

KIC 008328003

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})
008328003-01	OBS	No	0.521350	131.721910	0.0	3.784	8.1	0.0	0.97	6505	0.01	9156.18
008328003-02	OBS	No	17.087977	141.777778	2485.4	0.818	13.8	16.3	0.97	6505	4.96	87.29
008328003-03	OBS	No	13.810052	132.075326	57.8	38.472	12.9	1.9	0.97	6505	0.75	115.96
008328003-04	OBS	No	4.108740	133.645369	1463.4	1.500	12.2	-1.0	0.97	6505	3.77	583.82
008328003-05	OBS	No	11.343533	134.638700	1677.7	1.290	13.3	11.6	0.97	6505	4.07	150.74
008328003-06	OBS	No	13.052096	131.792444	1228.6	2.000	11.0	-1.0	0.97	6505	3.45	125.02
008328003-07	OBS	No	10.235624	133.143177	1032.2	1.462	10.2	8.3	0.97	6505	3.66	172.88

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008328003-01	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET
008328003-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
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008328003-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS
008328003-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
008328003-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS
008328003-07	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET

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

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

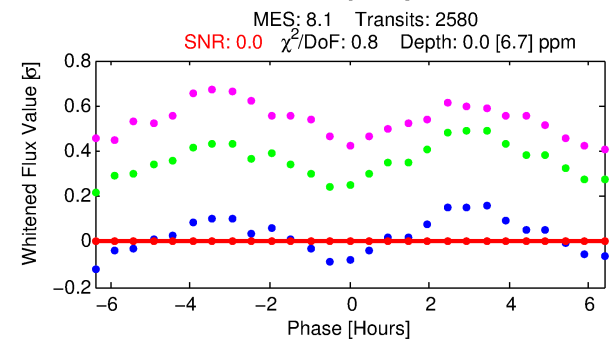
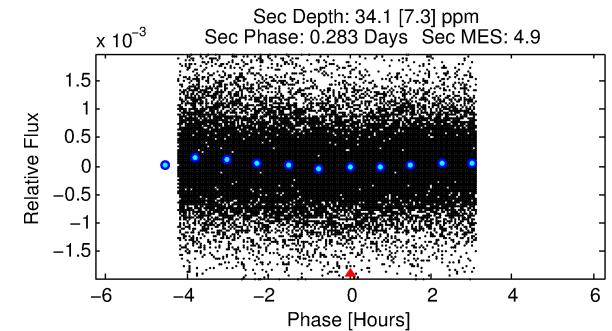
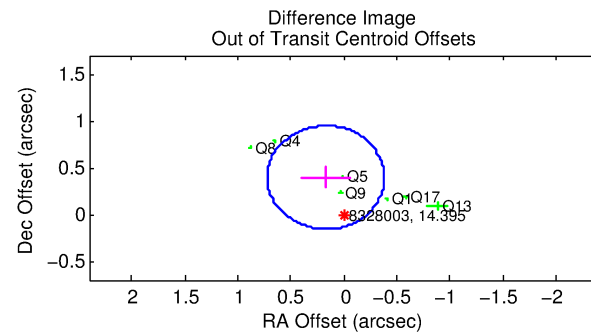
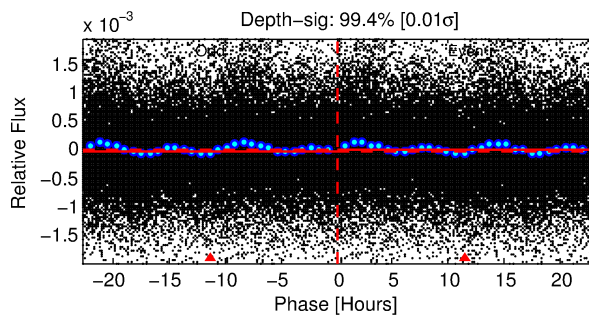
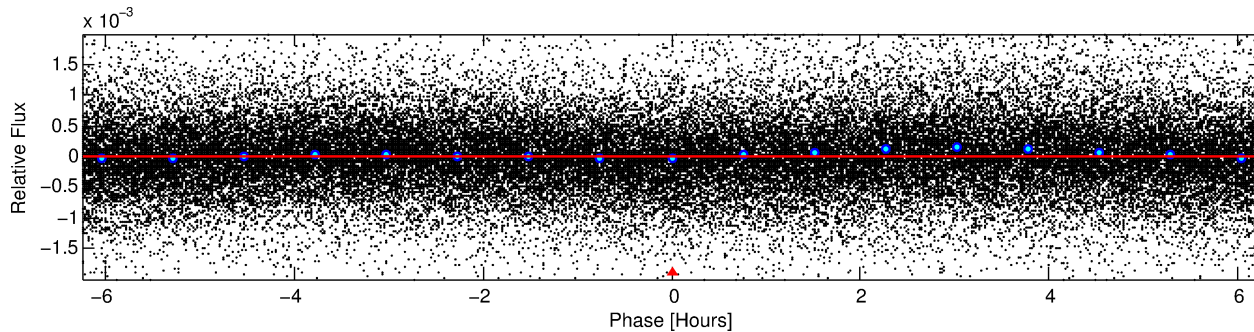
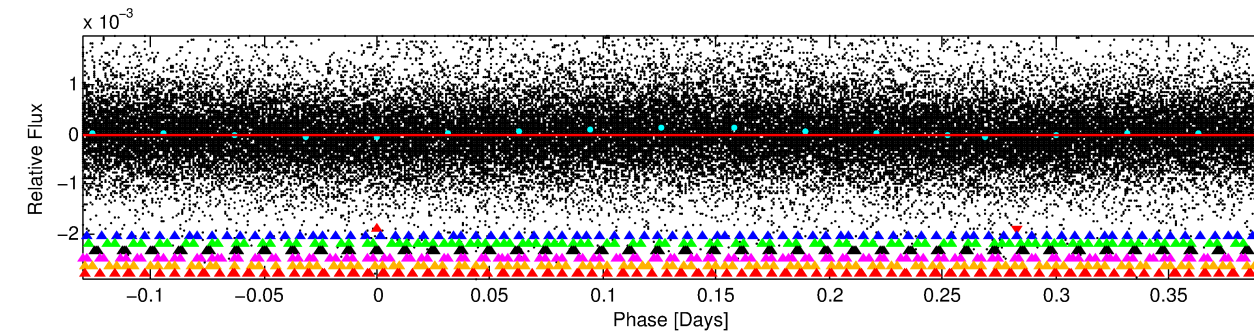
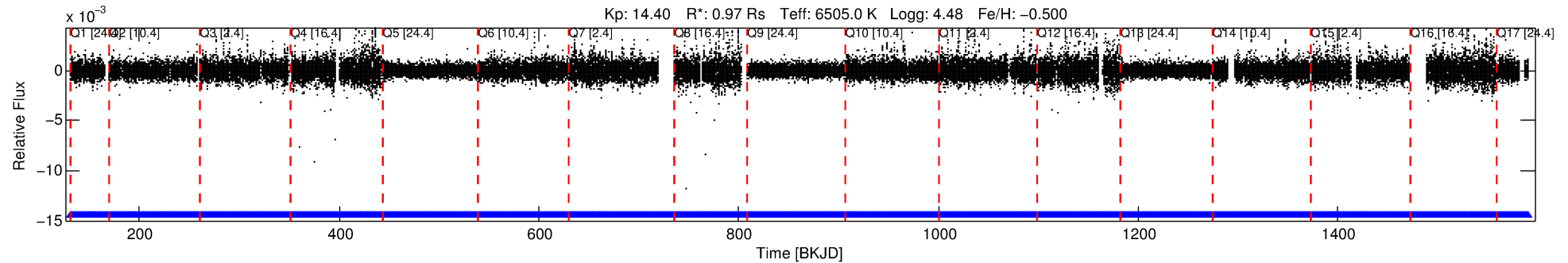
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008328003-01

No Significant Match Found

DV One-Page Summary

KIC: 8328003 Candidate: 1 of 7 Period: 0.521 d



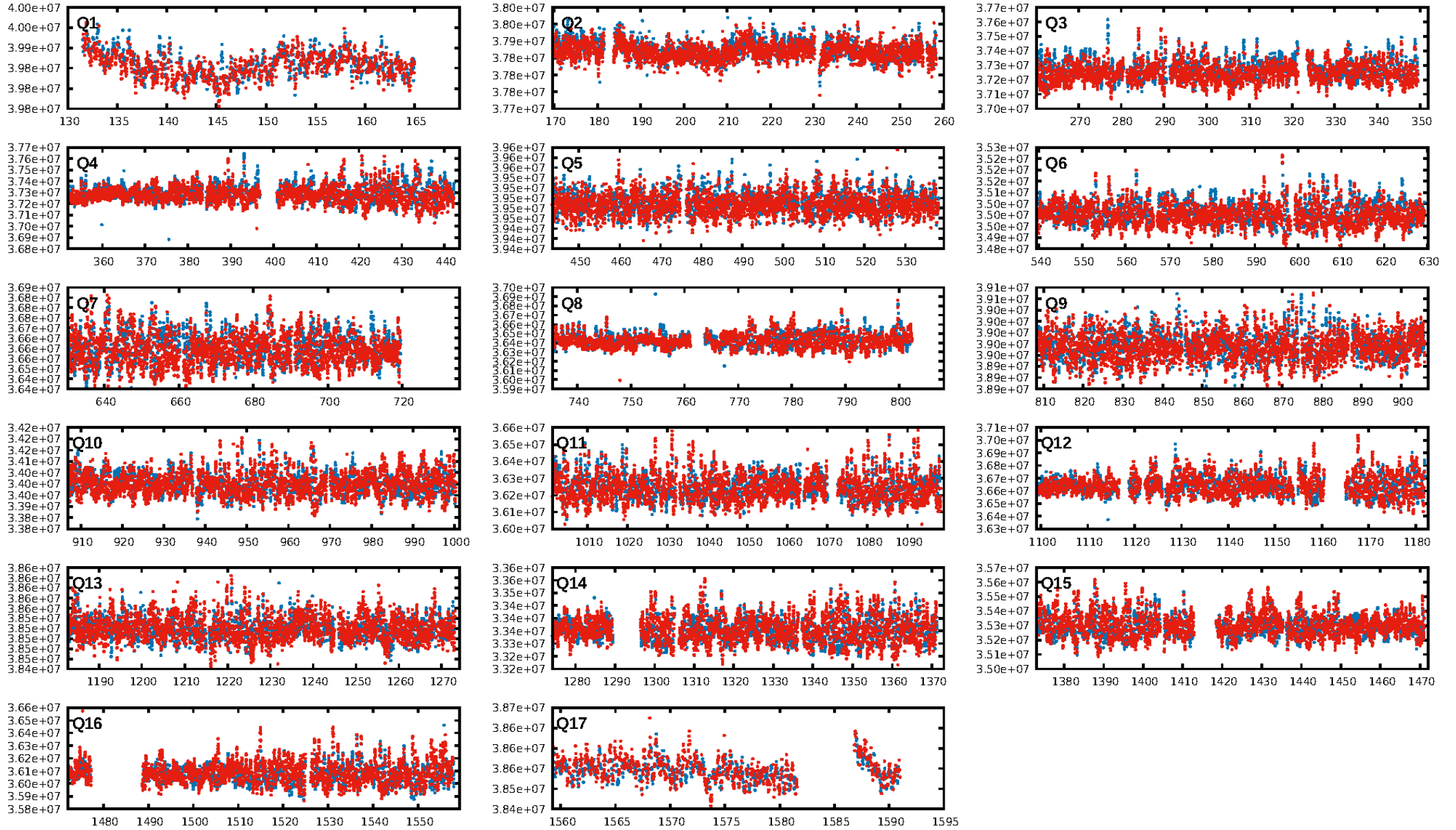
DV Fit Results:

Period = 0.52135 [0.14947] d
Epoch = 131.7219 [39.3311] BKJD
Rp/R* = 0.0001 [0.0686]
a/R* = 1.01 [17.75]
b = 0.98 [37.28]
Seff = 9156.18 [4963.22]
Teq = 2494 [338] K
Rp = 0.01 [7.30] Re
a = 0.0129 [0.0040] AU
Ag = 50075.54 [92542685.46] [0.00 σ]
Teffp = 57690 [26657049] K [0.00 σ]

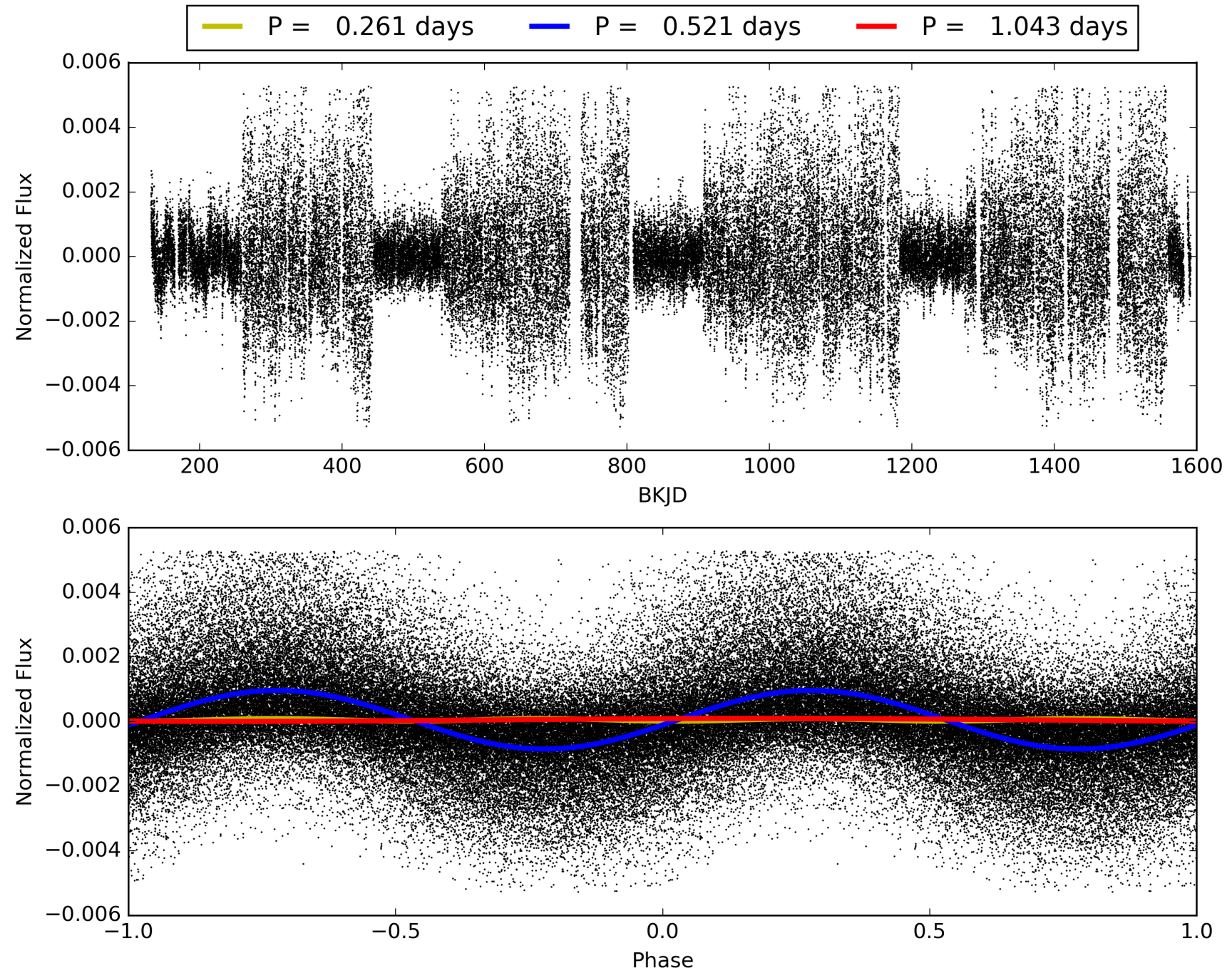
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [21.15 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.40e-13
RollingBand-fgt: 1.00 [2463/2463]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.430 arcsec [2.33 σ]
KicOffset-rm: 7.487 arcsec [49.98 σ]
OotOffset-st: 0/0/2/5 [7]
KicOffset-st: 0/0/2/5 [7]
DiffImageQuality-fgm: 0.71 [5/7]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 008328003-01, PDC Light Curves

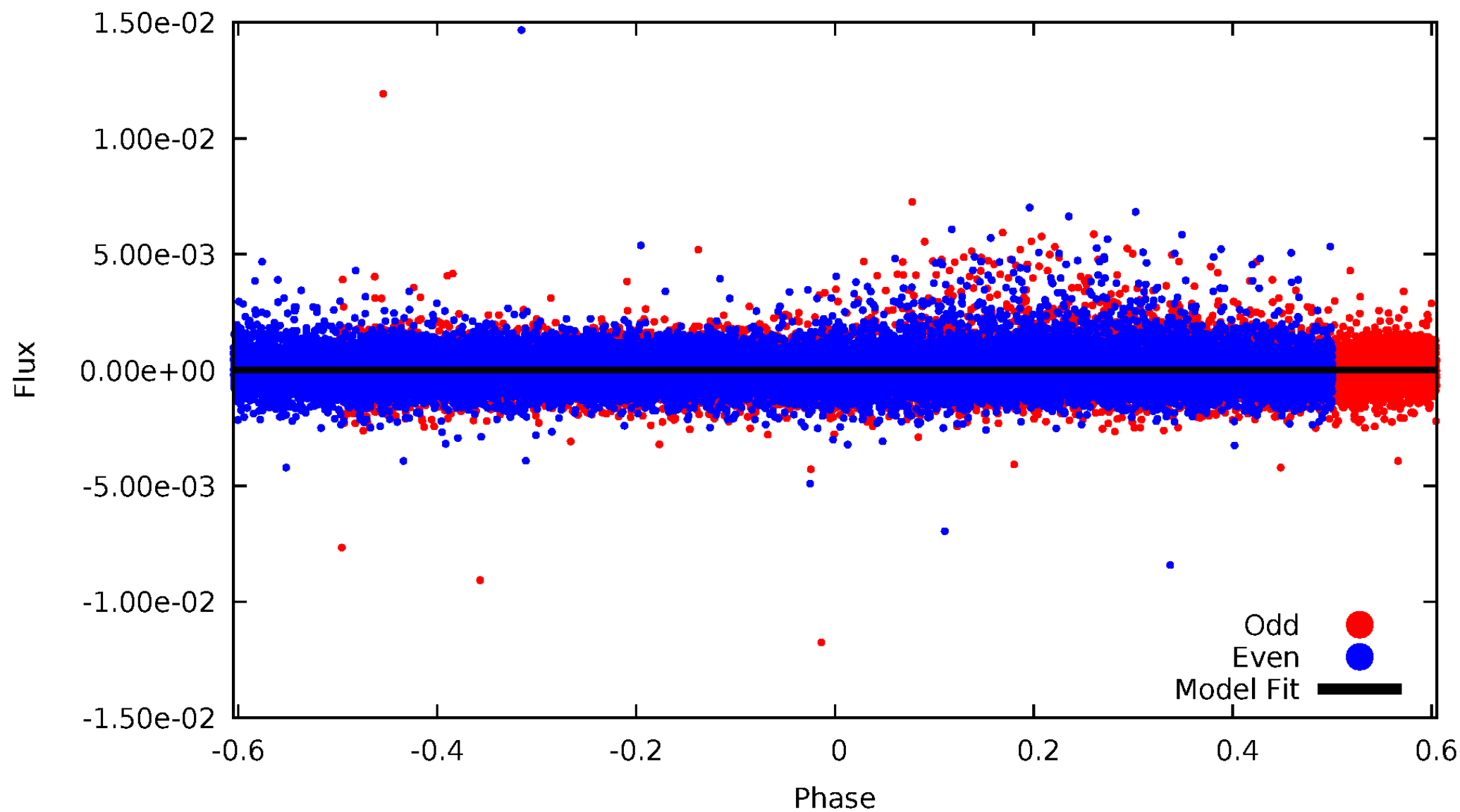


TCE 008328003-01



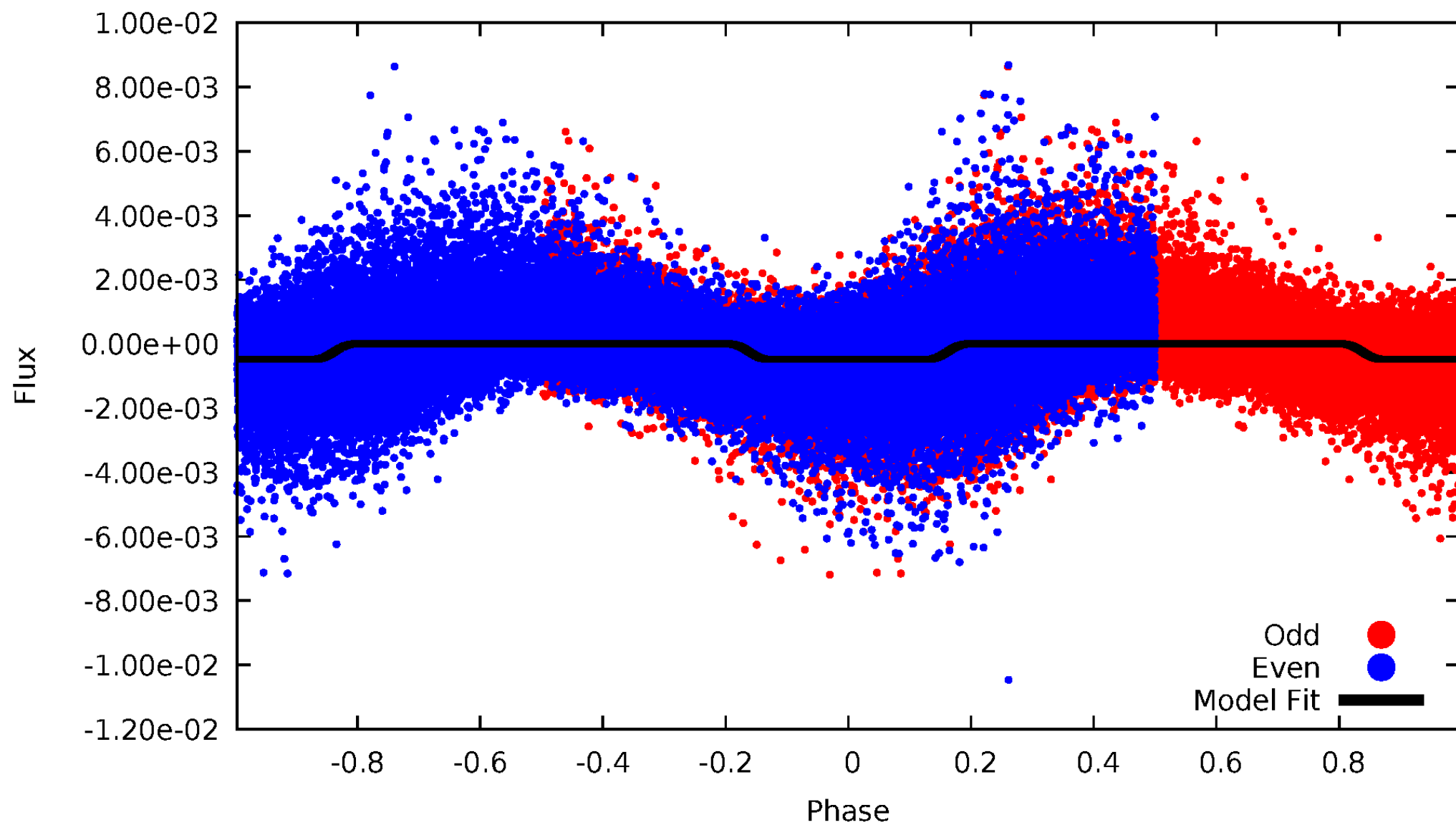
DV Odd/Even

TCE 008328003-01

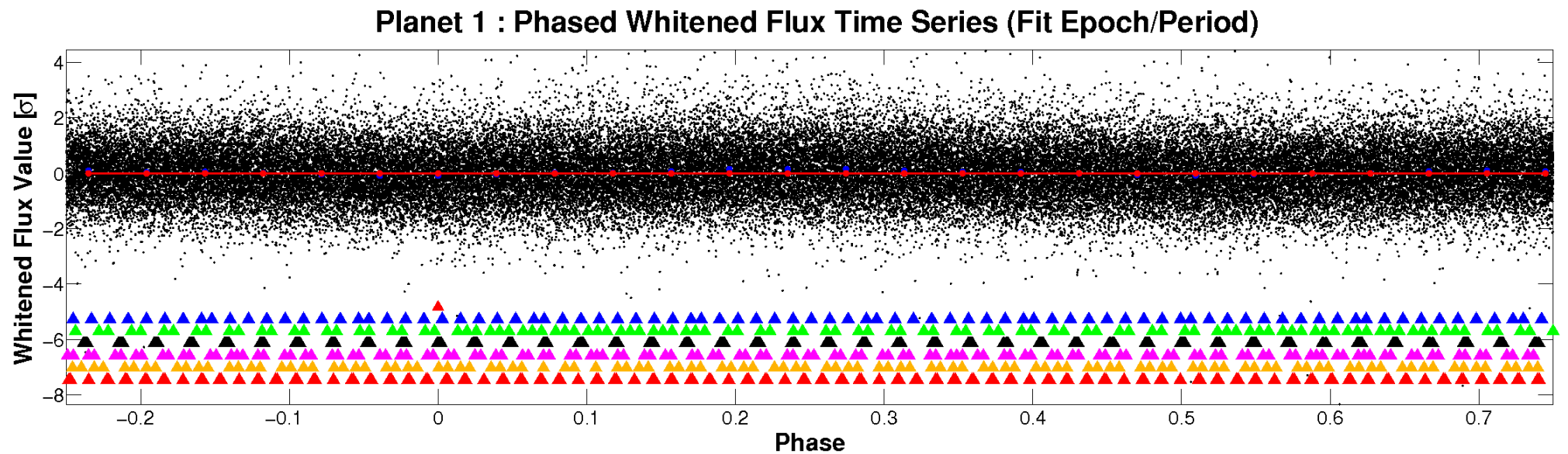
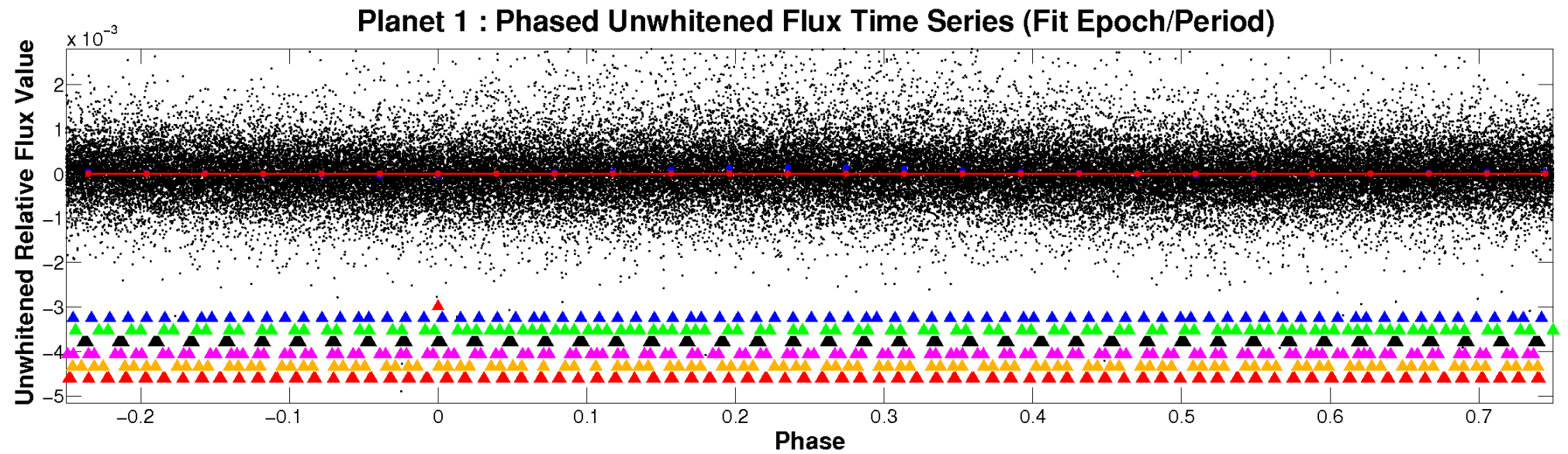


ALT Odd/Even

TCE 008328003-01

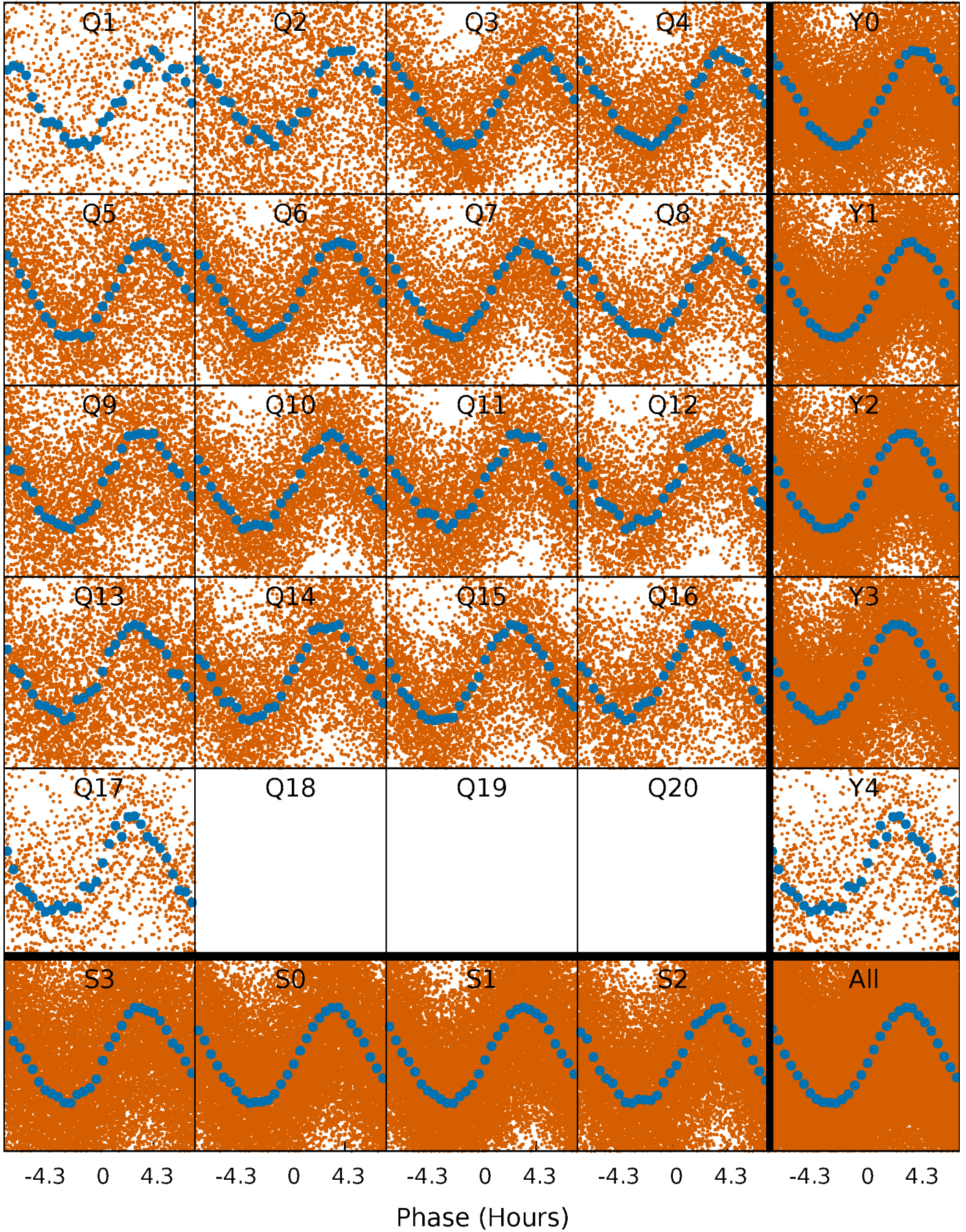


Non-Whitened Vs. Whitened Light Curve



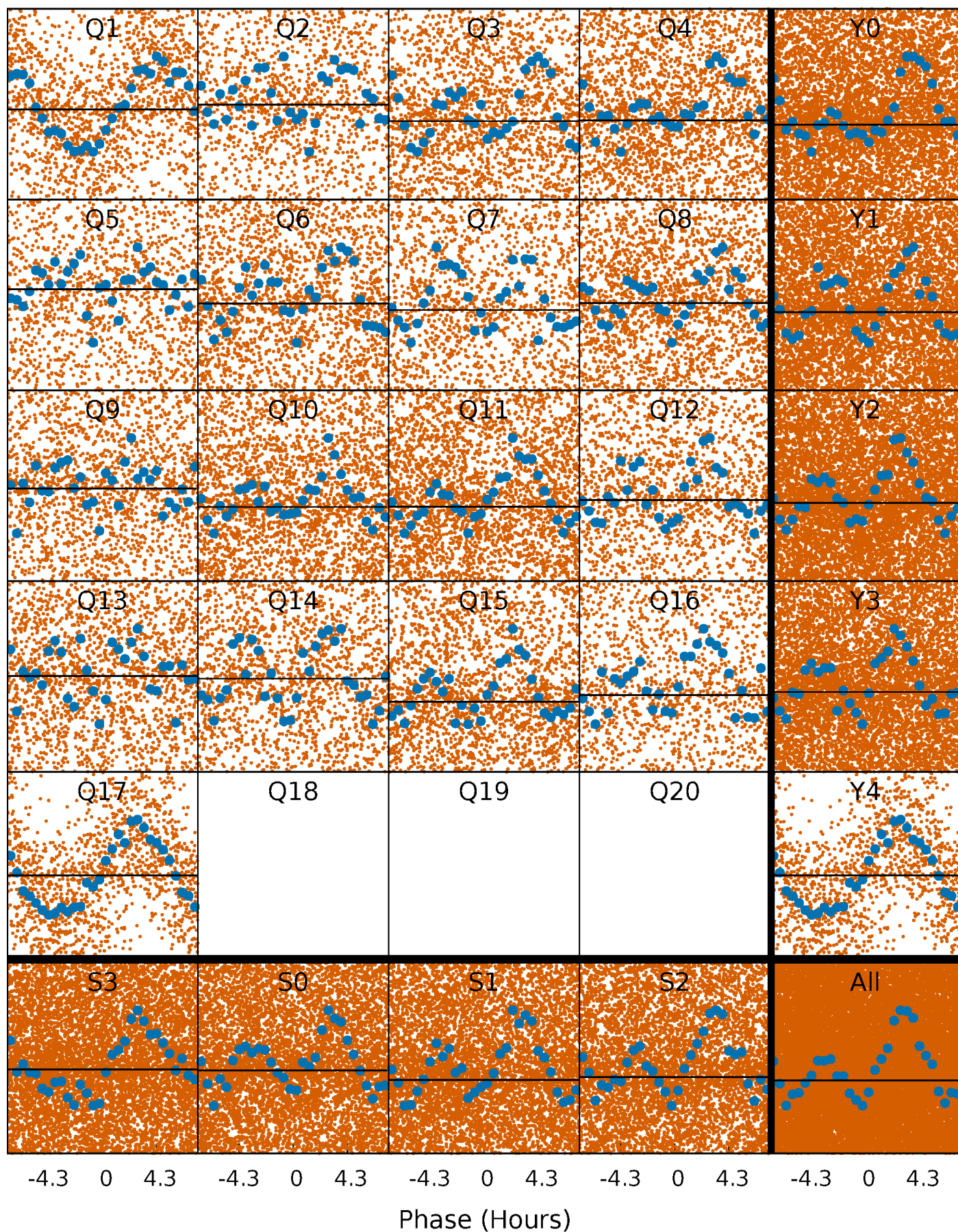
PDC Quarter-Phased Transit Curves

TCE 008328003-01 P= 0.521350 Days $T_0=131.721910$ (BKJD)



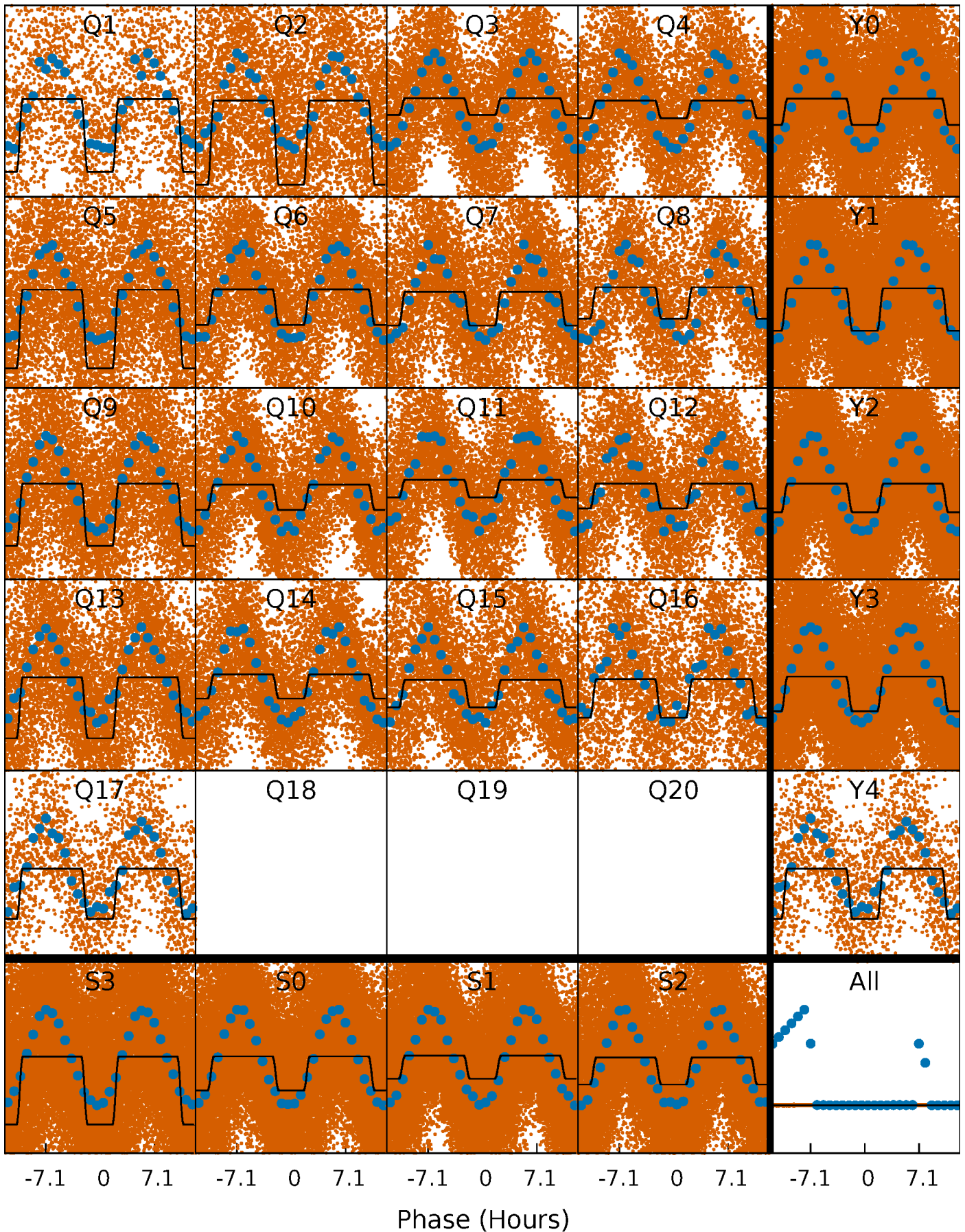
DV Quarter-Phased Transit Curves

TCE 008328003-01 P= 0.521350 Days $T_0=131.721910$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

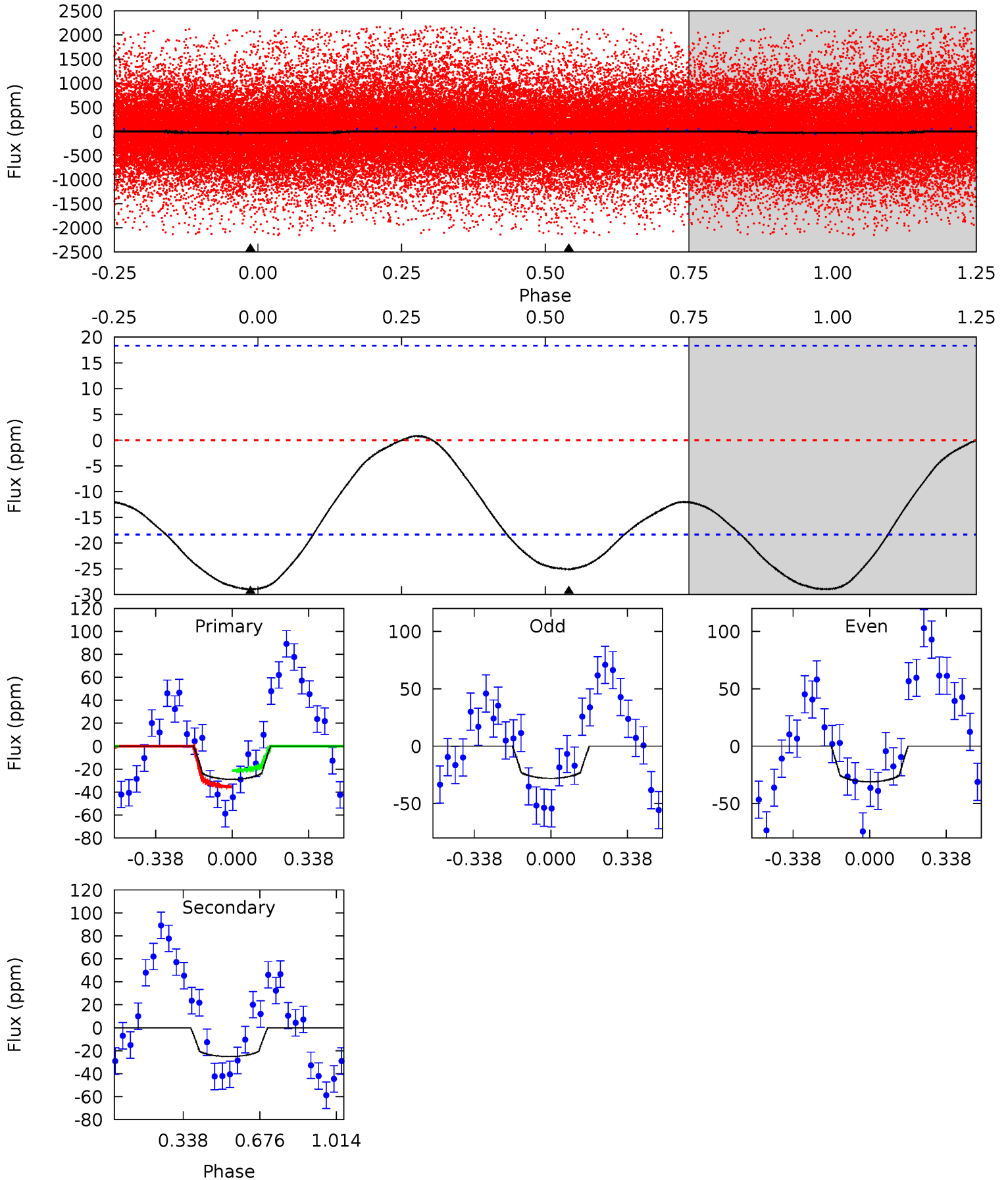
TCE 008328003-01 P= 0.521333 Days $T_0=131.651695$ (BKJD)



DV Model-Shift Uniqueness Test

008328003-01, P = 0.521350 Days, E = 131.200560 Days

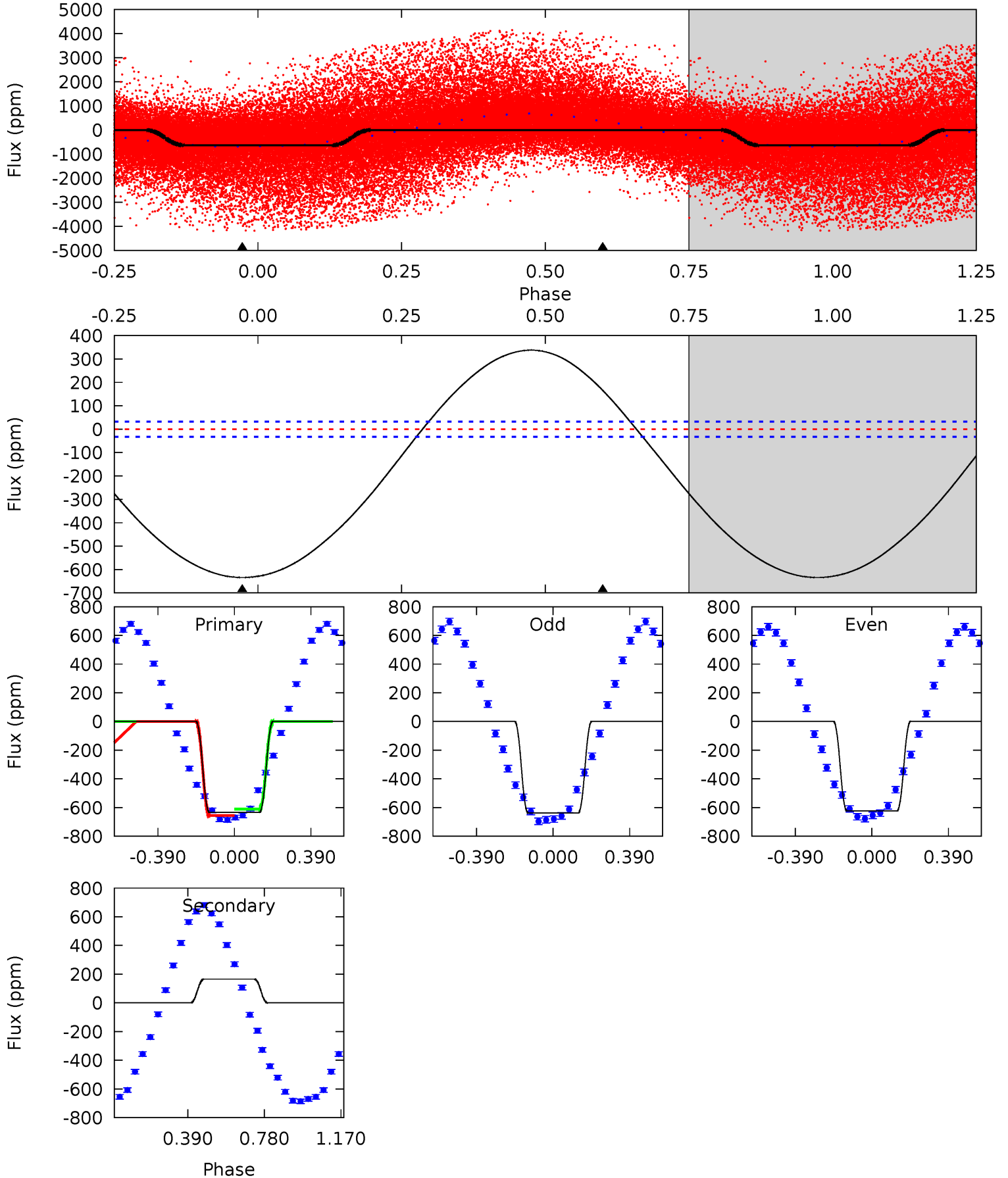
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.79	5.89	0	0	4.30	0.96	0.20	6.79	6.79	5.89	5.89	0.36	0.29	0.03	1.83



Alt Model-Shift Uniqueness Test

008328003-01, P = 0.521333 Days, E = 131.130362 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
83.6	-21.9	0	0	4.27	0.86	11.9	83.6	83.6	-21.9	-21.9	1.01	1.40	0.35	3.32



Stellar Parameters For KIC 008328003

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6505^{+155}_{-214}	$4.483^{+0.050}_{-0.200}$	$-0.500^{+0.250}_{-0.350}$	$0.975^{+0.278}_{-0.093}$	$1.054^{+0.119}_{-0.146}$	$1.604^{+0.418}_{-0.805}$
	+2%/-3%	+1%/-4%	+50%/-70%	+29%/-10%	+11%/-14%	+26%/-50%
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 008328003-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-25 ± 4	$5.54^{+5.83}_{-3.99}$	3580^{+503}_{-349}	-3214^{+6891}_{-383}	$0.066^{+0.775}_{-0.050}$
Alt.	166 ± 8	$6.28^{+5.53}_{-4.17}$	3590^{+474}_{-346}	-4016^{+383}_{-1564}	$-0.365^{+0.273}_{-2.911}$

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

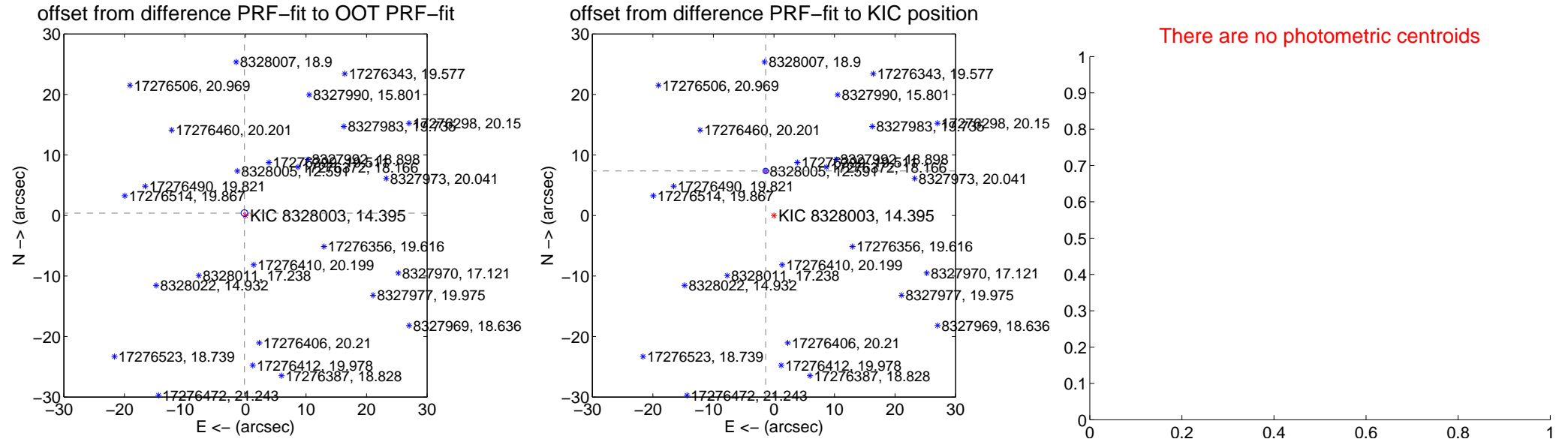
DV Centroid Data

Supplemental centroid analysis for 008328003-01. Kepler magnitude: 14.39. Transit SNR 0.00

There are 5 quarters with good PRF difference image offsets

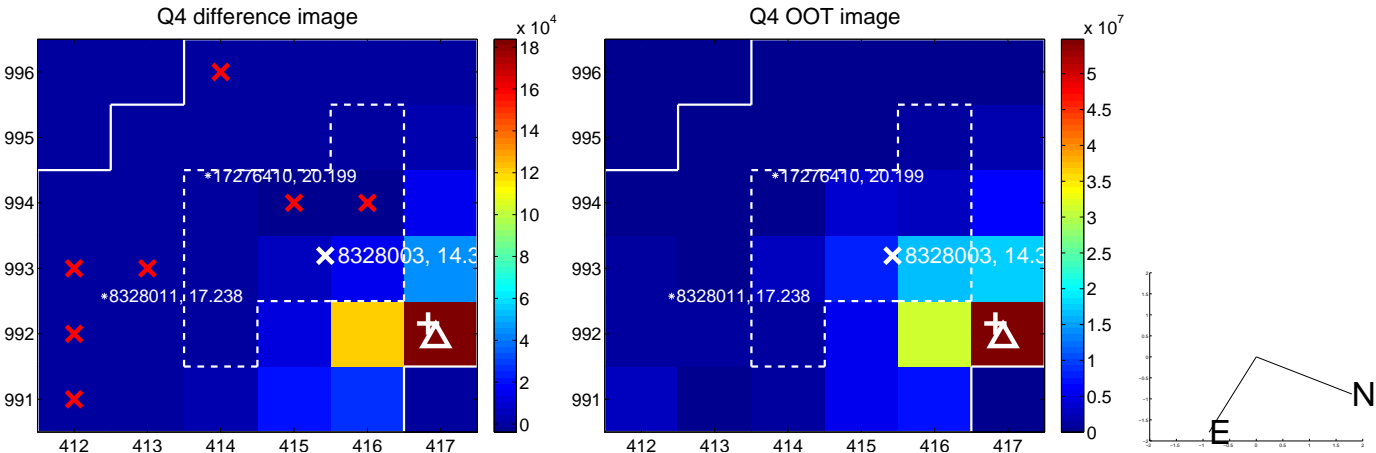
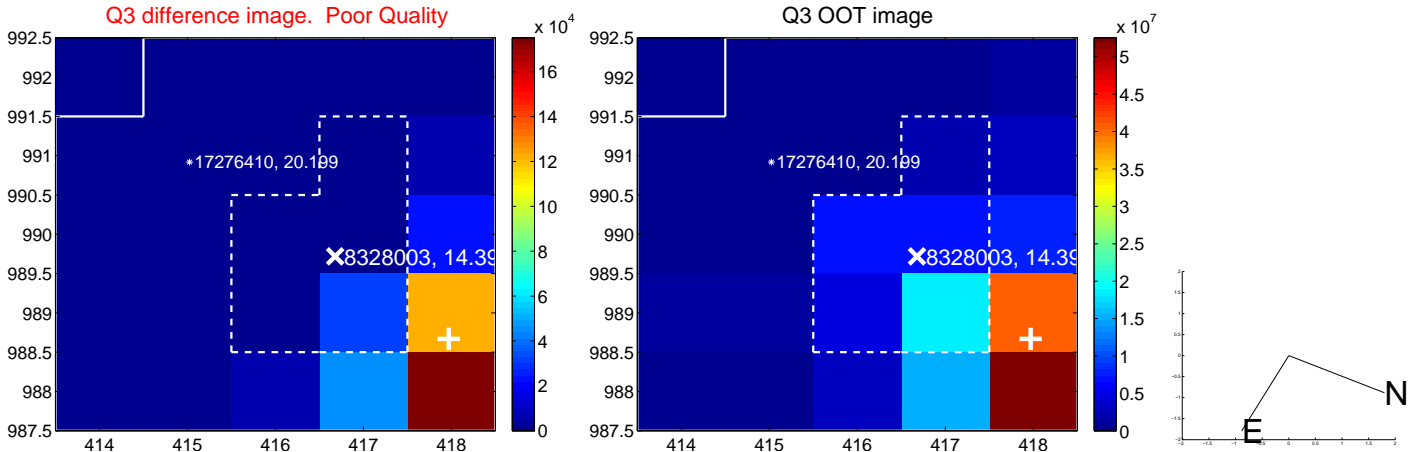
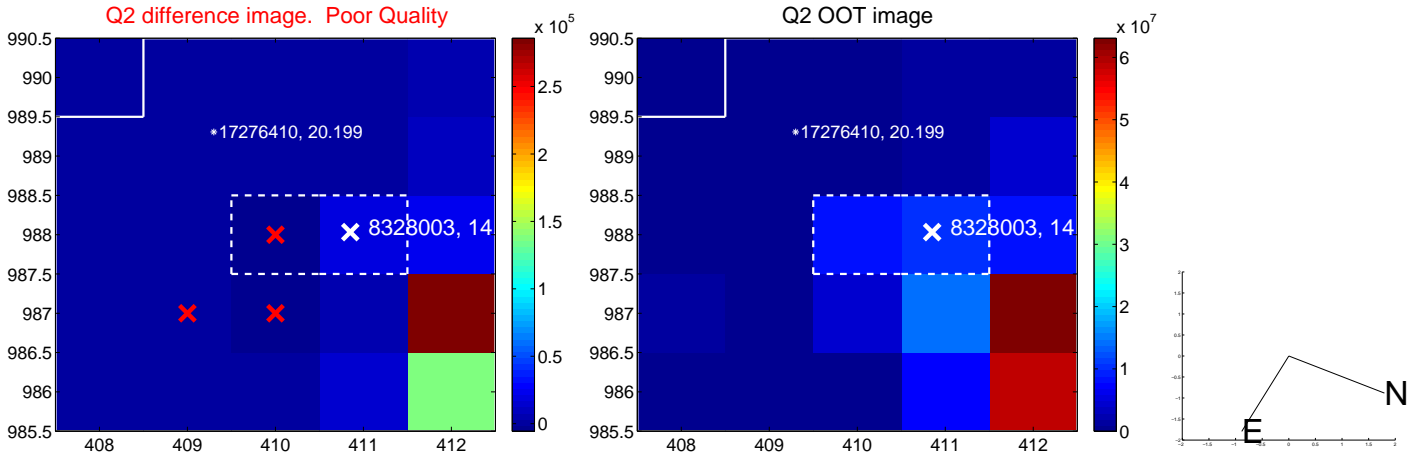
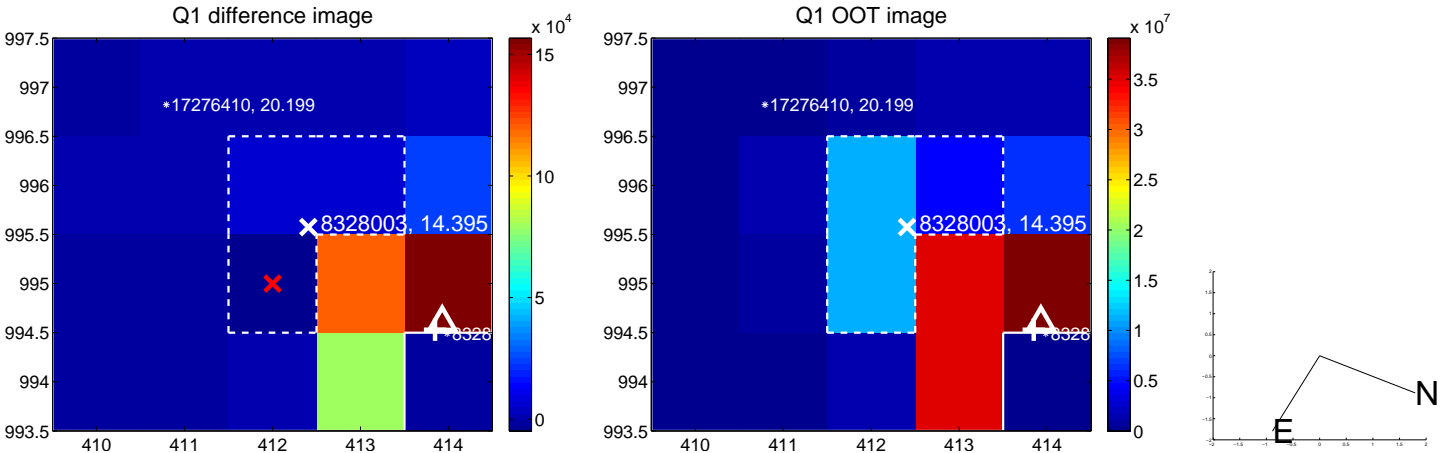
The OOT PRF centroid is offset from the target star catalog position by about 7.11 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.430 ± 0.184	2.33	0.169 ± 0.236	0.395 ± 0.115
PRF-fit source offset from KIC position	7.487 ± 0.150	49.98	1.370 ± 0.293	7.361 ± 0.108
photometric centroid source offset	—	—	—	—

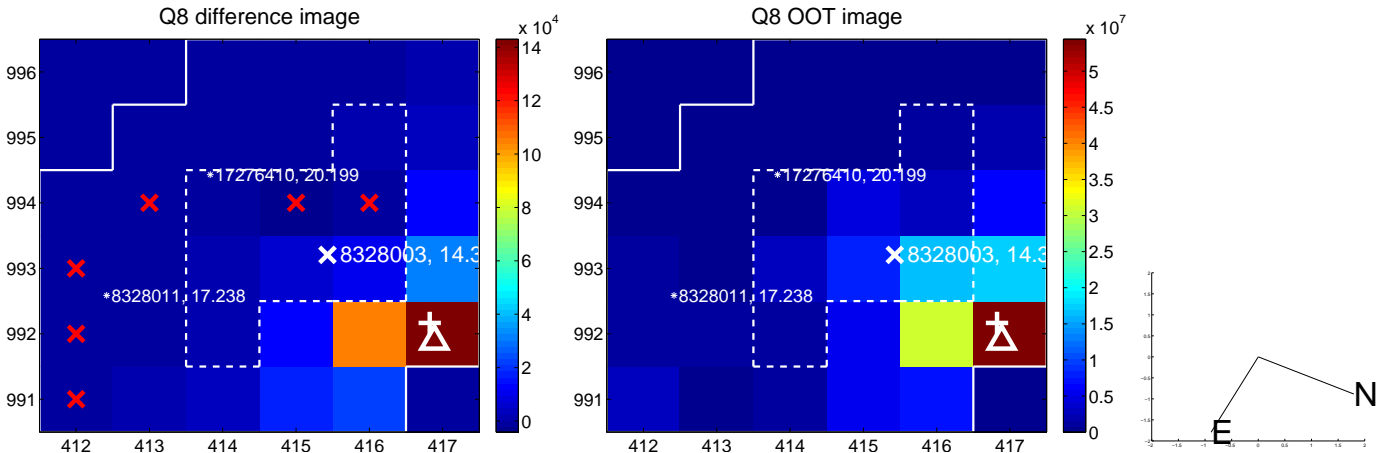
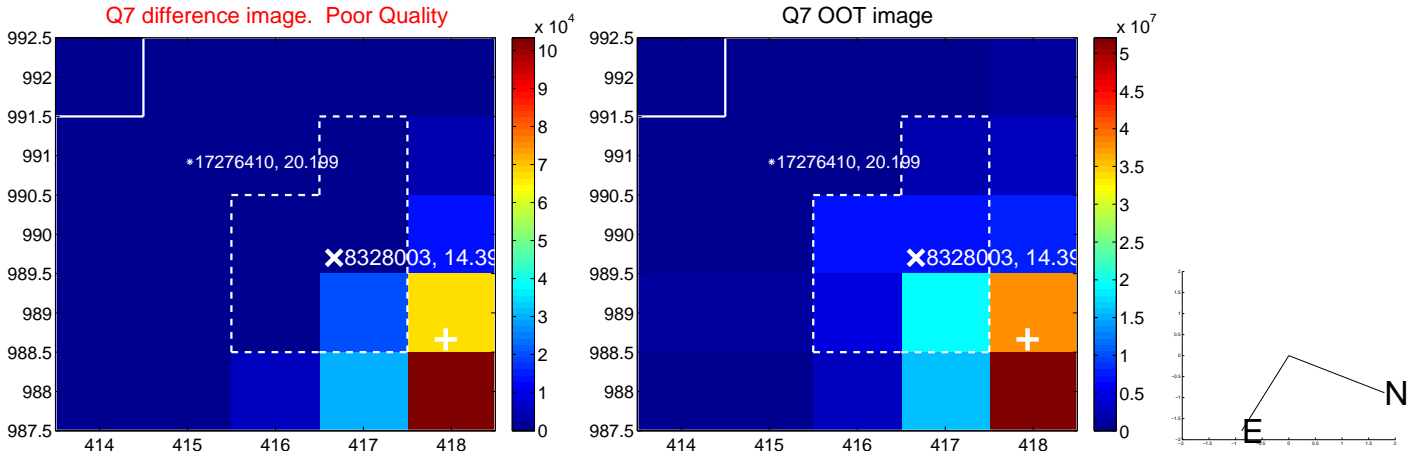
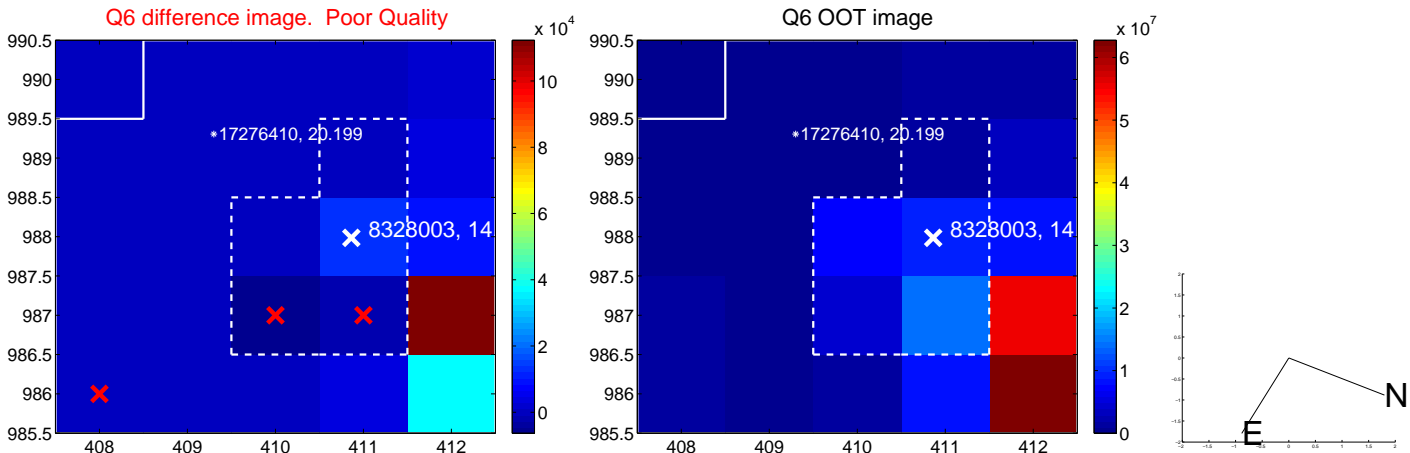
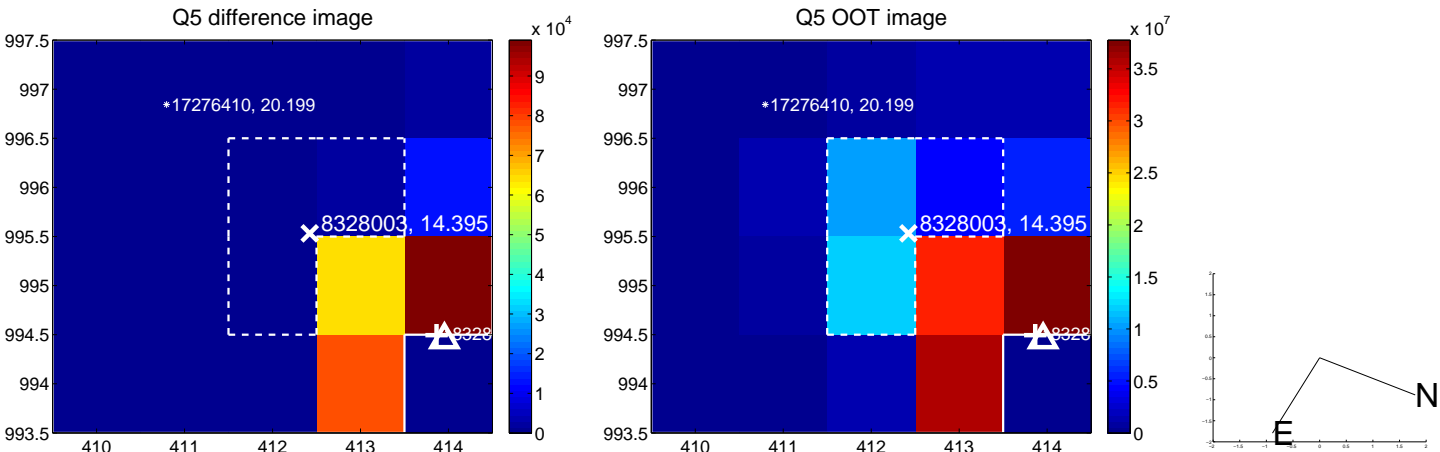


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

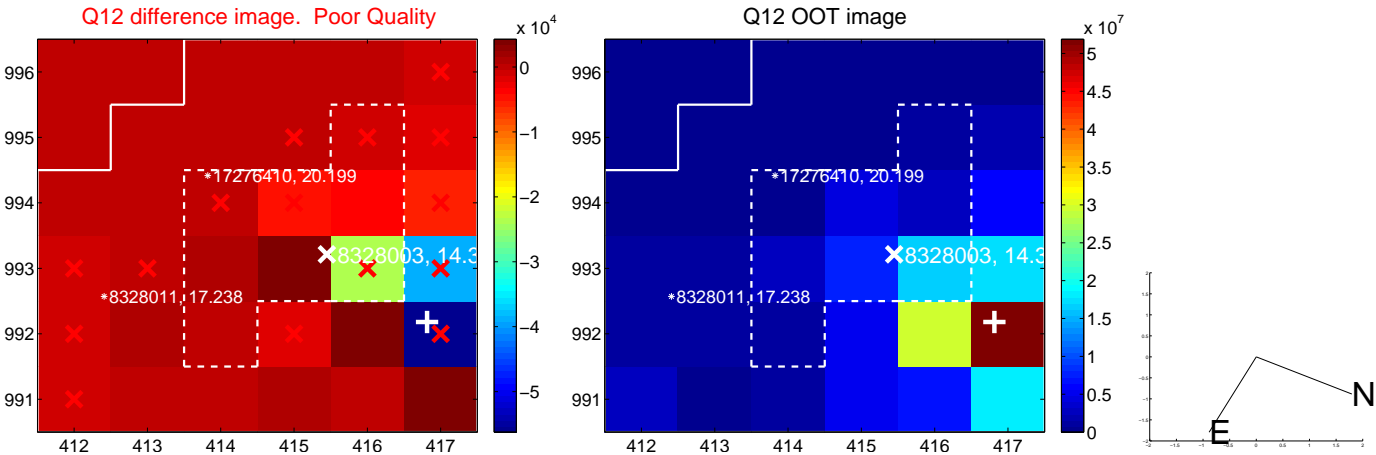
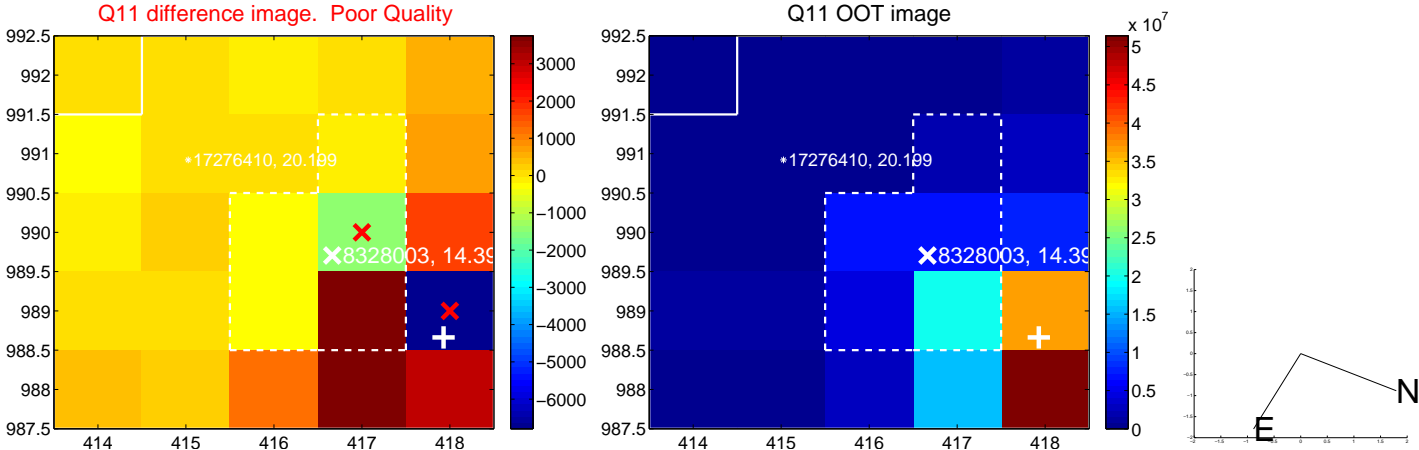
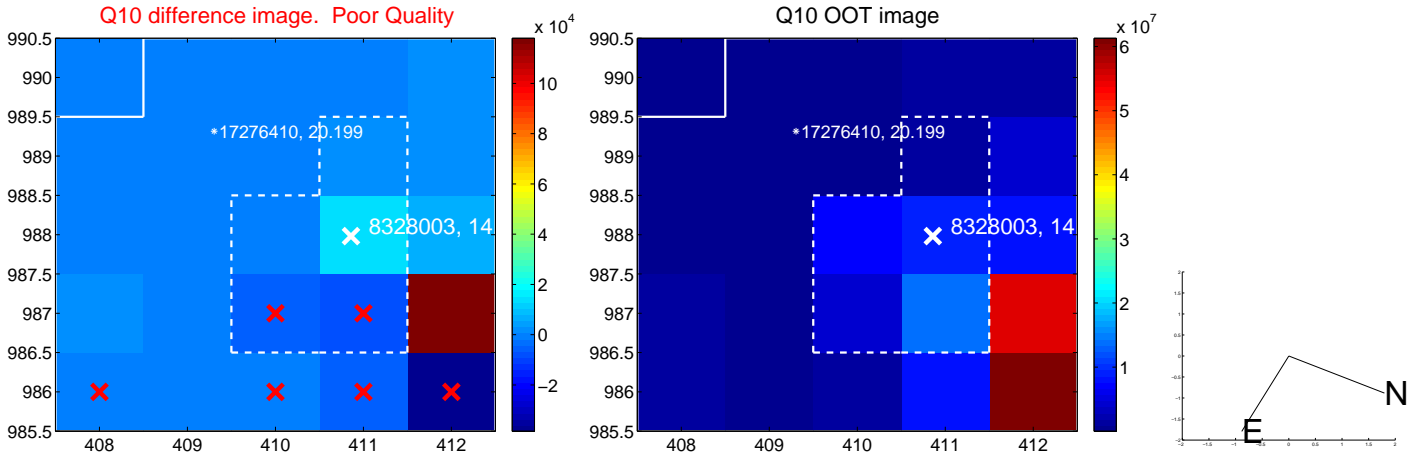
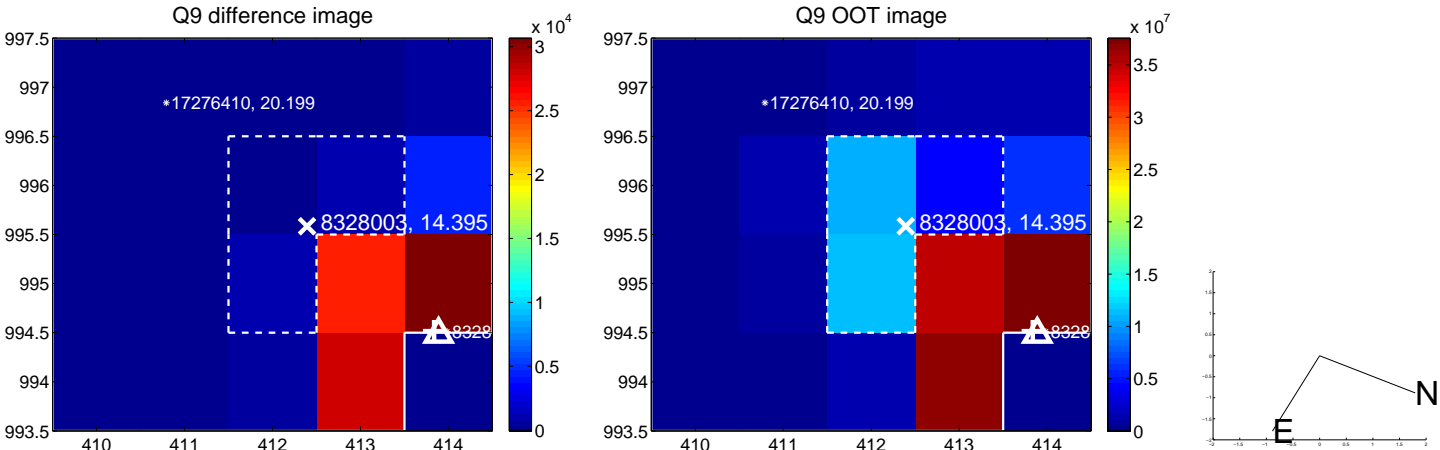
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



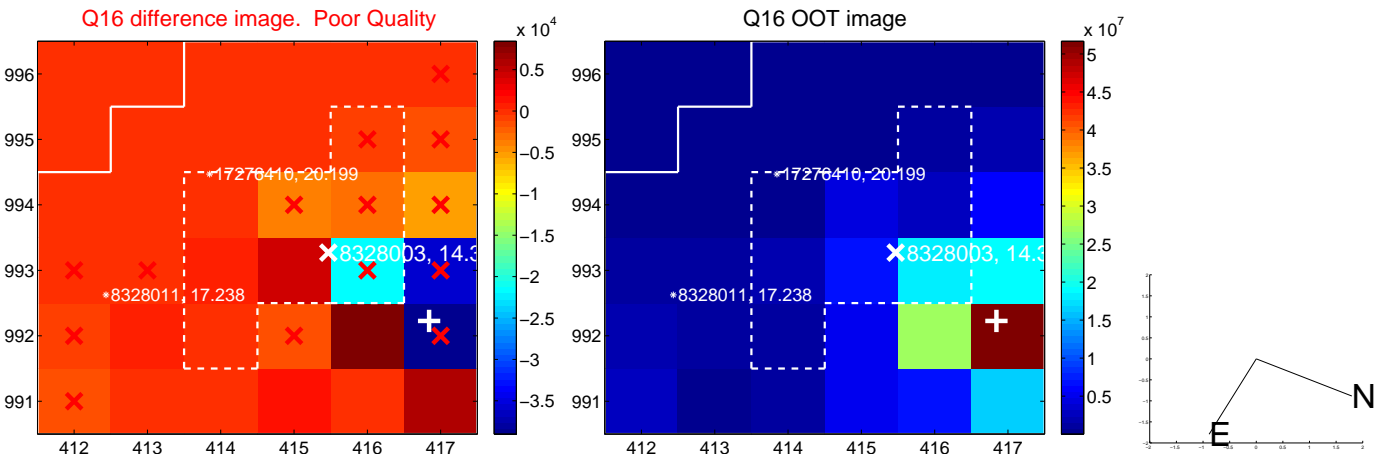
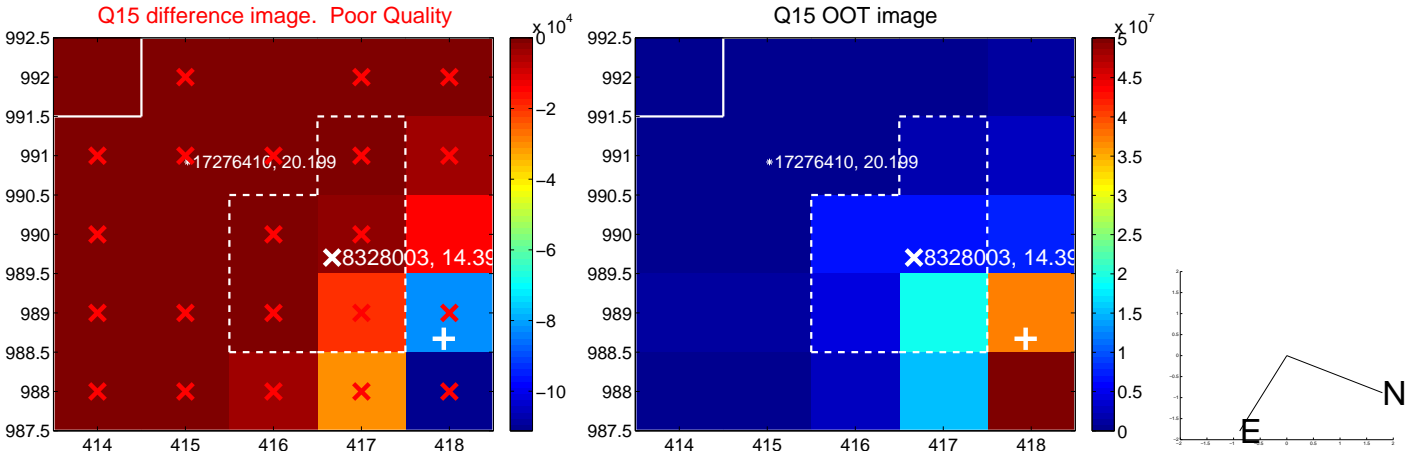
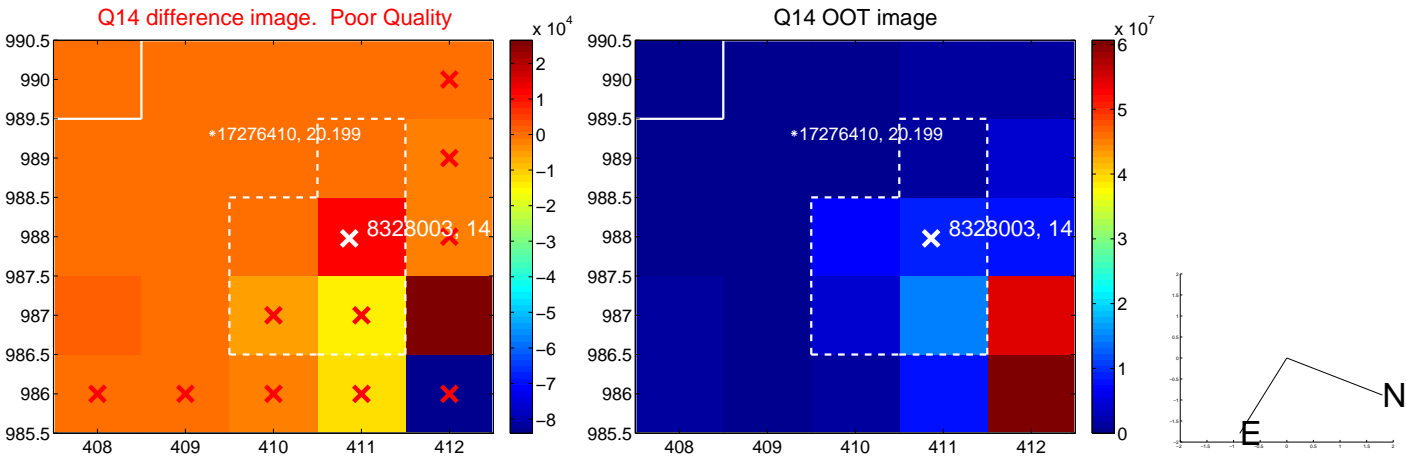
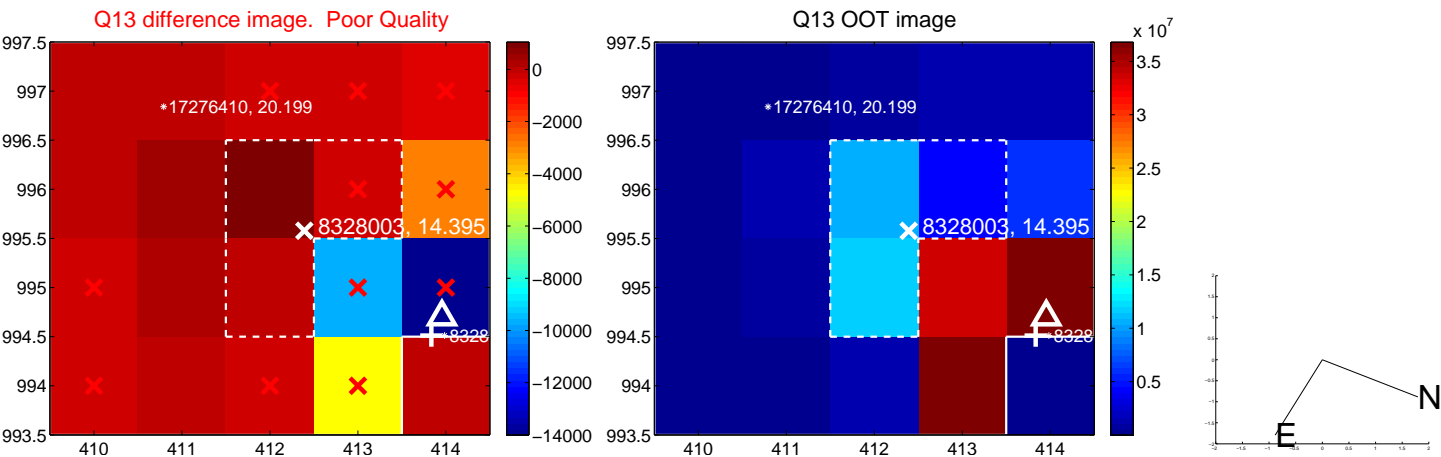
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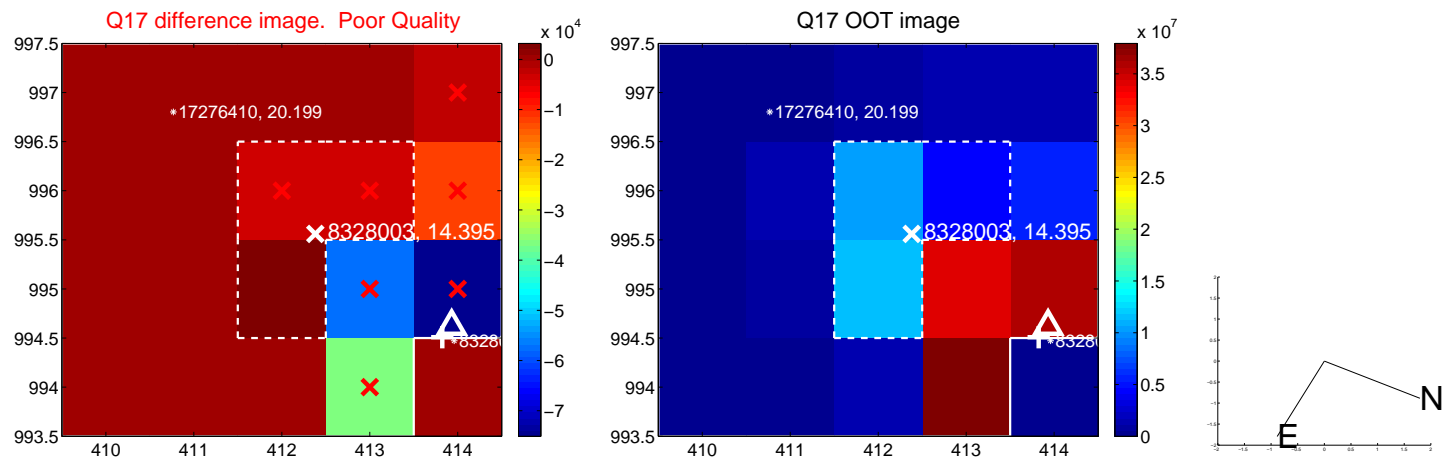
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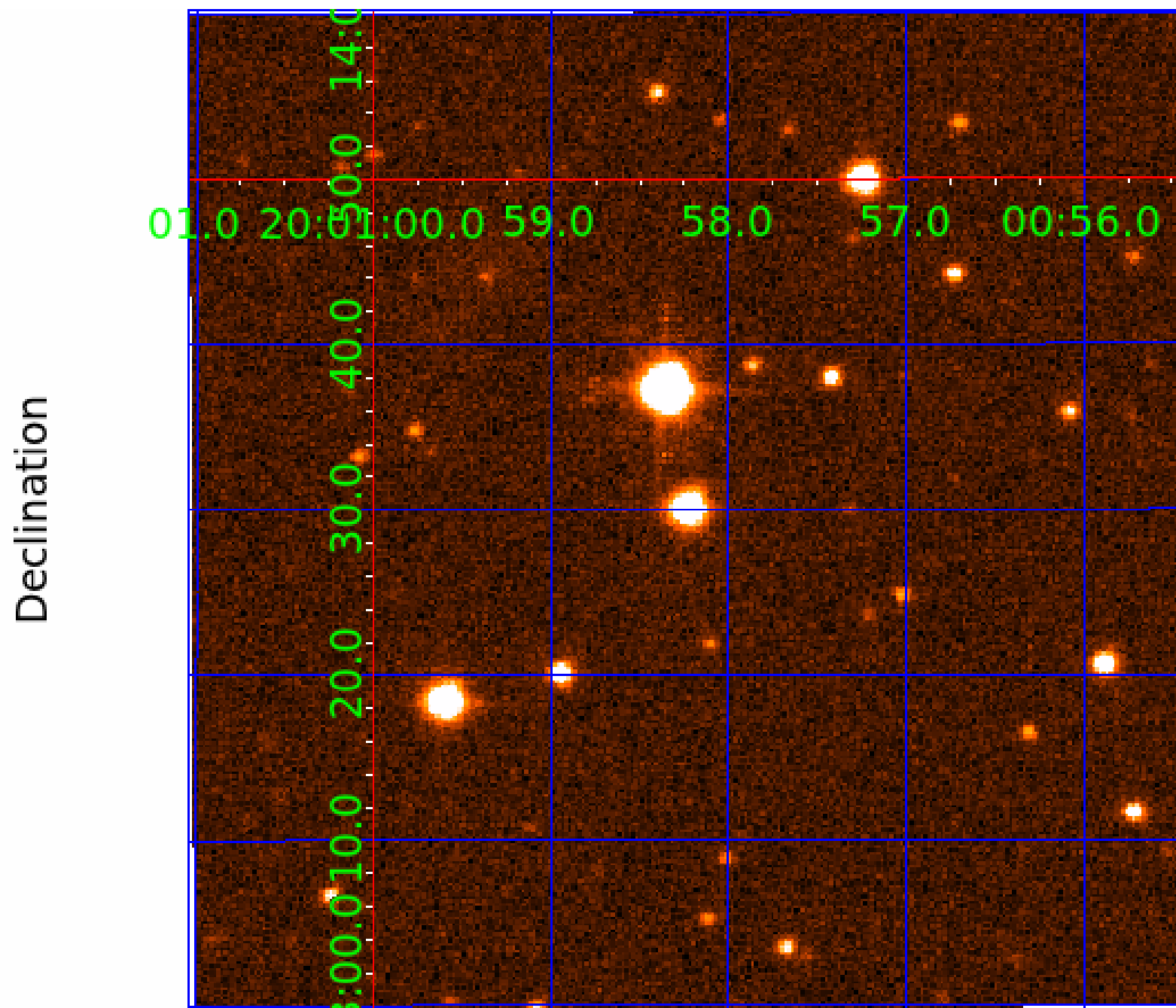


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image



KIC 008328003

Q1-17 DR25 TCE Parameters

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008328003-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
008328003-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
008328003-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS
008328003-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
008328003-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS
008328003-07	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET

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

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

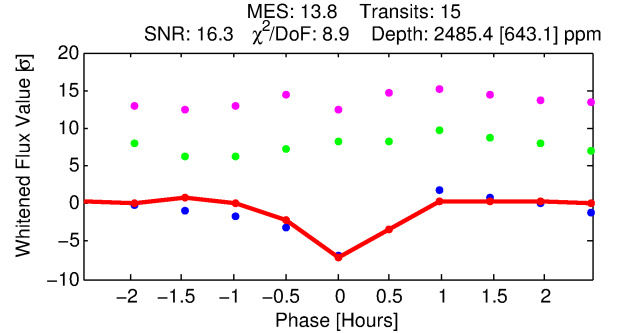
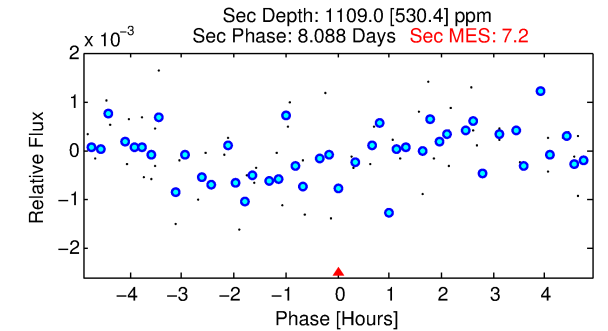
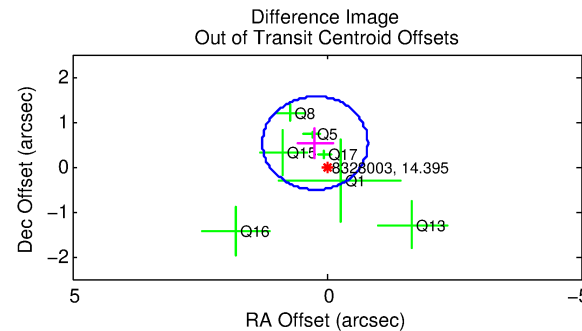
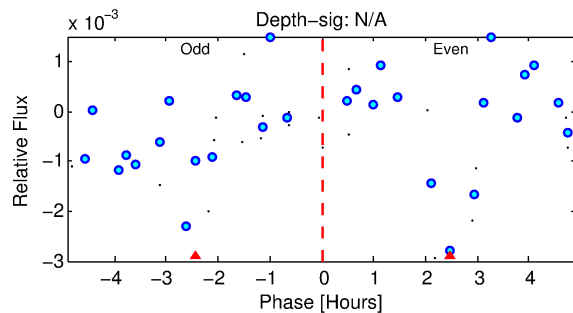
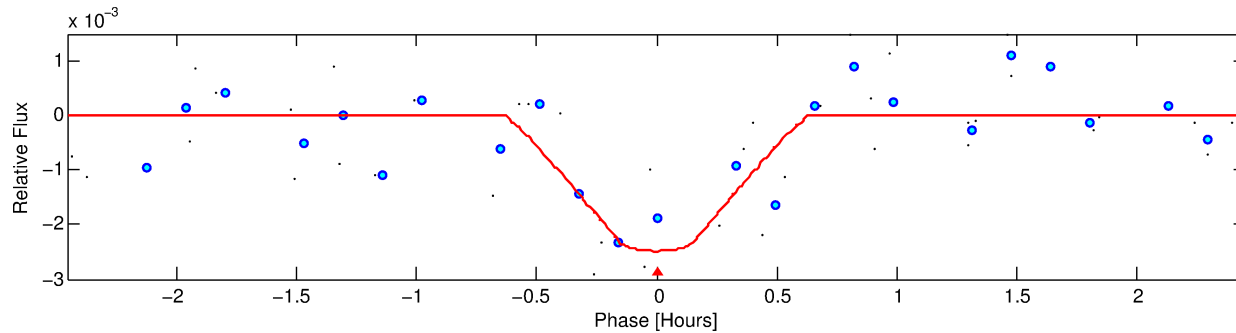
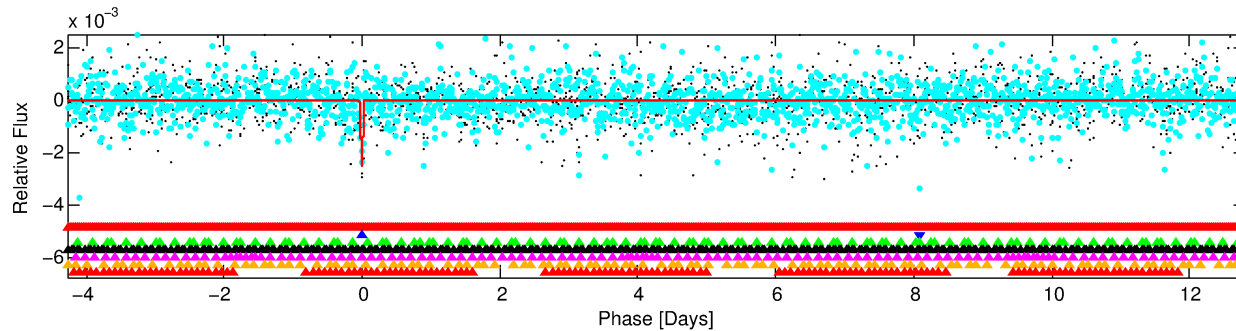
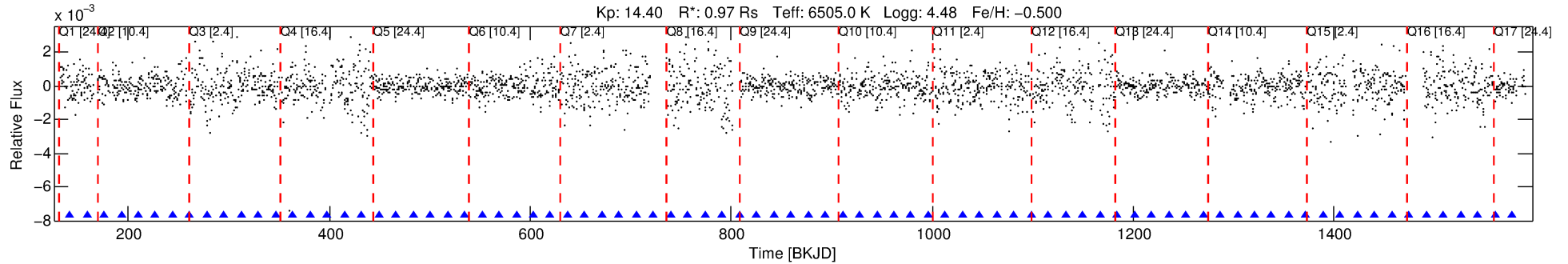
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008328003-02

No Significant Match Found

DV One-Page Summary

KIC: 8328003 Candidate: 2 of 7 Period: 17.088 d



DV Fit Results:

Period = 17.08798 [0.00010] d
Epoch = 141.7778 [0.0041] BKJD
Rp/R^{*} = 0.0466 [0.0992]
a/R^{*} = 166.46 [1822.78]
b = 0.09 [121.79]
Seff = 87.29 [33.55]
Teq = 779 [75] K
Rp = 4.96 [10.65] Re
a = 0.1322 [0.0323] AU
Ag = 432.79 [1859.89] [0.23σ]
Teff = 5496 [5887] K [0.80σ]

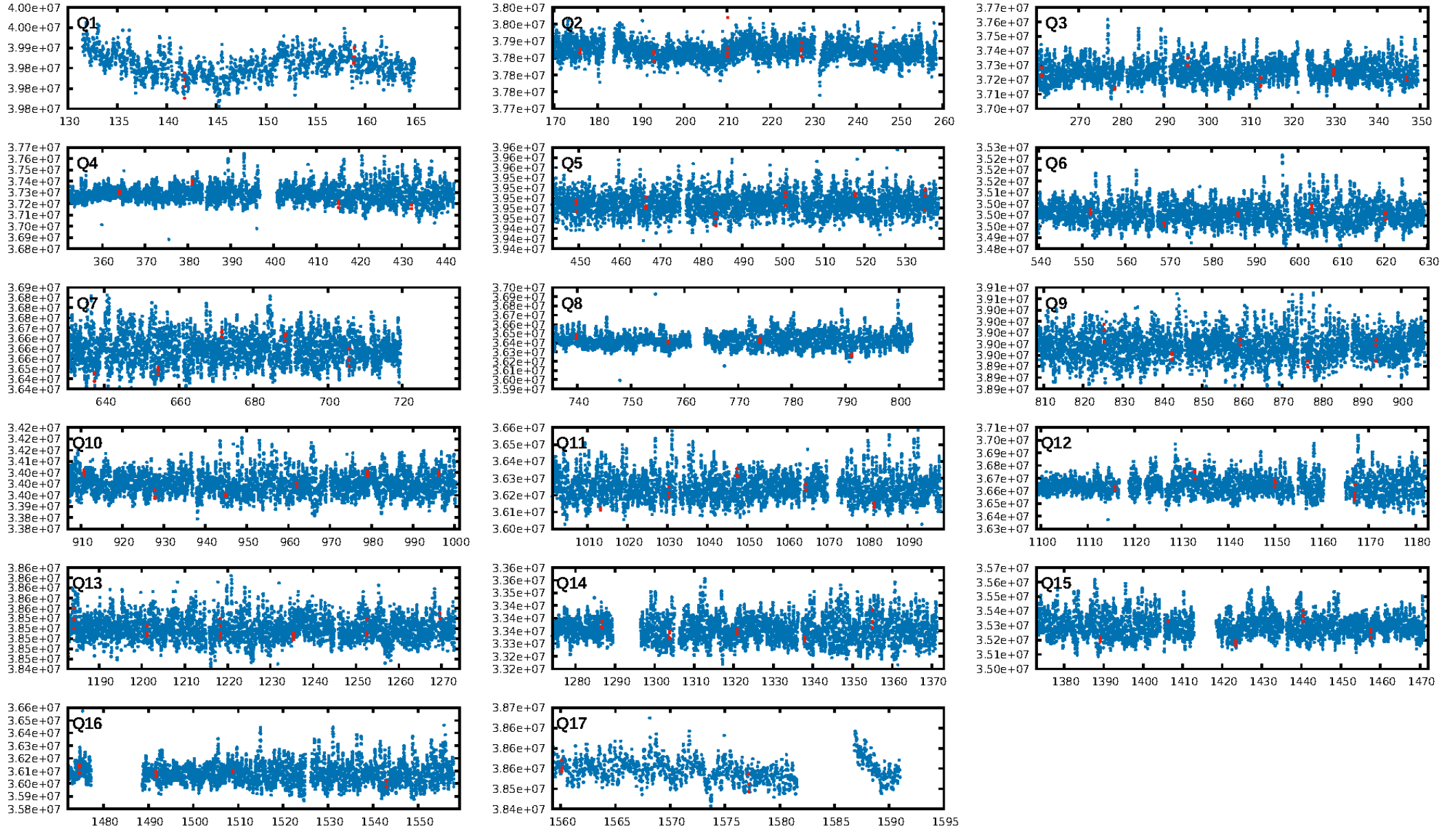
DV Diagnostic Results:

ShortPeriod-sig: 95.9% [2.04σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: 5.47e-30
RollingBand-fgt: 1.00 [14/14]
GhostDiagnostic-chr: -4.608
Centroid-sig: 64.0%
Centroid-so: 4.402 arcsec [35.12σ]
OotOffset-rm: 0.571 arcsec [1.65σ]
KicOffset-rm: 7.620 arcsec [19.92σ]
OotOffset-st: 0/1/2/4 [7]
KicOffset-st: 0/1/2/4 [7]
DiffImageQuality-fgm: 0.29 [2/7]
DiffImageOverlap-fno: 0.00 [0/17]

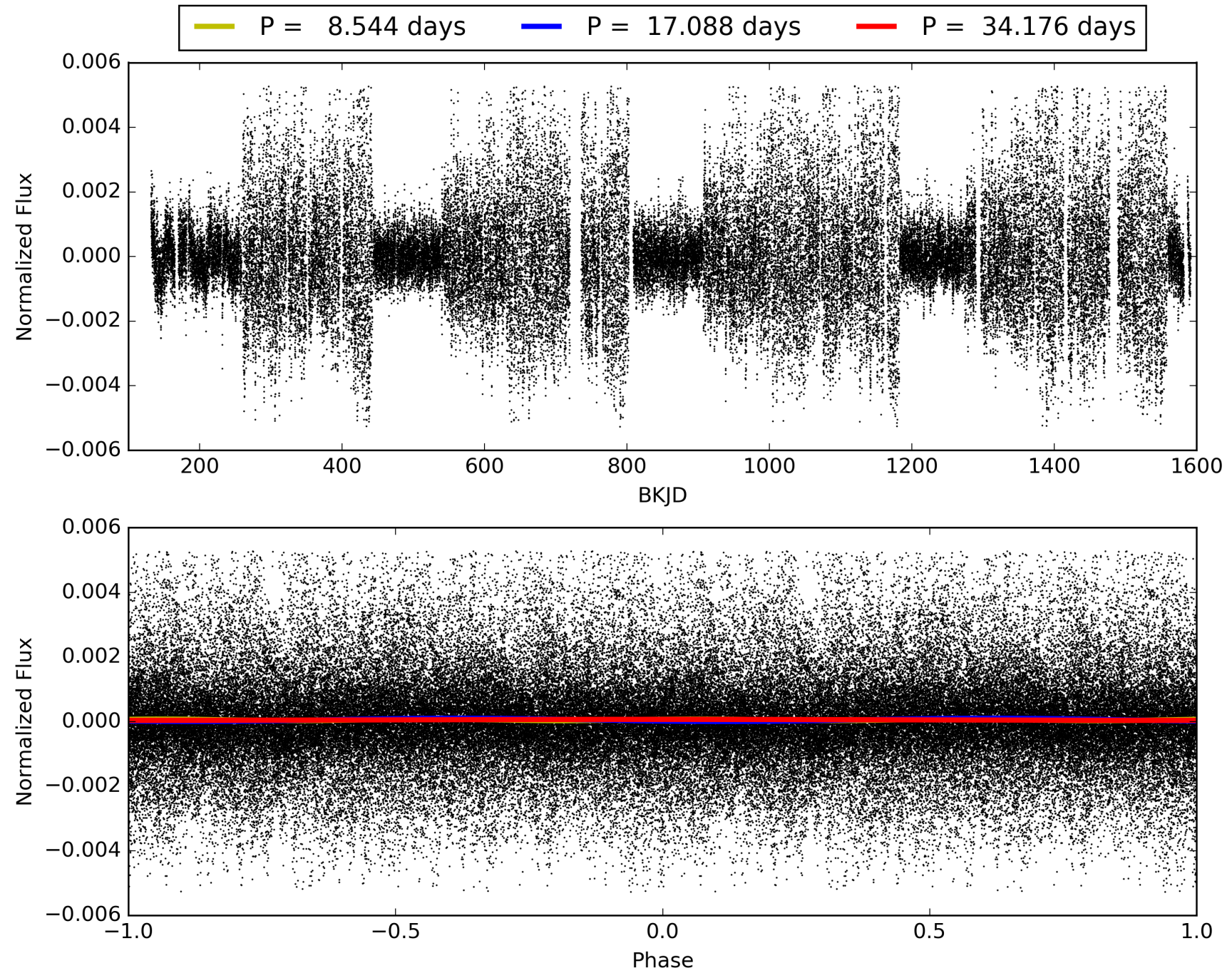
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 05:46:47 Z

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

TCE 008328003-02, PDC Light Curves

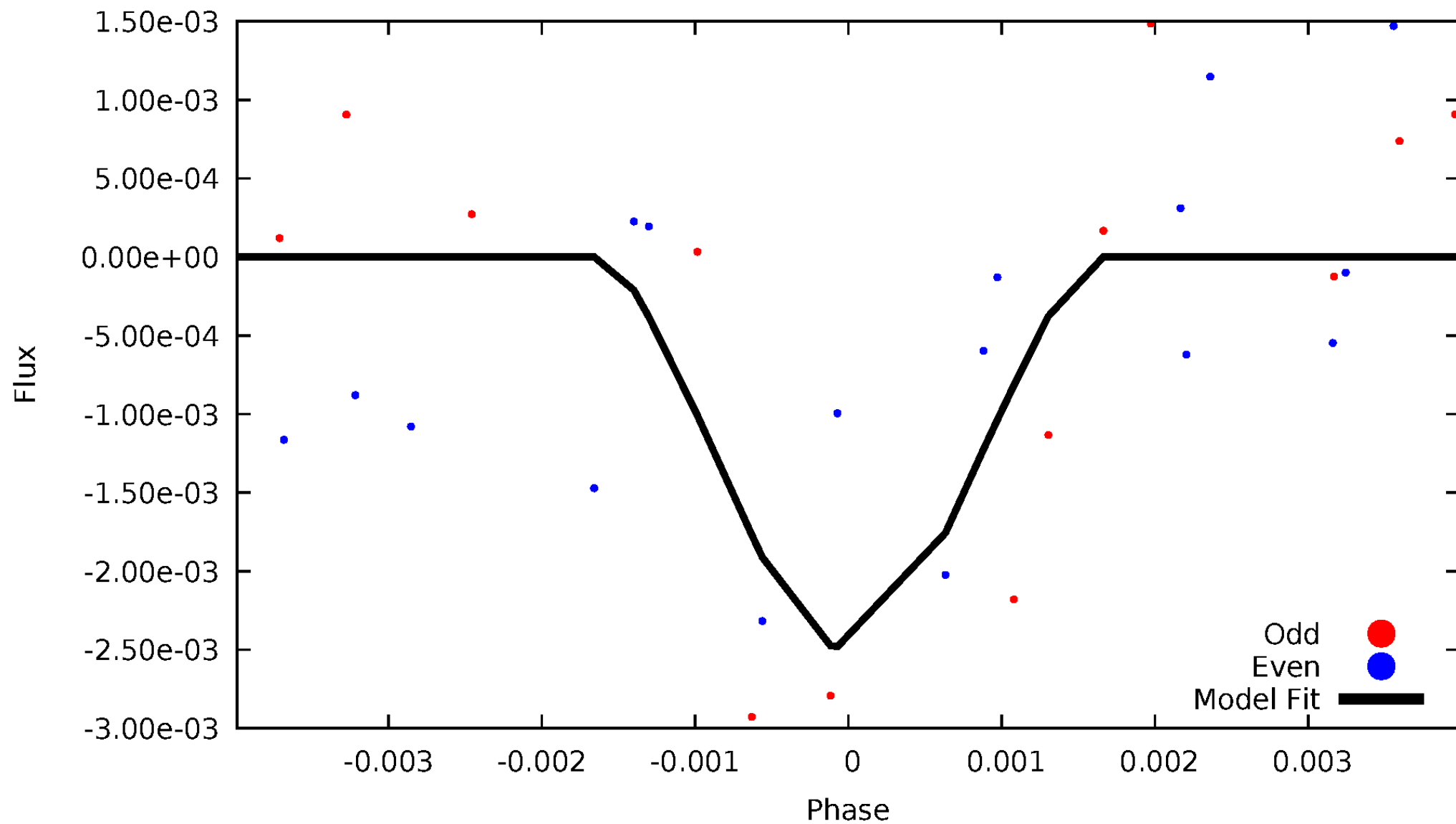


TCE 008328003-02



DV Odd/Even

TCE 008328003-02

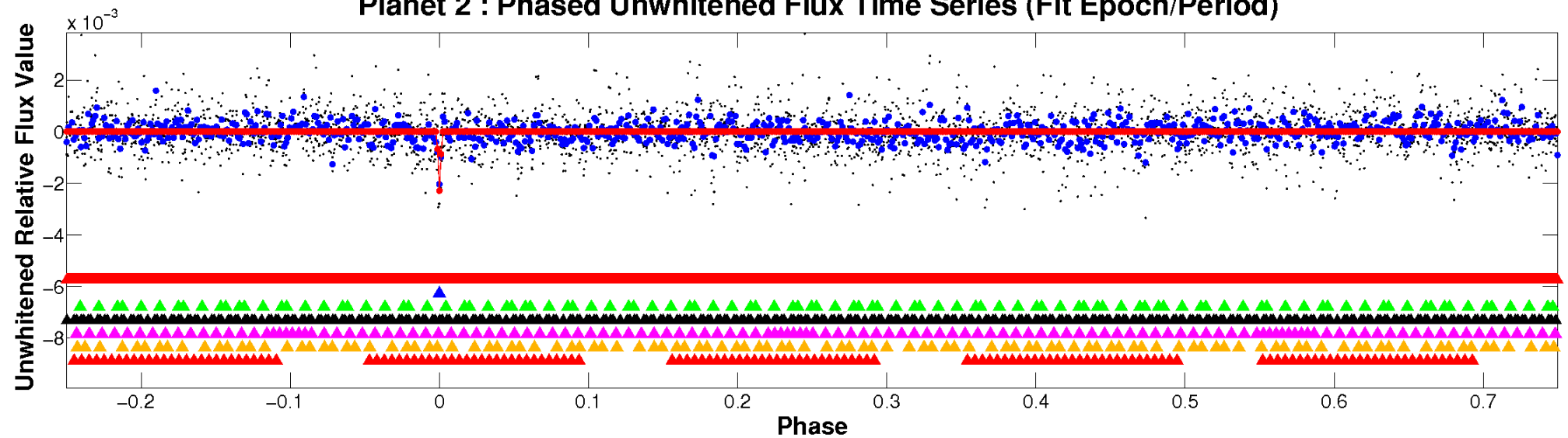


ALT Odd/Even

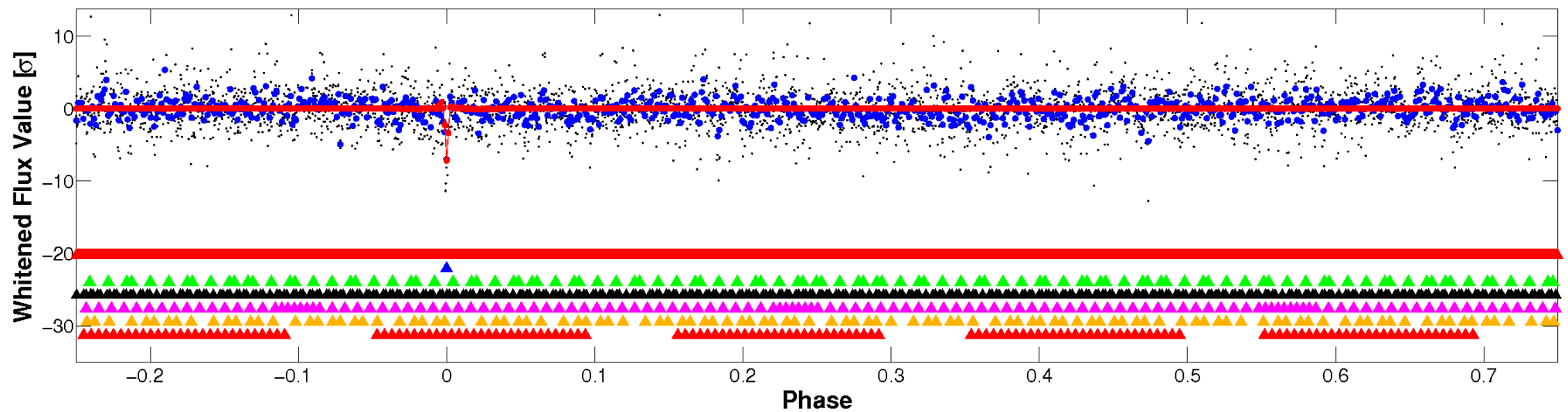
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

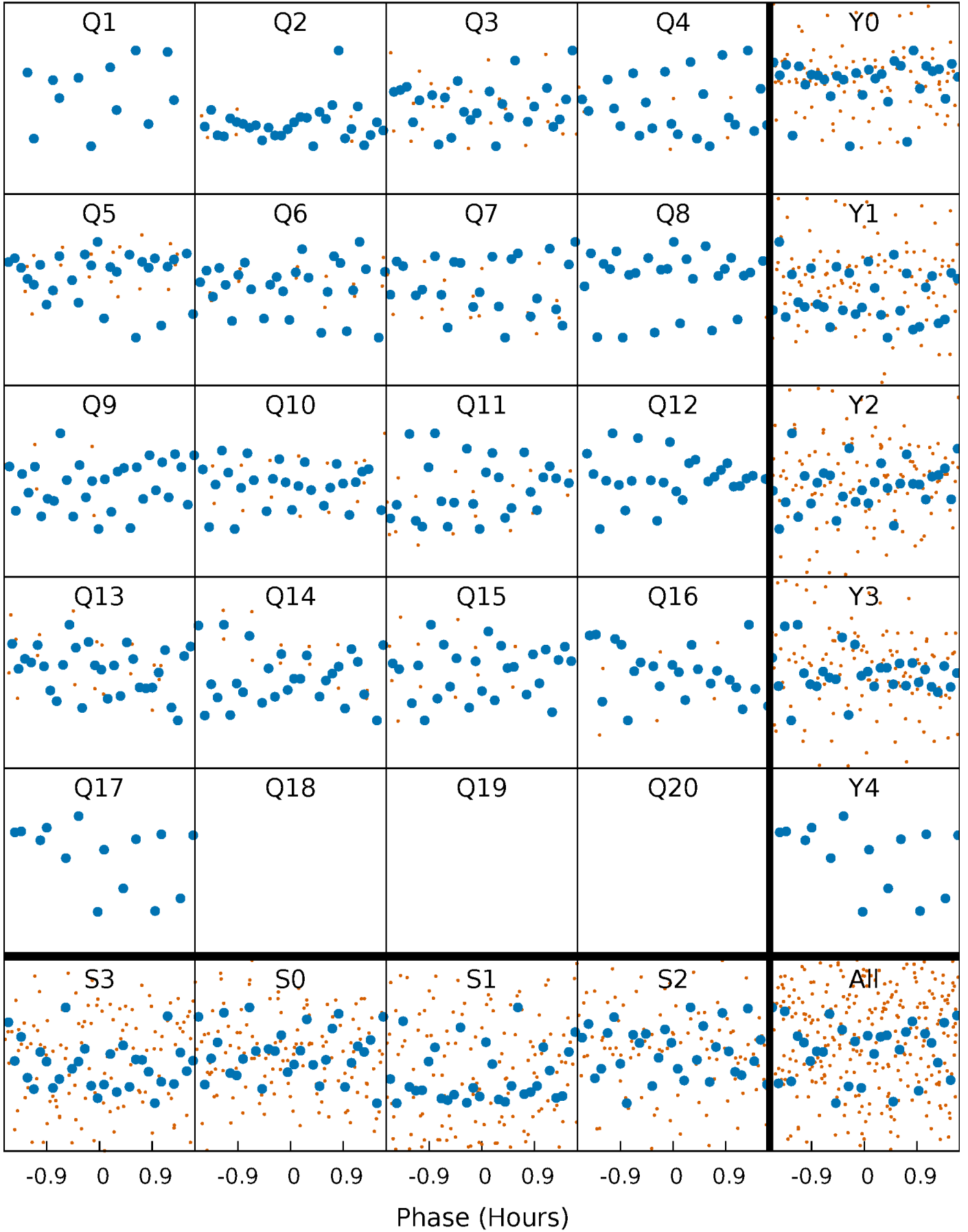


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



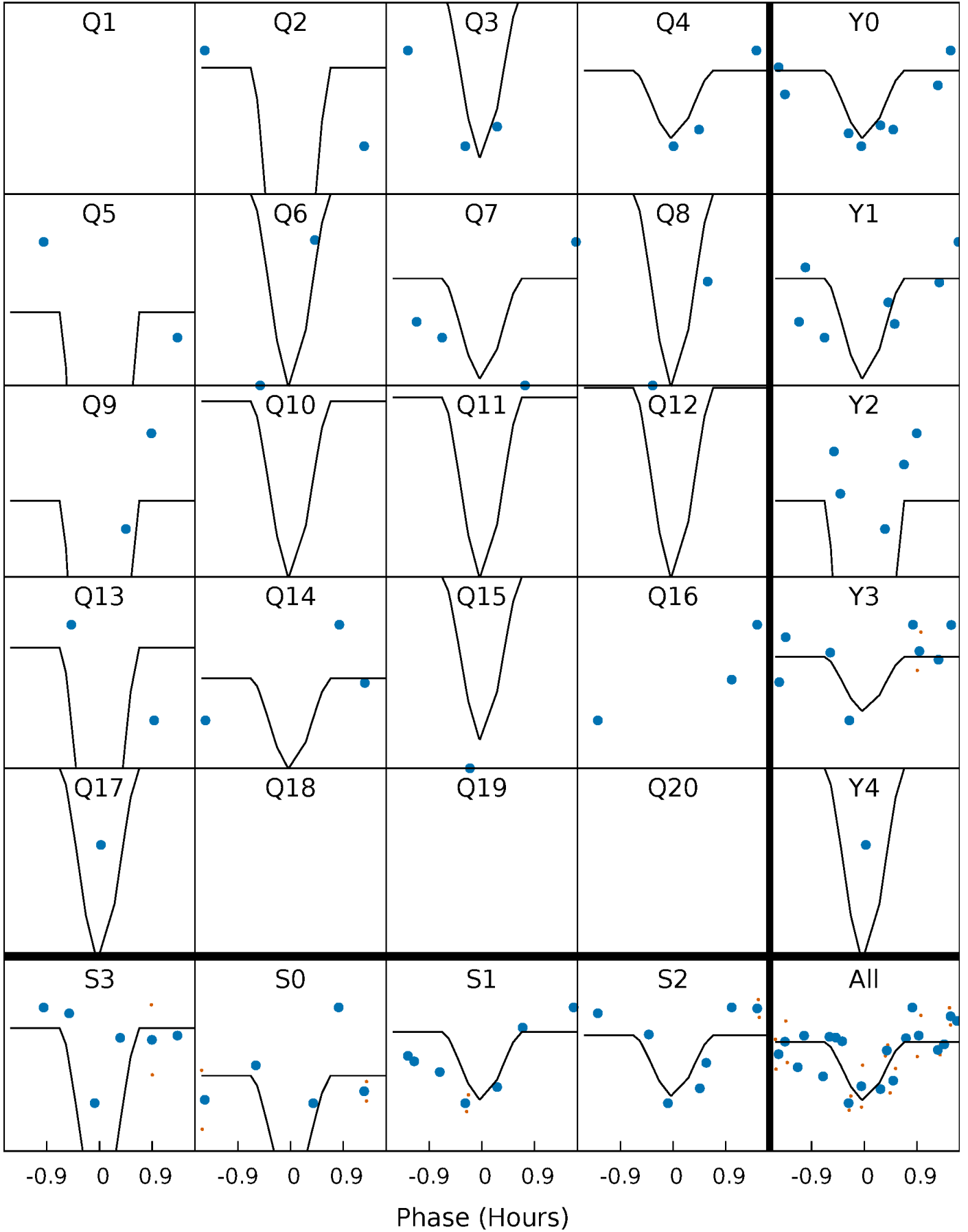
PDC Quarter-Phased Transit Curves

TCE 008328003-02 P= 17.087977 Days $T_0=141.777778$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 008328003-02 P= 17.087977 Days $T_0=141.777778$ (BKJD)

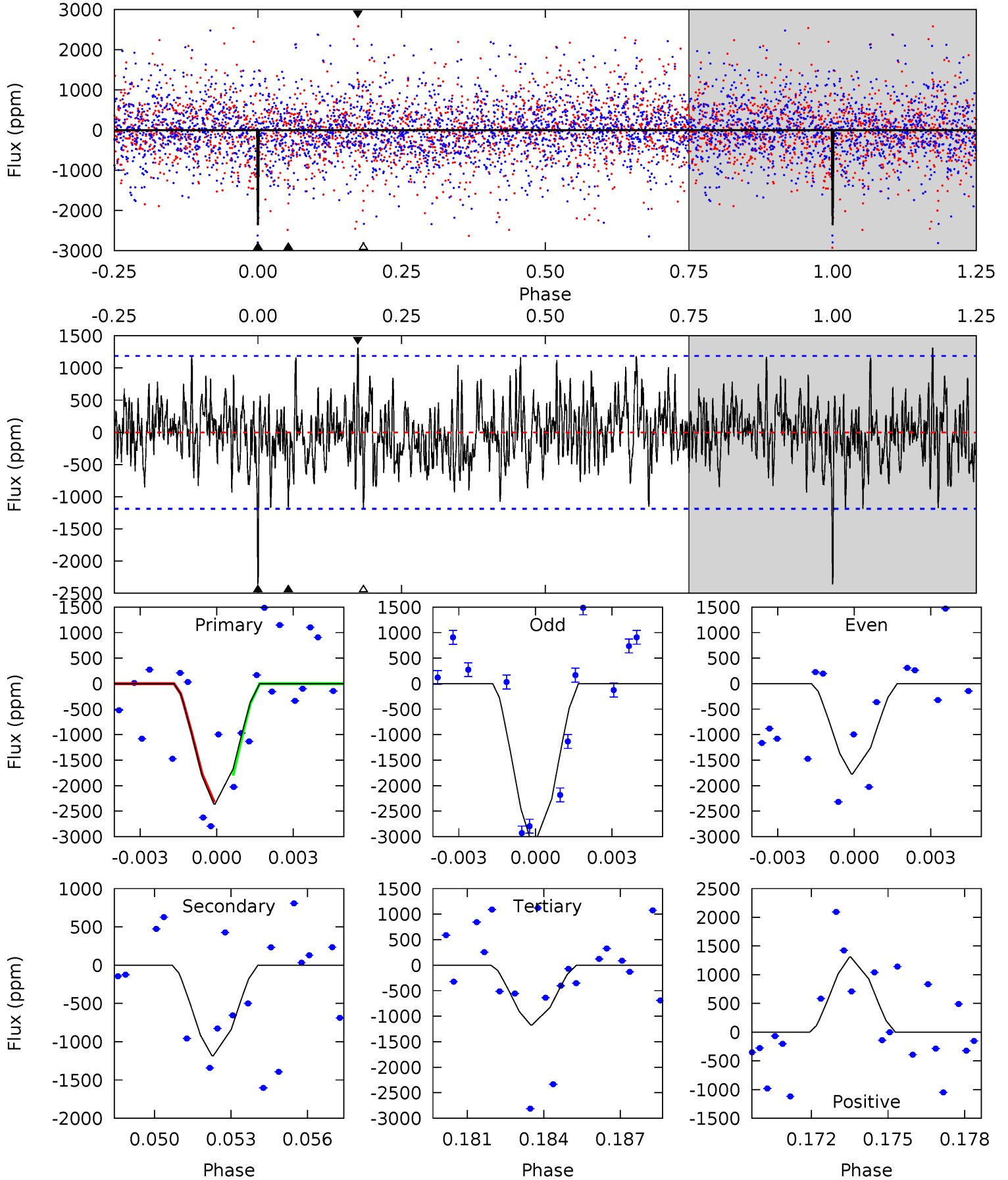


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

008328003-02, P = 17.087977 Days, E = 124.689801 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.5	5.25	5.20	5.80	5.25	2.97	1.72	5.26	4.66	0.05	-0.55	3.09	1.00	0.36	1.14



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 008328003

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	6505^{+155}_{-214}	$4.483^{+0.050}_{-0.200}$	$-0.500^{+0.250}_{-0.350}$	$0.975^{+0.278}_{-0.093}$	$1.054^{+0.119}_{-0.146}$	$1.604^{+0.418}_{-0.805}$
	+2%/-3%	+1%/-4%	+50%/-70%	+29%/-10%	+11%/-14%	+26%/-50%
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 008328003-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1186 ± 226	$9.72^{+8.42}_{-6.63}$	1108^{+74}_{-53}	4300^{+2927}_{-884}	117^{+938}_{-86}
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 $A_{obs} \gg 1.0$

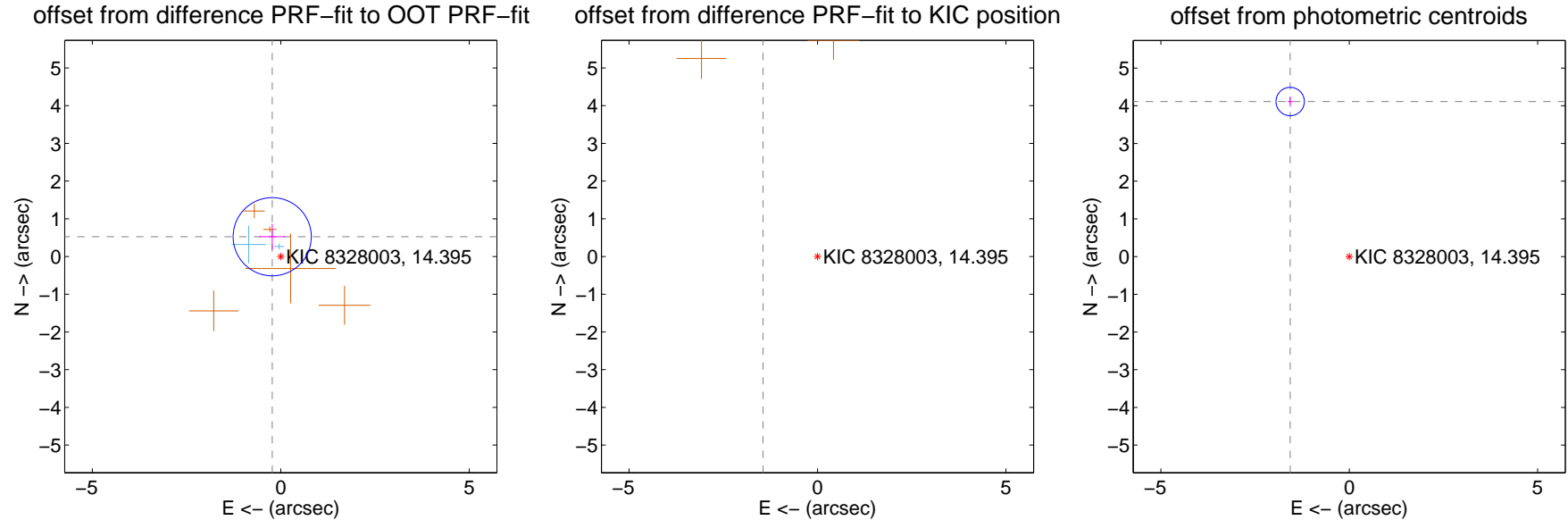
DV Centroid Data

Supplemental centroid analysis for 008328003-02. Kepler magnitude: 14.39. Transit SNR 16.34

There are 2 quarters with good PRF difference image offsets

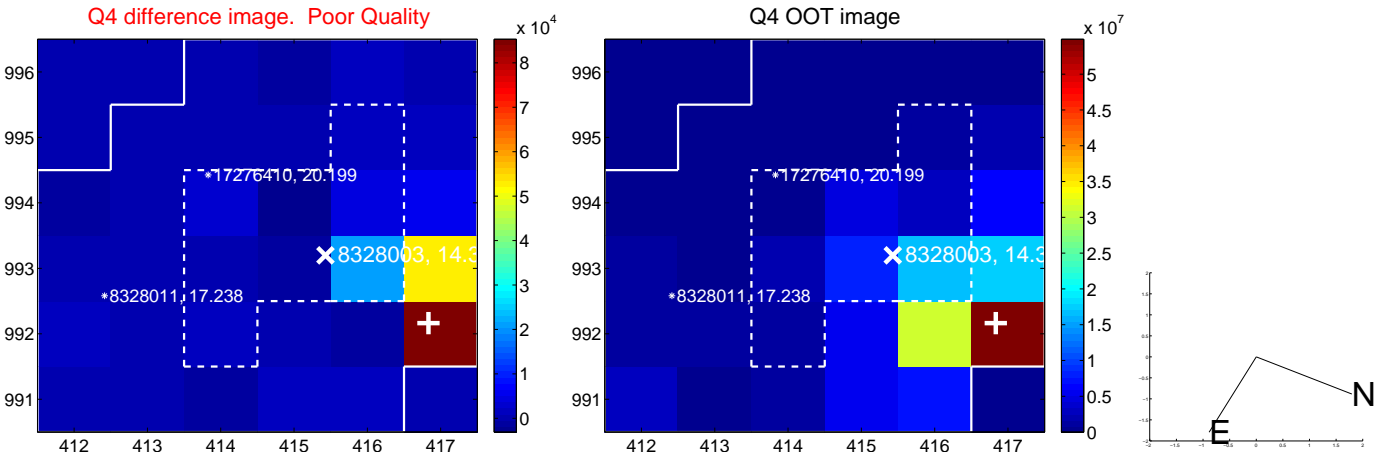
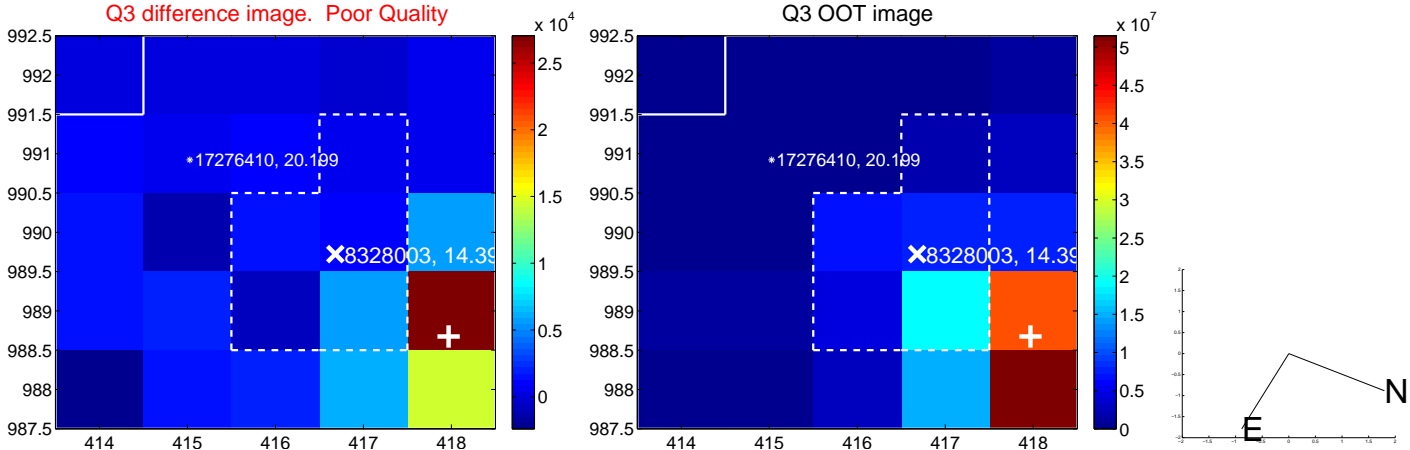
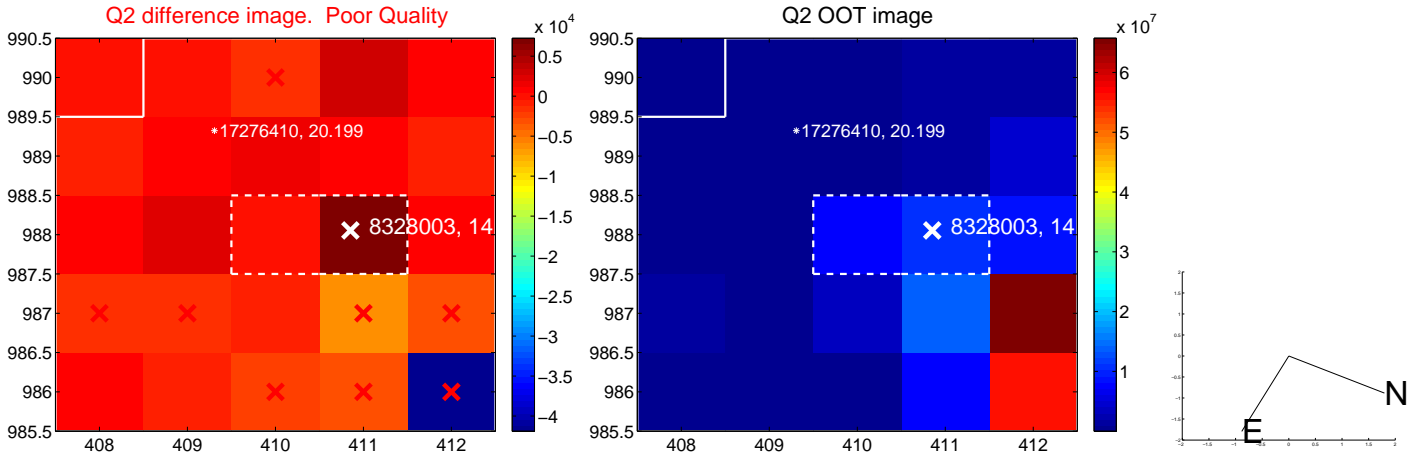
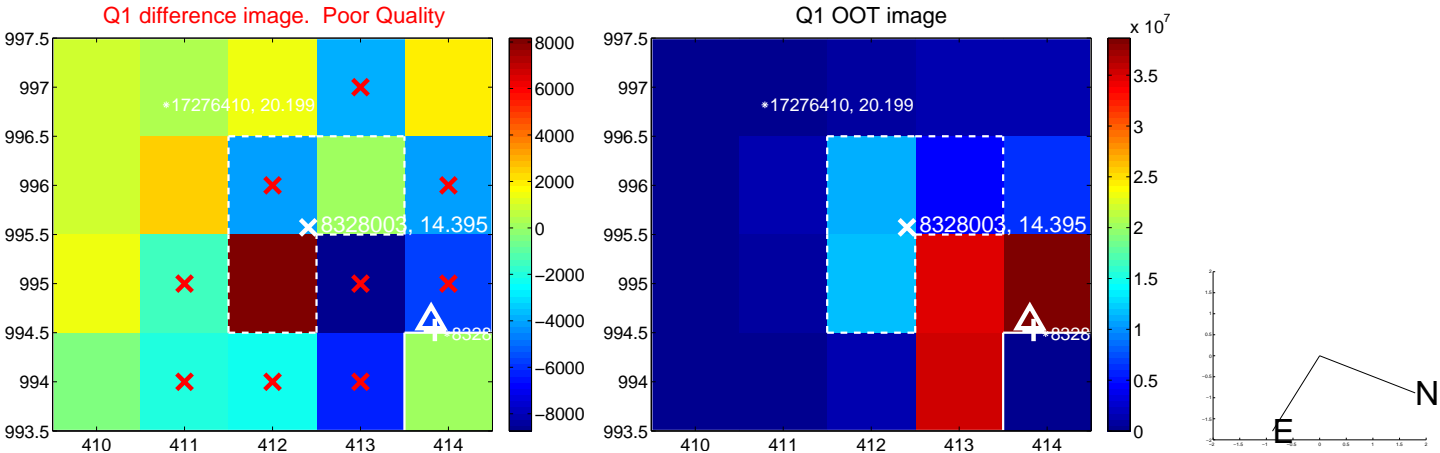
The OOT PRF centroid is offset from the target star catalog position by about 7.11 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.571 ± 0.346	1.65	0.227 ± 0.345	0.524 ± 0.338
PRF-fit source offset from KIC position	7.620 ± 0.383	19.92	1.444 ± 0.344	7.482 ± 0.386
photometric centroid source offset	4.40 ± 0.13	35.12	1.57 ± 0.07	4.11 ± 0.13

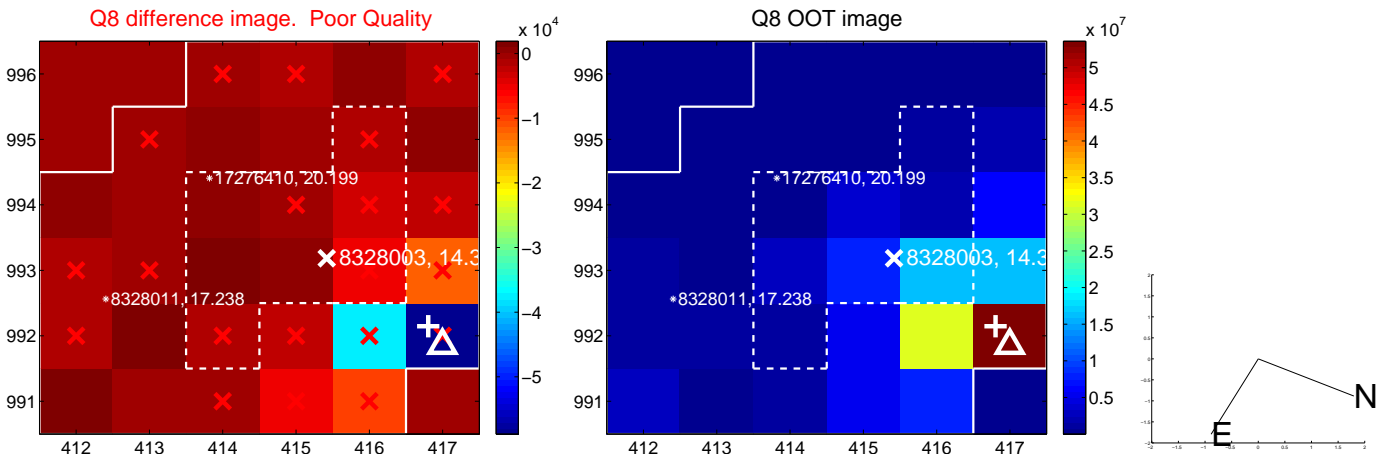
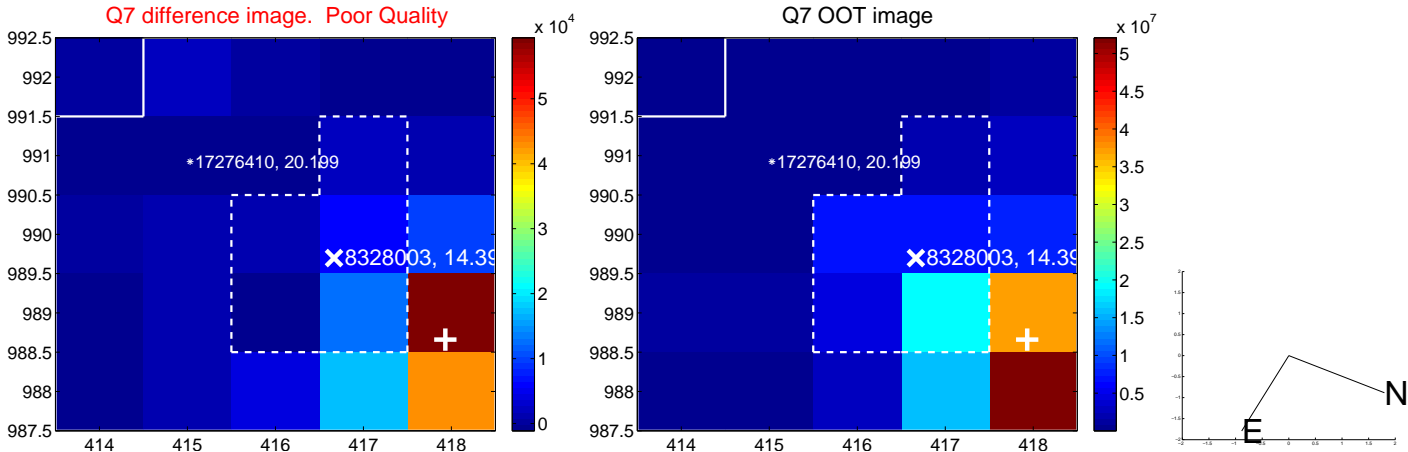
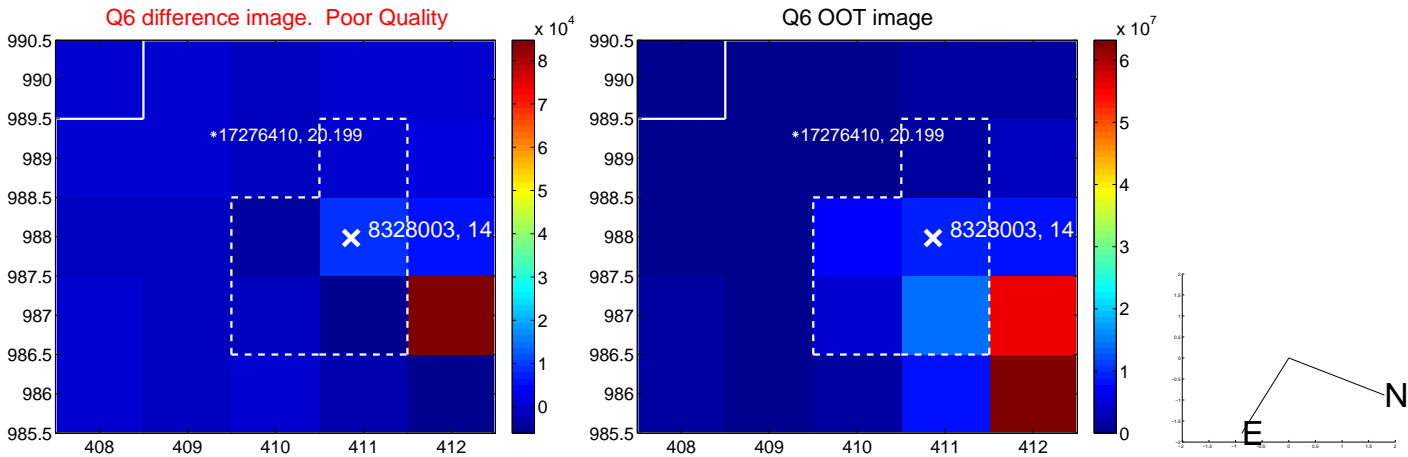
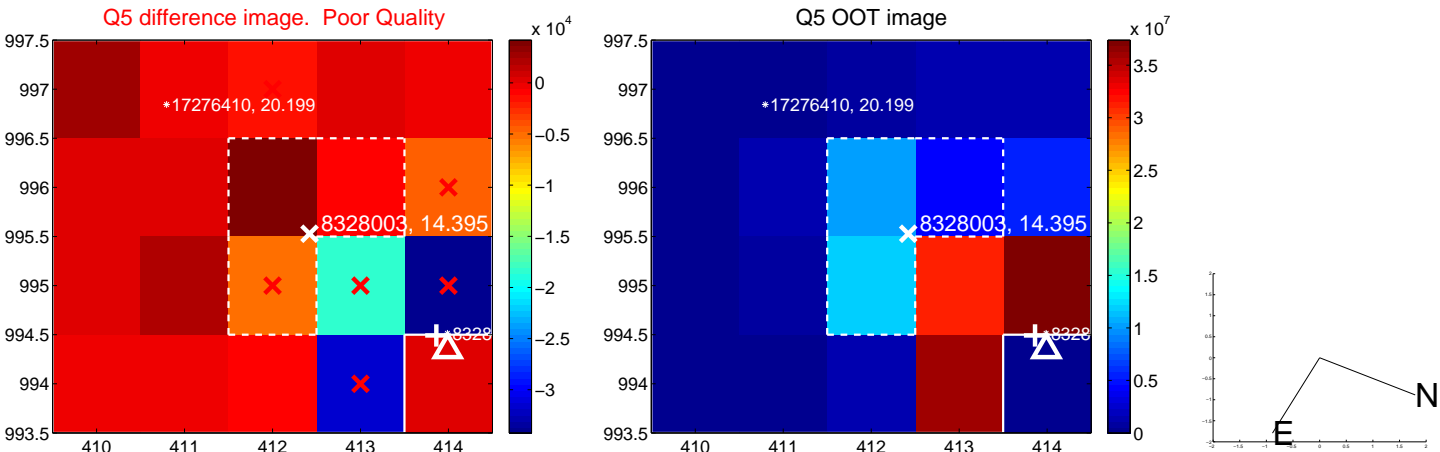


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

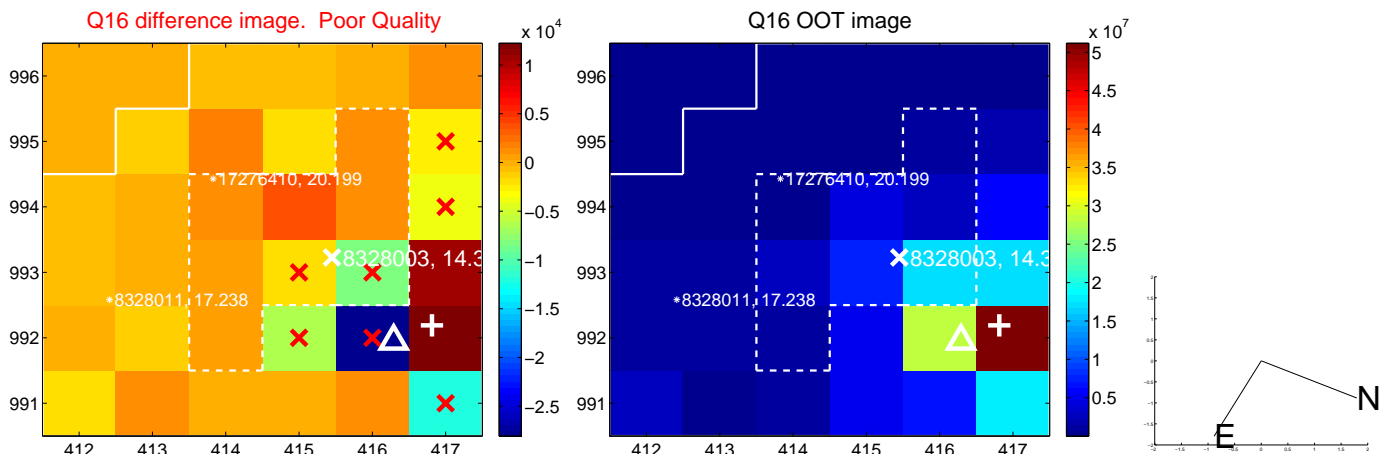
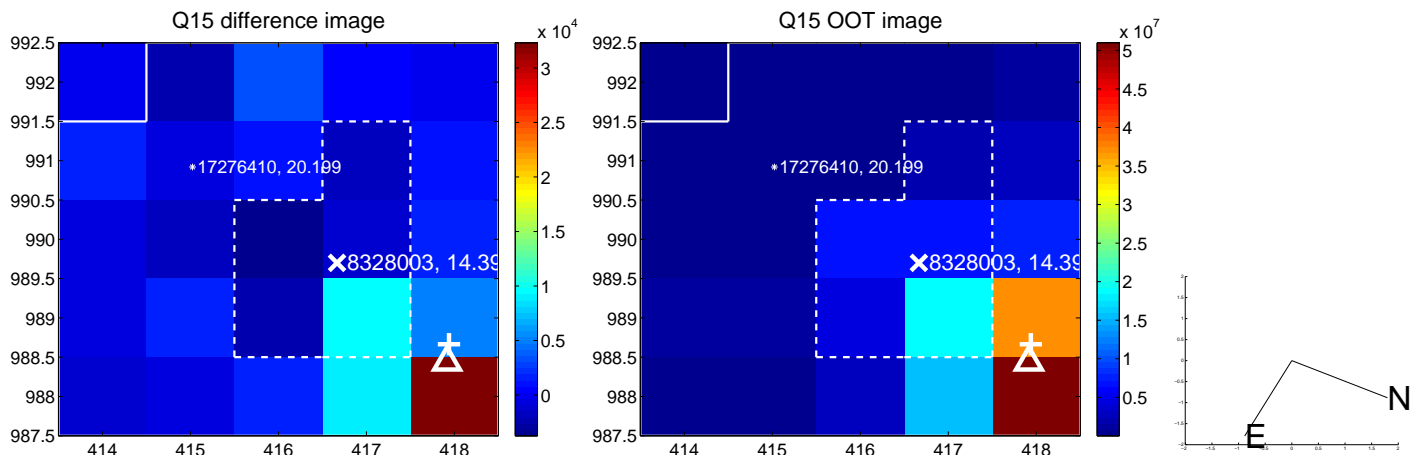
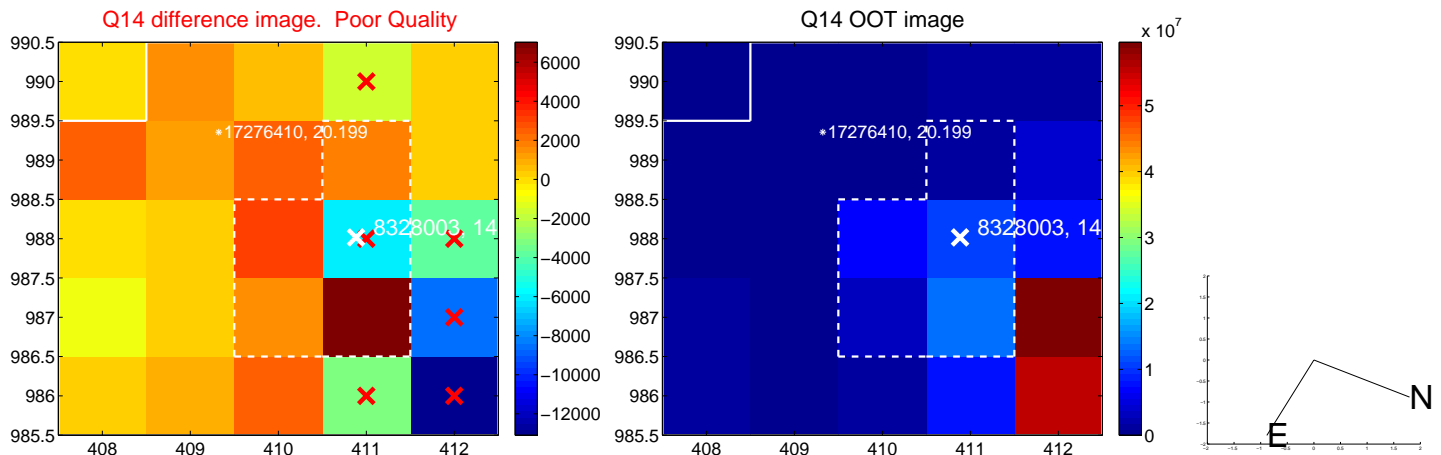
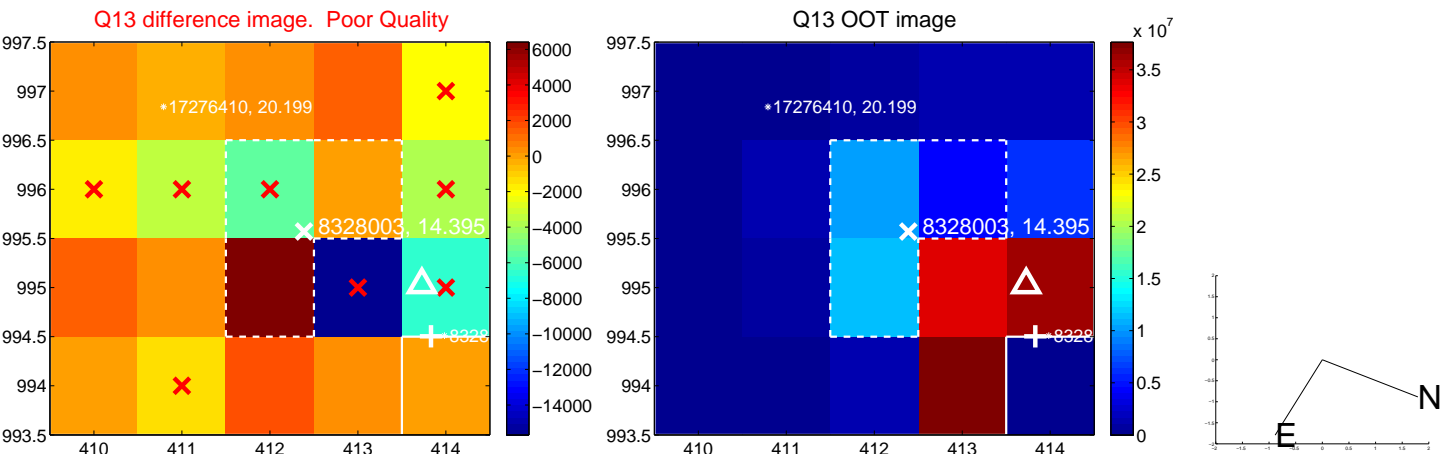
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



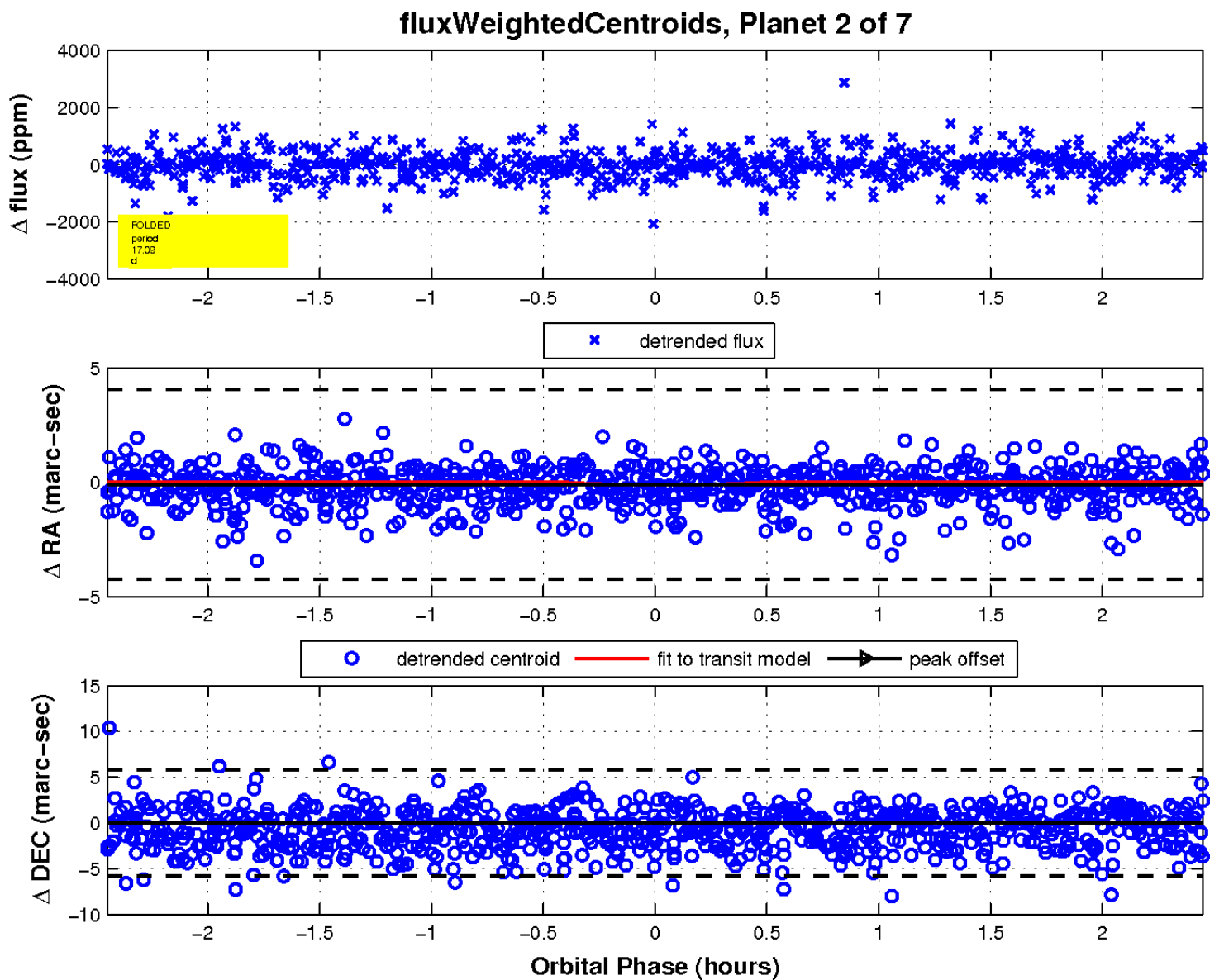
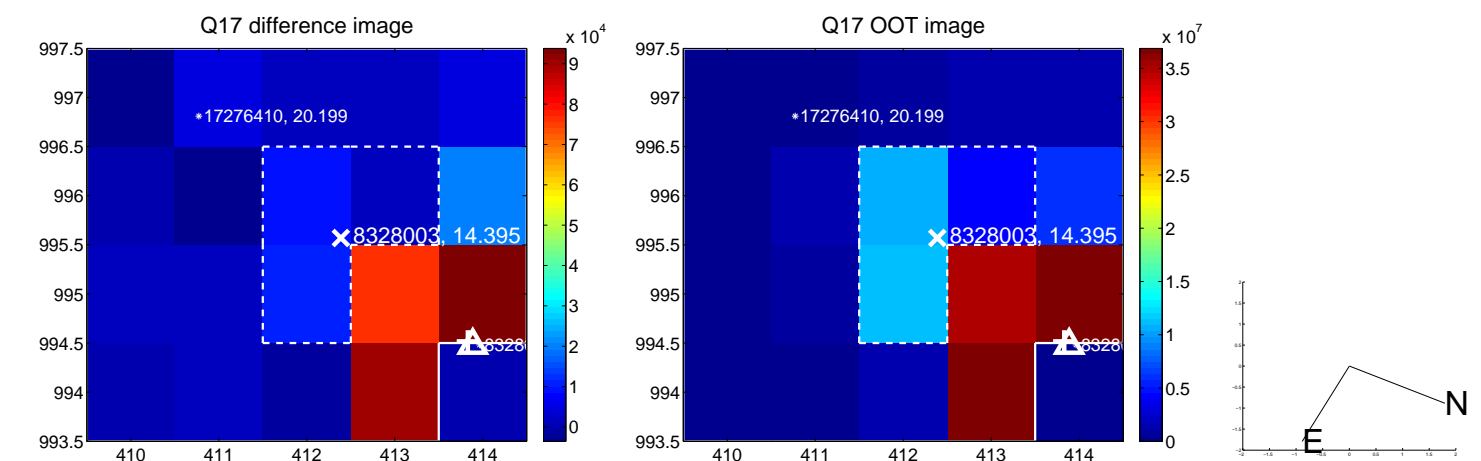
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



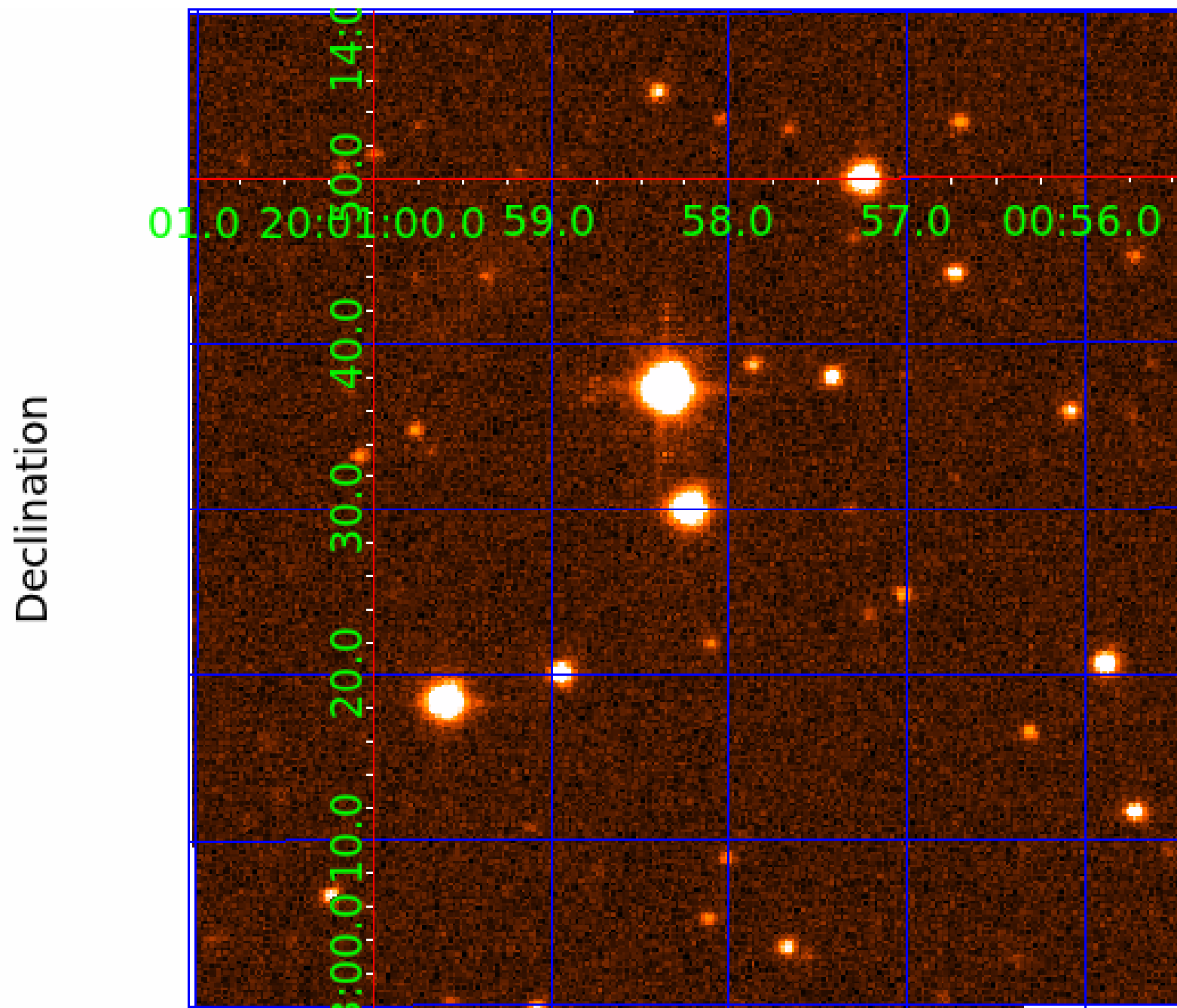
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 008328003

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})
008328003-01	OBS	No	0.521350	131.721910	0.0	3.784	8.1	0.0	0.97	6505	0.01	9156.18
008328003-02	OBS	No	17.087977	141.777778	2485.4	0.818	13.8	16.3	0.97	6505	4.96	87.29
008328003-03	OBS	No	13.810052	132.075326	57.8	38.472	12.9	1.9	0.97	6505	0.75	115.96
008328003-04	OBS	No	4.108740	133.645369	1463.4	1.500	12.2	-1.0	0.97	6505	3.77	583.82
008328003-05	OBS	No	11.343533	134.638700	1677.7	1.290	13.3	11.6	0.97	6505	4.07	150.74
008328003-06	OBS	No	13.052096	131.792444	1228.6	2.000	11.0	-1.0	0.97	6505	3.45	125.02
008328003-07	OBS	No	10.235624	133.143177	1032.2	1.462	10.2	8.3	0.97	6505	3.66	172.88

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008328003-01	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET
008328003-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
008328003-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
008328003-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS
008328003-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
008328003-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS
008328003-07	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET

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

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

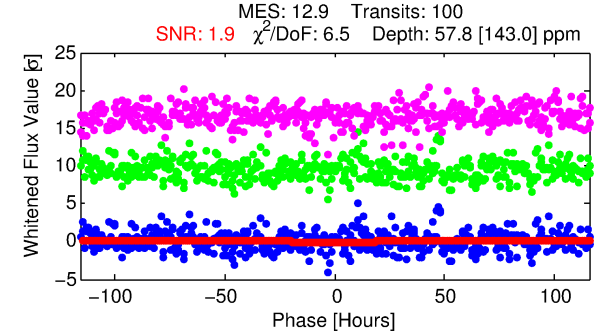
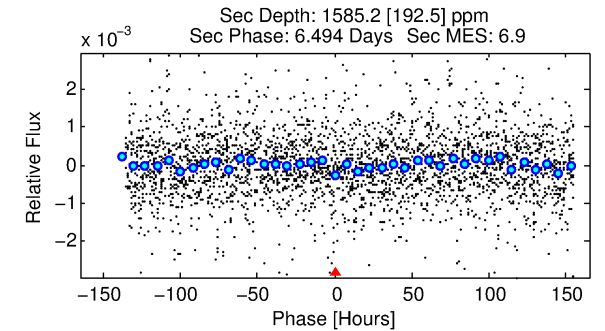
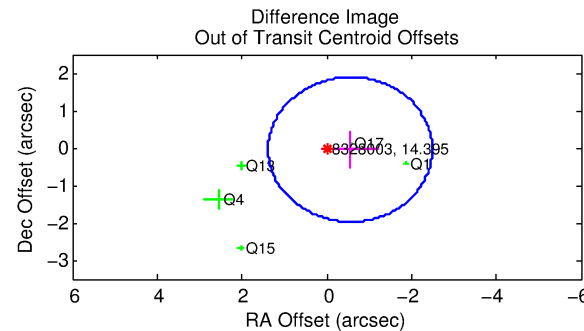
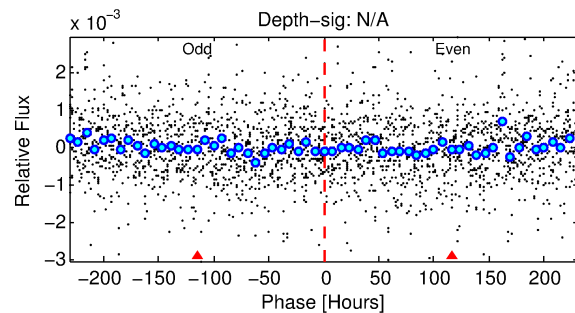
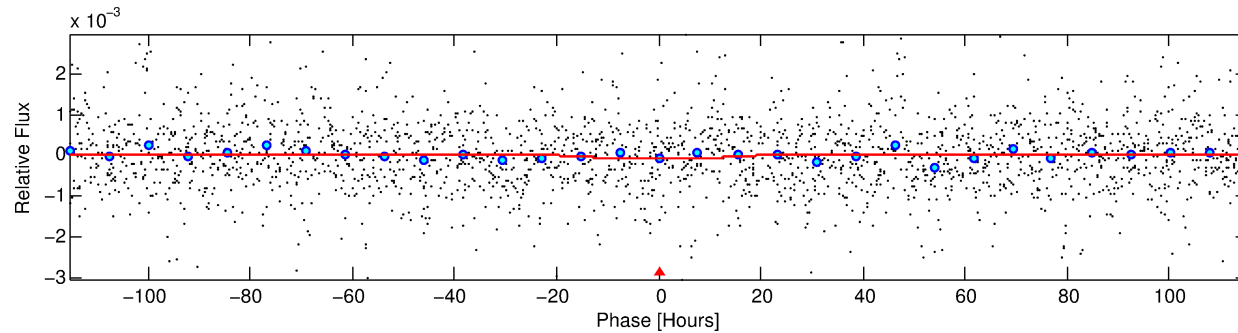
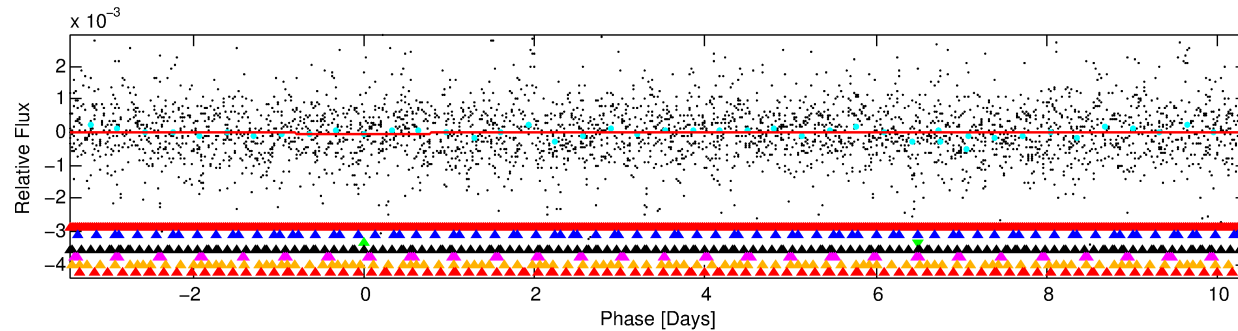
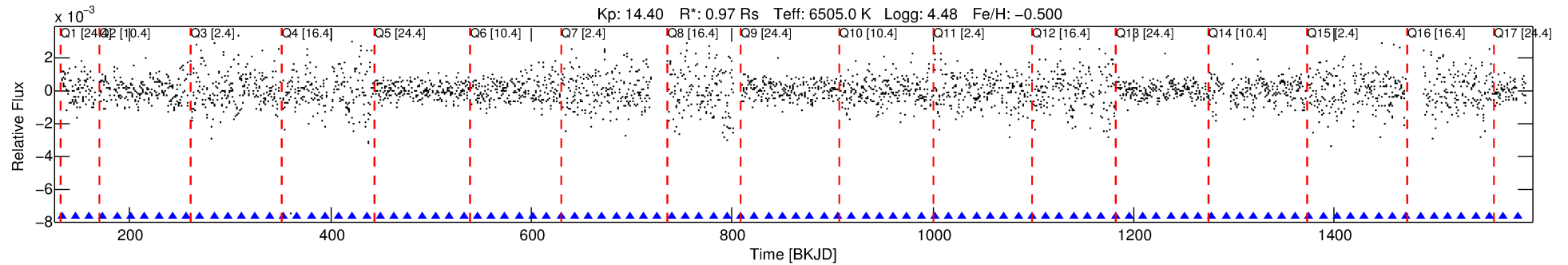
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008328003-03

No Significant Match Found

DV One-Page Summary

KIC: 8328003 Candidate: 3 of 7 Period: 13.810 d



DV Fit Results:

Period = 13.81005 [0.15359] d
Epoch = 132.0753 [10.7177] BKJD
Rp/R* = 0.0070 [0.5756]
a/R* = 2.82 [1056.56]
b = 0.03 [14480.39]
Seff = 115.96 [44.60]
Teq = 837 [80] K
Rp = 0.75 [61.24] Re
a = 0.1147 [0.0280] AU
Ag = 20636.12 [3390325.69] [0.01σ]
Teff = 15506 [636873] K [0.02σ]

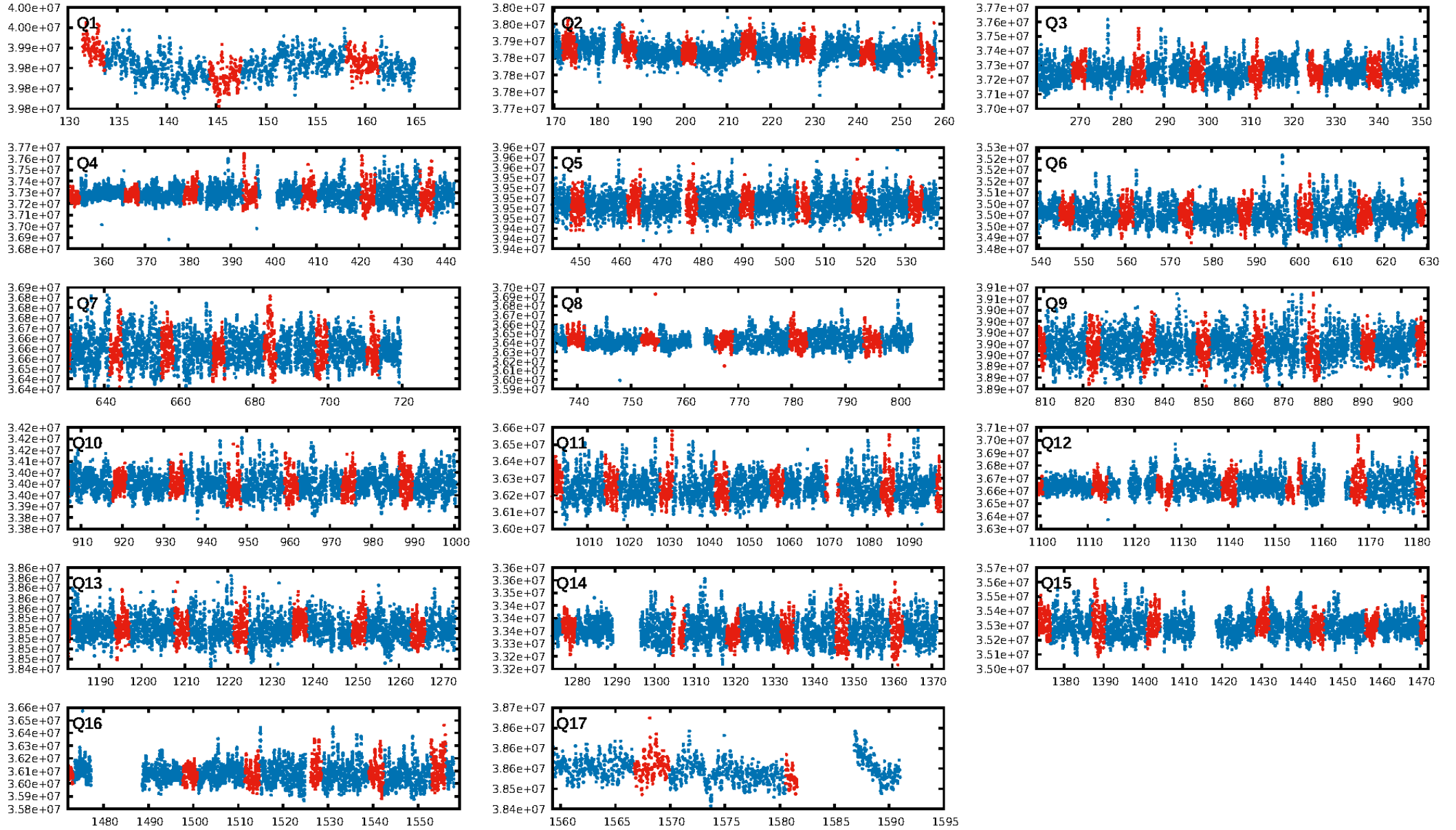
DV Diagnostic Results:

ShortPeriod-sig: 36.3% [0.47σ]
LongPeriod-sig: 95.9% [2.04σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.55e-37
RollingBand-fgt: 1.00 [95/95]
GhostDiagnostic-chr: -0.3697
Centroid-sig: 0.0%
Centroid-so: 3.895 arcsec [1.26σ]
OotOffset-rm: 0.556 arcsec [0.86σ]
OotOffset-st: 0/1/1/3 [5]
KicOffset-rm: 6.974 arcsec [12.94σ]
KicOffset-st: 0/1/1/3 [5]
DiffImageQuality-fgm: 0.40 [2/5]
DiffImageOverlap-fno: 0.00 [0/17]

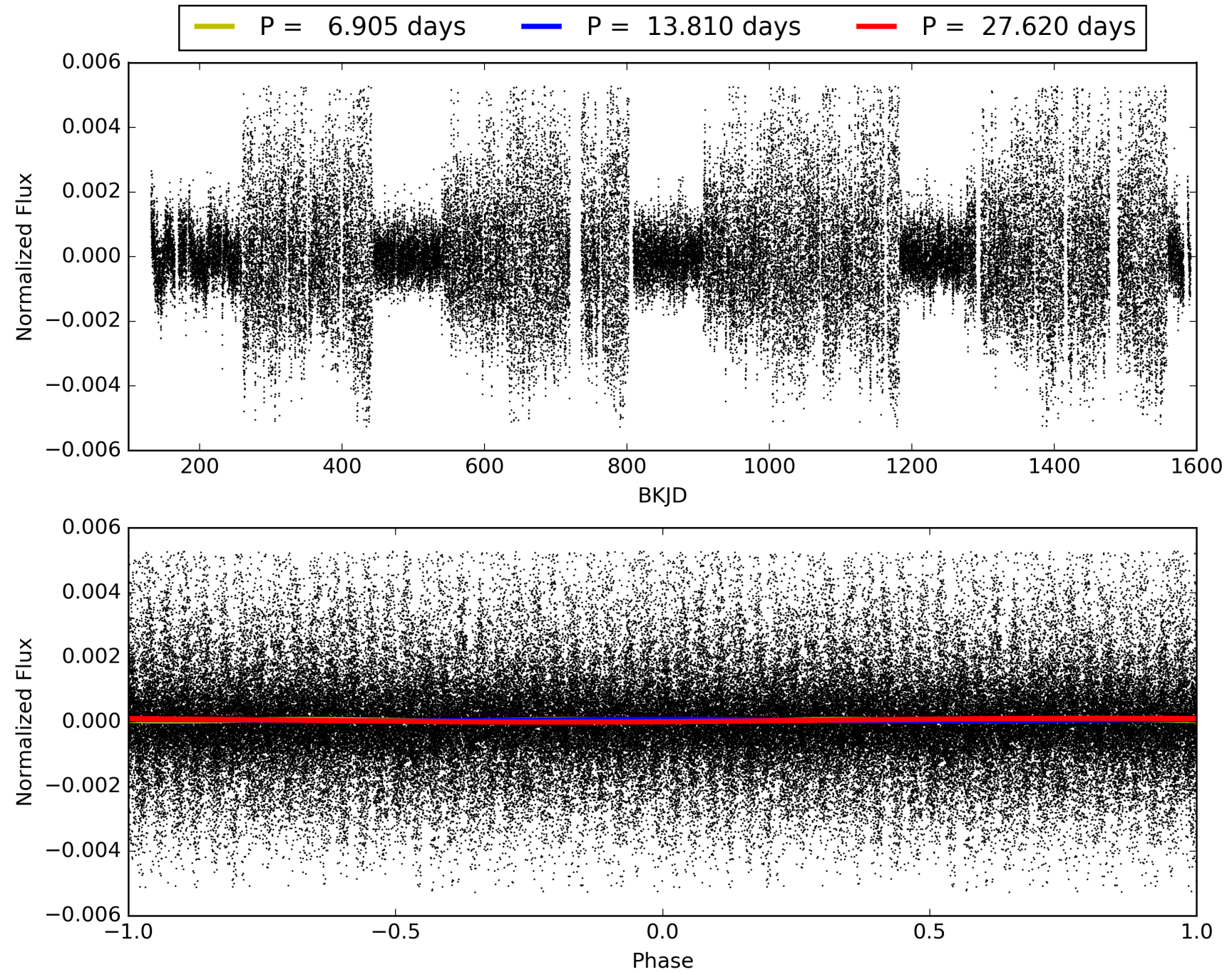
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 05:46:52 Z

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

TCE 008328003-03, PDC Light Curves

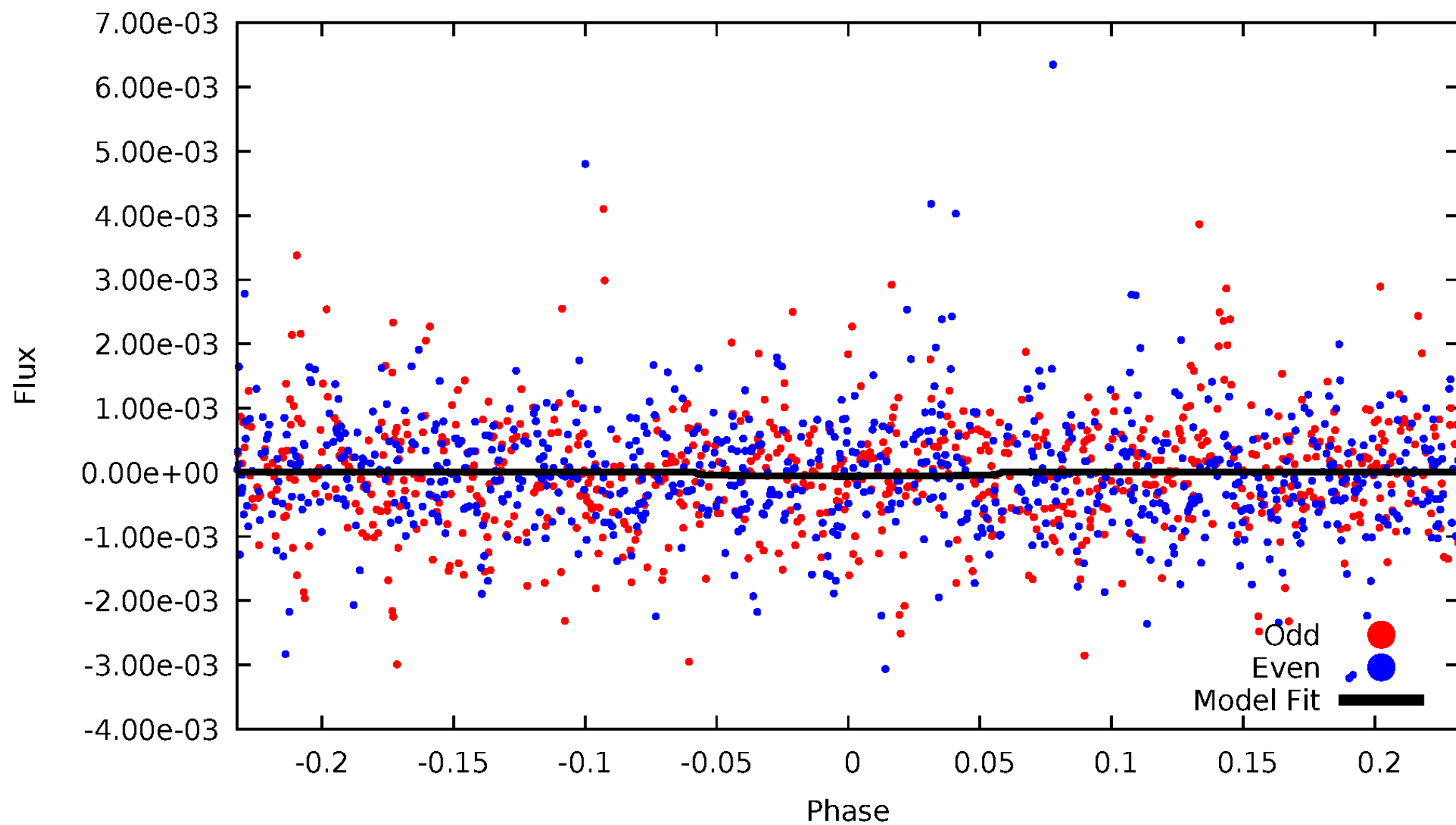


TCE 008328003-03



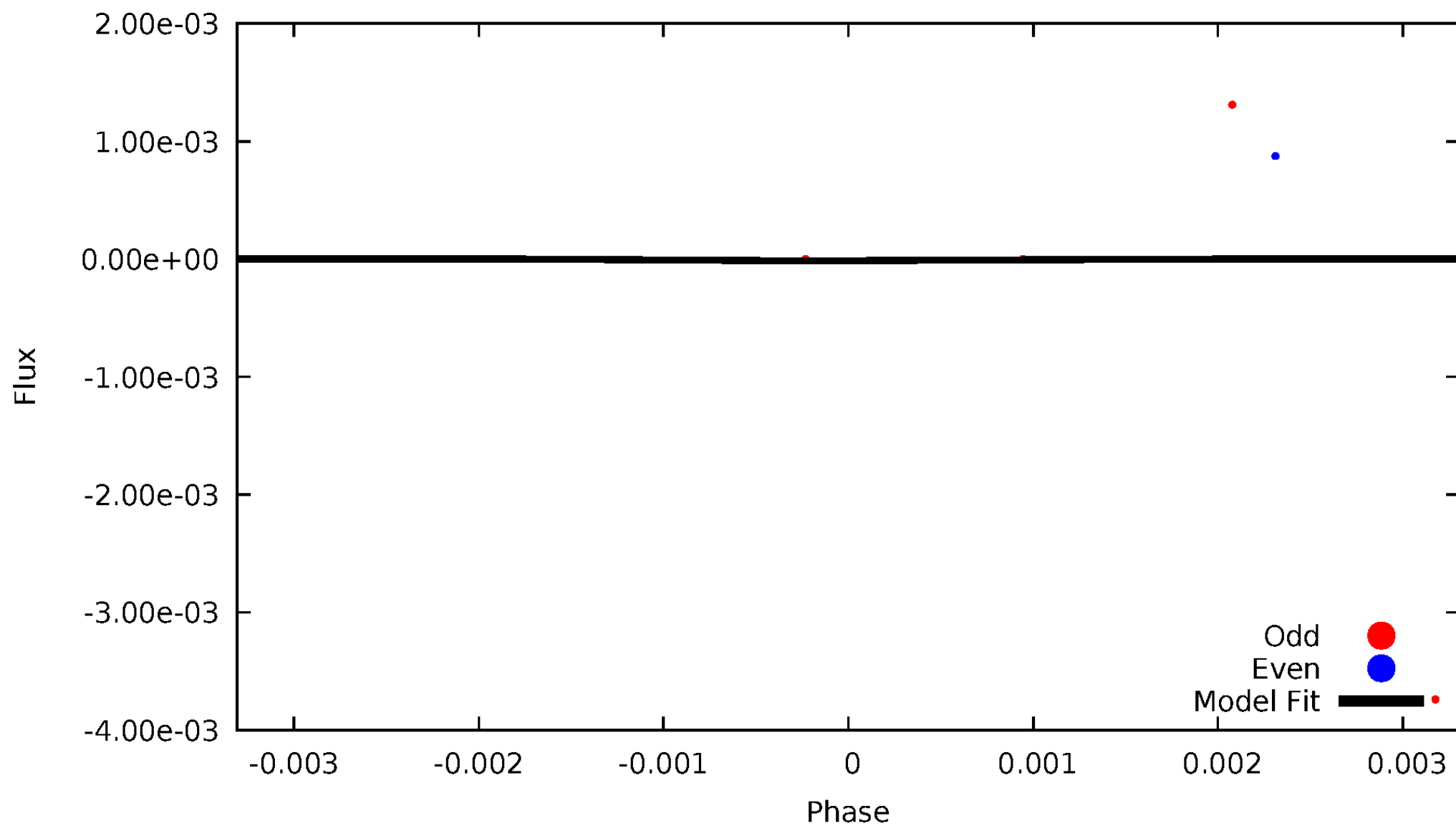
DV Odd/Even

TCE 008328003-03



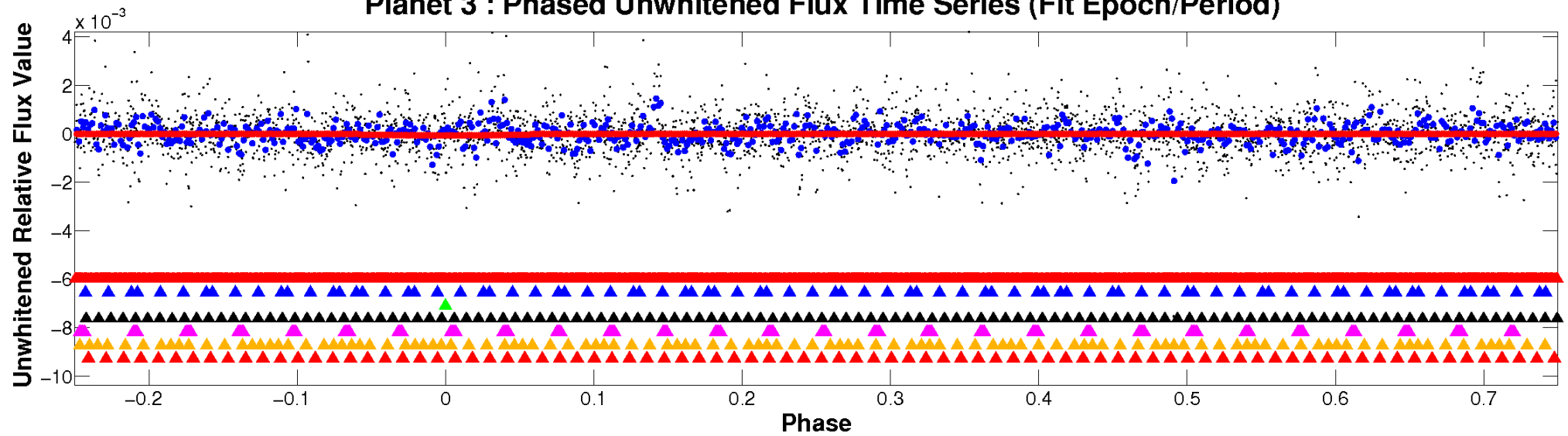
ALT Odd/Even

TCE 008328003-03

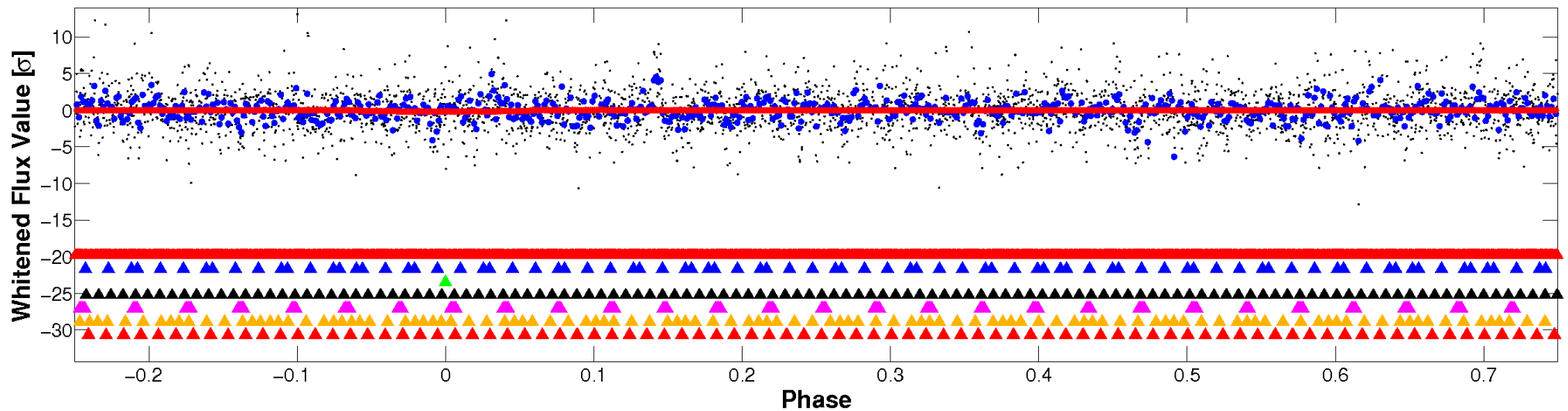


Non-Whitened Vs. Whitened Light Curve

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

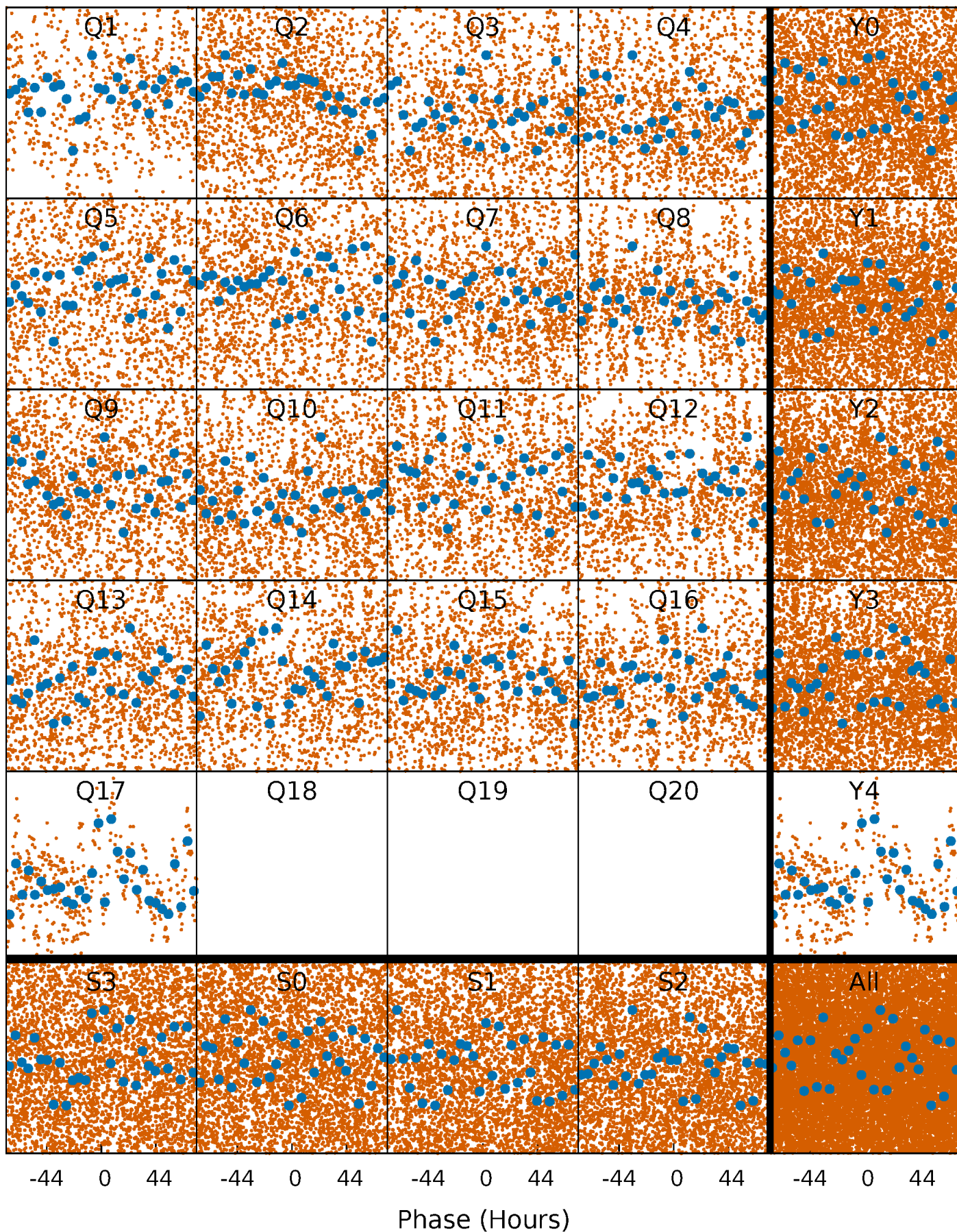


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



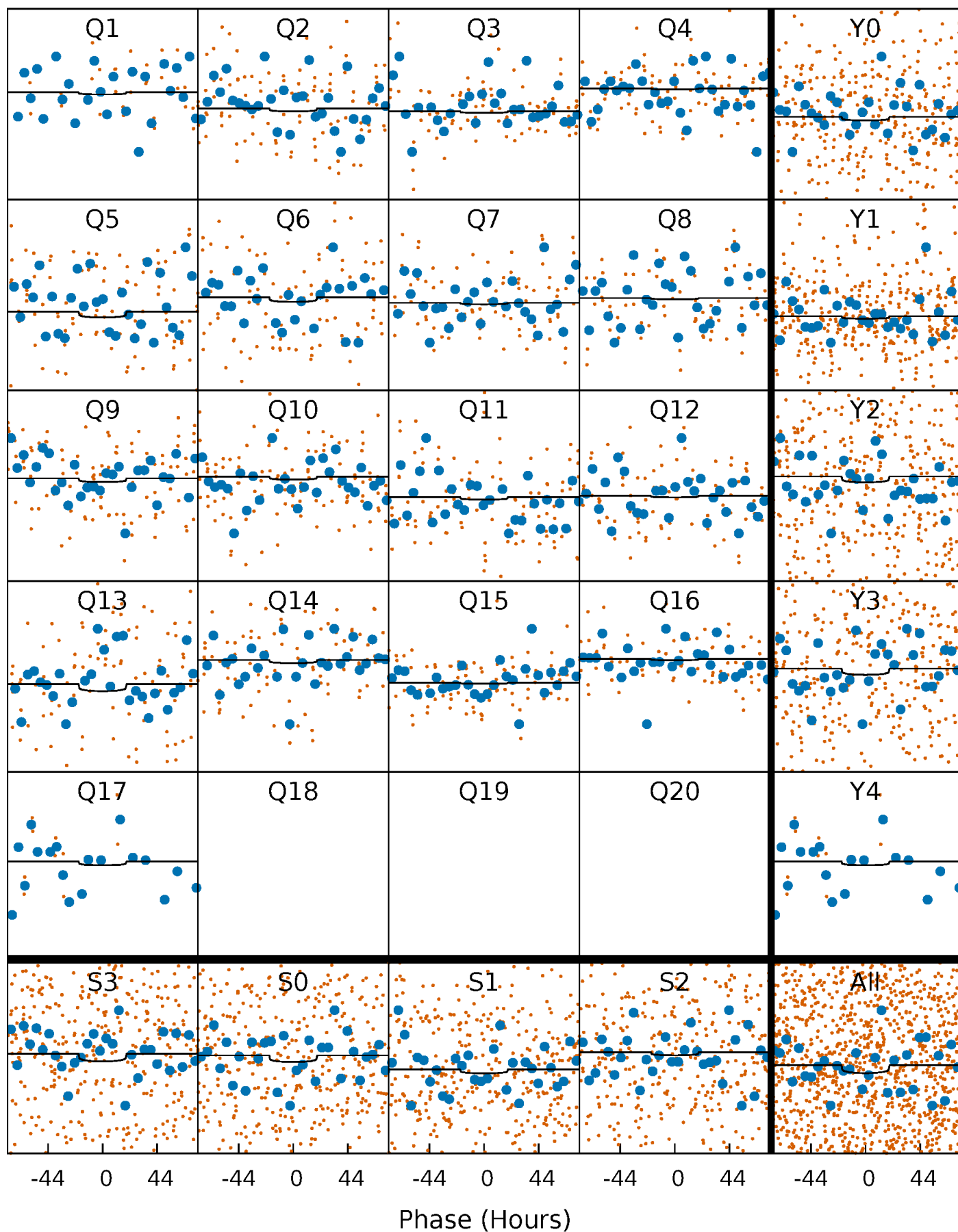
PDC Quarter-Phased Transit Curves

TCE 008328003-03 P= 13.810052 Days $T_0=132.075326$ (BKJD)



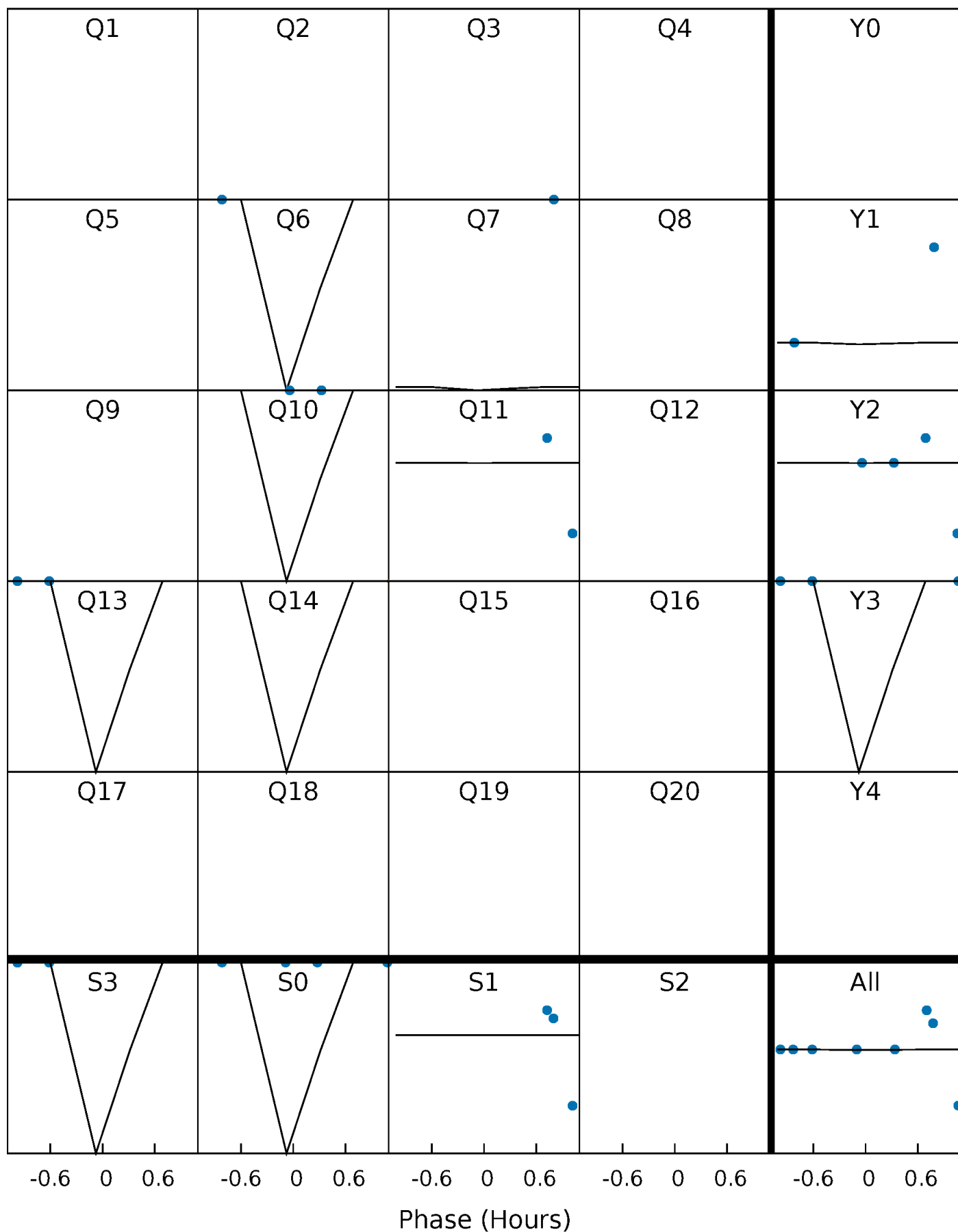
DV Quarter-Phased Transit Curves

TCE 008328003-03 P= 13.810052 Days $T_0=132.075326$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

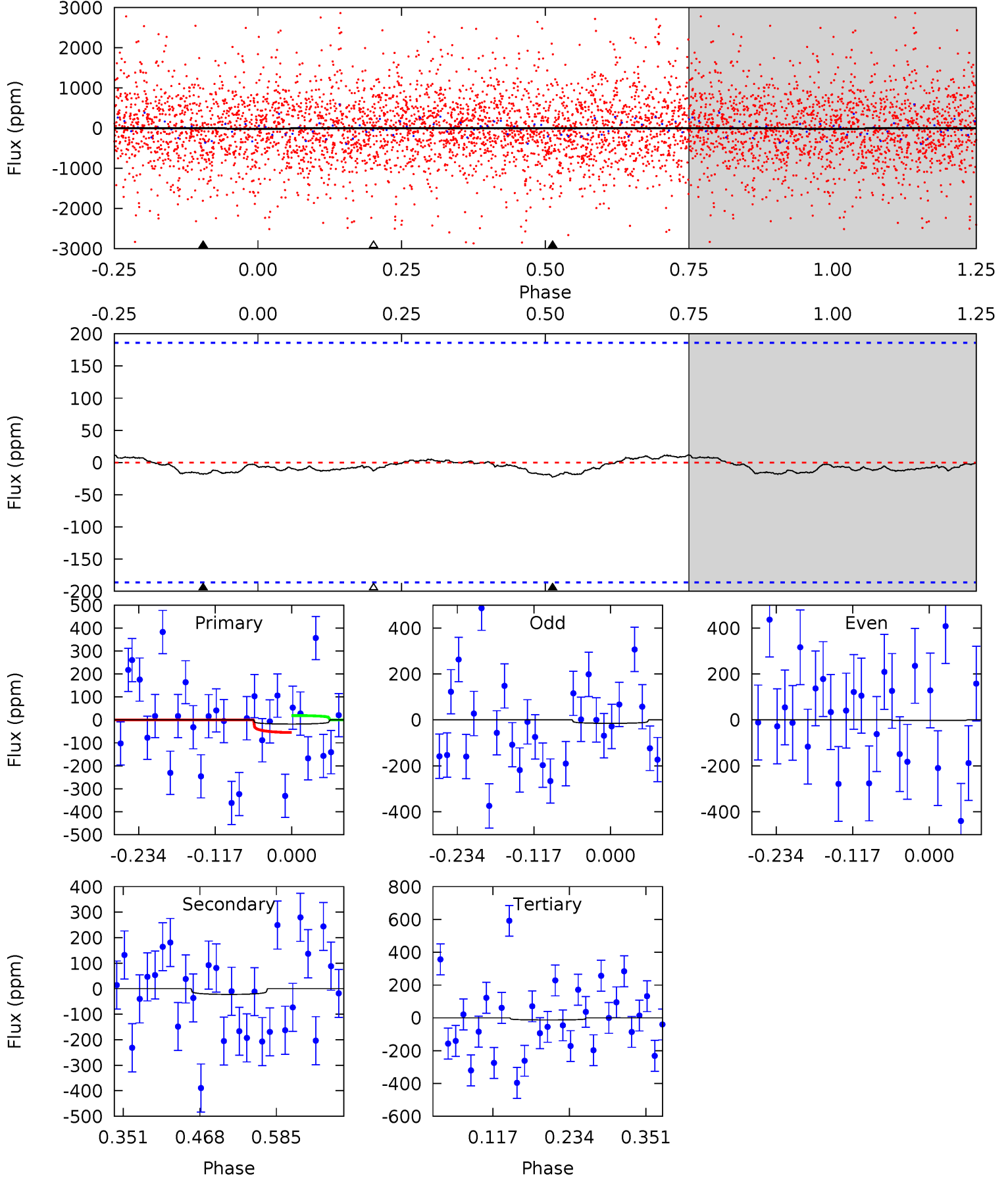
TCE 008328003-03 P= 13.805101 Days $T_0=132.357957$ (BKJD)



DV Model-Shift Uniqueness Test

008328003-03, P = 13.810052 Days, E = 118.265274 Days

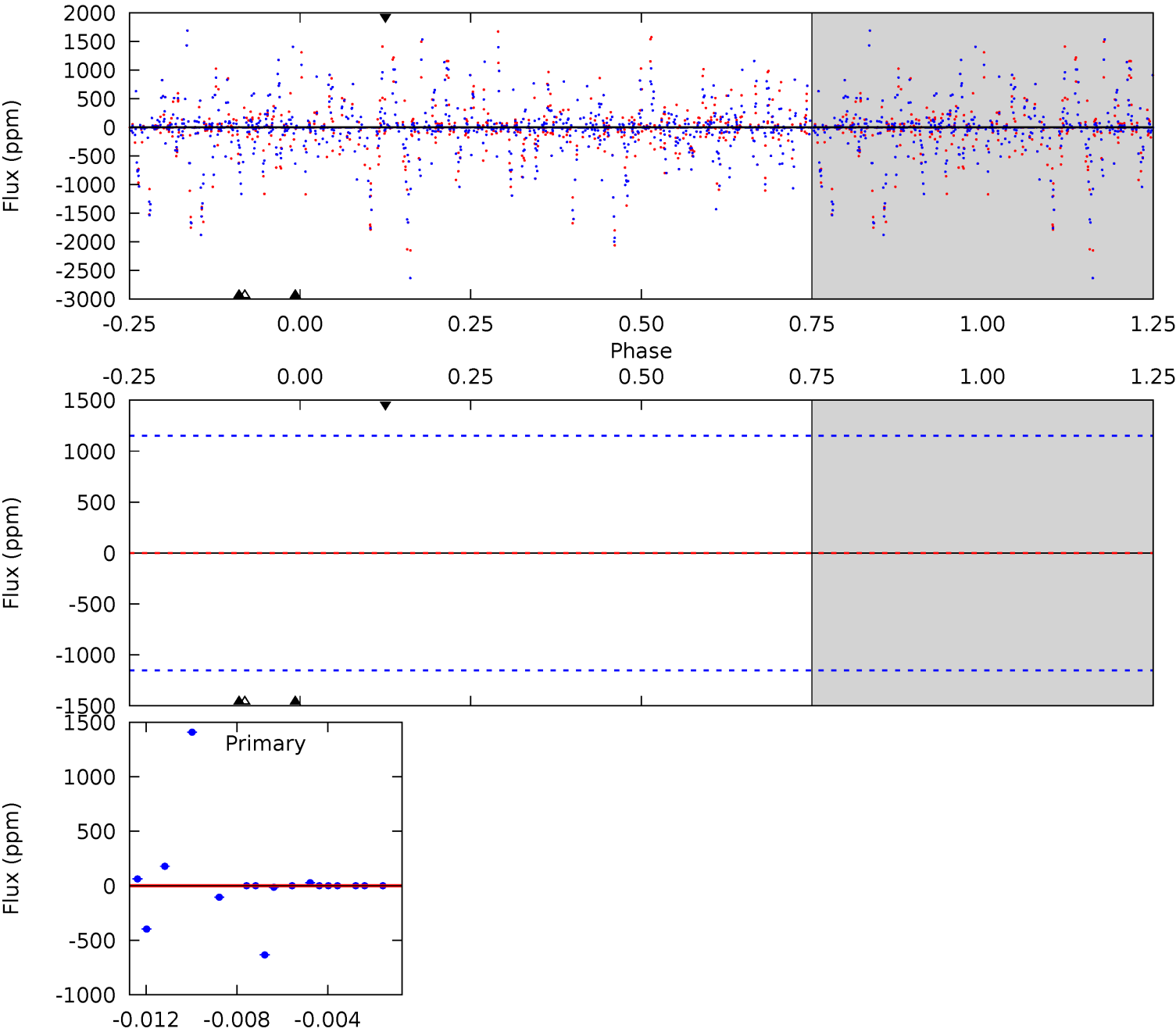
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.44	0.55	0.31	0	4.53	1.57	0.18	0.13	0.44	0.24	0.55	0.16	0.59	0.35	0.43



Alt Model-Shift Uniqueness Test

008328003-03, P = 13.805101 Days, E = 118.552856 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	5.19	2.87	0	0	0	0	0	0	0	0	0



Stellar Parameters For KIC 008328003

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6505^{+155}_{-214}	$4.483^{+0.050}_{-0.200}$	$-0.500^{+0.250}_{-0.350}$	$0.975^{+0.278}_{-0.093}$	$1.054^{+0.119}_{-0.146}$	$1.604^{+0.418}_{-0.805}$
	+2%/-3%	+1%/-4%	+50%/-70%	+29%/-10%	+11%/-14%	+26%/-50%
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 008328003-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-22 ± 41	$44.78^{+49.32}_{-32.76}$	1193^{+80}_{-55}	-1941^{+4018}_{-117}	$0.051^{+0.685}_{-0.106}$
Alt.	-0 ± 222	$43.09^{+43.36}_{-29.64}$	1186^{+77}_{-54}	-1999^{+4260}_{-417}	$-0.018^{+1.411}_{-1.488}$

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

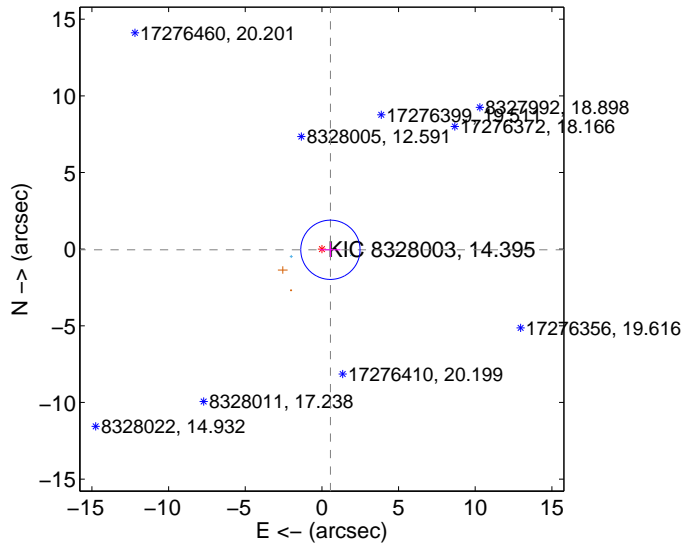
Supplemental centroid analysis for 008328003-03. Kepler magnitude: 14.39. Transit SNR 1.94

There are 2 quarters with good PRF difference image offsets

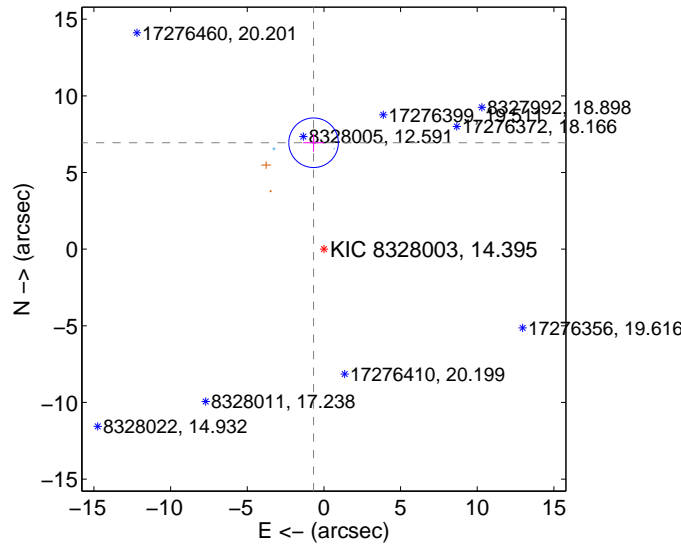
The OOT PRF centroid is offset from the target star catalog position by about 7.10 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.556 ± 0.644	0.86	-0.554 ± 0.670	-0.041 ± 0.471
PRF-fit source offset from KIC position	6.974 ± 0.539	12.94	0.675 ± 0.682	6.941 ± 0.571
photometric centroid source offset	3.89 ± 3.09	1.26	0.52 ± 0.74	-3.86 ± 3.11

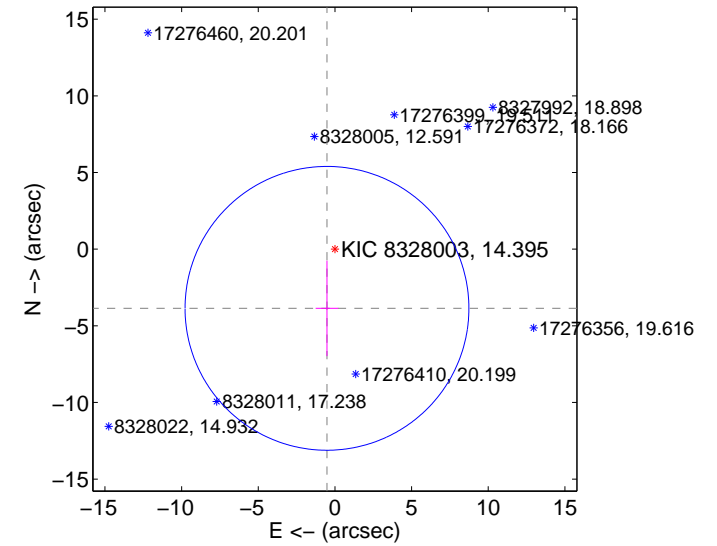
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

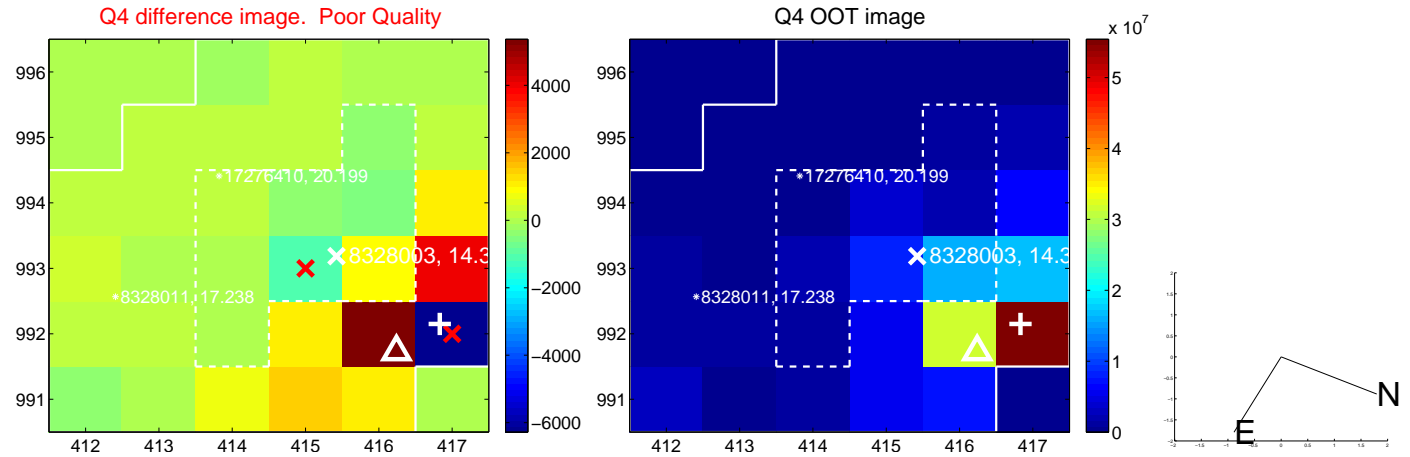
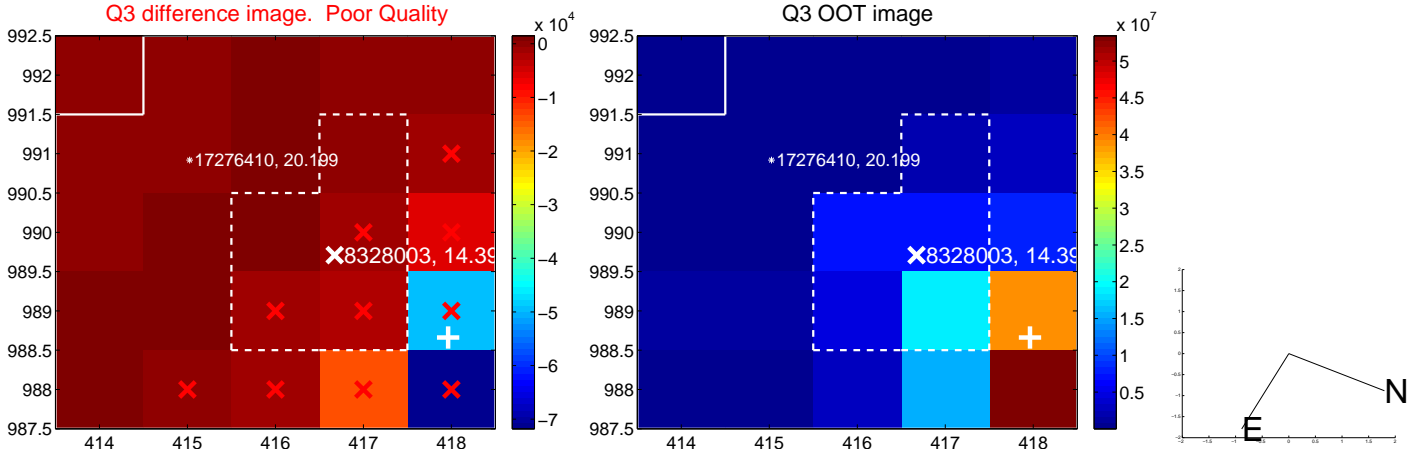
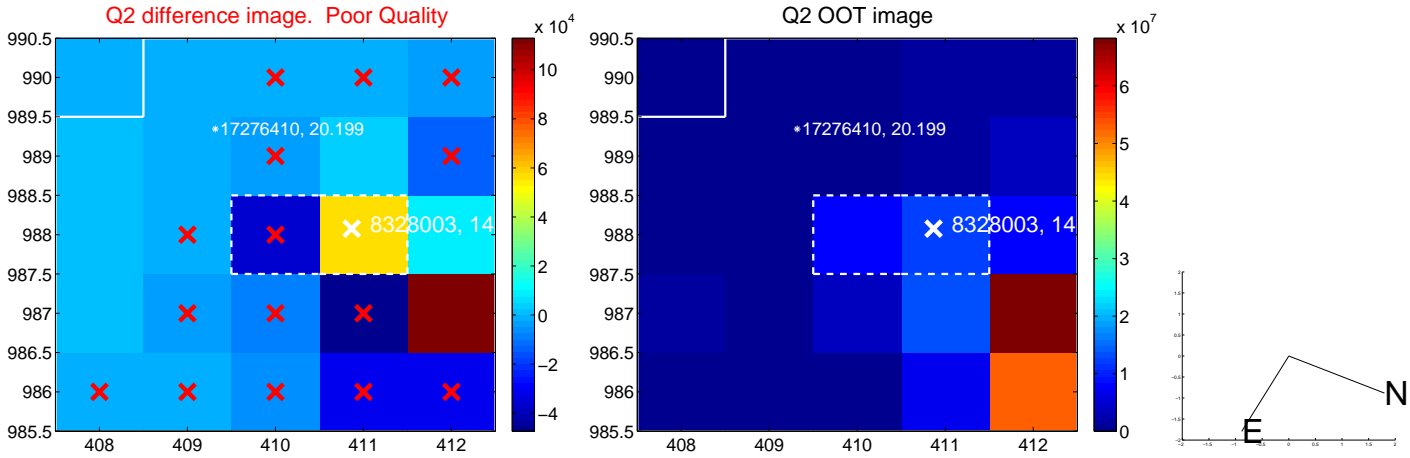
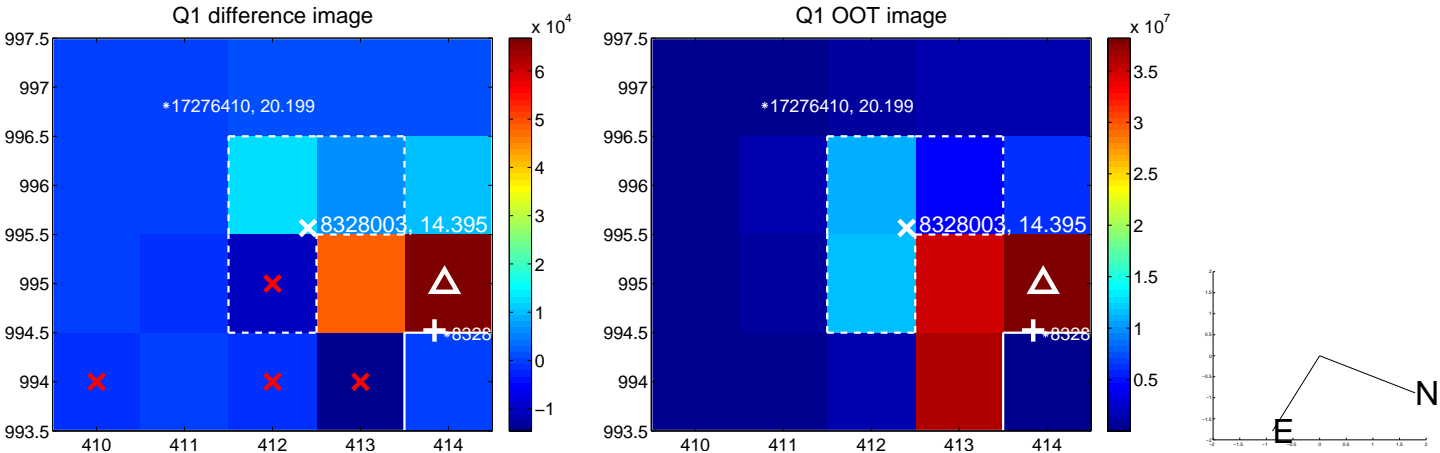


offset from photometric centroids

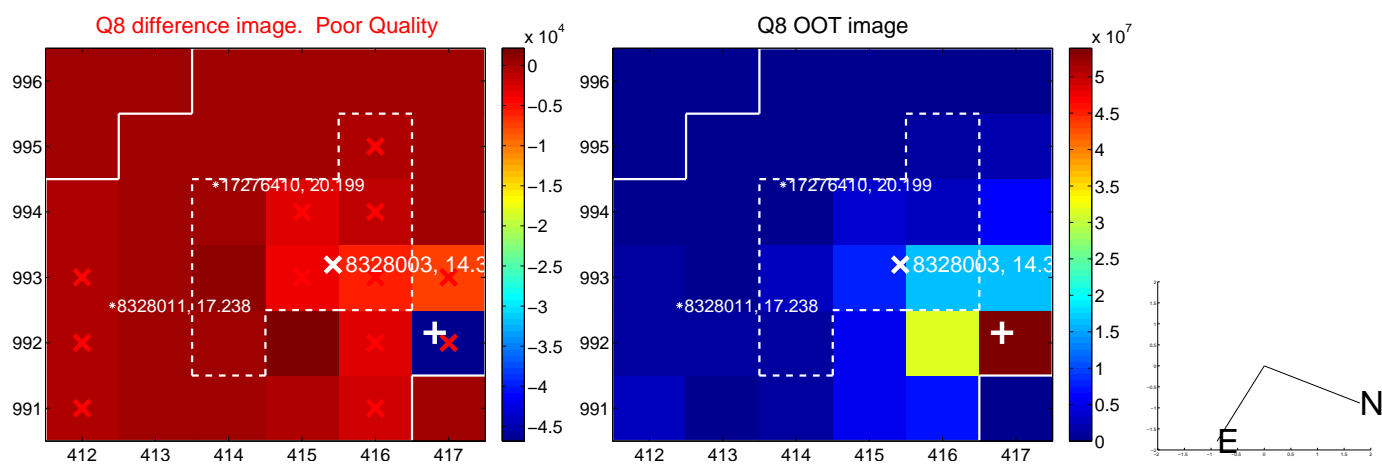
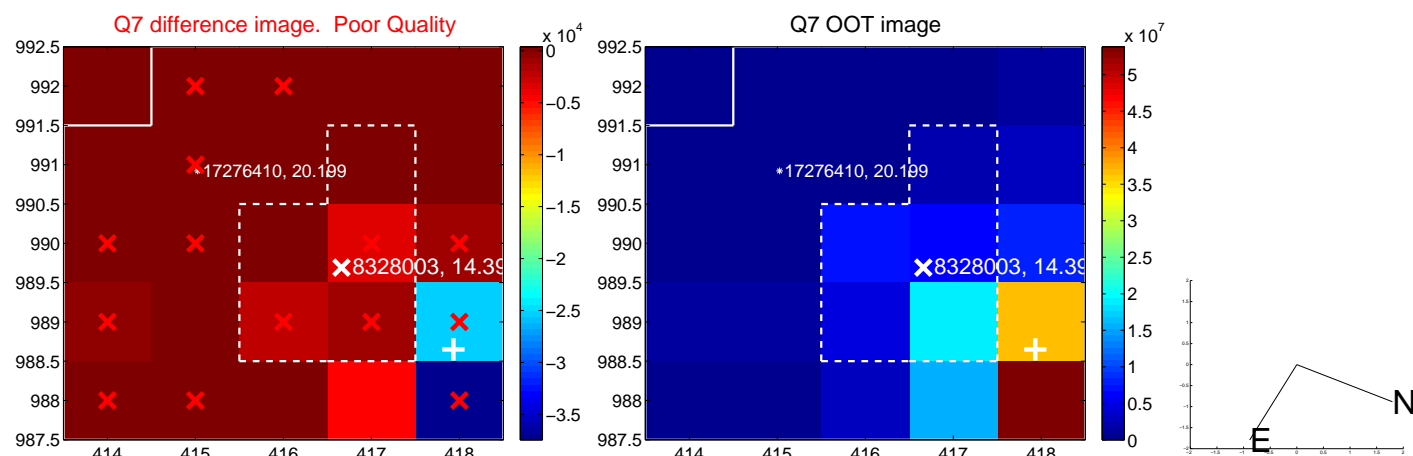
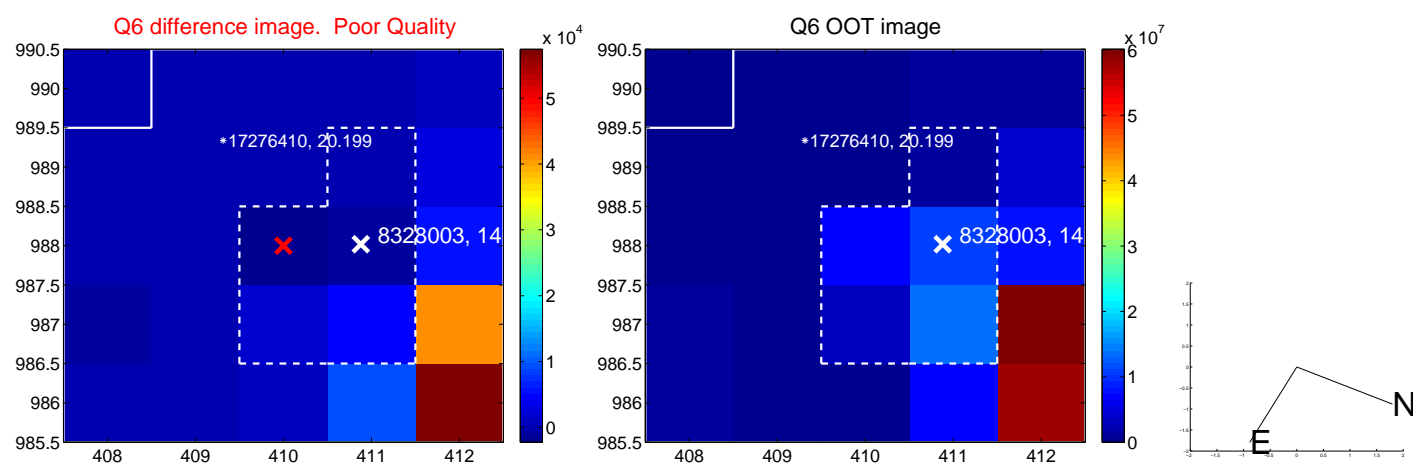
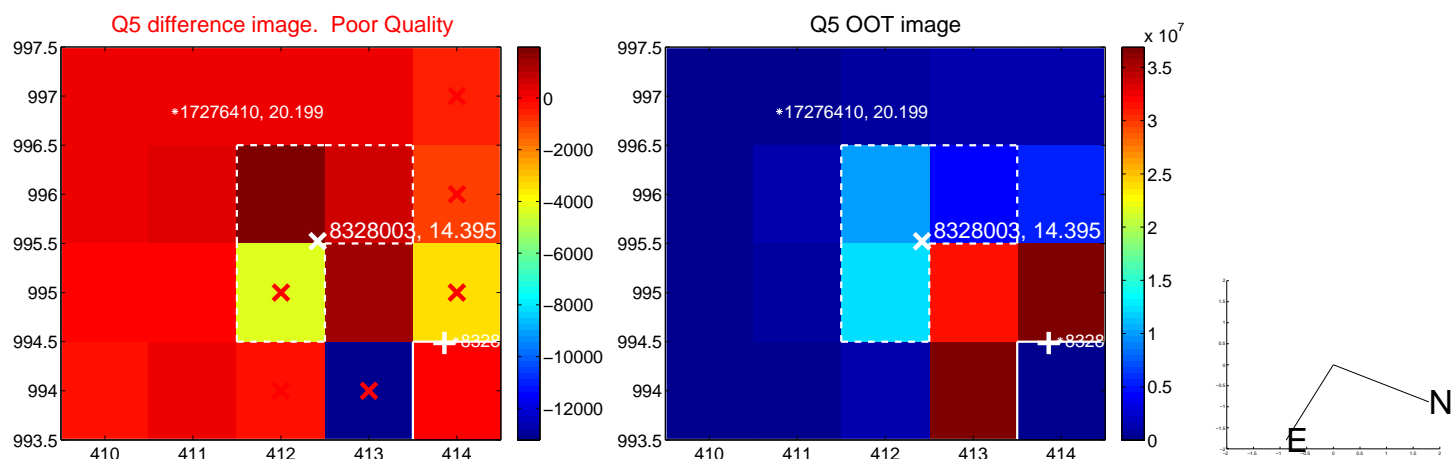


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

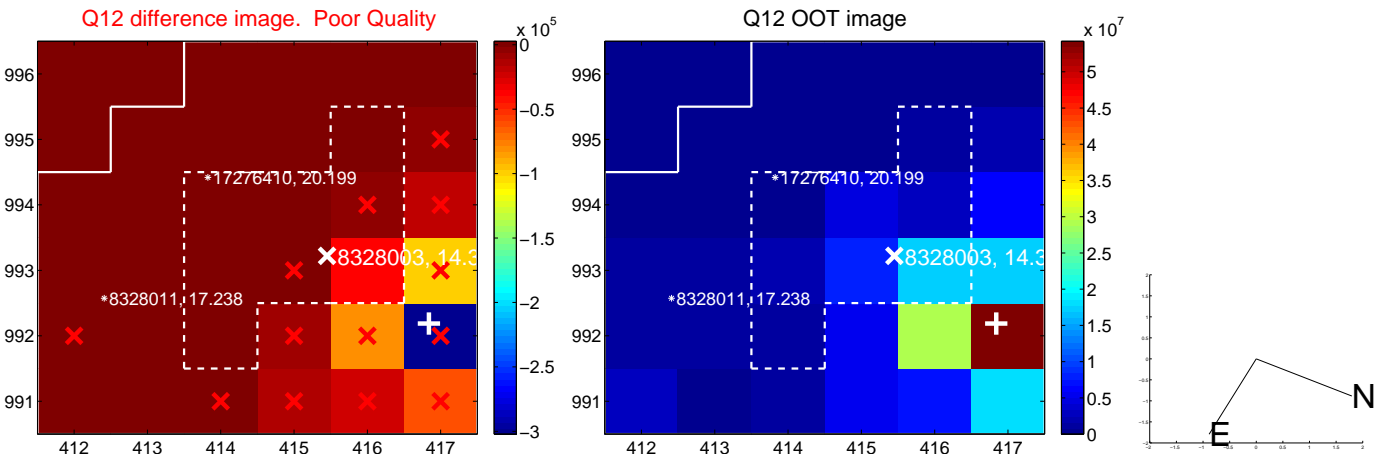
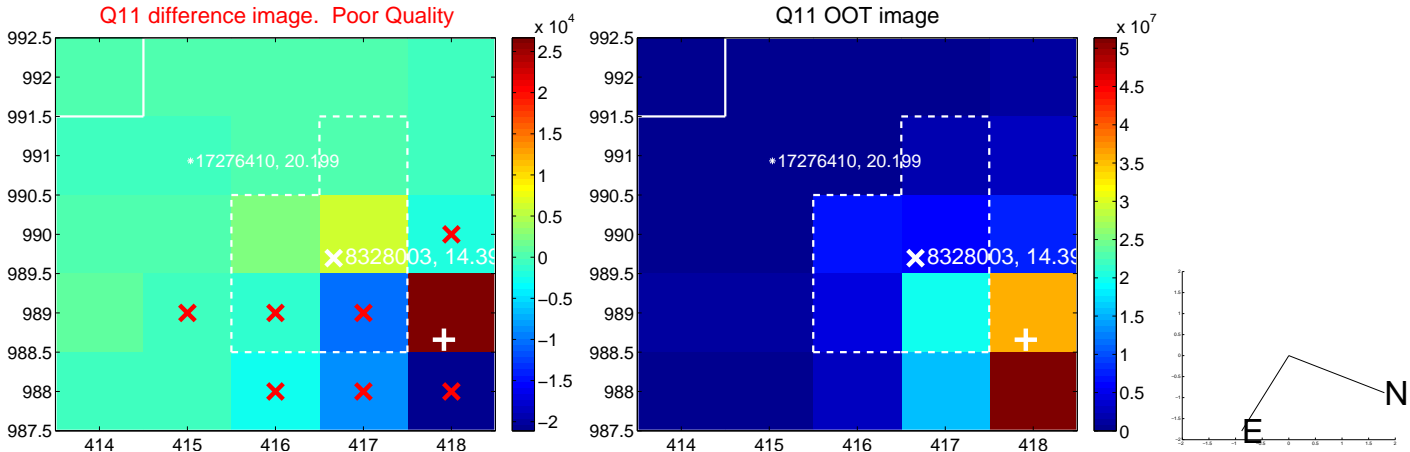
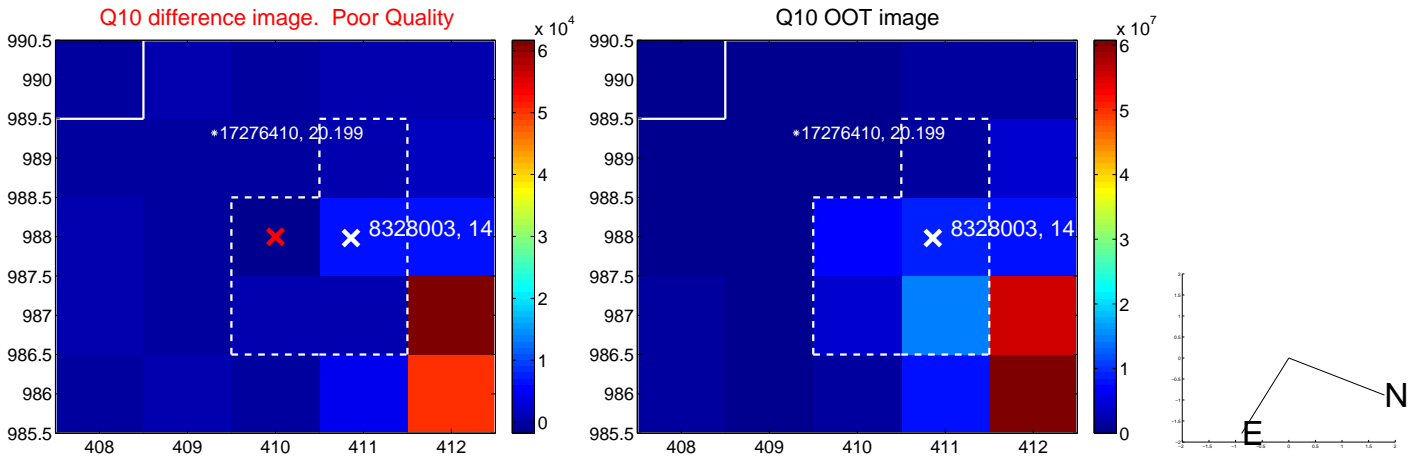
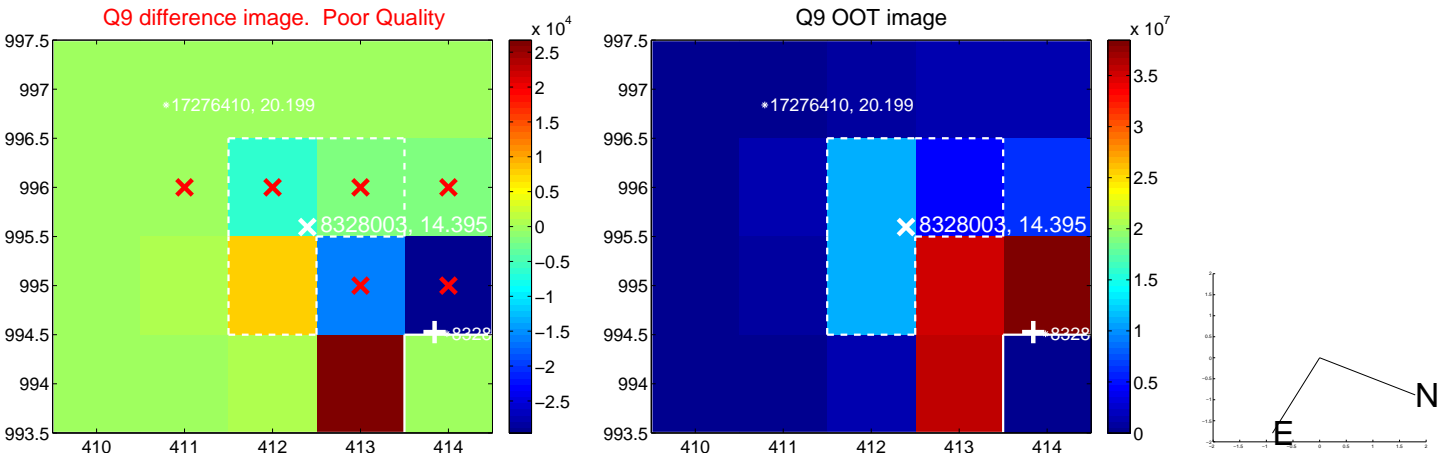
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



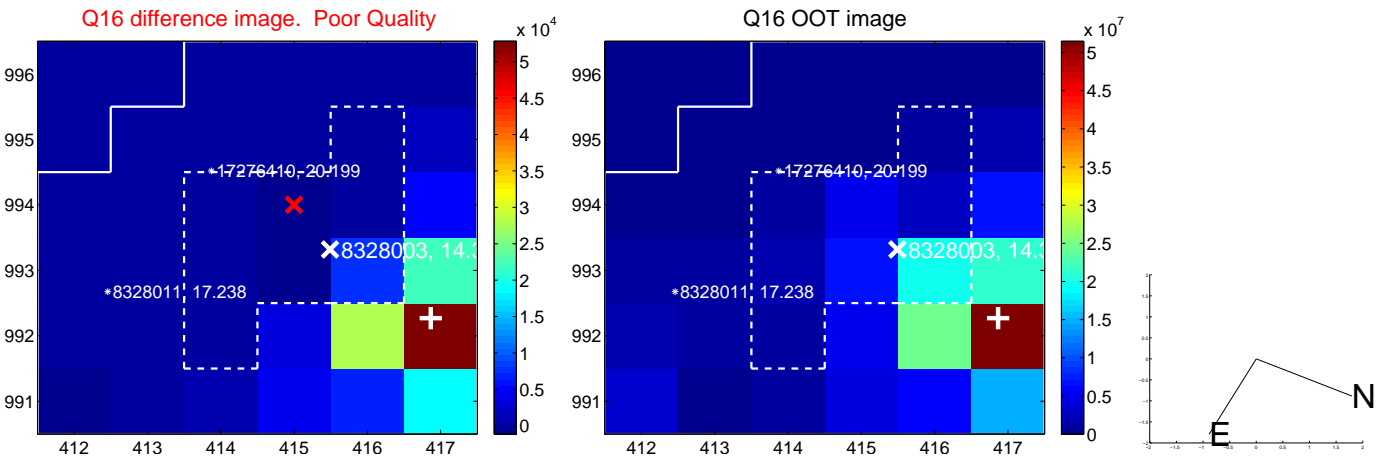
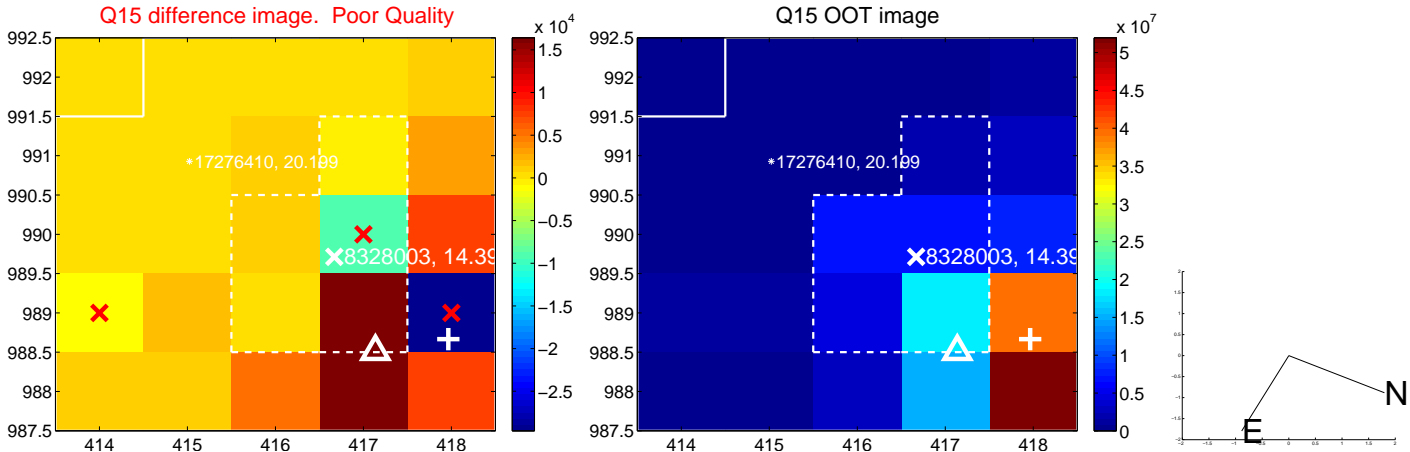
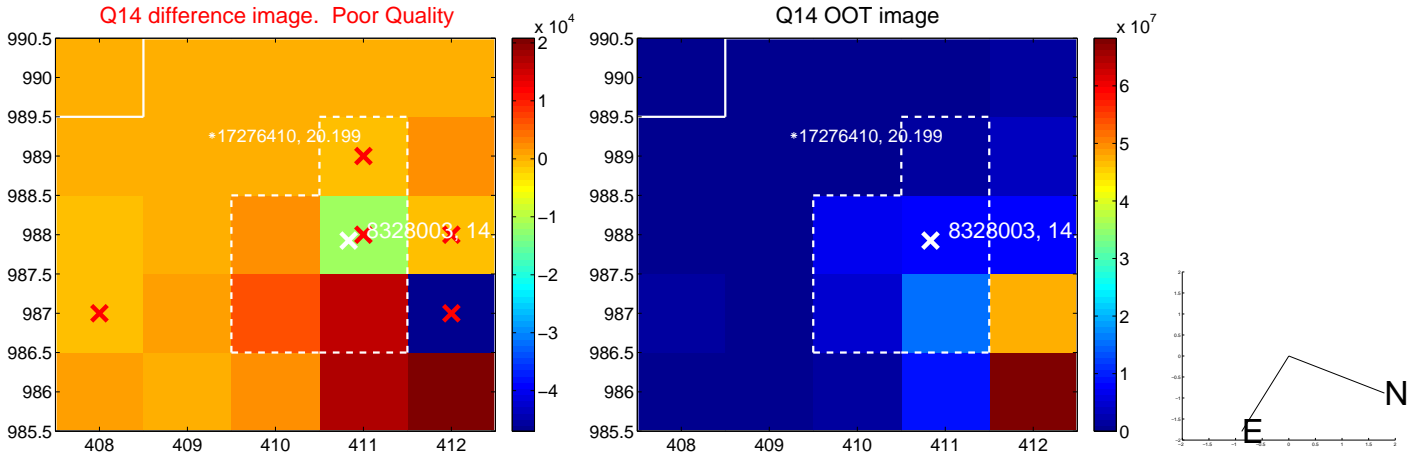
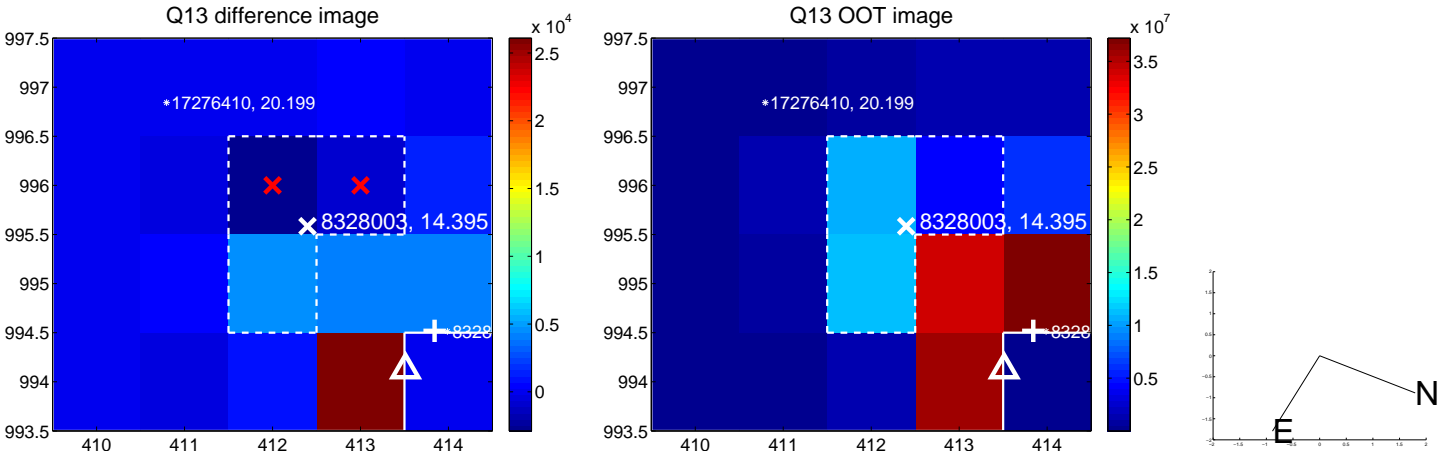
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



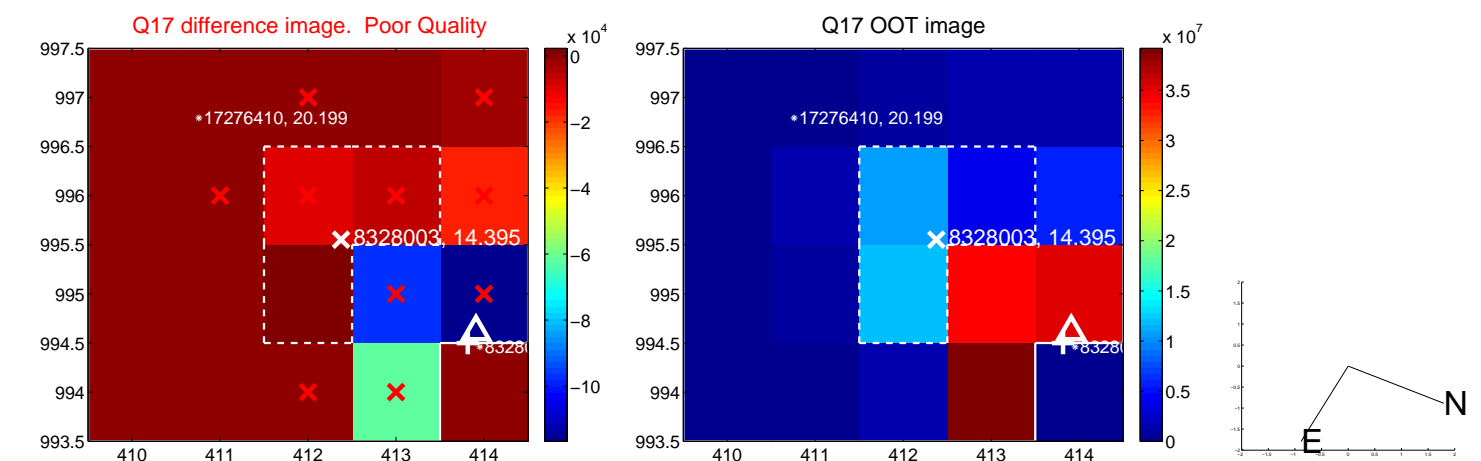
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



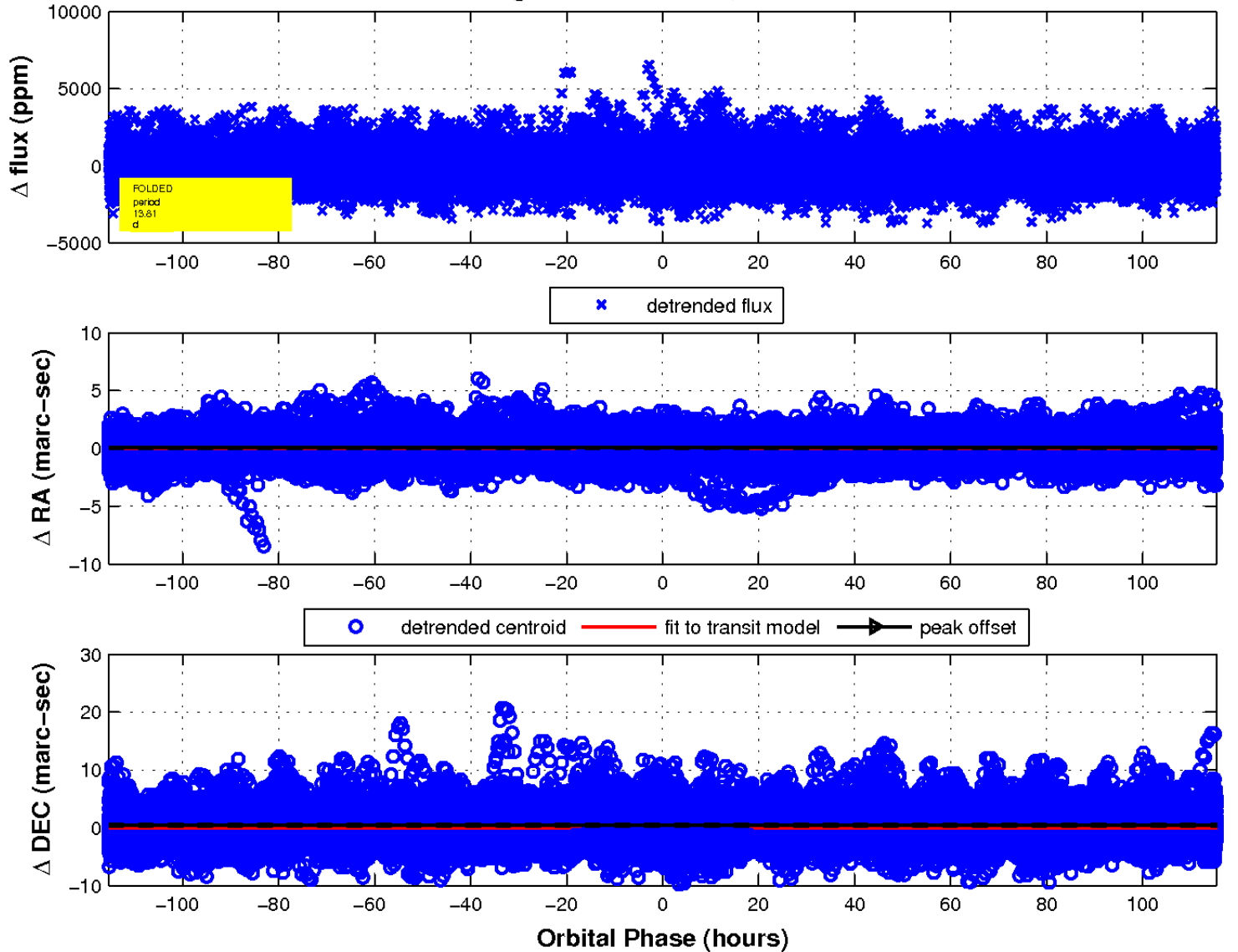
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



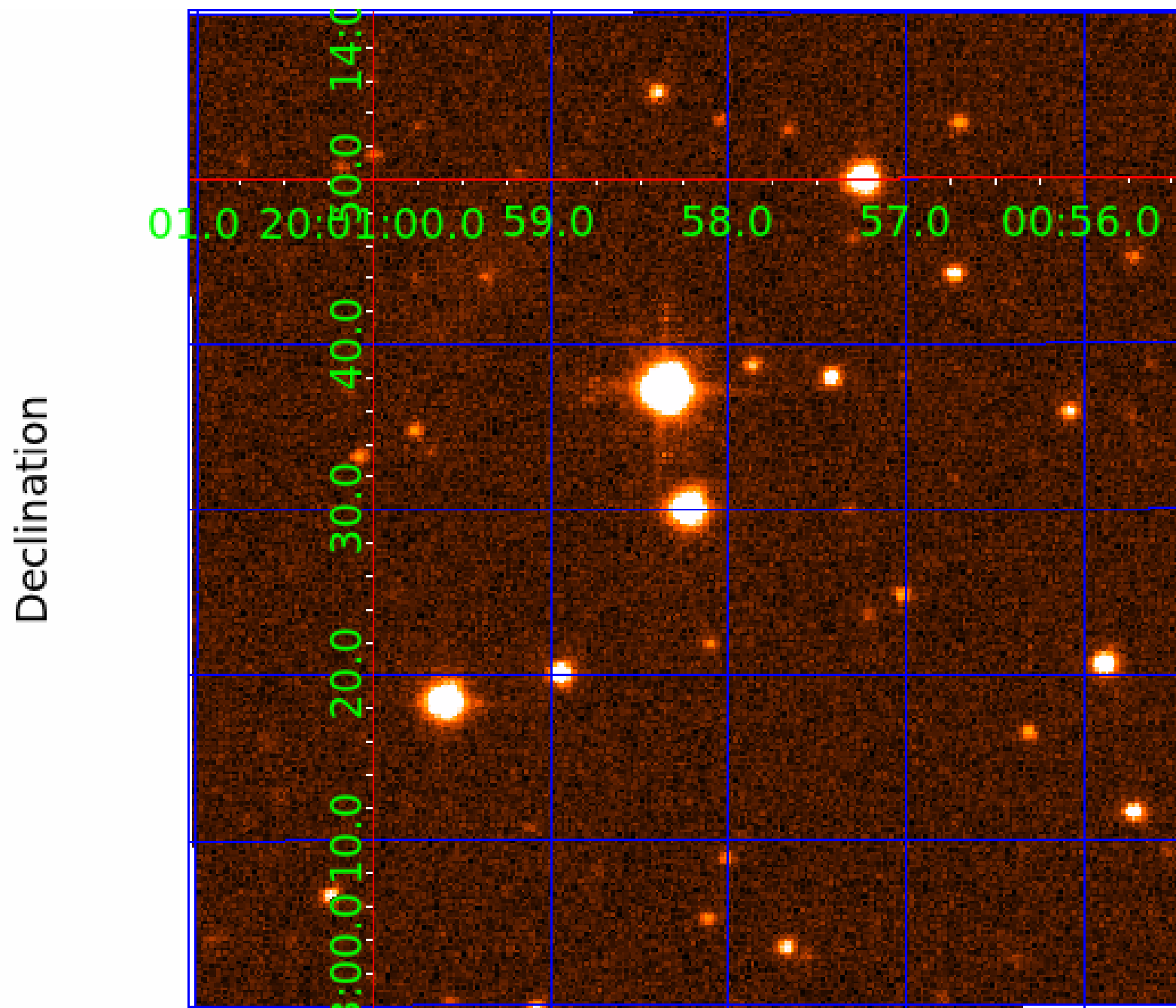
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 3 of 7



UKIRT Image



KIC 008328003

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})
008328003-01	OBS	No	0.521350	131.721910	0.0	3.784	8.1	0.0	0.97	6505	0.01	9156.18
008328003-02	OBS	No	17.087977	141.777778	2485.4	0.818	13.8	16.3	0.97	6505	4.96	87.29
008328003-03	OBS	No	13.810052	132.075326	57.8	38.472	12.9	1.9	0.97	6505	0.75	115.96
008328003-04	OBS	No	4.108740	133.645369	1463.4	1.500	12.2	-1.0	0.97	6505	3.77	583.82
008328003-05	OBS	No	11.343533	134.638700	1677.7	1.290	13.3	11.6	0.97	6505	4.07	150.74
008328003-06	OBS	No	13.052096	131.792444	1228.6	2.000	11.0	-1.0	0.97	6505	3.45	125.02
008328003-07	OBS	No	10.235624	133.143177	1032.2	1.462	10.2	8.3	0.97	6505	3.66	172.88

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008328003-01	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET
008328003-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
008328003-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
008328003-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS
008328003-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
008328003-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS
008328003-07	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET

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

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

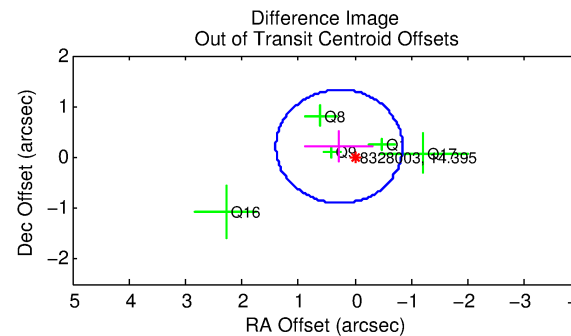
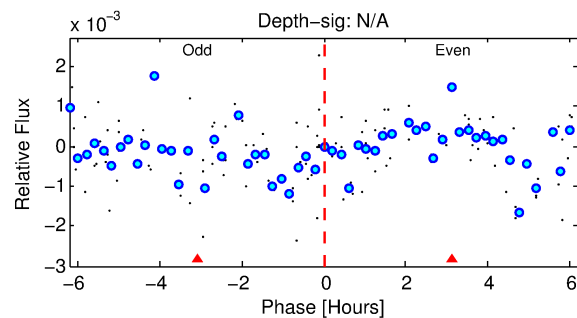
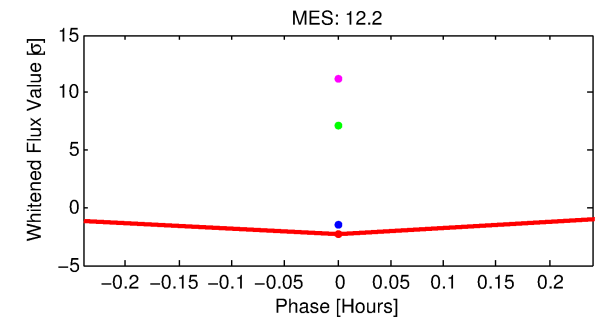
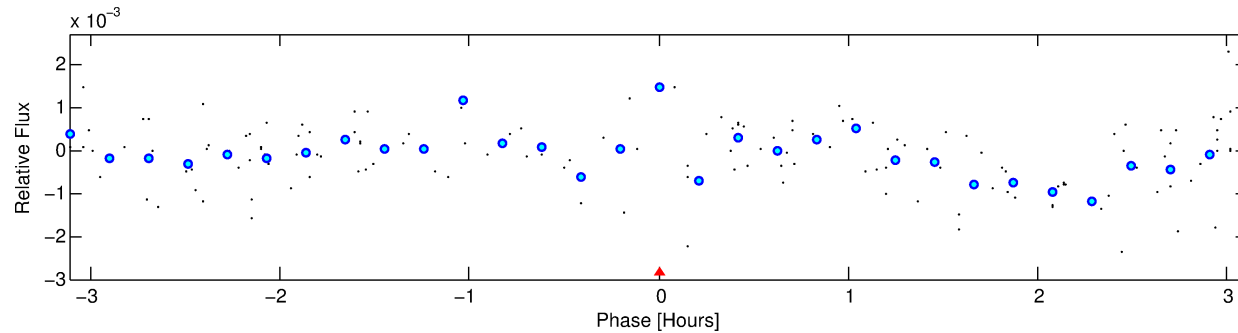
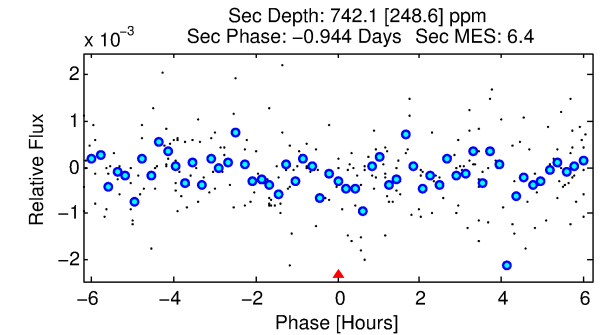
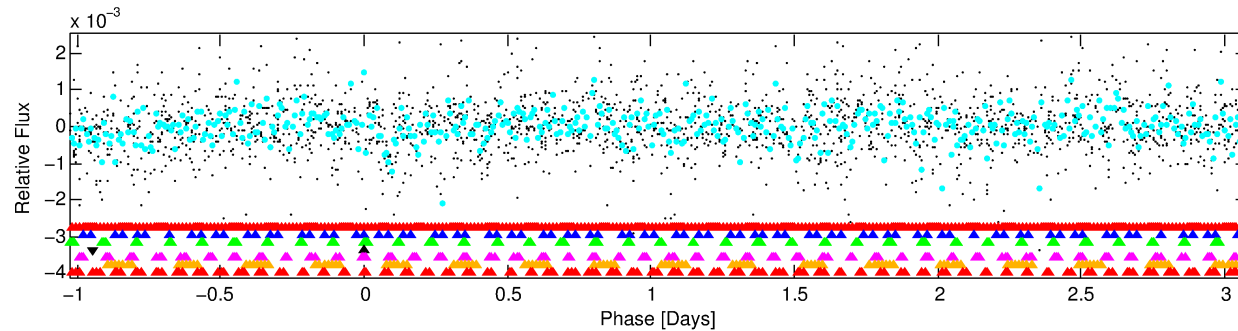
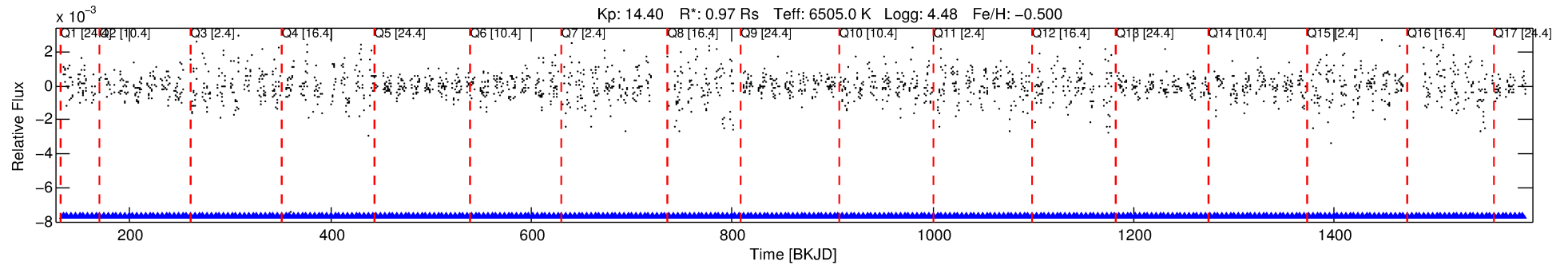
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008328003-04

No Significant Match Found

DV One-Page Summary

KIC: 8328003 Candidate: 4 of 7 Period: 4.109 d



TPS TCE Results:

Period = 4.10874 d
Epoch = 133.6454 BKJD

DV fit results are unavailable

DV Diagnostic Results:

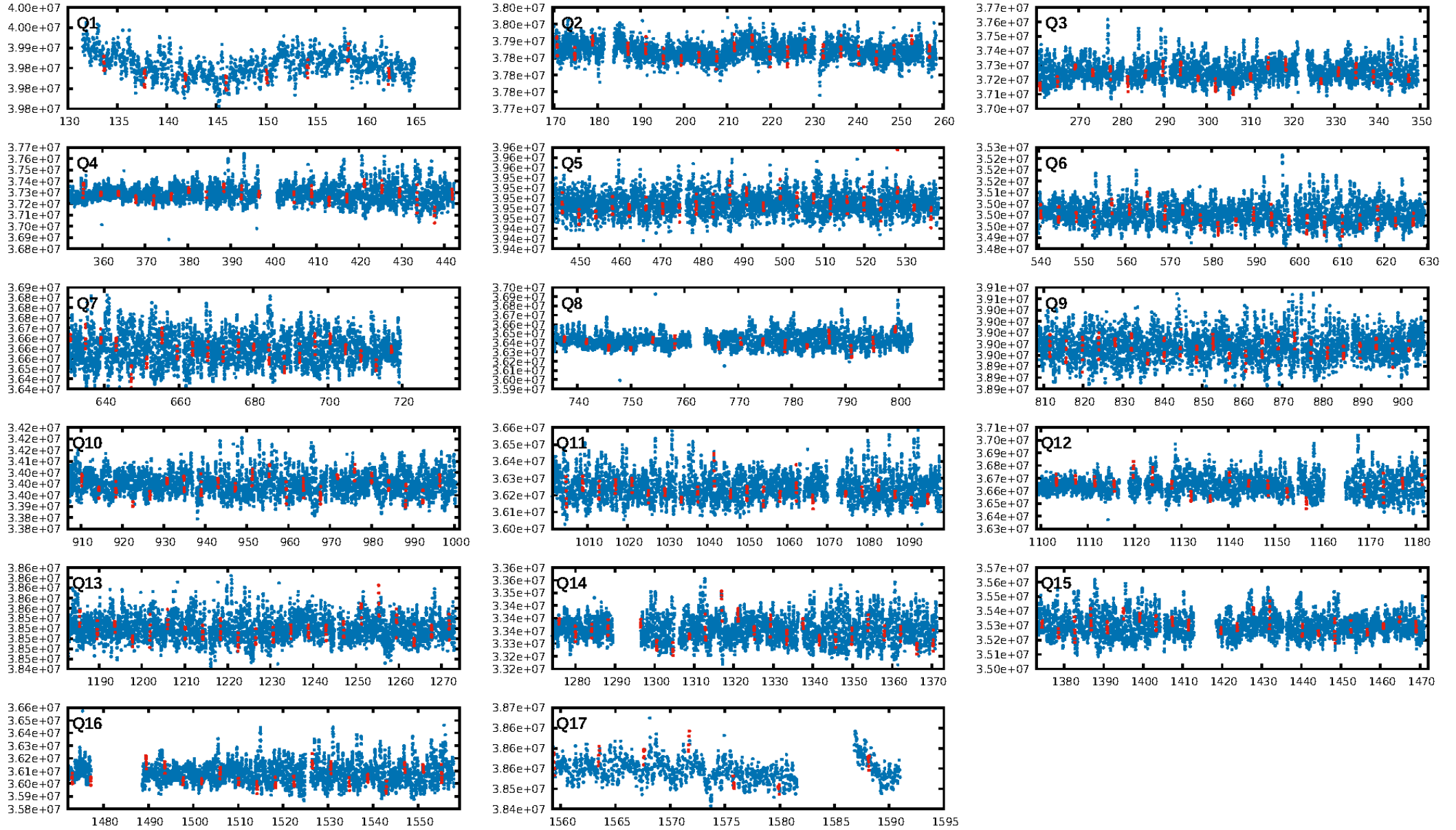
ShortPeriod-sig: 100.0% [21.15σ]
LongPeriod-sig: 100.0% [70.20σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.50e-41
RollingBand-fgt: 1.00 [35/35]
GhostDiagnostic-chr: -1.228

Centroid-sig: 0.0%
Centroid-so: 5.273 arcsec [10.28σ]
OotOffset-rm: 0.347 arcsec [0.93σ]
KicOffset-rm: 7.379 arcsec [25.61σ]
OotOffset-st: 0/0/2/3 [5]
KicOffset-st: 0/0/2/3 [5]
DiffImageQuality-fgm: 0.80 [4/5]
DiffImageOverlap-fno: 0.00 [0/17]

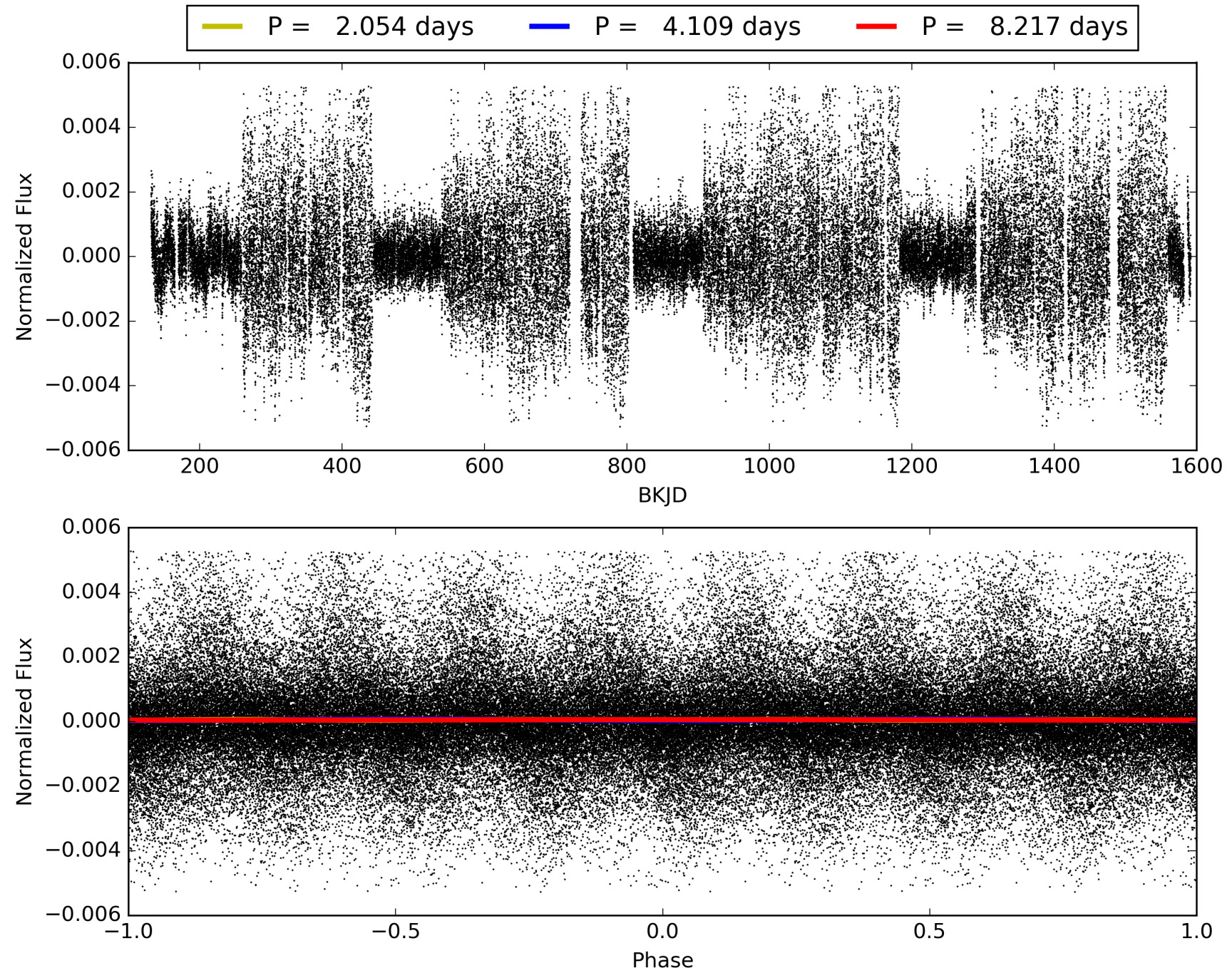
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 05:46:55 Z

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

TCE 008328003-04, PDC Light Curves

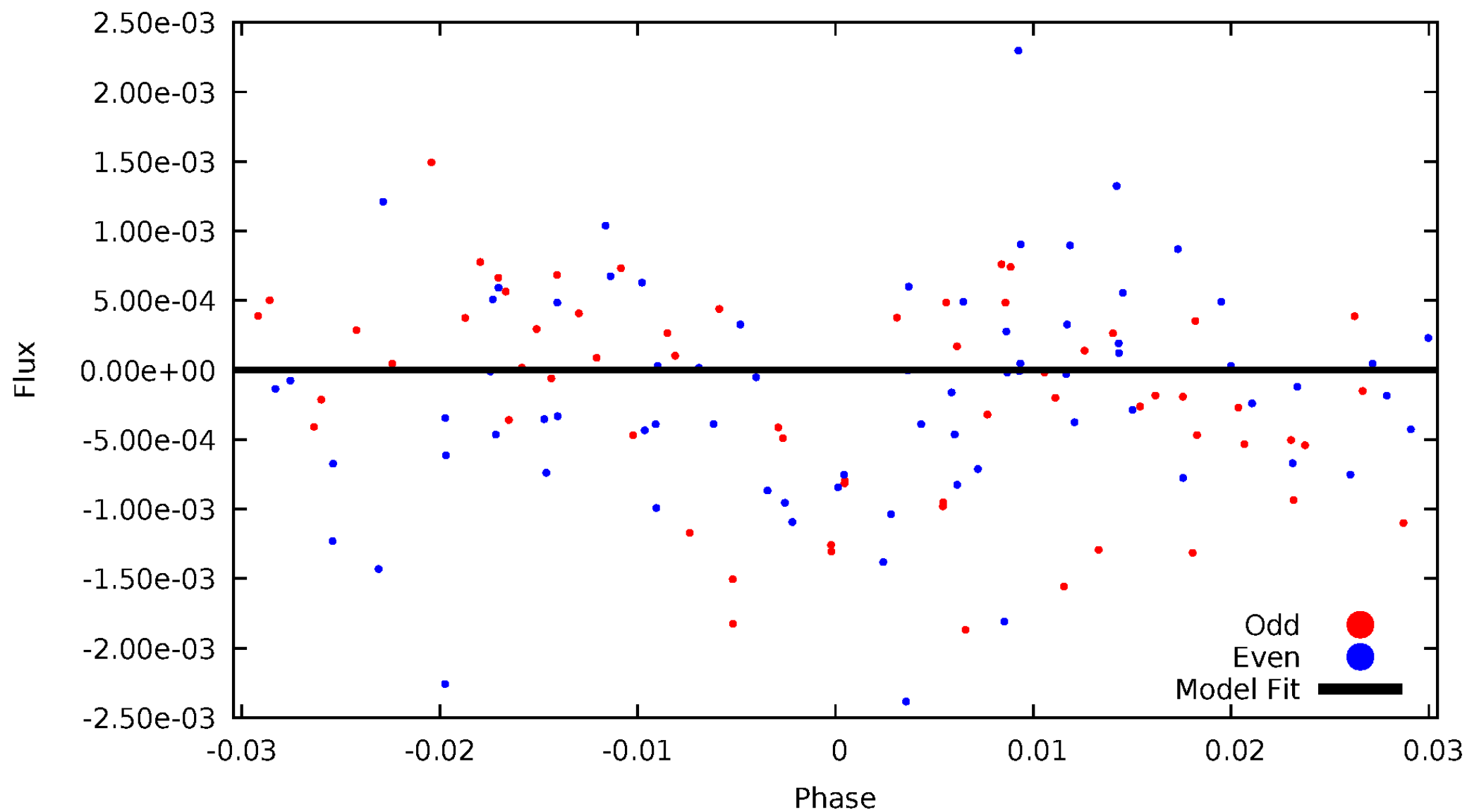


TCE 008328003-04



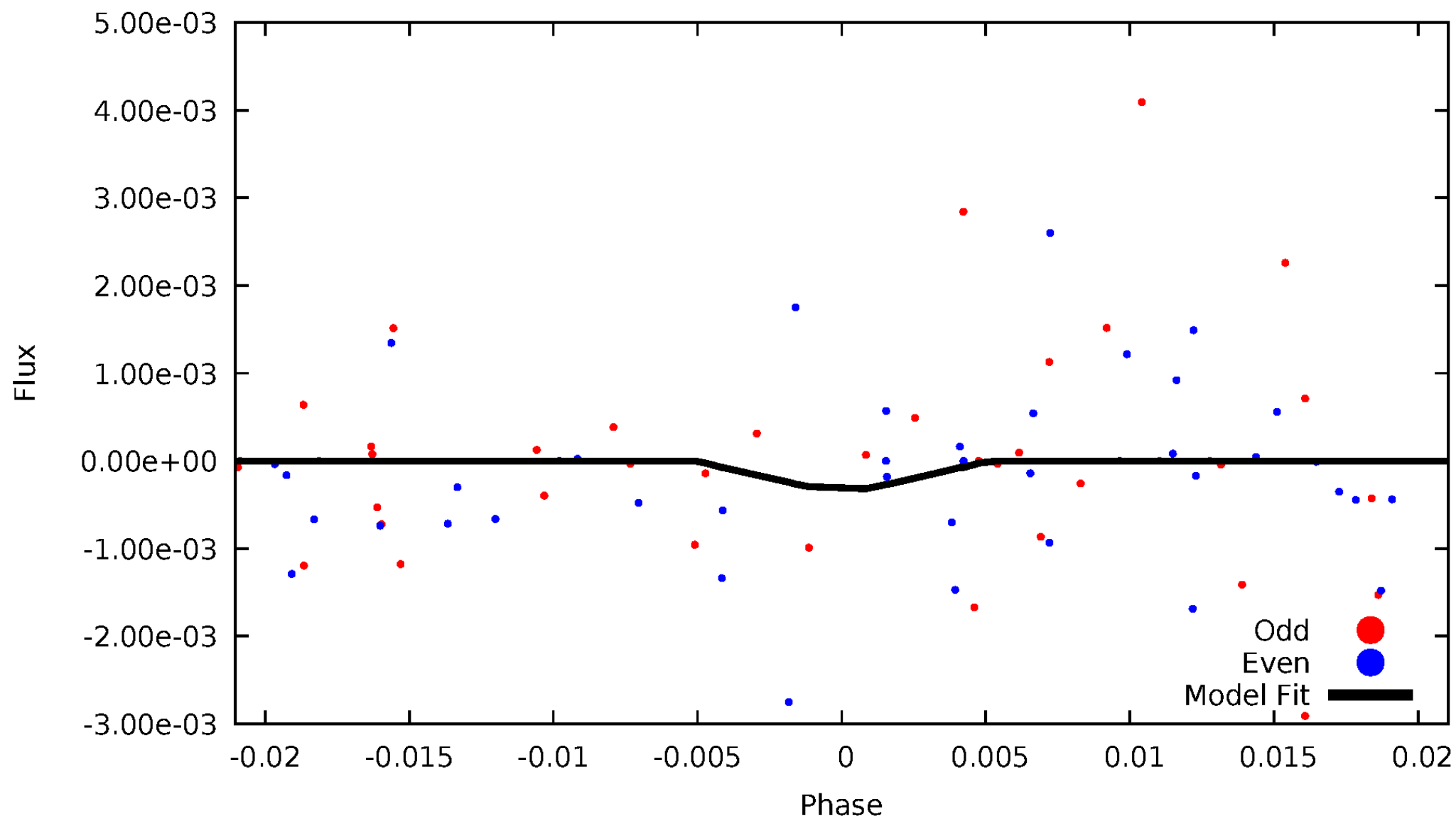
DV Odd/Even

TCE 008328003-04



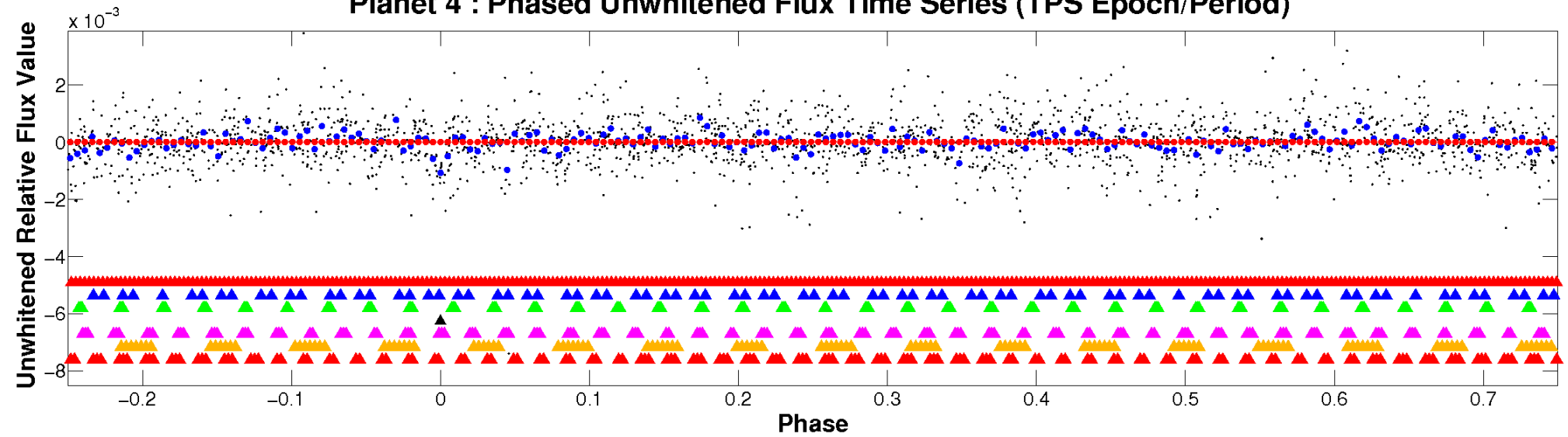
ALT Odd/Even

TCE 008328003-04

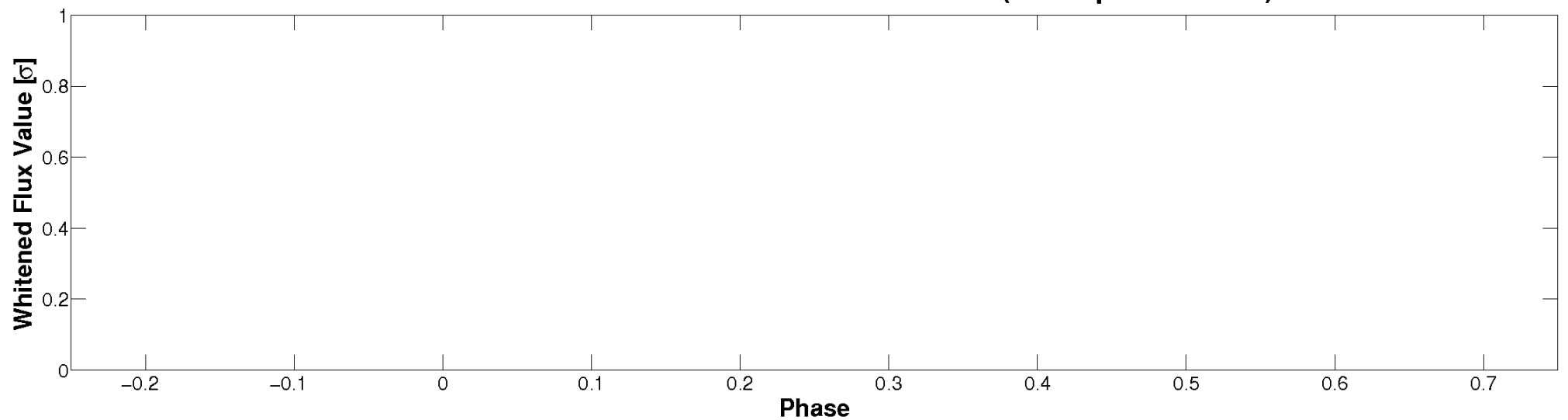


Non-Whitened Vs. Whitened Light Curve

Planet 4 : Phased Unwhitened Flux Time Series (TPS Epoch/Period)

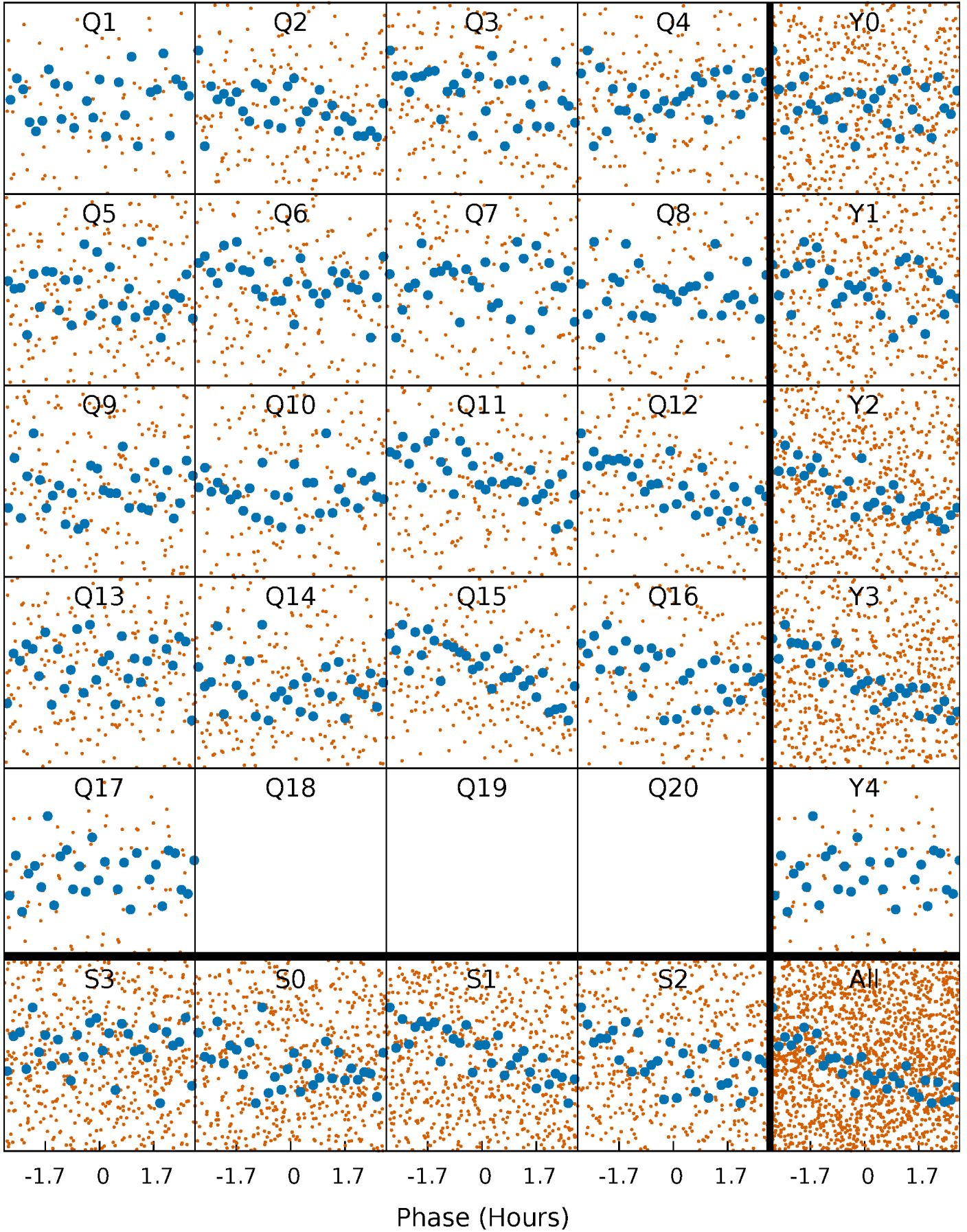


Planet 4 : Phased Whitened Flux Time Series (TPS Epoch/Period)



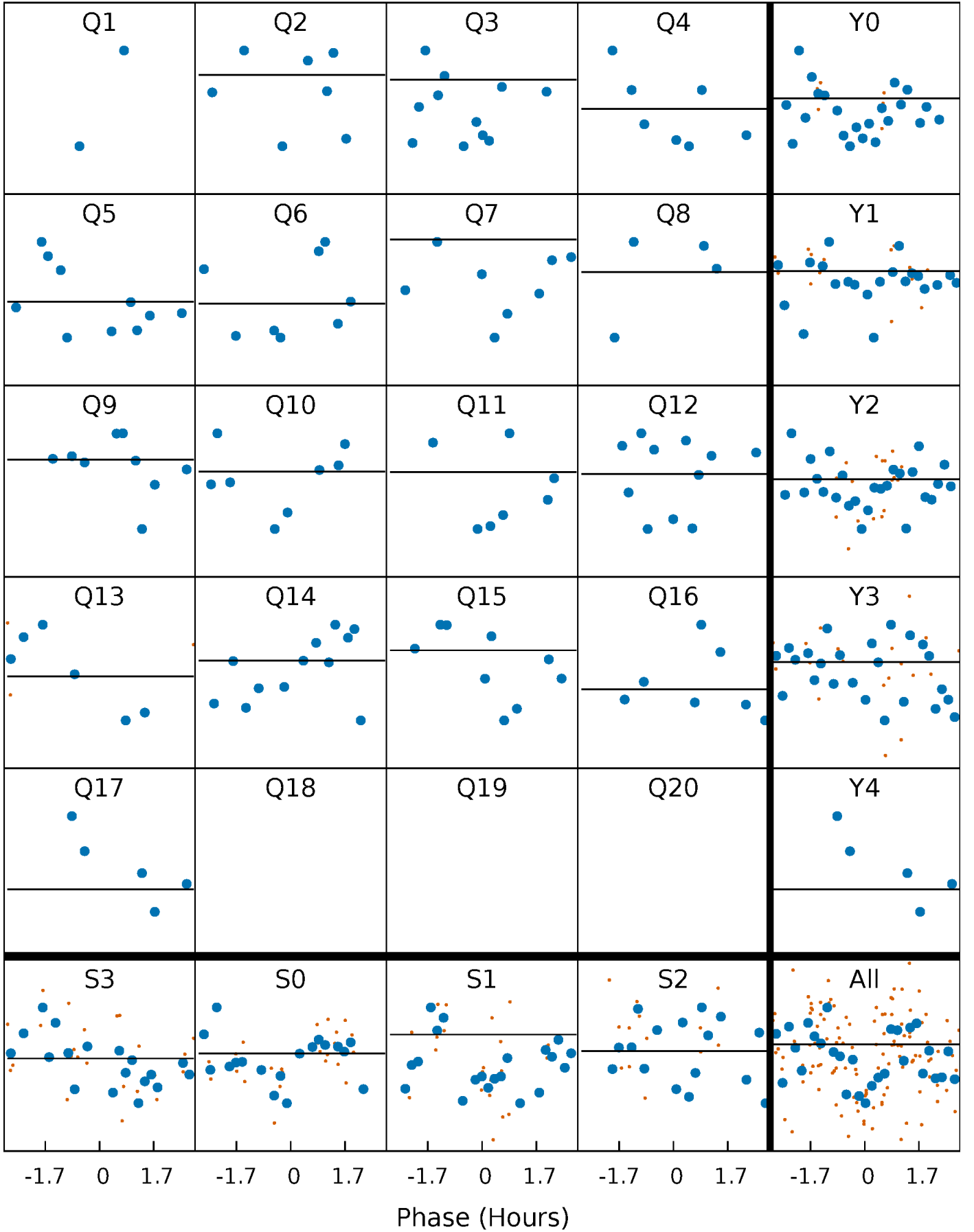
PDC Quarter-Phased Transit Curves

TCE 008328003-04 P= 4.108740 Days $T_0=133.645369$ (BKJD)



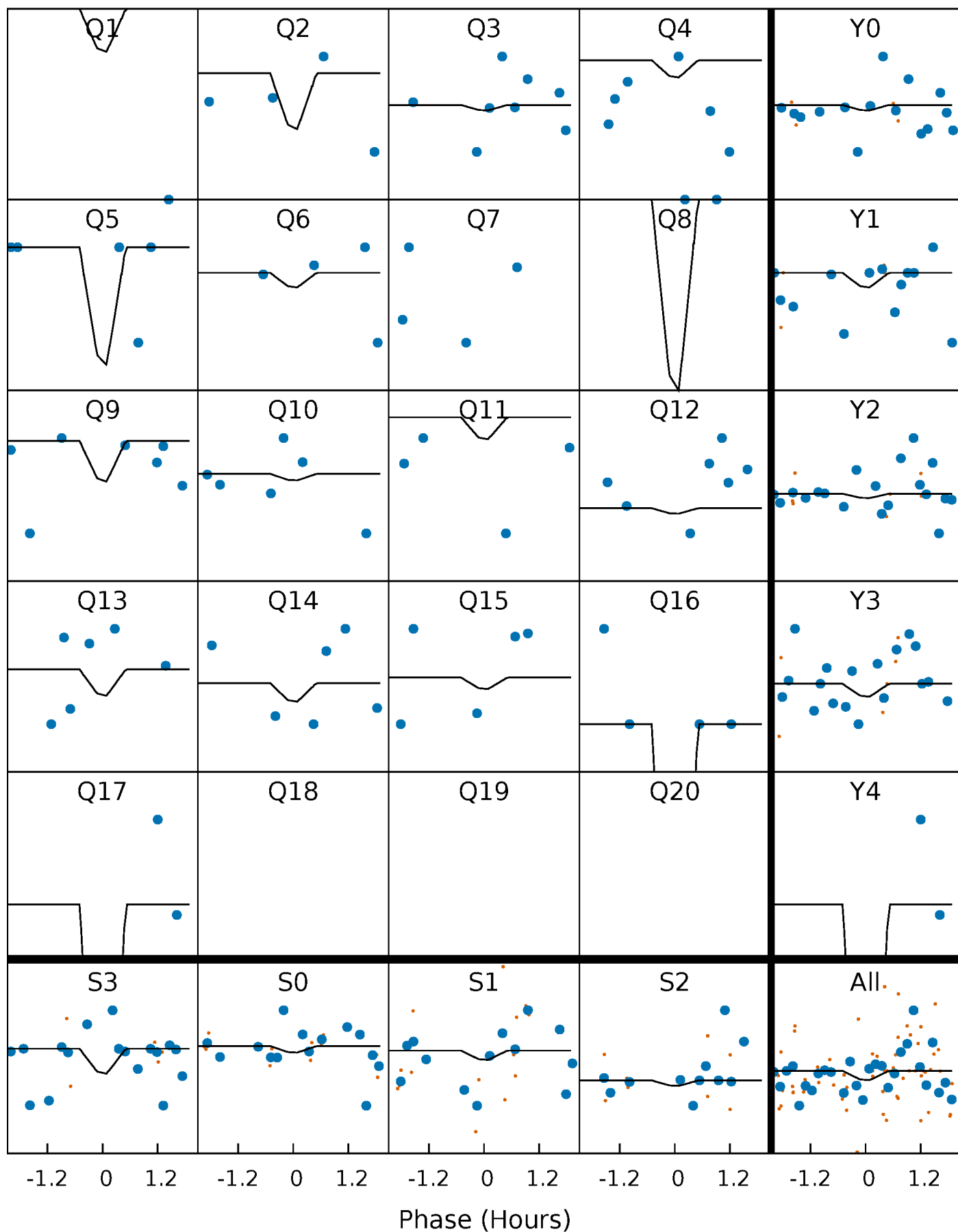
DV Quarter-Phased Transit Curves

TCE 008328003-04 P= 4.108740 Days $T_0=133.645369$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

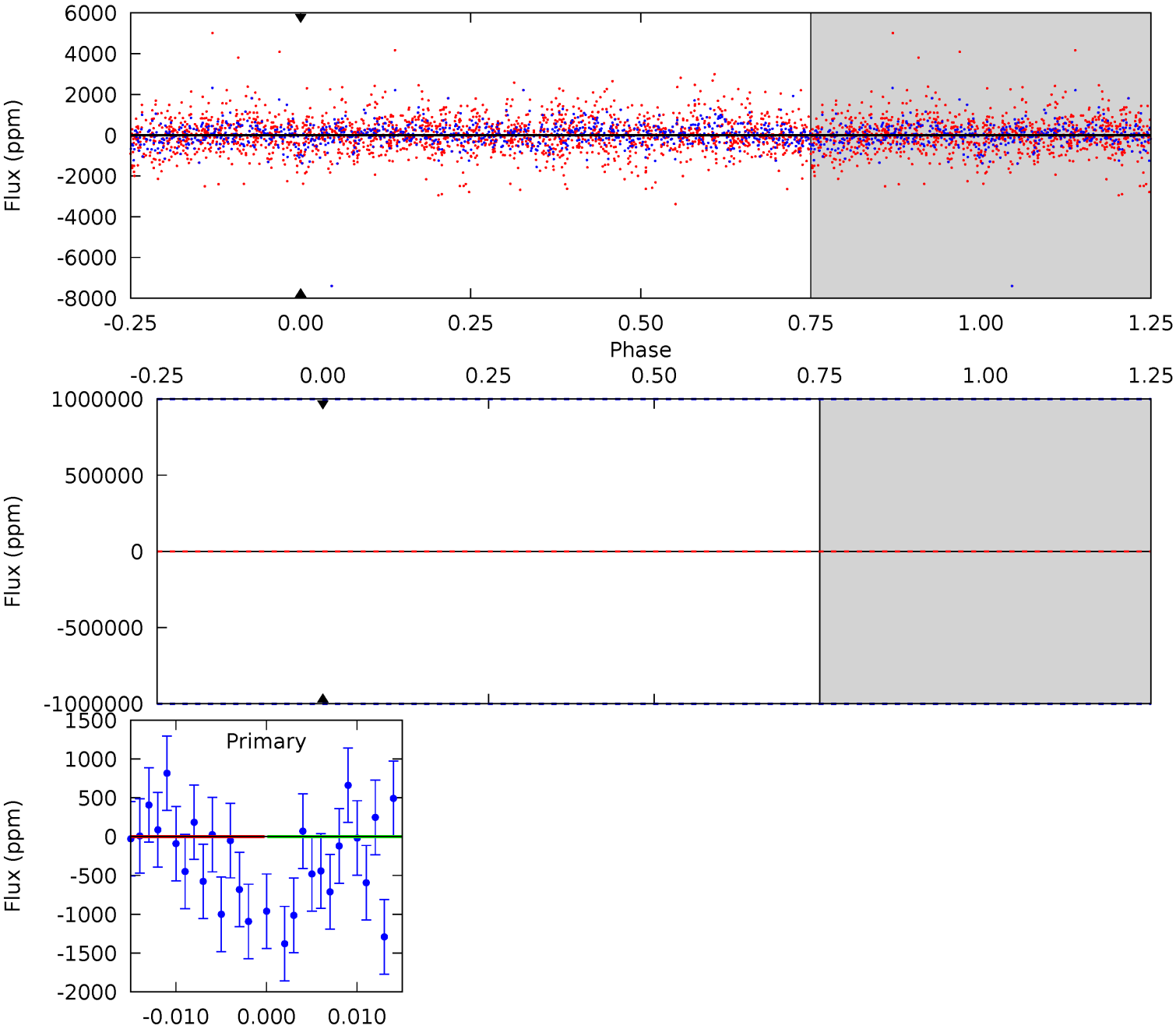
TCE 008328003-04 $P = 4.108740$ Days $T_0 = 133.557998$ (BKJD)



DV Model-Shift Uniqueness Test

008328003-04, P = 4.108740 Days, E = 133.645369 Days

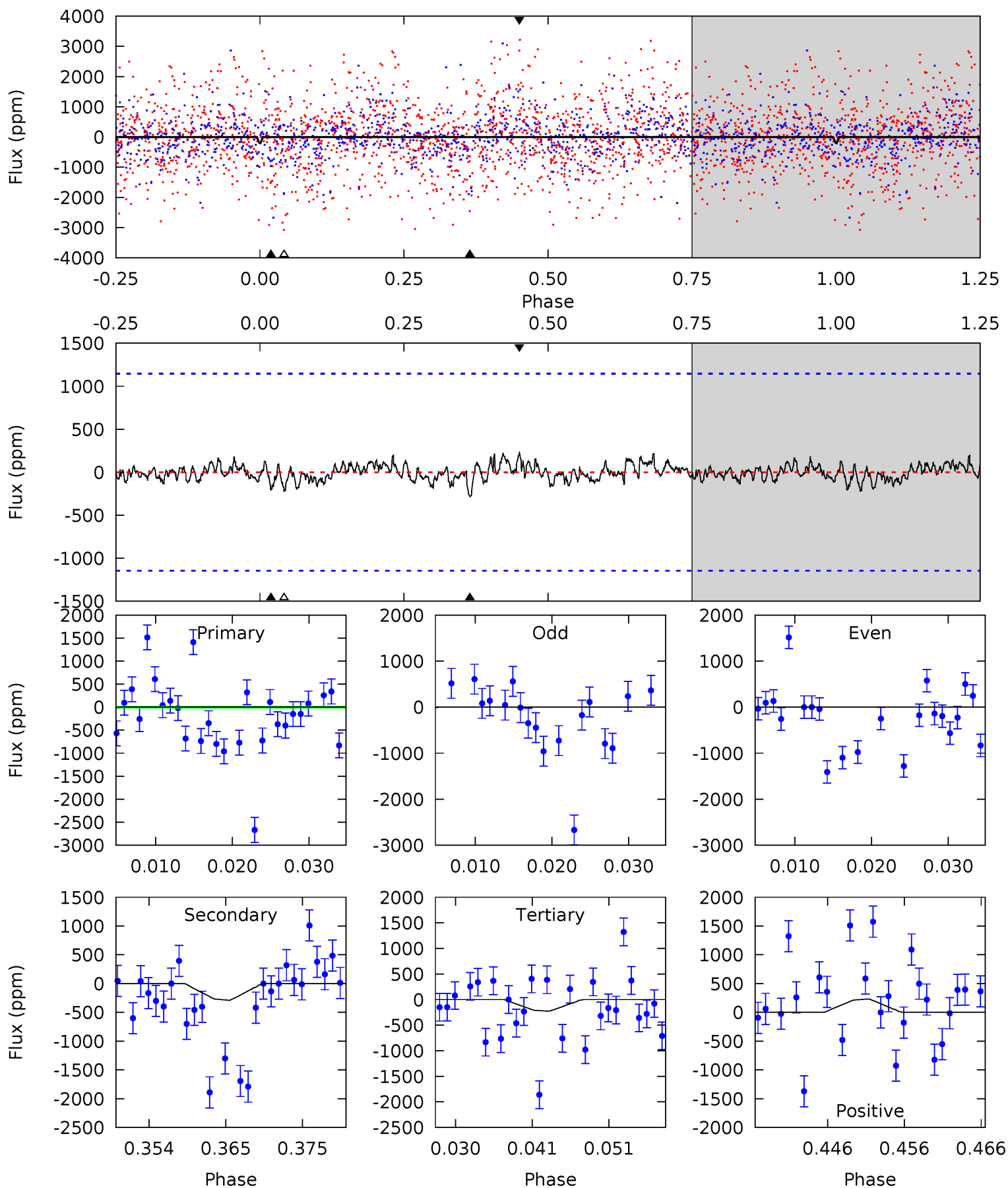
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

008328003-04, P = 4.108740 Days, E = 133.557998 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.90	1.27	0.99	1.02	5.02	2.57	0.36	-0.09	-0.12	0.28	0.25	0.40	0	0.44	3.30



Stellar Parameters For KIC 008328003

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6505^{+155}_{-214}	$4.483^{+0.050}_{-0.200}$	$-0.500^{+0.250}_{-0.350}$	$0.975^{+0.278}_{-0.093}$	$1.054^{+0.119}_{-0.146}$	$1.604^{+0.418}_{-0.805}$
	+2%/-3%	+1%/-4%	+50%/-70%	+29%/-10%	+11%/-14%	+26%/-50%
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 008328003-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$8.82^{+9.86}_{-6.24}$	1786^{+114}_{-82}	2911^{+24434}_{-28216}	$2.357^{+3641.266}_{-3221.699}$
Alt.	-291 ± 228	$8.15^{+8.55}_{-5.96}$	1781^{+120}_{-86}	3414^{+2186}_{-1023}	$4.799^{+67.899}_{-4.204}$

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

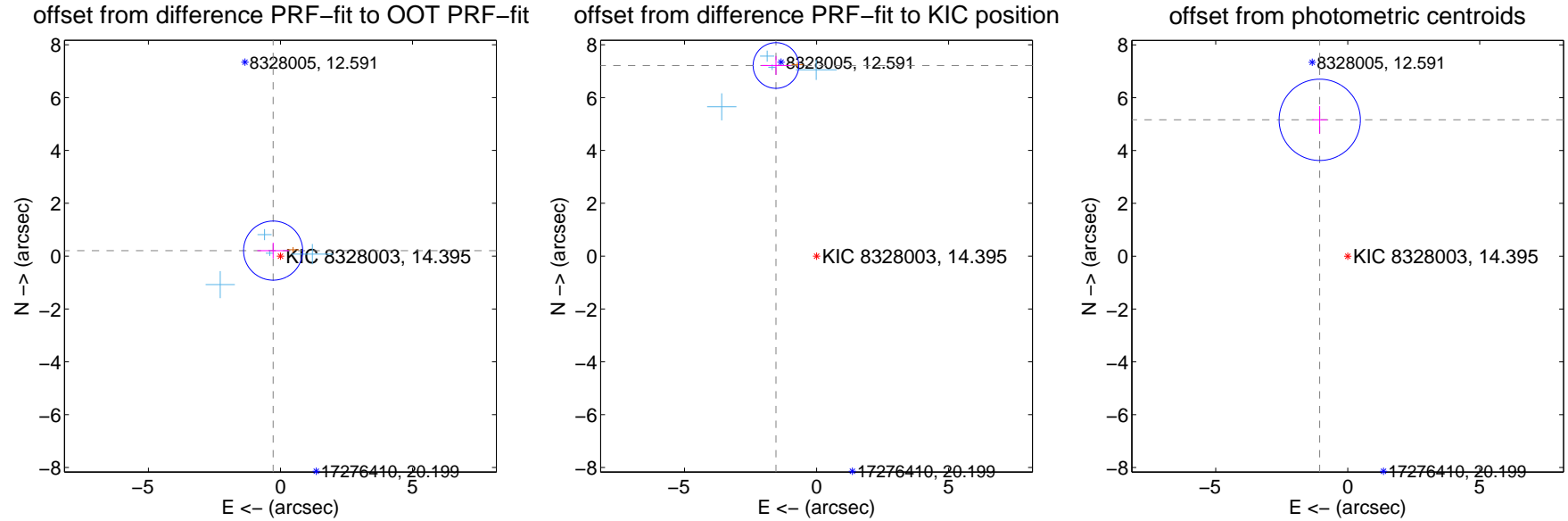
DV Centroid Data

Supplemental centroid analysis for 008328003-04. Kepler magnitude: 14.39. Transit SNR -1.00

There are 4 quarters with good PRF difference image offsets

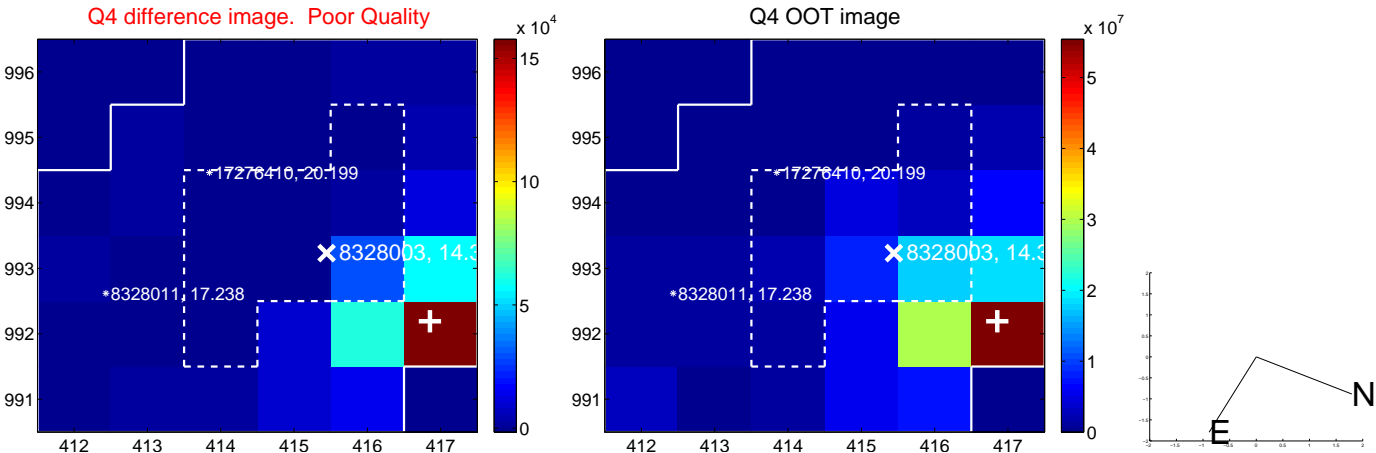
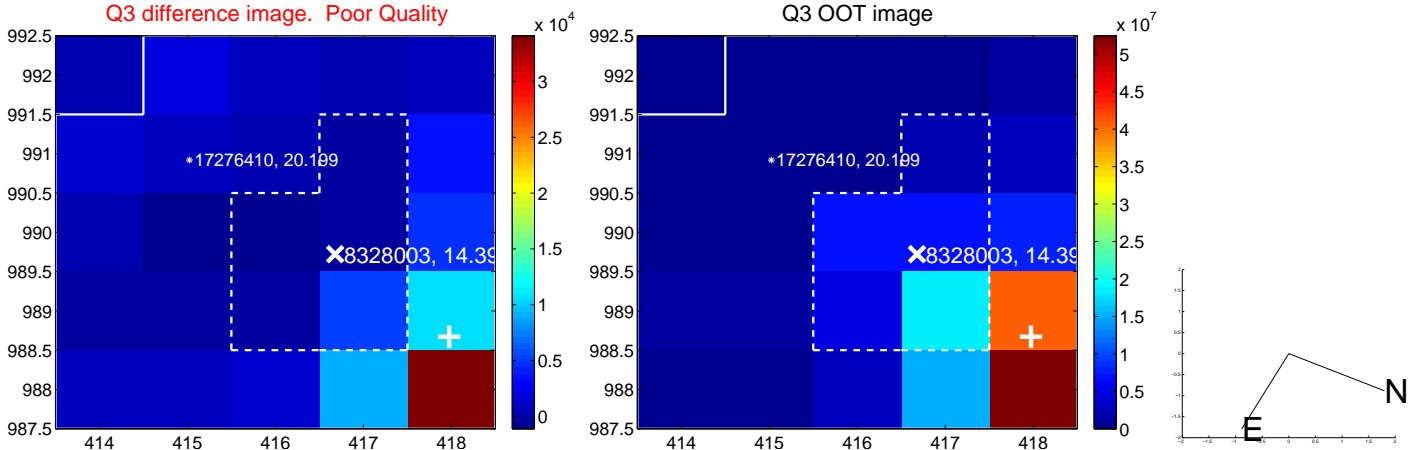
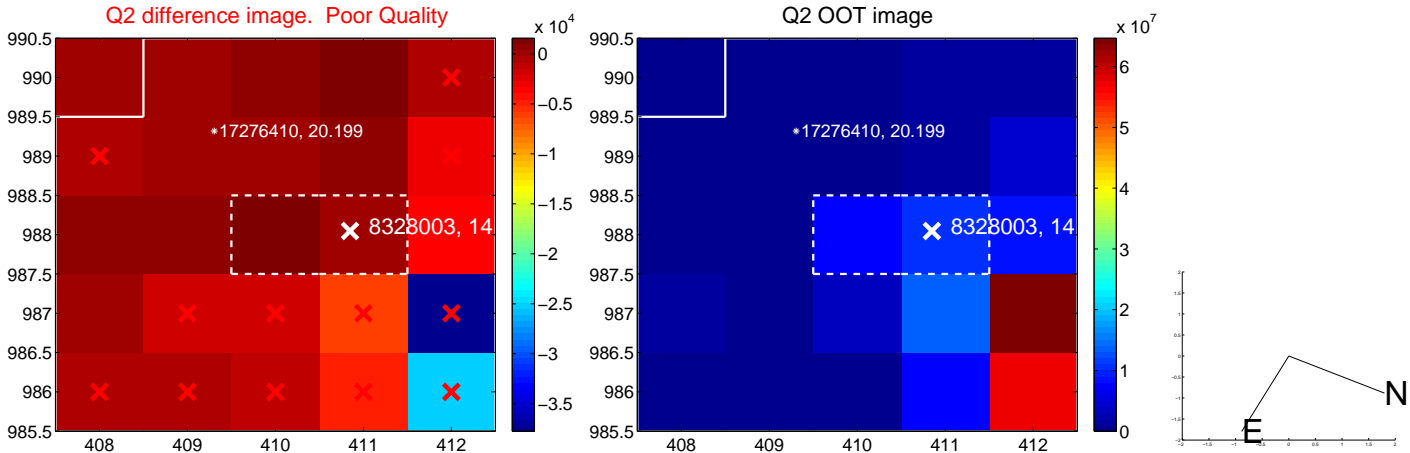
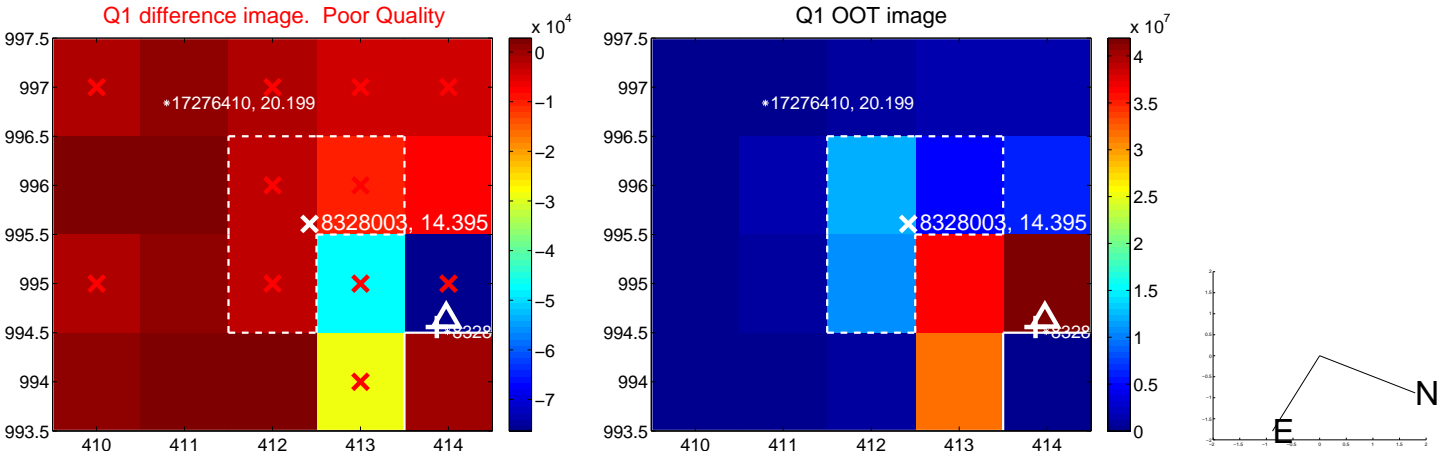
The OOT PRF centroid is offset from the target star catalog position by about 7.08 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.347 ± 0.373	0.93	0.278 ± 0.599	0.209 ± 0.300
PRF-fit source offset from KIC position	7.379 ± 0.288	25.61	1.538 ± 0.557	7.217 ± 0.358
photometric centroid source offset	5.27 ± 0.51	10.28	1.06 ± 0.28	5.16 ± 0.52

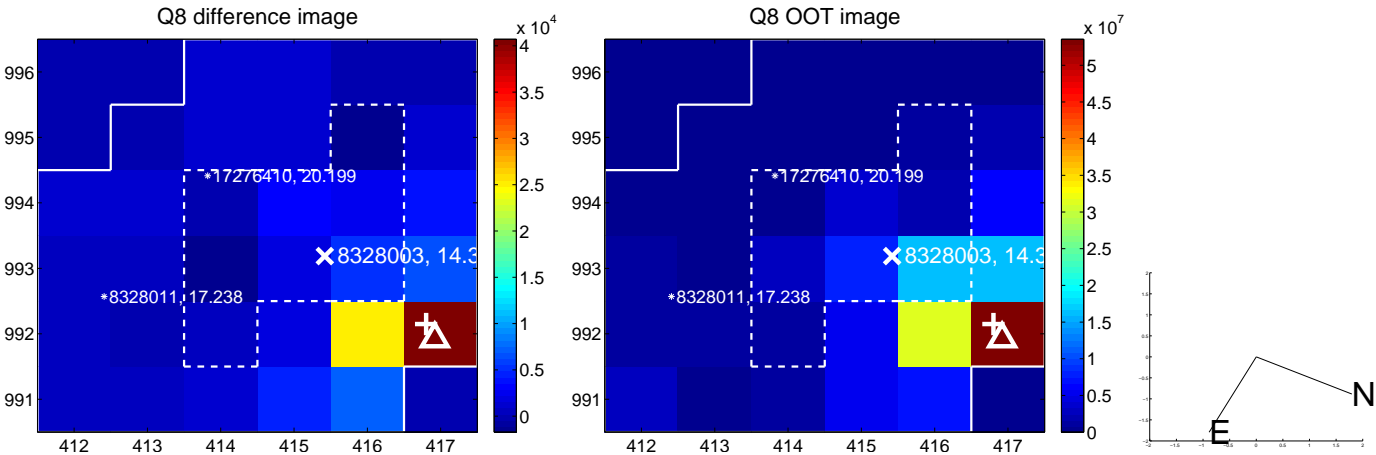
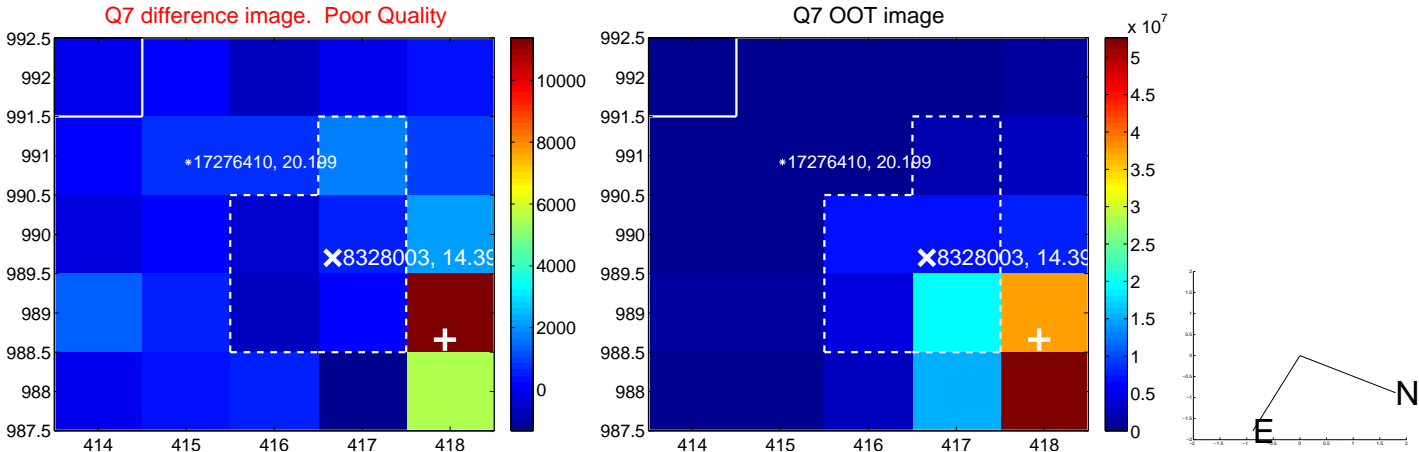
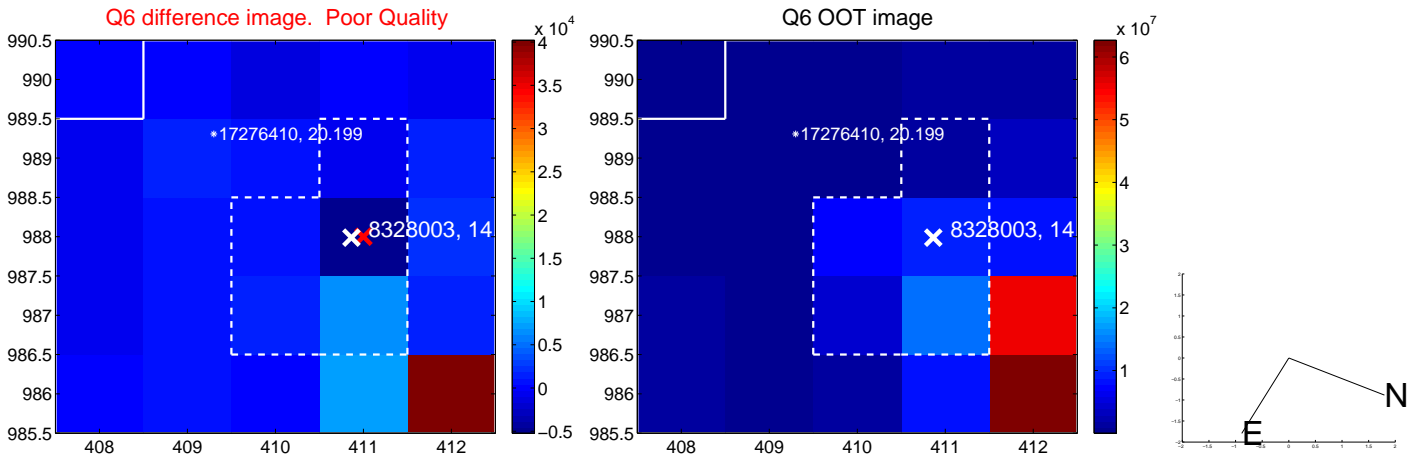
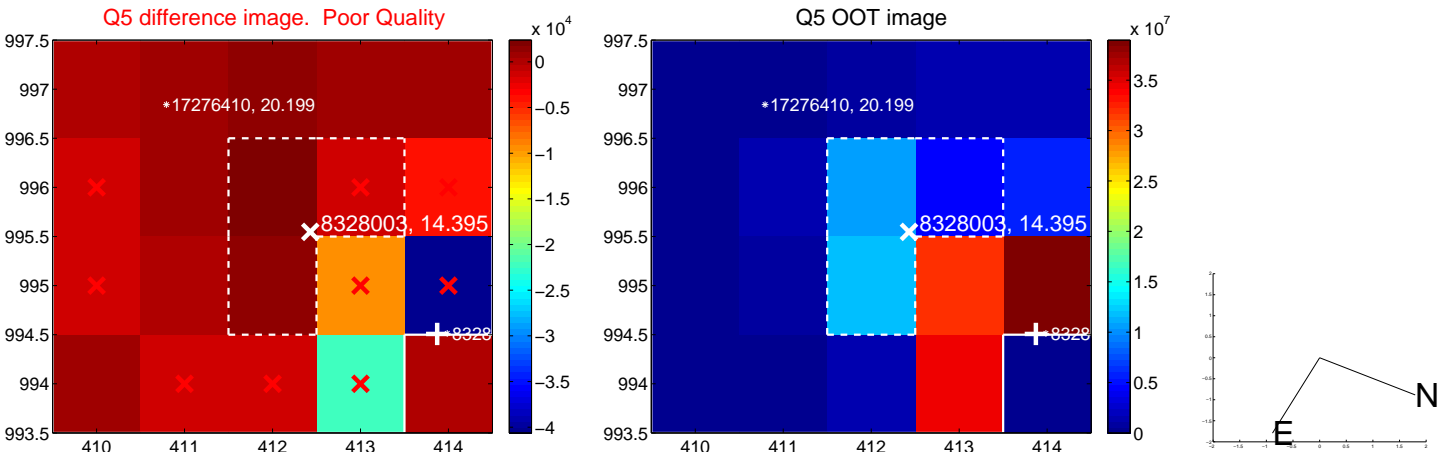


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

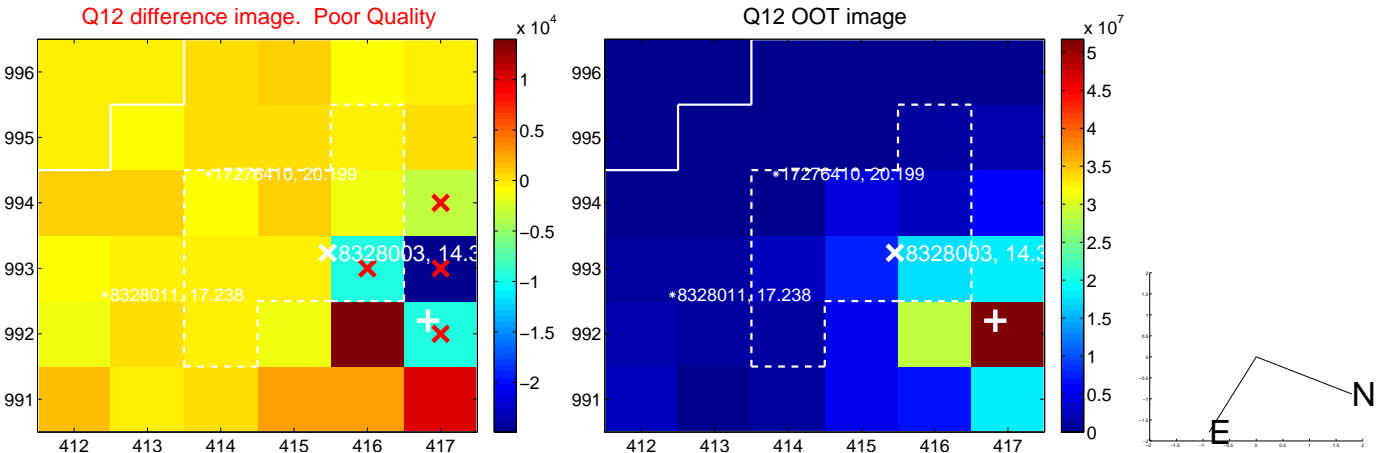
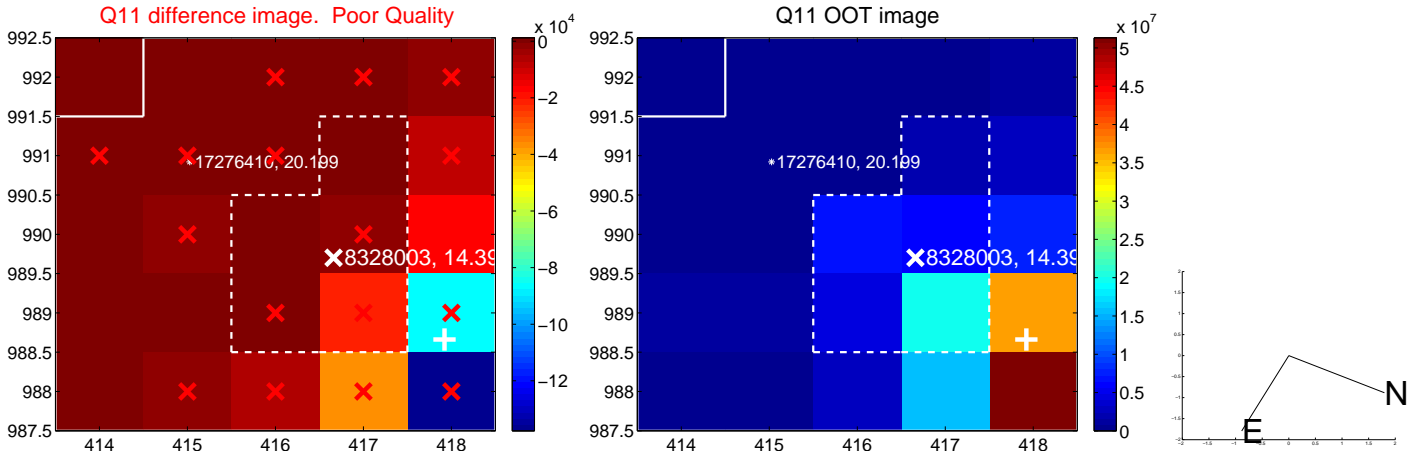
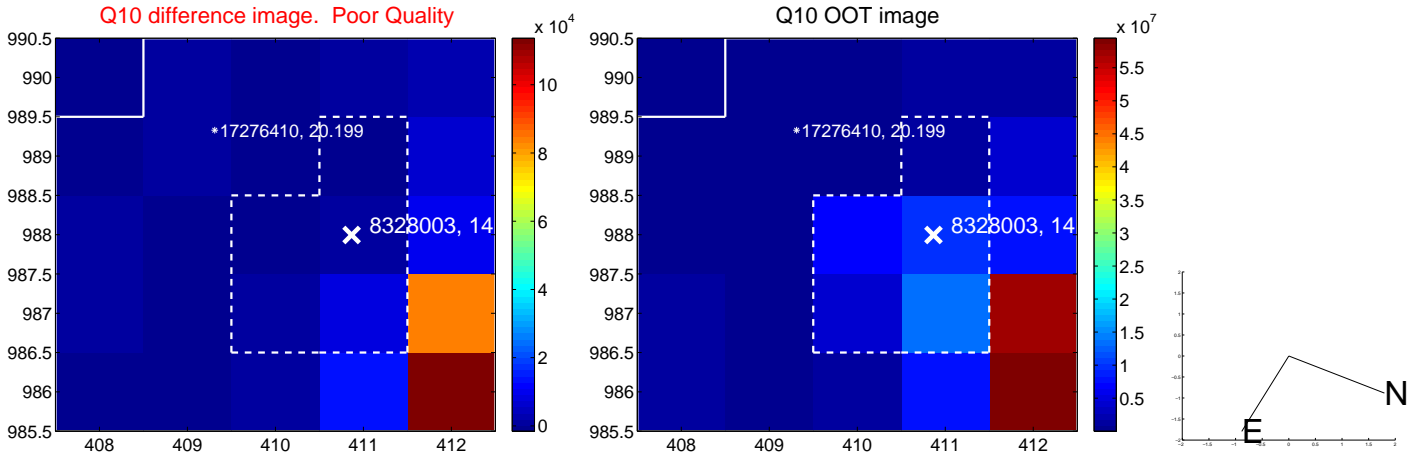
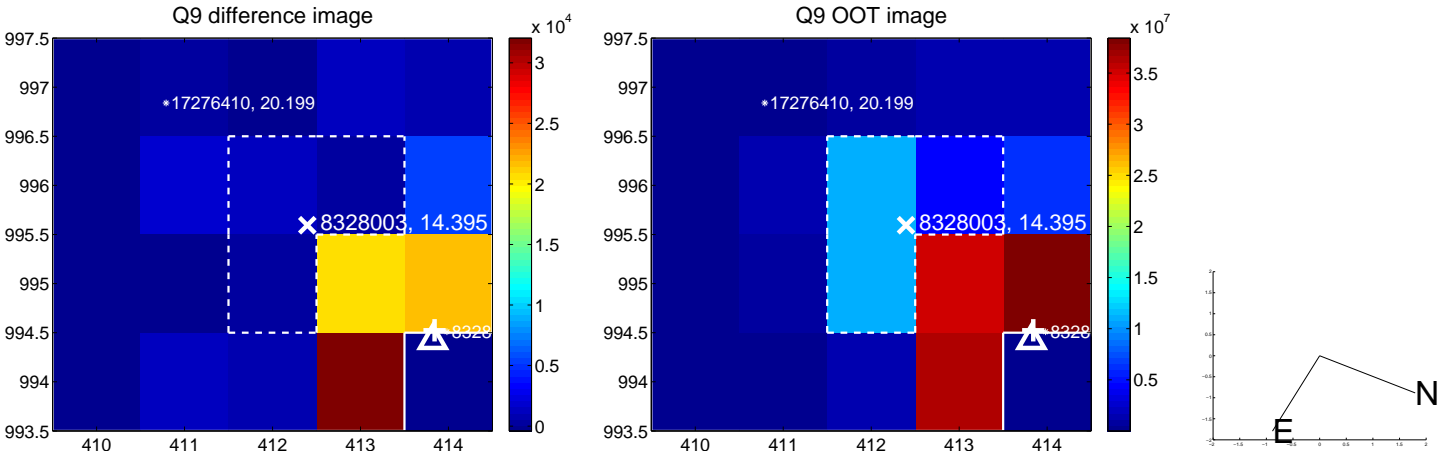
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



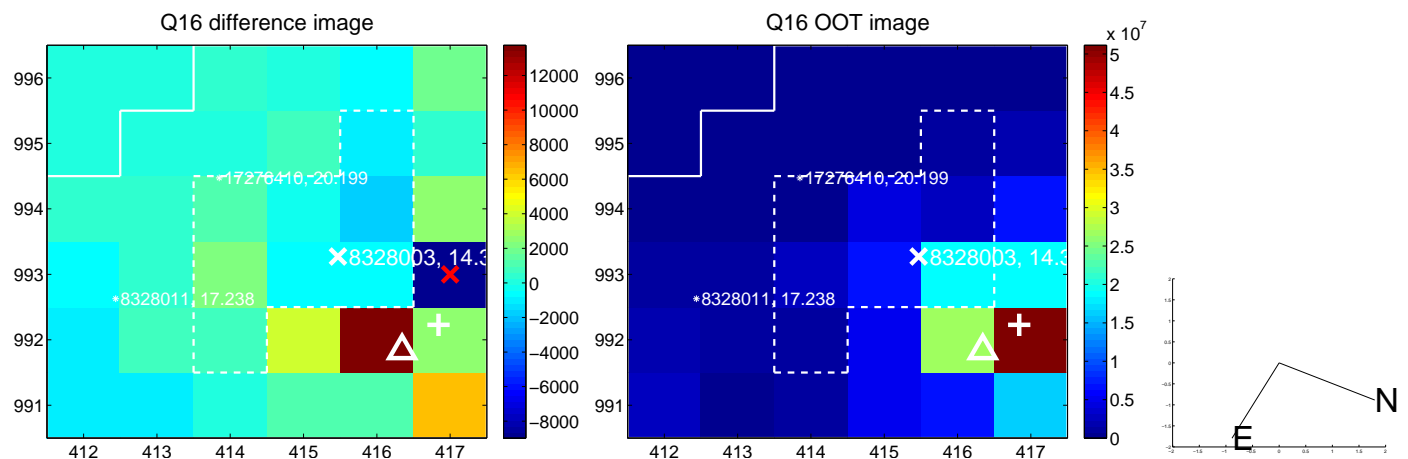
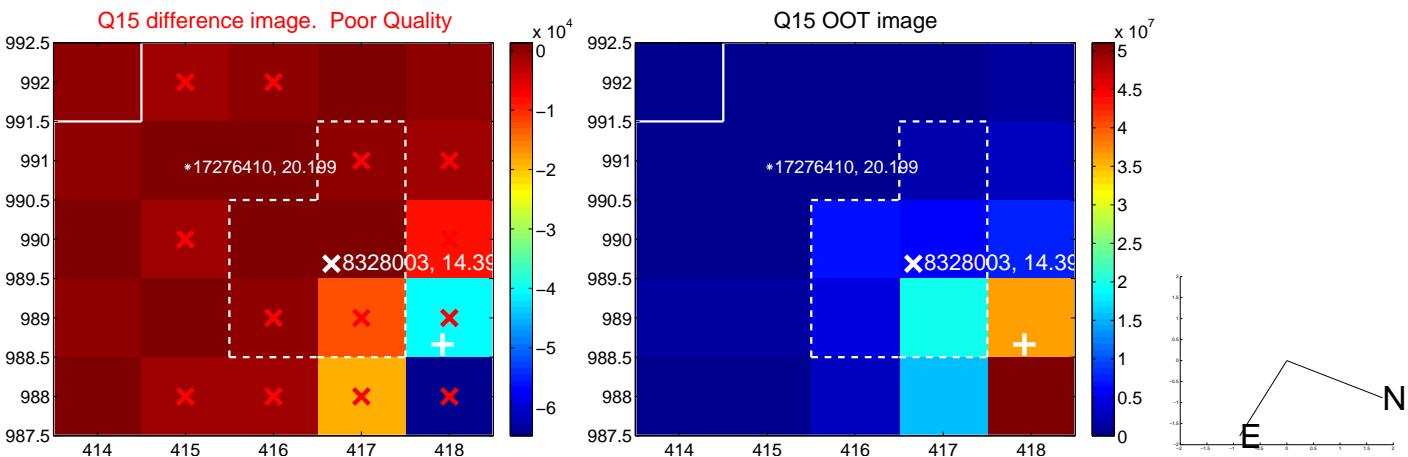
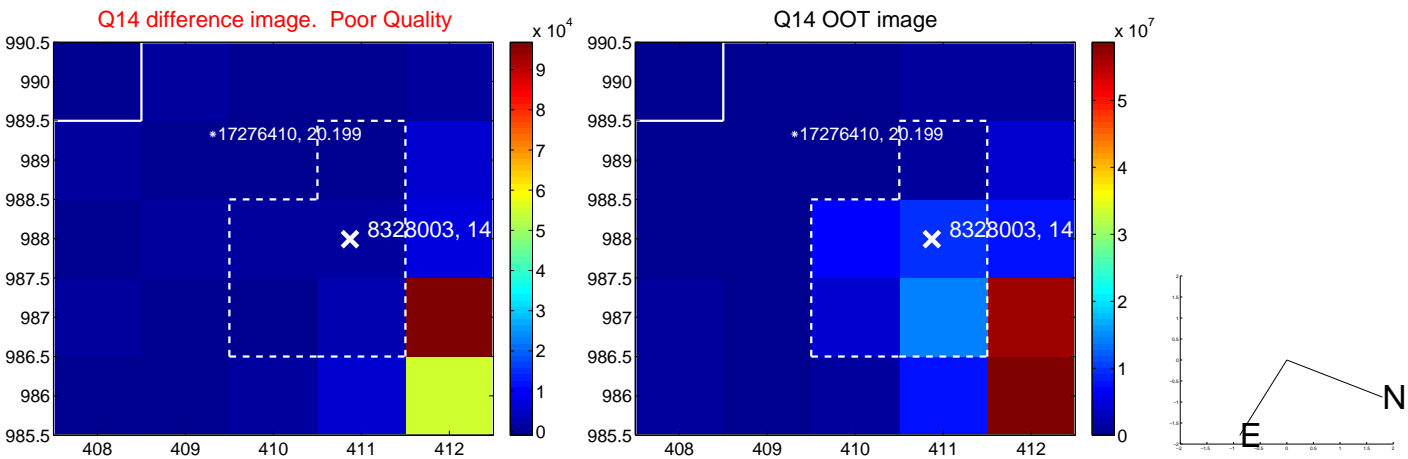
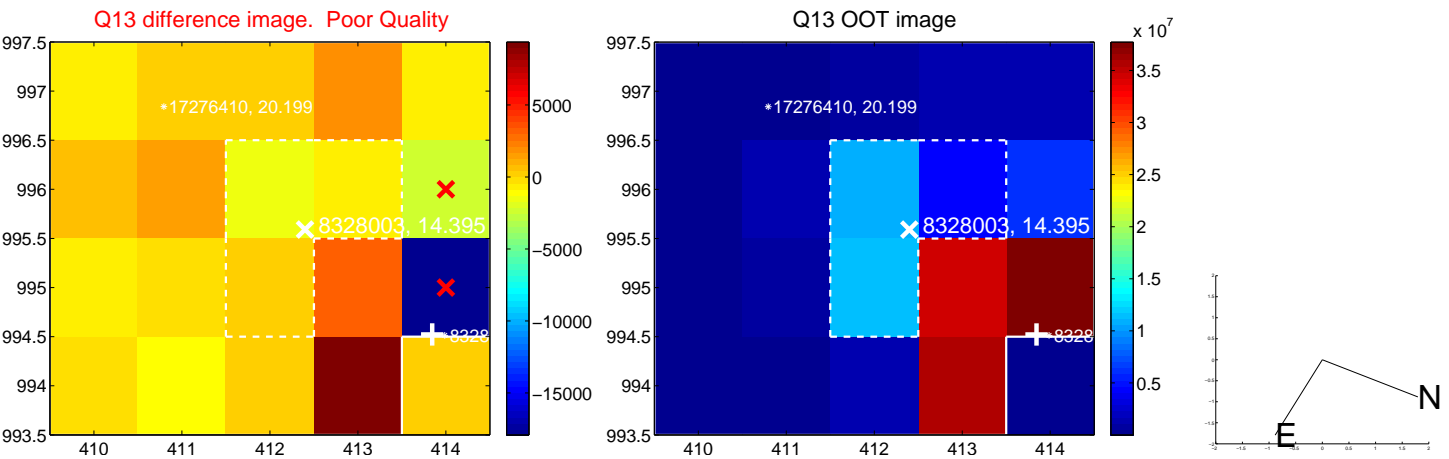
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



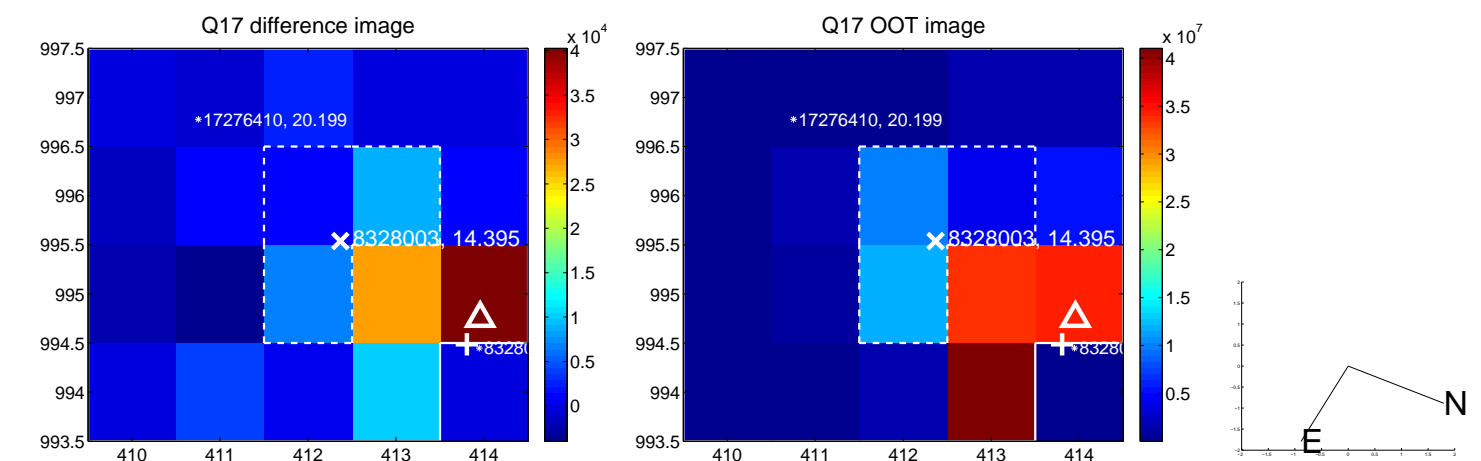
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



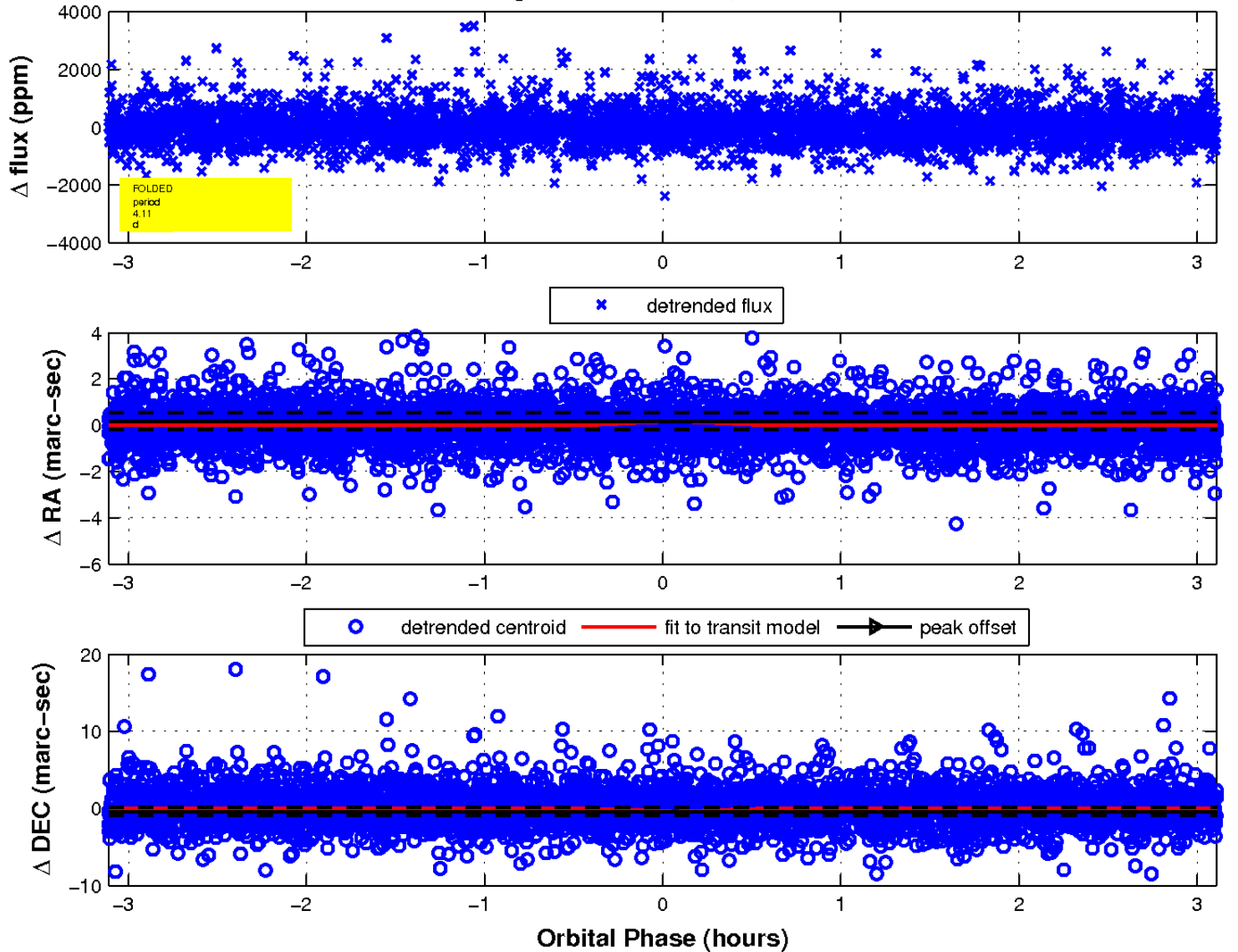
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



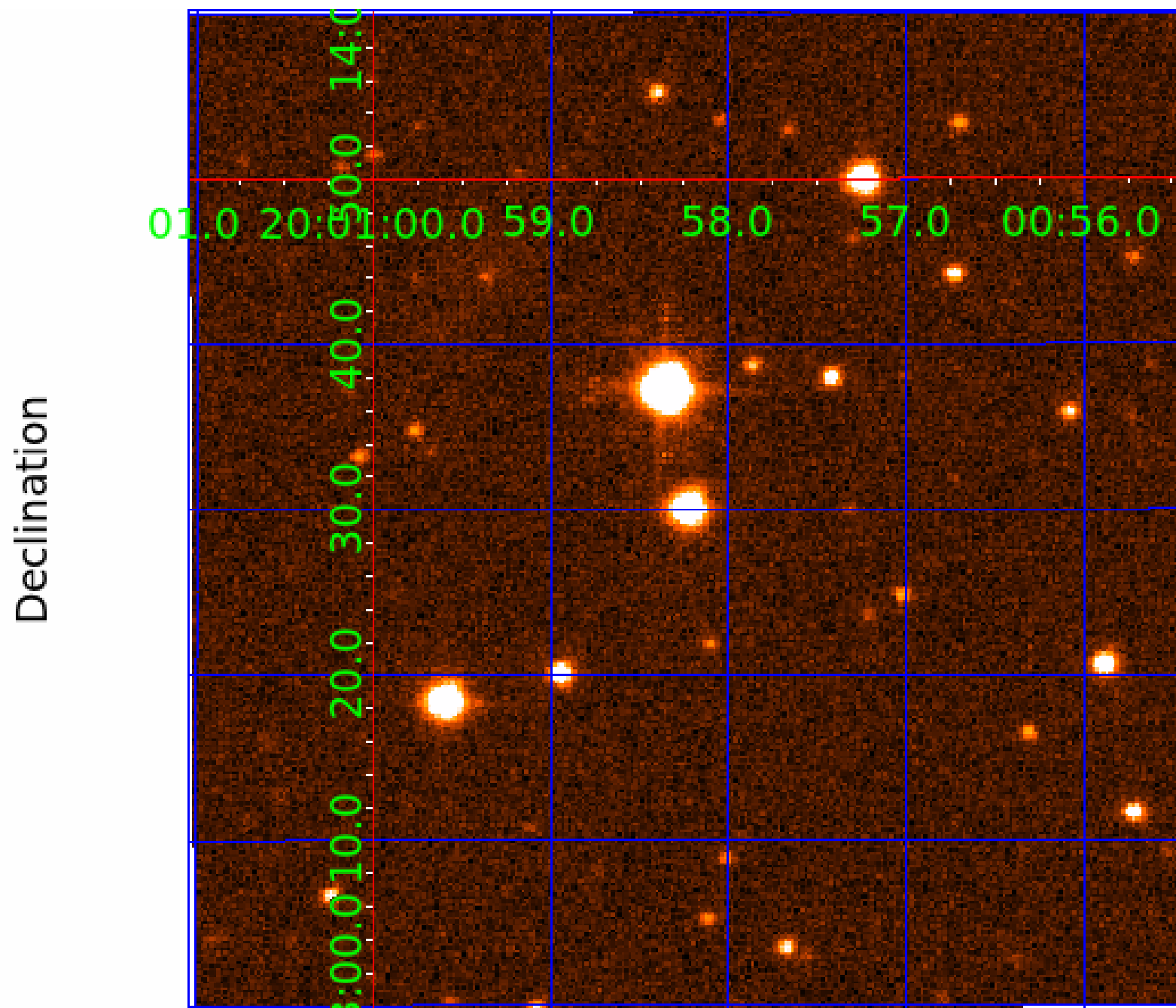
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 4 of 7



UKIRT Image



KIC 008328003

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})
008328003-01	OBS	No	0.521350	131.721910	0.0	3.784	8.1	0.0	0.97	6505	0.01	9156.18
008328003-02	OBS	No	17.087977	141.777778	2485.4	0.818	13.8	16.3	0.97	6505	4.96	87.29
008328003-03	OBS	No	13.810052	132.075326	57.8	38.472	12.9	1.9	0.97	6505	0.75	115.96
008328003-04	OBS	No	4.108740	133.645369	1463.4	1.500	12.2	-1.0	0.97	6505	3.77	583.82
008328003-05	OBS	No	11.343533	134.638700	1677.7	1.290	13.3	11.6	0.97	6505	4.07	150.74
008328003-06	OBS	No	13.052096	131.792444	1228.6	2.000	11.0	-1.0	0.97	6505	3.45	125.02
008328003-07	OBS	No	10.235624	133.143177	1032.2	1.462	10.2	8.3	0.97	6505	3.66	172.88

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008328003-01	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET
008328003-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
008328003-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
008328003-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS
008328003-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
008328003-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS
008328003-07	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET

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

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

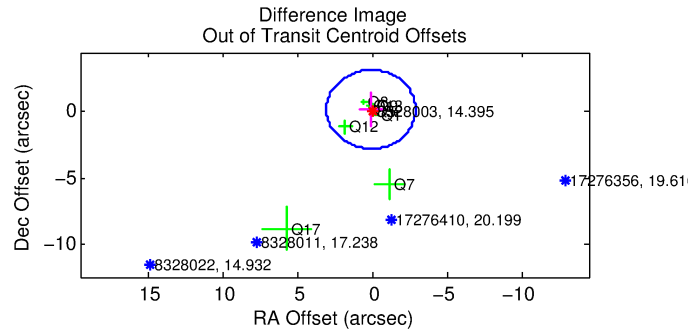
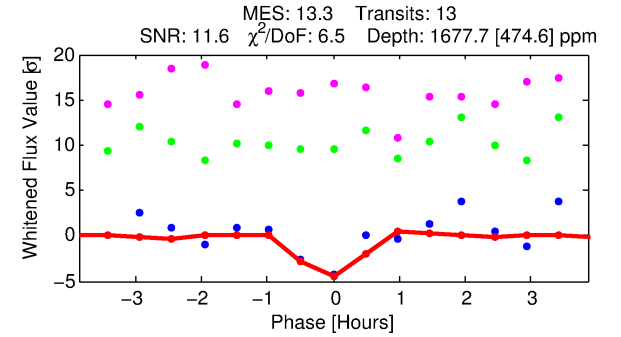
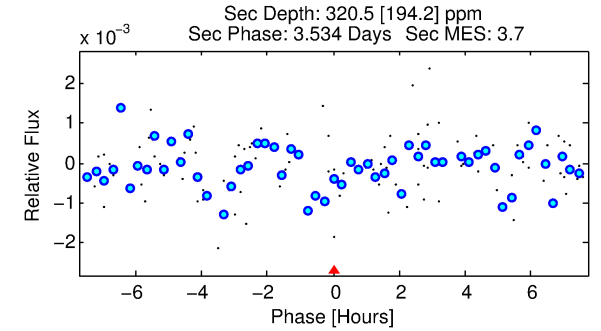
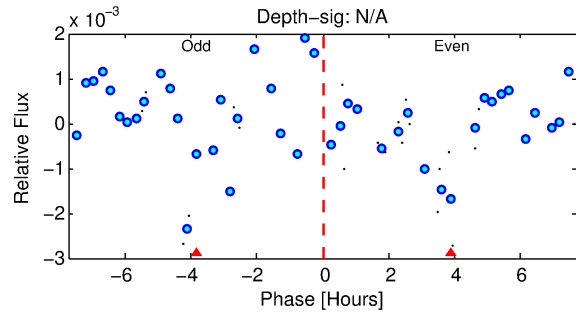
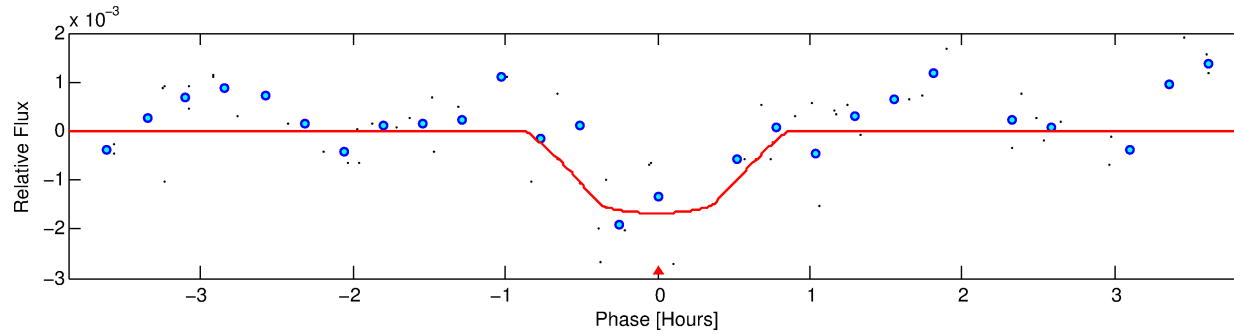
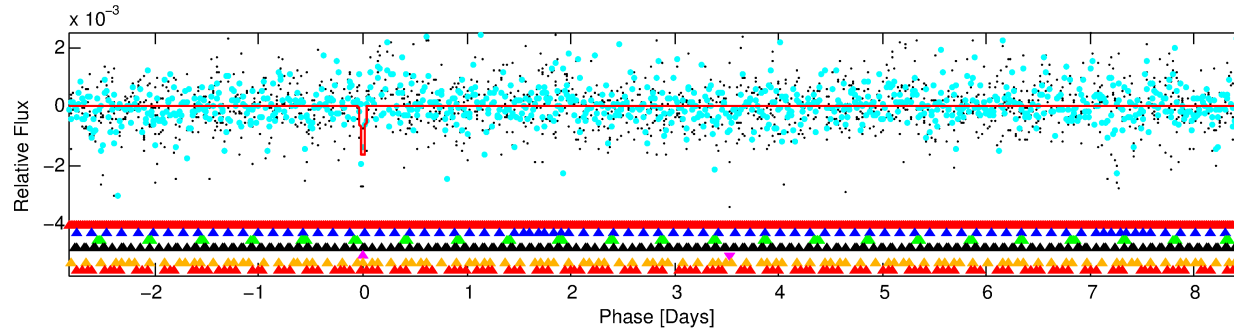
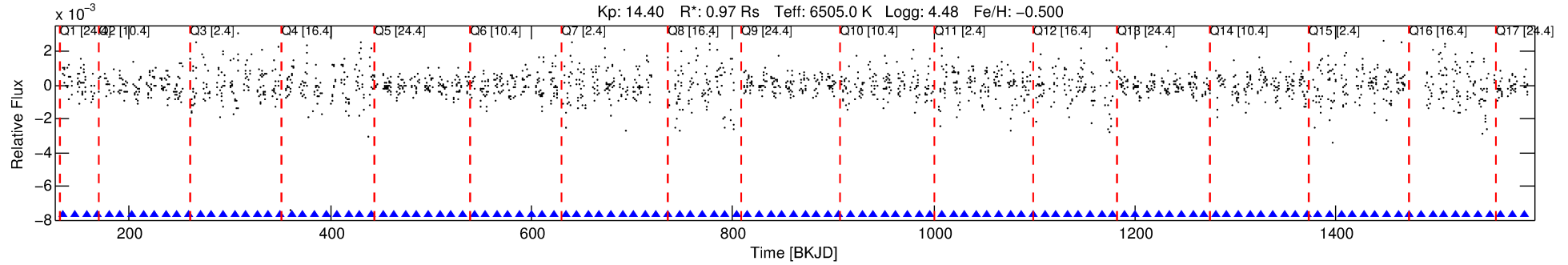
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008328003-05

No Significant Match Found

DV One-Page Summary

KIC: 8328003 Candidate: 5 of 7 Period: 11.344 d



DV Fit Results:

Period = 11.34353 [0.00013] d
Epoch = 134.6387 [0.0091] BKJD
Rp/R* = 0.0383 [0.0761]
a/R* = 67.07 [706.17]
b = 0.29 [33.93]
Seff = 150.74 [57.93]
Teq = 893 [86] K
Rp = 4.07 [8.18] Re
a = 0.1006 [0.0246] AU
Ag = 107.64 [434.93] [0.25σ]
Teffp = 4450 [4479] K [0.79σ]

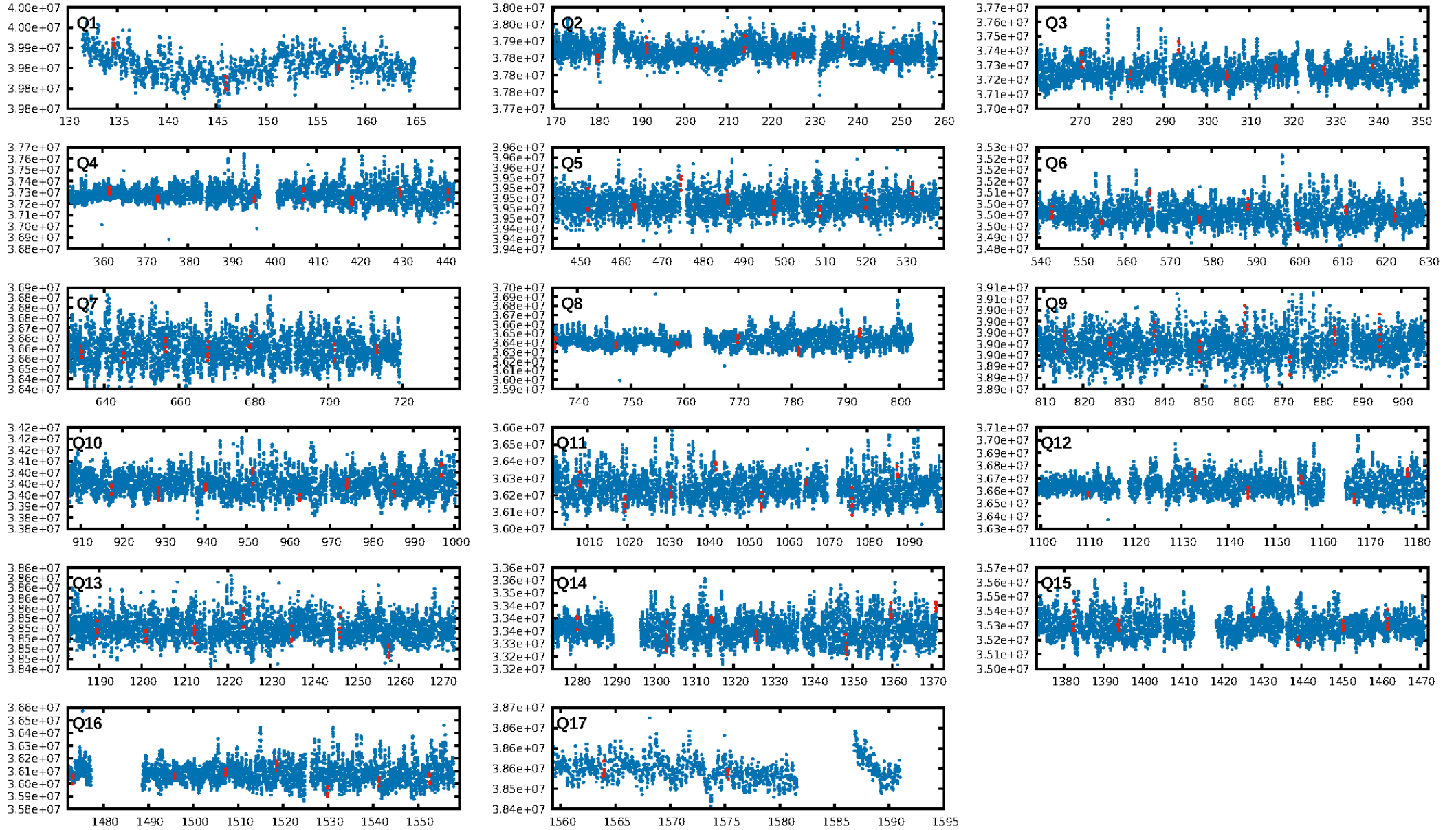
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [13.64σ]
LongPeriod-sig: 100.0% [17.23σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 3.9%
Bootstrap-pfa: 3.22e-40
RollingBand-fgt: 1.00 [12/12]
GhostDiagnostic-chr: -0.5686
Centroid-sig: 76.2%
Centroid-so: 4.427 arcsec [31.56σ]
OotOffset-rm: 0.202 arcsec [0.20σ]
KicOffset-rm: 7.301 arcsec [6.21σ]
OotOffset-st: 0/1/2/5 [8]
KicOffset-st: 1/1/2/5 [9]
DiffImageQuality-fgm: 0.22 [2/9]
DiffImageOverlap-fno: 0.00 [0/17]

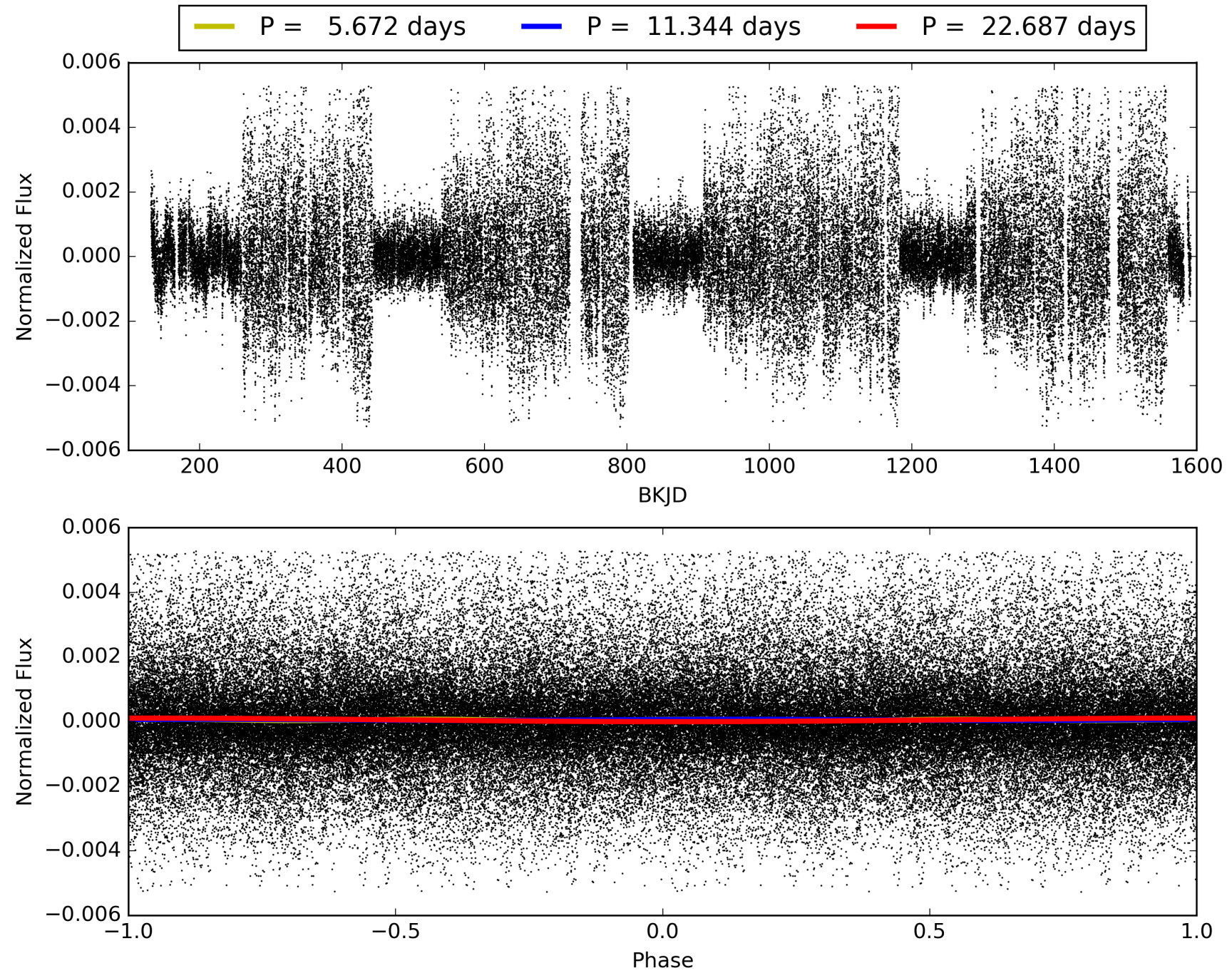
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 05:46:58 Z

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

TCE 008328003-05, PDC Light Curves

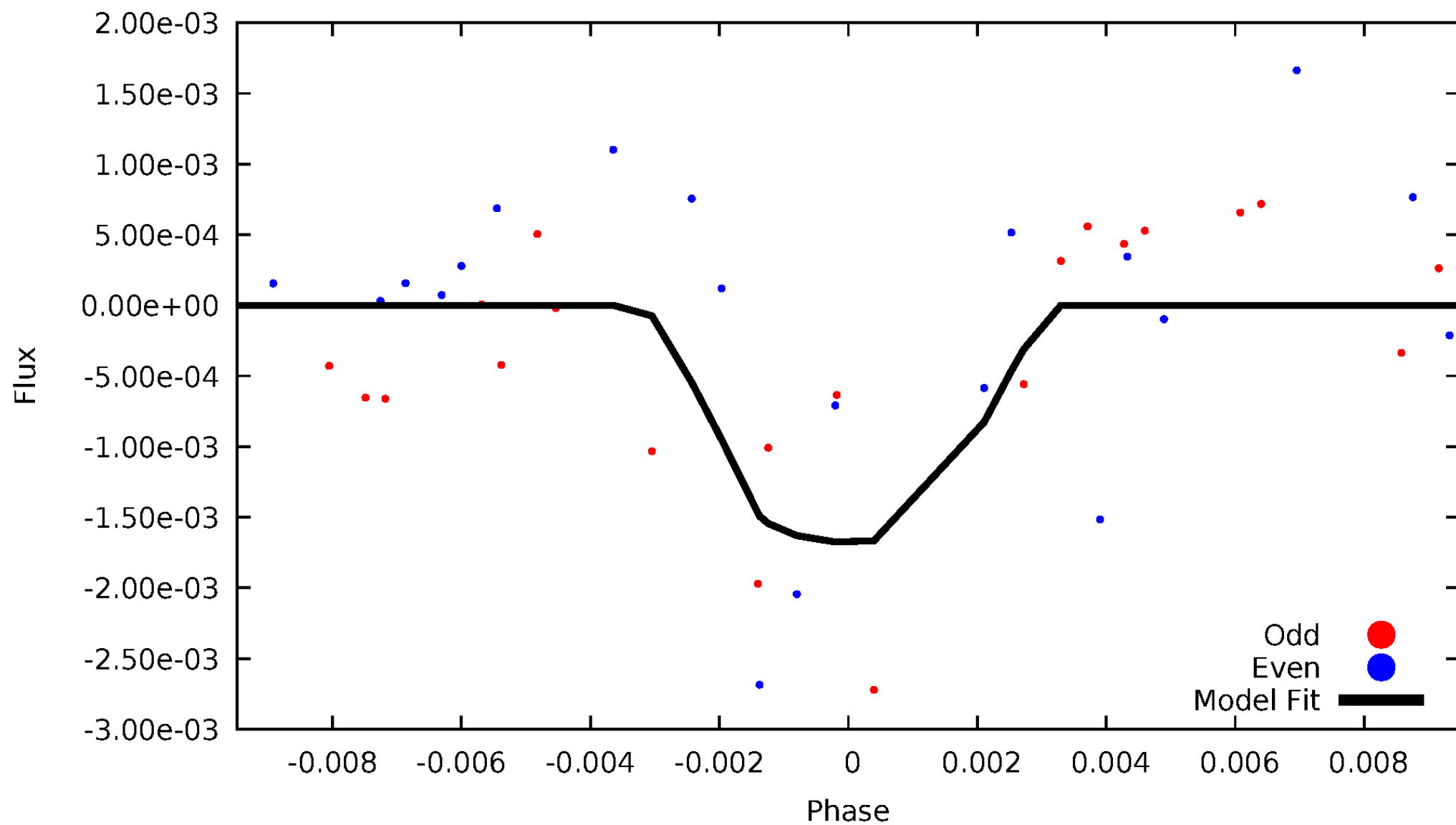


TCE 008328003-05



DV Odd/Even

TCE 008328003-05

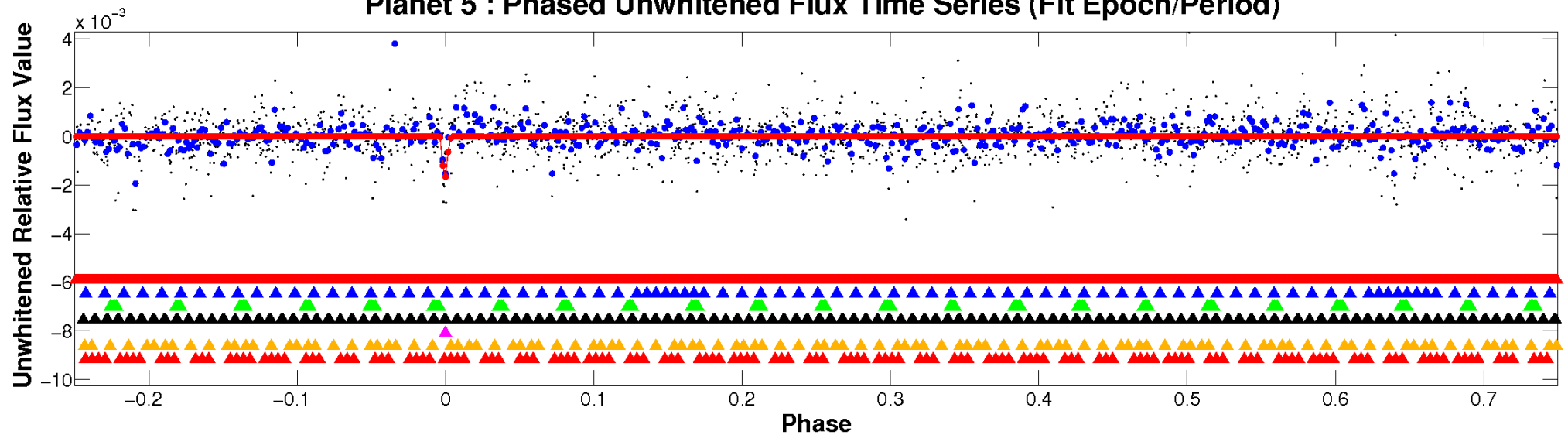


ALT Odd/Even

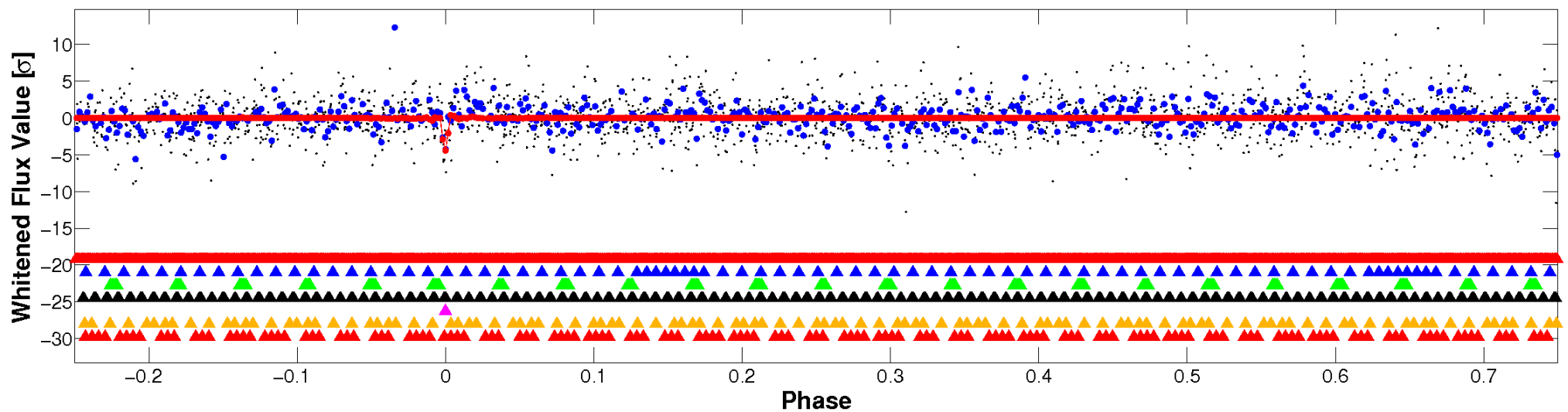
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

Planet 5 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

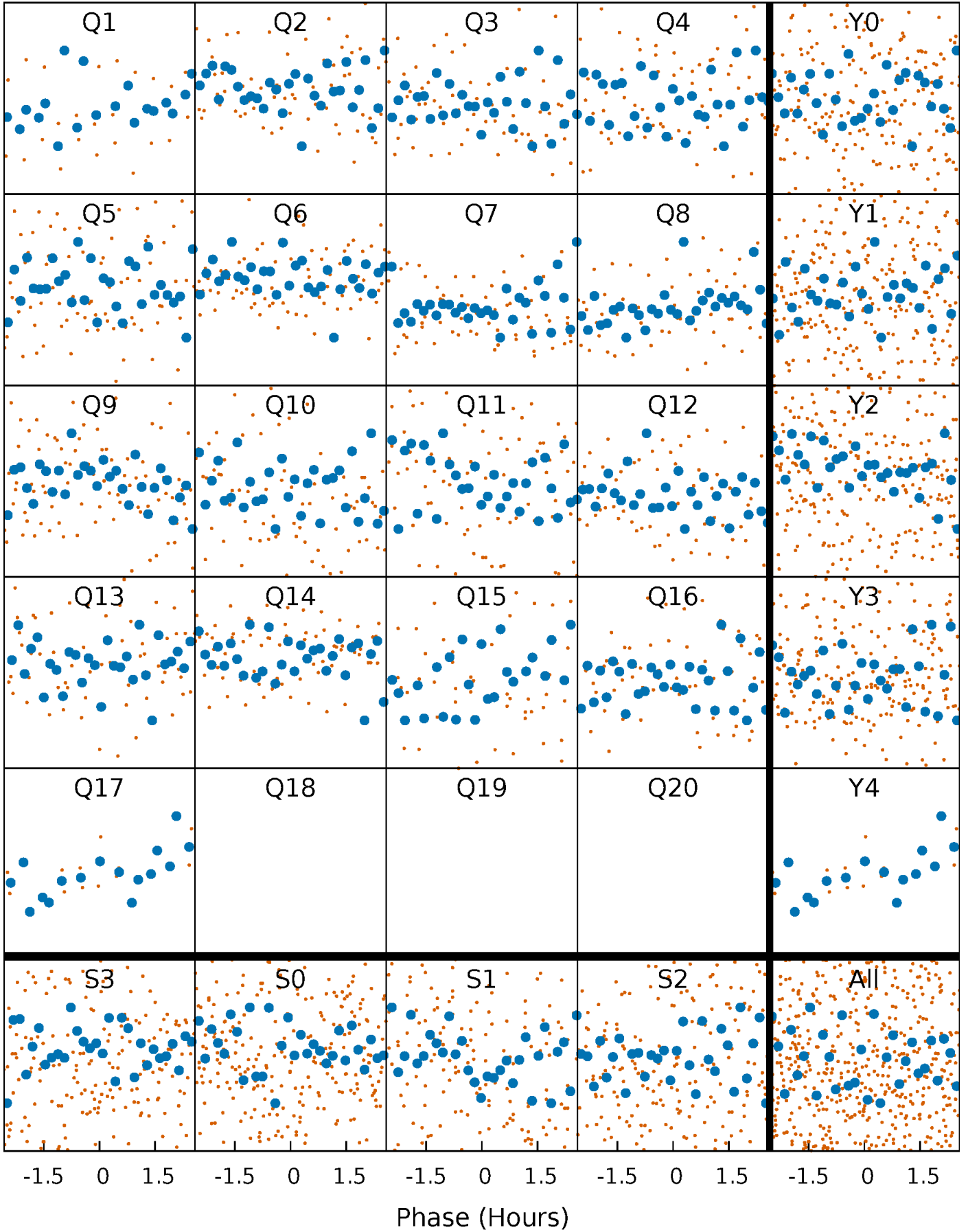


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



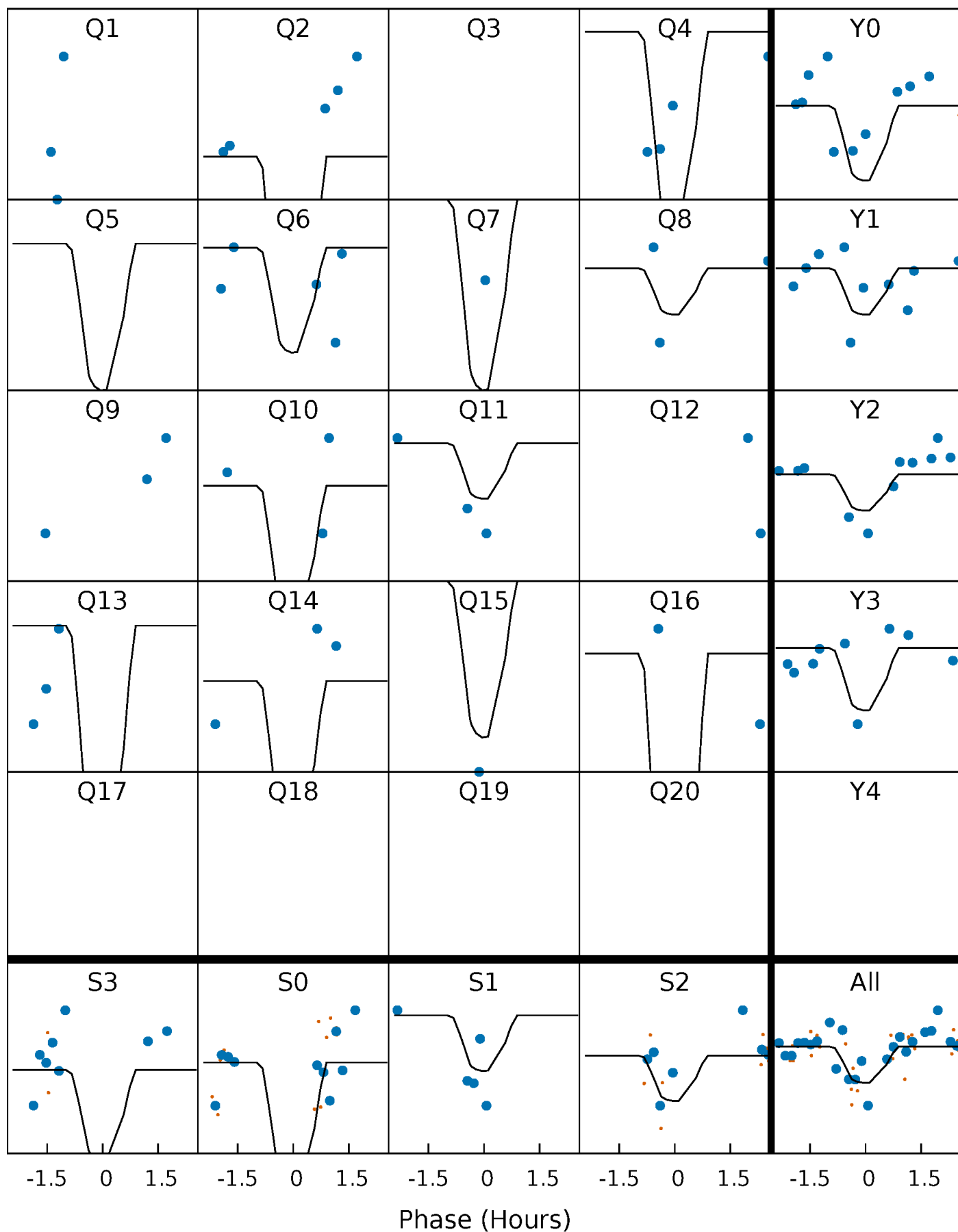
PDC Quarter-Phased Transit Curves

TCE 008328003-05 P= 11.343533 Days $T_0=134.638700$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 008328003-05 $P = 11.343533$ Days $T_0 = 134.638700$ (BKJD)

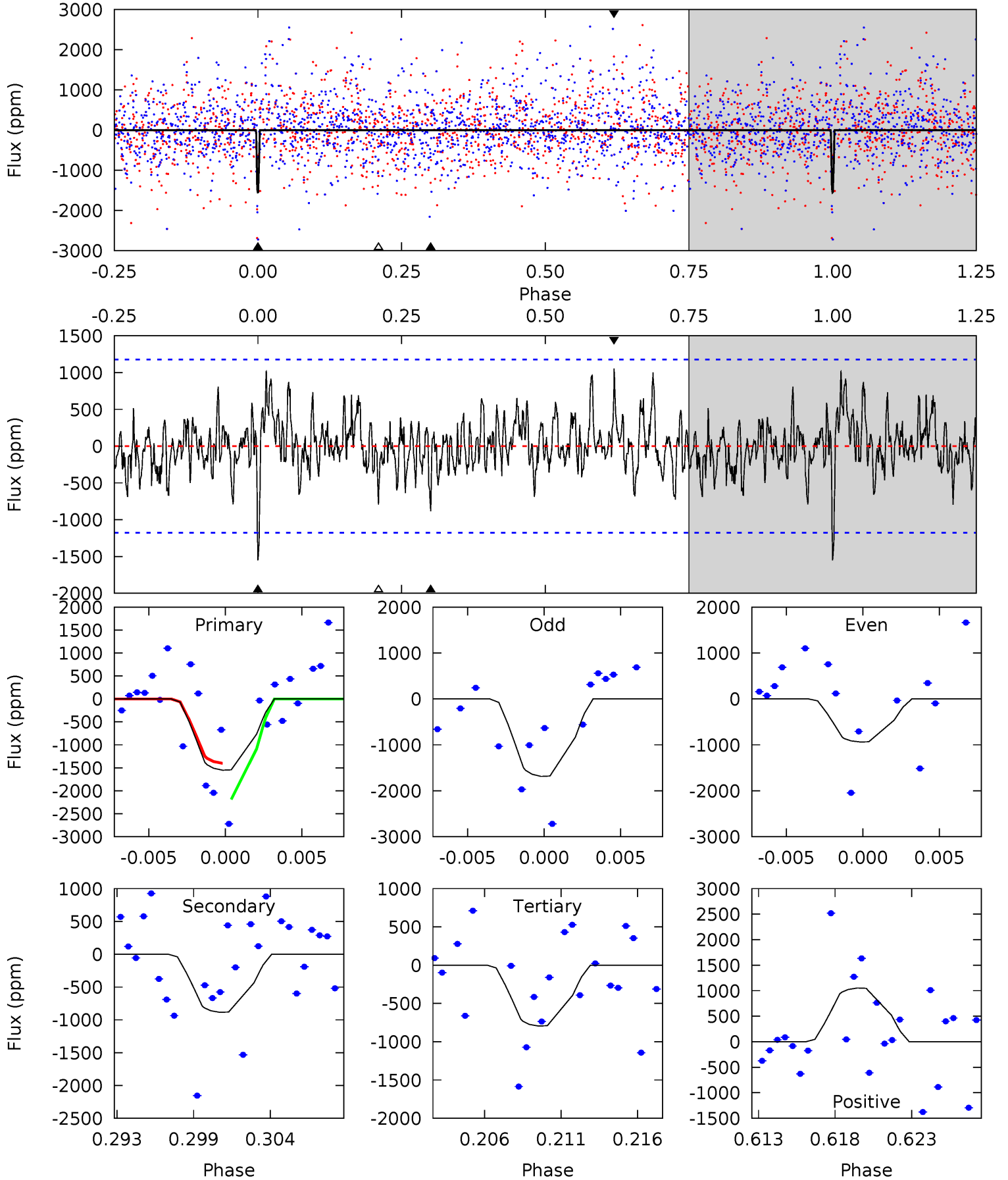


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

008328003-05, P = 11.343533 Days, E = 123.295167 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.79	3.87	3.48	4.61	5.15	2.80	1.31	3.31	2.18	0.39	-0.73	1.55	1.00	0.40	1.60



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 008328003

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6505^{+155}_{-214}	$4.483^{+0.050}_{-0.200}$	$-0.500^{+0.250}_{-0.350}$	$0.975^{+0.278}_{-0.093}$	$1.054^{+0.119}_{-0.146}$	$1.604^{+0.418}_{-0.805}$
	+2%/-3%	+1%/-4%	+50%/-70%	+29%/-10%	+11%/-14%	+26%/-50%
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 008328003-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-885 ± 228	$7.99^{+7.40}_{-5.06}$	1272^{+93}_{-61}	4344^{+2520}_{-882}	74^{+493}_{-54}
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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

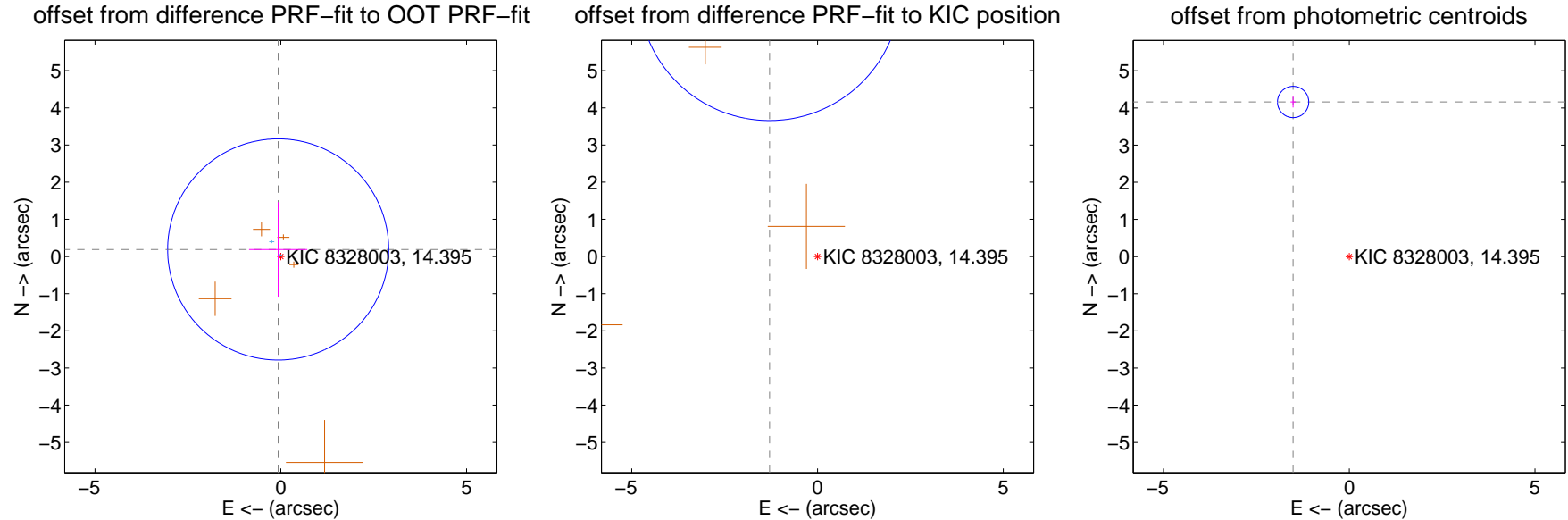
DV Centroid Data

Supplemental centroid analysis for 008328003-05. Kepler magnitude: 14.39. Transit SNR 11.58

There are 2 quarters with good PRF difference image offsets

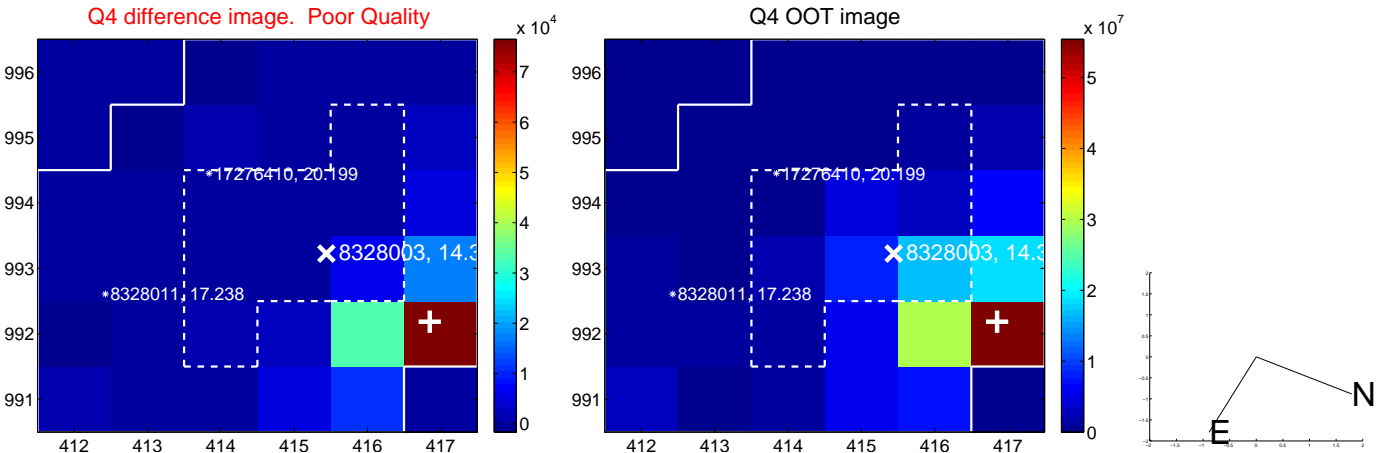
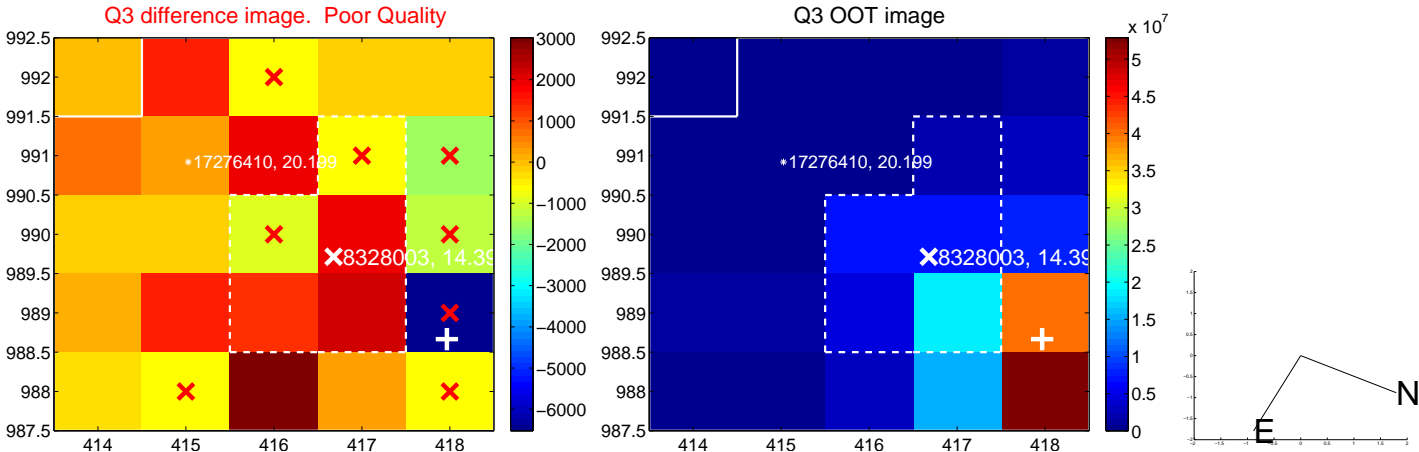
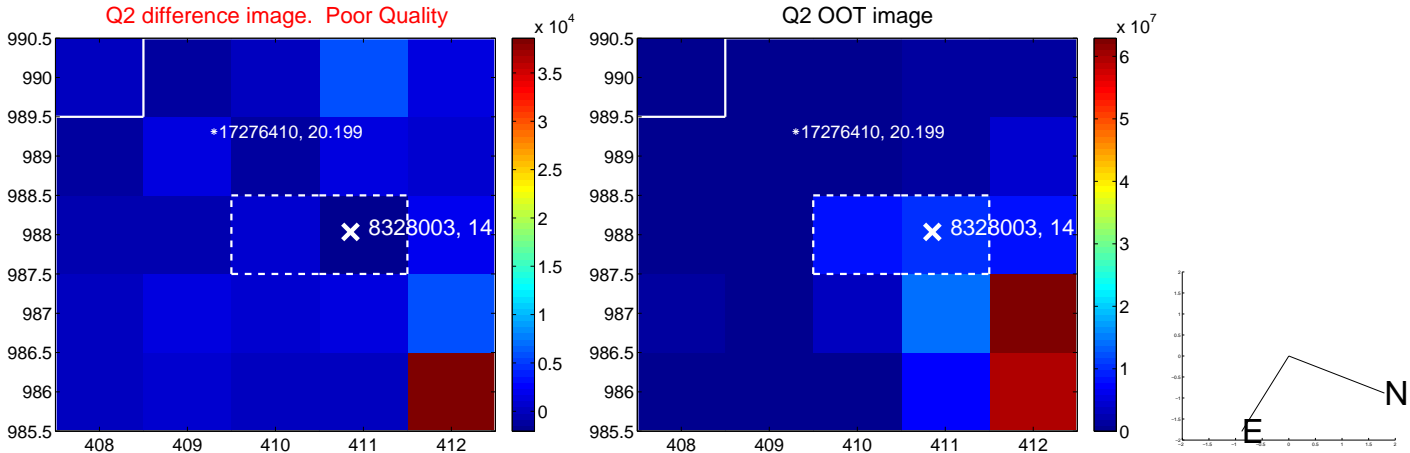
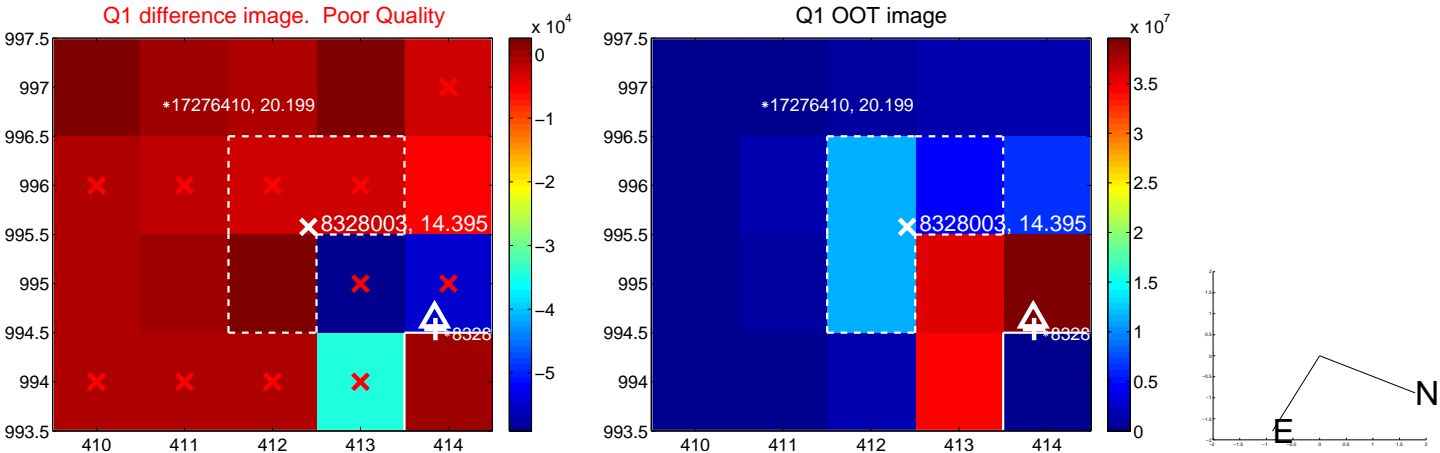
The OOT PRF centroid is offset from the target star catalog position by about 7.10 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.202 ± 0.992	0.20	0.070 ± 0.785	0.190 ± 1.270
PRF-fit source offset from KIC position	7.301 ± 1.176	6.21	1.291 ± 0.726	7.186 ± 1.283
photometric centroid source offset	4.43 ± 0.14	31.56	1.51 ± 0.07	4.16 ± 0.15

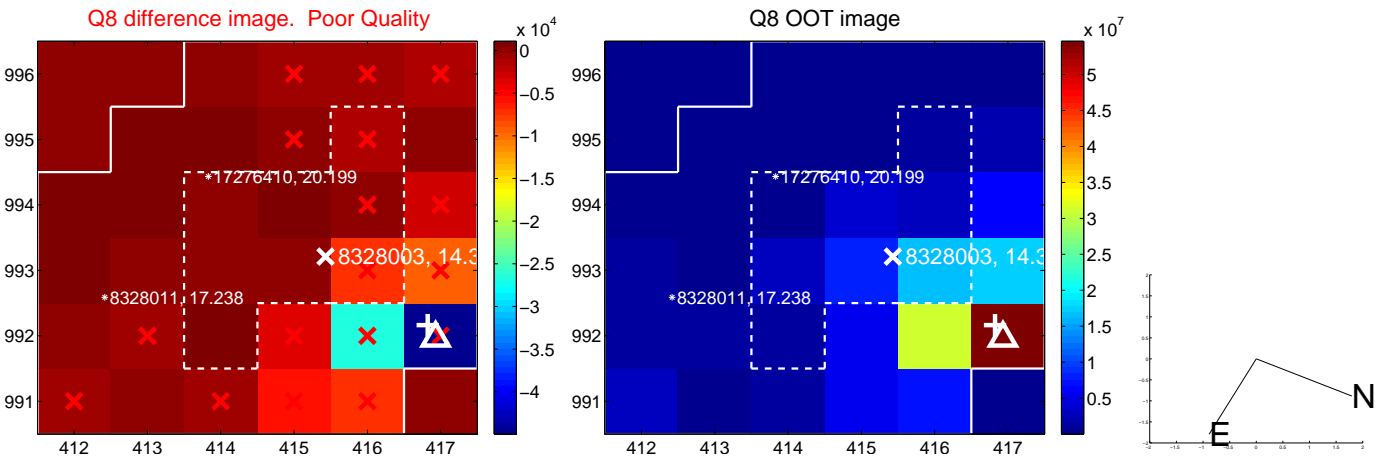
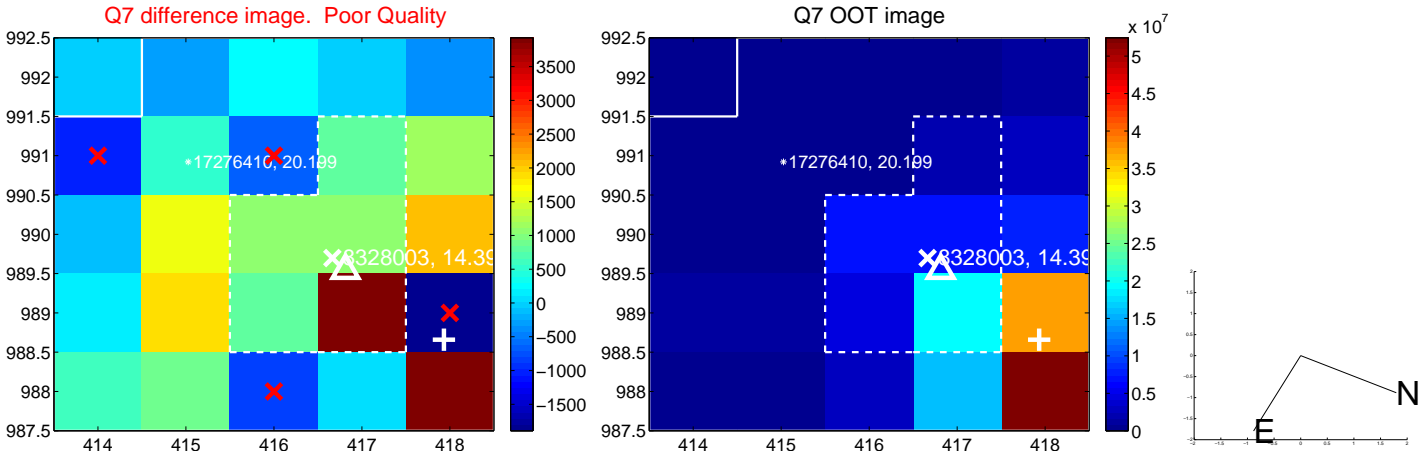
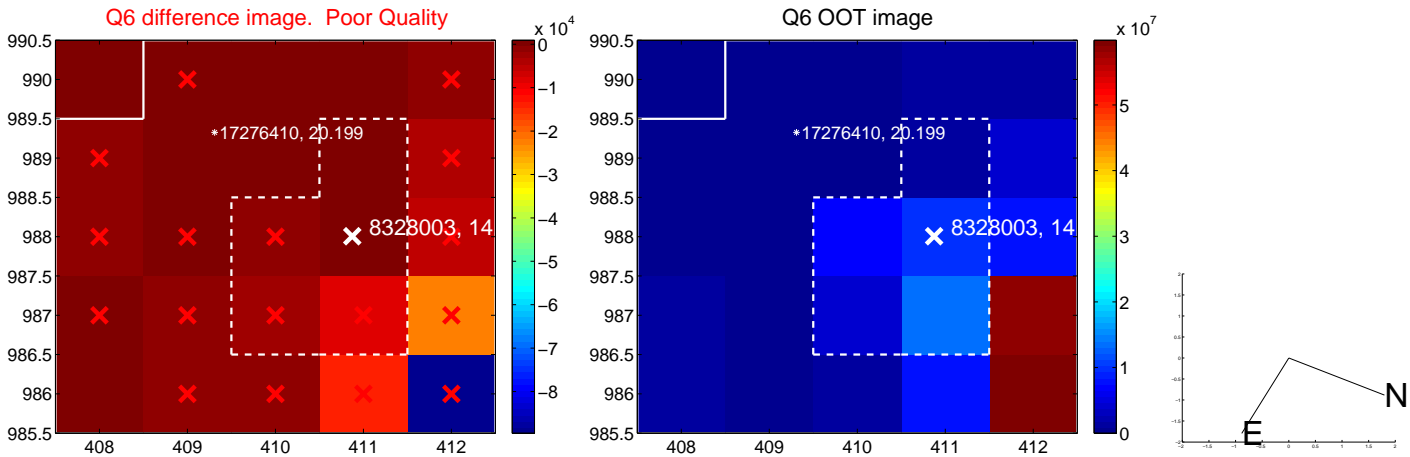
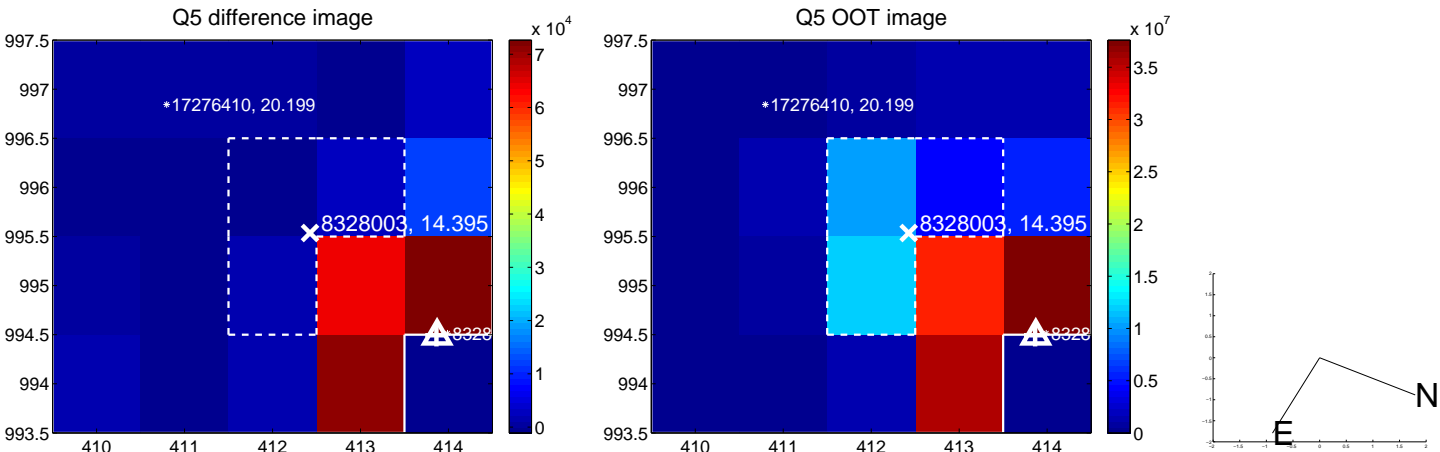


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

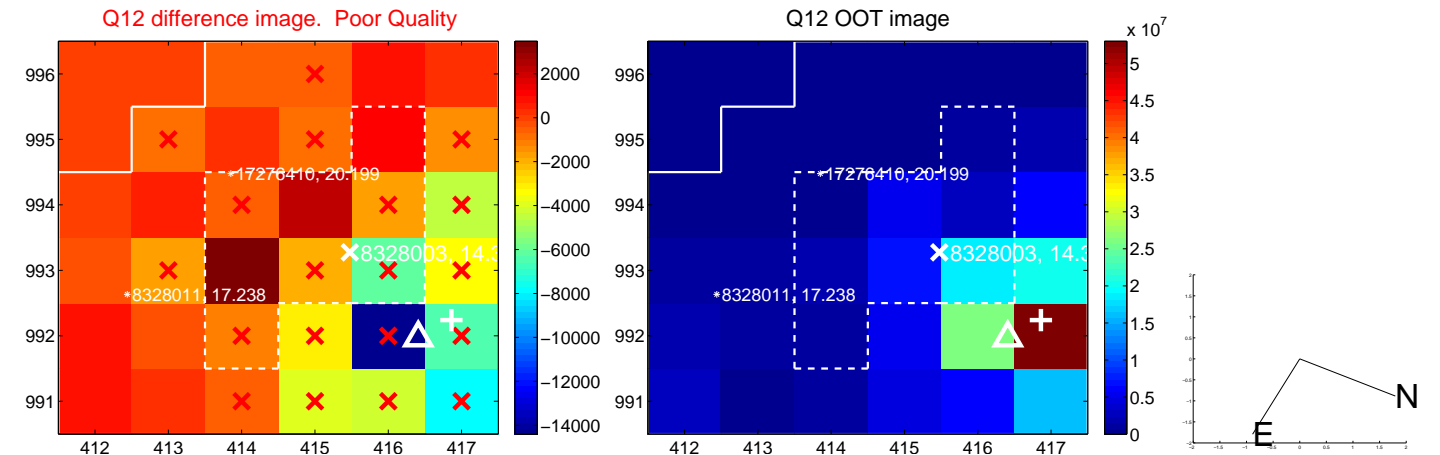
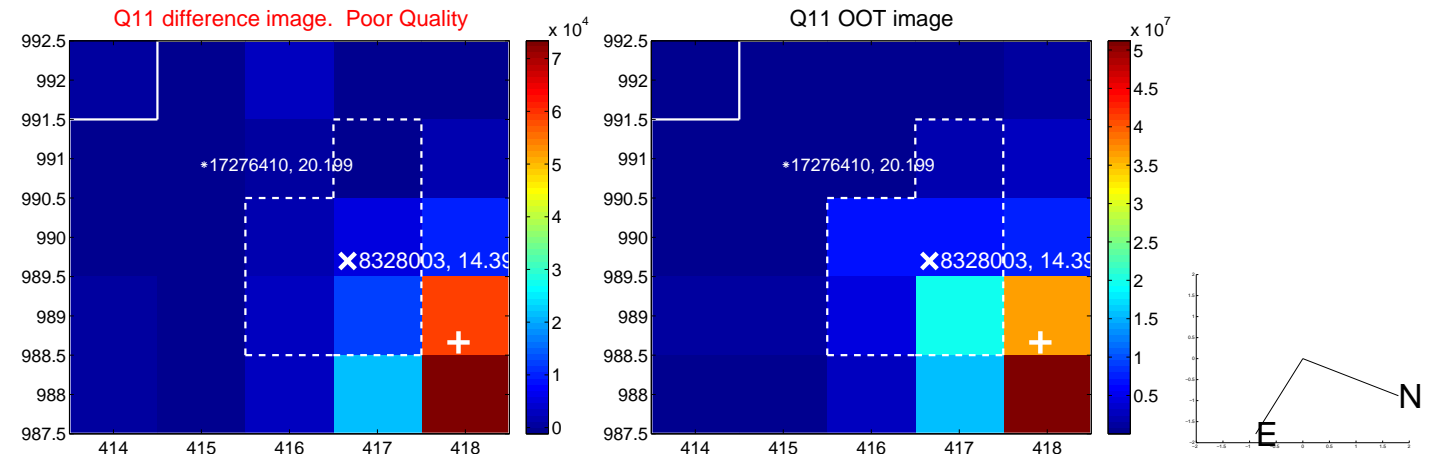
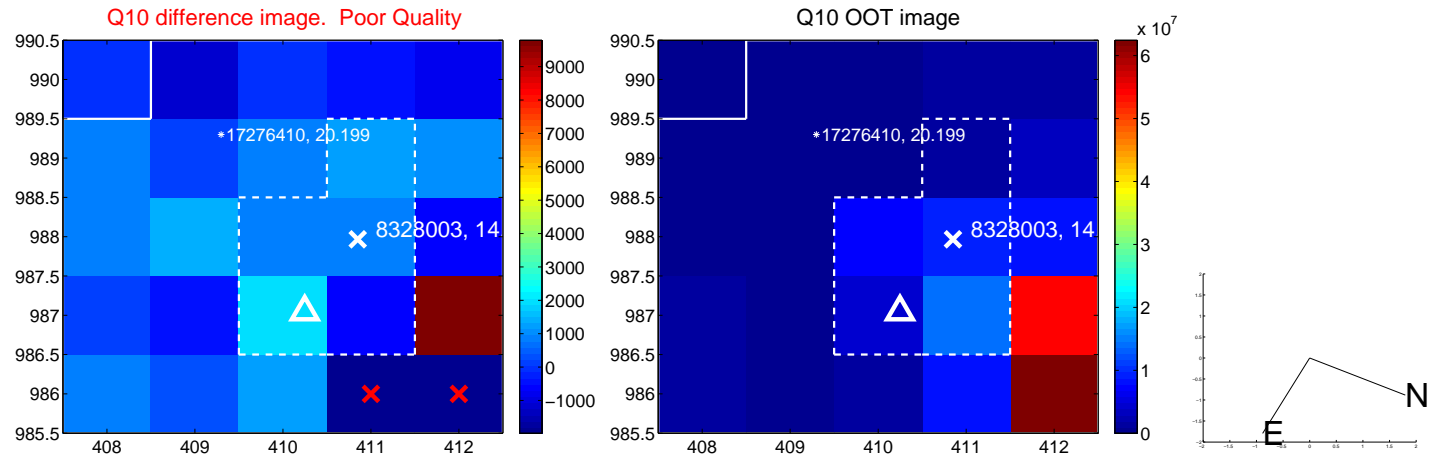
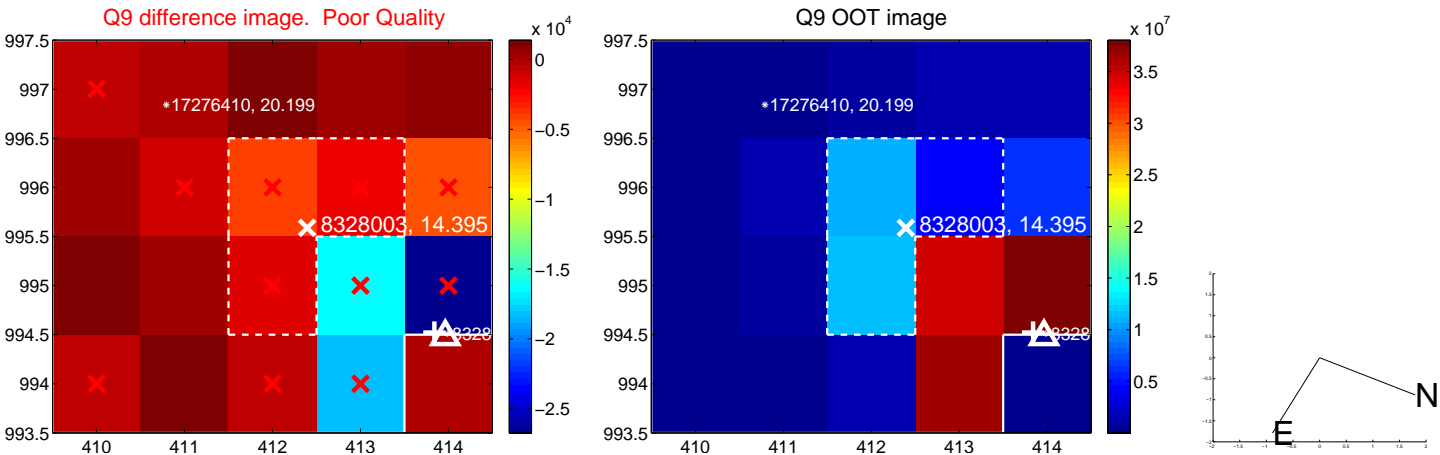
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



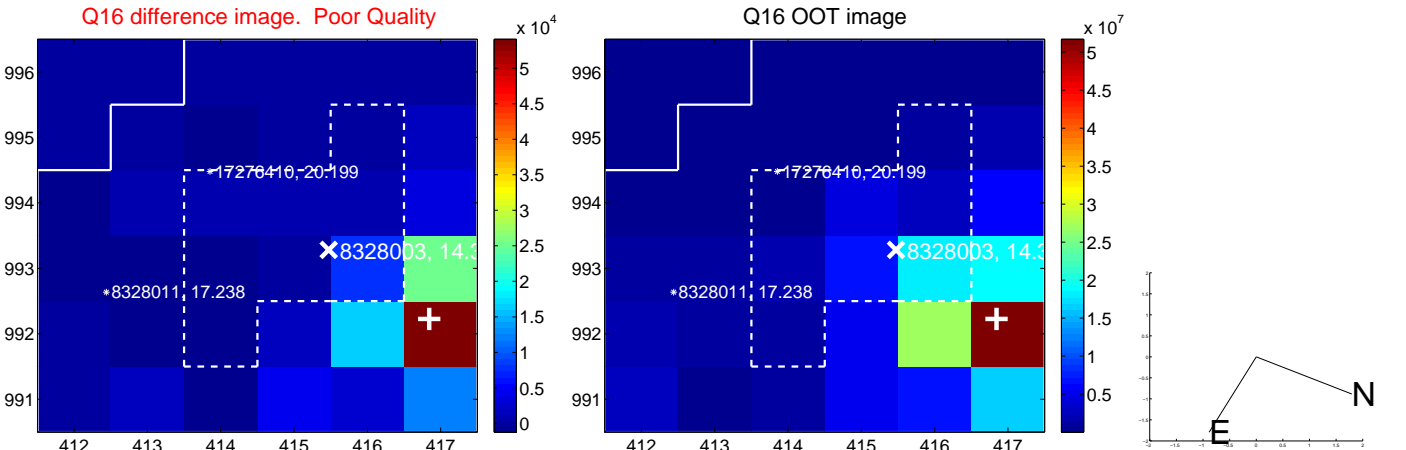
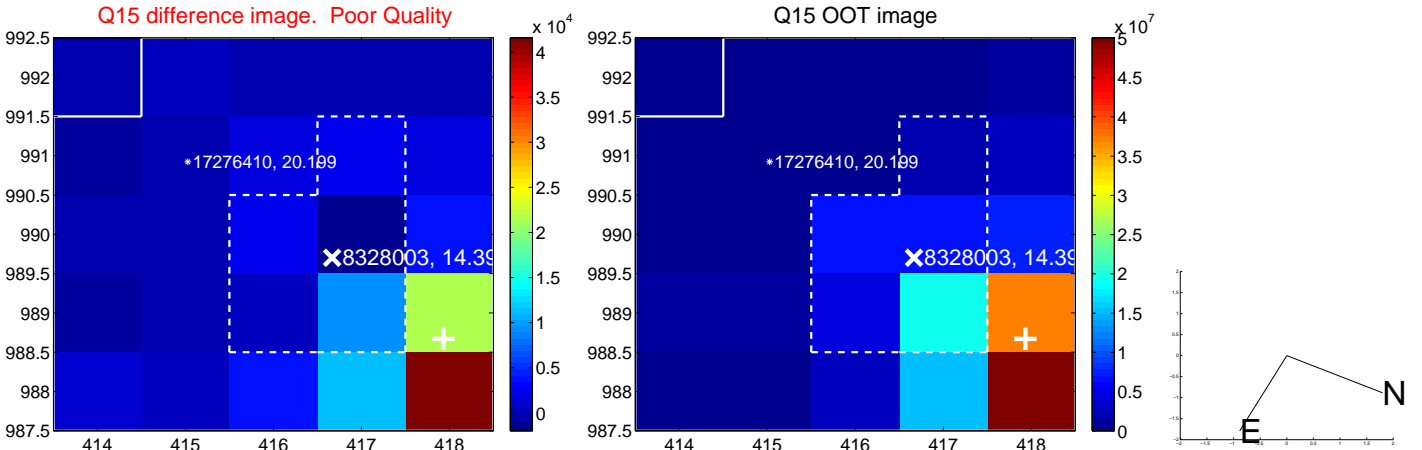
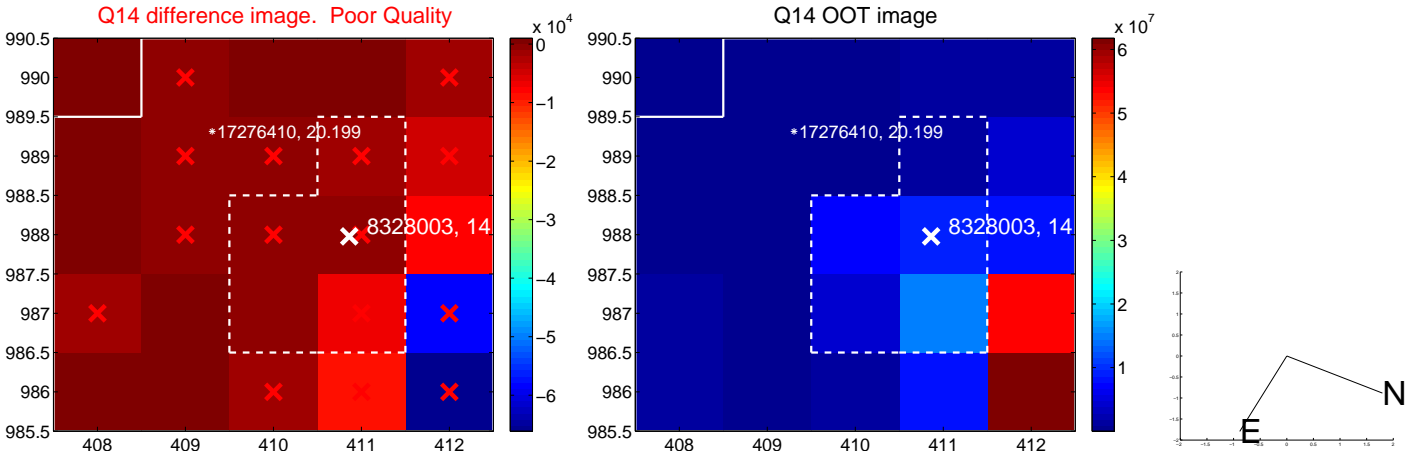
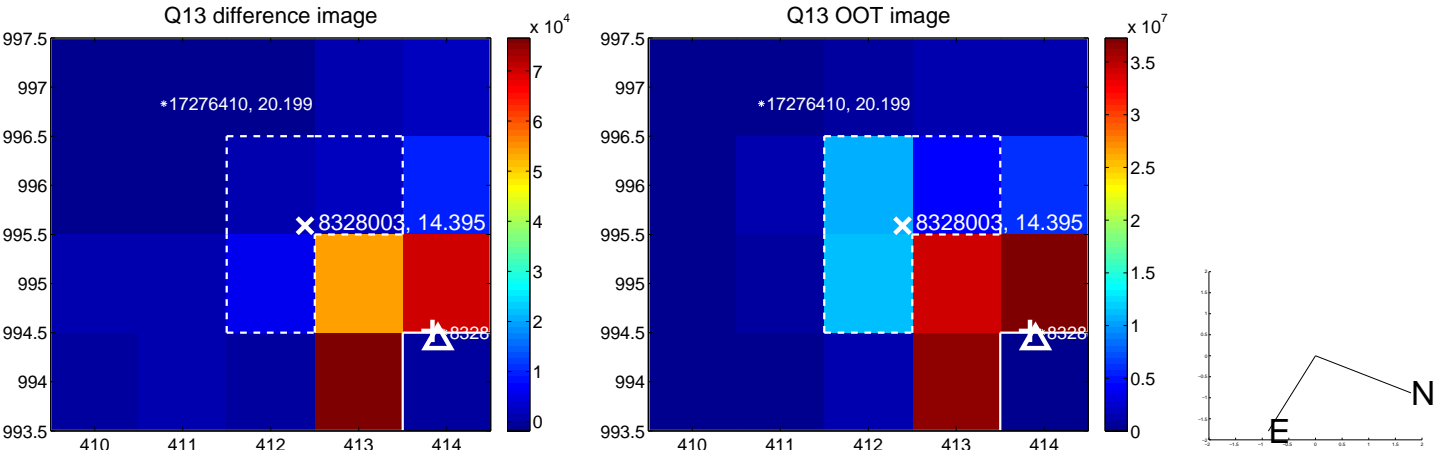
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



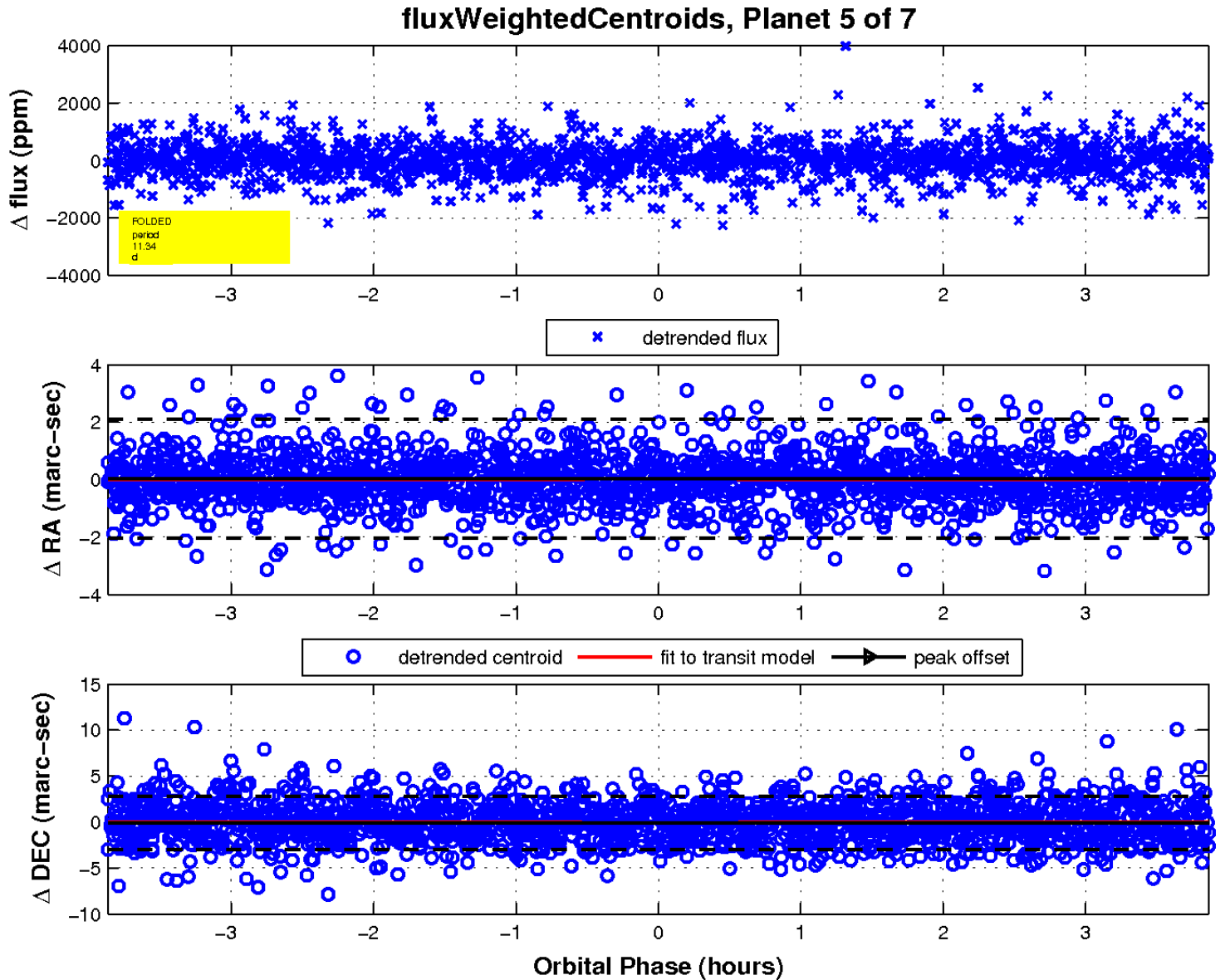
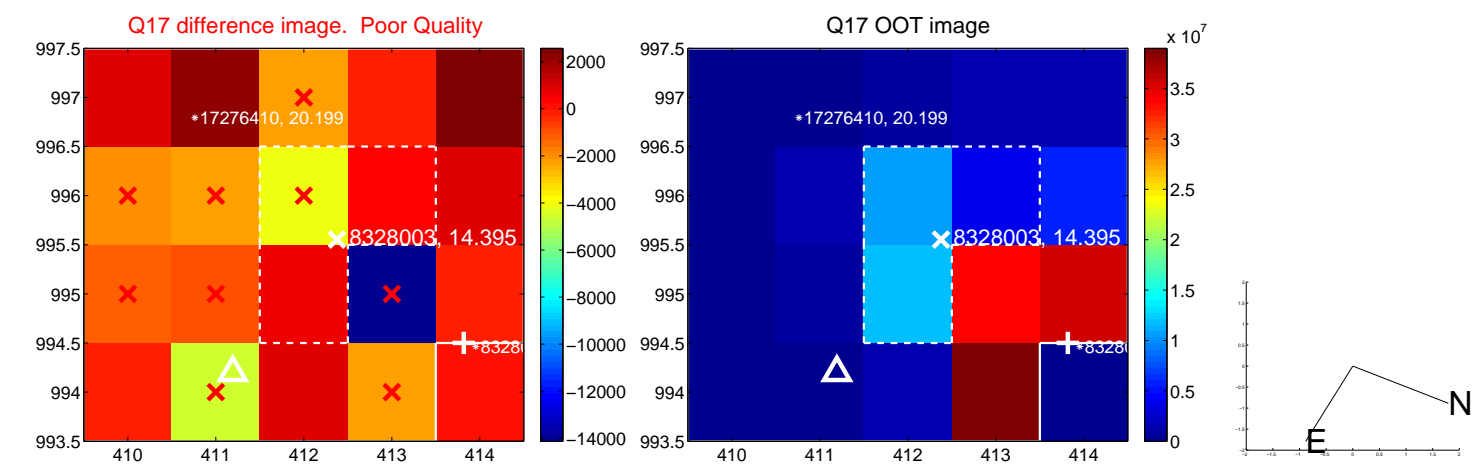
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



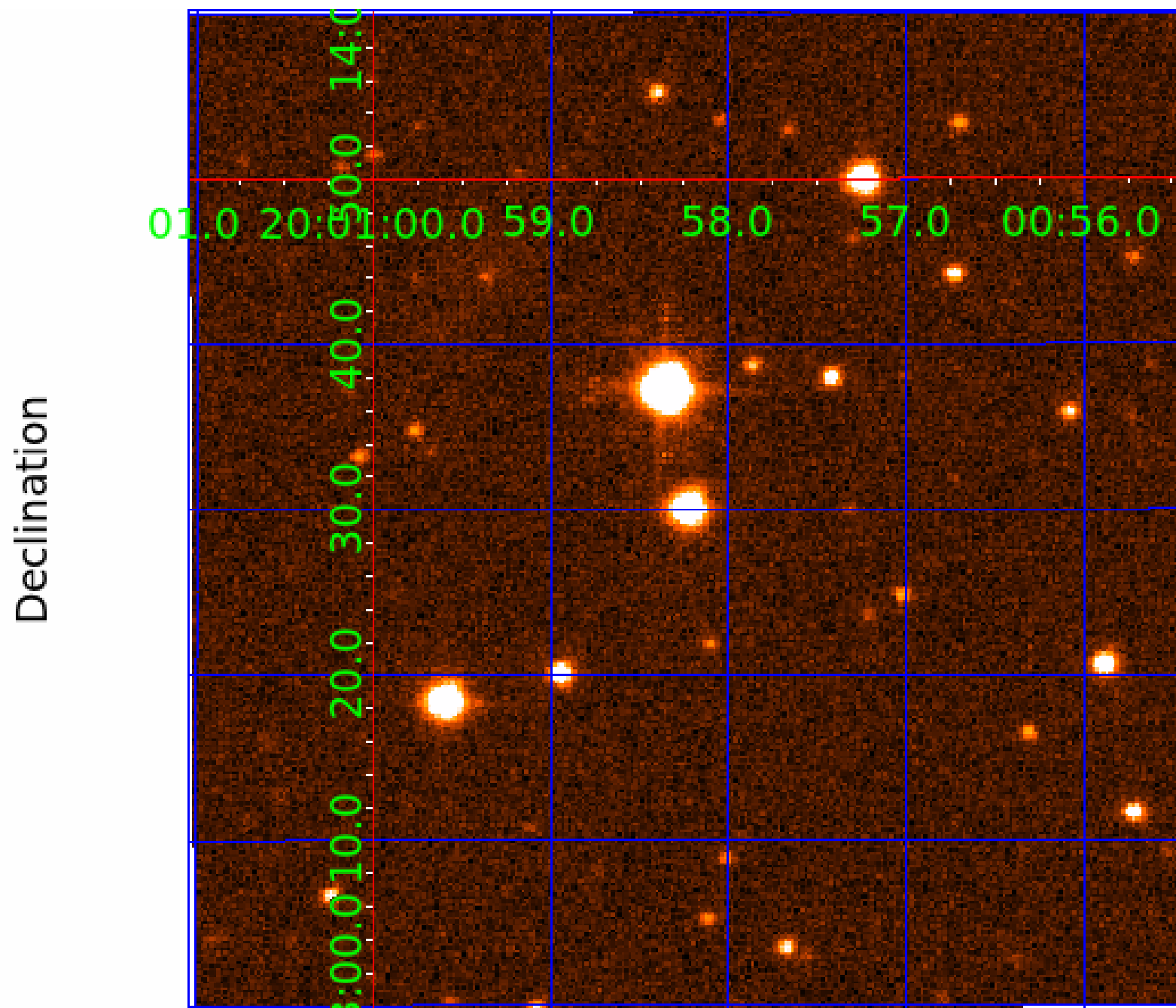
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 008328003

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})
008328003-01	OBS	No	0.521350	131.721910	0.0	3.784	8.1	0.0	0.97	6505	0.01	9156.18
008328003-02	OBS	No	17.087977	141.777778	2485.4	0.818	13.8	16.3	0.97	6505	4.96	87.29
008328003-03	OBS	No	13.810052	132.075326	57.8	38.472	12.9	1.9	0.97	6505	0.75	115.96
008328003-04	OBS	No	4.108740	133.645369	1463.4	1.500	12.2	-1.0	0.97	6505	3.77	583.82
008328003-05	OBS	No	11.343533	134.638700	1677.7	1.290	13.3	11.6	0.97	6505	4.07	150.74
008328003-06	OBS	No	13.052096	131.792444	1228.6	2.000	11.0	-1.0	0.97	6505	3.45	125.02
008328003-07	OBS	No	10.235624	133.143177	1032.2	1.462	10.2	8.3	0.97	6505	3.66	172.88

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008328003-01	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET
008328003-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
008328003-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
008328003-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS
008328003-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
008328003-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS
008328003-07	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET

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

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

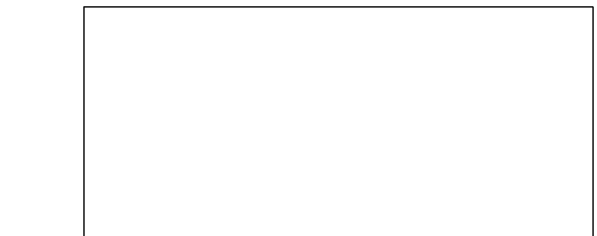
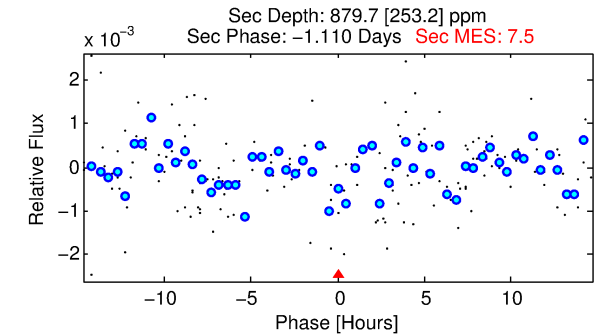
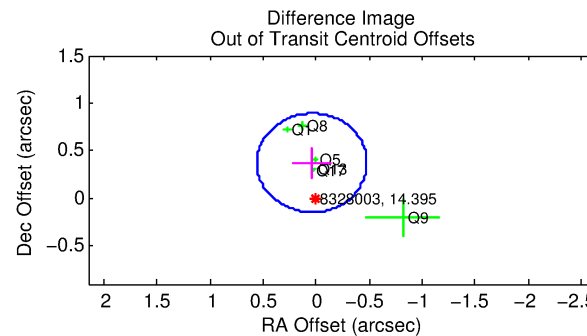
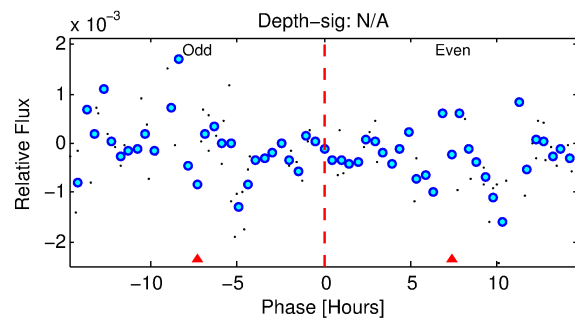
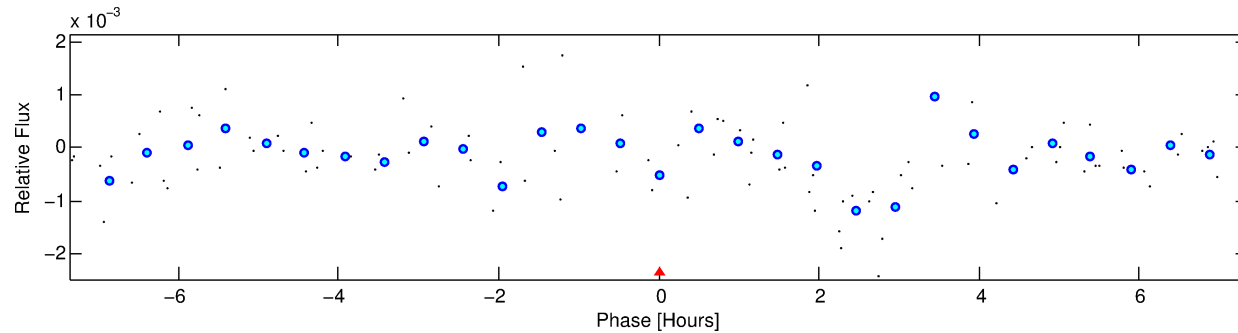
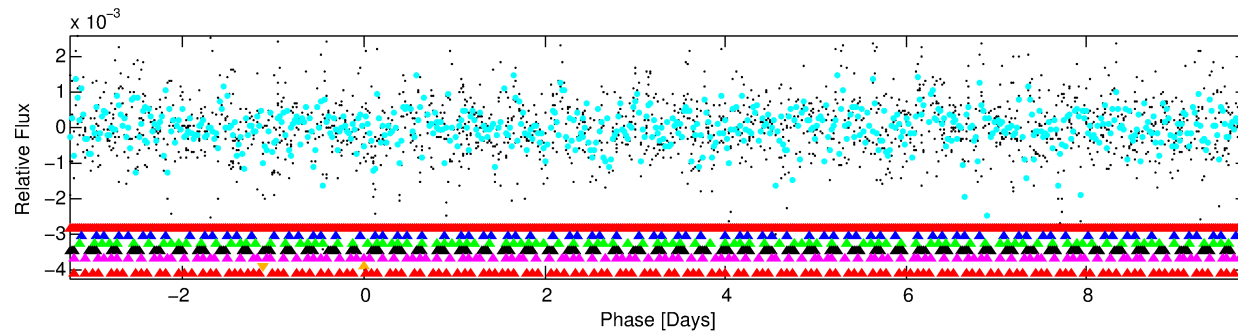
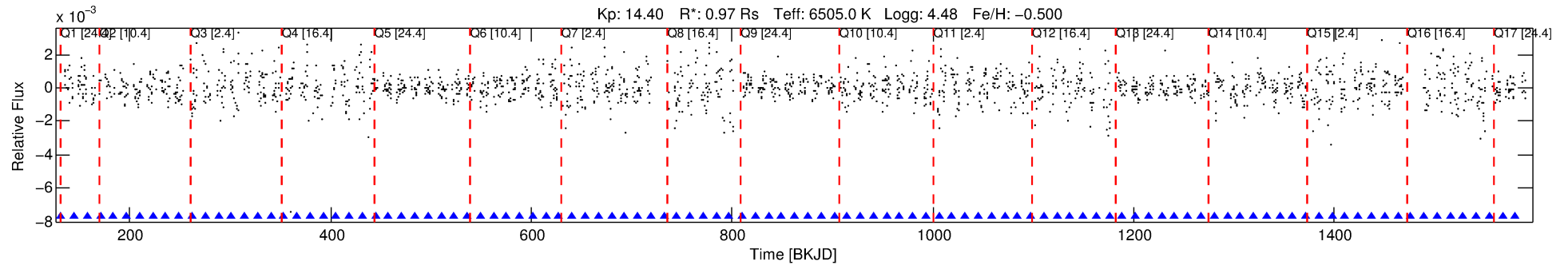
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008328003-06

No Significant Match Found

DV One-Page Summary

KIC: 8328003 Candidate: 6 of 7 Period: 13.052 d



TPS TCE Results:

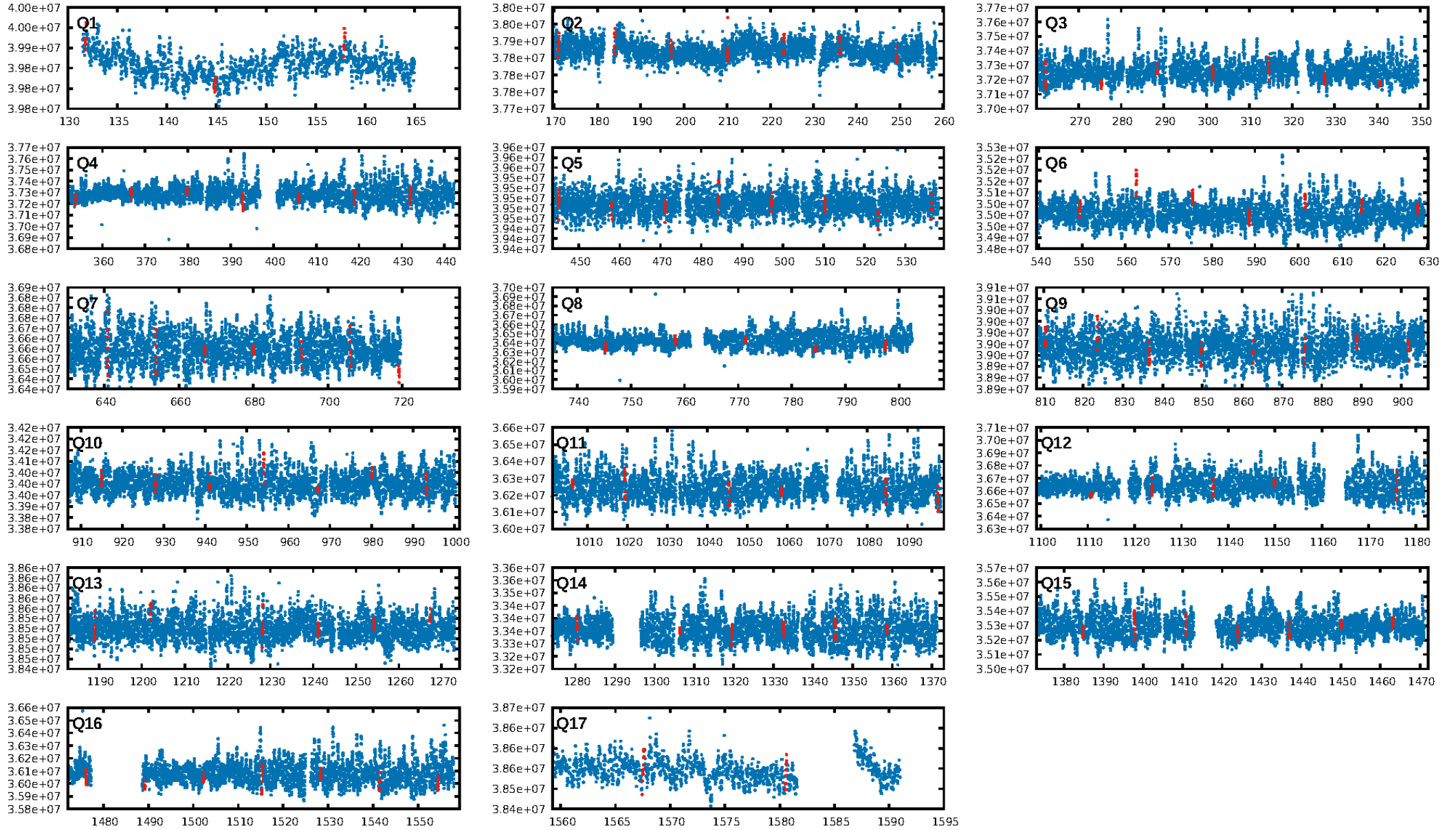
Period = 13.05210 d
Epoch = 131.7924 BKJD

DV fit results are unavailable

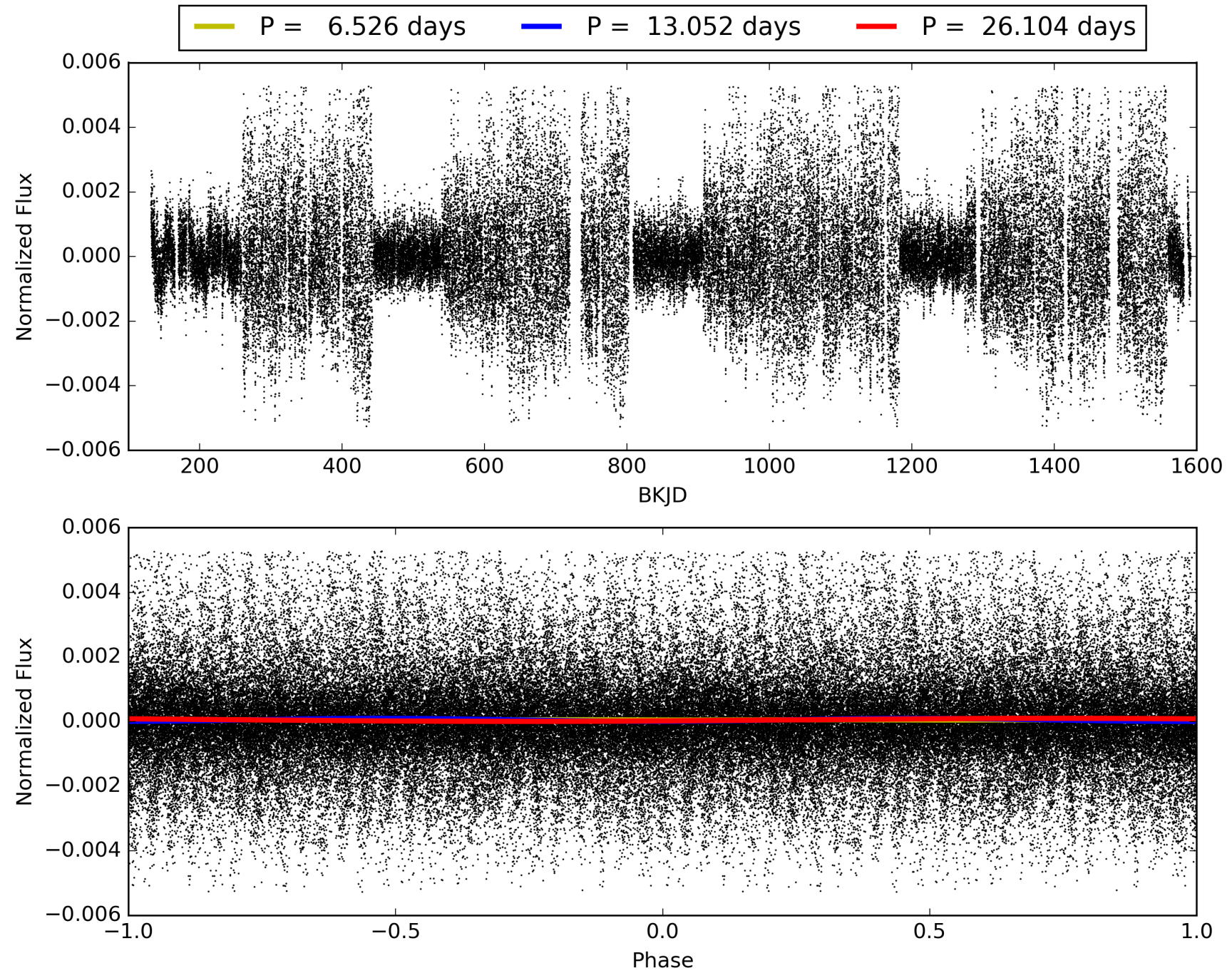
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [17.23 σ]
LongPeriod-sig: 36.3% [0.47 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.78e-20
RollingBand-fgt: 1.00 [13/13]
GhostDiagnostic-chr: -2.786
Centroid-sig: 78.8%
Centroid-so: 4.372 arcsec [6.54 σ]
OotOffset-rm: 0.375 arcsec [2.17 σ]
KicOffset-rm: 7.454 arcsec [43.50 σ]
OotOffset-st: 0/0/1/5 [6]
KicOffset-st: 0/0/1/5 [6]
DiffImageQuality-fgm: 1.00 [6/6]
DiffImageOverlap-fno: 0.00 [0/17]

TCE 008328003-06, PDC Light Curves

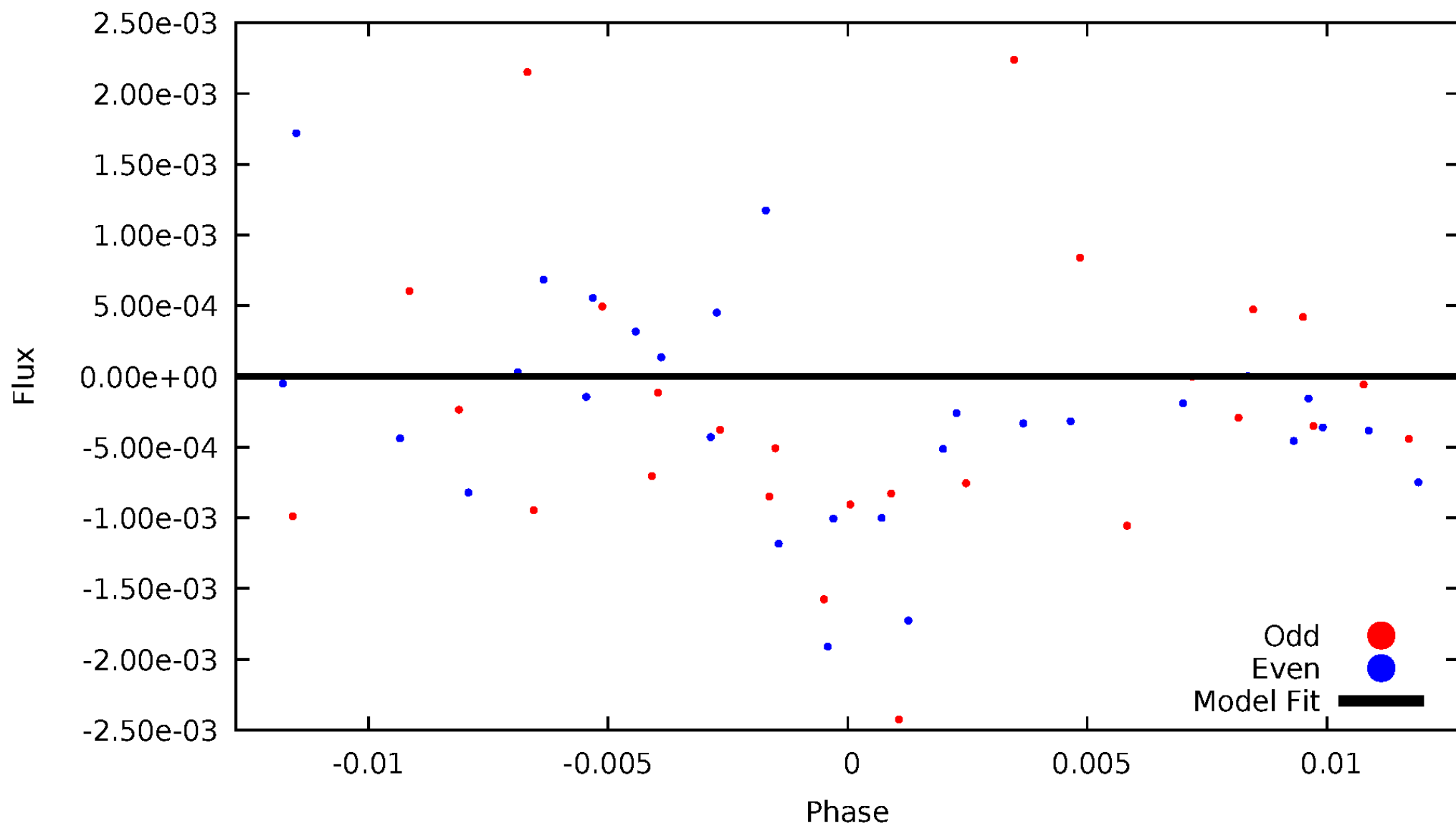


TCE 008328003-06



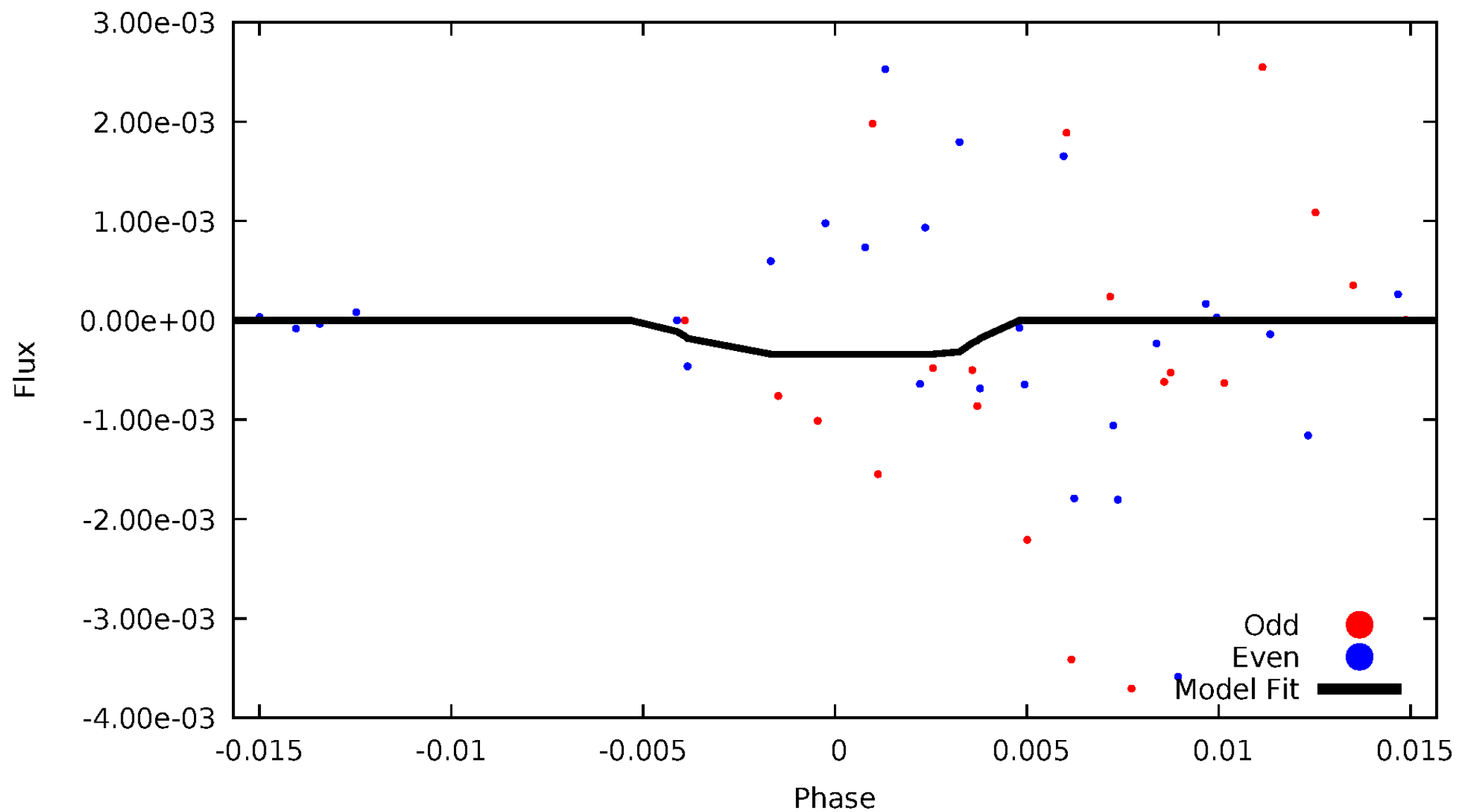
DV Odd/Even

TCE 008328003-06



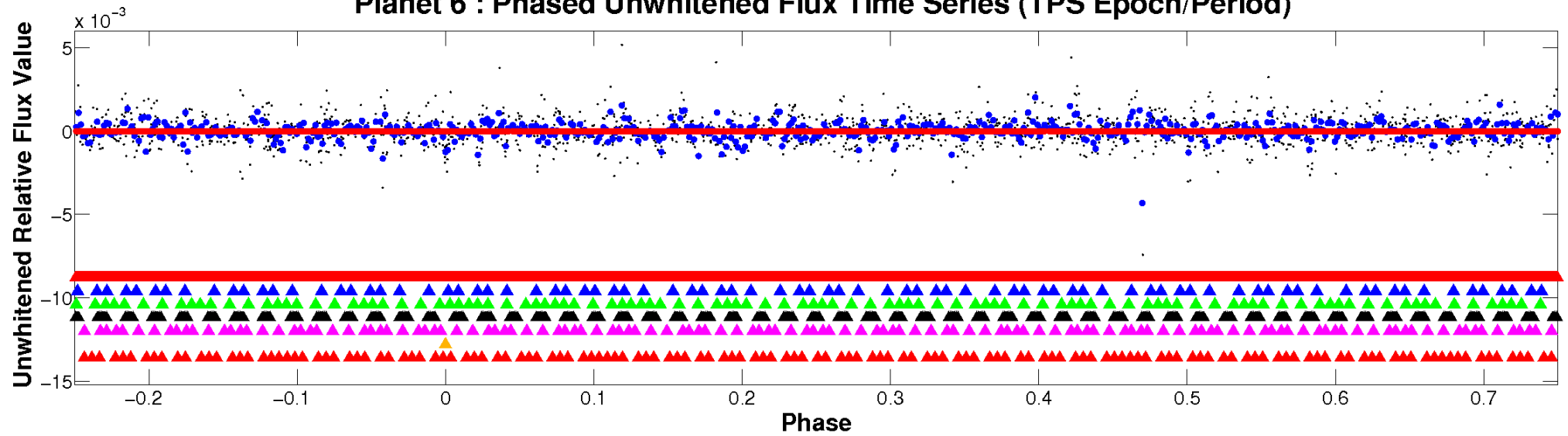
ALT Odd/Even

TCE 008328003-06



Non-Whitened Vs. Whitened Light Curve

Planet 6 : Phased Unwhitened Flux Time Series (TPS Epoch/Period)

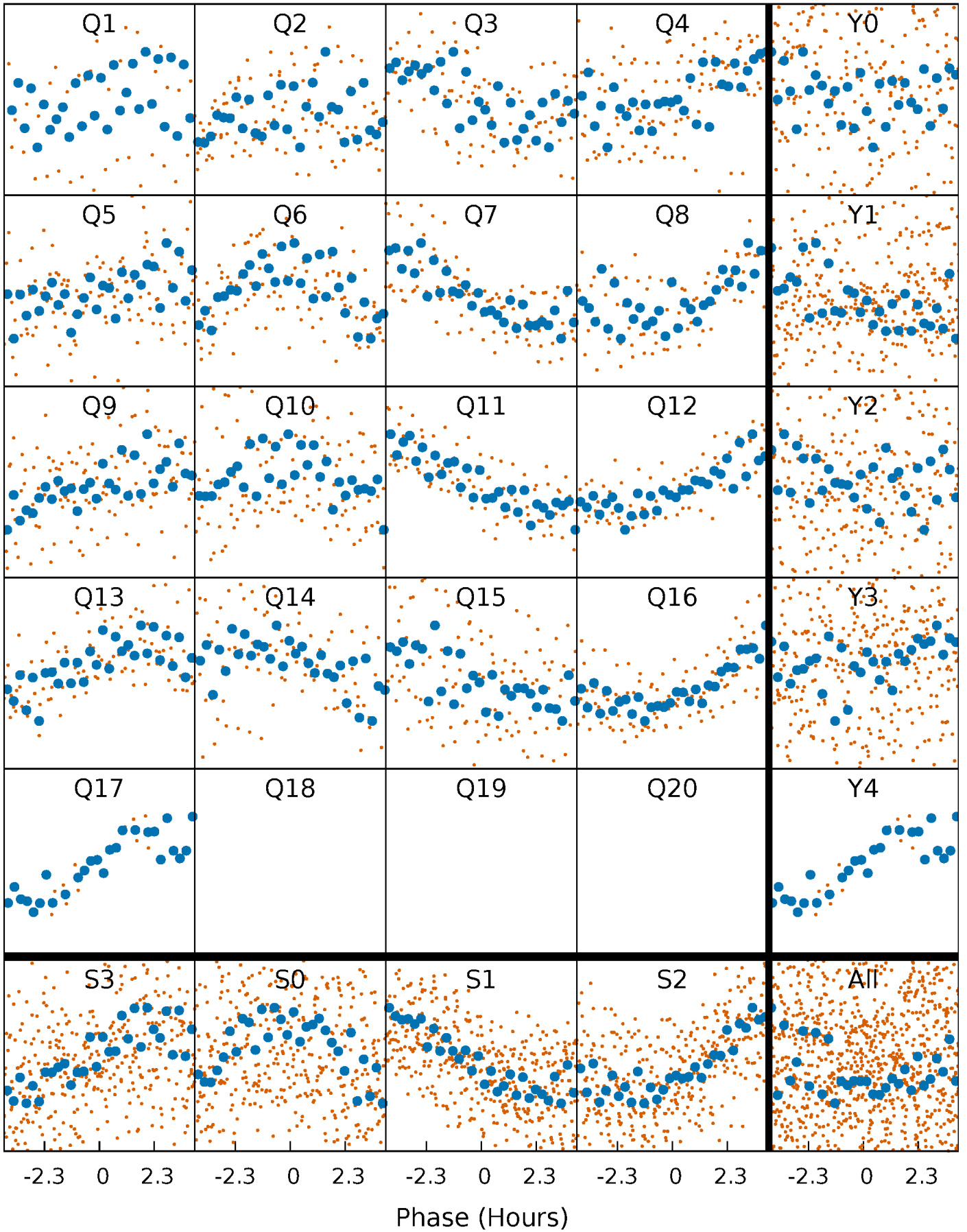


Planet 6 : Phased Whitened Flux Time Series (TPS Epoch/Period)



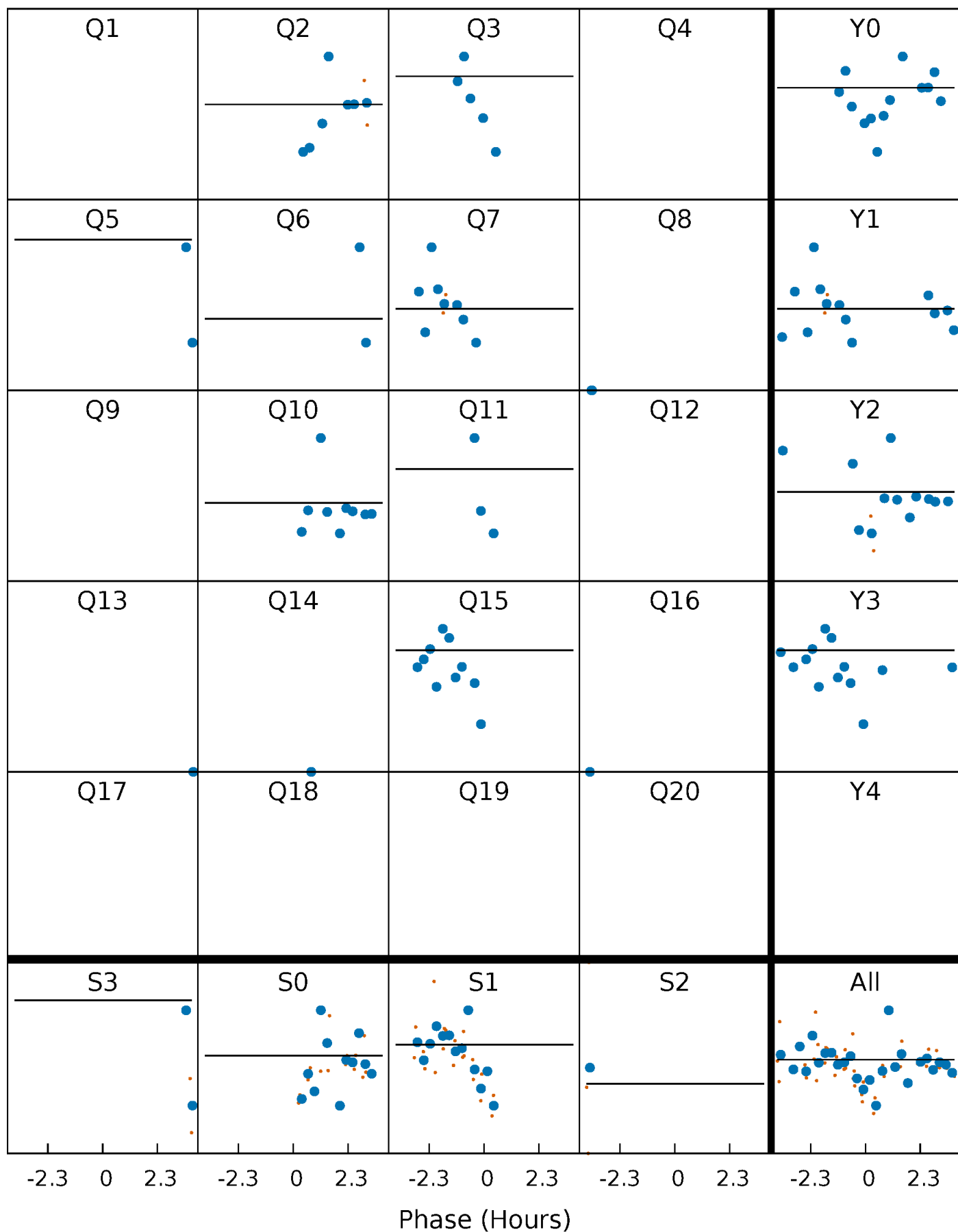
PDC Quarter-Phased Transit Curves

TCE 008328003-06 P= 13.052096 Days $T_0=131.792444$ (BKJD)



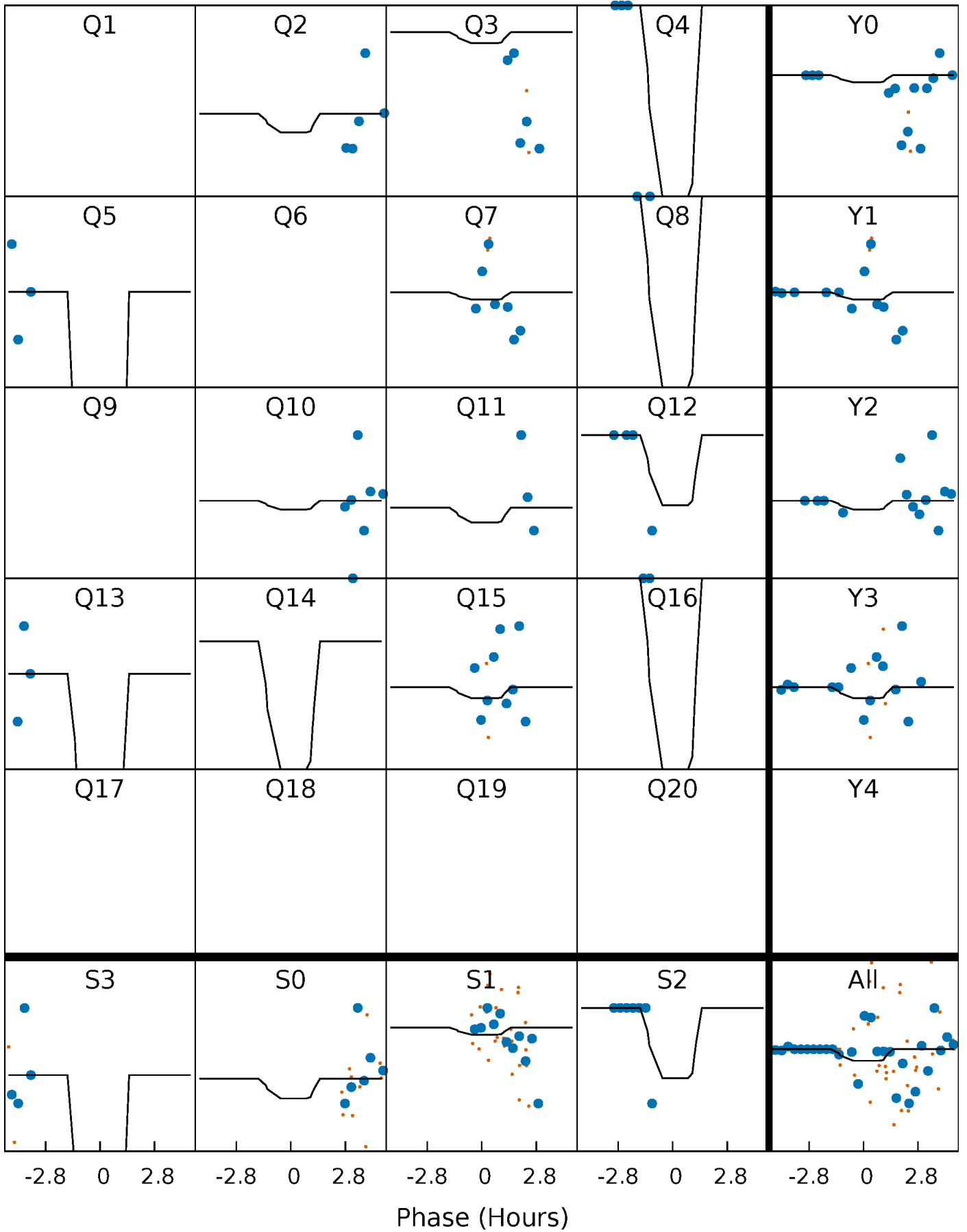
DV Quarter-Phased Transit Curves

TCE 008328003-06 P= 13.052096 Days $T_0=131.792444$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

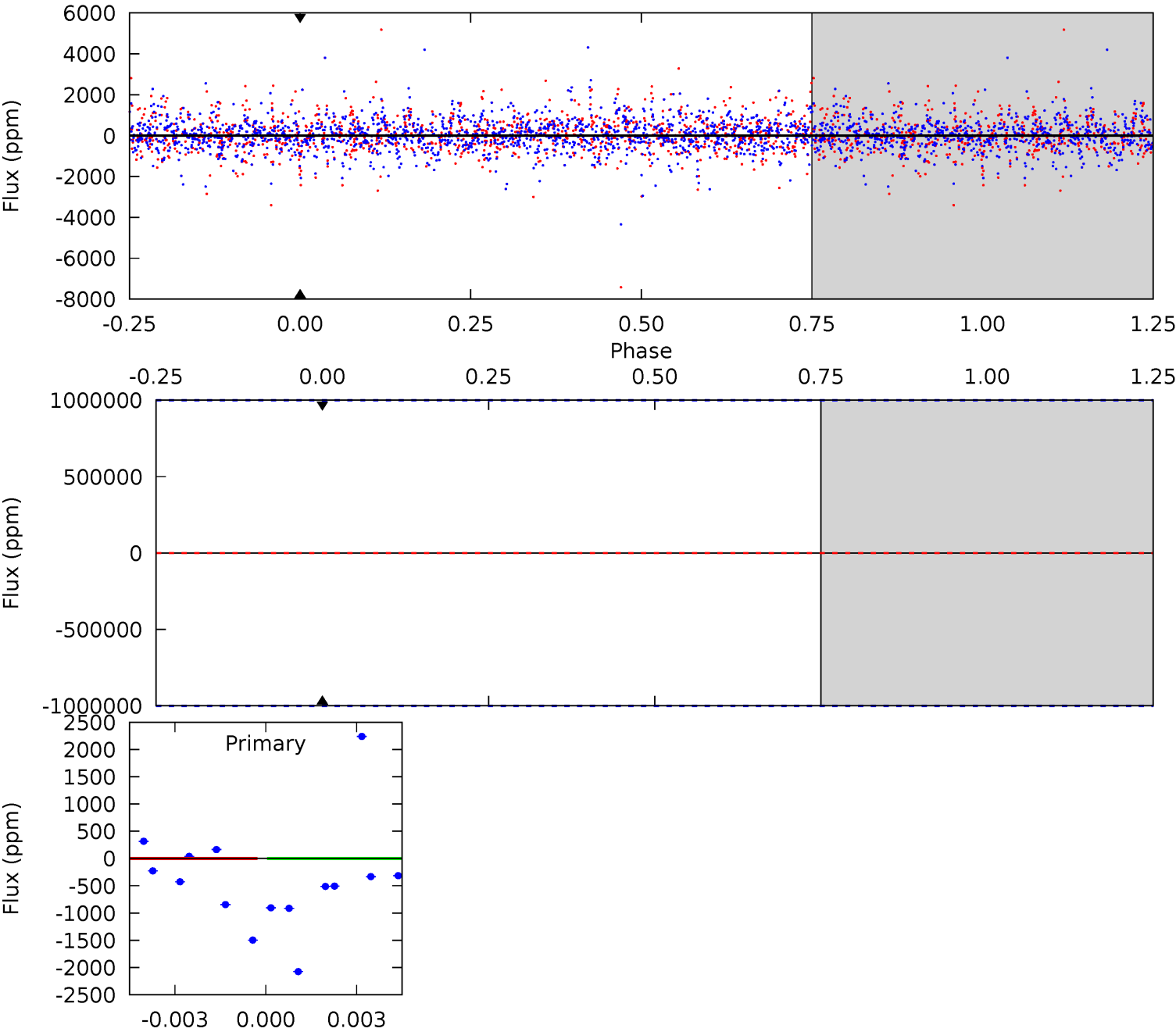
TCE 008328003-06 P= 13.052096 Days $T_0=131.692304$ (BKJD)



DV Model-Shift Uniqueness Test

008328003-06, P = 13.052096 Days, E = 131.792444 Days

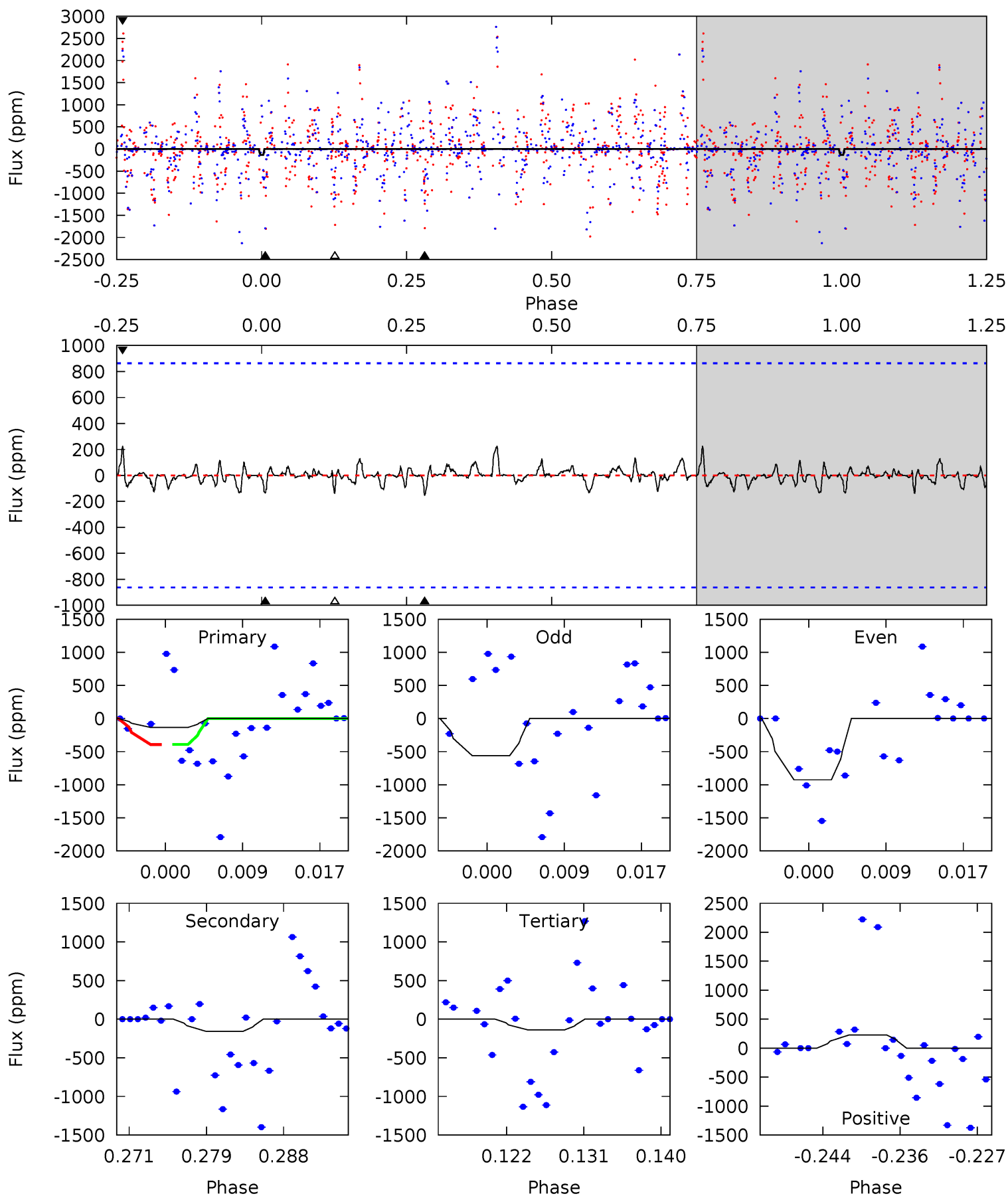
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

008328003-06, P = 13.052096 Days, E = 131.692304 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.79	0.91	0.80	1.33	5.05	2.62	0.27	-0.02	-0.55	0.11	-0.42	1.01	0.34	0.59	0



Stellar Parameters For KIC 008328003

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6505^{+155}_{-214}	$4.483^{+0.050}_{-0.200}$	$-0.500^{+0.250}_{-0.350}$	$0.975^{+0.278}_{-0.093}$	$1.054^{+0.119}_{-0.146}$	$1.604^{+0.418}_{-0.805}$
	+2%/-3%	+1%/-4%	+50%/-70%	+29%/-10%	+11%/-14%	+26%/-50%
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 008328003-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$8.75^{+9.08}_{-5.61}$	1214^{+85}_{-55}	-5349^{+30548}_{-20627}	$-199.208^{+13914.793}_{-15058.796}$
Alt.	-156 ± 171	$8.32^{+9.59}_{-6.09}$	1213^{+80}_{-50}	3001^{+1708}_{-5383}	$8.933^{+124.741}_{-10.120}$

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

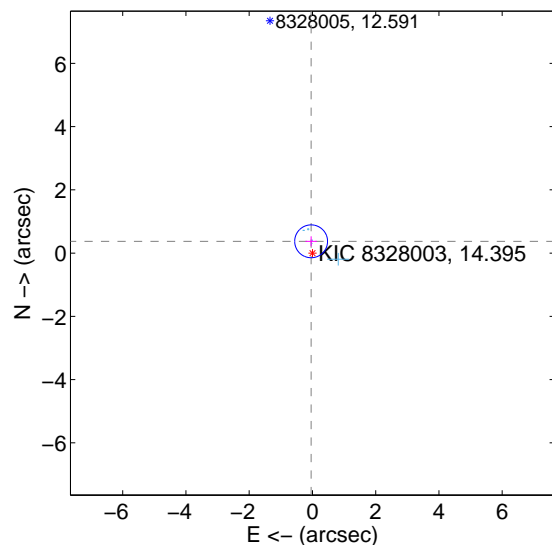
Supplemental centroid analysis for 008328003-06. Kepler magnitude: 14.39. Transit SNR -1.00

There are 6 quarters with good PRF difference image offsets

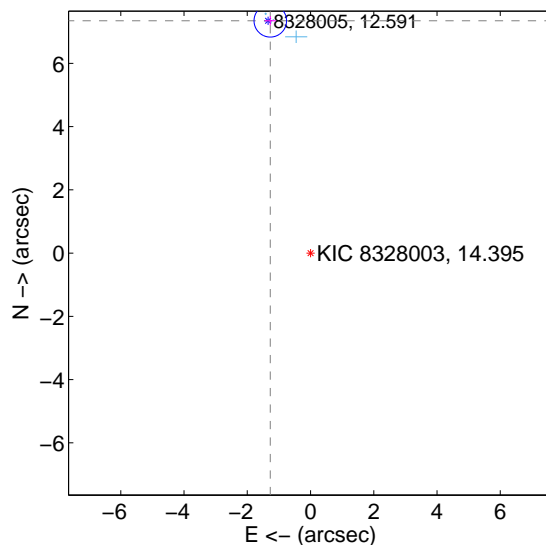
The OOT PRF centroid is offset from the target star catalog position by about 7.11 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.375 ± 0.173	2.17	0.042 ± 0.181	0.373 ± 0.158
PRF-fit source offset from KIC position	7.454 ± 0.171	43.50	1.272 ± 0.178	7.345 ± 0.148
photometric centroid source offset	4.37 ± 0.67	6.54	1.39 ± 0.28	4.15 ± 0.70

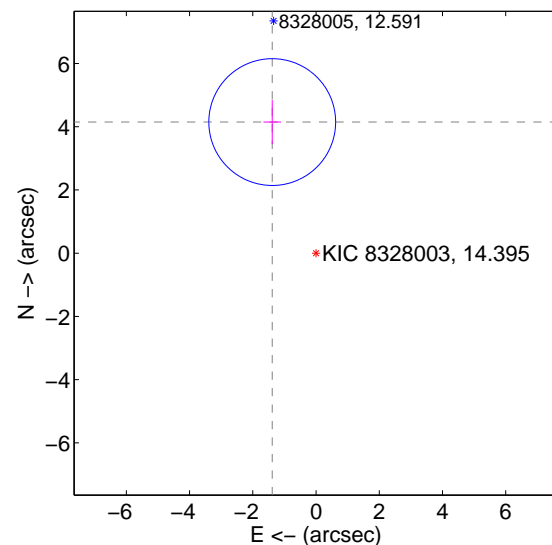
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

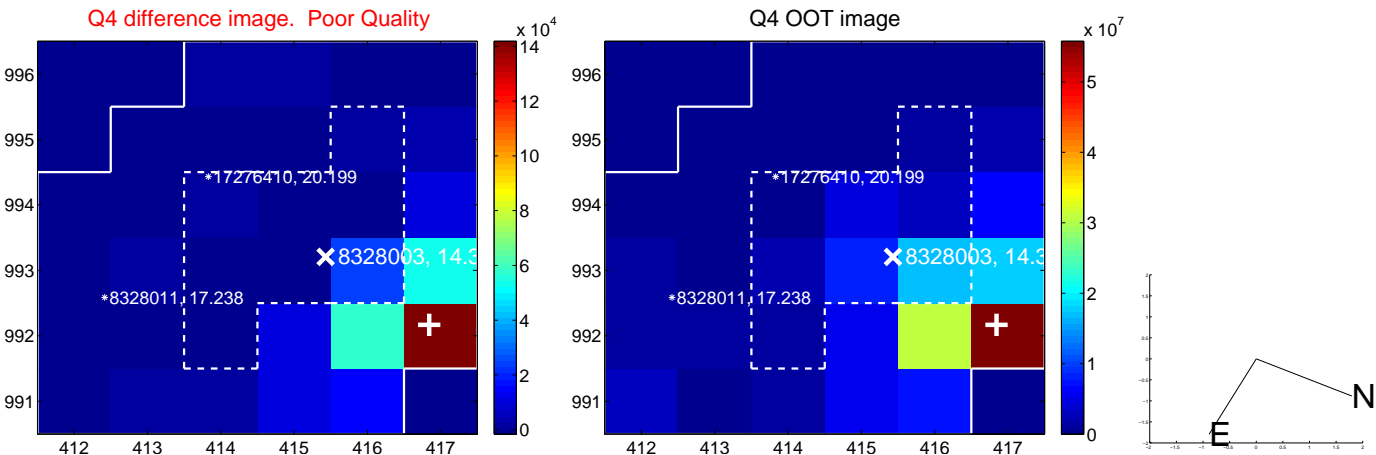
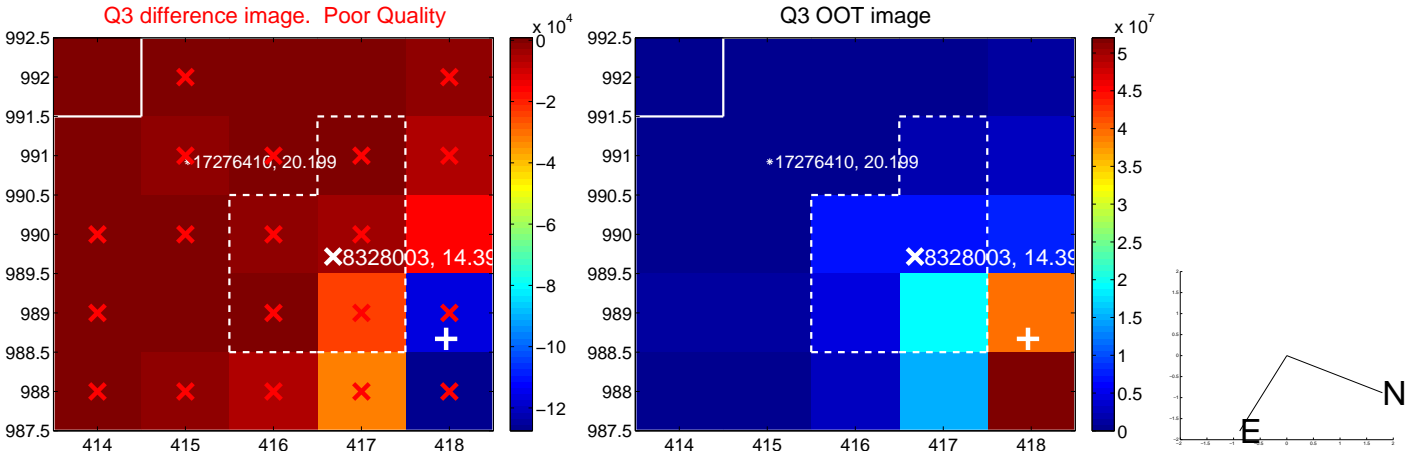
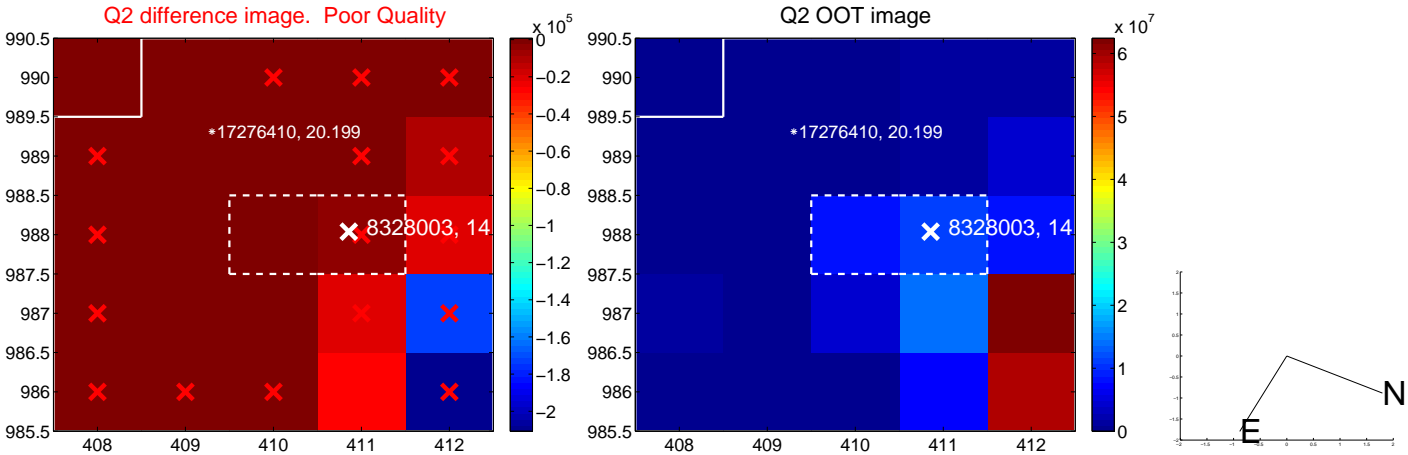
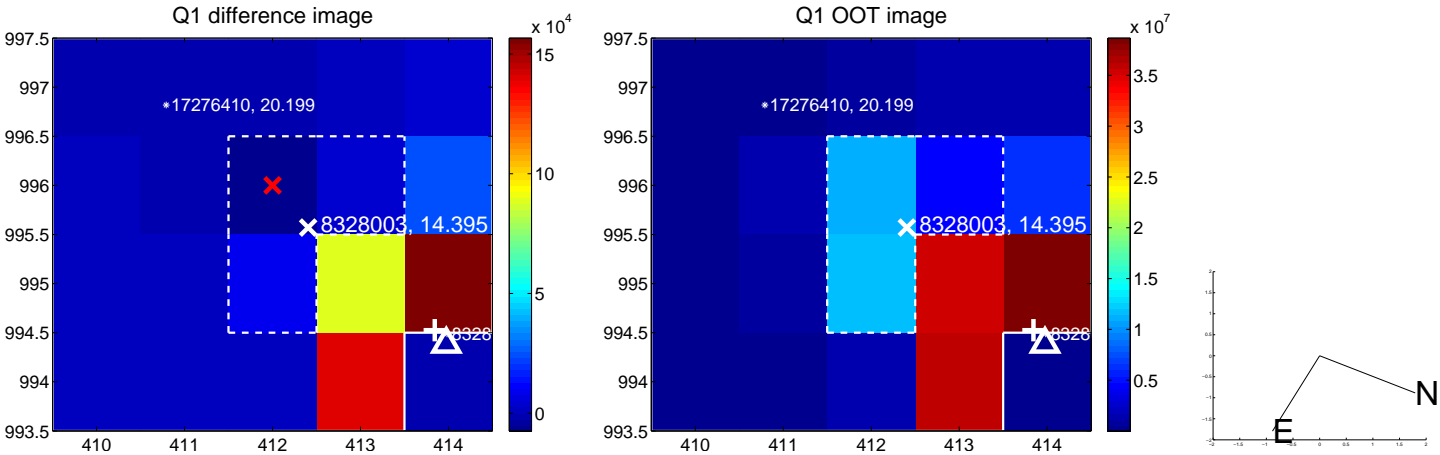


offset from photometric centroids

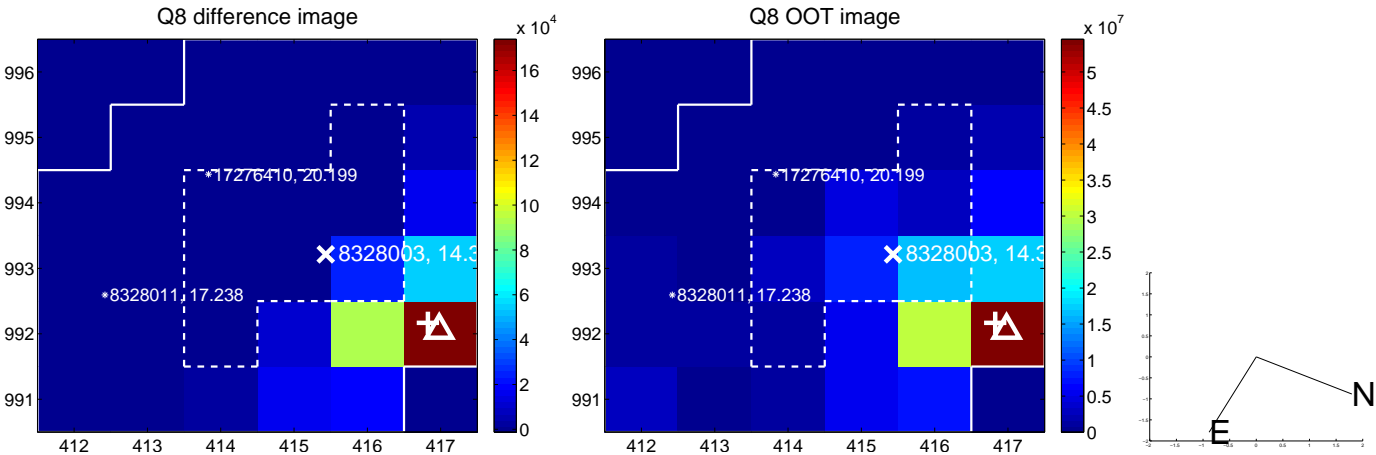
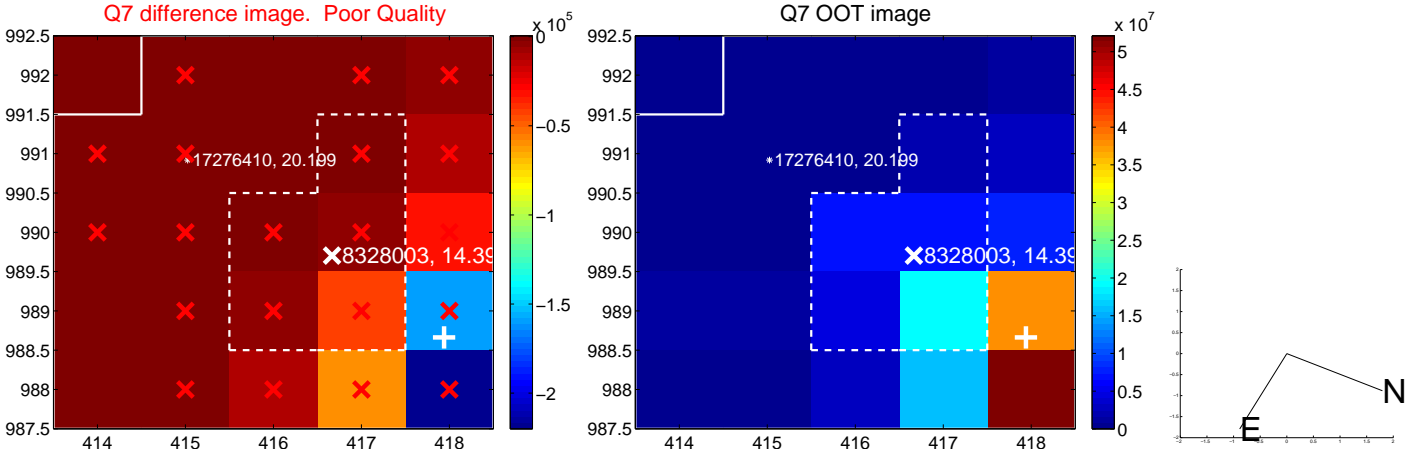
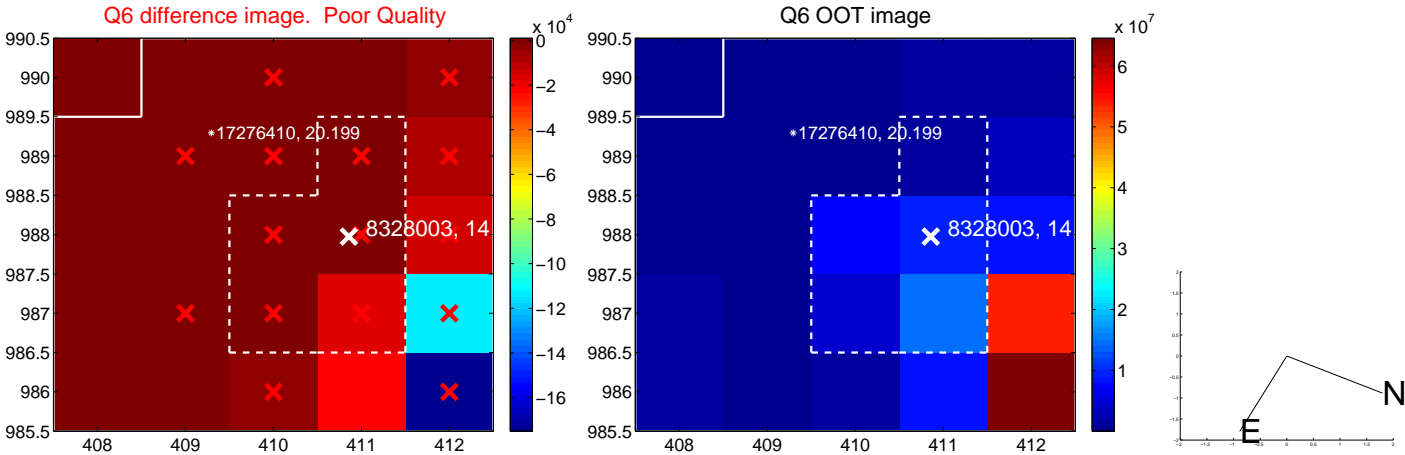
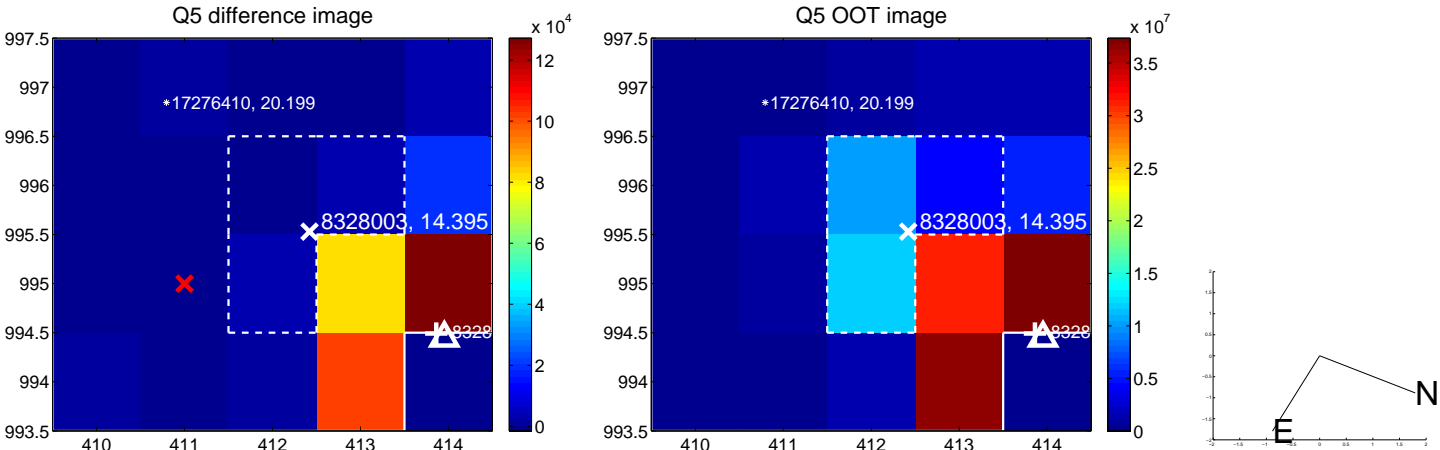


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

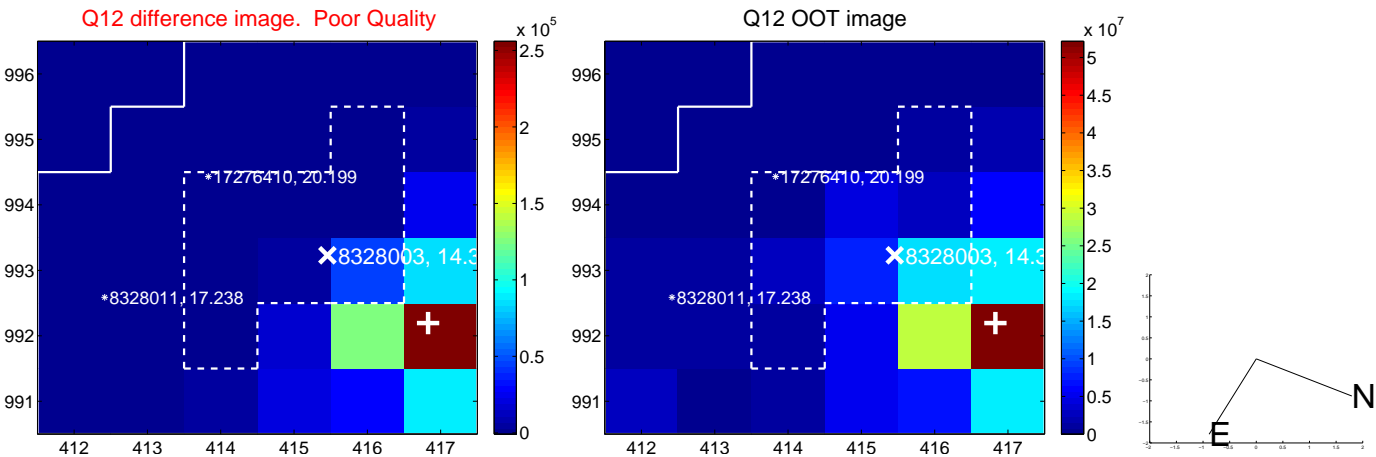
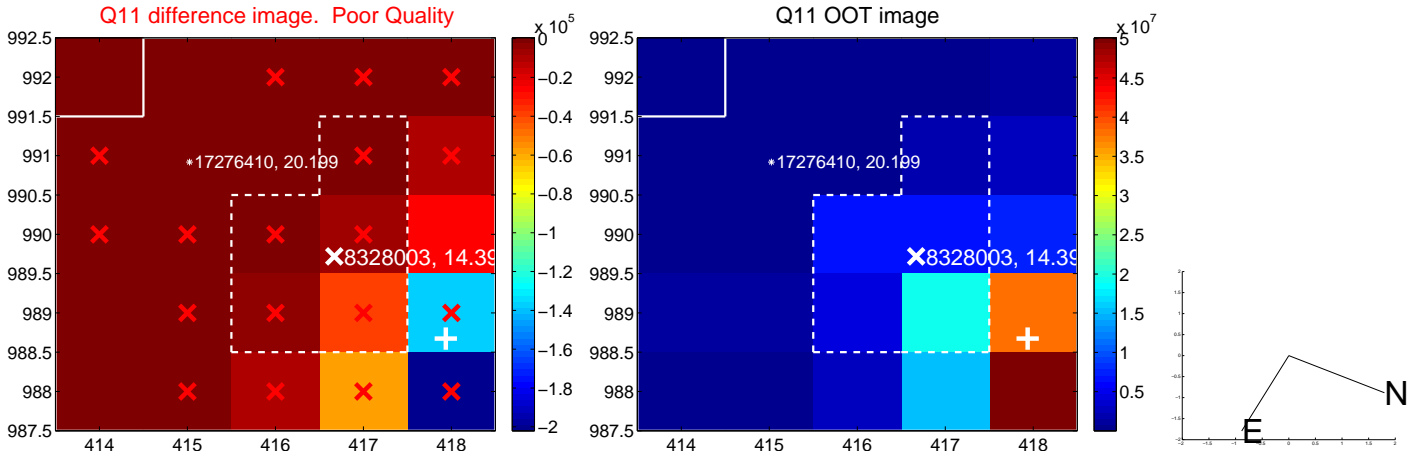
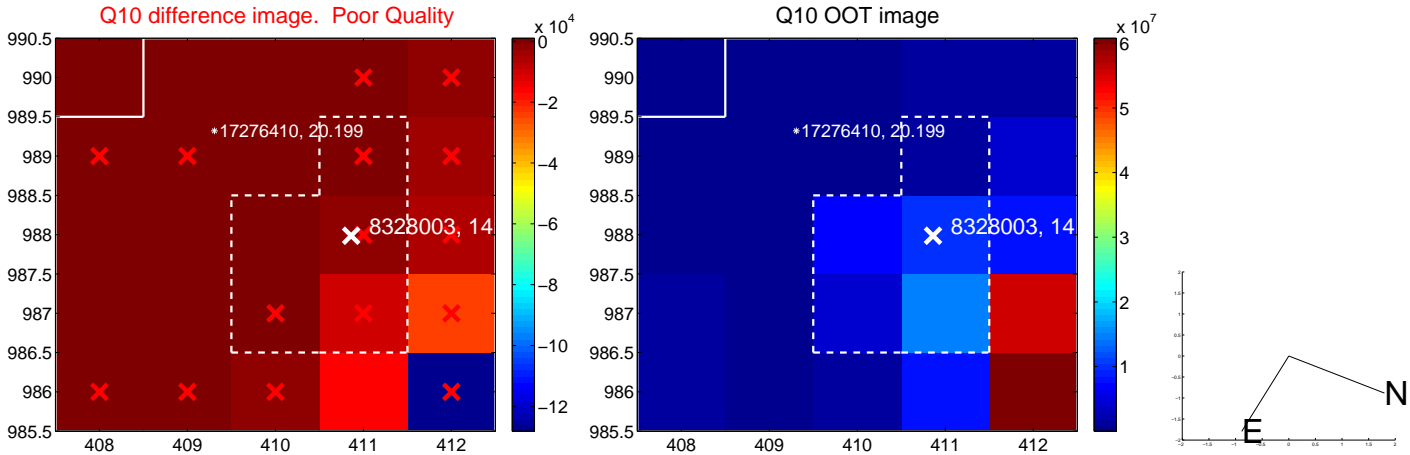
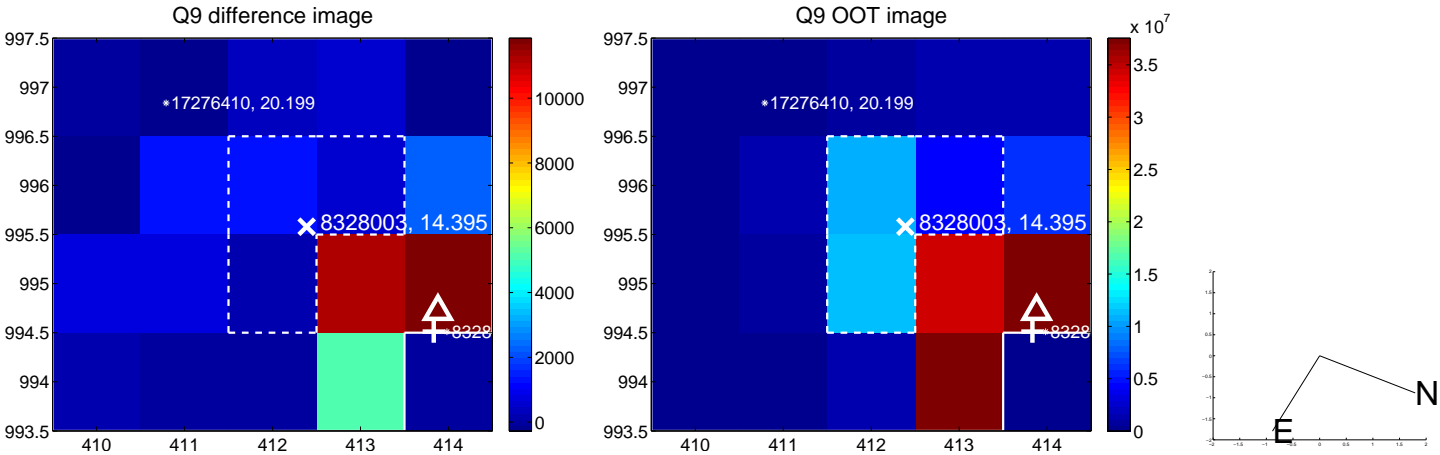
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



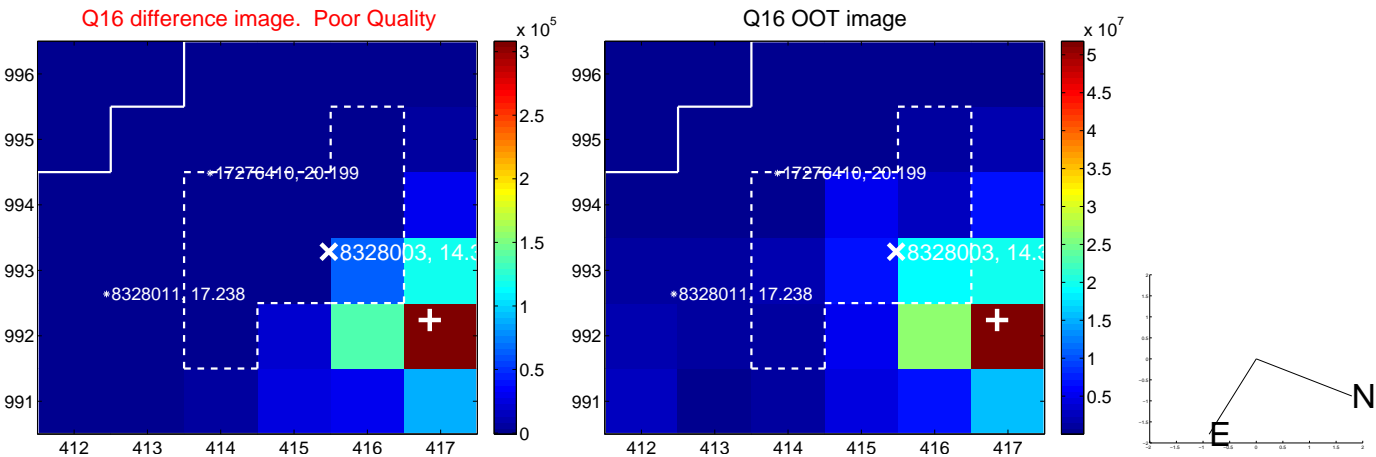
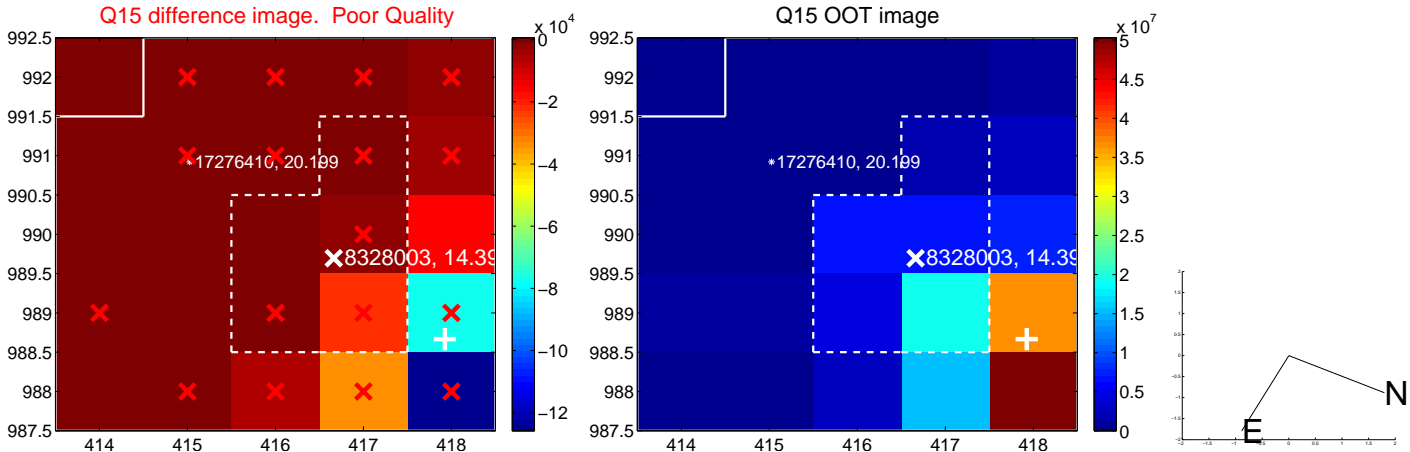
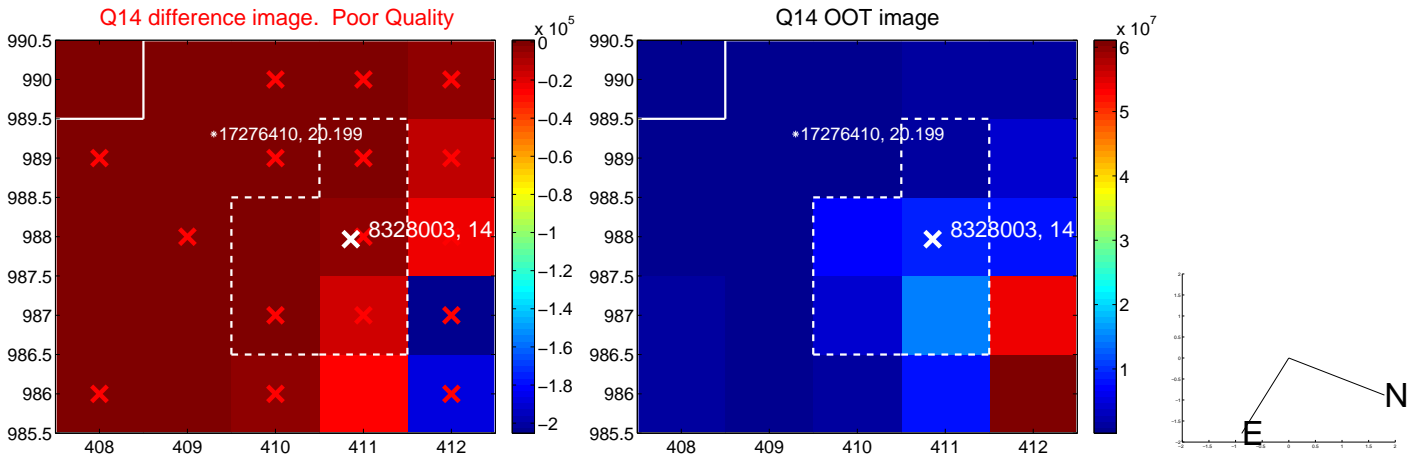
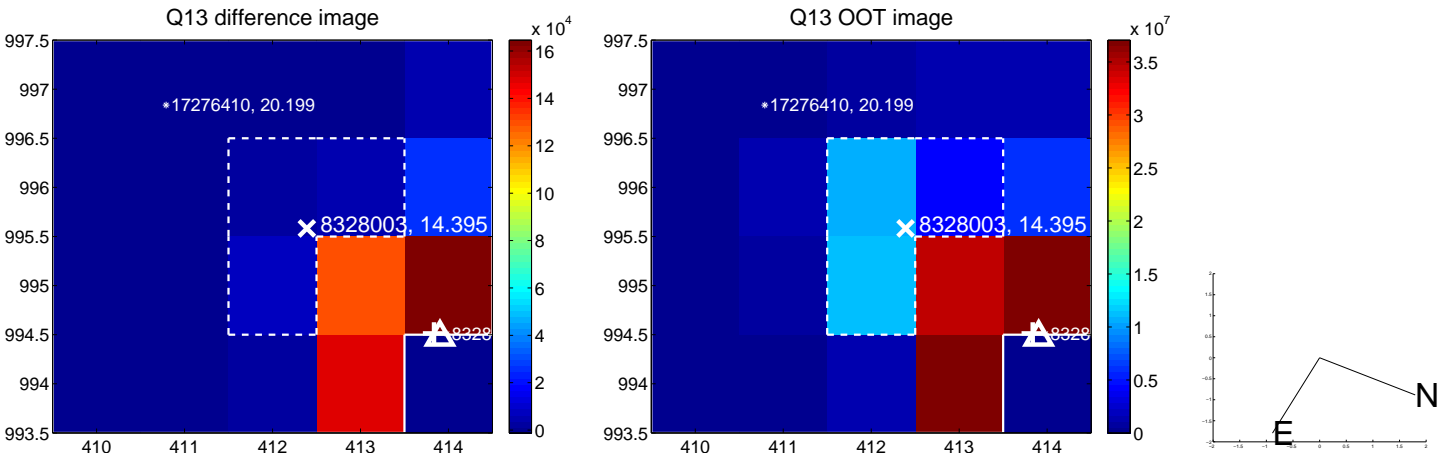
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



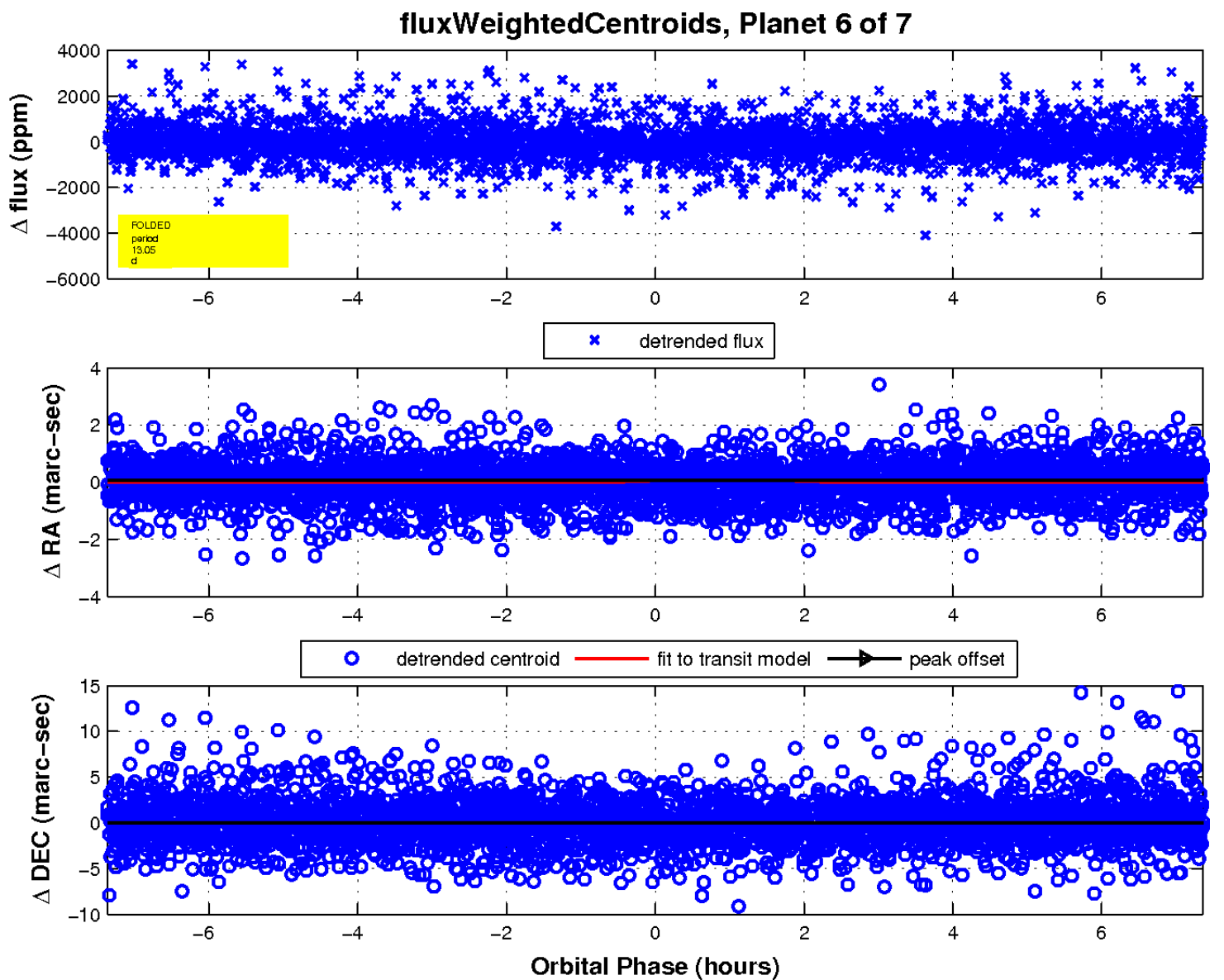
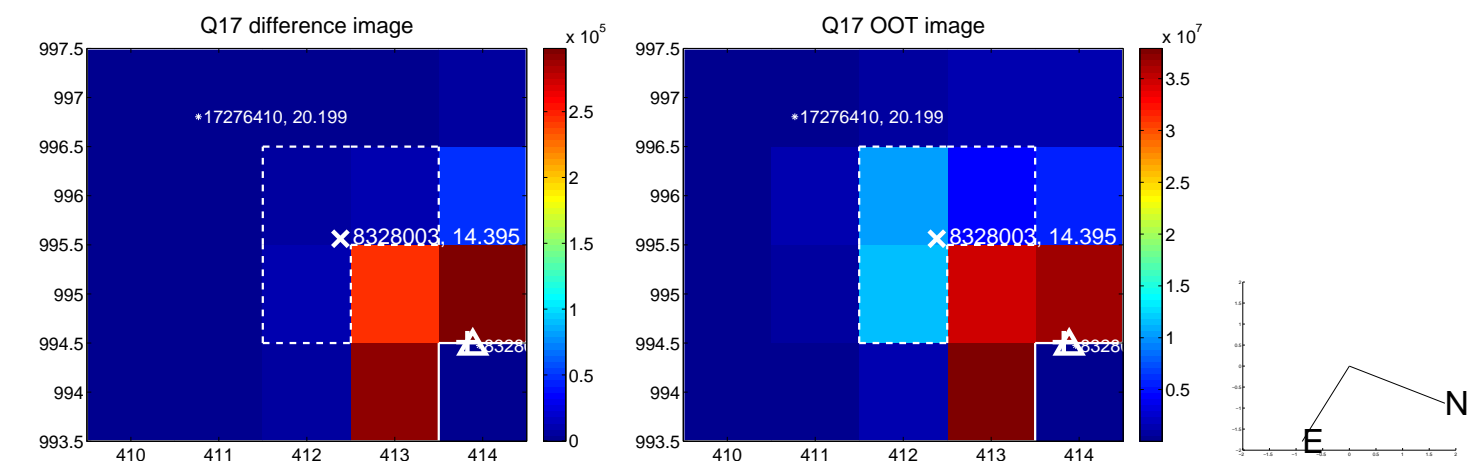
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



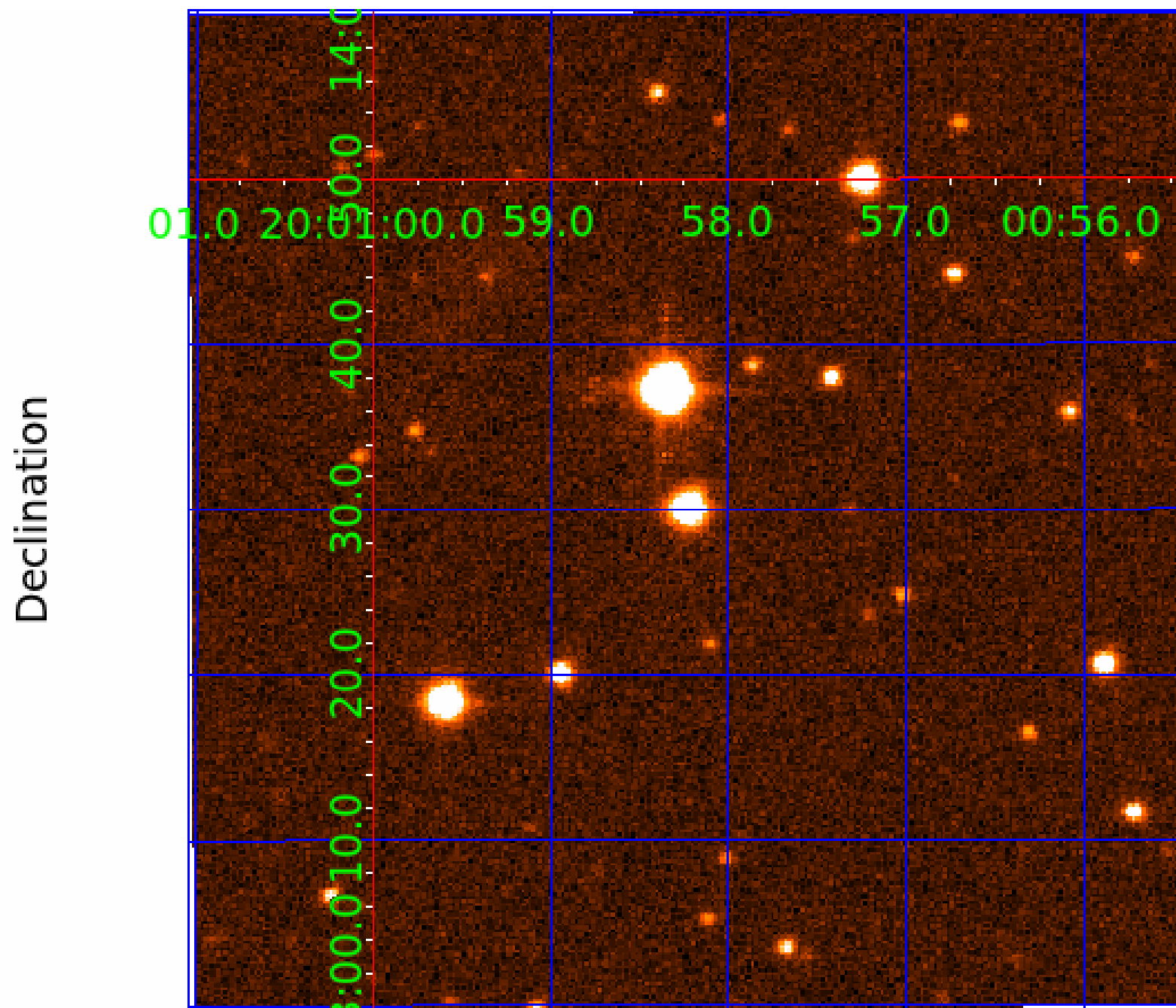
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 008328003

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})
008328003-01	OBS	No	0.521350	131.721910	0.0	3.784	8.1	0.0	0.97	6505	0.01	9156.18
008328003-02	OBS	No	17.087977	141.777778	2485.4	0.818	13.8	16.3	0.97	6505	4.96	87.29
008328003-03	OBS	No	13.810052	132.075326	57.8	38.472	12.9	1.9	0.97	6505	0.75	115.96
008328003-04	OBS	No	4.108740	133.645369	1463.4	1.500	12.2	-1.0	0.97	6505	3.77	583.82
008328003-05	OBS	No	11.343533	134.638700	1677.7	1.290	13.3	11.6	0.97	6505	4.07	150.74
008328003-06	OBS	No	13.052096	131.792444	1228.6	2.000	11.0	-1.0	0.97	6505	3.45	125.02
008328003-07	OBS	No	10.235624	133.143177	1032.2	1.462	10.2	8.3	0.97	6505	3.66	172.88

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008328003-01	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET
008328003-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
008328003-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
008328003-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS
008328003-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET
008328003-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS
008328003-07	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET

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

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

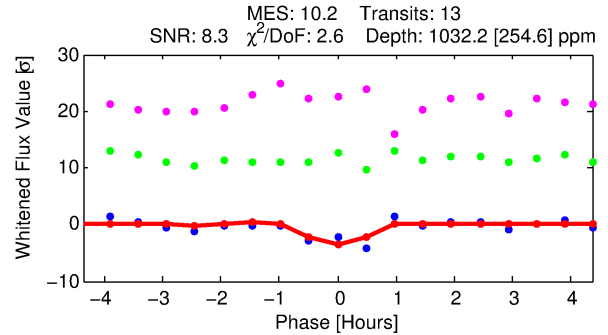
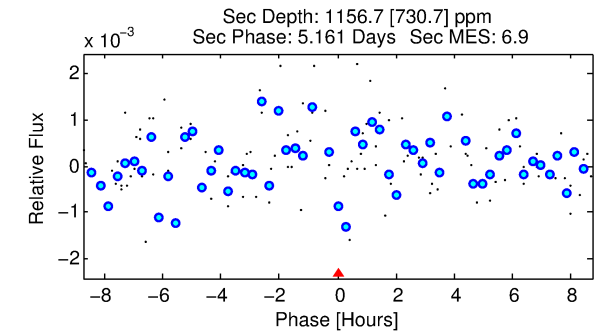
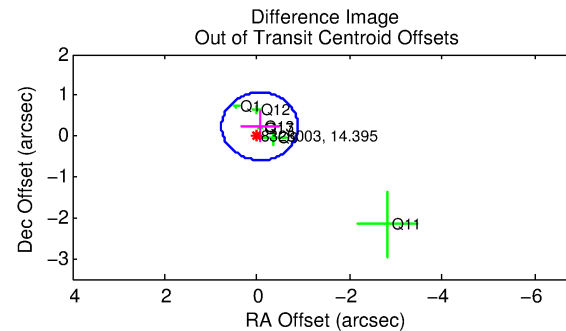
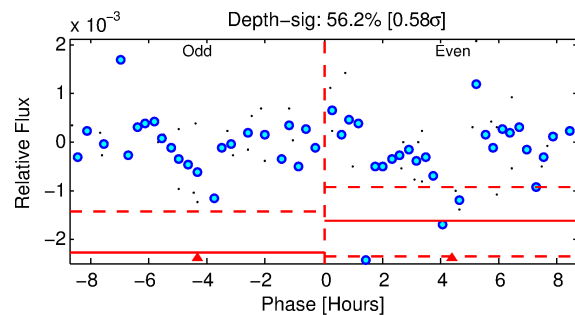
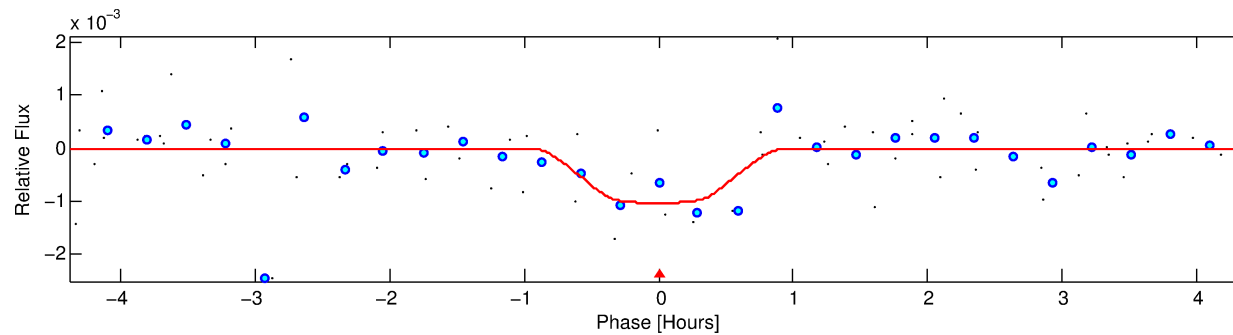
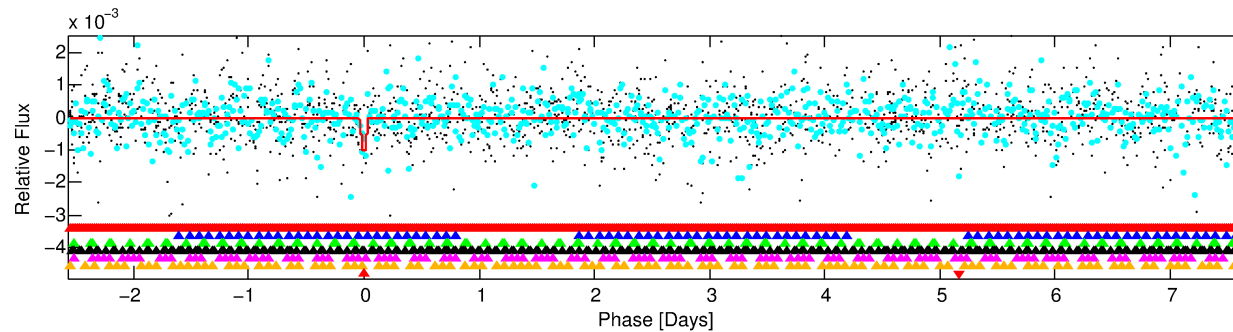
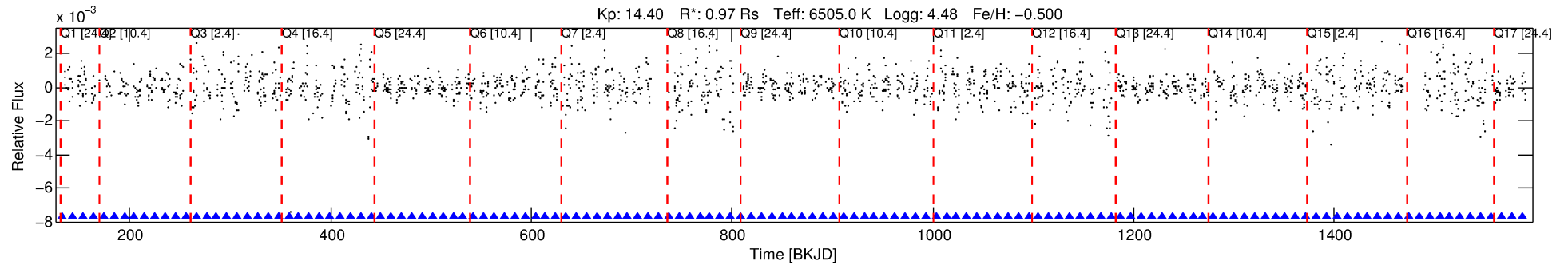
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008328003-07

No Significant Match Found

DV One-Page Summary

KIC: 8328003 Candidate: 7 of 7 Period: 10.236 d



DV Fit Results:

Period = 10.23562 [0.00014] d
Epoch = 133.1432 [0.0104] BKJD
Rp/R^{*} = 0.0344 [0.0371]
a/R^{*} = 27.76 [173.81]
b = 0.89 [1.39]
Seff = 172.88 [66.44]
Teq = 925 [89] K
Rp = 3.66 [4.08] Re
a = 0.0939 [0.0229] AU
Ag = 419.76 [955.47] [0.44σ]
Teffp = 6471 [3642] K [1.52σ]

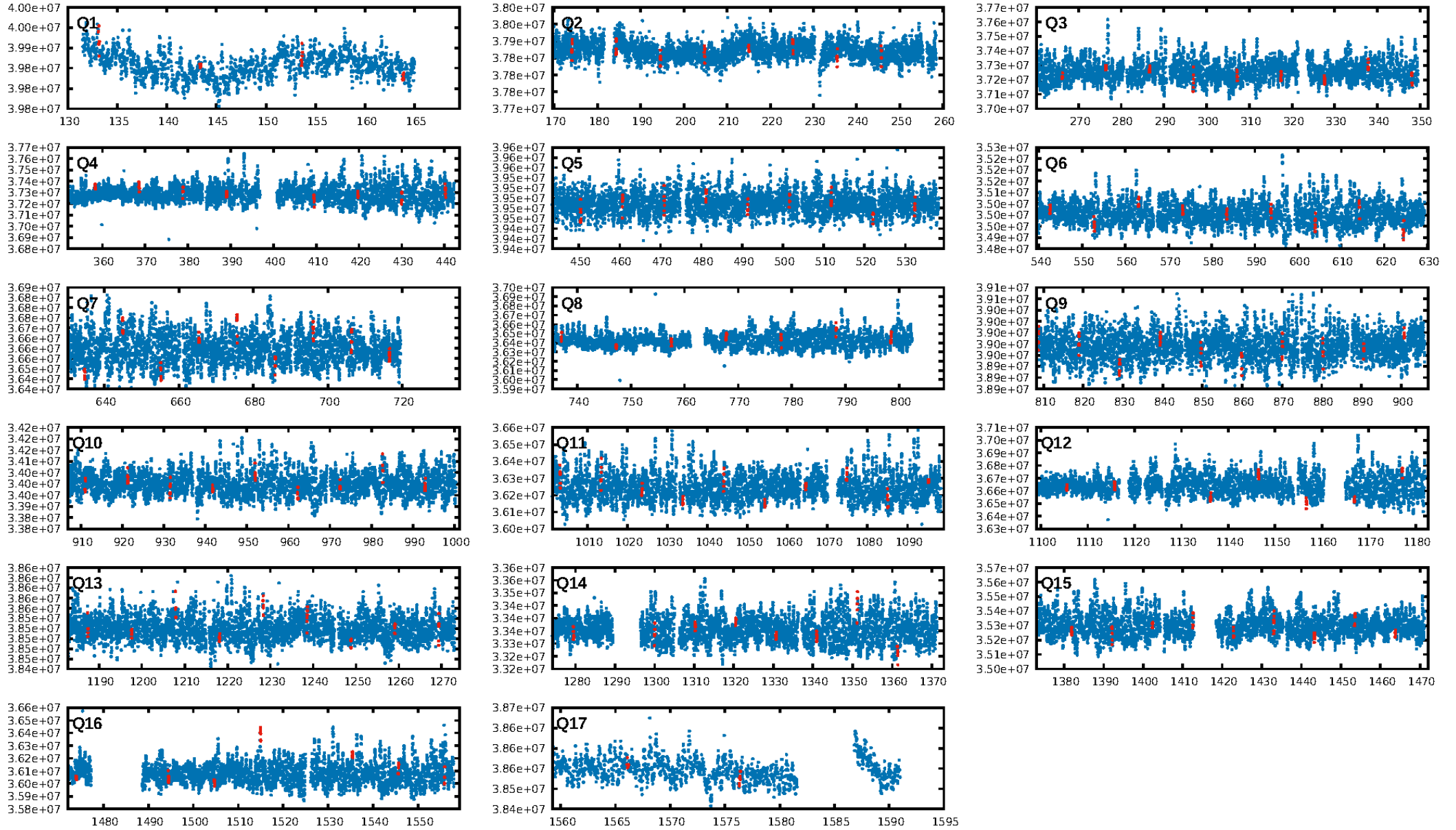
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [70.20σ]
LongPeriod-sig: 100.0% [13.64σ]
ModelChiSquare2-sig: 0.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 5.18e-20
RollingBand-fgt: 1.00 [13/13]
GhostDiagnostic-chr: -1.025
Centroid-sig: 75.7%
Centroid-so: 4.457 arcsec [21.49σ]
OotOffset-rm: 0.242 arcsec [0.88σ]
KicOffset-rm: 7.340 arcsec [11.46σ]
OotOffset-st: 0/1/1/4 [6]
KicOffset-st: 0/1/1/4 [6]
DiffImageQuality-fgm: 0.50 [3/6]
DiffImageOverlap-fno: 0.00 [0/17]

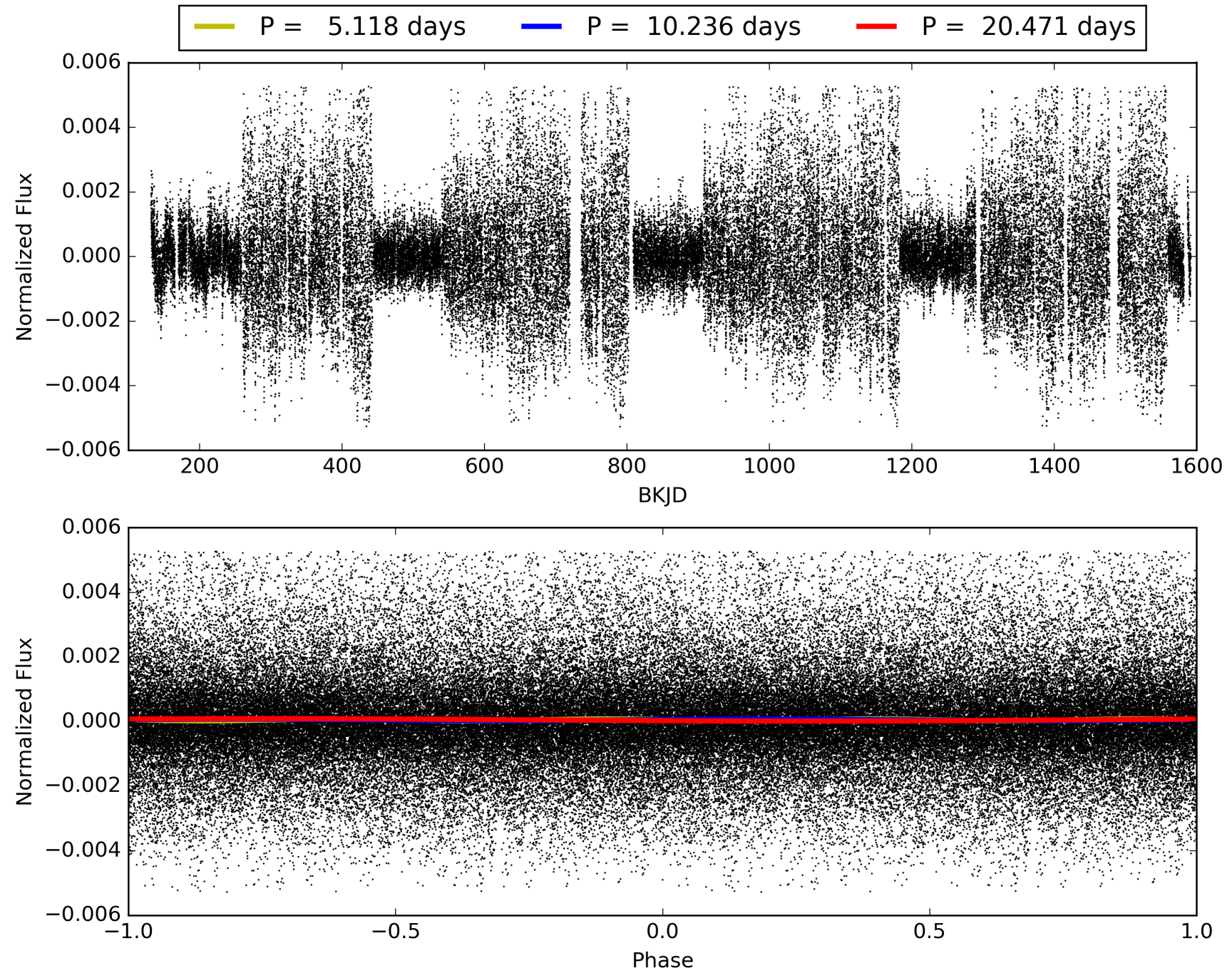
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 05:47:03 Z

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

TCE 008328003-07, PDC Light Curves

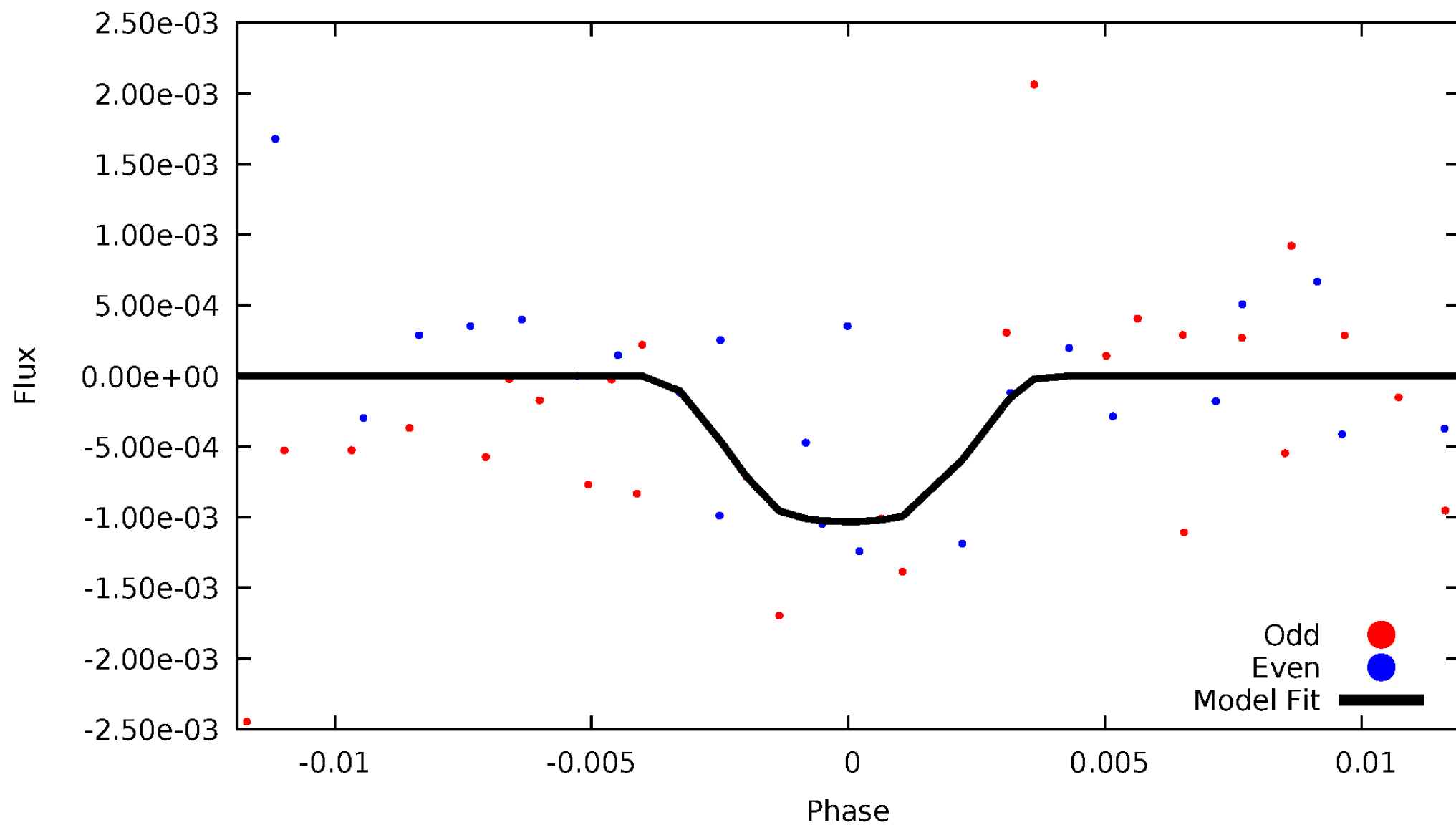


TCE 008328003-07



DV Odd/Even

TCE 008328003-07

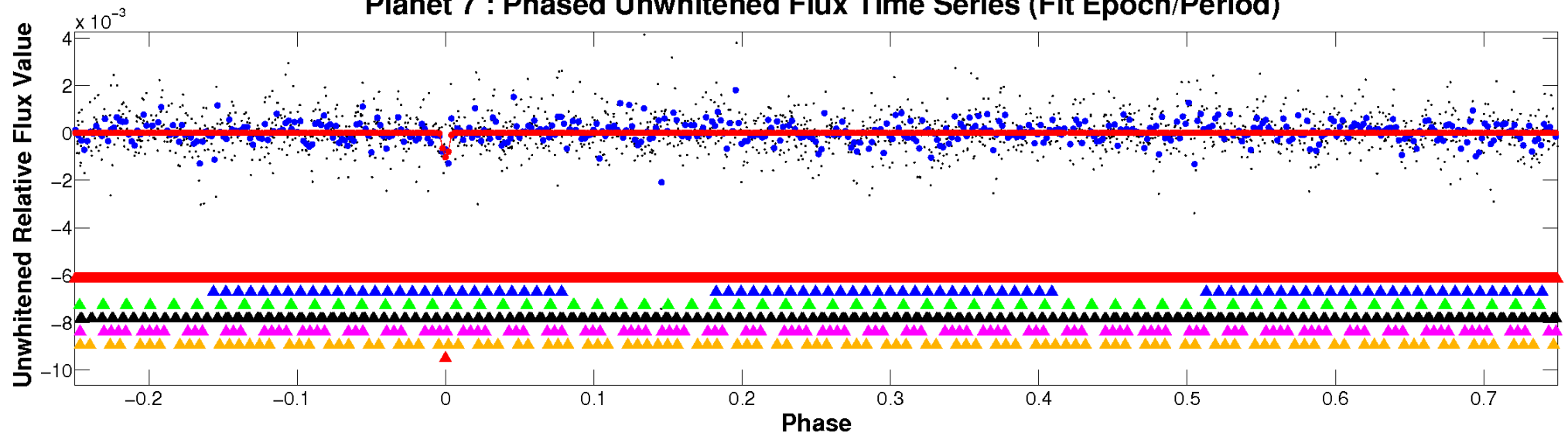


ALT Odd/Even

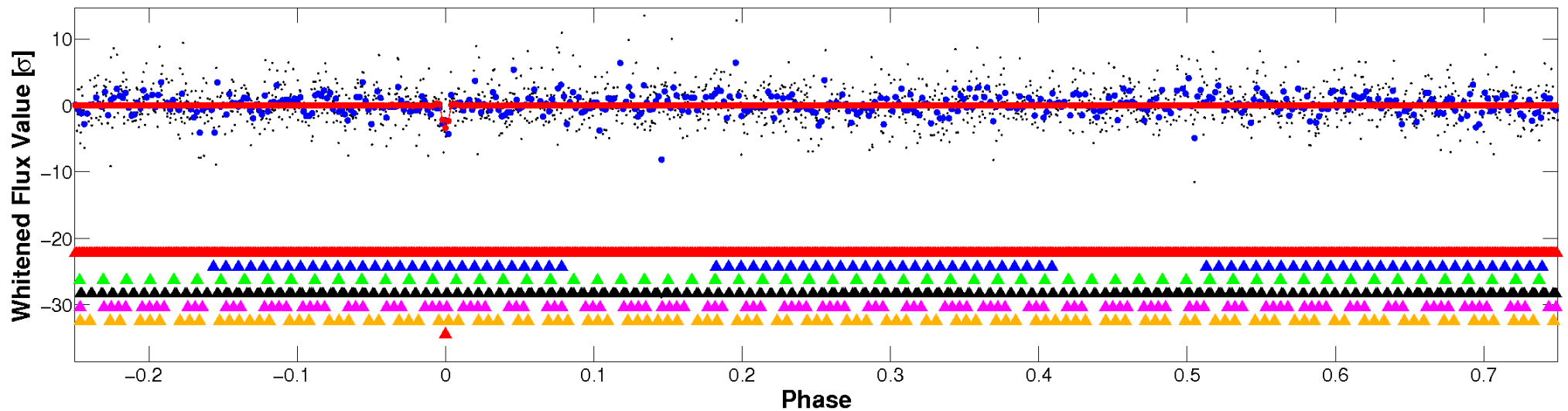
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

Planet 7 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

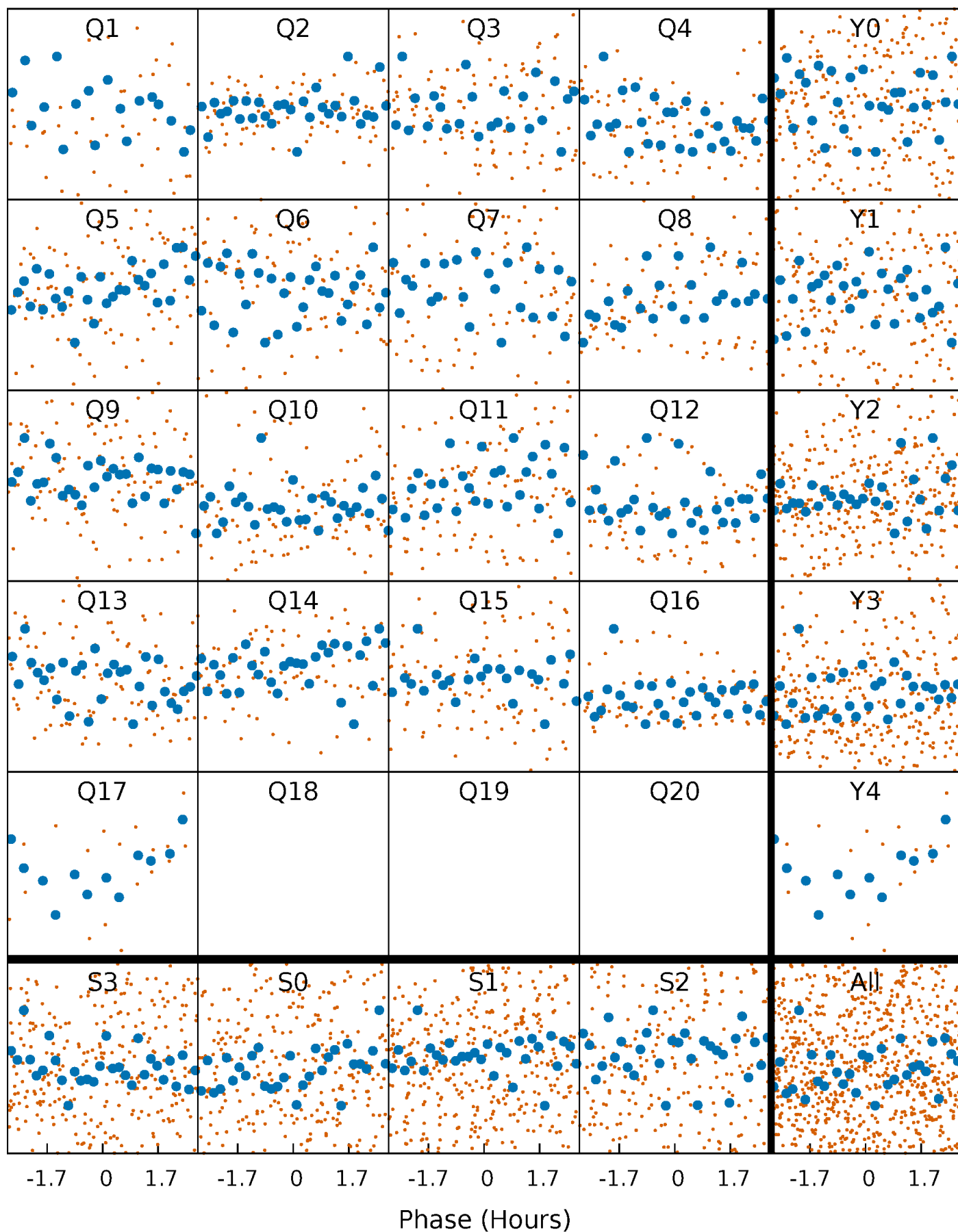


Planet 7 : Phased Whitened Flux Time Series (Fit Epoch/Period)



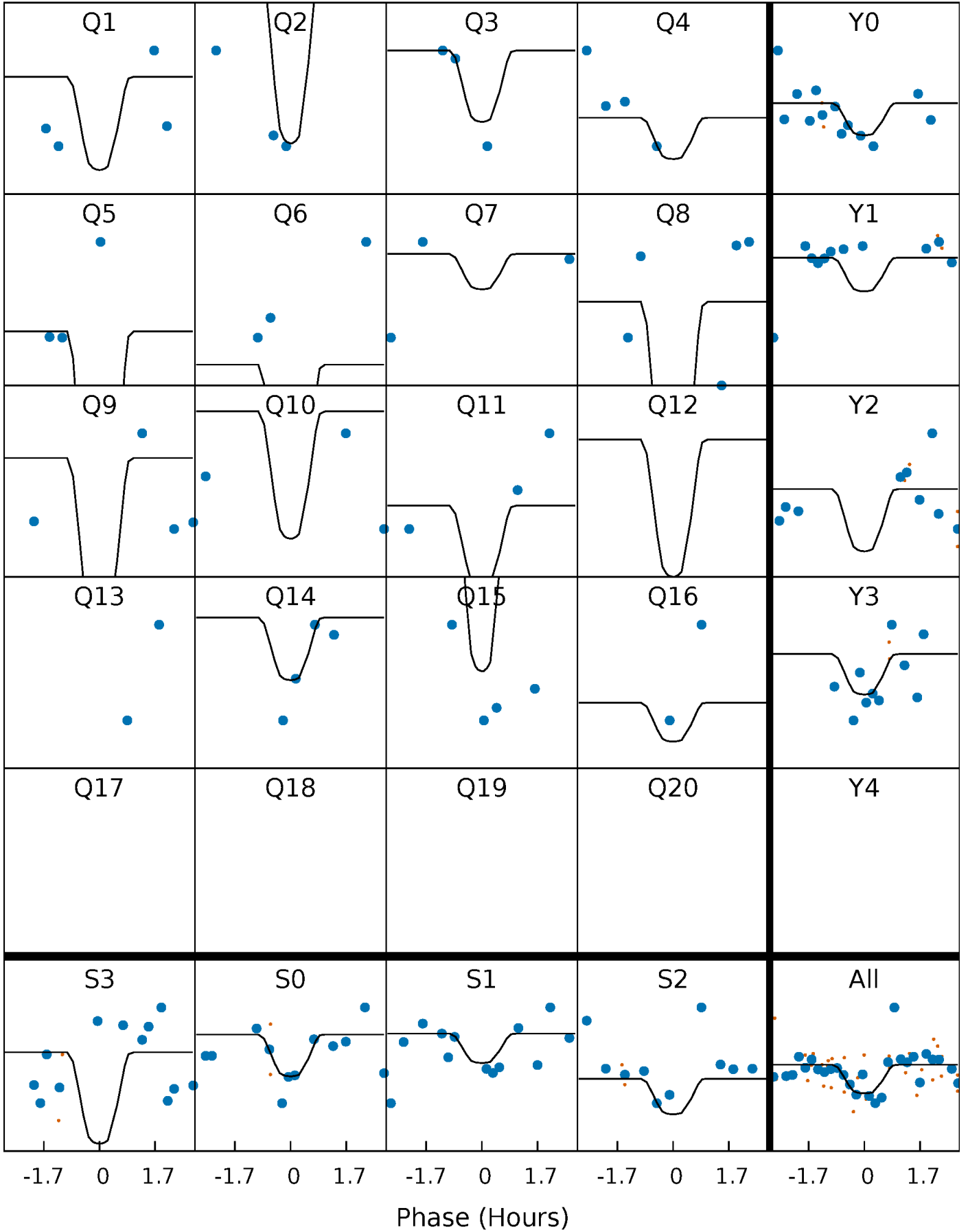
PDC Quarter-Phased Transit Curves

TCE 008328003-07 P= 10.235624 Days $T_0=133.143177$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 008328003-07 $P = 10.235624$ Days $T_0 = 133.143177$ (BKJD)

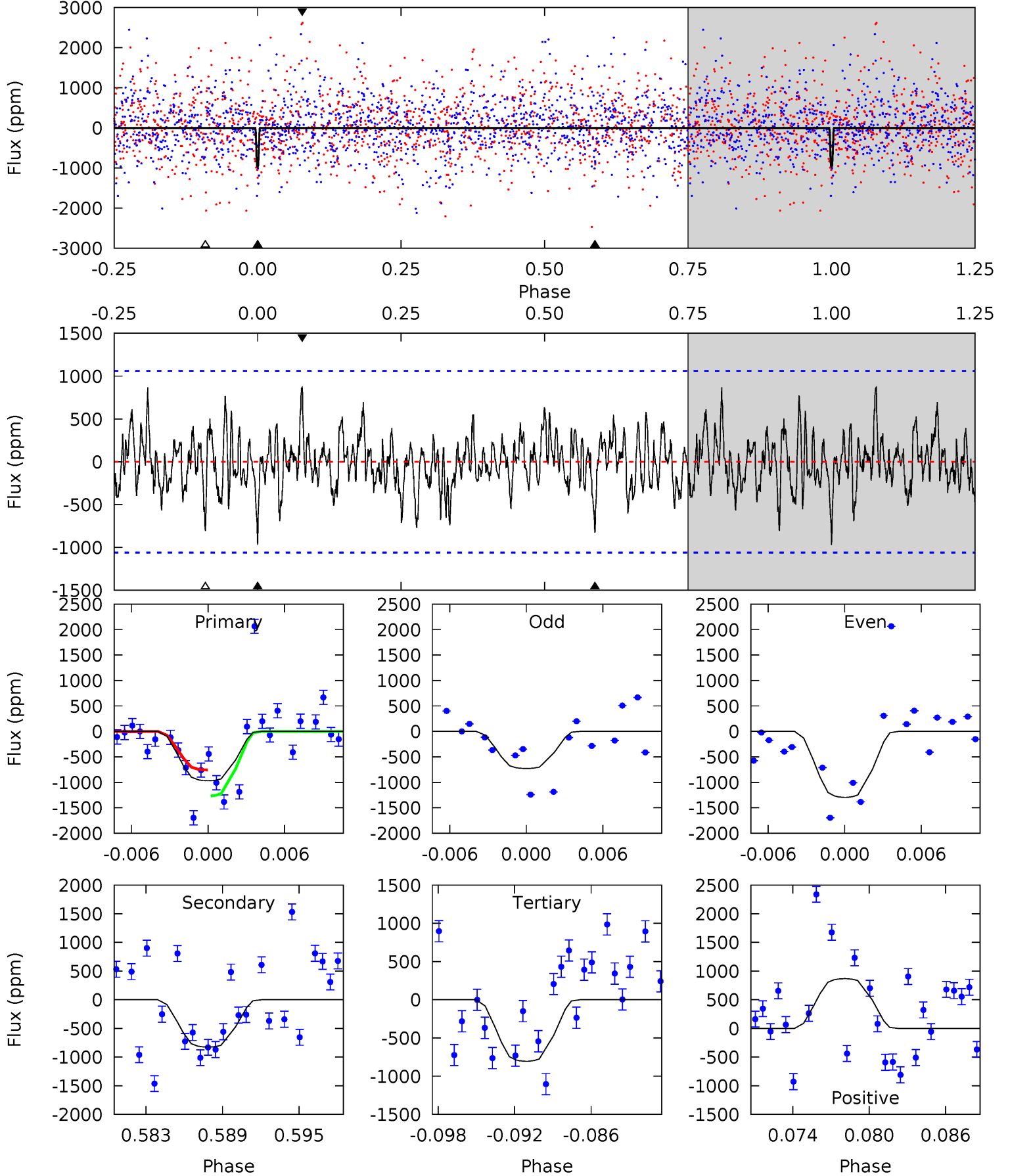


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

008328003-07, P = 10.235624 Days, E = 133.143177 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.68	3.99	3.89	4.19	5.12	2.74	1.29	0.79	0.48	0.10	-0.21	1.33	0.98	0.47	1.25



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 008328003

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6505^{+155}_{-214}	$4.483^{+0.050}_{-0.200}$	$-0.500^{+0.250}_{-0.350}$	$0.975^{+0.278}_{-0.093}$	$1.054^{+0.119}_{-0.146}$	$1.604^{+0.418}_{-0.805}$
	+2%/-3%	+1%/-4%	+50%/-70%	+29%/-10%	+11%/-14%	+26%/-50%
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 008328003-07 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-826 ± 207	$4.73^{+3.63}_{-3.18}$	1313^{+92}_{-57}	5415^{+4517}_{-1206}	176^{+1384}_{-125}
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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

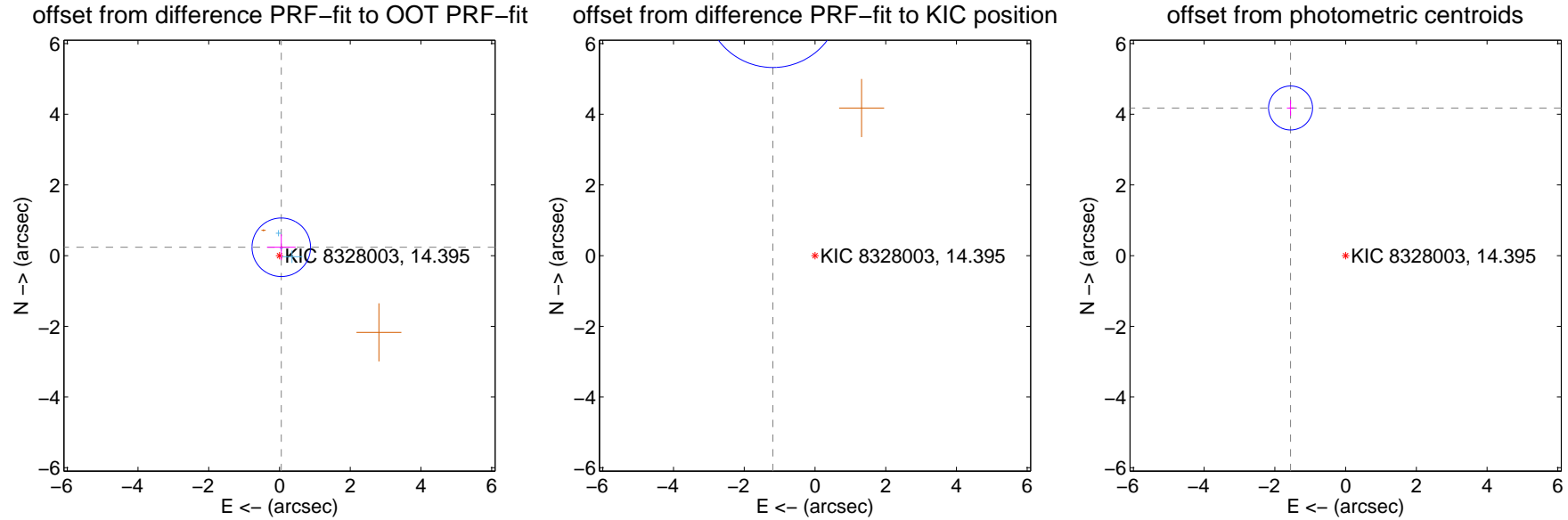
DV Centroid Data

Supplemental centroid analysis for 008328003-07. Kepler magnitude: 14.39. Transit SNR 8.29

There are 3 quarters with good PRF difference image offsets

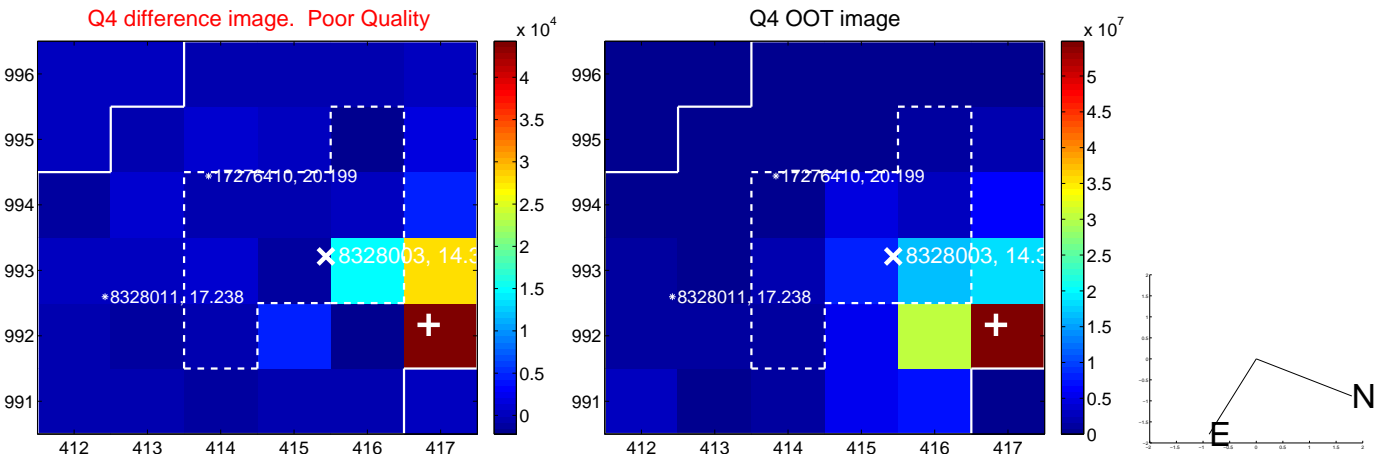
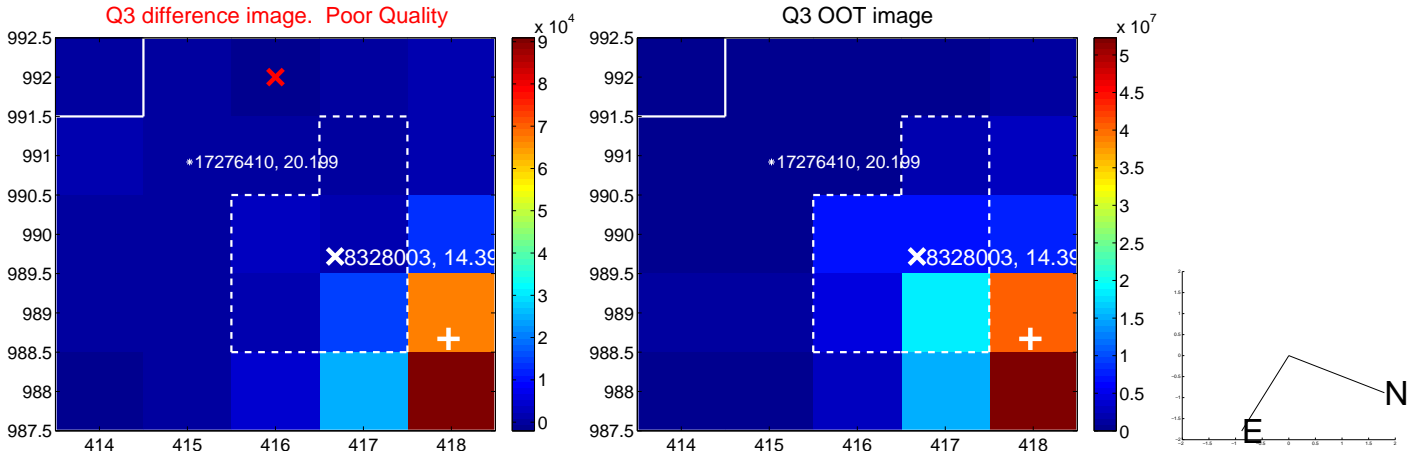
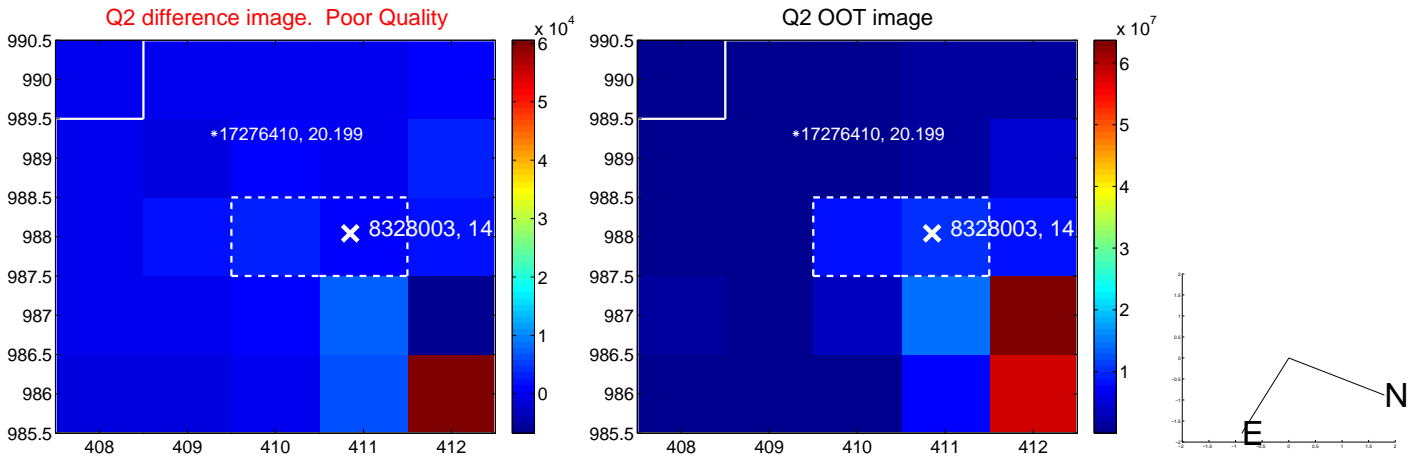
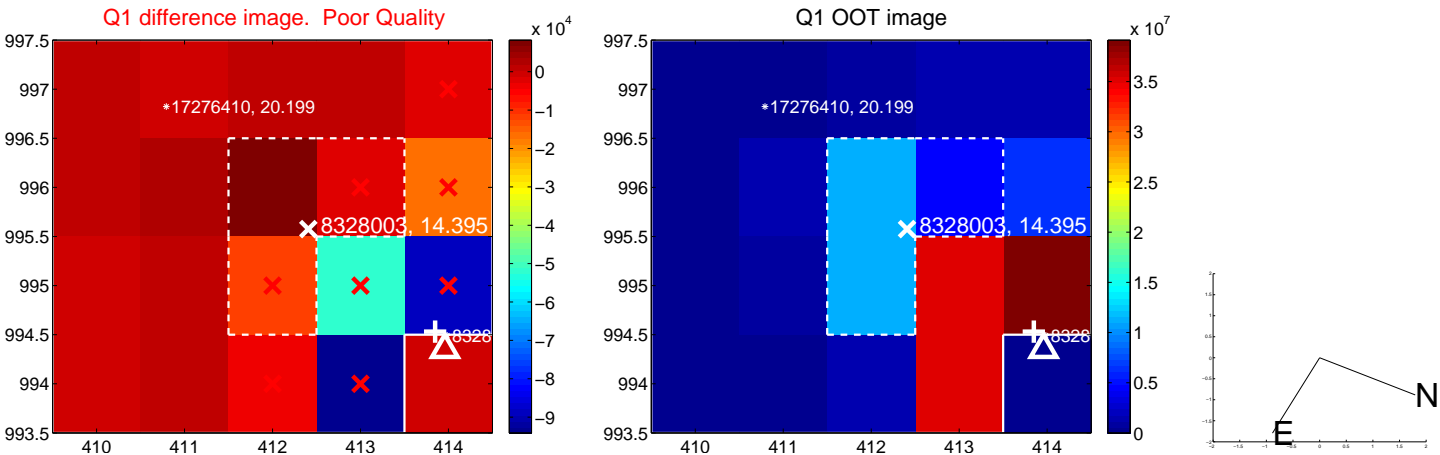
The OOT PRF centroid is offset from the target star catalog position by about 7.10 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.242 ± 0.276	0.88	-0.051 ± 0.406	0.237 ± 0.365
PRF-fit source offset from KIC position	7.340 ± 0.640	11.46	1.191 ± 0.479	7.243 ± 0.571
photometric centroid source offset	4.46 ± 0.21	21.49	1.56 ± 0.10	4.18 ± 0.22

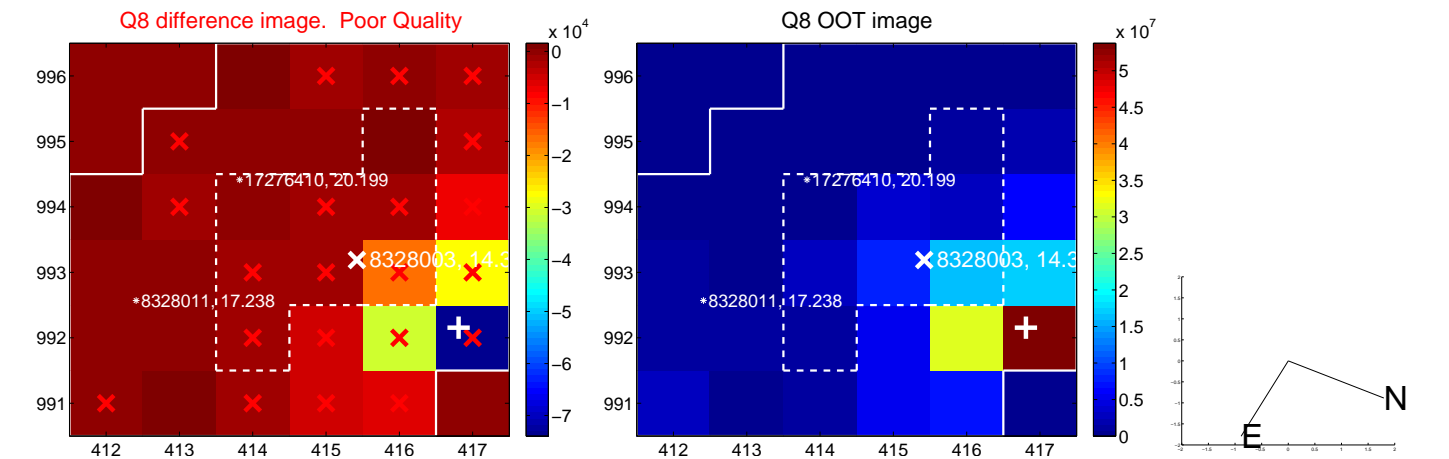
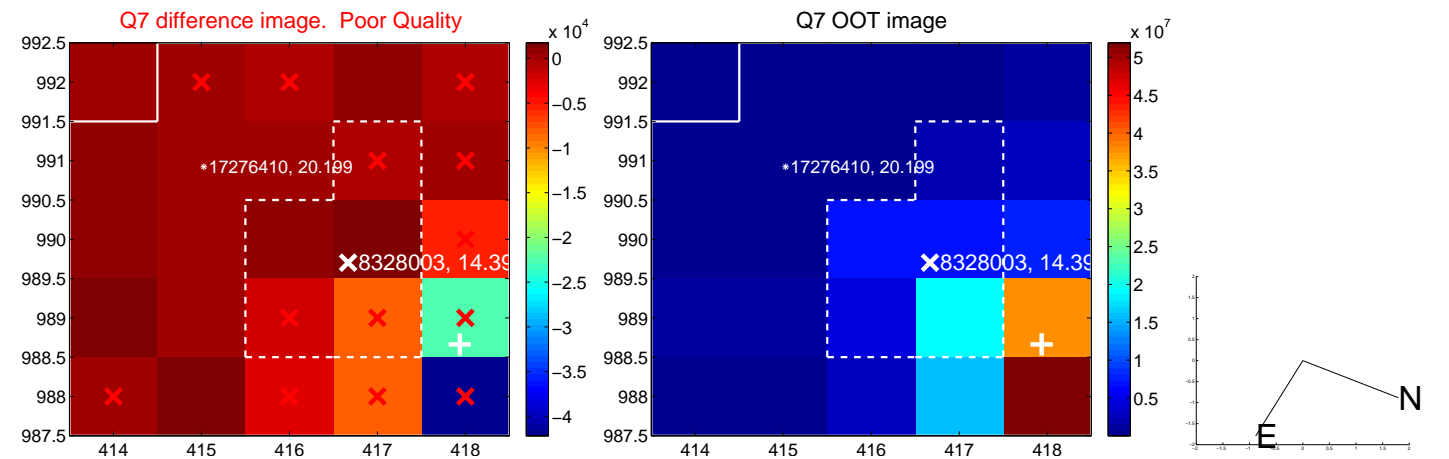
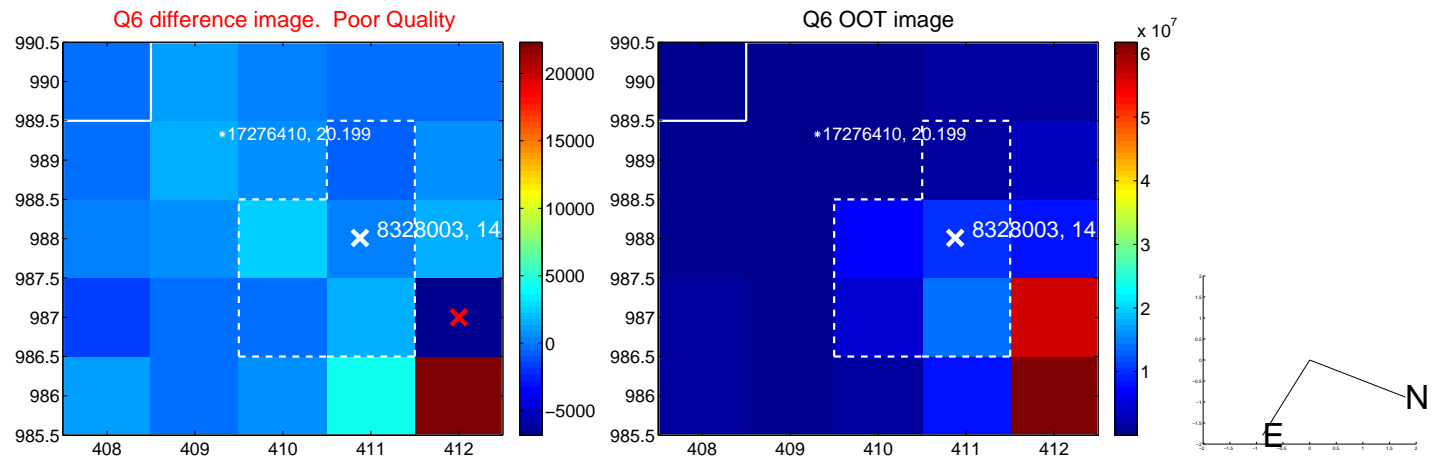
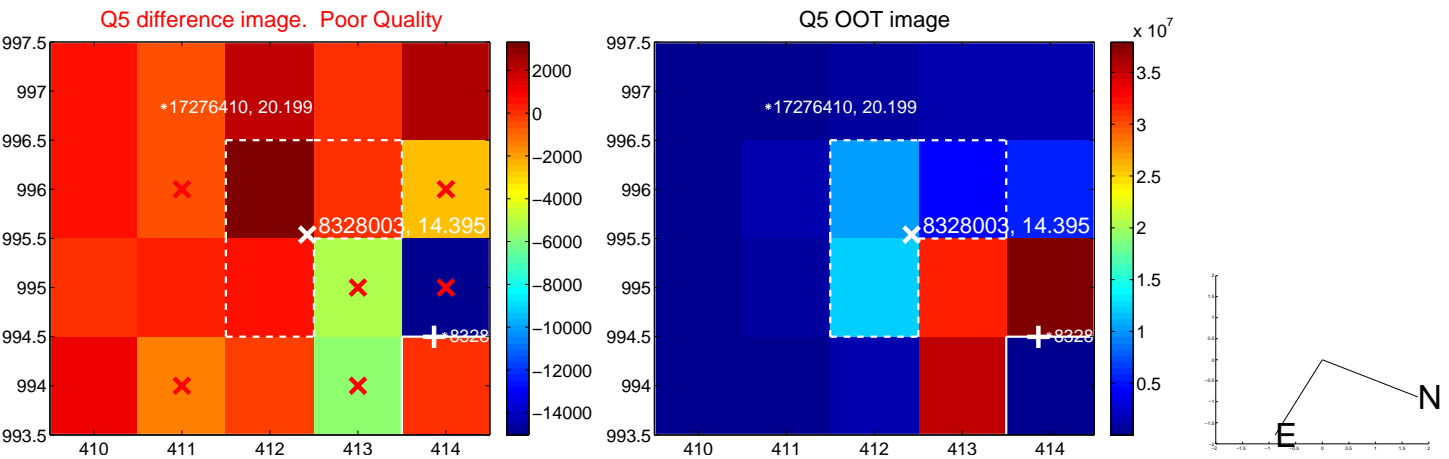


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

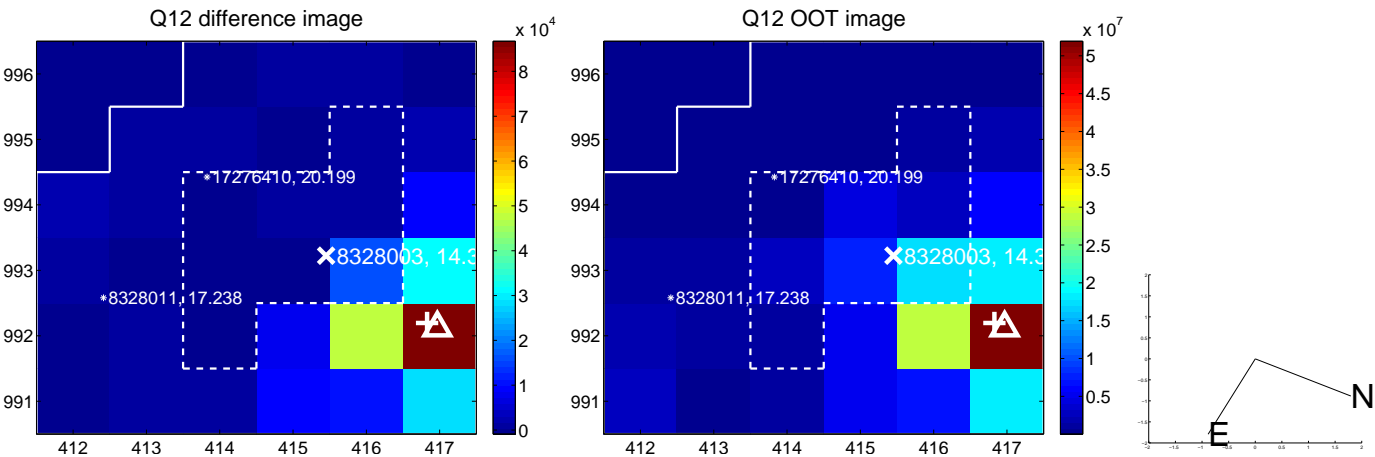
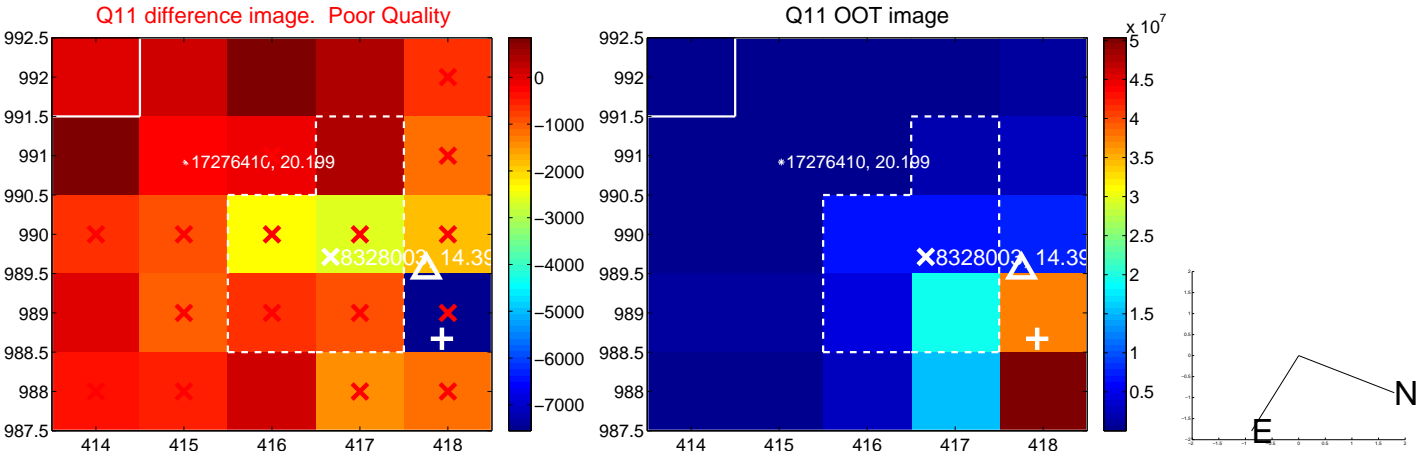
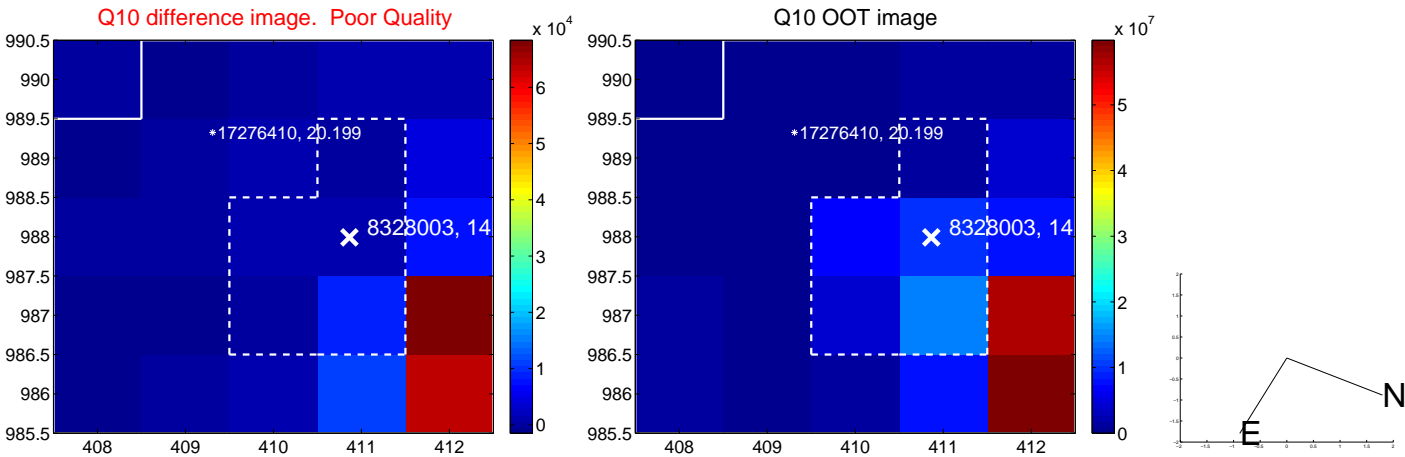
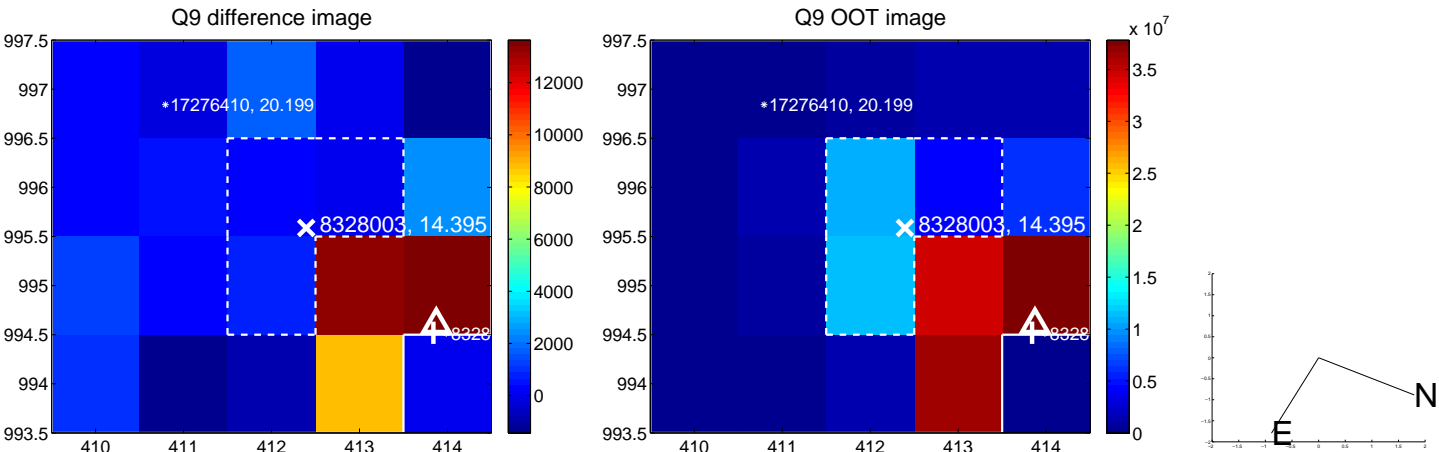
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



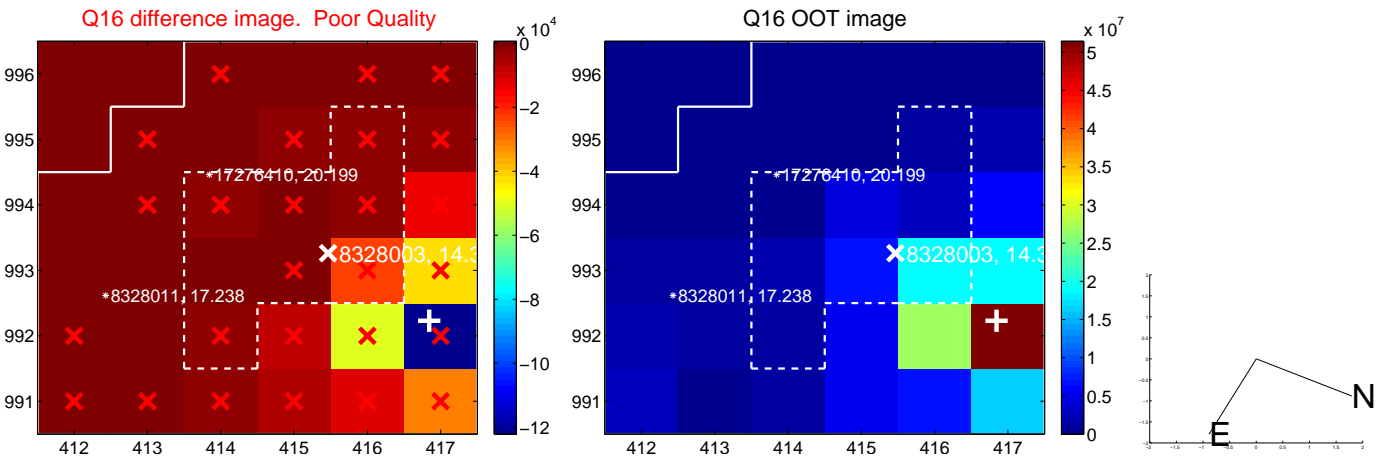
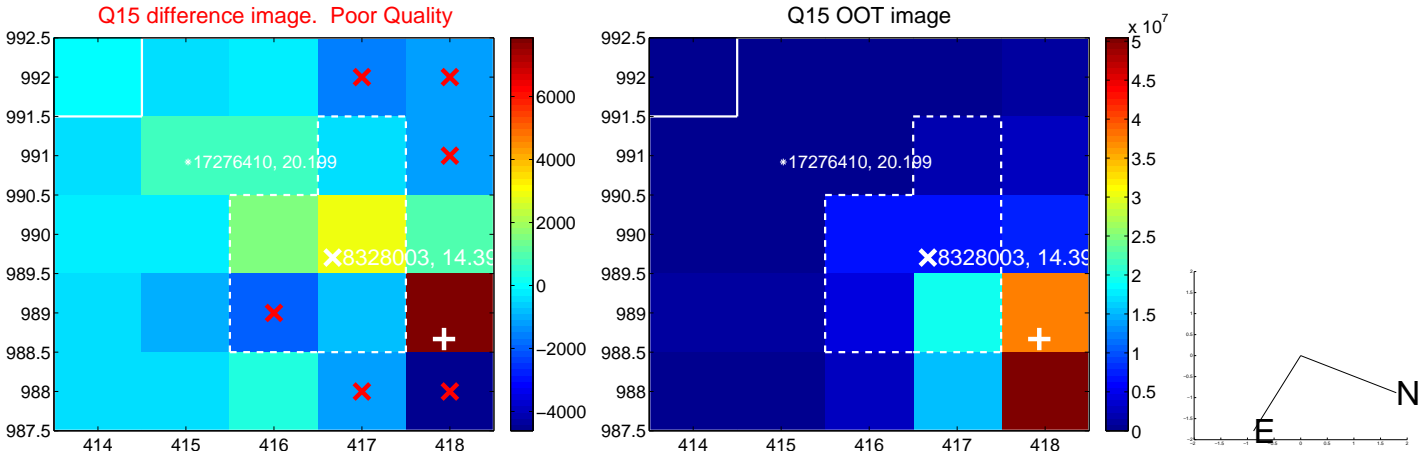
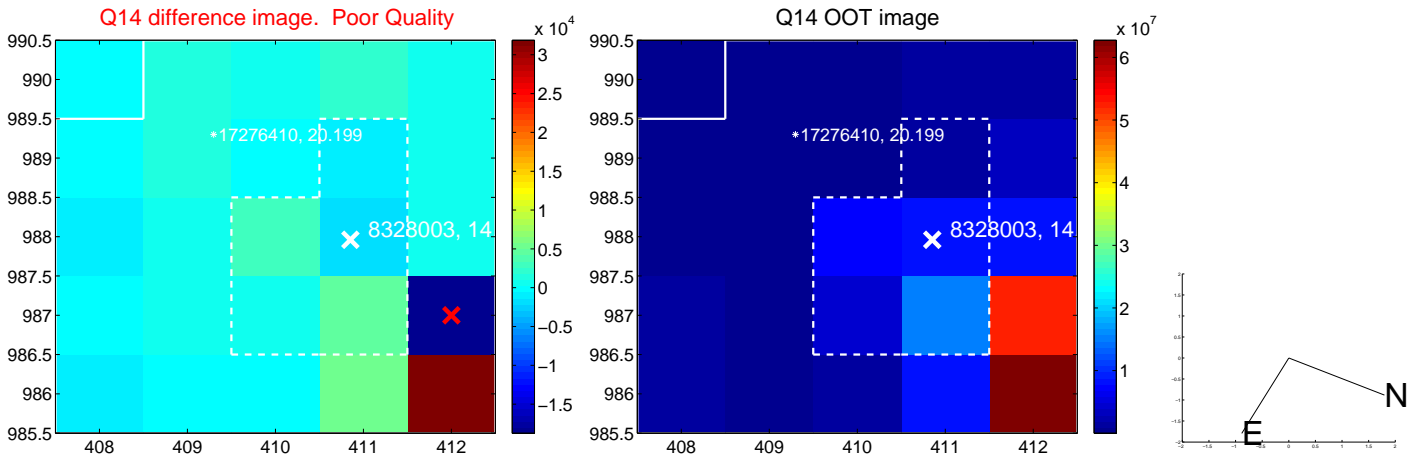
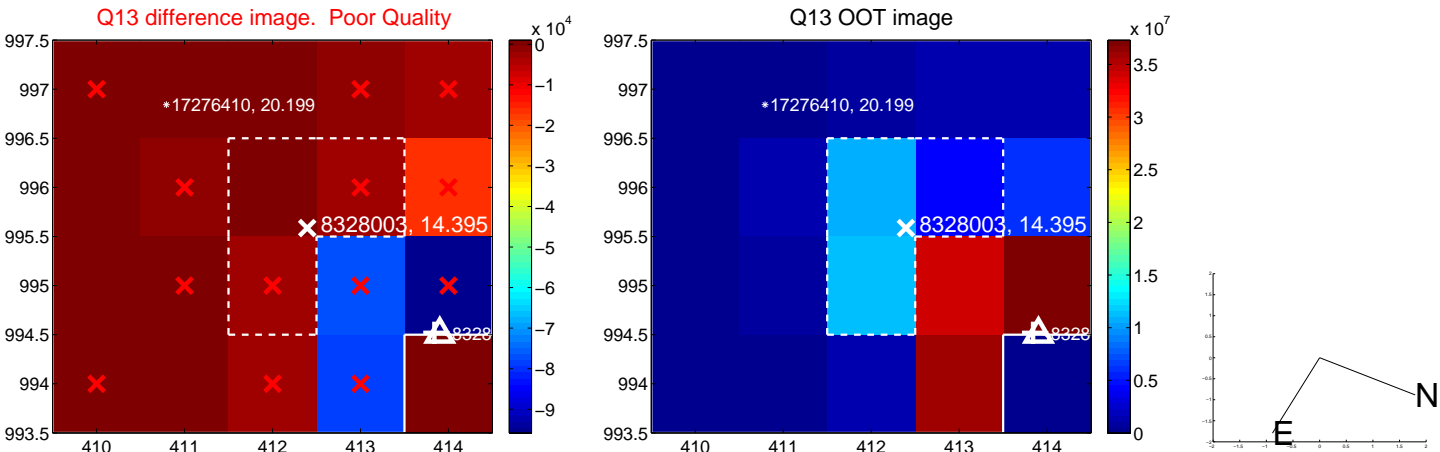
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



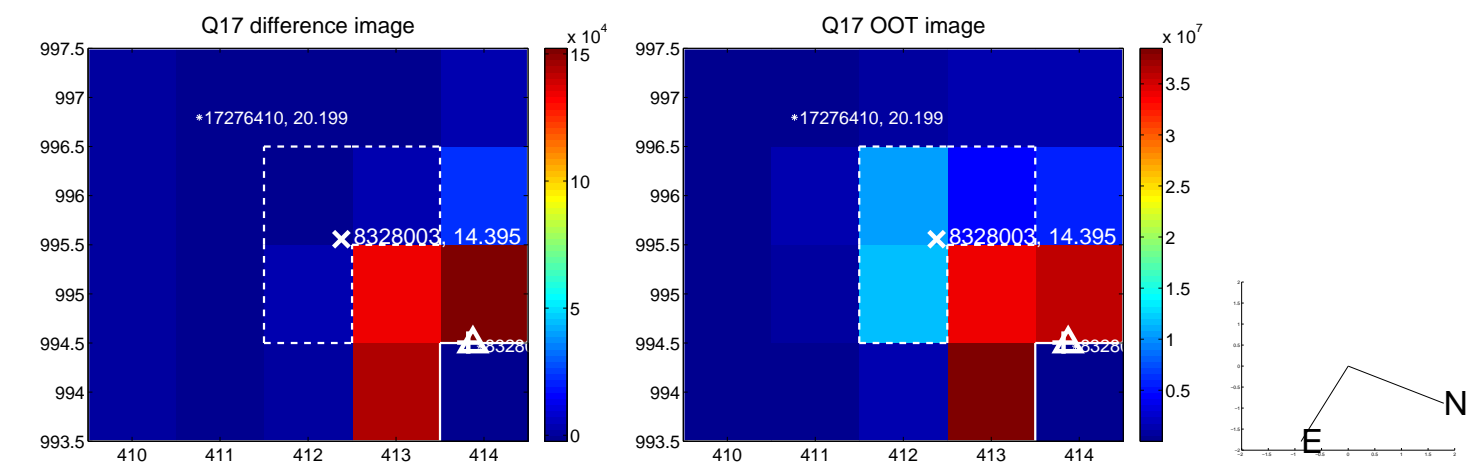
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



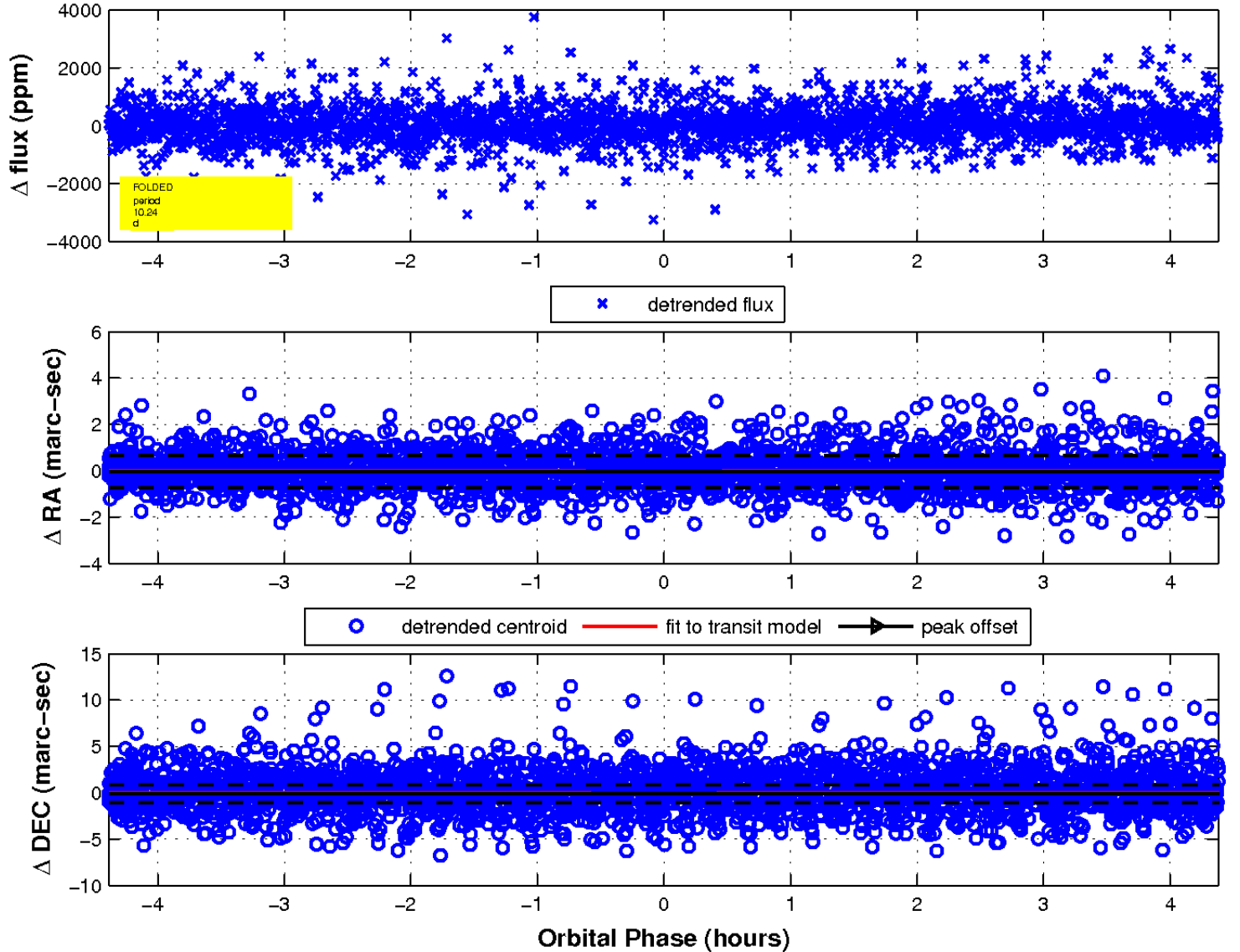
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 7 of 7



UKIRT Image

