

KIC 011454602

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})
011454602-01	OBS	No	1.204542	131.607513	15.9	9.112	7.4	8.5	1.06	5878	0.42	2387.87
011454602-02	OBS	No	40.784419	159.367250	2303.5	1.500	24.7	-1.0	1.06	5878	5.08	21.80
011454602-03	OBS	No	3.754298	134.337688	210.7	3.031	20.4	18.9	1.06	5878	2.53	524.49
011454602-04	OBS	No	12.176176	131.555593	353.0	1.247	17.6	16.1	1.06	5878	2.13	109.25
011454602-05	OBS	No	8.622852	140.092733	301.6	1.096	16.0	13.3	1.06	5878	1.86	173.08
011454602-06	OBS	No	8.544381	138.282764	246.6	1.515	14.9	12.2	1.06	5878	1.67	175.20
011454602-07	OBS	No	4.177766	132.060994	1361.2	1.500	14.4	-1.0	1.06	5878	3.91	454.83

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011454602-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET
011454602-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—NO_FITS—CENT_NOFITS
011454602-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_RESOLVED_OFFSET
011454602-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_MEAS
011454602-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS—HALO_GHOST
011454602-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV
011454602-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

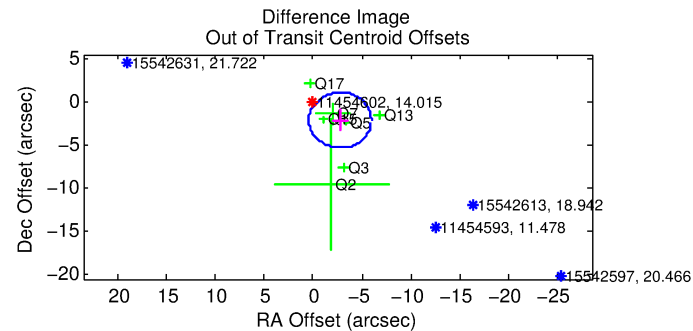
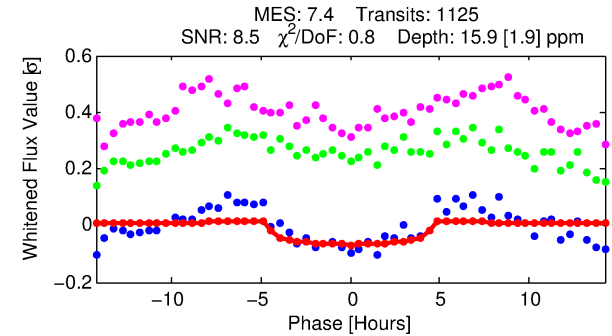
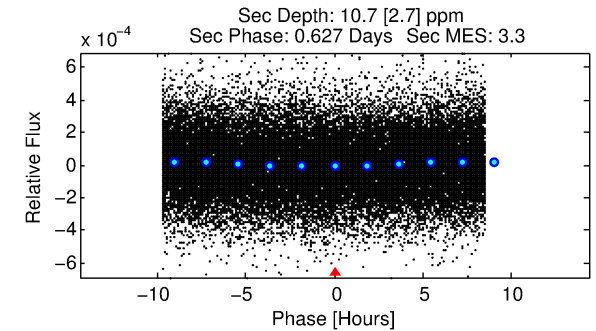
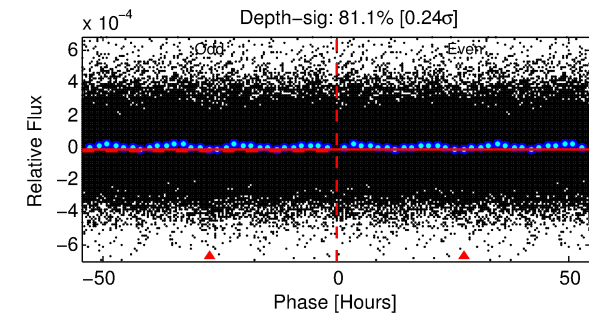
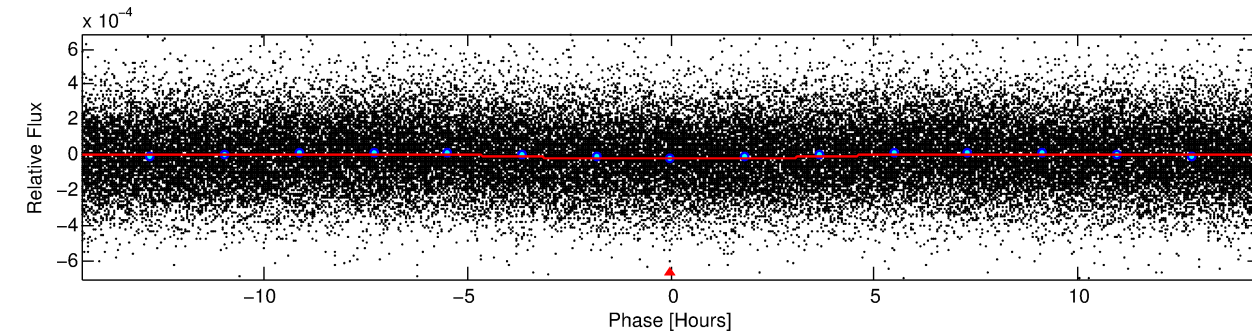
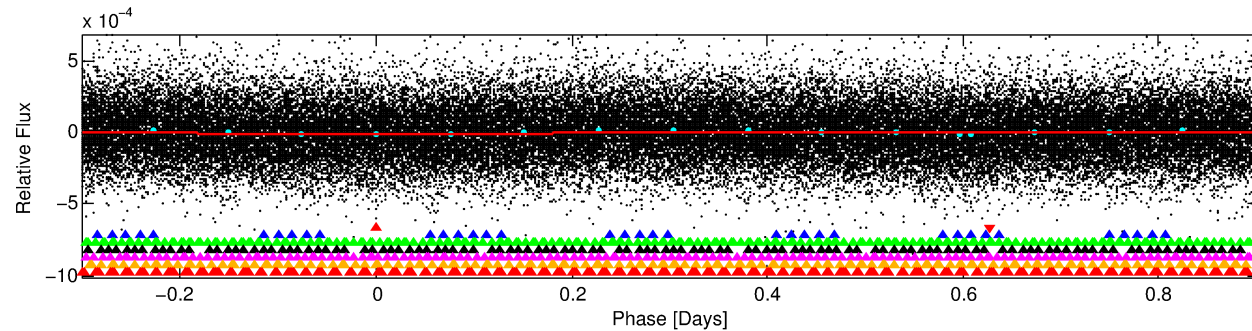
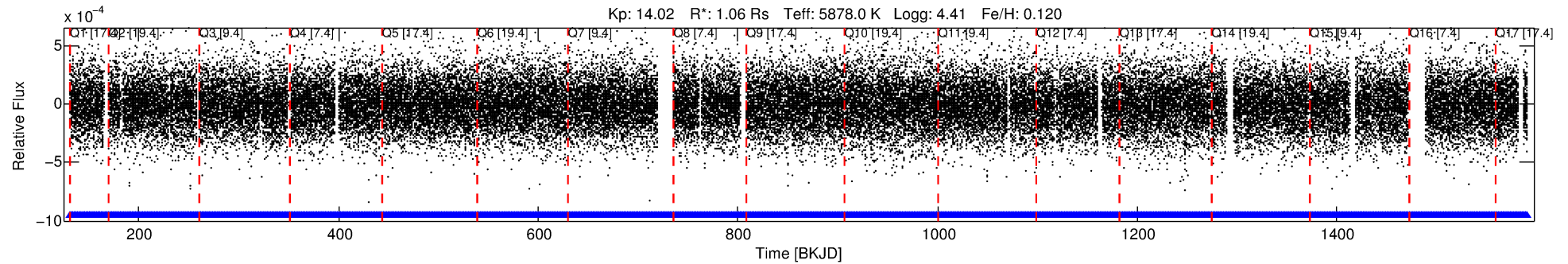
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011454602-01

No Significant Match Found

DV One-Page Summary

KIC: 11454602 Candidate: 1 of 7 Period: 1.205 d



DV Fit Results:

Period = 1.20454 [0.00002] d
Epoch = 131.6075 [0.0093] BKJD
Rp/R* = 0.0036 [0.0052]
a/R* = 1.20 [2.33]
b = 0.05 [140.96]
Seff = 2387.87 [927.89]
Teff = 1782 [173] K
Rp = 0.42 [0.61] Re
a = 0.0225 [0.0056] AU
Ag = 16.92 [49.07] [0.32 σ]
Teffp = 5590 [4024] K [0.95 σ]

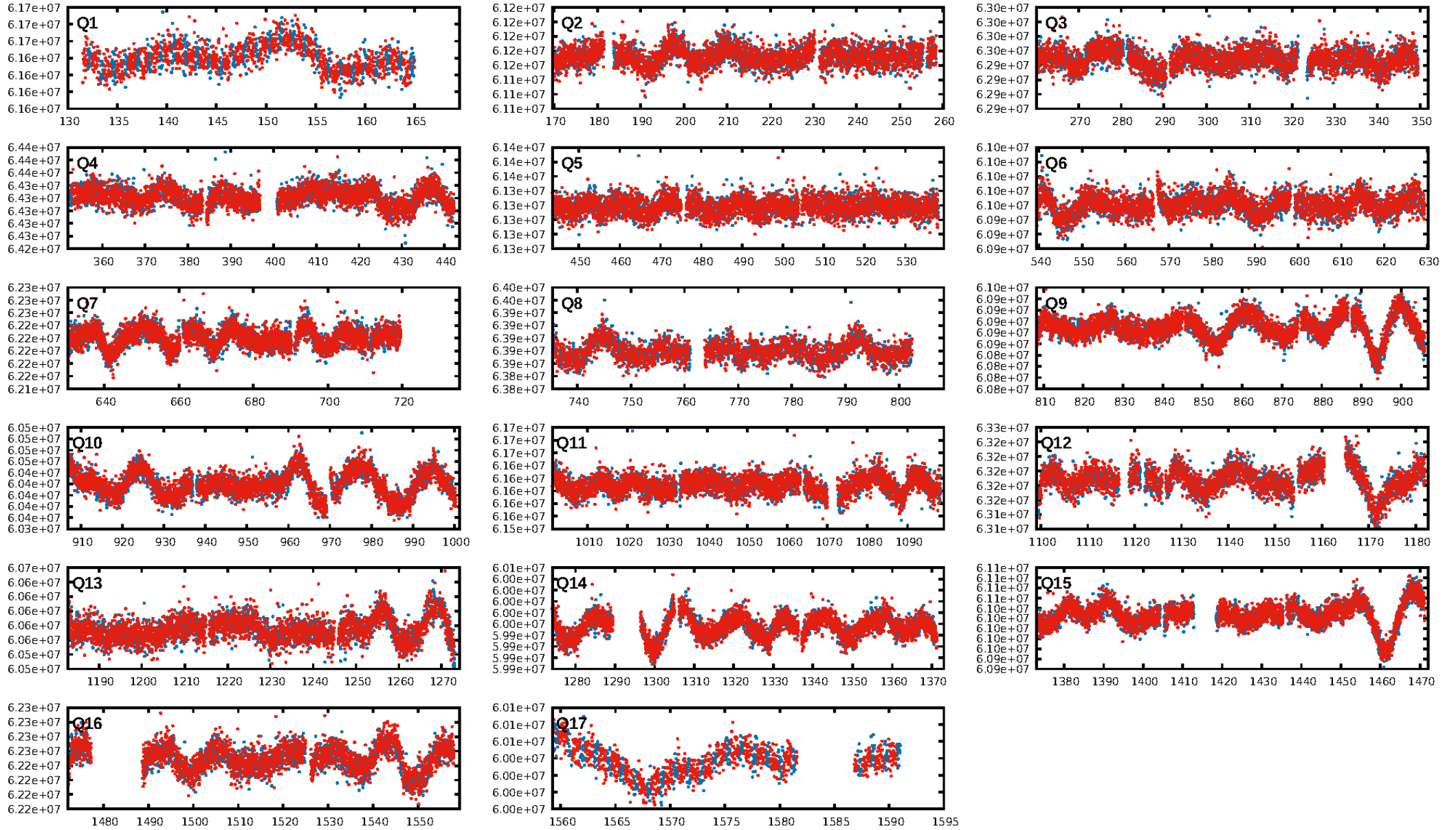
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [6.37 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1075/1075]
GhostDiagnostic-chr: -0.5411
Centroid-sig: 0.0%
Centroid-so: 3.808 arcsec [2.72 σ]
OotOffset-rm: 3.467 arcsec [3.24 σ]
KicOffset-rm: 3.420 arcsec [3.00 σ]
OotOffset-st: 1/3/0/3 [7]
KicOffset-st: 1/3/0/3 [7]
DiffImageQuality-fgm: 0.43 [3/7]
DiffImageOverlap-fno: 1.00 [17/17]

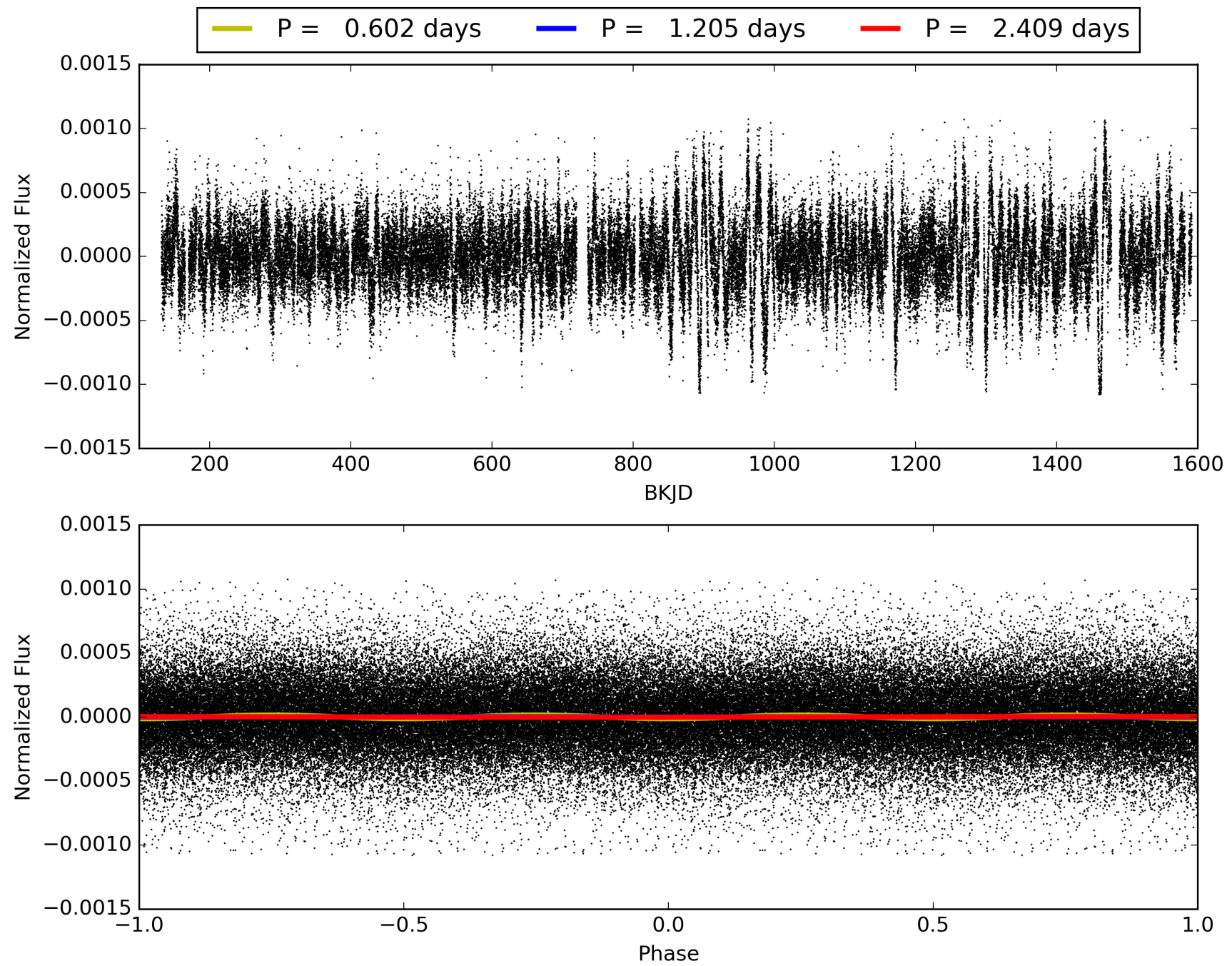
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:03:56 Z

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

TCE 011454602-01, PDC Light Curves

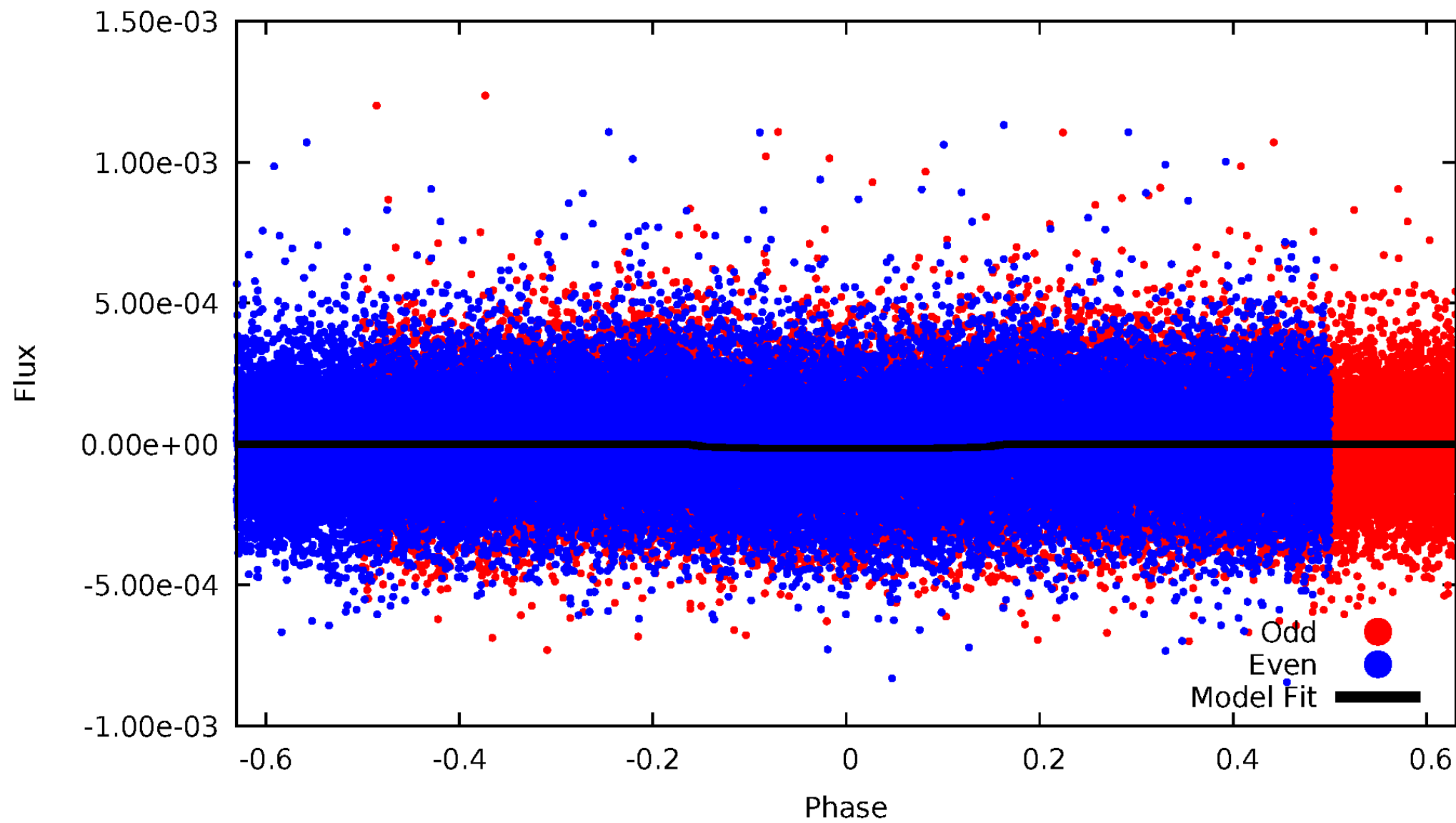


TCE 011454602-01



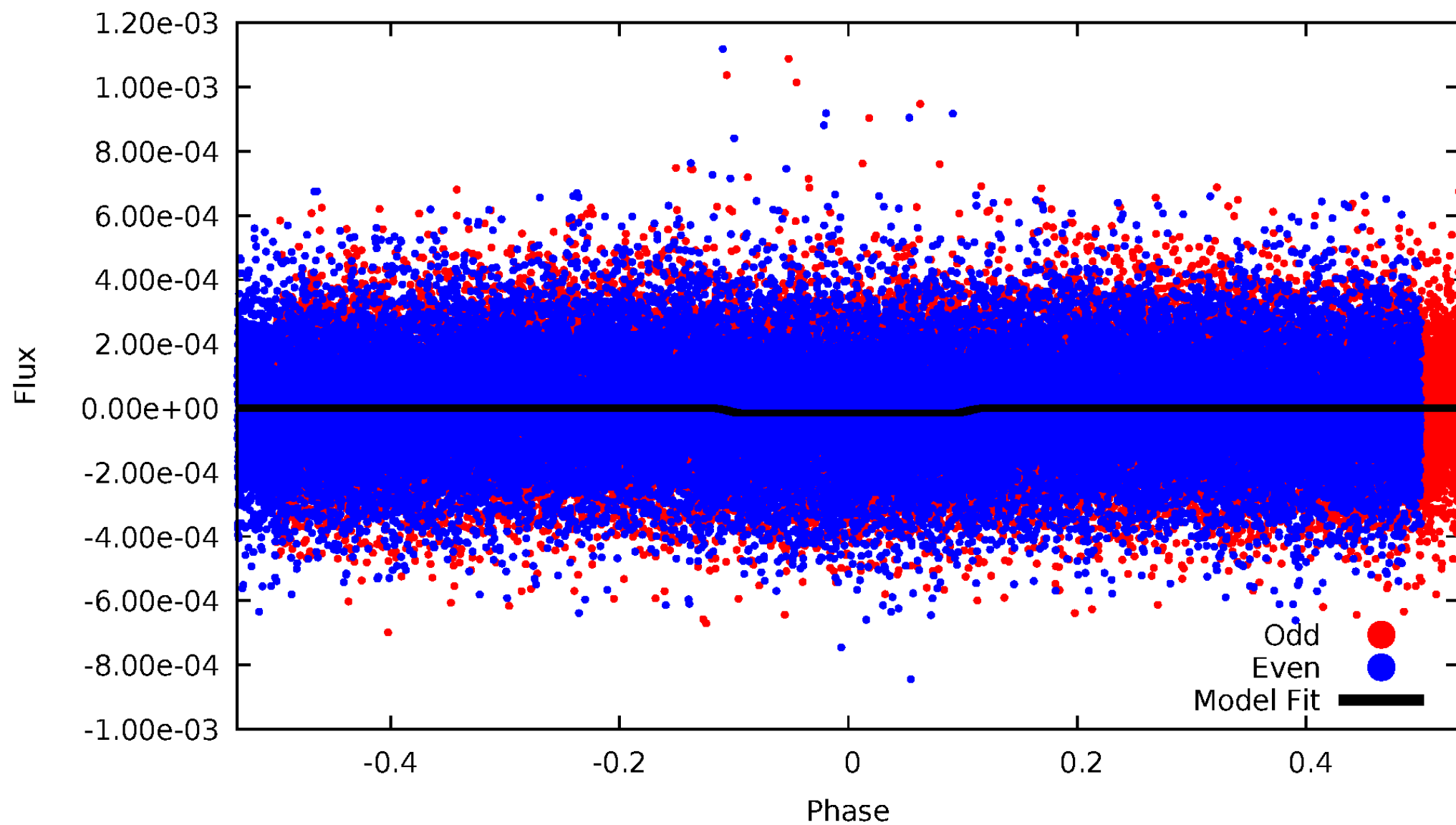
DV Odd/Even

TCE 011454602-01

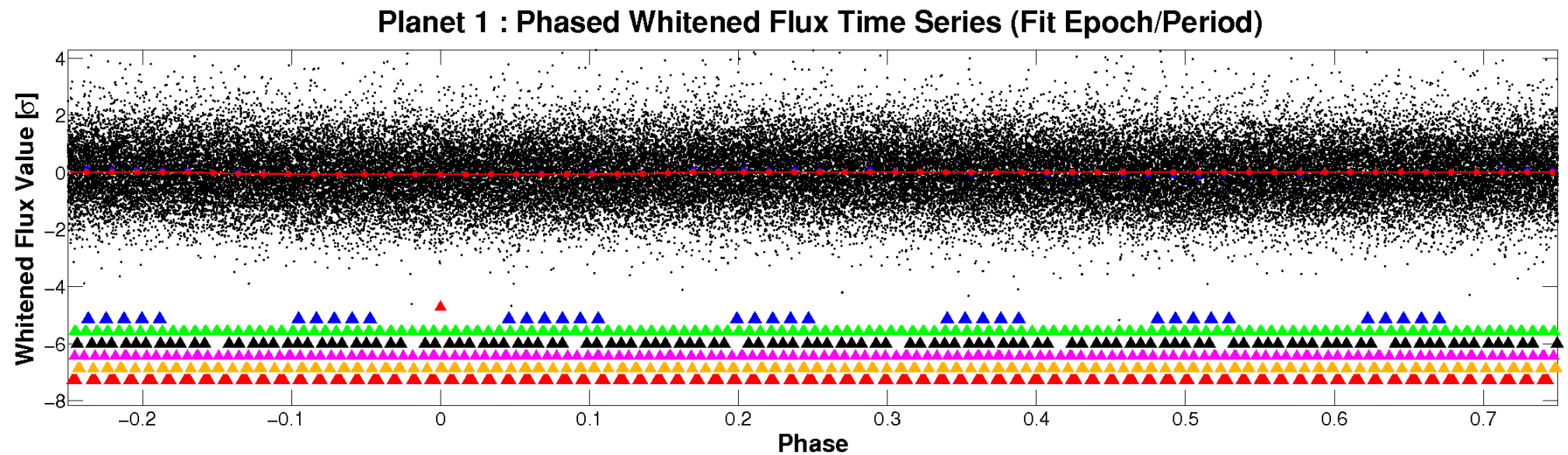
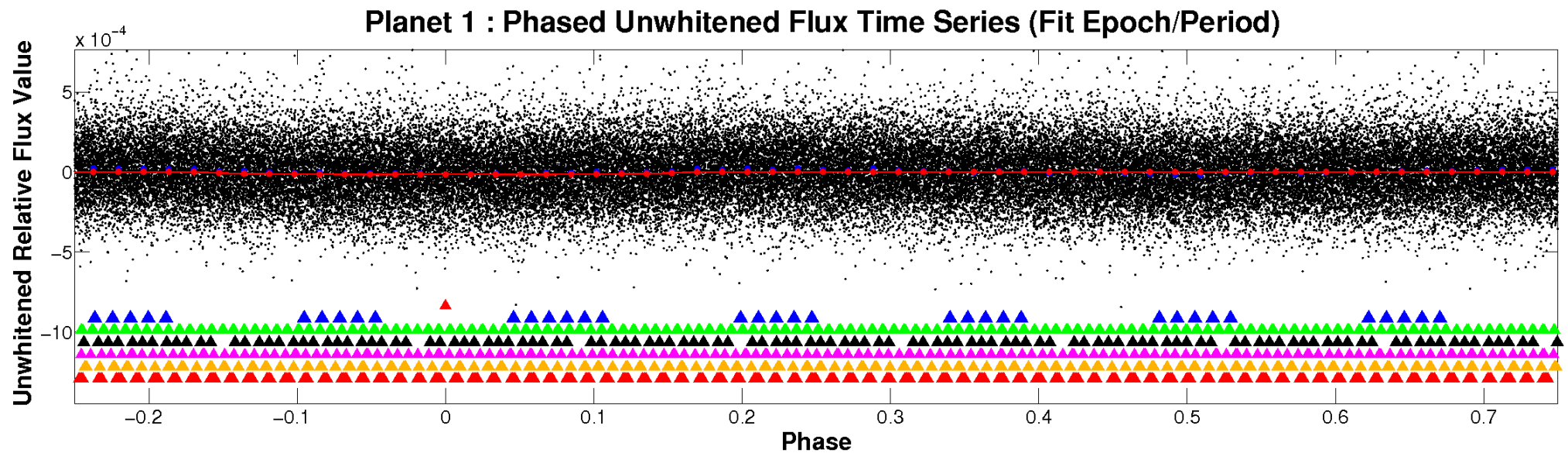


ALT Odd/Even

TCE 011454602-01

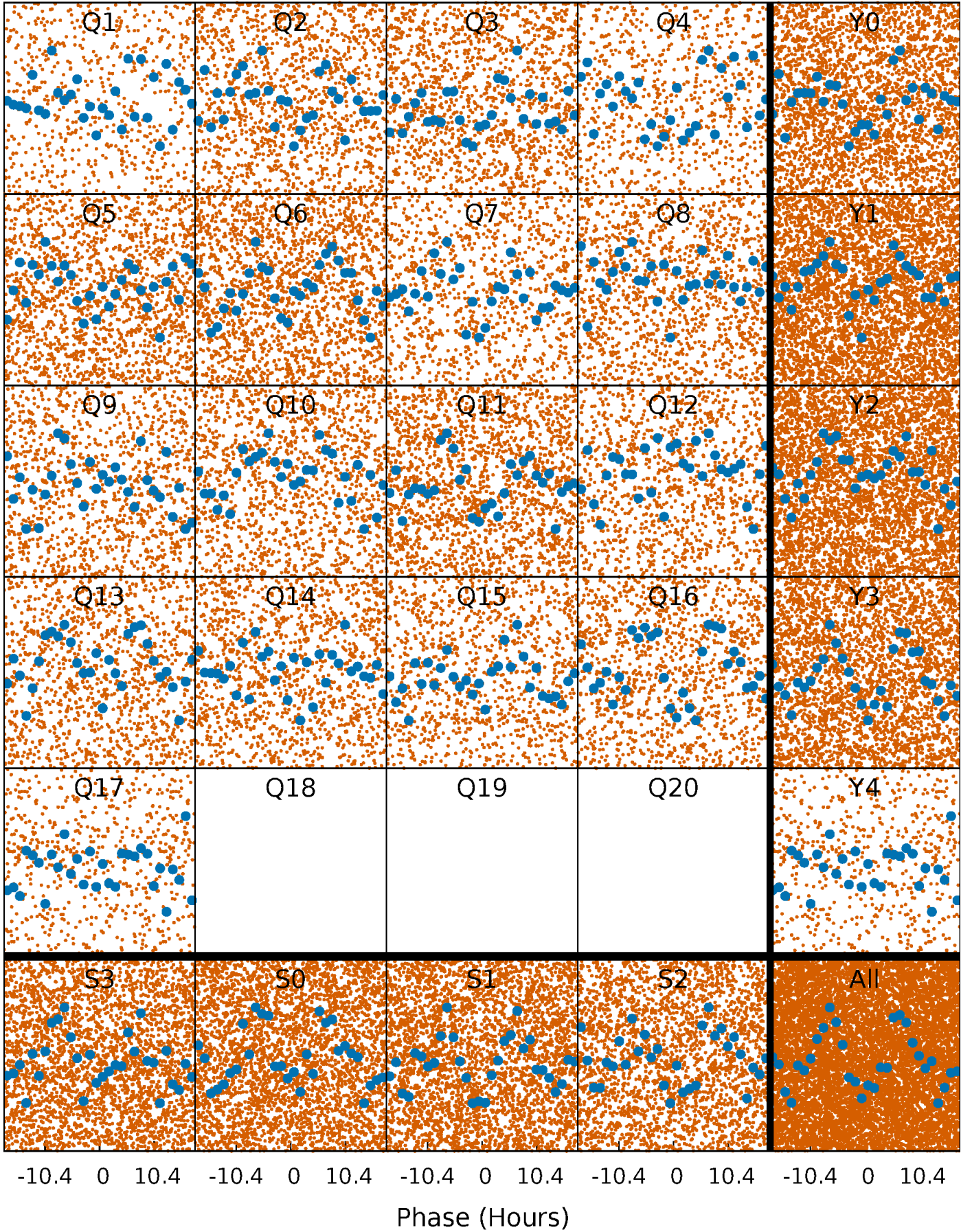


Non-Whitened Vs. Whitened Light Curve



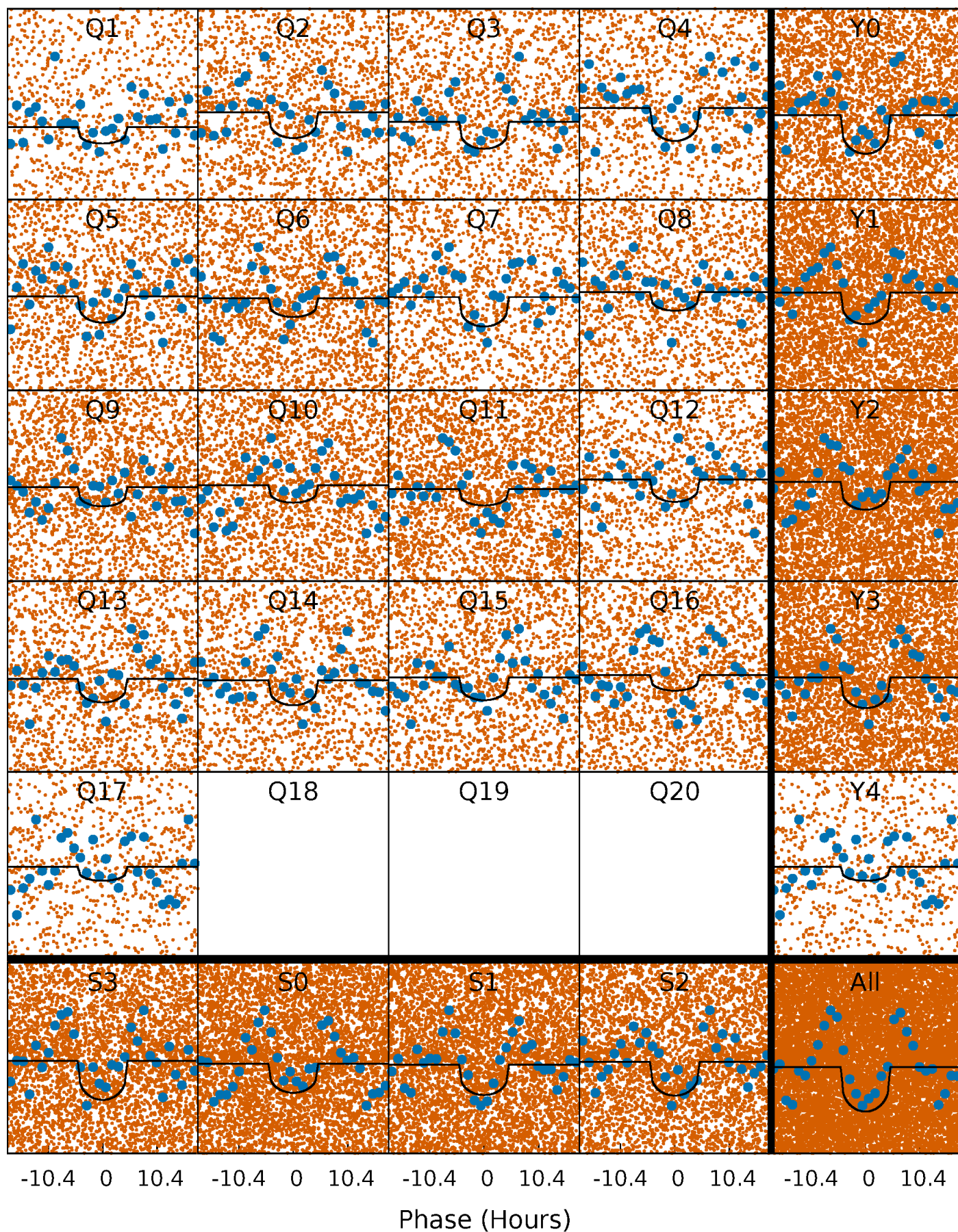
PDC Quarter-Phased Transit Curves

TCE 011454602-01 P= 1.204542 Days $T_0=131.607513$ (BKJD)



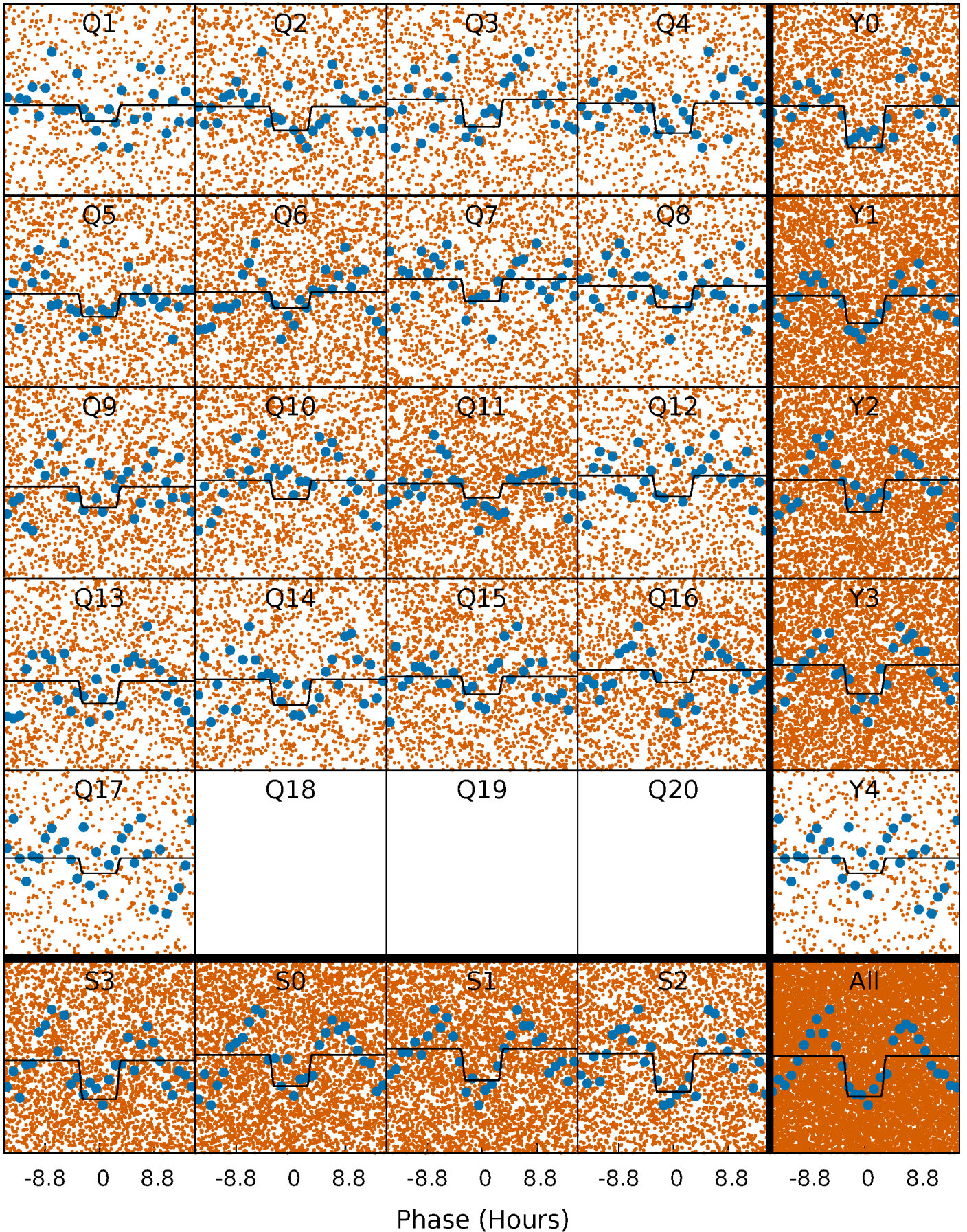
DV Quarter-Phased Transit Curves

TCE 011454602-01 P= 1.204542 Days $T_0=131.607513$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

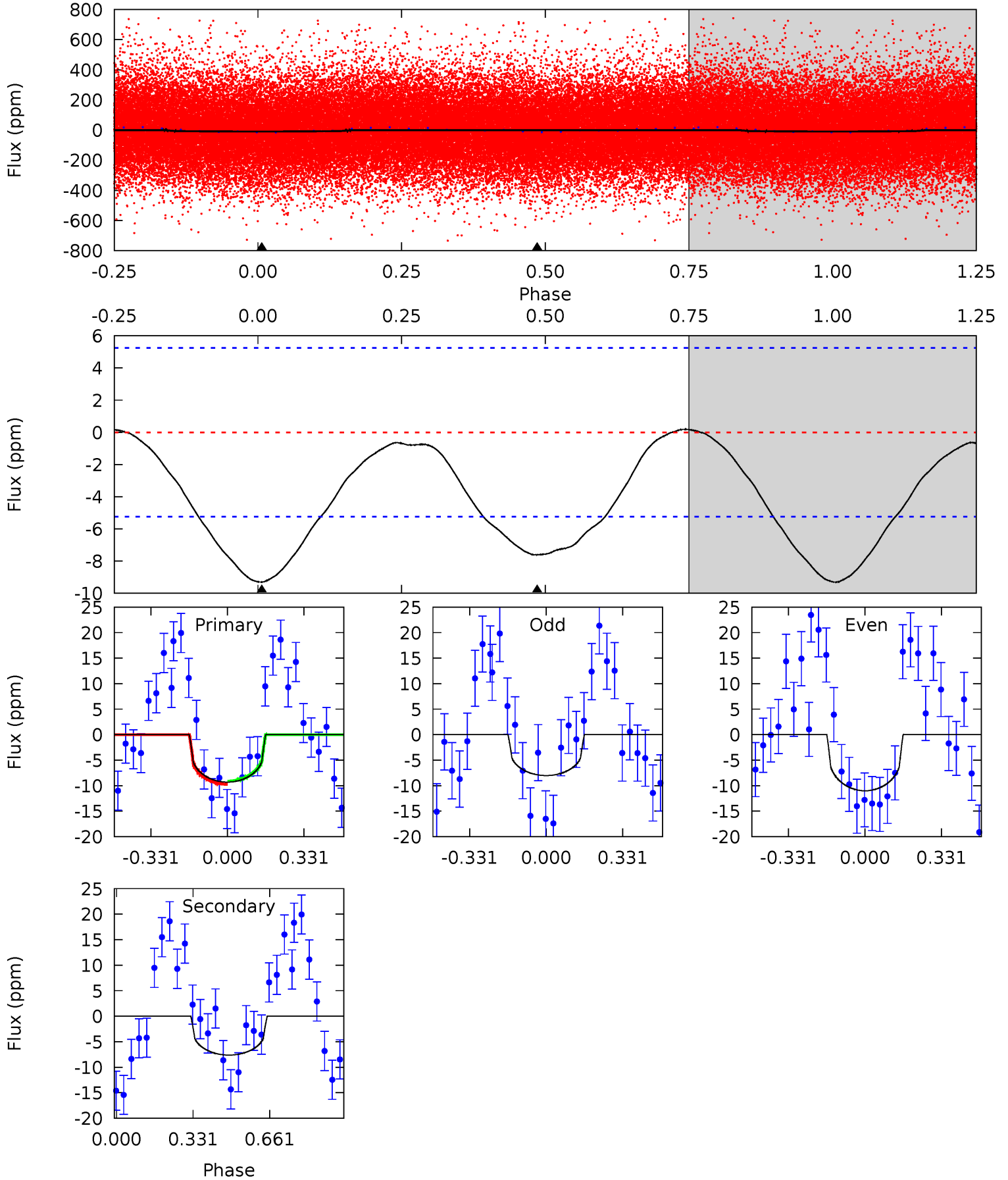
TCE 011454602-01 P= 1.204618 Days $T_0=131.562351$ (BKJD)



DV Model-Shift Uniqueness Test

011454602-01, P = 1.204542 Days, E = 130.402971 Days

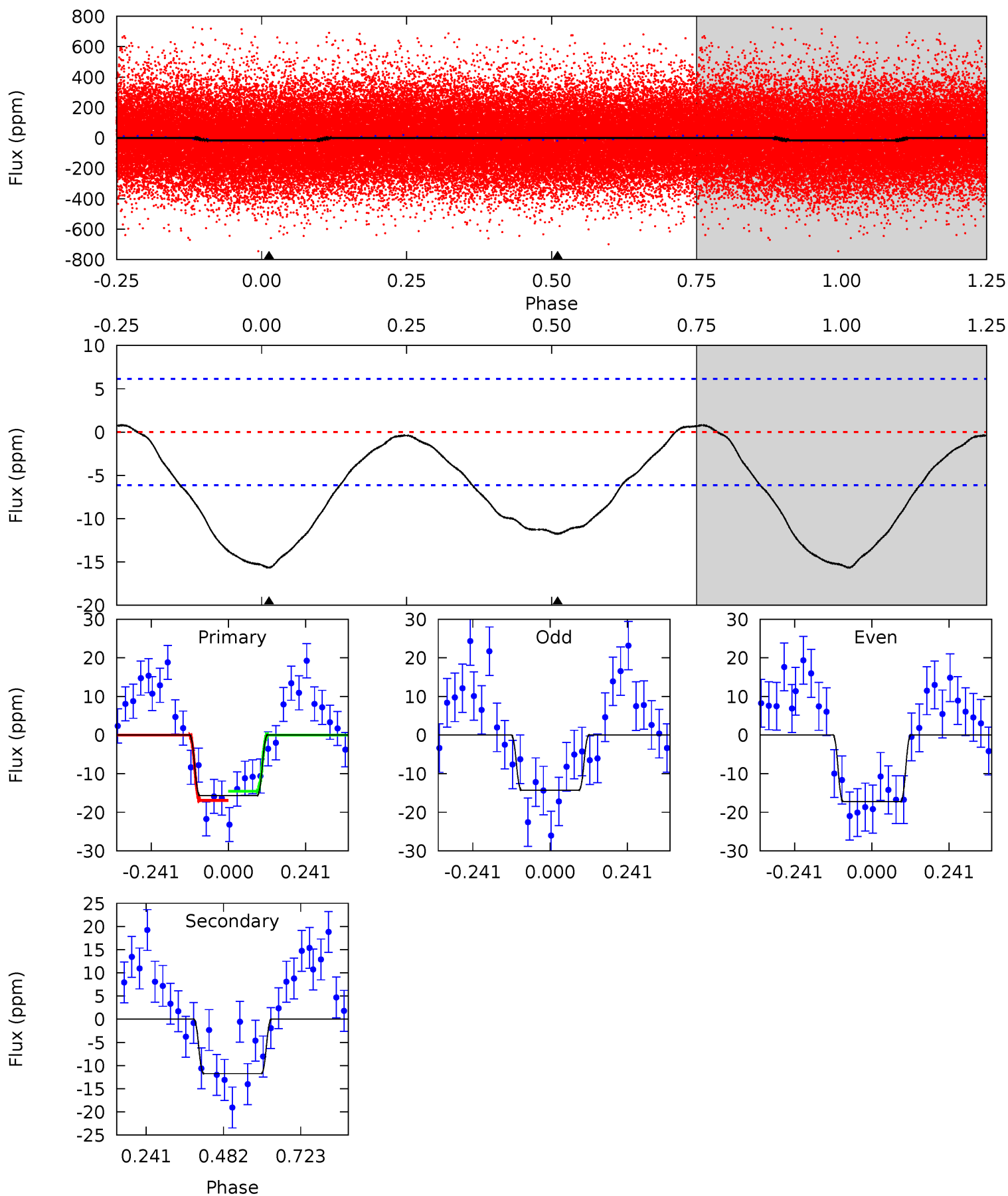
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.64	6.25	0	0	4.31	0.97	0.29	7.64	7.64	6.25	6.25	1.21	0.91	0.02	0.24



Alt Model-Shift Uniqueness Test

011454602-01, P = 1.204618 Days, E = 130.357733 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.2	8.36	0	0	4.38	1.17	0.51	11.2	11.2	8.36	8.36	1.05	0.99	0.05	0.82



Stellar Parameters For KIC 011454602

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5878^{+156}_{-191}	$4.405^{+0.087}_{-0.203}$	$0.120^{+0.250}_{-0.300}$	$1.064^{+0.307}_{-0.141}$	$1.051^{+0.122}_{-0.136}$	$1.228^{+0.542}_{-0.601}$
	+3%/-3%	+2%/-5%	+208%/-250%	+29%/-13%	+12%/-13%	+44%/-49%
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 011454602-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-8 ± 1	$0.64^{+0.56}_{-0.41}$	2523^{+176}_{-131}	4346^{+2887}_{-967}	$4.935^{+36.630}_{-3.602}$
Alt.	-12 ± 1	$0.68^{+0.56}_{-0.46}$	2527^{+179}_{-140}	4661^{+3574}_{-940}	$7.207^{+58.116}_{-5.079}$

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 $A_{obs} \gg 1.0$

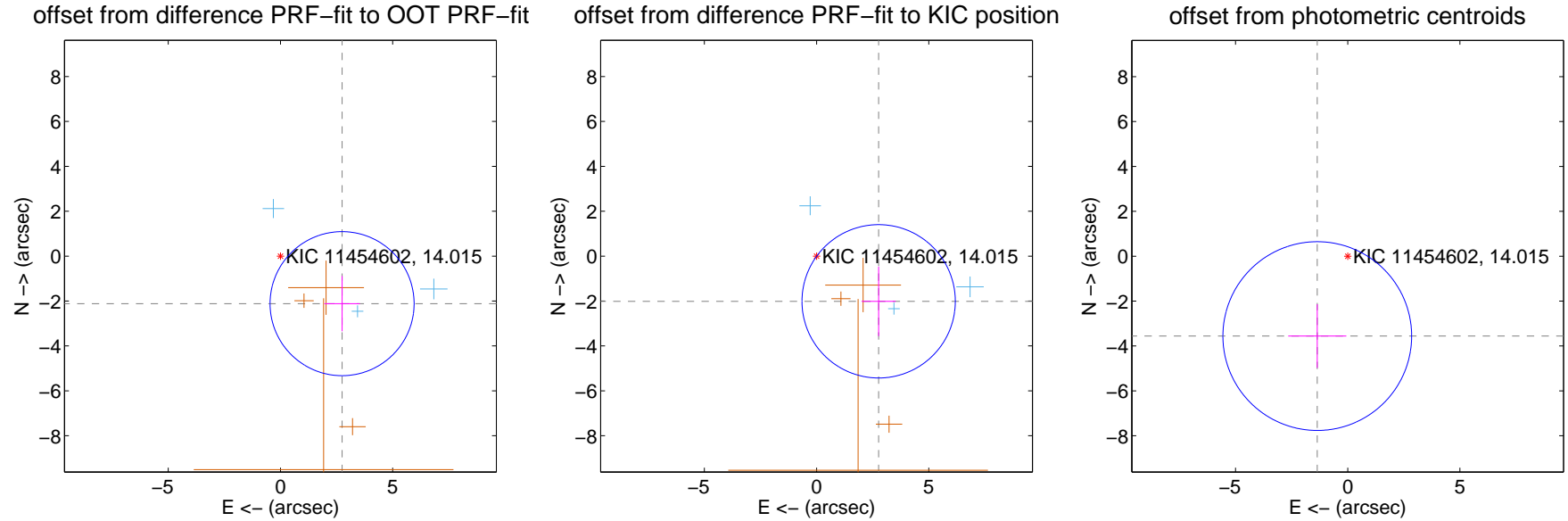
DV Centroid Data

Supplemental centroid analysis for 011454602-01. Kepler magnitude: 14.02. Transit SNR 8.46

There are 3 quarters with good PRF difference image offsets

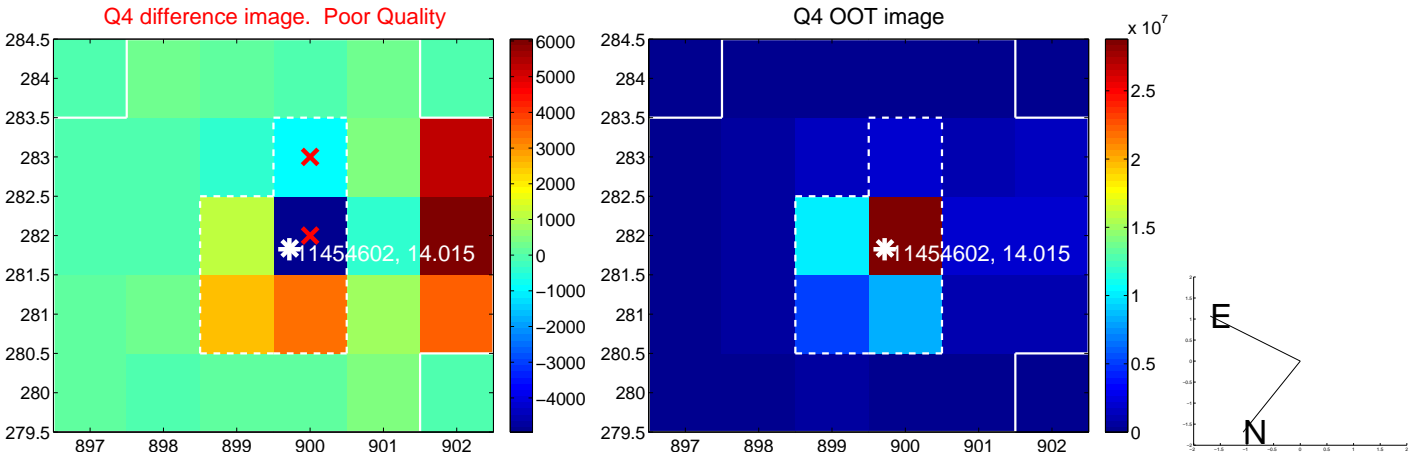
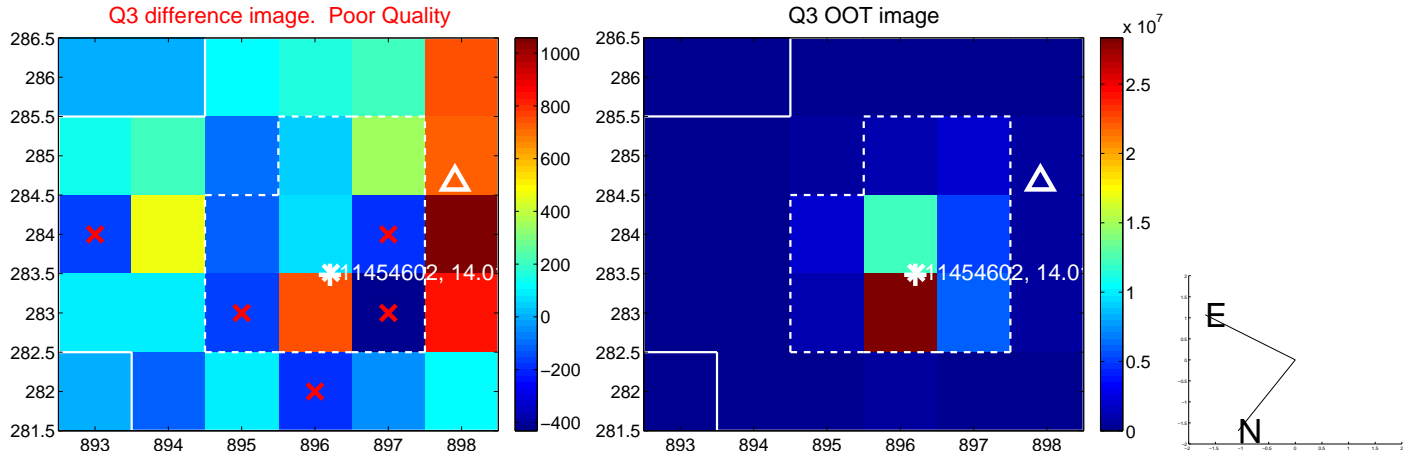
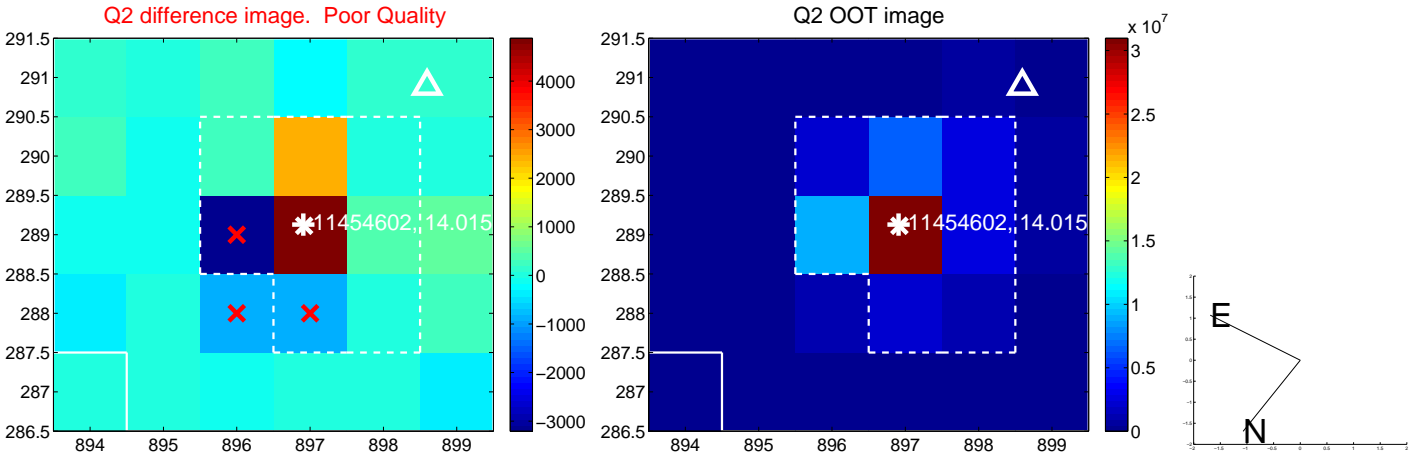
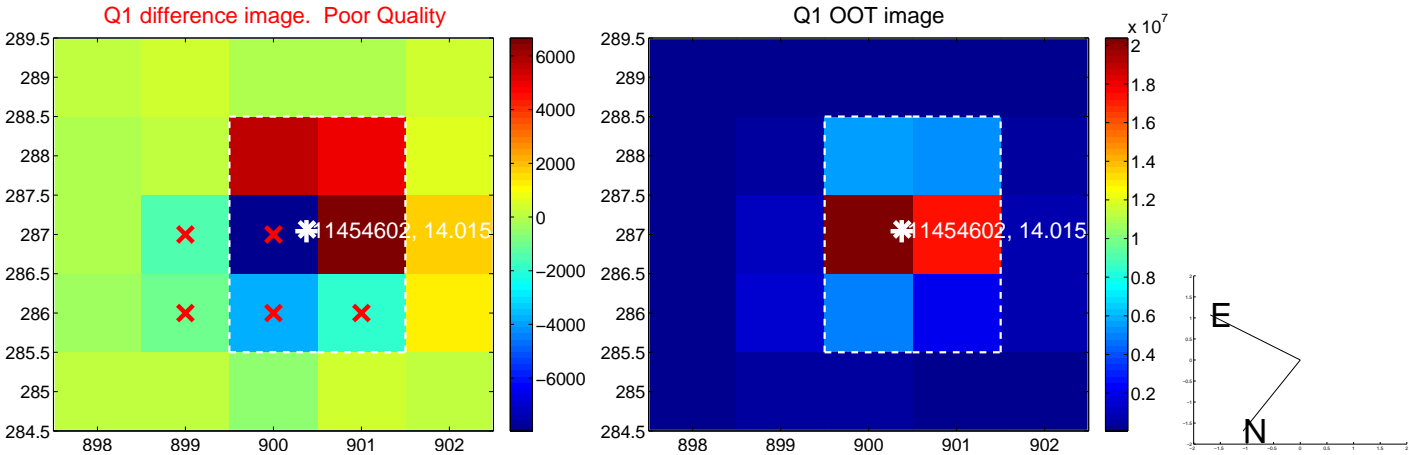
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.467 ± 1.069	3.24	-2.745 ± 0.790	-2.117 ± 1.230
PRF-fit source offset from KIC position	3.420 ± 1.138	3.00	-2.765 ± 0.758	-2.012 ± 1.547
photometric centroid source offset	3.81 ± 1.40	2.72	1.36 ± 1.29	-3.56 ± 1.42

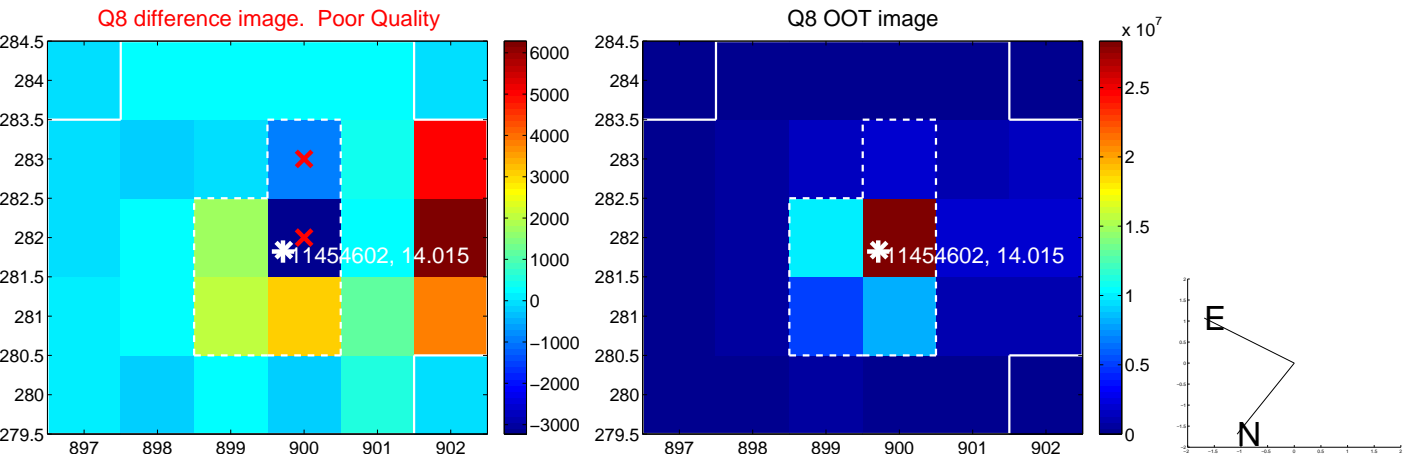
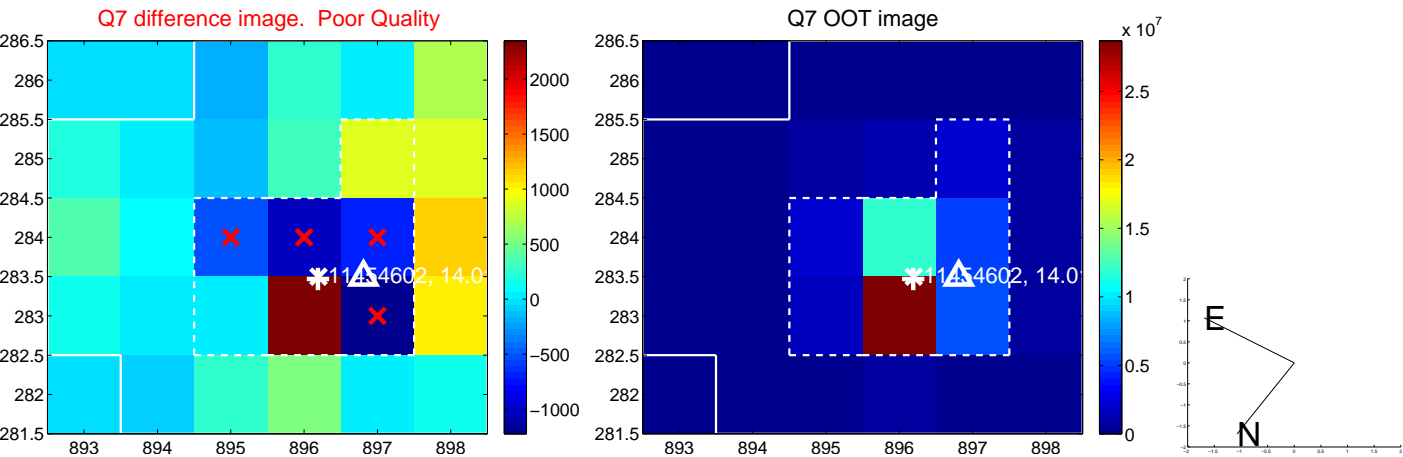
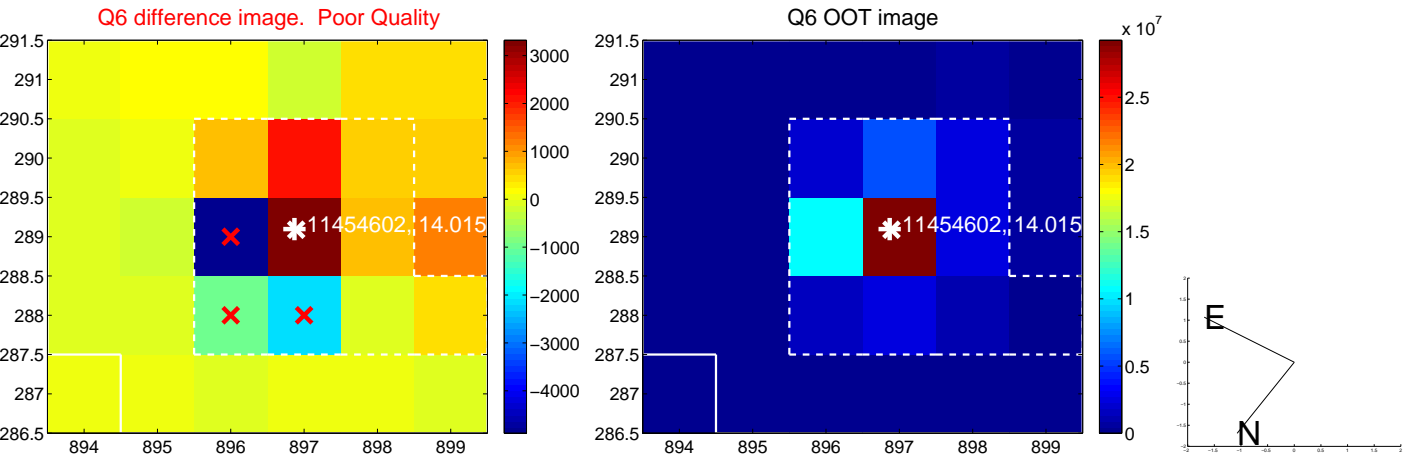
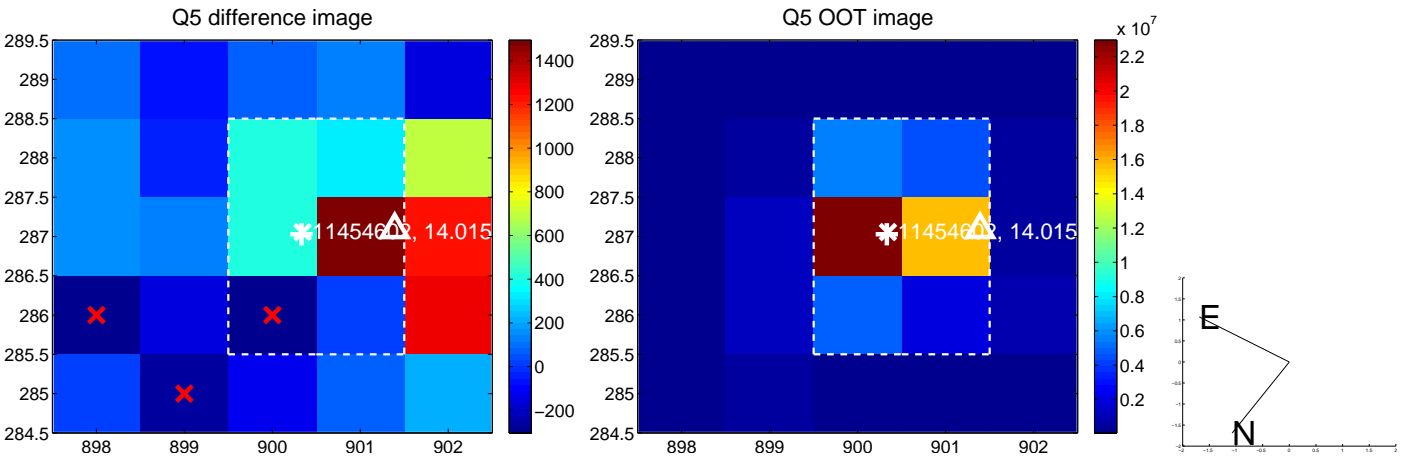


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

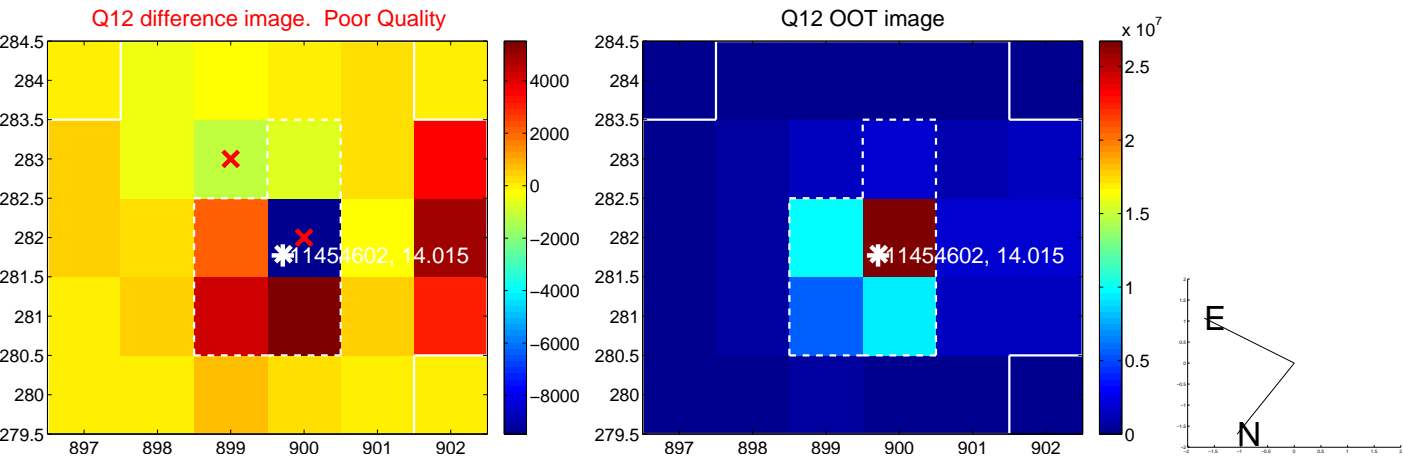
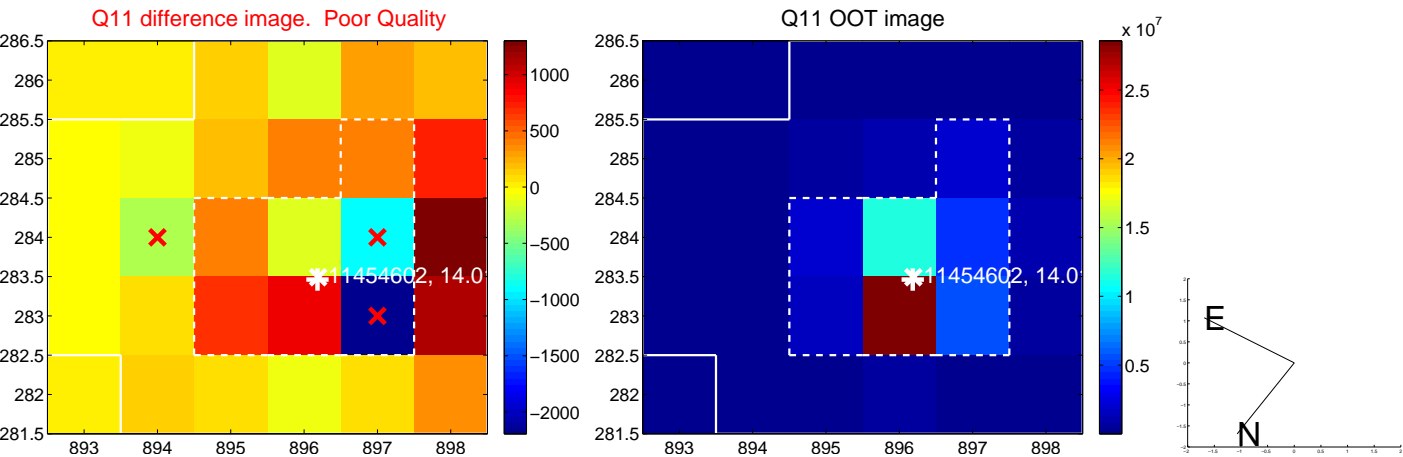
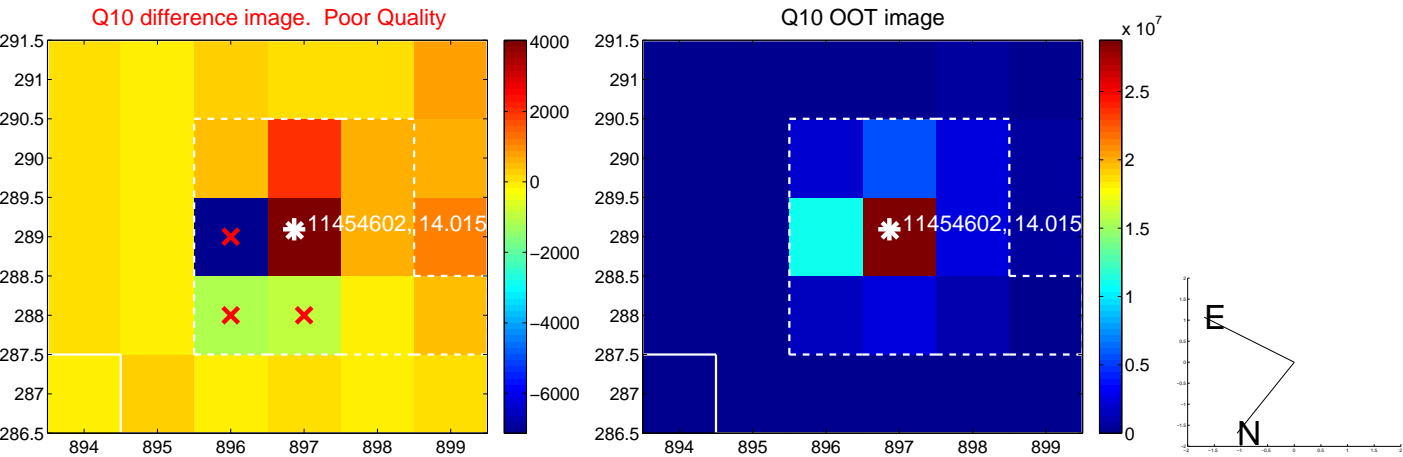
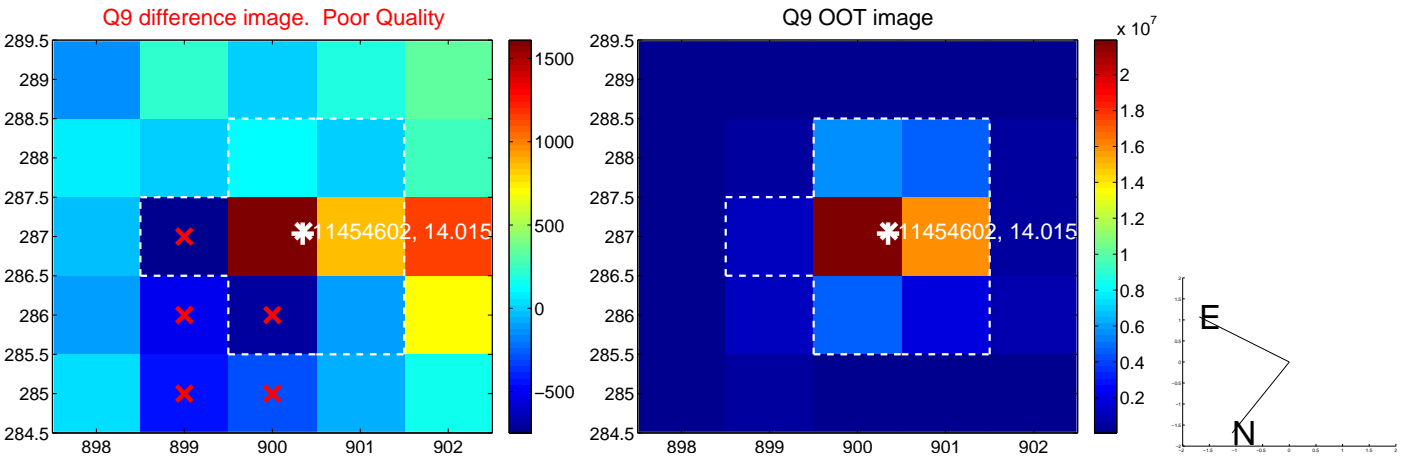
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



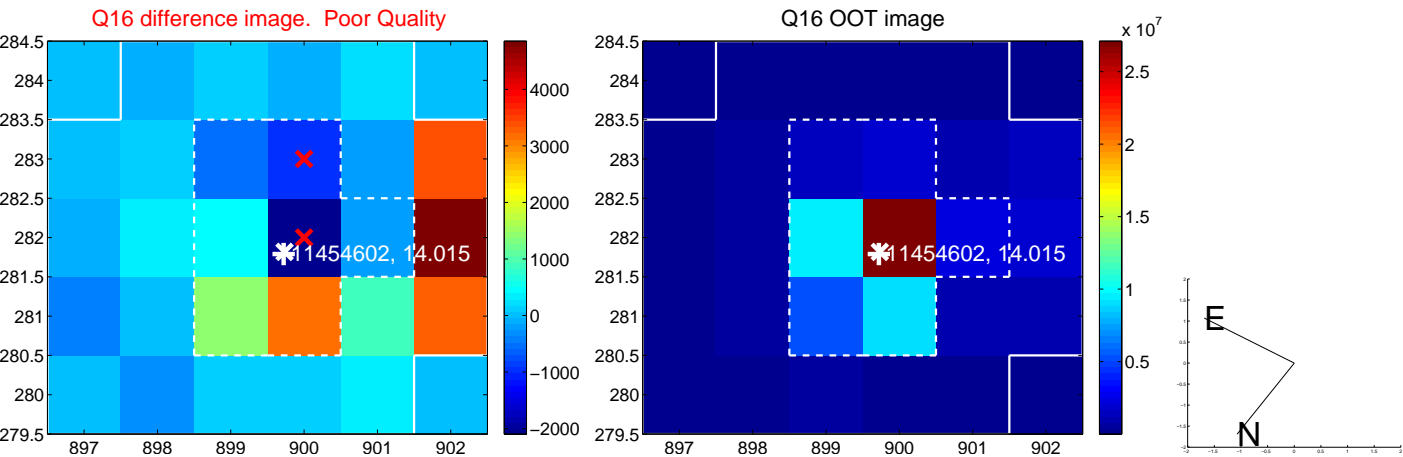
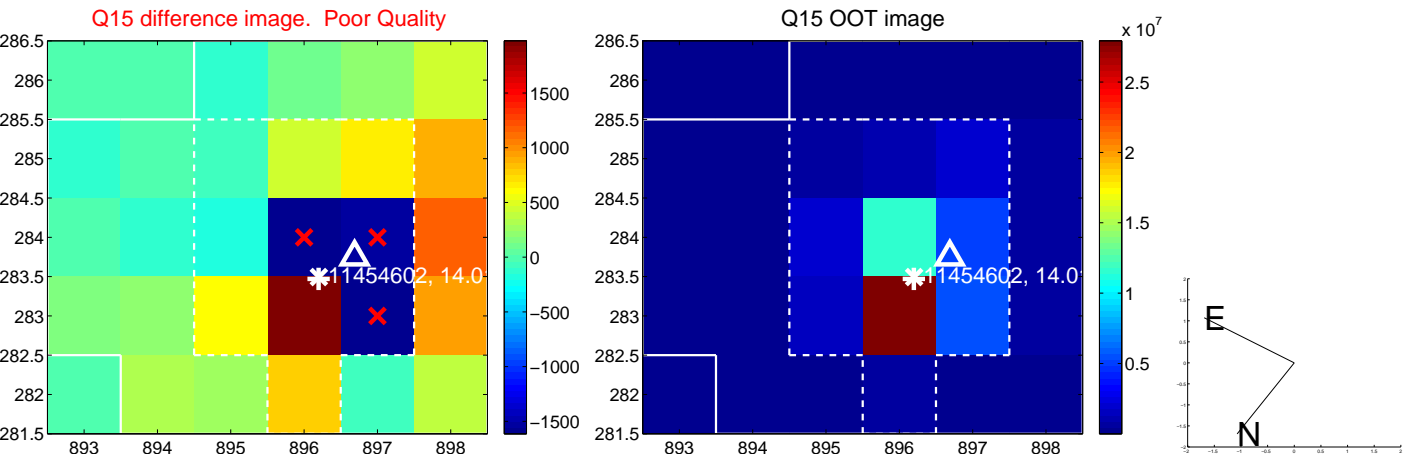
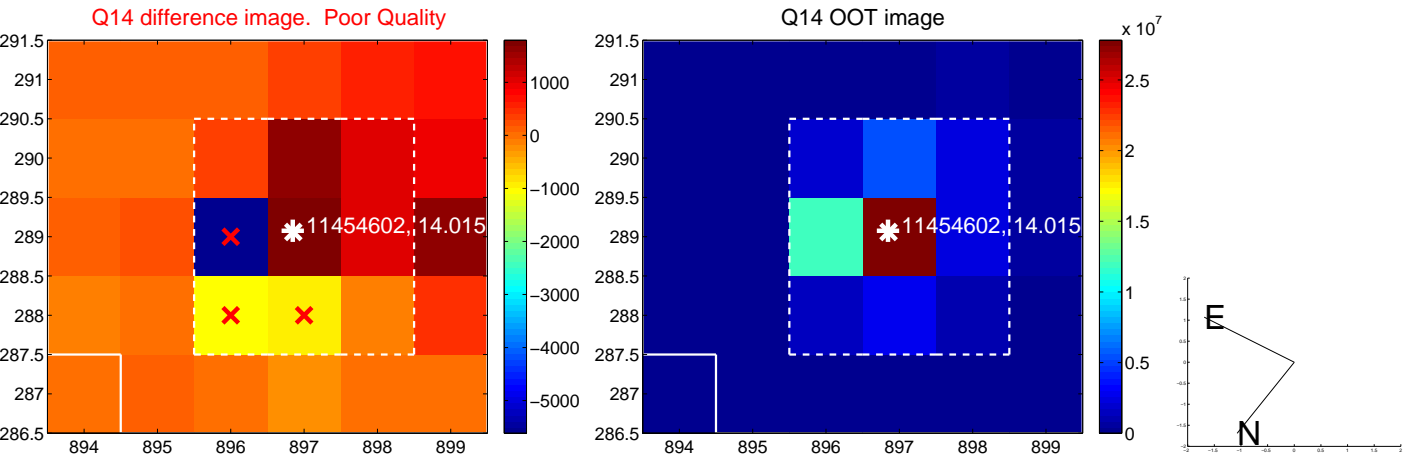
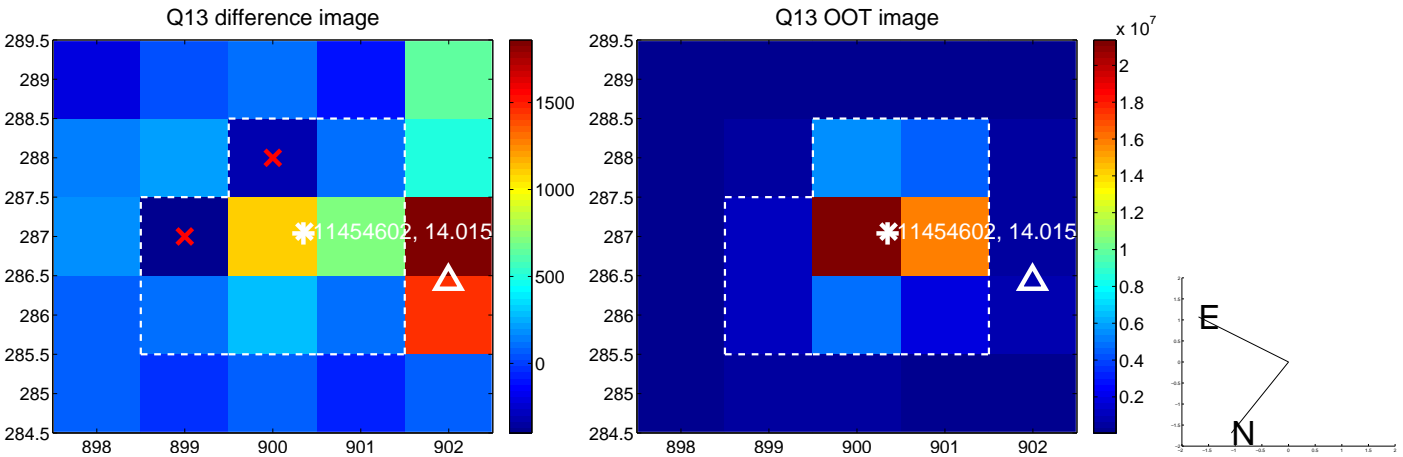
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



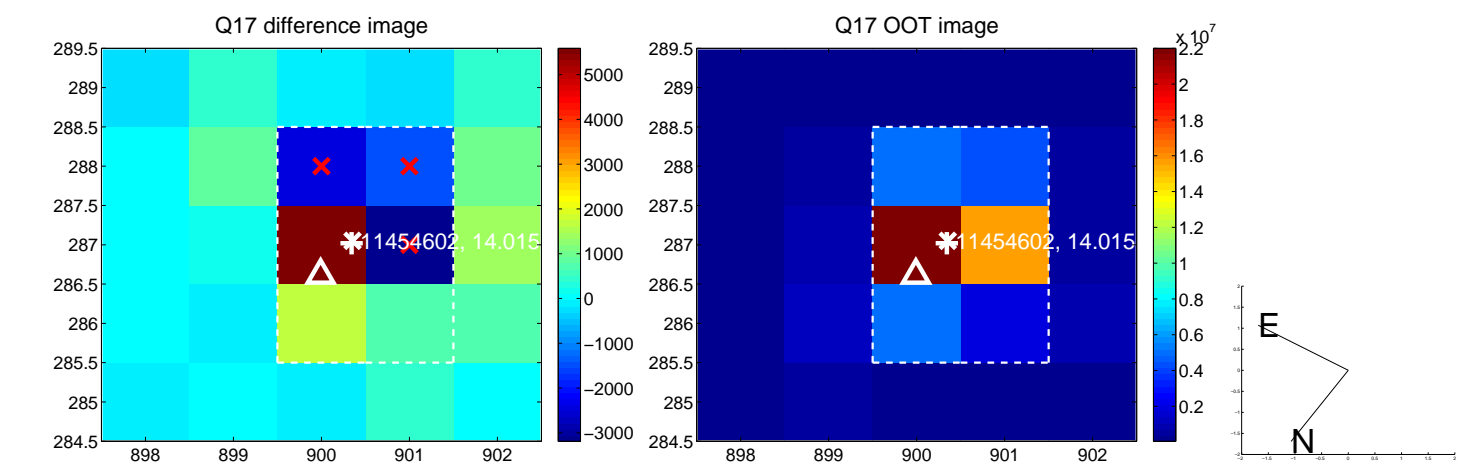
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



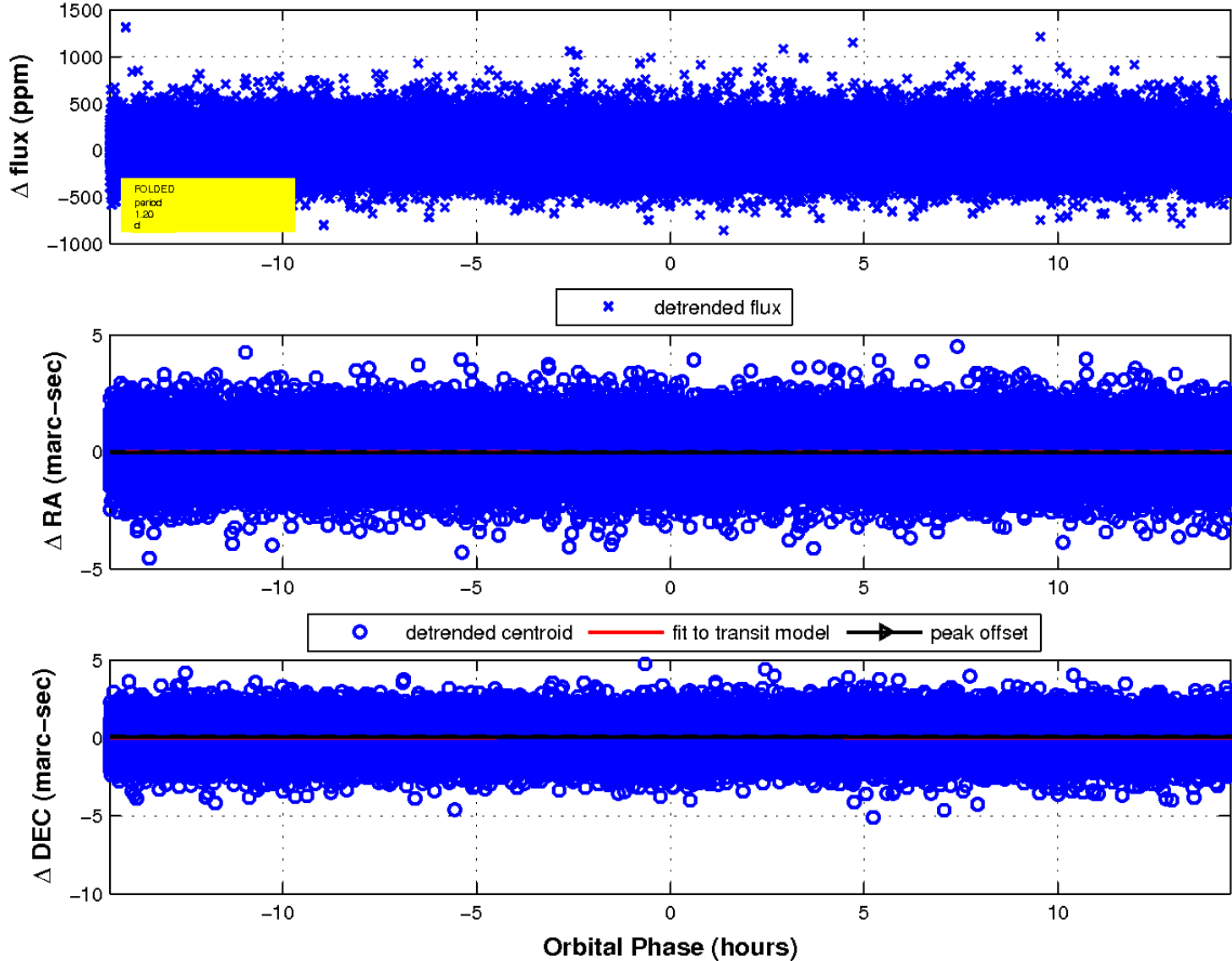
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

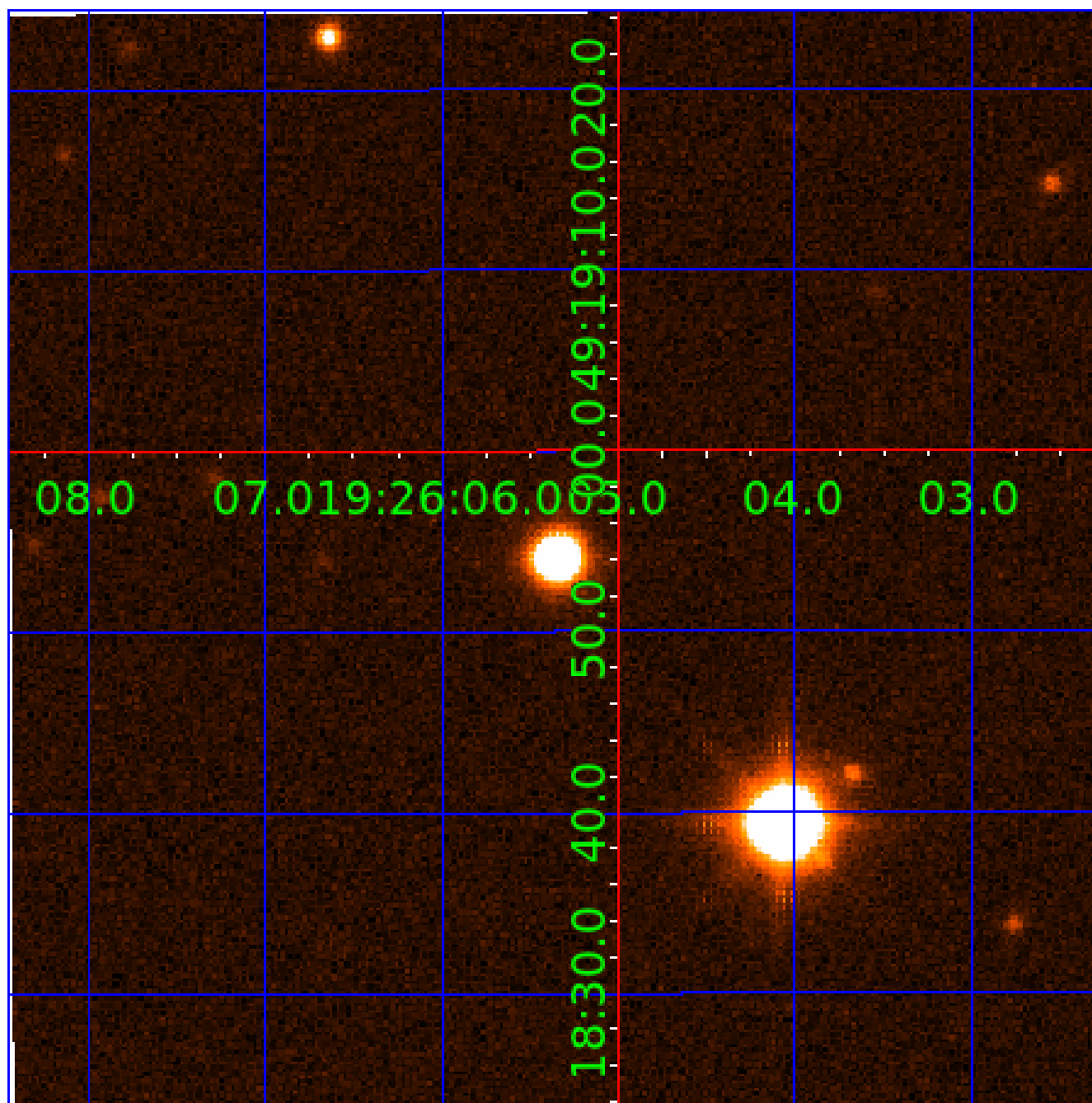


fluxWeightedCentroids, Planet 1 of 7



UKIRT Image

Declination



KIC 011454602

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})
011454602-01	OBS	No	1.204542	131.607513	15.9	9.112	7.4	8.5	1.06	5878	0.42	2387.87
011454602-02	OBS	No	40.784419	159.367250	2303.5	1.500	24.7	-1.0	1.06	5878	5.08	21.80
011454602-03	OBS	No	3.754298	134.337688	210.7	3.031	20.4	18.9	1.06	5878	2.53	524.49
011454602-04	OBS	No	12.176176	131.555593	353.0	1.247	17.6	16.1	1.06	5878	2.13	109.25
011454602-05	OBS	No	8.622852	140.092733	301.6	1.096	16.0	13.3	1.06	5878	1.86	173.08
011454602-06	OBS	No	8.544381	138.282764	246.6	1.515	14.9	12.2	1.06	5878	1.67	175.20
011454602-07	OBS	No	4.177766	132.060994	1361.2	1.500	14.4	-1.0	1.06	5878	3.91	454.83

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011454602-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET
011454602-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—NO_FITS—CENT_NOFITS
011454602-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_RESOLVED_OFFSET
011454602-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_MEAS
011454602-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS—HALO_GHOST
011454602-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV
011454602-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

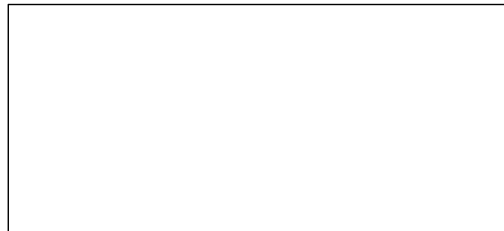
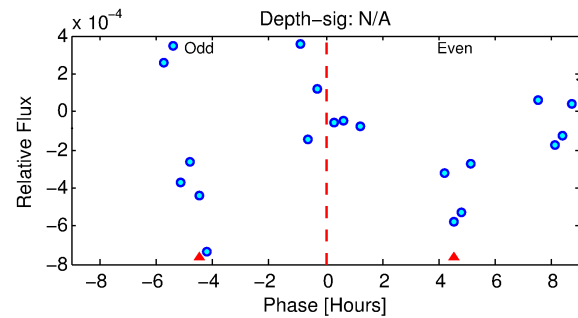
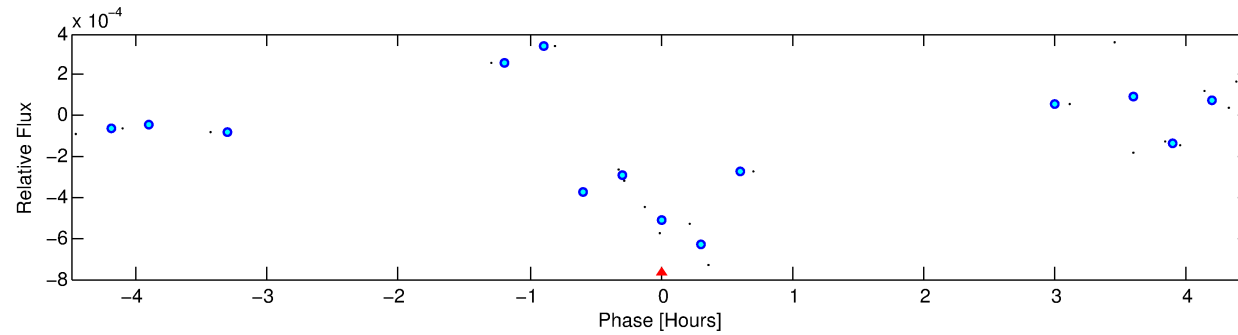
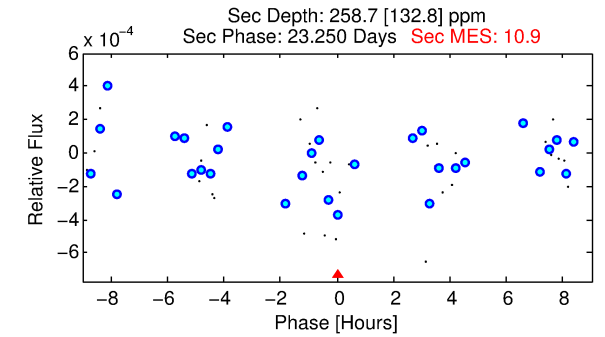
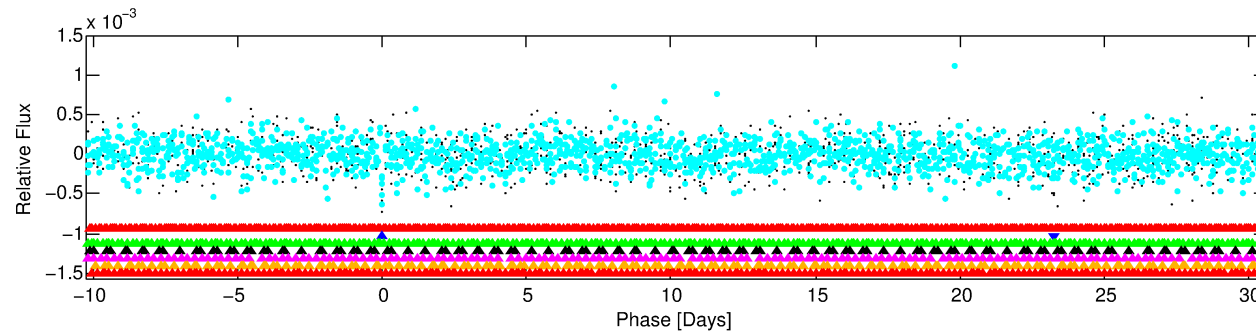
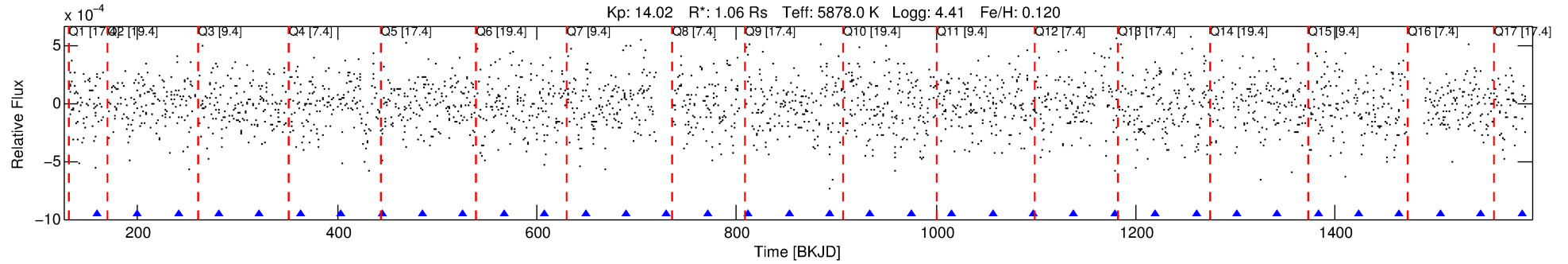
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011454602-02

No Significant Match Found

DV One-Page Summary

KIC: 11454602 Candidate: 2 of 7 Period: 40.784 d



TPS TCE Results:

Period = 40.78442 d
Epoch = 159.3673 BKJD

DV fit results are unavailable

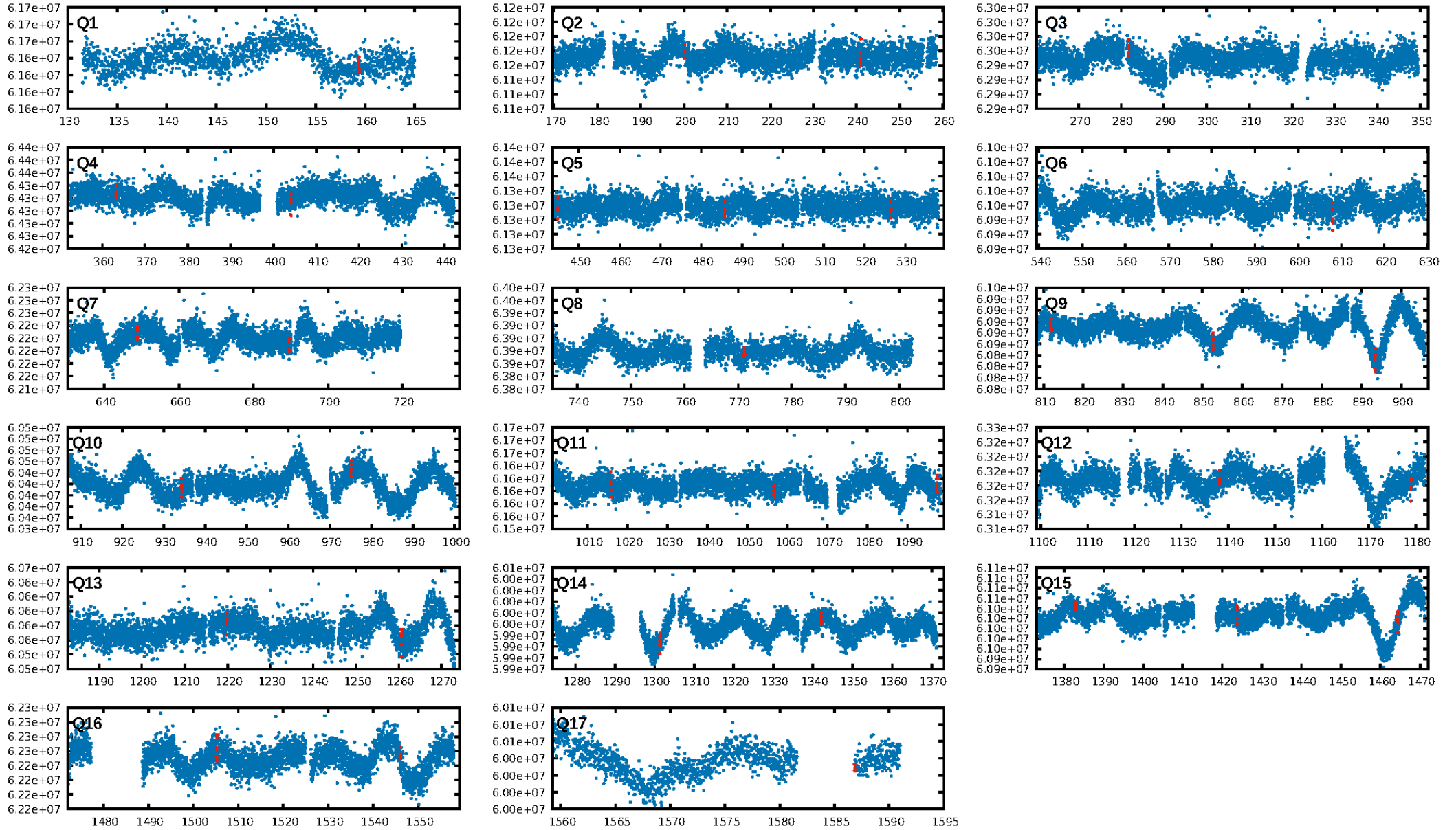
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [351.93σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: N/A
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: N/A

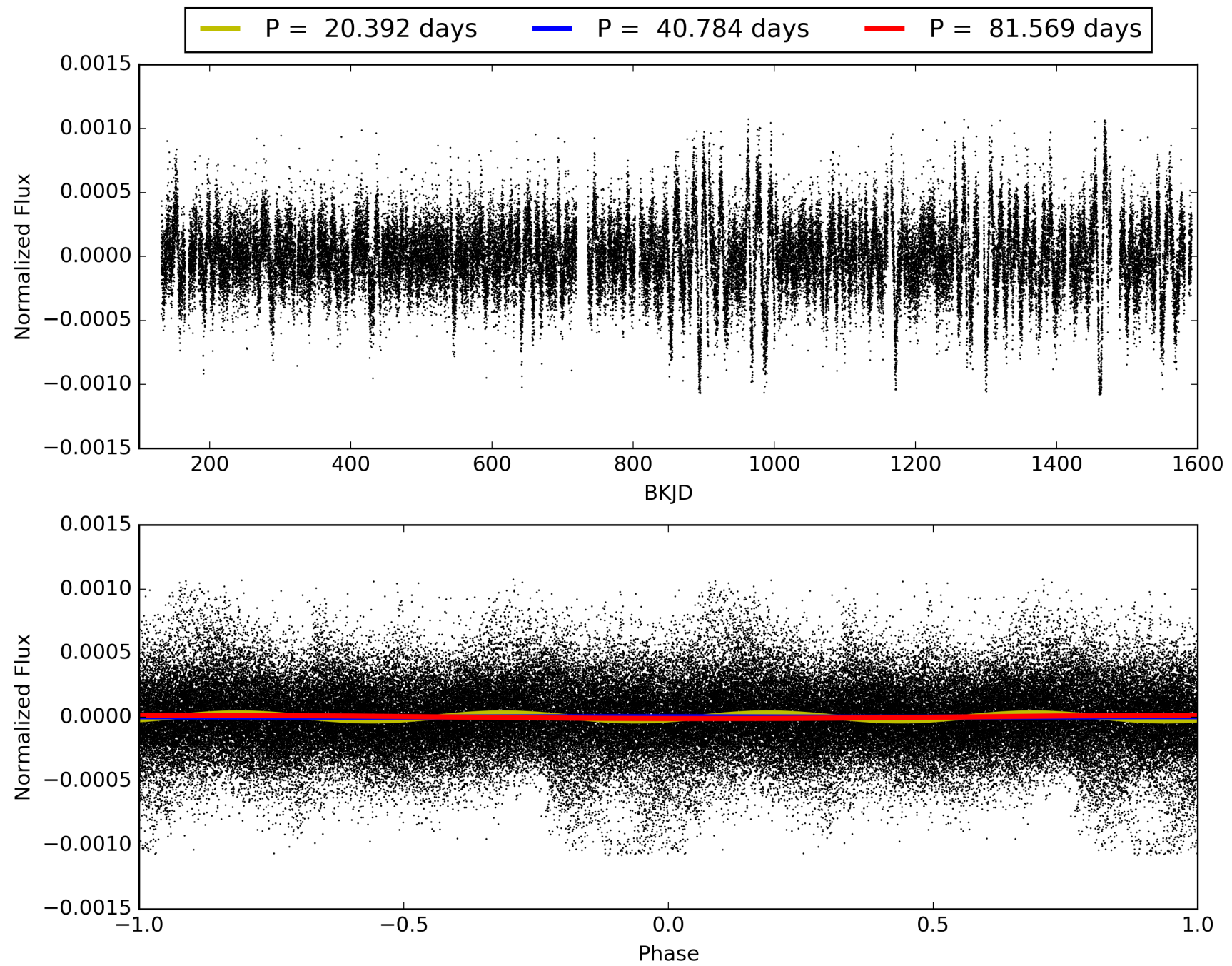
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:04:07 Z

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

TCE 011454602-02, PDC Light Curves

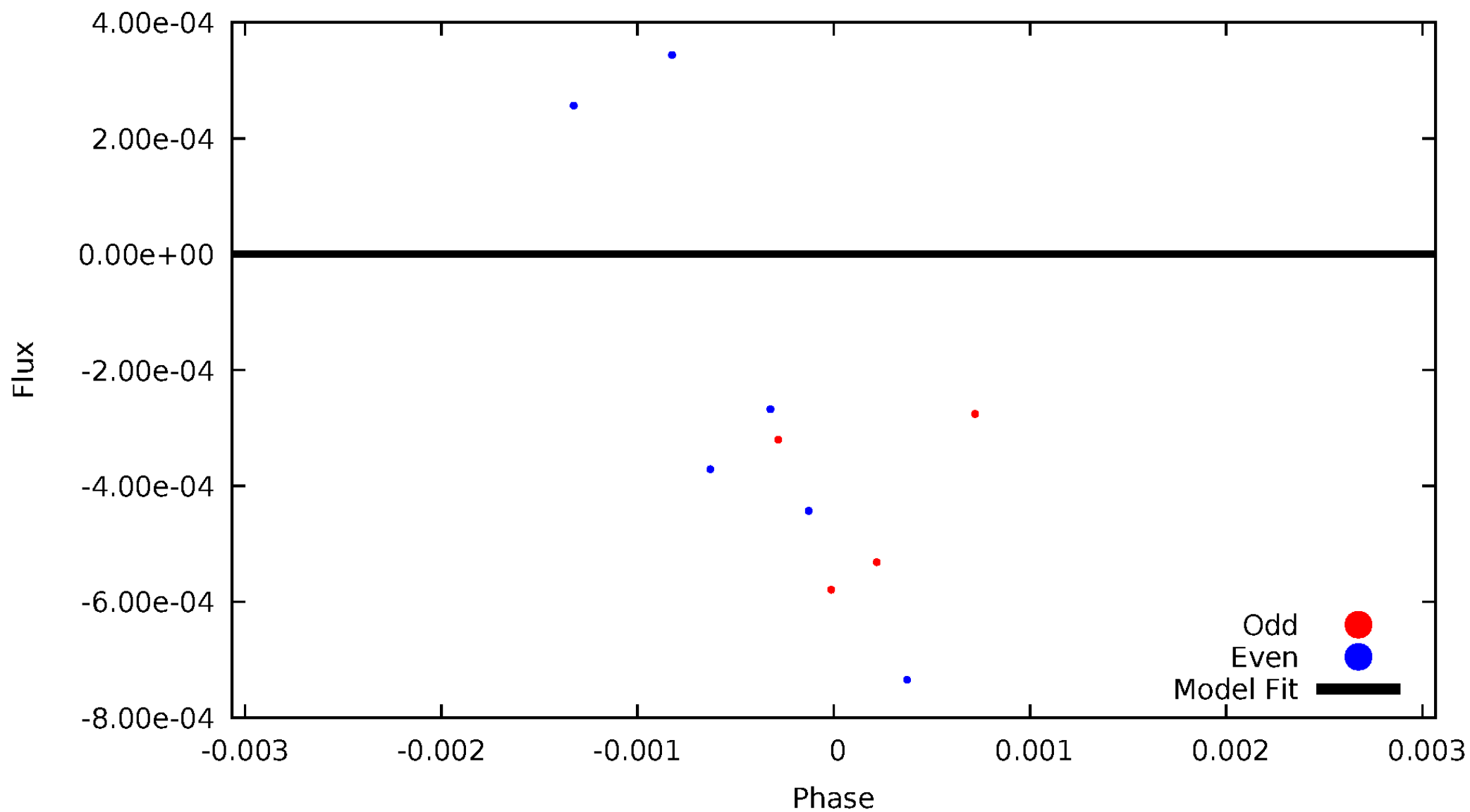


TCE 011454602-02



DV Odd/Even

TCE 011454602-02

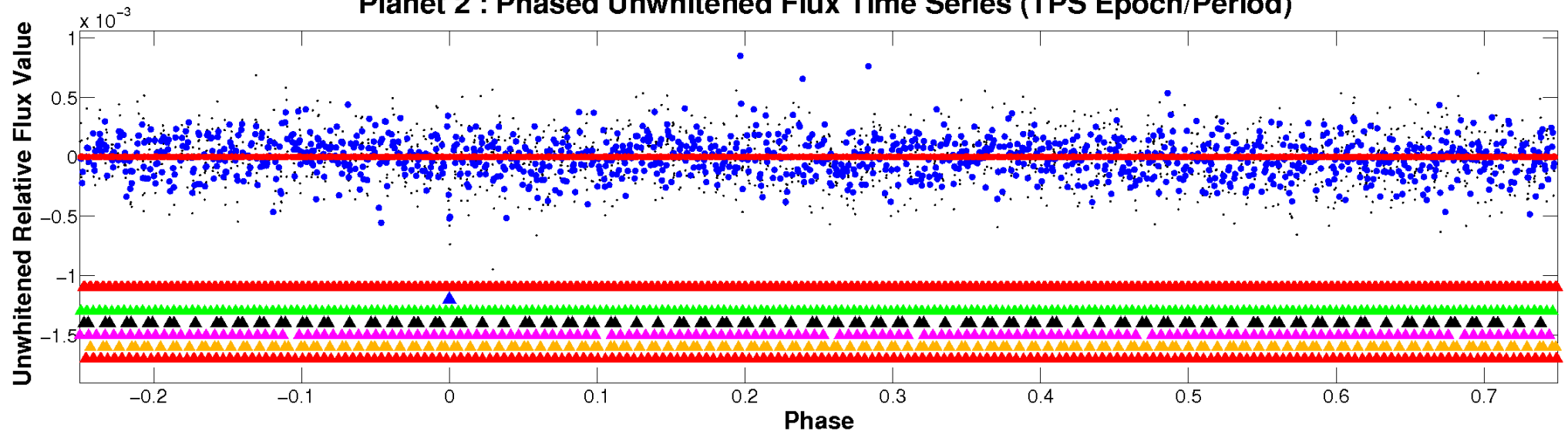


ALT Odd/Even

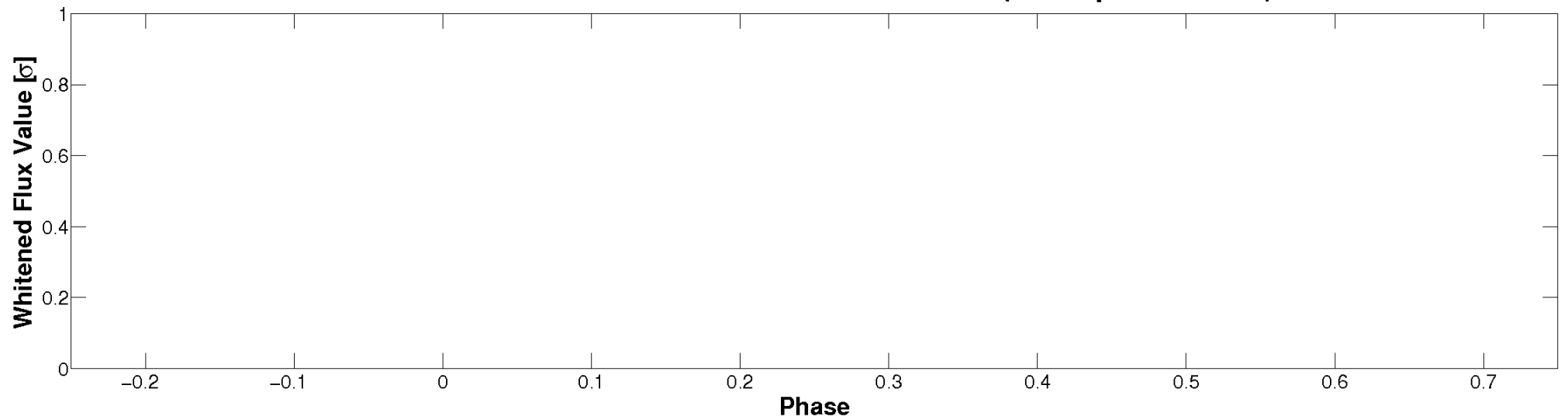
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

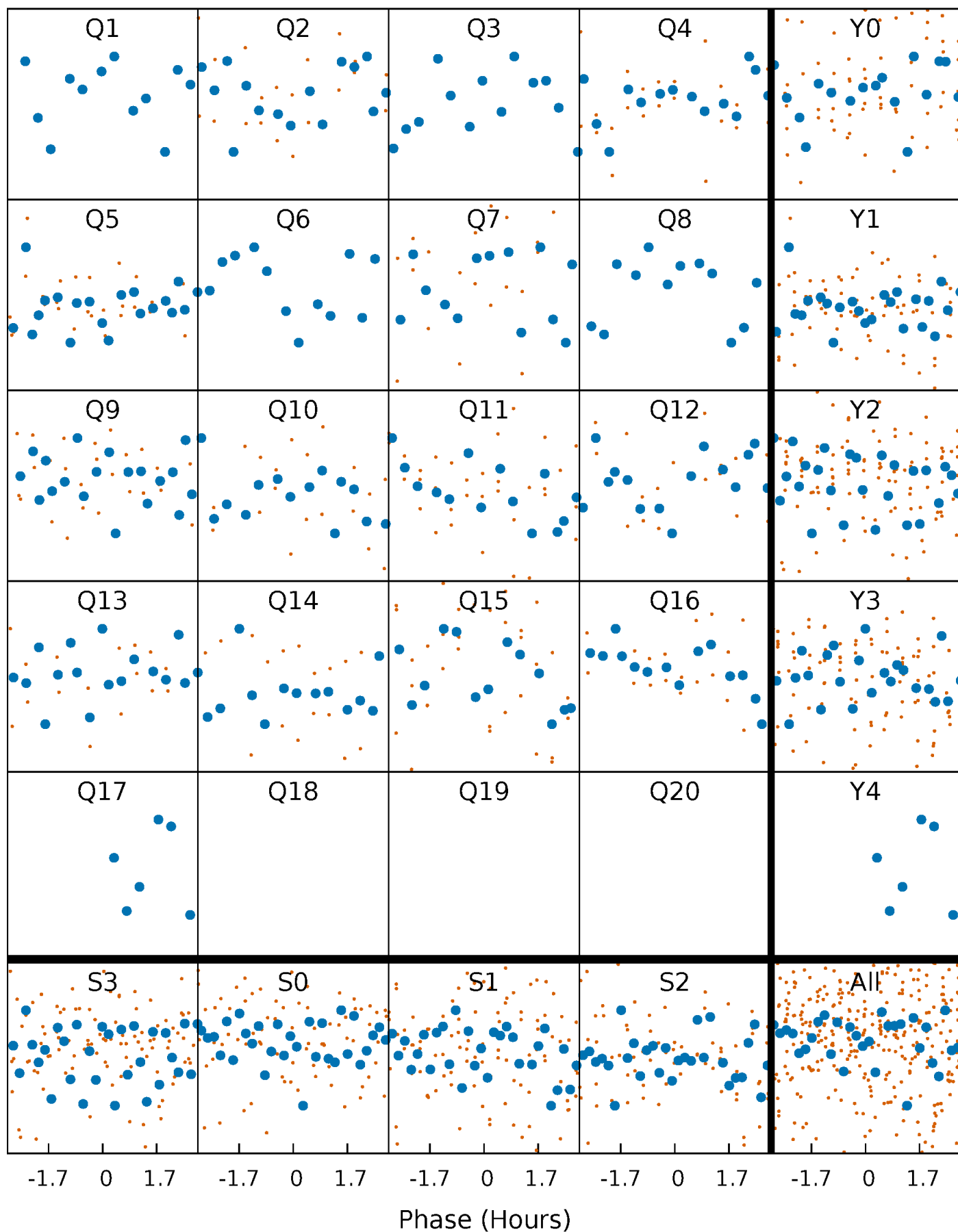


Planet 2 : Phased Whitened Flux Time Series (TPS Epoch/Period)



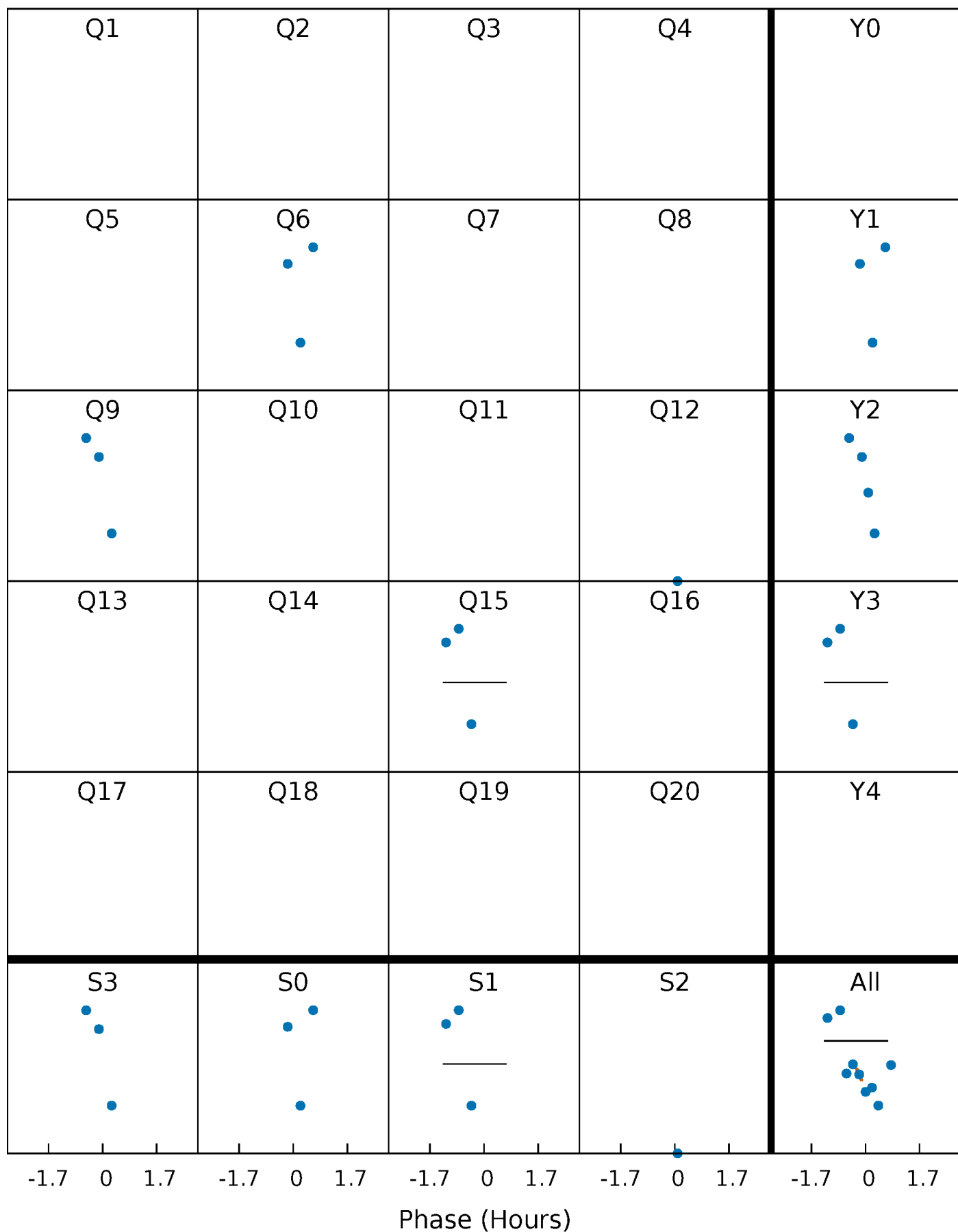
PDC Quarter-Phased Transit Curves

TCE 011454602-02 $P = 40.784419$ Days $T_0 = 159.367251$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 011454602-02 $P = 40.784419$ Days $T_0 = 159.367251$ (BKJD)

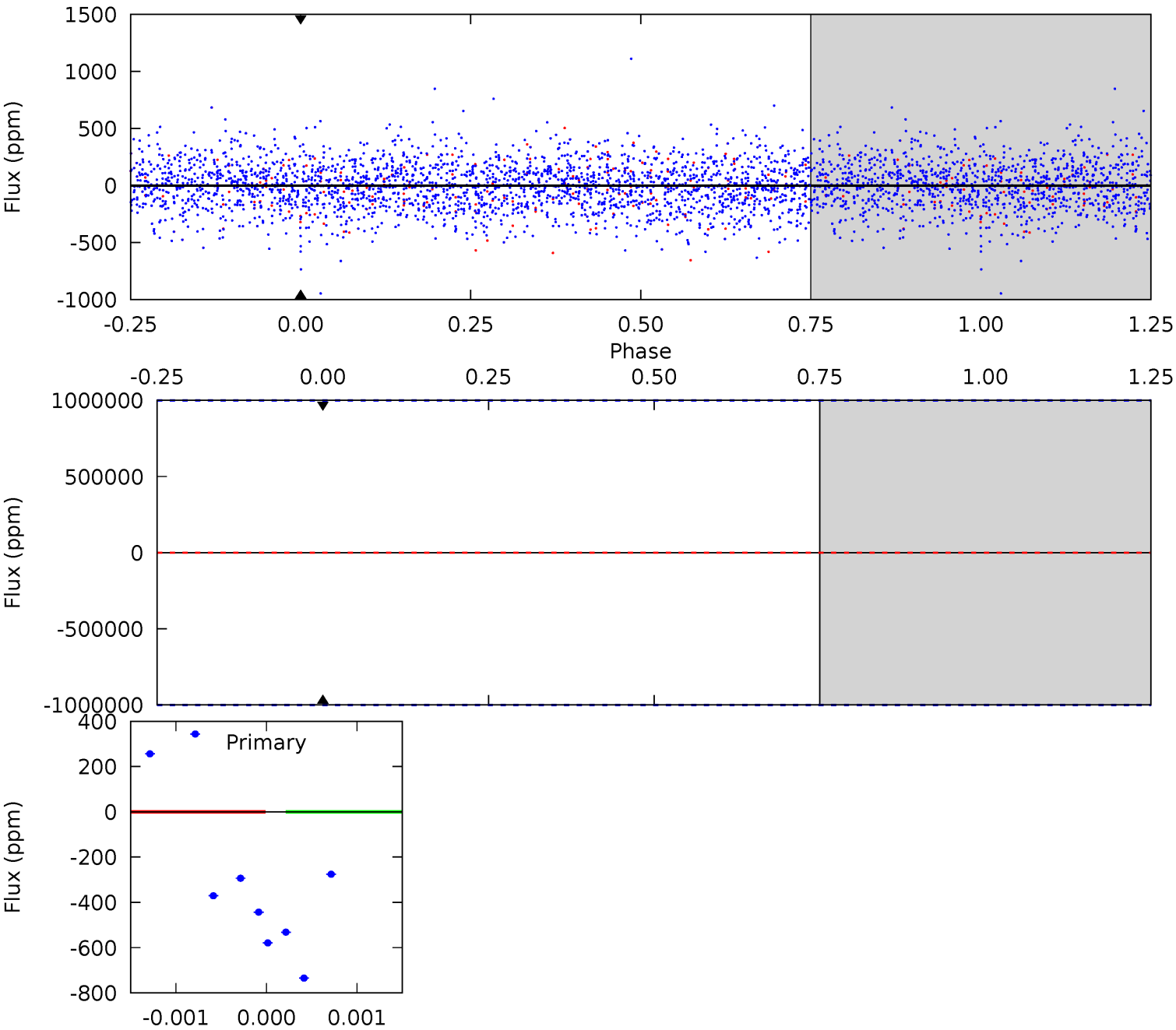


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

011454602-02, P = 40.784419 Days, E = 118.582832 Days

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



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 011454602

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5878^{+156}_{-191}	$4.405^{+0.087}_{-0.203}$	$0.120^{+0.250}_{-0.300}$	$1.064^{+0.307}_{-0.141}$	$1.051^{+0.122}_{-0.136}$	$1.228^{+0.542}_{-0.601}$
	+3%/-3%	+2%/-5%	+208%/-250%	+29%/-13%	+12%/-13%	+44%/-49%
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 011454602-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$10.93^{+9.23}_{-7.51}$	779^{+54}_{-41}	-4020^{+23412}_{-11931}	$-253.777^{+63667.230}_{-36297.287}$
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 $A_{obs} \gg 1.0$

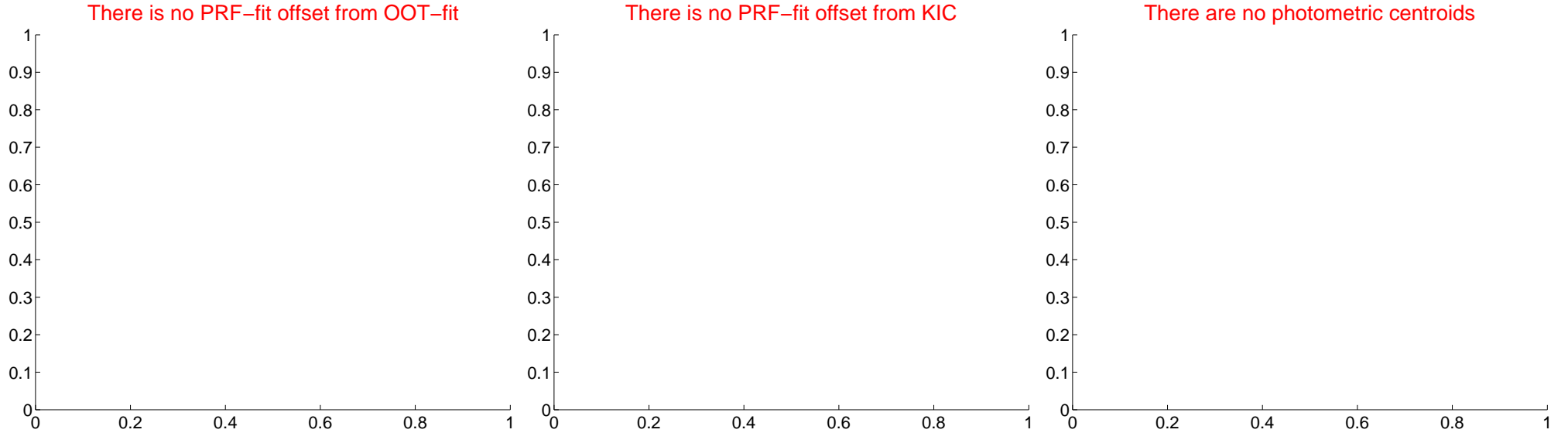
DV Centroid Data

Supplemental centroid analysis for 011454602-02. Kepler magnitude: 14.02. Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

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

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



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

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



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



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



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



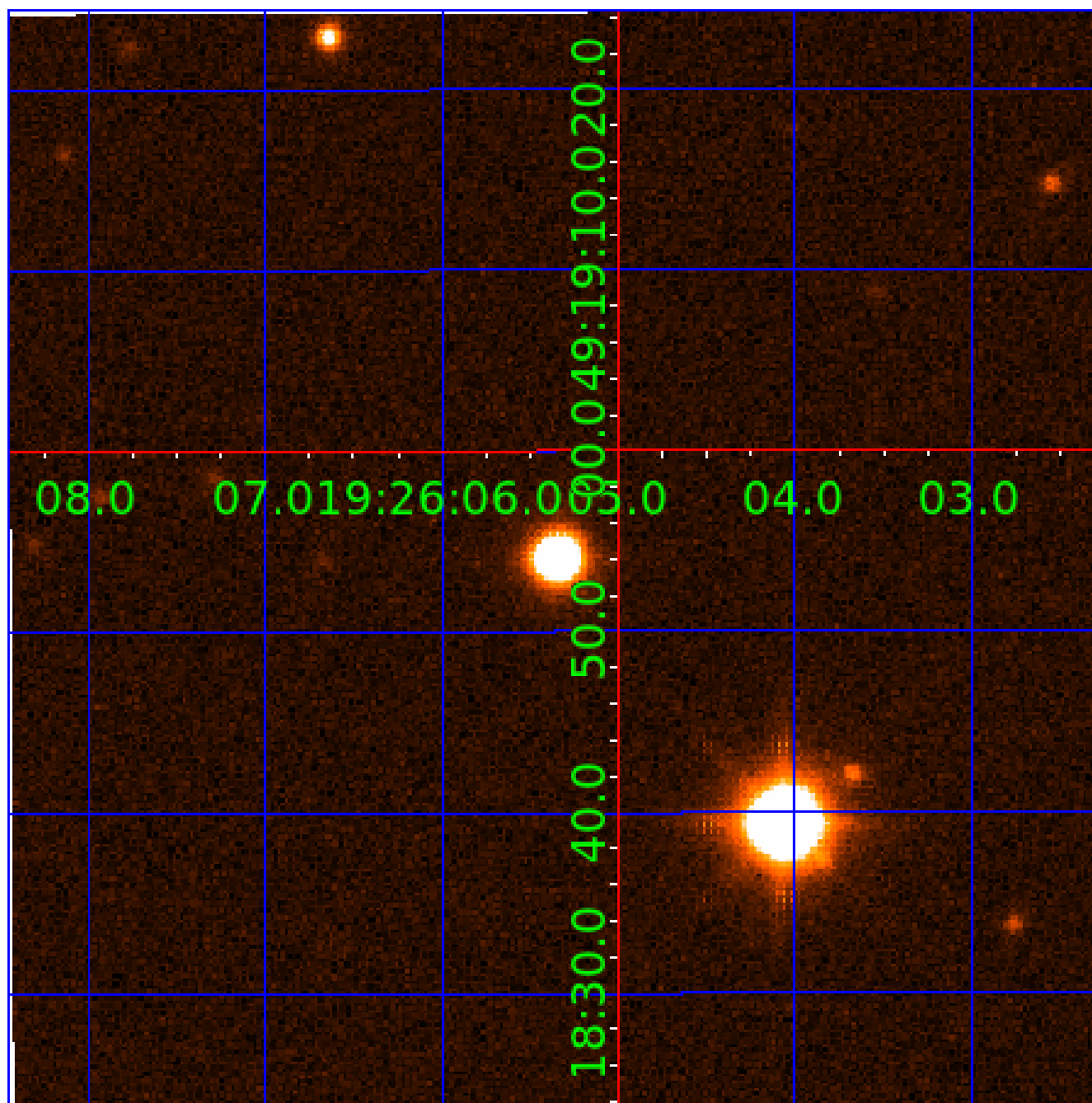
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination



KIC 011454602

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})
011454602-01	OBS	No	1.204542	131.607513	15.9	9.112	7.4	8.5	1.06	5878	0.42	2387.87
011454602-02	OBS	No	40.784419	159.367250	2303.5	1.500	24.7	-1.0	1.06	5878	5.08	21.80
011454602-03	OBS	No	3.754298	134.337688	210.7	3.031	20.4	18.9	1.06	5878	2.53	524.49
011454602-04	OBS	No	12.176176	131.555593	353.0	1.247	17.6	16.1	1.06	5878	2.13	109.25
011454602-05	OBS	No	8.622852	140.092733	301.6	1.096	16.0	13.3	1.06	5878	1.86	173.08
011454602-06	OBS	No	8.544381	138.282764	246.6	1.515	14.9	12.2	1.06	5878	1.67	175.20
011454602-07	OBS	No	4.177766	132.060994	1361.2	1.500	14.4	-1.0	1.06	5878	3.91	454.83

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011454602-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET
011454602-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—NO_FITS—CENT_NOFITS
011454602-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_RESOLVED_OFFSET
011454602-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_MEAS
011454602-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS—HALO_GHOST
011454602-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV
011454602-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

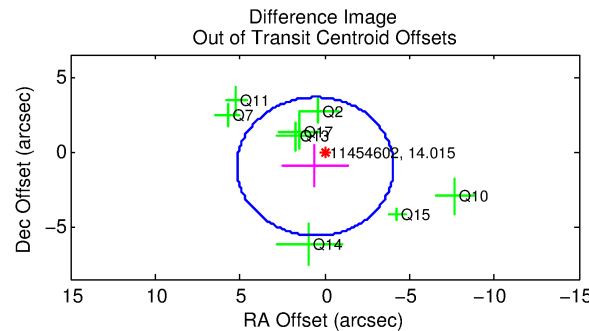
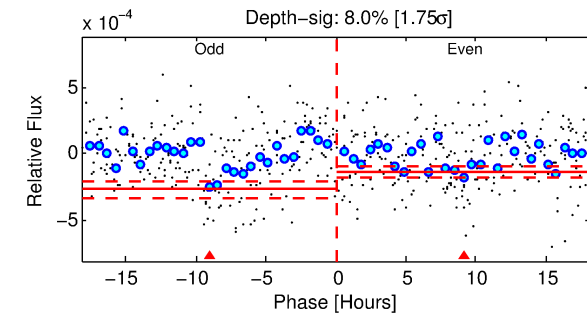
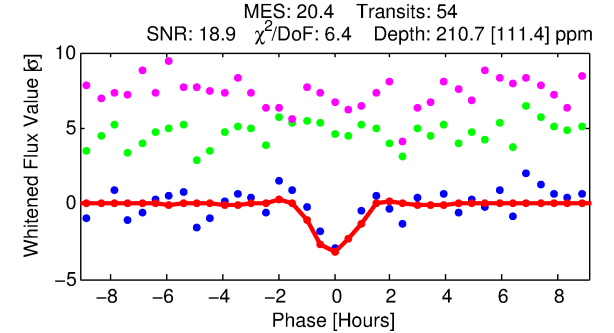
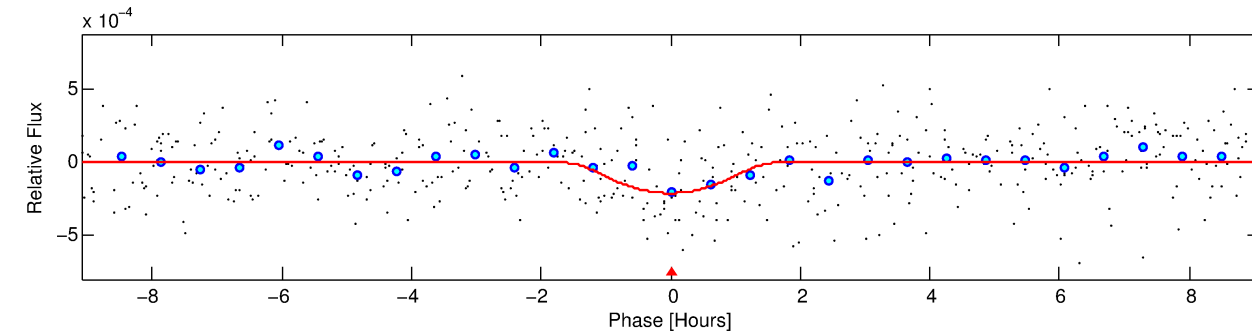
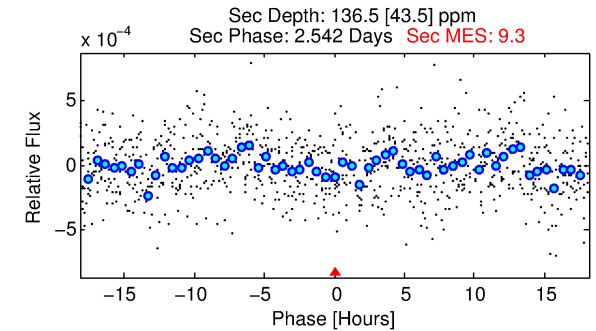
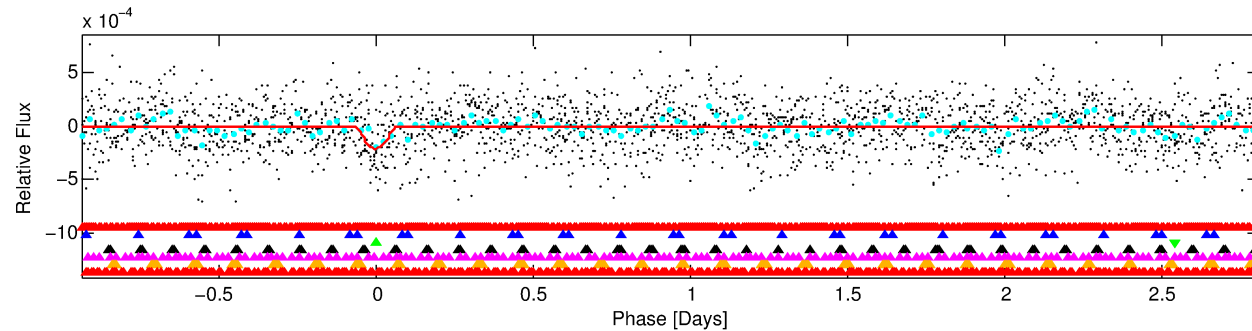
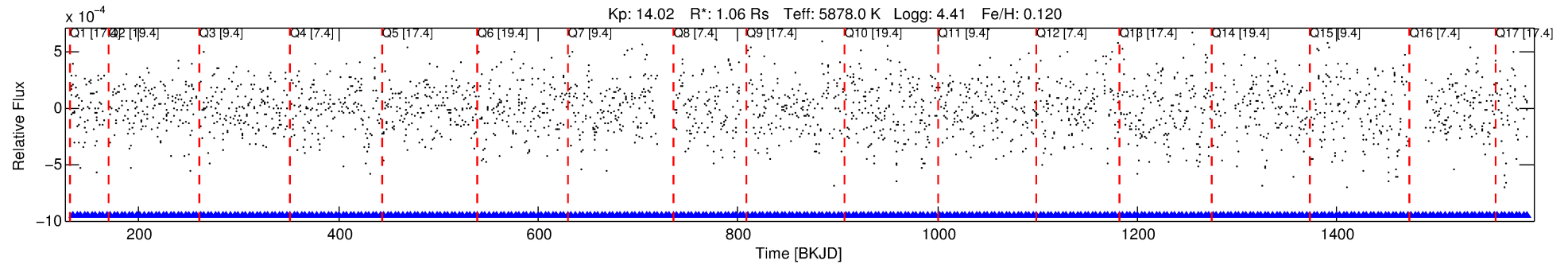
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011454602-03

No Significant Match Found

DV One-Page Summary

KIC: 11454602 Candidate: 3 of 7 Period: 3.754 d



DV Fit Results:

Period = 3.75430 [0.00005] d
Epoch = 134.3377 [0.0094] BKJD
Rp/R* = 0.0218 [0.0515]
a/R* = 2.57 [2.18]
b = 0.99 [0.10]
Seff = 524.49 [203.81]
Teq = 1220 [119] K
Rp = 2.53 [6.03] Re
a = 0.0480 [0.0119] AU
Ag = 27.07 [128.64] [0.20 σ]
Teffp = 4303 [5099] K [0.60 σ]

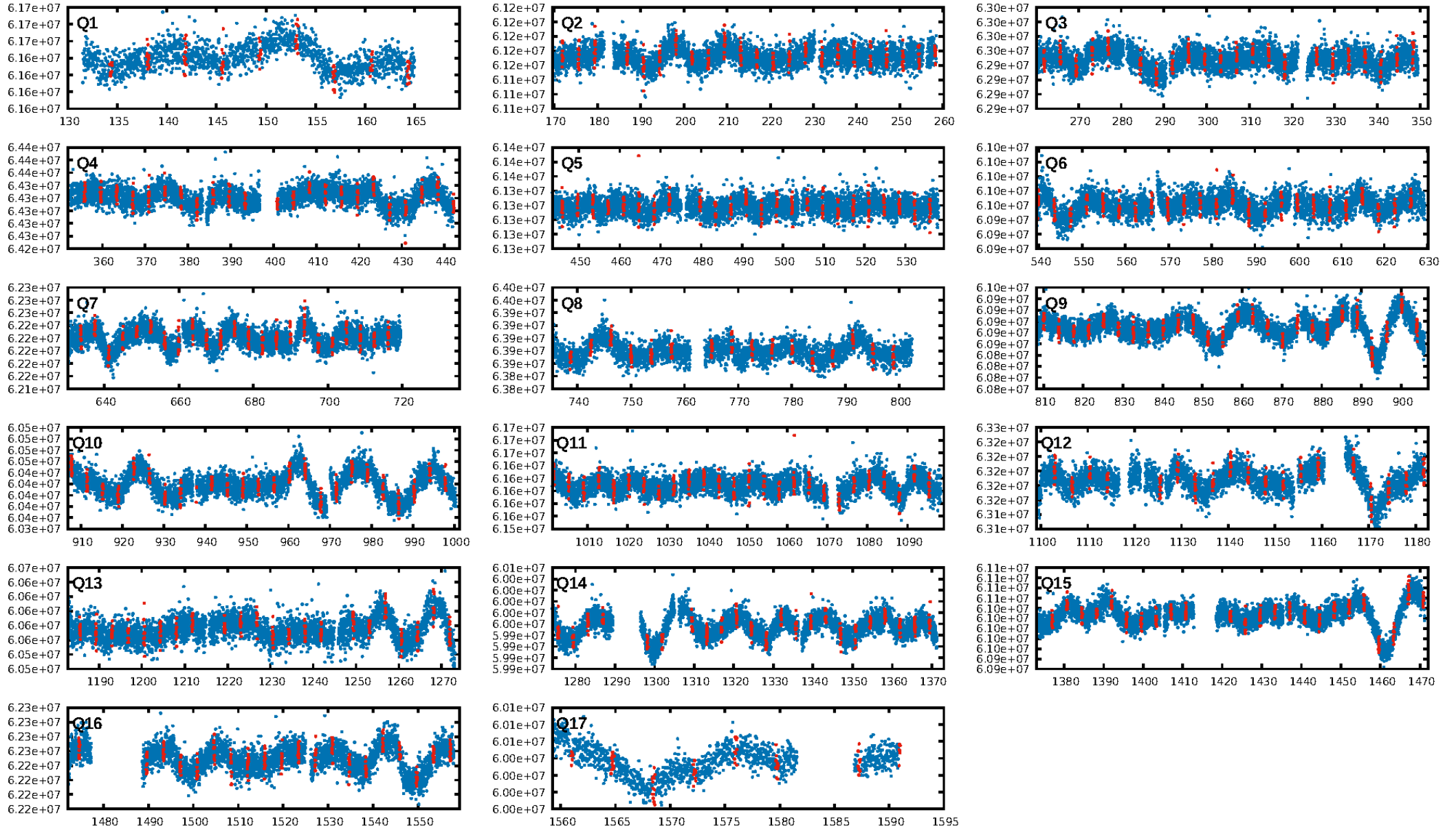
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [6.37 σ]
LongPeriod-sig: 99.7% [3.01 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.5%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [52/52]
GhostDiagnostic-chr: 0.4414
Centroid-sig: 89.0%
Centroid-so: 0.078 arcsec [0.20 σ]
OotOffset-rm: 1.137 arcsec [0.74 σ]
OotOffset-st: 3/3/0/2 [8]
KicOffset-rm: 1.075 arcsec [0.69 σ]
KicOffset-st: 3/3/0/2 [8]
DiffImageQuality-fgm: 0.00 [0/8]
DiffImageOverlap-fno: 0.82 [14/17]

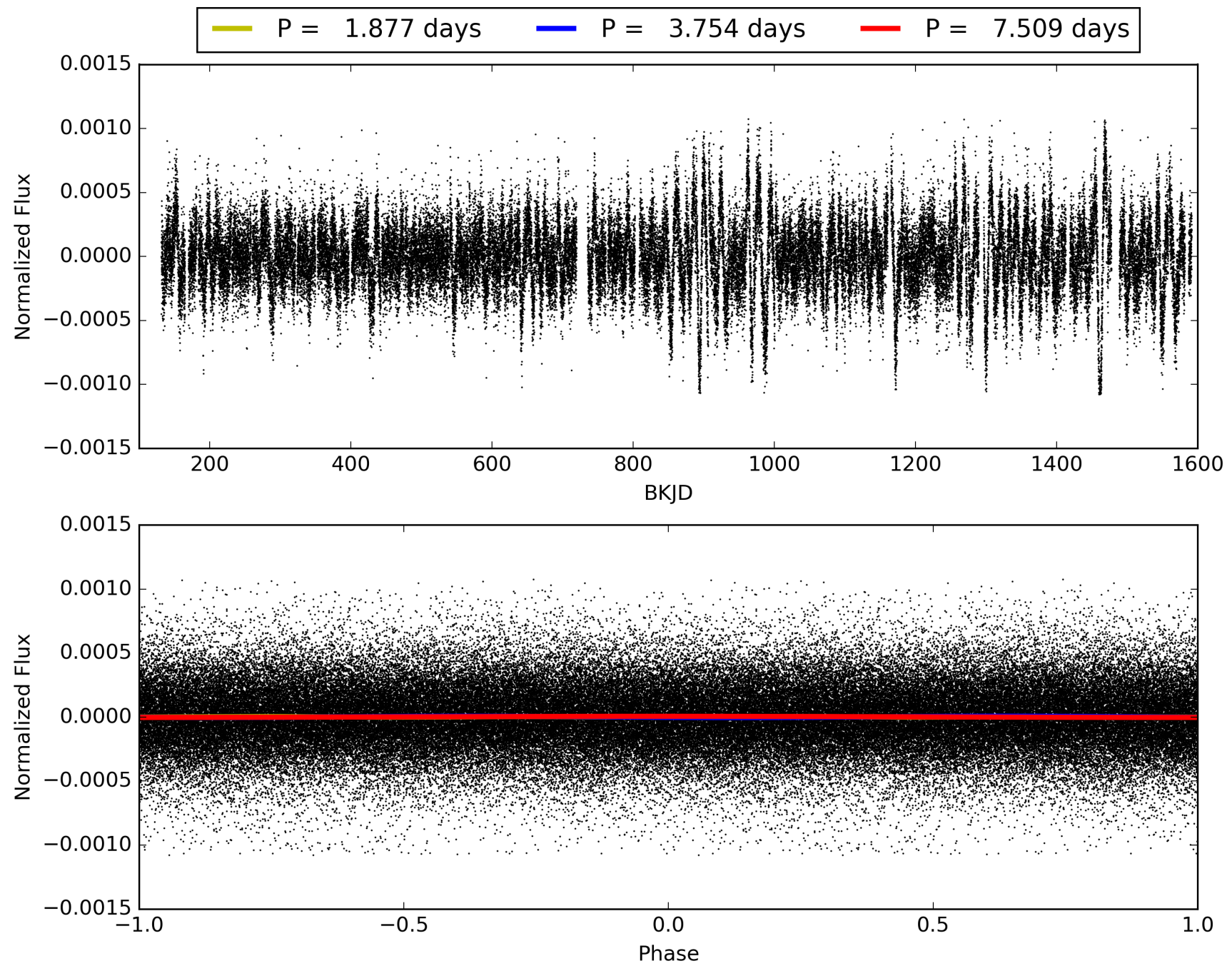
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:04:09 Z

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

TCE 011454602-03, PDC Light Curves

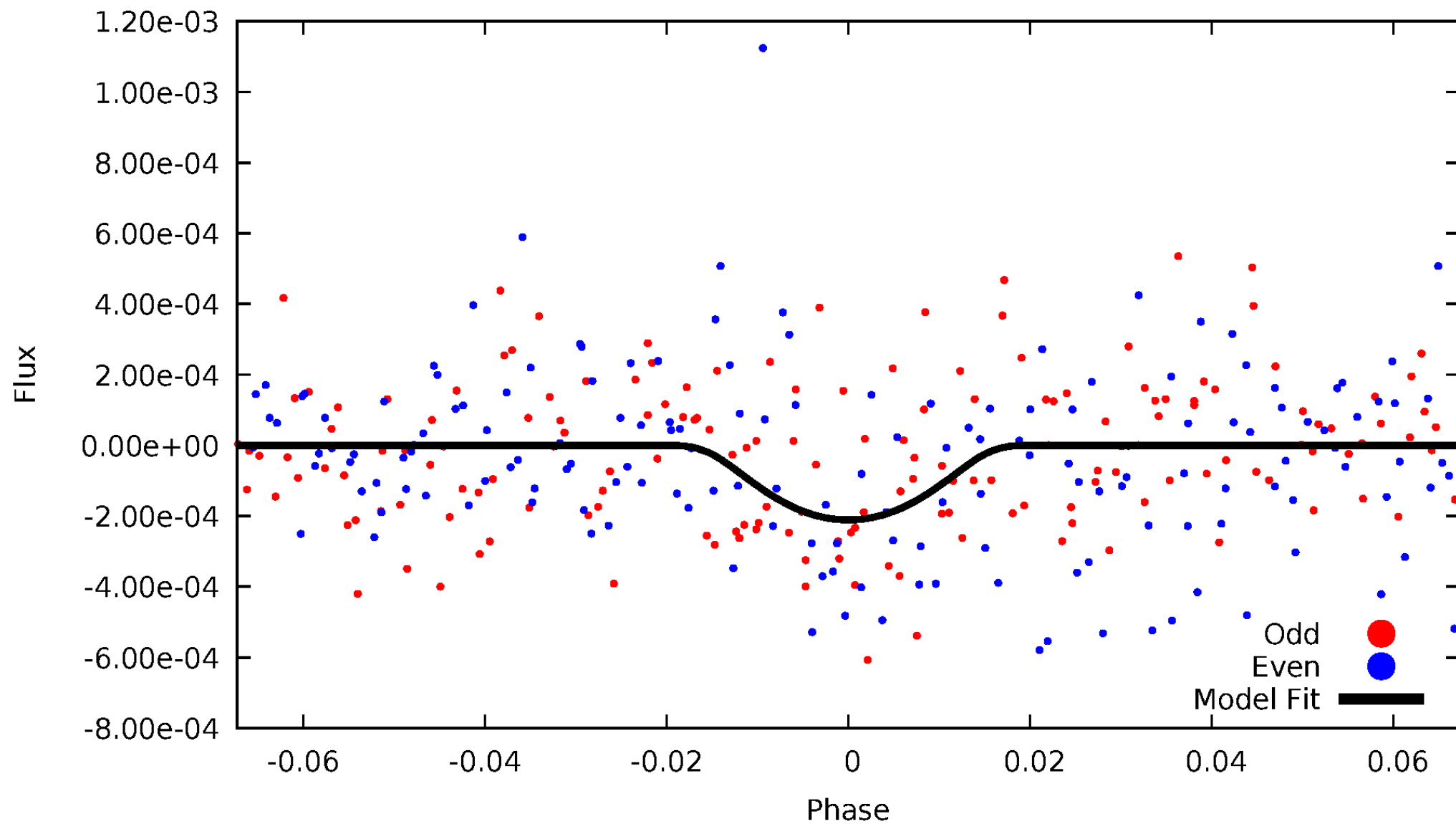


TCE 011454602-03



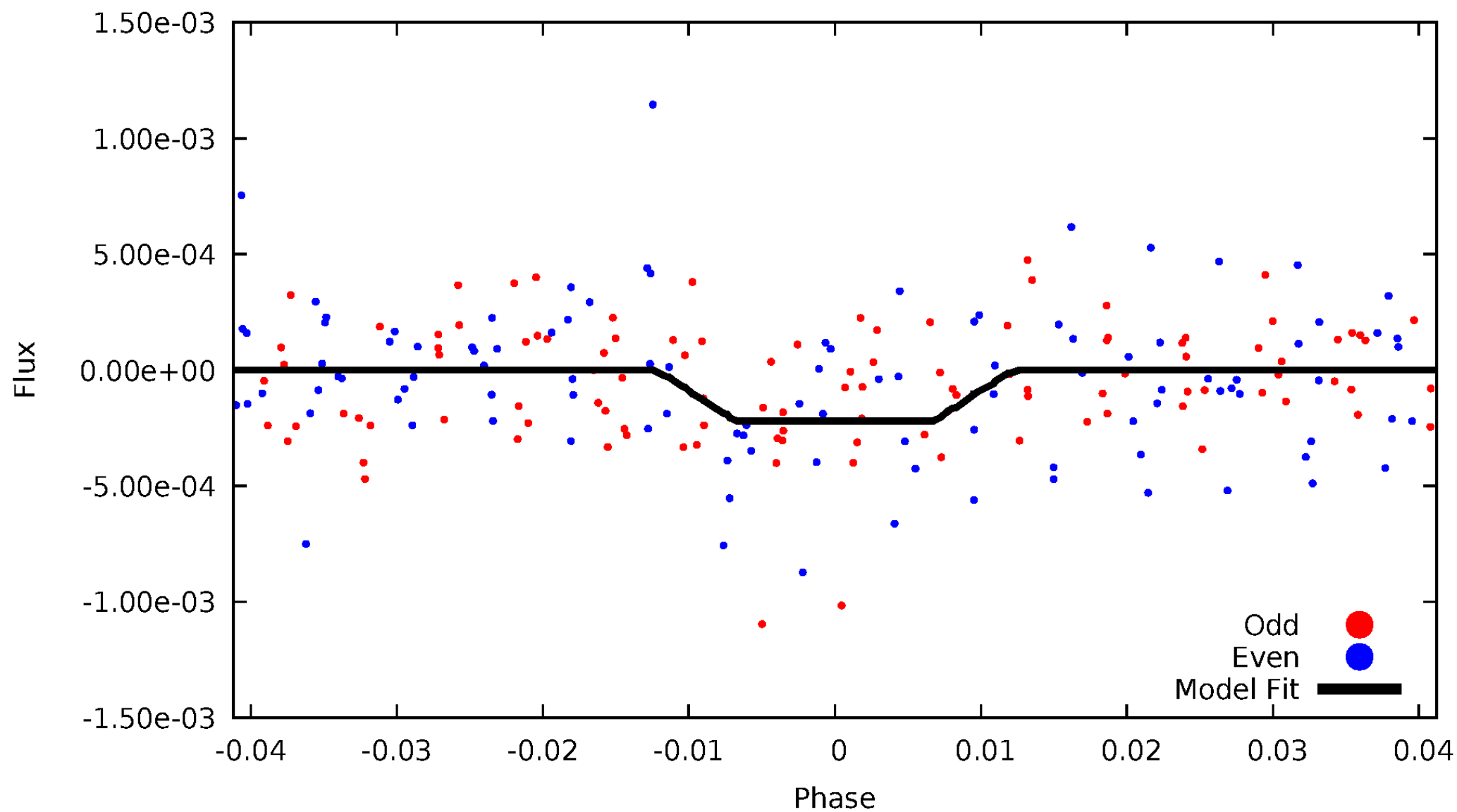
DV Odd/Even

TCE 011454602-03



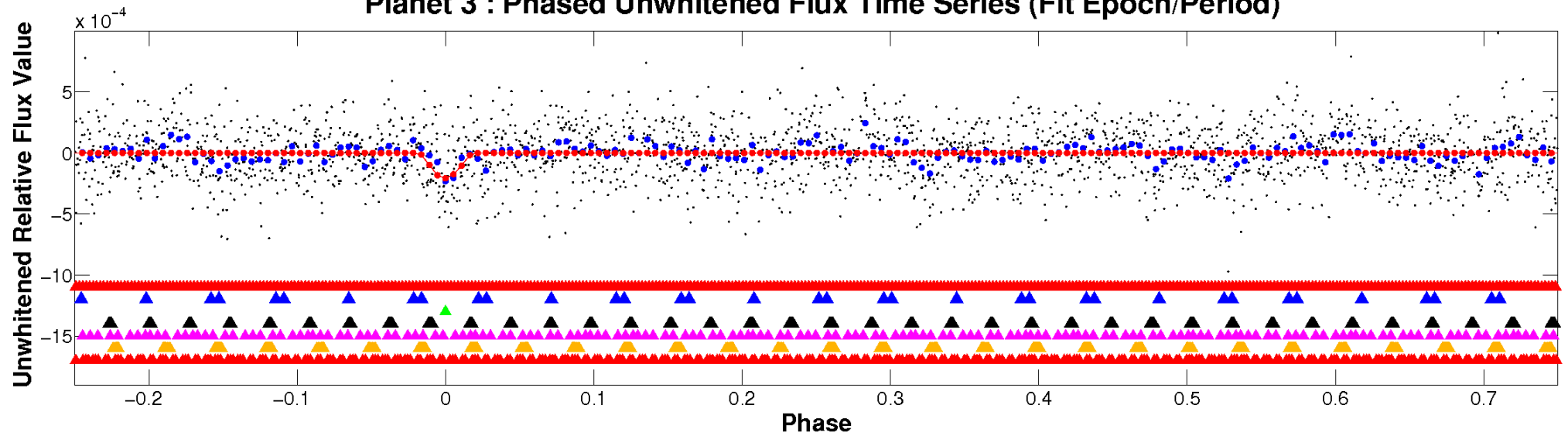
ALT Odd/Even

TCE 011454602-03

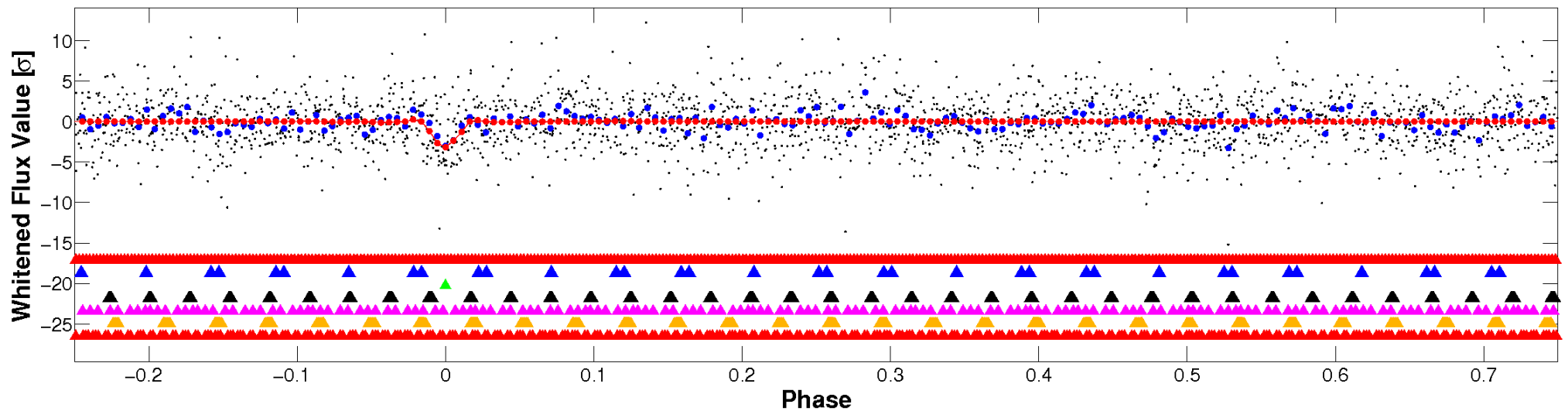


Non-Whitened Vs. Whitened Light Curve

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

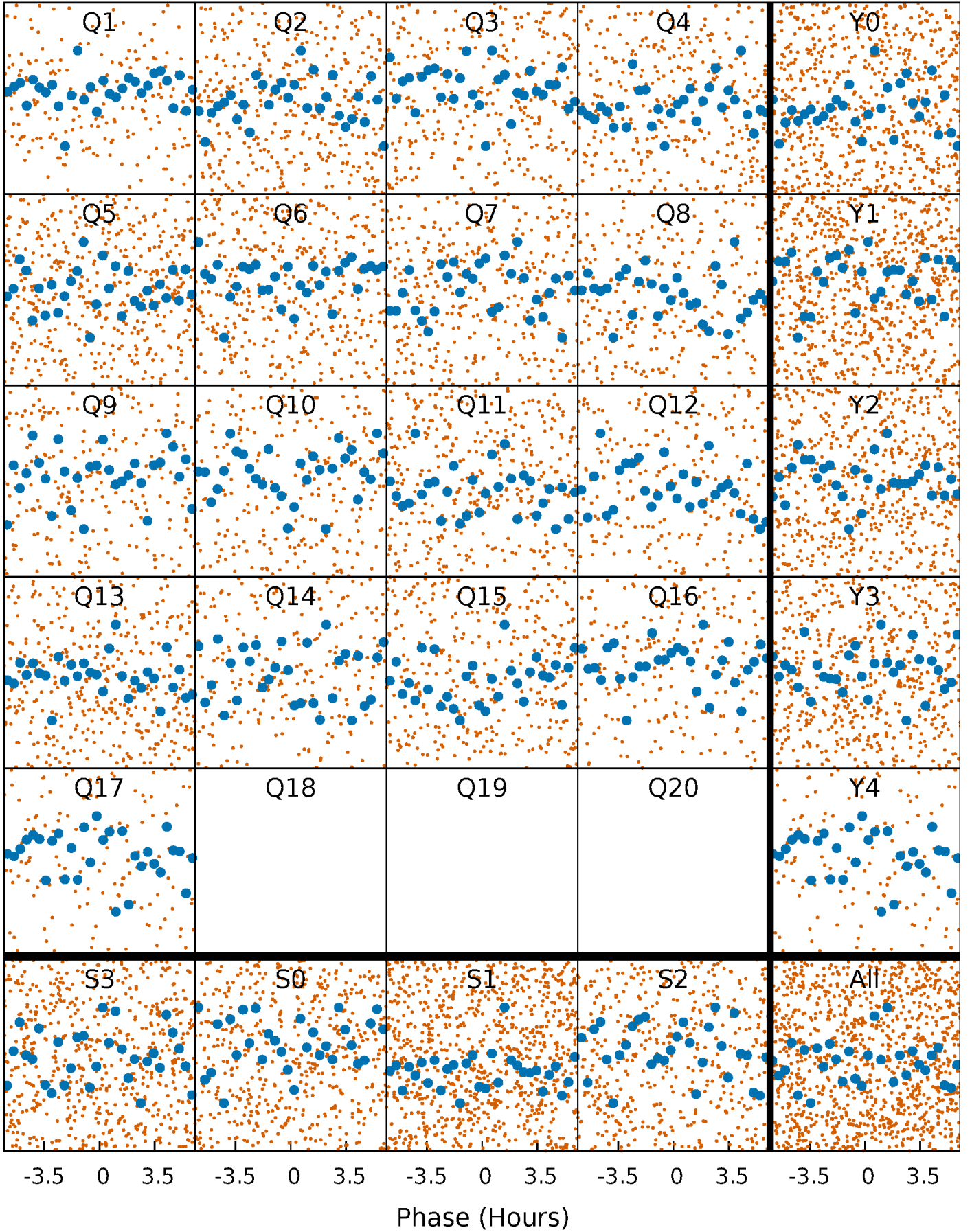


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



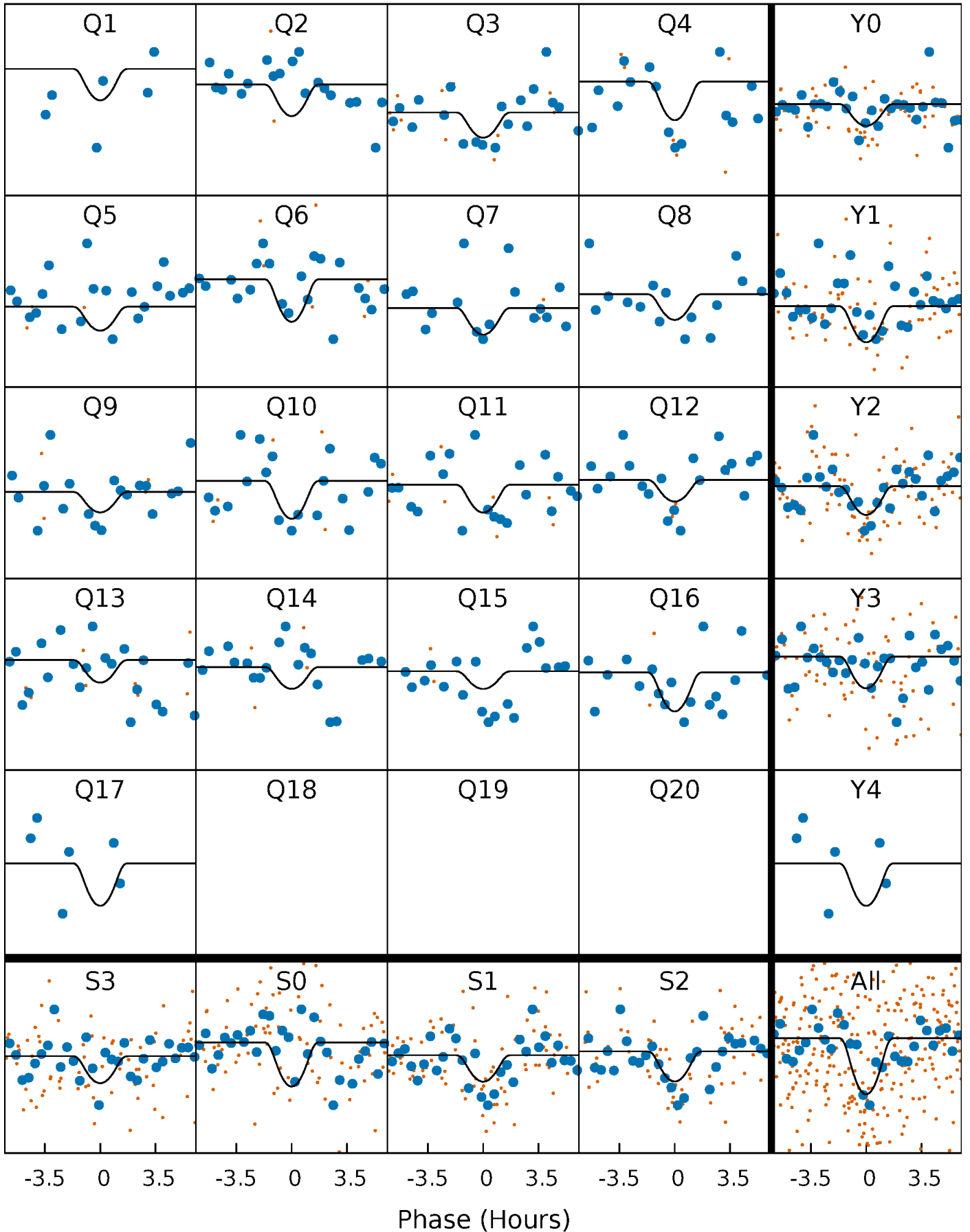
PDC Quarter-Phased Transit Curves

TCE 011454602-03 P= 3.754298 Days $T_0=134.337688$ (BKJD)



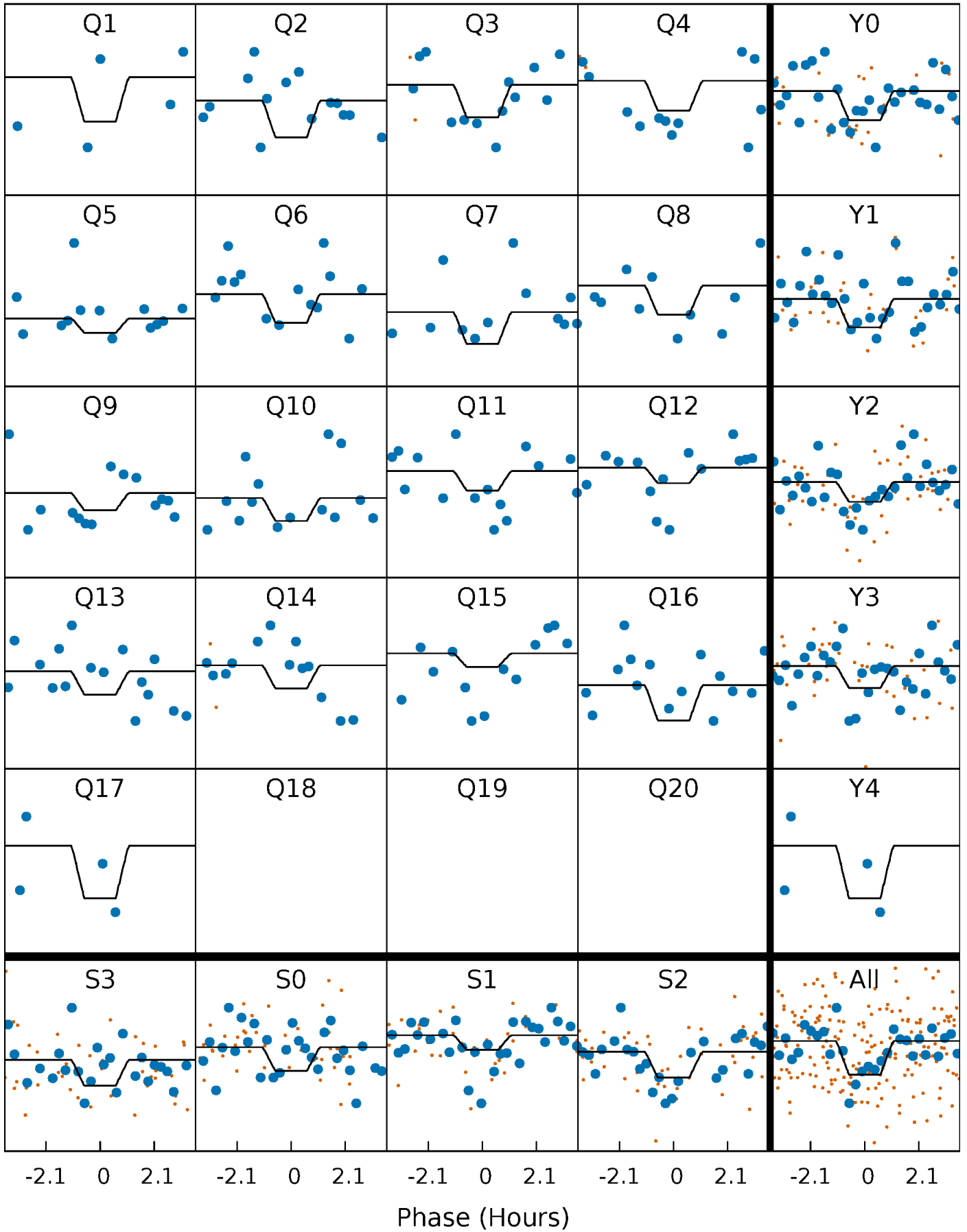
DV Quarter-Phased Transit Curves

TCE 011454602-03 P= 3.754298 Days $T_0=134.337688$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

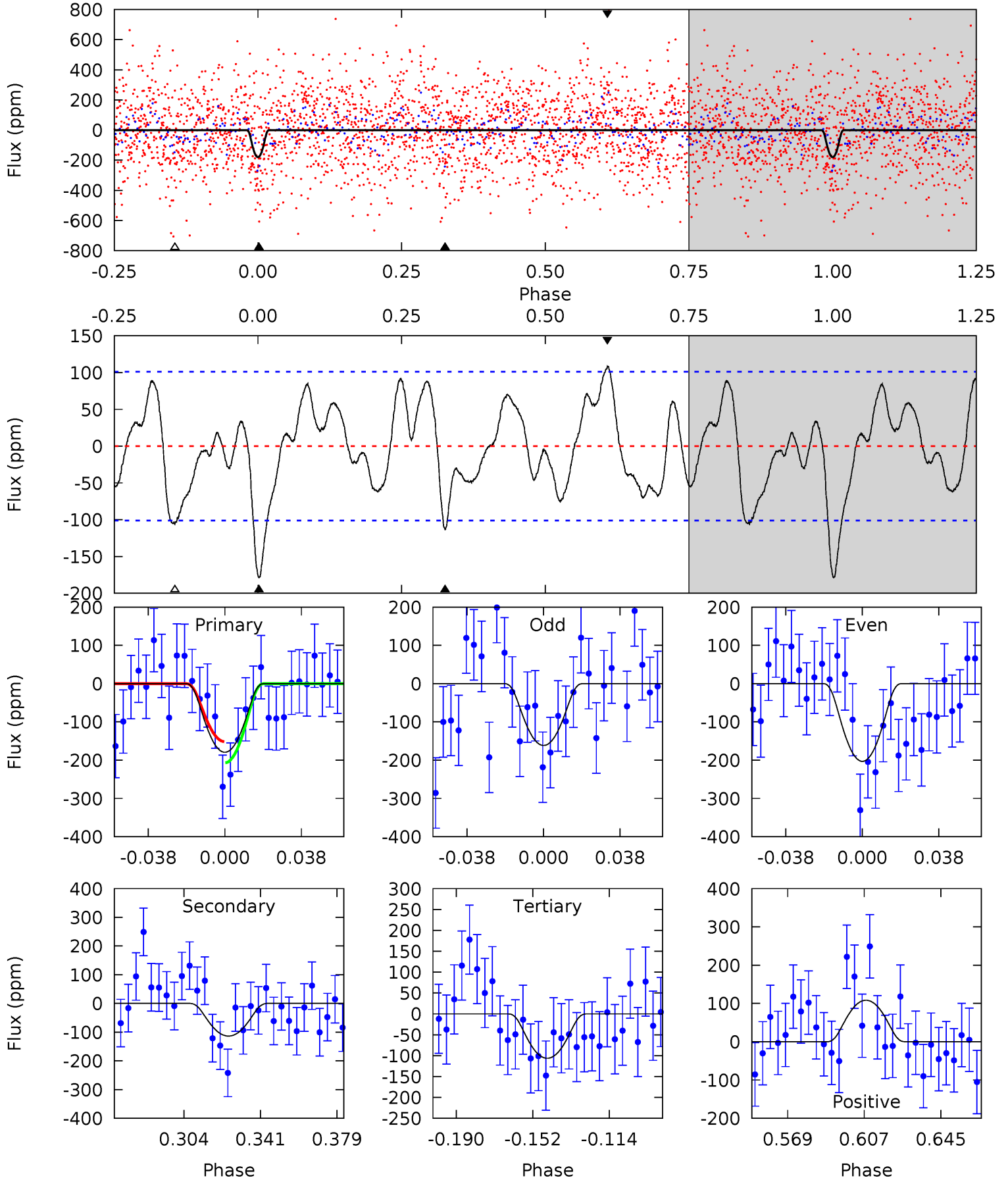
TCE 011454602-03 $P = 3.754355$ Days $T_0 = 134.344171$ (BKJD)



DV Model-Shift Uniqueness Test

011454602-03, P = 3.754298 Days, E = 130.583390 Days

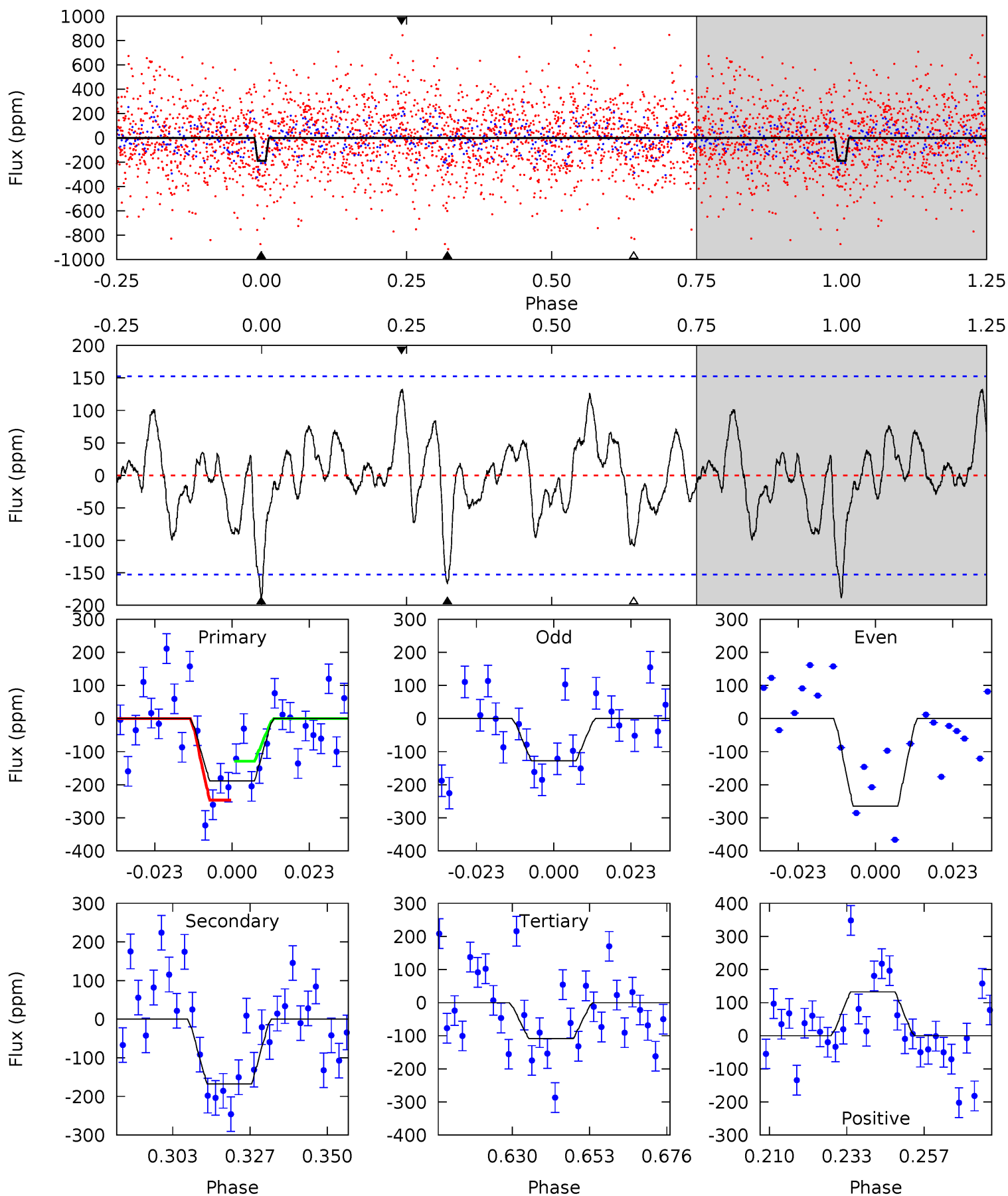
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.45	5.35	5.00	5.10	4.76	2.08	2.29	3.44	3.34	0.35	0.25	0.98	0.40	0.38	1.31



Alt Model-Shift Uniqueness Test

011454602-03, P = 3.754355 Days, E = 130.589816 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.02	5.33	3.45	4.22	4.86	2.27	1.49	2.56	1.80	1.88	1.11	2.23	0.97	0.41	1.88



Stellar Parameters For KIC 011454602

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5878^{+156}_{-191}	$4.405^{+0.087}_{-0.203}$	$0.120^{+0.250}_{-0.300}$	$1.064^{+0.307}_{-0.141}$	$1.051^{+0.122}_{-0.136}$	$1.228^{+0.542}_{-0.601}$
	+3%/-3%	+2%/-5%	+208%/-250%	+29%/-13%	+12%/-13%	+44%/-49%
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 011454602-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-114 ± 21	$5.30^{+5.33}_{-3.42}$	1730^{+112}_{-92}	3357^{+1583}_{-673}	$4.936^{+34.849}_{-3.746}$
Alt.	-167 ± 31	$4.86^{+5.06}_{-3.23}$	1723^{+128}_{-89}	3669^{+2159}_{-721}	$8.686^{+74.384}_{-6.561}$

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 $A_{obs} \gg 1.0$

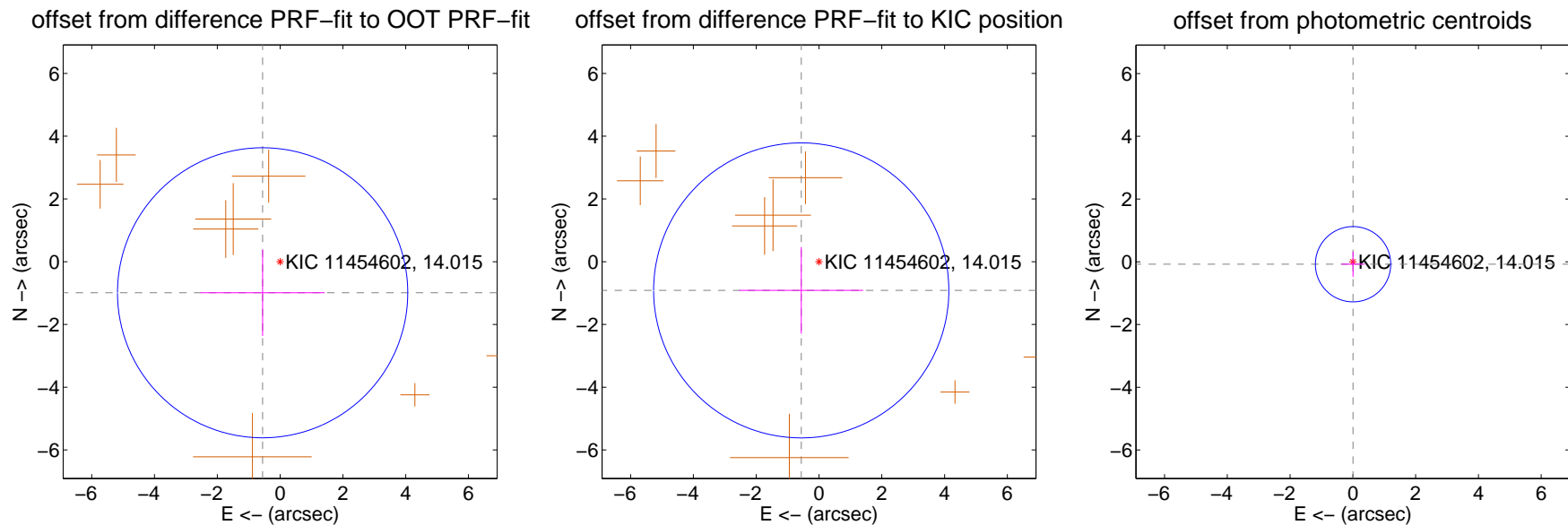
DV Centroid Data

Supplemental centroid analysis for 011454602-03. Kepler magnitude: 14.02. Transit SNR 18.91

There are 0 quarters with good PRF difference image offsets

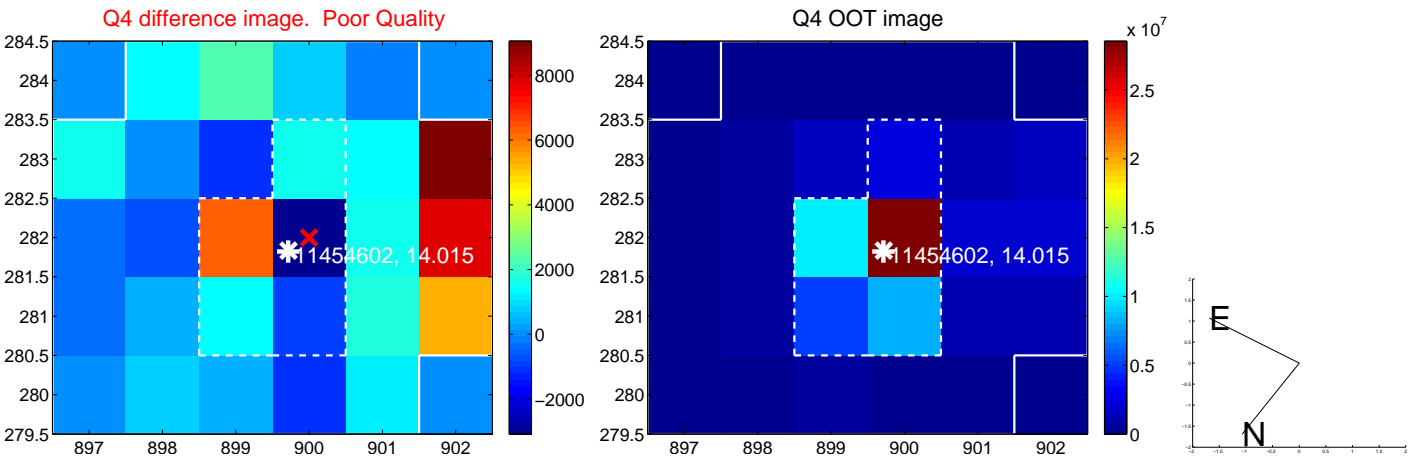
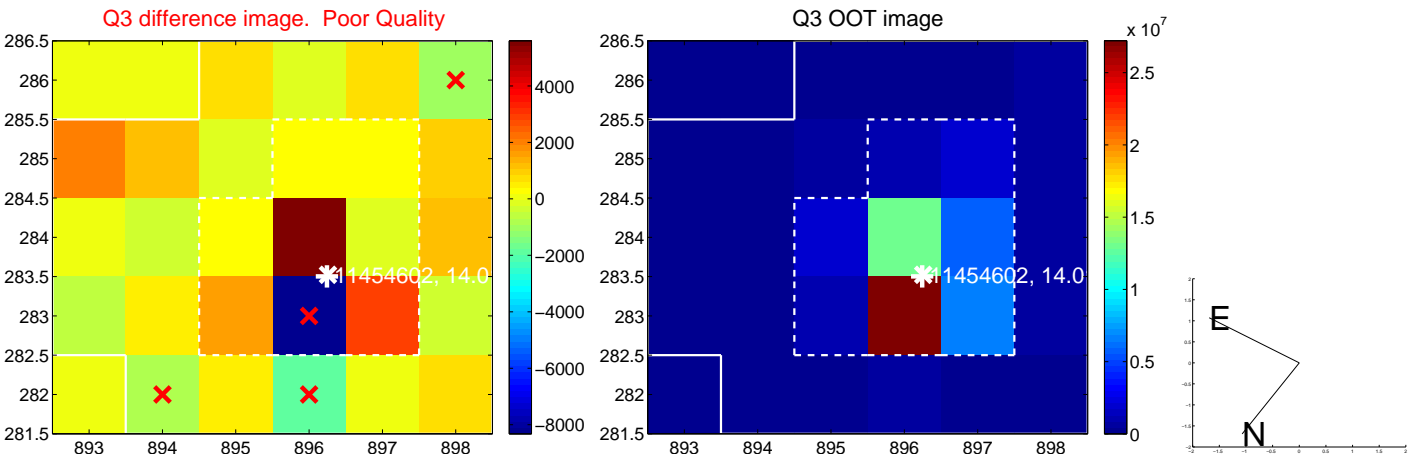
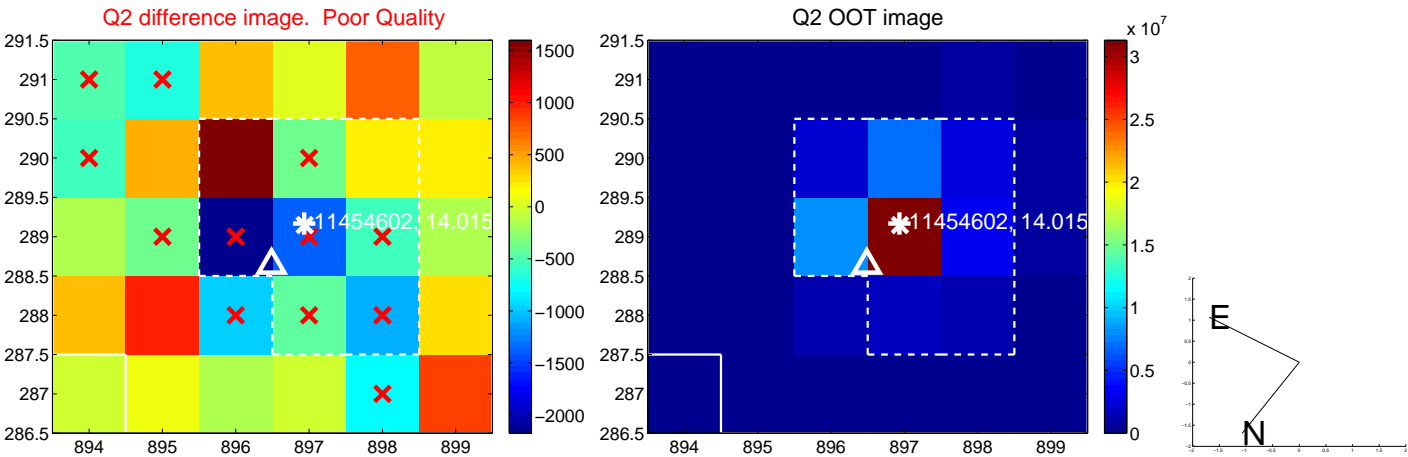
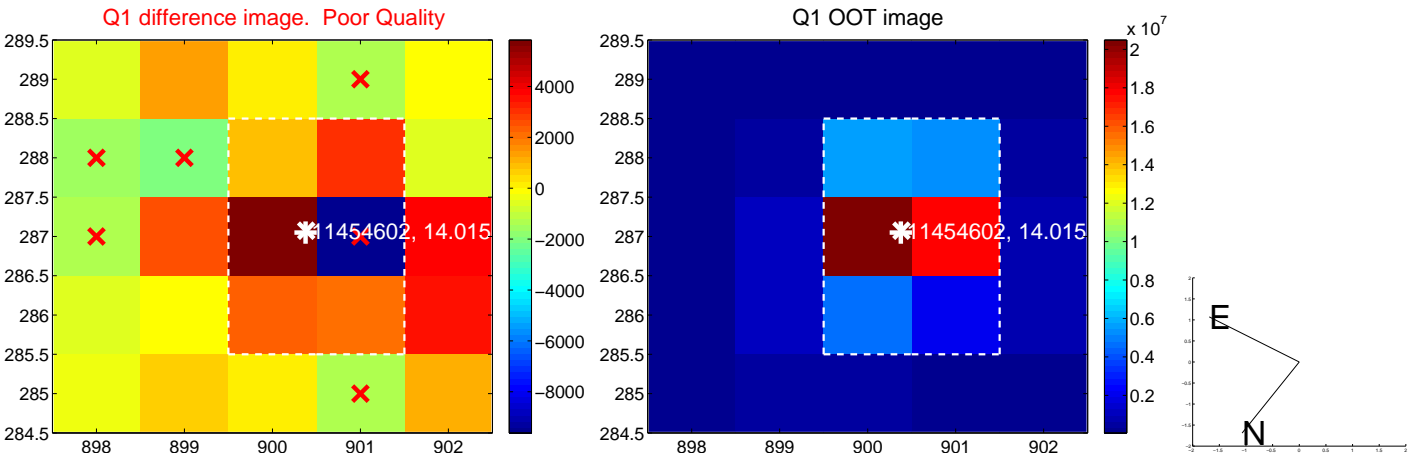
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.137 ± 1.541	0.74	0.557 ± 1.978	-0.991 ± 1.374
PRF-fit source offset from KIC position	1.075 ± 1.567	0.69	0.565 ± 1.973	-0.915 ± 1.381
photometric centroid source offset	0.08 ± 0.40	0.20	-0.01 ± 0.37	-0.08 ± 0.40

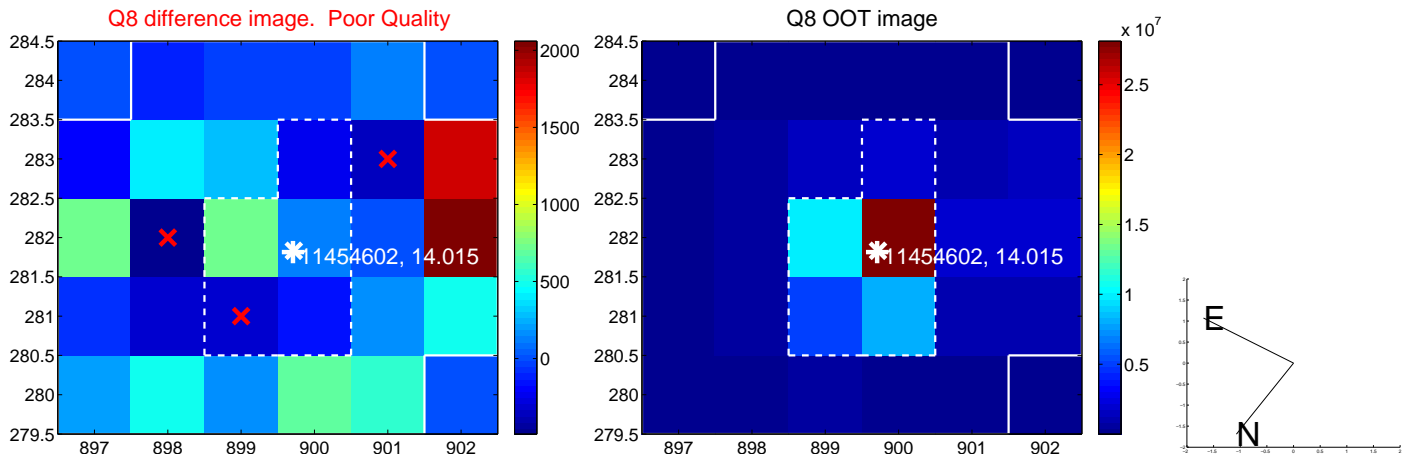
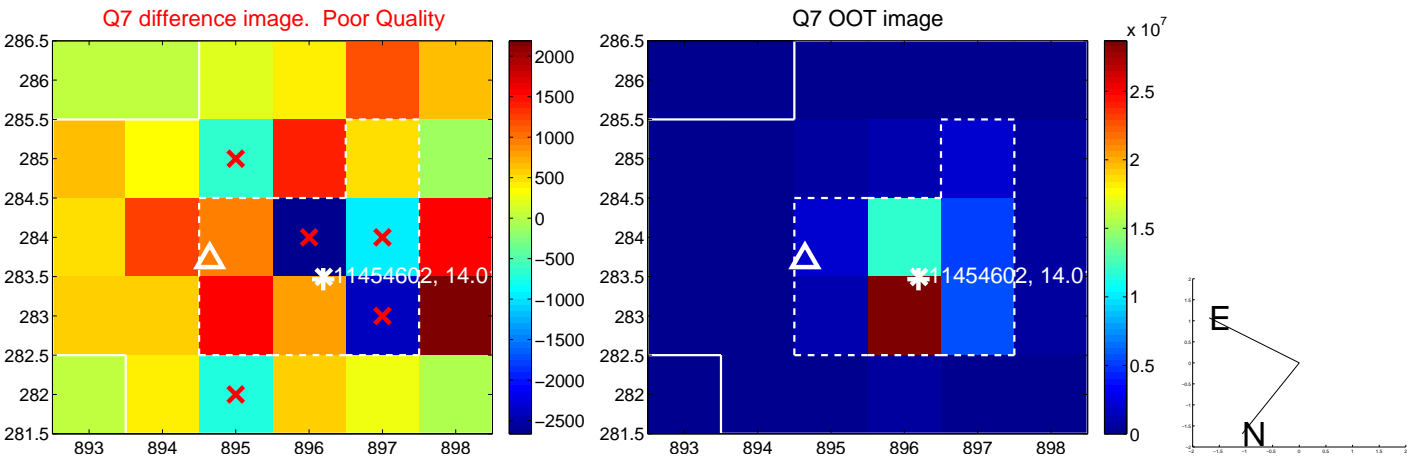
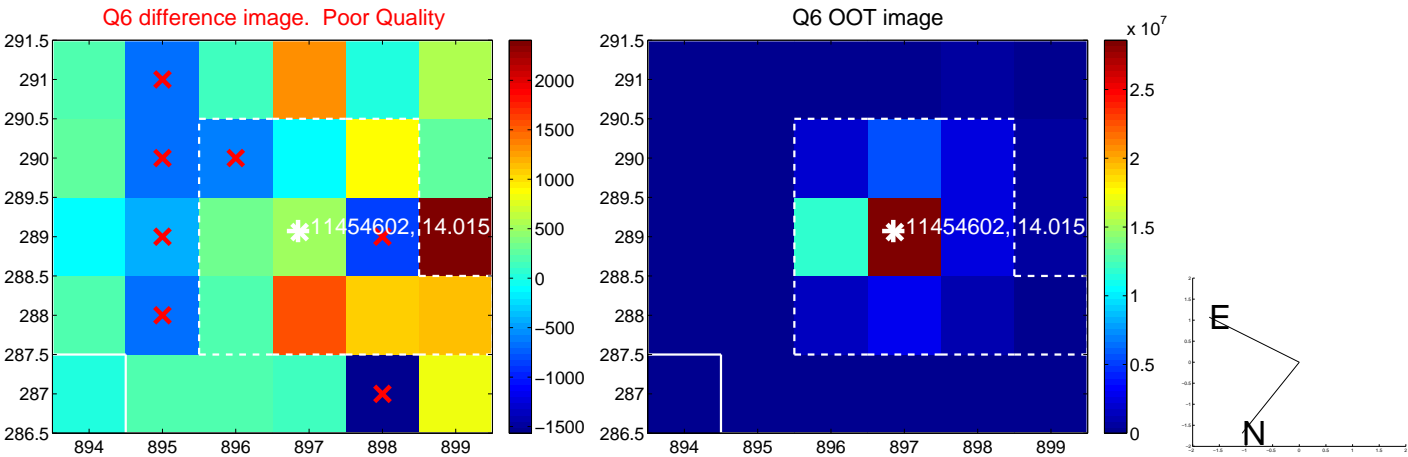
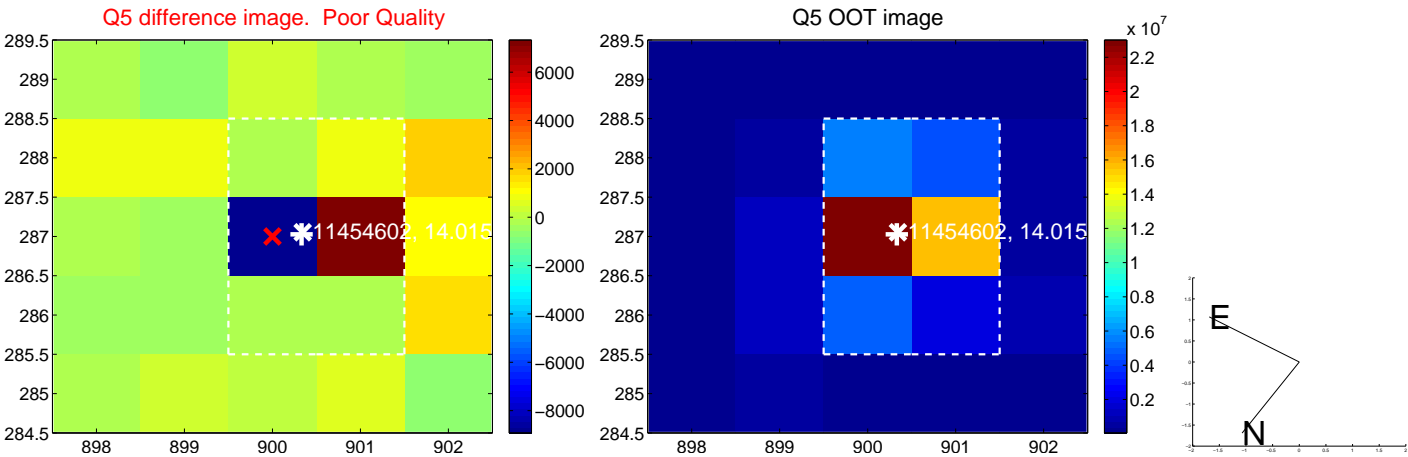


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

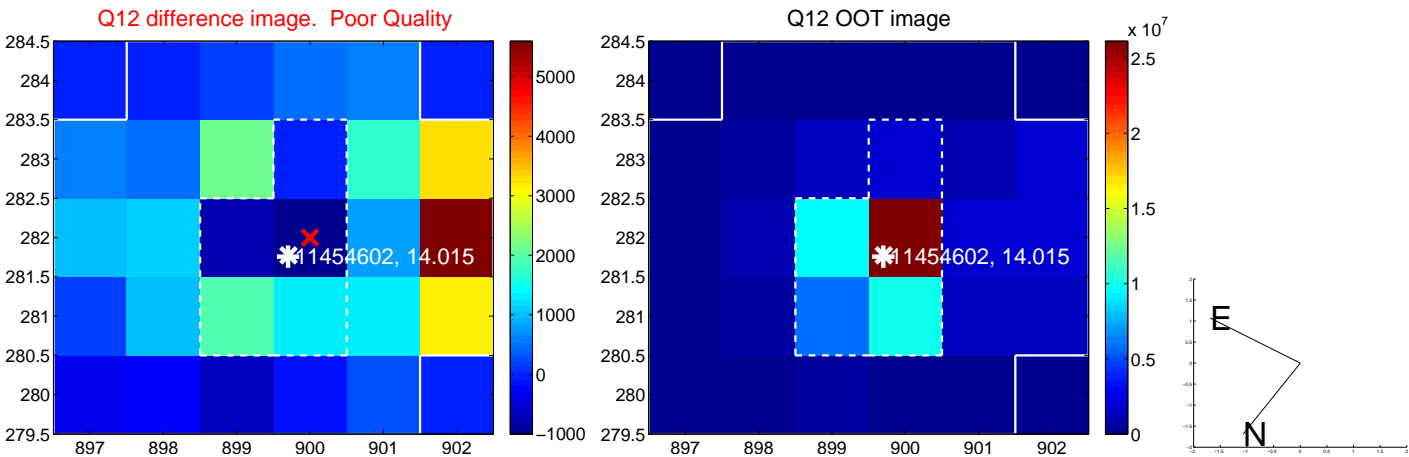
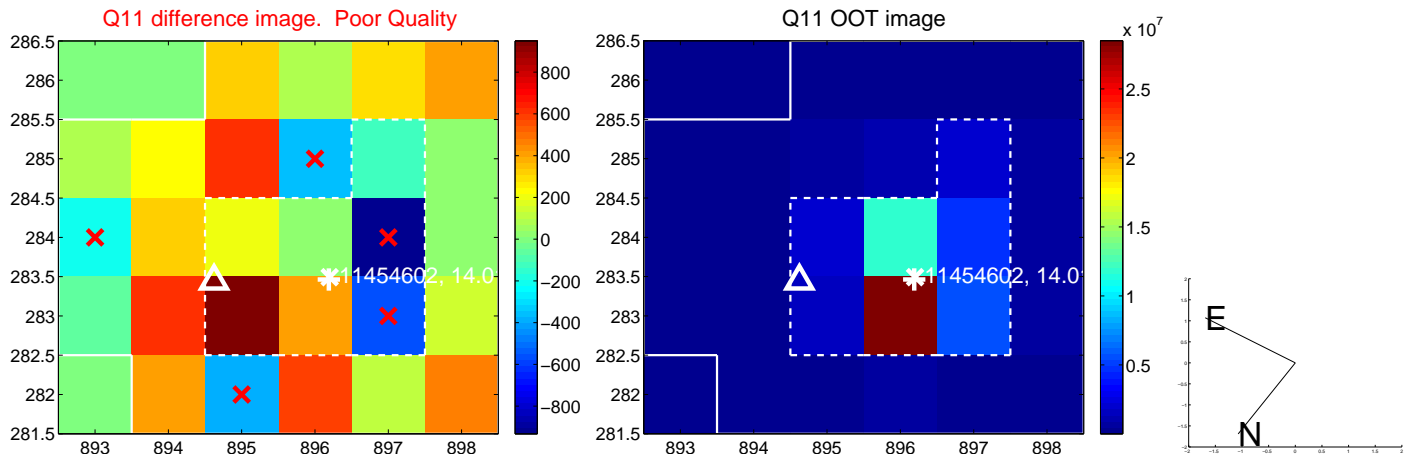
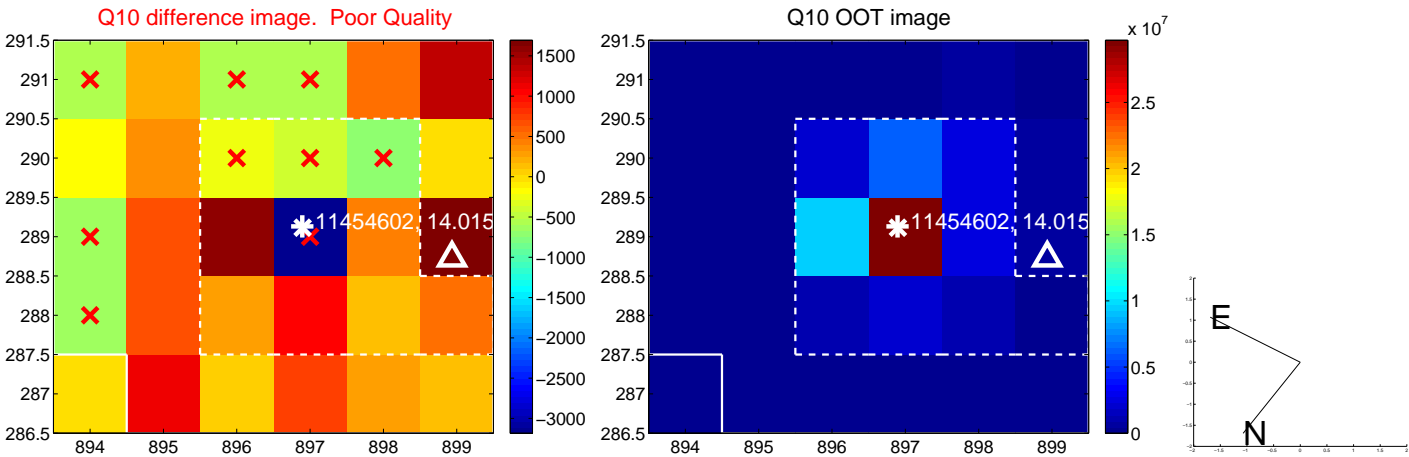
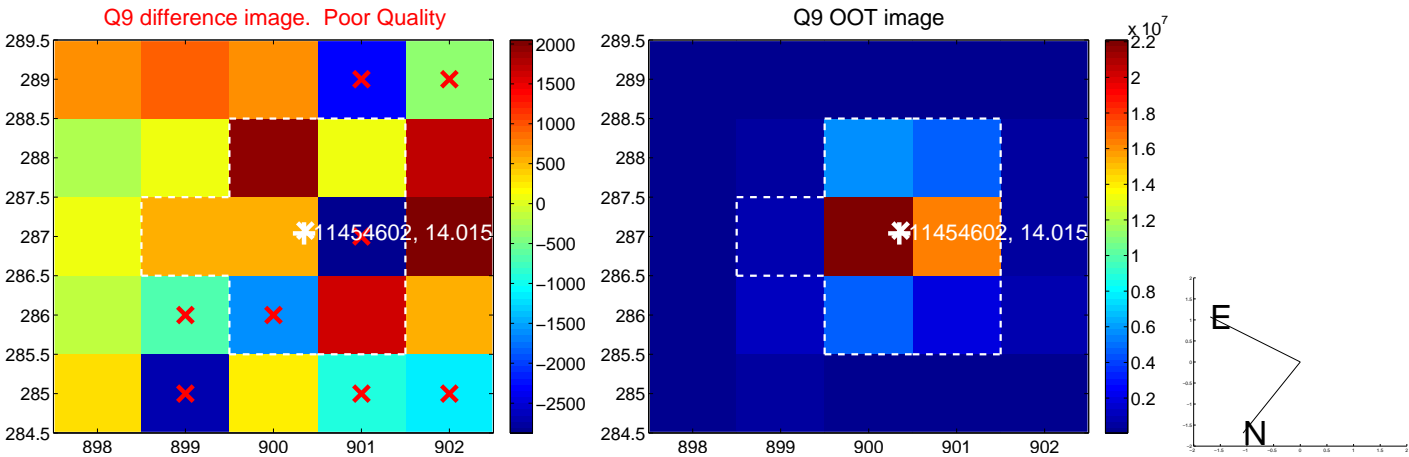
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



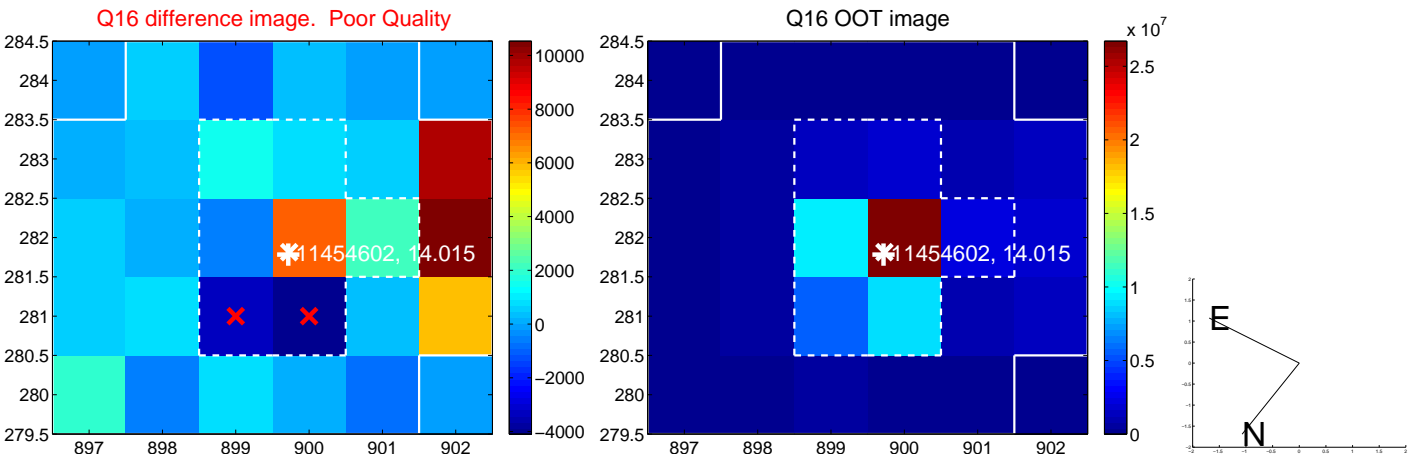
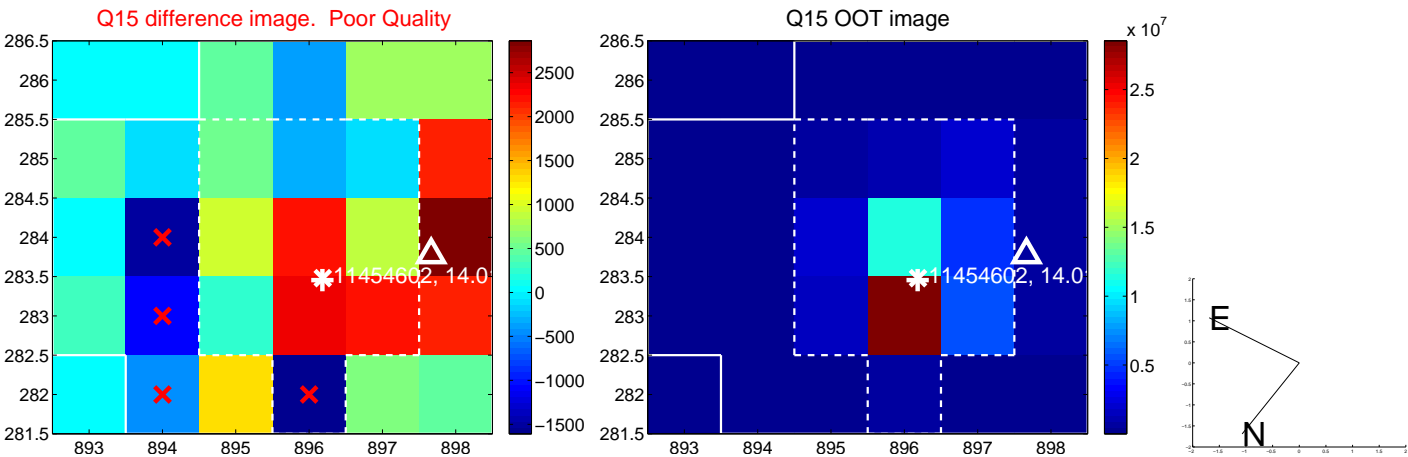
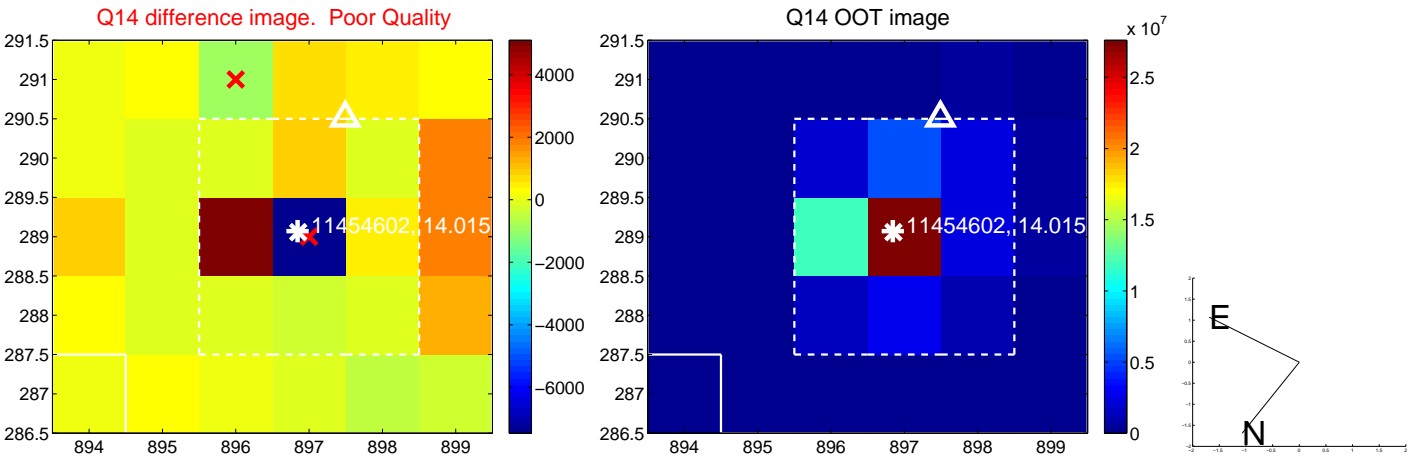
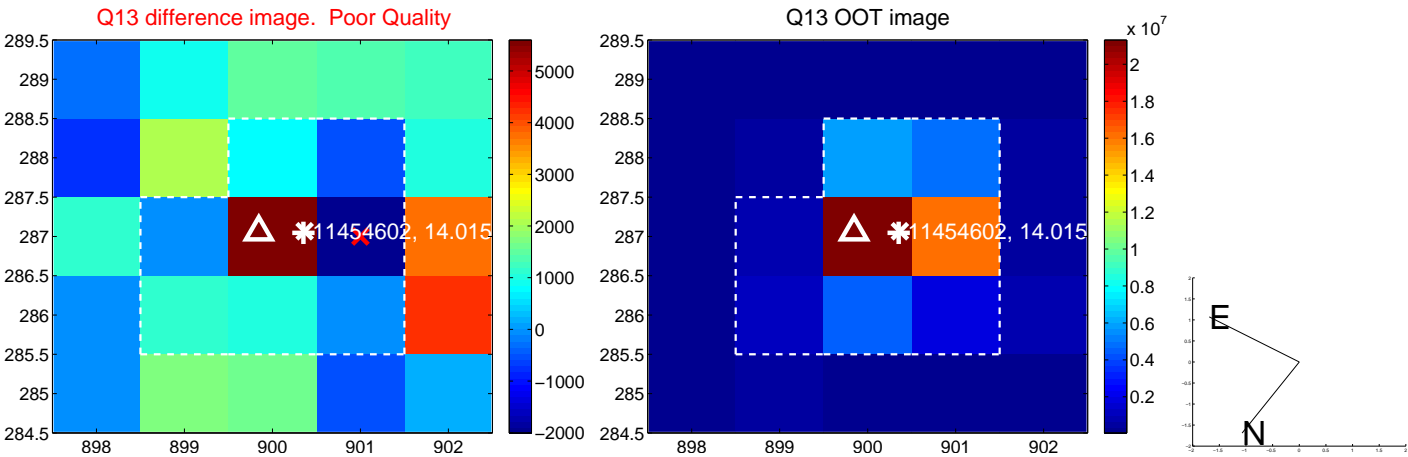
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



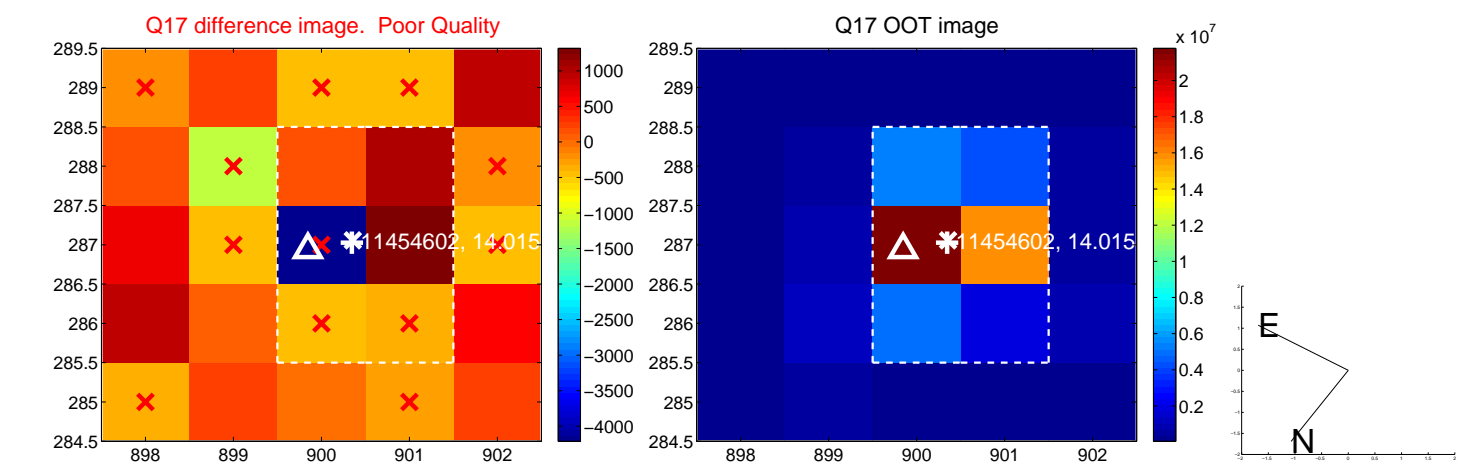
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



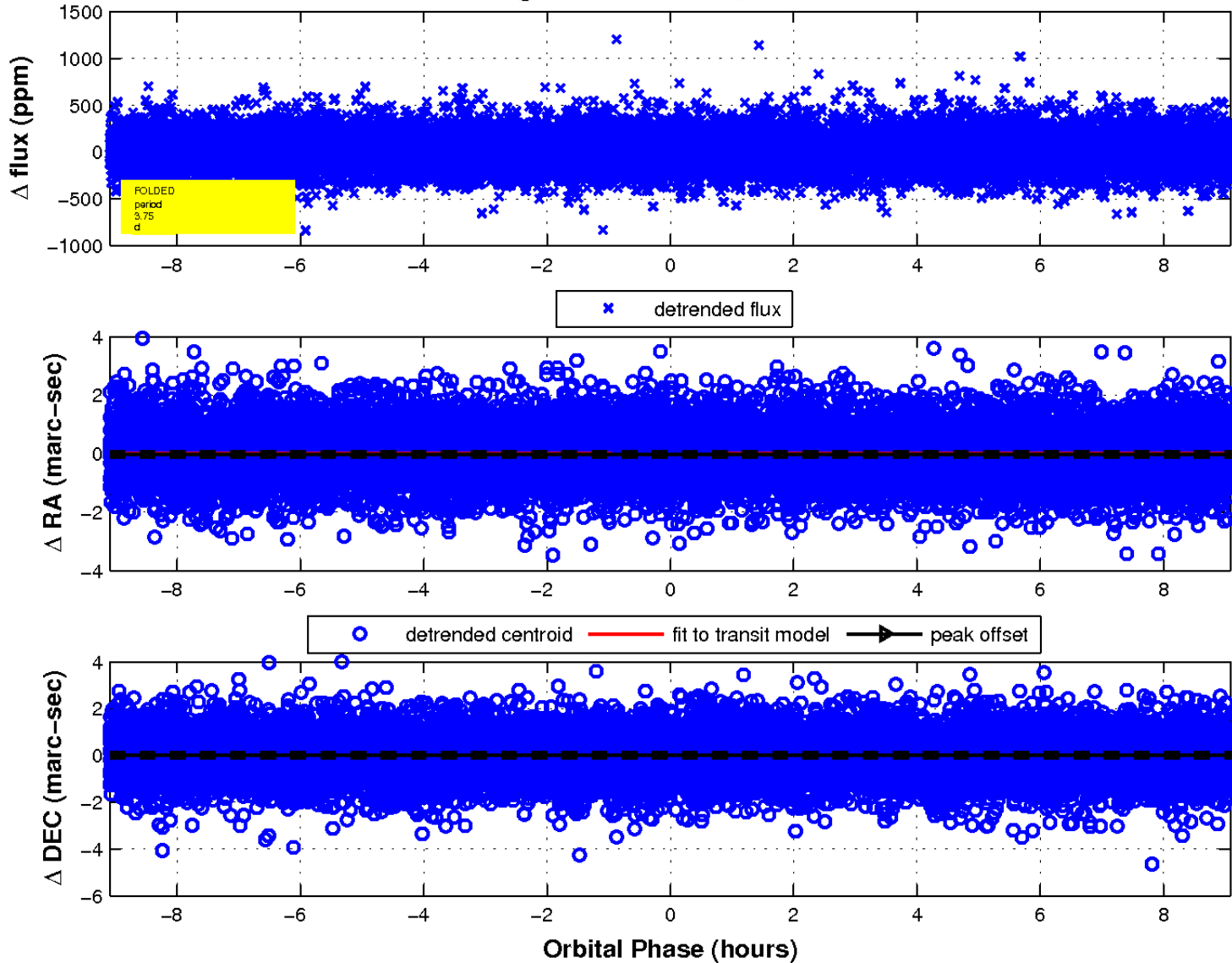
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

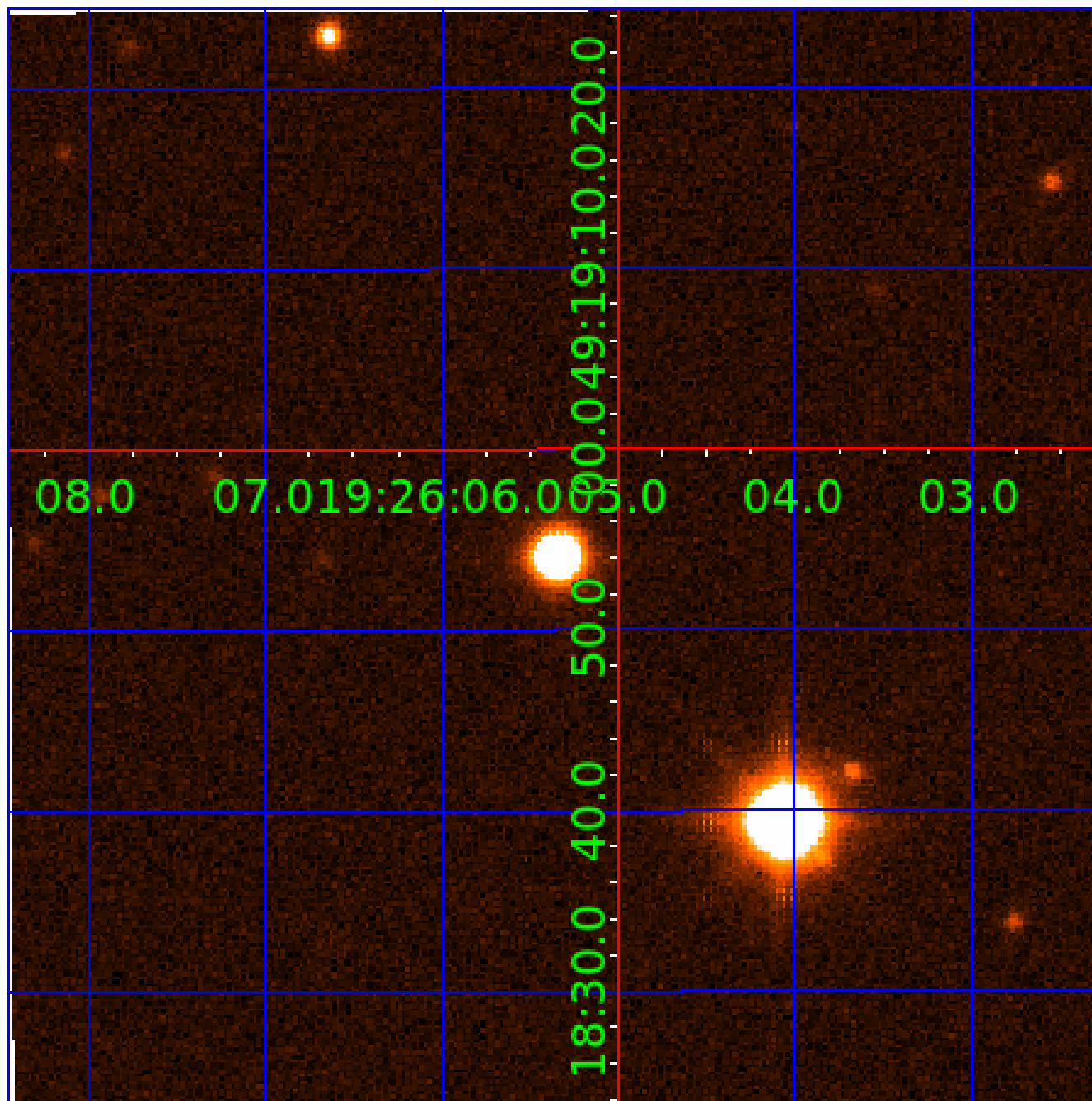


fluxWeightedCentroids, Planet 3 of 7



UKIRT Image

Declination



KIC 011454602

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})
011454602-01	OBS	No	1.204542	131.607513	15.9	9.112	7.4	8.5	1.06	5878	0.42	2387.87
011454602-02	OBS	No	40.784419	159.367250	2303.5	1.500	24.7	-1.0	1.06	5878	5.08	21.80
011454602-03	OBS	No	3.754298	134.337688	210.7	3.031	20.4	18.9	1.06	5878	2.53	524.49
011454602-04	OBS	No	12.176176	131.555593	353.0	1.247	17.6	16.1	1.06	5878	2.13	109.25
011454602-05	OBS	No	8.622852	140.092733	301.6	1.096	16.0	13.3	1.06	5878	1.86	173.08
011454602-06	OBS	No	8.544381	138.282764	246.6	1.515	14.9	12.2	1.06	5878	1.67	175.20
011454602-07	OBS	No	4.177766	132.060994	1361.2	1.500	14.4	-1.0	1.06	5878	3.91	454.83

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011454602-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET
011454602-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—NO_FITS—CENT_NOFITS
011454602-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_RESOLVED_OFFSET
011454602-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_MEAS
011454602-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS—HALO_GHOST
011454602-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV
011454602-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

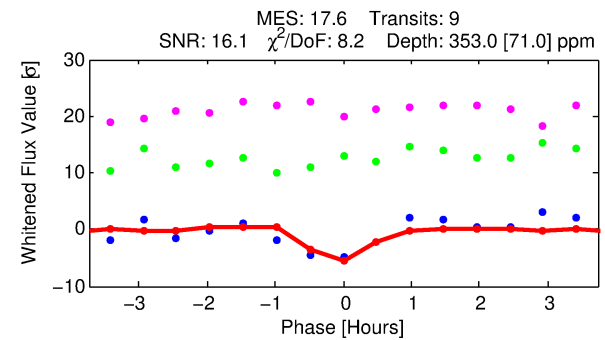
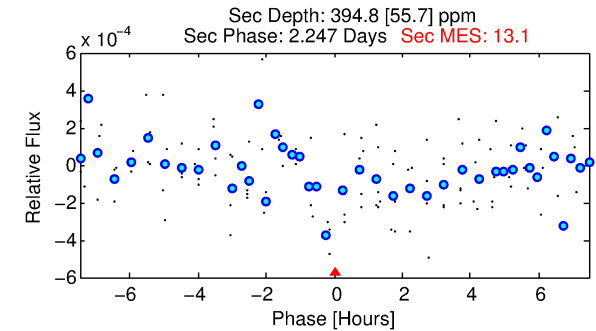
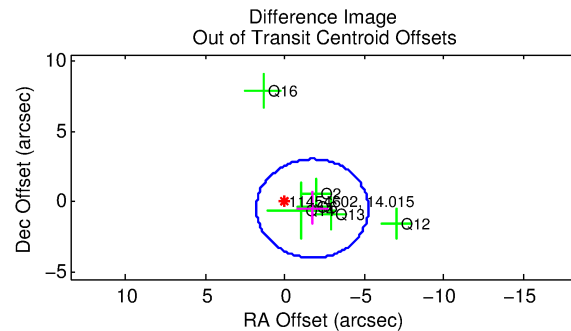
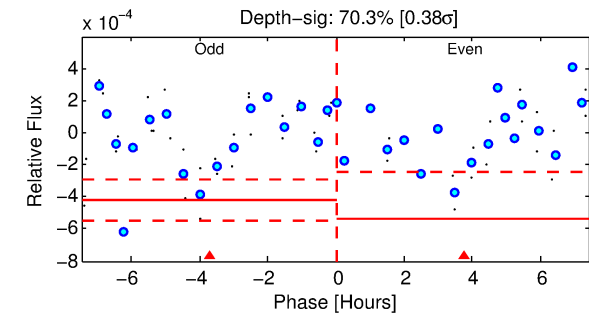
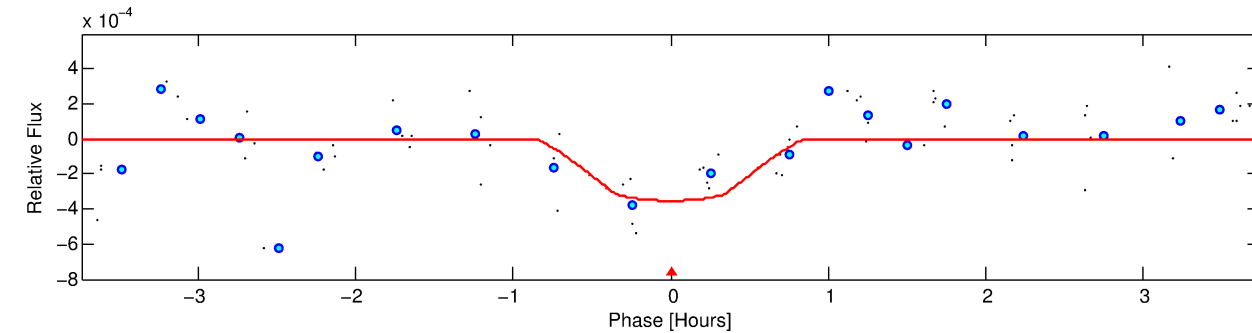
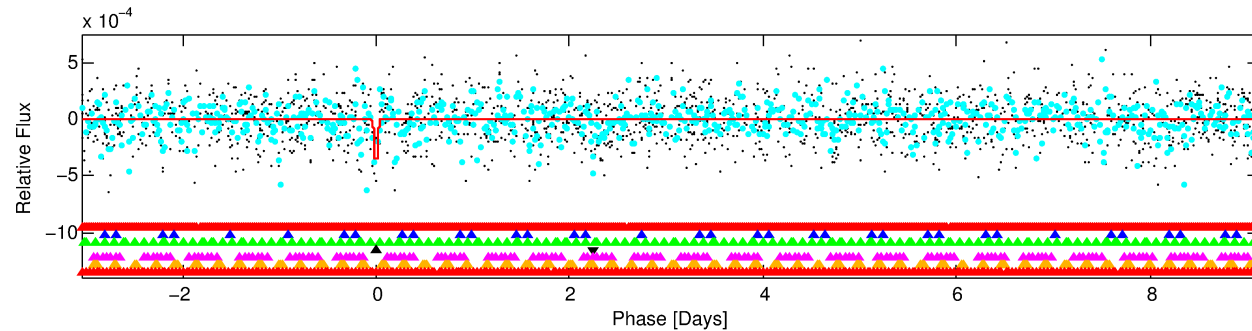
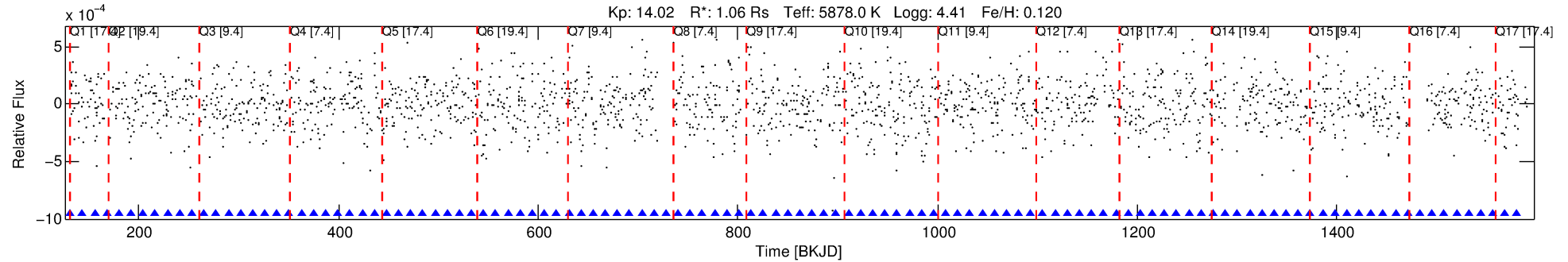
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011454602-04

No Significant Match Found

DV One-Page Summary

KIC: 11454602 Candidate: 4 of 7 Period: 12.176 d



DV Fit Results:

Period = 12.17618 [0.00016] d
Epoch = 131.5556 [0.0112] BKJD
Rp/R* = 0.0183 [0.0264]
a/R* = 57.08 [348.49]
b = 0.67 [5.23]
Seff = 109.25 [42.45]
Teq = 824 [80] K
Rp = 2.13 [3.13] Re
a = 0.1053 [0.0261] AU
Ag = 530.60 [1542.37] [0.34 σ]
Teffp = 6117 [4415] K [1.20 σ]

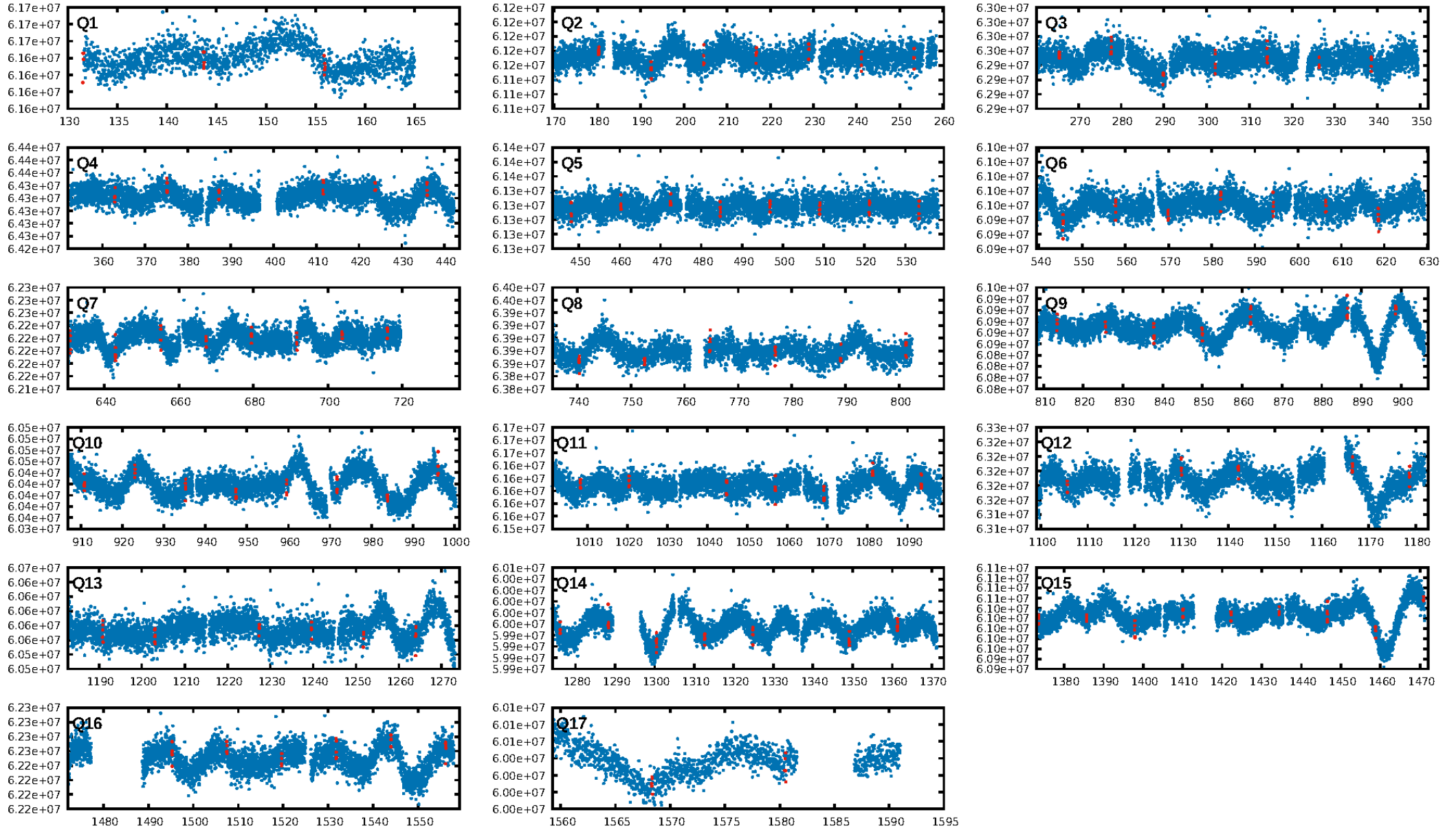
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [51.35 σ]
LongPeriod-sig: 100.0% [351.93 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [9/9]
GhostDiagnostic-chr: 4.433
Centroid-sig: 13.2%
Centroid-so: 0.640 arcsec [1.27 σ]
OotOffset-rm: 1.792 arcsec [1.53 σ]
KicOffset-rm: 1.733 arcsec [1.86 σ]
OotOffset-st: 3/0/2/1 [6]
KicOffset-st: 3/0/2/1 [6]
DiffImageQuality-fgm: 0.33 [2/6]
DiffImageOverlap-fno: 0.65 [11/17]

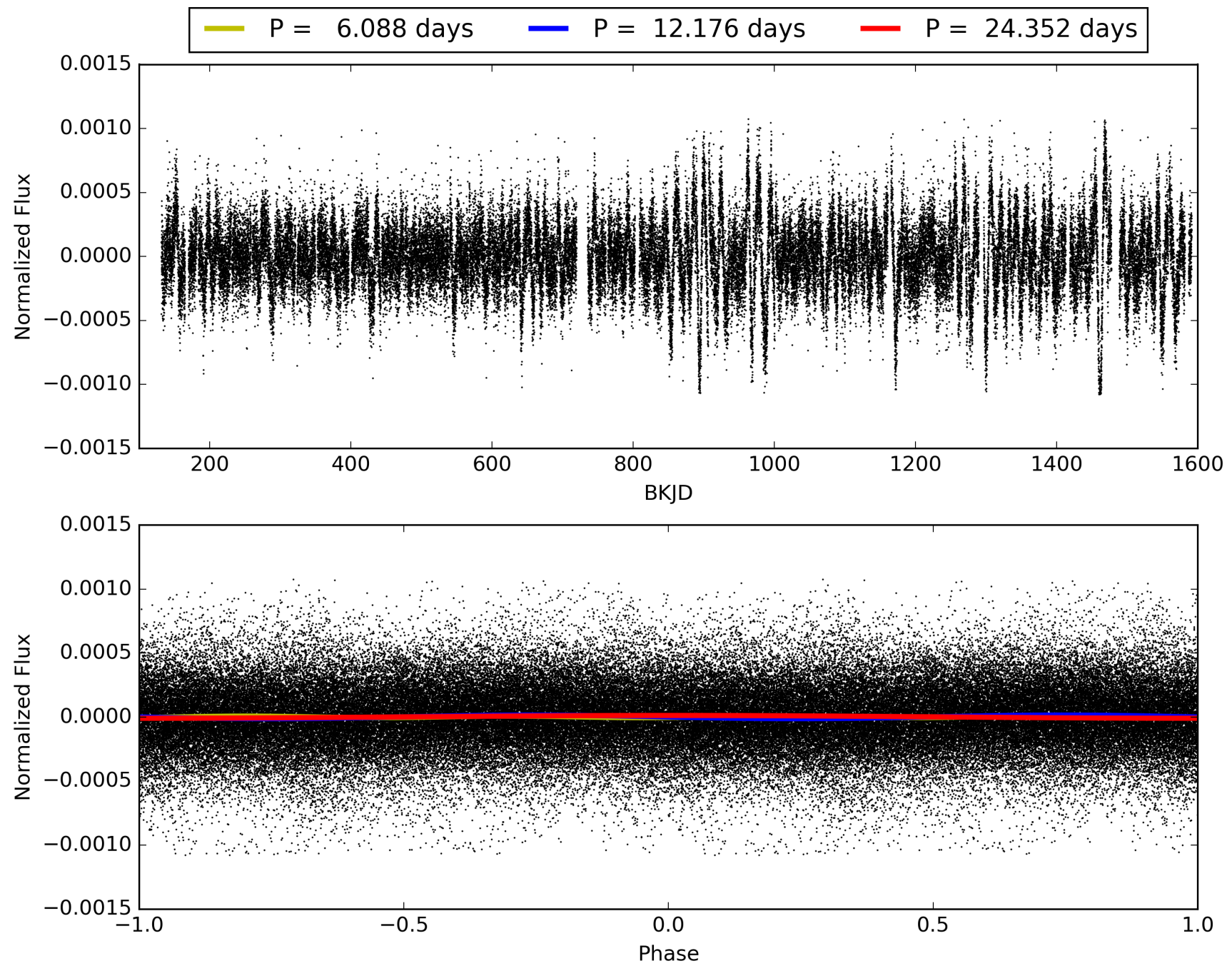
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:04:12 Z

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

TCE 011454602-04, PDC Light Curves

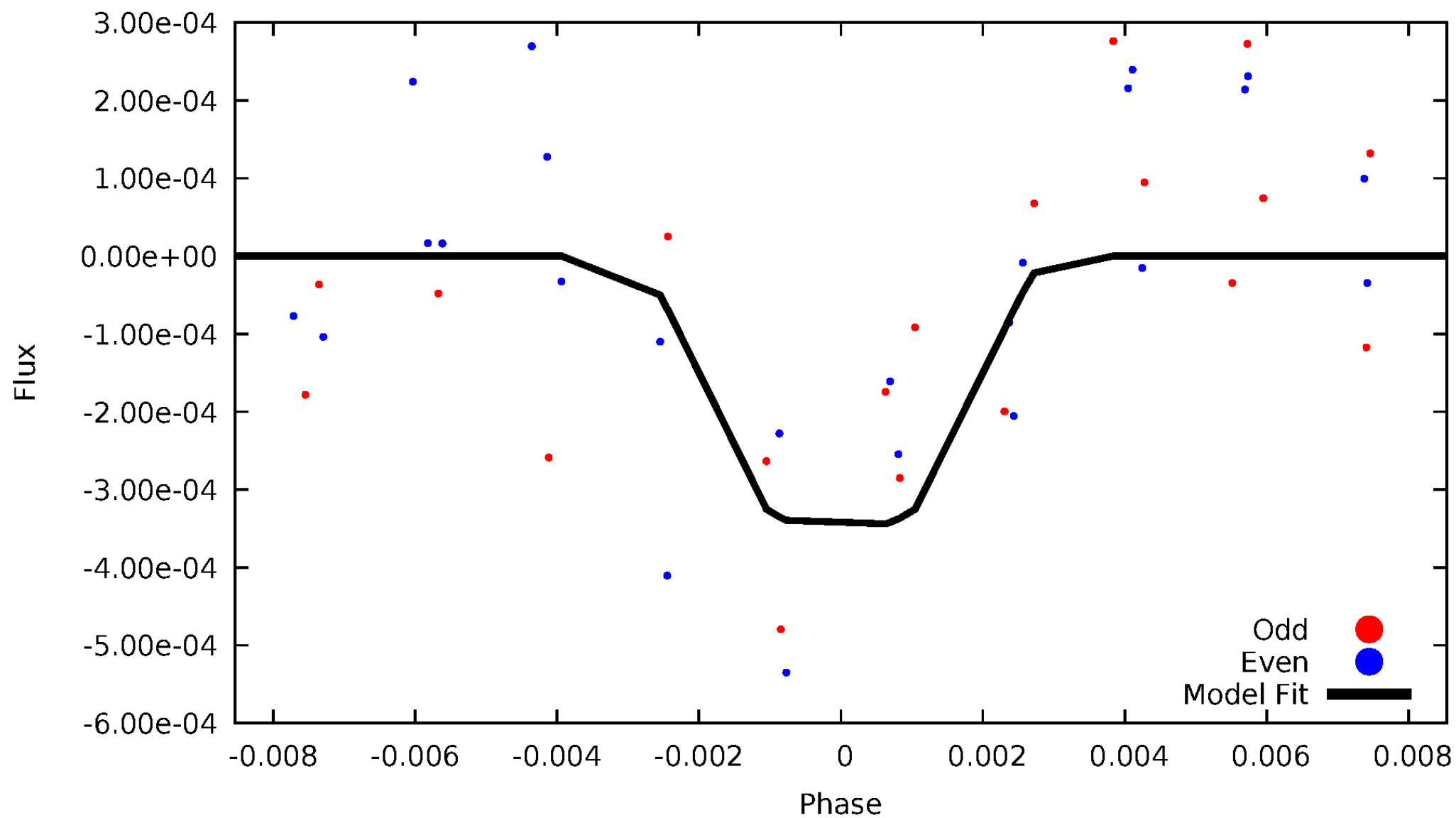


TCE 011454602-04



DV Odd/Even

TCE 011454602-04

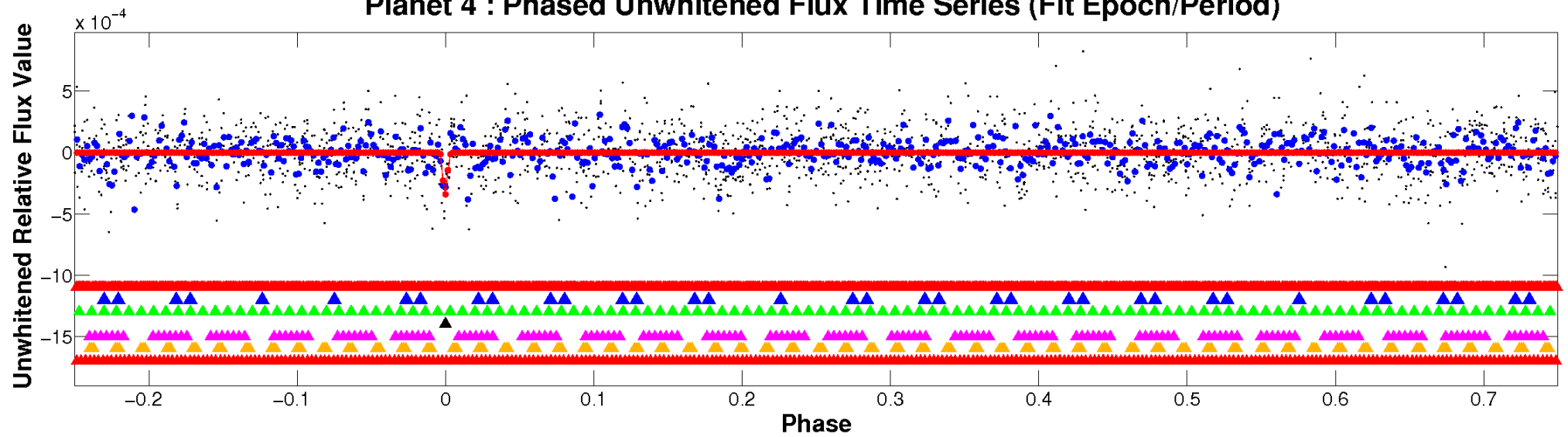


ALT Odd/Even

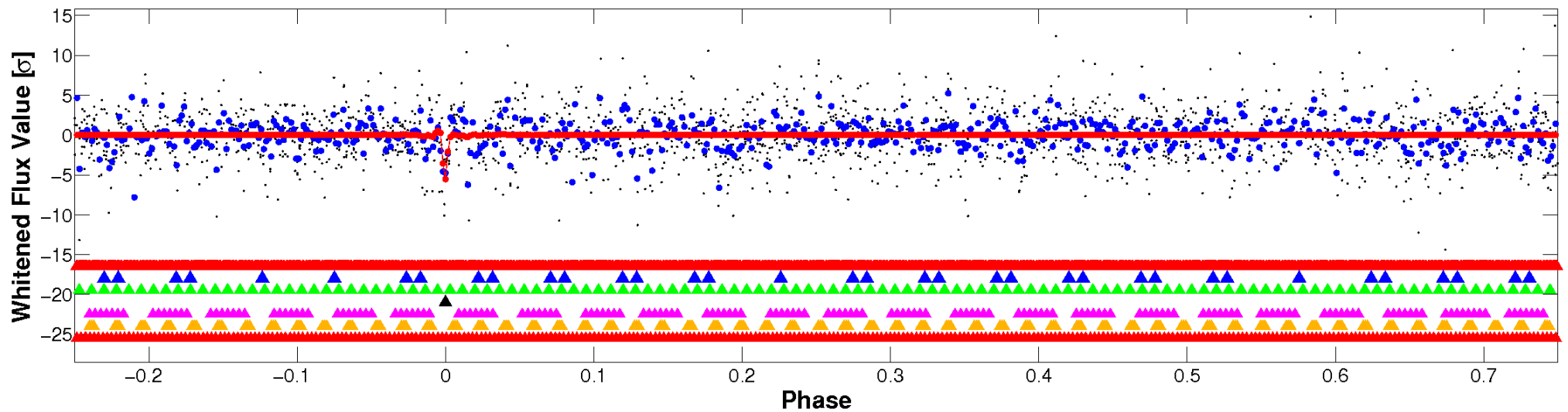
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

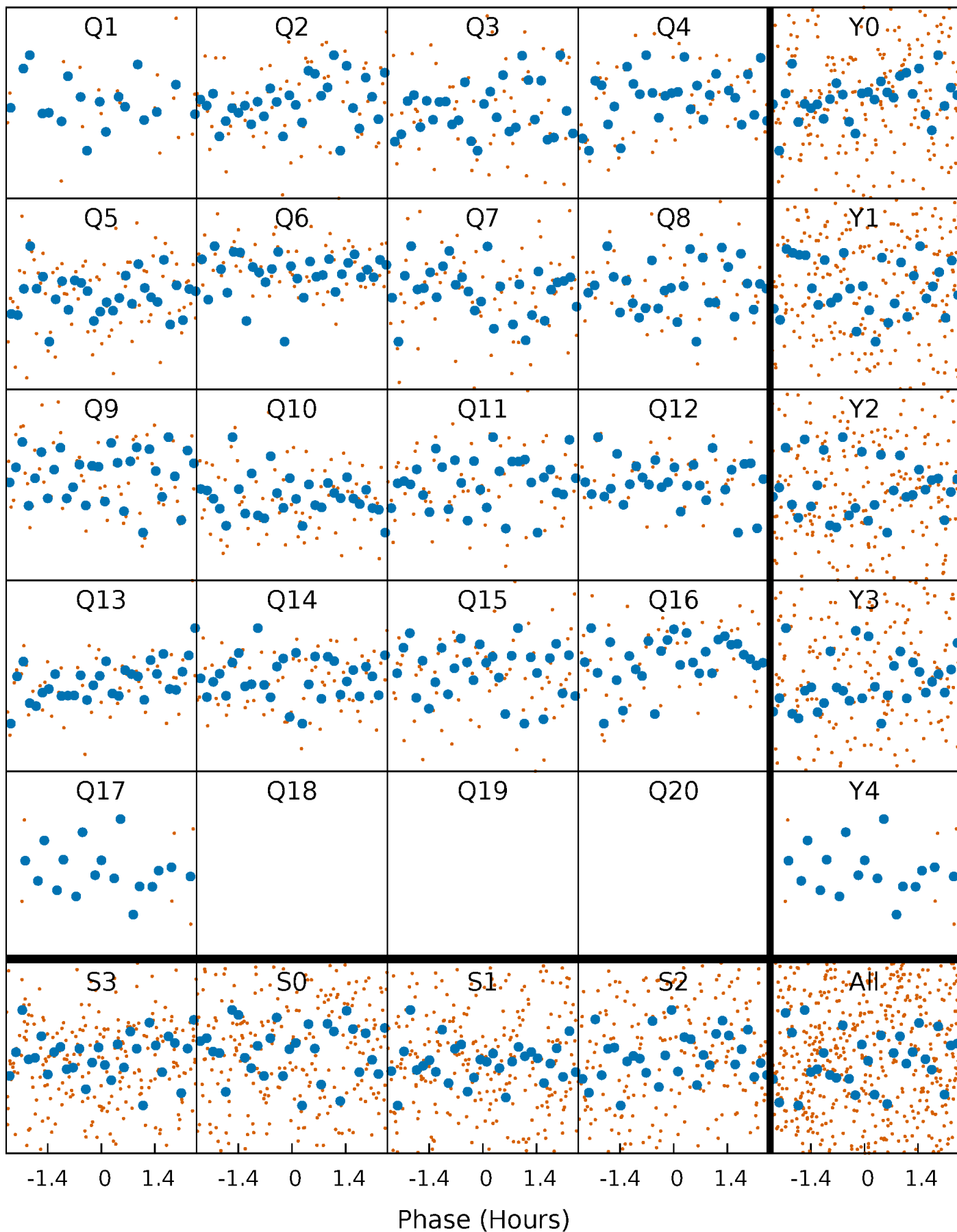


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



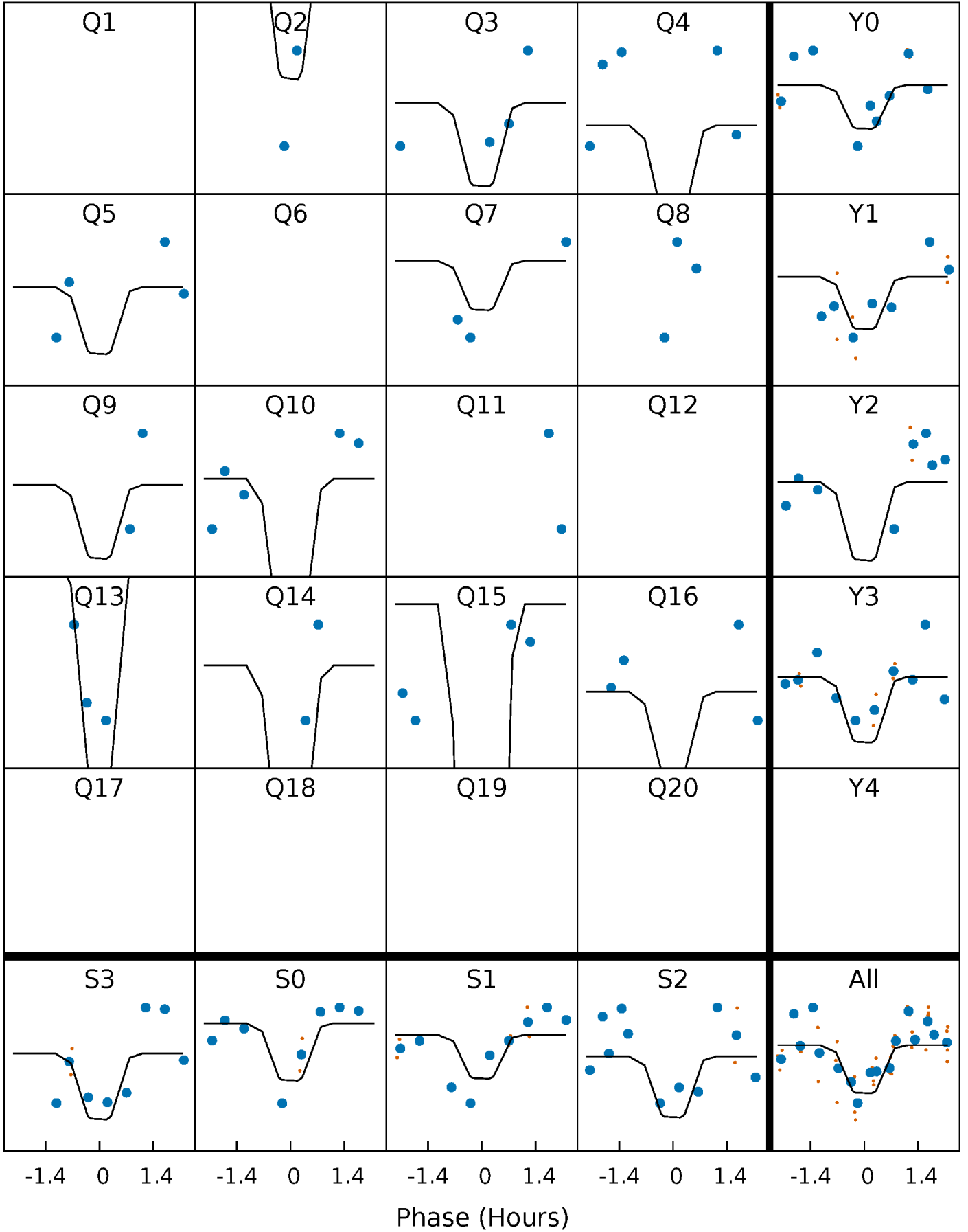
PDC Quarter-Phased Transit Curves

TCE 011454602-04 P= 12.176176 Days $T_0=131.555593$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 011454602-04 P= 12.176176 Days $T_0=131.555593$ (BKJD)

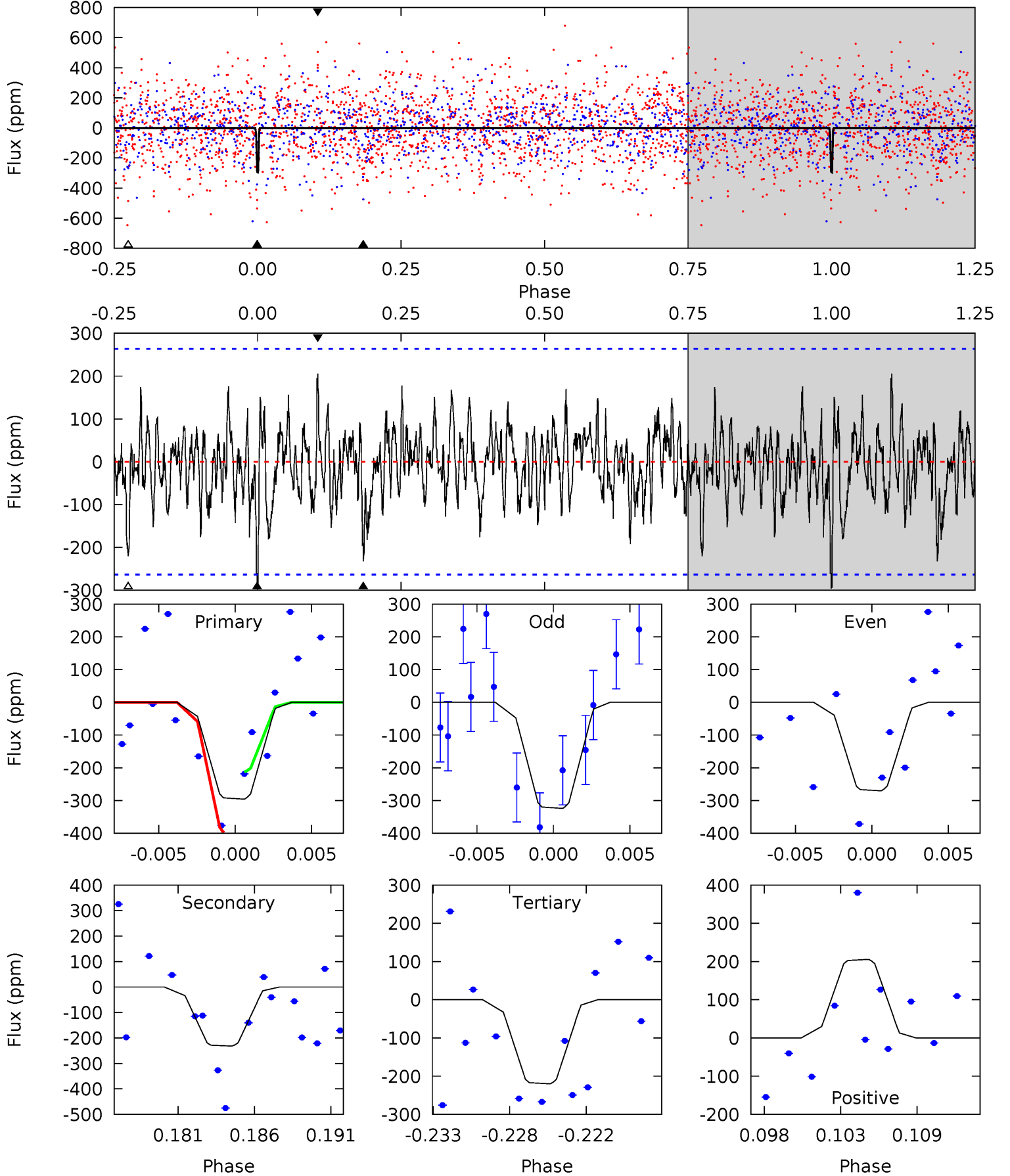


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

011454602-04, P = 12.176176 Days, E = 131.555593 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.79	4.54	4.31	4.02	5.15	2.80	1.35	1.48	1.77	0.23	0.51	0.53	1.18	0.41	1.73



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 011454602

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5878^{+156}_{-191}	$4.405^{+0.087}_{-0.203}$	$0.120^{+0.250}_{-0.300}$	$1.064^{+0.307}_{-0.141}$	$1.051^{+0.122}_{-0.136}$	$1.228^{+0.542}_{-0.601}$
	+3%/-3%	+2%/-5%	+208%/-250%	+29%/-13%	+12%/-13%	+44%/-49%
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 011454602-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-232 ± 51	$3.36^{+2.88}_{-2.39}$	1166^{+89}_{-62}	4483^{+3891}_{-855}	127^{+1358}_{-92}
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

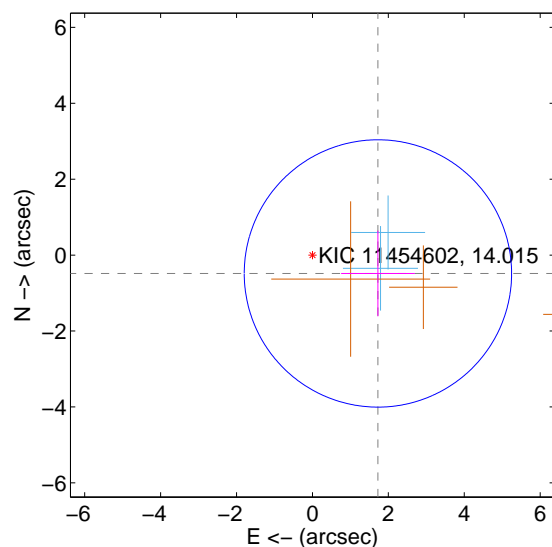
Supplemental centroid analysis for 011454602-04. Kepler magnitude: 14.02. Transit SNR 16.08

There are 2 quarters with good PRF difference image offsets

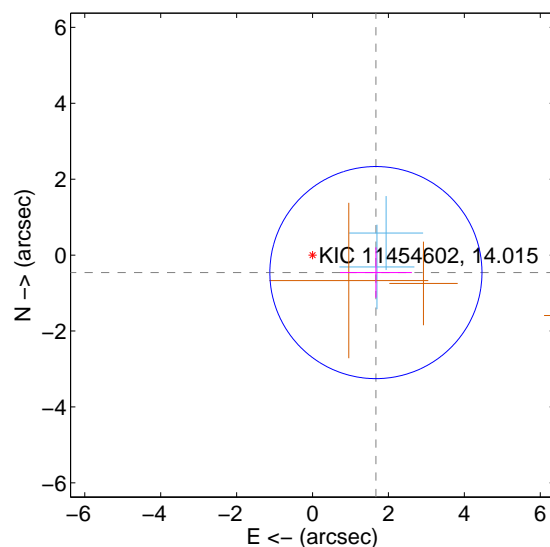
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.792 ± 1.174	1.53	-1.725 ± 0.970	-0.484 ± 1.129
PRF-fit source offset from KIC position	1.733 ± 0.932	1.86	-1.670 ± 0.949	-0.461 ± 0.664
photometric centroid source offset	0.64 ± 0.50	1.27	0.52 ± 0.49	-0.38 ± 0.52

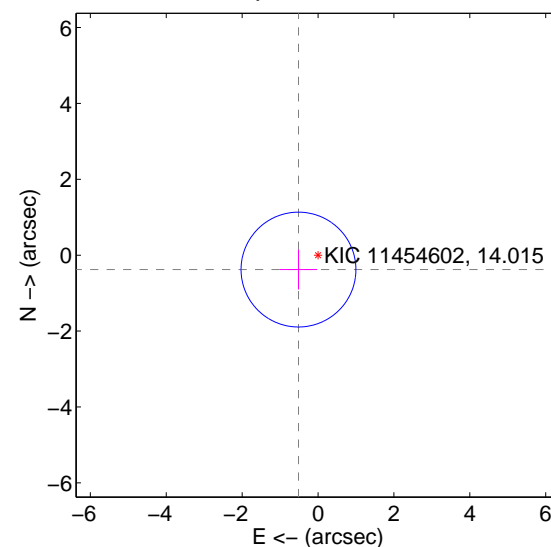
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

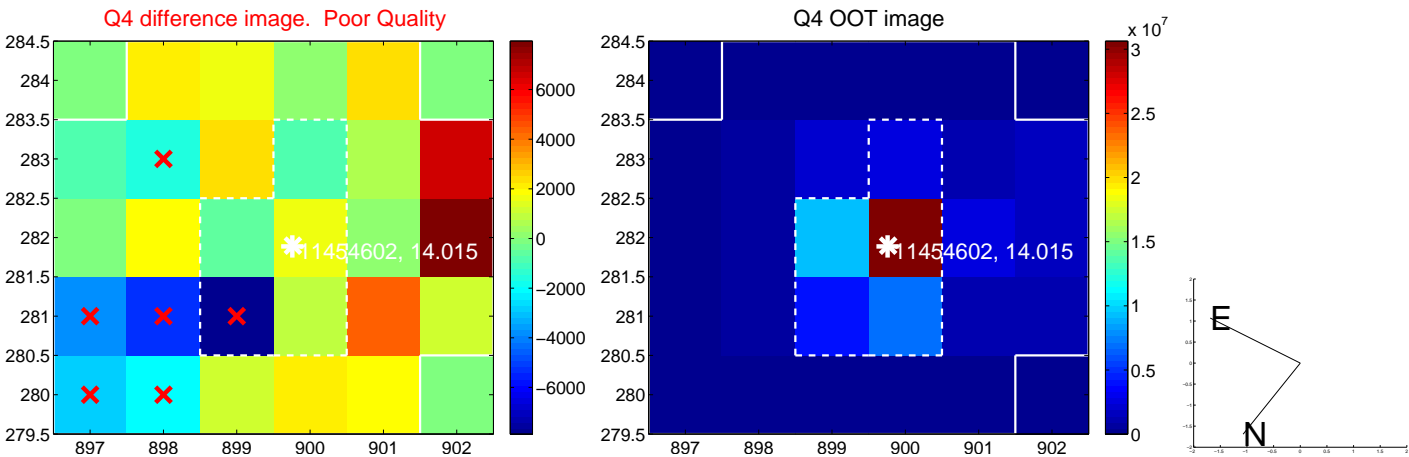
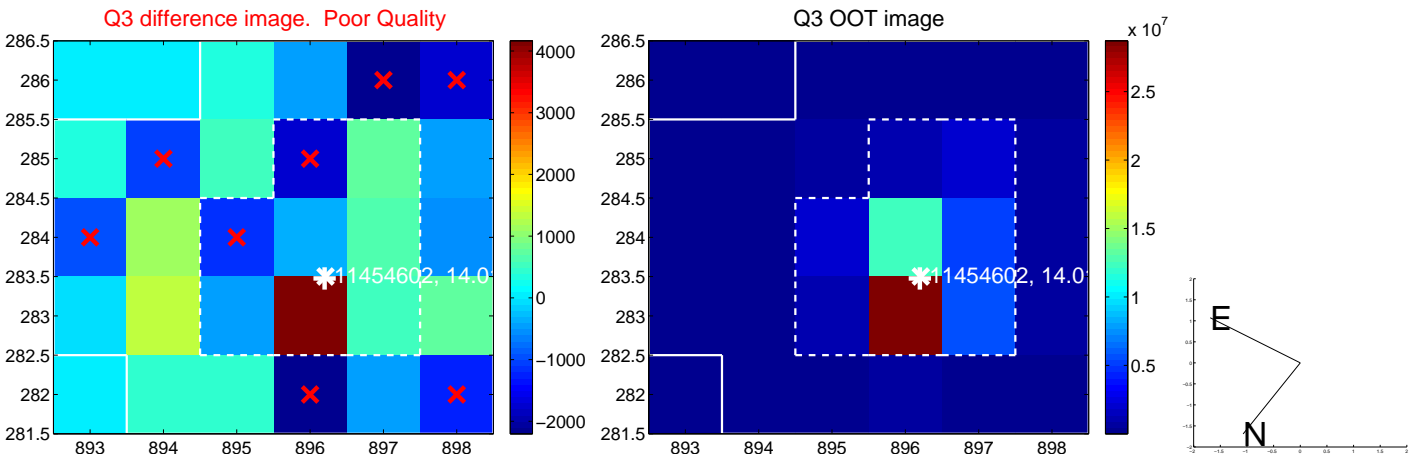
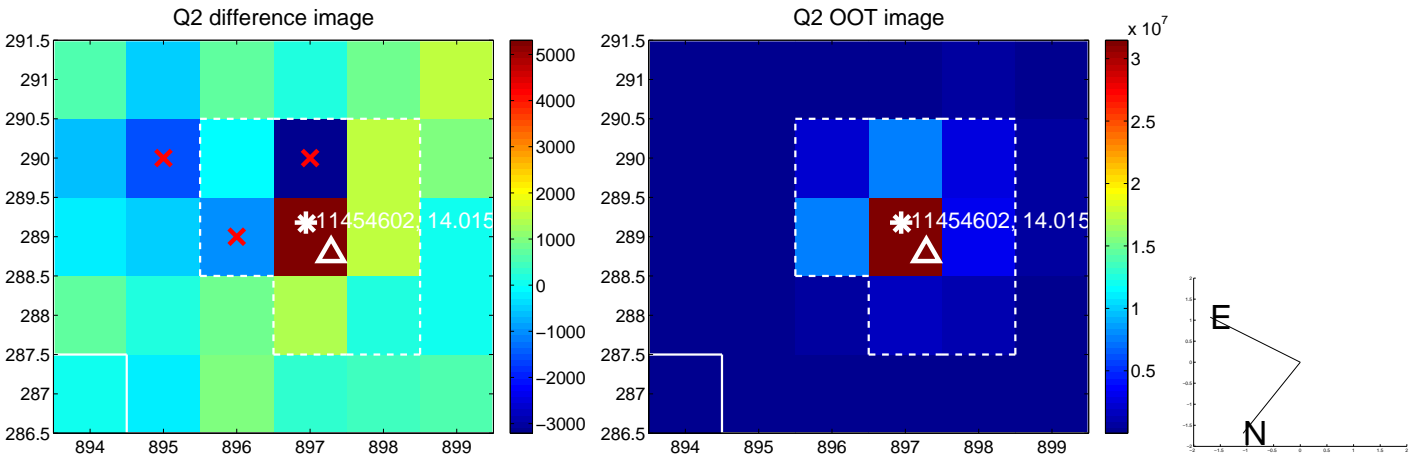
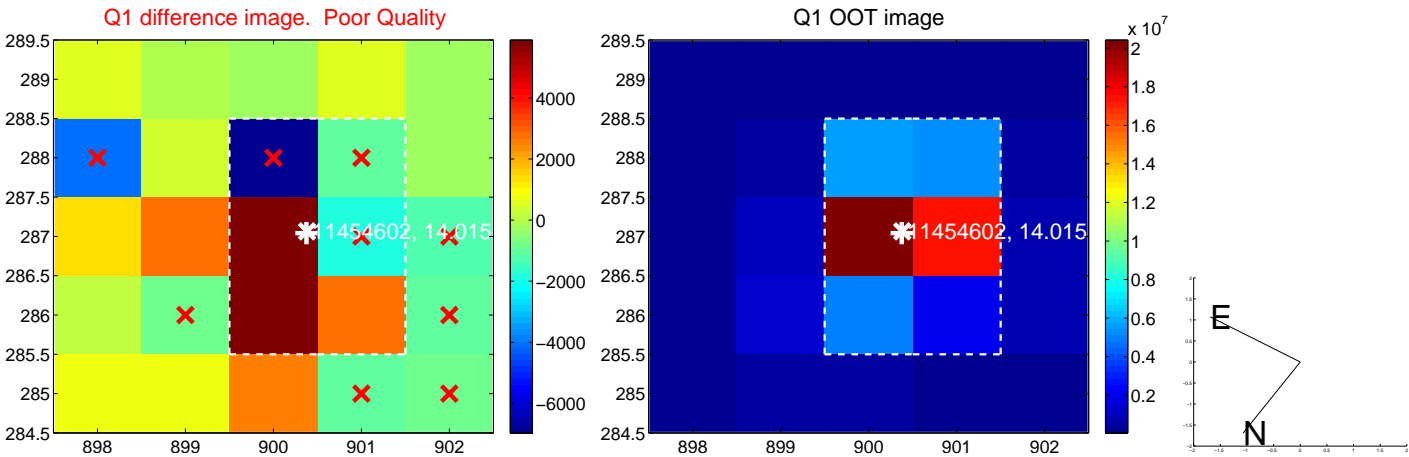


offset from photometric centroids

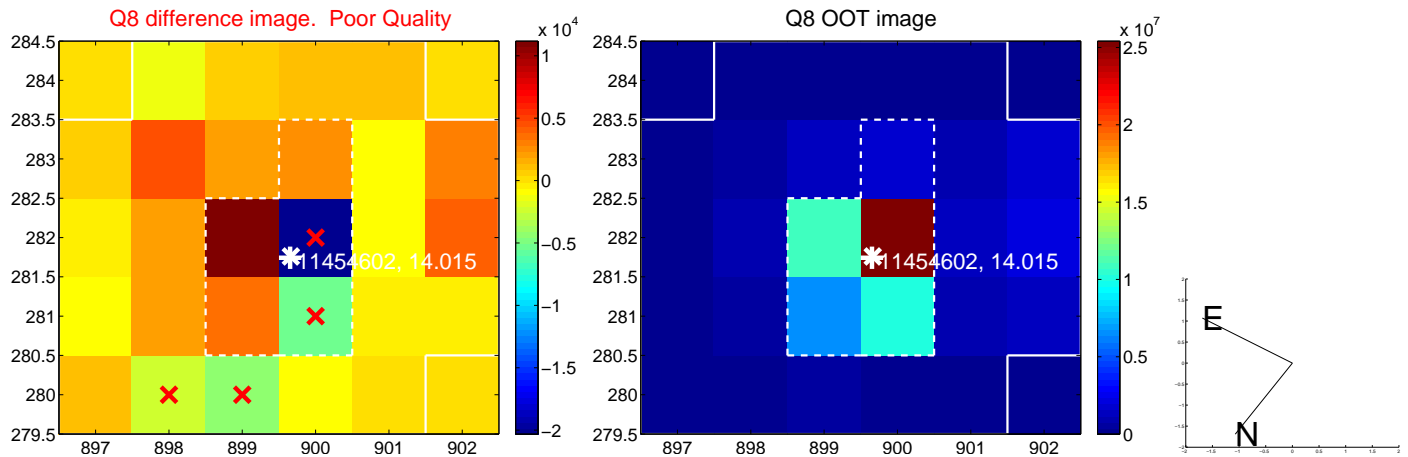
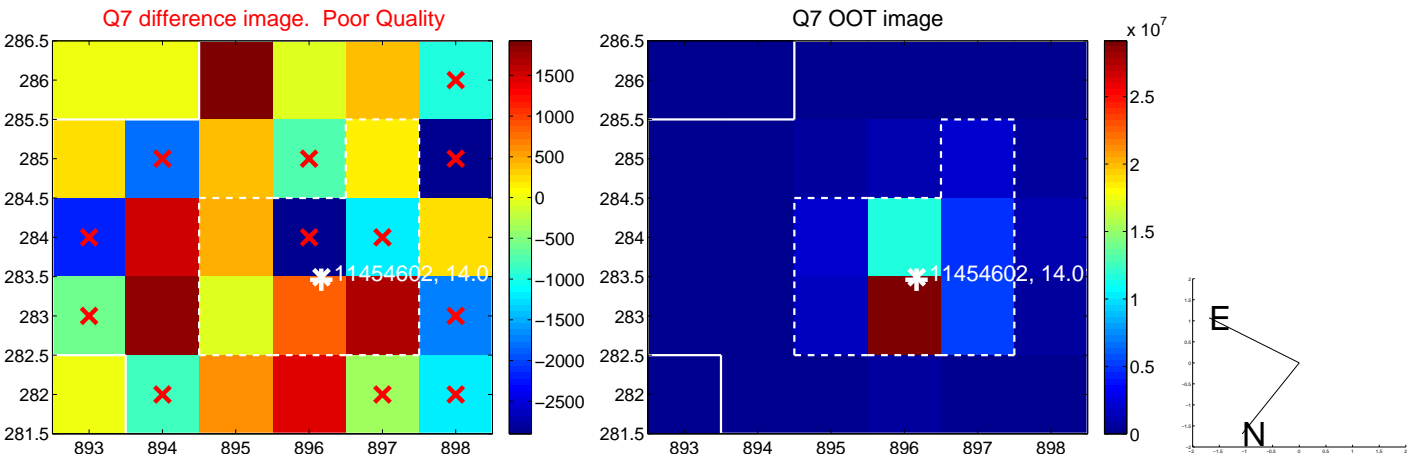
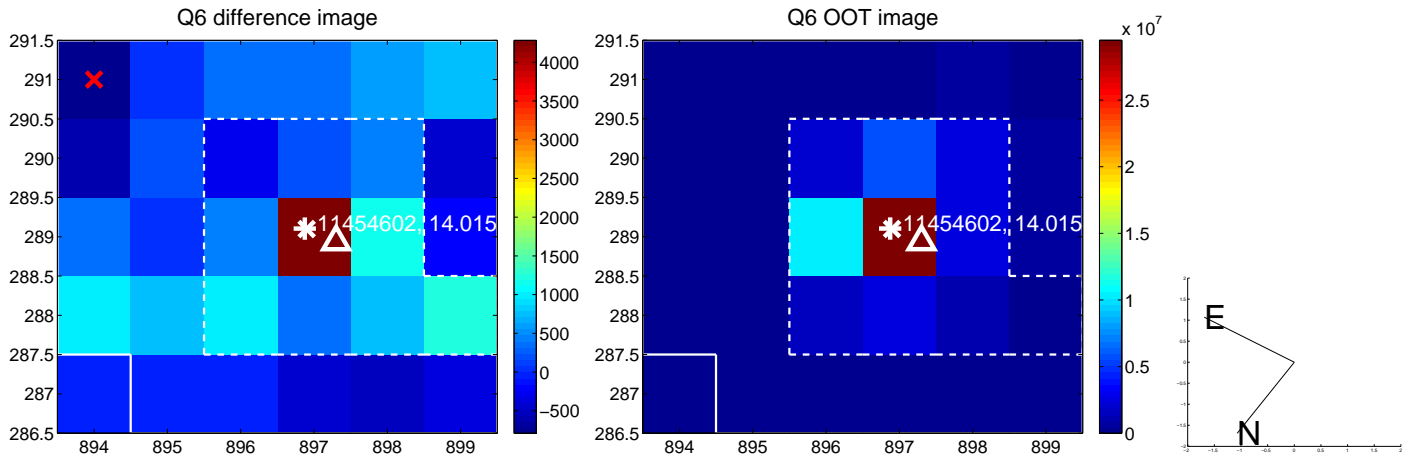
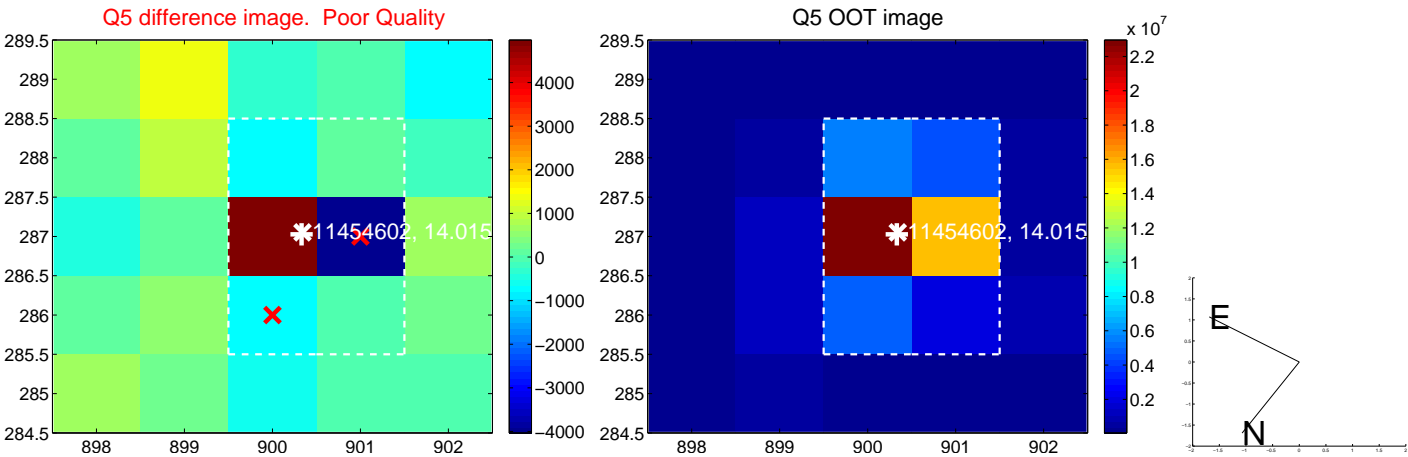


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

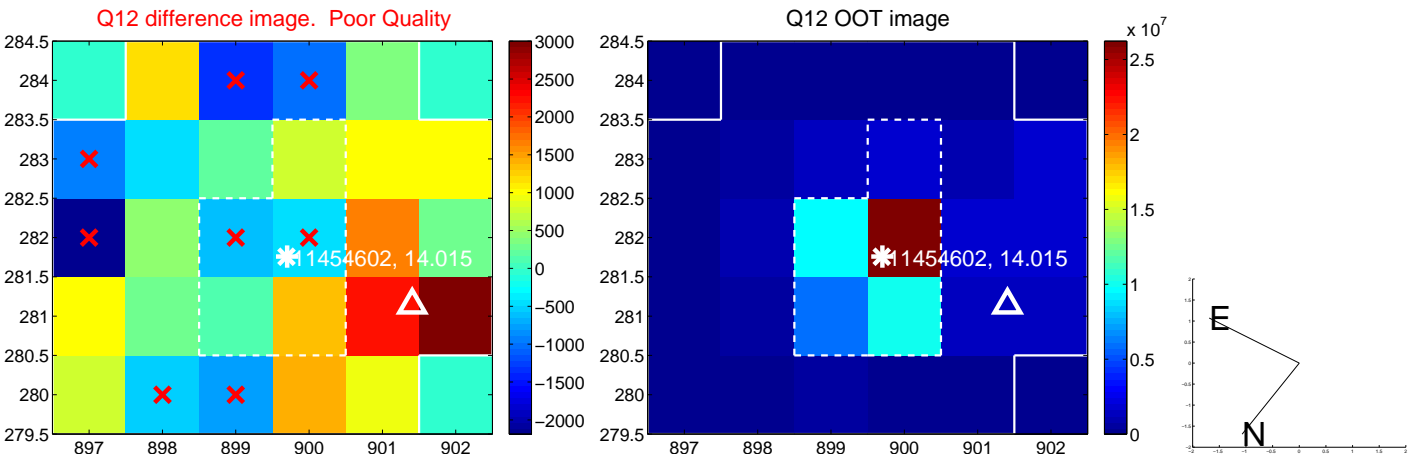
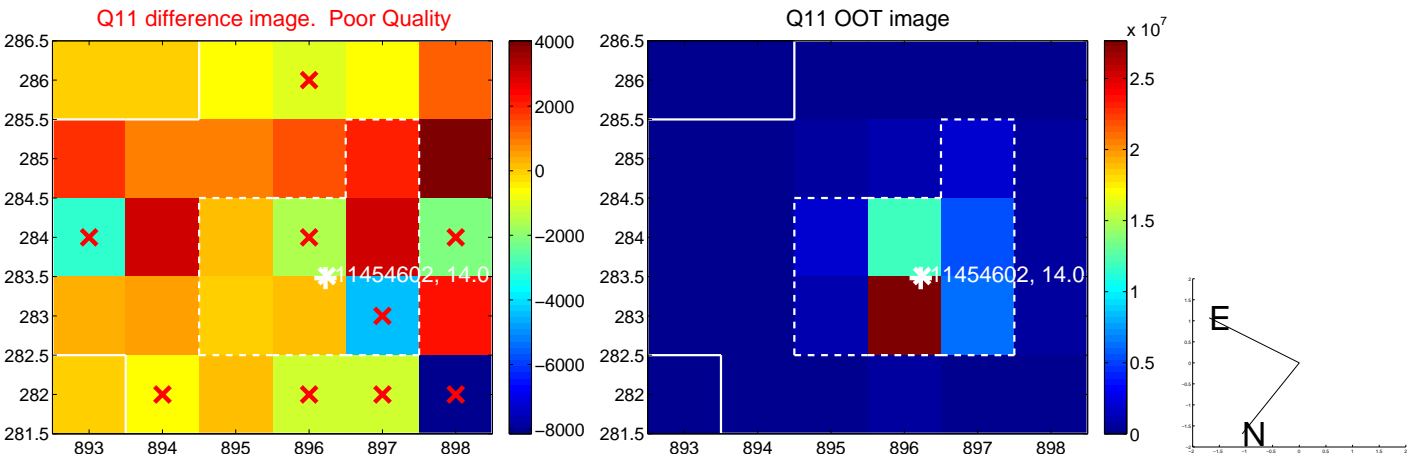
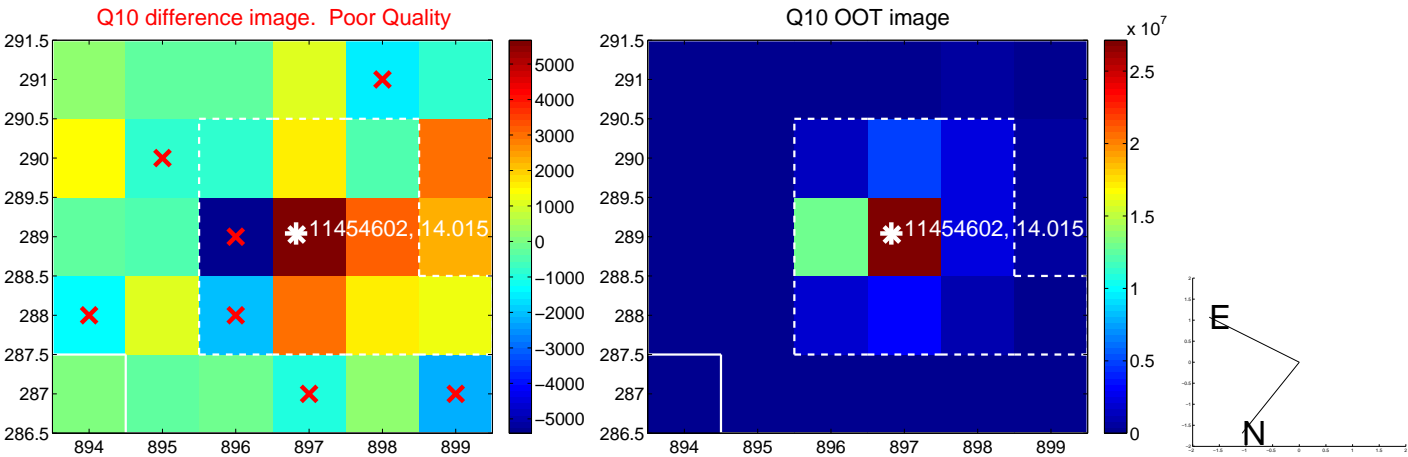
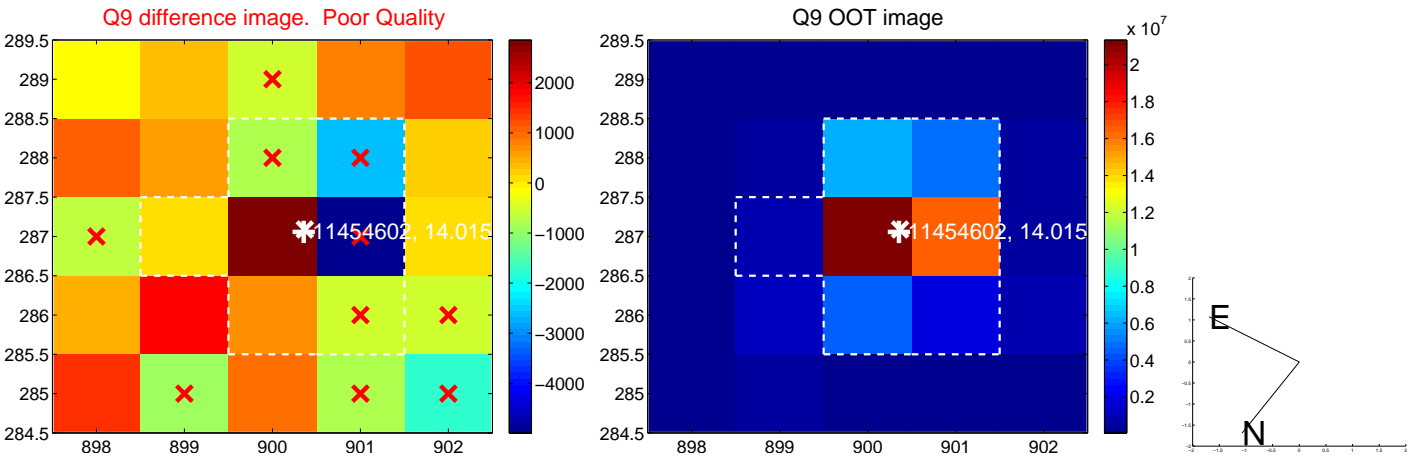
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



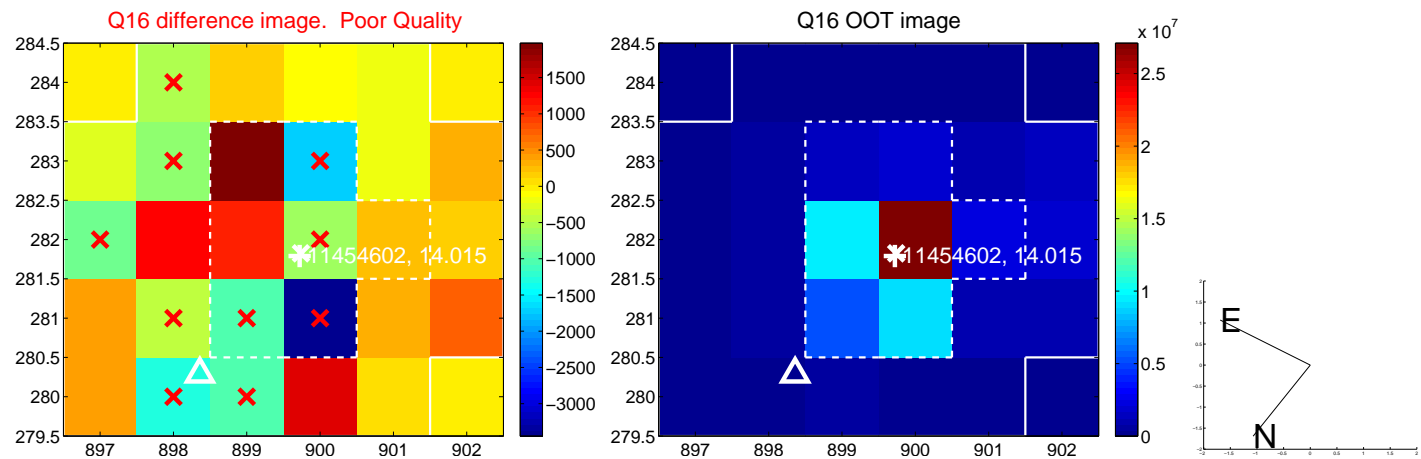
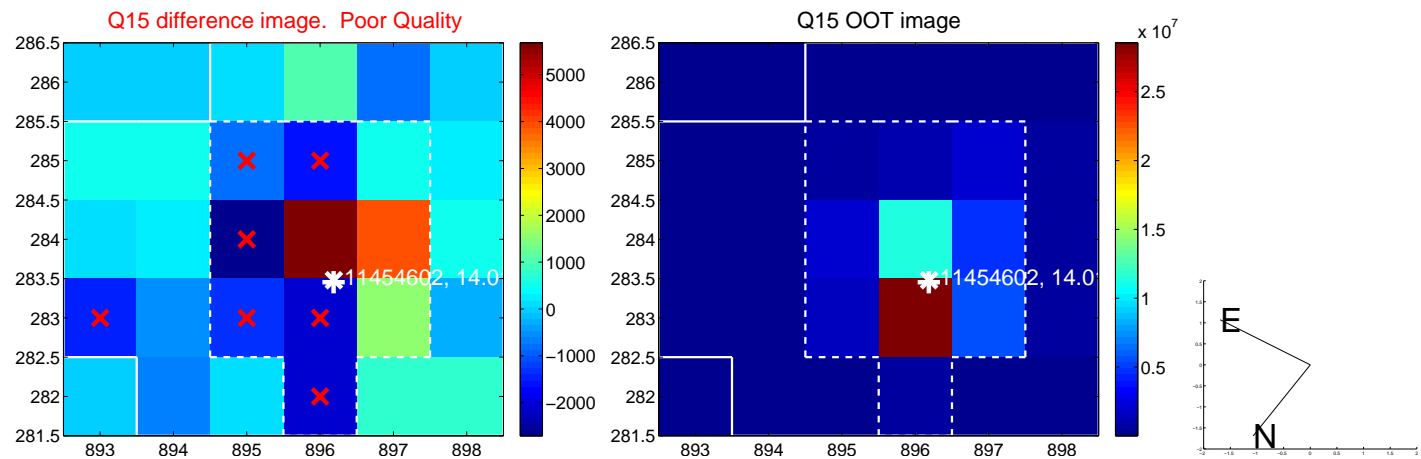
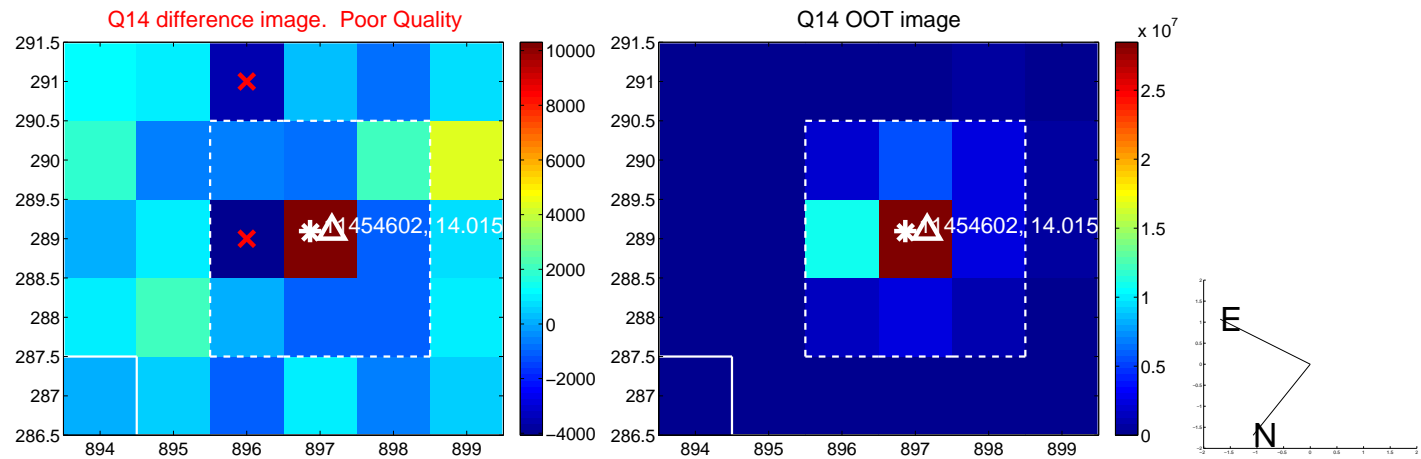
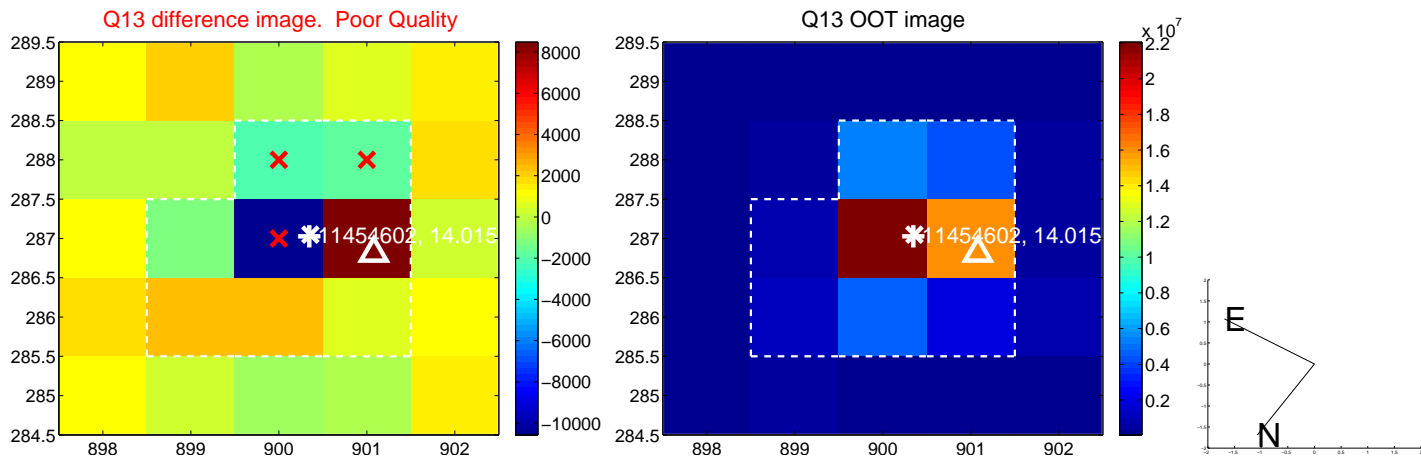
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



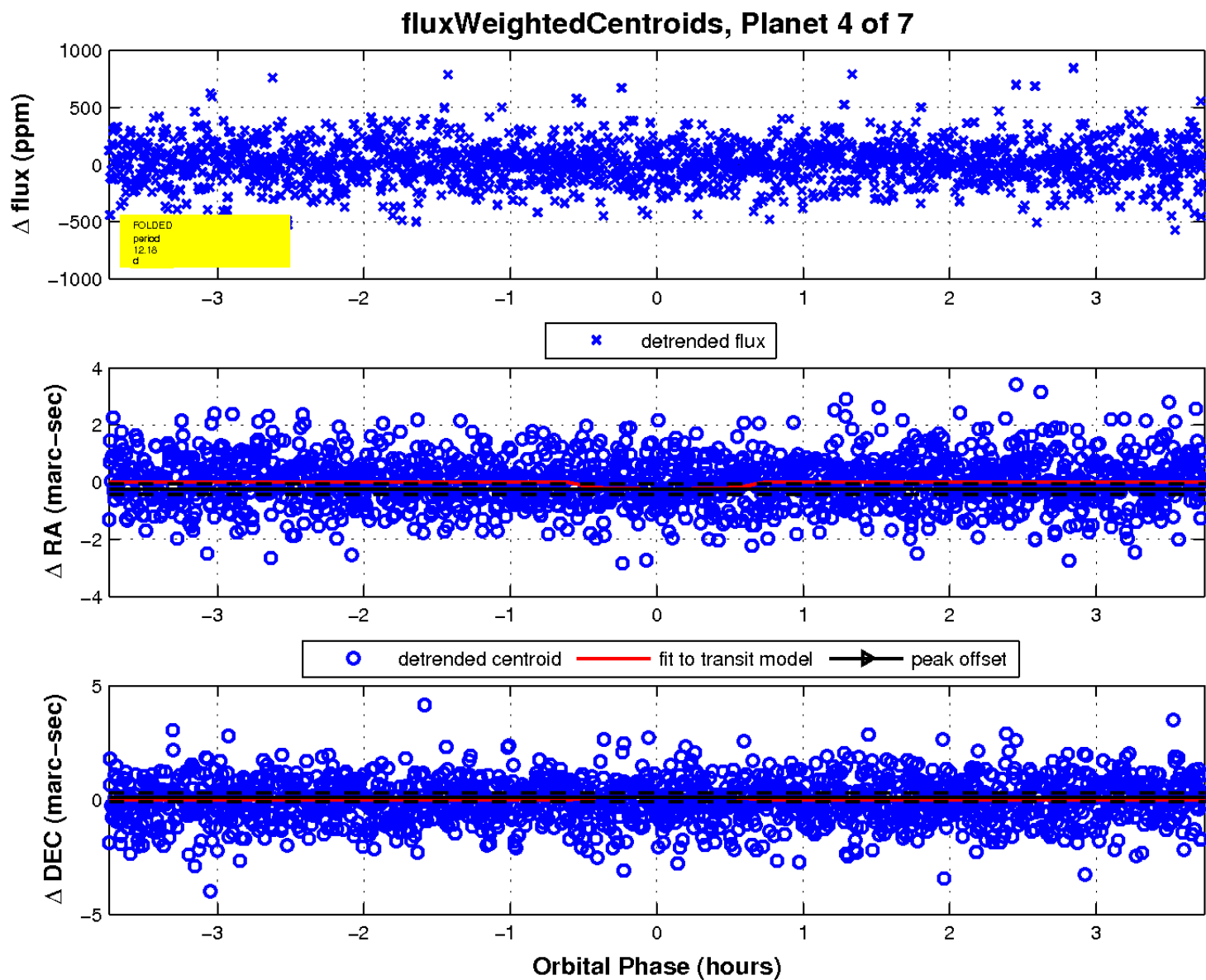
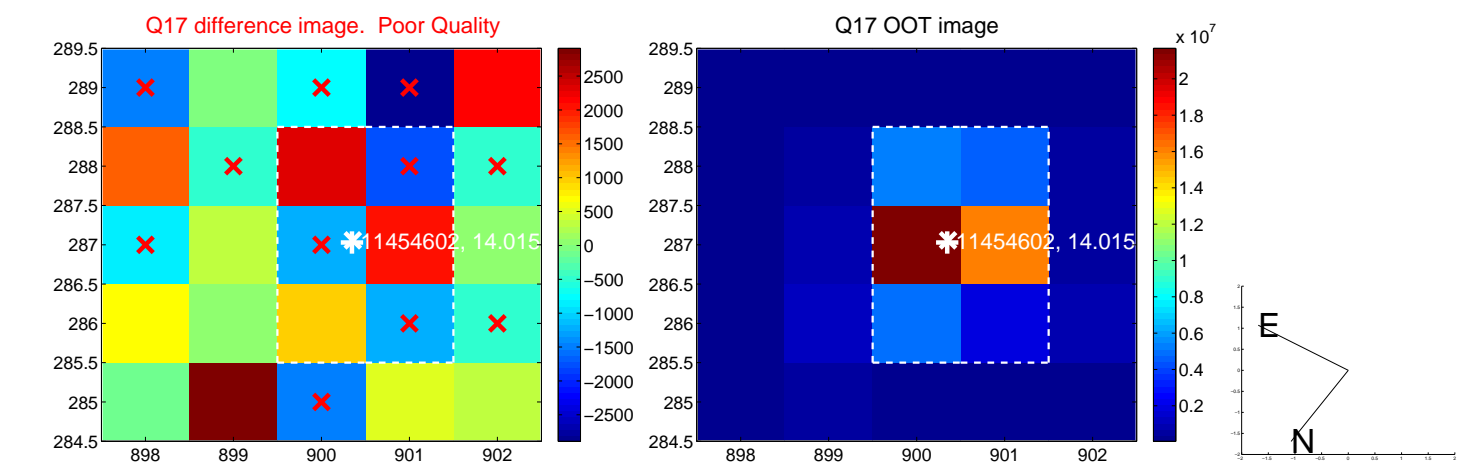
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

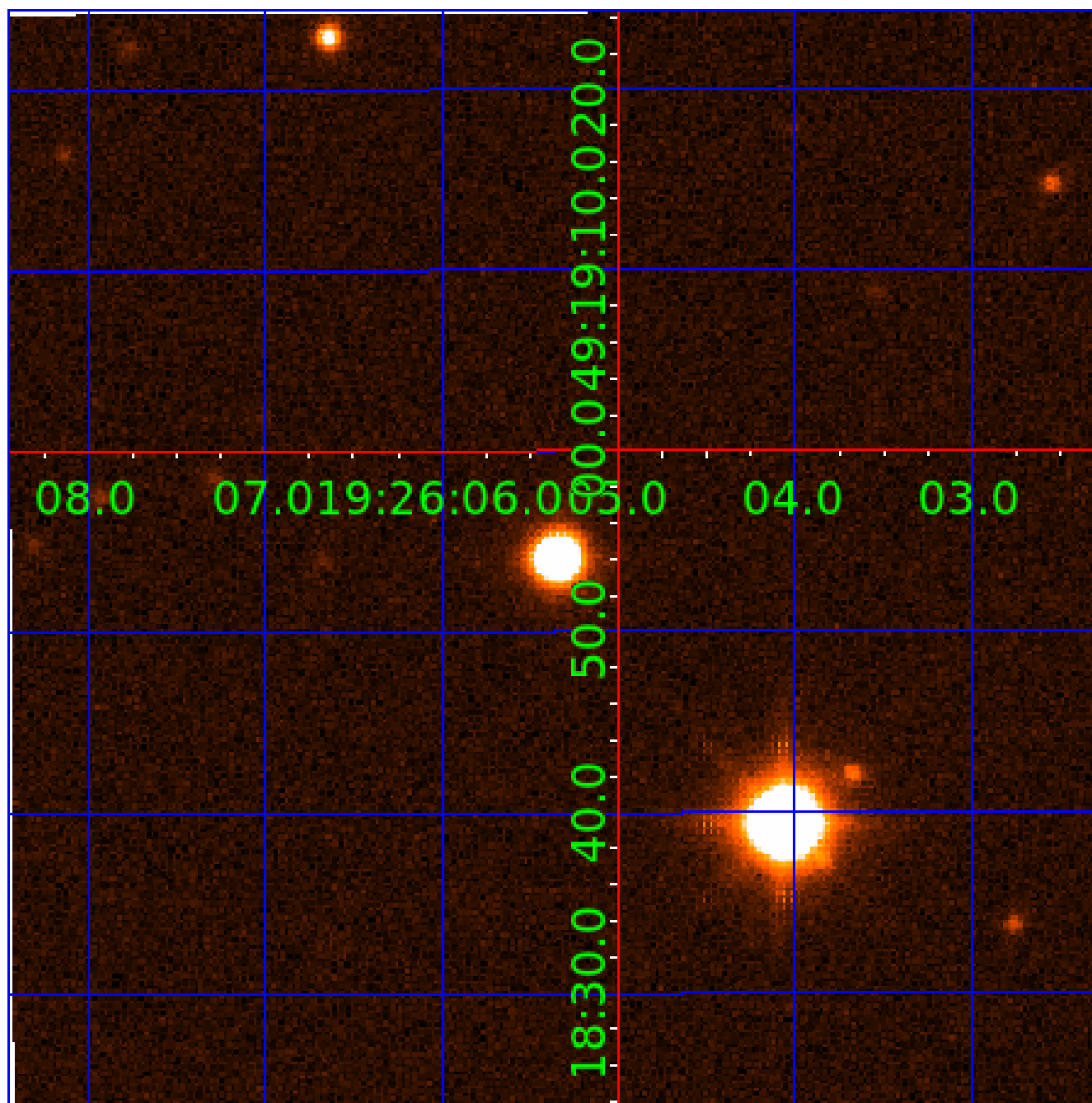


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011454602

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})
011454602-01	OBS	No	1.204542	131.607513	15.9	9.112	7.4	8.5	1.06	5878	0.42	2387.87
011454602-02	OBS	No	40.784419	159.367250	2303.5	1.500	24.7	-1.0	1.06	5878	5.08	21.80
011454602-03	OBS	No	3.754298	134.337688	210.7	3.031	20.4	18.9	1.06	5878	2.53	524.49
011454602-04	OBS	No	12.176176	131.555593	353.0	1.247	17.6	16.1	1.06	5878	2.13	109.25
011454602-05	OBS	No	8.622852	140.092733	301.6	1.096	16.0	13.3	1.06	5878	1.86	173.08
011454602-06	OBS	No	8.544381	138.282764	246.6	1.515	14.9	12.2	1.06	5878	1.67	175.20
011454602-07	OBS	No	4.177766	132.060994	1361.2	1.500	14.4	-1.0	1.06	5878	3.91	454.83

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011454602-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET
011454602-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—NO_FITS—CENT_NOFITS
011454602-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_RESOLVED_OFFSET
011454602-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_MEAS
011454602-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS—HALO_GHOST
011454602-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV
011454602-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

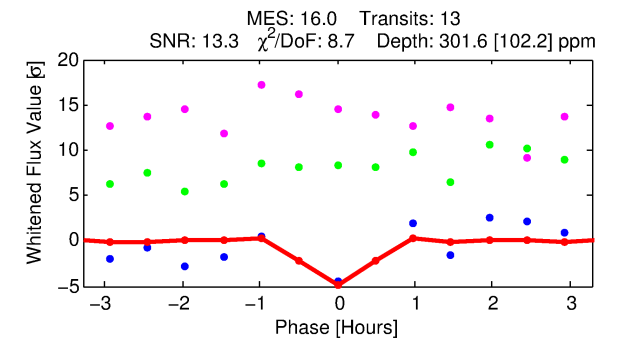
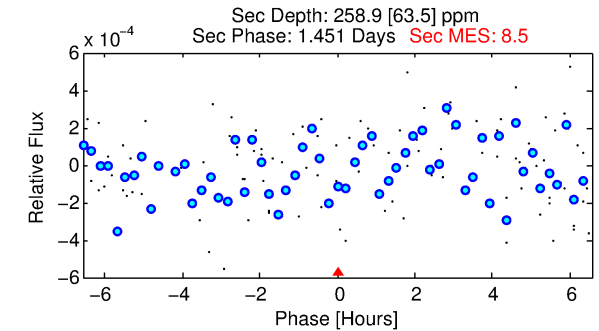
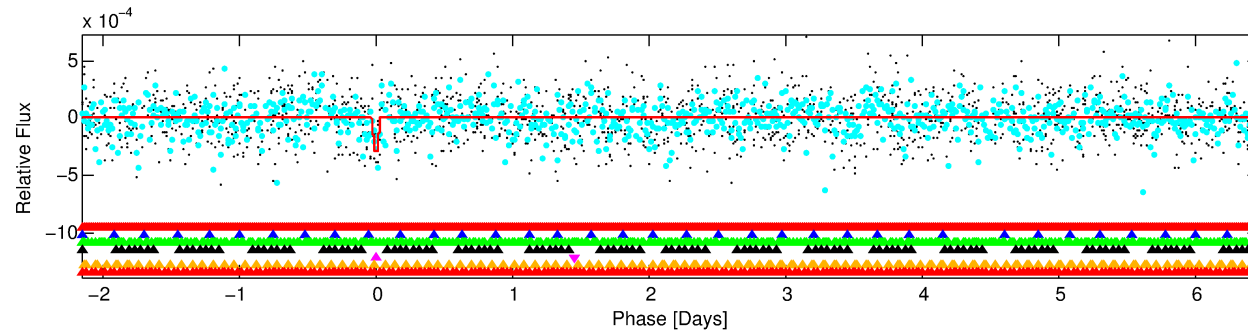
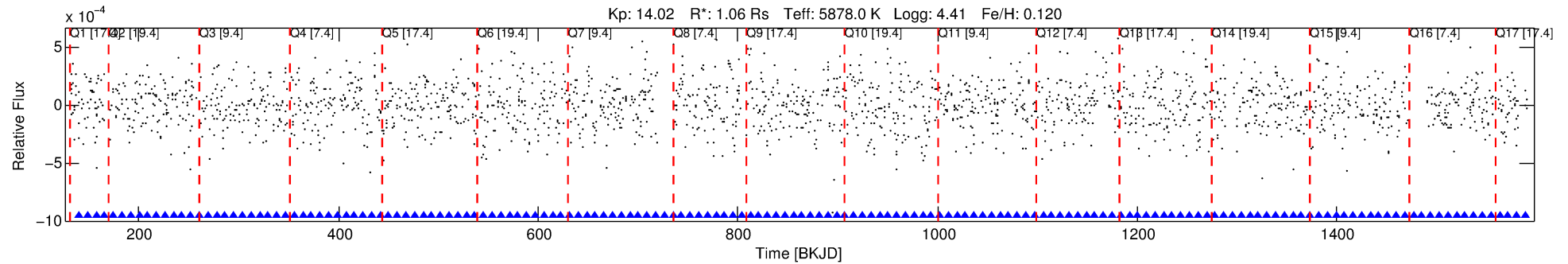
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011454602-05

No Significant Match Found

DV One-Page Summary

KIC: 11454602 Candidate: 5 of 7 Period: 8.623 d

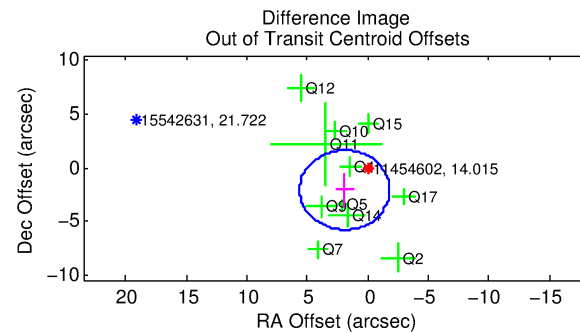
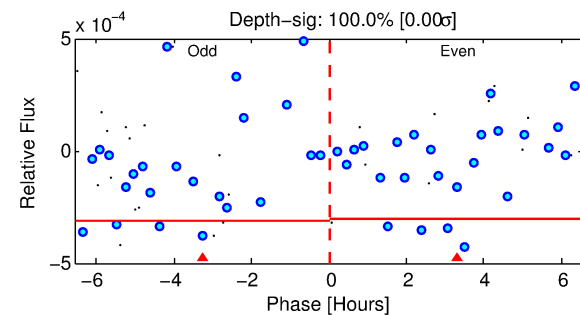
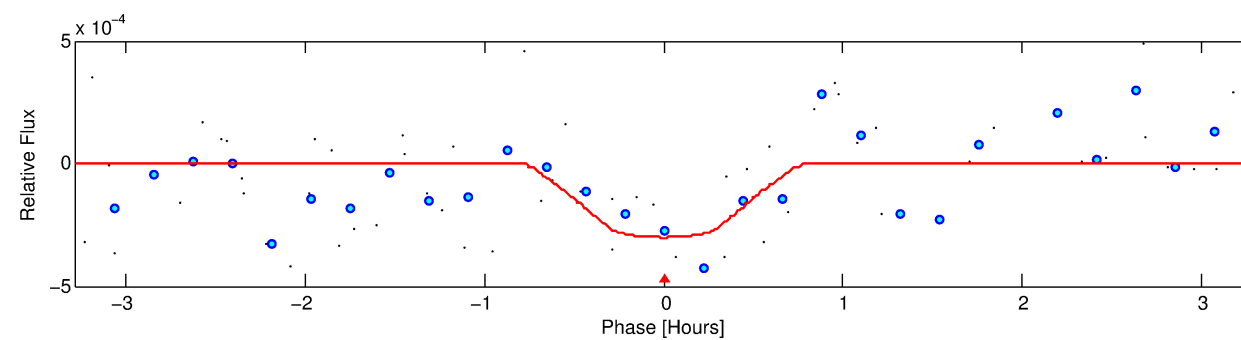


DV Fit Results:

Period = 8.62285 [0.00010] d
Epoch = 140.0927 [0.0078] BKJD
Rp/R* = 0.0160 [0.1123]
a/R* = 58.69 [1866.84]
b = 0.28 [104.16]
Seff = 173.08 [67.26]
Teq = 925 [90] K
Rp = 1.86 [13.05] Re
a = 0.0836 [0.0207] AU
Ag = 287.80 [4034.16] [0.07σ]
Teffp = 5890 [20634] K [0.24σ]

DV Diagnostic Results:

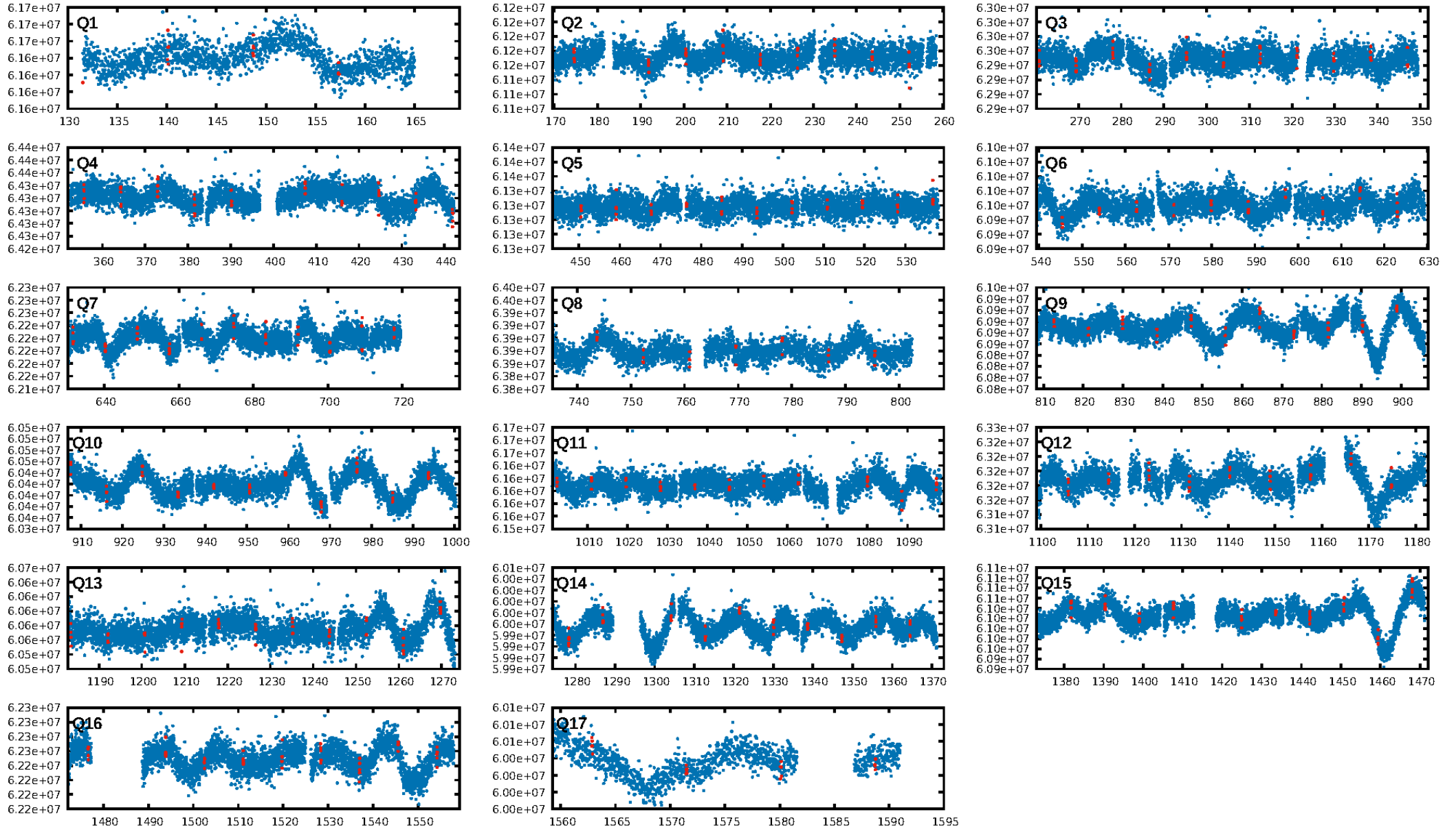
ShortPeriod-sig: 68.6% [1.01σ]
LongPeriod-sig: 100.0% [51.35σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 1.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [12/12]
GhostDiagnostic-chr: -0.05845
Centroid-sig: 0.1%
Centroid-so: 1.155 arcsec [2.14σ]
OotOffset-rm: 2.843 arcsec [2.30σ]
KicOffset-rm: 2.795 arcsec [2.27σ]
OotOffset-st: 3/3/2/3 [11]
KicOffset-st: 3/3/2/3 [11]
DiffImageQuality-fgm: 0.00 [0/11]
DiffImageOverlap-fno: 0.94 [16/17]



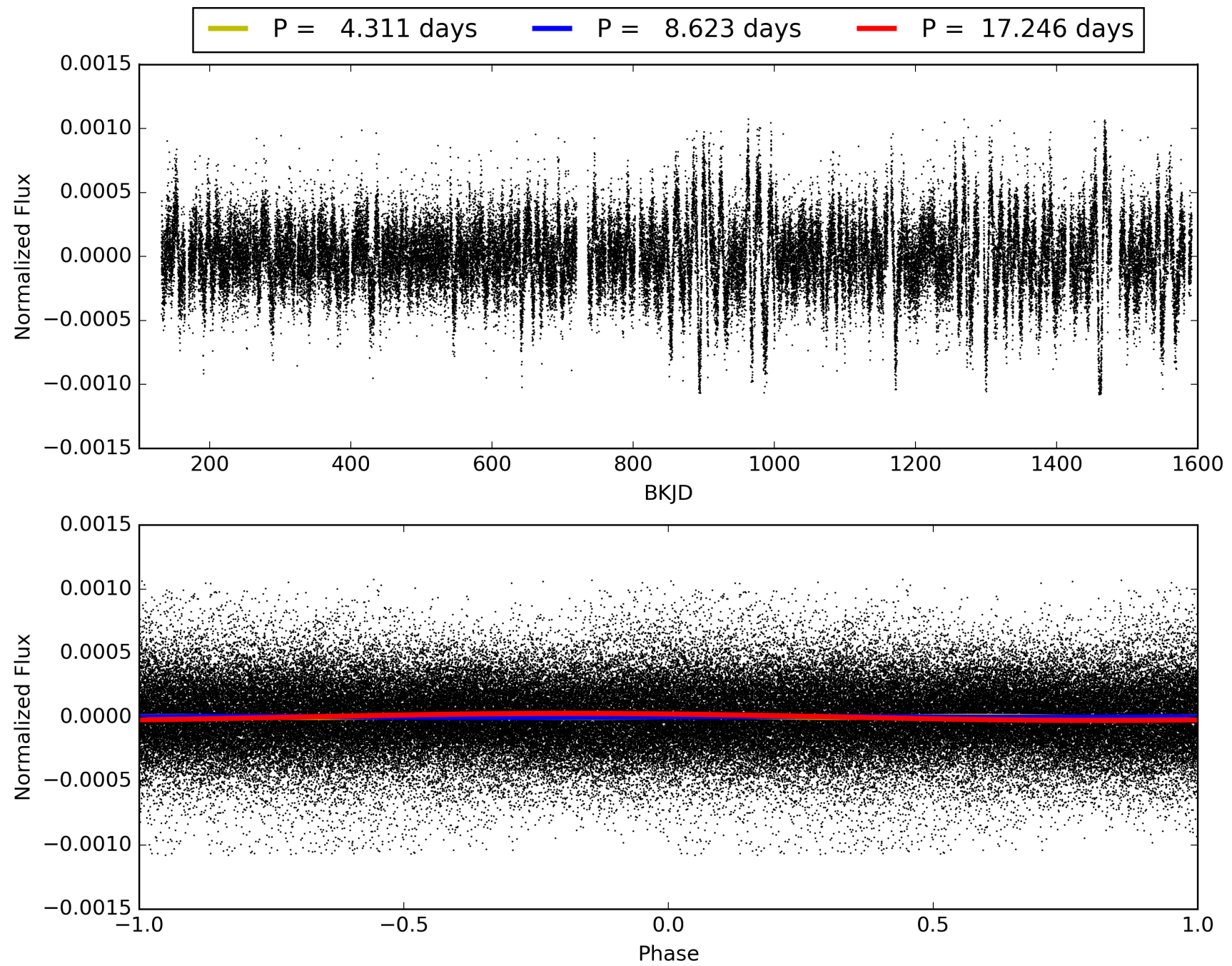
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:04:15 Z

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

TCE 011454602-05, PDC Light Curves

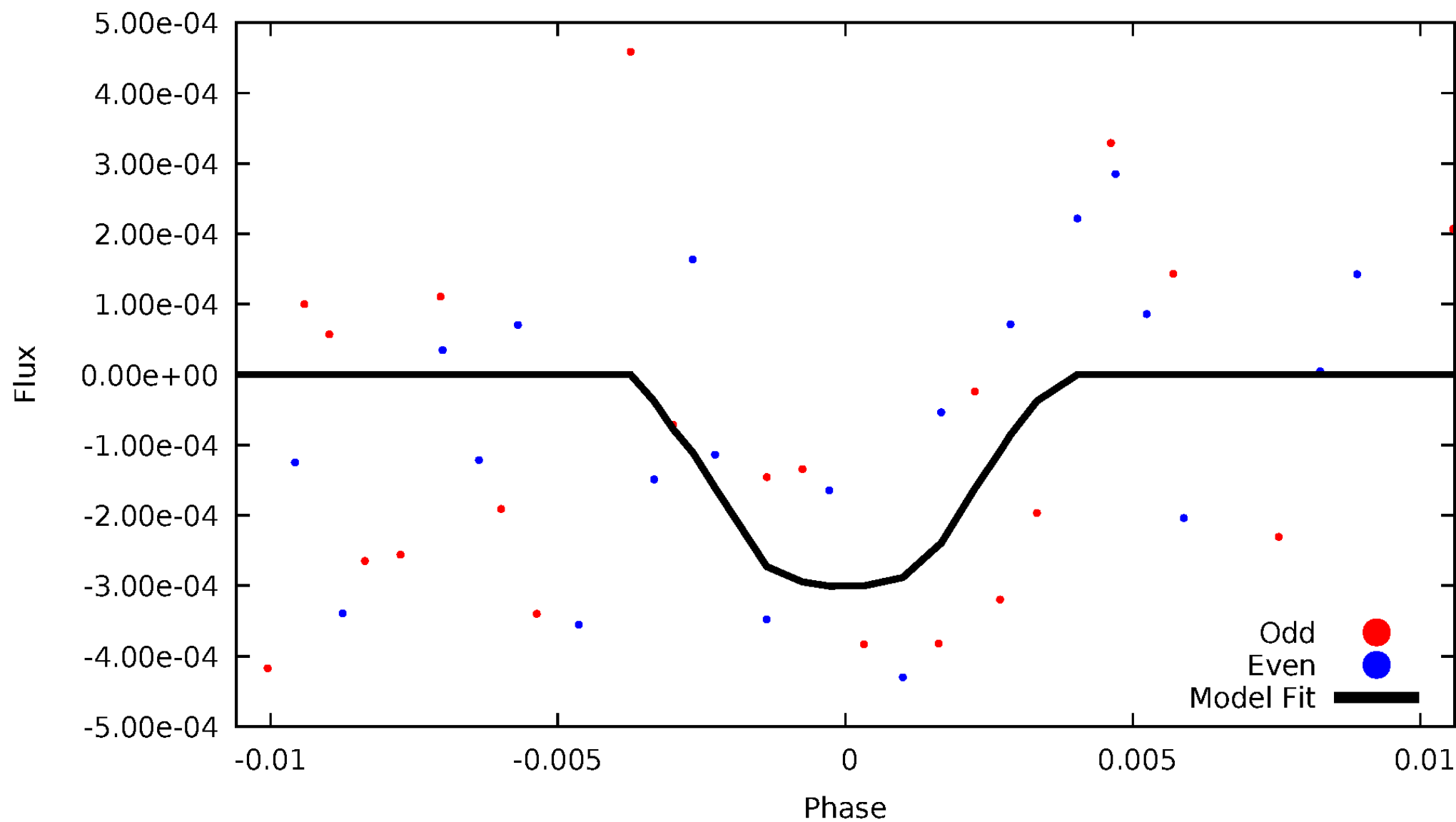


TCE 011454602-05



DV Odd/Even

TCE 011454602-05

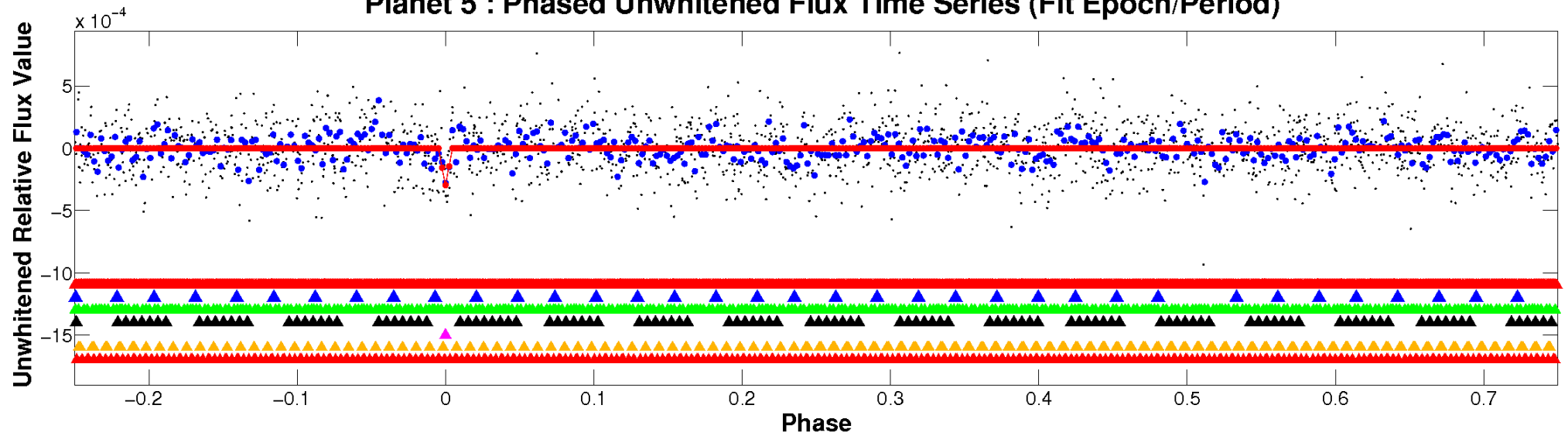


ALT Odd/Even

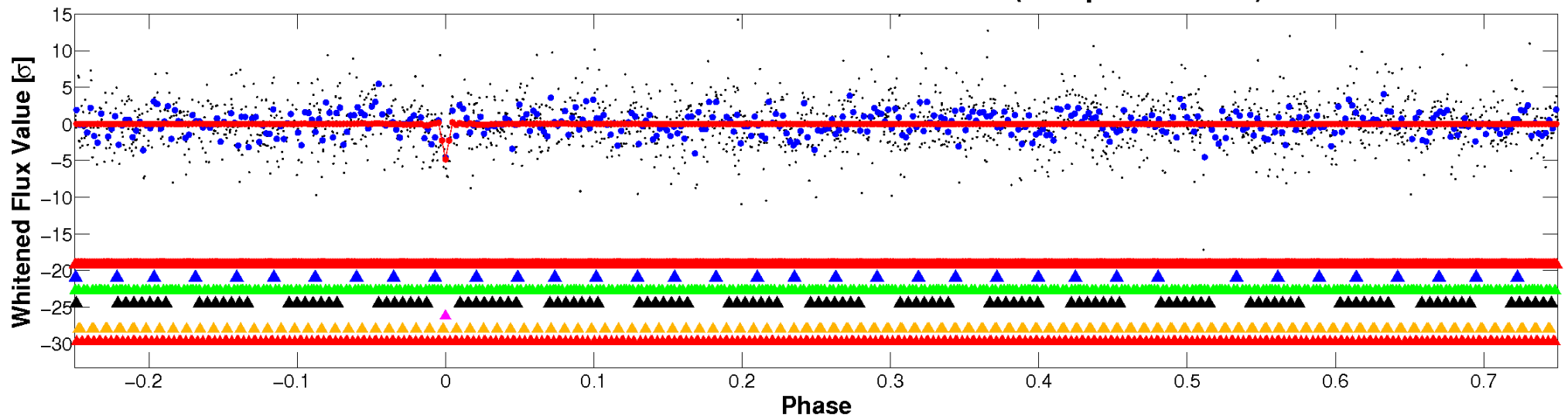
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

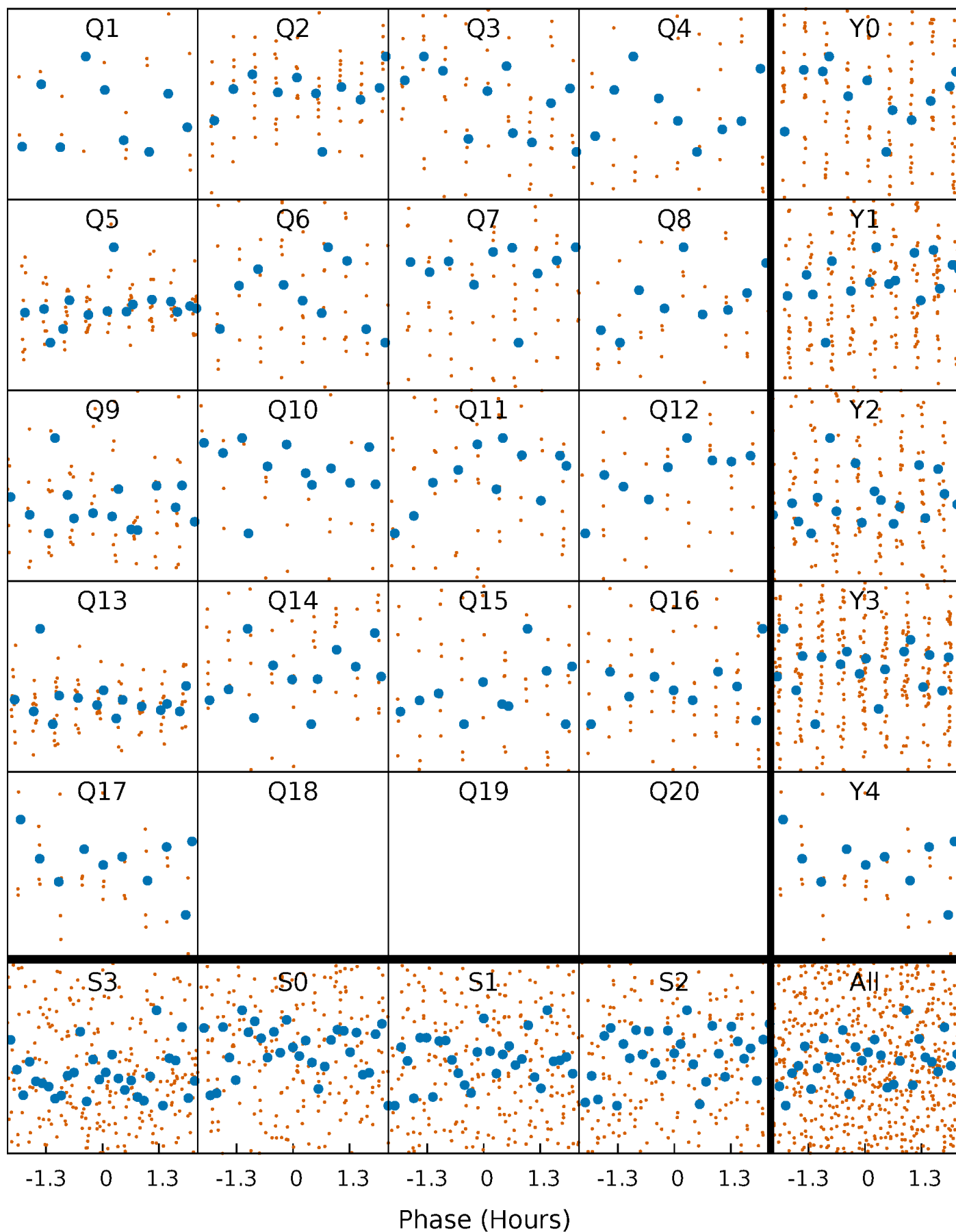


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



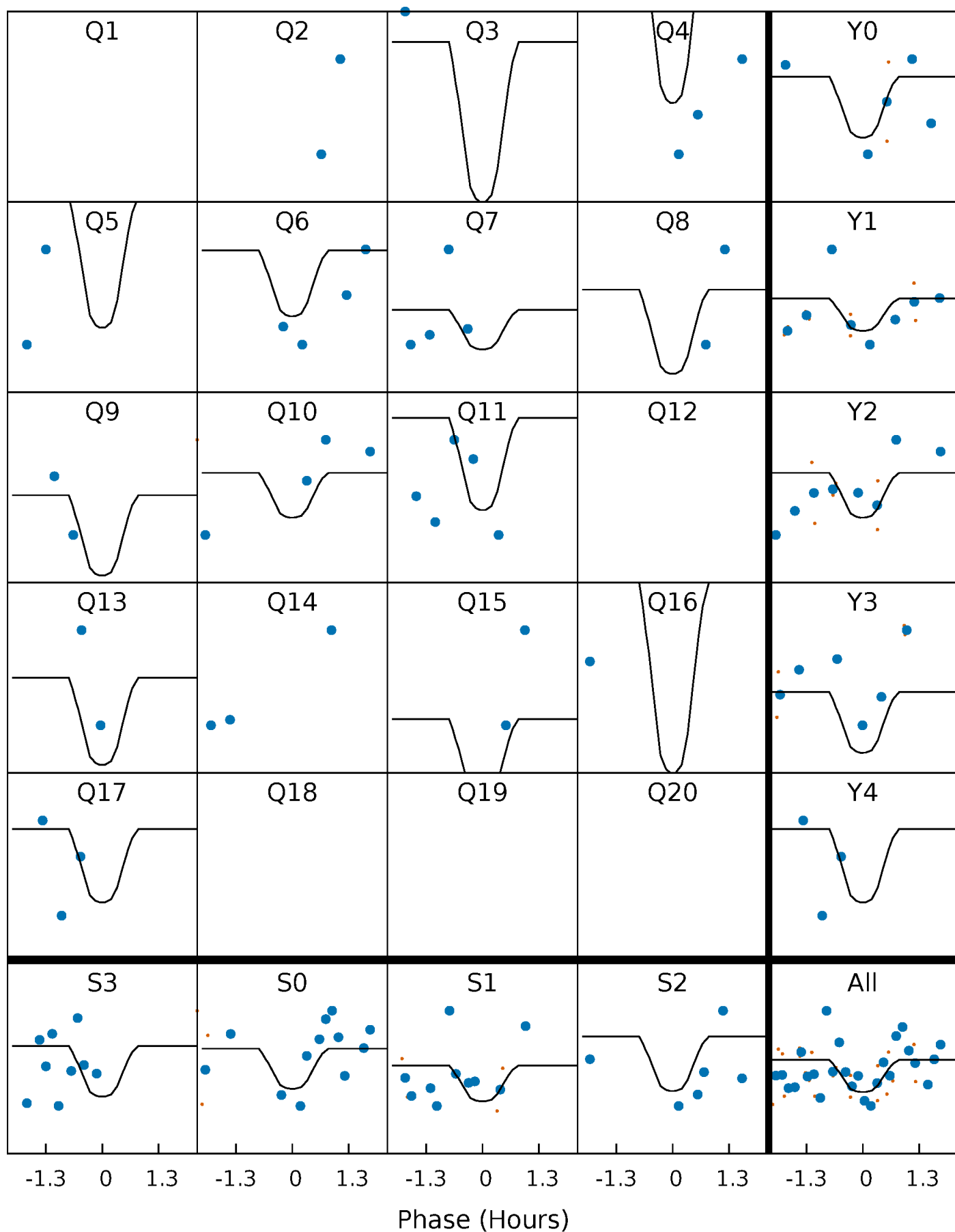
PDC Quarter-Phased Transit Curves

TCE 011454602-05 P= 8.622852 Days $T_0=140.092733$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 011454602-05 $P = 8.622852$ Days $T_0 = 140.092733$ (BKJD)

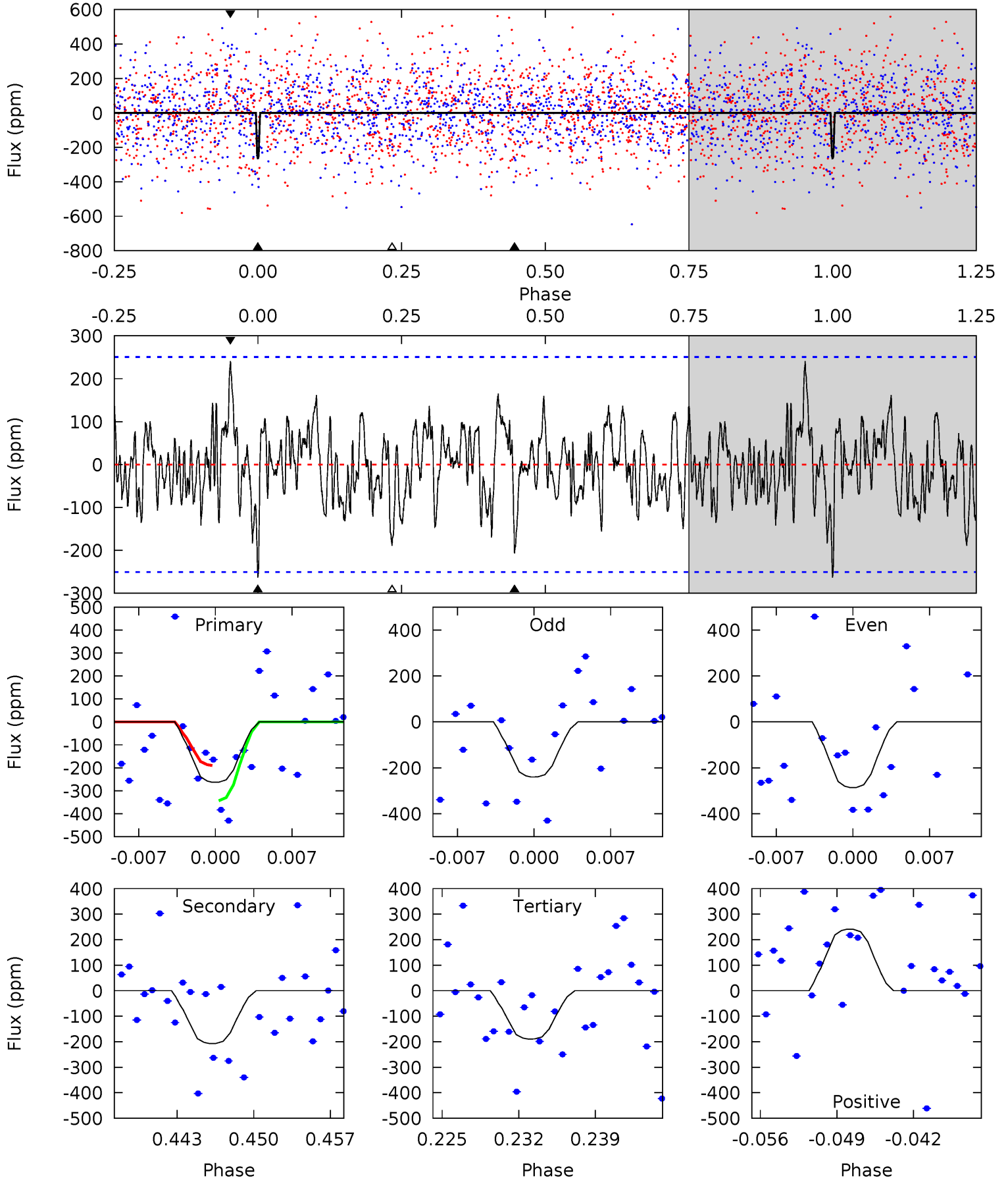


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

011454602-05, P = 8.622852 Days, E = 131.469881 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.35	4.21	3.85	4.90	5.09	2.70	1.42	1.50	0.46	0.36	-0.69	0.47	0.89	0.48	1.56



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 011454602

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5878^{+156}_{-191}	$4.405^{+0.087}_{-0.203}$	$0.120^{+0.250}_{-0.300}$	$1.064^{+0.307}_{-0.141}$	$1.051^{+0.122}_{-0.136}$	$1.228^{+0.542}_{-0.601}$
	+3%/-3%	+2%/-5%	+208%/-250%	+29%/-13%	+12%/-13%	+44%/-49%
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 011454602-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-207 ± 49	$9.18^{+11.02}_{-6.21}$	1304^{+95}_{-67}	3117^{+1418}_{-629}	$9.325^{+70.620}_{-7.478}$
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 $A_{obs} \gg 1.0$

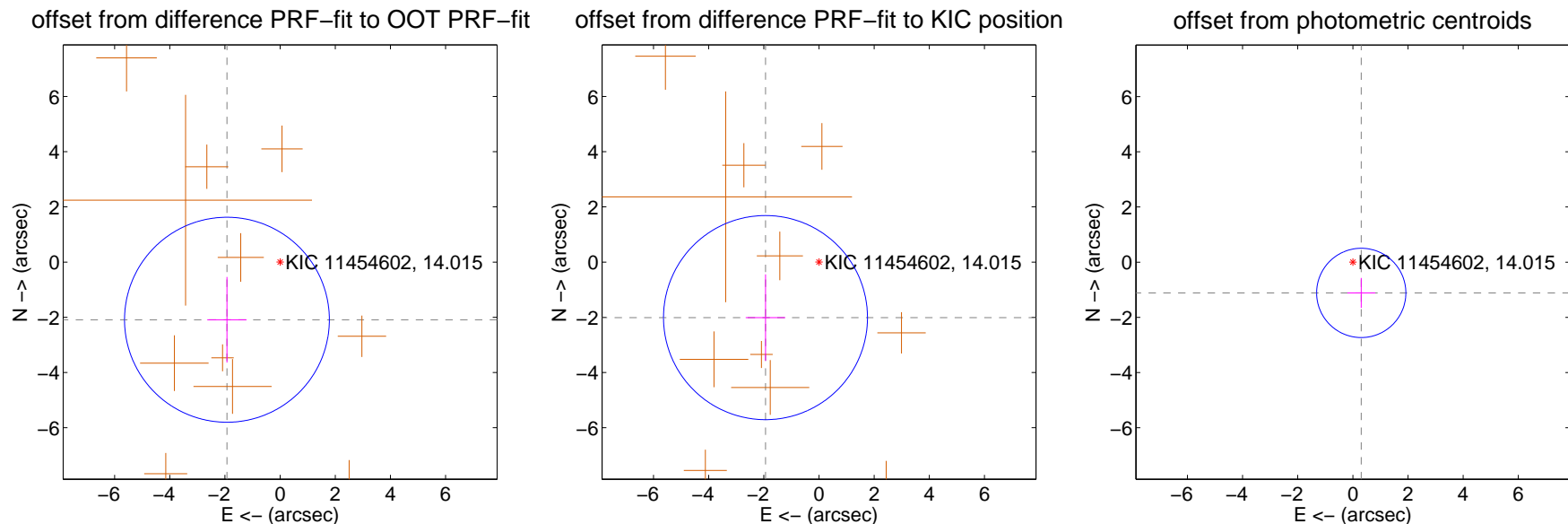
DV Centroid Data

Supplemental centroid analysis for 011454602-05. Kepler magnitude: 14.02. Transit SNR 13.31

There are 0 quarters with good PRF difference image offsets

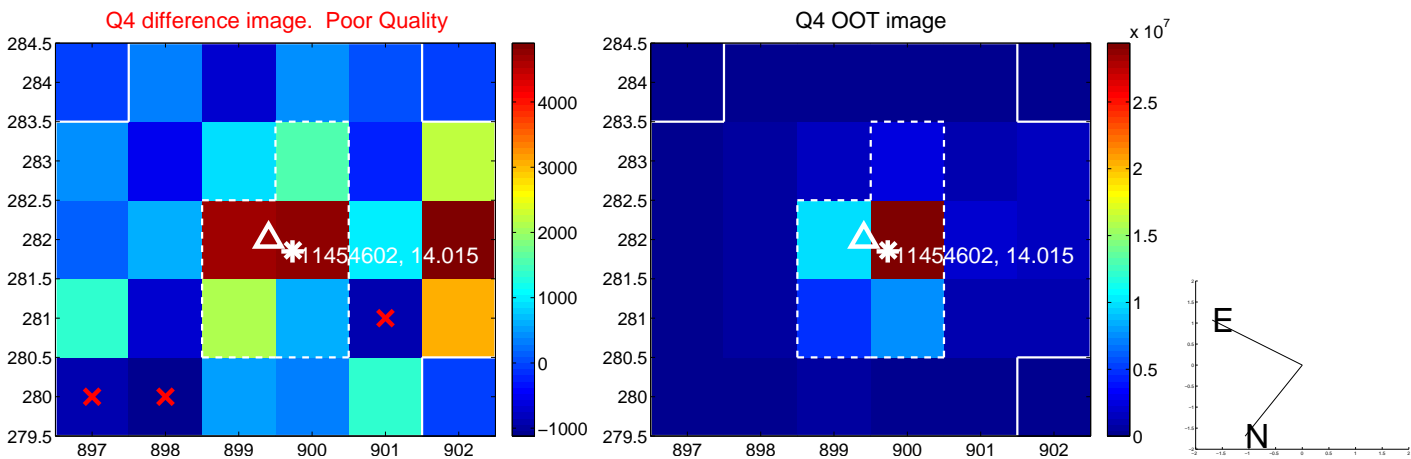
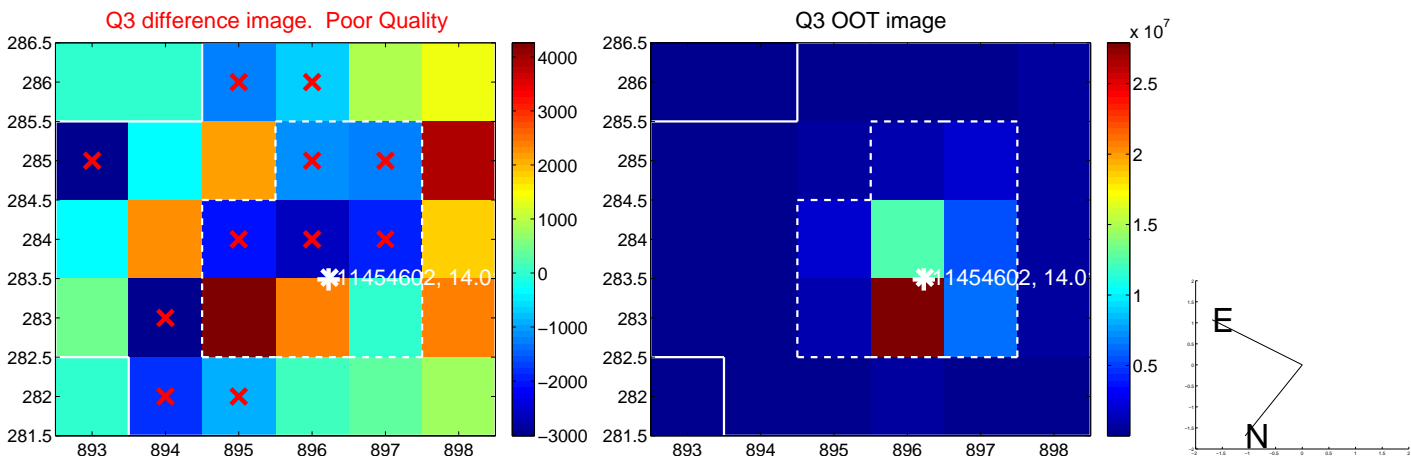
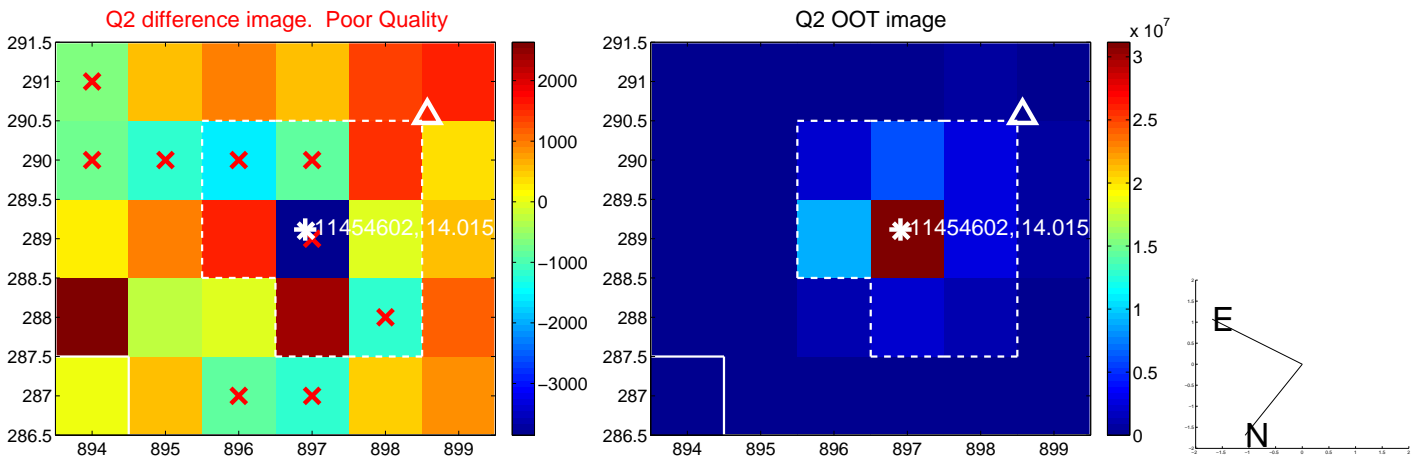
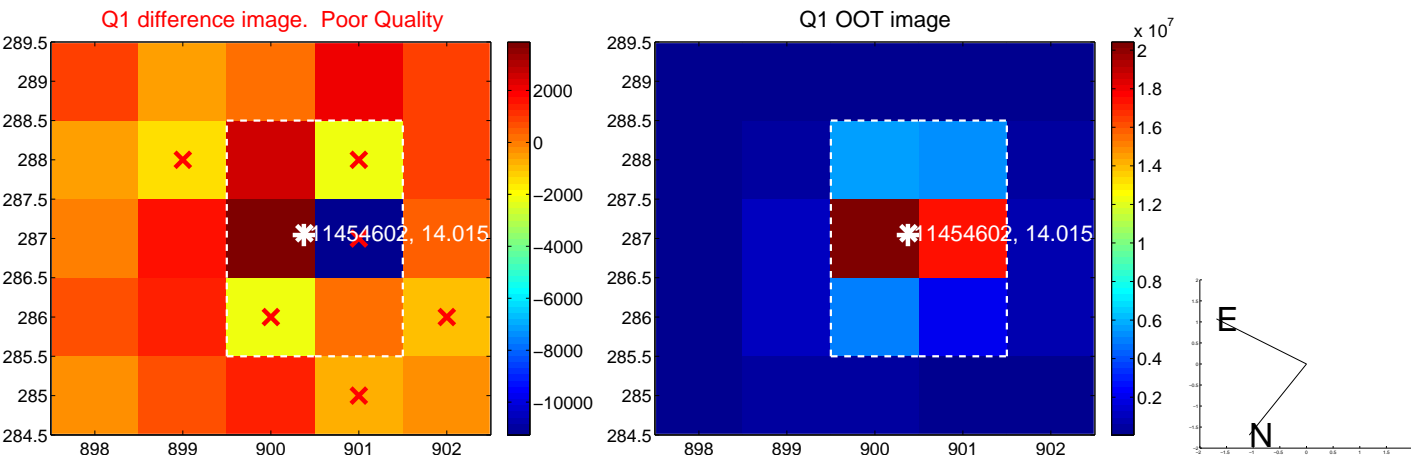
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.843 ± 1.238	2.30	1.928 ± 0.713	-2.090 ± 1.551
PRF-fit source offset from KIC position	2.795 ± 1.233	2.27	1.940 ± 0.715	-2.011 ± 1.568
photometric centroid source offset	1.16 ± 0.54	2.14	-0.30 ± 0.50	-1.11 ± 0.54

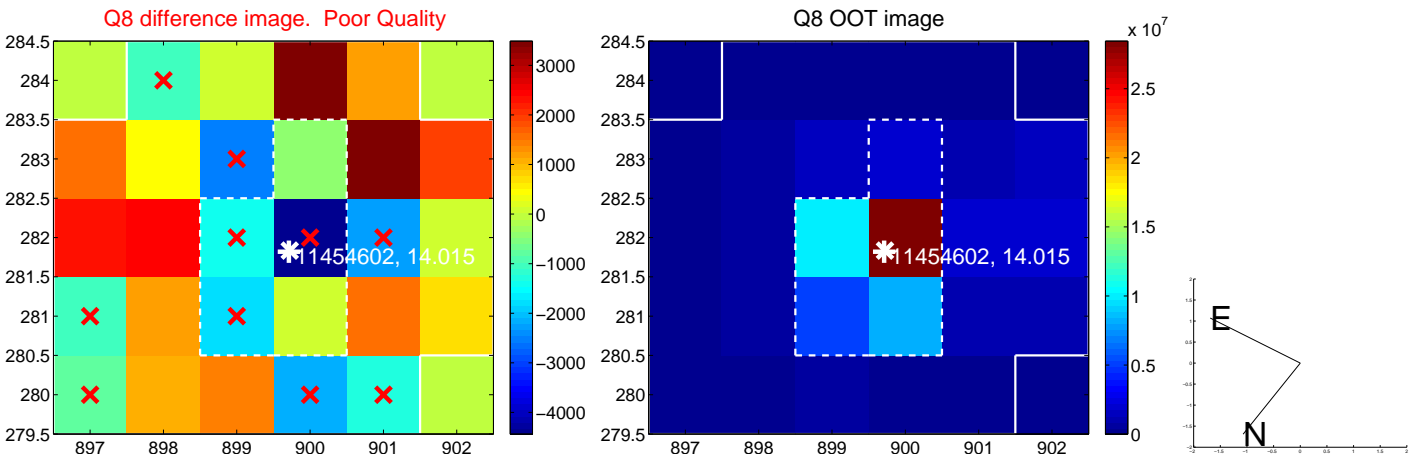
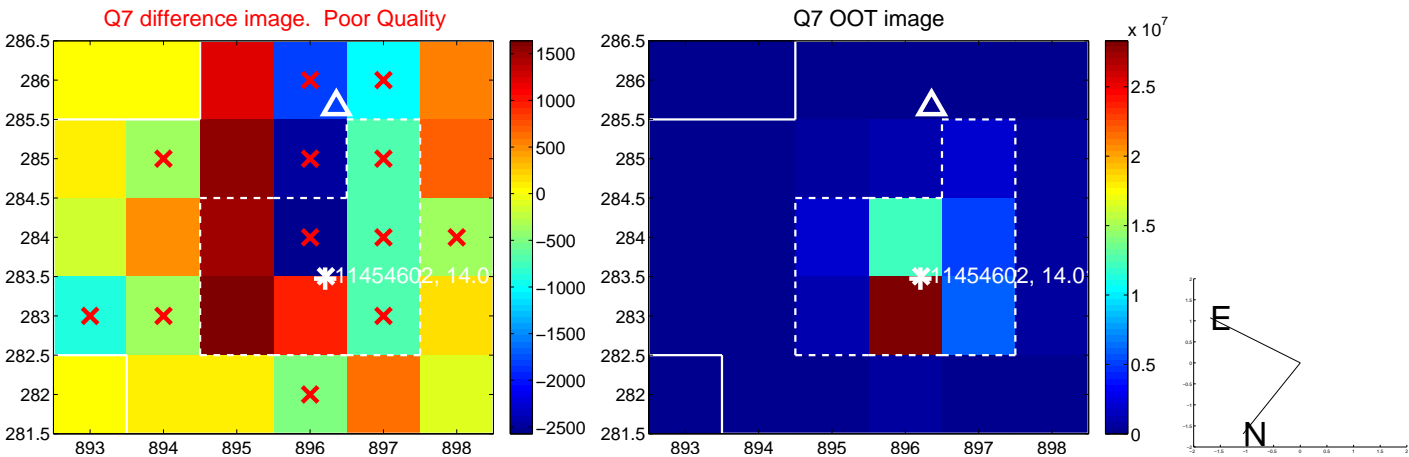
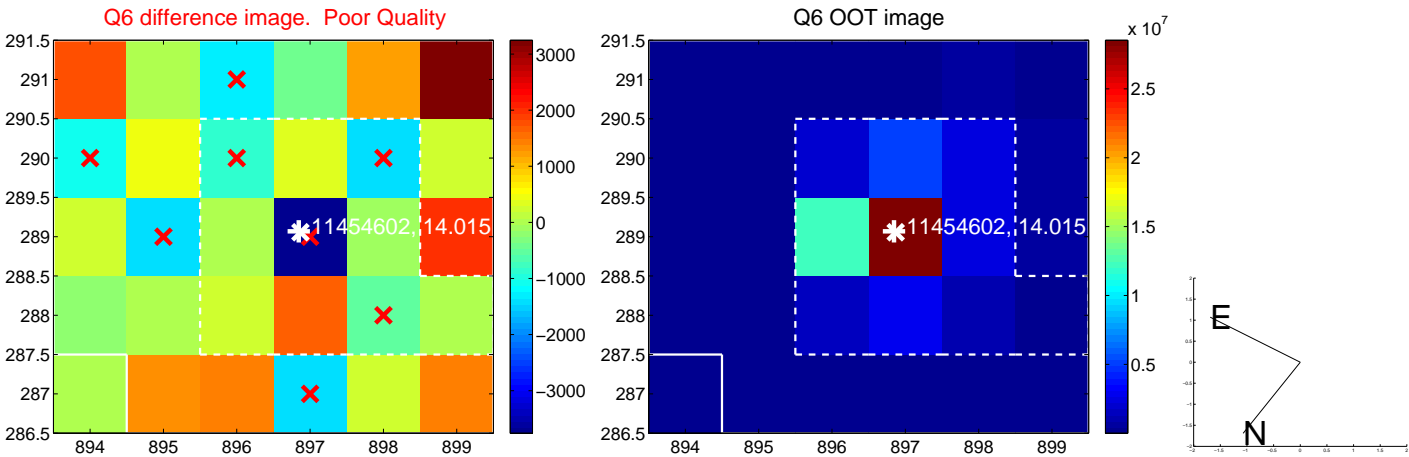
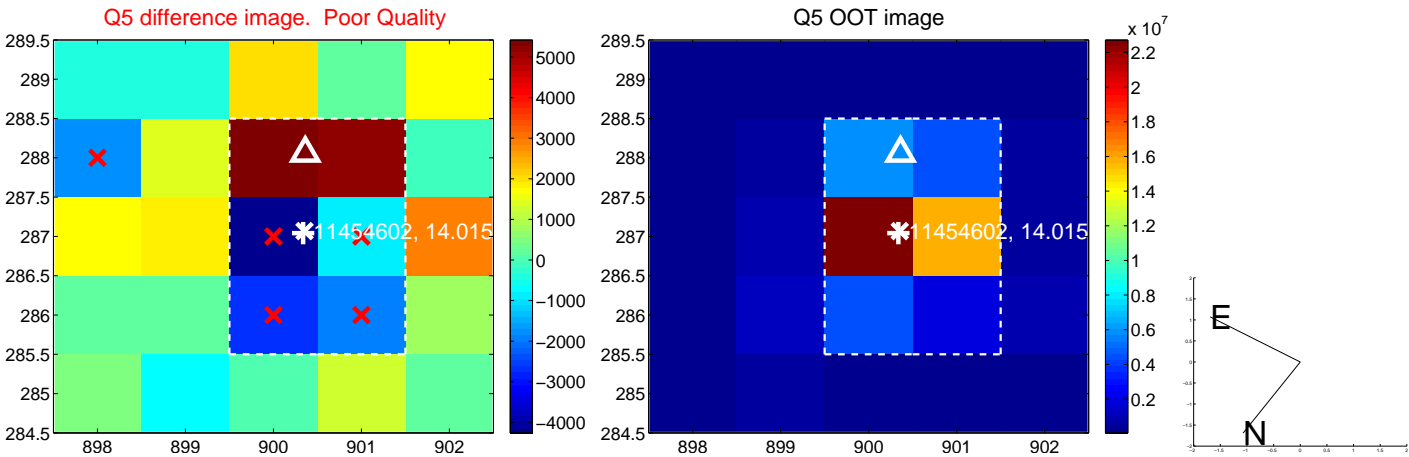


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

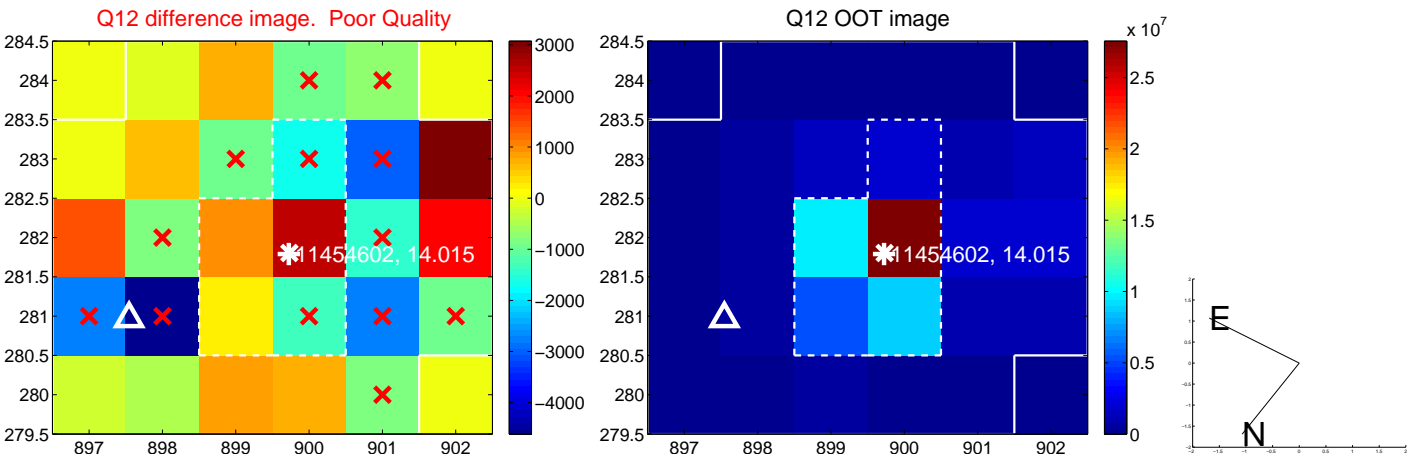
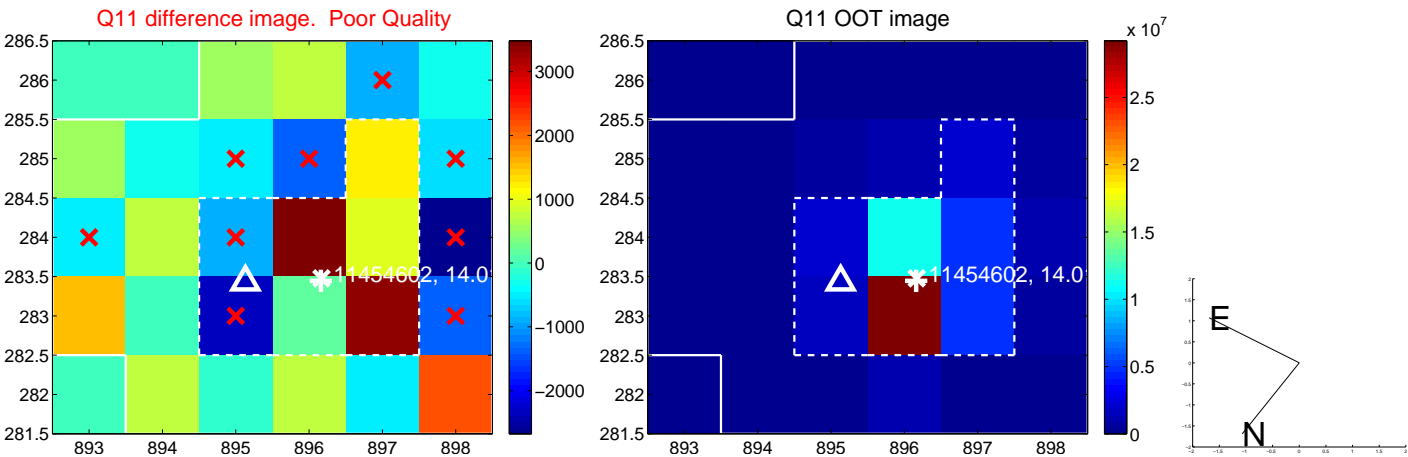
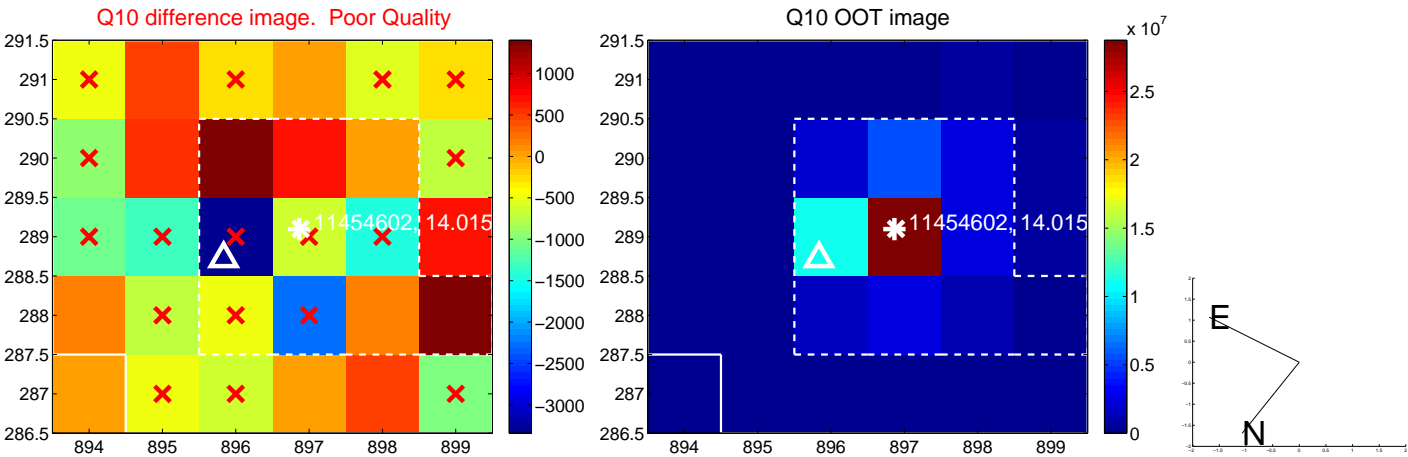
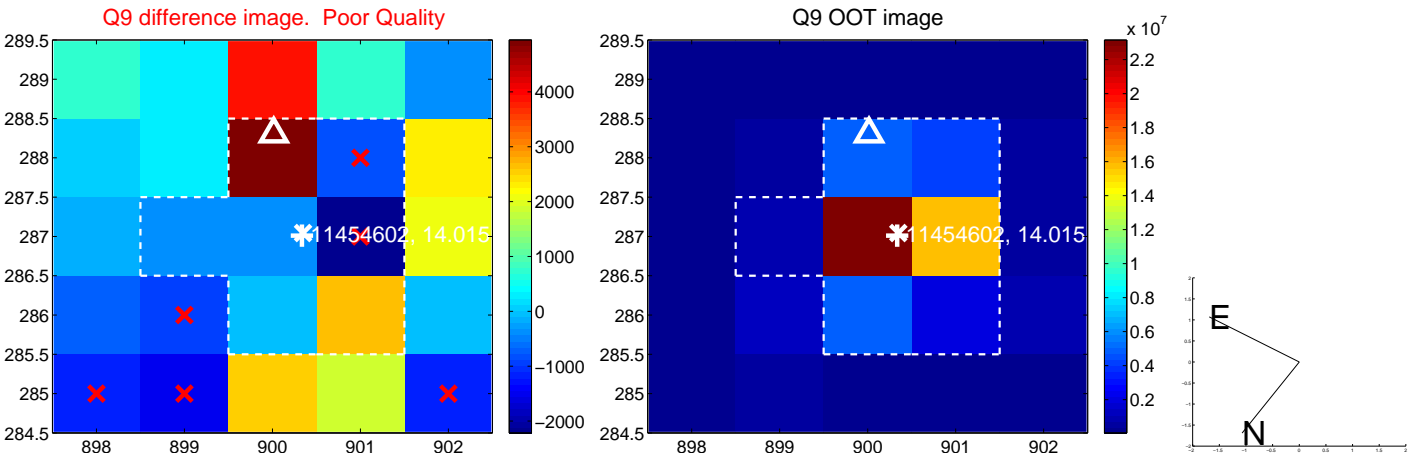
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



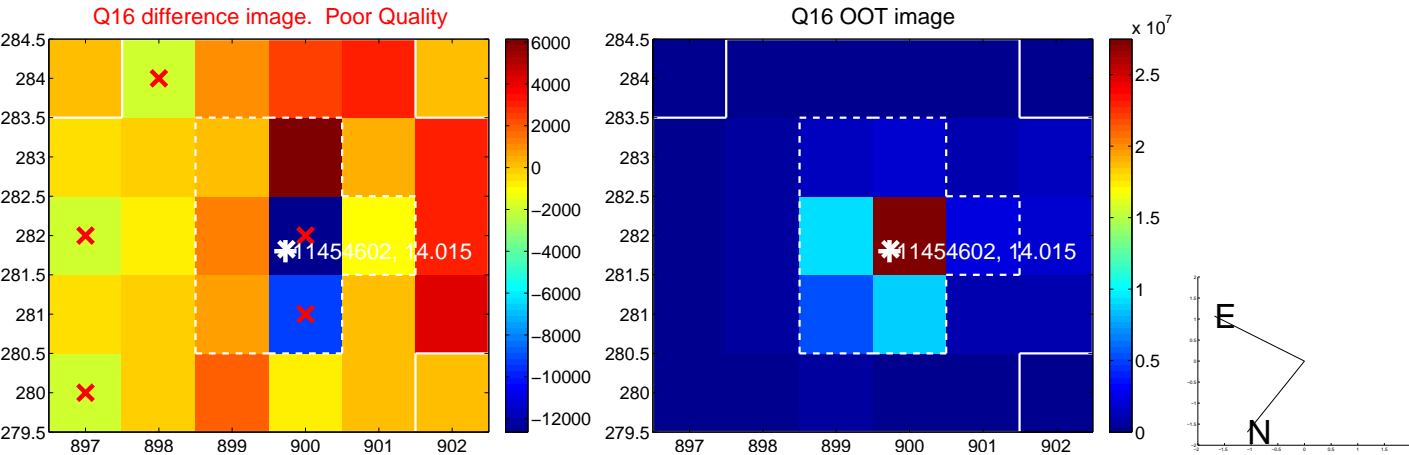
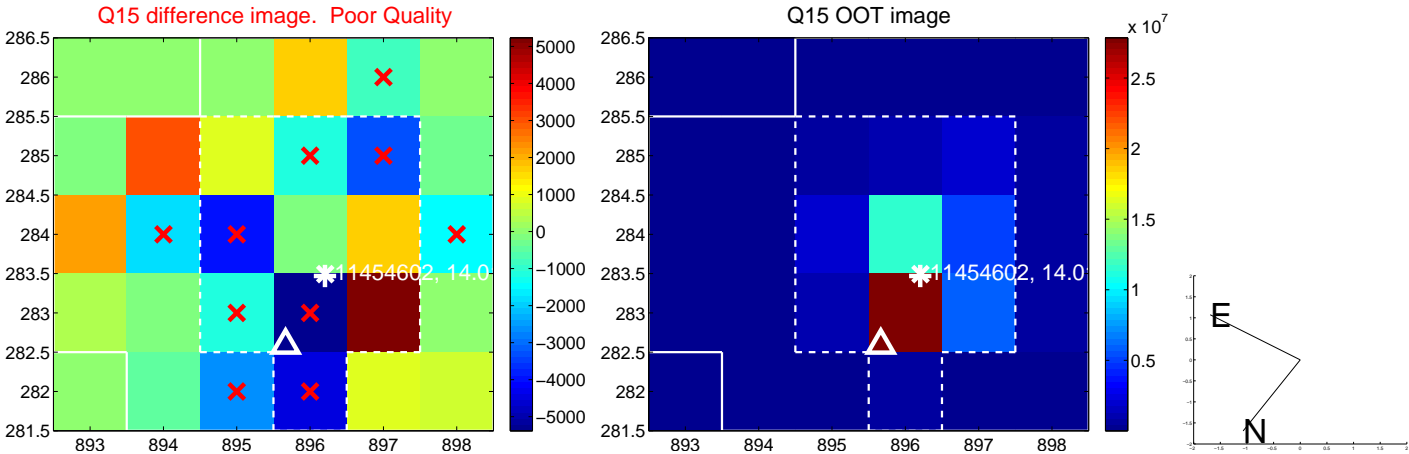
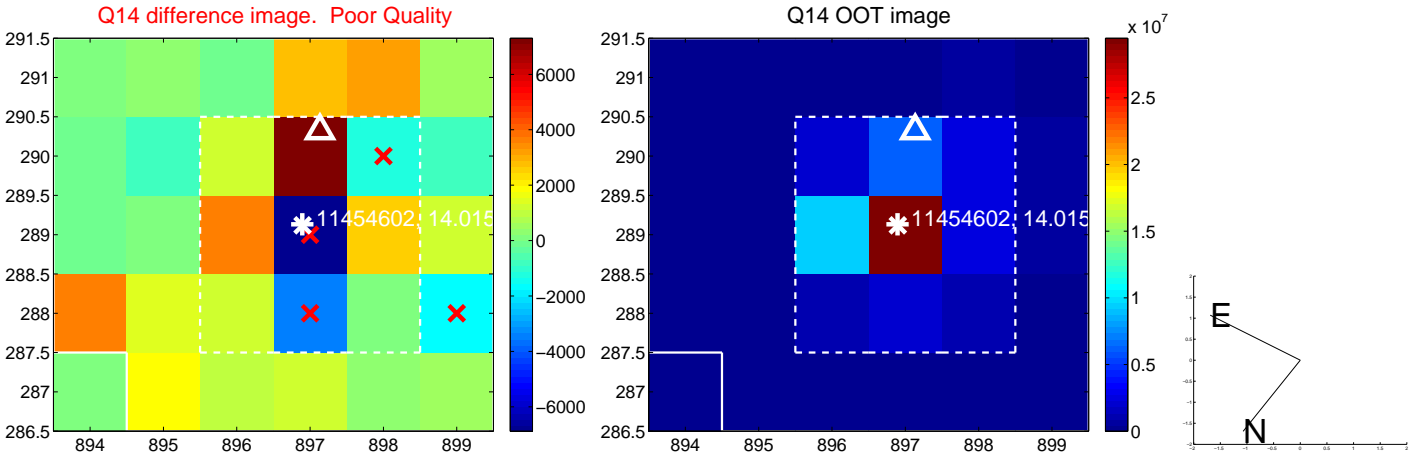
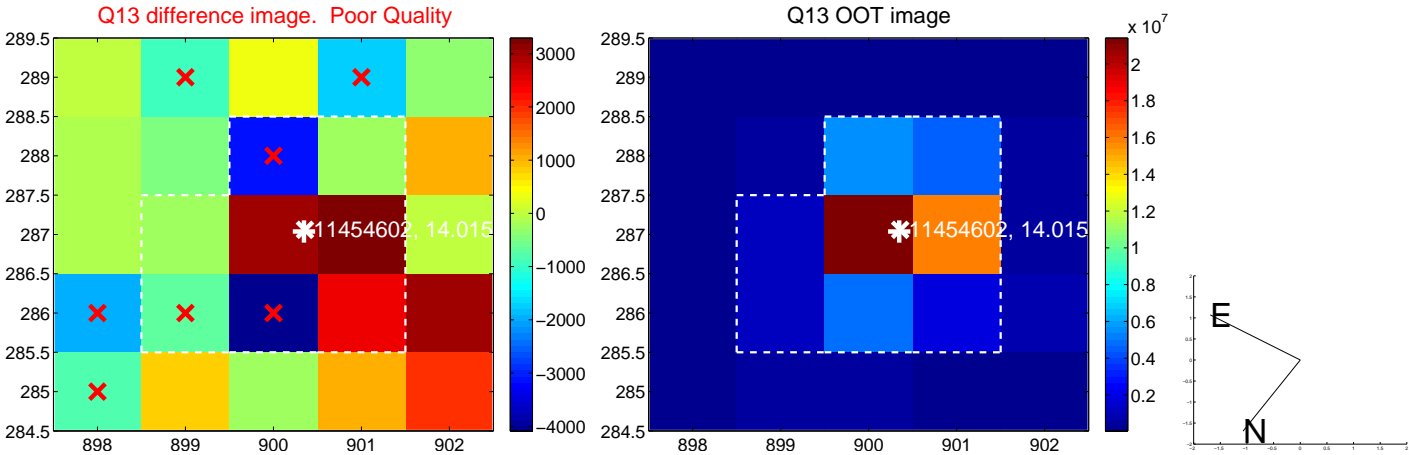
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



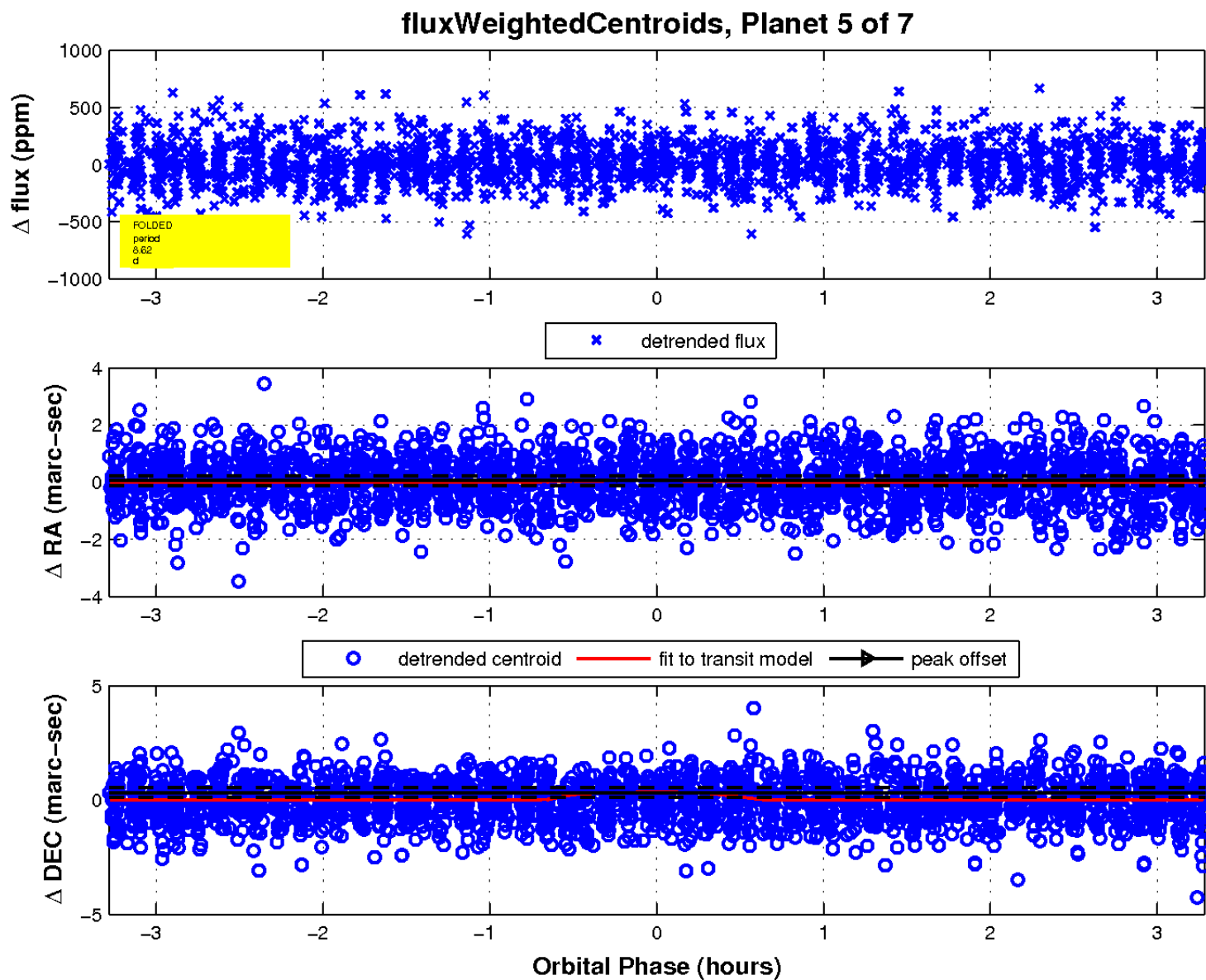
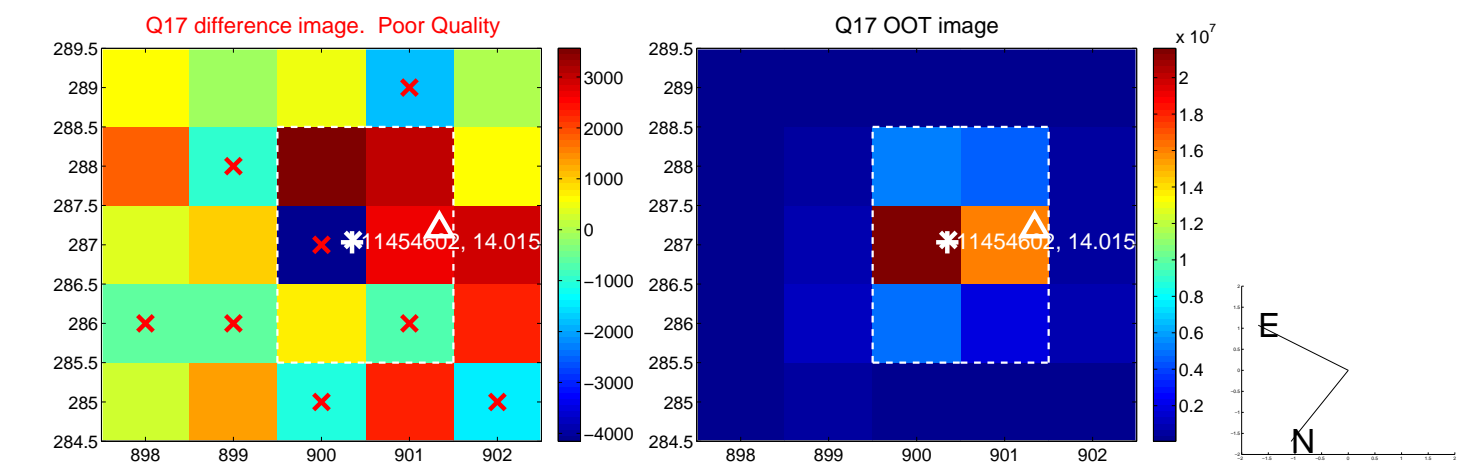
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

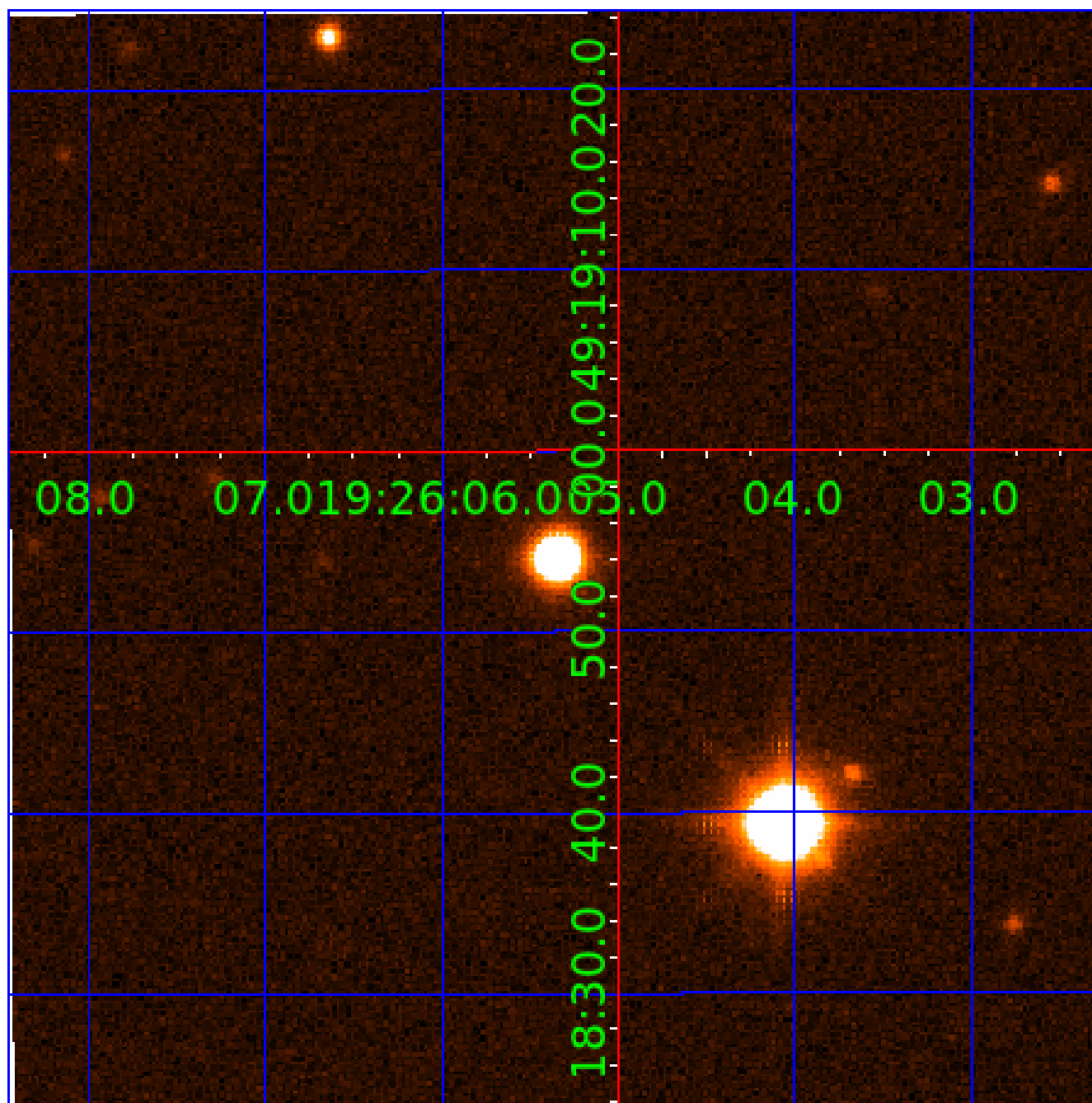


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011454602

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})
011454602-01	OBS	No	1.204542	131.607513	15.9	9.112	7.4	8.5	1.06	5878	0.42	2387.87
011454602-02	OBS	No	40.784419	159.367250	2303.5	1.500	24.7	-1.0	1.06	5878	5.08	21.80
011454602-03	OBS	No	3.754298	134.337688	210.7	3.031	20.4	18.9	1.06	5878	2.53	524.49
011454602-04	OBS	No	12.176176	131.555593	353.0	1.247	17.6	16.1	1.06	5878	2.13	109.25
011454602-05	OBS	No	8.622852	140.092733	301.6	1.096	16.0	13.3	1.06	5878	1.86	173.08
011454602-06	OBS	No	8.544381	138.282764	246.6	1.515	14.9	12.2	1.06	5878	1.67	175.20
011454602-07	OBS	No	4.177766	132.060994	1361.2	1.500	14.4	-1.0	1.06	5878	3.91	454.83

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011454602-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET
011454602-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—NO_FITS—CENT_NOFITS
011454602-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_RESOLVED_OFFSET
011454602-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_MEAS
011454602-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS—HALO_GHOST
011454602-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV
011454602-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

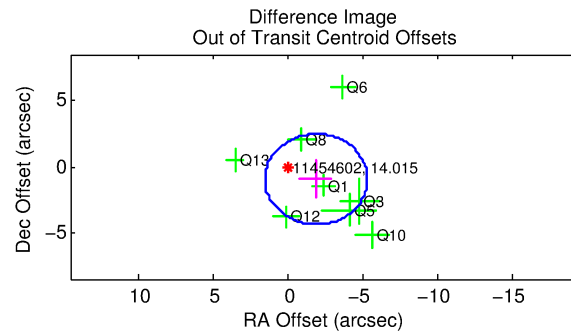
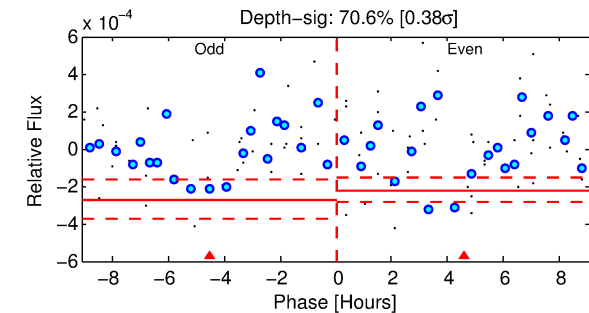
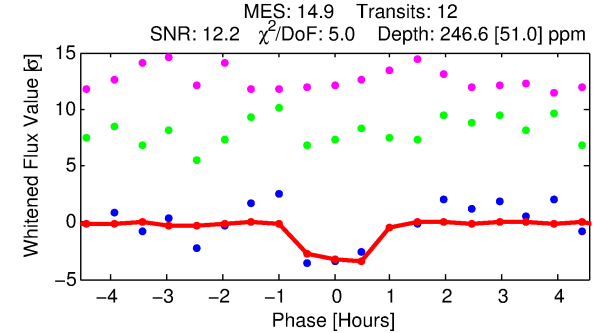
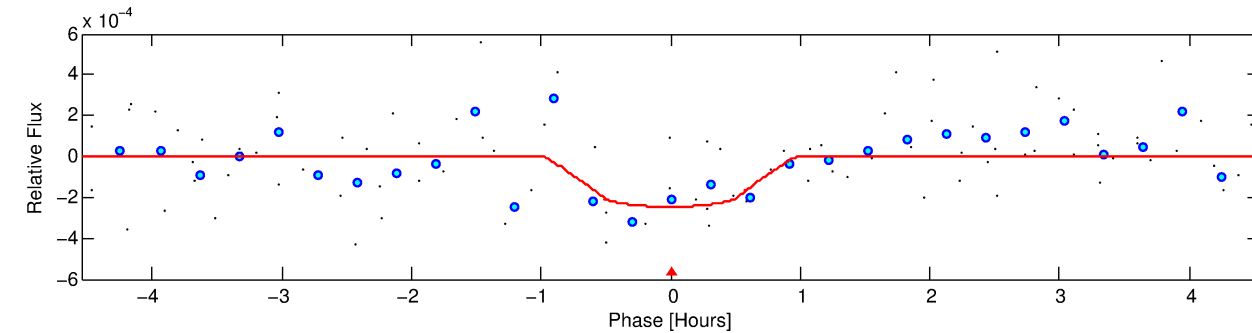
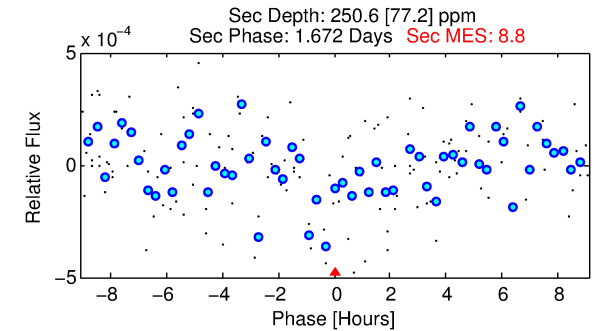
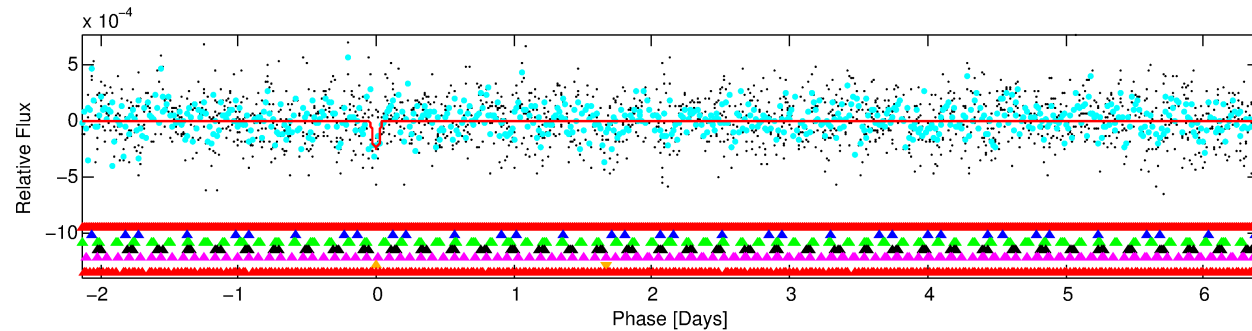
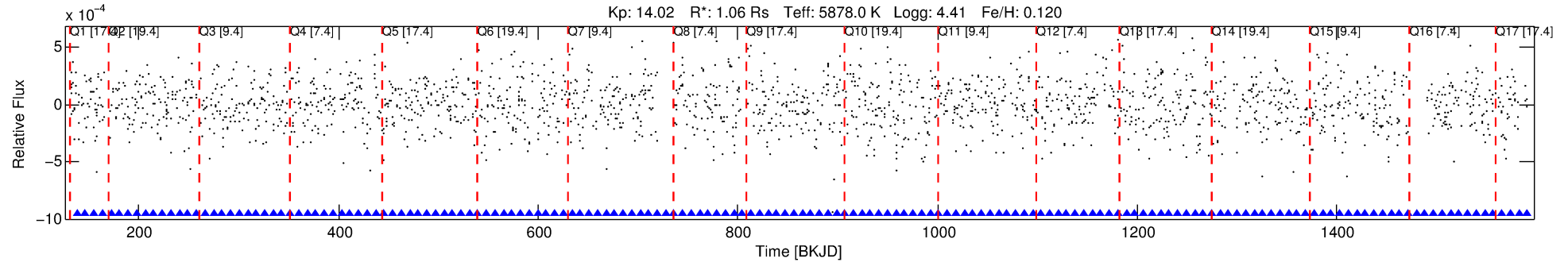
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011454602-06

No Significant Match Found

DV One-Page Summary

KIC: 11454602 Candidate: 6 of 7 Period: 8.544 d



DV Fit Results:

Period = 8.54438 [0.00016] d
Epoch = 138.2828 [0.0159] BKJD
Rp/R* = 0.0144 [0.0983]
a/R* = 42.92 [1310.41]
b = 0.19 [152.96]
Seff = 175.20 [68.08]
Teff = 928 [90] K
Rp = 1.67 [11.42] Re
a = 0.0831 [0.0206] AU
Ag = 342.65 [4691.86] [0.07 σ]
Teffp = 6171 [21118] K [0.25 σ]

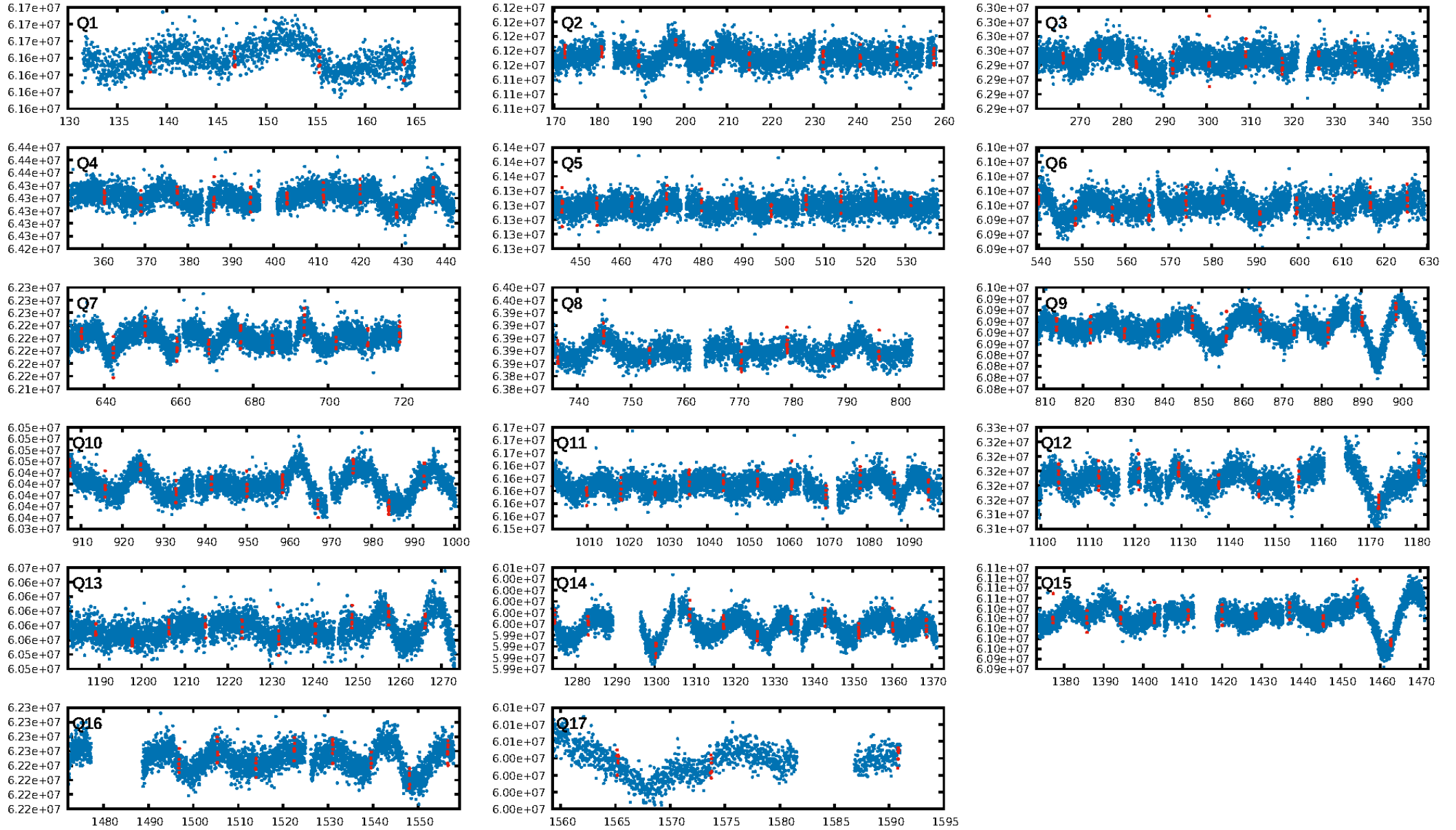
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [49.16 σ]
LongPeriod-sig: 68.6% [1.01 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 1.4%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [12/12]
GhostDiagnostic-chr: 15.45
Centroid-sig: 76.3%
Centroid-so: 0.256 arcsec [0.47 σ]
OotOffset-rm: 2.152 arcsec [1.88 σ]
OotOffset-st: 2/1/2/3 [8]
KicOffset-rm: 2.782 arcsec [2.32 σ]
KicOffset-st: 2/1/2/3 [8]
DiffImageQuality-fgm: 0.12 [1/8]
DiffImageOverlap-fno: 0.88 [15/17]

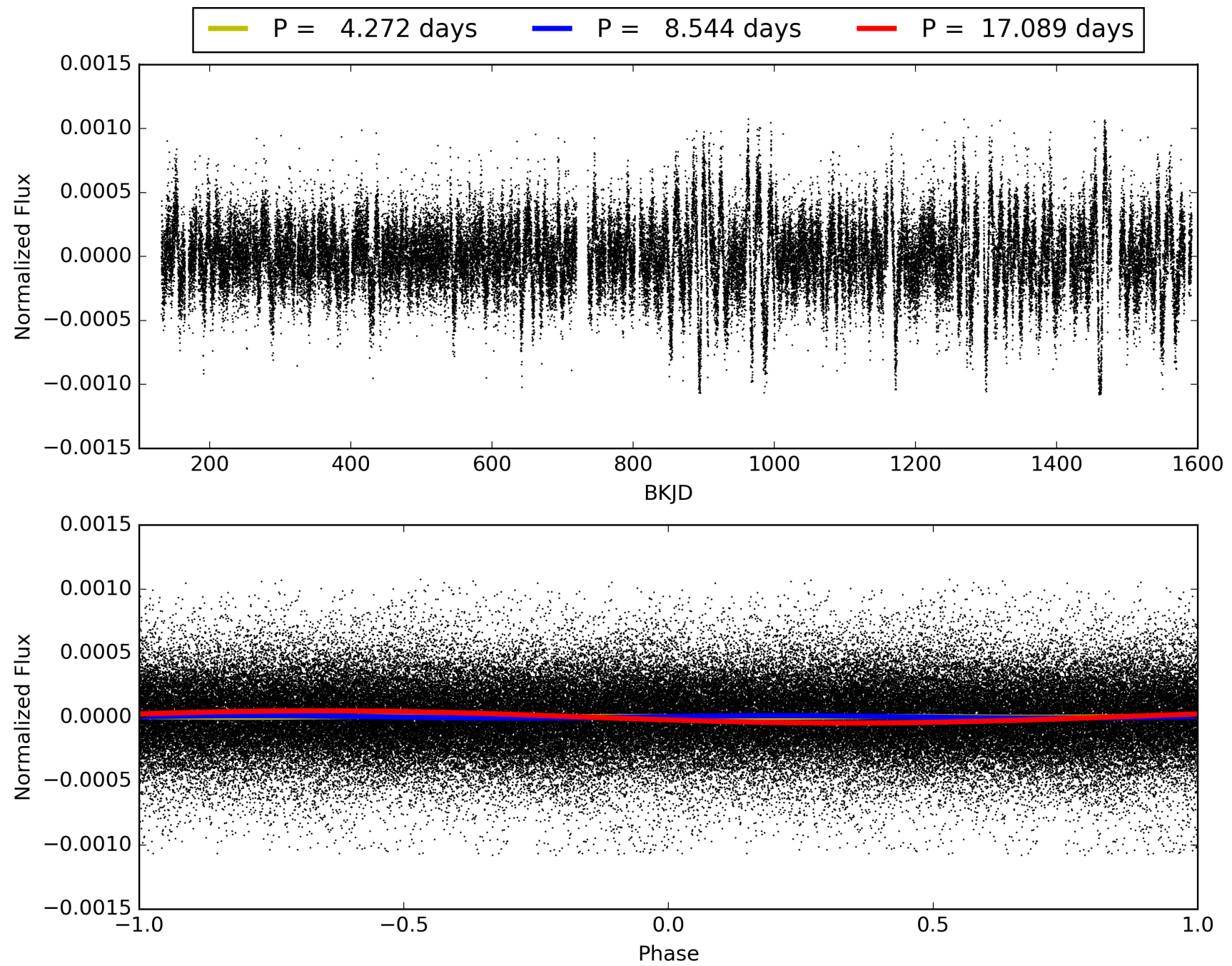
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:04:18 Z

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

TCE 011454602-06, PDC Light Curves

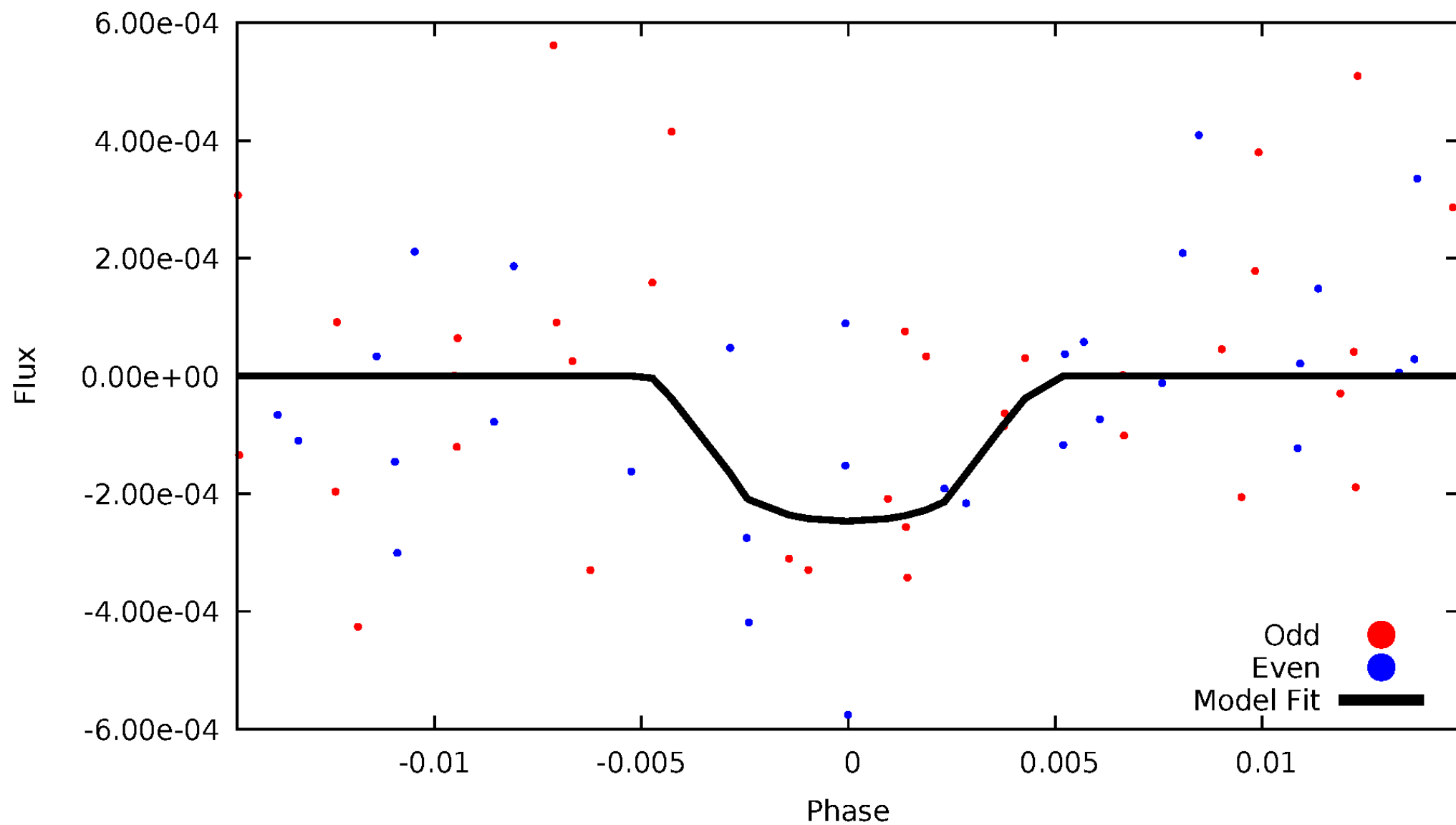


TCE 011454602-06



DV Odd/Even

TCE 011454602-06

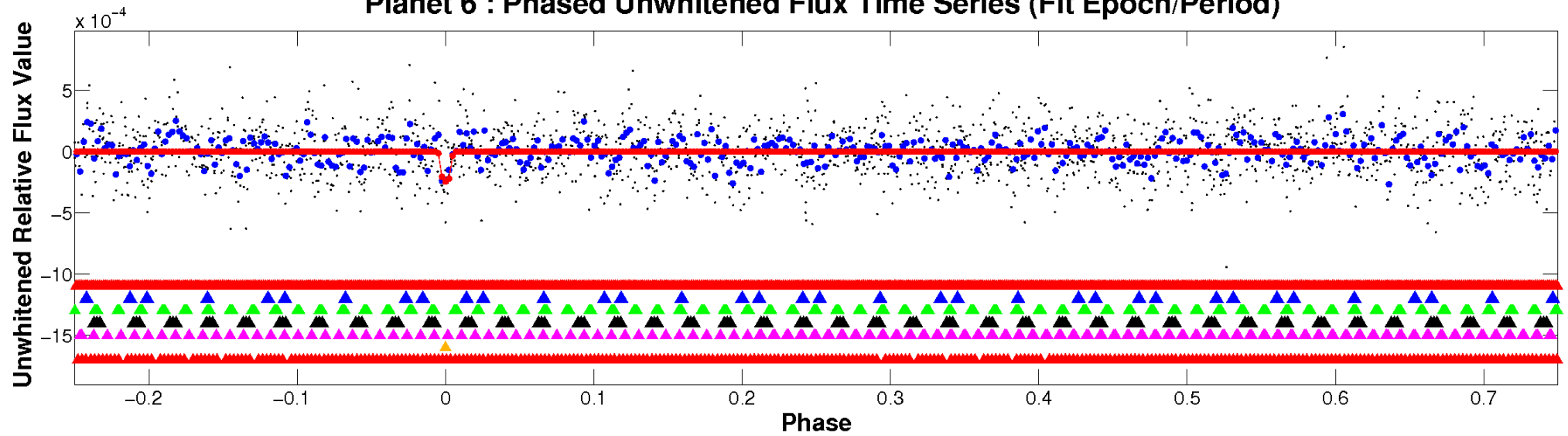


ALT Odd/Even

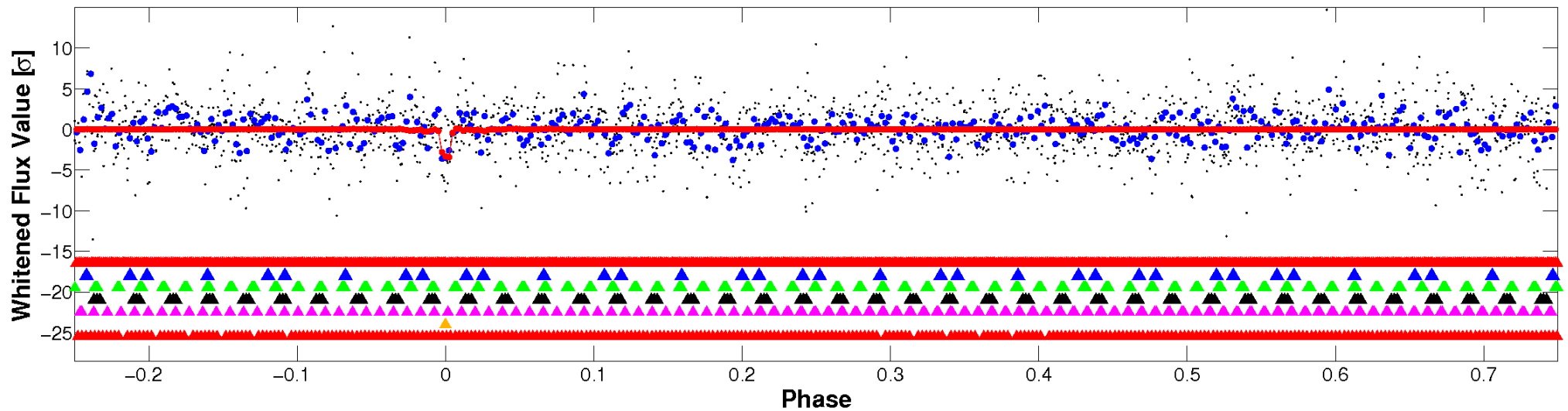
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

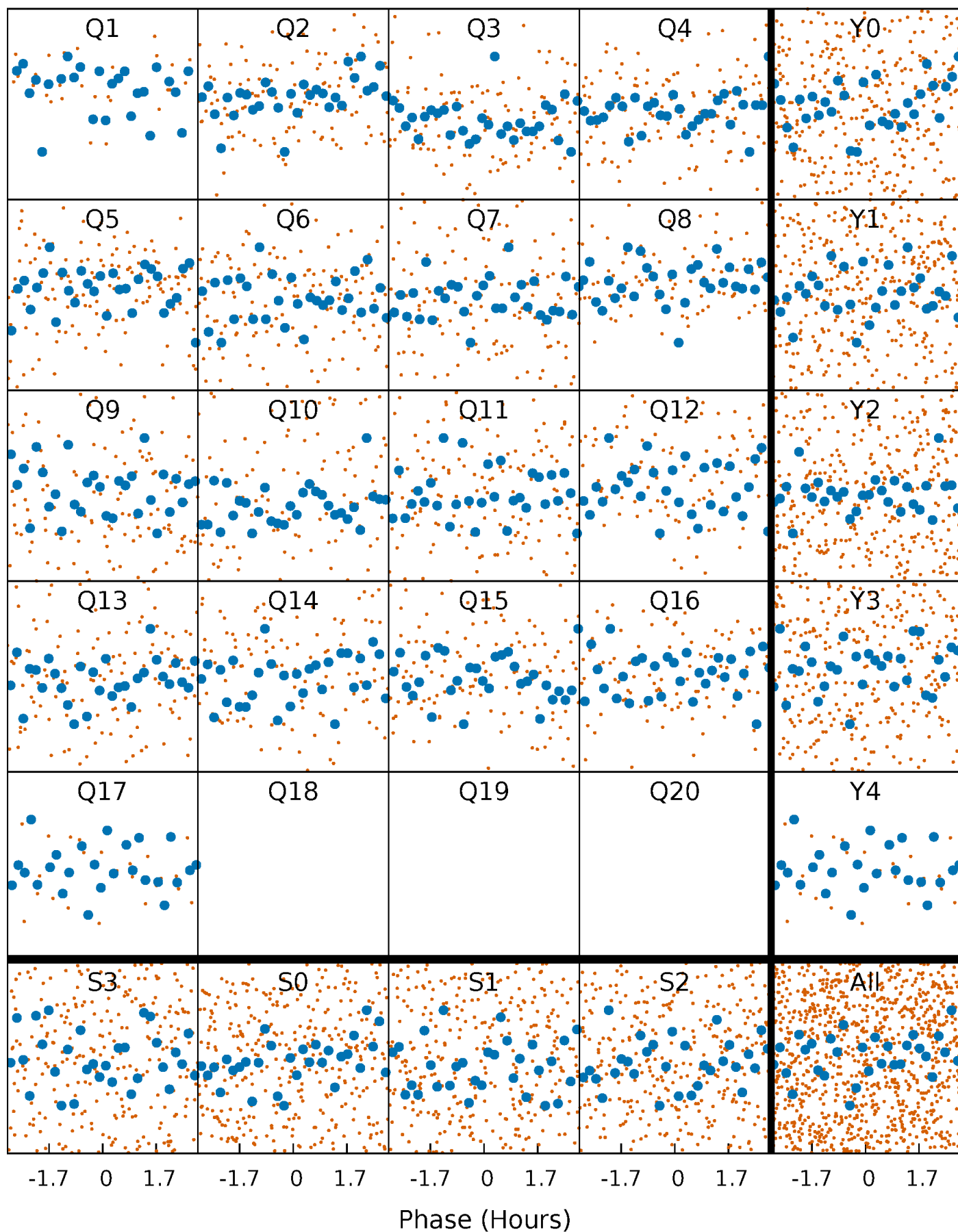


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



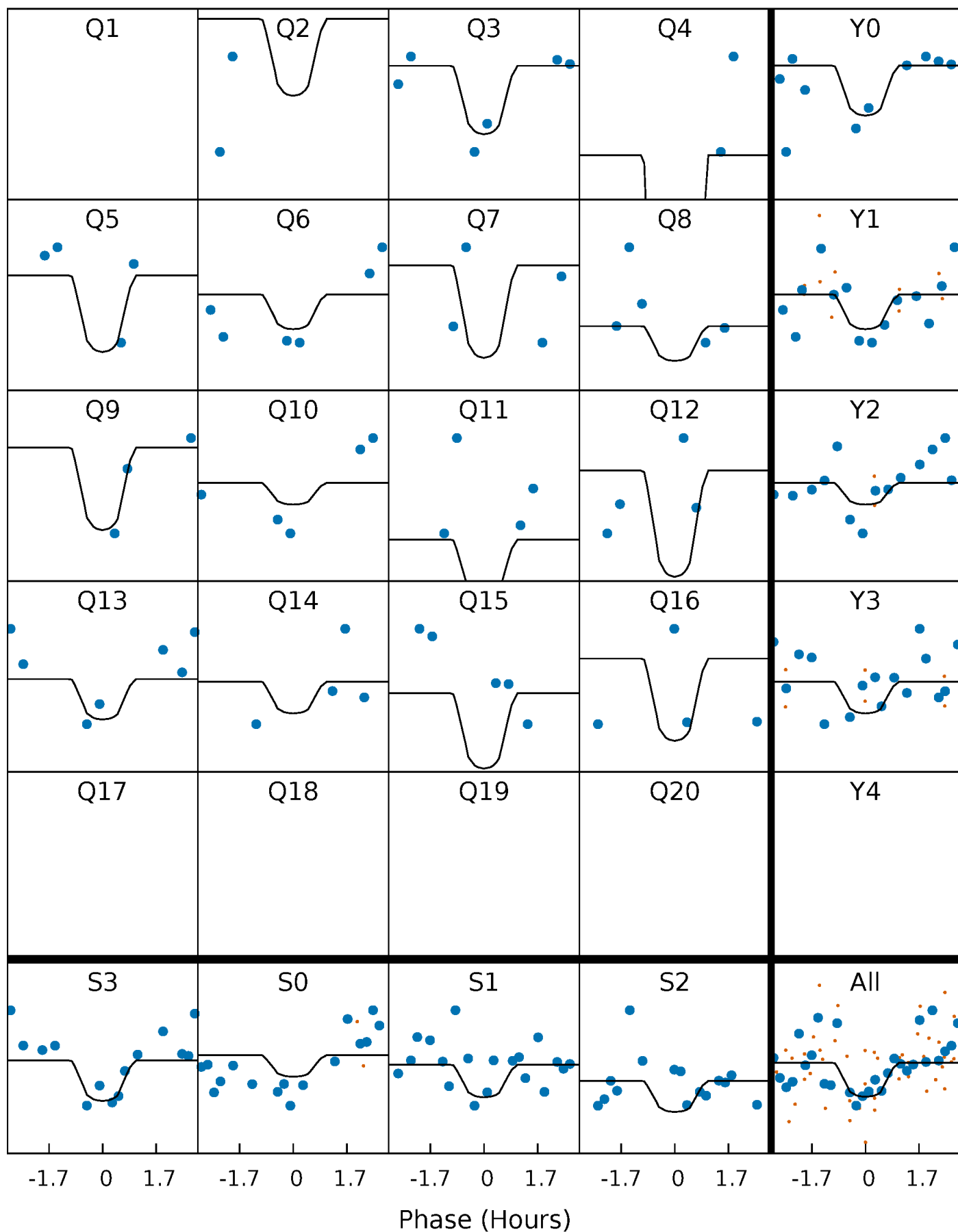
PDC Quarter-Phased Transit Curves

TCE 011454602-06 P= 8.544381 Days $T_0=138.282764$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 011454602-06 P= 8.544381 Days $T_0=138.282764$ (BKJD)

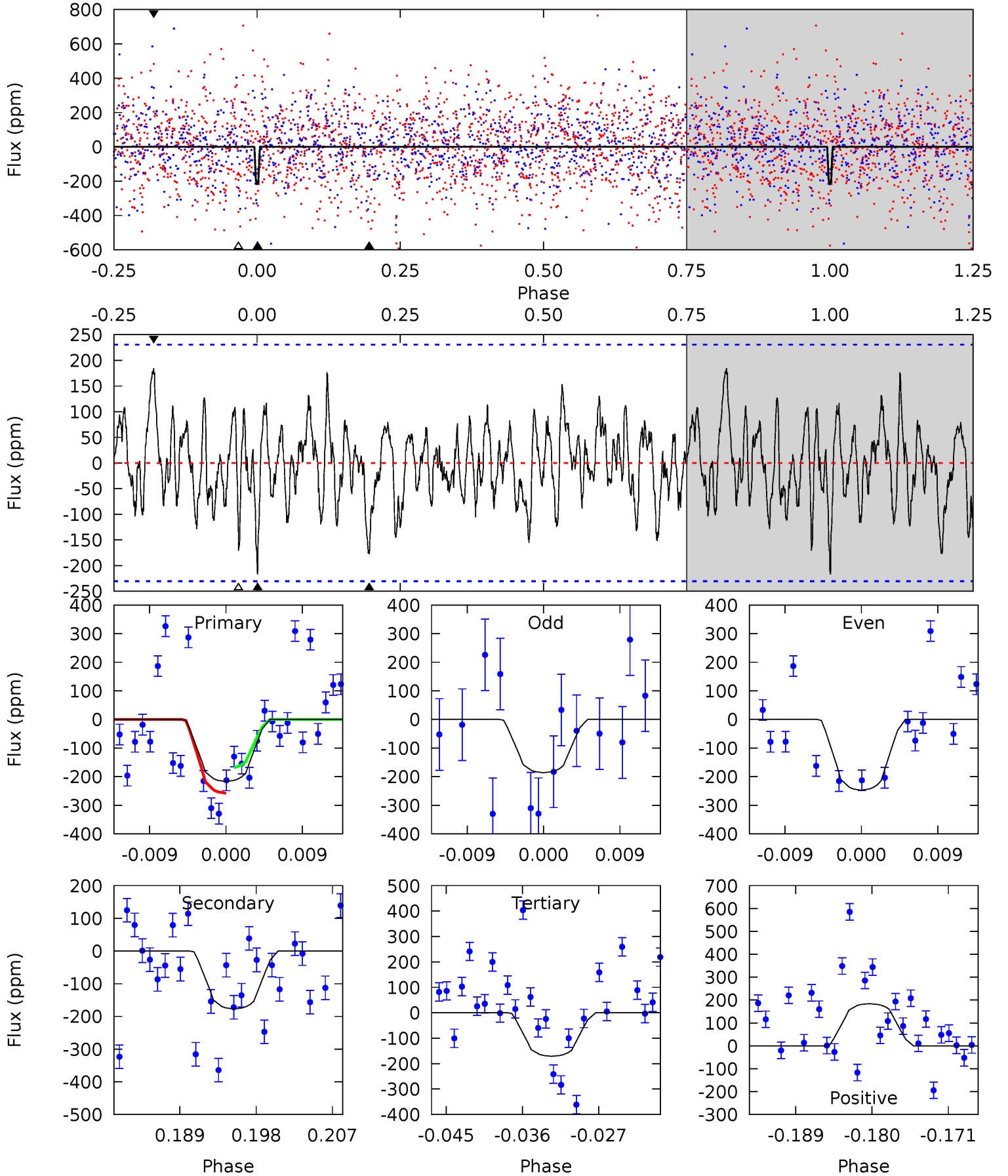


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

011454602-06, P = 8.544381 Days, E = 129.738383 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.75	3.88	3.74	4.03	5.05	2.61	1.36	1.01	0.71	0.14	-0.16	0.67	0.82	0.46	0.99



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 011454602

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5878^{+156}_{-191}	$4.405^{+0.087}_{-0.203}$	$0.120^{+0.250}_{-0.300}$	$1.064^{+0.307}_{-0.141}$	$1.051^{+0.122}_{-0.136}$	$1.228^{+0.542}_{-0.601}$
	+3%/-3%	+2%/-5%	+208%/-250%	+29%/-13%	+12%/-13%	+44%/-49%
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 011454602-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-177 ± 46	$9.16^{+9.39}_{-6.61}$	1308^{+98}_{-71}	3086^{+1645}_{-607}	$8.277^{+92.361}_{-6.502}$
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 $A_{\text{obs}} \gg 1.0$

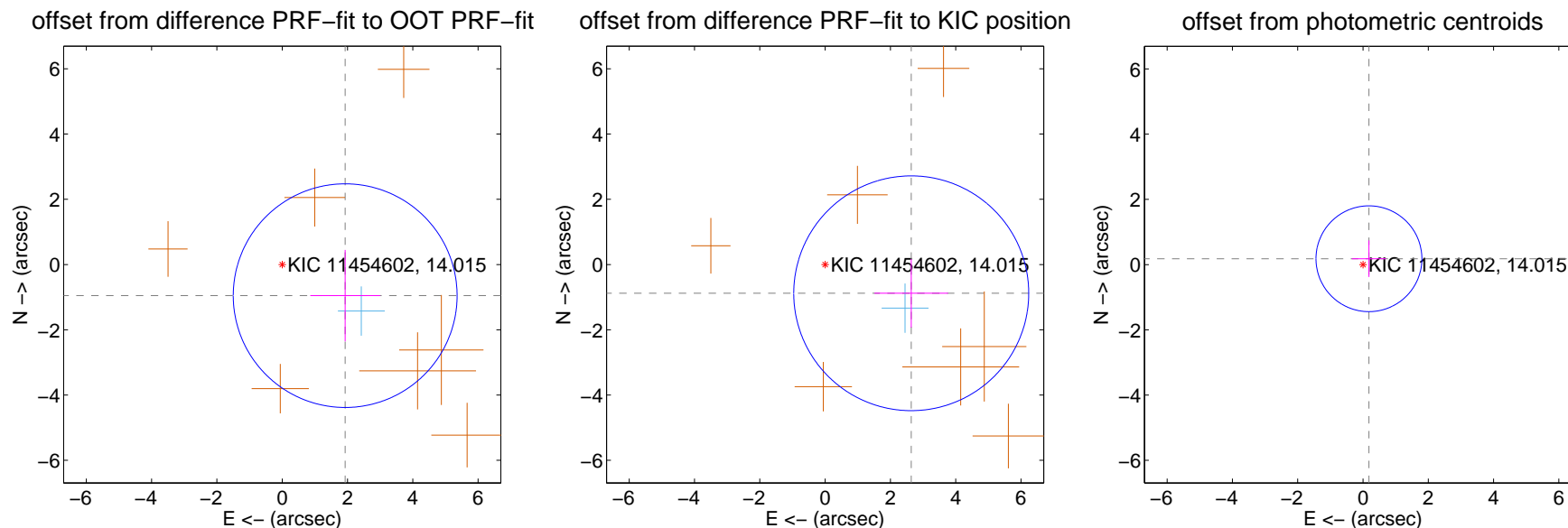
DV Centroid Data

Supplemental centroid analysis for 011454602-06. Kepler magnitude: 14.02. Transit SNR 12.17

There are 1 quarters with good PRF difference image offsets

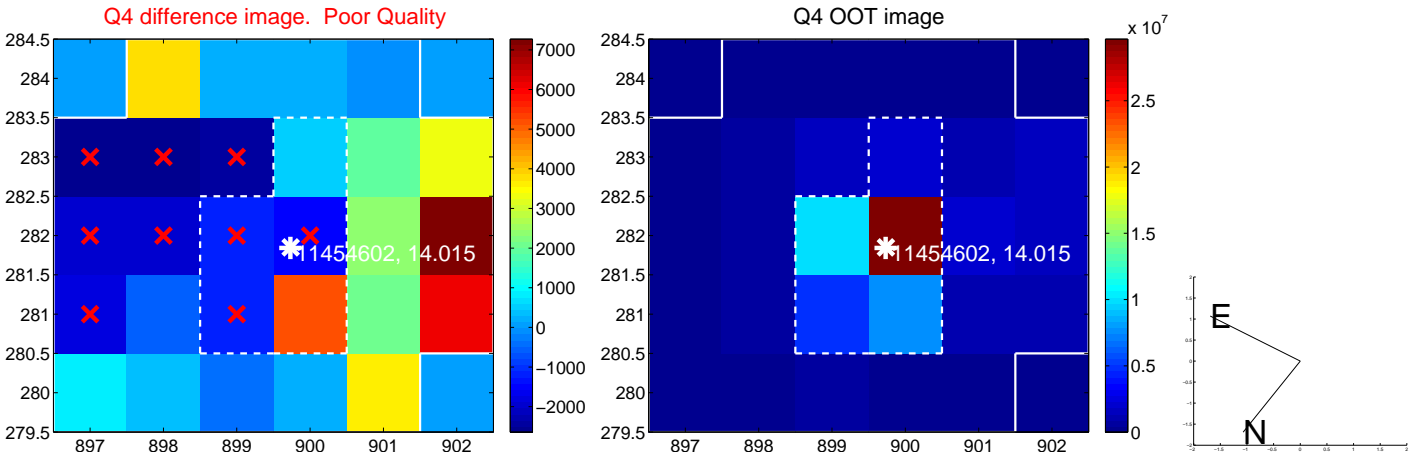
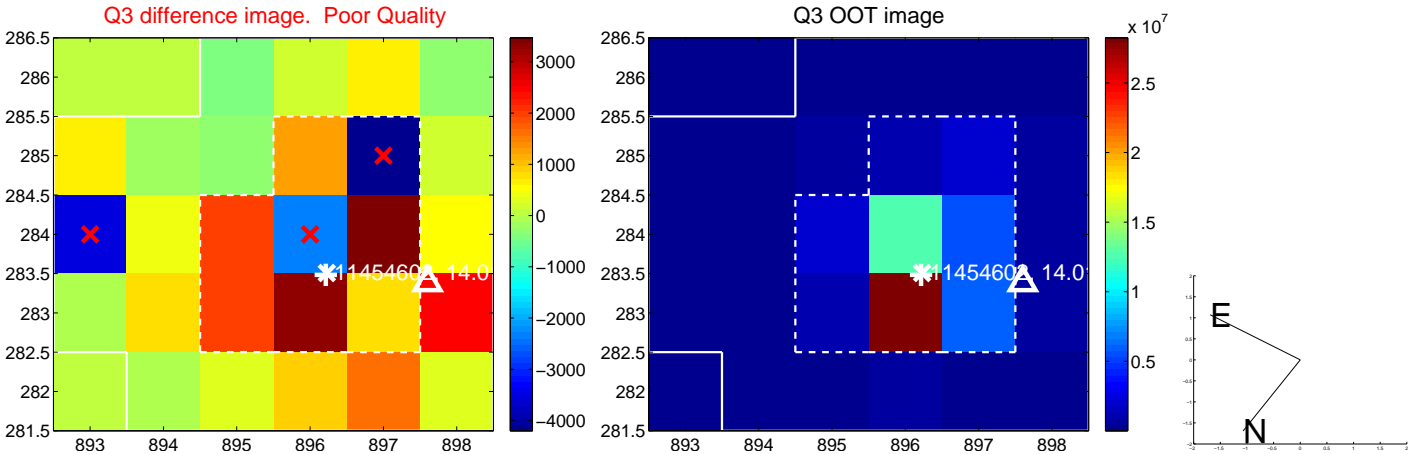
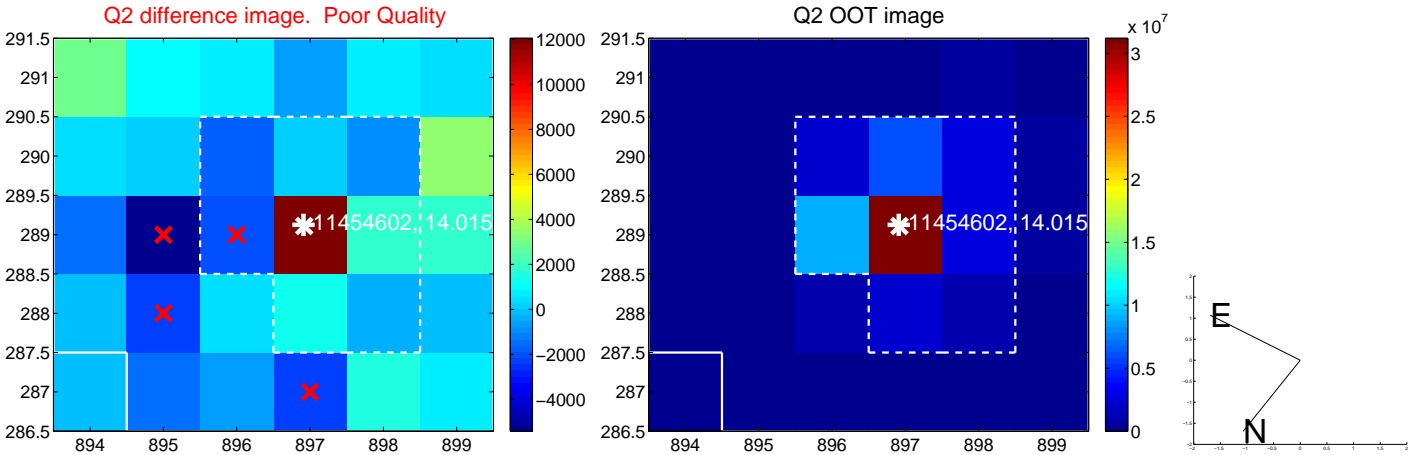
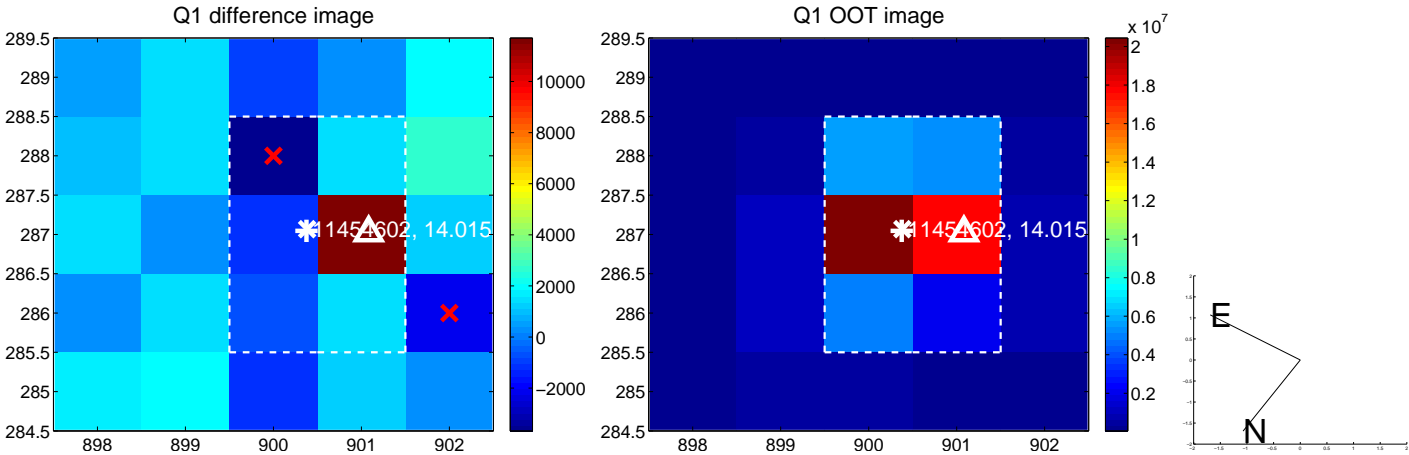
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.152 ± 1.143	1.88	-1.929 ± 1.070	-0.954 ± 1.402
PRF-fit source offset from KIC position	2.782 ± 1.200	2.32	-2.639 ± 1.129	-0.881 ± 1.049
photometric centroid source offset	0.26 ± 0.54	0.47	-0.18 ± 0.52	0.18 ± 0.56

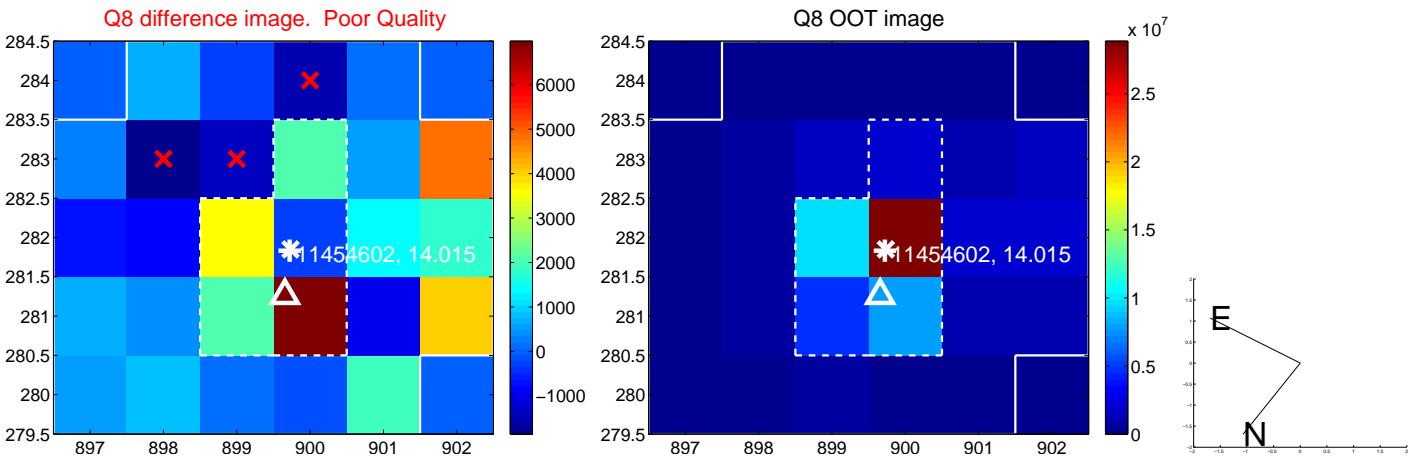
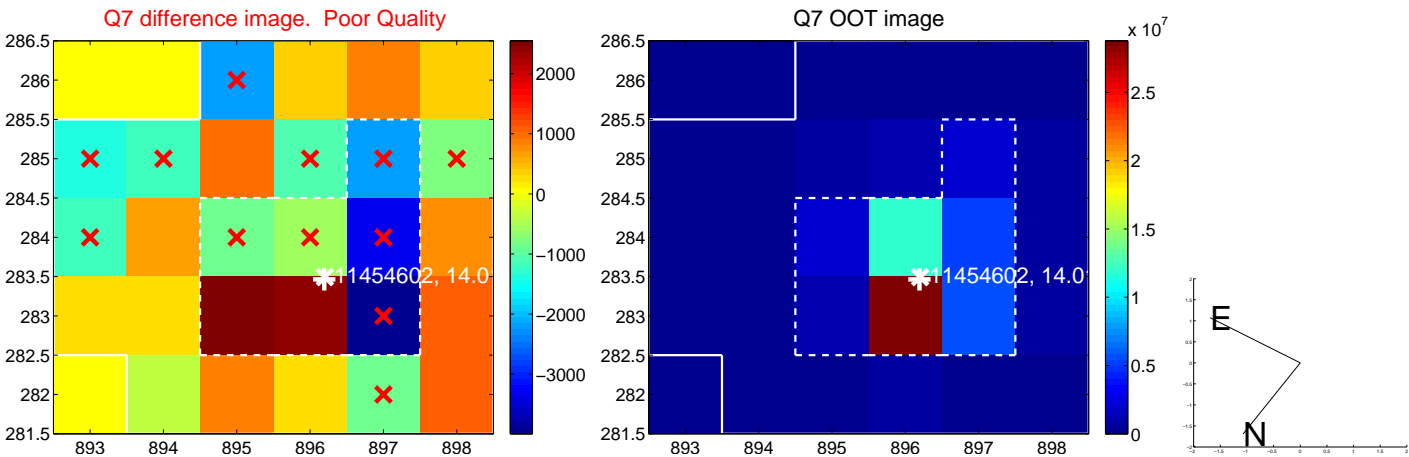
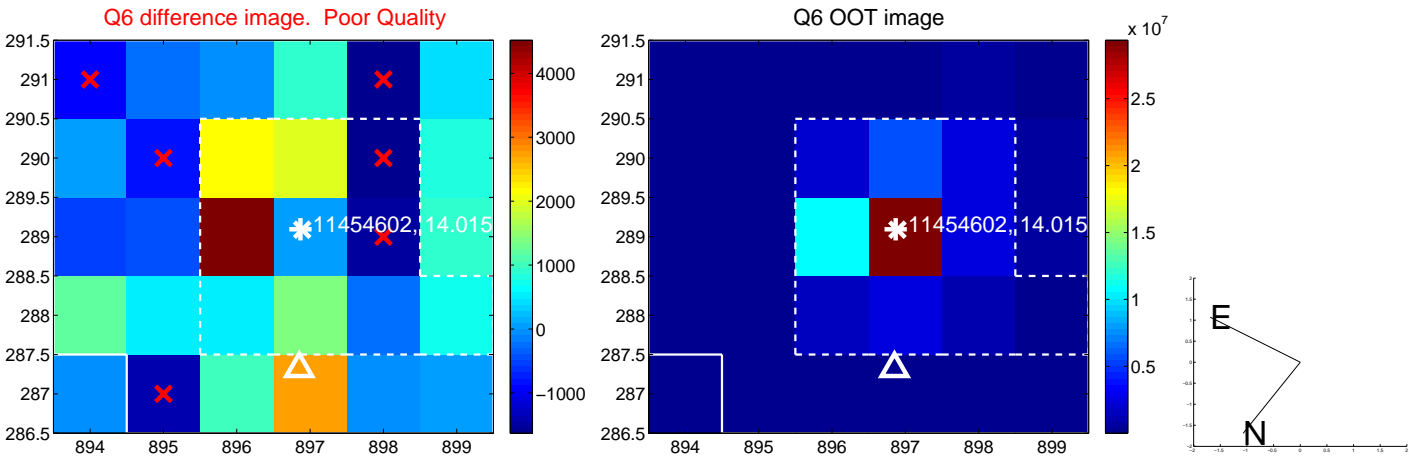
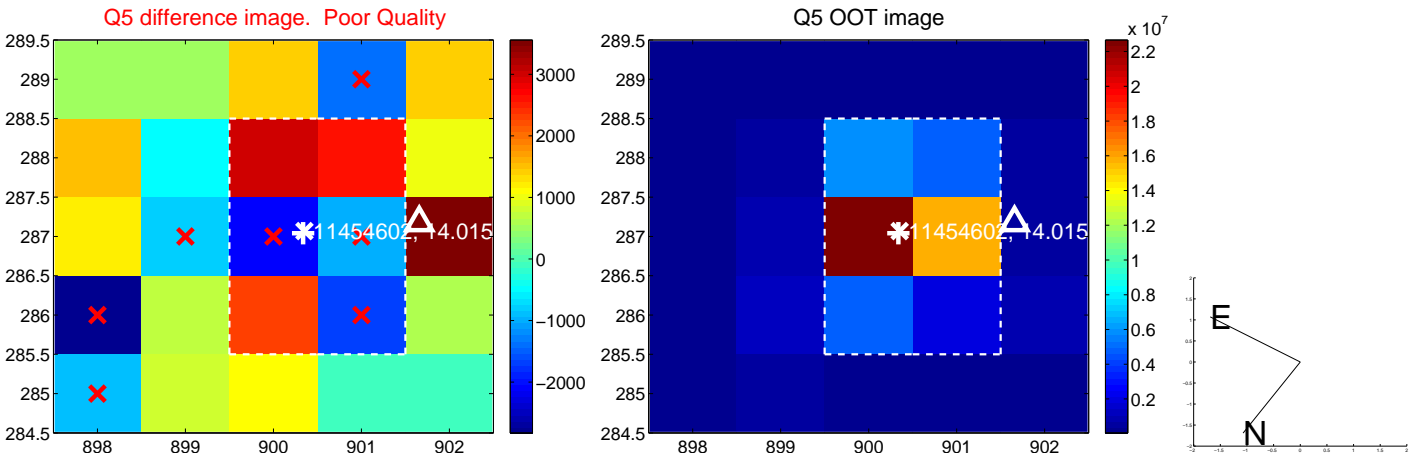


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

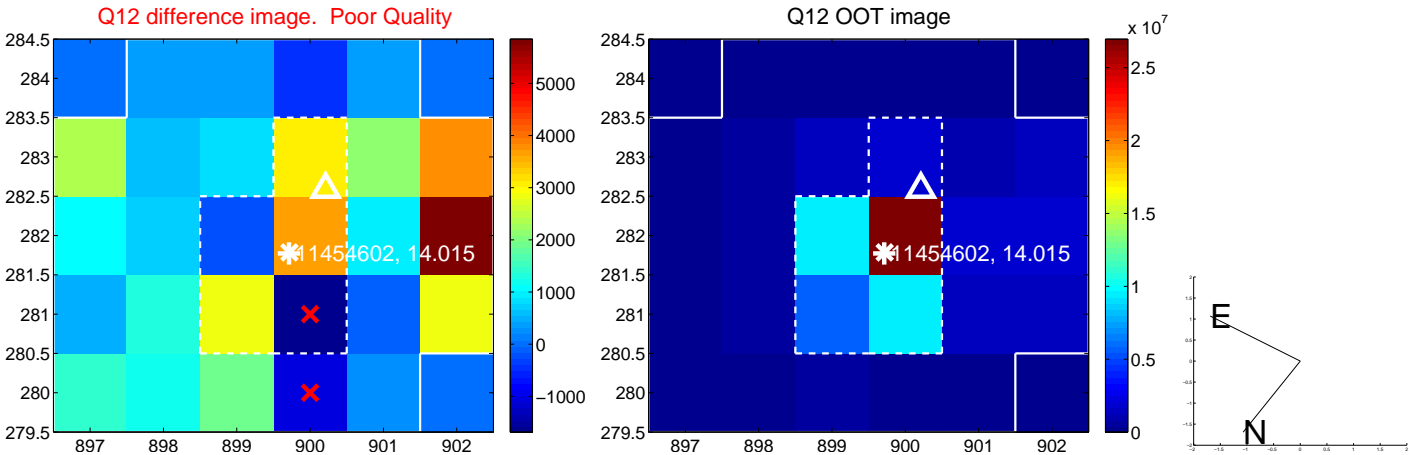
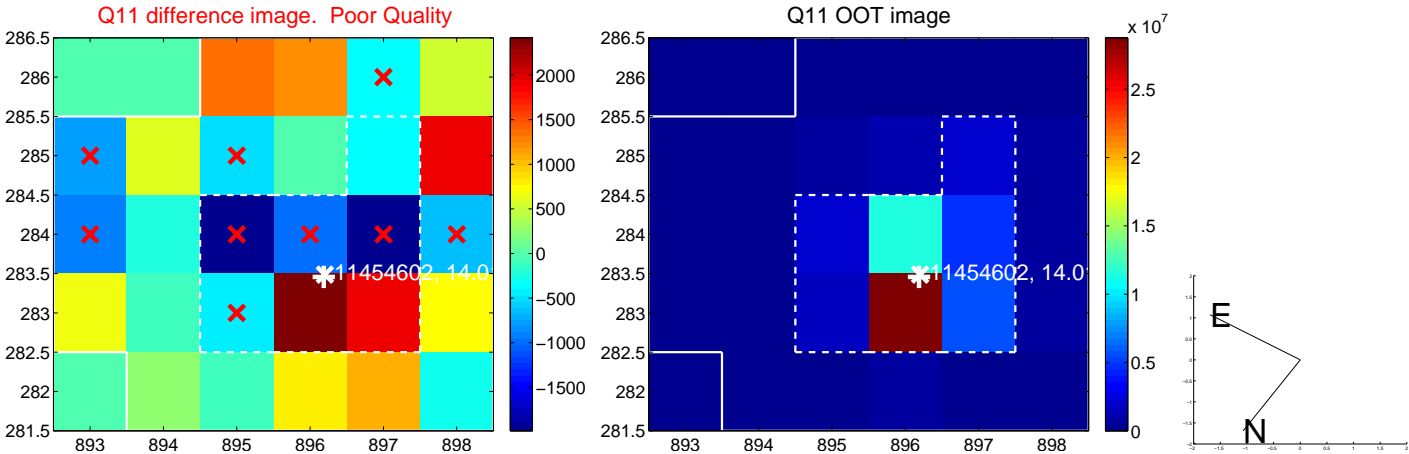
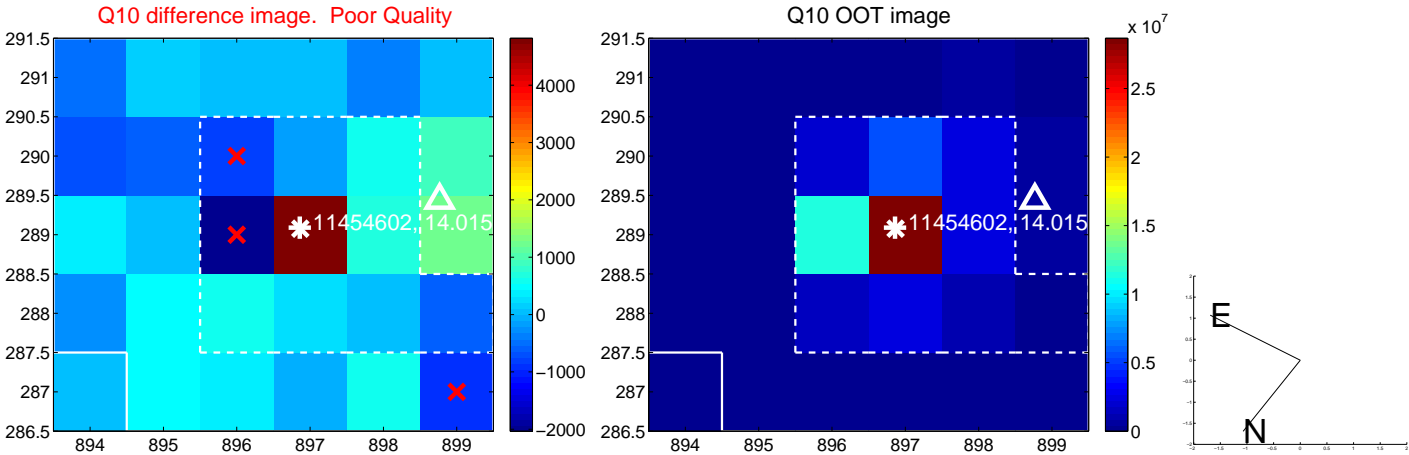
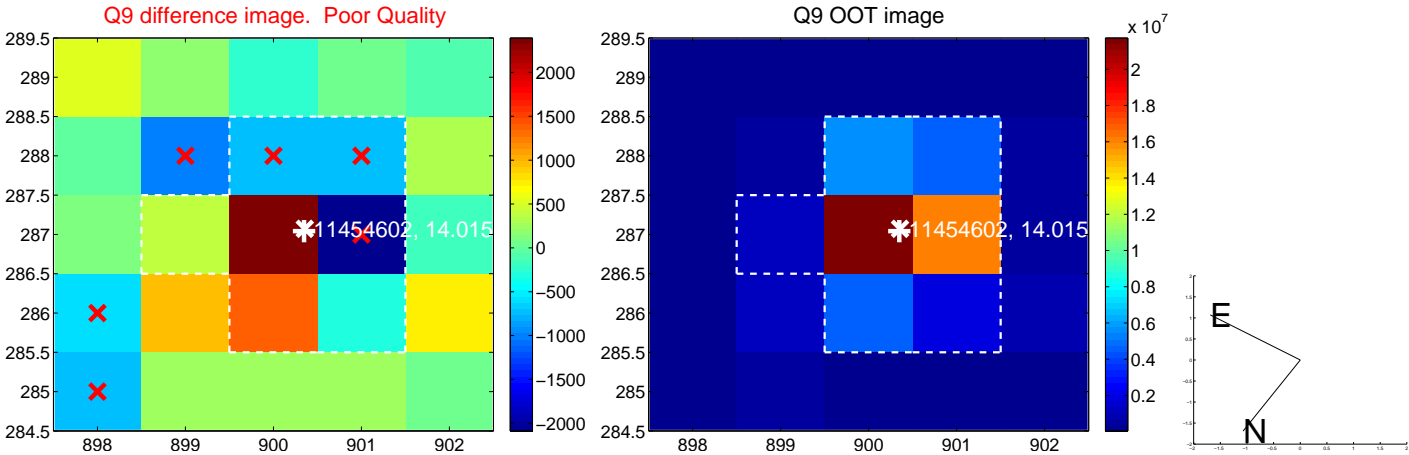
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



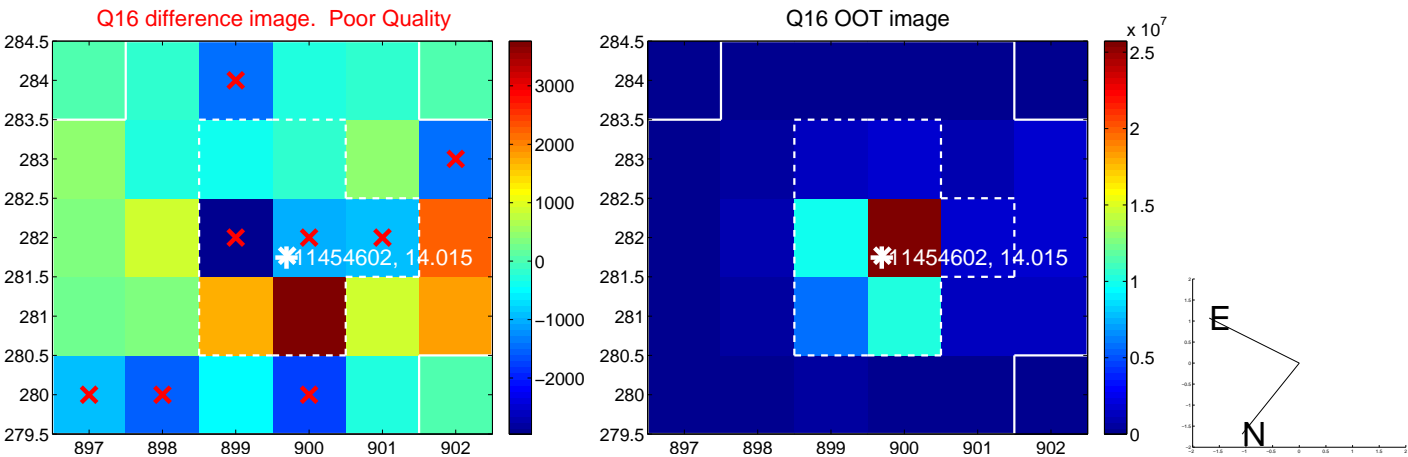
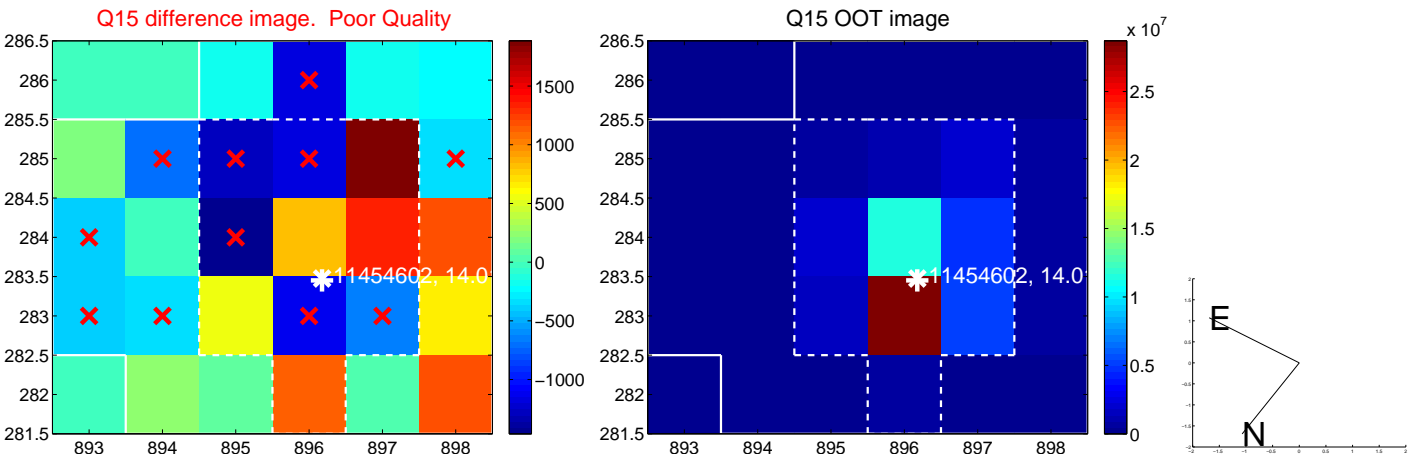
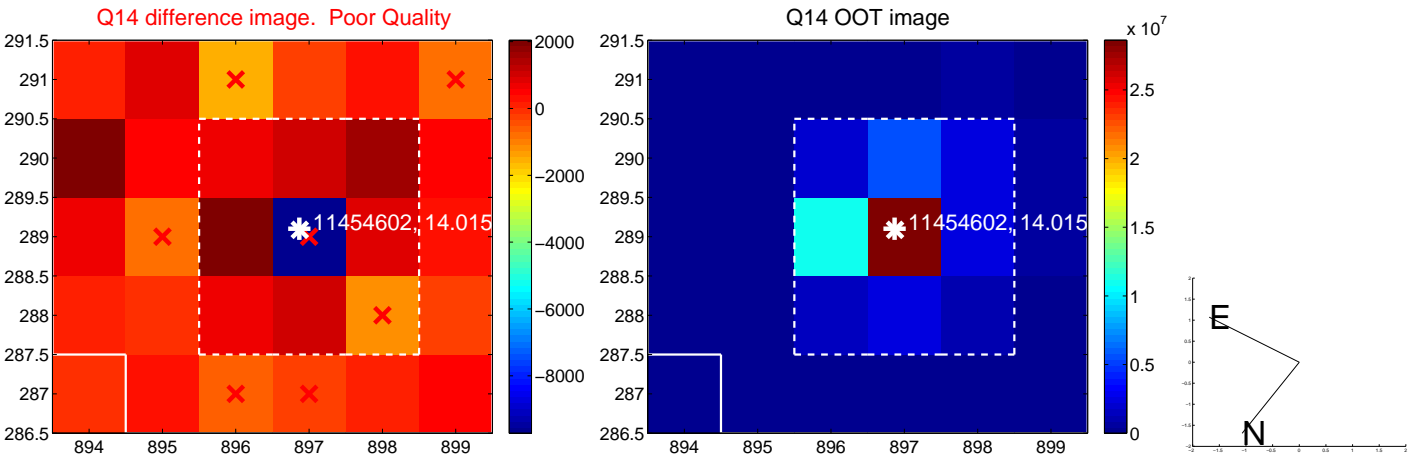
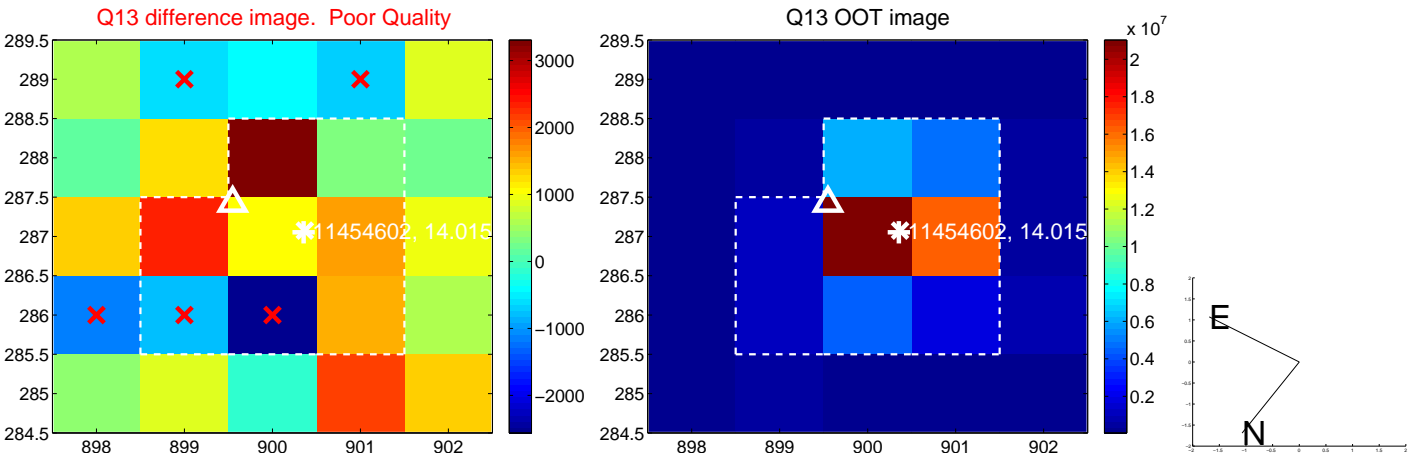
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



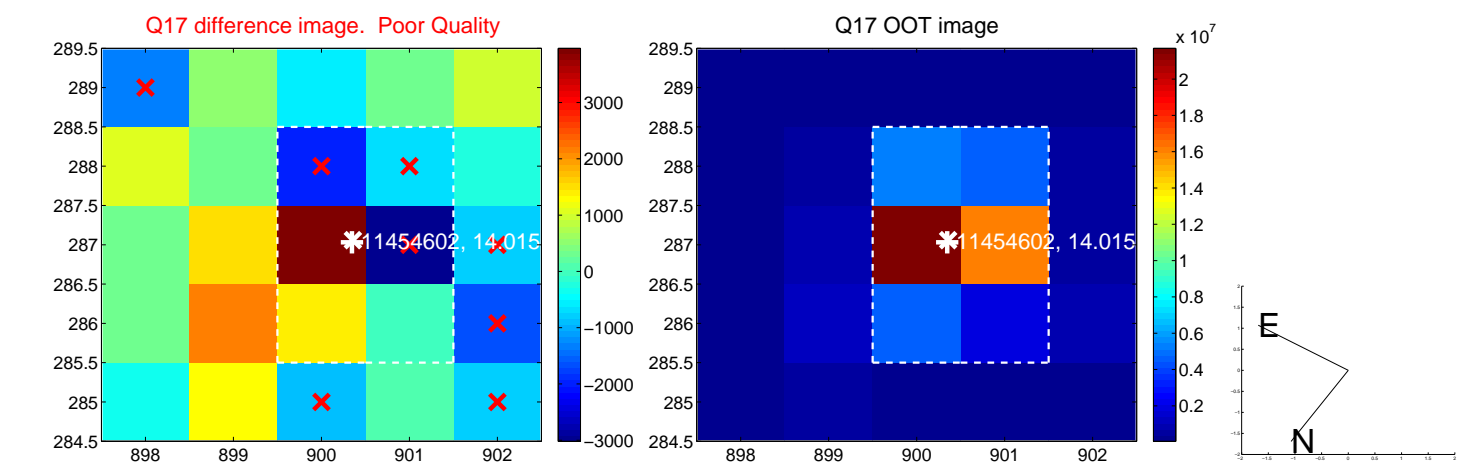
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



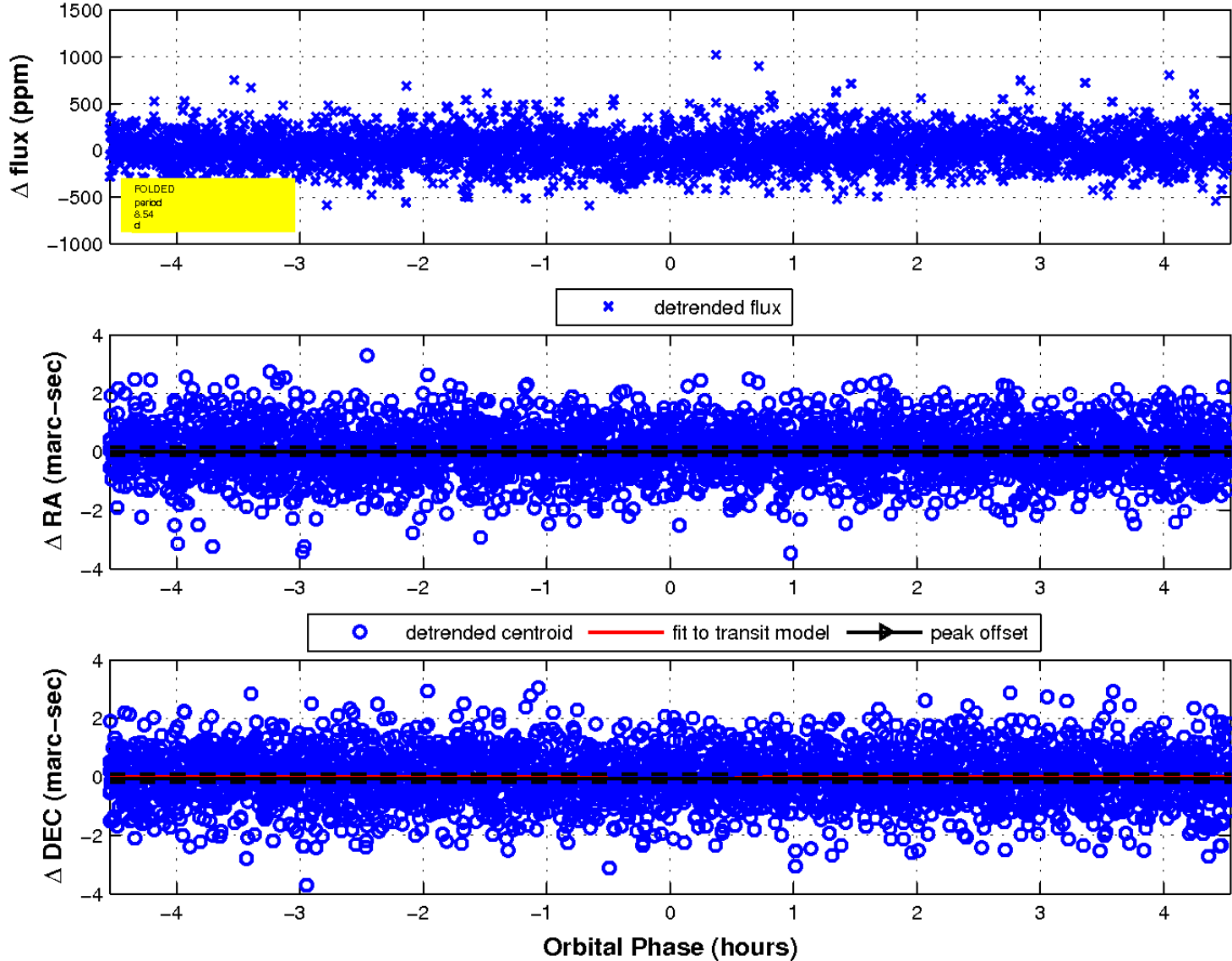
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

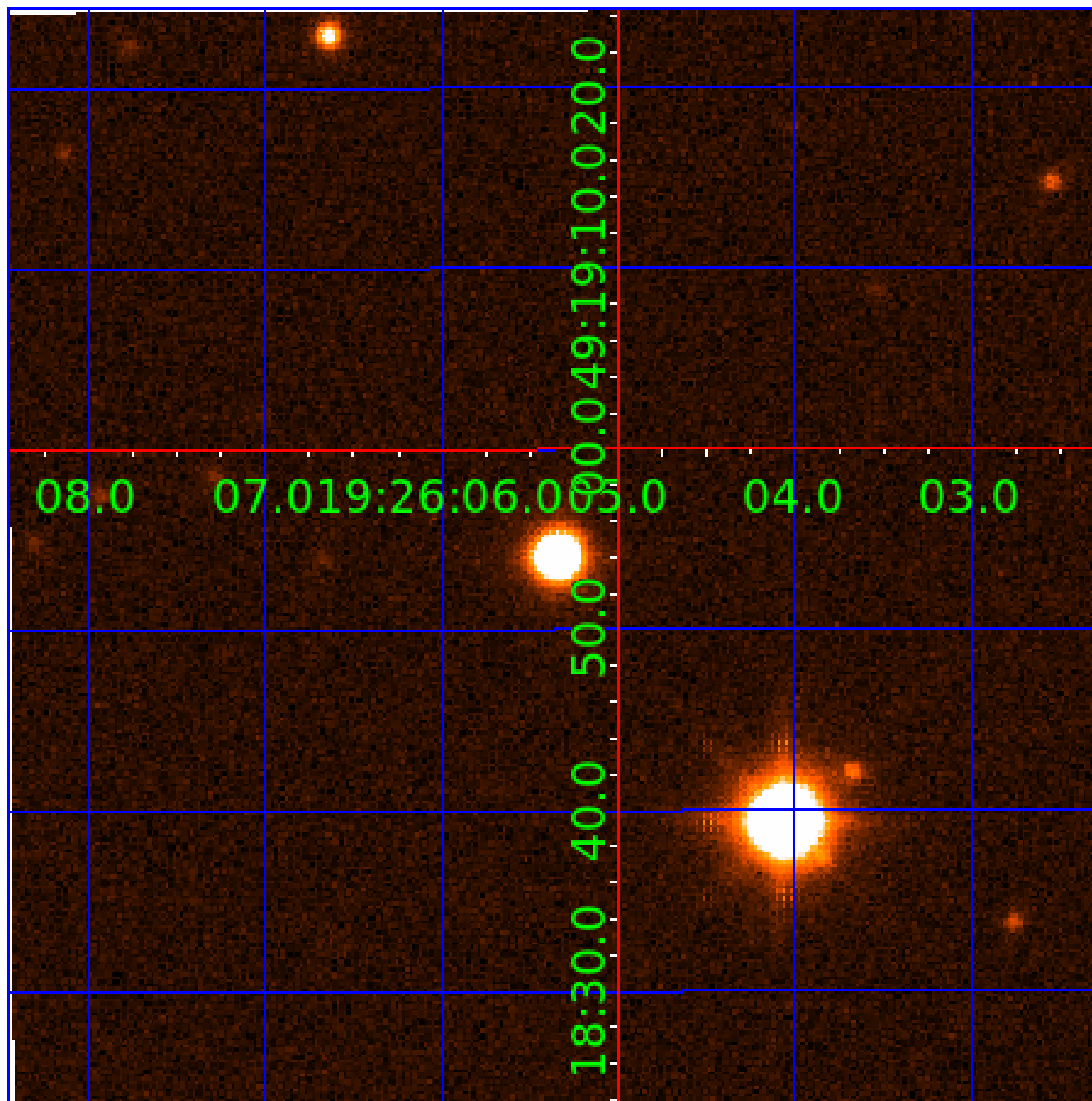


fluxWeightedCentroids, Planet 6 of 7



UKIRT Image

Declination



KIC 011454602

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})
011454602-01	OBS	No	1.204542	131.607513	15.9	9.112	7.4	8.5	1.06	5878	0.42	2387.87
011454602-02	OBS	No	40.784419	159.367250	2303.5	1.500	24.7	-1.0	1.06	5878	5.08	21.80
011454602-03	OBS	No	3.754298	134.337688	210.7	3.031	20.4	18.9	1.06	5878	2.53	524.49
011454602-04	OBS	No	12.176176	131.555593	353.0	1.247	17.6	16.1	1.06	5878	2.13	109.25
011454602-05	OBS	No	8.622852	140.092733	301.6	1.096	16.0	13.3	1.06	5878	1.86	173.08
011454602-06	OBS	No	8.544381	138.282764	246.6	1.515	14.9	12.2	1.06	5878	1.67	175.20
011454602-07	OBS	No	4.177766	132.060994	1361.2	1.500	14.4	-1.0	1.06	5878	3.91	454.83

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011454602-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET
011454602-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—NO_FITS—CENT_NOFITS
011454602-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_RESOLVED_OFFSET
011454602-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_MEAS
011454602-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS—HALO_GHOST
011454602-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV
011454602-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

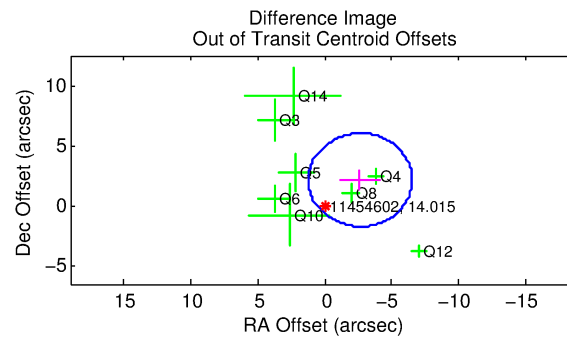
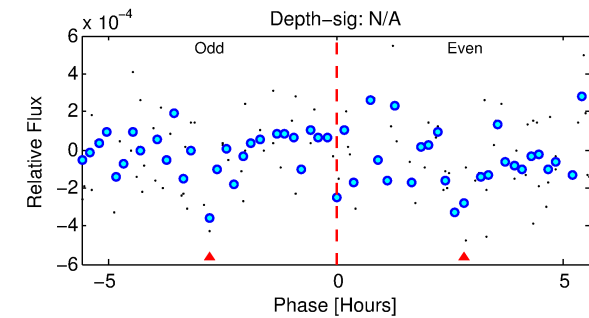
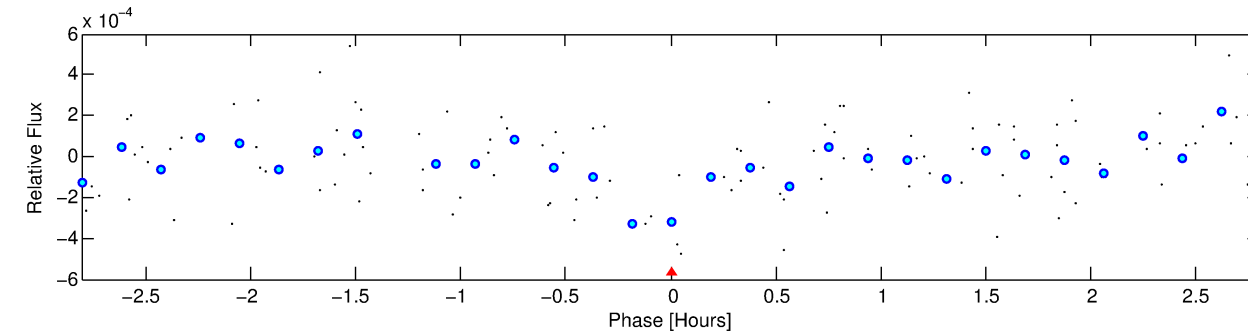
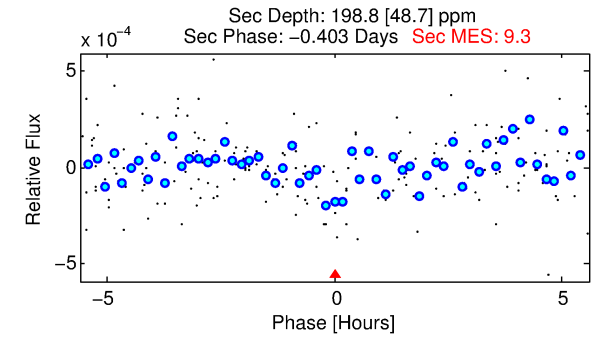
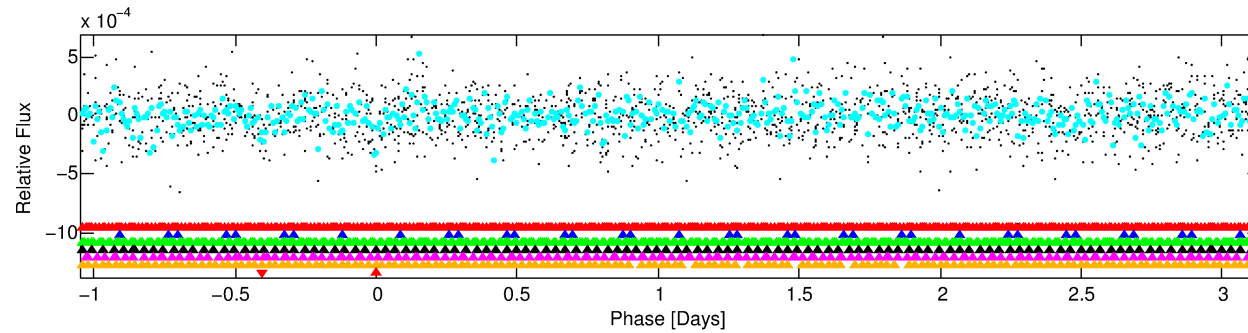
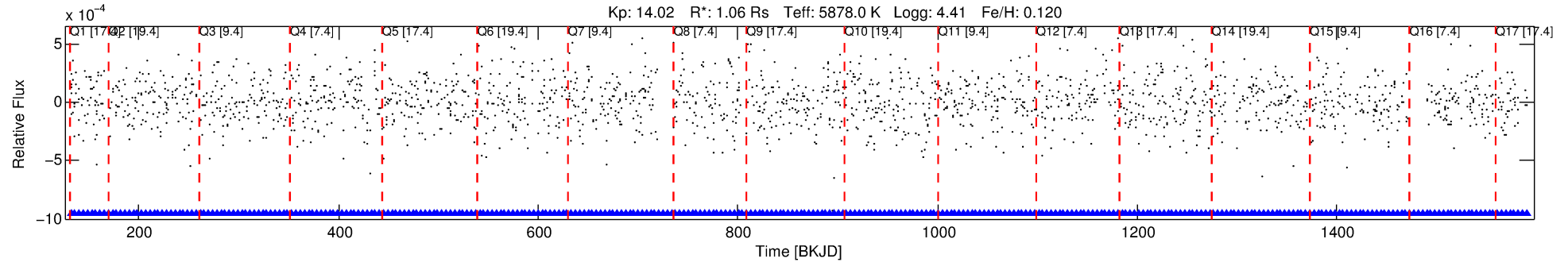
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011454602-07

No Significant Match Found

DV One-Page Summary

KIC: 11454602 Candidate: 7 of 7 Period: 4.178 d



TPS TCE Results:

Period = 4.17777 d
Epoch = 132.0610 BKJD

DV fit results are unavailable

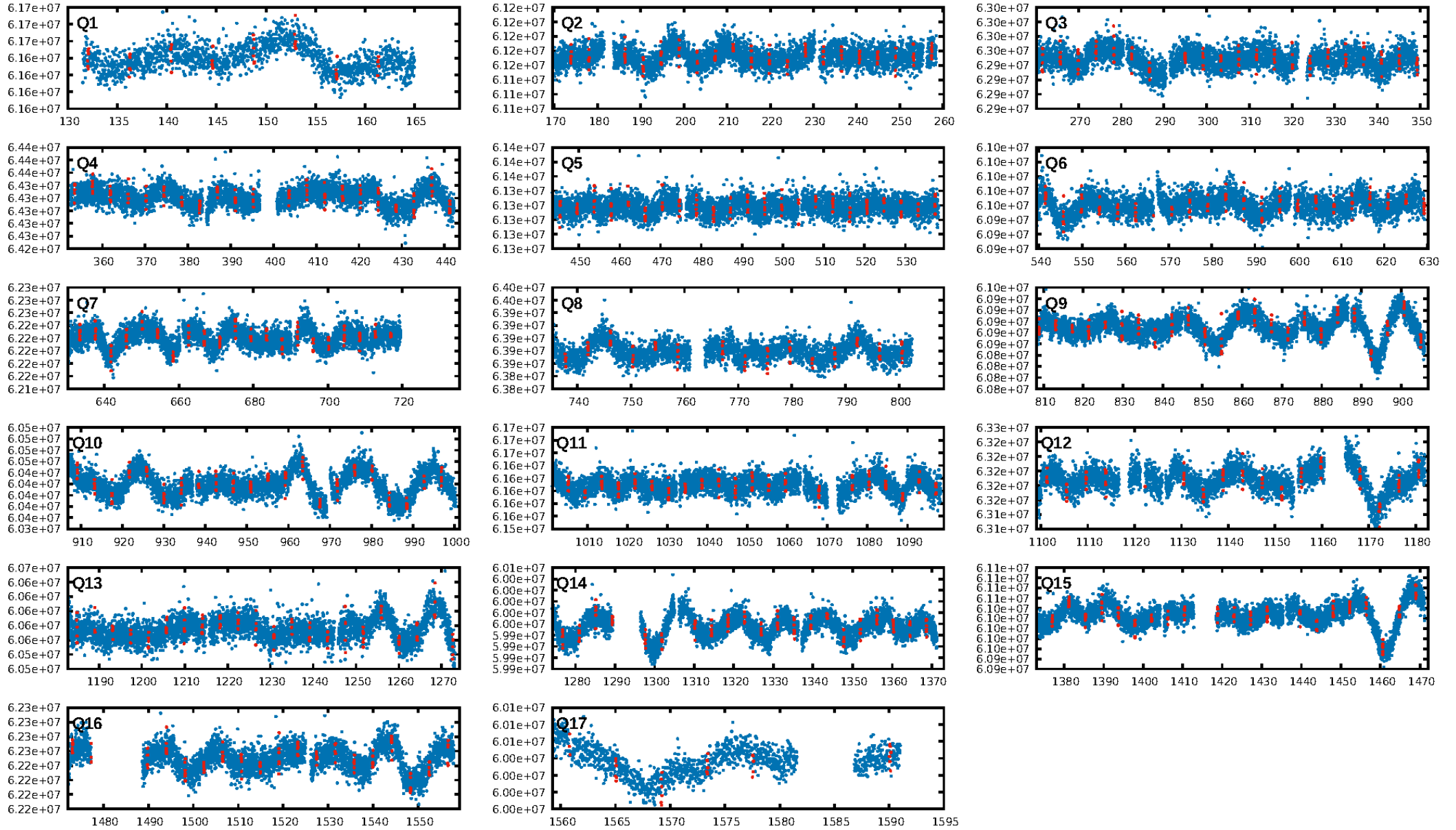
DV Diagnostic Results:

ShortPeriod-sig: 99.7% [3.01 σ]
LongPeriod-sig: 100.0% [49.16 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [22/22]
GhostDiagnostic-chr: -0.7607
Centroid-sig: 22.9%
Centroid-so: 0.448 arcsec [1.05 σ]
OotOffset-rm: 3.413 arcsec [2.64 σ]
KicOffset-rm: 3.444 arcsec [2.67 σ]
OotOffset-st: 3/1/3/1 [8]
KicOffset-st: 3/1/3/1 [8]
DiffImageQuality-fgm: 0.25 [2/8]
DiffImageOverlap-fno: 1.00 [14/14]

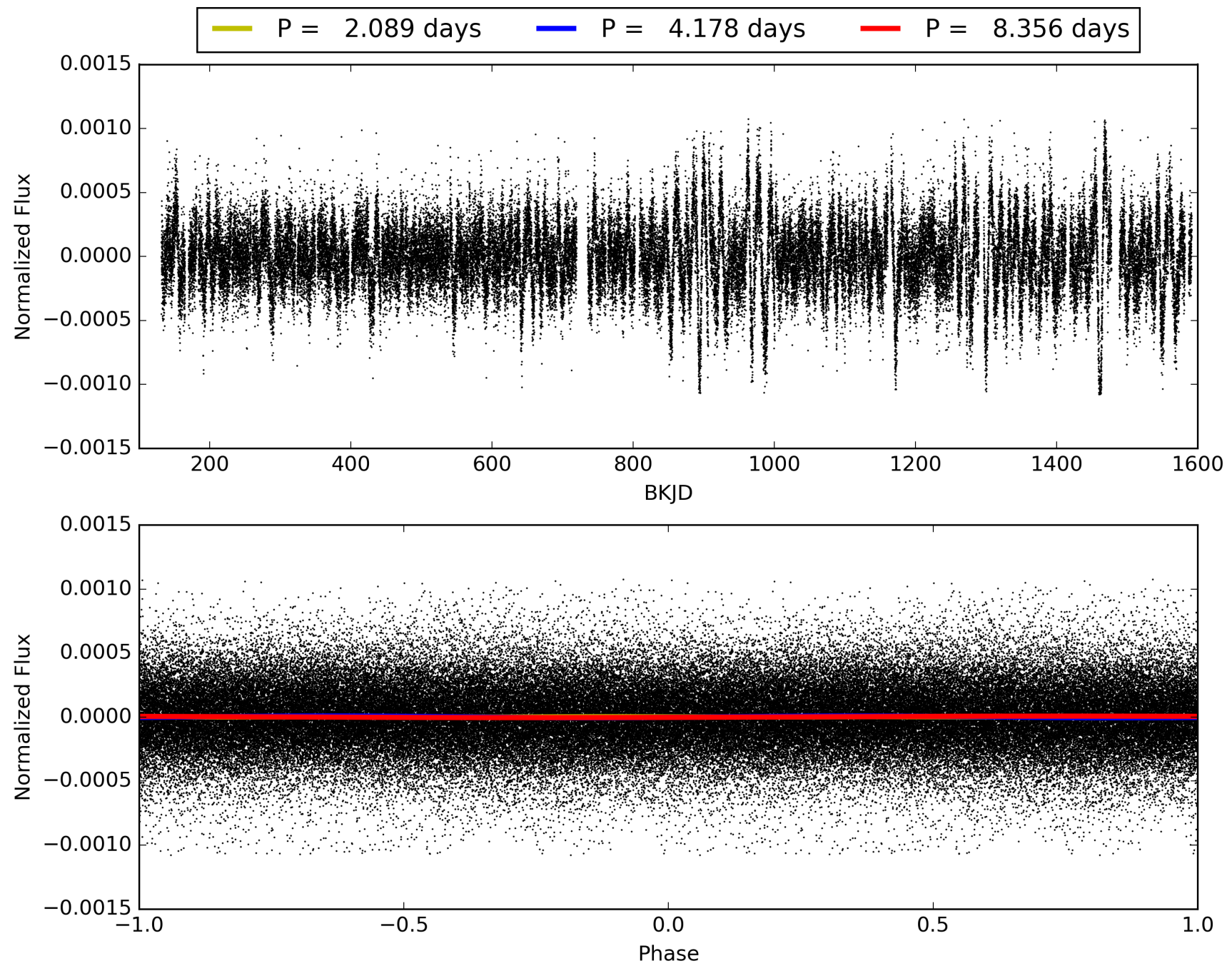
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:04:20 Z

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

TCE 011454602-07, PDC Light Curves

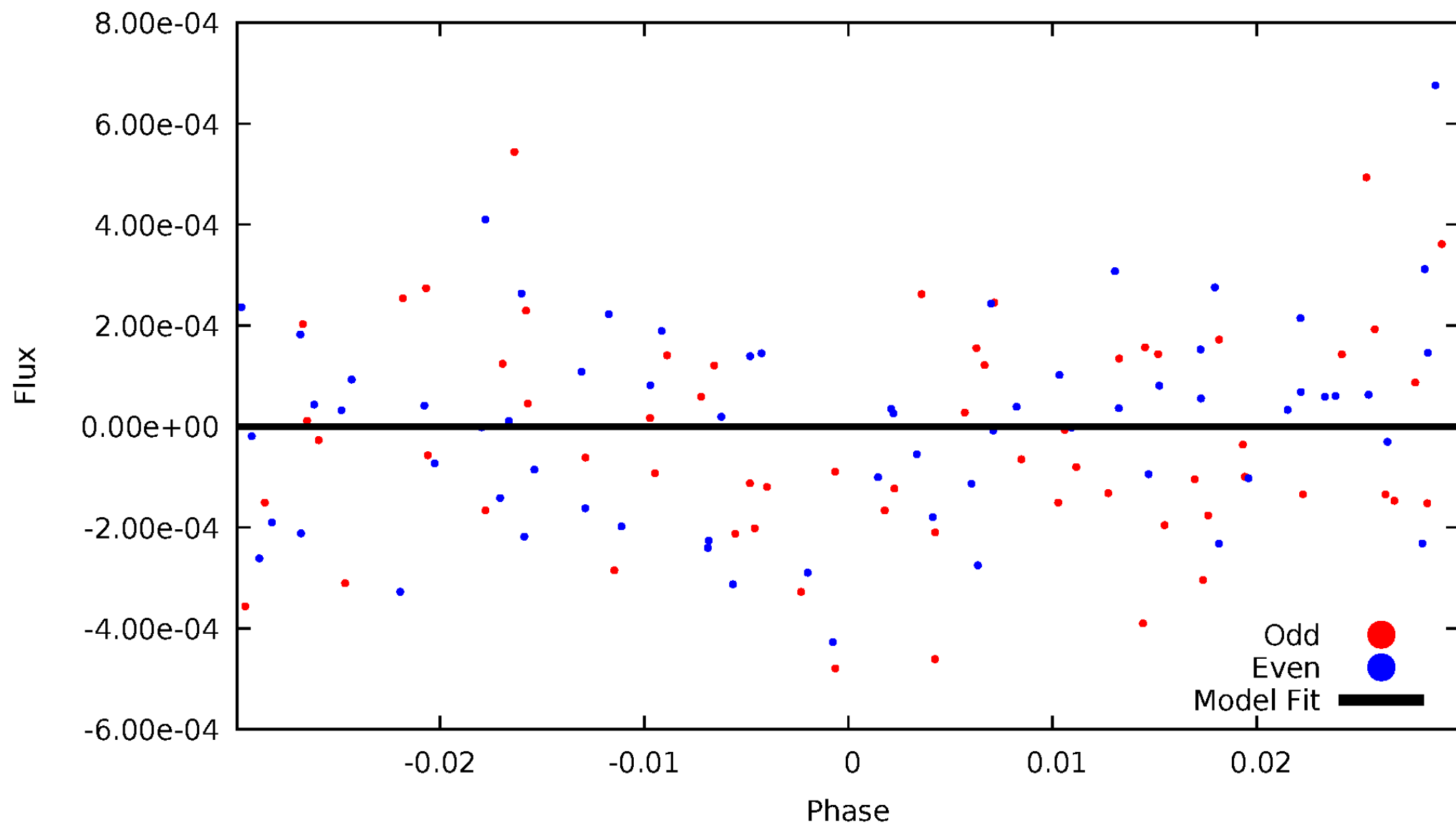


TCE 011454602-07



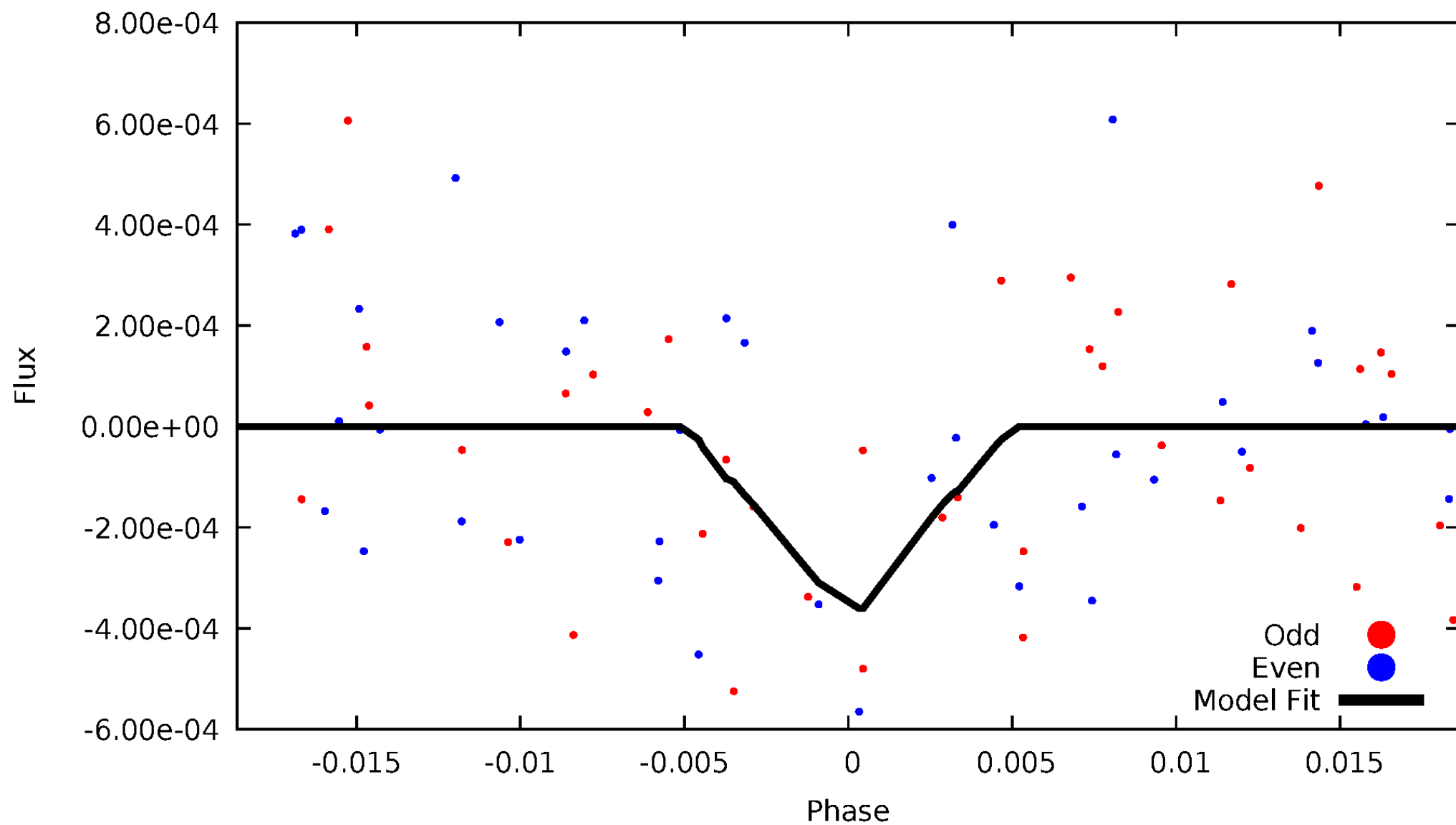
DV Odd/Even

TCE 011454602-07

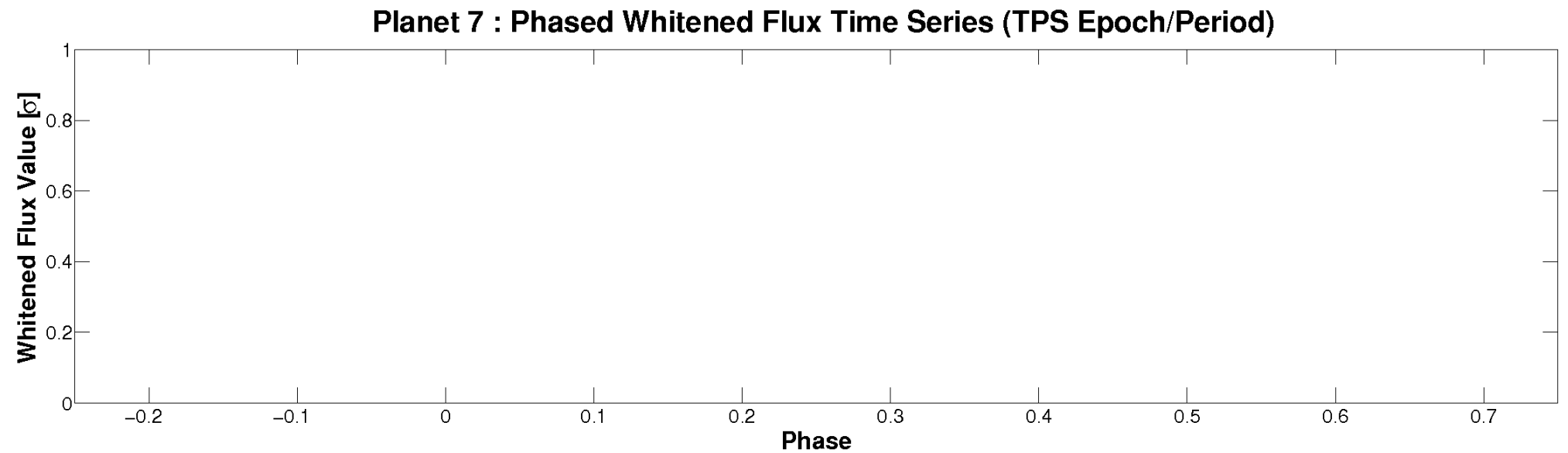
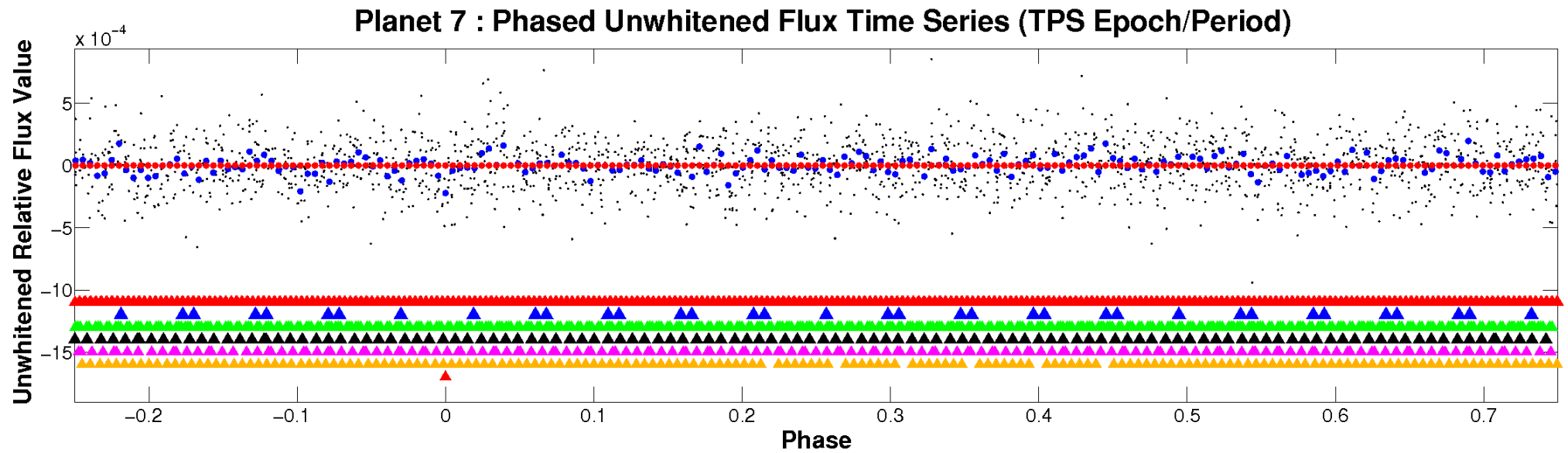


ALT Odd/Even

TCE 011454602-07

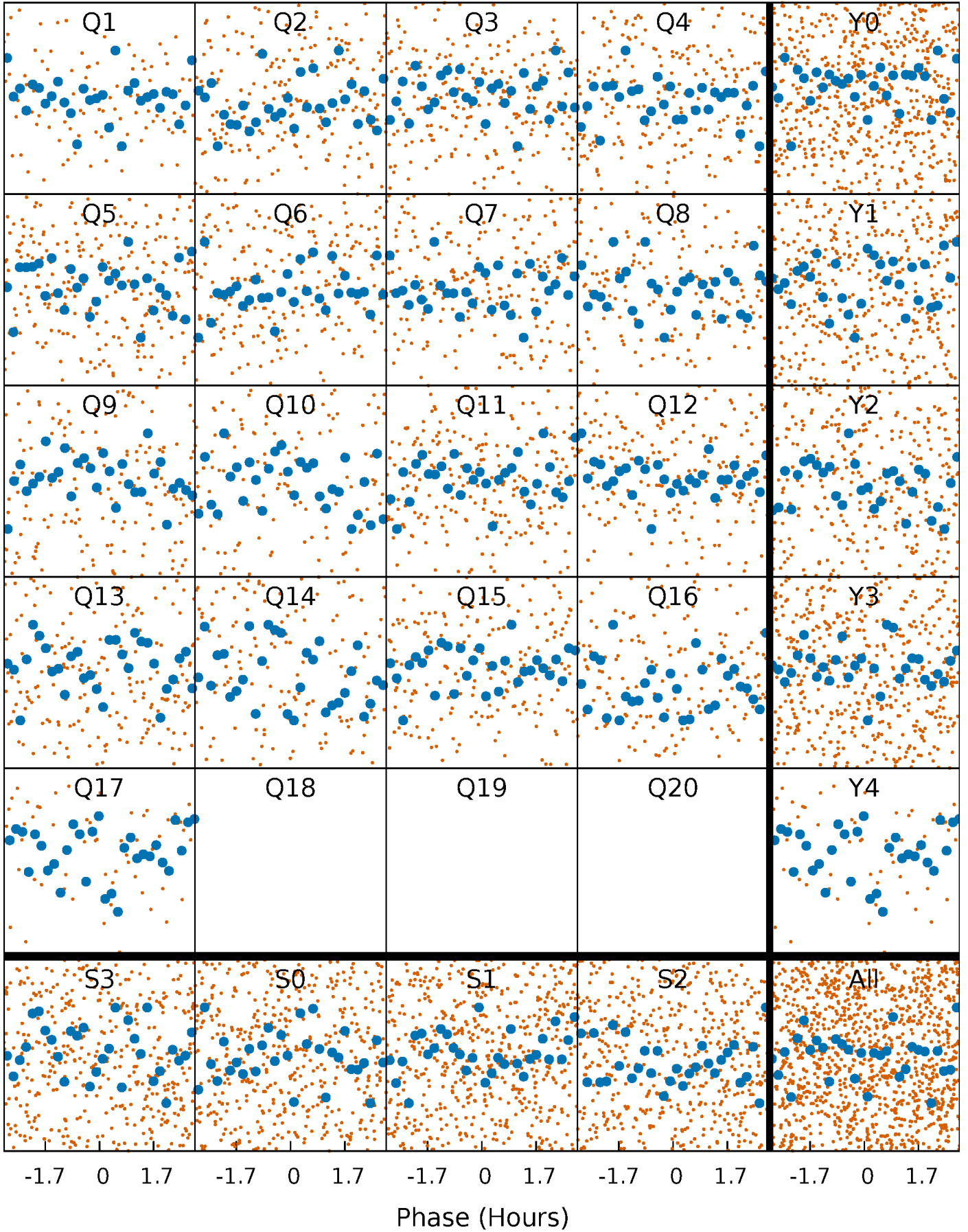


Non-Whitened Vs. Whitened Light Curve



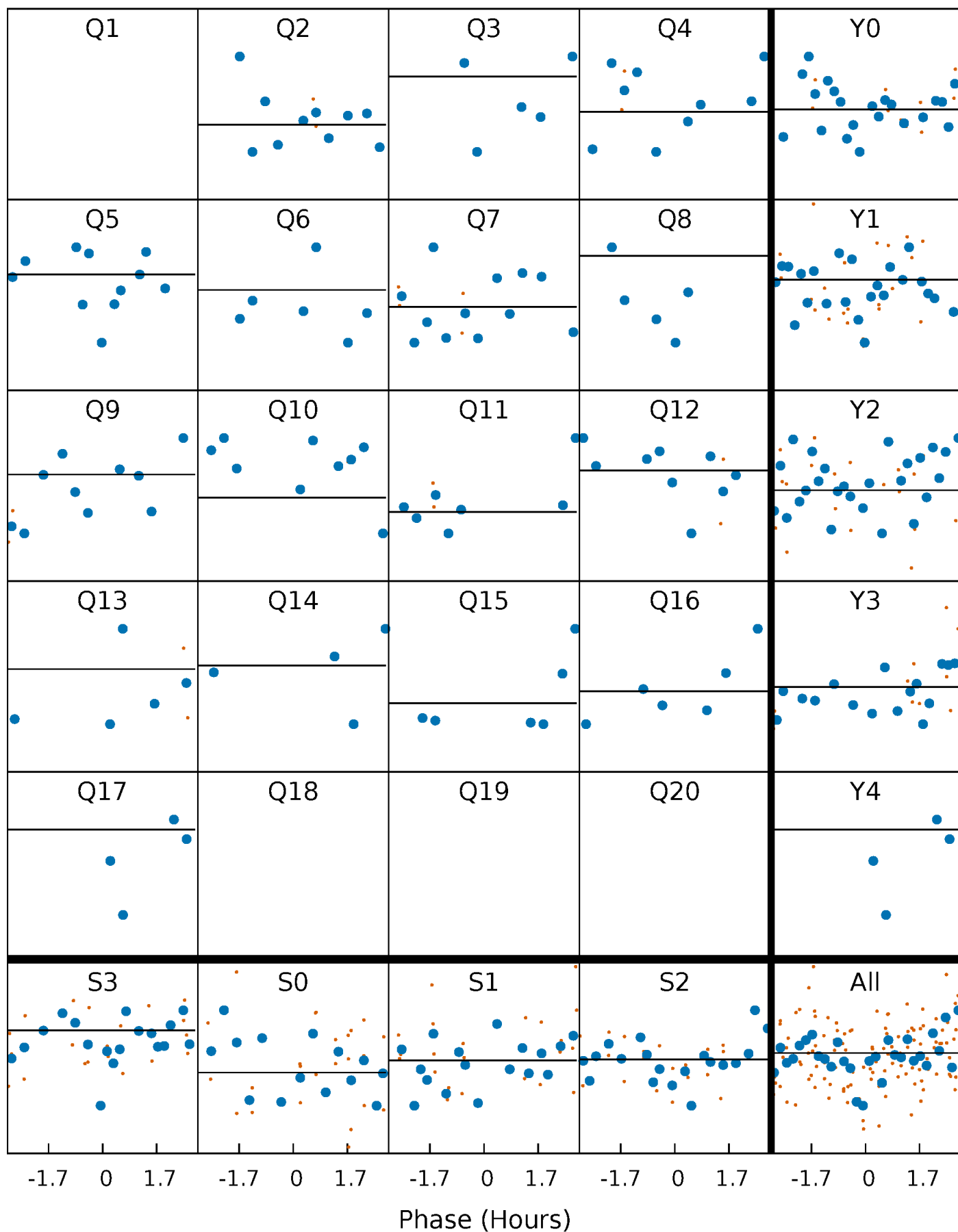
PDC Quarter-Phased Transit Curves

TCE 011454602-07 $P = 4.177766$ Days $T_0 = 132.060994$ (BKJD)



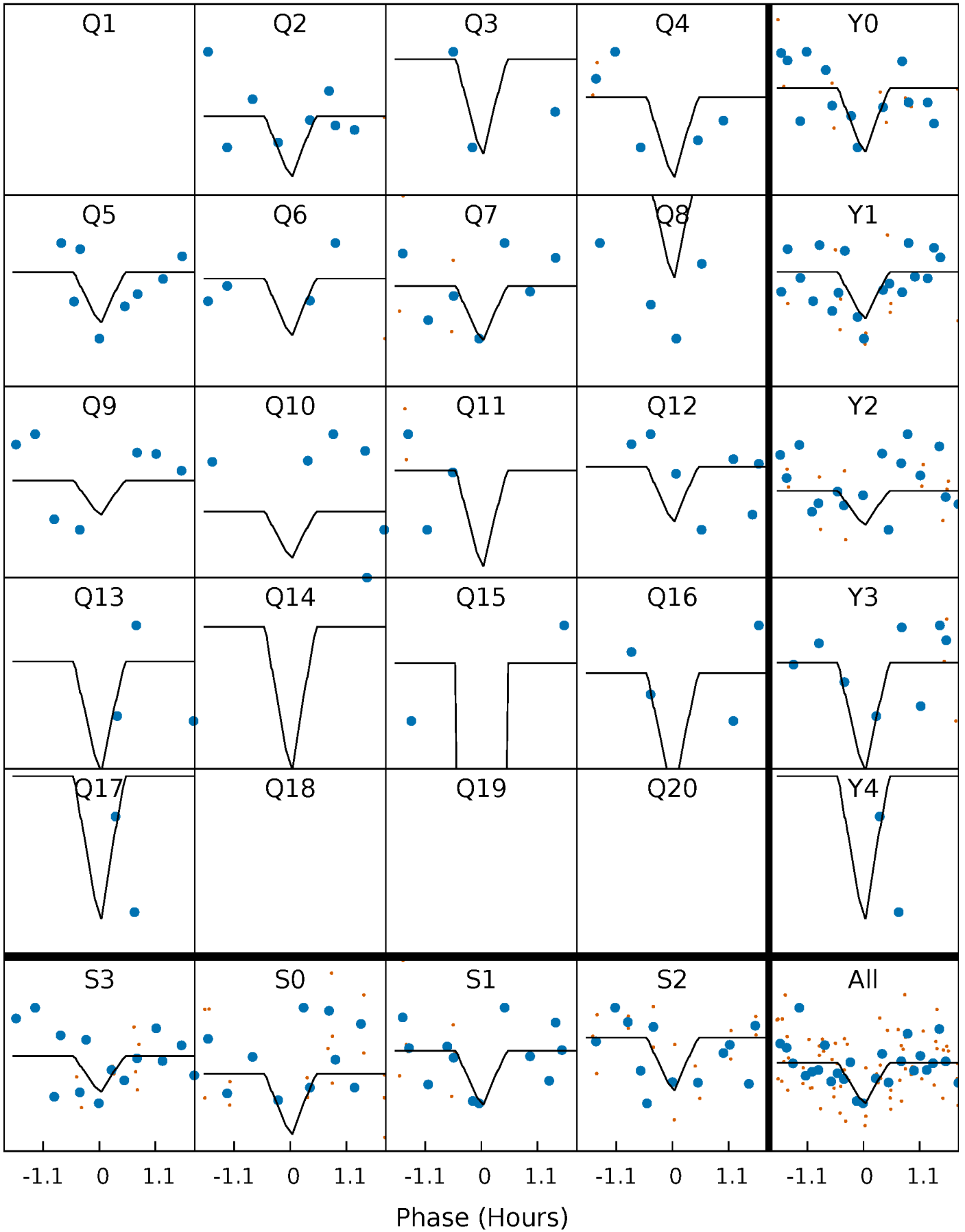
DV Quarter-Phased Transit Curves

TCE 011454602-07 P= 4.177766 Days $T_0=132.060994$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

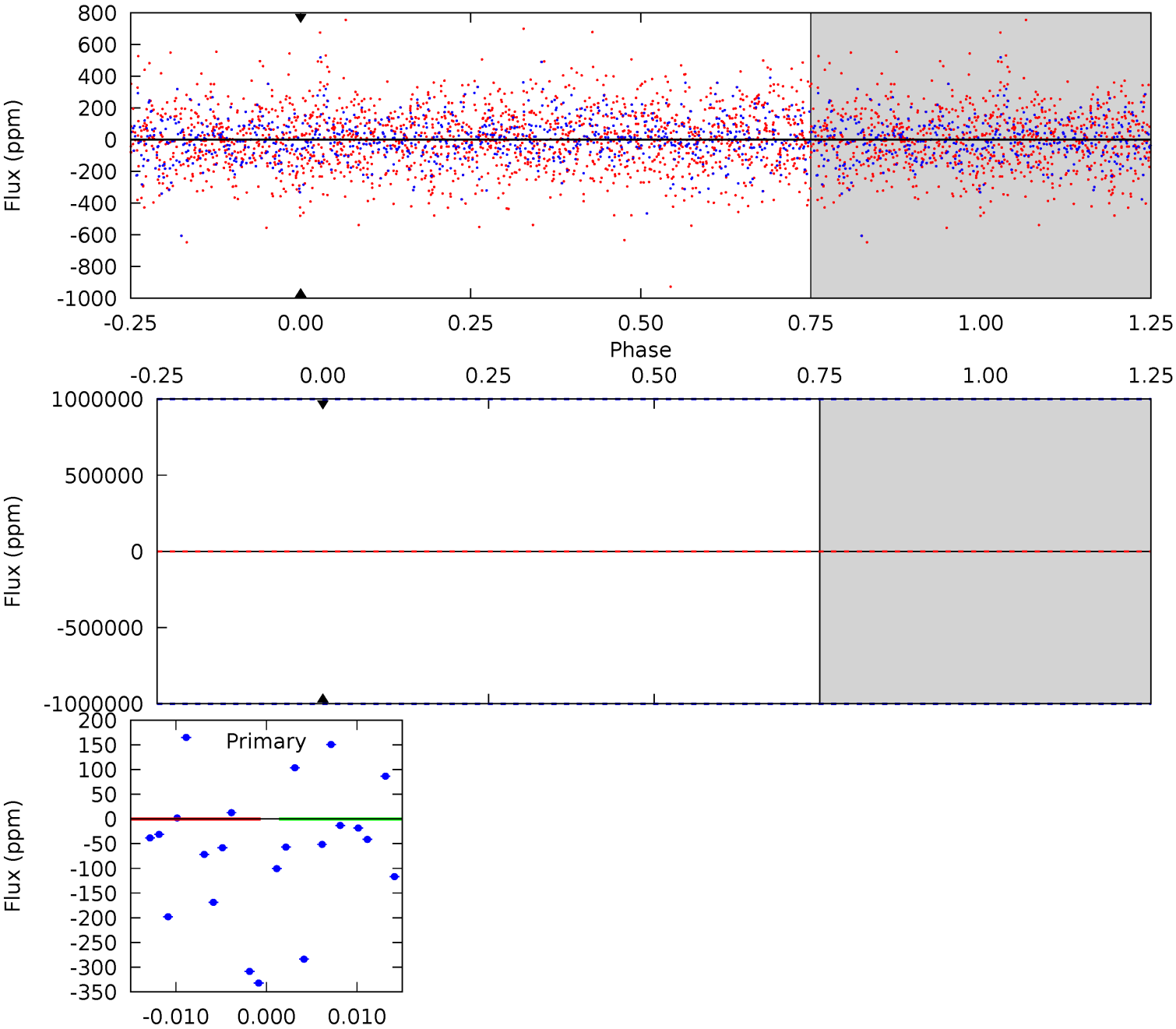
TCE 011454602-07 $P = 4.177766$ Days $T_0 = 132.056458$ (BKJD)



DV Model-Shift Uniqueness Test

011454602-07, P = 4.177766 Days, E = 132.060994 Days

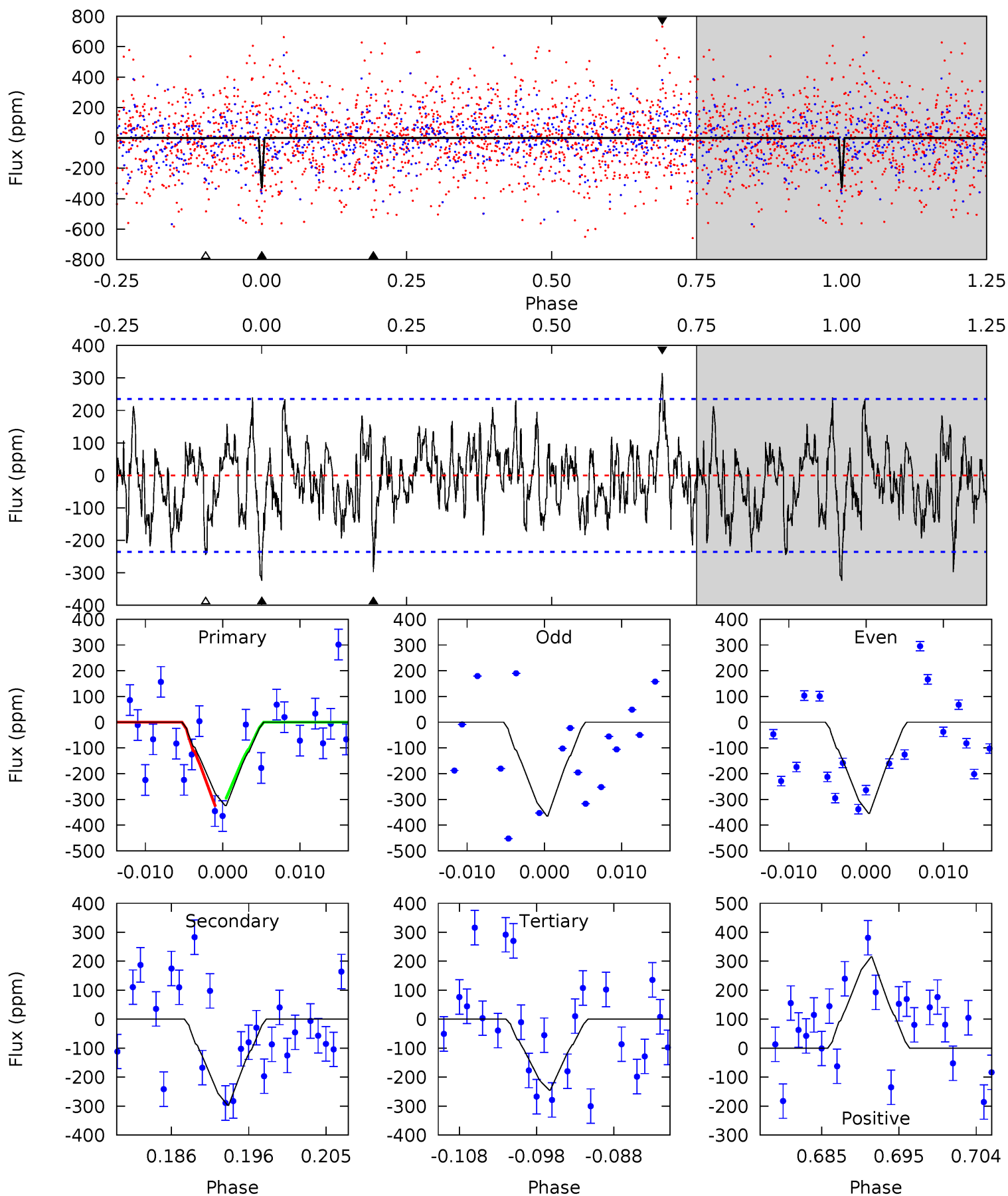
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

011454602-07, P = 4.177766 Days, E = 132.056458 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.93	6.35	5.24	6.73	5.03	2.58	1.87	1.69	0.20	1.12	-0.38	0.11	1.00	0.49	0.35



Stellar Parameters For KIC 011454602

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5878^{+156}_{-191}	$4.405^{+0.087}_{-0.203}$	$0.120^{+0.250}_{-0.300}$	$1.064^{+0.307}_{-0.141}$	$1.051^{+0.122}_{-0.136}$	$1.228^{+0.542}_{-0.601}$
	+3%/-3%	+2%/-5%	+208%/-250%	+29%/-13%	+12%/-13%	+44%/-49%
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 011454602-07 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$10.12^{+9.86}_{-7.16}$	1666^{+120}_{-86}	4498^{+15405}_{-20607}	28^{+2839}_{-1924}
Alt.	-297 ± 47	$9.04^{+9.38}_{-5.76}$	1661^{+123}_{-86}	3321^{+1473}_{-698}	$5.160^{+35.236}_{-3.910}$

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 $A_{obs} \gg 1.0$

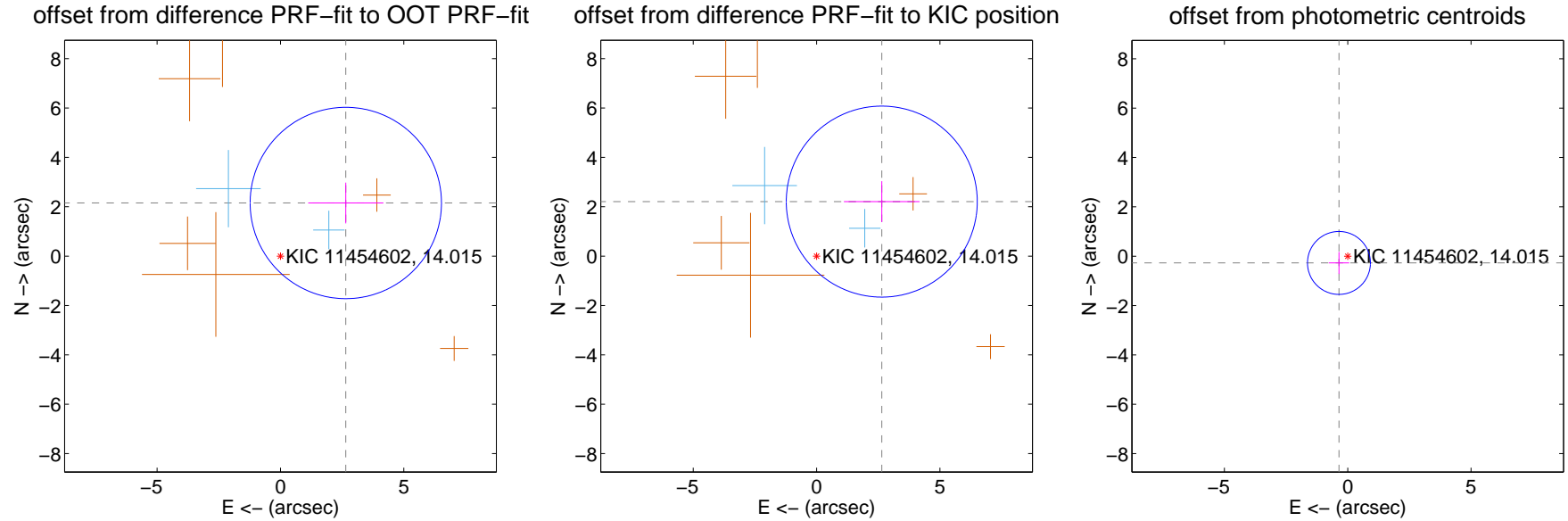
DV Centroid Data

Supplemental centroid analysis for 011454602-07. Kepler magnitude: 14.02. Transit SNR -1.00

There are 2 quarters with good PRF difference image offsets

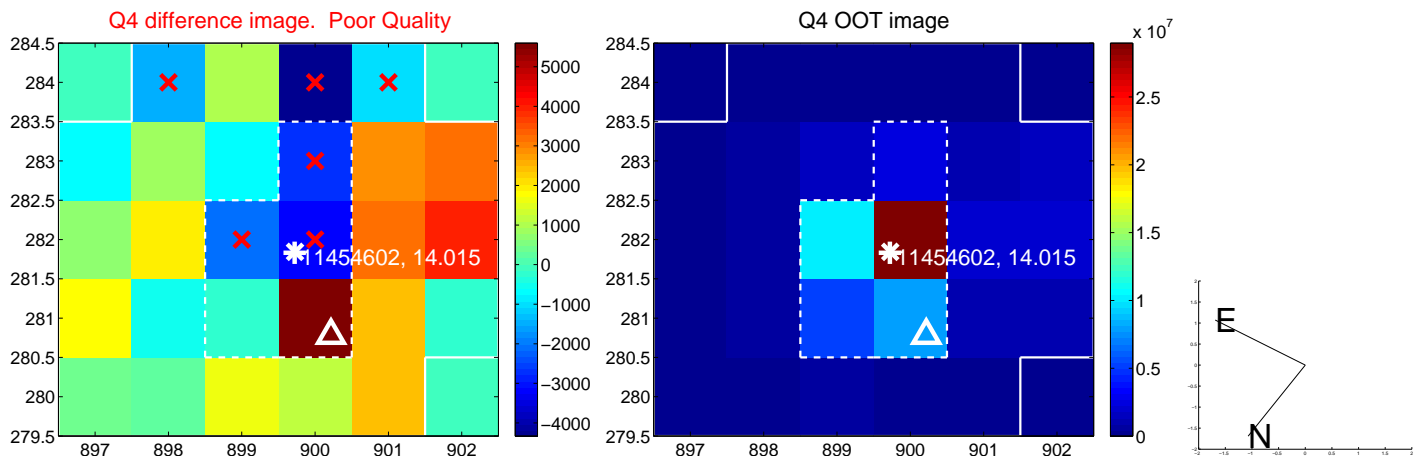
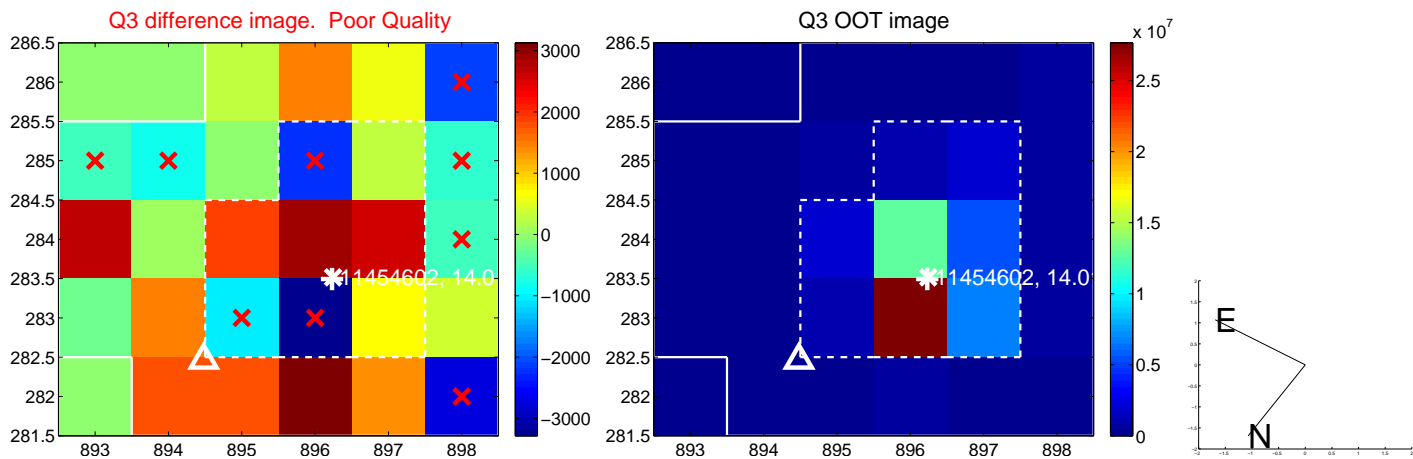
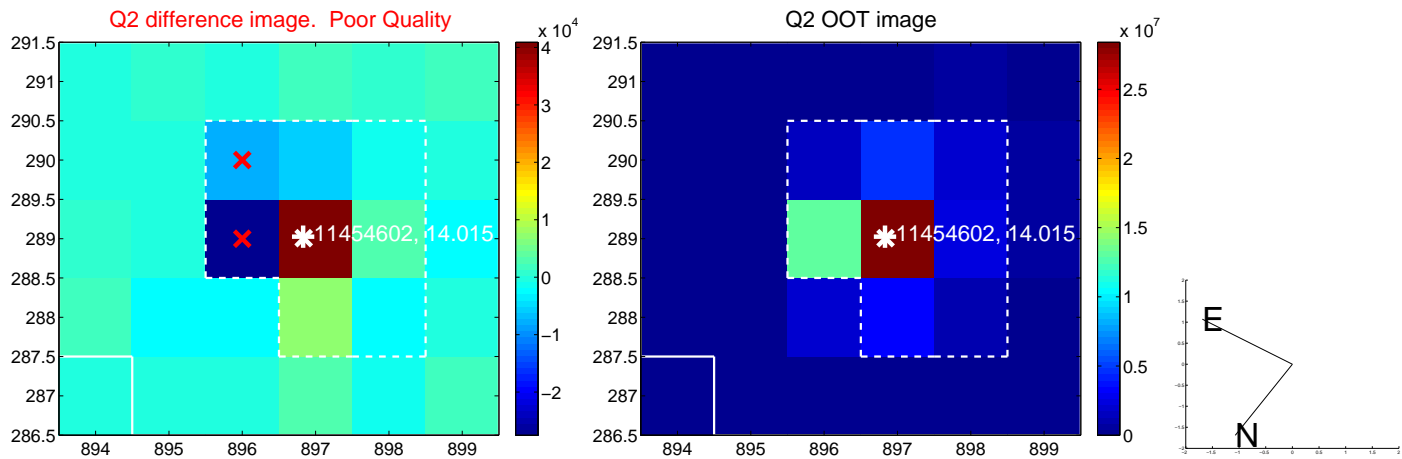
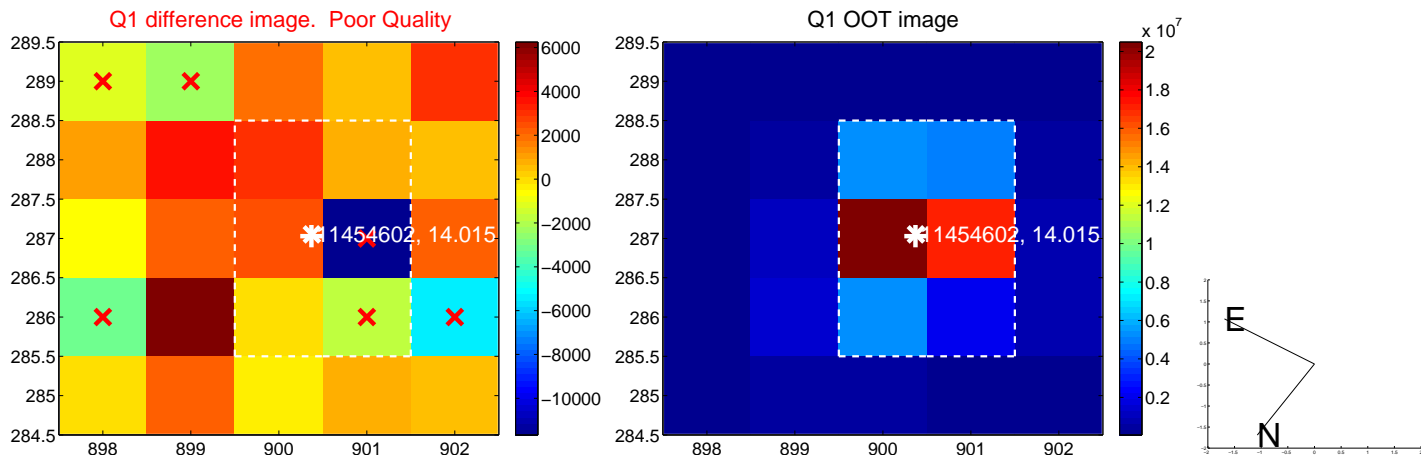
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.413 ± 1.292	2.64	-2.648 ± 1.524	2.153 ± 0.826
PRF-fit source offset from KIC position	3.444 ± 1.290	2.67	-2.642 ± 1.533	2.209 ± 0.827
photometric centroid source offset	0.45 ± 0.43	1.05	0.36 ± 0.41	-0.27 ± 0.44

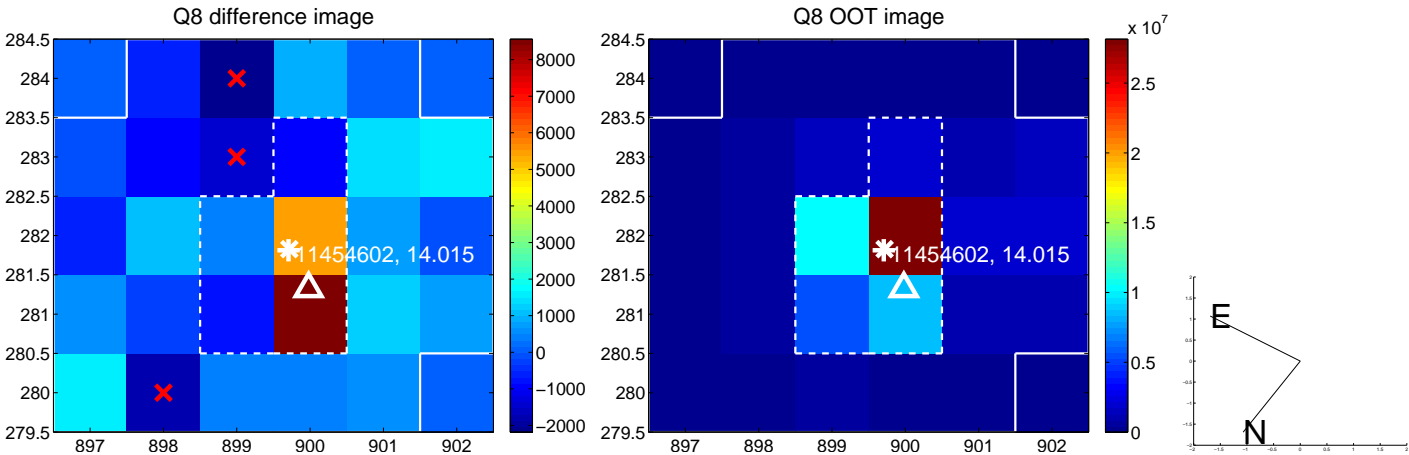
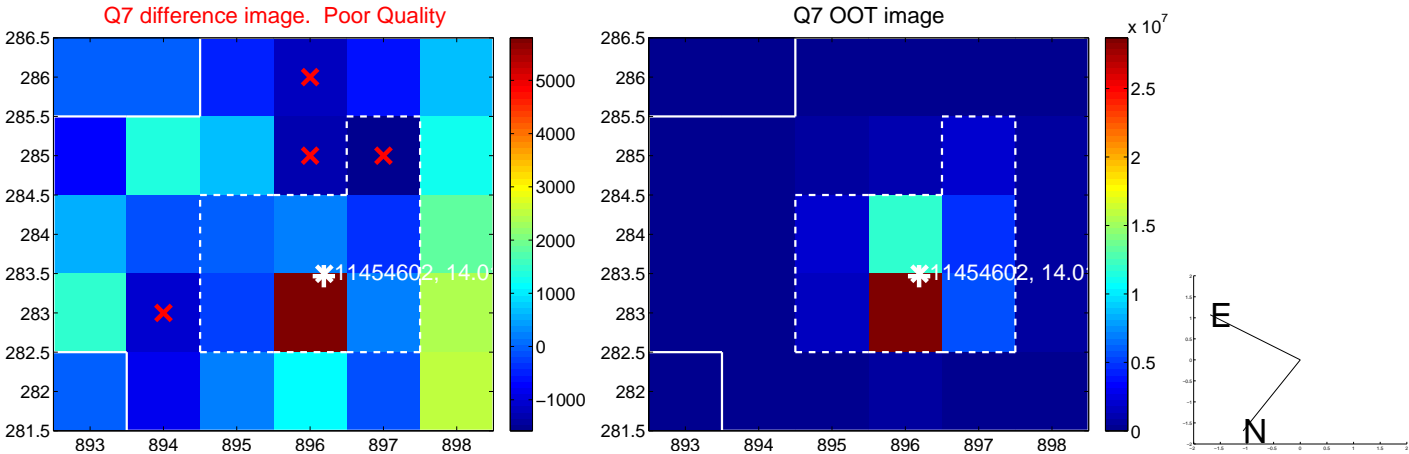
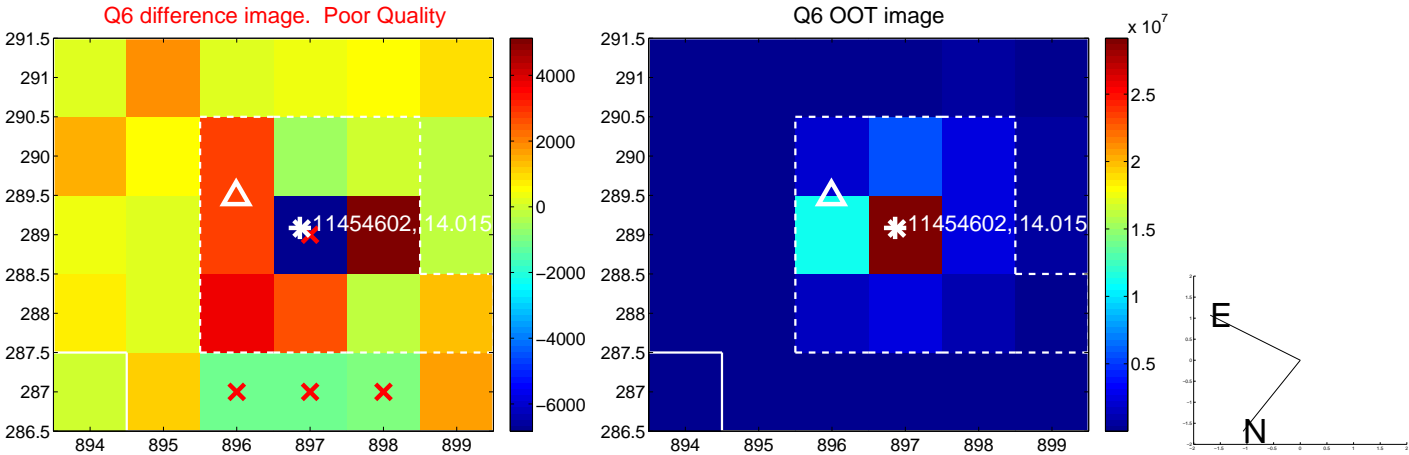
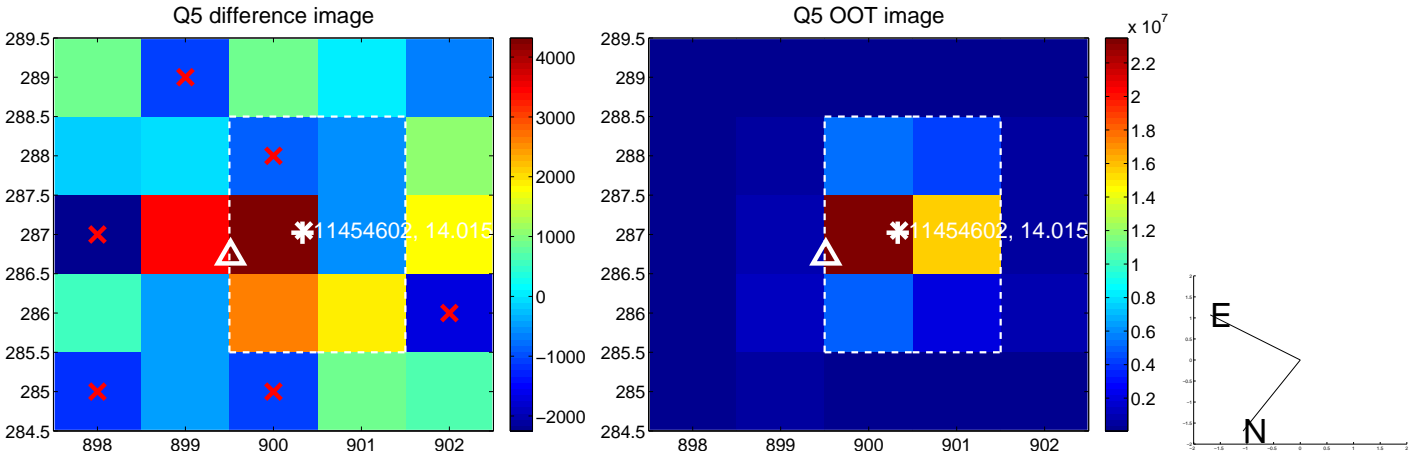


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

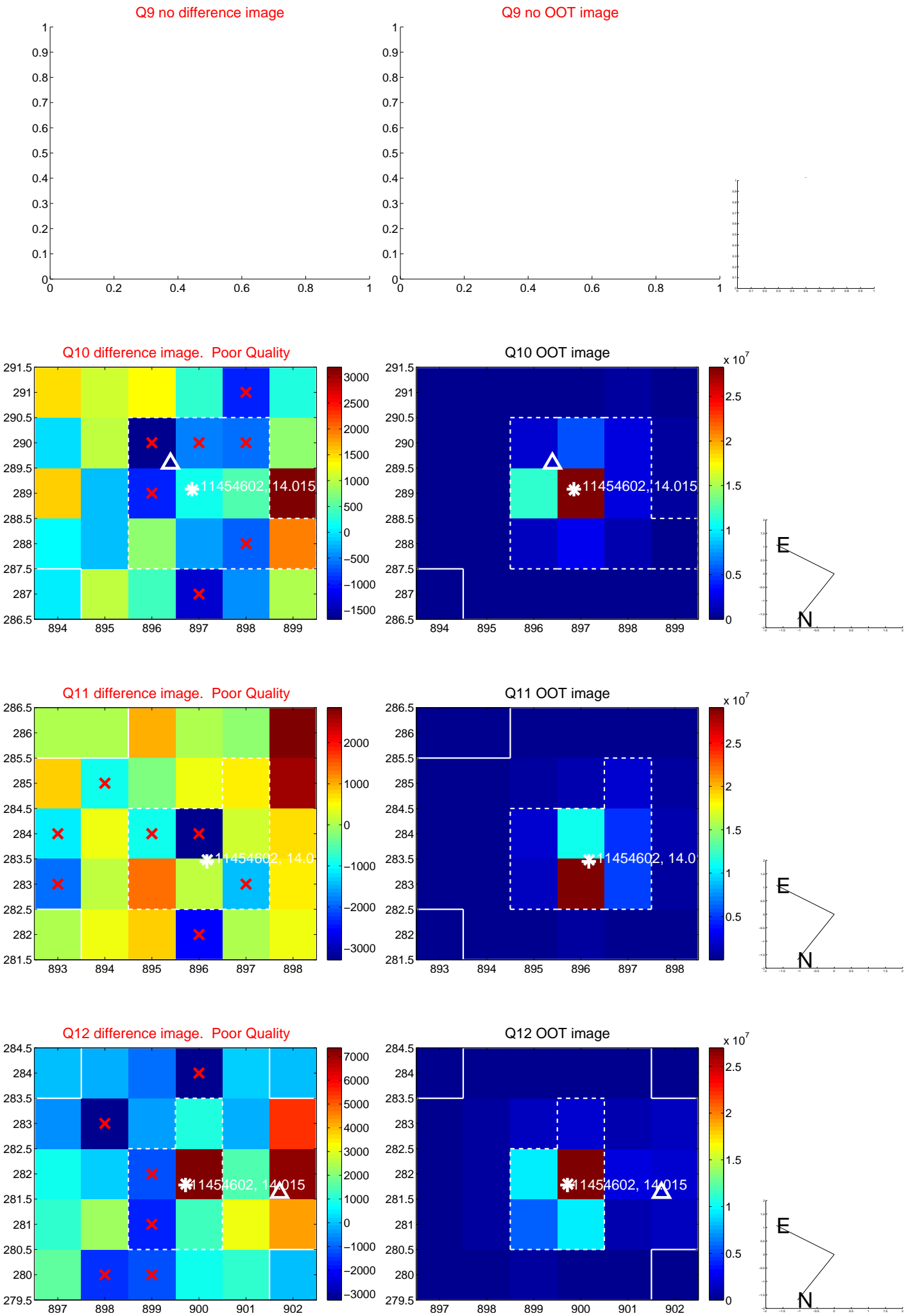
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



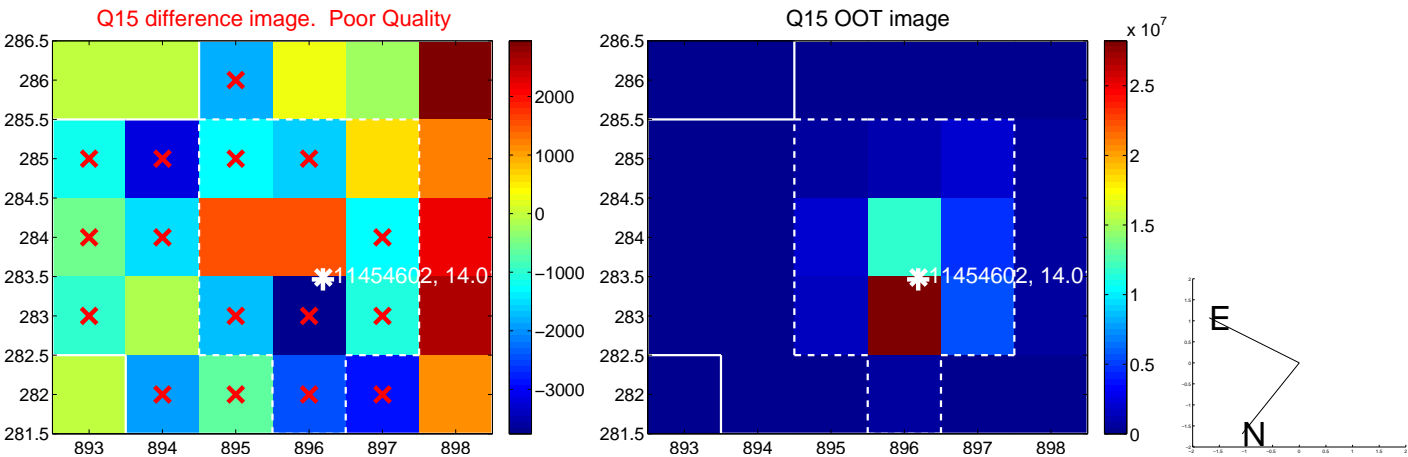
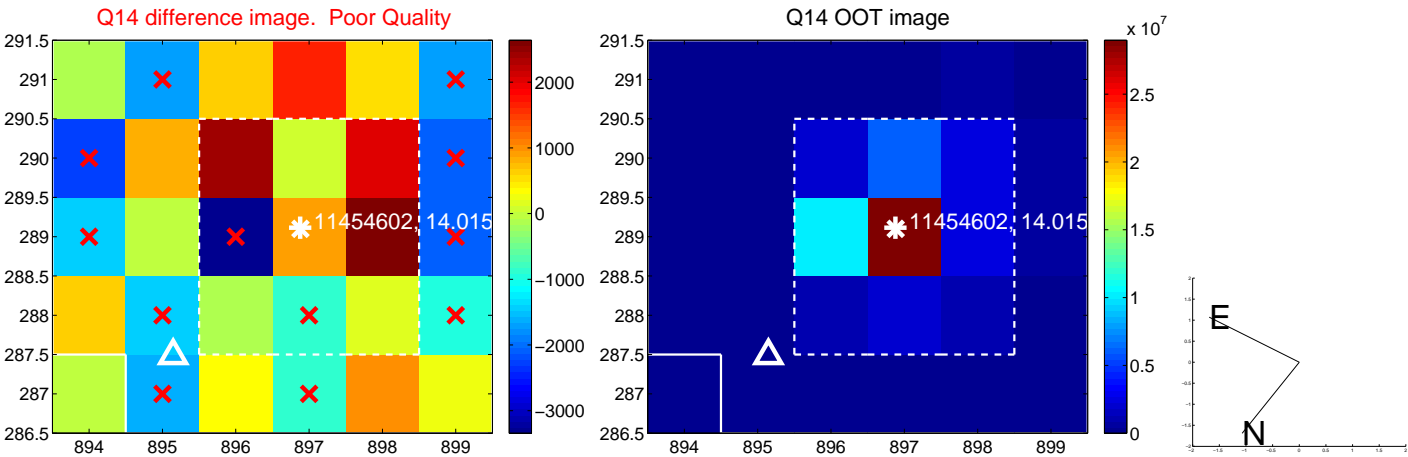
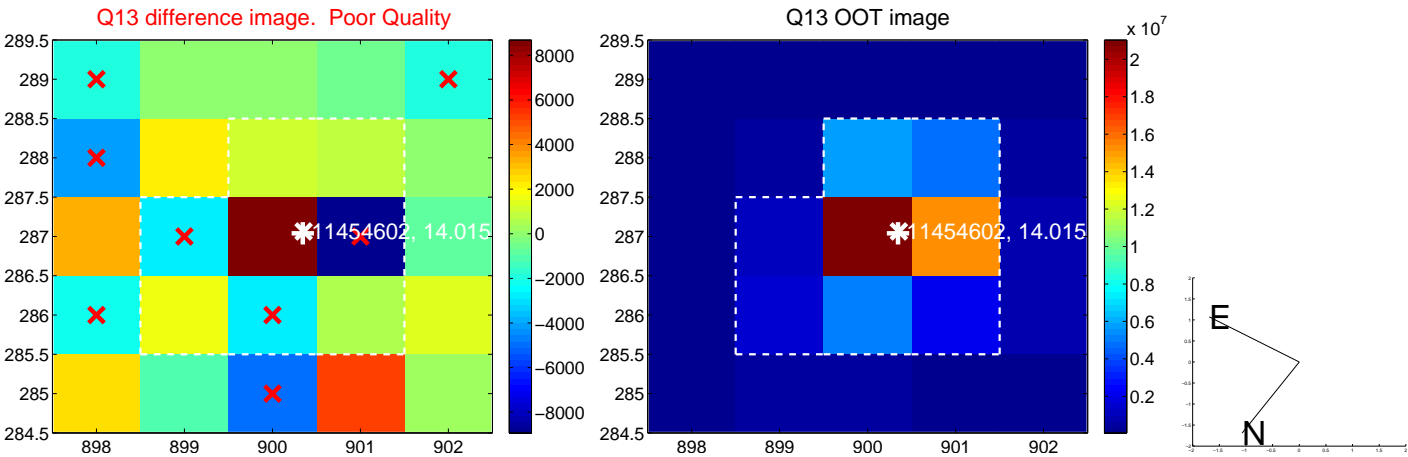
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



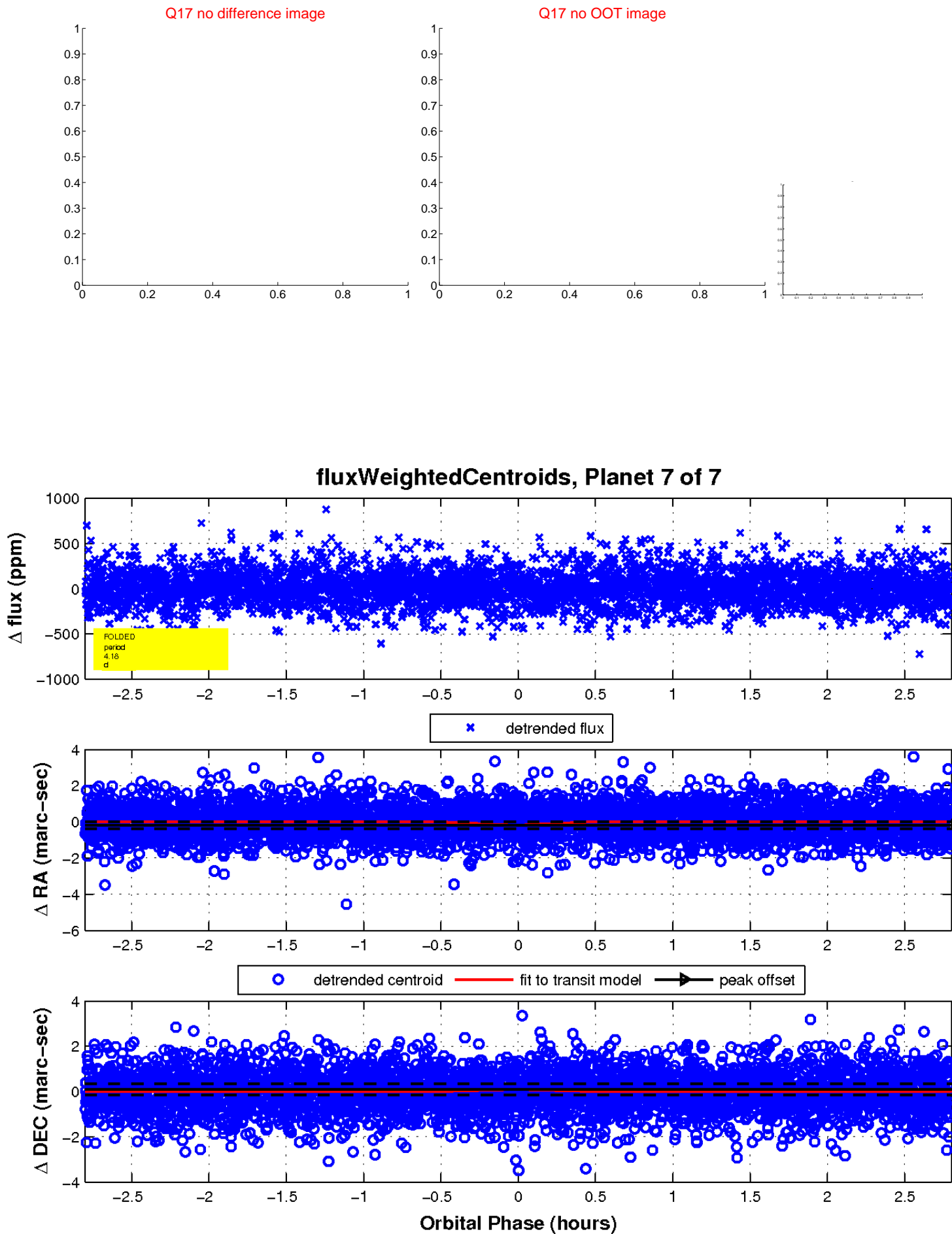
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

