

KIC 011774013

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})
011774013-01	OBS	No	1.878606	131.849759	11.0	13.744	10.9	4.7	3.56	6522	1.29	16746.67
011774013-02	OBS	No	31.281057	143.956892	488.3	2.792	16.0	13.2	3.56	6522	8.93	393.85
011774013-03	OBS	No	26.898709	135.712572	276.4	4.075	11.8	11.7	3.56	6522	6.91	481.65
011774013-04	OBS	No	23.278293	144.361034	262.5	4.124	10.7	10.7	3.56	6522	7.00	584.04
011774013-05	OBS	No	96.125516	209.751529	376.3	2.661	9.6	10.5	3.56	6522	7.01	88.16
011774013-06	OBS	No	35.543544	135.384255	440.0	1.455	10.5	10.5	3.56	6522	7.61	332.17

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011774013-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—CENT_KIC_POS
011774013-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_KIC_POS
011774013-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
011774013-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—CENT_FEW_DIFFS
011774013-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
011774013-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_FEW_MEAS

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

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

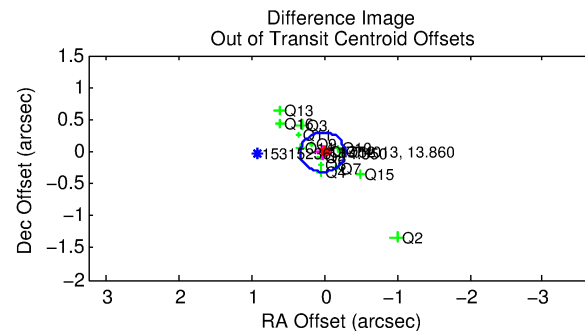
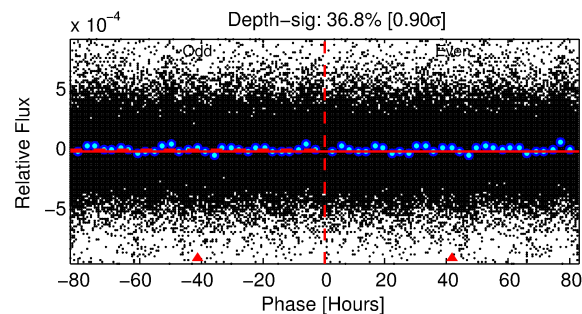
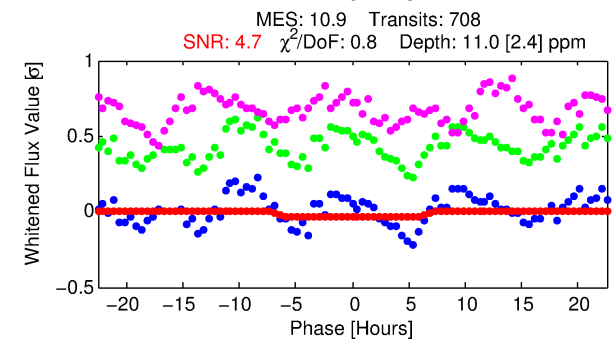
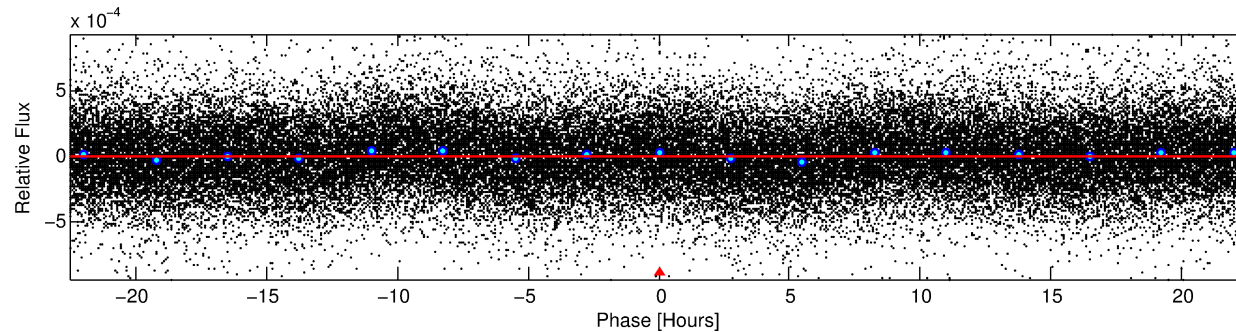
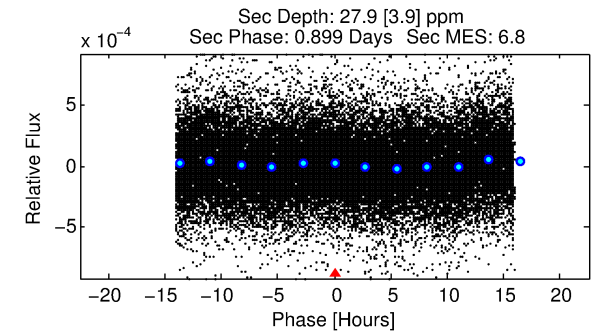
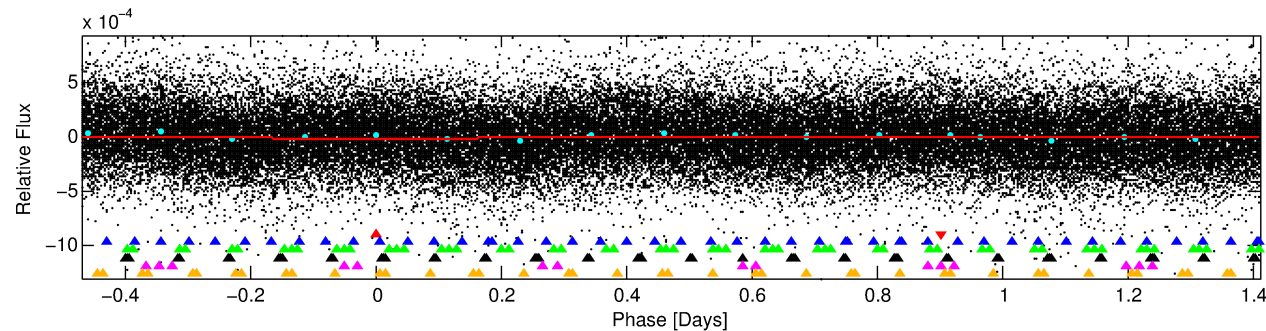
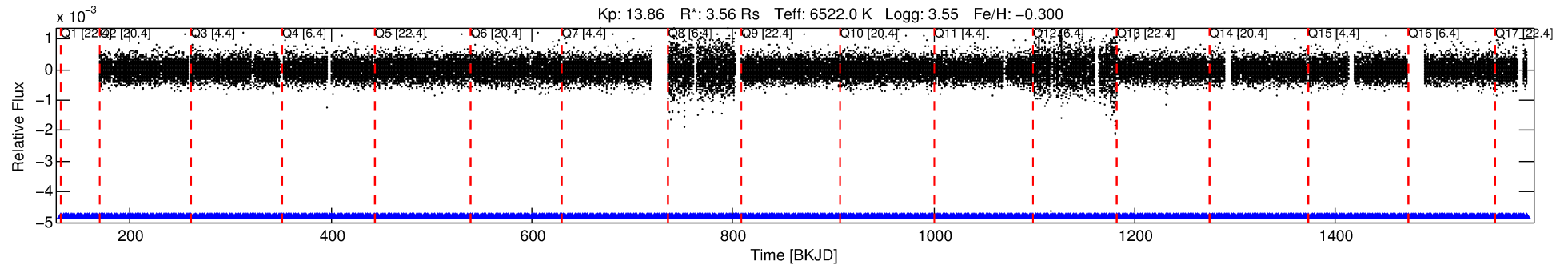
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011774013-01

No Significant Match Found

DV One-Page Summary

KIC: 11774013 Candidate: 1 of 6 Period: 1.879 d



DV Fit Results:

Period = 1.87861 [0.00008] d
Epoch = 131.8498 [0.0226] BKJD
Rp/R* = 0.0033 [0.0047]
a/R* = 1.11 [1.64]
b = 0.76 [4.66]
Seff = 16746.67 [18887.01]
Teff = 2901 [818] K
Rp = 1.29 [1.99] Re
a = 0.0351 [0.0231] AU
Ag = 11.40 [34.96] [0.30σ]
Teffp = 8241 [5889] K [0.90σ]

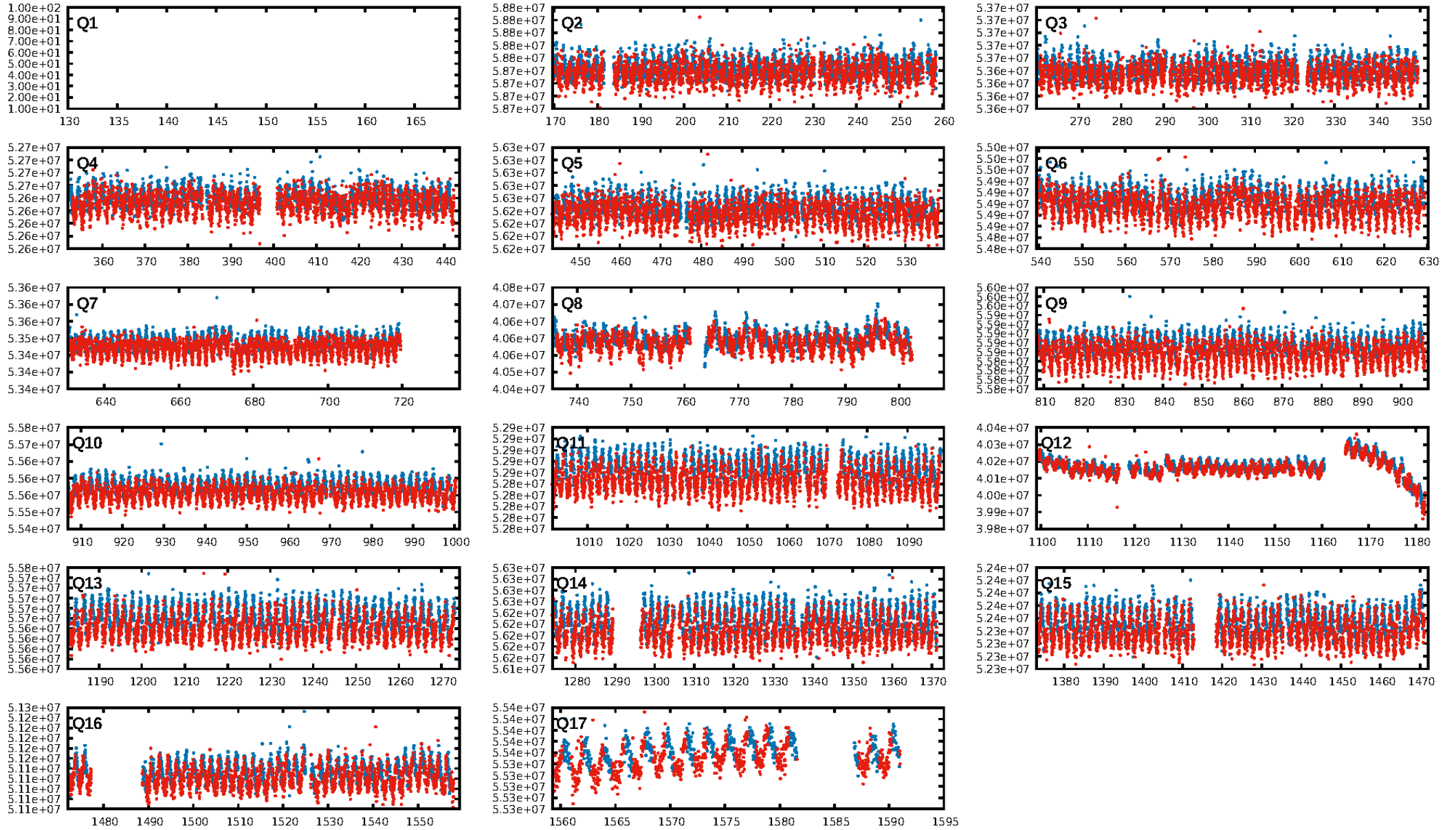
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [35.79σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.36e-24
RollingBand-fgt: 1.00 [694/694]
GhostDiagnostic-chr: 0.7668
Centroid-sig: 0.0%
Centroid-so: 8.402 arcsec [3.53σ]
OotOffset-rm: 0.028 arcsec [0.28σ]
KicOffset-rm: 0.872 arcsec [7.83σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 1.00 [16/16]
DiffImageOverlap-fno: 1.00 [16/16]

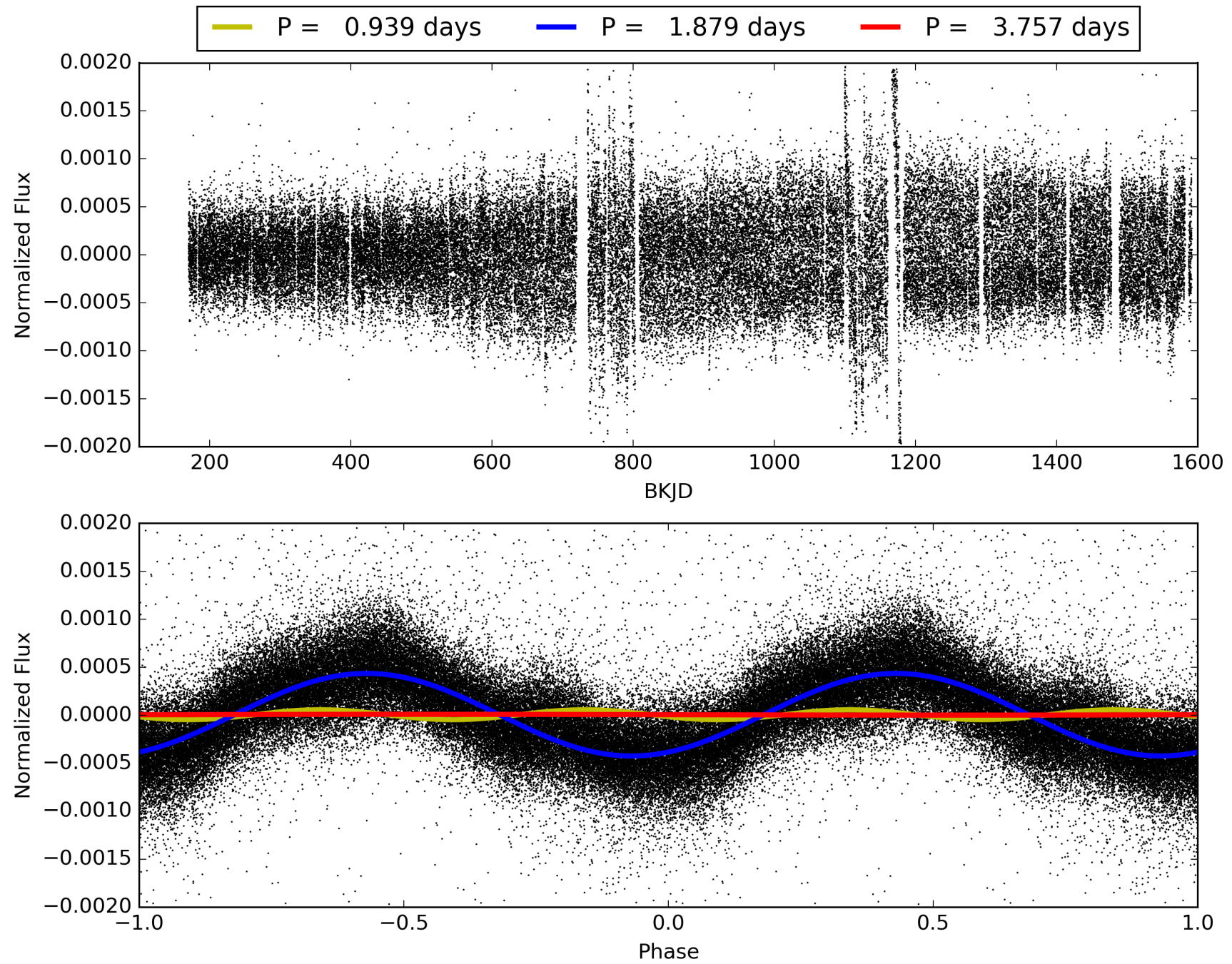
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:34:10 Z

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

TCE 011774013-01, PDC Light Curves

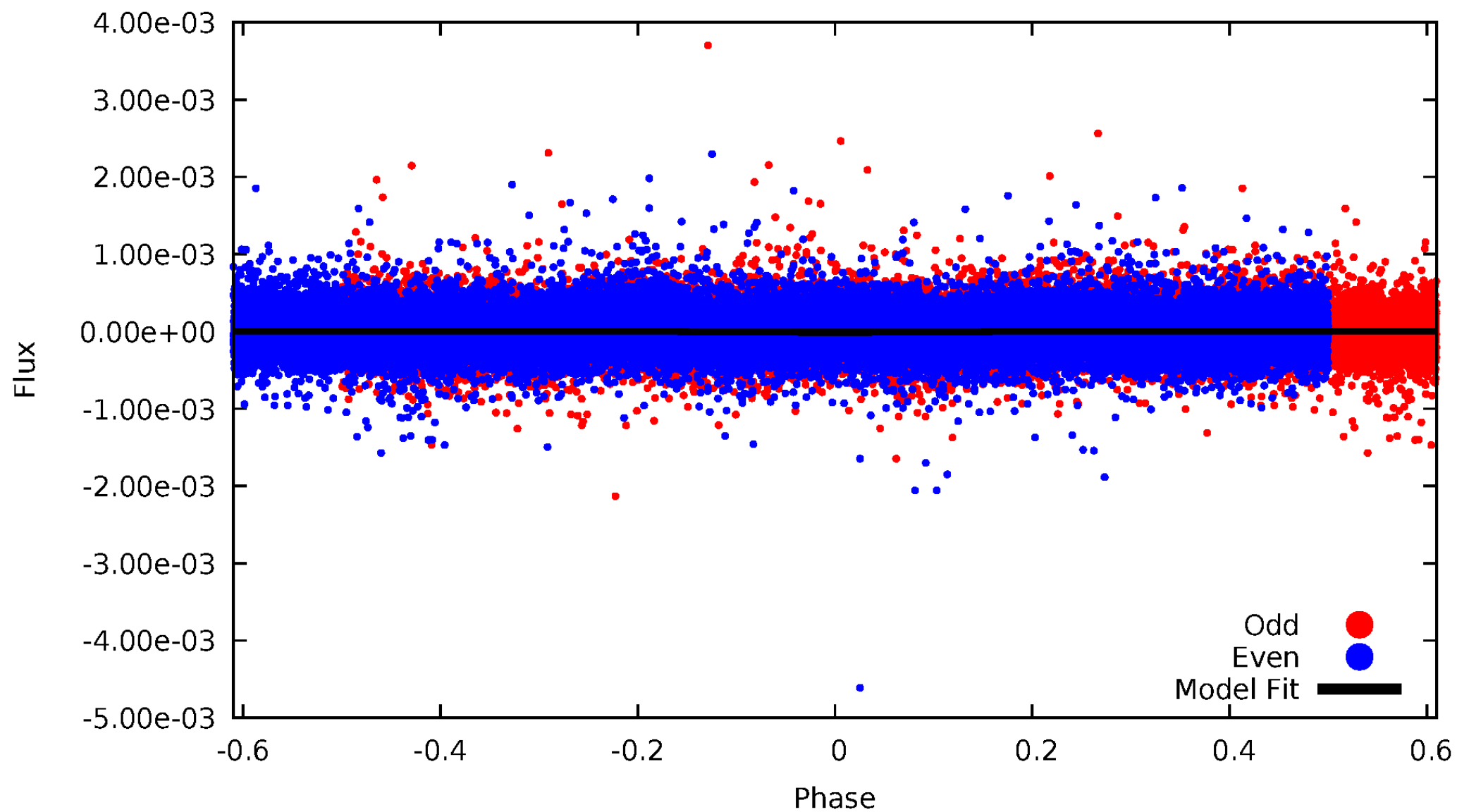


TCE 011774013-01



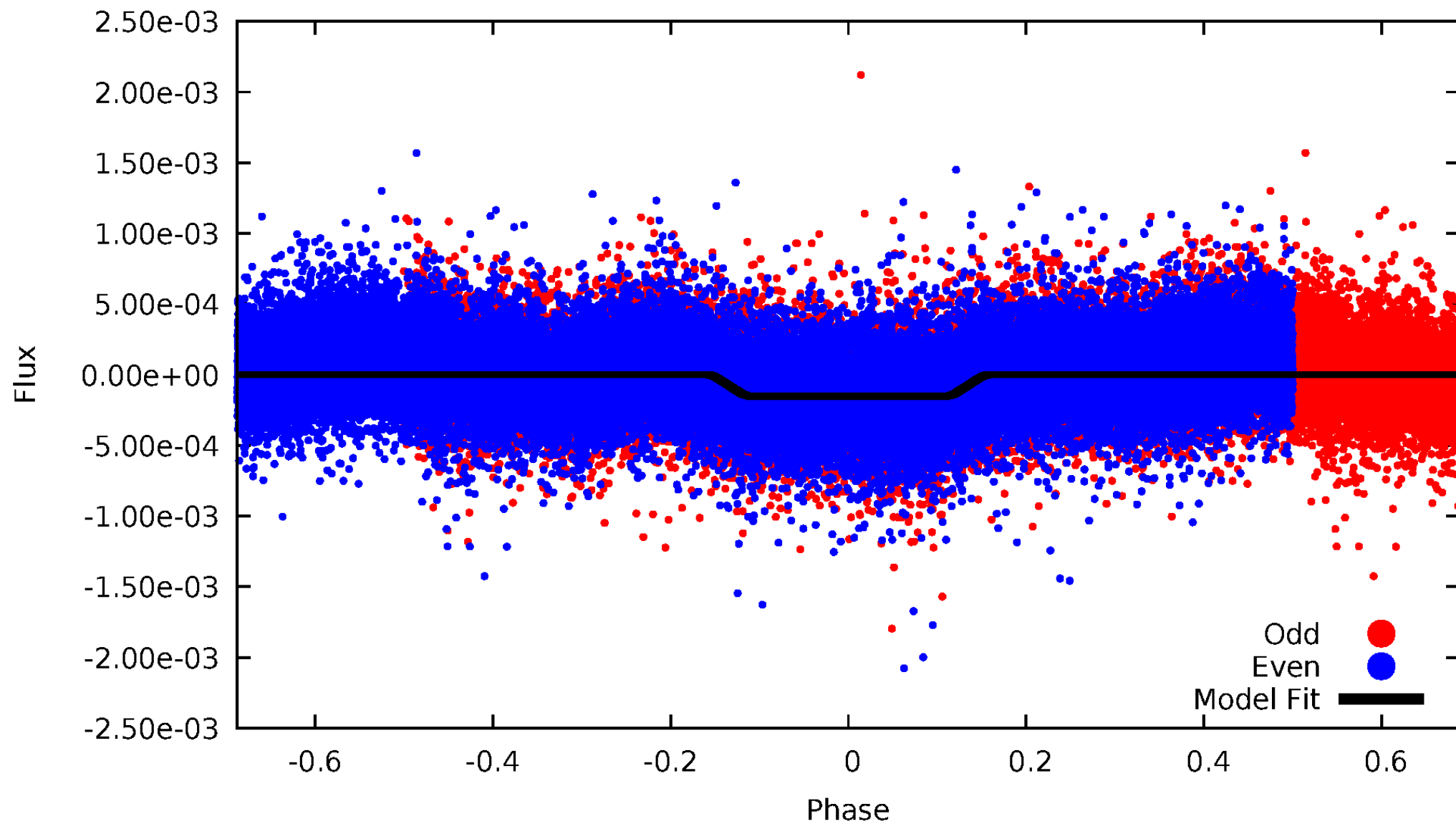
DV Odd/Even

TCE 011774013-01

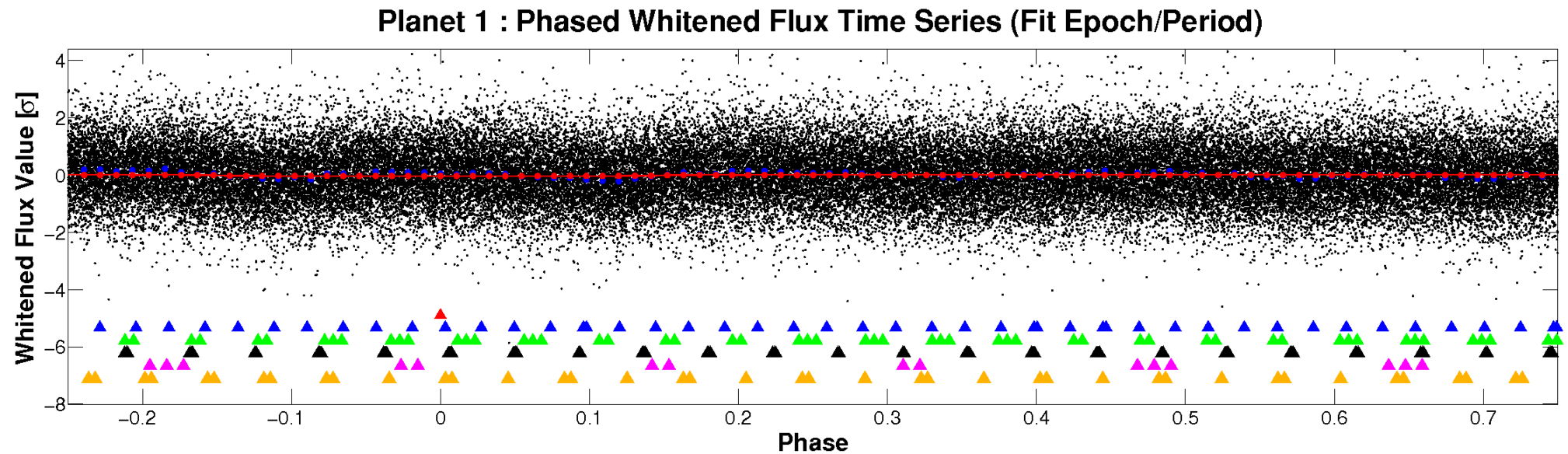
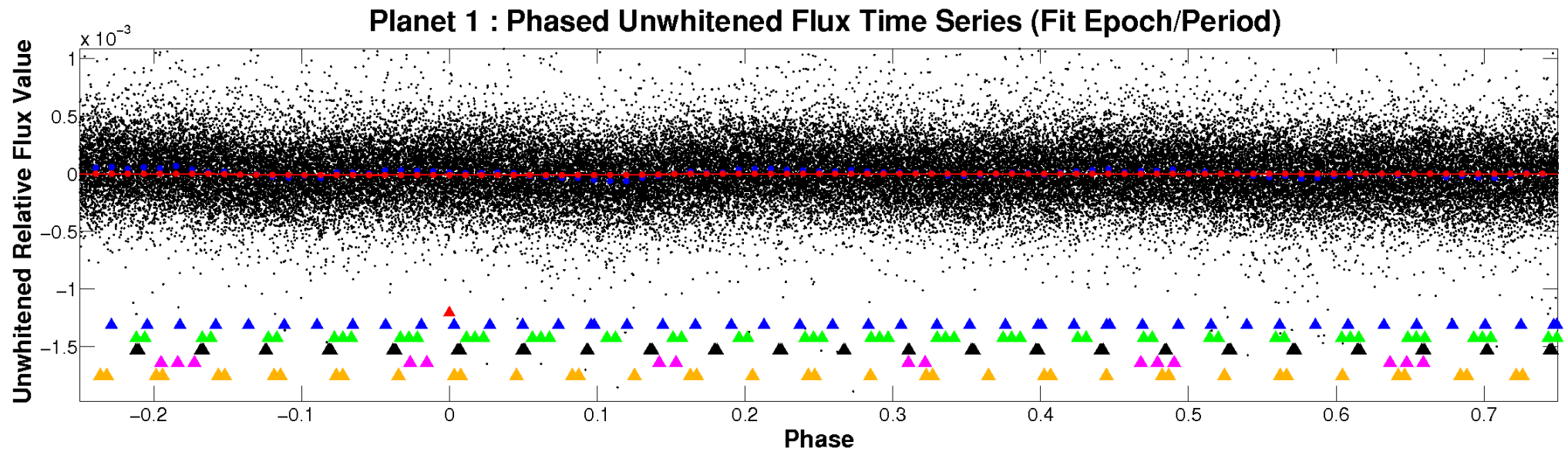


ALT Odd/Even

TCE 011774013-01

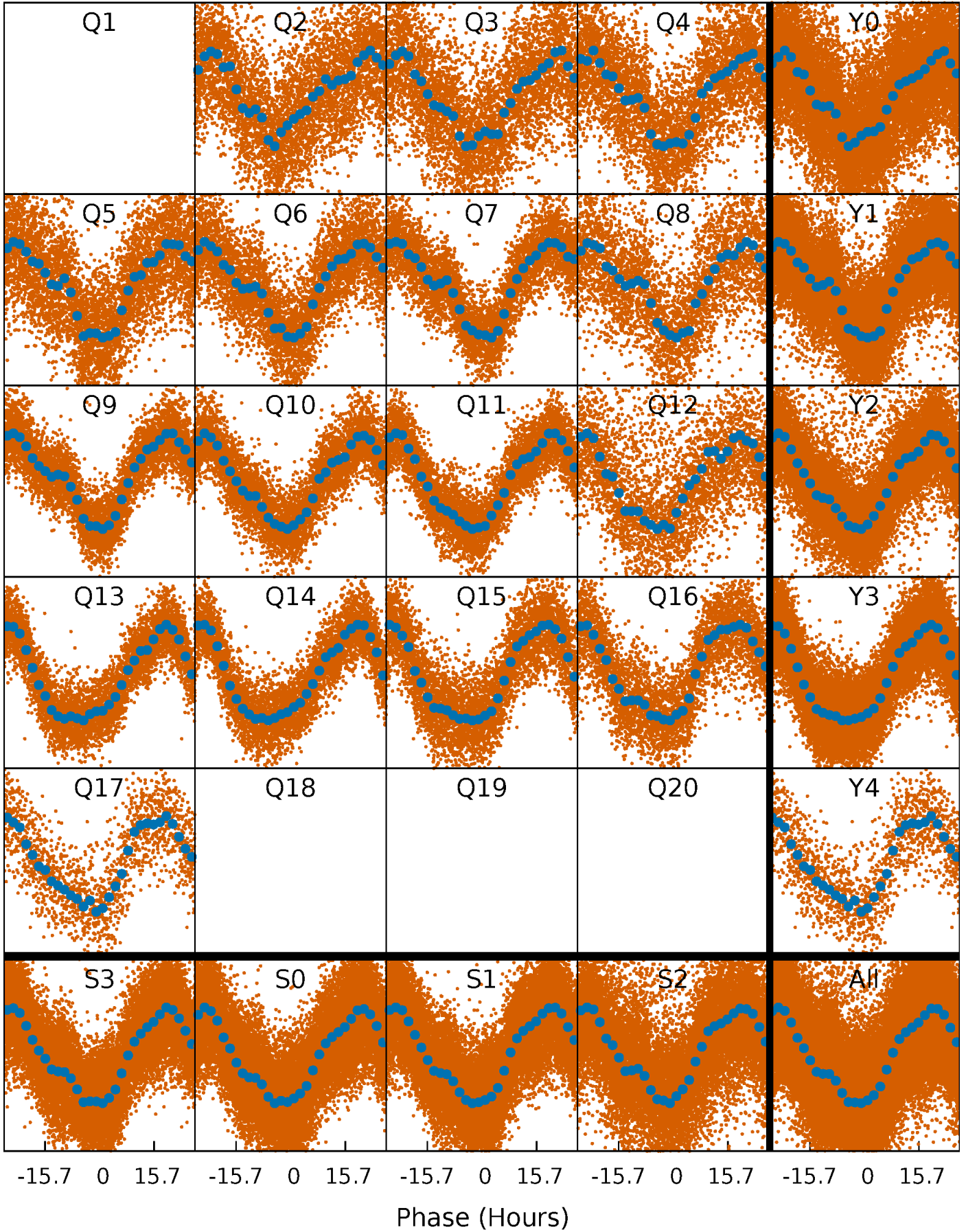


Non-Whitened Vs. Whitened Light Curve



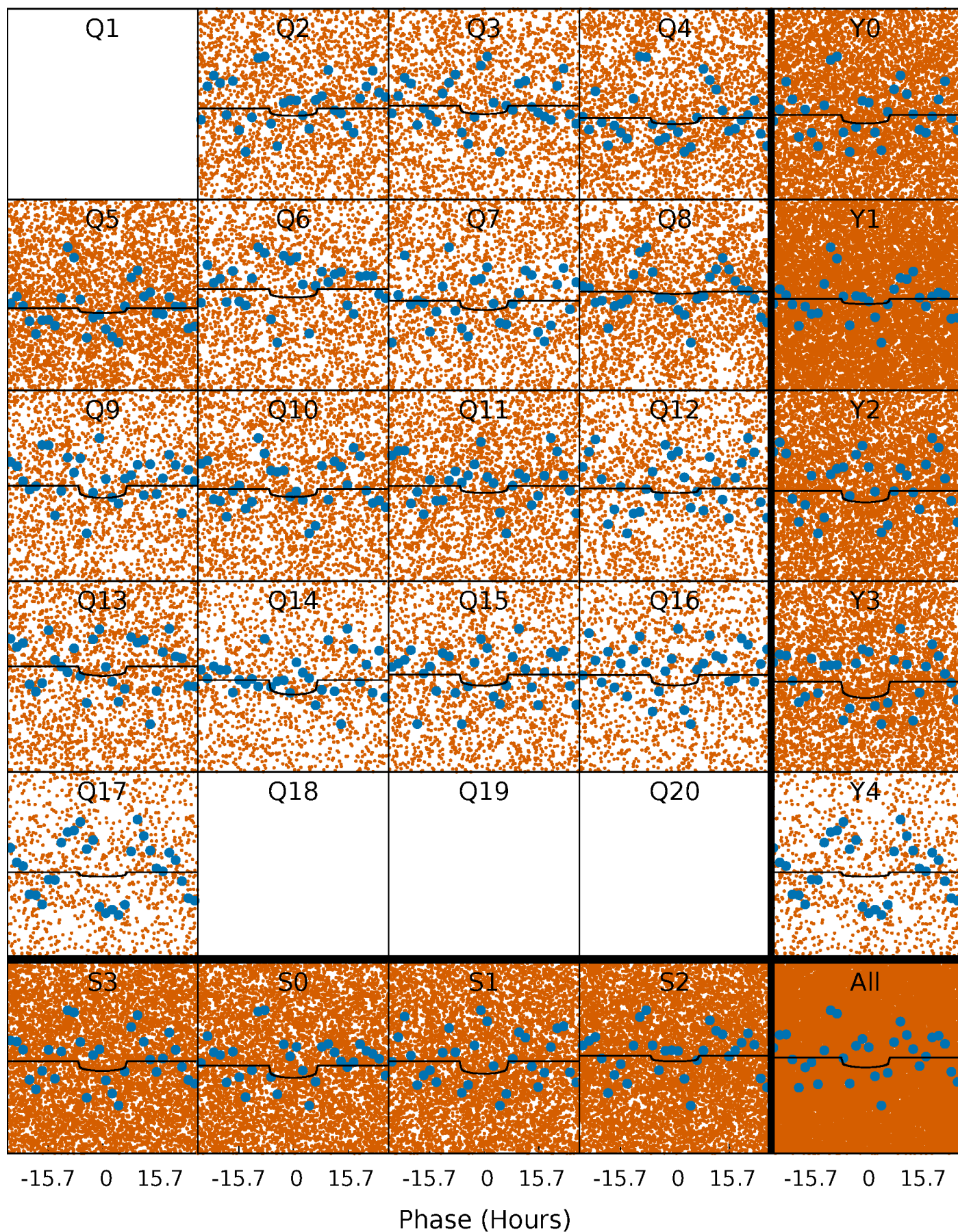
PDC Quarter-Phased Transit Curves

TCE 011774013-01 P= 1.878606 Days $T_0=131.849759$ (BKJD)



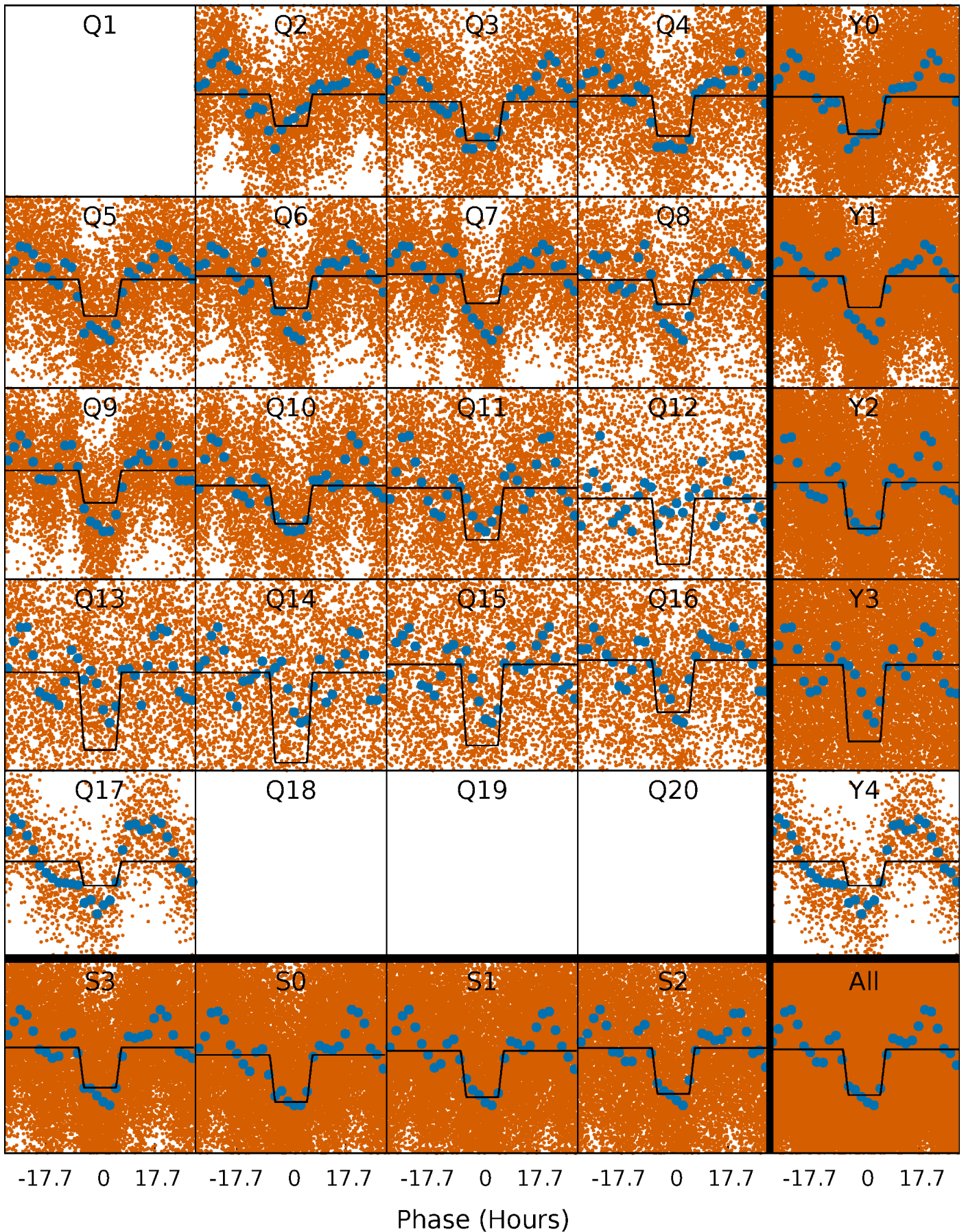
DV Quarter-Phased Transit Curves

TCE 011774013-01 P= 1.878606 Days $T_0=131.849759$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

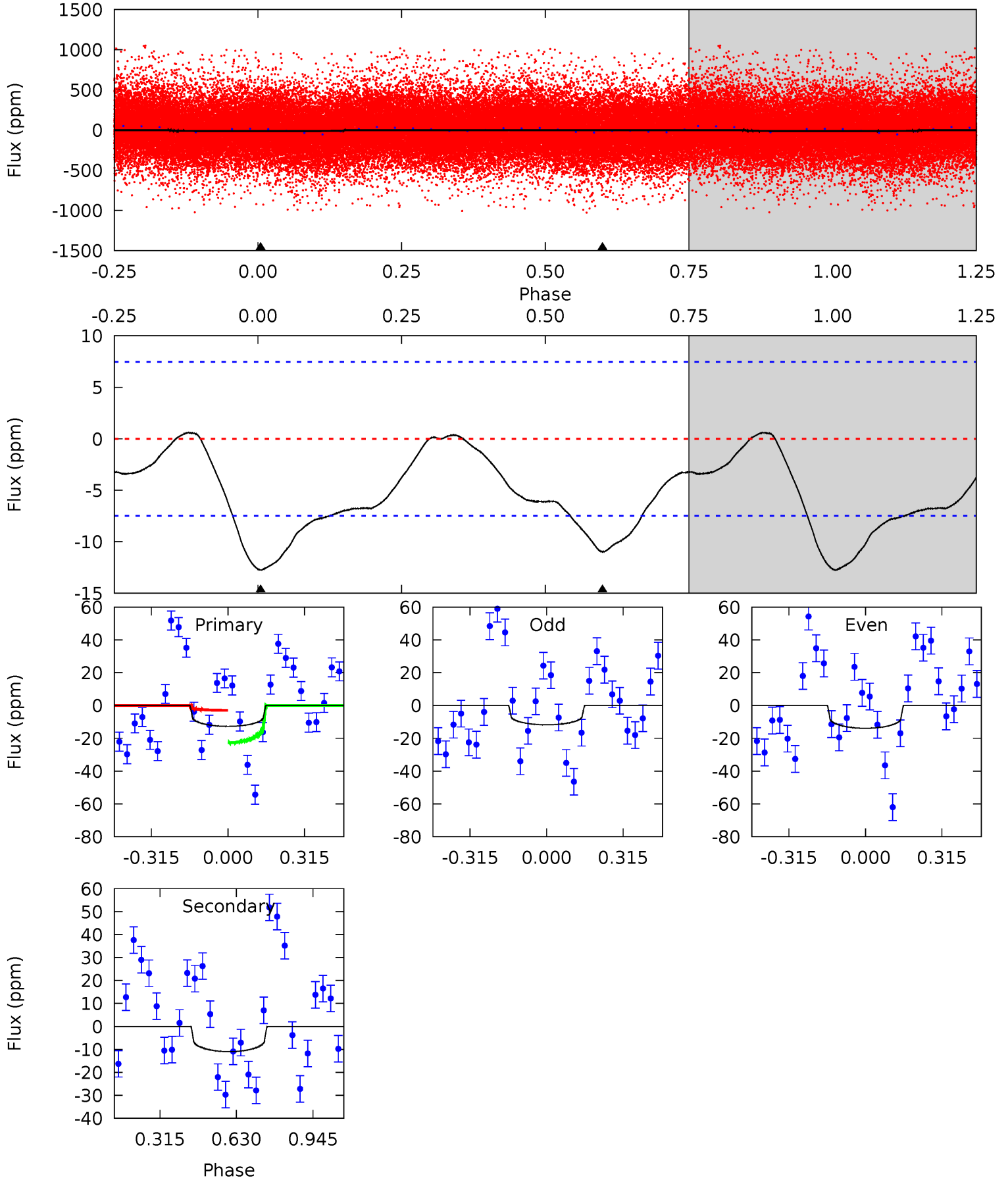
TCE 011774013-01 P= 1.878651 Days $T_0=131.859884$ (BKJD)



DV Model-Shift Uniqueness Test

011774013-01, P = 1.878606 Days, E = 131.849759 Days

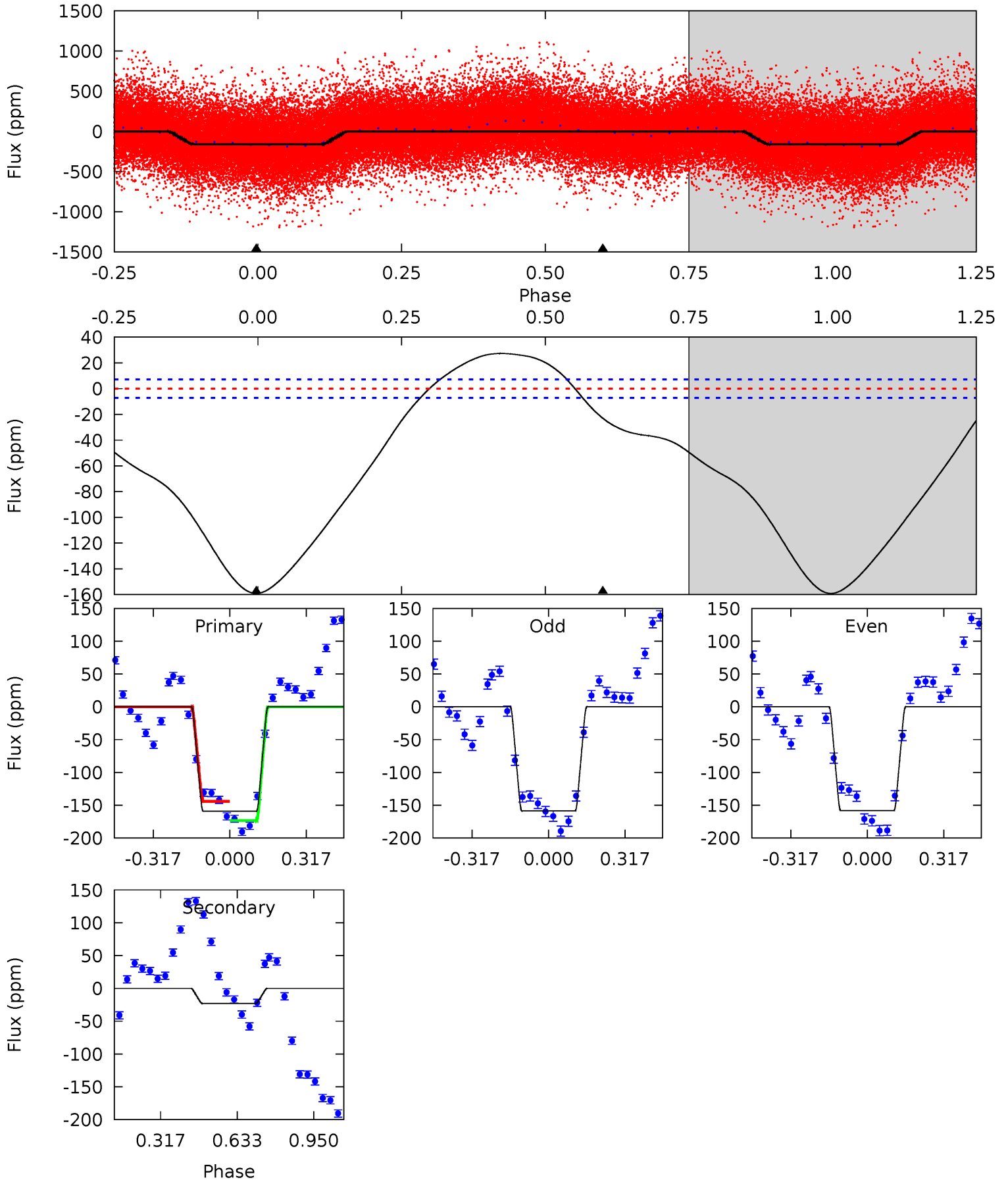
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.36	6.35	0	0	4.32	1.00	0.71	7.36	7.36	6.35	6.35	0.62	0.88	0.04	5.71



Alt Model-Shift Uniqueness Test

011774013-01, P = 1.878651 Days, E = 131.859884 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
95.4	13.8	0	0	4.32	1.00	7.52	95.4	95.4	13.8	13.8	0.16	1.01	0.15	8.19



Stellar Parameters For KIC 011774013

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6522^{+182}_{-228}	$3.546^{+0.680}_{-0.120}$	$-0.300^{+0.300}_{-0.250}$	$3.564^{+0.539}_{-2.157}$	$1.627^{+0.185}_{-0.556}$	$0.051^{+0.554}_{-0.018}$
	+3%/-3%	+19%/-3%	+100%/-83%	+15%/-61%	+11%/-34%	+1094%/-35%
Source	PHO54	PHO54	PHO54	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011774013-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-11 ± 2	$1.65^{+1.57}_{-1.14}$	3961^{+295}_{-570}	5238^{+5129}_{-1418}	$2.711^{+24.669}_{-1.999}$
Alt.	-23 ± 2	$4.22^{+2.17}_{-2.02}$	3938^{+319}_{-680}	3949^{+1046}_{-929}	$0.870^{+2.019}_{-0.499}$

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

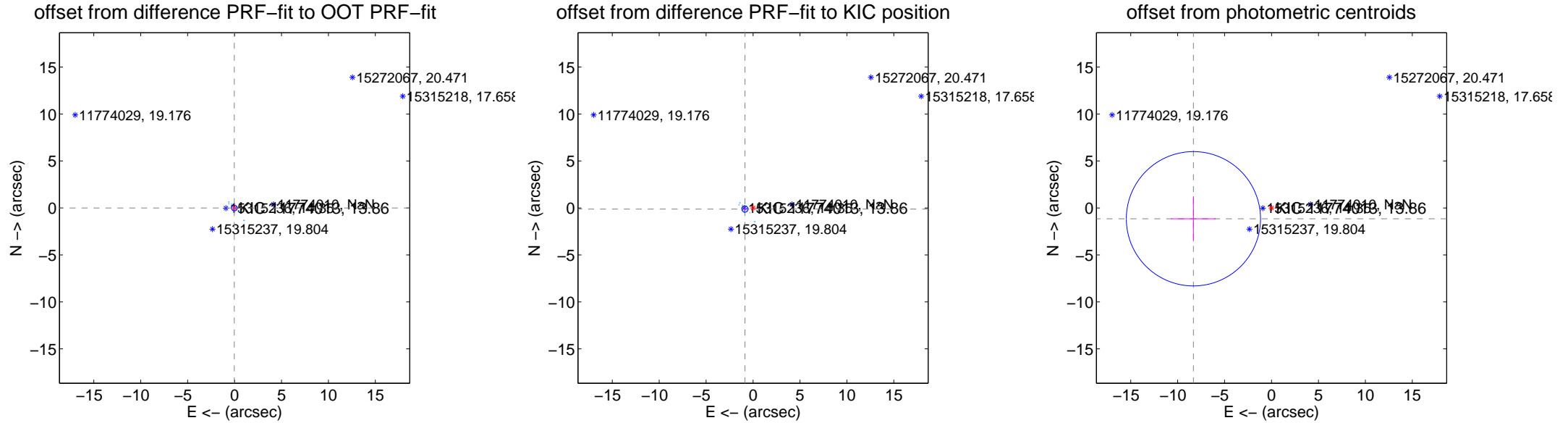
DV Centroid Data

Supplemental centroid analysis for 011774013-01. Kepler magnitude: 13.86. Transit SNR 4.69

There are 16 quarters with good PRF difference image offsets

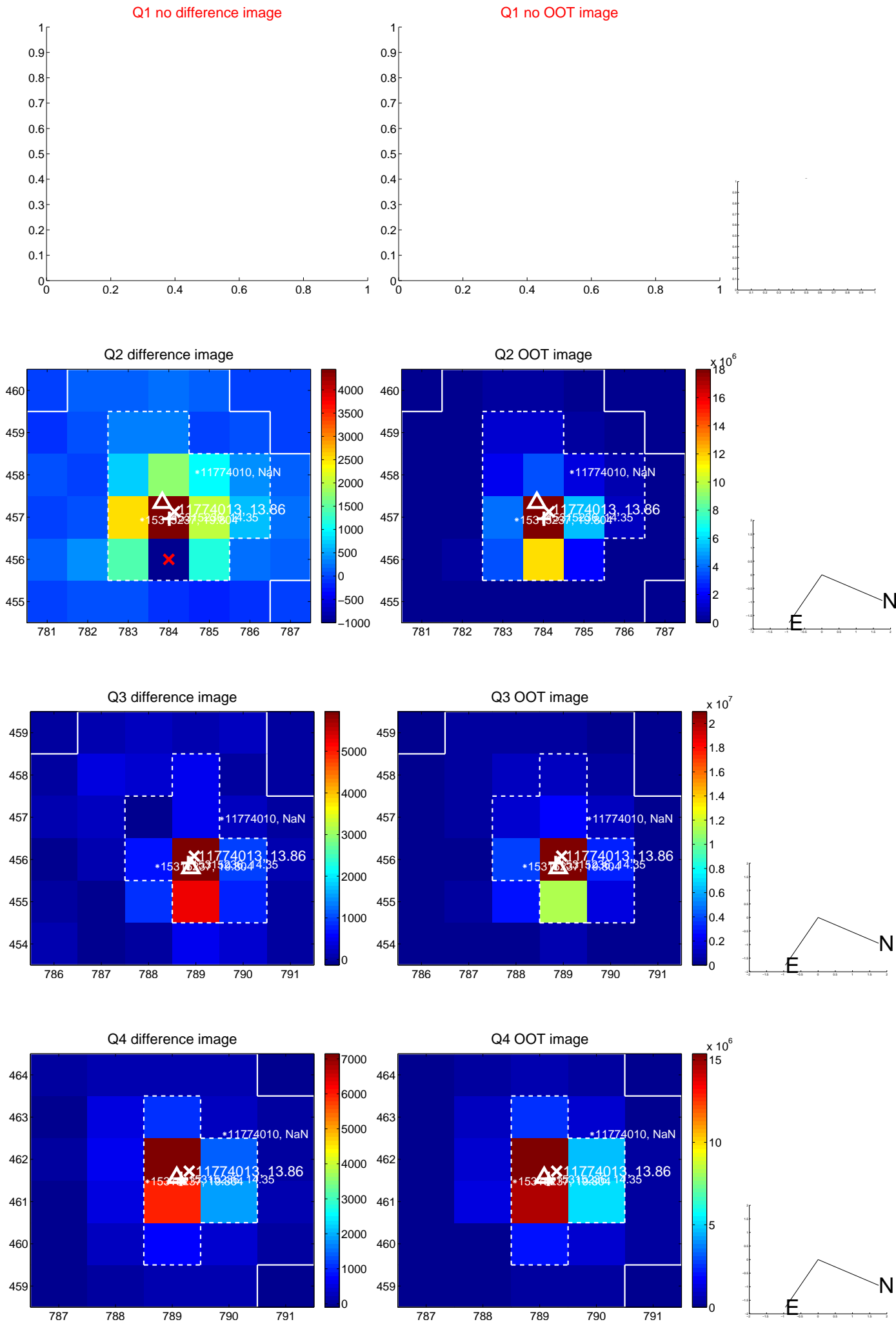
The direct PRF centroid is offset from the target star catalog position by about 0.83 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.028 ± 0.103	0.28	0.027 ± 0.102	-0.007 ± 0.105
PRF-fit source offset from KIC position	0.872 ± 0.111	7.83	0.865 ± 0.122	-0.116 ± 0.126
photometric centroid source offset	8.40 ± 2.38	3.53	8.32 ± 2.38	-1.15 ± 2.39

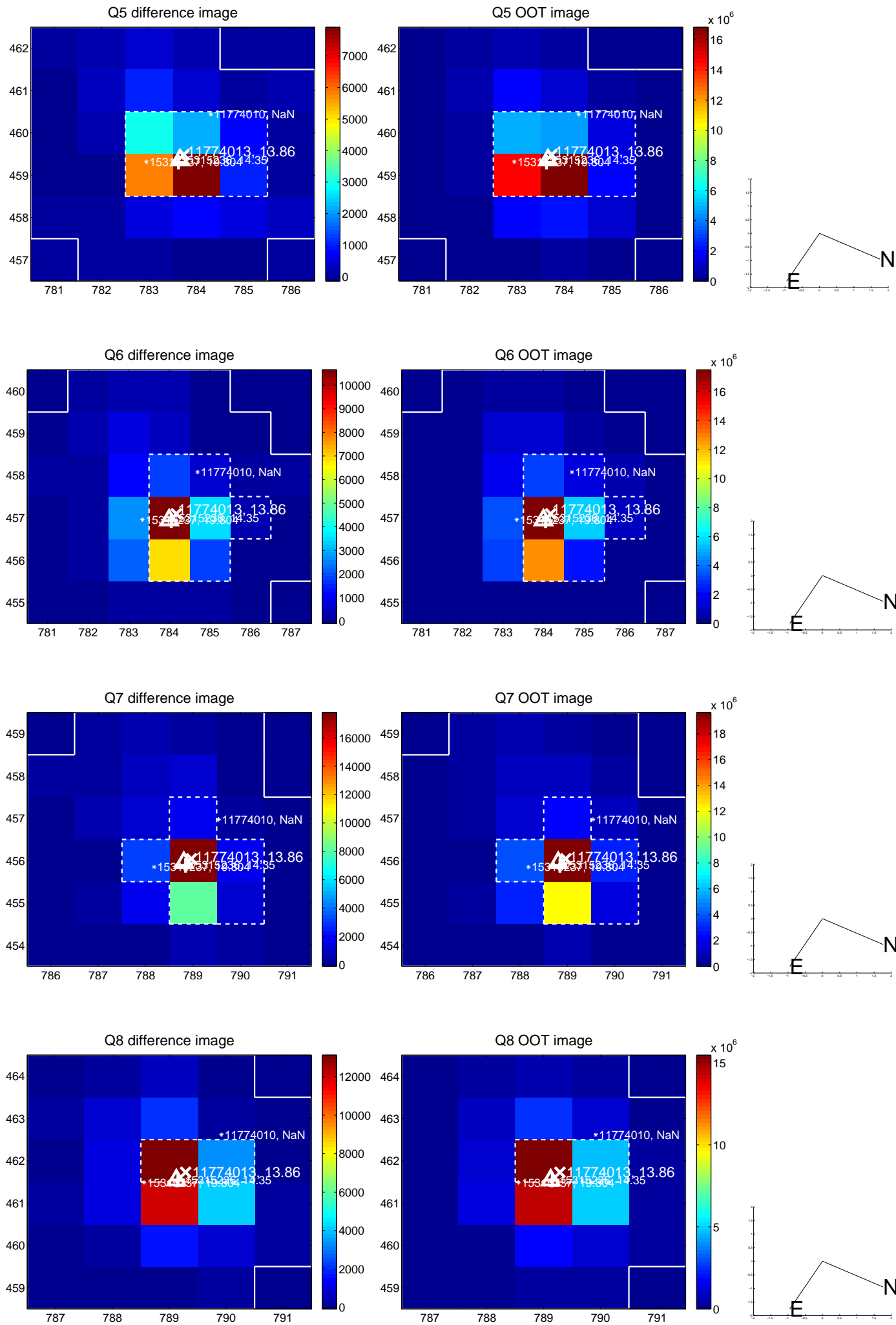


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

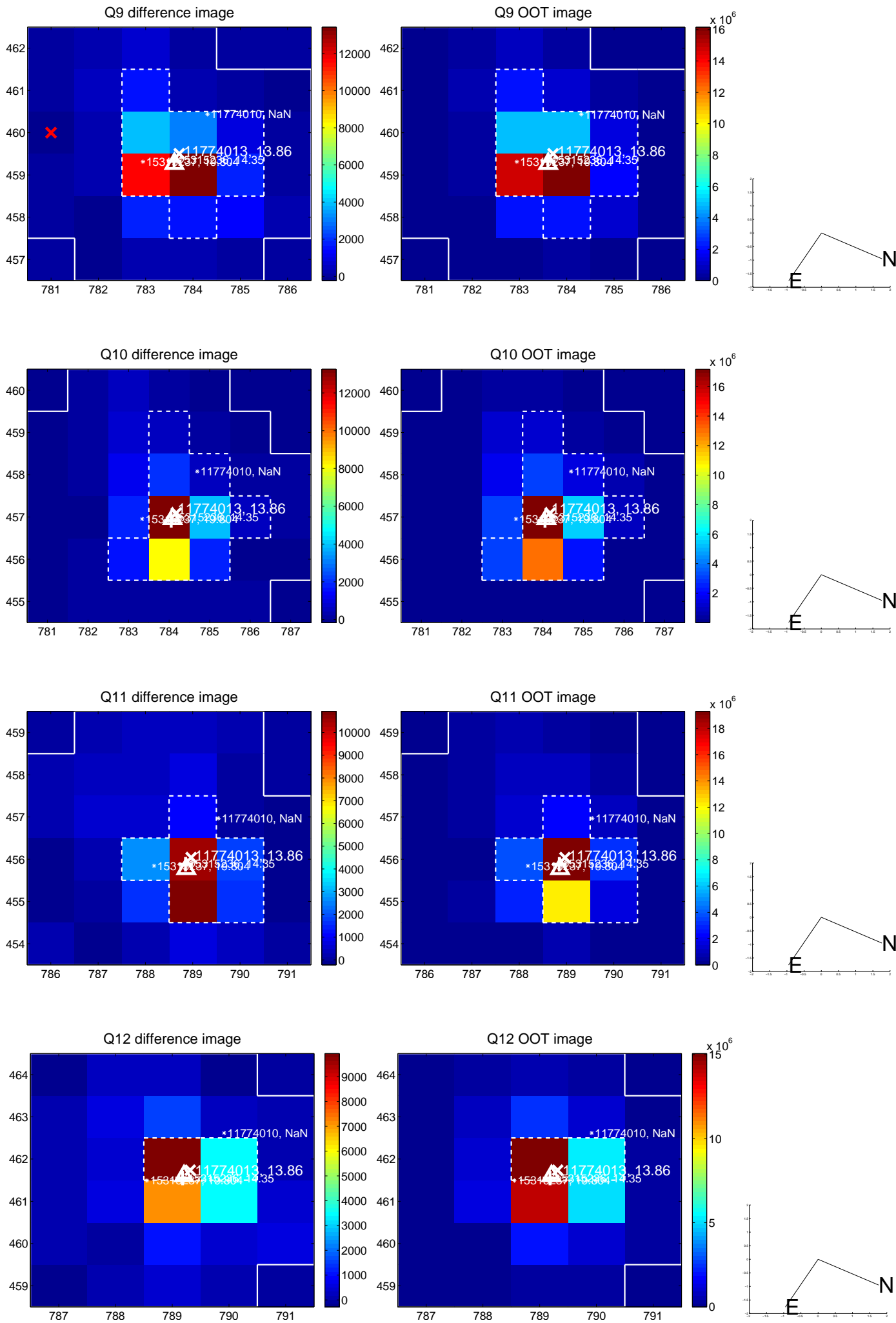
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



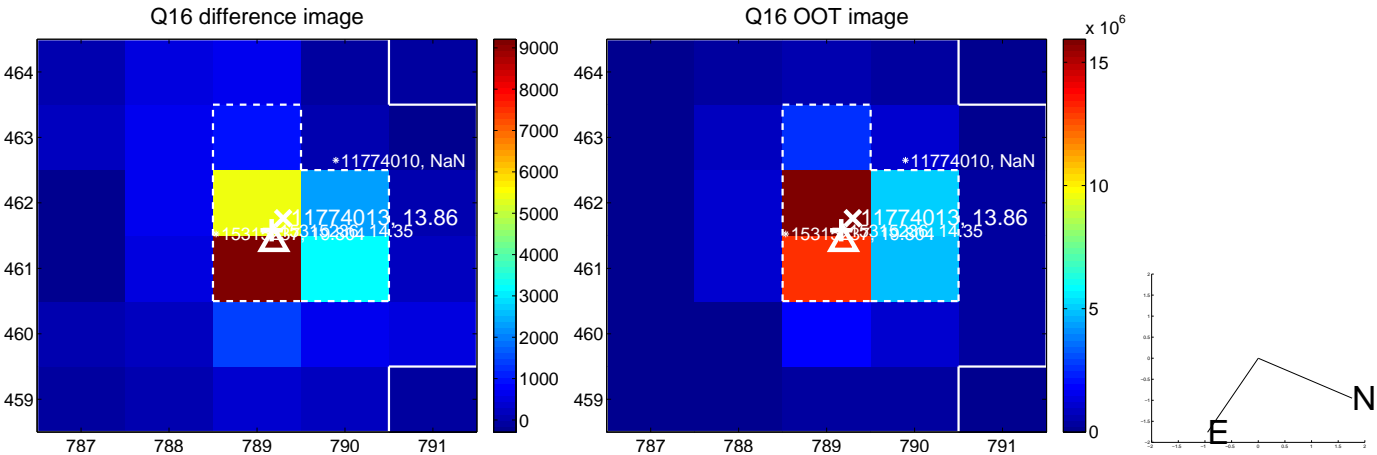
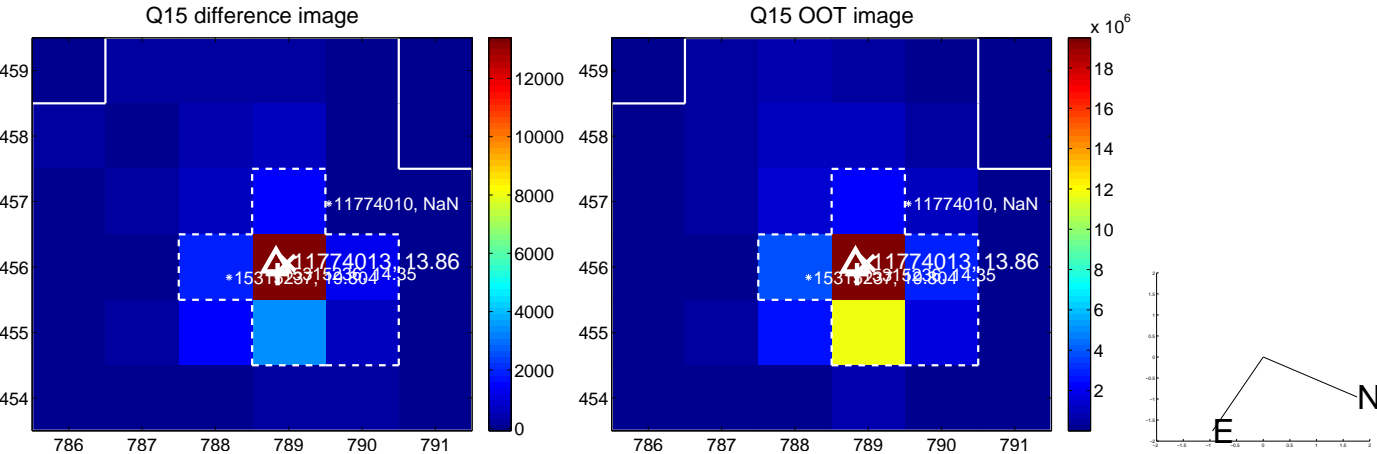
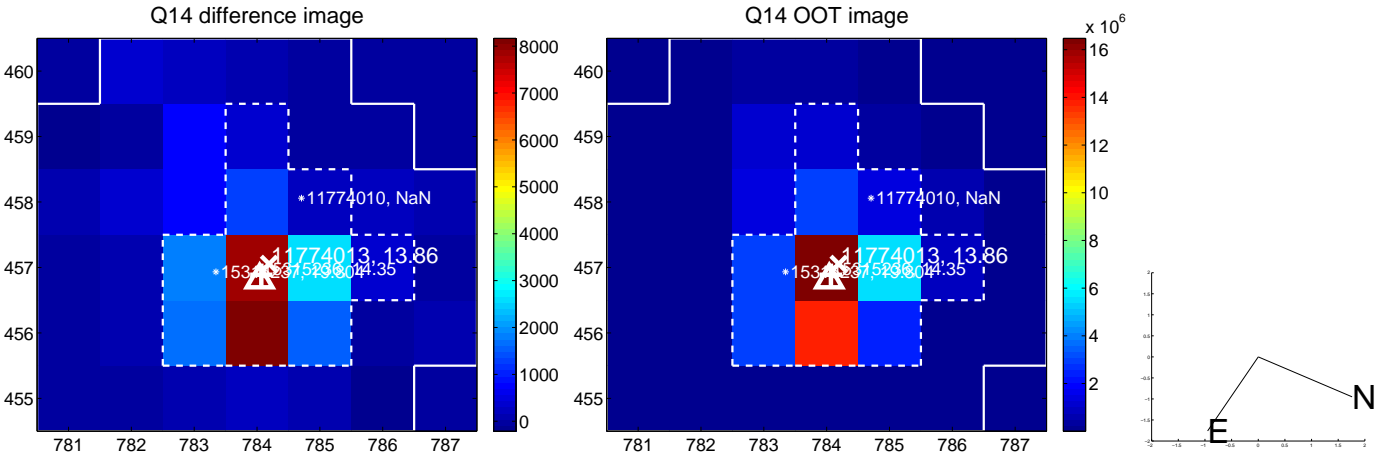
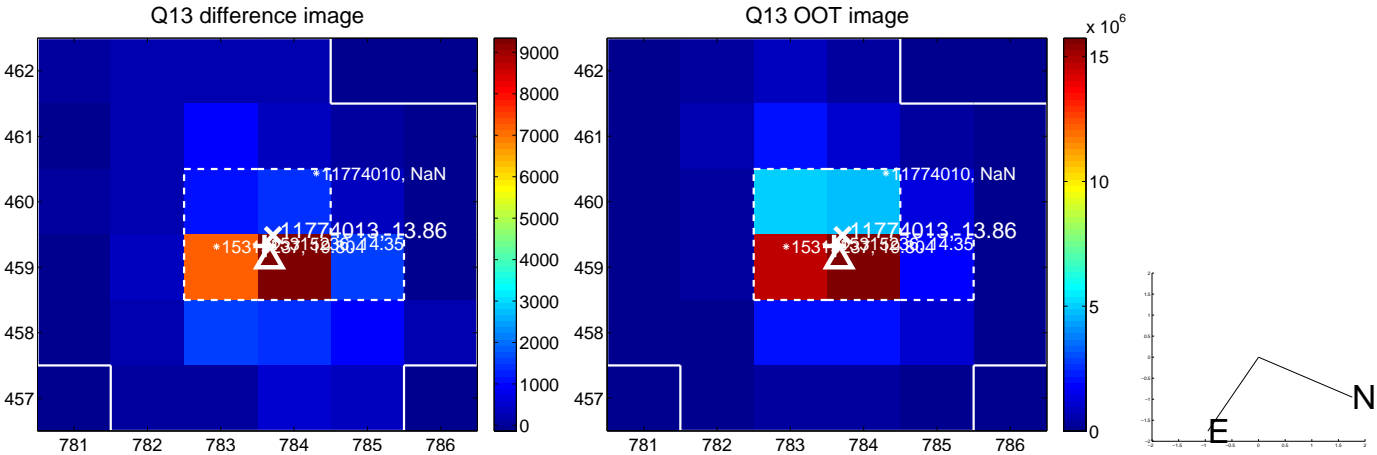
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



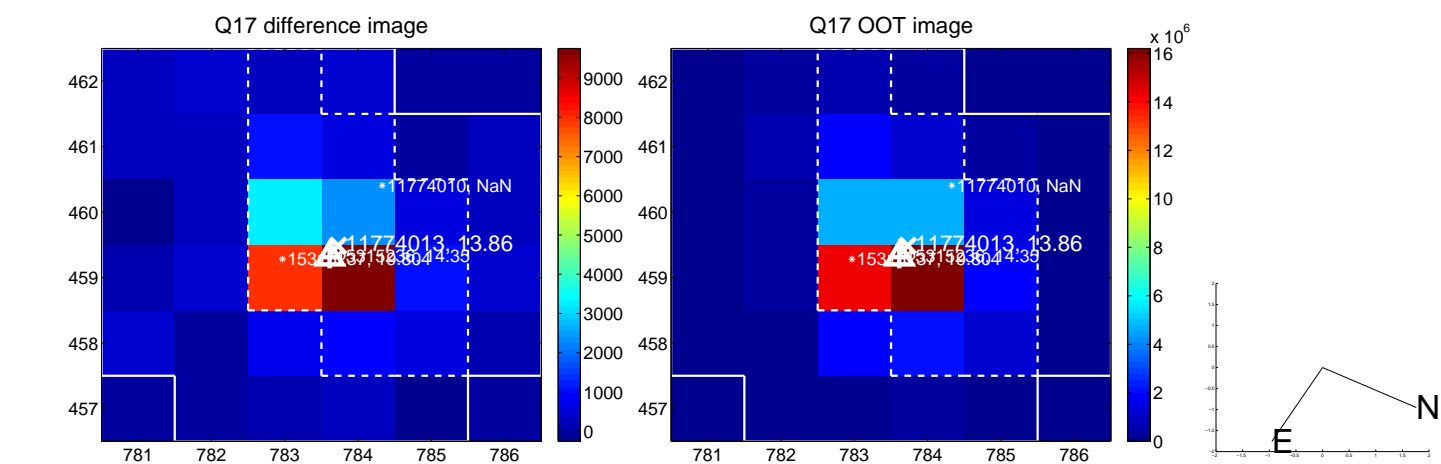
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



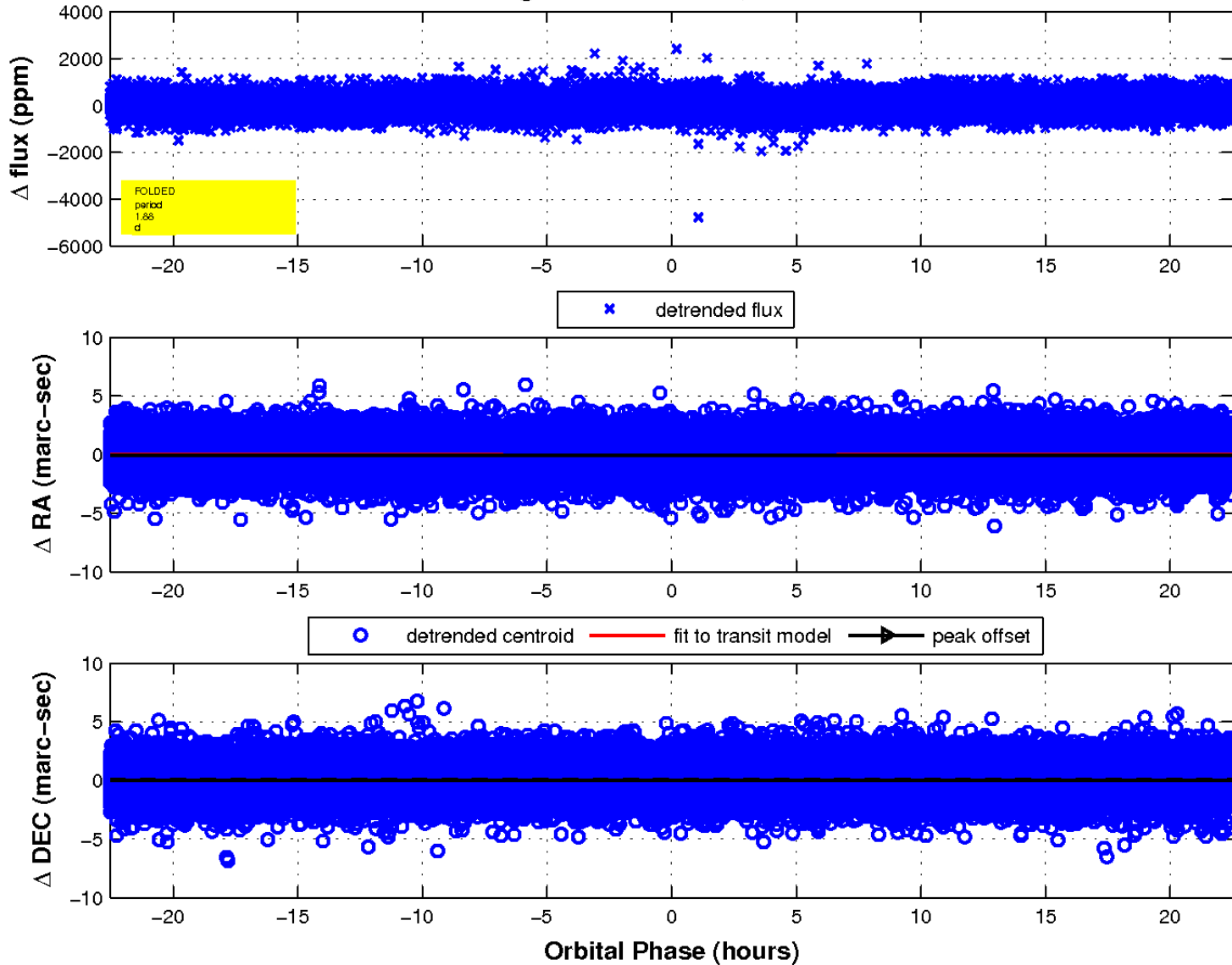
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



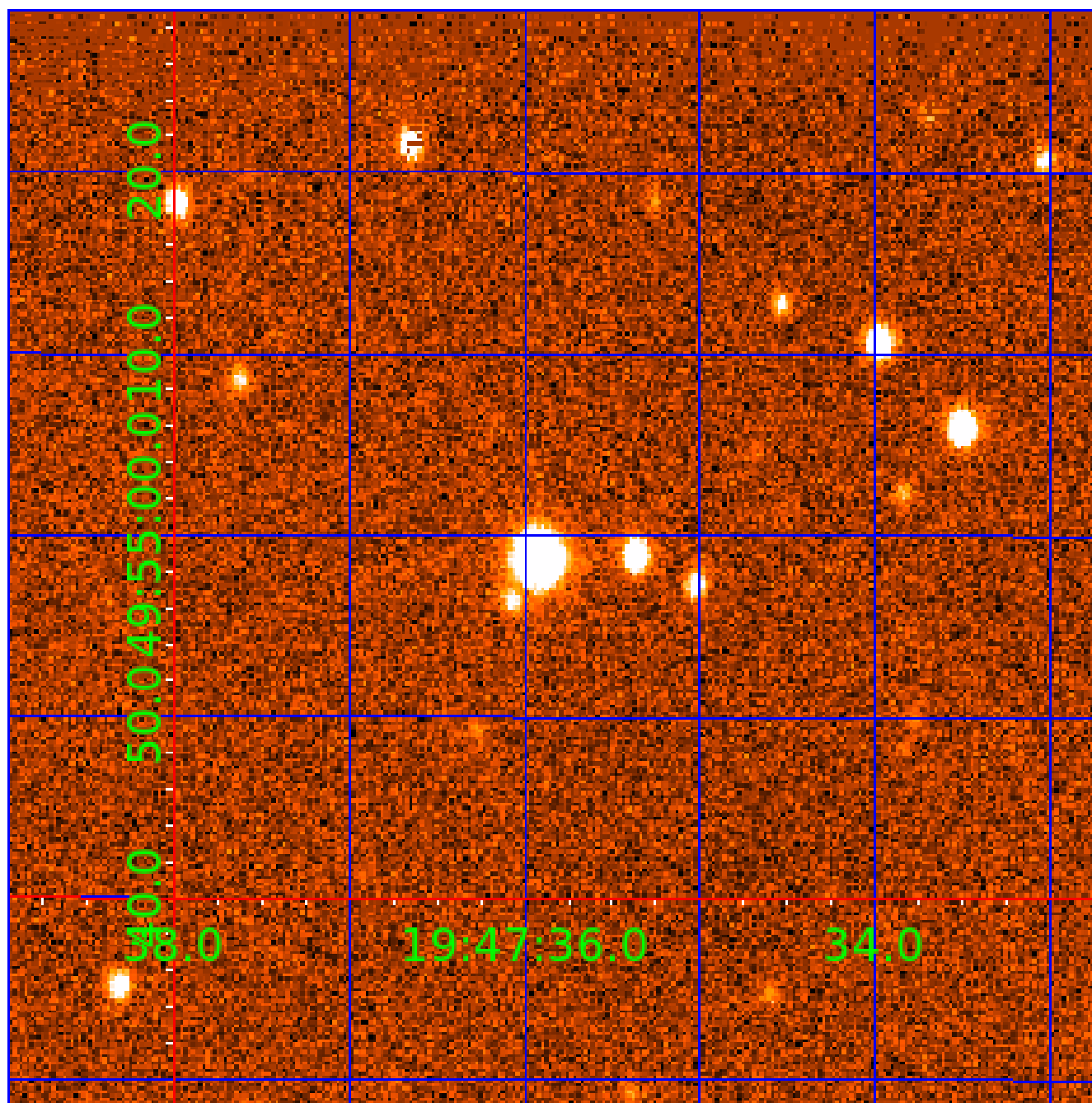
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 1 of 6



UKIRT Image



KIC 011774013

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})
011774013-01	OBS	No	1.878606	131.849759	11.0	13.744	10.9	4.7	3.56	6522	1.29	16746.67
011774013-02	OBS	No	31.281057	143.956892	488.3	2.792	16.0	13.2	3.56	6522	8.93	393.85
011774013-03	OBS	No	26.898709	135.712572	276.4	4.075	11.8	11.7	3.56	6522	6.91	481.65
011774013-04	OBS	No	23.278293	144.361034	262.5	4.124	10.7	10.7	3.56	6522	7.00	584.04
011774013-05	OBS	No	96.125516	209.751529	376.3	2.661	9.6	10.5	3.56	6522	7.01	88.16
011774013-06	OBS	No	35.543544	135.384255	440.0	1.455	10.5	10.5	3.56	6522	7.61	332.17

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011774013-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—CENT_KIC_POS
011774013-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_KIC_POS
011774013-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
011774013-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—CENT_FEW_DIFFS
011774013-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
011774013-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_FEW_MEAS

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

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

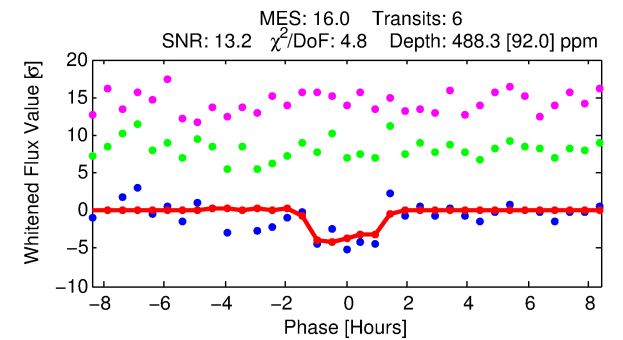
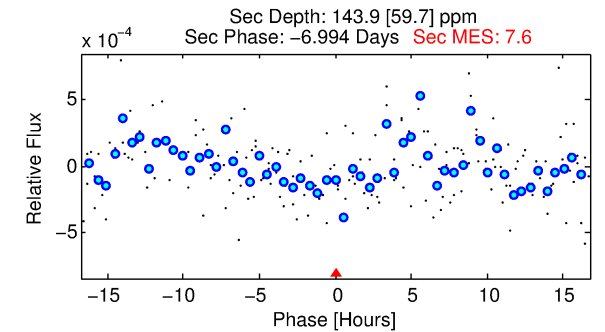
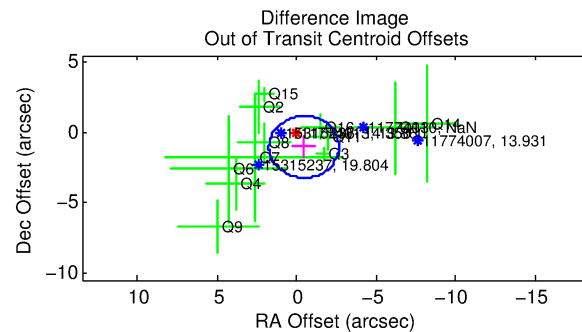
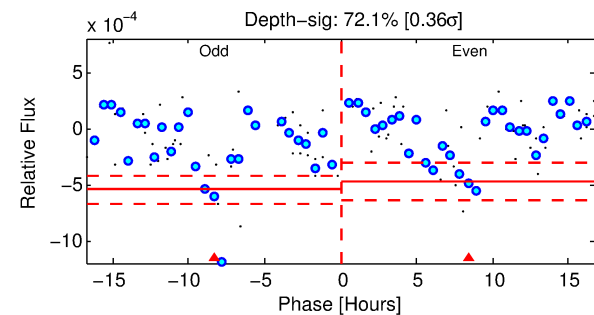
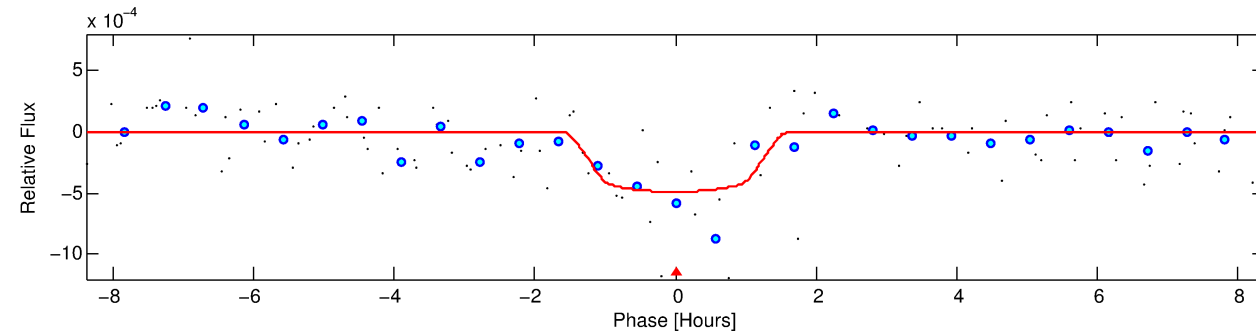
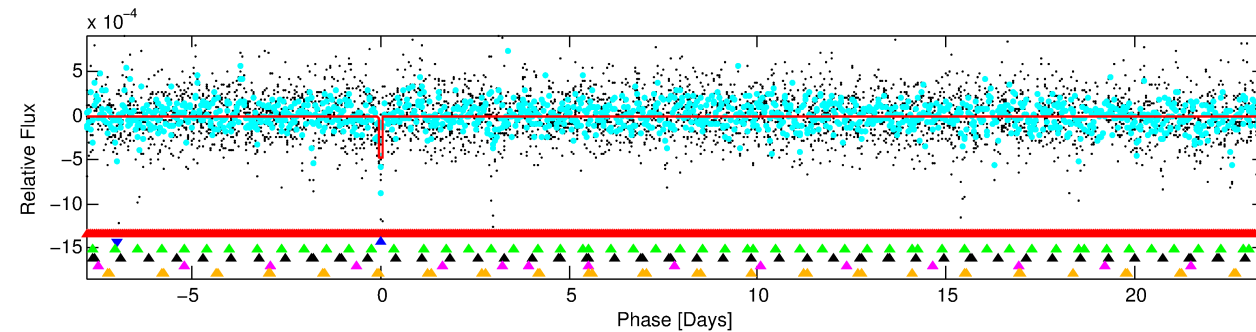
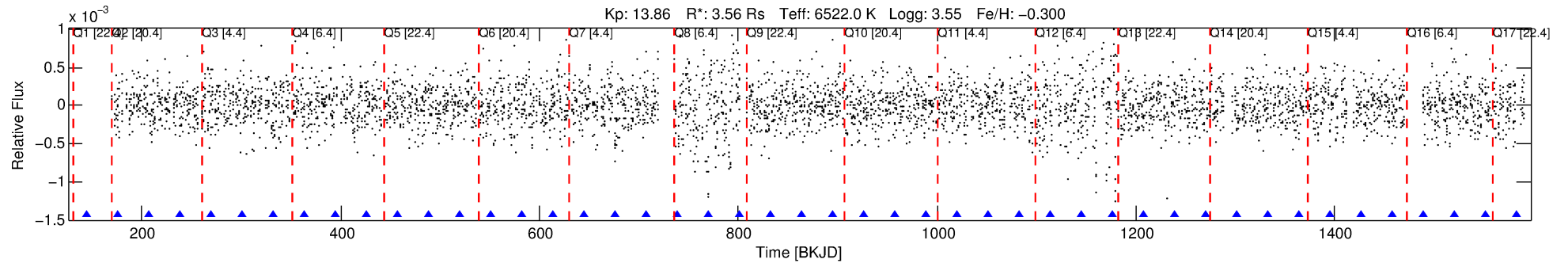
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011774013-02

No Significant Match Found

DV One-Page Summary

KIC: 11774013 Candidate: 2 of 6 Period: 31.281 d



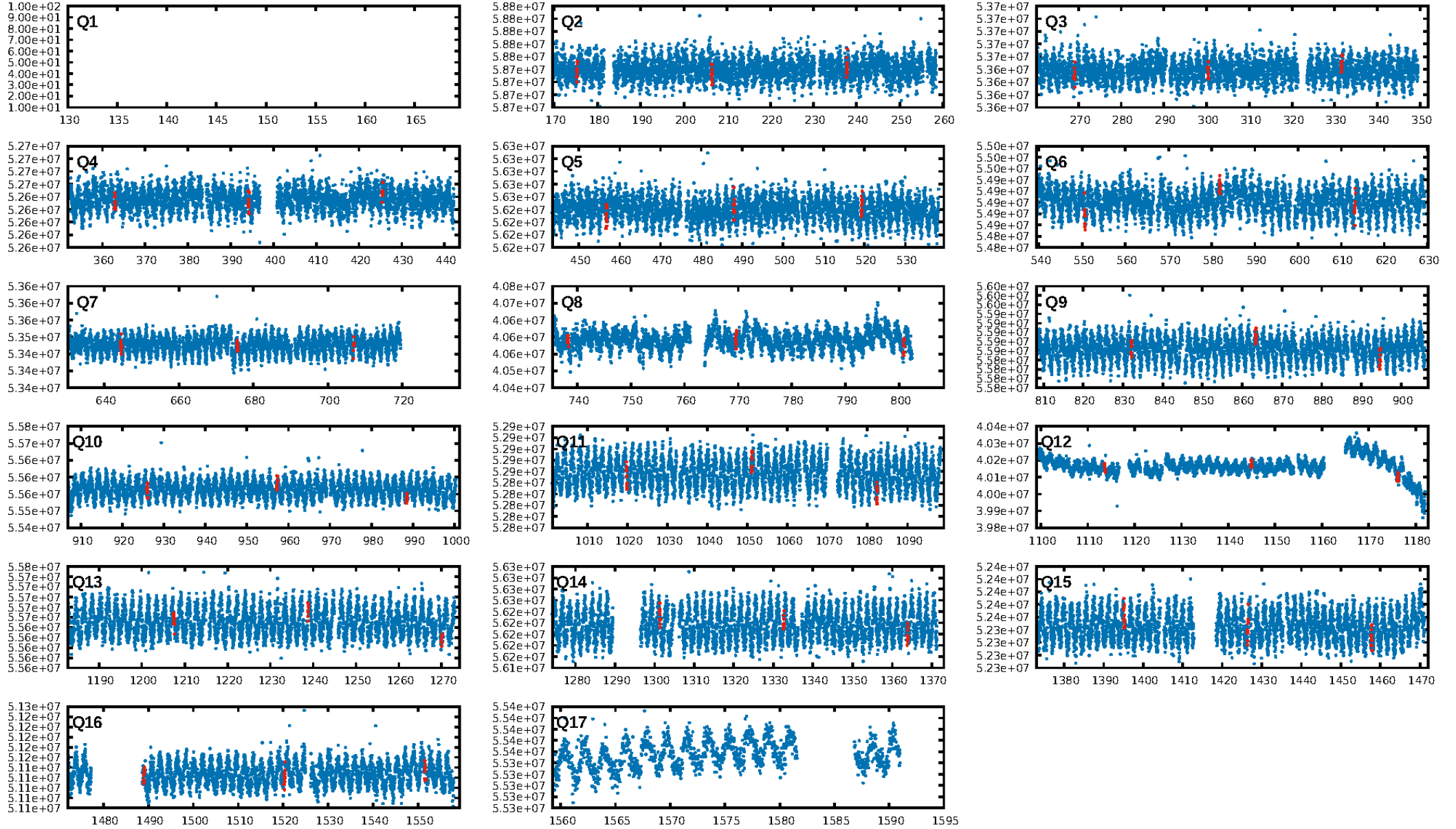
DV Fit Results:

Period = 31.28106 [0.00057] d
Epoch = 143.9569 [0.0211] BKJD
Rp/R* = 0.0230 [0.0259]
a/R* = 48.08 [305.74]
b = 0.86 [2.04]
Seff = 393.85 [444.19]
Teq = 1136 [320] K
Rp = 8.93 [11.43] Re
a = 0.2287 [0.1508] AU
Ag = 51.94 [132.52] [0.38 σ]
Teffp = 4715 [2708] K [1.31 σ]

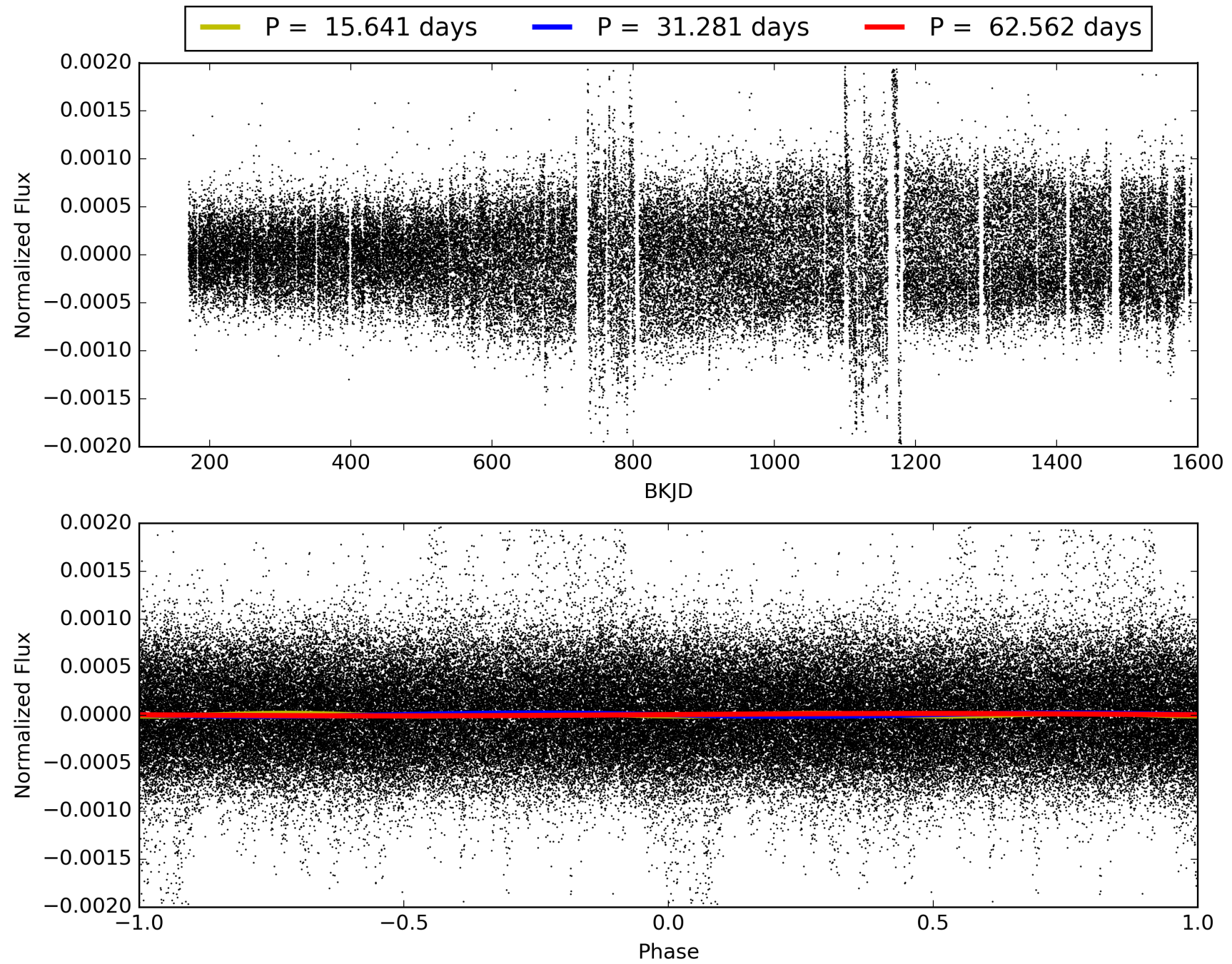
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [21.29 σ]
LongPeriod-sig: 100.0% [32.50 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.3%
Bootstrap-pfa: 9.16e-20
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: -3.881
Centroid-sig: 0.0%
Centroid-so: 1.322 arcsec [2.83 σ]
OotOffset-rm: 1.119 arcsec [1.53 σ]
KicOffset-rm: 1.211 arcsec [1.42 σ]
OotOffset-st: 3/4/3/2 [12]
KicOffset-st: 3/4/3/2 [12]
DiffImageQuality-fgm: 0.25 [3/12]
DiffImageOverlap-fno: 0.87 [13/15]

TCE 011774013-02, PDC Light Curves

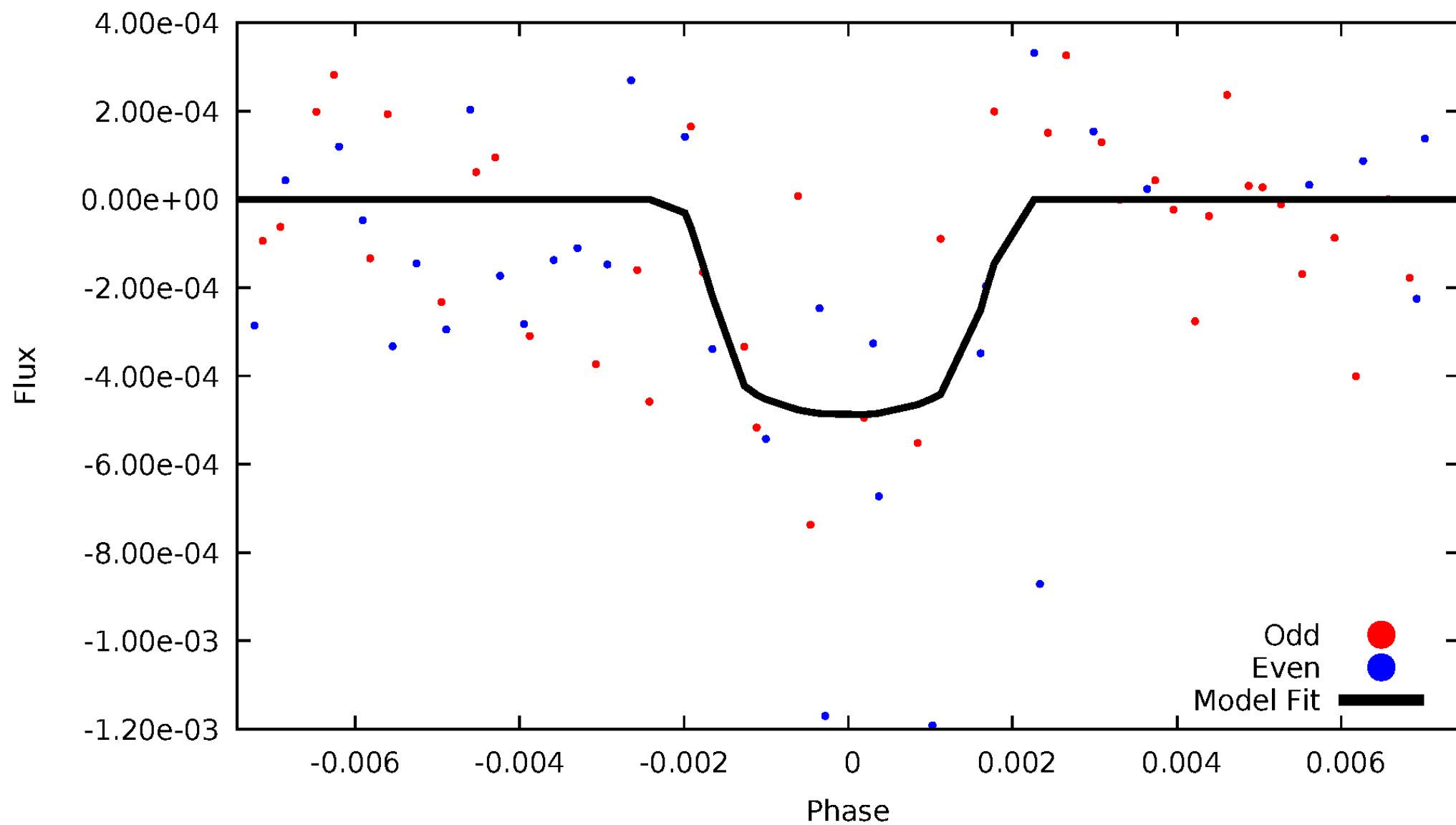


TCE 011774013-02



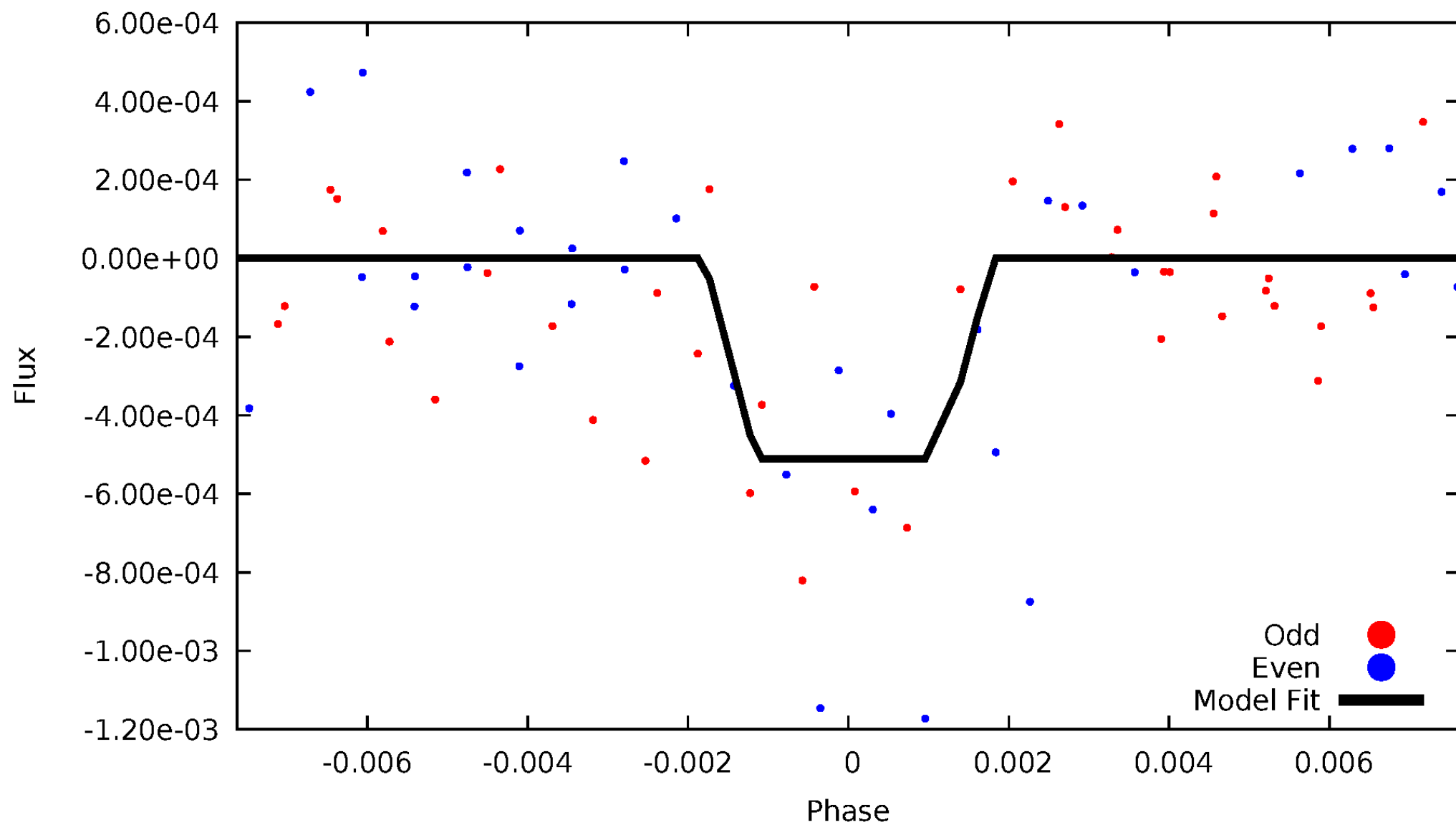
DV Odd/Even

TCE 011774013-02



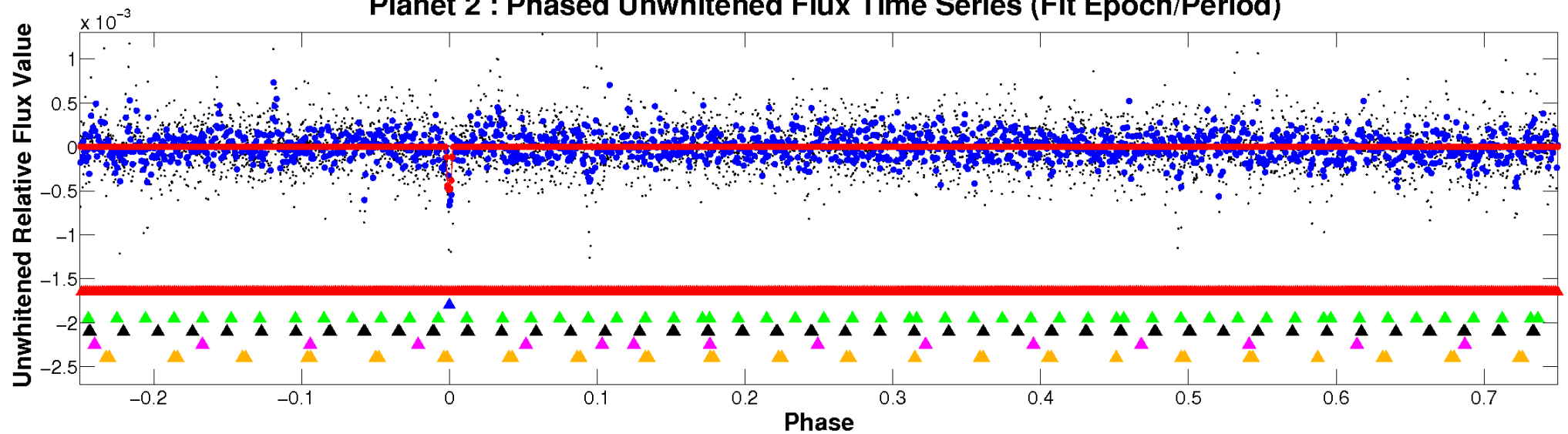
ALT Odd/Even

TCE 011774013-02

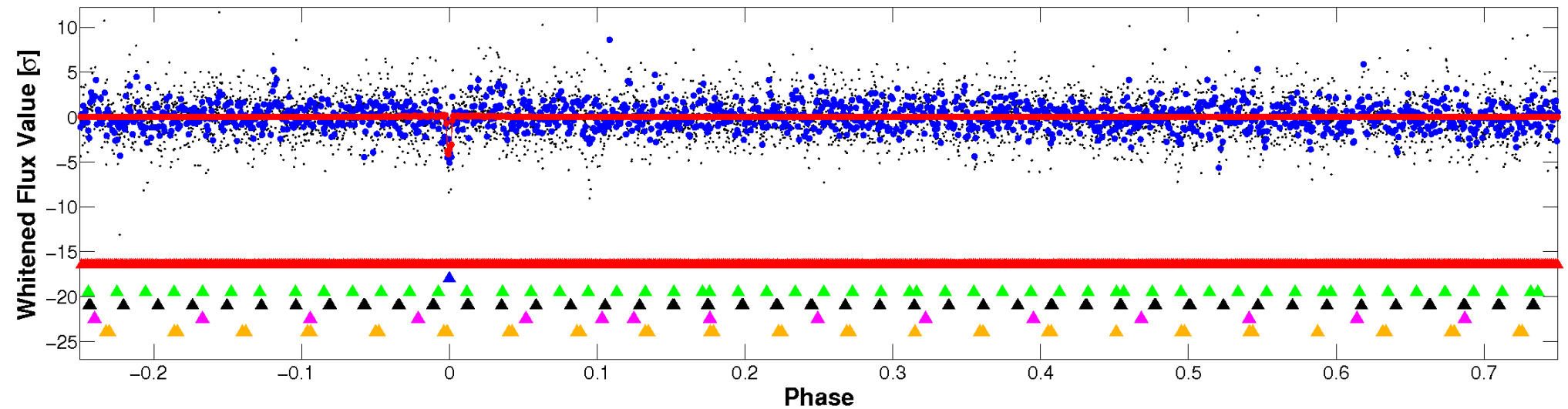


Non-Whitened Vs. Whitened Light Curve

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

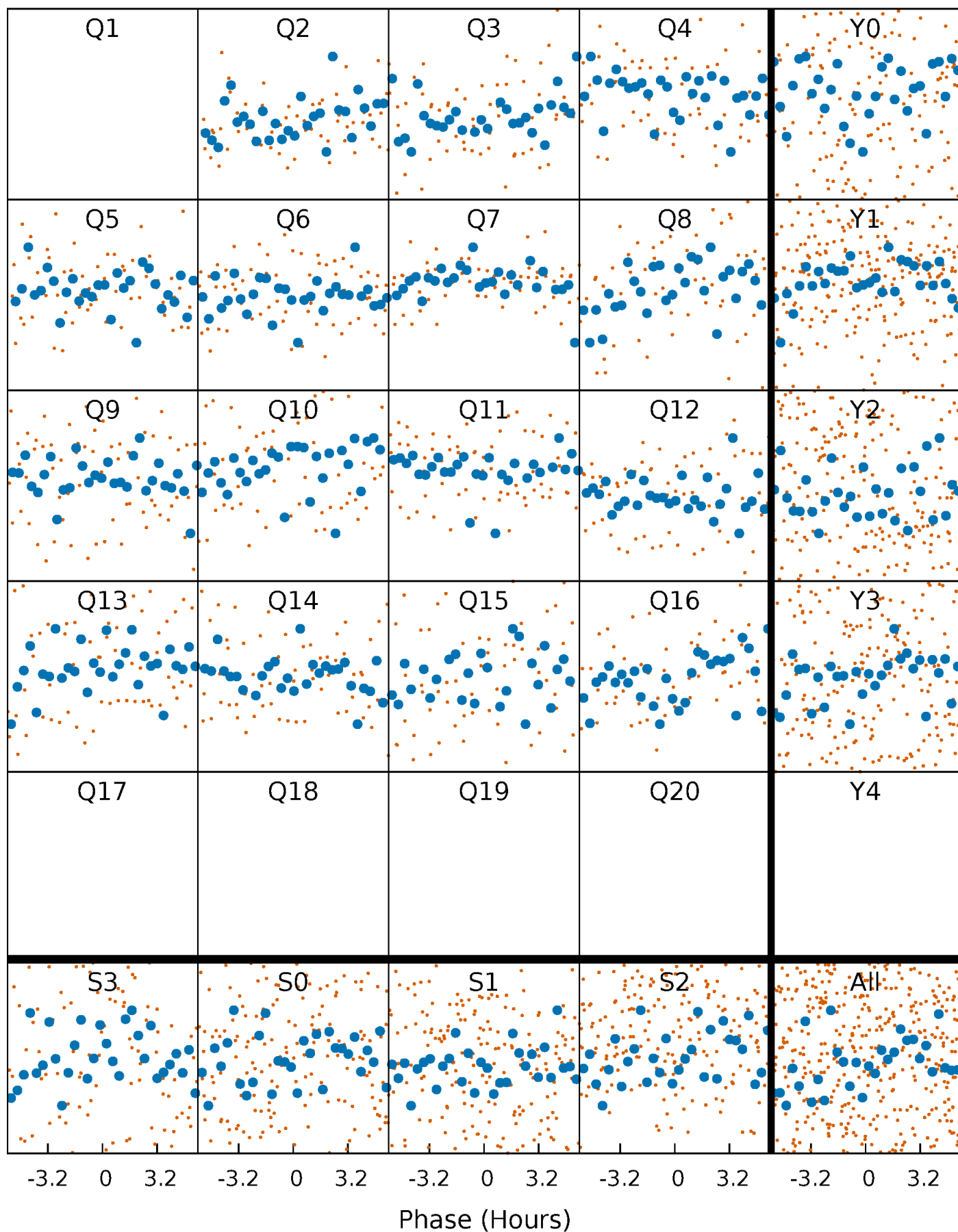


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



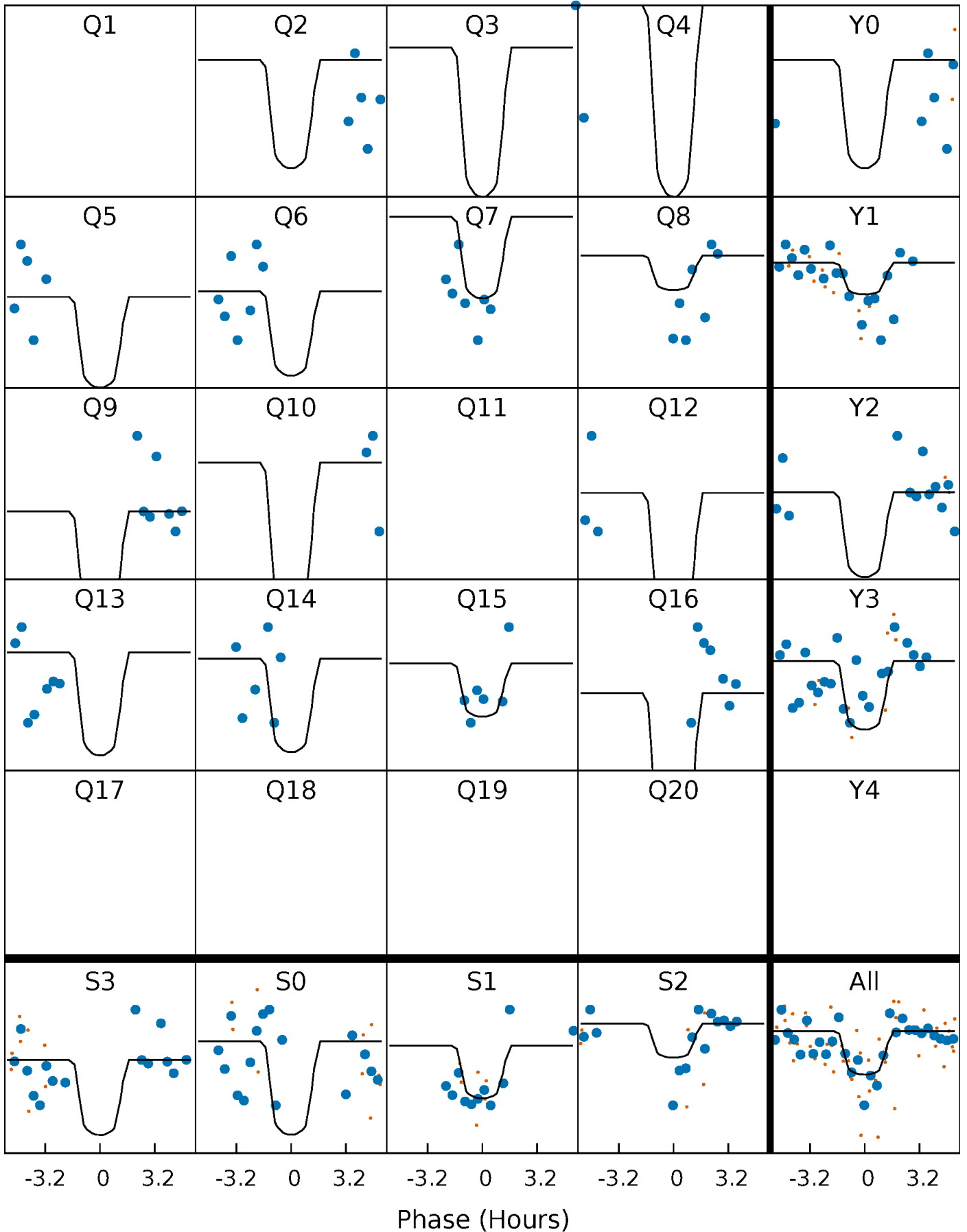
PDC Quarter-Phased Transit Curves

TCE 011774013-02 P= 31.281057 Days $T_0=143.956892$ (BKJD)



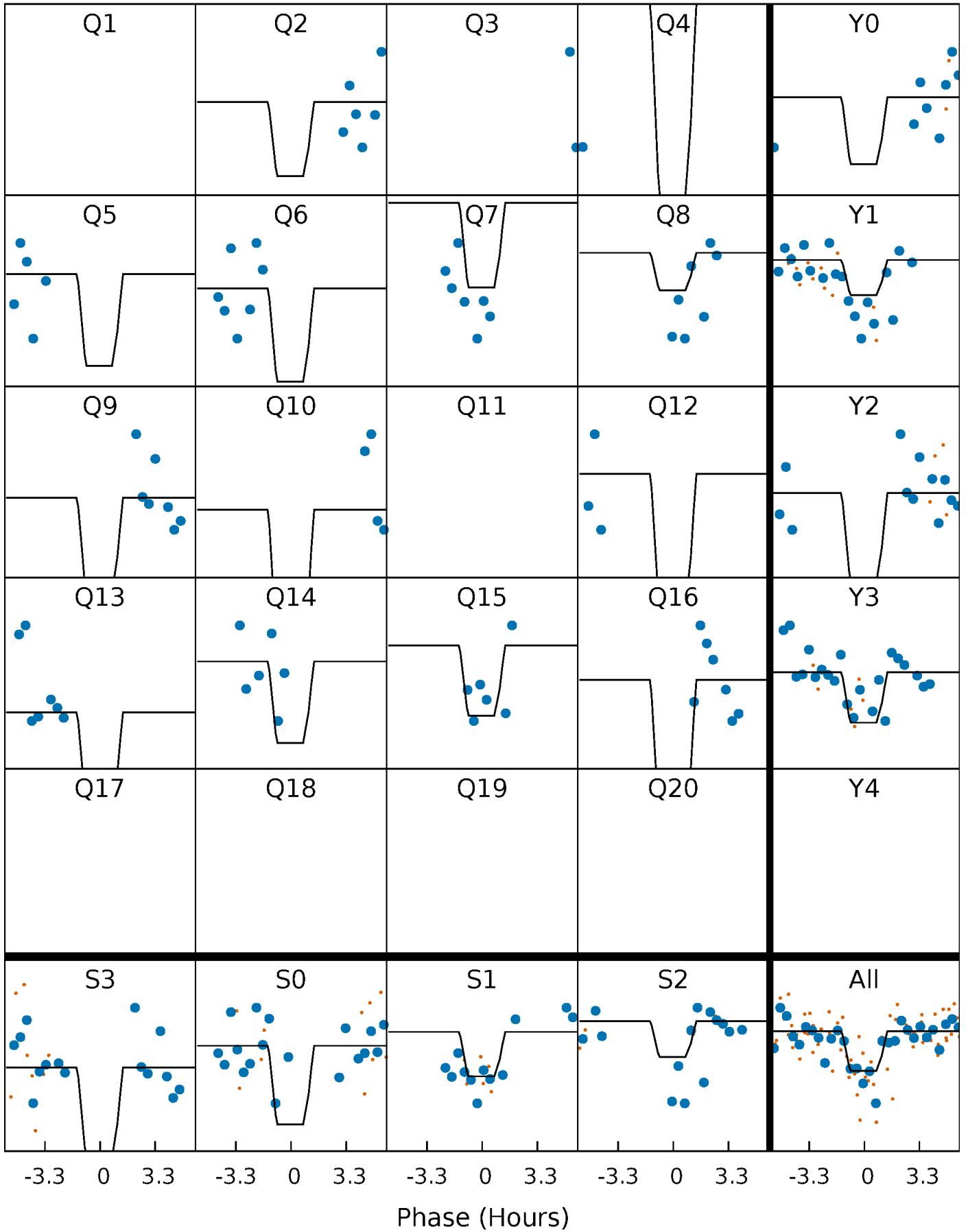
DV Quarter-Phased Transit Curves

TCE 011774013-02 P= 31.281057 Days $T_0=143.956892$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

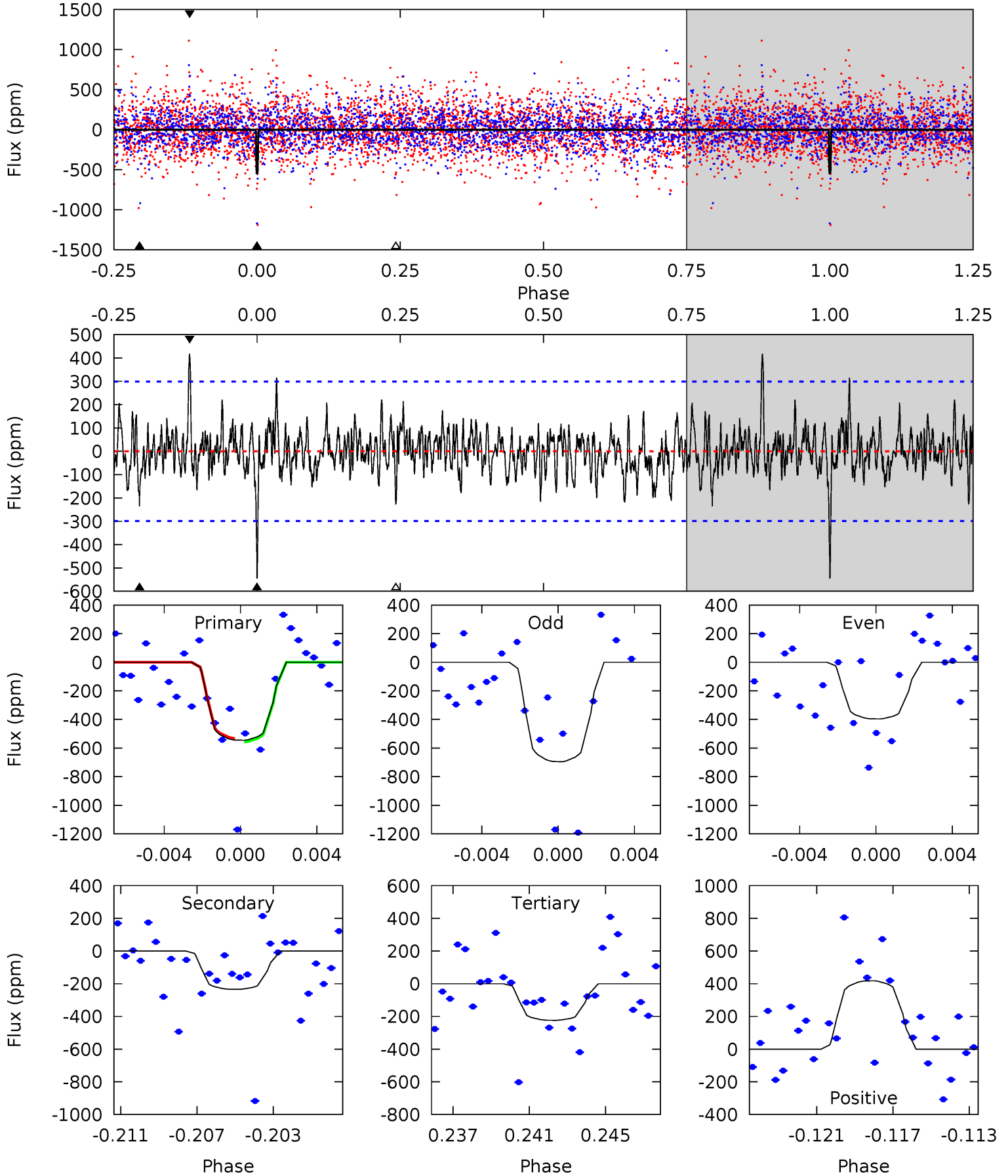
TCE 011774013-02 P= 31.280594 Days $T_0=143.968227$ (BKJD)



DV Model-Shift Uniqueness Test

011774013-02, P = 31.281057 Days, E = 143.956892 Days

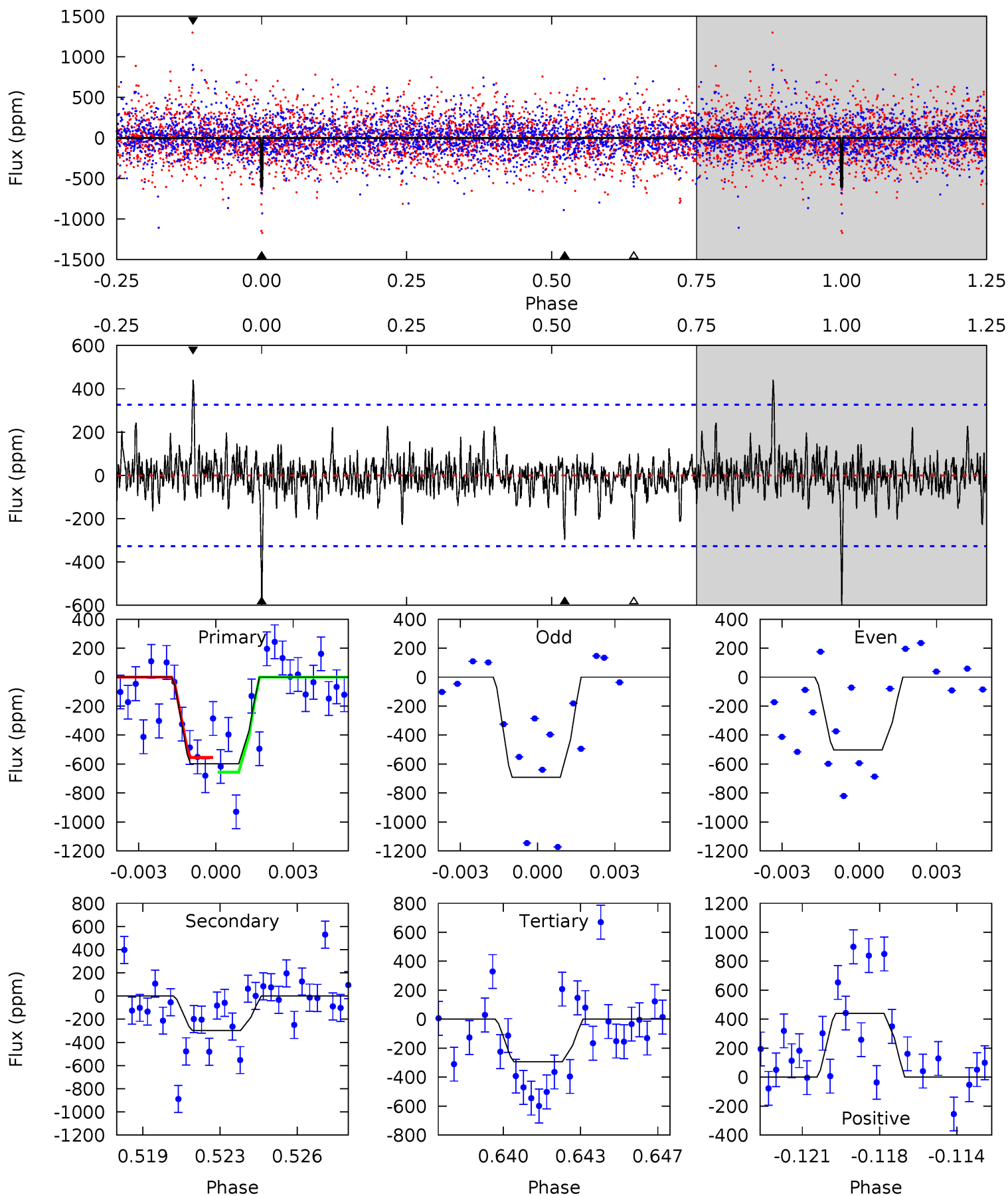
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.51	4.09	3.90	7.29	5.21	2.90	1.35	5.61	2.22	0.19	-3.20	2.59	1.04	0.43	0.21



Alt Model-Shift Uniqueness Test

011774013-02, P = 31.280594 Days, E = 143.968227 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.60	4.76	4.72	7.07	5.24	2.94	1.10	4.88	2.53	0.04	-2.31	1.49	1.03	0.42	0.83



Stellar Parameters For KIC 011774013

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6522^{+182}_{-228}	$3.546^{+0.680}_{-0.120}$	$-0.300^{+0.300}_{-0.250}$	$3.564^{+0.539}_{-2.157}$	$1.627^{+0.185}_{-0.556}$	$0.051^{+0.554}_{-0.018}$
	+3%/-3%	+19%/-3%	+100%/-83%	+15%/-61%	+11%/-34%	+1094%/-35%
Source	PHO54	PHO54	PHO54	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011774013-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-235 ± 57	$9.25^{+8.90}_{-6.06}$	1540^{+119}_{-228}	4898^{+3063}_{-979}	77^{+533}_{-57}
Alt.	-297 ± 62	$9.55^{+8.88}_{-6.41}$	1537^{+115}_{-272}	5038^{+3235}_{-1053}	90^{+670}_{-67}

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

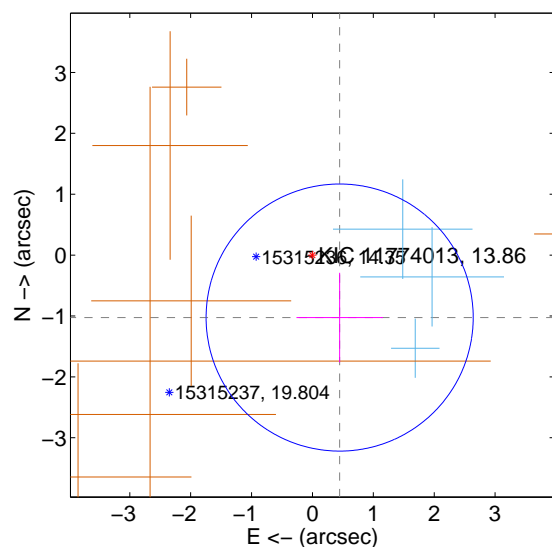
Supplemental centroid analysis for 011774013-02. Kepler magnitude: 13.86. Transit SNR 13.16

There are 3 quarters with good PRF difference image offsets

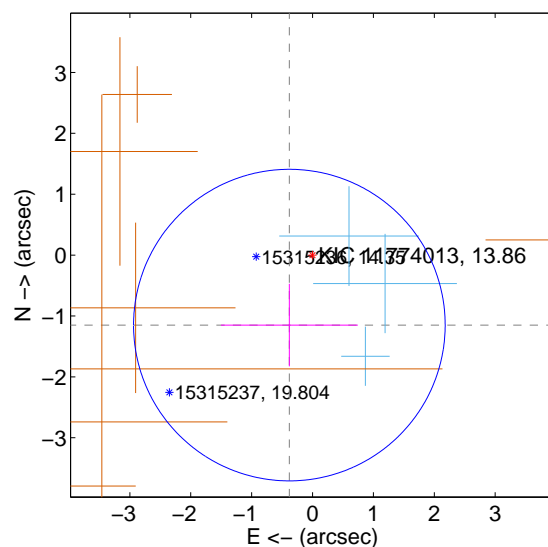
The direct PRF centroid is offset from the target star catalog position by about 0.89 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.119 ± 0.731	1.53	-0.447 ± 0.710	-1.026 ± 0.735
PRF-fit source offset from KIC position	1.211 ± 0.853	1.42	0.380 ± 1.124	-1.150 ± 0.678
photometric centroid source offset	1.32 ± 0.47	2.83	0.11 ± 0.45	1.32 ± 0.47

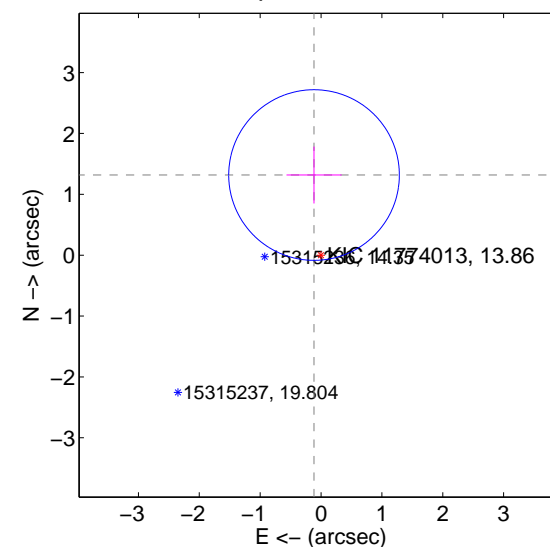
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

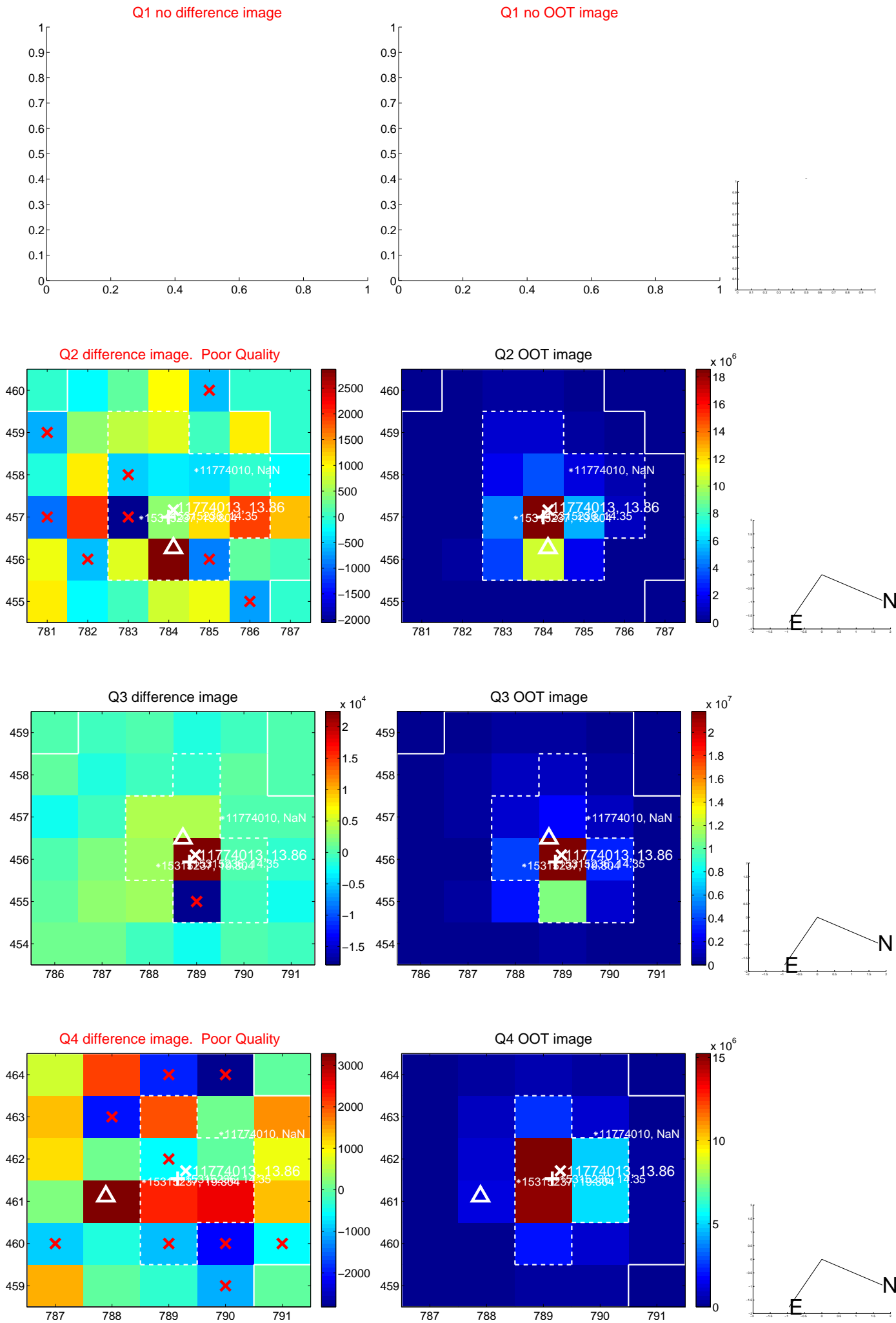


offset from photometric centroids

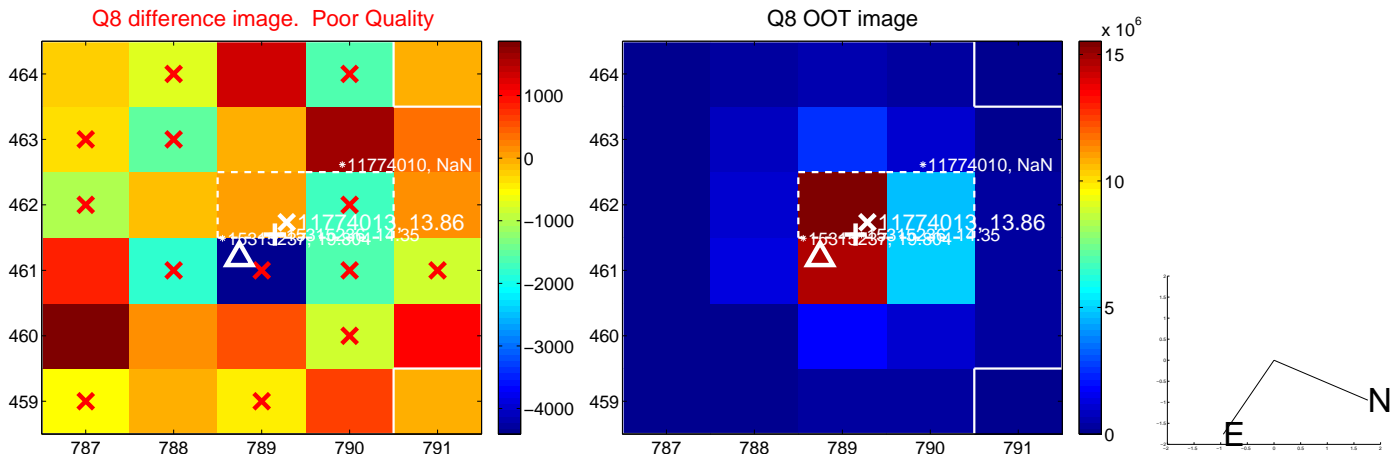
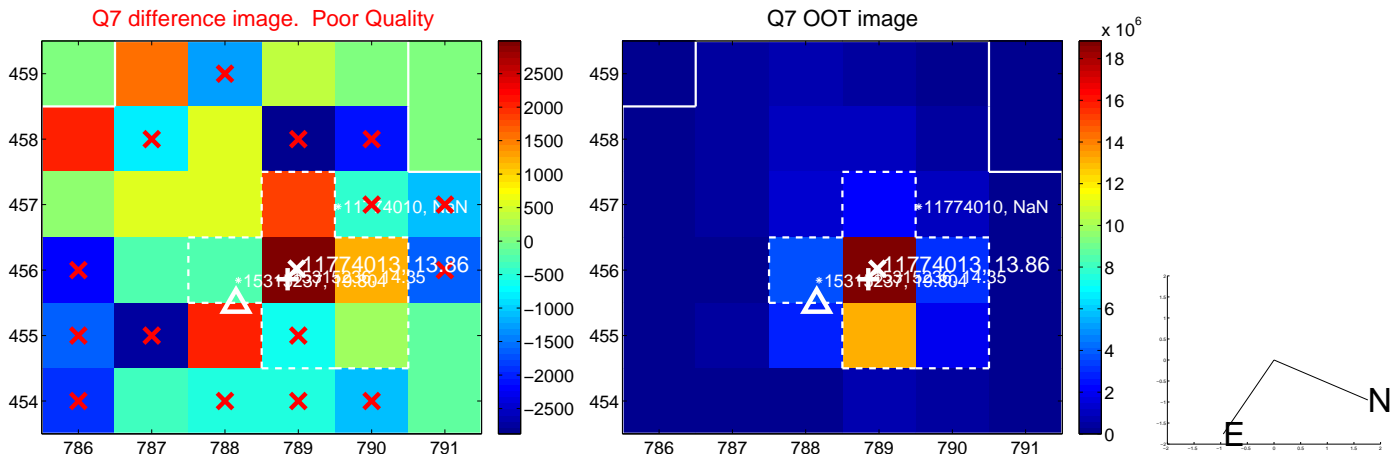
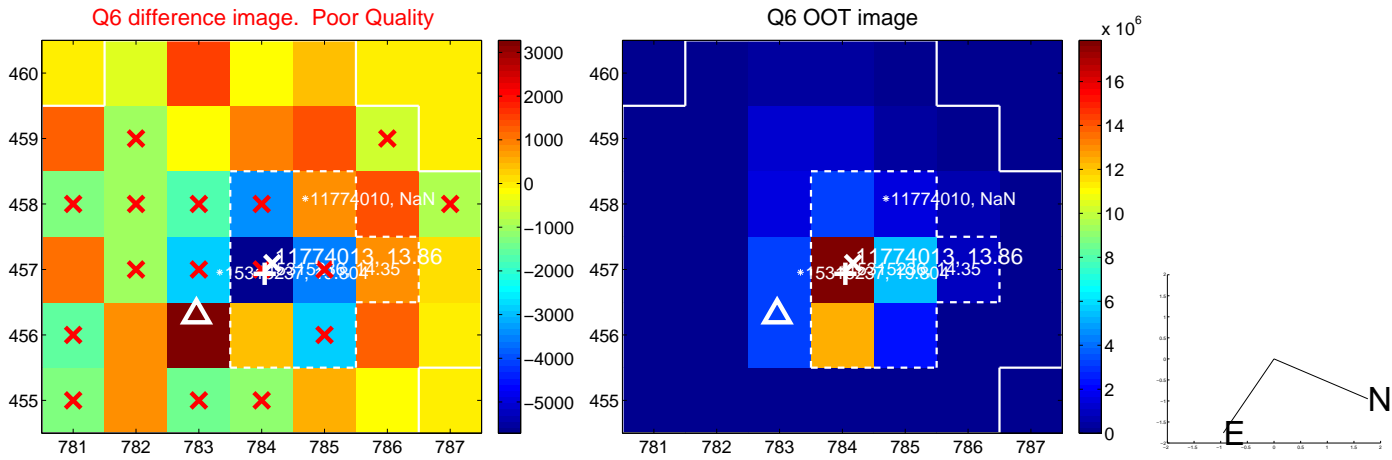
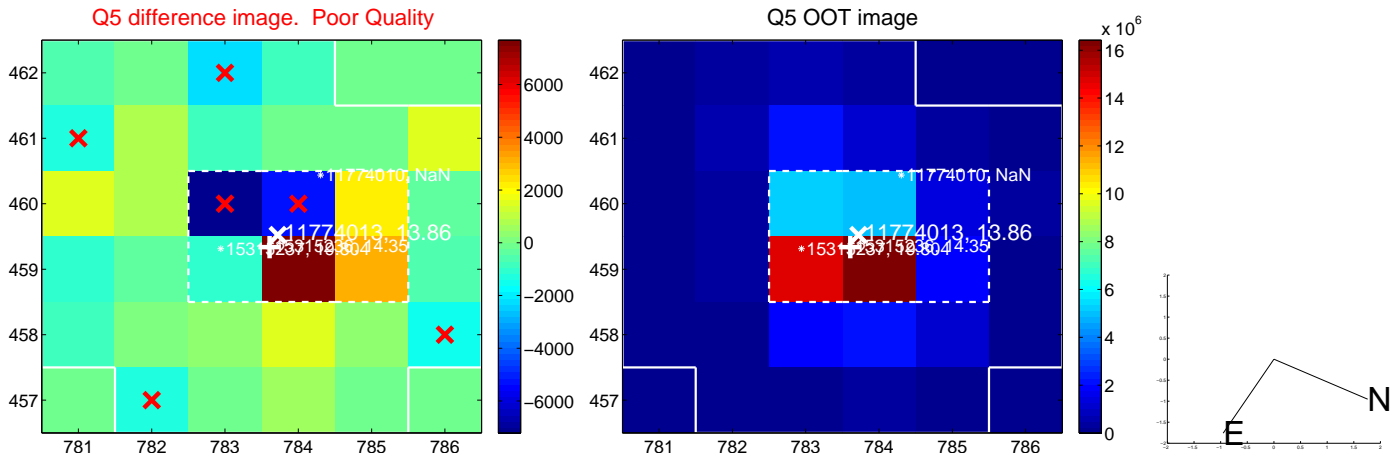


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

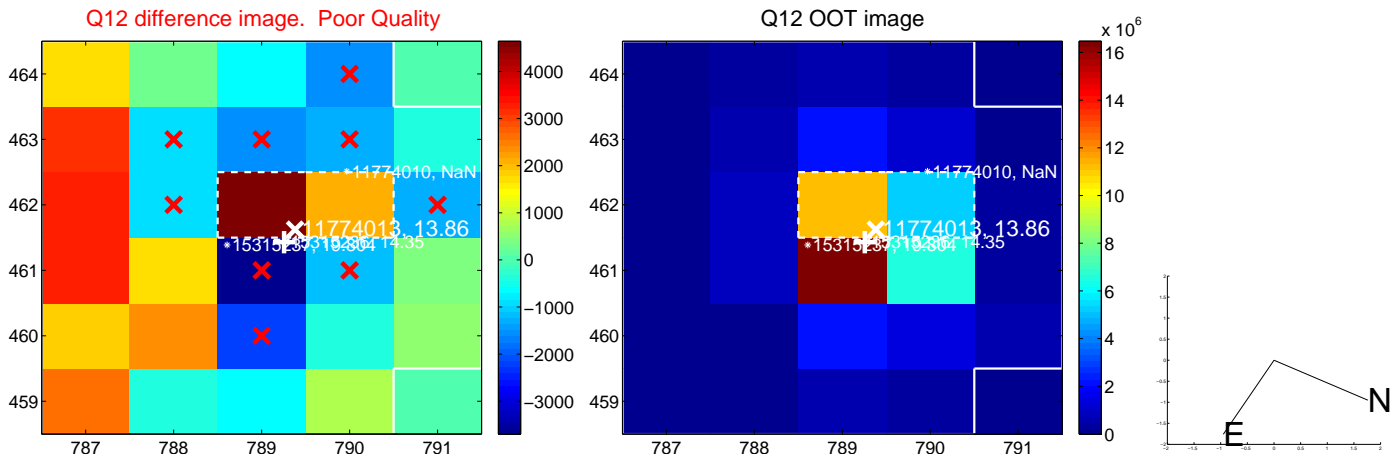
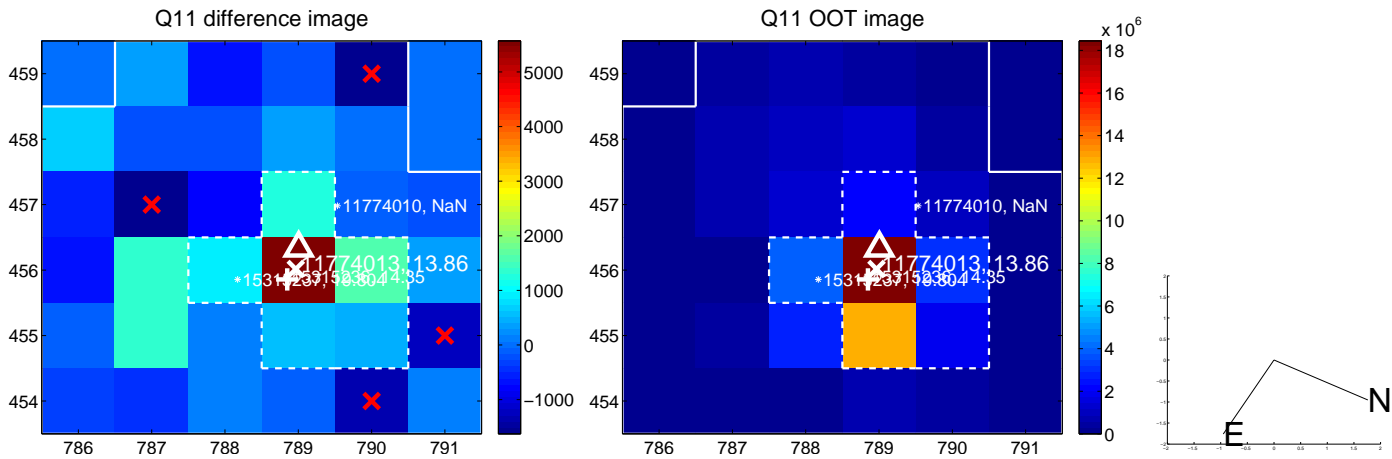
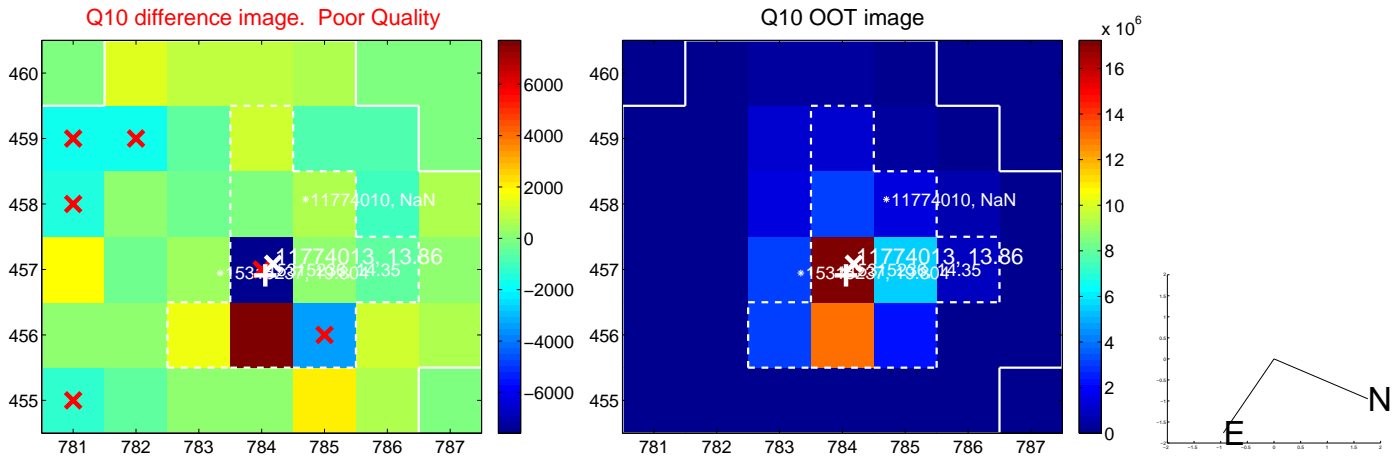
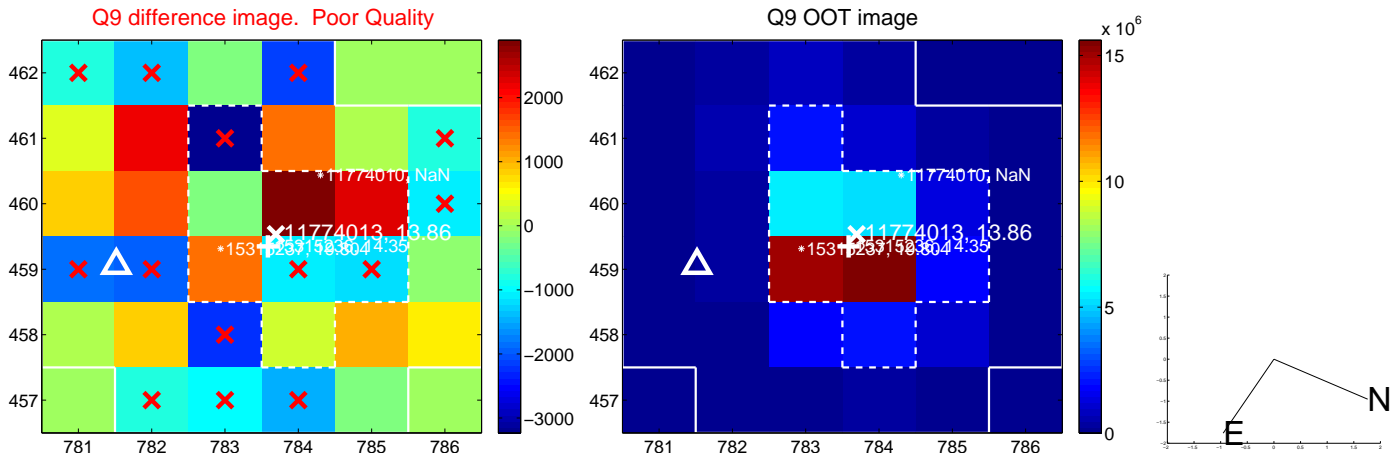
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



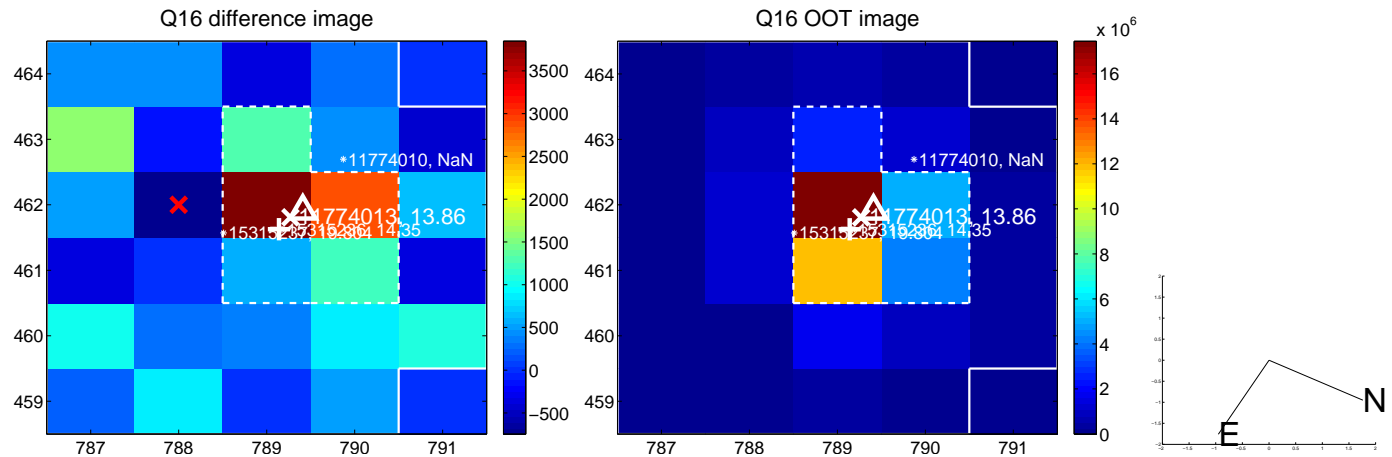
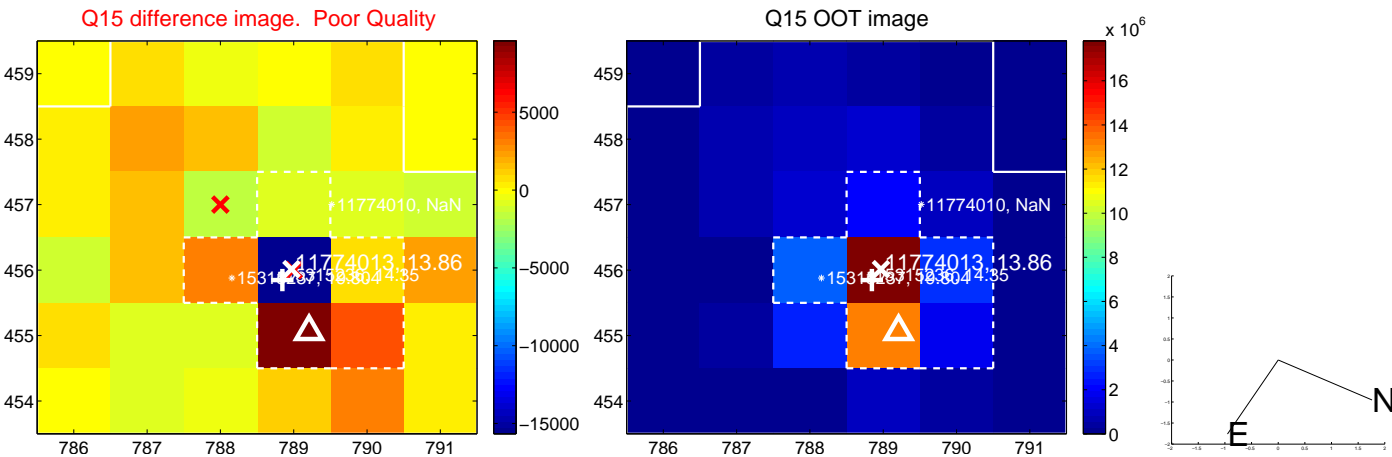
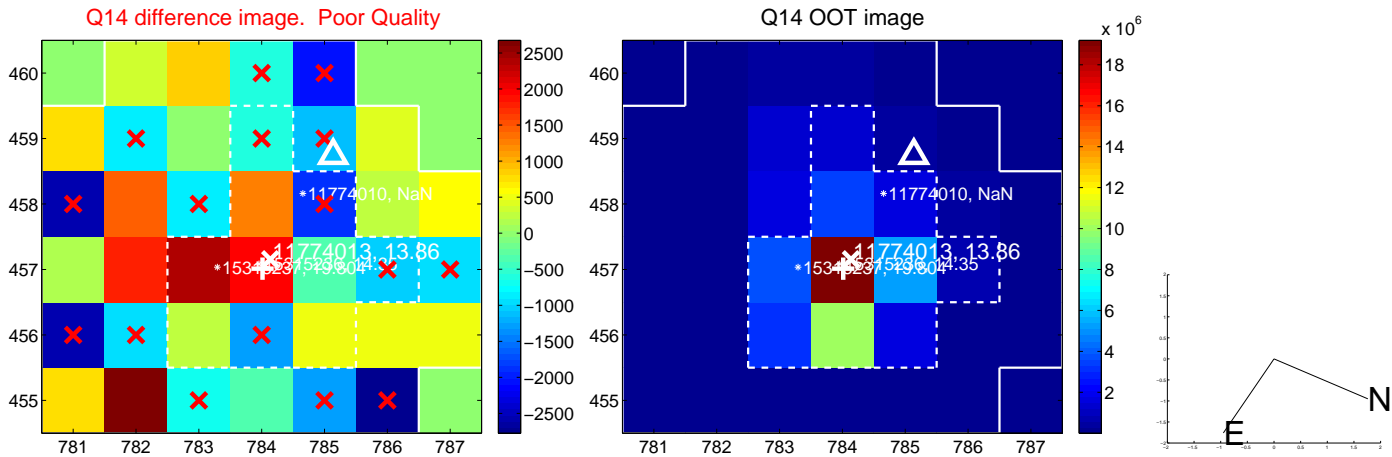
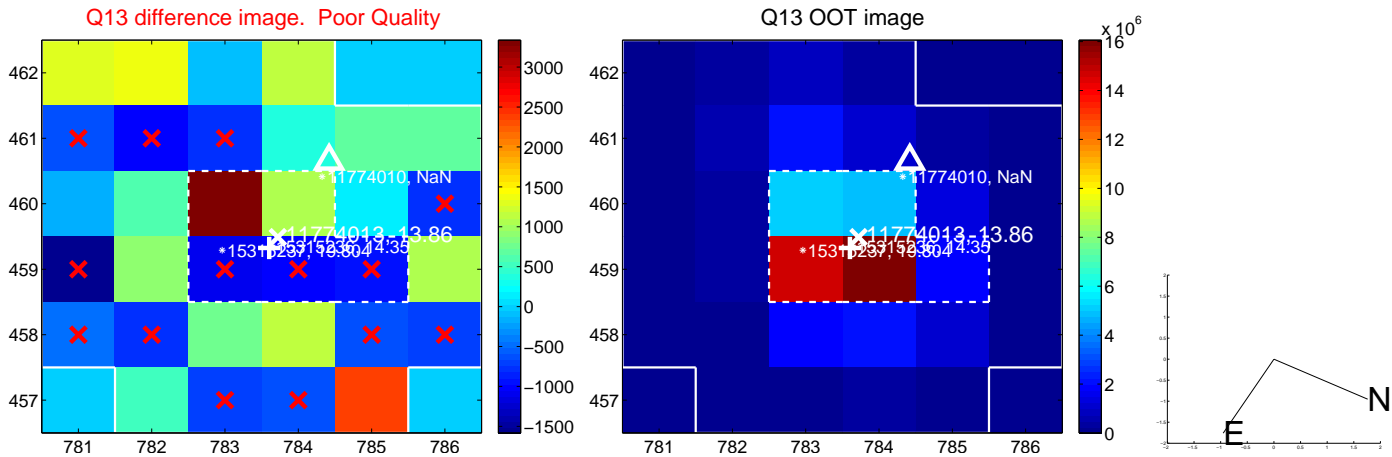
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



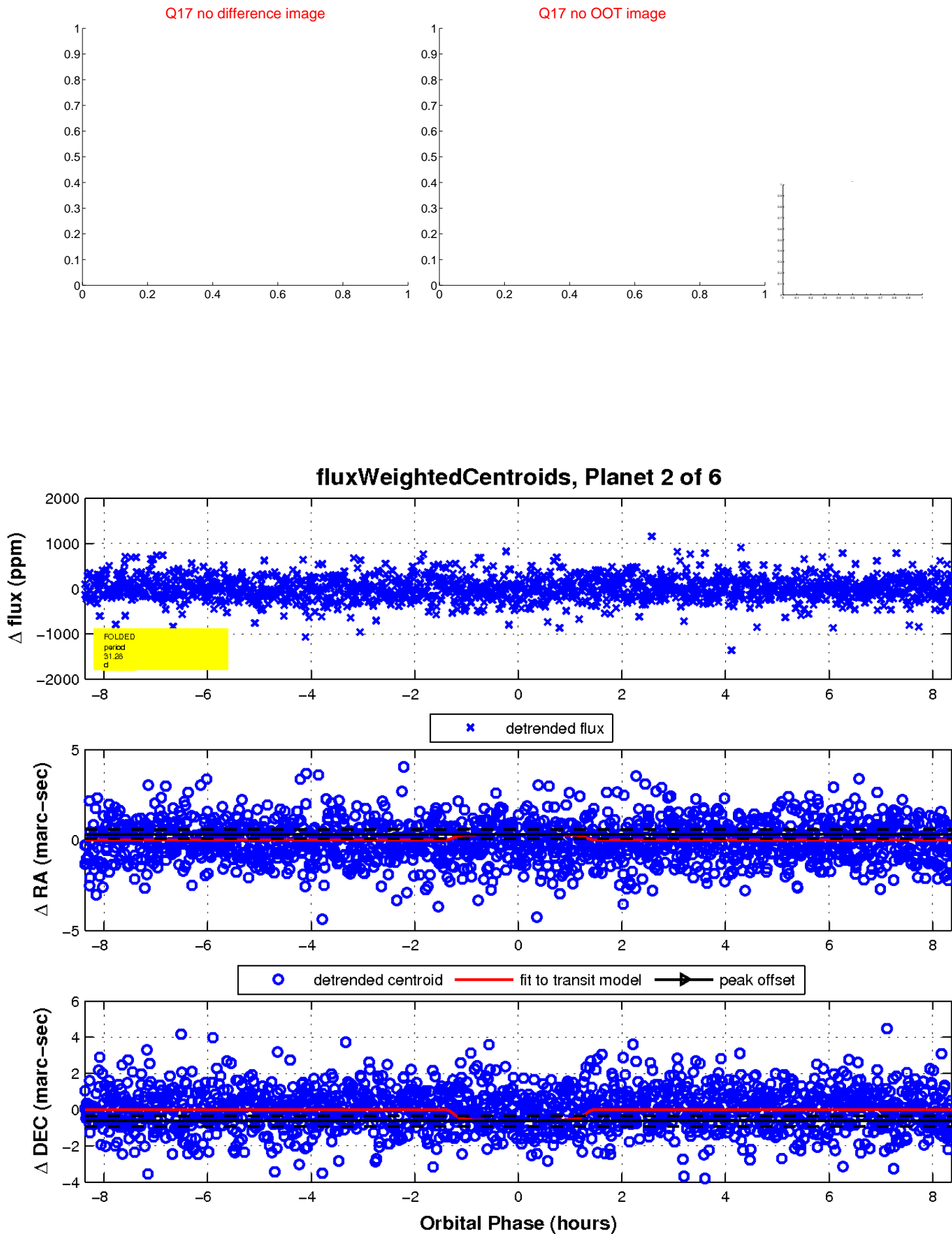
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

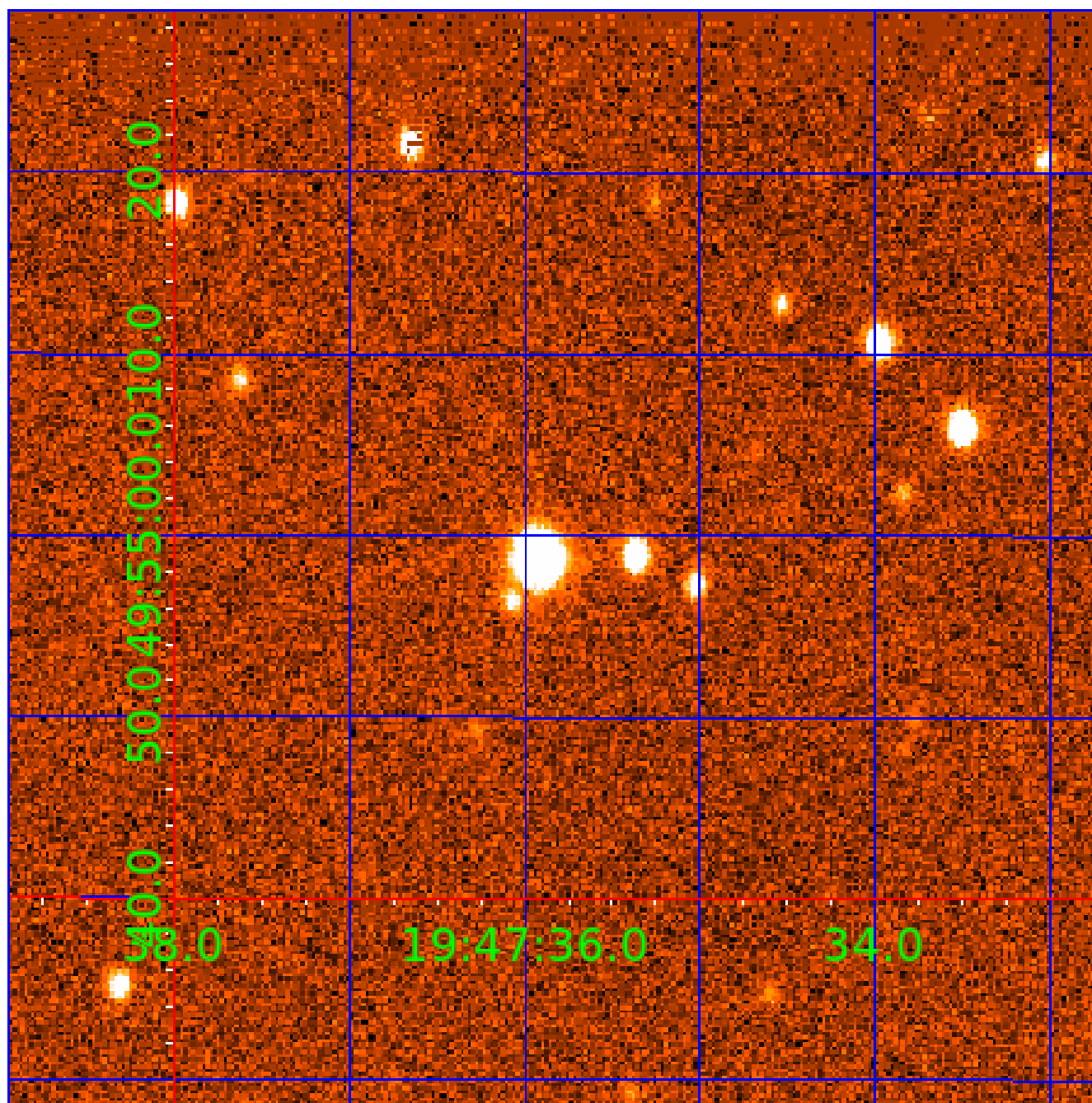


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011774013

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})
011774013-01	OBS	No	1.878606	131.849759	11.0	13.744	10.9	4.7	3.56	6522	1.29	16746.67
011774013-02	OBS	No	31.281057	143.956892	488.3	2.792	16.0	13.2	3.56	6522	8.93	393.85
011774013-03	OBS	No	26.898709	135.712572	276.4	4.075	11.8	11.7	3.56	6522	6.91	481.65
011774013-04	OBS	No	23.278293	144.361034	262.5	4.124	10.7	10.7	3.56	6522	7.00	584.04
011774013-05	OBS	No	96.125516	209.751529	376.3	2.661	9.6	10.5	3.56	6522	7.01	88.16
011774013-06	OBS	No	35.543544	135.384255	440.0	1.455	10.5	10.5	3.56	6522	7.61	332.17

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011774013-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—CENT_KIC_POS
011774013-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_KIC_POS
011774013-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
011774013-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—CENT_FEW_DIFFS
011774013-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
011774013-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_FEW_MEAS

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

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

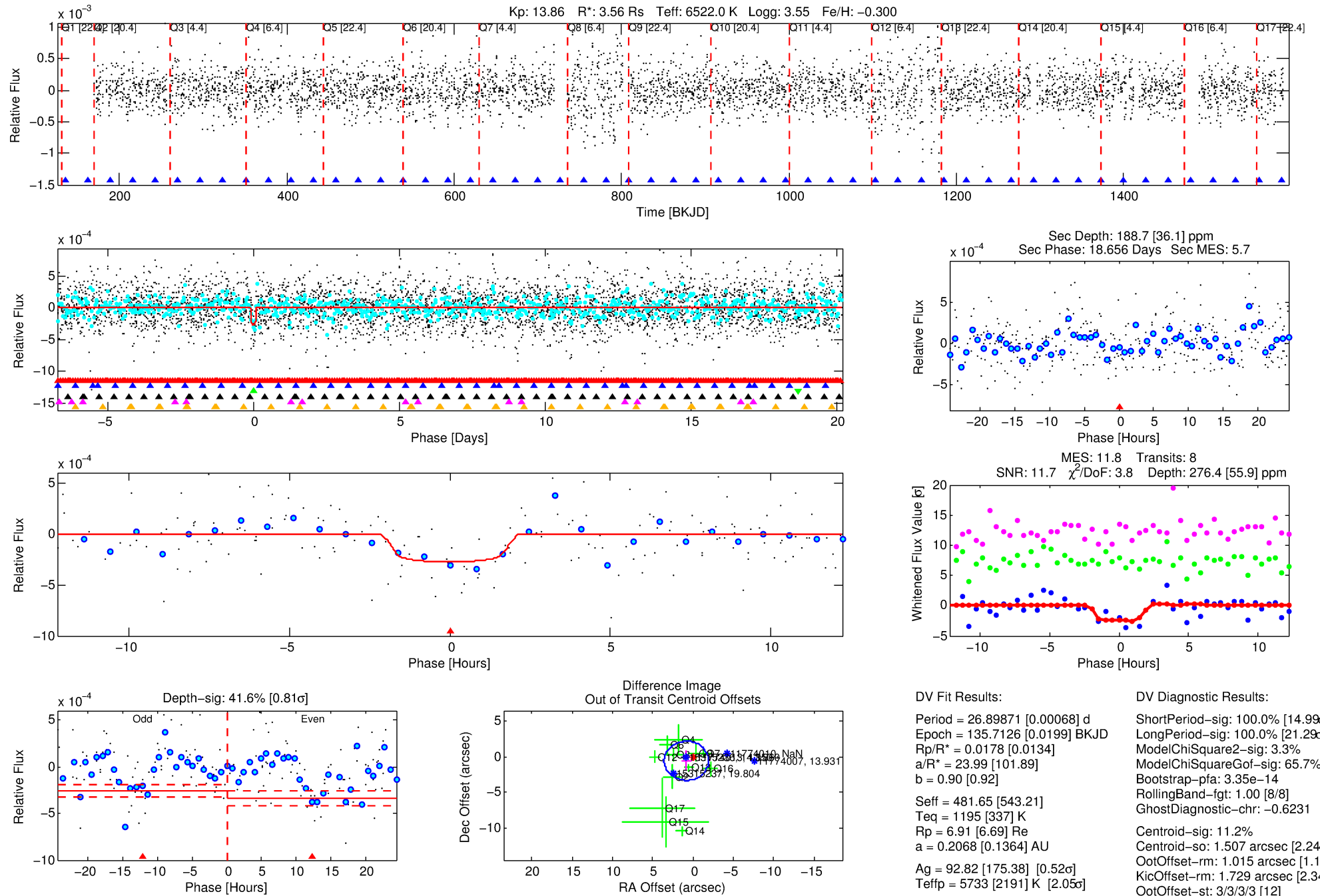
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011774013-03

No Significant Match Found

DV One-Page Summary

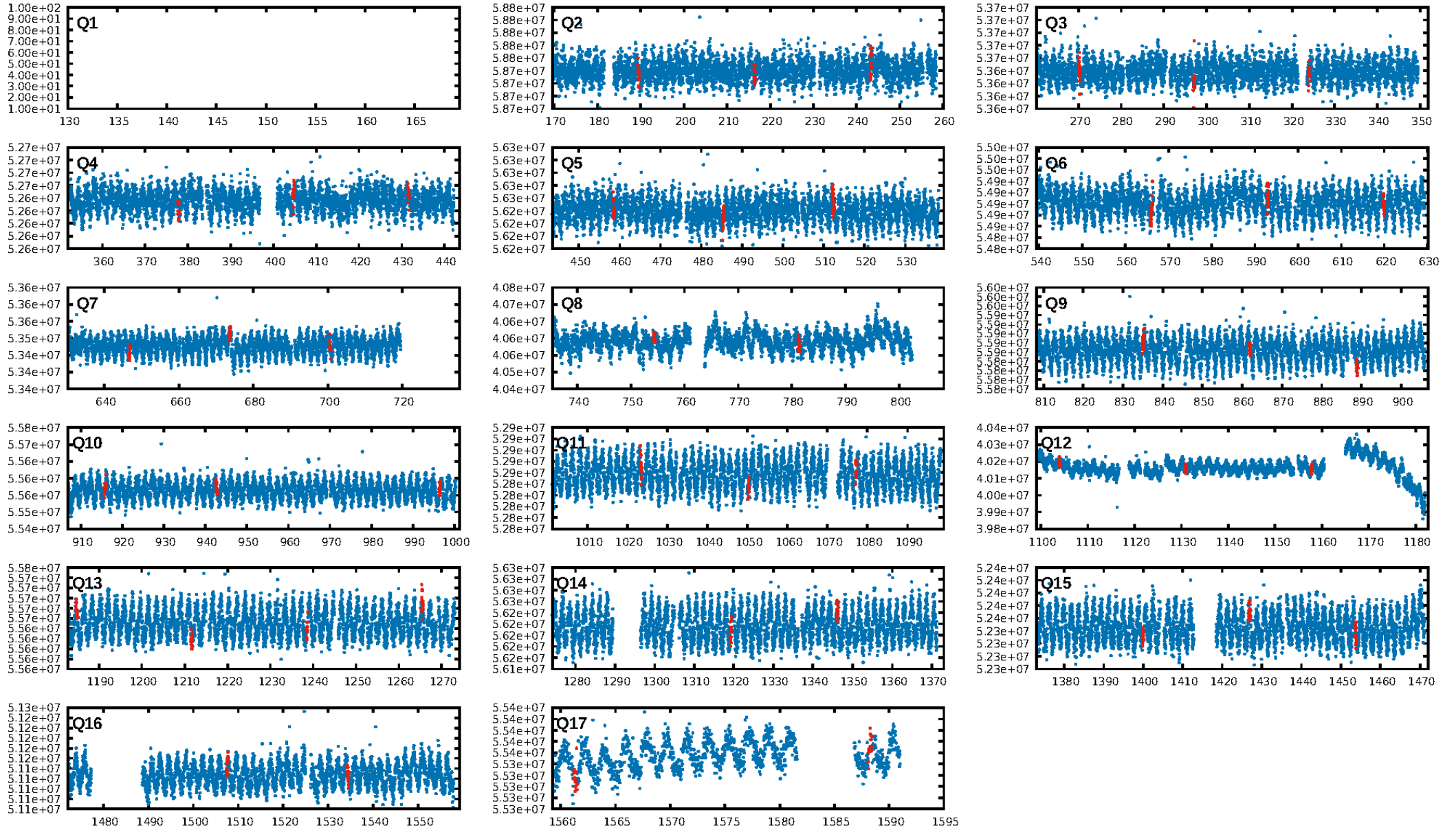
KIC: 11774013 Candidate: 3 of 6 Period: 26.899 d



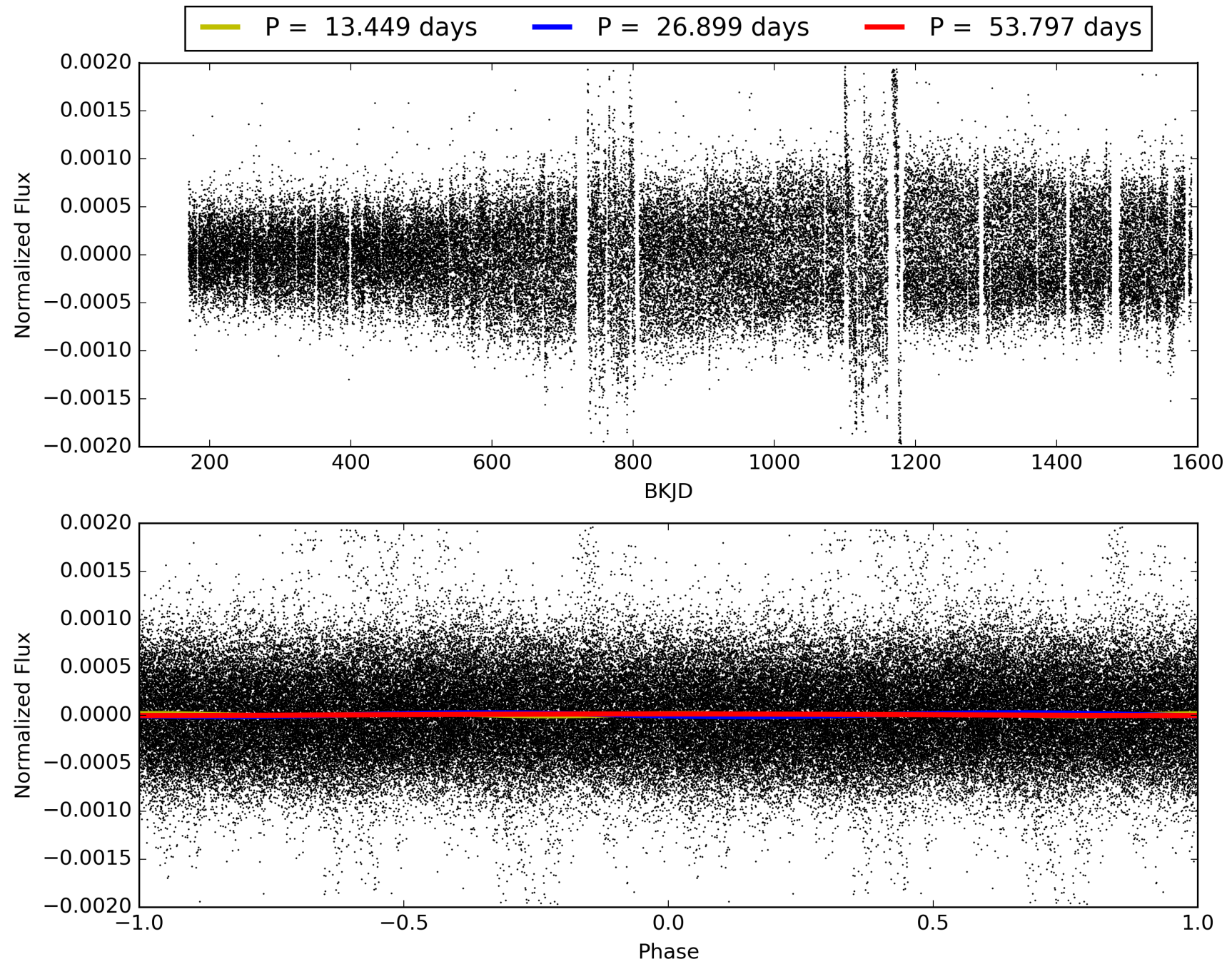
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:34:24 Z

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

TCE 011774013-03, PDC Light Curves

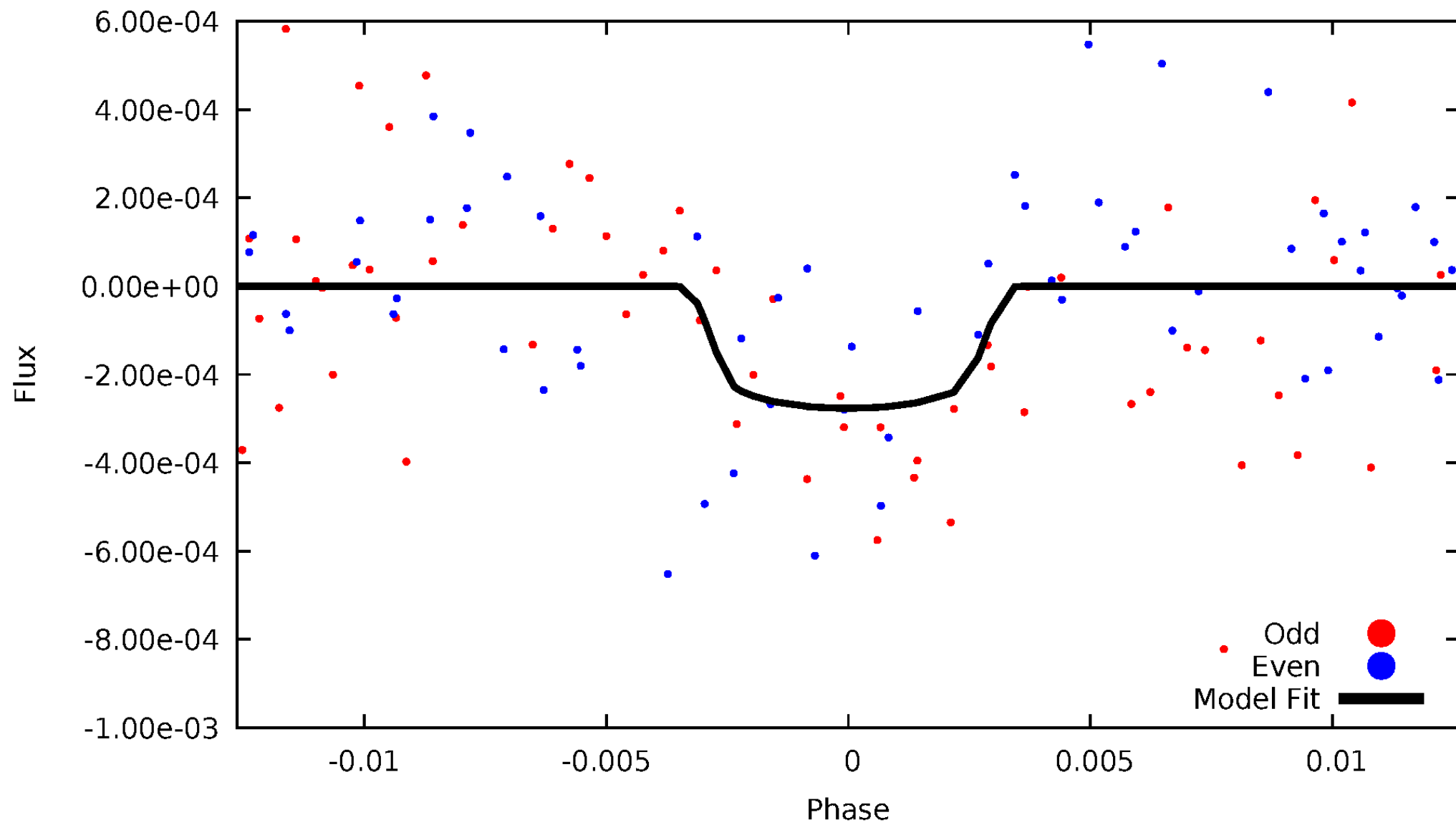


TCE 011774013-03



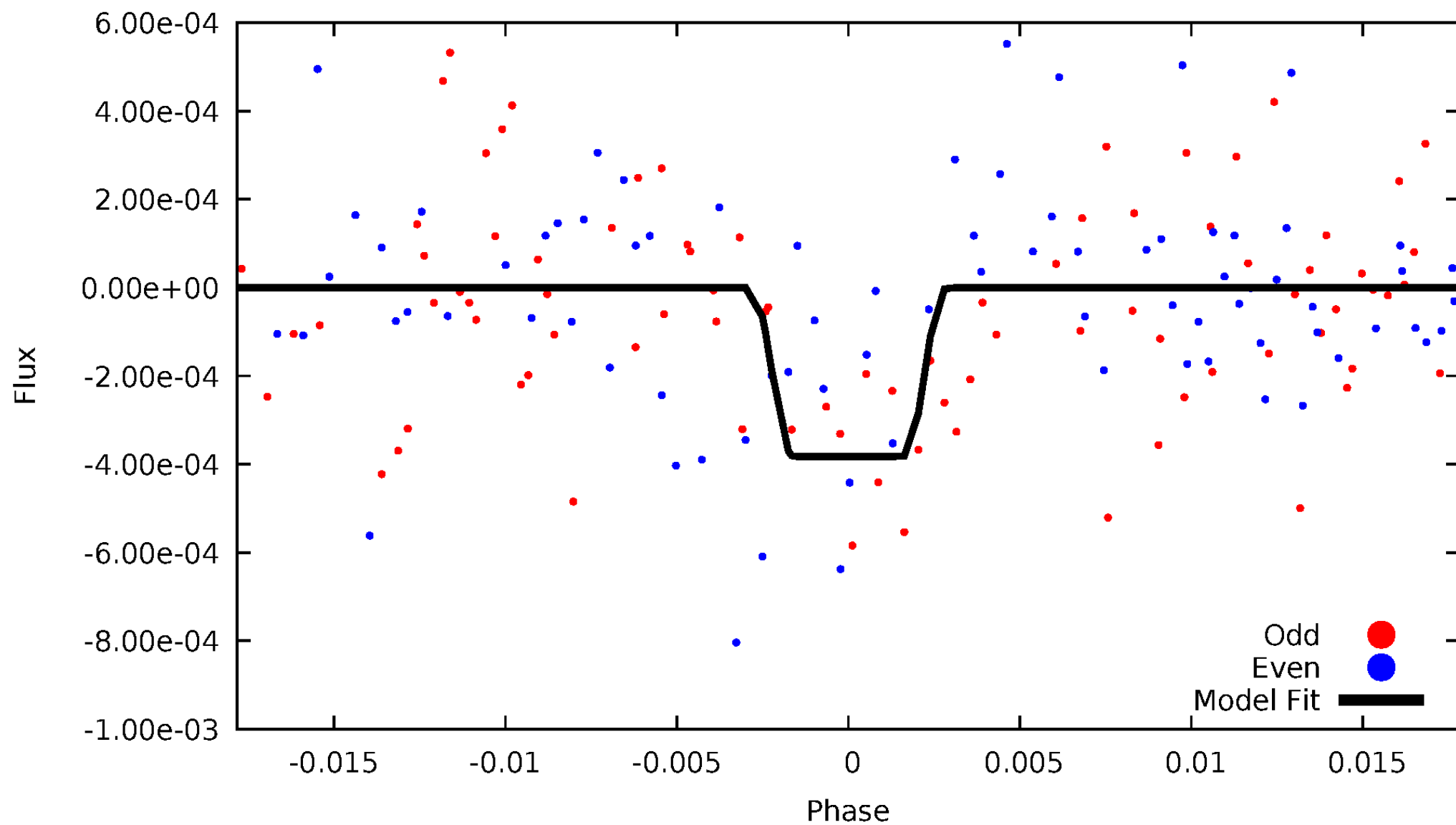
DV Odd/Even

TCE 011774013-03



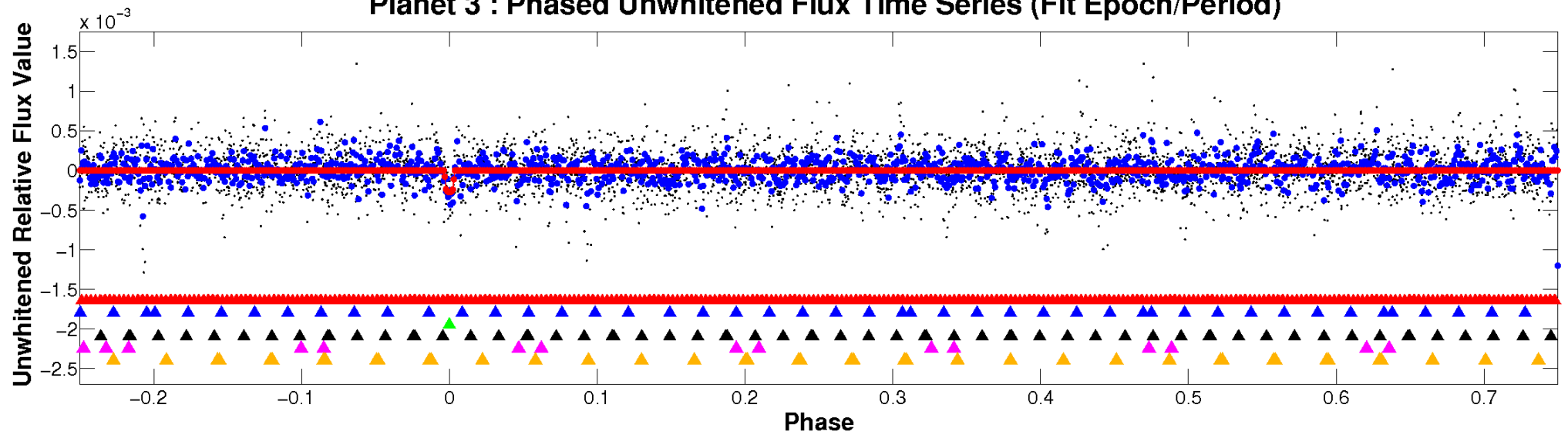
ALT Odd/Even

TCE 011774013-03

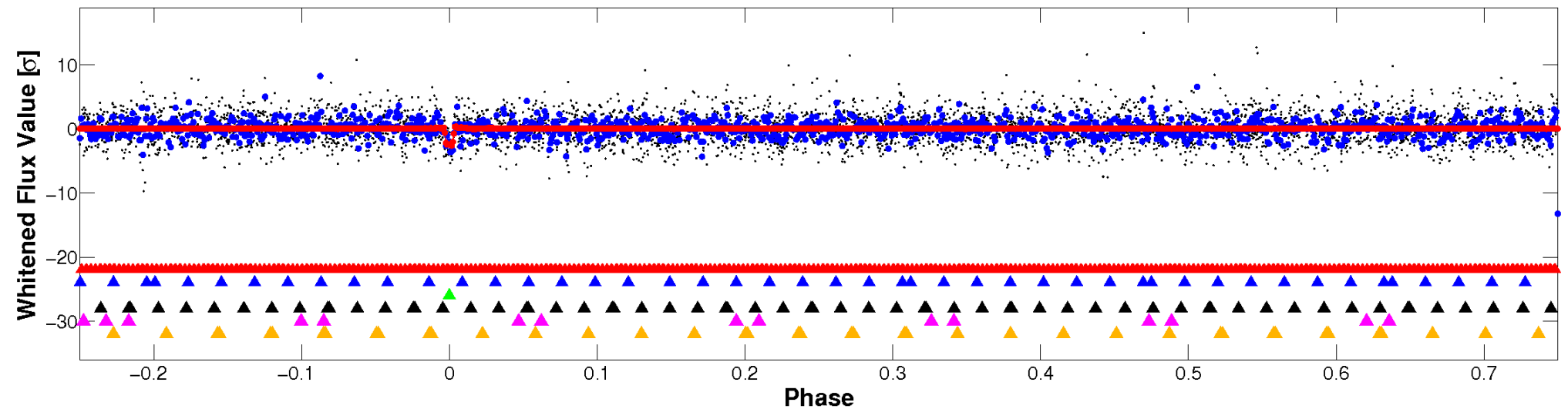


Non-Whitened Vs. Whitened Light Curve

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

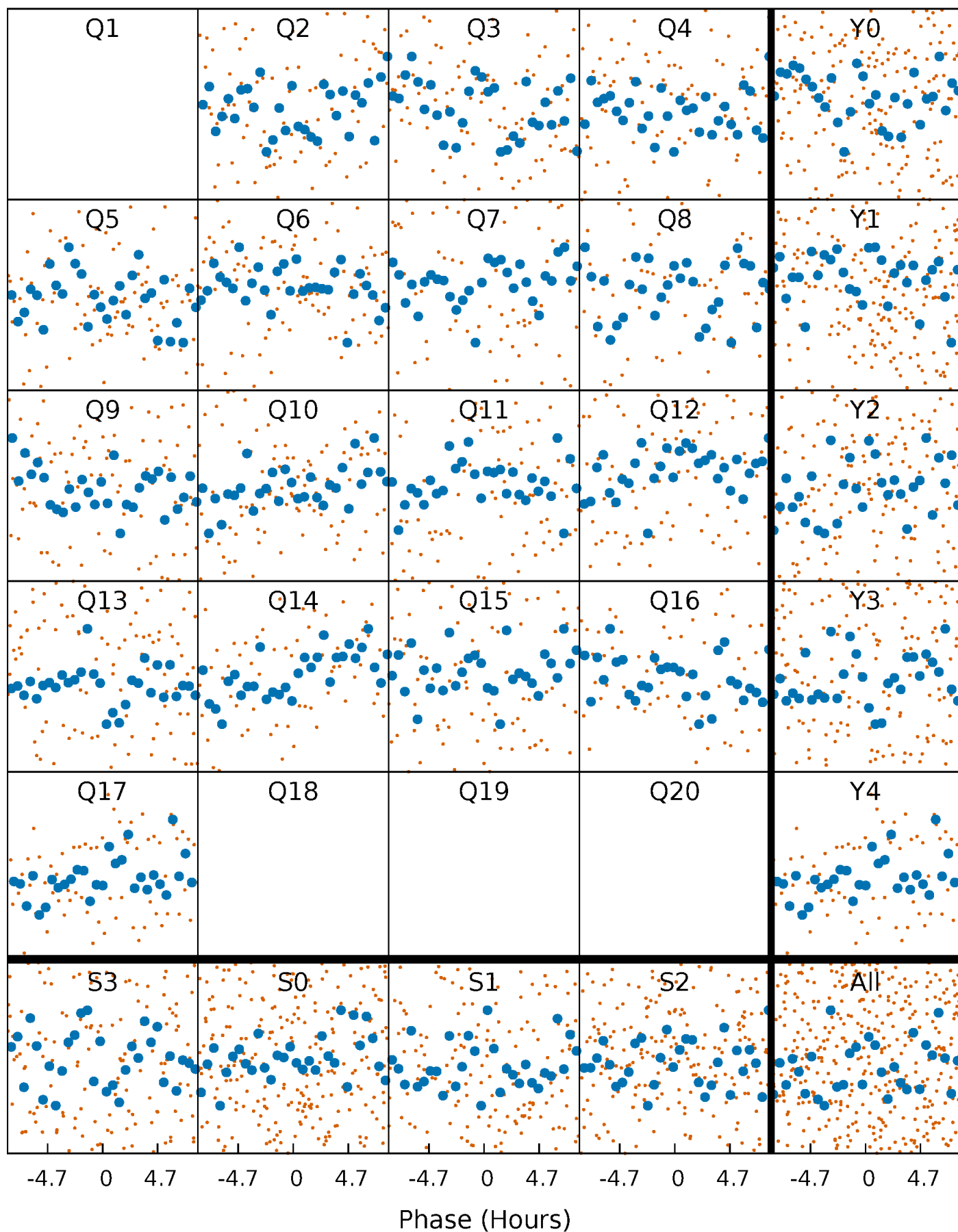


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



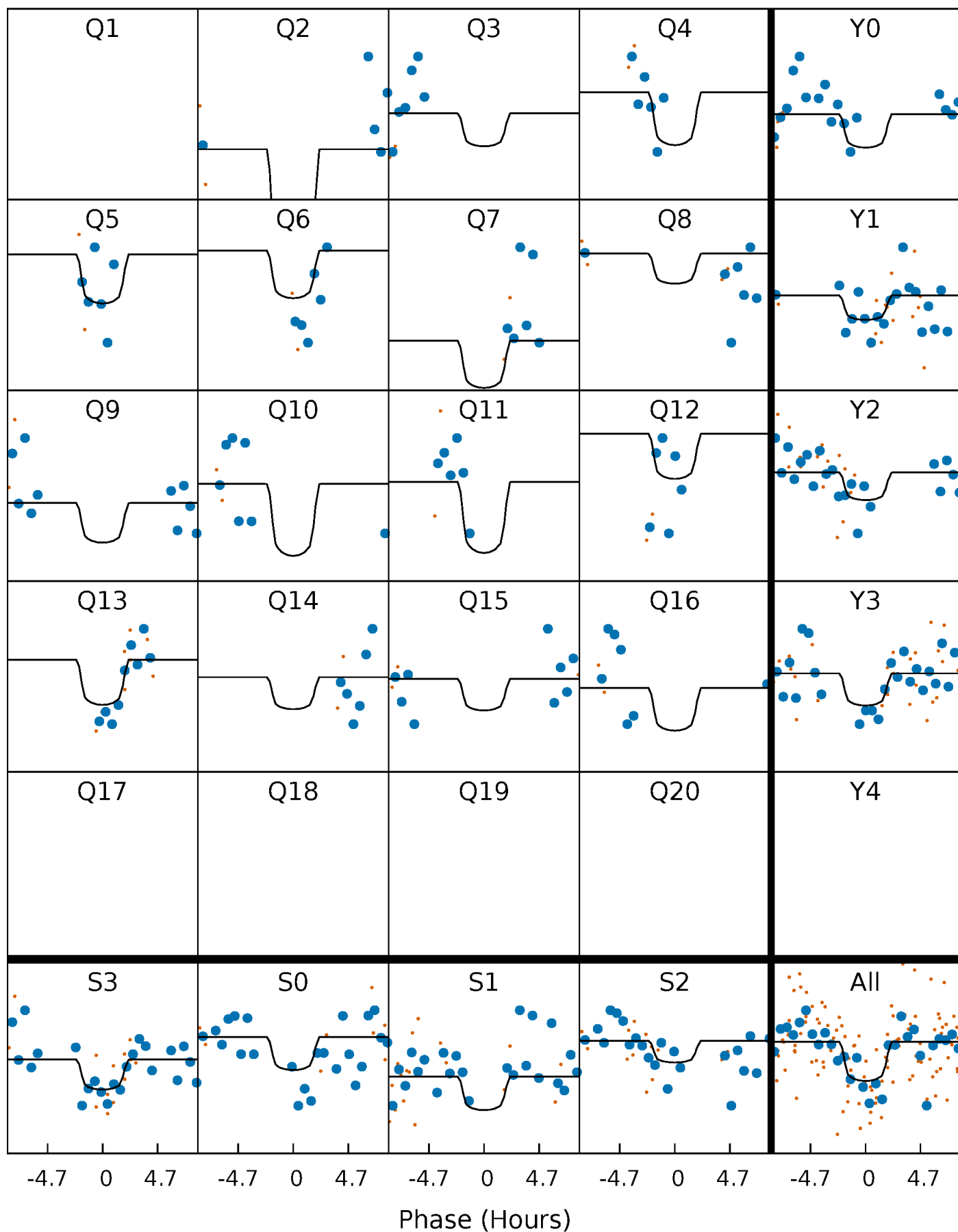
PDC Quarter-Phased Transit Curves

TCE 011774013-03 P= 26.898709 Days $T_0=135.712572$ (BKJD)



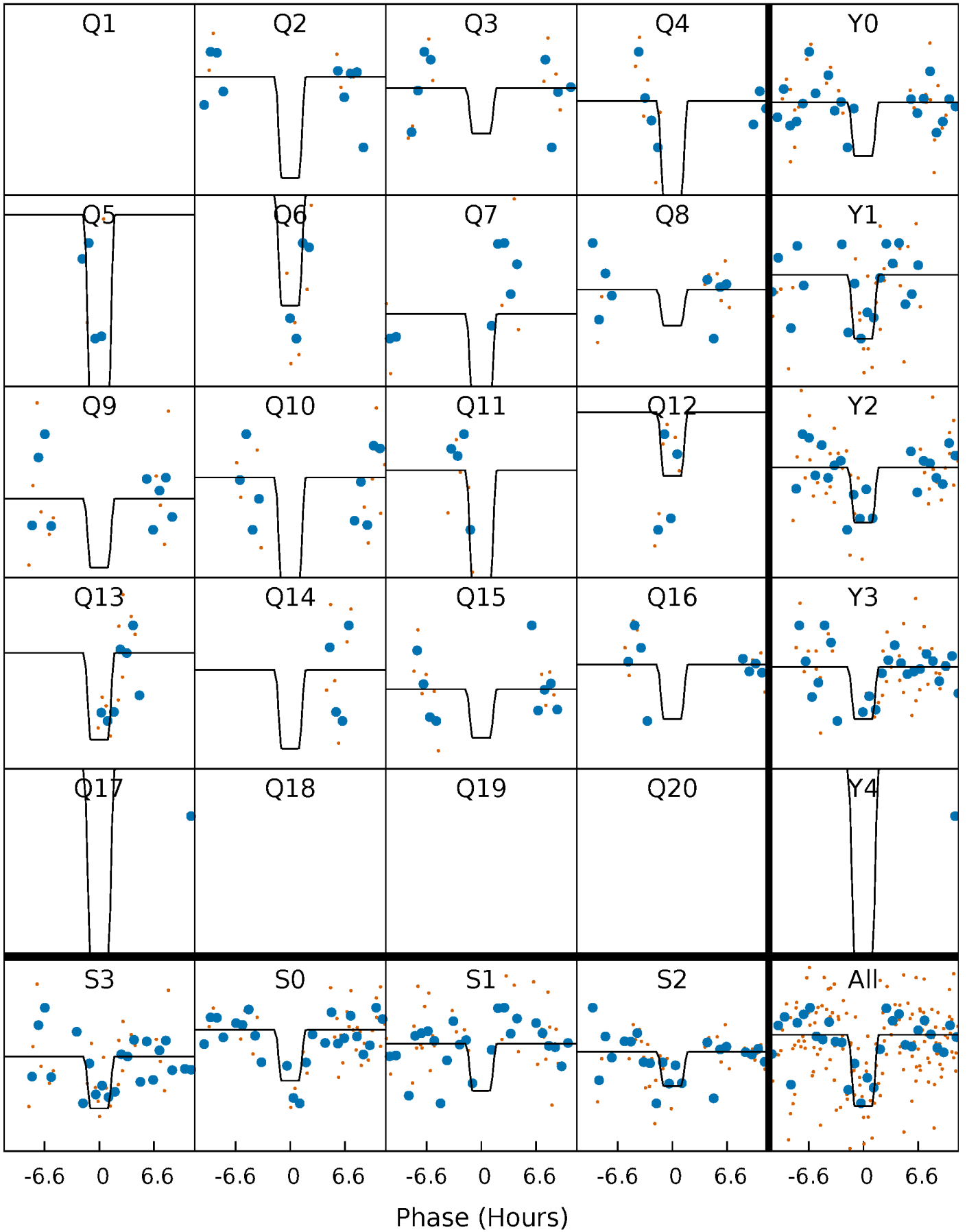
DV Quarter-Phased Transit Curves

TCE 011774013-03 P= 26.898709 Days $T_0=135.712572$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

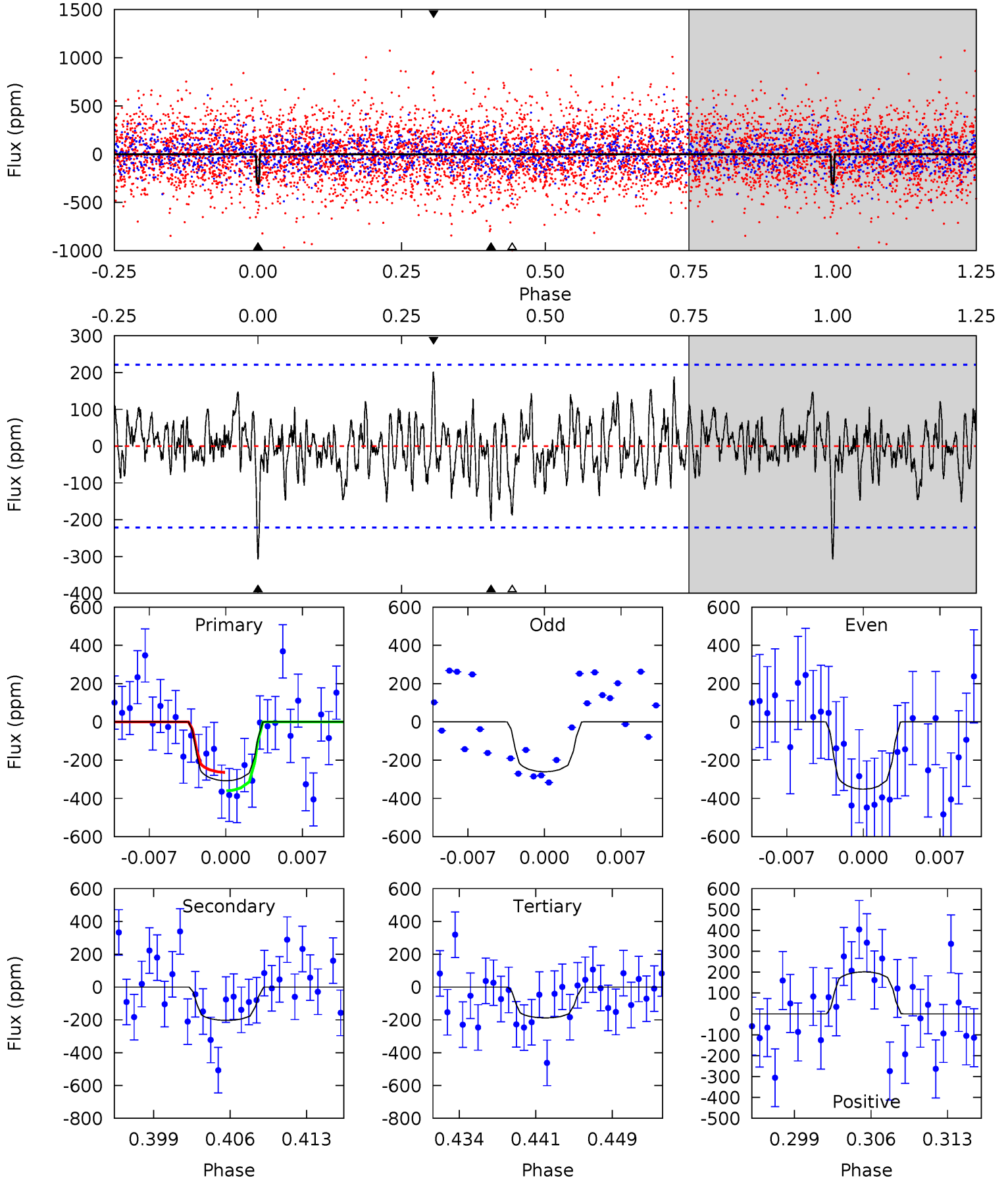
TCE 011774013-03 P= 26.897366 Days $T_0=135.748421$ (BKJD)



DV Model-Shift Uniqueness Test

011774013-03, P = 26.898709 Days, E = 135.712572 Days

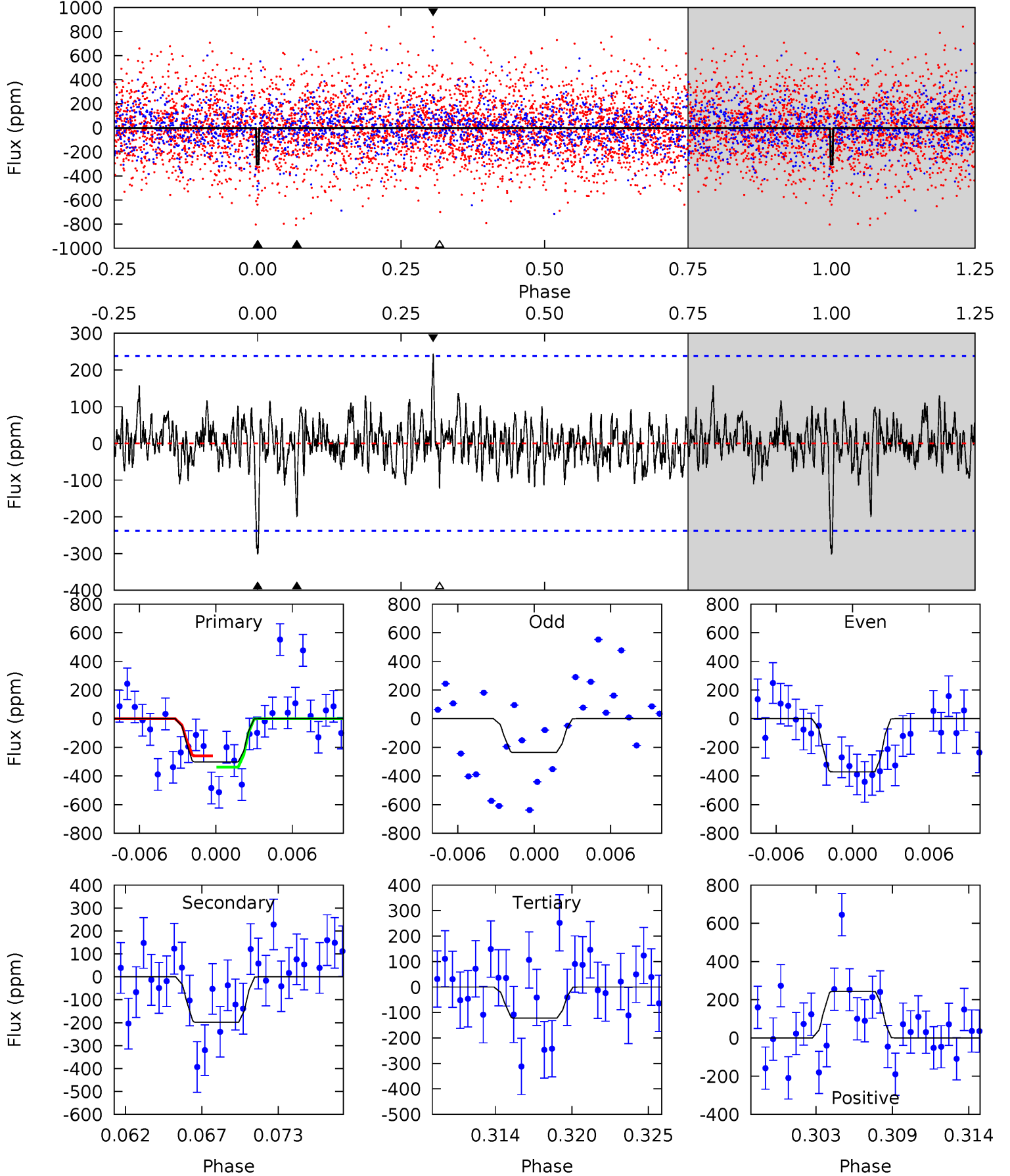
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.07	4.67	4.33	4.62	5.09	2.69	1.40	2.74	2.44	0.35	0.05	1.05	1.07	0.40	1.11



Alt Model-Shift Uniqueness Test

011774013-03, P = 26.897366 Days, E = 135.748421 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.51	4.27	2.64	5.25	5.14	2.77	1.01	3.87	1.26	1.64	-0.98	1.46	1.01	0.45	0.85



Stellar Parameters For KIC 011774013

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6522^{+182}_{-228}	$3.546^{+0.680}_{-0.120}$	$-0.300^{+0.300}_{-0.250}$	$3.564^{+0.539}_{-2.157}$	$1.627^{+0.185}_{-0.556}$	$0.051^{+0.554}_{-0.018}$
	+3%/-3%	+19%/-3%	+100%/-83%	+15%/-61%	+11%/-34%	+1094%/-35%
Source	PHO54	PHO54	PHO54	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011774013-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-203 ± 44	$6.54^{+4.93}_{-3.92}$	1627^{+115}_{-251}	5631^{+3429}_{-1148}	107^{+599}_{-72}
Alt.	-198 ± 46	$6.94^{+5.19}_{-4.04}$	1618^{+124}_{-224}	5374^{+2639}_{-982}	93^{+424}_{-63}

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

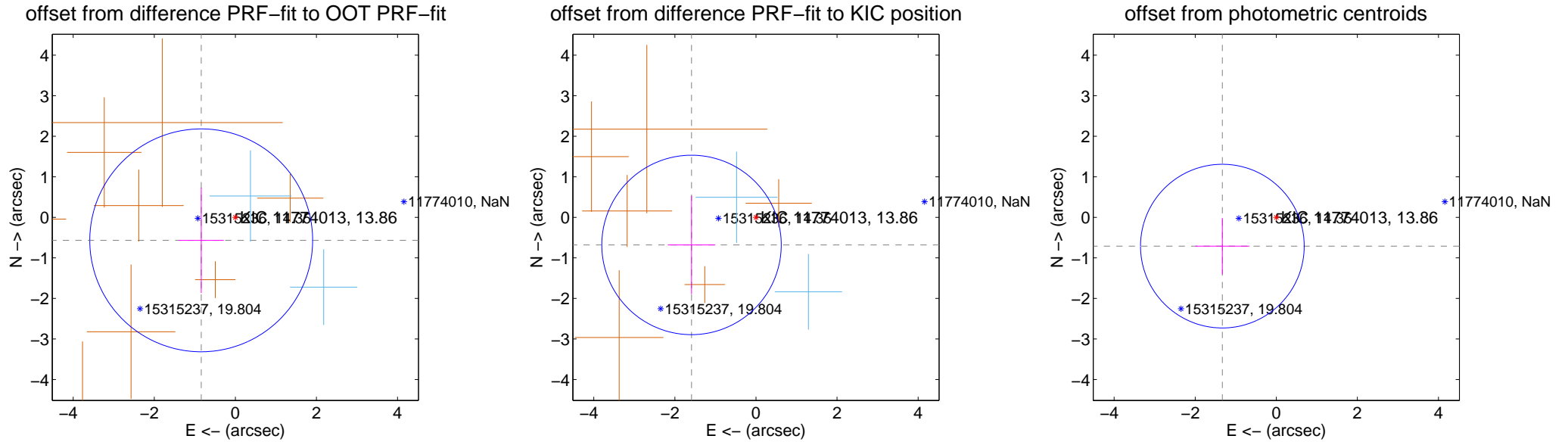
DV Centroid Data

Supplemental centroid analysis for 011774013-03. Kepler magnitude: 13.86. Transit SNR 11.75

There are 2 quarters with good PRF difference image offsets

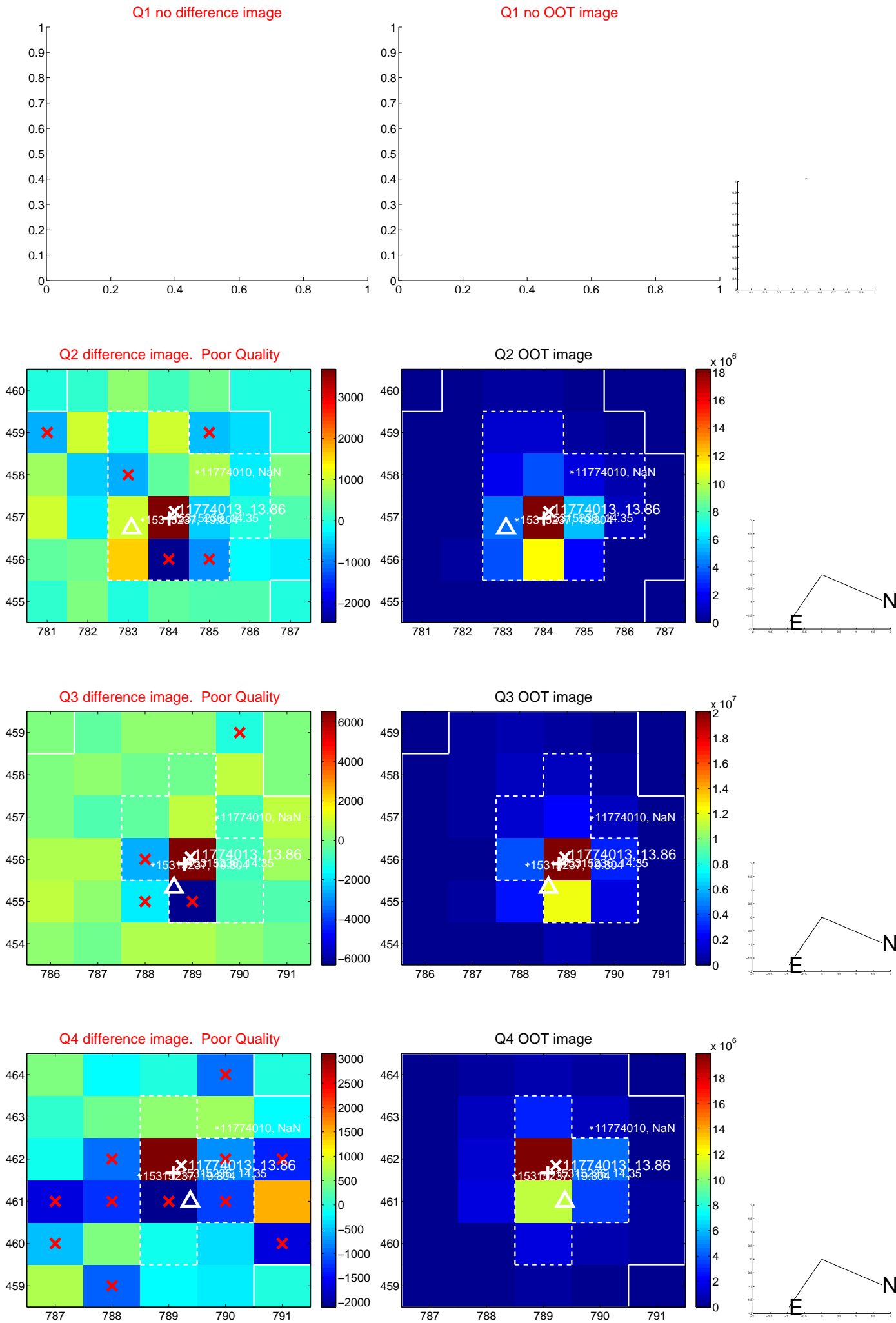
The direct PRF centroid is offset from the target star catalog position by about 0.83 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.015 ± 0.916	1.11	0.842 ± 0.556	-0.567 ± 1.300
PRF-fit source offset from KIC position	1.729 ± 0.737	2.34	1.589 ± 0.586	-0.680 ± 1.211
photometric centroid source offset	1.51 ± 0.67	2.24	1.33 ± 0.67	-0.71 ± 0.69

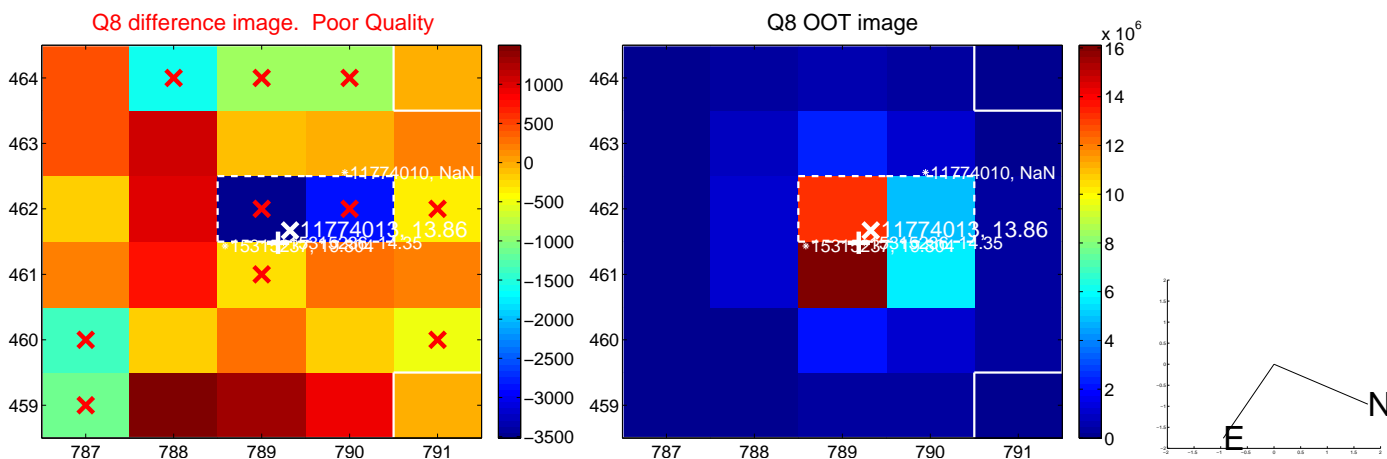
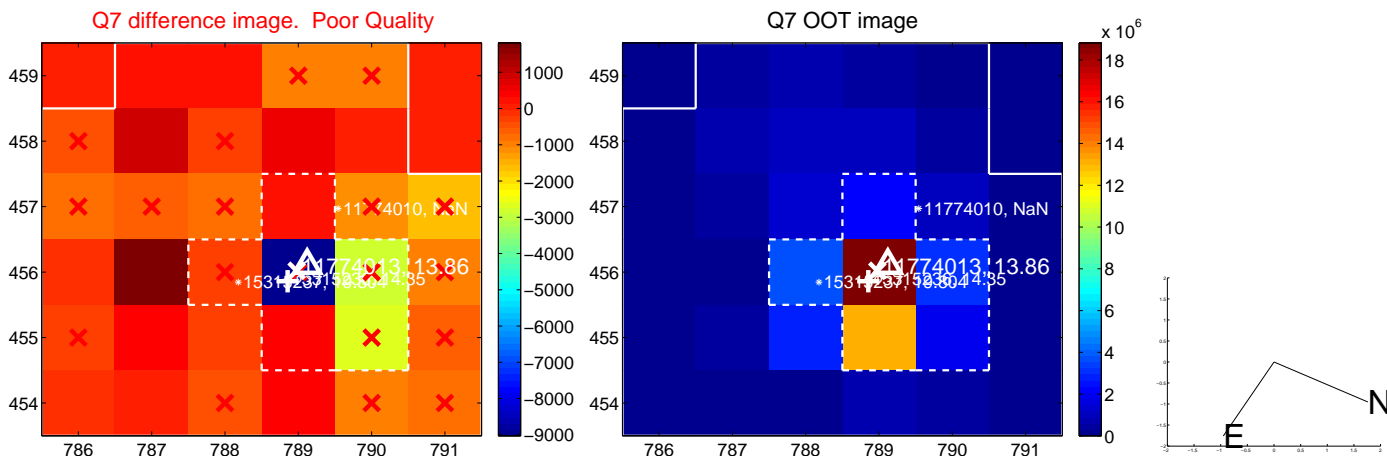
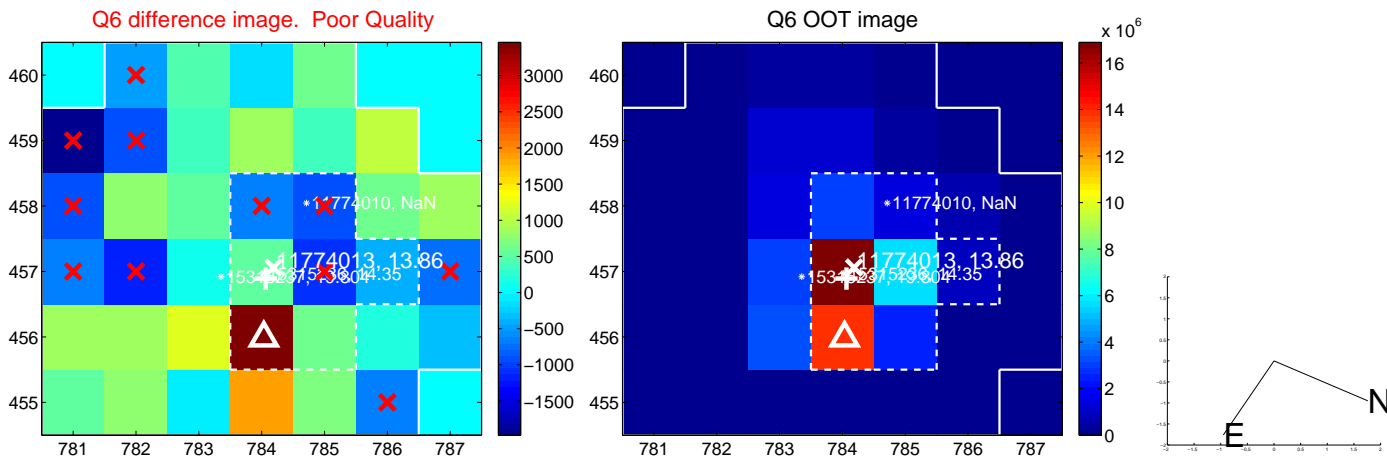
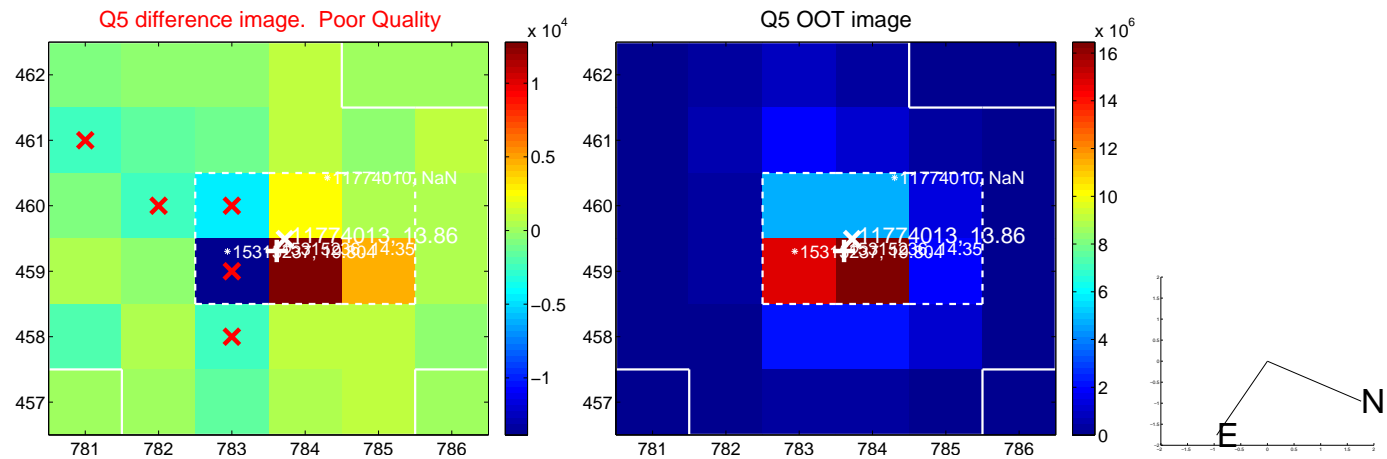


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

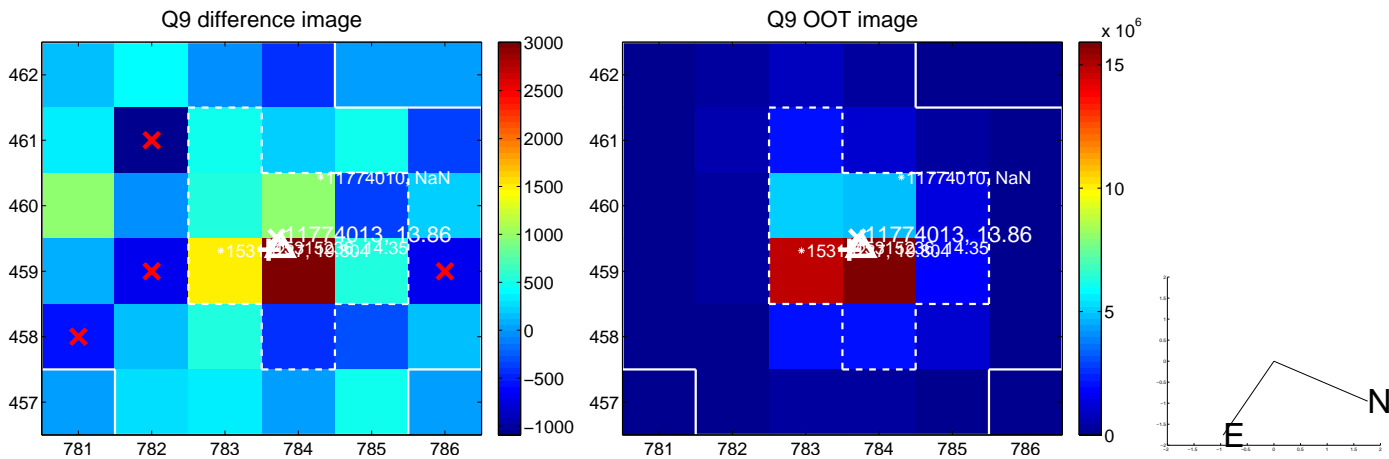
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



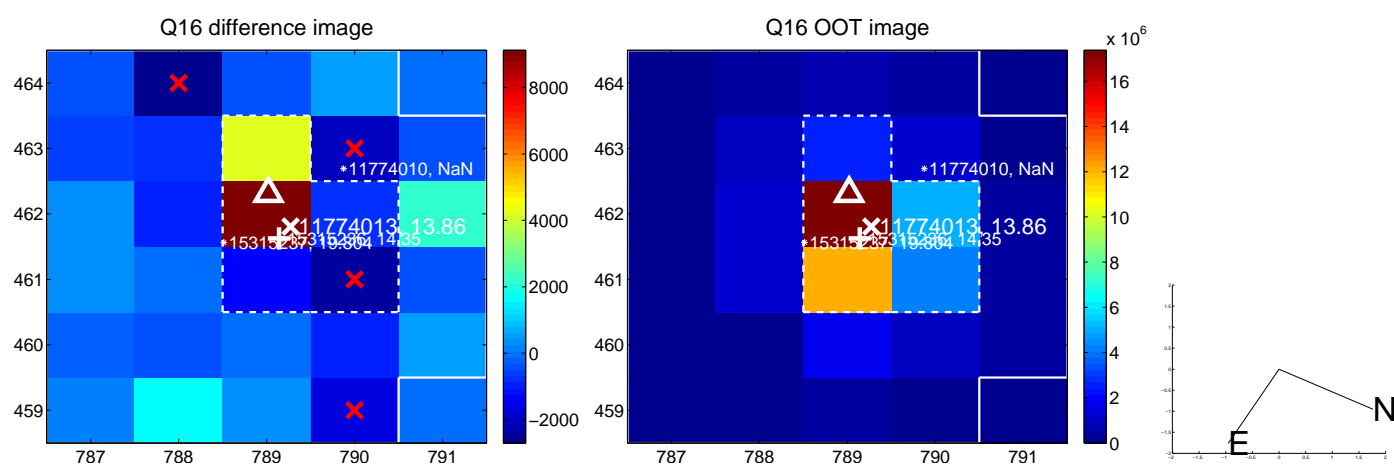
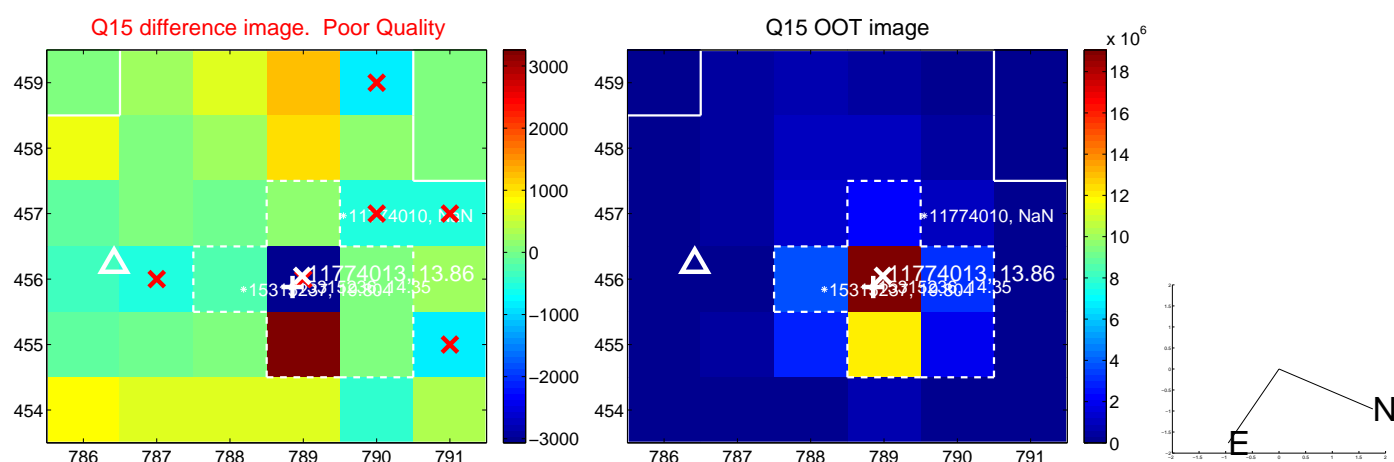
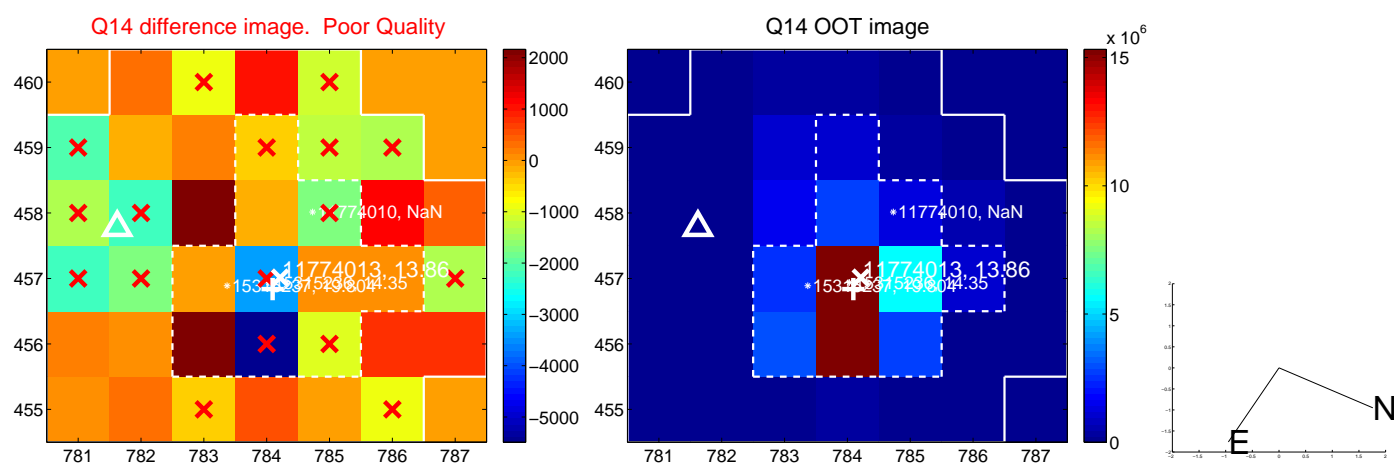
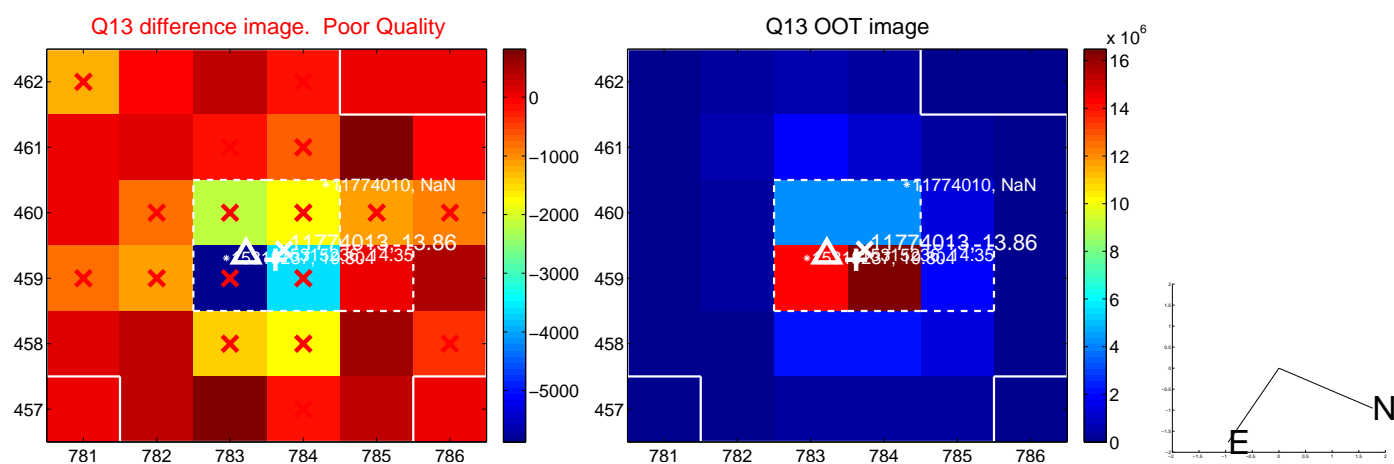
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



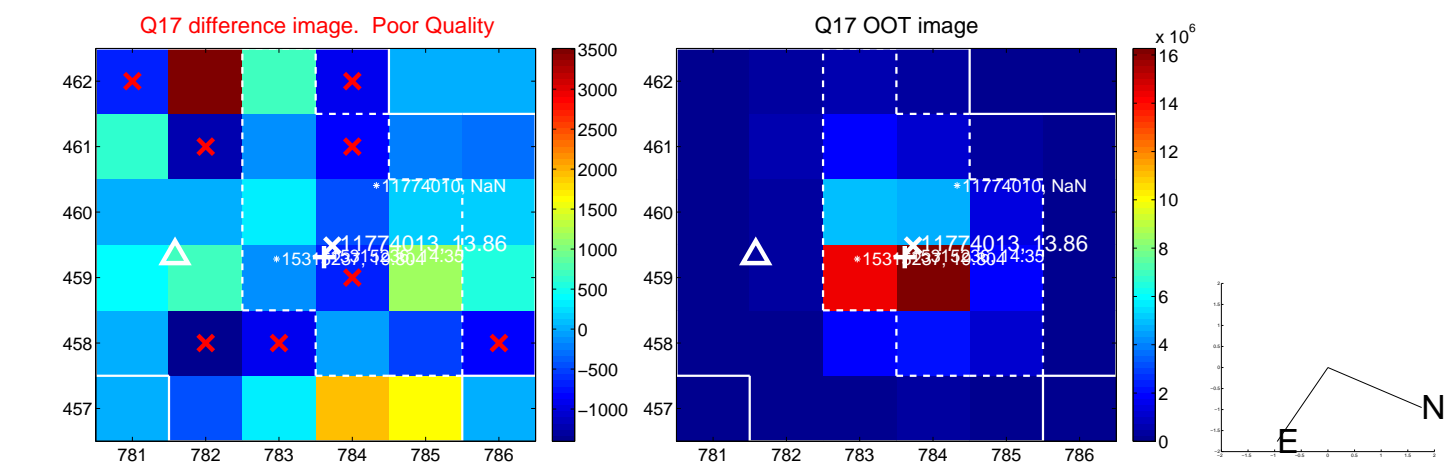
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



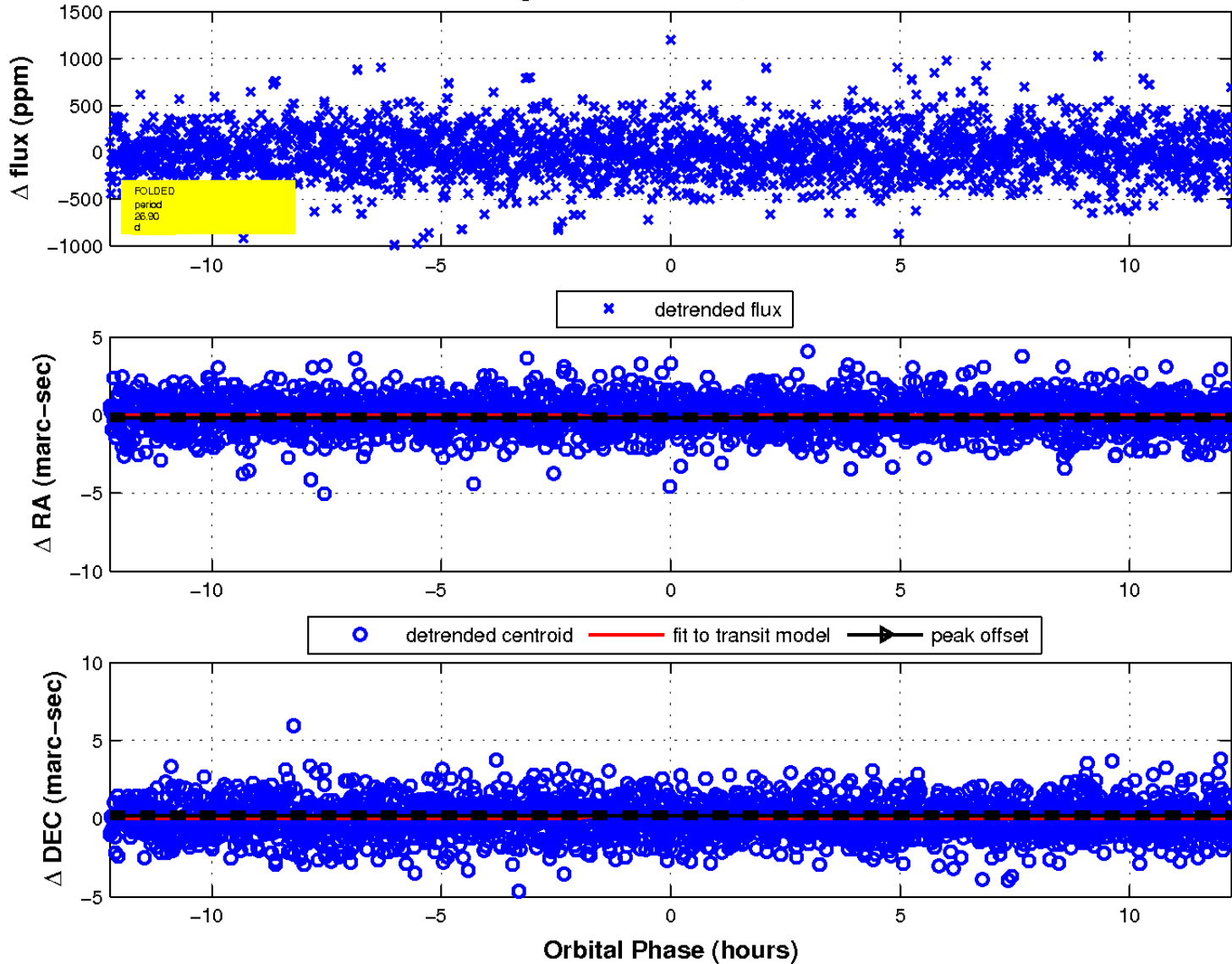
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

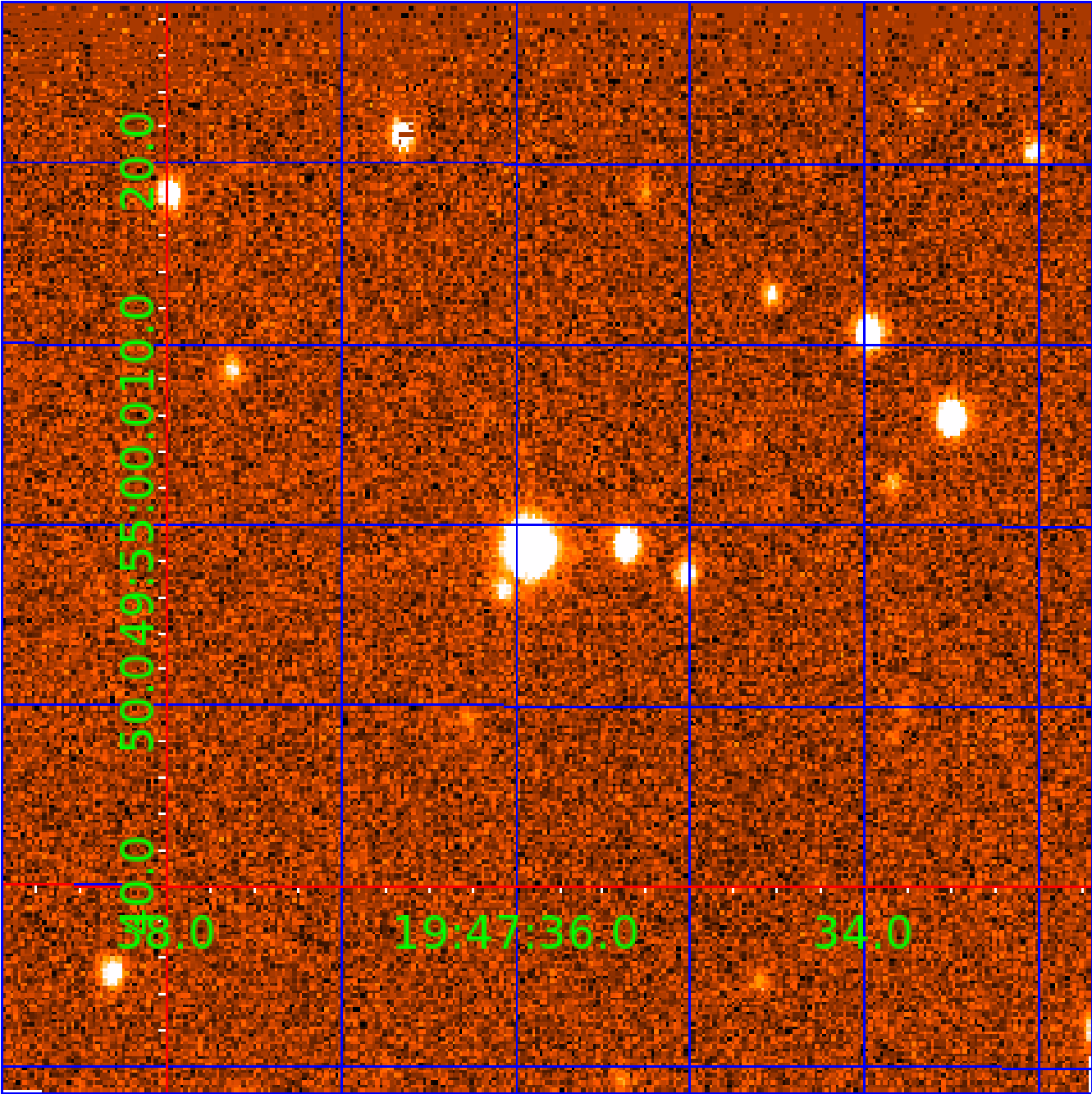


fluxWeightedCentroids, Planet 3 of 6



UKIRT Image

Declination



KIC 011774013

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})
011774013-01	OBS	No	1.878606	131.849759	11.0	13.744	10.9	4.7	3.56	6522	1.29	16746.67
011774013-02	OBS	No	31.281057	143.956892	488.3	2.792	16.0	13.2	3.56	6522	8.93	393.85
011774013-03	OBS	No	26.898709	135.712572	276.4	4.075	11.8	11.7	3.56	6522	6.91	481.65
011774013-04	OBS	No	23.278293	144.361034	262.5	4.124	10.7	10.7	3.56	6522	7.00	584.04
011774013-05	OBS	No	96.125516	209.751529	376.3	2.661	9.6	10.5	3.56	6522	7.01	88.16
011774013-06	OBS	No	35.543544	135.384255	440.0	1.455	10.5	10.5	3.56	6522	7.61	332.17

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011774013-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—CENT_KIC_POS
011774013-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_KIC_POS
011774013-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
011774013-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—CENT_FEW_DIFFS
011774013-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
011774013-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_FEW_MEAS

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

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

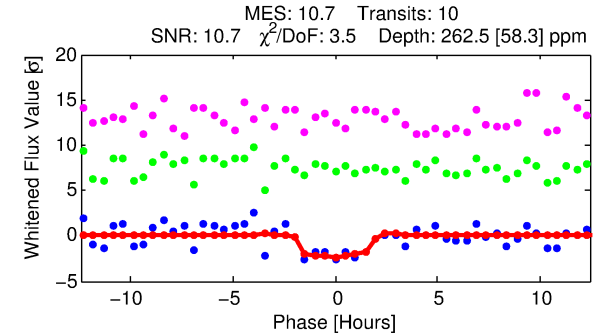
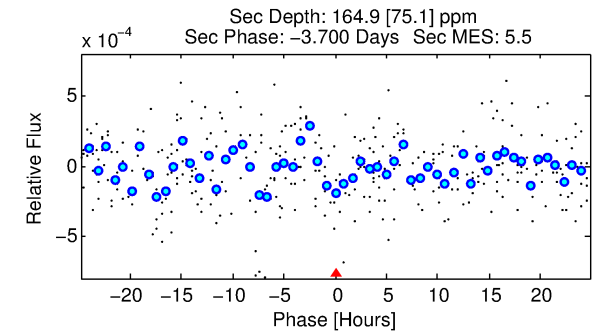
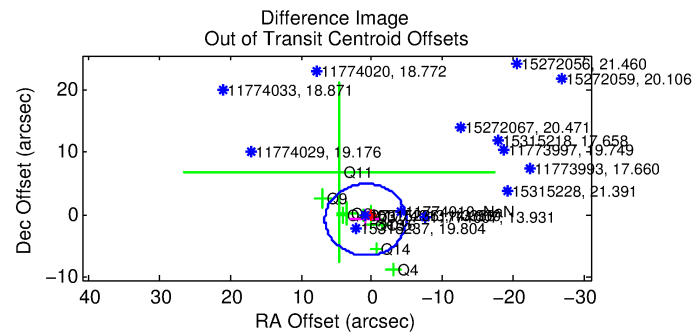
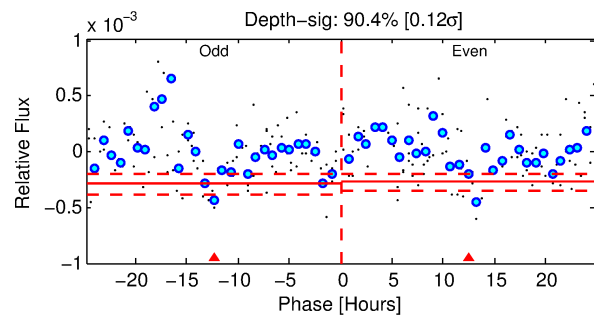
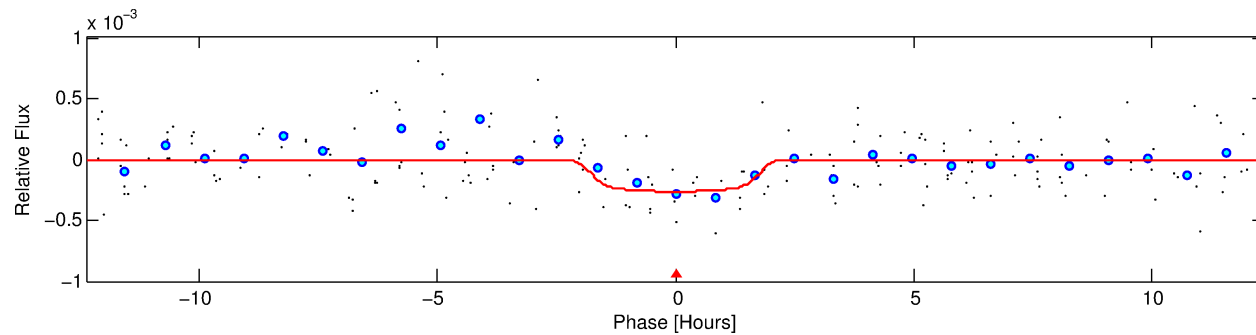
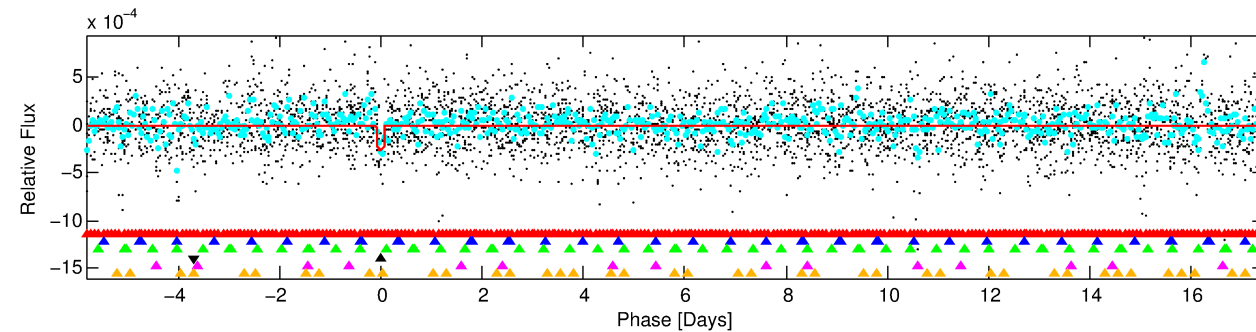
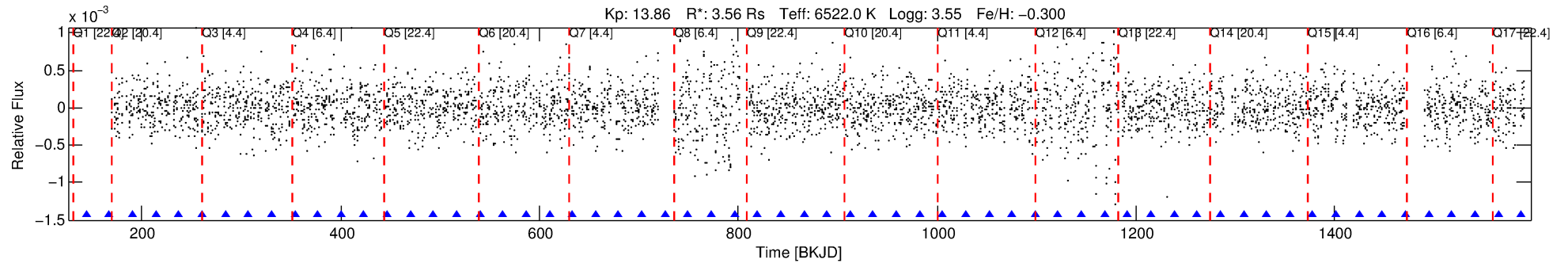
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011774013-04

No Significant Match Found

DV One-Page Summary

KIC: 11774013 Candidate: 4 of 6 Period: 23.278 d



DV Fit Results:

Period = 23.27829 [0.00051] d
Epoch = 144.3610 [0.0191] BKJD
Rp/R* = 0.0180 [0.0056]
a/R* = 17.05 [25.13]
b = 0.94 [0.20]
Seff = 584.04 [658.68]
Teq = 1254 [353] K
Rp = 7.00 [4.77] Re
a = 0.1878 [0.1239] AU
Ag = 65.18 [88.62] [0.72 σ]
Teffp = 5507 [1080] K [3.74 σ]

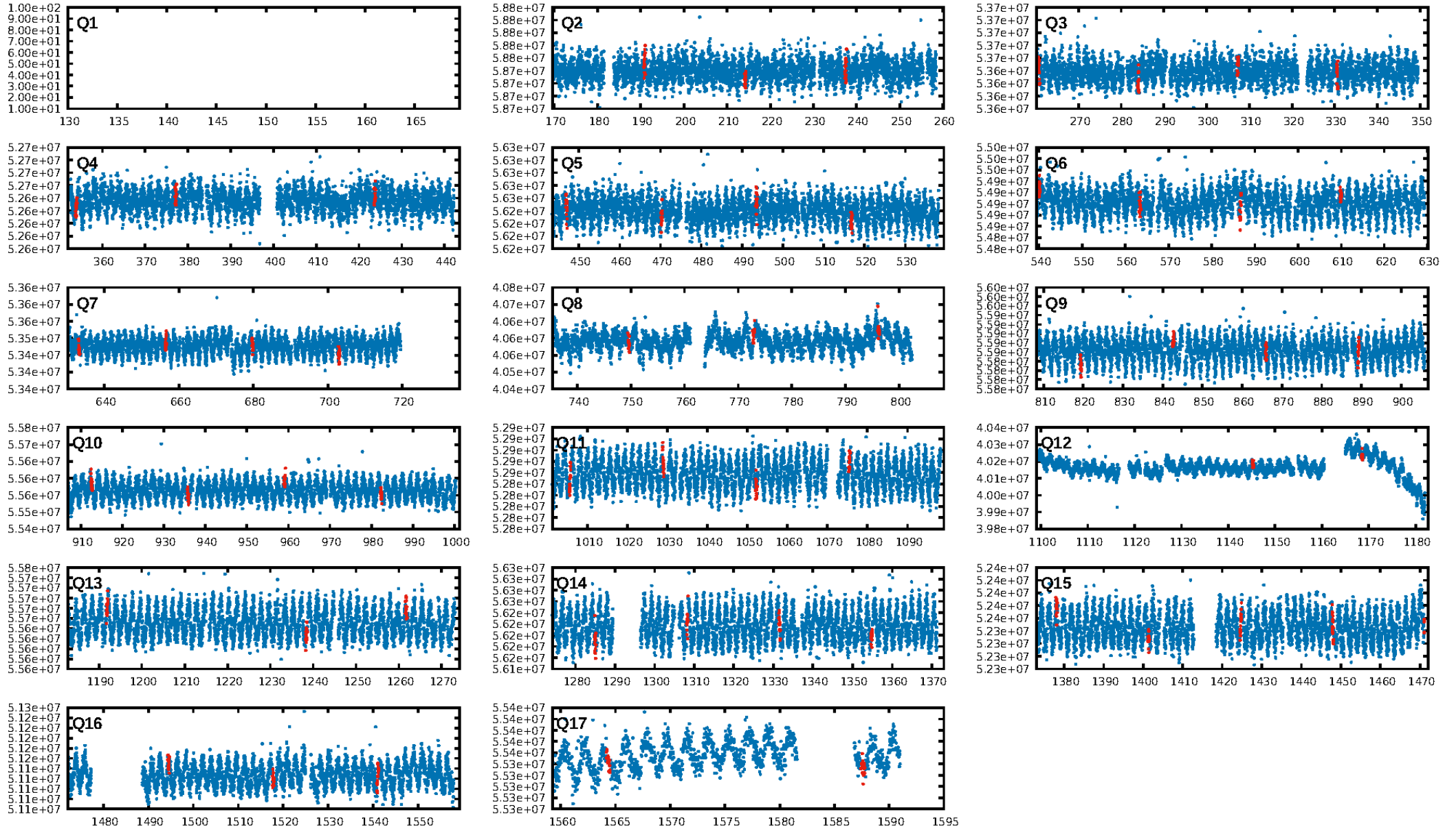
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [35.79 σ]
LongPeriod-sig: 100.0% [14.99 σ]
ModelChiSquare2-sig: 8.8%
ModelChiSquareGof-sig: 98.1%
Bootstrap-pfa: 9.35e-11
RollingBand-fgt: 1.00 [9/9]
GhostDiagnostic-chr: 3.975
Centroid-sig: 52.5%
Centroid-so: 0.495 arcsec [0.74 σ]
OotOffset-rm: 1.217 arcsec [0.64 σ]
KicOffset-rm: 1.929 arcsec [0.93 σ]
OotOffset-st: 3/3/2/2 [10]
KicOffset-st: 3/3/2/2 [10]
DiffImageQuality-fgm: 0.10 [1/10]
DiffImageOverlap-fno: 0.81 [13/16]

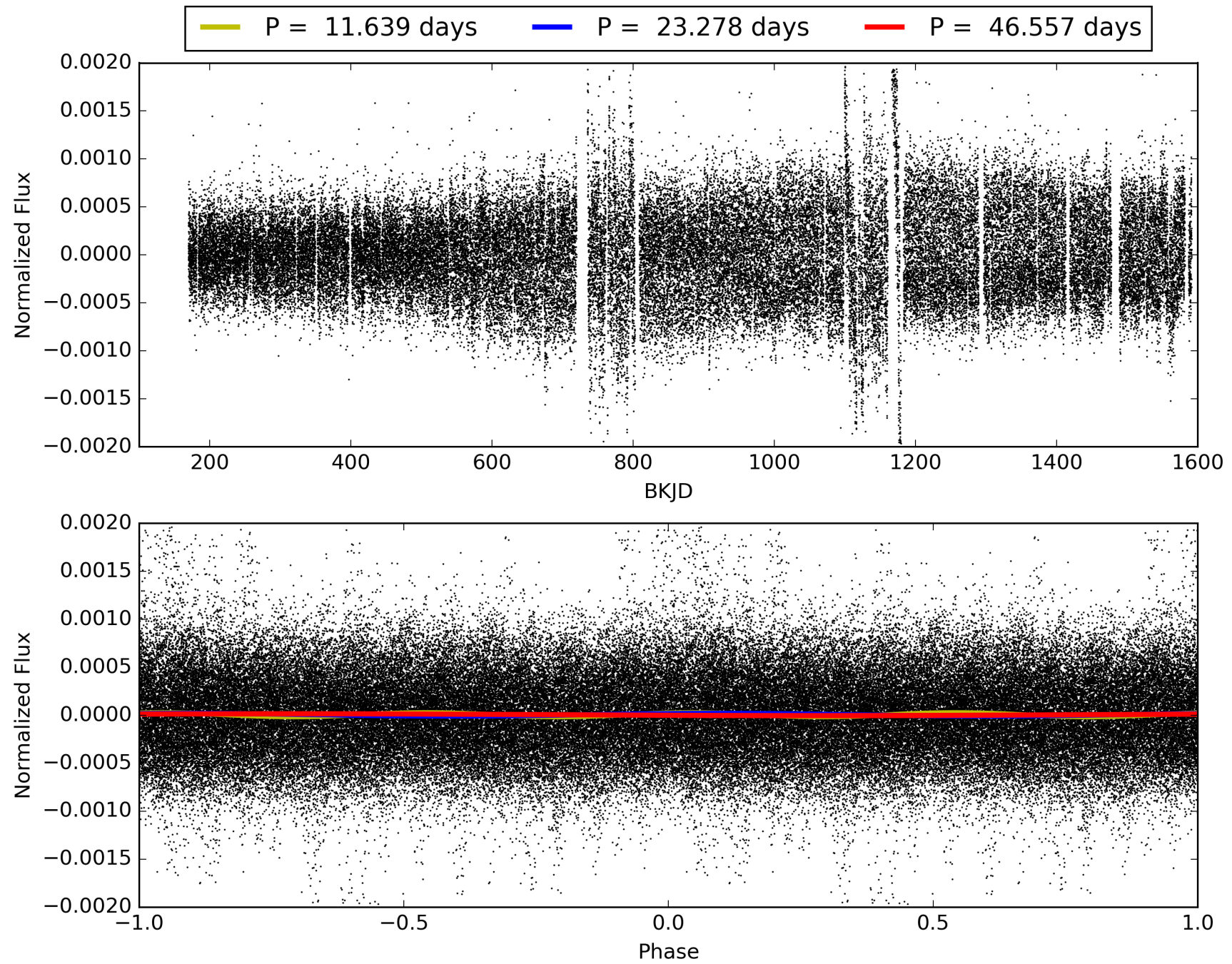
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:34:27 Z

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

TCE 011774013-04, PDC Light Curves

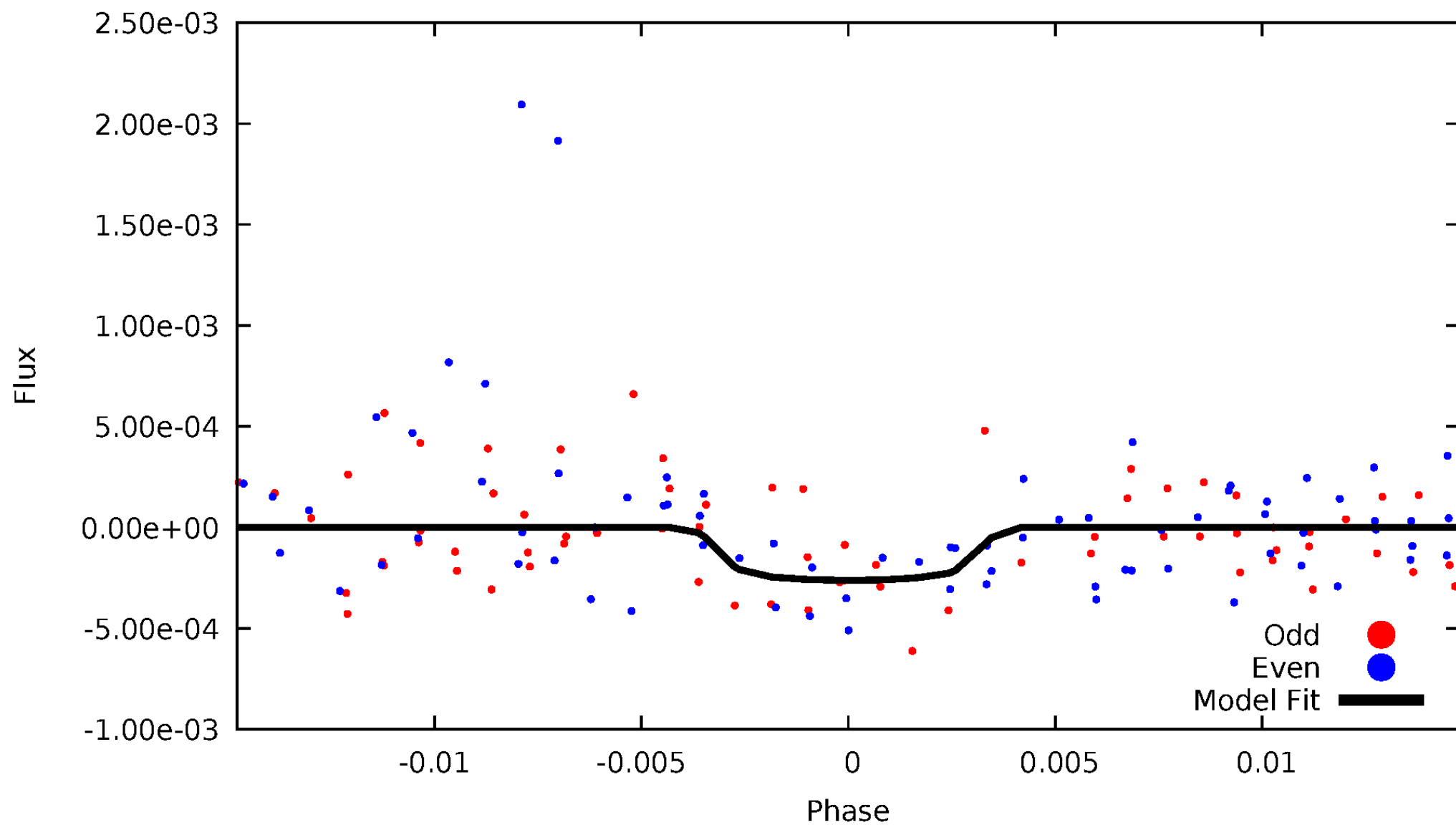


TCE 011774013-04



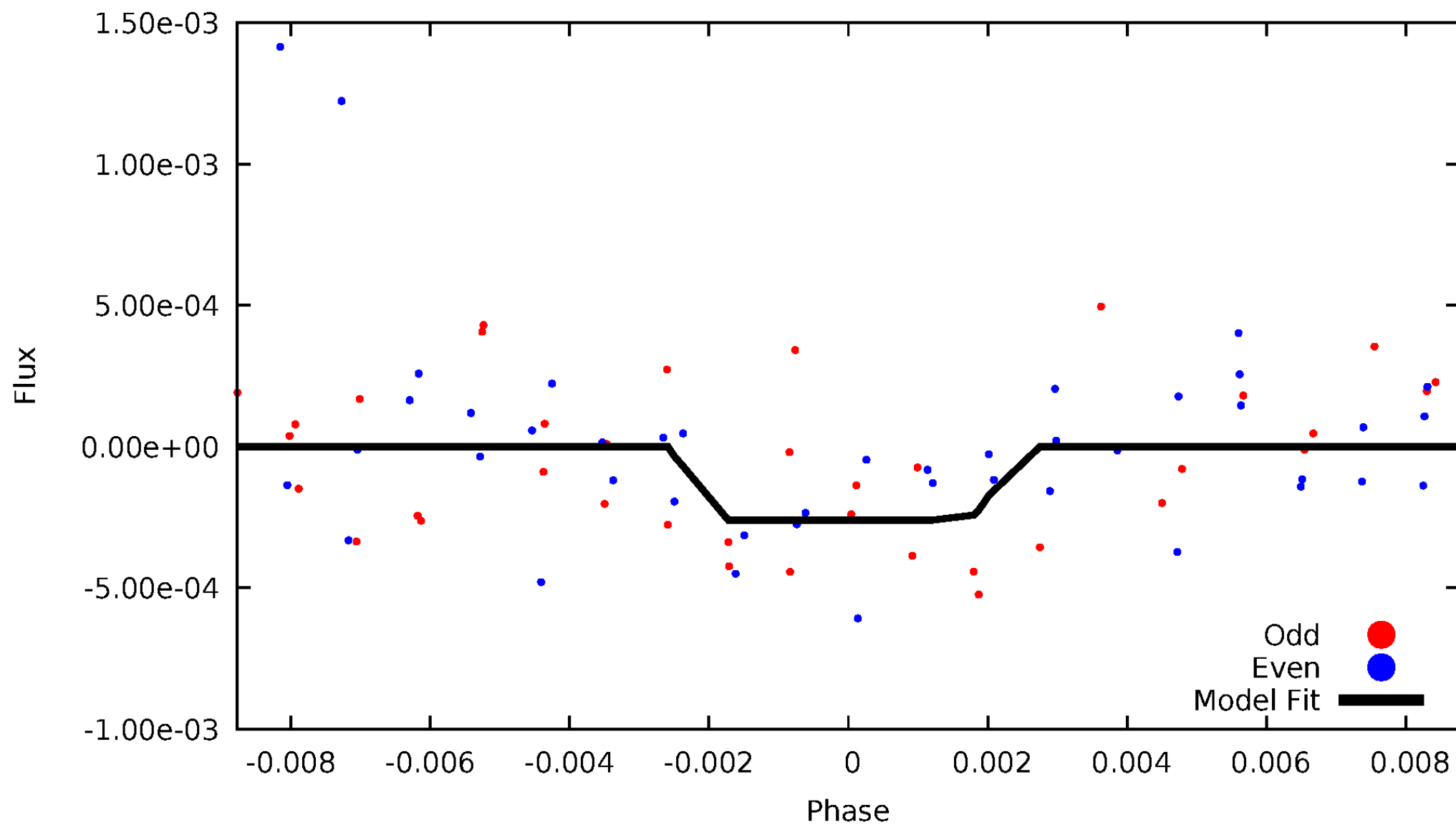
DV Odd/Even

TCE 011774013-04



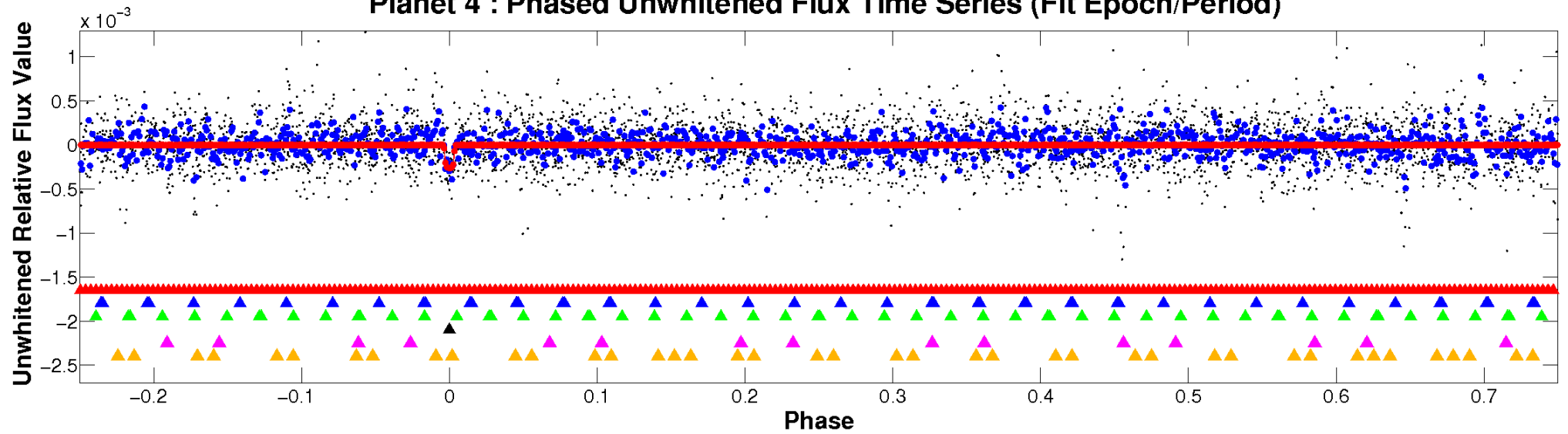
ALT Odd/Even

TCE 011774013-04

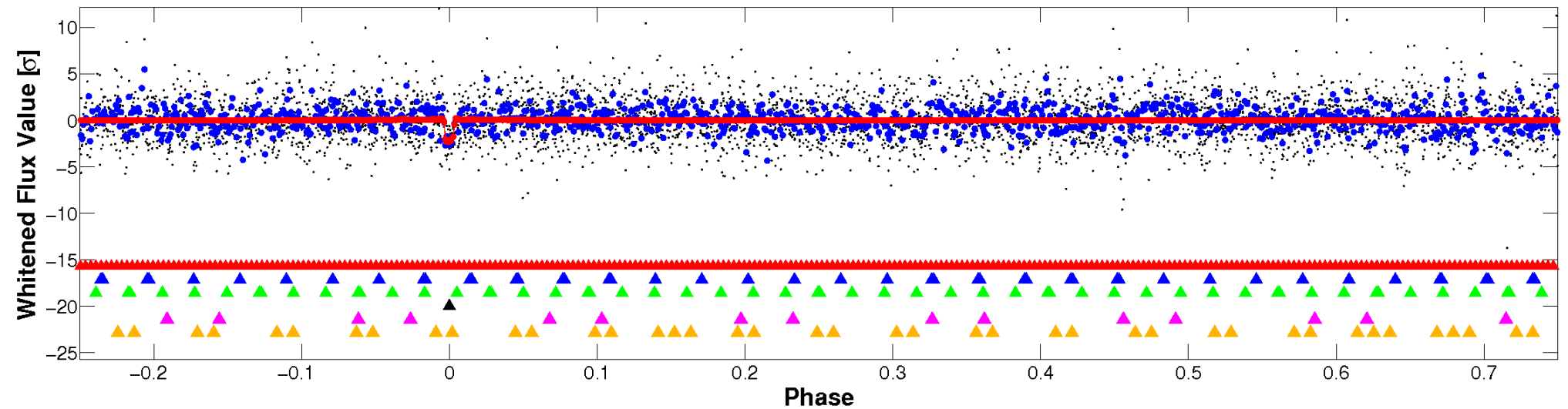


Non-Whitened Vs. Whitened Light Curve

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

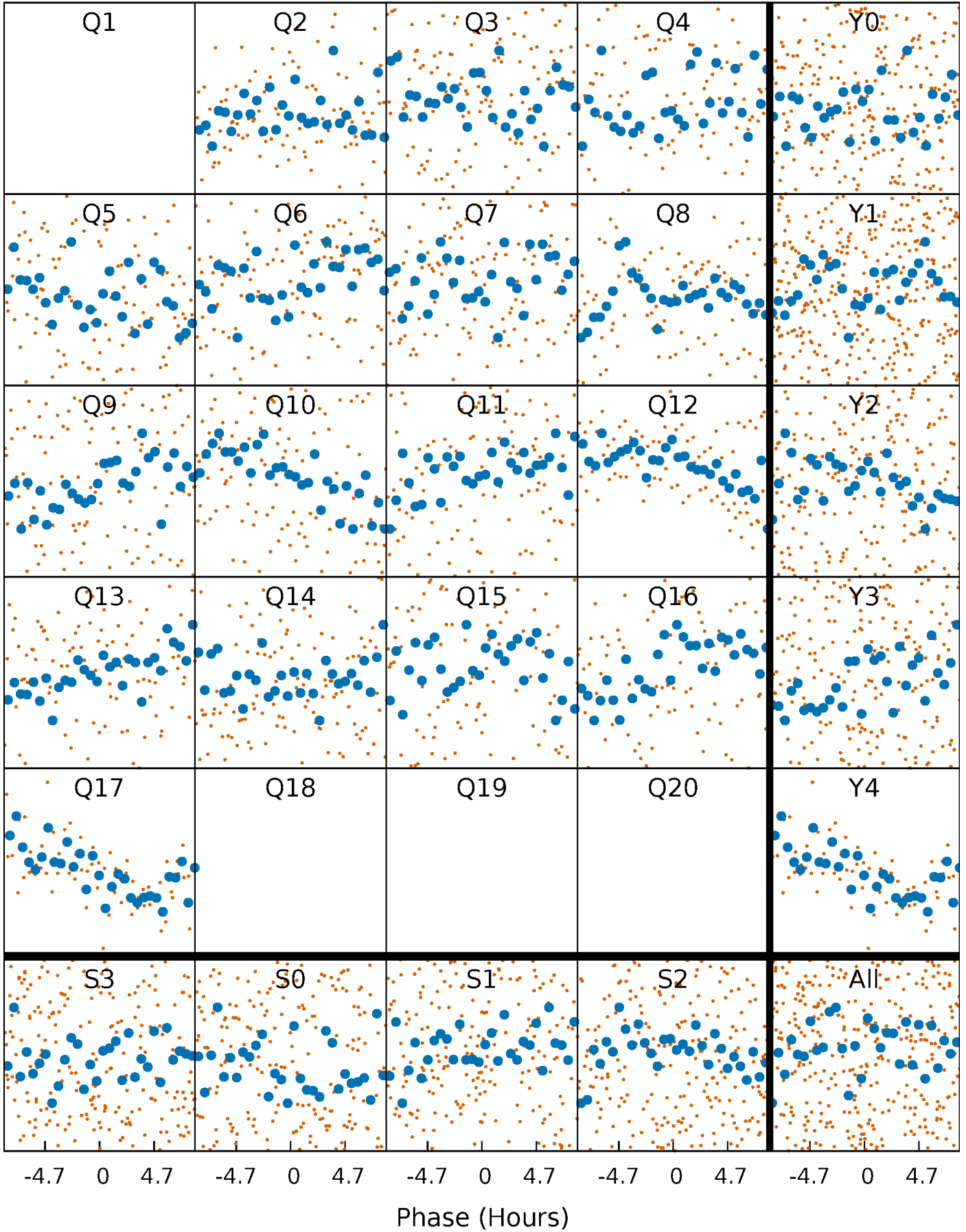


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



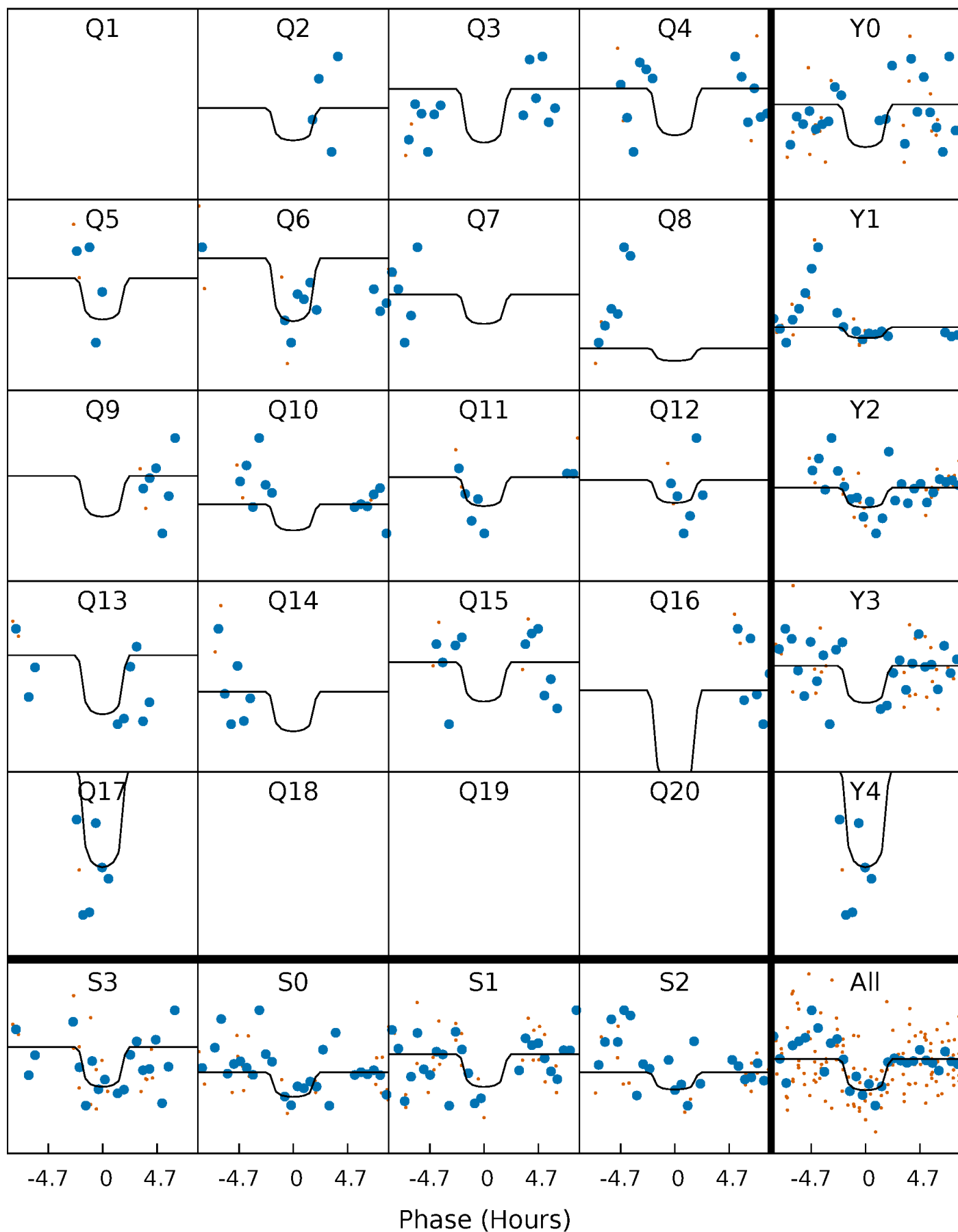
PDC Quarter-Phased Transit Curves

TCE 011774013-04 P= 23.278293 Days $T_0=144.361034$ (BKJD)



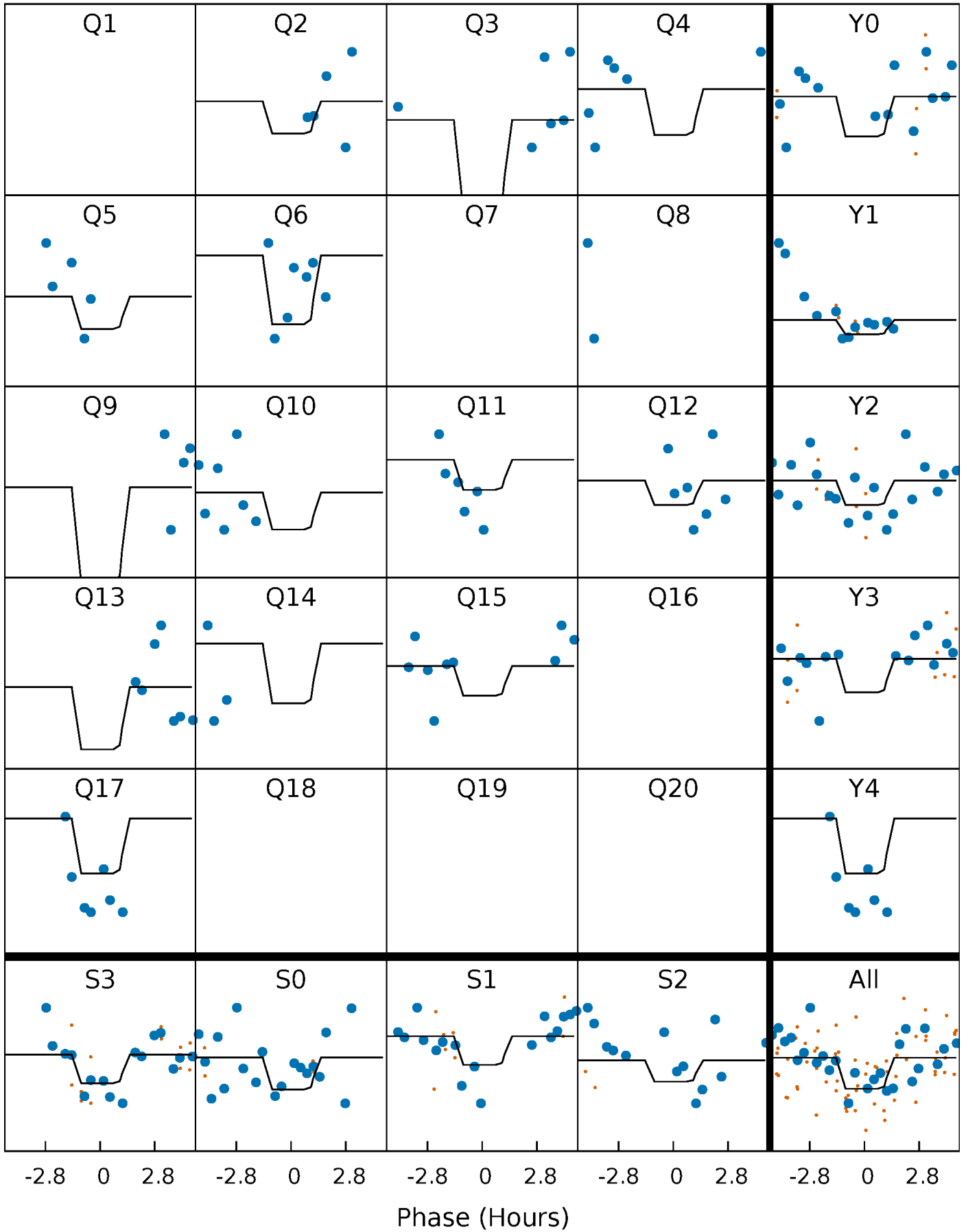
DV Quarter-Phased Transit Curves

TCE 011774013-04 P= 23.278293 Days $T_0=144.361034$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

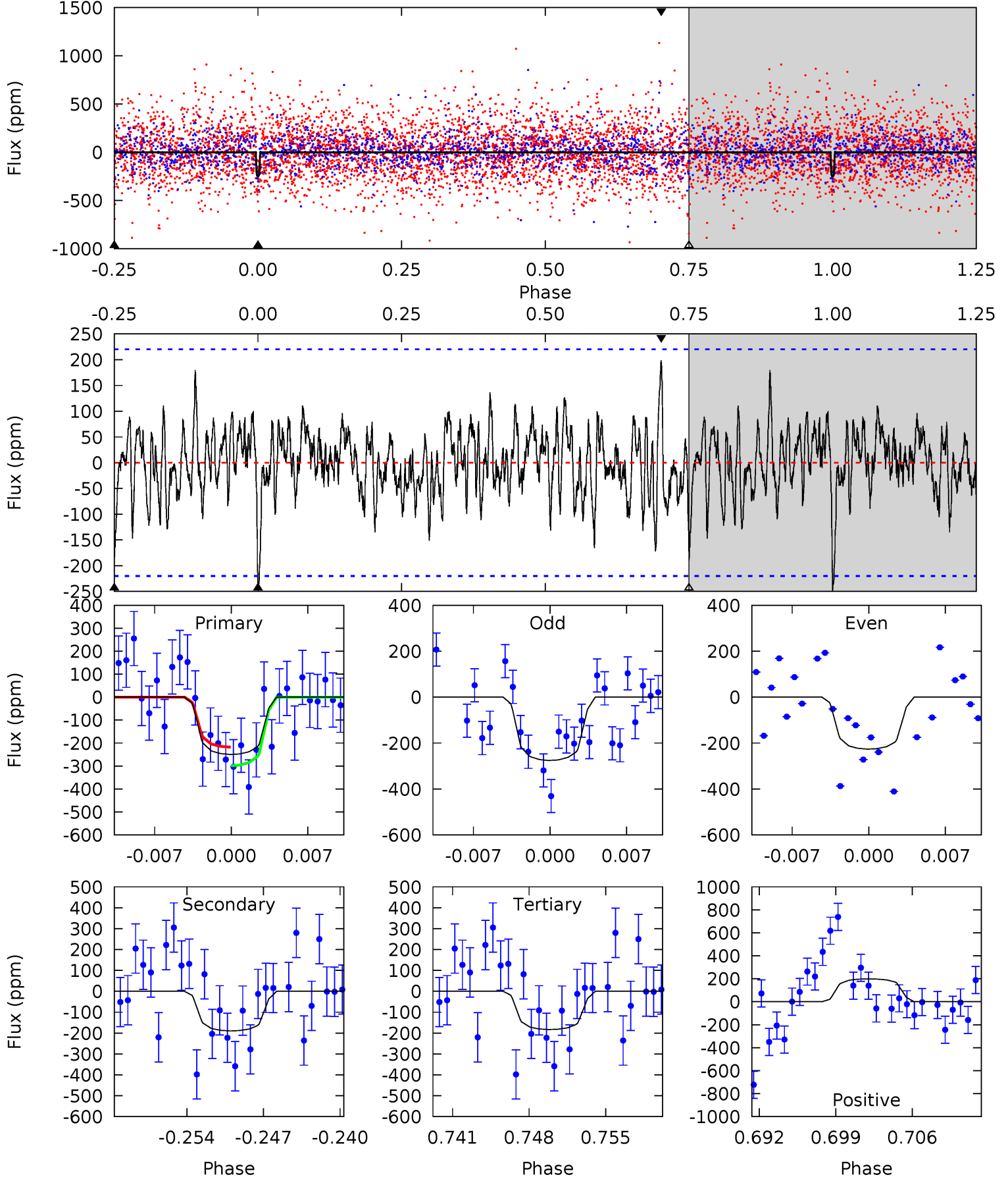
TCE 011774013-04 P= 23.277387 Days $T_0=144.392338$ (BKJD)



DV Model-Shift Uniqueness Test

011774013-04, P = 23.278293 Days, E = 144.361034 Days

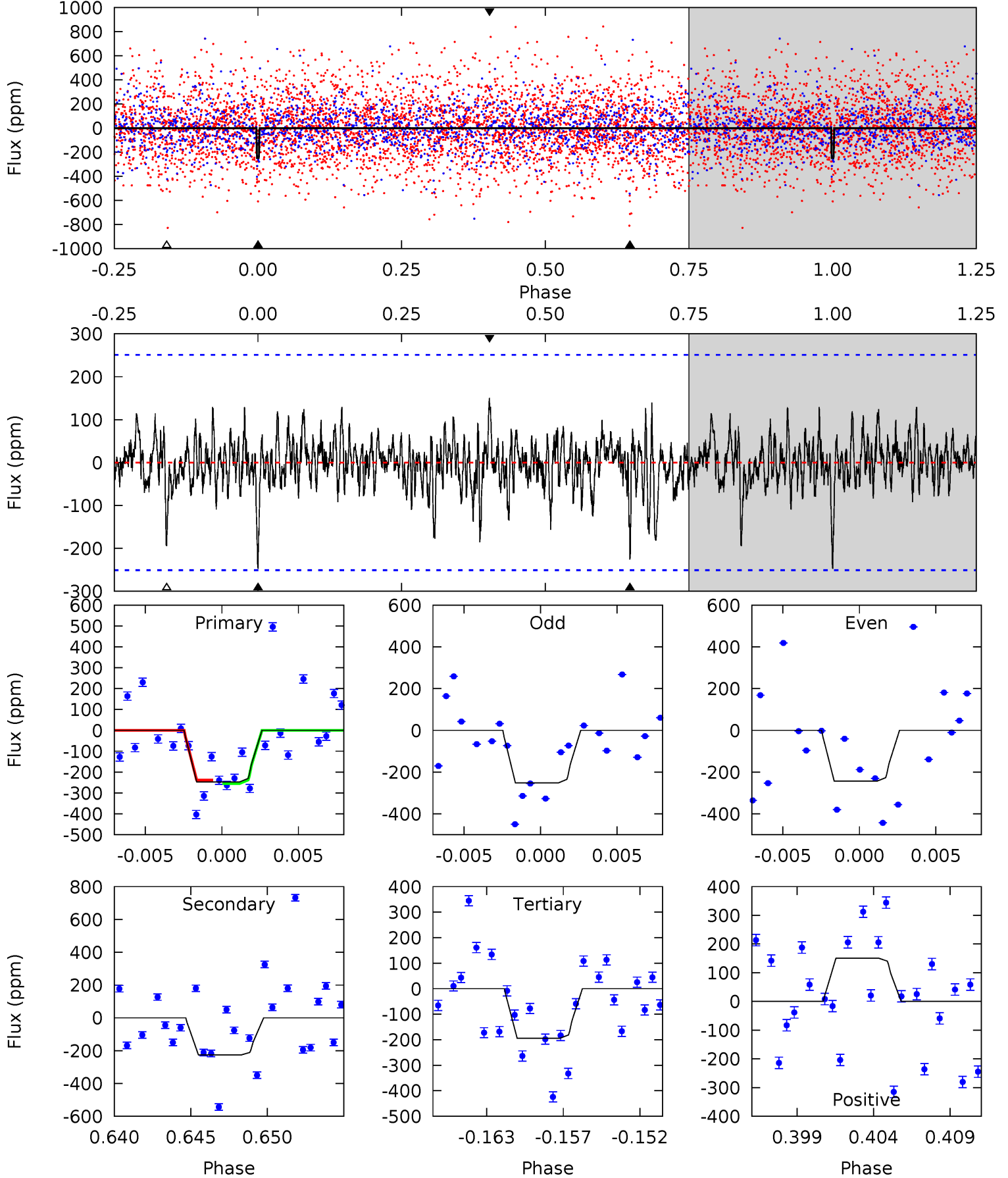
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.77	4.39	4.23	4.60	5.09	2.69	1.28	1.54	1.17	0.15	-0.21	0.57	1.07	0.44	0.93



Alt Model-Shift Uniqueness Test

011774013-04, P = 23.277387 Days, E = 144.392338 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.07	4.63	3.98	3.09	5.15	2.79	1.01	1.09	1.98	0.65	1.55	0.09	1.42	0.38	0.17



Stellar Parameters For KIC 011774013

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6522^{+182}_{-228}	$3.546^{+0.680}_{-0.120}$	$-0.300^{+0.300}_{-0.250}$	$3.564^{+0.539}_{-2.157}$	$1.627^{+0.185}_{-0.556}$	$0.051^{+0.554}_{-0.018}$
	+3%/-3%	+19%/-3%	+100%/-83%	+15%/-61%	+11%/-34%	+1094%/-35%
Source	PHO54	PHO54	PHO54	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011774013-04 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-190 ± 43	$6.46^{+2.49}_{-2.74}$	1717^{+125}_{-278}	5643^{+1155}_{-732}	84^{+156}_{-42}
Alt.	-226 ± 49	$5.36^{+2.78}_{-2.14}$	1698^{+132}_{-286}	6209^{+1597}_{-877}	141^{+273}_{-78}

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

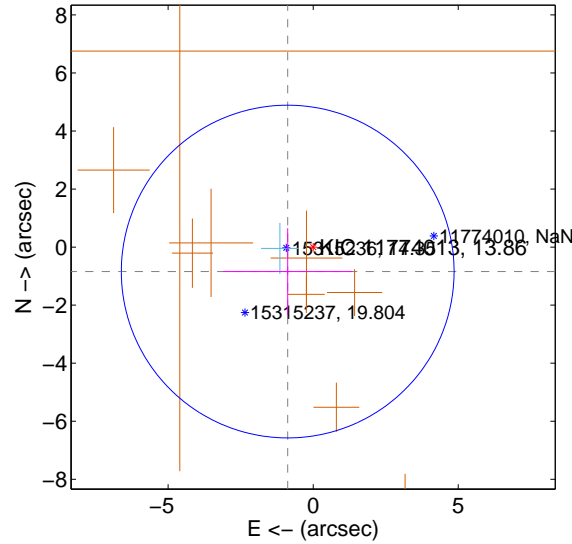
Supplemental centroid analysis for 011774013-04. Kepler magnitude: 13.86. Transit SNR 10.68

There are 1 quarters with good PRF difference image offsets

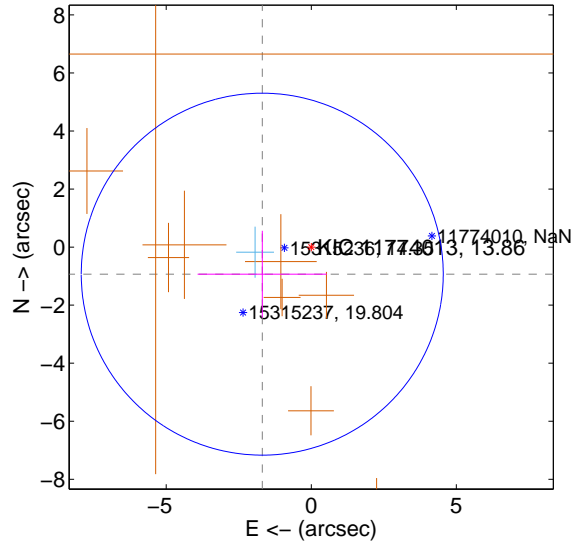
The direct PRF centroid is offset from the target star catalog position by about 0.91 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.217 ± 1.911	0.64	0.878 ± 2.227	-0.843 ± 1.494
PRF-fit source offset from KIC position	1.929 ± 2.079	0.93	1.689 ± 2.227	-0.933 ± 1.494
photometric centroid source offset	0.50 ± 0.67	0.74	0.37 ± 0.65	0.33 ± 0.68

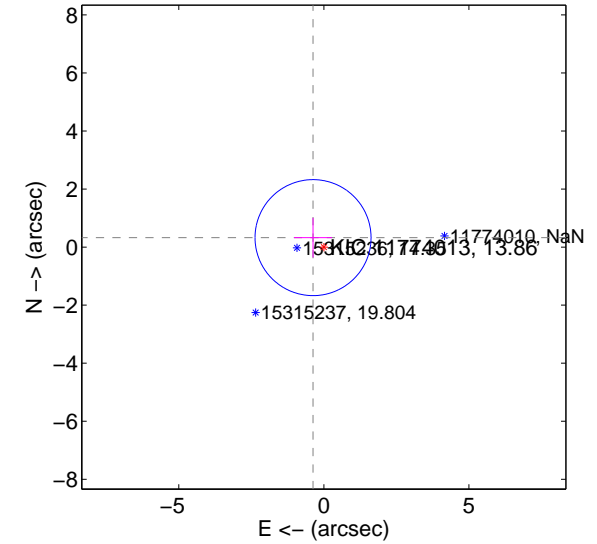
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

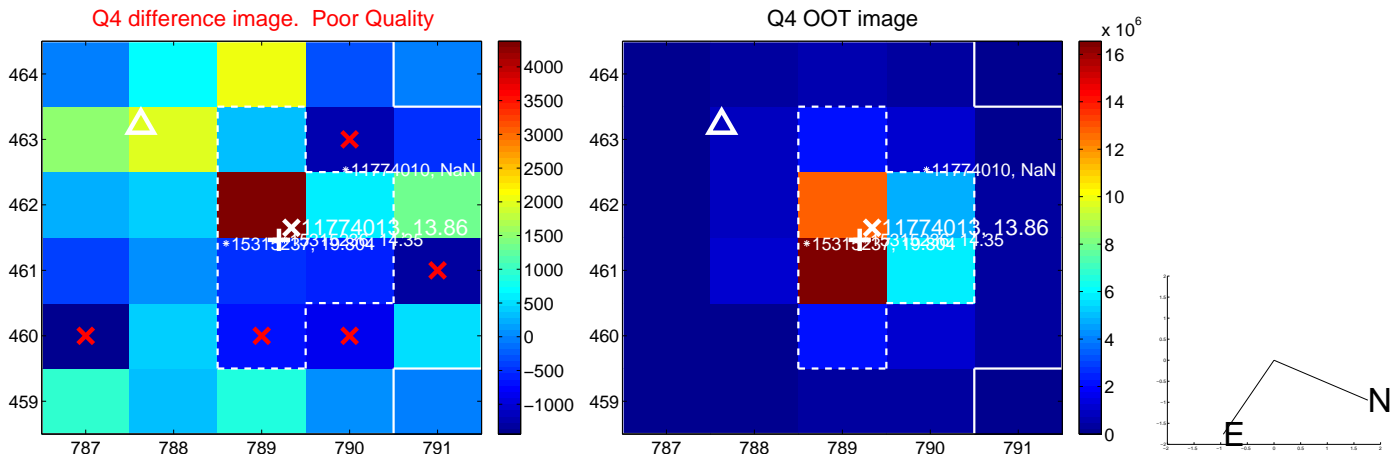
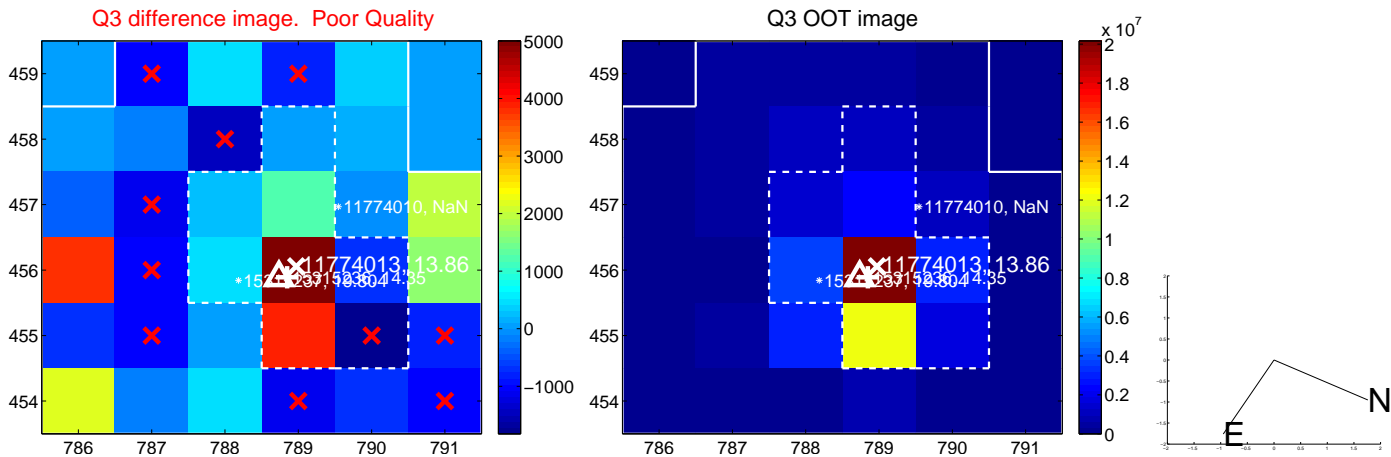
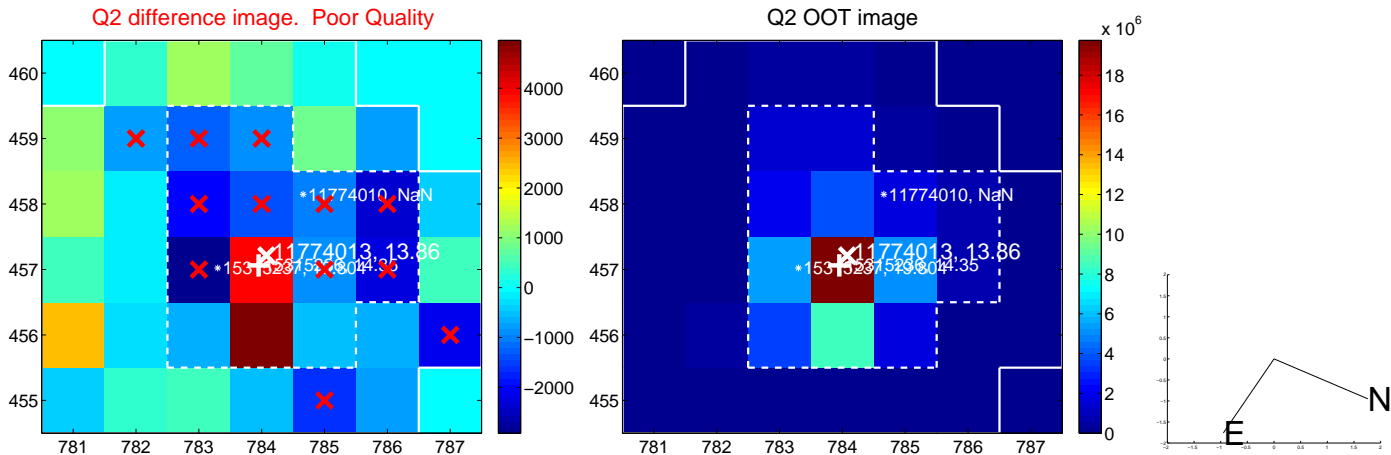
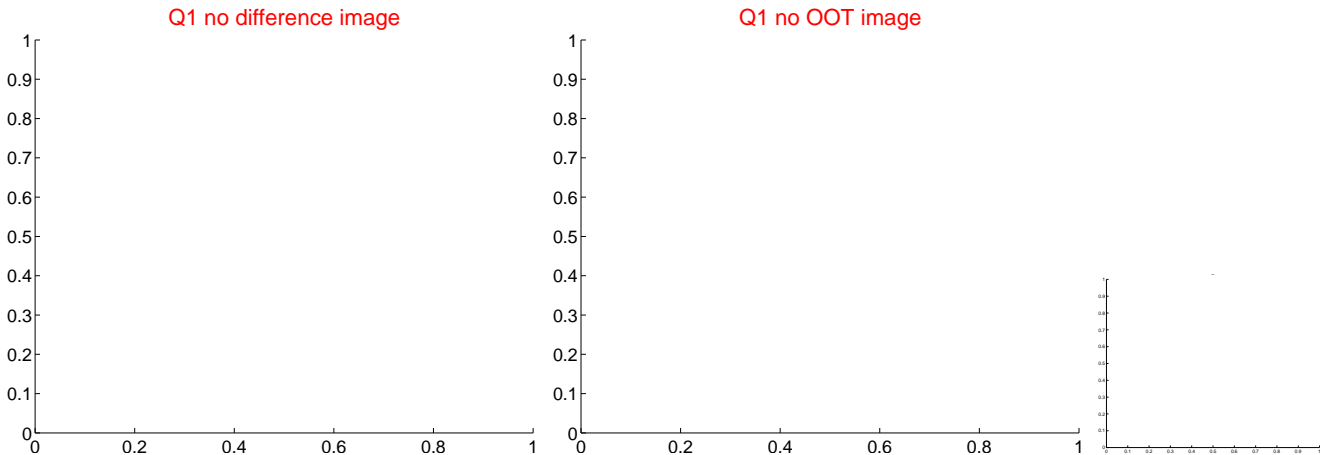


offset from photometric centroids

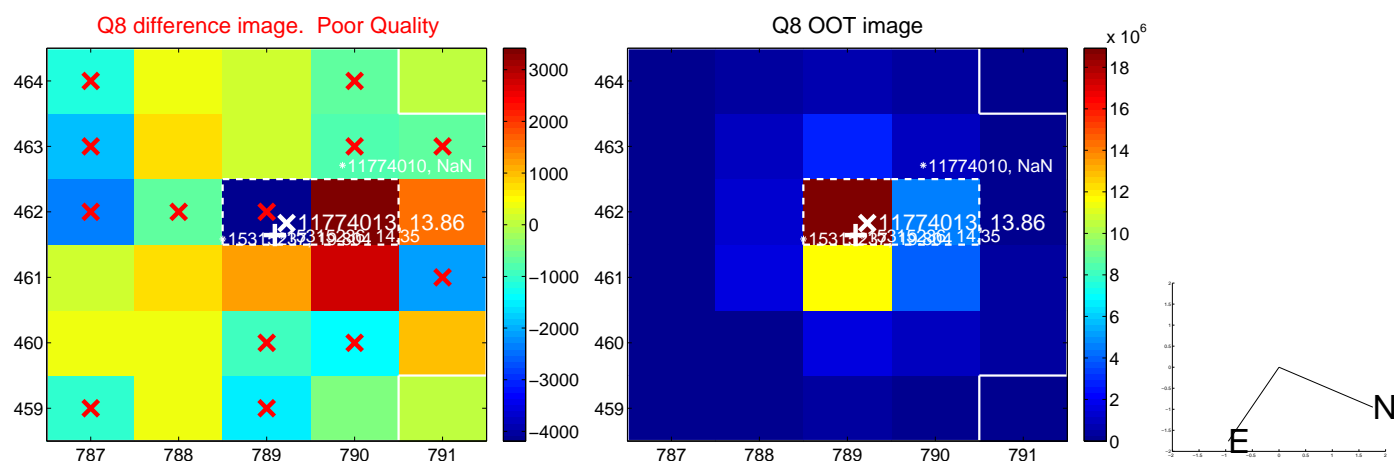
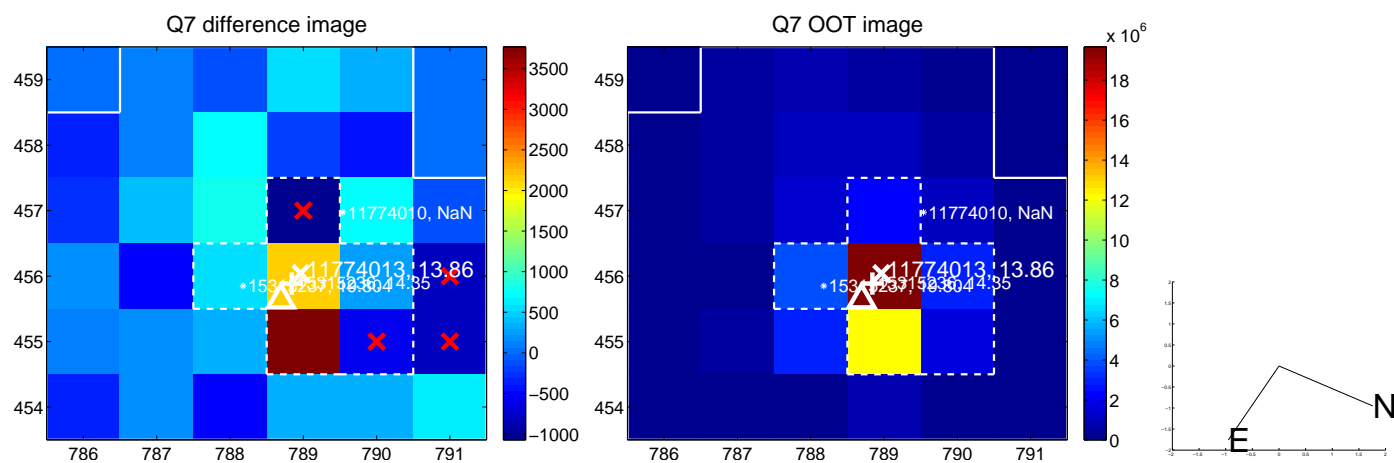
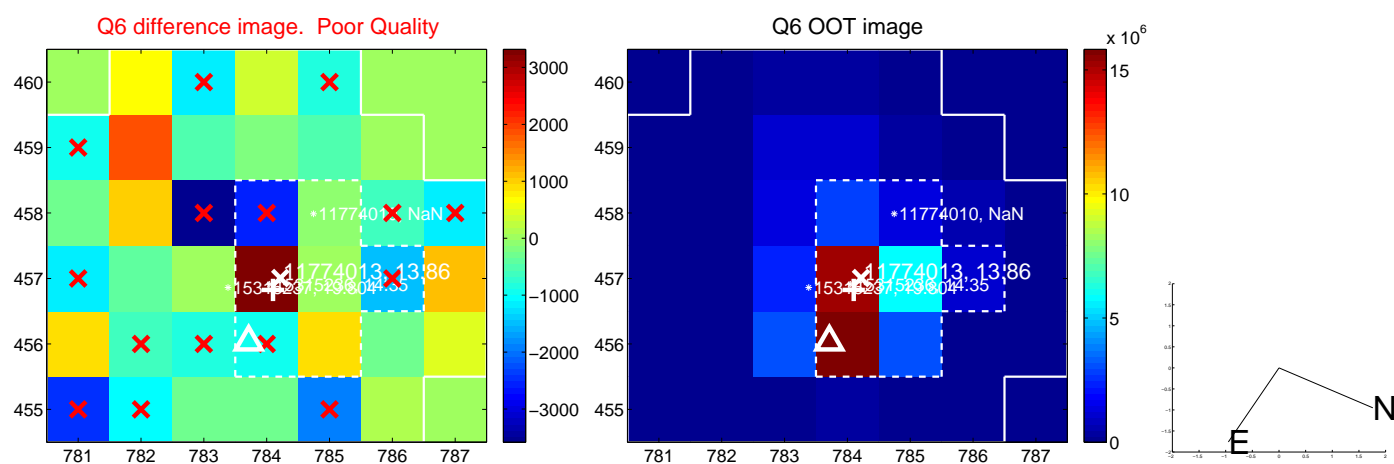
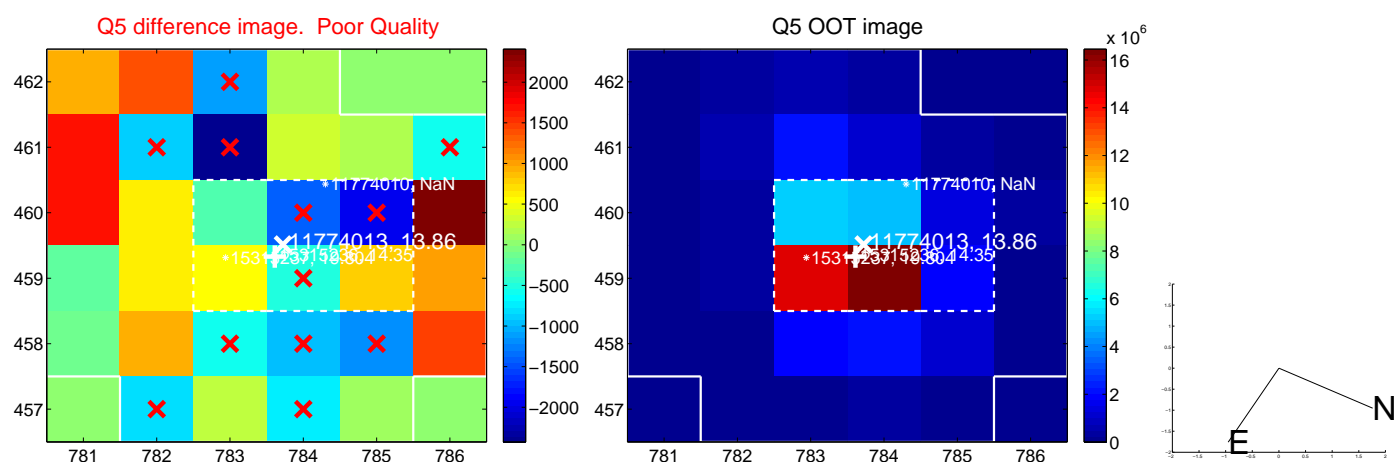


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

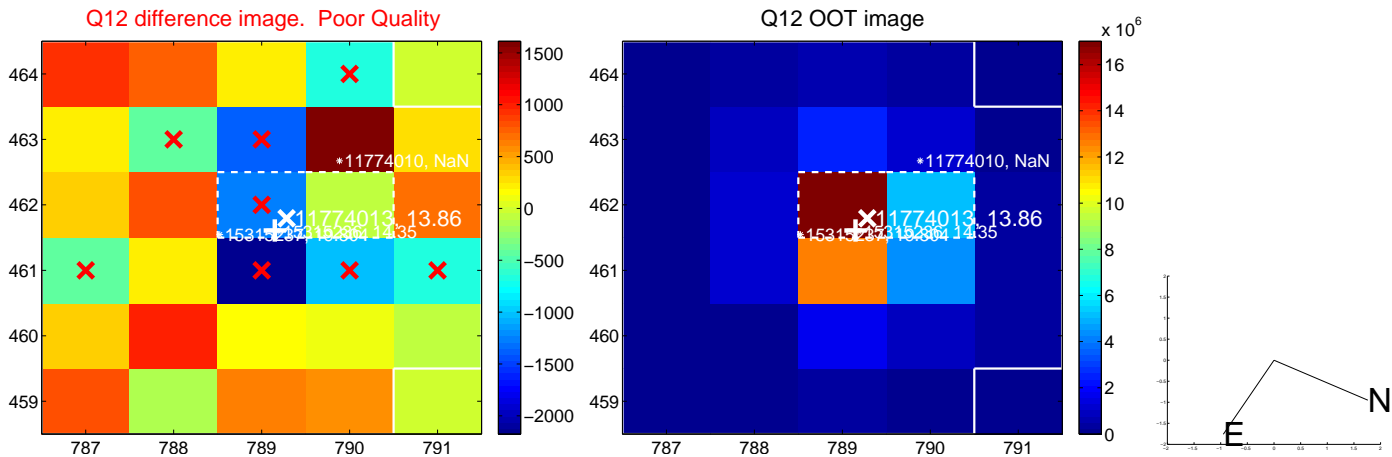
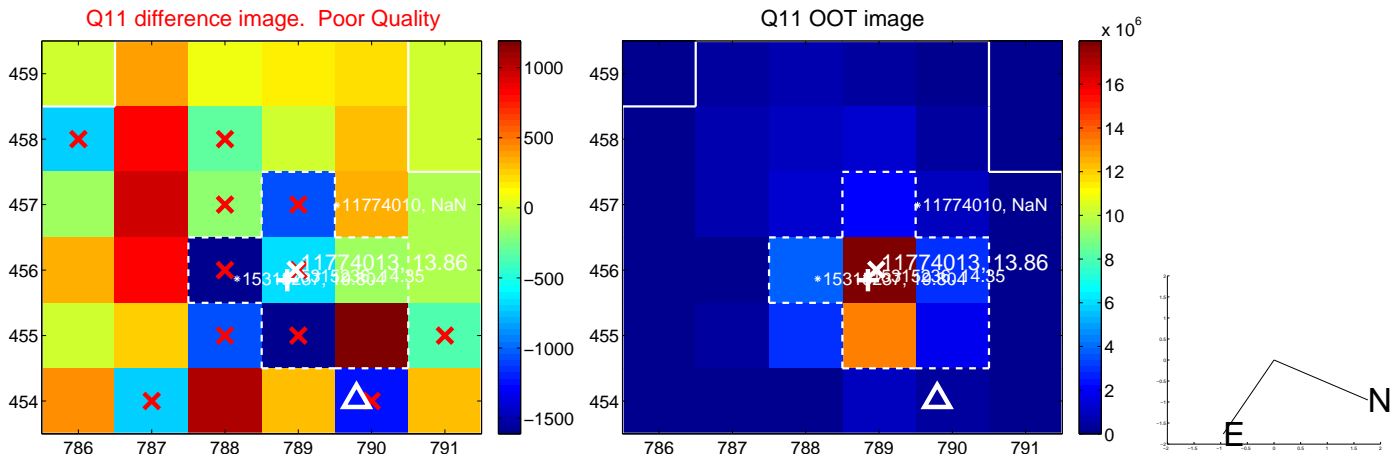
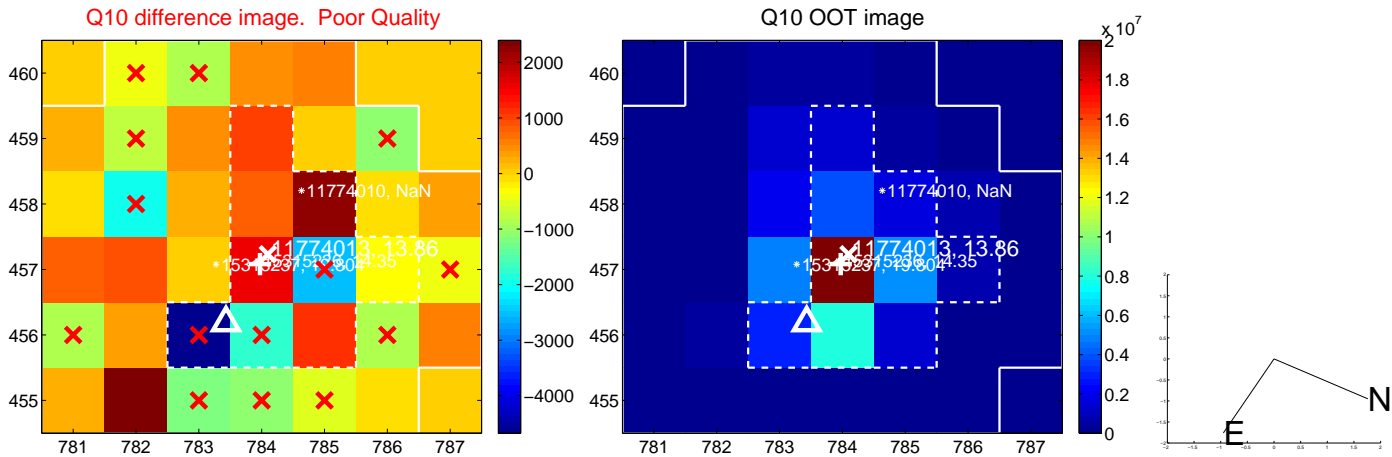
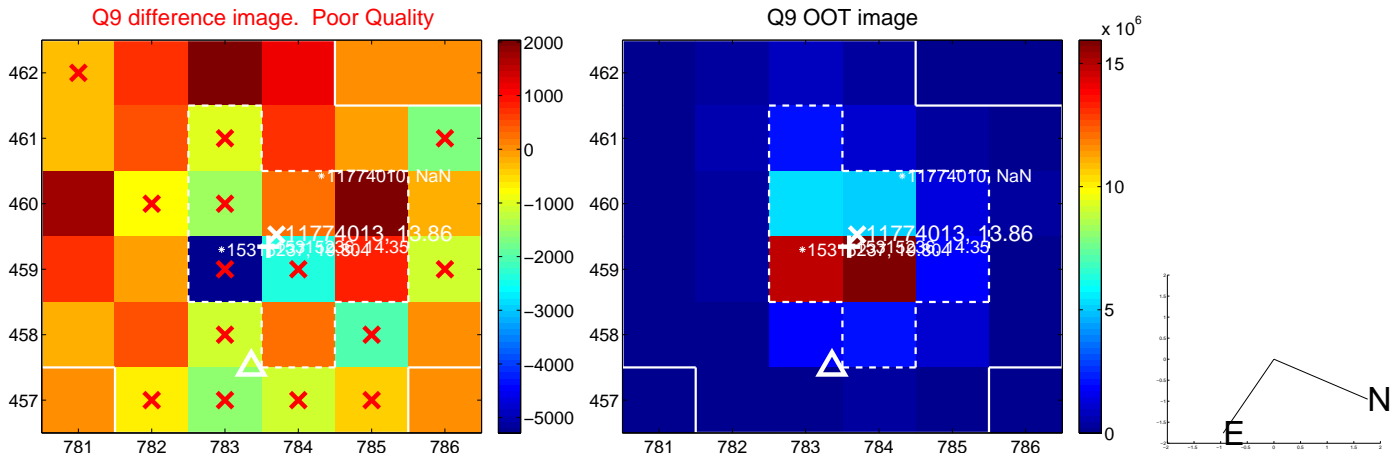
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



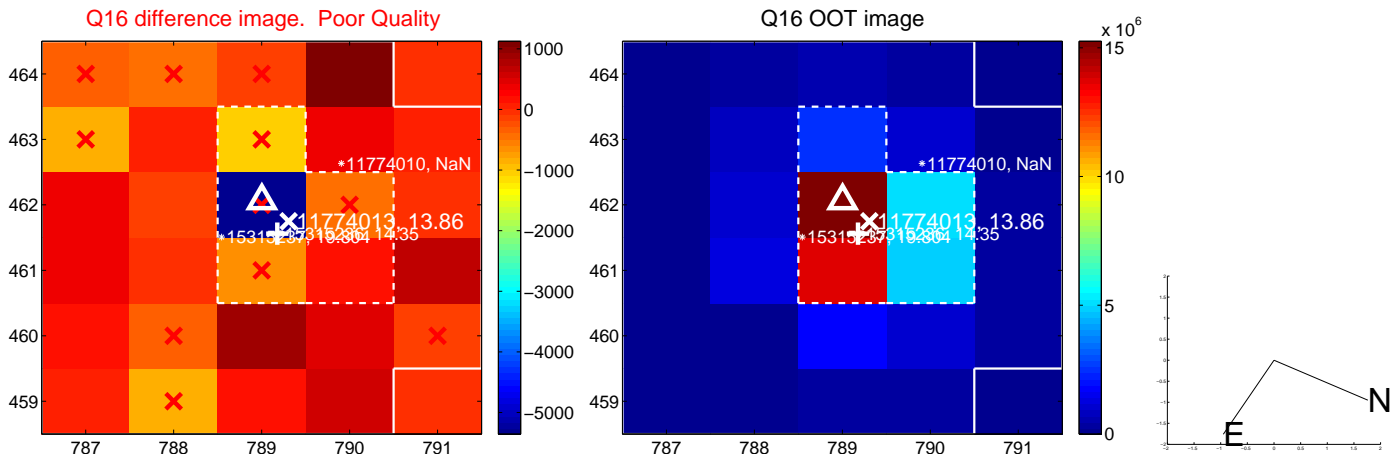
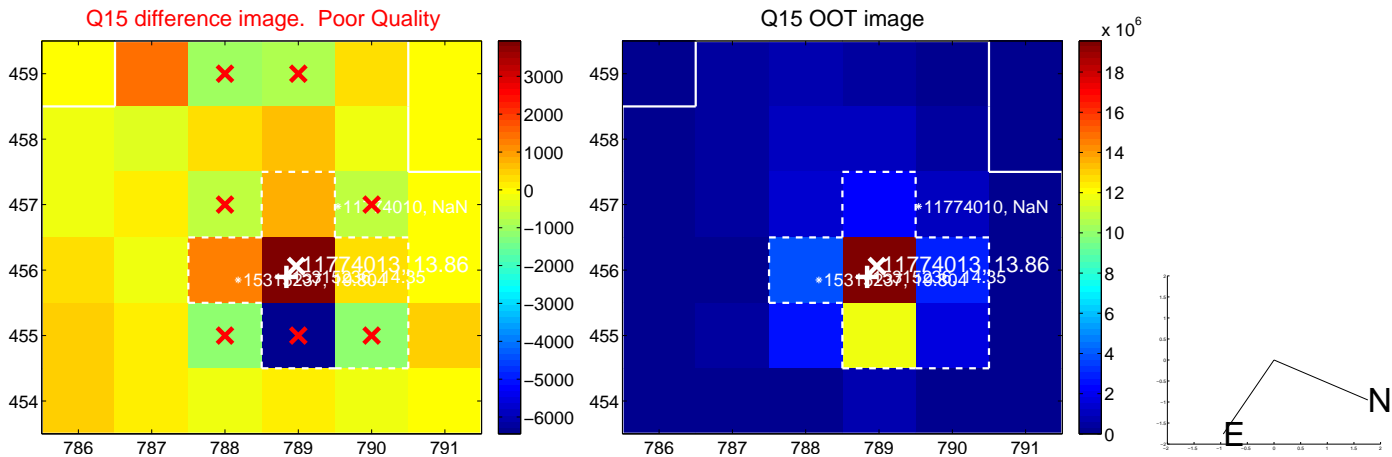
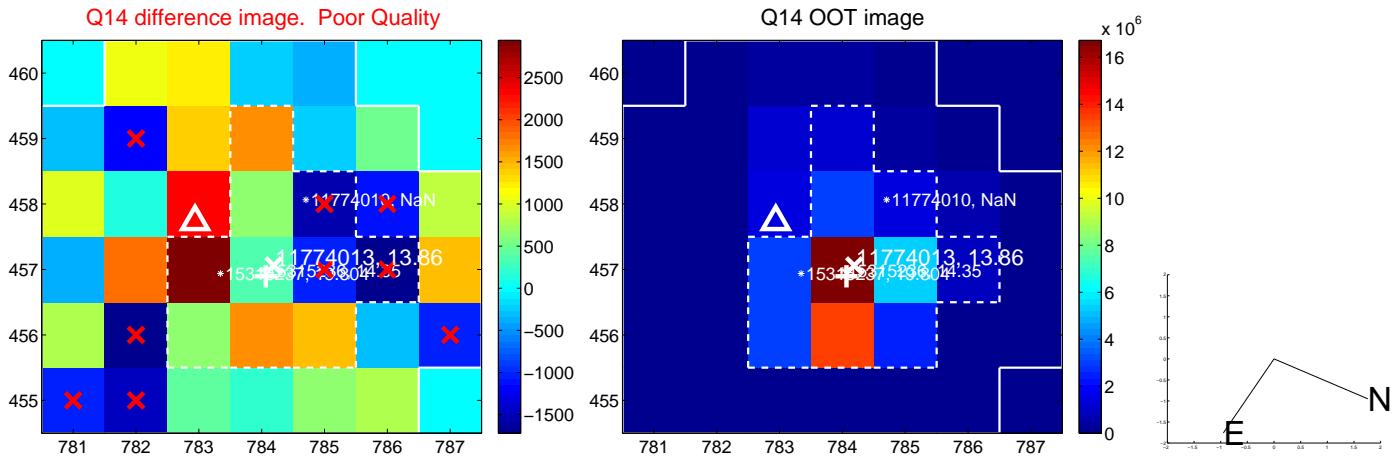
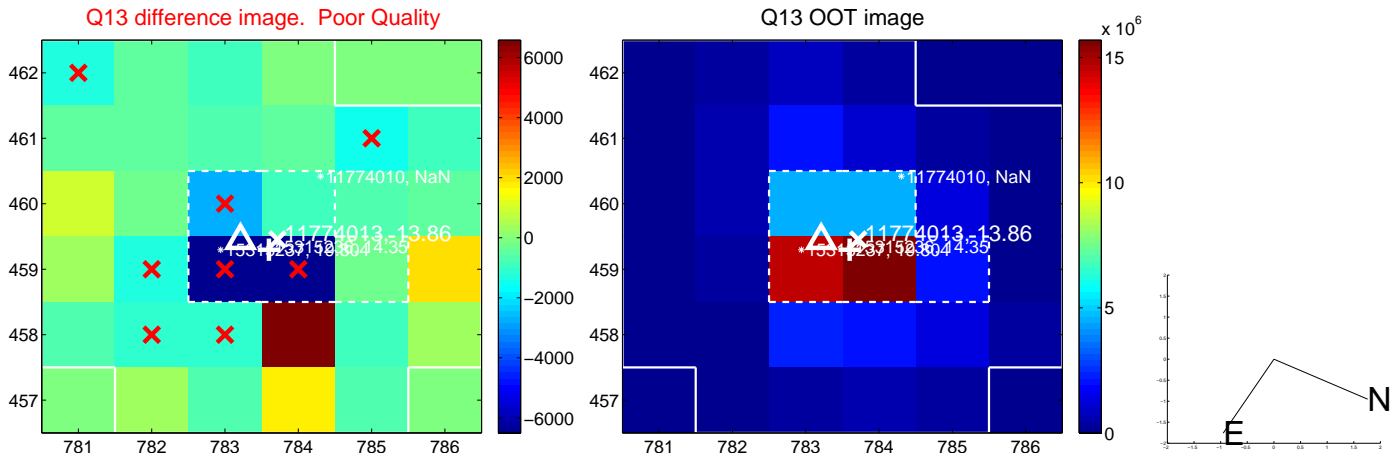
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

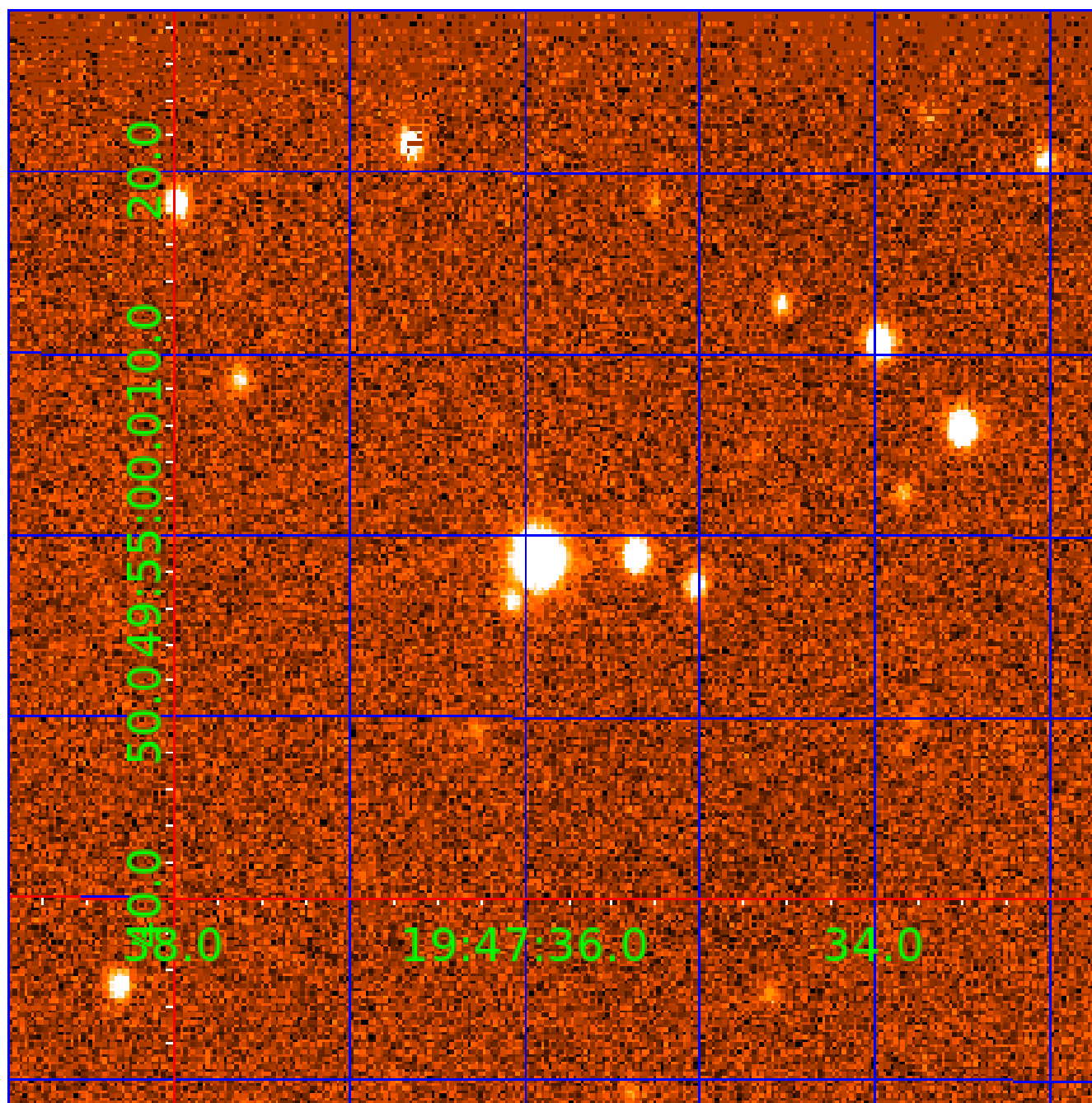


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011774013

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})
011774013-01	OBS	No	1.878606	131.849759	11.0	13.744	10.9	4.7	3.56	6522	1.29	16746.67
011774013-02	OBS	No	31.281057	143.956892	488.3	2.792	16.0	13.2	3.56	6522	8.93	393.85
011774013-03	OBS	No	26.898709	135.712572	276.4	4.075	11.8	11.7	3.56	6522	6.91	481.65
011774013-04	OBS	No	23.278293	144.361034	262.5	4.124	10.7	10.7	3.56	6522	7.00	584.04
011774013-05	OBS	No	96.125516	209.751529	376.3	2.661	9.6	10.5	3.56	6522	7.01	88.16
011774013-06	OBS	No	35.543544	135.384255	440.0	1.455	10.5	10.5	3.56	6522	7.61	332.17

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011774013-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—CENT_KIC_POS
011774013-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_KIC_POS
011774013-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
011774013-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—CENT_FEW_DIFFS
011774013-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
011774013-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_FEW_MEAS

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

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

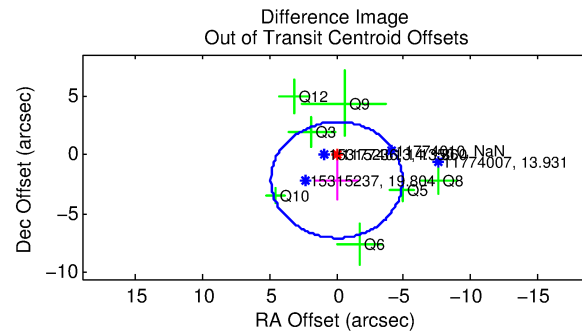
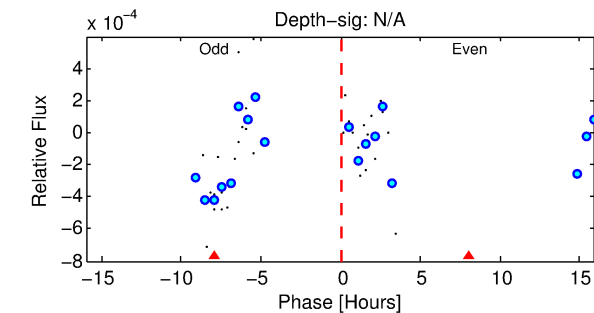
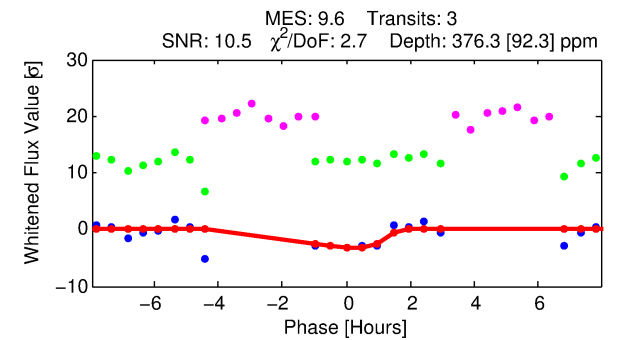
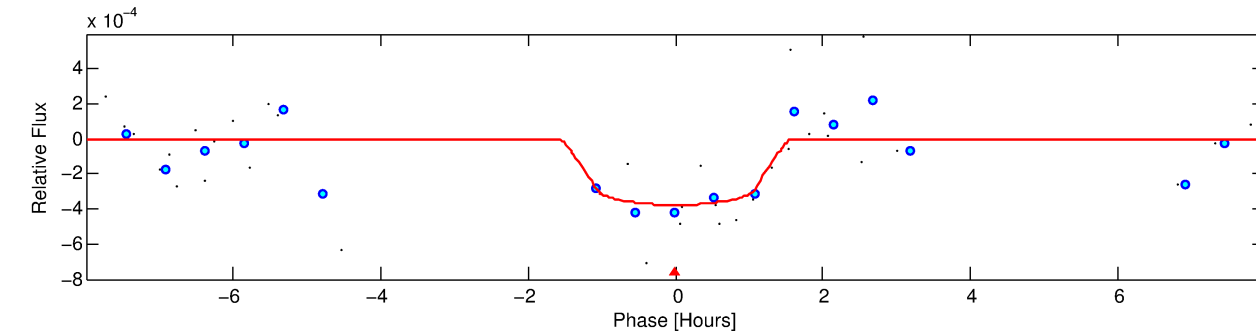
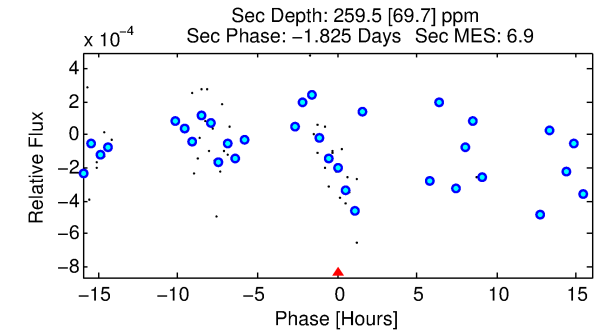
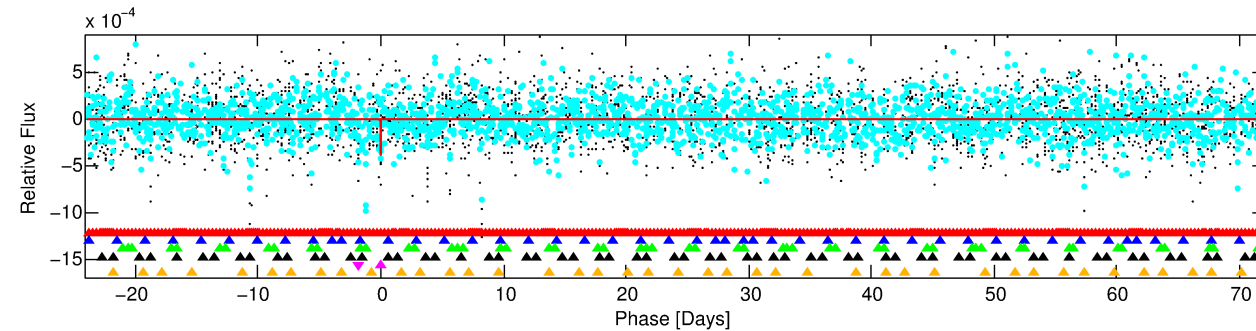
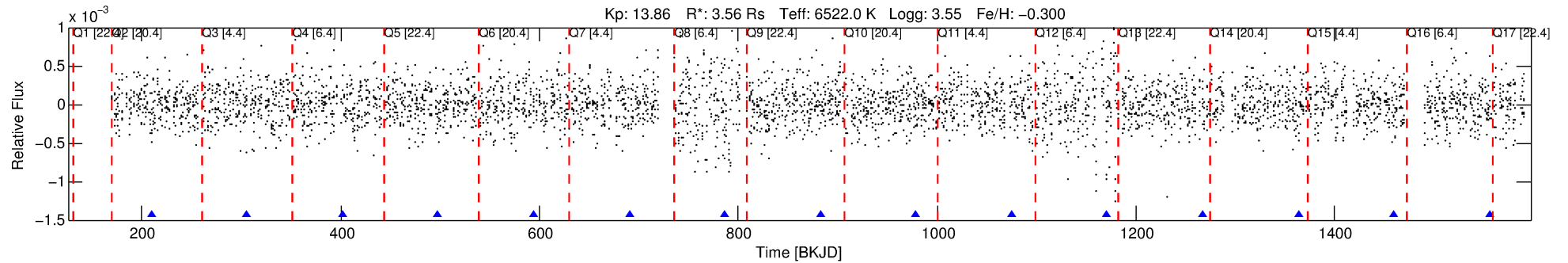
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011774013-05

No Significant Match Found

DV One-Page Summary

KIC: 11774013 Candidate: 5 of 6 Period: 96.126 d



DV Fit Results:

Period = 96.12552 [0.00138] d
Epoch = 209.7515 [0.0144] BKJD
Rp/R* = 0.0180 [0.0687]
a/R* = 269.89 [5361.05]
b = 0.28 [65.82]
Seff = 88.16 [99.42]
Teff = 781 [220] K
Rp = 7.01 [27.06] Re
a = 0.4833 [0.3188] AU
Ag = 677.86 [5223.81] [0.13σ]
Teffp = 6164 [11752] K [0.46σ]

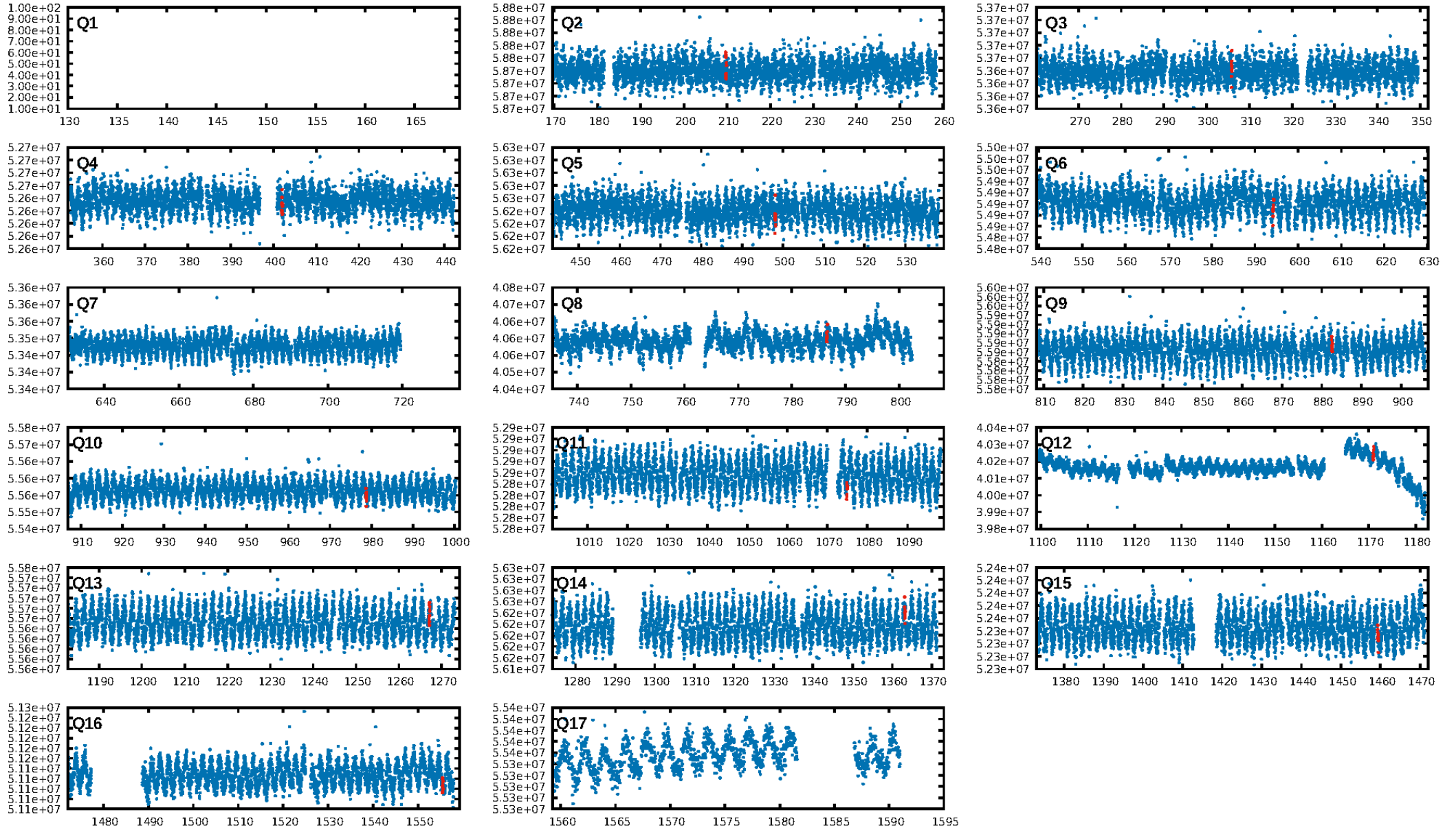
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [479.43σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 23.8%
ModelChiSquareGof-sig: 93.6%
Bootstrap-pfa: 1.86e-06
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 3.473
Centroid-sig: 50.4%
Centroid-so: 1.390 arcsec [1.34σ]
OotOffset-rm: 2.126 arcsec [1.30σ]
KicOffset-rm: 2.362 arcsec [1.60σ]
OotOffset-st: 2/1/2/2 [7]
KicOffset-st: 2/1/2/2 [7]
DiffImageQuality-fgm: 0.00 [0/7]
DiffImageOverlap-fno: 0.50 [6/12]

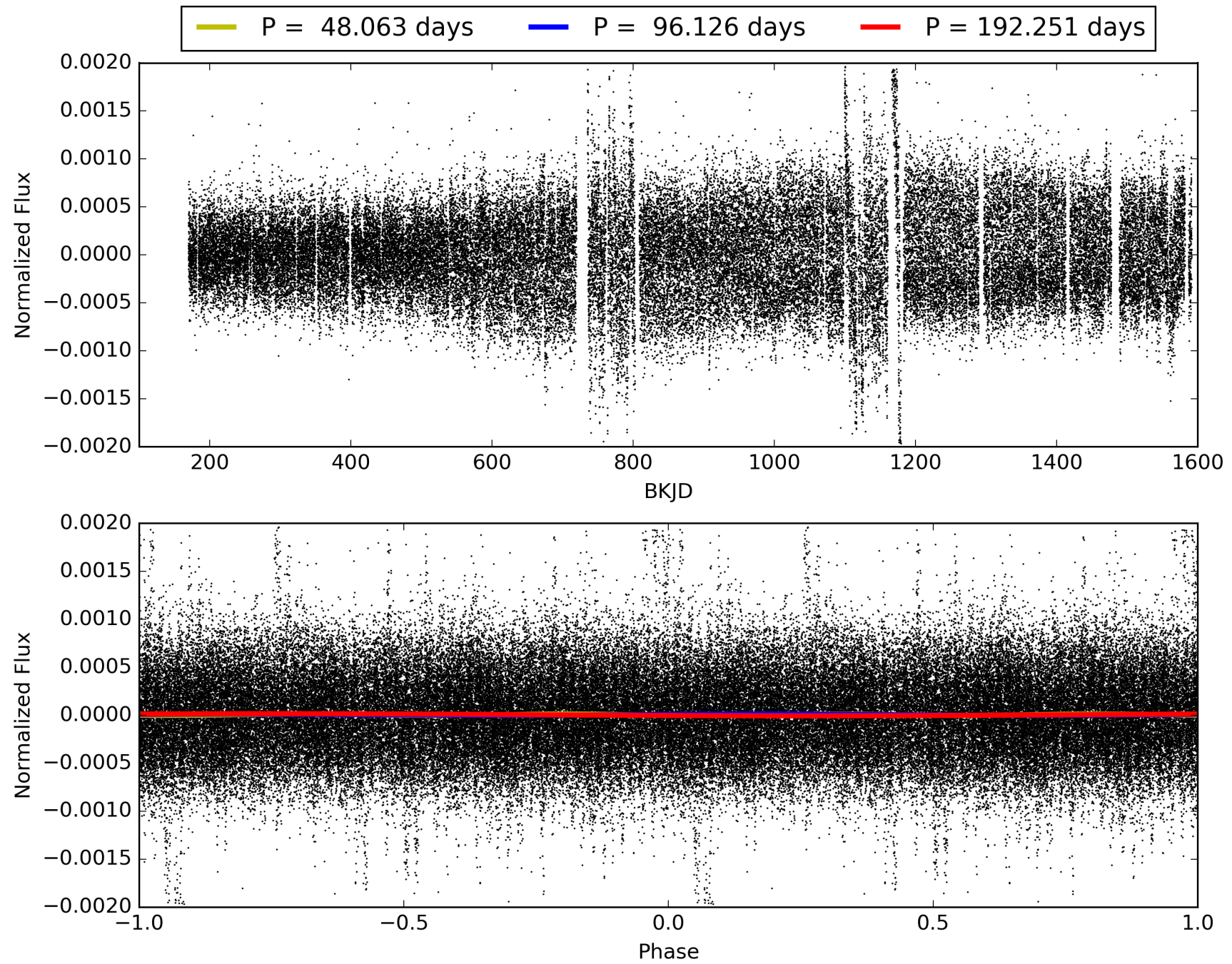
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:34:30 Z

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

TCE 011774013-05, PDC Light Curves

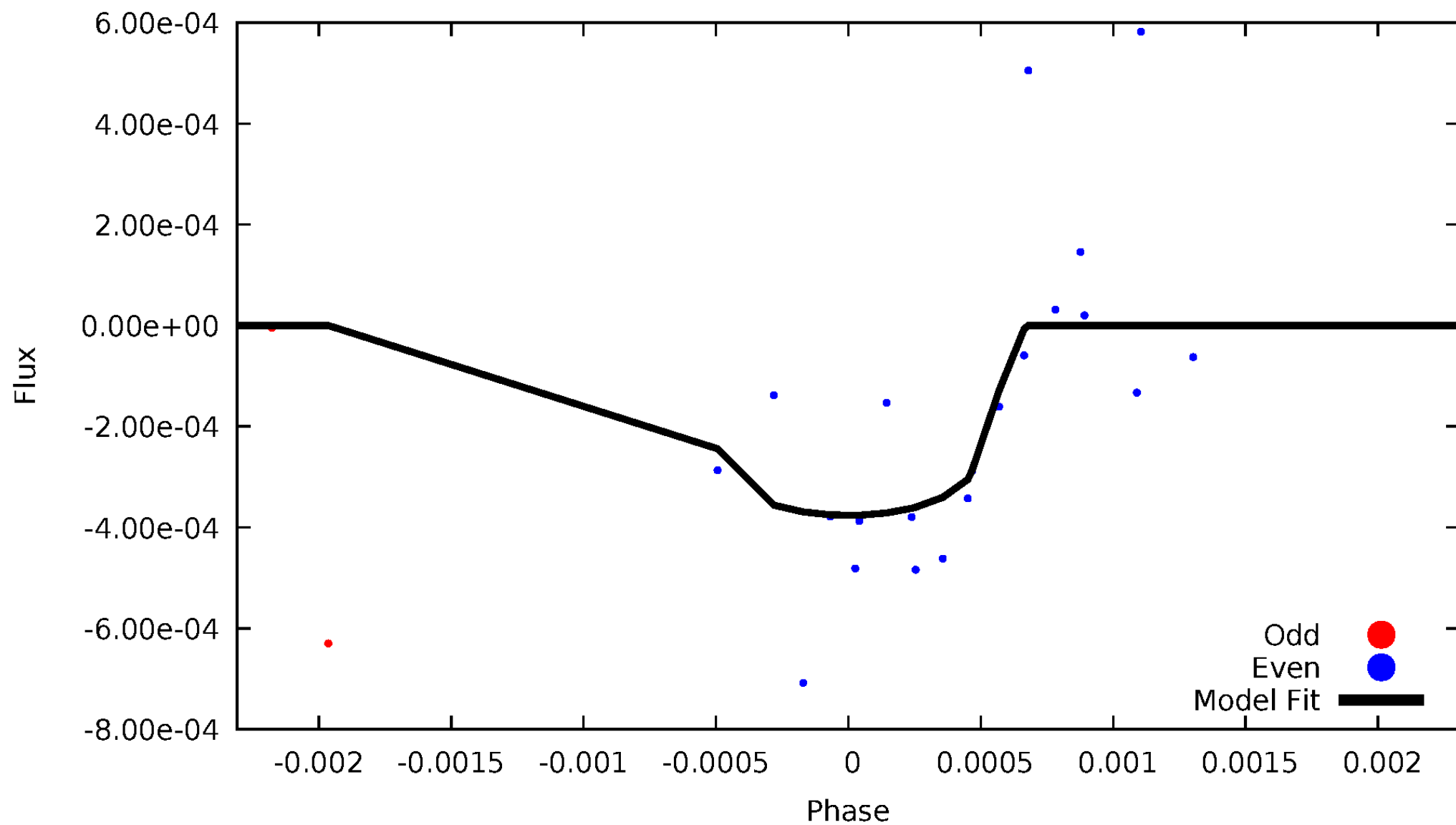


TCE 011774013-05



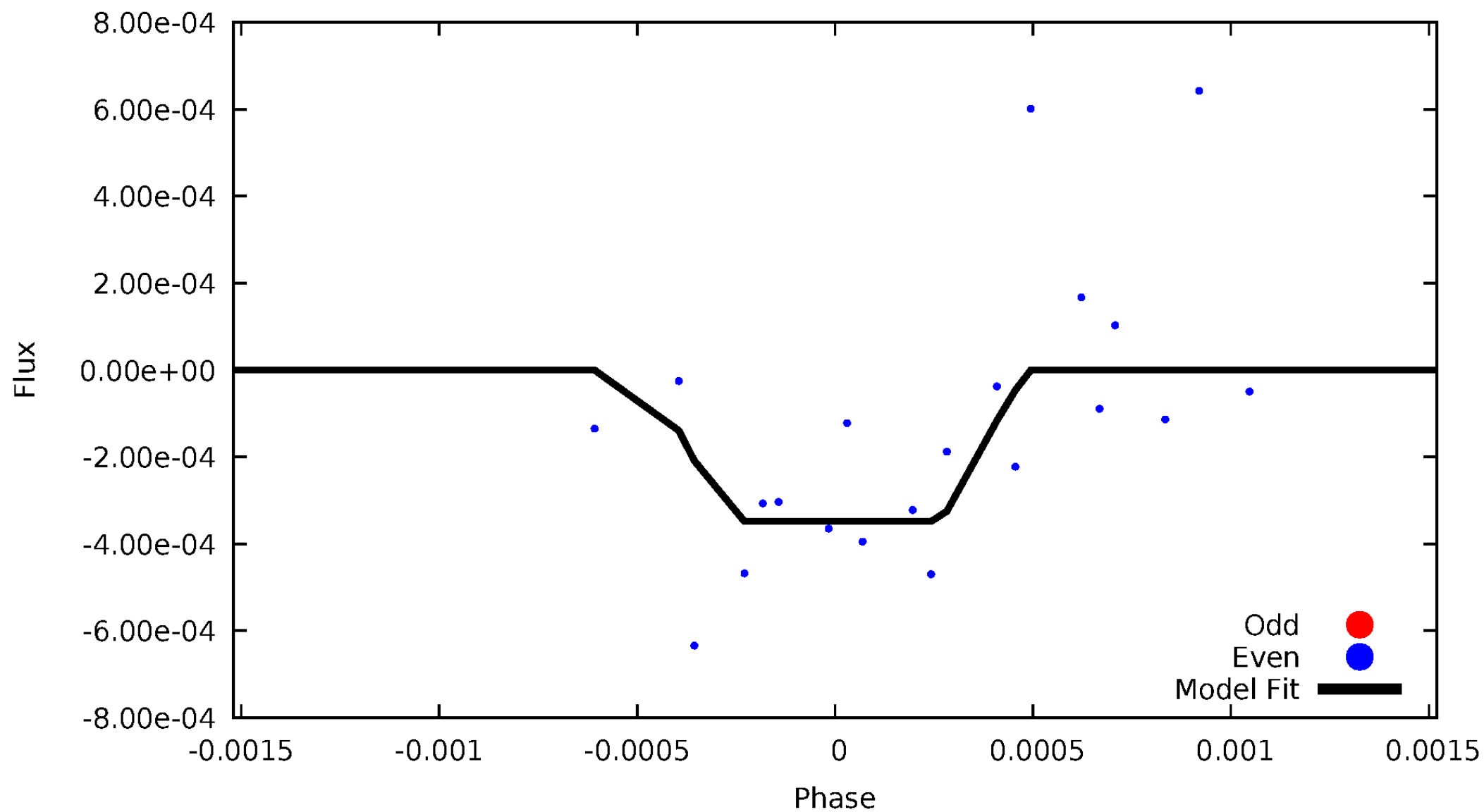
DV Odd/Even

TCE 011774013-05



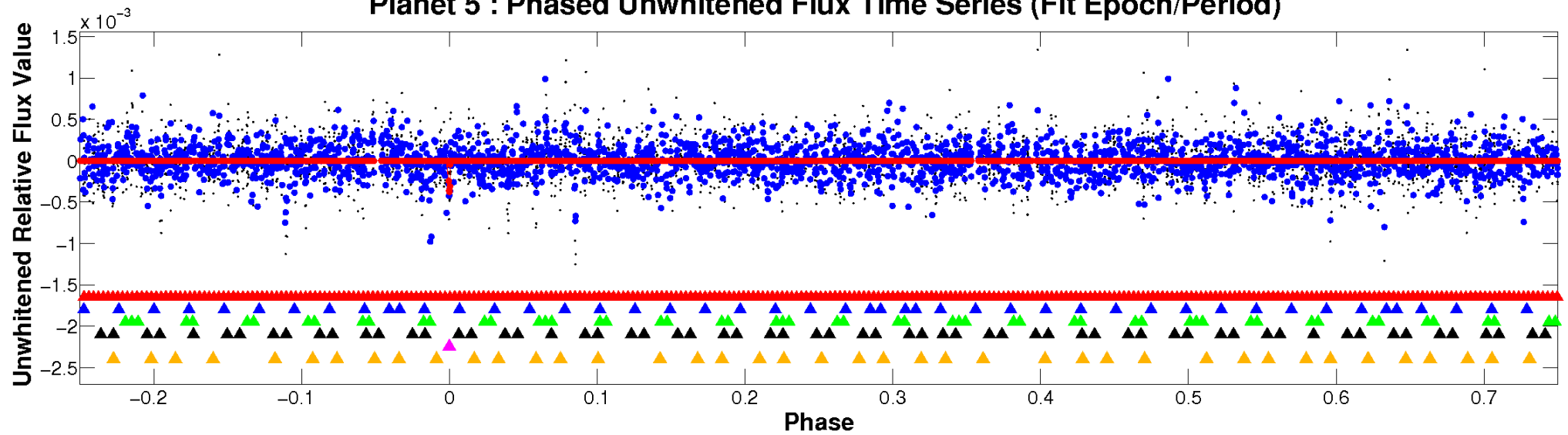
ALT Odd/Even

TCE 011774013-05

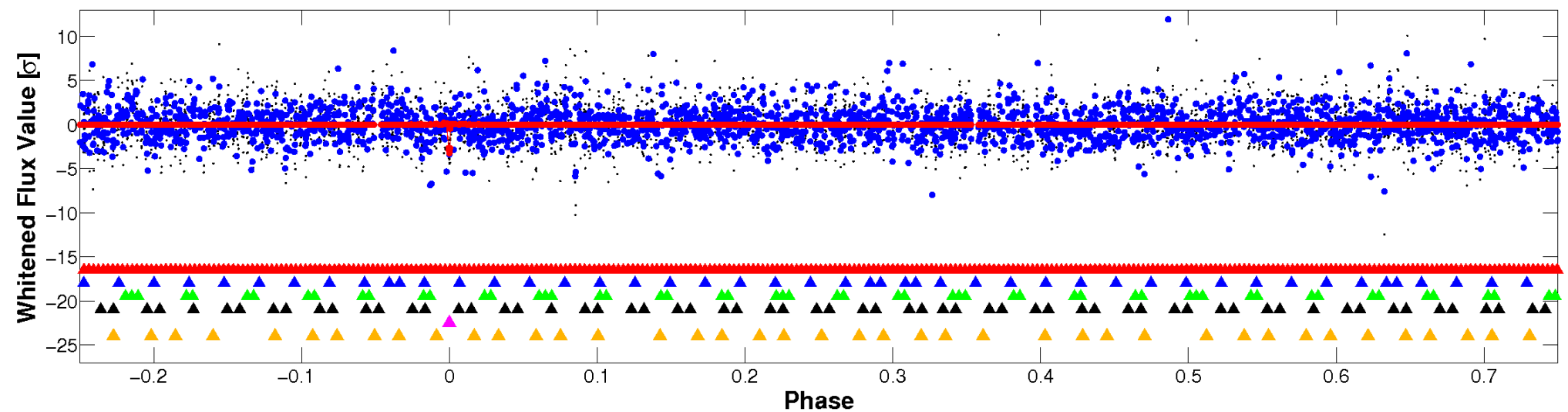


Non-Whitened Vs. Whitened Light Curve

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

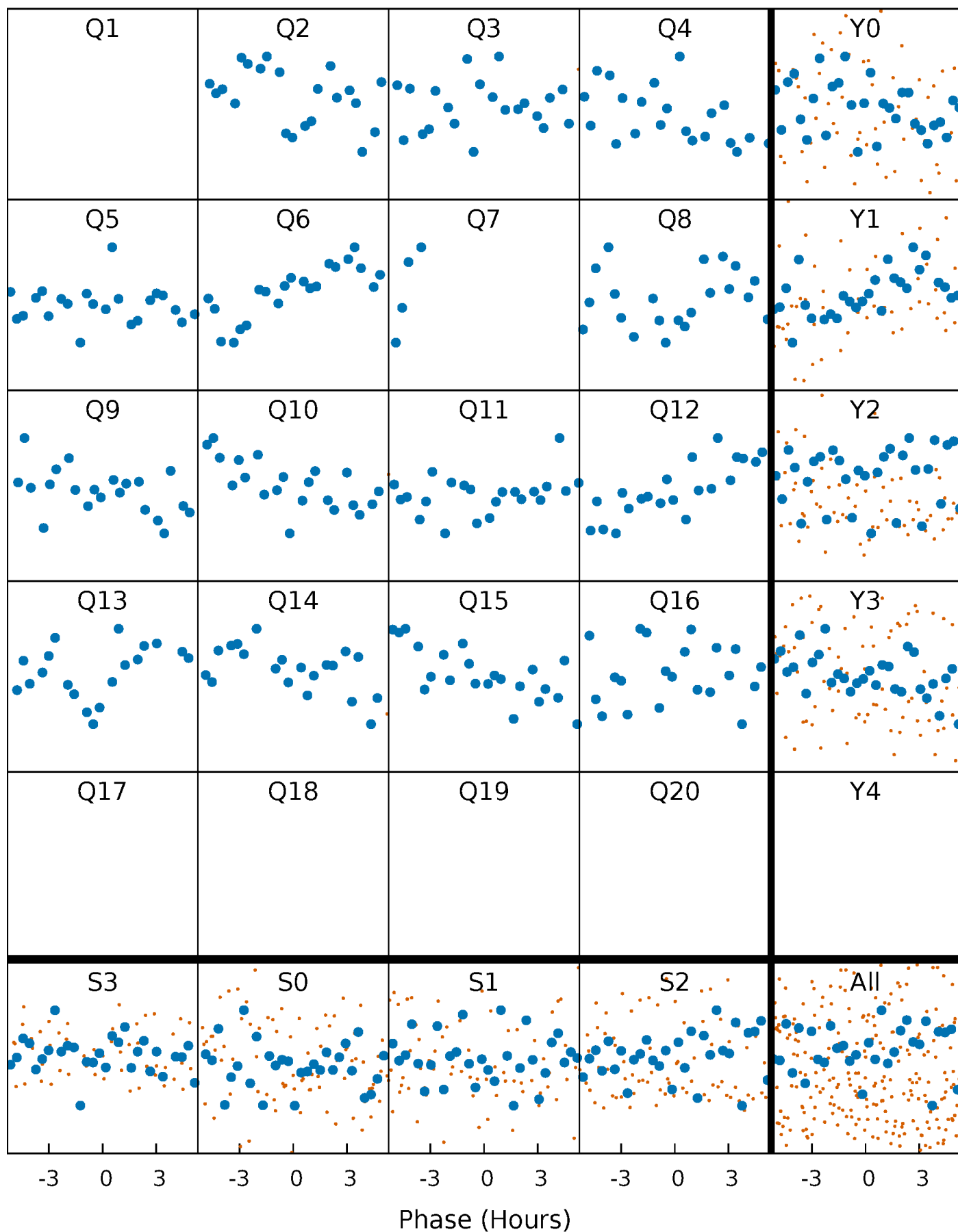


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



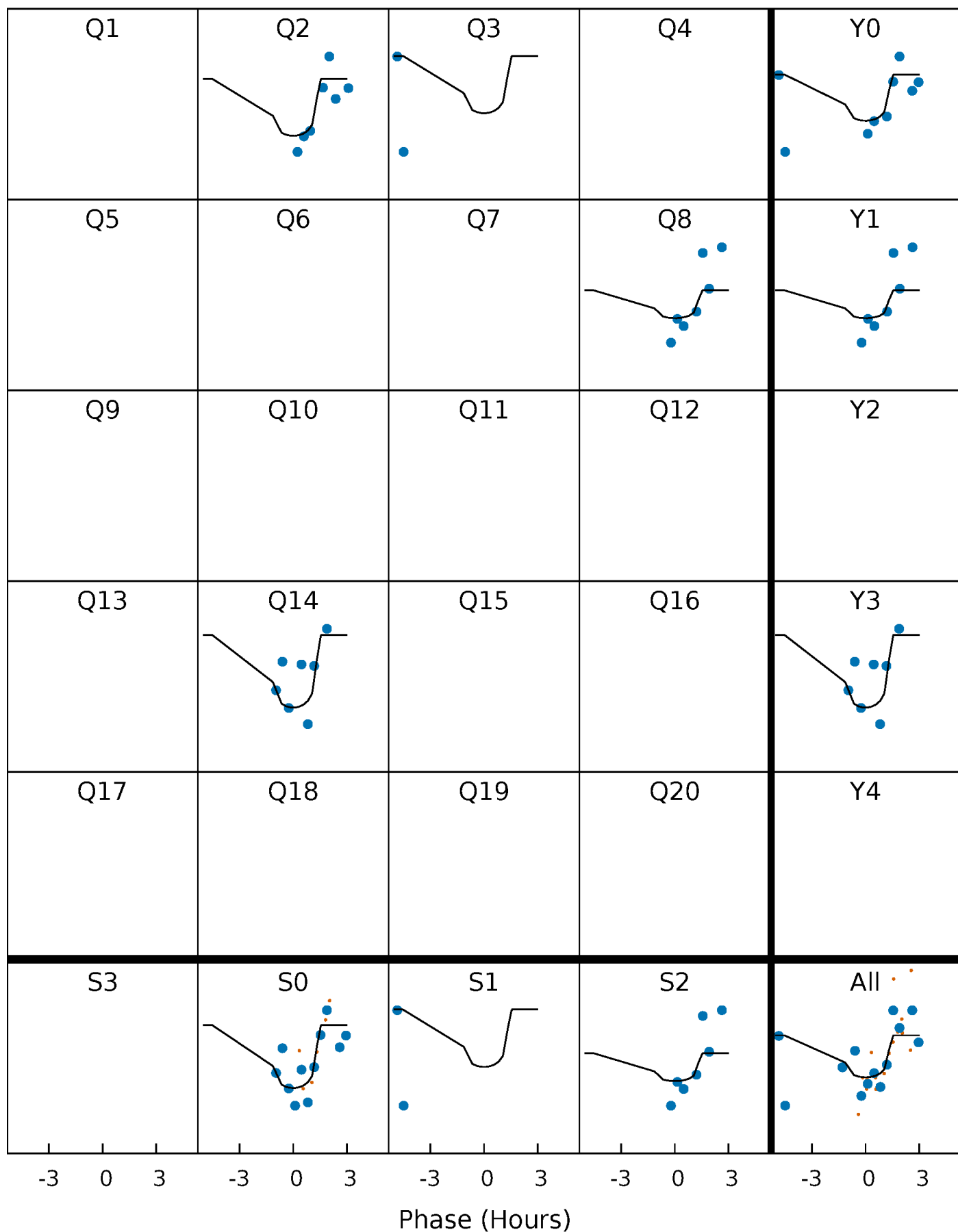
PDC Quarter-Phased Transit Curves

TCE 011774013-05 P= 96.125516 Days $T_0=209.751529$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 011774013-05 P= 96.125516 Days $T_0=209.751529$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

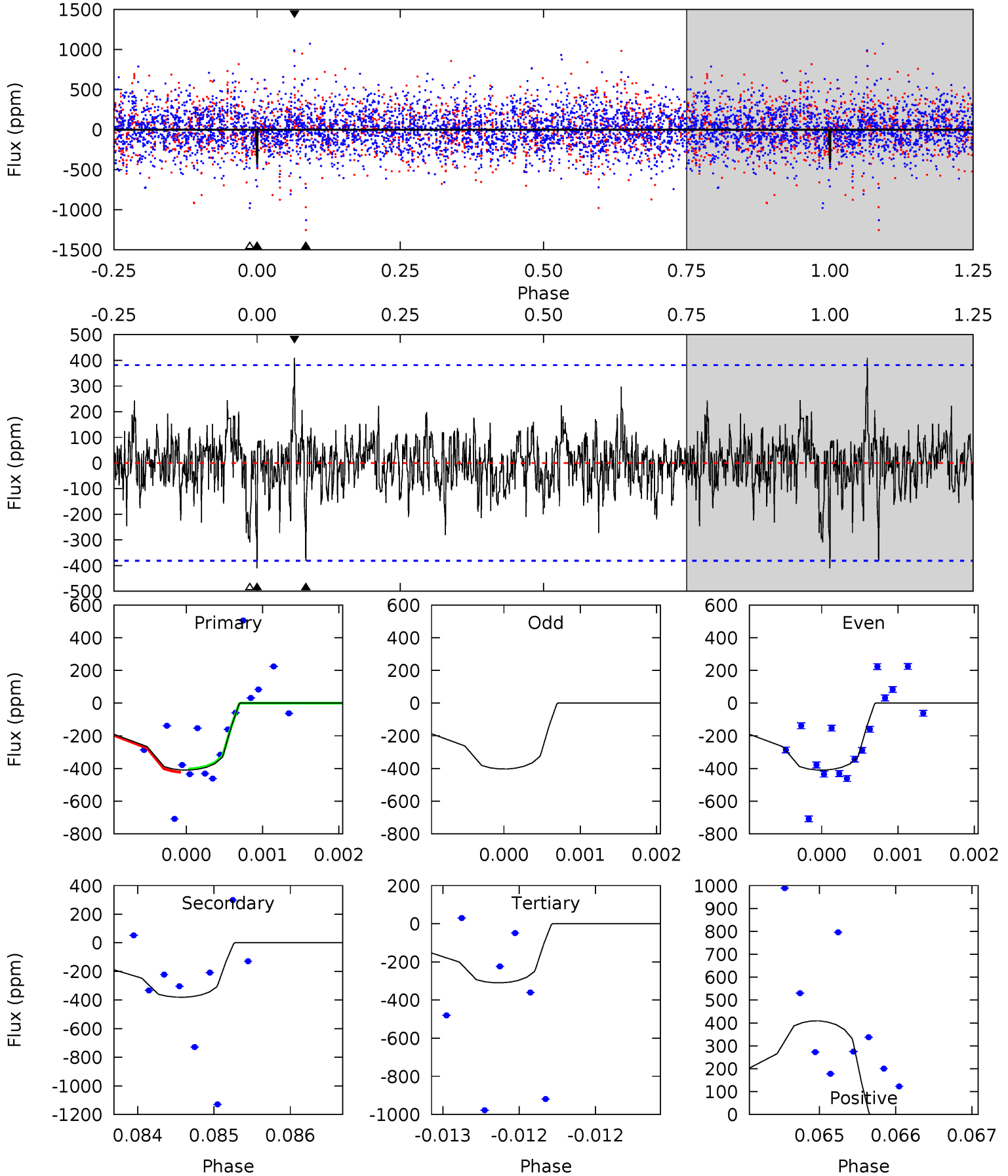
TCE 011774013-05 P= 96.124386 Days $T_0=209.776035$ (BKJD)



DV Model-Shift Uniqueness Test

011774013-05, P = 96.125516 Days, E = 113.626013 Days

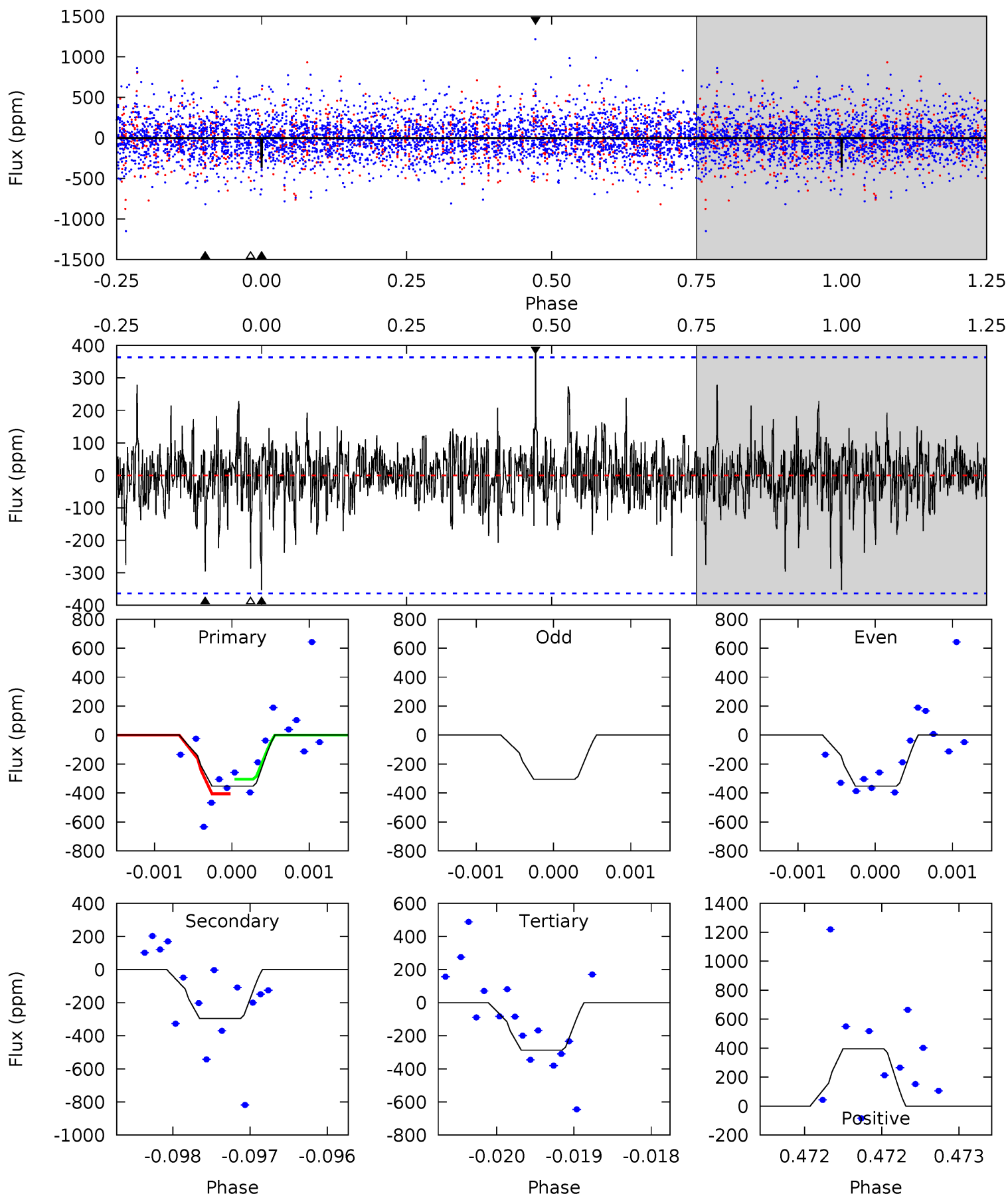
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.87	5.45	4.44	5.86	5.46	3.30	1.18	1.44	0.01	1.01	-0.41	0.07	0.96	0.50	0.11



Alt Model-Shift Uniqueness Test

011774013-05, P = 96.124386 Days, E = 113.651649 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.31	4.44	4.32	5.94	5.47	3.32	1.07	0.99	-0.64	0.13	-1.50	0.44	0.94	0.53	0.75



Stellar Parameters For KIC 011774013

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6522^{+182}_{-228}	$3.546^{+0.680}_{-0.120}$	$-0.300^{+0.300}_{-0.250}$	$3.564^{+0.539}_{-2.157}$	$1.627^{+0.185}_{-0.556}$	$0.051^{+0.554}_{-0.018}$
	+3%/-3%	+19%/-3%	+100%/-83%	+15%/-61%	+11%/-34%	+1094%/-35%
Source	PHO54	PHO54	PHO54	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011774013-05 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-380 ± 70	$17.14^{+21.75}_{-11.91}$	1059^{+85}_{-169}	4238^{+2907}_{-940}	161^{+1616}_{-130}
Alt.	-295 ± 66	$17.69^{+20.37}_{-12.31}$	1064^{+77}_{-171}	4017^{+2532}_{-849}	115^{+1132}_{-90}

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

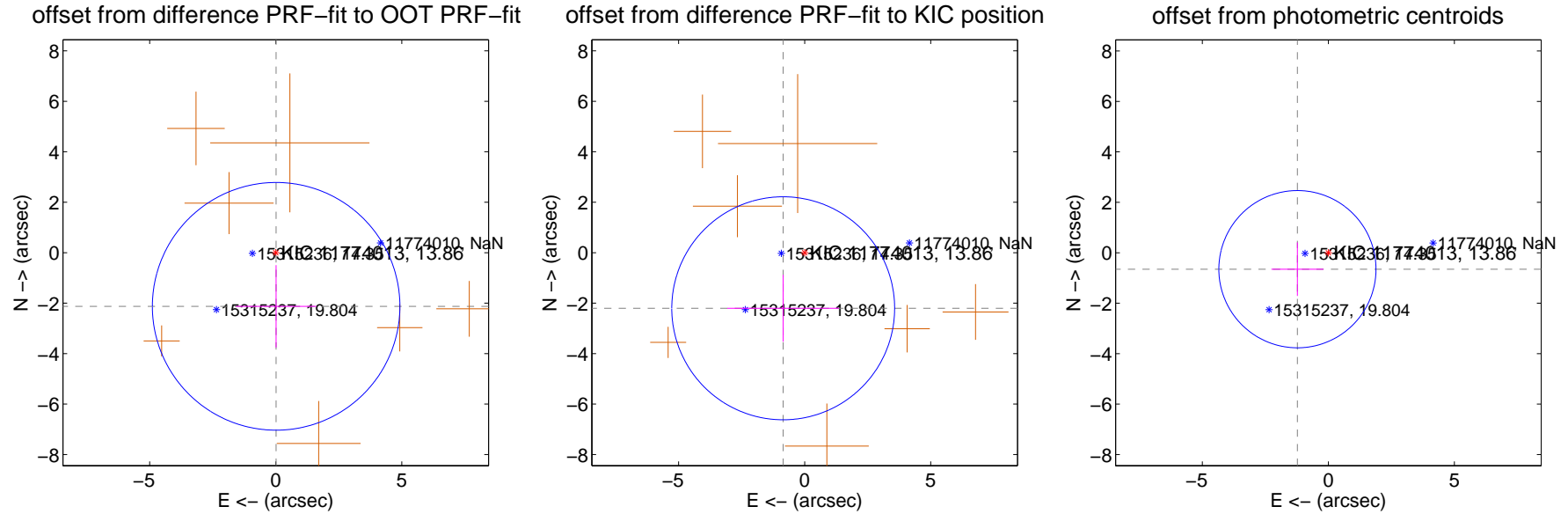
DV Centroid Data

Supplemental centroid analysis for 011774013-05. Kepler magnitude: 13.86. Transit SNR 10.45

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.90 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.126 ± 1.636	1.30	-0.016 ± 1.597	-2.126 ± 1.633
PRF-fit source offset from KIC position	2.362 ± 1.473	1.60	0.851 ± 2.217	-2.204 ± 1.327
photometric centroid source offset	1.39 ± 1.04	1.34	1.23 ± 1.03	-0.65 ± 1.06



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.

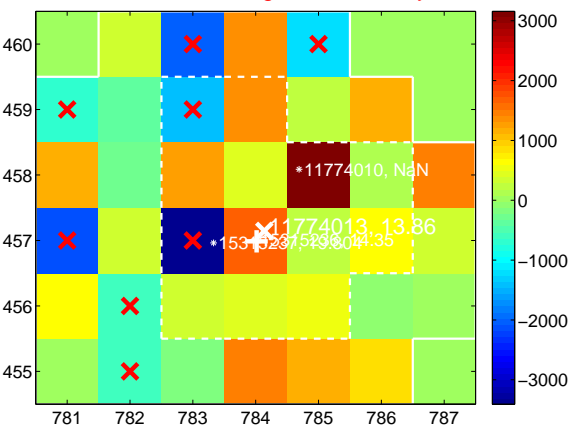
Q1 no difference image



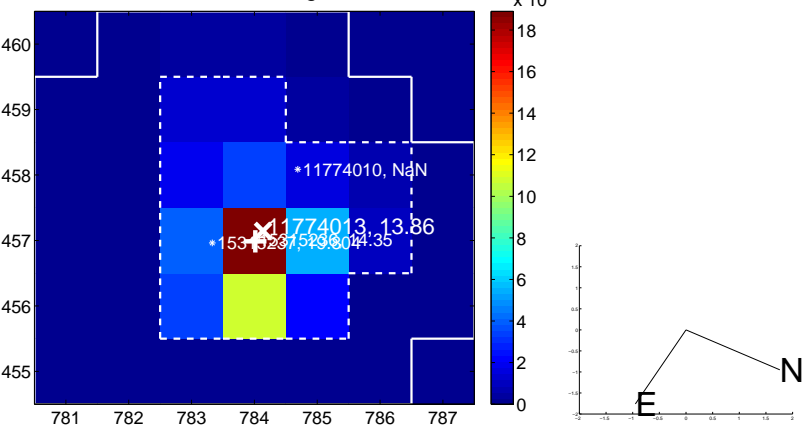
Q1 no OOT image



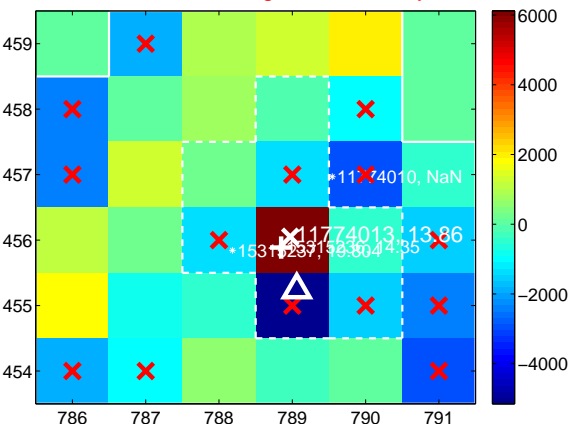
Q2 difference image. Poor Quality



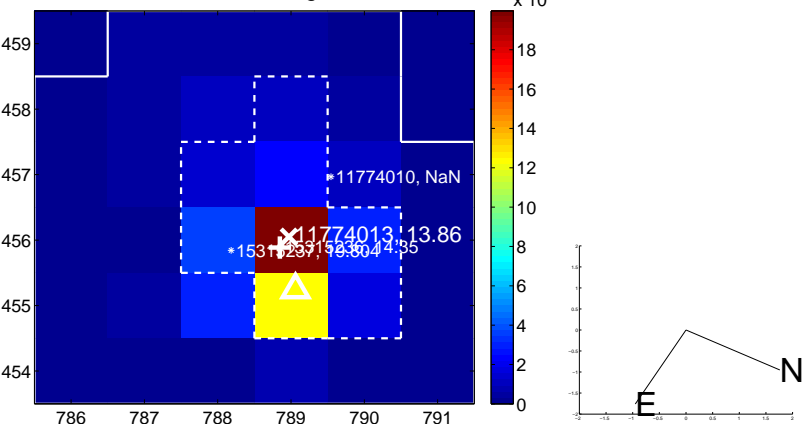
Q2 OOT image



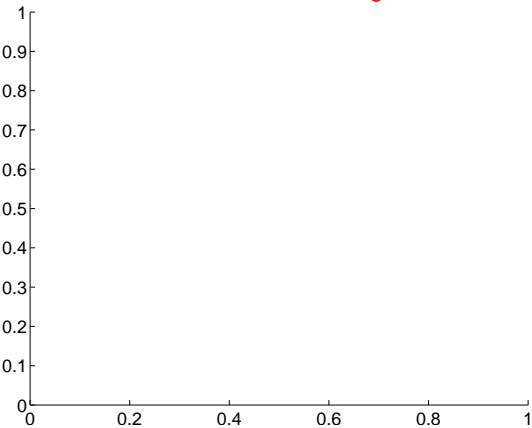
Q3 difference image. Poor Quality



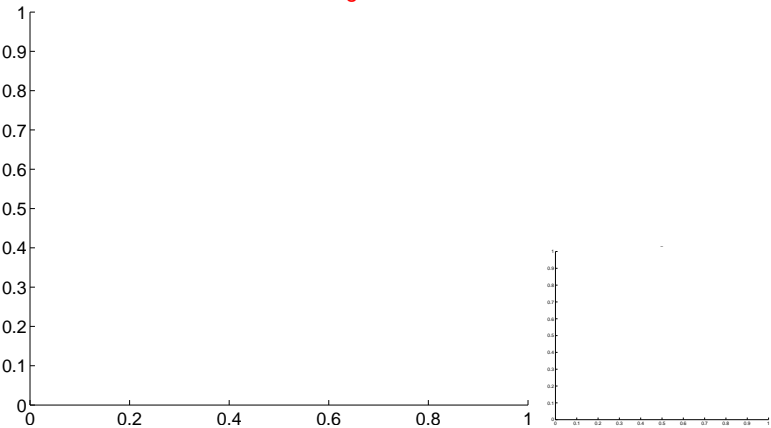
Q3 OOT image



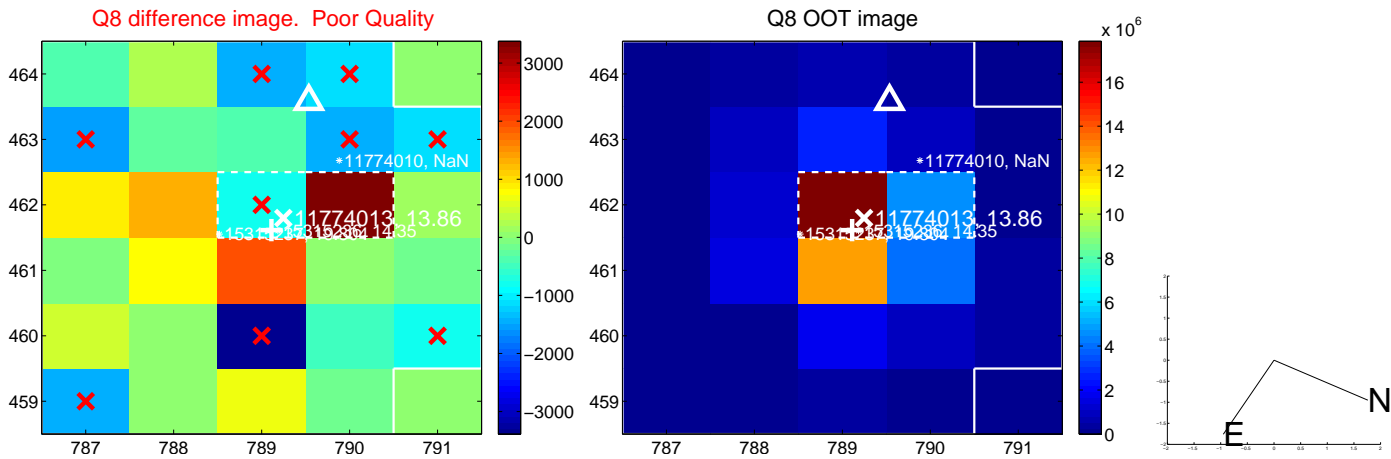
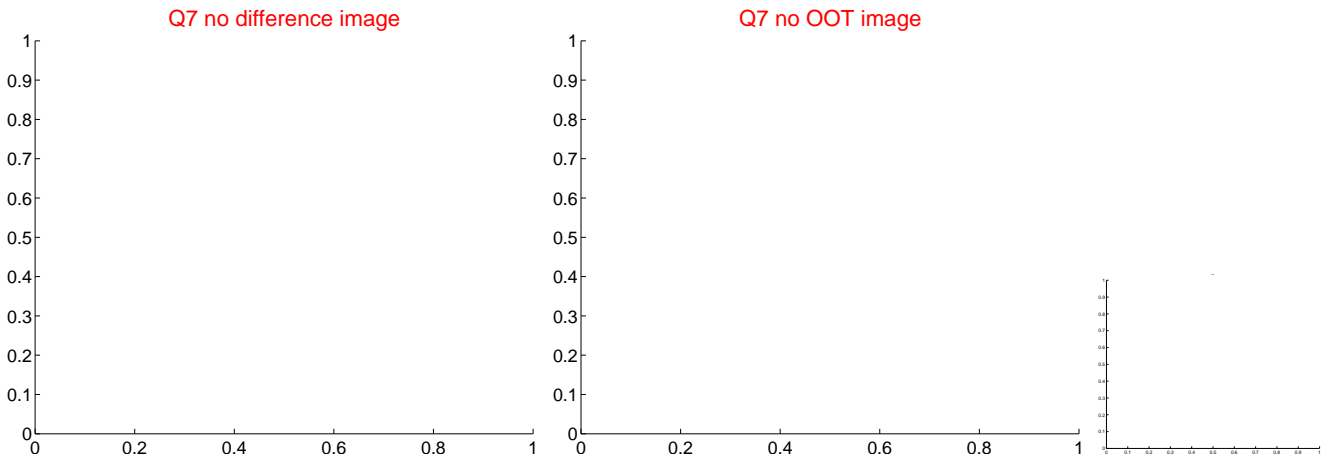
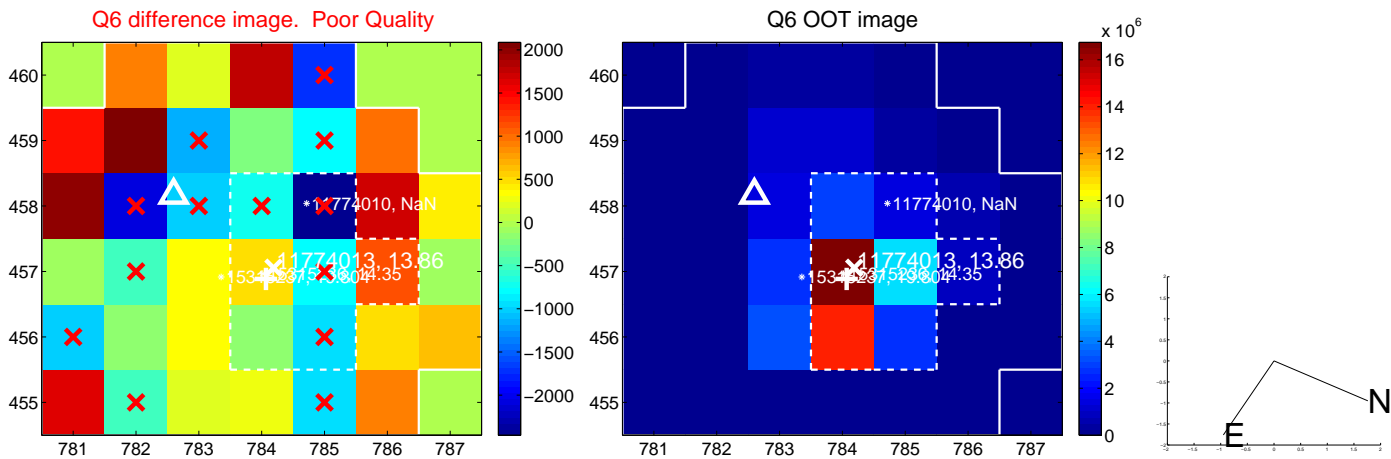
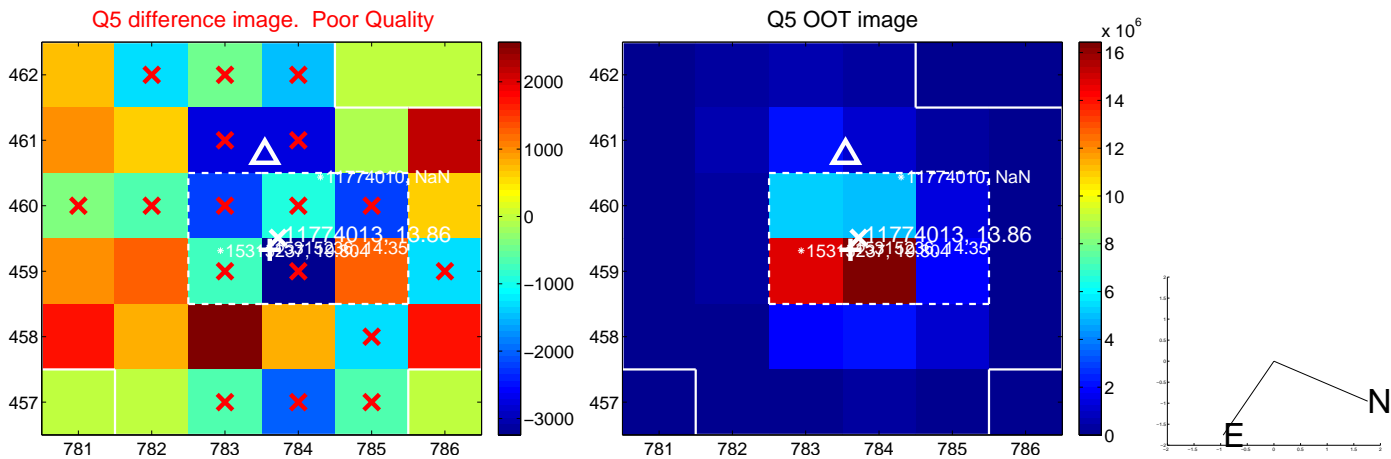
Q4 no difference image



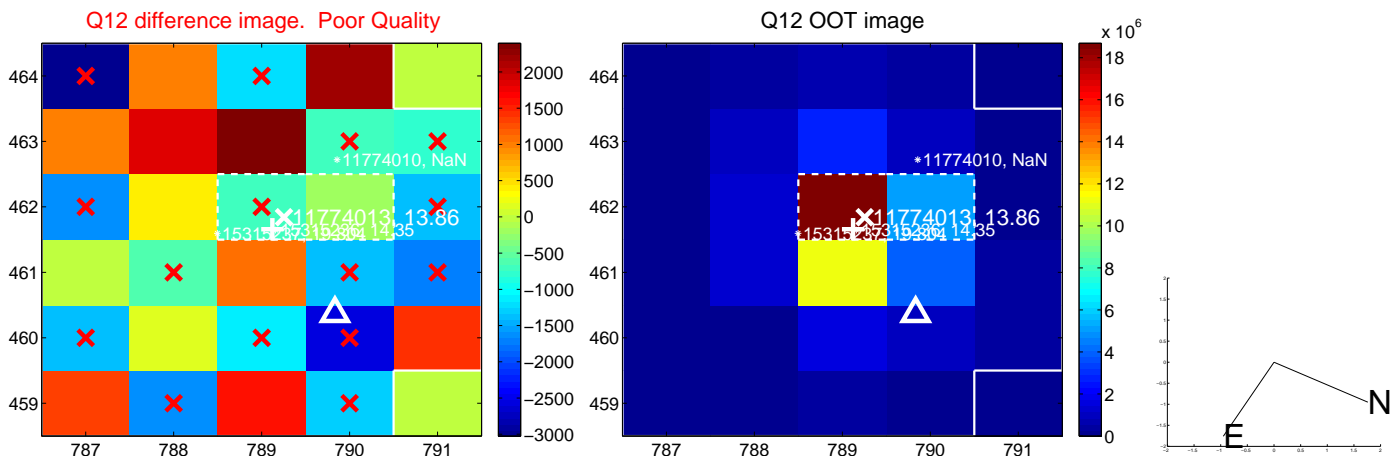
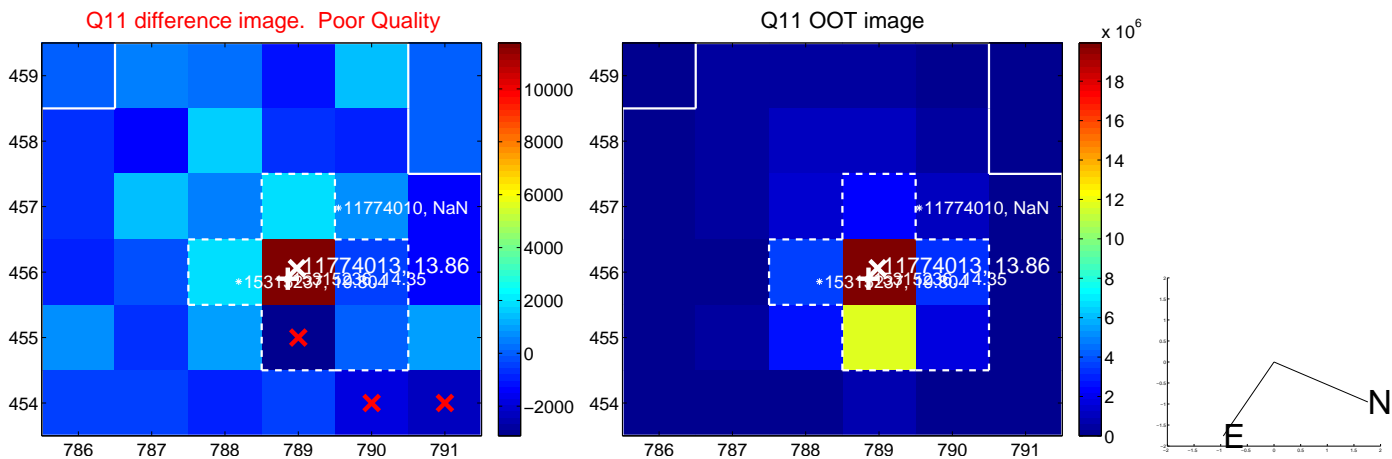
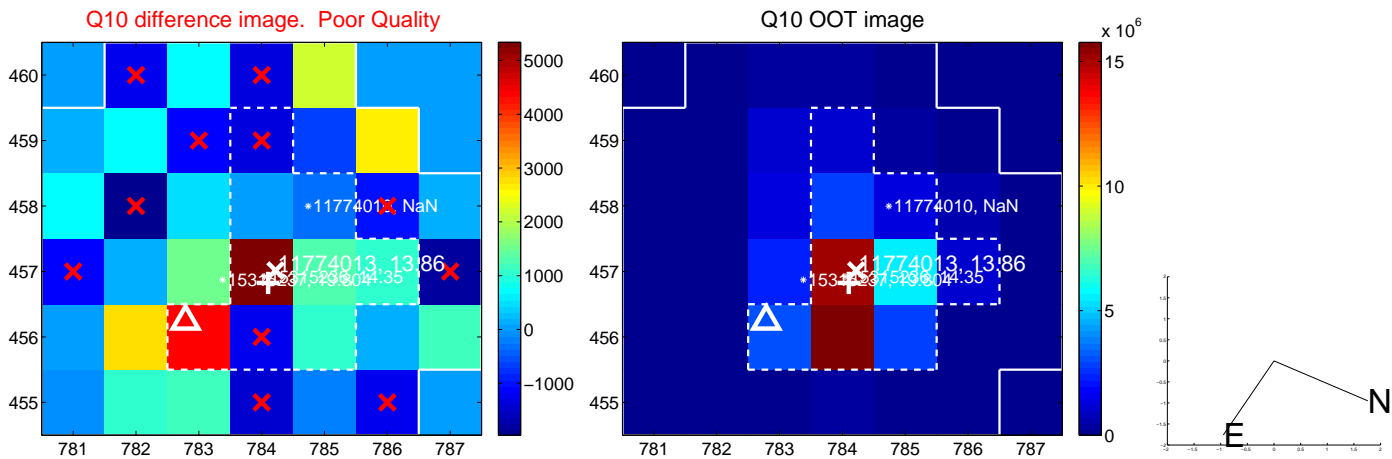
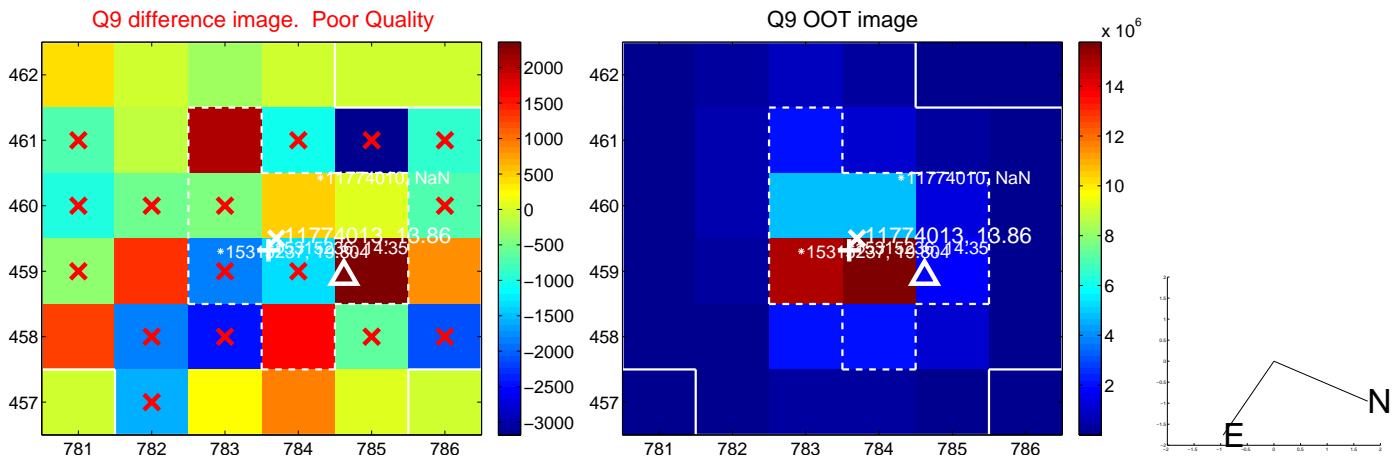
Q4 no OOT image



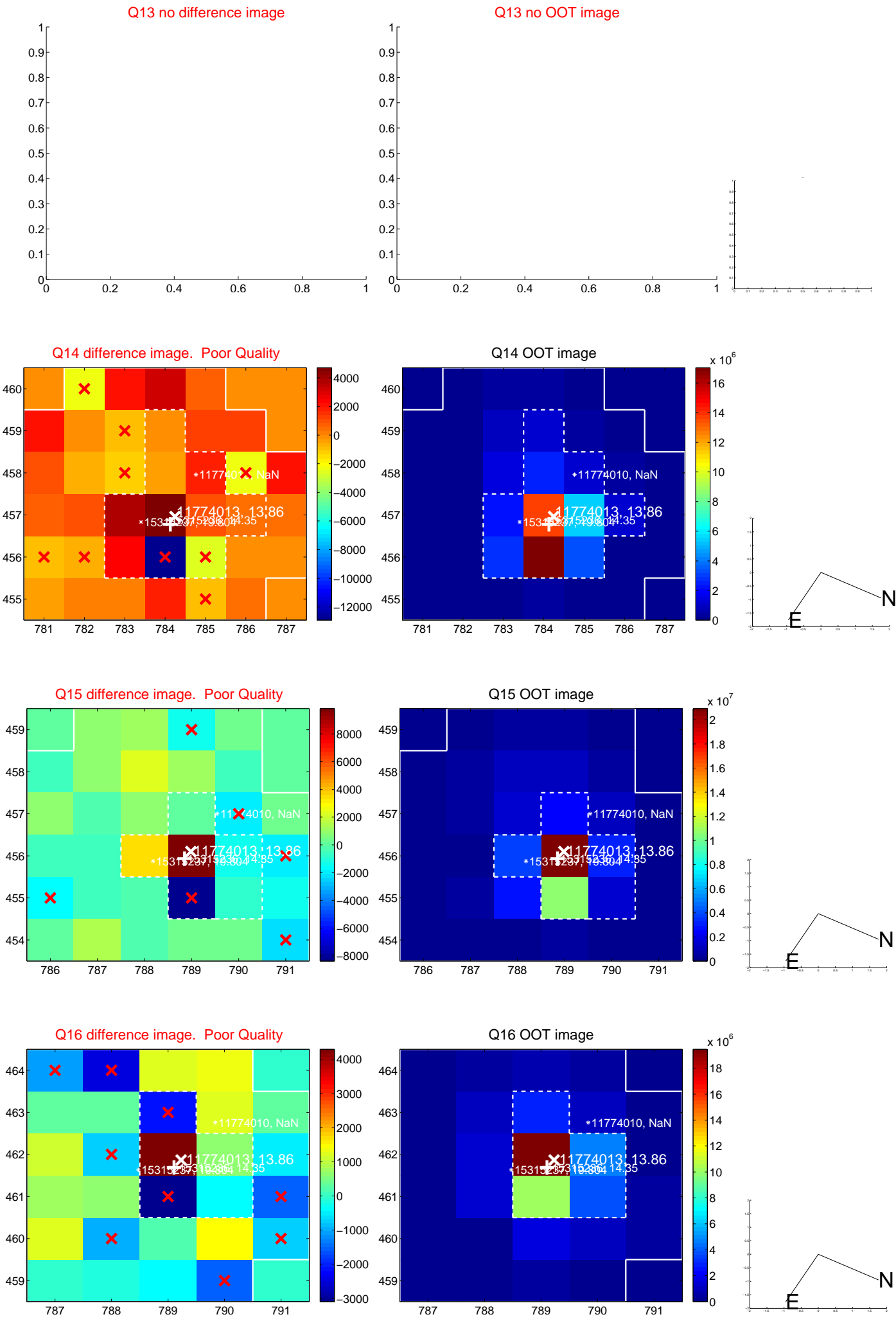
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



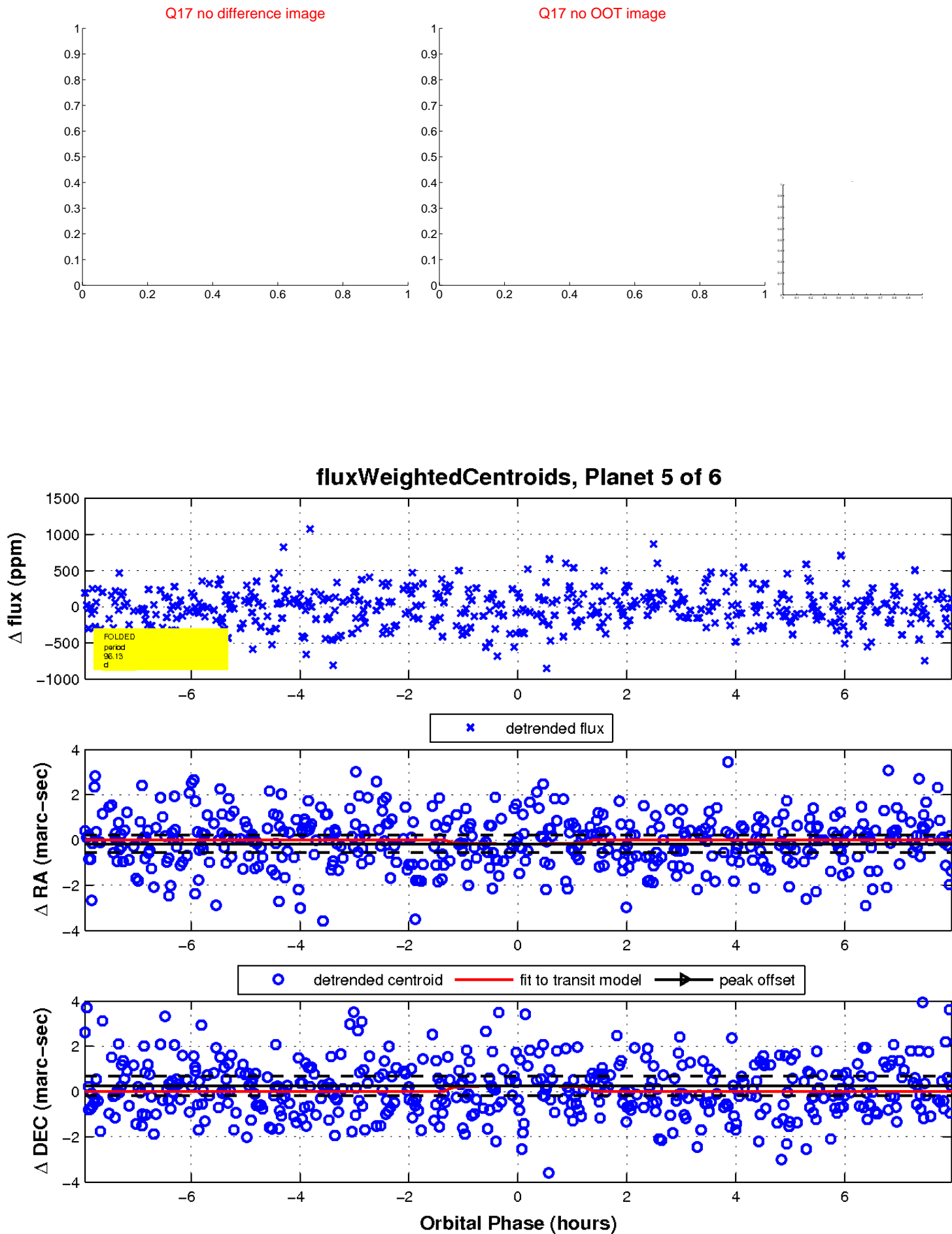
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

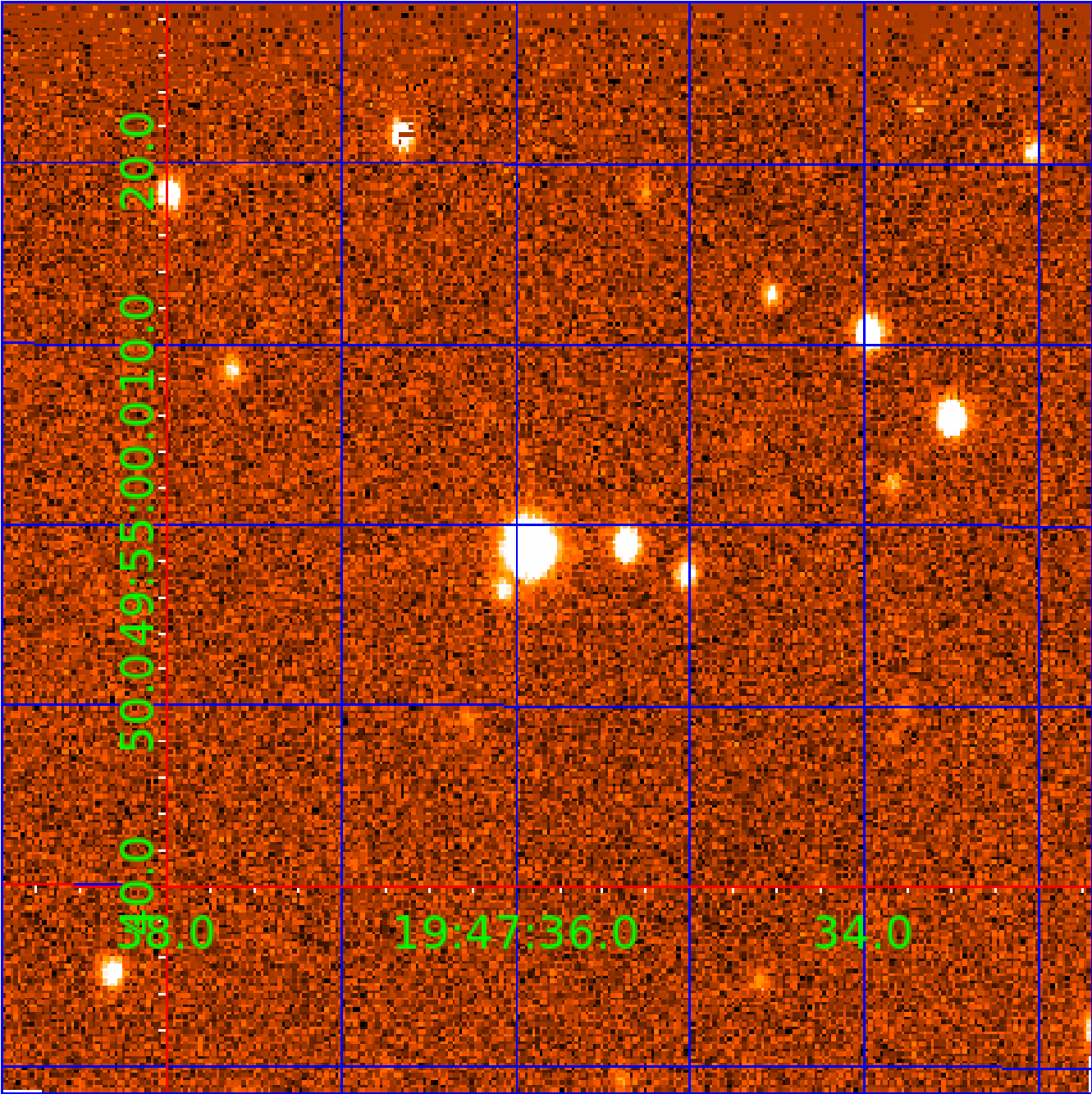


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011774013

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})
011774013-01	OBS	No	1.878606	131.849759	11.0	13.744	10.9	4.7	3.56	6522	1.29	16746.67
011774013-02	OBS	No	31.281057	143.956892	488.3	2.792	16.0	13.2	3.56	6522	8.93	393.85
011774013-03	OBS	No	26.898709	135.712572	276.4	4.075	11.8	11.7	3.56	6522	6.91	481.65
011774013-04	OBS	No	23.278293	144.361034	262.5	4.124	10.7	10.7	3.56	6522	7.00	584.04
011774013-05	OBS	No	96.125516	209.751529	376.3	2.661	9.6	10.5	3.56	6522	7.01	88.16
011774013-06	OBS	No	35.543544	135.384255	440.0	1.455	10.5	10.5	3.56	6522	7.61	332.17

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011774013-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—CENT_KIC_POS
011774013-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_KIC_POS
011774013-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
011774013-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—CENT_FEW_DIFFS
011774013-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
011774013-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_FEW_MEAS

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

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

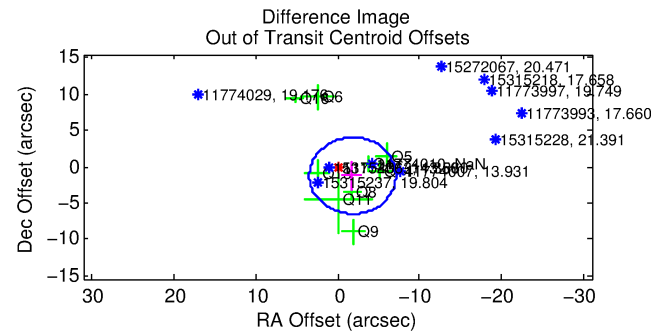
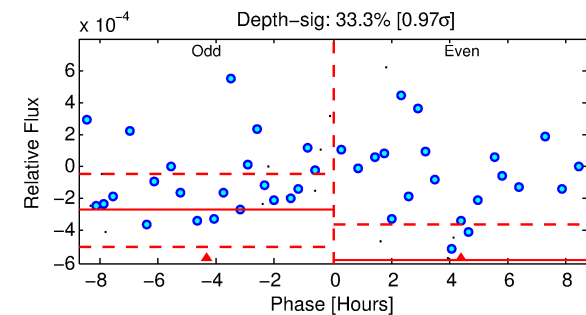
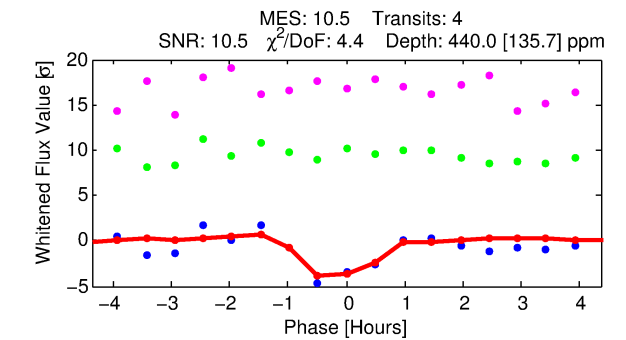
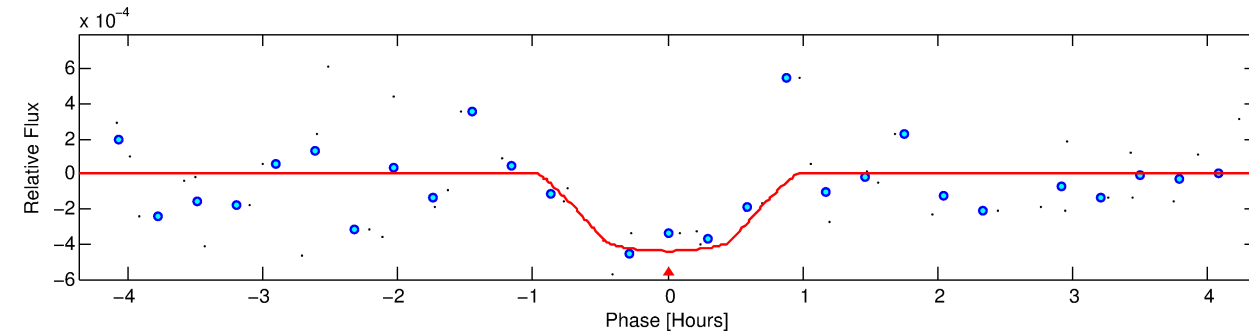
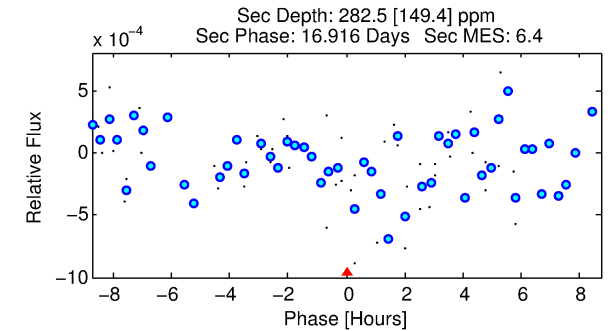
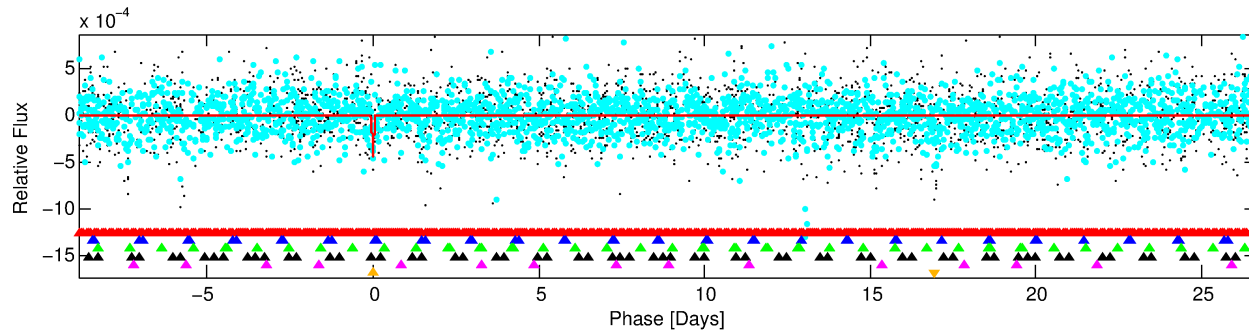
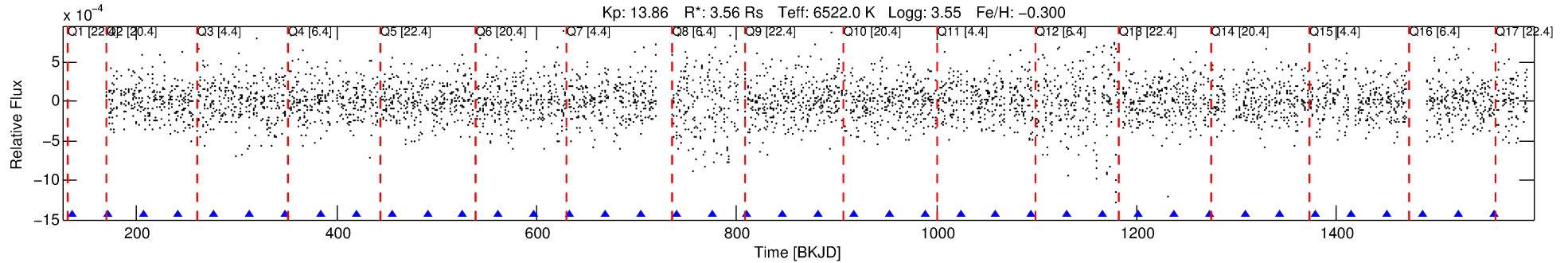
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011774013-06

No Significant Match Found

DV One-Page Summary

KIC: 11774013 Candidate: 6 of 6 Period: 35.544 d



DV Fit Results:

Period = 35.54354 [0.00078] d
Epoch = 135.3843 [0.0134] BKJD
Rp/R* = 0.0196 [0.1095]
a/R* = 181.92 [5347.18]
b = 0.30 [90.09]
Seff = 332.17 [374.62]
Teq = 1089 [307] K
Rp = 7.61 [42.85] Re
a = 0.2490 [0.1642] AU
Ag = 166.22 [1871.74] [0.09 σ]
Teffp = 6043 [16930] K [0.29 σ]

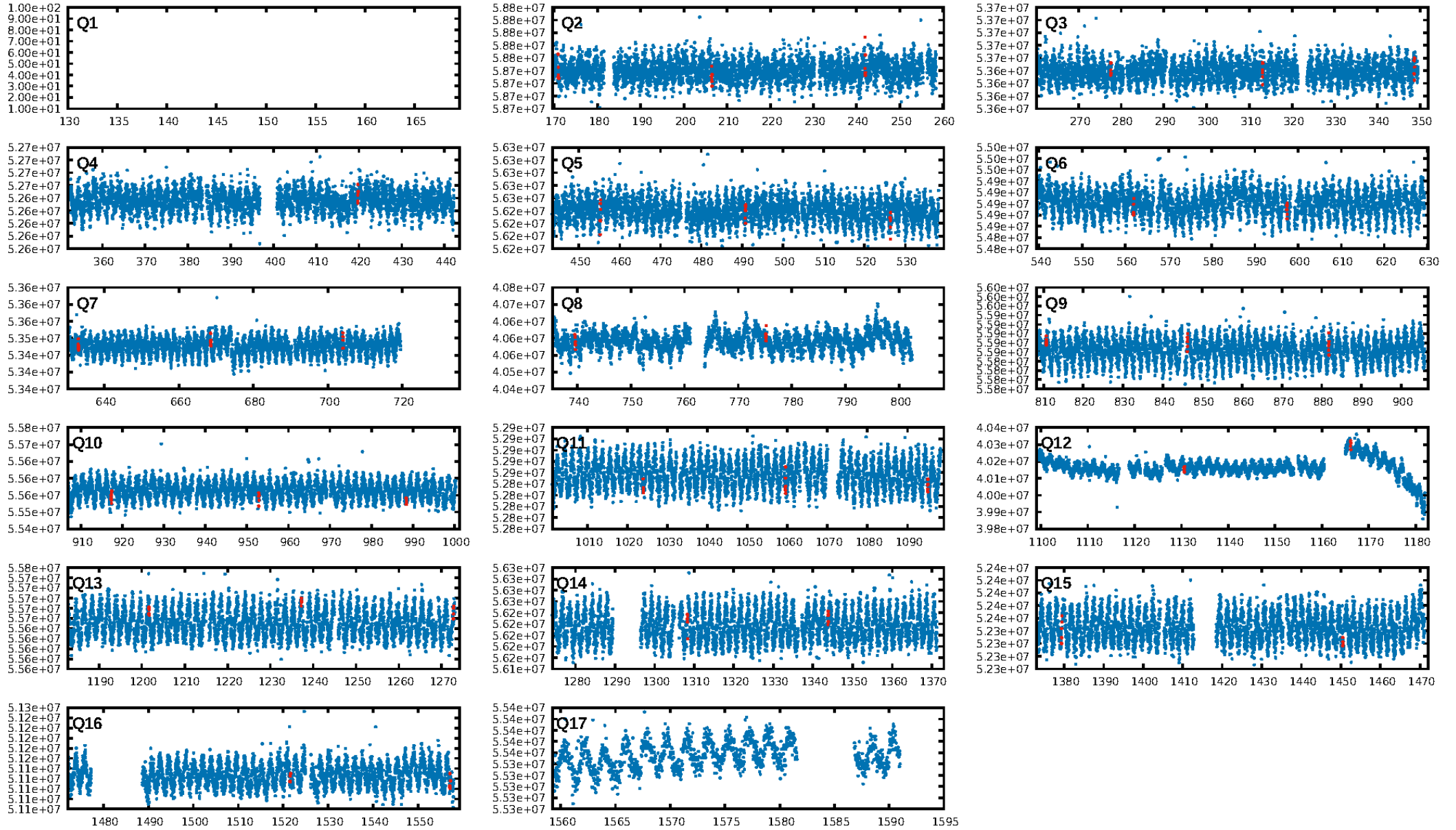
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [32.50 σ]
LongPeriod-sig: 100.0% [479.43 σ]
ModelChiSquare2-sig: 21.0%
ModelChiSquareGof-sig: 79.0%
Bootstrap-pfa: 3.12e-07
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 2.343
Centroid-sig: 18.5%
Centroid-so: 0.490 arcsec [0.63 σ]
OotOffset-rm: 2.198 arcsec [1.25 σ]
KicOffset-rm: 1.655 arcsec [0.84 σ]
OotOffset-st: 2/1/3/3 [9]
KicOffset-st: 2/1/3/3 [9]
DiffImageQuality-fgm: 0.11 [1/9]
DiffImageOverlap-fno: 0.53 [8/15]

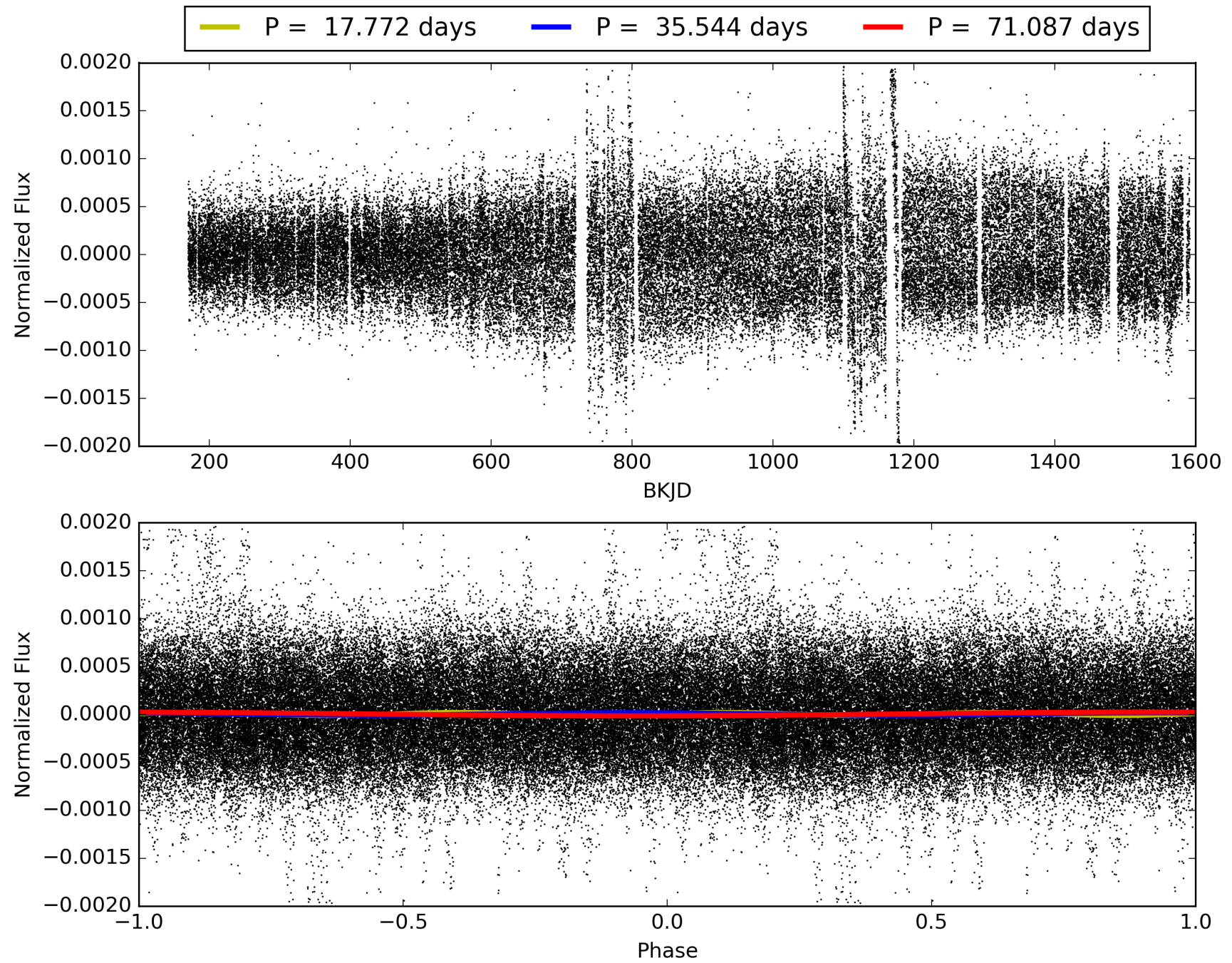
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:34:34 Z

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

TCE 011774013-06, PDC Light Curves

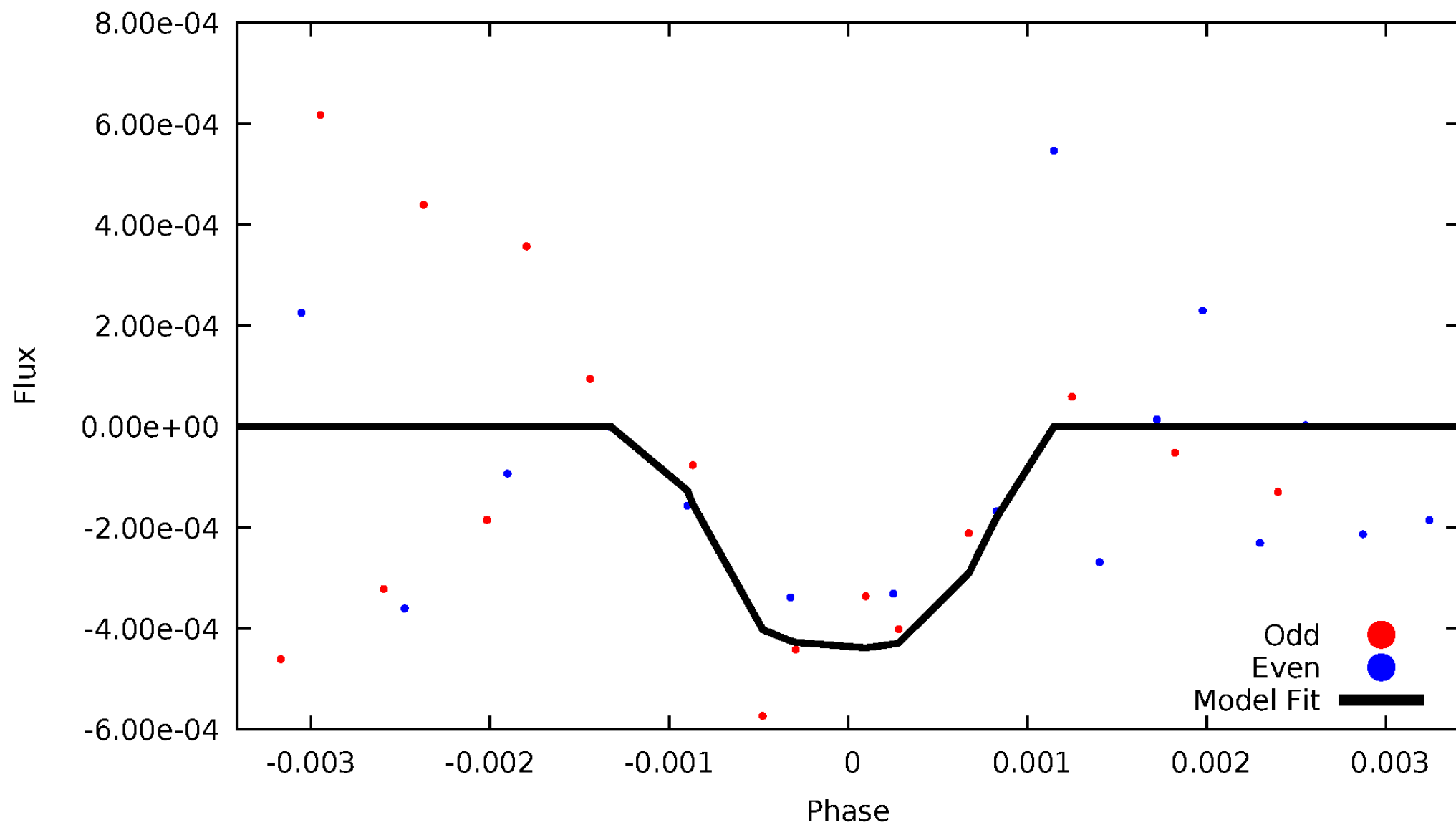


TCE 011774013-06



DV Odd/Even

TCE 011774013-06

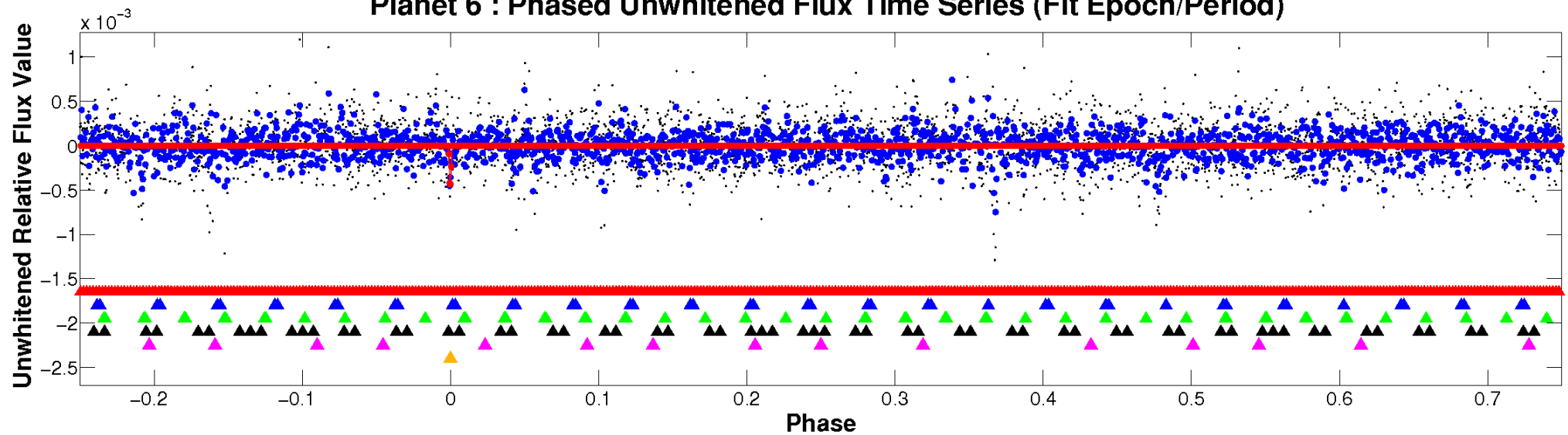


ALT Odd/Even

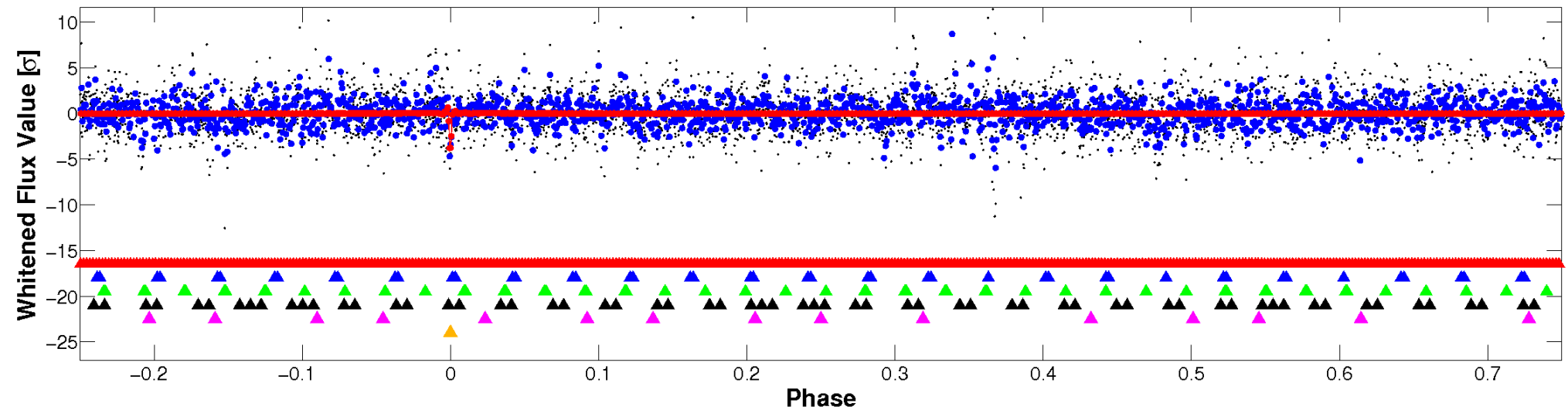
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

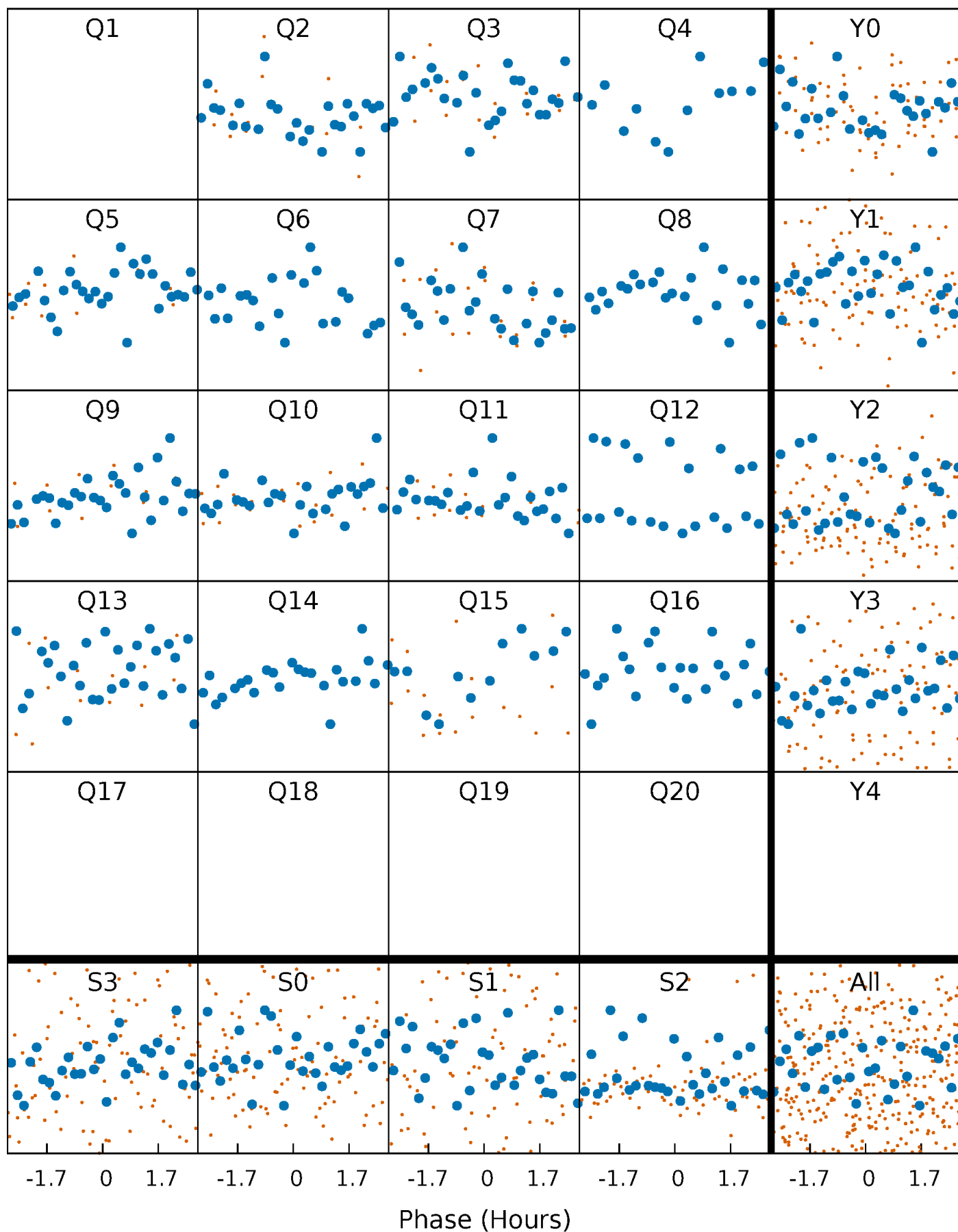


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



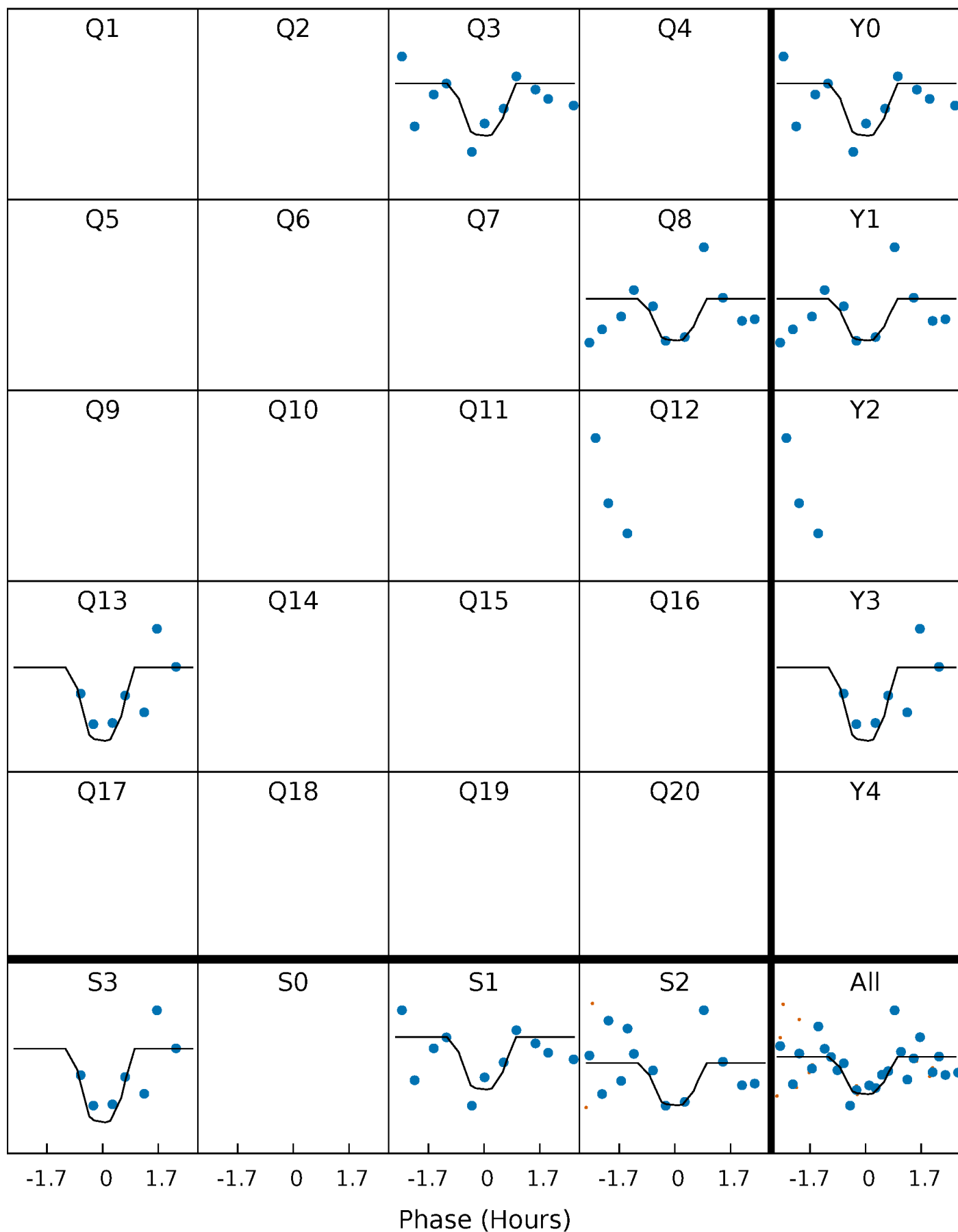
PDC Quarter-Phased Transit Curves

TCE 011774013-06 P= 35.543544 Days $T_0=135.384255$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 011774013-06 P= 35.543544 Days $T_0=135.384255$ (BKJD)

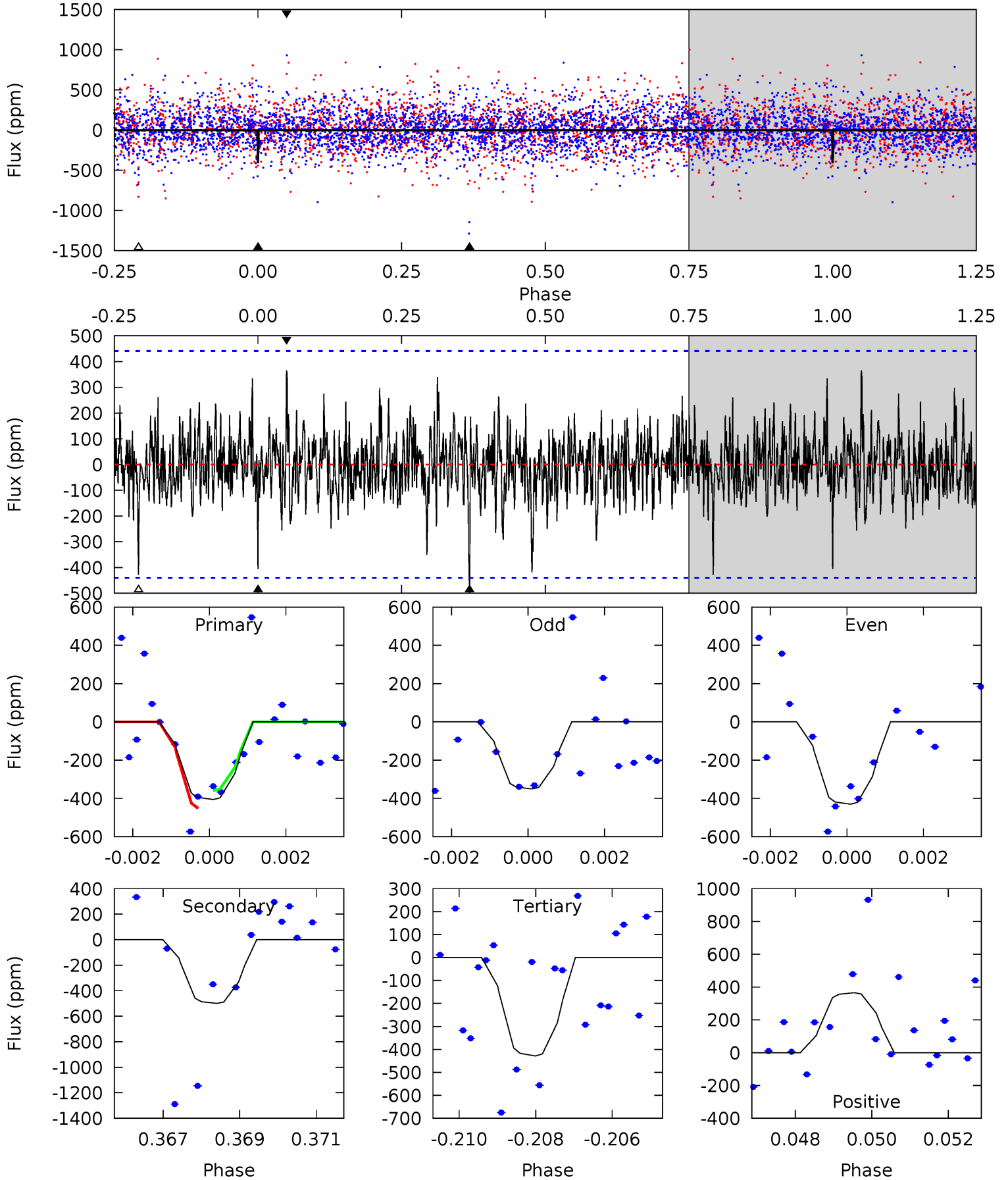


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

011774013-06, P = 35.543544 Days, E = 135.384255 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.90	6.04	5.18	4.41	5.33	3.09	1.20	-0.28	0.49	0.86	1.62	0.47	0.97	0.42	0.55



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 011774013

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6522^{+182}_{-228}	$3.546^{+0.680}_{-0.120}$	$-0.300^{+0.300}_{-0.250}$	$3.564^{+0.539}_{-2.157}$	$1.627^{+0.185}_{-0.556}$	$0.051^{+0.554}_{-0.018}$
	+3%/-3%	+19%/-3%	+100%/-83%	+15%/-61%	+11%/-34%	+1094%/-35%
Source	PHO54	PHO54	PHO54	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011774013-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-500 ± 83	$28.53^{+31.14}_{-19.69}$	1481^{+114}_{-211}	3765^{+2174}_{-774}	21^{+200}_{-16}
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 $A_{\text{obs}} \gg 1.0$

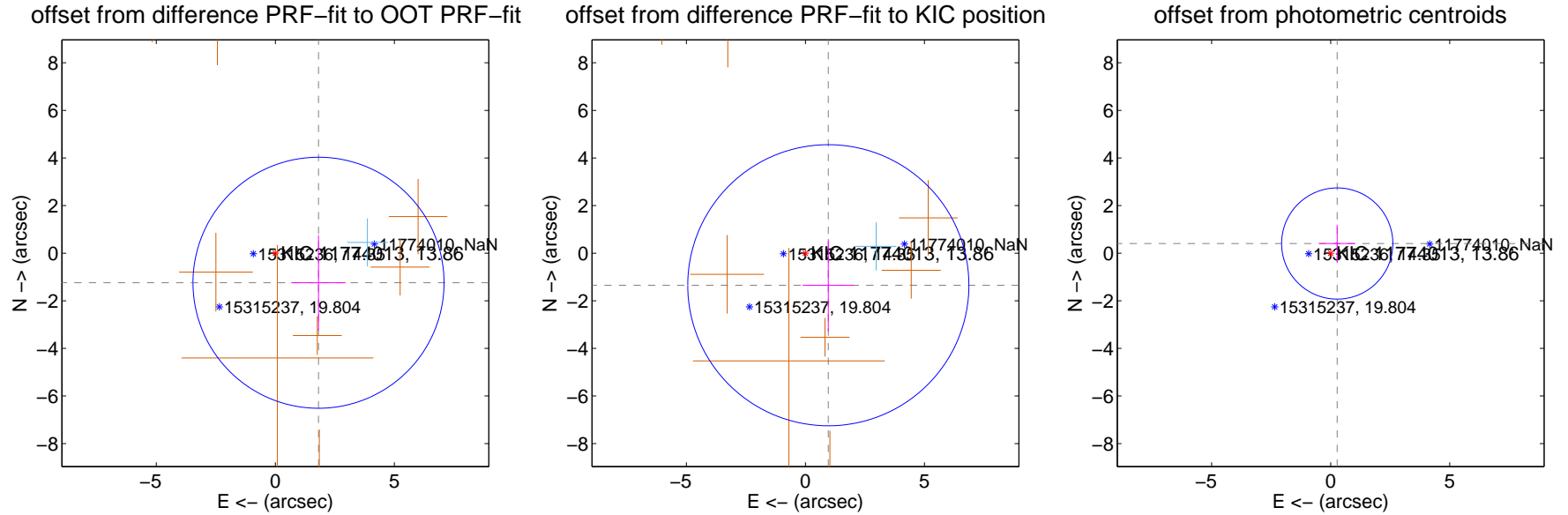
DV Centroid Data

Supplemental centroid analysis for 011774013-06. Kepler magnitude: 13.86. Transit SNR 10.45

There are 1 quarters with good PRF difference image offsets

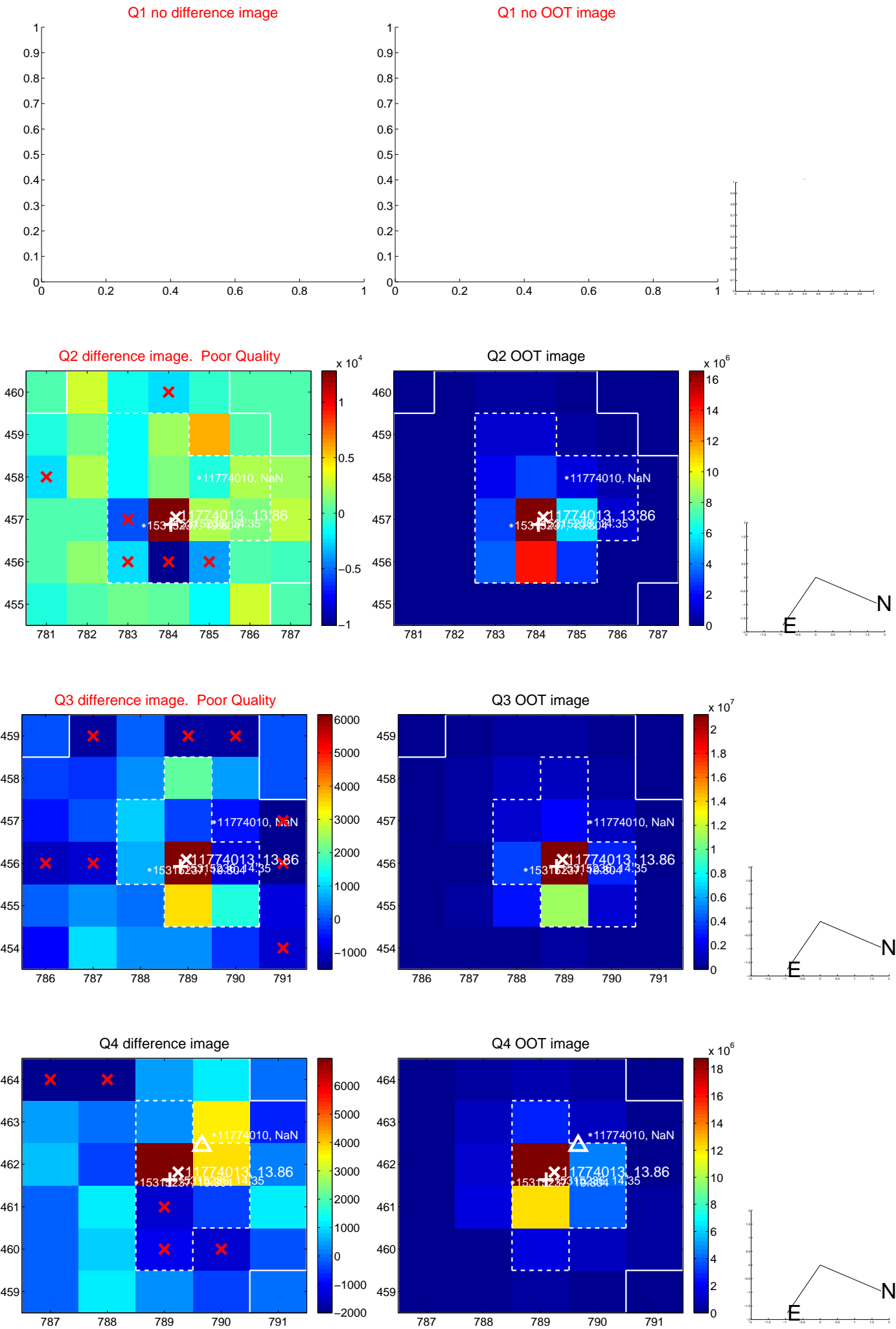
The direct PRF centroid is offset from the target star catalog position by about 0.87 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.198 ± 1.758	1.25	-1.814 ± 1.145	-1.242 ± 1.997
PRF-fit source offset from KIC position	1.655 ± 1.968	0.84	-0.962 ± 1.084	-1.347 ± 1.938
photometric centroid source offset	0.49 ± 0.78	0.63	-0.28 ± 0.76	0.41 ± 0.79

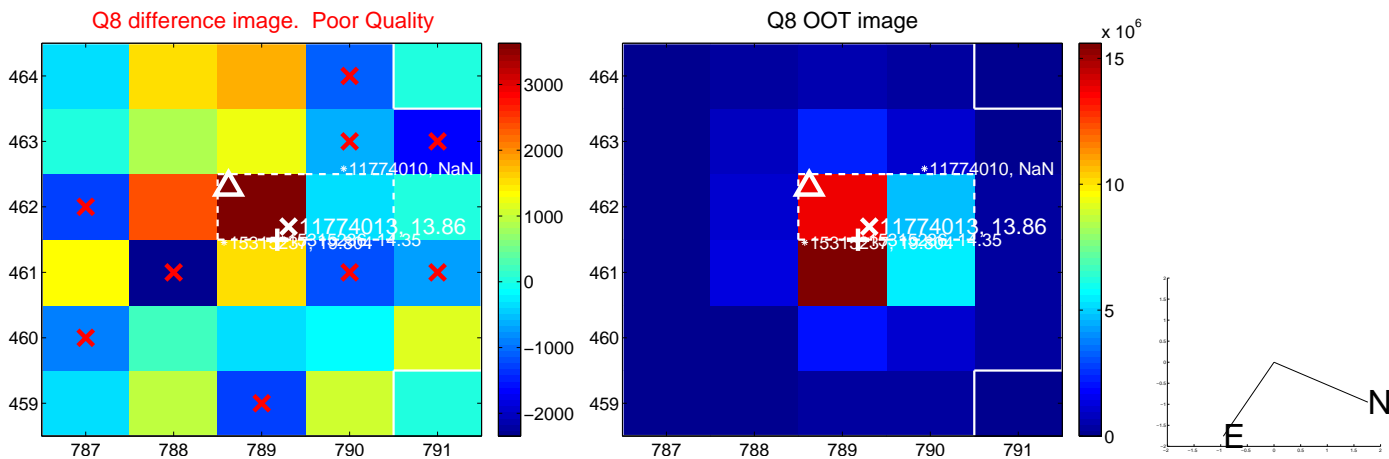
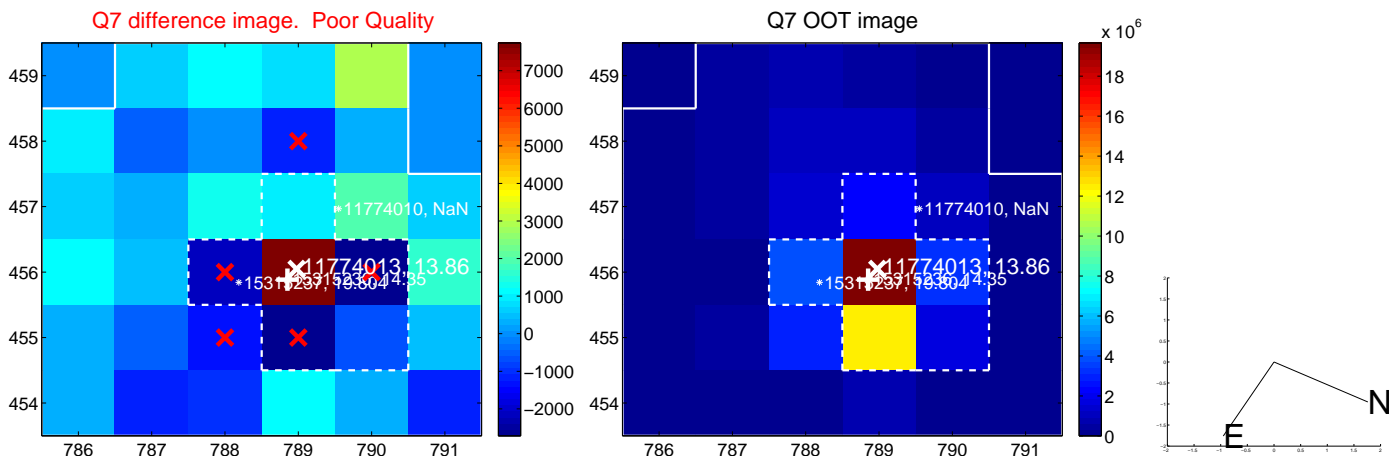
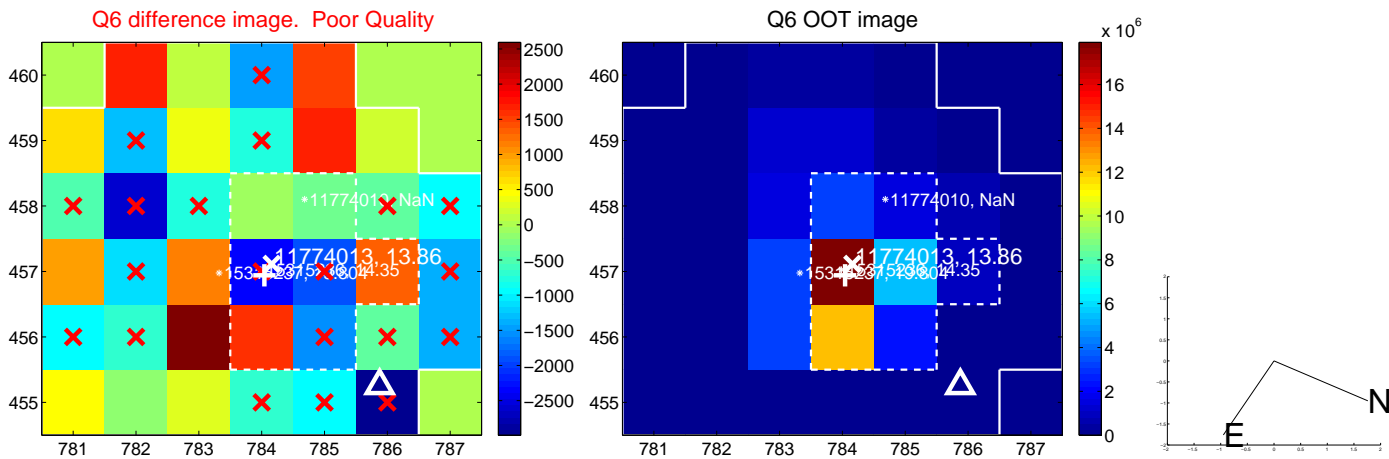
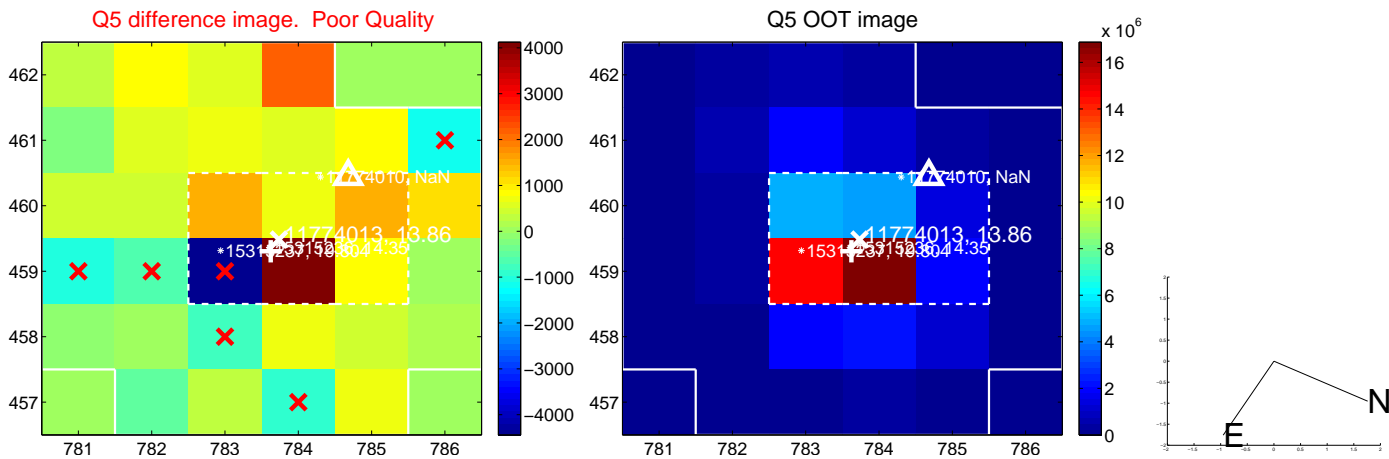


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

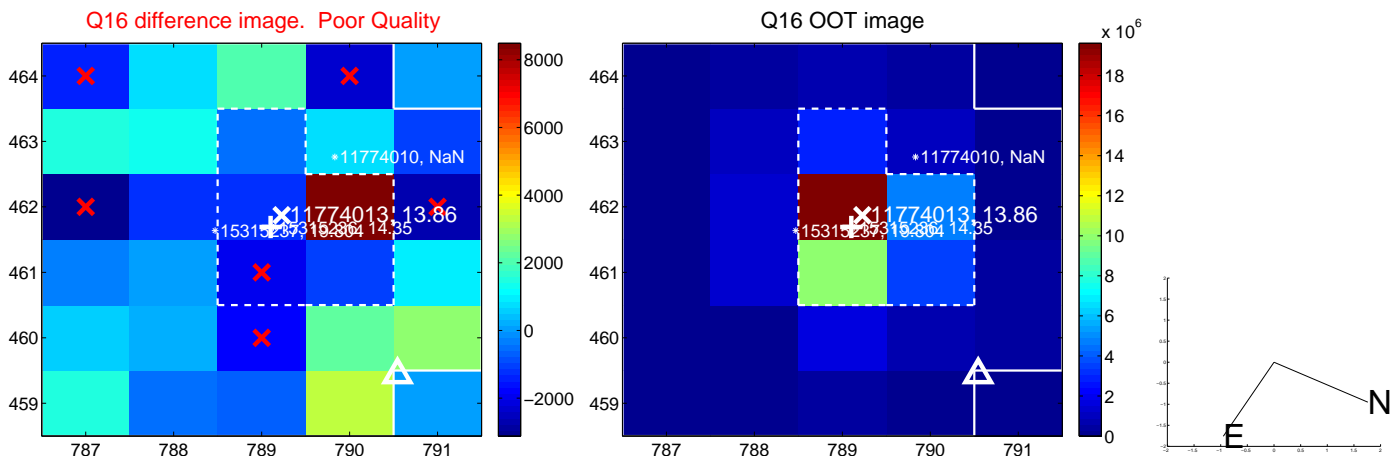
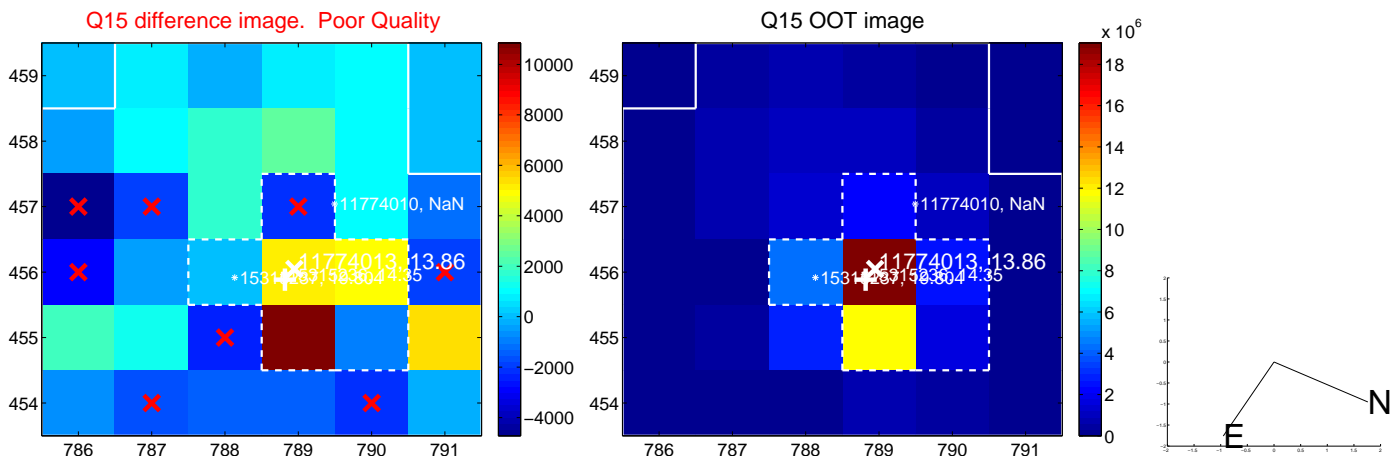
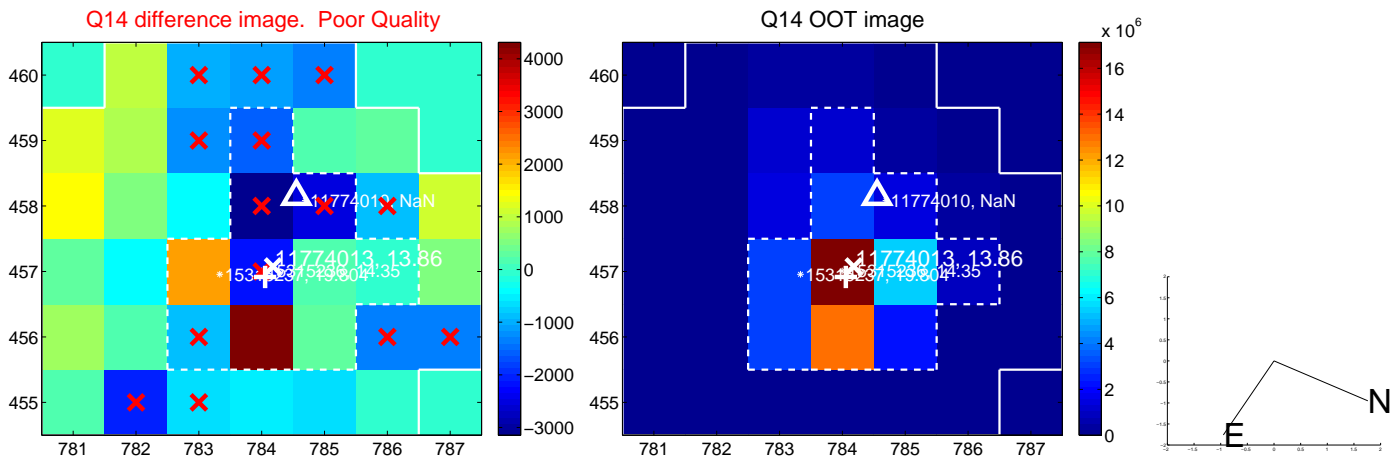
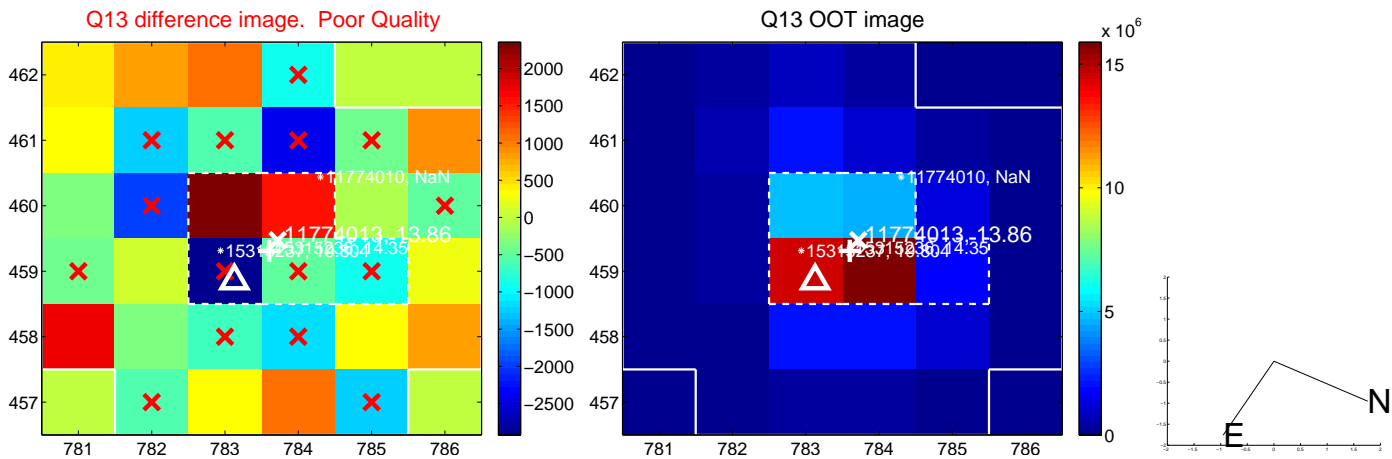
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



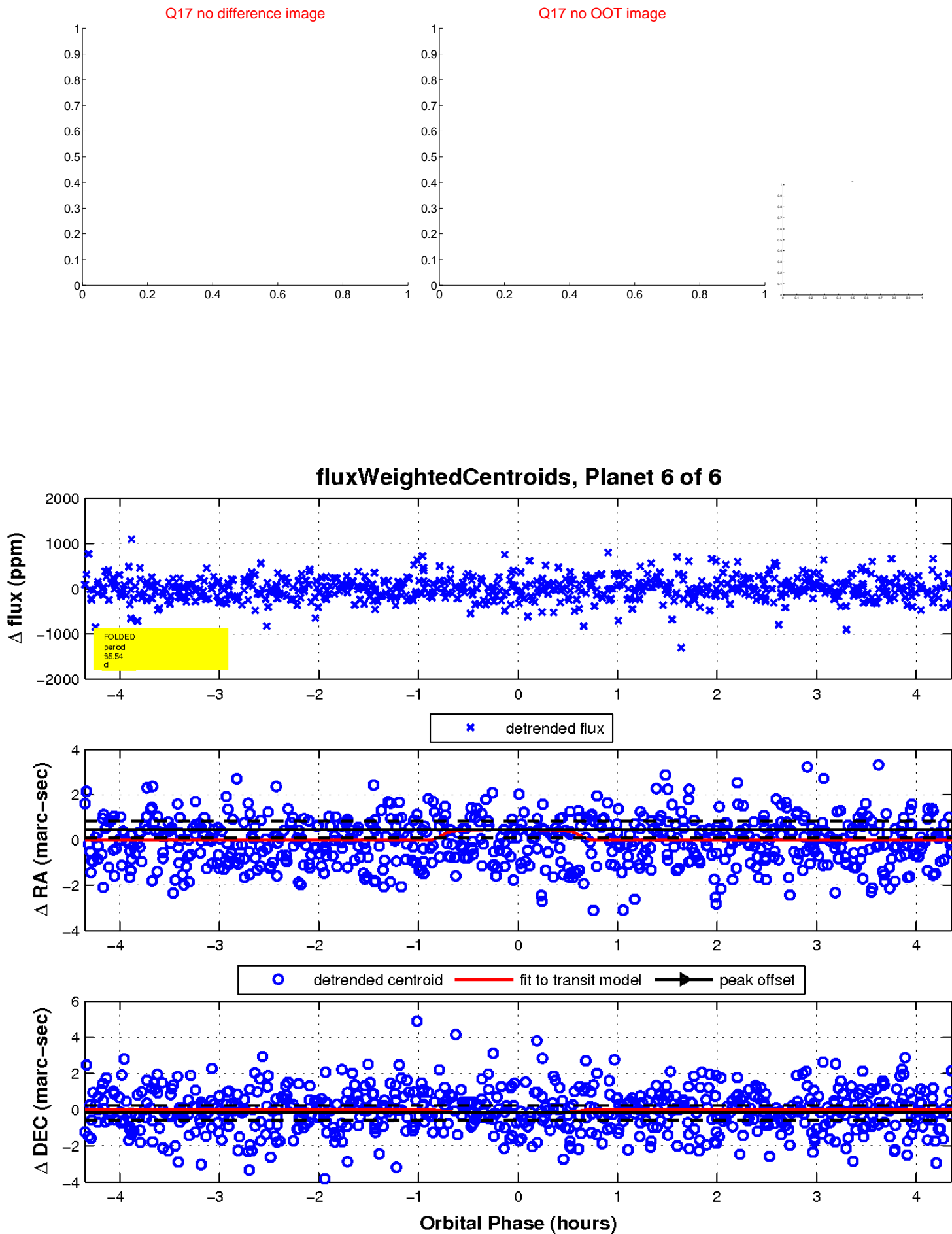
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

