

KIC 001572114

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})
001572114-01	OBS	No	639.047341	215.806413	1299.2	31.349	9.5	9.7	0.87	5518	3.13	0.32
001572114-02	OBS	No	542.137613	199.045804	794.0	2.062	7.9	2.5	0.87	5518	2.49	0.40
001572114-03	OBS	No	365.292061	376.581541	1129.0	25.479	7.9	9.4	0.87	5518	2.93	0.67

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
001572114-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
001572114-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
001572114-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

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

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

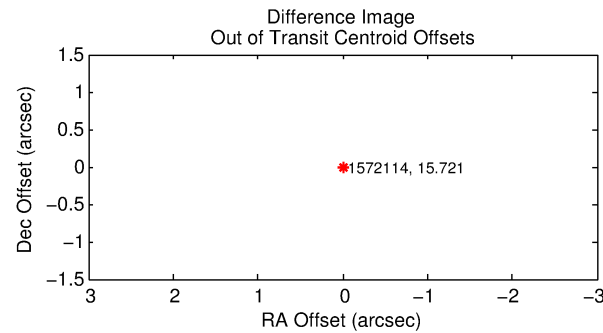
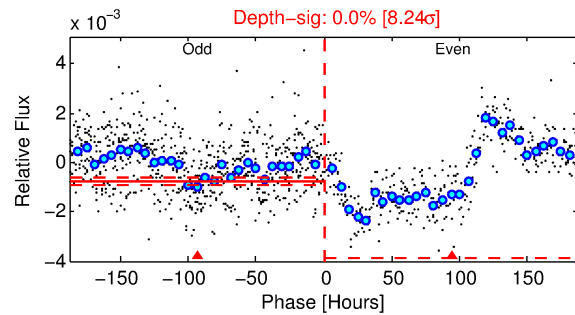
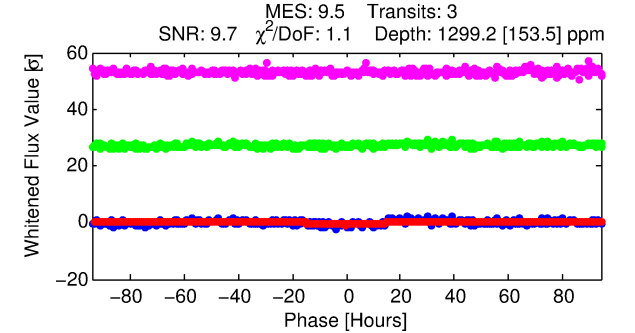
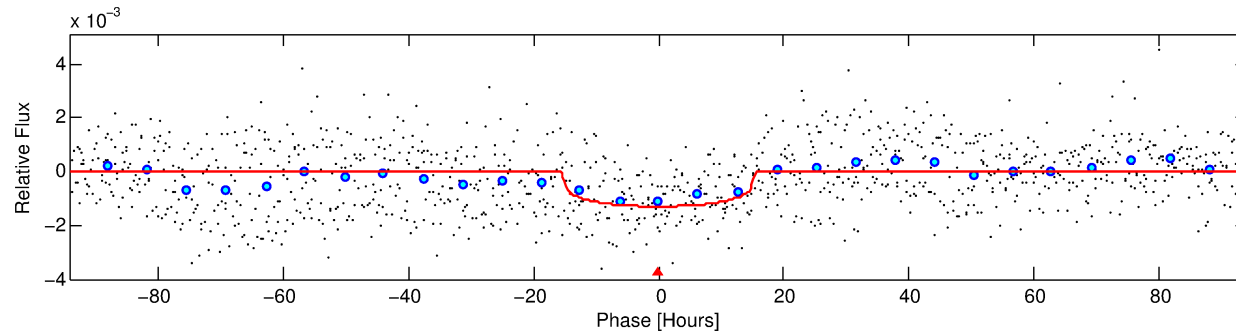
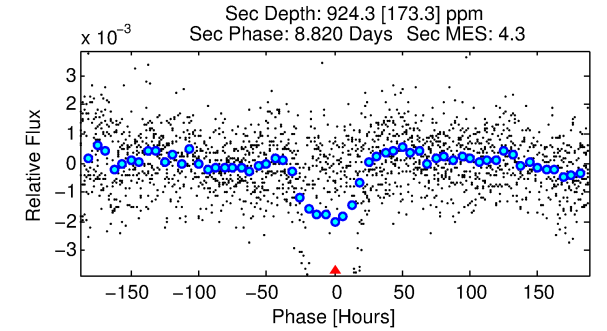
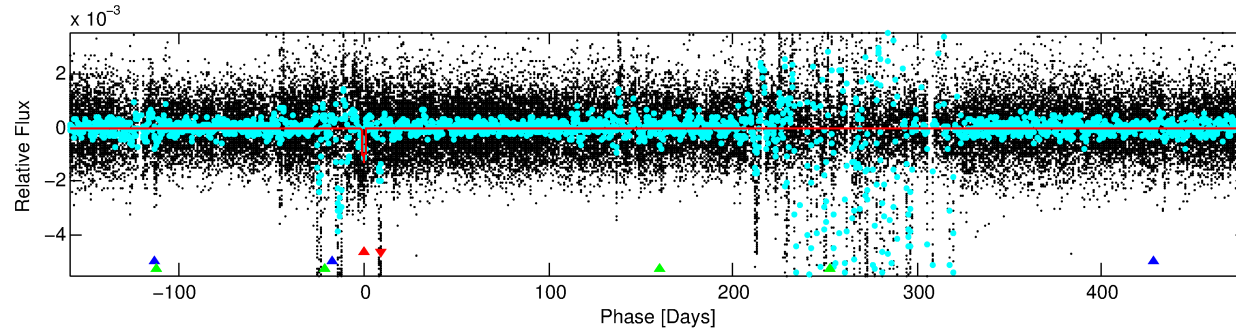
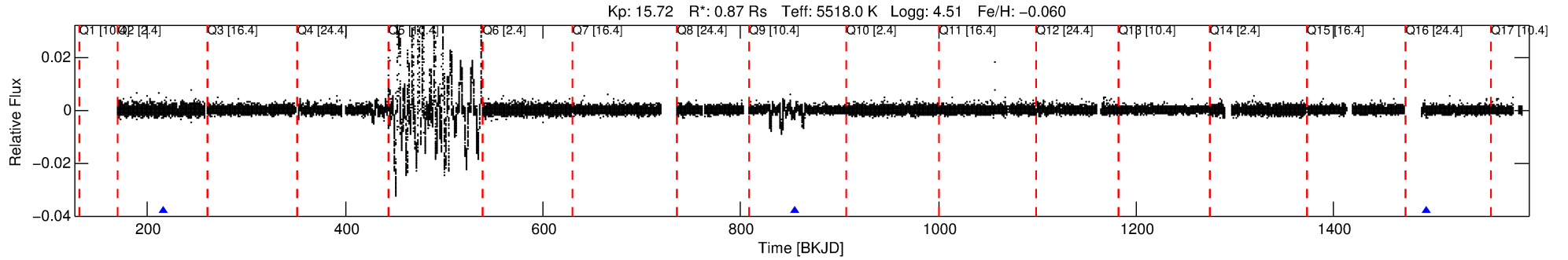
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 001572114-01

No Significant Match Found

DV One-Page Summary

KIC: 1572114 Candidate: 1 of 3 Period: 639.047 d



DV Fit Results:

Period = 639.04734 [0.02383] d
Epoch = 215.8064 [0.0348] BKJD
Rp/R* = 0.0331 [0.0084]
a/R* = 149.19 [148.31]
b = 0.39 [2.20]
Seff = 0.32 [0.10]
Teff = 192 [15] K
Rp = 3.13 [1.07] Re
a = 1.3955 [0.2700] AU
Ag = 101187.21 [61906.37] [1.63 σ]
Teffp = 5288 [735] K [6.93 σ]

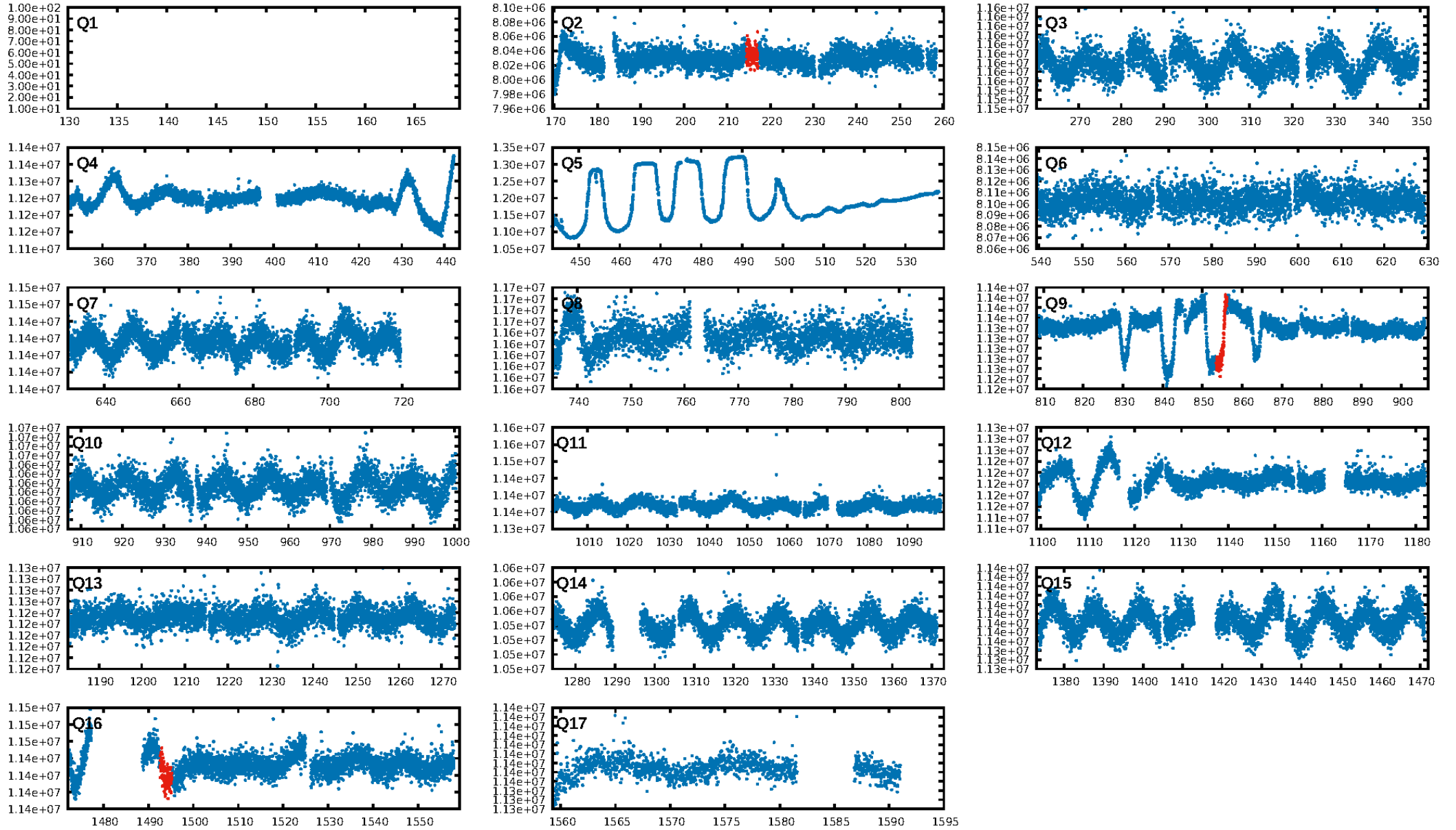
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [74.03 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 96.5%
Bootstrap-pfa: 6.64e-07
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -0.9256
Centroid-sig: 3.1%
Centroid-so: N/A
OotOffset-rm: N/A
KicOffset-rm: 9.498 arcsec [142.23 σ]
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/1/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [3/3]

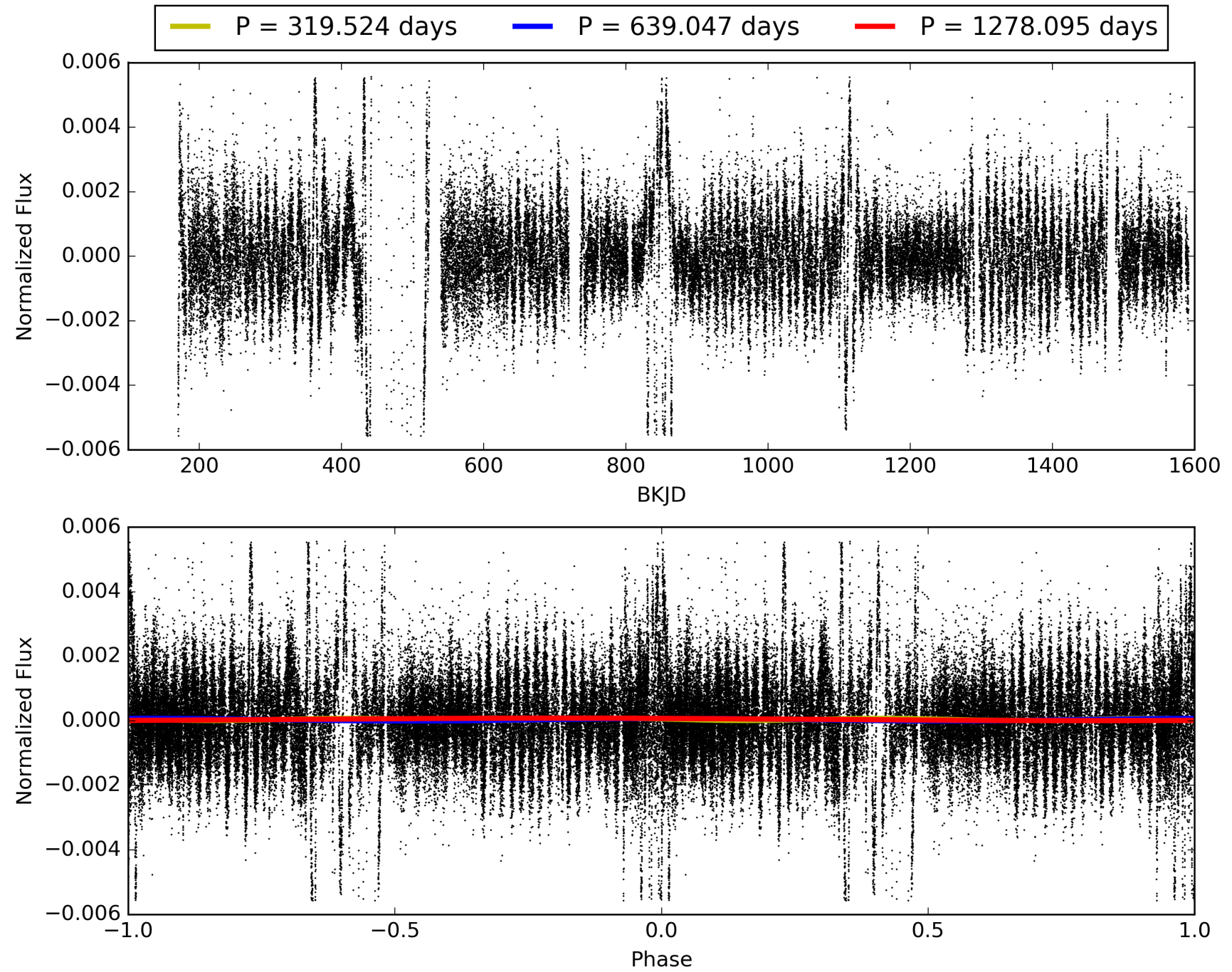
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 00:37:20 Z

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

TCE 001572114-01, PDC Light Curves

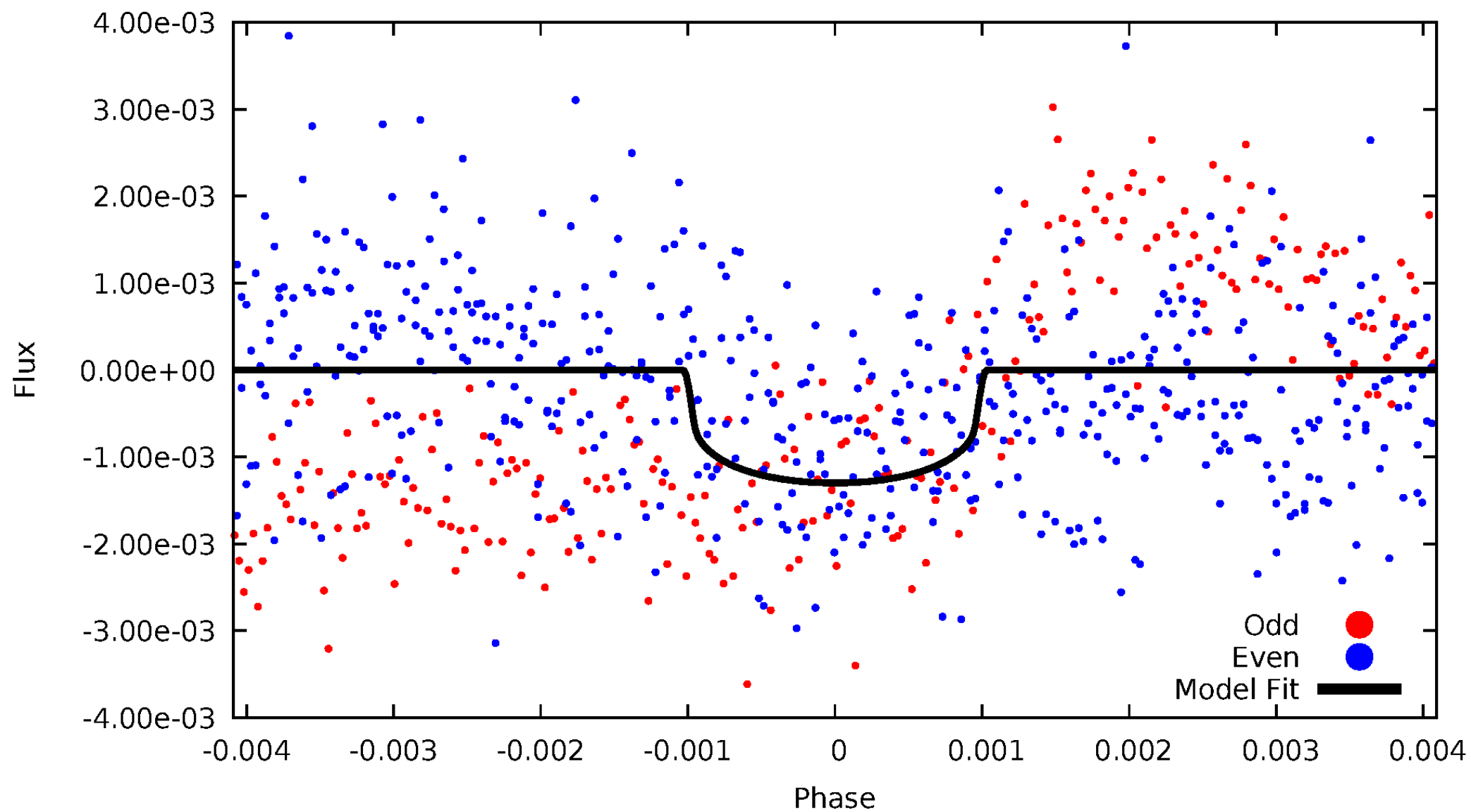


TCE 001572114-01



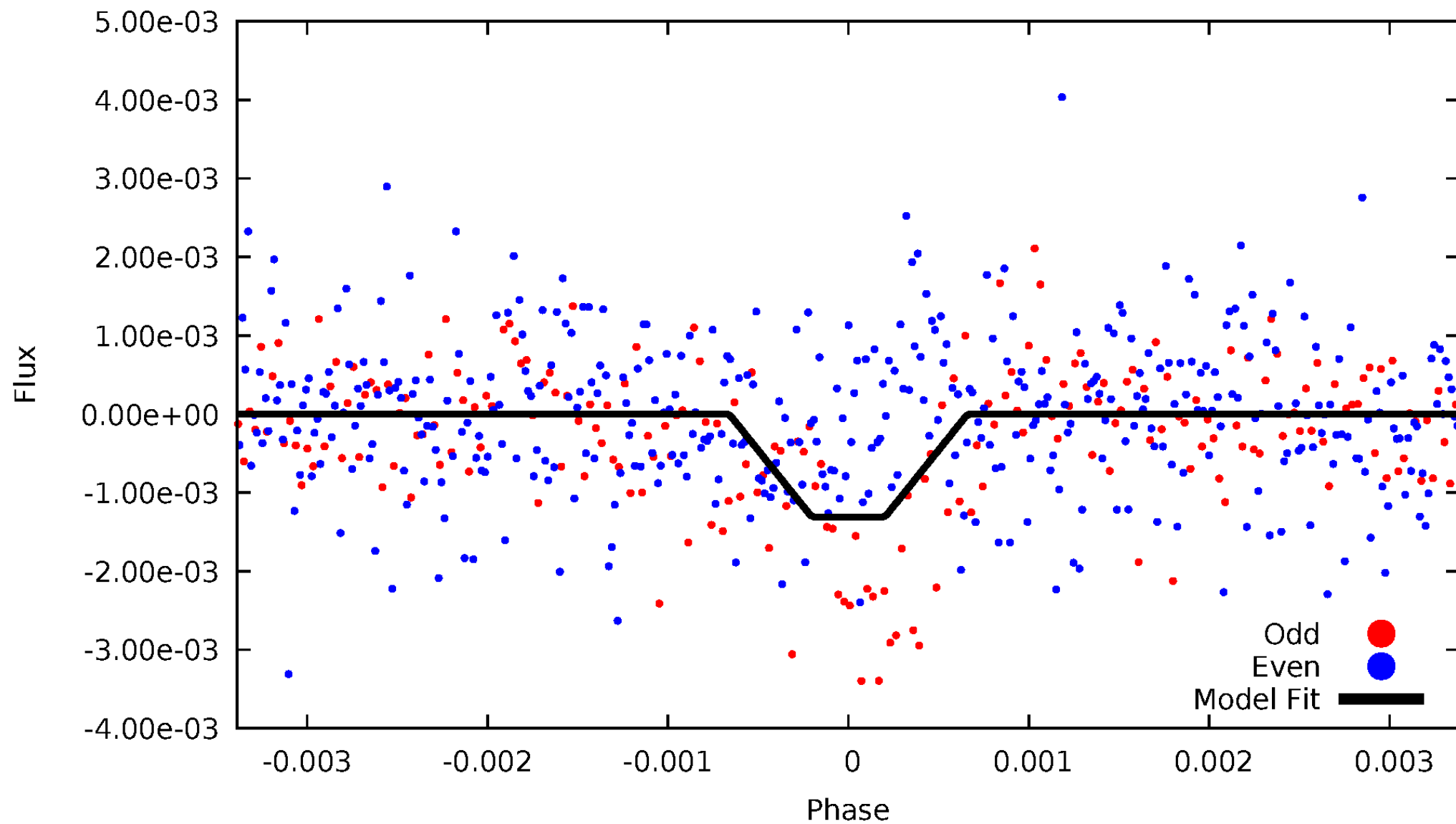
DV Odd/Even

TCE 001572114-01



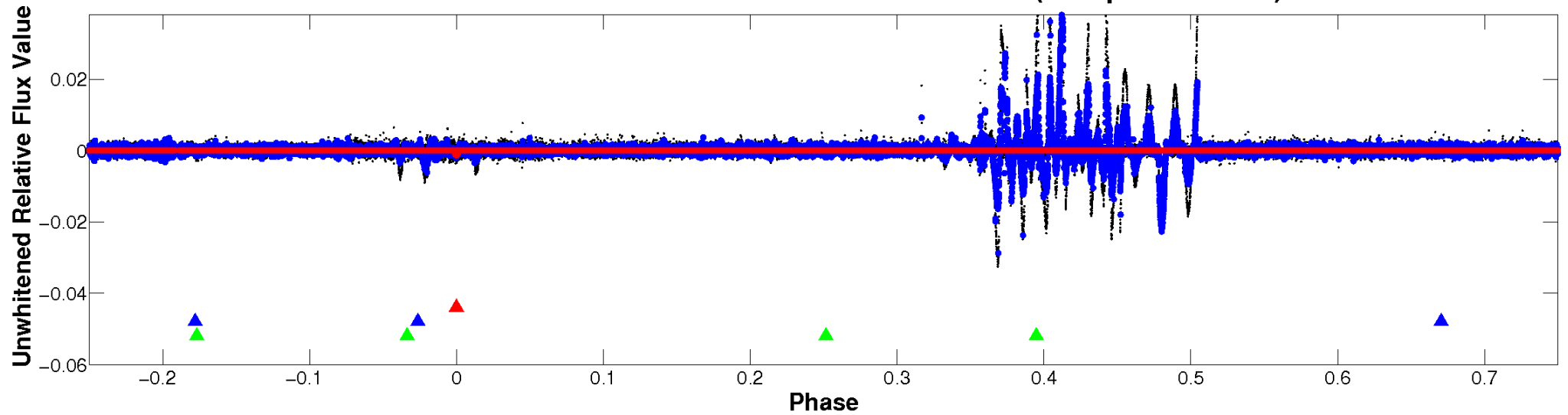
ALT Odd/Even

TCE 001572114-01

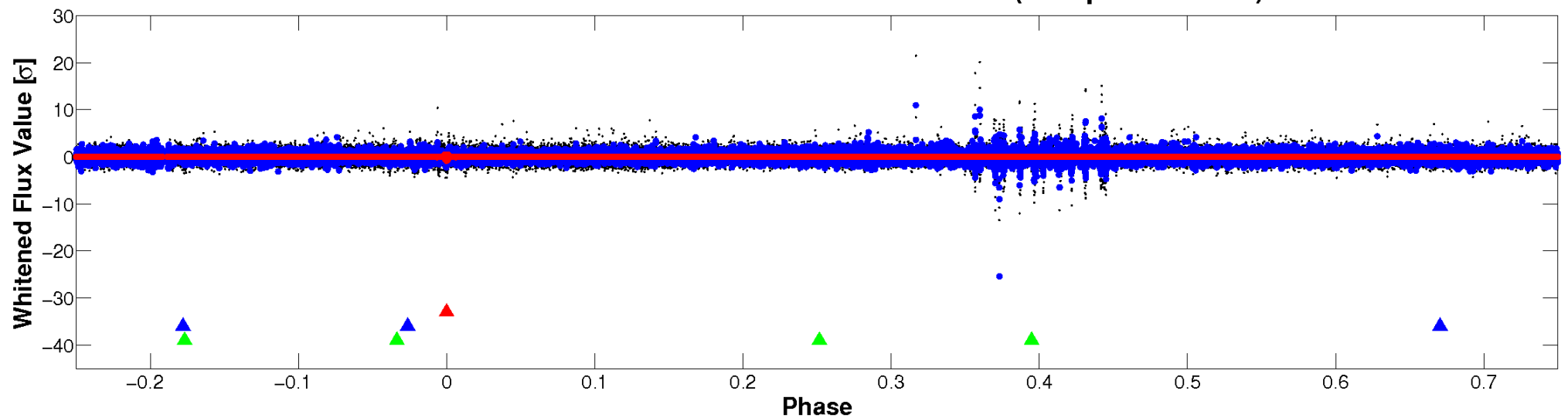


Non-Whitened Vs. Whitened Light Curve

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

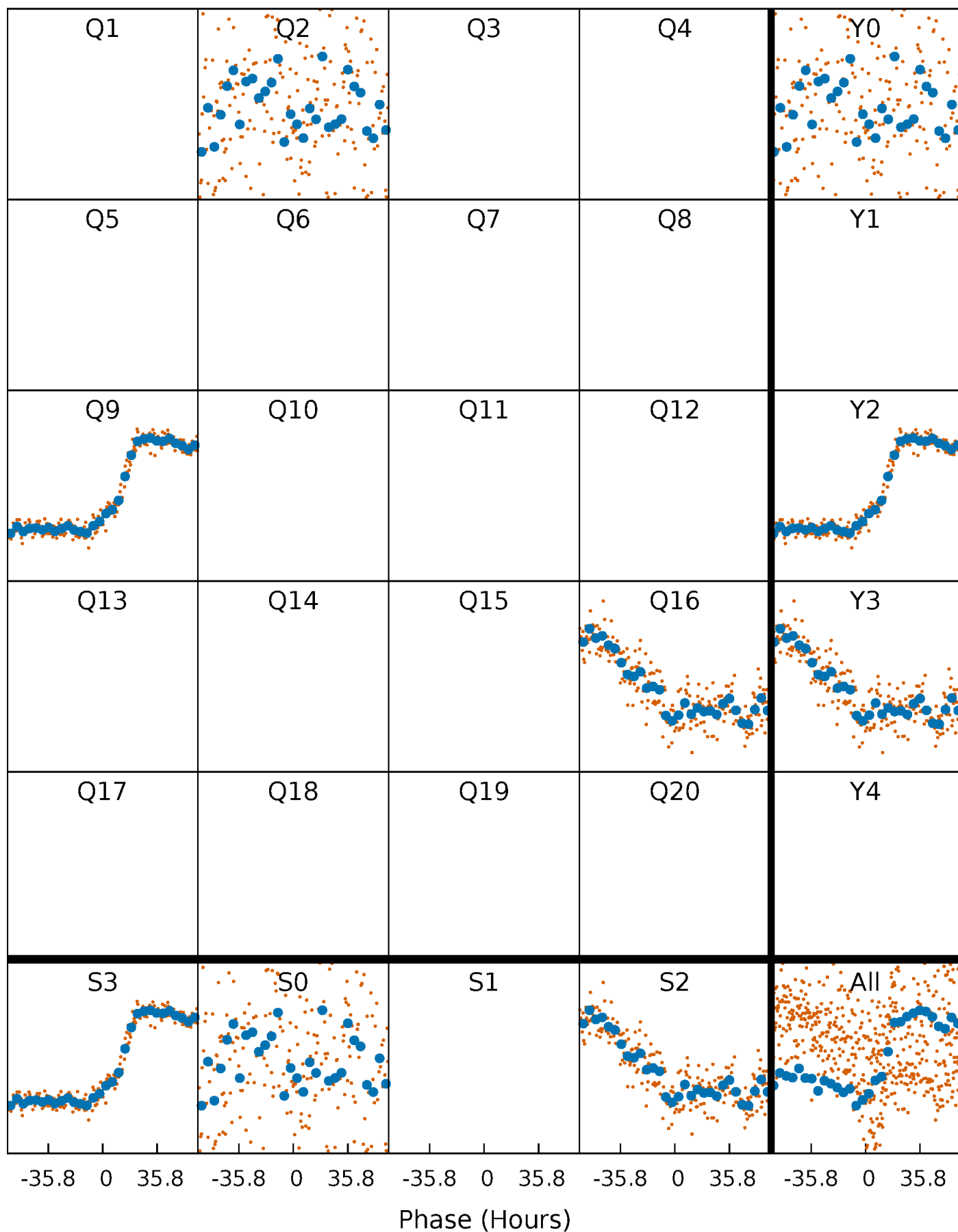


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 001572114-01 P=639.047341 Days $T_0=215.806413$ (BKJD)



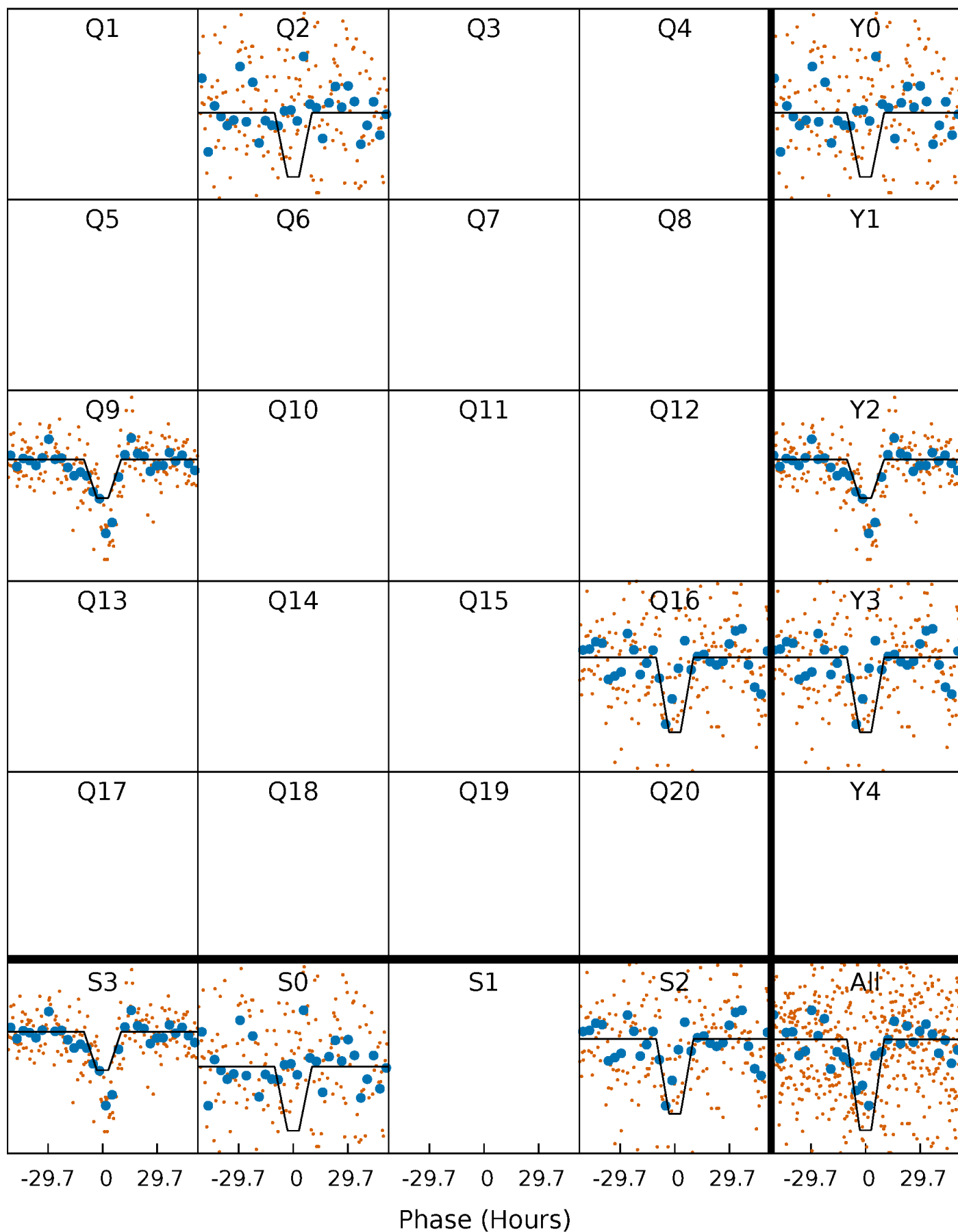
DV Quarter-Phased Transit Curves

TCE 001572114-01 P=639.047341 Days $T_0=215.806413$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

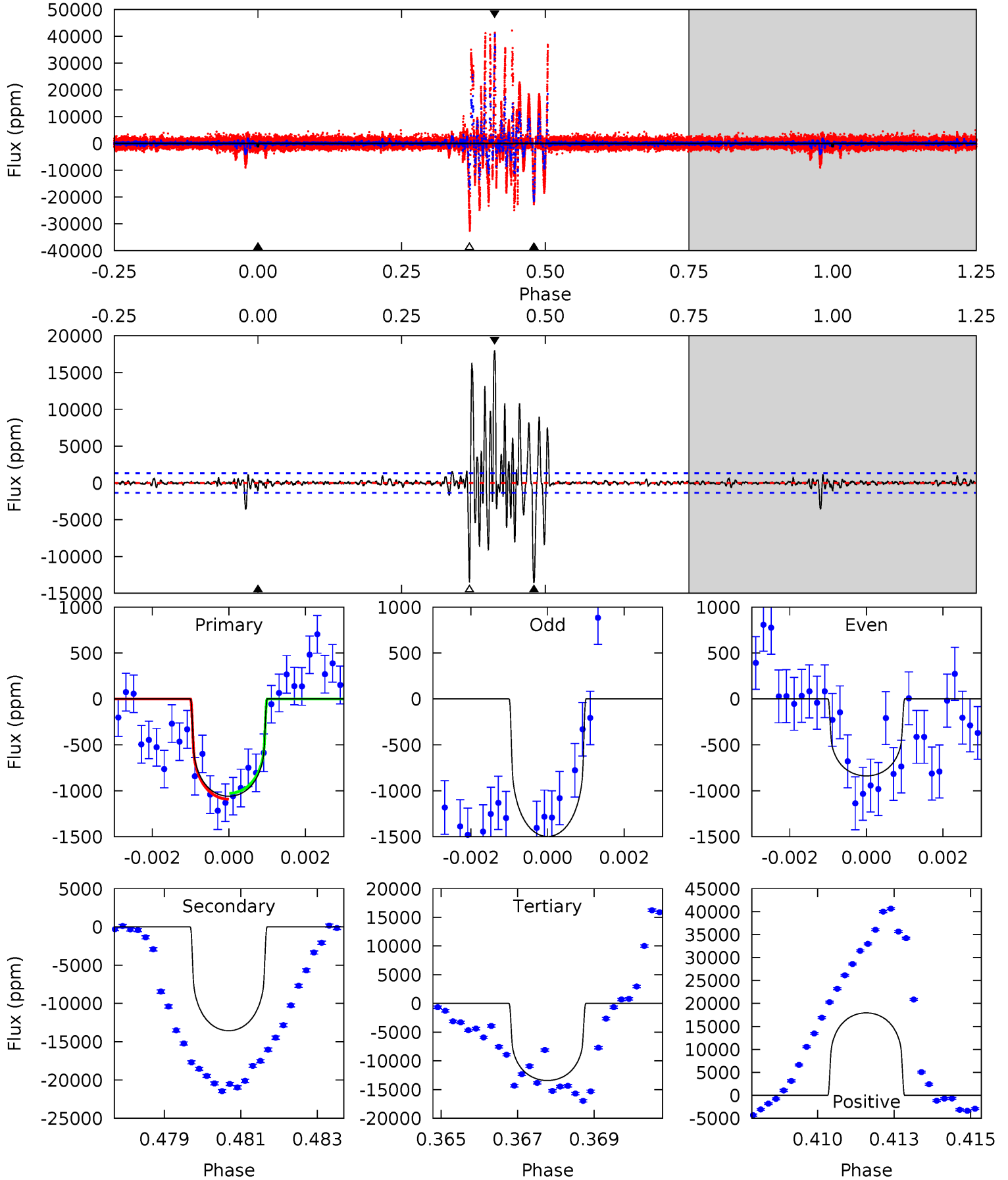
TCE 001572114-01 P=638.828009 Days $T_0=216.313766$ (BKJD)



DV Model-Shift Uniqueness Test

001572114-01, P = 639.047341 Days, E = 215.806413 Days

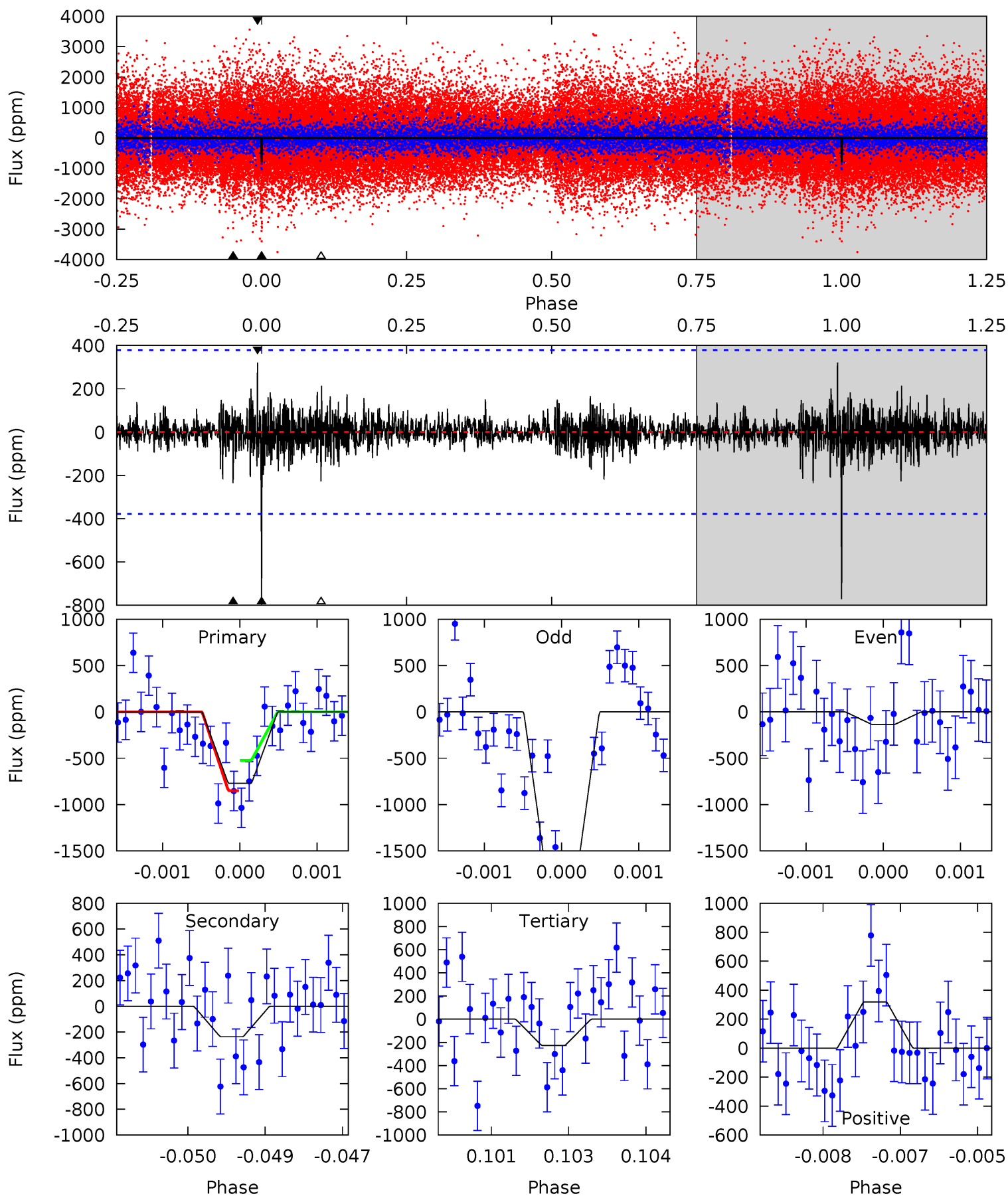
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.19	53.6	53.0	70.9	5.32	3.08	8.32	-48.9	-66.7	0.56	-17.3	1.46	0.84	0.57	0.13



Alt Model-Shift Uniqueness Test

001572114-01, P = 638.828009 Days, E = 216.313766 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.0	3.36	3.25	4.57	5.40	3.20	0.75	7.77	6.45	0.12	-1.20	12.7	1.42	0.29	2.31



Stellar Parameters For KIC 001572114

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5518^{+166}_{-166}	$4.511^{+0.055}_{-0.154}$	$-0.060^{+0.300}_{-0.300}$	$0.866^{+0.199}_{-0.085}$	$0.887^{+0.092}_{-0.092}$	$1.924^{+0.522}_{-0.823}$
	+3%/-3%	+1%/-3%	+500%/-500%	+23%/-10%	+10%/-10%	+27%/-43%
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 001572114-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-13561 ± 253	$3.25^{+0.88}_{-0.83}$	272^{+16}_{-13}	11865^{+3564}_{-1887}	$1397719^{+1074923}_{-544463}$
Alt.	-236 ± 70	$3.46^{+1.01}_{-0.81}$	272^{+16}_{-12}	3948^{+467}_{-353}	21101^{+16286}_{-9449}

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

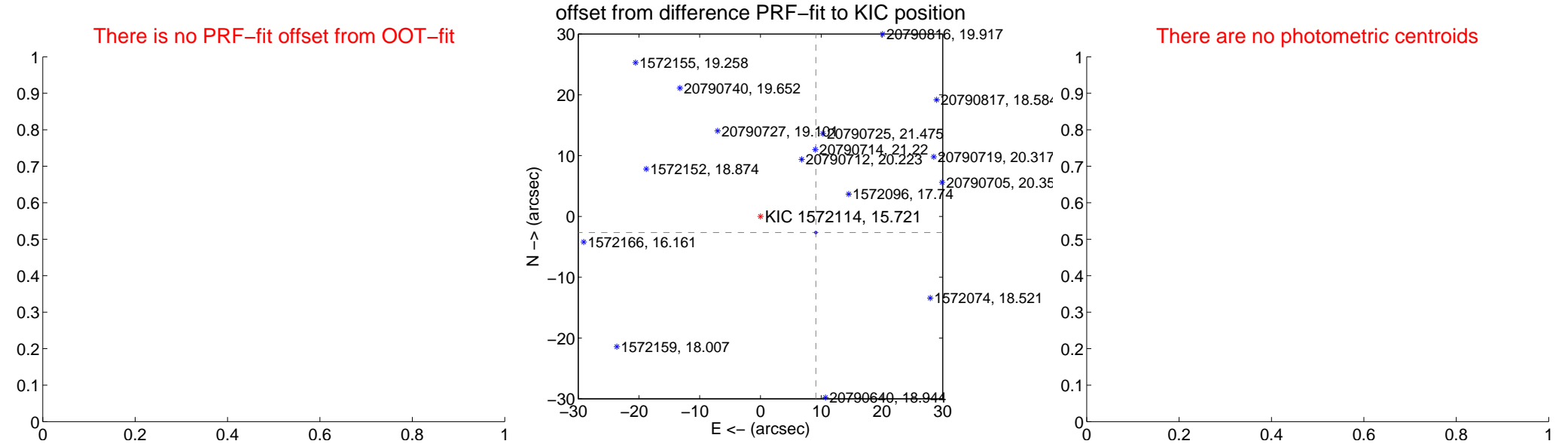
DV Centroid Data

Supplemental centroid analysis for 001572114-01. Kepler magnitude: 15.72. Transit SNR 9.71

There are 0 quarters with good PRF difference image offsets

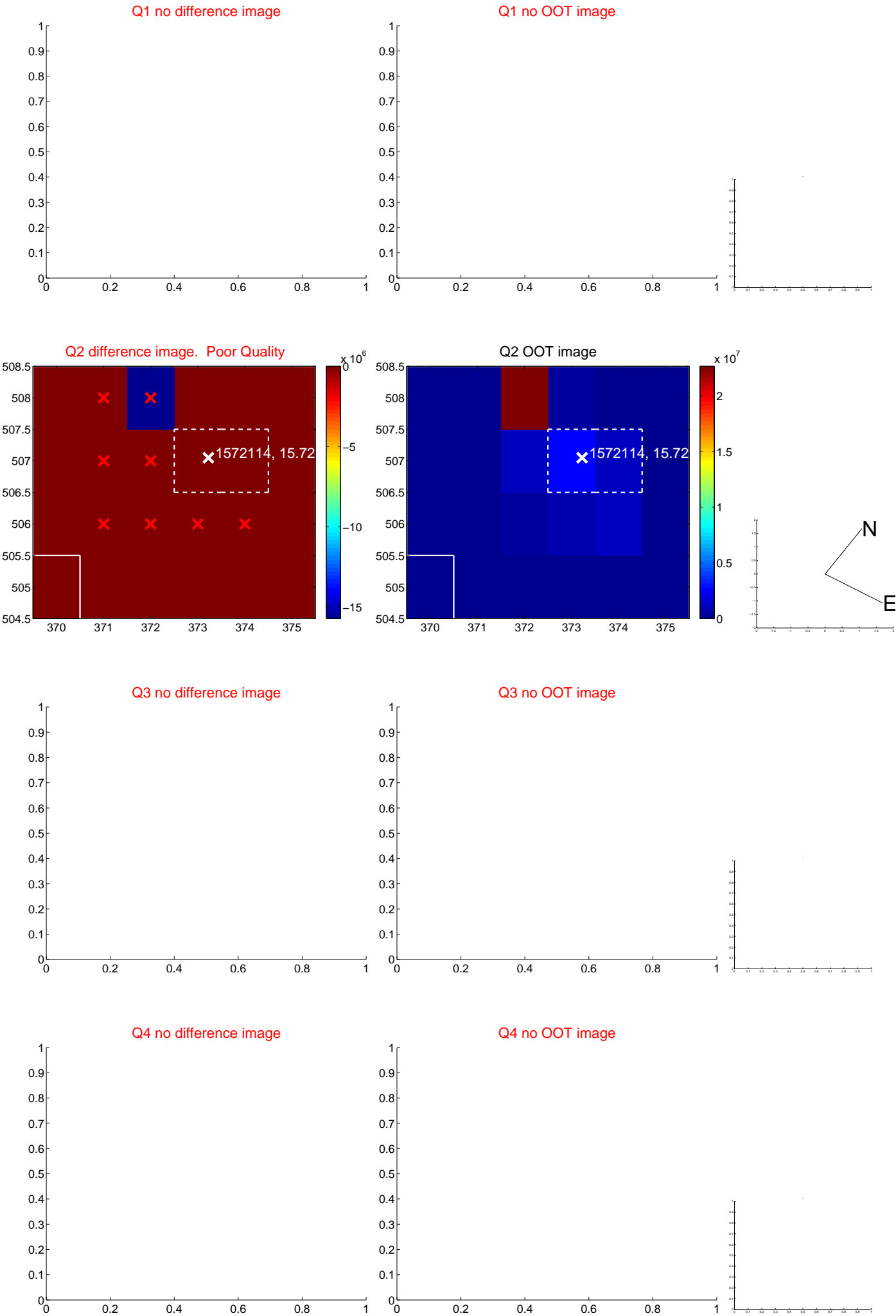
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	9.498 ± 0.067	142.23	-9.122 ± 0.067	-2.648 ± 0.067
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.

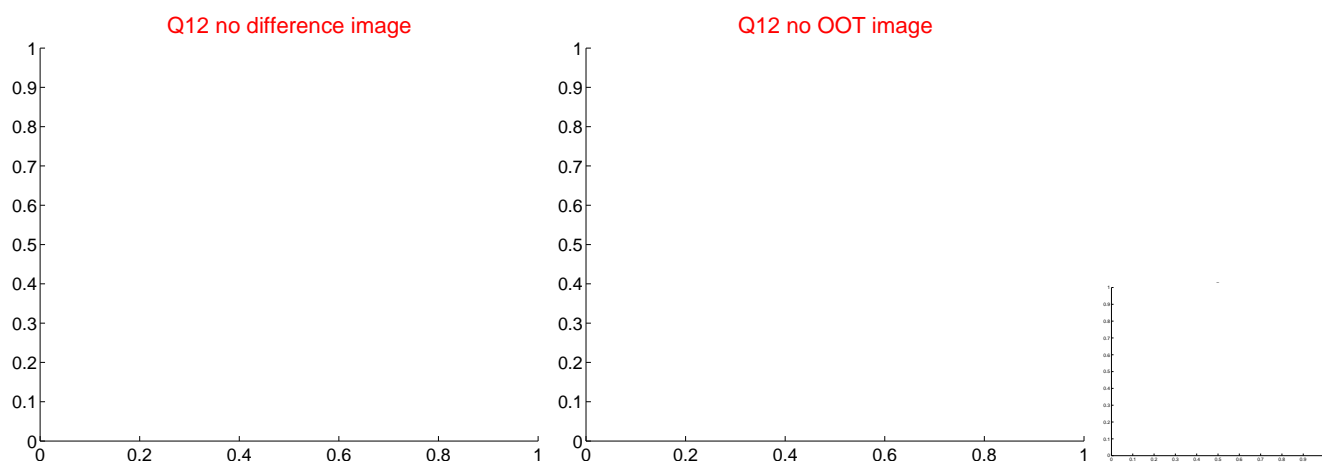
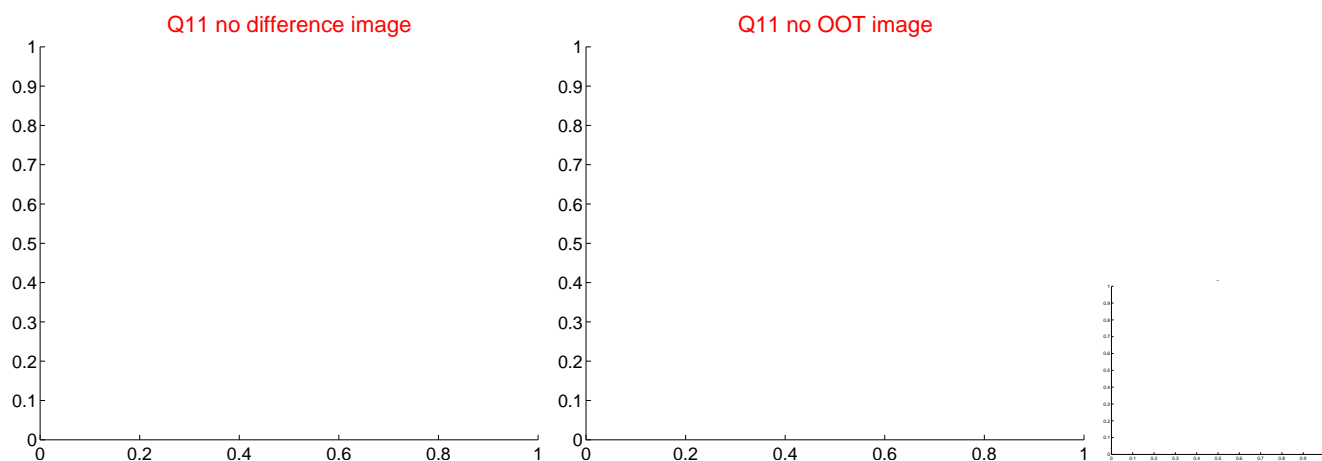
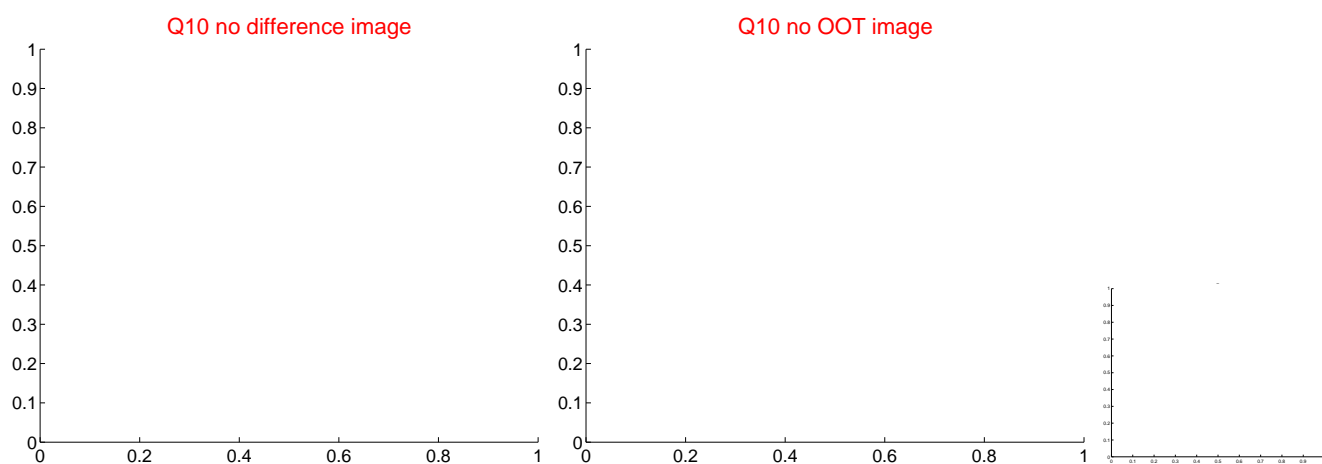
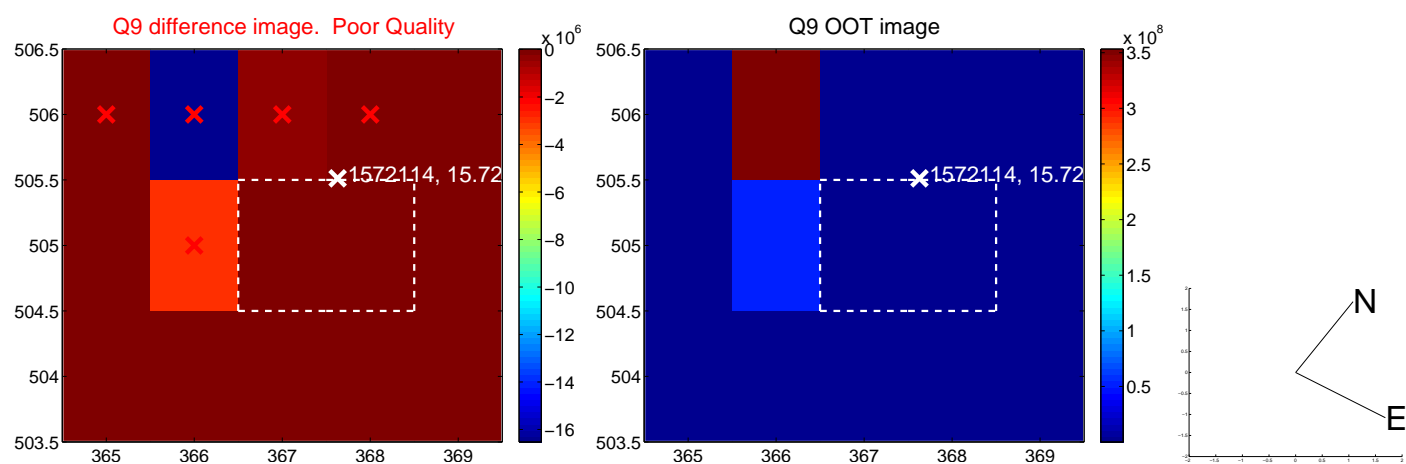
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



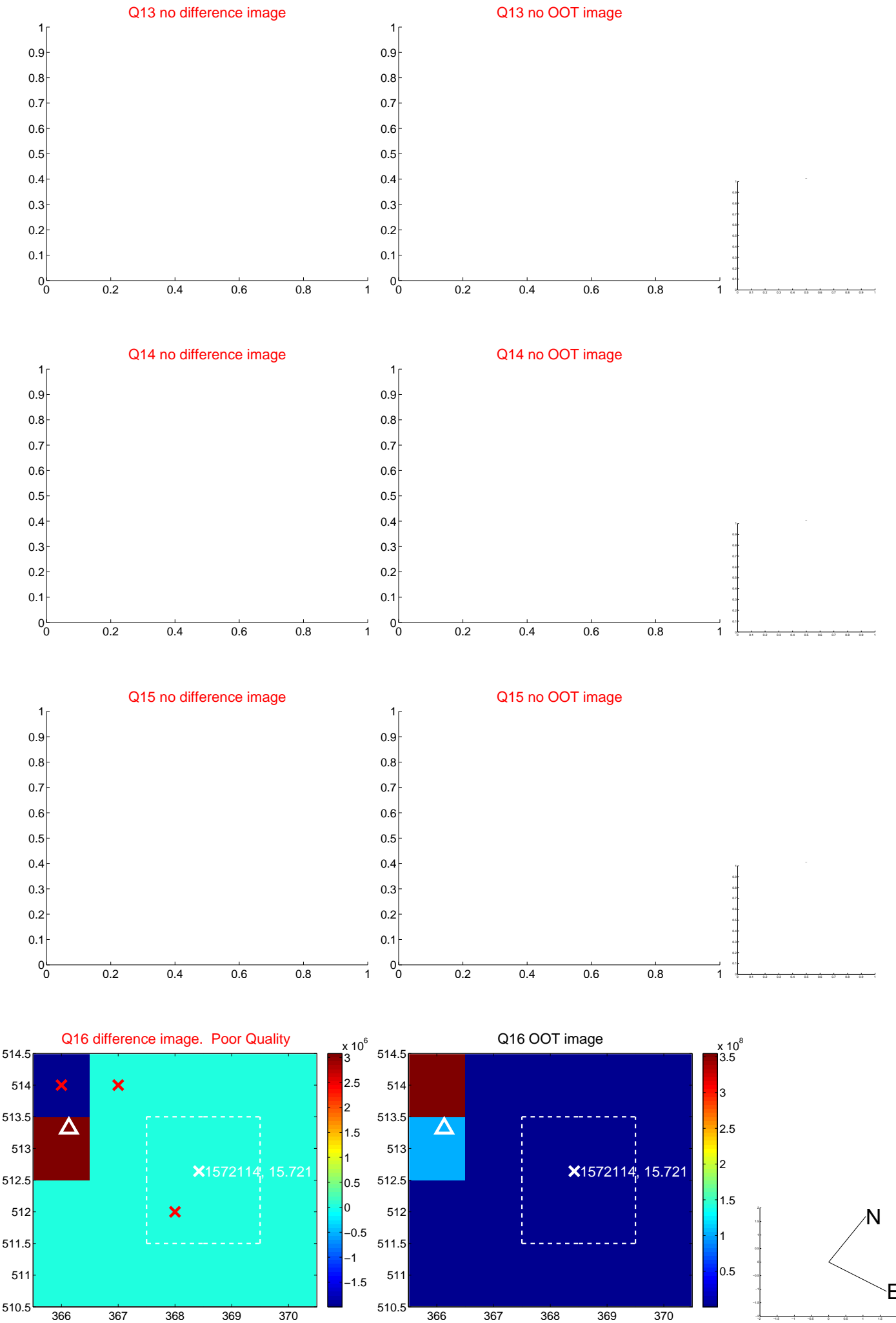
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



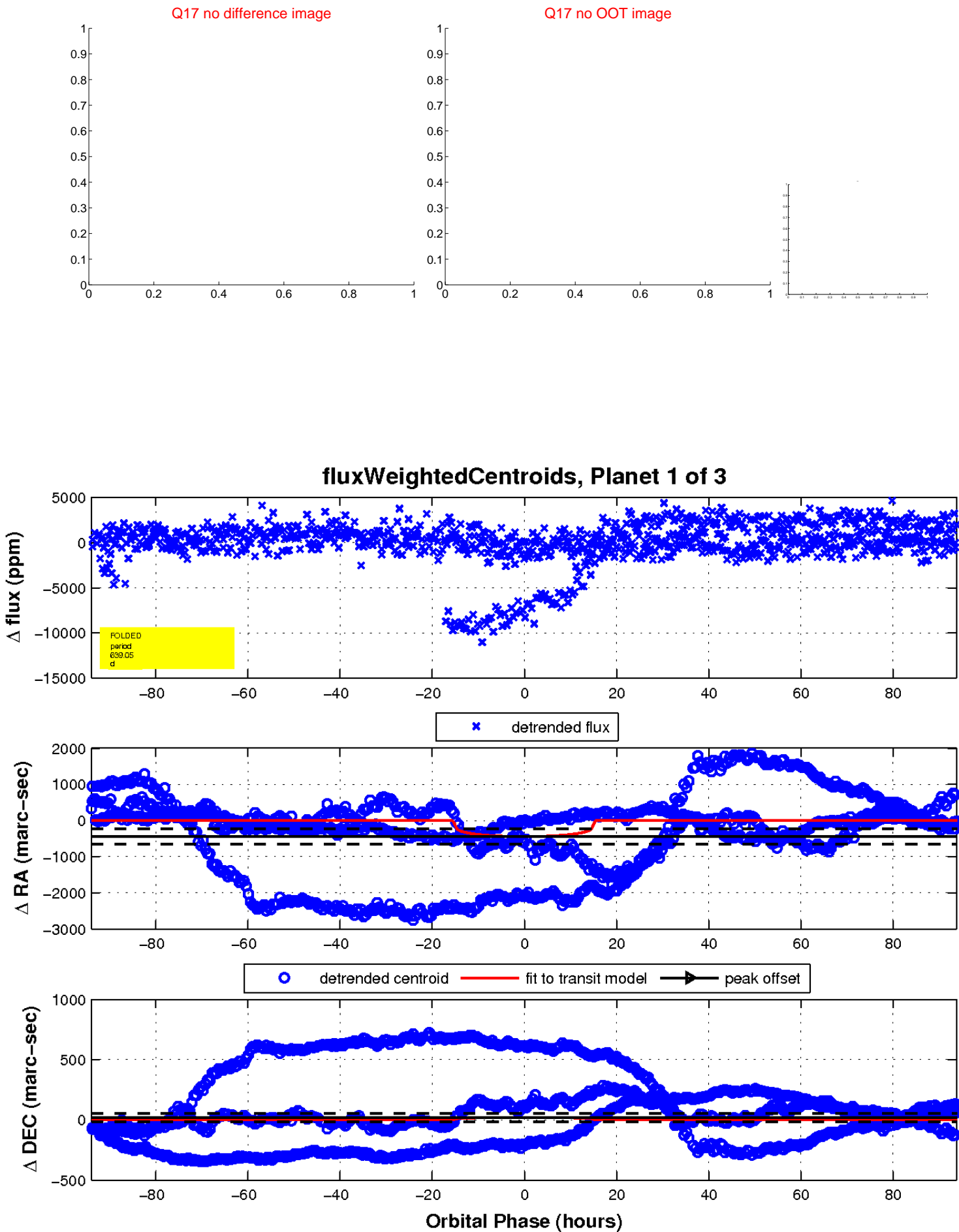
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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

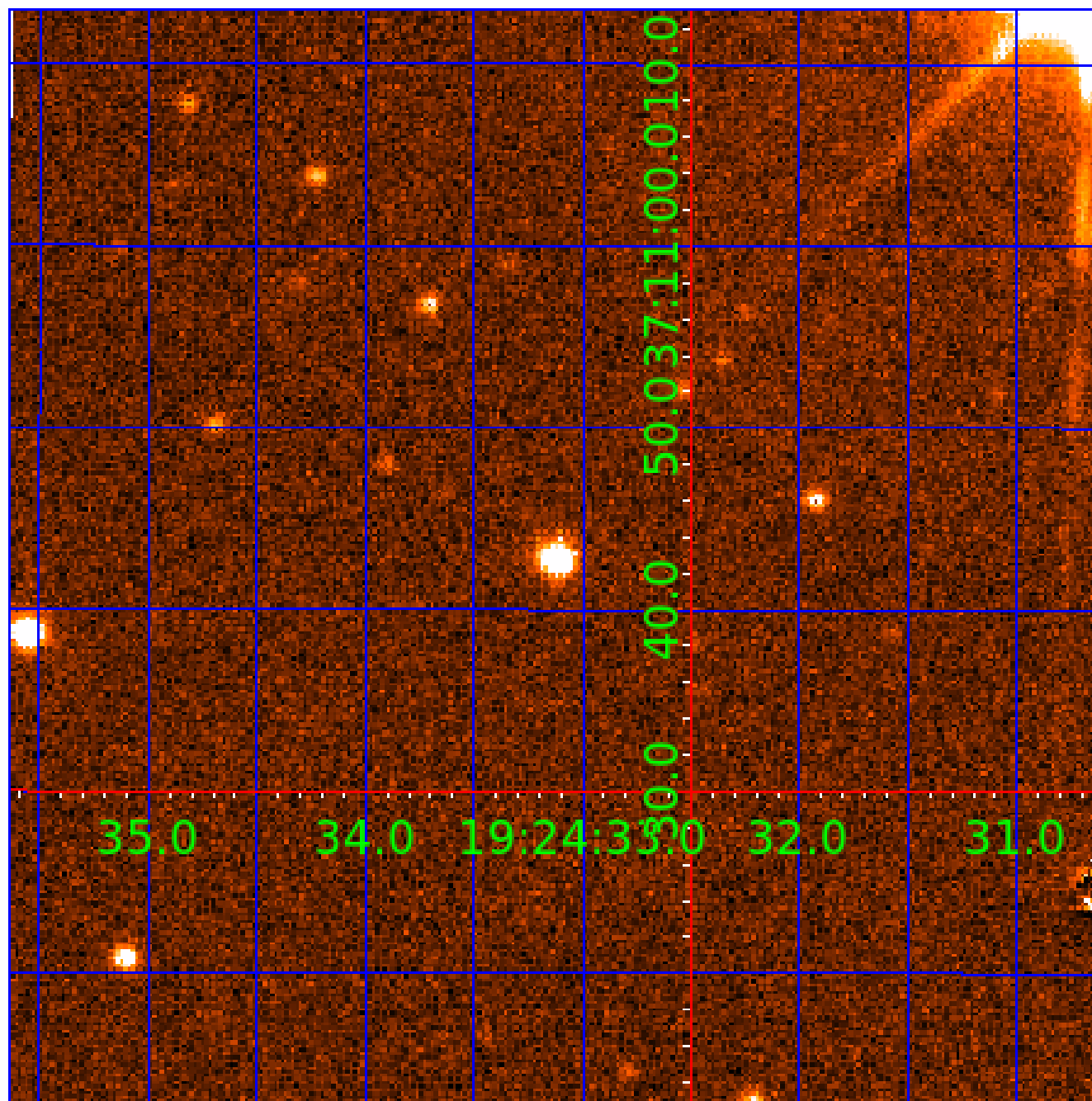


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 001572114

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})
001572114-01	OBS	No	639.047341	215.806413	1299.2	31.349	9.5	9.7	0.87	5518	3.13	0.32
001572114-02	OBS	No	542.137613	199.045804	794.0	2.062	7.9	2.5	0.87	5518	2.49	0.40
001572114-03	OBS	No	365.292061	376.581541	1129.0	25.479	7.9	9.4	0.87	5518	2.93	0.67

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
001572114-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
001572114-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
001572114-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

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

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

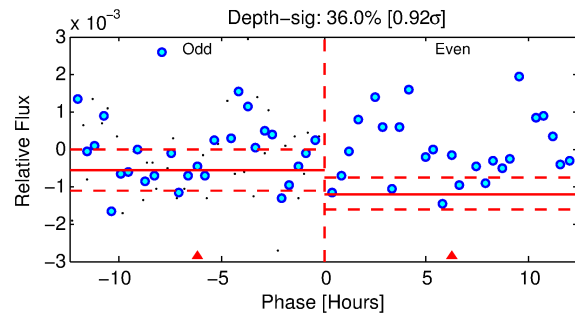
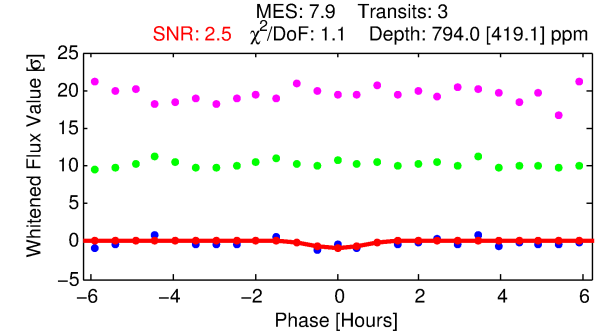
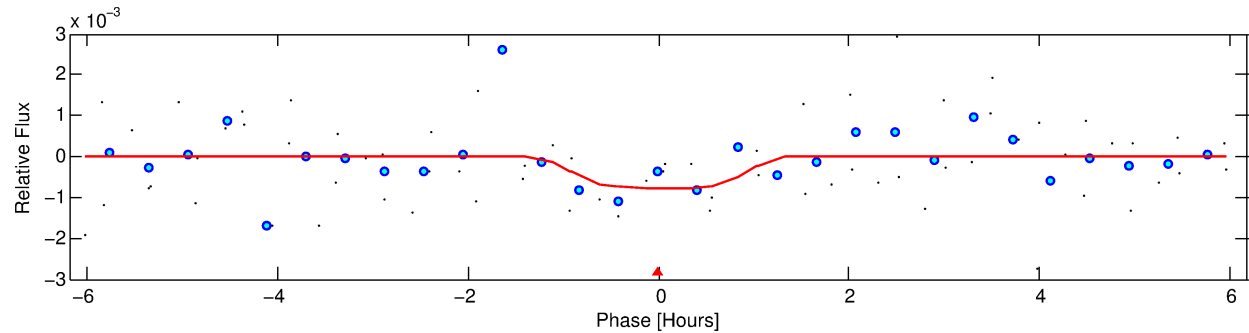
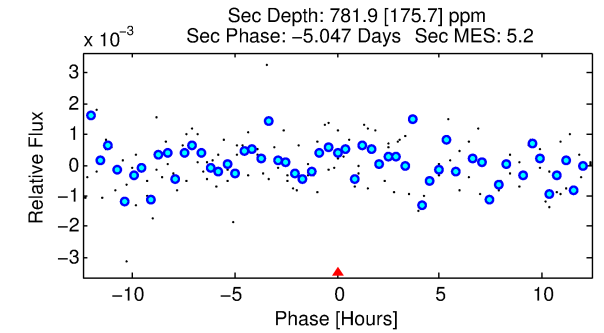
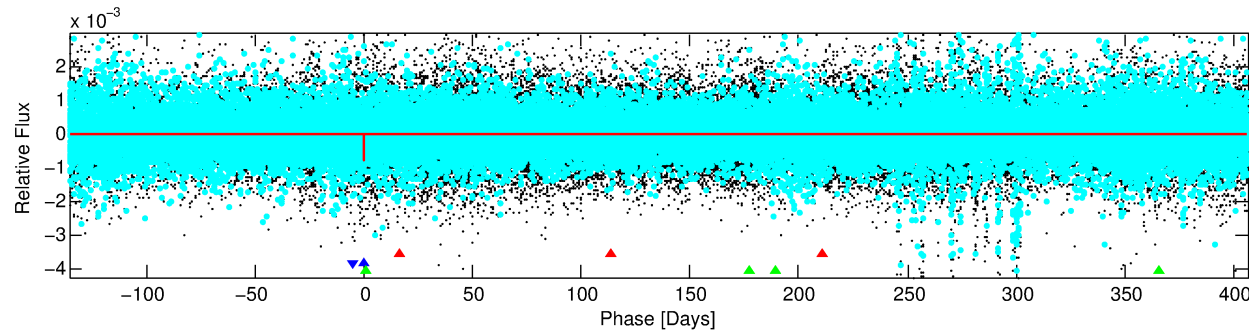
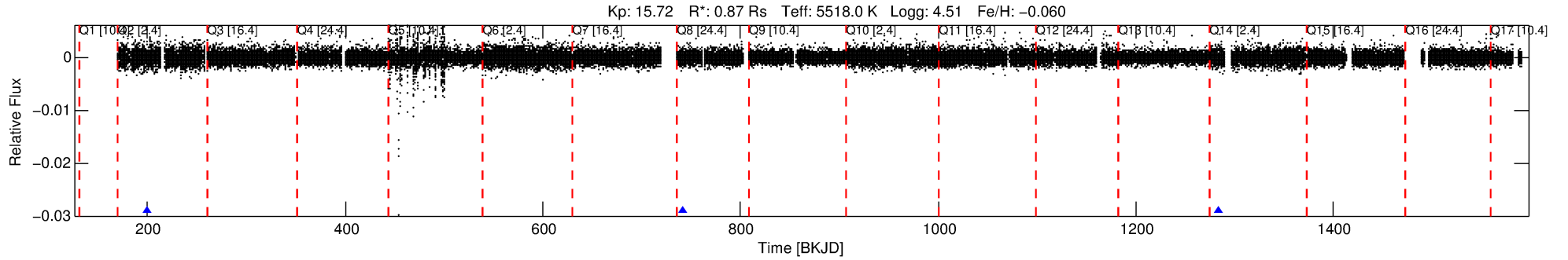
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 001572114-02

No Significant Match Found

DV One-Page Summary

KIC: 1572114 Candidate: 2 of 3 Period: 542.138 d



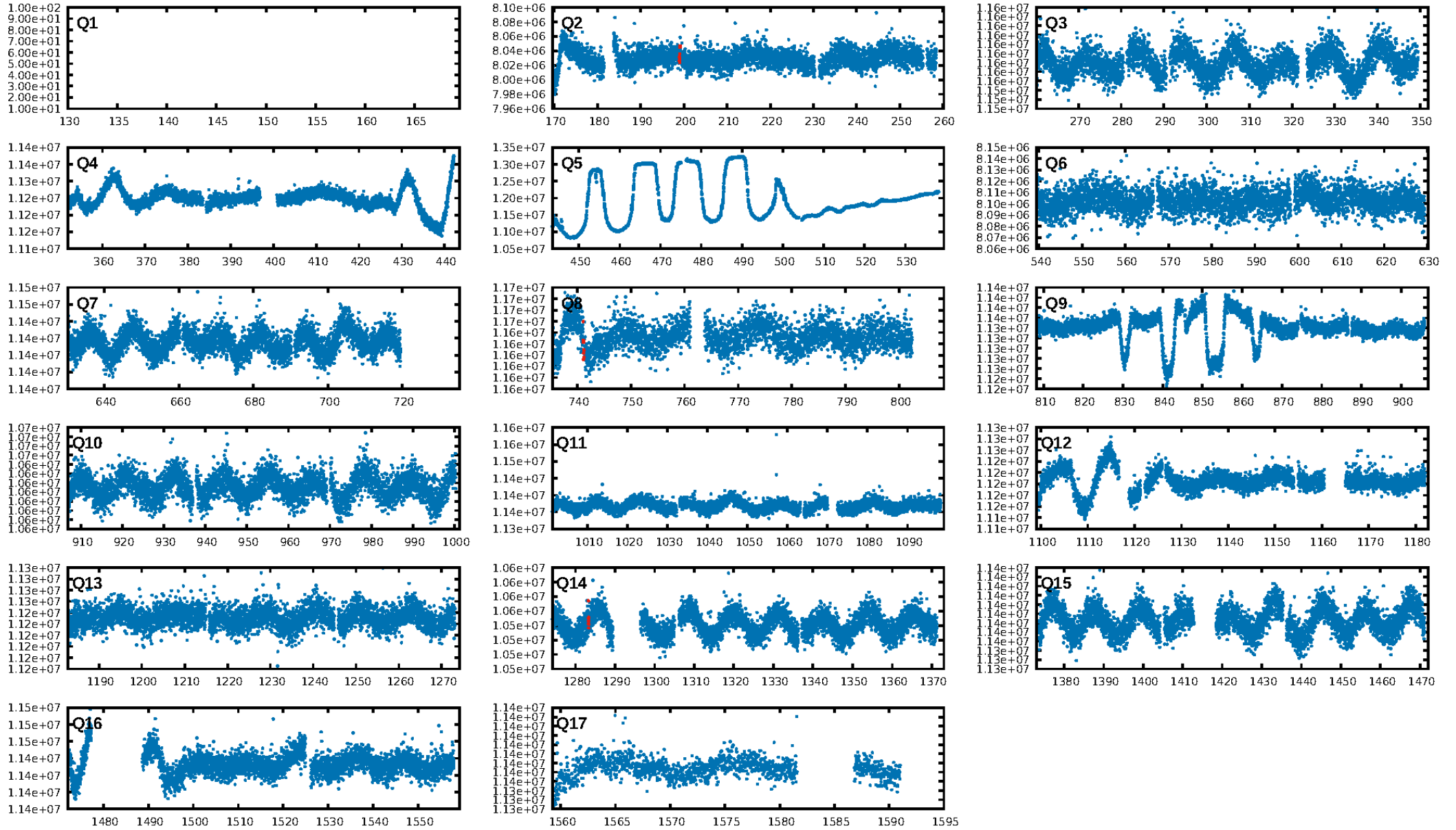
DV Fit Results:

Period = 542.13761 [0.02474] d
Epoch = 199.0458 [0.0319] BKJD
Rp/R* = 0.0264 [0.7252]
a/R* = 1789.05 [196570.51]
b = 0.51 [163.05]
Seff = 0.40 [0.12]
Teq = 203 [16] K
Rp = 2.49 [68.53] Re
a = 1.2506 [0.2420] AU
Ag = 108128.95 [5941498.28] [0.02σ]
Teffp = 5679 [78018] K [0.07σ]

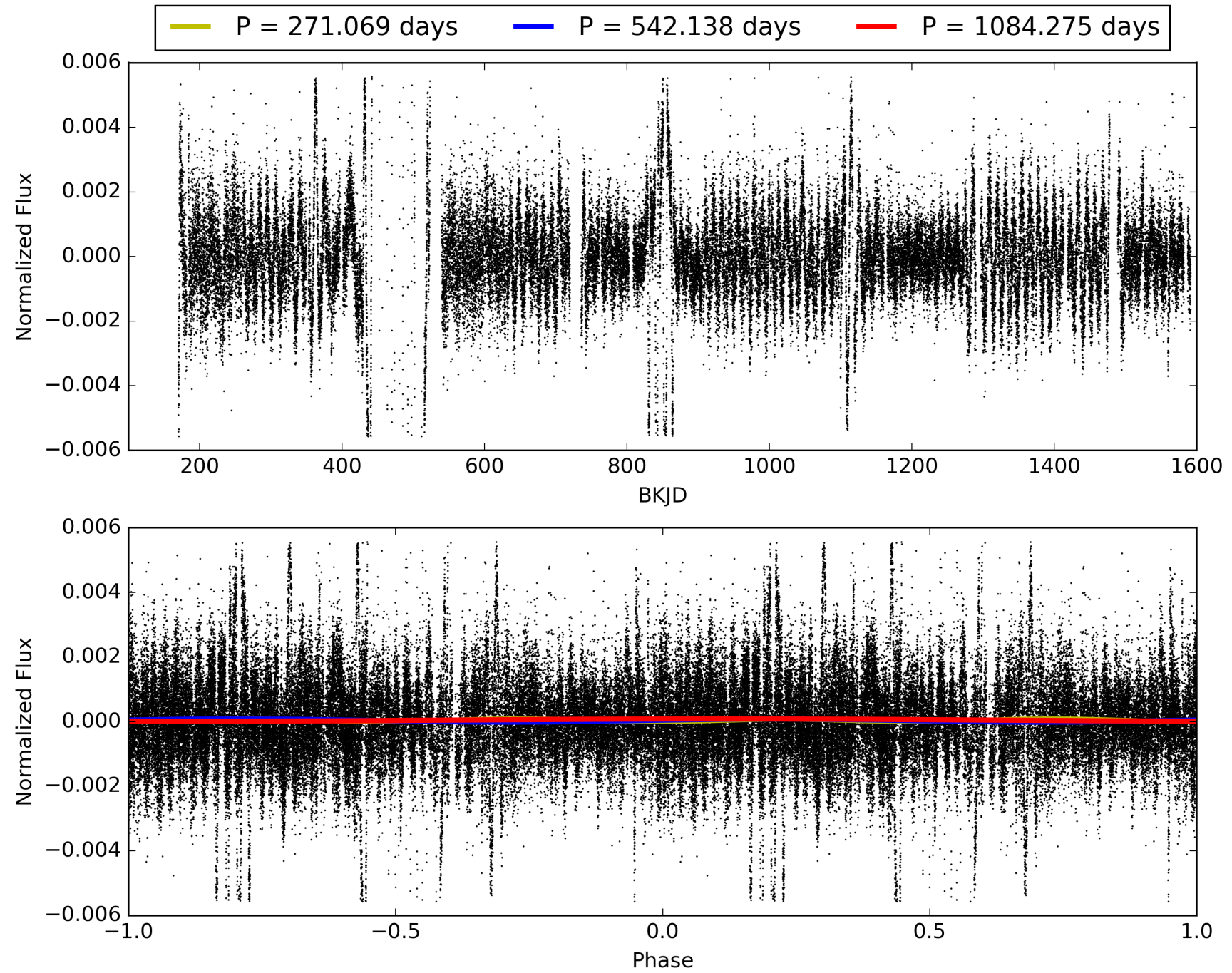
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [166.04σ]
LongPeriod-sig: 100.0% [74.03σ]
ModelChiSquare2-sig: 63.2%
ModelChiSquareGof-sig: 99.0%
Bootstrap-pfa: 2.70e-06
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -1.106
Centroid-sig: 66.5%
Centroid-so: 22.349 arcsec [0.26σ]
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
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TCE 001572114-02, PDC Light Curves

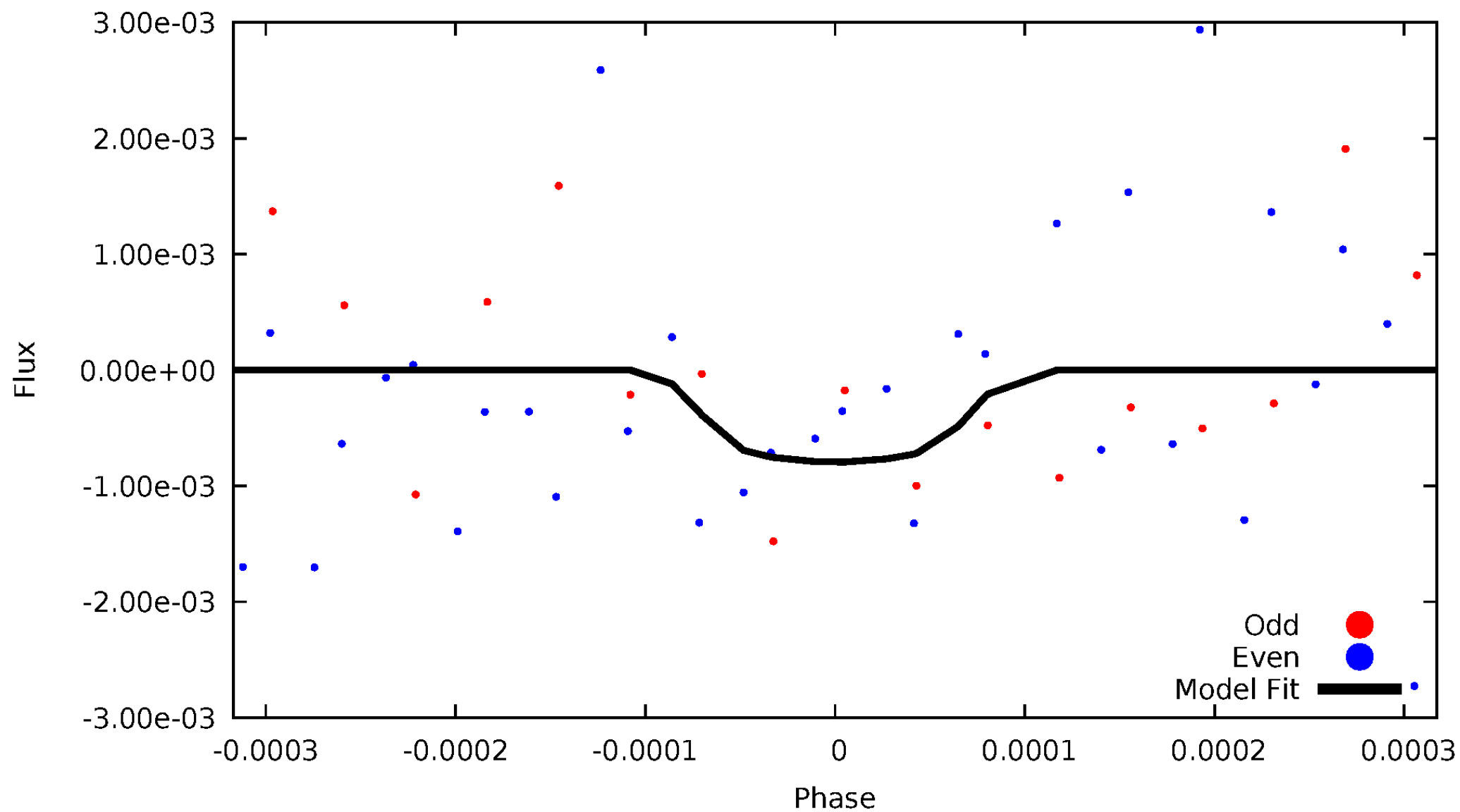


TCE 001572114-02



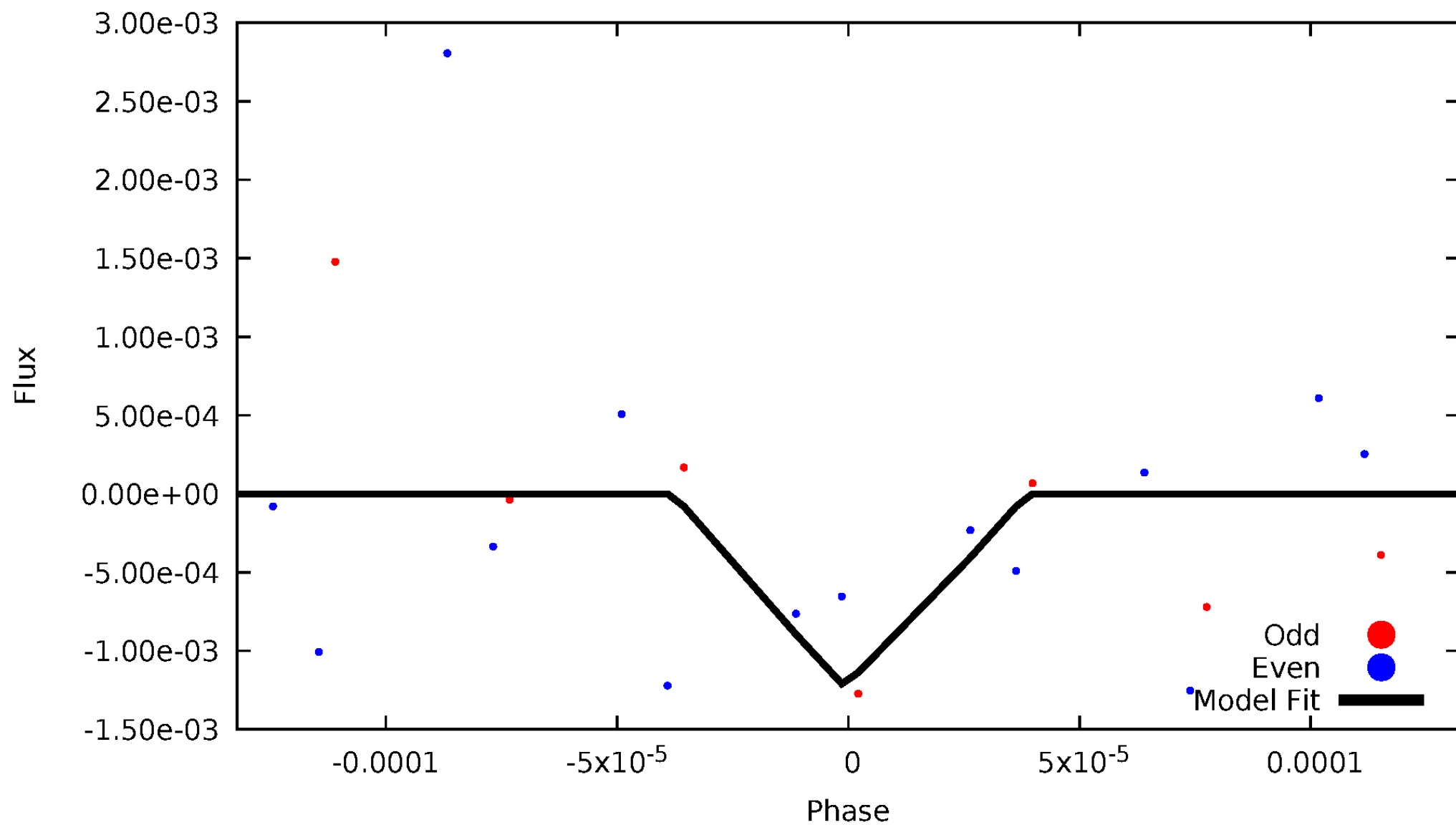
DV Odd/Even

TCE 001572114-02



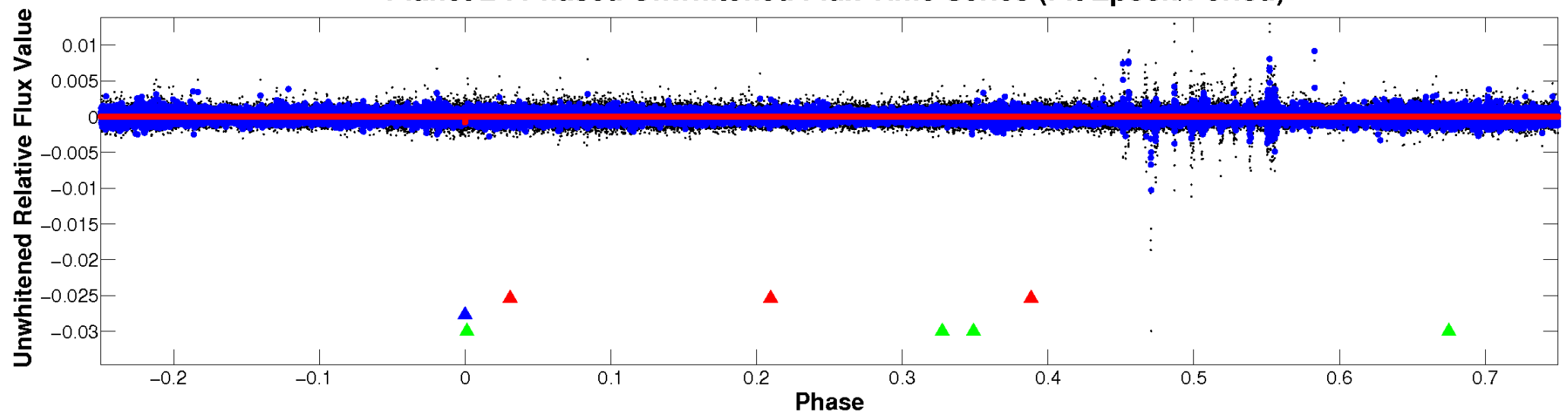
ALT Odd/Even

TCE 001572114-02

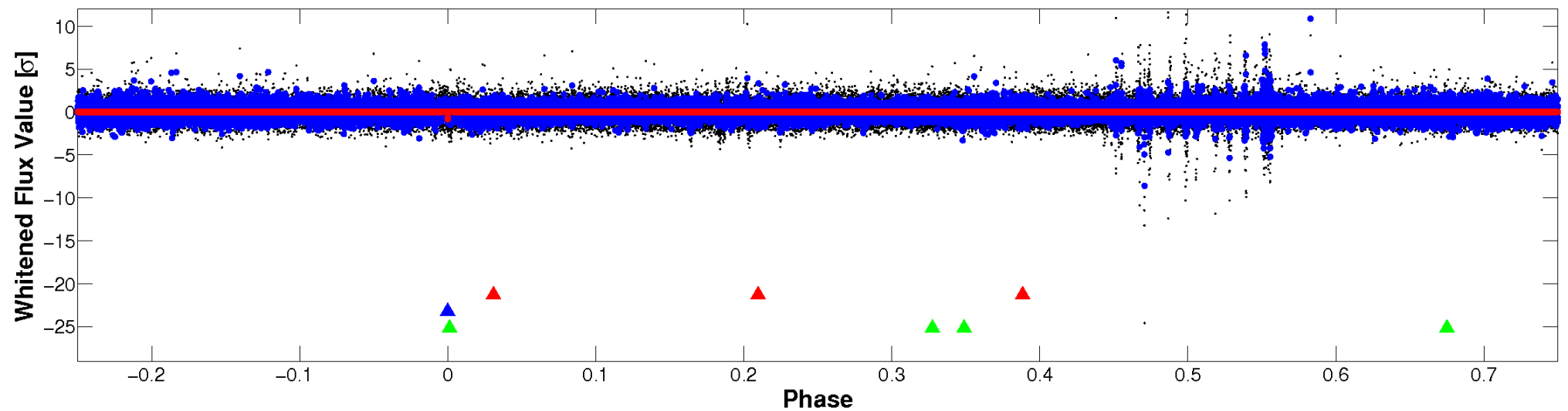


Non-Whitened Vs. Whitened Light Curve

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

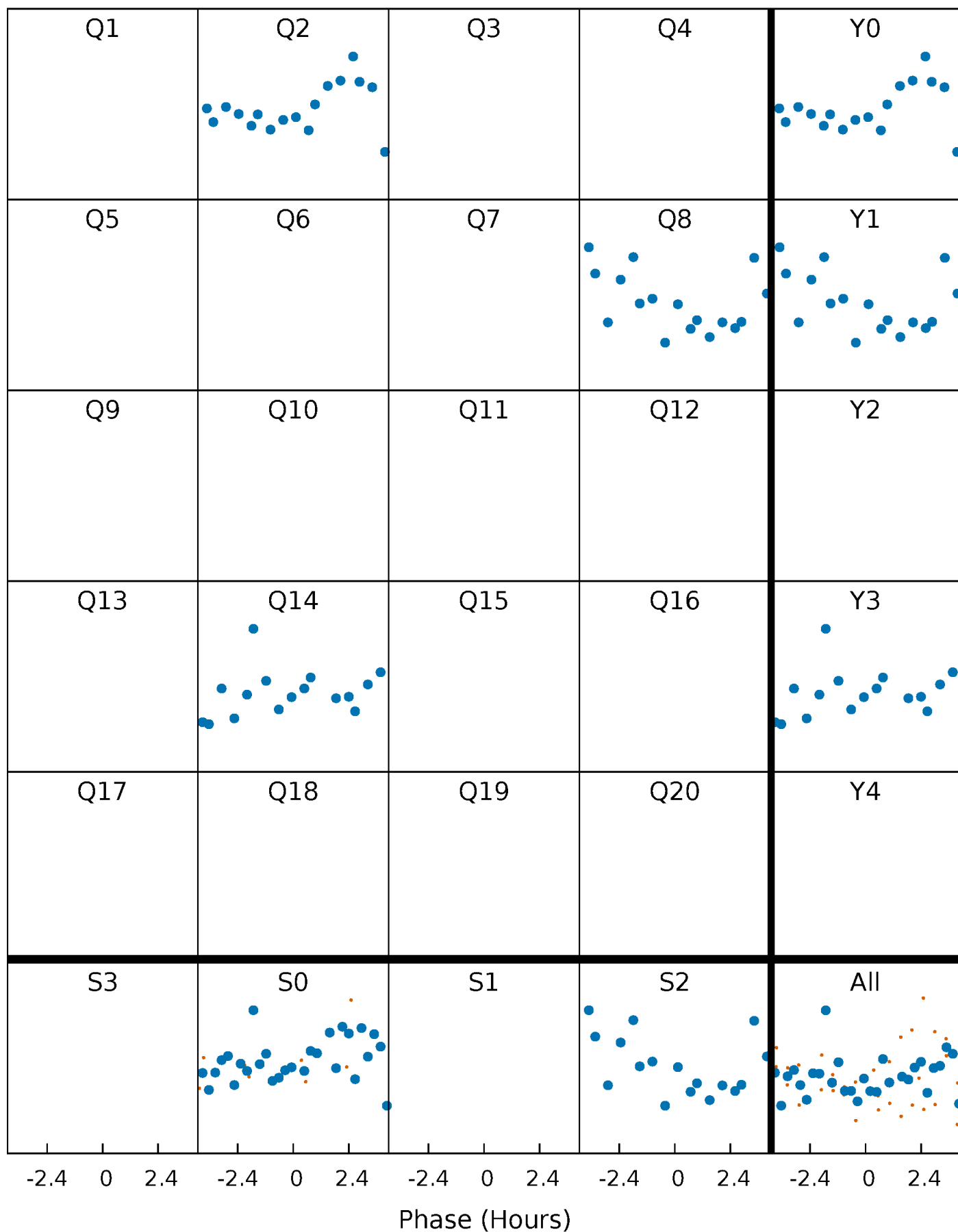


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



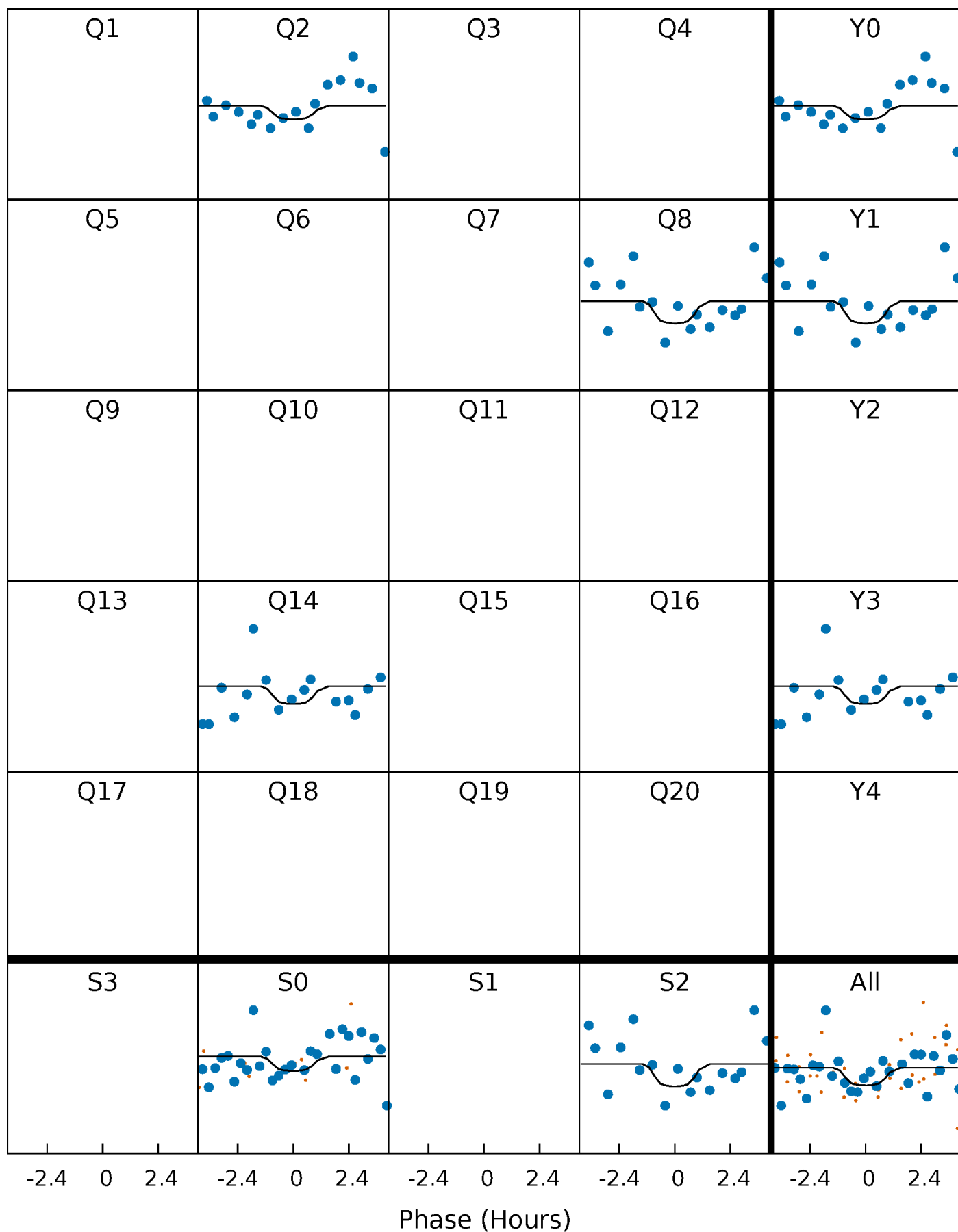
PDC Quarter-Phased Transit Curves

TCE 001572114-02 P=542.137613 Days $T_0=199.045804$ (BKJD)



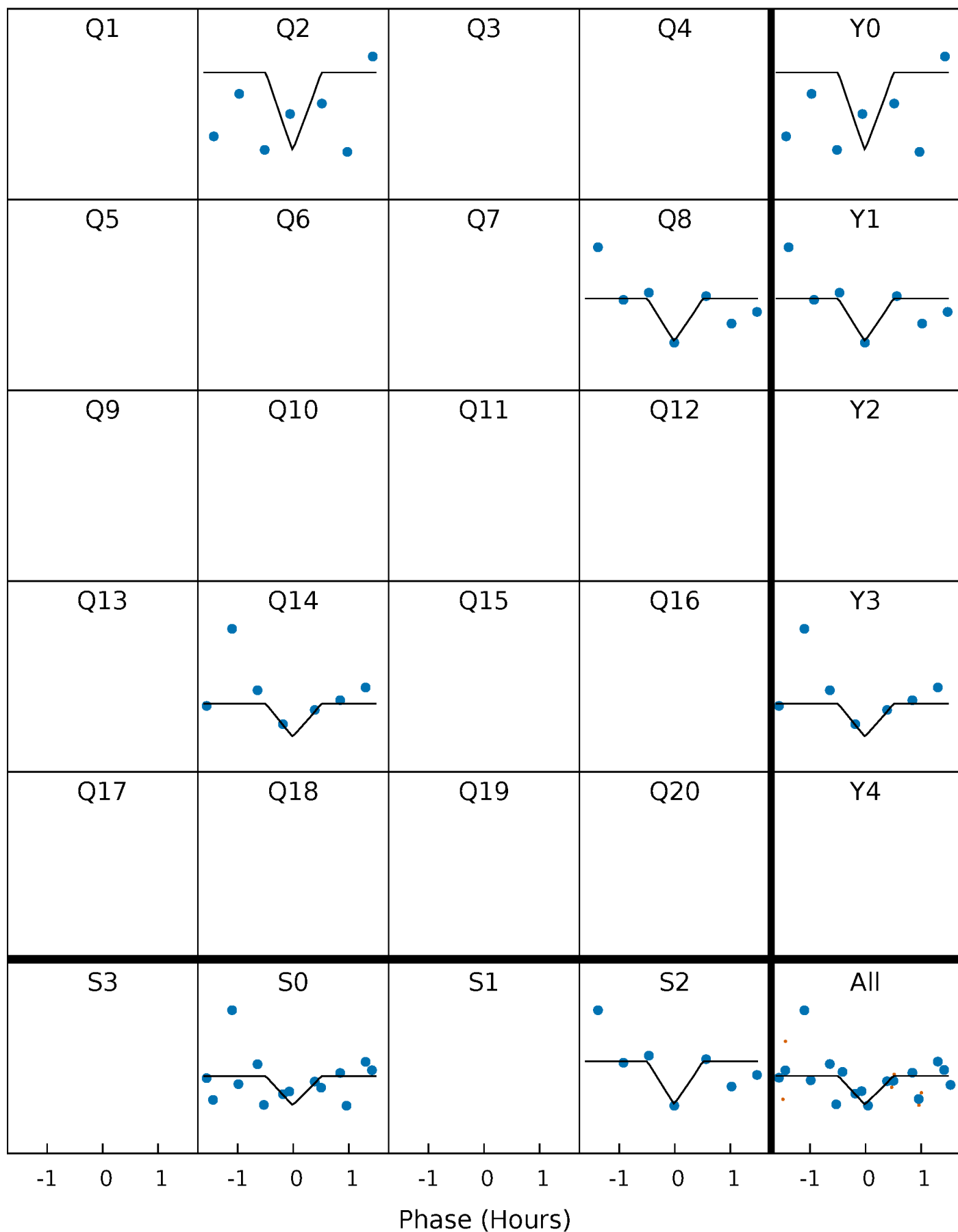
DV Quarter-Phased Transit Curves

TCE 001572114-02 P=542.137613 Days $T_0=199.045804$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

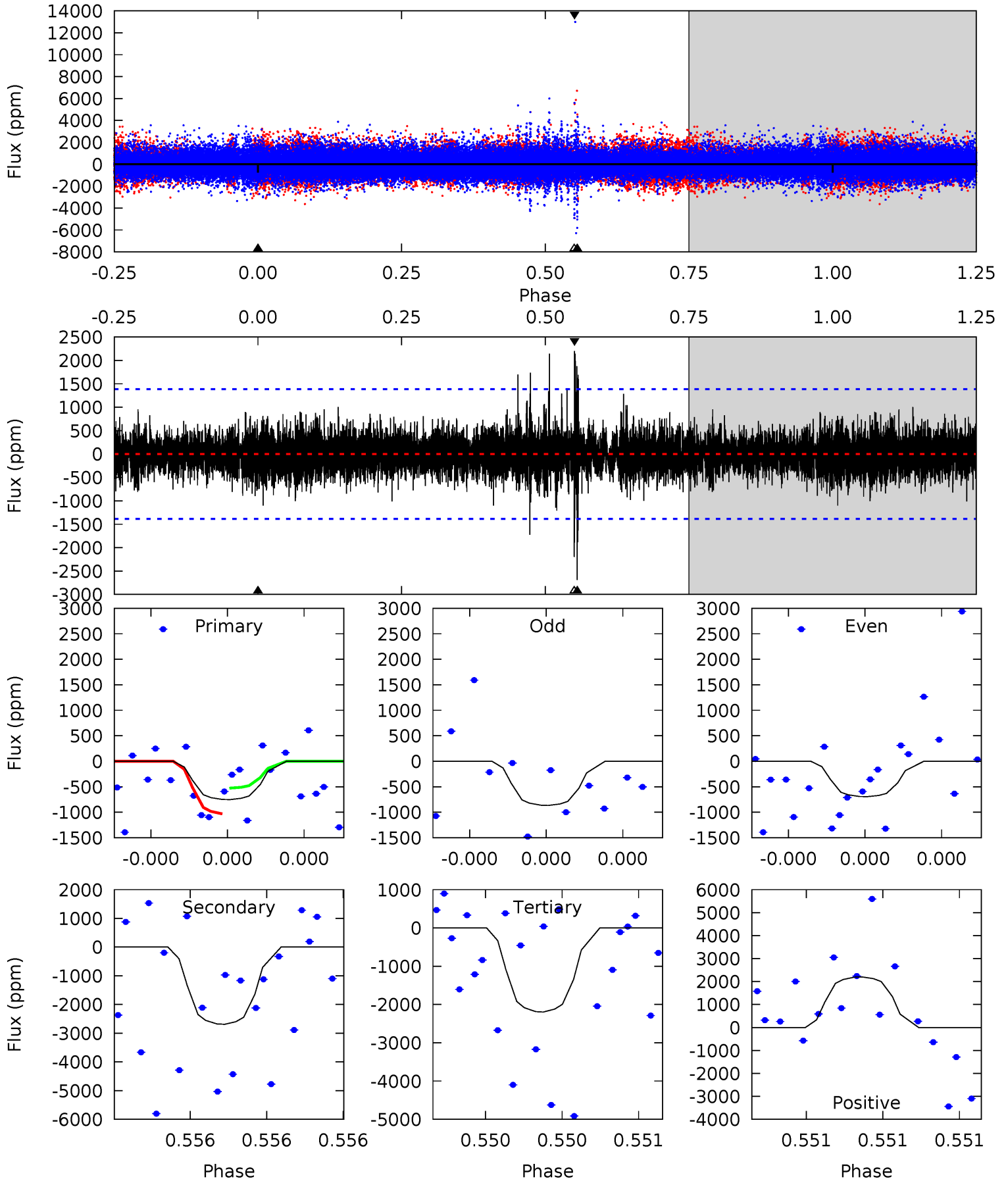
TCE 001572114-02 P=542.136403 Days $T_0=199.028232$ (BKJD)



DV Model-Shift Uniqueness Test

001572114-02, P = 542.137613 Days, E = 199.045804 Days

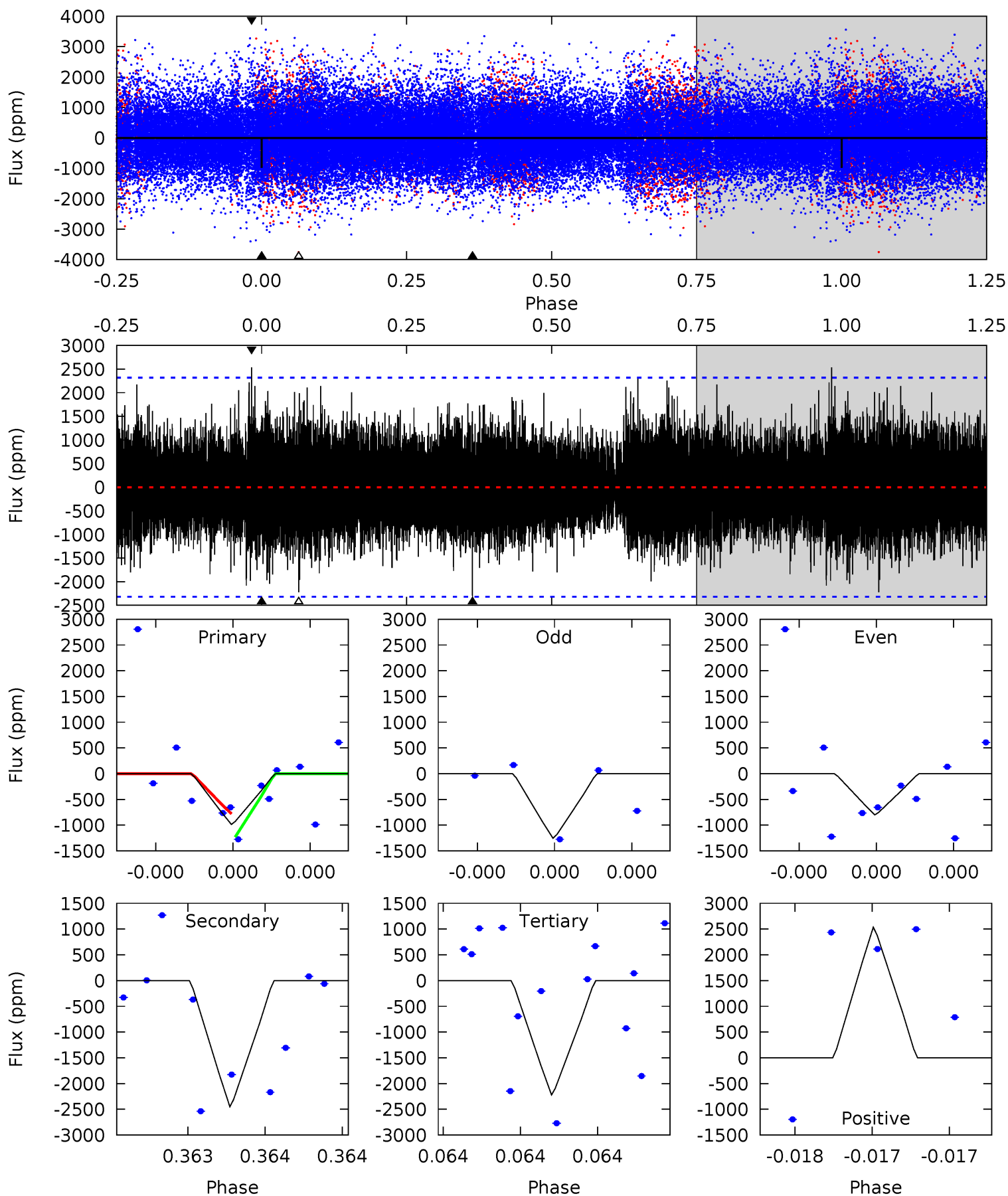
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.13	11.2	9.15	9.18	5.78	3.79	1.15	-6.02	-6.05	2.05	2.03	0.33	0.87	0.45	1.03



Alt Model-Shift Uniqueness Test

001572114-02, P = 542.136403 Days, E = 199.028232 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.51	6.24	5.65	6.45	5.90	3.97	1.27	-3.14	-3.94	0.59	-0.21	0.52	1.02	0.51	0.57



Stellar Parameters For KIC 001572114

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5518^{+166}_{-166}	$4.511^{+0.055}_{-0.154}$	$-0.060^{+0.300}_{-0.300}$	$0.866^{+0.199}_{-0.085}$	$0.887^{+0.092}_{-0.092}$	$1.924^{+0.522}_{-0.823}$
	+3%/-3%	+1%/-3%	+500%/-500%	+23%/-10%	+10%/-10%	+27%/-43%
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 001572114-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-2689 ± 240	$48.49^{+53.90}_{-33.29}$	287^{+16}_{-13}	2583^{+1055}_{-402}	964^{+9380}_{-751}
Alt.	-2452 ± 393	$50.73^{+53.03}_{-35.52}$	287^{+16}_{-12}	2554^{+976}_{-411}	831^{+7412}_{-641}

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 $A_{obs} \gg 1.0$

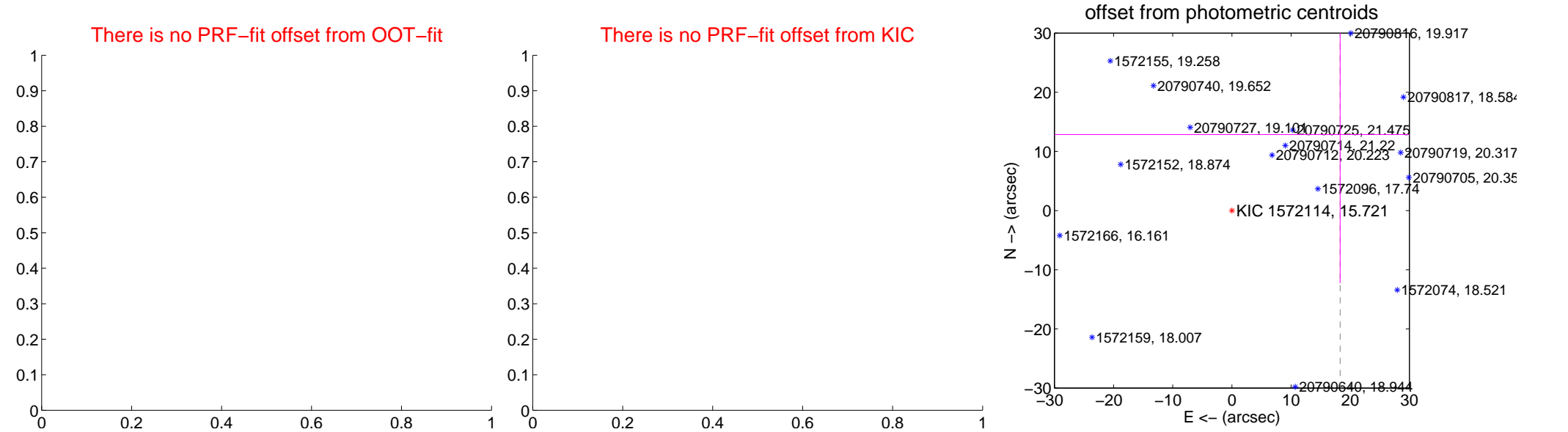
DV Centroid Data

Supplemental centroid analysis for 001572114-02. Kepler magnitude: 15.72. Transit SNR 2.49

There are 0 quarters with good PRF difference image offsets

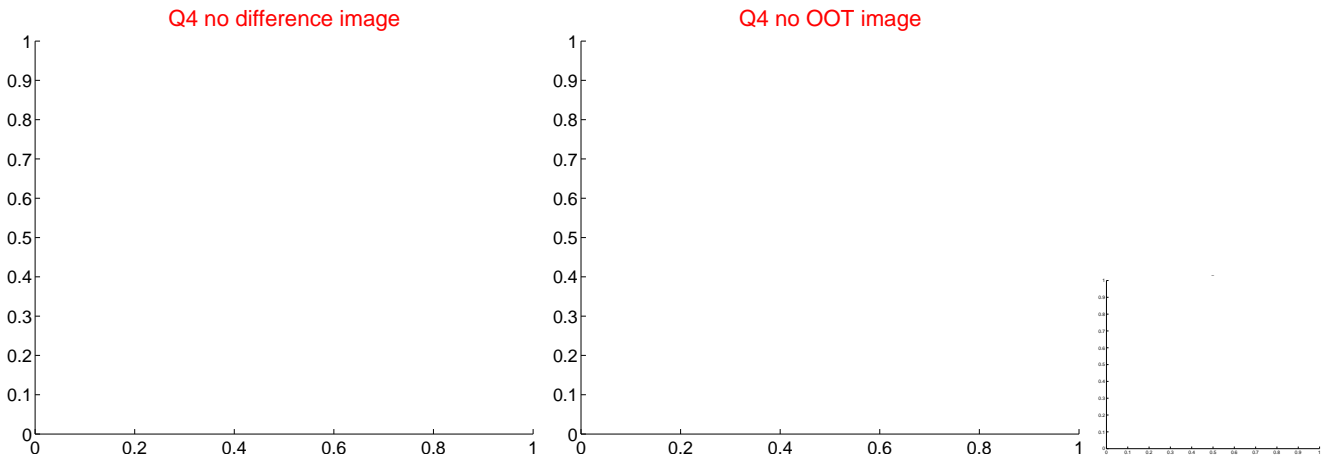
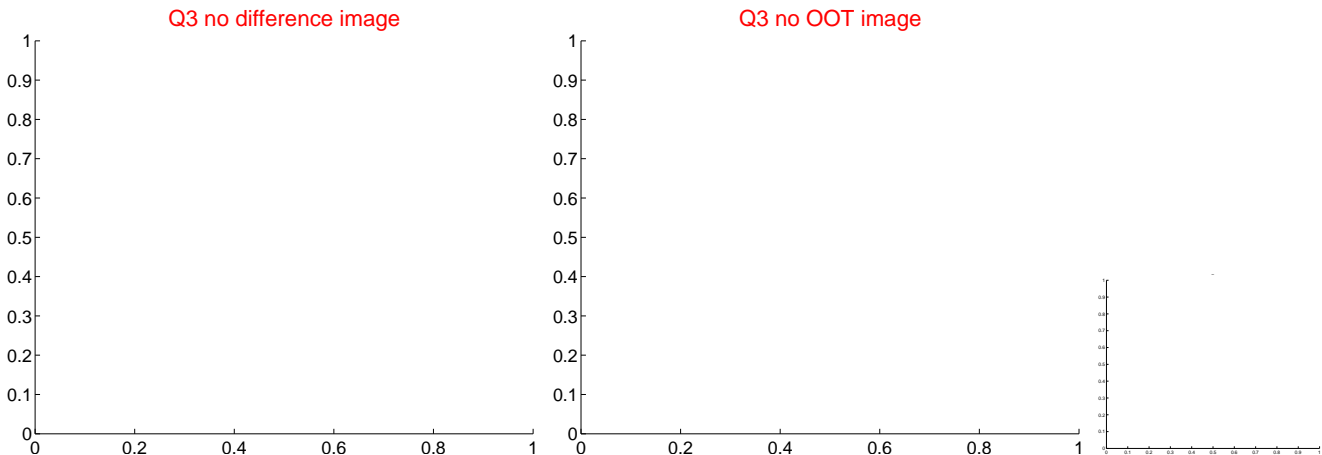
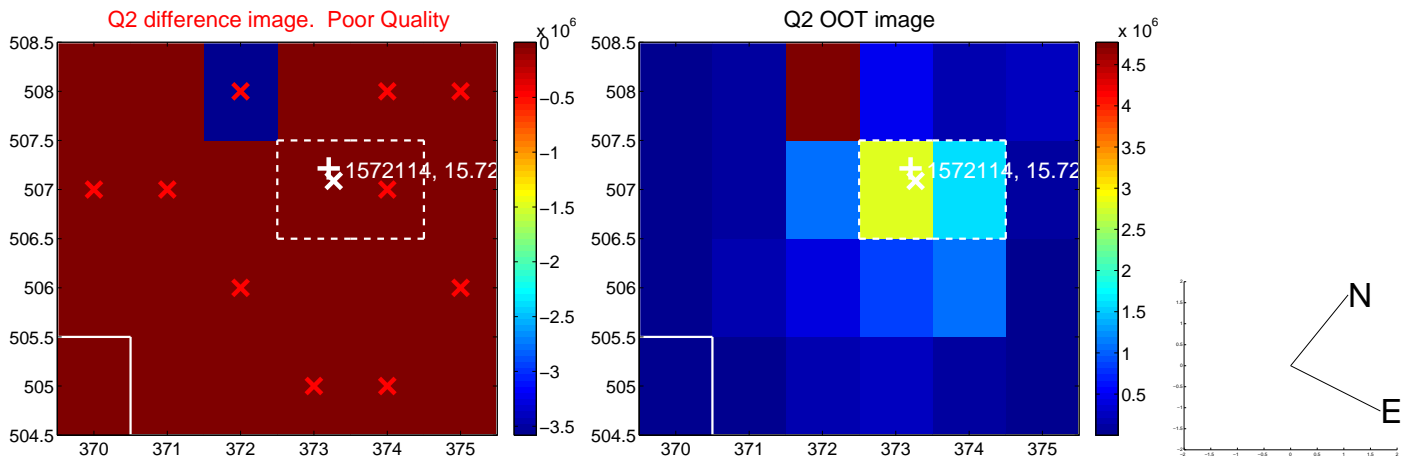
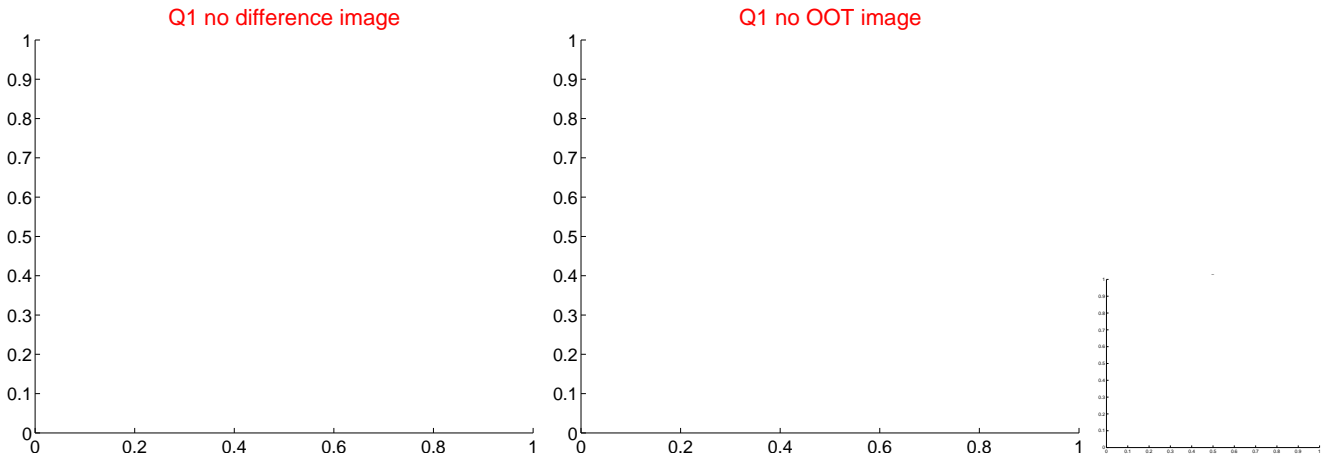
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	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	22.35 ± 87.46	0.26	-18.29 ± 105.42	12.85 ± 25.14

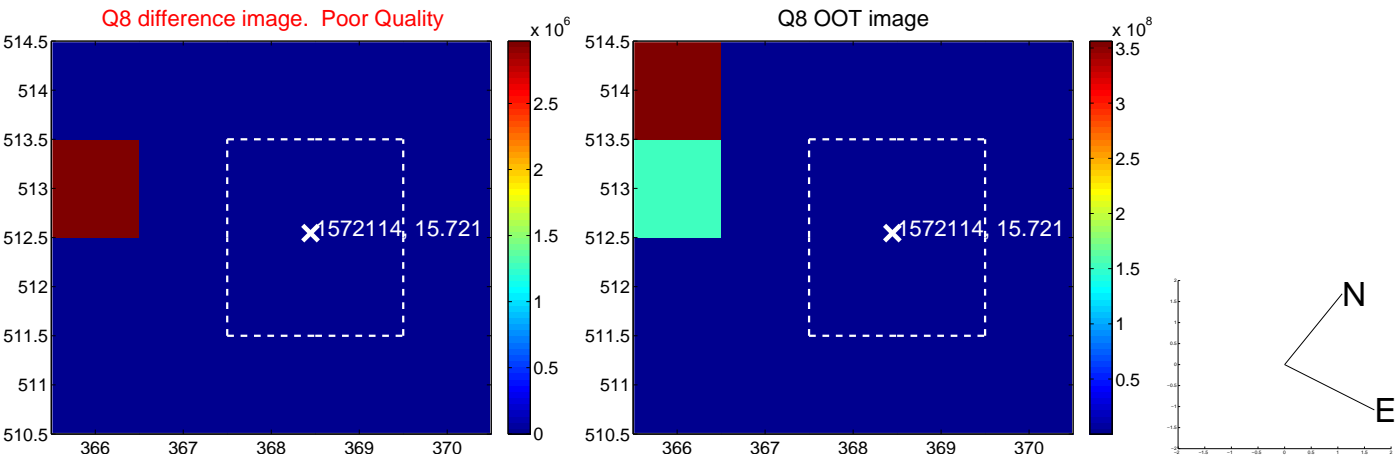


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



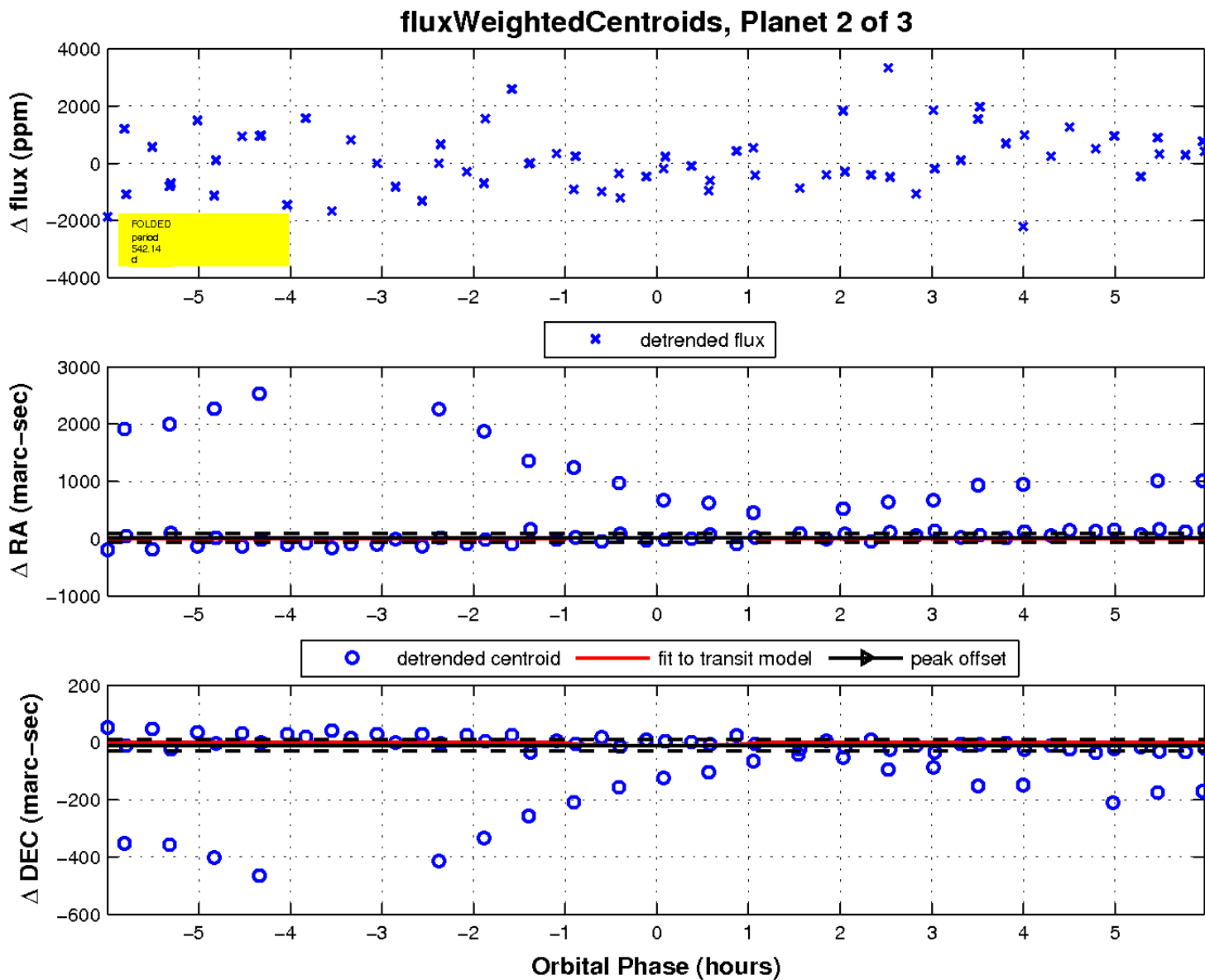
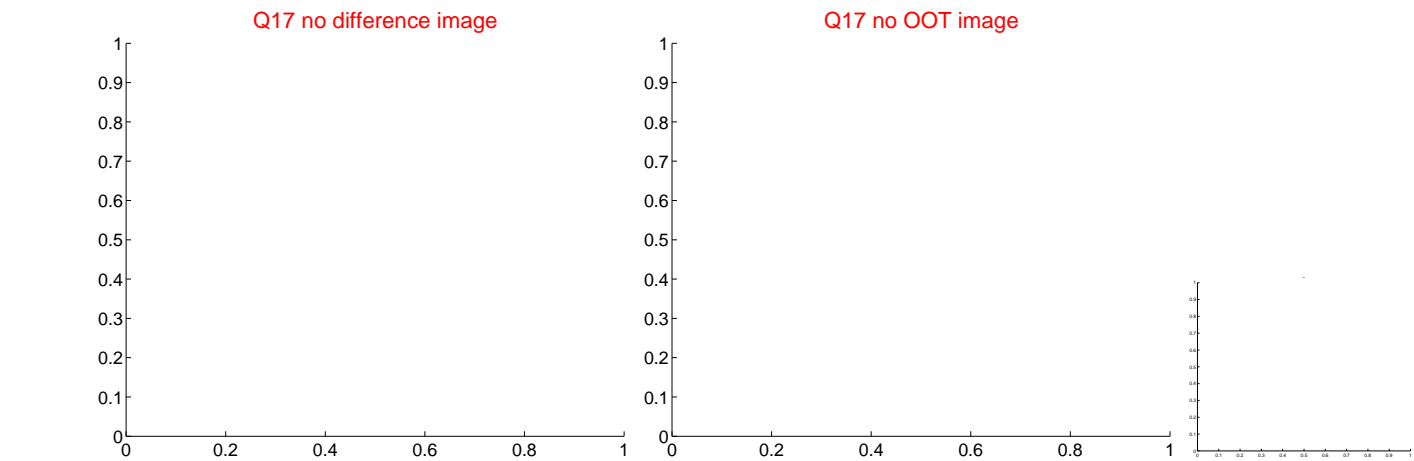
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

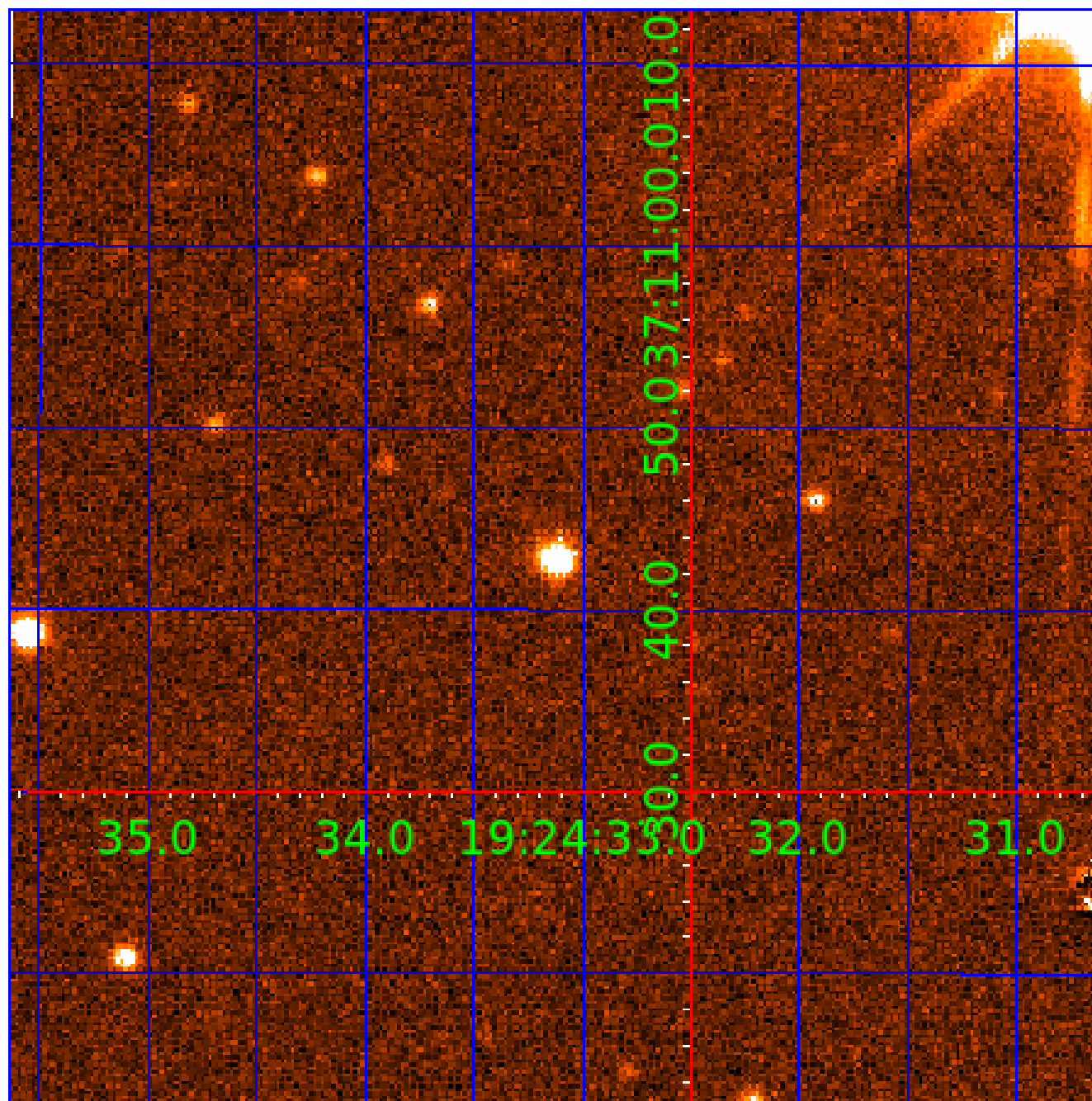


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 001572114

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})
001572114-01	OBS	No	639.047341	215.806413	1299.2	31.349	9.5	9.7	0.87	5518	3.13	0.32
001572114-02	OBS	No	542.137613	199.045804	794.0	2.062	7.9	2.5	0.87	5518	2.49	0.40
001572114-03	OBS	No	365.292061	376.581541	1129.0	25.479	7.9	9.4	0.87	5518	2.93	0.67

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
001572114-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
001572114-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
001572114-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

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

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

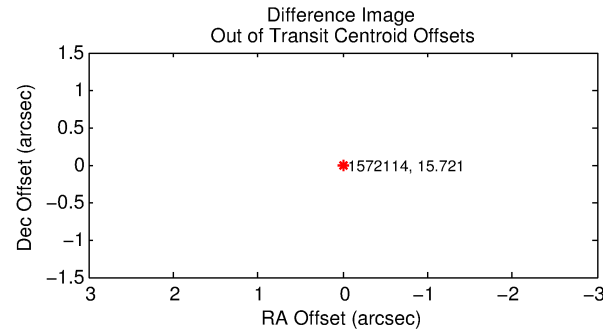
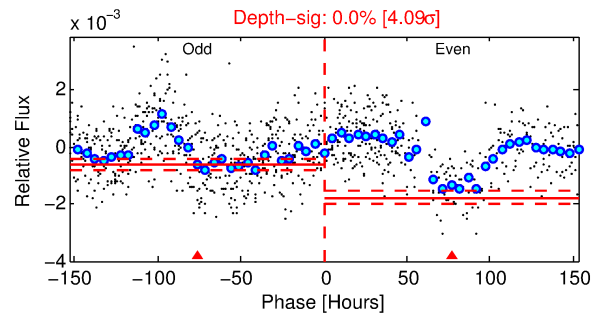
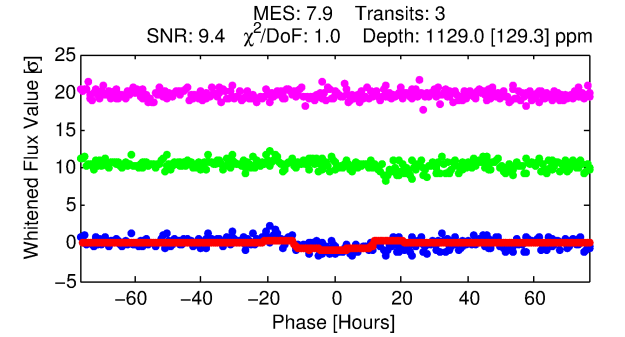
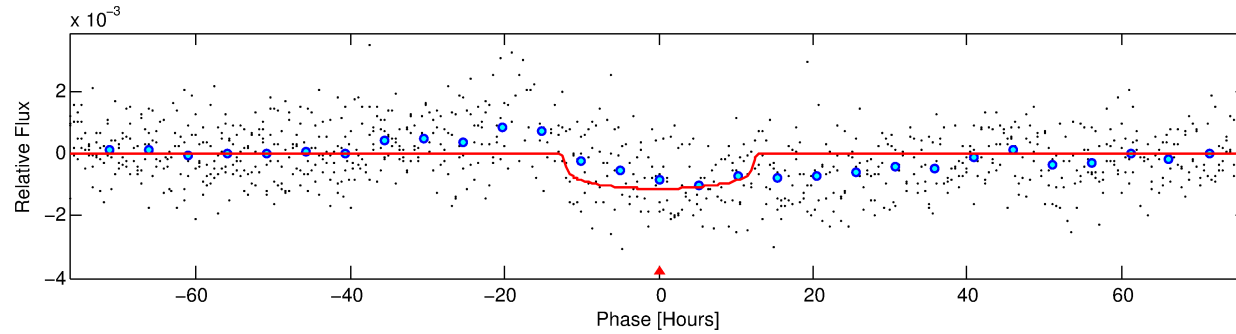
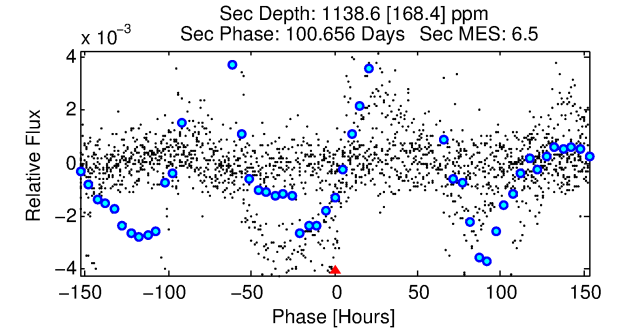
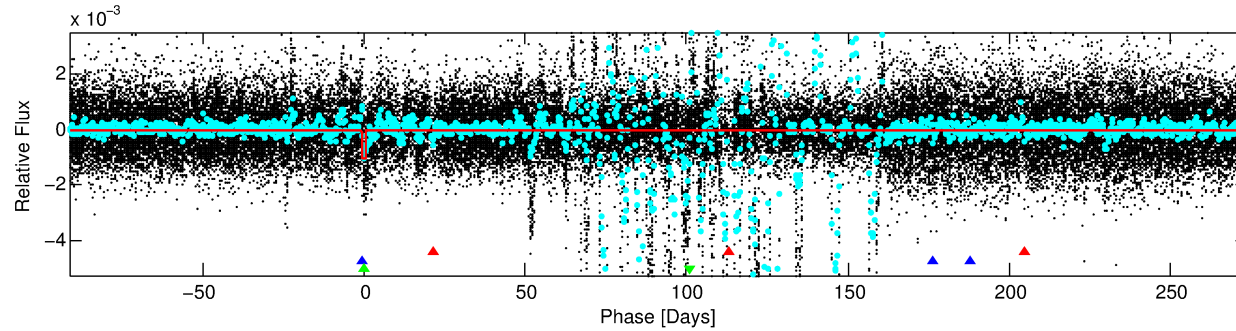
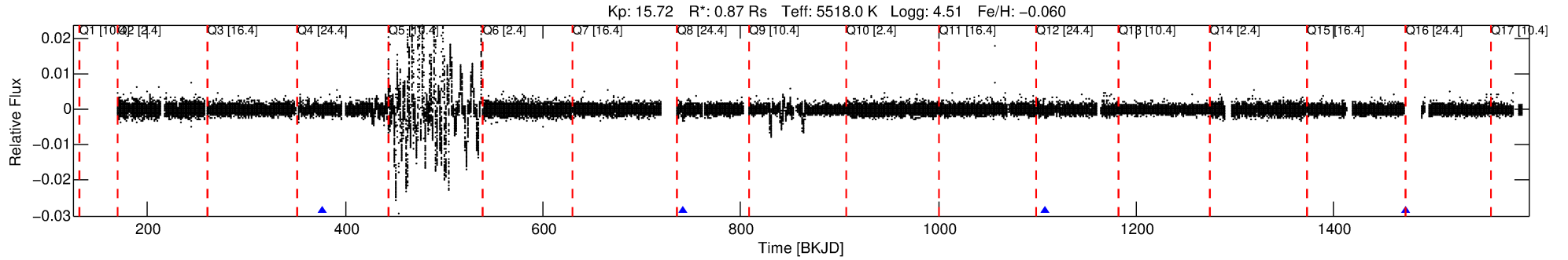
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 001572114-03

No Significant Match Found

DV One-Page Summary

KIC: 1572114 Candidate: 3 of 3 Period: 365.292 d



DV Fit Results:

Period = 365.29206 [0.01944] d
Epoch = 376.5815 [0.0266] BKJD
Rp/R* = 0.0310 [0.0086]
a/R* = 102.40 [111.51]
b = 0.43 [2.04]
Seff = 0.67 [0.21]
Teq = 231 [18] K
Rp = 2.93 [1.05] Re
a = 0.9612 [0.1860] AU
Ag = 67258.33 [42801.41] [1.57 σ]
Teffp = 5753 [839] K [6.58 σ]

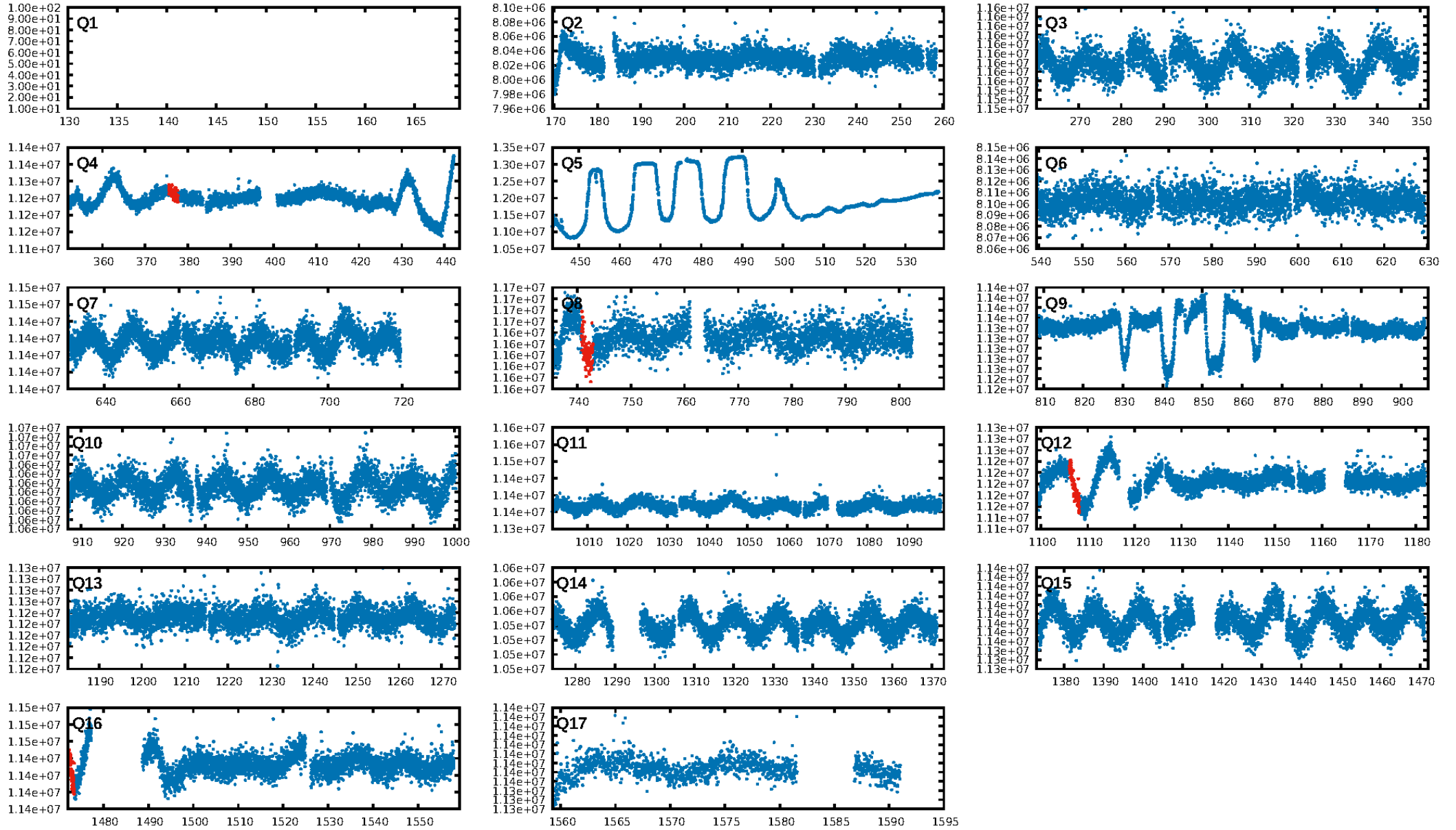
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [166.04 σ]
ModelChiSquare2-sig: 0.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 8.87e-07
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -0.0796
Centroid-sig: 14.5%
Centroid-so: N/A
OotOffset-rm: N/A
KicOffset-rm: 9.284 arcsec [139.19 σ]
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/1/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 0.67 [2/3]

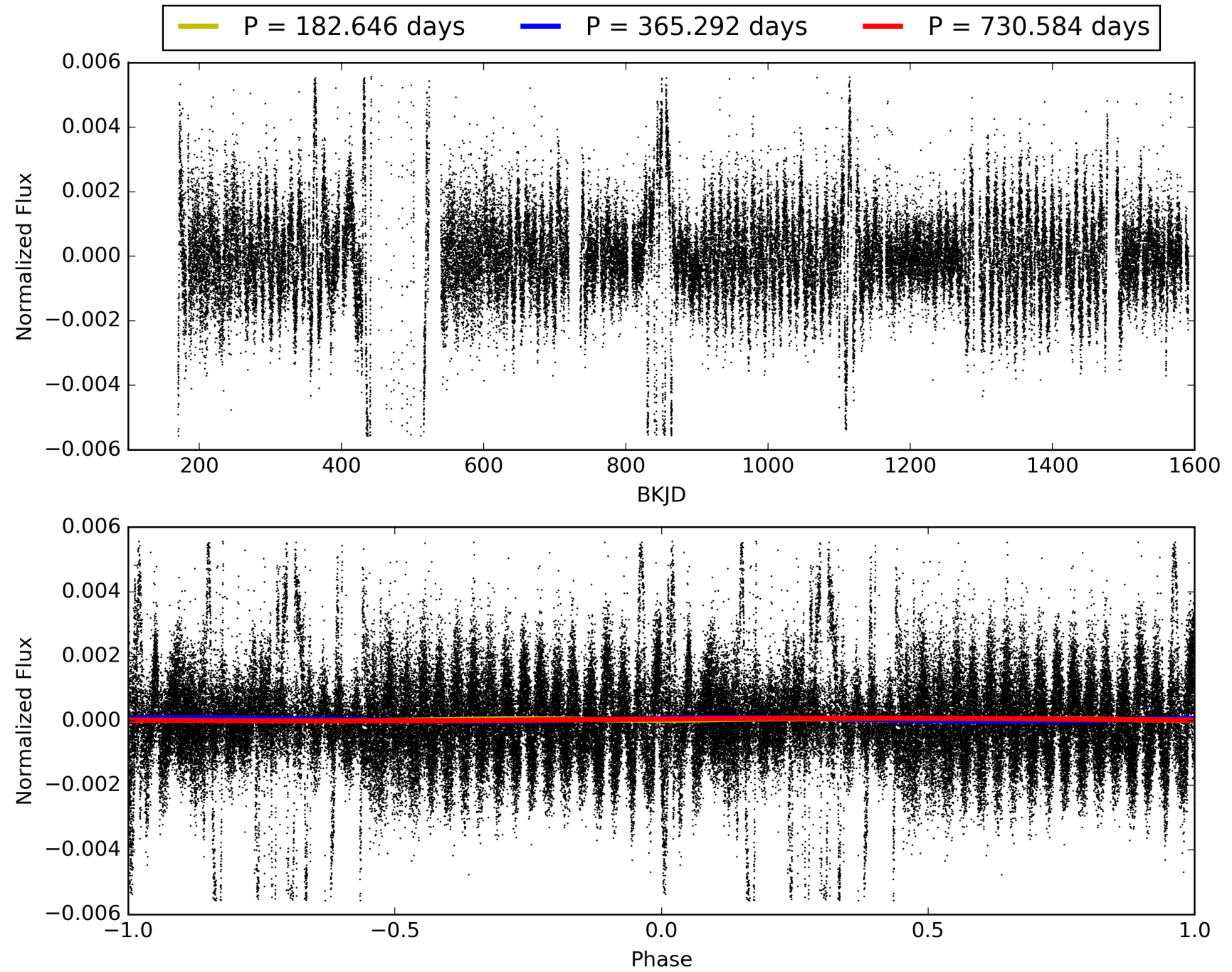
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 00:38:01 Z

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

TCE 001572114-03, PDC Light Curves

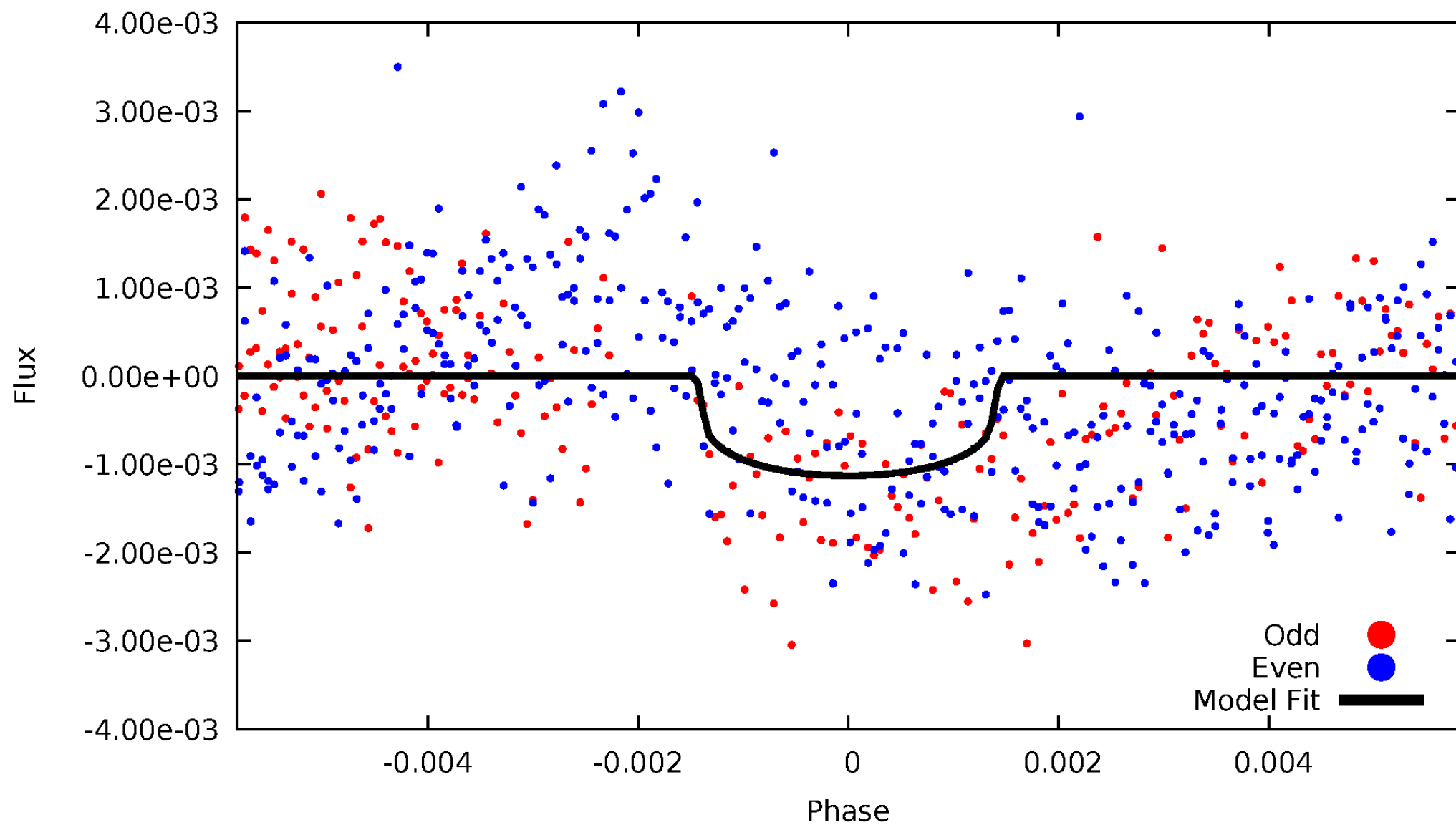


TCE 001572114-03



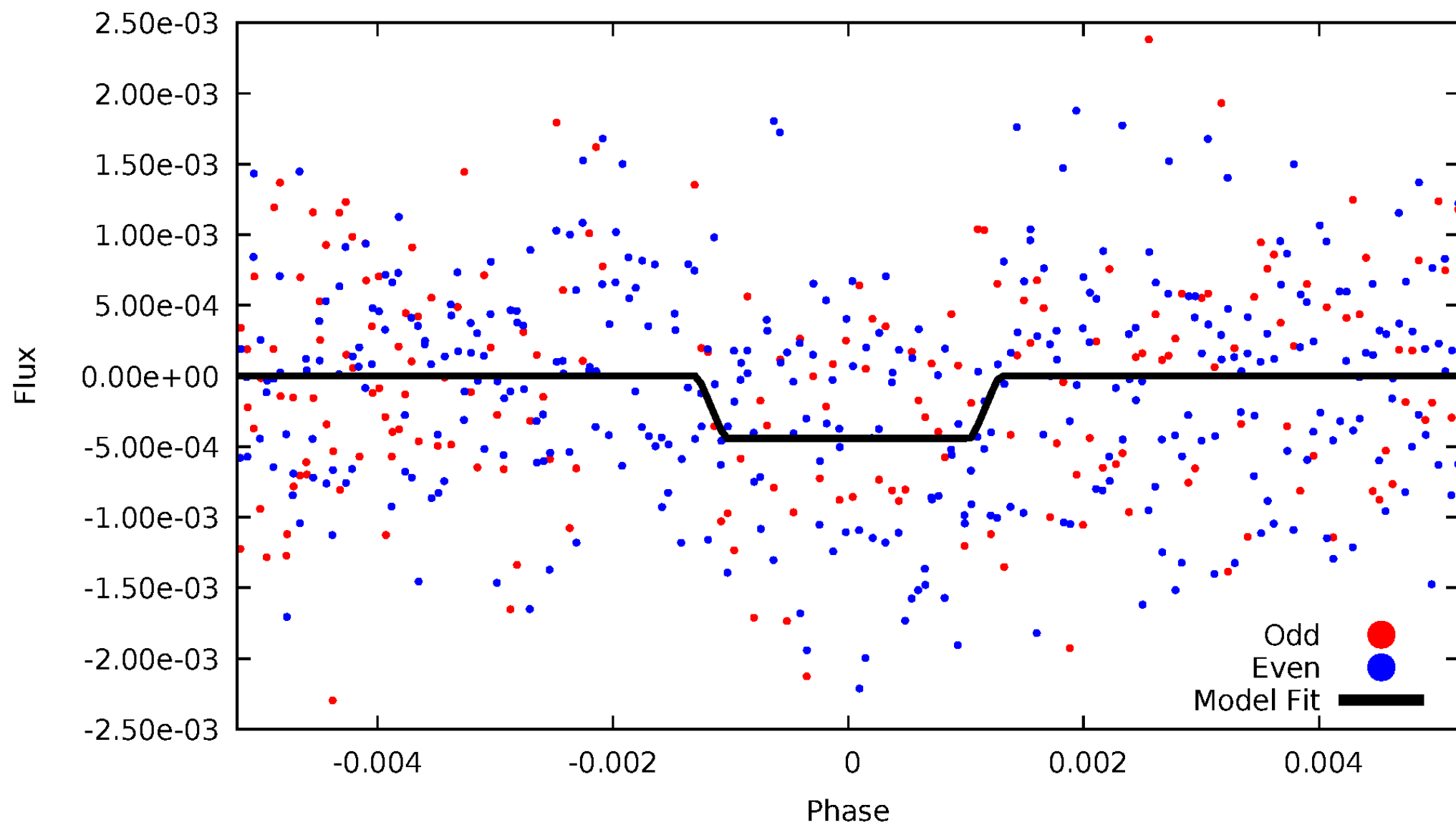
DV Odd/Even

TCE 001572114-03



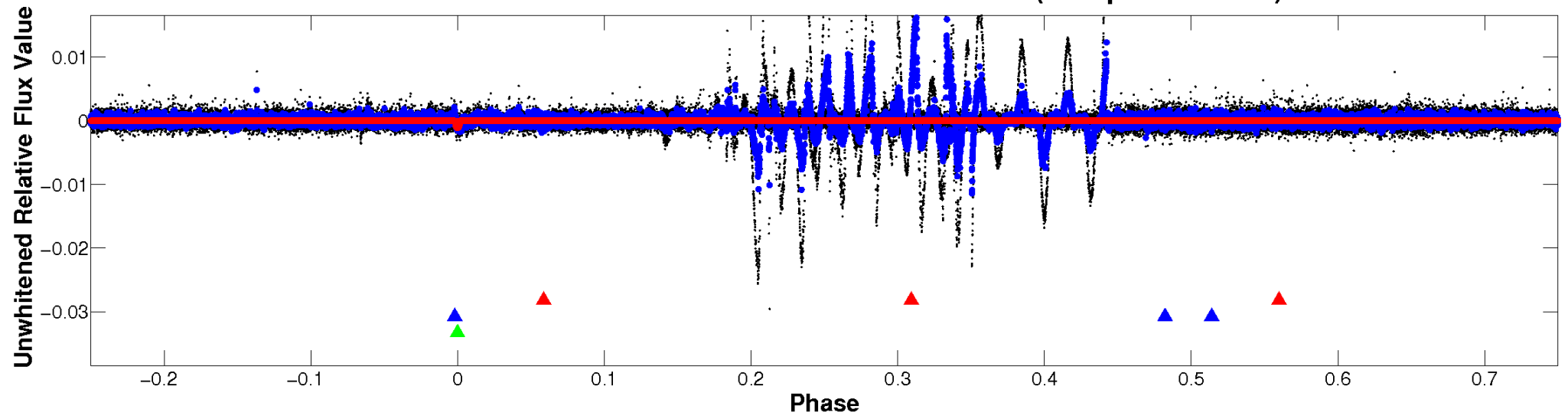
ALT Odd/Even

TCE 001572114-03

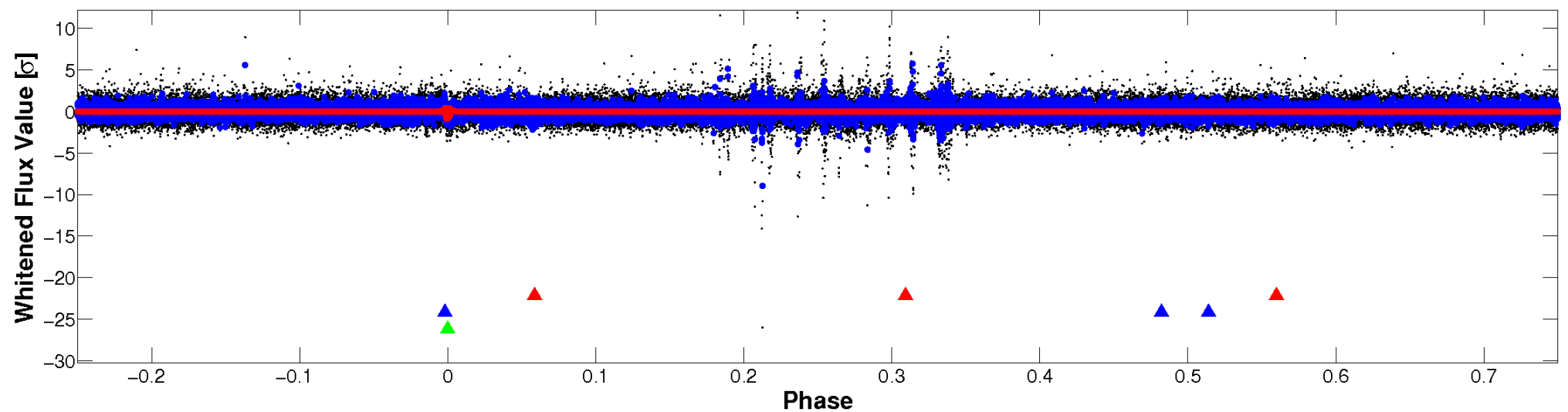


Non-Whitened Vs. Whitened Light Curve

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

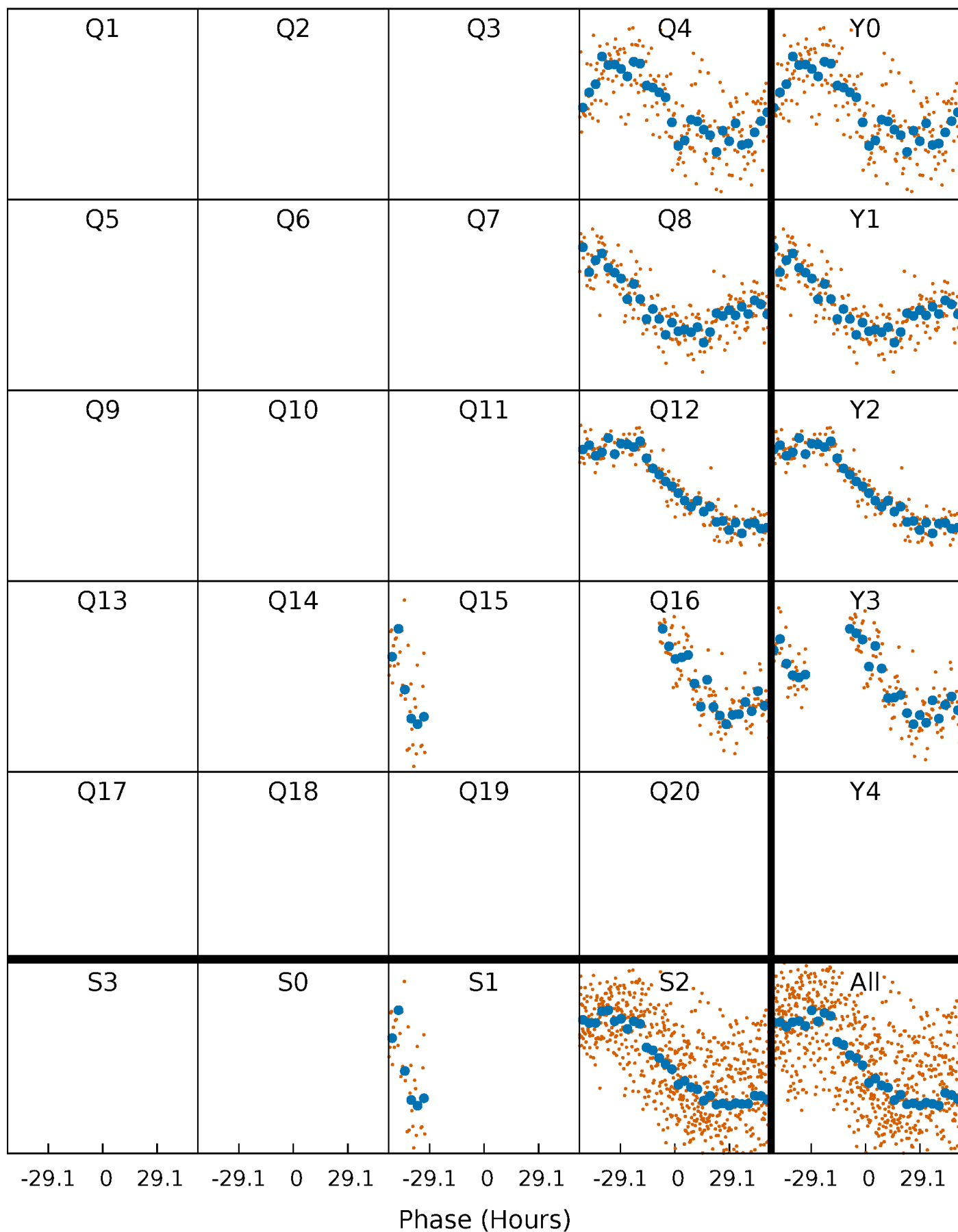


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



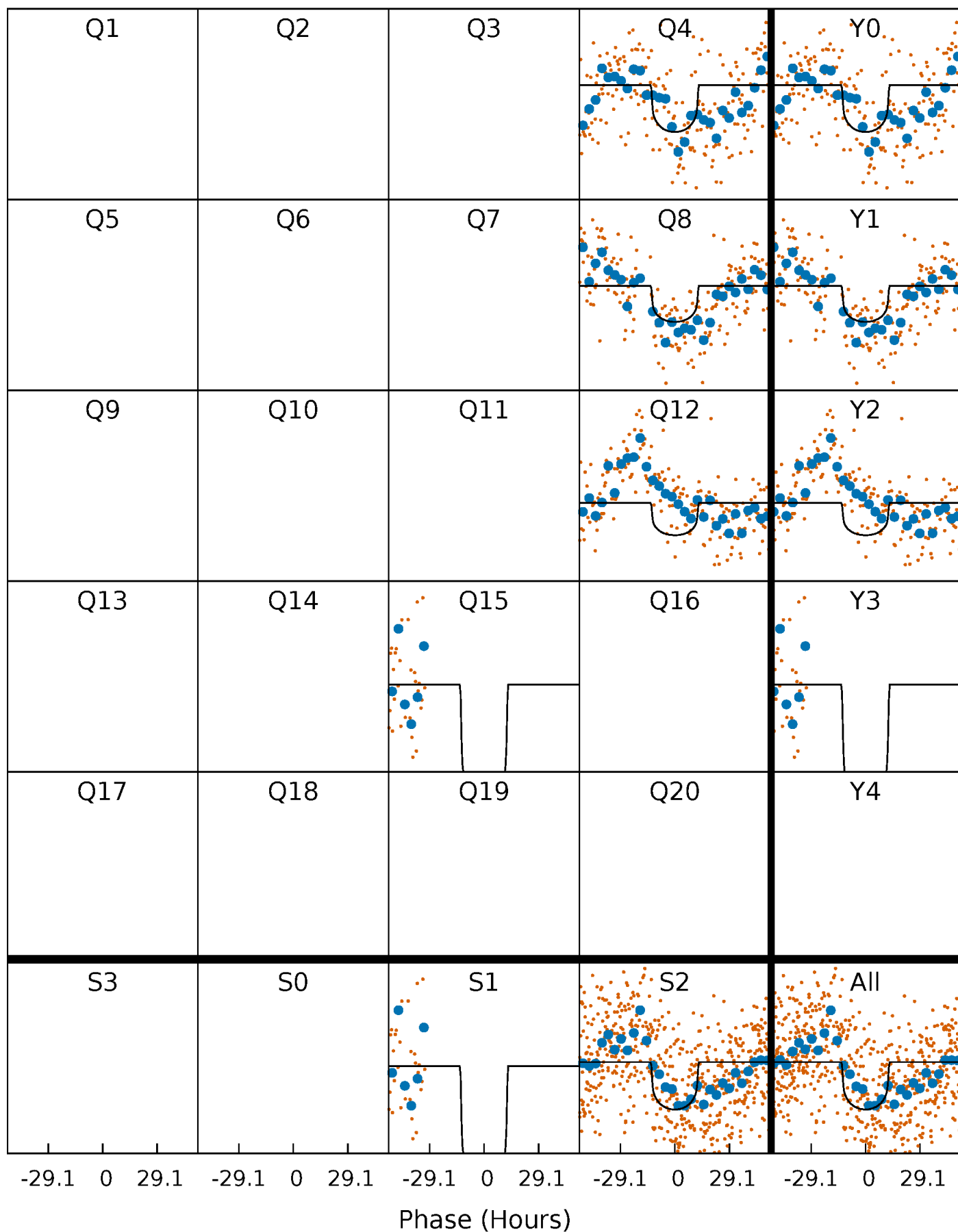
PDC Quarter-Phased Transit Curves

TCE 001572114-03 P=365.292061 Days $T_0=376.581541$ (BKJD)



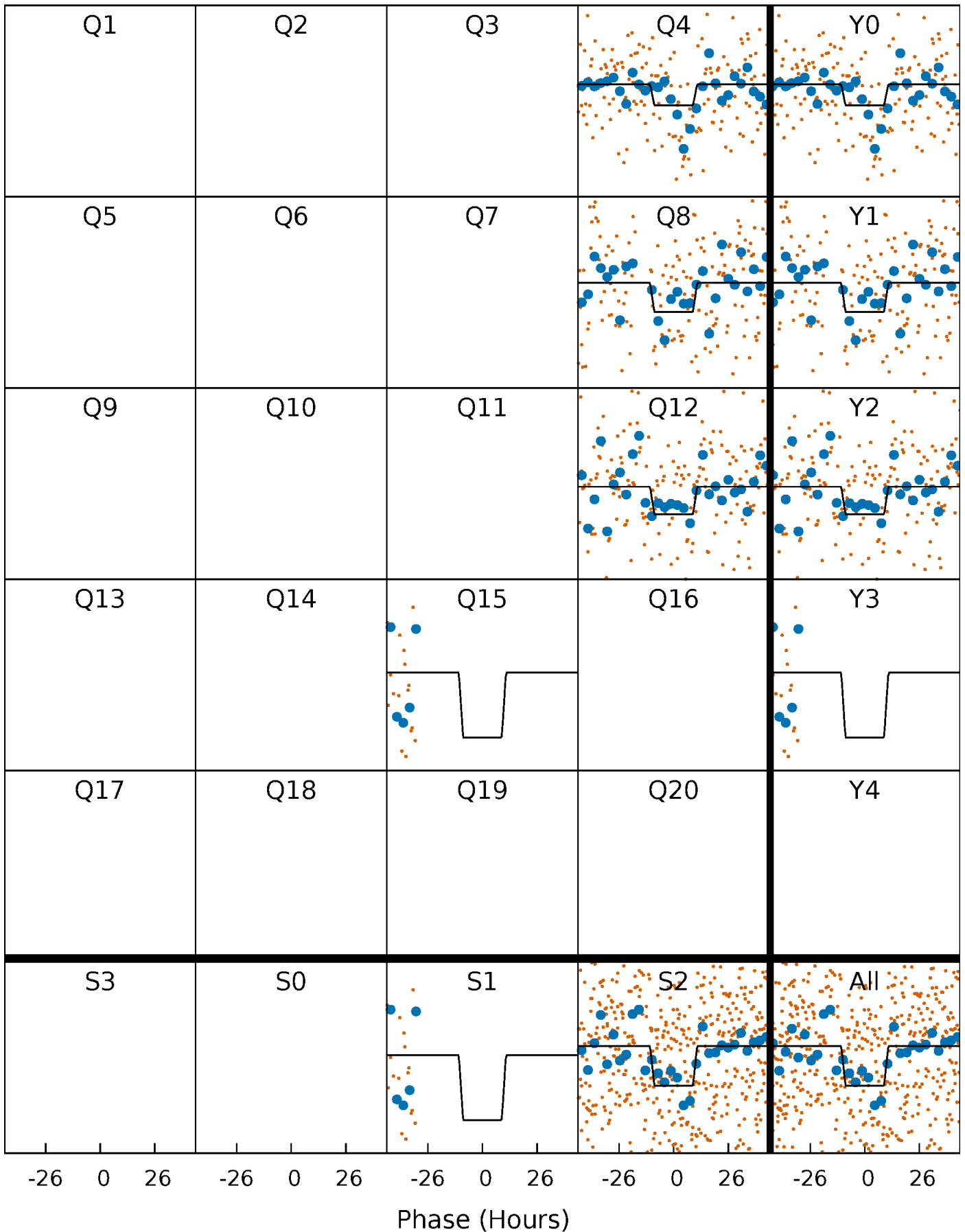
DV Quarter-Phased Transit Curves

TCE 001572114-03 P=365.292061 Days $T_0=376.581541$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

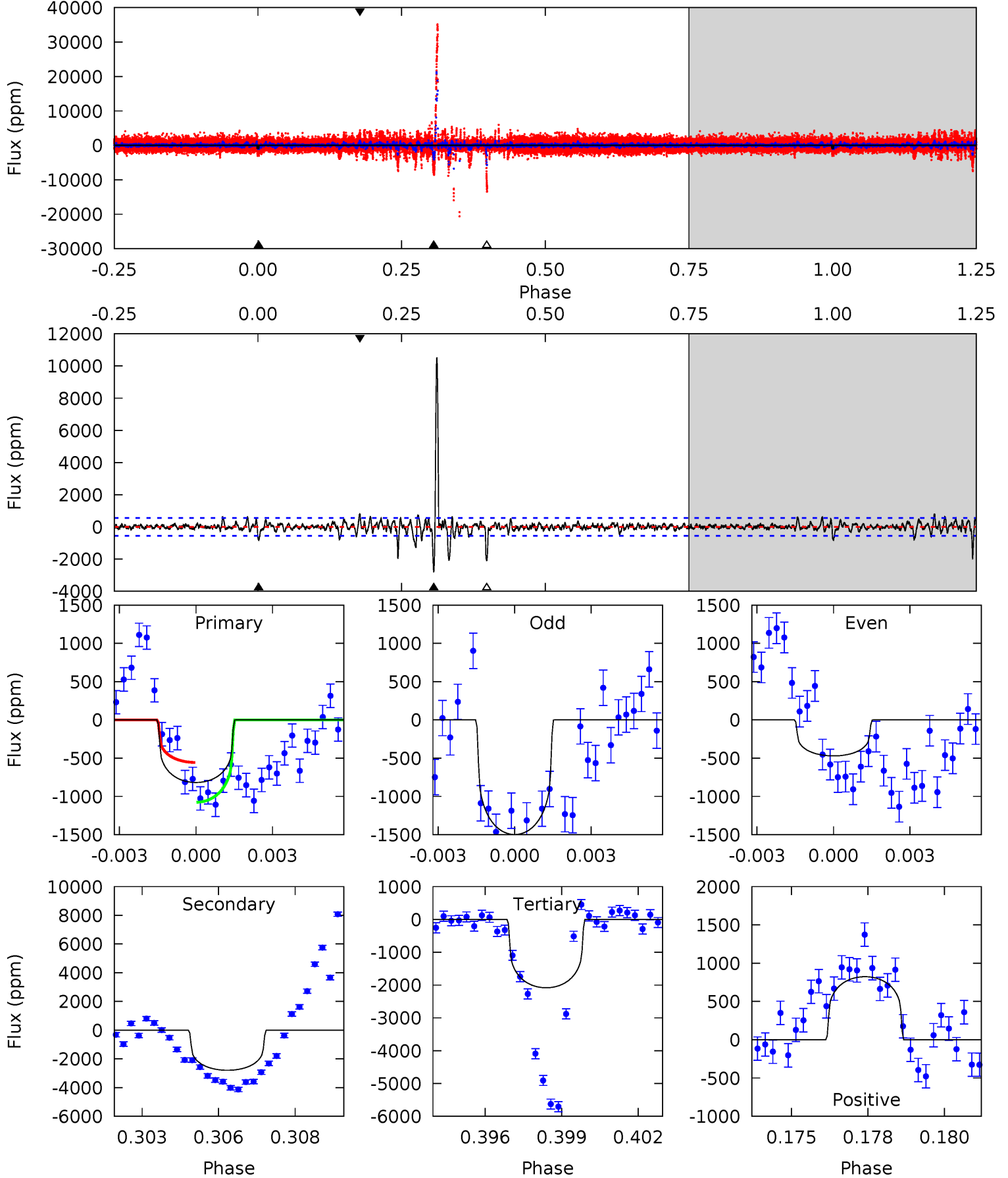
TCE 001572114-03 P=365.331619 Days $T_0=376.474548$ (BKJD)



DV Model-Shift Uniqueness Test

001572114-03, P = 365.292061 Days, E = 11.289480 Days

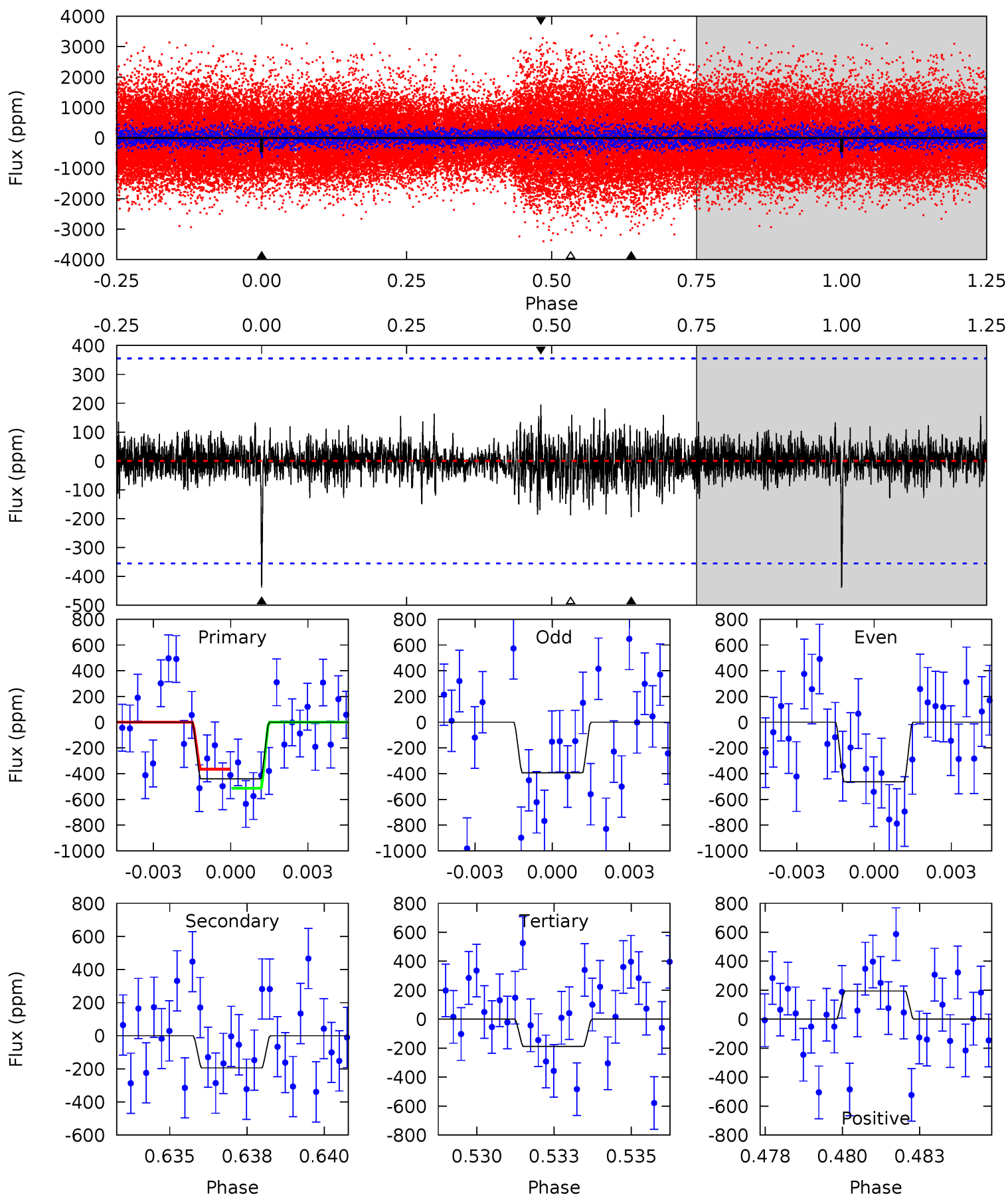
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.73	26.4	19.7	7.78	5.26	2.98	4.71	-12.0	-0.05	6.72	18.6	2.61	0.80	0.79	2.43



Alt Model-Shift Uniqueness Test

001572114-03, P = 365.331619 Days, E = 11.142929 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.53	2.89	2.79	2.89	5.28	3.01	0.68	3.73	3.63	0.10	-0.00	0.49	1.12	0.31	1.11



Stellar Parameters For KIC 001572114

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5518^{+166}_{-166}	$4.511^{+0.055}_{-0.154}$	$-0.060^{+0.300}_{-0.300}$	$0.866^{+0.199}_{-0.085}$	$0.887^{+0.092}_{-0.092}$	$1.924^{+0.522}_{-0.823}$
	+3%/-3%	+1%/-3%	+500%/-500%	+23%/-10%	+10%/-10%	+27%/-43%
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 001572114-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-2794 ± 106	$3.00^{+0.94}_{-0.79}$	328^{+20}_{-15}	7245^{+1558}_{-901}	$154492^{+131216}_{-63202}$
Alt.	-194 ± 67	$2.04^{+0.84}_{-0.79}$	327^{+20}_{-15}	4601^{+1208}_{-663}	22899^{+40123}_{-12753}

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

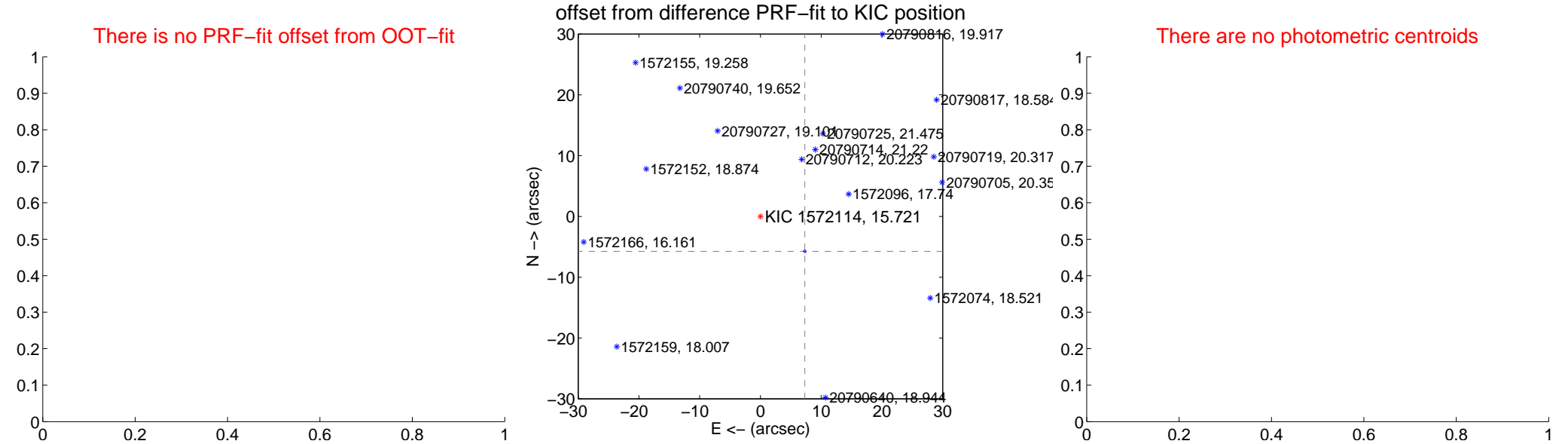
DV Centroid Data

Supplemental centroid analysis for 001572114-03. Kepler magnitude: 15.72. Transit SNR 9.41

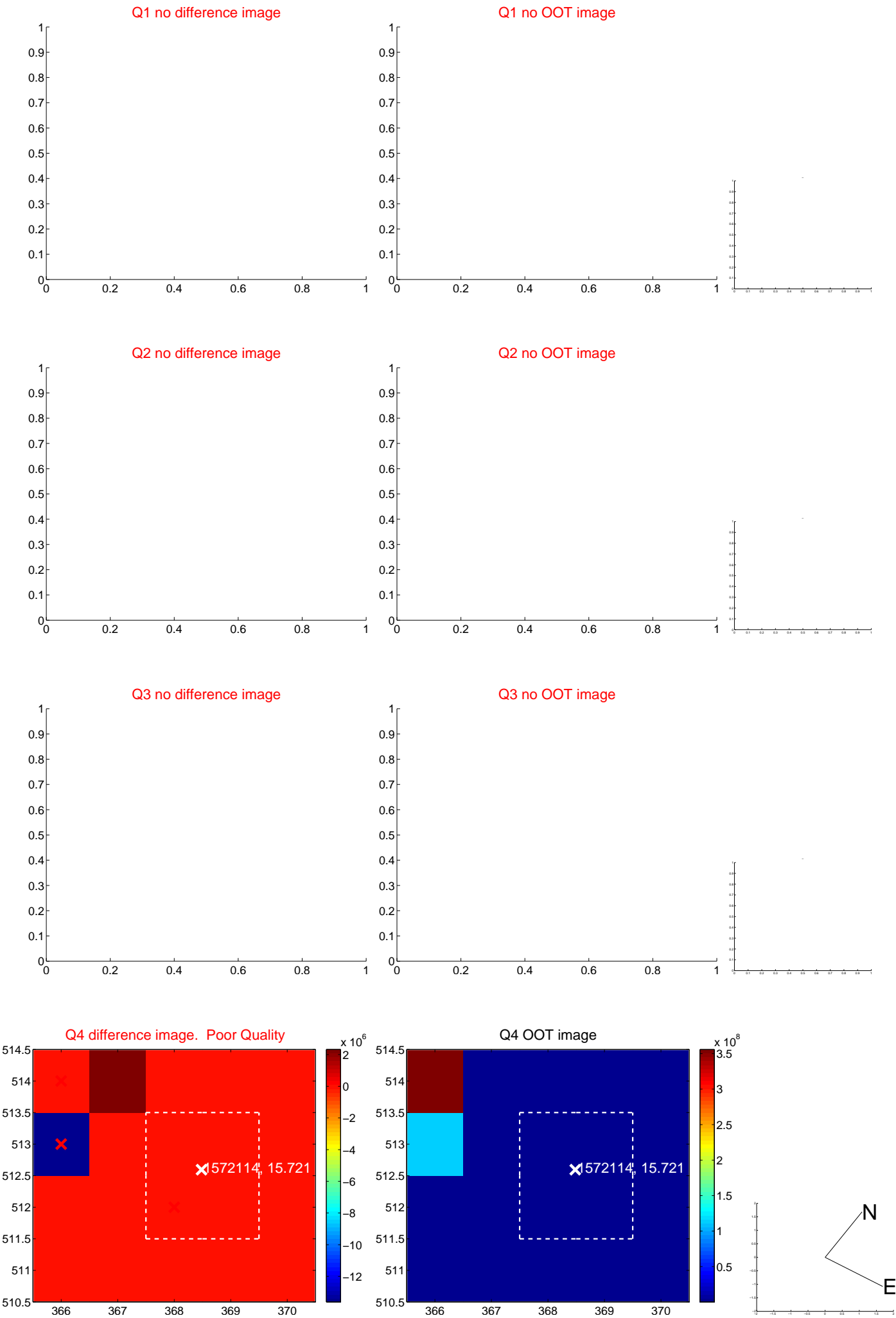
There are 0 quarters with good PRF difference image offsets

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

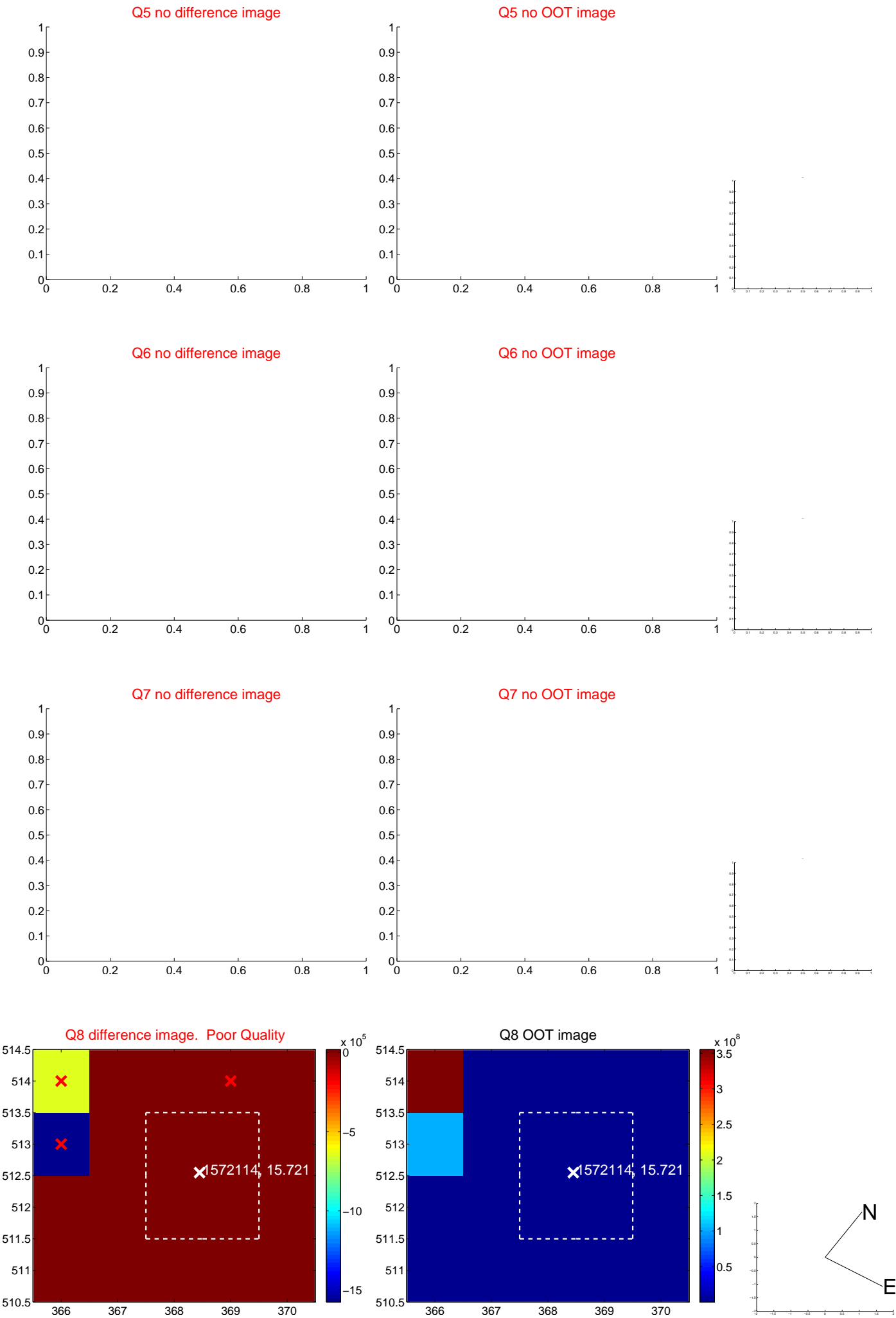
	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	9.284 ± 0.067	139.19	-7.300 ± 0.067	-5.736 ± 0.067
photometric centroid source offset	—	—	—	—



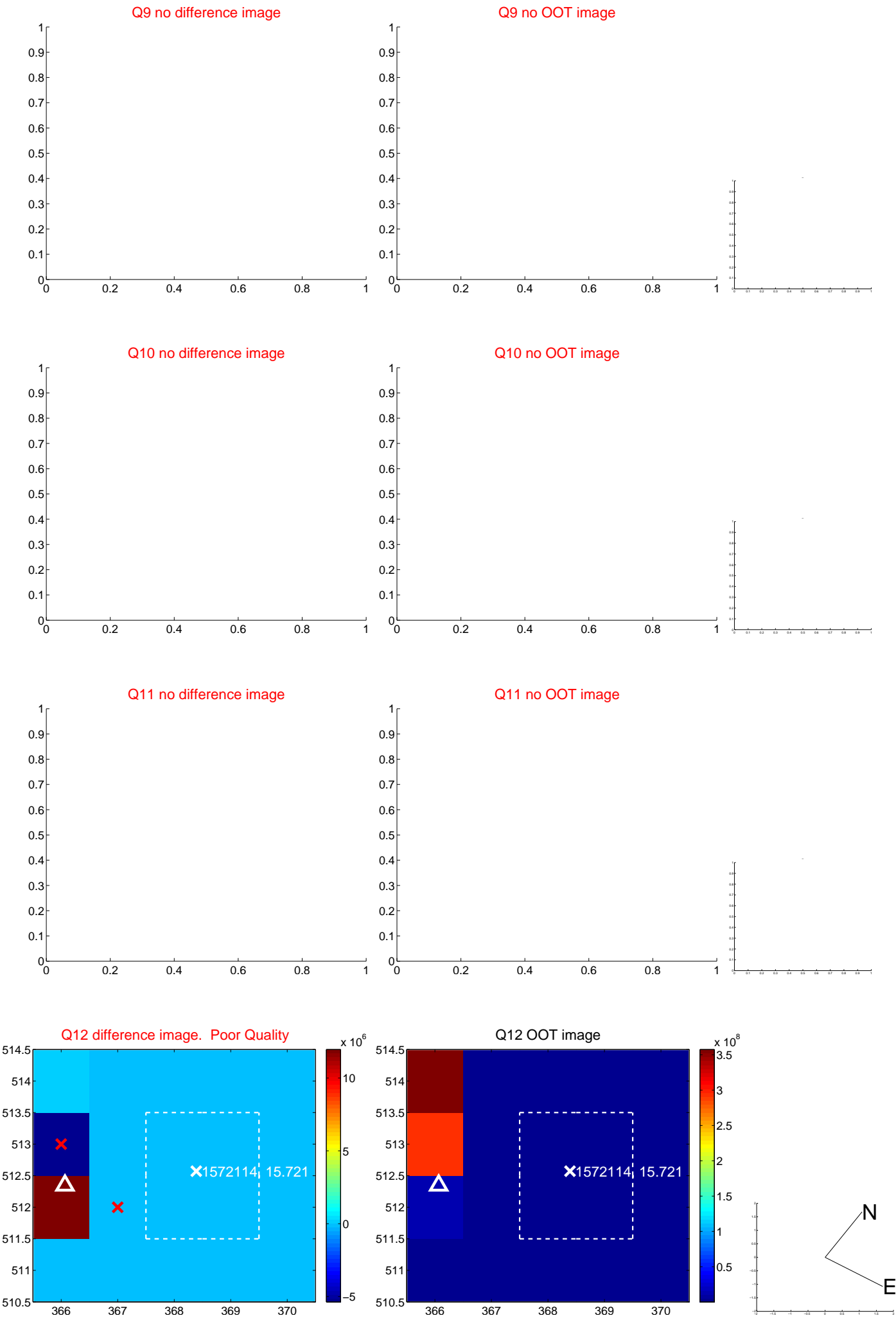
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



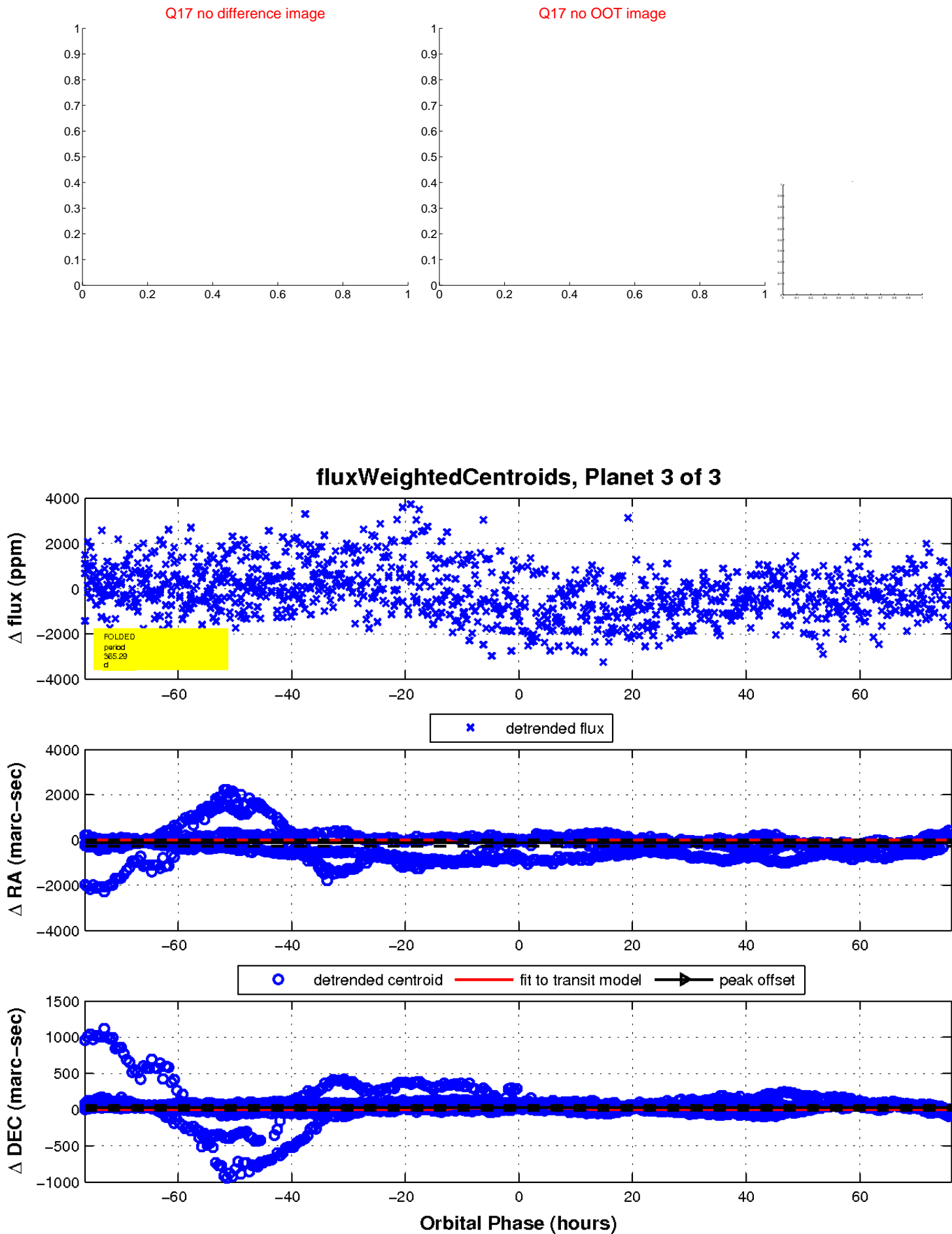
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



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



UKIRT Image

Declination

