

KIC 010732401

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})
010732401-01	OBS	7366.01	0.933621	131.619764	15.9	5.010	9.0	3.3	1.02	6224	0.41	3811.93
010732401-02	OBS	No	52.800900	149.645200	441.8	60.396	11.6	7.4	1.02	6224	2.52	17.56
010732401-03	OBS	No	348.281789	479.393440	520.3	5.660	11.2	7.7	1.02	6224	2.69	1.42

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010732401-01	OBS	FP	0.00	1	0	0	1	LPP_DV—CENT_FEW_DIFFS—EPHEM_MATCH
010732401-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—CENT_UNCERTAIN
010732401-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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 010732401-01

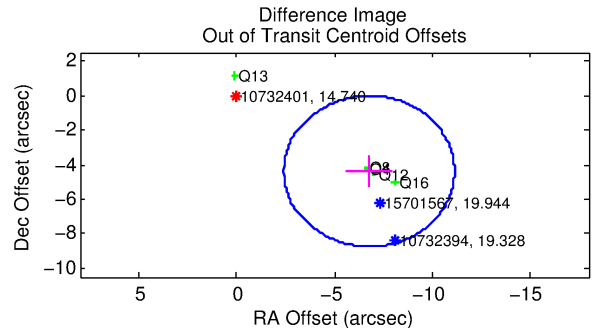
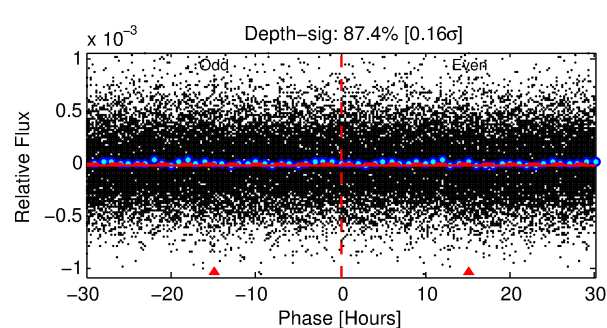
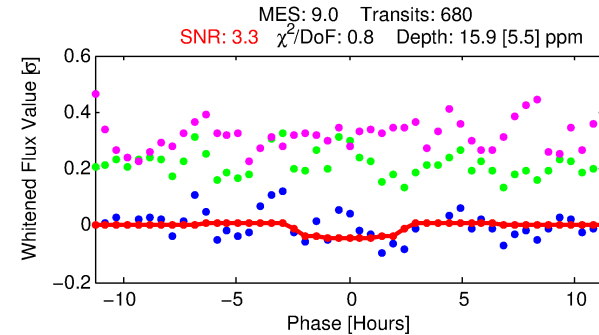
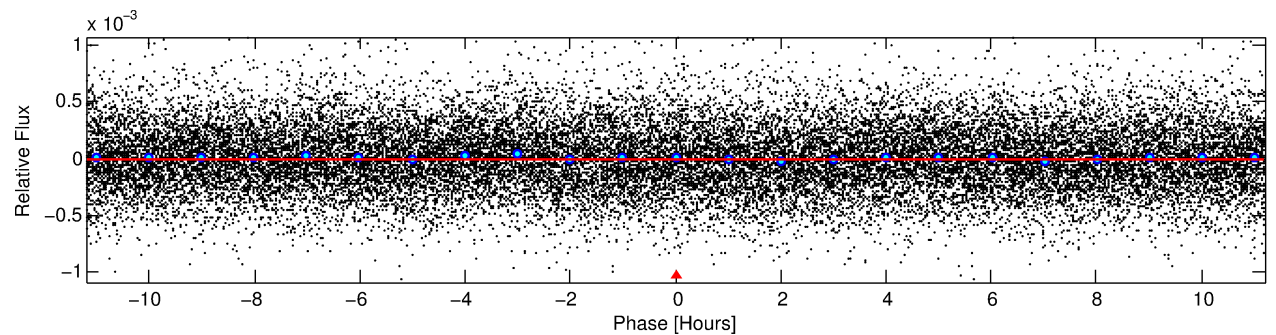
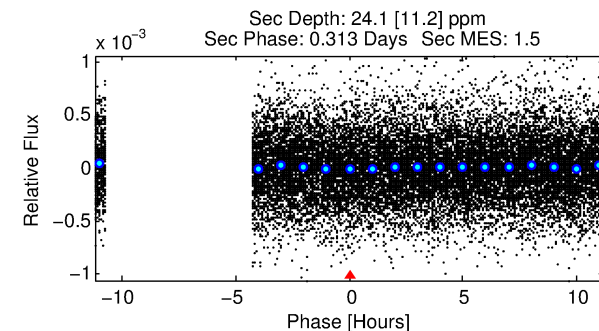
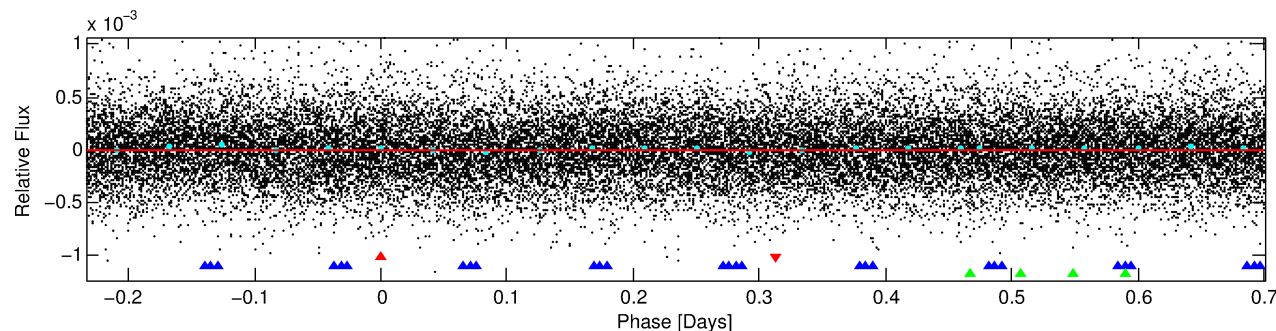
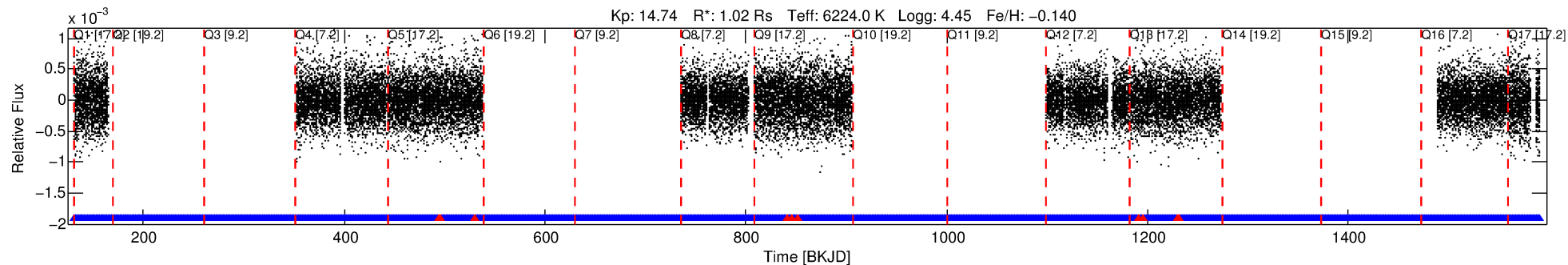
TCE (1)	KIC	Parent (2)	Parent KIC	P ₁ :P ₂	Dist (″)	Δ Row	Δ Col	m ₂	m ₁	D ₂ /D ₁	Mechanism	Flag	σ_P	σ_T
010732401-01	10732401	010342041-01	10342041	1:1	2252.9	566	12	14.66	14.74	106.44	Col-Anomaly	0	1.74	0.82

Notes: P₁:P₂ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m₂ and m₁ are the magnitudes of the parent and child. D₂/D₁ is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

KIC: 10732401 Candidate: 1 of 3 Period: 0.934 d

KOI: K07366.01 Corr: 0.782



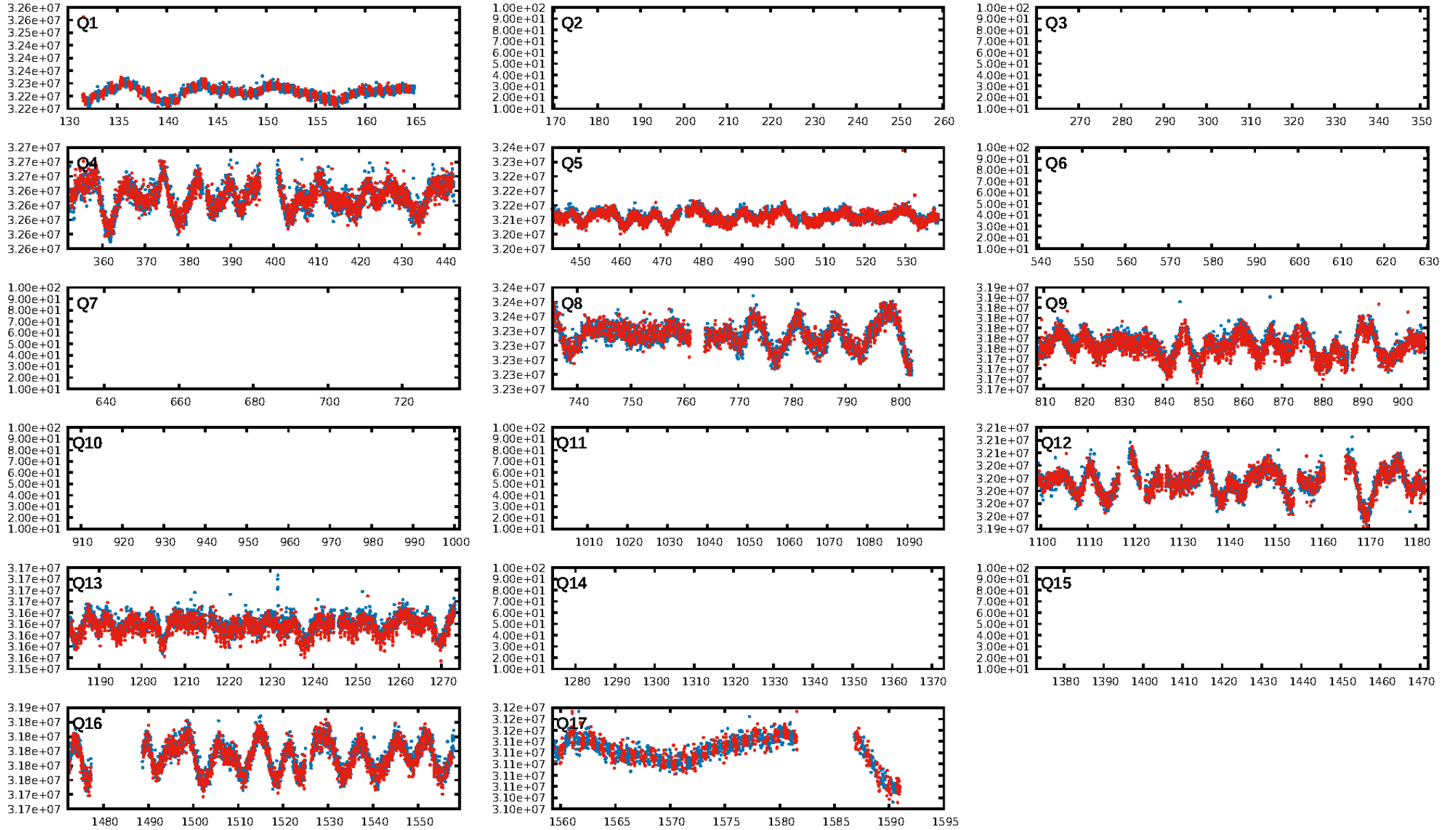
DV Fit Results:

Period = 0.93362 [0.00004] d
Epoch = 131.6198 [0.0148] BKJD
Rp/R* = 0.0037 [0.0060]
a/R* = 1.48 [6.58]
b = 0.40 [17.53]
Seff = 3811.93 [1462.13]
Teq = 2004 [192] K
Rp = 0.42 [0.68] Re
a = 0.0192 [0.0047] AU
Ag = 28.47 [93.68] [0.29σ]
Teffp = 7156 [5857] K [0.88σ]

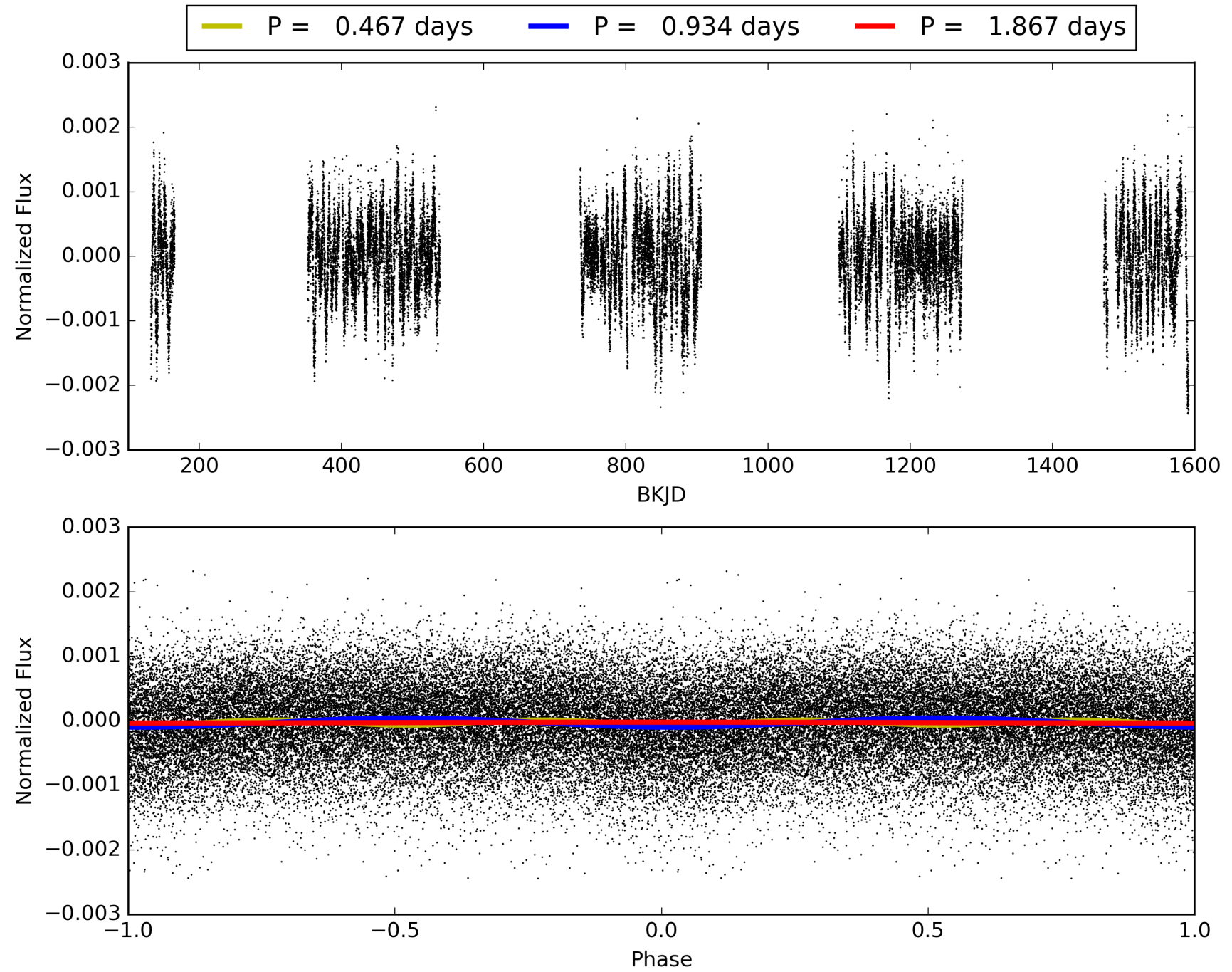
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [20.54σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.07e-15
RollingBand-fgt: 0.98 [605/615]
GhostDiagnostic-chr: -0.4594
Centroid-sig: 0.0%
Centroid-so: 11.137 arcsec [2.79σ]
OotOffset-rm: 8.068 arcsec [5.55σ]
KicOffset-rm: 8.000 arcsec [3.77σ]
OotOffset-st: 0/0/4/1 [5]
KicOffset-st: 0/0/4/1 [5]
DiffImageQuality-fgm: 0.00 [0/5]
DiffImageOverlap-fno: 1.00 [9/9]

TCE 010732401-01, PDC Light Curves

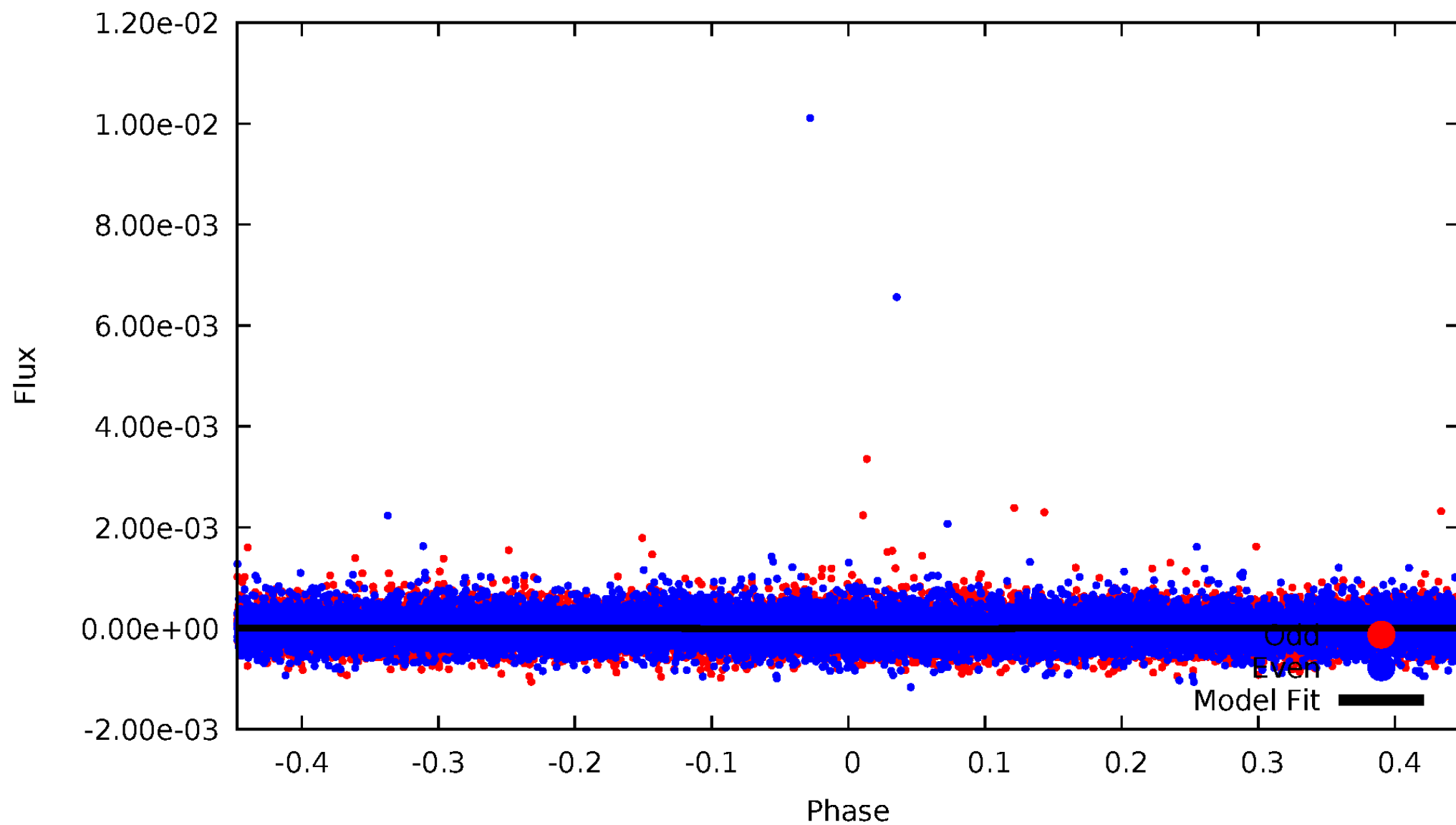


TCE 010732401-01



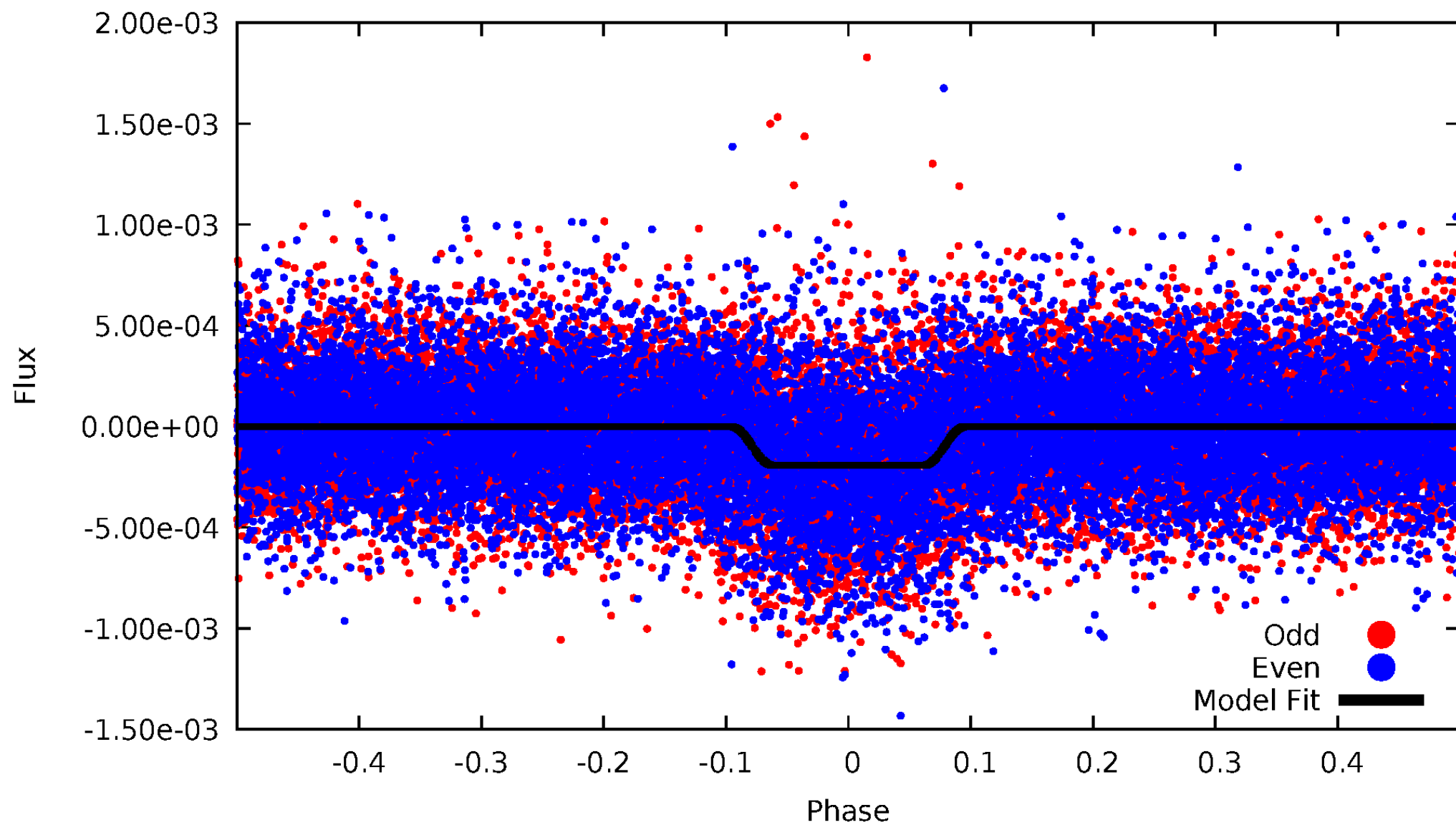
DV Odd/Even

TCE 010732401-01



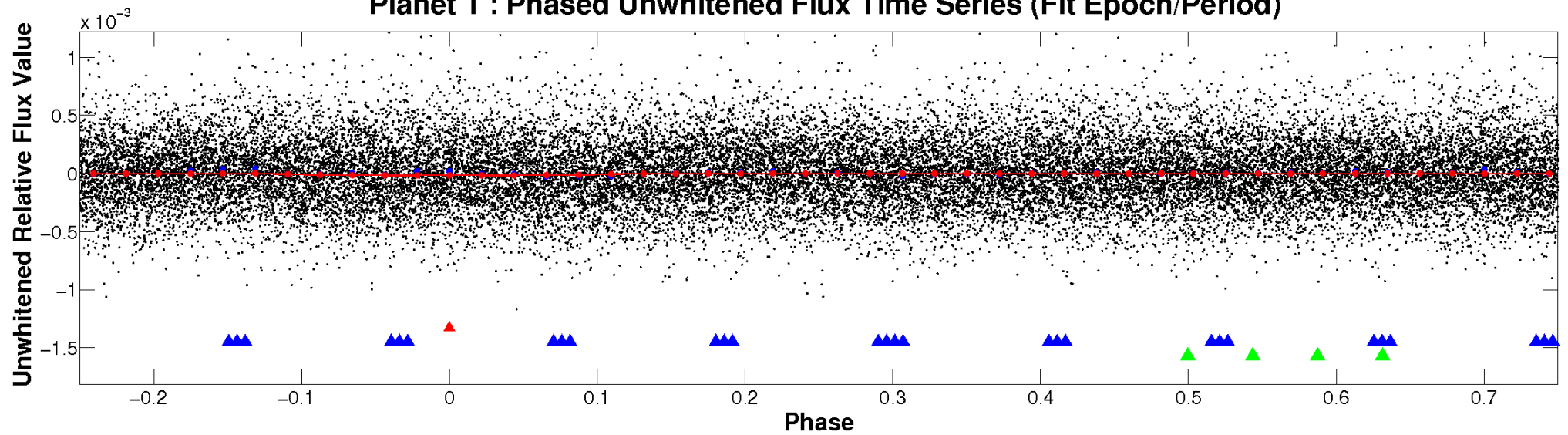
ALT Odd/Even

TCE 010732401-01

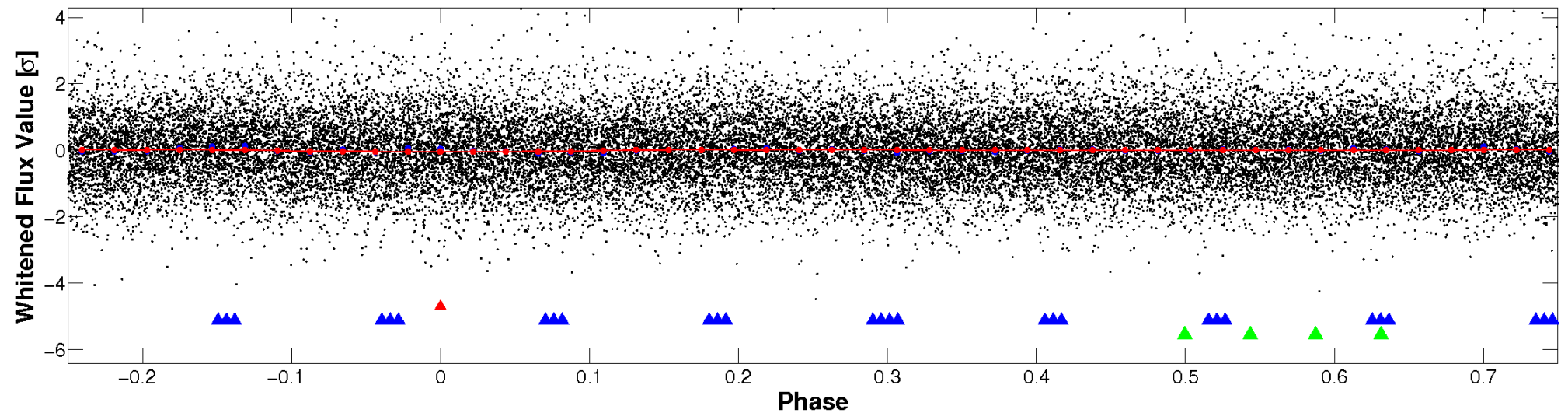


Non-Whitened Vs. Whitened Light Curve

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

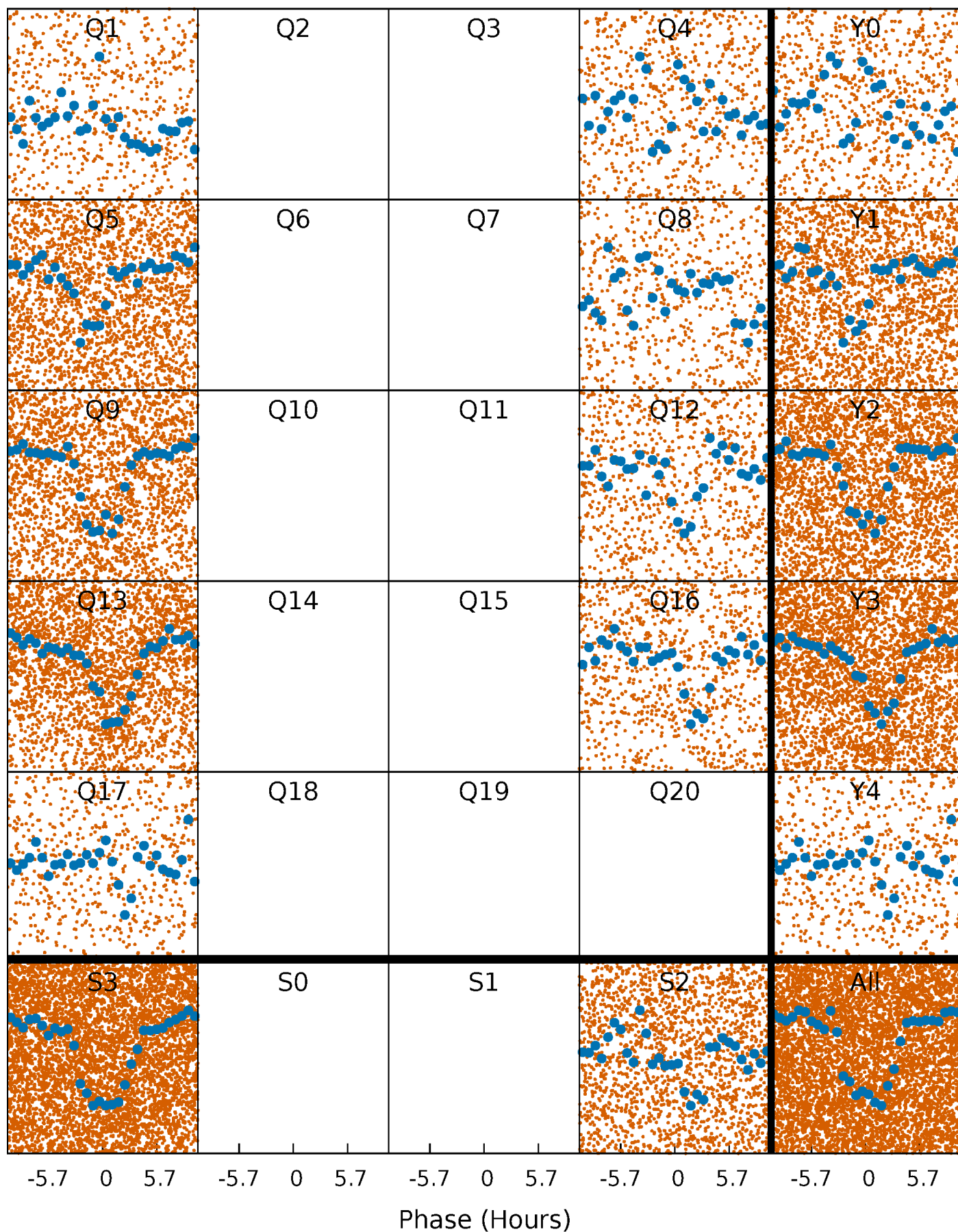


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



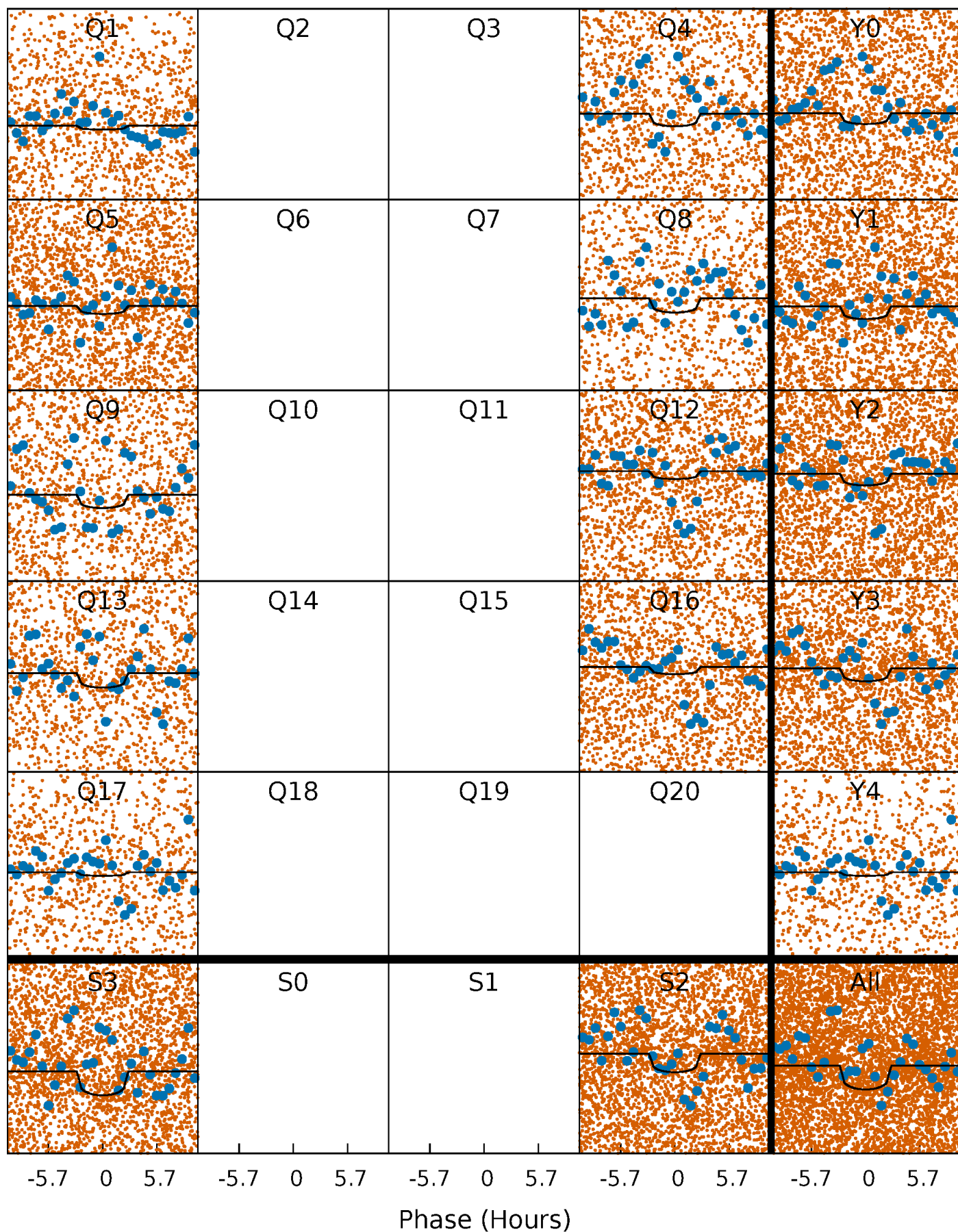
PDC Quarter-Phased Transit Curves

TCE 010732401-01 P= 0.933621 Days $T_0=131.619764$ (BKJD)



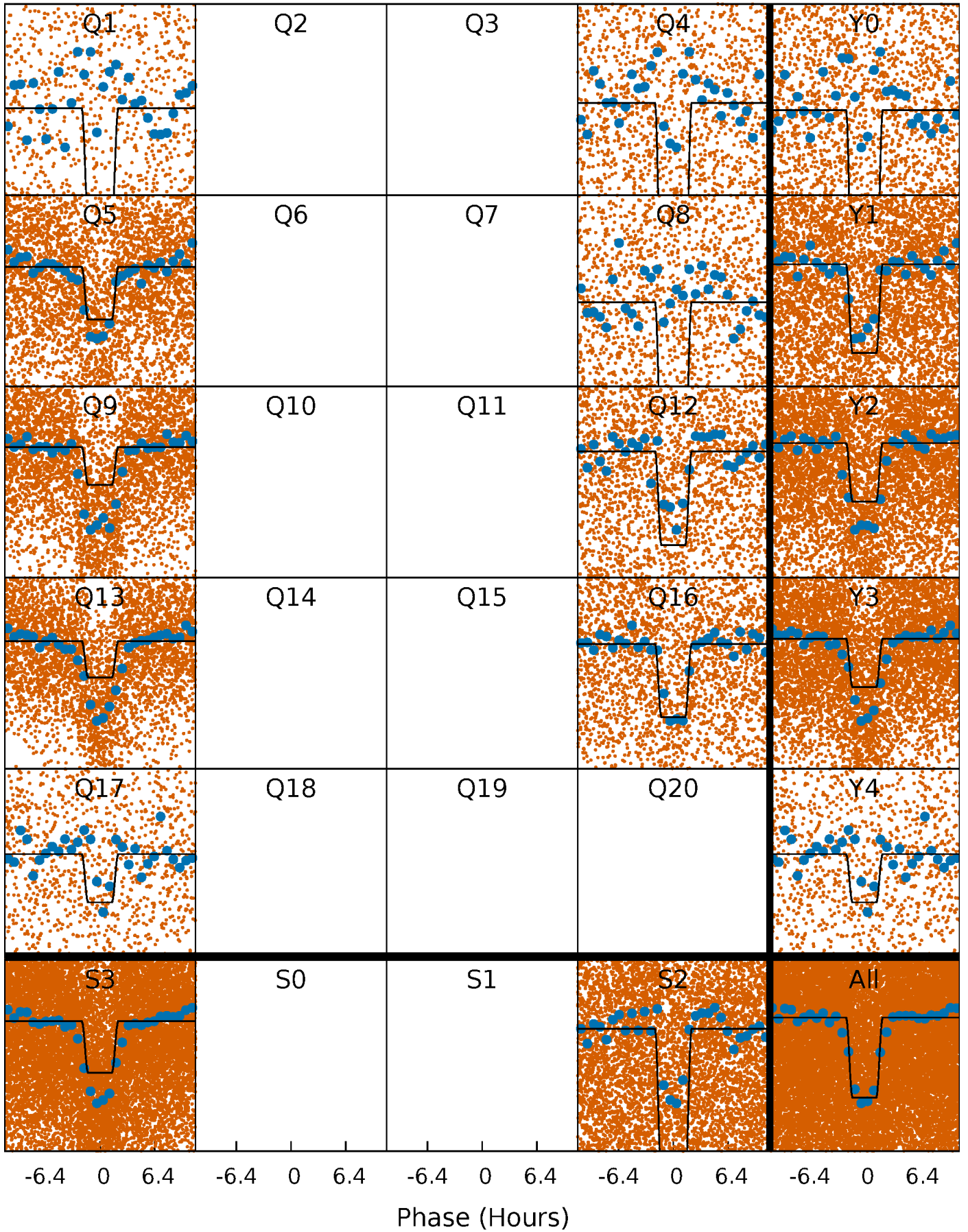
DV Quarter-Phased Transit Curves

TCE 010732401-01 $P = 0.933621$ Days $T_0 = 131.619764$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

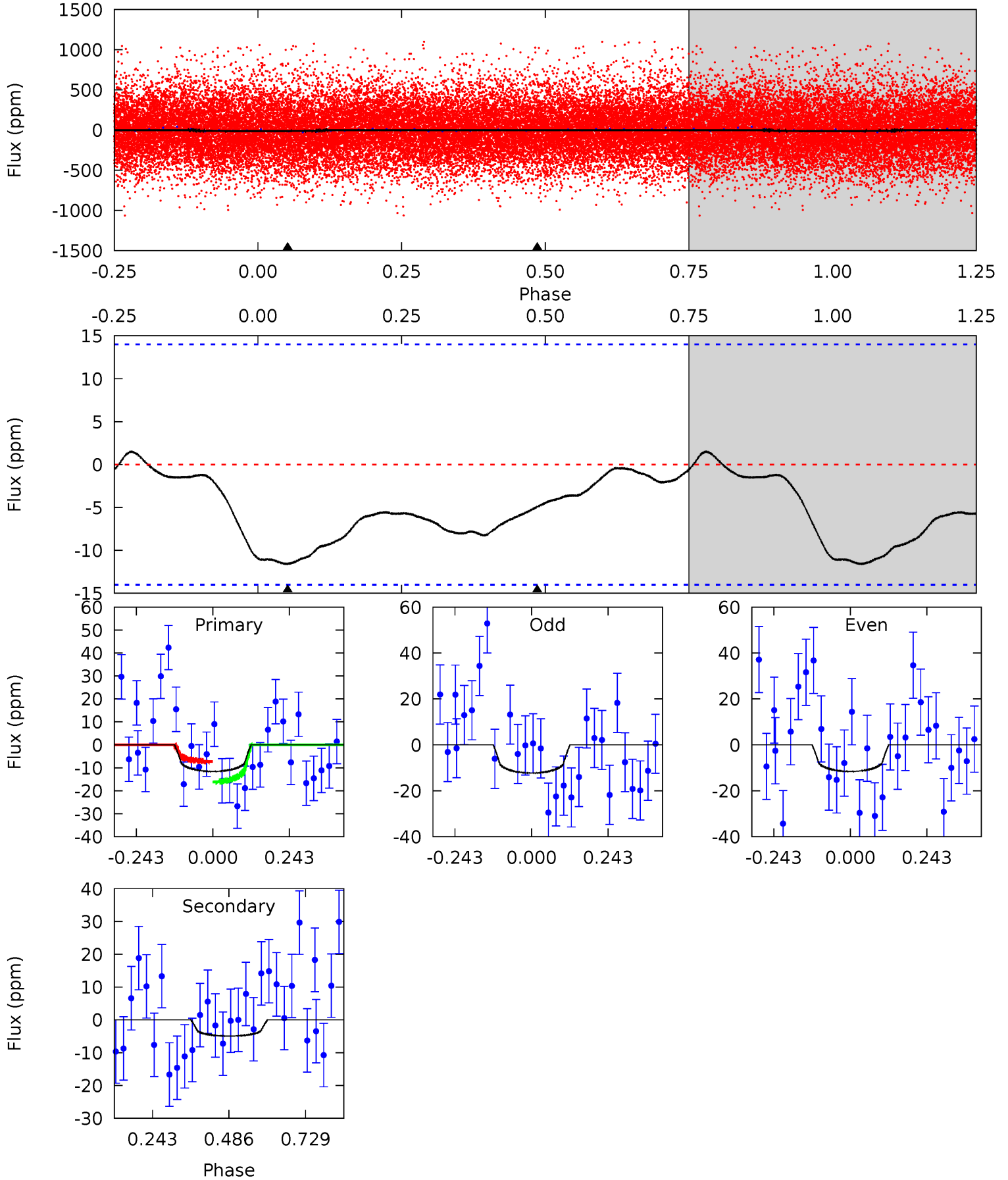
TCE 010732401-01 P= 0.933732 Days $T_0=131.534618$ (BKJD)



DV Model-Shift Uniqueness Test

010732401-01, P = 0.933621 Days, E = 130.686143 Days

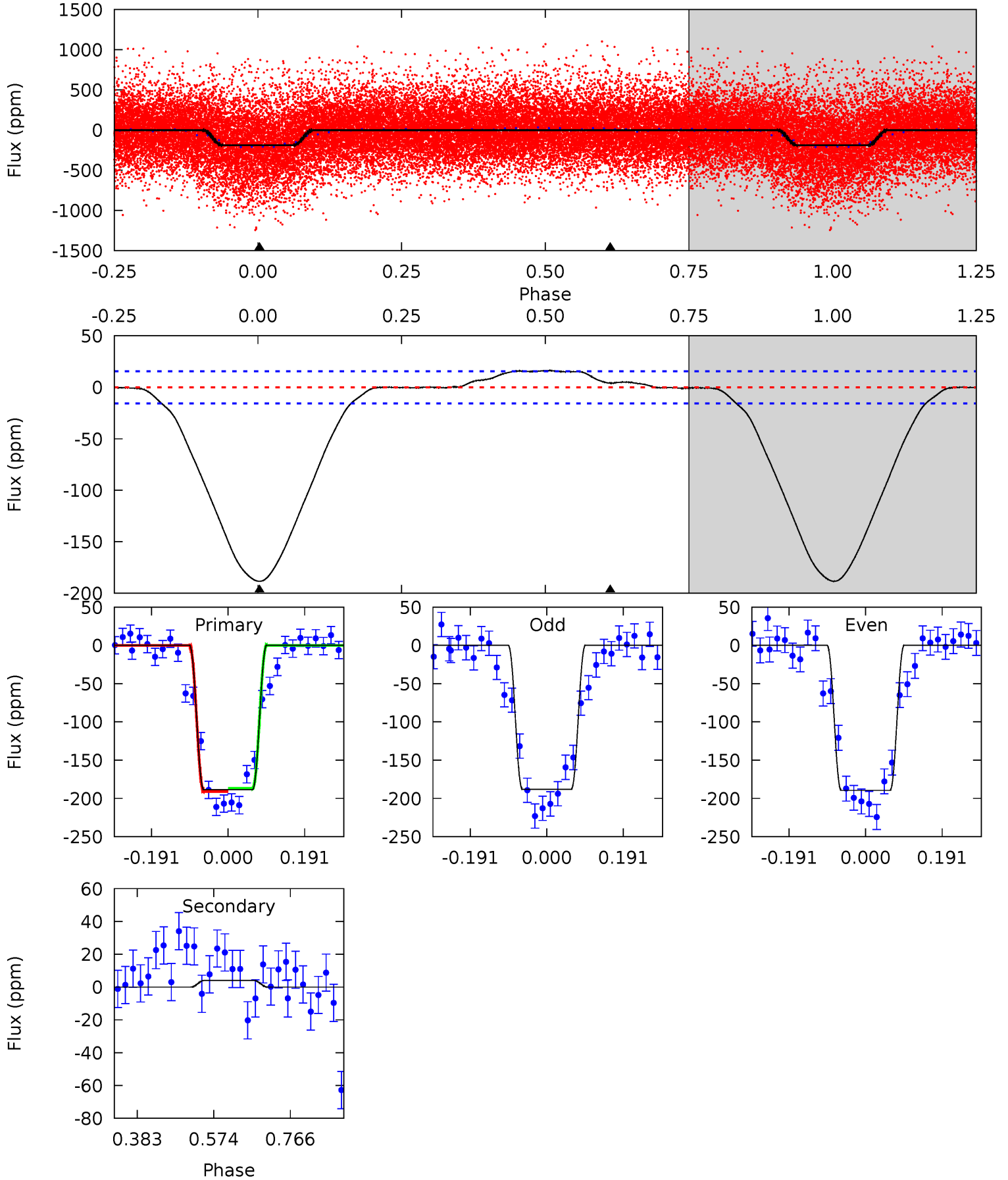
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.62	1.54	0	0	4.37	1.17	0.34	3.62	3.62	1.54	1.54	0.11	1.04	0.12	1.36



Alt Model-Shift Uniqueness Test

010732401-01, P = 0.933732 Days, E = 130.600886 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
53.3	-1.14	0	0	4.43	1.31	1.02	53.3	53.3	-1.14	-1.14	0.18	1.02	0.08	0.55



Stellar Parameters For KIC 010732401

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6224^{+153}_{-218}	$4.454^{+0.052}_{-0.195}$	$-0.140^{+0.250}_{-0.350}$	$1.024^{+0.299}_{-0.107}$	$1.084^{+0.144}_{-0.144}$	$1.423^{+0.380}_{-0.684}$
	+2%/-4%	+1%/-4%	+179%/-250%	+29%/-10%	+13%/-13%	+27%/-48%
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 010732401-01 / KOI 7366.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-5 ± 3	$0.66^{+0.67}_{-0.41}$	2857^{+187}_{-153}	3961^{+2171}_{-1538}	$2.061^{+12.766}_{-1.709}$
Alt.	4 ± 4	$1.62^{+0.74}_{-0.69}$	2850^{+189}_{-126}	-3335^{+282}_{-507}	$-0.277^{+0.239}_{-0.876}$

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 $A_{obs} \gg 1.0$

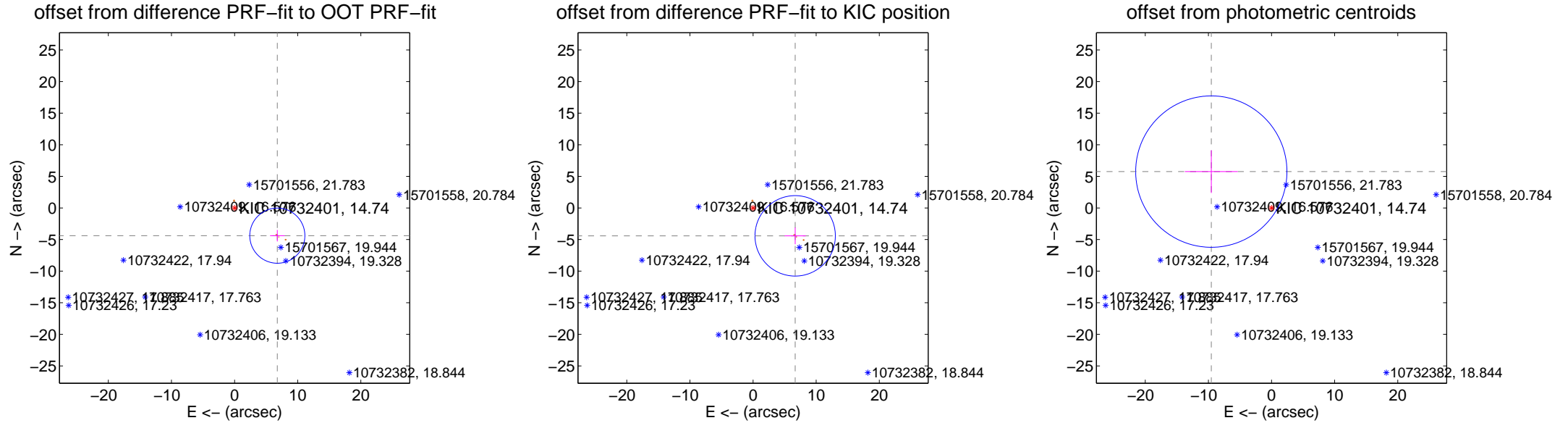
DV Centroid Data

Supplemental centroid analysis for 010732401-01. Kepler magnitude: 14.74. Transit SNR 3.27

There are 0 quarters with good PRF difference image offsets

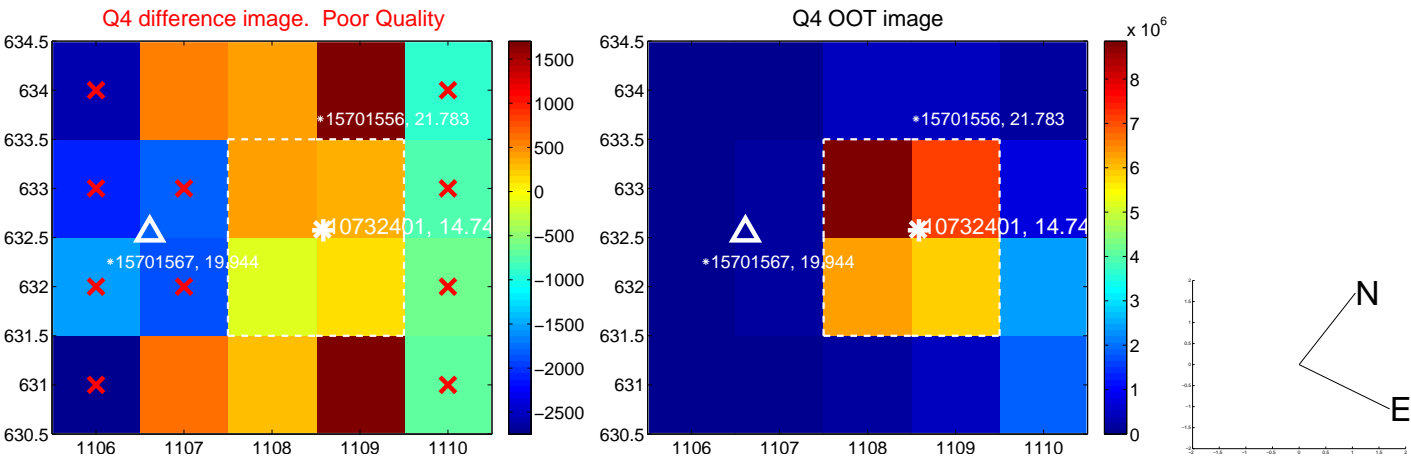
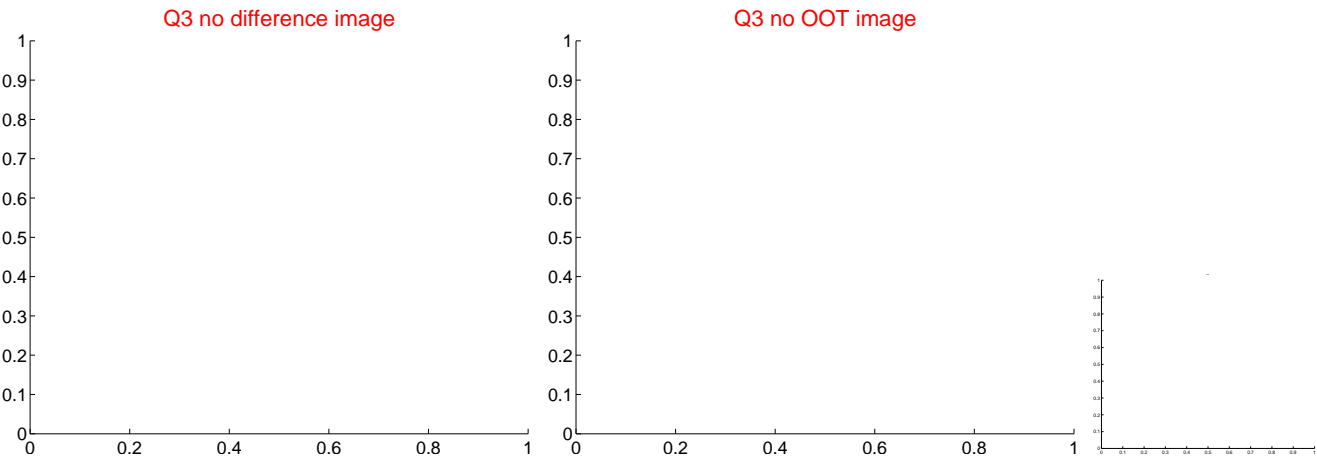
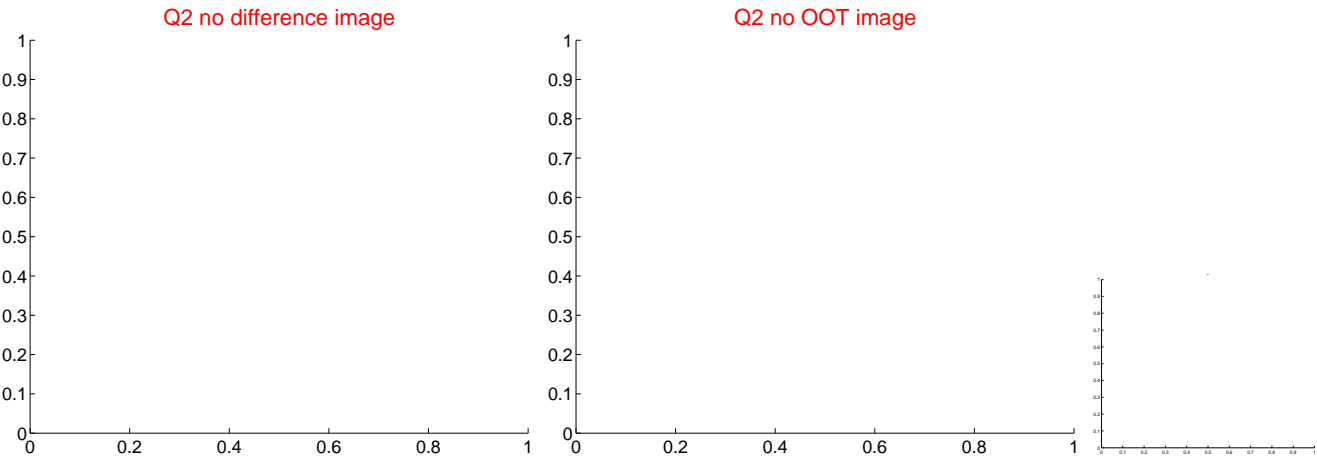
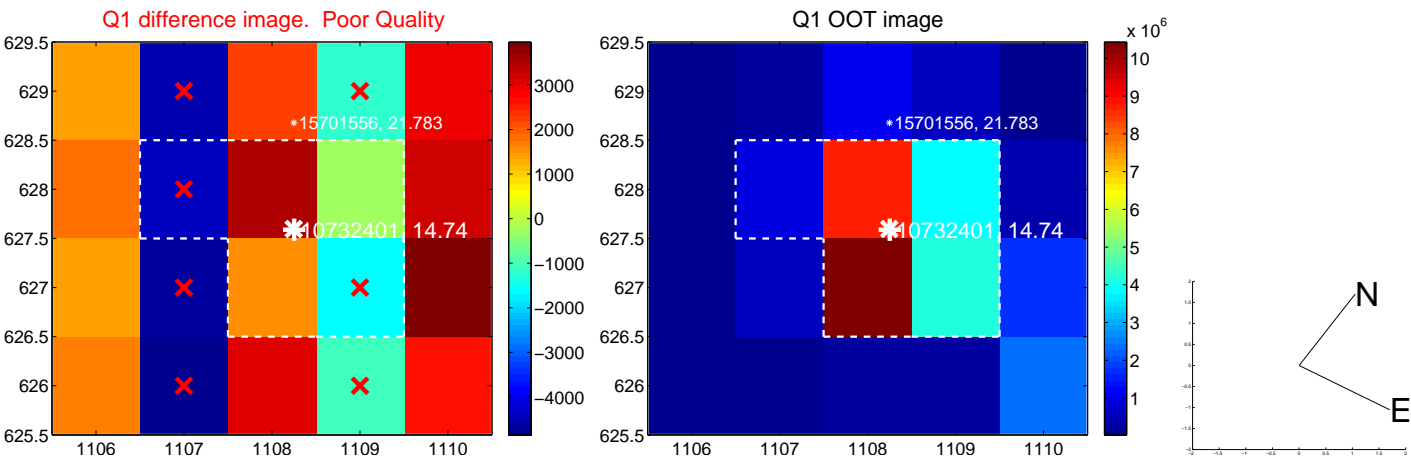
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.068 ± 1.454	5.55	-6.773 ± 1.149	-4.385 ± 0.906
PRF-fit source offset from KIC position	8.000 ± 2.122	3.77	-6.671 ± 1.667	-4.415 ± 1.329
photometric centroid source offset	11.14 ± 3.99	2.79	9.54 ± 4.19	5.75 ± 3.38

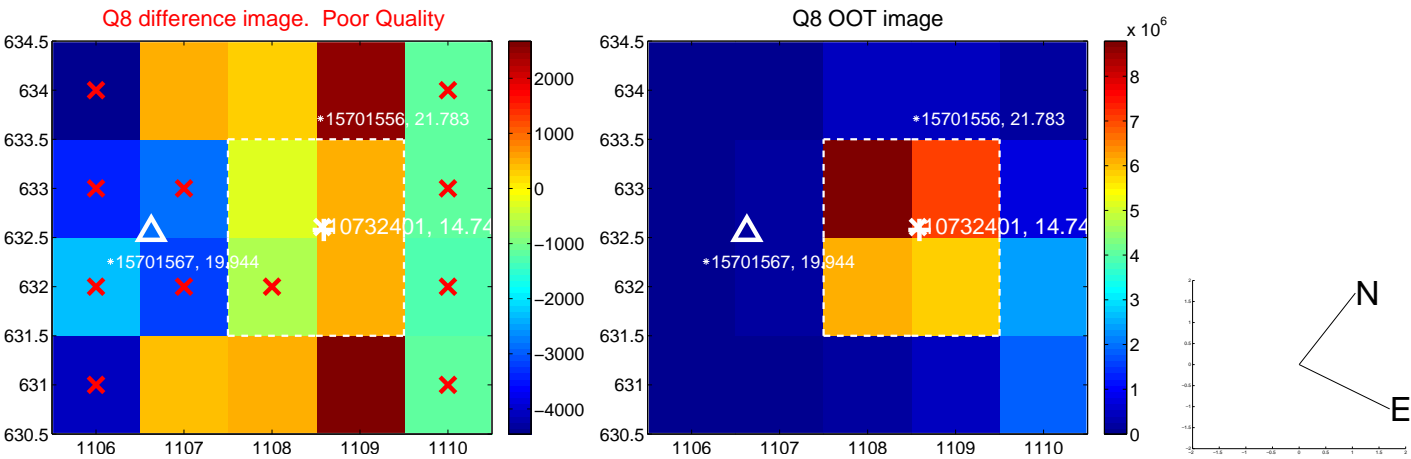
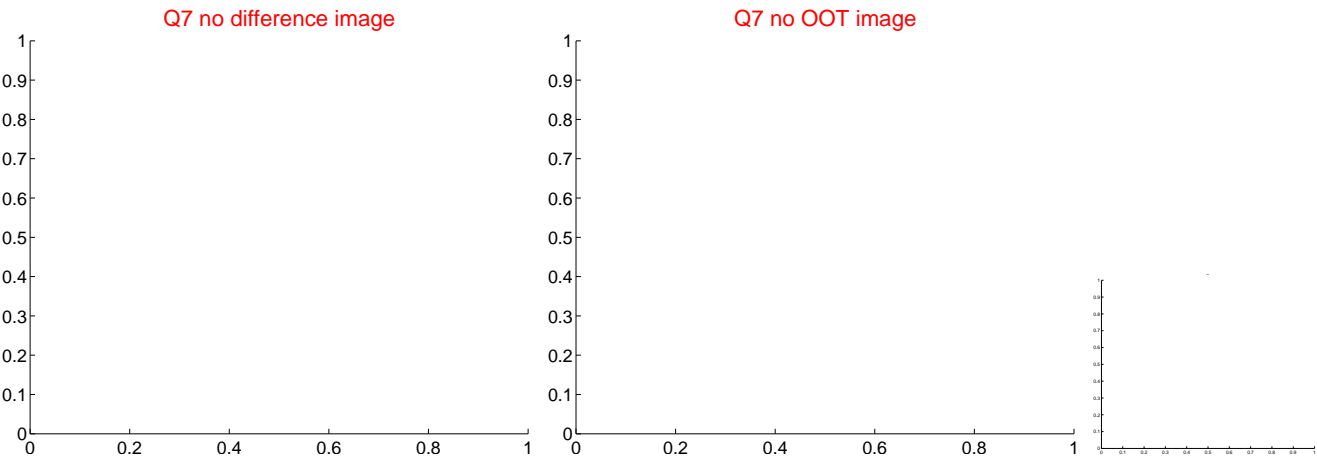
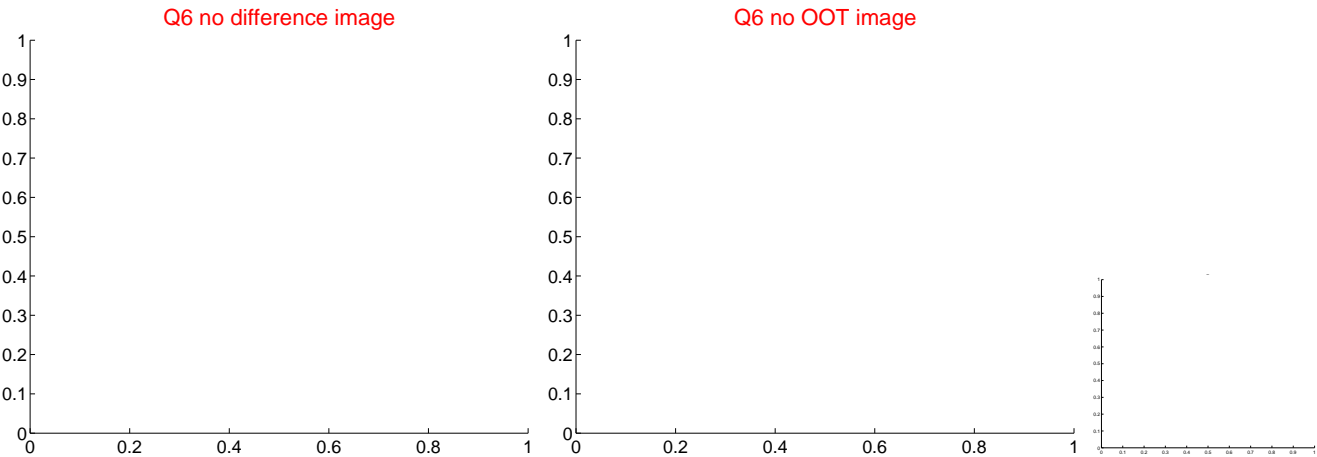
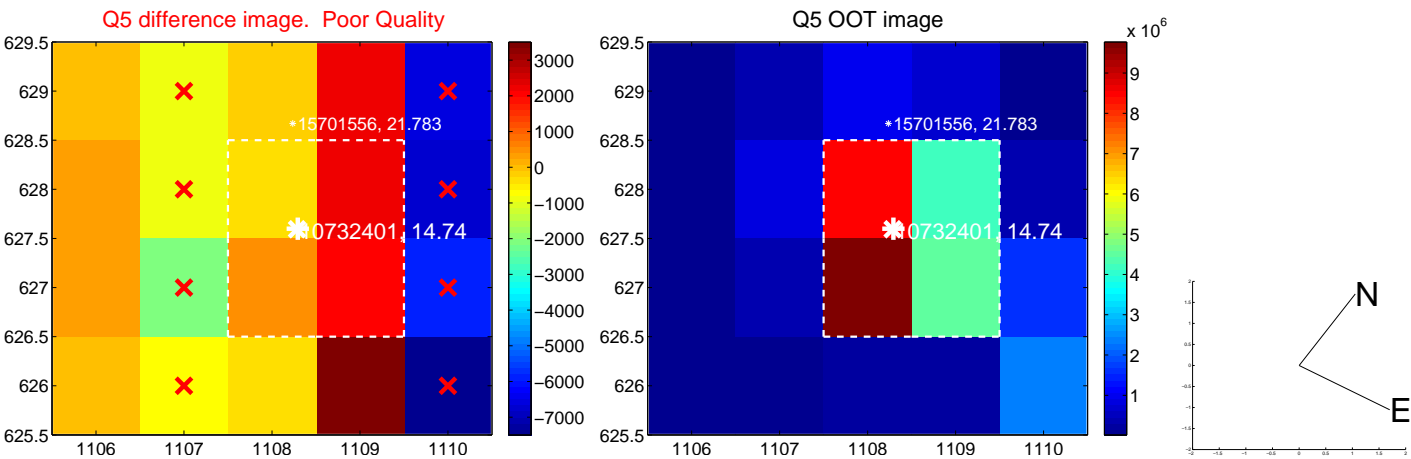


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

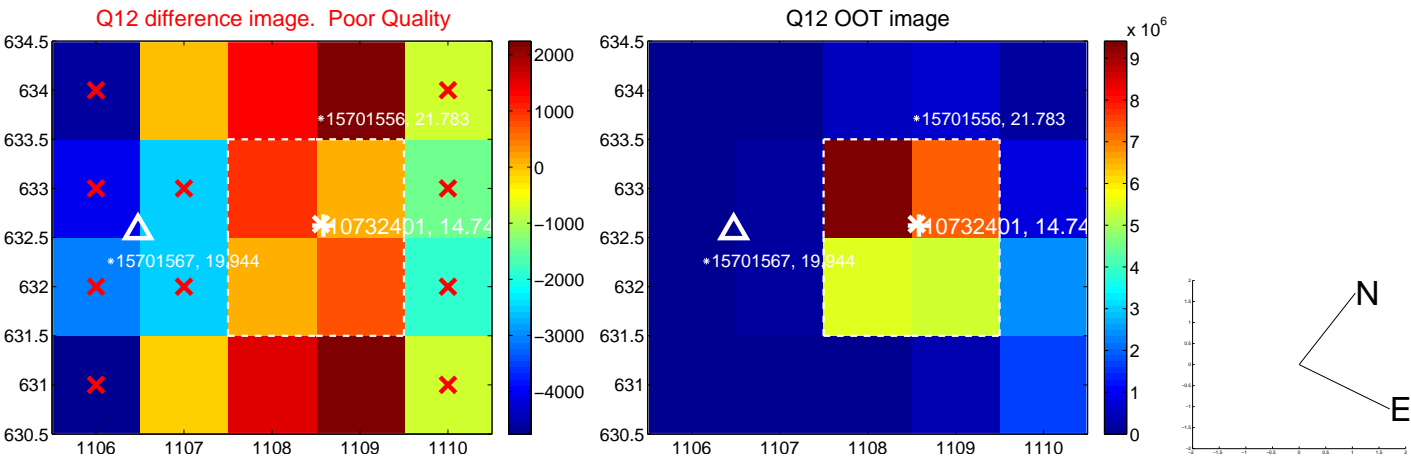
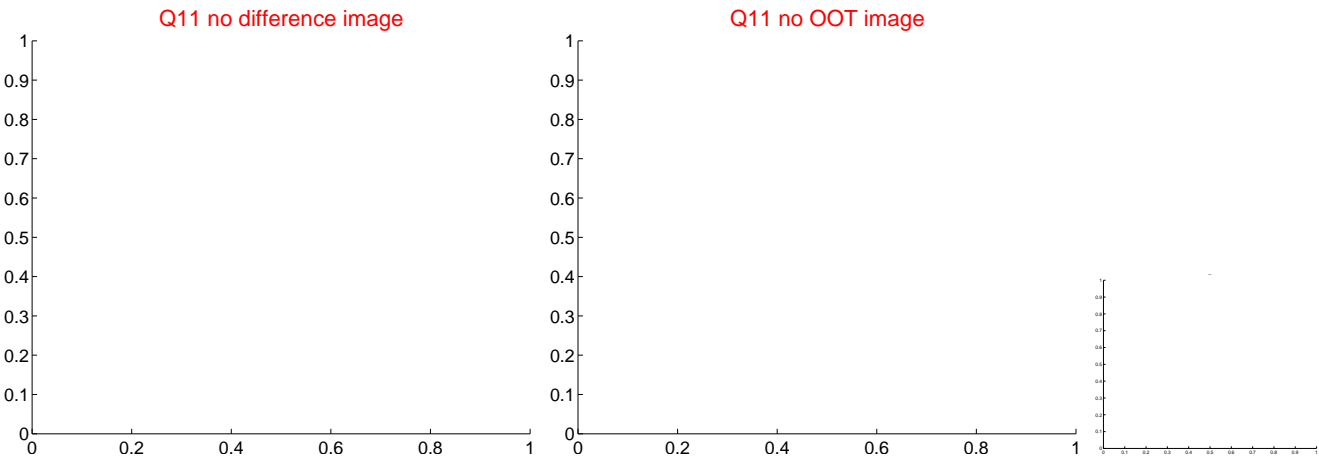
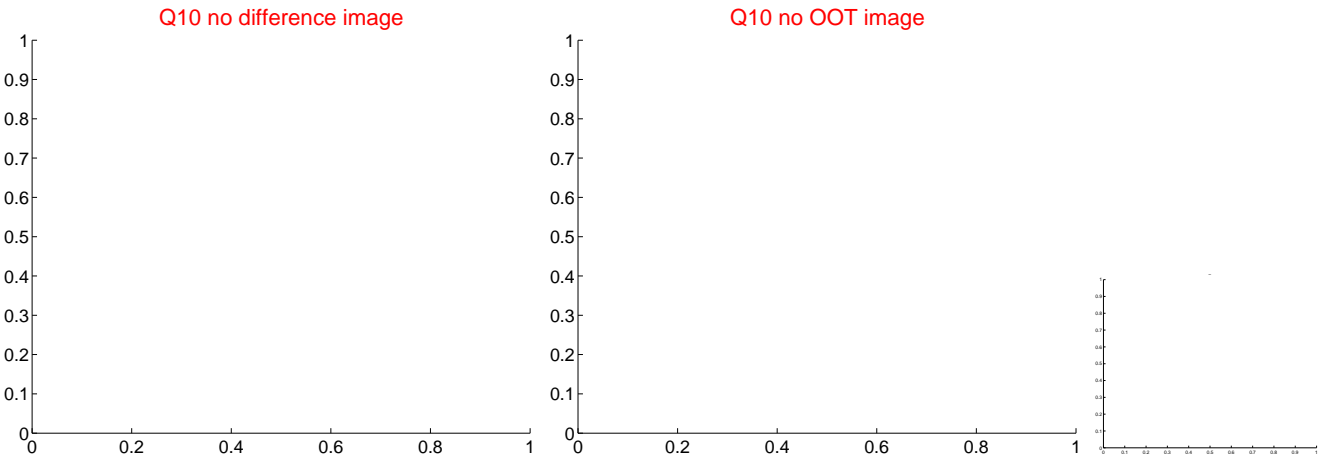
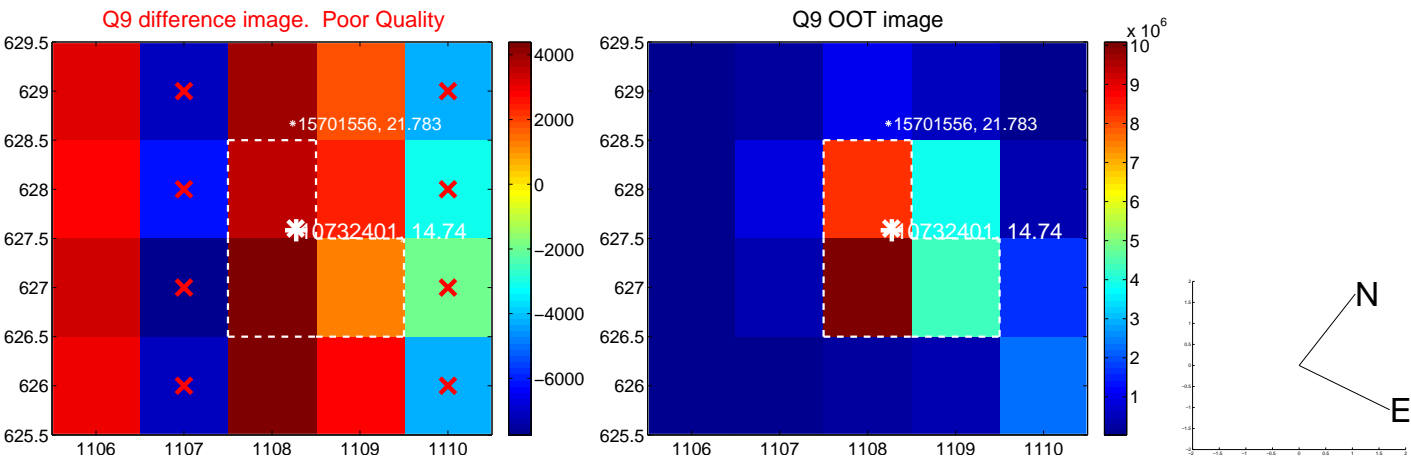
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



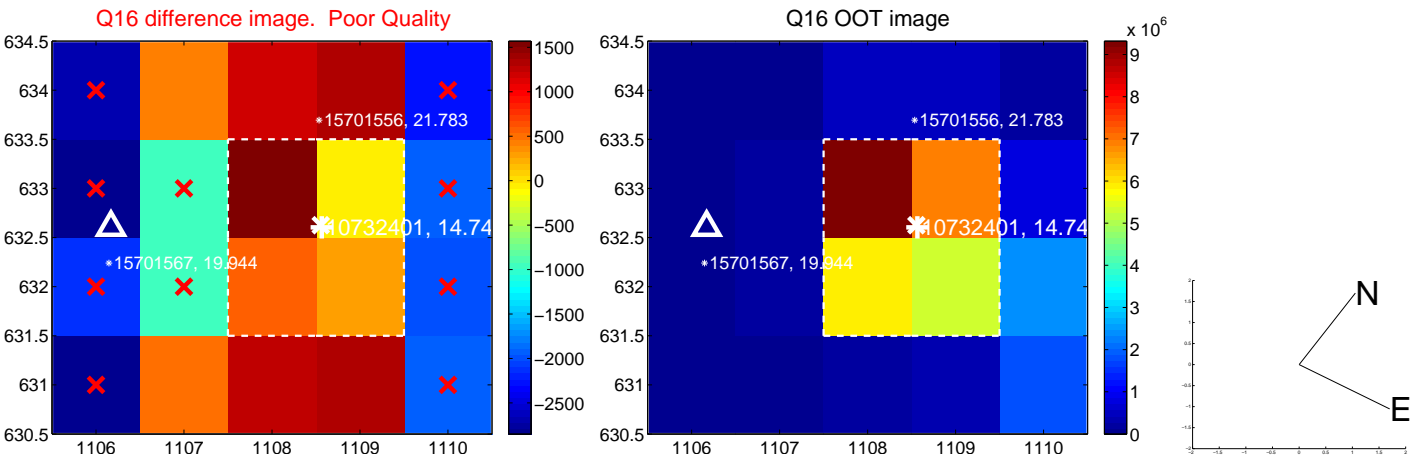
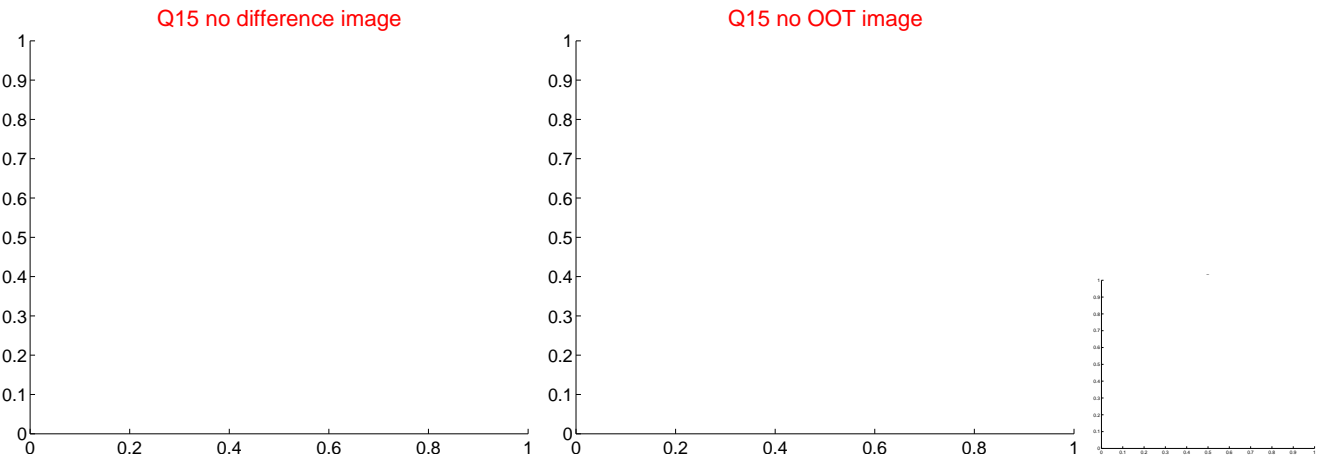
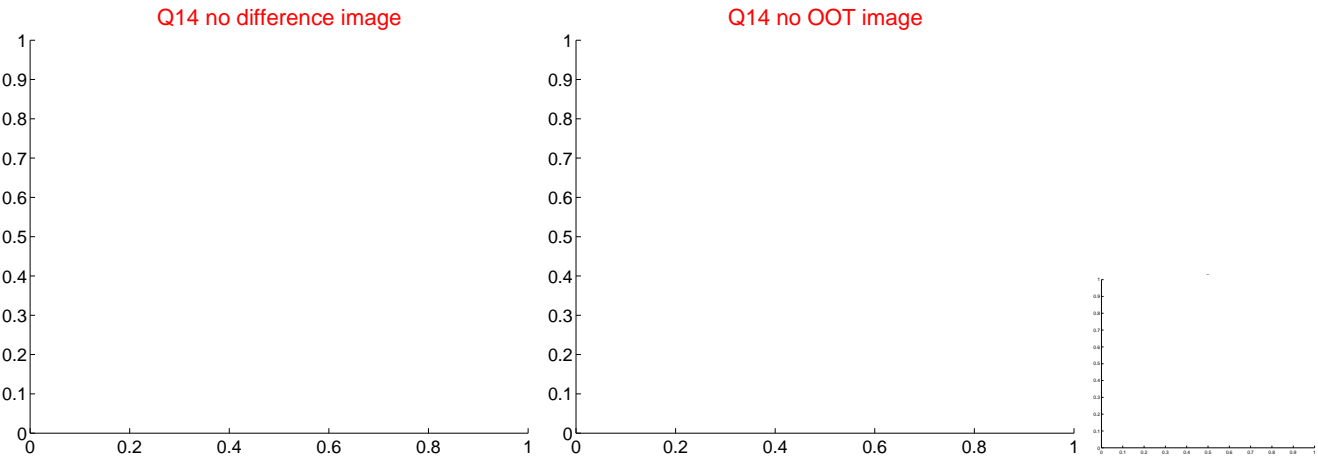
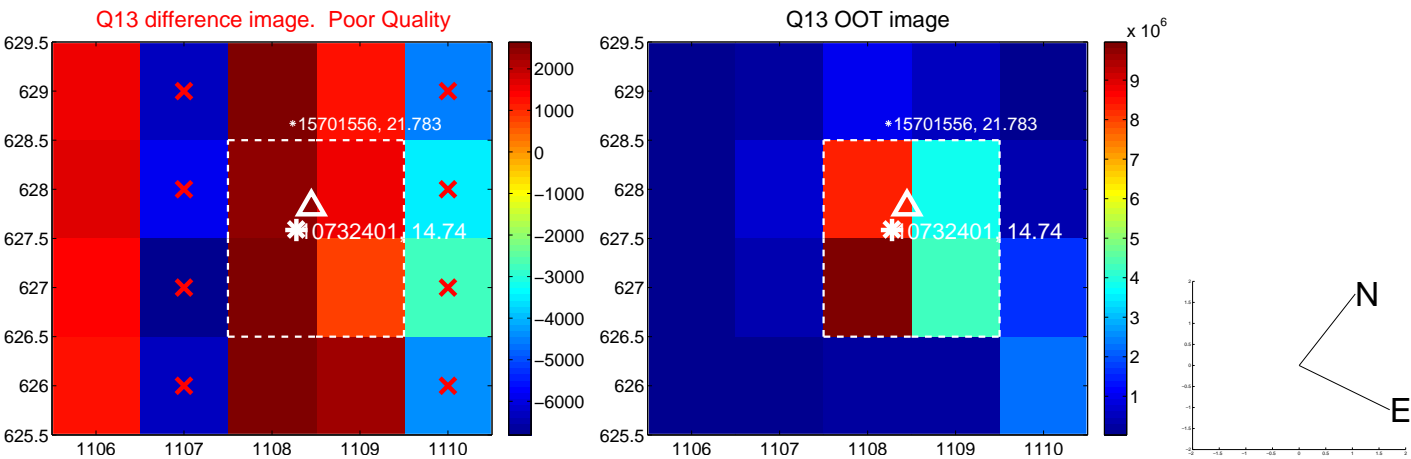
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



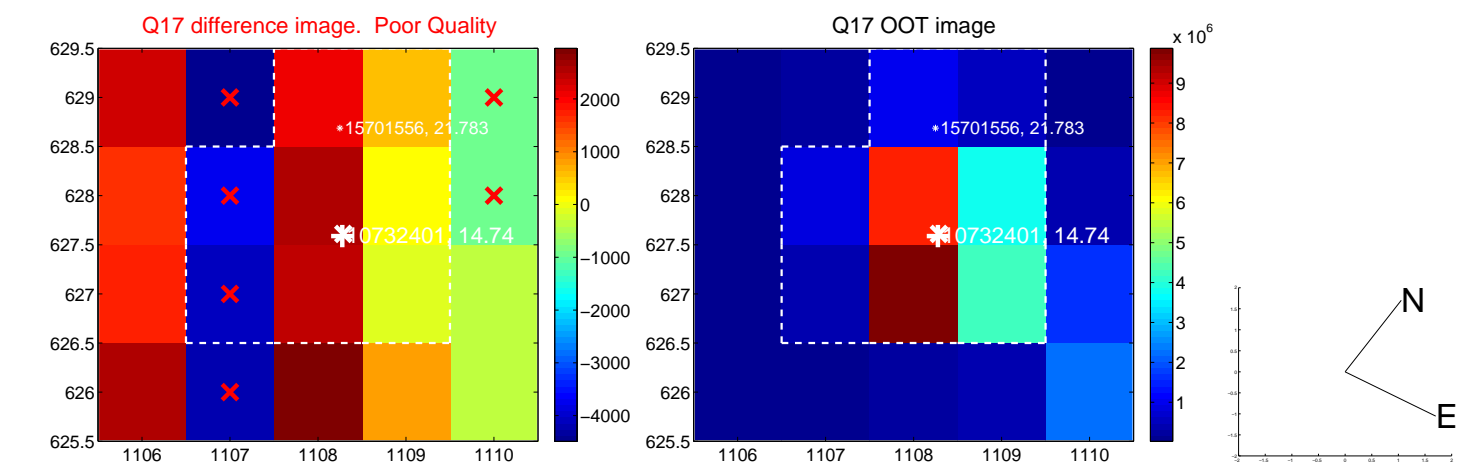
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



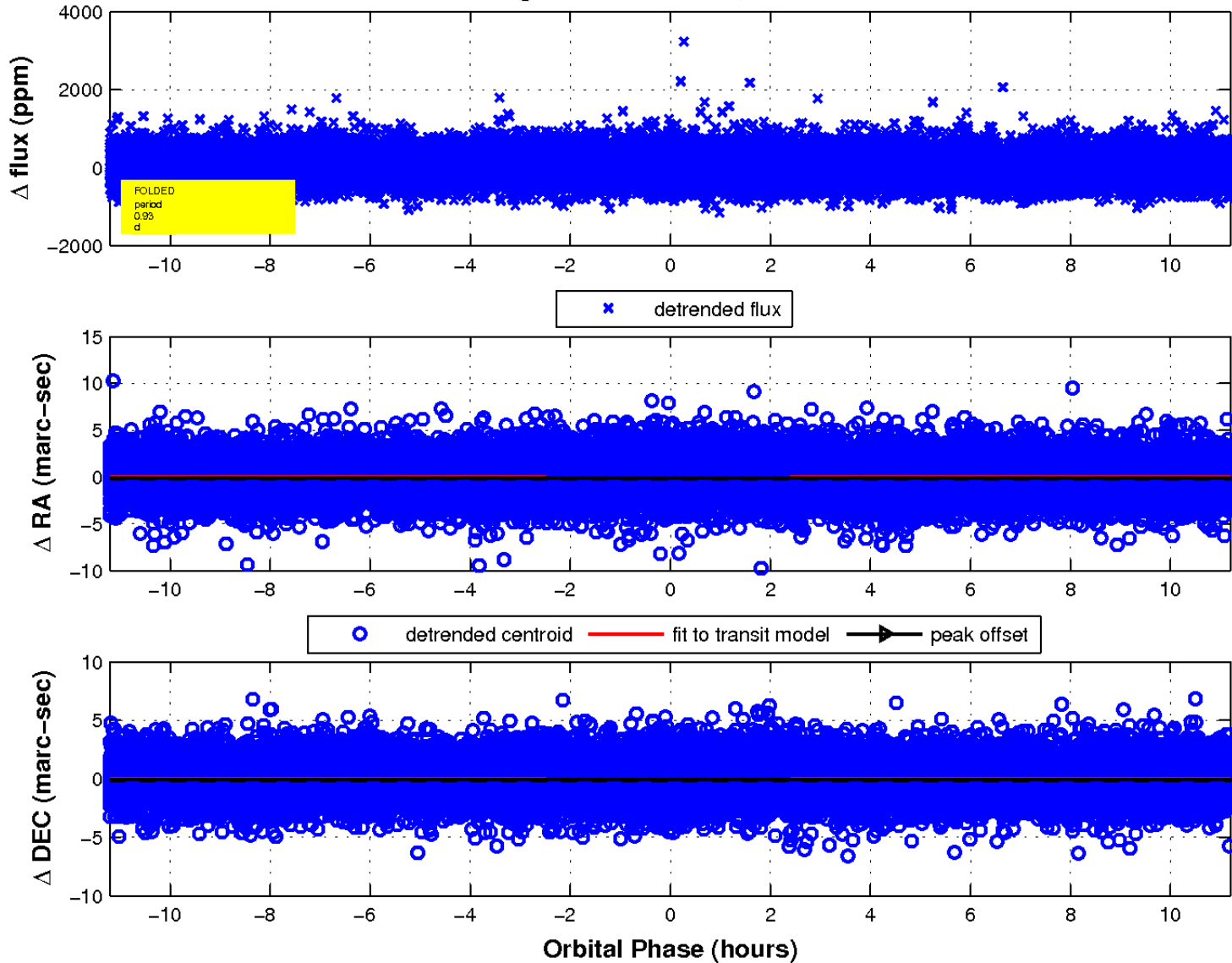
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

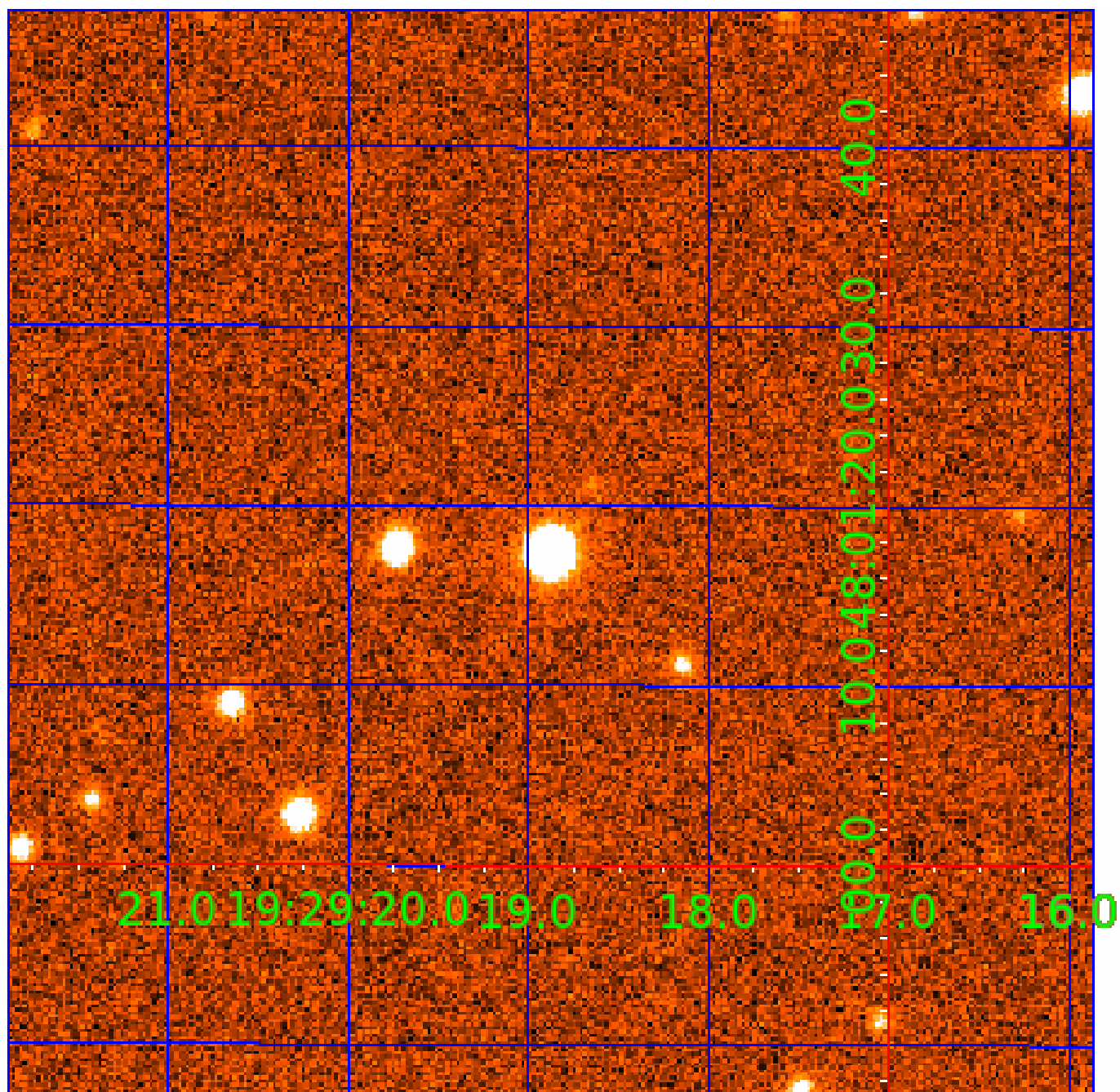


fluxWeightedCentroids, Planet 1 of 3



UKIRT Image

Declination



KIC 010732401

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})
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010732401-02	OBS	No	52.800900	149.645200	441.8	60.396	11.6	7.4	1.02	6224	2.52	17.56
010732401-03	OBS	No	348.281789	479.393440	520.3	5.660	11.2	7.7	1.02	6224	2.69	1.42

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010732401-01	OBS	FP	0.00	1	0	0	1	LPP_DV—CENT_FEW_DIFFS—EPHEM_MATCH
010732401-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—CENT_UNCERTAIN
010732401-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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 010732401-02

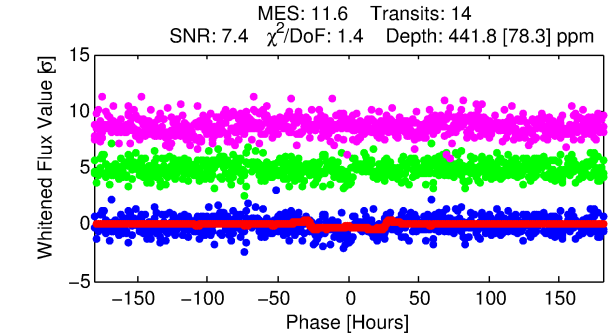
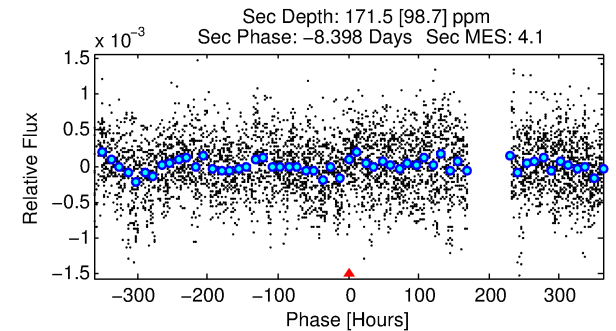
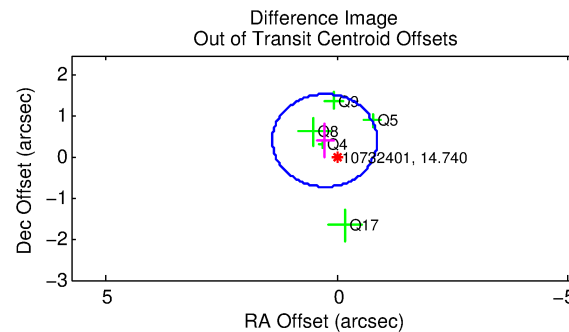
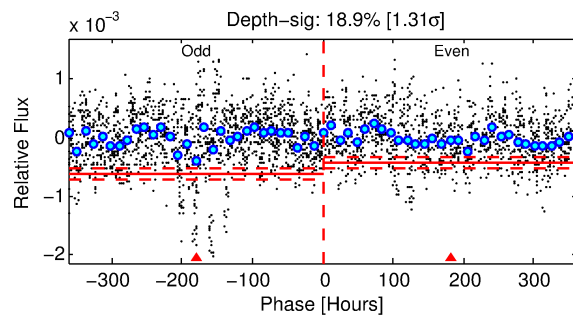
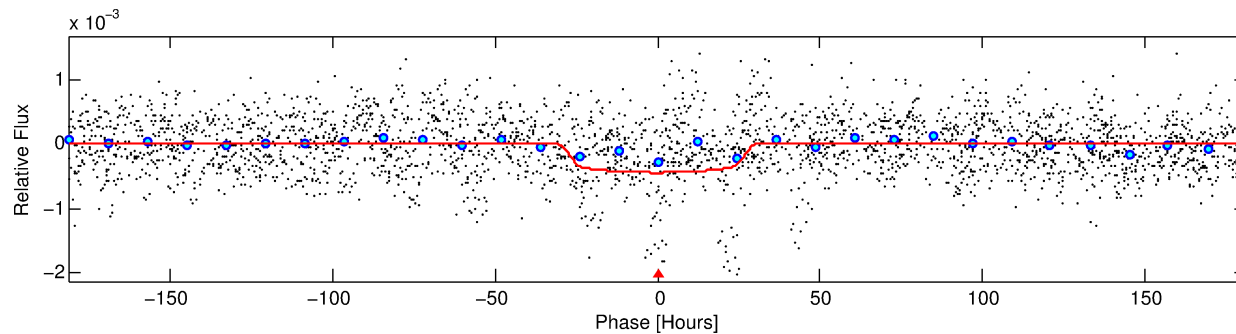
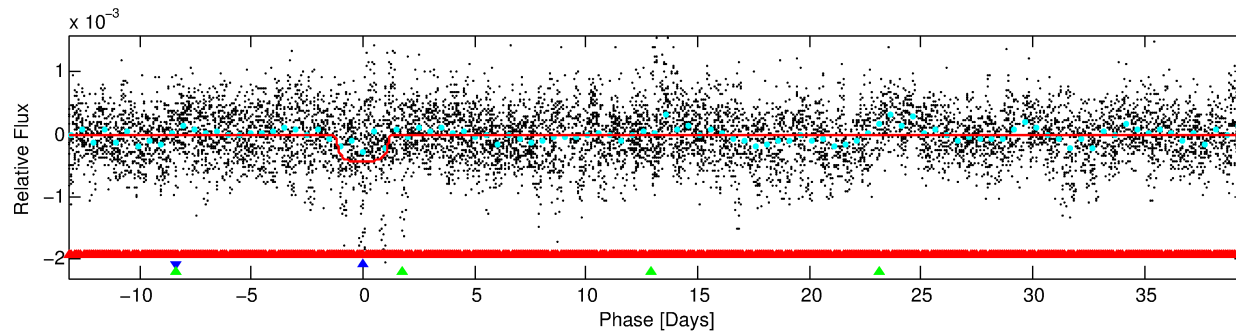
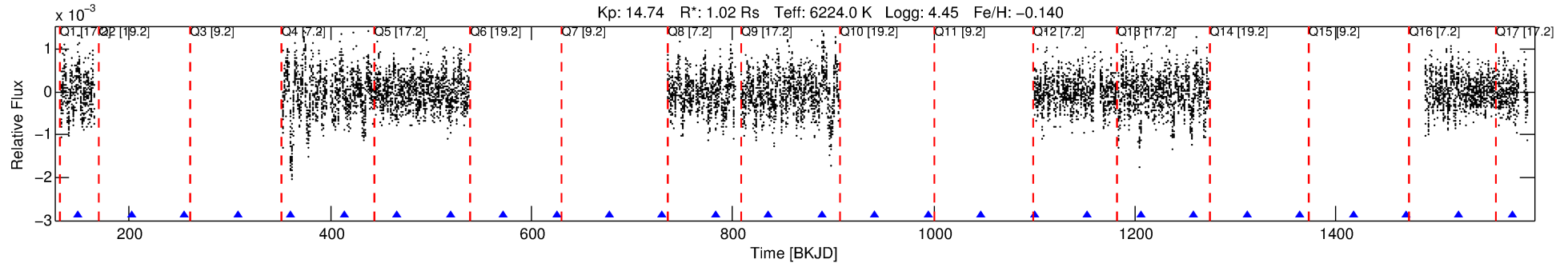
No Significant Match Found

DV One-Page Summary

KIC: 10732401 Candidate: 2 of 3 Period: 52.801 d

KOI: K07366 Corr: No Ephemeris Match

Kp: 14.74 R*: 1.02 Rs Teff: 6224.0 K Logg: 4.45 Fe/H: -0.140



DV Fit Results:

Period = 52.80090 [0.00381] d
Epoch = 149.6452 [0.0682] BKJD
Rp/R* = 0.0225 [0.0023]
a/R* = 3.44 [0.67]
b = 0.89 [0.05]
Seff = 17.56 [6.74]
Teq = 522 [50] K
Rp = 2.51 [0.78] Re
a = 0.2834 [0.0696] AU
Ag = 1197.84 [847.50] [1.41σ]
Teffp = 4748 [744] K [5.67σ]

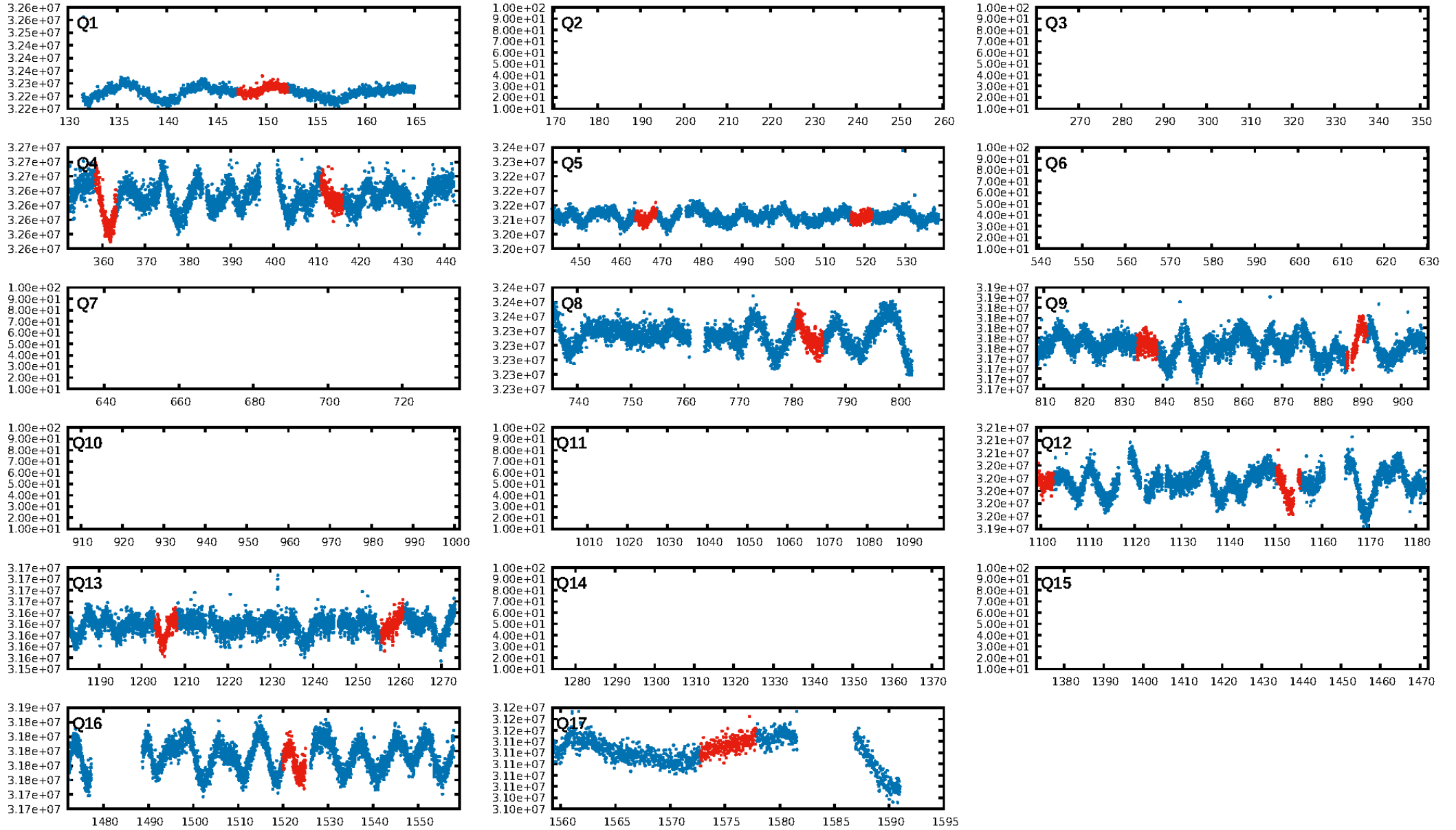
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [20.54σ]
LongPeriod-sig: 100.0% [116.91σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.73e-16
RollingBand-fgt: 1.00 [12/12]
GhostDiagnostic-chr: 0.5949
Centroid-sig: 4.3%
Centroid-so: 0.585 arcsec [1.42σ]
OotOffset-rm: 0.493 arcsec [1.30σ]
OotOffset-st: 0/0/2/3 [5]
KicOffset-rm: 0.511 arcsec [1.14σ]
KicOffset-st: 0/0/2/3 [5]
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DiffImageOverlap-fno: 0.00 [0/7]

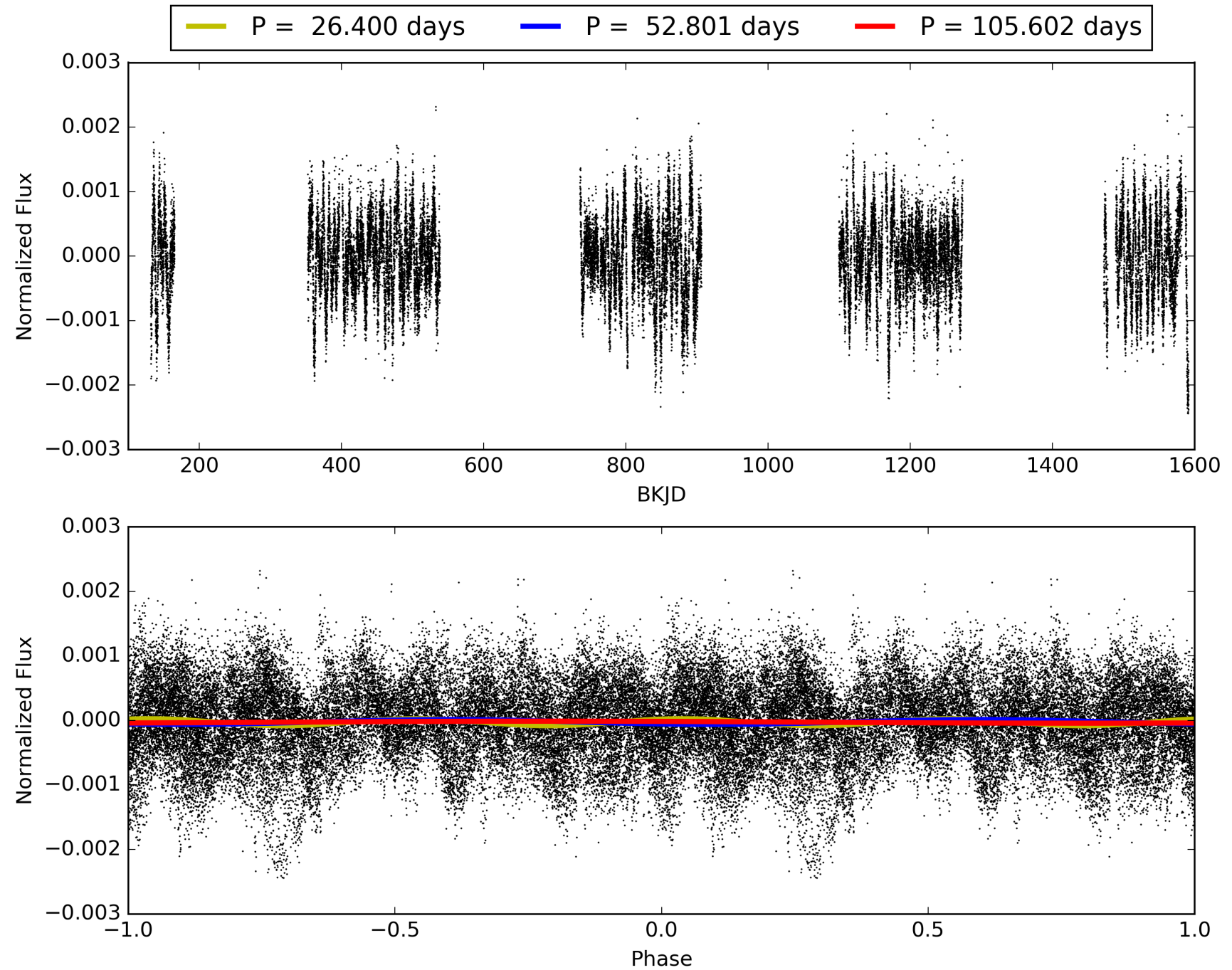
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 10:36:53 Z

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

TCE 010732401-02, PDC Light Curves

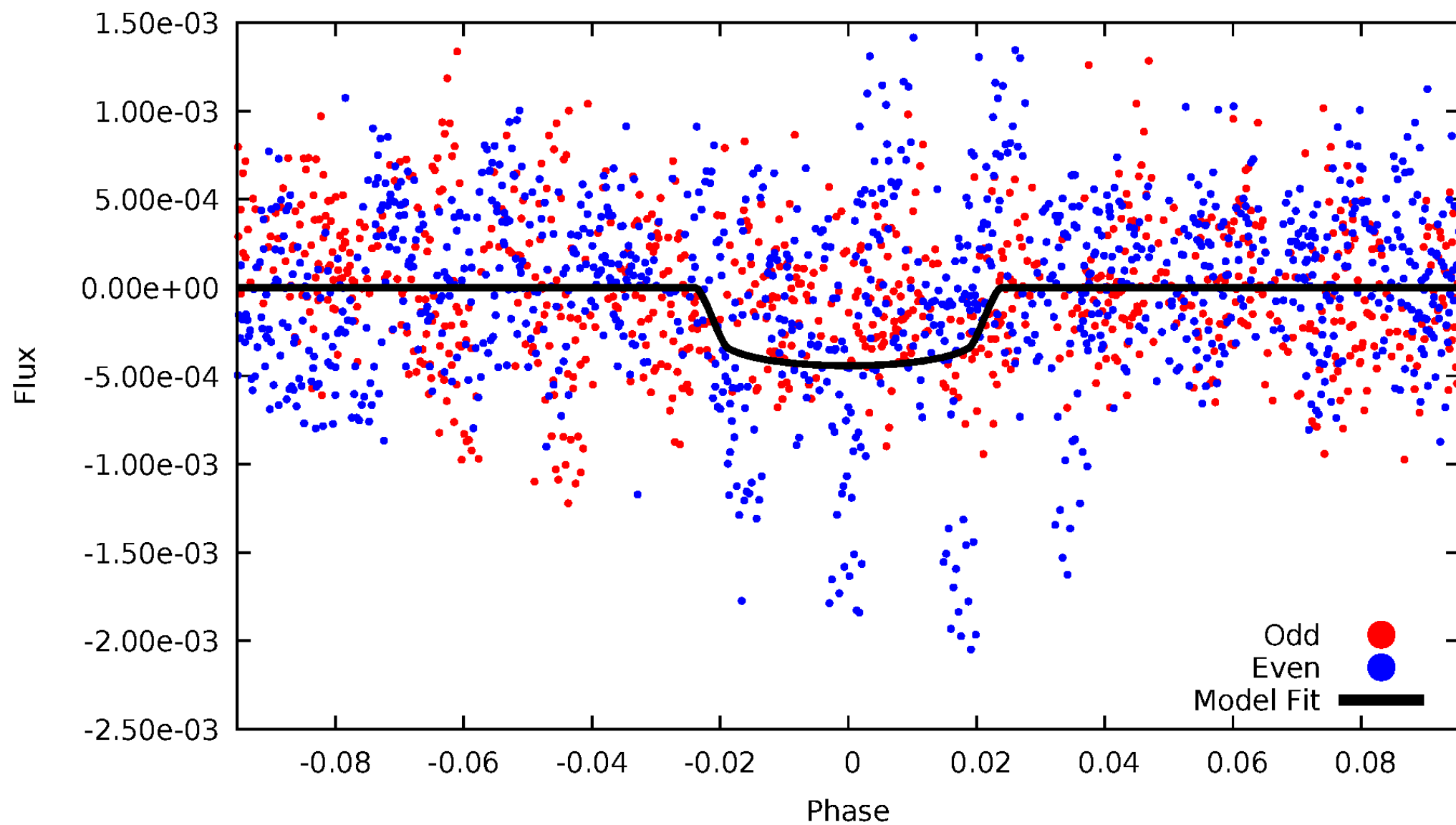


TCE 010732401-02



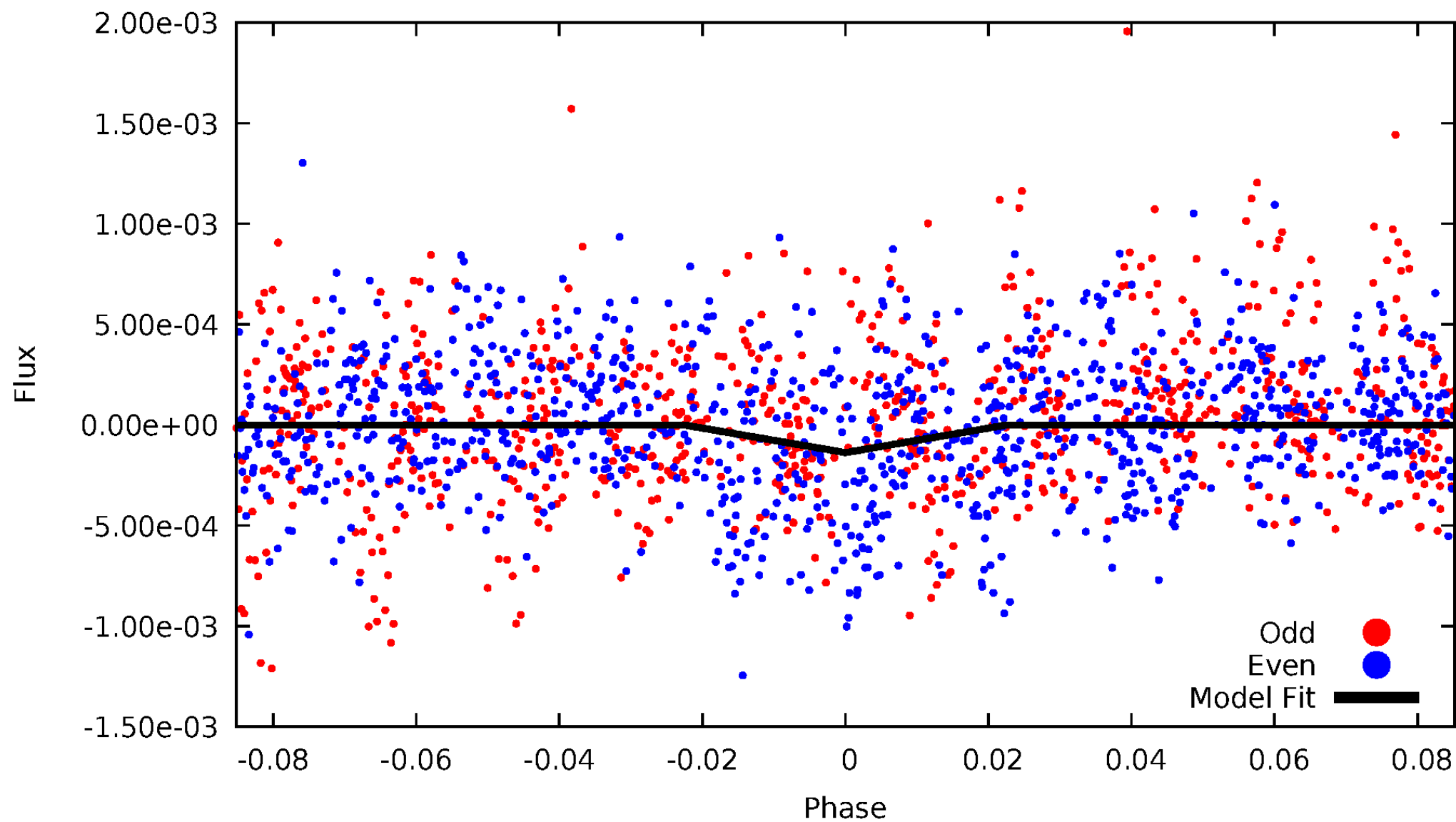
DV Odd/Even

TCE 010732401-02



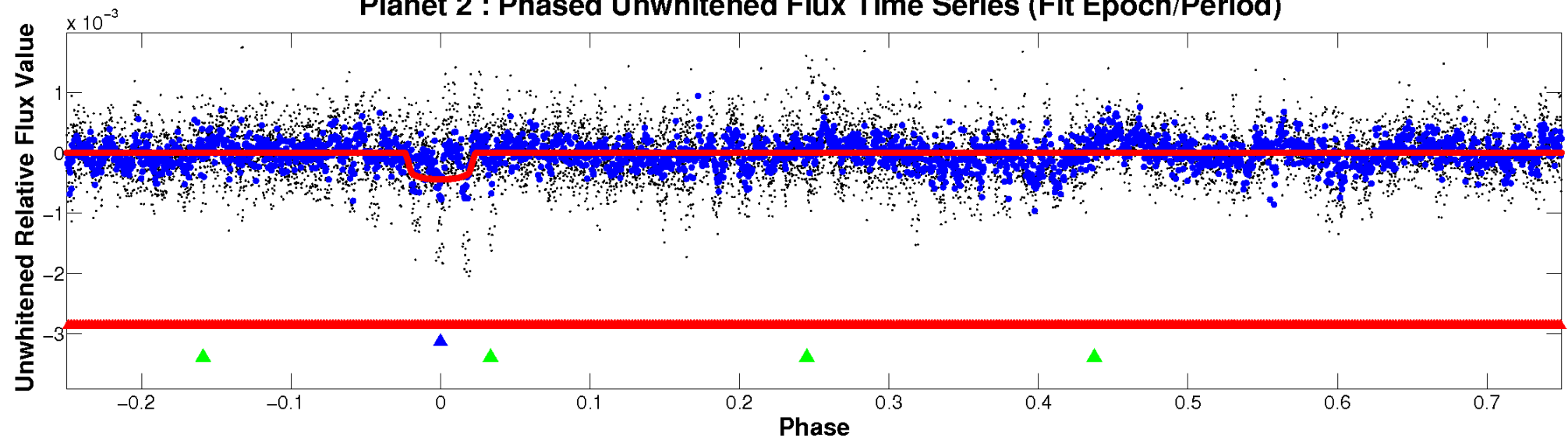
ALT Odd/Even

TCE 010732401-02

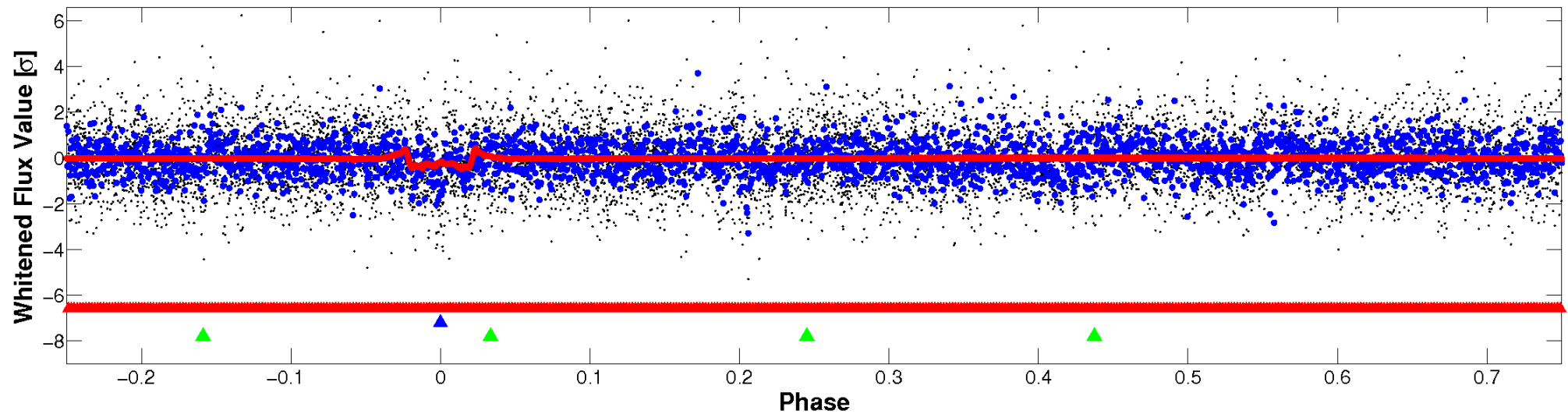


Non-Whitened Vs. Whitened Light Curve

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

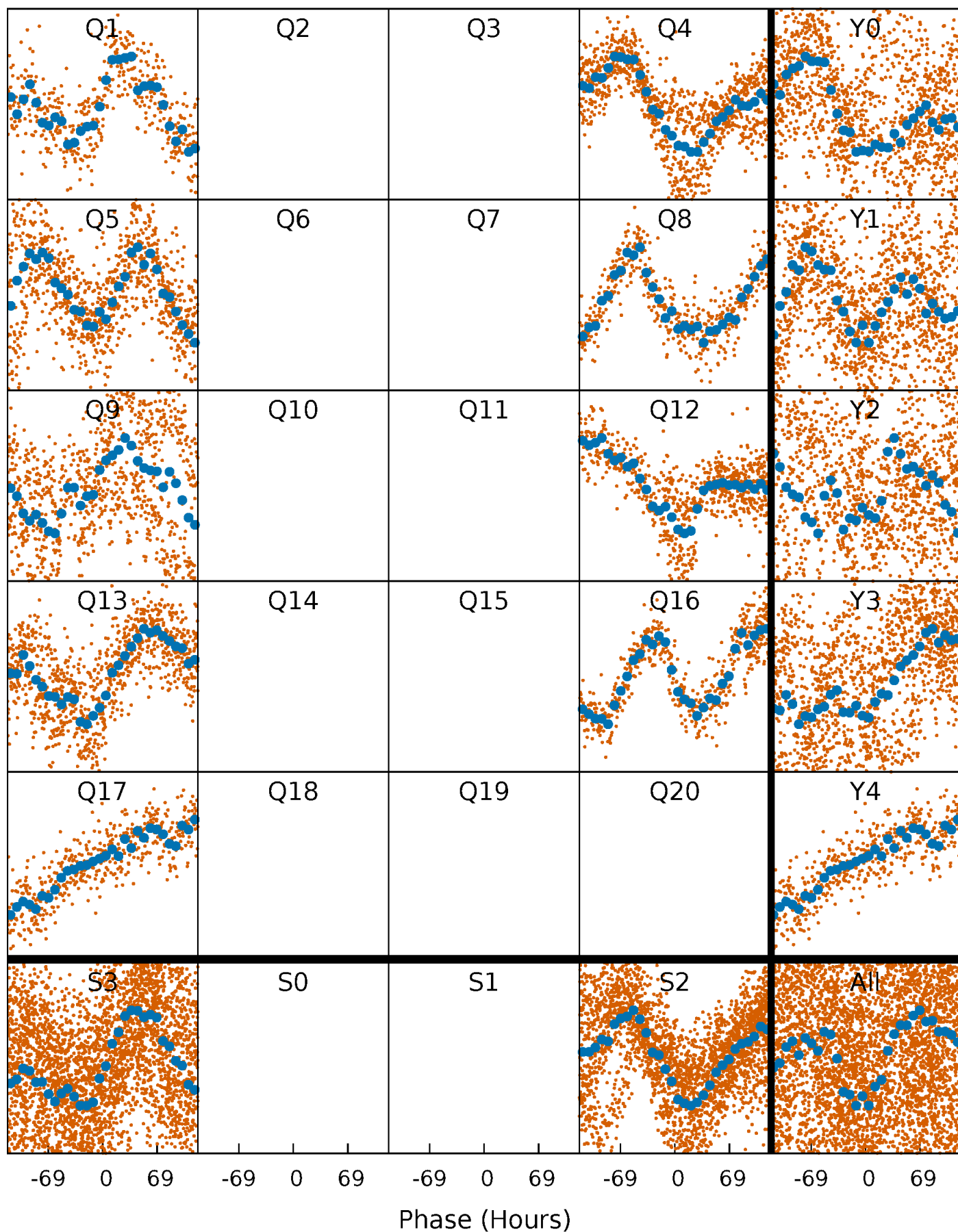


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



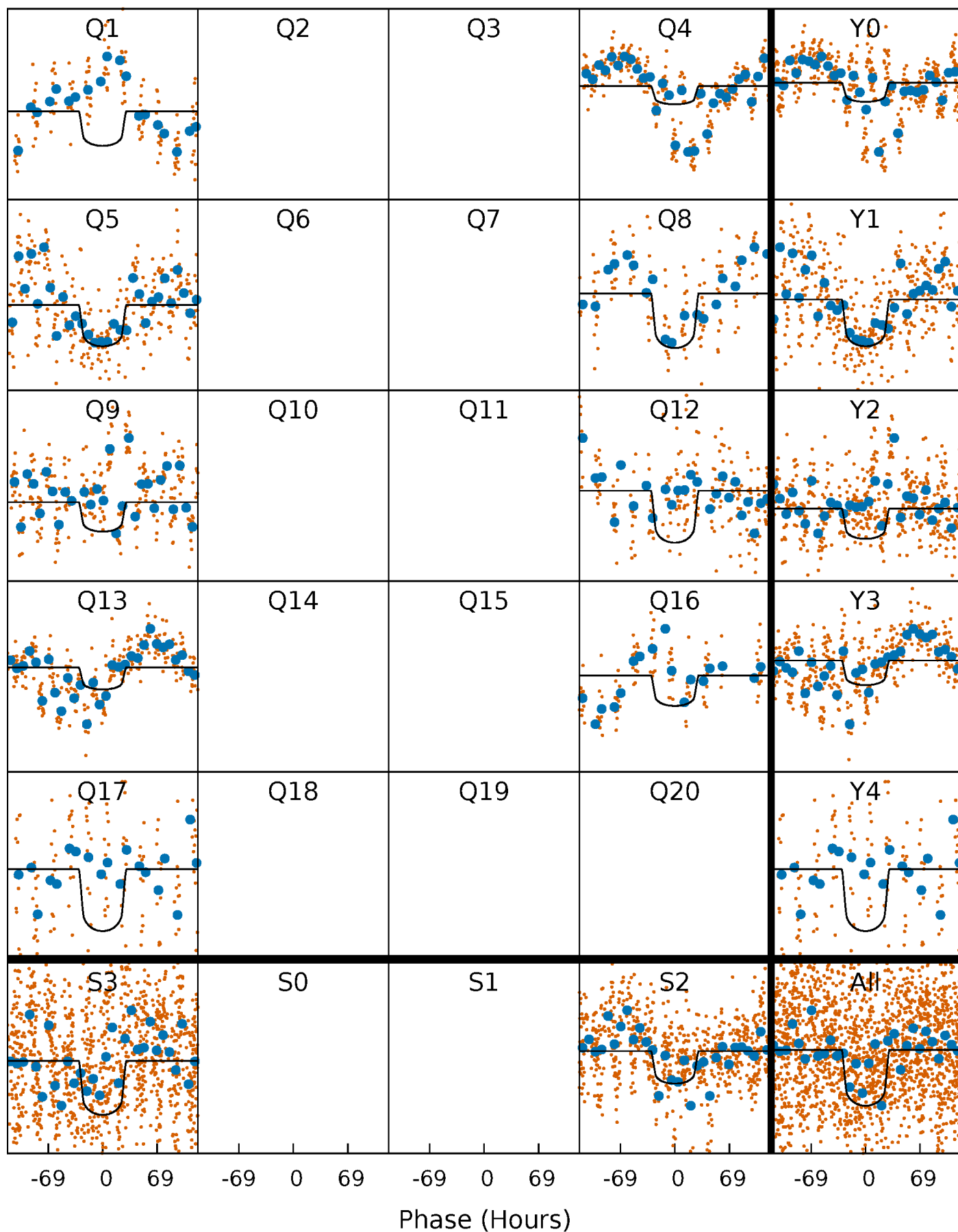
PDC Quarter-Phased Transit Curves

TCE 010732401-02 $P = 52.800900$ Days $T_0 = 149.645200$ (BKJD)



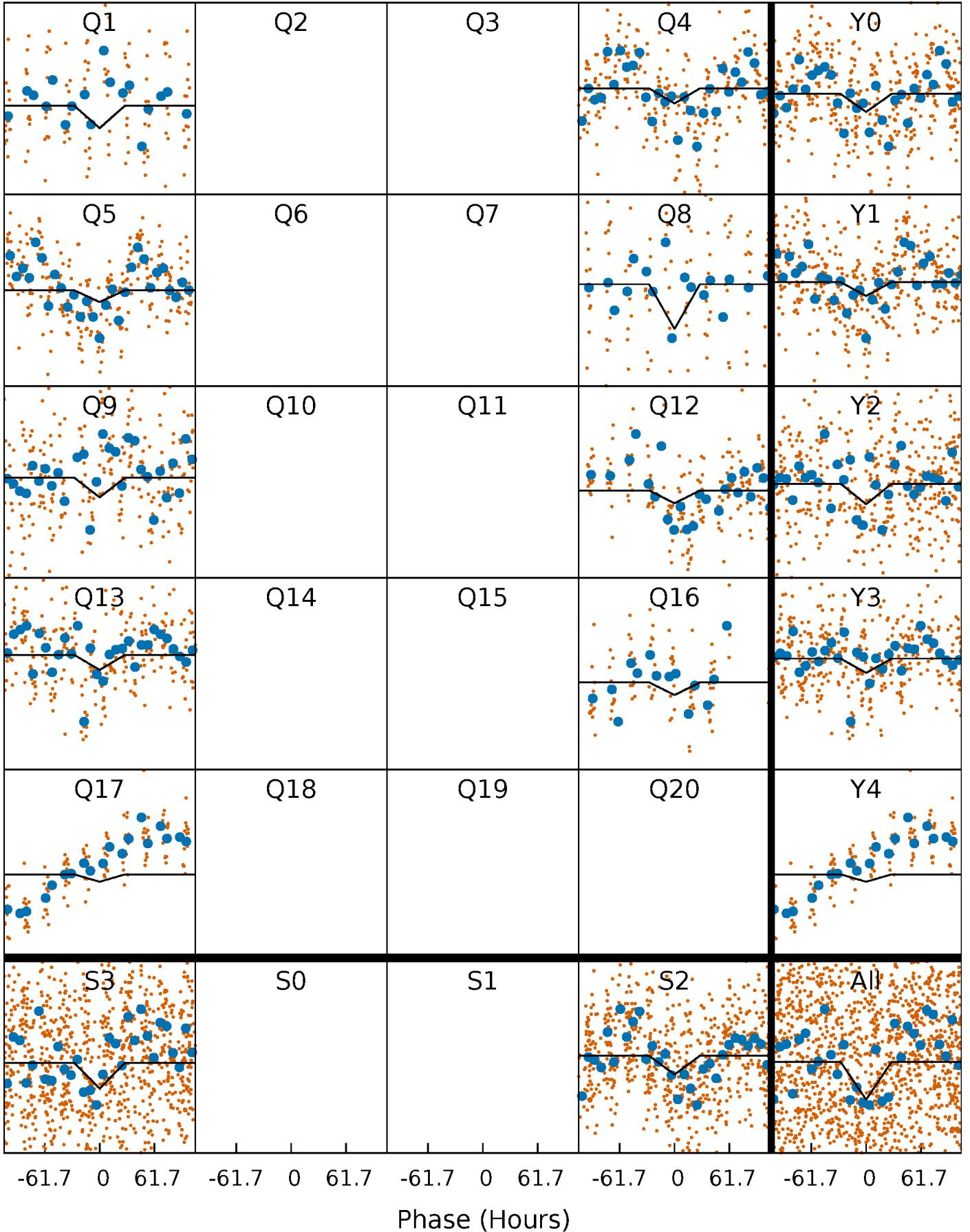
DV Quarter-Phased Transit Curves

TCE 010732401-02 P= 52.800900 Days $T_0=149.645200$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

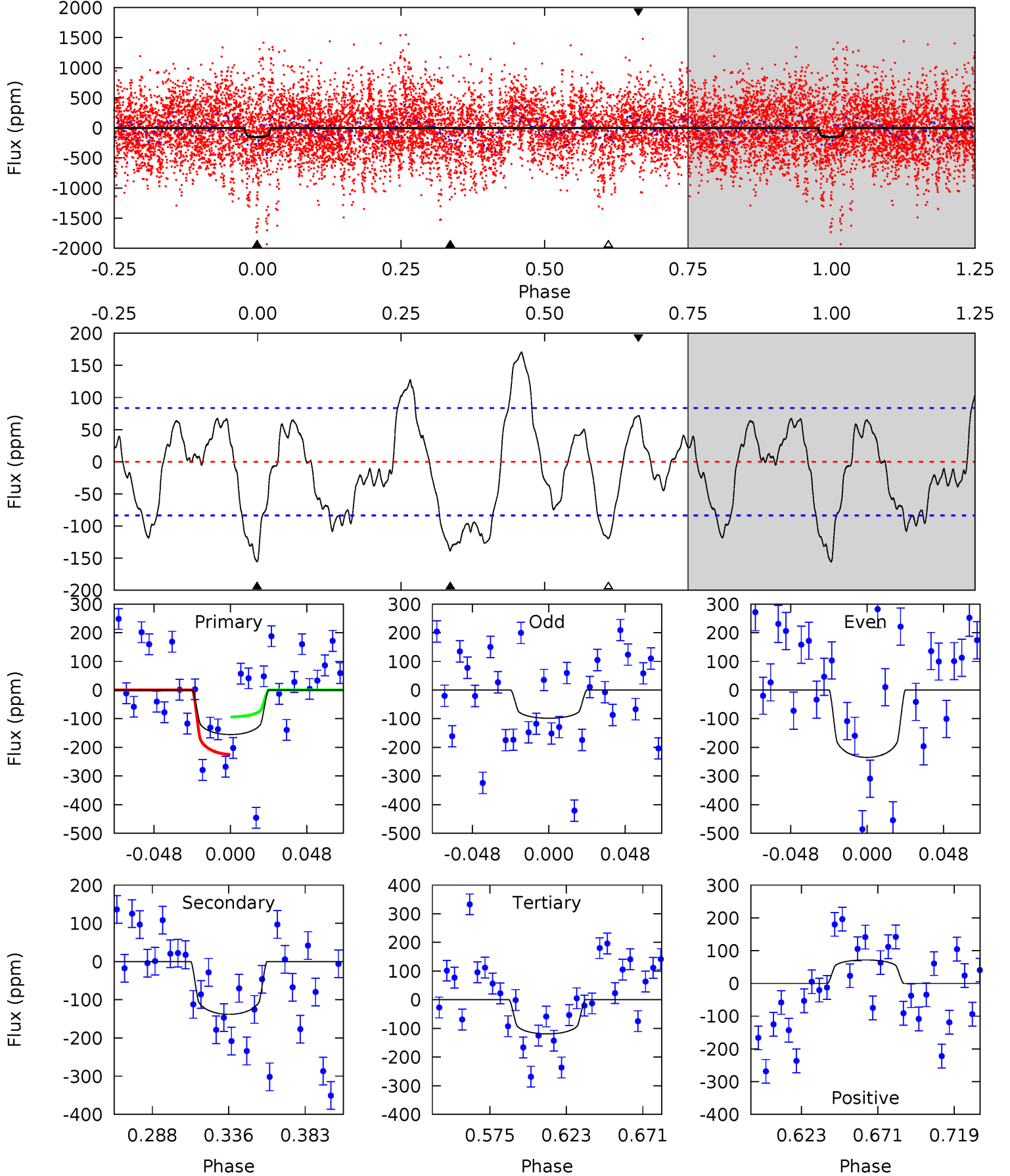
TCE 010732401-02 $P = 52.803695$ Days $T_0 = 149.469997$ (BKJD)



DV Model-Shift Uniqueness Test

010732401-02, P = 52.800900 Days, E = 96.844300 Days

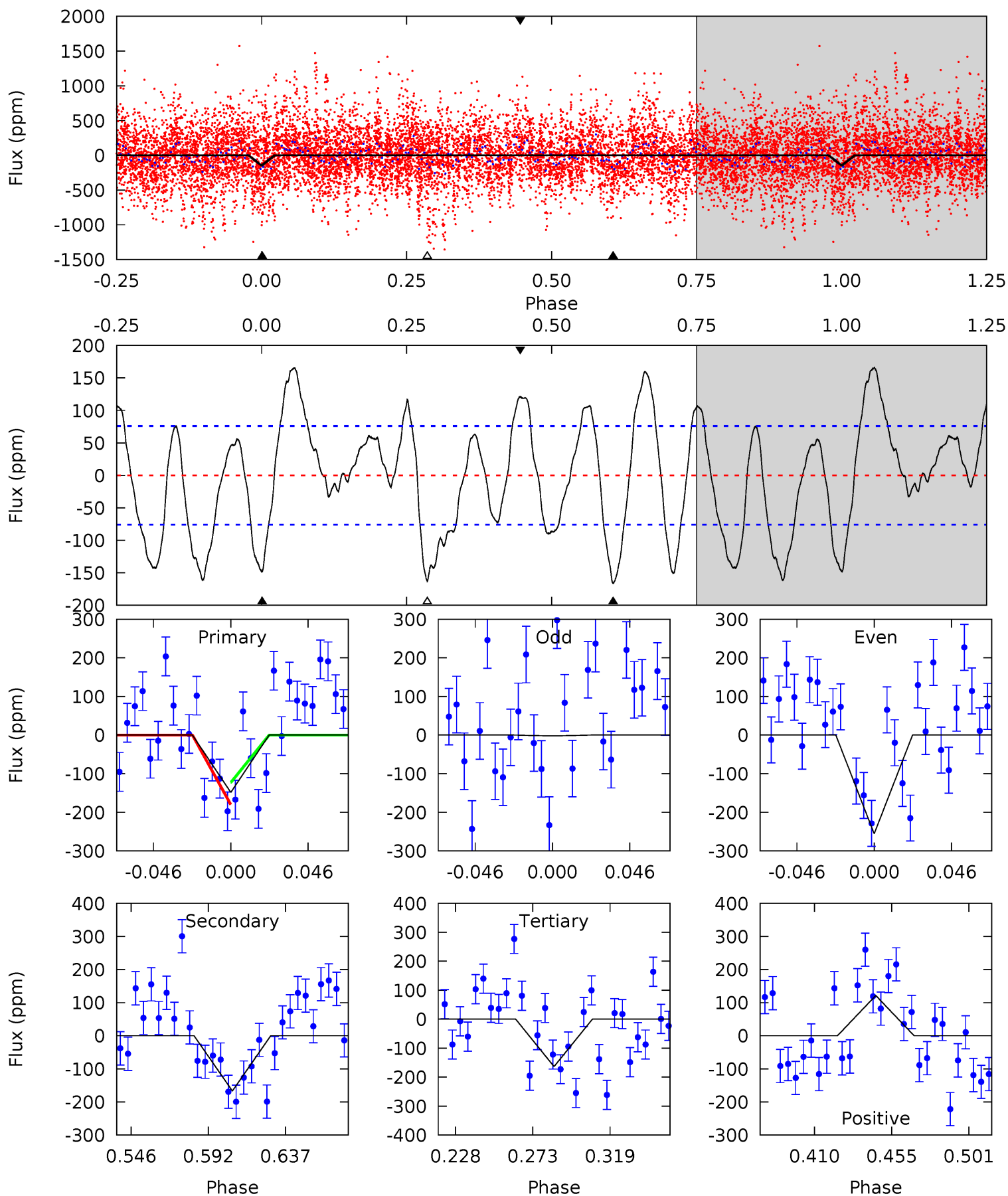
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.77	7.79	6.72	4.04	4.72	1.98	3.73	2.05	4.73	1.07	3.76	3.86	3.26	0.52	3.64



Alt Model-Shift Uniqueness Test

010732401-02, P = 52.803695 Days, E = 96.666302 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.21	10.4	10.2	7.54	4.73	2.00	5.15	-0.94	1.67	0.20	2.81	7.88	1.23	0.50	1.86



Stellar Parameters For KIC 010732401

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6224^{+153}_{-218}	$4.454^{+0.052}_{-0.195}$	$-0.140^{+0.250}_{-0.350}$	$1.024^{+0.299}_{-0.107}$	$1.084^{+0.144}_{-0.144}$	$1.423^{+0.380}_{-0.684}$
	+2%/-4%	+1%/-4%	+179%/-250%	+29%/-10%	+13%/-13%	+27%/-48%
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 010732401-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-138 ± 18	$2.58^{+0.44}_{-0.36}$	738^{+50}_{-31}	4630^{+284}_{-229}	877^{+333}_{-230}
Alt.	-166 ± 16	$1.40^{+0.33}_{-0.29}$	741^{+47}_{-35}	6445^{+804}_{-615}	3695^{+2100}_{-1281}

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 $A_{obs} \gg 1.0$

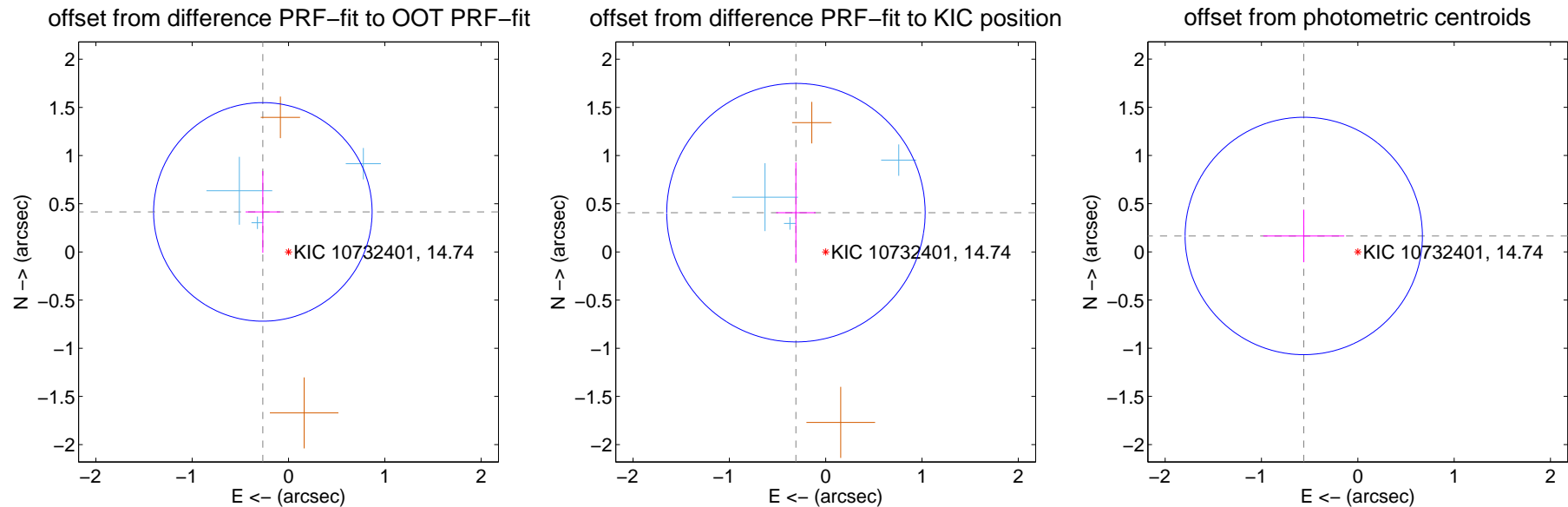
DV Centroid Data

Supplemental centroid analysis for 010732401-02. Kepler magnitude: 14.74. Transit SNR 7.44

There are 3 quarters with good PRF difference image offsets

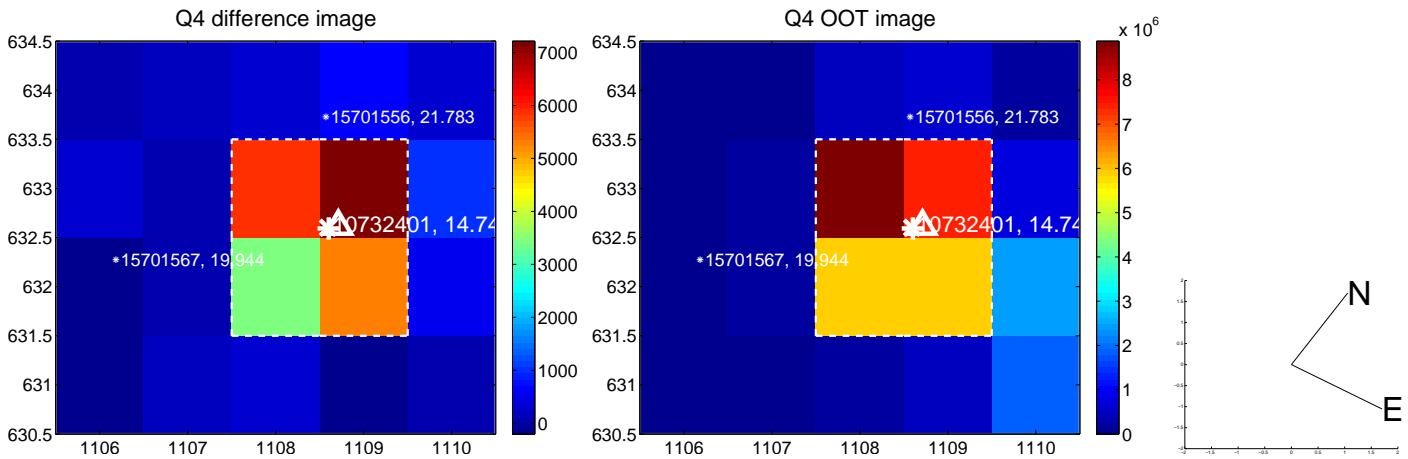
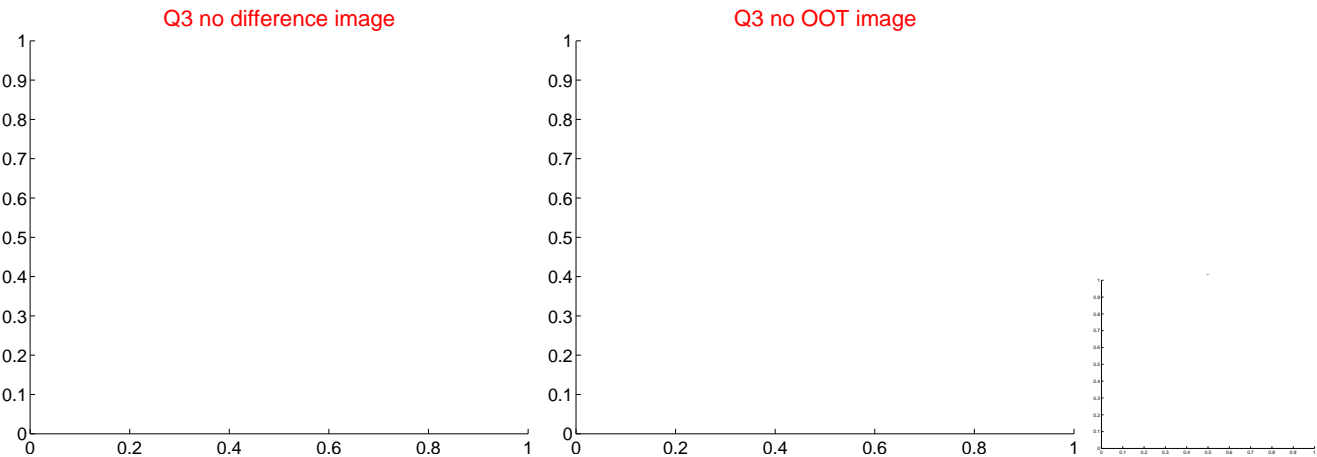
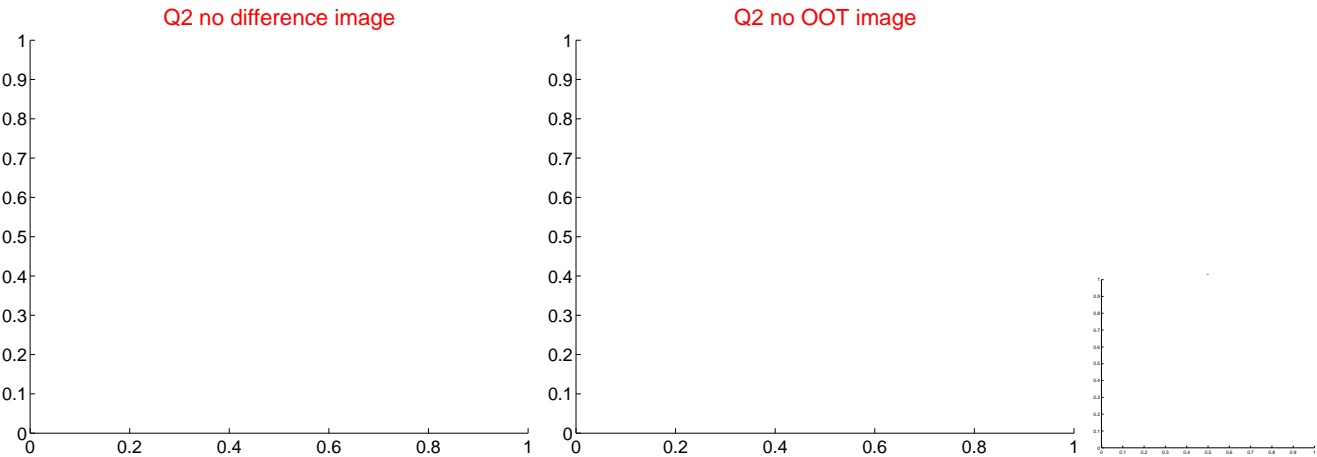
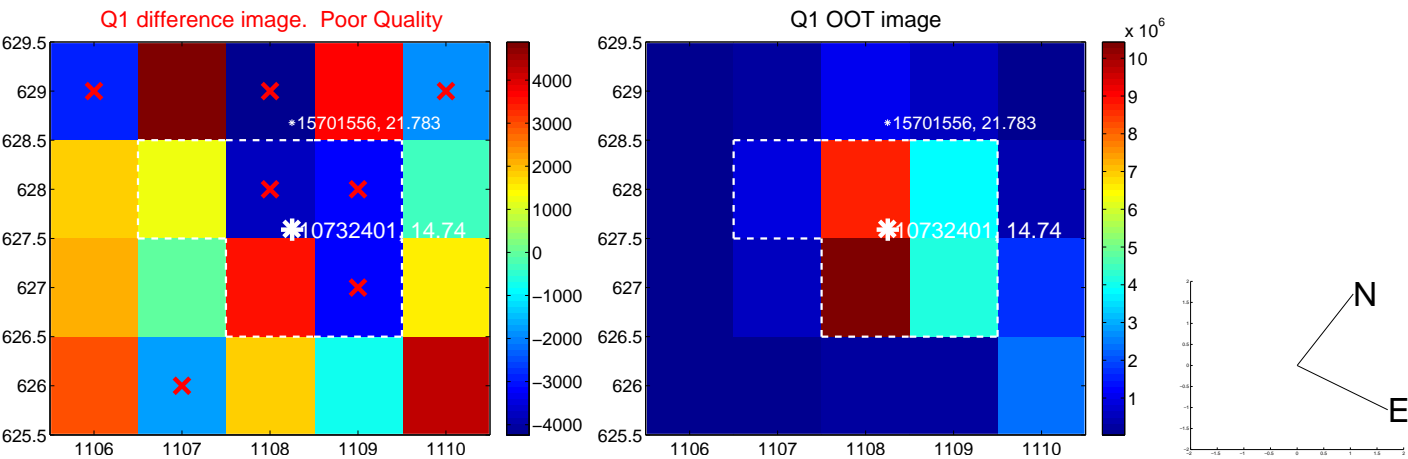
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.493 ± 0.378	1.30	0.266 ± 0.179	0.415 ± 0.424
PRF-fit source offset from KIC position	0.511 ± 0.447	1.14	0.309 ± 0.205	0.407 ± 0.522
photometric centroid source offset	0.59 ± 0.41	1.42	0.56 ± 0.42	0.17 ± 0.27

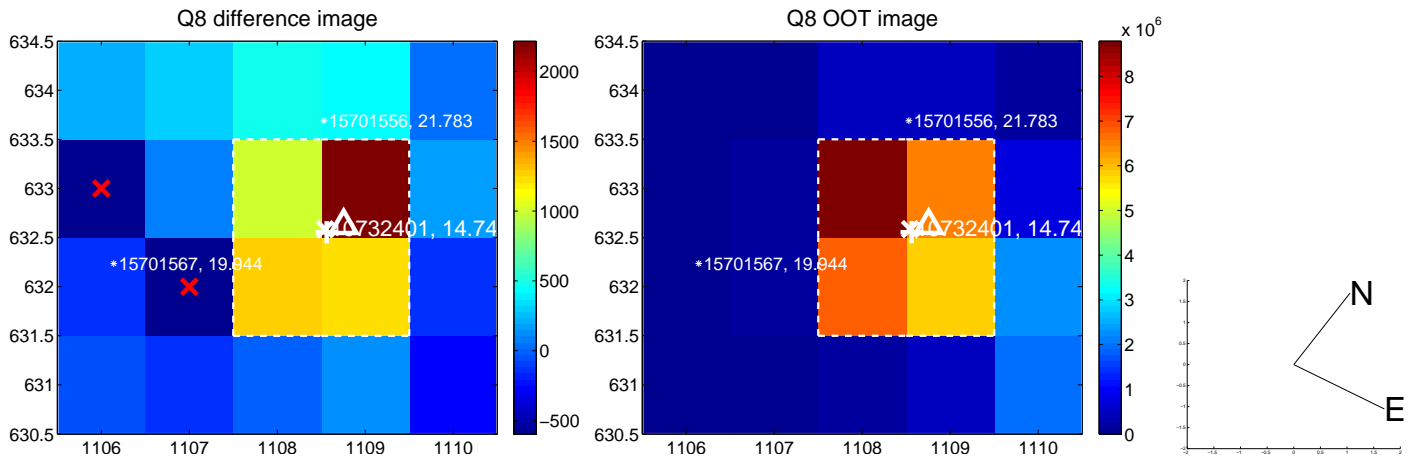
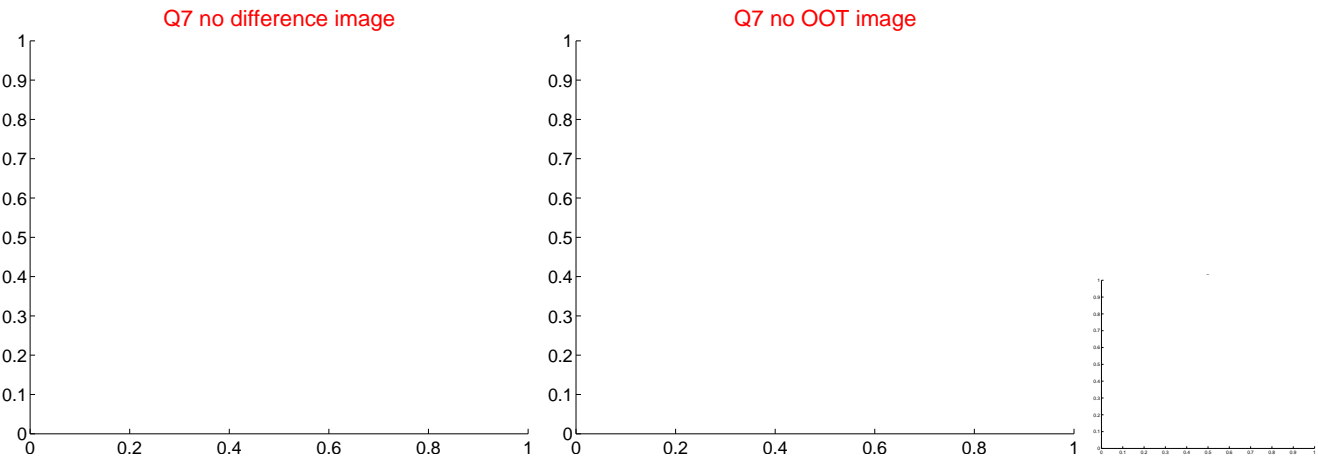
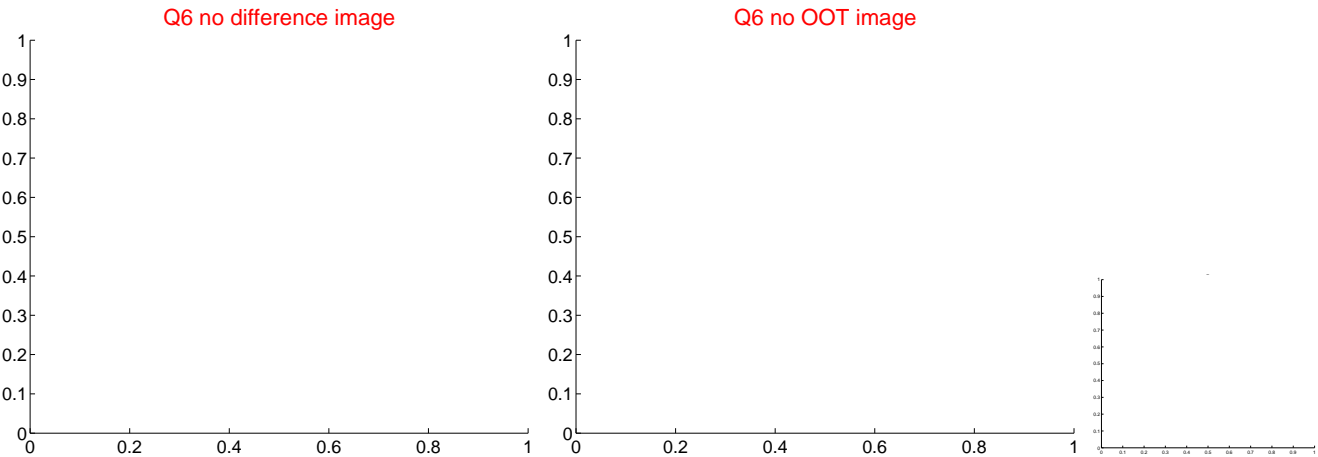
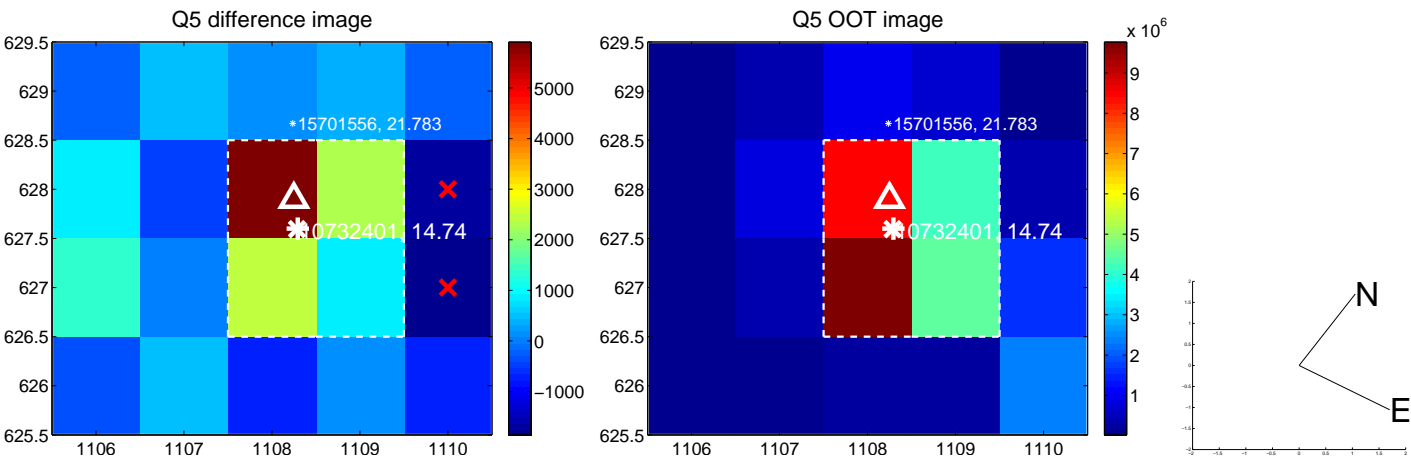


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

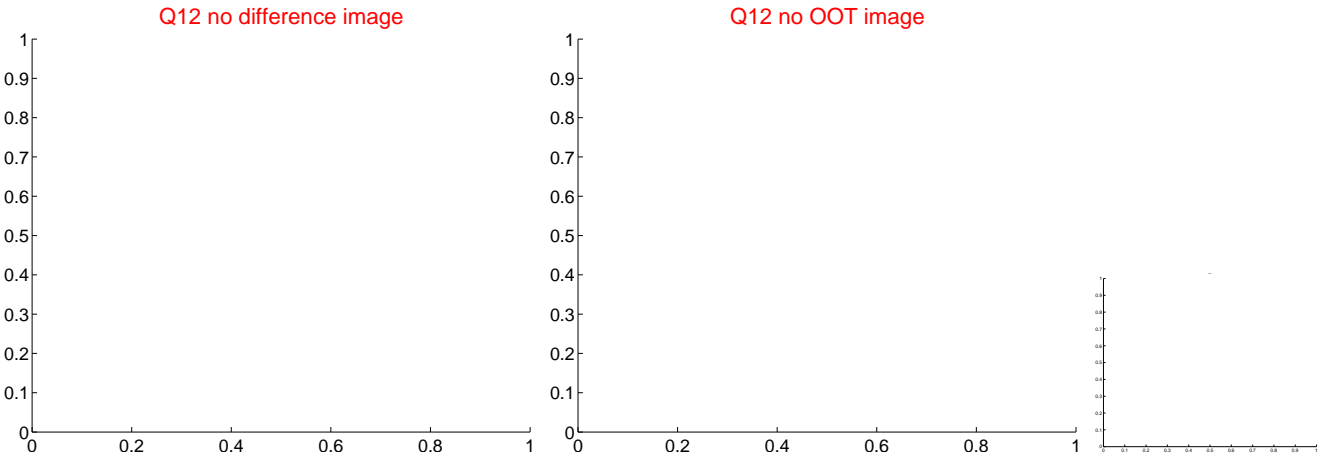
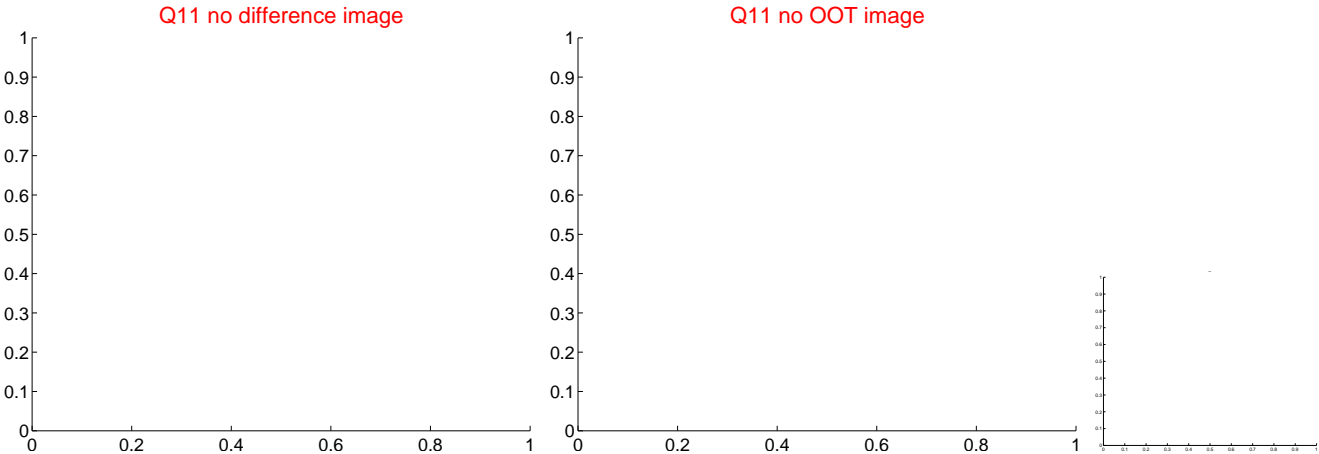
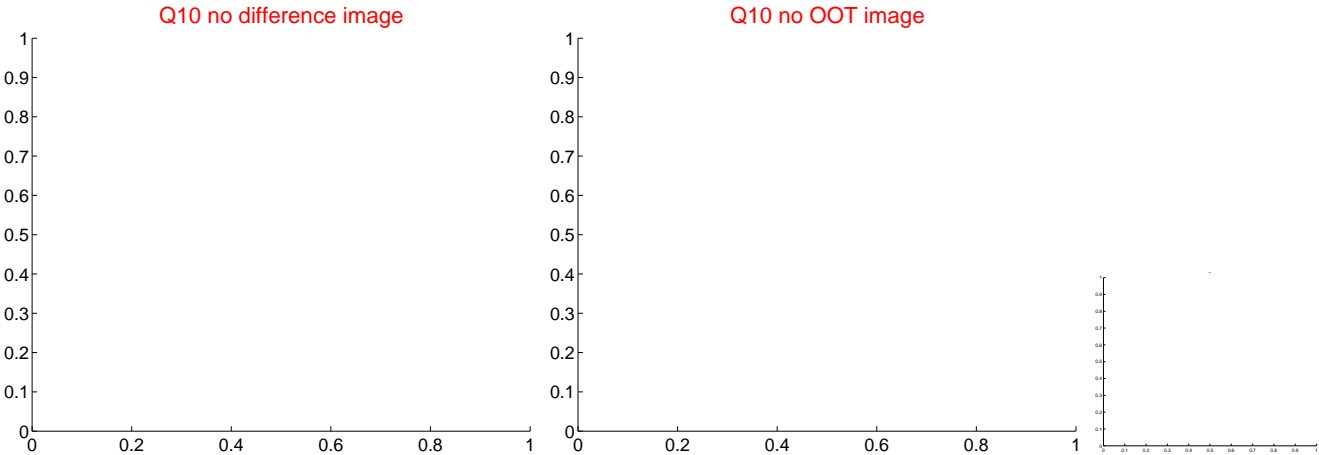
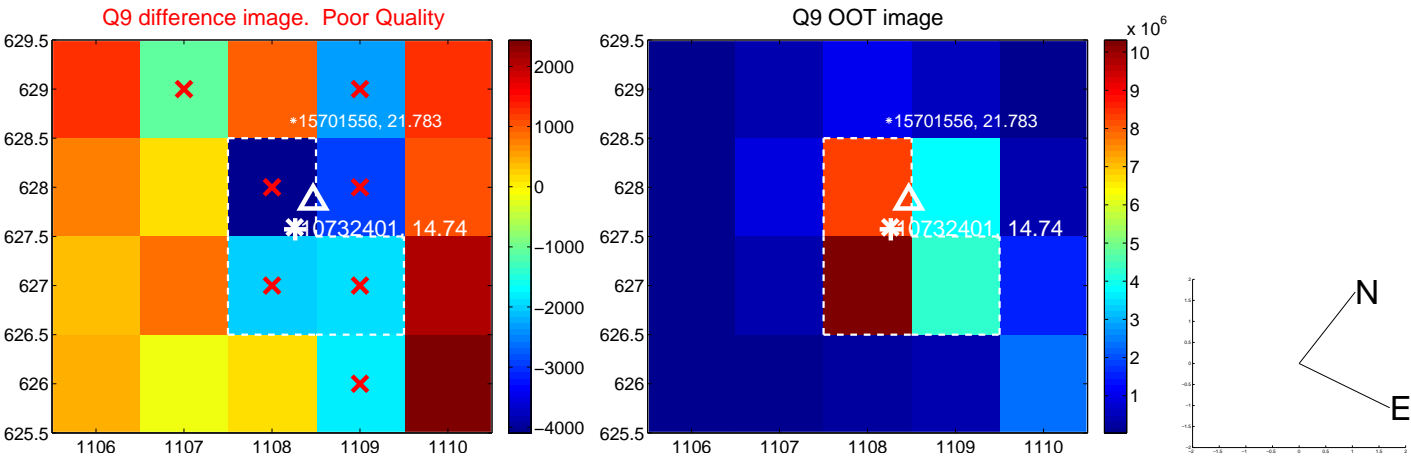
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



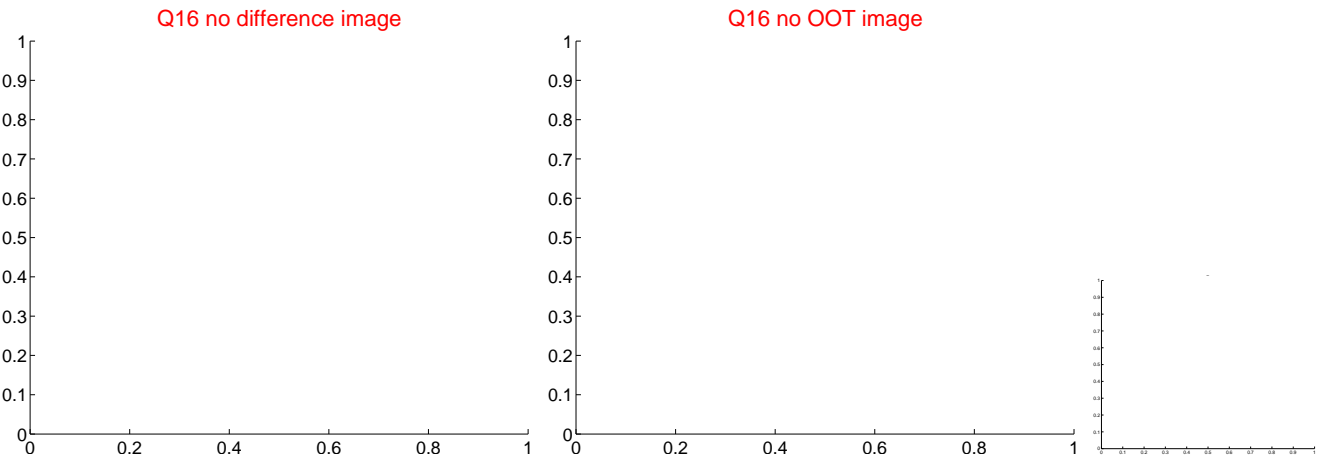
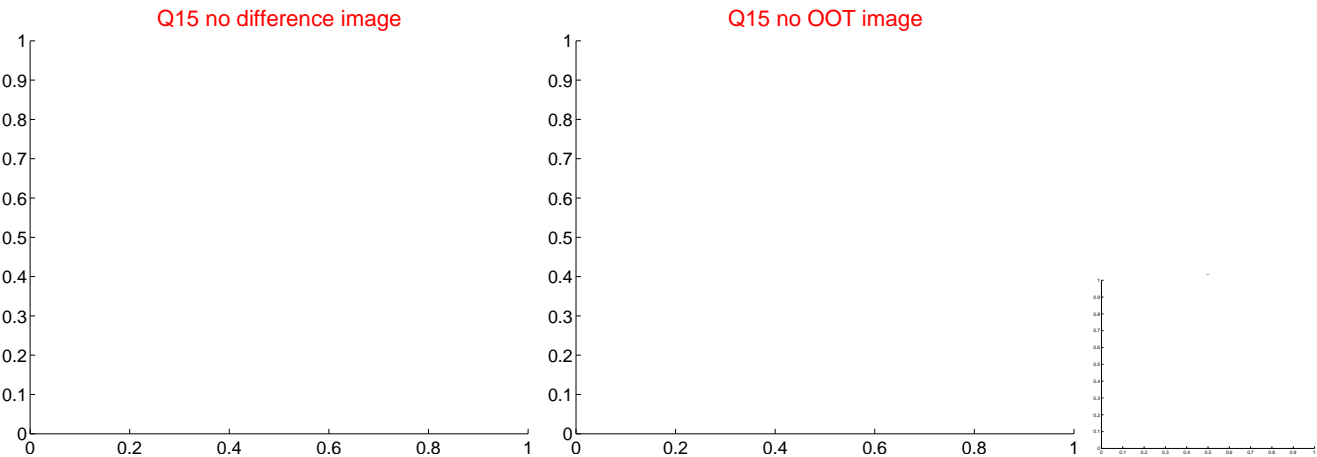
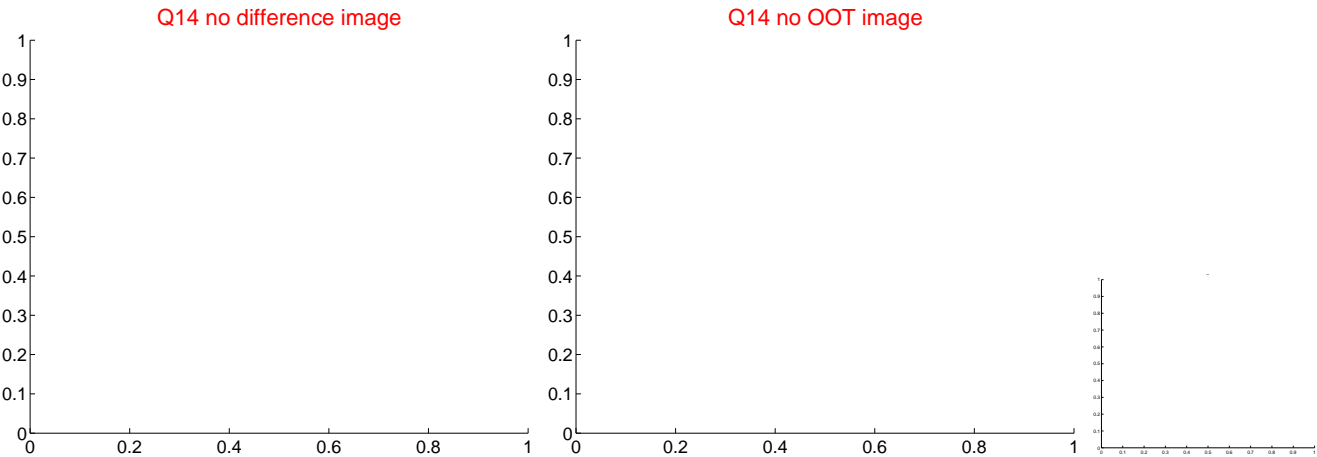
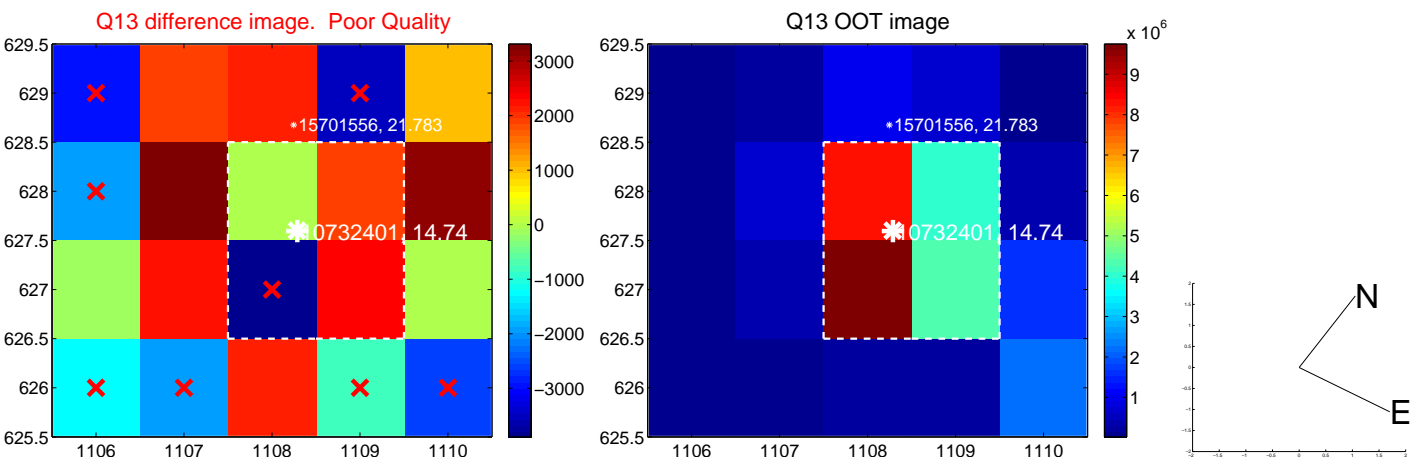
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



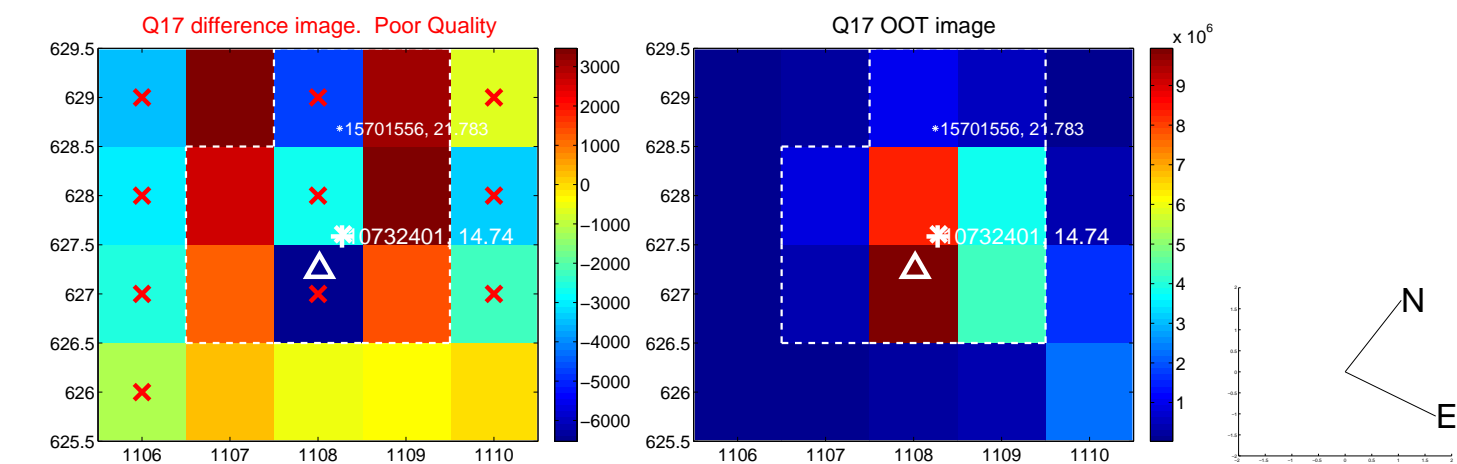
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



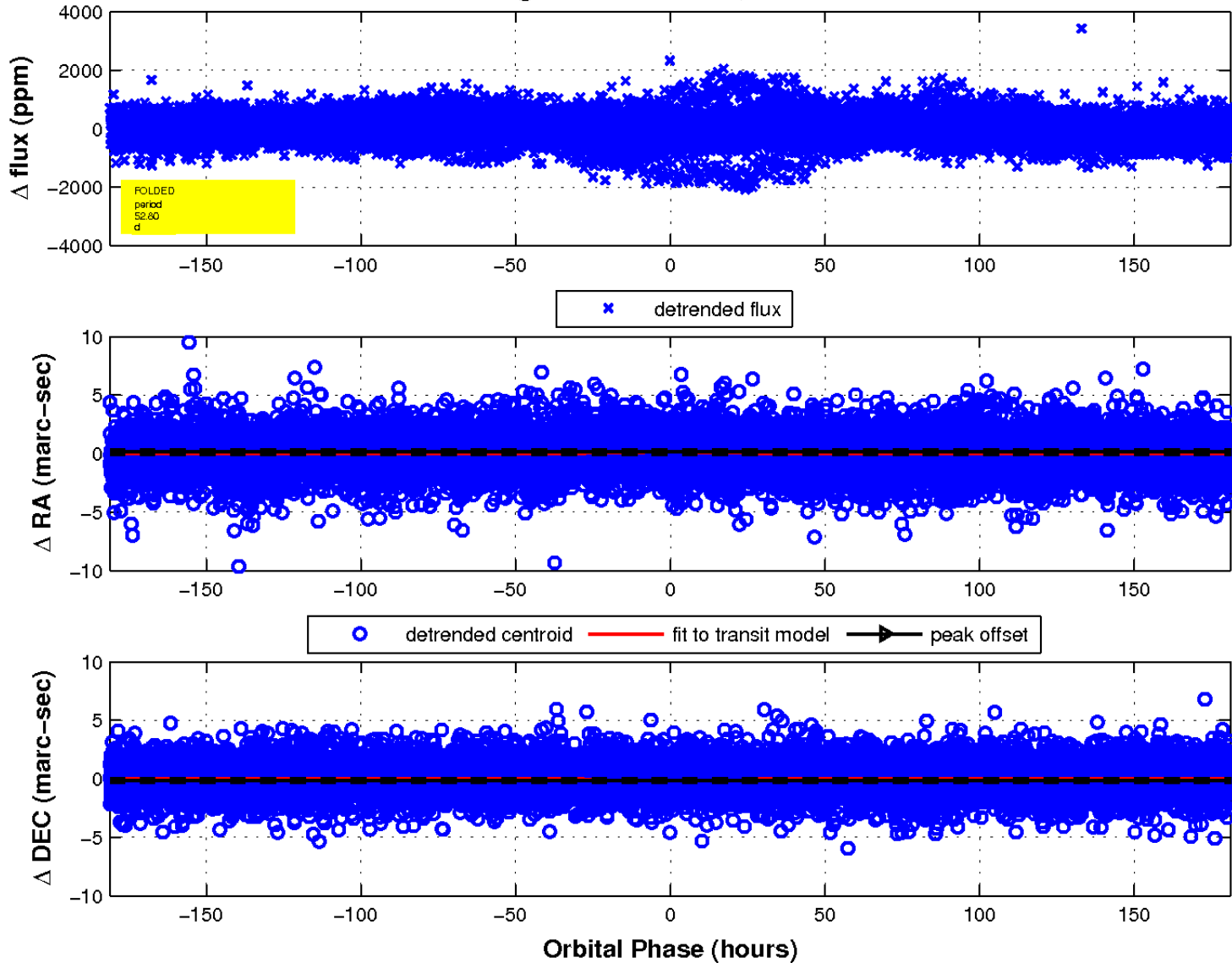
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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

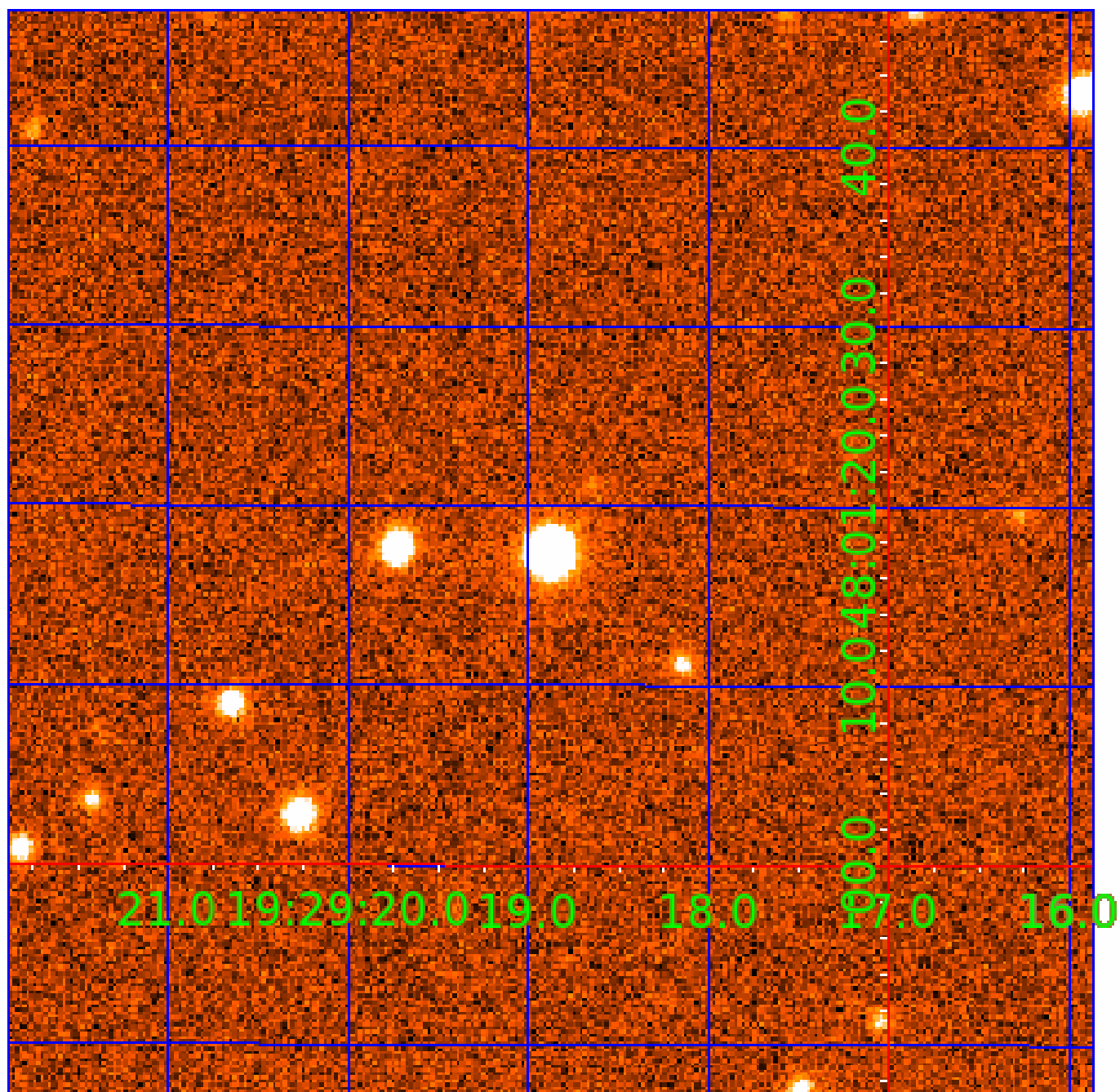


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 010732401

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})
010732401-01	OBS	7366.01	0.933621	131.619764	15.9	5.010	9.0	3.3	1.02	6224	0.41	3811.93
010732401-02	OBS	No	52.800900	149.645200	441.8	60.396	11.6	7.4	1.02	6224	2.52	17.56
010732401-03	OBS	No	348.281789	479.393440	520.3	5.660	11.2	7.7	1.02	6224	2.69	1.42

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010732401-01	OBS	FP	0.00	1	0	0	1	LPP_DV—CENT_FEW_DIFFS—EPHEM_MATCH
010732401-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—CENT_UNCERTAIN
010732401-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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.

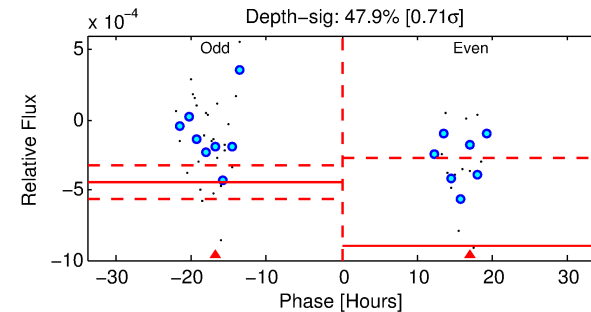
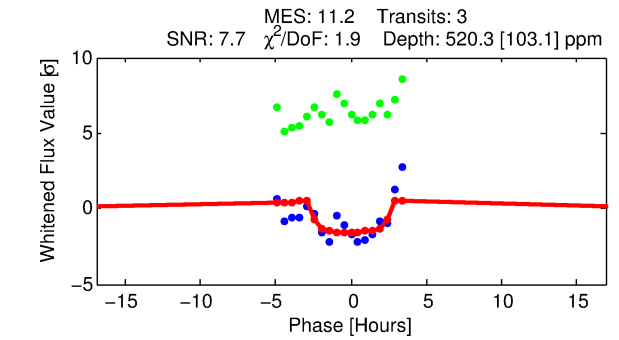
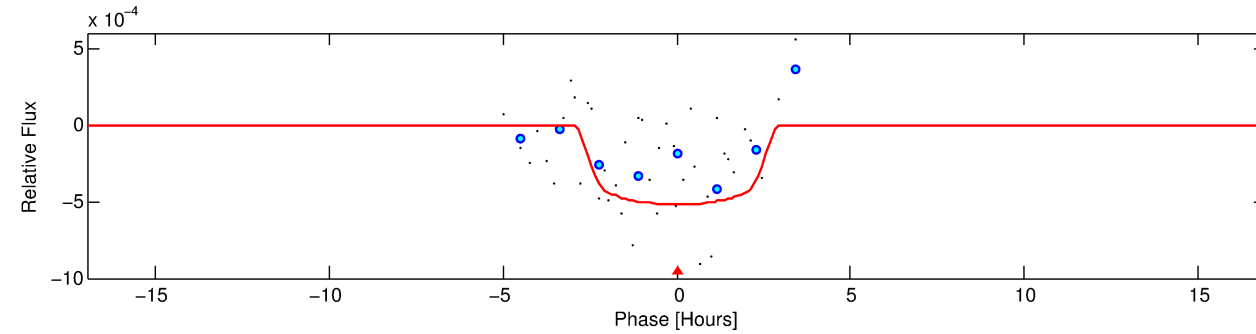
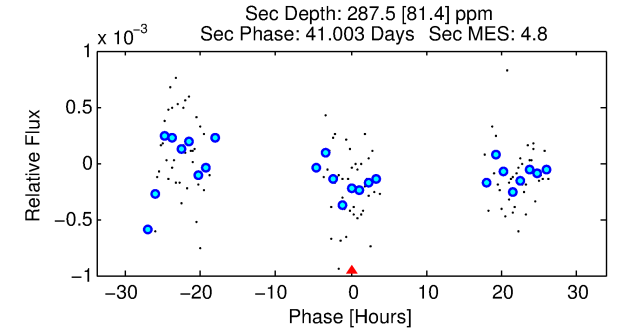
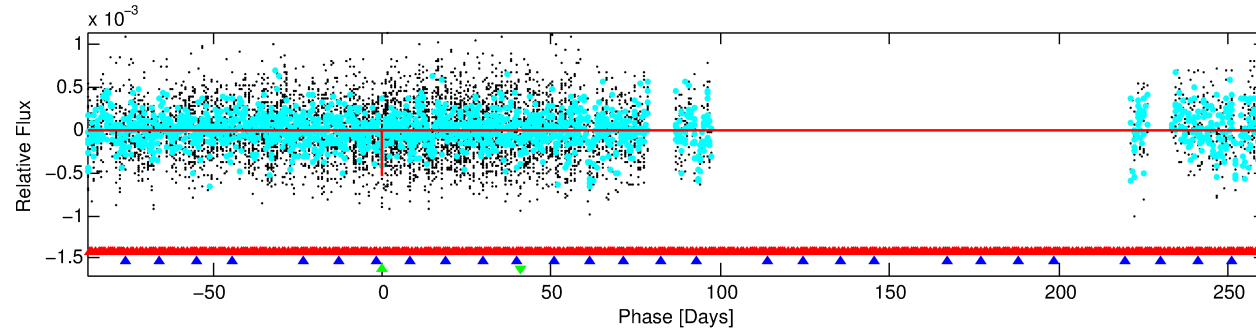
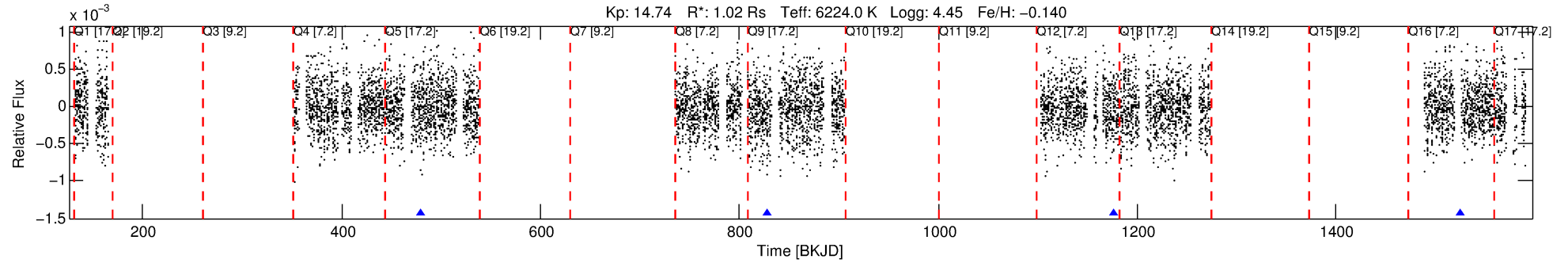
Ephemeris Match Information For 010732401-03

No Significant Match Found

DV One-Page Summary

KIC: 10732401 Candidate: 3 of 3 Period: 348.282 d
KOI: K07366 Corr: No Ephemeris Match

Kp: 14.74 R*: 1.02 Rs Teff: 6224.0 K Logg: 4.45 Fe/H: -0.140



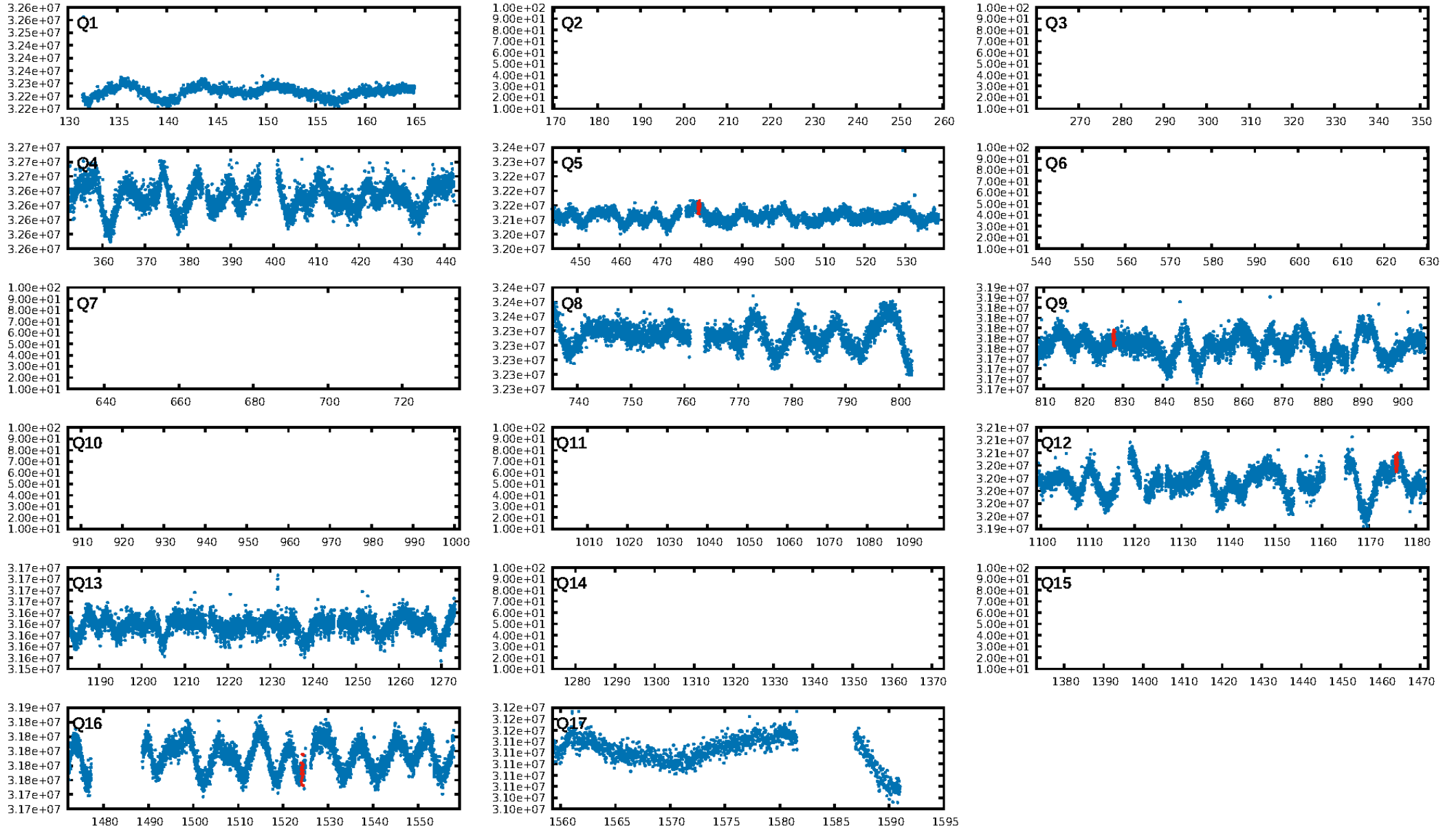
DV Fit Results:

Period = 348.28179 [0.01350] d
Epoch = 479.3934 [0.0135] BKJD
Rp/R* = 0.0240 [0.0091]
a/R* = 251.82 [478.28]
b = 0.87 [0.52]
Seff = 1.42 [0.54]
Teq = 278 [27] K
Rp = 2.69 [1.29] Re
a = 0.9966 [0.2447] AU
Ag = 21772.15 [19304.38] [1.13σ]
Teffp = 5227 [1076] K [4.60σ]

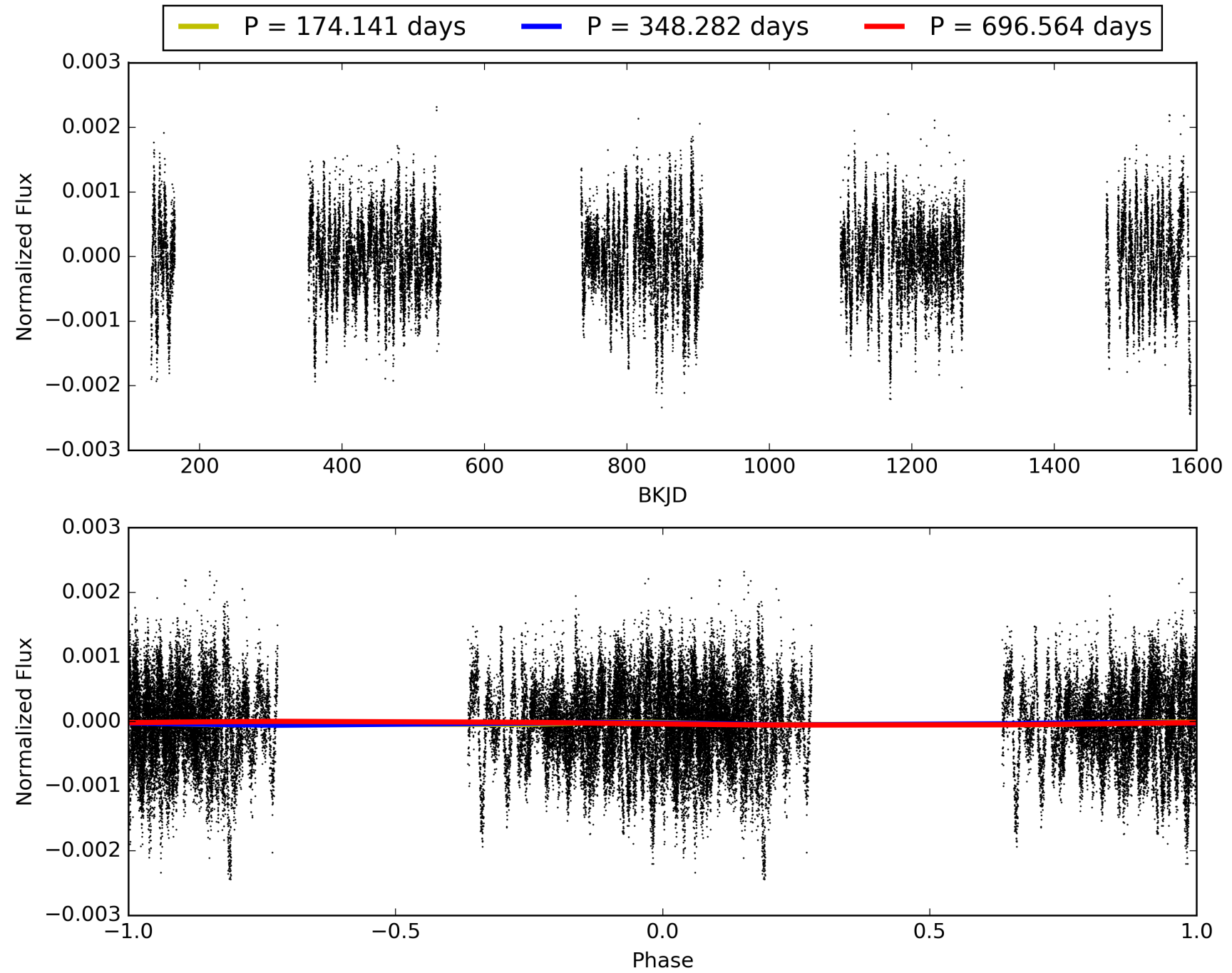
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [116.91σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 8.5%
ModelChiSquareGof-sig: 16.0%
Bootstrap-pfa: 5.10e-15
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.553
Centroid-sig: 28.3%
Centroid-so: 2.239 arcsec [1.39σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 0.00 [0/4]

TCE 010732401-03, PDC Light Curves

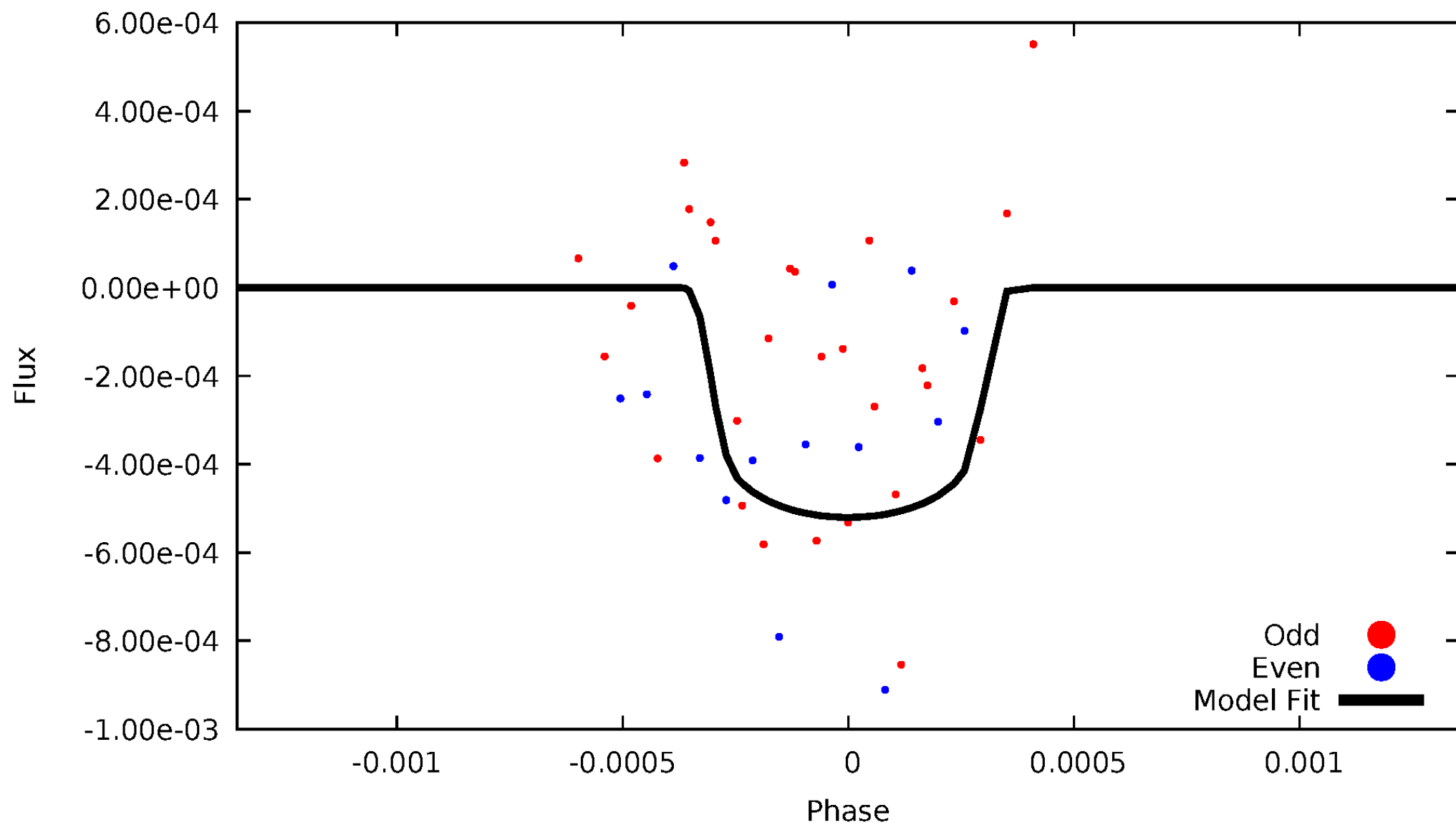


TCE 010732401-03



DV Odd/Even

TCE 010732401-03

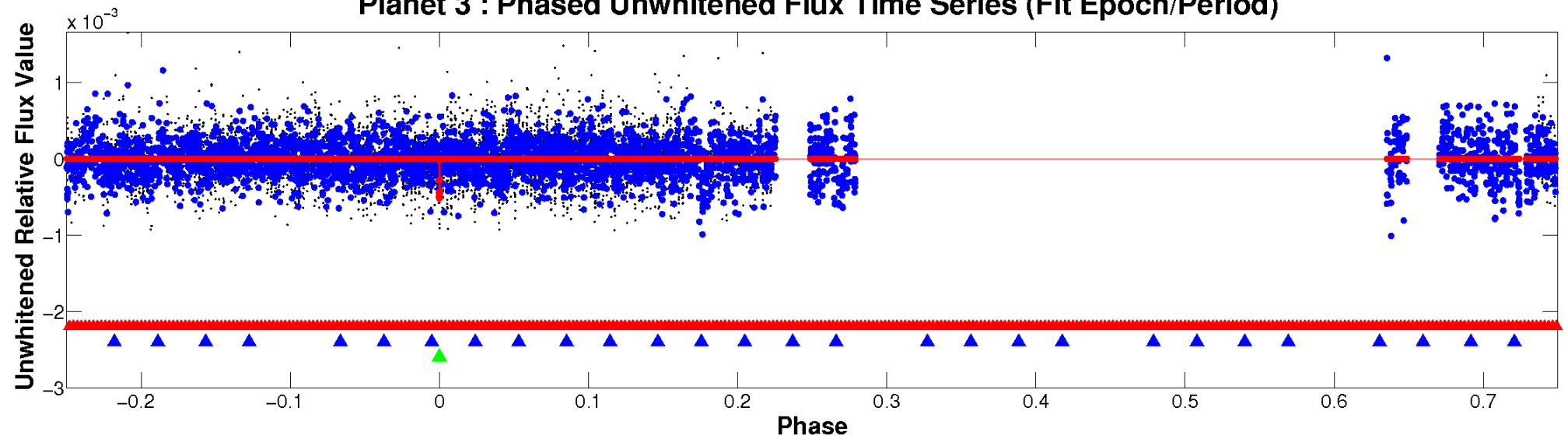


ALT Odd/Even

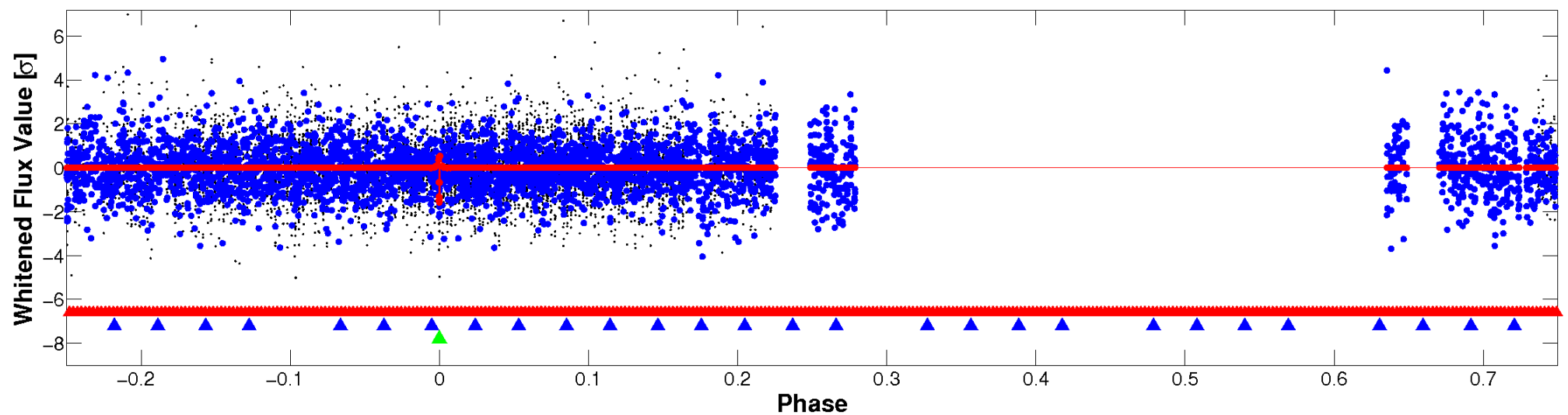
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

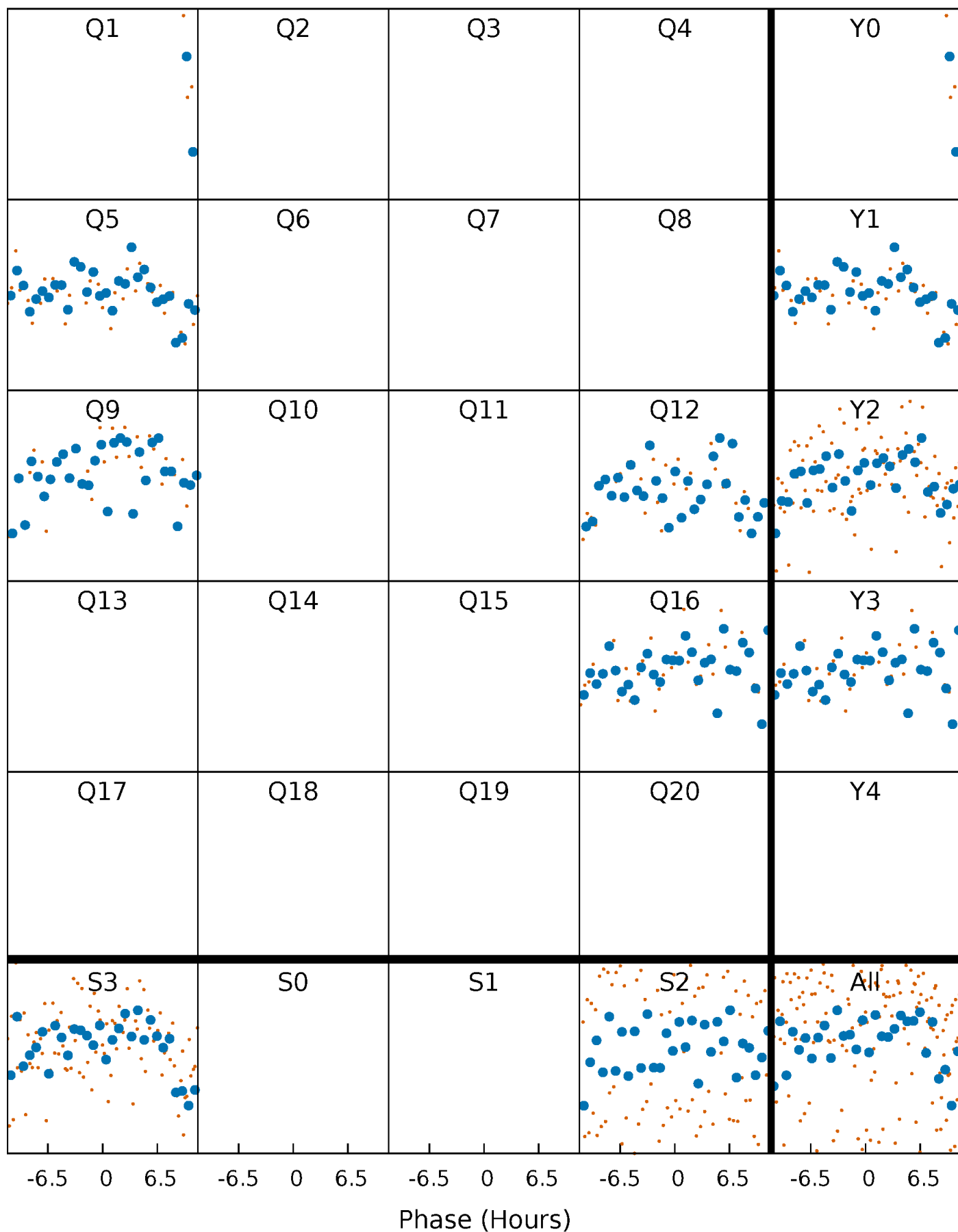


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



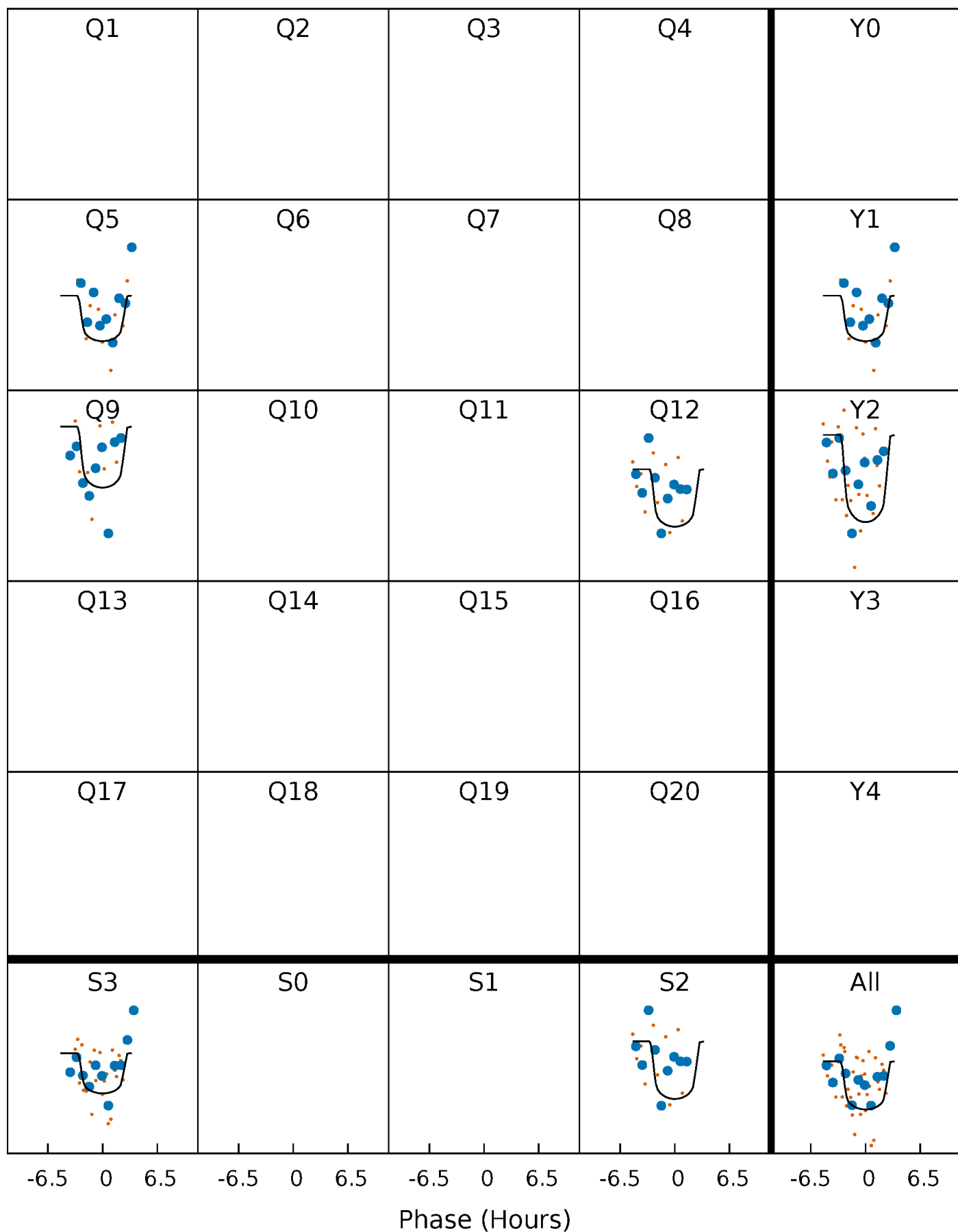
PDC Quarter-Phased Transit Curves

TCE 010732401-03 $P=348.281789$ Days $T_0=479.393440$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 010732401-03 $P=348.281789$ Days $T_0=479.393440$ (BKJD)

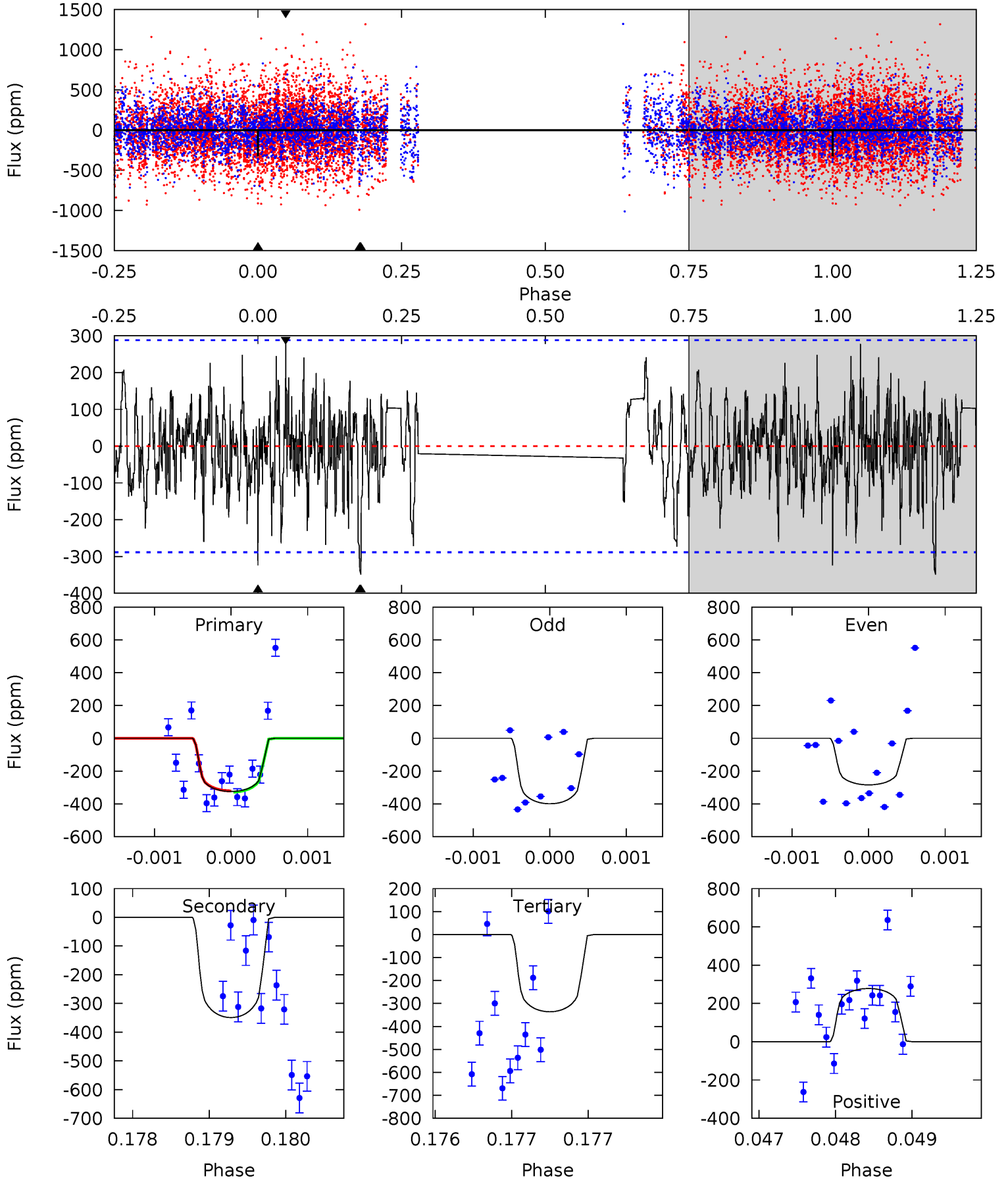


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

010732401-03, P = 348.281789 Days, E = 131.111651 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.20	6.68	6.43	5.32	5.51	3.38	1.77	-0.23	0.88	0.25	1.36	1.04	1.05	0.44	0.07



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 010732401

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6224^{+153}_{-218}	$4.454^{+0.052}_{-0.195}$	$-0.140^{+0.250}_{-0.350}$	$1.024^{+0.299}_{-0.107}$	$1.084^{+0.144}_{-0.144}$	$1.423^{+0.380}_{-0.684}$
	+2%/-4%	+1%/-4%	+179%/-250%	+29%/-10%	+13%/-13%	+27%/-48%
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 010732401-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-349 ± 52	$2.85^{+1.07}_{-1.17}$	396^{+26}_{-20}	5459^{+1752}_{-739}	23423^{+40565}_{-11871}
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

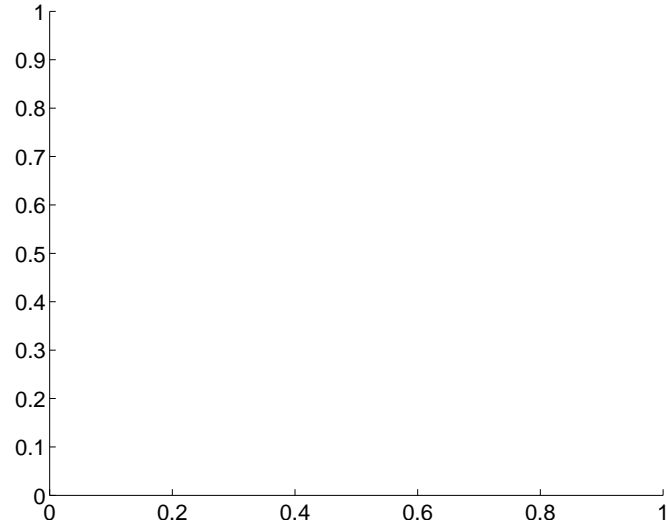
Supplemental centroid analysis for 010732401-03. Kepler magnitude: 14.74. Transit SNR 7.73

There are 0 quarters with good PRF difference image offsets

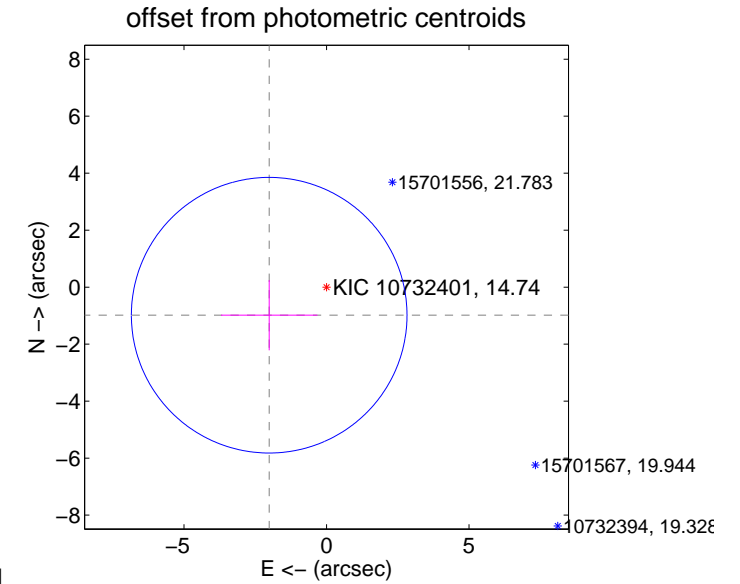
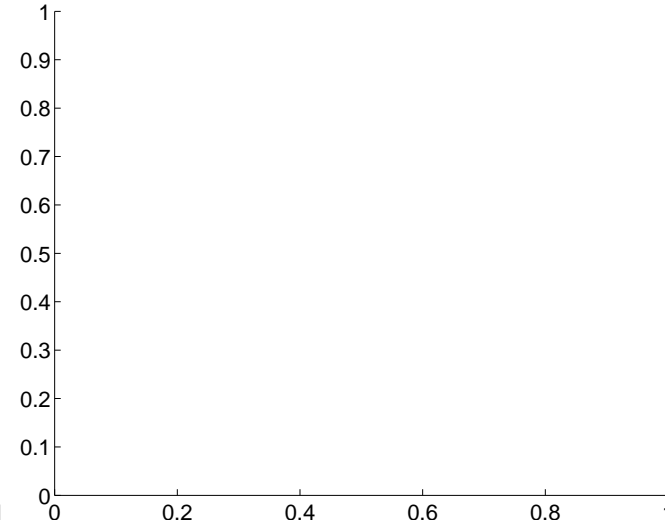
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	2.24 ± 1.61	1.39	2.01 ± 1.69	-0.98 ± 1.23

There is no PRF-fit offset from OOT-fit

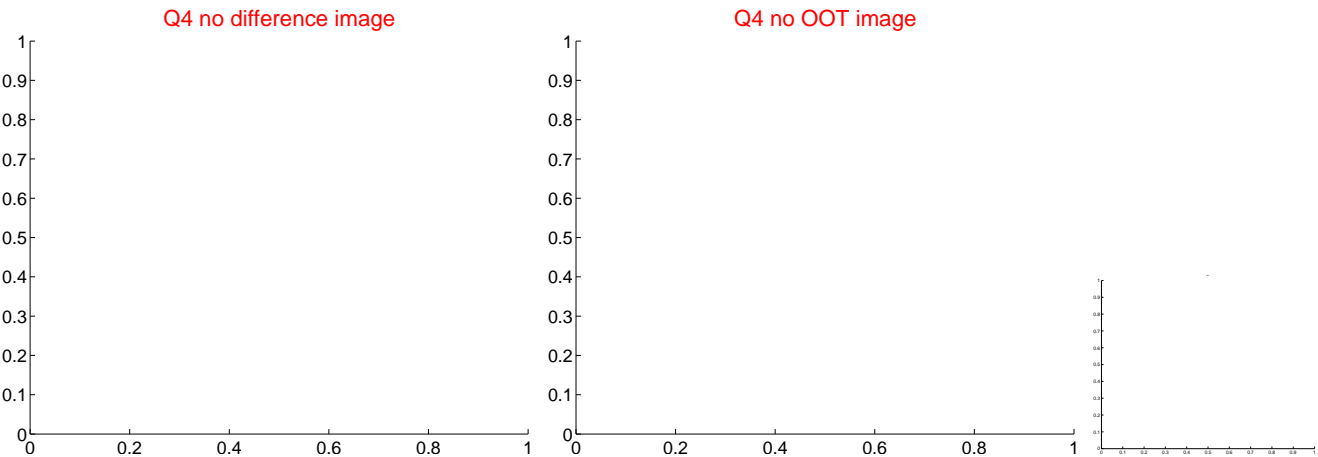
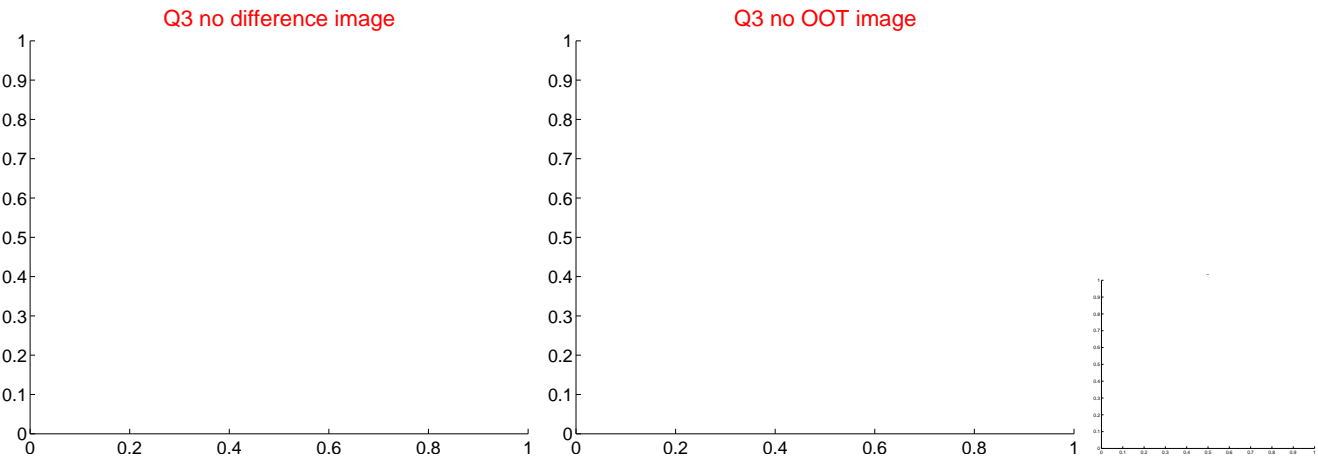
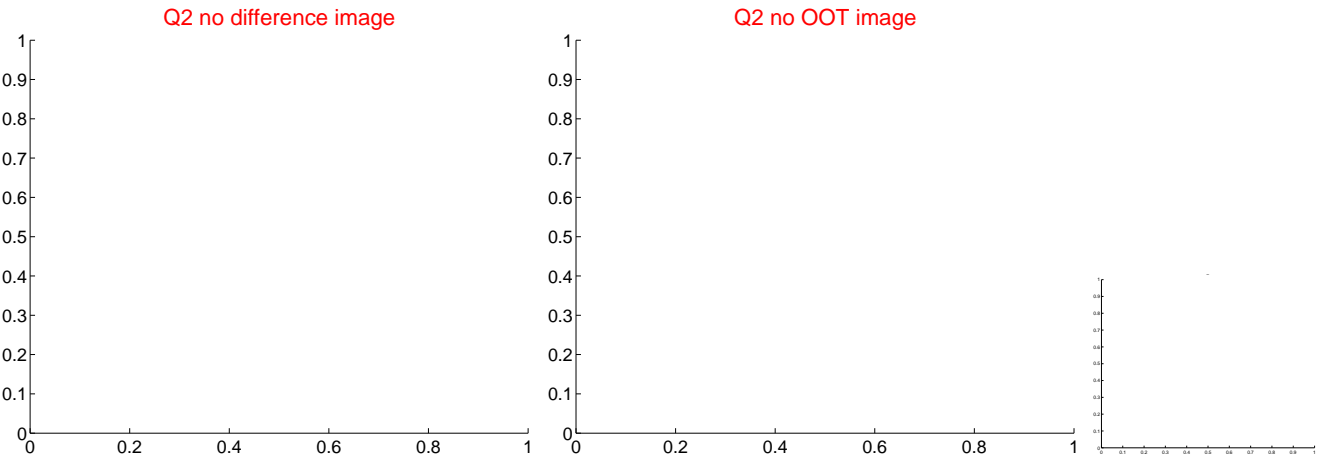
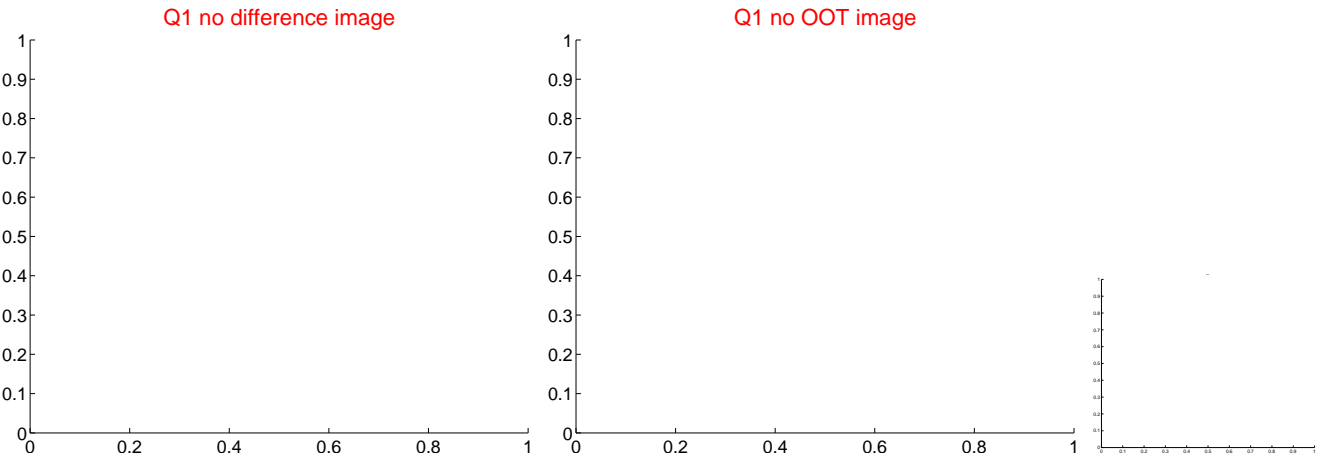


There is no PRF-fit offset from KIC

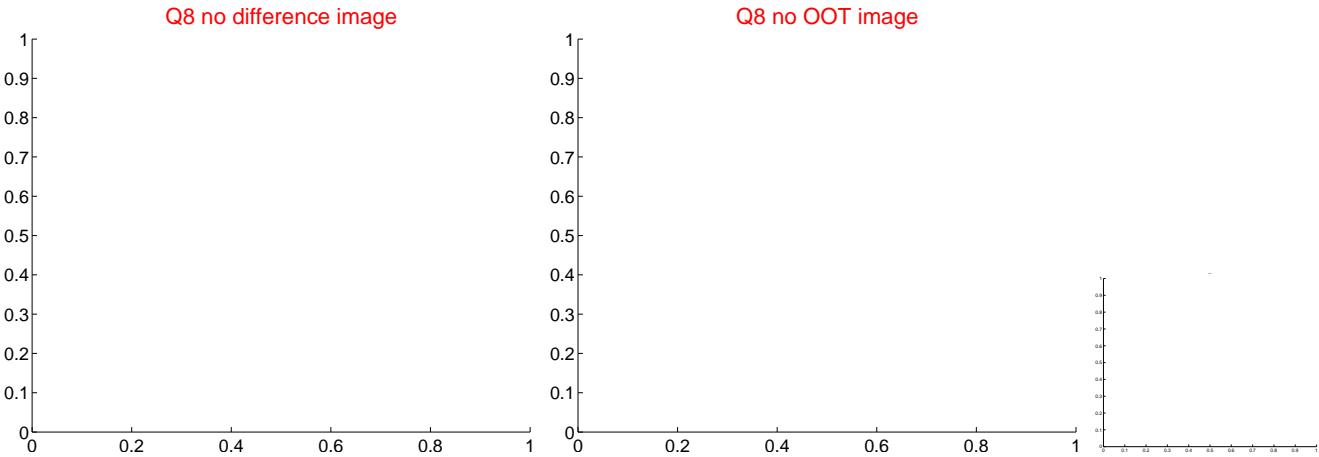
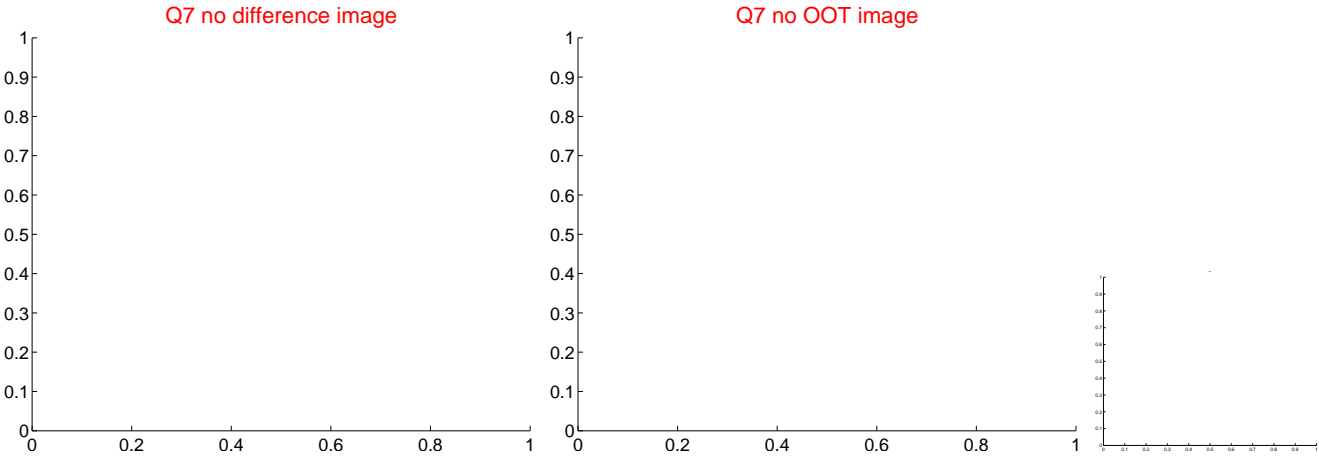
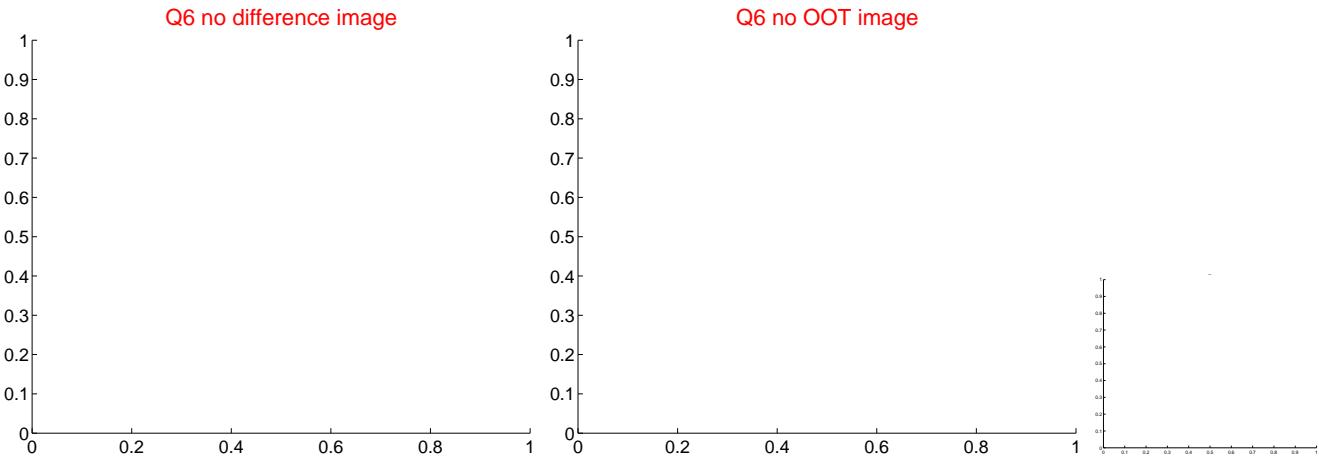
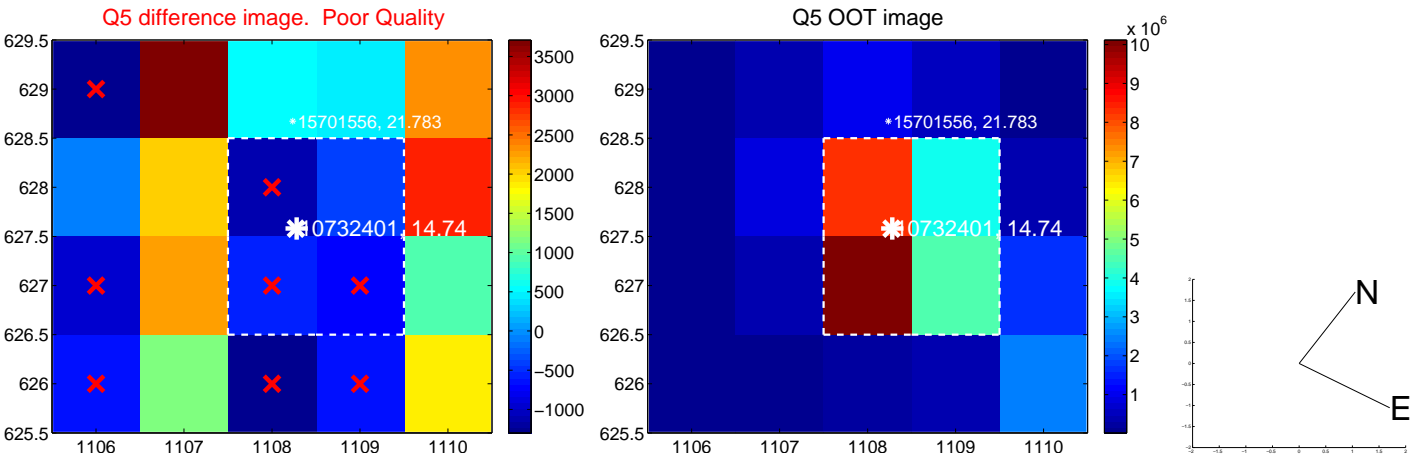


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

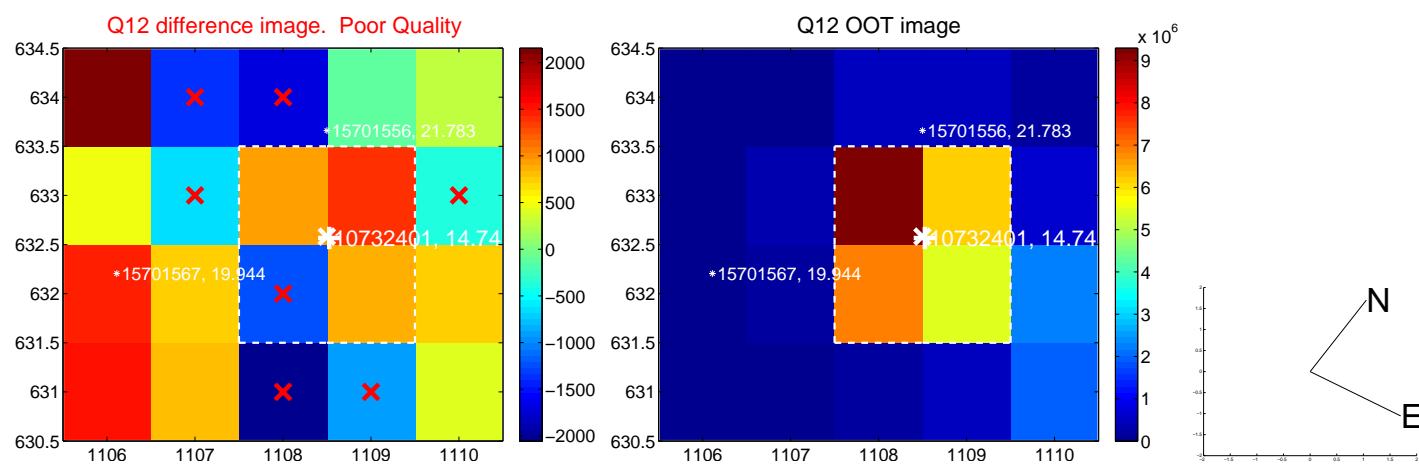
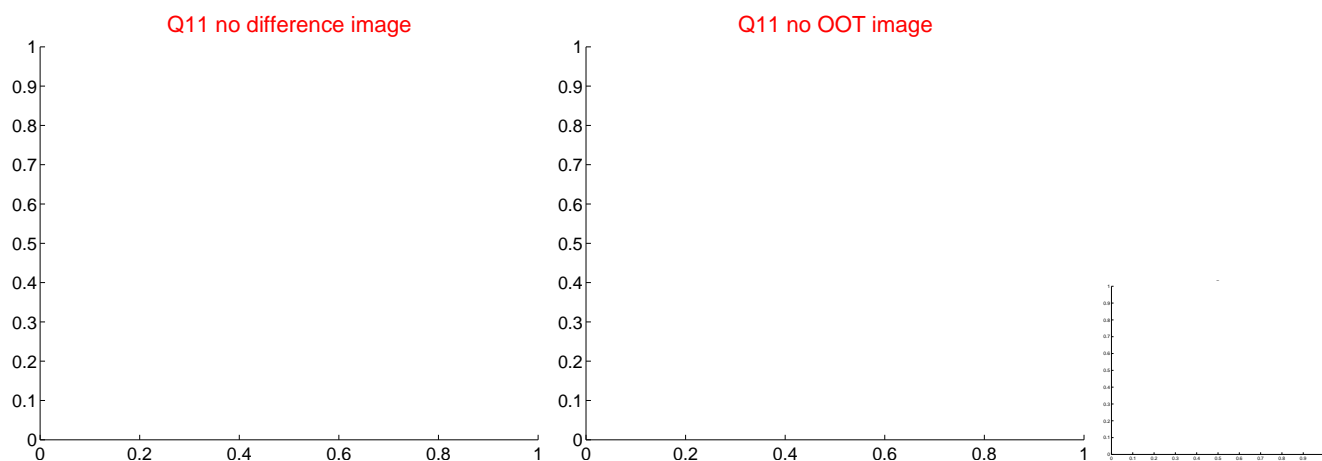
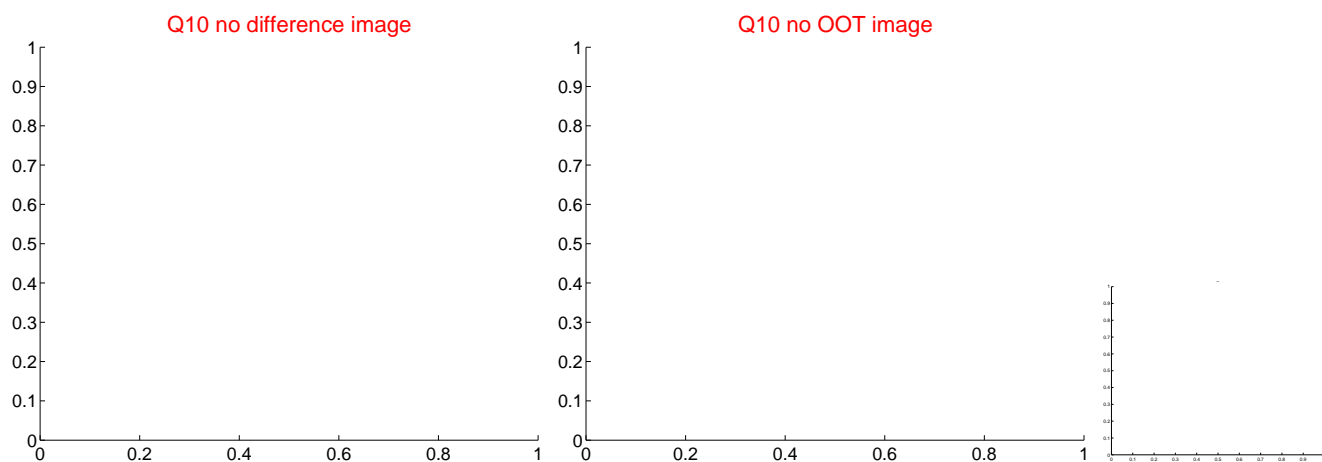
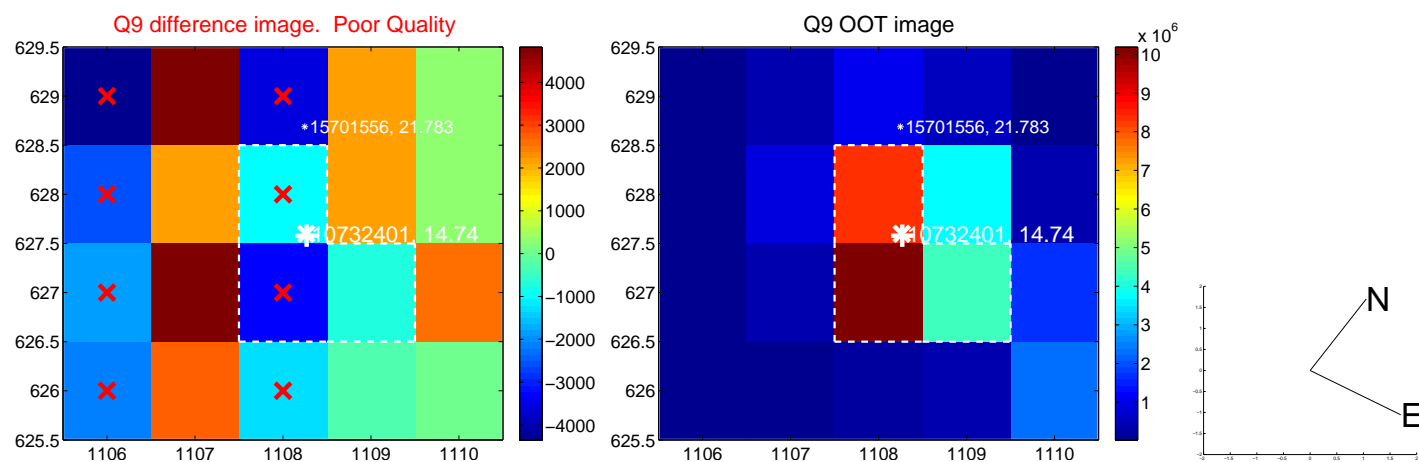
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



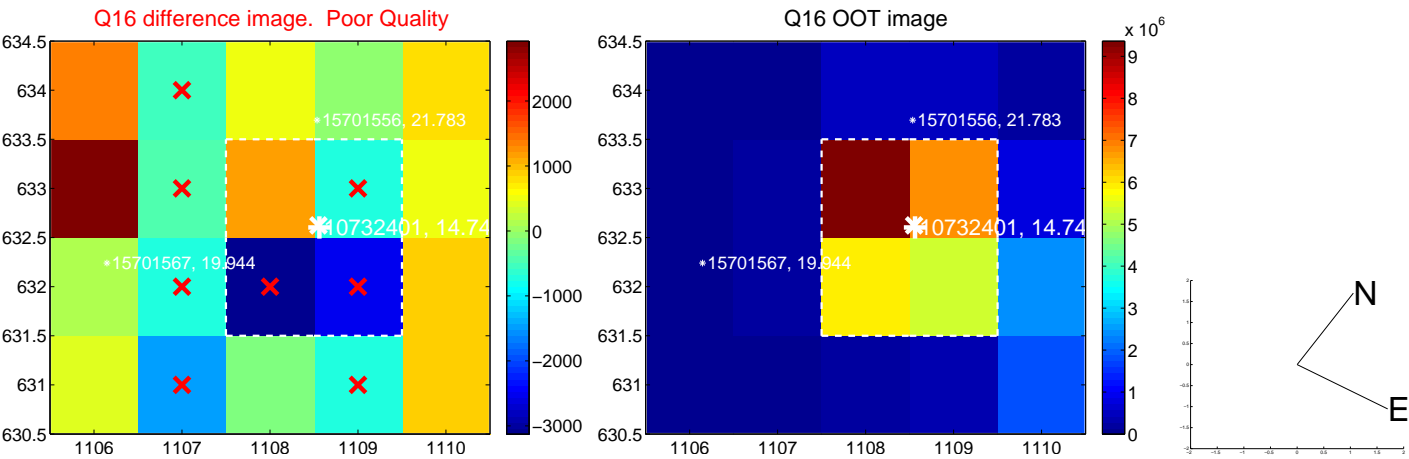
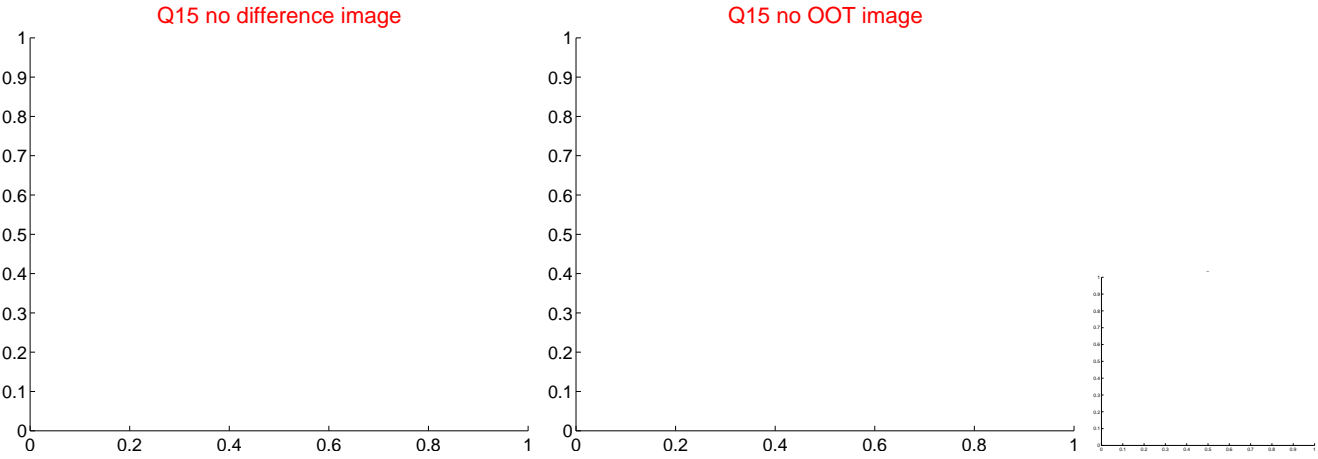
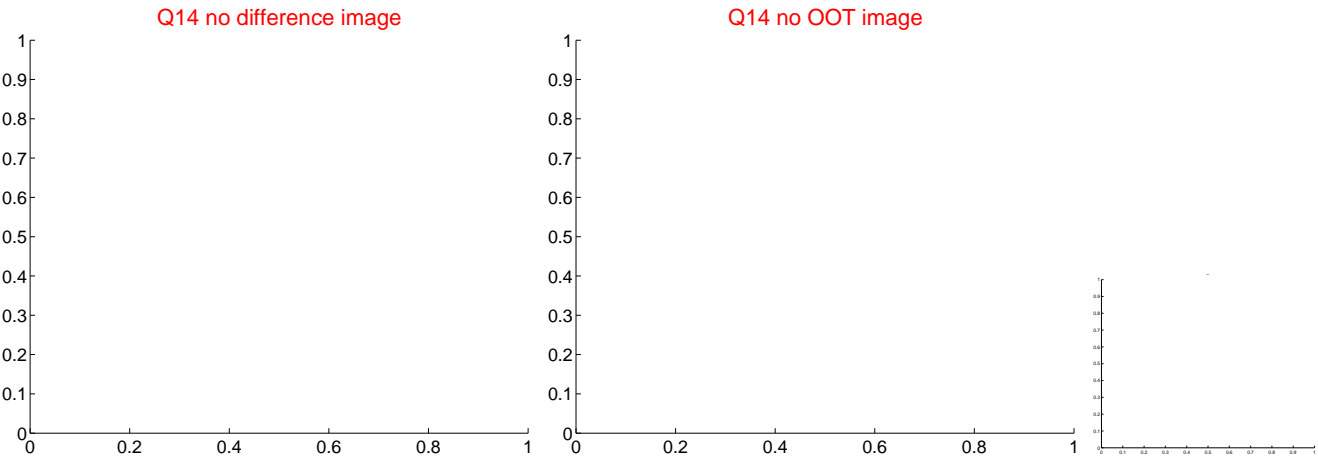
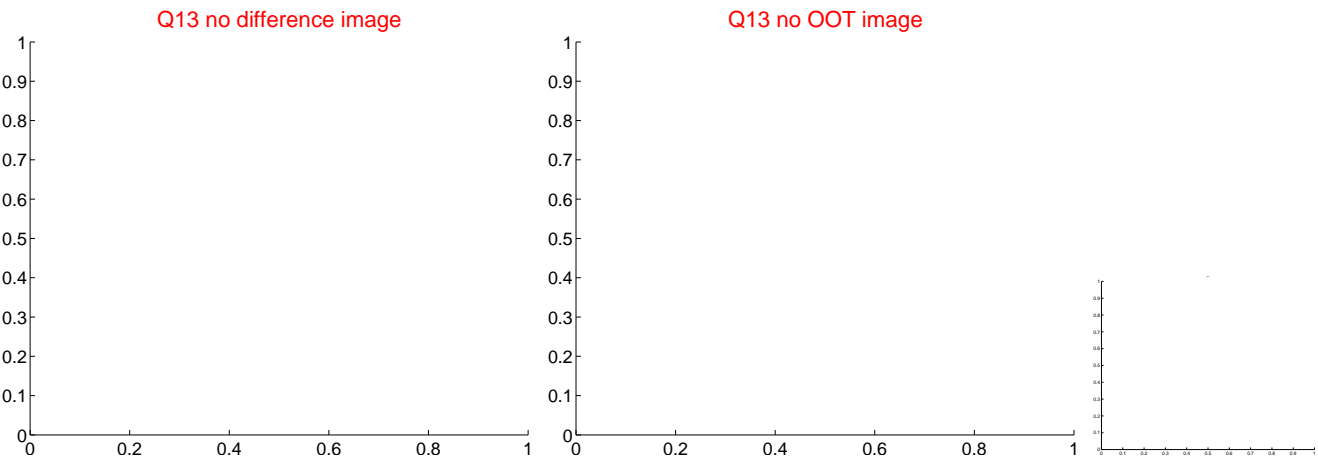
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



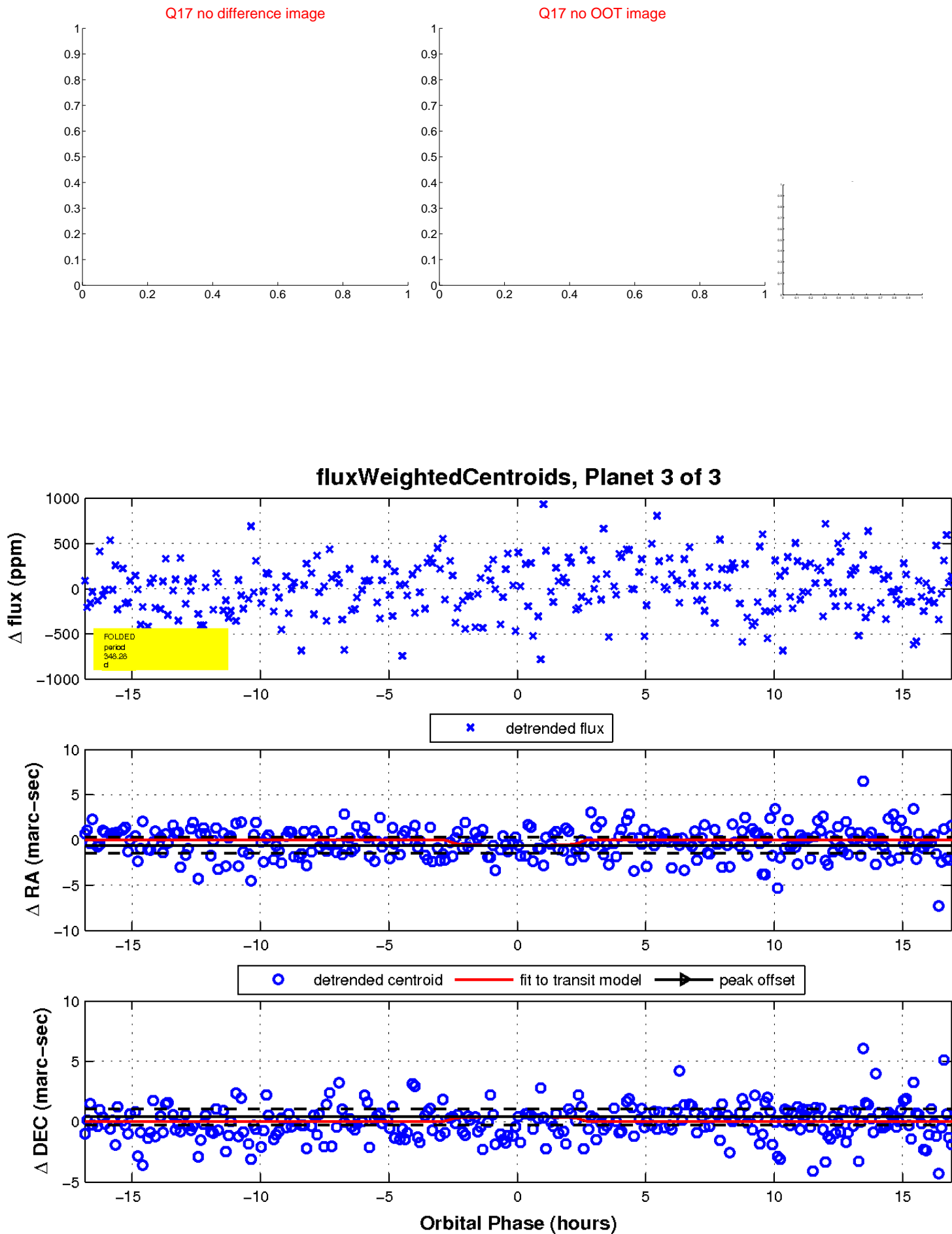
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

