

KIC 011919968

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})
011919968-01	OBS	No	2.628739	131.606703	48.6	14.242	10.3	6.3	2.53	7935	1.79	10642.44
011919968-02	OBS	No	267.756509	141.587893	1236.1	7.836	12.6	9.2	2.53	7935	16.41	22.37
011919968-04	OBS	No	199.755848	143.598092	562.8	9.162	11.6	10.6	2.53	7935	6.83	33.06
011919968-05	OBS	No	268.049107	311.741872	571.9	8.594	11.5	9.1	2.53	7935	6.14	22.34
011919968-06	OBS	No	446.889317	253.774294	898.0	9.982	10.9	11.3	2.53	7935	8.18	11.30
011919968-07	OBS	No	380.862826	243.690824	758.5	7.345	11.2	8.0	2.53	7935	7.53	13.99
011919968-08	OBS	No	56.777775	139.781024	980.3	6.760	10.8	10.8	2.53	7935	14.72	176.93
011919968-09	OBS	No	171.288785	295.916012	482.9	5.000	10.6	-1.0	2.53	7935	5.62	40.59

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011919968-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
011919968-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_CHASES—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—HALO_GHOST
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011919968-08	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
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Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

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

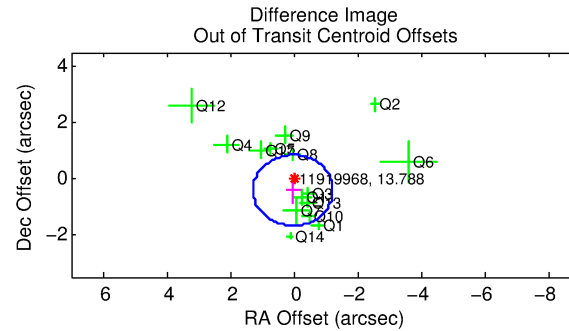
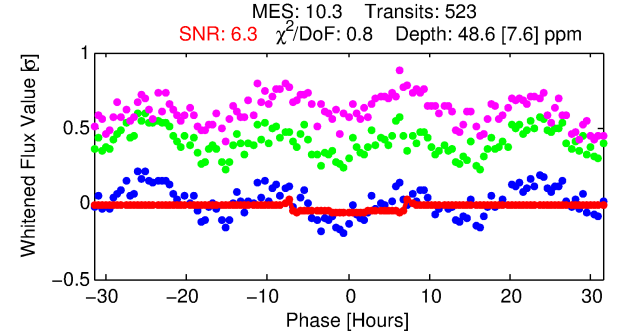
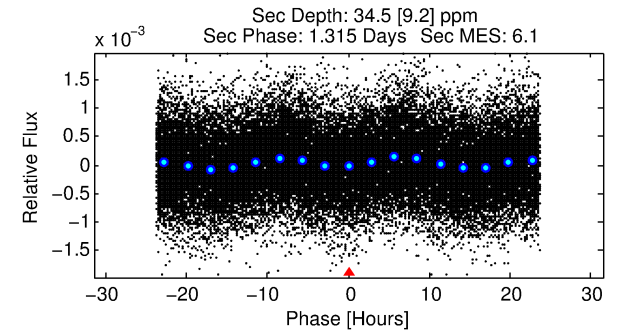
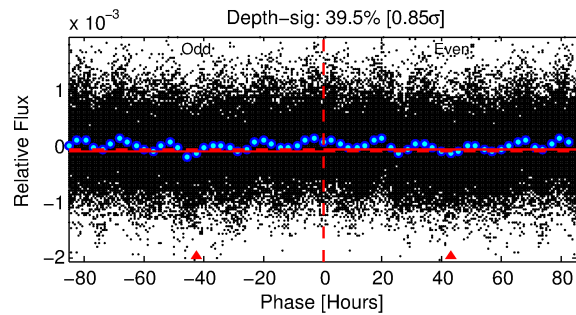
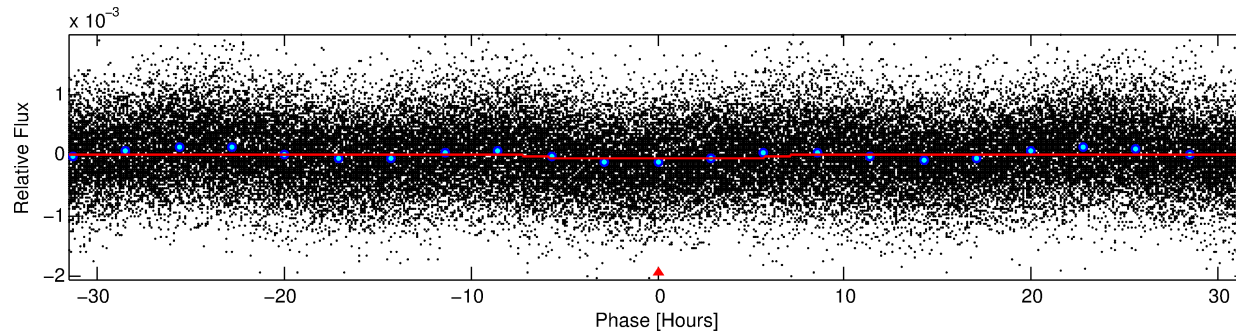
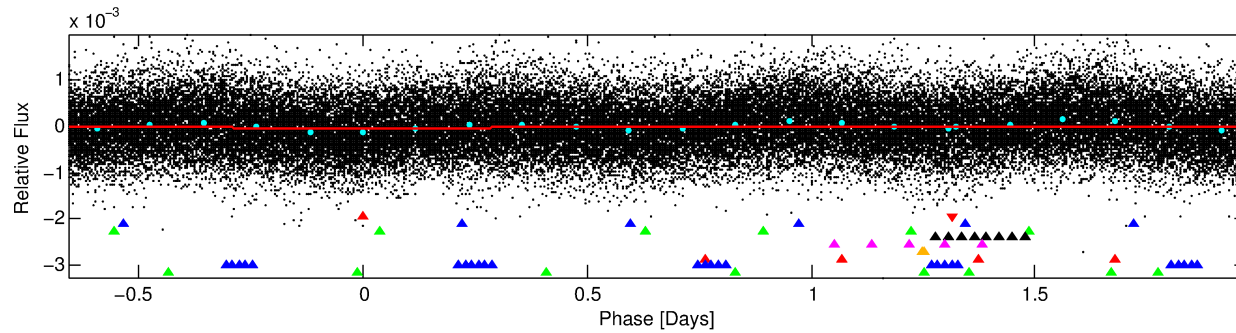
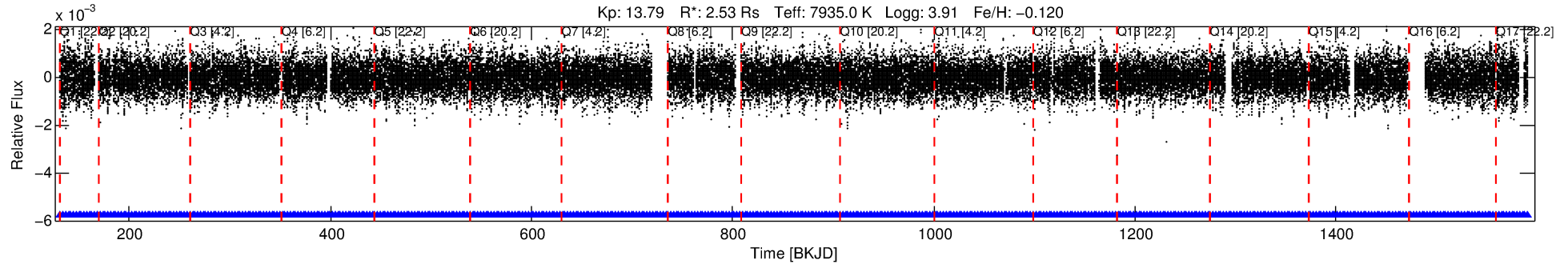
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011919968-01

No Significant Match Found

DV One-Page Summary

KIC: 11919968 Candidate: 1 of 9 Period: 2.629 d



DV Fit Results:

Period = 2.62874 [0.00004] d
Epoch = 131.6067 [0.0065] BKJD
Rp/R* = 0.0065 [0.0049]
a/R* = 1.51 [3.71]
b = 0.30 [13.32]
Seff = 10642.44 [5477.26]
Teq = 2590 [333] K
Rp = 1.79 [1.51] Re
a = 0.0461 [0.0150] AU
Ag = 12.56 [20.24] [0.57 σ]
Teffp = 7538 [2912] K [1.69 σ]

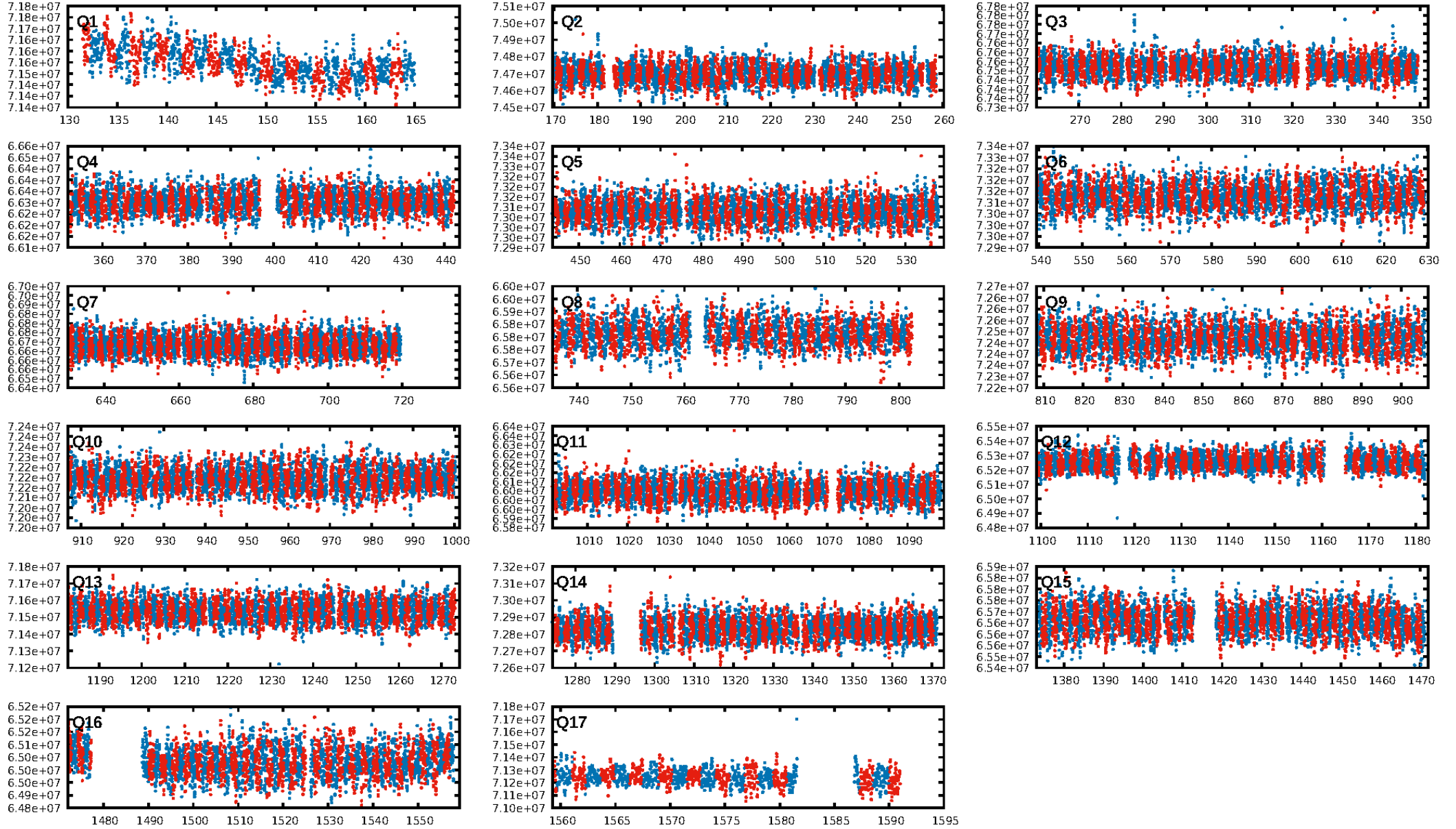
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [82.44 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [499/499]
GhostDiagnostic-chr: 29.18
Centroid-sig: 29.4%
Centroid-so: 0.469 arcsec [0.80 σ]
OotOffset-rm: 0.416 arcsec [0.99 σ]
KicOffset-rm: 0.505 arcsec [1.22 σ]
OotOffset-st: 4/3/3/5 [15]
KicOffset-st: 4/3/3/5 [15]
DiffImageQuality-fgm: 0.87 [13/15]
DiffImageOverlap-fno: 1.00 [17/17]

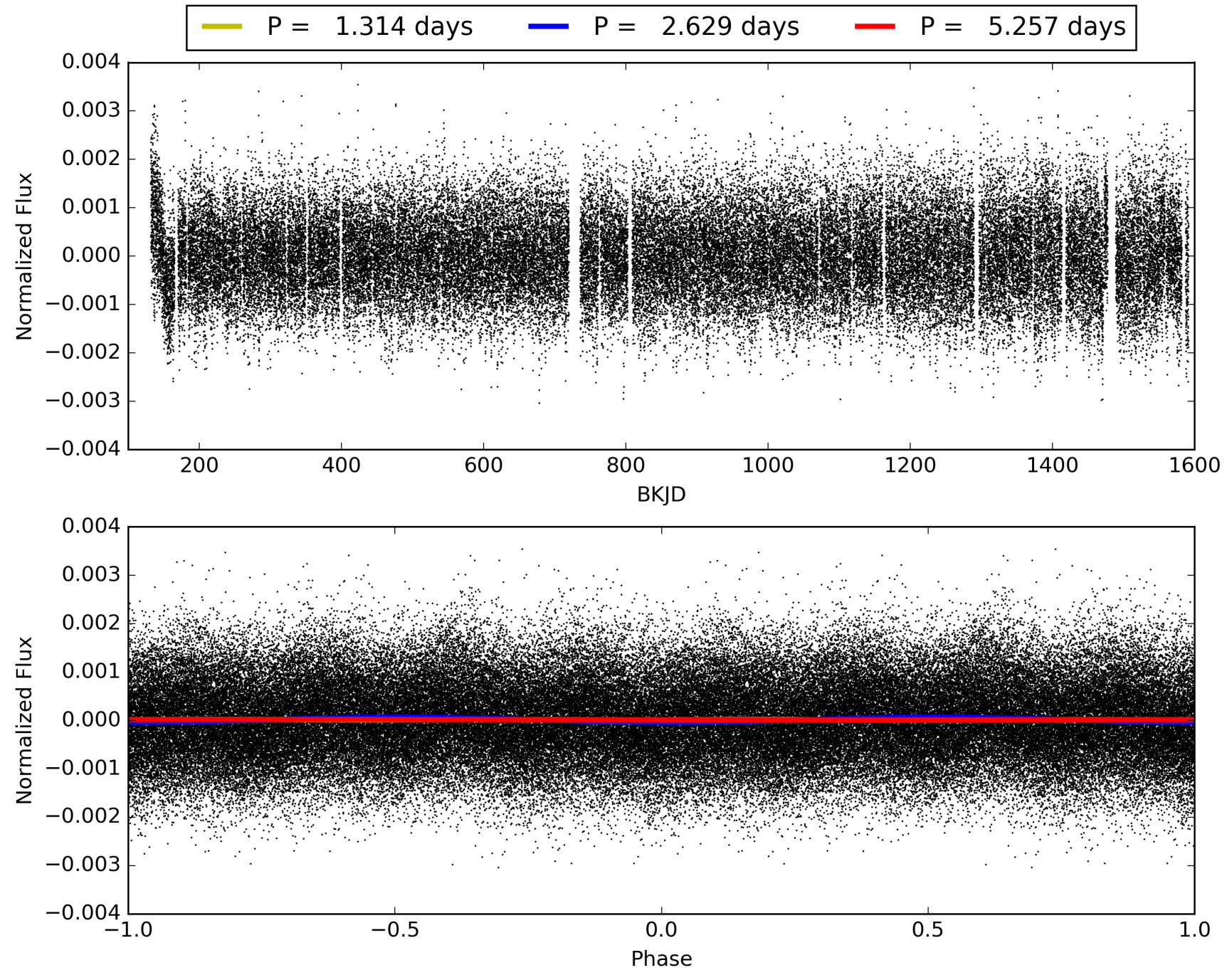
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 011919968-01, PDC Light Curves

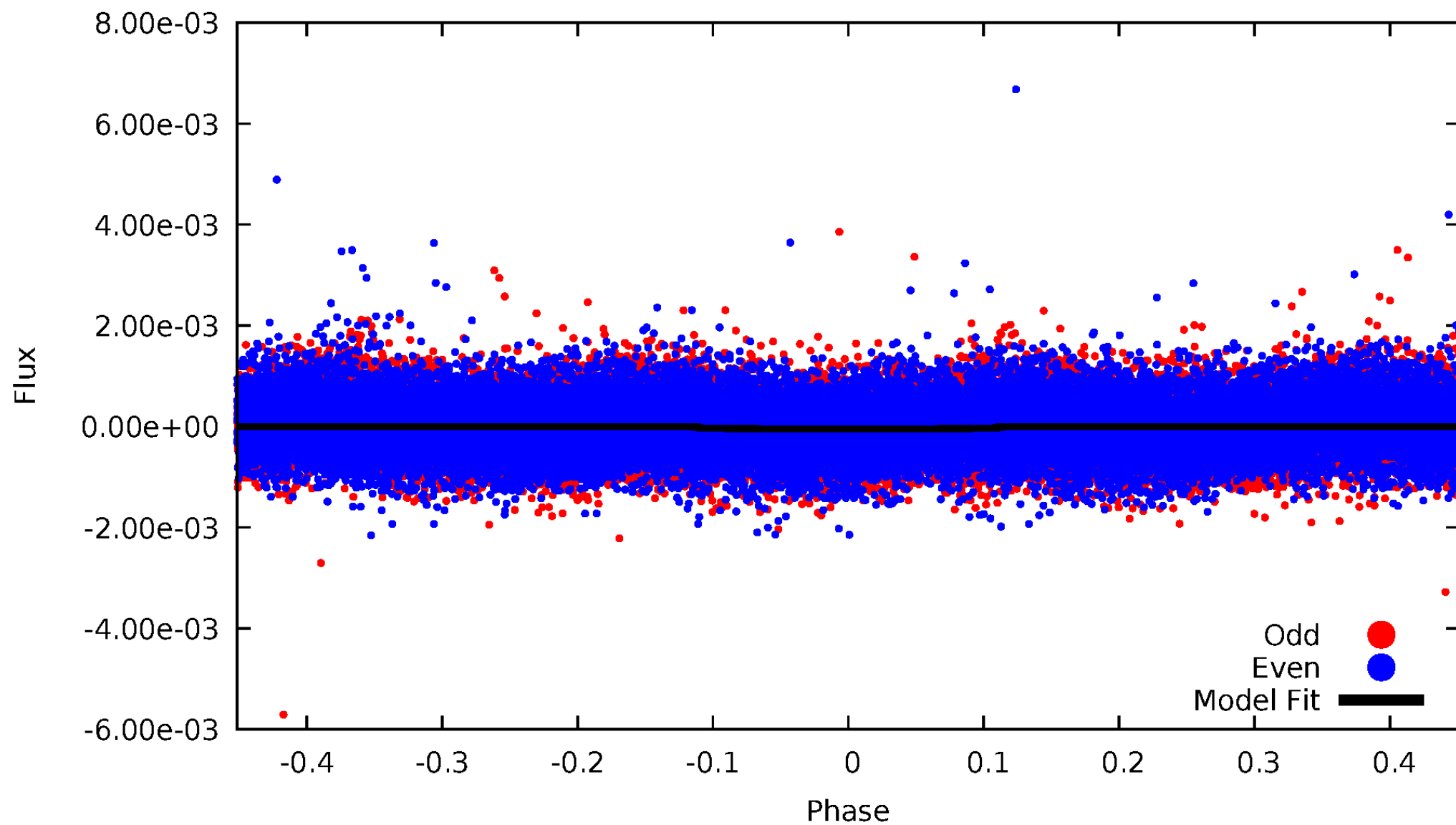


TCE 011919968-01



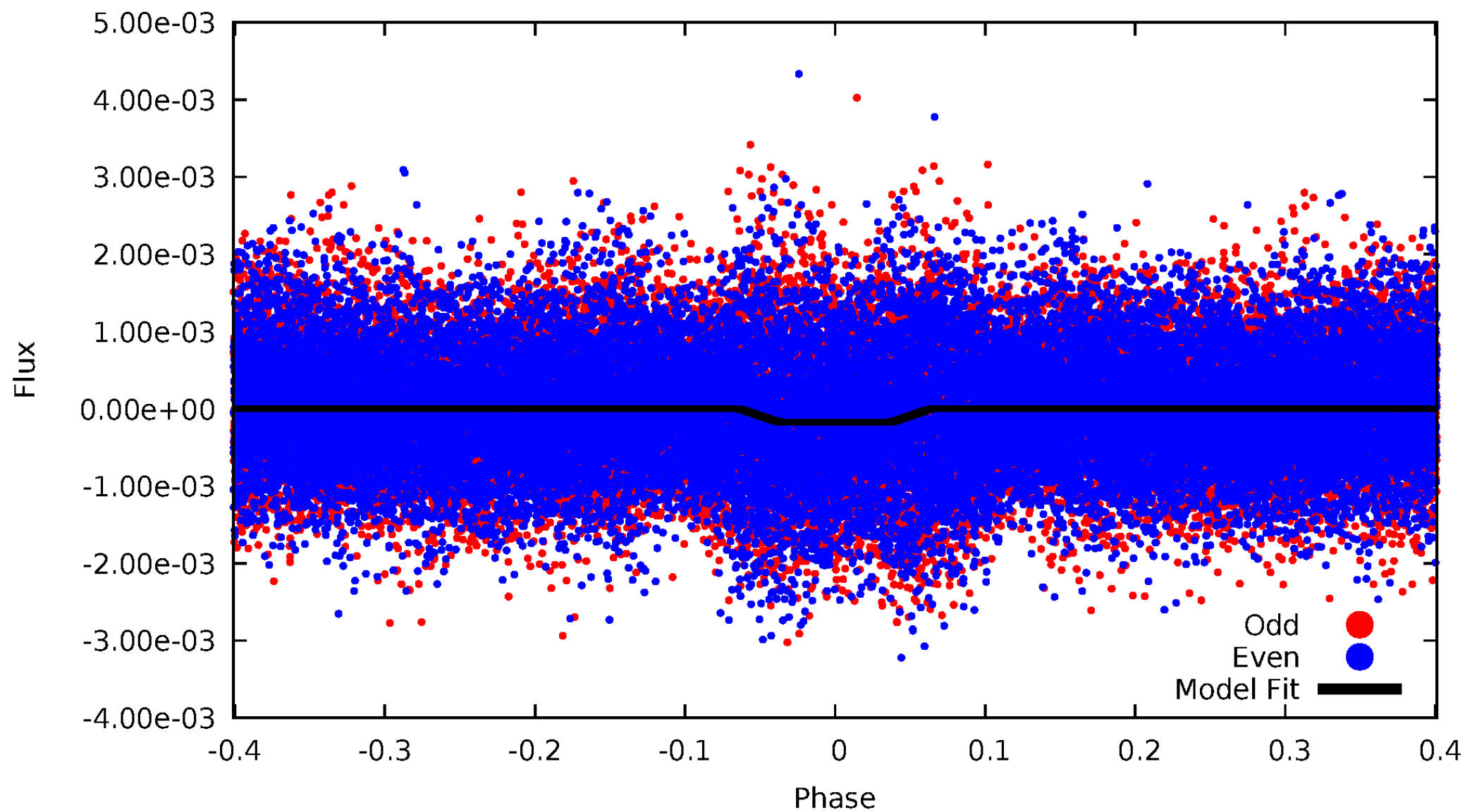
DV Odd/Even

TCE 011919968-01



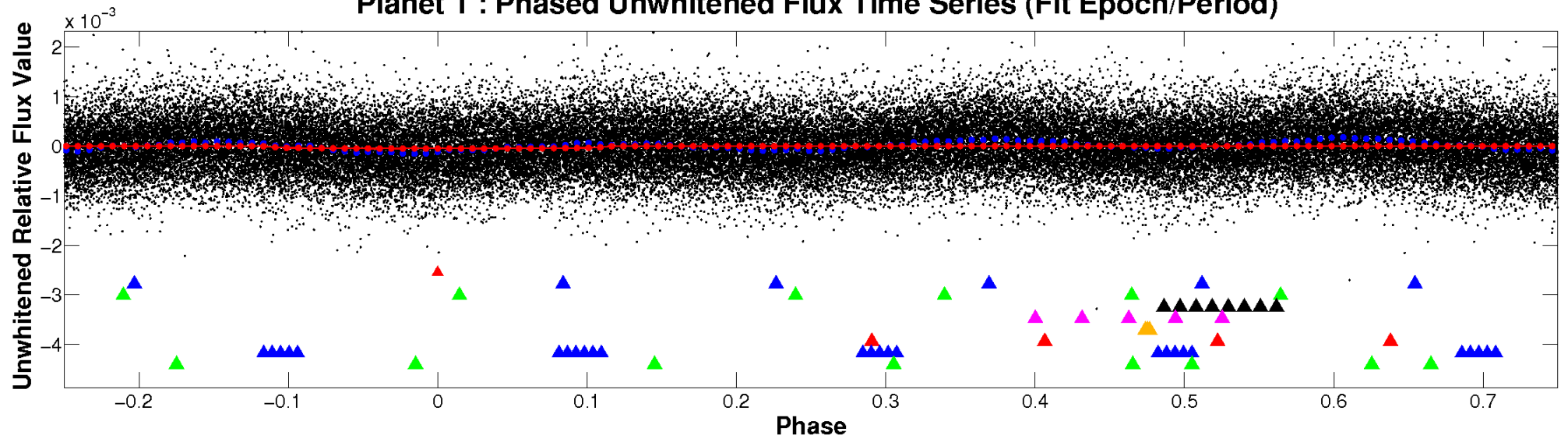
ALT Odd/Even

TCE 011919968-01

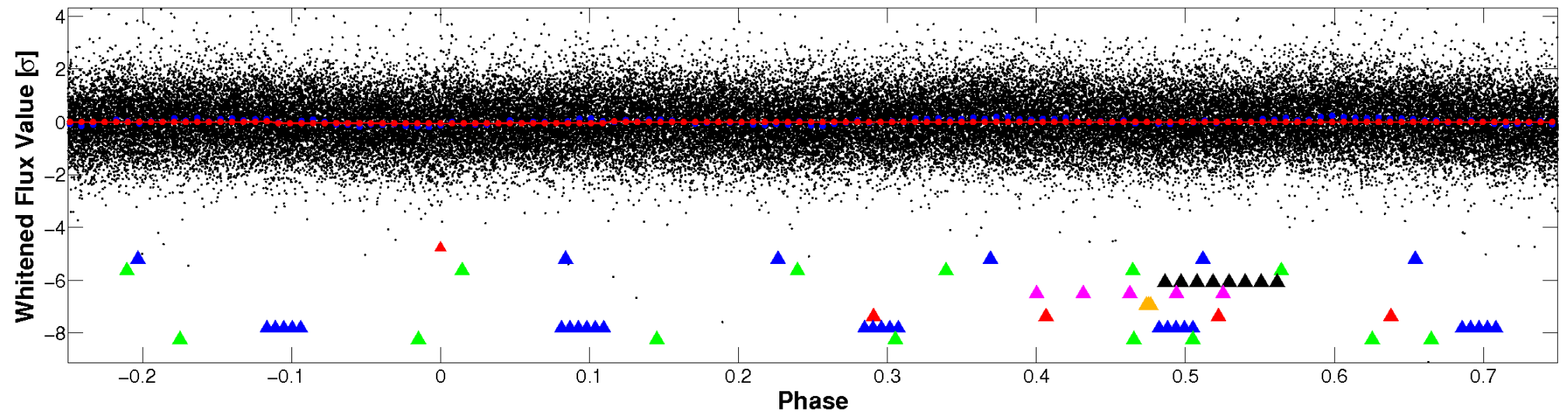


Non-Whitened Vs. Whitened Light Curve

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

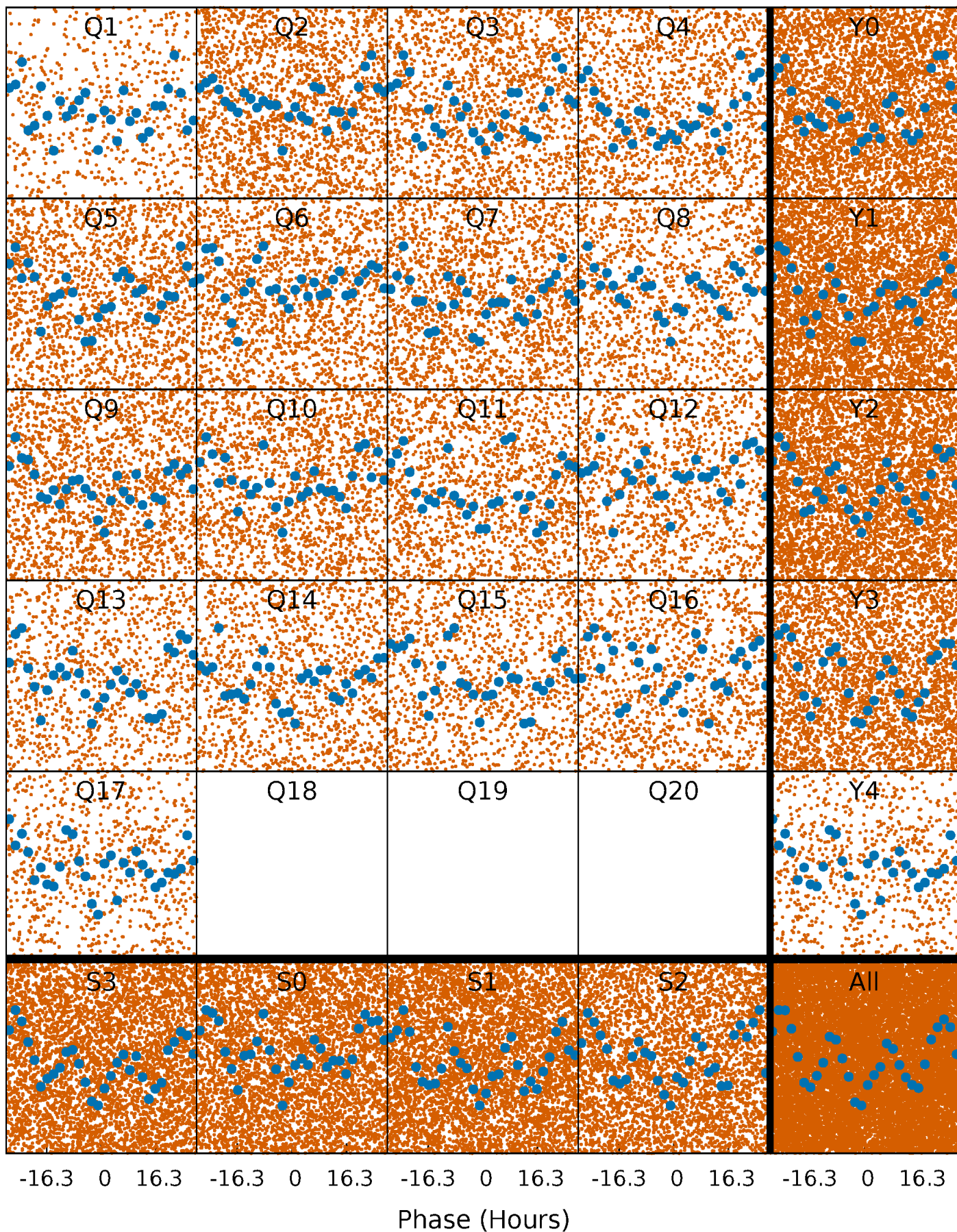


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



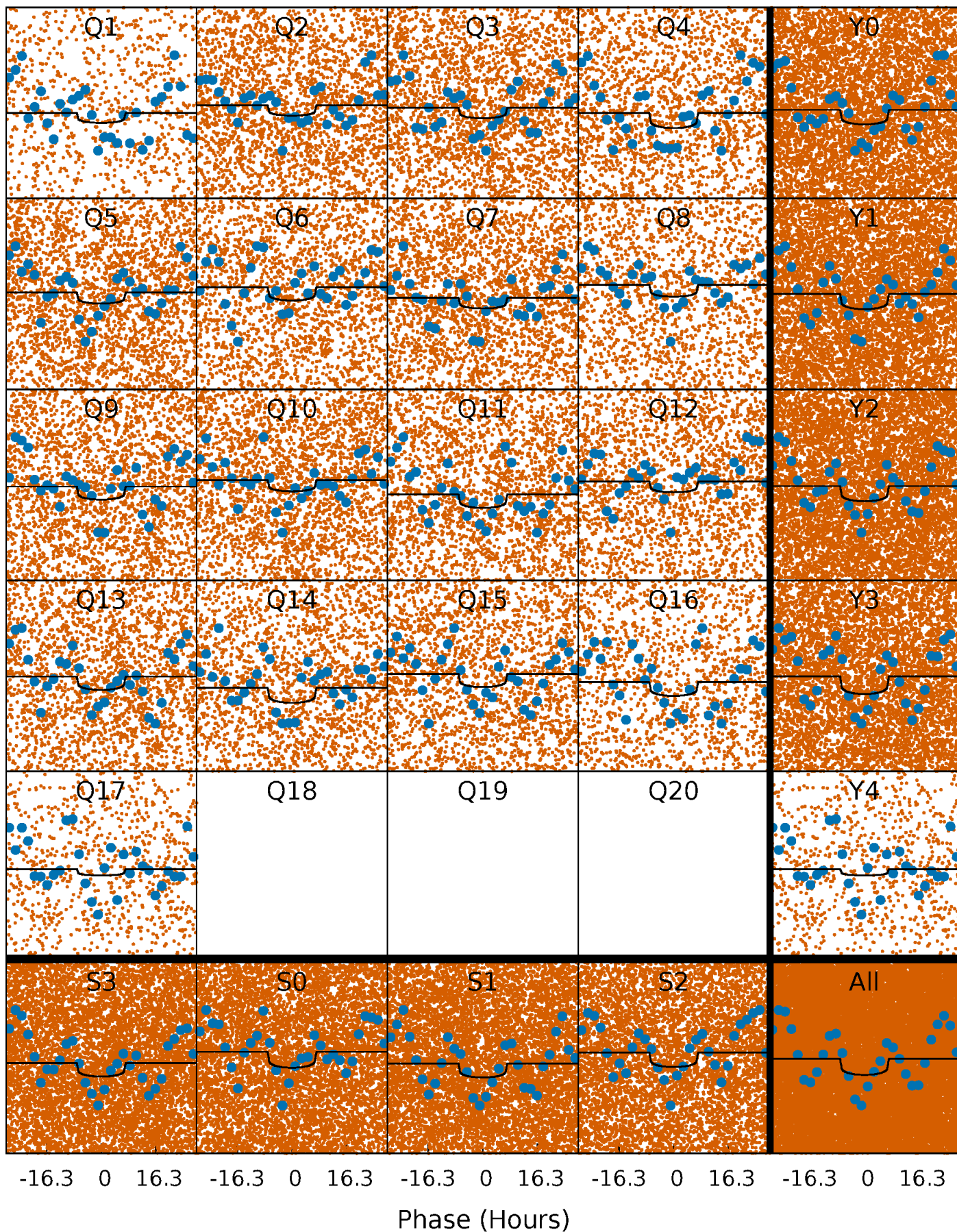
PDC Quarter-Phased Transit Curves

TCE 011919968-01 P= 2.628739 Days $T_0=131.606703$ (BKJD)



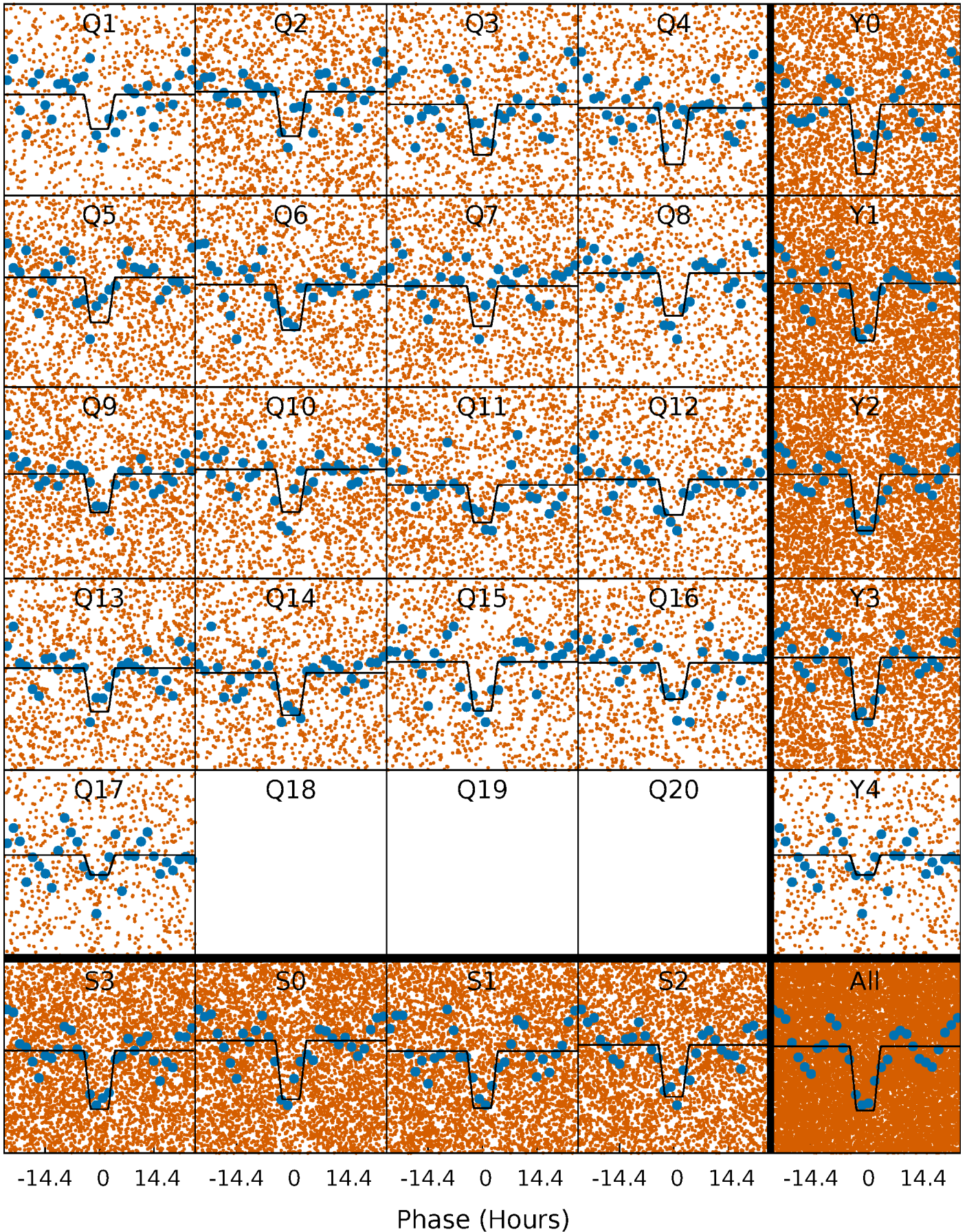
DV Quarter-Phased Transit Curves

TCE 011919968-01 P= 2.628739 Days $T_0=131.606703$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

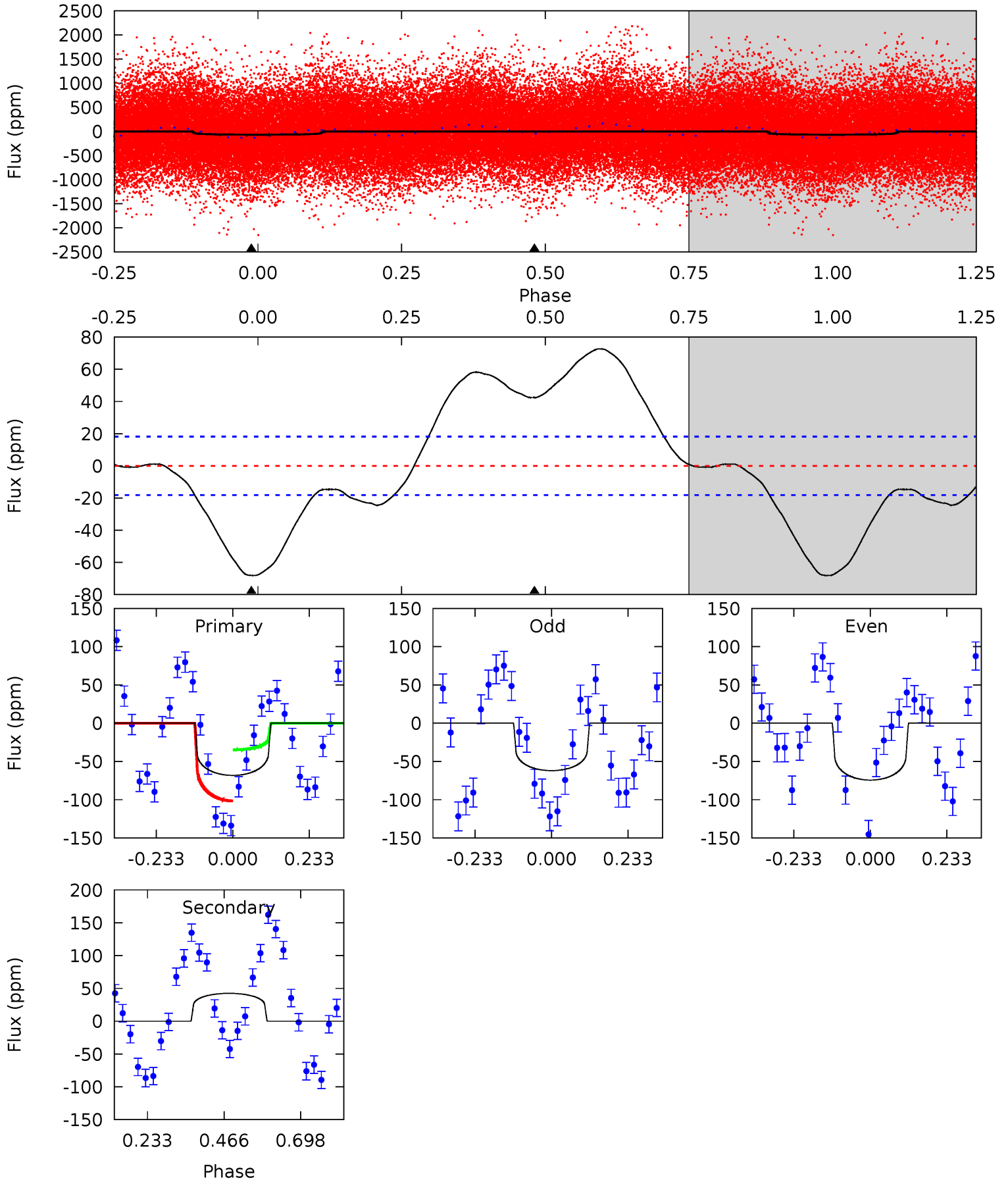
TCE 011919968-01 P= 2.628756 Days $T_0=131.549780$ (BKJD)



DV Model-Shift Uniqueness Test

011919968-01, P = 2.628739 Days, E = 128.977964 Days

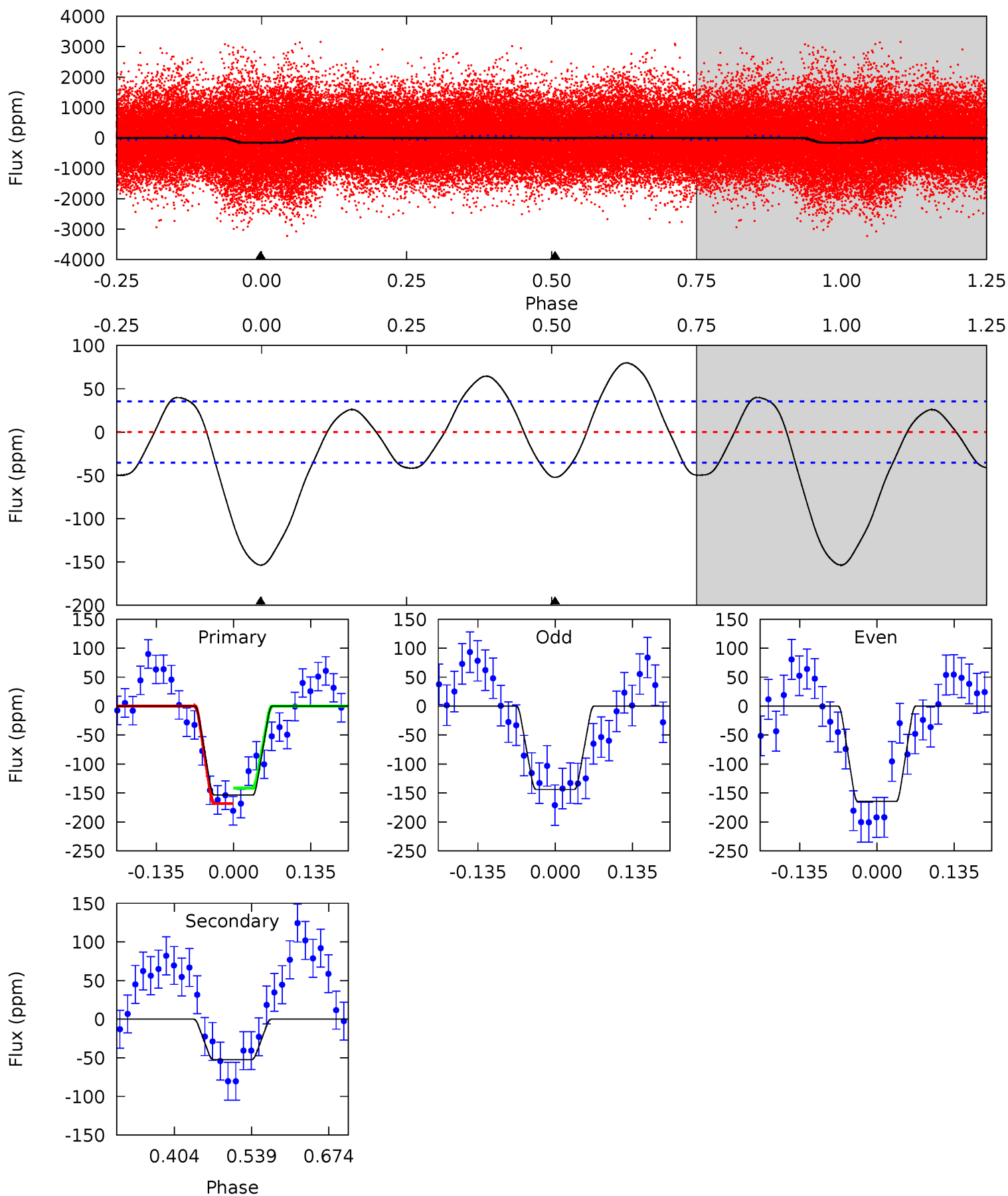
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.5	-10.2	0	0	4.38	1.19	3.16	16.5	16.5	-10.2	-10.2	1.50	1.05	0.52	8.16



Alt Model-Shift Uniqueness Test

011919968-01, P = 2.628756 Days, E = 128.921024 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.6	6.67	0	0	4.50	1.50	4.49	19.6	19.6	6.67	6.67	1.34	1.04	0.34	1.70



Stellar Parameters For KIC 011919968

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7935^{+220}_{-331}	$3.911^{+0.273}_{-0.117}$	$-0.120^{+0.200}_{-0.350}$	$2.526^{+0.402}_{-0.939}$	$1.895^{+0.103}_{-0.414}$	$0.166^{+0.311}_{-0.061}$
	+3%/-4%	+7%/-3%	+167%/-292%	+16%/-37%	+5%/-22%	+188%/-37%
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 011919968-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	42 ± 4	$1.90^{+1.29}_{-1.09}$	3555^{+235}_{-314}	-7318^{+1608}_{-6353}	$-13.187^{+8.537}_{-63.149}$
Alt.	-52 ± 8	$3.43^{+1.57}_{-1.37}$	3558^{+240}_{-340}	5587^{+1535}_{-837}	$4.915^{+8.952}_{-2.545}$

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

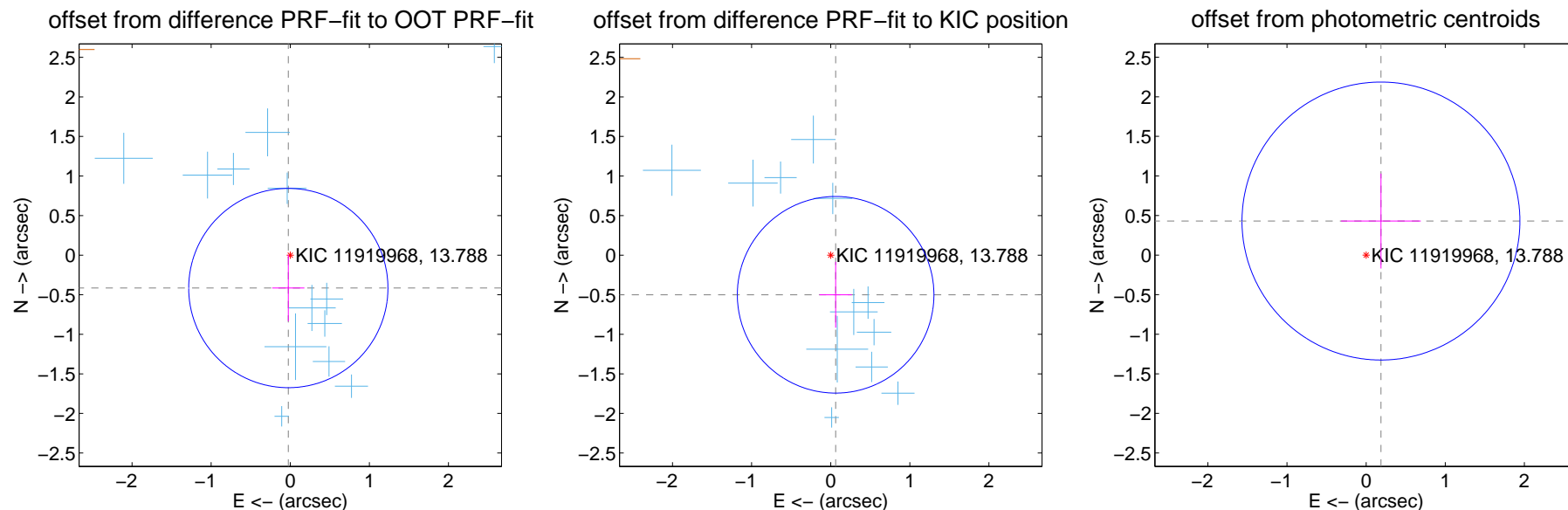
DV Centroid Data

Supplemental centroid analysis for 011919968-01. Kepler magnitude: 13.79. Transit SNR 6.28

There are 13 quarters with good PRF difference image offsets

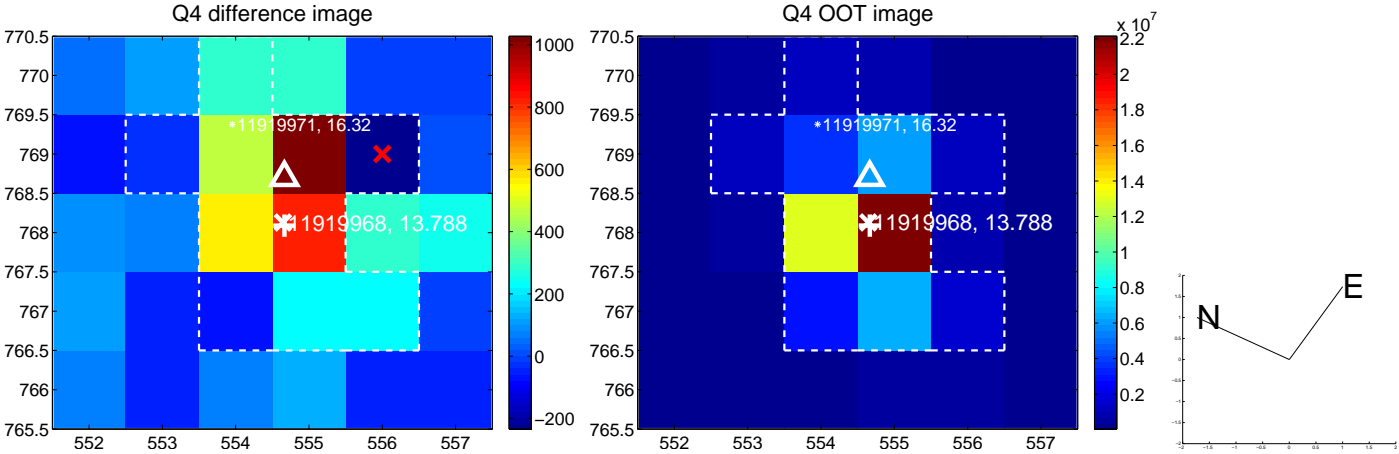
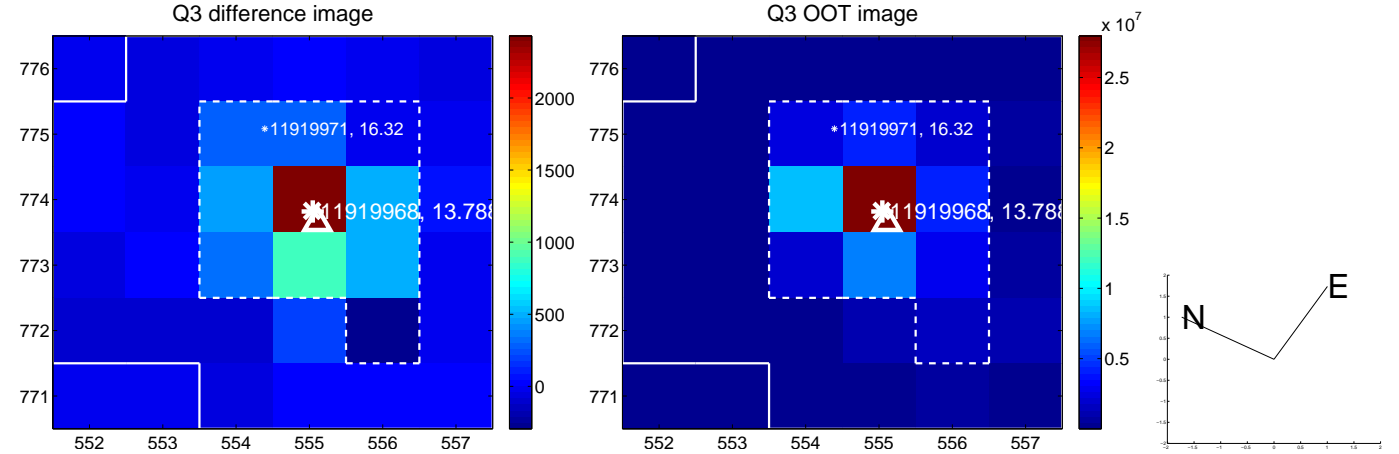
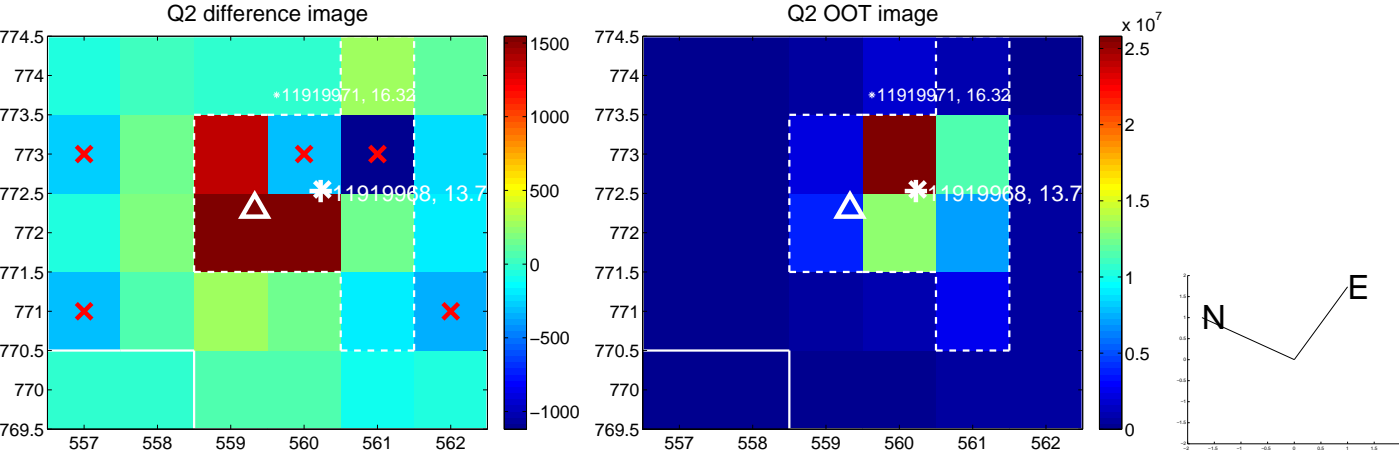
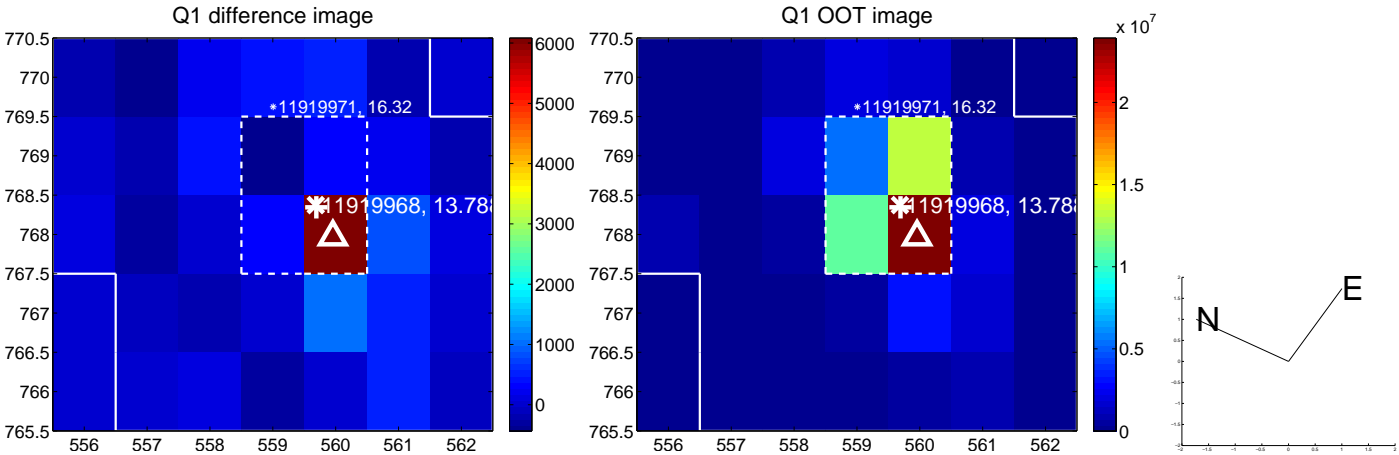
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.416 ± 0.420	0.99	0.025 ± 0.204	-0.416 ± 0.420
PRF-fit source offset from KIC position	0.505 ± 0.414	1.22	-0.062 ± 0.204	-0.501 ± 0.416
photometric centroid source offset	0.47 ± 0.59	0.80	-0.19 ± 0.50	0.43 ± 0.60

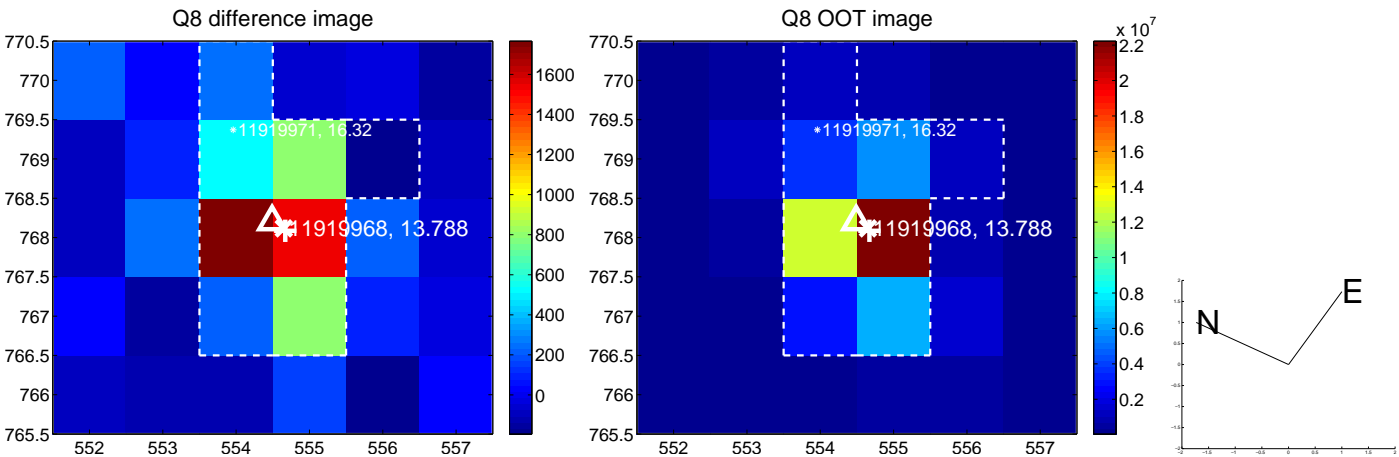
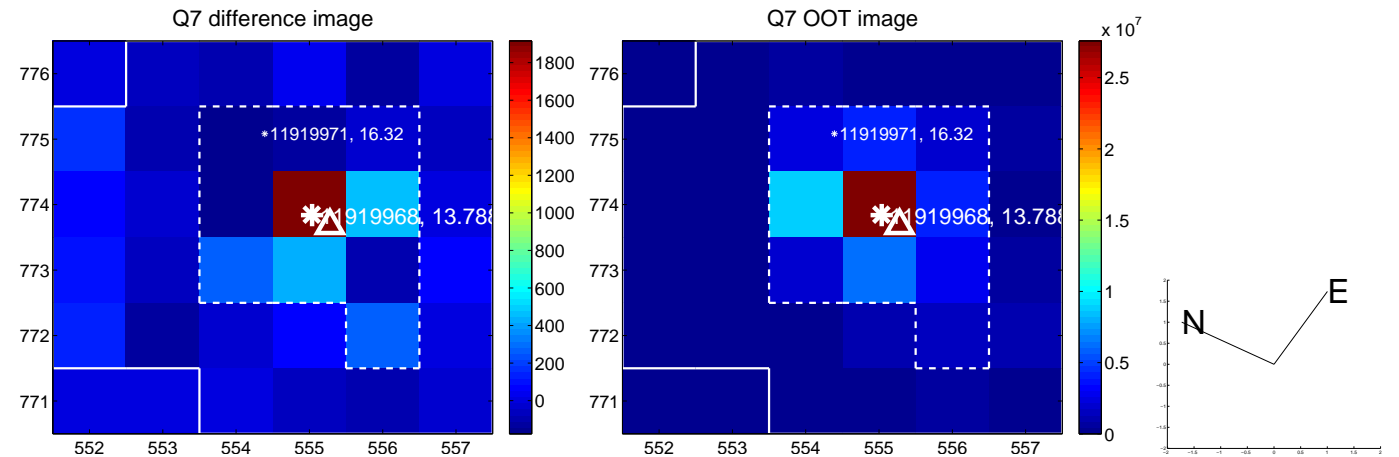
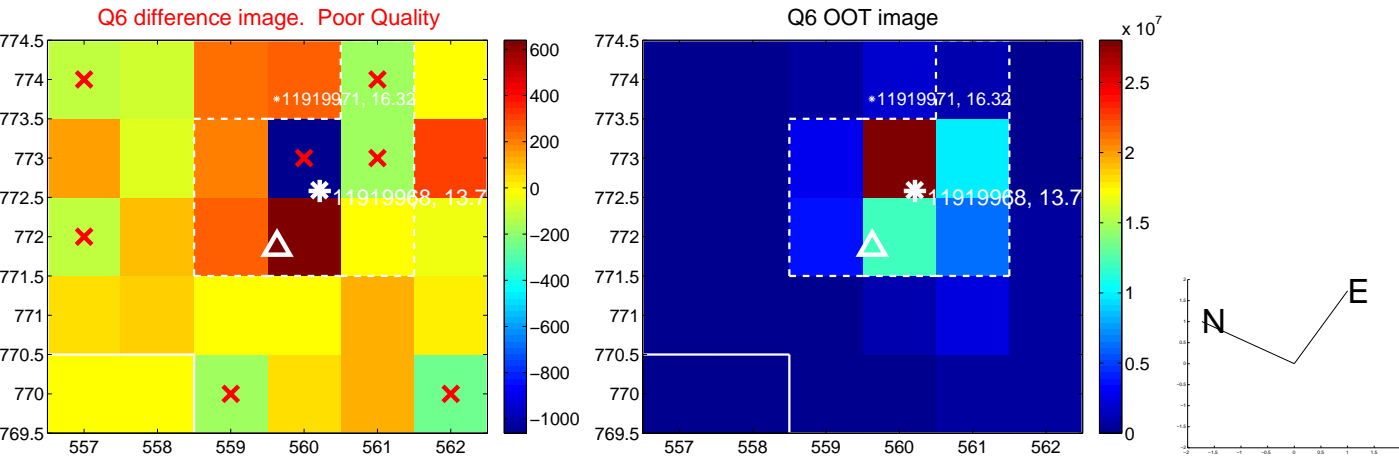
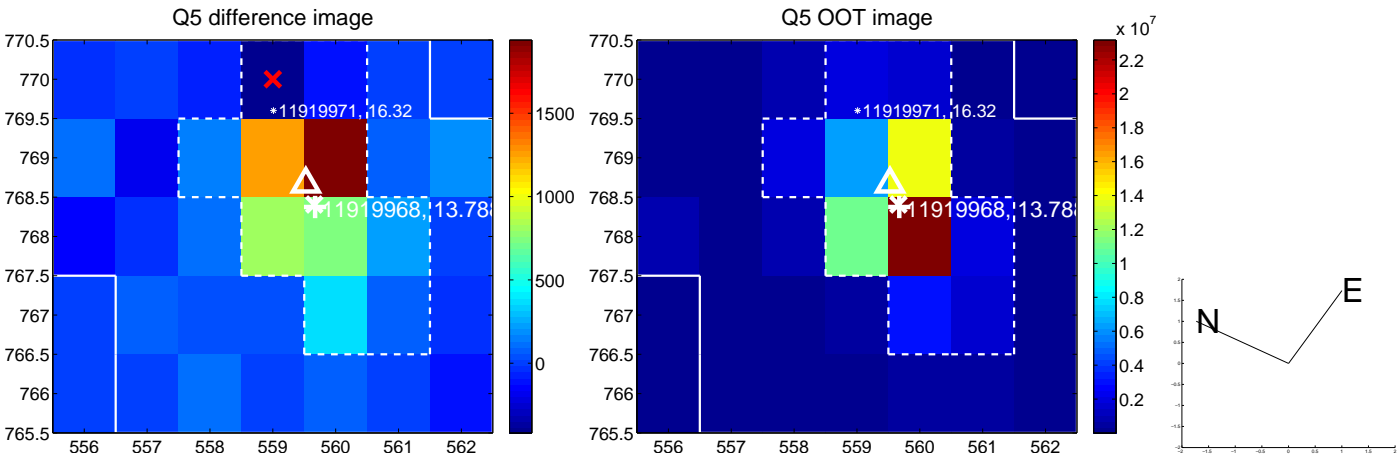


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

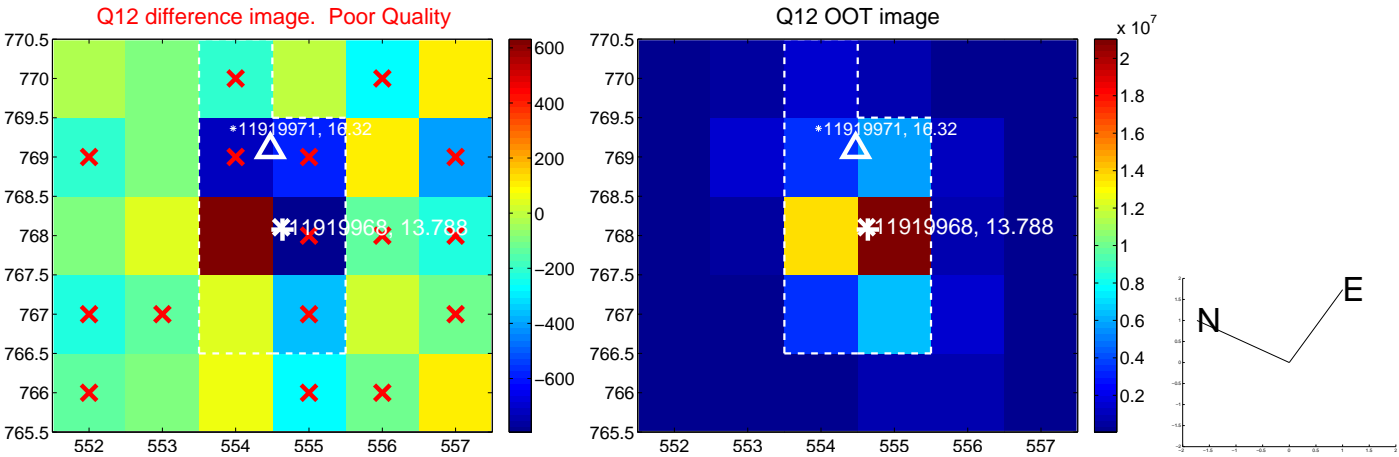
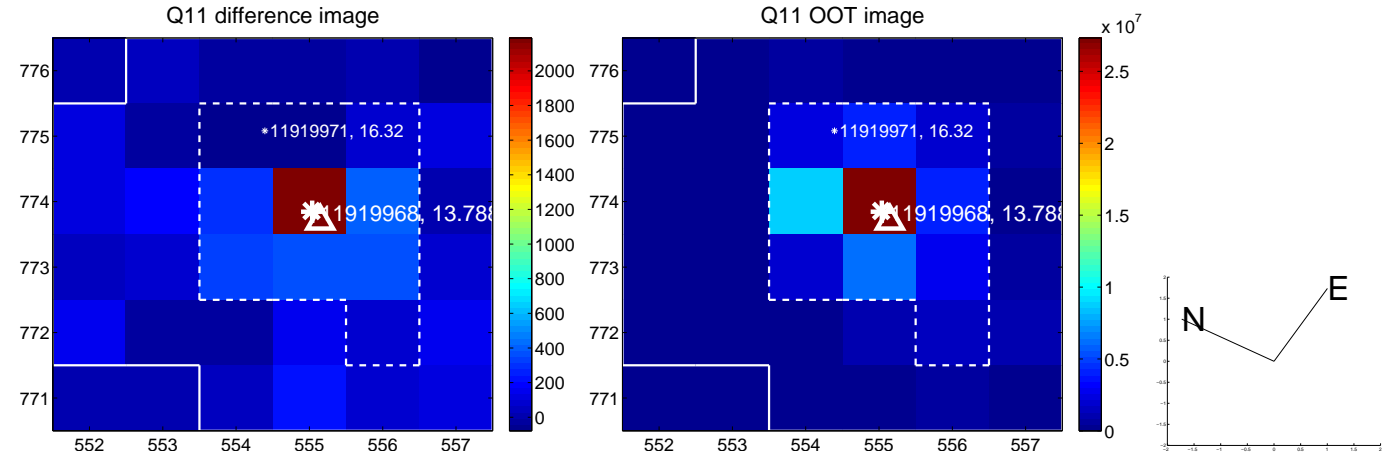
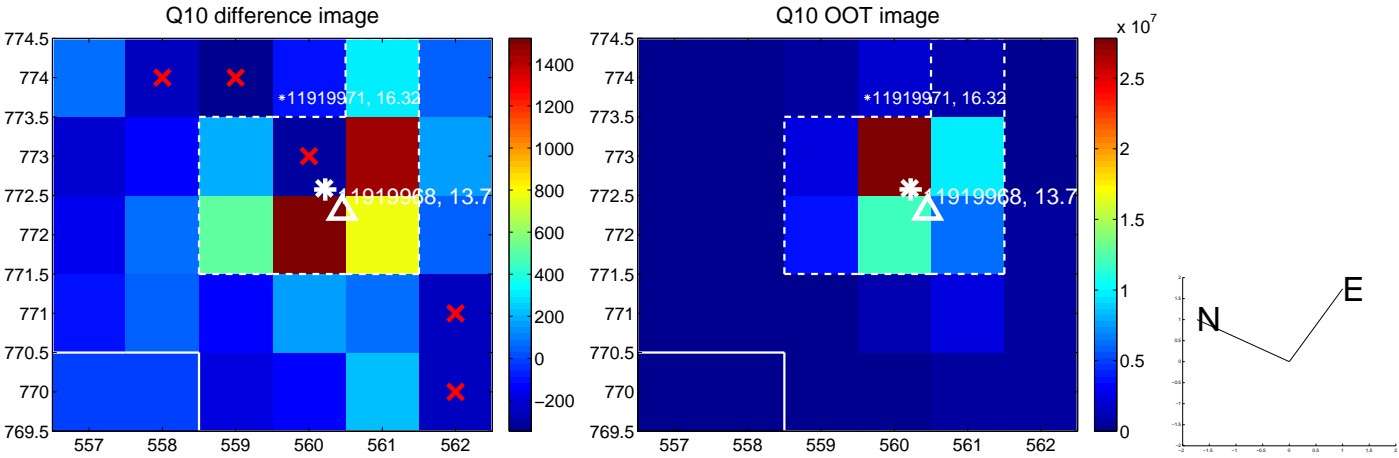
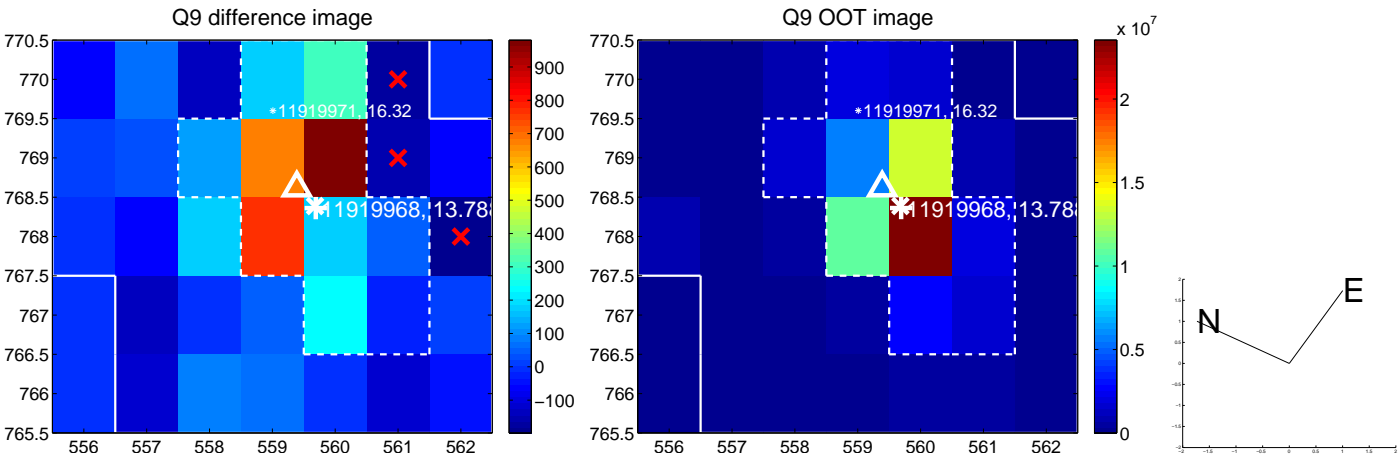
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



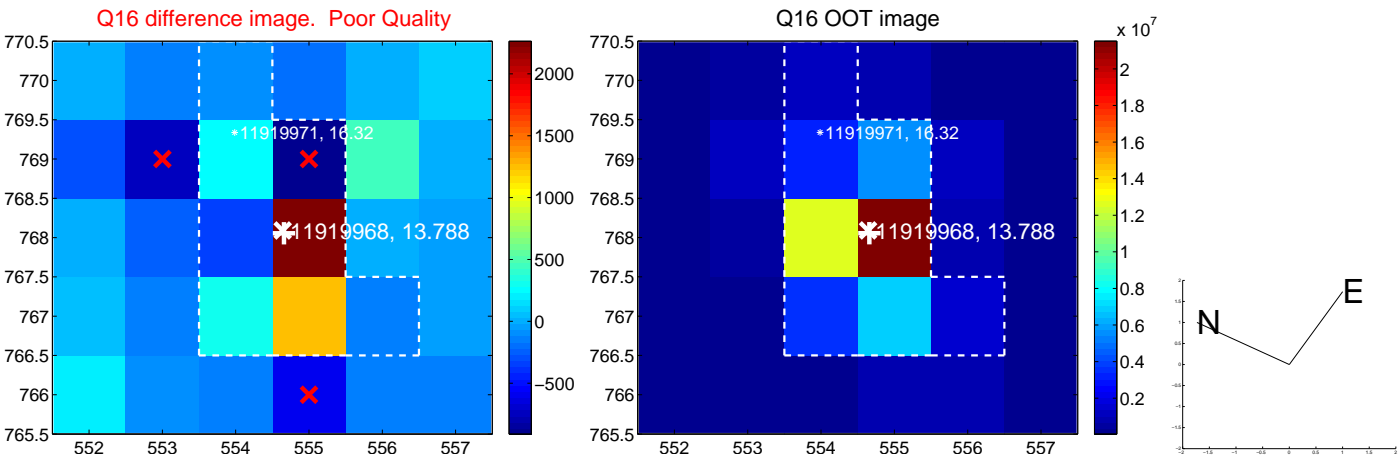
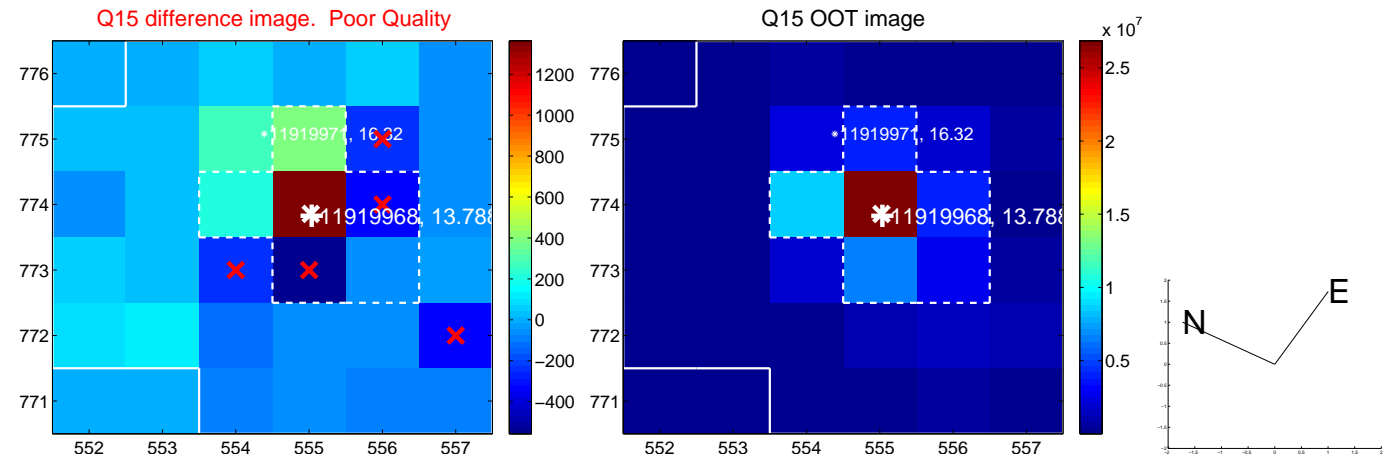
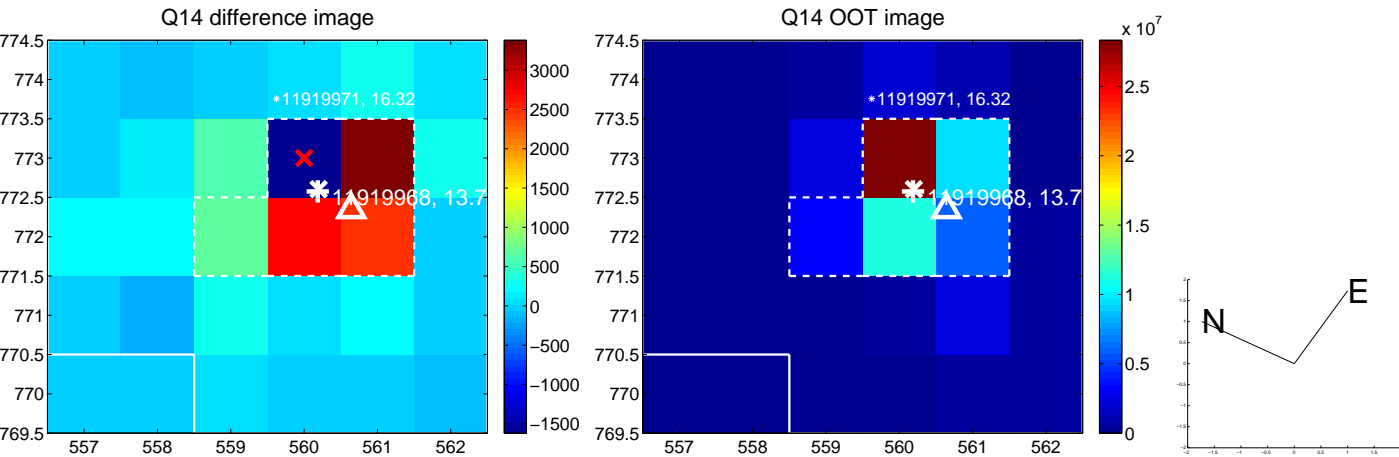
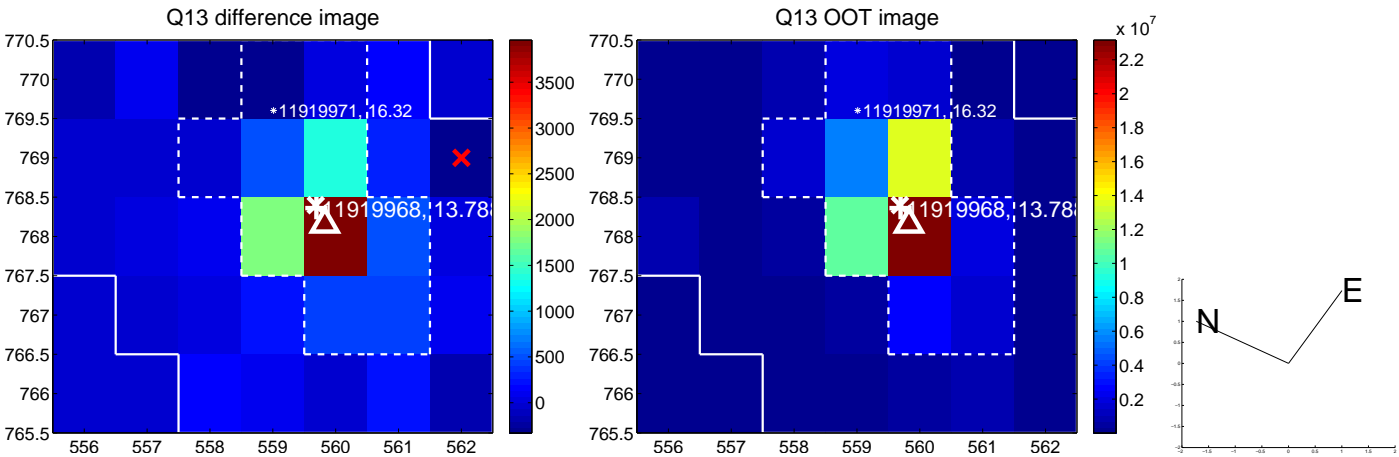
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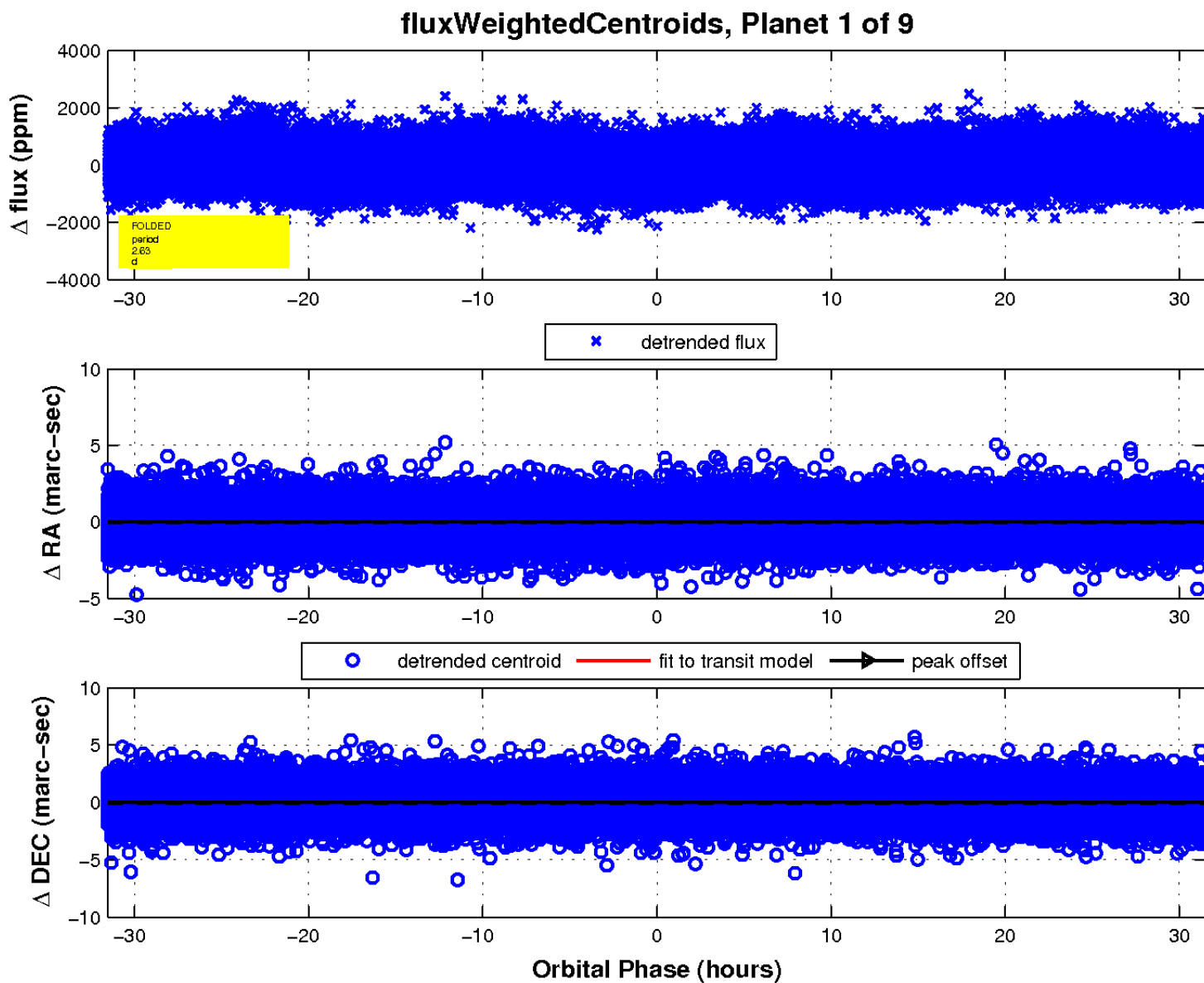
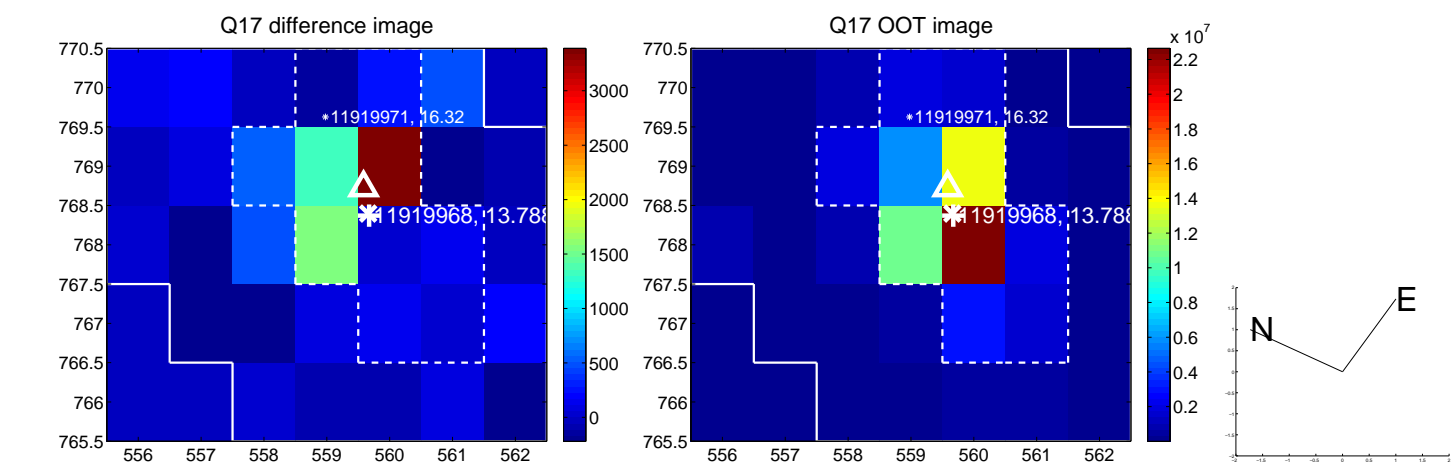
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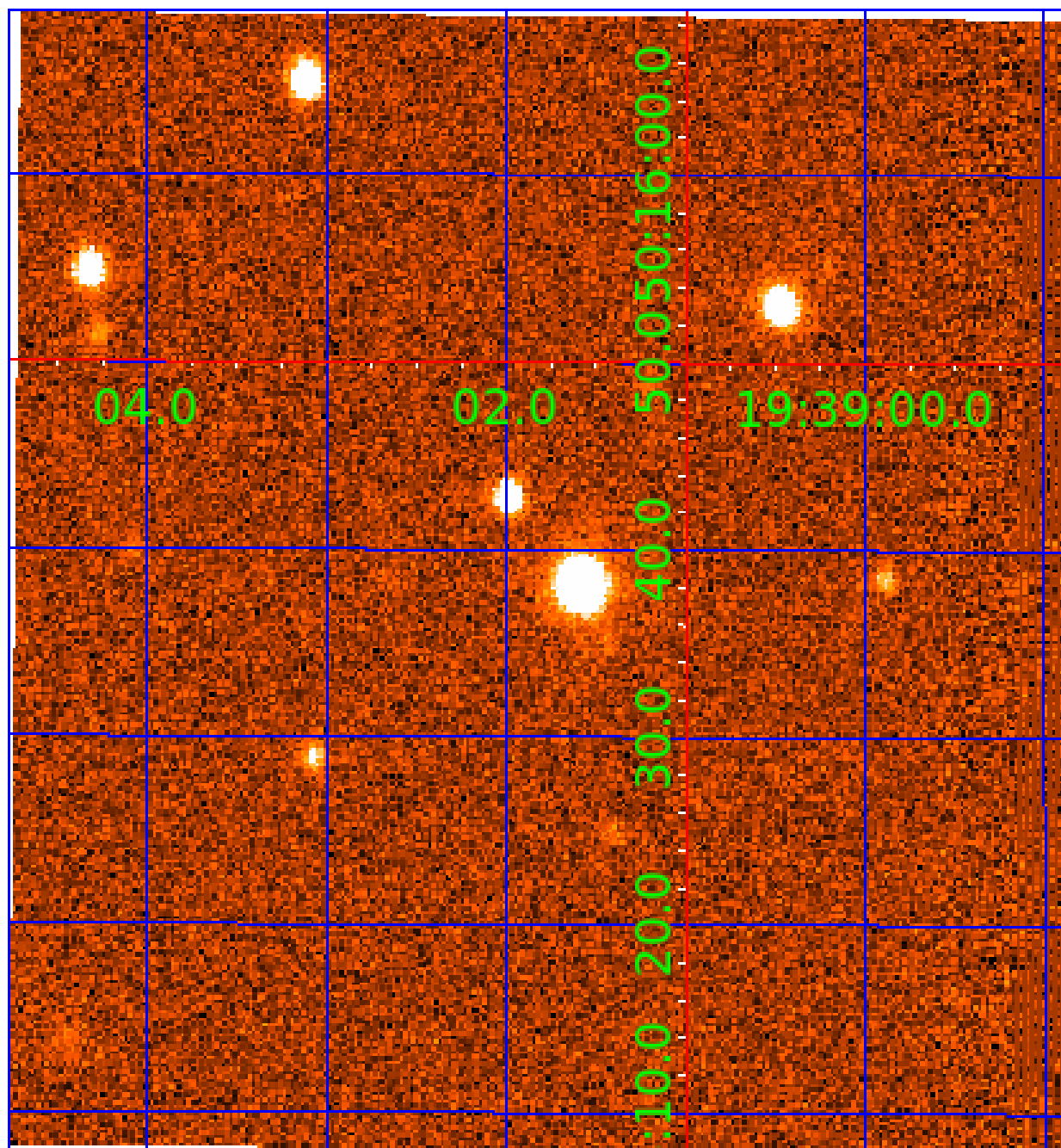


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UKIRT Image

Declination



KIC 011919968

Q1-17 DR25 TCE Parameters

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011919968-04	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
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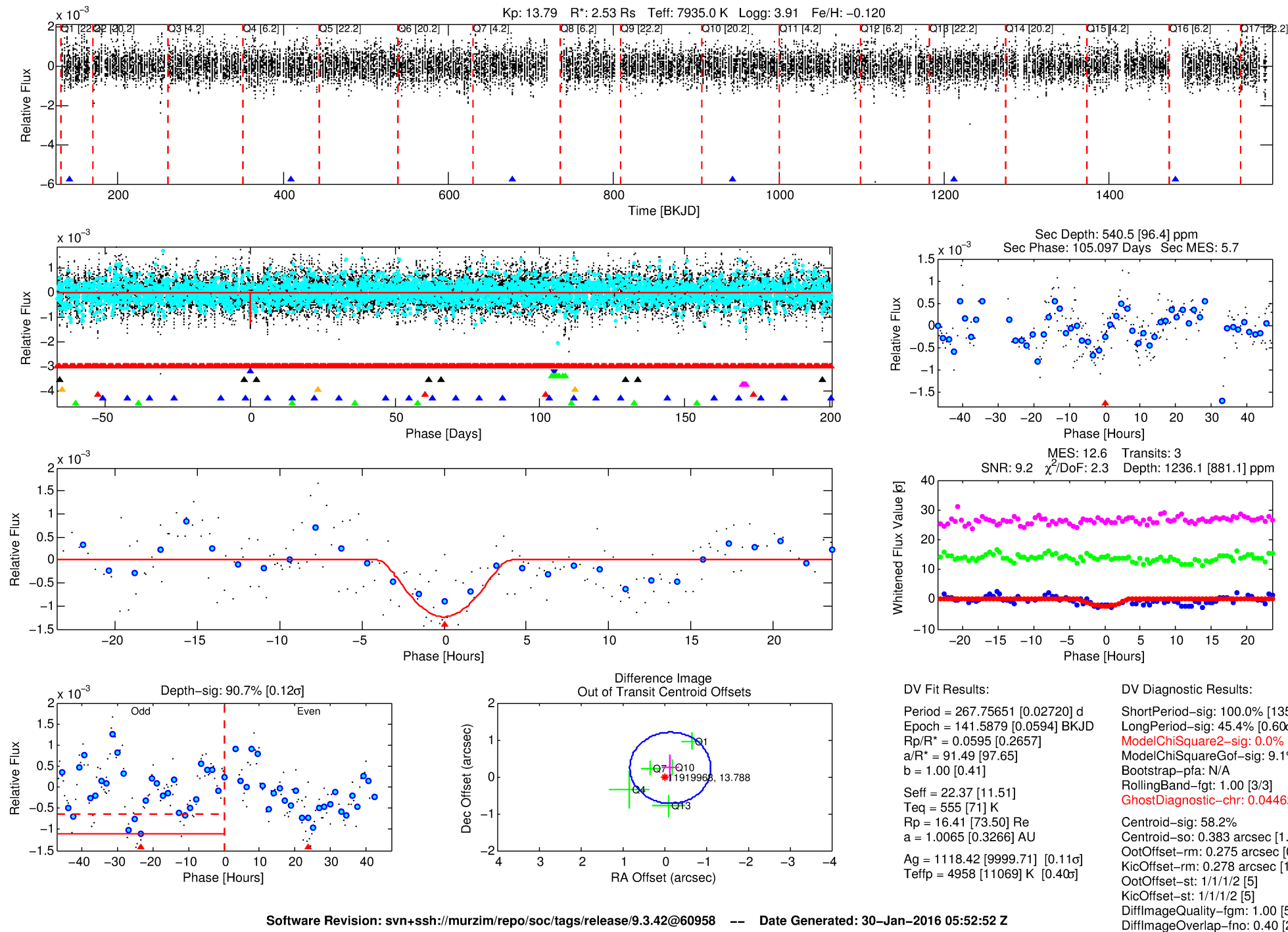
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011919968-02

No Significant Match Found

DV One-Page Summary

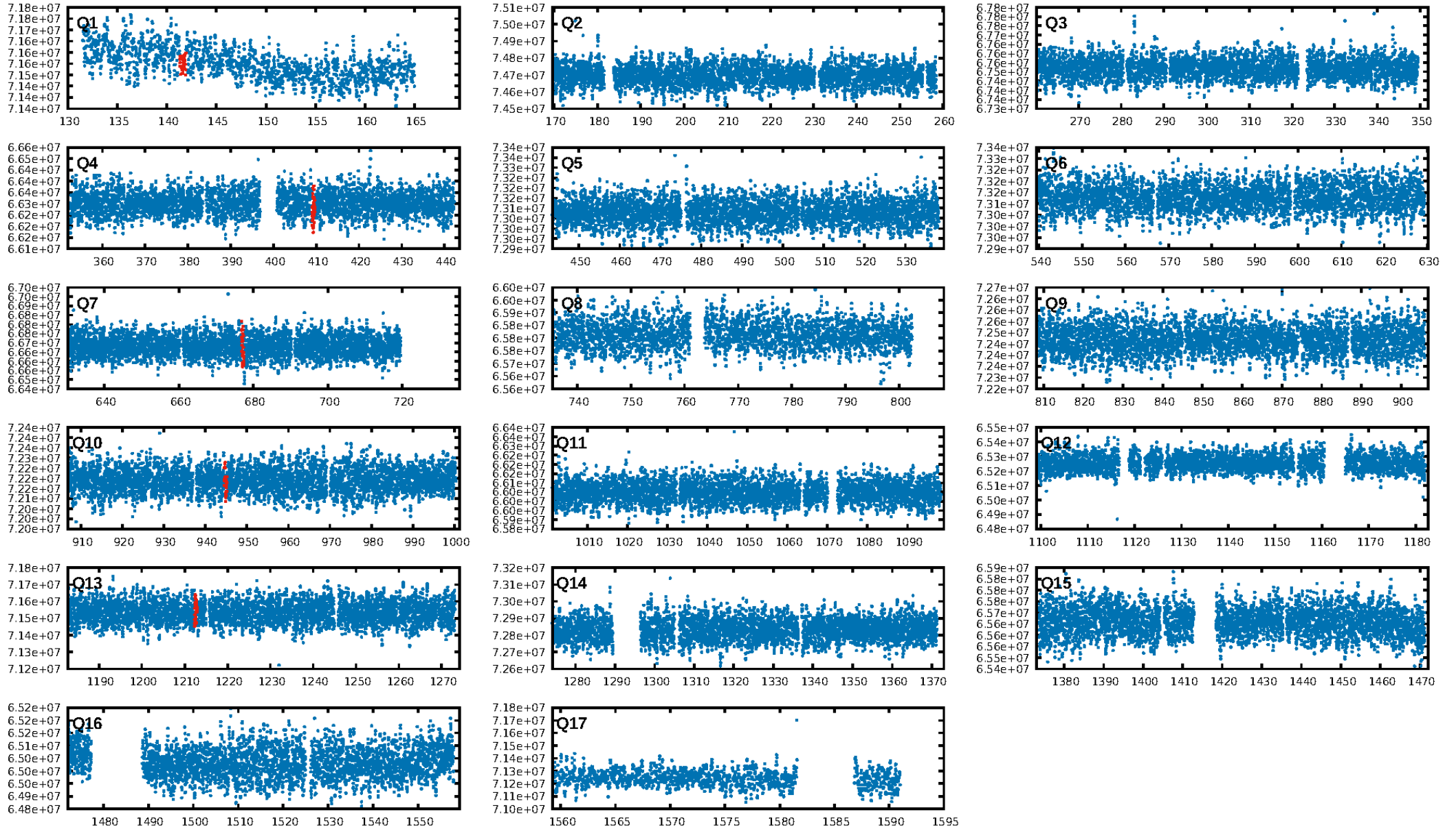
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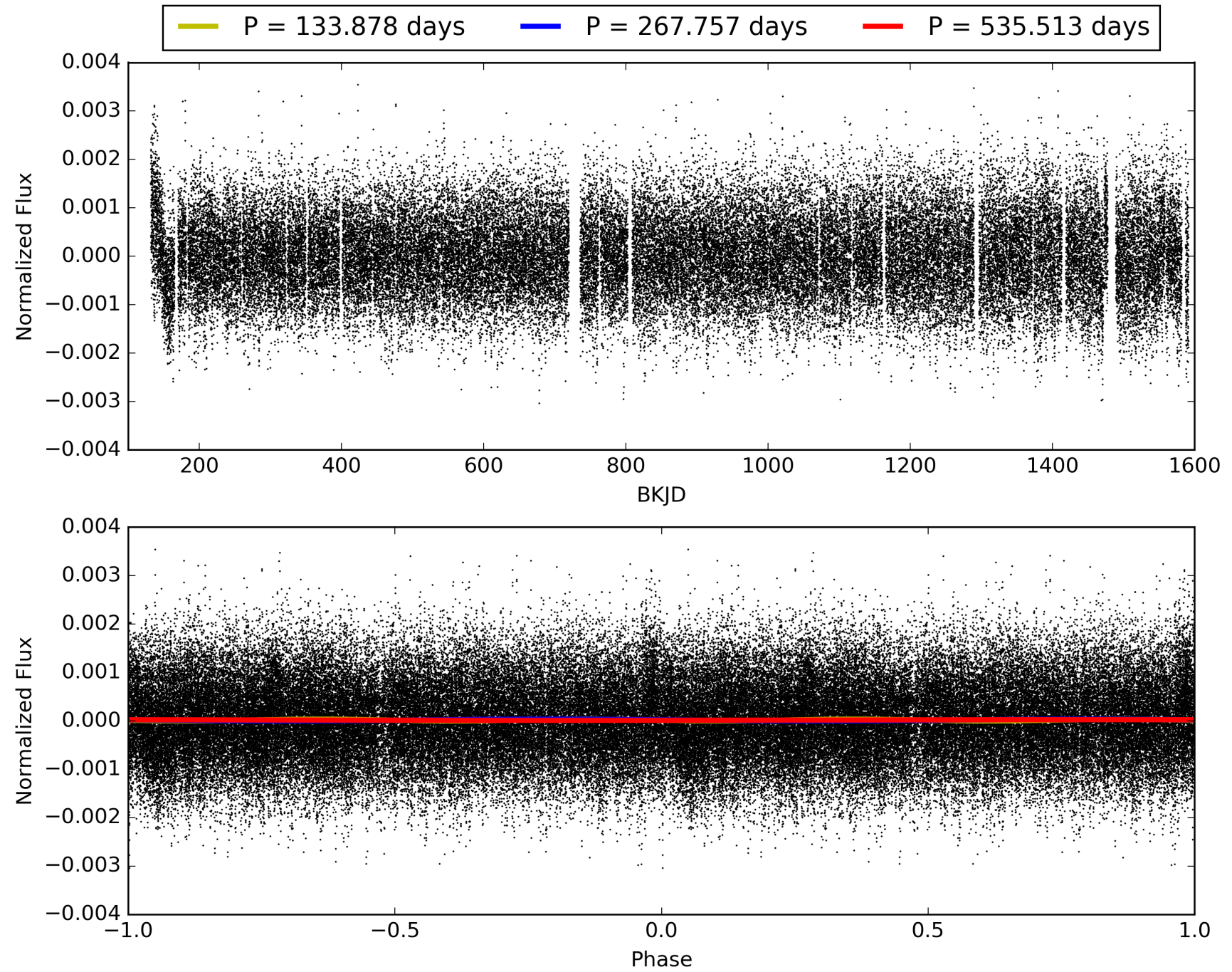
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 011919968-02, PDC Light Curves

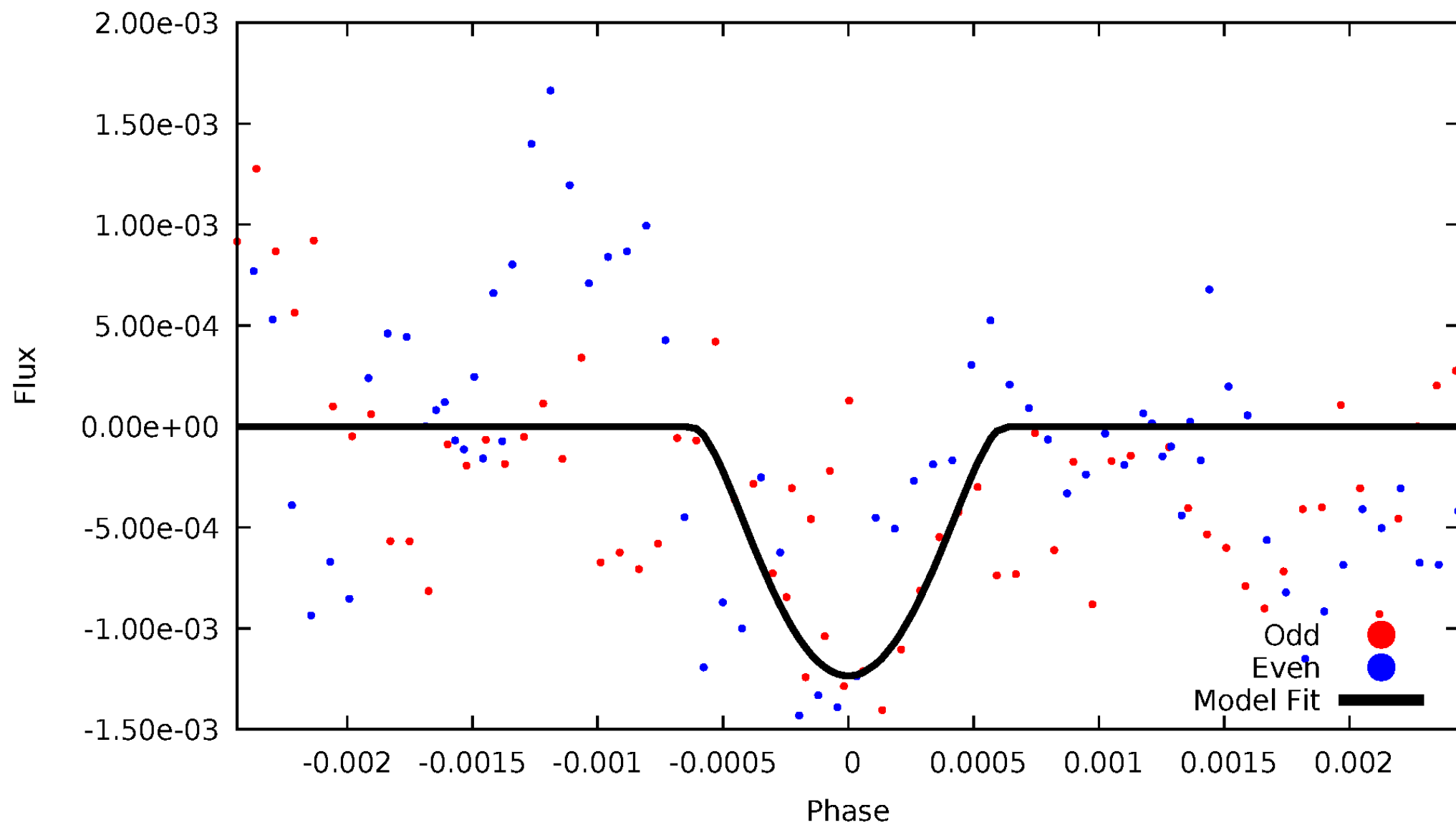


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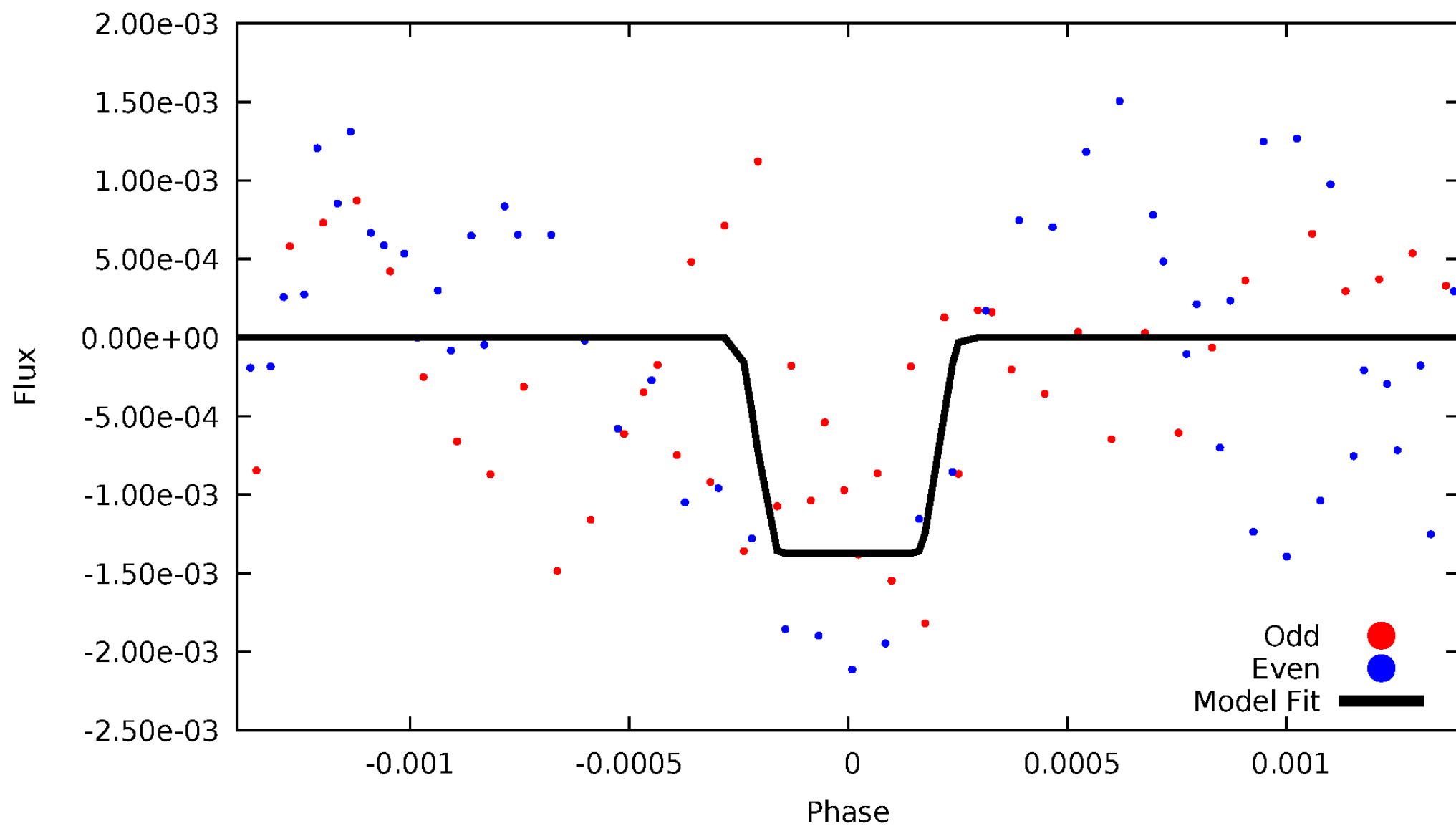
DV Odd/Even

TCE 011919968-02



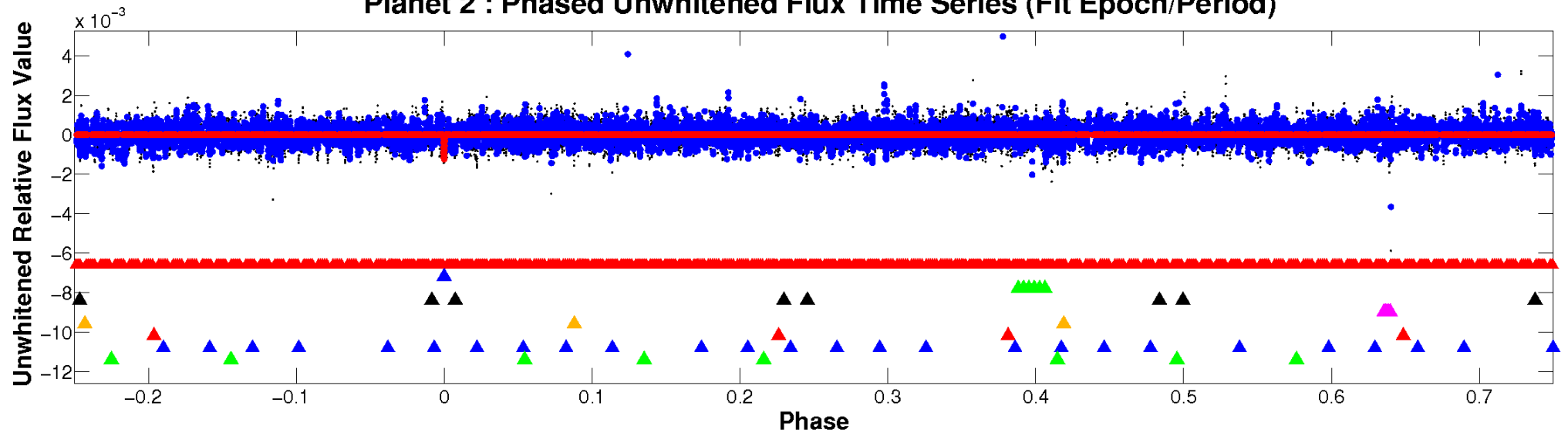
ALT Odd/Even

TCE 011919968-02

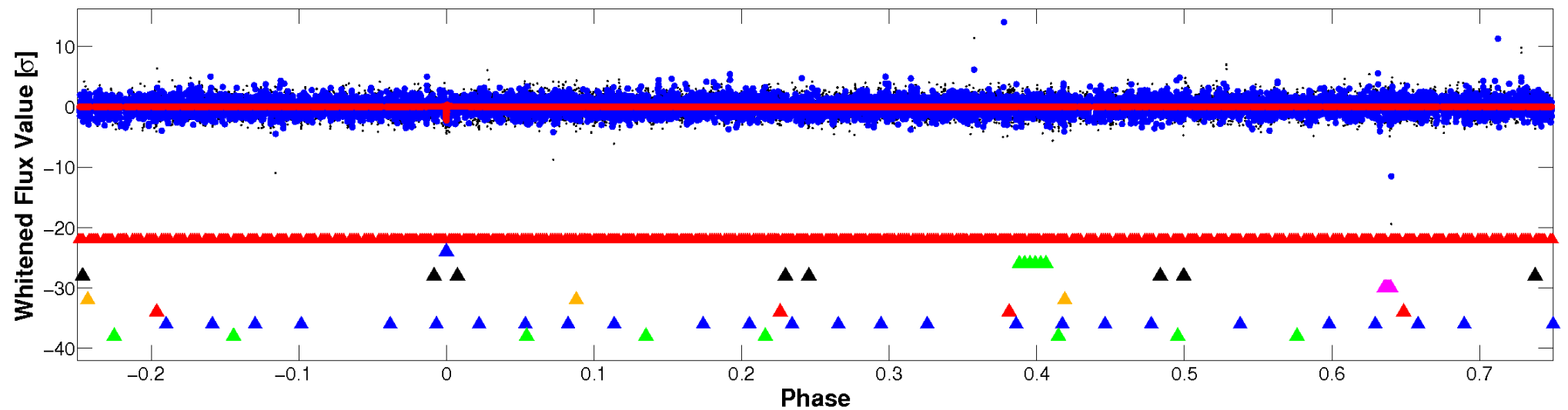


Non-Whitened Vs. Whitened Light Curve

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

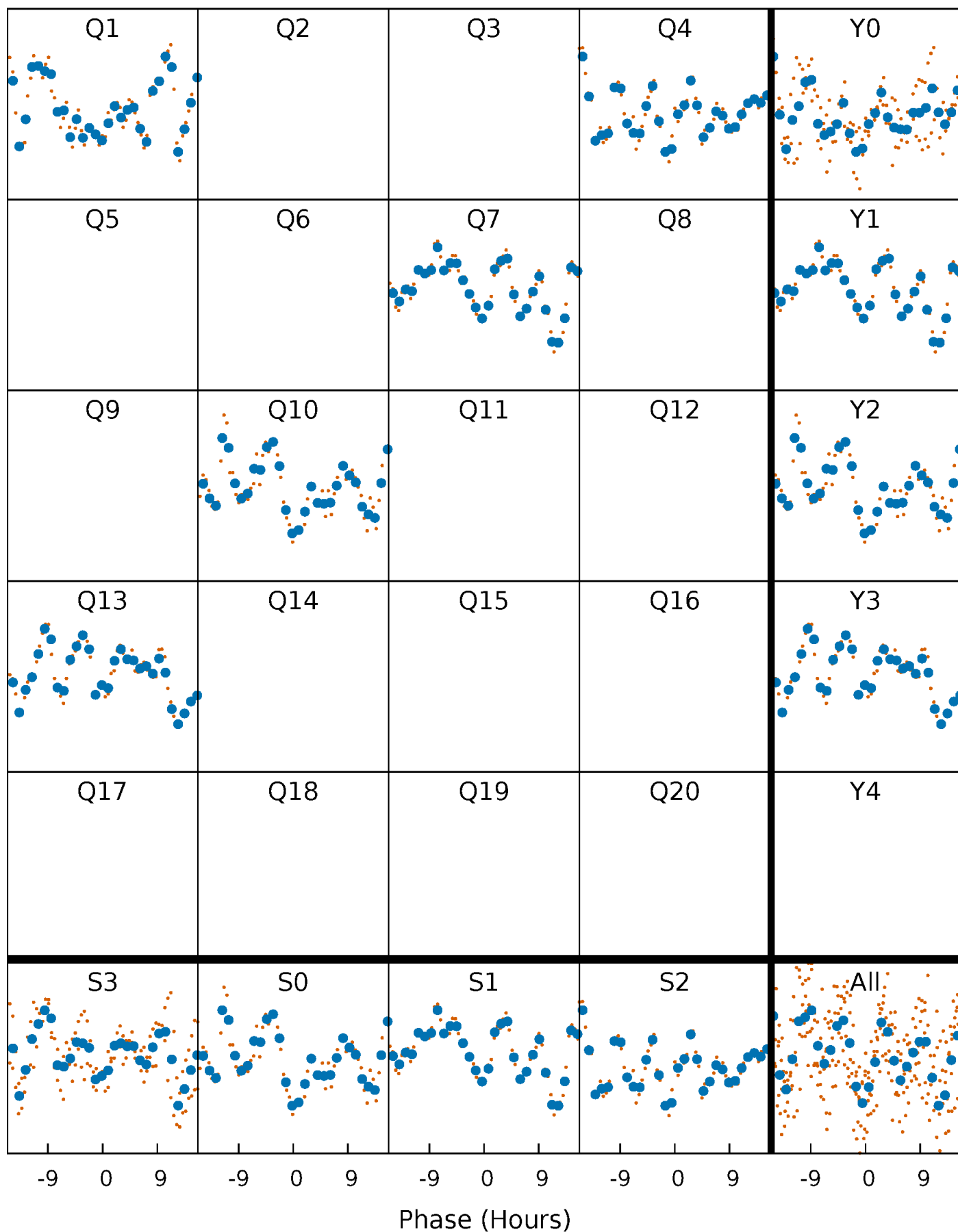


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



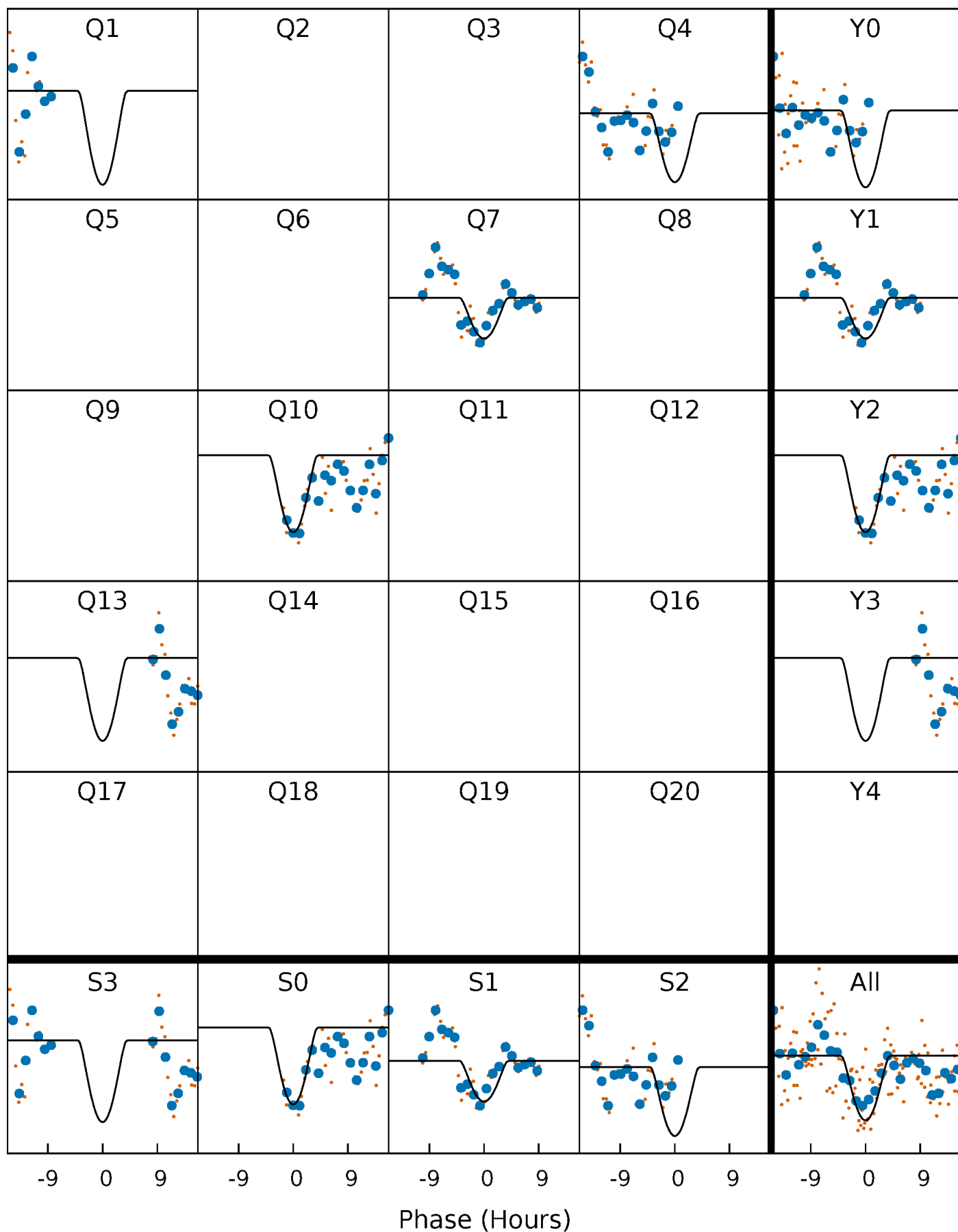
PDC Quarter-Phased Transit Curves

TCE 011919968-02 P=267.756509 Days $T_0=141.587893$ (BKJD)



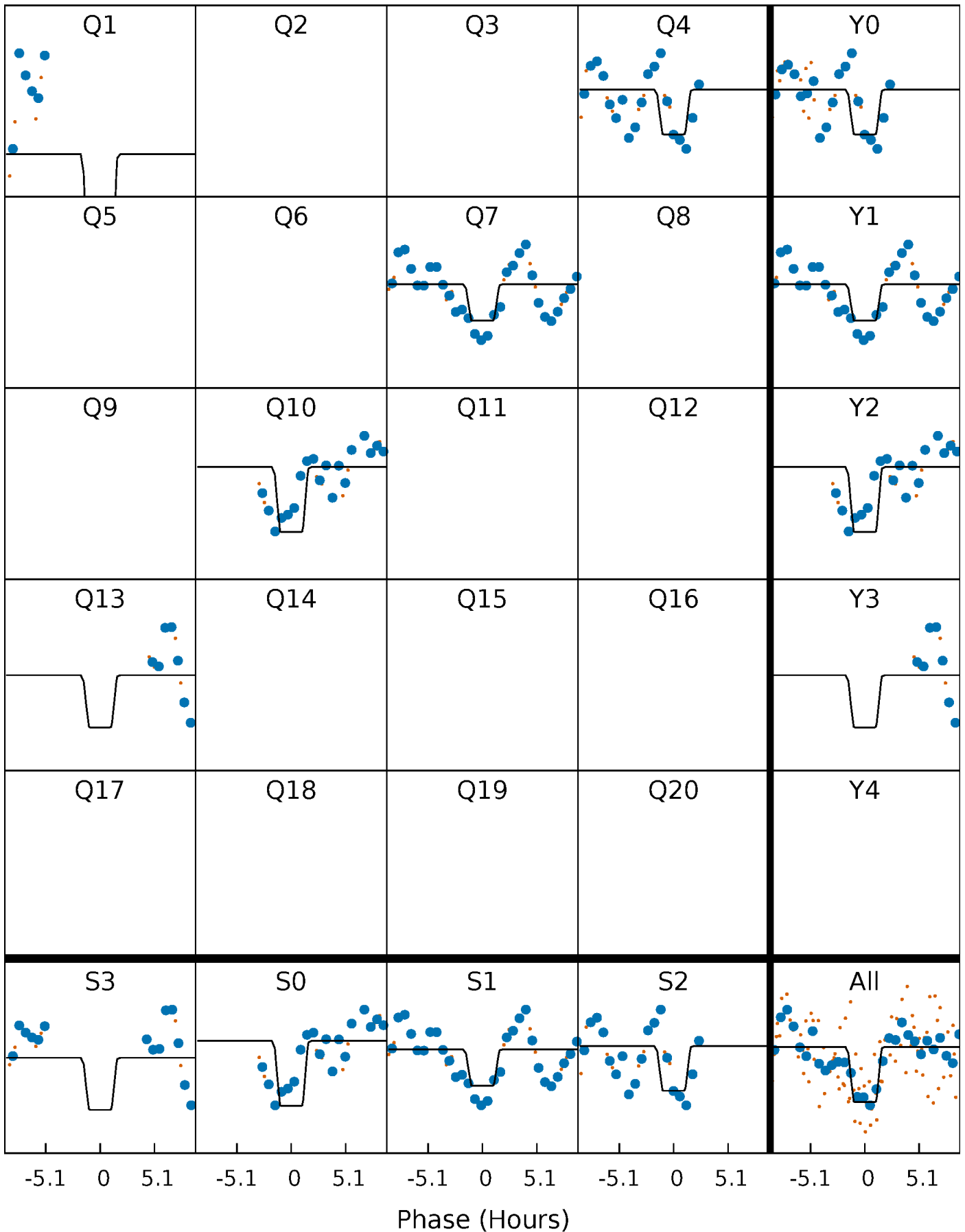
DV Quarter-Phased Transit Curves

TCE 011919968-02 P=267.756509 Days $T_0=141.587893$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

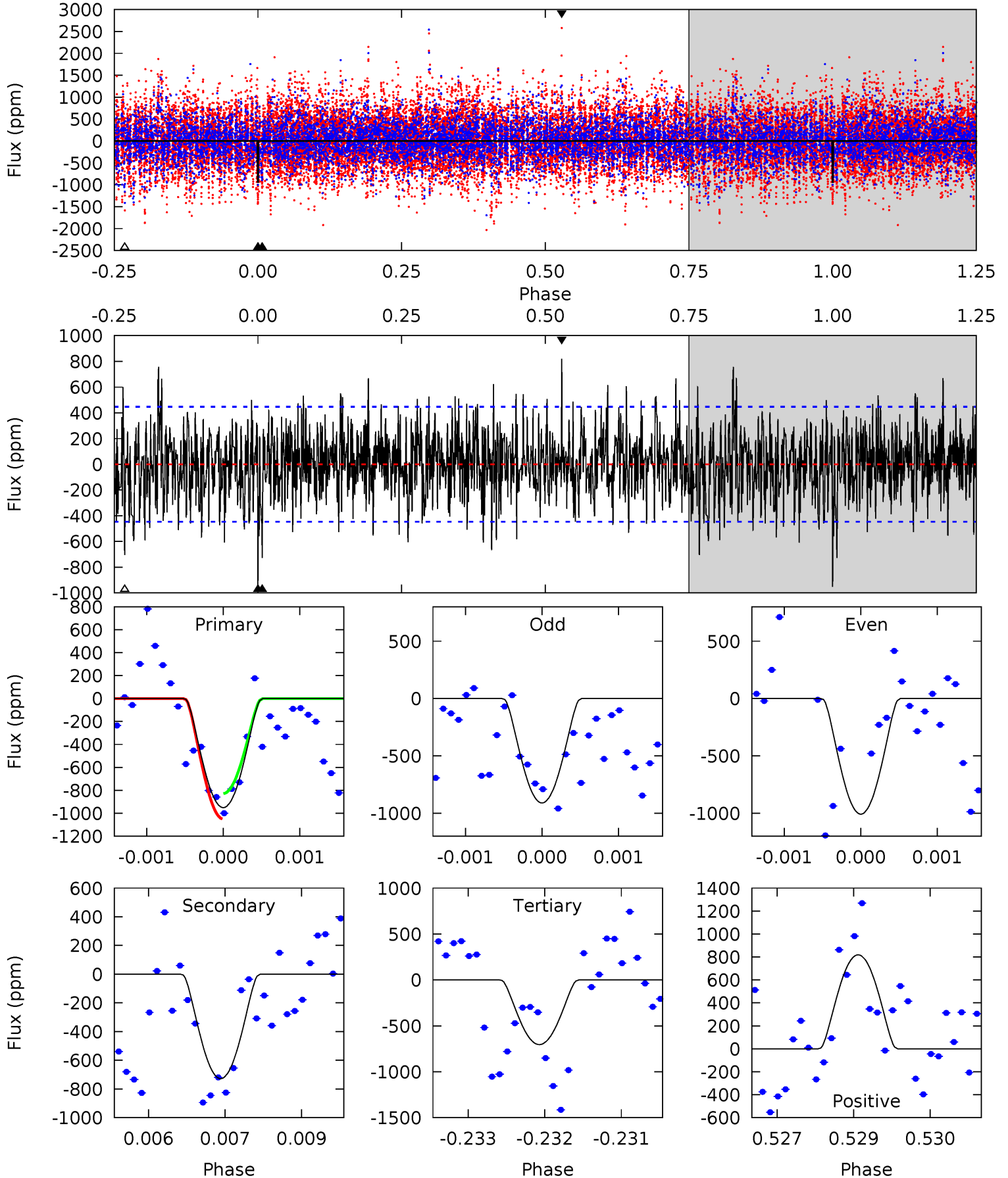
TCE 011919968-02 $P=267.829482$ Days $T_0=141.428034$ (BKJD)



DV Model-Shift Uniqueness Test

011919968-02, P = 267.756509 Days, E = 141.587893 Days

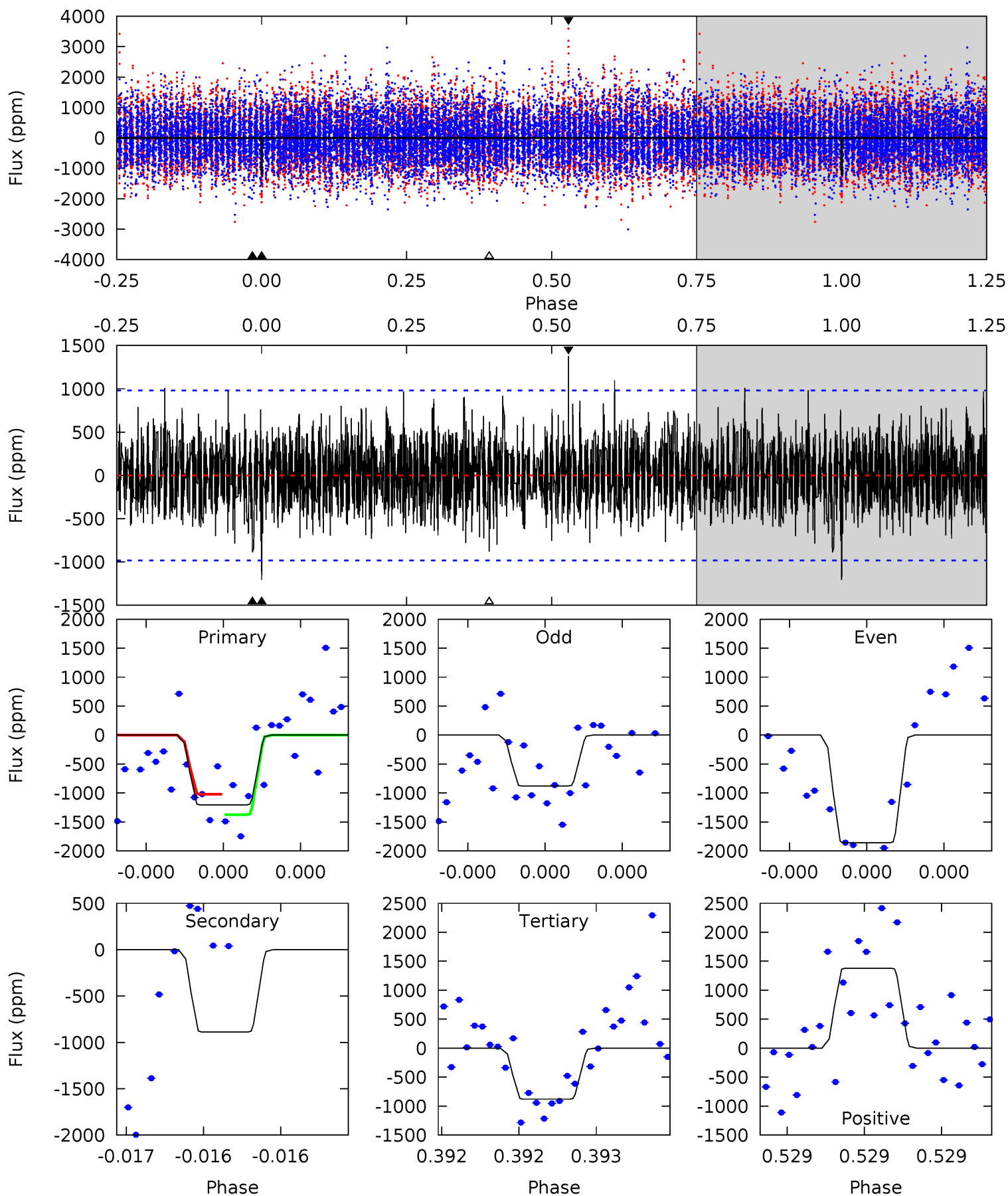
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.5	8.82	8.53	9.92	5.41	3.23	2.49	2.99	1.61	0.29	-1.10	0.59	0.86	0.46	1.34



Alt Model-Shift Uniqueness Test

011919968-02, P = 267.829482 Days, E = 141.428034 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.85	5.04	5.00	7.84	5.58	3.50	1.57	1.85	-0.99	0.05	-2.79	2.76	1.30	0.53	0.99



Stellar Parameters For KIC 011919968

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7935^{+220}_{-331}	$3.911^{+0.273}_{-0.117}$	$-0.120^{+0.200}_{-0.350}$	$2.526^{+0.402}_{-0.939}$	$1.895^{+0.103}_{-0.414}$	$0.166^{+0.311}_{-0.061}$
	+3%/-4%	+7%/-3%	+167%/-292%	+16%/-37%	+5%/-22%	+188%/-37%
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 011919968-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-728 ± 83	$52.76^{+58.76}_{-36.55}$	768^{+49}_{-68}	3361^{+1775}_{-636}	139^{+1324}_{-107}
Alt.	-887 ± 176	$52.59^{+53.73}_{-36.84}$	763^{+46}_{-64}	3432^{+1946}_{-617}	175^{+1735}_{-134}

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

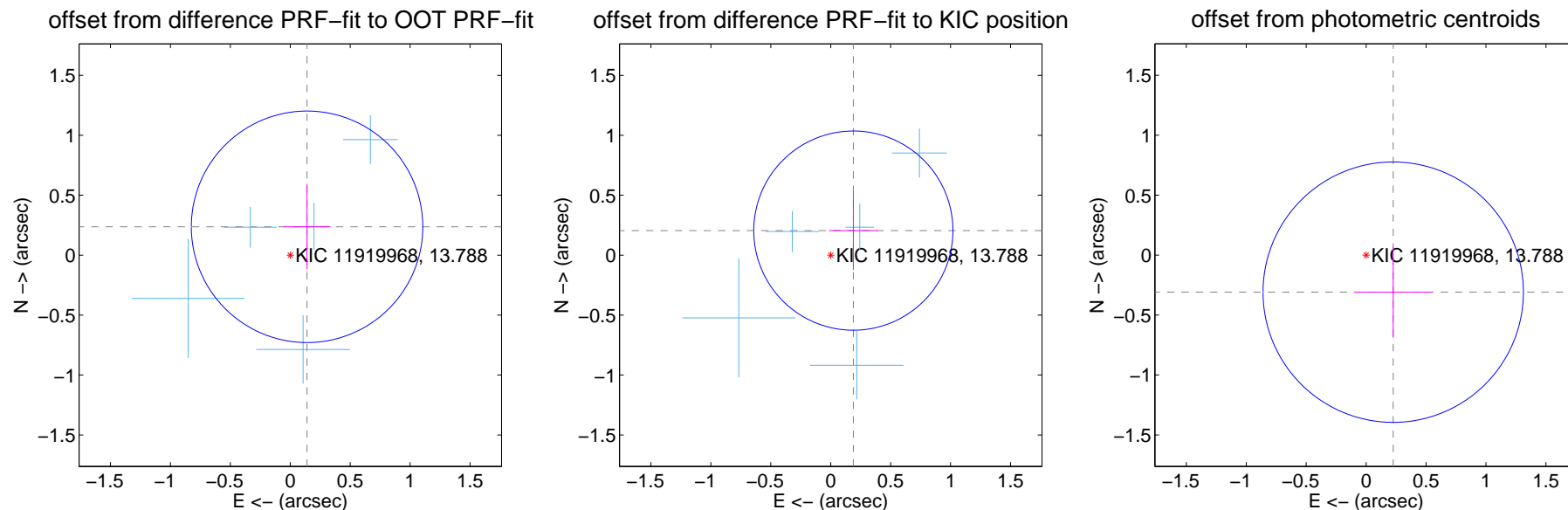
DV Centroid Data

Supplemental centroid analysis for 011919968-02. Kepler magnitude: 13.79. Transit SNR 9.21

There are 5 quarters with good PRF difference image offsets

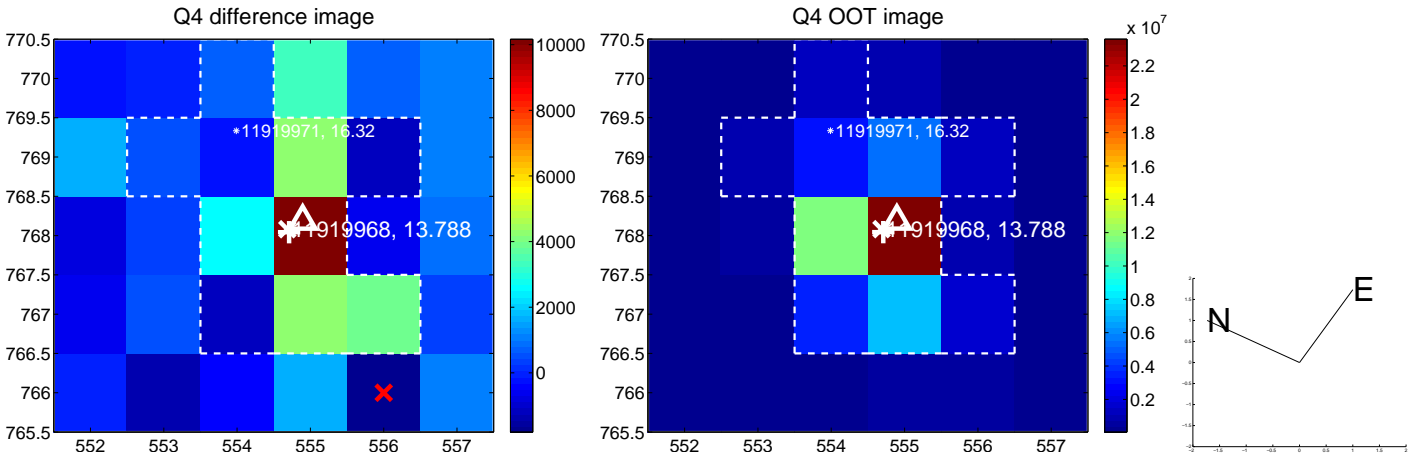
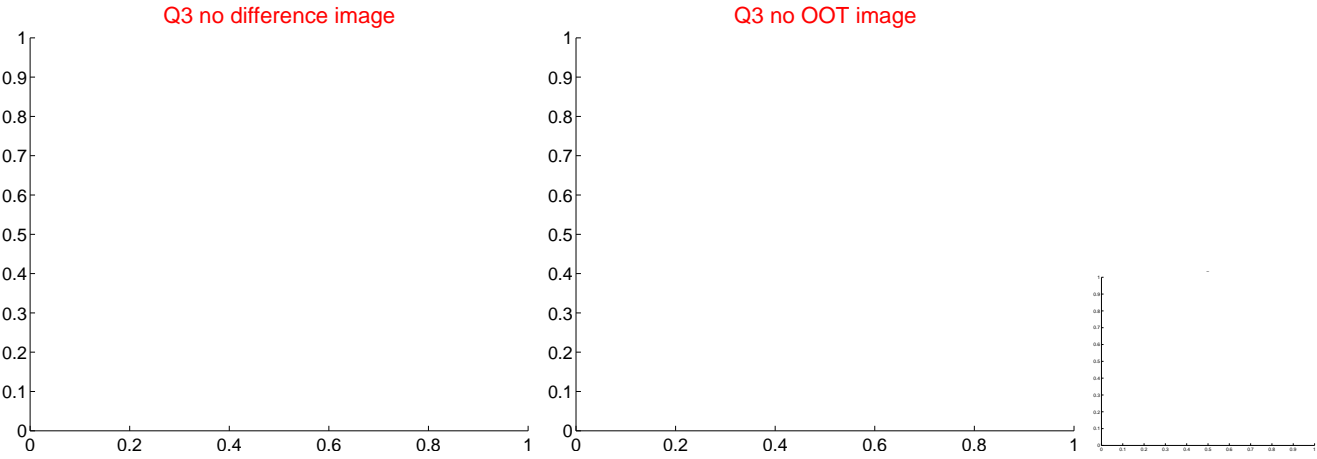
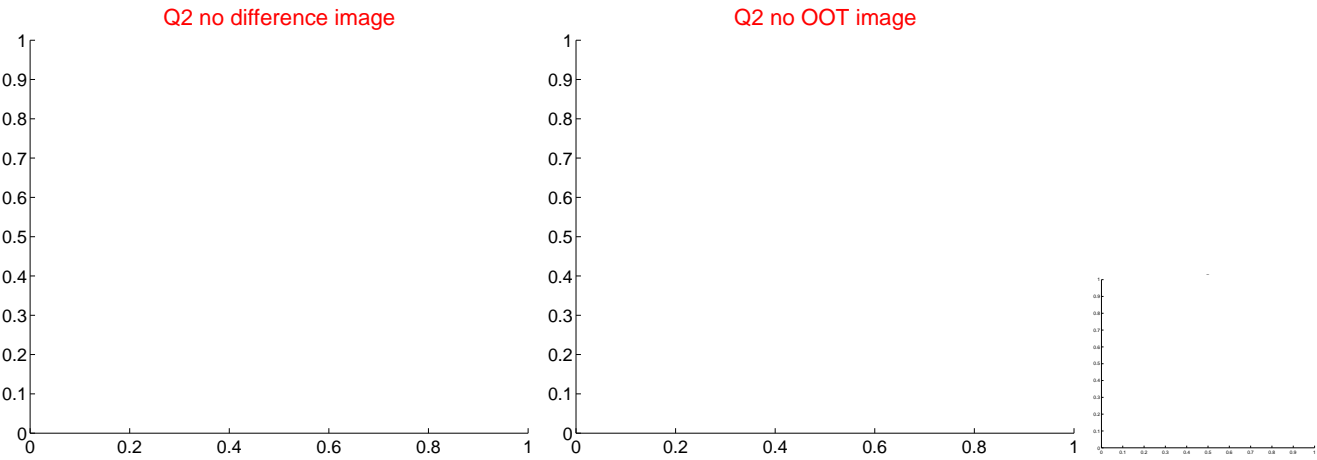
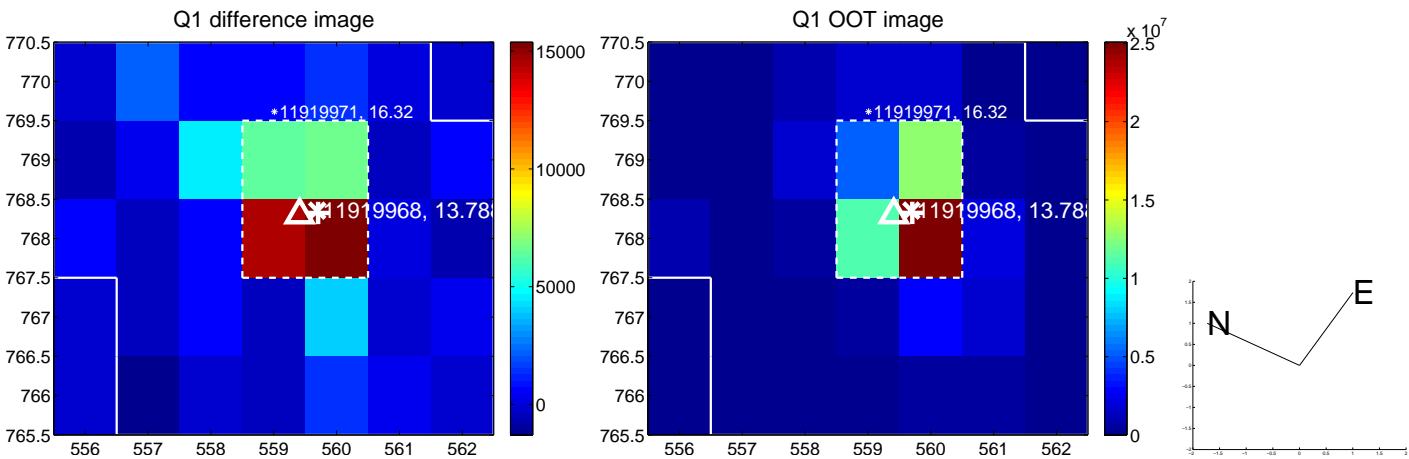
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.275 ± 0.322	0.85	-0.140 ± 0.197	0.236 ± 0.356
PRF-fit source offset from KIC position	0.278 ± 0.277	1.01	-0.189 ± 0.203	0.205 ± 0.327
photometric centroid source offset	0.38 ± 0.36	1.06	-0.23 ± 0.33	-0.31 ± 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.

Q5 no difference image



Q5 no OOT image



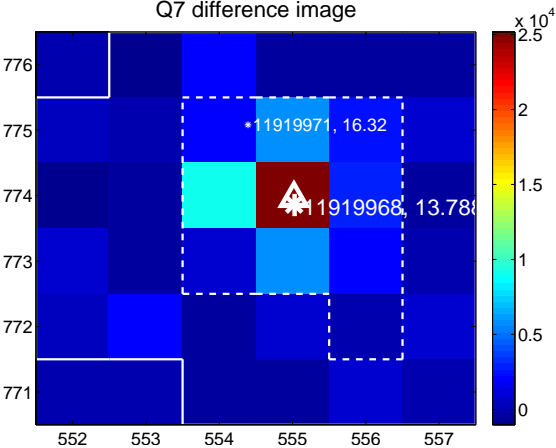
Q6 no difference image



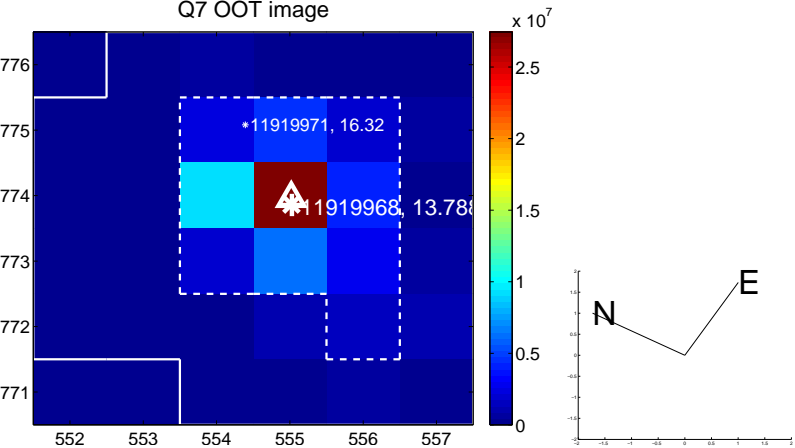
Q6 no OOT image



Q7 difference image



Q7 OOT image



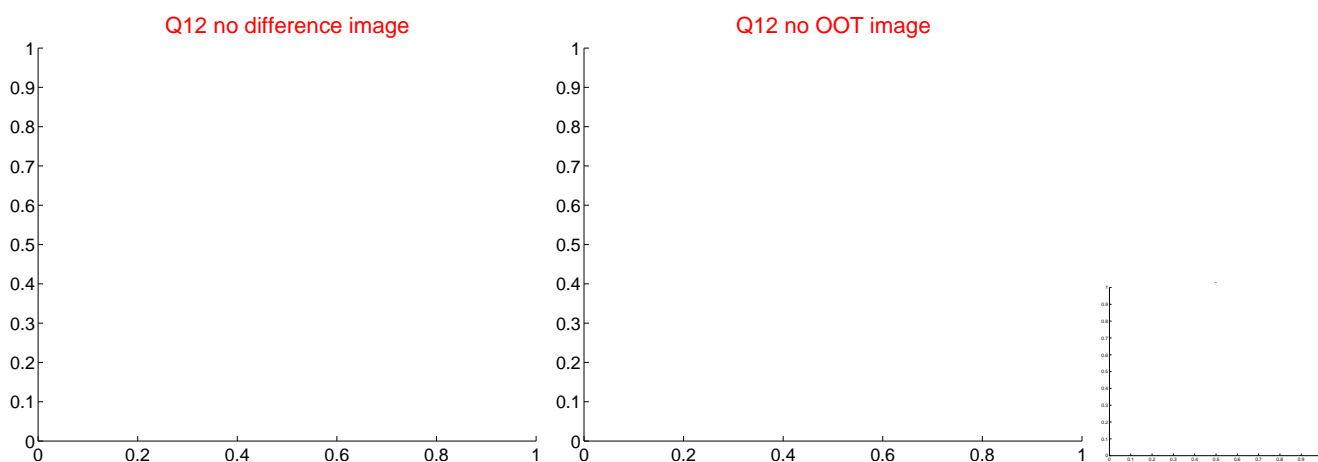
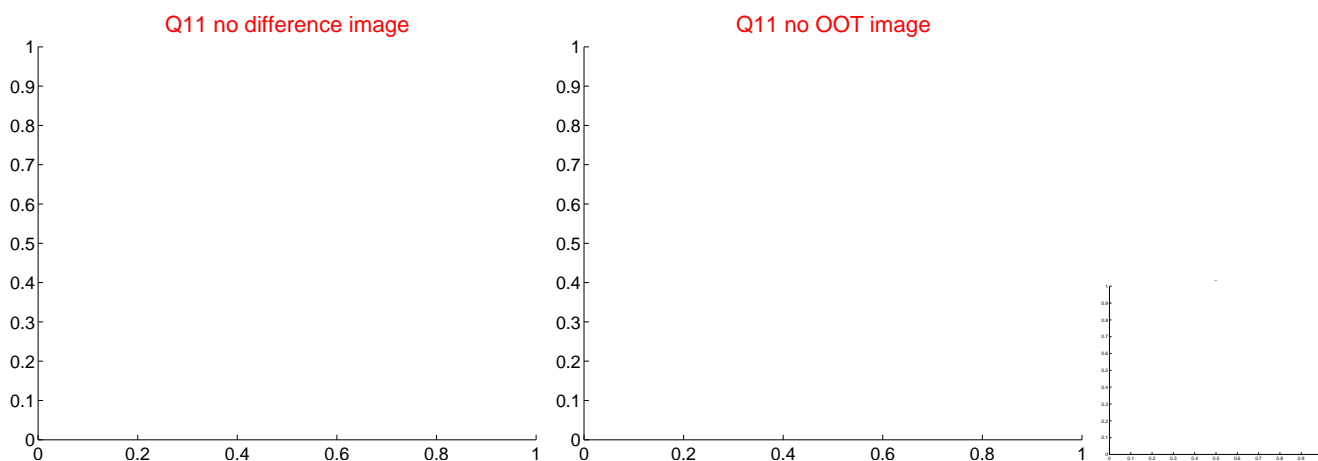
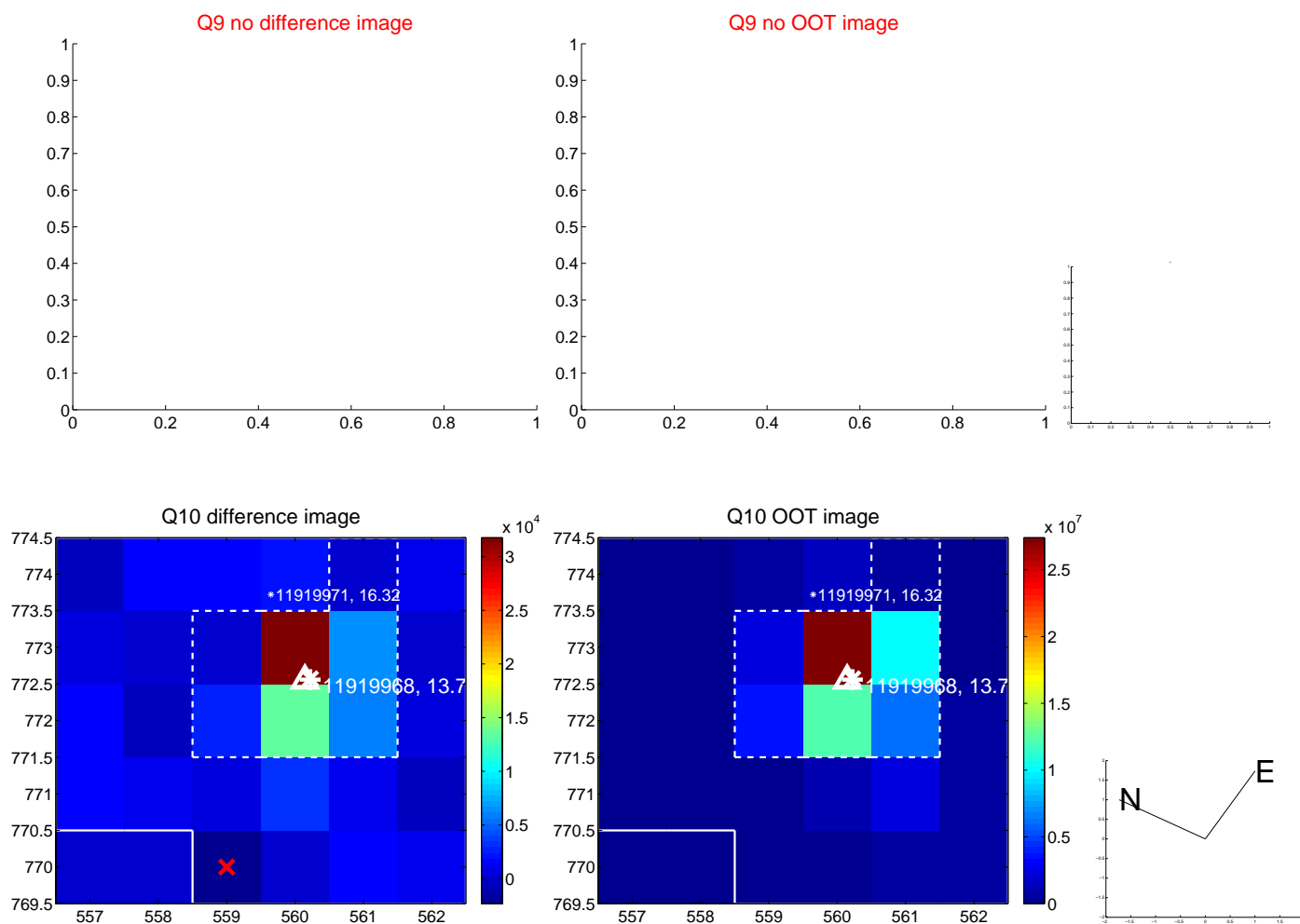
Q8 no difference image



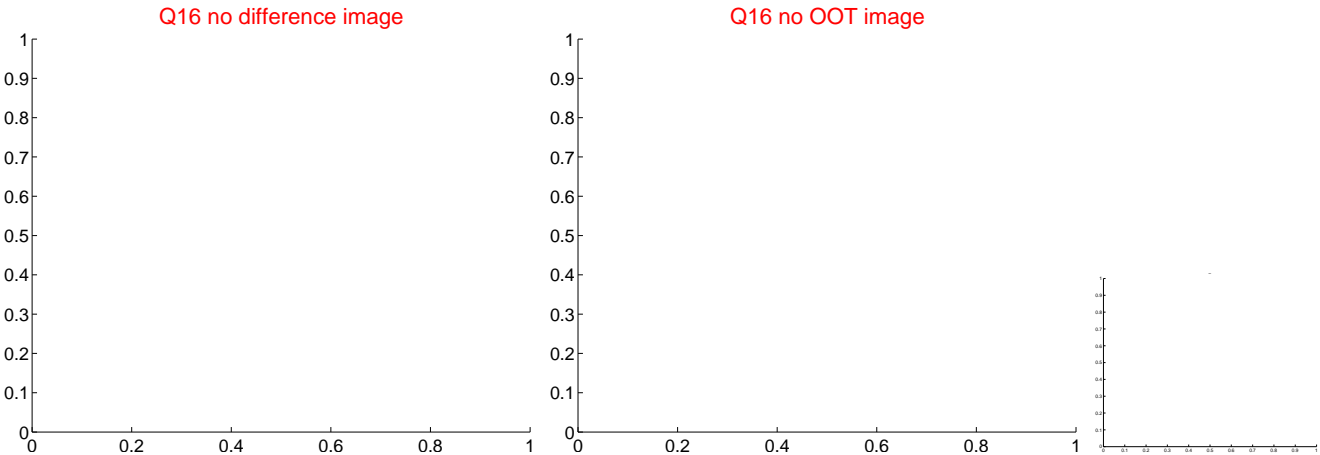
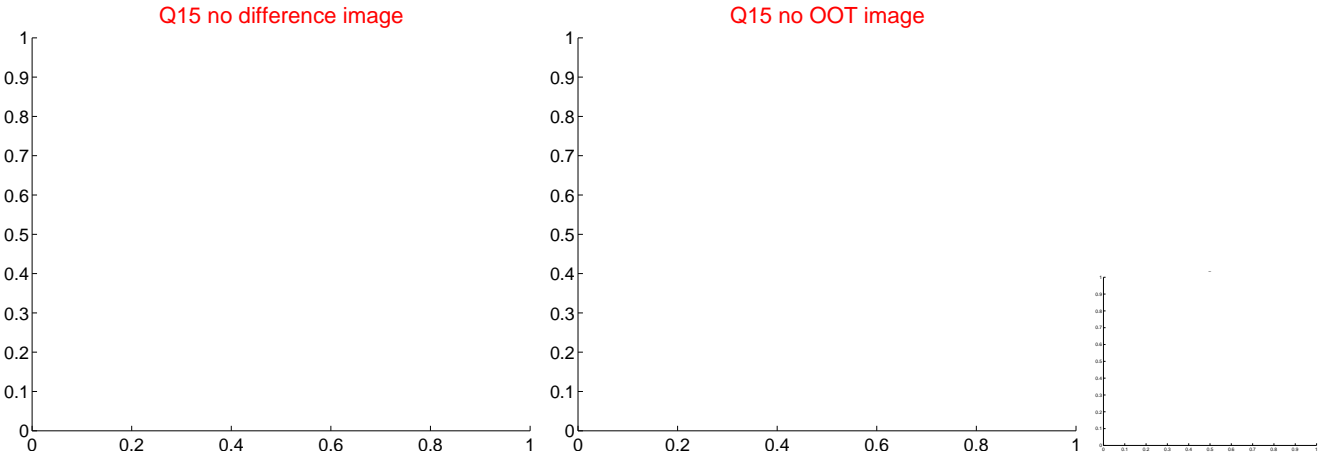
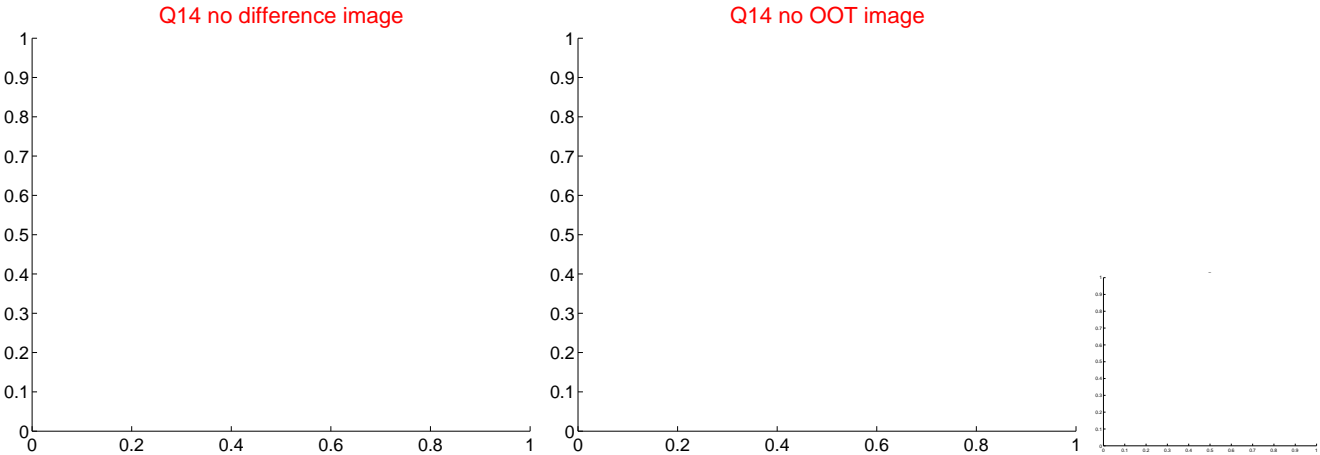
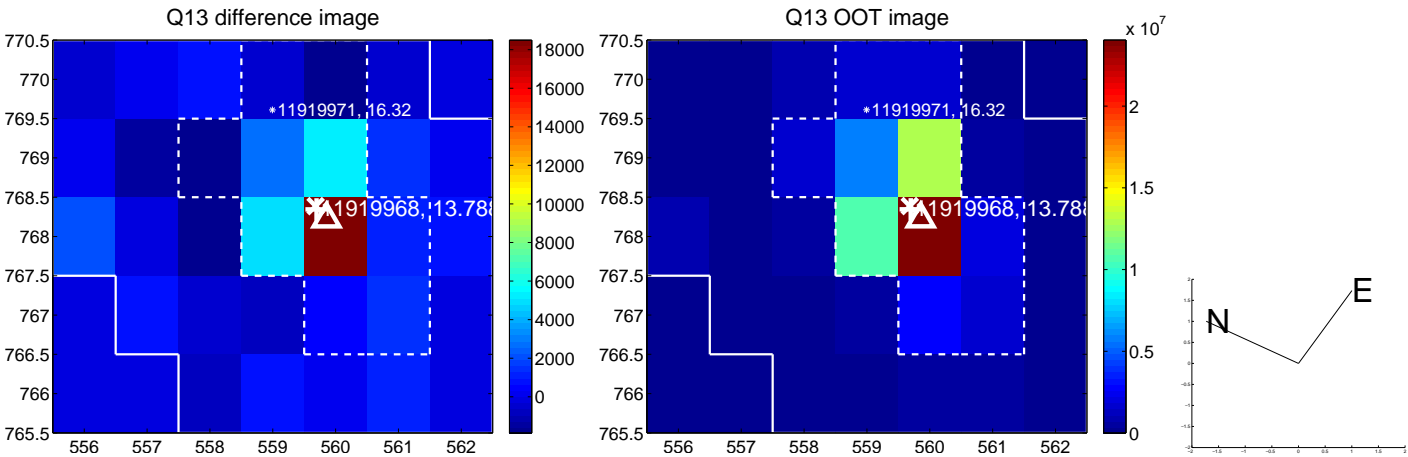
Q8 no OOT image



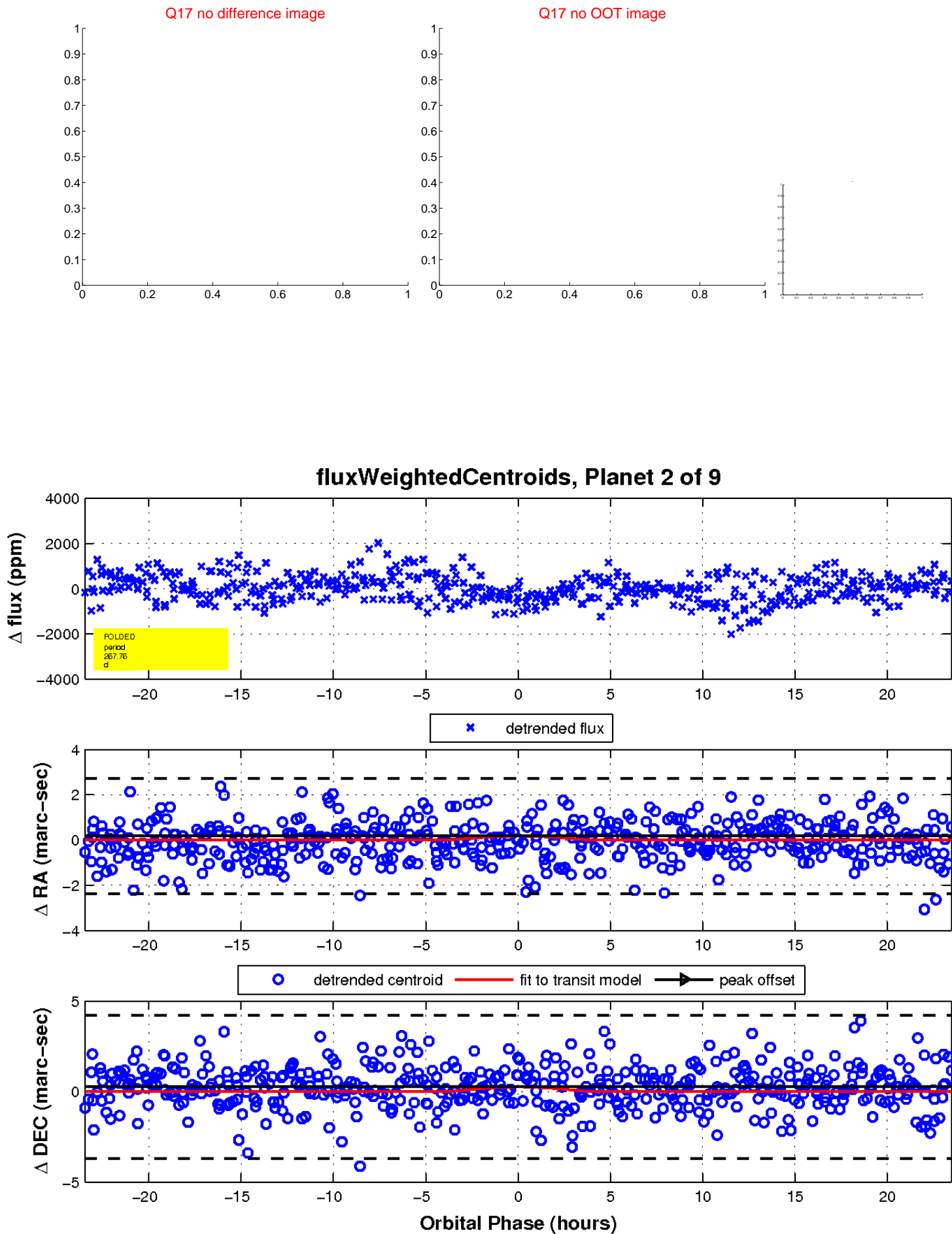
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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

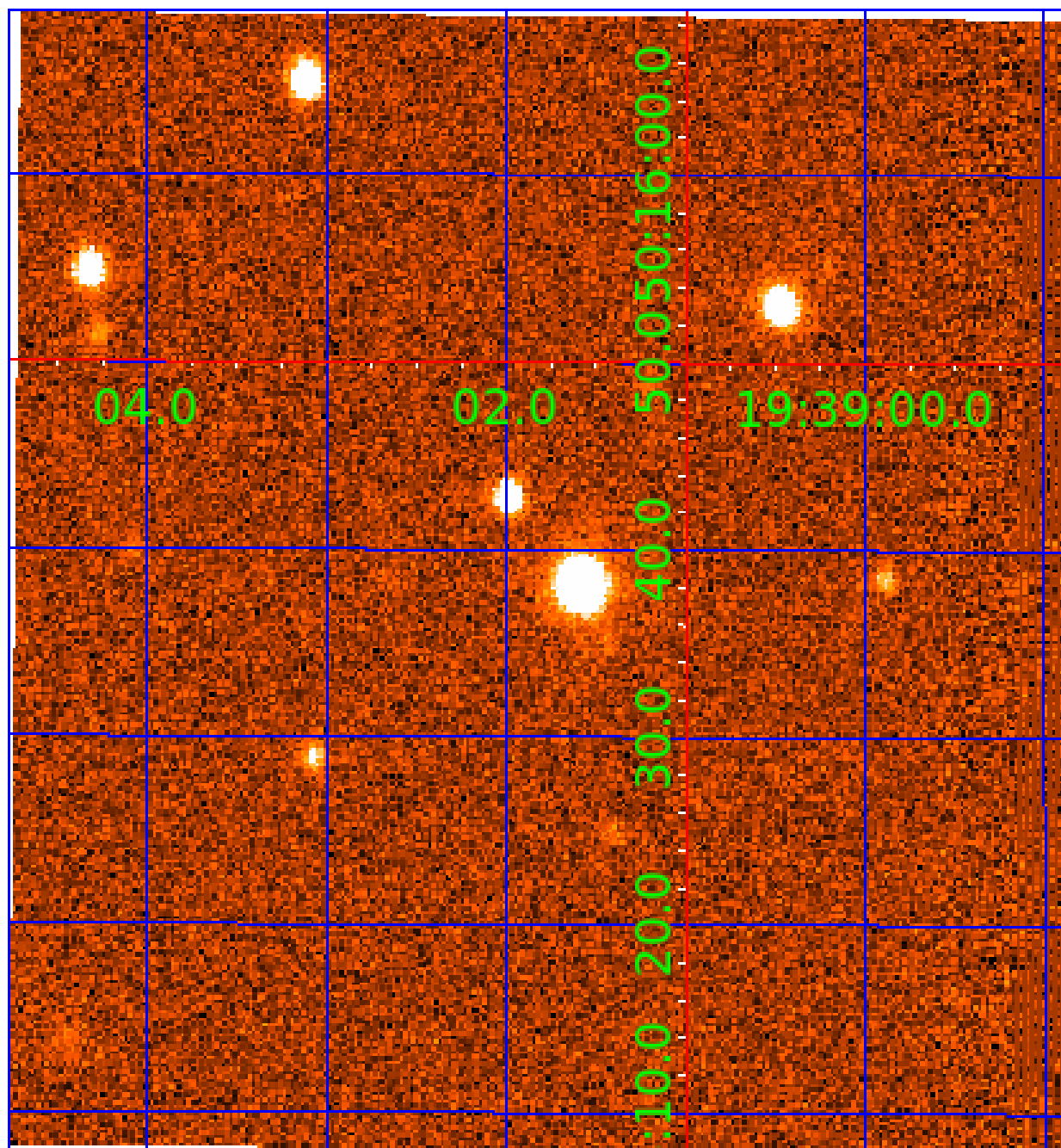


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011919968

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})
011919968-01	OBS	No	2.628739	131.606703	48.6	14.242	10.3	6.3	2.53	7935	1.79	10642.44
011919968-02	OBS	No	267.756509	141.587893	1236.1	7.836	12.6	9.2	2.53	7935	16.41	22.37
011919968-04	OBS	No	199.755848	143.598092	562.8	9.162	11.6	10.6	2.53	7935	6.83	33.06
011919968-05	OBS	No	268.049107	311.741872	571.9	8.594	11.5	9.1	2.53	7935	6.14	22.34
011919968-06	OBS	No	446.889317	253.774294	898.0	9.982	10.9	11.3	2.53	7935	8.18	11.30
011919968-07	OBS	No	380.862826	243.690824	758.5	7.345	11.2	8.0	2.53	7935	7.53	13.99
011919968-08	OBS	No	56.777775	139.781024	980.3	6.760	10.8	10.8	2.53	7935	14.72	176.93
011919968-09	OBS	No	171.288785	295.916012	482.9	5.000	10.6	-1.0	2.53	7935	5.62	40.59

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011919968-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
011919968-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_CHASES—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—HALO_GHOST
011919968-04	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011919968-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011919968-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011919968-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT
011919968-08	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011919968-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

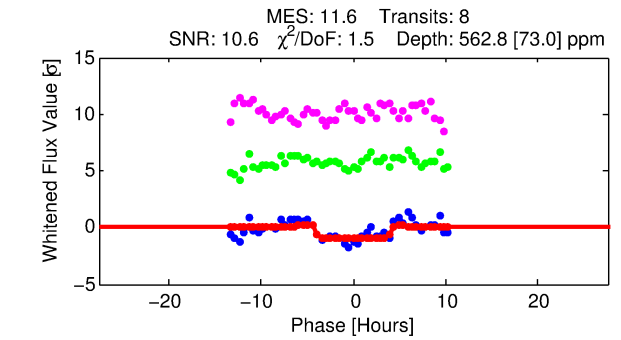
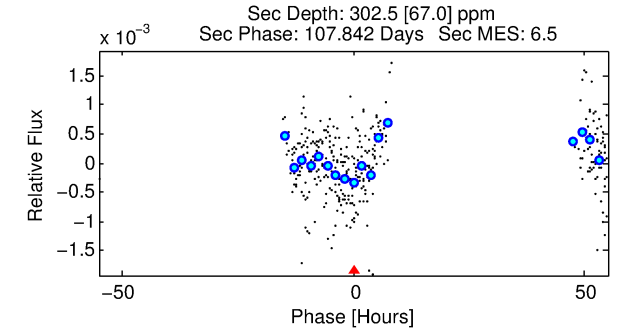
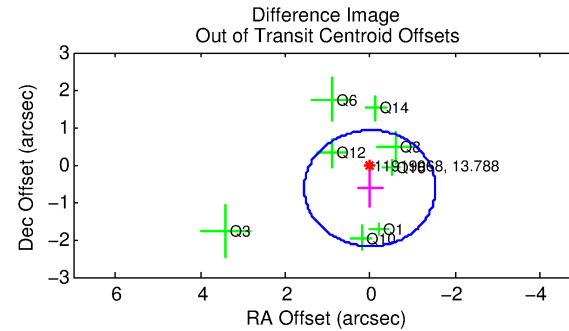
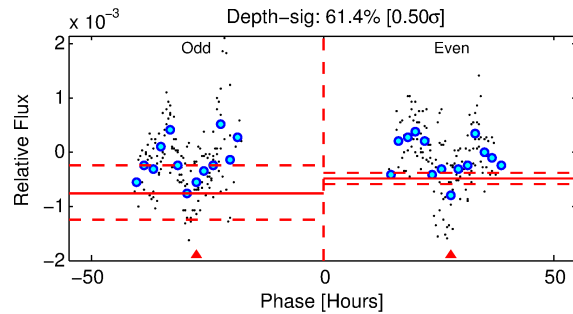
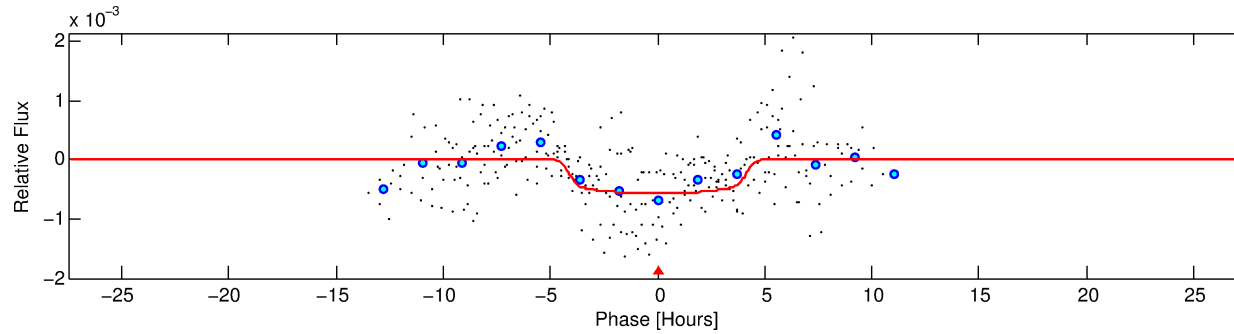
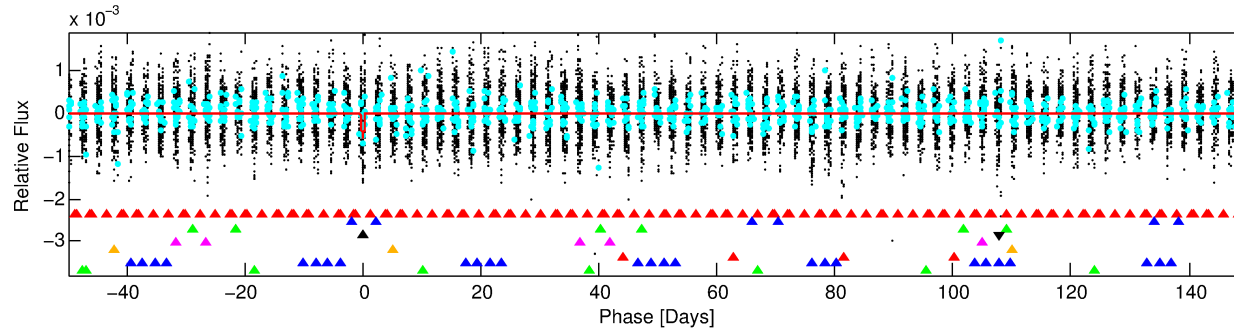
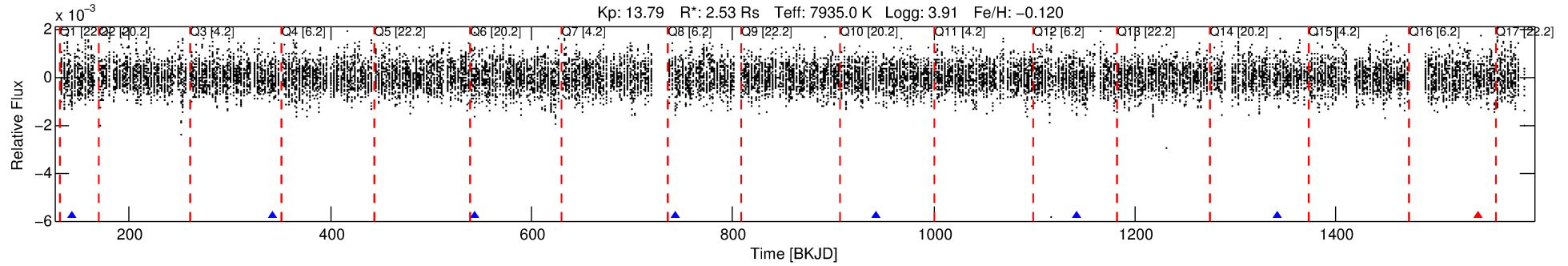
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011919968-04

No Significant Match Found

DV One-Page Summary

KIC: 11919968 Candidate: 4 of 9 Period: 199.756 d



DV Fit Results:

Period = 199.75585 [0.00319] d
Epoch = 143.5981 [0.0131] BKJD
Rp/R* = 0.0248 [0.0027]
a/R* = 90.60 [43.95]
b = 0.87 [0.14]
Seff = 33.07 [17.02]
Teq = 611 [79] K
Rp = 6.82 [2.64] Re
a = 0.8279 [0.2687] AU
Ag = 2449.05 [1414.75] [1.73 σ]
Teffp = 6651 [587] K [10.20 σ]

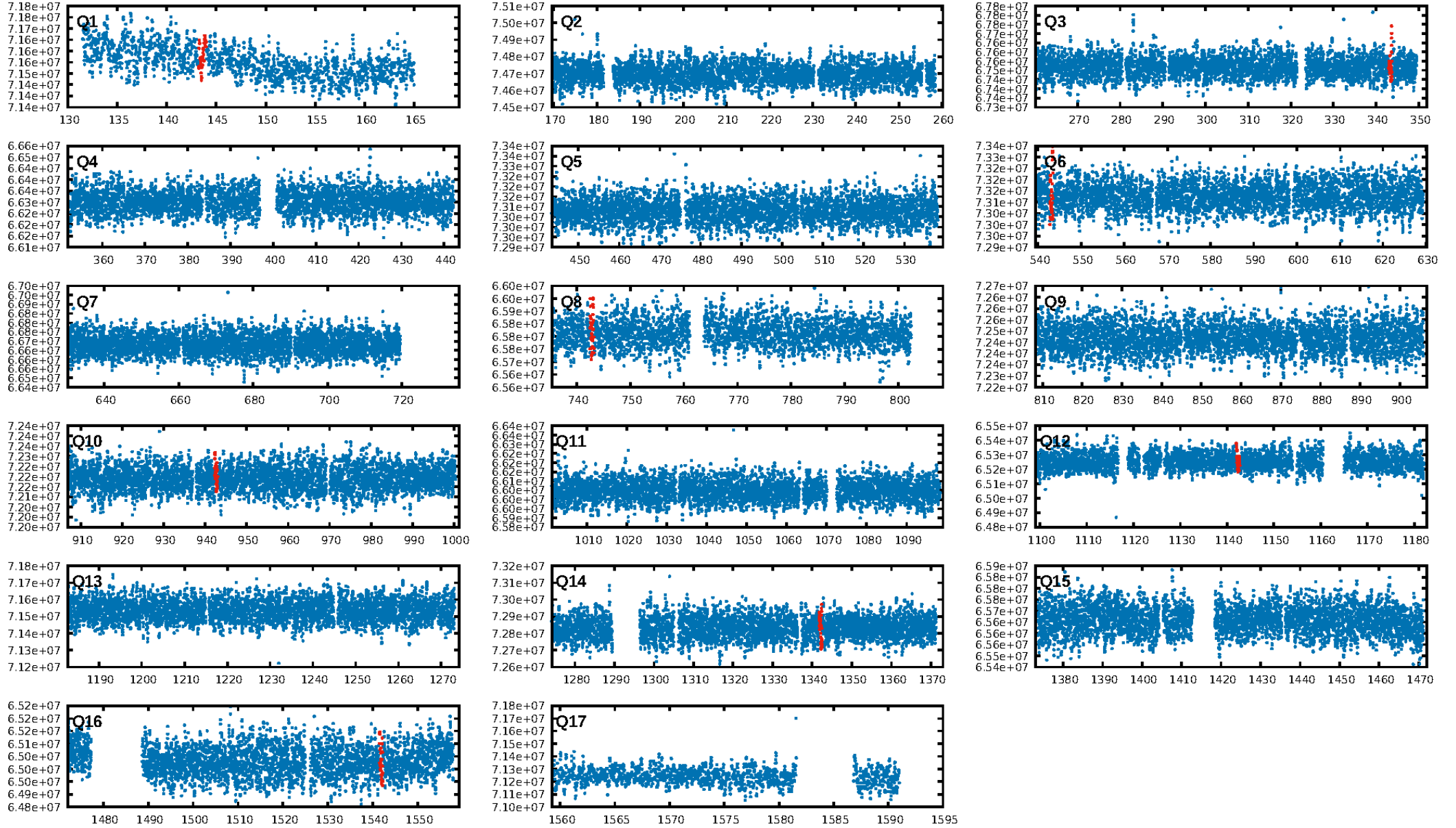
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [65.46 σ]
LongPeriod-sig: 100.0% [135.37 σ]
ModelChiSquare2-sig: 1.1%
ModelChiSquareGof-sig: 87.5%
Bootstrap-pfa: N/A
RollingBand-fgt: 0.86 [6/7]
GhostDiagnostic-chr: 0.2776
Centroid-sig: 74.4%
Centroid-so: 0.380 arcsec [0.83 σ]
OotOffset-rm: 0.630 arcsec [1.22 σ]
KicOffset-rm: 0.674 arcsec [1.28 σ]
OotOffset-st: 3/1/3/1 [8]
KicOffset-st: 3/1/3/1 [8]
DiffImageQuality-fgm: 0.75 [6/8]
DiffImageOverlap-fno: 1.00 [8/8]

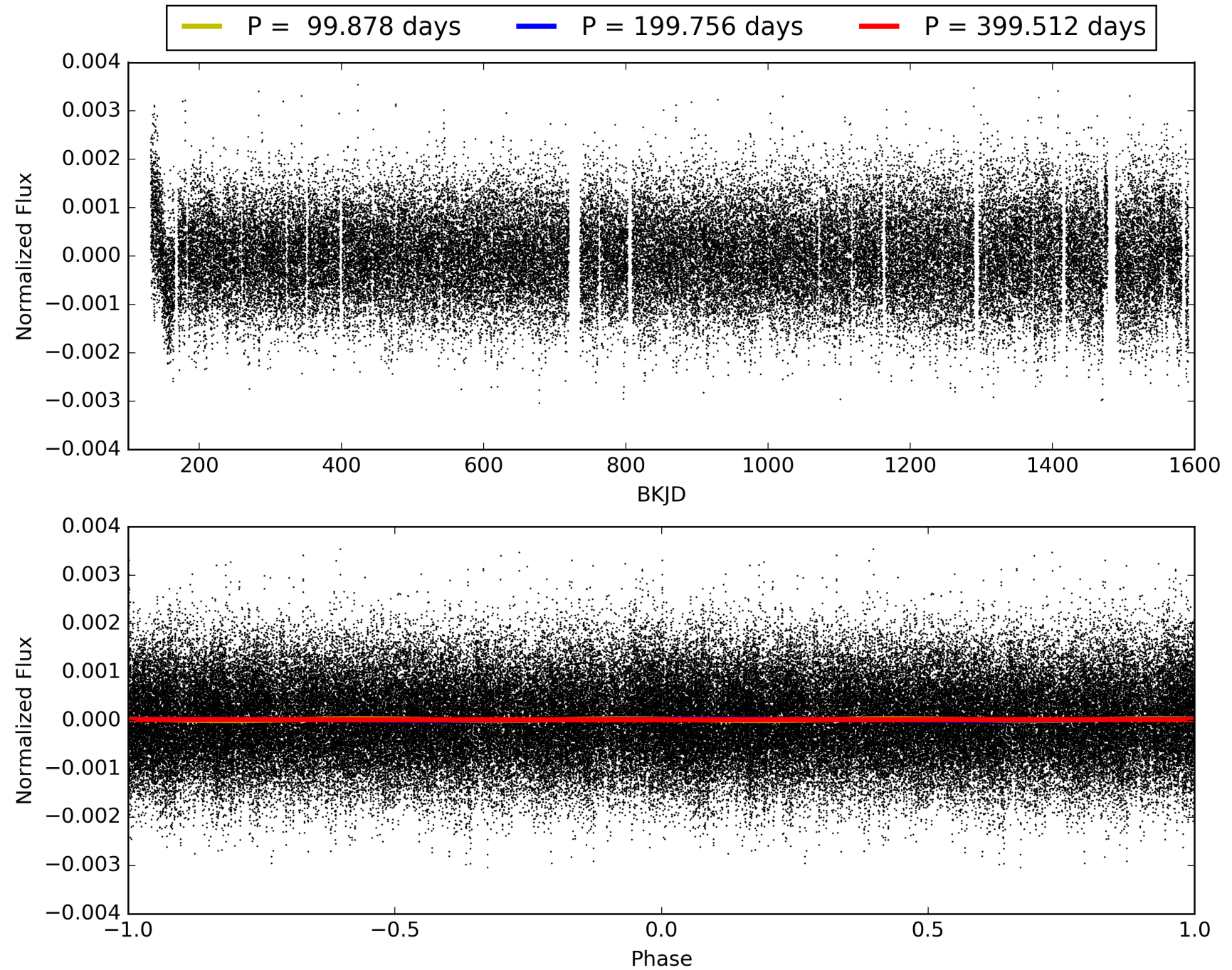
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:53:02 Z

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

TCE 011919968-04, PDC Light Curves

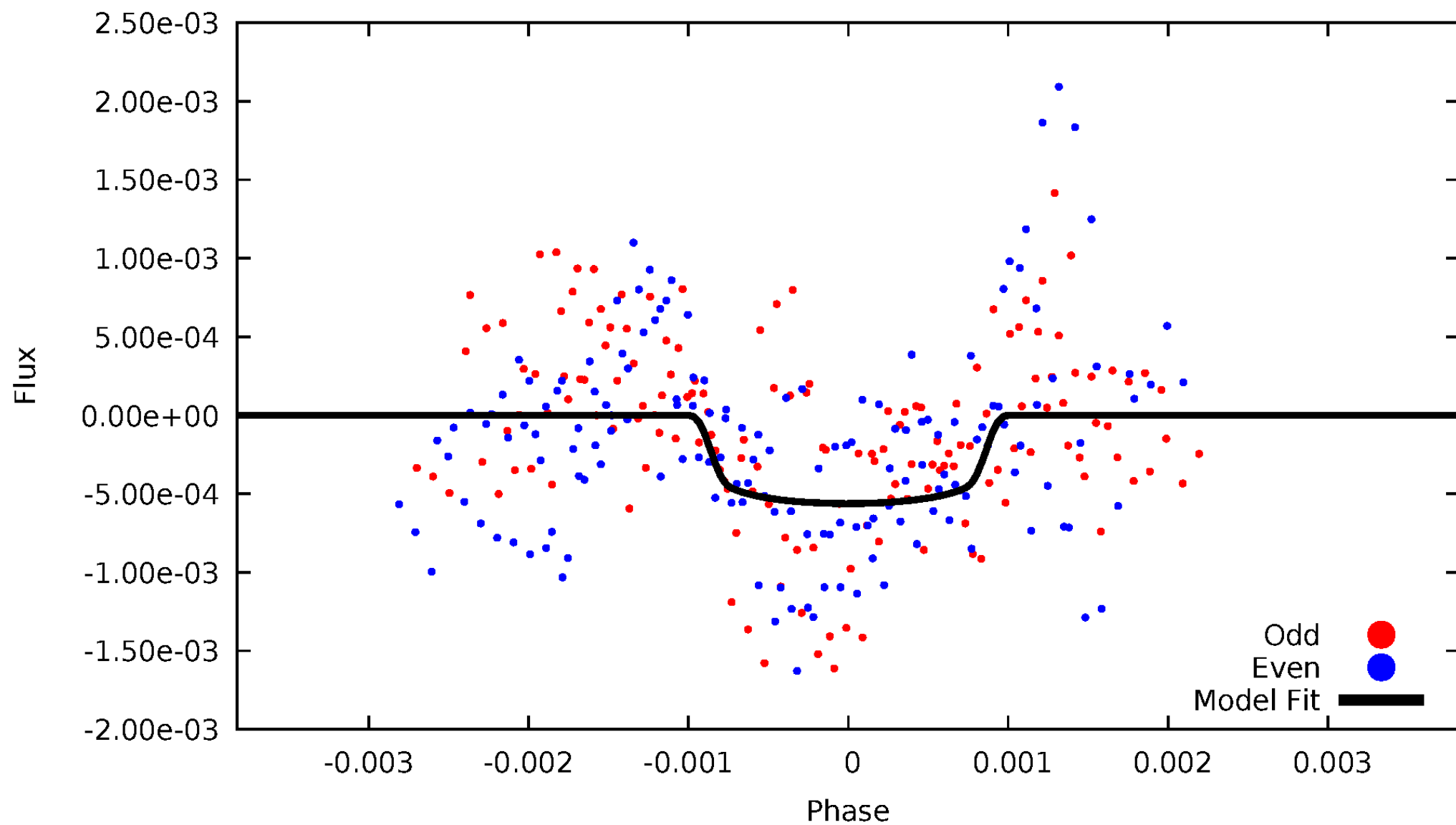


TCE 011919968-04



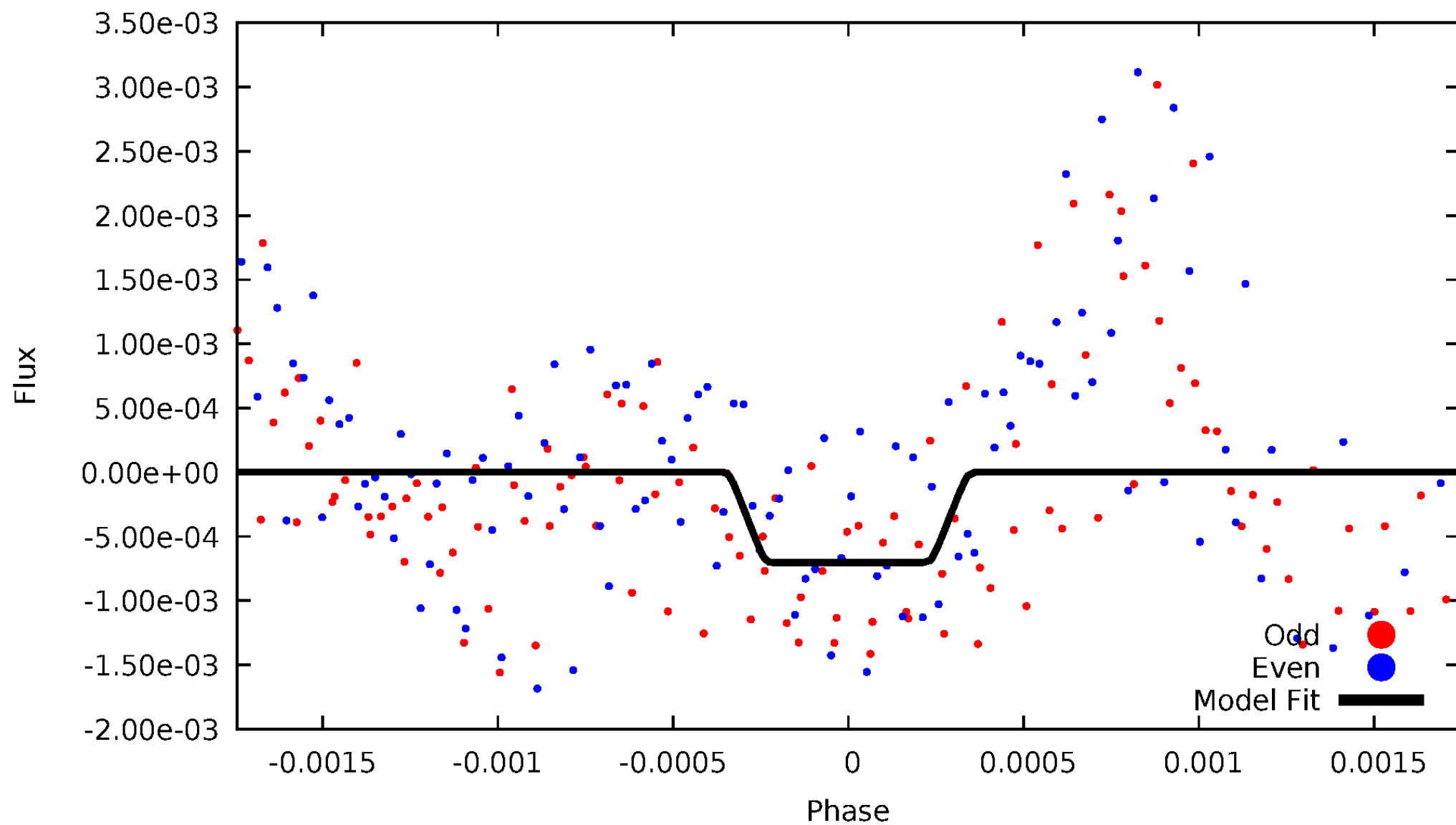
DV Odd/Even

TCE 011919968-04



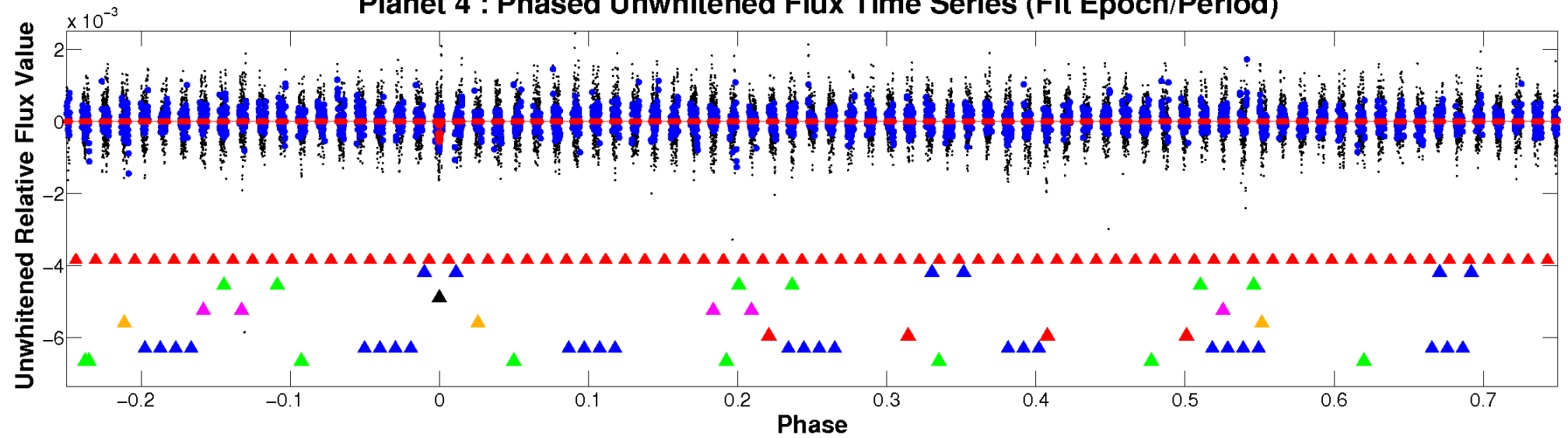
ALT Odd/Even

TCE 011919968-04

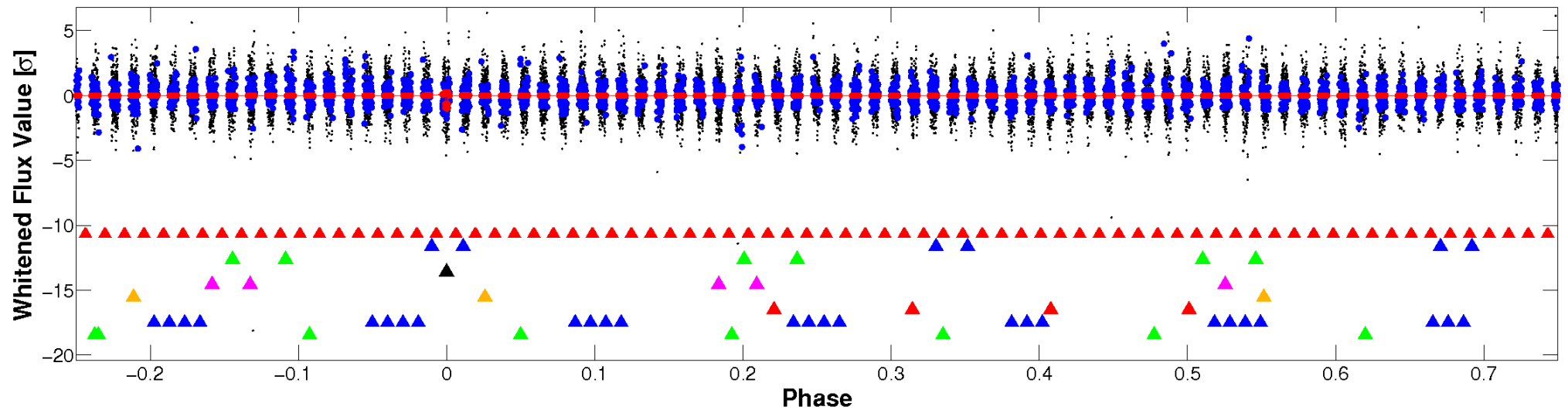


Non-Whitened Vs. Whitened Light Curve

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

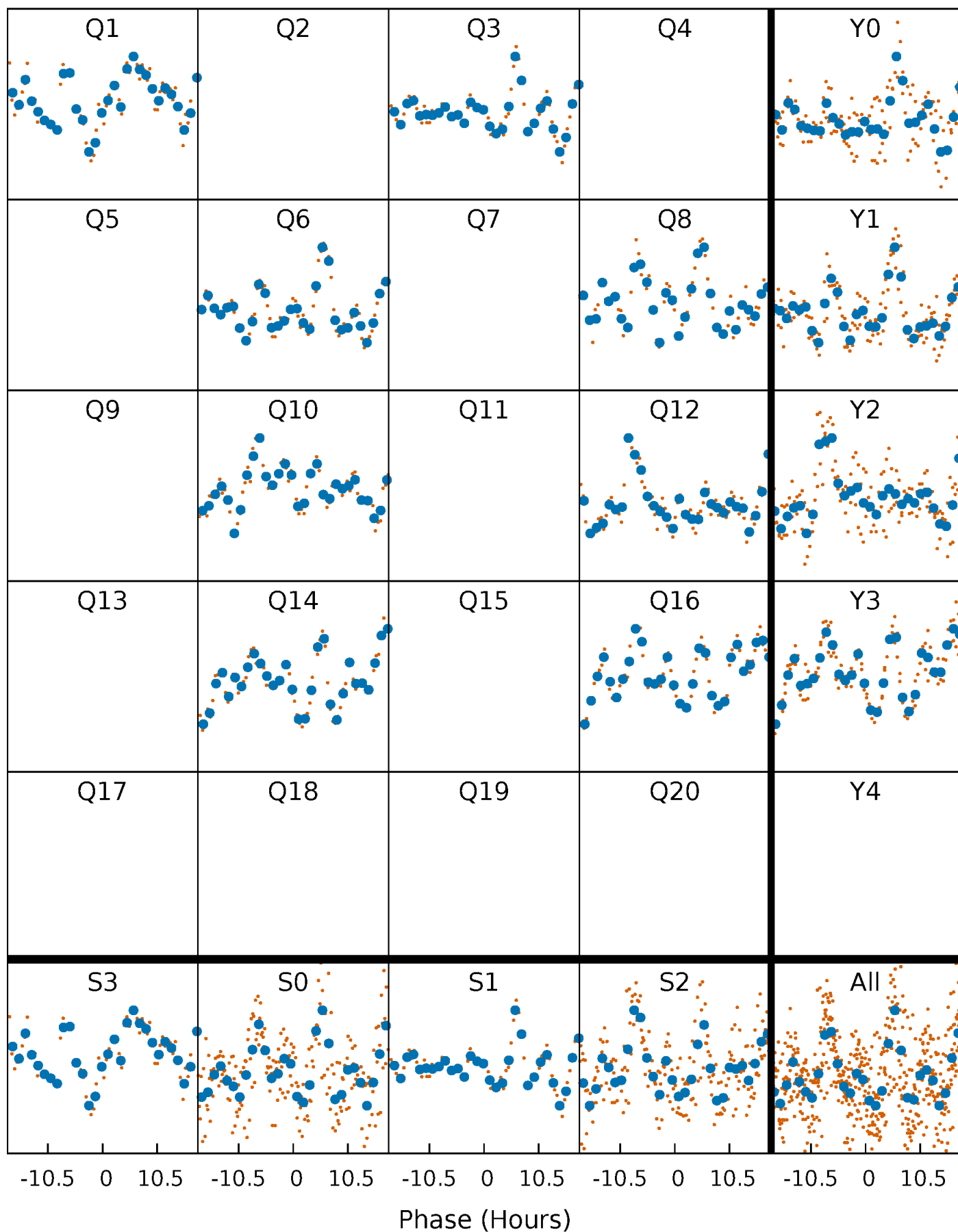


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



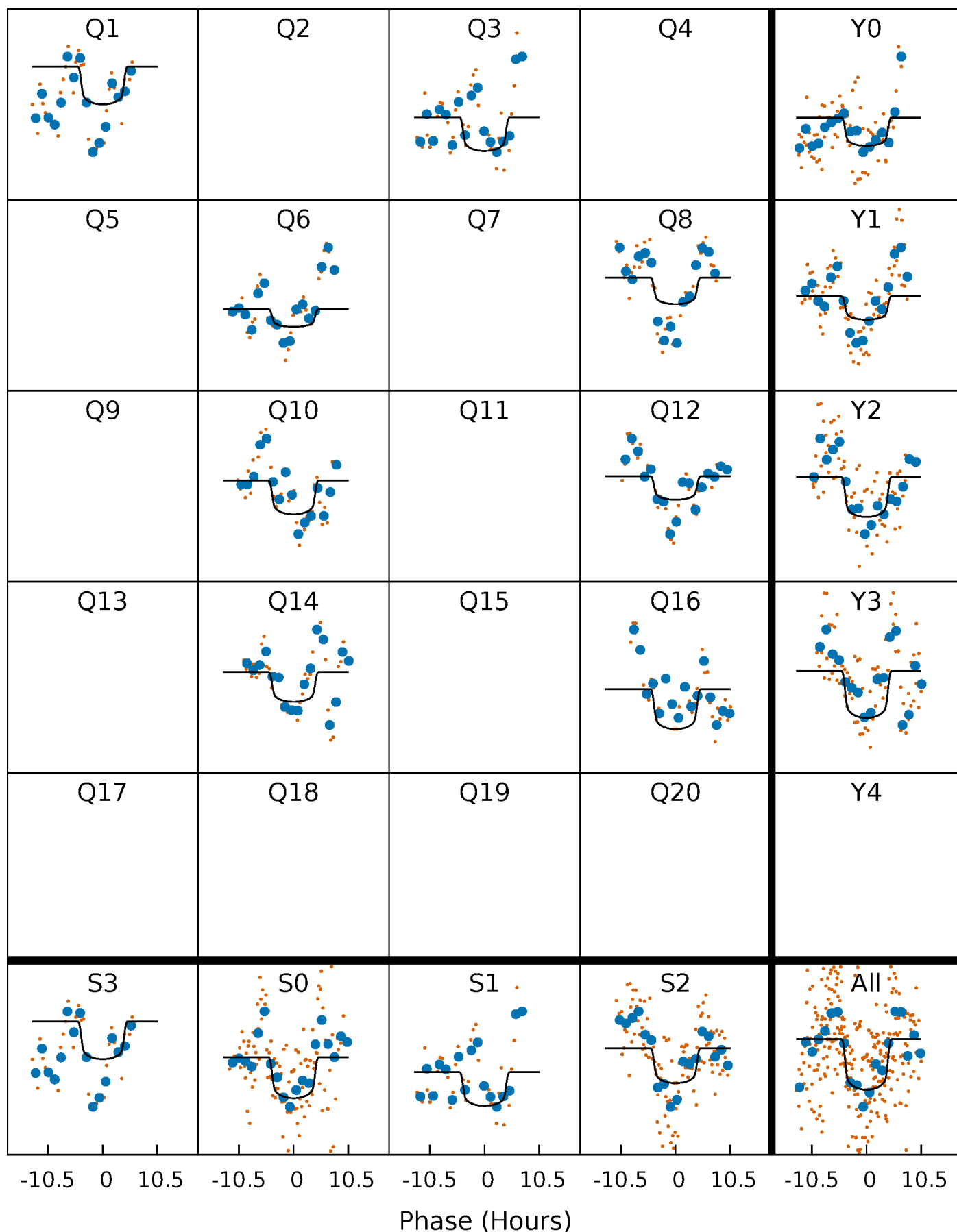
PDC Quarter-Phased Transit Curves

TCE 011919968-04 $P=199.755848$ Days $T_0=143.598092$ (BKJD)



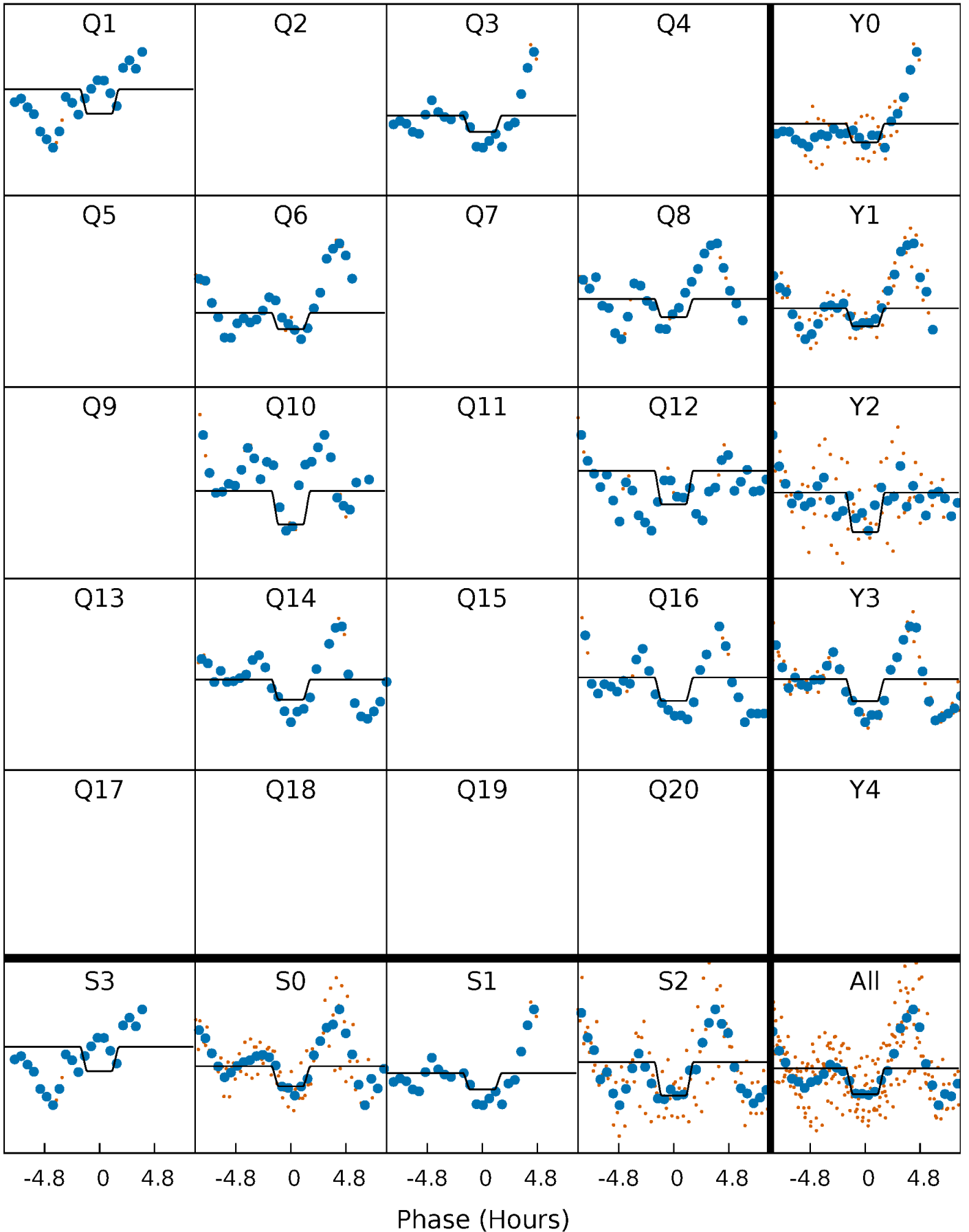
DV Quarter-Phased Transit Curves

TCE 011919968-04 P=199.755848 Days $T_0=143.598092$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

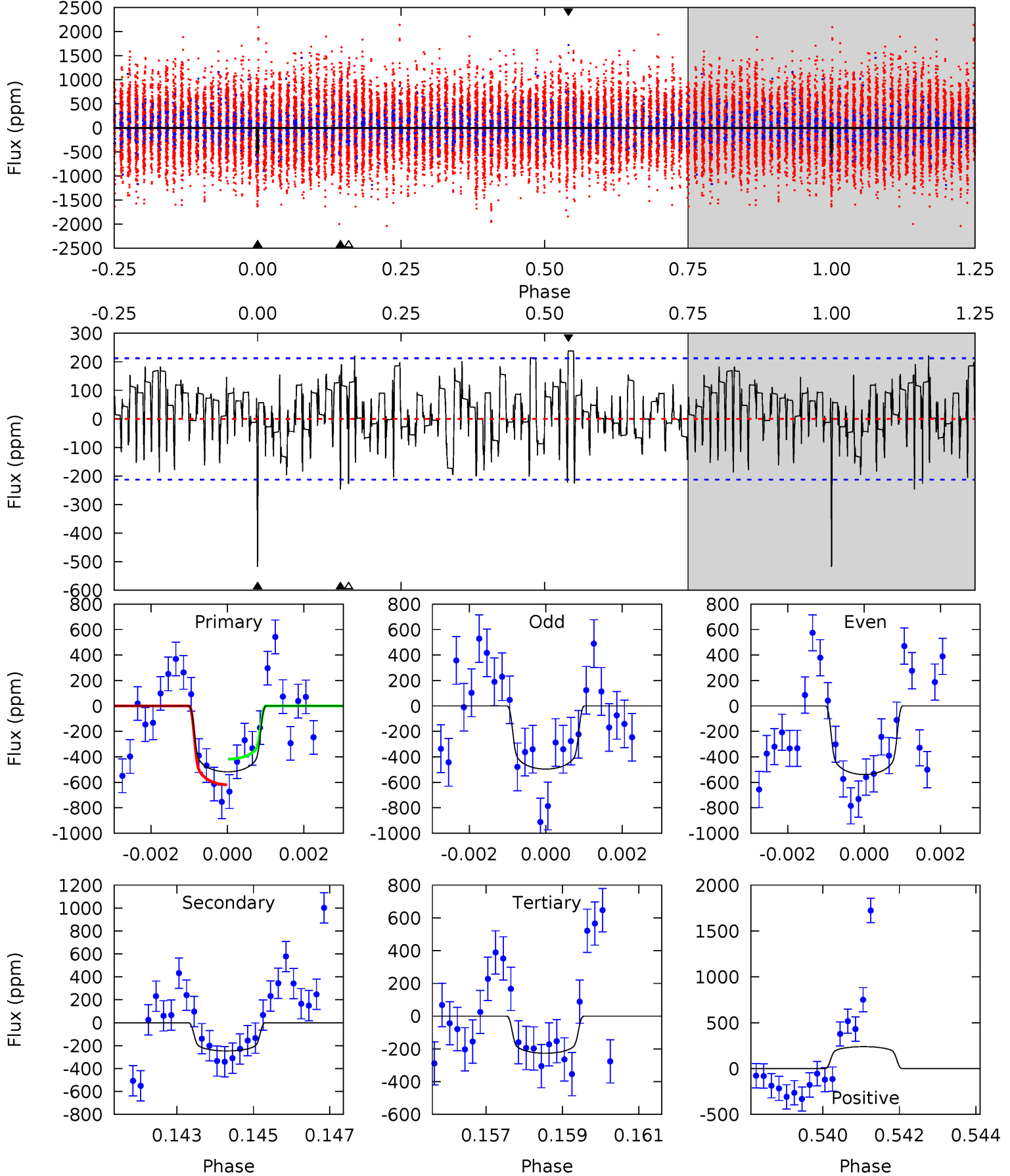
TCE 011919968-04 P=199.751671 Days $T_0=143.683926$ (BKJD)



DV Model-Shift Uniqueness Test

011919968-04, P = 199.755848 Days, E = 143.598092 Days

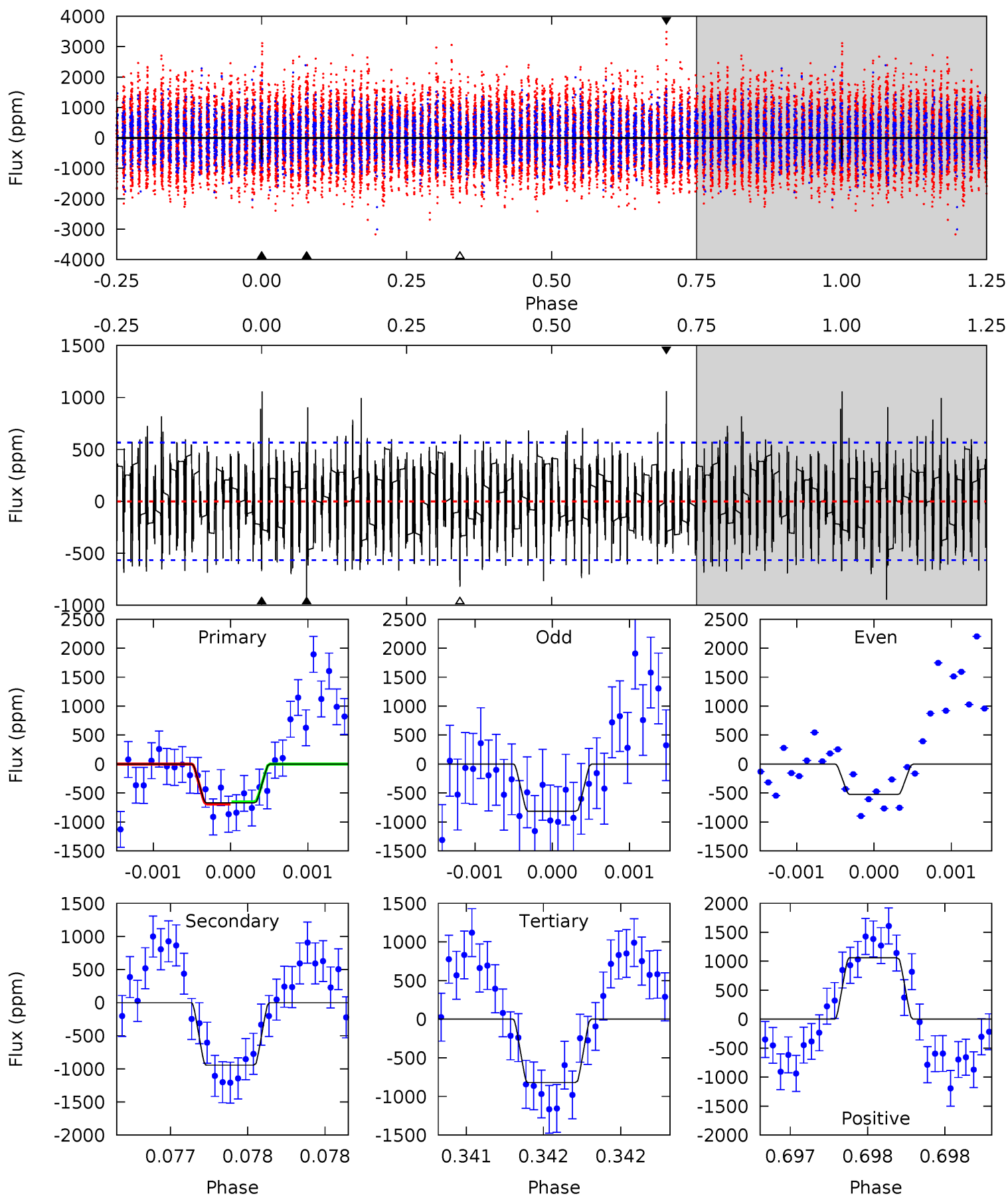
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.0	6.18	5.68	5.98	5.33	3.09	2.07	7.28	6.98	0.50	0.20	0.54	1.11	0.32	2.52



Alt Model-Shift Uniqueness Test

011919968-04, P = 199.751671 Days, E = 143.683926 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.54	9.20	8.00	10.3	5.51	3.39	2.96	-1.46	-3.78	1.20	-1.12	1.40	1.16	0.53	0.19



Stellar Parameters For KIC 011919968

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7935^{+220}_{-331}	$3.911^{+0.273}_{-0.117}$	$-0.120^{+0.200}_{-0.350}$	$2.526^{+0.402}_{-0.939}$	$1.895^{+0.103}_{-0.414}$	$0.166^{+0.311}_{-0.061}$
	+3%/-4%	+7%/-3%	+167%/-292%	+16%/-37%	+5%/-22%	+188%/-37%
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 011919968-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-247 ± 40	$6.64^{+1.09}_{-1.29}$	844^{+52}_{-78}	6135^{+509}_{-446}	2116^{+1037}_{-644}
Alt.	-944 ± 103	$6.97^{+1.27}_{-1.31}$	843^{+51}_{-78}	8680^{+829}_{-692}	7091^{+3437}_{-2008}

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 $A_{obs} \gg 1.0$

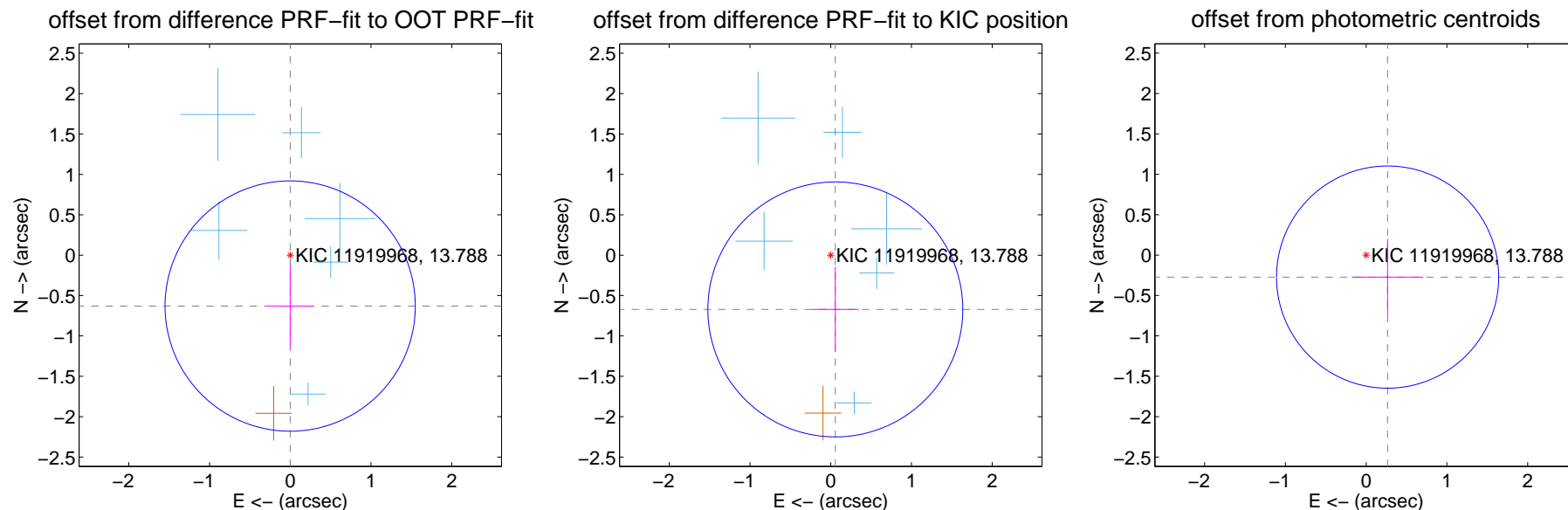
DV Centroid Data

Supplemental centroid analysis for 011919968-04. Kepler magnitude: 13.79. Transit SNR 10.55

There are 6 quarters with good PRF difference image offsets

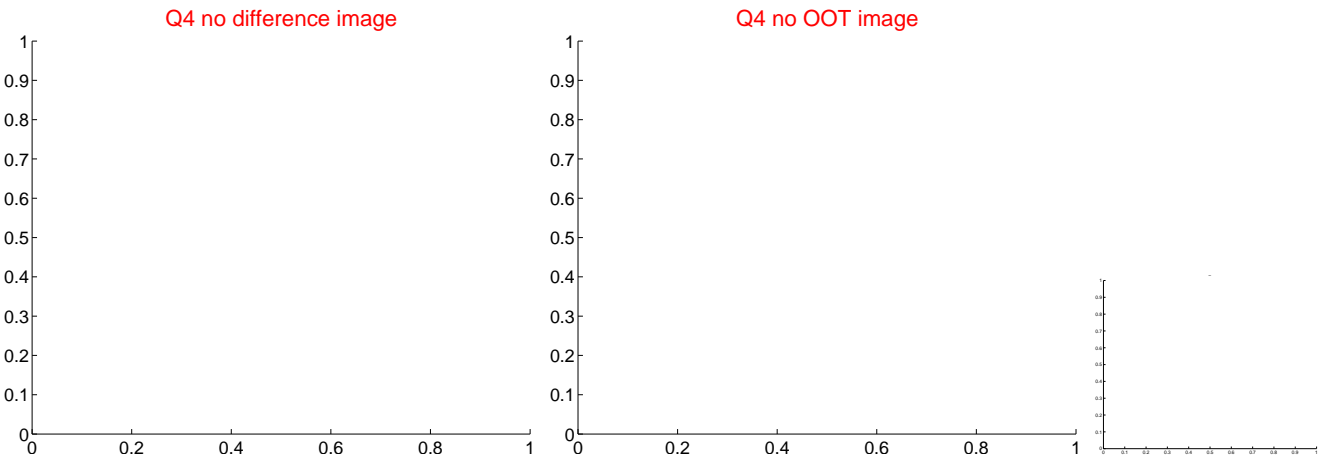
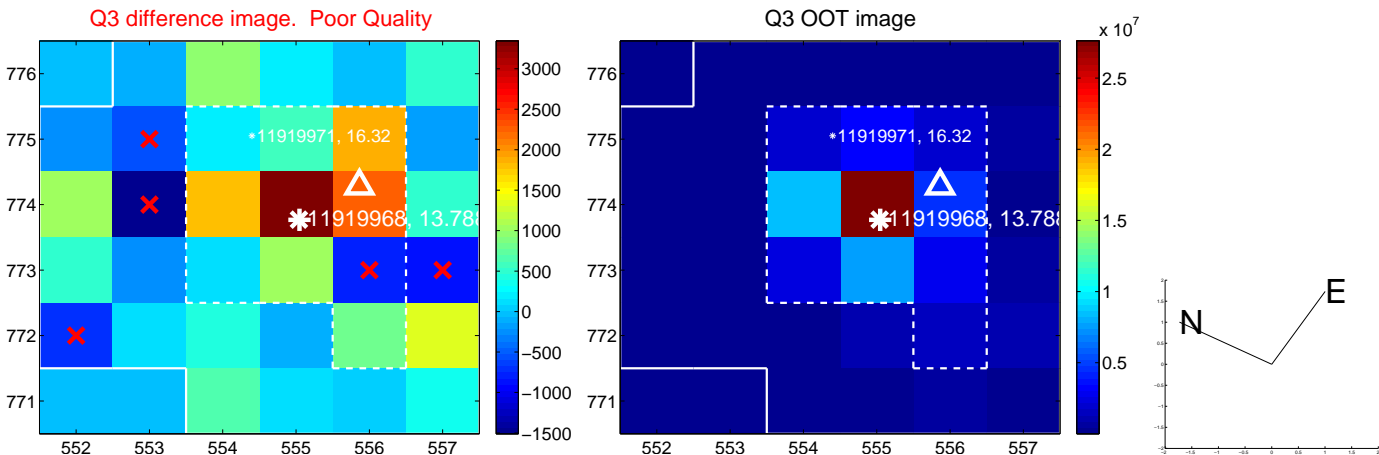
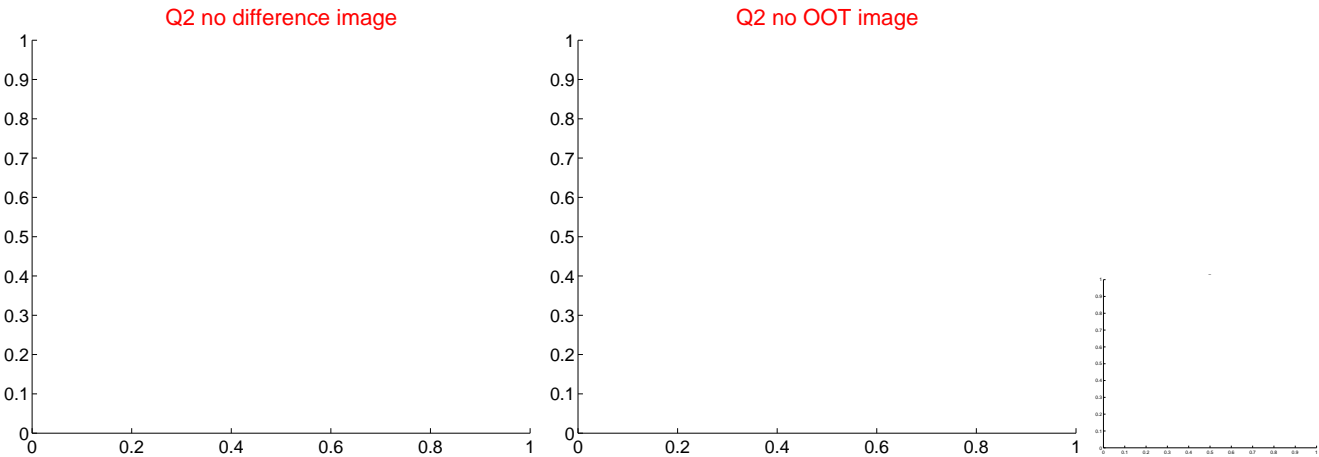
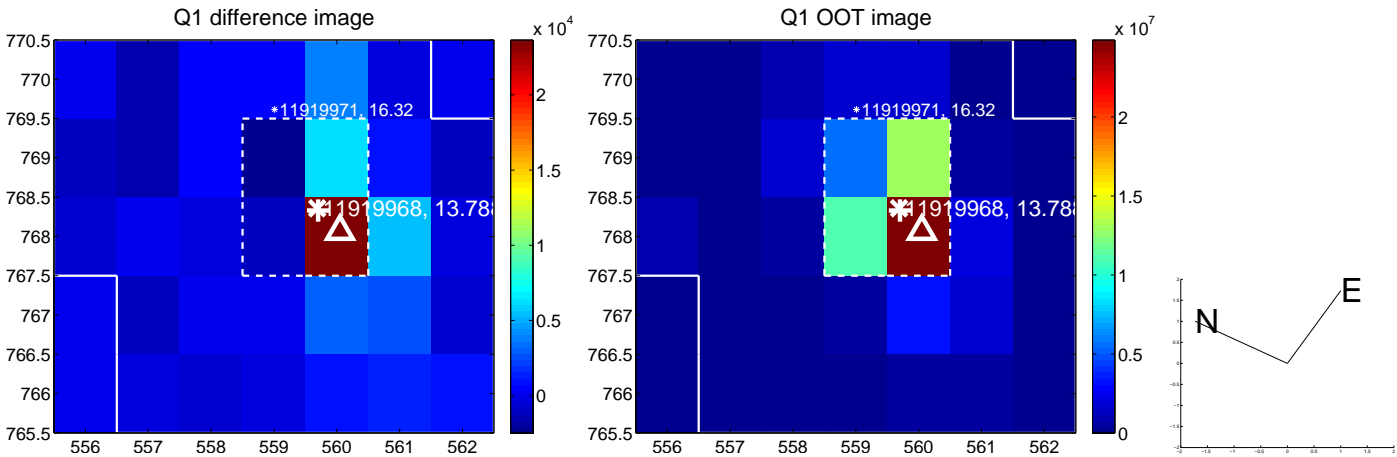
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.630 ± 0.516	1.22	0.001 ± 0.290	-0.630 ± 0.516
PRF-fit source offset from KIC position	0.674 ± 0.526	1.28	-0.057 ± 0.293	-0.672 ± 0.527
photometric centroid source offset	0.38 ± 0.46	0.83	-0.27 ± 0.44	-0.27 ± 0.47

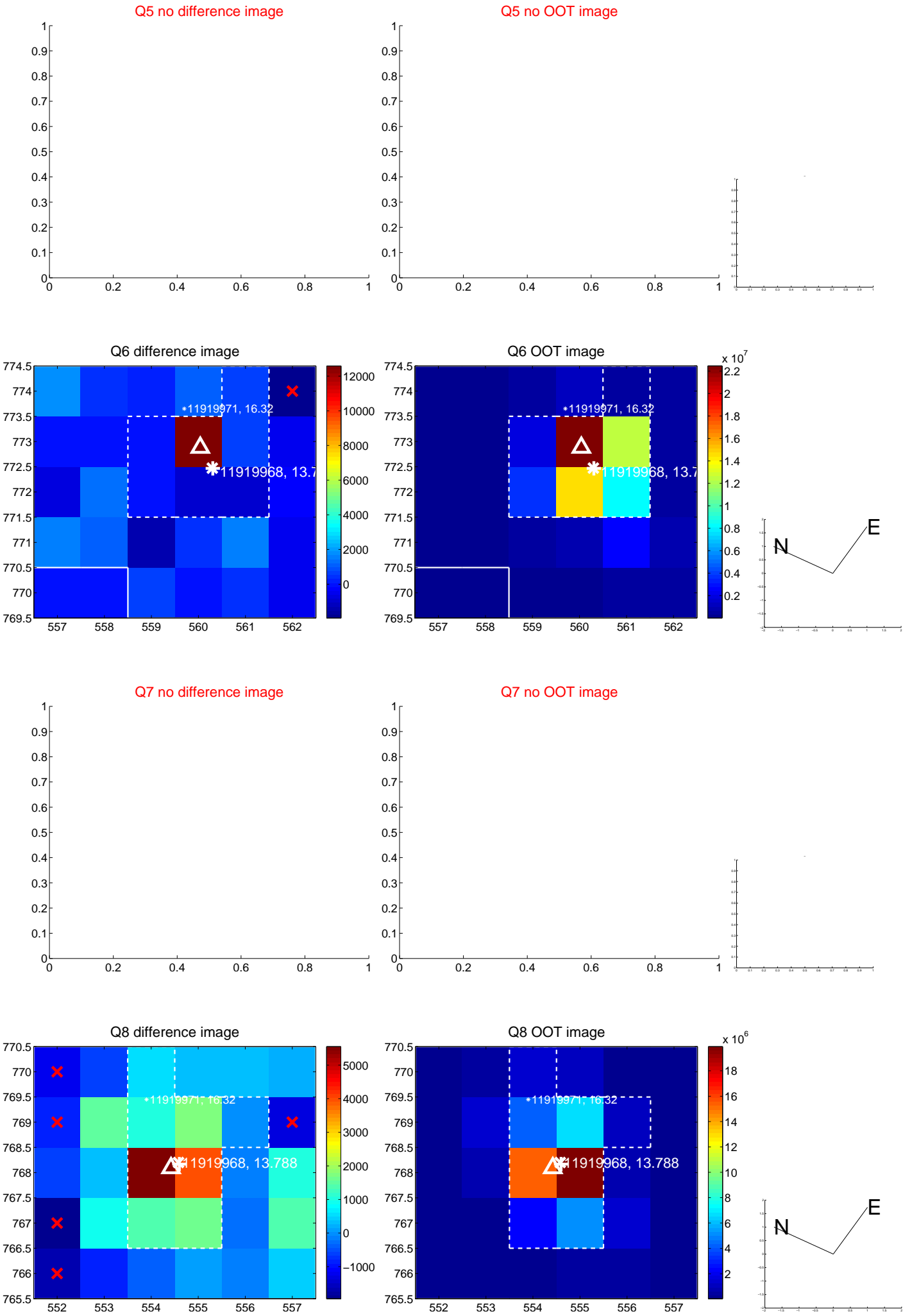


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

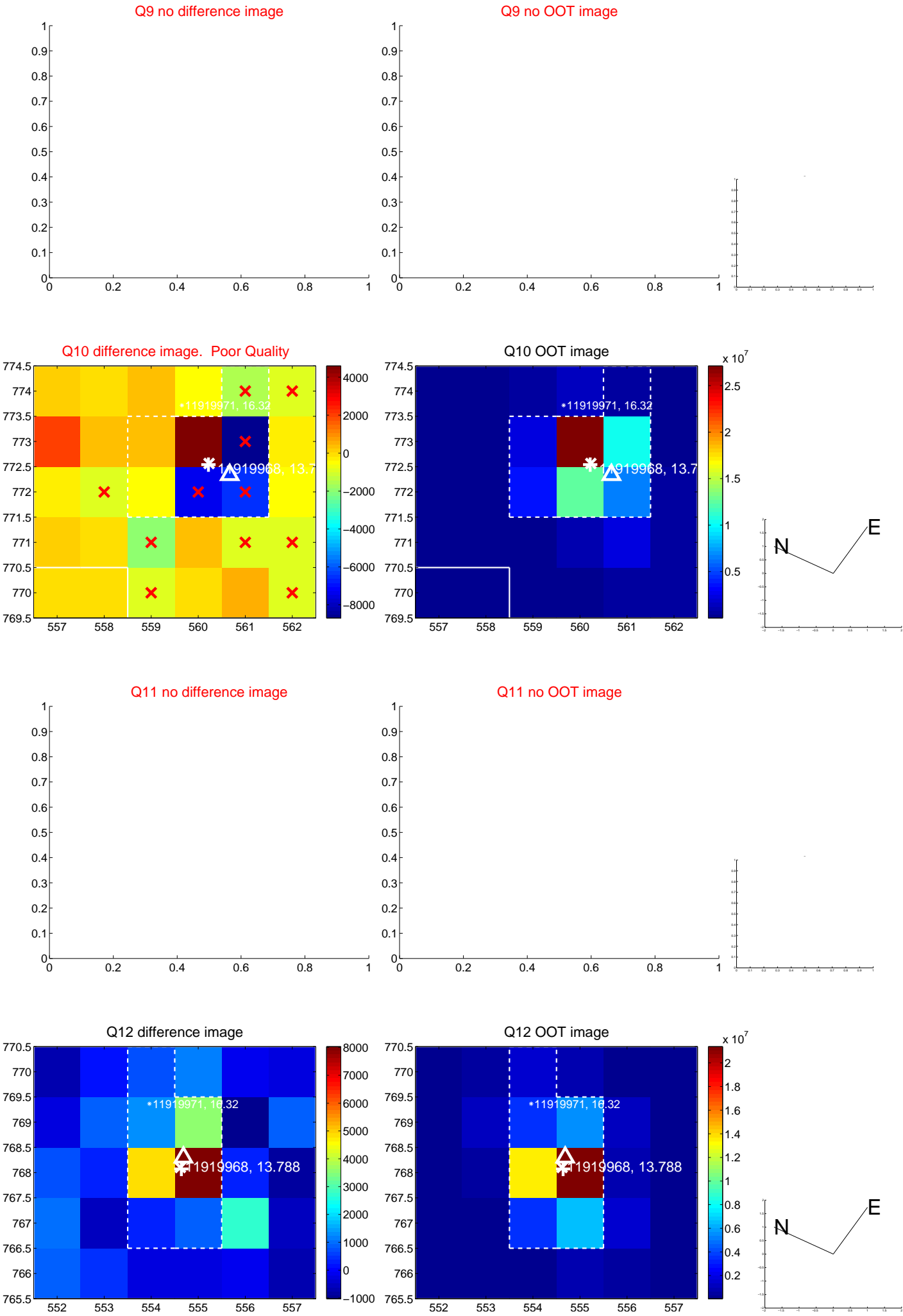
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



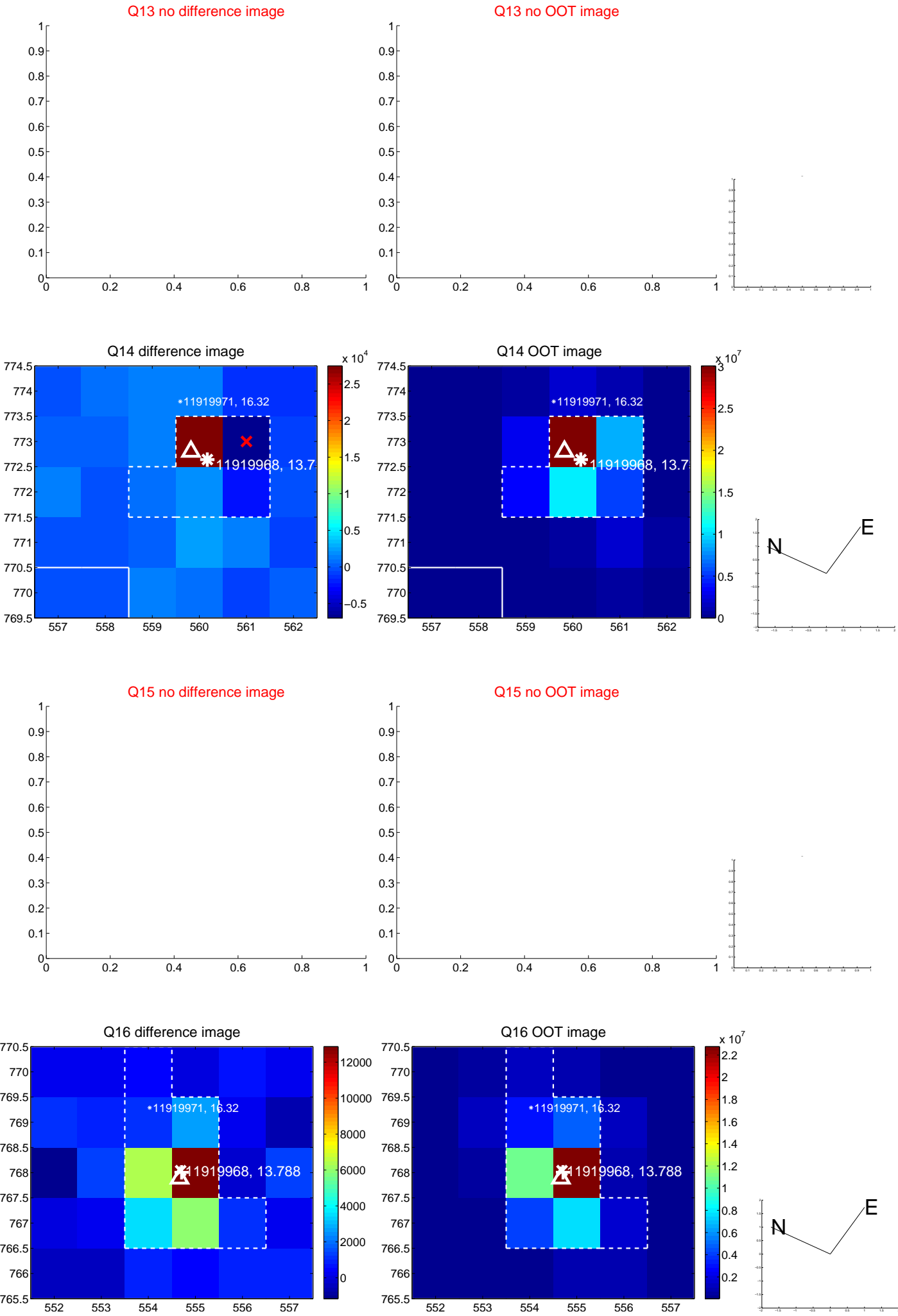
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



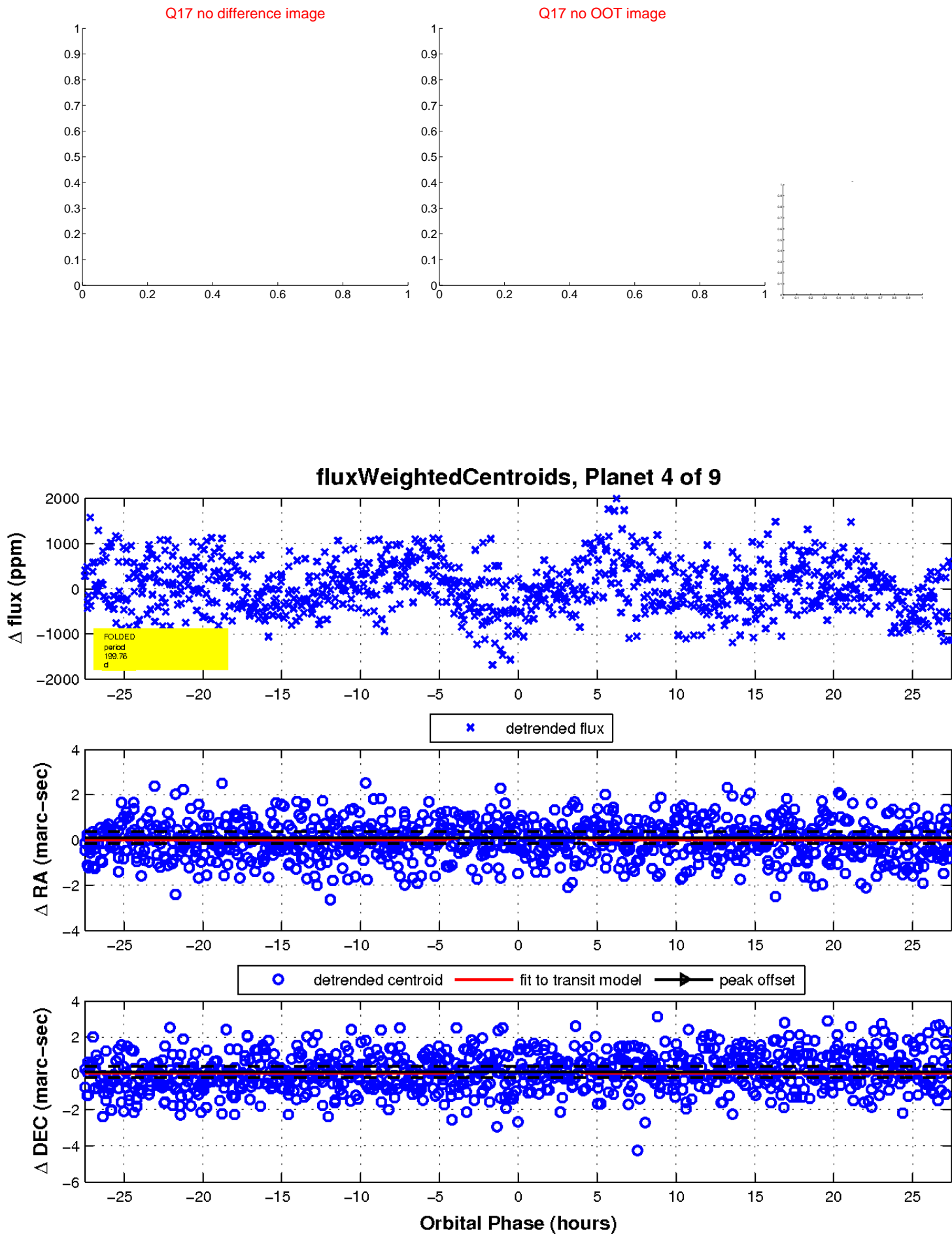
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

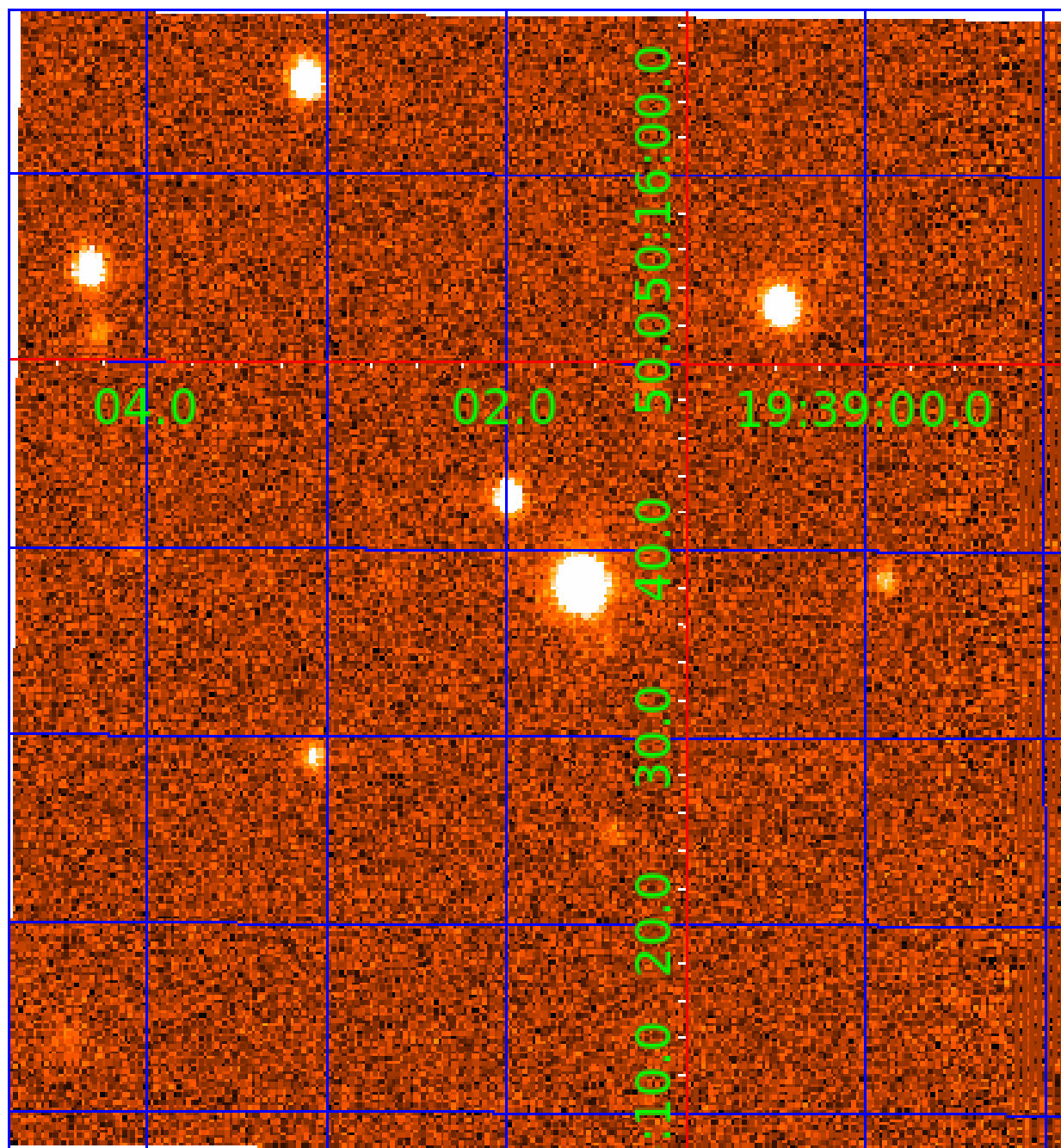


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011919968

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})
011919968-01	OBS	No	2.628739	131.606703	48.6	14.242	10.3	6.3	2.53	7935	1.79	10642.44
011919968-02	OBS	No	267.756509	141.587893	1236.1	7.836	12.6	9.2	2.53	7935	16.41	22.37
011919968-04	OBS	No	199.755848	143.598092	562.8	9.162	11.6	10.6	2.53	7935	6.83	33.06
011919968-05	OBS	No	268.049107	311.741872	571.9	8.594	11.5	9.1	2.53	7935	6.14	22.34
011919968-06	OBS	No	446.889317	253.774294	898.0	9.982	10.9	11.3	2.53	7935	8.18	11.30
011919968-07	OBS	No	380.862826	243.690824	758.5	7.345	11.2	8.0	2.53	7935	7.53	13.99
011919968-08	OBS	No	56.777775	139.781024	980.3	6.760	10.8	10.8	2.53	7935	14.72	176.93
011919968-09	OBS	No	171.288785	295.916012	482.9	5.000	10.6	-1.0	2.53	7935	5.62	40.59

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011919968-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
011919968-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_CHASES—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—HALO_GHOST
011919968-04	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011919968-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011919968-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011919968-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT
011919968-08	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011919968-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

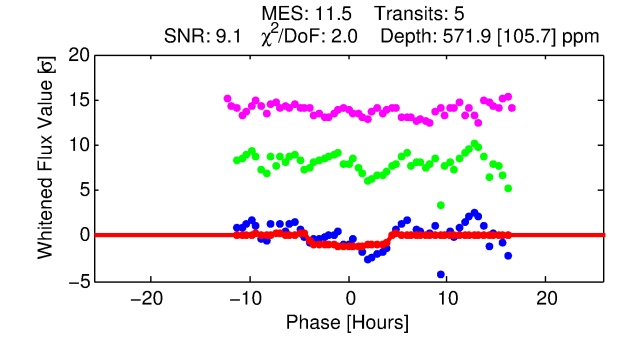
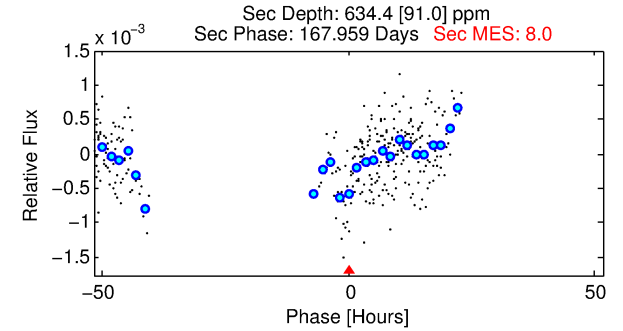
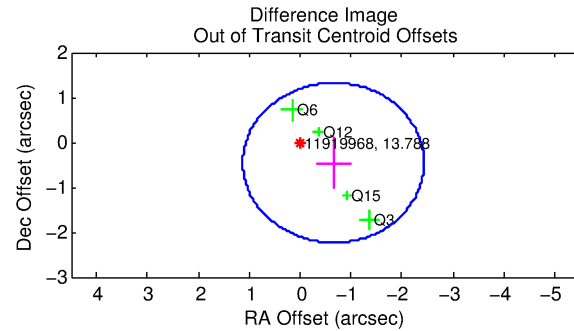
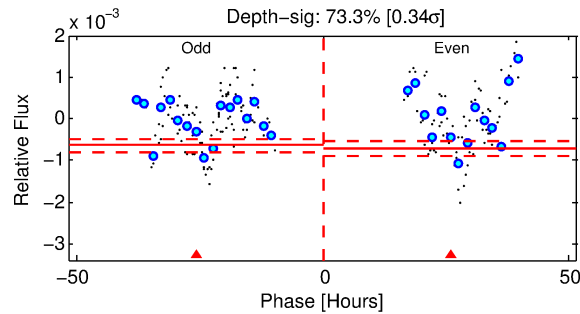
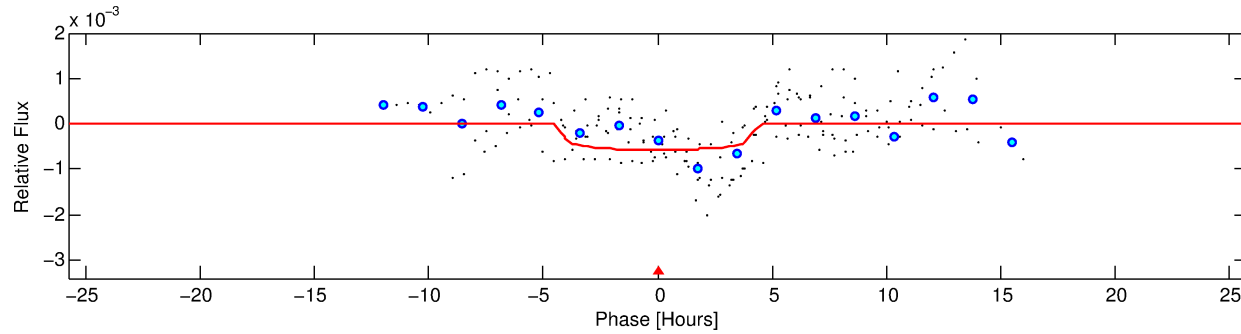
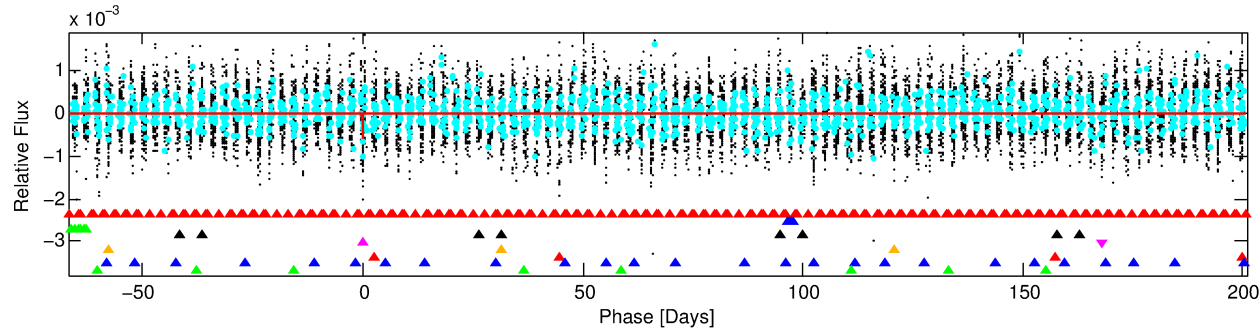
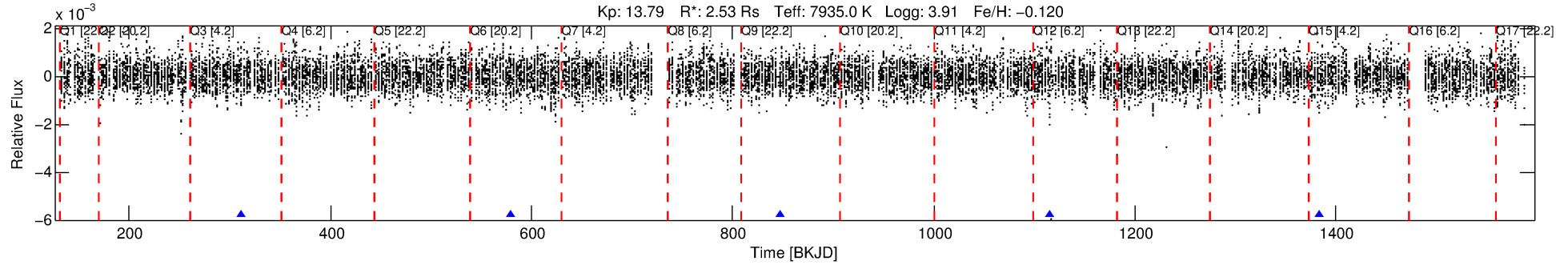
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011919968-05

No Significant Match Found

DV One-Page Summary

KIC: 11919968 Candidate: 5 of 9 Period: 268.049 d



DV Fit Results:

Period = 268.04911 [0.00591] d
Epoch = 311.7419 [0.0130] BKJD
Rp/R* = 0.0223 [0.0795]
a/R* = 236.14 [4863.67]
b = 0.25 [77.30]
Seff = 22.34 [11.50]
Teq = 554 [71] K
Rp = 6.14 [22.03] Re
a = 1.0072 [0.3269] AU
Ag = 9393.94 [67222.72] [0.14 σ]
Teffp = 8438 [15065] K [0.52 σ]

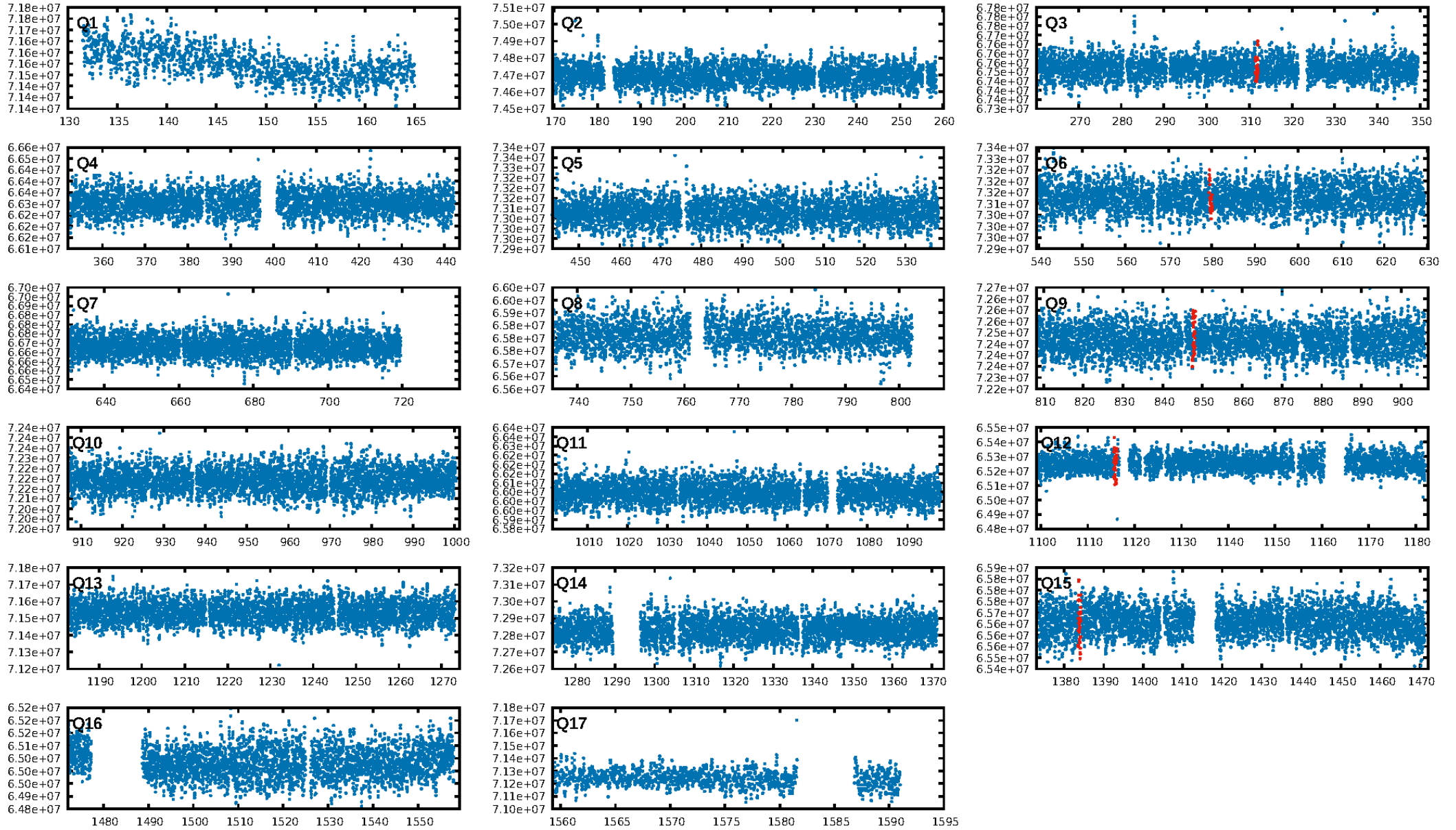
DV Diagnostic Results:

ShortPeriod-sig: 45.4% [0.60 σ]
LongPeriod-sig: 75.3% [1.16 σ]
ModelChiSquare2-sig: 14.5%
ModelChiSquareGof-sig: 3.1%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: 1.357
Centroid-sig: 17.6%
Centroid-so: 0.752 arcsec [1.29 σ]
OotOffset-rm: 0.799 arcsec [1.35 σ]
OotOffset-st: 1/2/1/0 [4]
KicOffset-rm: 0.916 arcsec [1.47 σ]
KicOffset-st: 1/2/1/0 [4]
DiffImageQuality-fgm: 1.00 [4/4]
DiffImageOverlap-fno: 1.00 [5/5]

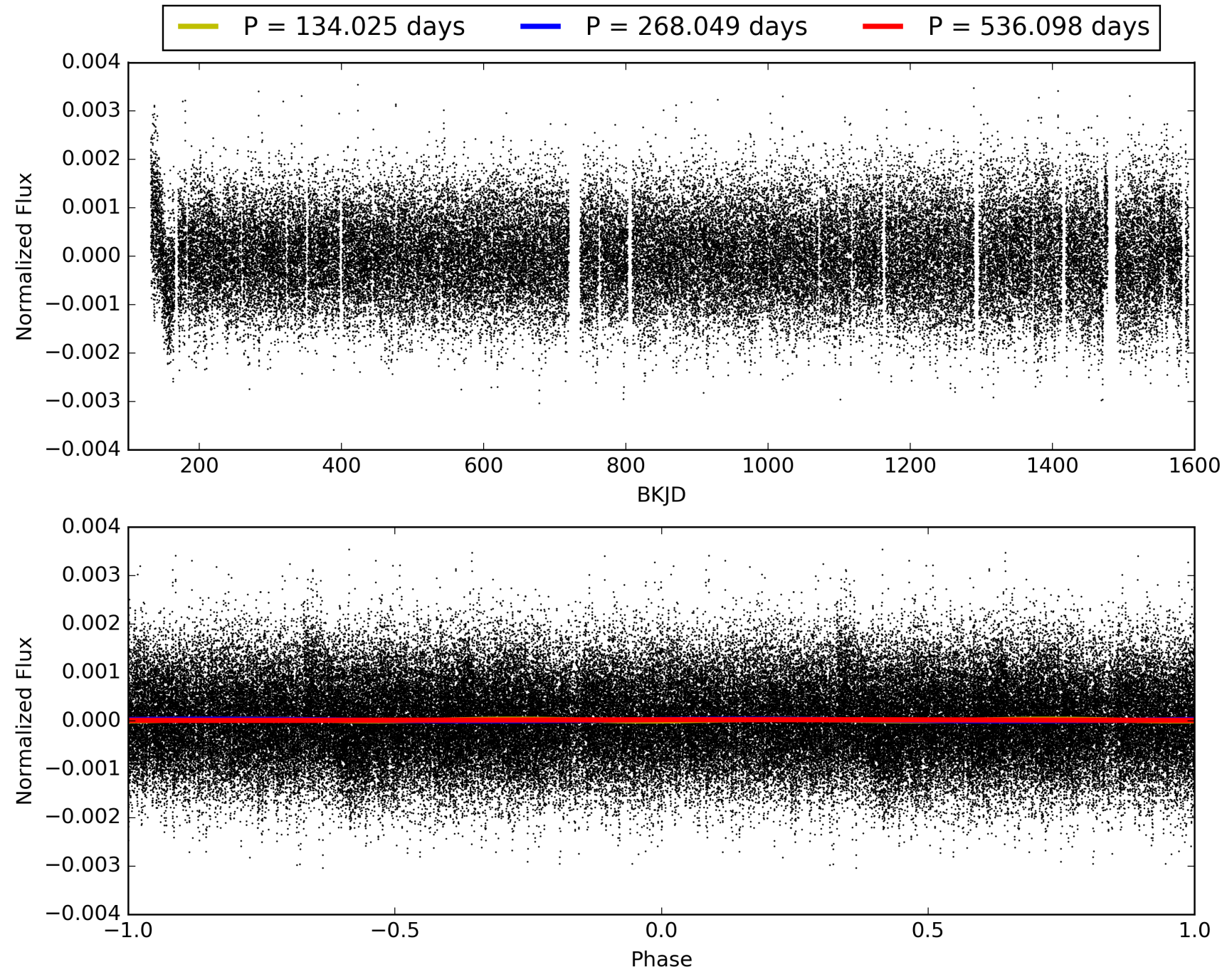
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:53:06 Z

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

TCE 011919968-05, PDC Light Curves

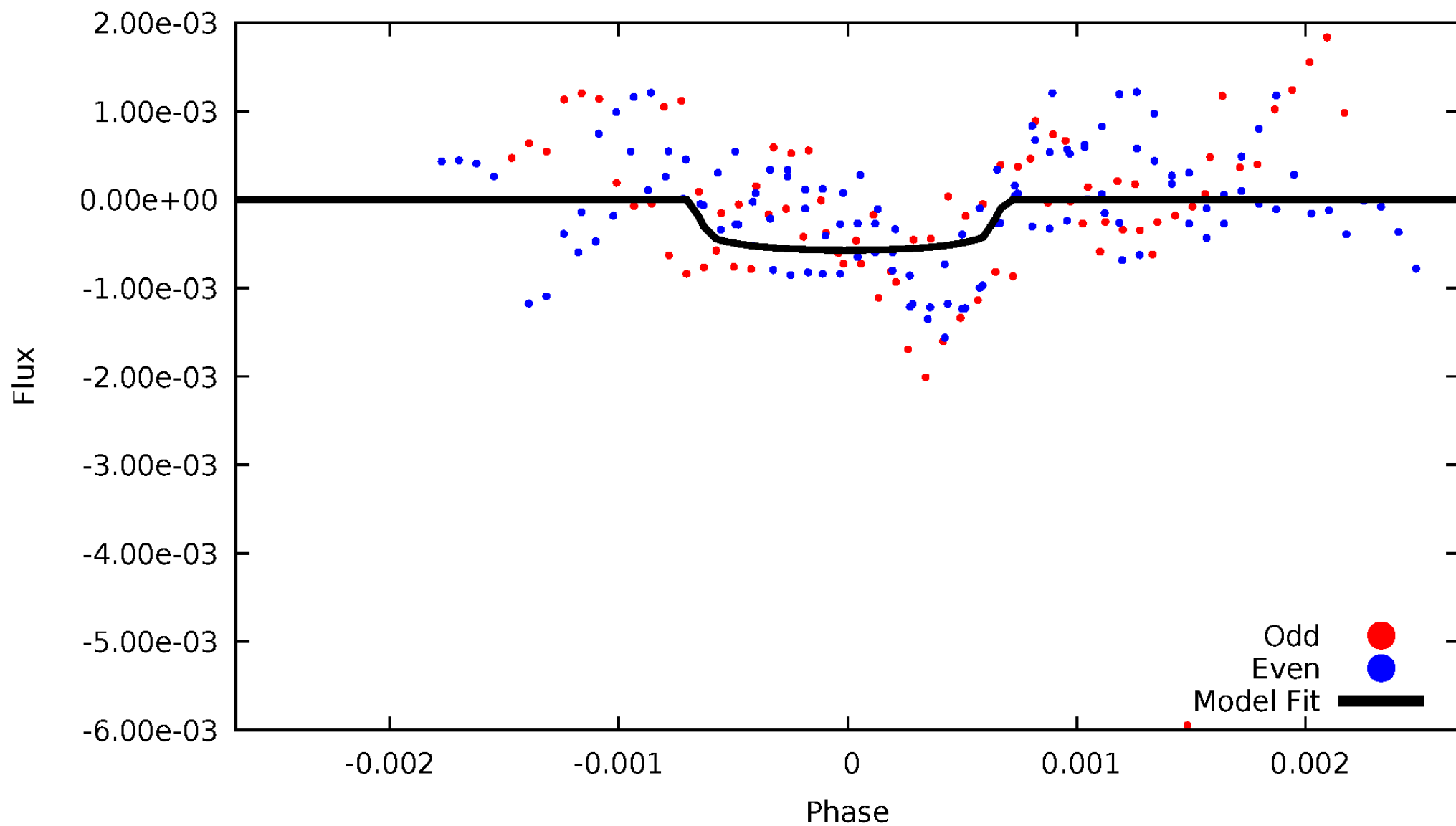


TCE 011919968-05



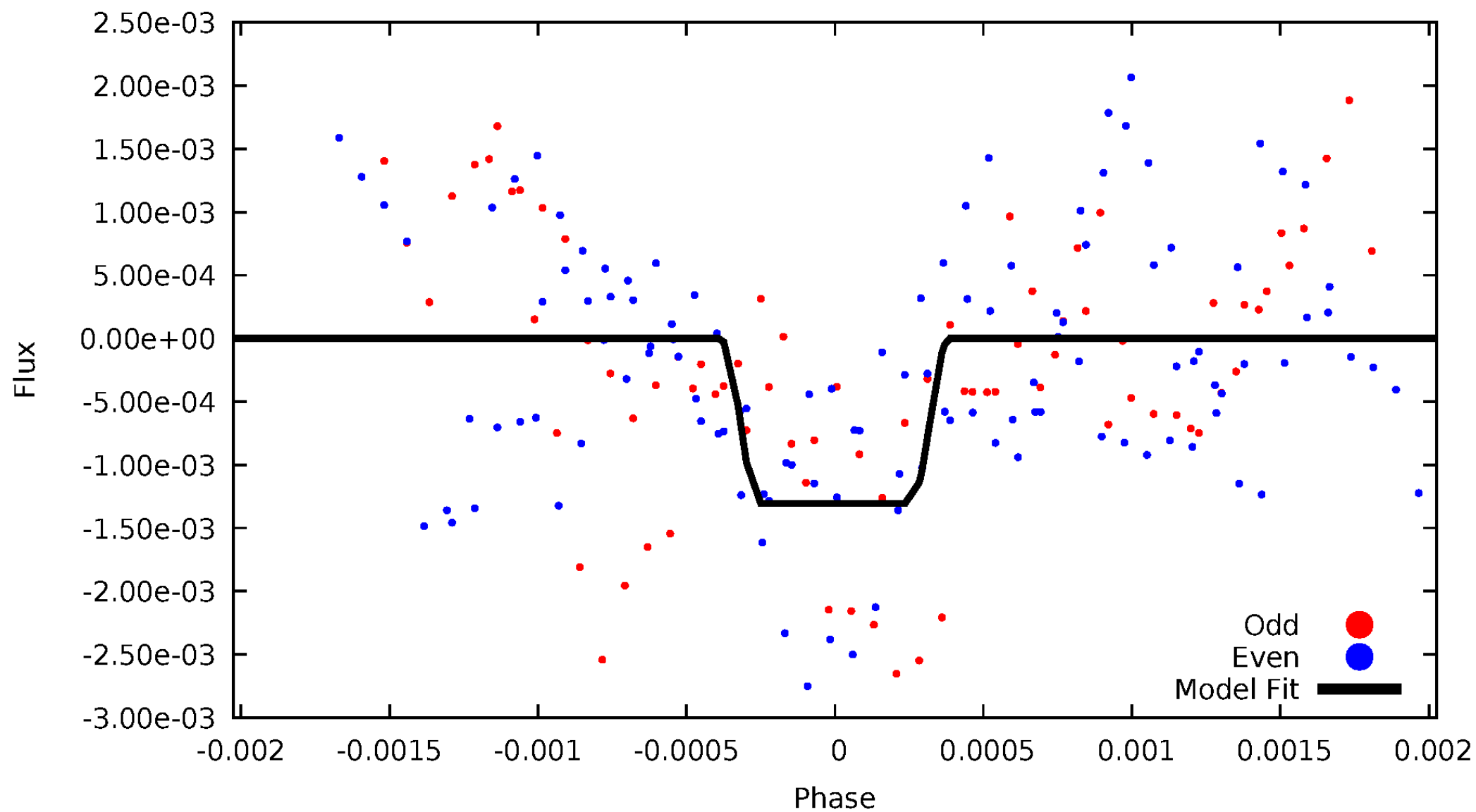
DV Odd/Even

TCE 011919968-05



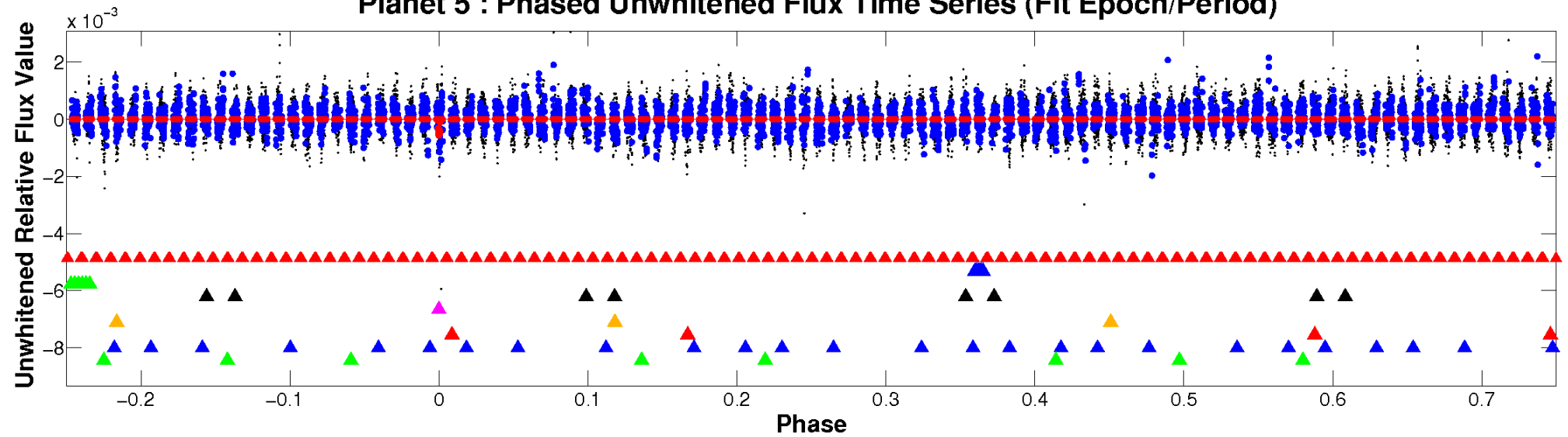
ALT Odd/Even

TCE 011919968-05

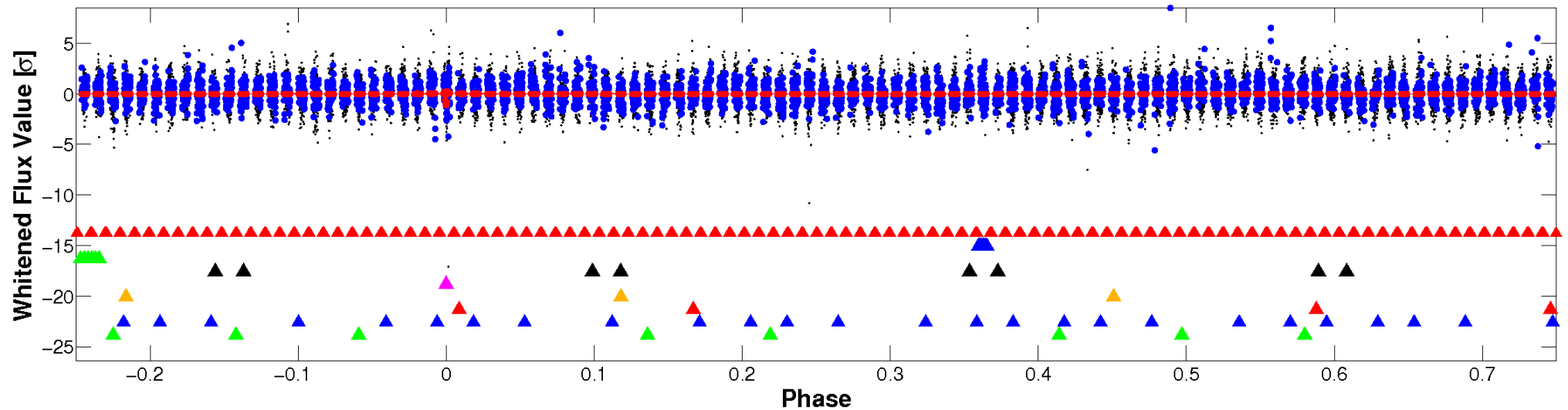


Non-Whitened Vs. Whitened Light Curve

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

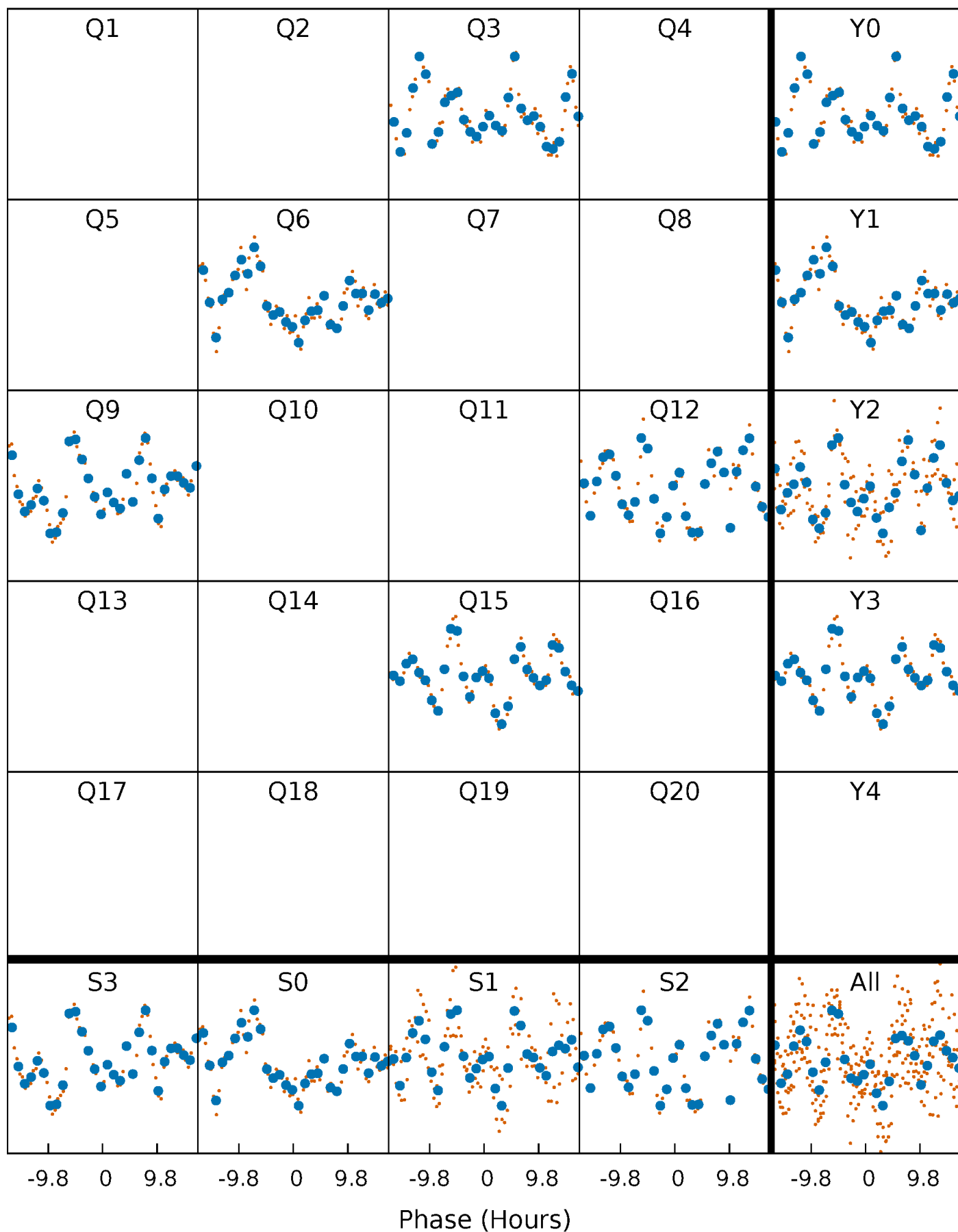


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



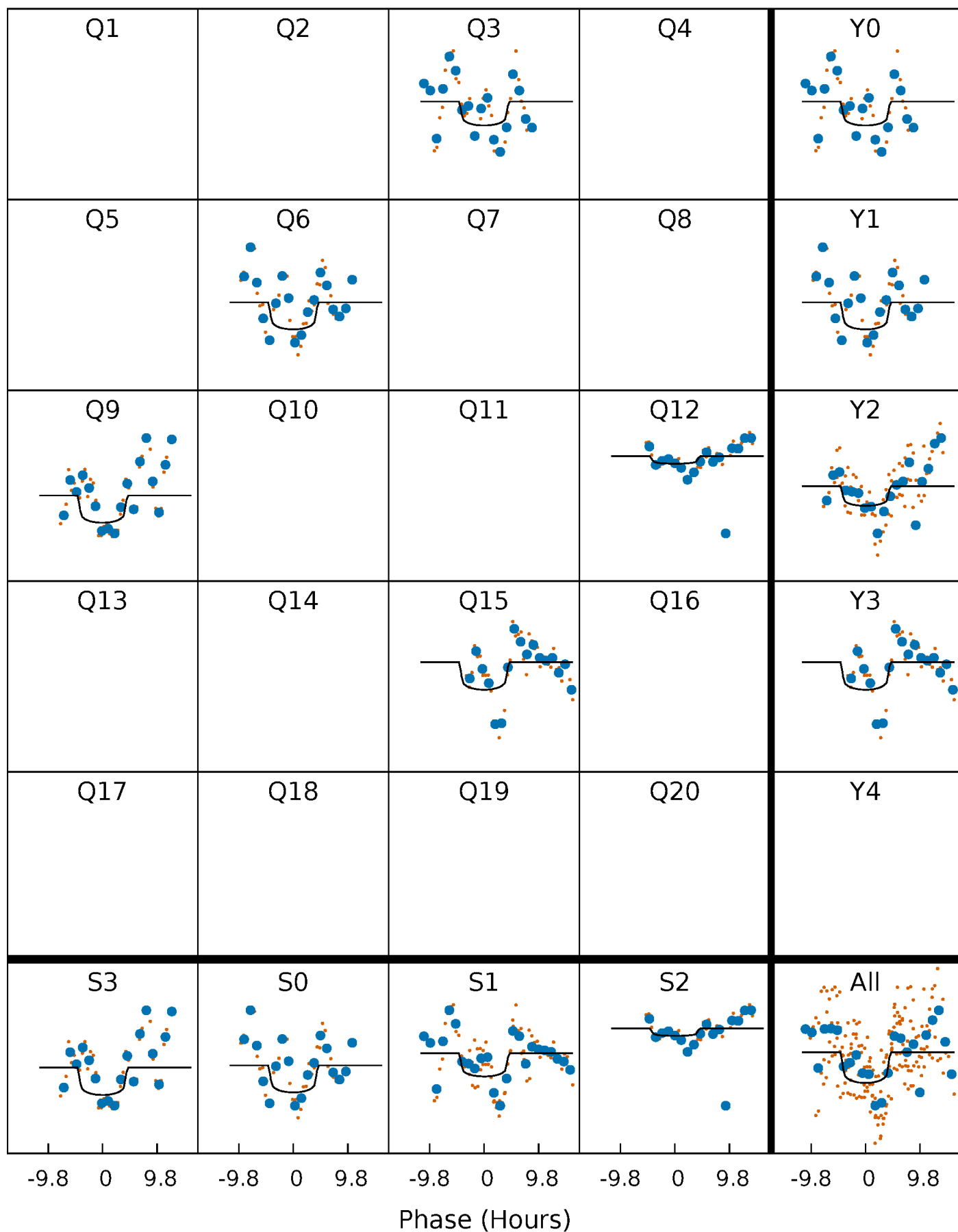
PDC Quarter-Phased Transit Curves

TCE 011919968-05 $P=268.049107$ Days $T_0=311.741872$ (BKJD)



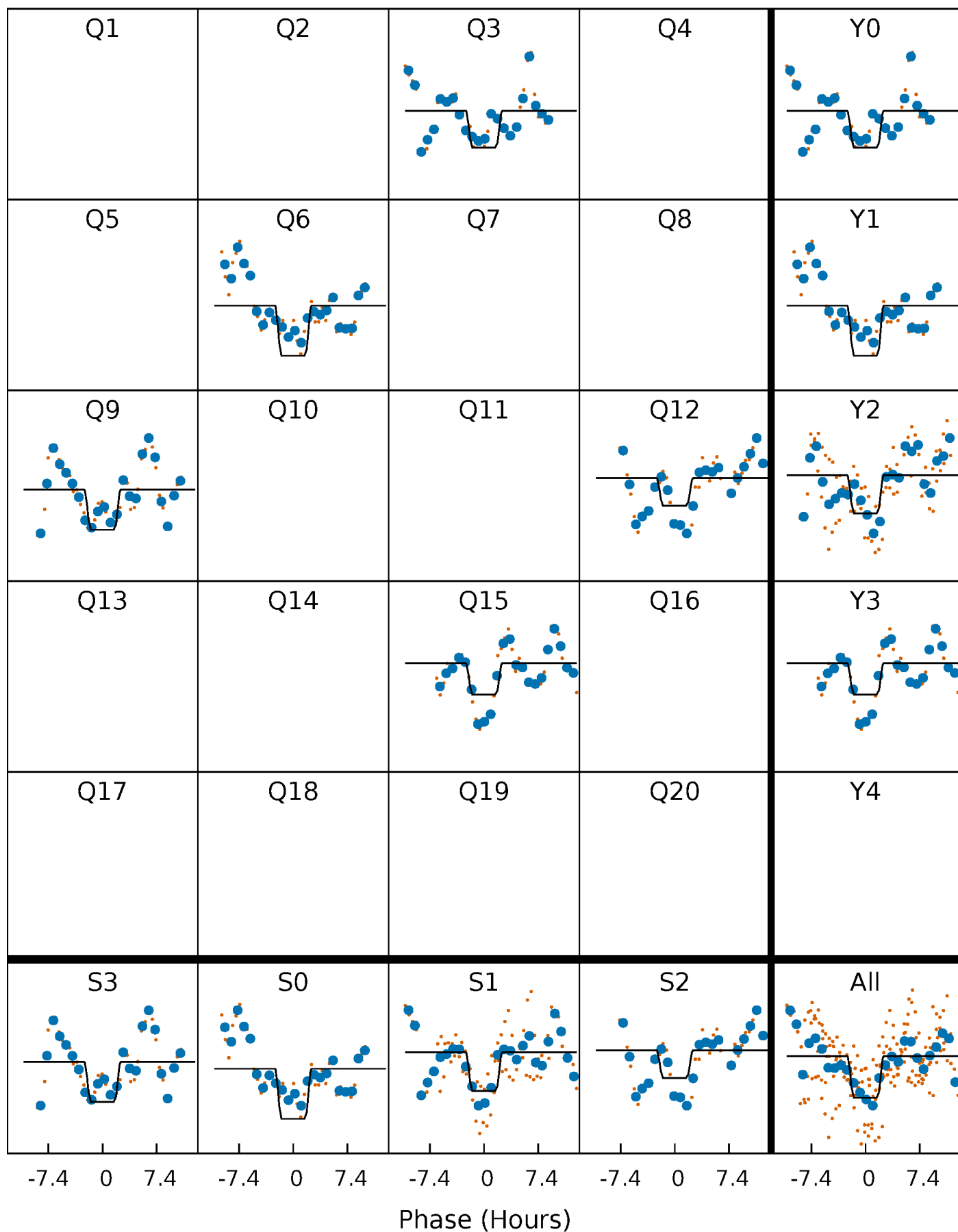
DV Quarter-Phased Transit Curves

TCE 011919968-05 $P=268.049107$ Days $T_0=311.741872$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

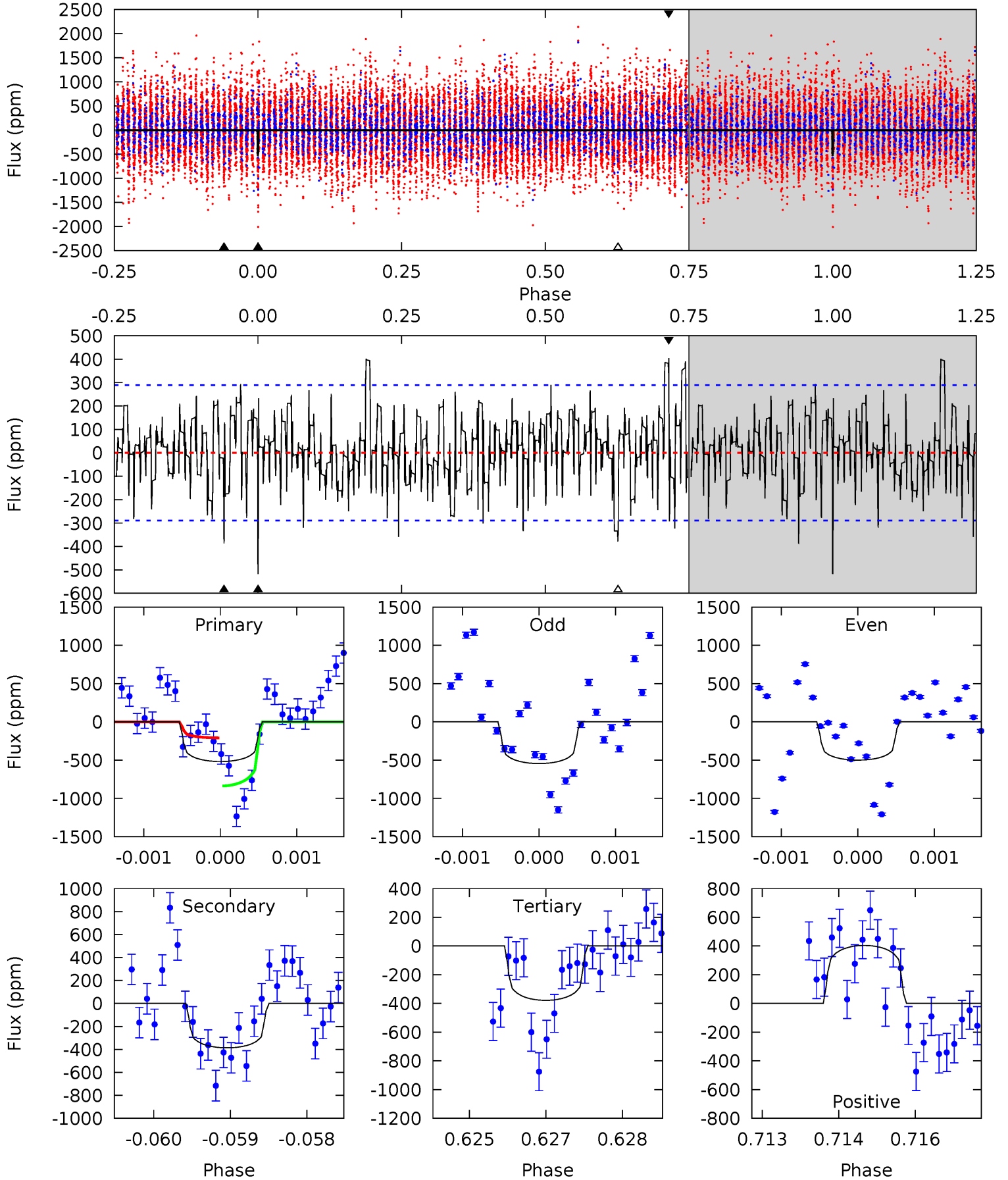
TCE 011919968-05 P=268.090664 Days $T_0=311.714103$ (BKJD)



DV Model-Shift Uniqueness Test

011919968-05, P = 268.049107 Days, E = 43.692765 Days

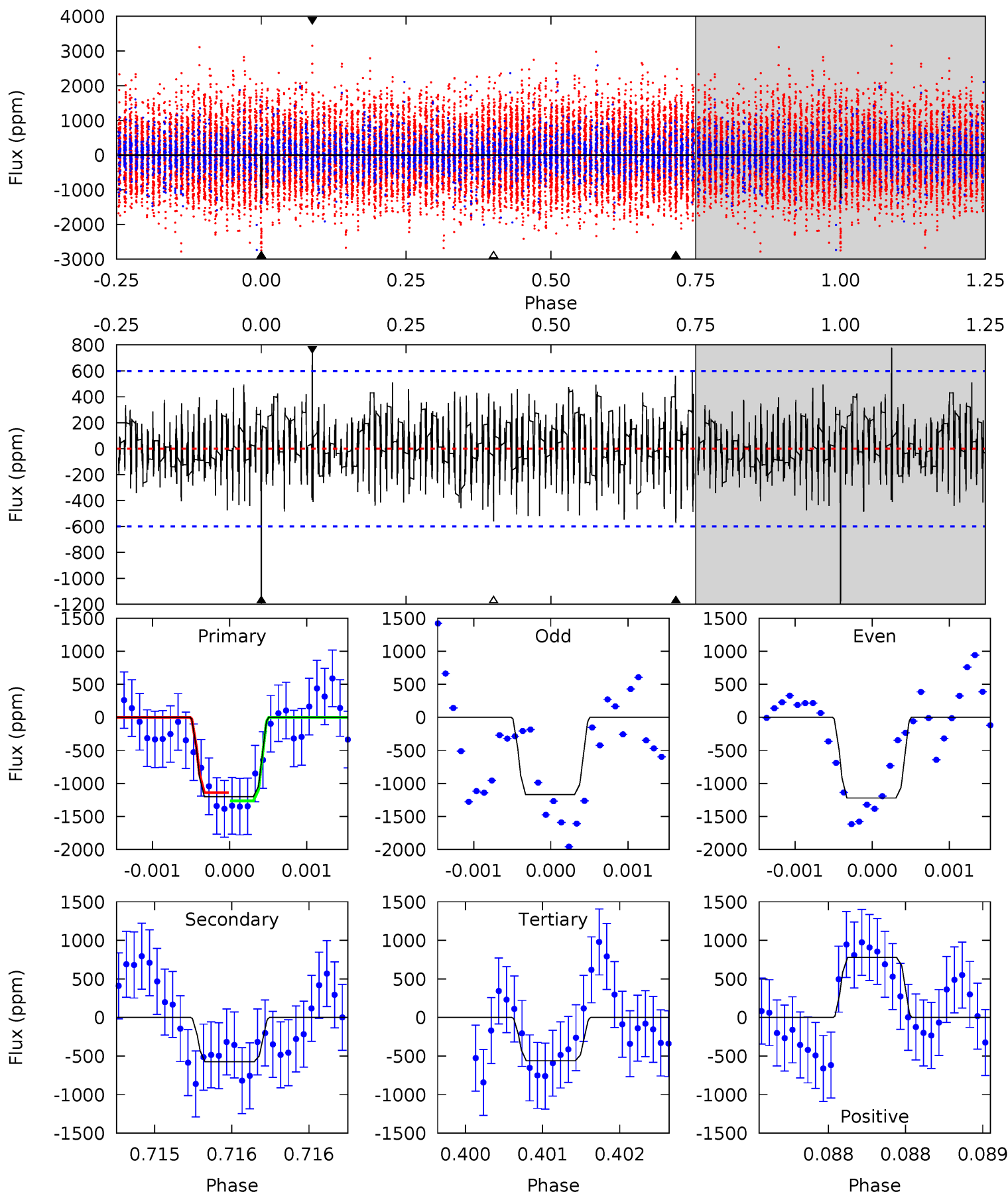
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.67	7.21	7.07	7.55	5.40	3.21	2.24	2.60	2.12	0.15	-0.33	0.41	0.92	0.44	5.87



Alt Model-Shift Uniqueness Test

011919968-05, P = 268.090664 Days, E = 43.623439 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	5.27	5.14	7.14	5.50	3.37	1.69	5.87	3.87	0.13	-1.87	0.24	1.30	0.39	0.57



Stellar Parameters For KIC 011919968

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7935^{+220}_{-331}	$3.911^{+0.273}_{-0.117}$	$-0.120^{+0.200}_{-0.350}$	$2.526^{+0.402}_{-0.939}$	$1.895^{+0.103}_{-0.414}$	$0.166^{+0.311}_{-0.061}$
	+3%/-4%	+7%/-3%	+167%/-292%	+16%/-37%	+5%/-22%	+188%/-37%
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 011919968-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-386 ± 54	$16.77^{+16.32}_{-11.73}$	760^{+54}_{-68}	4466^{+3421}_{-935}	735^{+8141}_{-545}
Alt.	-574 ± 109	$18.58^{+17.68}_{-12.55}$	766^{+48}_{-66}	4613^{+3438}_{-938}	897^{+7407}_{-656}

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

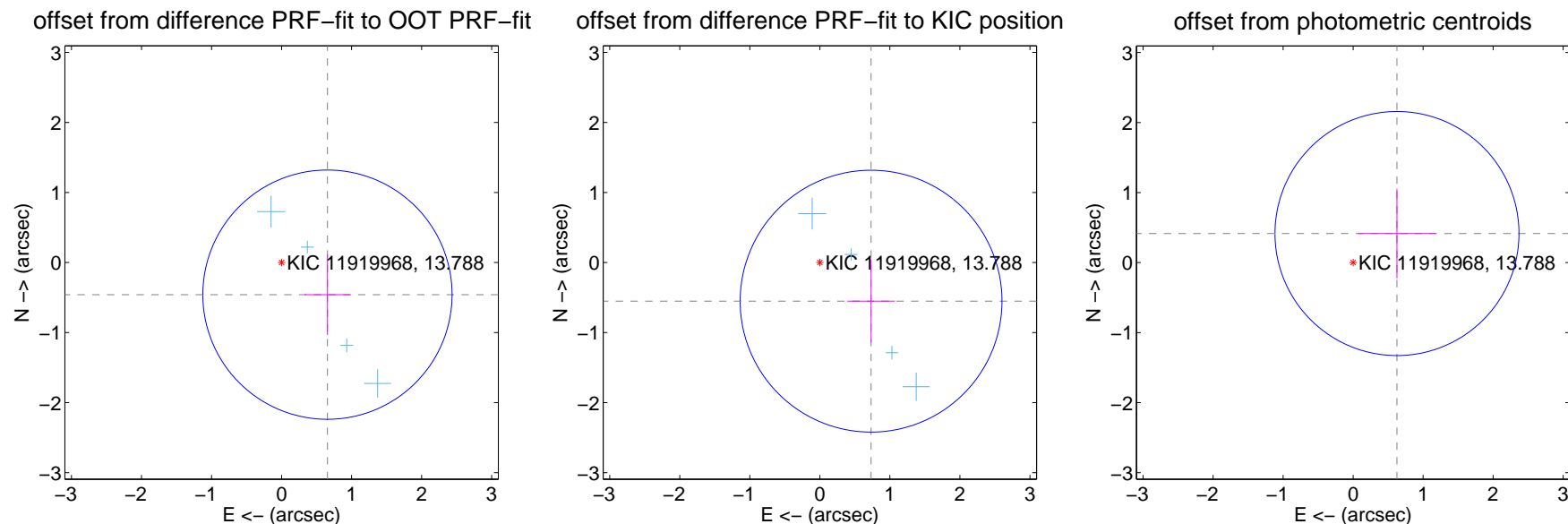
DV Centroid Data

Supplemental centroid analysis for 011919968-05. Kepler magnitude: 13.79. Transit SNR 9.10

There are 4 quarters with good PRF difference image offsets

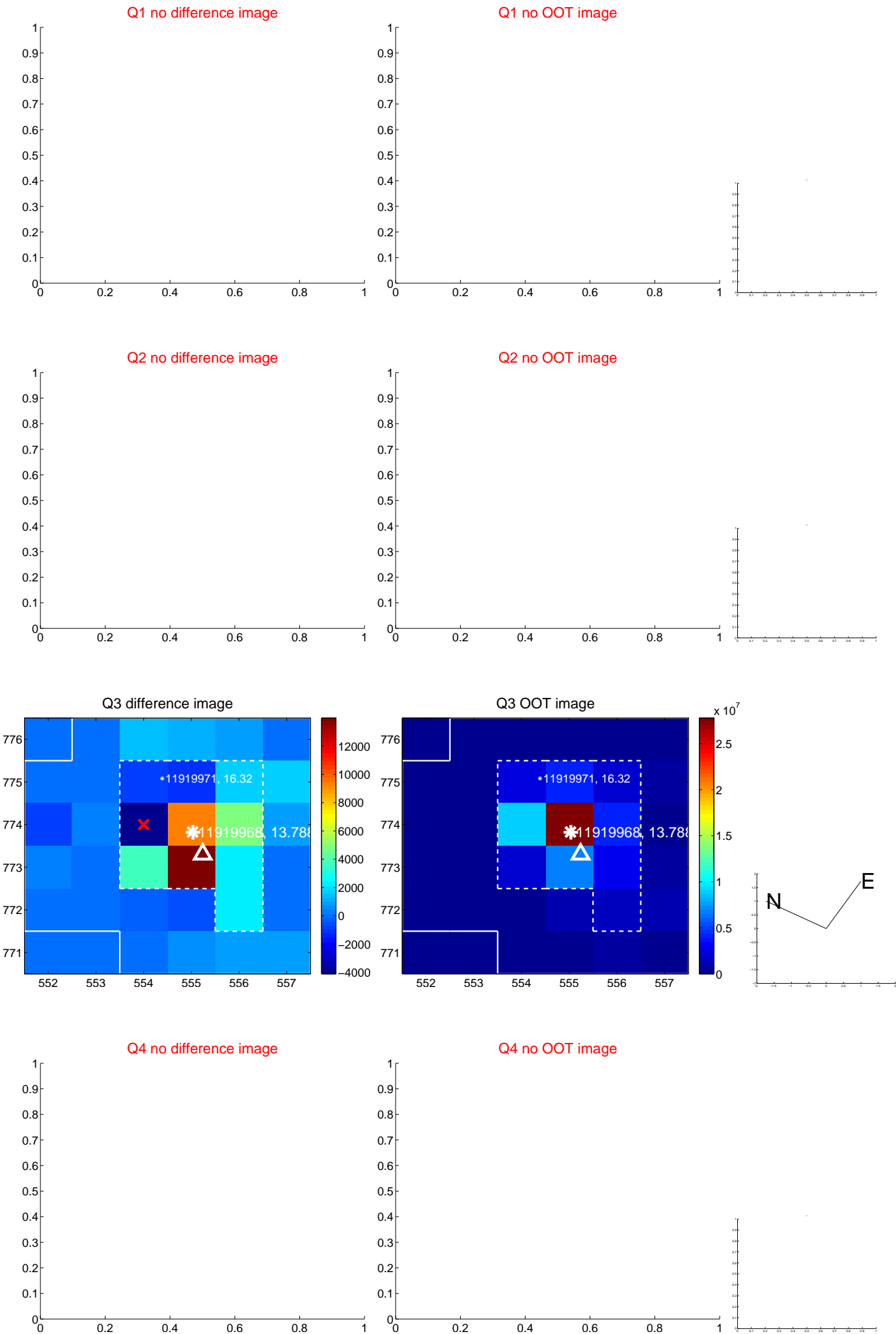
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.799 ± 0.593	1.35	-0.655 ± 0.330	-0.458 ± 0.574
PRF-fit source offset from KIC position	0.916 ± 0.623	1.47	-0.732 ± 0.340	-0.551 ± 0.593
photometric centroid source offset	0.75 ± 0.58	1.29	-0.63 ± 0.55	0.42 ± 0.64

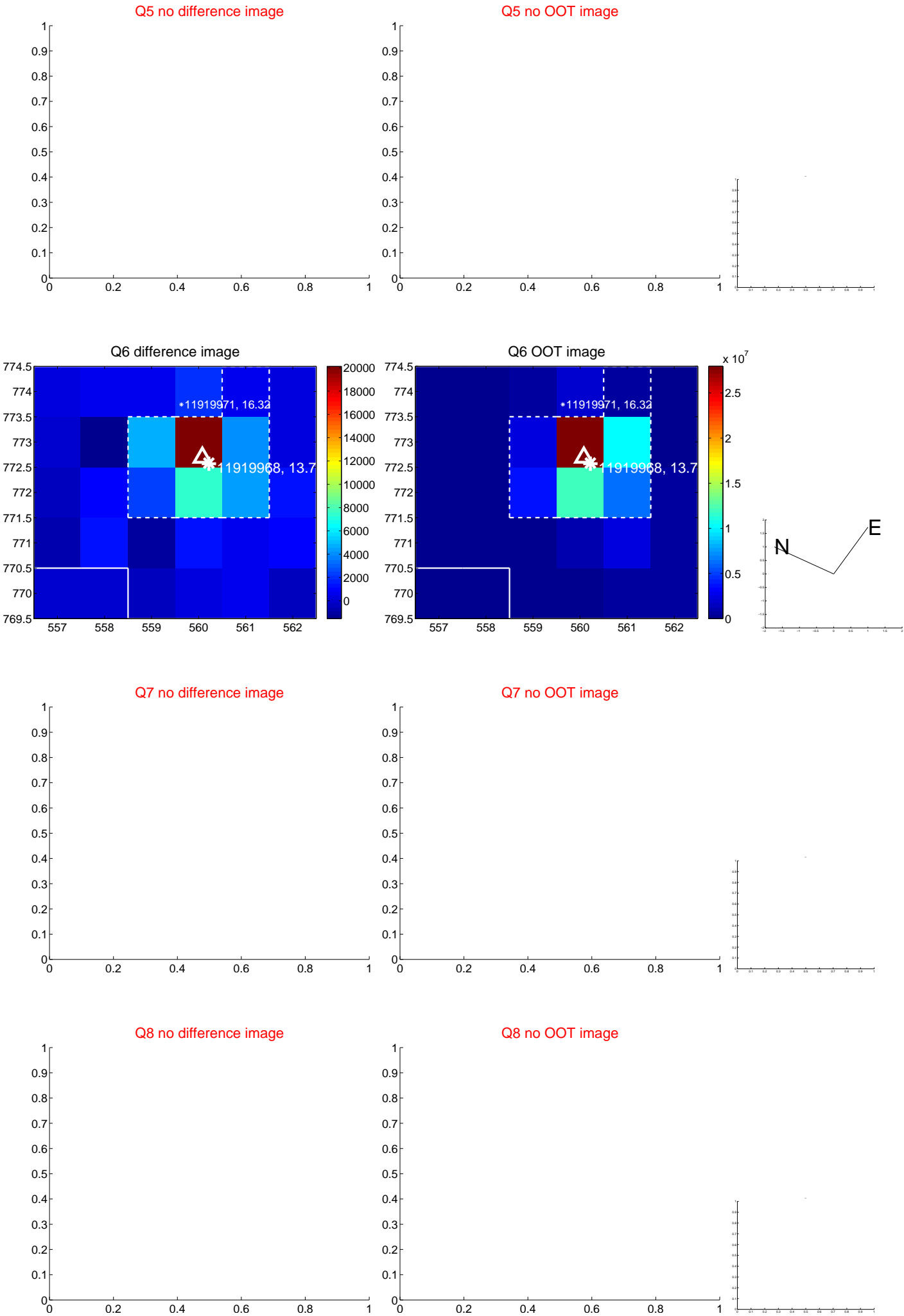


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

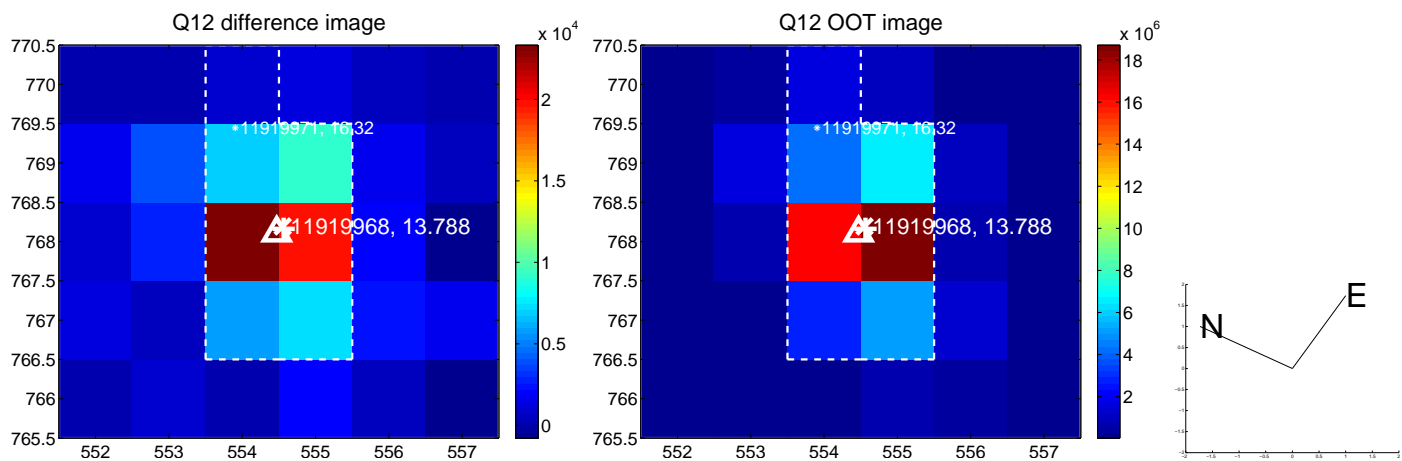
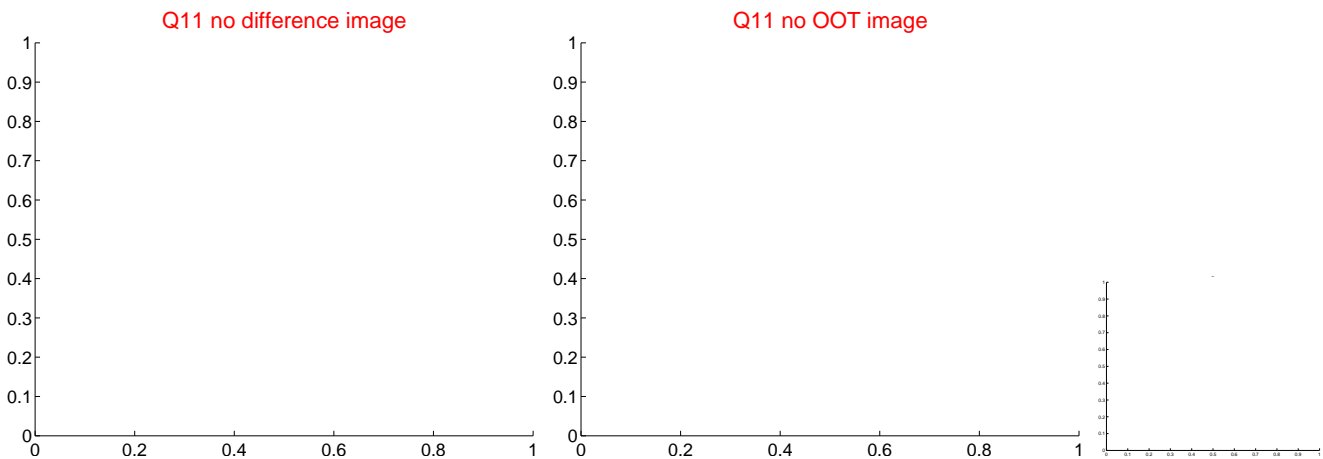
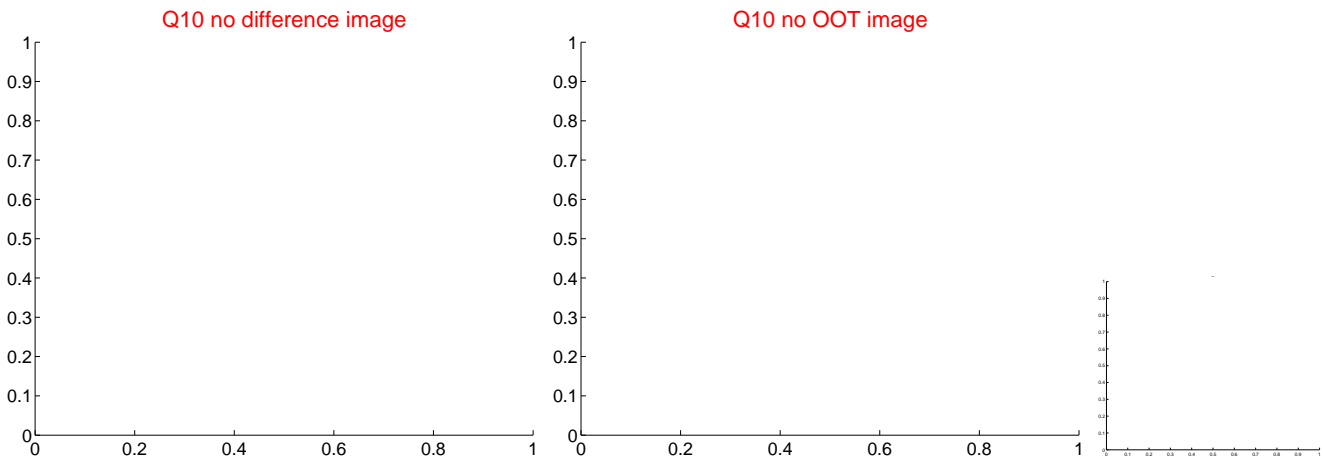
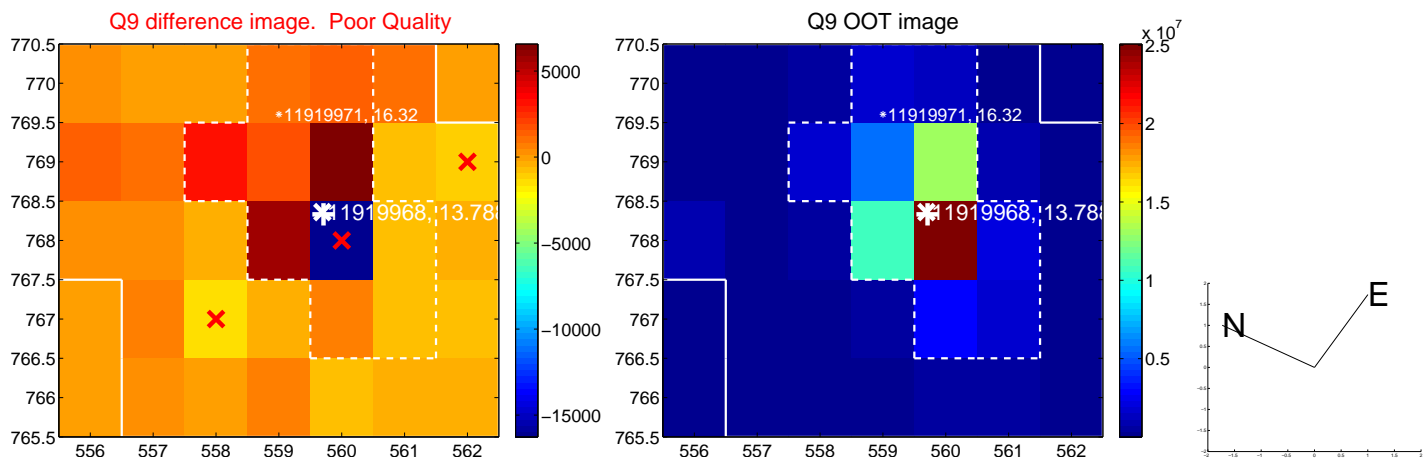
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



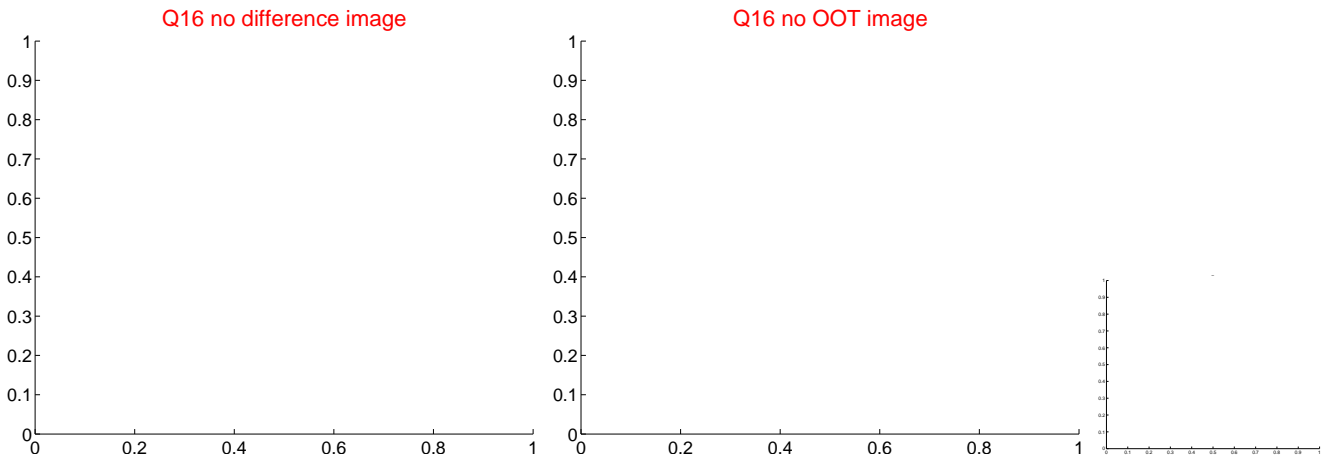
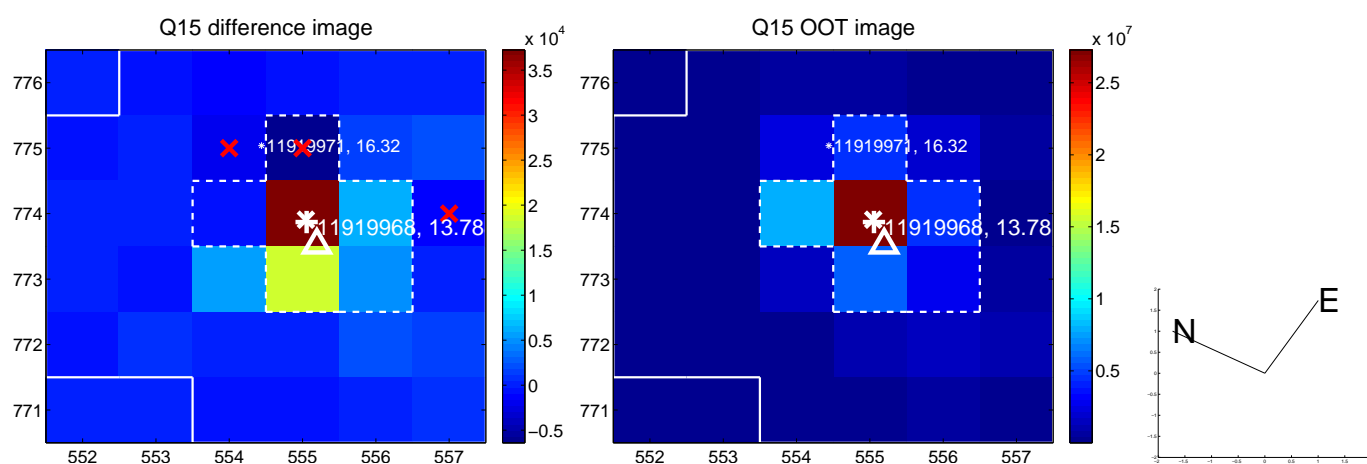
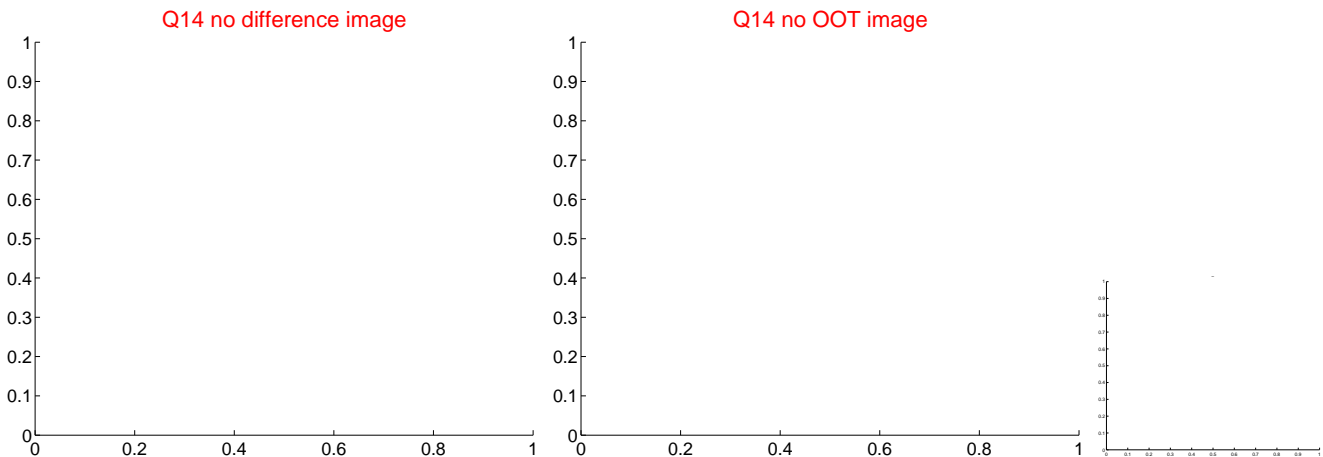
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



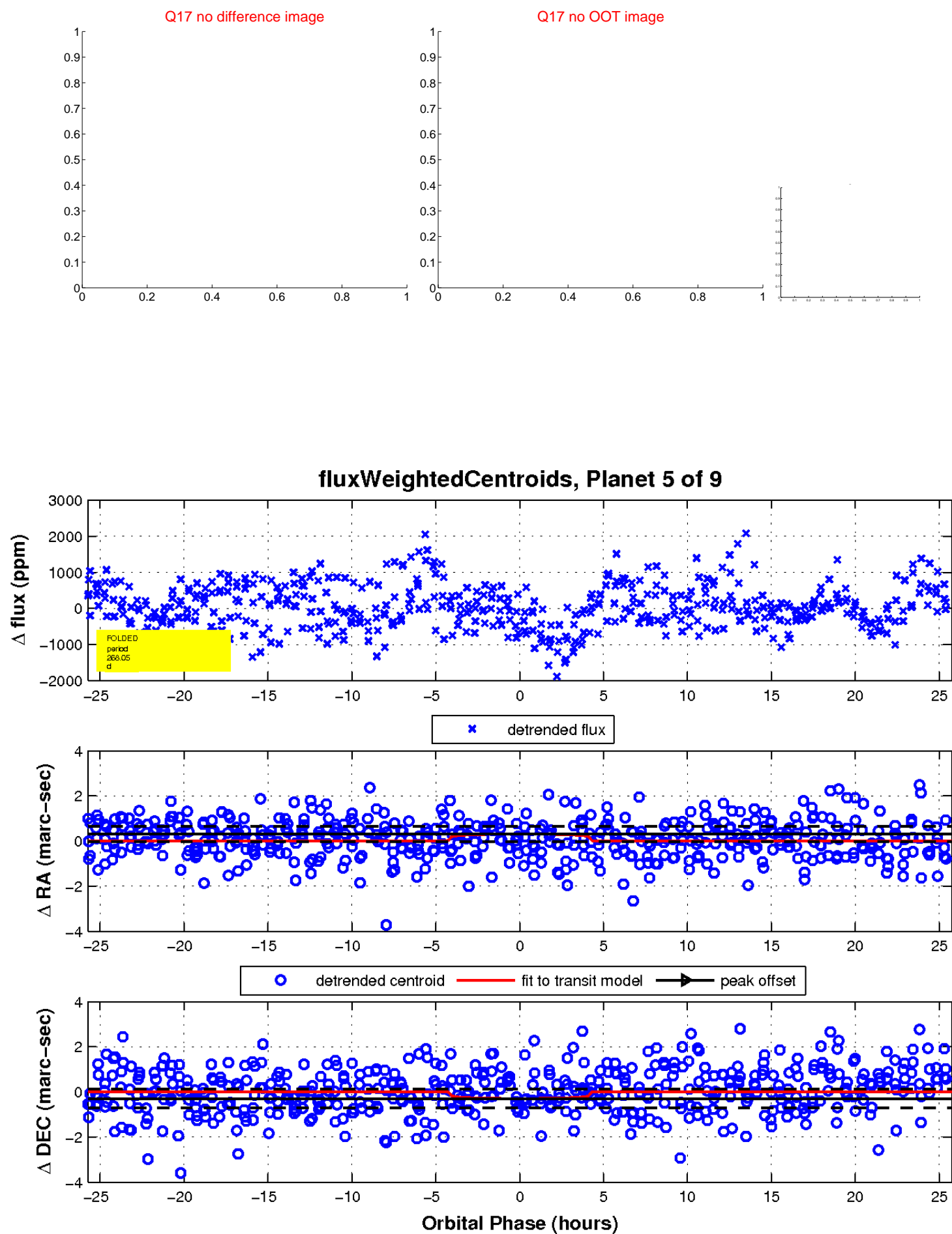
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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

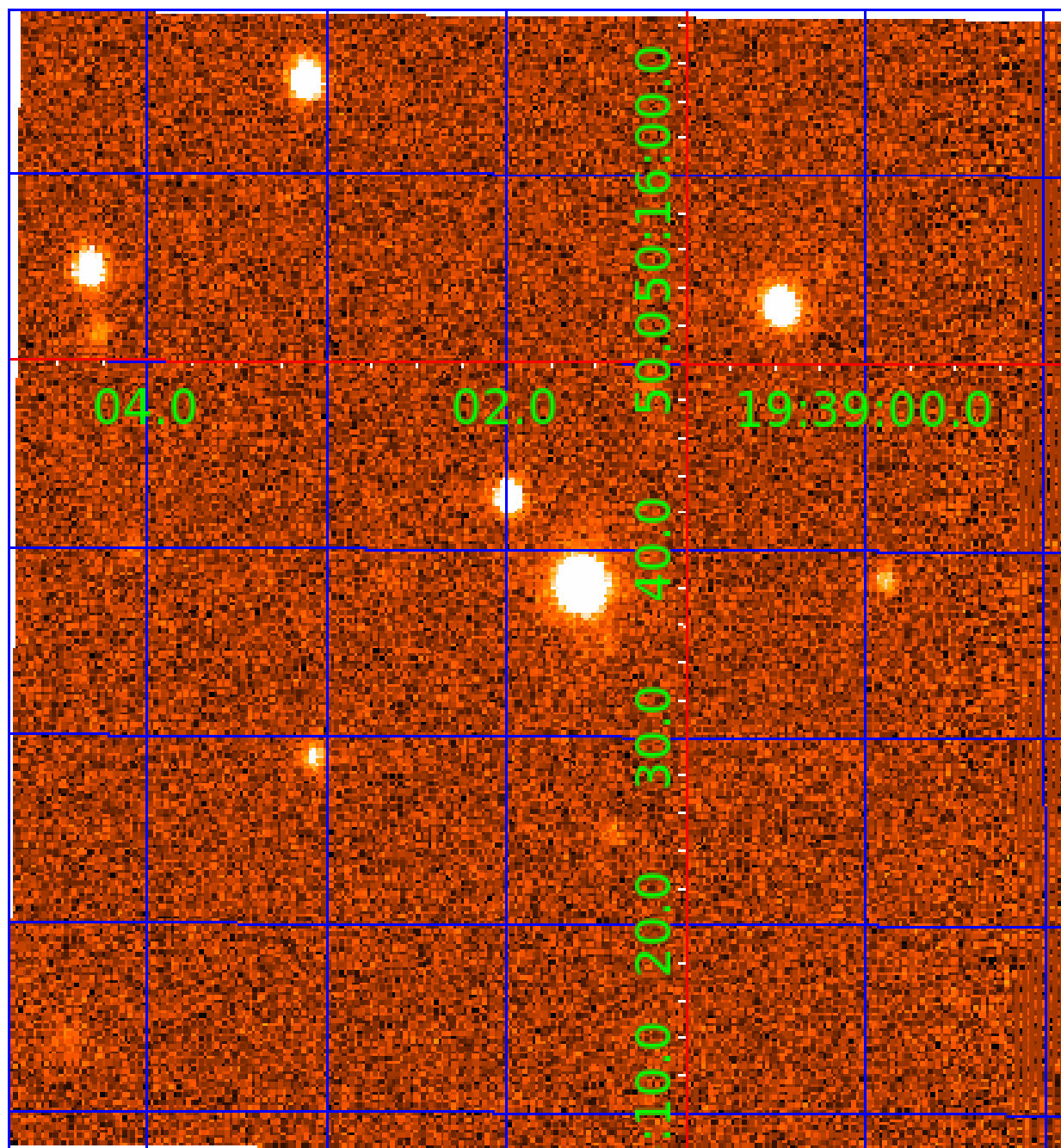


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011919968

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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011919968-04	OBS	No	199.755848	143.598092	562.8	9.162	11.6	10.6	2.53	7935	6.83	33.06
011919968-05	OBS	No	268.049107	311.741872	571.9	8.594	11.5	9.1	2.53	7935	6.14	22.34
011919968-06	OBS	No	446.889317	253.774294	898.0	9.982	10.9	11.3	2.53	7935	8.18	11.30
011919968-07	OBS	No	380.862826	243.690824	758.5	7.345	11.2	8.0	2.53	7935	7.53	13.99
011919968-08	OBS	No	56.777775	139.781024	980.3	6.760	10.8	10.8	2.53	7935	14.72	176.93
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011919968-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
011919968-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—HALO_GHOST
011919968-04	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011919968-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011919968-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011919968-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT
011919968-08	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011919968-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

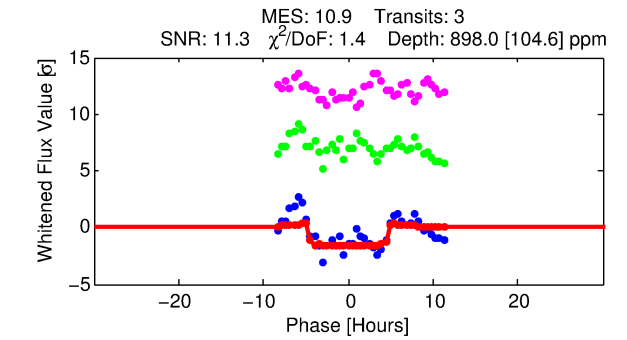
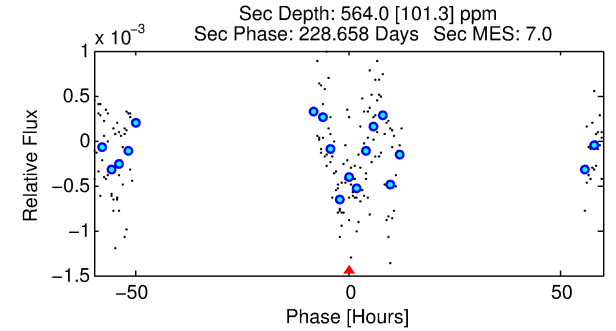
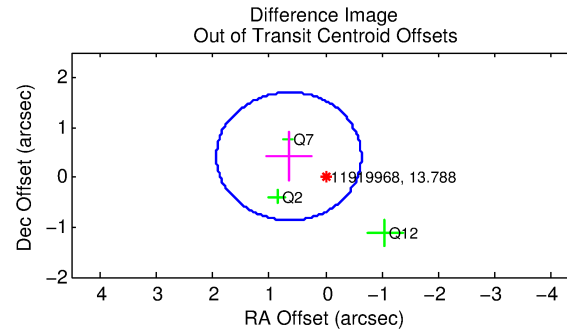
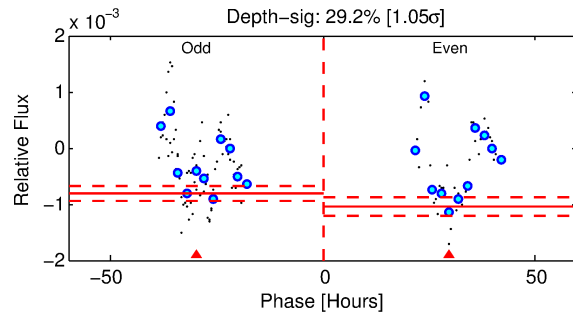
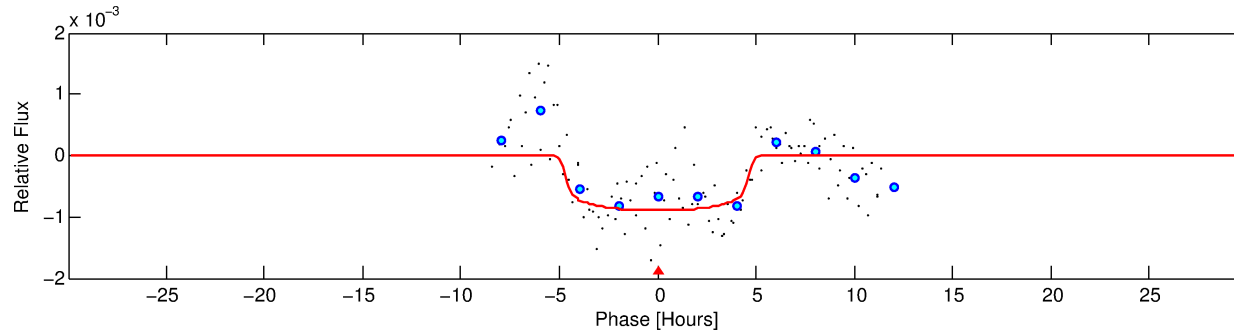
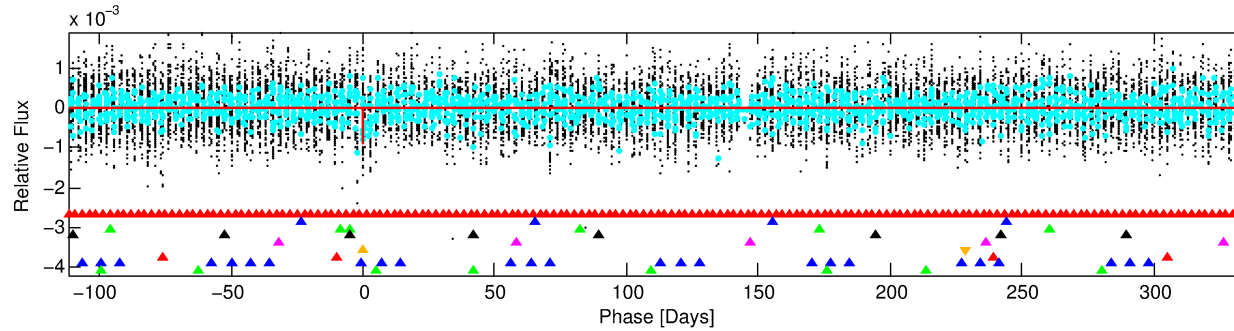
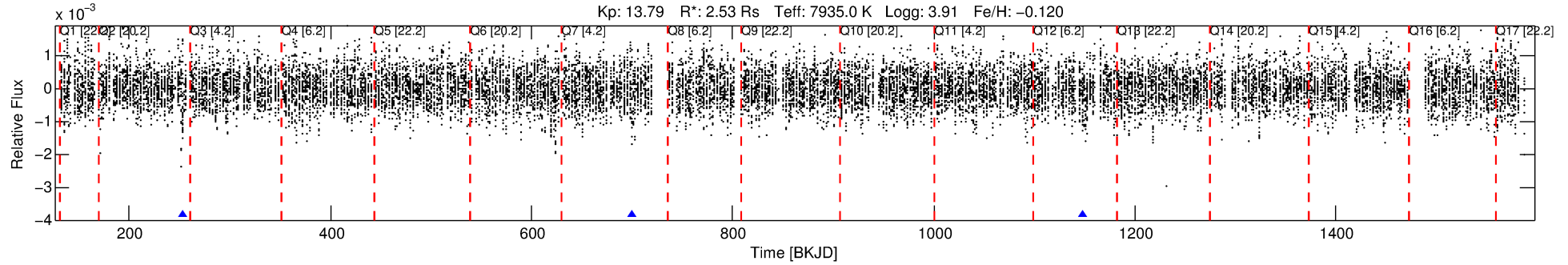
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011919968-06

No Significant Match Found

DV One-Page Summary

KIC: 11919968 Candidate: 6 of 9 Period: 446.889 d



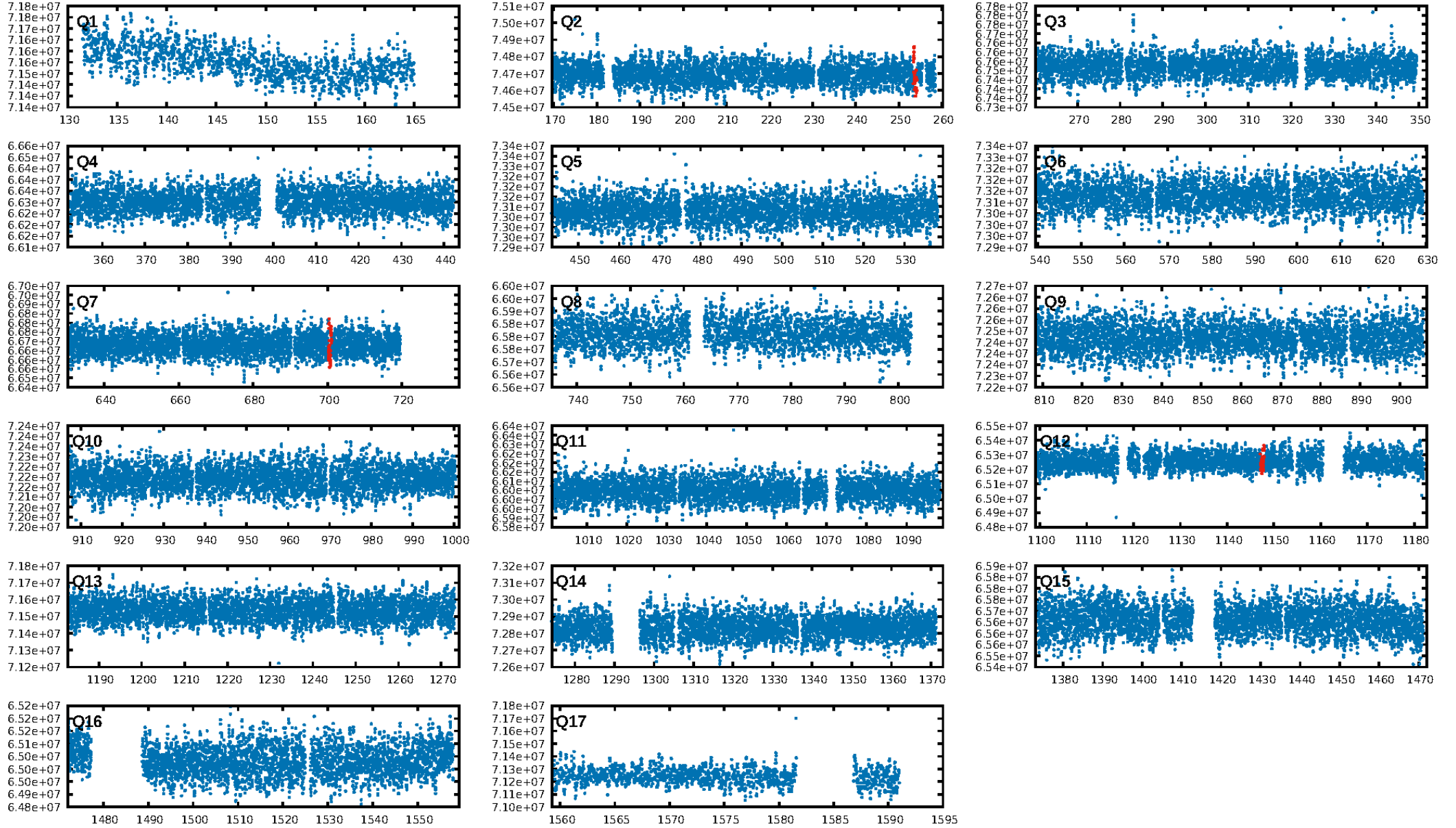
DV Fit Results:

Period = 446.88932 [0.00851] d
Epoch = 253.7743 [0.0105] BKJD
Rp/R* = 0.0297 [0.0046]
a/R* = 246.94 [196.85]
b = 0.73 [0.50]
Seff = 11.30 [5.82]
Teq = 468 [60] K
Rp = 8.18 [3.29] Re
a = 1.4162 [0.4596] AU
Ag = 9303.00 [5615.89] [1.66 σ]
Teffp = 7099 [699] K [9.45 σ]

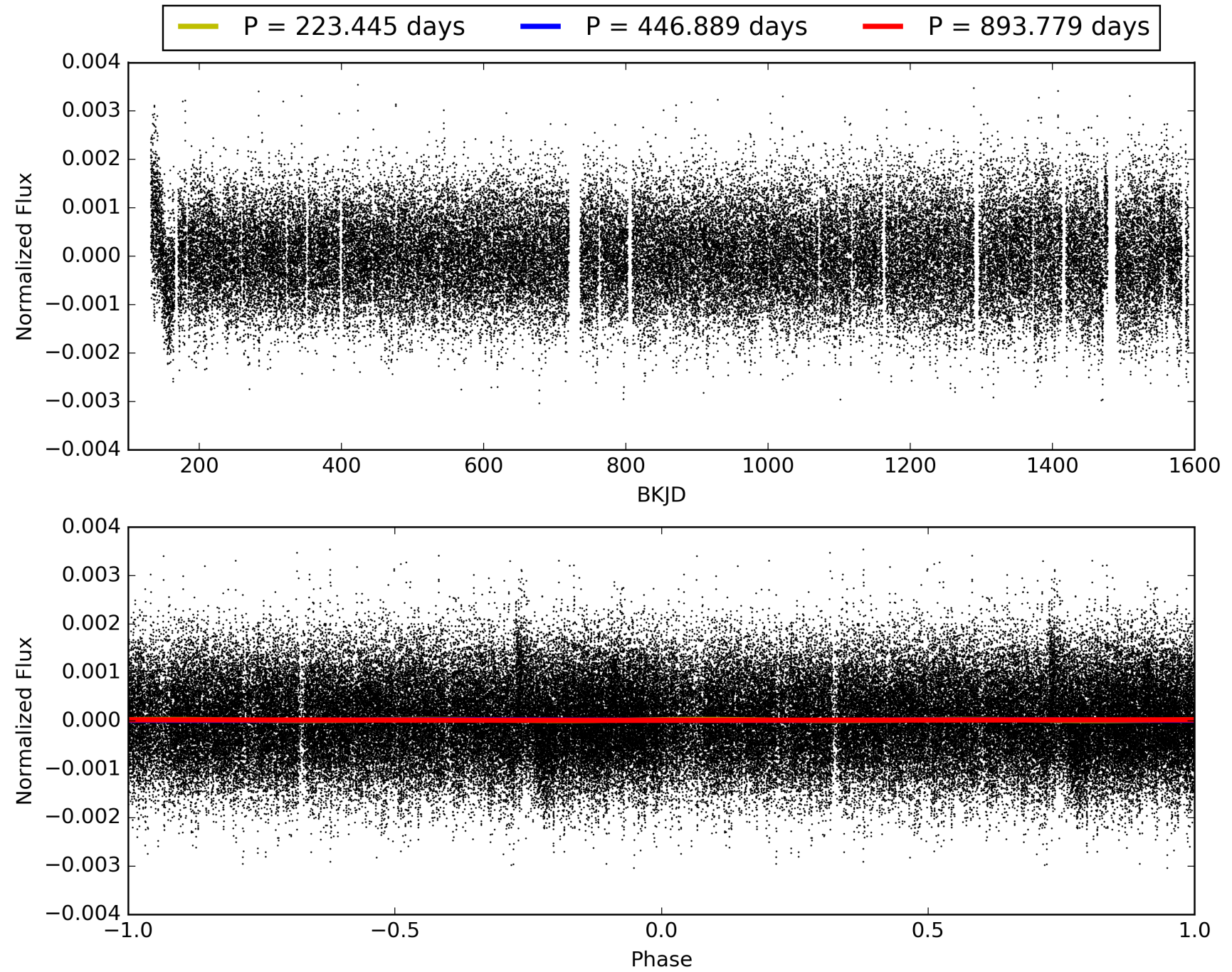
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [127.87 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 11.3%
ModelChiSquareGof-sig: 77.4%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 3.195
Centroid-sig: 81.5%
Centroid-so: 0.337 arcsec [0.67 σ]
OotOffset-rm: 0.769 arcsec [1.80 σ]
OotOffset-st: 1/1/1/0 [3]
KicOffset-rm: 0.787 arcsec [1.27 σ]
KicOffset-st: 1/1/1/0 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 0.67 [2/3]

TCE 011919968-06, PDC Light Curves

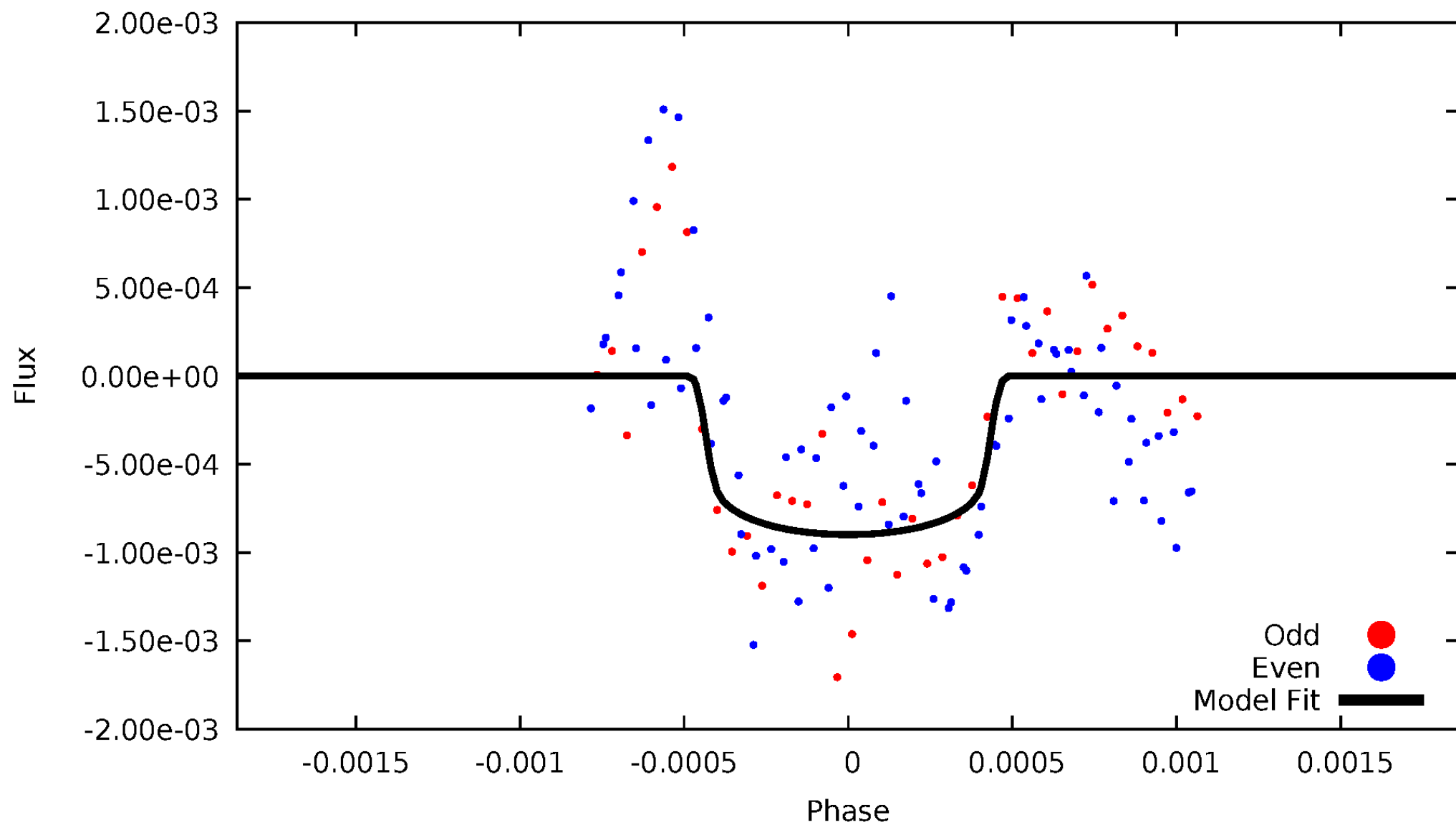


TCE 011919968-06



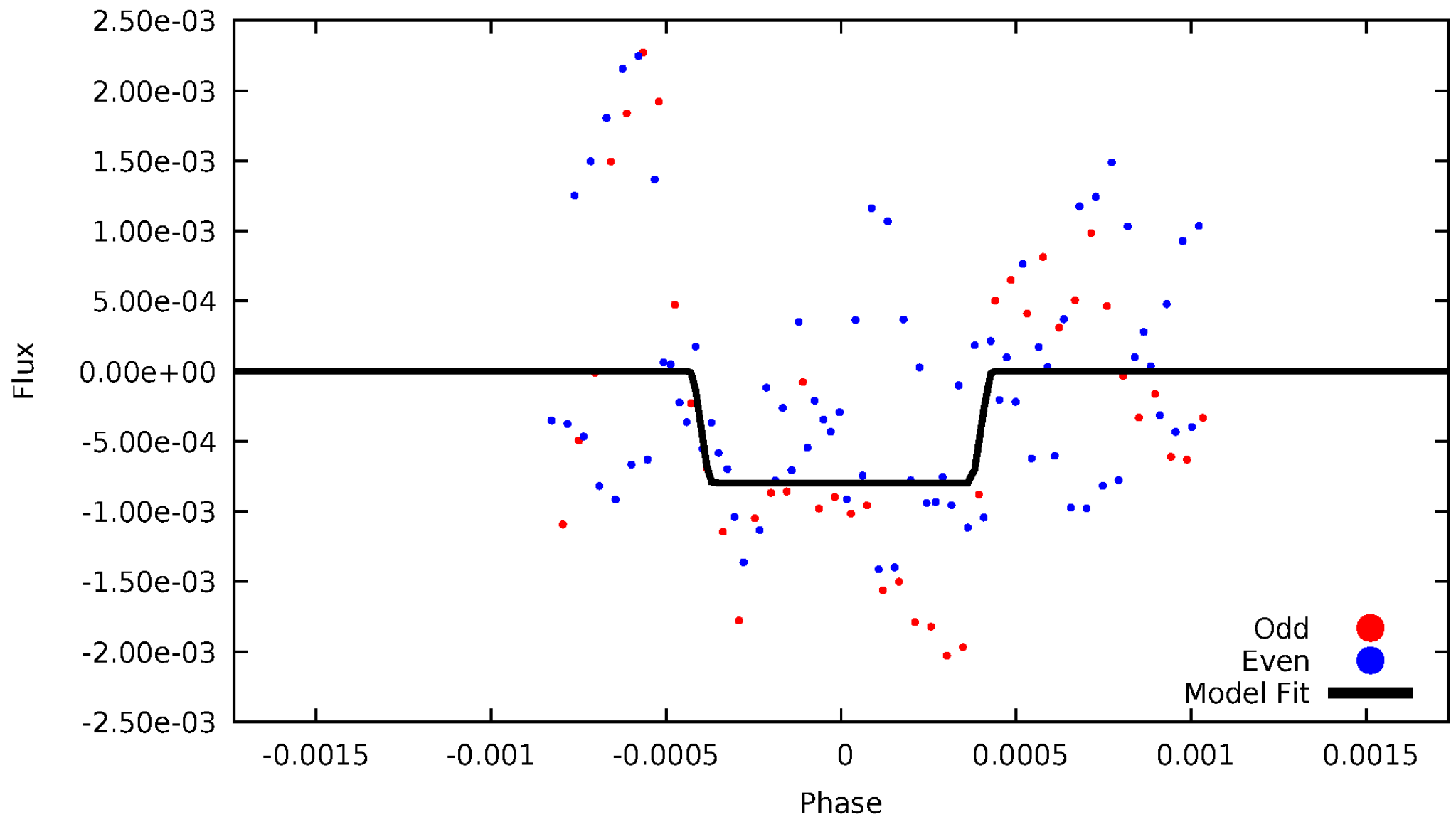
DV Odd/Even

TCE 011919968-06



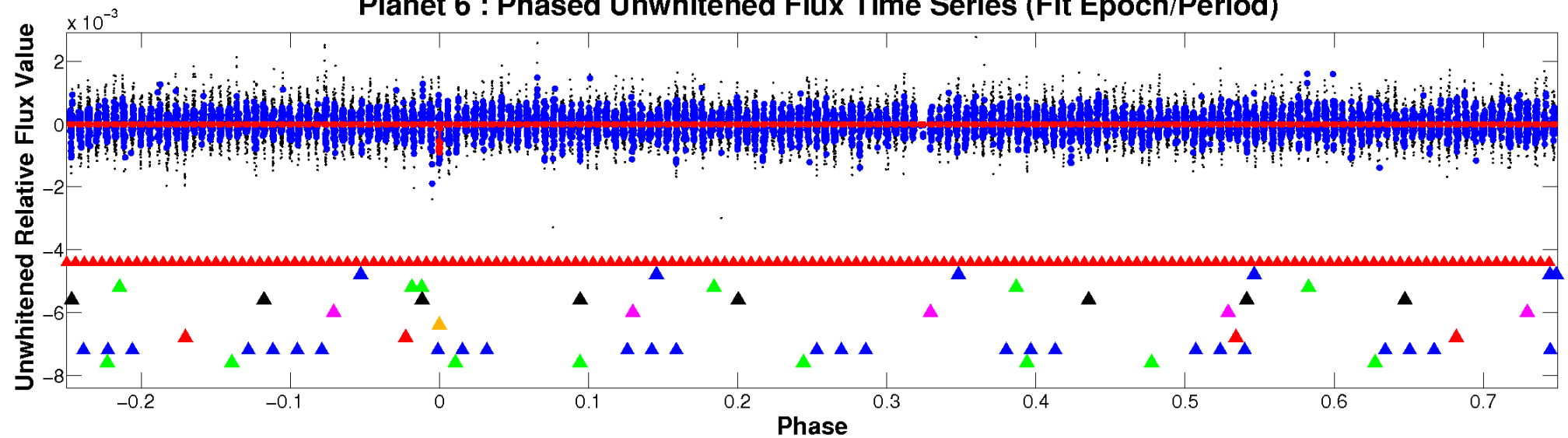
ALT Odd/Even

TCE 011919968-06

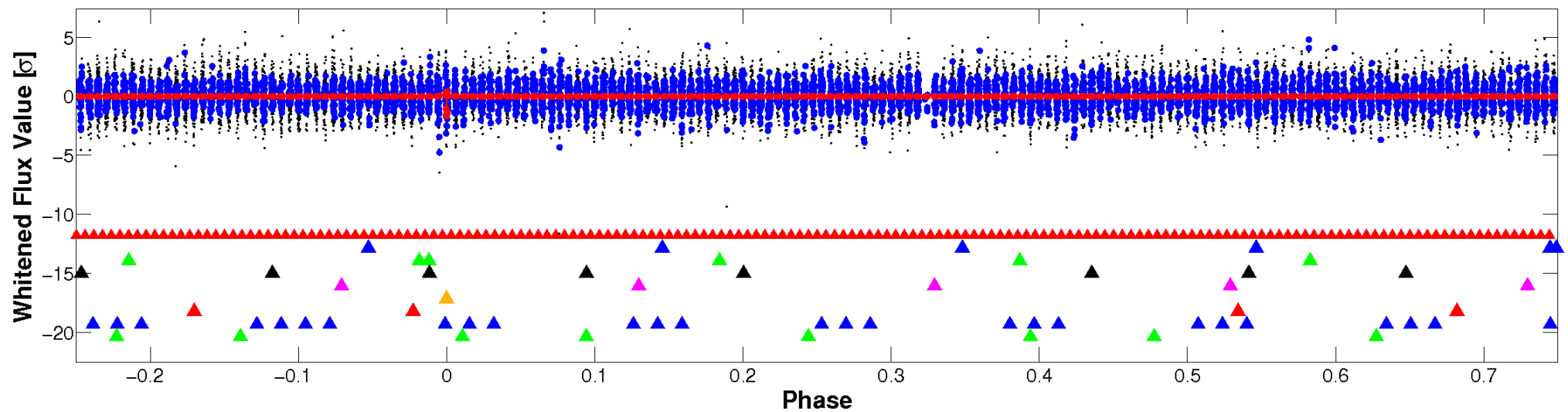


Non-Whitened Vs. Whitened Light Curve

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

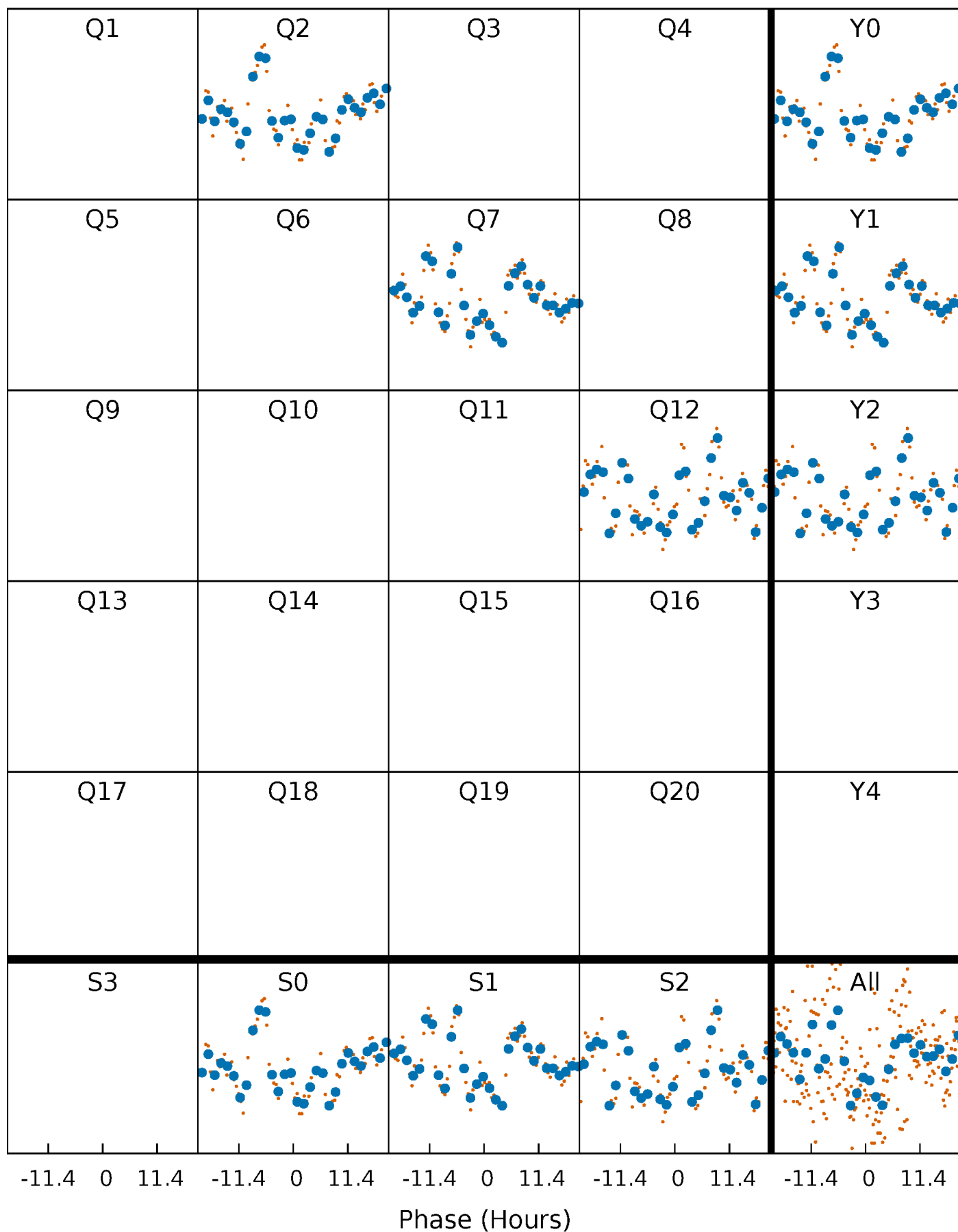


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 011919968-06 P=446.889317 Days $T_0=253.774294$ (BKJD)



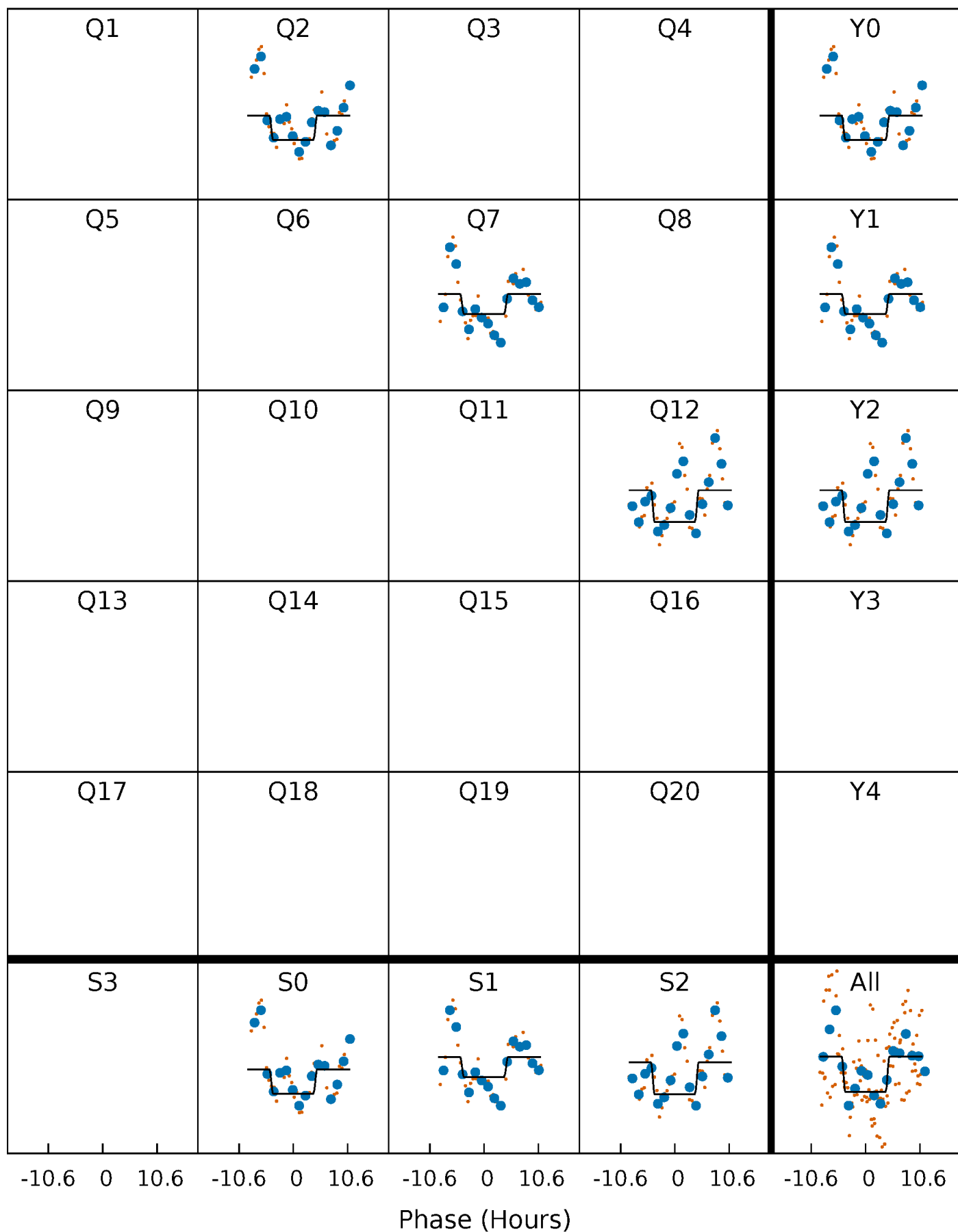
DV Quarter-Phased Transit Curves

TCE 011919968-06 P=446.889317 Days $T_0=253.774294$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

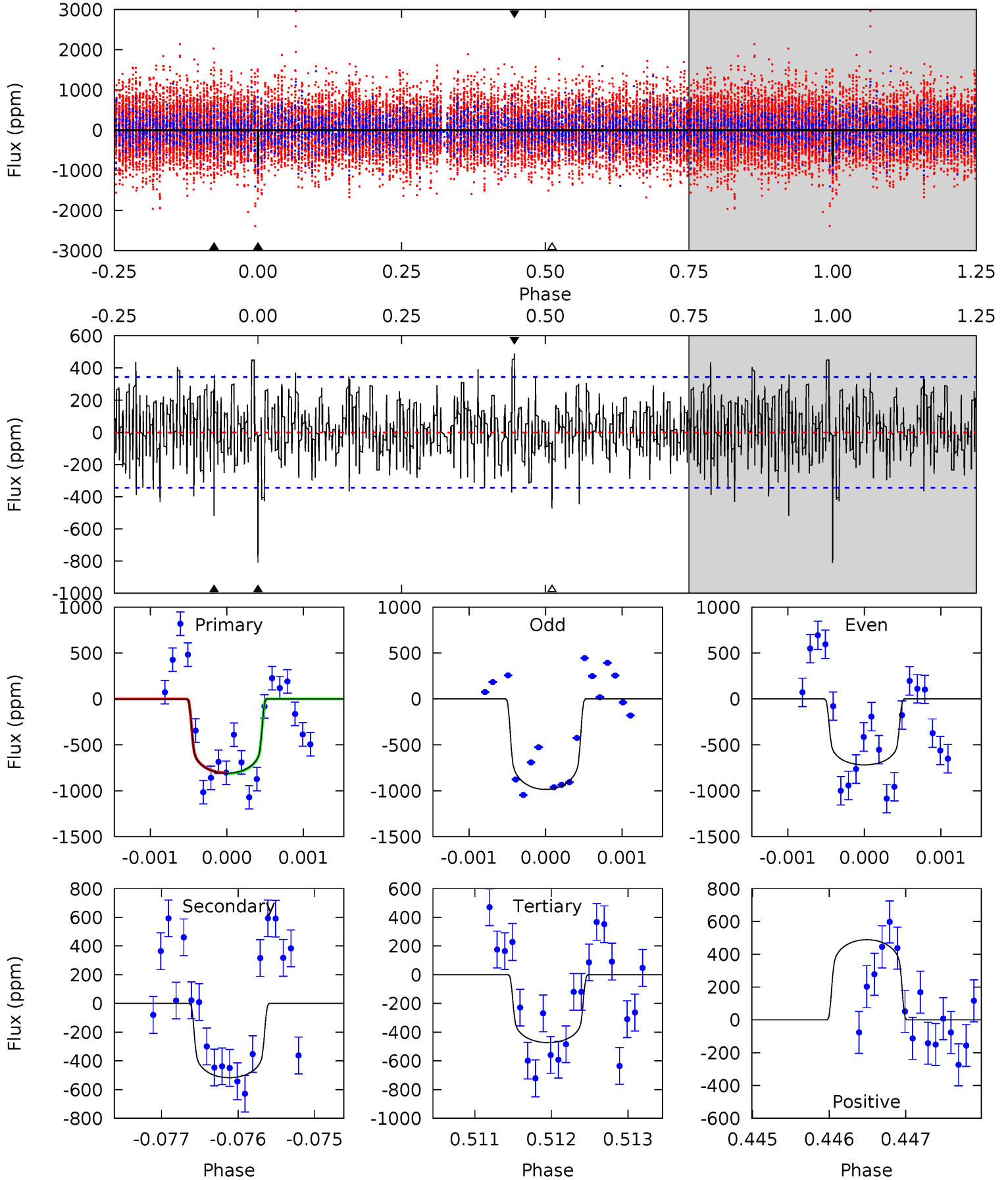
TCE 011919968-06 P=446.895580 Days $T_0=253.781174$ (BKJD)



DV Model-Shift Uniqueness Test

011919968-06, P = 446.889317 Days, E = 253.774294 Days

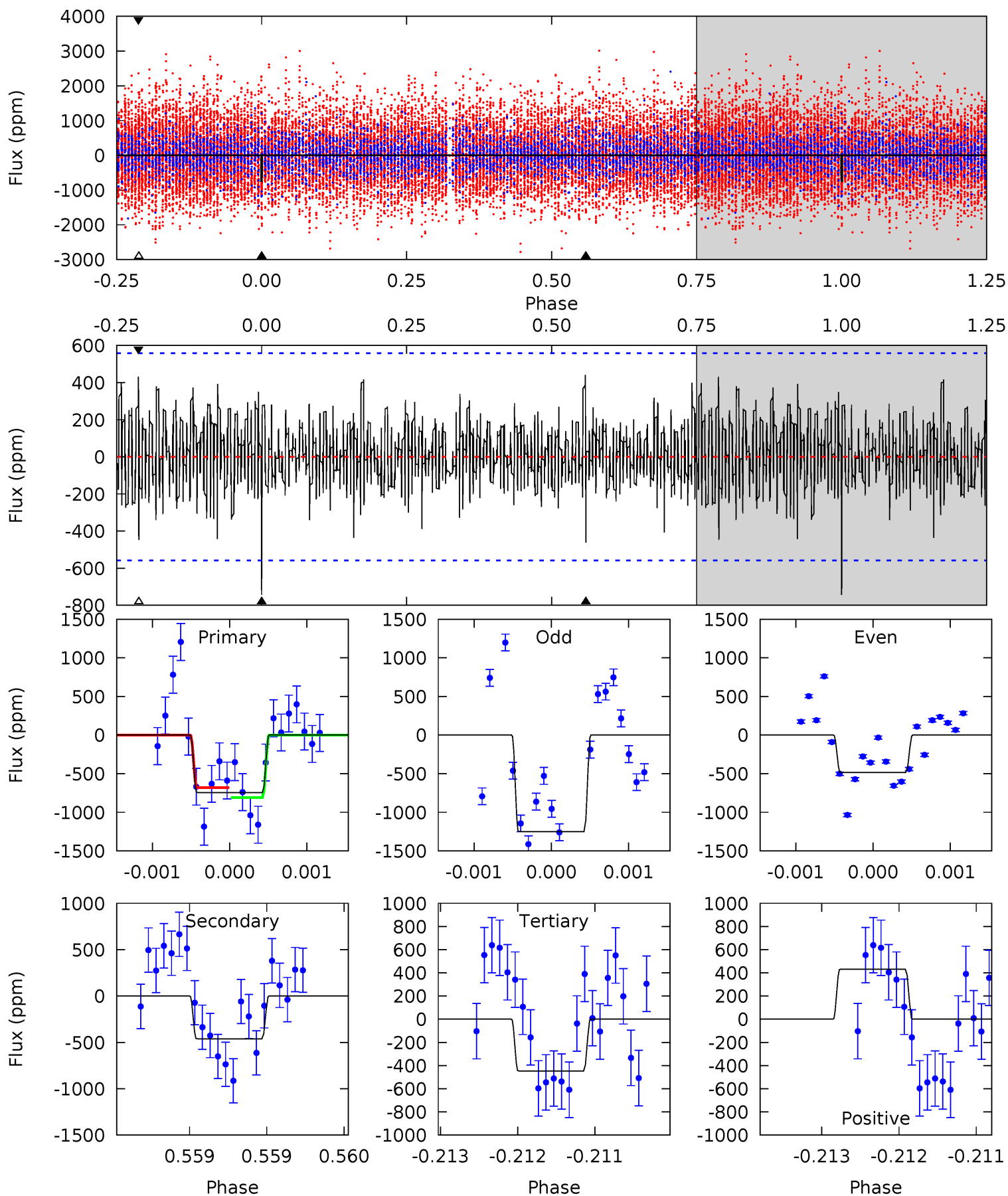
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.8	8.19	7.49	7.74	5.46	3.31	2.16	5.32	5.07	0.70	0.45	1.98	0.86	0.38	0.05



Alt Model-Shift Uniqueness Test

011919968-06, P = 446.895580 Days, E = 253.781174 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.31	4.53	4.39	4.24	5.48	3.33	1.25	2.91	3.07	0.14	0.30	3.55	1.26	0.37	0.63



Stellar Parameters For KIC 011919968

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7935^{+220}_{-331}	$3.911^{+0.273}_{-0.117}$	$-0.120^{+0.200}_{-0.350}$	$2.526^{+0.402}_{-0.939}$	$1.895^{+0.103}_{-0.414}$	$0.166^{+0.311}_{-0.061}$
	+3%/-4%	+7%/-3%	+167%/-292%	+16%/-37%	+5%/-22%	+188%/-37%
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 011919968-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-517 ± 63	$7.88^{+1.68}_{-1.77}$	644^{+41}_{-58}	6772^{+740}_{-571}	9120^{+5678}_{-3170}
Alt.	-462 ± 102	$7.38^{+1.74}_{-1.72}$	641^{+44}_{-56}	6733^{+854}_{-682}	9145^{+5818}_{-3465}

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 $A_{obs} \gg 1.0$

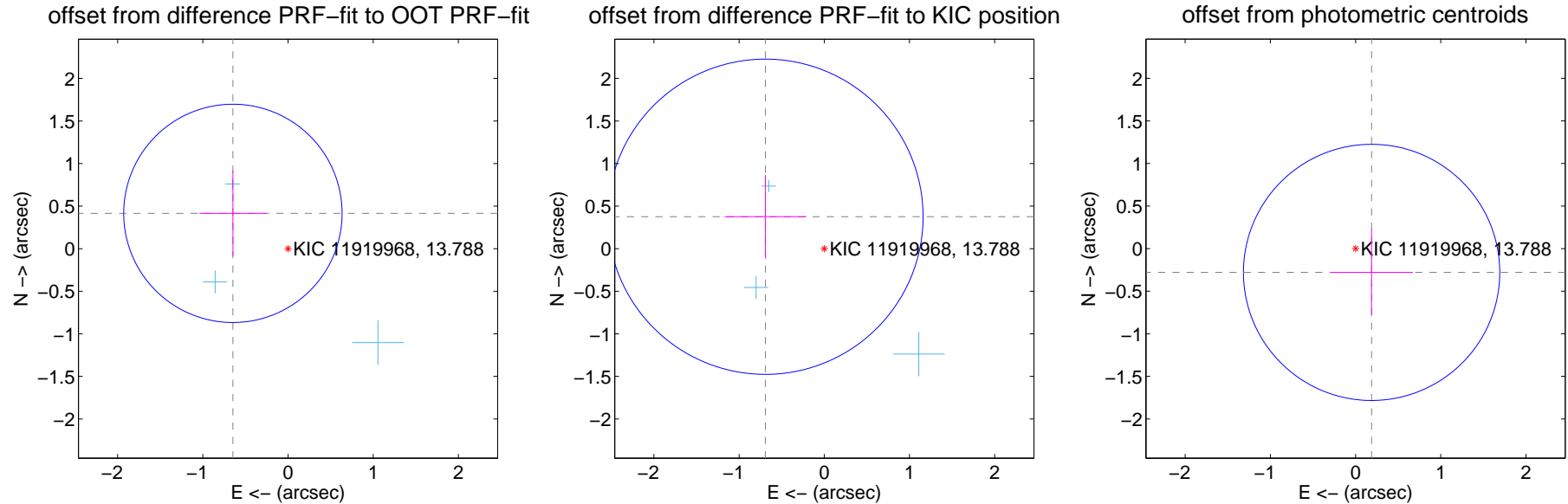
DV Centroid Data

Supplemental centroid analysis for 011919968-06. Kepler magnitude: 13.79. Transit SNR 11.28

There are 3 quarters with good PRF difference image offsets

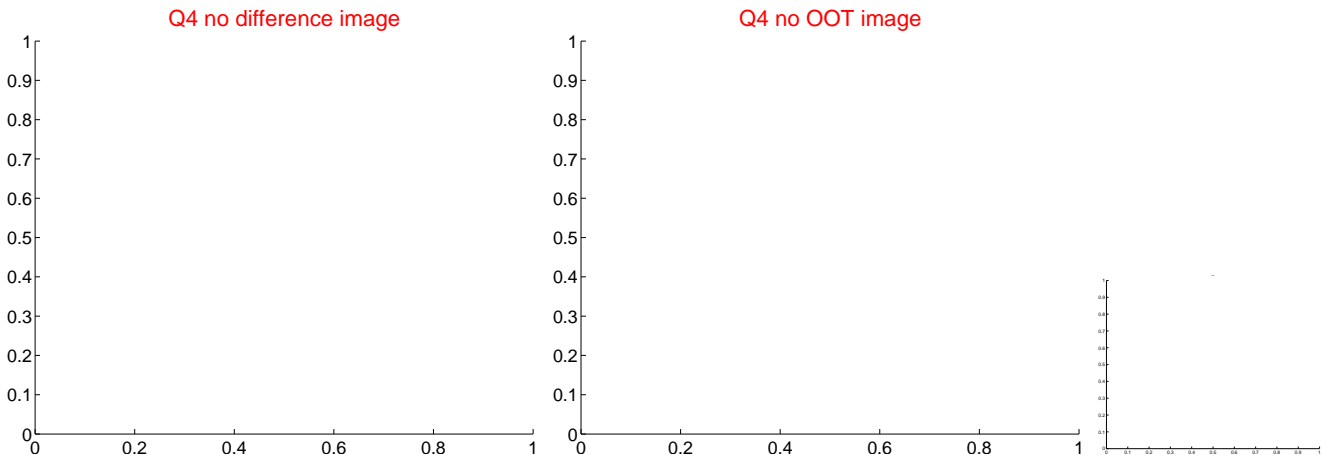
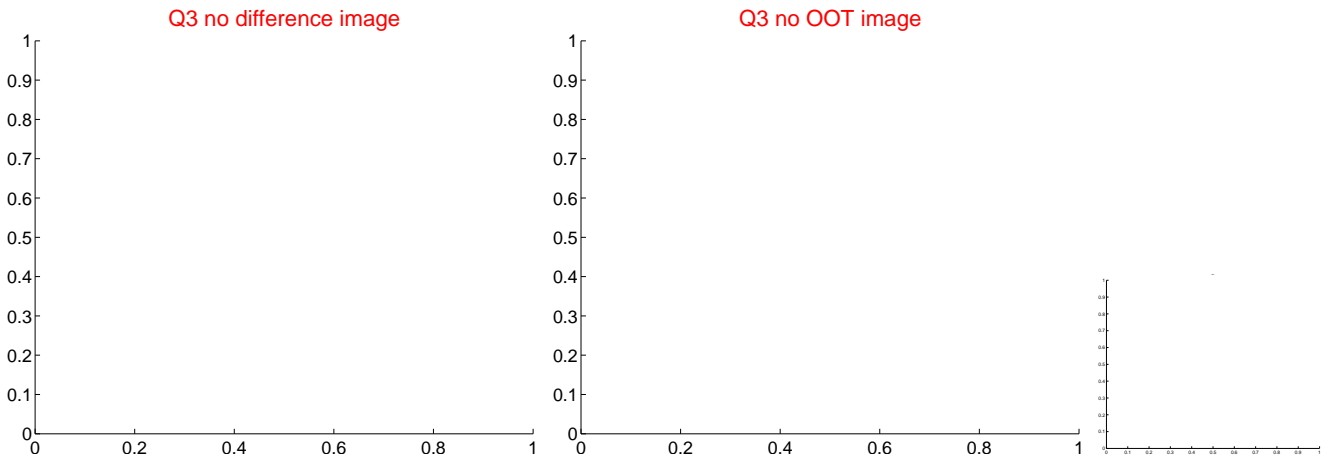
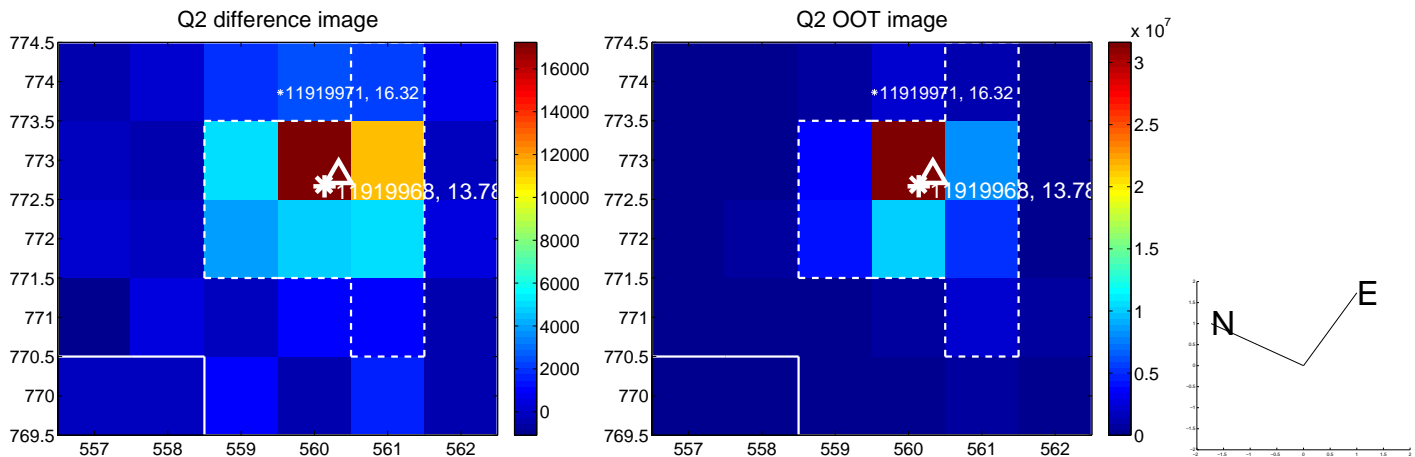
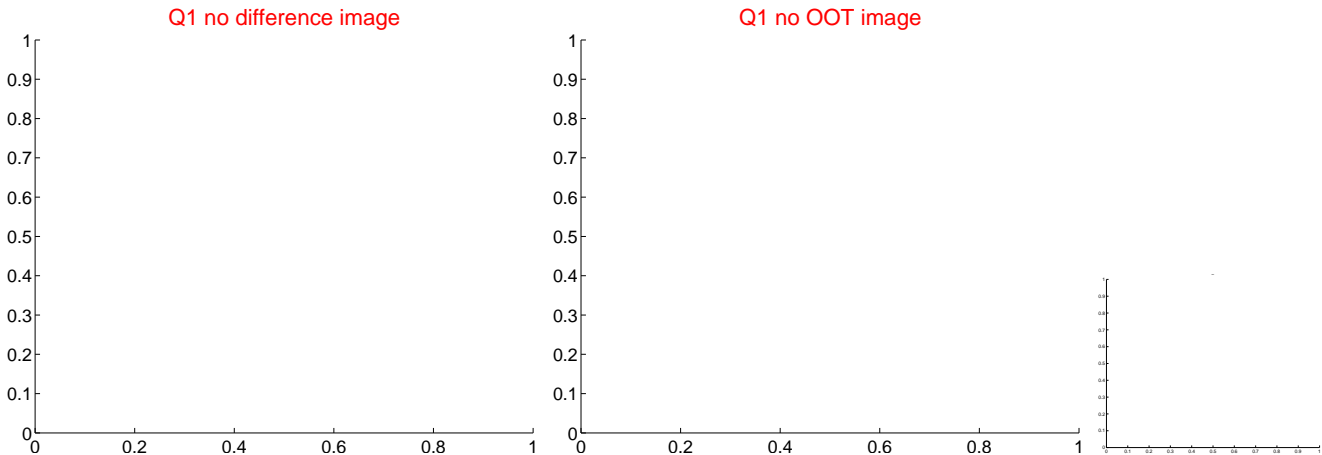
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.769 ± 0.427	1.80	0.647 ± 0.393	0.415 ± 0.501
PRF-fit source offset from KIC position	0.787 ± 0.617	1.27	0.691 ± 0.480	0.375 ± 0.492
photometric centroid source offset	0.34 ± 0.50	0.67	-0.19 ± 0.49	-0.28 ± 0.51

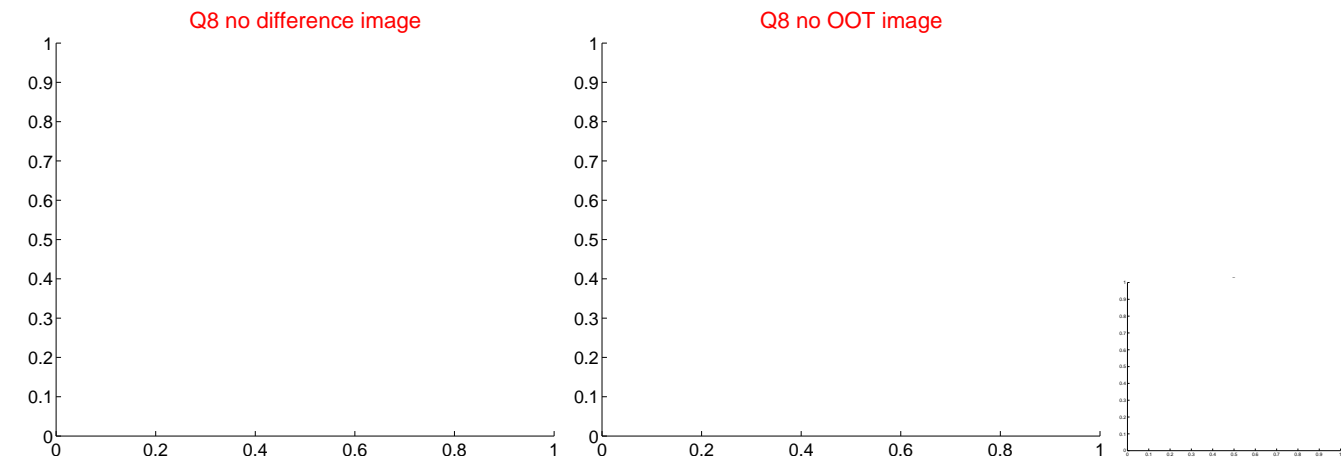
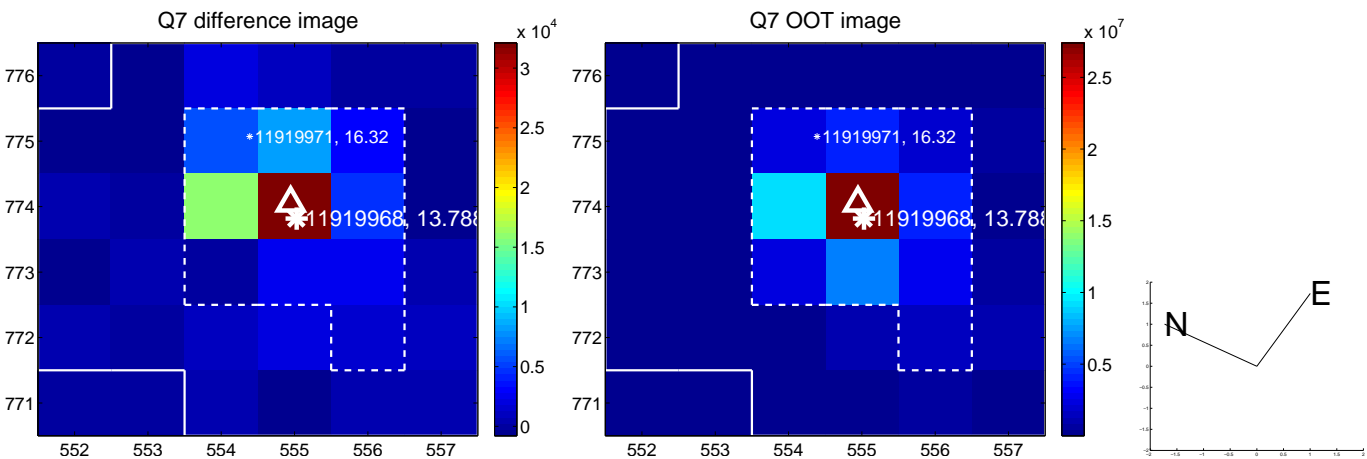
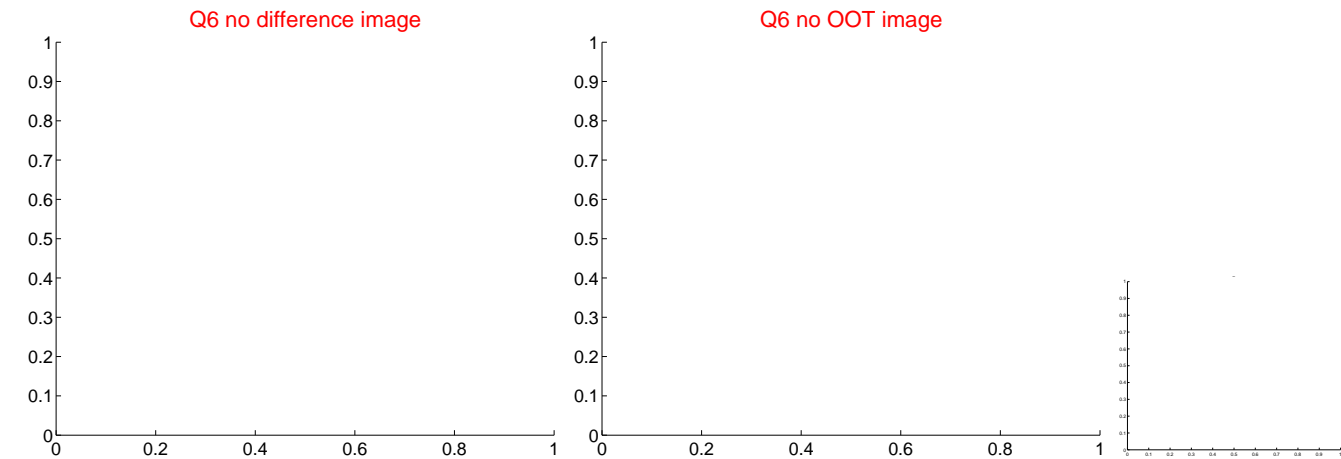
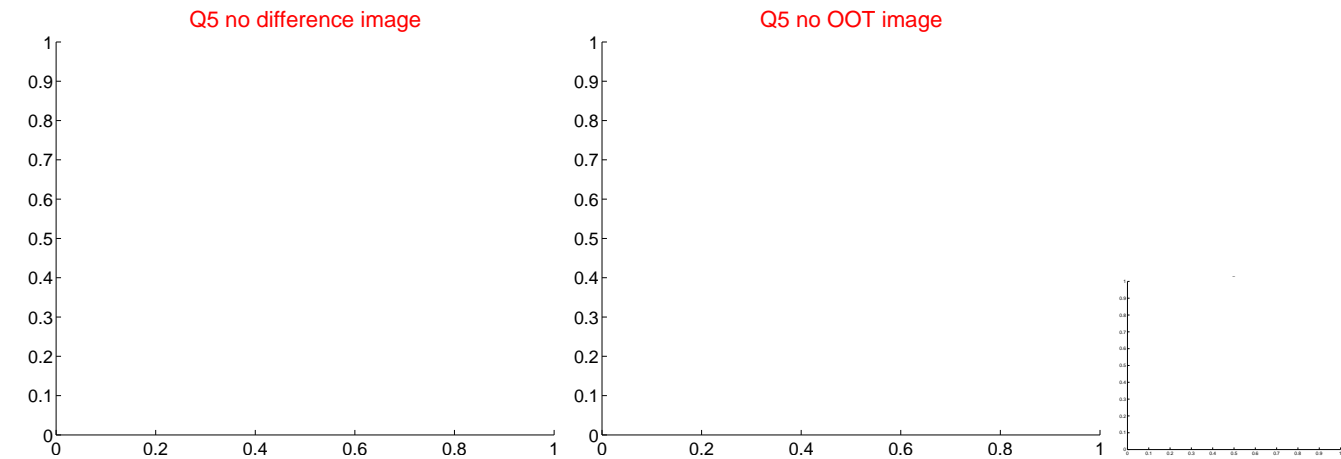


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

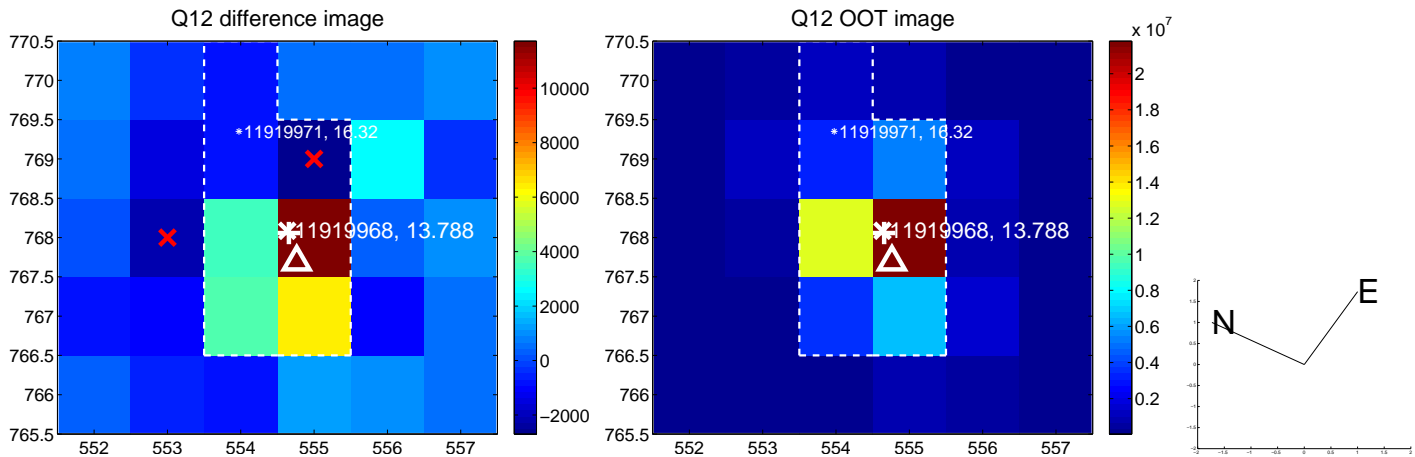
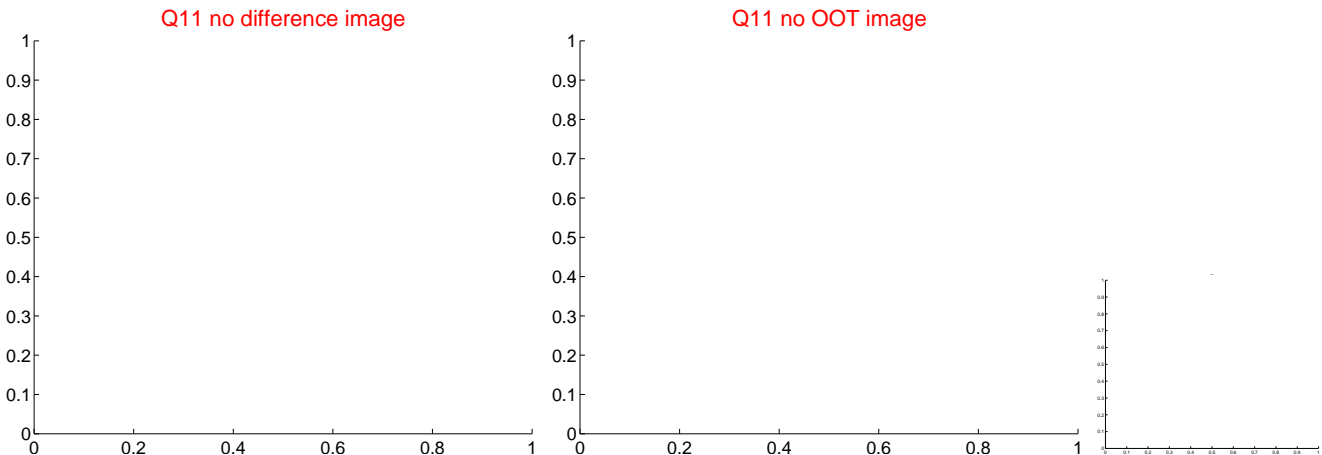
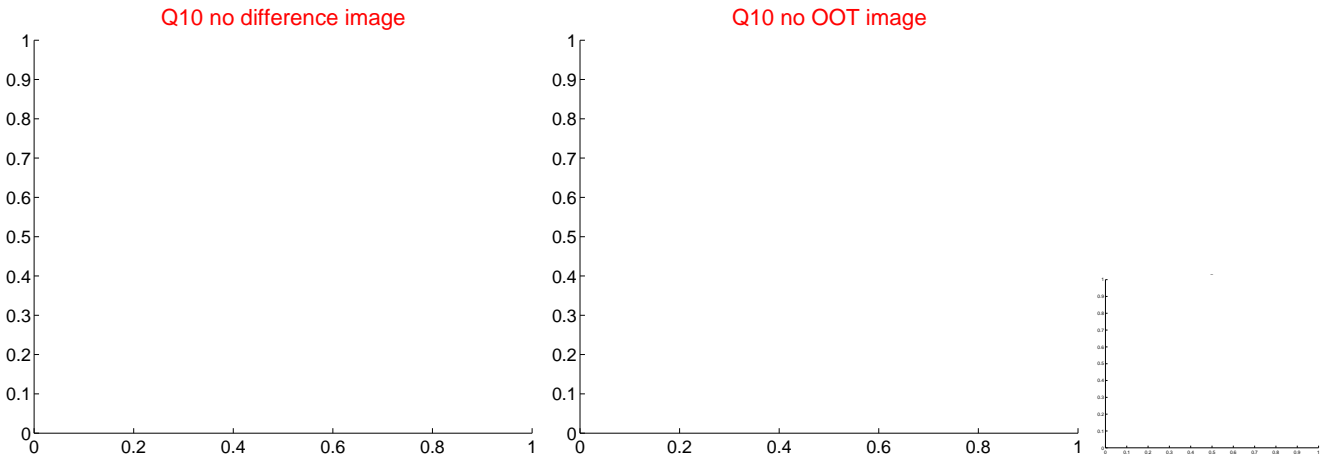
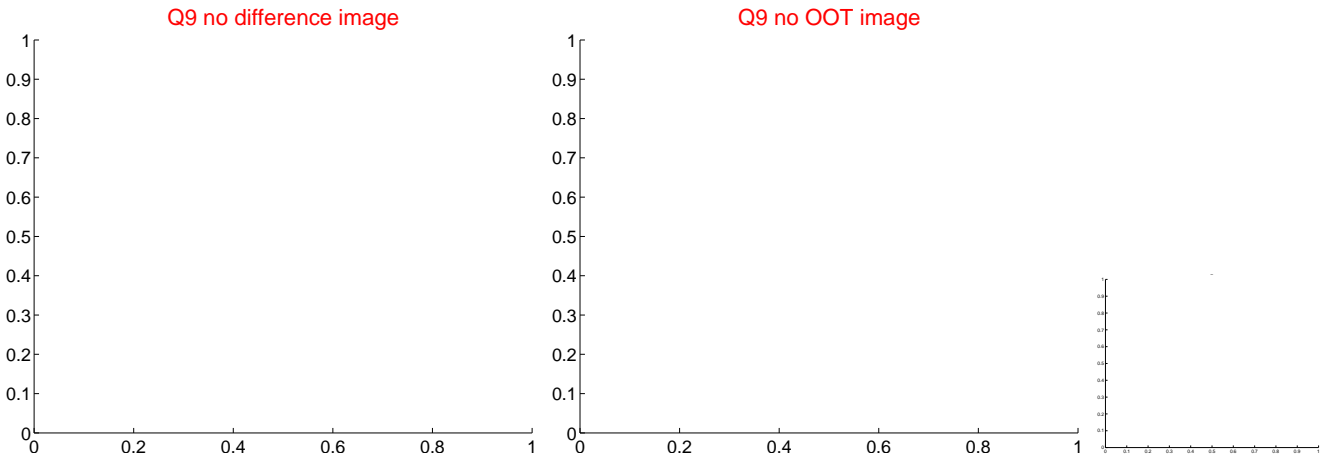
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



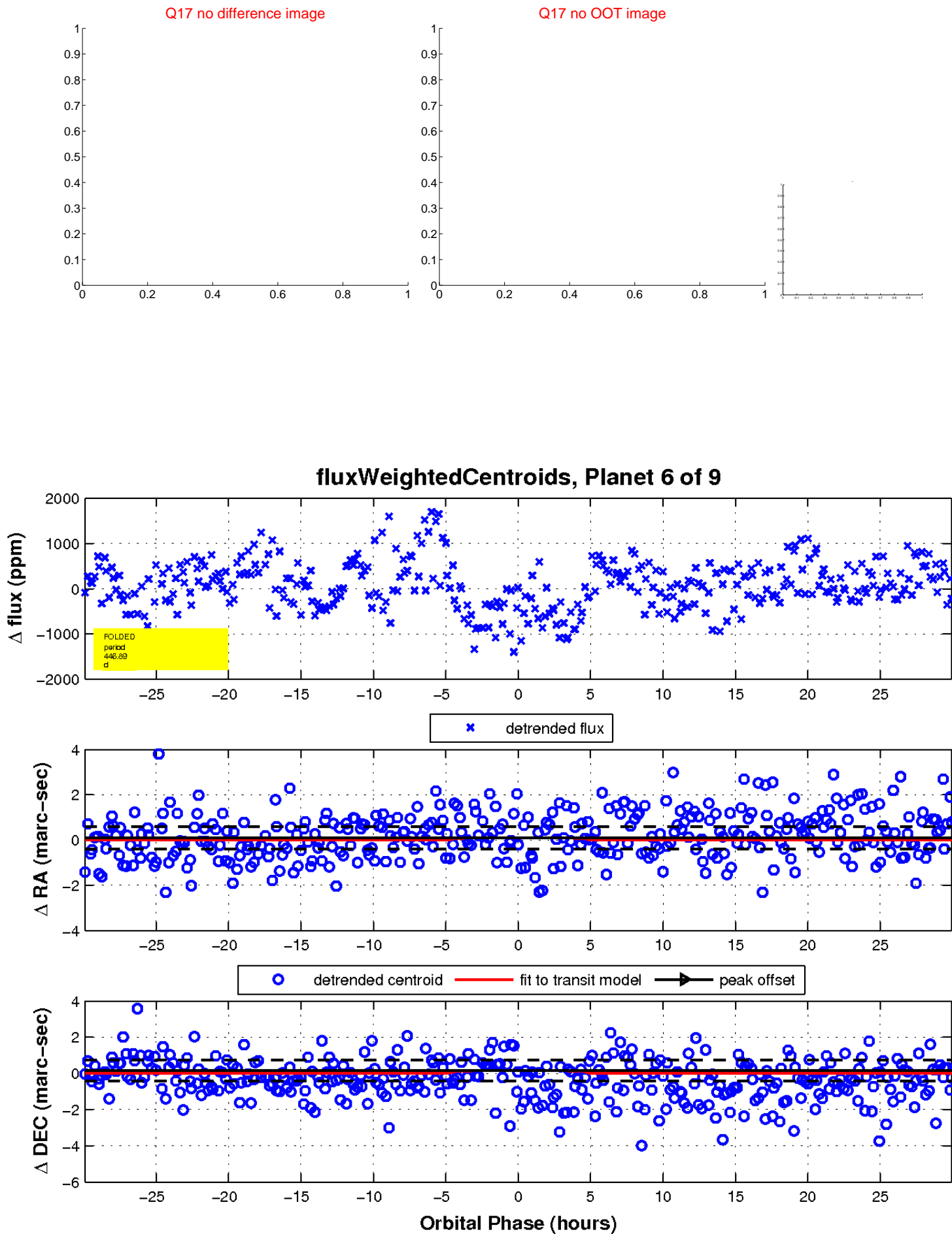
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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

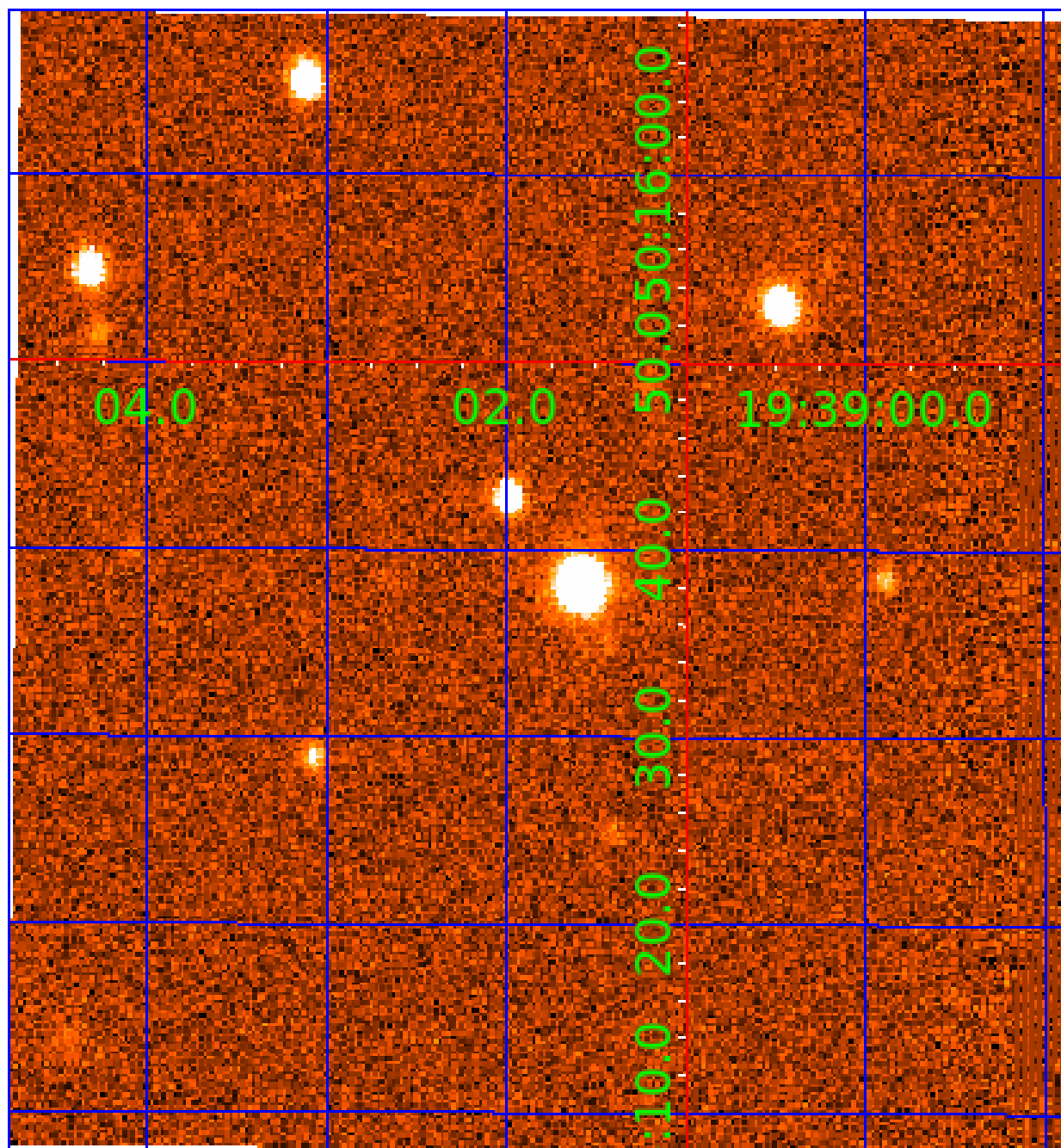


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011919968

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})
011919968-01	OBS	No	2.628739	131.606703	48.6	14.242	10.3	6.3	2.53	7935	1.79	10642.44
011919968-02	OBS	No	267.756509	141.587893	1236.1	7.836	12.6	9.2	2.53	7935	16.41	22.37
011919968-04	OBS	No	199.755848	143.598092	562.8	9.162	11.6	10.6	2.53	7935	6.83	33.06
011919968-05	OBS	No	268.049107	311.741872	571.9	8.594	11.5	9.1	2.53	7935	6.14	22.34
011919968-06	OBS	No	446.889317	253.774294	898.0	9.982	10.9	11.3	2.53	7935	8.18	11.30
011919968-07	OBS	No	380.862826	243.690824	758.5	7.345	11.2	8.0	2.53	7935	7.53	13.99
011919968-08	OBS	No	56.777775	139.781024	980.3	6.760	10.8	10.8	2.53	7935	14.72	176.93
011919968-09	OBS	No	171.288785	295.916012	482.9	5.000	10.6	-1.0	2.53	7935	5.62	40.59

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011919968-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
011919968-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_CHASES—MARSHALL—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—HALO_GHOST
011919968-04	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011919968-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011919968-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011919968-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT
011919968-08	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011919968-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

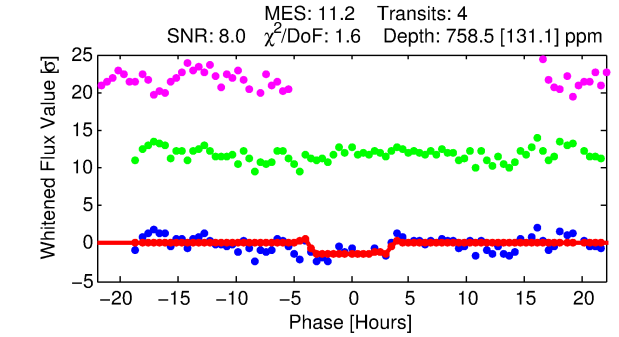
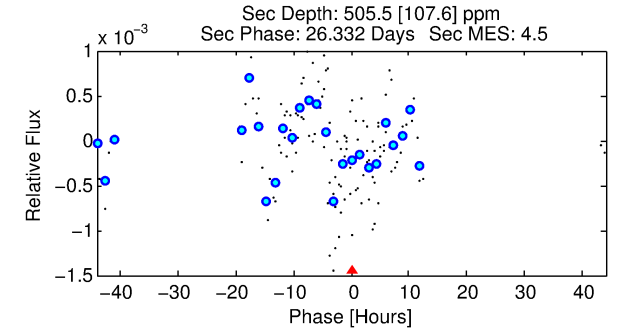
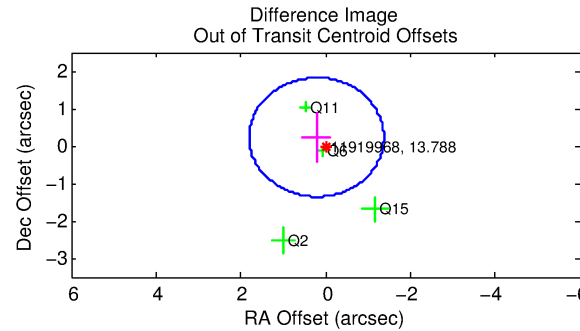
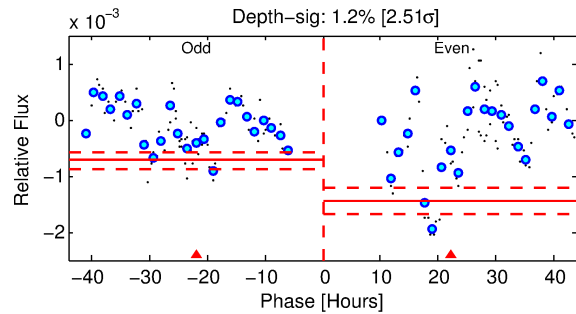
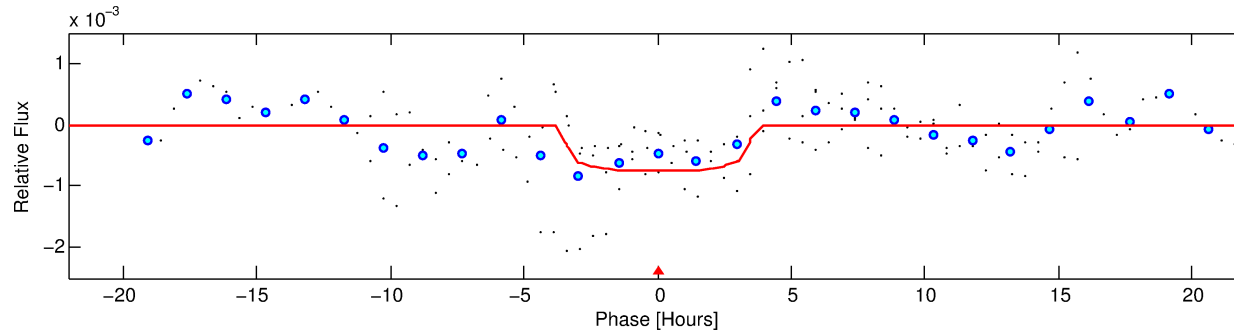
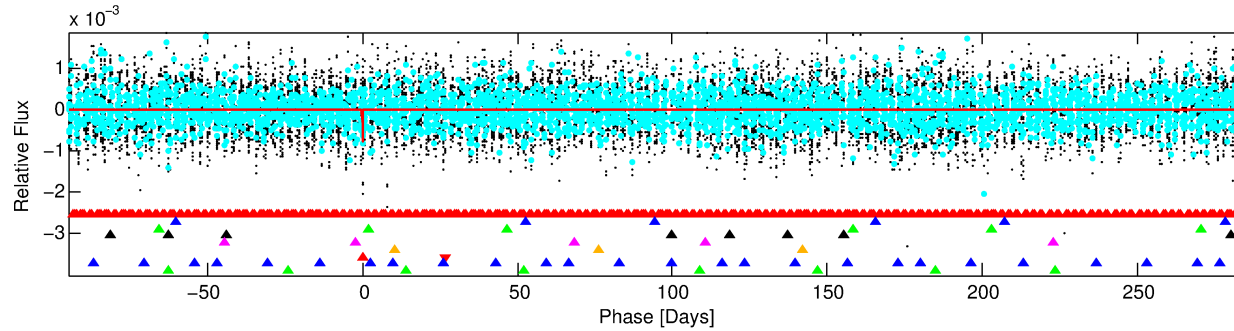
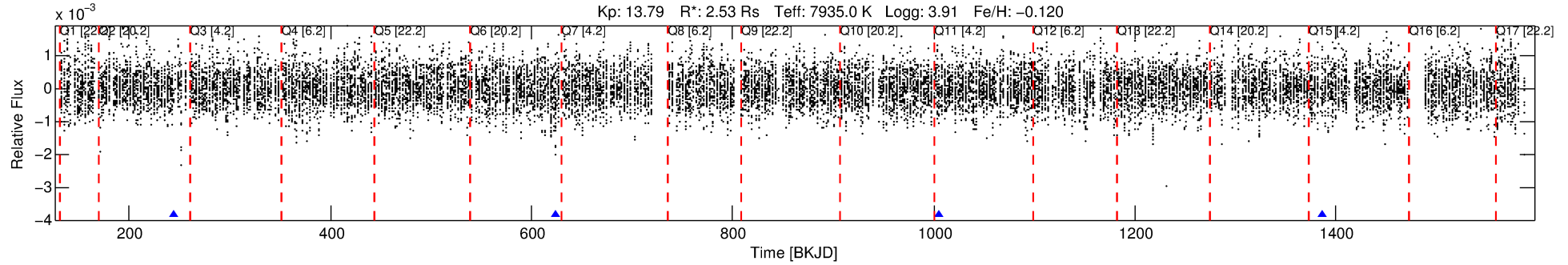
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011919968-07

No Significant Match Found

DV One-Page Summary

KIC: 11919968 Candidate: 7 of 9 Period: 380.863 d



DV Fit Results:

Period = 380.86283 [0.00767] d
Epoch = 243.6908 [0.0155] BKJD
Rp/R* = 0.0273 [0.0266]
a/R* = 282.64 [1616.20]
b = 0.74 [3.53]
Seff = 13.99 [7.20]
Teq = 493 [63] K
Rp = 7.53 [7.84] Re
a = 1.2730 [0.4131] AU
Ag = 7953.69 [16046.21] [0.50 σ]
Teffp = 7200 [3537] K [1.90 σ]

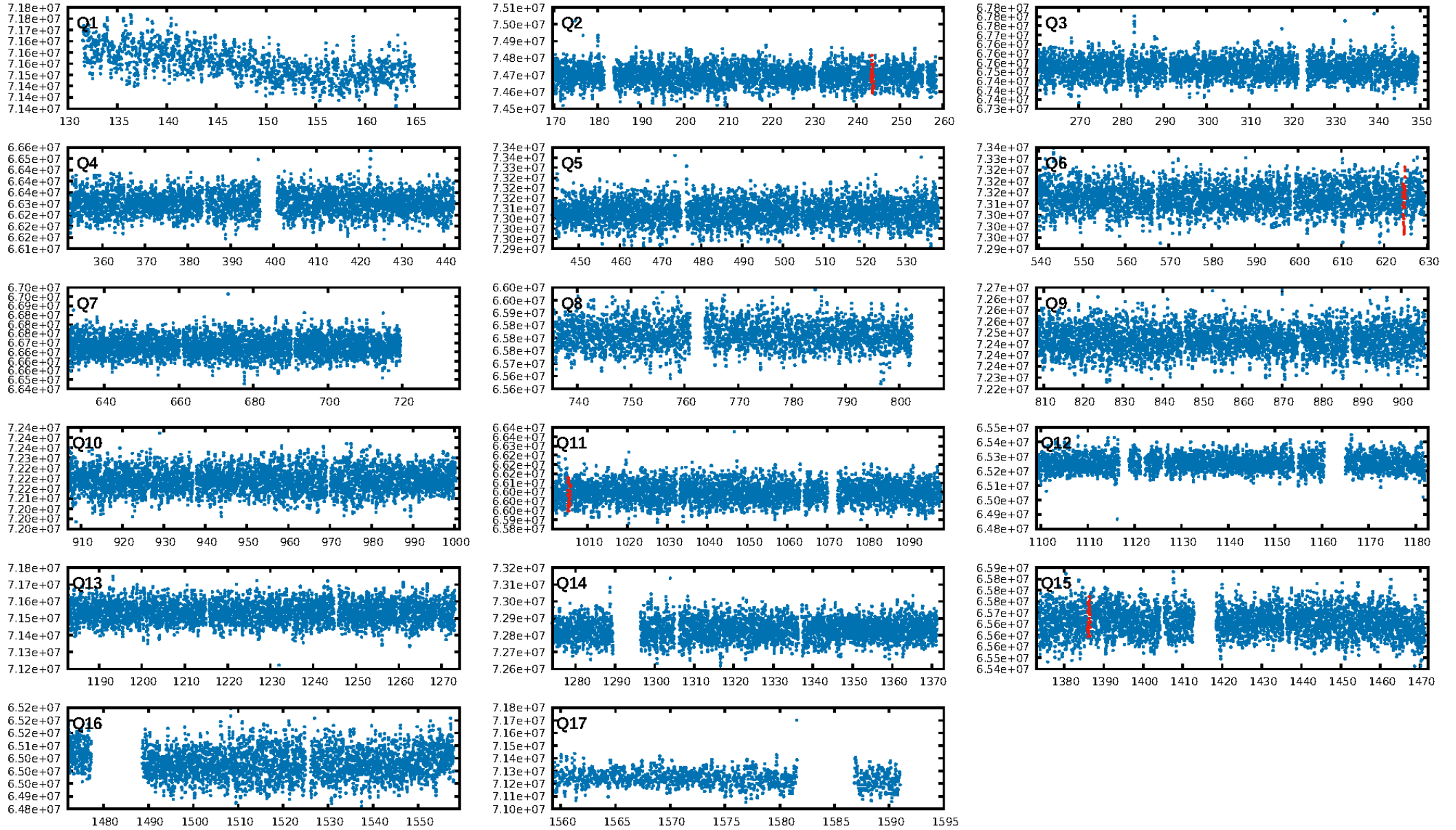
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [203.19 σ]
LongPeriod-sig: 100.0% [127.87 σ]
ModelChiSquare2-sig: 20.9%
ModelChiSquareGof-sig: 95.1%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 0.9361
Centroid-sig: 53.9%
Centroid-so: 0.337 arcsec [0.60 σ]
OotOffset-rm: 0.315 arcsec [0.60 σ]
OotOffset-st: 2/2/0/0 [4]
KicOffset-rm: 0.228 arcsec [0.28 σ]
KicOffset-st: 2/2/0/0 [4]
DiffImageQuality-fgm: 0.75 [3/4]
DiffImageOverlap-fno: 0.75 [3/4]

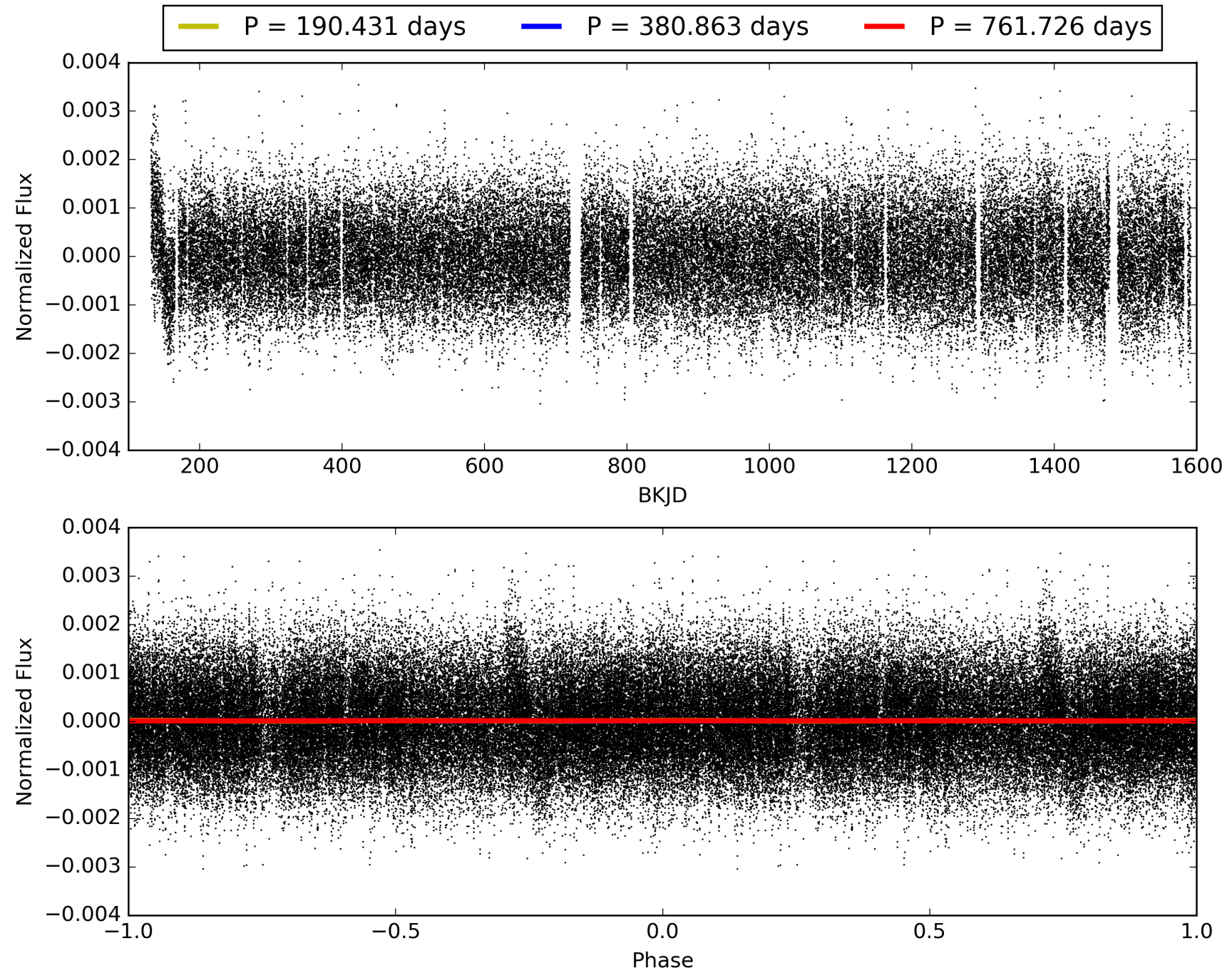
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:53:17 Z

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

TCE 011919968-07, PDC Light Curves

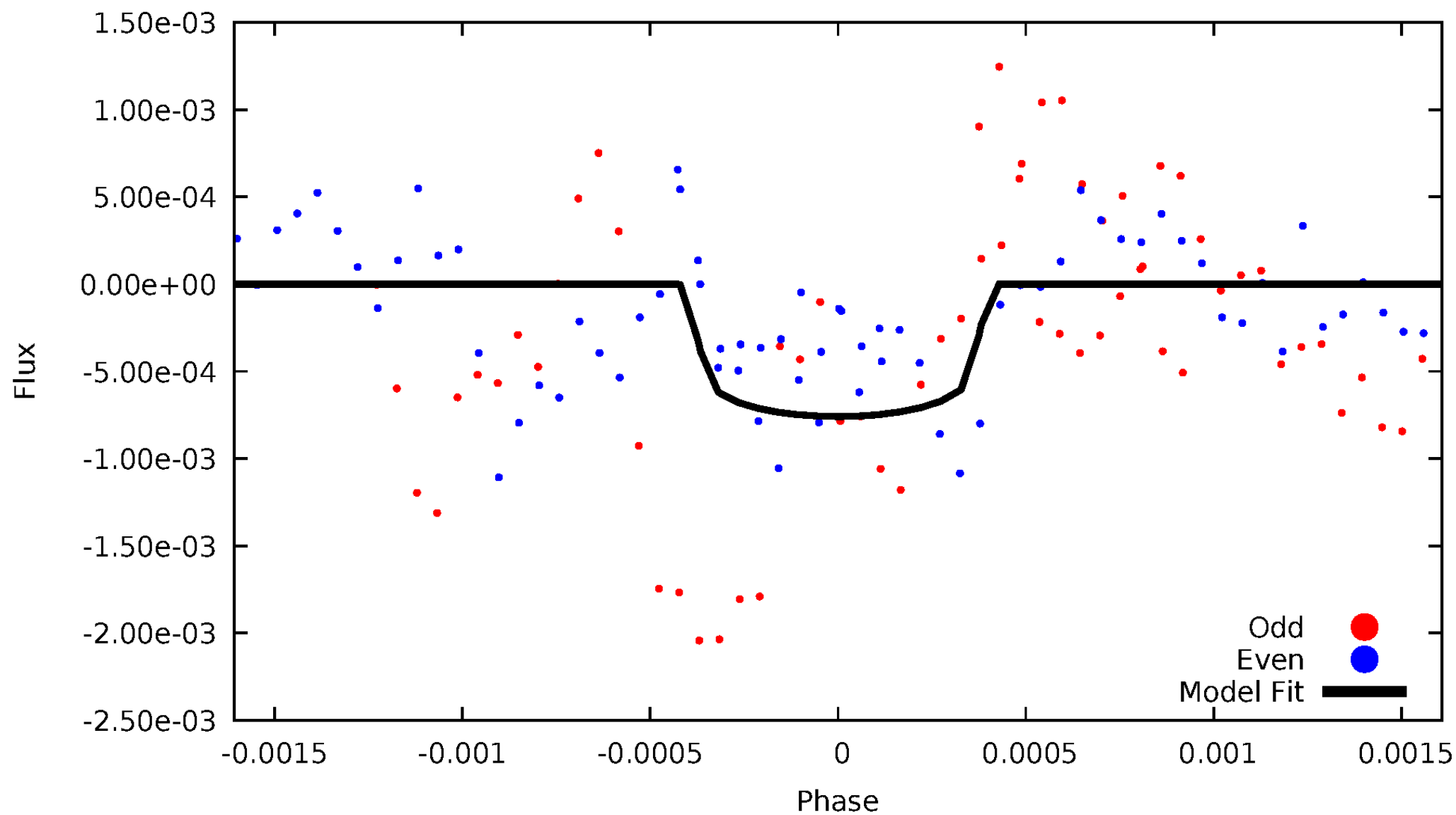


TCE 011919968-07



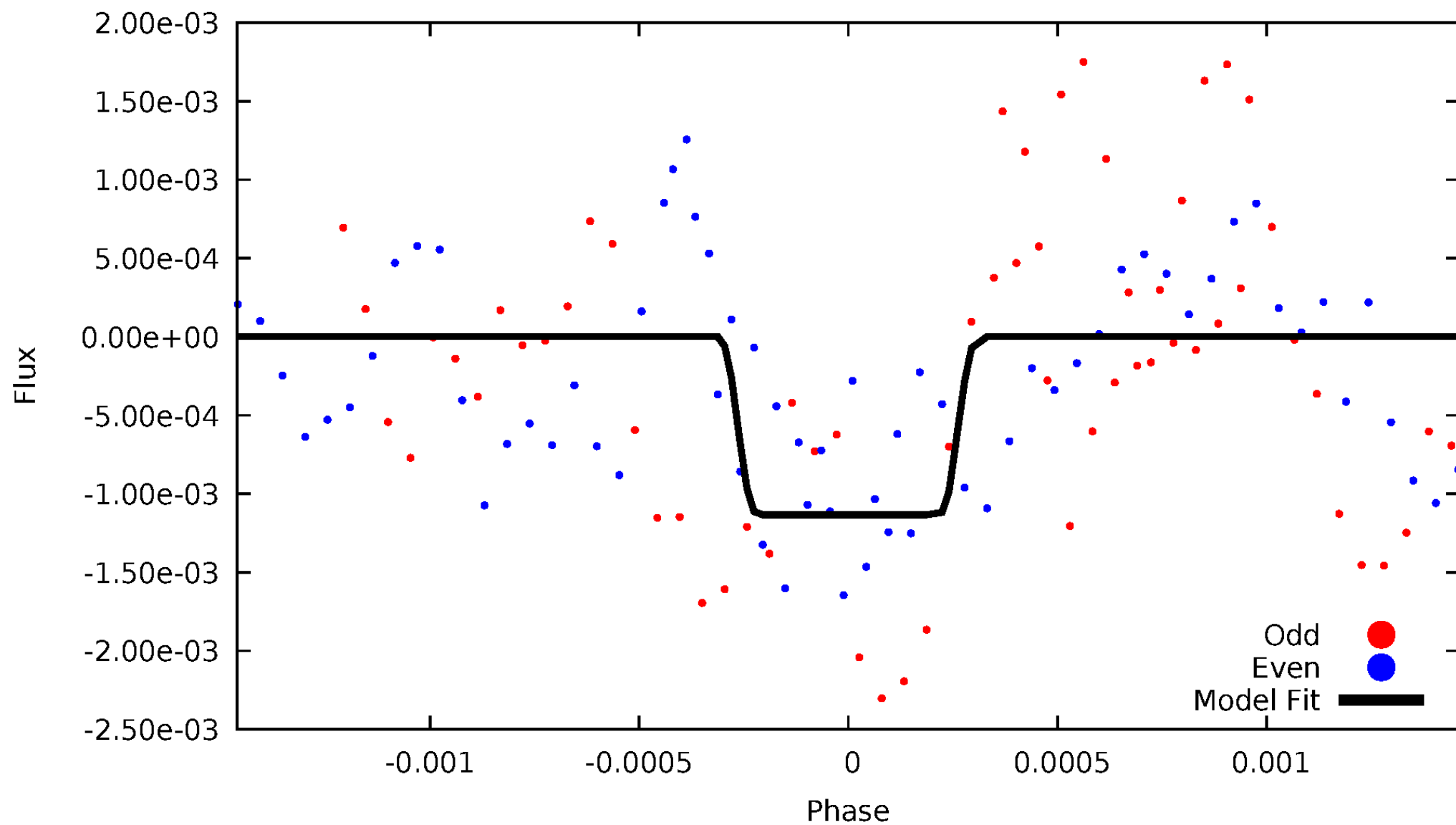
DV Odd/Even

TCE 011919968-07



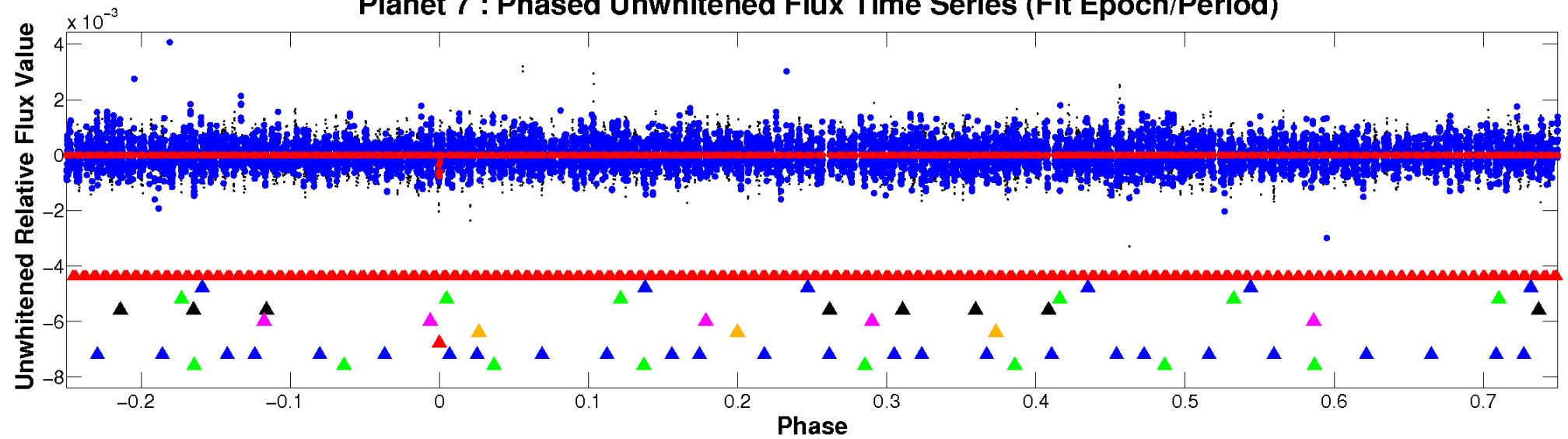
ALT Odd/Even

TCE 011919968-07

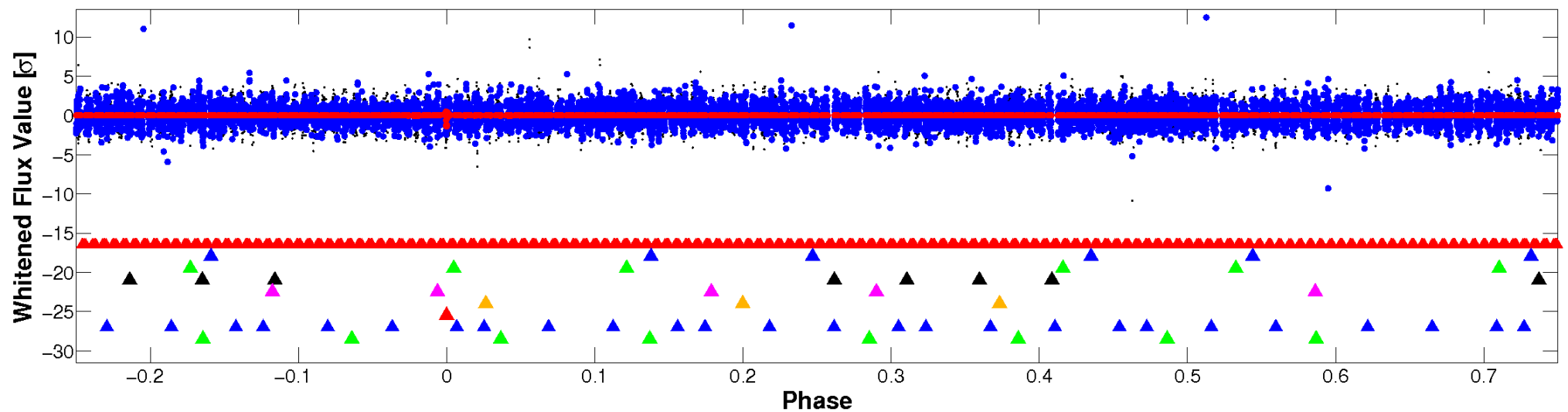


Non-Whitened Vs. Whitened Light Curve

Planet 7 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

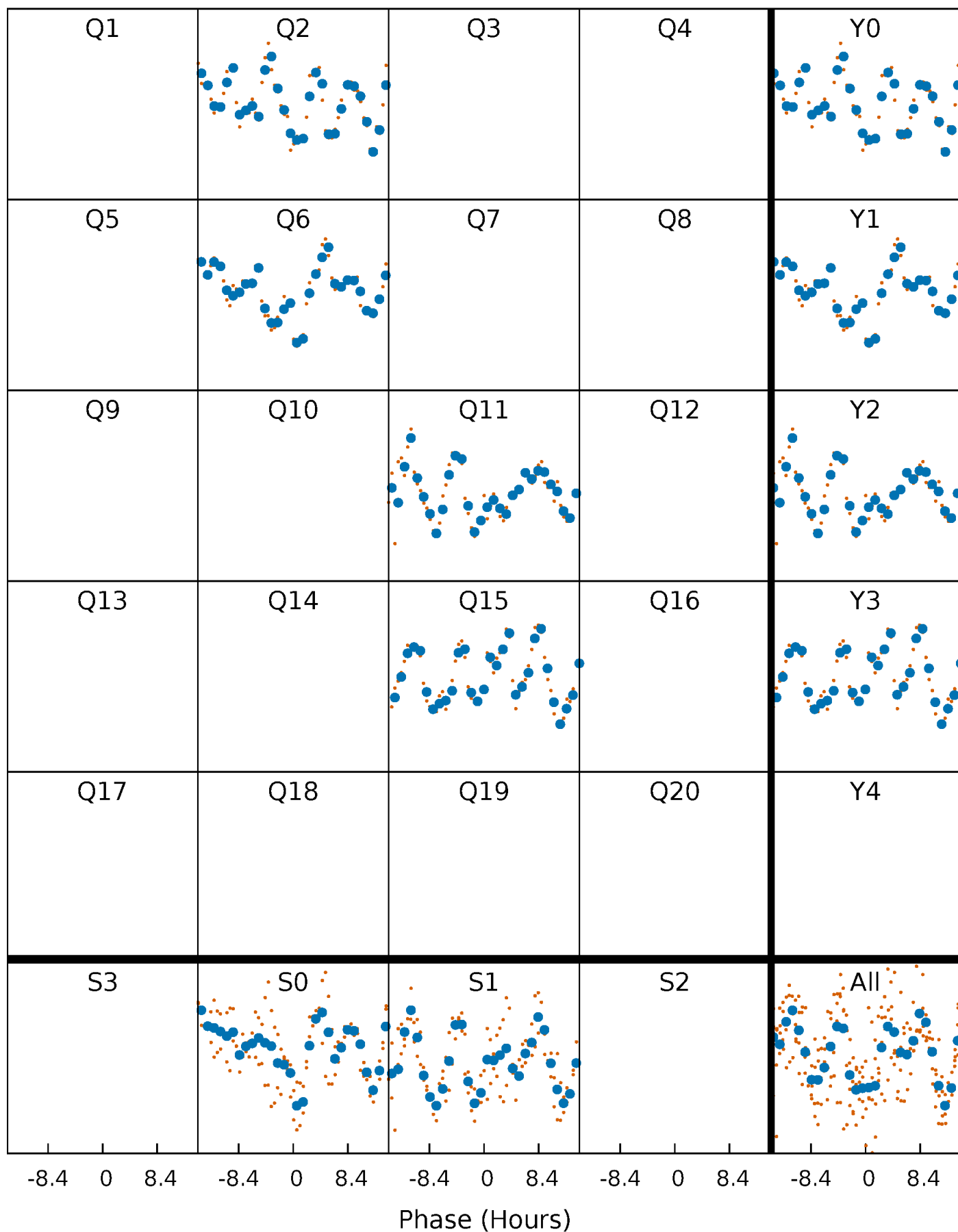


Planet 7 : Phased Whitened Flux Time Series (Fit Epoch/Period)



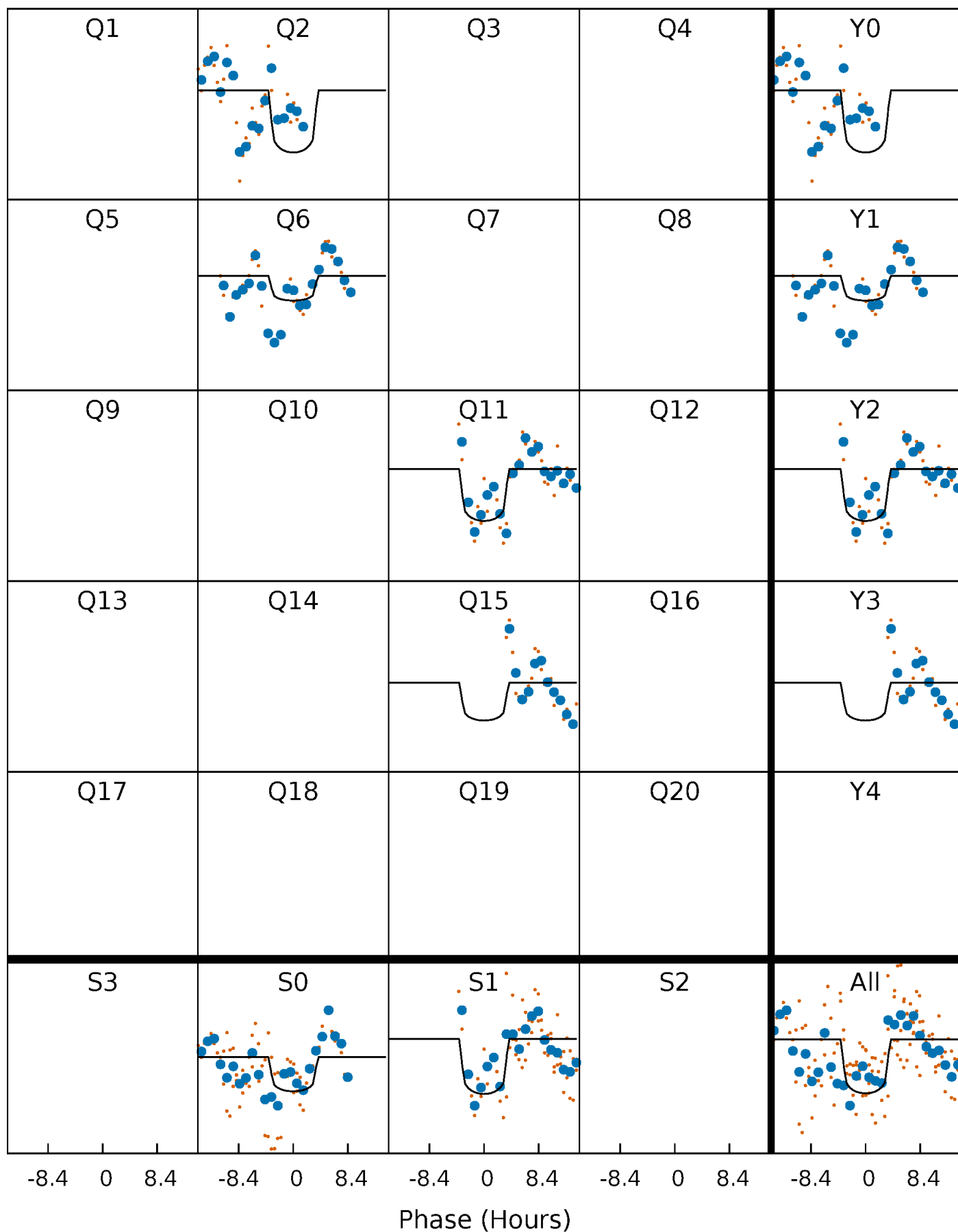
PDC Quarter-Phased Transit Curves

TCE 011919968-07 $P=380.862825$ Days $T_0=243.690824$ (BKJD)



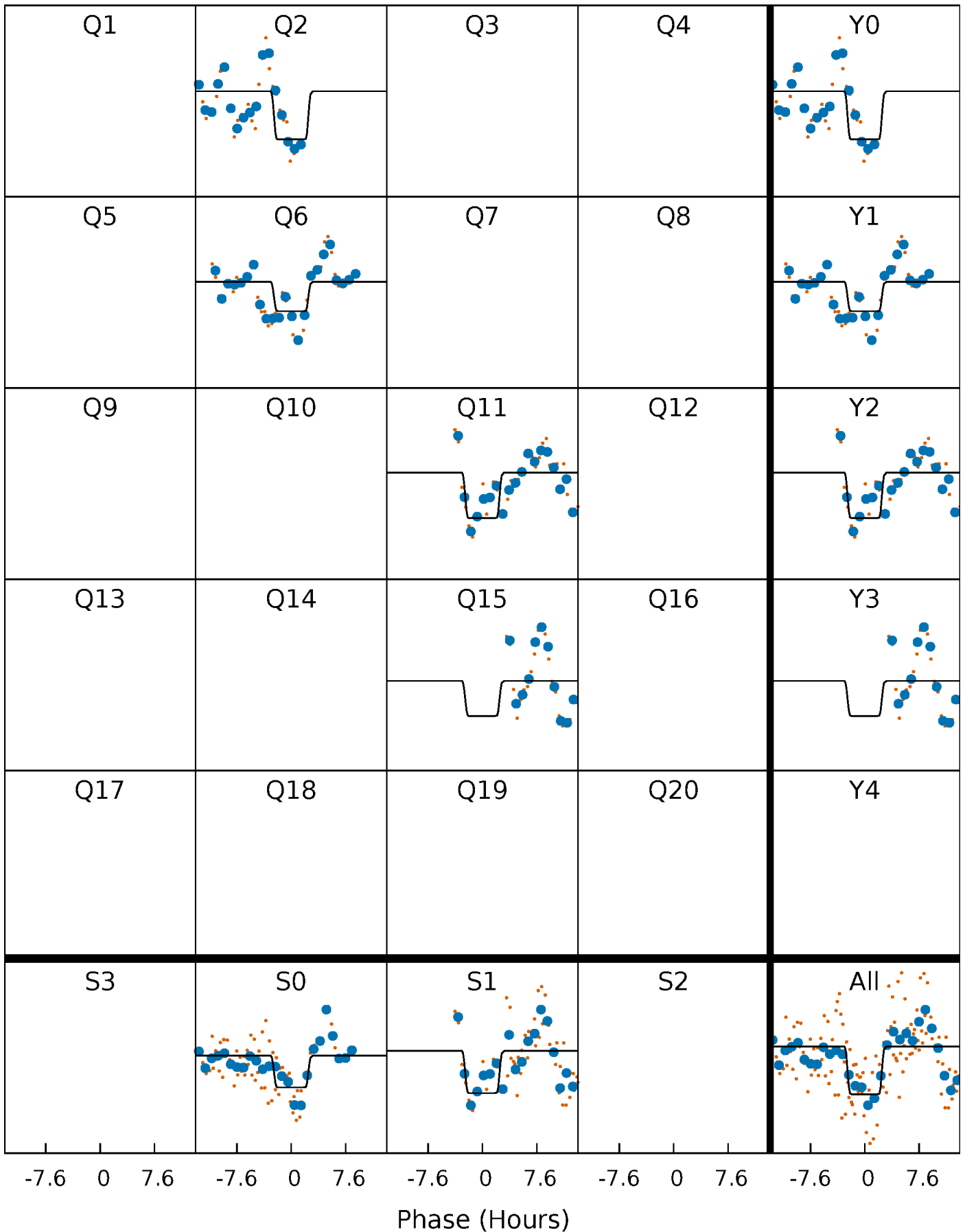
DV Quarter-Phased Transit Curves

TCE 011919968-07 $P=380.862825$ Days $T_0=243.690824$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

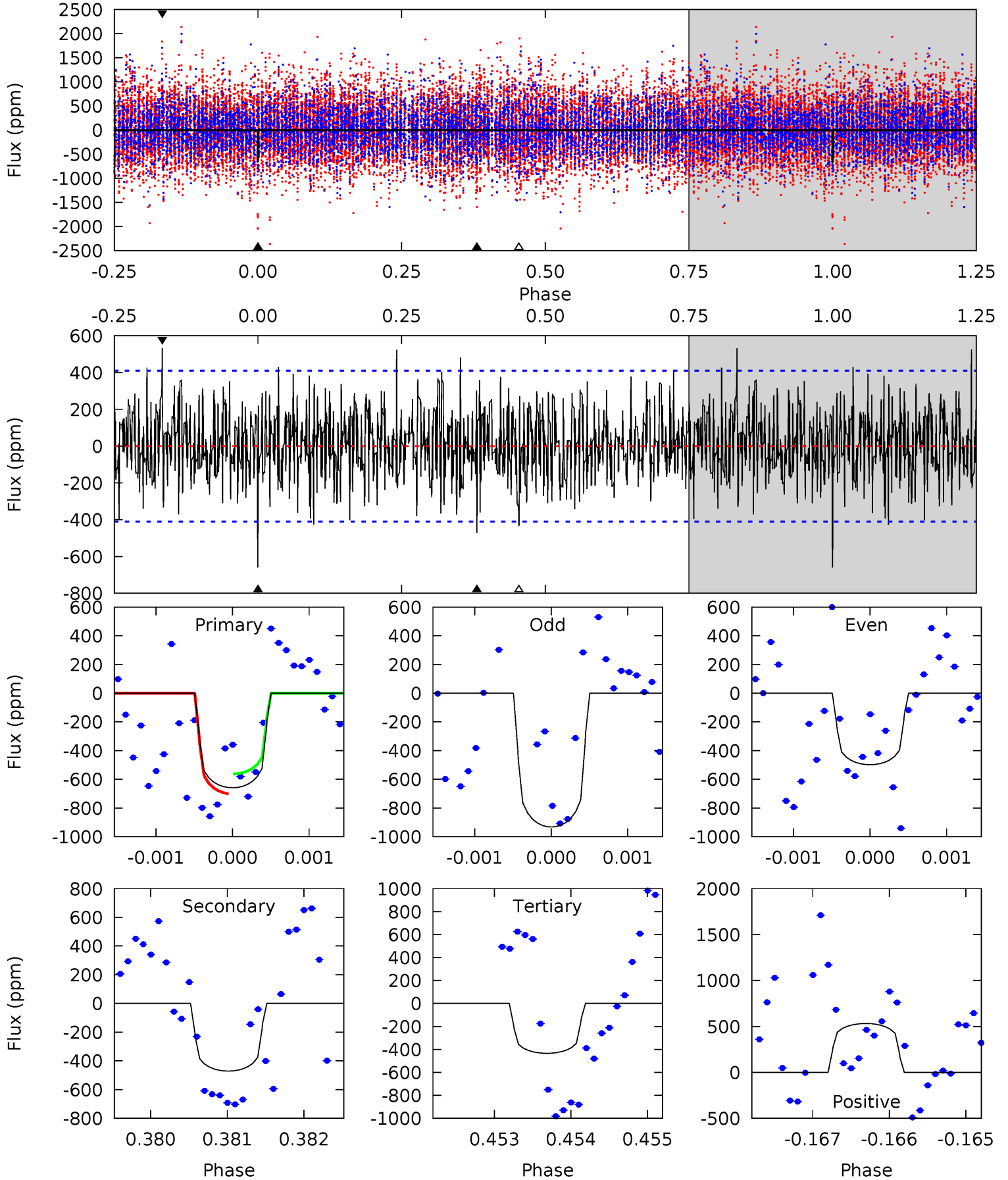
TCE 011919968-07 $P=380.867936$ Days $T_0=243.678000$ (BKJD)



DV Model-Shift Uniqueness Test

011919968-07, P = 380.862825 Days, E = 243.690824 Days

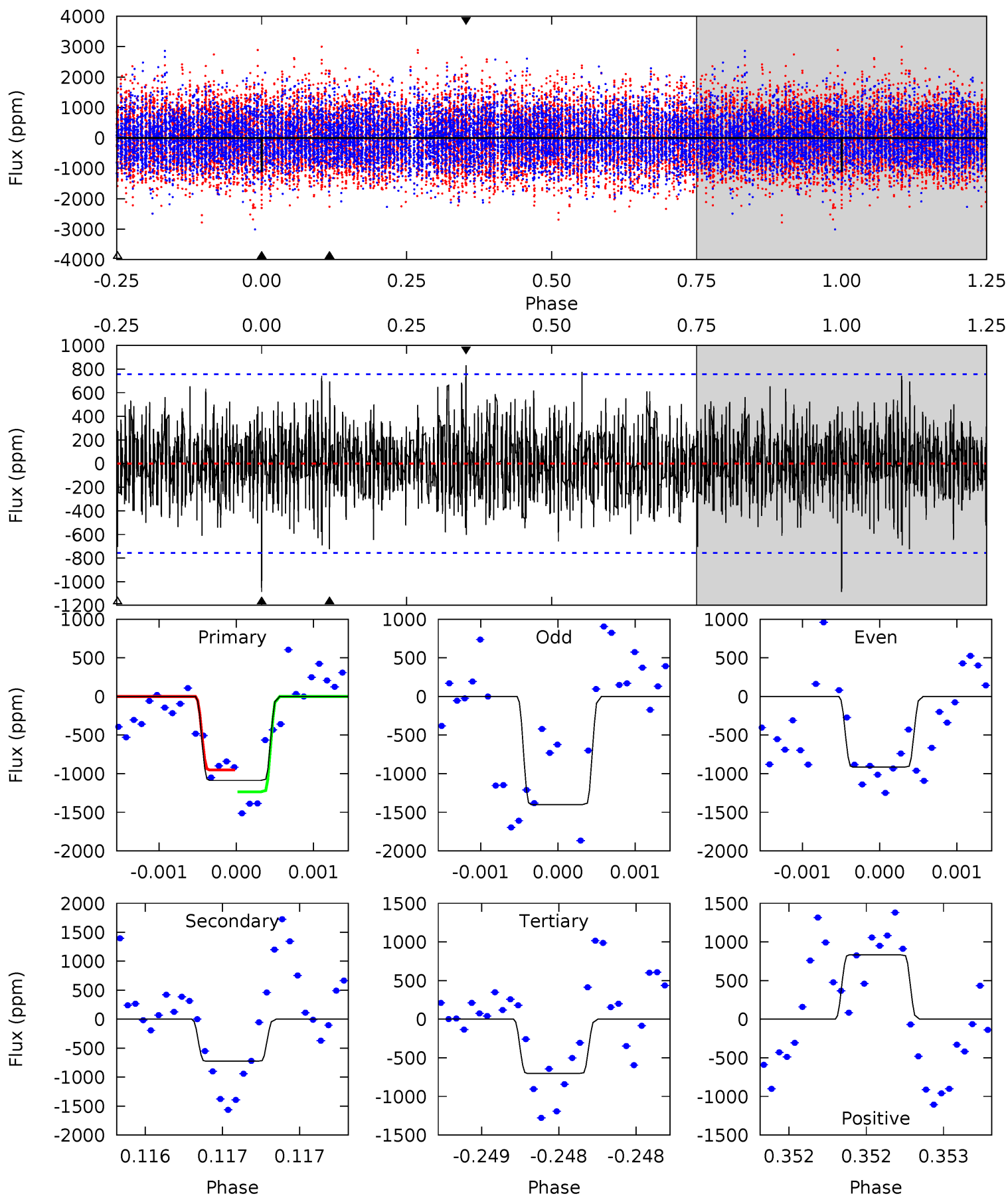
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.80	6.30	5.80	7.10	5.48	3.34	1.91	3.00	1.70	0.49	-0.81	2.80	1.01	0.45	0.91



Alt Model-Shift Uniqueness Test

011919968-07, P = 380.867936 Days, E = 243.678000 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.96	5.32	5.15	6.10	5.54	3.44	1.62	2.81	1.86	0.17	-0.79	1.66	1.15	0.43	1.03



Stellar Parameters For KIC 011919968

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7935^{+220}_{-331}	$3.911^{+0.273}_{-0.117}$	$-0.120^{+0.200}_{-0.350}$	$2.526^{+0.402}_{-0.939}$	$1.895^{+0.103}_{-0.414}$	$0.166^{+0.311}_{-0.061}$
	+3%/-4%	+7%/-3%	+167%/-292%	+16%/-37%	+5%/-22%	+188%/-37%
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 011919968-07 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-471 ± 75	$8.50^{+6.36}_{-5.59}$	681^{+44}_{-57}	6264^{+6449}_{-1411}	5482^{+41529}_{-3682}
Alt.	-726 ± 136	$9.40^{+6.87}_{-5.54}$	679^{+41}_{-57}	6590^{+5423}_{-1438}	6996^{+36341}_{-4643}

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 $A_{obs} \gg 1.0$

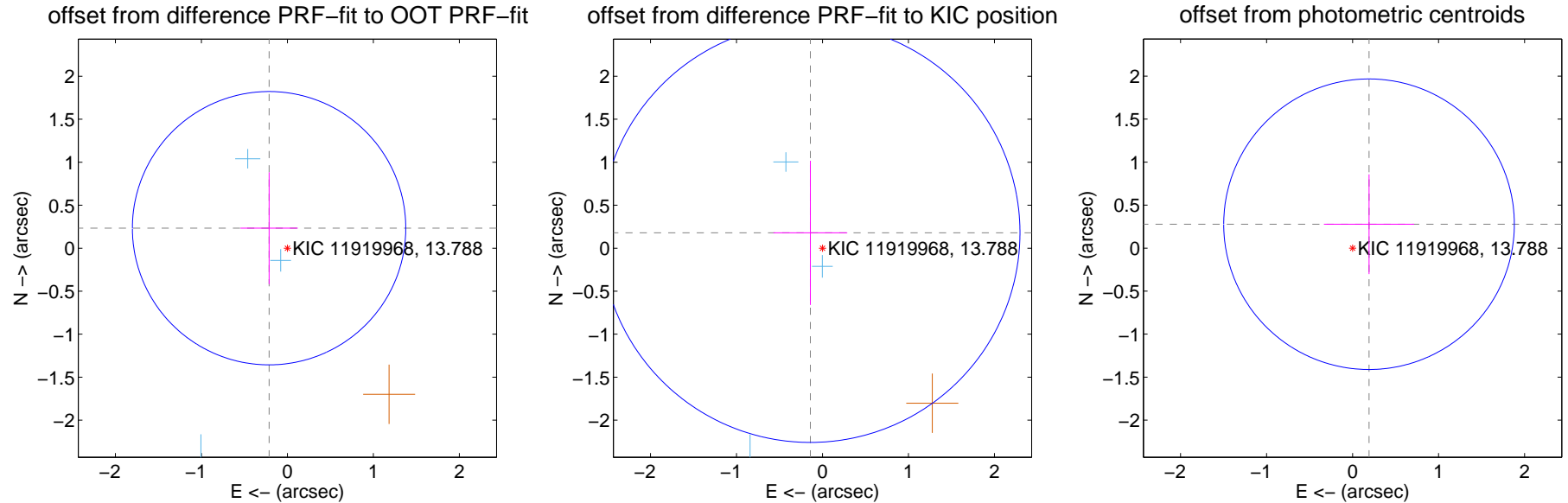
DV Centroid Data

Supplemental centroid analysis for 011919968-07. Kepler magnitude: 13.79. Transit SNR 7.98

There are 3 quarters with good PRF difference image offsets

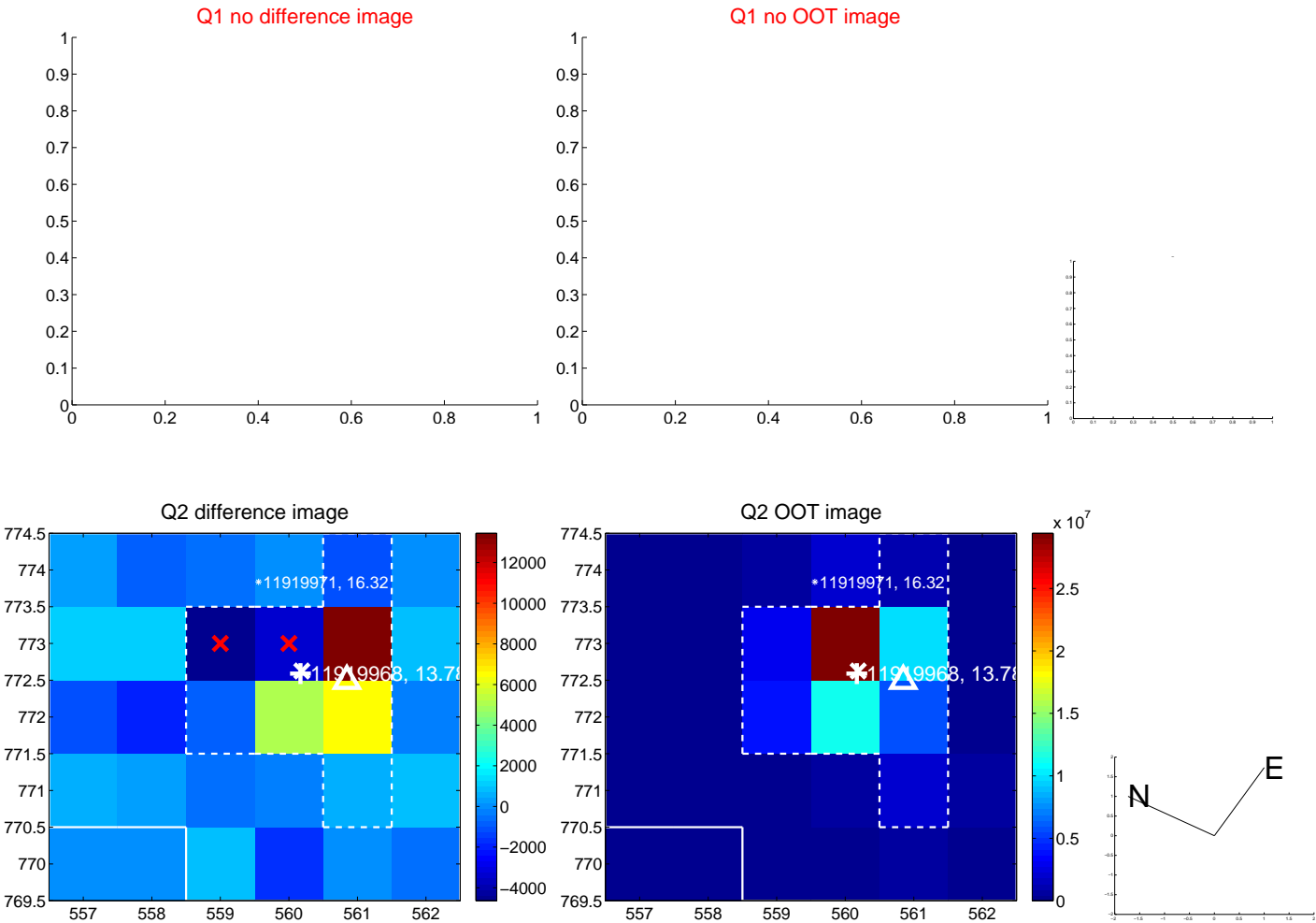
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.315 ± 0.530	0.60	0.213 ± 0.334	0.233 ± 0.650
PRF-fit source offset from KIC position	0.228 ± 0.812	0.28	0.141 ± 0.429	0.179 ± 0.838
photometric centroid source offset	0.34 ± 0.56	0.60	-0.19 ± 0.52	0.28 ± 0.58

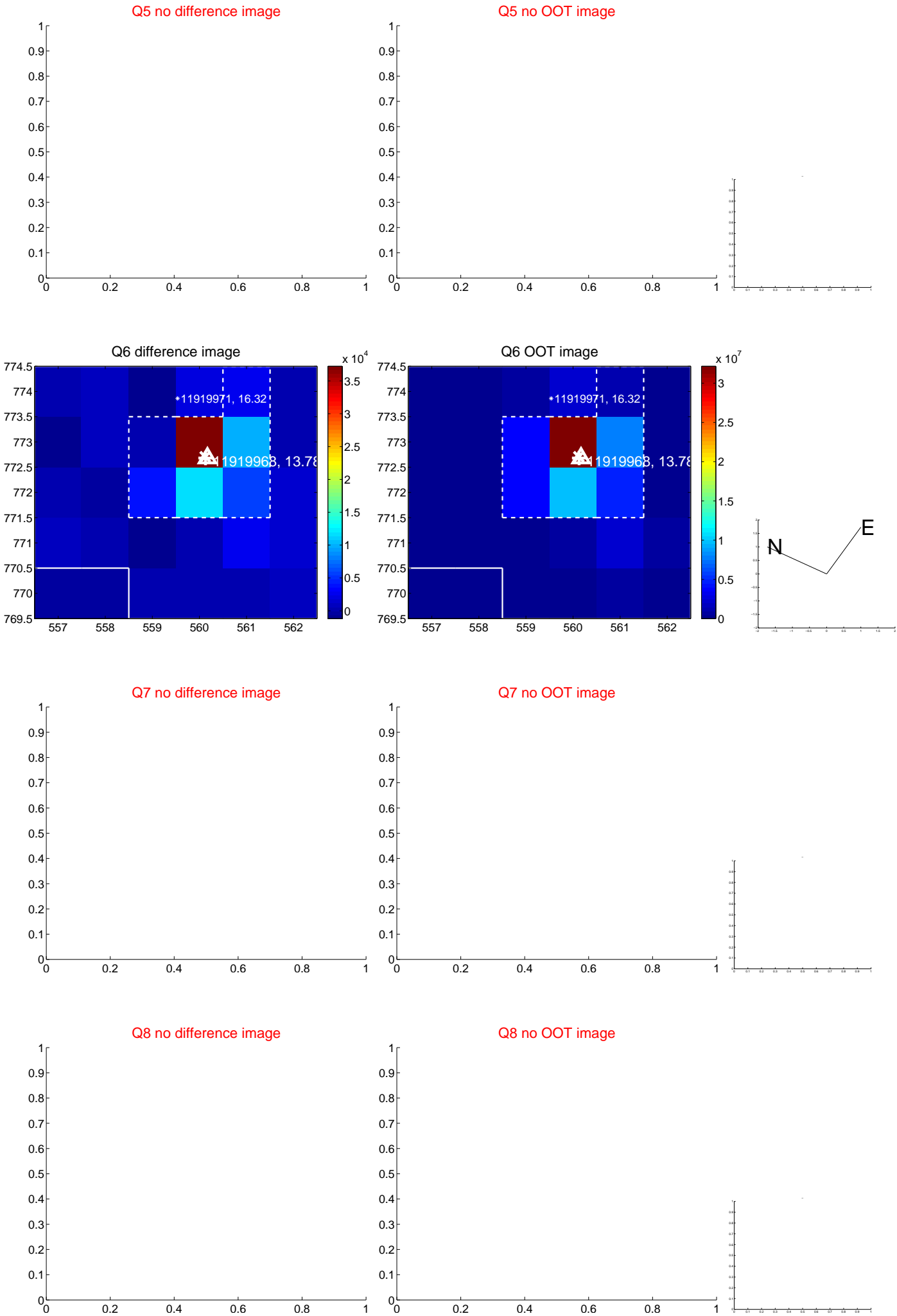


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

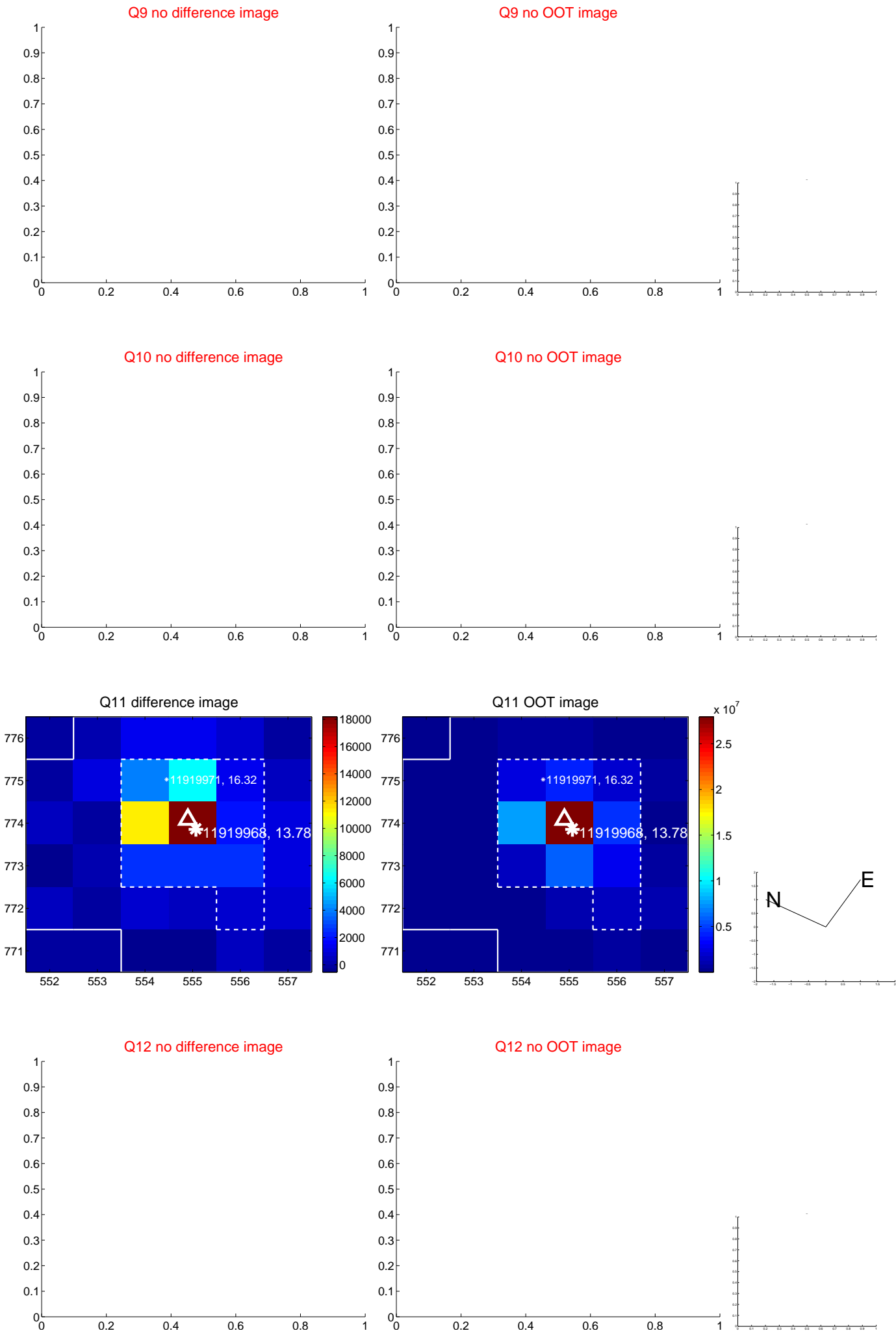
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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.

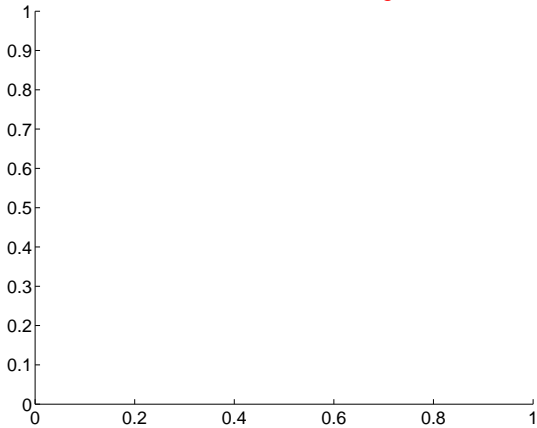
Q13 no difference image



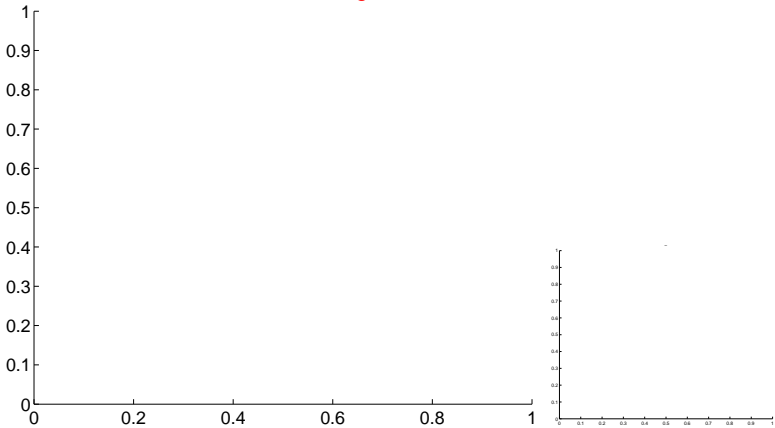
Q13 no OOT image



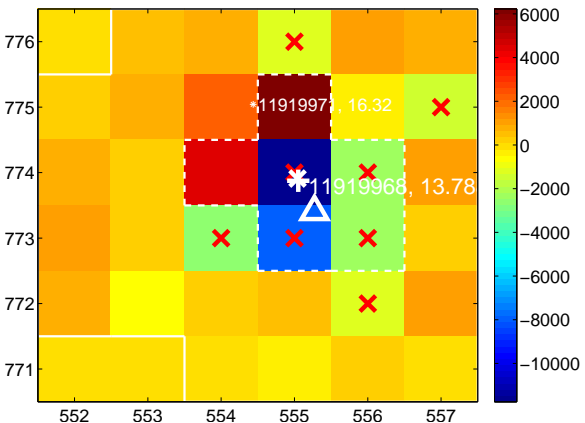
Q14 no difference image



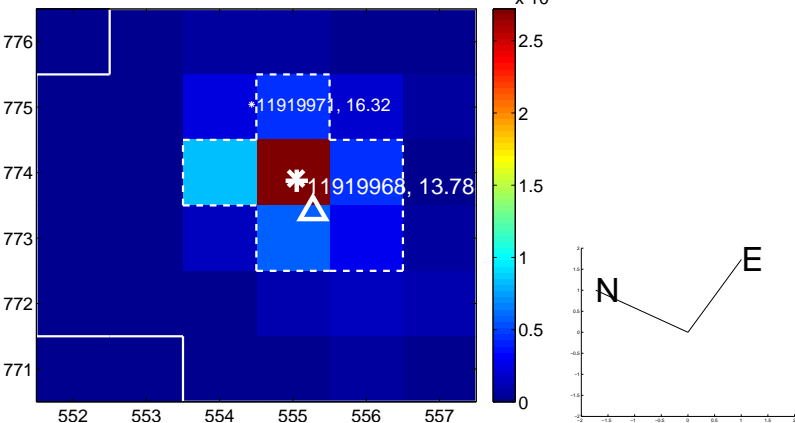
Q14 no OOT image



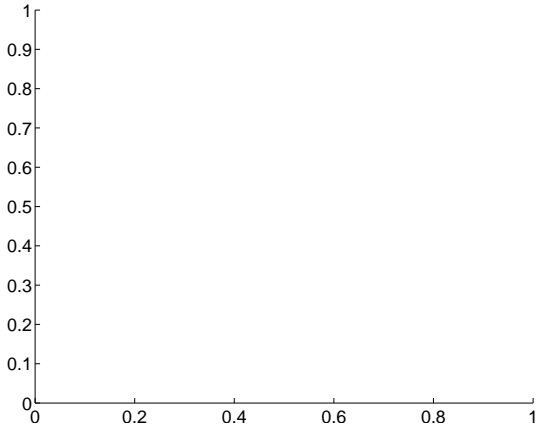
Q15 difference image. Poor Quality



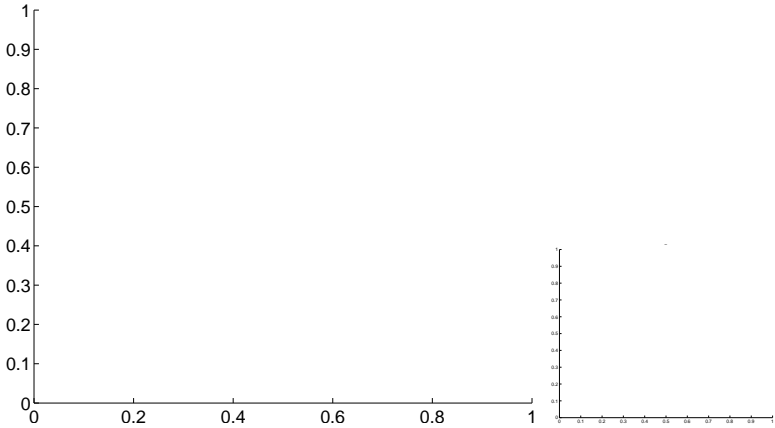
Q15 OOT image



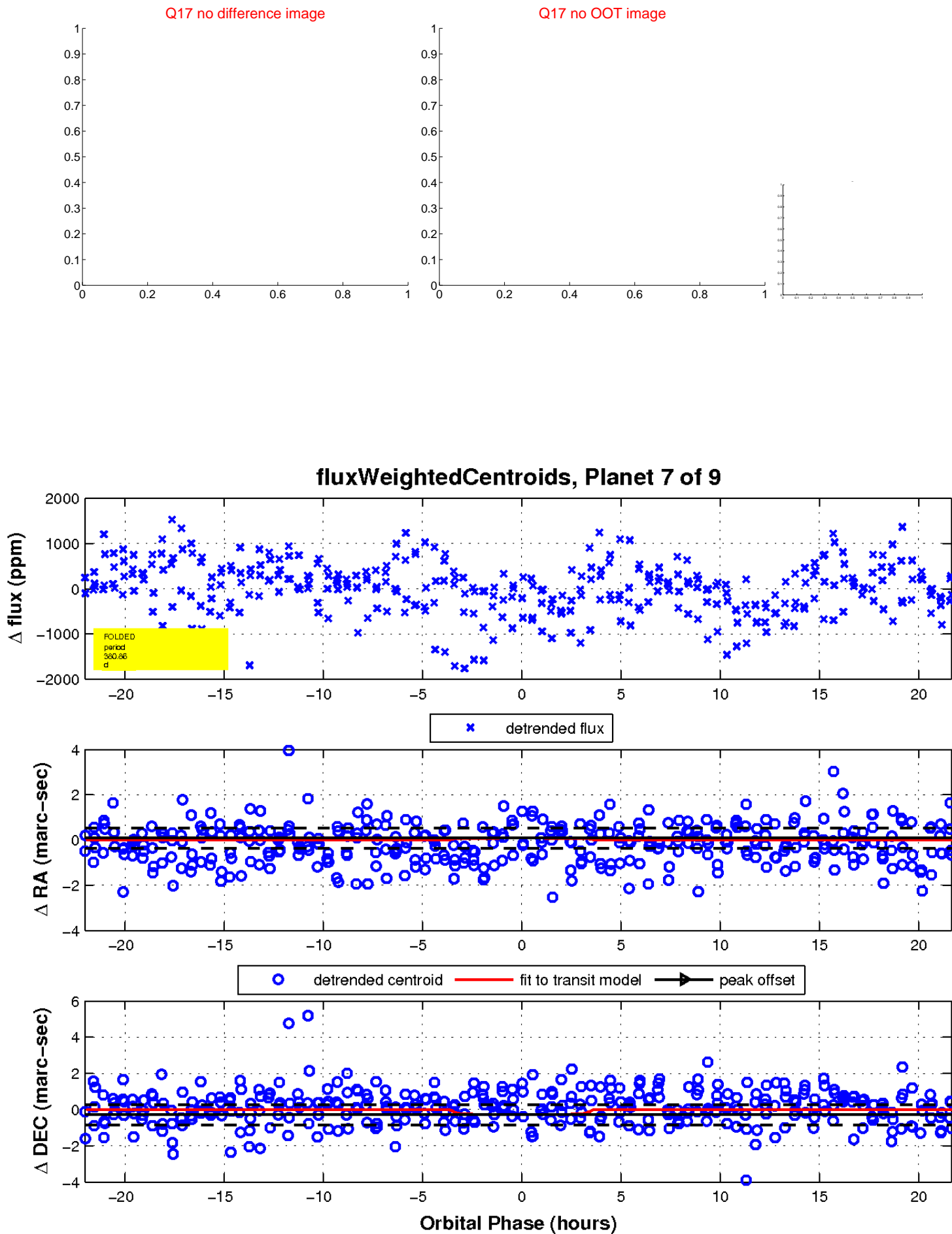
Q16 no difference image



Q16 no OOT image

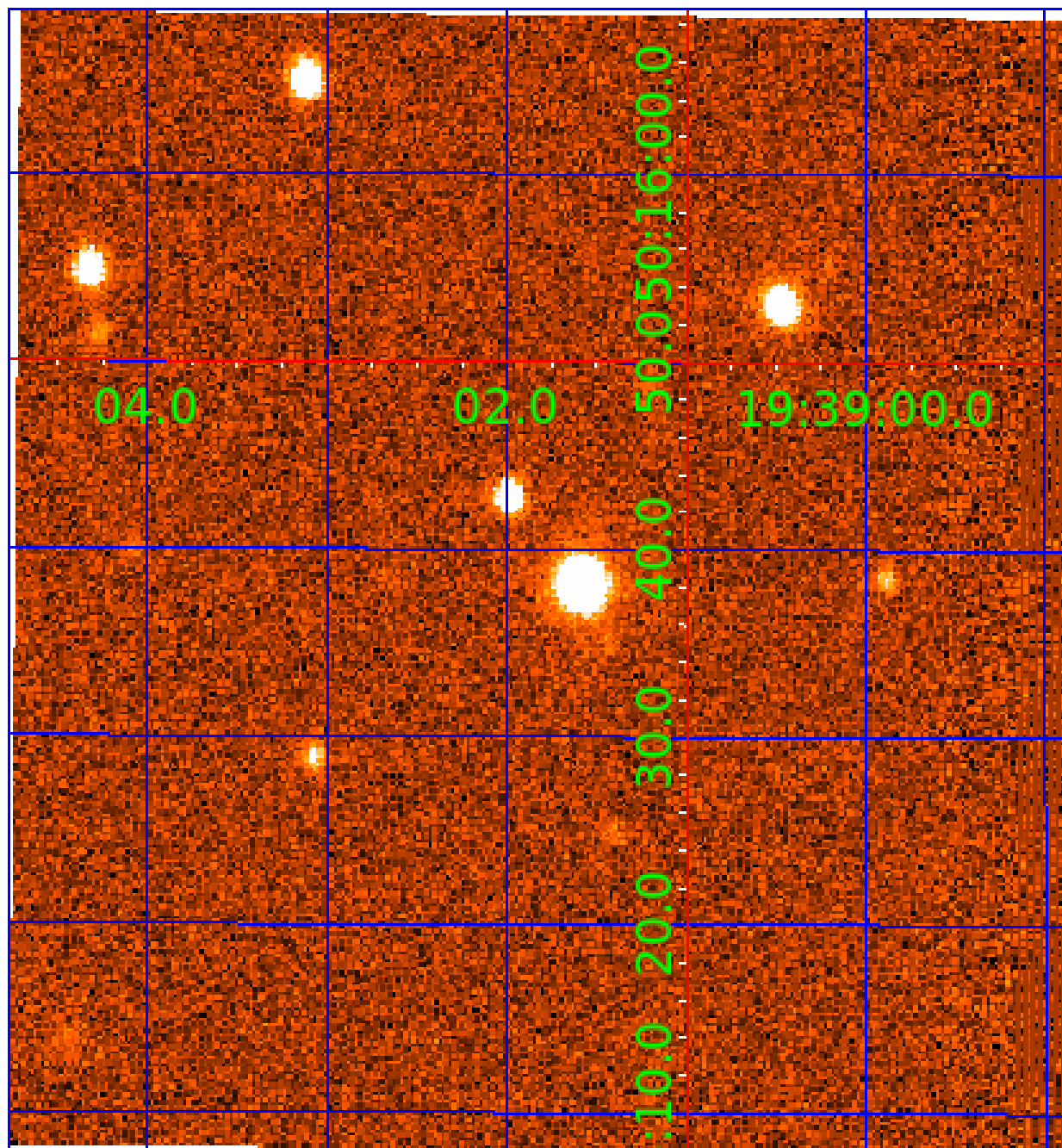


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011919968

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})
011919968-01	OBS	No	2.628739	131.606703	48.6	14.242	10.3	6.3	2.53	7935	1.79	10642.44
011919968-02	OBS	No	267.756509	141.587893	1236.1	7.836	12.6	9.2	2.53	7935	16.41	22.37
011919968-04	OBS	No	199.755848	143.598092	562.8	9.162	11.6	10.6	2.53	7935	6.83	33.06
011919968-05	OBS	No	268.049107	311.741872	571.9	8.594	11.5	9.1	2.53	7935	6.14	22.34
011919968-06	OBS	No	446.889317	253.774294	898.0	9.982	10.9	11.3	2.53	7935	8.18	11.30
011919968-07	OBS	No	380.862826	243.690824	758.5	7.345	11.2	8.0	2.53	7935	7.53	13.99
011919968-08	OBS	No	56.777775	139.781024	980.3	6.760	10.8	10.8	2.53	7935	14.72	176.93
011919968-09	OBS	No	171.288785	295.916012	482.9	5.000	10.6	-1.0	2.53	7935	5.62	40.59

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011919968-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
011919968-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—HALO_GHOST
011919968-04	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011919968-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011919968-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011919968-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT
011919968-08	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011919968-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

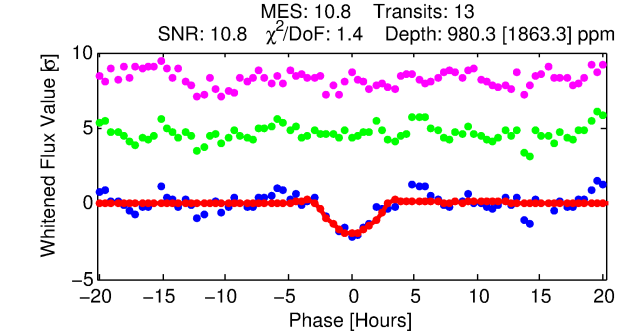
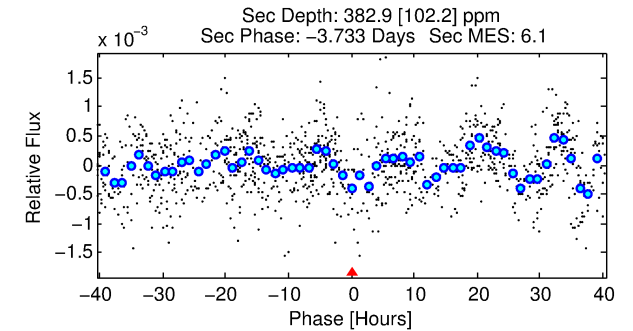
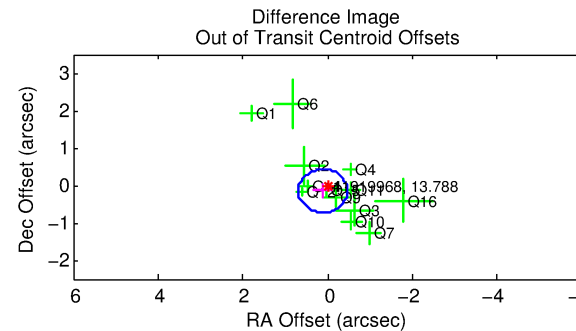
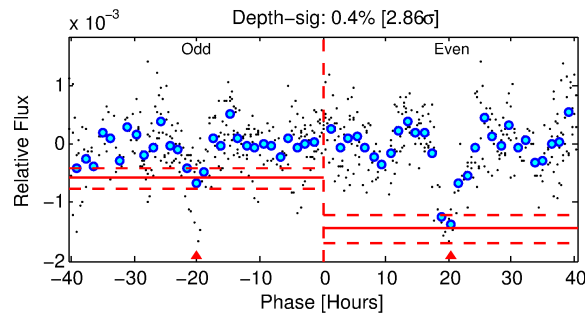
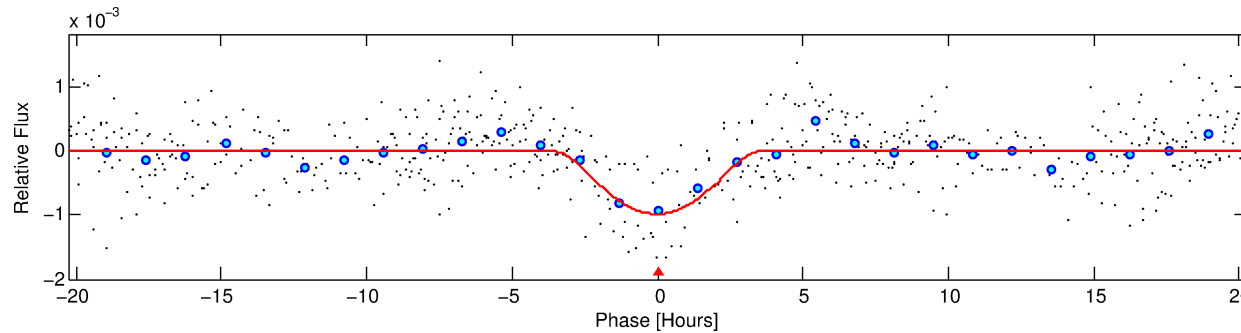
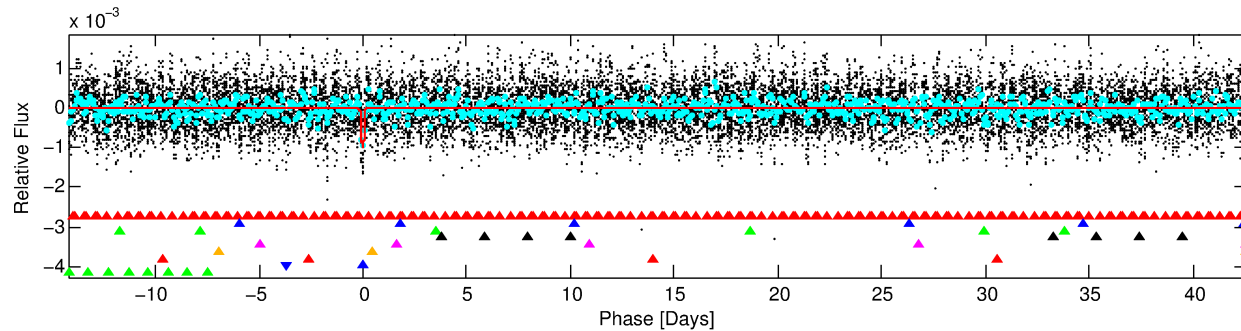
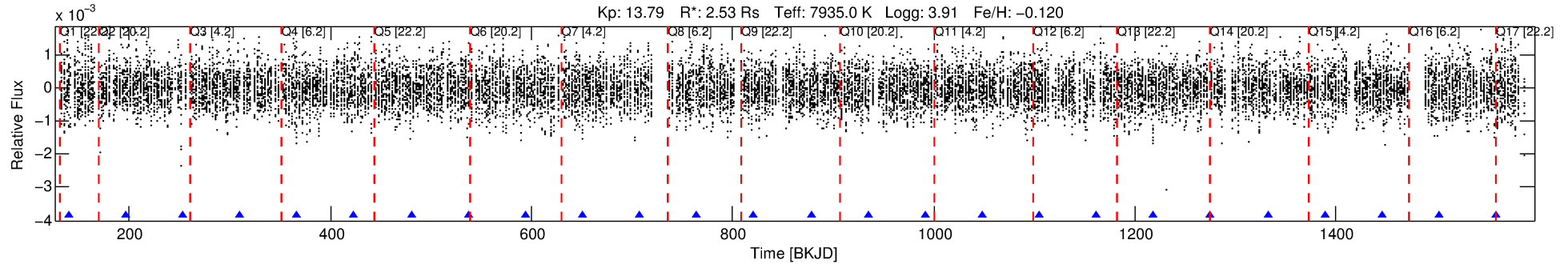
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011919968-08

No Significant Match Found

DV One-Page Summary

KIC: 11919968 Candidate: 8 of 9 Period: 56.778 d



DV Fit Results:

Period = 56.77777 [0.00125] d
Epoch = 139.7810 [0.0201] BKJD
Rp/R* = 0.0534 [0.1497]
a/R* = 21.28 [14.21]
b = 1.00 [0.15]
Seff = 176.93 [91.06]
Teq = 930 [120] K
Rp = 14.72 [41.62] Re
a = 0.3579 [0.1162] AU
Ag = 124.46 [700.91] [0.18 σ]
Teffp = 4803 [6739] K [0.57 σ]

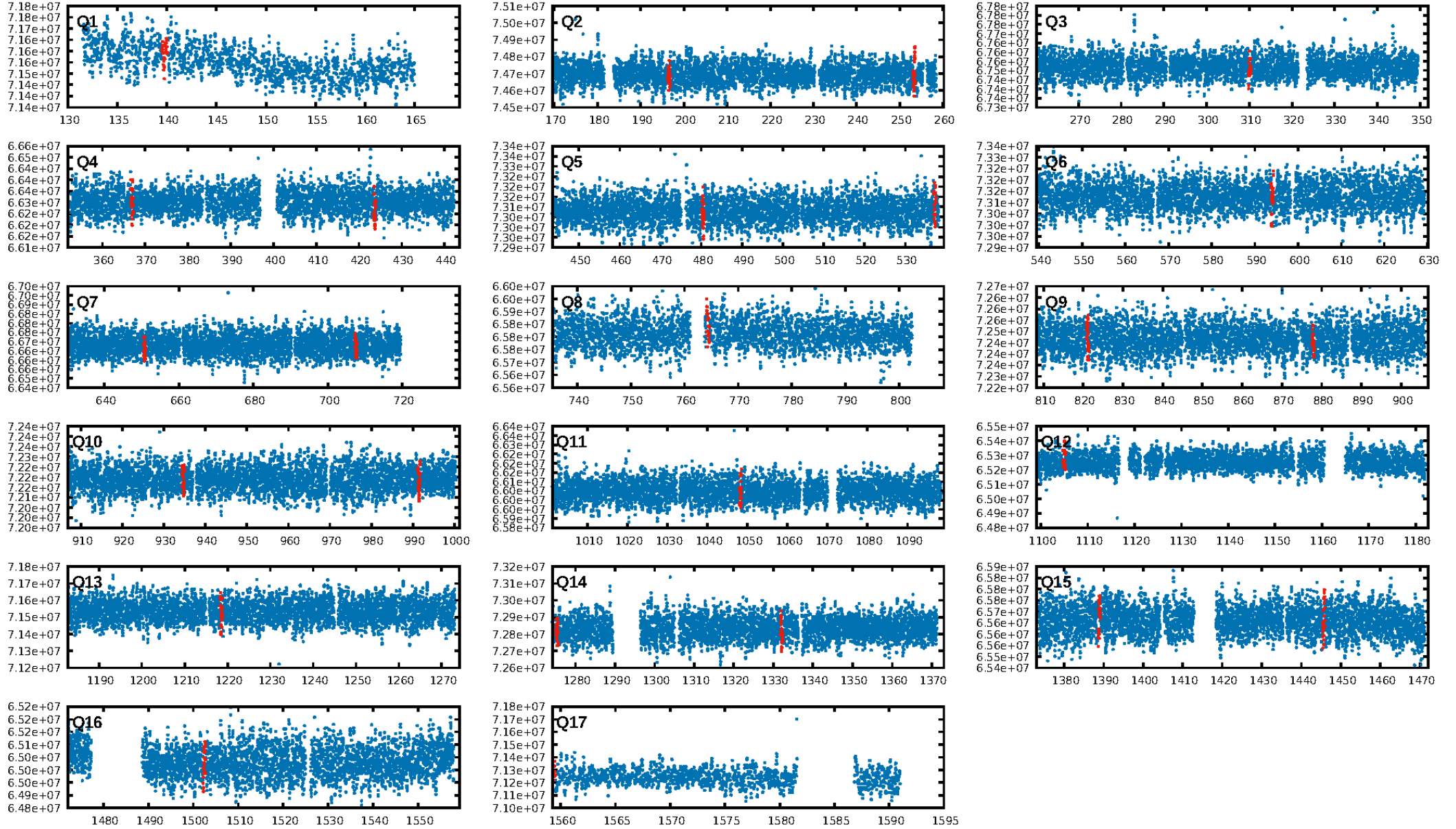
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [82.44 σ]
LongPeriod-sig: 100.0% [326.87 σ]
ModelChiSquare2-sig: 0.2%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [13/13]
GhostDiagnostic-chr: -0.4571
Centroid-sig: 0.7%
Centroid-so: 0.533 arcsec [2.17 σ]
OotOffset-rm: 0.186 arcsec [0.97 σ]
OotOffset-st: 4/4/3/2 [13]
KicOffset-rm: 0.223 arcsec [0.90 σ]
KicOffset-st: 4/4/3/2 [13]
DiffImageQuality-fgm: 0.54 [7/13]
DiffImageOverlap-fno: 0.29 [4/14]

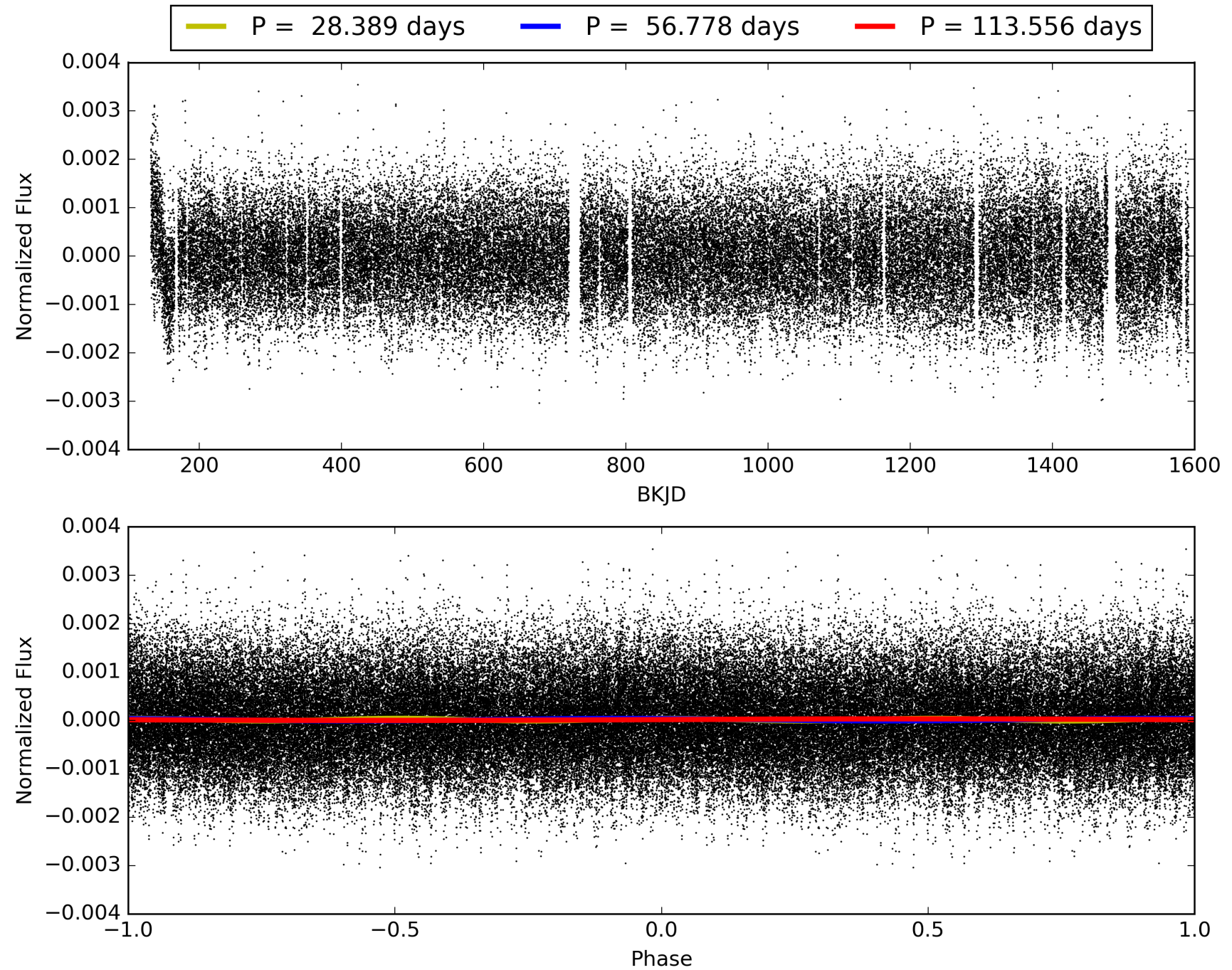
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:53:21 Z

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

TCE 011919968-08, PDC Light Curves

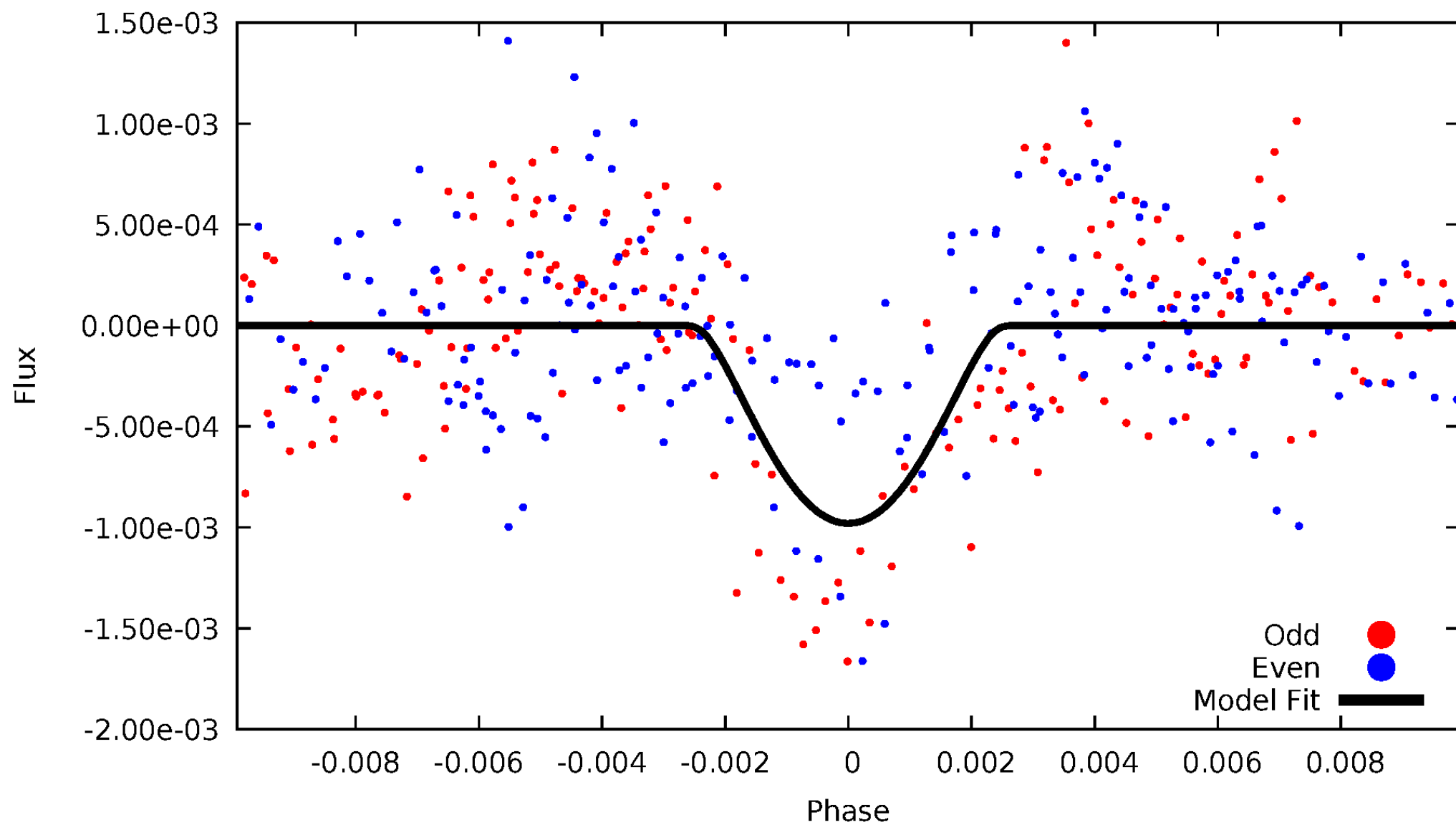


TCE 011919968-08



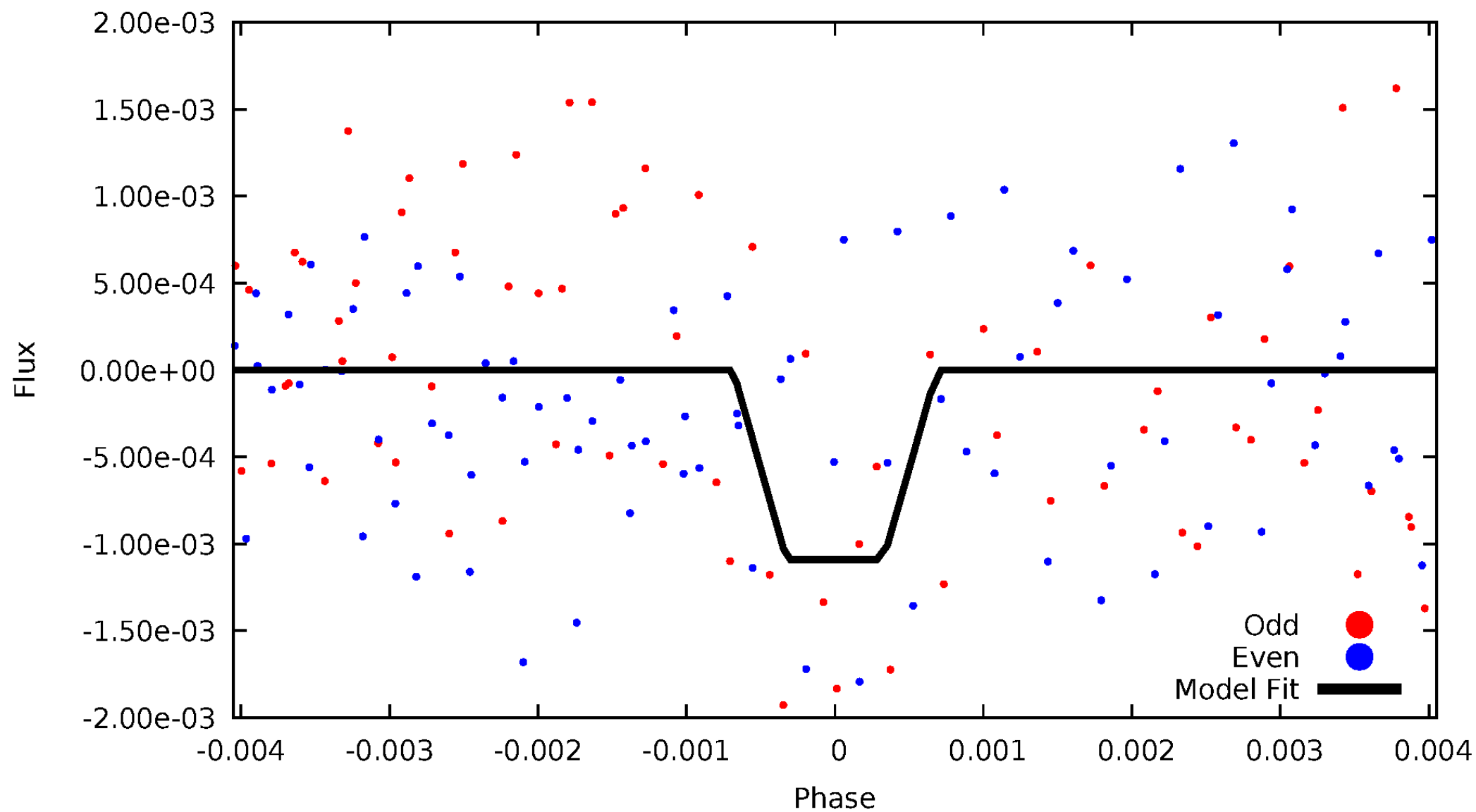
DV Odd/Even

TCE 011919968-08



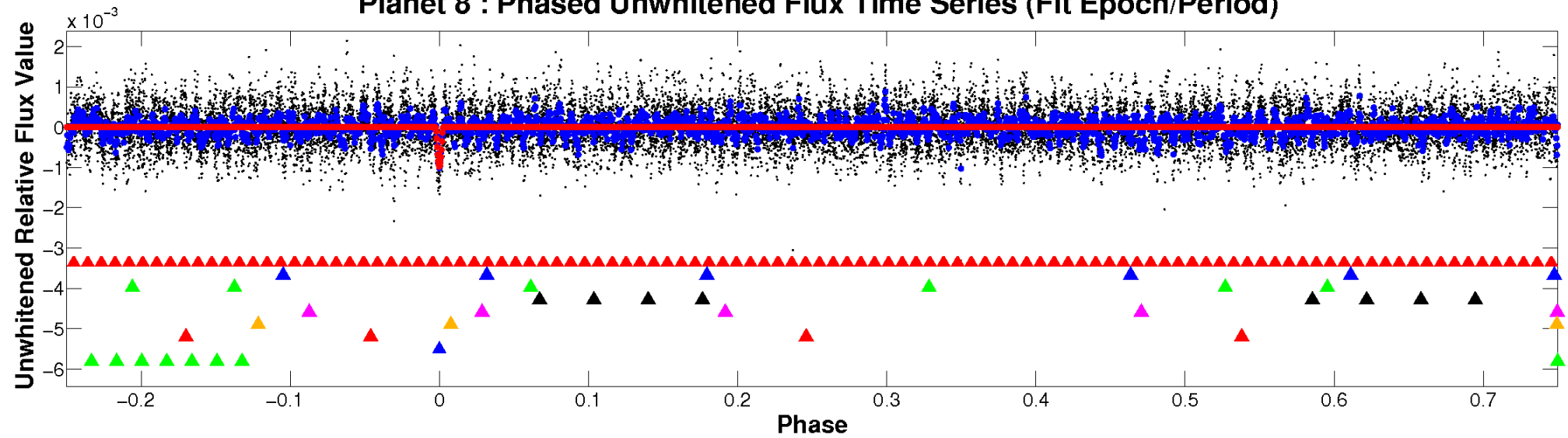
ALT Odd/Even

TCE 011919968-08

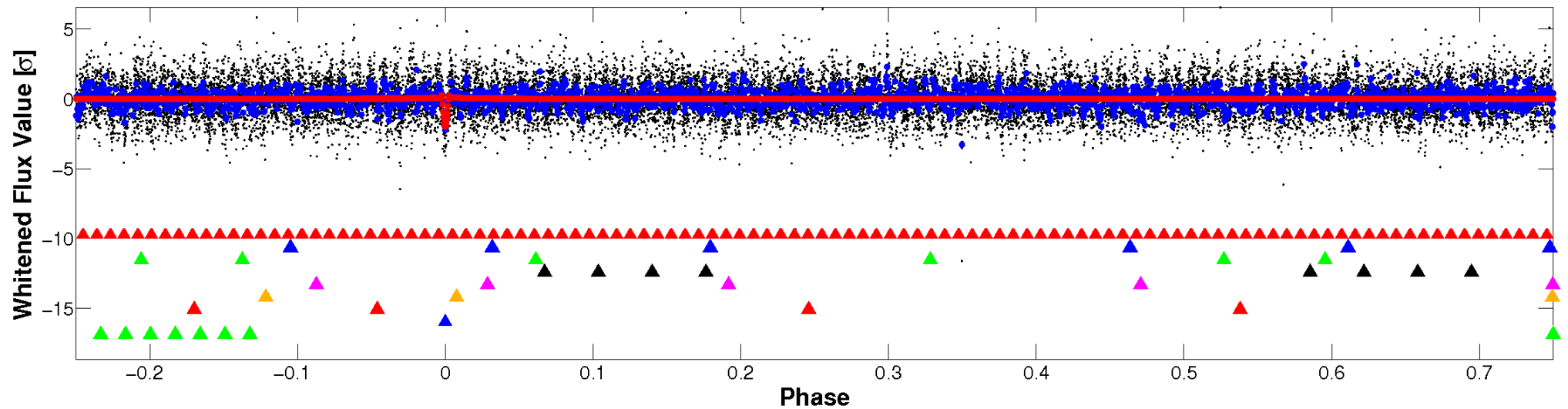


Non-Whitened Vs. Whitened Light Curve

Planet 8 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

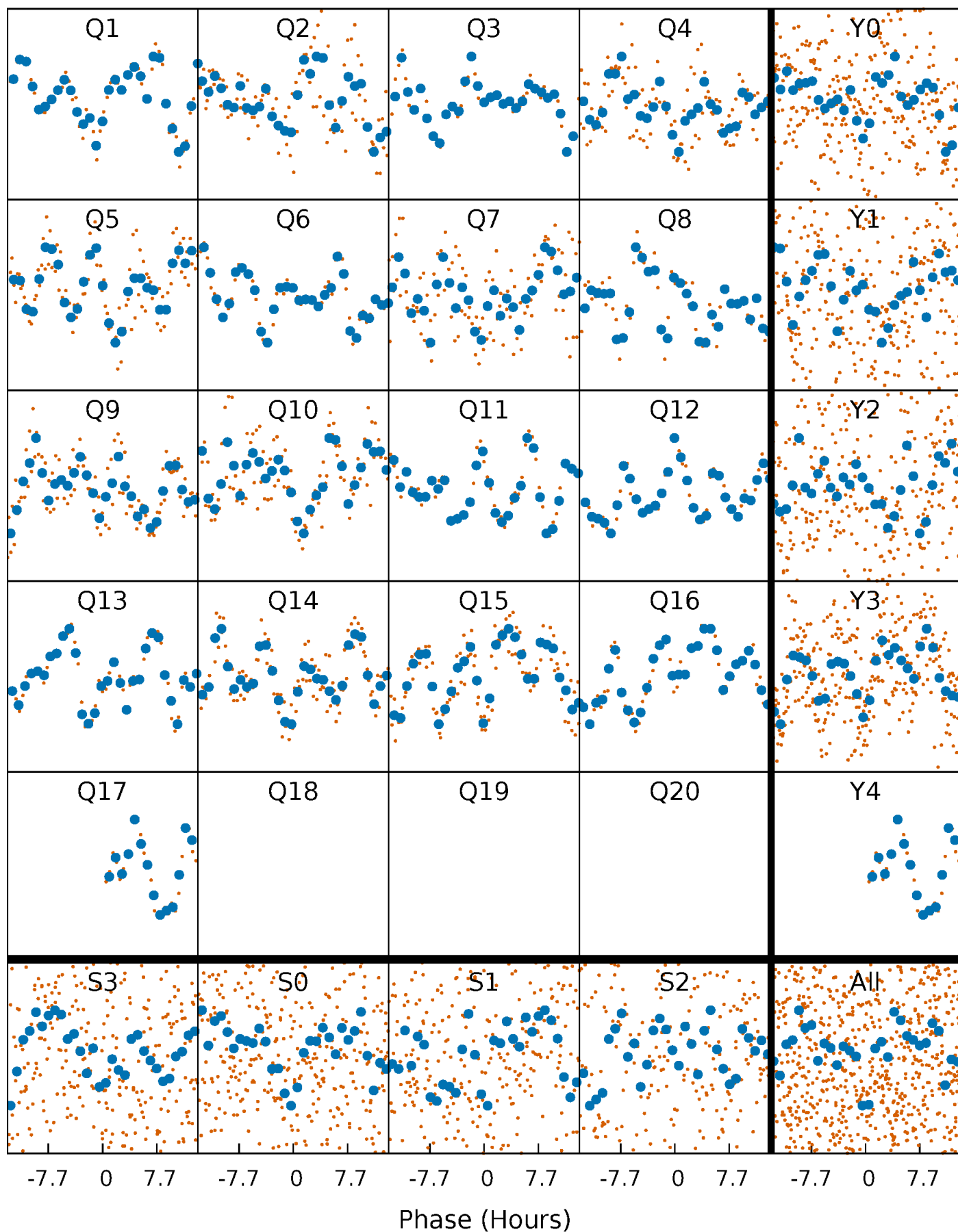


Planet 8 : Phased Whitened Flux Time Series (Fit Epoch/Period)



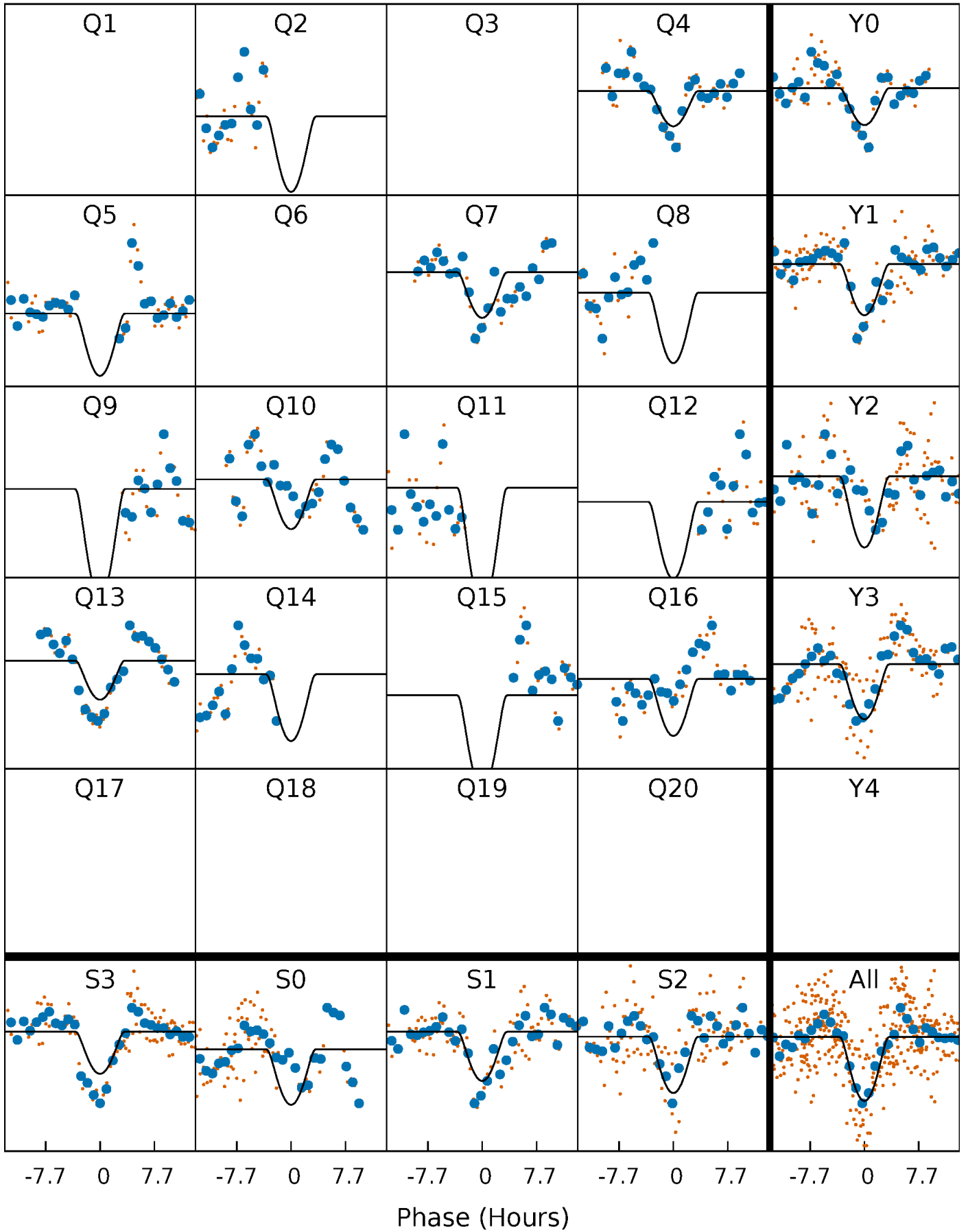
PDC Quarter-Phased Transit Curves

TCE 011919968-08 P= 56.777775 Days $T_0=139.781024$ (BKJD)



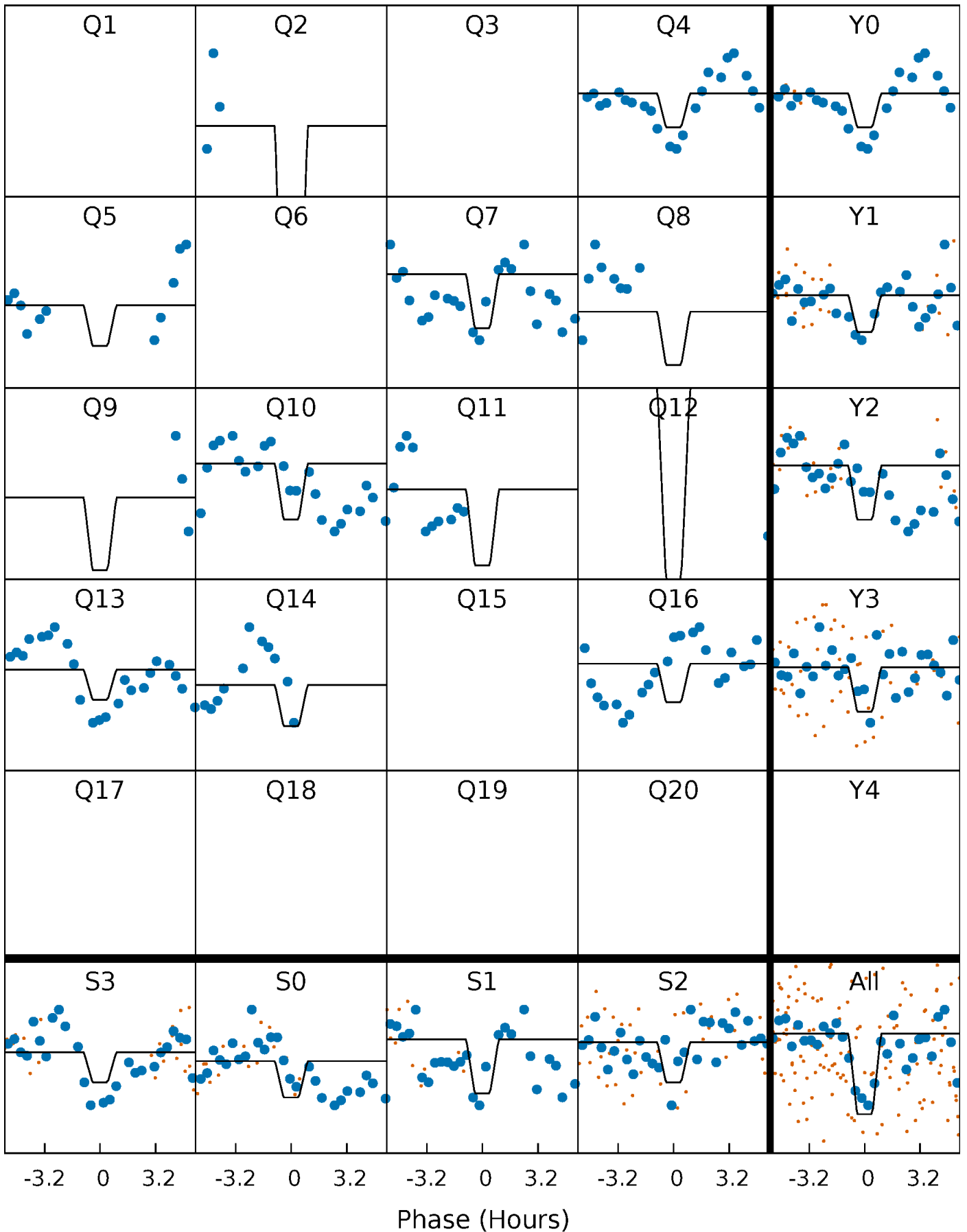
DV Quarter-Phased Transit Curves

TCE 011919968-08 P= 56.777775 Days $T_0=139.781024$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

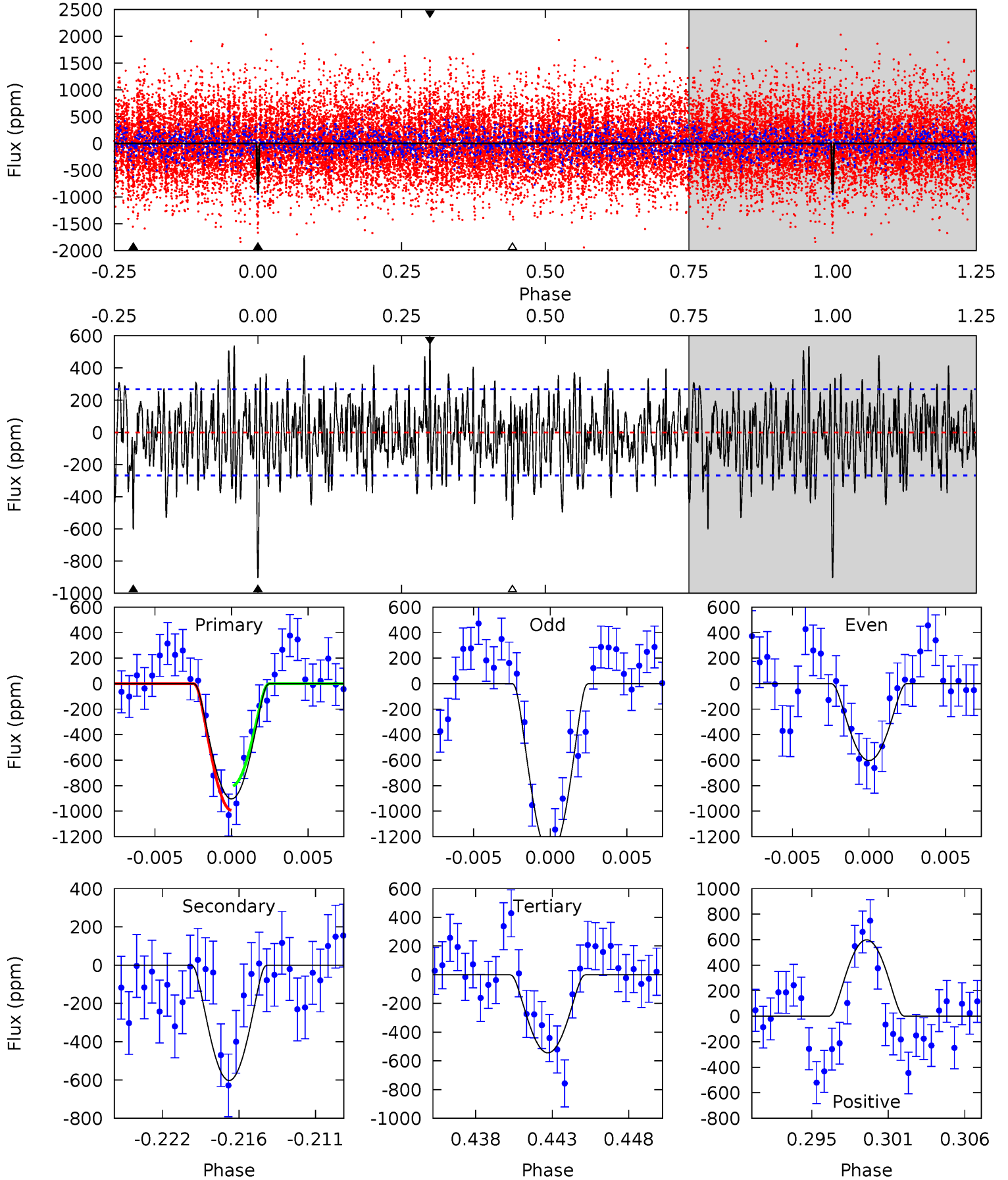
TCE 011919968-08 P= 56.771971 Days $T_0=139.807939$ (BKJD)



DV Model-Shift Uniqueness Test

011919968-08, P = 56.777775 Days, E = 83.003249 Days

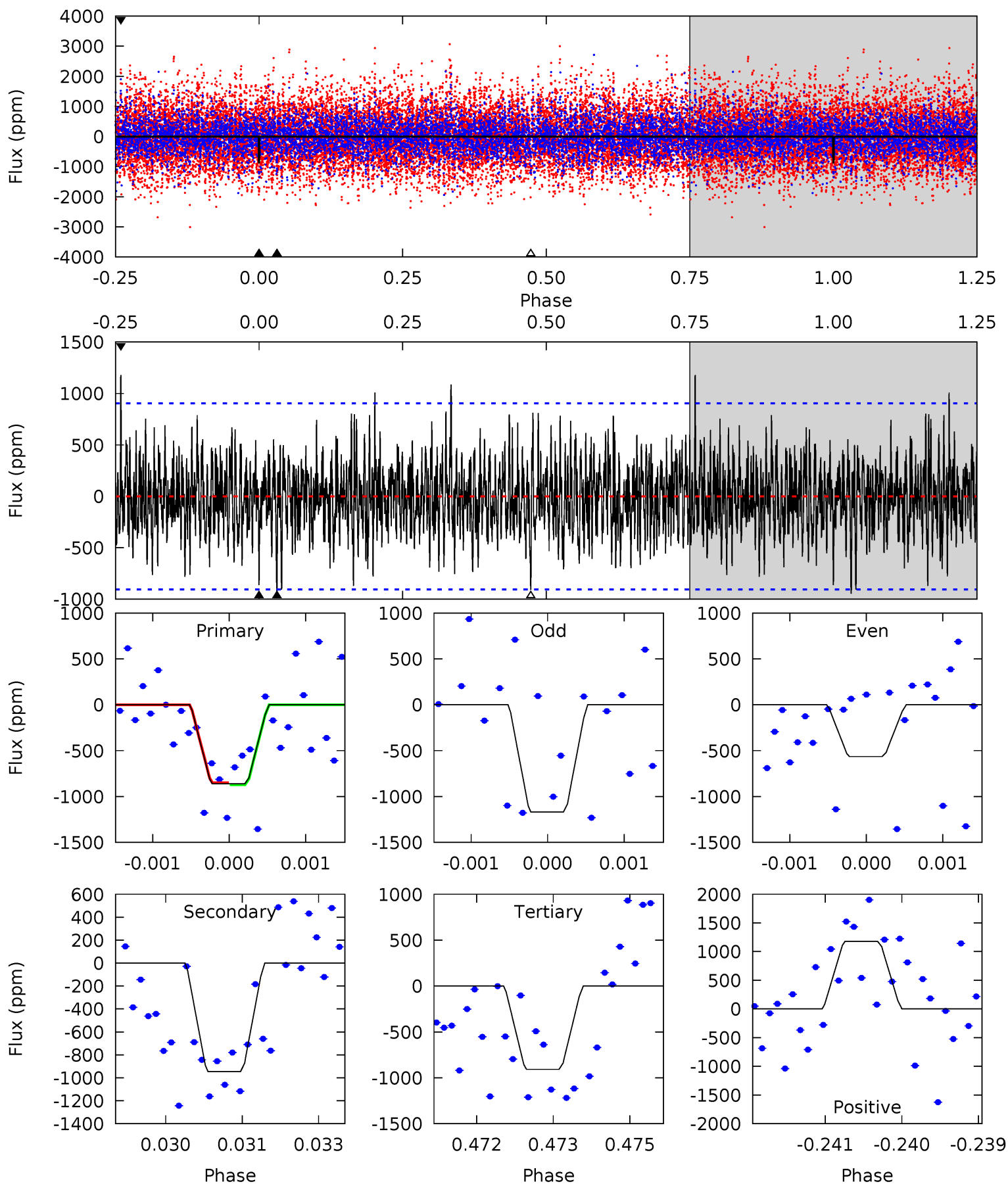
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.3	11.6	10.4	11.5	5.15	2.79	3.35	6.90	5.85	1.12	0.07	7.15	0.44	0.40	1.81



Alt Model-Shift Uniqueness Test

011919968-08, P = 56.771971 Days, E = 83.035968 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.14	5.64	5.42	7.02	5.40	3.20	1.72	-0.28	-1.89	0.22	-1.38	1.80	1.15	0.55	0.07



Stellar Parameters For KIC 011919968

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7935^{+220}_{-331}	$3.911^{+0.273}_{-0.117}$	$-0.120^{+0.200}_{-0.350}$	$2.526^{+0.402}_{-0.939}$	$1.895^{+0.103}_{-0.414}$	$0.166^{+0.311}_{-0.061}$
	+3%/-4%	+7%/-3%	+167%/-292%	+16%/-37%	+5%/-22%	+188%/-37%
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 011919968-08 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-603 ± 52	$31.44^{+30.31}_{-21.62}$	1284^{+85}_{-115}	3818^{+2512}_{-712}	43^{+403}_{-32}
Alt.	-946 ± 168	$30.29^{+31.41}_{-20.43}$	1276^{+88}_{-111}	4218^{+2568}_{-859}	69^{+604}_{-52}

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

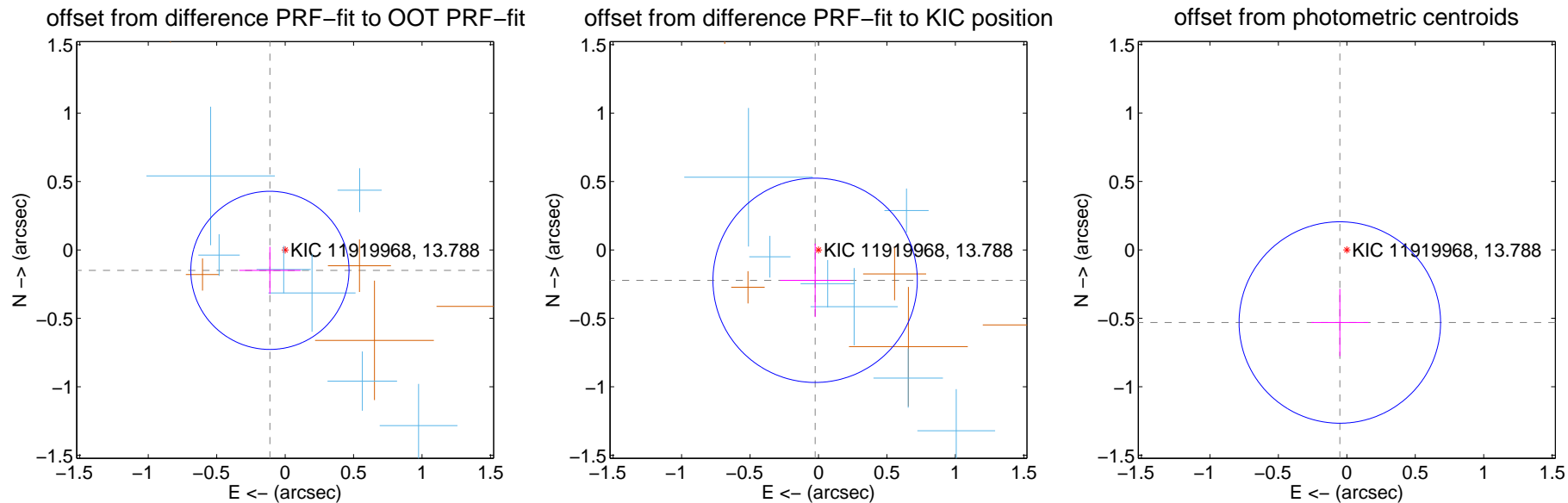
DV Centroid Data

Supplemental centroid analysis for 011919968-08. Kepler magnitude: 13.79. Transit SNR 10.77

There are 7 quarters with good PRF difference image offsets

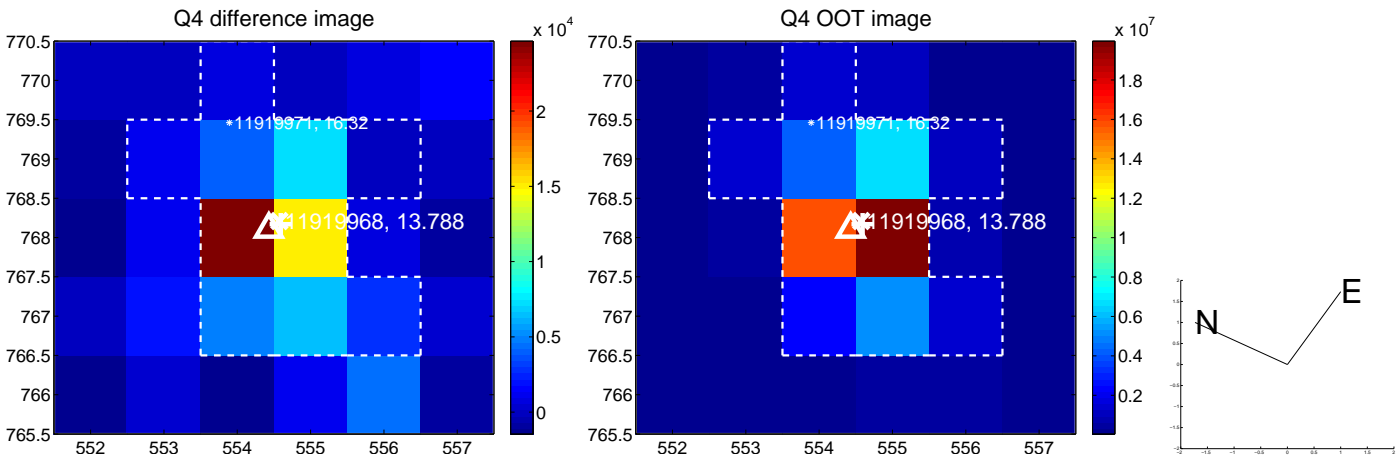
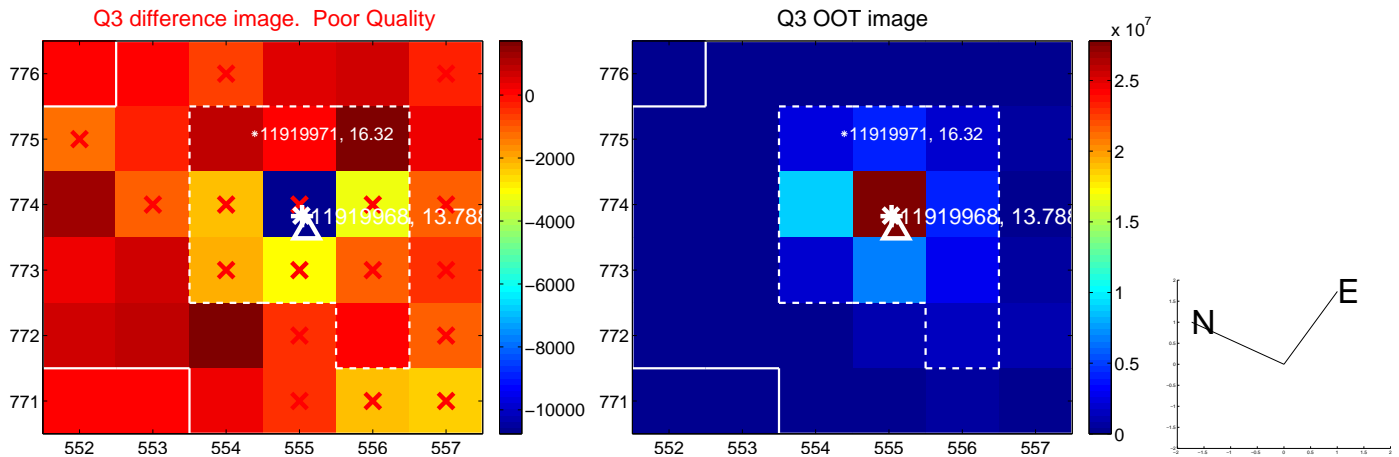
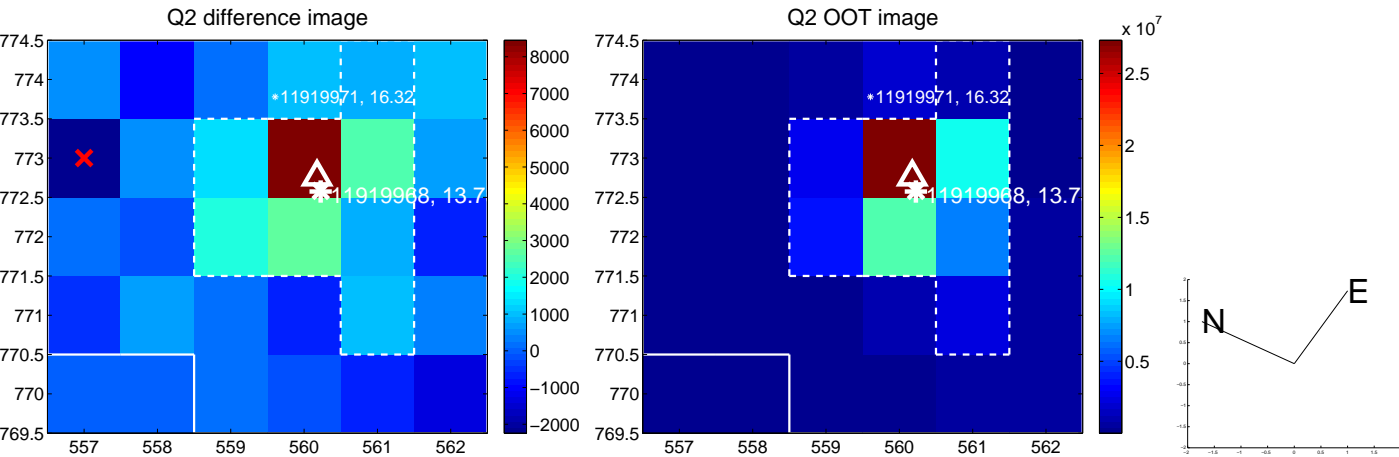
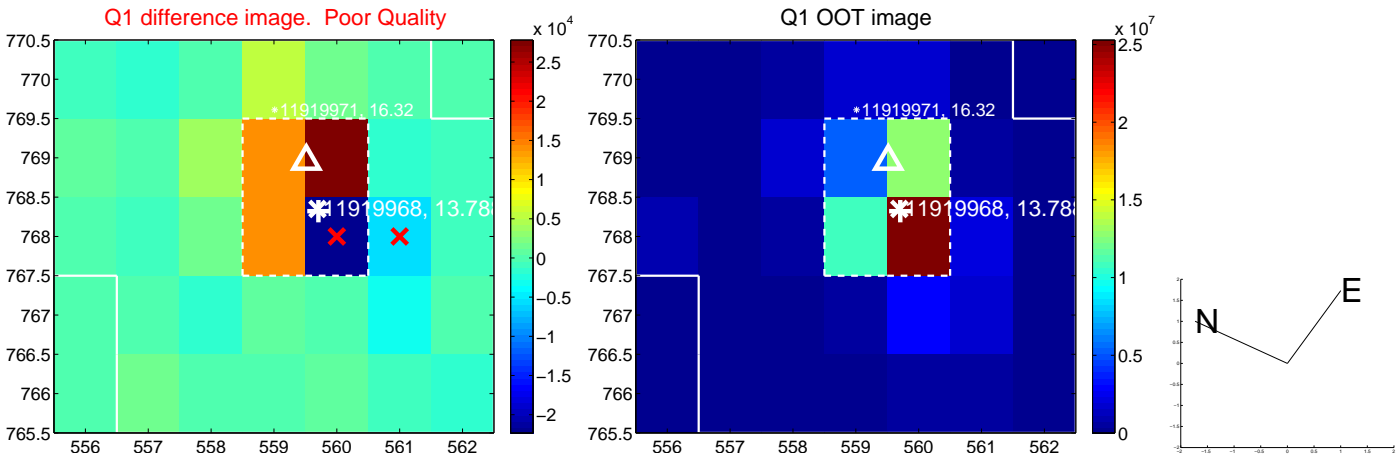
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.186 ± 0.193	0.97	0.111 ± 0.224	-0.149 ± 0.172
PRF-fit source offset from KIC position	0.223 ± 0.249	0.90	0.024 ± 0.254	-0.222 ± 0.268
photometric centroid source offset	0.53 ± 0.25	2.17	0.05 ± 0.21	-0.53 ± 0.25

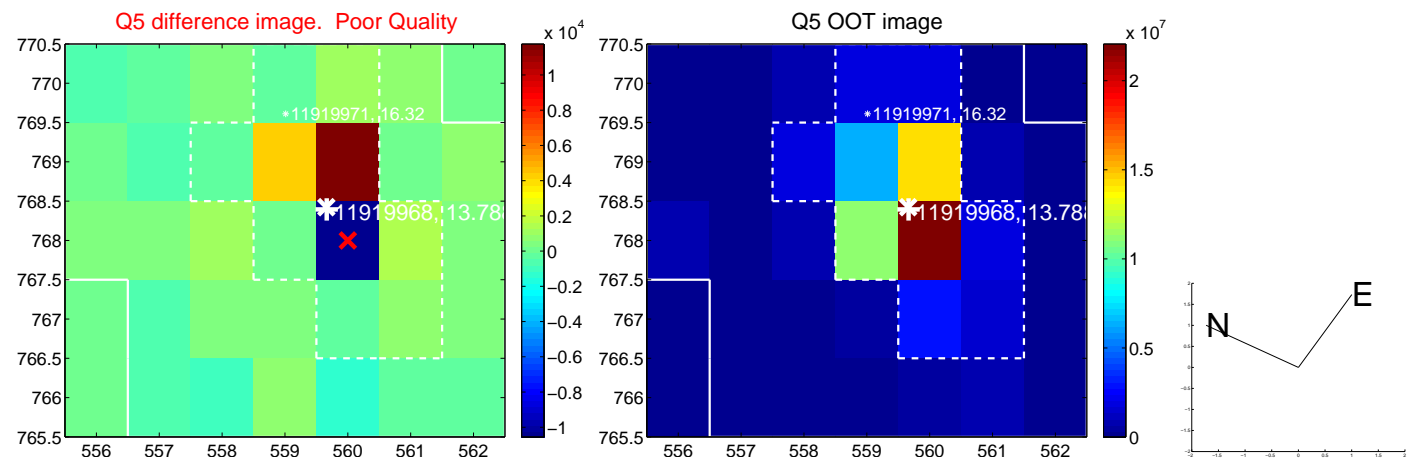


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

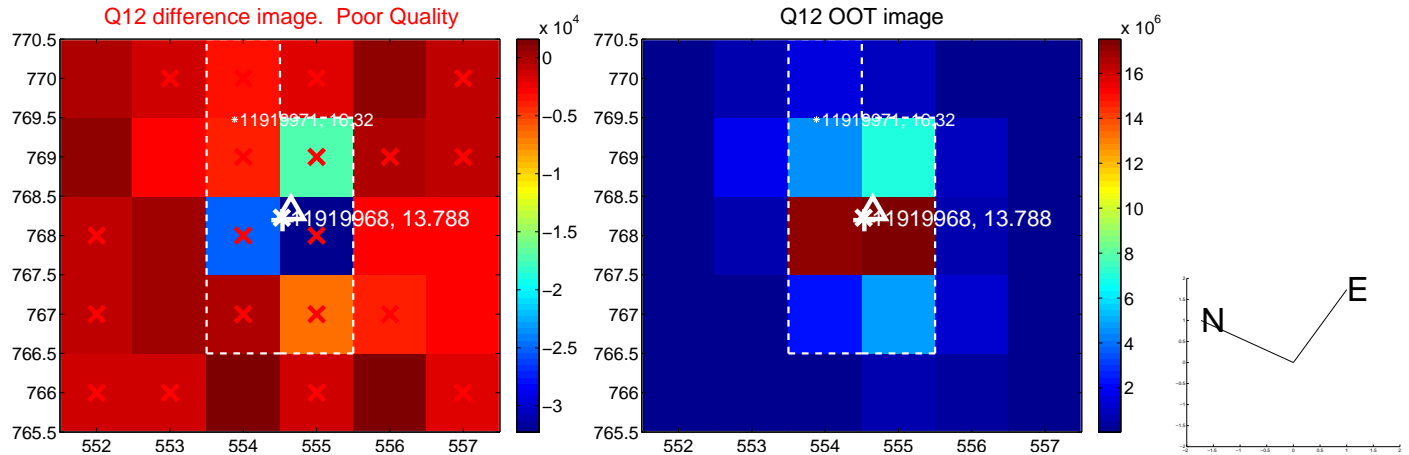
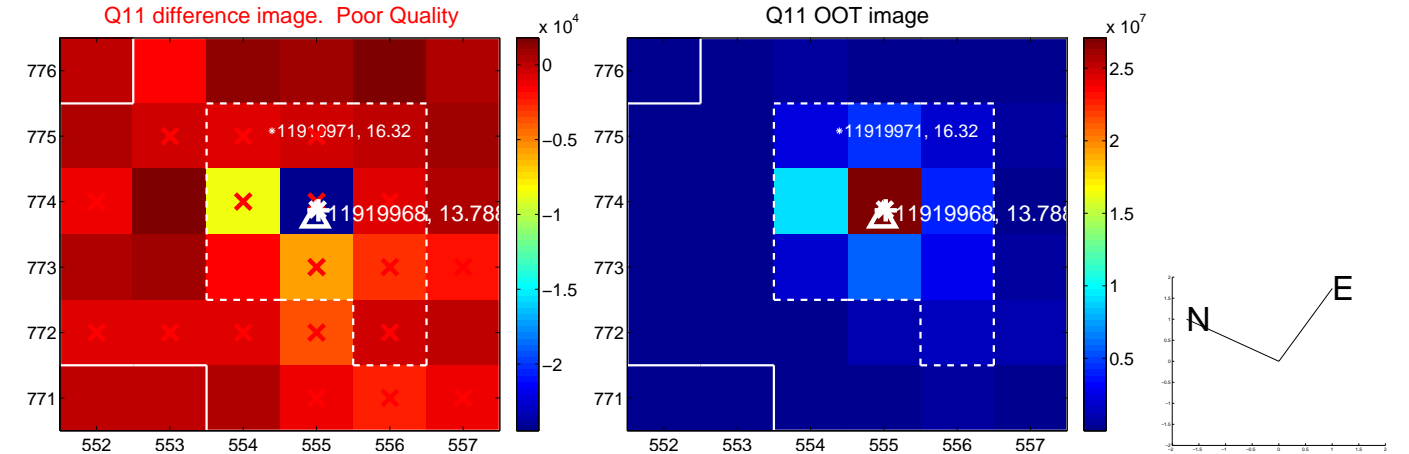
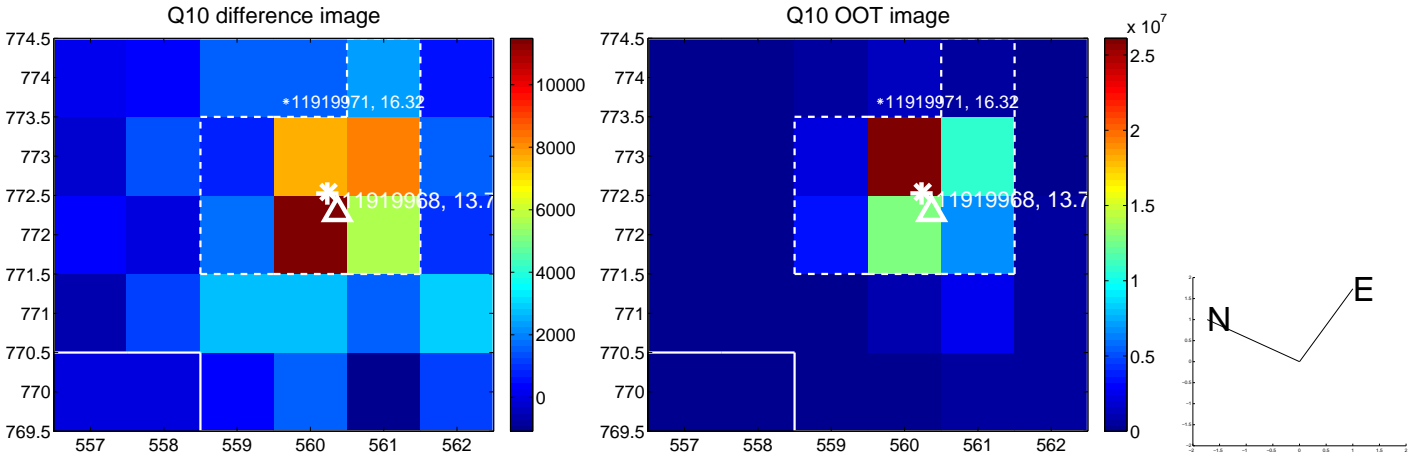
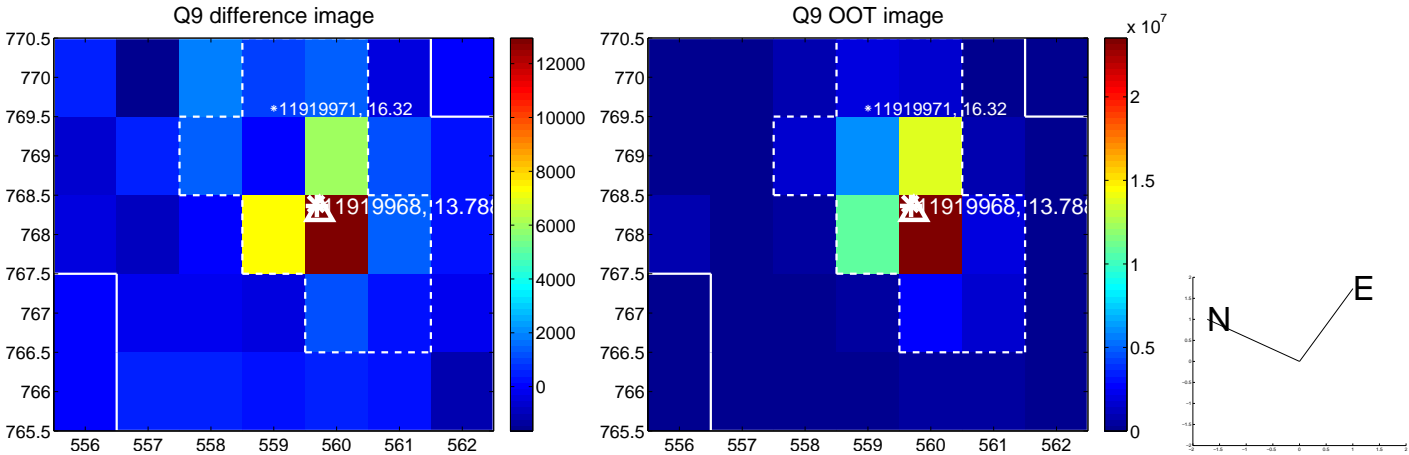
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



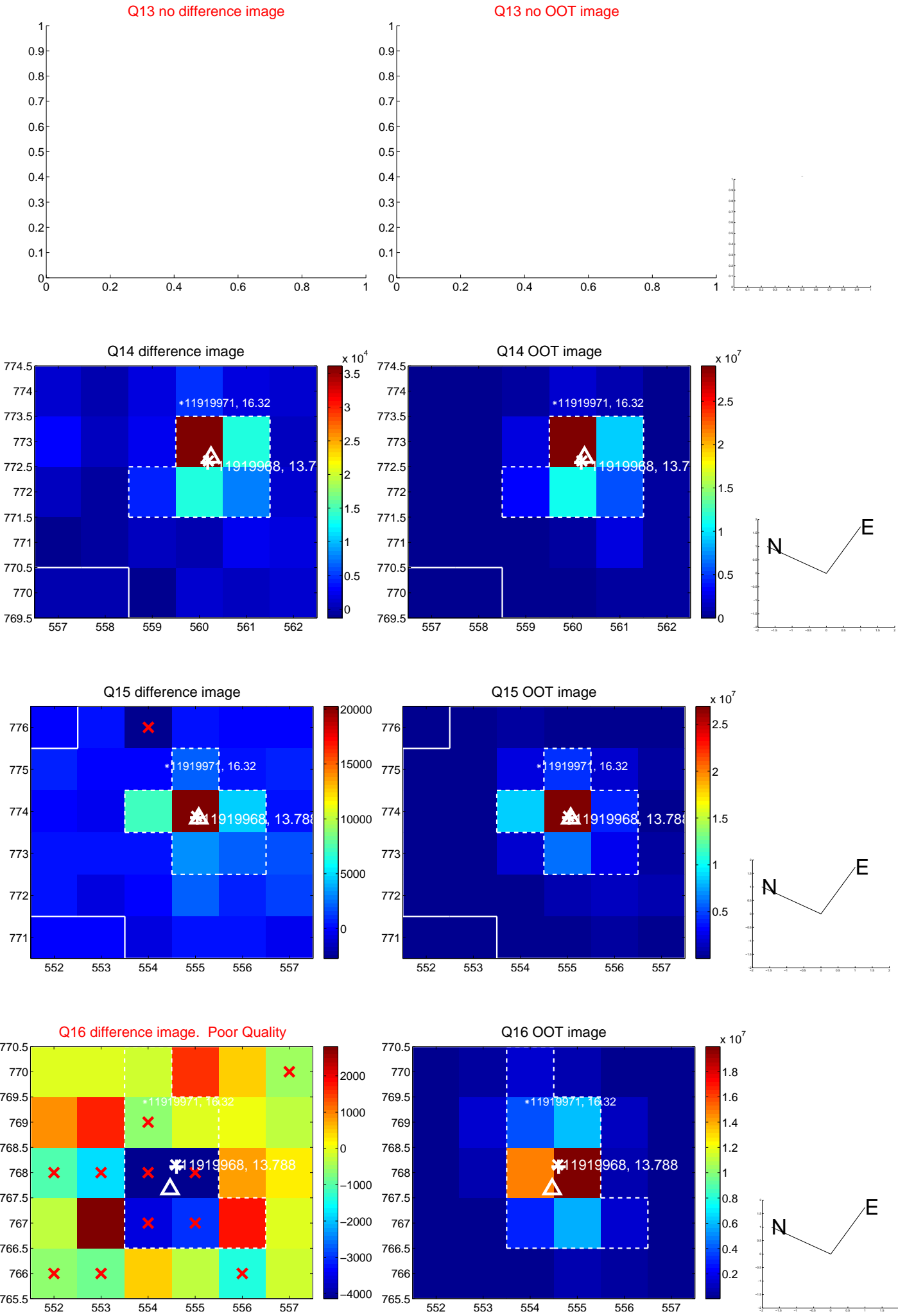
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



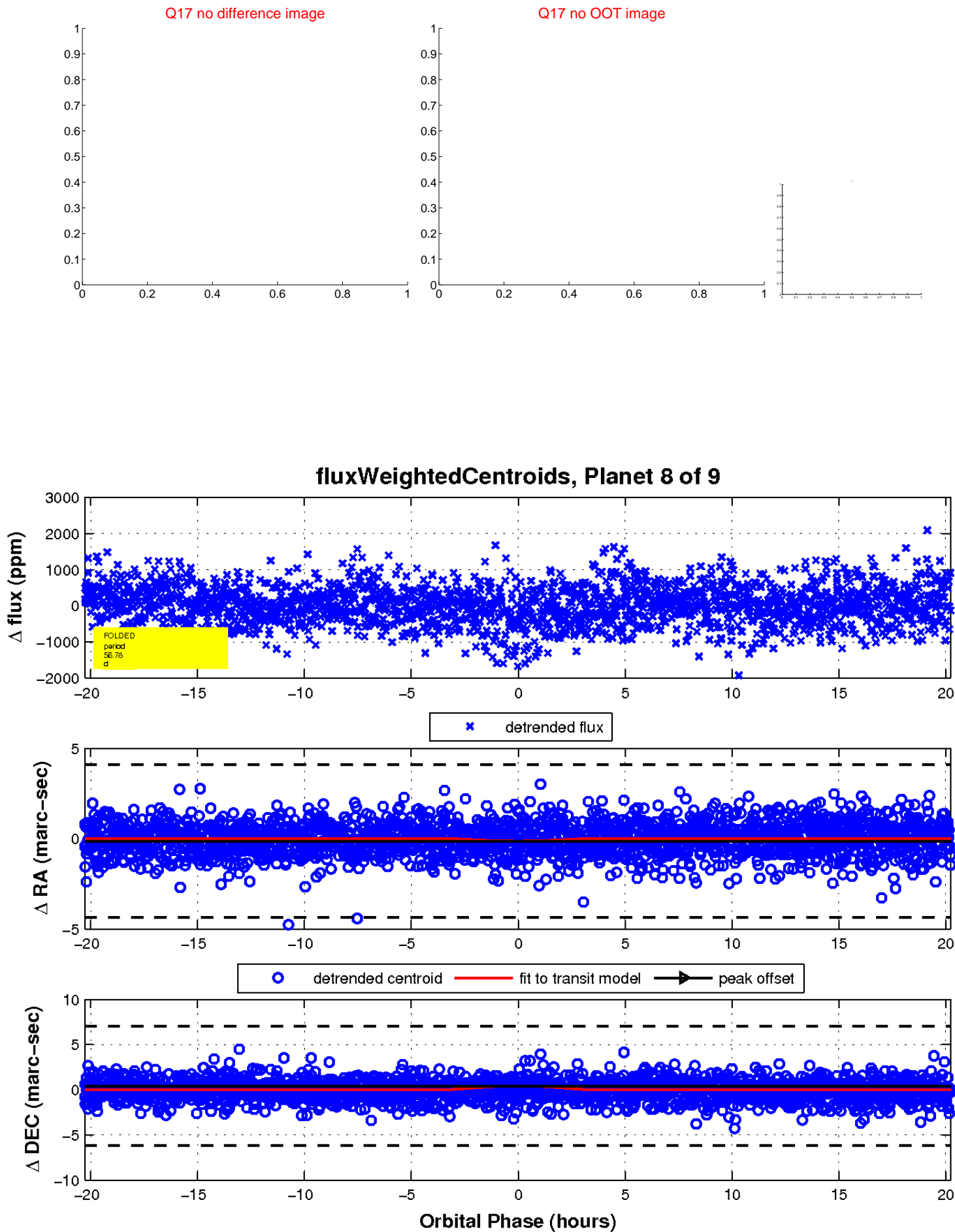
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

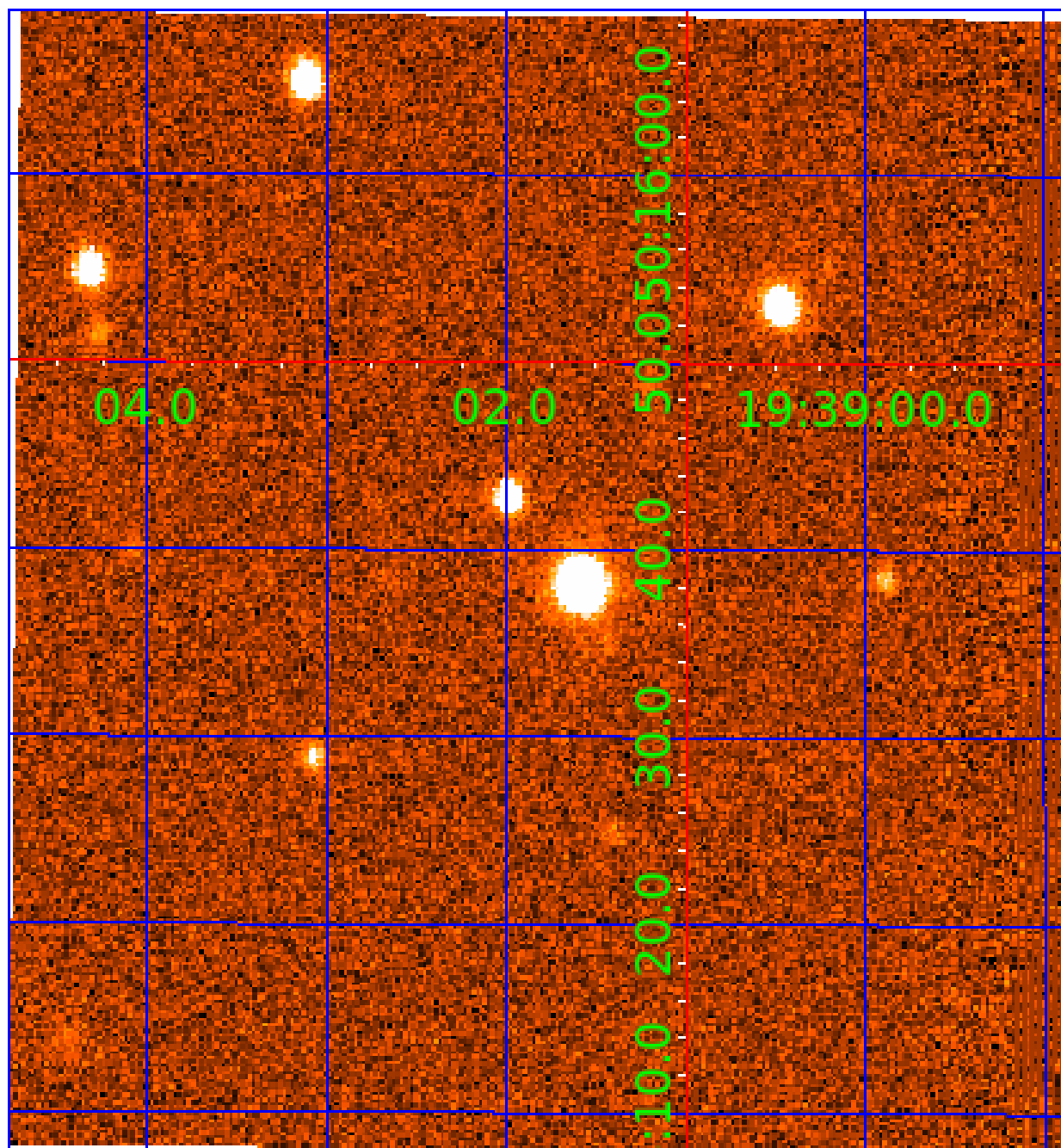


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011919968

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})
011919968-01	OBS	No	2.628739	131.606703	48.6	14.242	10.3	6.3	2.53	7935	1.79	10642.44
011919968-02	OBS	No	267.756509	141.587893	1236.1	7.836	12.6	9.2	2.53	7935	16.41	22.37
011919968-04	OBS	No	199.755848	143.598092	562.8	9.162	11.6	10.6	2.53	7935	6.83	33.06
011919968-05	OBS	No	268.049107	311.741872	571.9	8.594	11.5	9.1	2.53	7935	6.14	22.34
011919968-06	OBS	No	446.889317	253.774294	898.0	9.982	10.9	11.3	2.53	7935	8.18	11.30
011919968-07	OBS	No	380.862826	243.690824	758.5	7.345	11.2	8.0	2.53	7935	7.53	13.99
011919968-08	OBS	No	56.777775	139.781024	980.3	6.760	10.8	10.8	2.53	7935	14.72	176.93
011919968-09	OBS	No	171.288785	295.916012	482.9	5.000	10.6	-1.0	2.53	7935	5.62	40.59

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011919968-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
011919968-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_CHASES—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—HALO_GHOST
011919968-04	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011919968-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011919968-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011919968-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT
011919968-08	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011919968-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

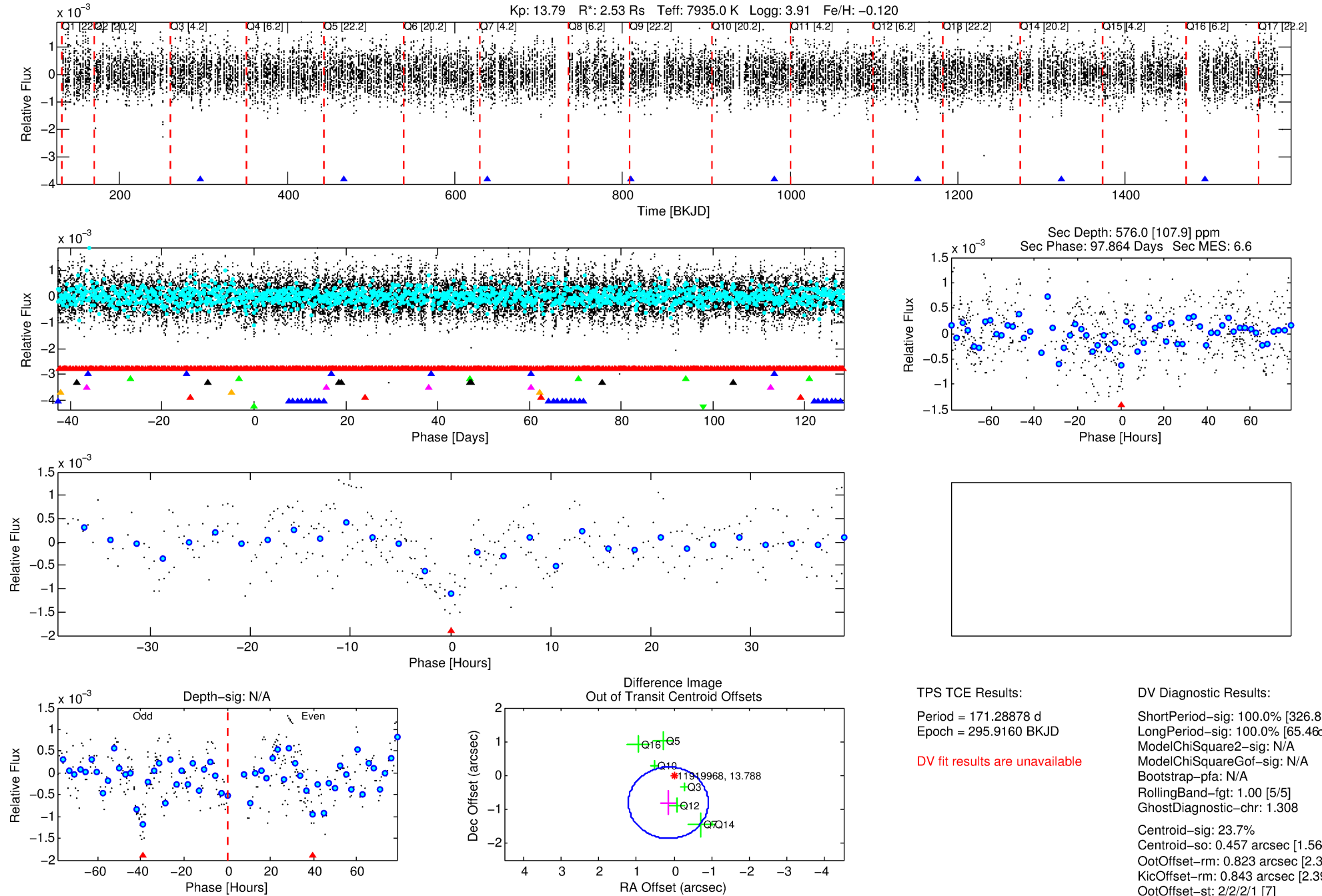
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011919968-09

No Significant Match Found

DV One-Page Summary

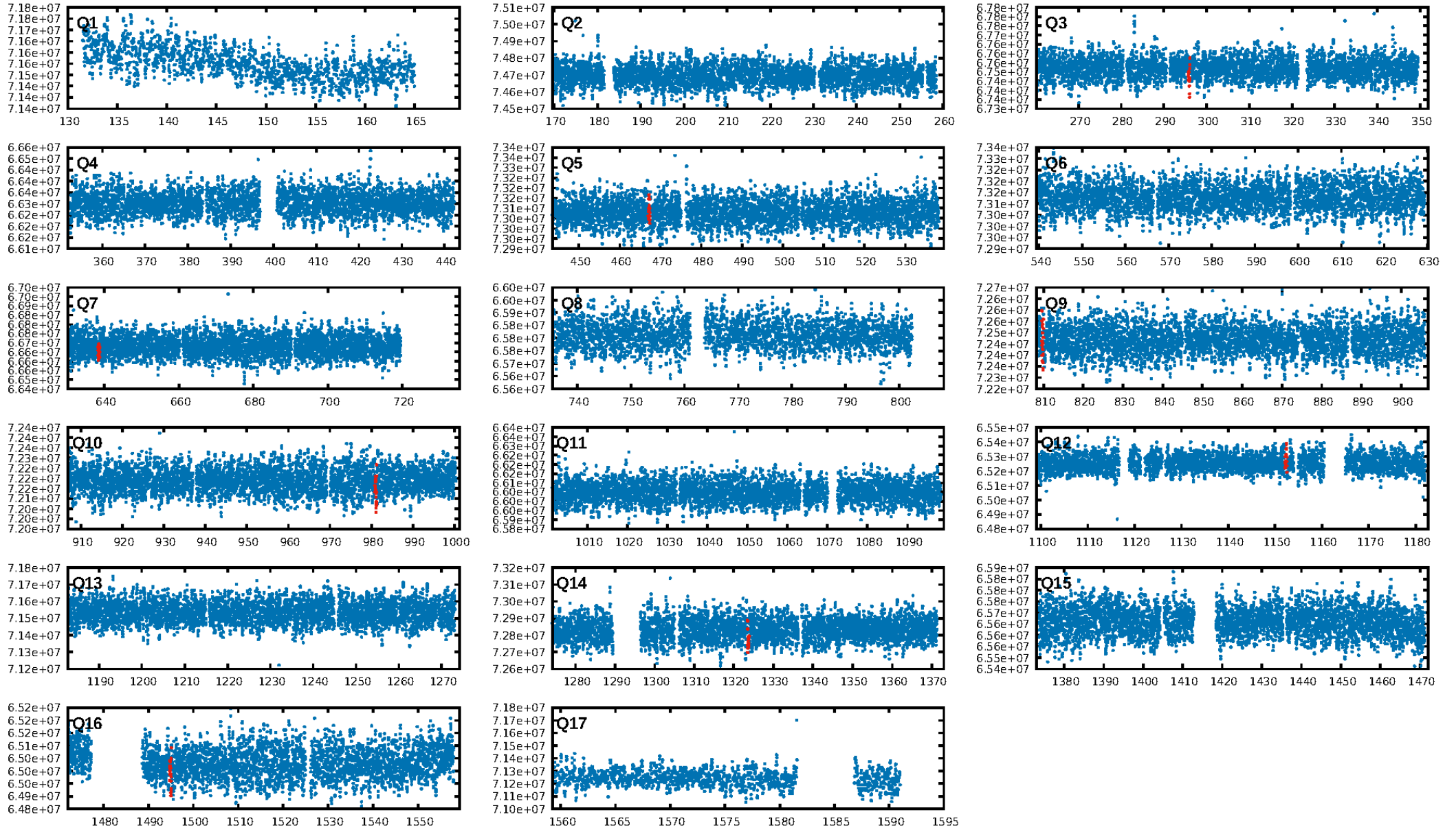
KIC: 11919968 Candidate: 9 of 9 Period: 171.289 d



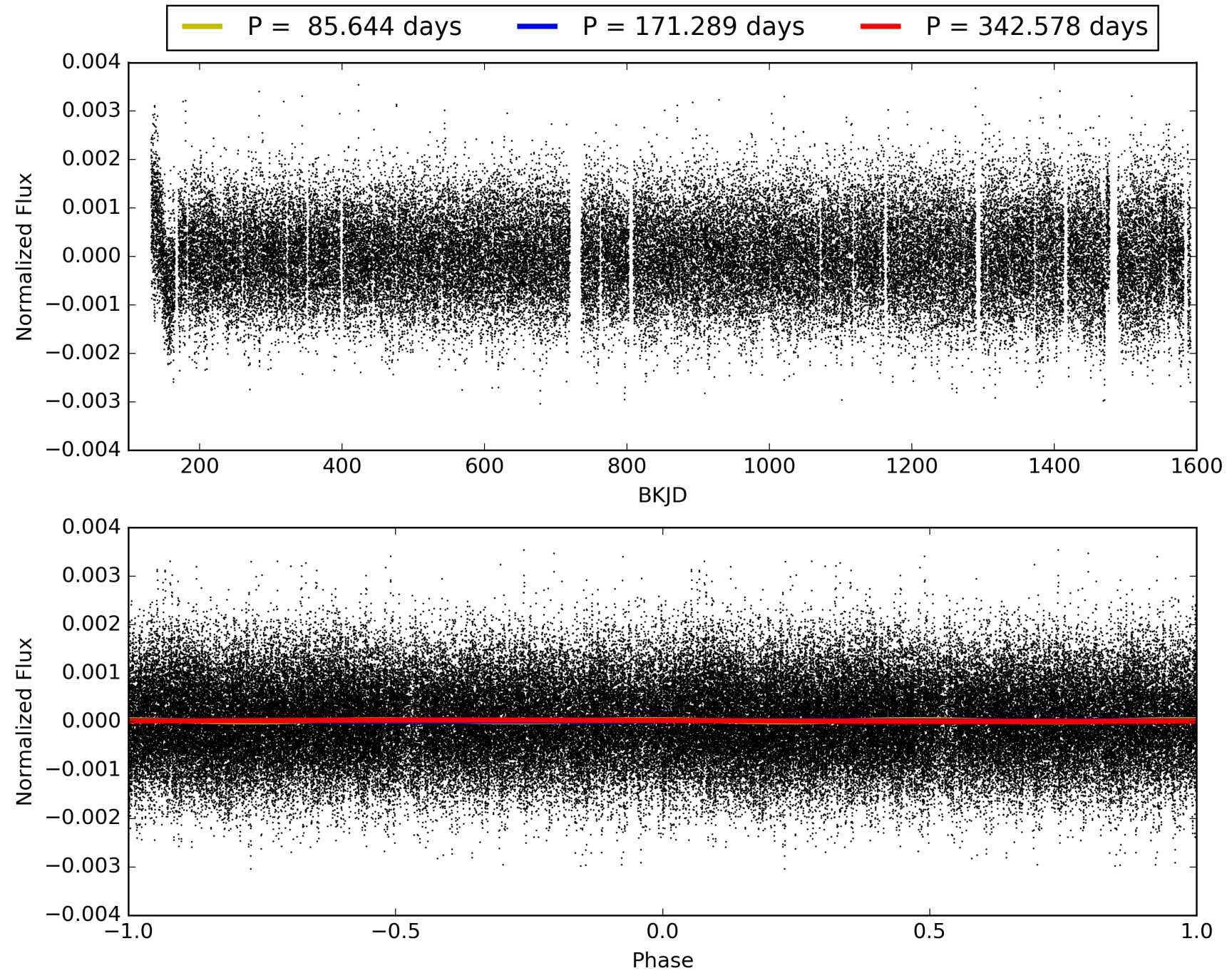
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:53:25 Z

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

TCE 011919968-09, PDC Light Curves

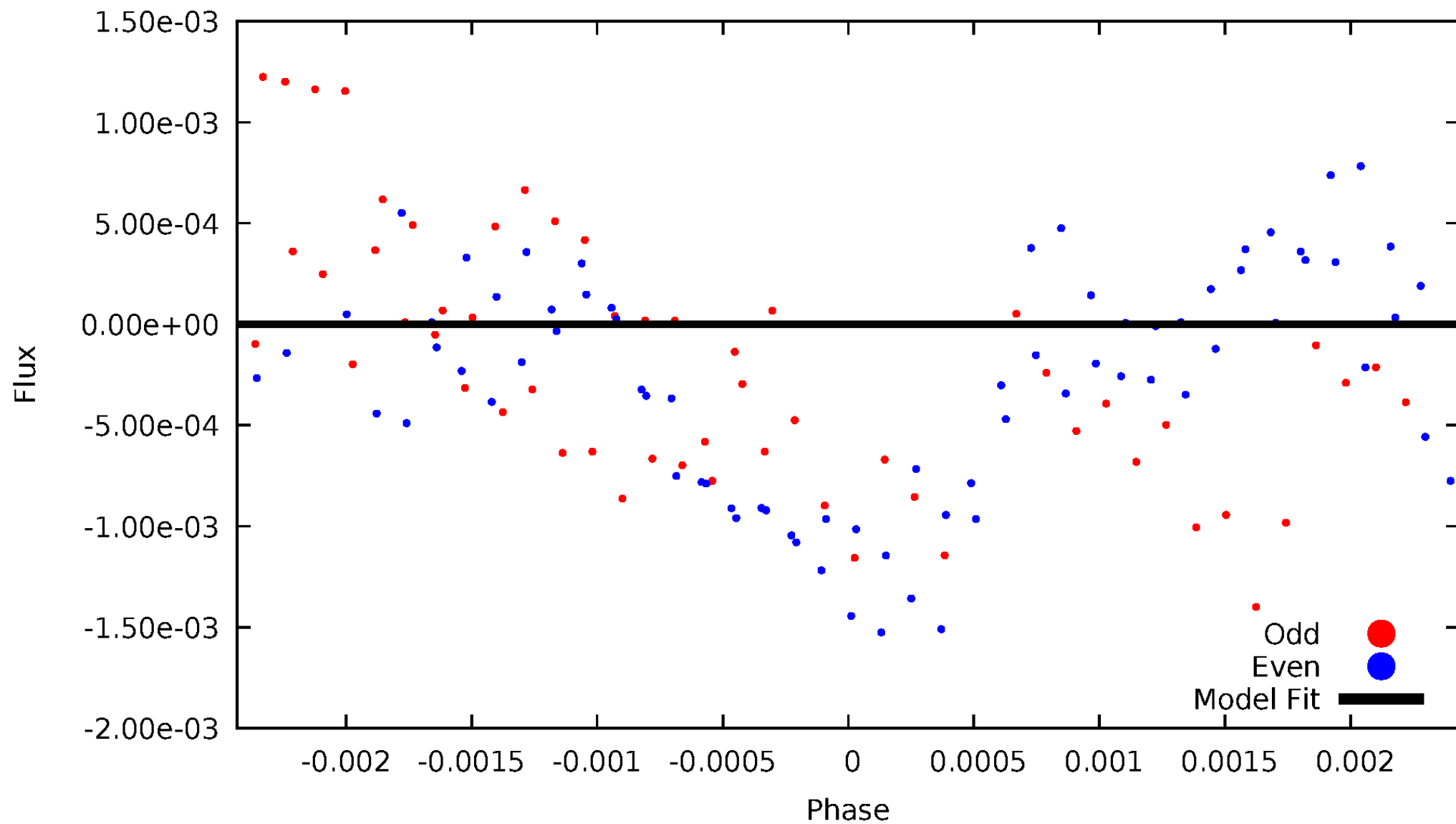


TCE 011919968-09



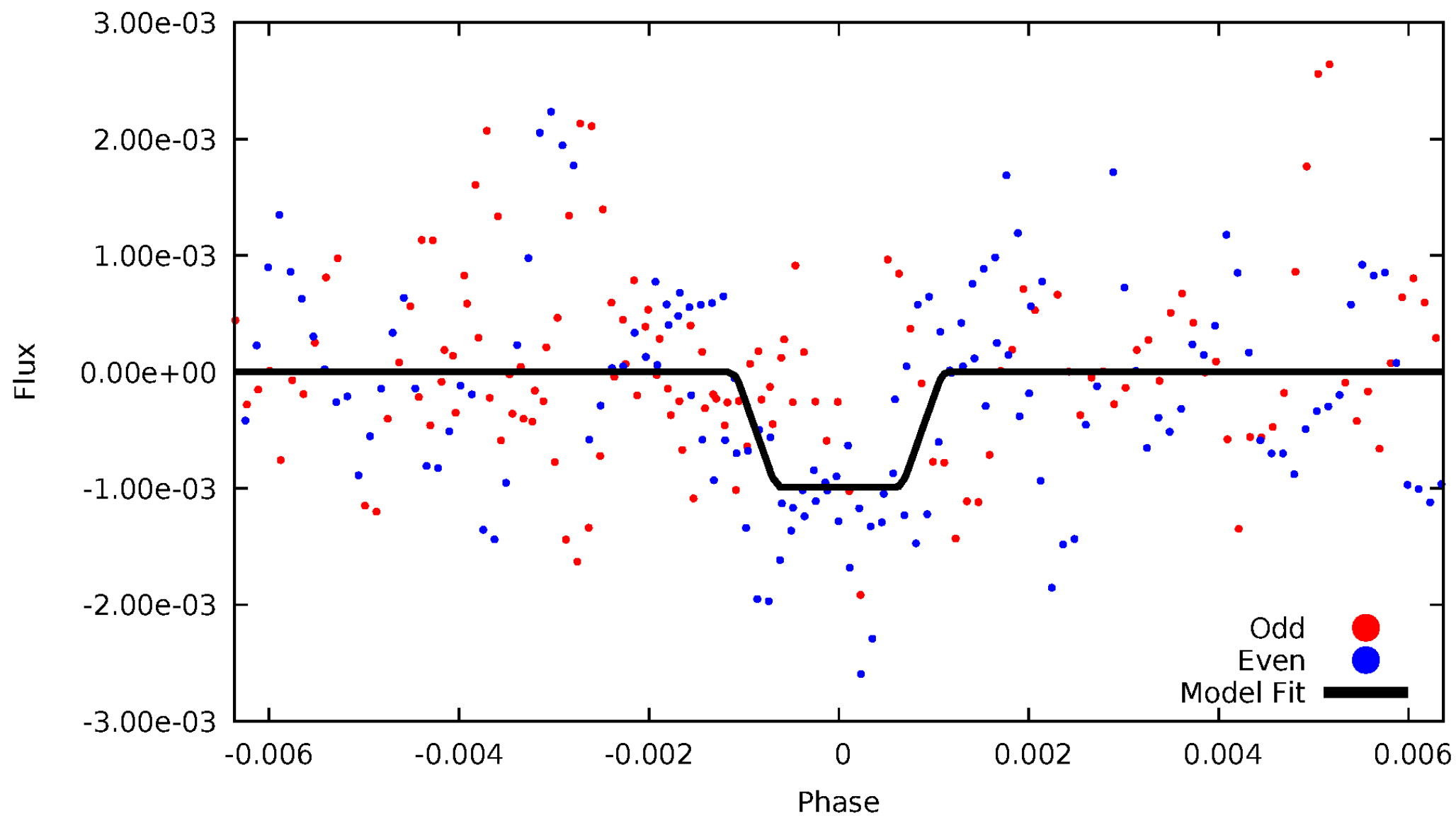
DV Odd/Even

TCE 011919968-09

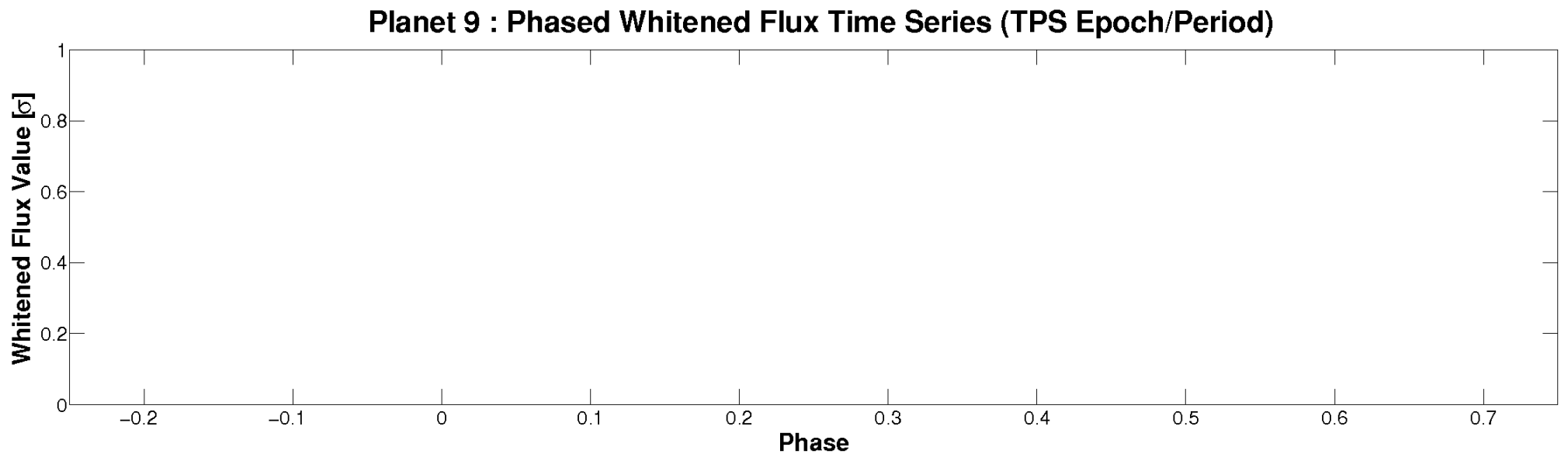
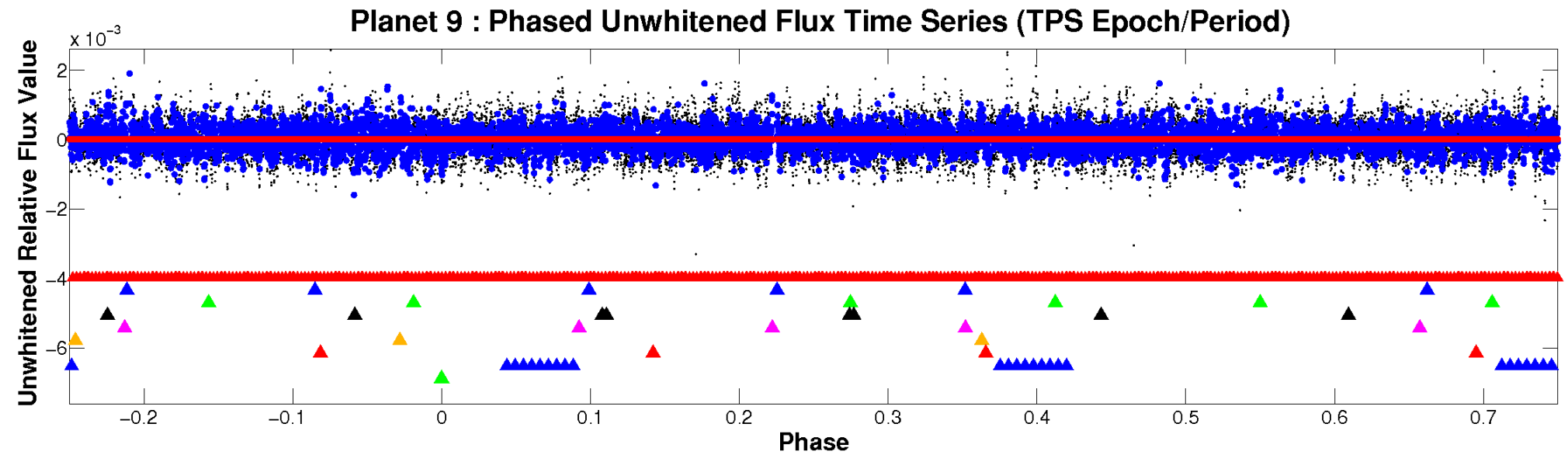


ALT Odd/Even

TCE 011919968-09

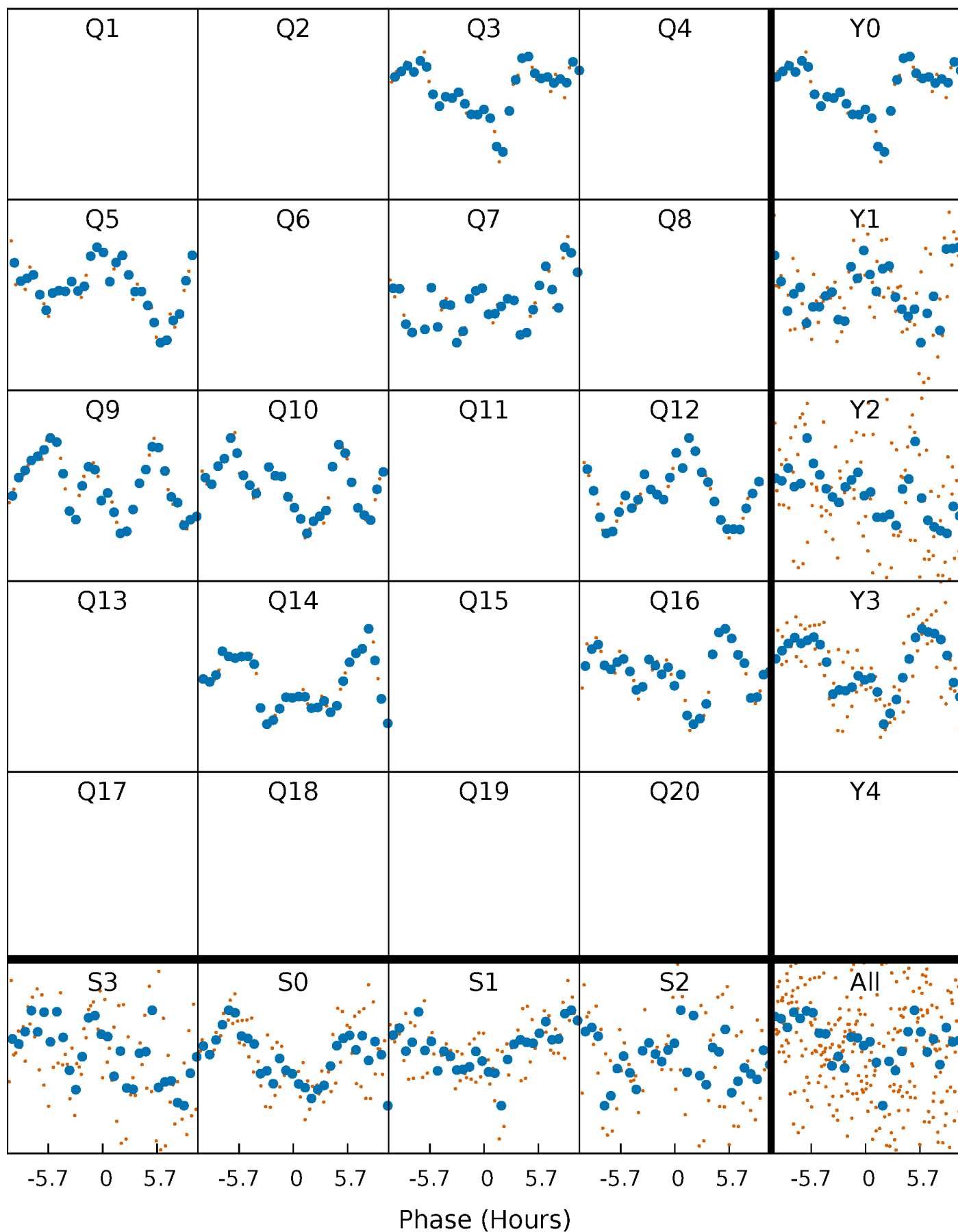


Non-Whitened Vs. Whitened Light Curve



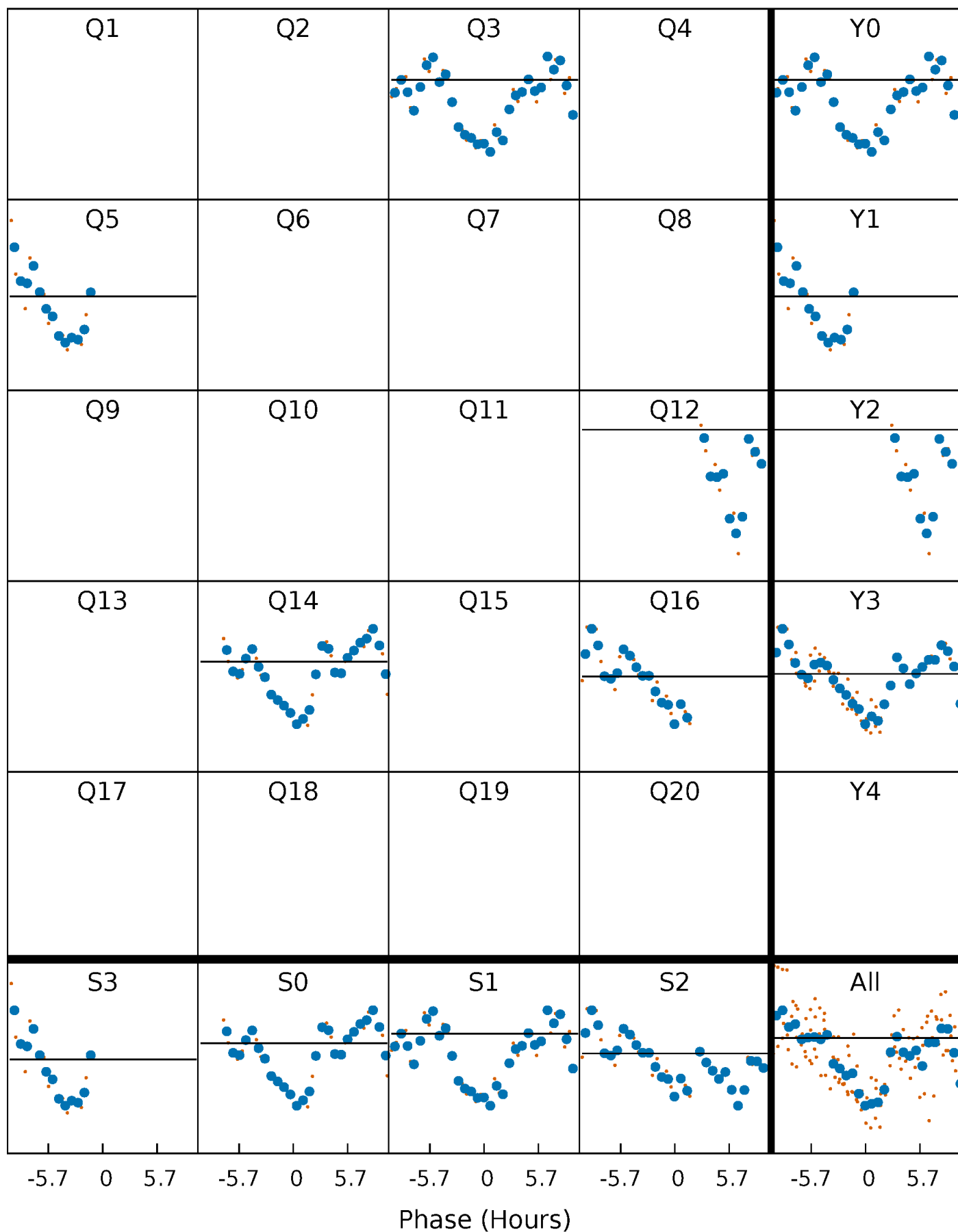
PDC Quarter-Phased Transit Curves

TCE 011919968-09 P=171.288785 Days $T_0=295.916012$ (BKJD)



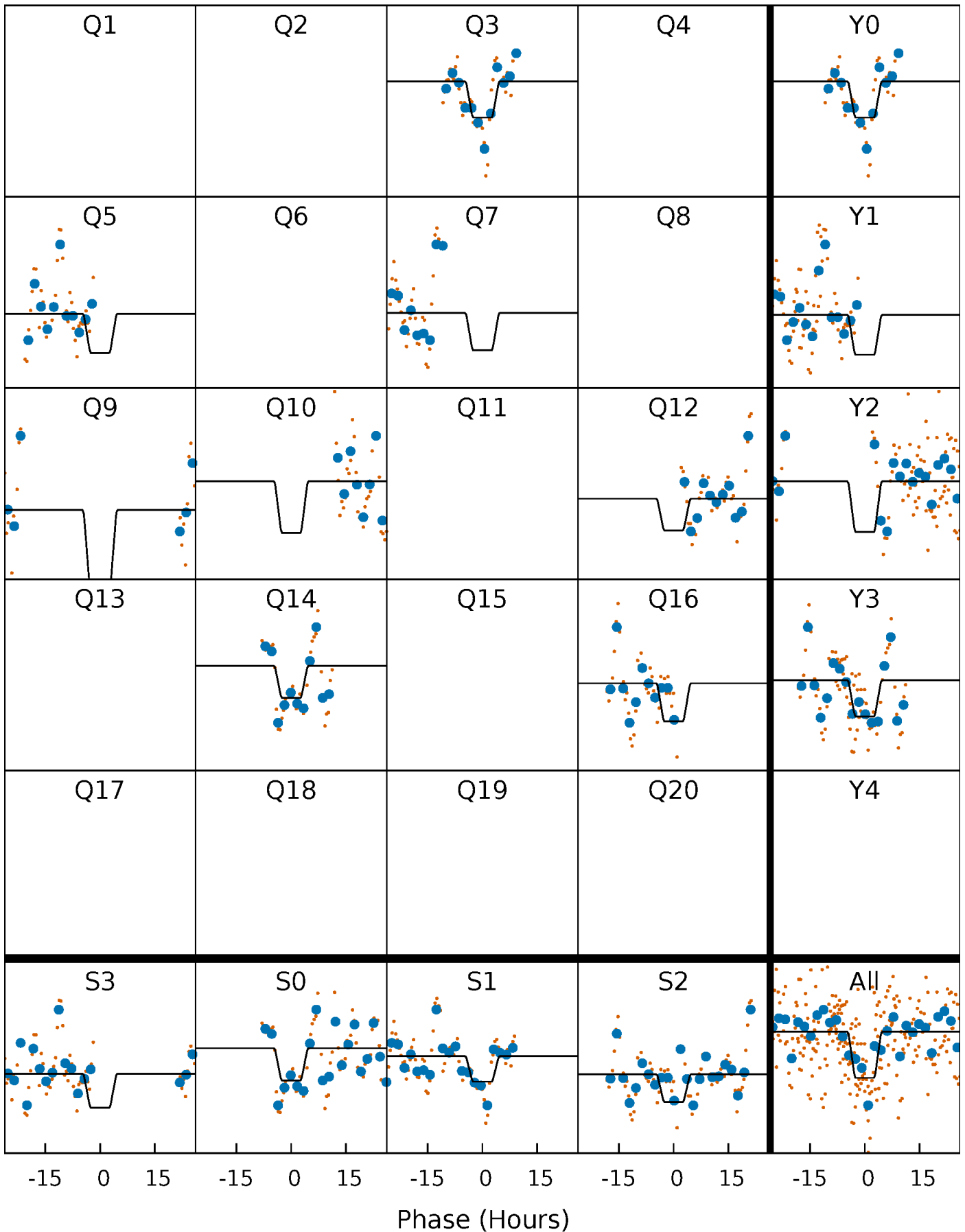
DV Quarter-Phased Transit Curves

TCE 011919968-09 $P=171.288785$ Days $T_0=295.916012$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

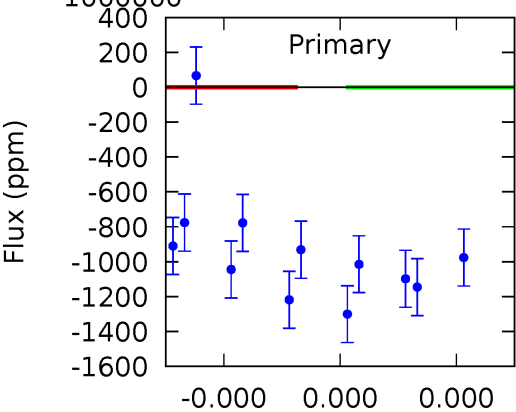
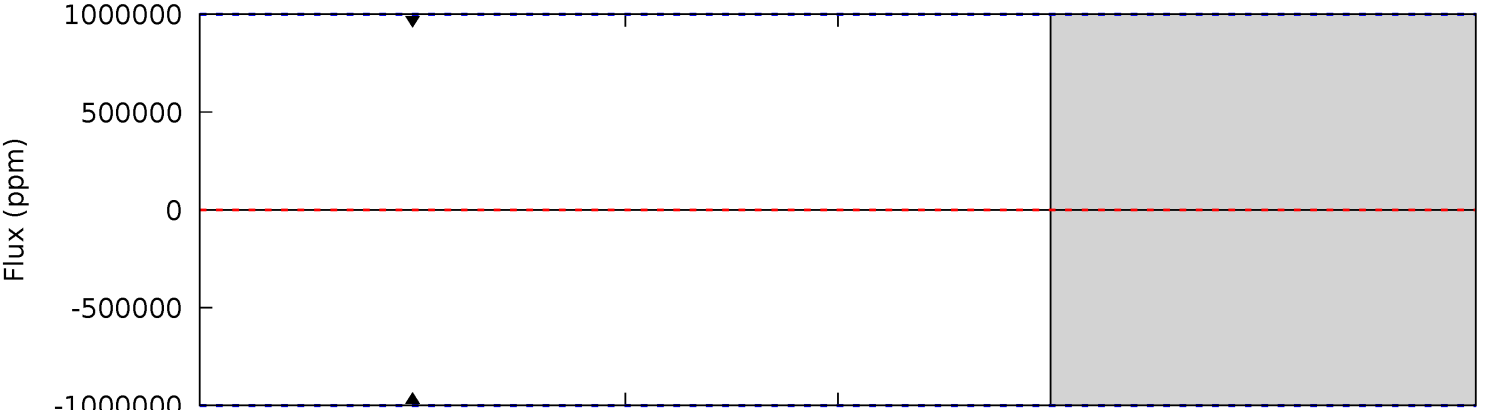
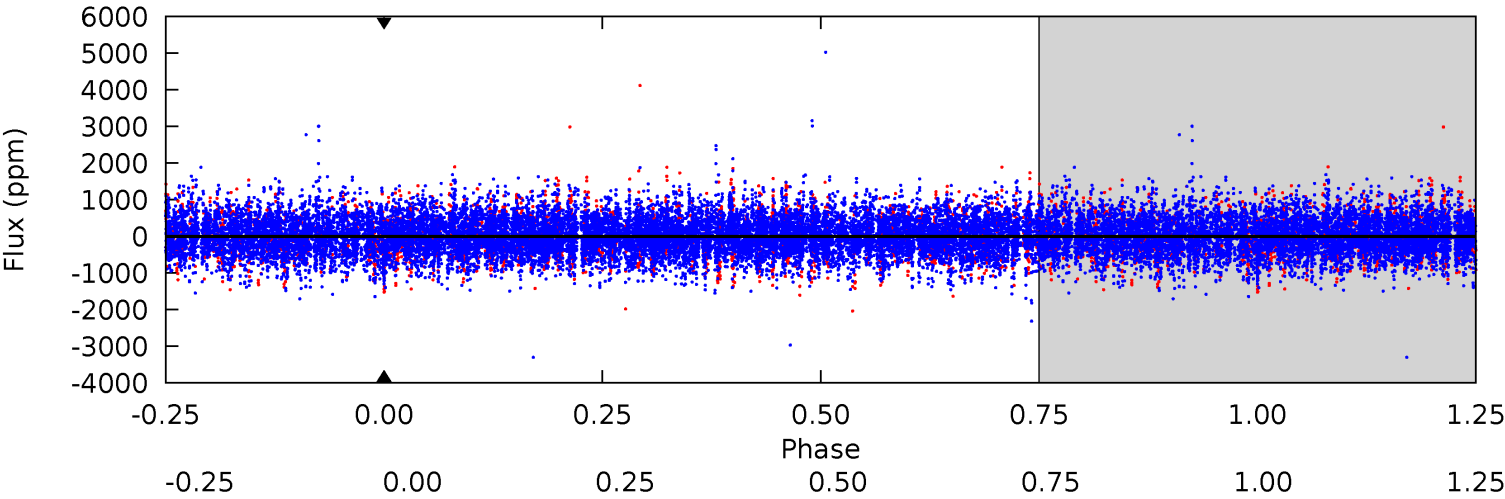
TCE 011919968-09 P=171.288785 Days $T_0=295.942464$ (BKJD)



DV Model-Shift Uniqueness Test

011919968-09, P = 171.288785 Days, E = 124.627227 Days

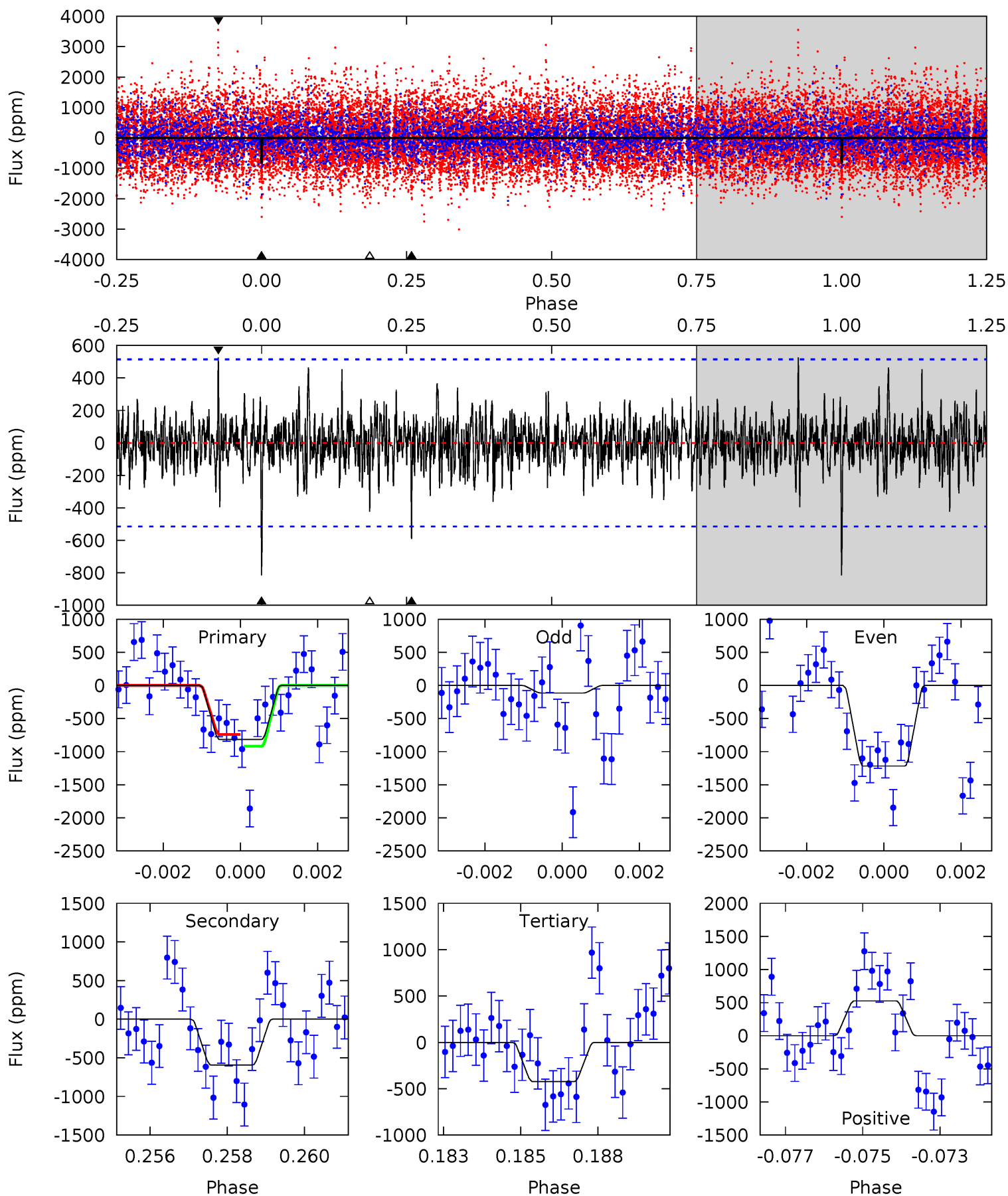
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

011919968-09, P = 171.288785 Days, E = 124.653679 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.41	6.11	4.36	5.43	5.31	3.06	1.23	4.06	2.99	1.75	0.68	5.54	0.90	0.39	0.90



Stellar Parameters For KIC 011919968

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7935^{+220}_{-331}	$3.911^{+0.273}_{-0.117}$	$-0.120^{+0.200}_{-0.350}$	$2.526^{+0.402}_{-0.939}$	$1.895^{+0.103}_{-0.414}$	$0.166^{+0.311}_{-0.061}$
	+3%/-4%	+7%/-3%	+167%/-292%	+16%/-37%	+5%/-22%	+188%/-37%
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 011919968-09 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$19.80^{+21.67}_{-13.81}$	888^{+58}_{-79}	-5975^{+48202}_{-38686}	$-1742.957^{+133929.445}_{-136850.061}$
Alt.	-592 ± 97	$20.07^{+22.63}_{-14.04}$	889^{+58}_{-79}	4497^{+3633}_{-1013}	446^{+4520}_{-348}

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 $A_{obs} \gg 1.0$

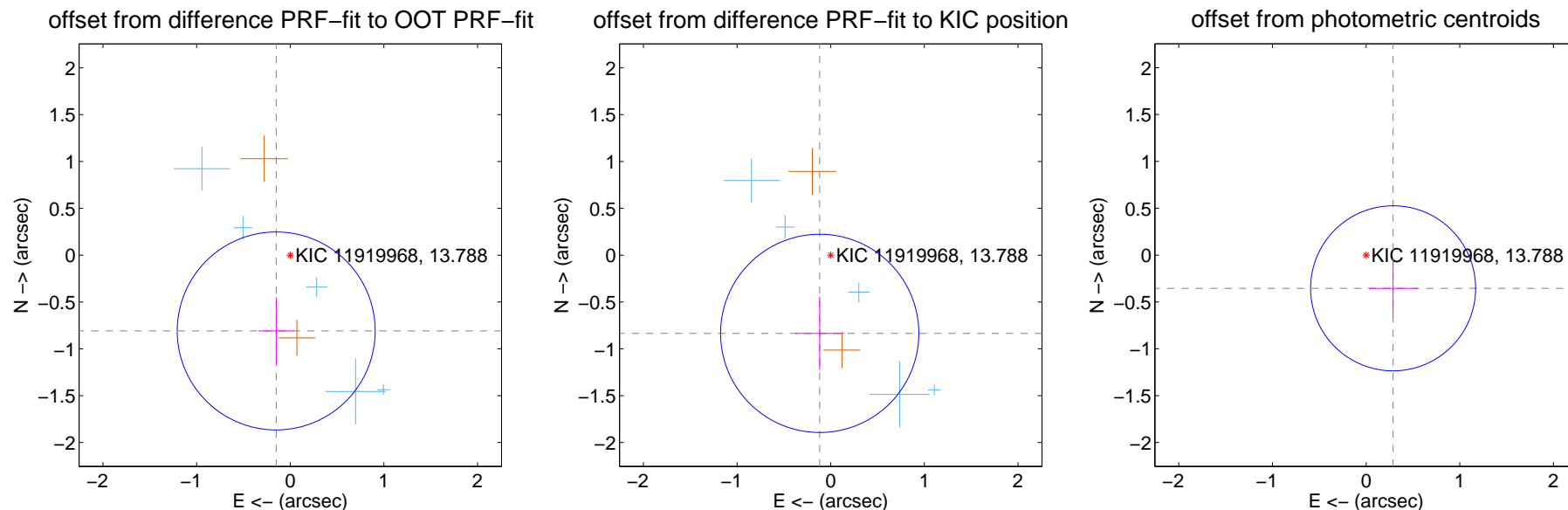
DV Centroid Data

Supplemental centroid analysis for 011919968-09. Kepler magnitude: 13.79. Transit SNR -1.00

There are 5 quarters with good PRF difference image offsets

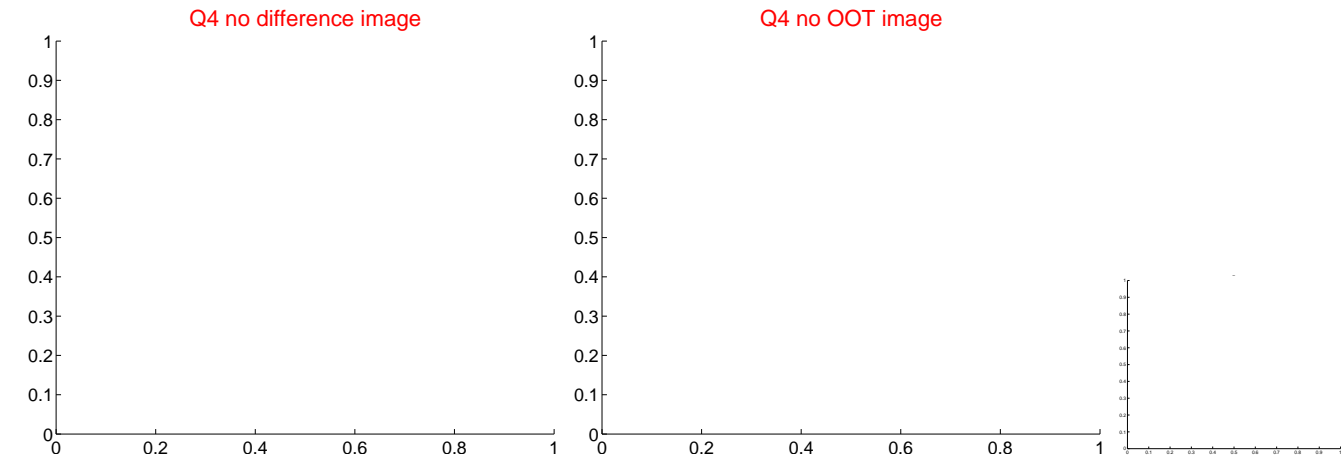
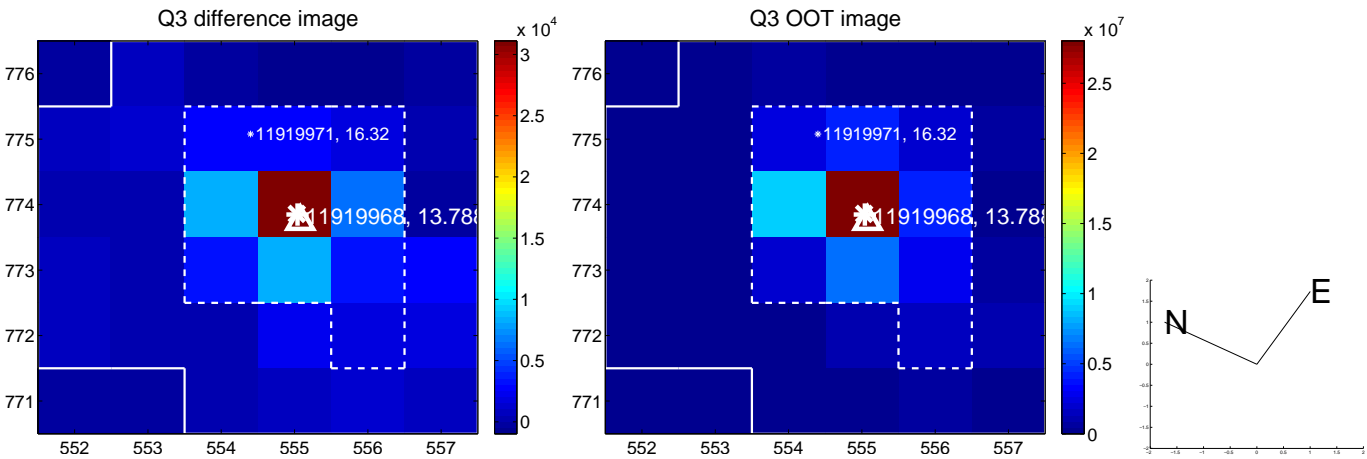
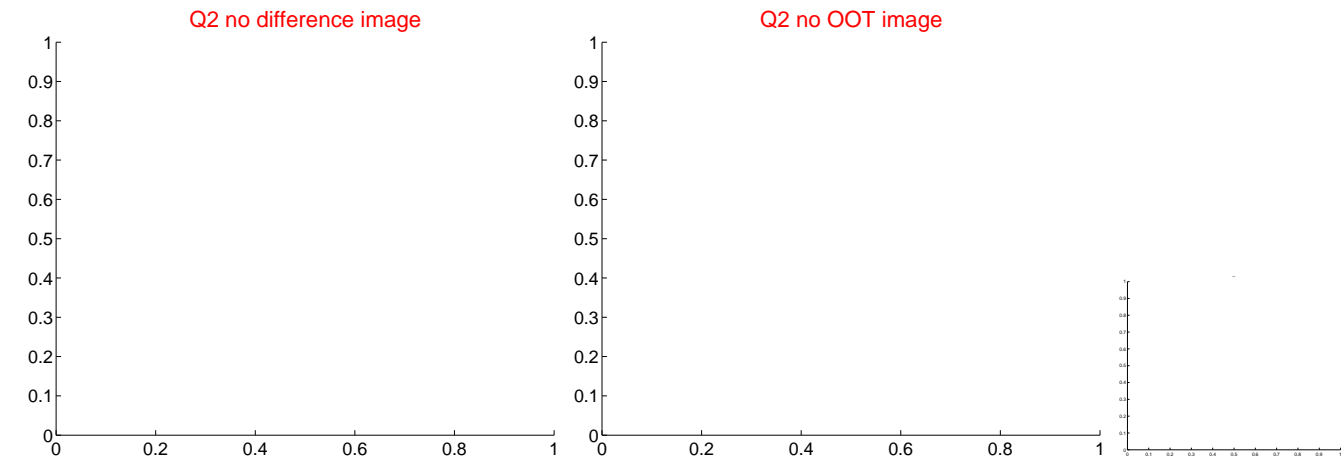
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.823 ± 0.352	2.34	0.150 ± 0.191	-0.809 ± 0.356
PRF-fit source offset from KIC position	0.843 ± 0.353	2.39	0.118 ± 0.264	-0.835 ± 0.390
photometric centroid source offset	0.46 ± 0.29	1.56	-0.29 ± 0.26	-0.35 ± 0.31

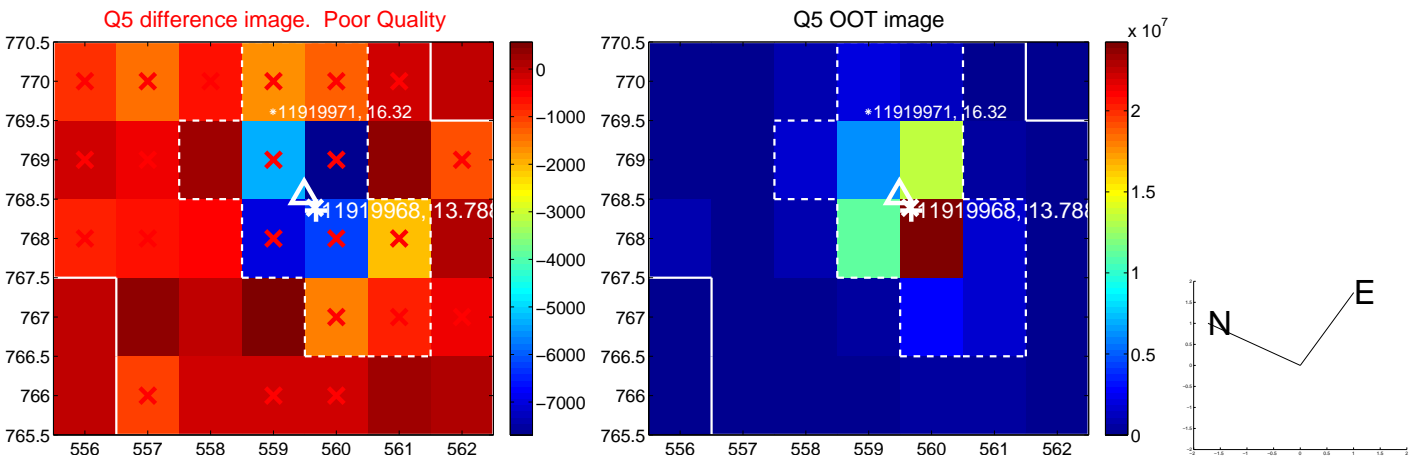


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

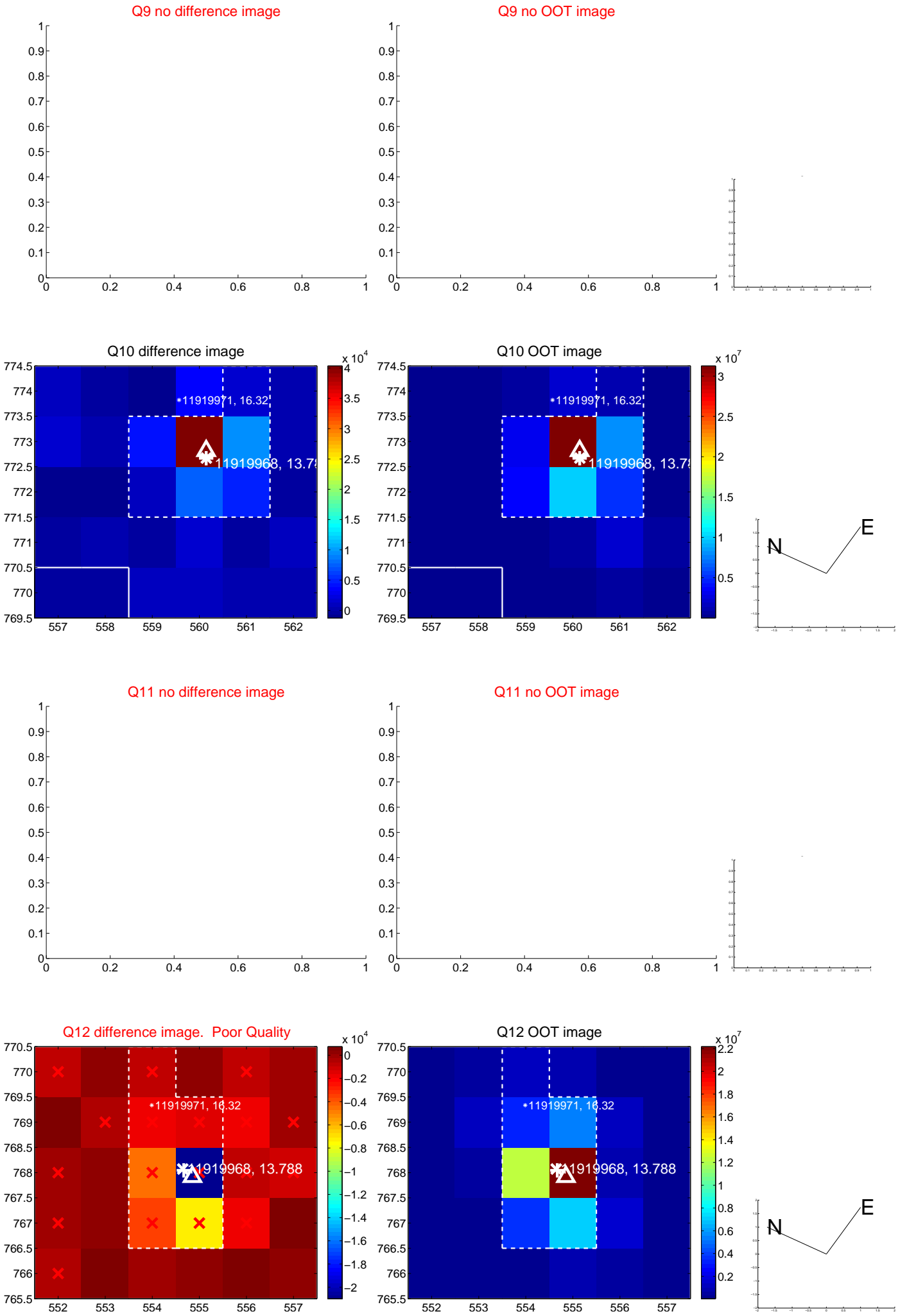
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



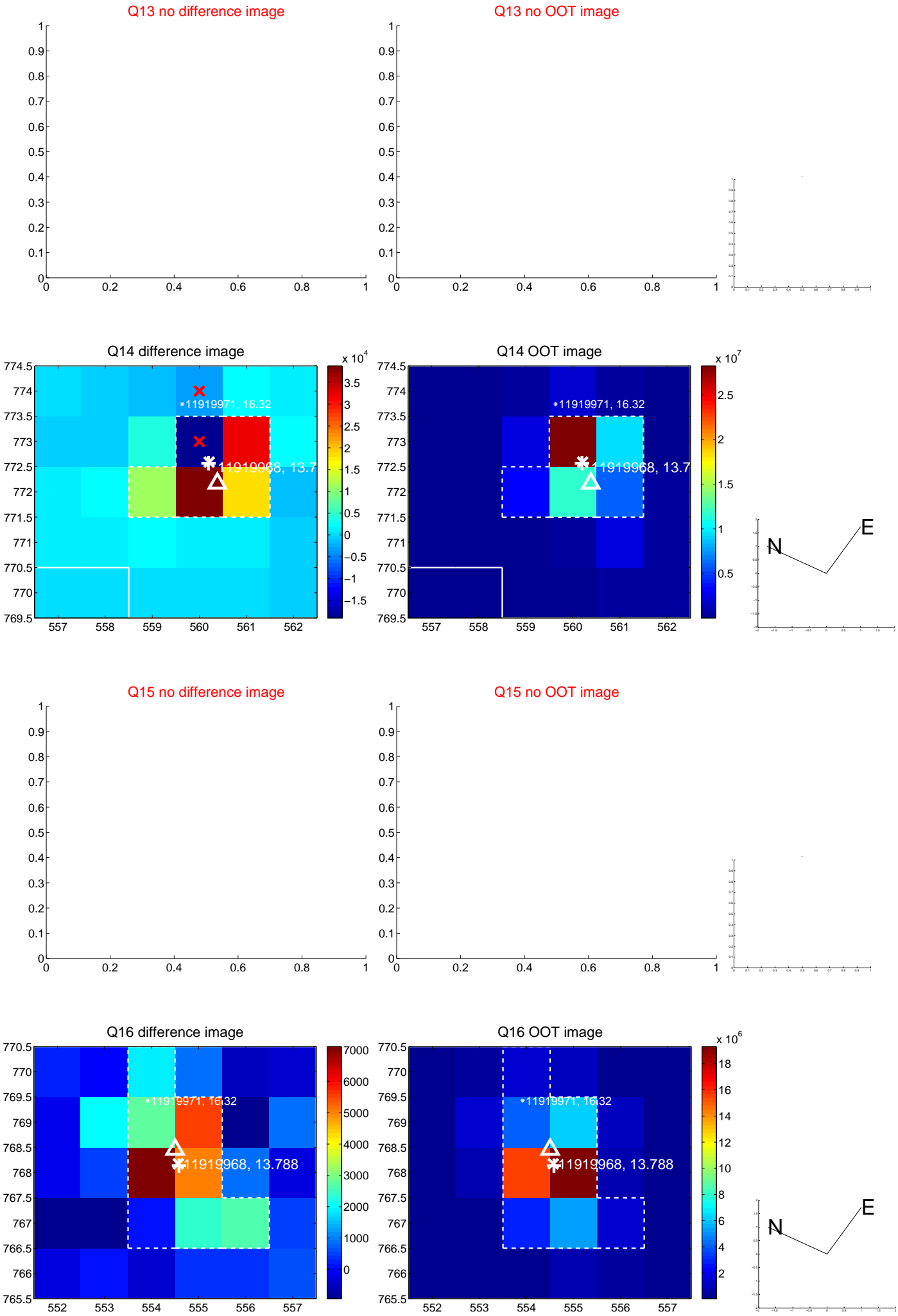
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



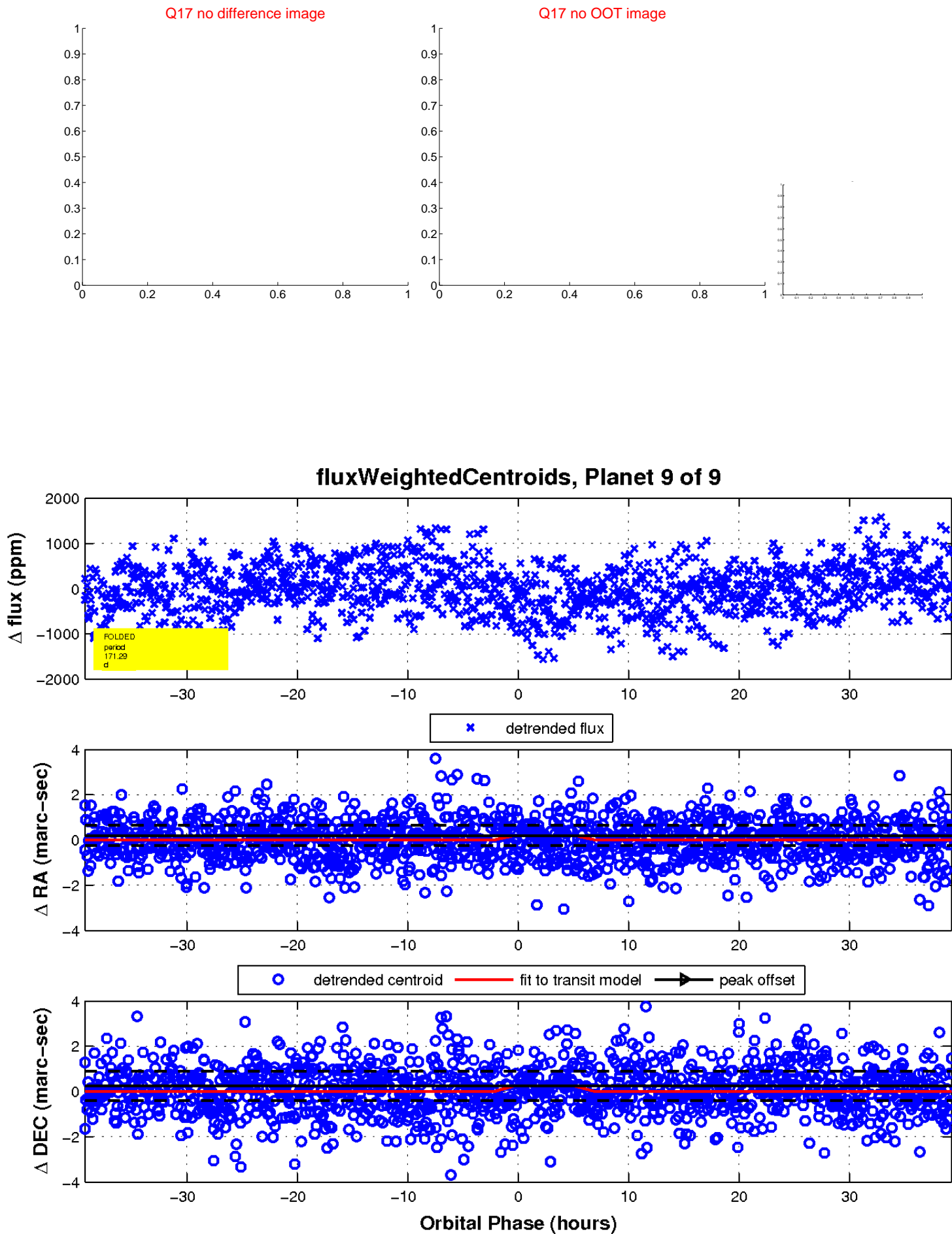
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

