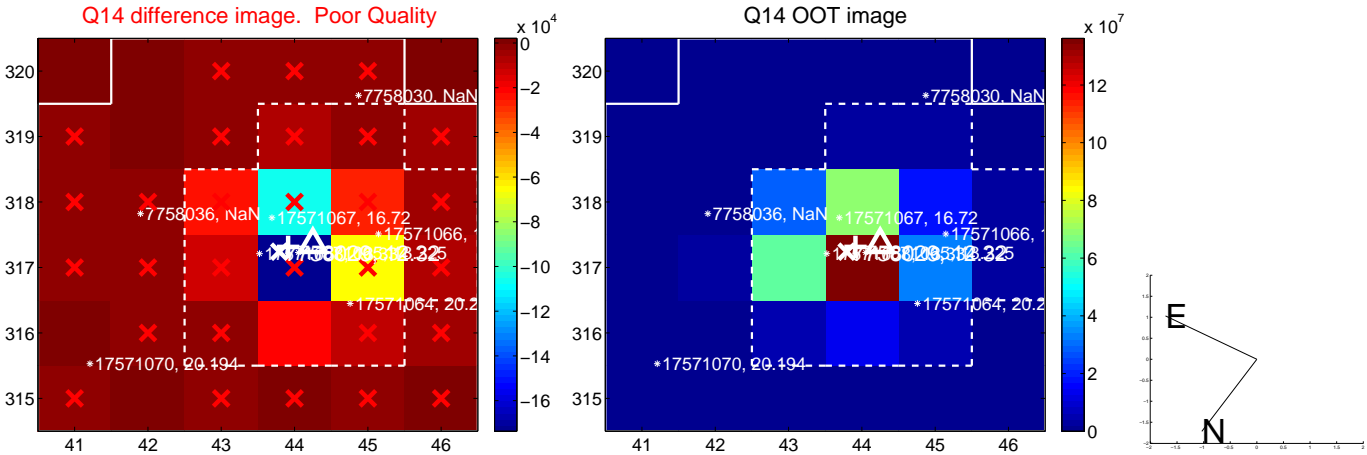
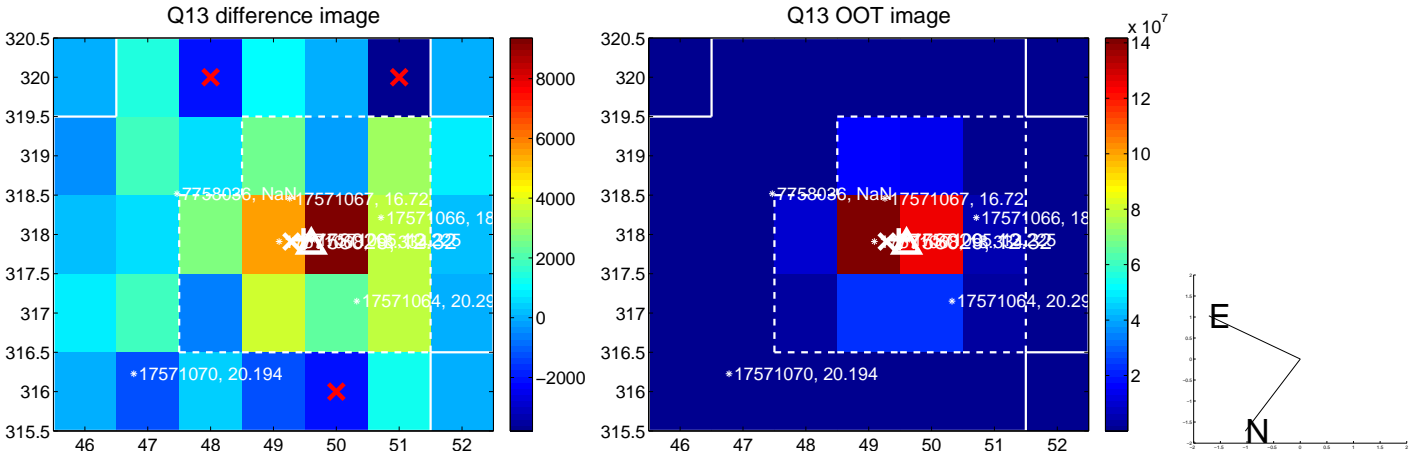
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



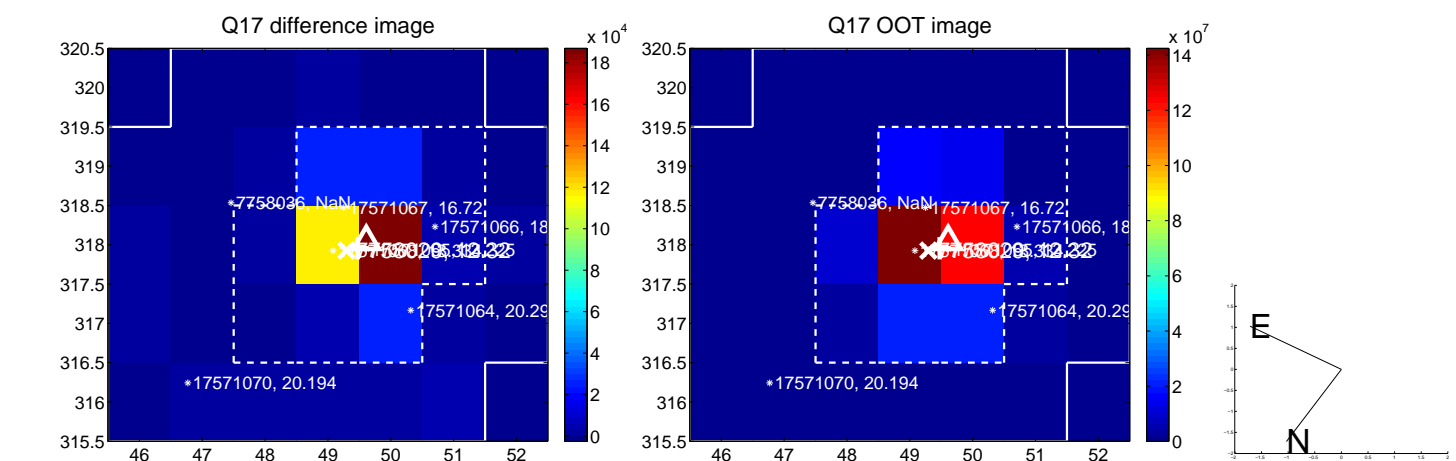
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



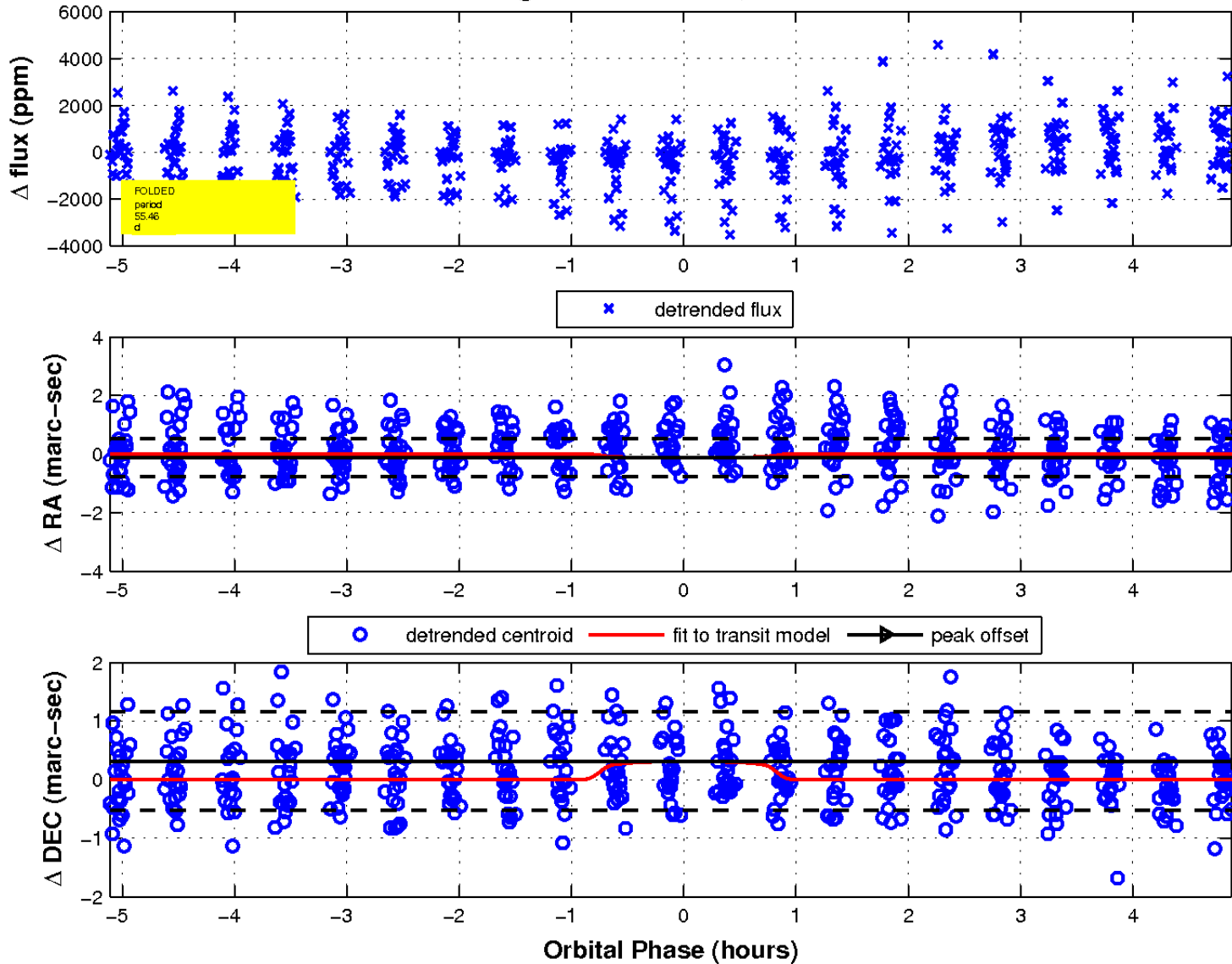
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 3 of 3



UKIRT Image

Declination

