

KIC 011819949

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})
011819949-01	OBS	No	488.301431	339.144246	816.3	2.445	15.3	6.2	1.78	5129	5.01	1.45
011819949-02	OBS	No	352.774509	349.727662	817.6	2.832	10.0	6.6	1.78	5129	5.27	2.23
011819949-03	OBS	No	192.456052	148.948498	340.4	2.500	11.6	-1.0	1.78	5129	3.21	5.01

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011819949-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_FEW_DIFFS
011819949-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS
011819949-03	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_NOFITS

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

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

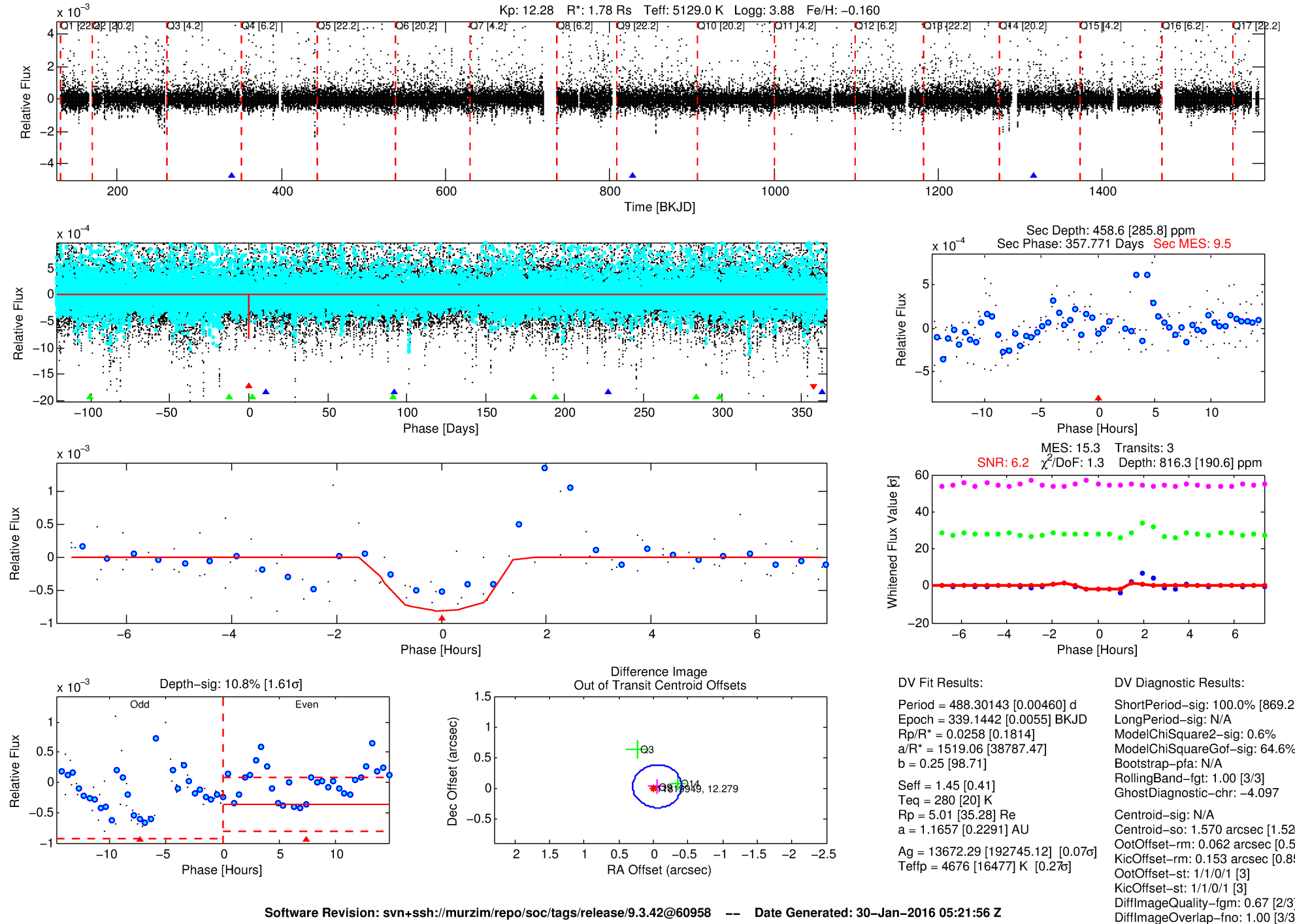
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011819949-01

No Significant Match Found

DV One-Page Summary

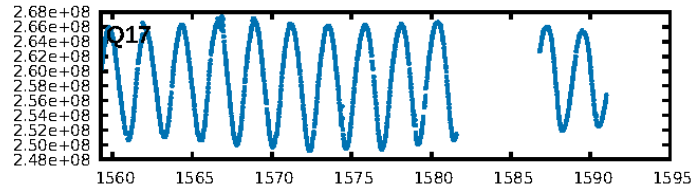
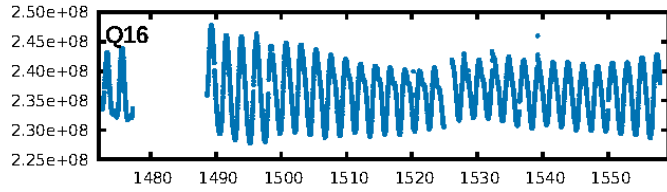
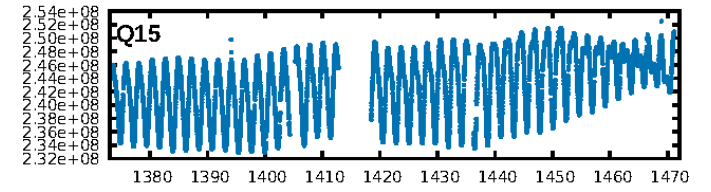
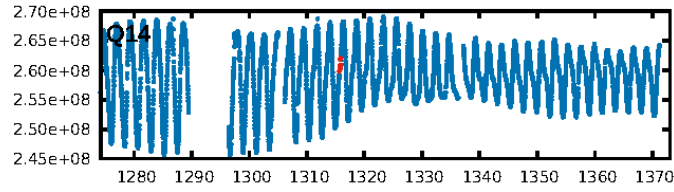
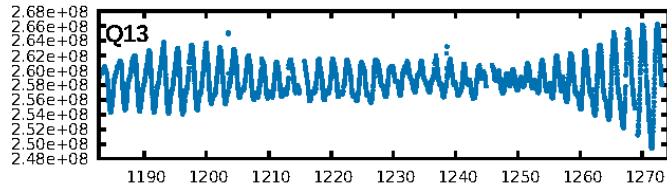
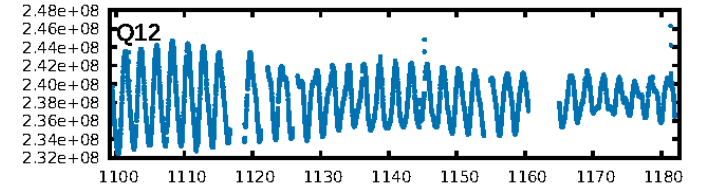
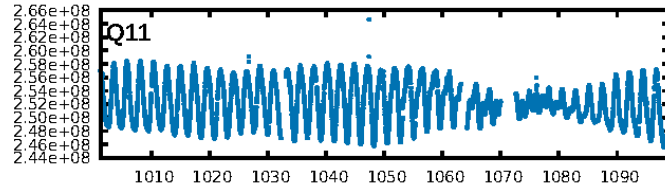
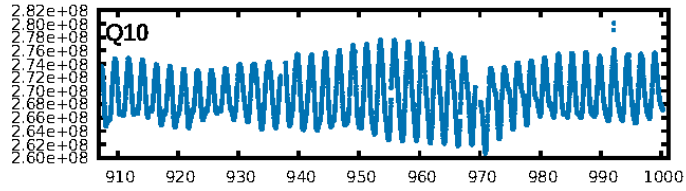
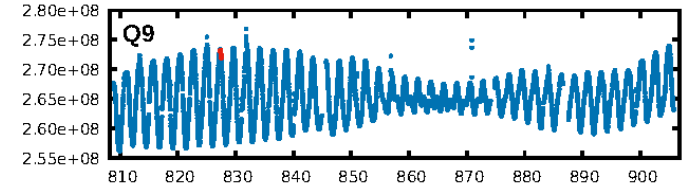
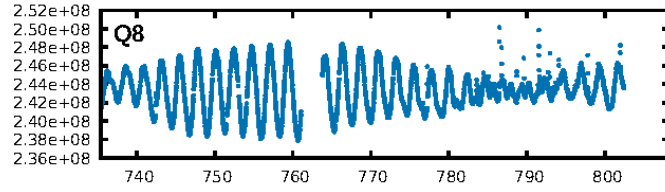
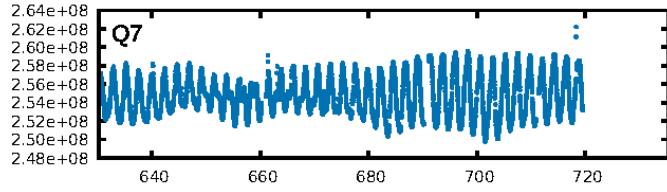
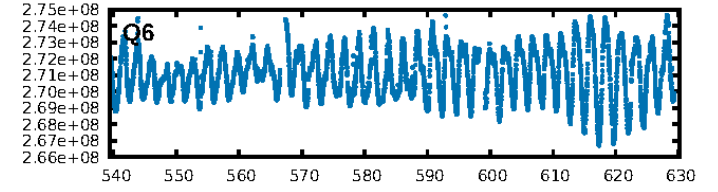
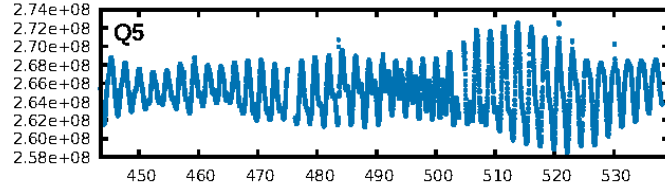
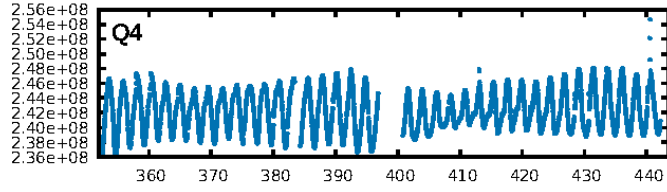
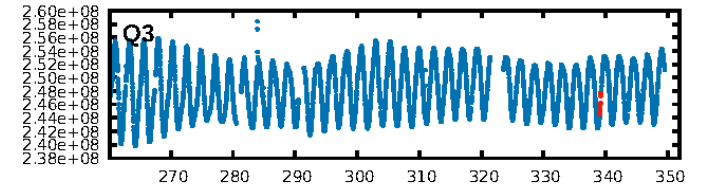
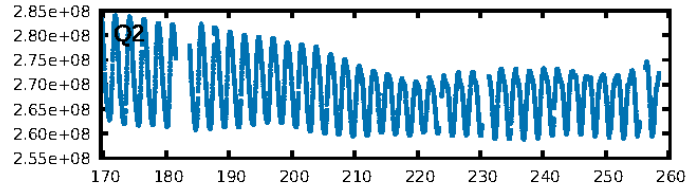
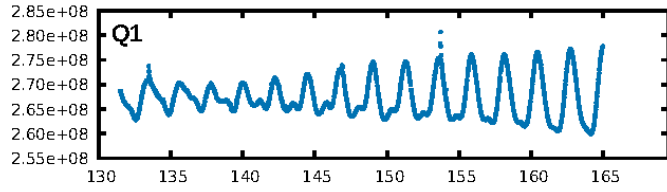
KIC: 11819949 Candidate: 1 of 3 Period: 488.301 d



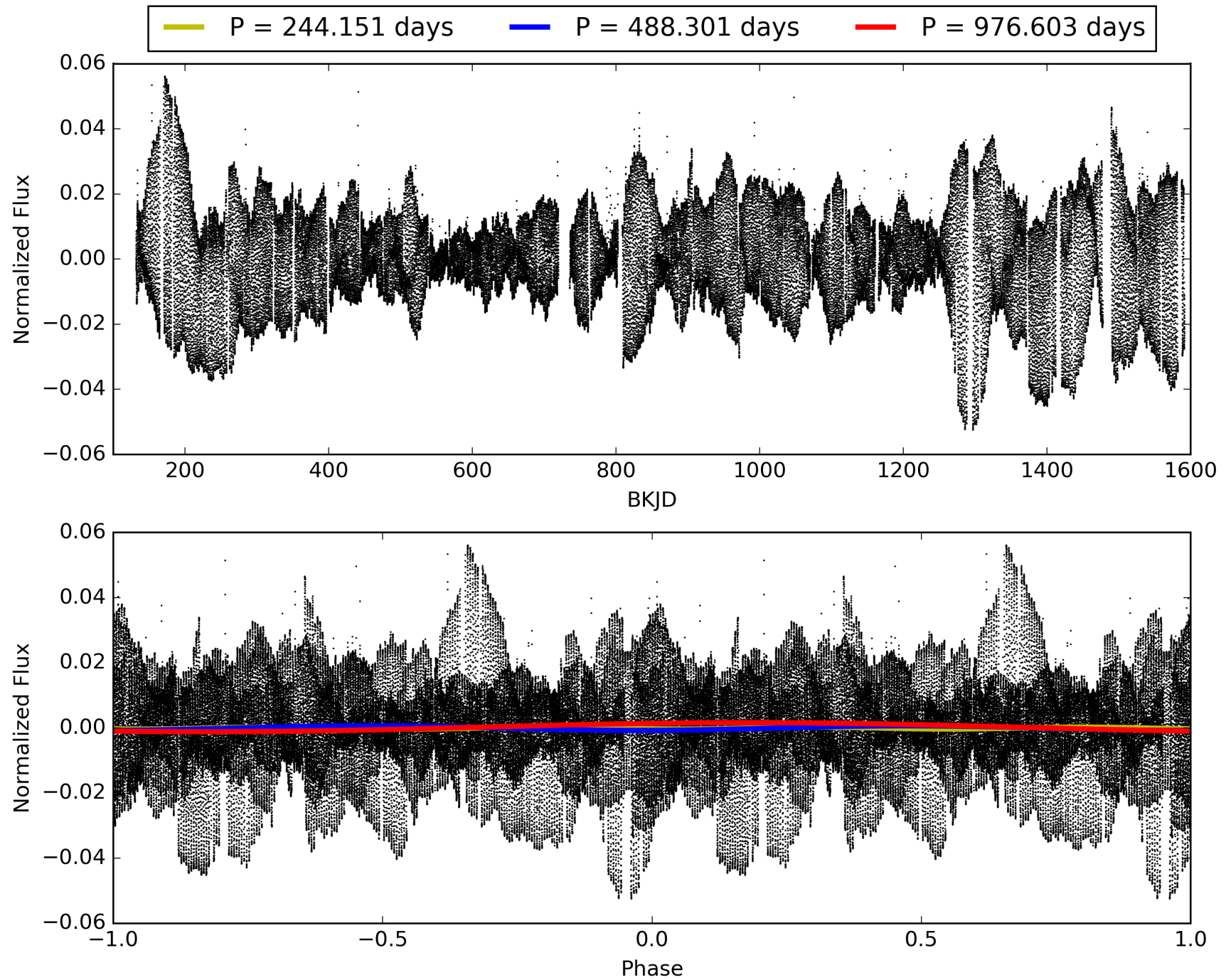
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:21:56 Z

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

TCE 011819949-01, PDC Light Curves

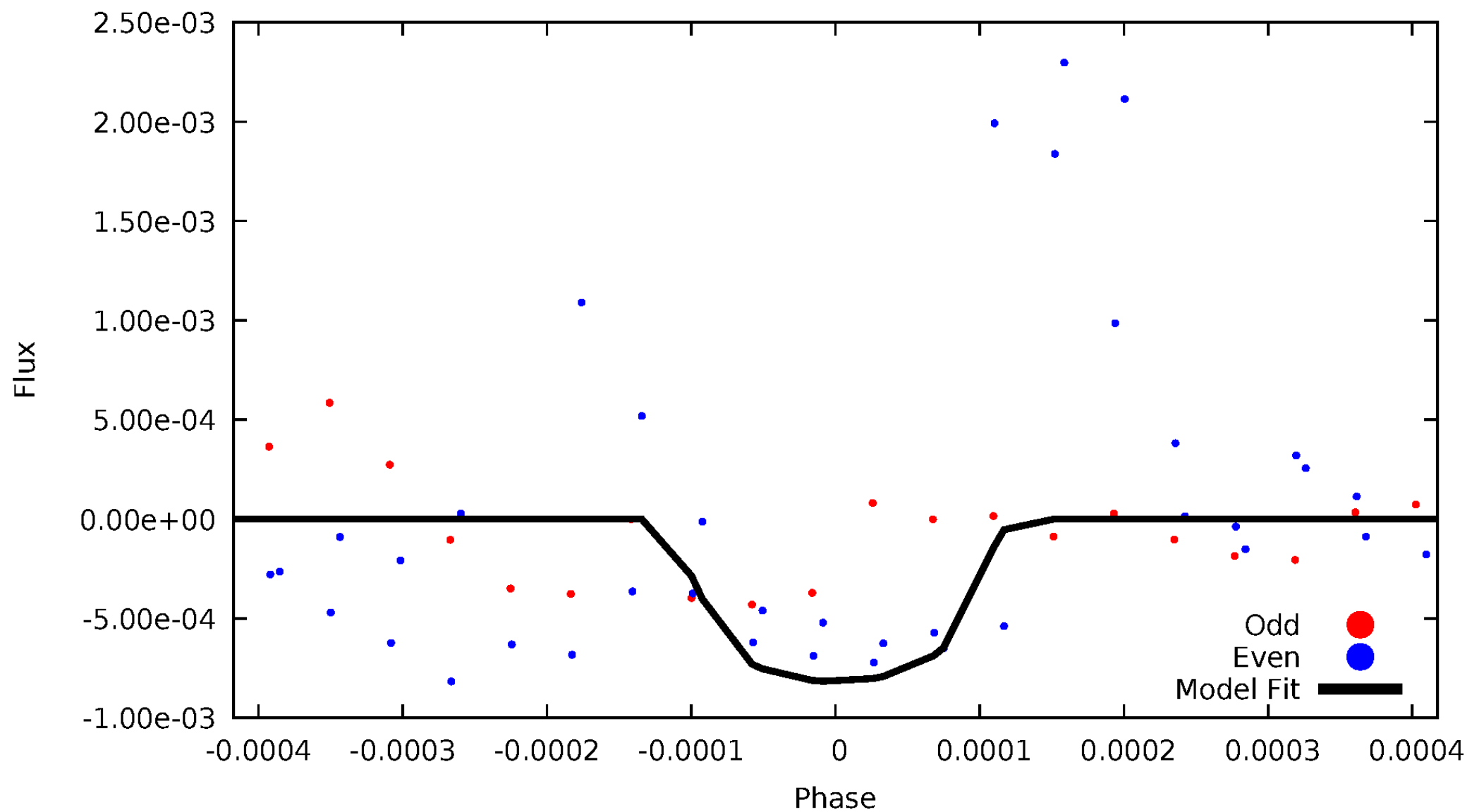


TCE 011819949-01



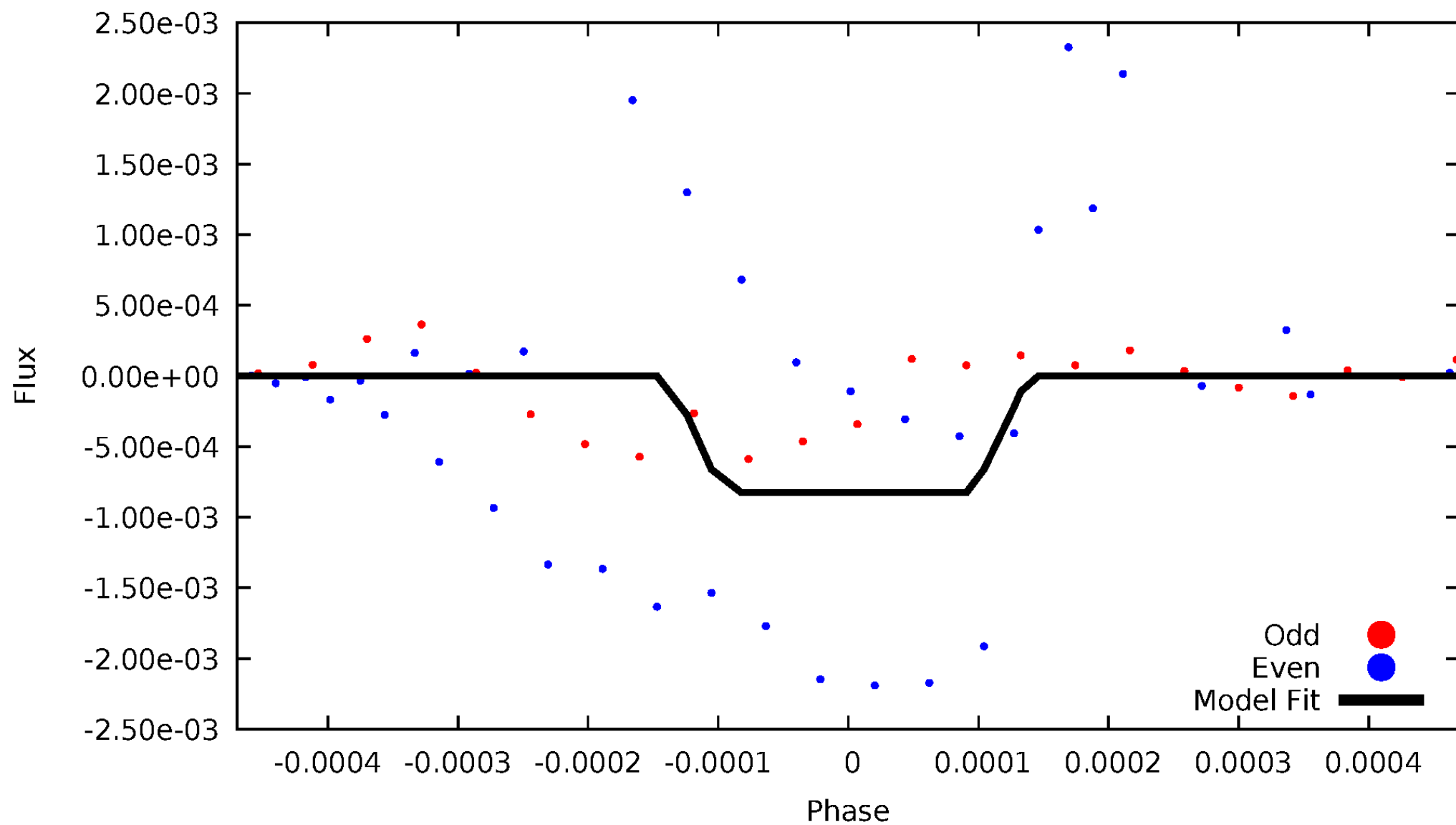
DV Odd/Even

TCE 011819949-01



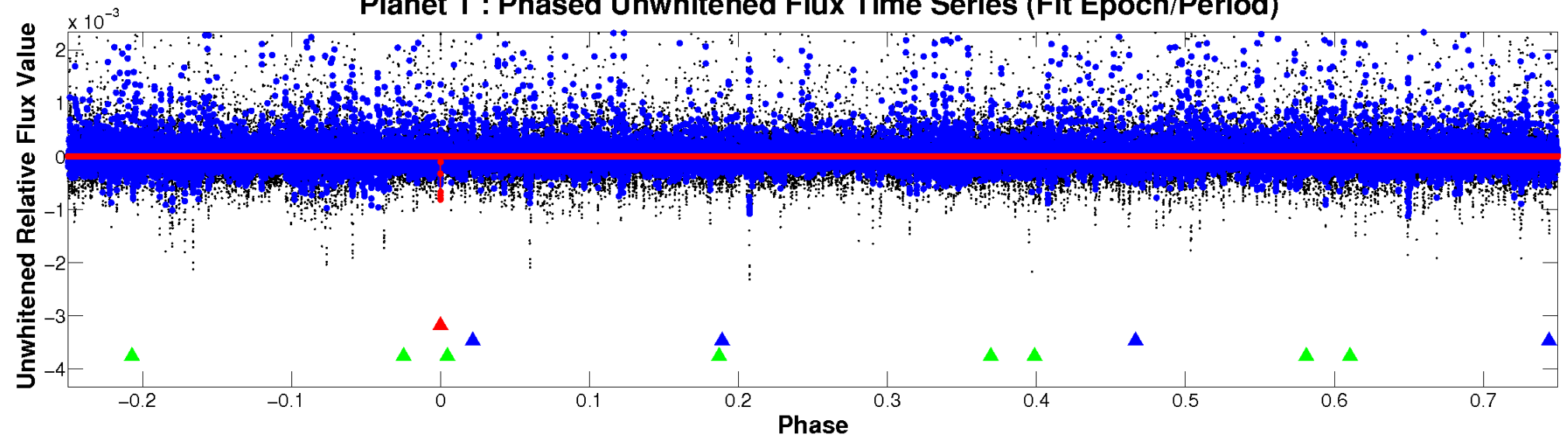
ALT Odd/Even

TCE 011819949-01

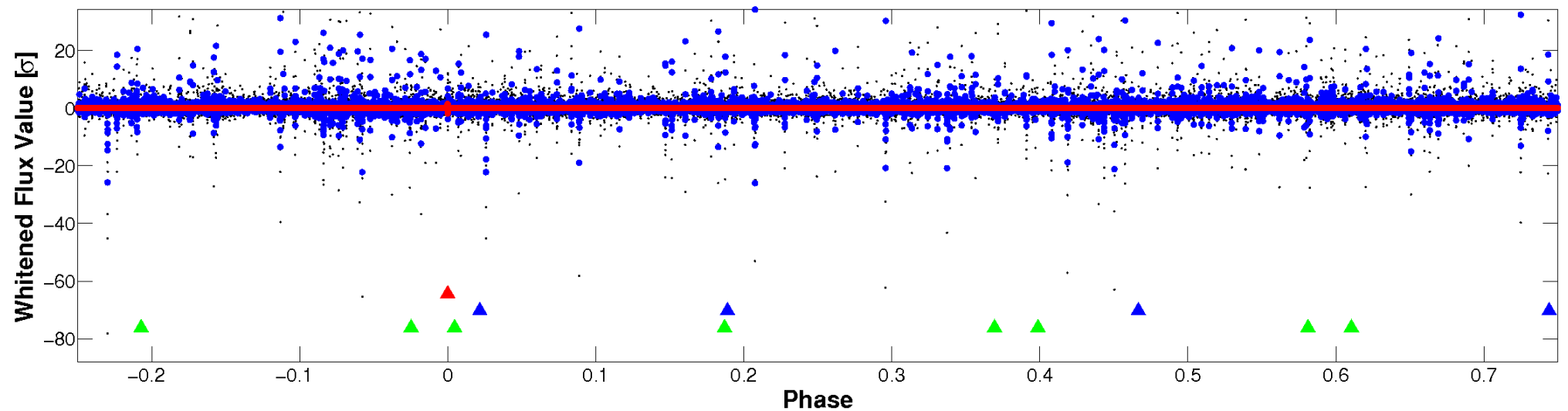


Non-Whitened Vs. Whitened Light Curve

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

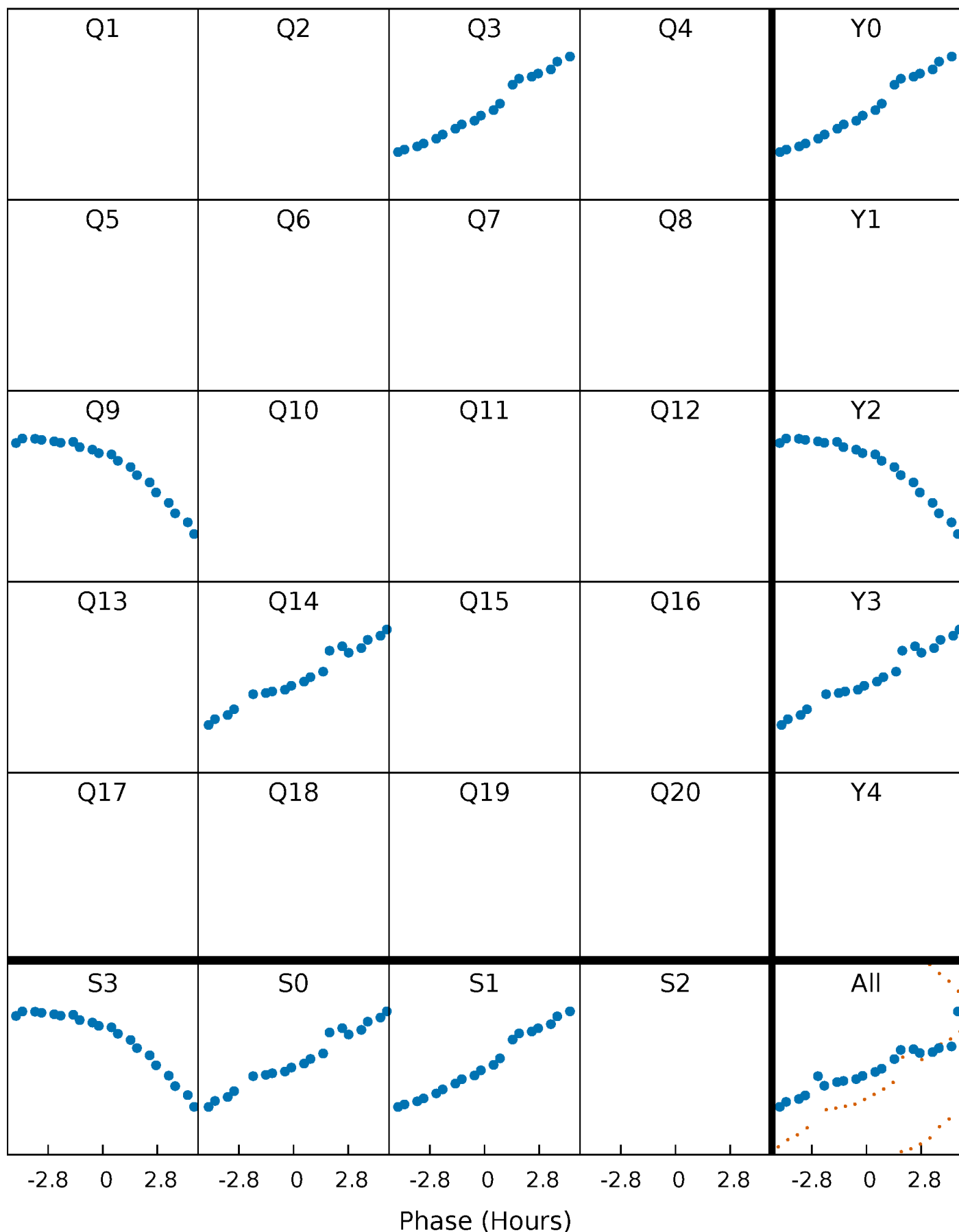


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 011819949-01 P=488.301431 Days $T_0=339.144246$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 011819949-01 P=488.301431 Days $T_0=339.144246$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

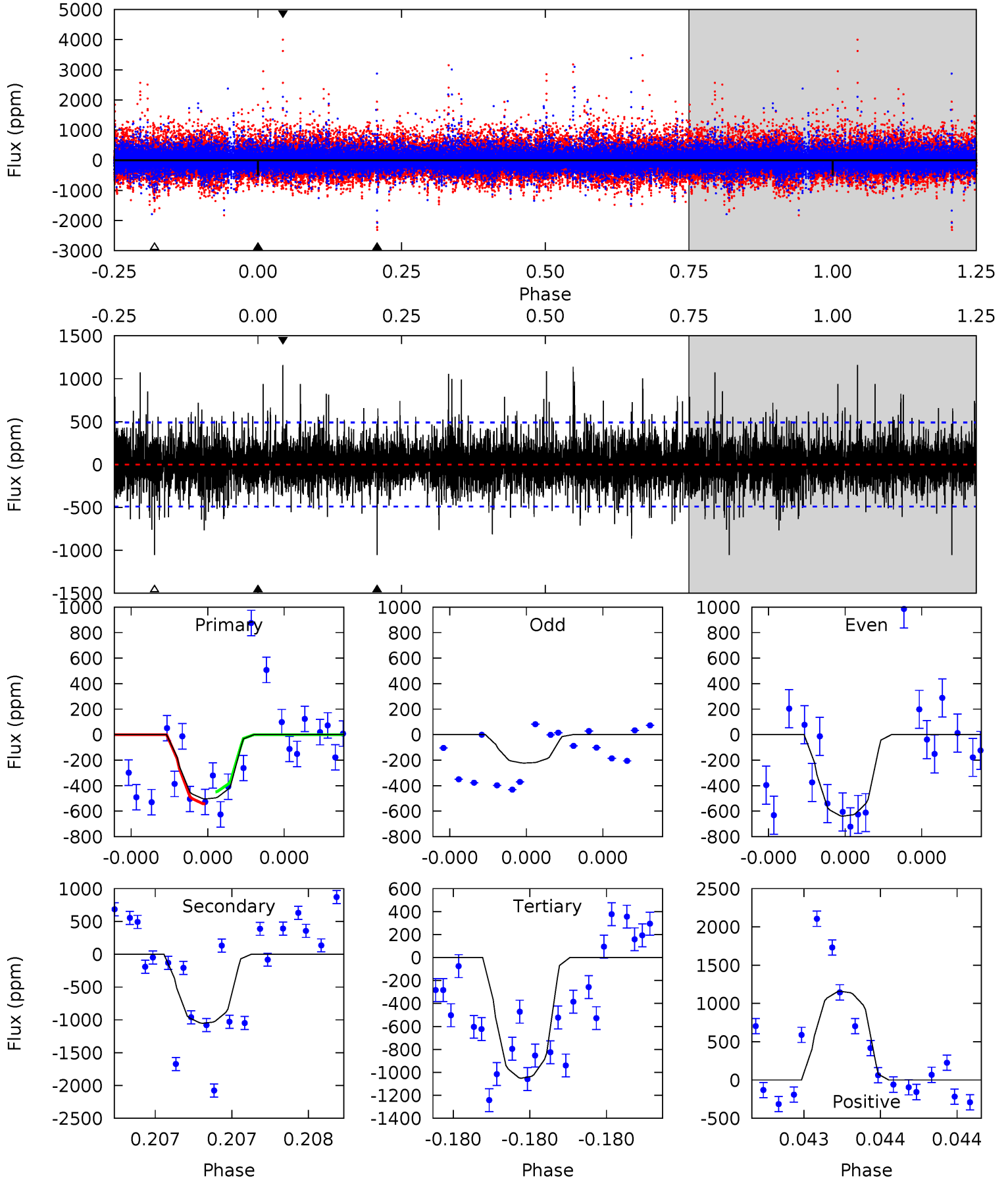
TCE 011819949-01 P=488.307594 Days $T_0=339.126845$ (BKJD)



DV Model-Shift Uniqueness Test

011819949-01, P = 488.301431 Days, E = 339.144246 Days

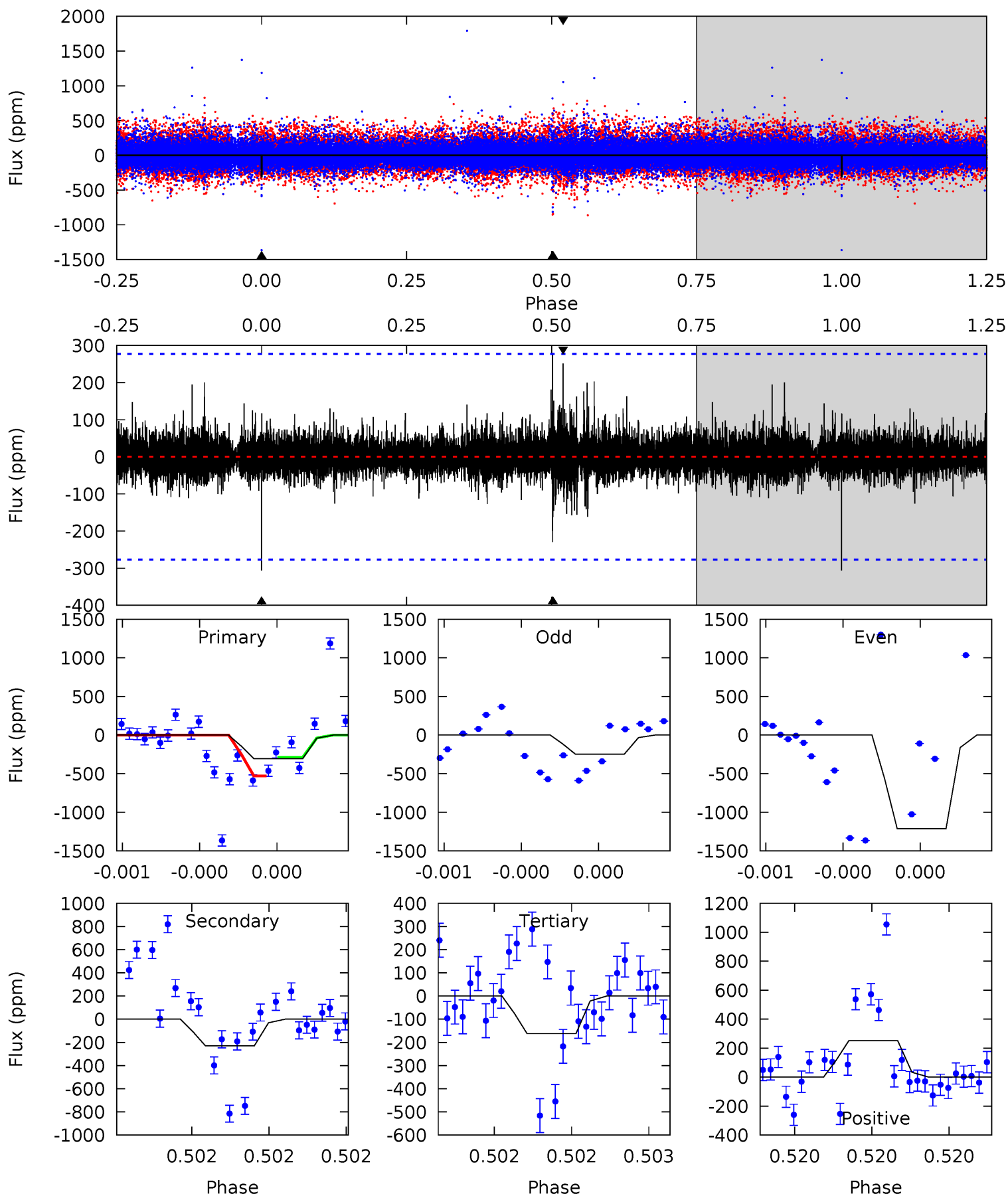
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.85	12.2	12.2	13.5	5.69	3.66	2.15	-6.36	-7.62	0.00	-1.25	1.28	0.82	0.52	0.54



Alt Model-Shift Uniqueness Test

011819949-01, P = 488.307594 Days, E = 339.126845 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.29	4.71	3.33	5.15	5.69	3.66	0.59	2.96	1.13	1.38	-0.44	11.3	3.08	0.47	0



Stellar Parameters For KIC 011819949

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5129^{+77}_{-77}	$3.884^{+0.053}_{-0.147}$	$-0.160^{+0.150}_{-0.100}$	$1.781^{+0.430}_{-0.108}$	$0.887^{+0.129}_{-0.032}$	$0.221^{+0.046}_{-0.091}$
	+2%/-2%	+1%/-4%	+94%/-62%	+24%/-6%	+15%/-4%	+21%/-41%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 011819949-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1052 ± 86	$26.38^{+31.31}_{-18.63}$	393^{+21}_{-11}	3134^{+1652}_{-572}	1148^{+12463}_{-905}
Alt.	-230 ± 49	$27.12^{+27.18}_{-18.75}$	394^{+20}_{-12}	2520^{+1018}_{-362}	228^{+2209}_{-172}

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 $A_{obs} \gg 1.0$

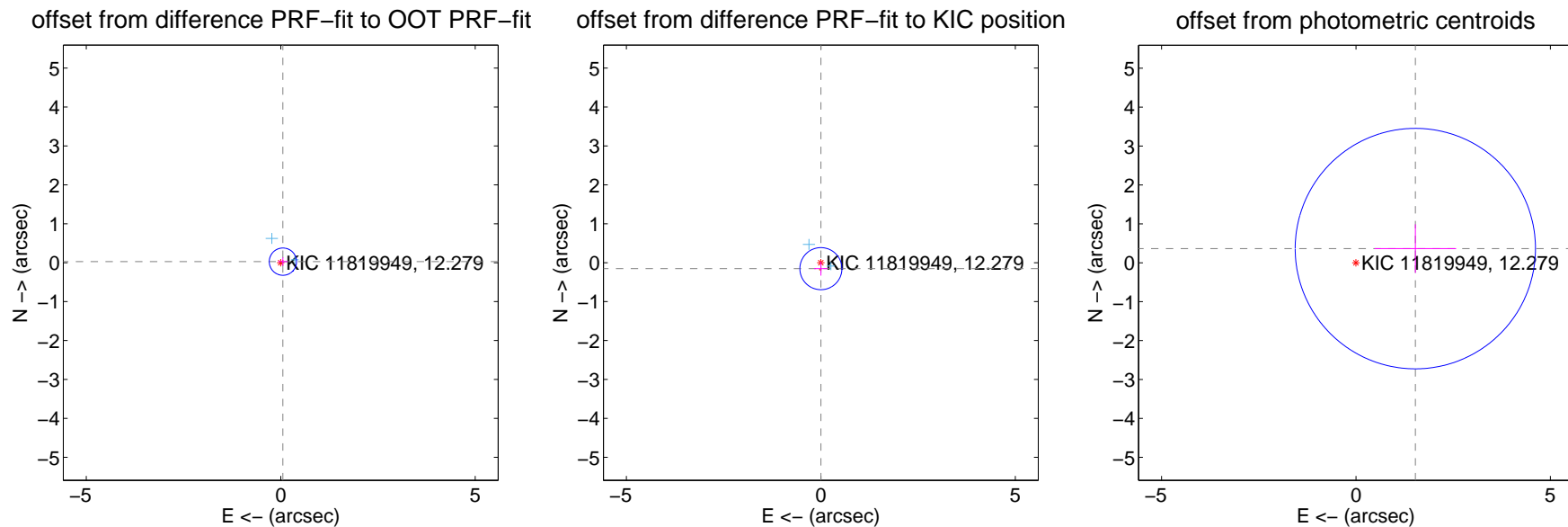
DV Centroid Data

Supplemental centroid analysis for 011819949-01. Kepler magnitude: 12.28. Transit SNR 6.18

There are 2 quarters with good PRF difference image offsets

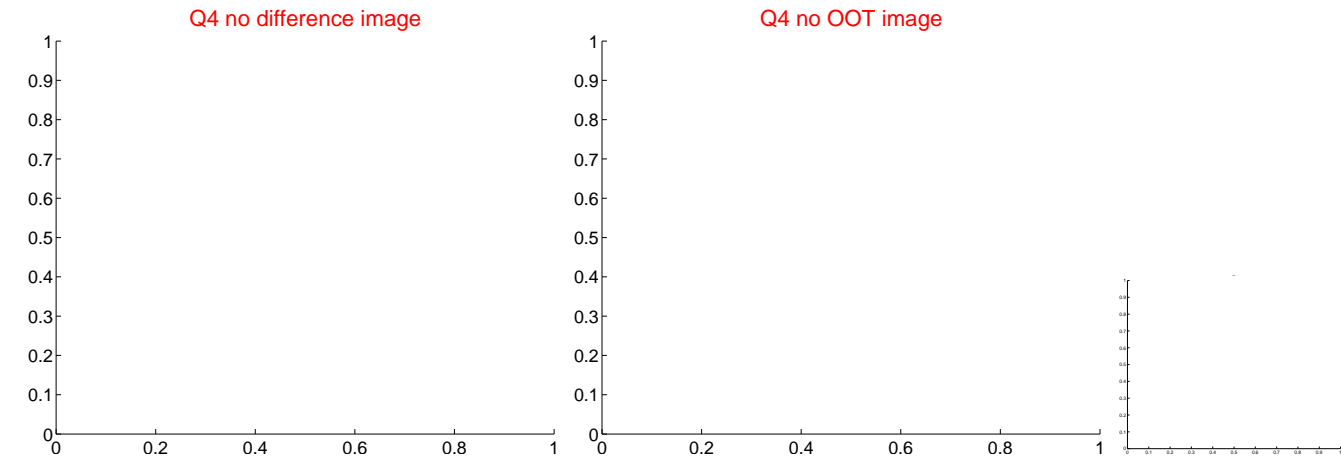
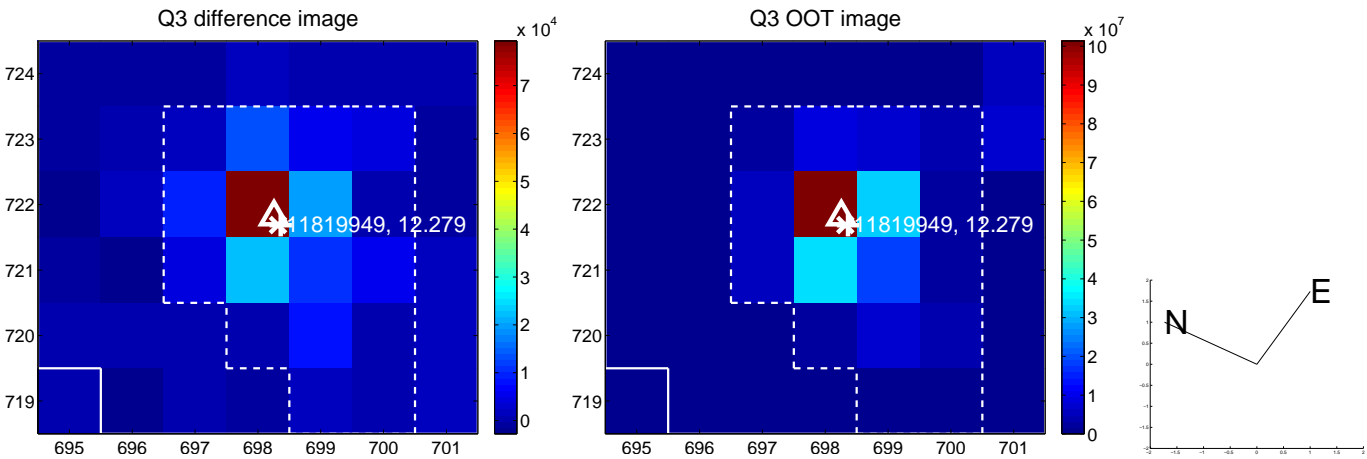
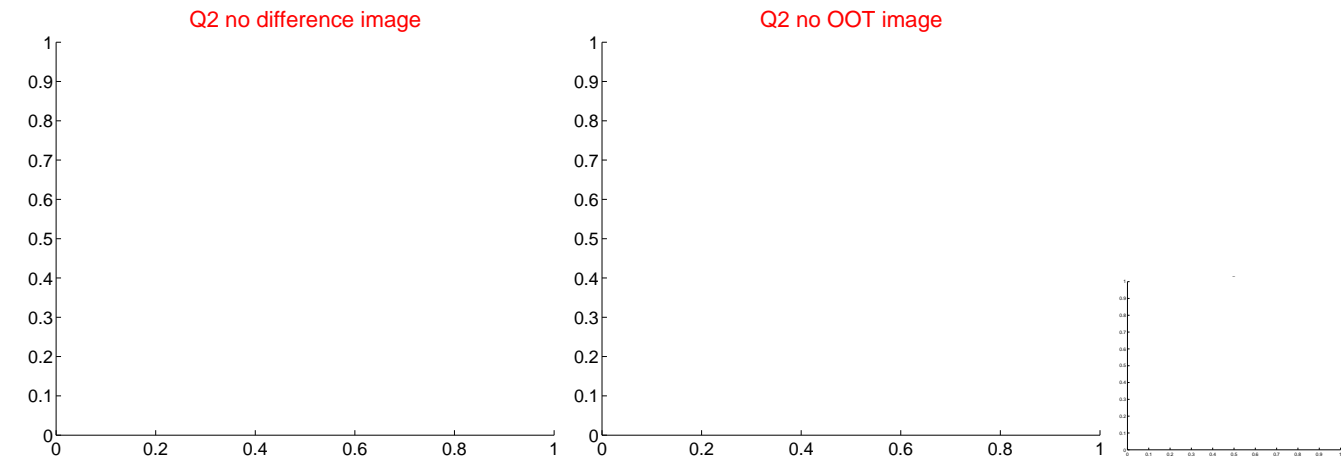
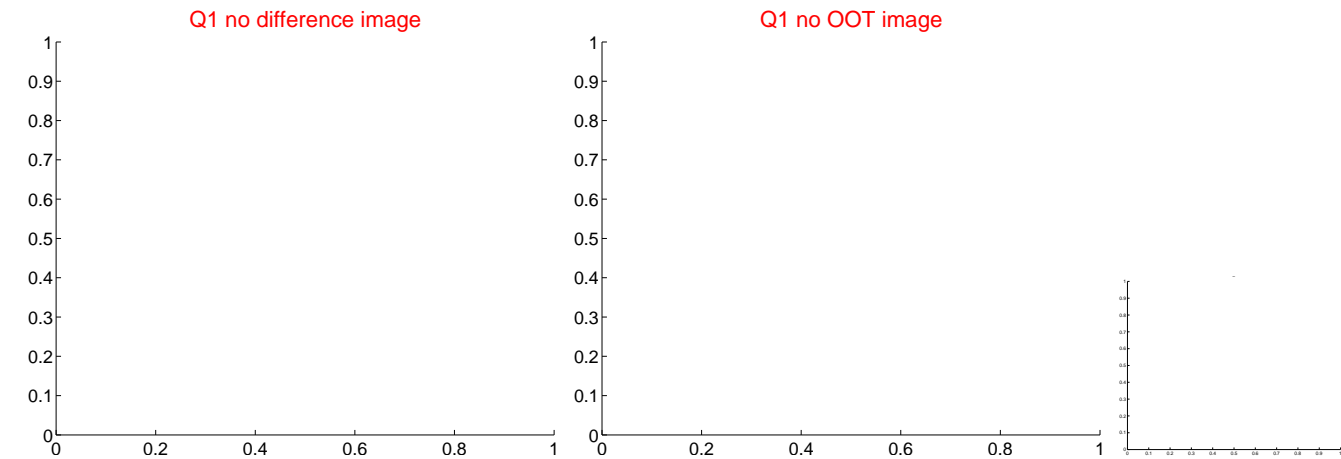
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.062 ± 0.117	0.53	-0.056 ± 0.119	0.027 ± 0.109
PRF-fit source offset from KIC position	0.153 ± 0.180	0.85	-0.001 ± 0.175	-0.153 ± 0.179
photometric centroid source offset	1.57 ± 1.03	1.52	-1.53 ± 1.05	0.36 ± 0.62



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.

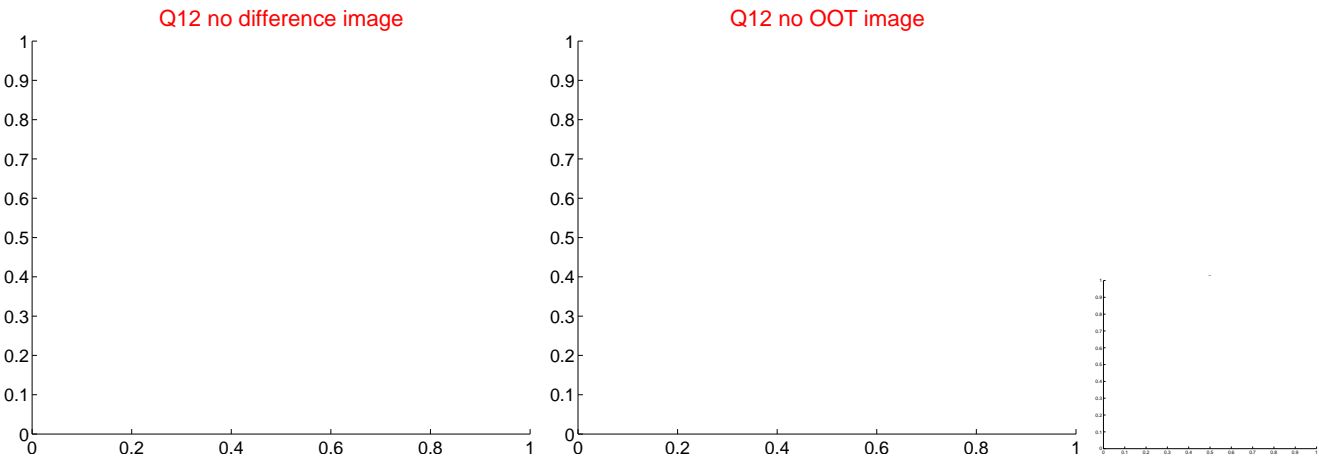
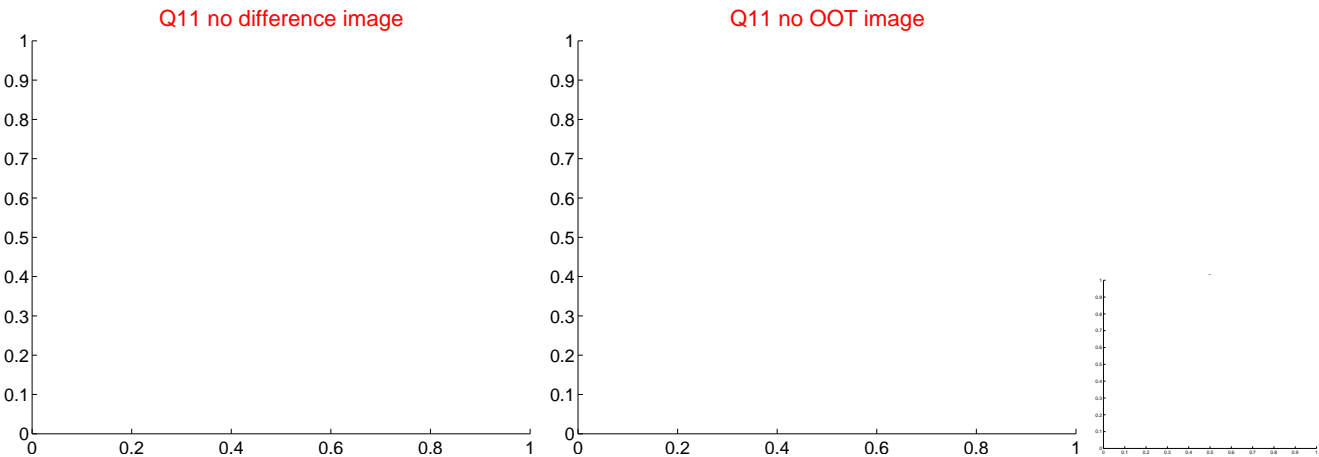
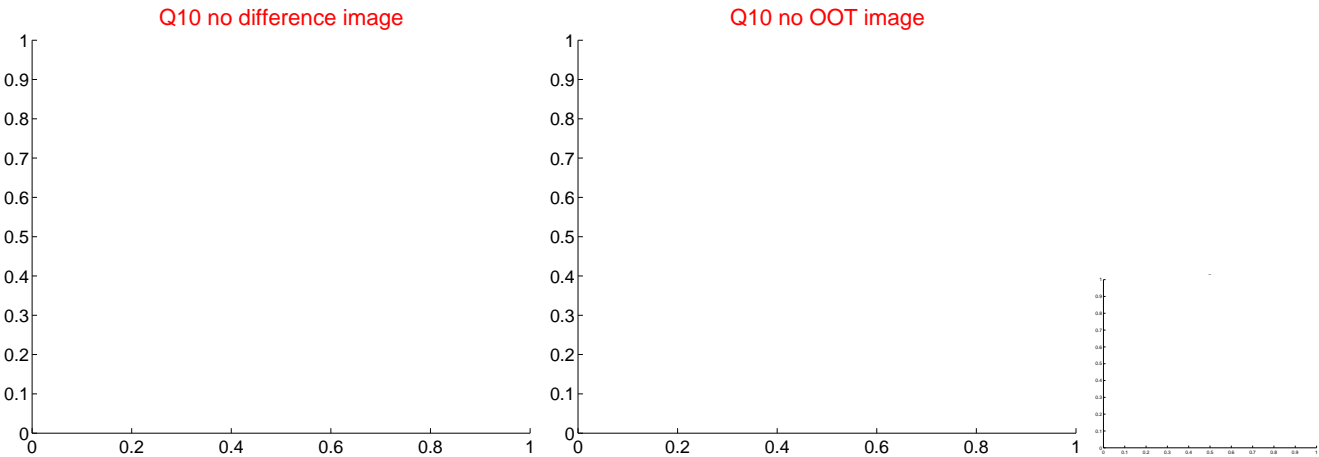
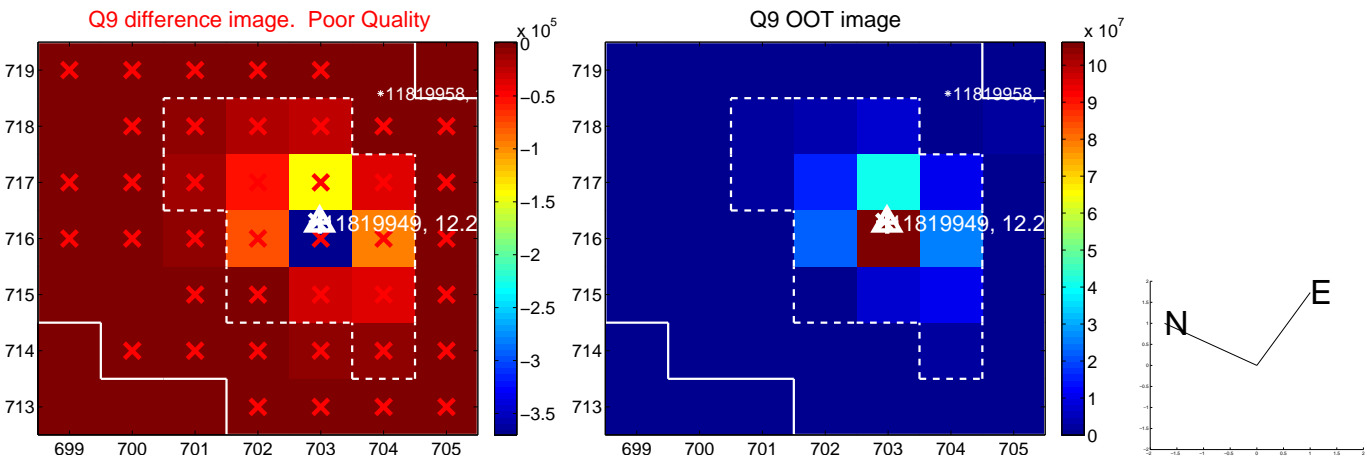
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



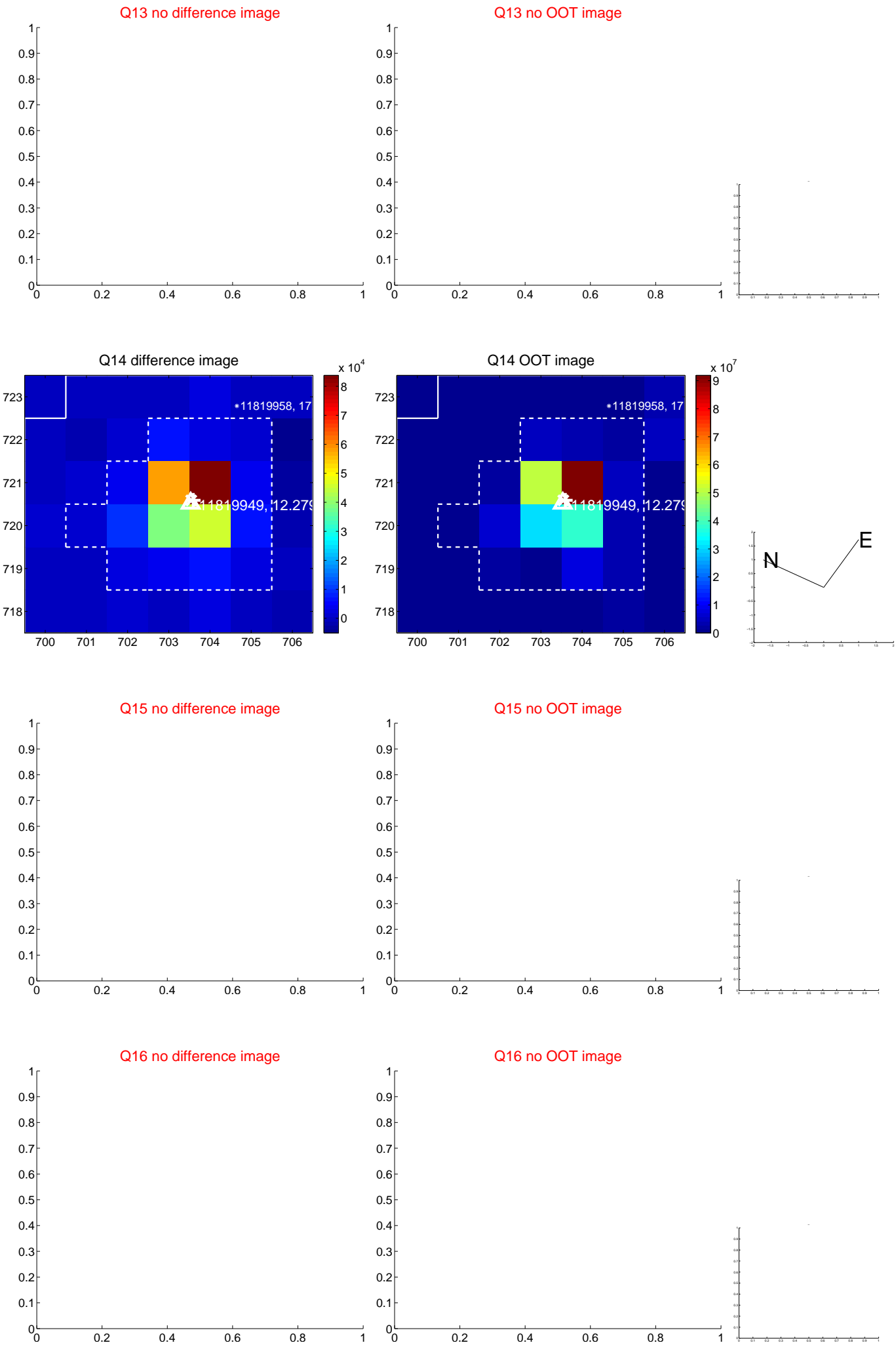
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



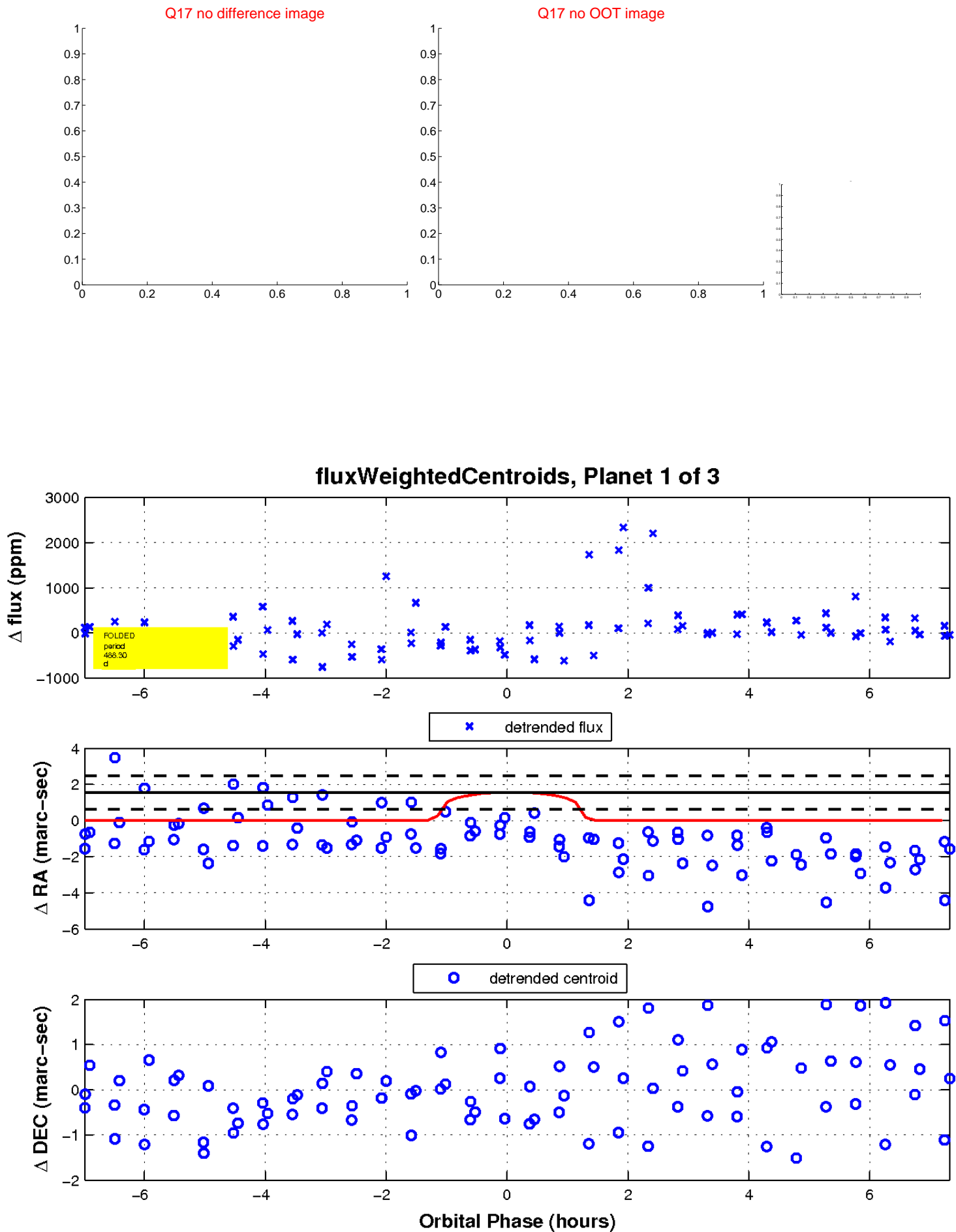
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

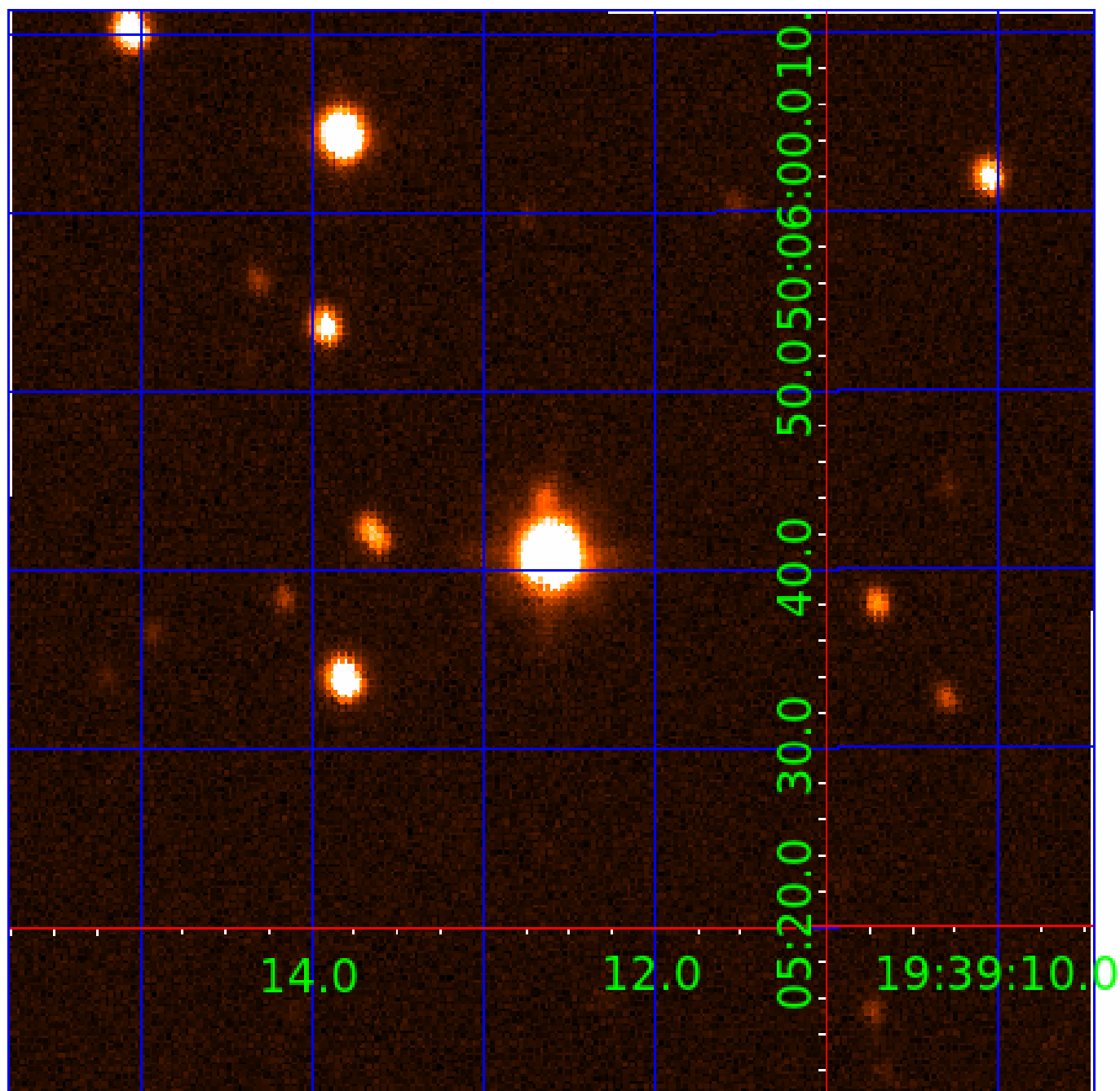


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011819949

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
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Robovetter Results

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011819949-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS
011819949-03	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_NOFITS

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

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

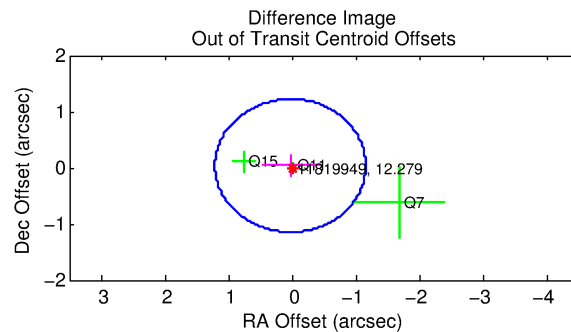
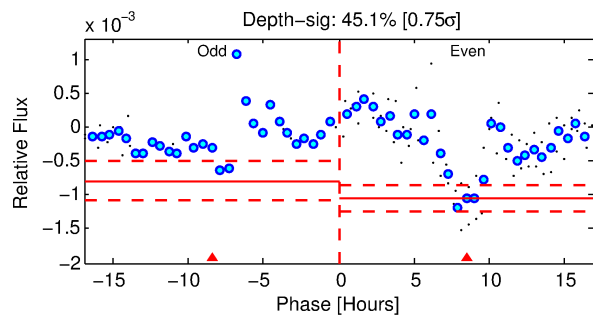
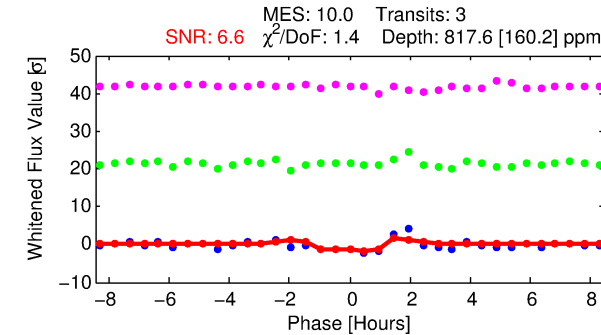
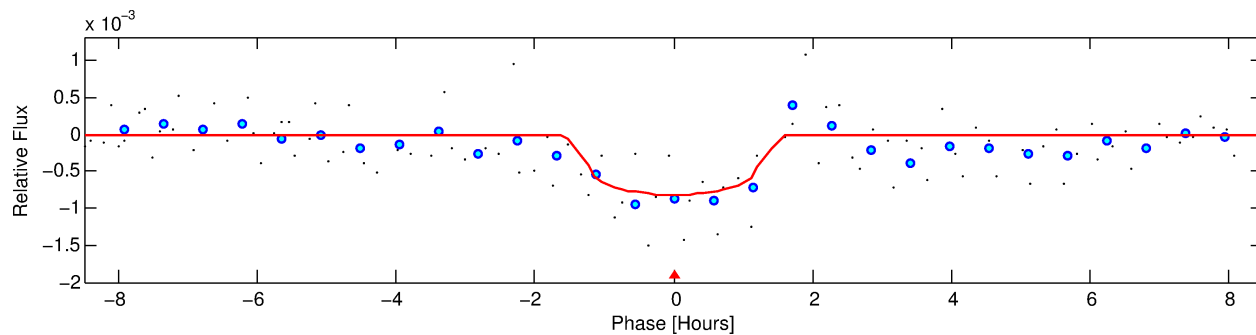
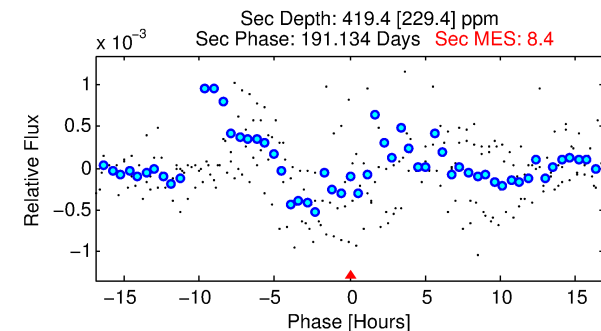
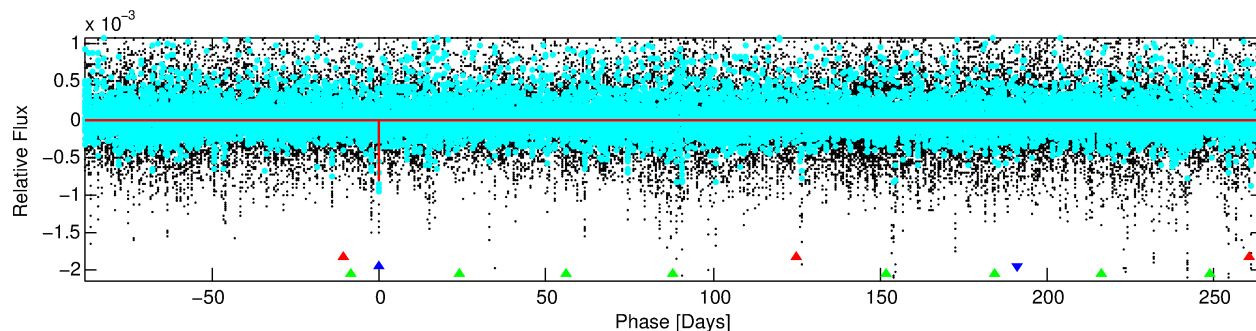
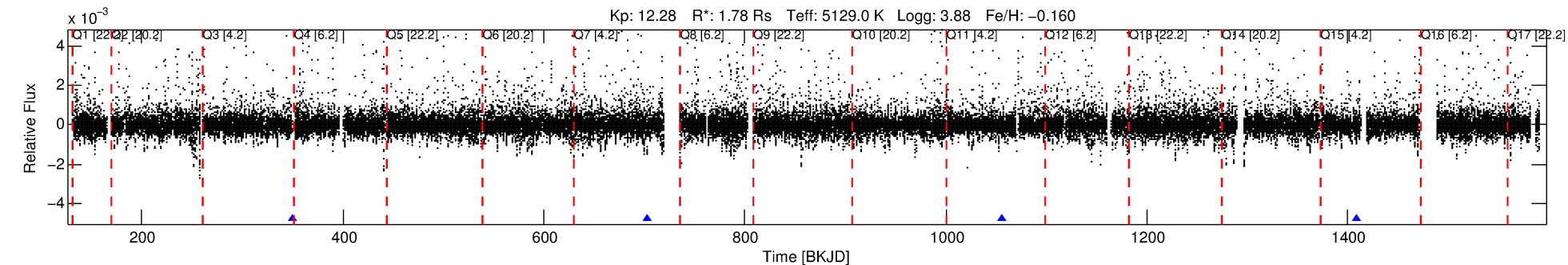
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011819949-02

No Significant Match Found

DV One-Page Summary

KIC: 11819949 Candidate: 2 of 3 Period: 352.775 d



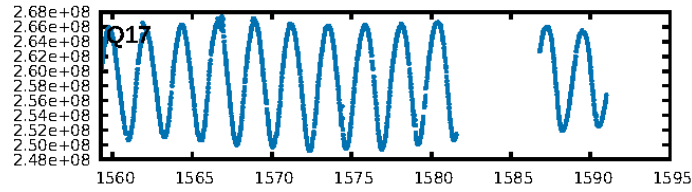
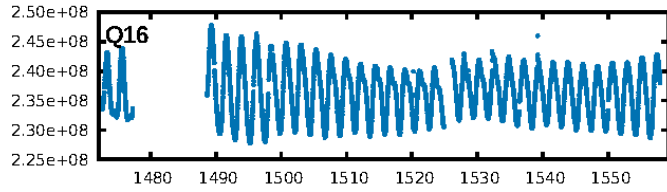
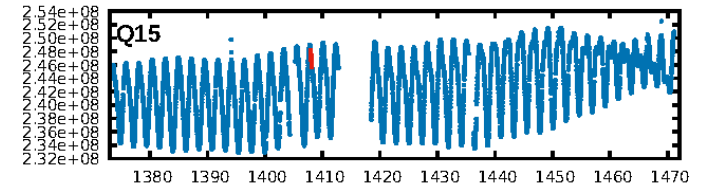
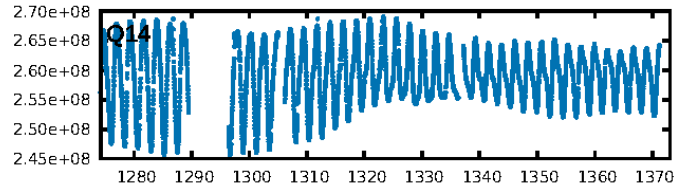
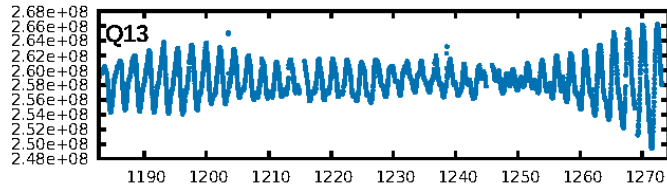
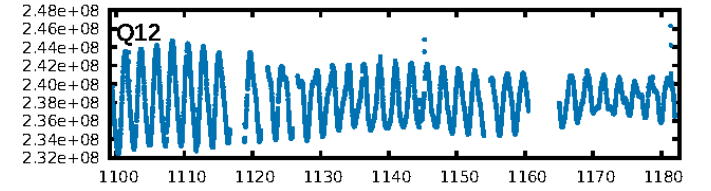
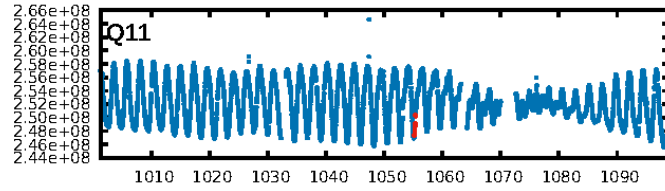
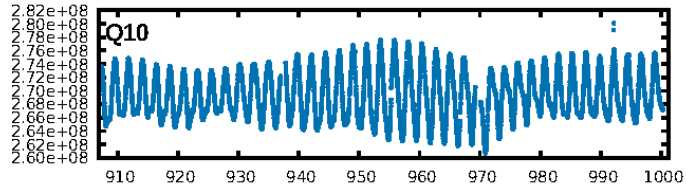
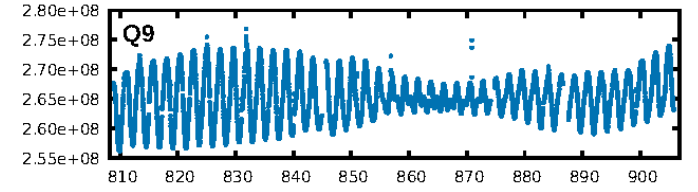
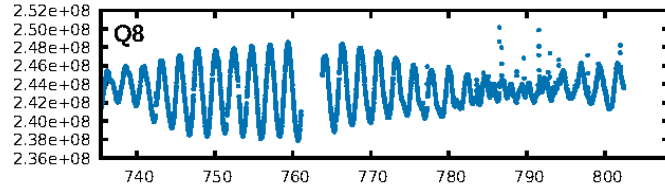
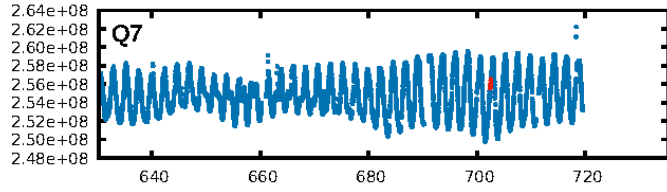
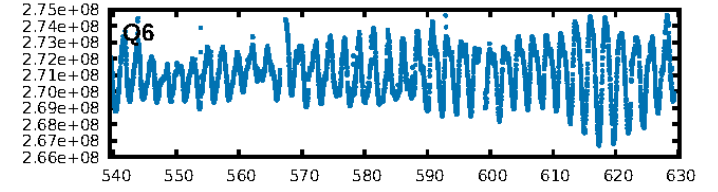
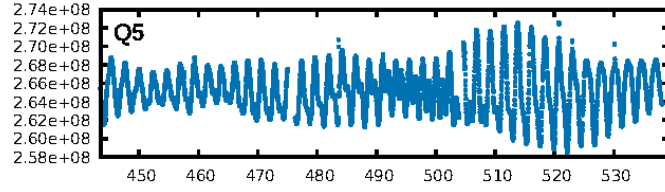
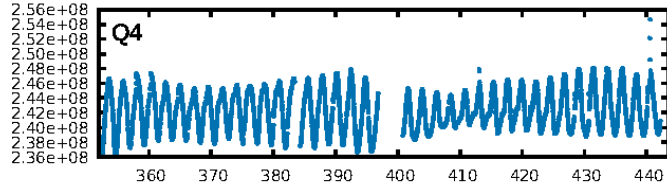
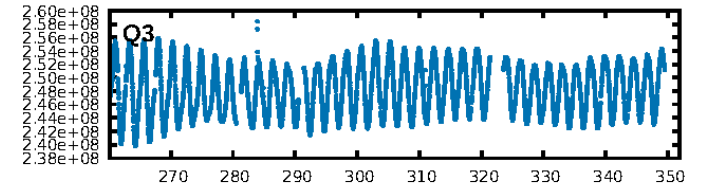
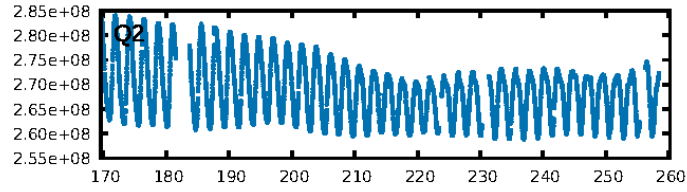
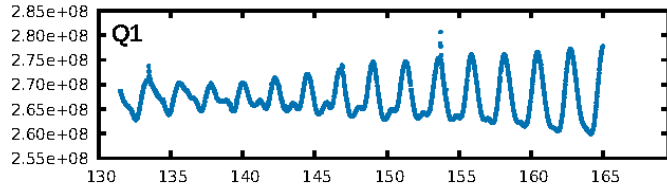
DV Fit Results:

Period = 352.77451 [0.00395] d
Epoch = 349.7277 [0.0101] BKJD
Rp/R* = 0.0271 [0.0558]
a/R* = 794.76 [5938.41]
b = 0.60 [8.18]
Seff = 2.23 [0.63]
Teq = 312 [22] K
Rp = 5.27 [10.92] Re
a = 0.9386 [0.1845] AU
Ag = 7316.17 [30444.24] [0.24 σ]
Teffp = 4457 [4627] K [0.90 σ]

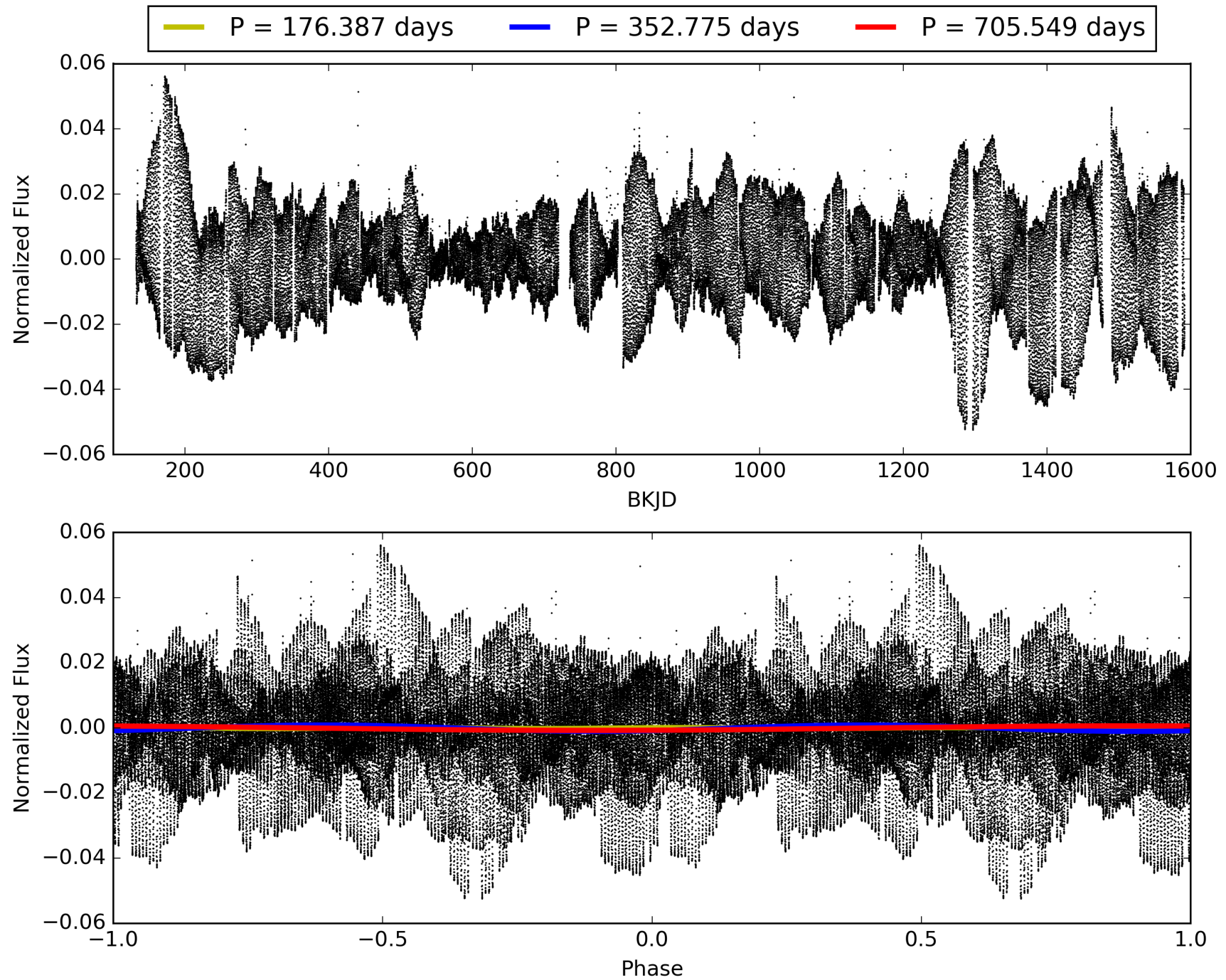
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [1018.45 σ]
LongPeriod-sig: 100.0% [869.27 σ]
ModelChiSquare2-sig: 0.3%
ModelChiSquareGof-sig: 46.5%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -5.728
Centroid-sig: N/A
Centroid-so: 1.736 arcsec [2.42 σ]
OotOffset-rm: 0.044 arcsec [0.11 σ]
OotOffset-st: 0/3/0/0 [3]
KicOffset-rm: 0.175 arcsec [0.73 σ]
KicOffset-st: 0/3/0/0 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 1.00 [3/3]

TCE 011819949-02, PDC Light Curves

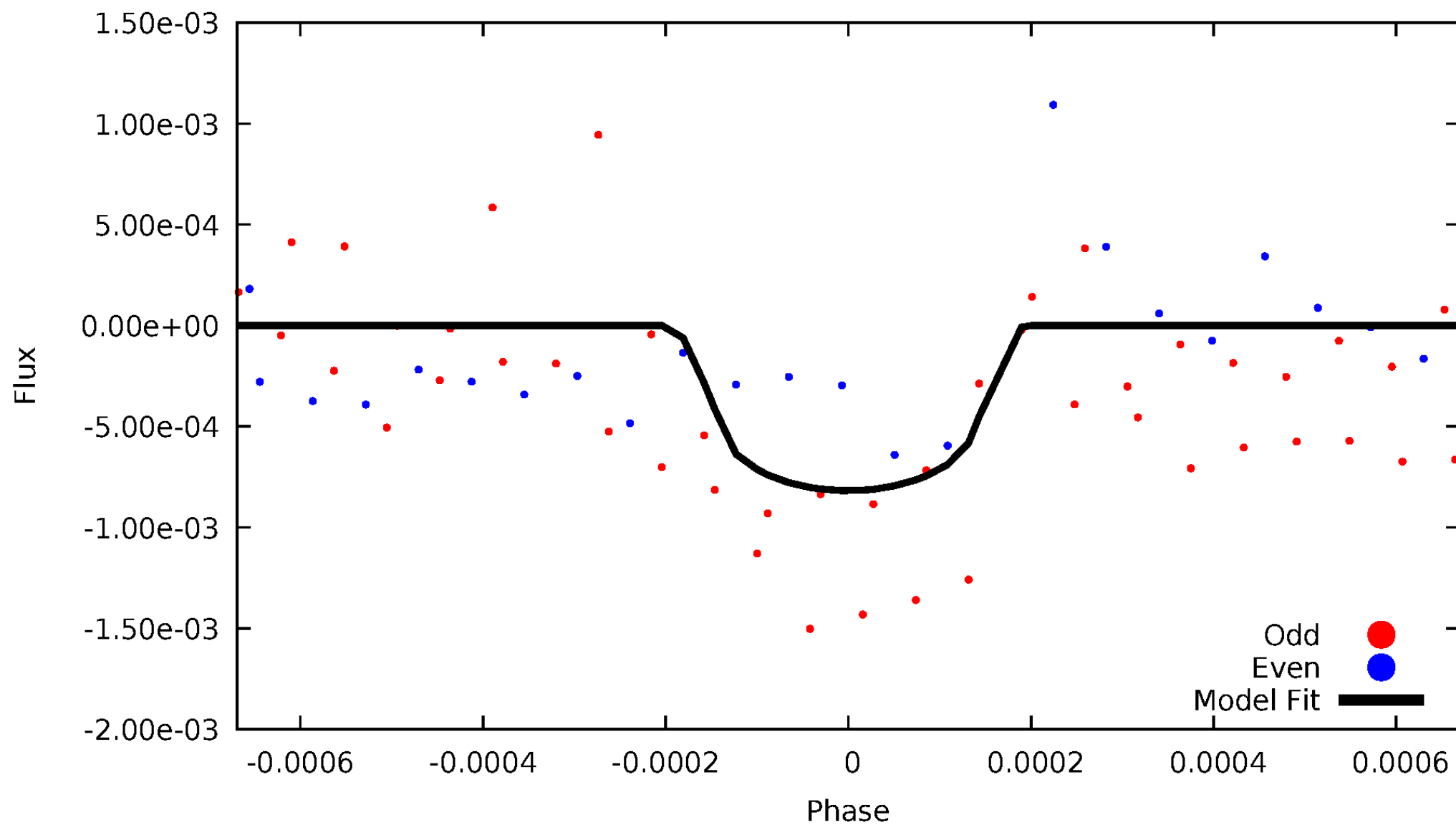


TCE 011819949-02



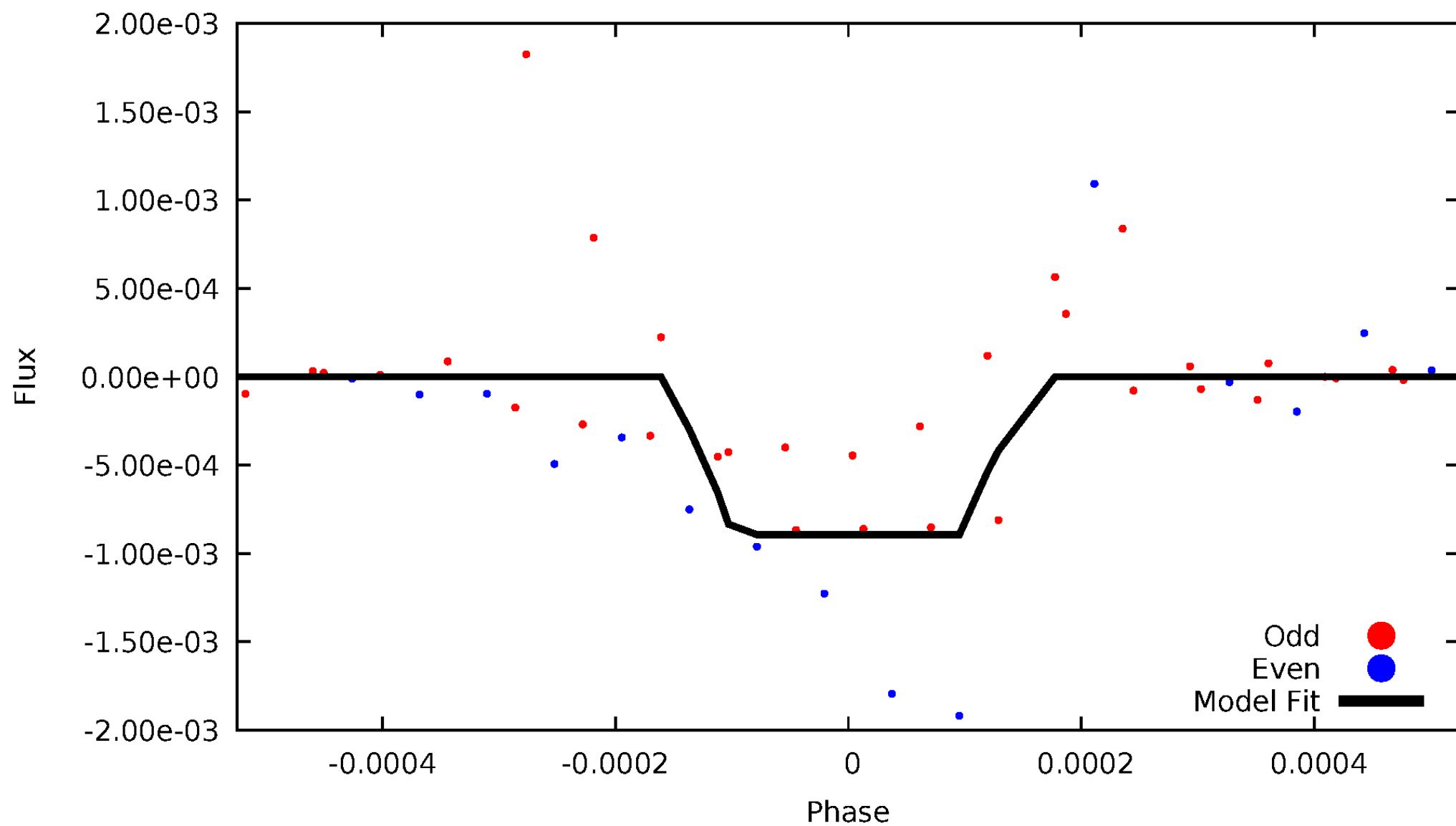
DV Odd/Even

TCE 011819949-02



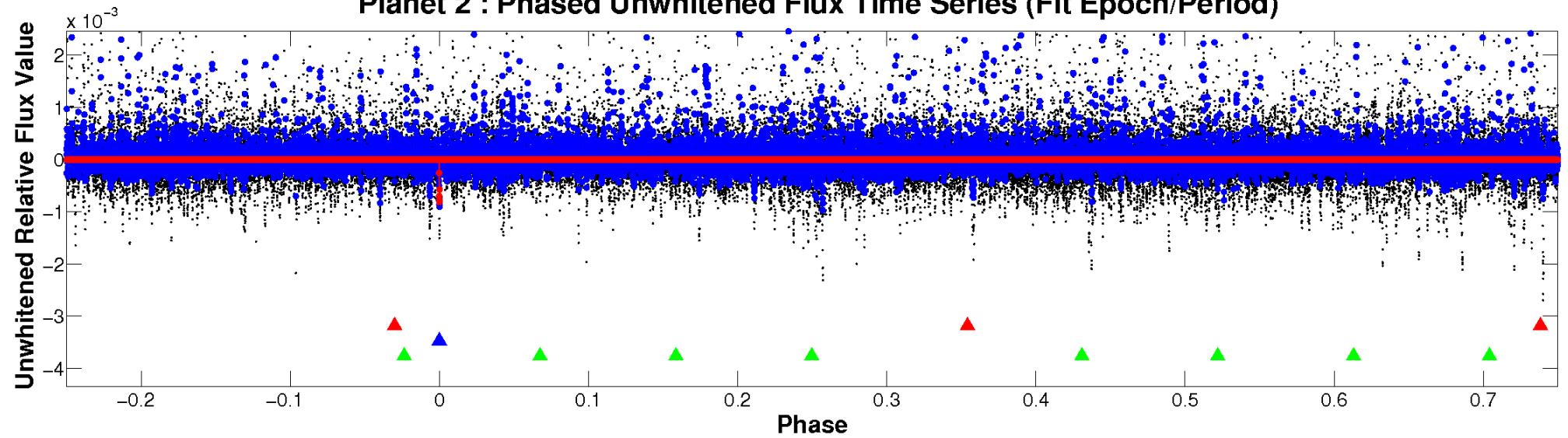
ALT Odd/Even

TCE 011819949-02

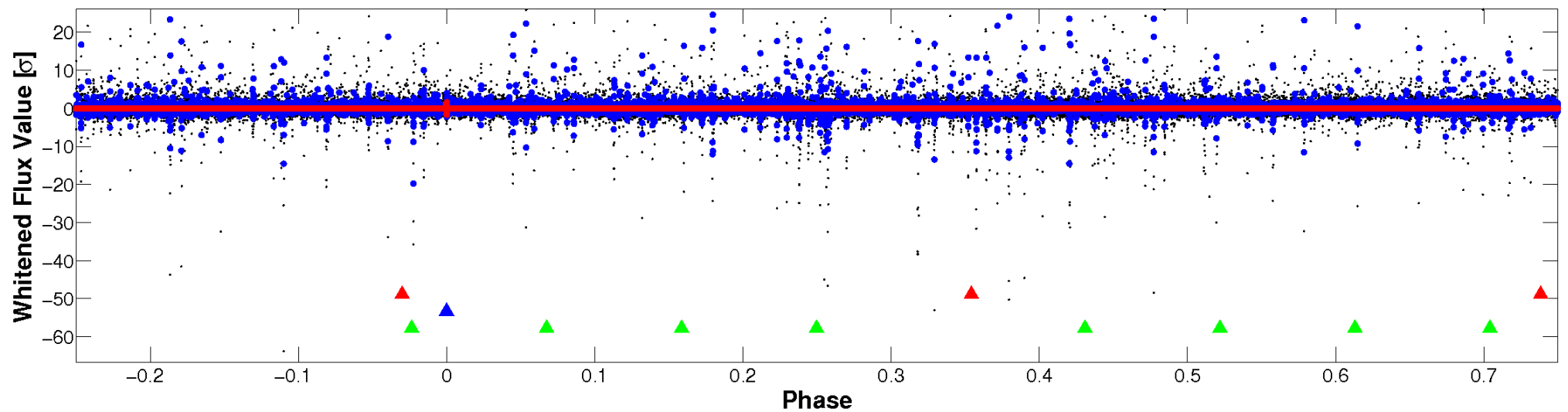


Non-Whitened Vs. Whitened Light Curve

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

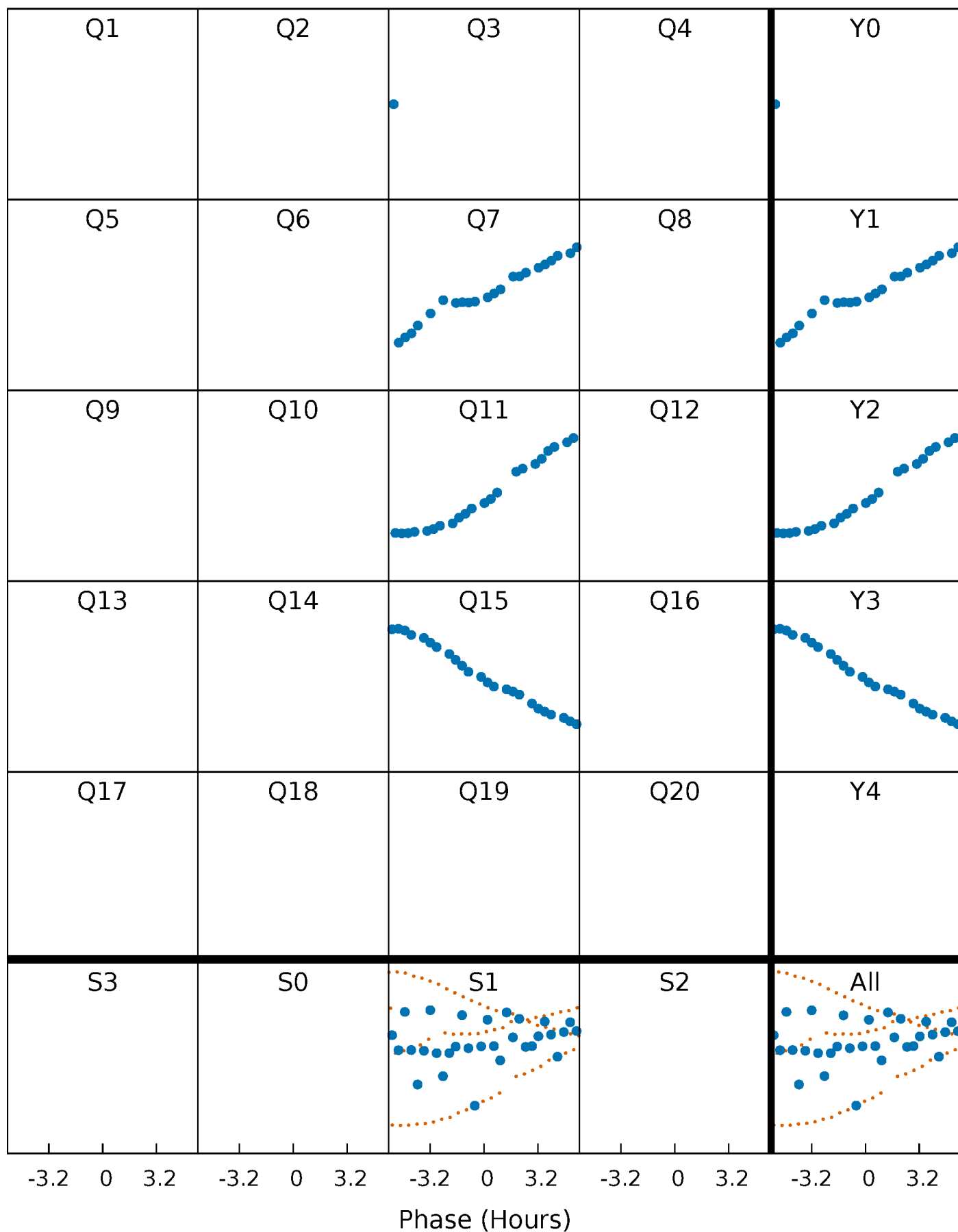


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



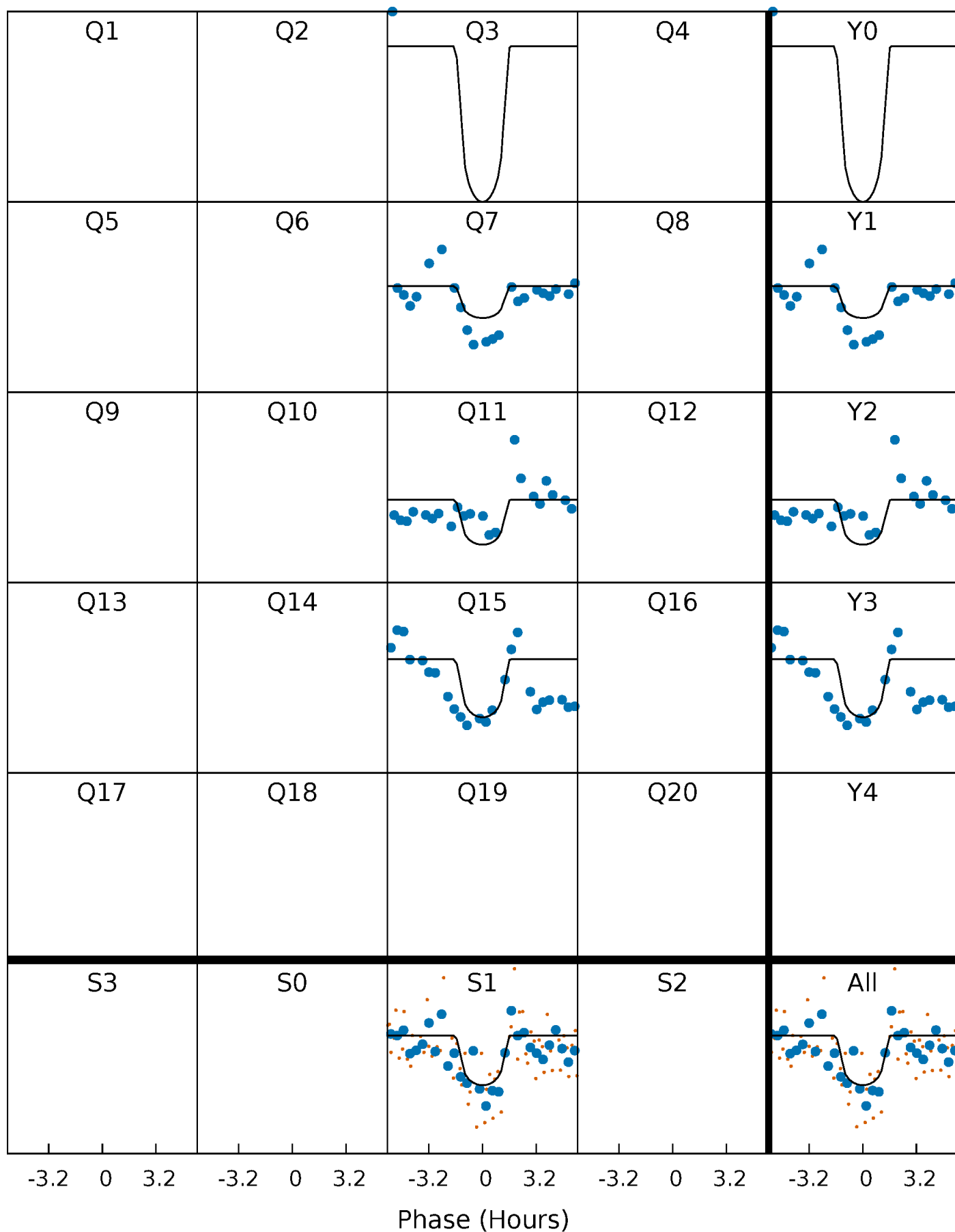
PDC Quarter-Phased Transit Curves

TCE 011819949-02 $P=352.774509$ Days $T_0=349.727662$ (BKJD)



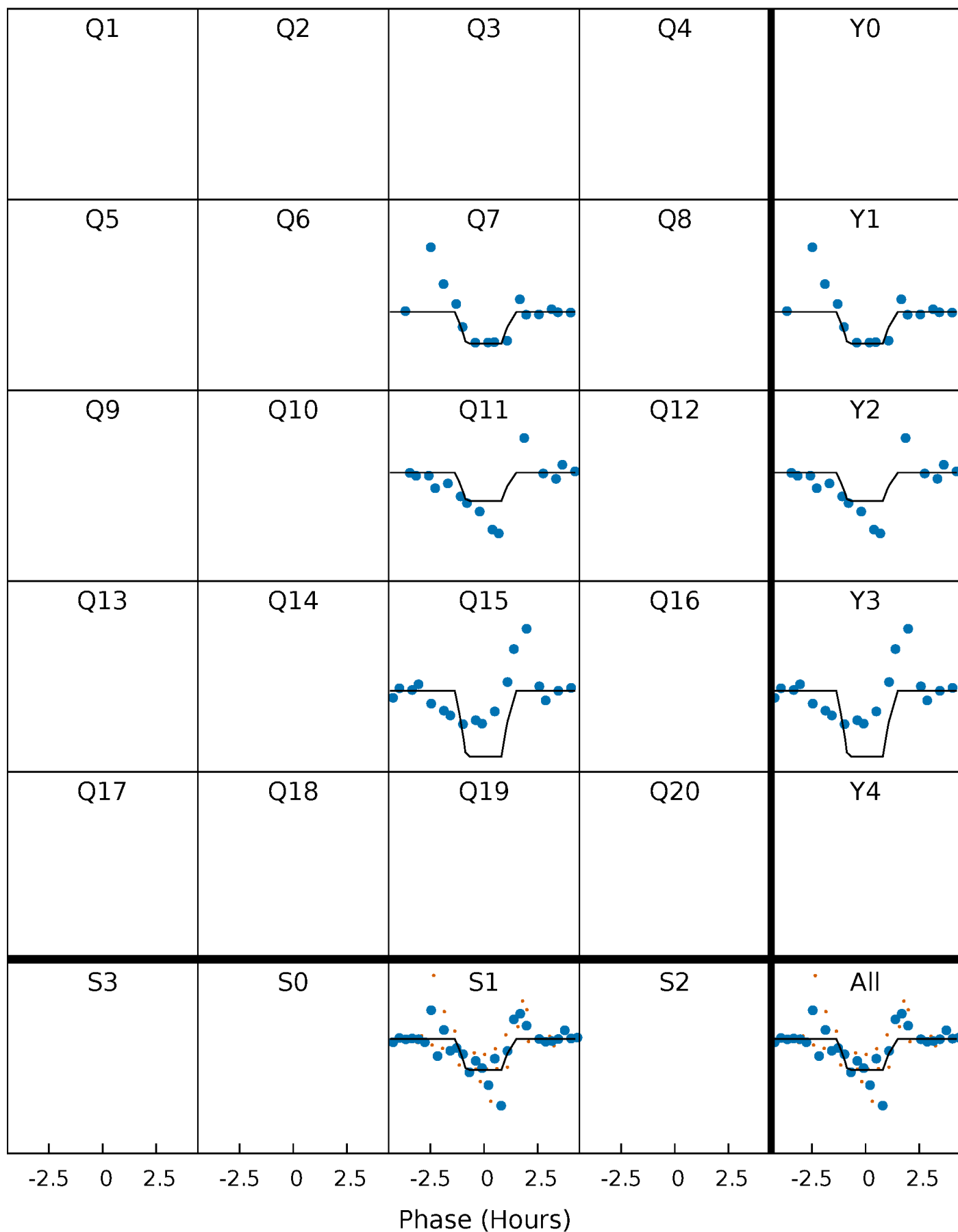
DV Quarter-Phased Transit Curves

TCE 011819949-02 P=352.774509 Days $T_0=349.727662$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

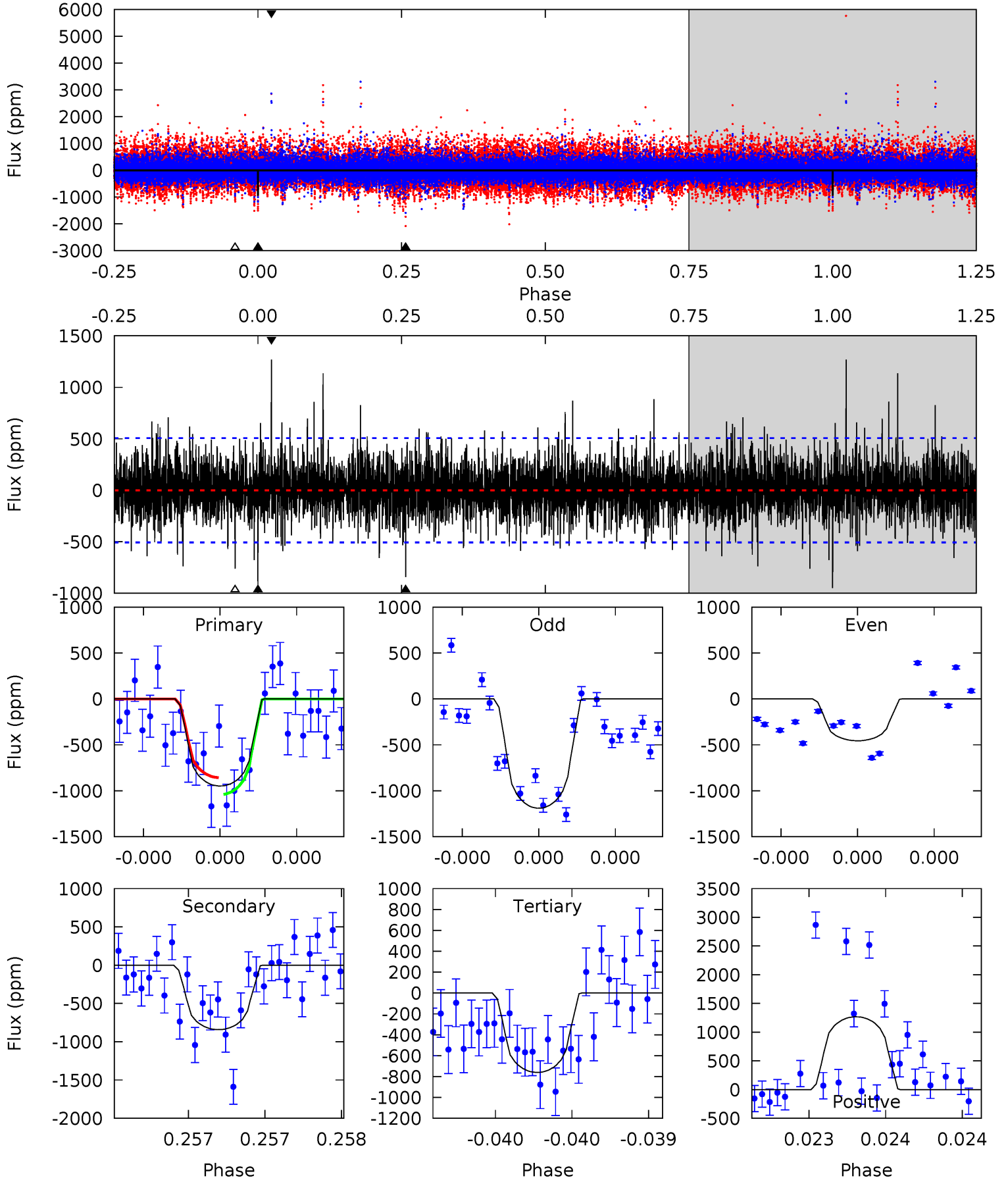
TCE 011819949-02 $P=352.778184$ Days $T_0=349.725016$ (BKJD)



DV Model-Shift Uniqueness Test

011819949-02, P = 352.774509 Days, E = 349.727662 Days

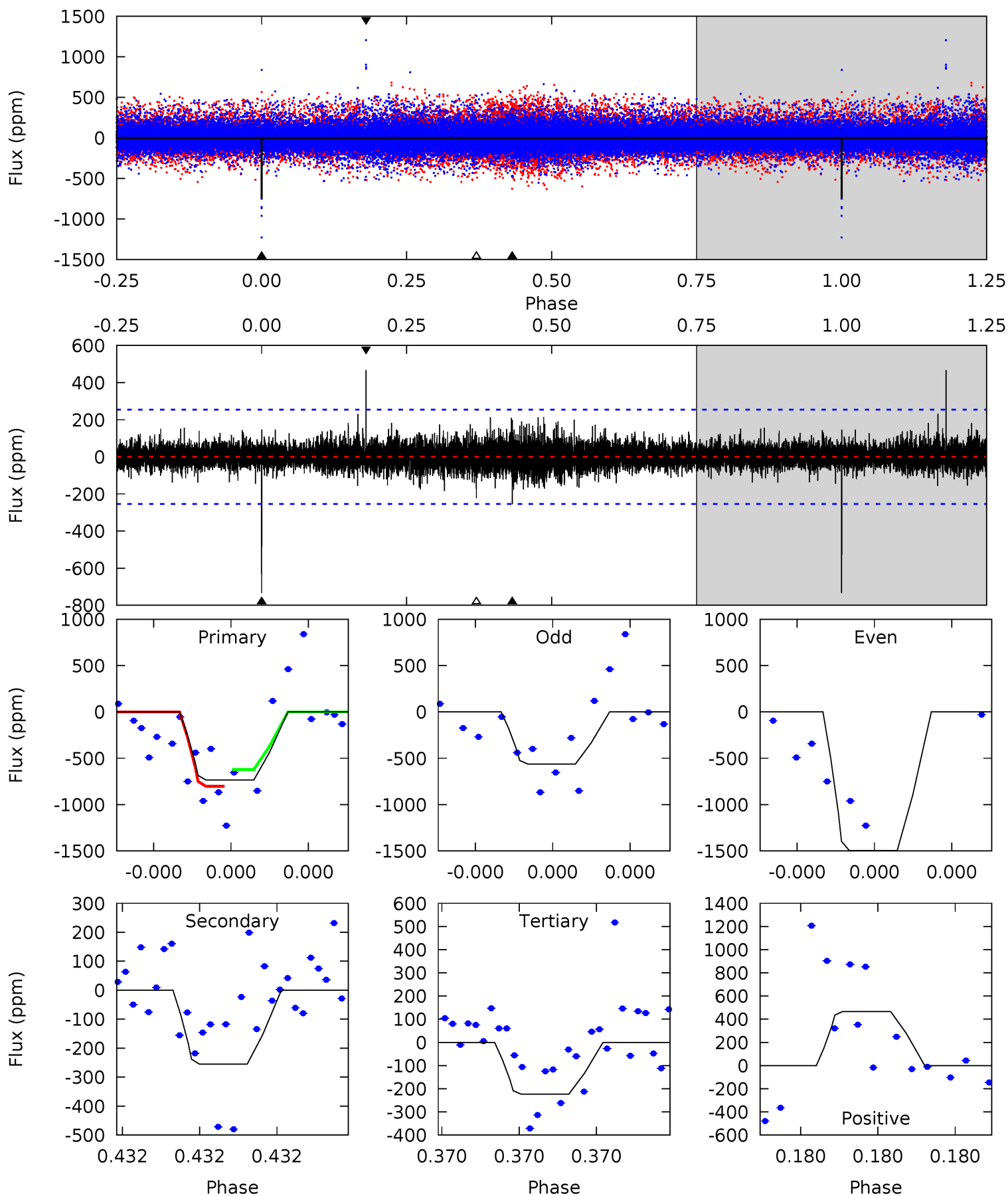
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.5	9.36	8.46	14.1	5.64	3.58	1.99	2.09	-3.56	0.90	-4.74	3.25	1.05	0.57	1.02



Alt Model-Shift Uniqueness Test

011819949-02, P = 352.778184 Days, E = 349.725016 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.5	5.71	5.01	10.5	5.70	3.67	0.98	11.5	6.01	0.70	-4.75	11.2	1.08	0.39	2.01



Stellar Parameters For KIC 011819949

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5129^{+77}_{-77}	$3.884^{+0.053}_{-0.147}$	$-0.160^{+0.150}_{-0.100}$	$1.781^{+0.430}_{-0.108}$	$0.887^{+0.129}_{-0.032}$	$0.221^{+0.046}_{-0.091}$
	+2%/-2%	+1%/-4%	+94%/-62%	+24%/-6%	+15%/-4%	+21%/-41%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 011819949-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-842 ± 90	$10.11^{+8.62}_{-6.87}$	438^{+23}_{-13}	4126^{+2701}_{-793}	3987^{+35436}_{-2825}
Alt.	-255 ± 45	$10.28^{+10.24}_{-6.69}$	438^{+25}_{-13}	3358^{+1537}_{-593}	1178^{+8087}_{-880}

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 $A_{obs} \gg 1.0$

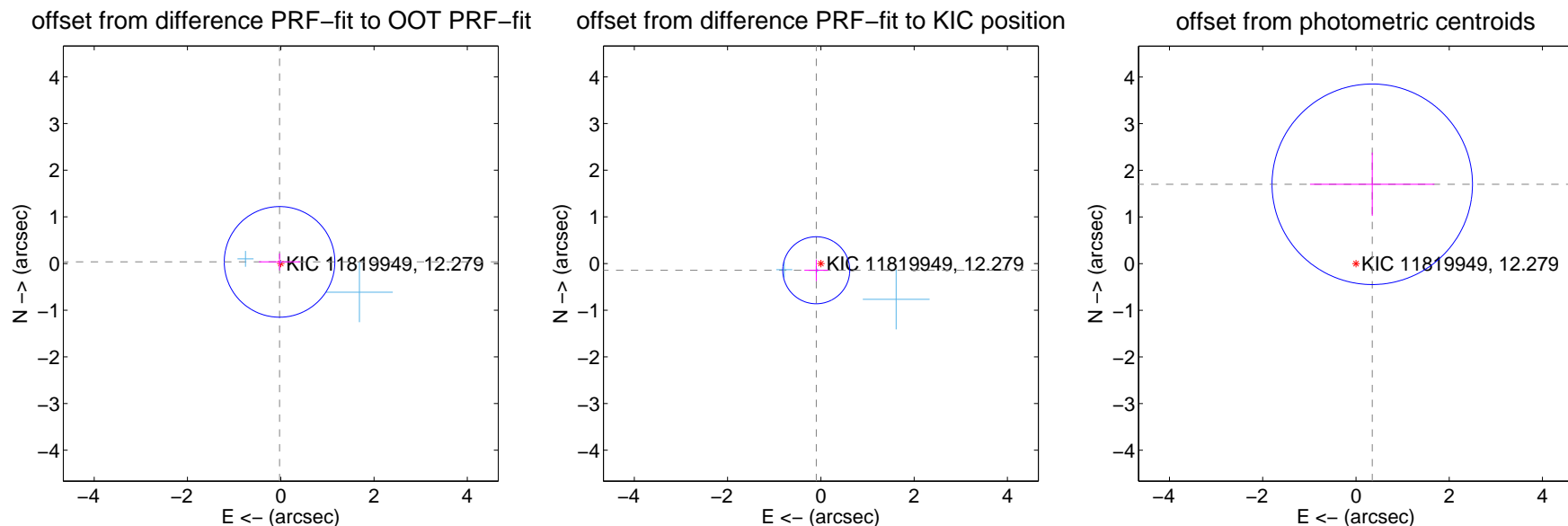
DV Centroid Data

Supplemental centroid analysis for 011819949-02. Kepler magnitude: 12.28. Transit SNR 6.62

There are 3 quarters with good PRF difference image offsets

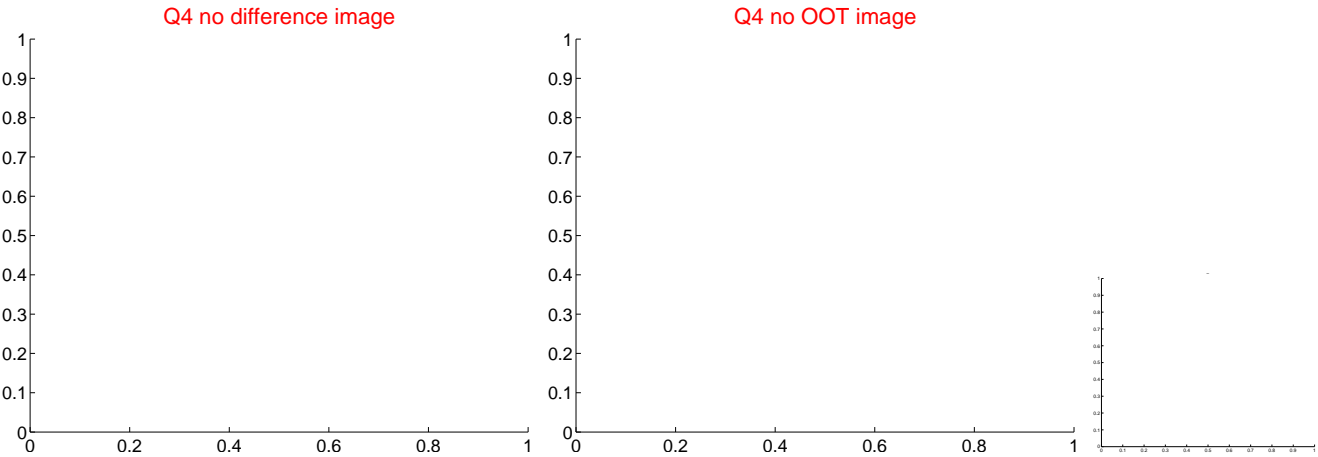
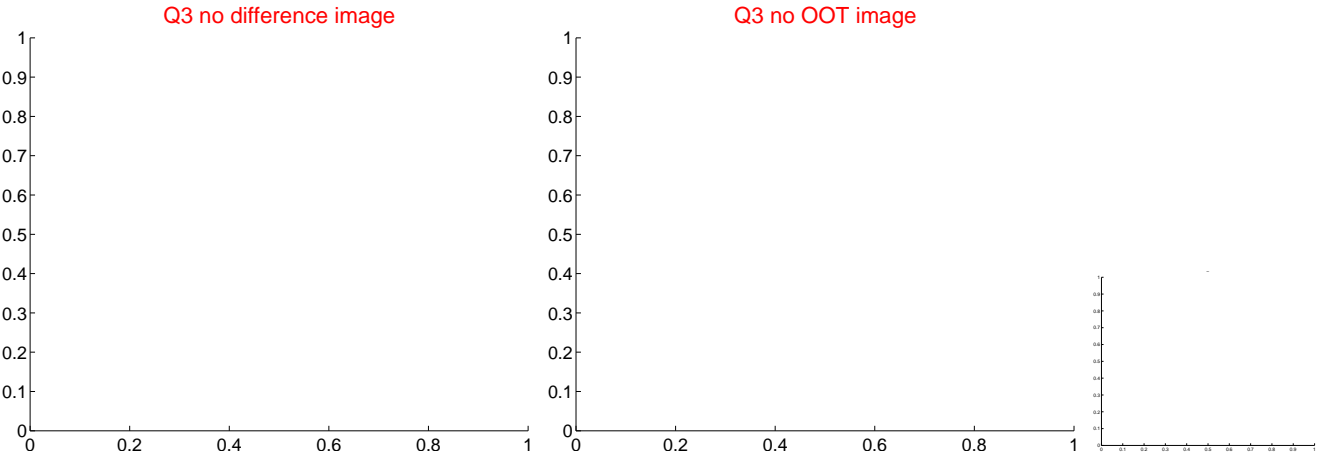
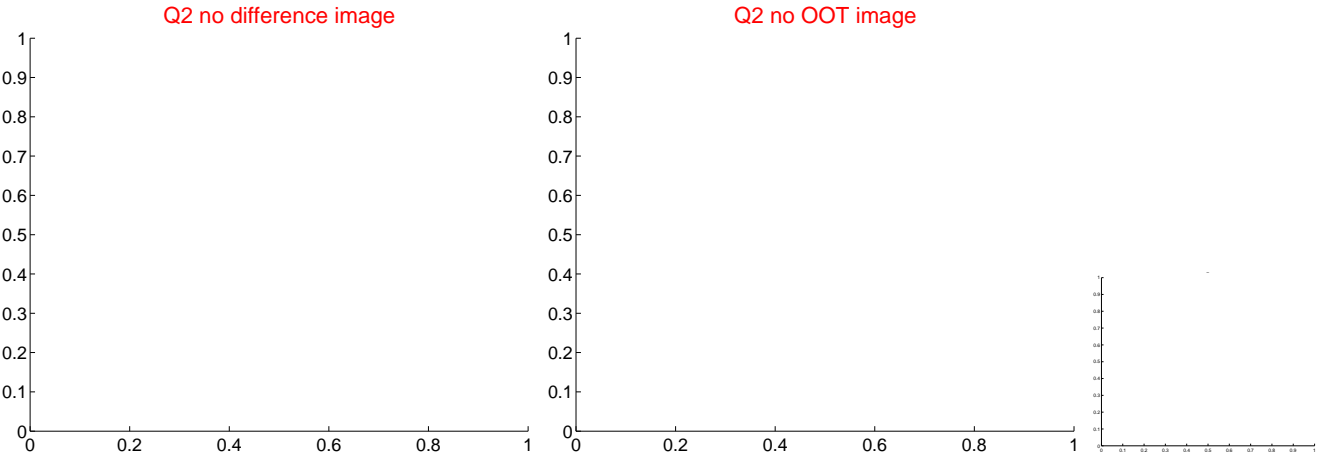
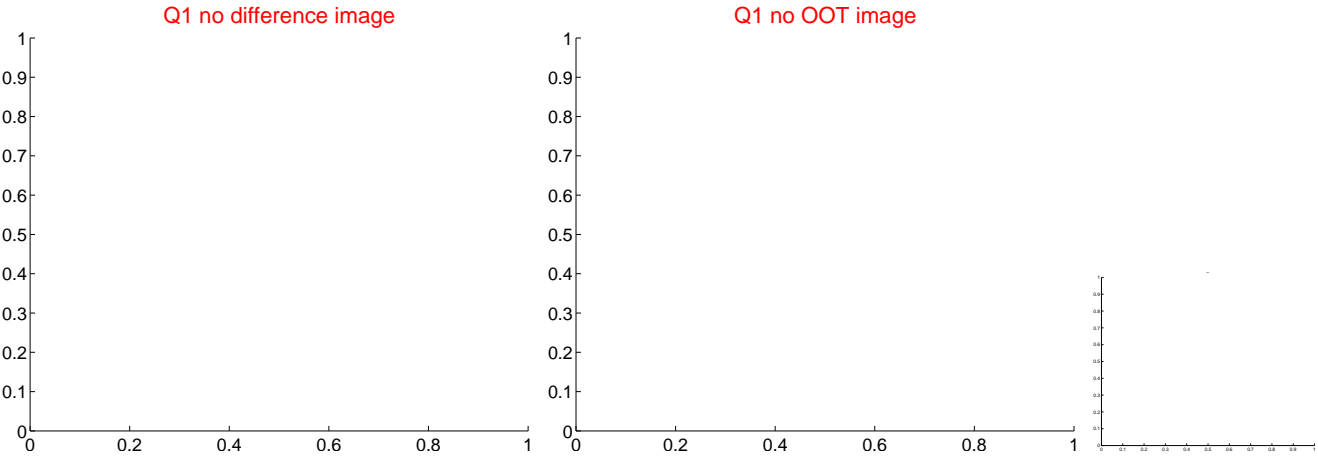
The direct PRF centroid is offset from the target star catalog position by about 0.23 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.044 ± 0.395	0.11	0.026 ± 0.442	0.035 ± 0.180
PRF-fit source offset from KIC position	0.175 ± 0.239	0.73	0.099 ± 0.255	-0.144 ± 0.232
photometric centroid source offset	1.74 ± 0.72	2.42	-0.35 ± 1.33	1.70 ± 0.68

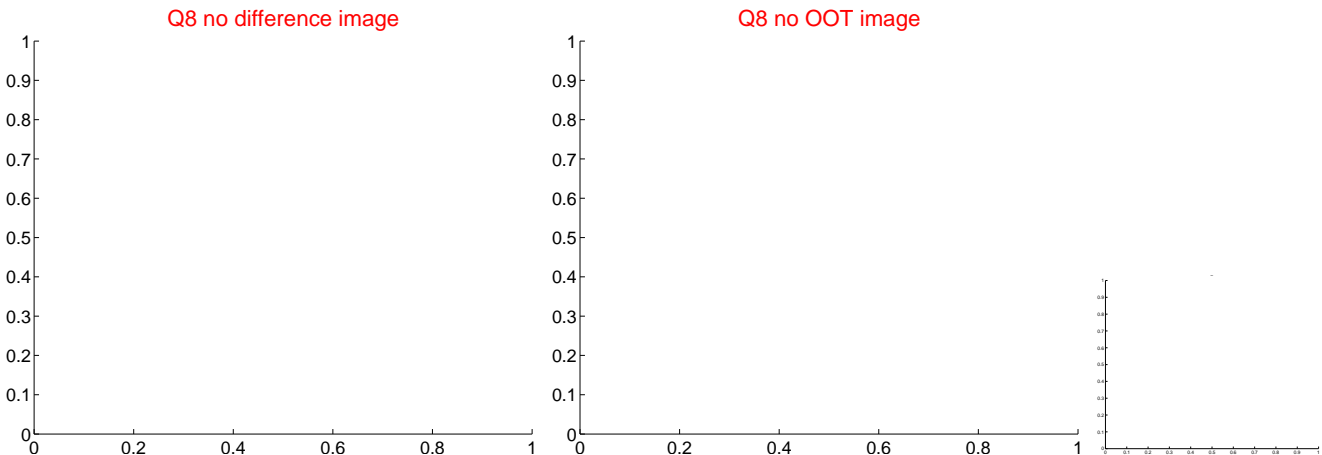
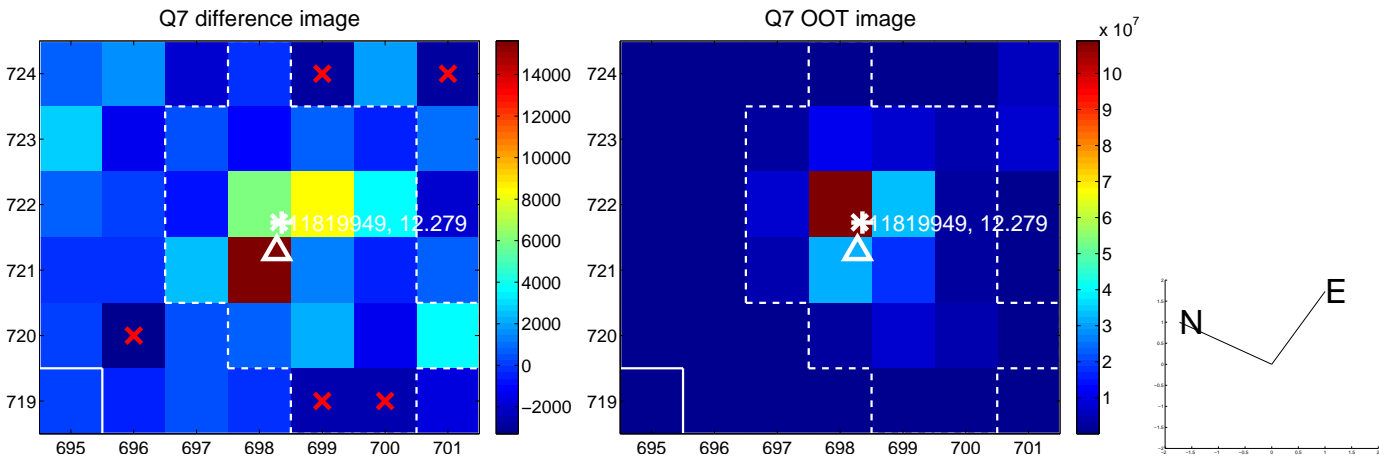
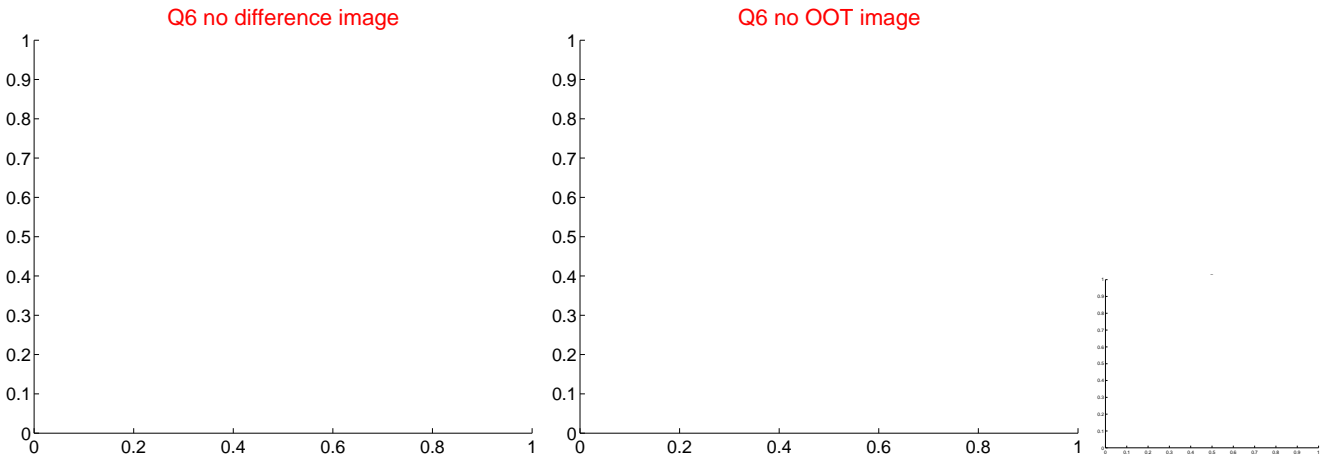
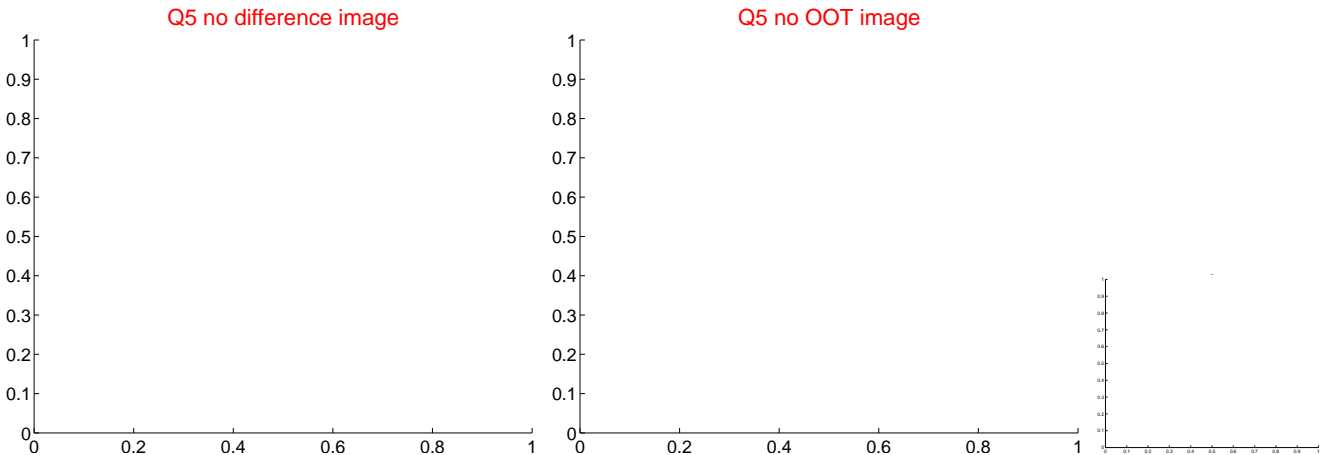


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

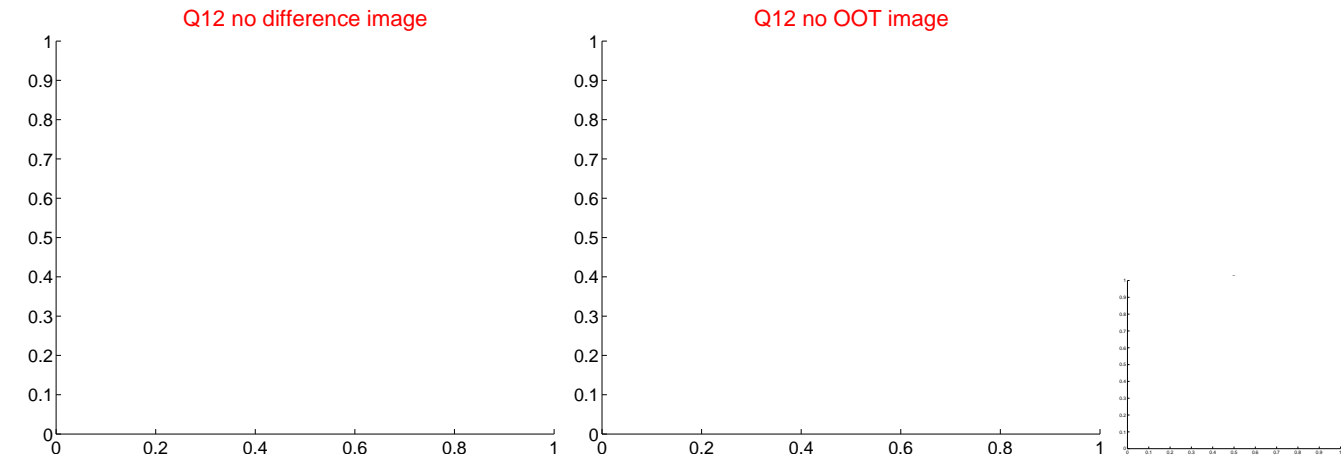
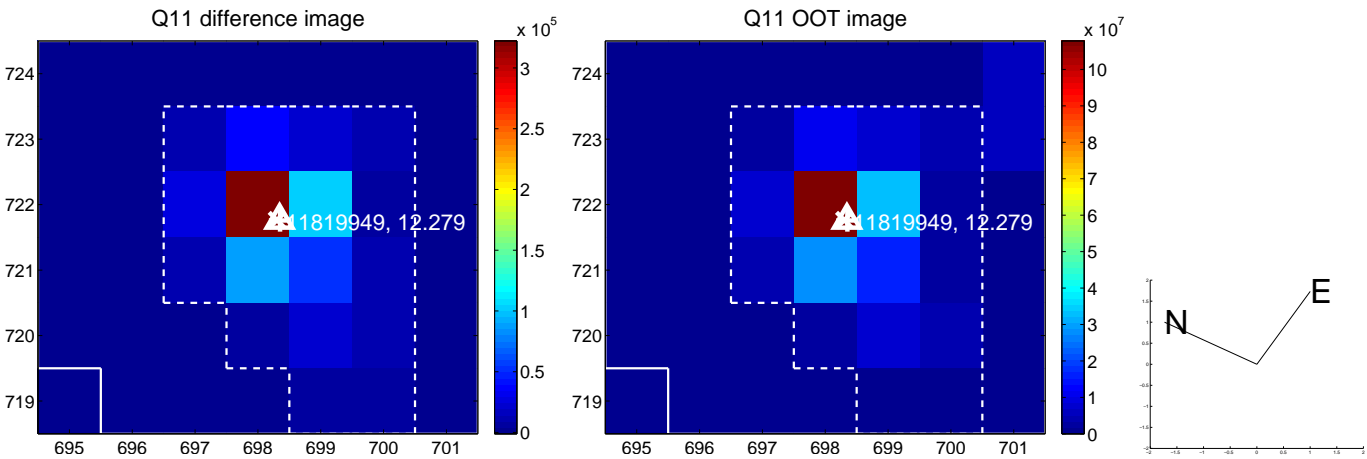
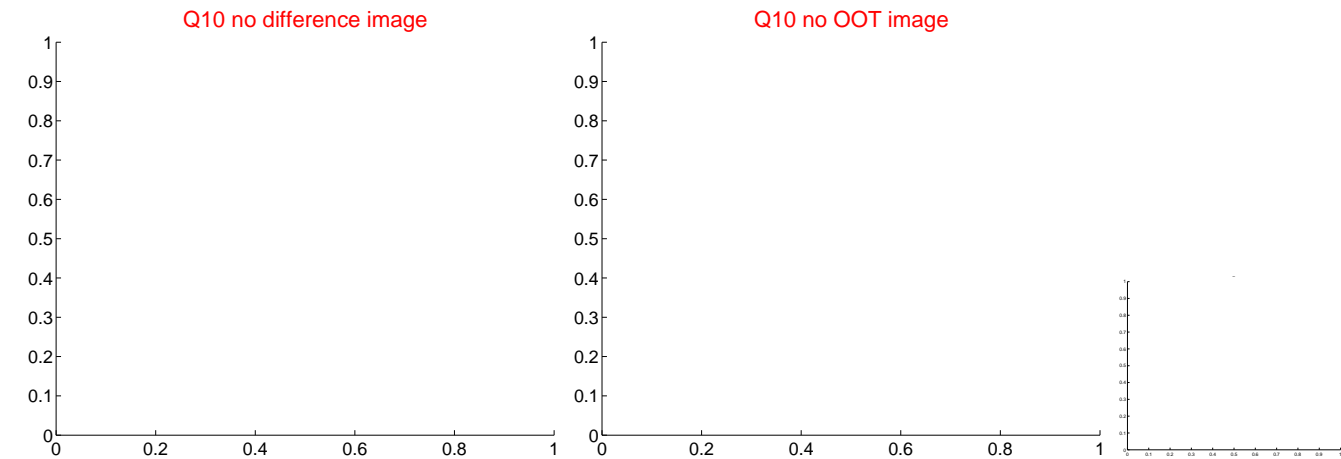
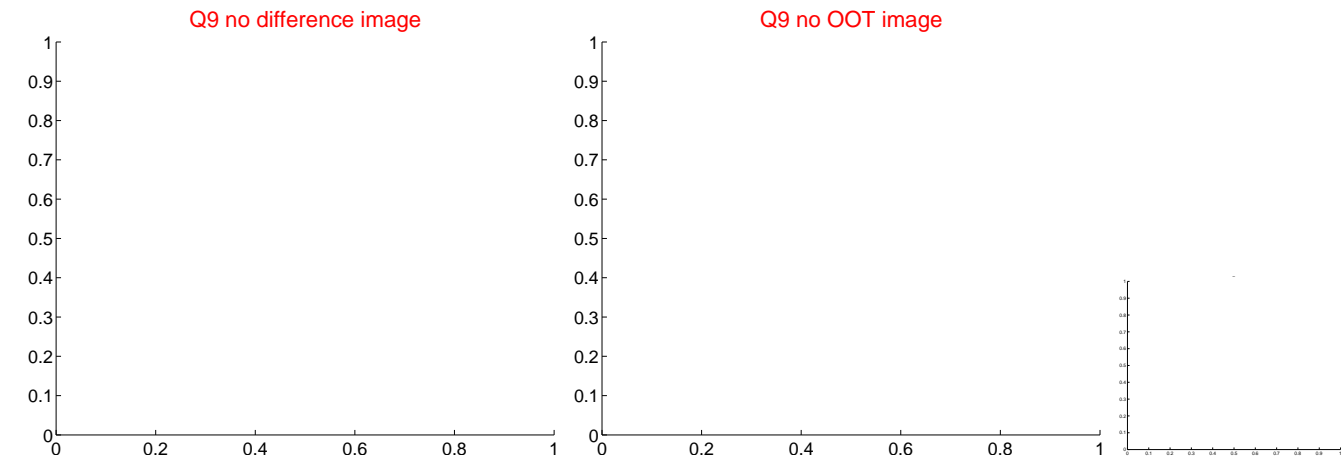
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



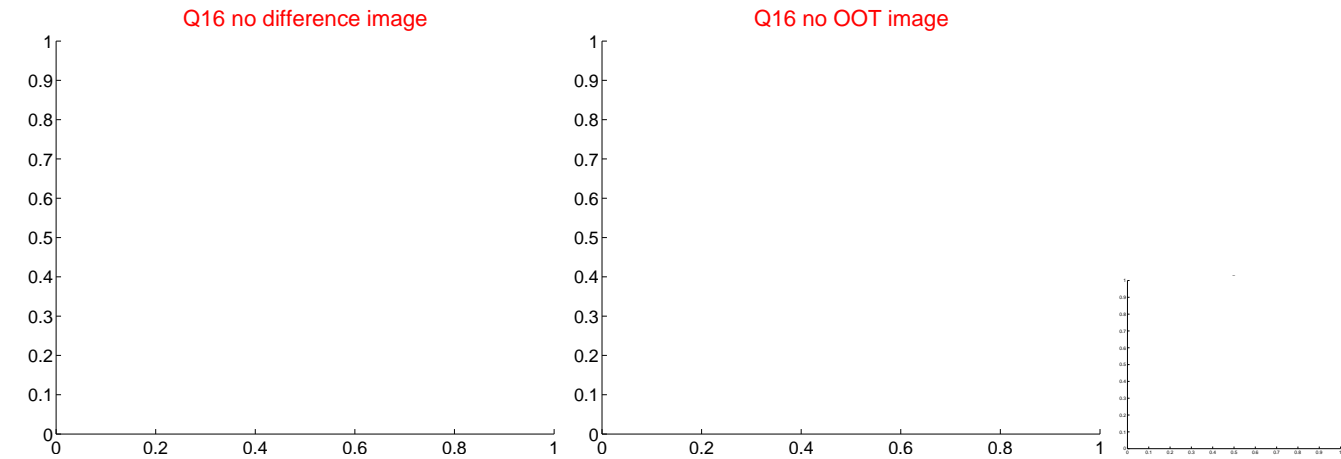
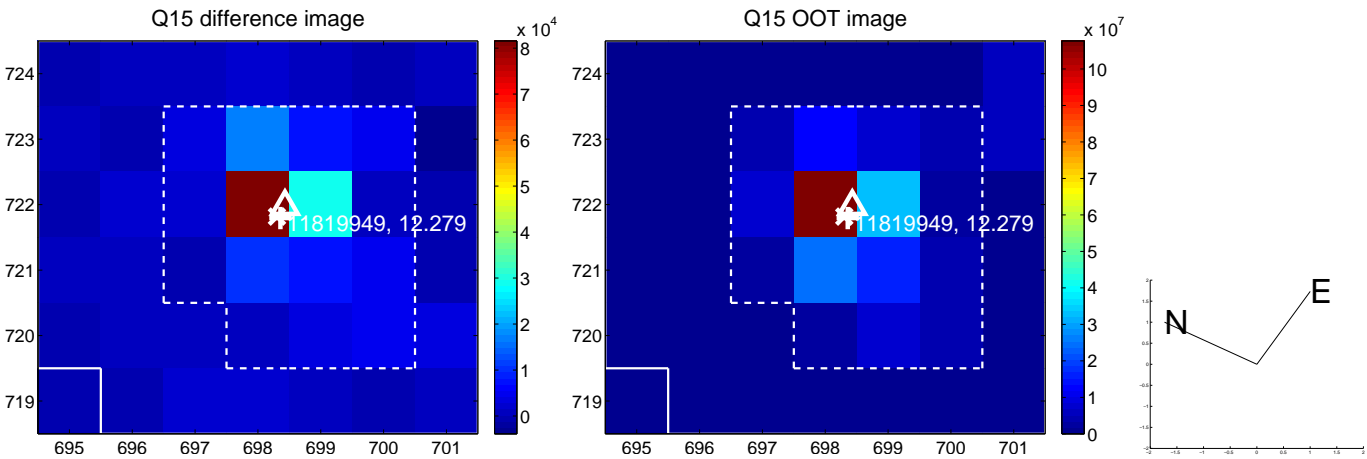
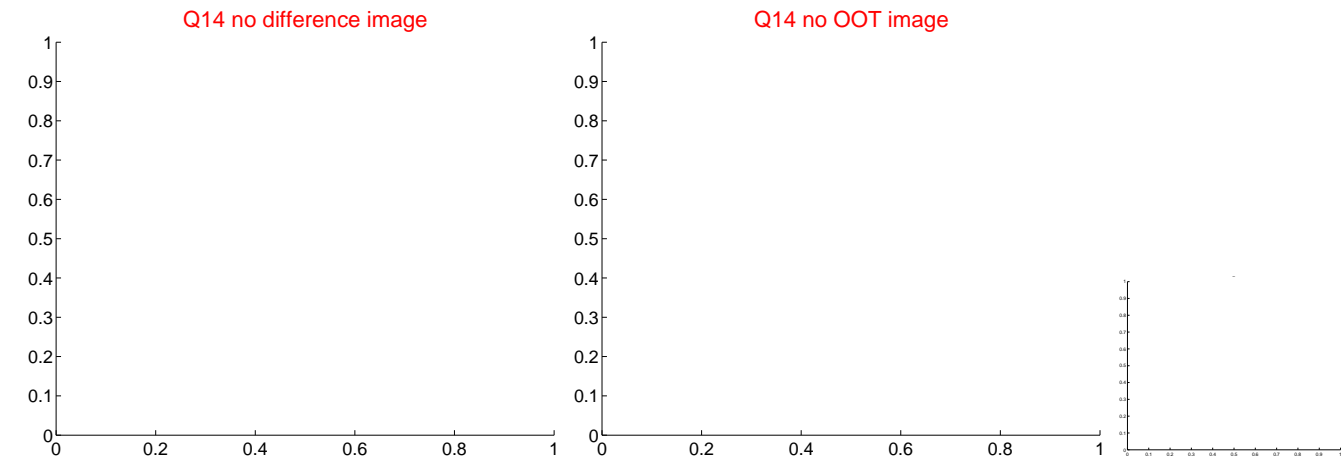
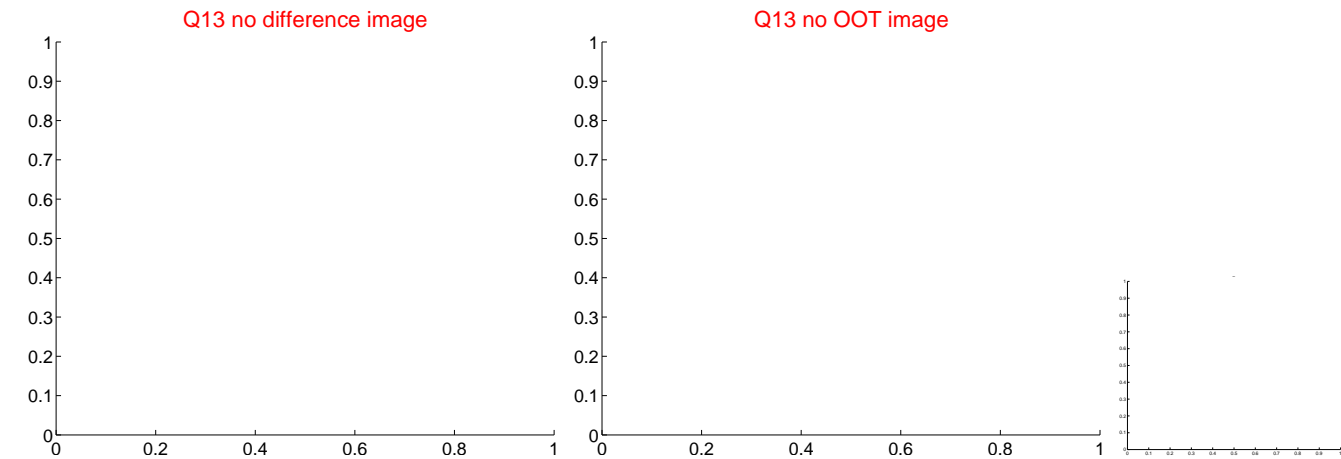
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



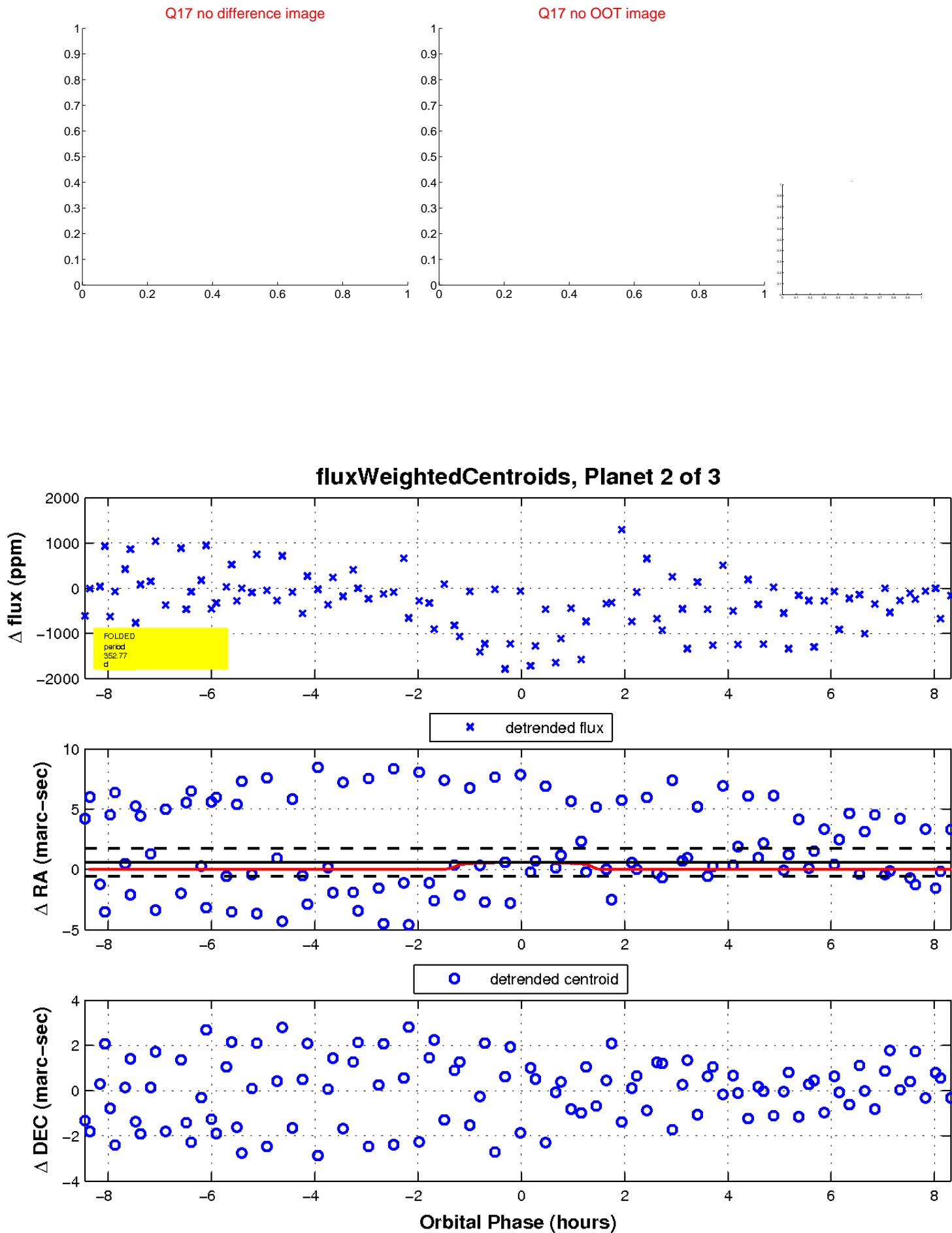
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

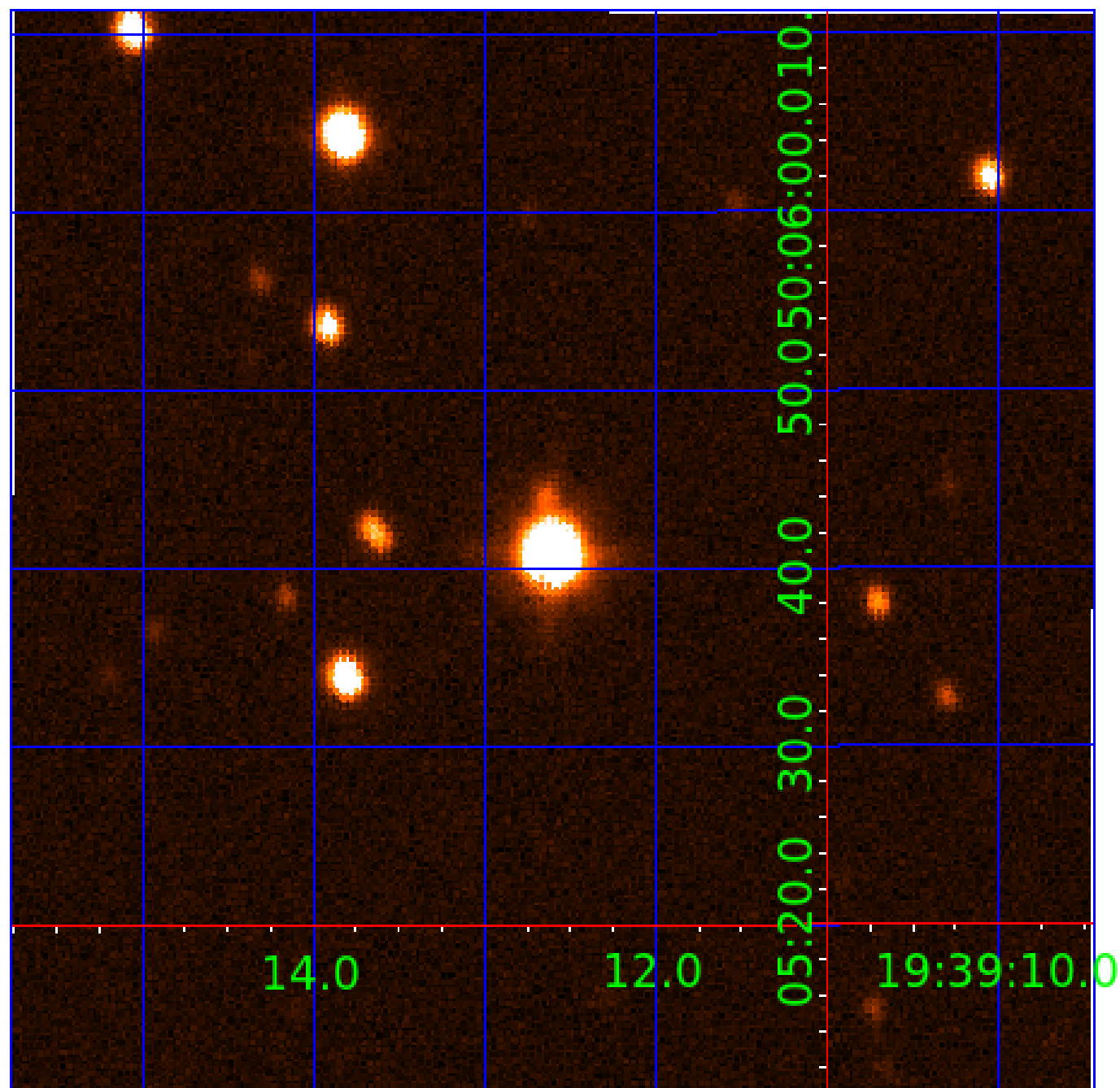


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011819949

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})
011819949-01	OBS	No	488.301431	339.144246	816.3	2.445	15.3	6.2	1.78	5129	5.01	1.45
011819949-02	OBS	No	352.774509	349.727662	817.6	2.832	10.0	6.6	1.78	5129	5.27	2.23
011819949-03	OBS	No	192.456052	148.948498	340.4	2.500	11.6	-1.0	1.78	5129	3.21	5.01

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011819949-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
011819949-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS
011819949-03	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_NOFITS

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

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

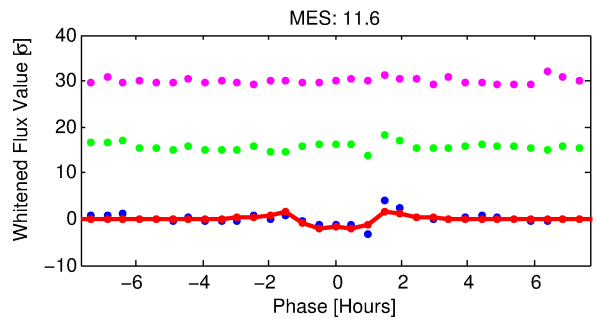
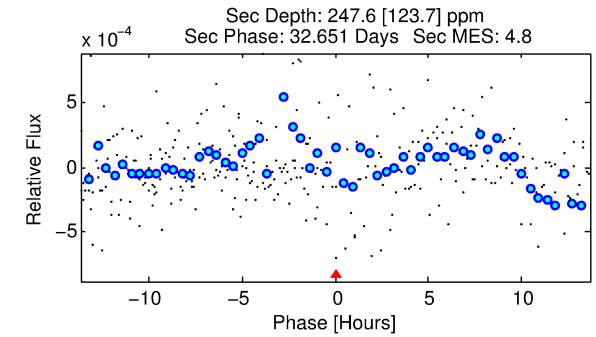
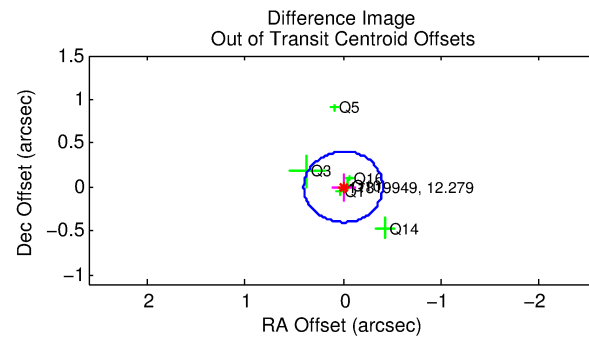
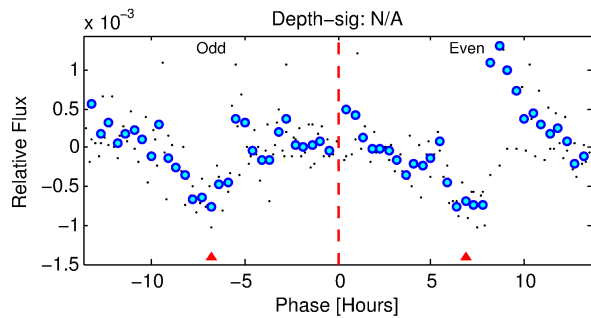
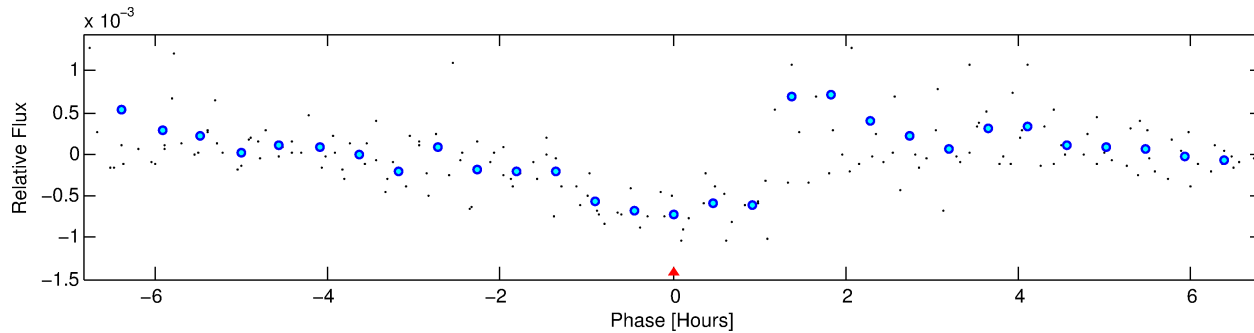
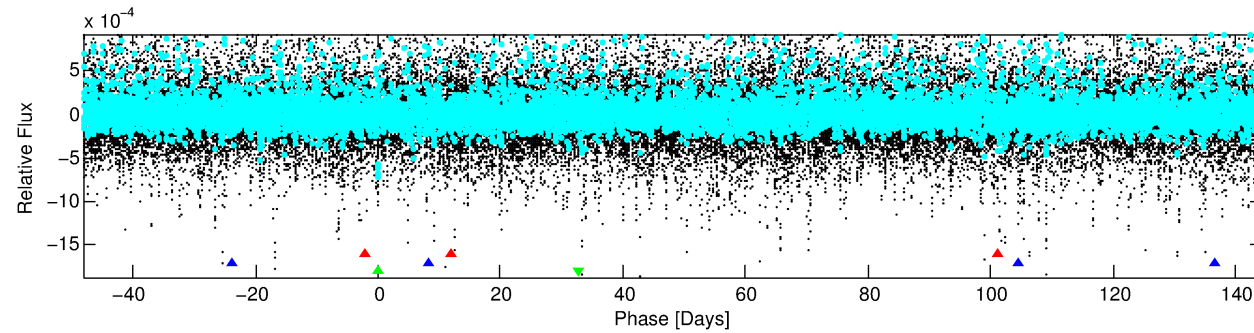
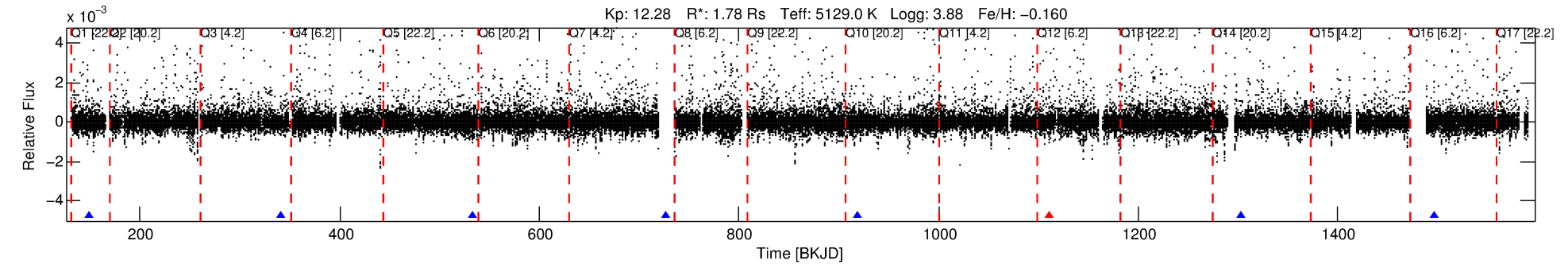
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011819949-03

No Significant Match Found

DV One-Page Summary

KIC: 11819949 Candidate: 3 of 3 Period: 192.456 d



TPS TCE Results:

Period = 192.45605 d
Epoch = 148.9485 BKJD

DV fit results are unavailable

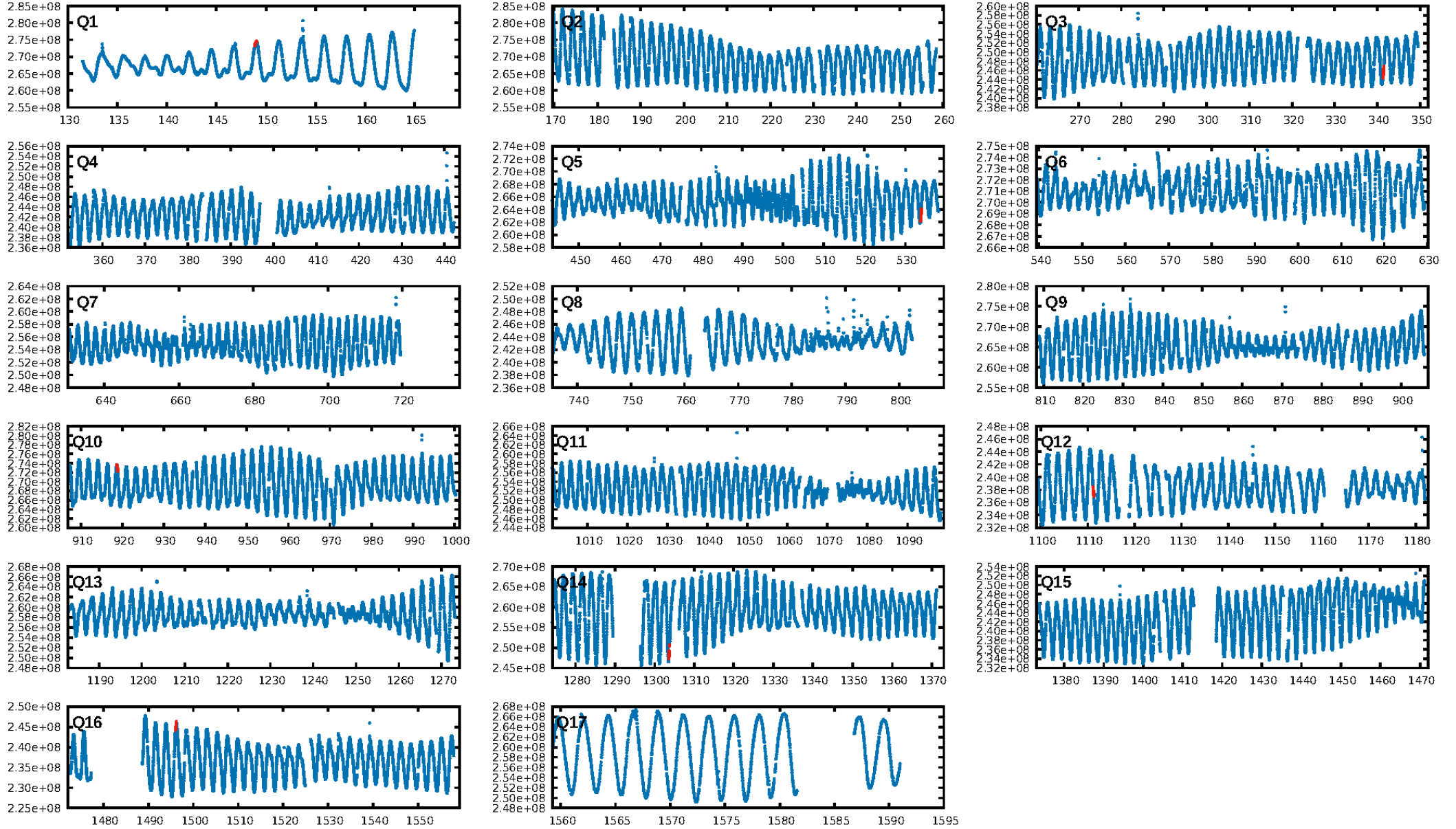
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [1018.45σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.83 [5/6]
GhostDiagnostic-chr: 2.235
Centroid-sig: N/A
Centroid-so: 0.408 arcsec [0.76σ]
OotOffset-rm: 0.005 arcsec [0.04σ]
KicOffset-rm: 0.181 arcsec [1.29σ]
OotOffset-st: 2/1/1/2 [6]
KicOffset-st: 2/1/1/2 [6]
DiffImageQuality-fgm: 0.50 [3/6]
DiffImageOverlap-fno: 1.00 [7/7]

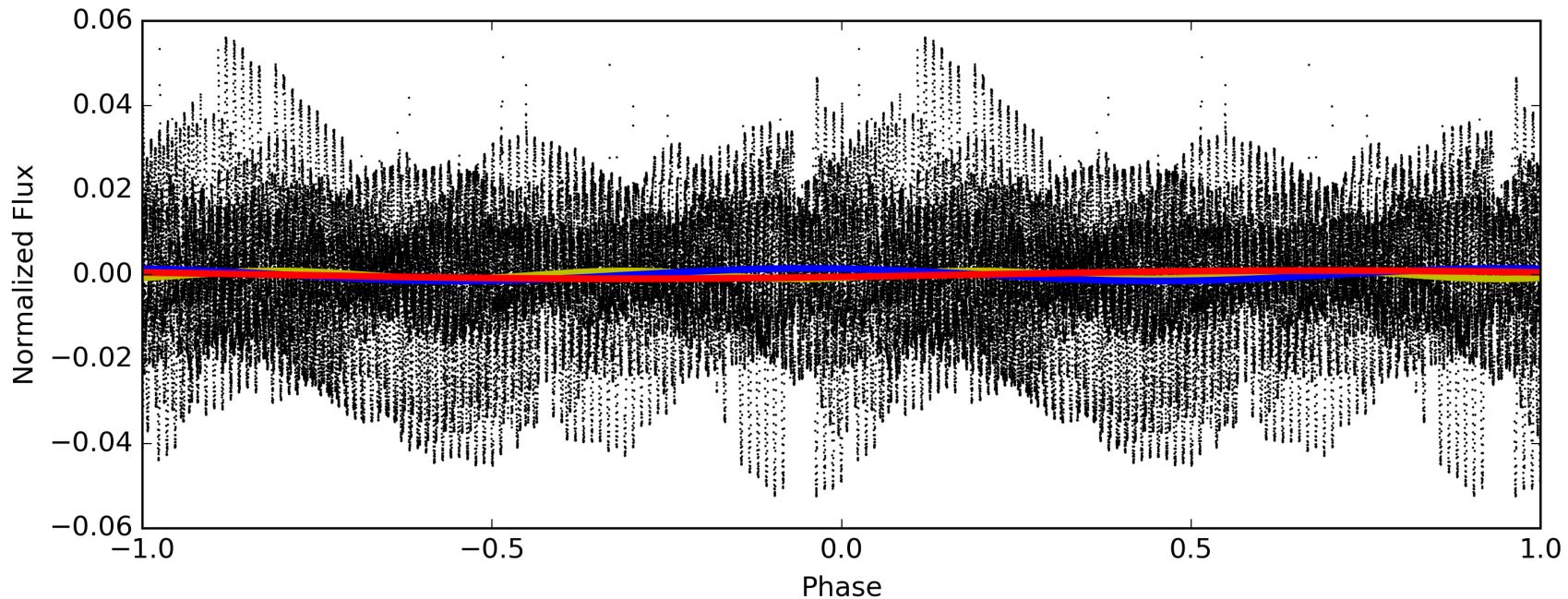
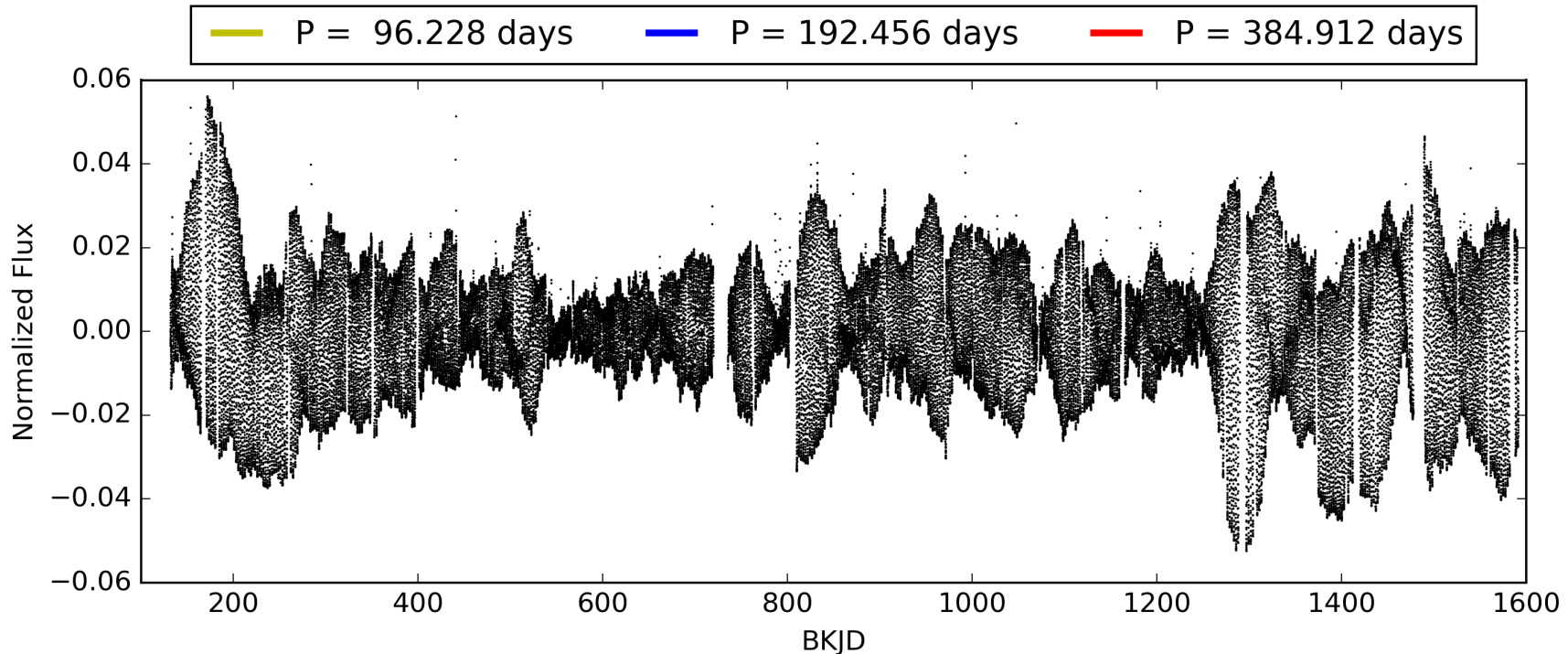
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:22:29 Z

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

TCE 011819949-03, PDC Light Curves

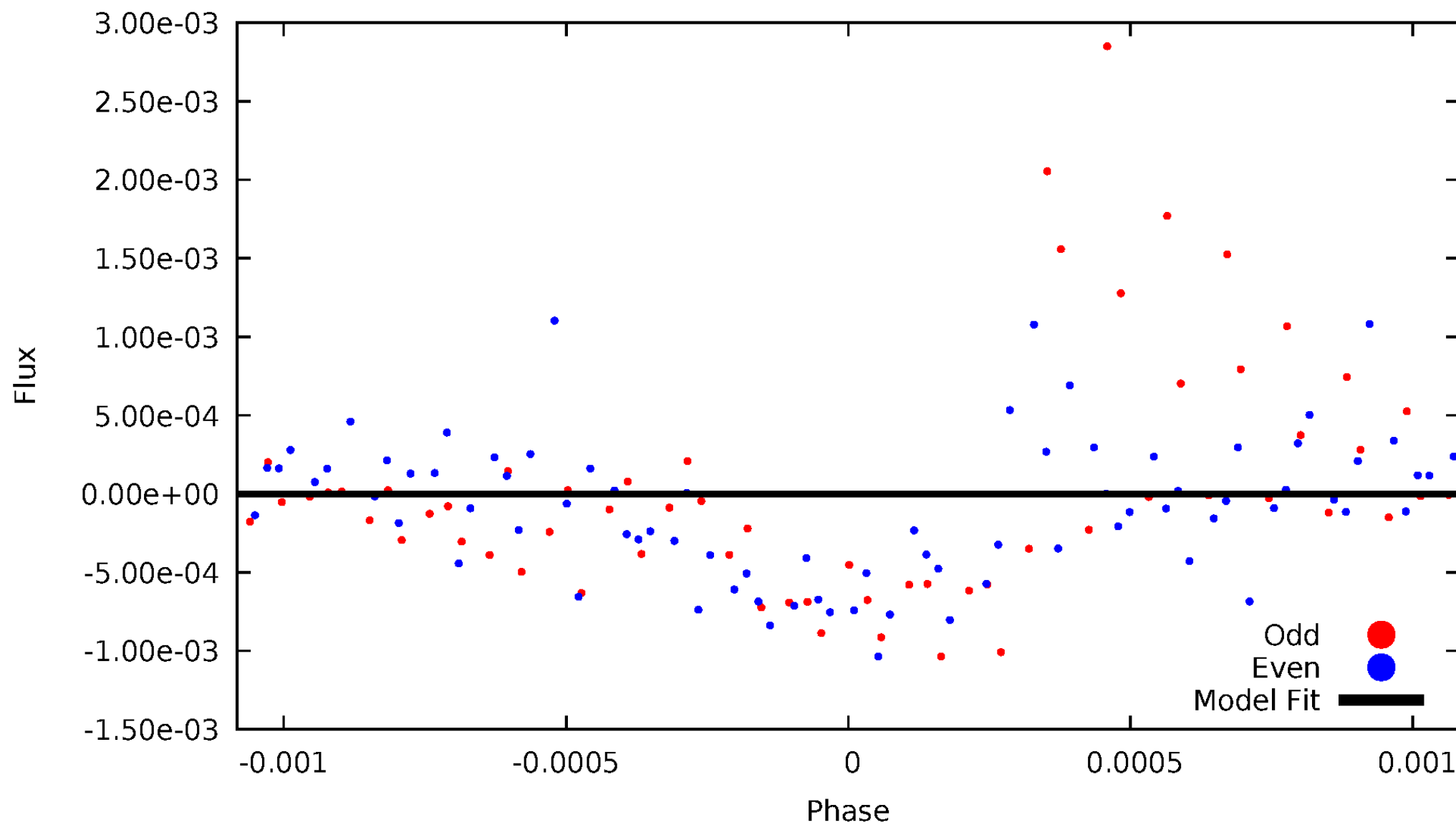


TCE 011819949-03



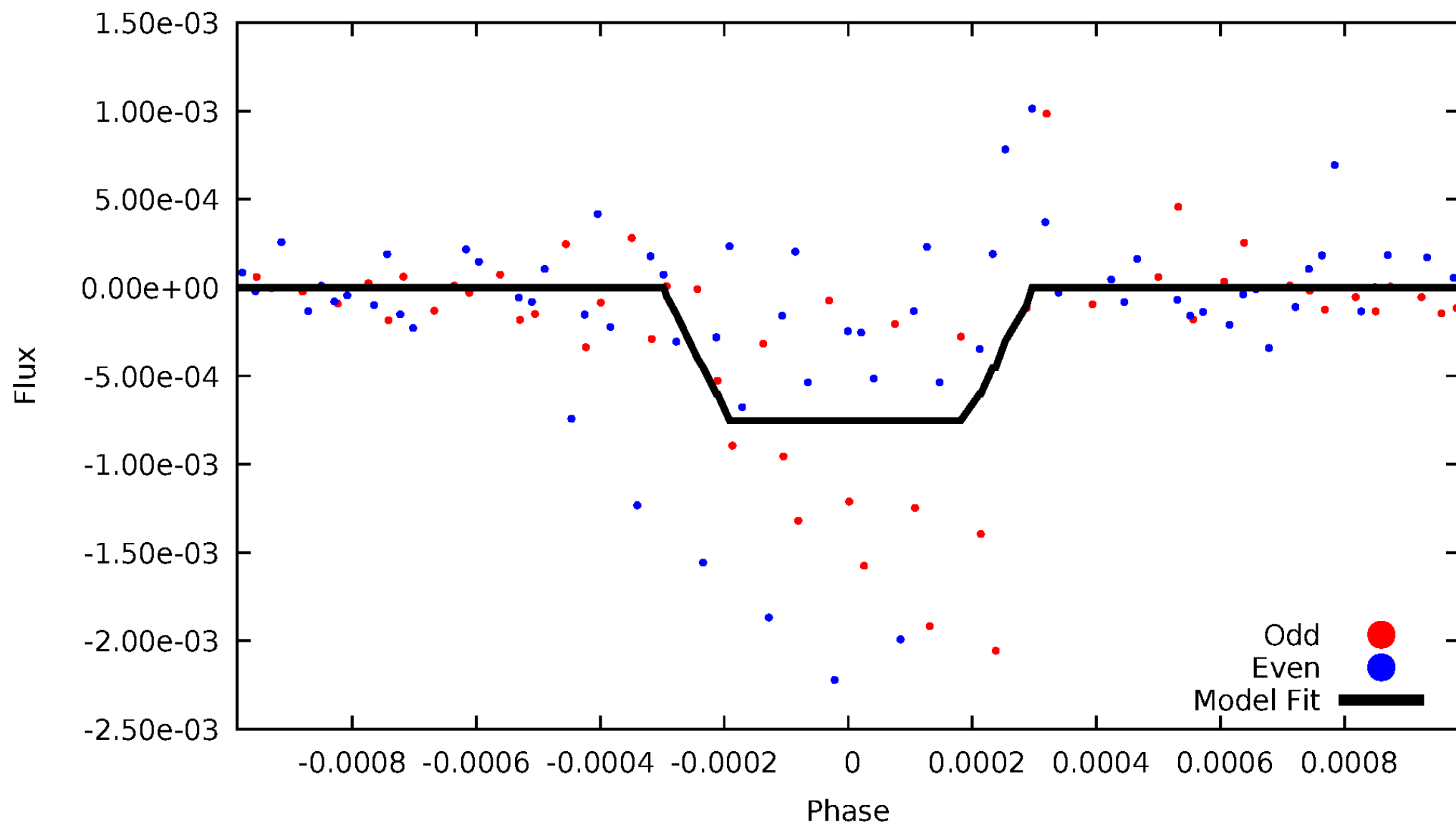
DV Odd/Even

TCE 011819949-03

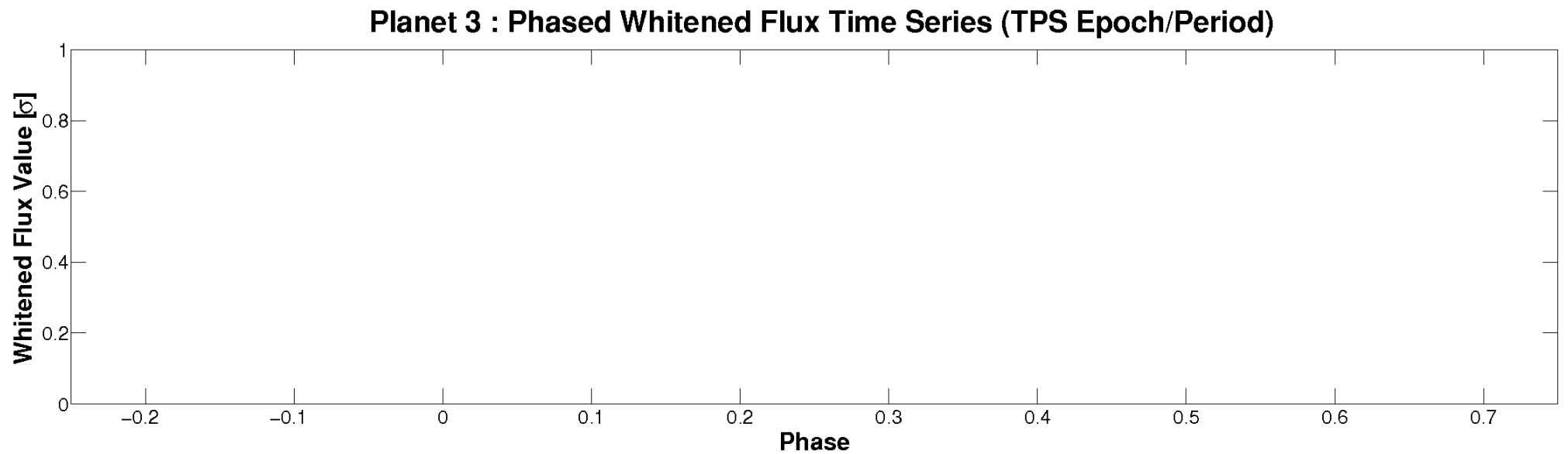
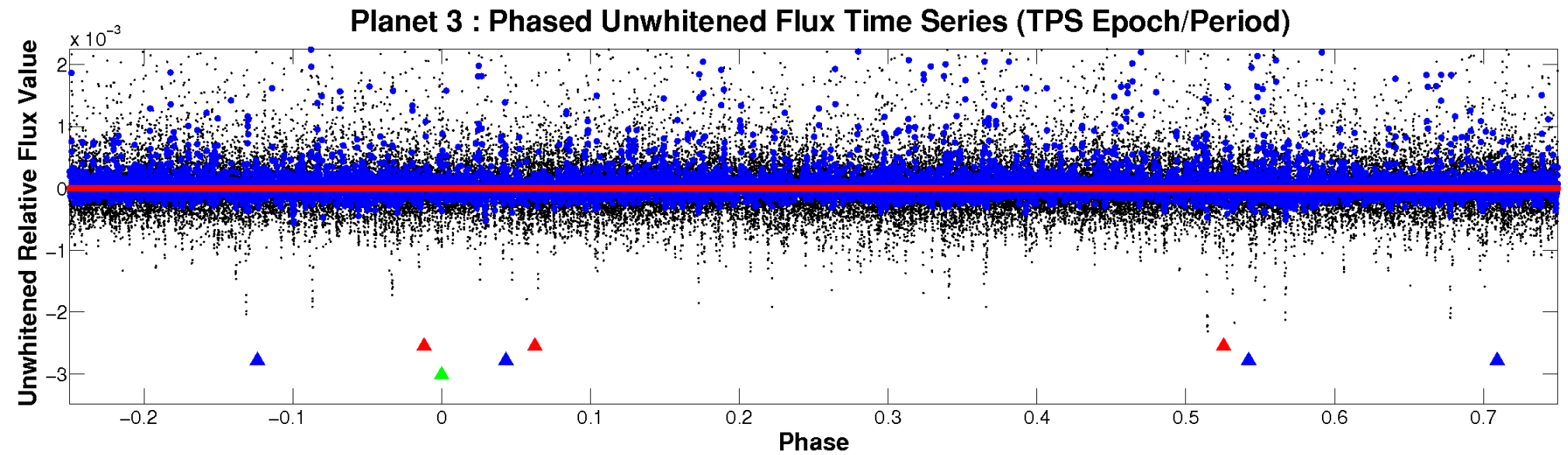


ALT Odd/Even

TCE 011819949-03

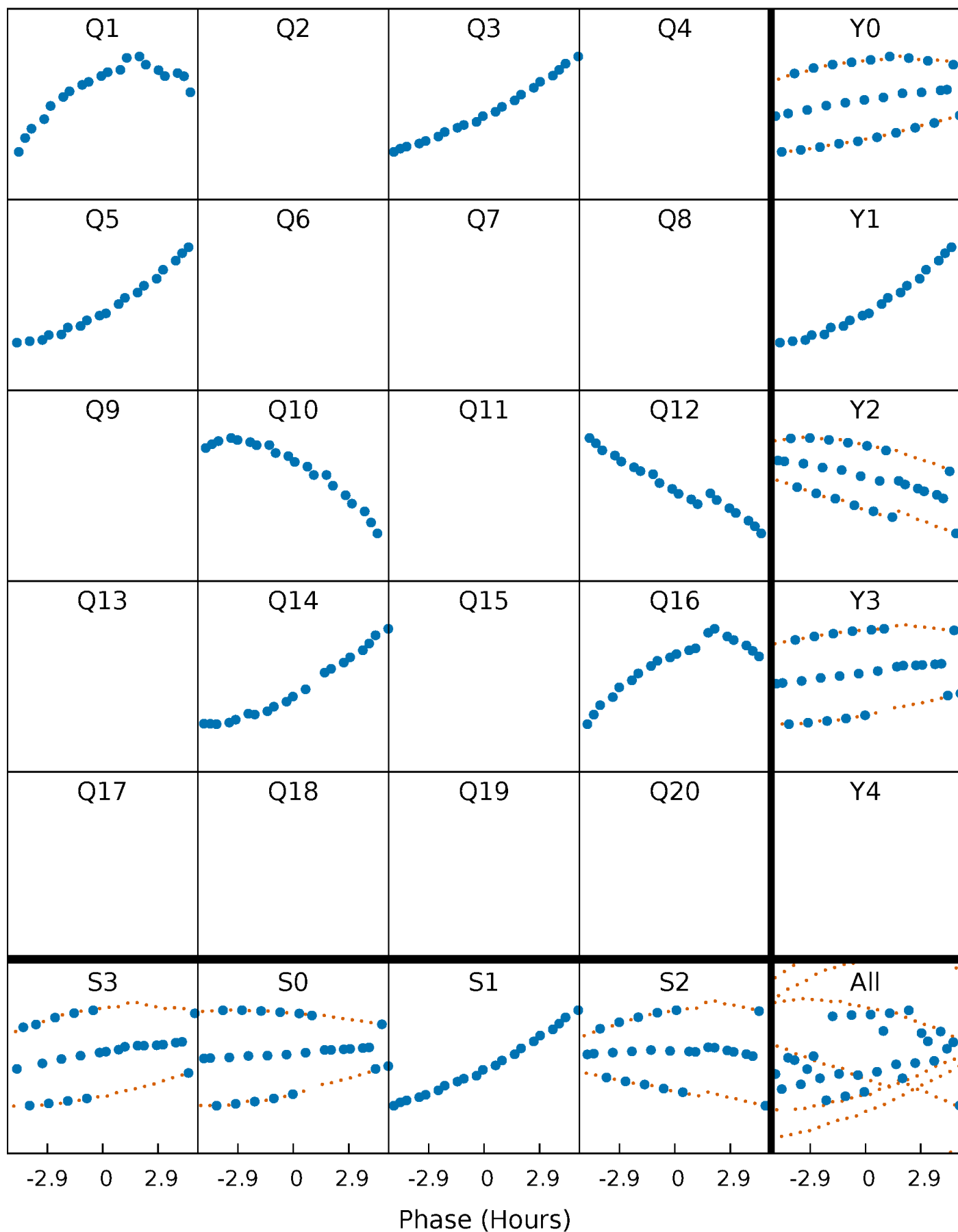


Non-Whitened Vs. Whitened Light Curve



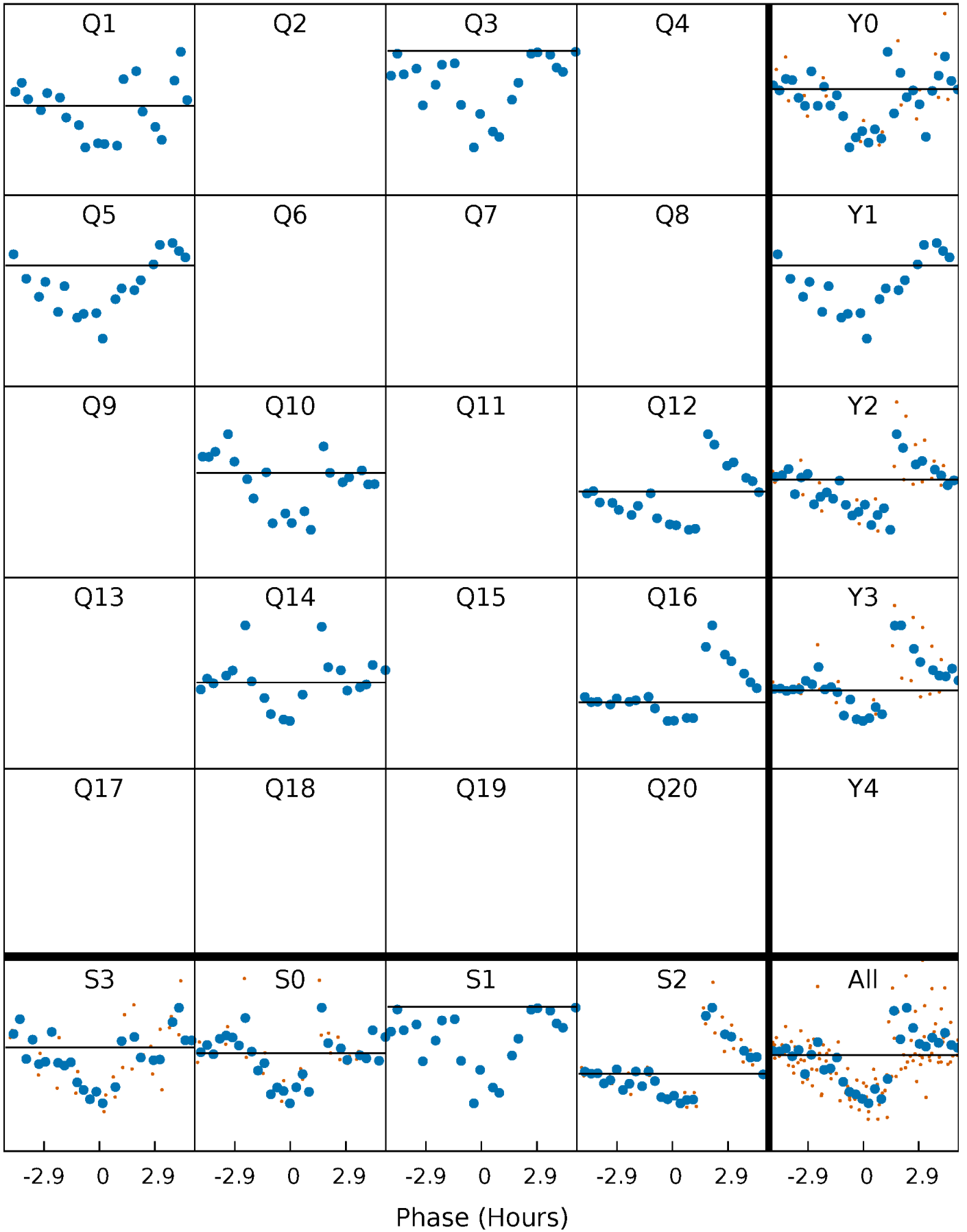
PDC Quarter-Phased Transit Curves

TCE 011819949-03 P=192.456052 Days $T_0=148.948498$ (BKJD)



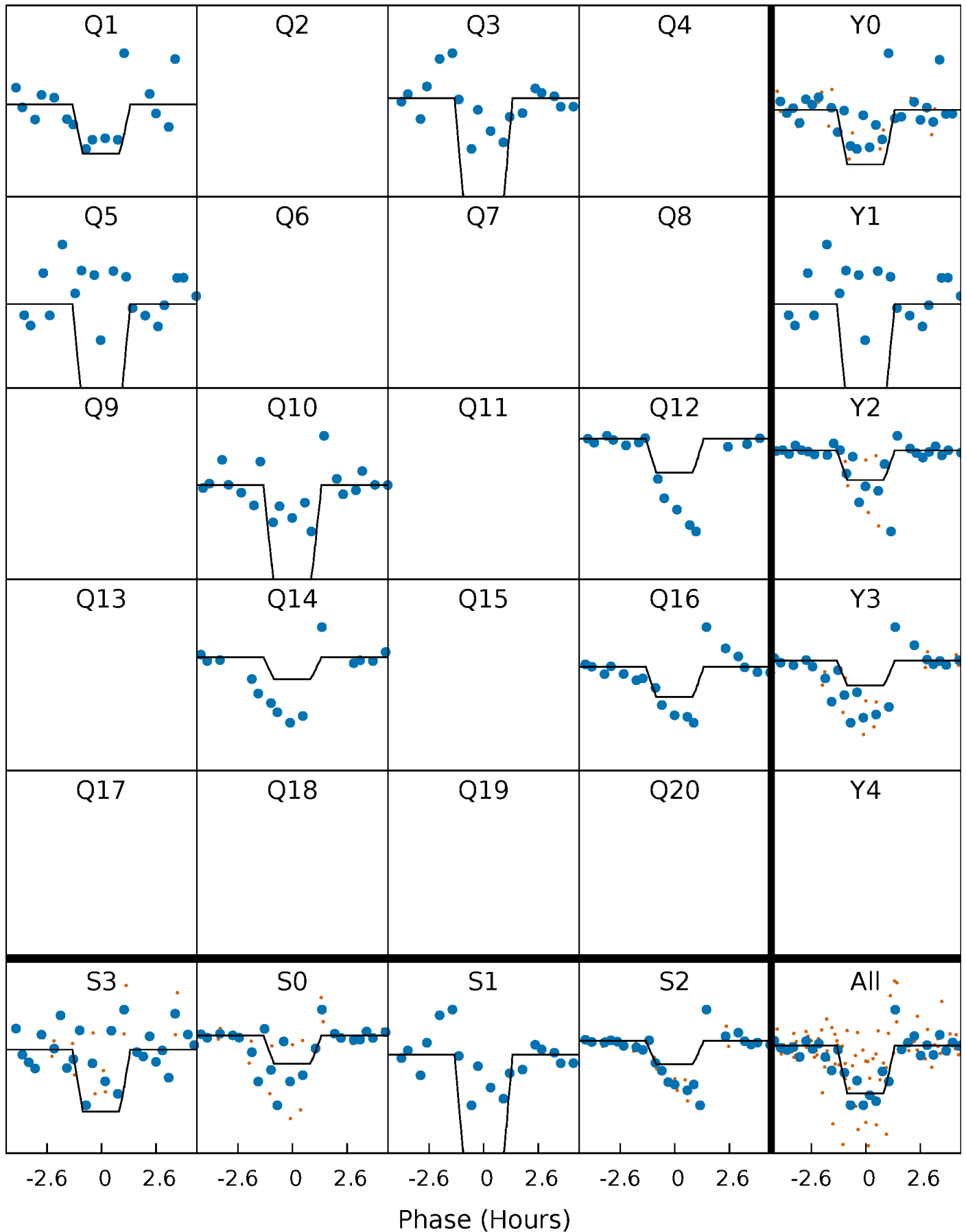
DV Quarter-Phased Transit Curves

TCE 011819949-03 $P=192.456052$ Days $T_0=148.948498$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

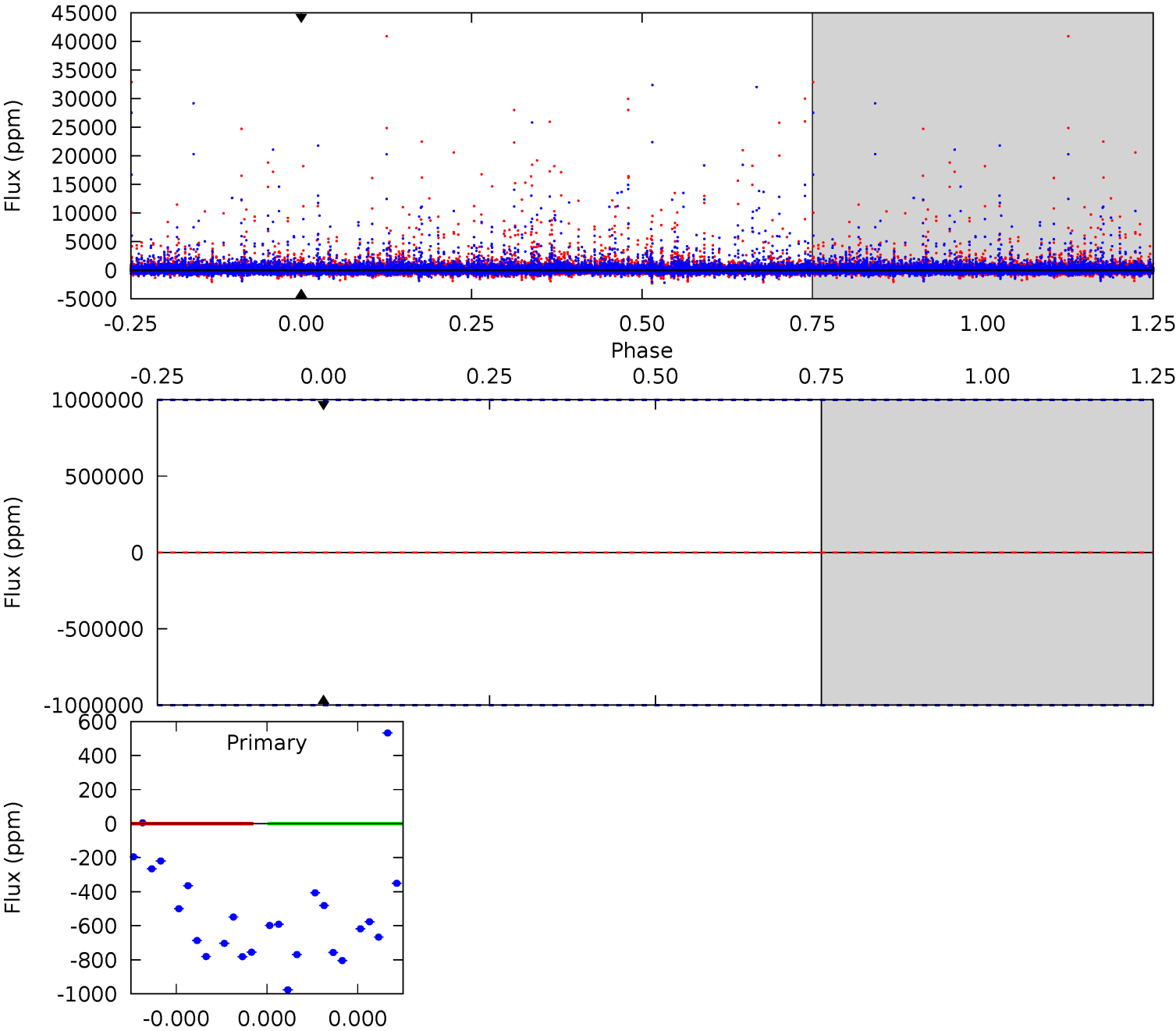
TCE 011819949-03 P=192.456052 Days $T_0=148.954759$ (BKJD)



DV Model-Shift Uniqueness Test

011819949-03, P = 192.456052 Days, E = 148.948498 Days

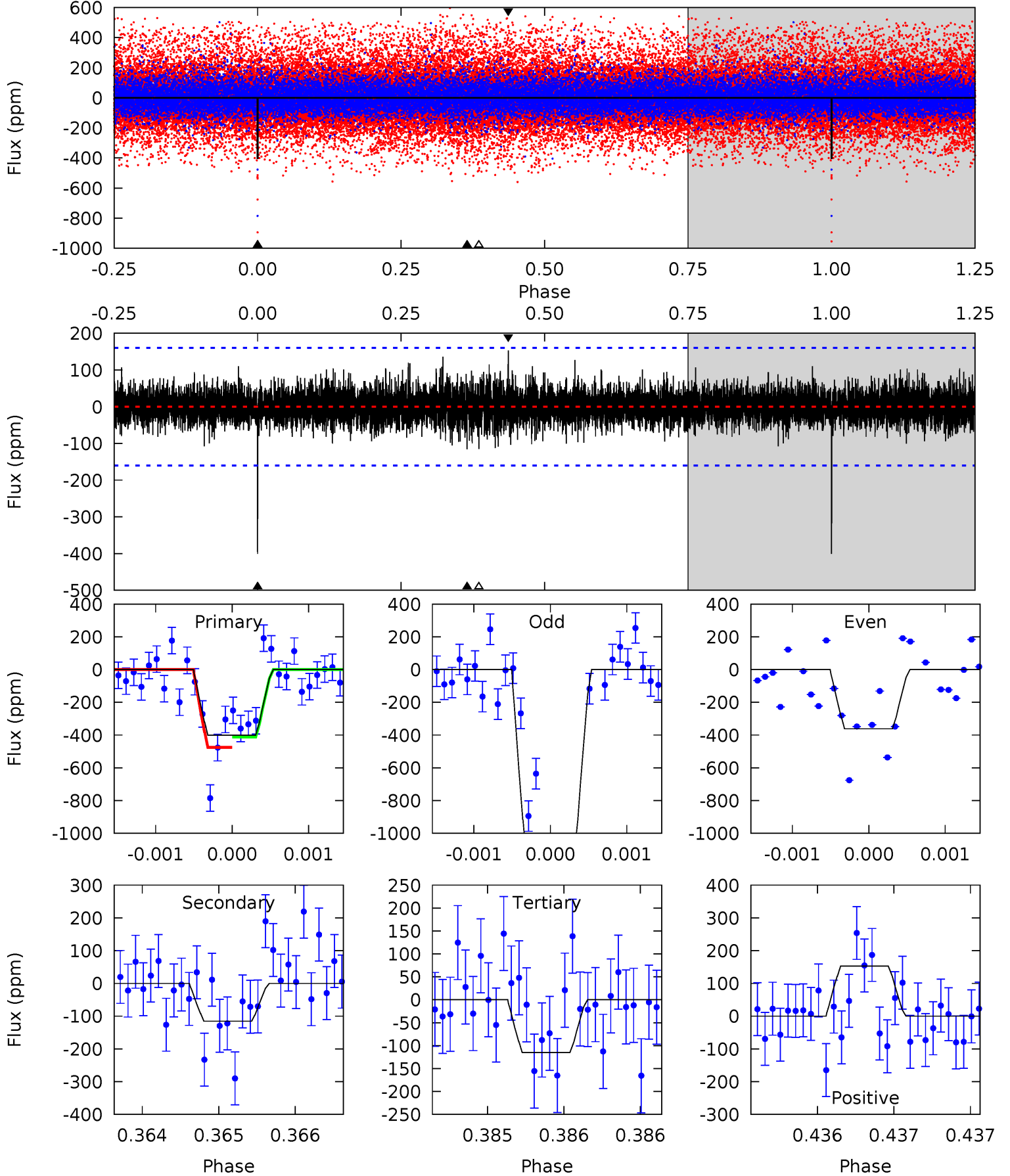
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

011819949-03, P = 192.456052 Days, E = 148.954759 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.9	4.00	3.98	5.28	5.54	3.44	1.06	9.90	8.60	0.02	-1.28	14.4	1.68	0.28	1.11



Stellar Parameters For KIC 011819949

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	5129^{+77}_{-77}	$3.884^{+0.053}_{-0.147}$	$-0.160^{+0.150}_{-0.100}$	$1.781^{+0.430}_{-0.108}$	$0.887^{+0.129}_{-0.032}$	$0.221^{+0.046}_{-0.091}$
	+2%/-2%	+1%/-4%	+94%/-62%	+24%/-6%	+15%/-4%	+21%/-41%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 011819949-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$15.50^{+16.08}_{-10.98}$	538^{+31}_{-16}	-2924^{+20349}_{-10306}	$-179.249^{+207846.092}_{-119031.196}$
Alt.	-116 ± 29	$16.01^{+15.52}_{-10.58}$	538^{+30}_{-16}	2676^{+962}_{-421}	99^{+748}_{-75}

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 $A_{obs} \gg 1.0$

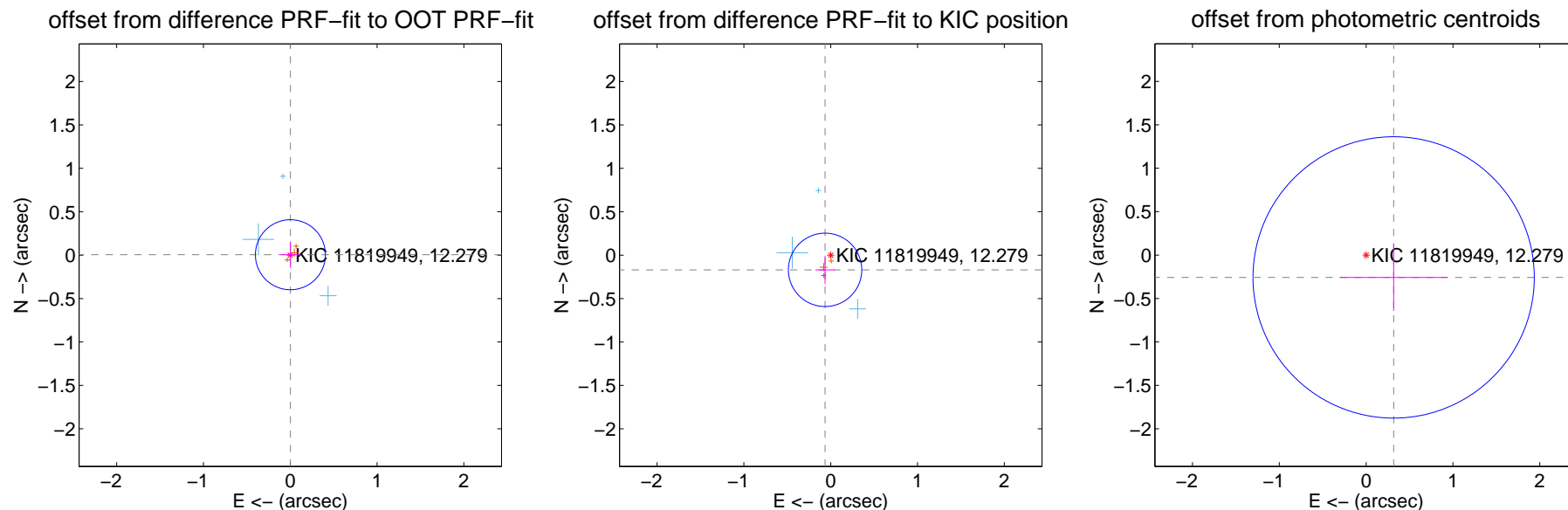
DV Centroid Data

Supplemental centroid analysis for 011819949-03. Kepler magnitude: 12.28. Transit SNR -1.00

There are 3 quarters with good PRF difference image offsets

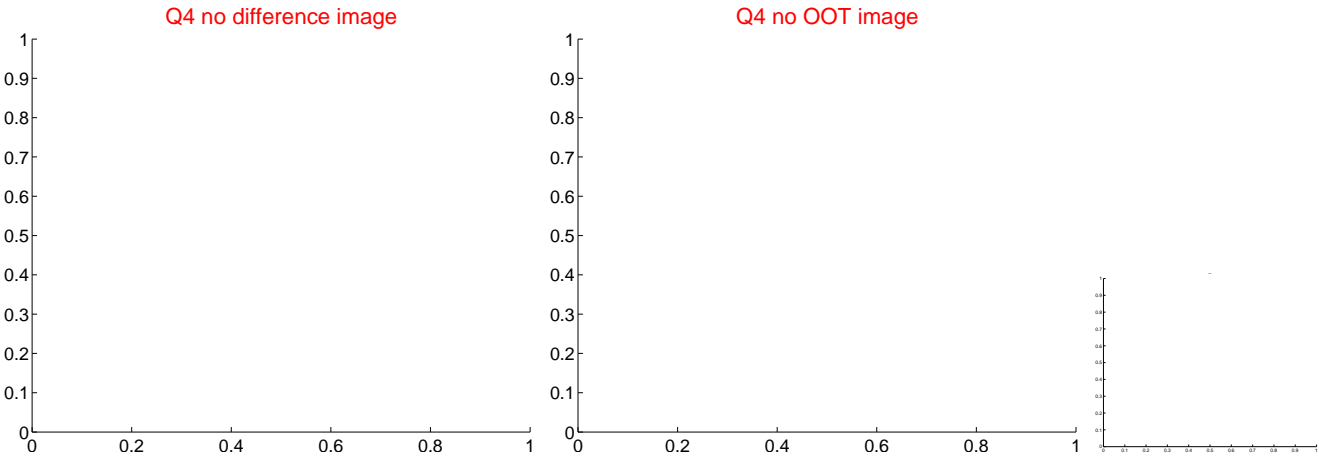
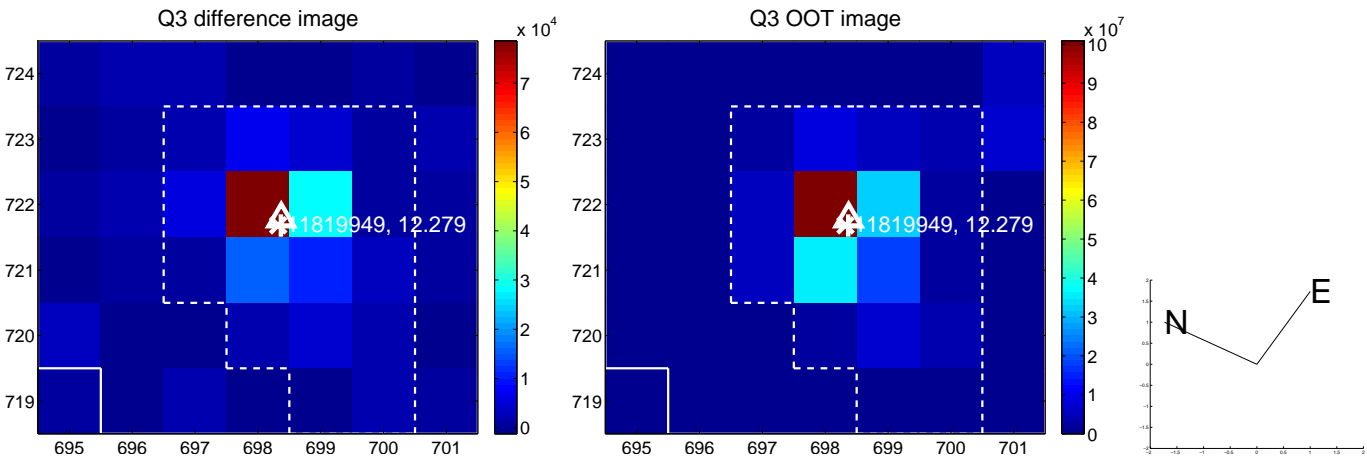
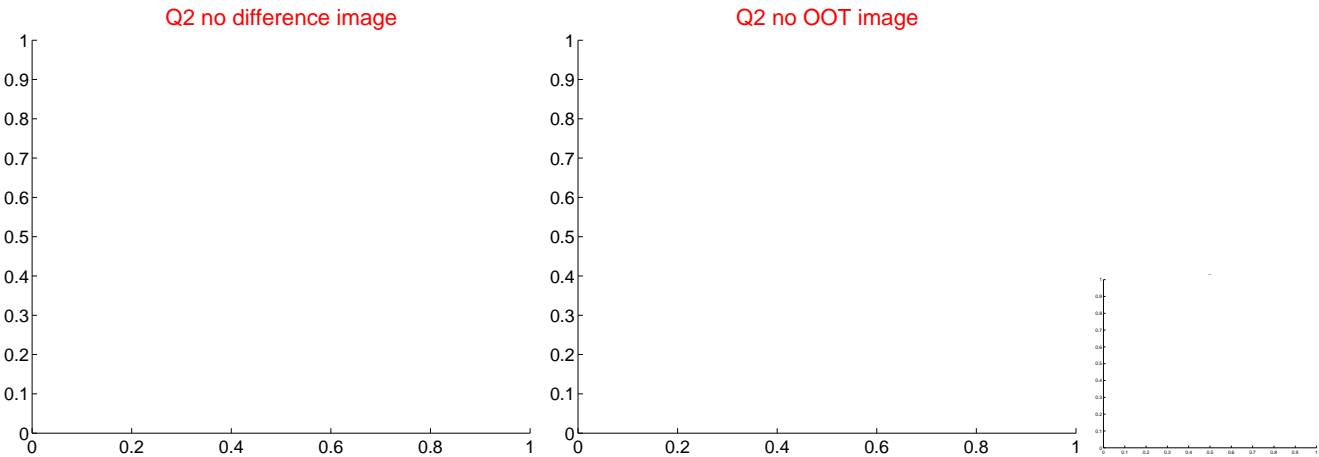
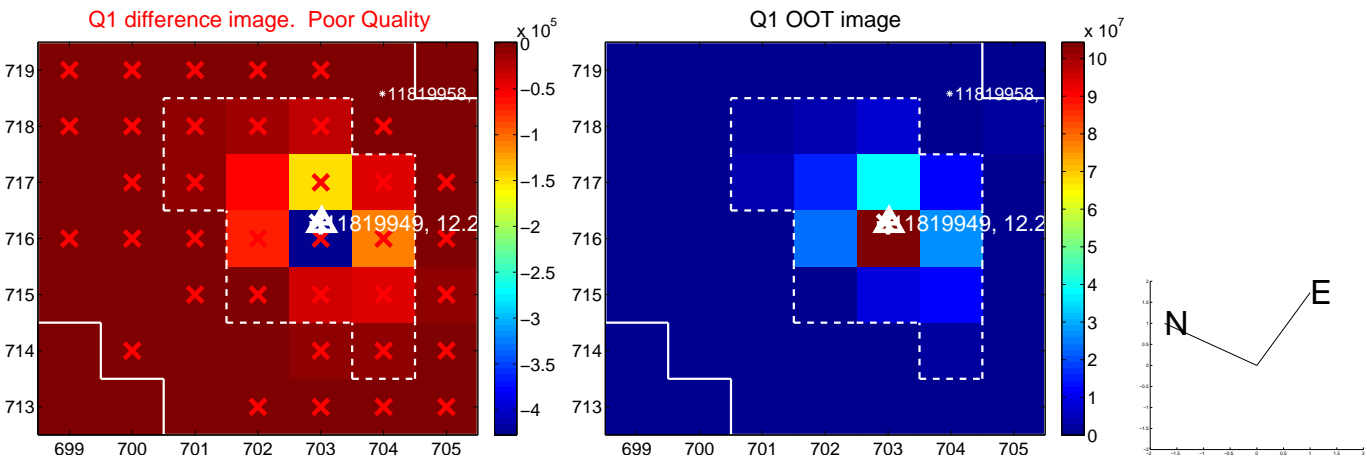
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.005 ± 0.134	0.04	-0.002 ± 0.114	0.005 ± 0.152
PRF-fit source offset from KIC position	0.181 ± 0.141	1.29	0.065 ± 0.111	-0.169 ± 0.163
photometric centroid source offset	0.41 ± 0.54	0.76	-0.32 ± 0.62	-0.26 ± 0.38

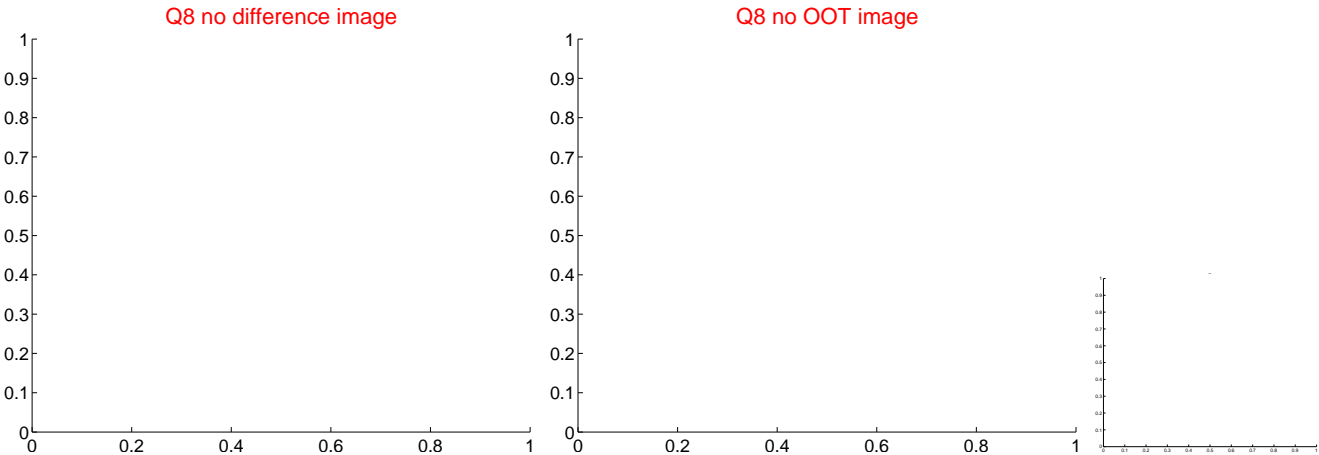
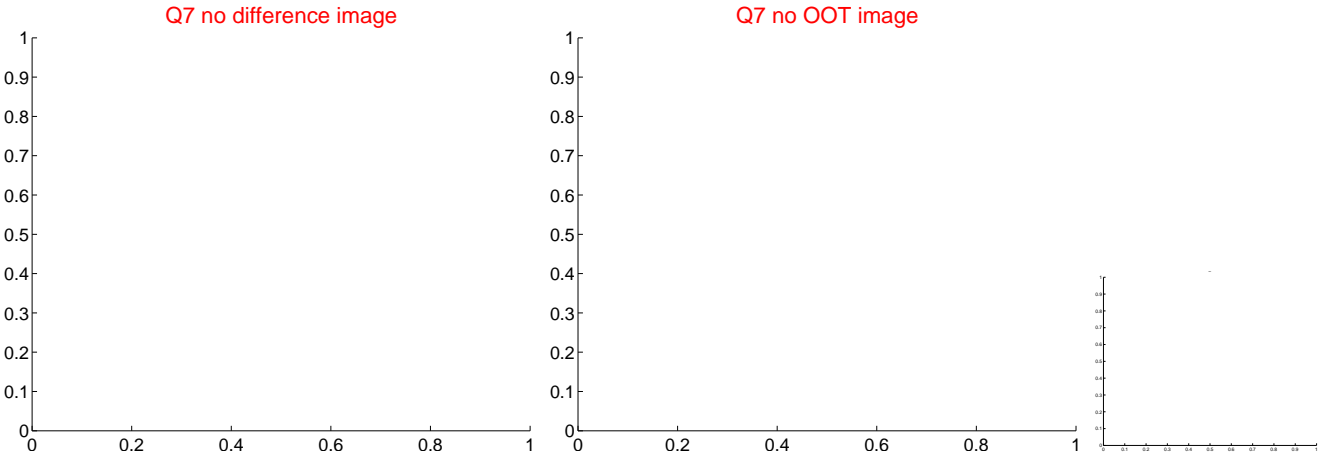
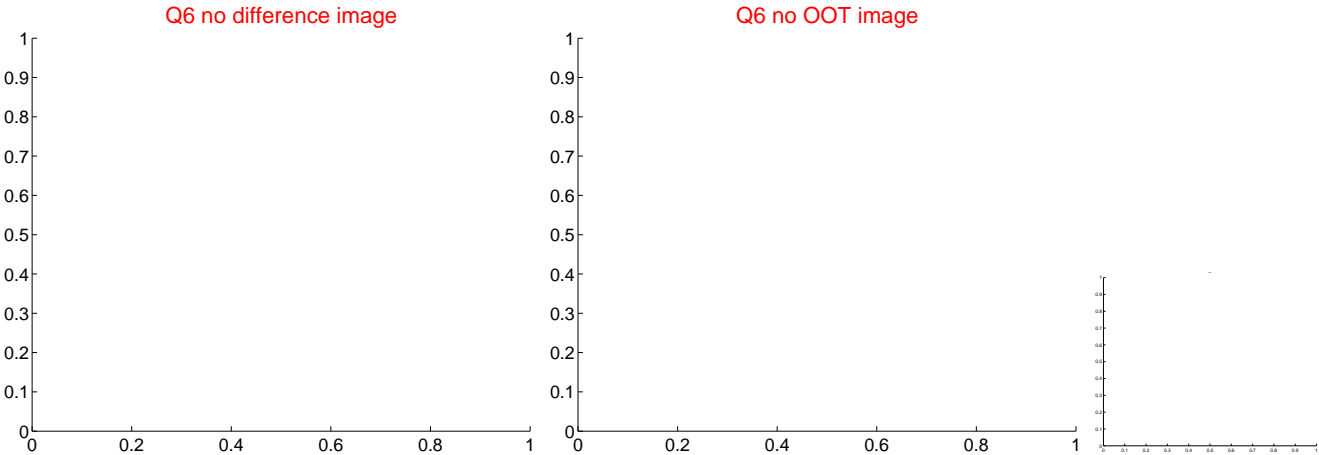
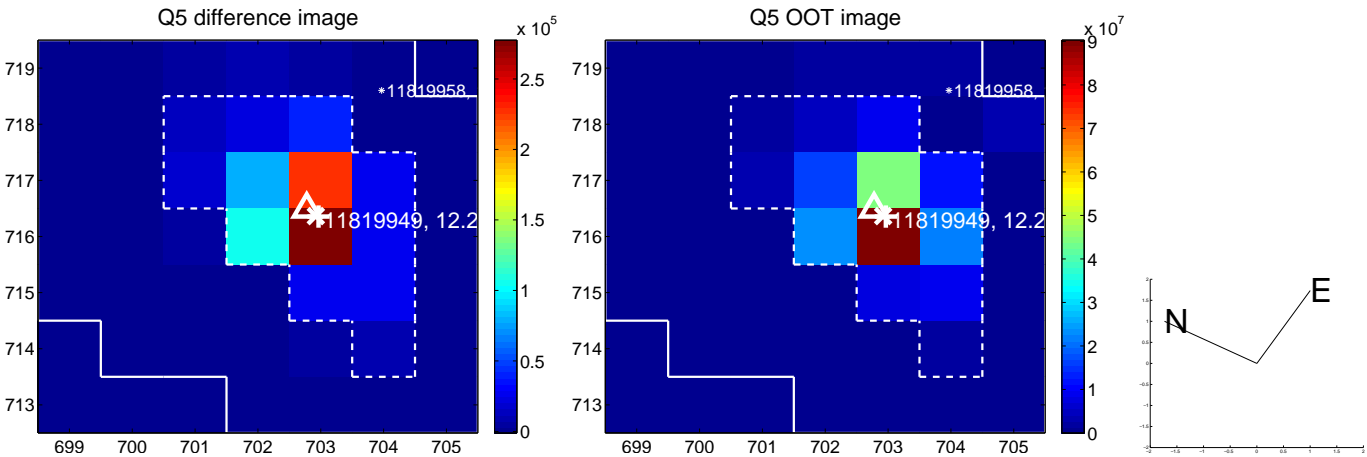


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

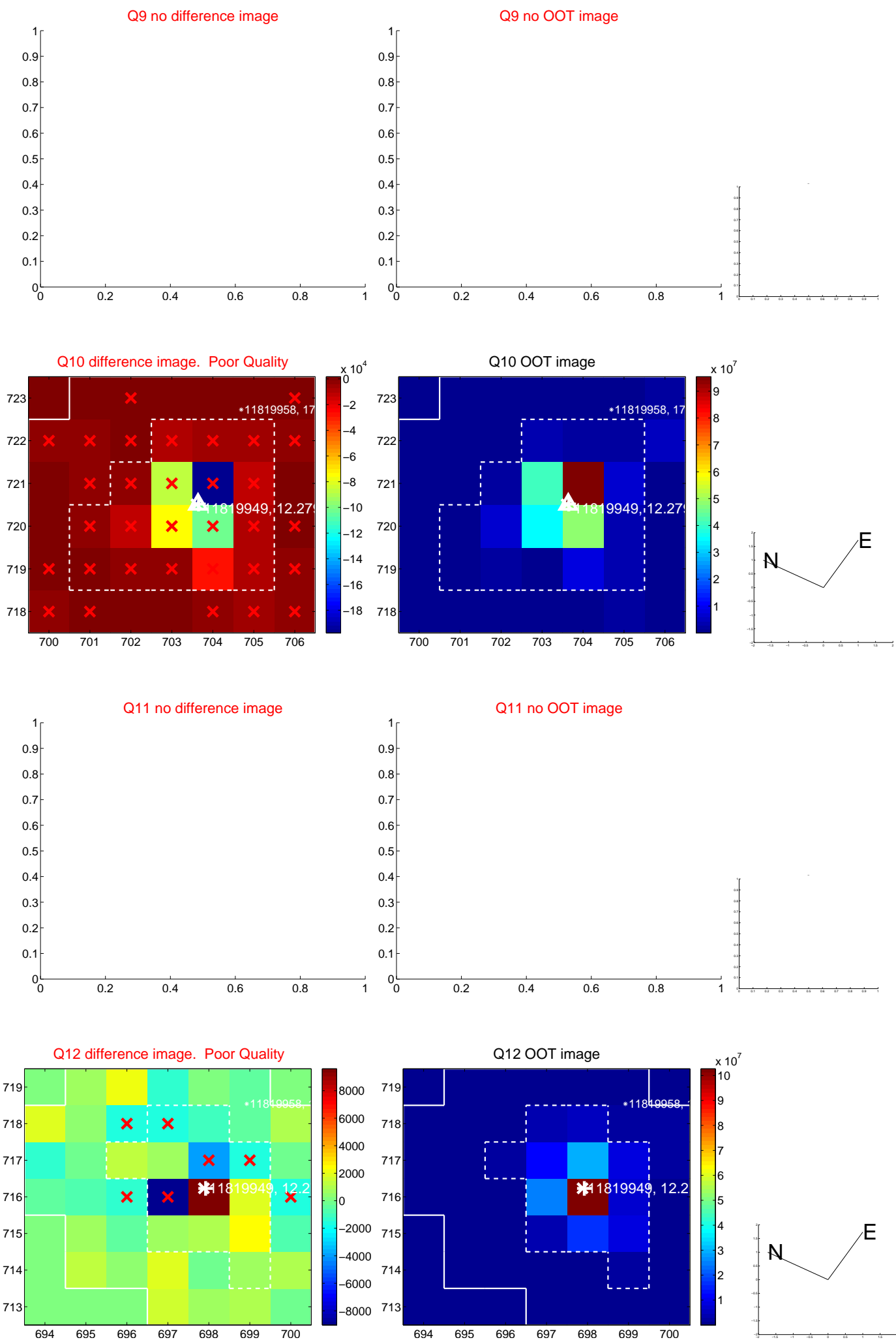
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



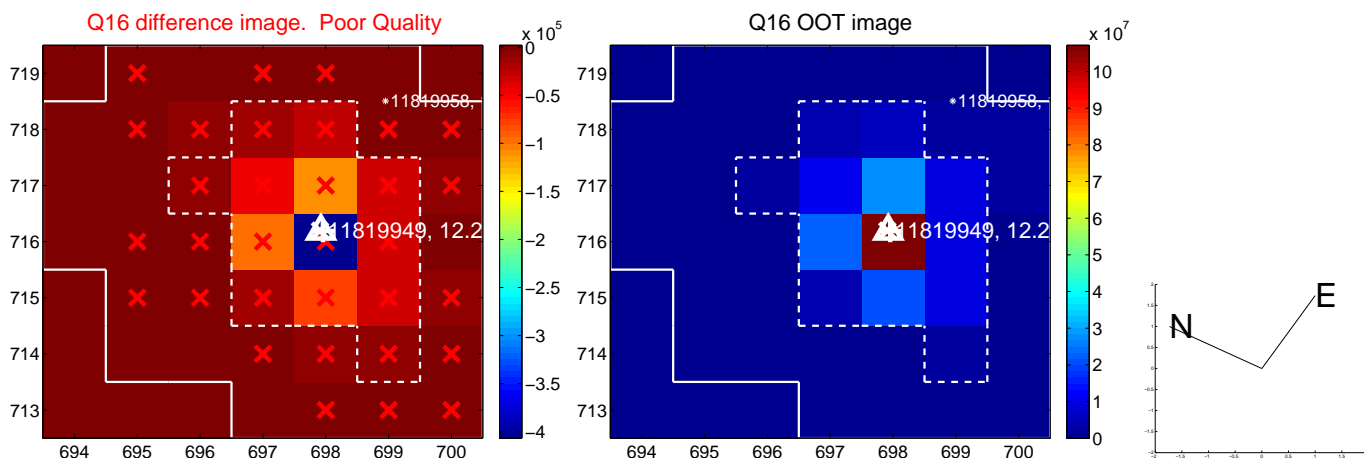
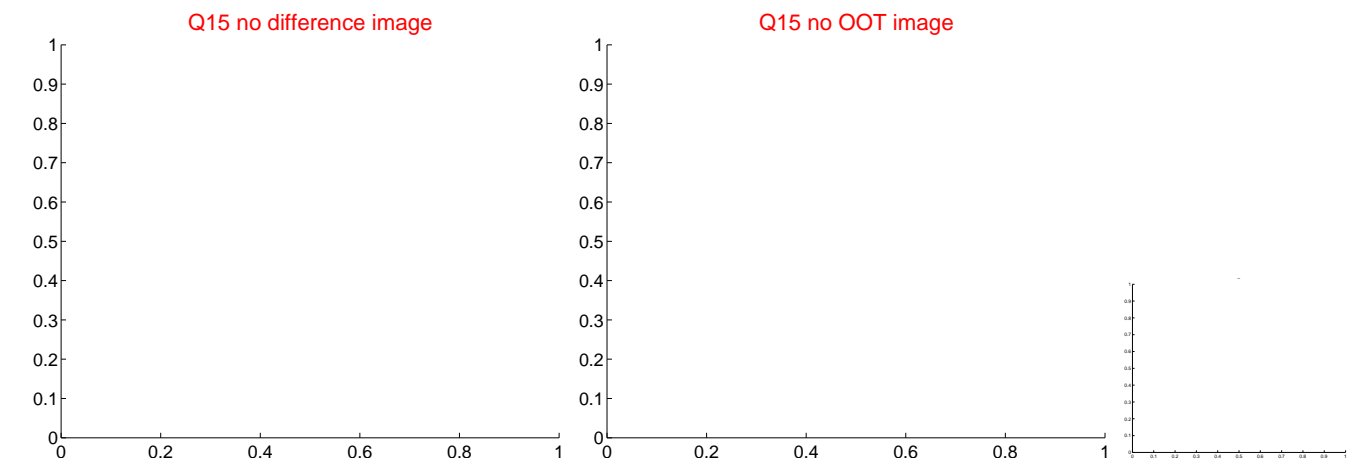
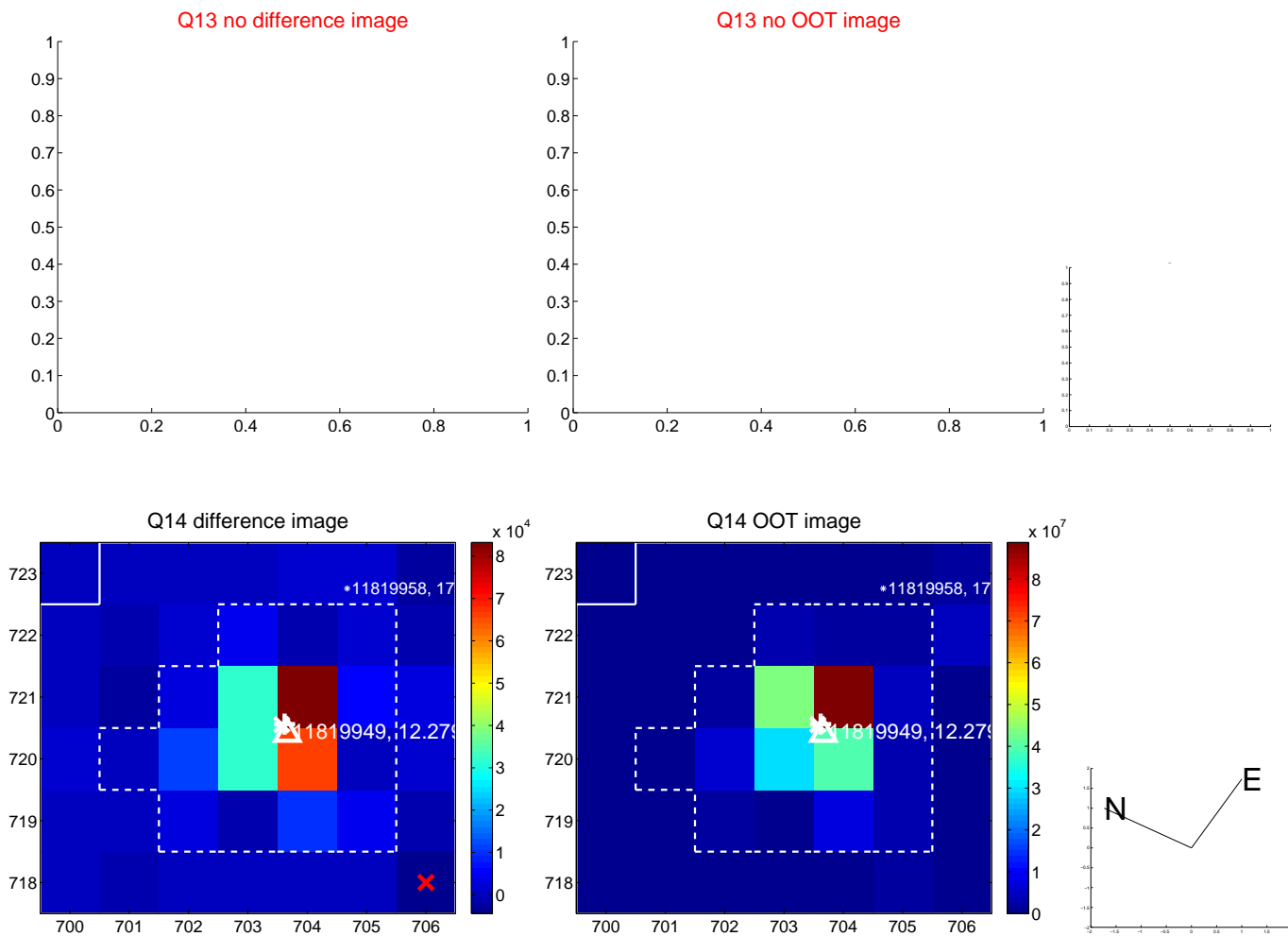
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



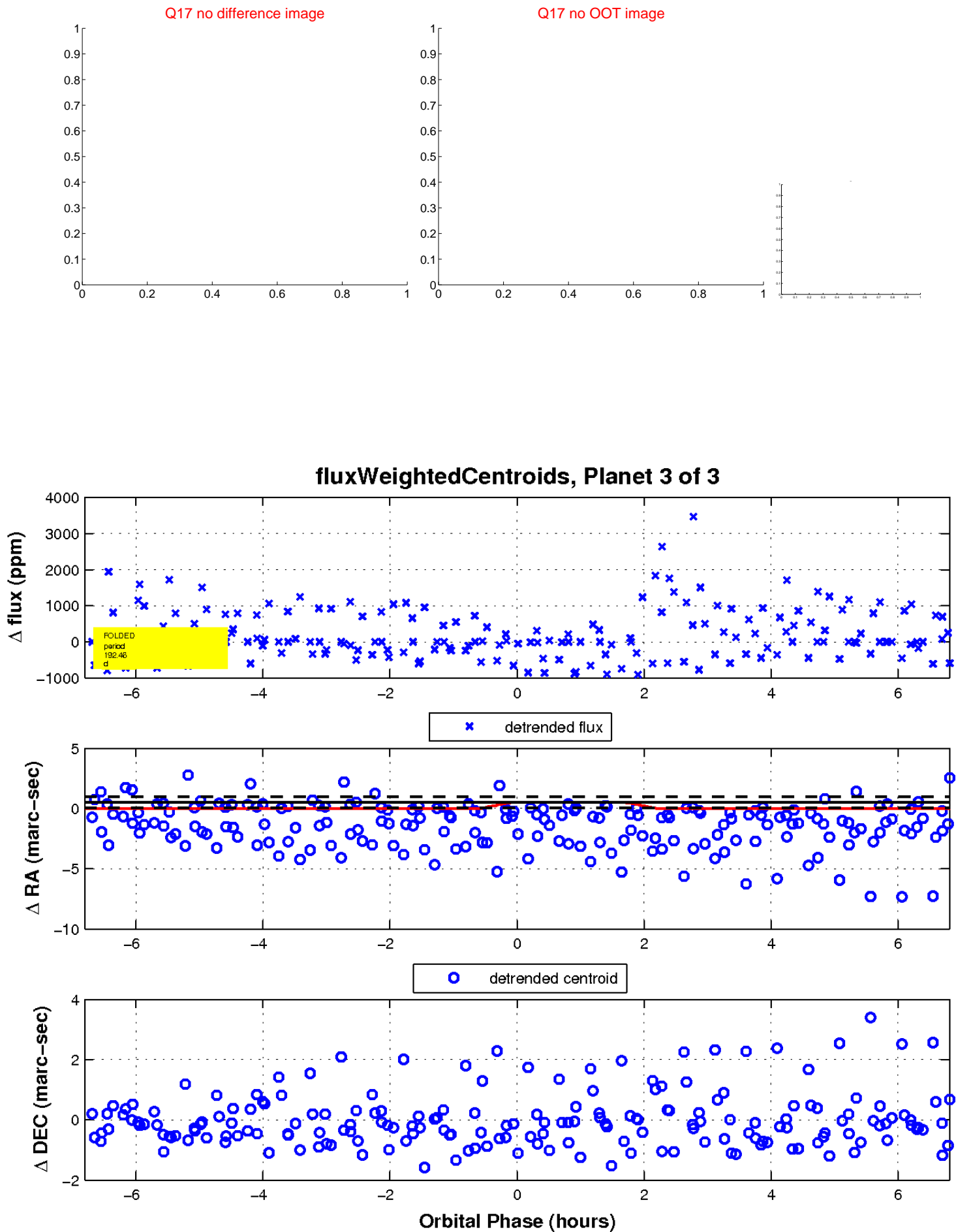
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



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



UKIRT Image

Declination

