

KIC 011924025

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})
011924025-01	OBS	No	0.808582	132.082064	13.9	3.383	7.9	8.2	2.06	7449	0.91	29738.60
011924025-02	OBS	No	227.413796	163.795152	180.5	8.789	8.4	6.6	2.06	7449	3.21	16.14
011924025-03	OBS	No	144.907324	186.607764	101.4	18.933	7.2	4.5	2.06	7449	2.32	29.43

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011924025-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011924025-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_UNCERTAIN
011924025-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

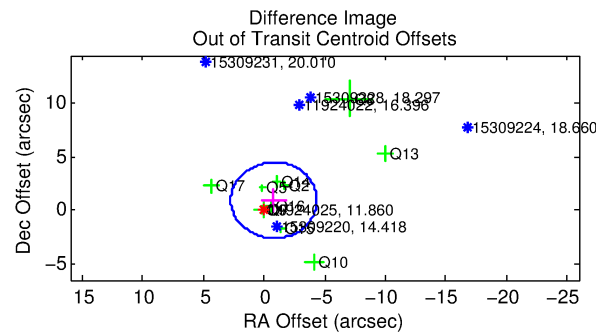
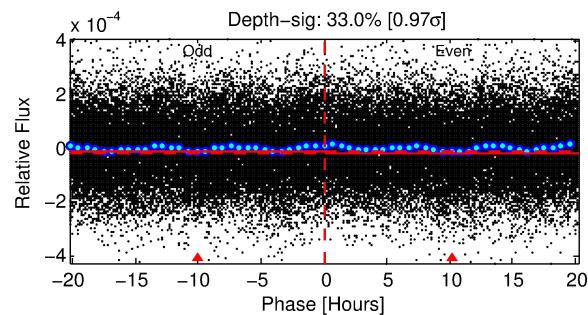
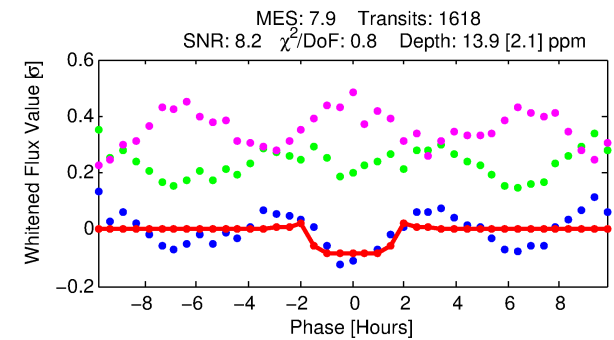
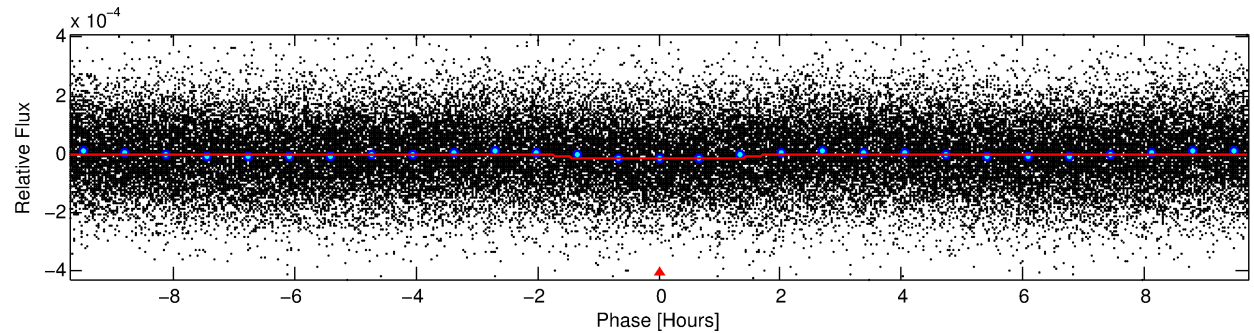
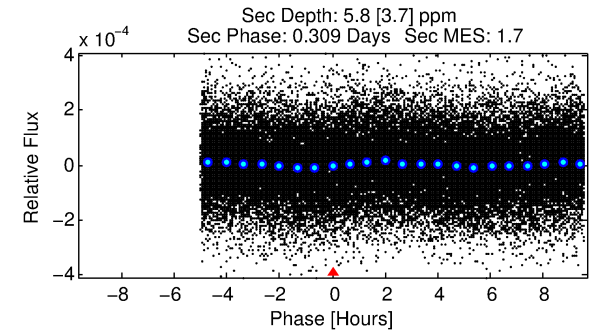
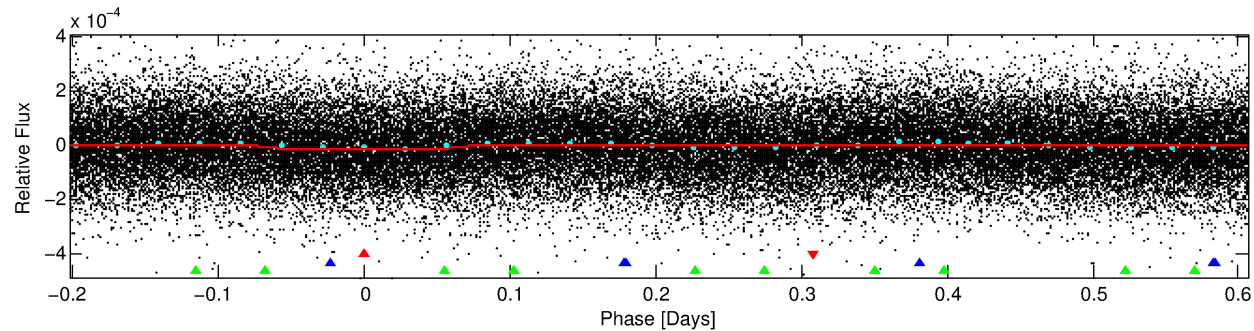
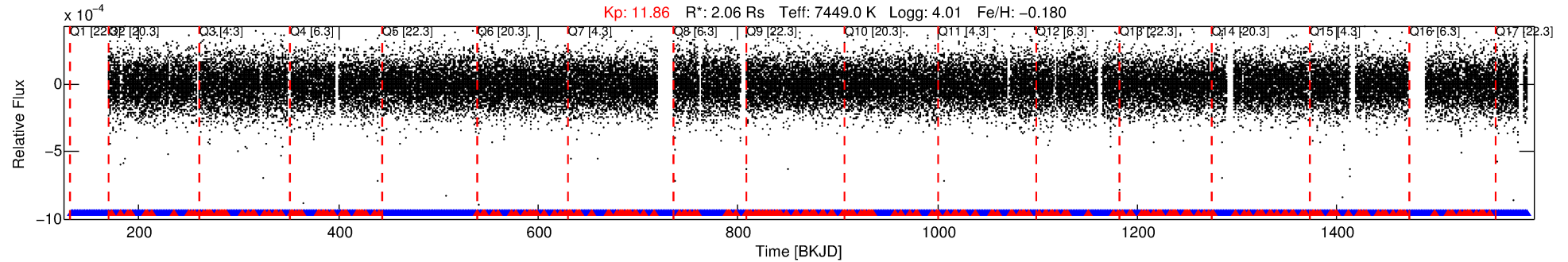
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011924025-01

No Significant Match Found

DV One-Page Summary

KIC: 11924025 Candidate: 1 of 3 Period: 0.809 d



DV Fit Results:

Period = 0.80858 [0.00001] d
Epoch = 132.0821 [0.0034] BKJD
Rp/R* = 0.0040 [0.0010]
a/R* = 1.23 [0.60]
b = 0.91 [0.29]
Seff = 29738.60 [12773.95]
T_{eq} = 3349 [360] K
Rp = 0.91 [0.36] Re
a = 0.0199 [0.0052] AU
Ag = 1.52 [1.39] [0.37σ]
T_{eff} = 5751 [1210] K [1.90σ]

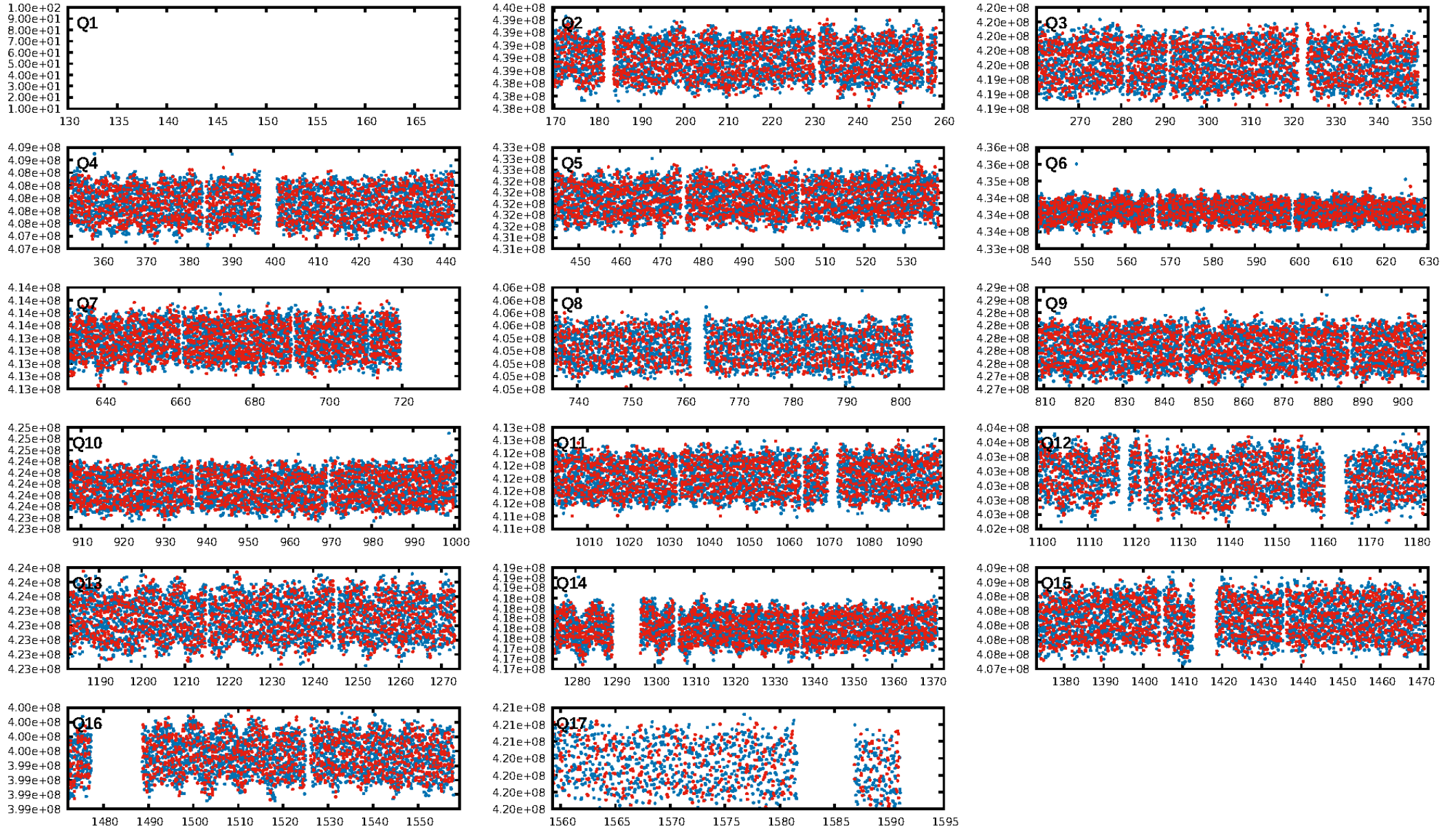
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [179.82σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 7.98e-13
RollingBand-fgt: 0.83 [1316/1585]
GhostDiagnostic-chr: 1.028
Centroid-sig: 15.7%
Centroid-so: 0.960 arcsec [1.03σ]
OotOffset-rm: 1.244 arcsec [1.05σ]
KicOffset-rm: 1.210 arcsec [0.92σ]
OotOffset-st: 3/2/2/4 [11]
KicOffset-st: 3/2/2/4 [11]
DiffImageQuality-fgm: 0.55 [6/11]
DiffImageOverlap-fno: 1.00 [16/16]

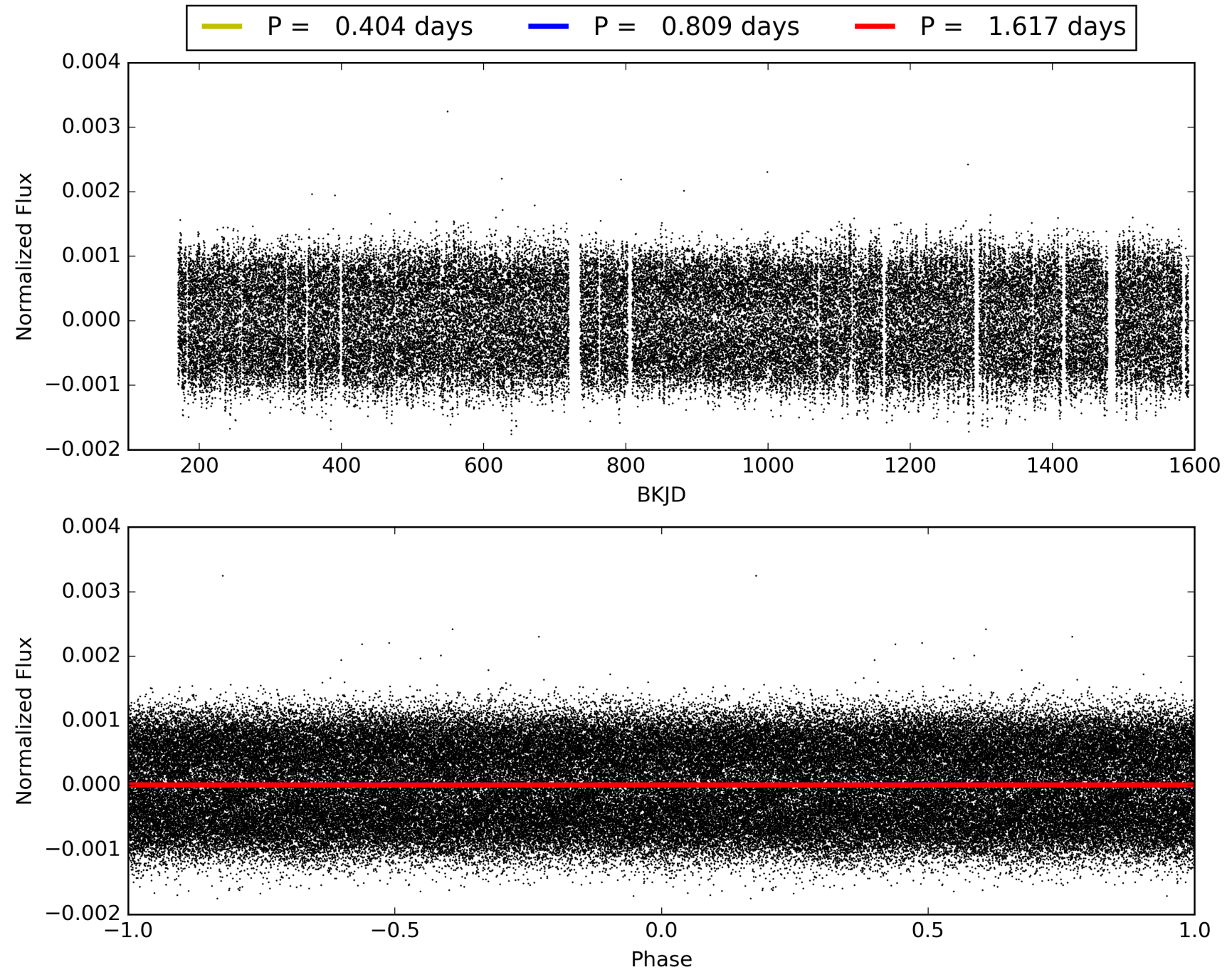
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 011924025-01, PDC Light Curves

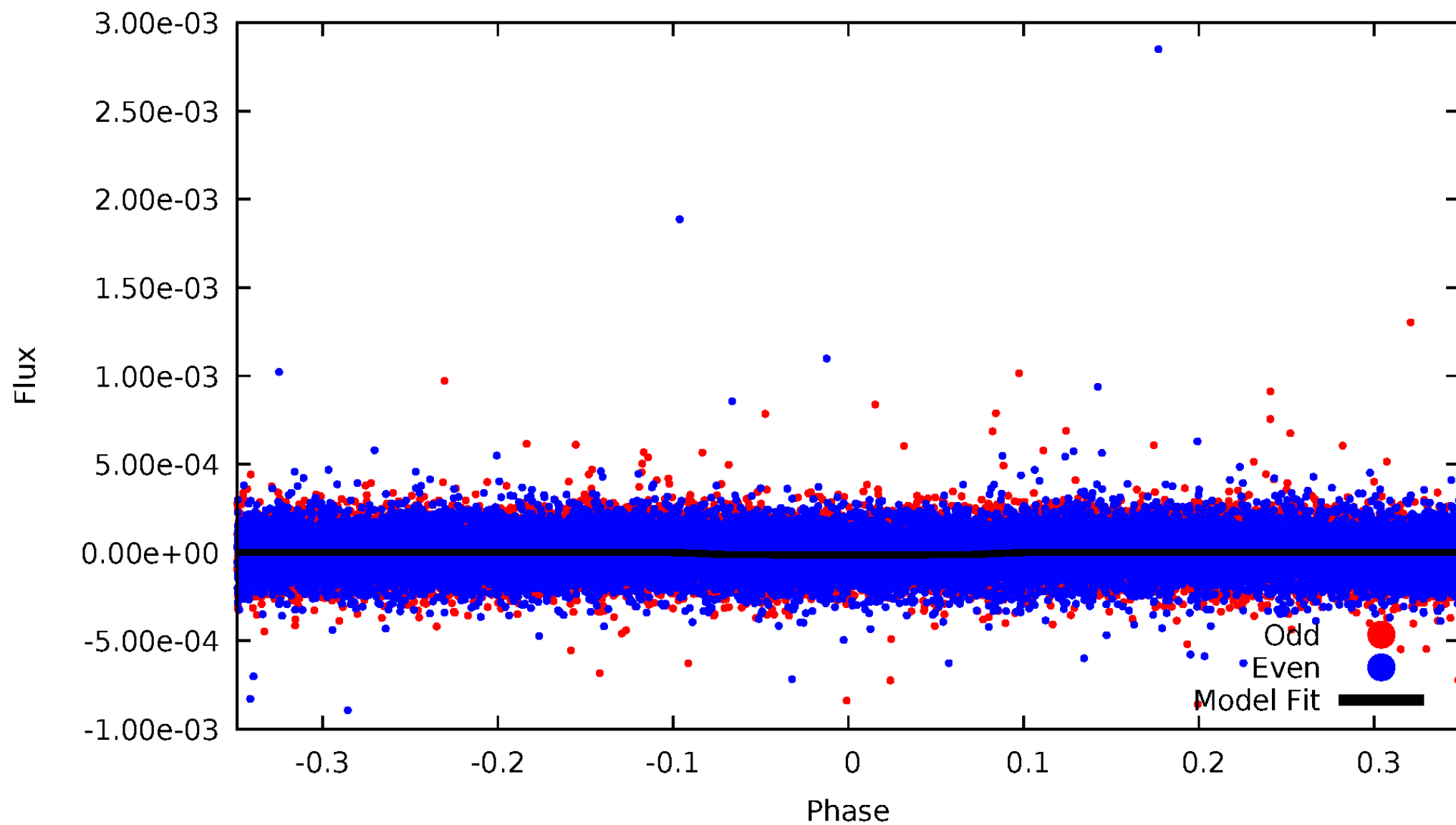


TCE 011924025-01



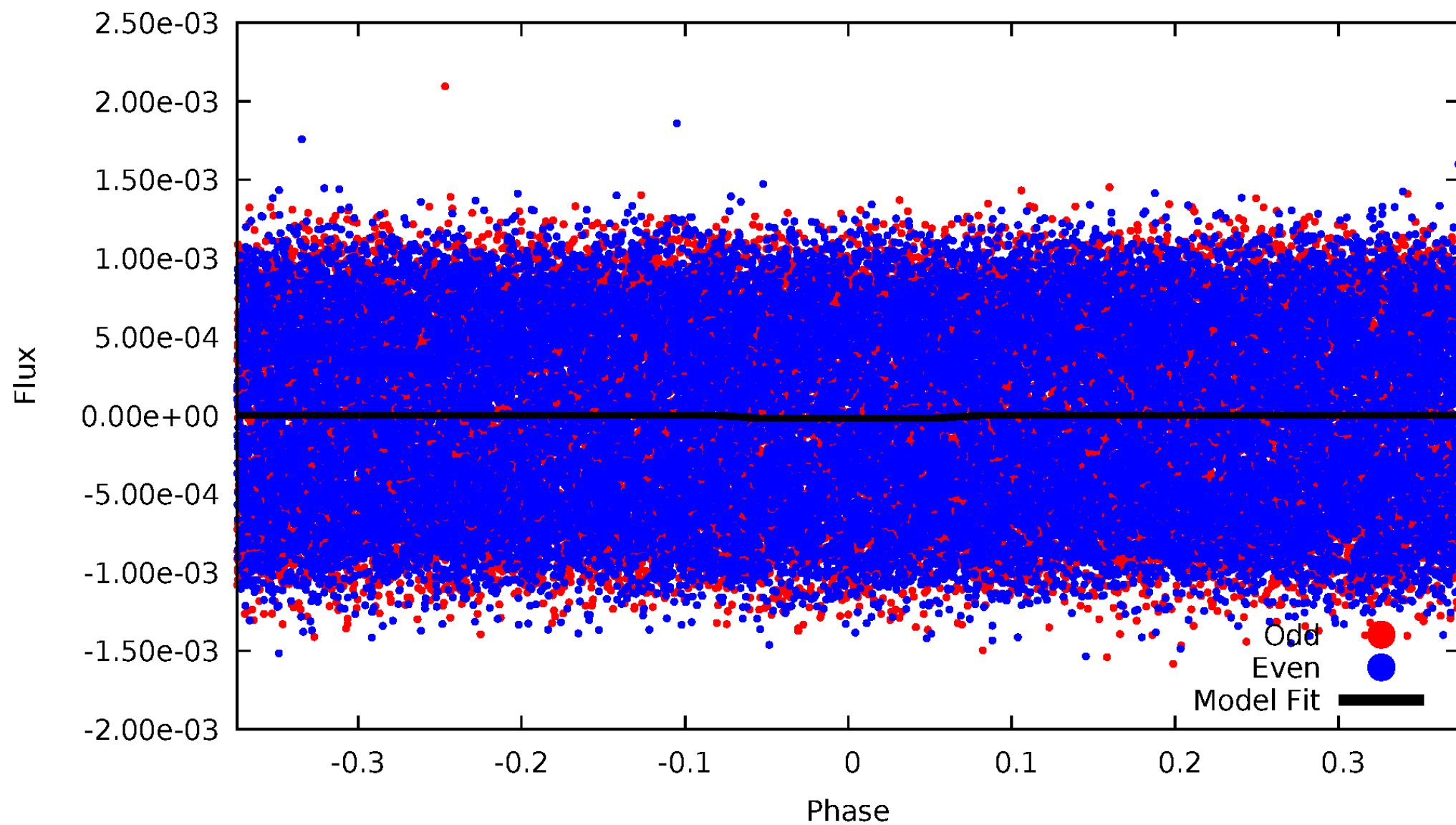
DV Odd/Even

TCE 011924025-01

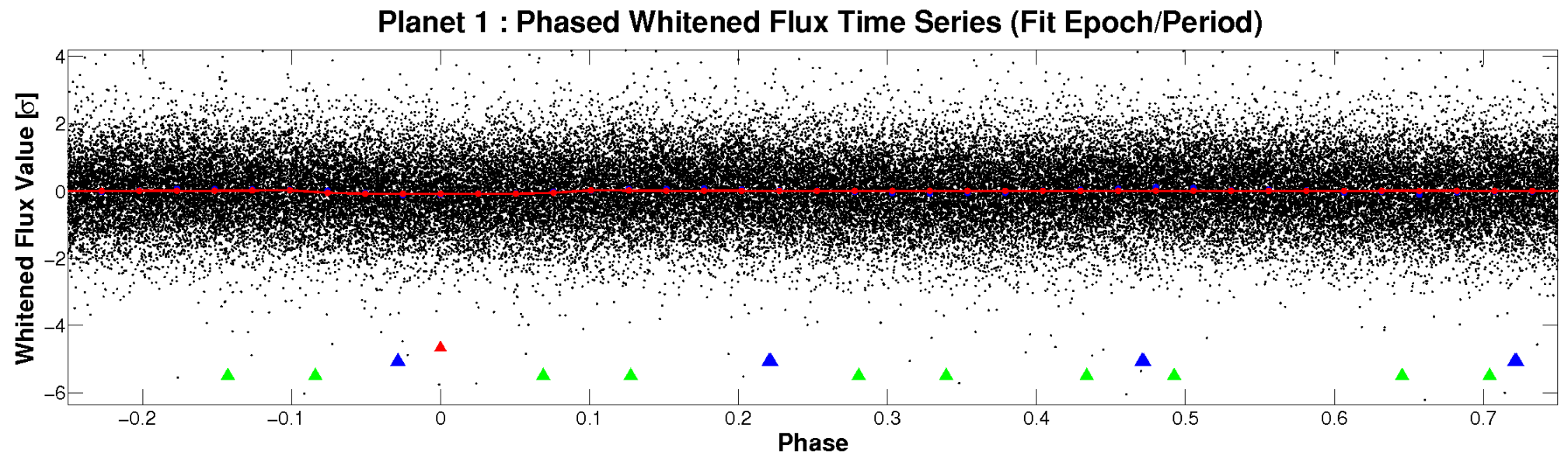
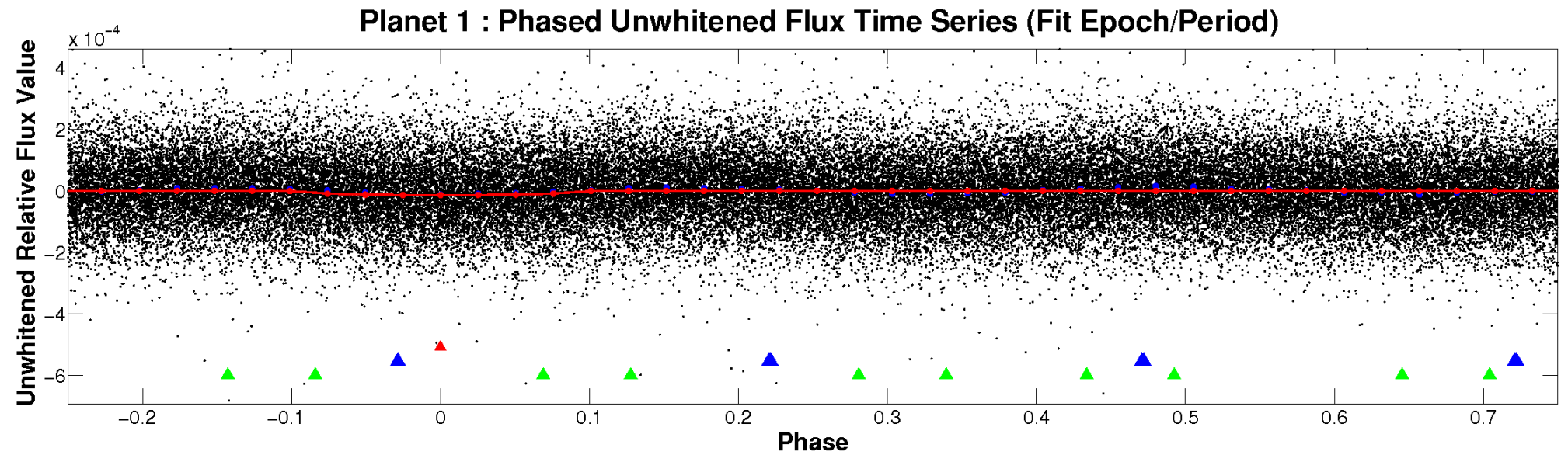


ALT Odd/Even

TCE 011924025-01

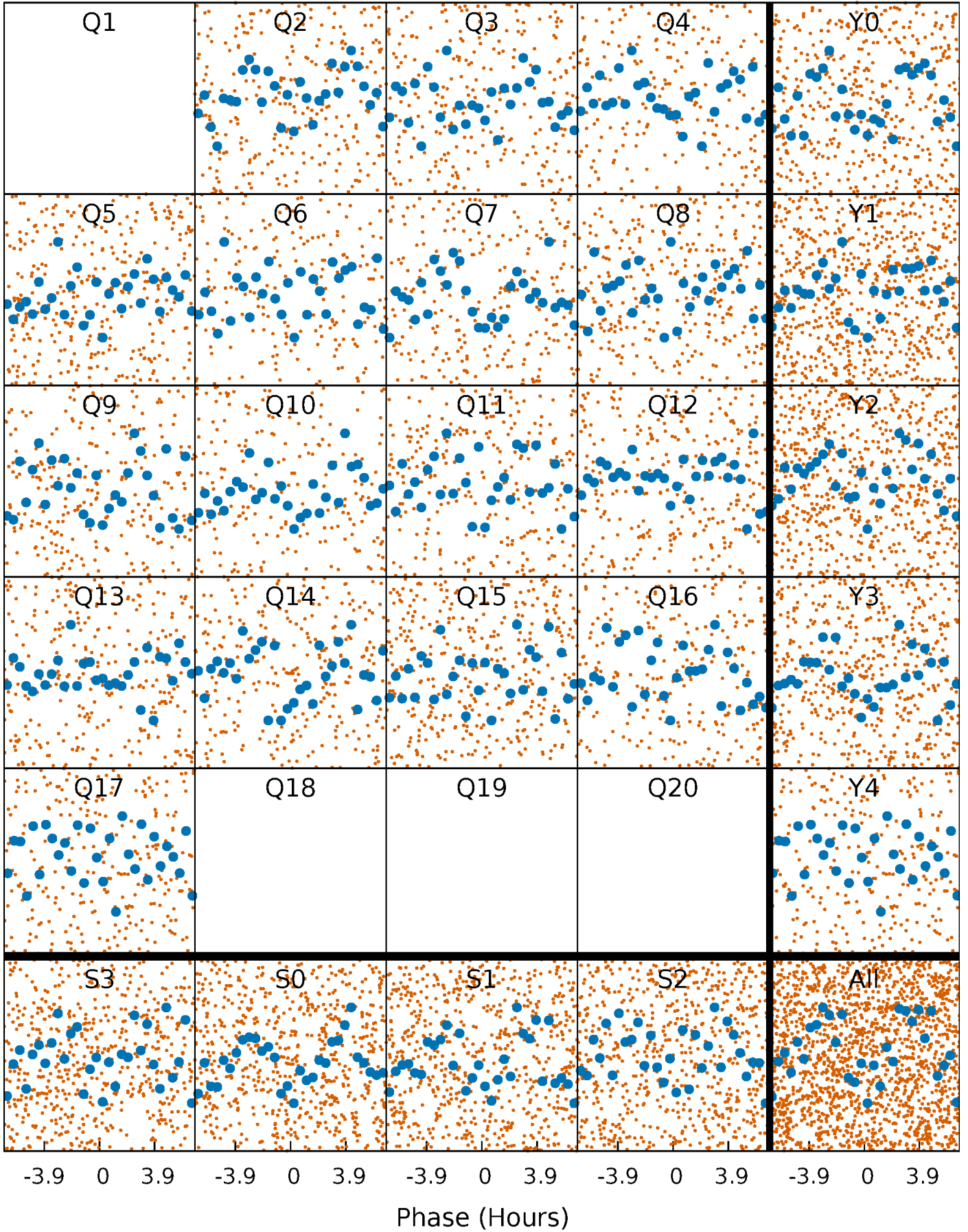


Non-Whitened Vs. Whitened Light Curve



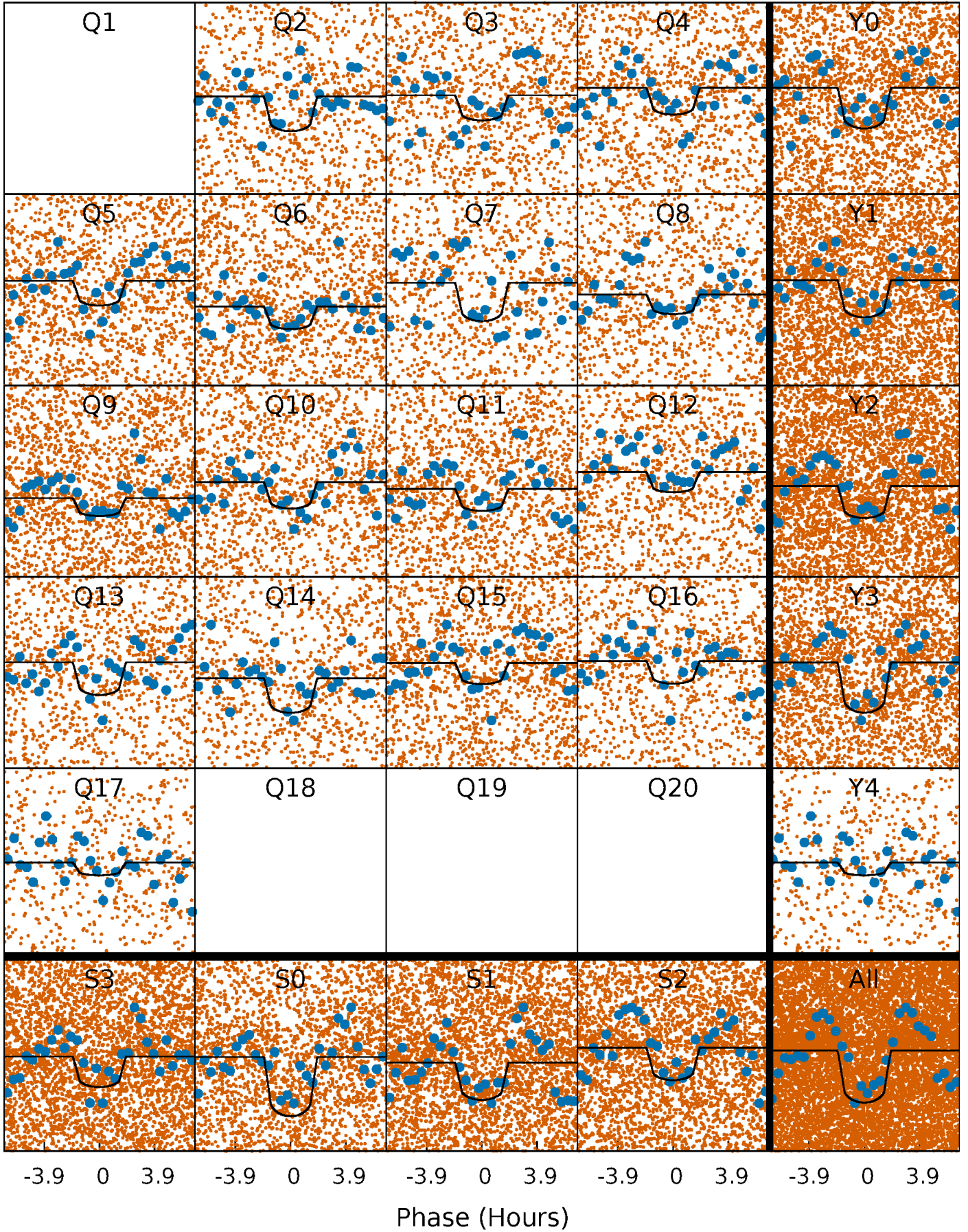
PDC Quarter-Phased Transit Curves

TCE 011924025-01 P= 0.808582 Days $T_0=132.082064$ (BKJD)



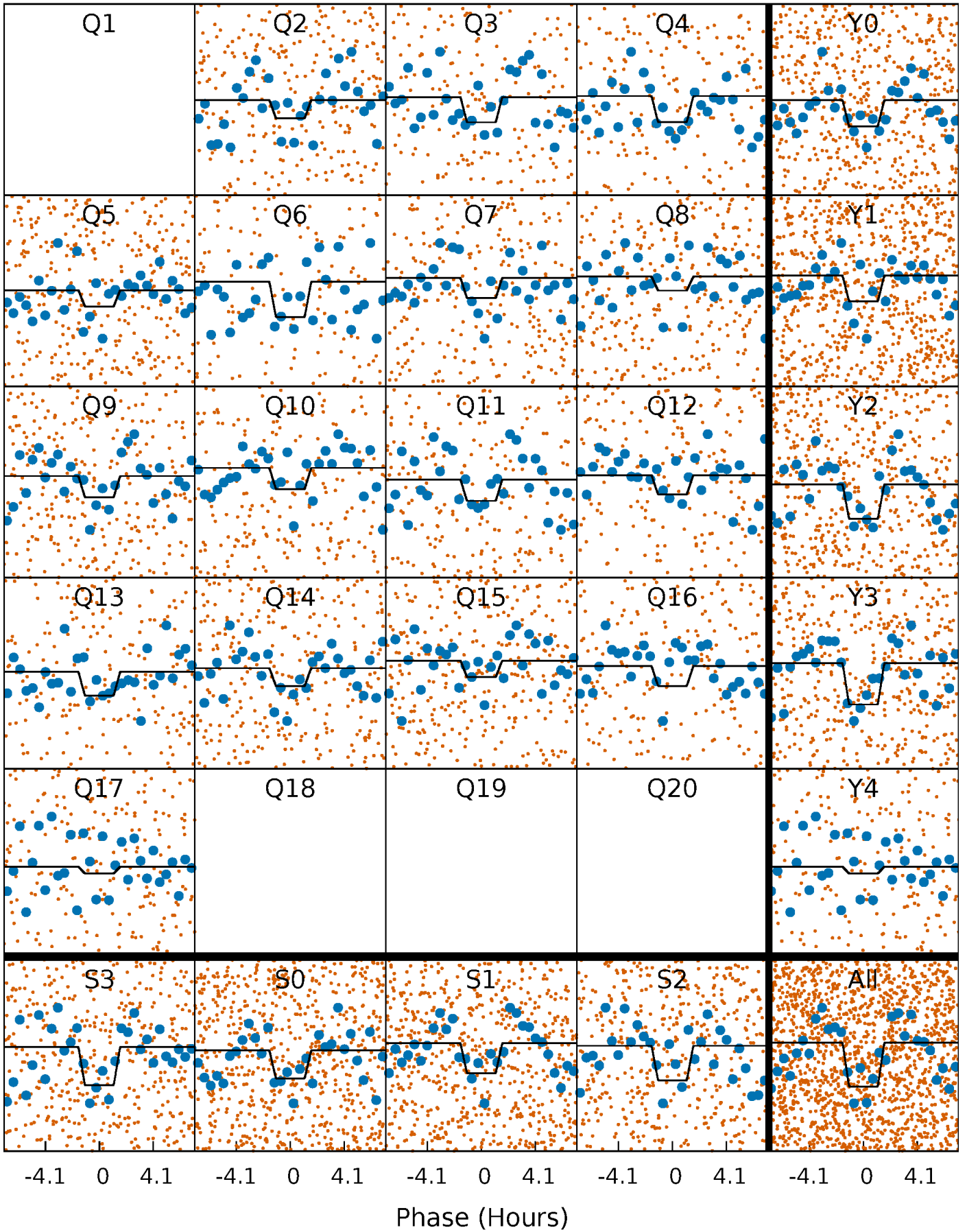
DV Quarter-Phased Transit Curves

TCE 011924025-01 P= 0.808582 Days $T_0=132.082064$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

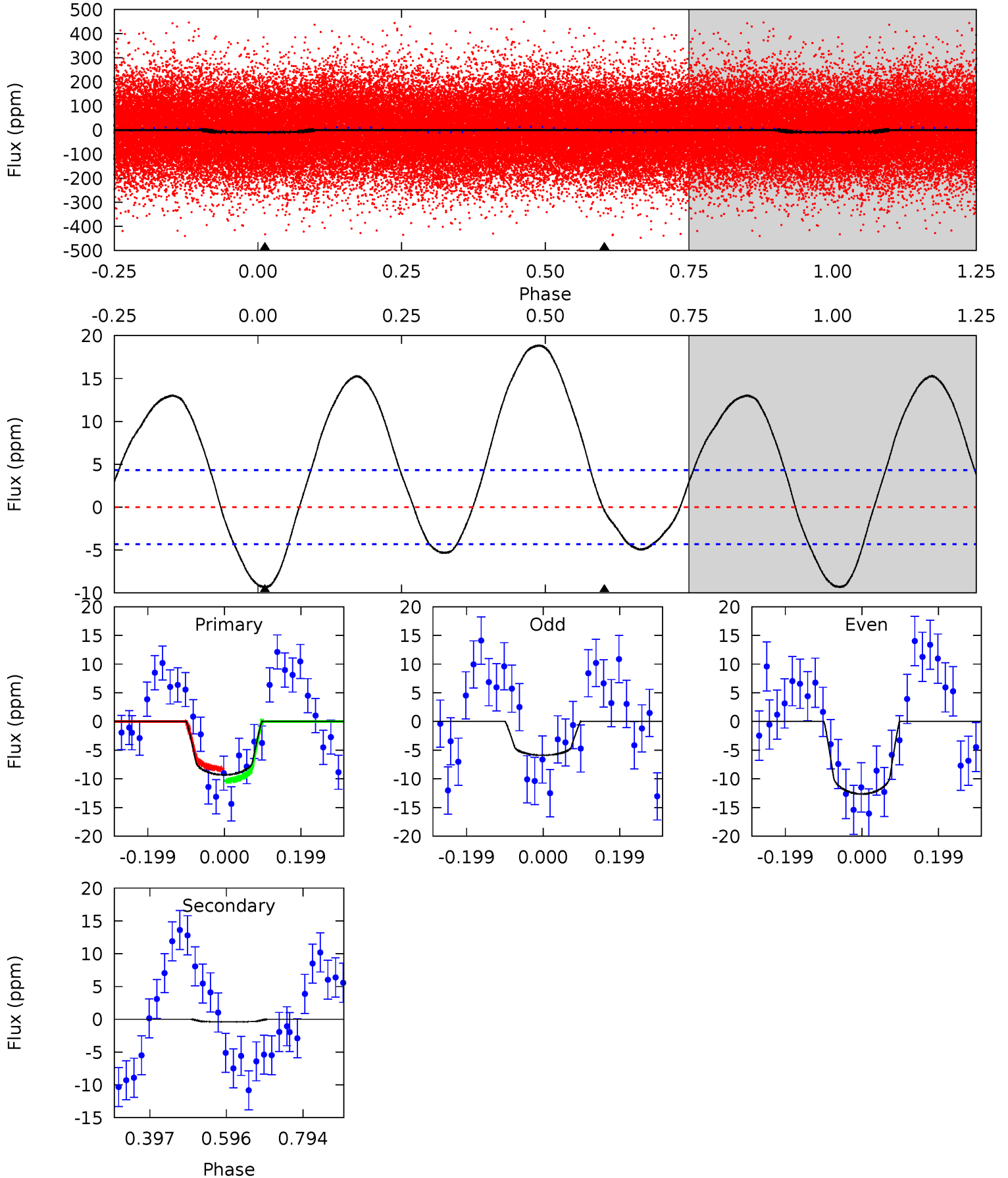
TCE 011924025-01 P= 0.808595 Days $T_0=132.081119$ (BKJD)



DV Model-Shift Uniqueness Test

011924025-01, P = 0.808582 Days, E = 132.082064 Days

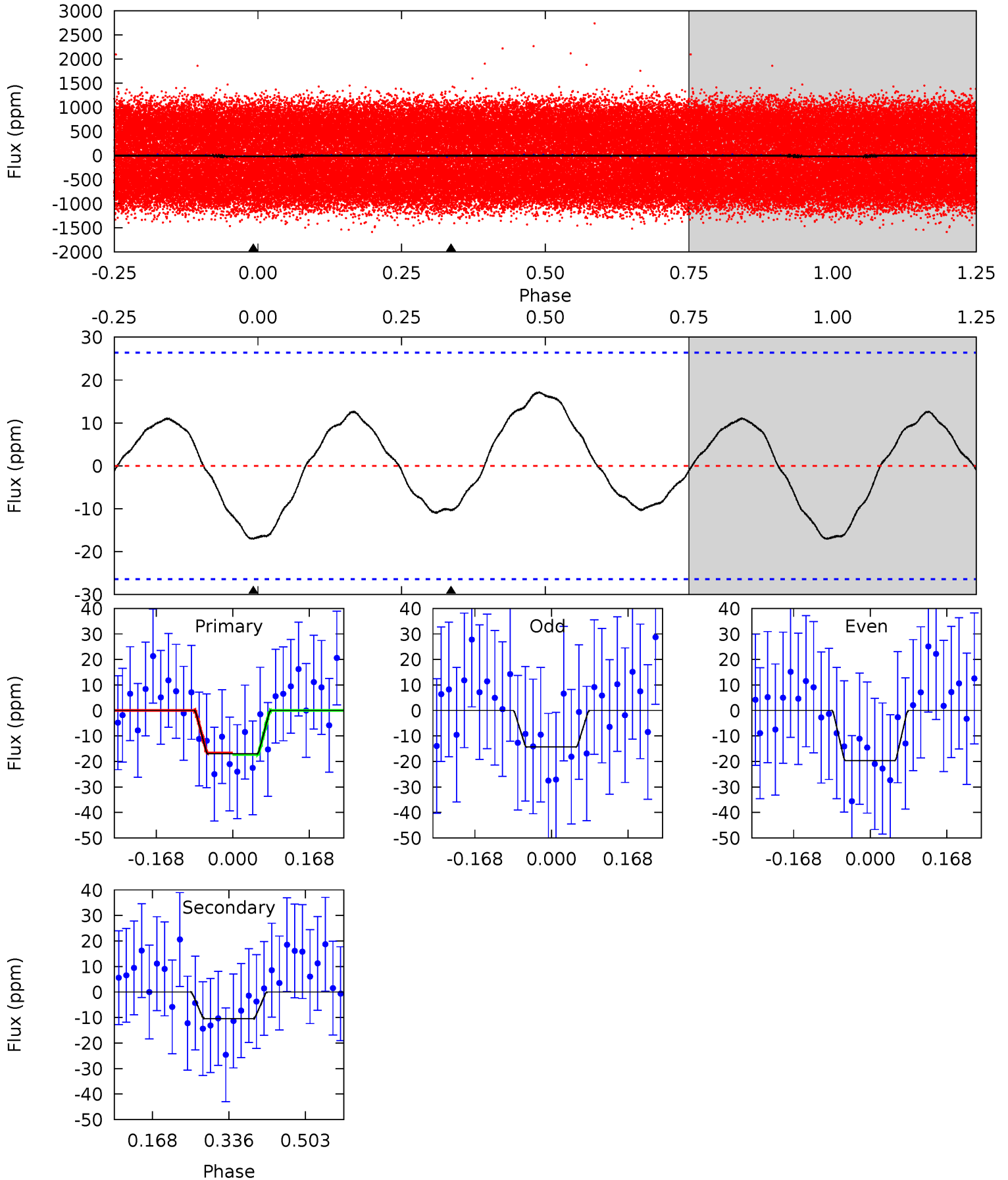
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.52	0.40	0	0	4.42	1.29	5.52	9.52	9.52	0.40	0.40	3.47	1.06	0.67	1.06



Alt Model-Shift Uniqueness Test

011924025-01, P = 0.808595 Days, E = 132.081119 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.87	1.76	0	0	4.45	1.38	1.38	2.87	2.87	1.76	1.76	0.45	0.88	0.50	0.05



Stellar Parameters For KIC 011924025

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7449^{+232}_{-310}	$4.013^{+0.222}_{-0.148}$	$-0.180^{+0.250}_{-0.350}$	$2.063^{+0.510}_{-0.624}$	$1.599^{+0.181}_{-0.311}$	$0.257^{+0.351}_{-0.111}$
	+3%/-4%	+6%/-4%	+139%/-194%	+25%/-30%	+11%/-19%	+137%/-43%
Source	KIC0	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 011924025-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-0 ± 1	$0.86^{+0.29}_{-0.23}$	4627^{+341}_{-360}	-3736^{+7315}_{-693}	$0.107^{+0.358}_{-0.273}$
Alt.	-10 ± 6	$0.93^{+0.28}_{-0.28}$	4649^{+324}_{-364}	6132^{+1557}_{-1533}	$2.432^{+3.176}_{-1.553}$

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

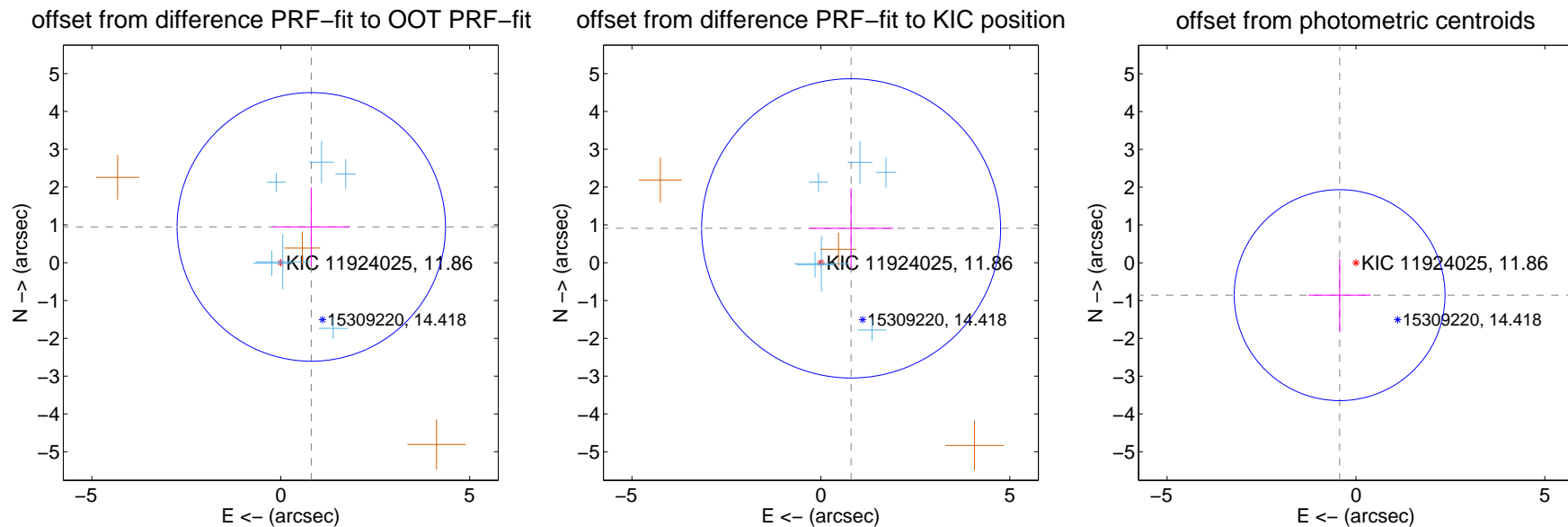
DV Centroid Data

Supplemental centroid analysis for 011924025-01. **Kepler magnitude: 11.86.** Transit SNR 8.15

There are 6 quarters with good PRF difference image offsets

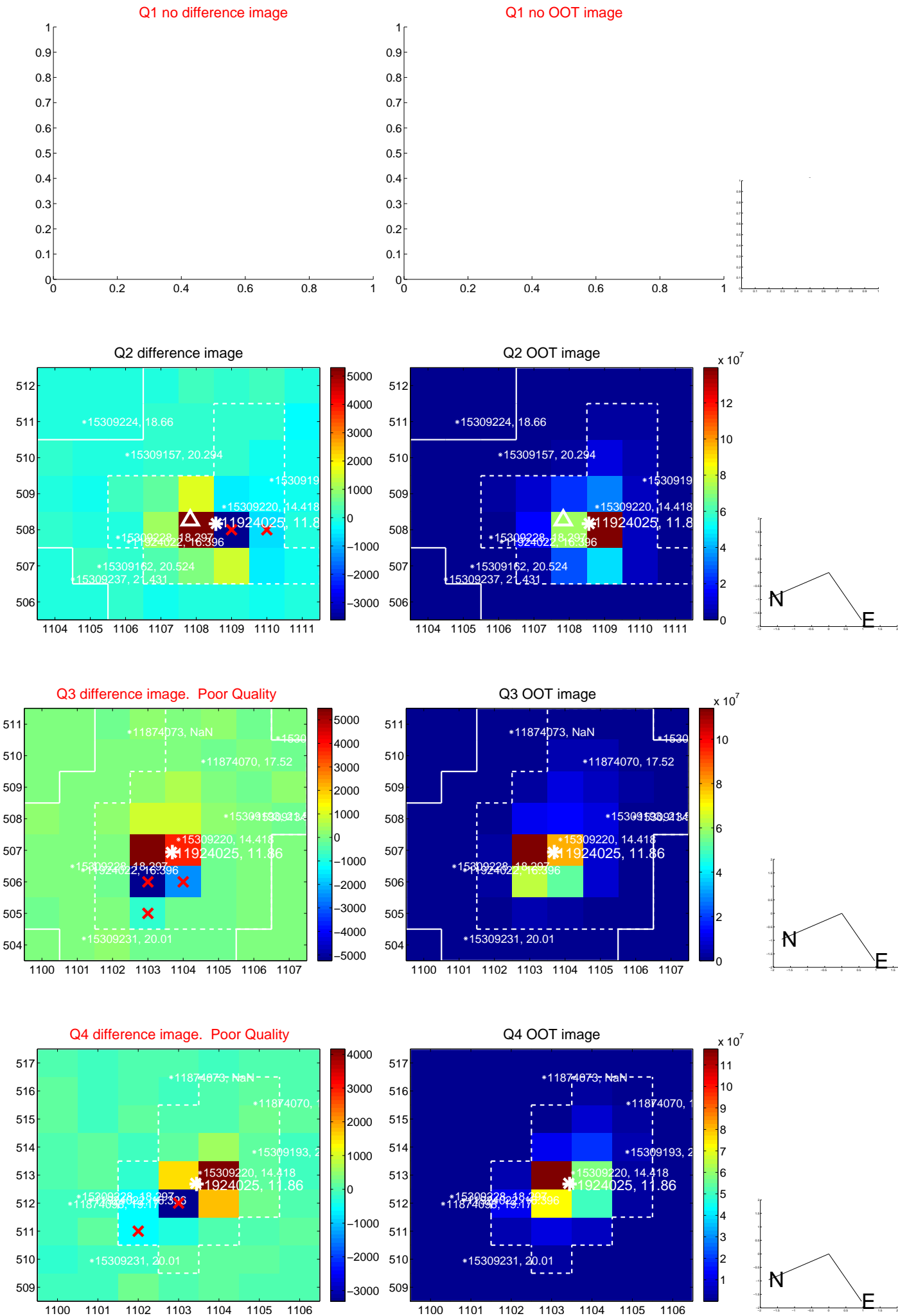
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.244 ± 1.184	1.05	-0.808 ± 1.018	0.947 ± 1.042
PRF-fit source offset from KIC position	1.210 ± 1.319	0.92	-0.801 ± 1.119	0.908 ± 1.065
photometric centroid source offset	0.96 ± 0.93	1.03	0.43 ± 0.82	-0.86 ± 0.96

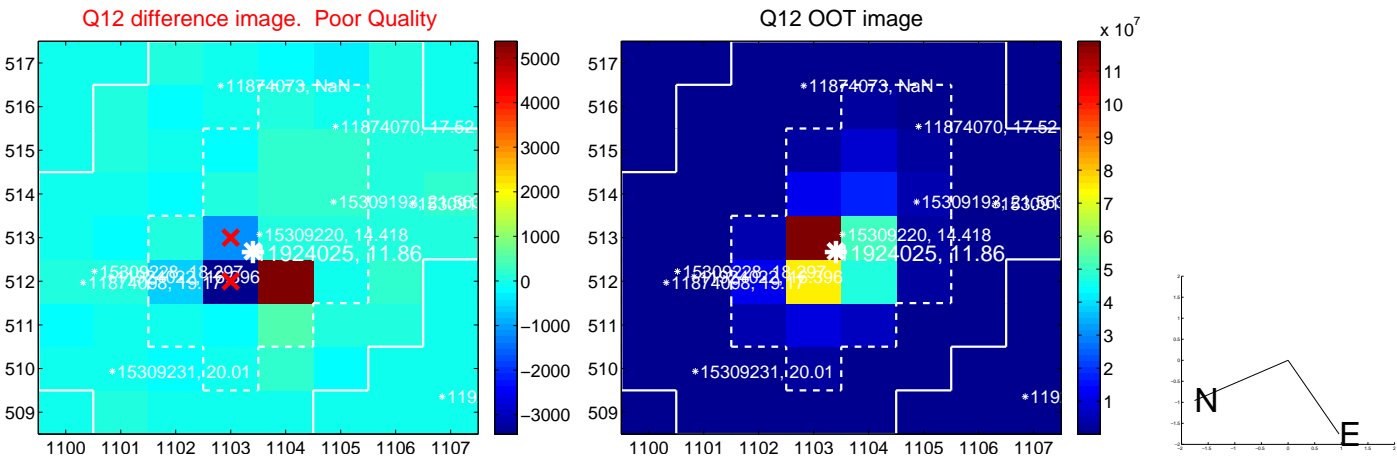
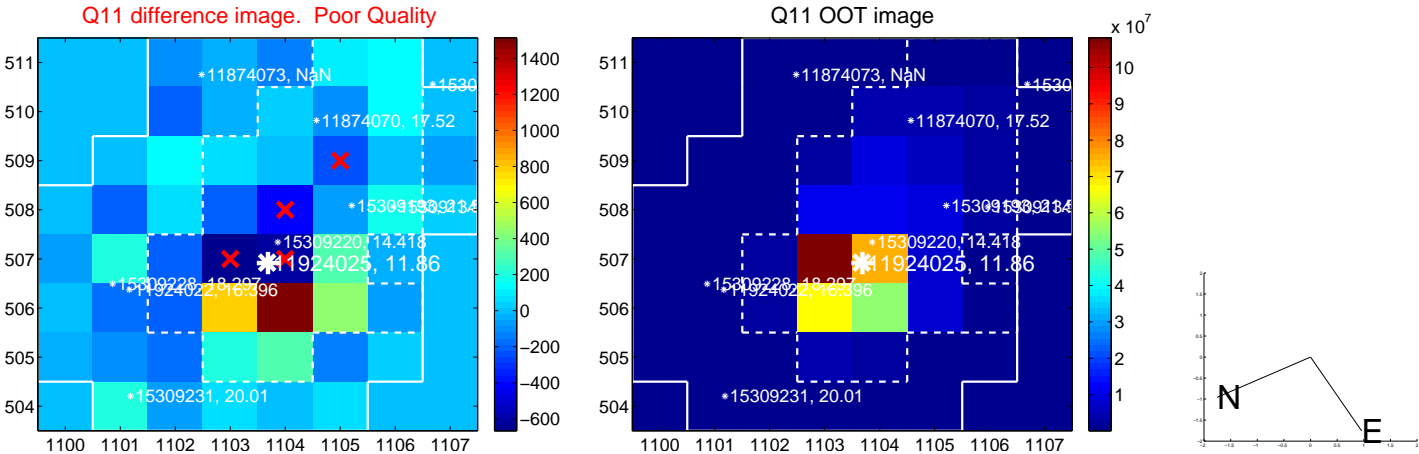
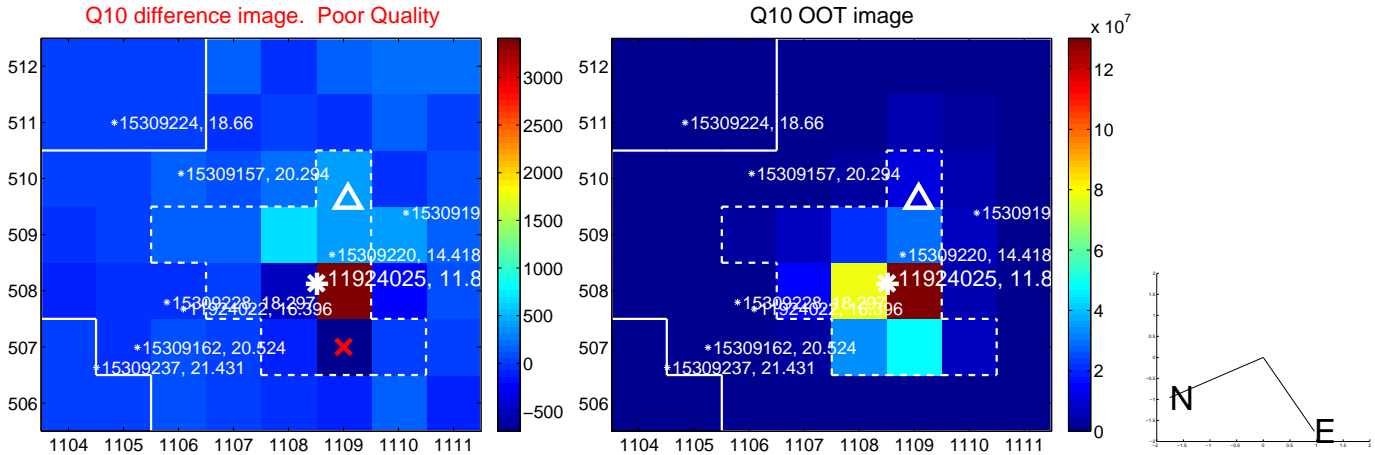
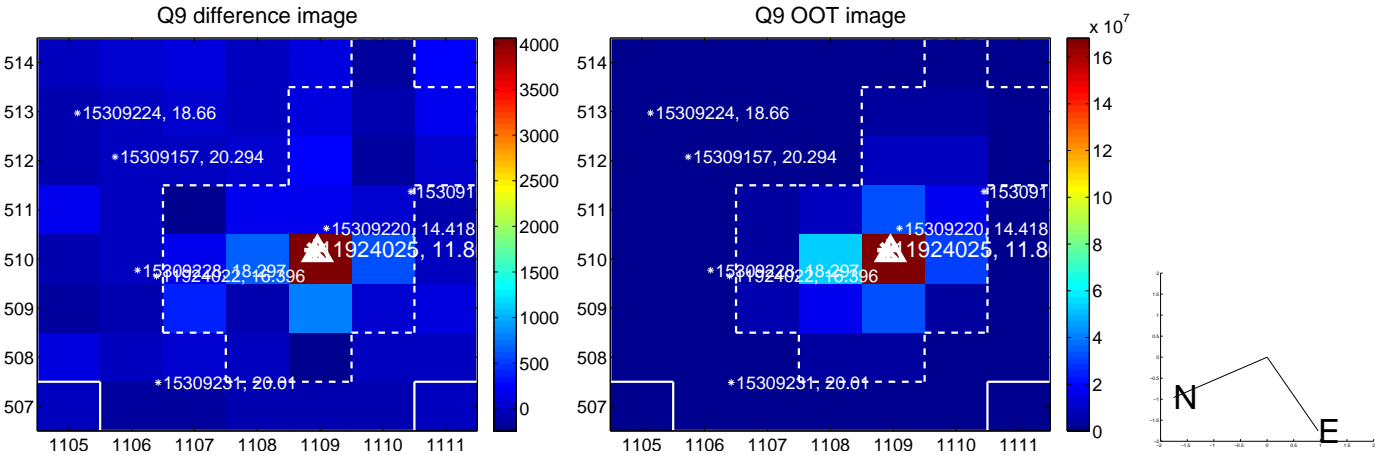


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

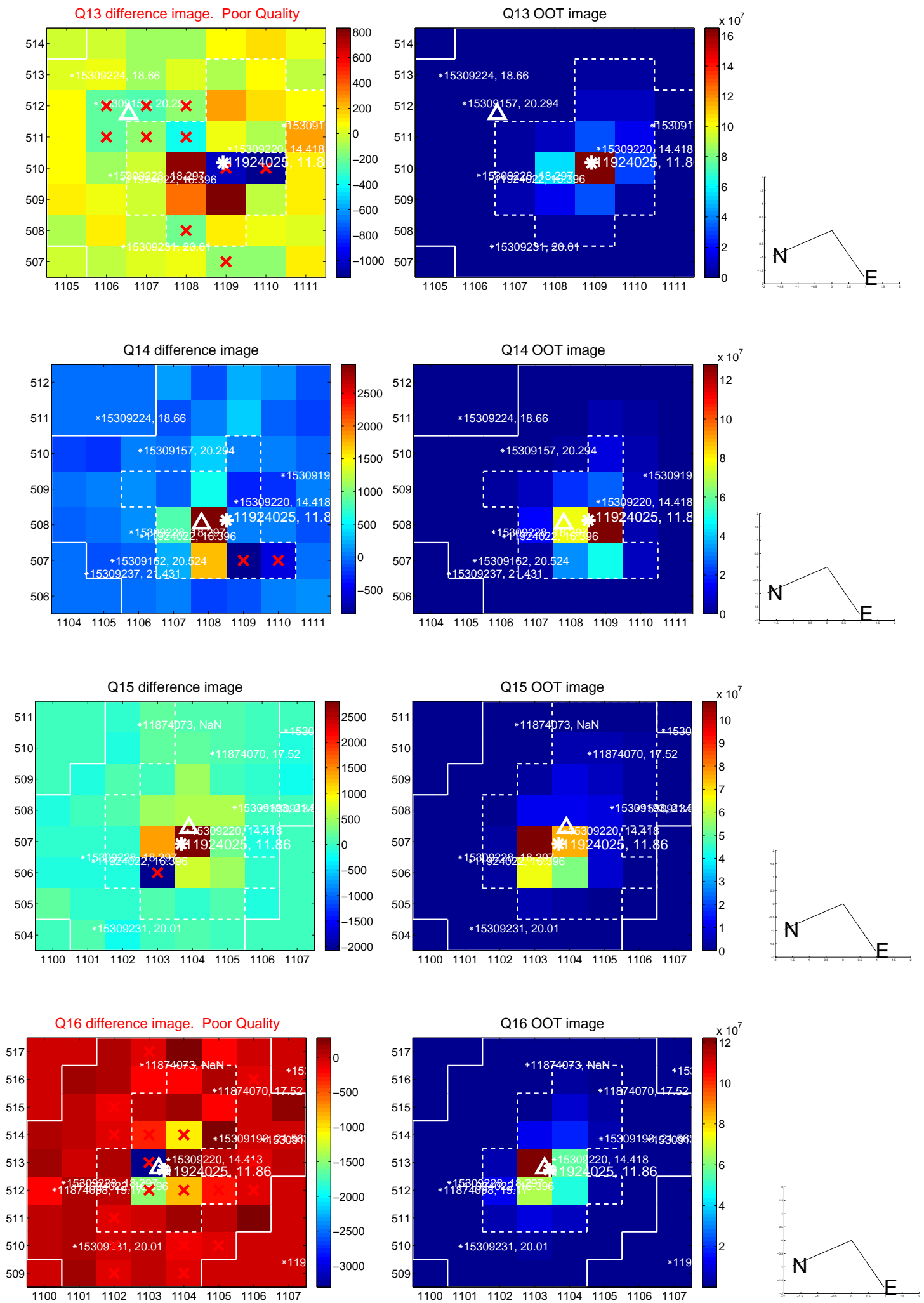
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



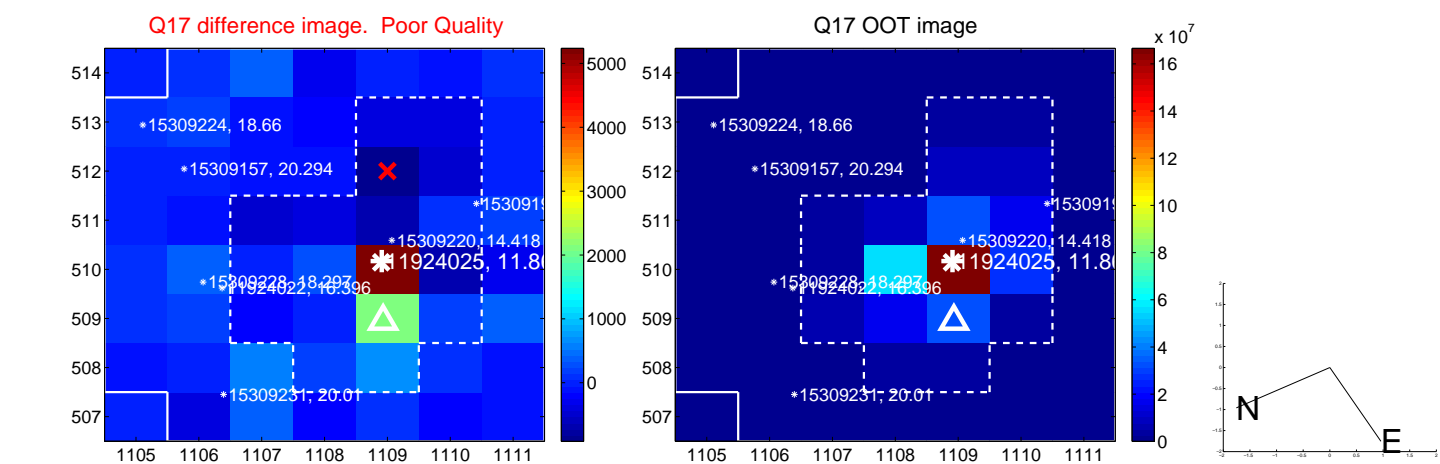
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



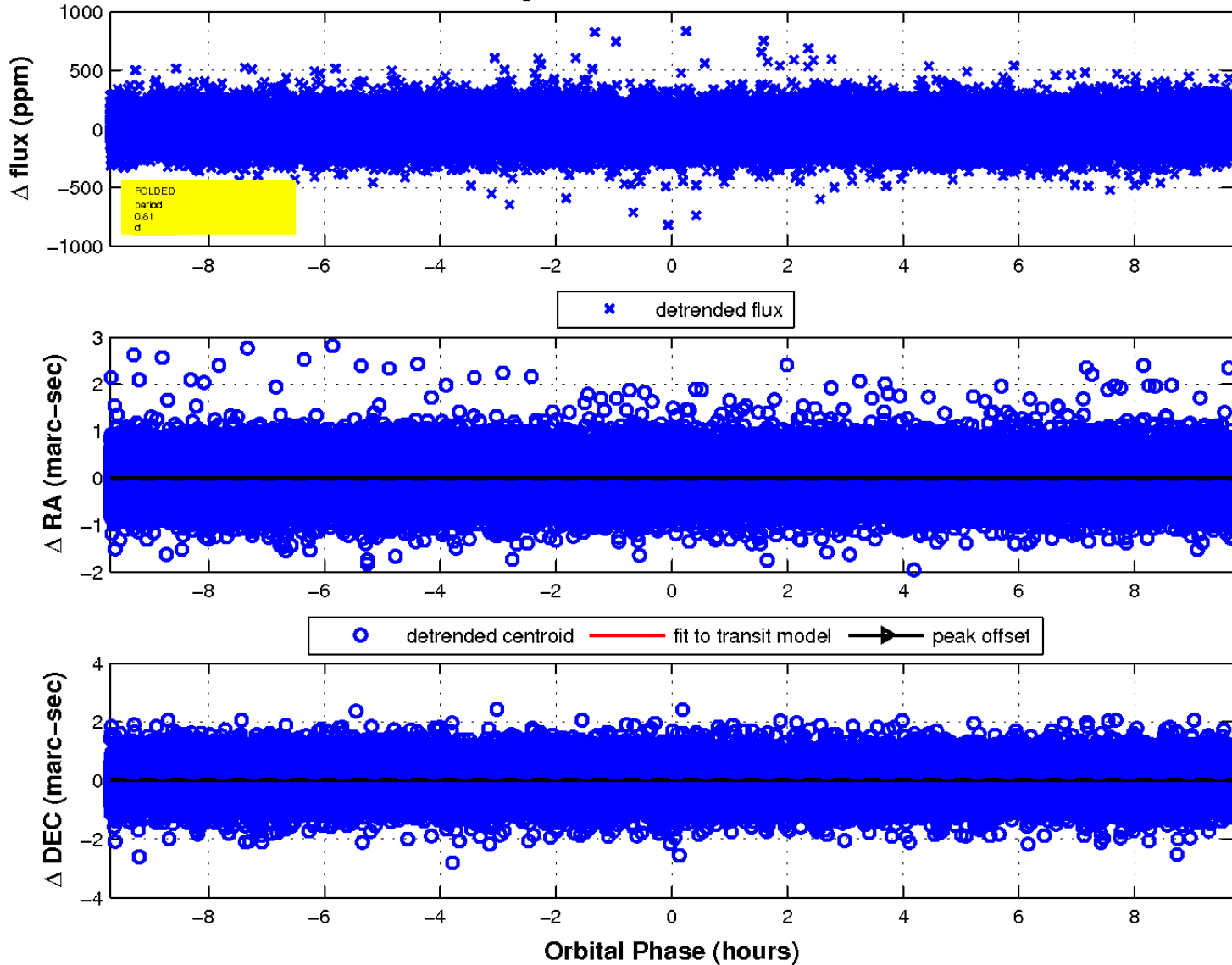
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

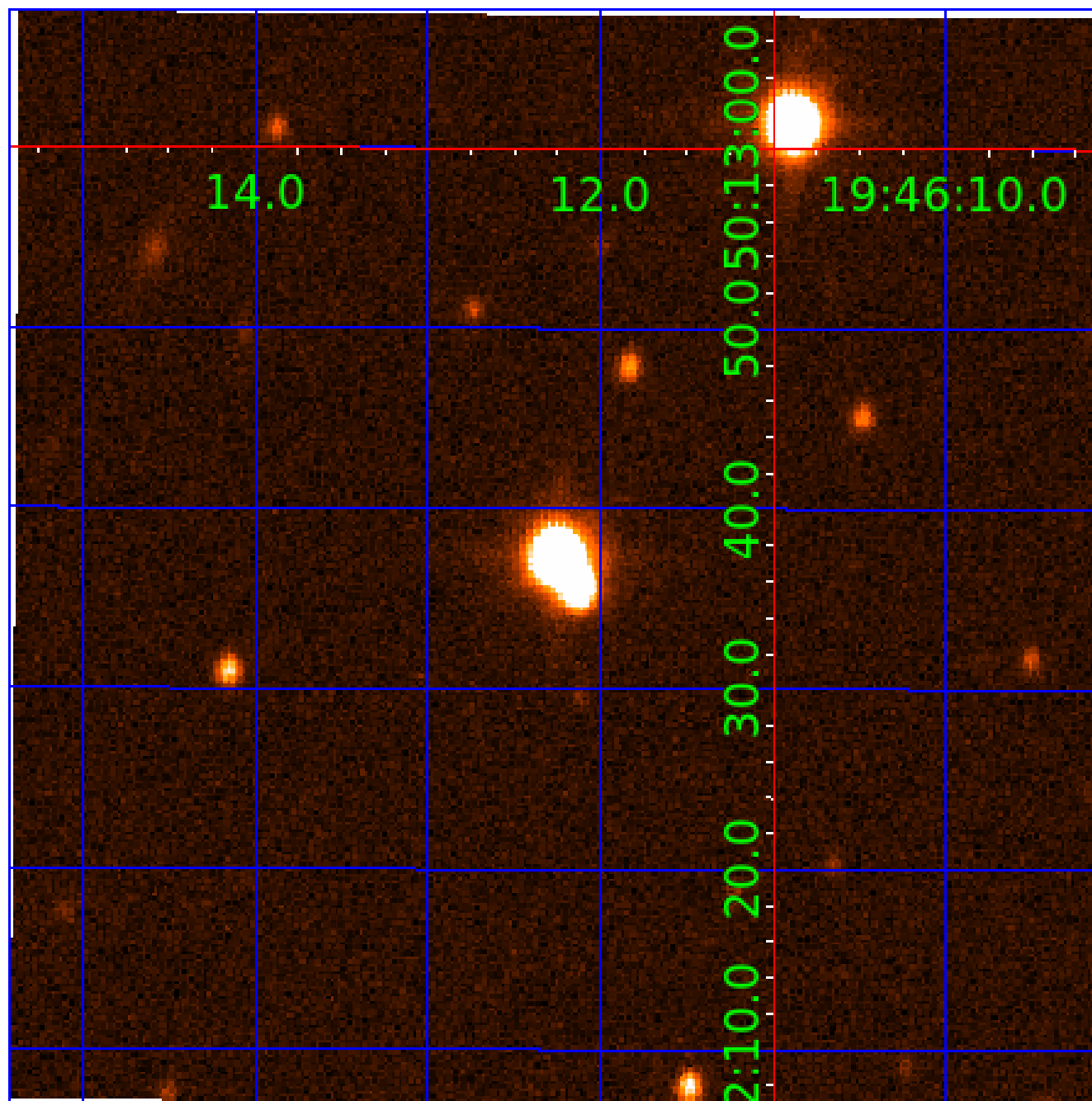


fluxWeightedCentroids, Planet 1 of 3



UKIRT Image

Declination



KIC 011924025

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})
011924025-01	OBS	No	0.808582	132.082064	13.9	3.383	7.9	8.2	2.06	7449	0.91	29738.60
011924025-02	OBS	No	227.413796	163.795152	180.5	8.789	8.4	6.6	2.06	7449	3.21	16.14
011924025-03	OBS	No	144.907324	186.607764	101.4	18.933	7.2	4.5	2.06	7449	2.32	29.43

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011924025-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011924025-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_UNCERTAIN
011924025-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

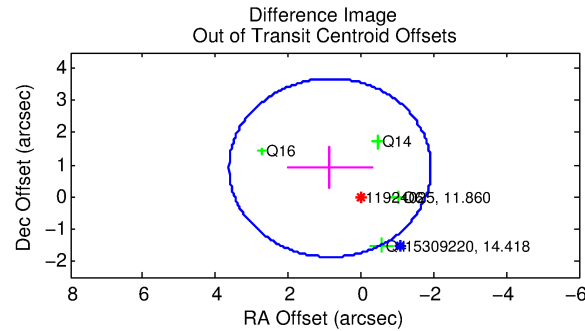
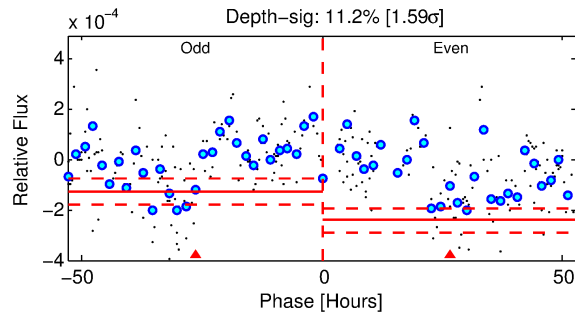
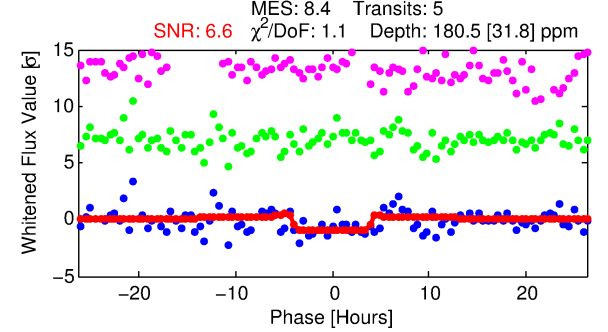
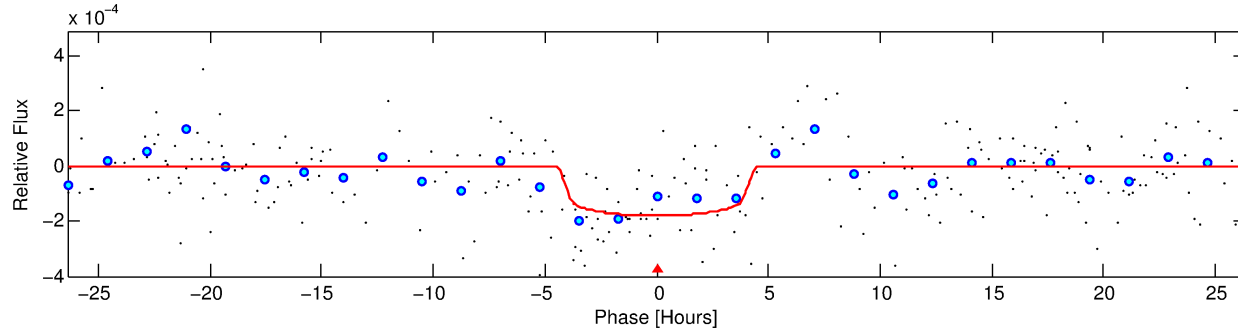
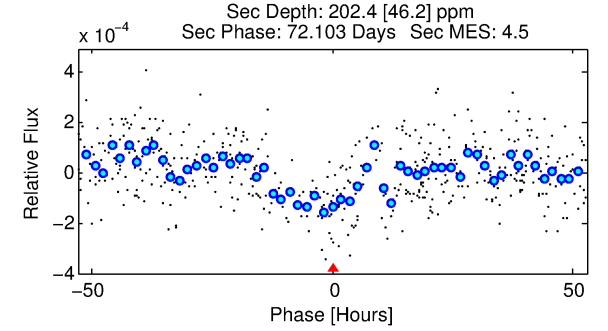
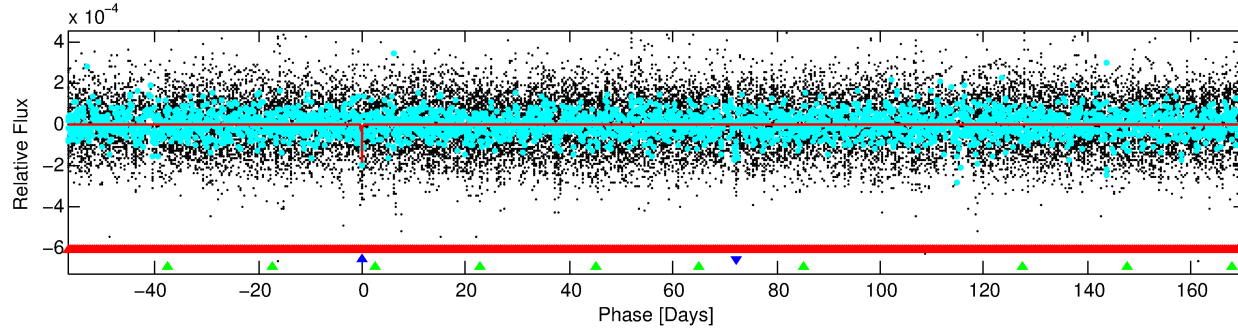
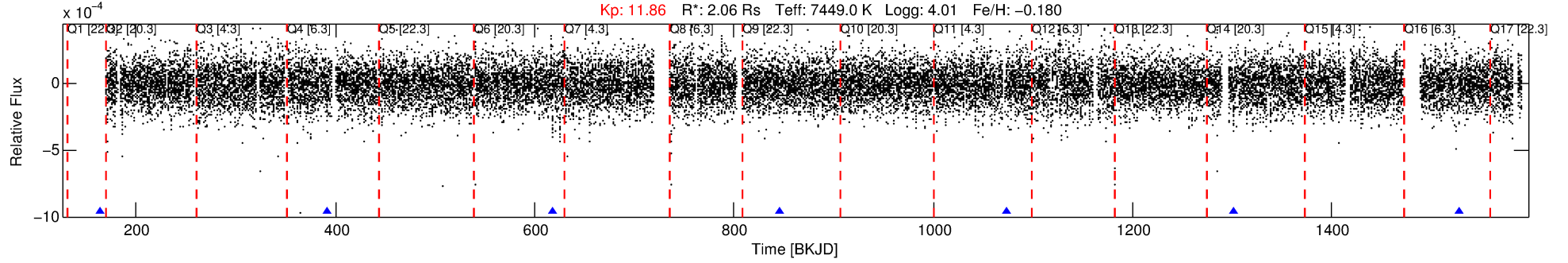
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011924025-02

No Significant Match Found

DV One-Page Summary

KIC: 11924025 Candidate: 2 of 3 Period: 227.414 d



DV Fit Results:

Period = 227.41380 [0.00489] d
Epoch = 163.7952 [0.0207] BKJD
 R_p/R^* = 0.0143 [0.0044]
 a/R^* = 97.18 [158.27]
 b = 0.89 [0.40]
 S_{eff} = 16.14 [6.93]
 T_{eq} = 511 [55] K
 R_p = 3.21 [1.39] R_e
 a = 0.8529 [0.2252] AU
 A_g = 7840.20 [6012.65] [1.30σ]
 T_{eff} = 7436 [1259] K [5.49σ]

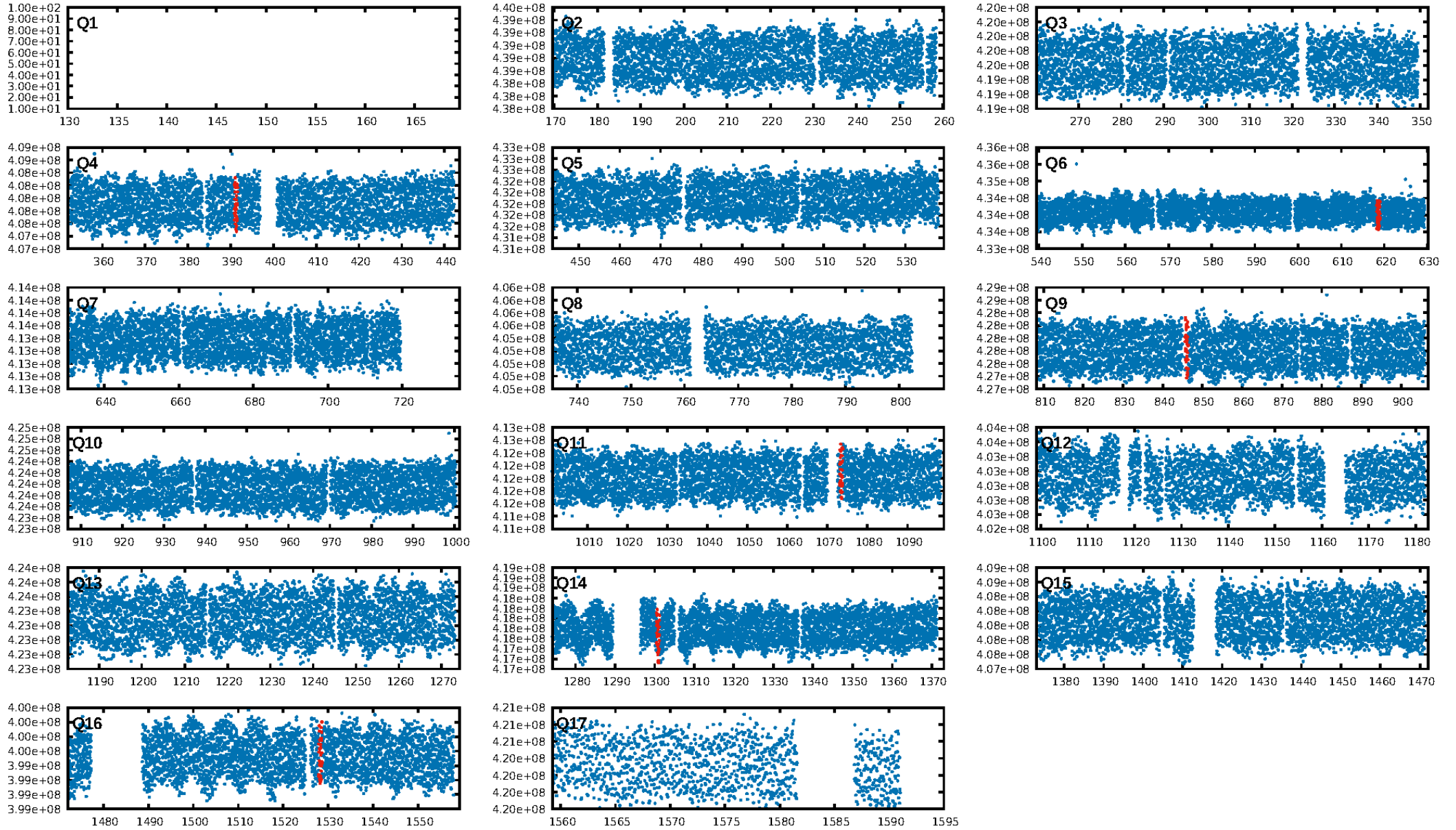
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [94.87σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 21.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.43e-13
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: 2.801
Centroid-sig: 0.2%
Centroid-so: 1.848 arcsec [1.93σ]
OotOffset-rm: 1.238 arcsec [1.33σ]
KicOffset-rm: 1.278 arcsec [1.33σ]
OotOffset-st: 2/0/2/0 [4]
KicOffset-st: 2/0/2/0 [4]
DiffImageQuality-fgm: 1.00 [4/4]
DiffImageOverlap-fno: 0.00 [0/4]

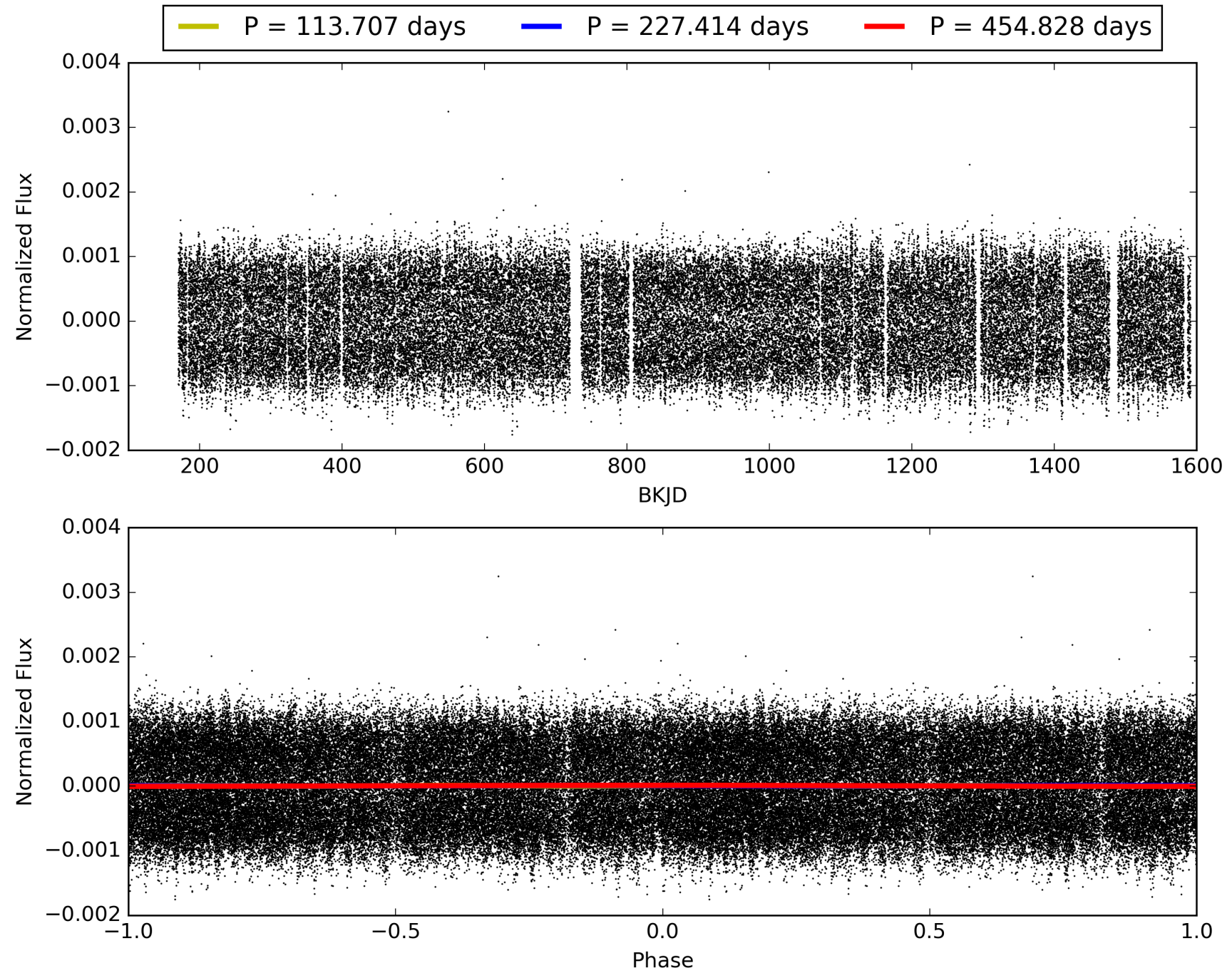
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 11:08:25 Z

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

TCE 011924025-02, PDC Light Curves

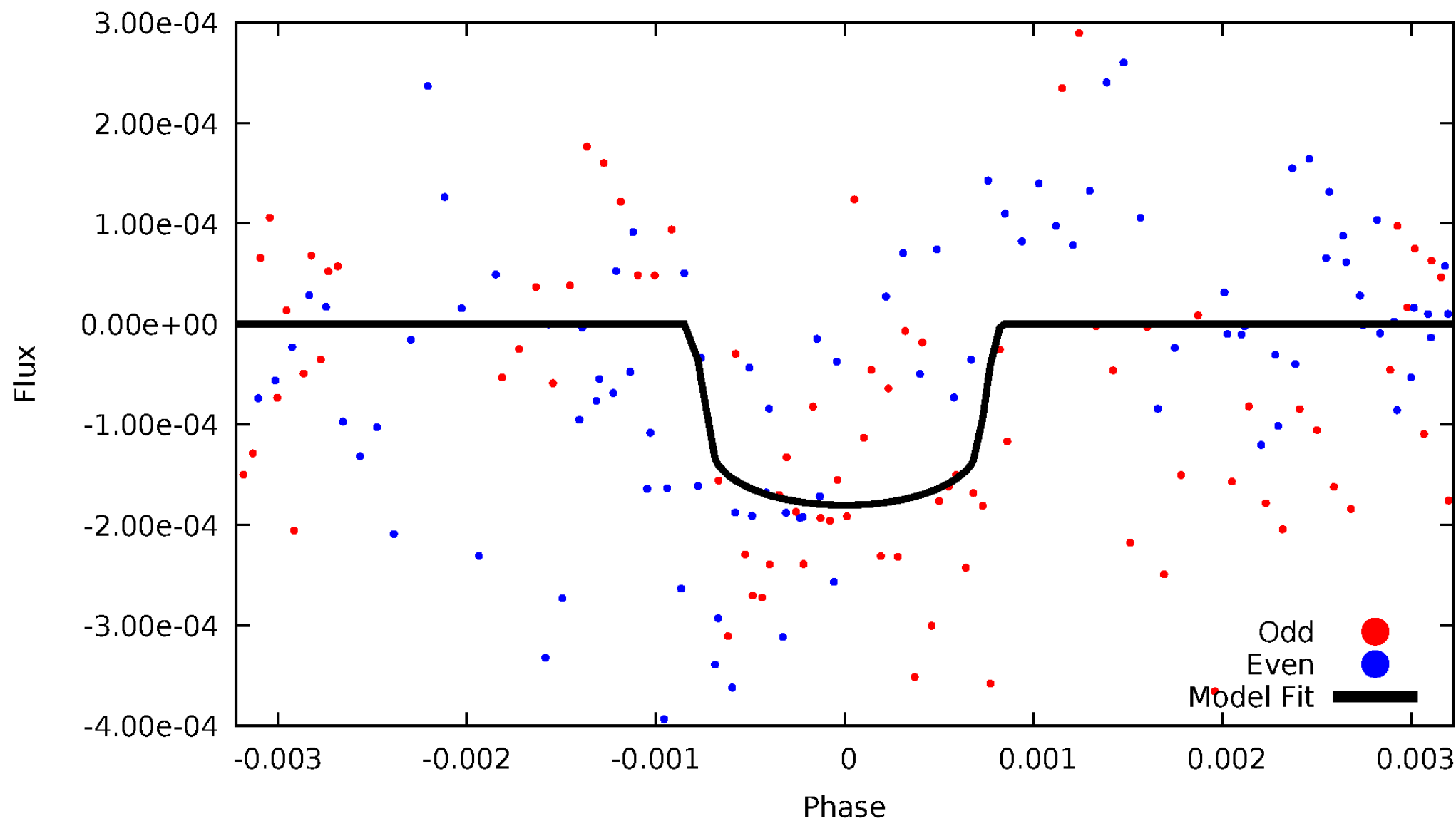


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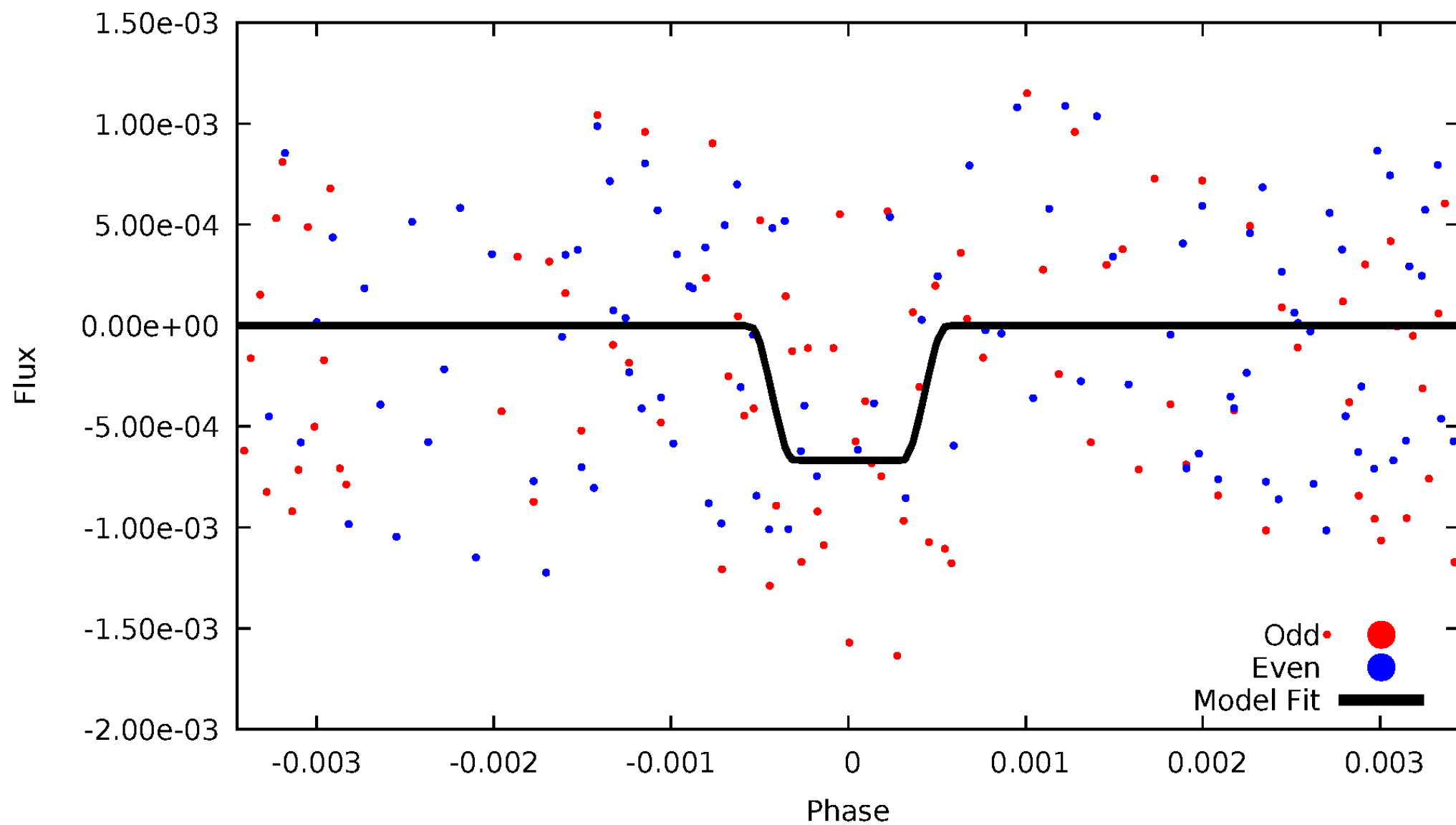
DV Odd/Even

TCE 011924025-02



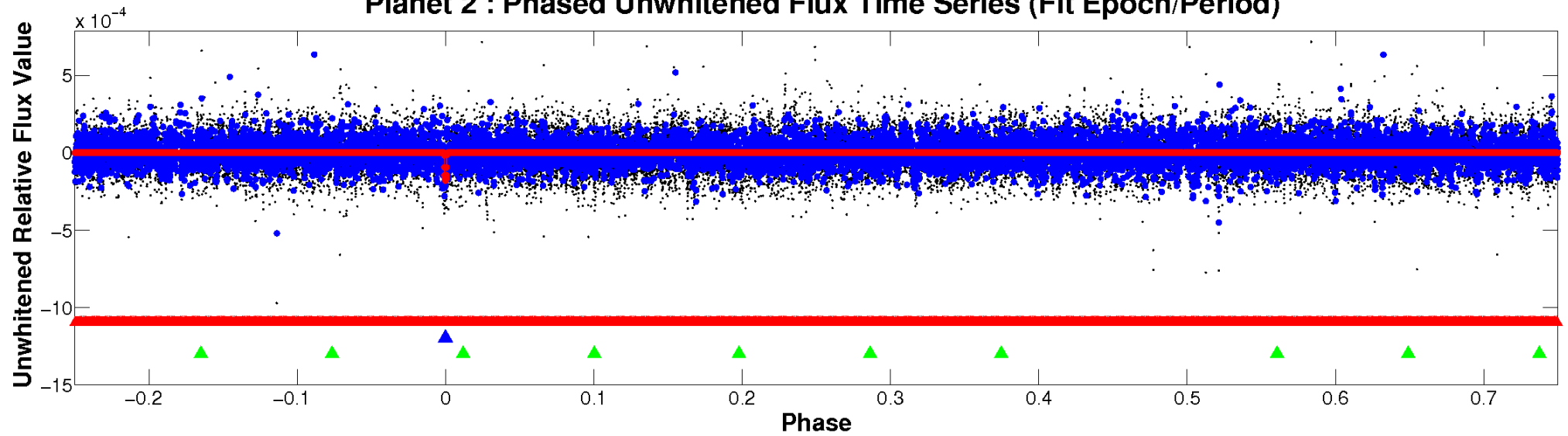
ALT Odd/Even

TCE 011924025-02

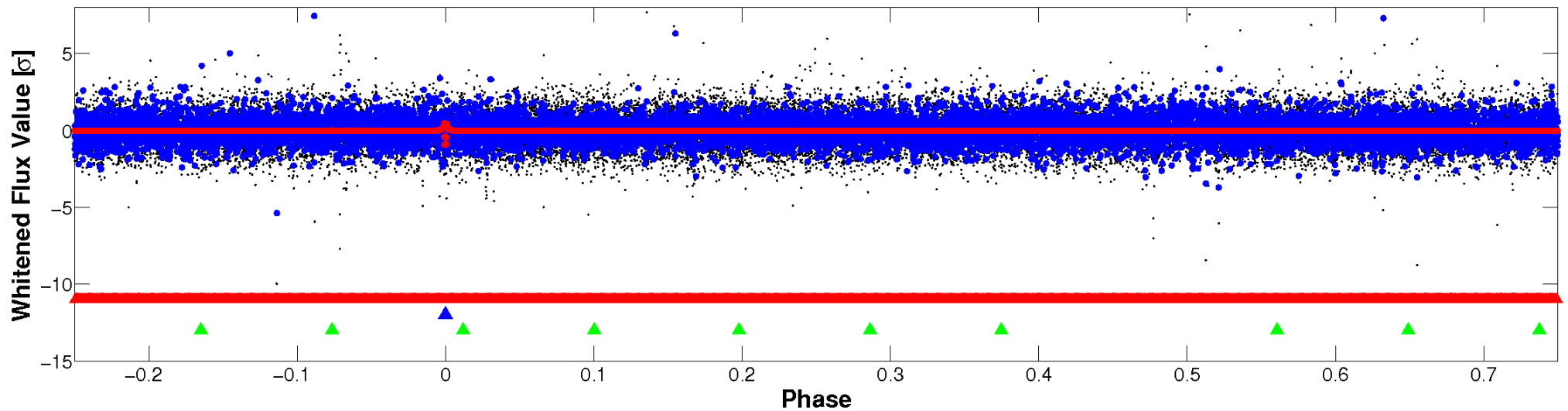


Non-Whitened Vs. Whitened Light Curve

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

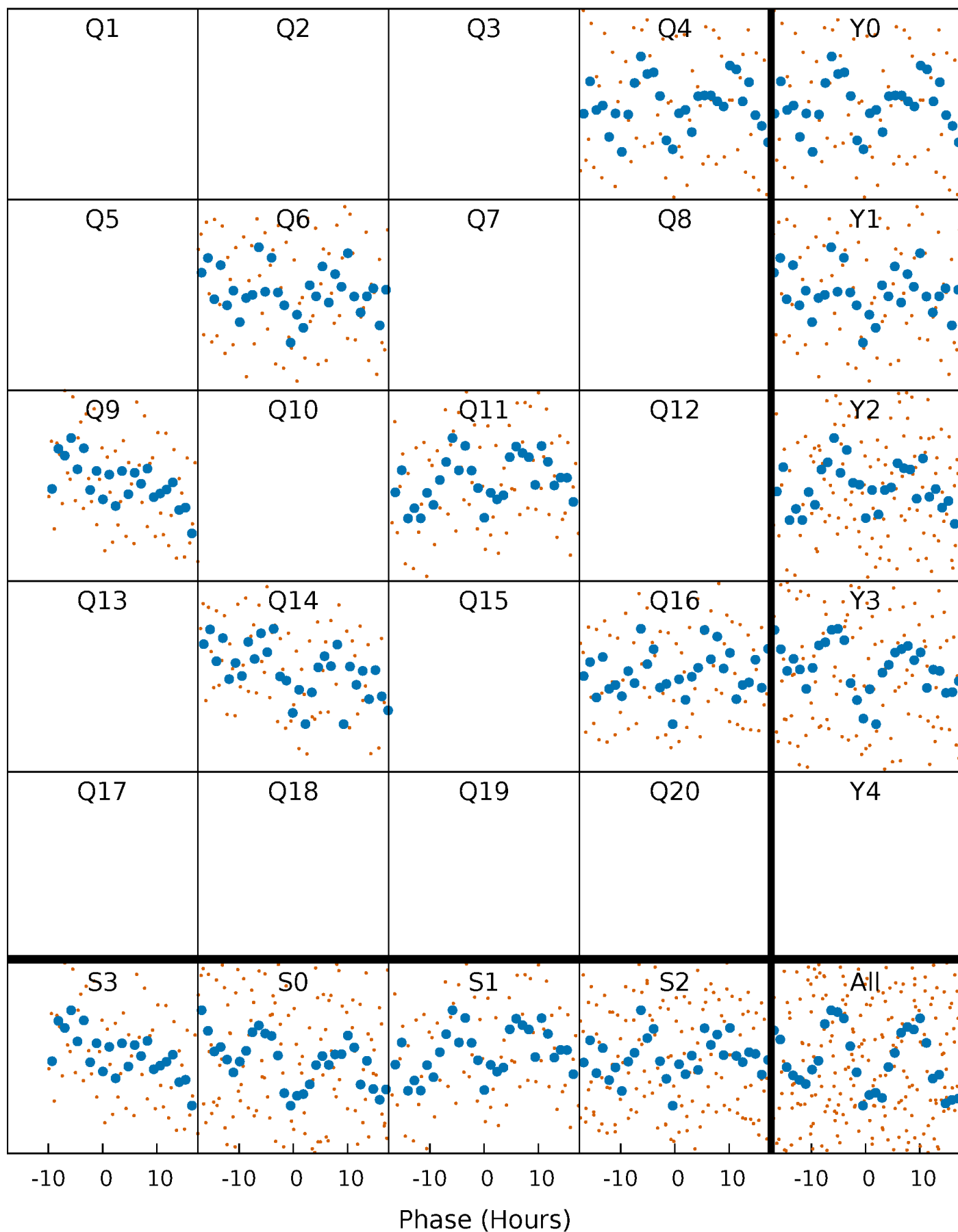


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



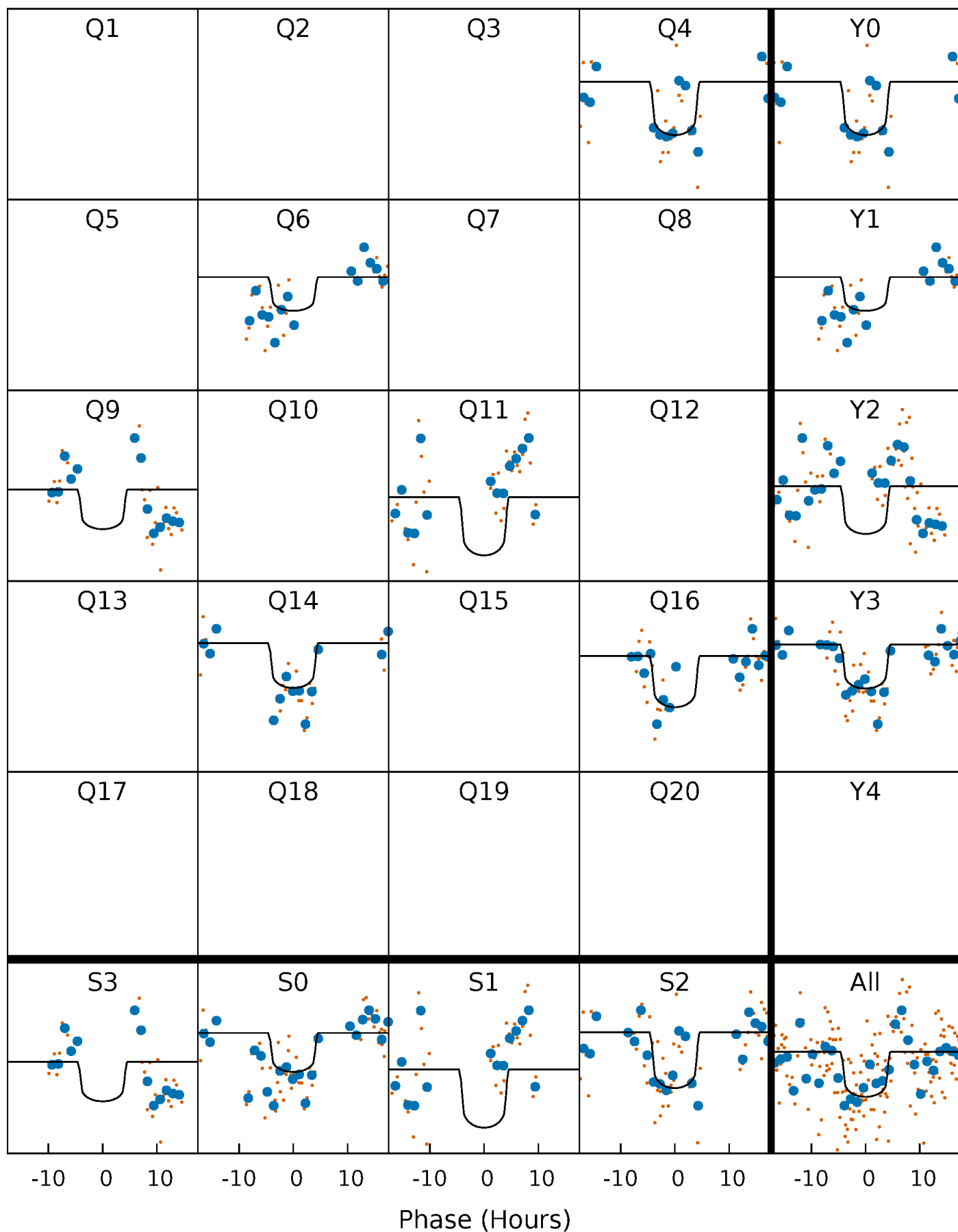
PDC Quarter-Phased Transit Curves

TCE 011924025-02 $P=227.413796$ Days $T_0=163.795152$ (BKJD)



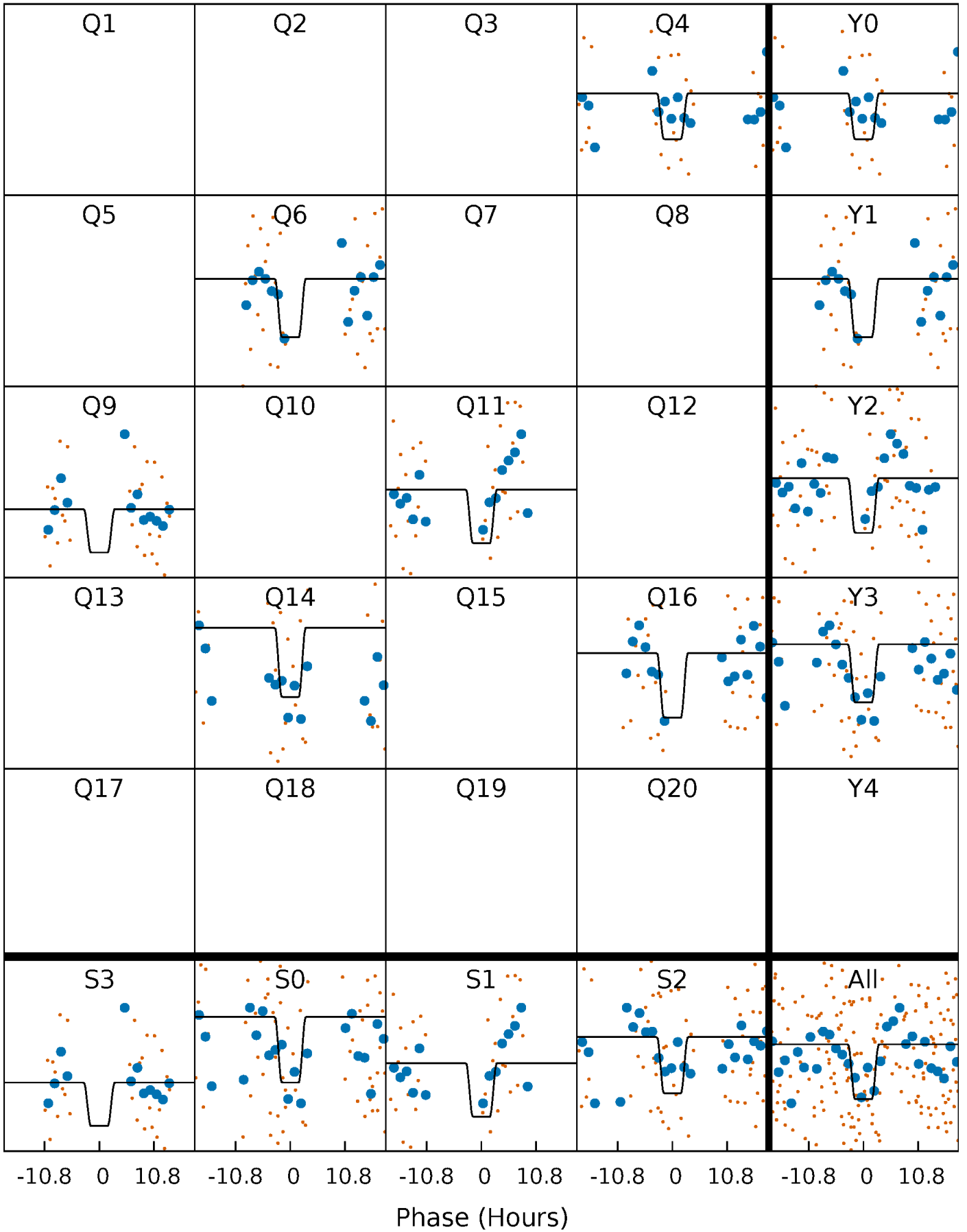
DV Quarter-Phased Transit Curves

TCE 011924025-02 P=227.413796 Days $T_0=163.795152$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

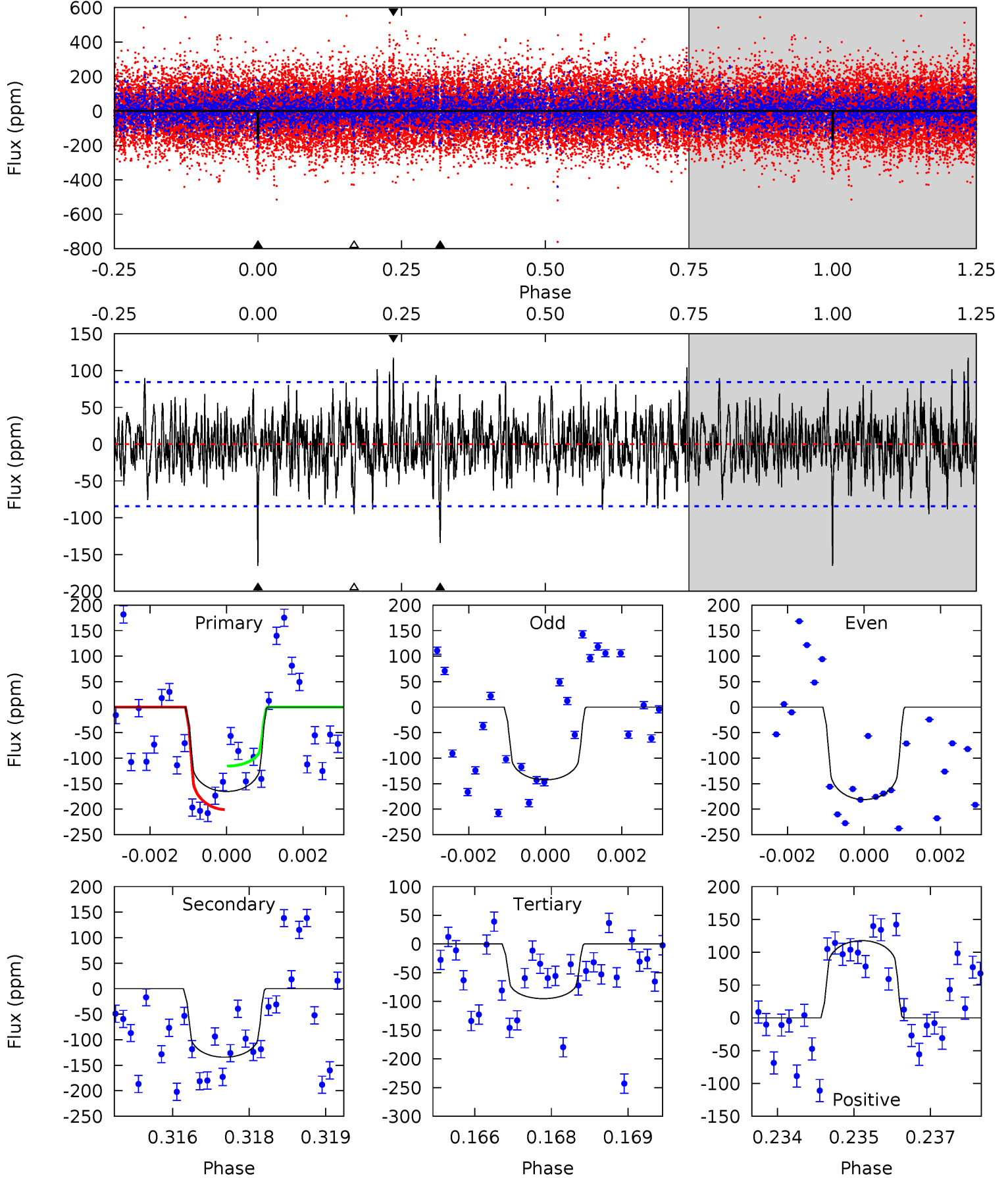
TCE 011924025-02 $P=227.418712$ Days $T_0=163.812974$ (BKJD)



DV Model-Shift Uniqueness Test

011924025-02, P = 227.413796 Days, E = 163.795152 Days

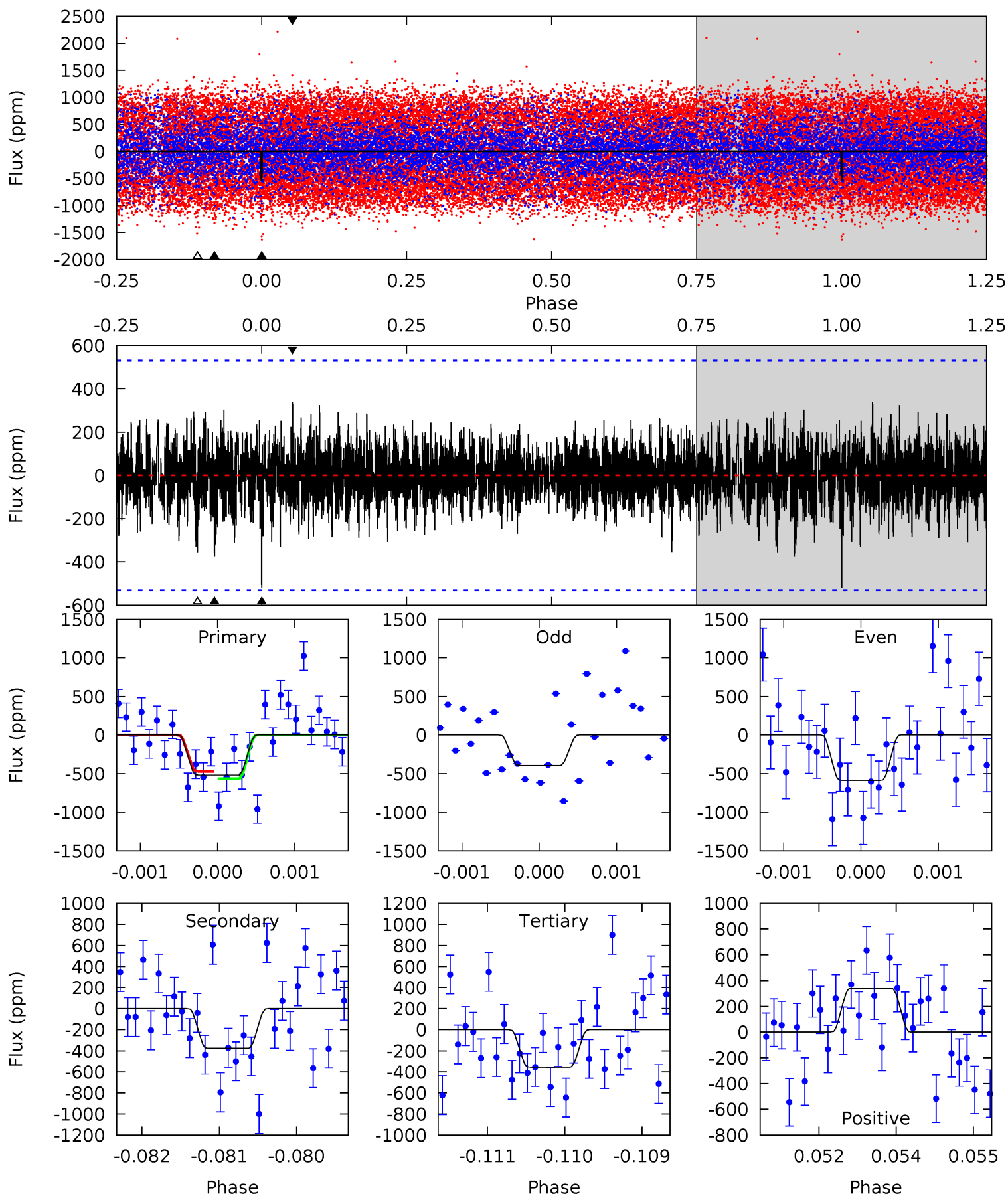
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.5	8.55	6.06	7.49	5.37	3.16	1.90	4.47	3.04	2.49	1.05	1.21	0.86	0.42	2.70



Alt Model-Shift Uniqueness Test

011924025-02, P = 227.418712 Days, E = 163.812974 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	3.84	3.64	3.46	5.43	3.26	1.15	1.67	1.85	0.21	0.38	0.95	1.10	0.39	0.49



Stellar Parameters For KIC 011924025

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7449^{+232}_{-310}	$4.013^{+0.222}_{-0.148}$	$-0.180^{+0.250}_{-0.350}$	$2.063^{+0.510}_{-0.624}$	$1.599^{+0.181}_{-0.311}$	$0.257^{+0.351}_{-0.111}$
	+3%/-4%	+6%/-4%	+139%/-194%	+25%/-30%	+11%/-19%	+137%/-43%
Source	KIC0	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 011924025-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-134 ± 16	$3.07^{+1.22}_{-0.99}$	709^{+52}_{-56}	6637^{+1616}_{-931}	5595^{+6564}_{-2683}
Alt.	-375 ± 98	$5.66^{+1.44}_{-1.25}$	707^{+54}_{-62}	6257^{+914}_{-614}	4454^{+3346}_{-1816}

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

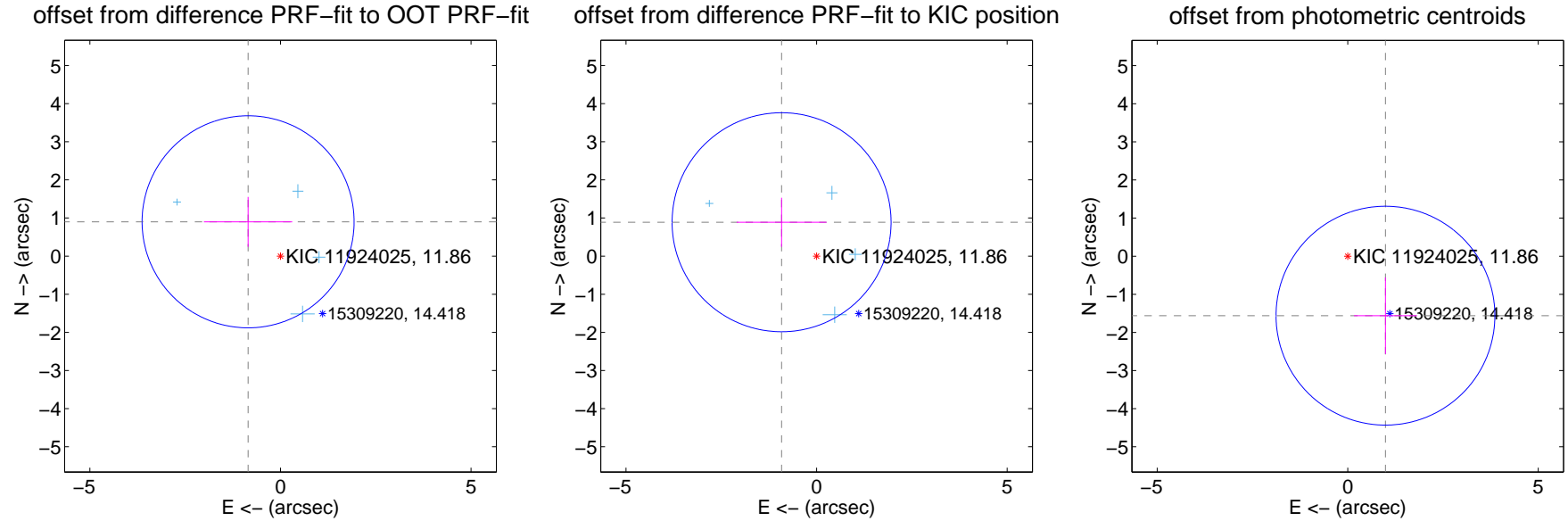
DV Centroid Data

Supplemental centroid analysis for 011924025-02. **Kepler magnitude: 11.86.** Transit SNR 6.60

There are 4 quarters with good PRF difference image offsets

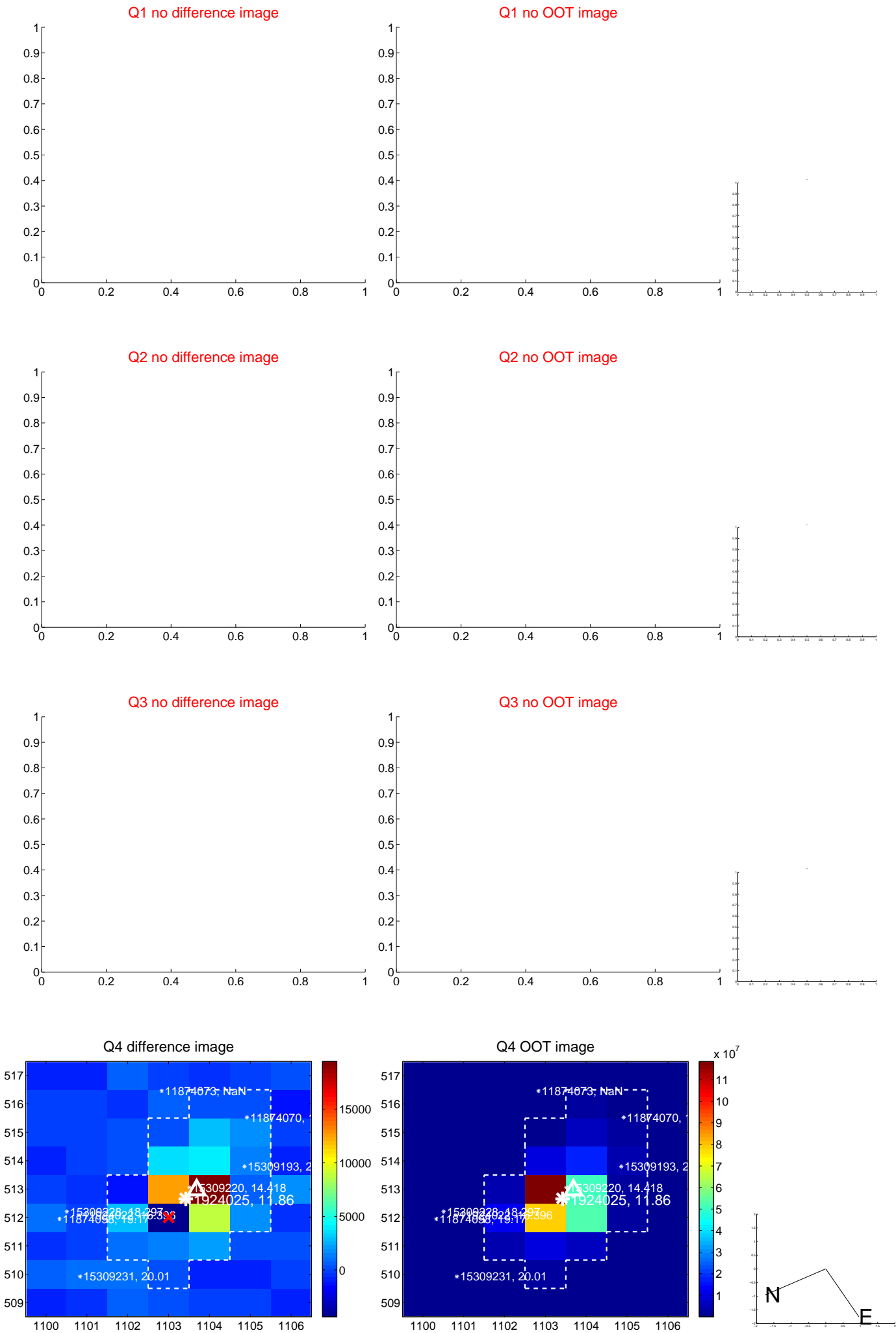
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.238 ± 0.927	1.33	0.849 ± 1.159	0.900 ± 0.654
PRF-fit source offset from KIC position	1.278 ± 0.958	1.33	0.918 ± 1.179	0.889 ± 0.642
photometric centroid source offset	1.85 ± 0.96	1.93	-0.99 ± 0.83	-1.56 ± 1.01

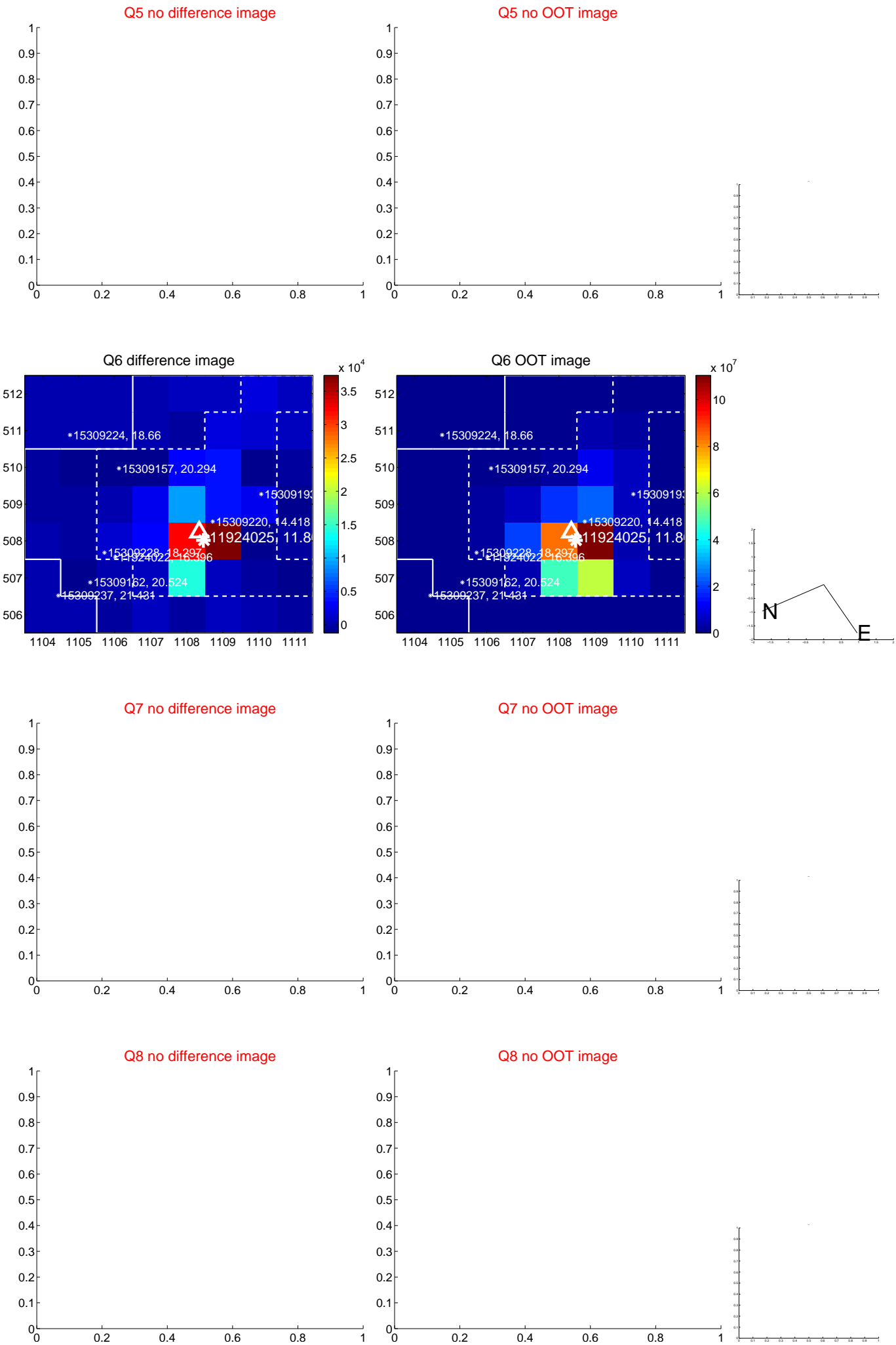


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

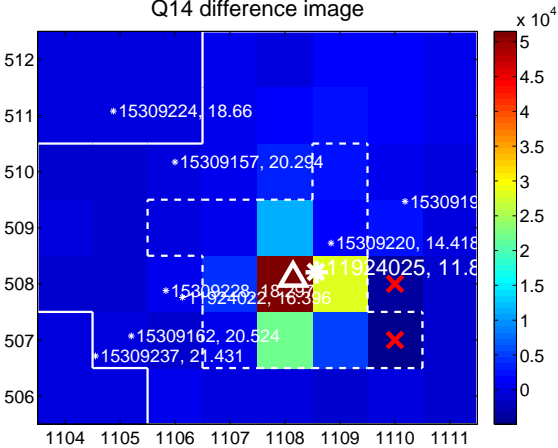
Q13 no difference image



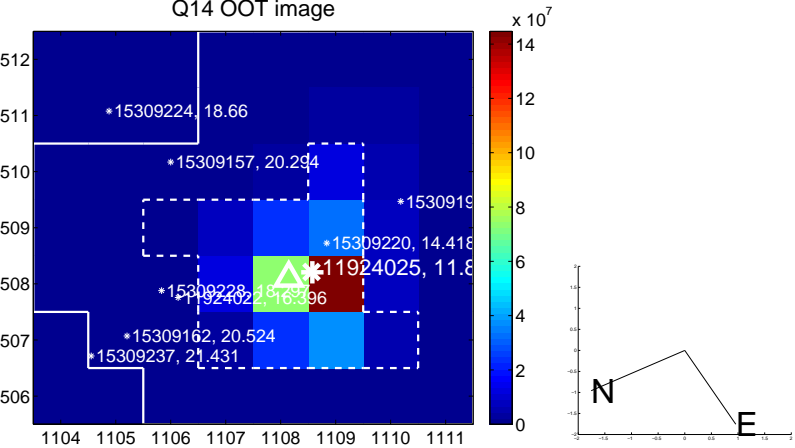
Q13 no OOT image



Q14 difference image



Q14 OOT image



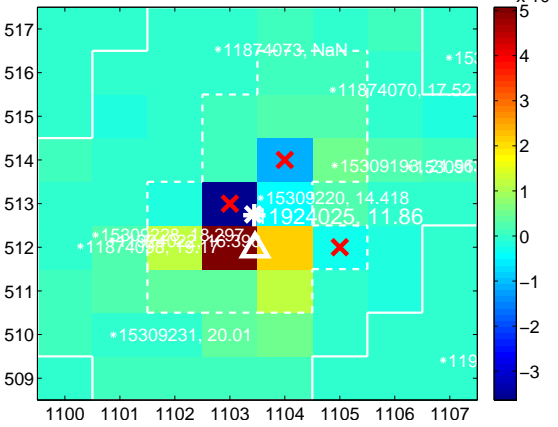
Q15 no difference image



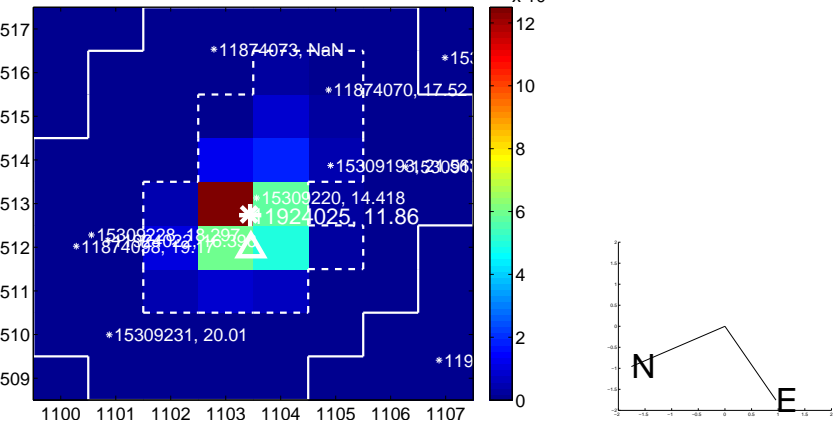
Q15 no OOT image



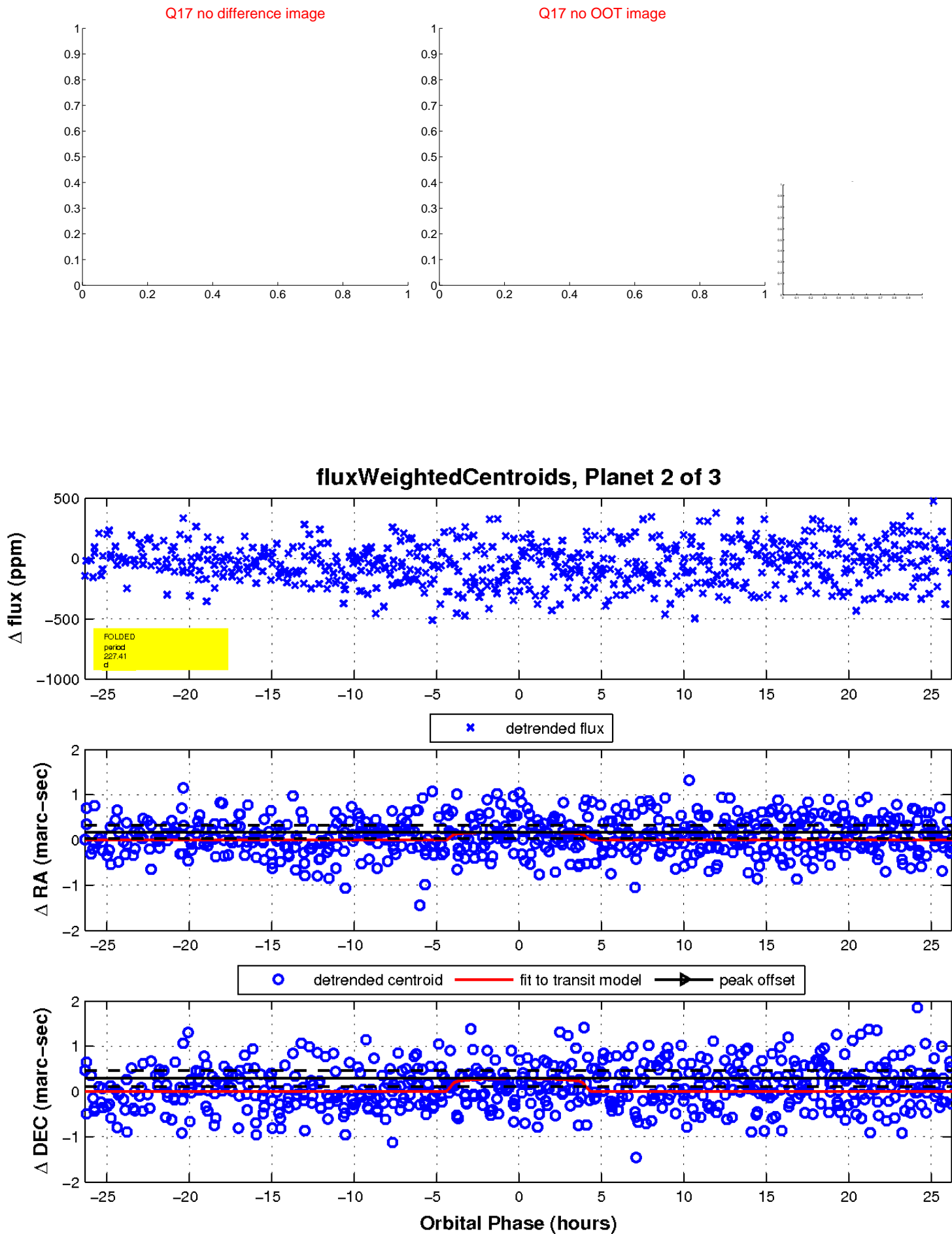
Q16 difference image



Q16 OOT image

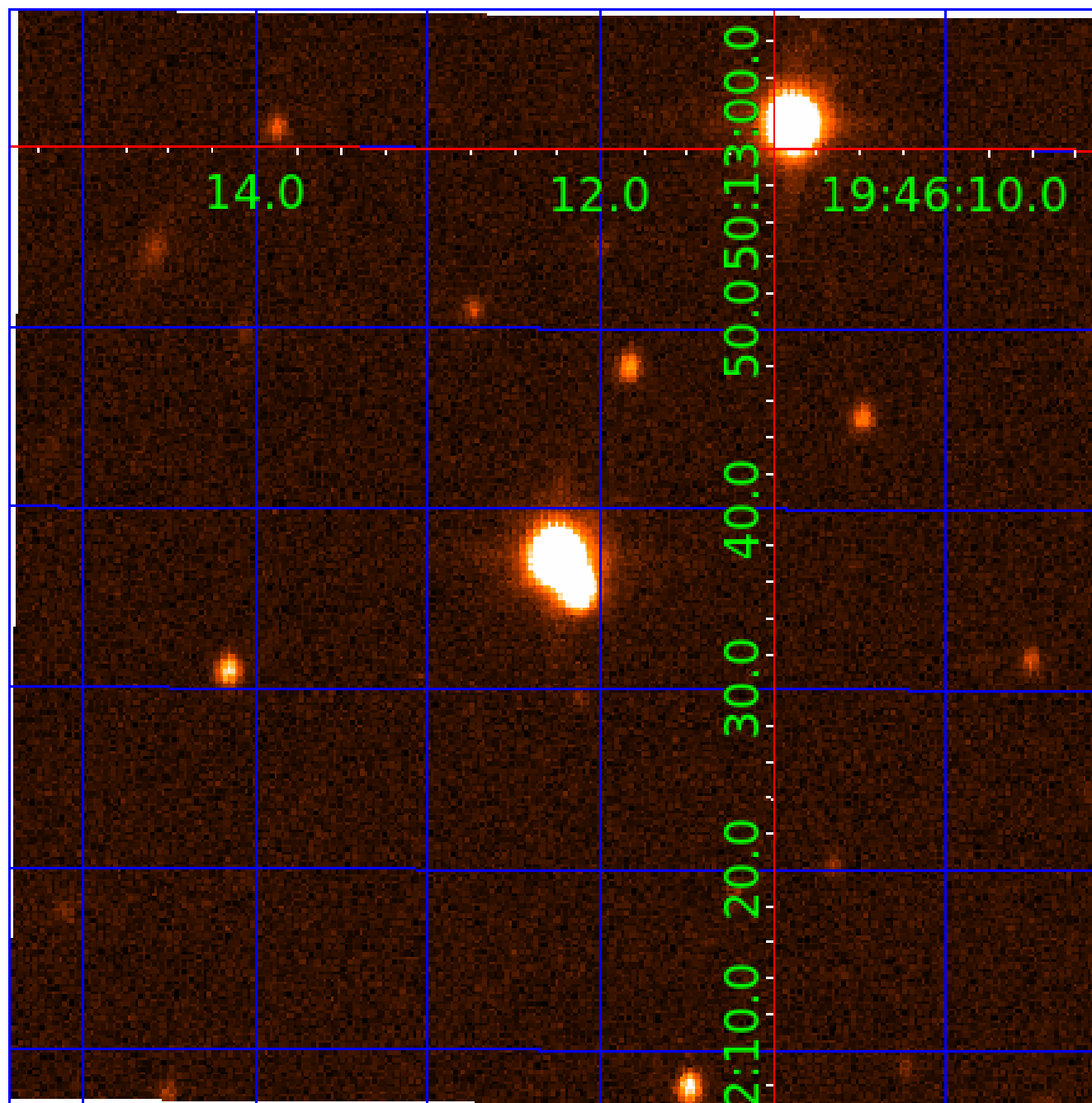


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011924025

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})
011924025-01	OBS	No	0.808582	132.082064	13.9	3.383	7.9	8.2	2.06	7449	0.91	29738.60
011924025-02	OBS	No	227.413796	163.795152	180.5	8.789	8.4	6.6	2.06	7449	3.21	16.14
011924025-03	OBS	No	144.907324	186.607764	101.4	18.933	7.2	4.5	2.06	7449	2.32	29.43

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011924025-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011924025-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_UNCERTAIN
011924025-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

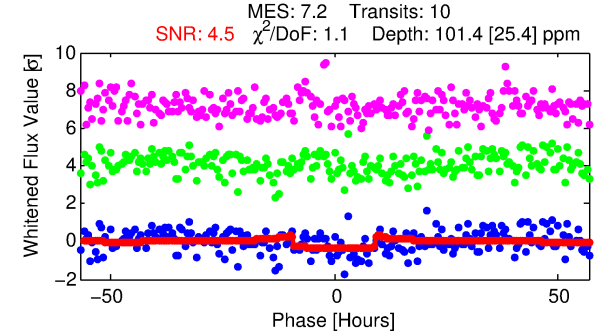
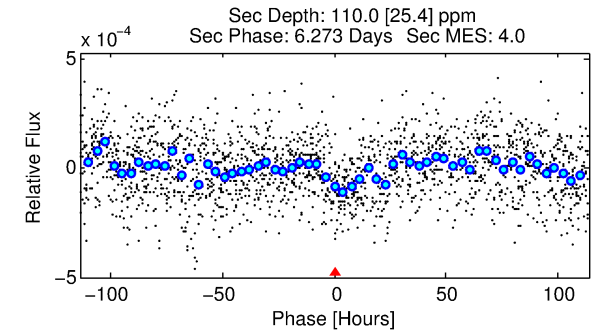
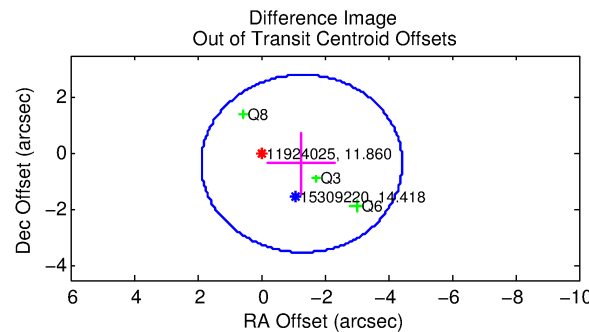
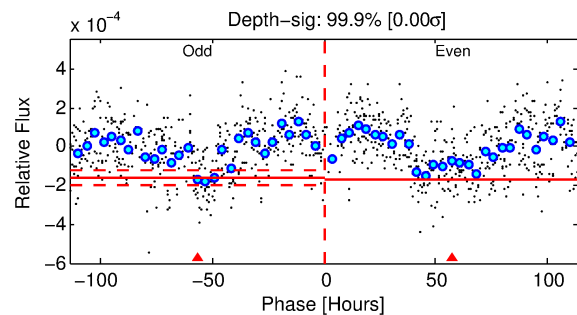
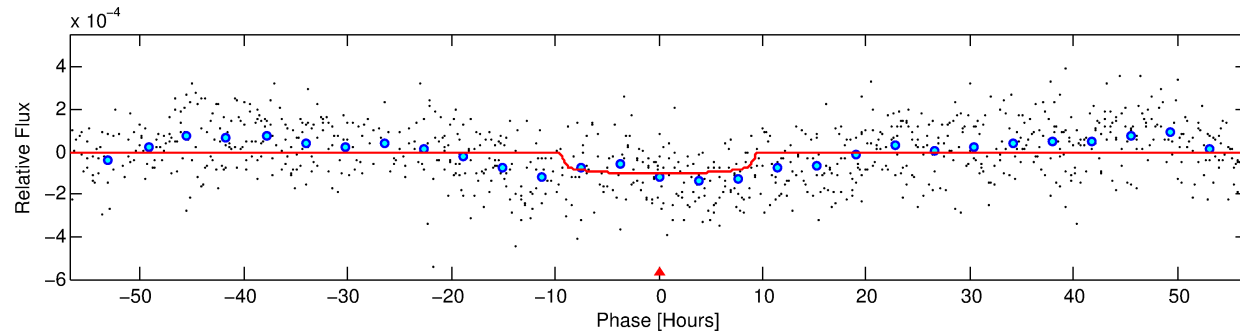
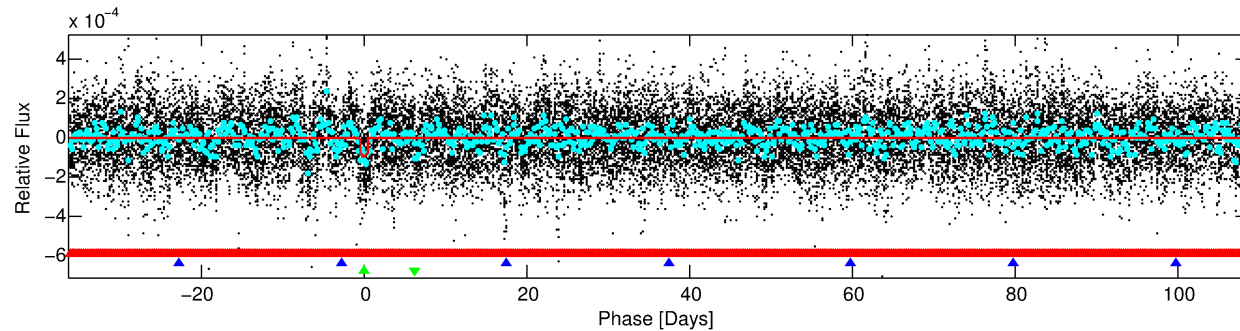
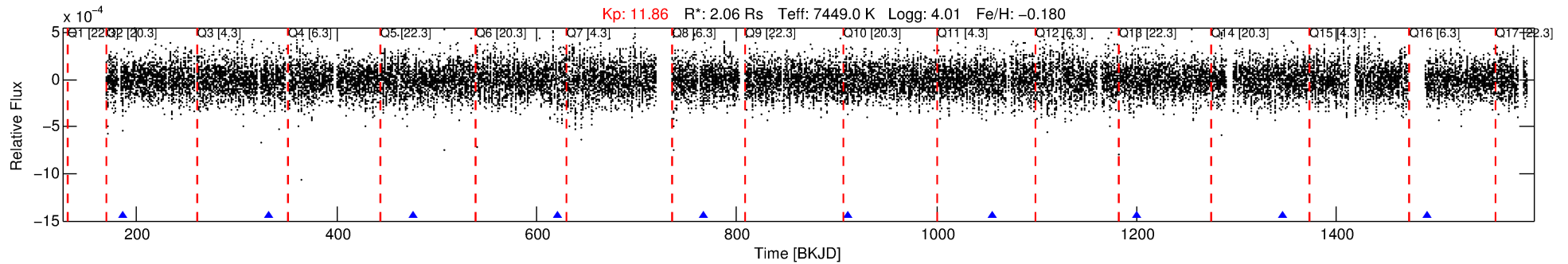
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011924025-03

No Significant Match Found

DV One-Page Summary

KIC: 11924025 Candidate: 3 of 3 Period: 144.907 d



DV Fit Results:

Period = 144.90732 [0.00667] d
Epoch = 186.6078 [0.0409] BKJD
Rp/R* = 0.0103 [0.0025]
a/R* = 34.25 [35.60]
b = 0.82 [0.41]
Seff = 29.43 [12.64]
Teq = 594 [64] K
Rp = 2.32 [0.89] Re
a = 0.6316 [0.1667] AU
Ag = 4486.27 [2966.00] [1.51σ]
Teffp = 7515 [1043] K [6.63σ]

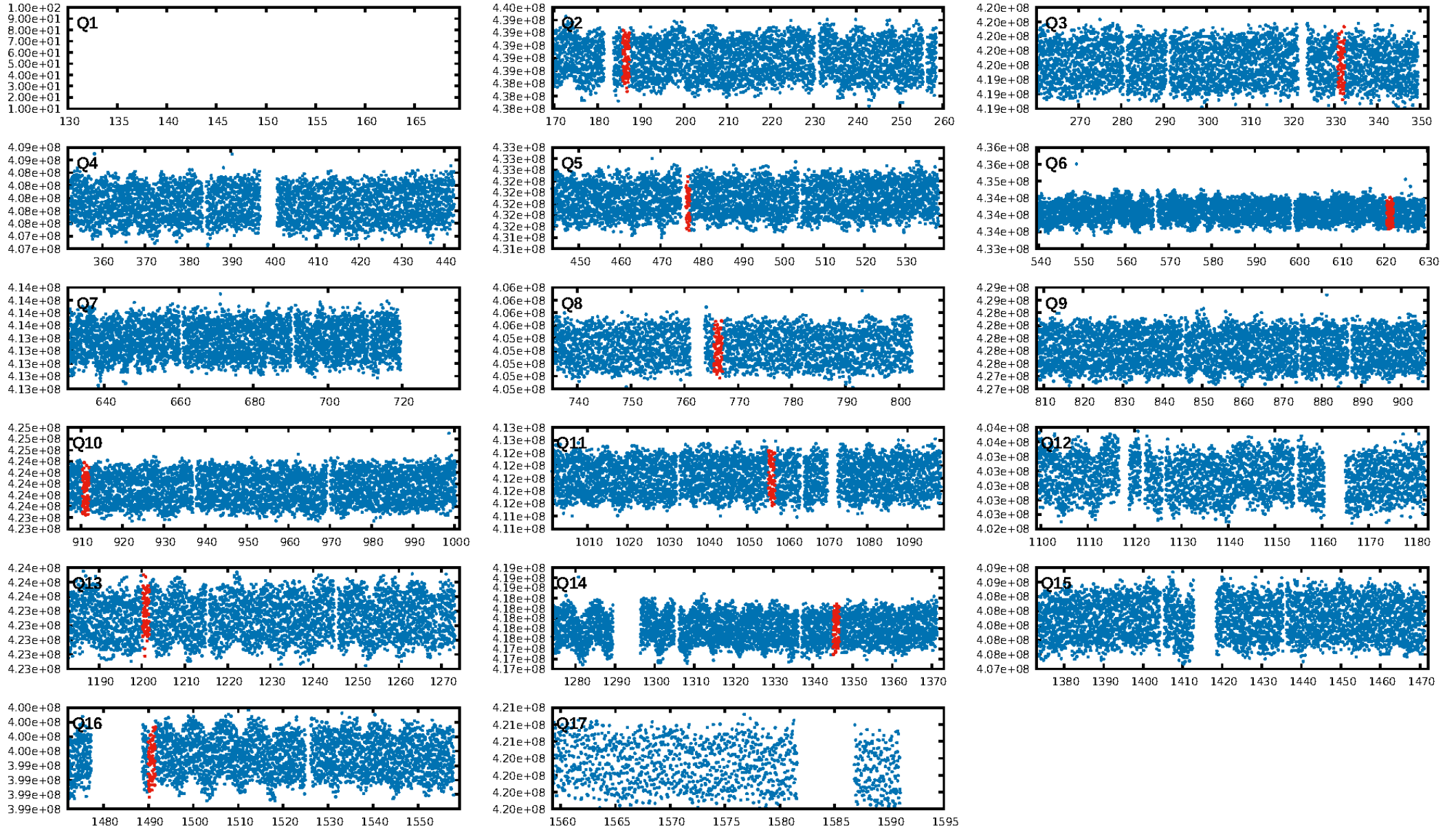
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [179.82σ]
LongPeriod-sig: 100.0% [94.87σ]
ModelChiSquare2-sig: 2.5%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.10e-10
RollingBand-fgt: 1.00 [10/10]
GhostDiagnostic-chr: -1.041
Centroid-sig: 22.8%
Centroid-so: 1.339 arcsec [1.20σ]
OotOffset-rm: 1.331 arcsec [1.26σ]
KicOffset-rm: 1.312 arcsec [1.22σ]
OotOffset-st: 1/1/1/0 [3]
KicOffset-st: 1/1/1/0 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 0.00 [0/7]

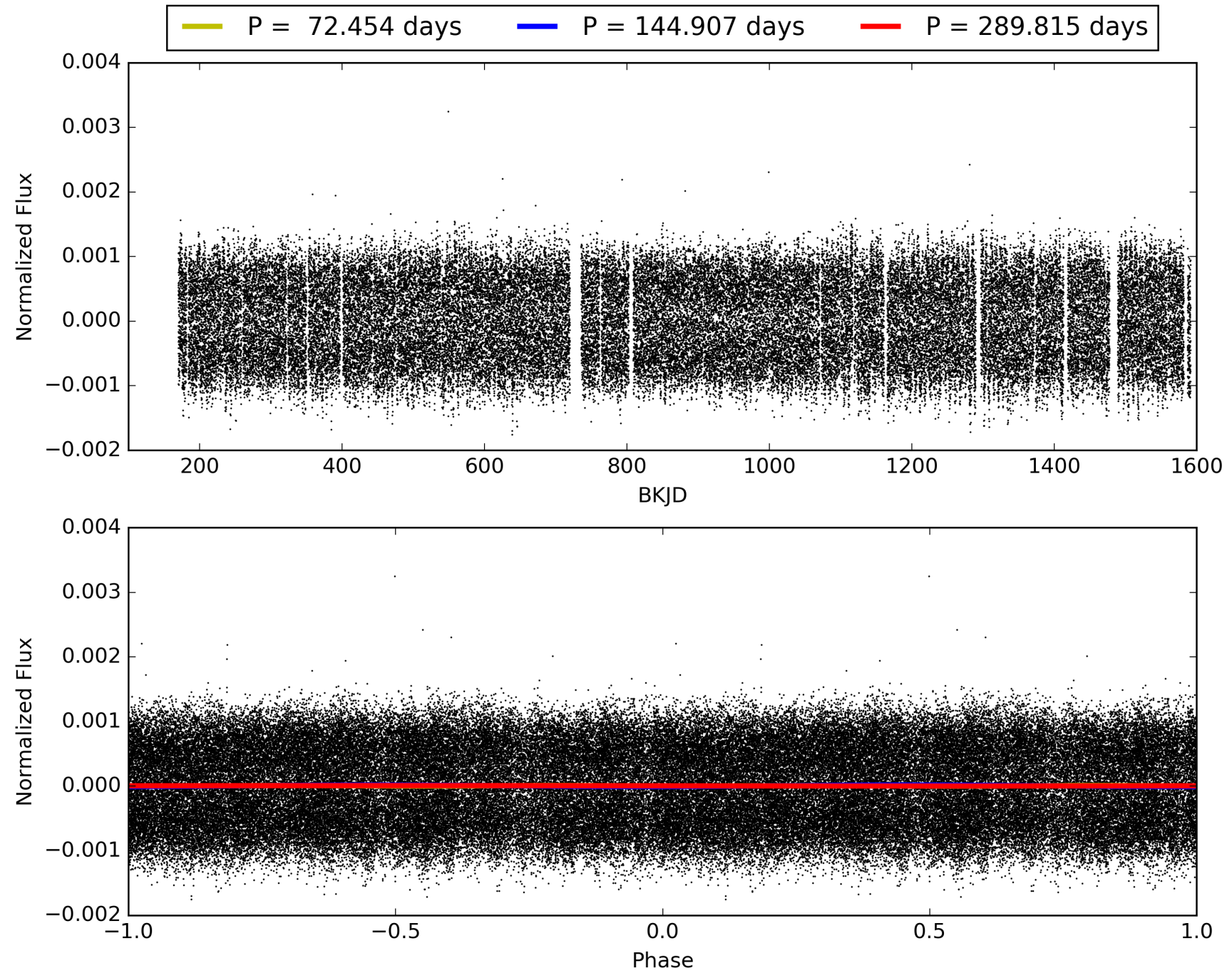
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 11:08:30 Z

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

TCE 011924025-03, PDC Light Curves

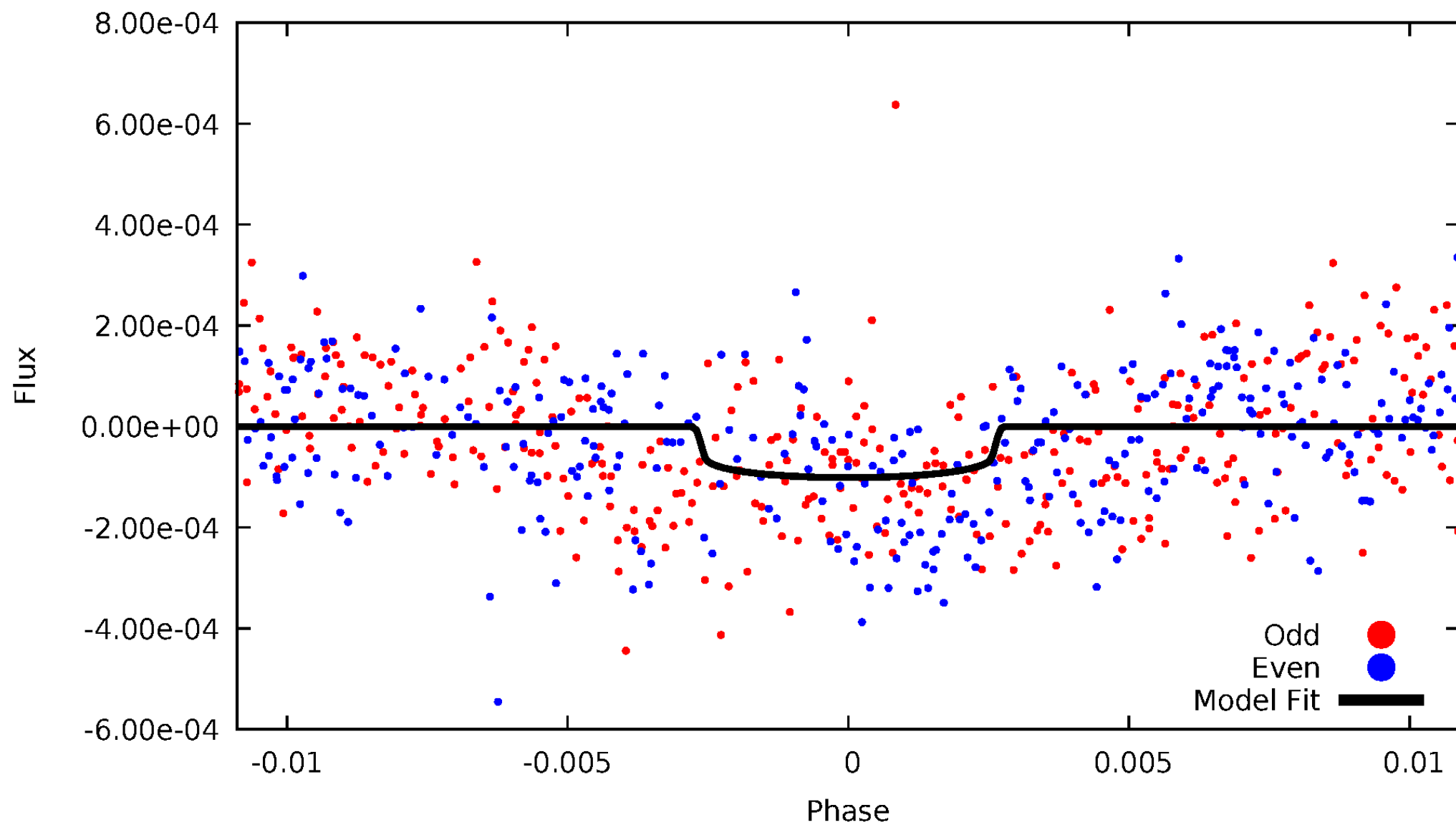


TCE 011924025-03



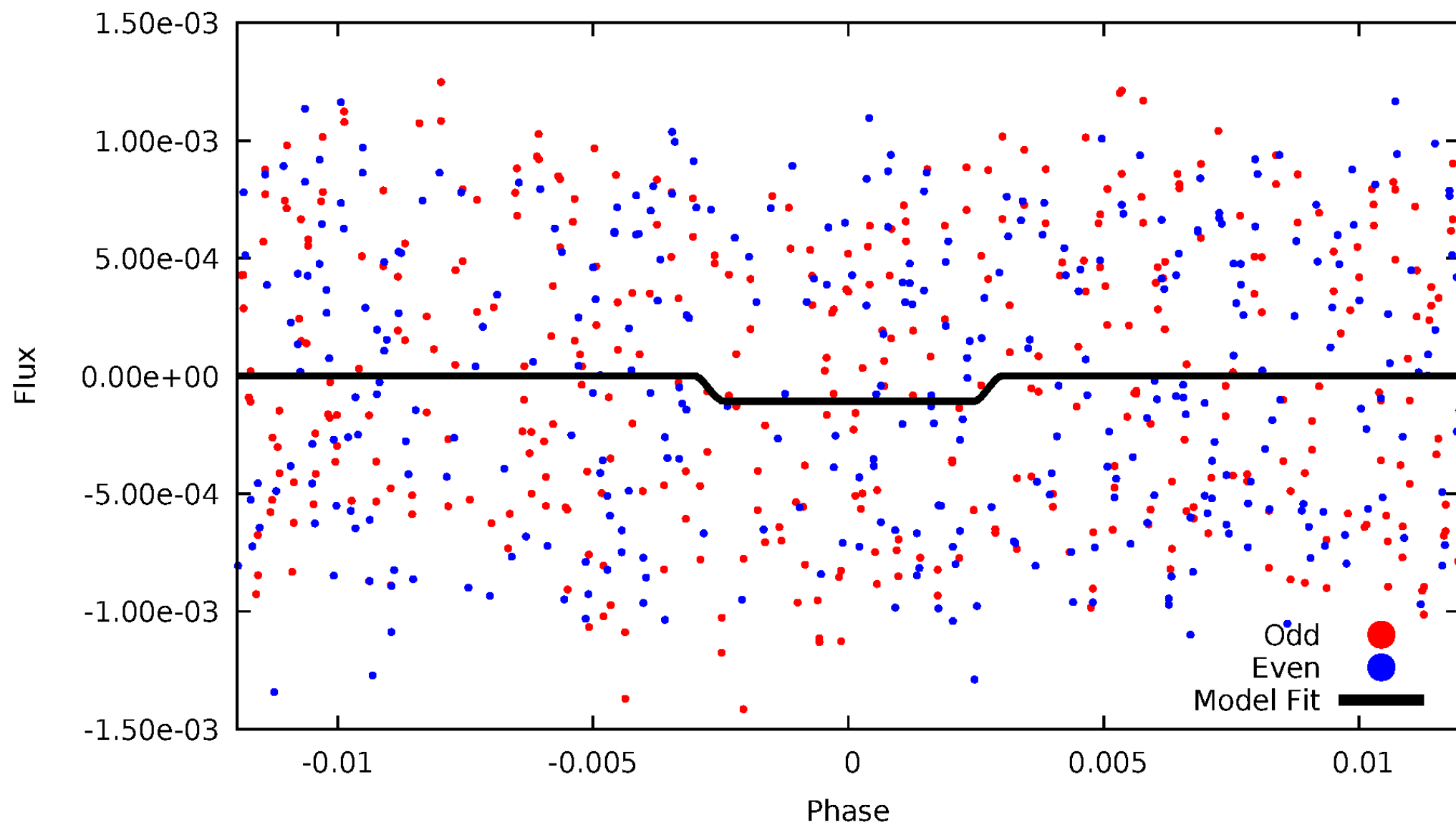
DV Odd/Even

TCE 011924025-03

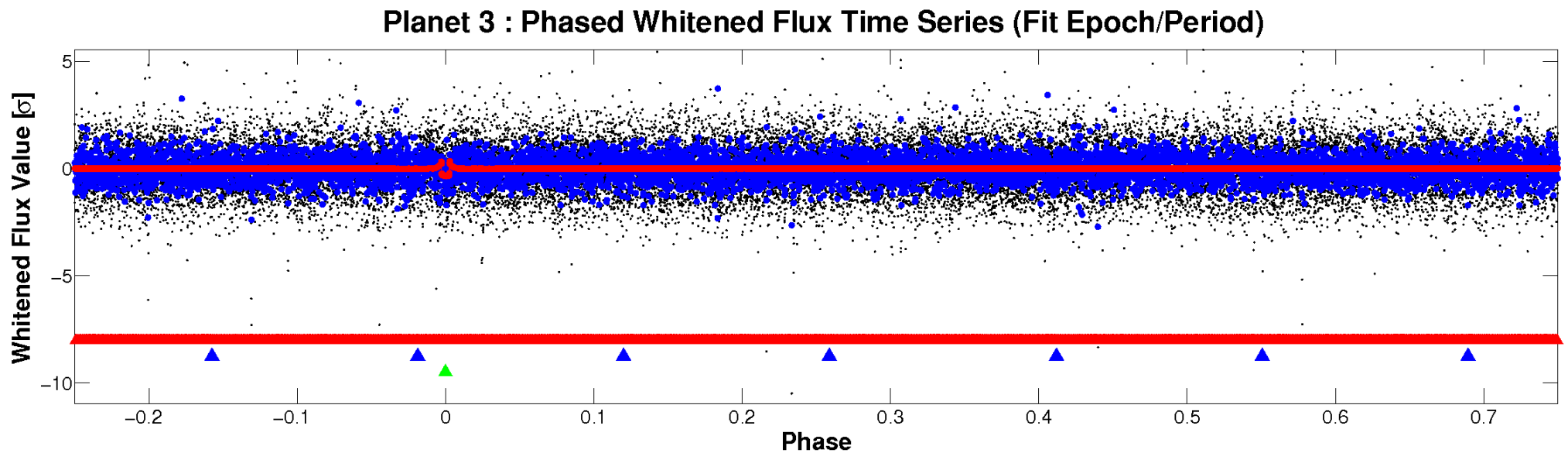
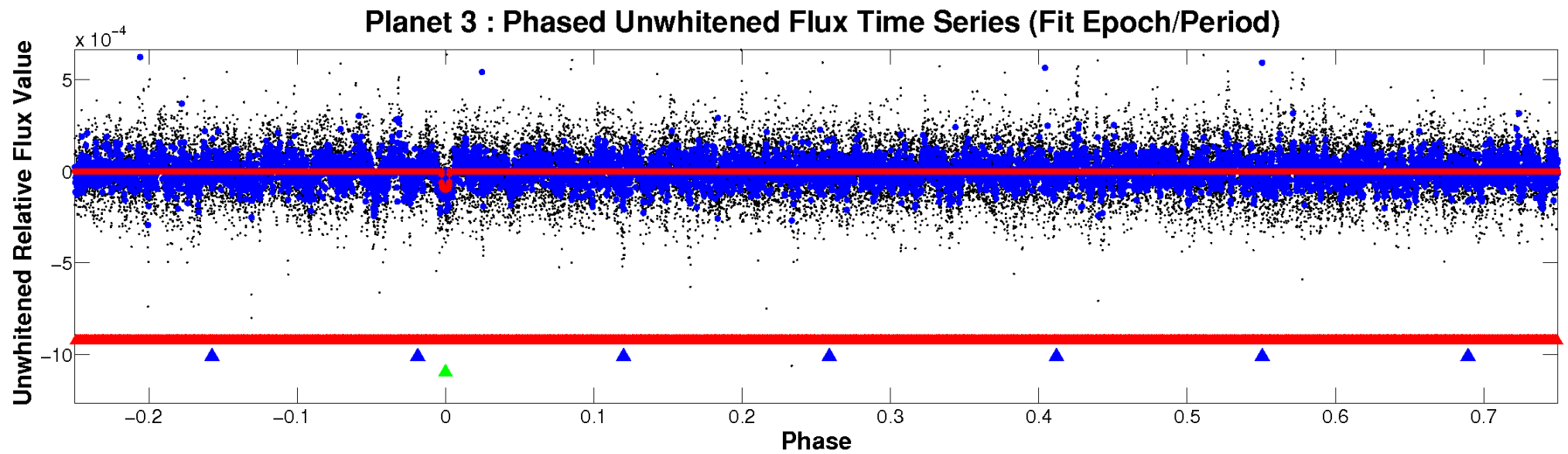


ALT Odd/Even

TCE 011924025-03

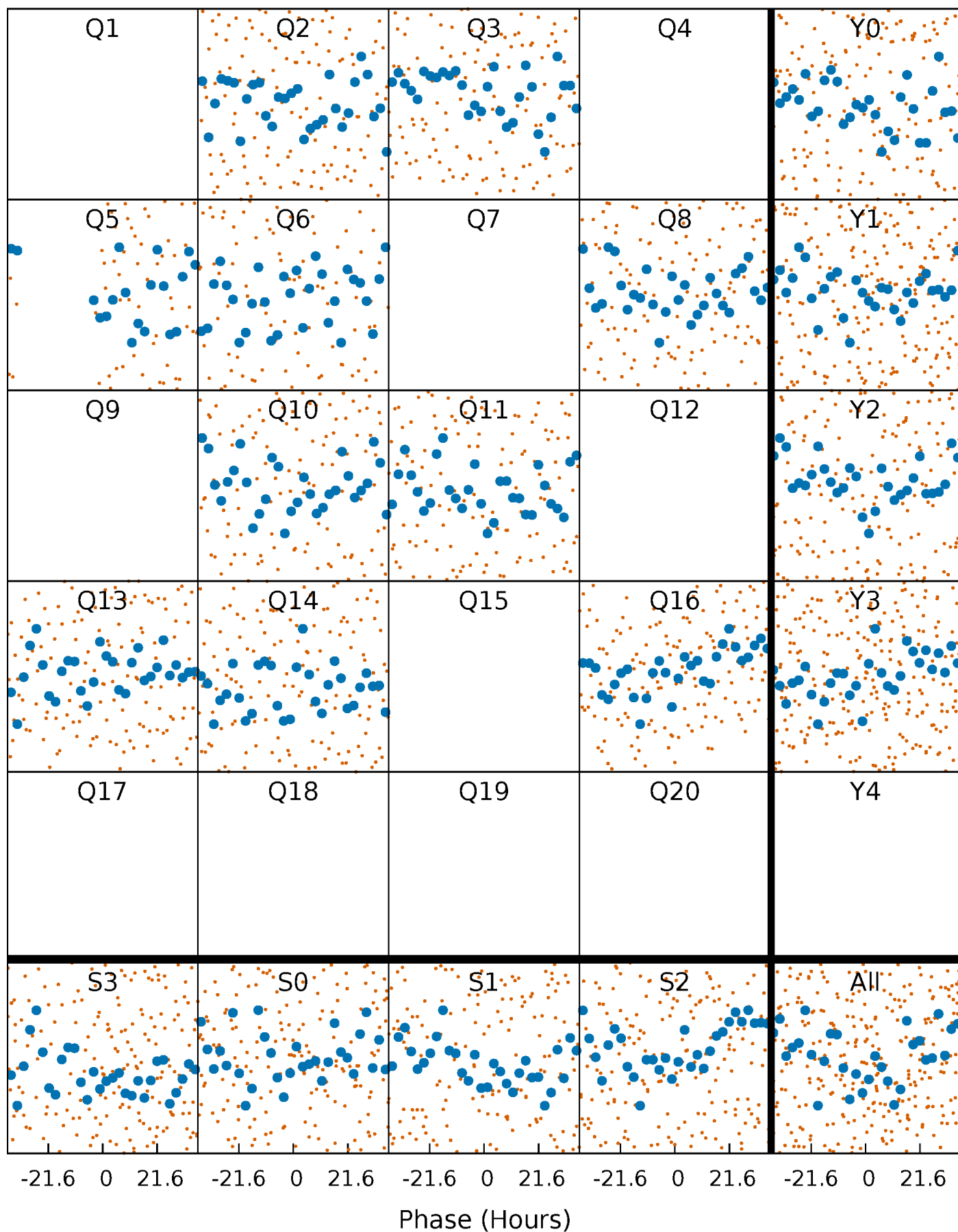


Non-Whitened Vs. Whitened Light Curve



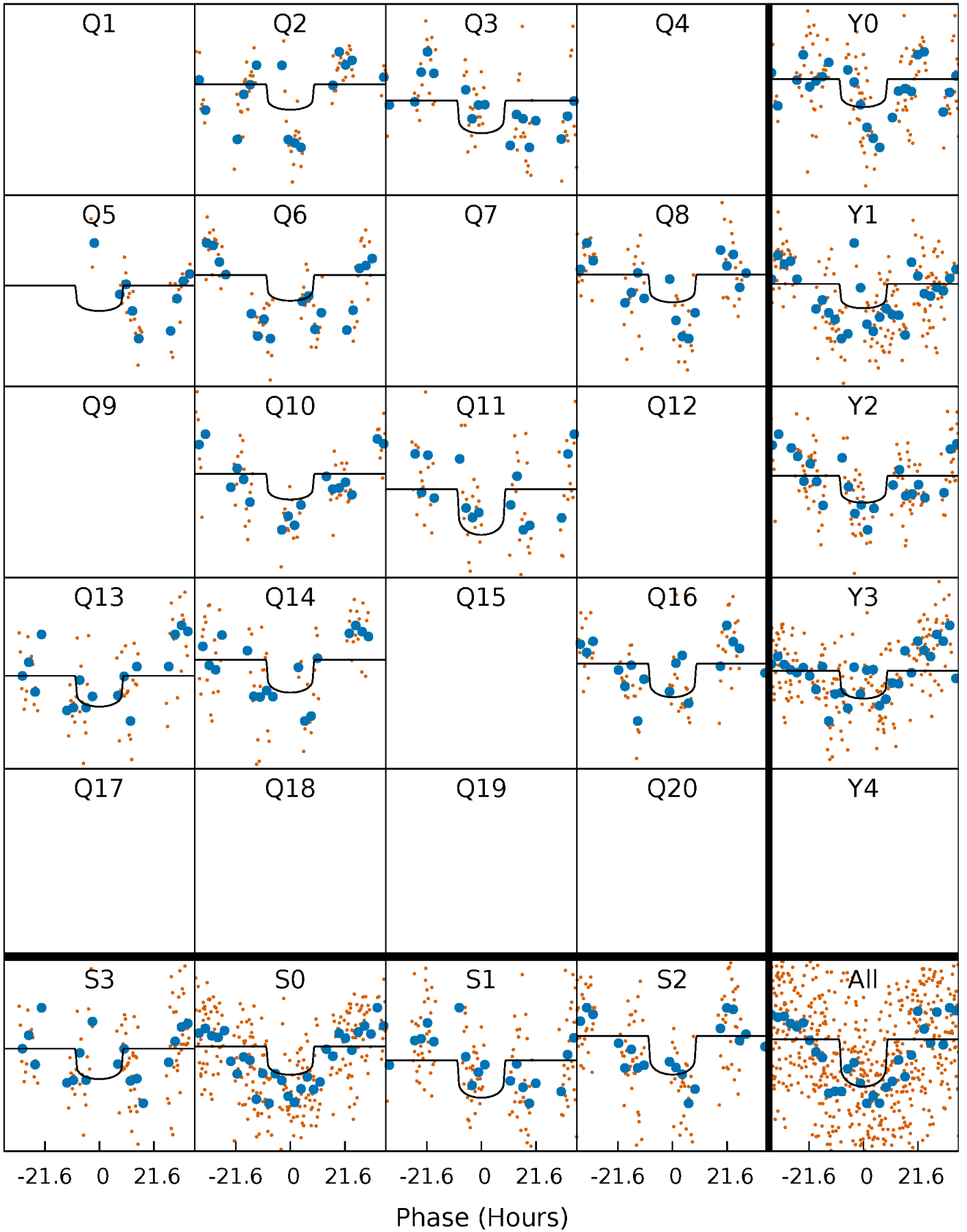
PDC Quarter-Phased Transit Curves

TCE 011924025-03 P=144.907324 Days $T_0=186.607764$ (BKJD)



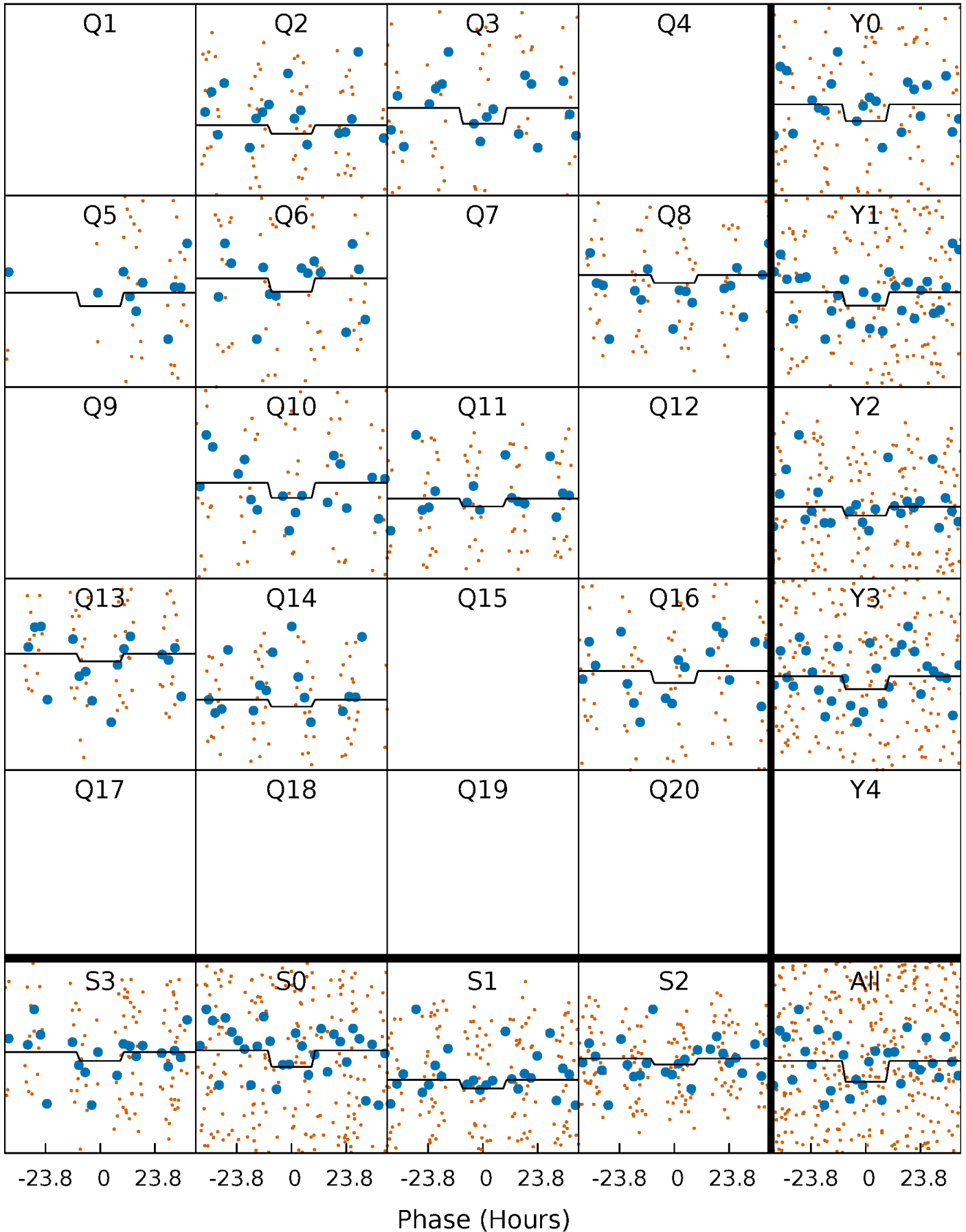
DV Quarter-Phased Transit Curves

TCE 011924025-03 P=144.907324 Days $T_0=186.607764$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

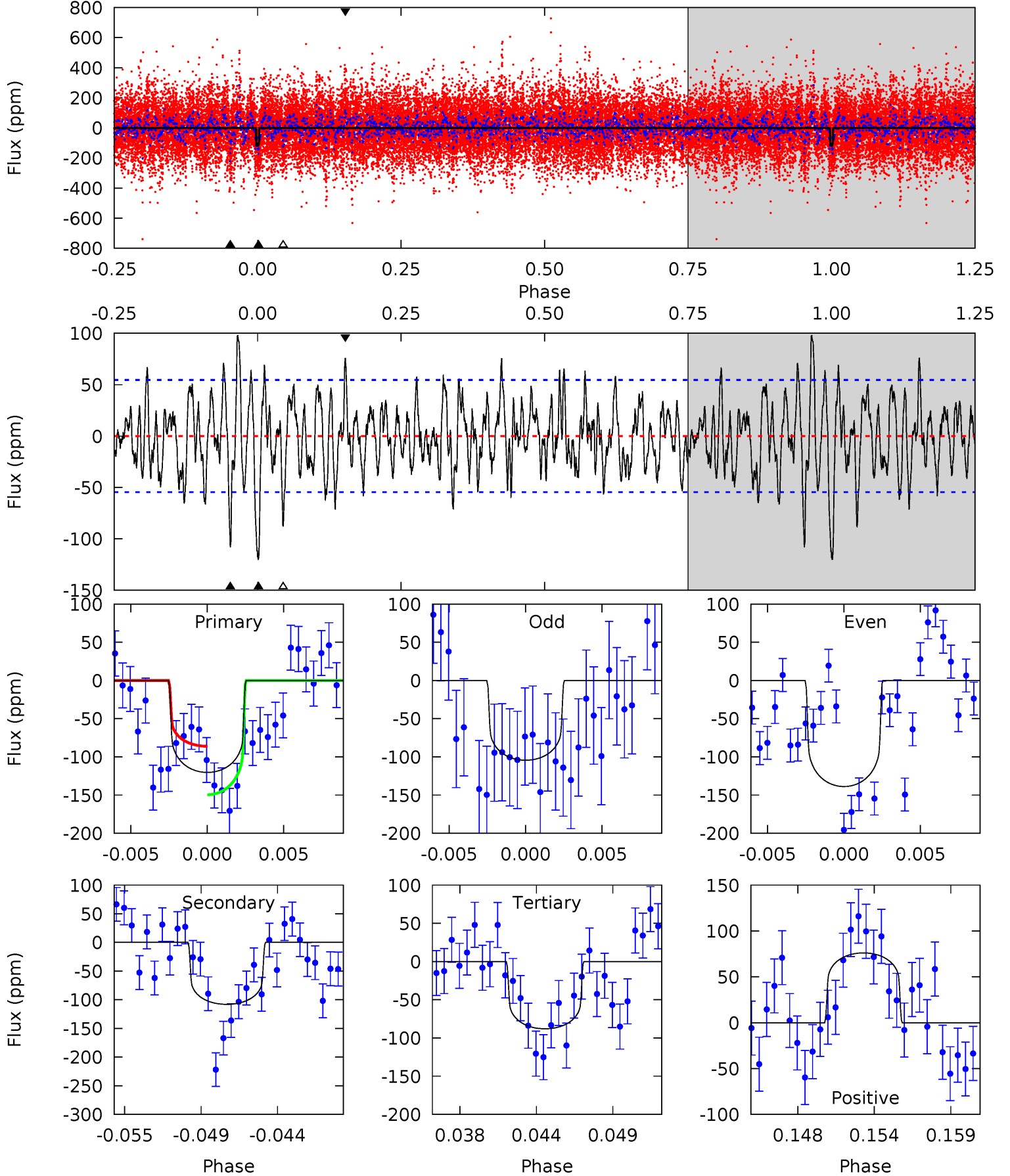
TCE 011924025-03 P=144.929552 Days $T_0=186.489400$ (BKJD)



DV Model-Shift Uniqueness Test

011924025-03, P = 144.907324 Days, E = 41.700440 Days

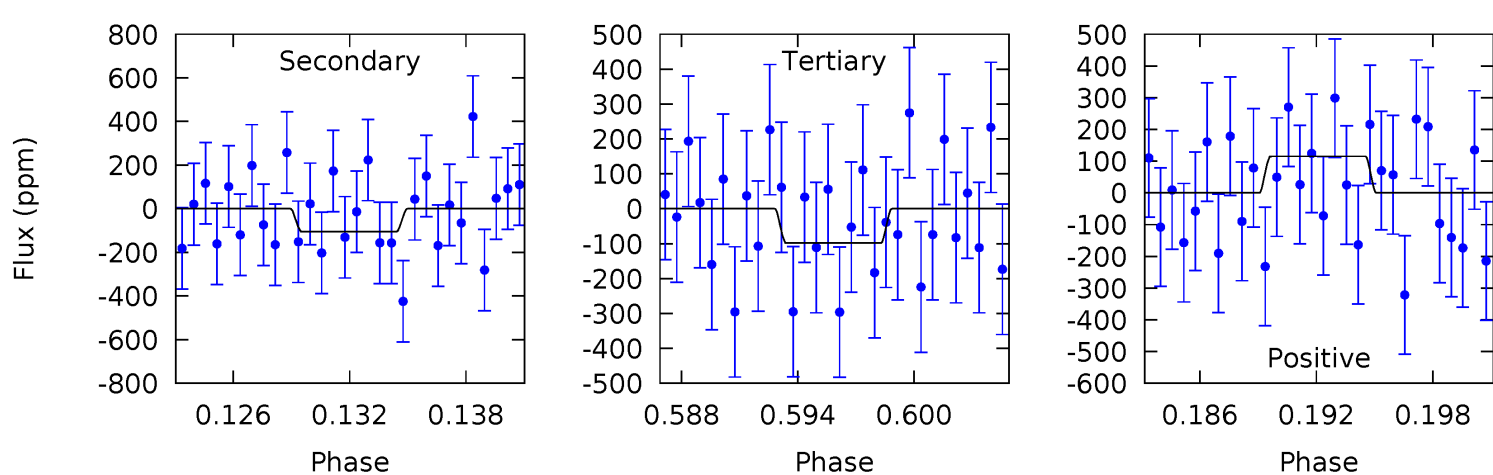
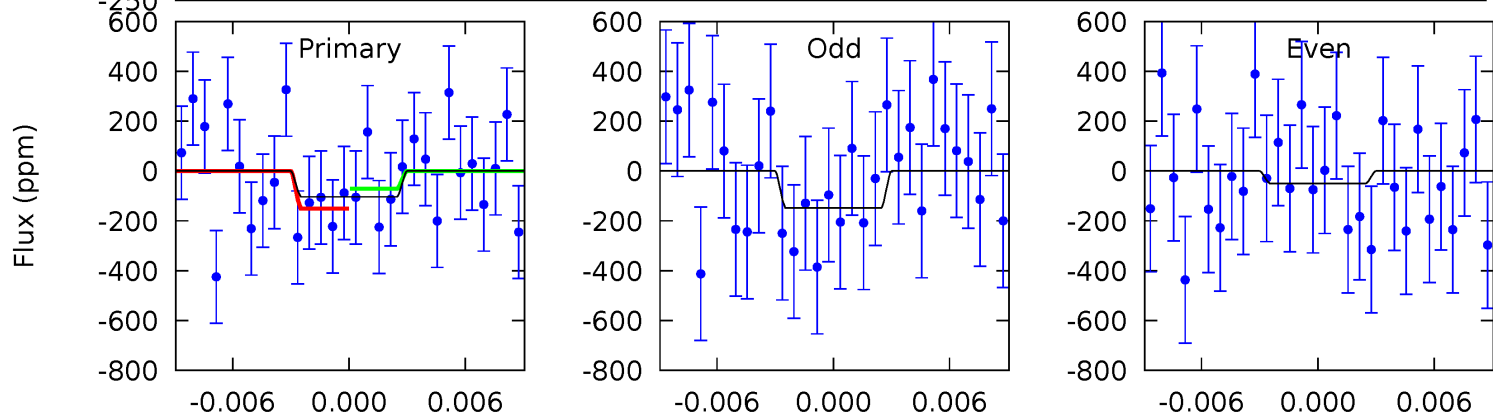
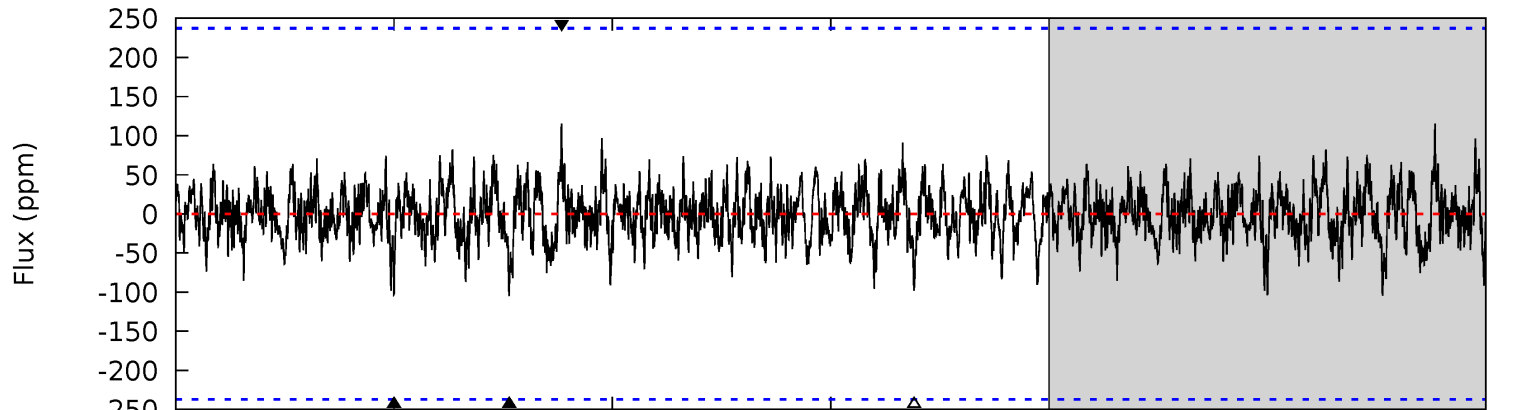
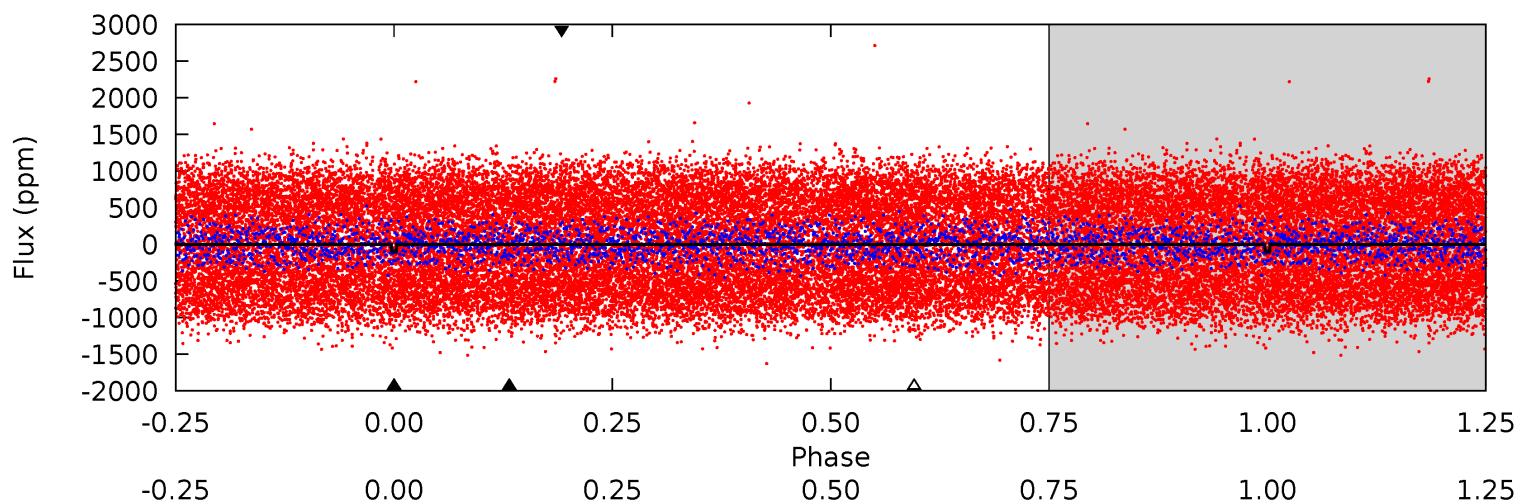
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.3	10.2	8.30	7.17	5.14	2.78	2.71	3.05	4.17	1.89	3.01	1.62	0.84	0.45	2.98



Alt Model-Shift Uniqueness Test

011924025-03, P = 144.929552 Days, E = 41.559848 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.25	2.26	2.12	2.49	5.12	2.75	0.64	0.12	-0.24	0.14	-0.23	1.05	1.23	0.52	0.84



Stellar Parameters For KIC 011924025

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7449^{+232}_{-310}	$4.013^{+0.222}_{-0.148}$	$-0.180^{+0.250}_{-0.350}$	$2.063^{+0.510}_{-0.624}$	$1.599^{+0.181}_{-0.311}$	$0.257^{+0.351}_{-0.111}$
	+3%/-4%	+6%/-4%	+139%/-194%	+25%/-30%	+11%/-19%	+137%/-43%
Source	KIC0	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 011924025-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-108 ± 11	$2.22^{+0.65}_{-0.63}$	820^{+59}_{-59}	7495^{+1463}_{-927}	4656^{+4343}_{-1837}
Alt.	-105 ± 46	$2.25^{+0.69}_{-0.62}$	823^{+60}_{-65}	7263^{+1746}_{-1265}	4150^{+4578}_{-2240}

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

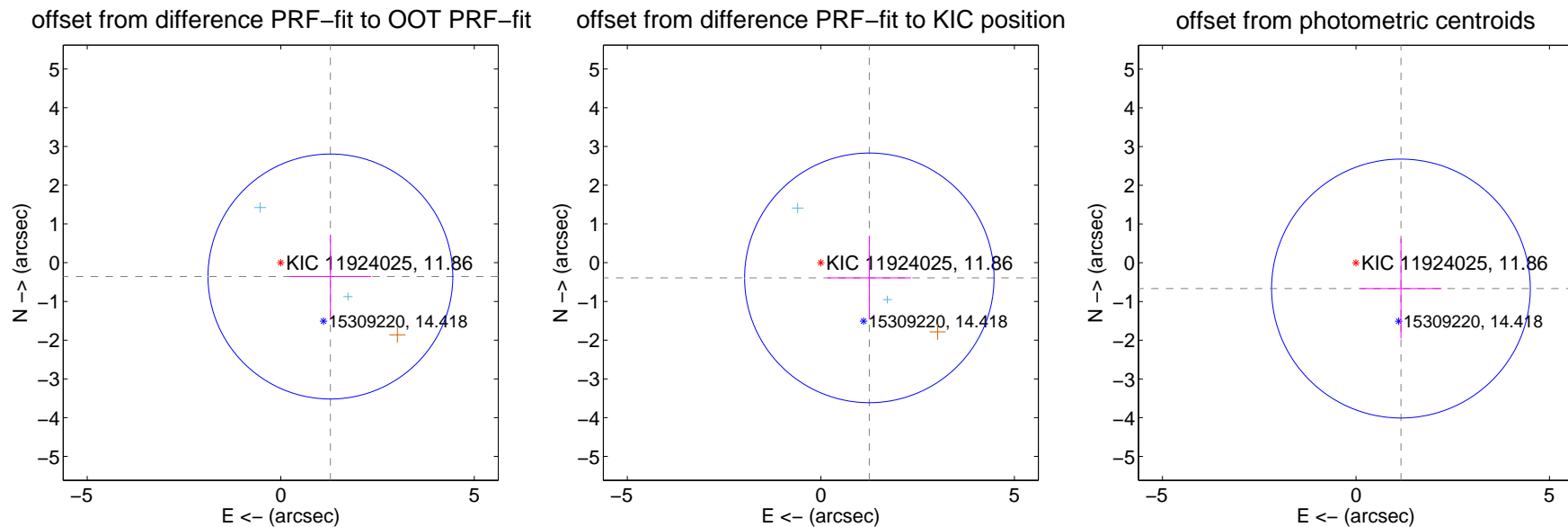
DV Centroid Data

Supplemental centroid analysis for 011924025-03. **Kepler magnitude: 11.86.** Transit SNR 4.48

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.331 ± 1.054	1.26	-1.283 ± 1.052	-0.357 ± 1.082
PRF-fit source offset from KIC position	1.312 ± 1.074	1.22	-1.252 ± 1.074	-0.392 ± 1.072
photometric centroid source offset	1.34 ± 1.11	1.20	-1.16 ± 1.05	-0.67 ± 1.29



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.

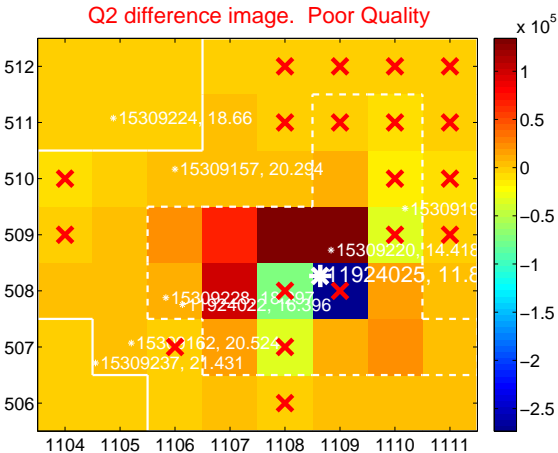
Q1 no difference image



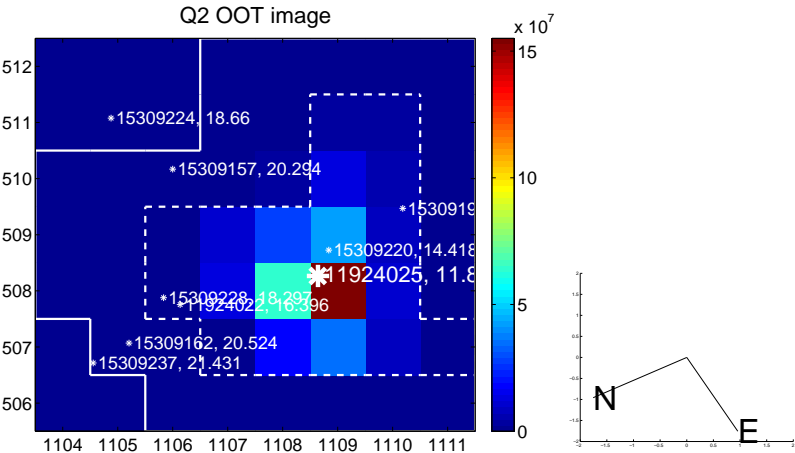
Q1 no OOT image



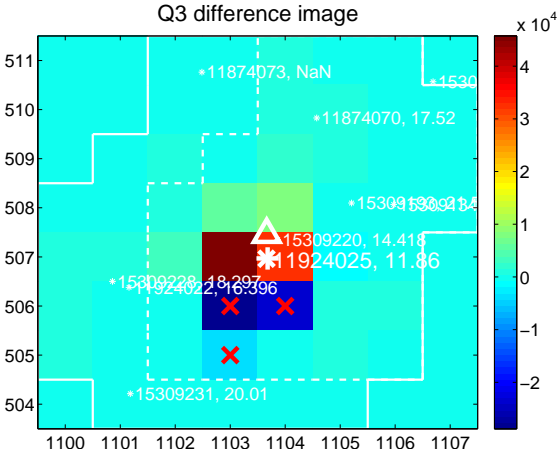
Q2 difference image. Poor Quality



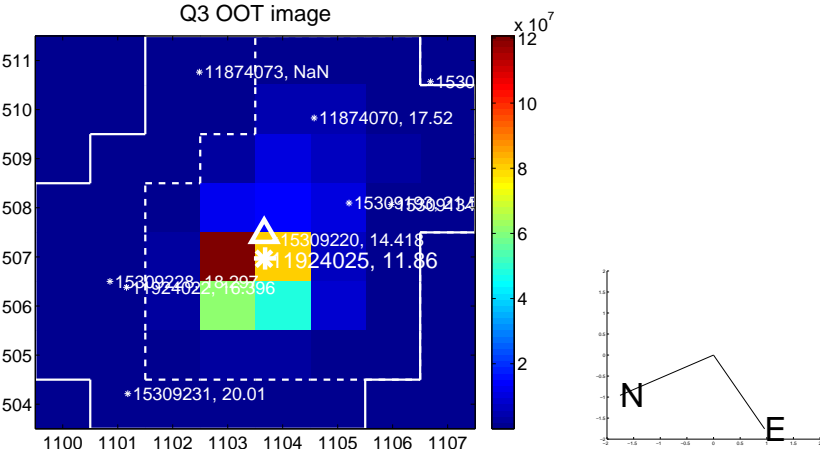
Q2 OOT image



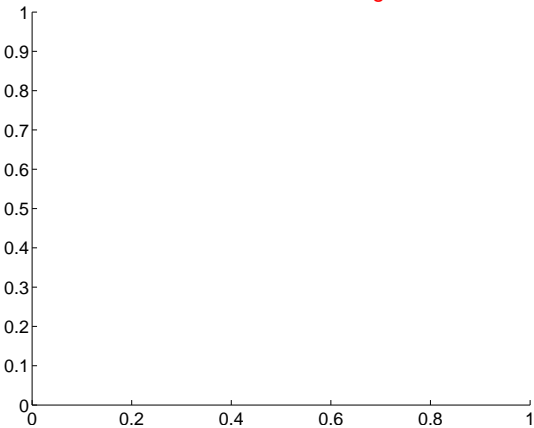
Q3 difference image



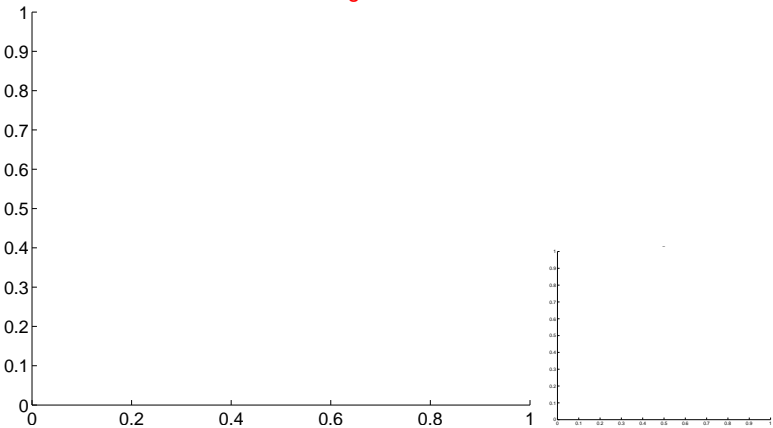
Q3 OOT image



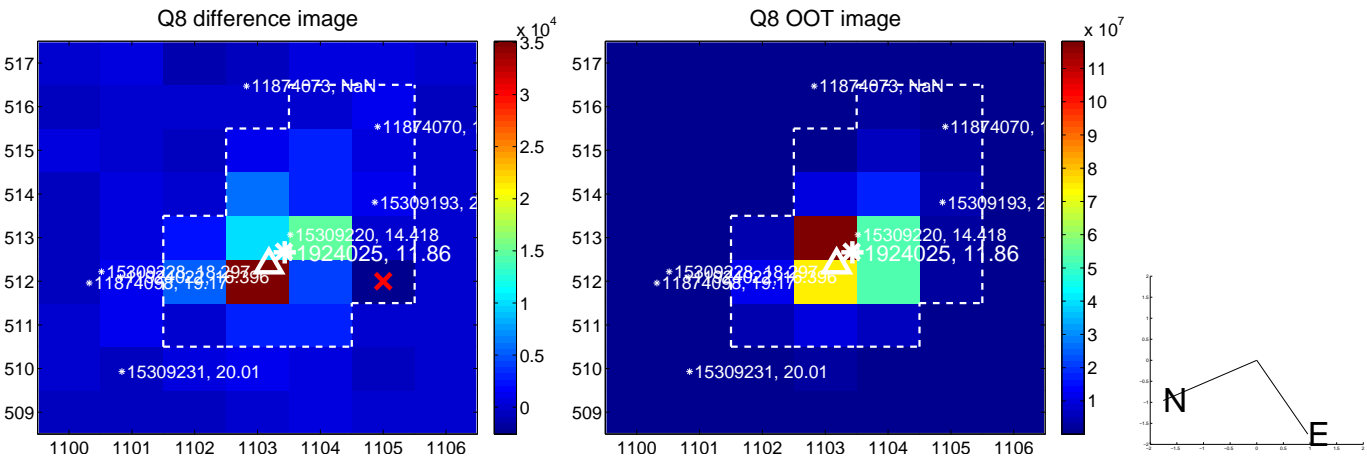
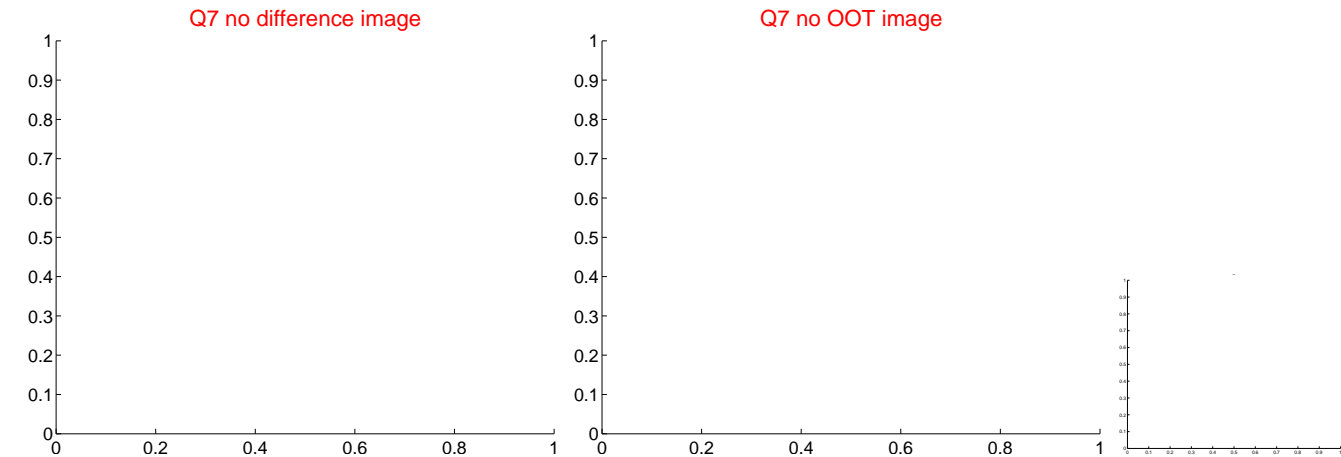
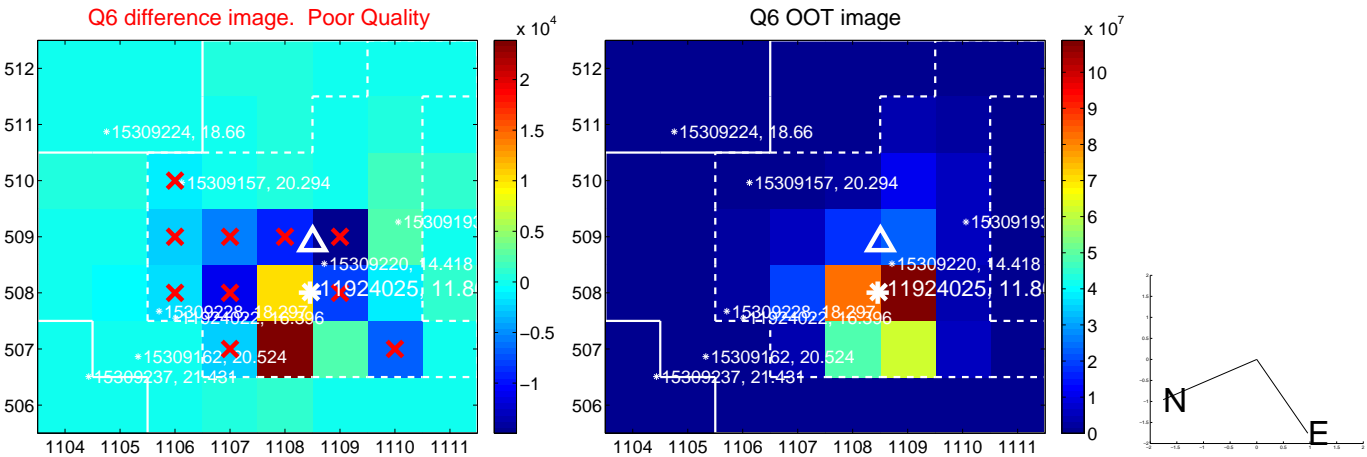
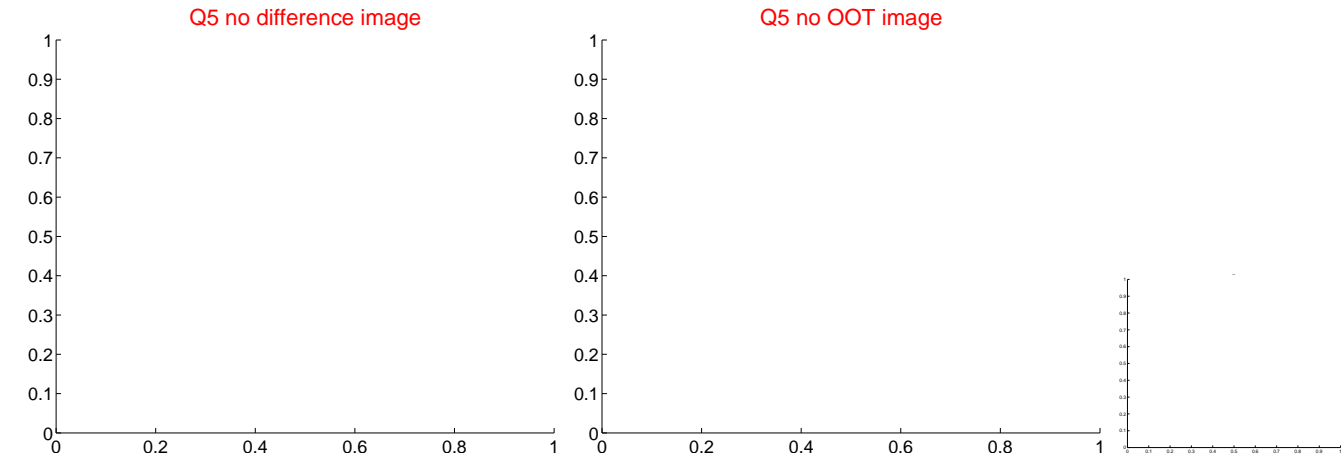
Q4 no difference image



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.

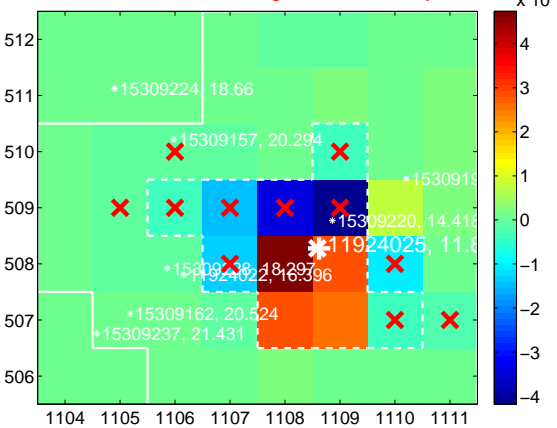
Q9 no difference image



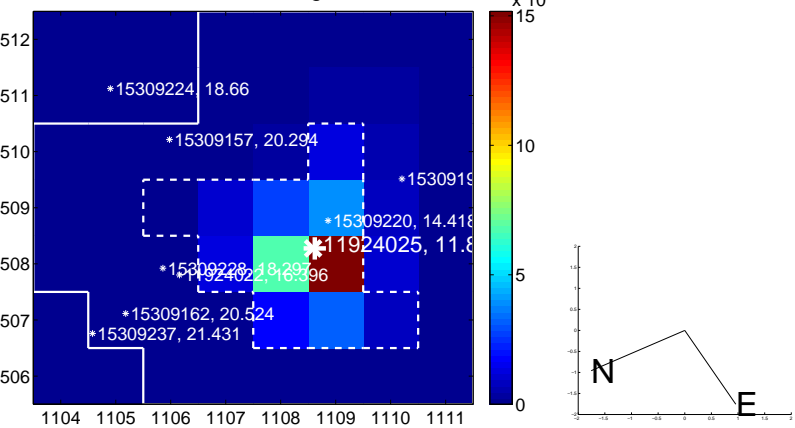
Q9 no OOT image



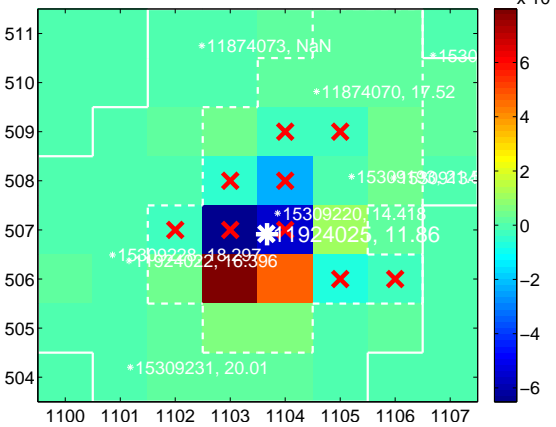
Q10 difference image. Poor Quality



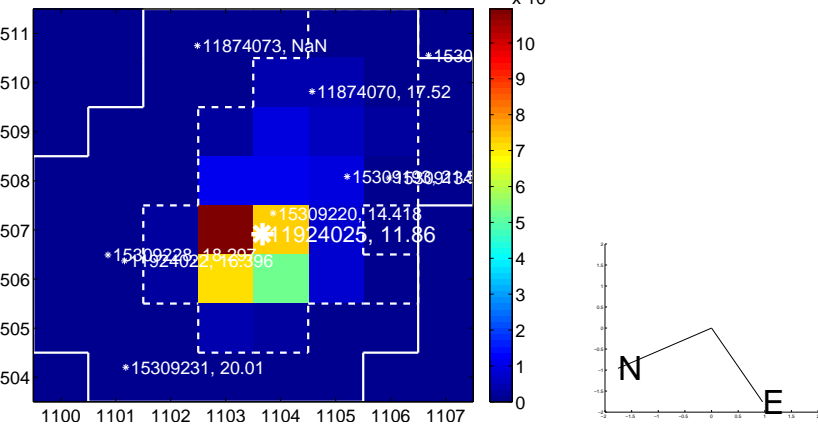
Q10 OOT image



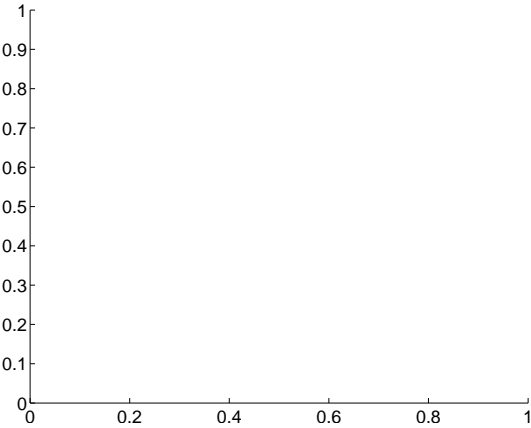
Q11 difference image. Poor Quality



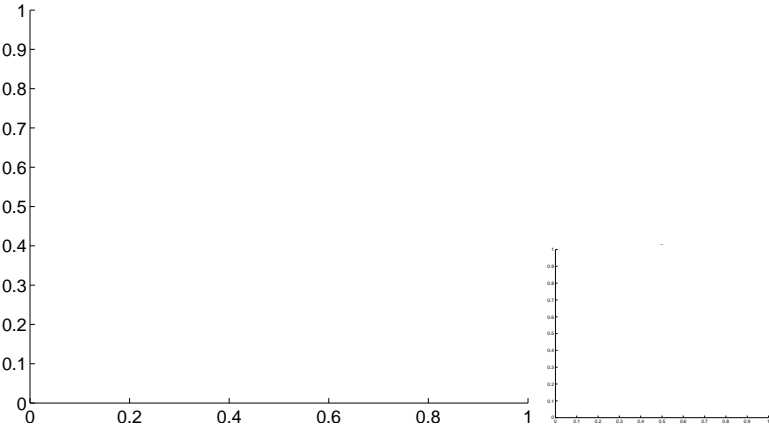
Q11 OOT image



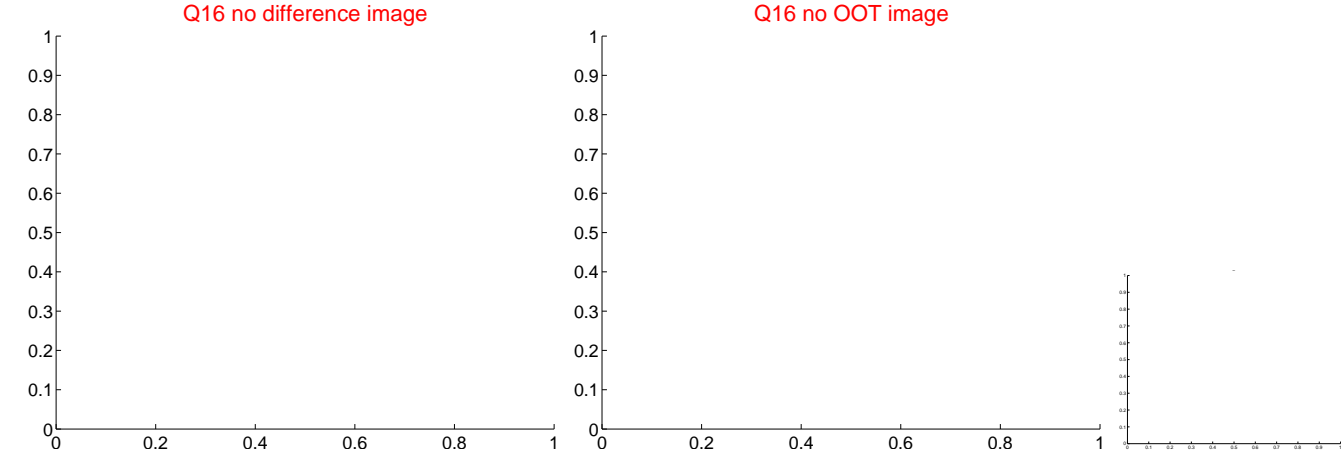
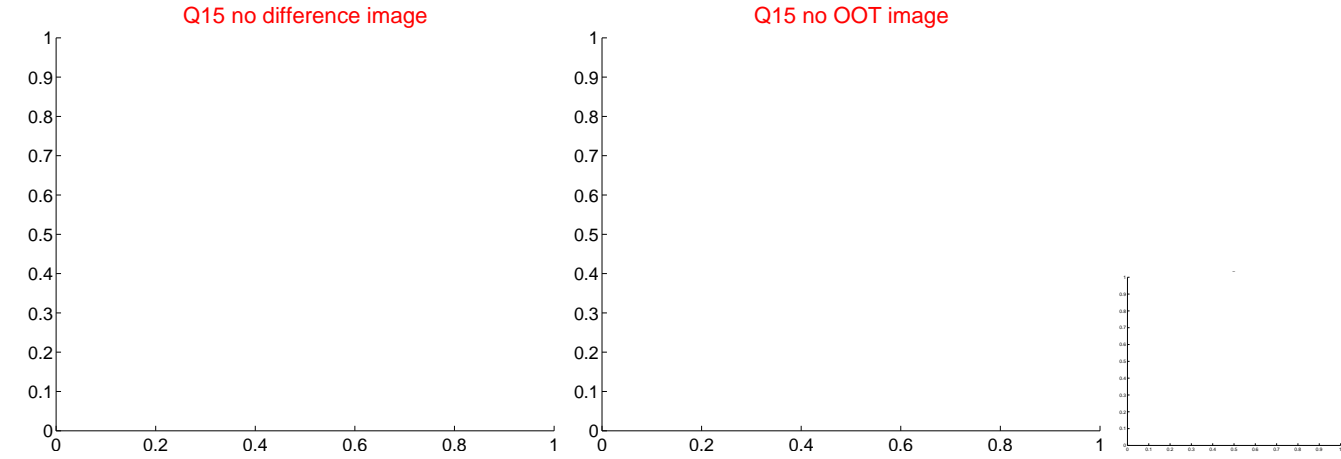
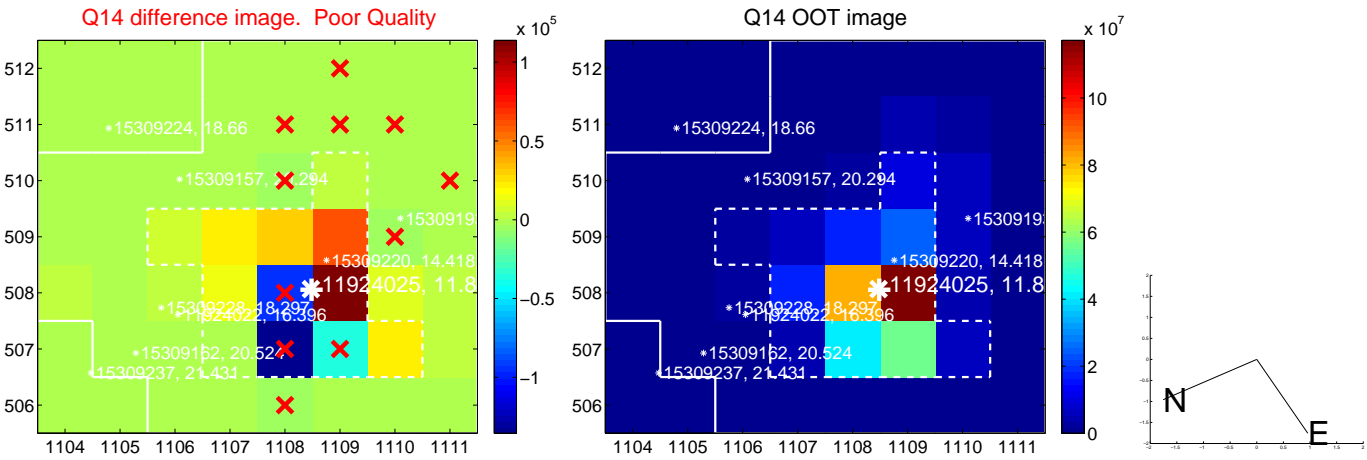
Q12 no difference image



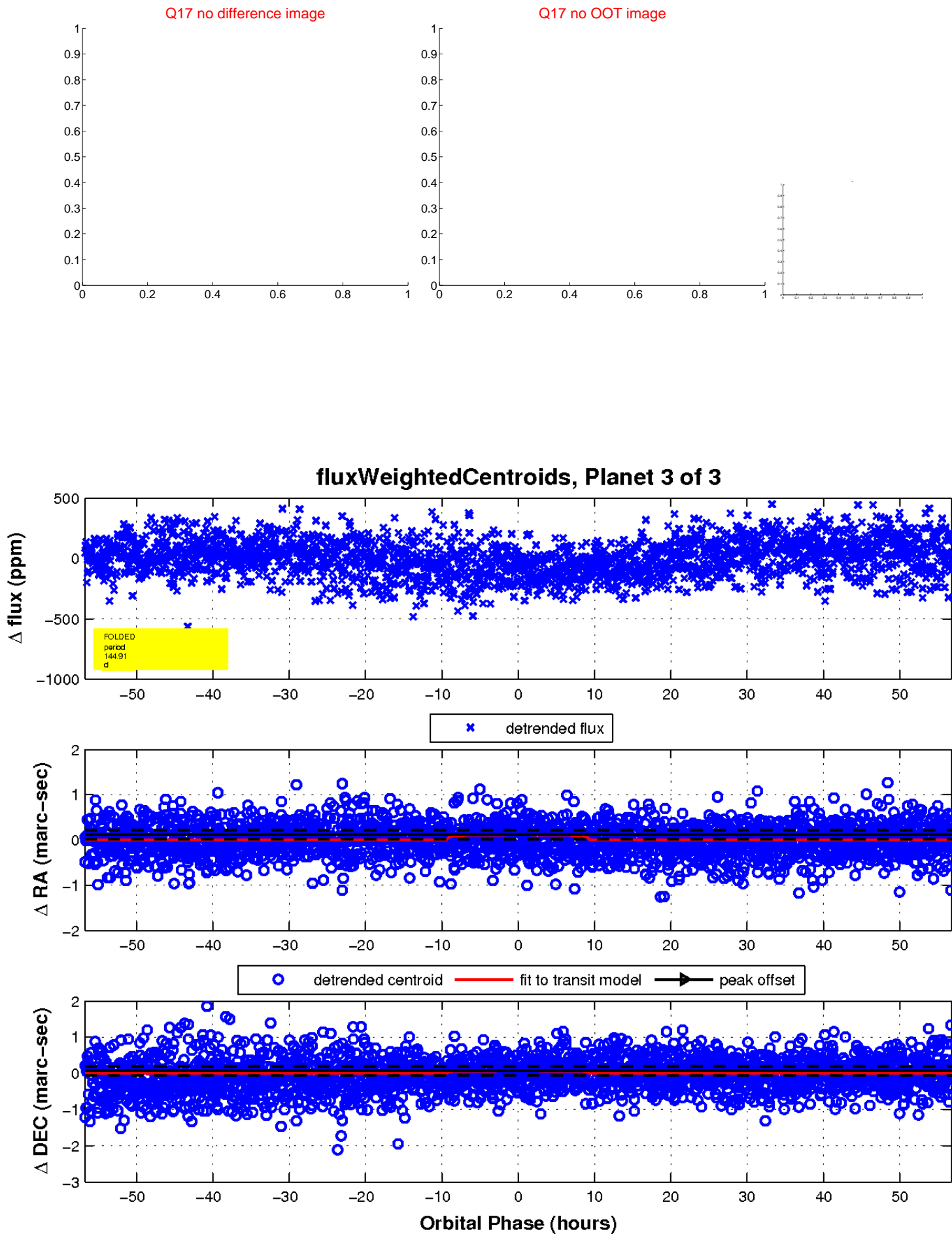
Q12 no OOT image



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.



UKIRT Image

Declination

