

KIC 003967268

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})
003967268-01	OBS	No	0.912698	131.581129	69.7	6.249	11.5	6.0	2.41	7232	2.04	29913.25
003967268-02	OBS	No	38.456267	152.135736	2118.8	2.376	16.3	12.9	2.41	7232	11.23	204.02
003967268-03	OBS	No	49.378882	134.767014	2390.7	1.690	16.1	14.2	2.41	7232	12.08	146.19
003967268-04	OBS	No	32.353172	163.057910	1524.9	1.673	13.7	11.8	2.41	7232	10.84	256.89
003967268-05	OBS	No	12.637158	135.701476	1231.3	2.645	13.4	13.2	2.41	7232	15.81	899.71
003967268-06	OBS	No	32.638873	139.071766	526.5	16.356	9.9	6.5	2.41	7232	5.87	253.89

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003967268-01	OBS	FP	0.00	1	0	0	0	LPP_DV
003967268-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
003967268-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
003967268-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
003967268-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
003967268-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

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

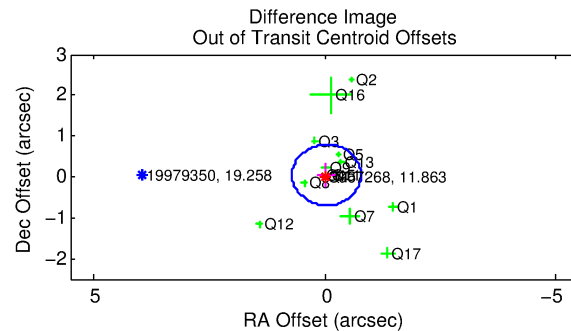
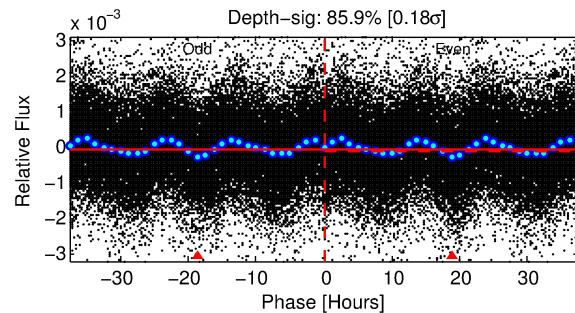
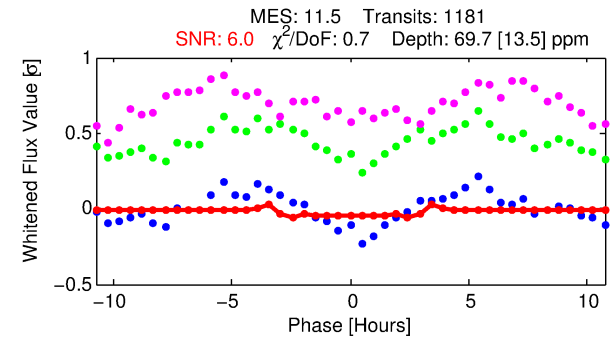
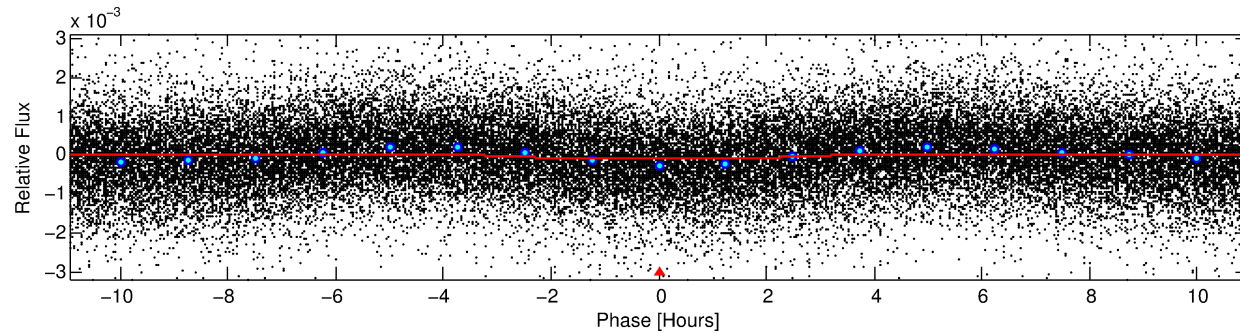
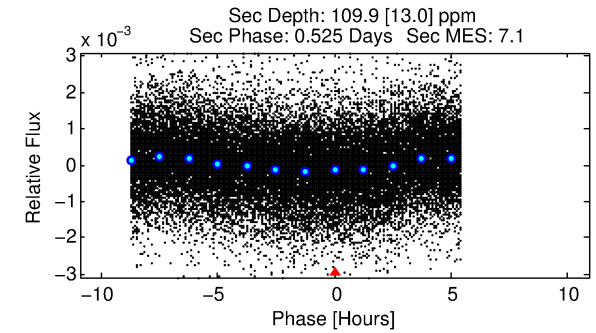
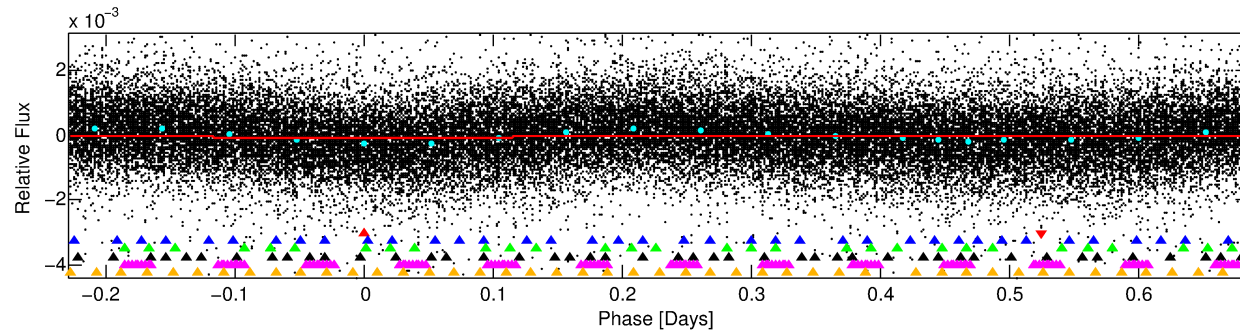
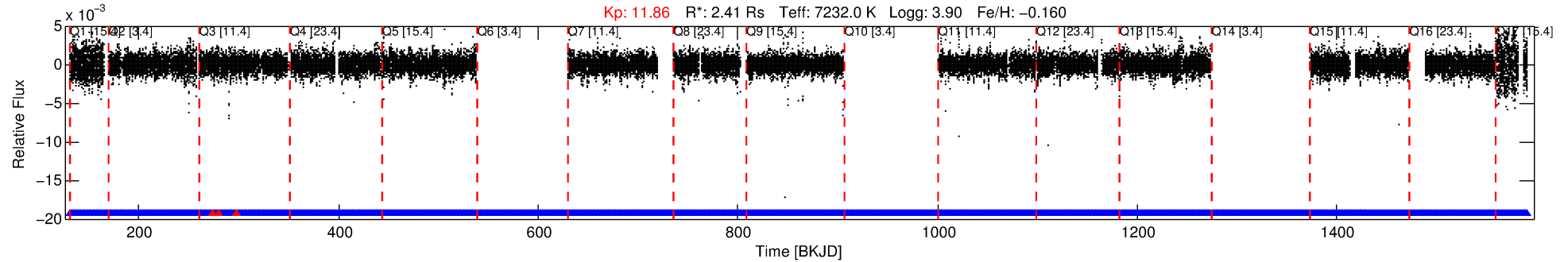
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003967268-01

No Significant Match Found

DV One-Page Summary

KIC: 3967268 Candidate: 1 of 6 Period: 0.913 d



DV Fit Results:

Period = 0.91270 [0.00002] d
Epoch = 131.5811 [0.0032] BKJD
Rp/R* = 0.0077 [0.0079]
a/R* = 1.28 [2.93]
b = 0.20 [28.98]
Seff = 29913.25 [16893.96]
Teq = 3353 [473] K
Rp = 2.04 [2.20] Re
a = 0.0218 [0.0074] AU
Ag = 6.93 [14.63] [0.41σ]
Teffp = 8413 [4305] K [1.17σ]

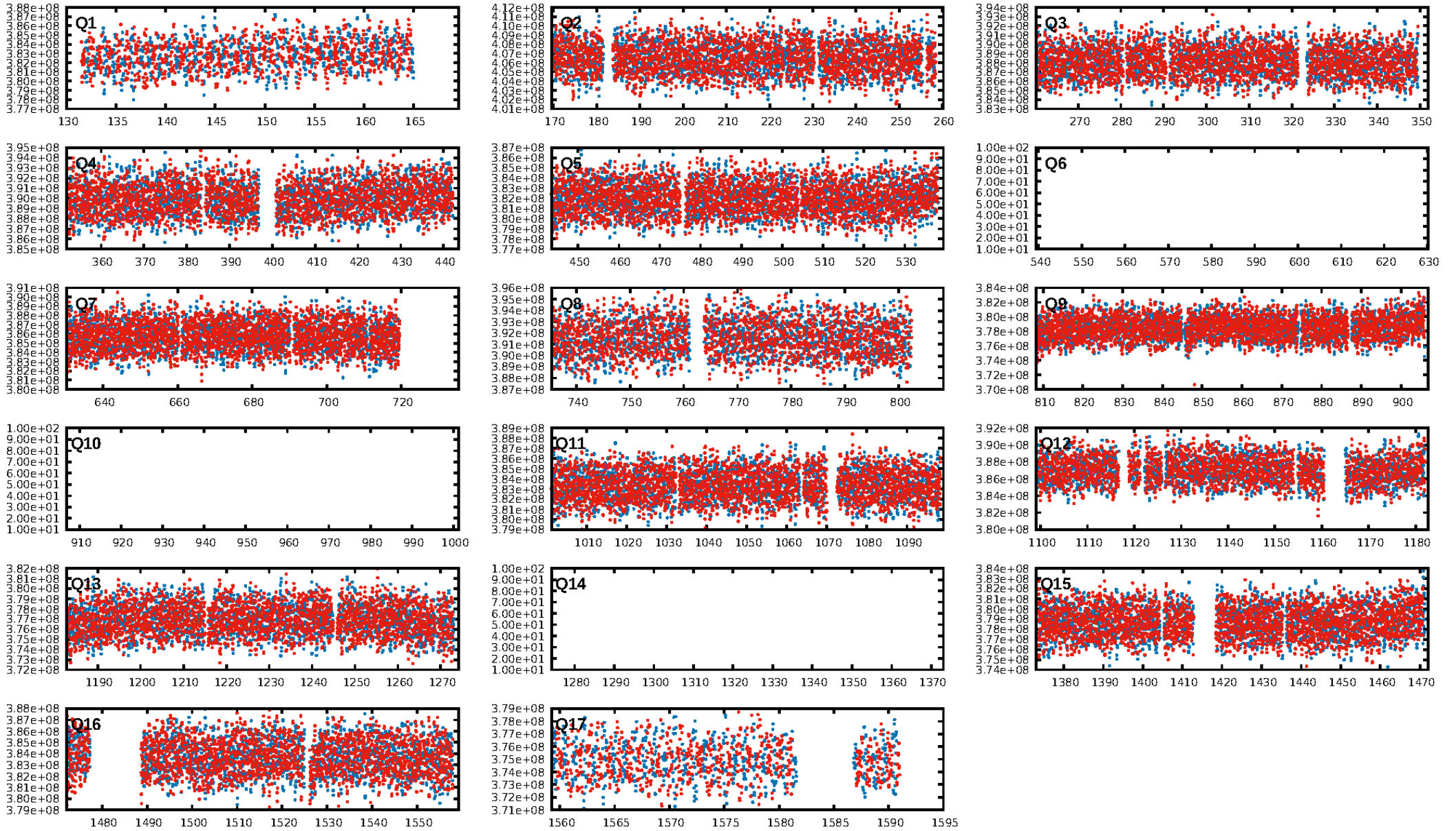
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [41.47σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1112/1115]
GhostDiagnostic-chr: 1.115
Centroid-sig: 0.0%
Centroid-so: 0.251 arcsec [1.60σ]
OotOffset-rm: 0.060 arcsec [0.24σ]
KicOffset-rm: 0.073 arcsec [0.29σ]
OotOffset-st: 1/4/4/5 [14]
KicOffset-st: 1/4/4/5 [14]
DiffImageQuality-fgm: 0.86 [12/14]
DiffImageOverlap-fno: 1.00 [14/14]

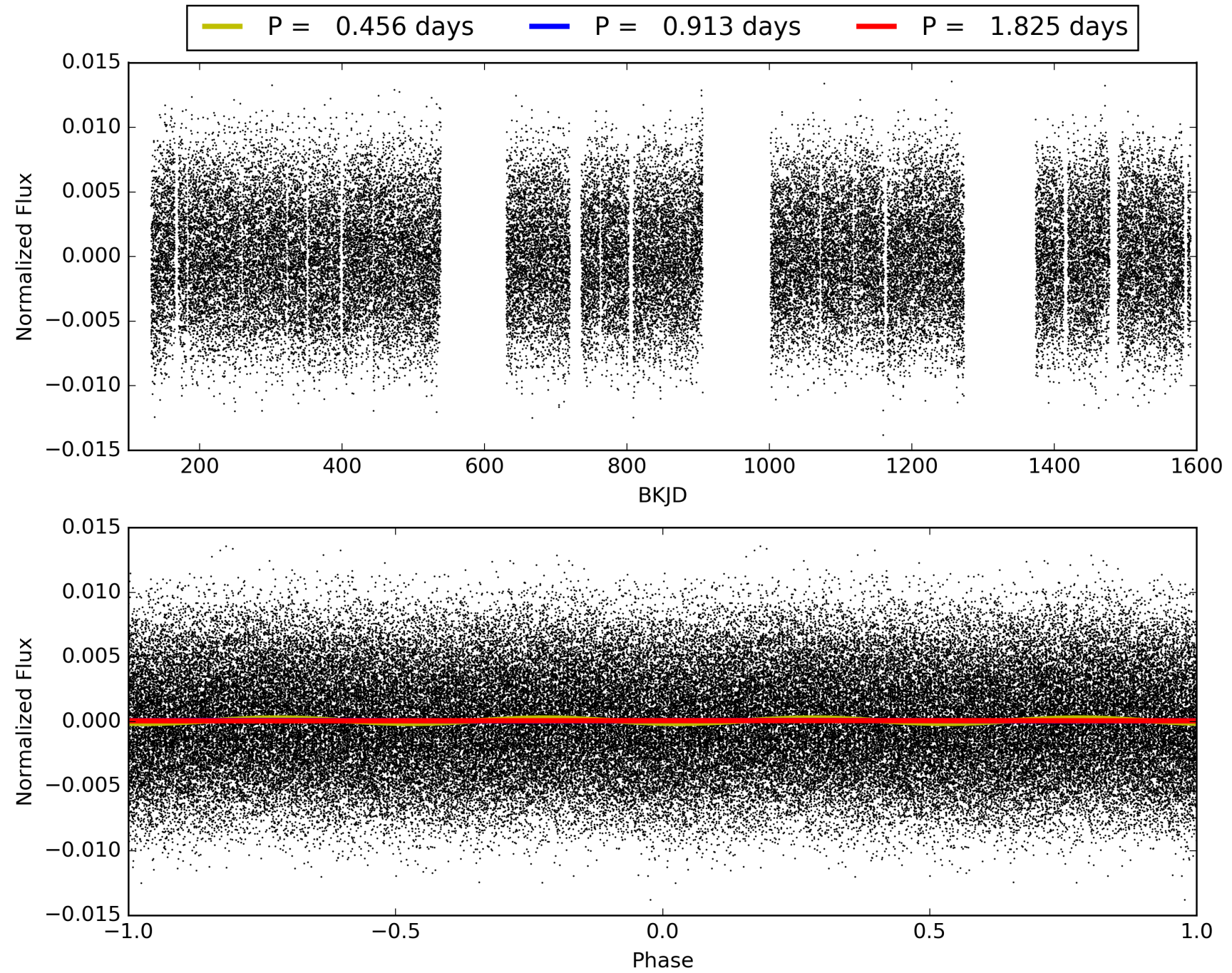
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:24:18 Z

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

TCE 003967268-01, PDC Light Curves

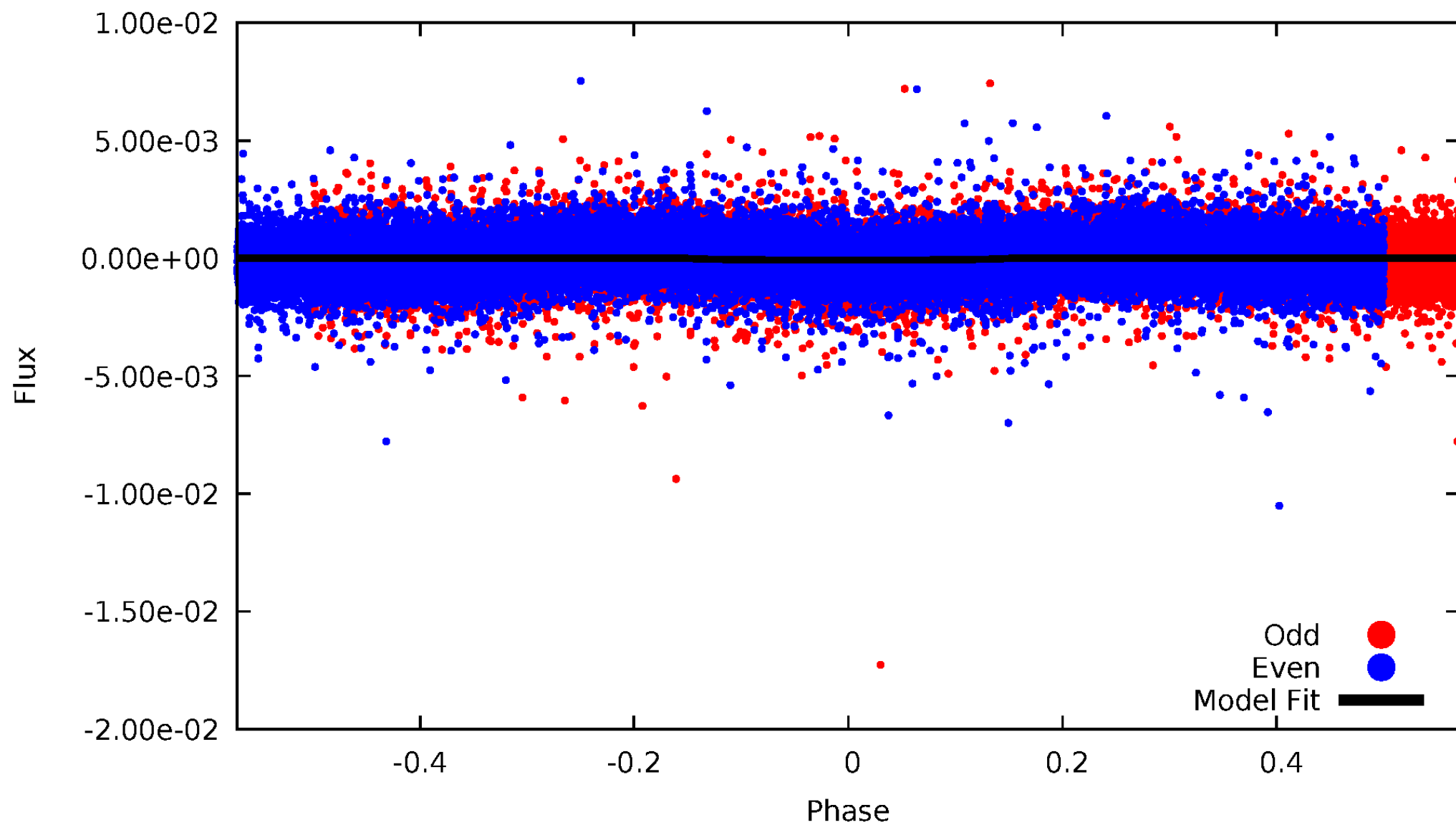


TCE 003967268-01



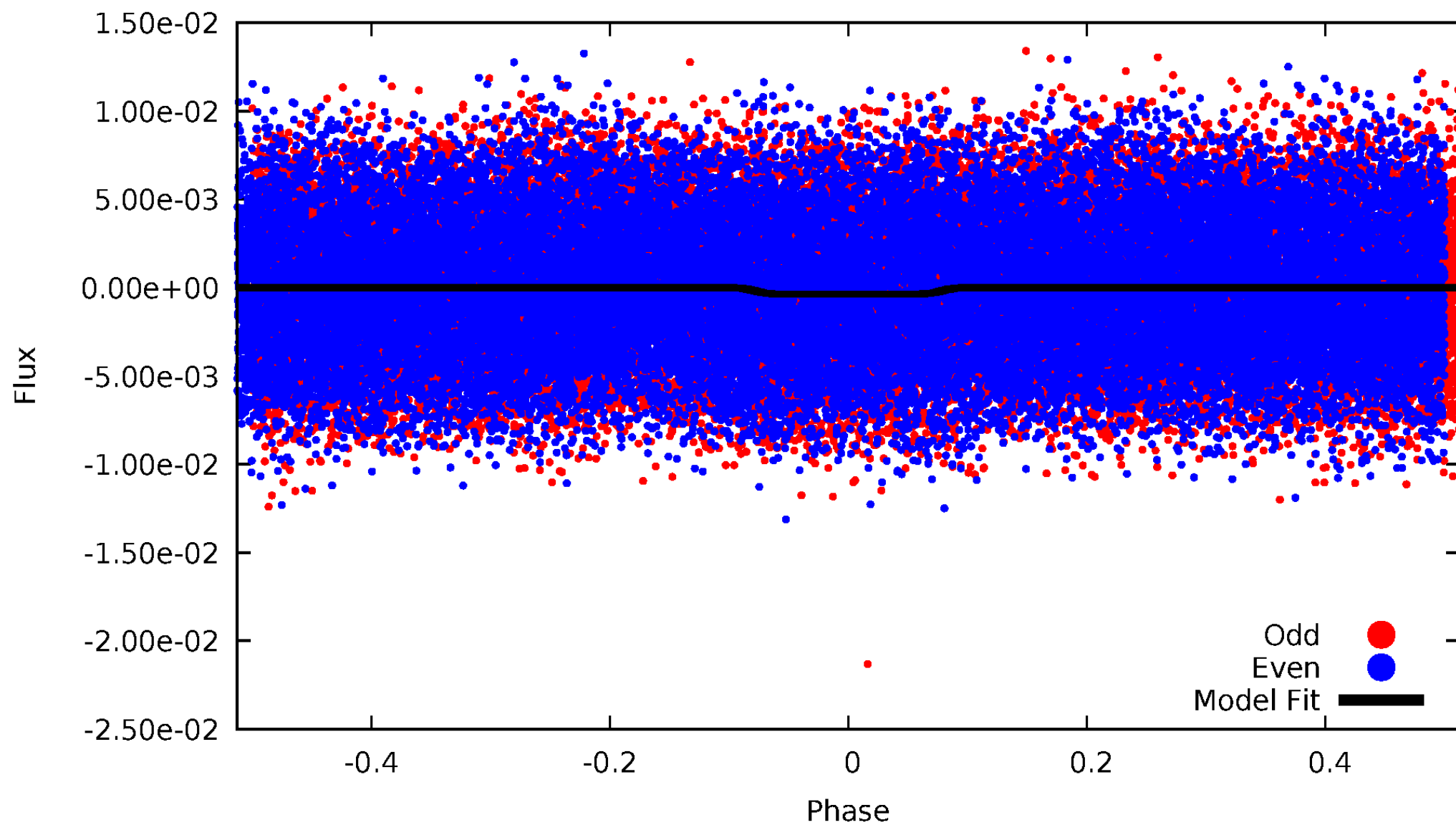
DV Odd/Even

TCE 003967268-01

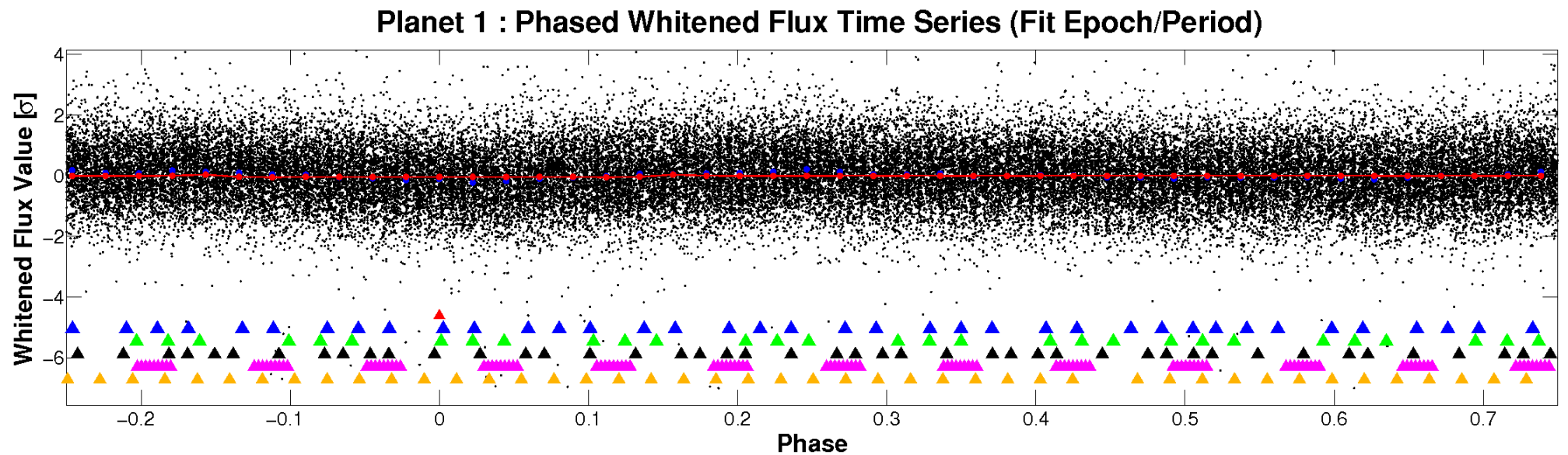
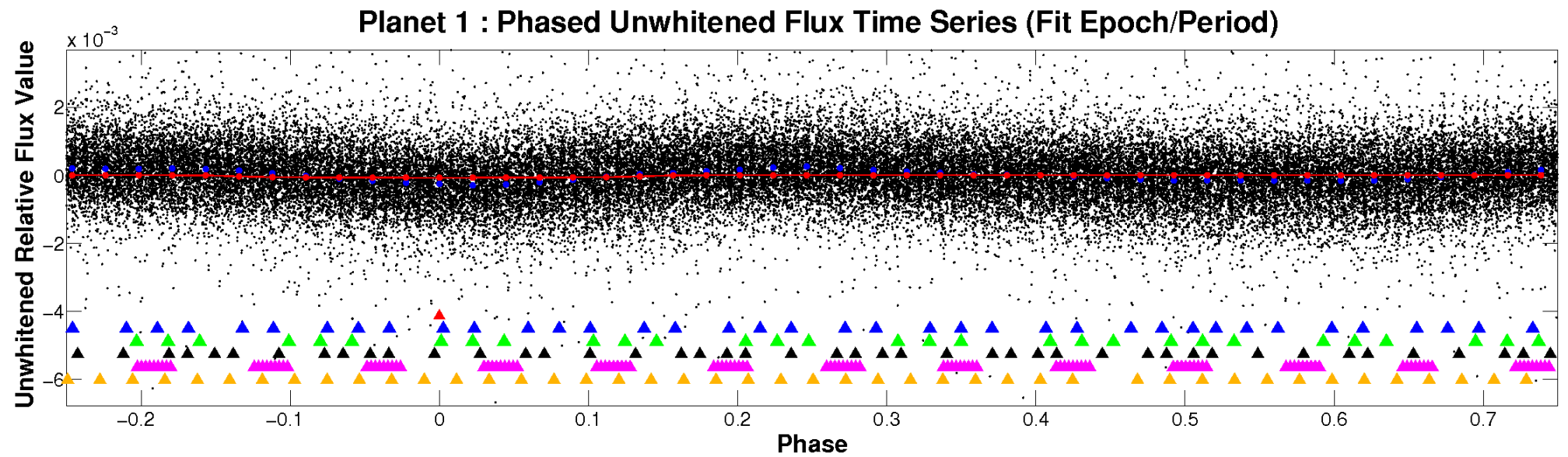


ALT Odd/Even

TCE 003967268-01

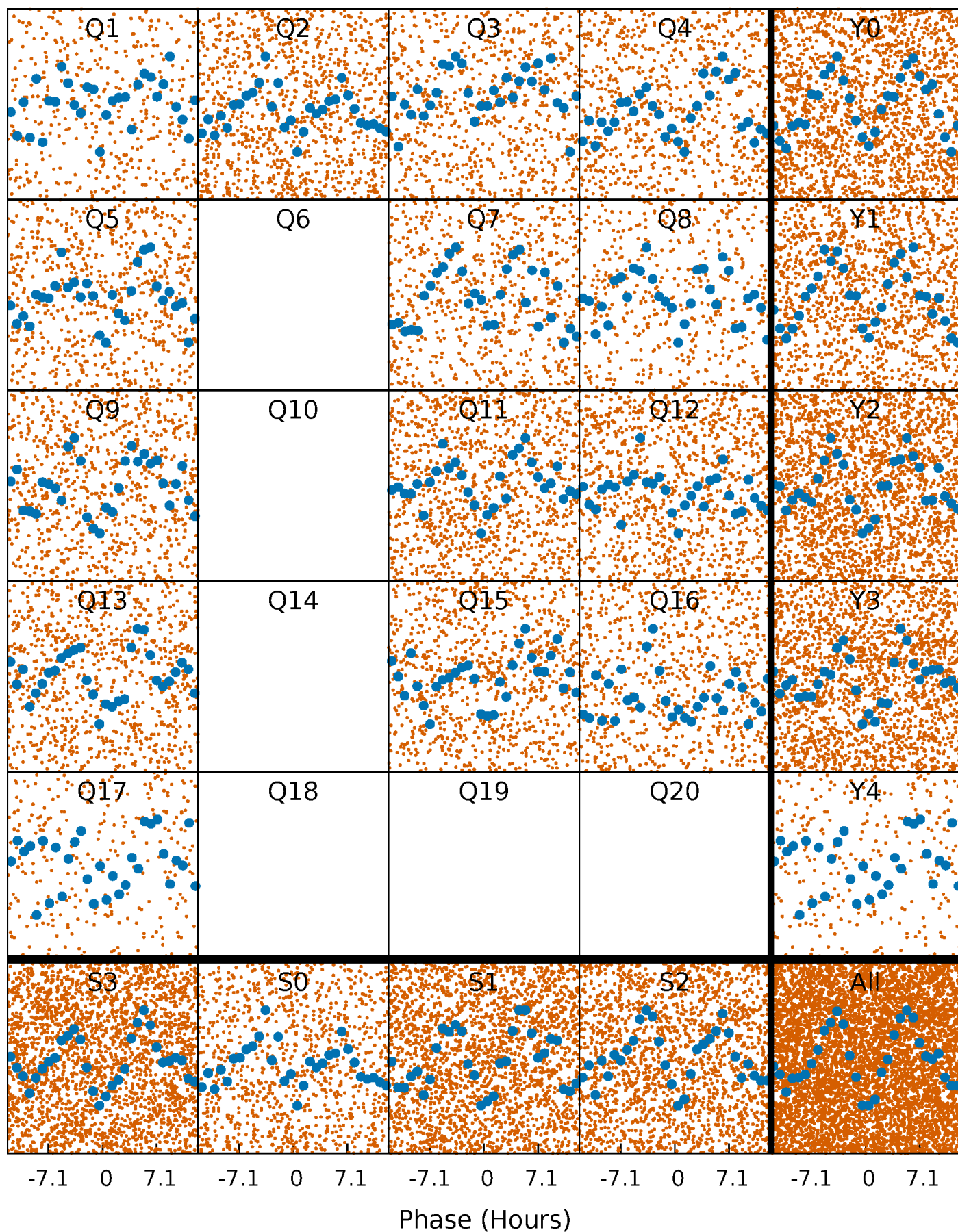


Non-Whitened Vs. Whitened Light Curve



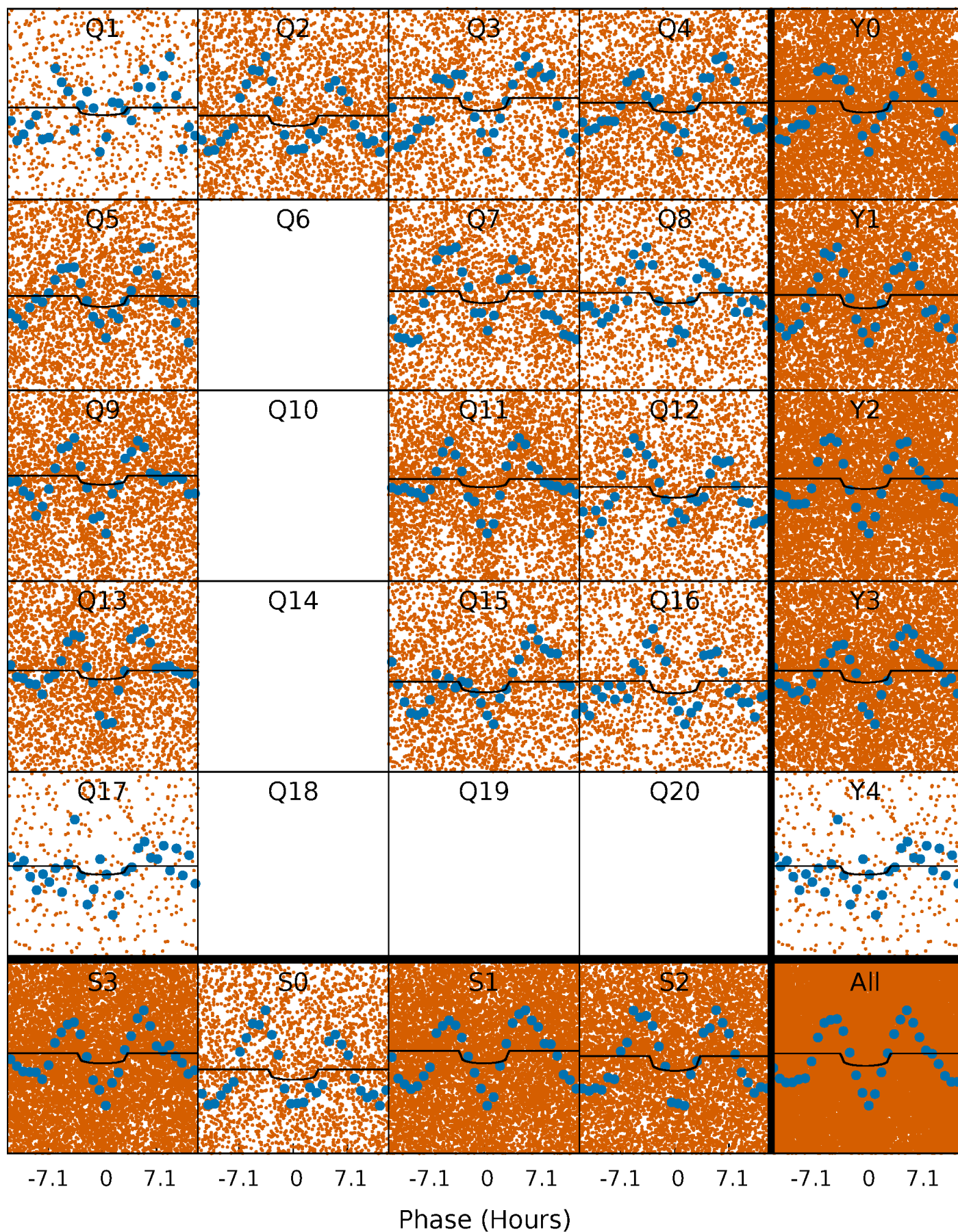
PDC Quarter-Phased Transit Curves

TCE 003967268-01 P= 0.912698 Days $T_0=131.581129$ (BKJD)



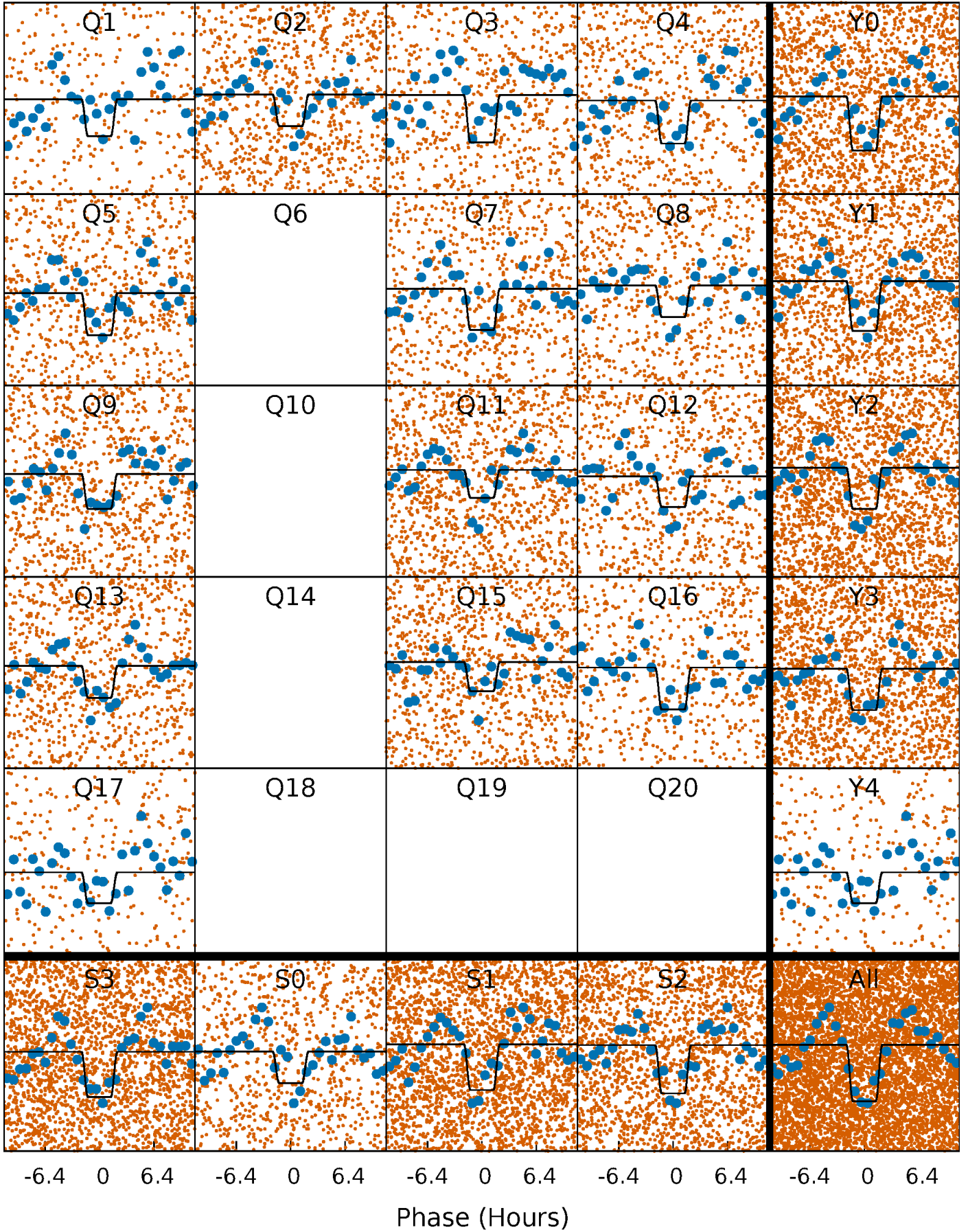
DV Quarter-Phased Transit Curves

TCE 003967268-01 P= 0.912698 Days $T_0=131.581129$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

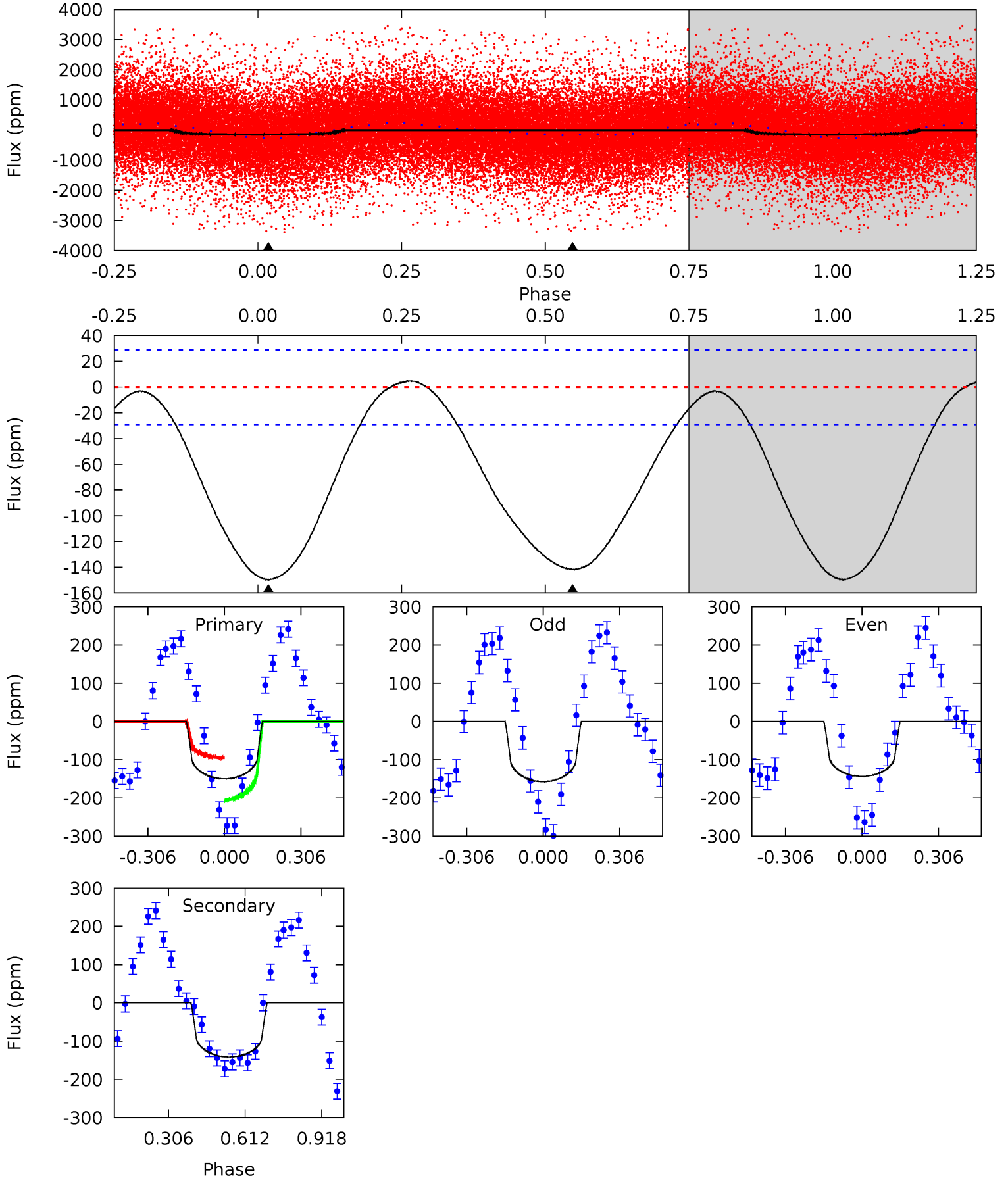
TCE 003967268-01 P= 0.912738 Days $T_0=131.562023$ (BKJD)



DV Model-Shift Uniqueness Test

003967268-01, P = 0.912698 Days, E = 130.668431 Days

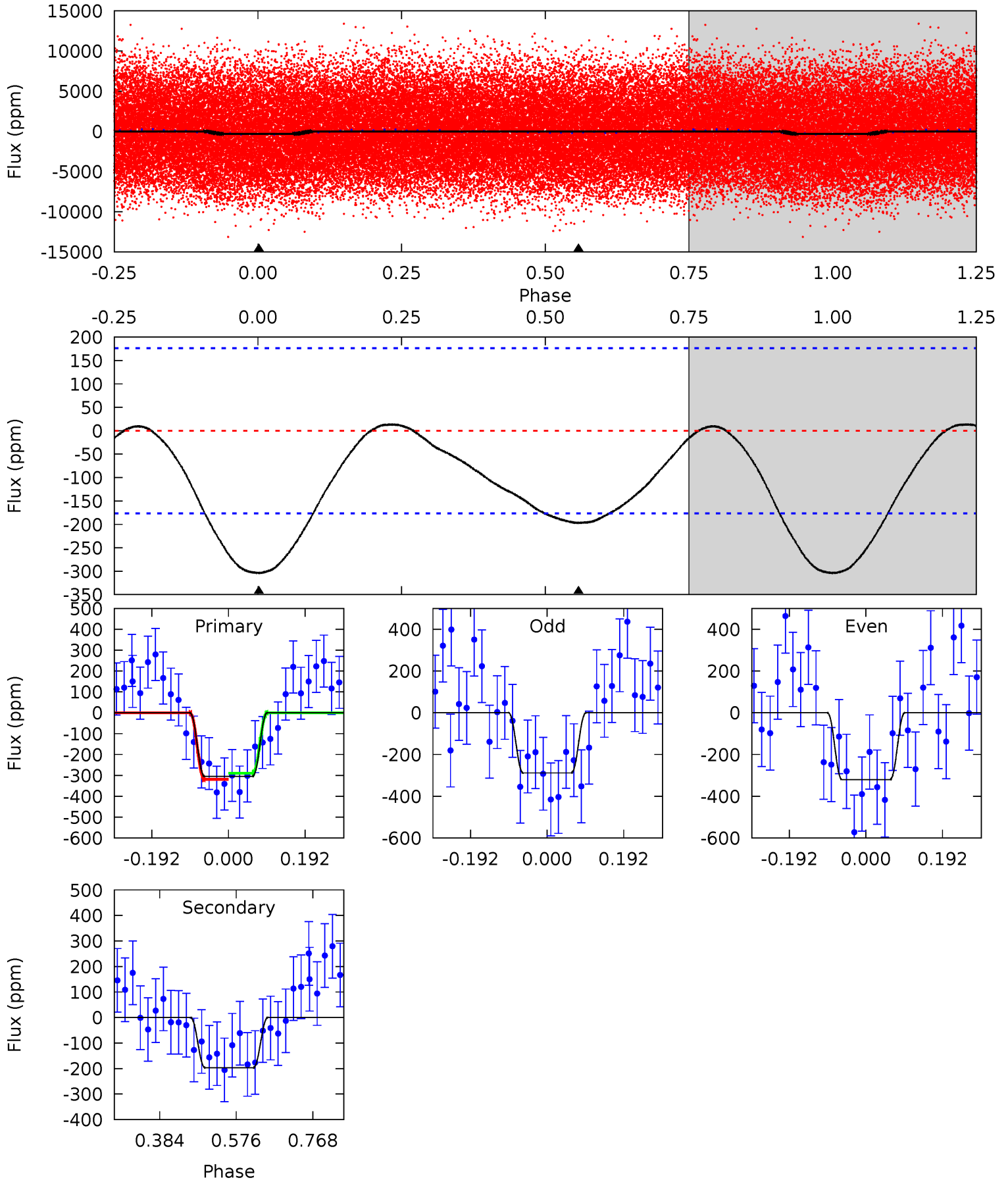
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.3	21.1	0	0	4.32	1.02	0.74	22.3	22.3	21.1	21.1	1.05	1.19	0.03	8.20



Alt Model-Shift Uniqueness Test

003967268-01, P = 0.912738 Days, E = 130.649285 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.64	4.94	0	0	4.43	1.30	0.66	7.64	7.64	4.94	4.94	0.40	0.89	0.04	0.36



Stellar Parameters For KIC 003967268

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7232^{+226}_{-302}	$3.895^{+0.315}_{-0.135}$	$-0.160^{+0.250}_{-0.350}$	$2.413^{+0.578}_{-0.866}$	$1.666^{+0.196}_{-0.364}$	$0.167^{+0.365}_{-0.064}$
	+3%/-4%	+8%/-3%	+156%/-219%	+24%/-36%	+12%/-22%	+218%/-39%
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 003967268-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-142 ± 7	$2.22^{+1.95}_{-1.35}$	4581^{+367}_{-432}	8201^{+11603}_{-2378}	$7.432^{+40.954}_{-5.332}$
Alt.	-197 ± 40	$4.45^{+2.16}_{-1.89}$	4575^{+352}_{-463}	5962^{+2305}_{-1114}	$2.502^{+5.388}_{-1.389}$

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 $A_{obs} \gg 1.0$

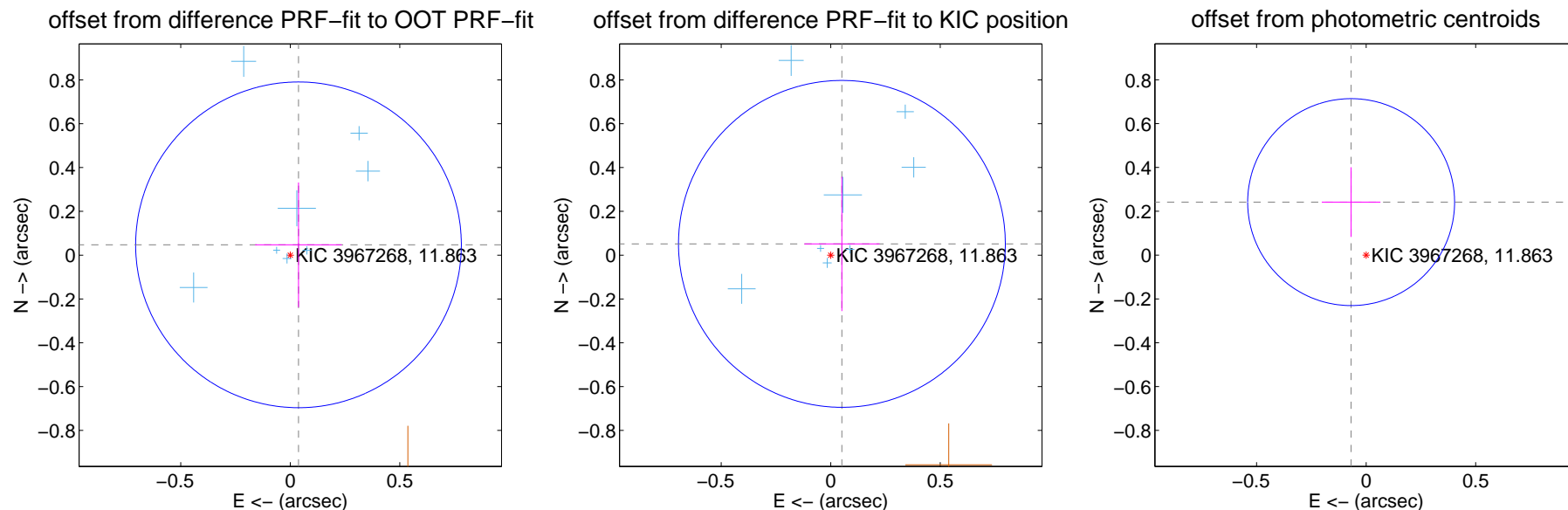
DV Centroid Data

Supplemental centroid analysis for 003967268-01. **Kepler magnitude: 11.86.** Transit SNR 5.99

There are 12 quarters with good PRF difference image offsets

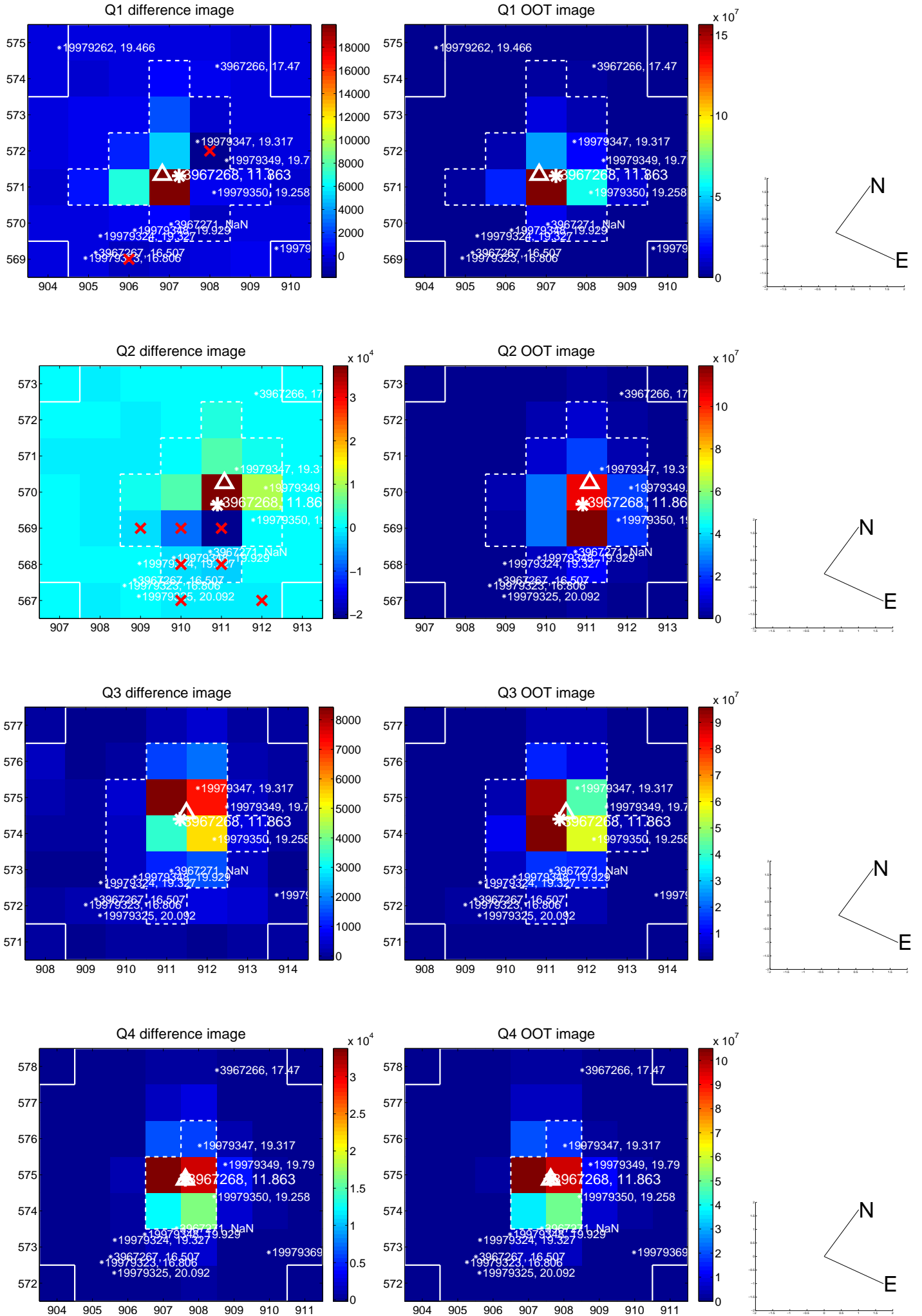
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.060 ± 0.248	0.24	-0.038 ± 0.198	0.047 ± 0.285
PRF-fit source offset from KIC position	0.073 ± 0.249	0.29	-0.051 ± 0.172	0.051 ± 0.307
photometric centroid source offset	0.25 ± 0.16	1.60	0.07 ± 0.13	0.24 ± 0.16

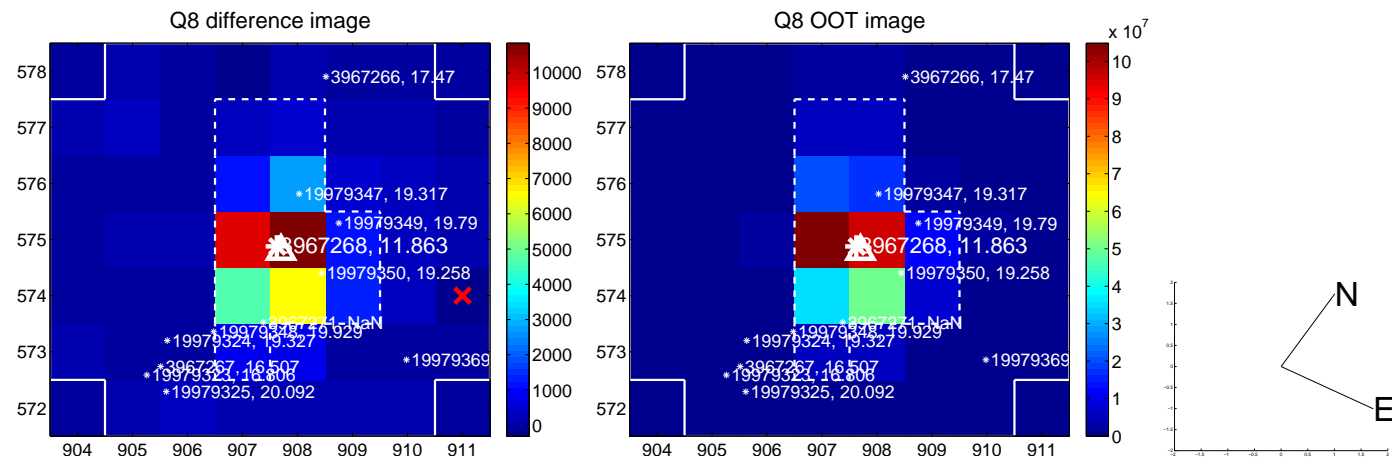
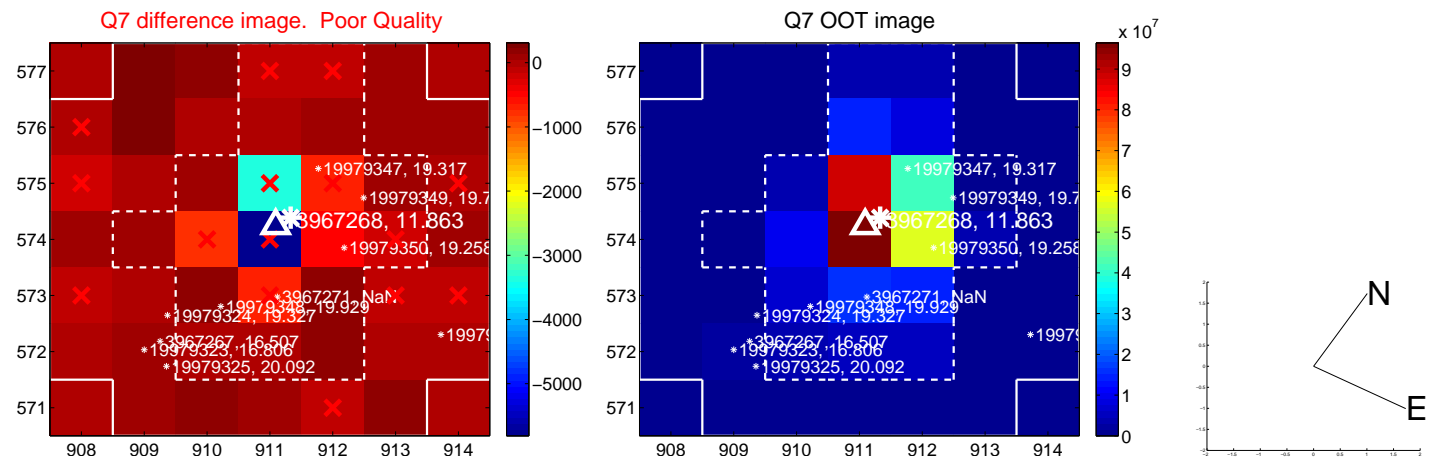
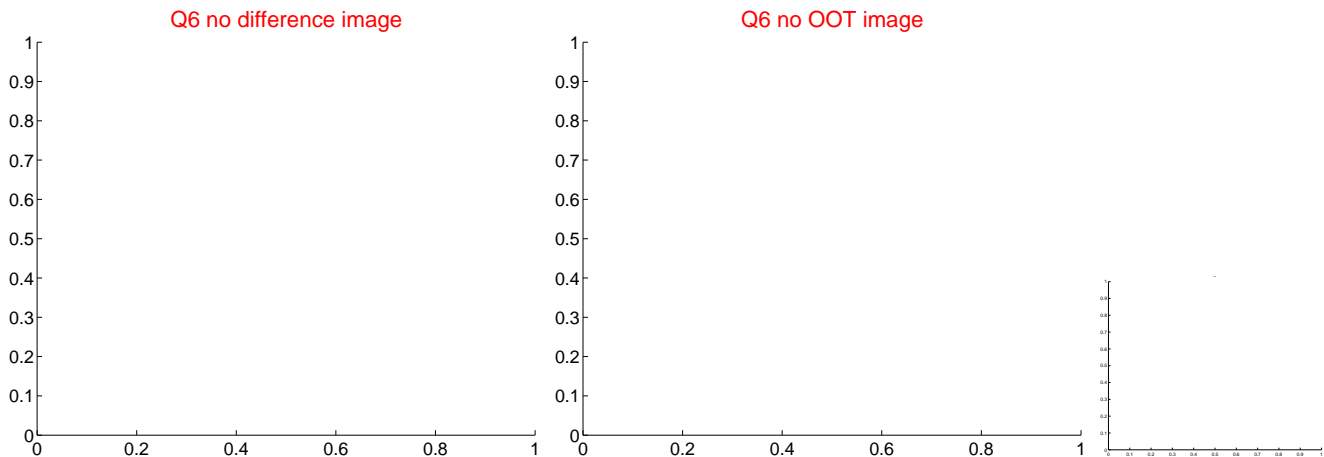
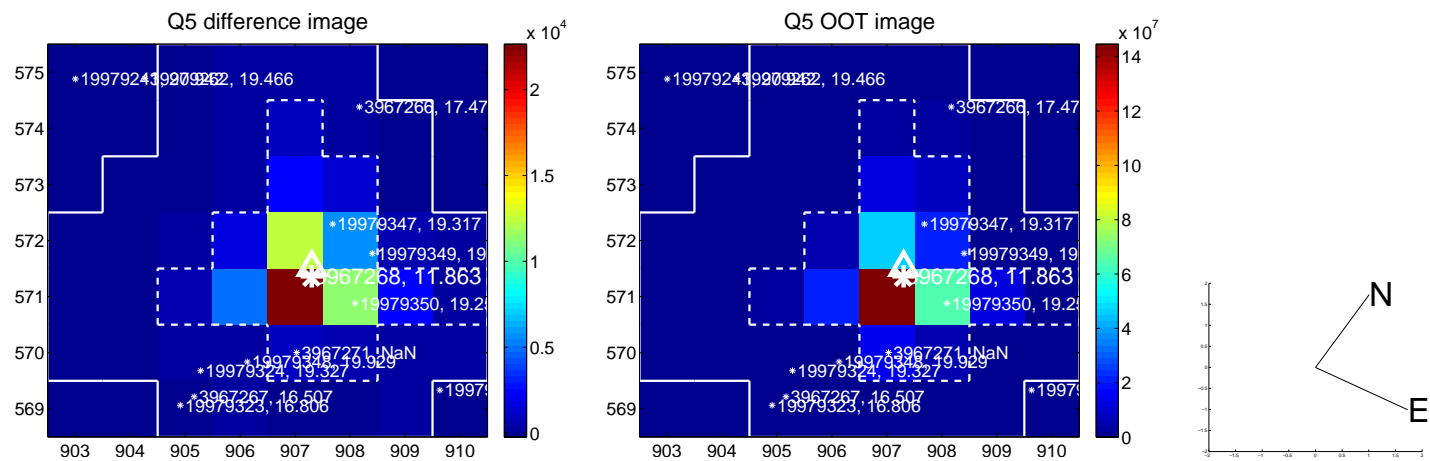


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

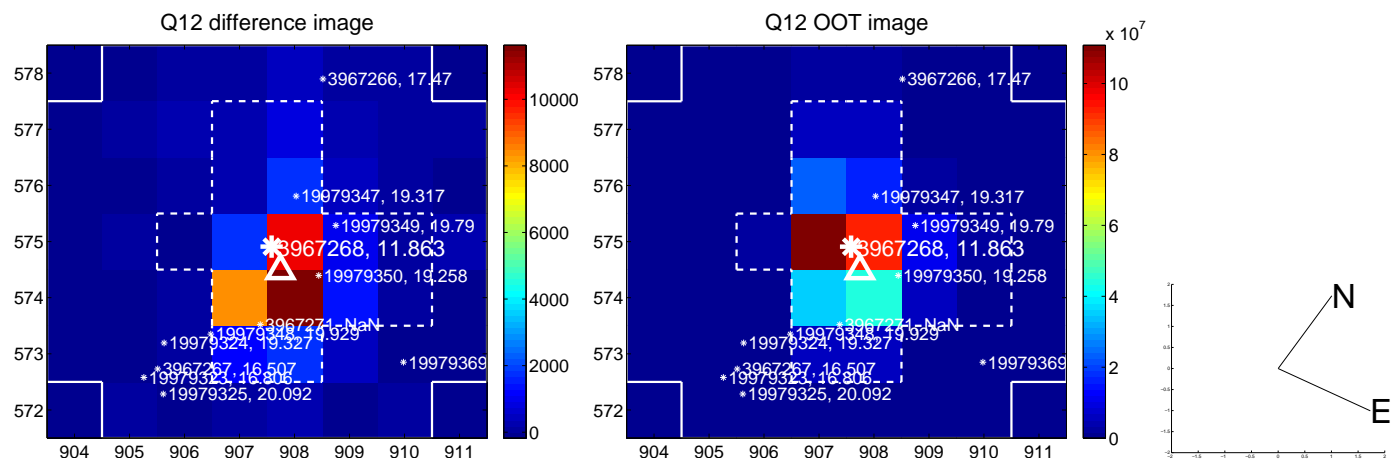
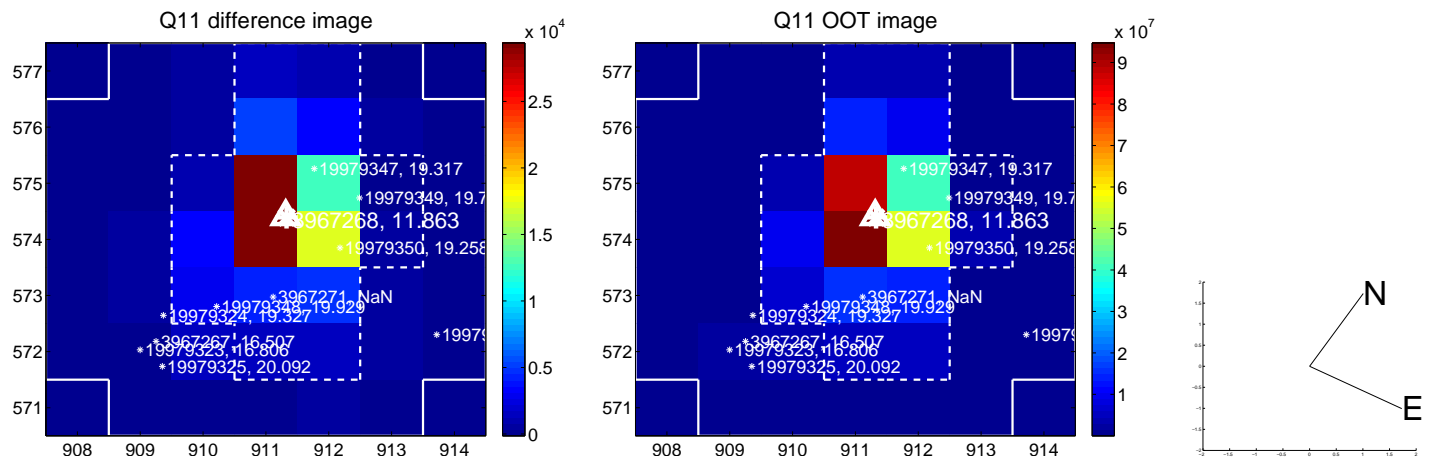
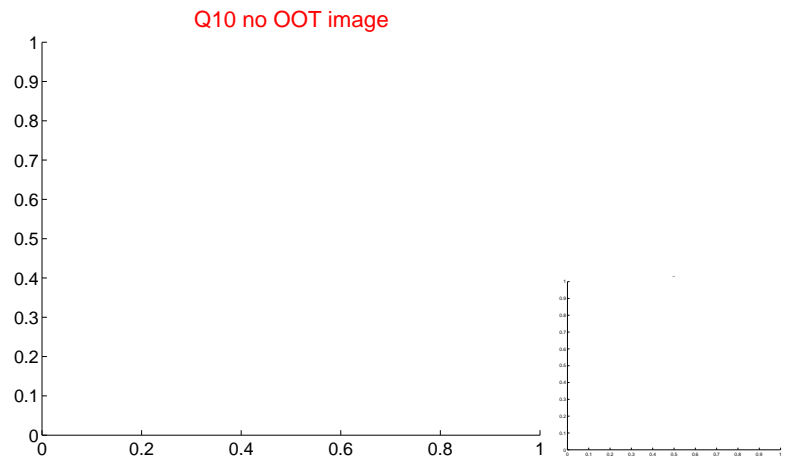
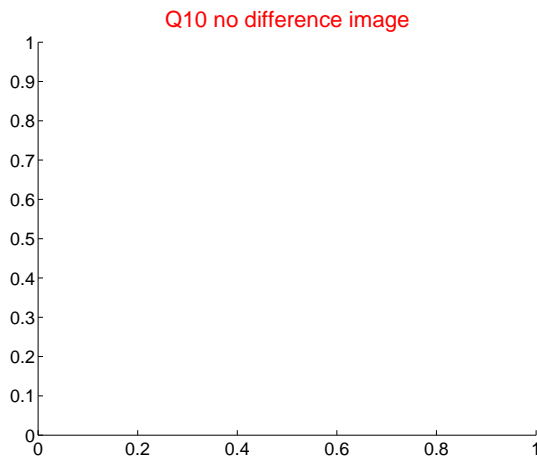
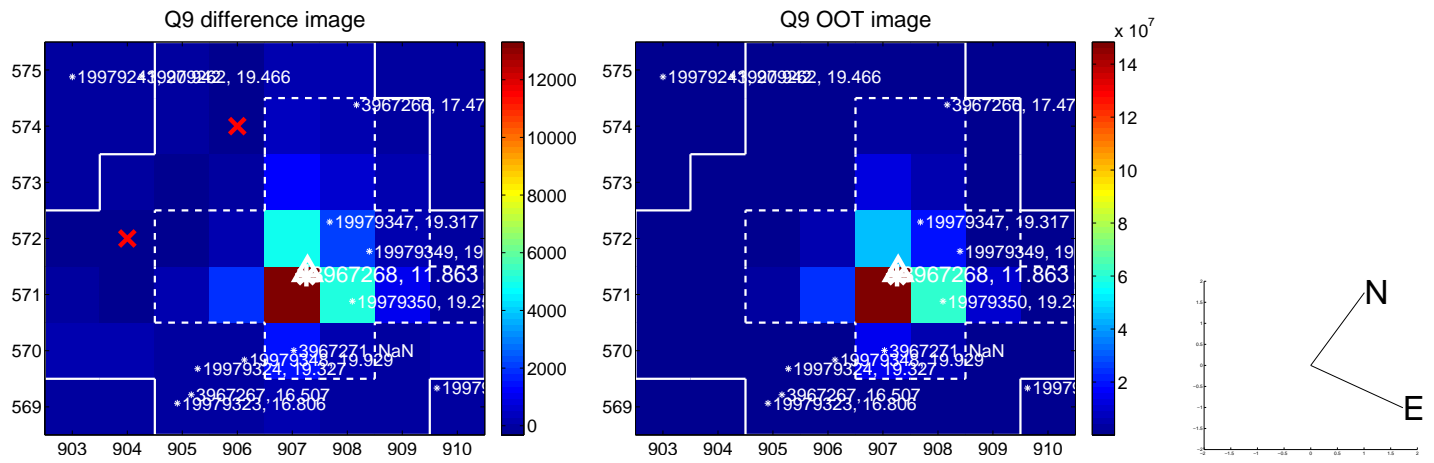
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



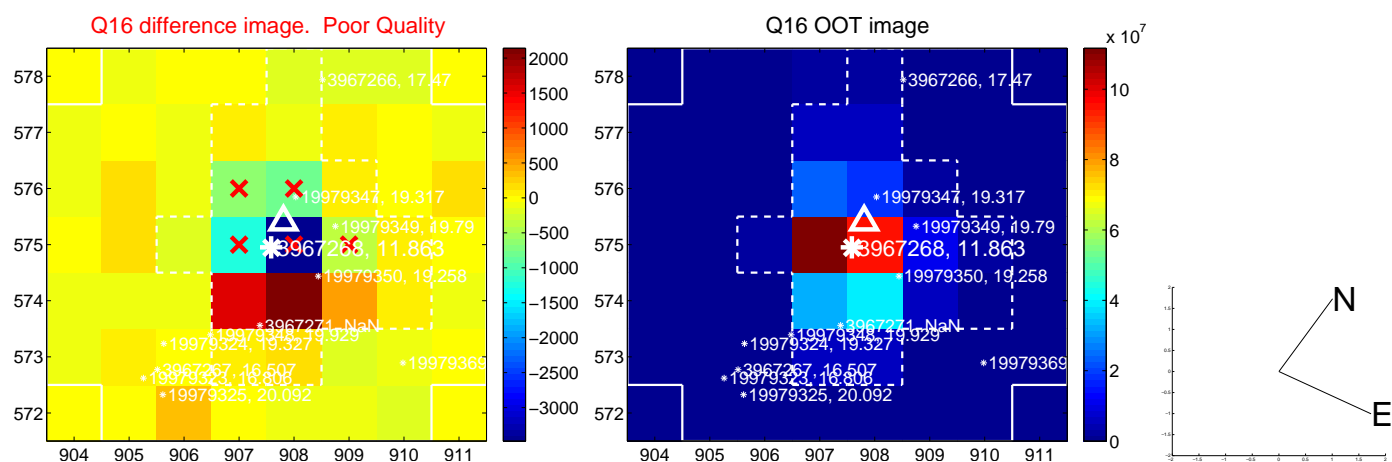
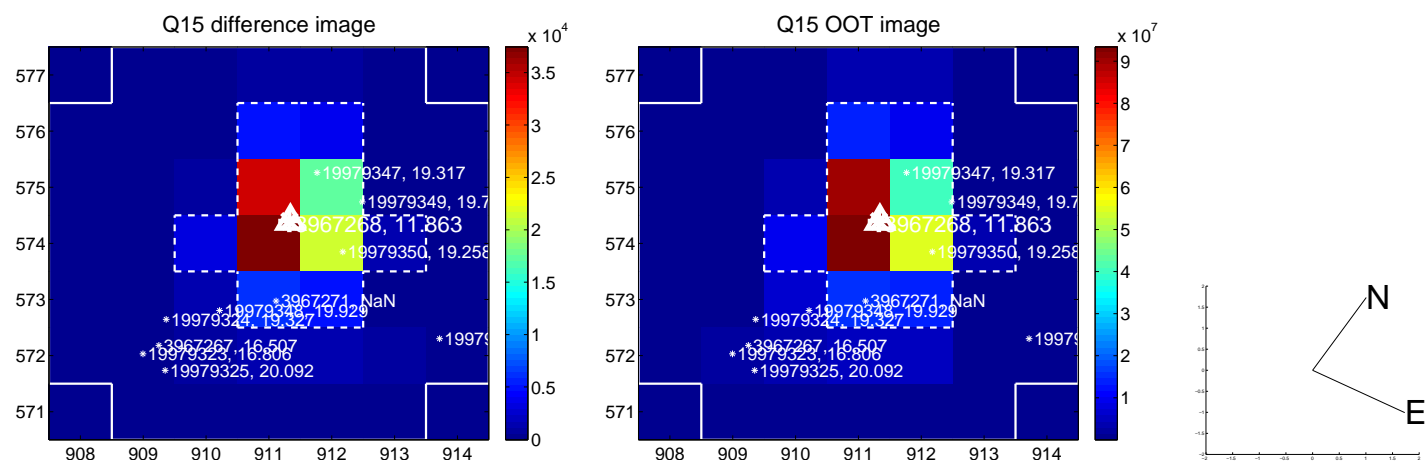
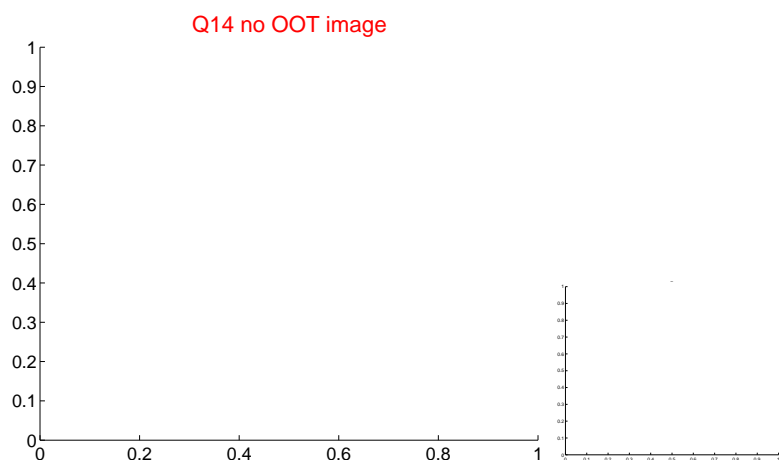
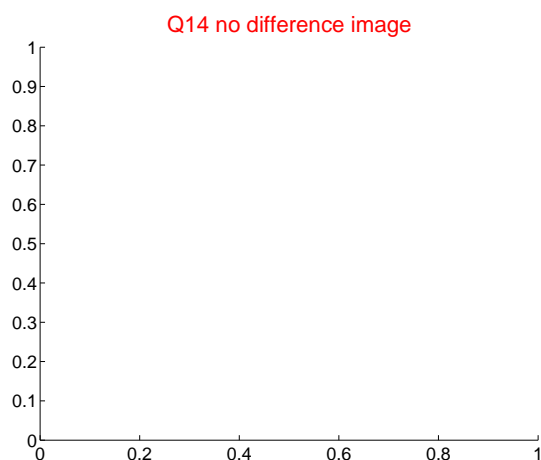
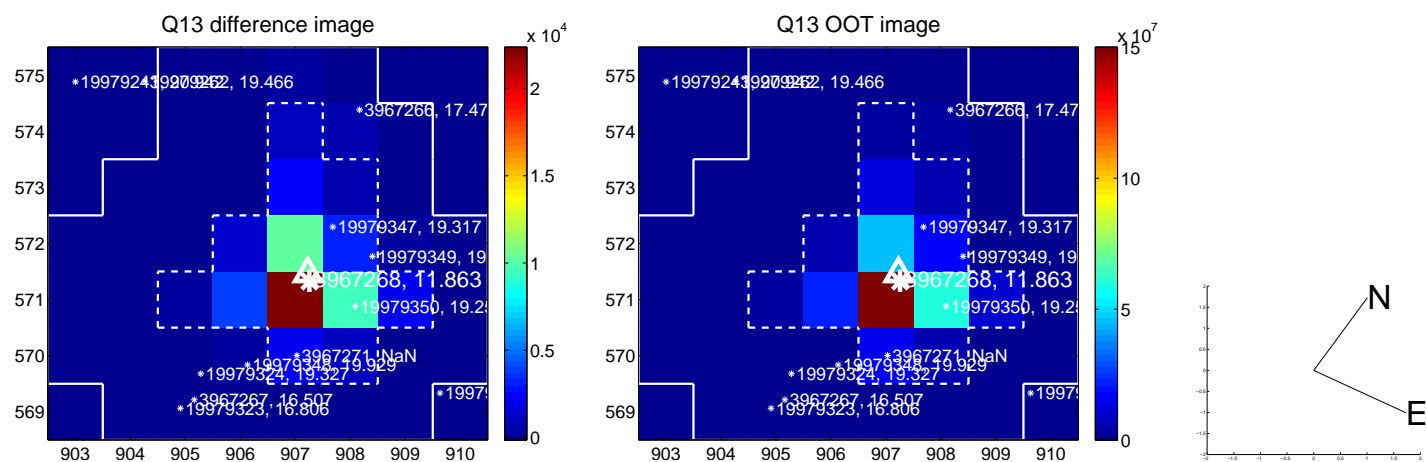
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



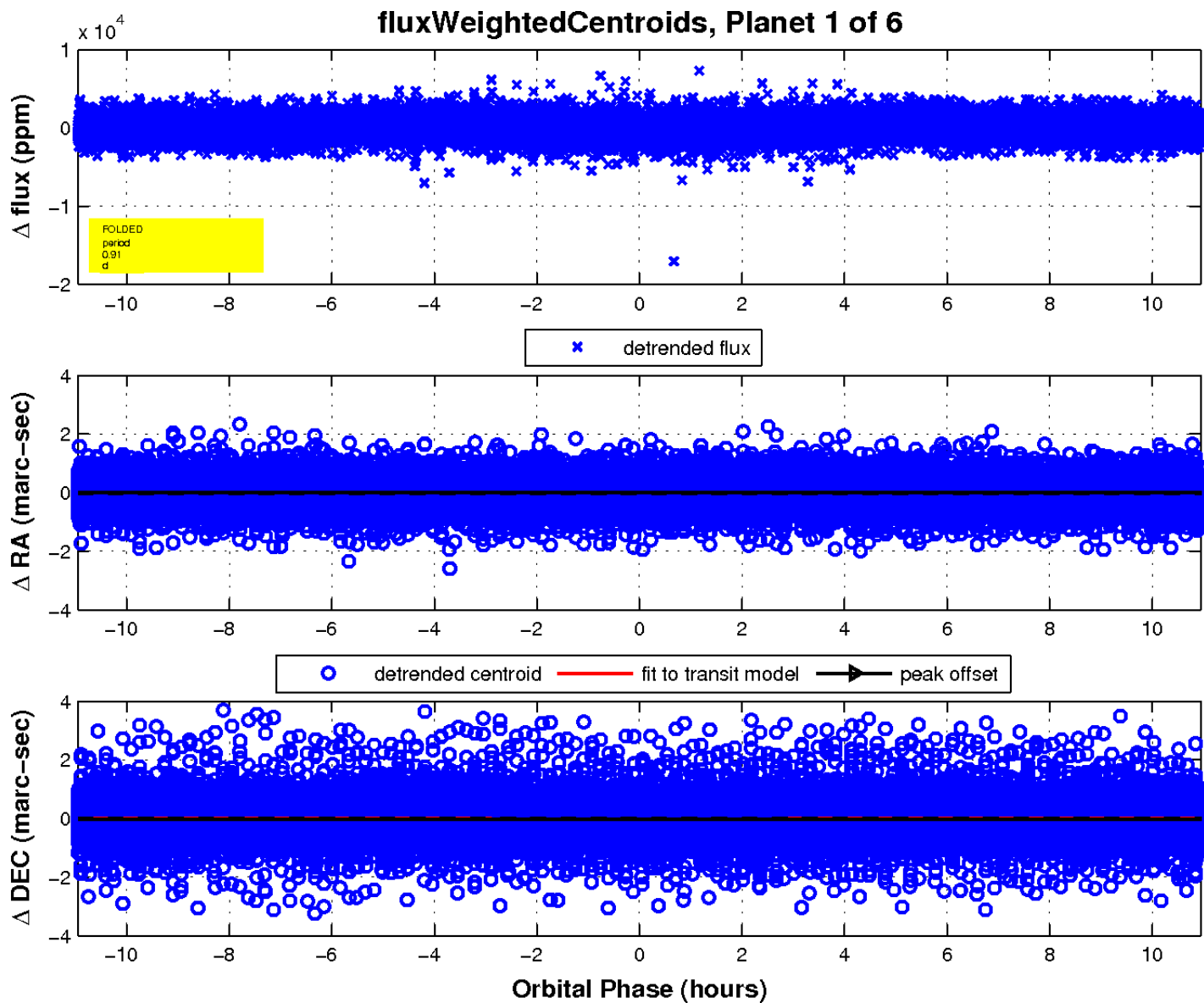
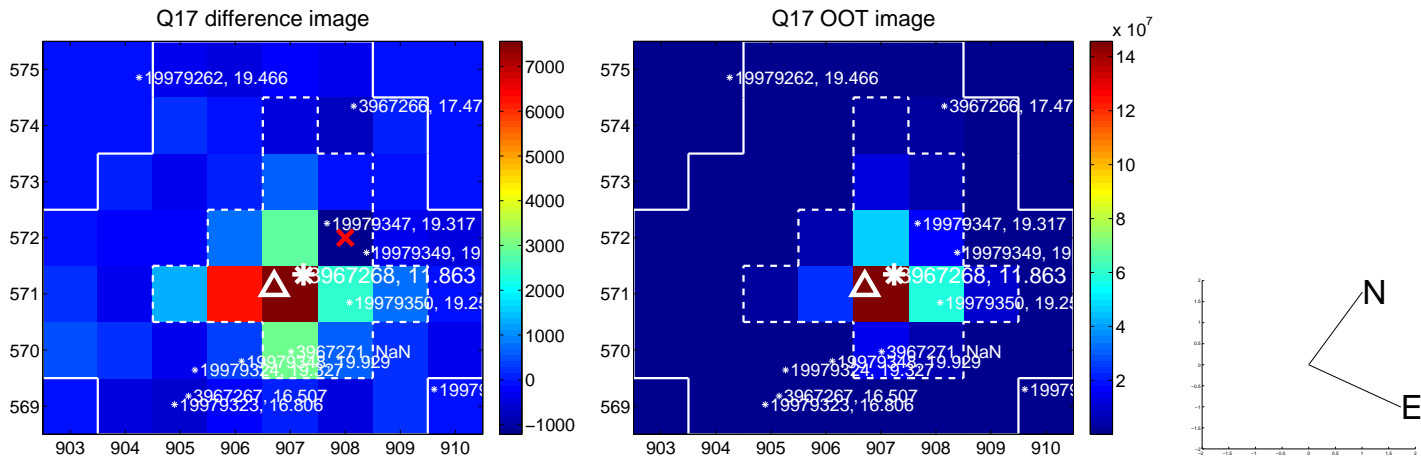
white \times : KIC target position; $+$: OOT centroid; Δ : difference centroid. red \times : large negative pixel value.



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

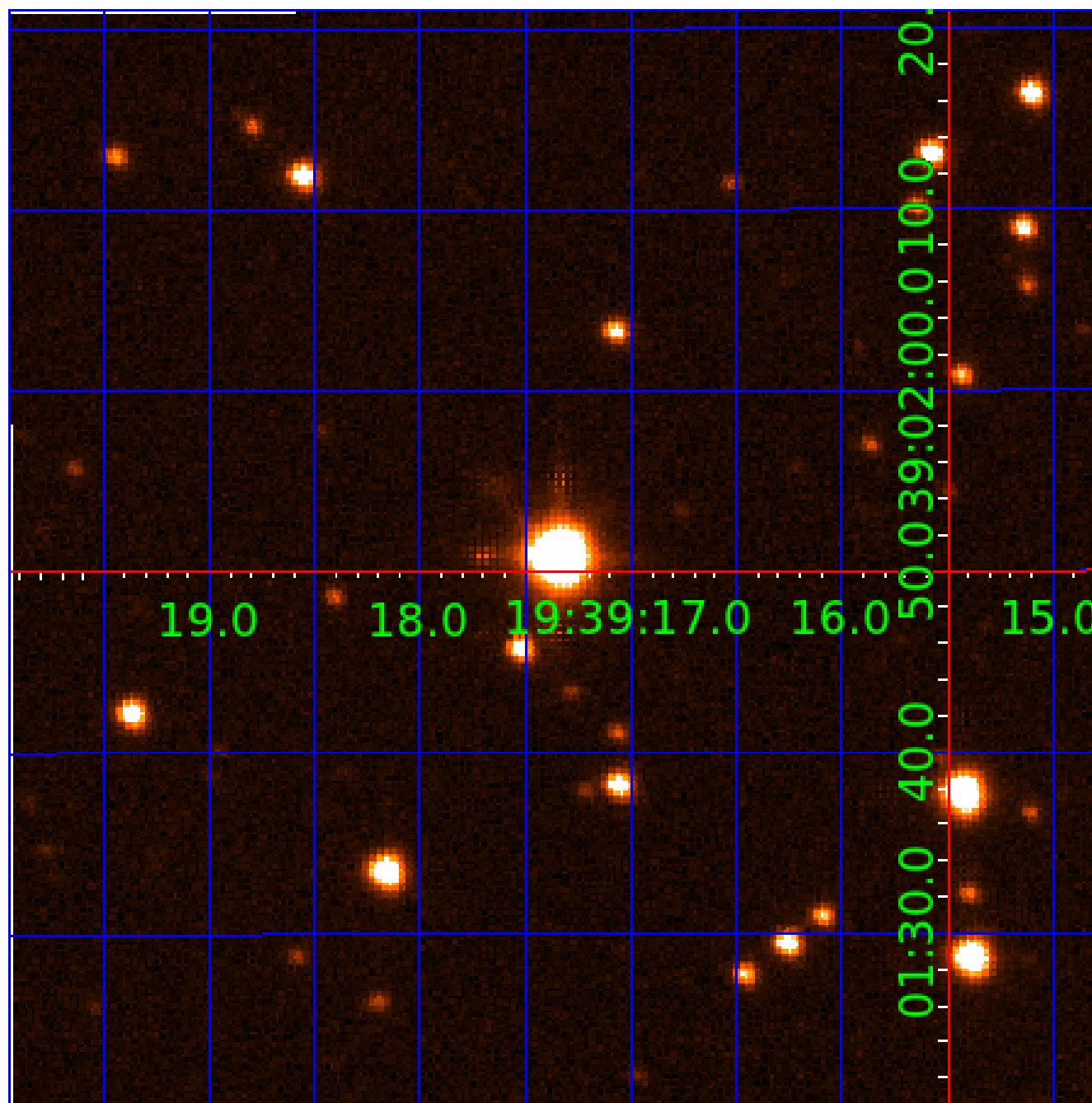


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 003967268

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})
003967268-01	OBS	No	0.912698	131.581129	69.7	6.249	11.5	6.0	2.41	7232	2.04	29913.25
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Robovetter Results

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003967268-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
003967268-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
003967268-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
003967268-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

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

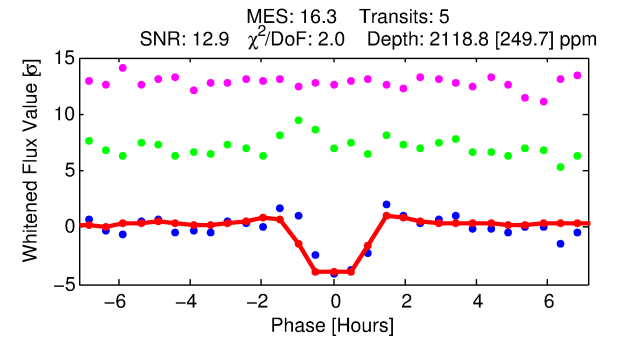
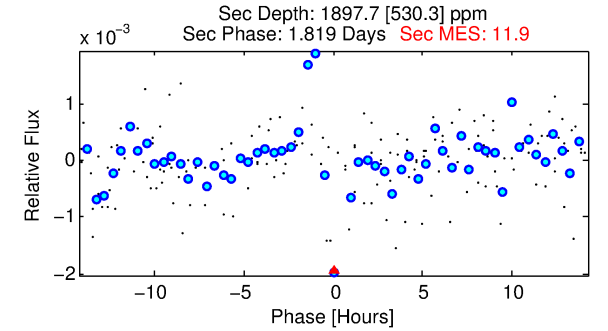
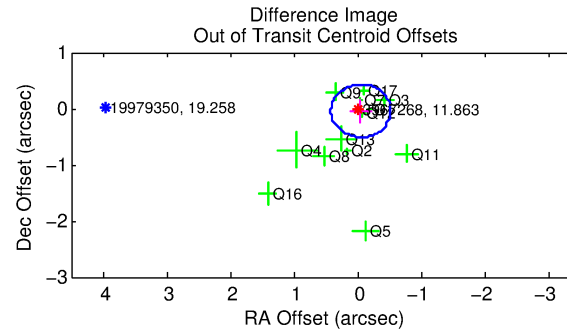
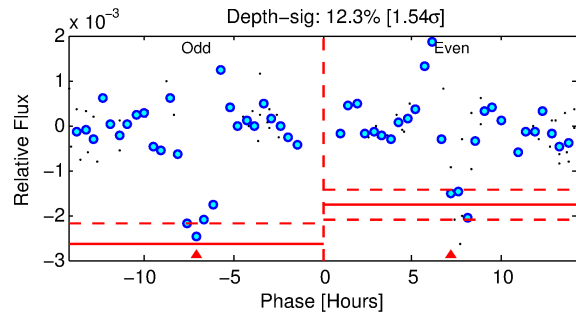
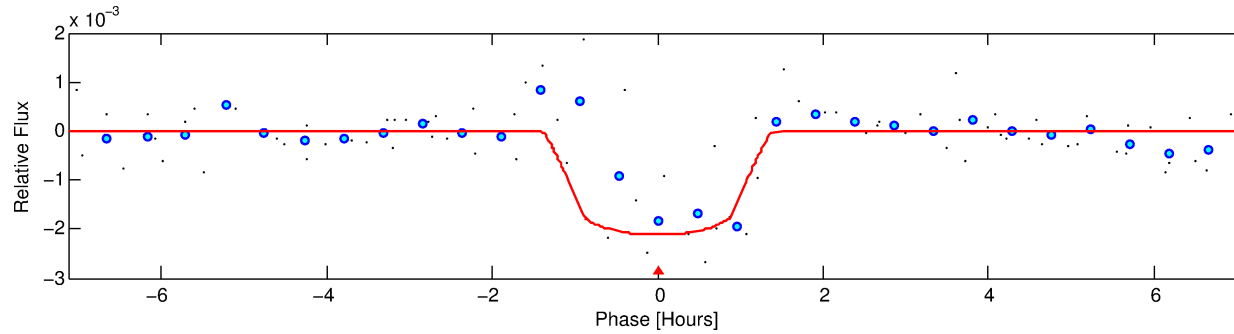
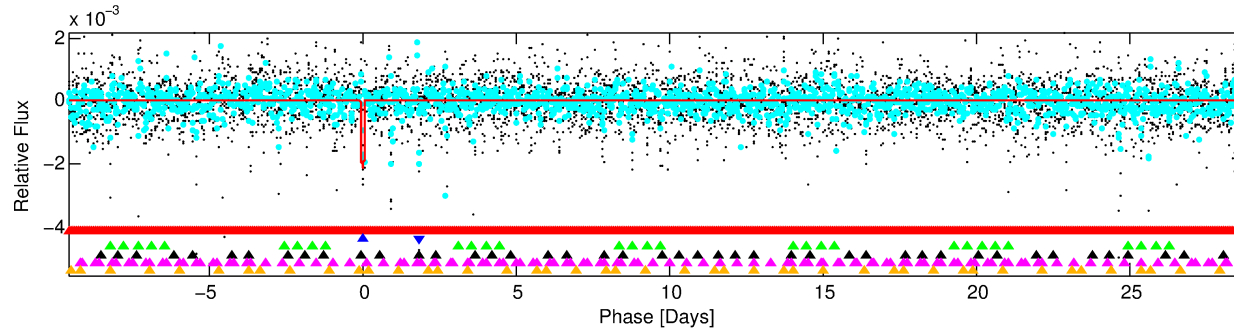
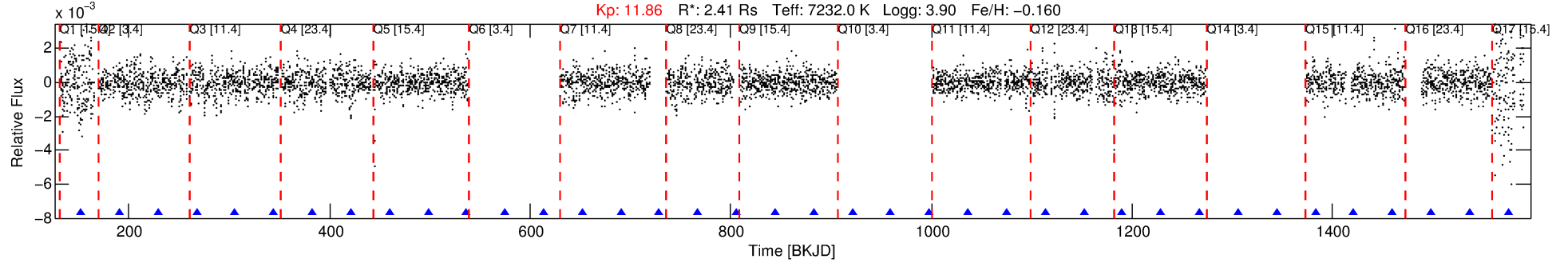
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003967268-02

No Significant Match Found

DV One-Page Summary

KIC: 3967268 Candidate: 2 of 6 Period: 38.456 d



DV Fit Results:

Period = 38.45627 [0.00024] d
Epoch = 152.1357 [0.0049] BKJD
Rp/R* = 0.0427 [0.0508]
a/R* = 128.70 [849.44]
b = 0.06 [110.98]
Seff = 204.02 [115.22]
Teq = 964 [136] K
Rp = 11.23 [13.98] Re
a = 0.2645 [0.0900] AU
Ag = 578.96 [1424.19] [0.41 σ]
Teffp = 7309 [4396] K [1.44 σ]

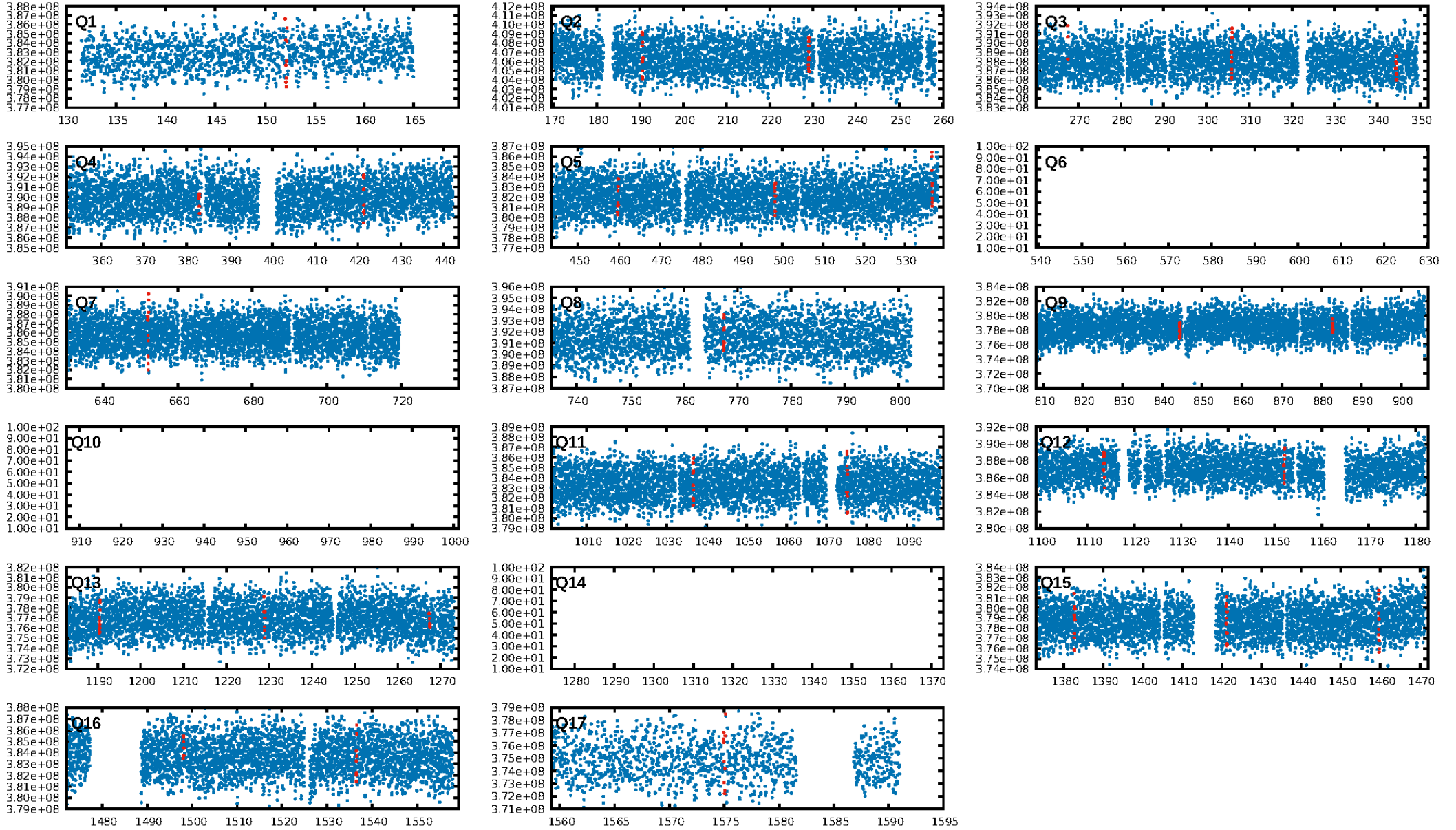
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [8.45 σ]
LongPeriod-sig: 100.0% [89.90 σ]
ModelChiSquare2-sig: 2.6%
ModelChiSquareGof-sig: 63.9%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -0.004635
Centroid-sig: 0.1%
Centroid-so: 0.143 arcsec [2.97 σ]
OotOffset-rm: 0.067 arcsec [0.43 σ]
KicOffset-rm: 0.074 arcsec [0.49 σ]
OotOffset-st: 1/3/4/5 [13]
KicOffset-st: 1/3/4/5 [13]
DiffImageQuality-fgm: 0.62 [8/13]
DiffImageOverlap-fno: 0.14 [2/14]

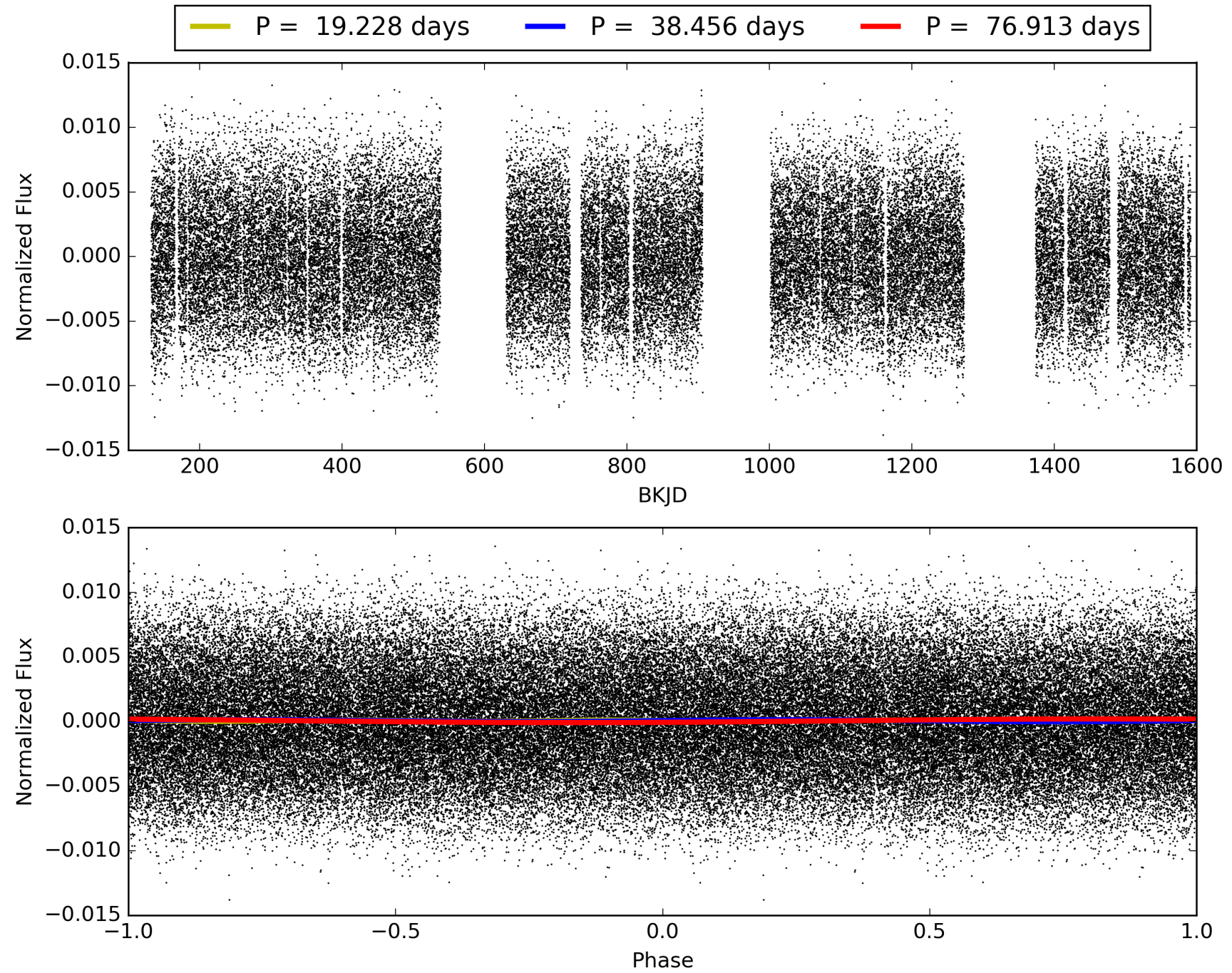
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:24:27 Z

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

TCE 003967268-02, PDC Light Curves

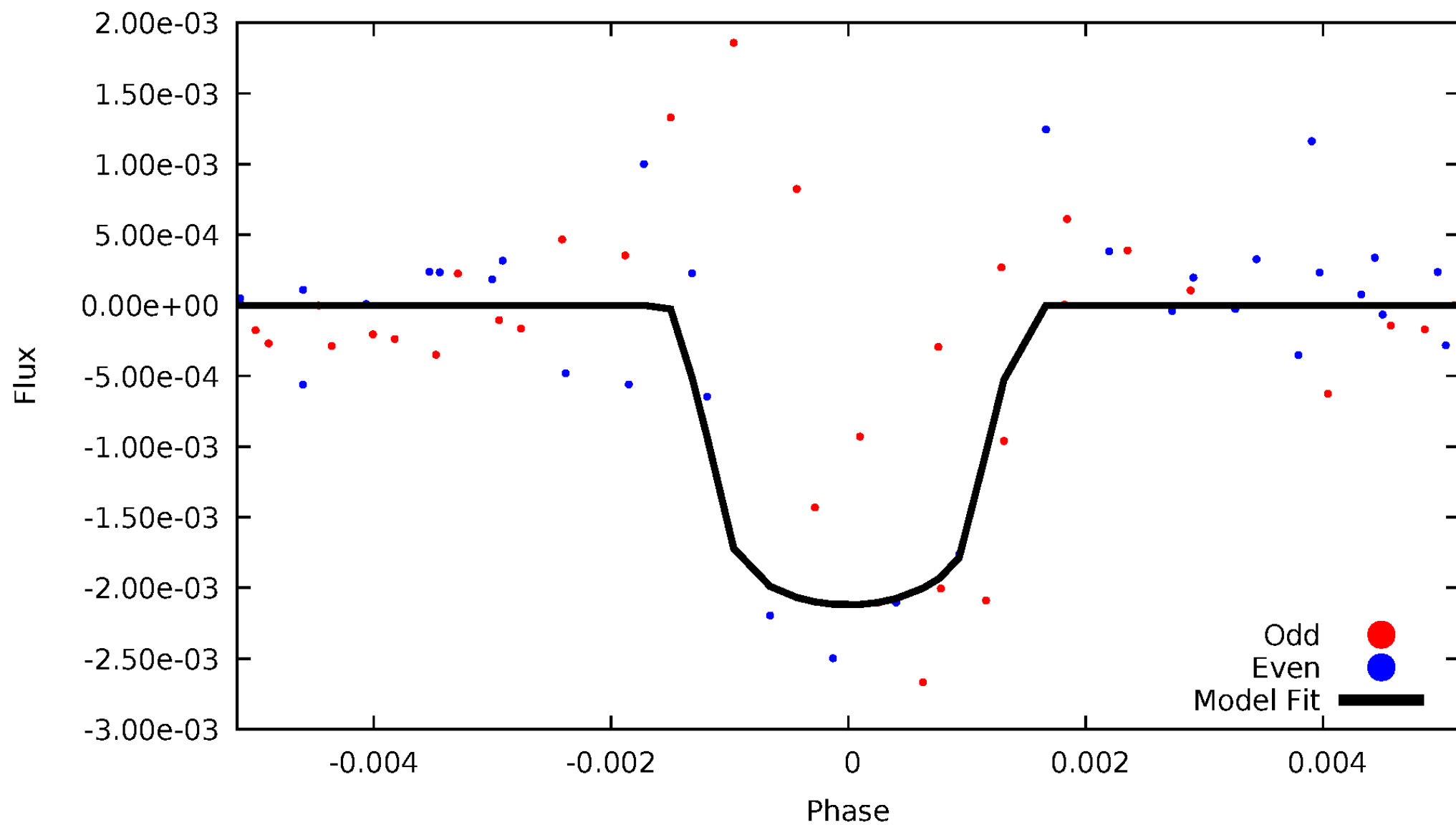


TCE 003967268-02



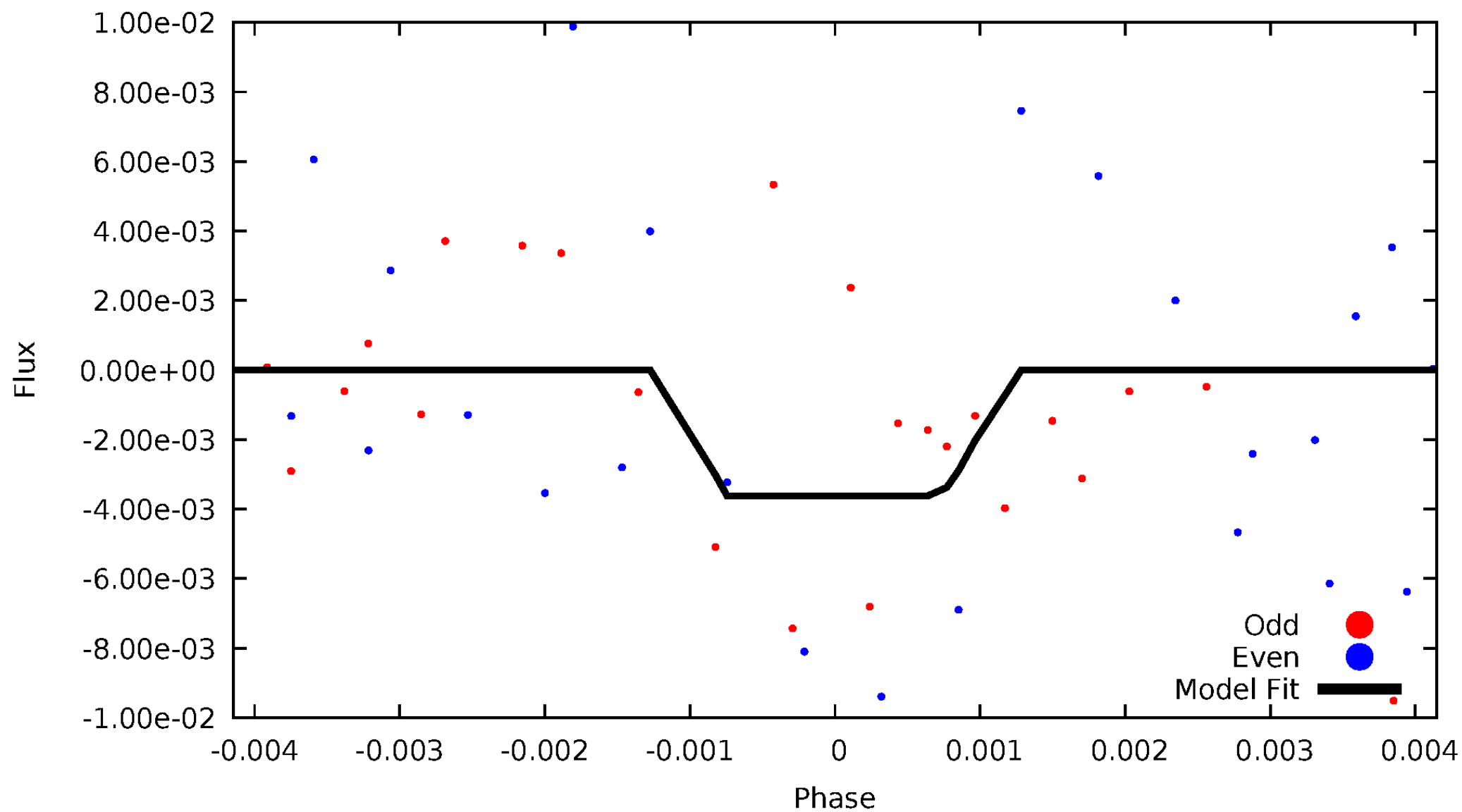
DV Odd/Even

TCE 003967268-02



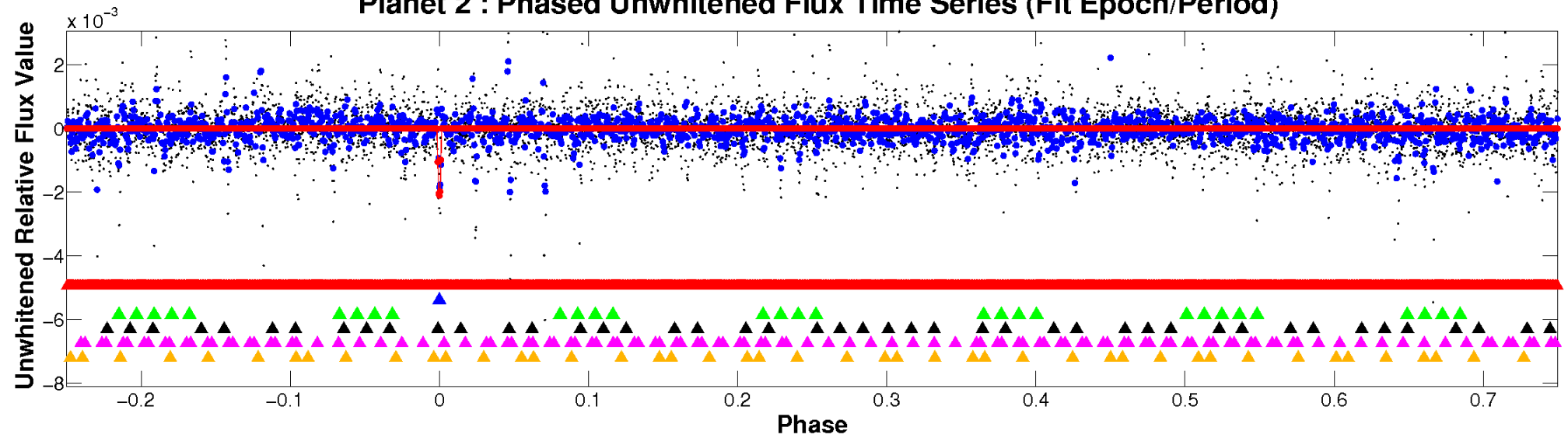
ALT Odd/Even

TCE 003967268-02

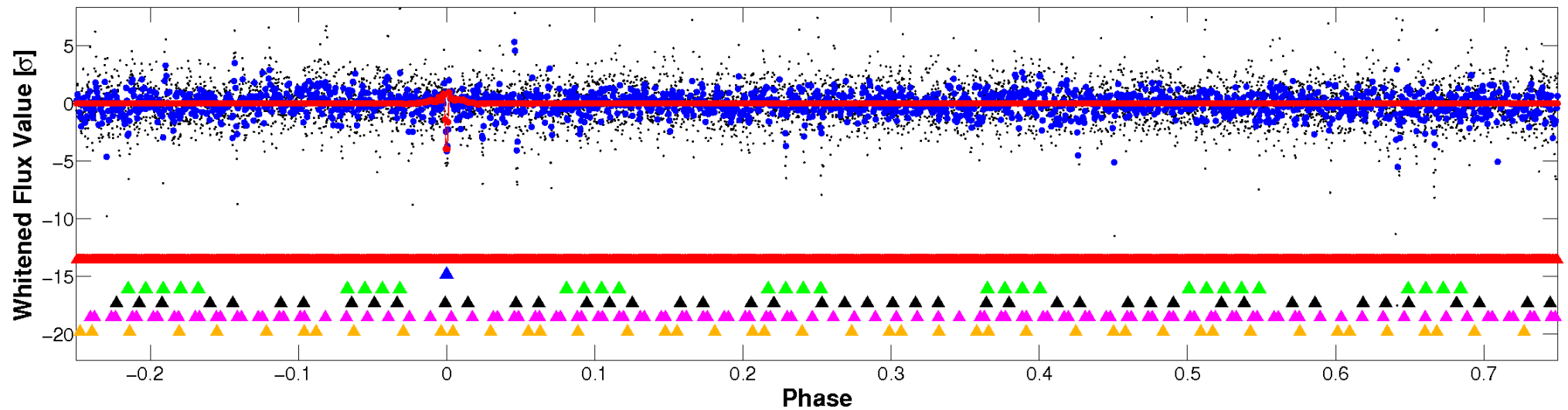


Non-Whitened Vs. Whitened Light Curve

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

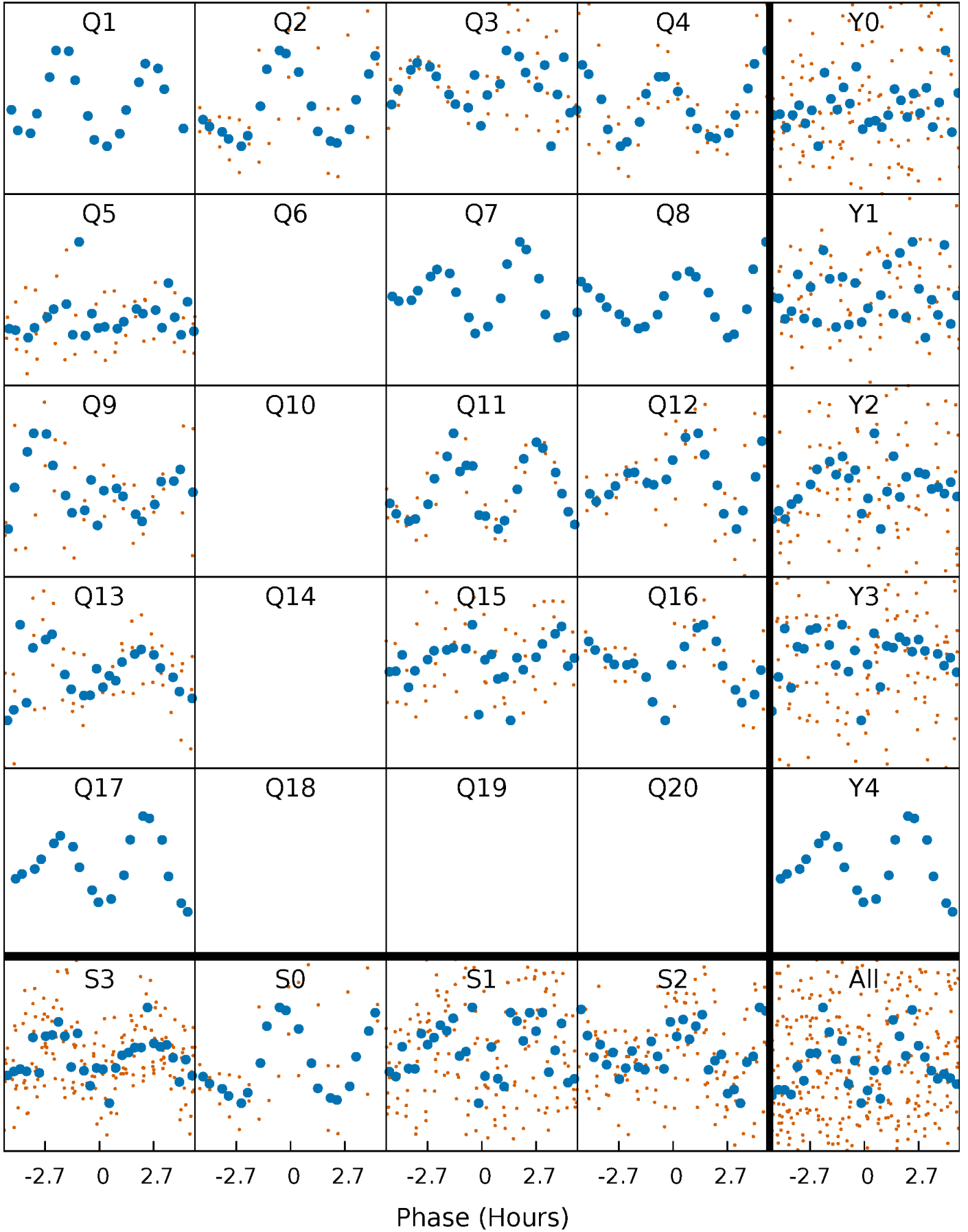


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



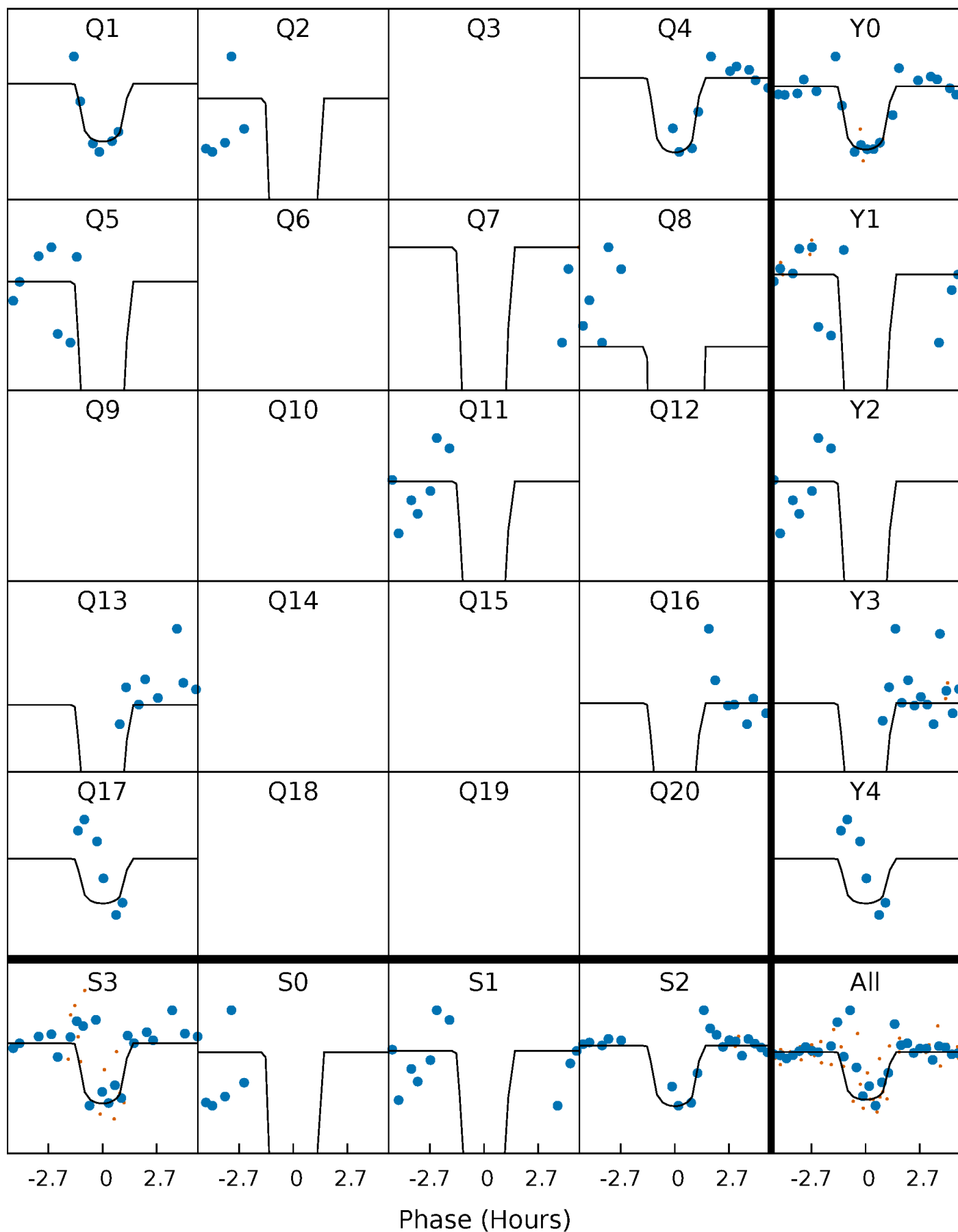
PDC Quarter-Phased Transit Curves

TCE 003967268-02 P= 38.456267 Days $T_0=152.135736$ (BKJD)



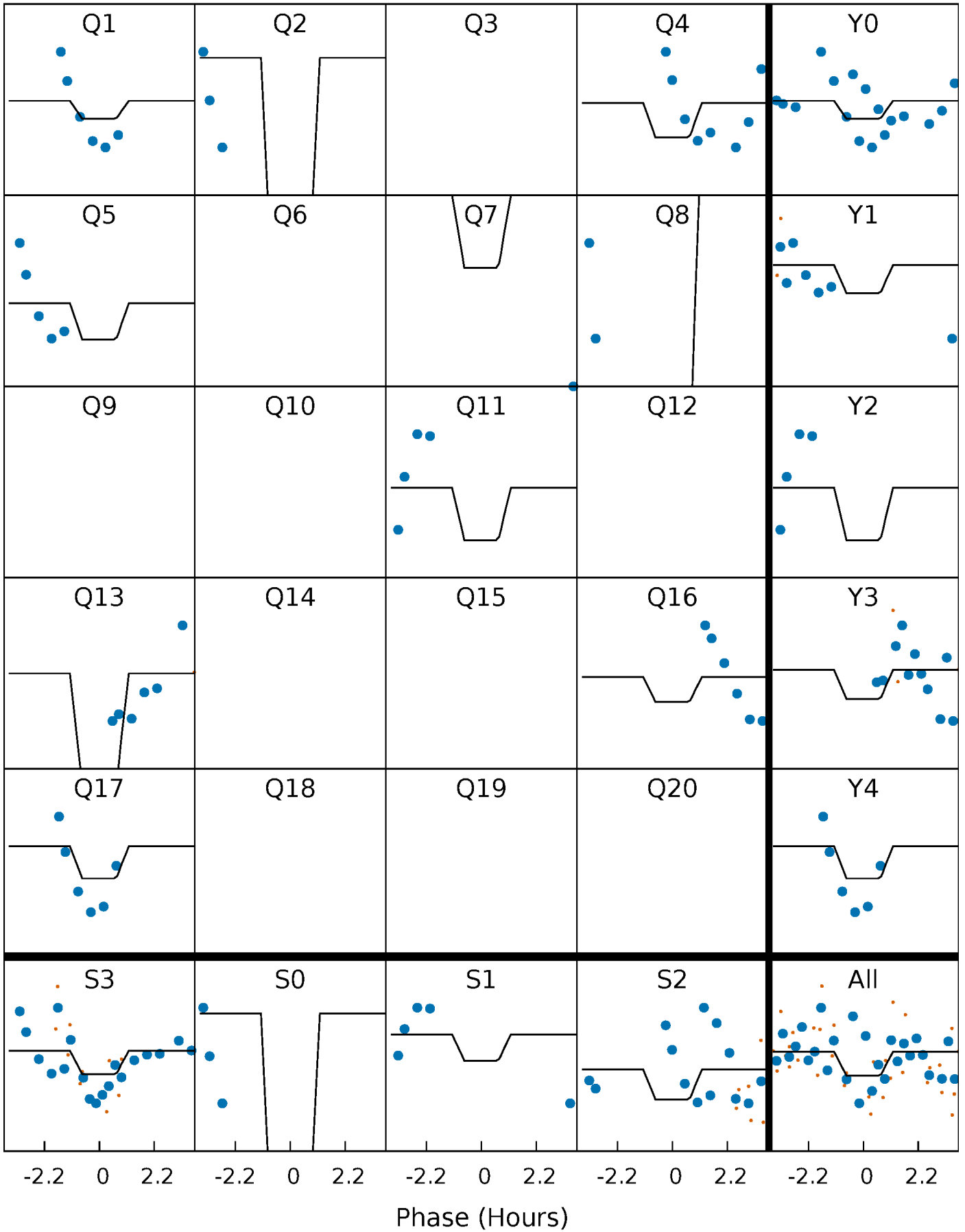
DV Quarter-Phased Transit Curves

TCE 003967268-02 P= 38.456267 Days $T_0=152.135736$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

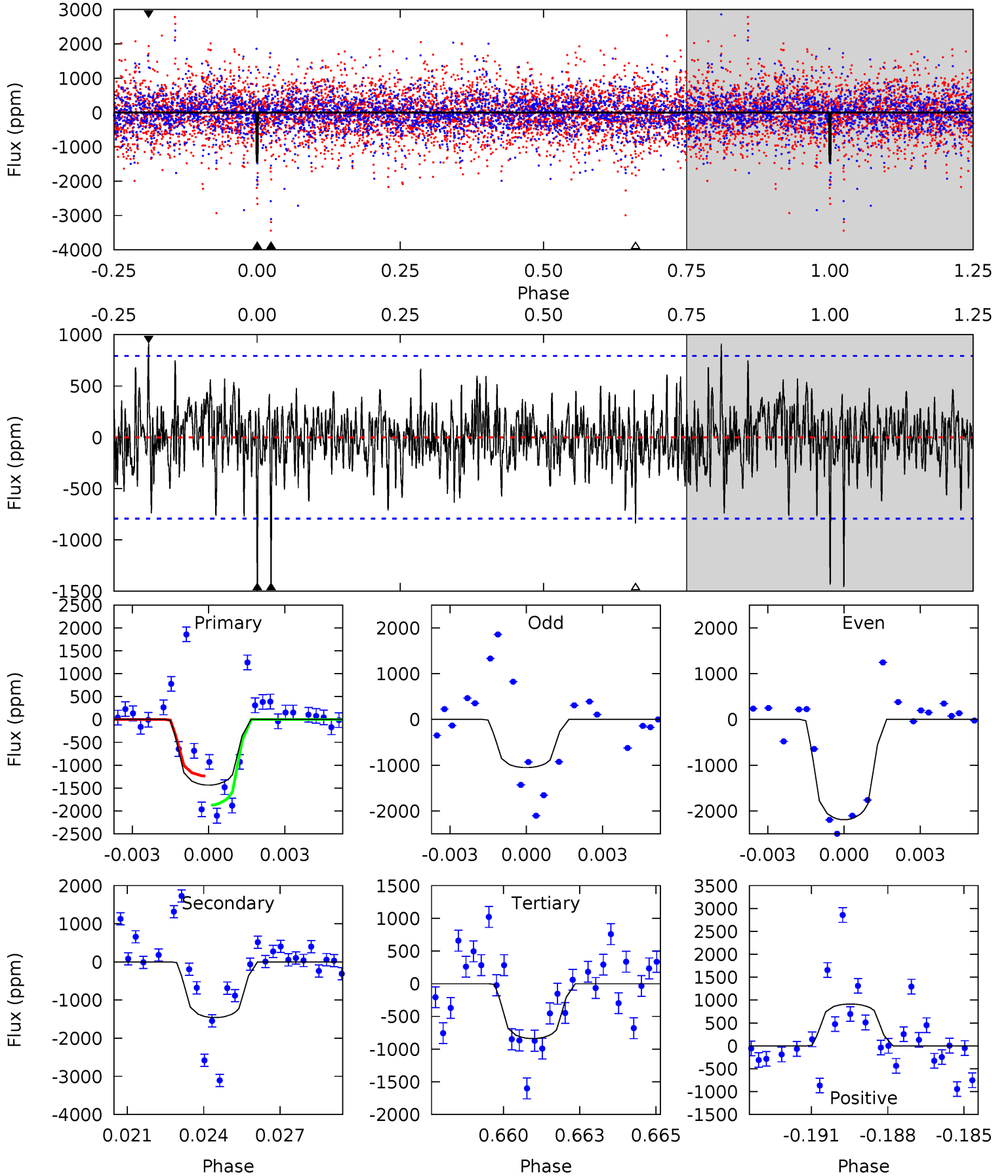
TCE 003967268-02 P= 38.456586 Days $T_0=152.138931$ (BKJD)



DV Model-Shift Uniqueness Test

003967268-02, P = 38.456267 Days, E = 113.679469 Days

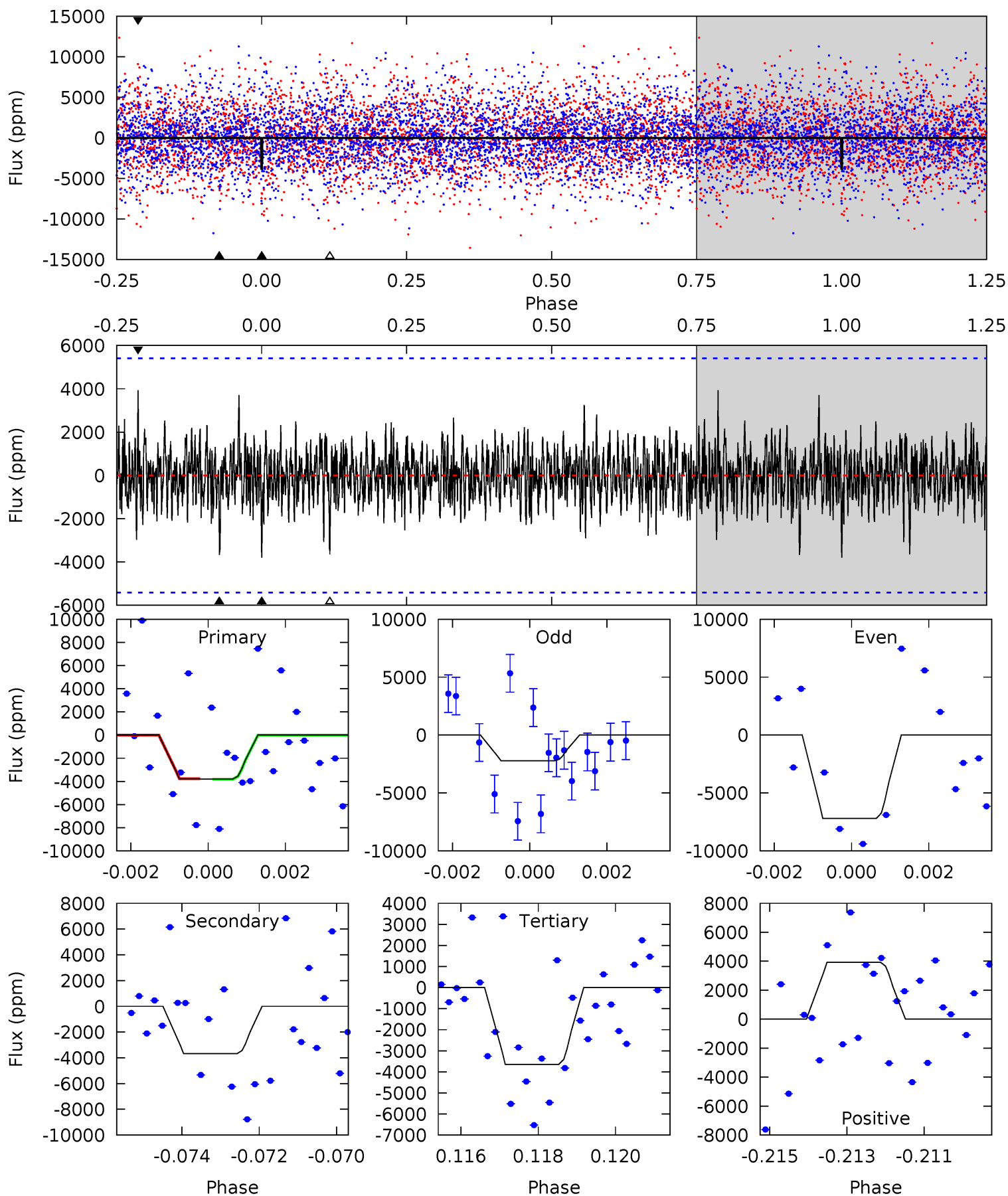
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.50	9.67	5.55	6.05	5.25	2.97	1.48	3.95	3.45	4.11	3.61	3.63	0.99	0.39	1.93



Alt Model-Shift Uniqueness Test

003967268-02, P = 38.456586 Days, E = 113.682345 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.73	3.62	3.59	3.87	5.33	3.09	0.96	0.14	-0.13	0.03	-0.24	2.32	0.87	0.51	0.02



Stellar Parameters For KIC 003967268

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7232^{+226}_{-302}	$3.895^{+0.315}_{-0.135}$	$-0.160^{+0.250}_{-0.350}$	$2.413^{+0.578}_{-0.866}$	$1.666^{+0.196}_{-0.364}$	$0.167^{+0.365}_{-0.064}$
	+3%/-4%	+8%/-3%	+156%/-219%	+24%/-36%	+12%/-22%	+218%/-39%
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 003967268-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1459 ± 151	$13.75^{+11.53}_{-9.70}$	1325^{+97}_{-130}	5961^{+6644}_{-1409}	294^{+3003}_{-207}
Alt.	-3677 ± 1016	$16.92^{+12.06}_{-10.07}$	1321^{+102}_{-129}	6632^{+5440}_{-1496}	463^{+2474}_{-309}

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

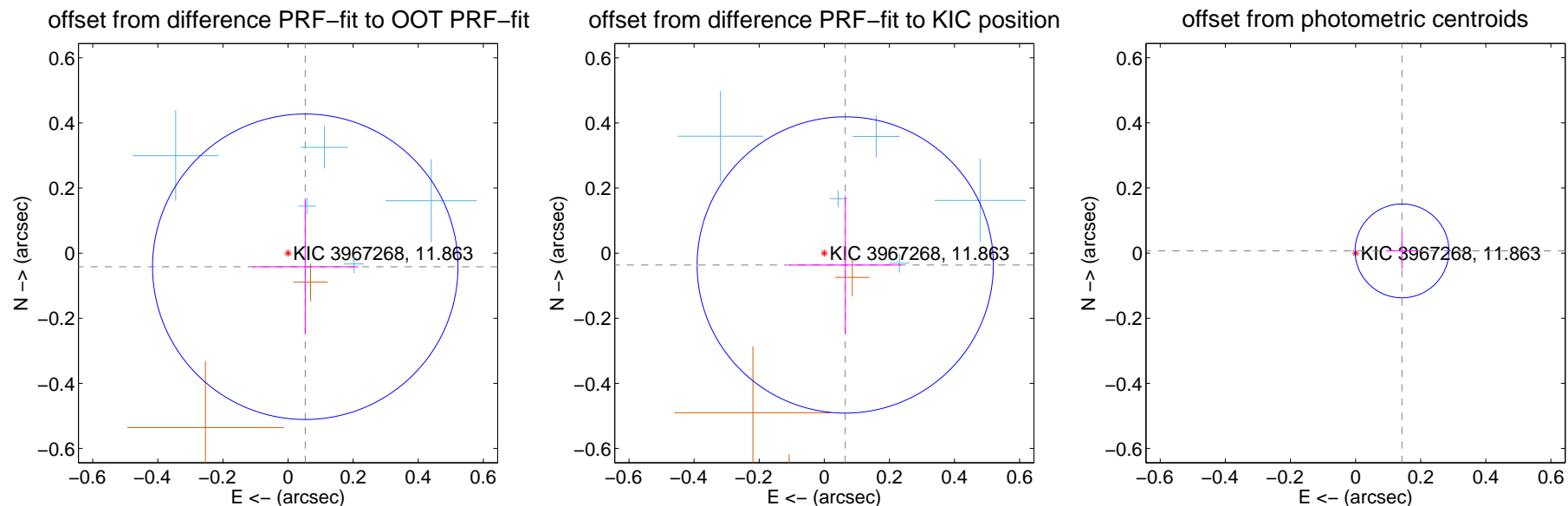
DV Centroid Data

Supplemental centroid analysis for 003967268-02. **Kepler magnitude: 11.86.** Transit SNR 12.94

There are 8 quarters with good PRF difference image offsets

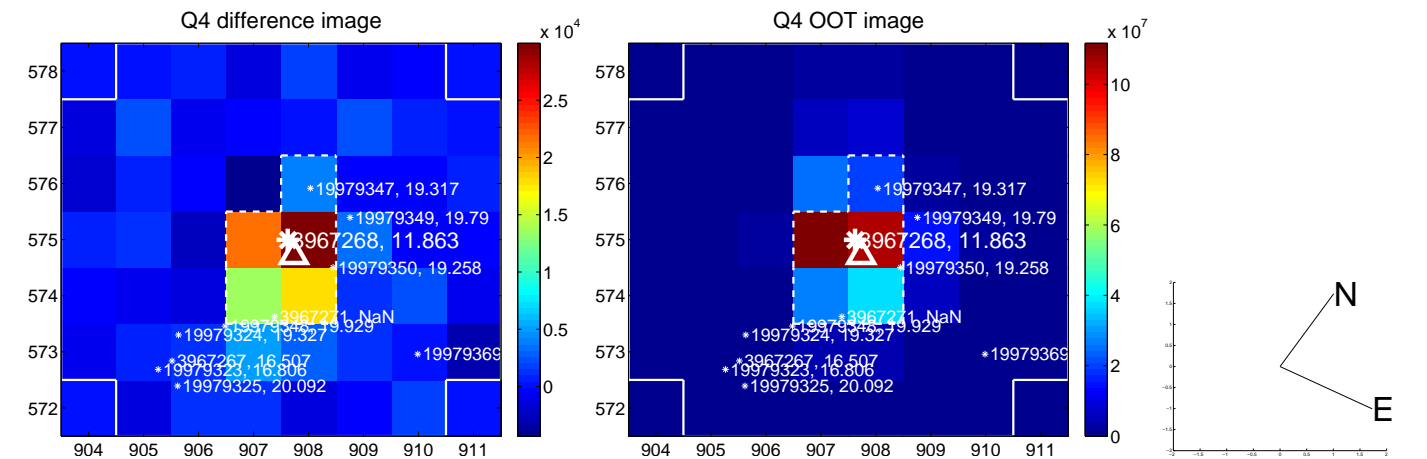
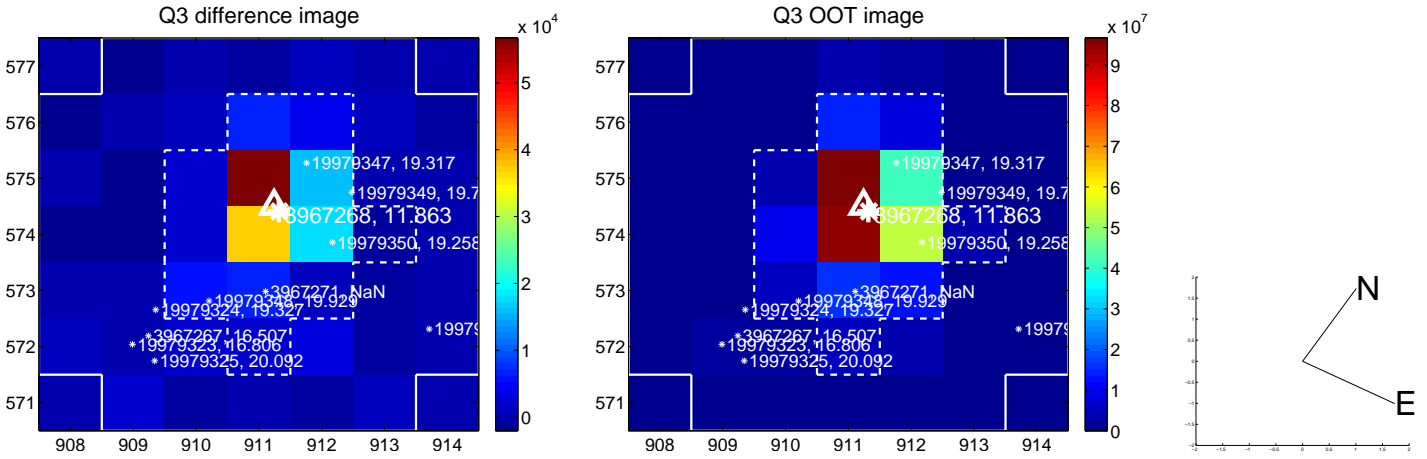
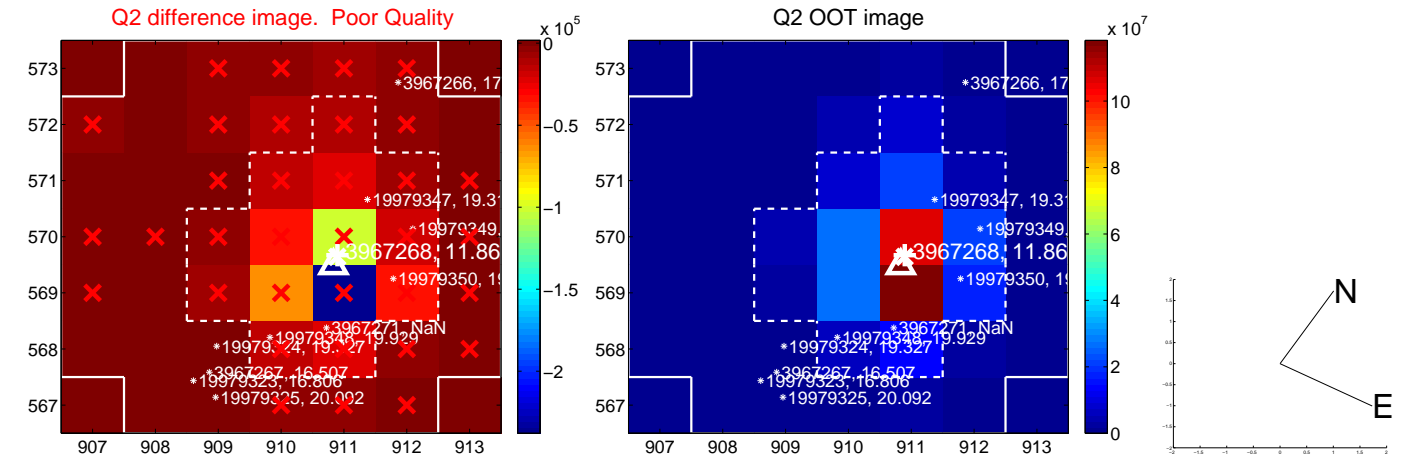
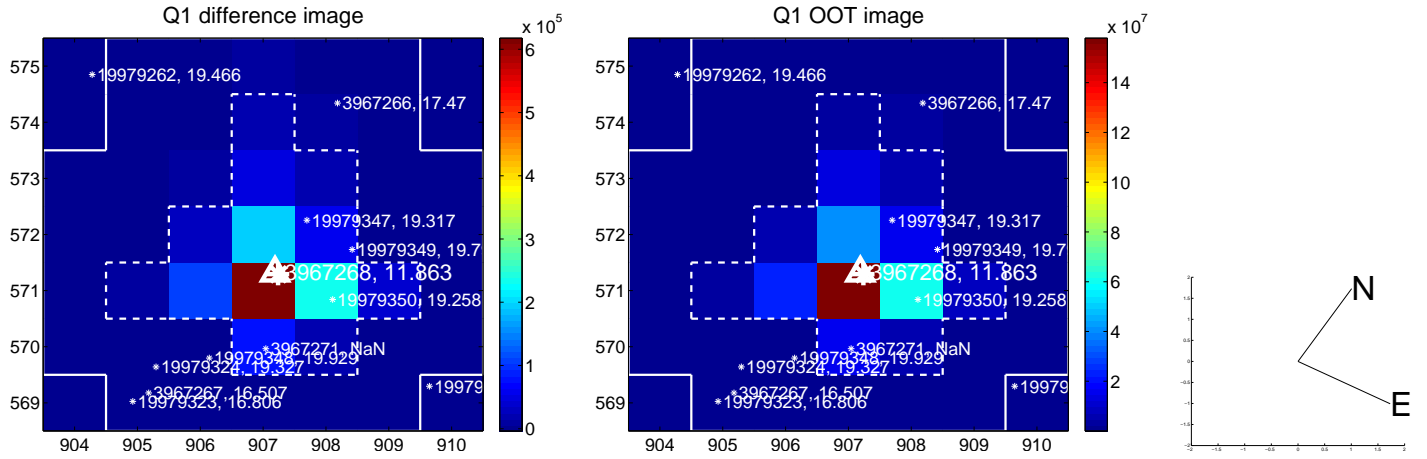
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.067 ± 0.156	0.43	-0.053 ± 0.163	-0.042 ± 0.206
PRF-fit source offset from KIC position	0.074 ± 0.152	0.49	-0.064 ± 0.172	-0.036 ± 0.213
photometric centroid source offset	0.14 ± 0.05	2.97	-0.14 ± 0.05	0.01 ± 0.06

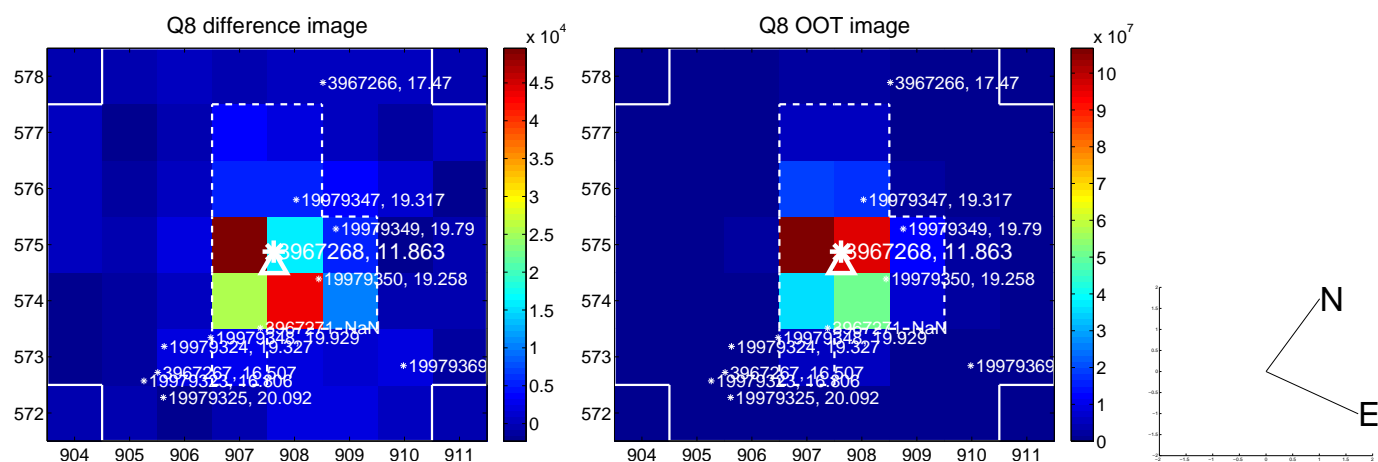
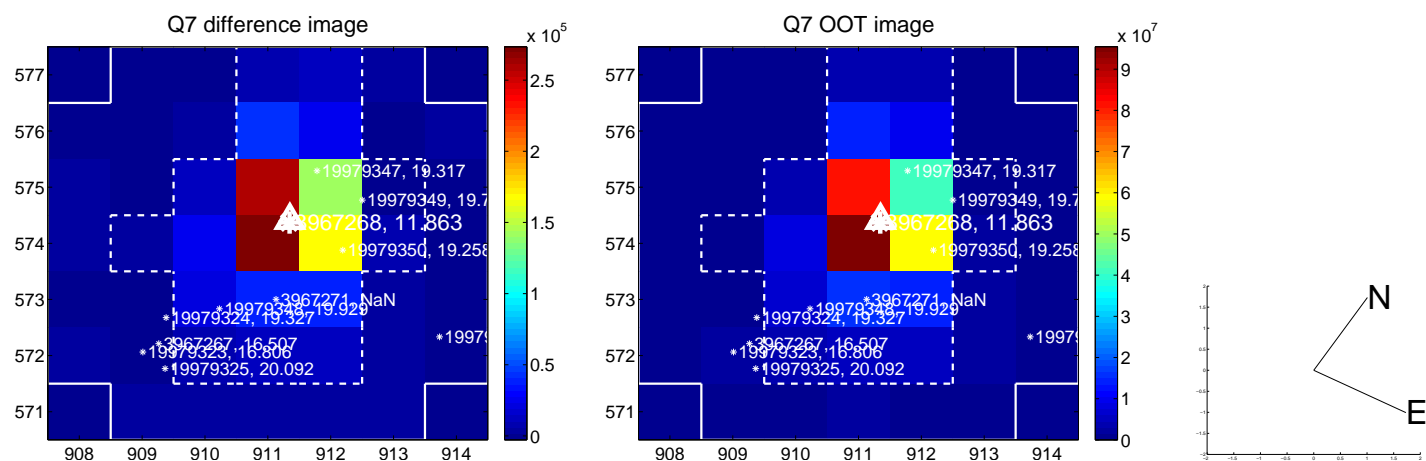
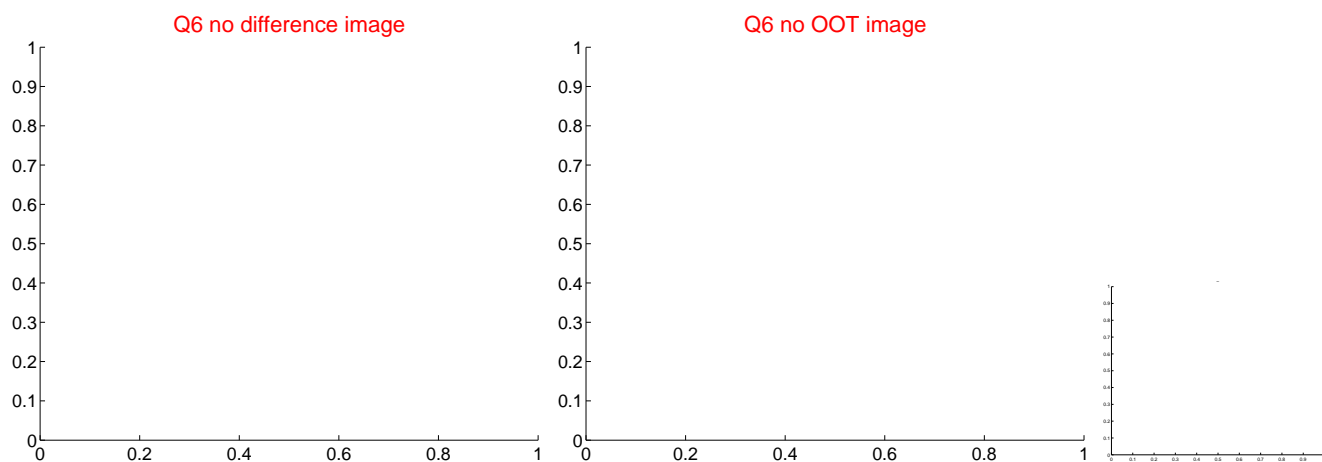
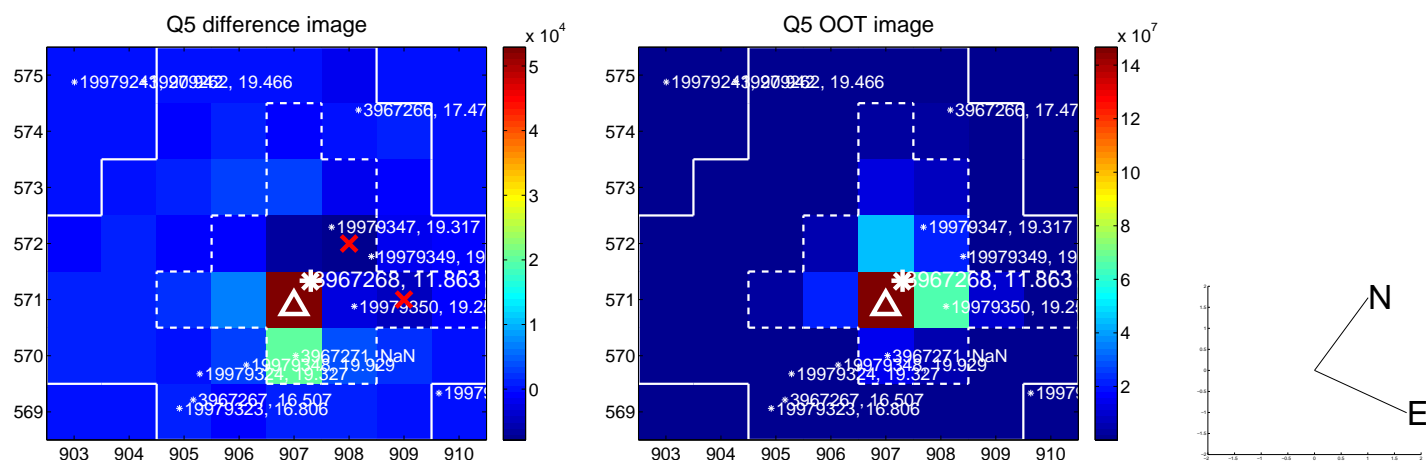


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

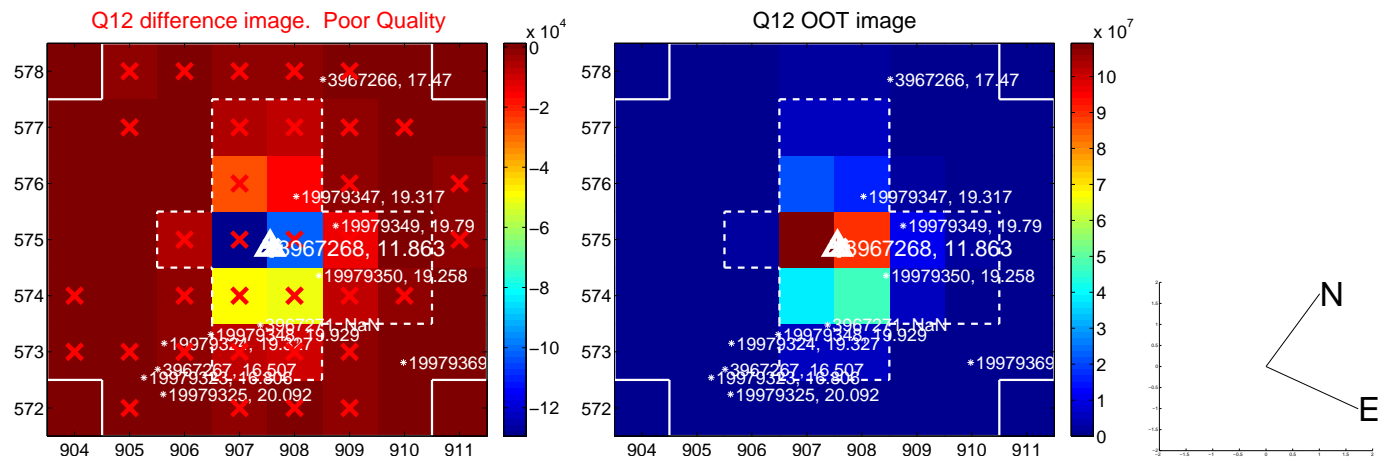
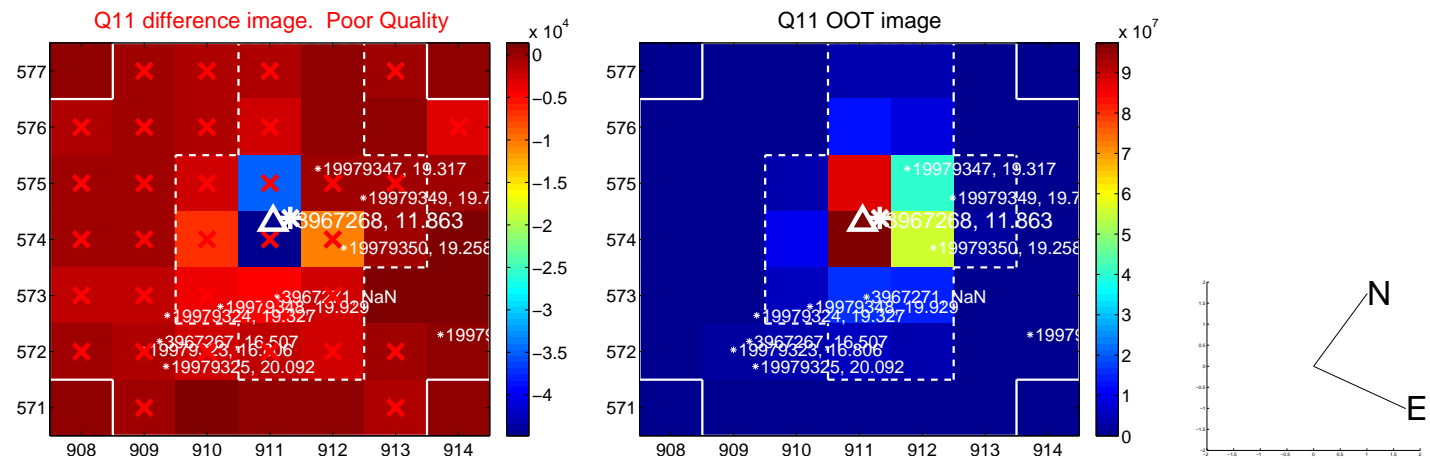
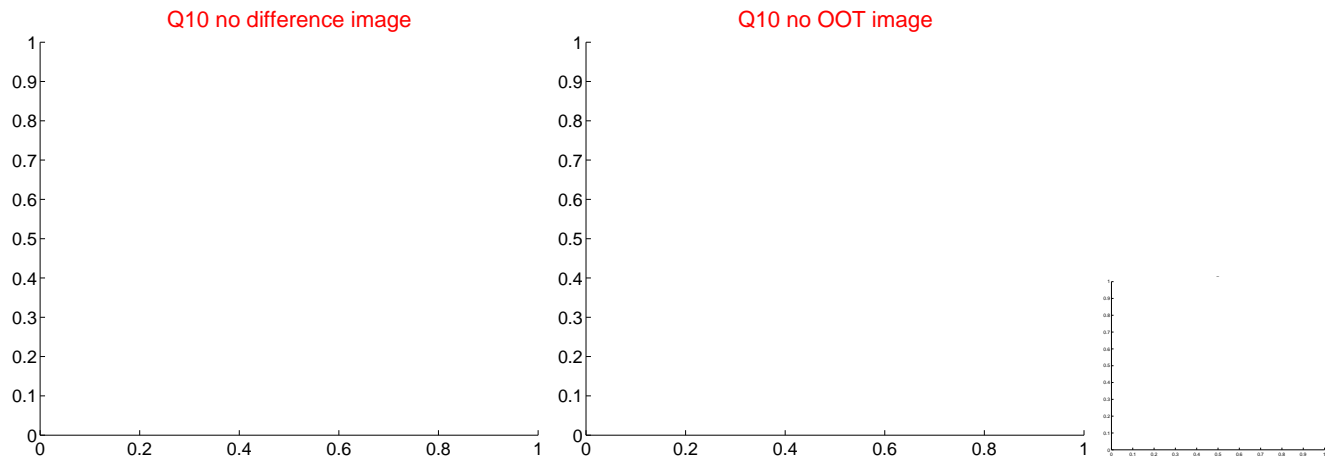
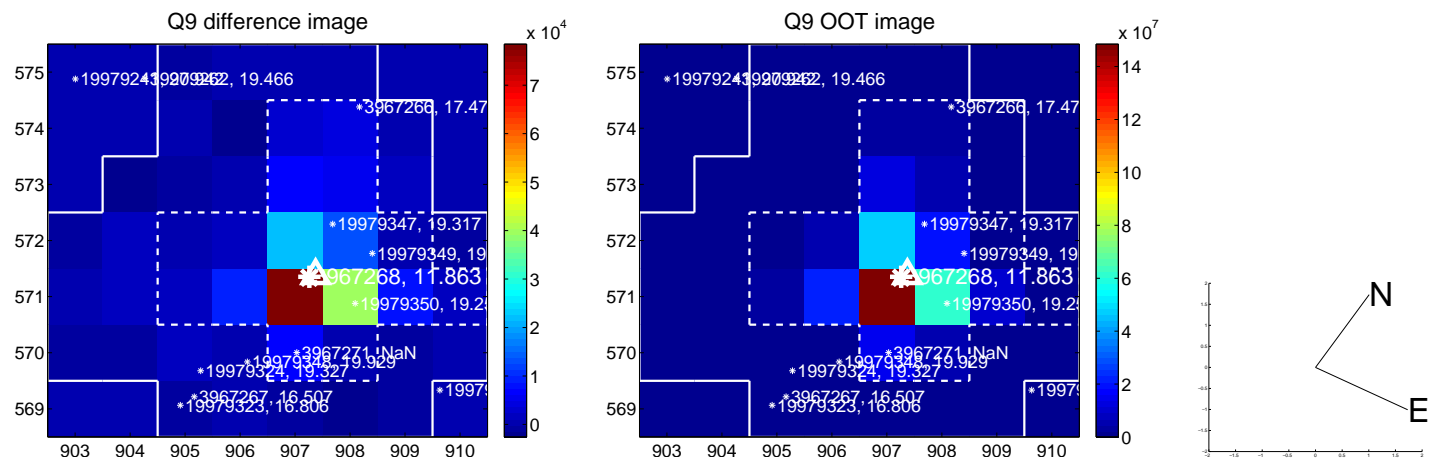
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



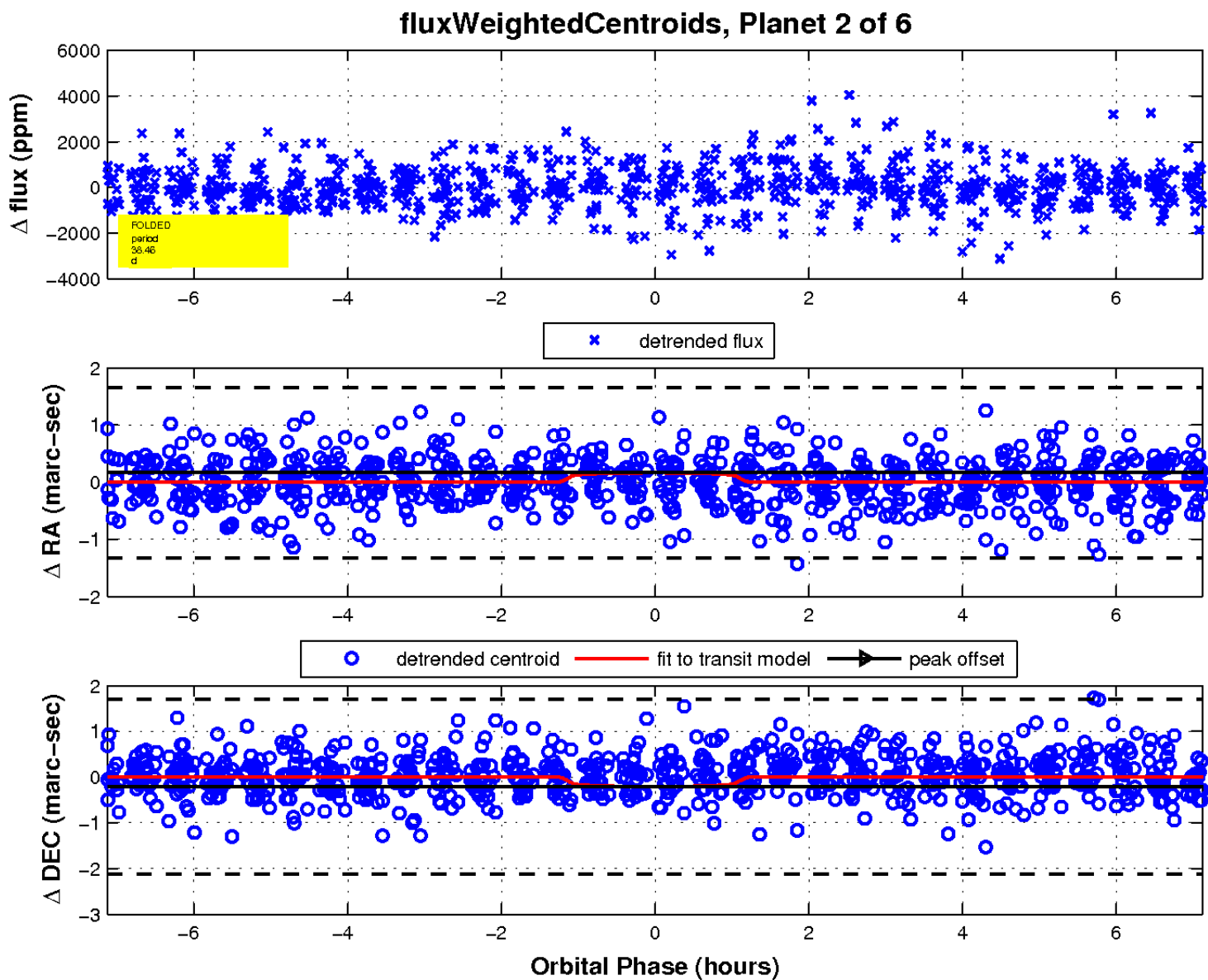
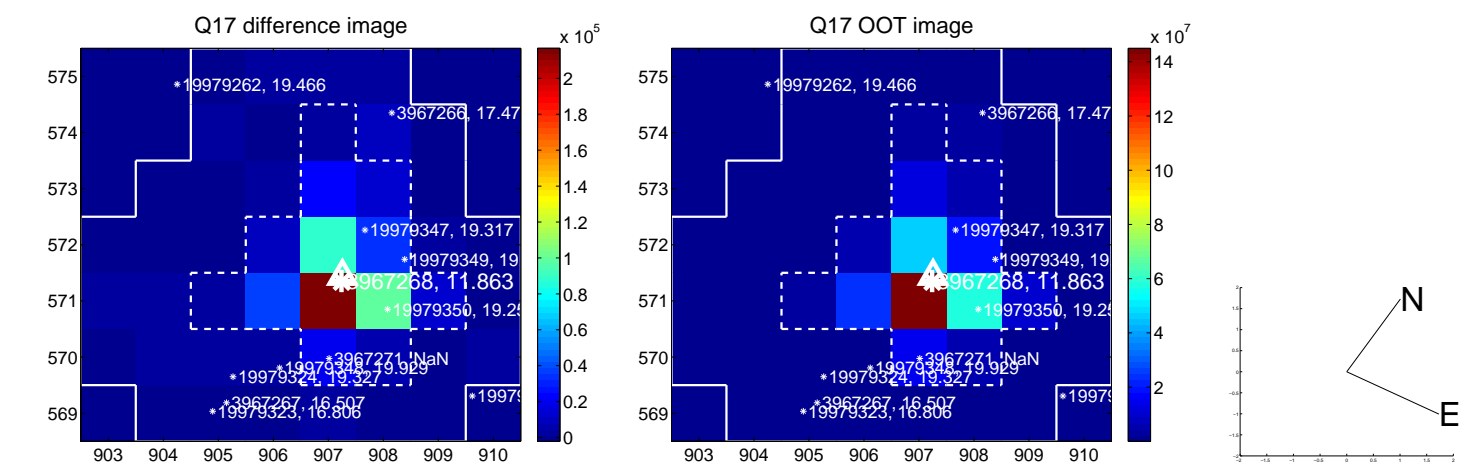
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

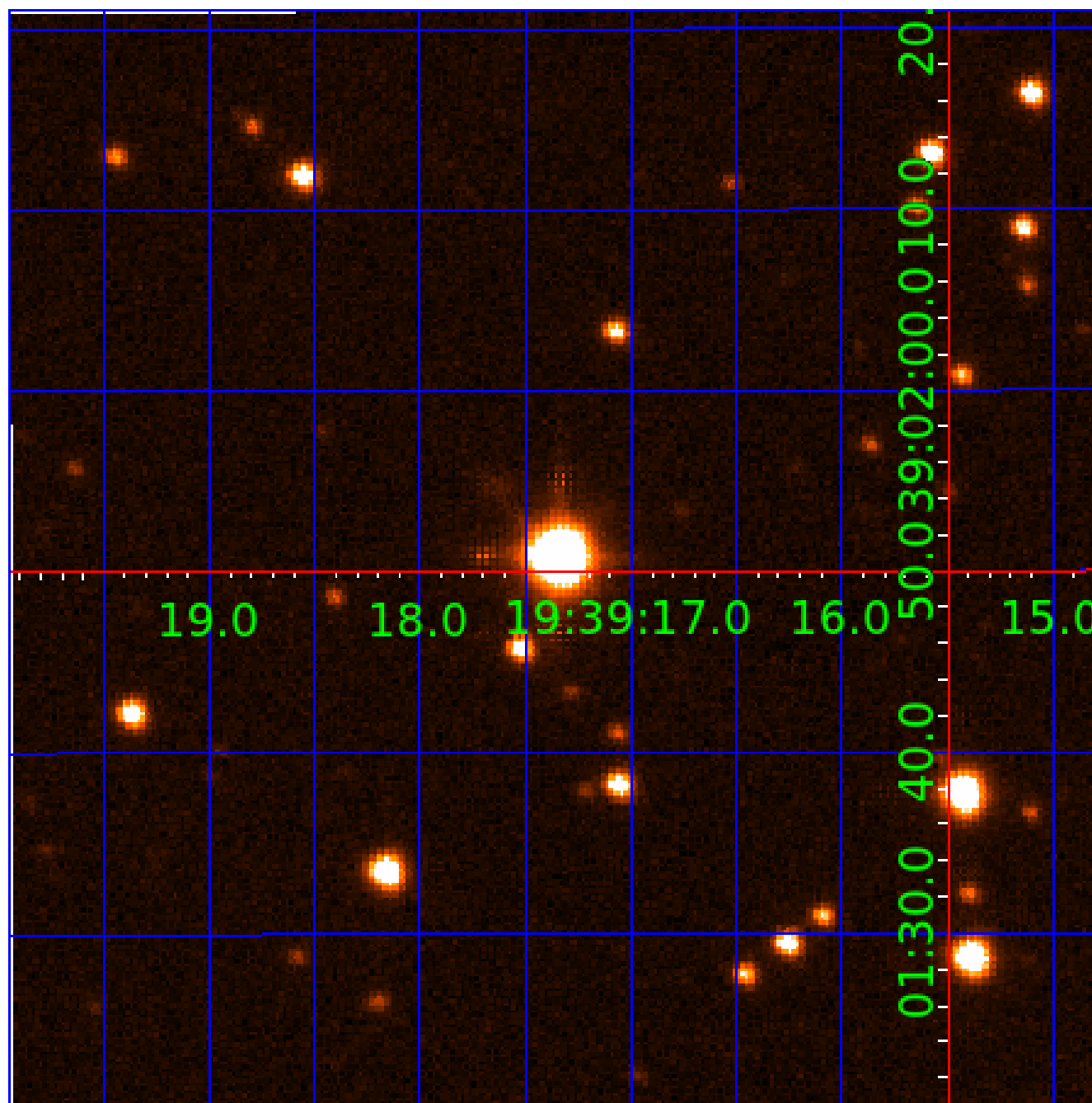


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 003967268

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})
003967268-01	OBS	No	0.912698	131.581129	69.7	6.249	11.5	6.0	2.41	7232	2.04	29913.25
003967268-02	OBS	No	38.456267	152.135736	2118.8	2.376	16.3	12.9	2.41	7232	11.23	204.02
003967268-03	OBS	No	49.378882	134.767014	2390.7	1.690	16.1	14.2	2.41	7232	12.08	146.19
003967268-04	OBS	No	32.353172	163.057910	1524.9	1.673	13.7	11.8	2.41	7232	10.84	256.89
003967268-05	OBS	No	12.637158	135.701476	1231.3	2.645	13.4	13.2	2.41	7232	15.81	899.71
003967268-06	OBS	No	32.638873	139.071766	526.5	16.356	9.9	6.5	2.41	7232	5.87	253.89

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003967268-01	OBS	FP	0.00	1	0	0	0	LPP_DV
003967268-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
003967268-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
003967268-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
003967268-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
003967268-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

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

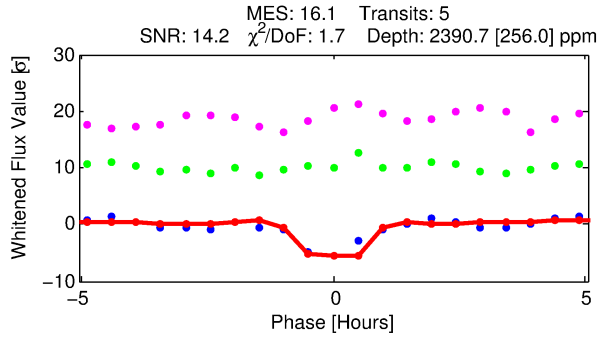
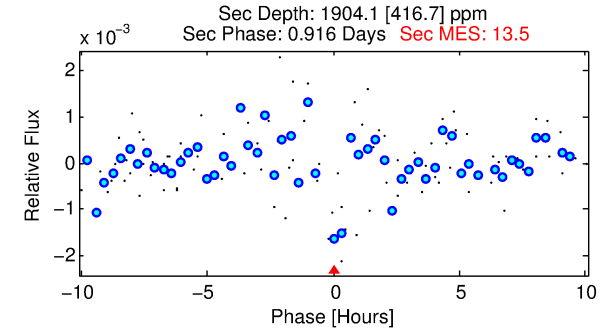
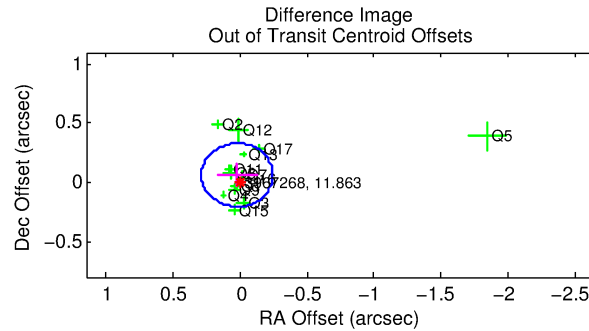
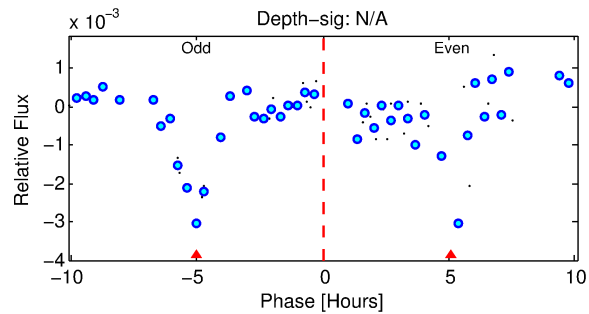
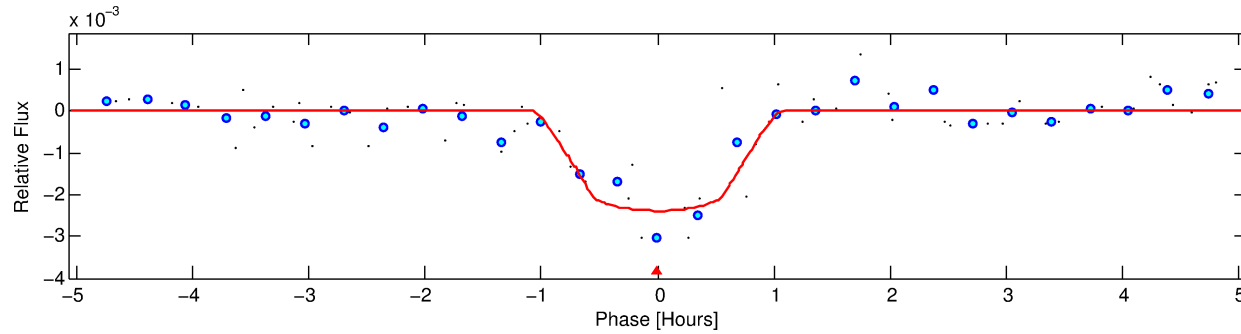
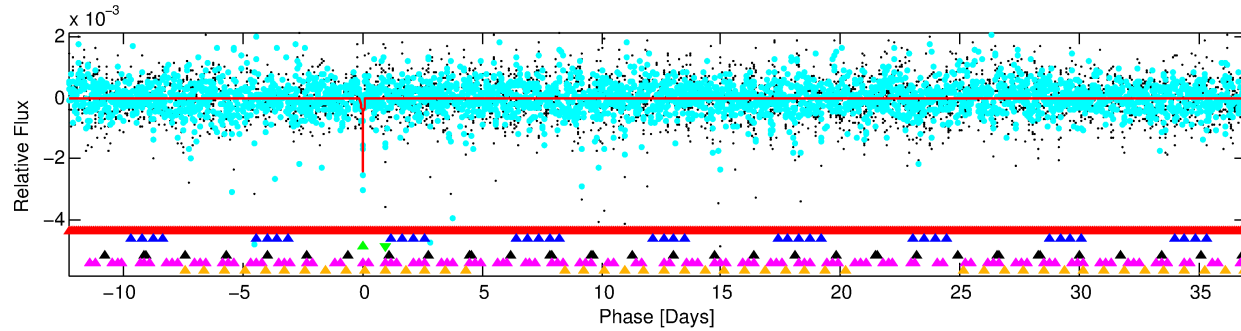
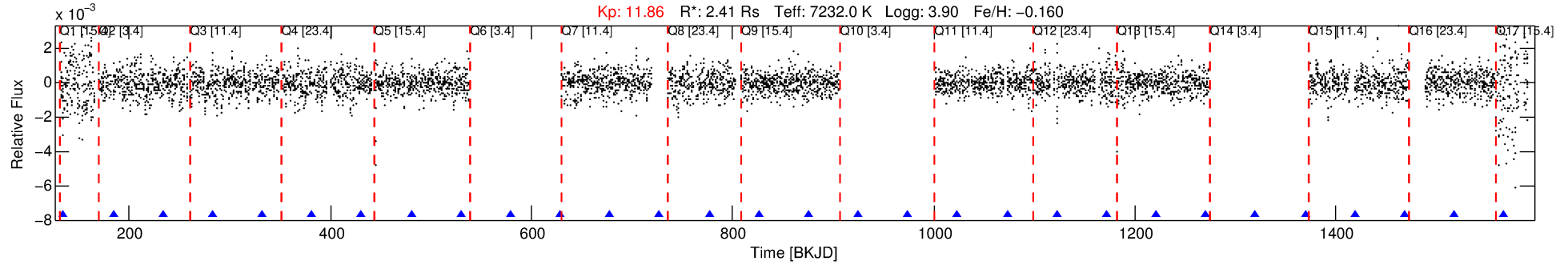
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003967268-03

No Significant Match Found

DV One-Page Summary

KIC: 3967268 Candidate: 3 of 6 Period: 49.379 d



DV Fit Results:

Period = 49.37888 [0.00022] d
Epoch = 134.7670 [0.0035] BKJD
Rp/R* = 0.0459 [0.0284]
a/R* = 220.30 [737.73]
b = 0.35 [8.59]
Seff = 146.19 [82.56]
Teq = 887 [125] K
Rp = 12.08 [8.65] Re
a = 0.3124 [0.1063] AU
Ag = 701.05 [960.62] [0.73σ]
Teffp = 7054 [2241] K [2.75σ]

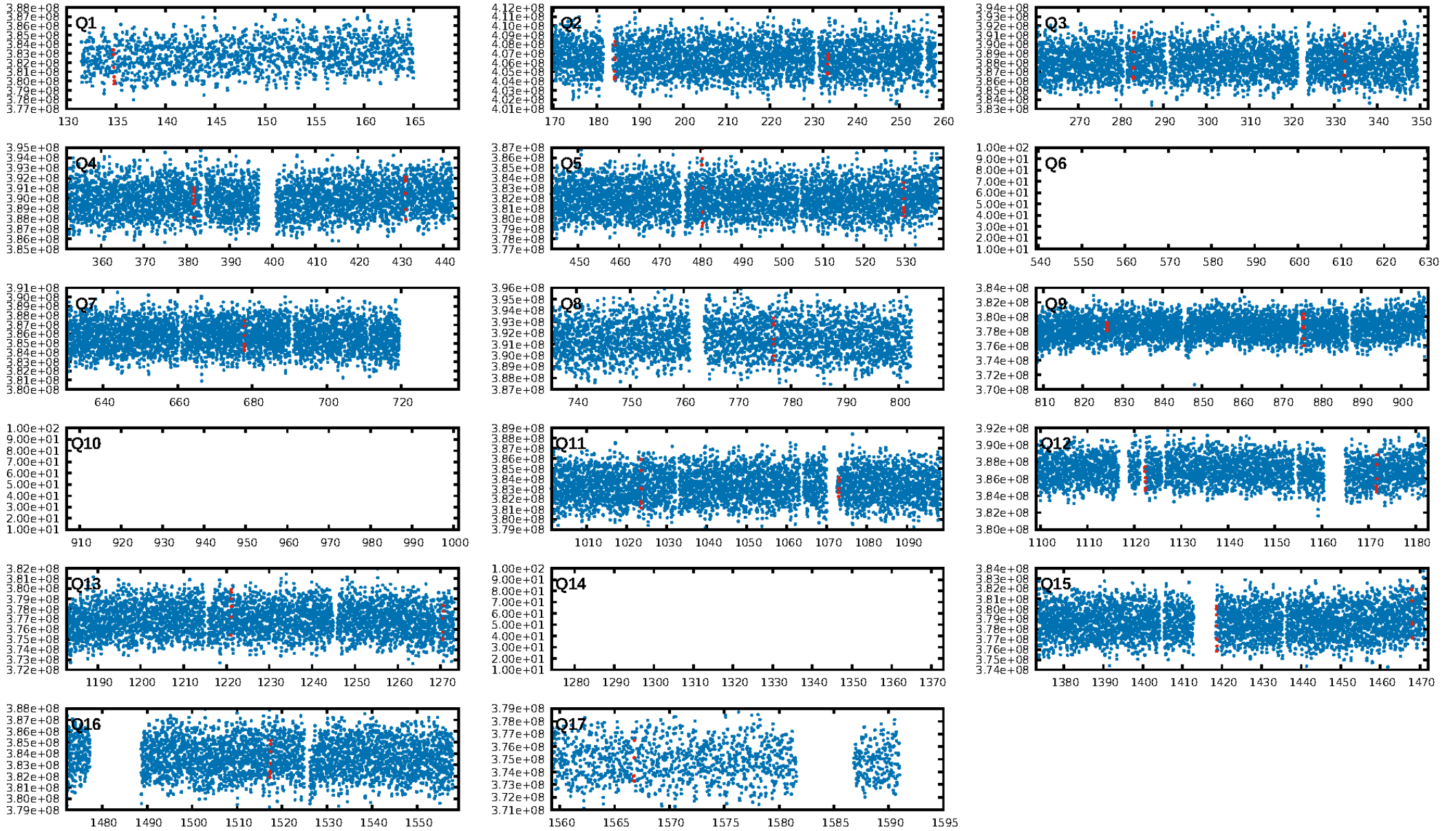
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [89.90σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 71.4%
ModelChiSquareGof-sig: 95.6%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.09176
Centroid-sig: 93.9%
Centroid-so: 0.124 arcsec [2.15σ]
OotOffset-rm: 0.066 arcsec [0.74σ]
OotOffset-st: 1/4/4/5 [14]
KicOffset-rm: 0.096 arcsec [0.86σ]
KicOffset-st: 1/4/4/5 [14]
DiffImageQuality-fgm: 0.57 [8/14]
DiffImageOverlap-fno: 0.14 [2/14]

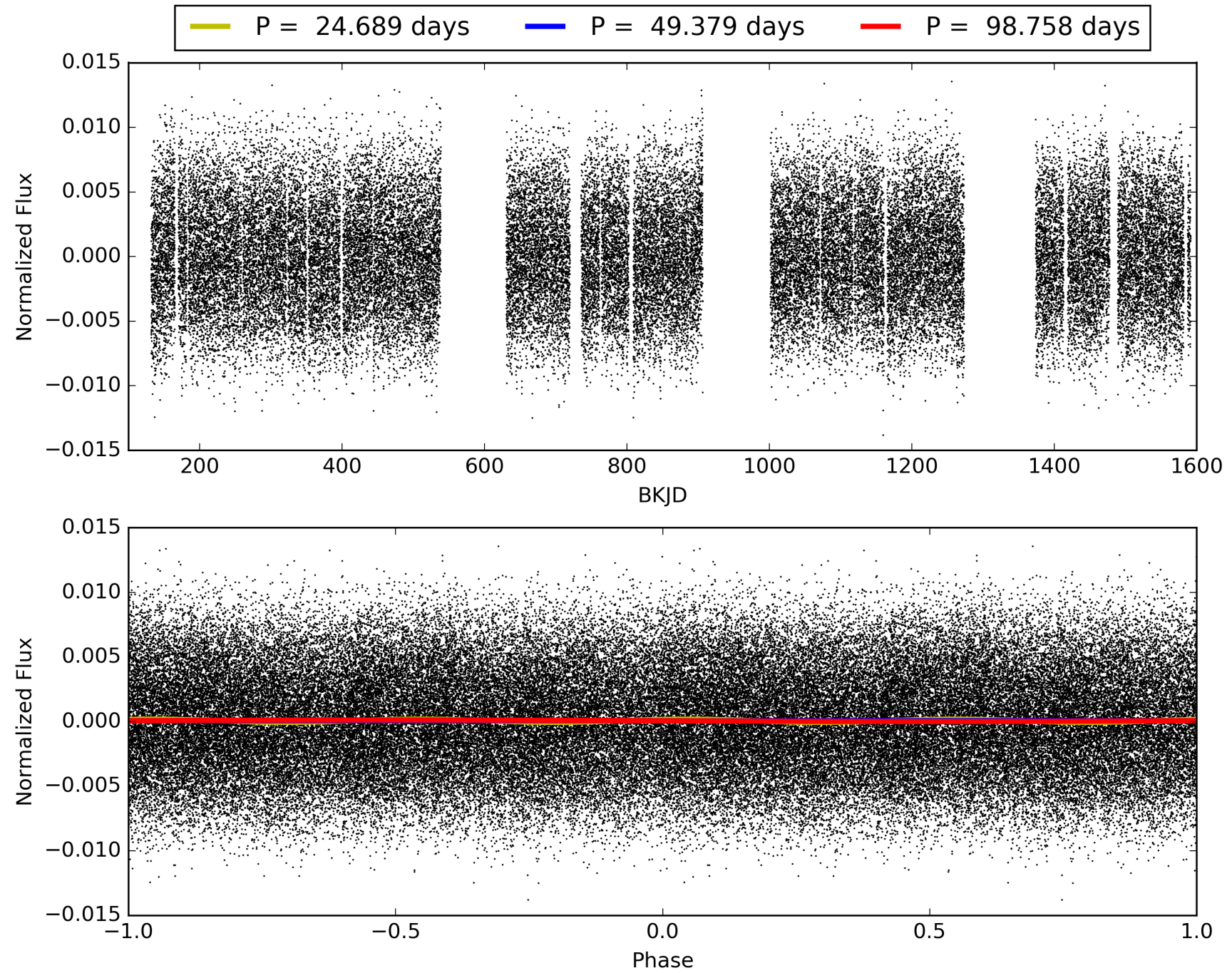
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:24:31 Z

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

TCE 003967268-03, PDC Light Curves

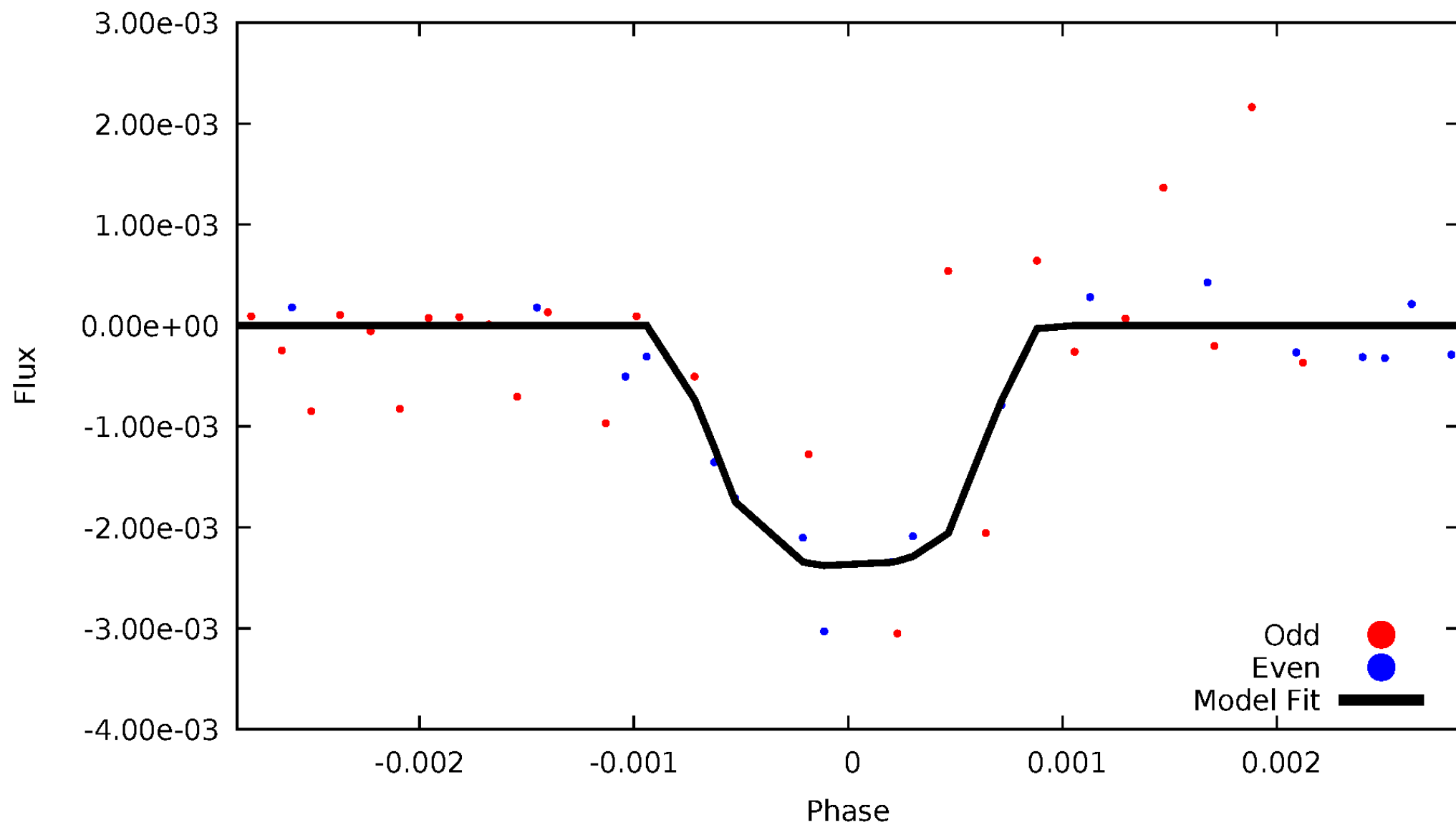


TCE 003967268-03



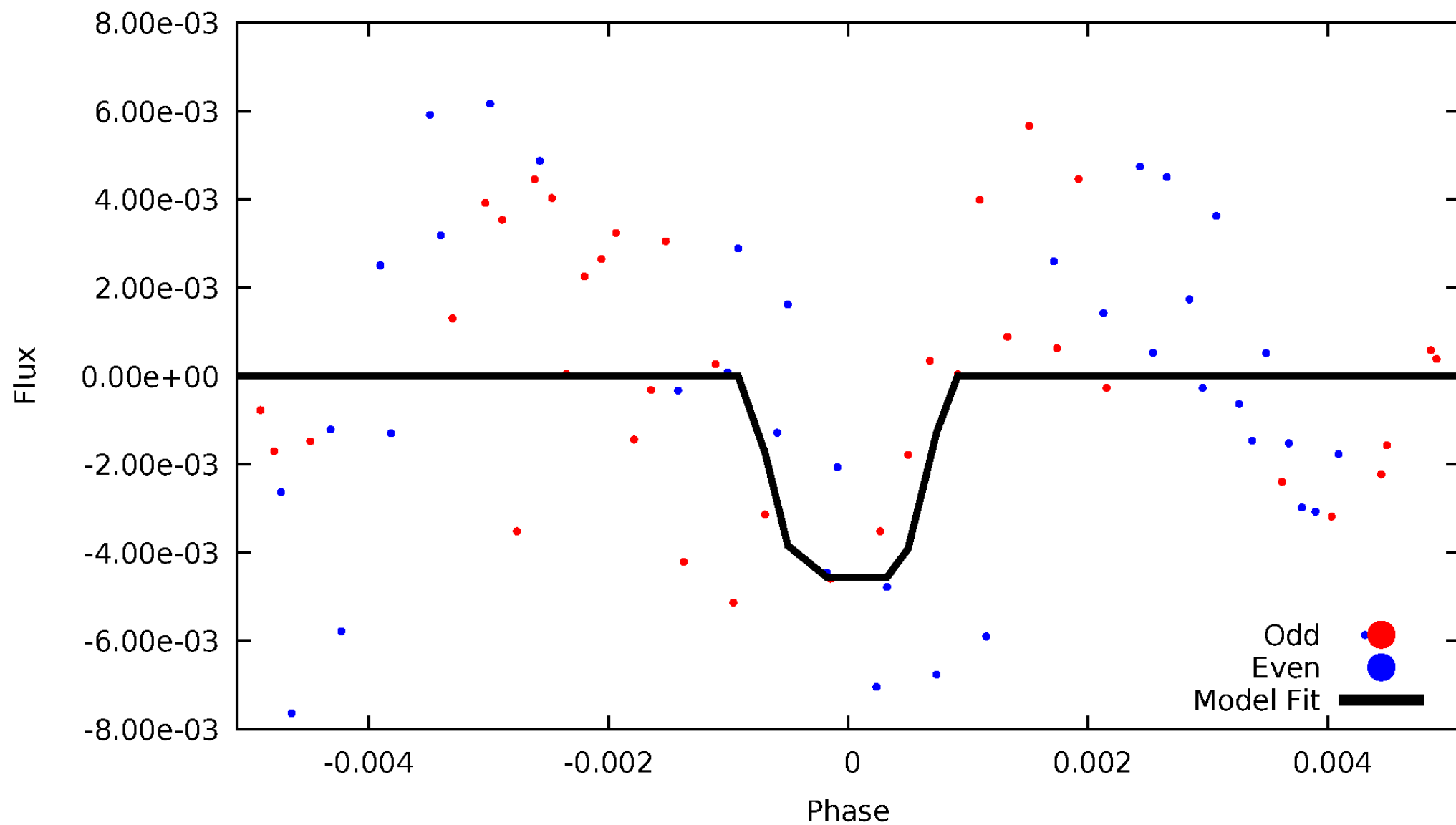
DV Odd/Even

TCE 003967268-03



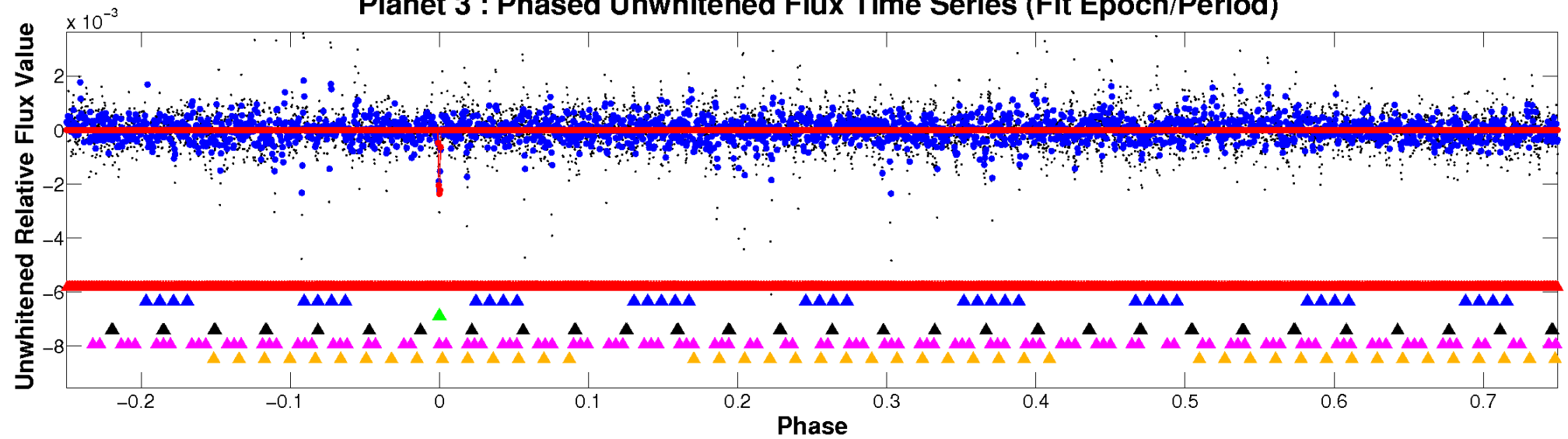
ALT Odd/Even

TCE 003967268-03

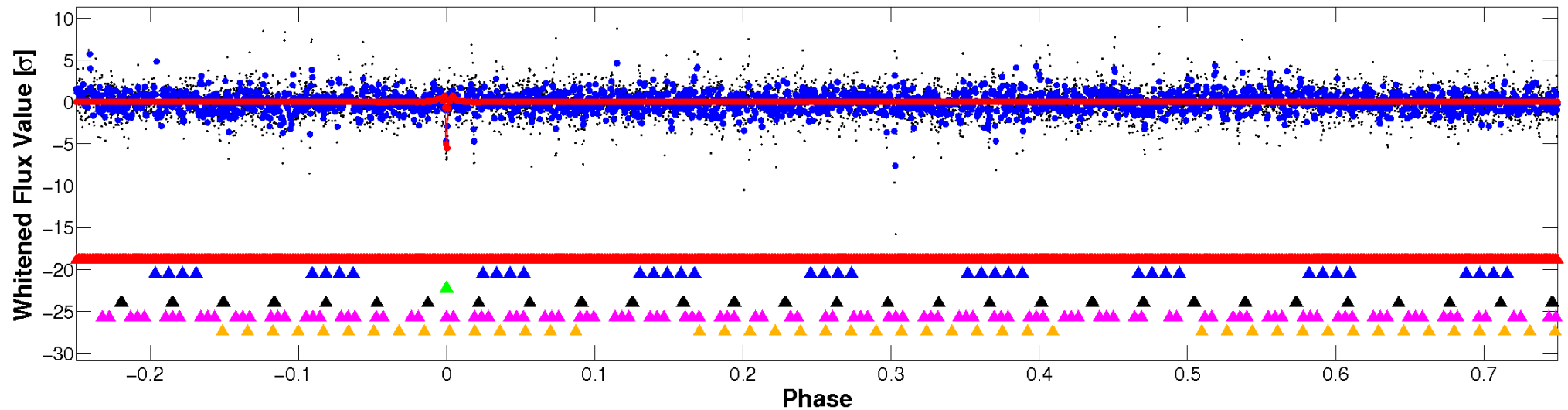


Non-Whitened Vs. Whitened Light Curve

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

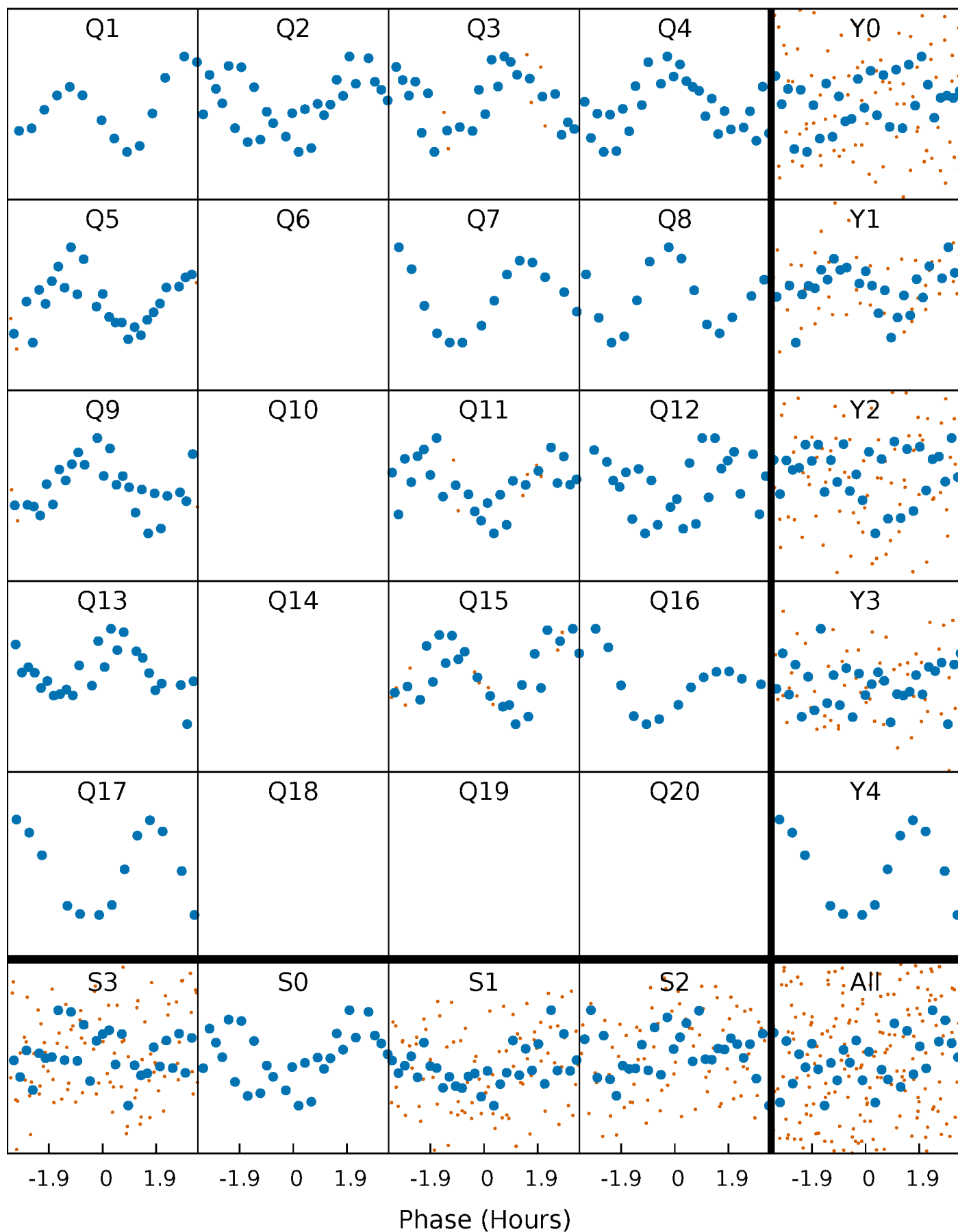


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



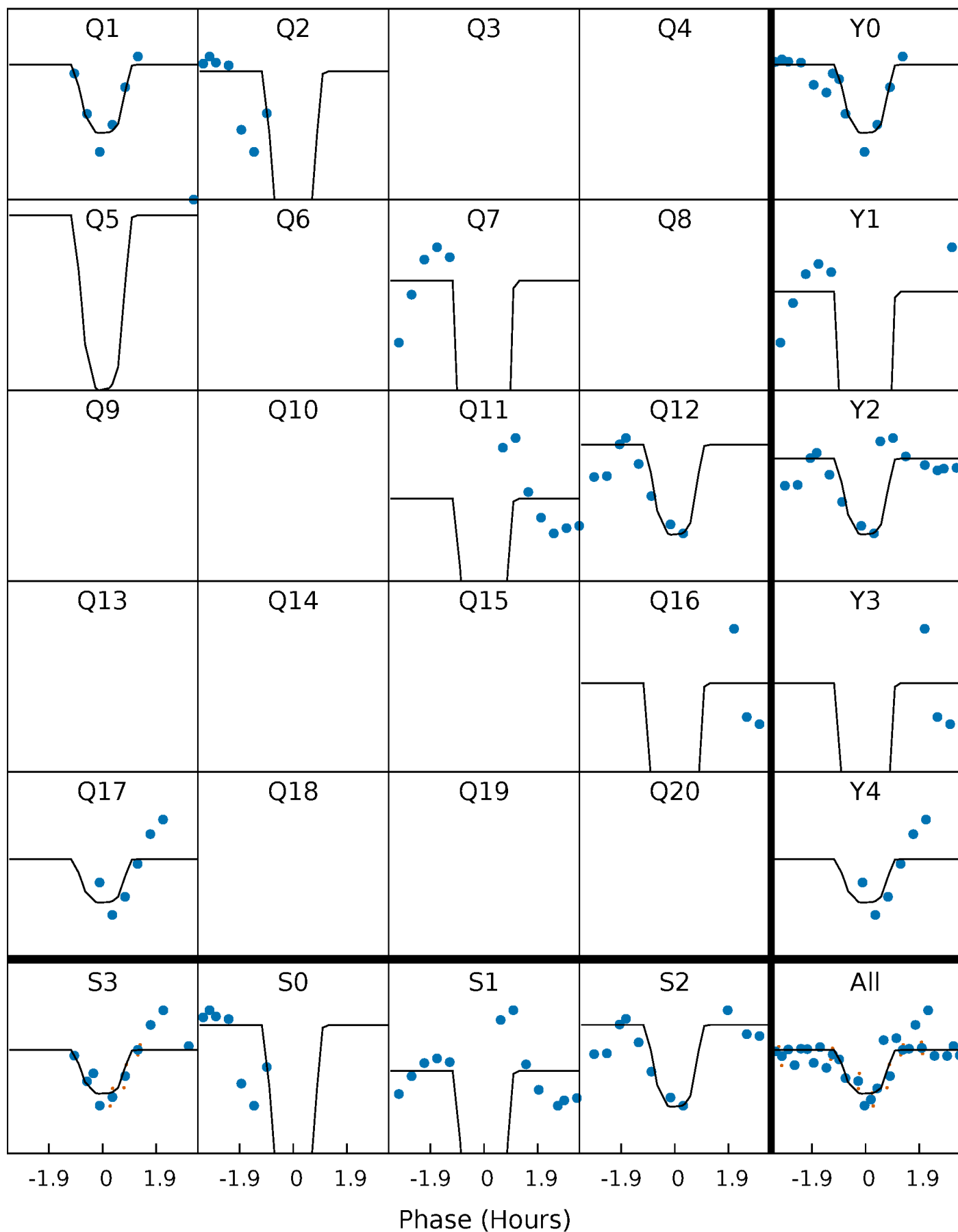
PDC Quarter-Phased Transit Curves

TCE 003967268-03 $P = 49.378882$ Days $T_0 = 134.767014$ (BKJD)



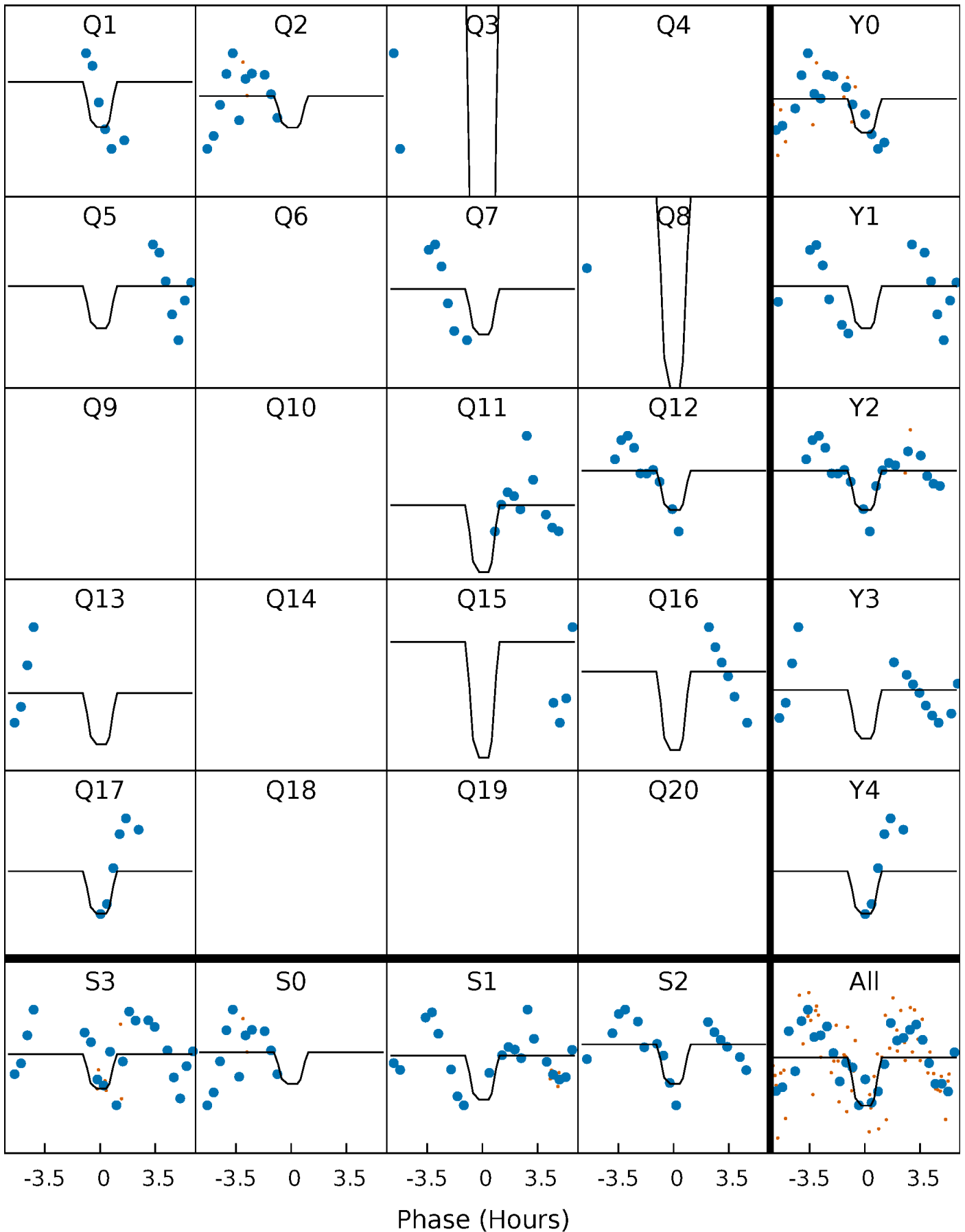
DV Quarter-Phased Transit Curves

TCE 003967268-03 P= 49.378882 Days $T_0=134.767014$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

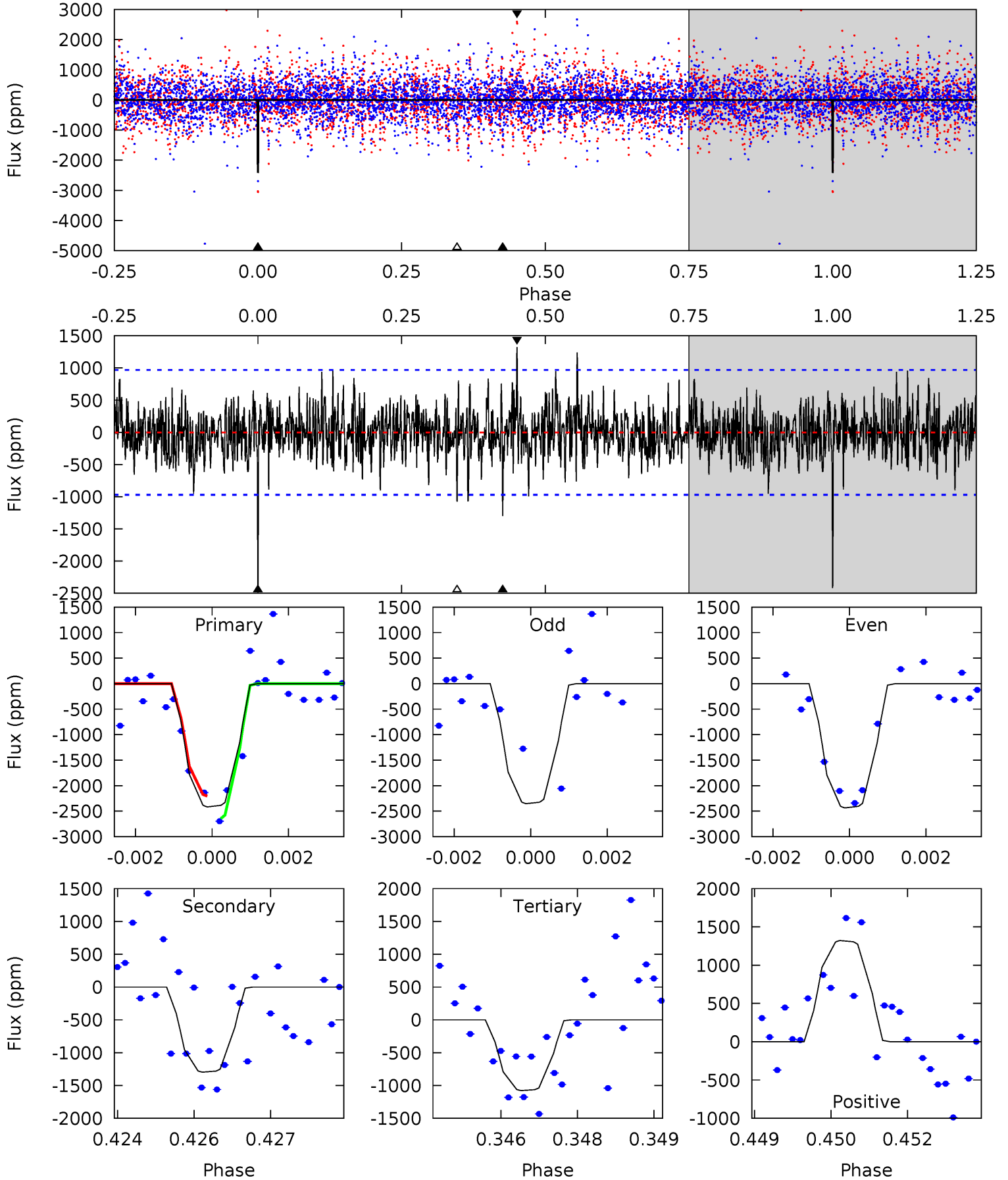
TCE 003967268-03 P= 49.378855 Days $T_0=134.765916$ (BKJD)



DV Model-Shift Uniqueness Test

003967268-03, P = 49.378882 Days, E = 85.388132 Days

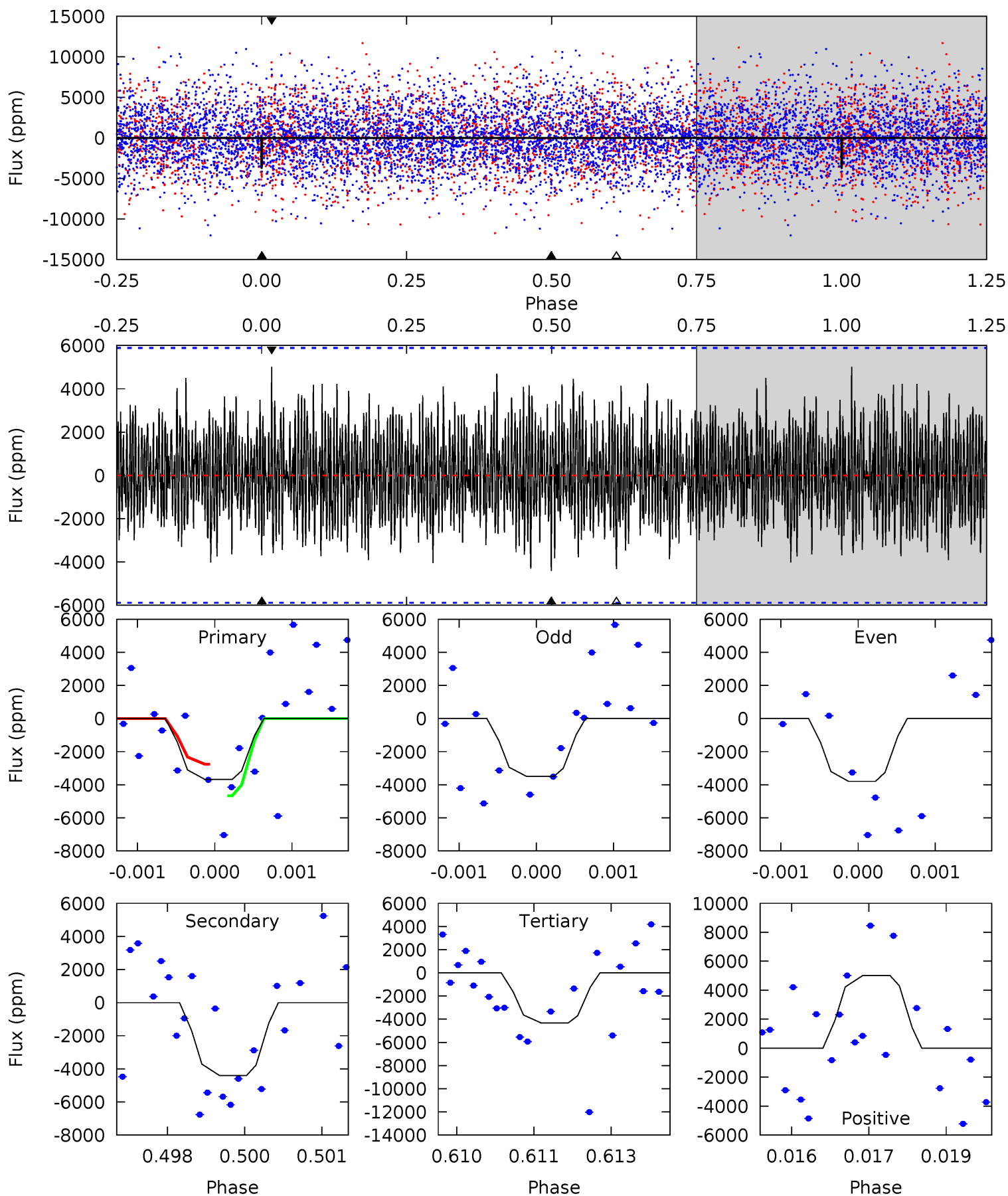
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.3	7.16	5.94	7.29	5.35	3.13	1.66	7.39	6.04	1.21	-0.14	0.21	0.70	0.35	1.22



Alt Model-Shift Uniqueness Test

003967268-03, P = 49.378855 Days, E = 85.387061 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.37	4.03	3.95	4.59	5.39	3.19	1.59	-0.58	-1.22	0.08	-0.56	0.13	1.04	0.53	0.87



Stellar Parameters For KIC 003967268

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7232^{+226}_{-302}	$3.895^{+0.315}_{-0.135}$	$-0.160^{+0.250}_{-0.350}$	$2.413^{+0.578}_{-0.866}$	$1.666^{+0.196}_{-0.364}$	$0.167^{+0.365}_{-0.064}$
	+3%/-4%	+8%/-3%	+156%/-219%	+24%/-36%	+12%/-22%	+218%/-39%
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 003967268-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1297 ± 181	$11.46^{+8.59}_{-6.39}$	1211^{+98}_{-121}	6241^{+3434}_{-1337}	522^{+2087}_{-352}
Alt.	-4403 ± 1093	$16.78^{+8.84}_{-7.59}$	1220^{+98}_{-123}	7111^{+3029}_{-1295}	819^{+1868}_{-456}

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

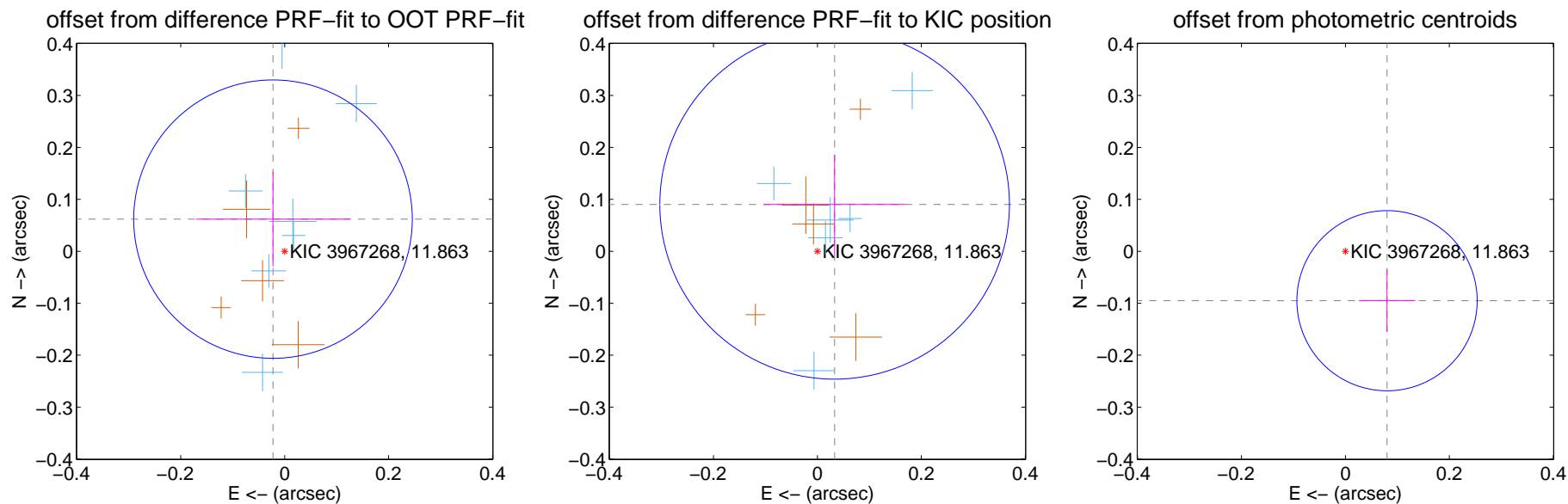
DV Centroid Data

Supplemental centroid analysis for 003967268-03. **Kepler magnitude: 11.86.** Transit SNR 14.24

There are 8 quarters with good PRF difference image offsets

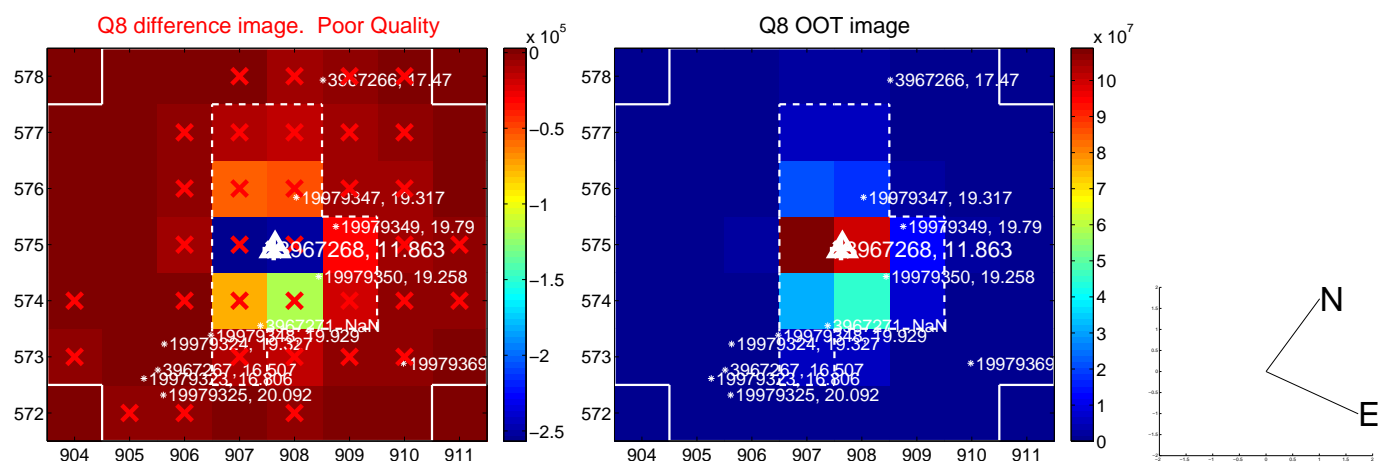
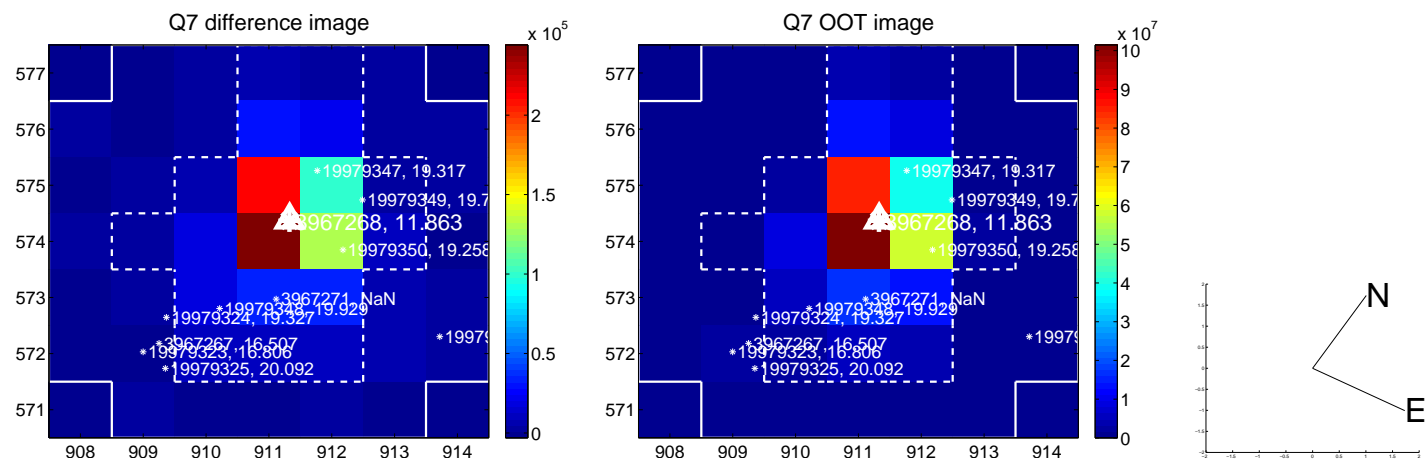
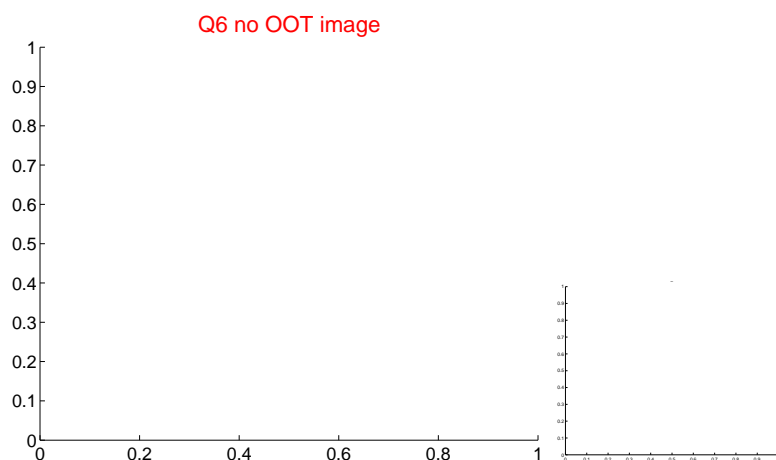
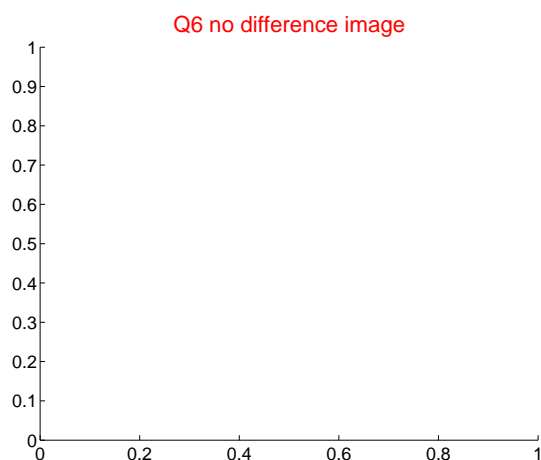
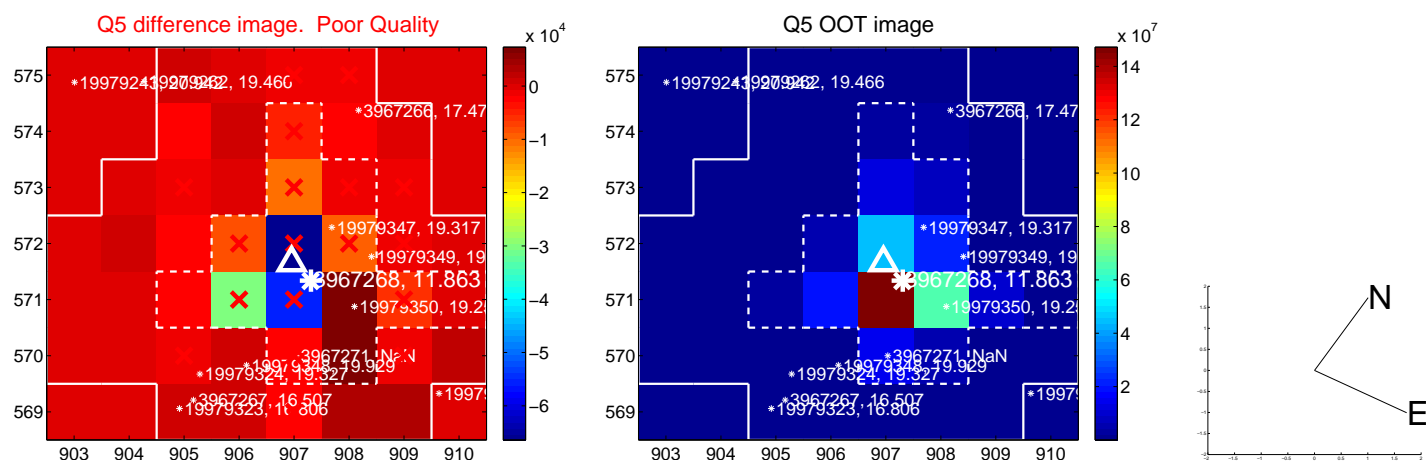
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.066 ± 0.089	0.74	0.022 ± 0.148	0.062 ± 0.091
PRF-fit source offset from KIC position	0.096 ± 0.112	0.86	-0.033 ± 0.136	0.090 ± 0.096
photometric centroid source offset	0.12 ± 0.06	2.15	-0.08 ± 0.05	-0.10 ± 0.06

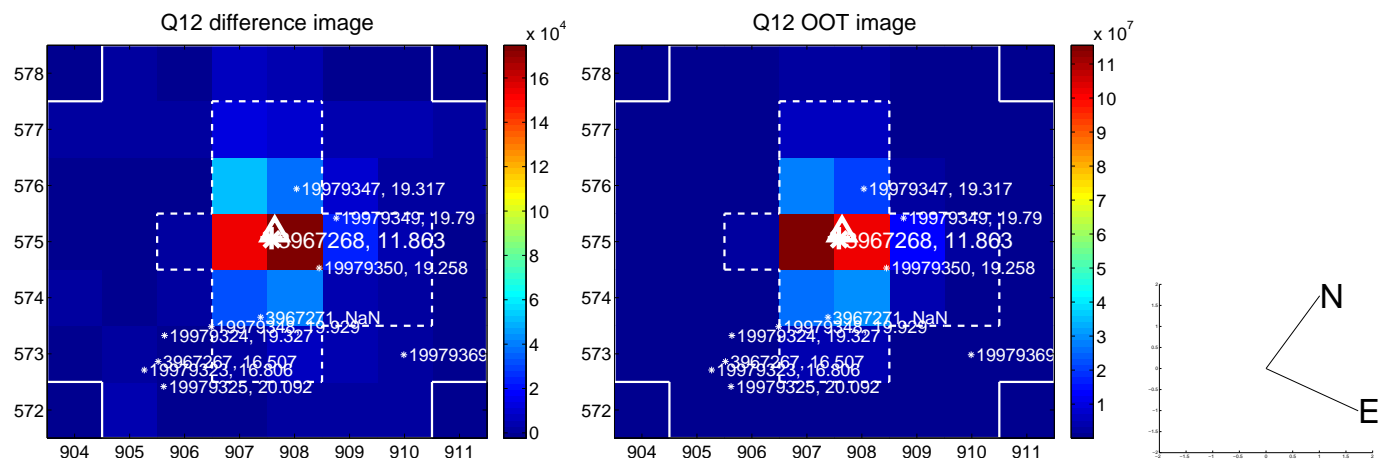
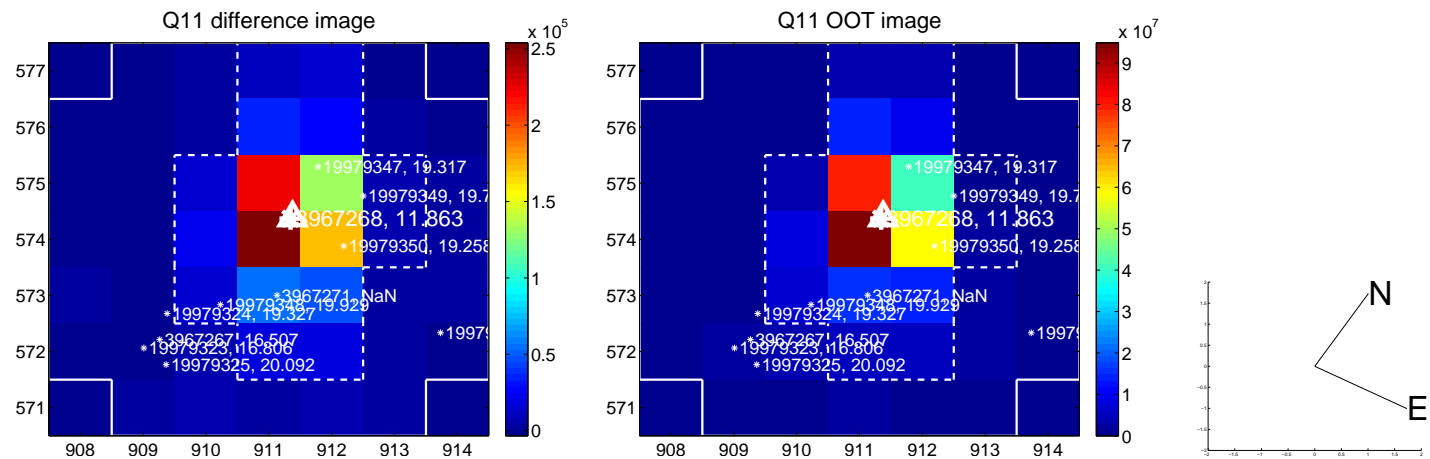
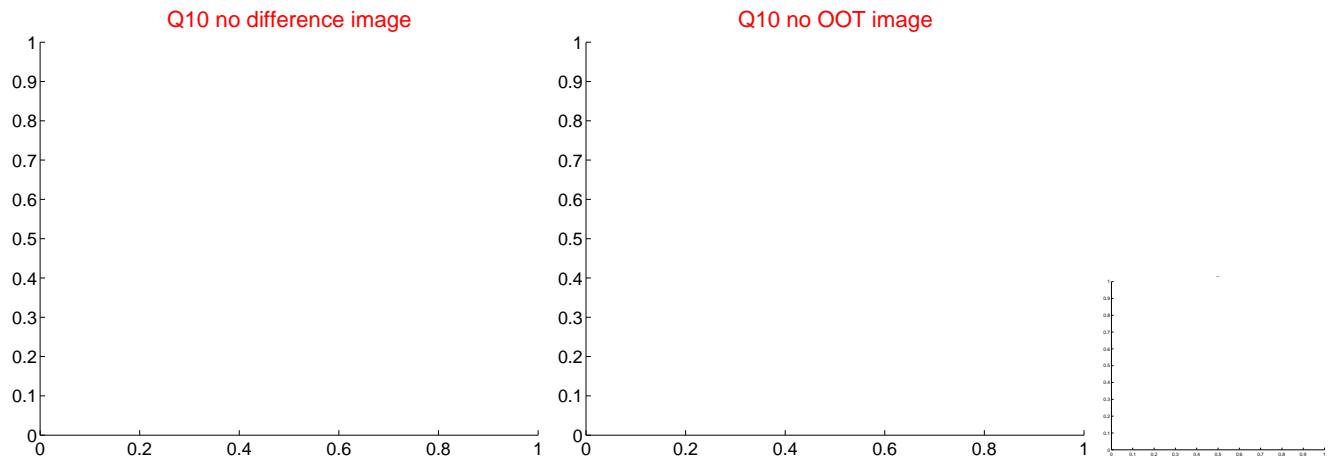
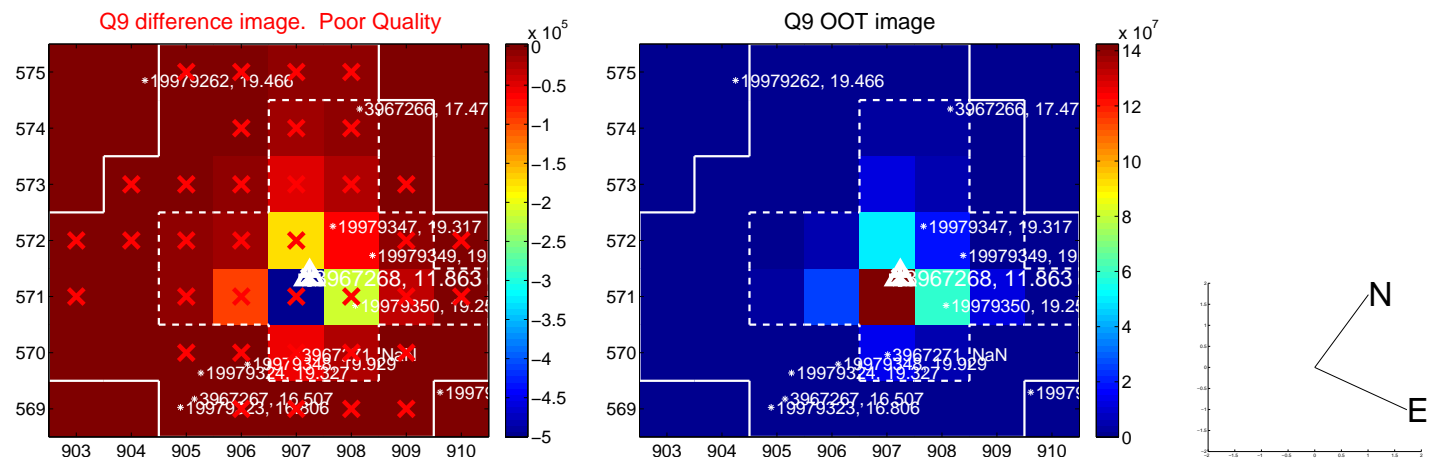


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

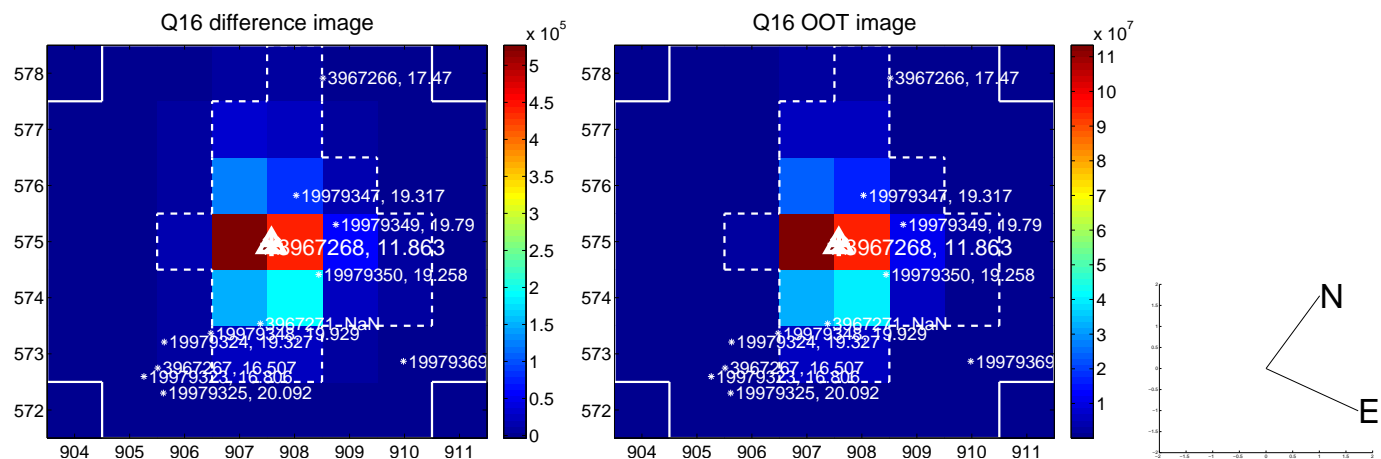
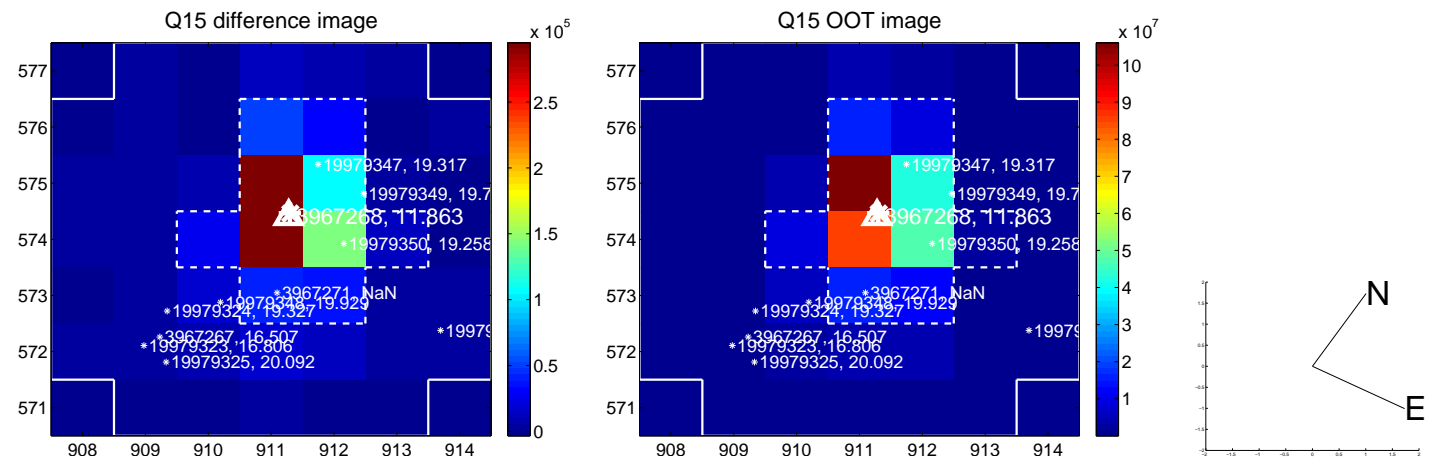
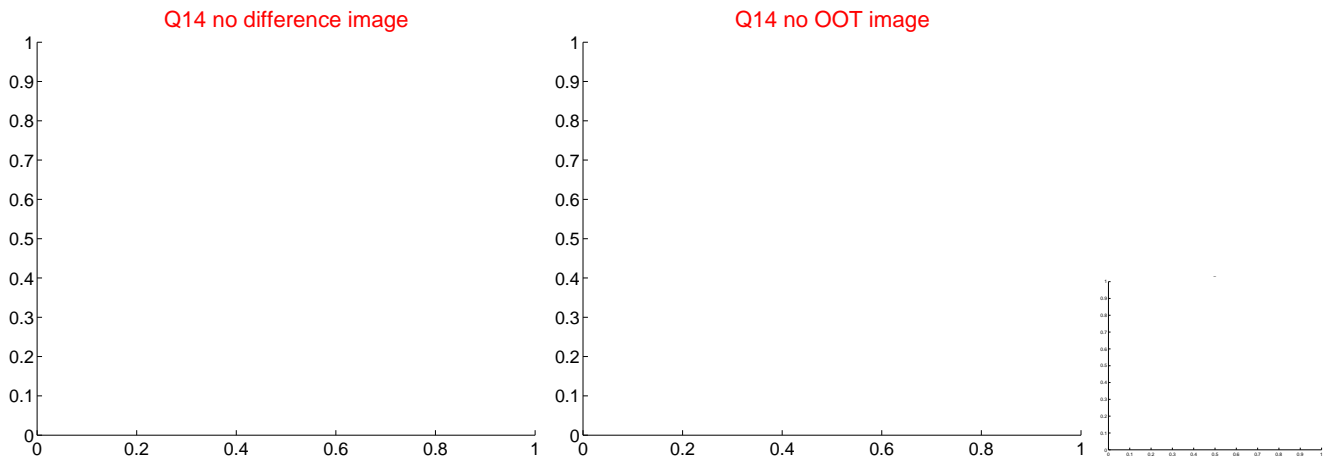
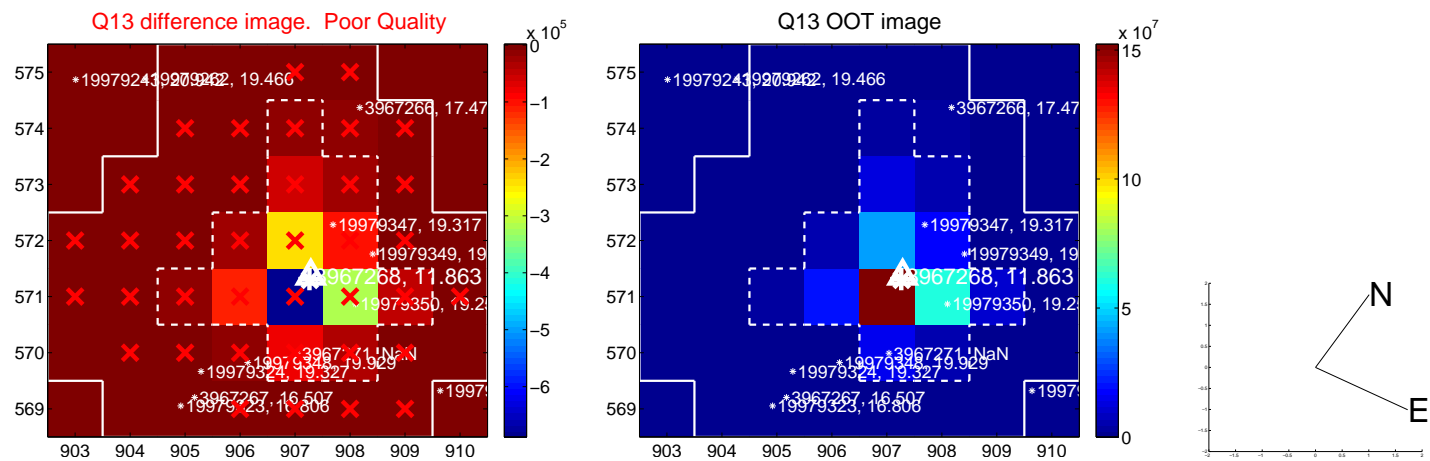
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

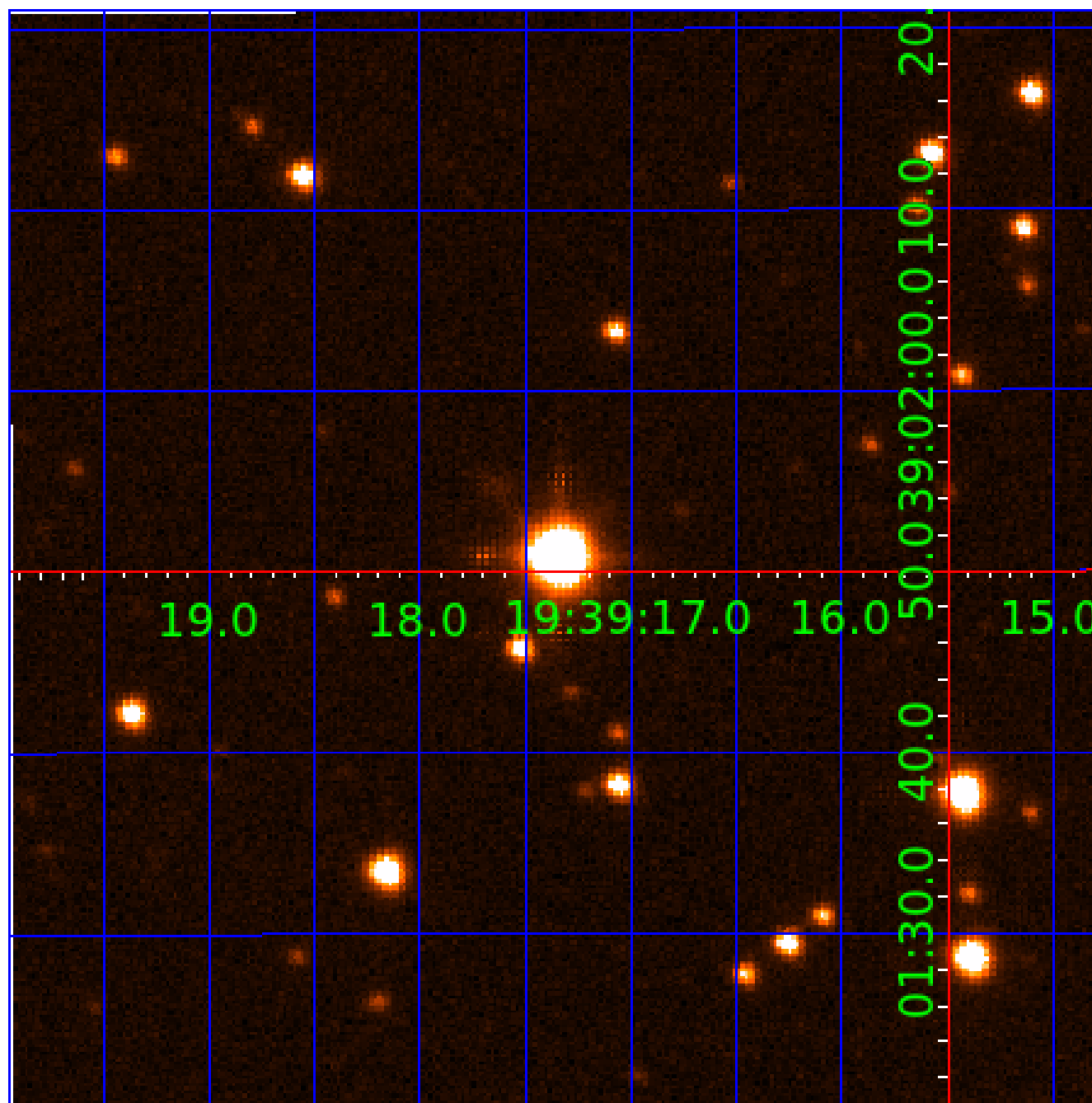


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 003967268

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})
003967268-01	OBS	No	0.912698	131.581129	69.7	6.249	11.5	6.0	2.41	7232	2.04	29913.25
003967268-02	OBS	No	38.456267	152.135736	2118.8	2.376	16.3	12.9	2.41	7232	11.23	204.02
003967268-03	OBS	No	49.378882	134.767014	2390.7	1.690	16.1	14.2	2.41	7232	12.08	146.19
003967268-04	OBS	No	32.353172	163.057910	1524.9	1.673	13.7	11.8	2.41	7232	10.84	256.89
003967268-05	OBS	No	12.637158	135.701476	1231.3	2.645	13.4	13.2	2.41	7232	15.81	899.71
003967268-06	OBS	No	32.638873	139.071766	526.5	16.356	9.9	6.5	2.41	7232	5.87	253.89

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003967268-01	OBS	FP	0.00	1	0	0	0	LPP_DV
003967268-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
003967268-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
003967268-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
003967268-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
003967268-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

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

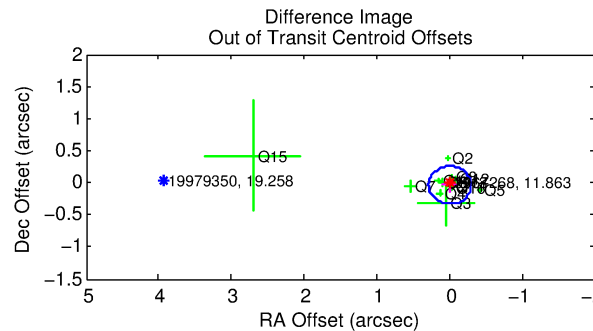
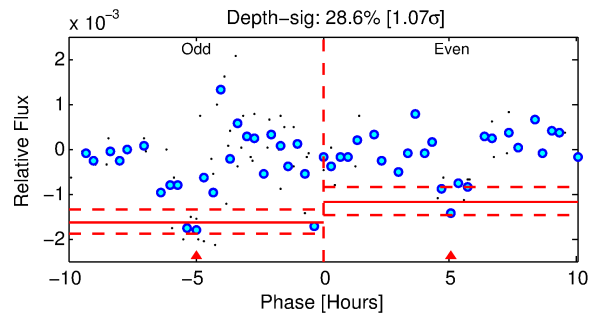
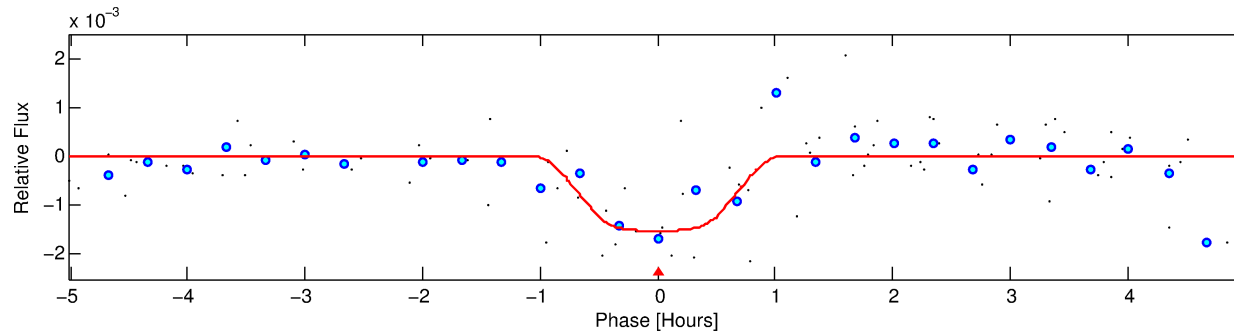
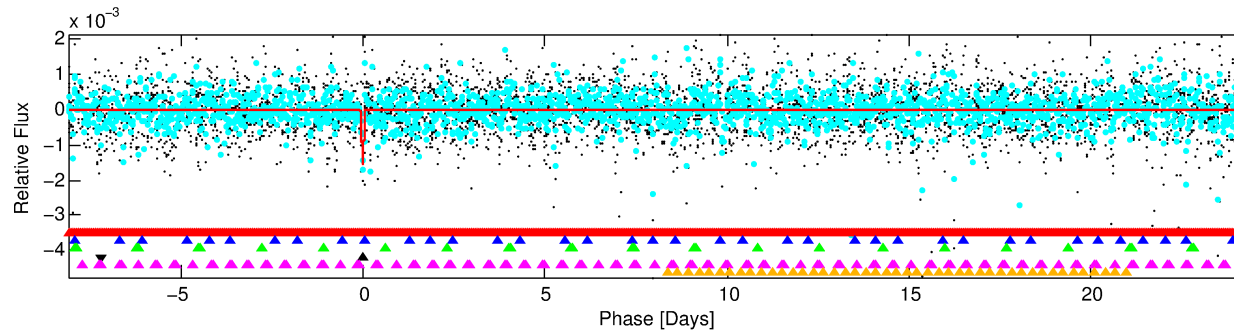
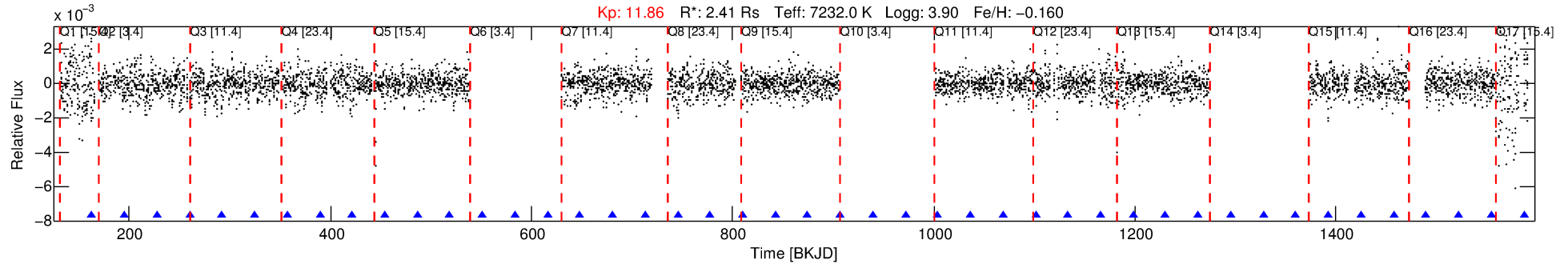
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003967268-04

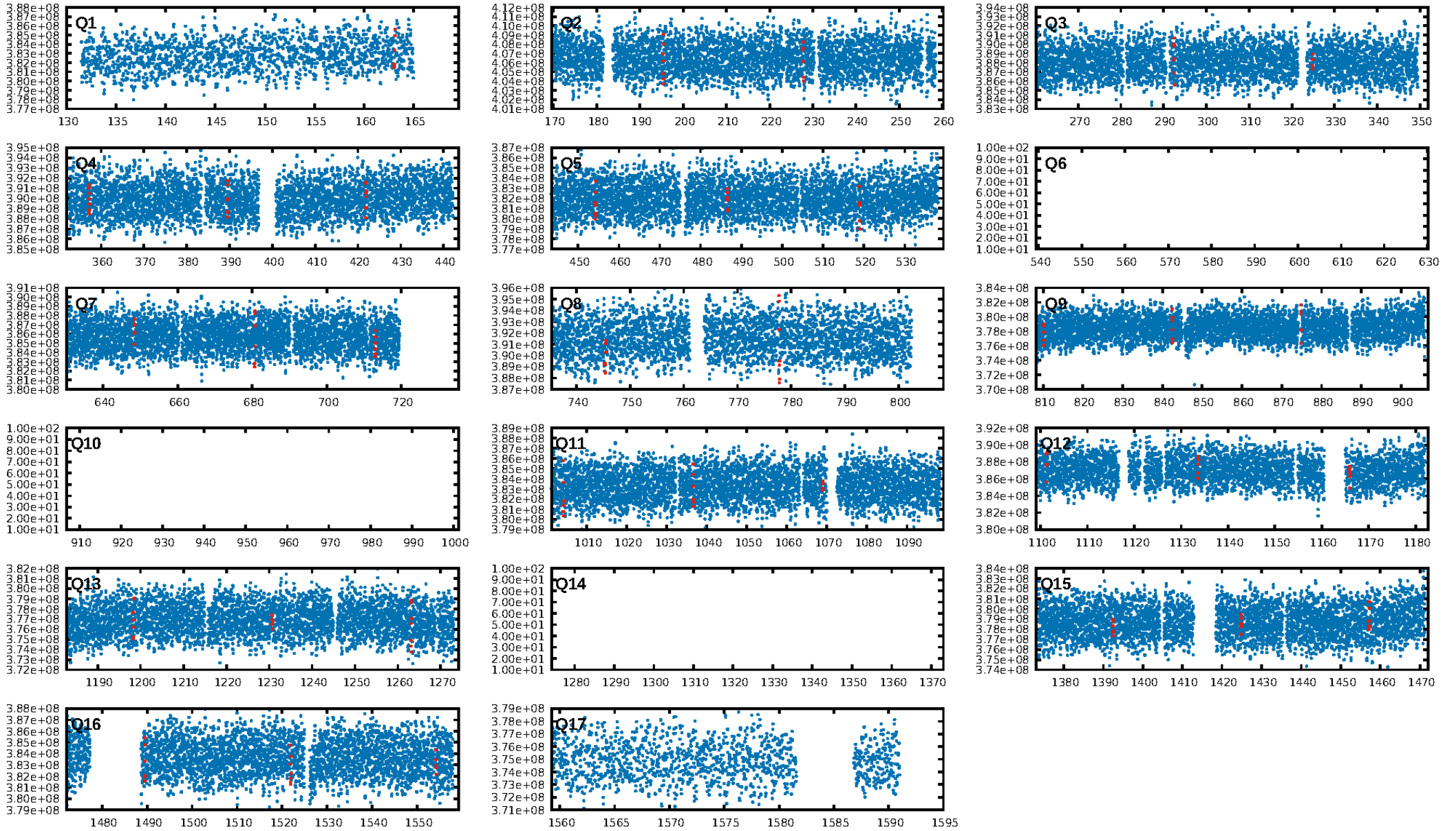
No Significant Match Found

DV One-Page Summary

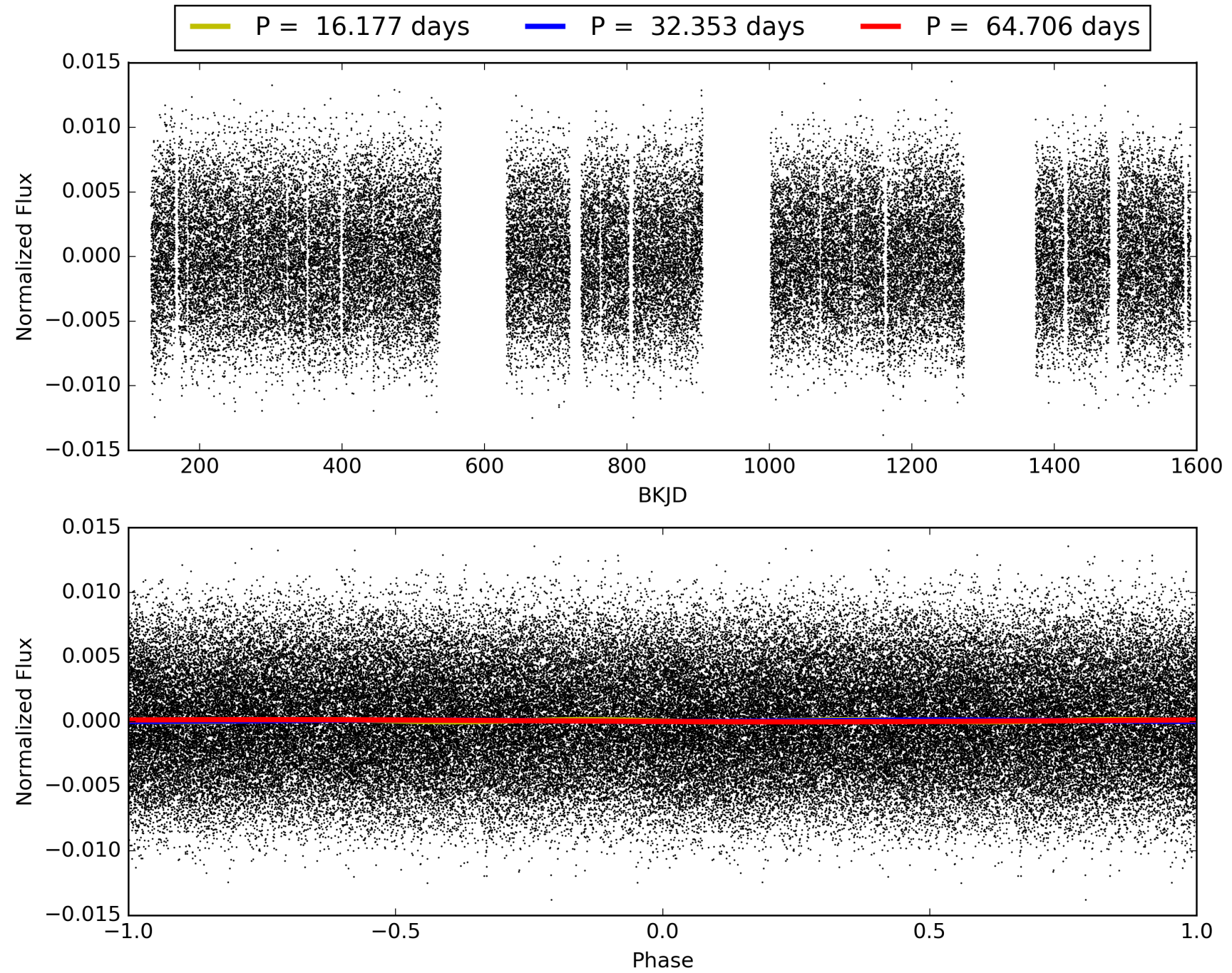
KIC: 3967268 Candidate: 4 of 6 Period: 32.353 d



TCE 003967268-04, PDC Light Curves

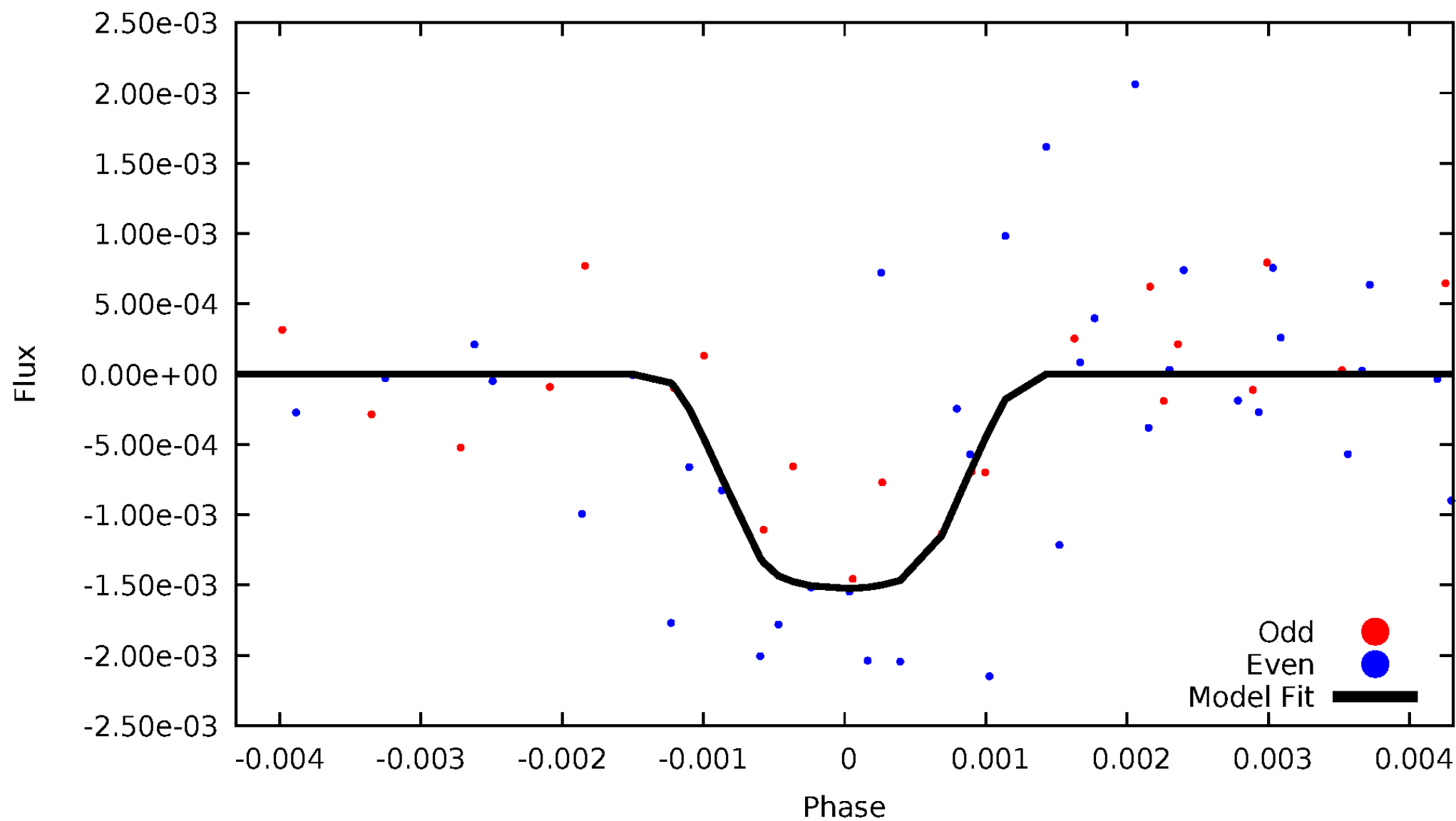


TCE 003967268-04



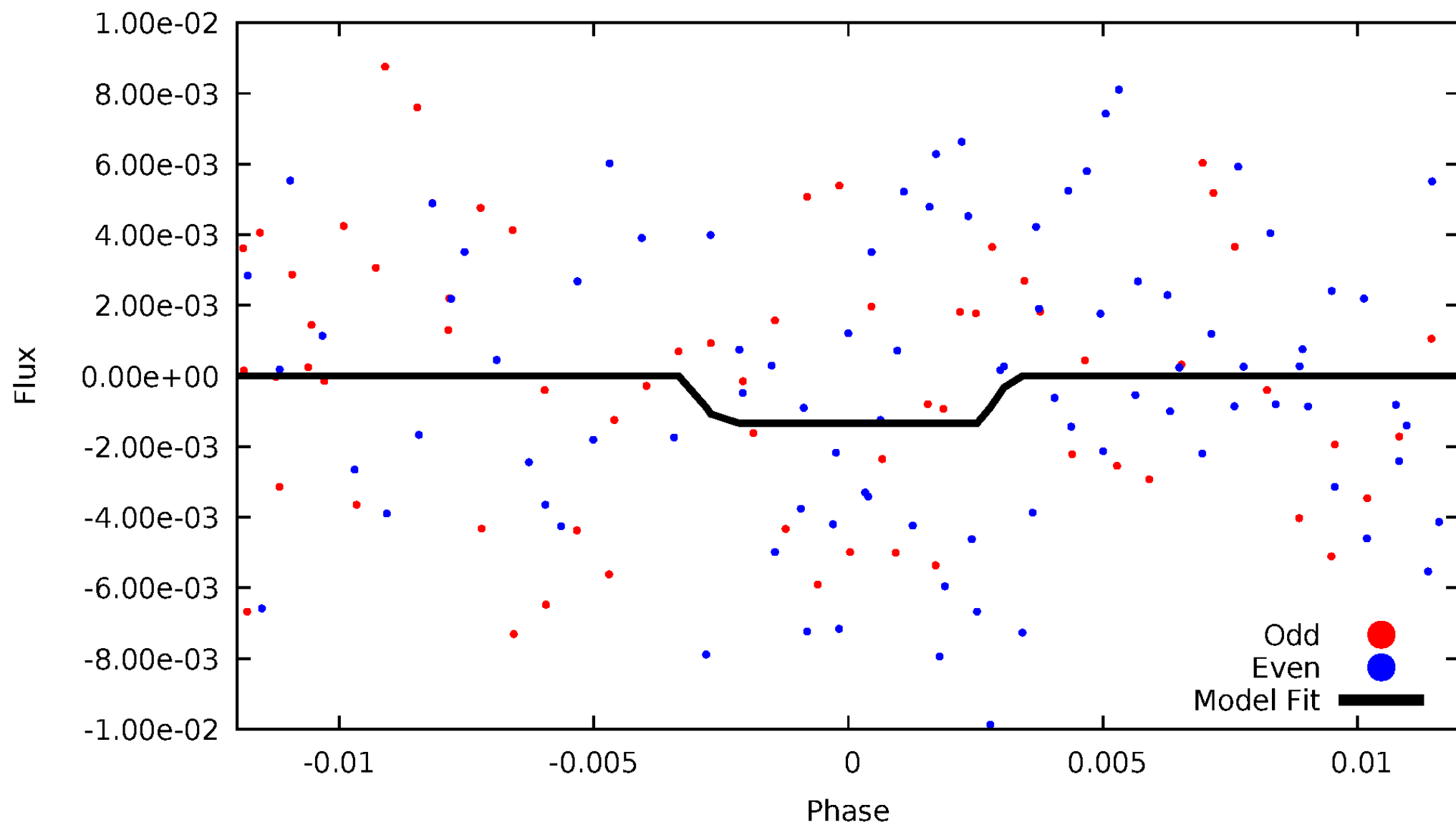
DV Odd/Even

TCE 003967268-04



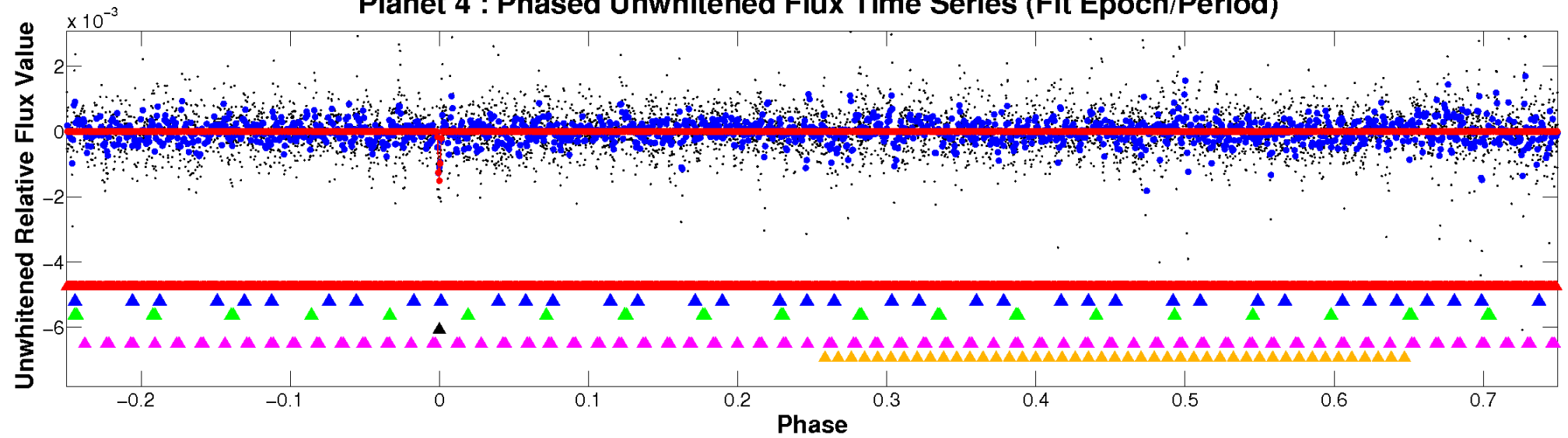
ALT Odd/Even

TCE 003967268-04

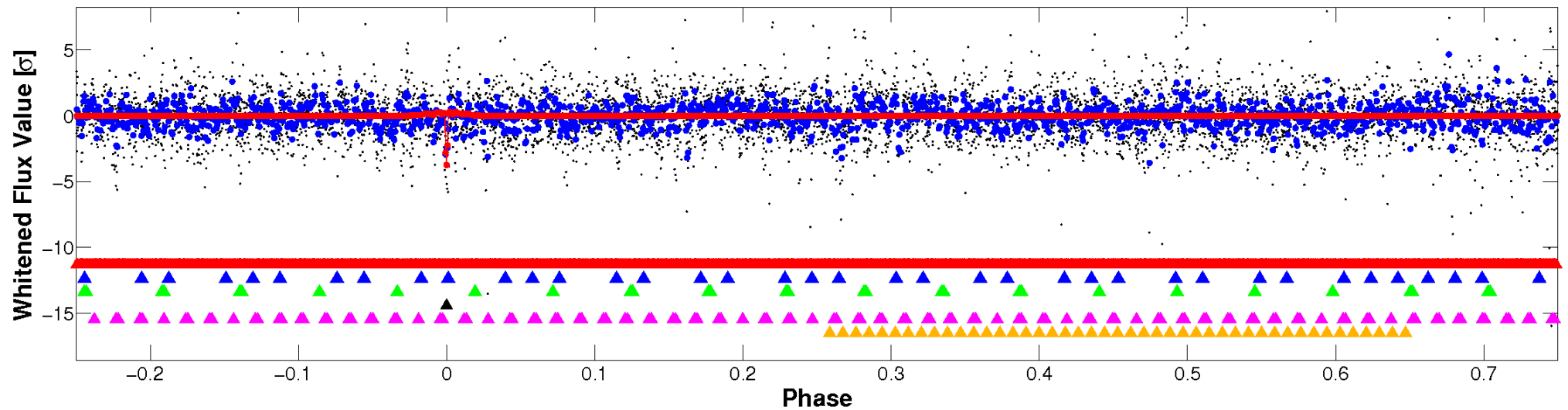


Non-Whitened Vs. Whitened Light Curve

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

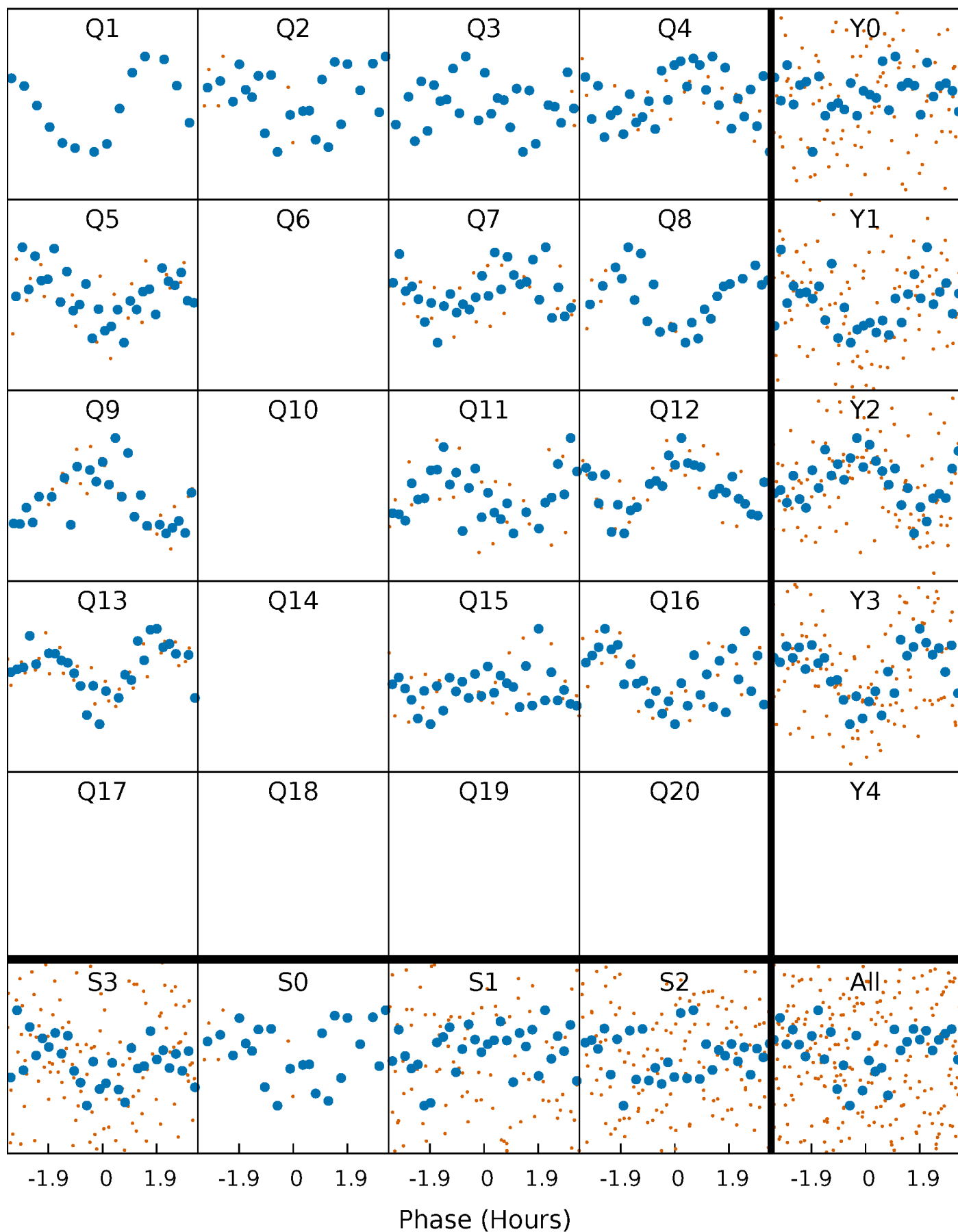


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



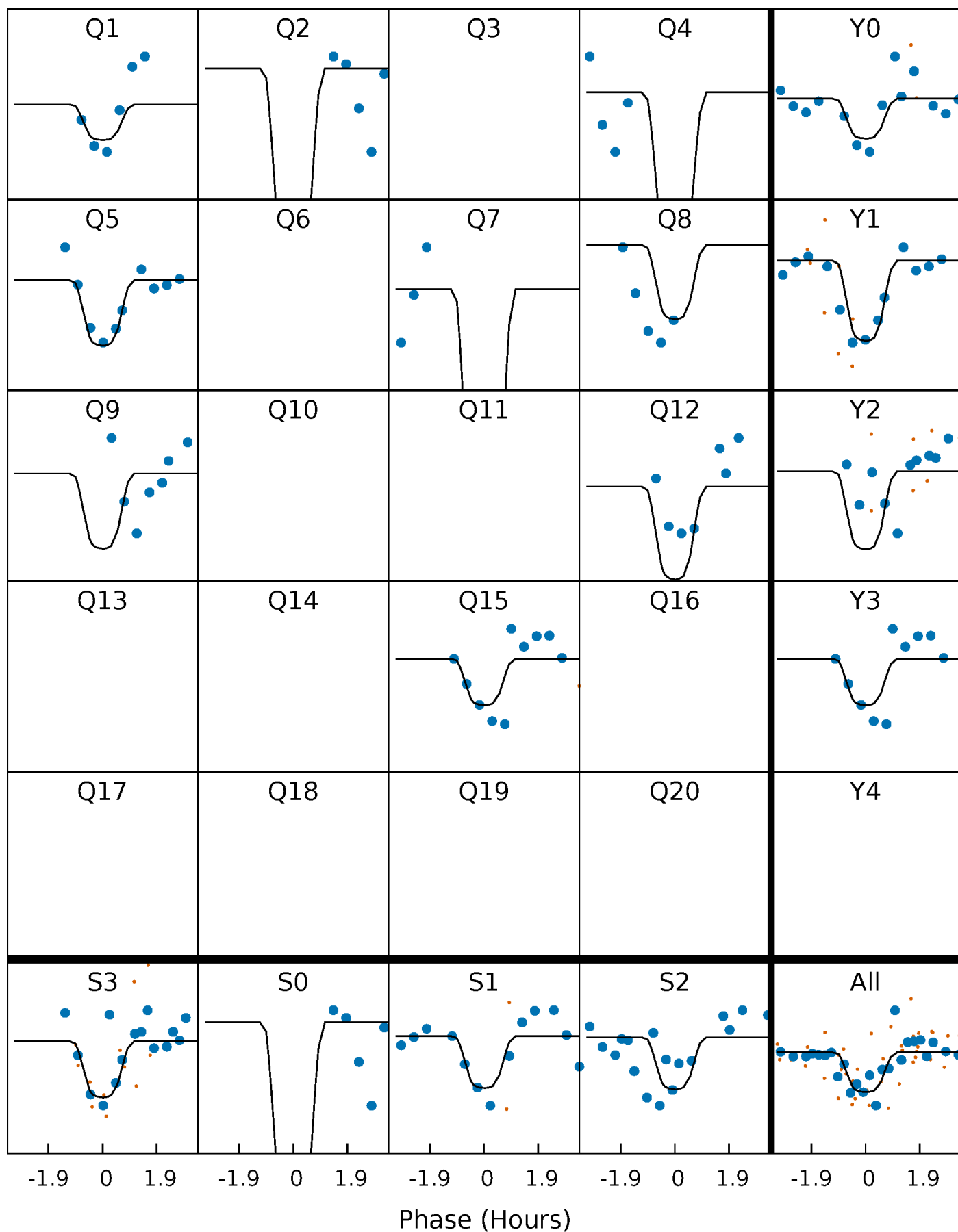
PDC Quarter-Phased Transit Curves

TCE 003967268-04 P= 32.353172 Days $T_0=163.057910$ (BKJD)



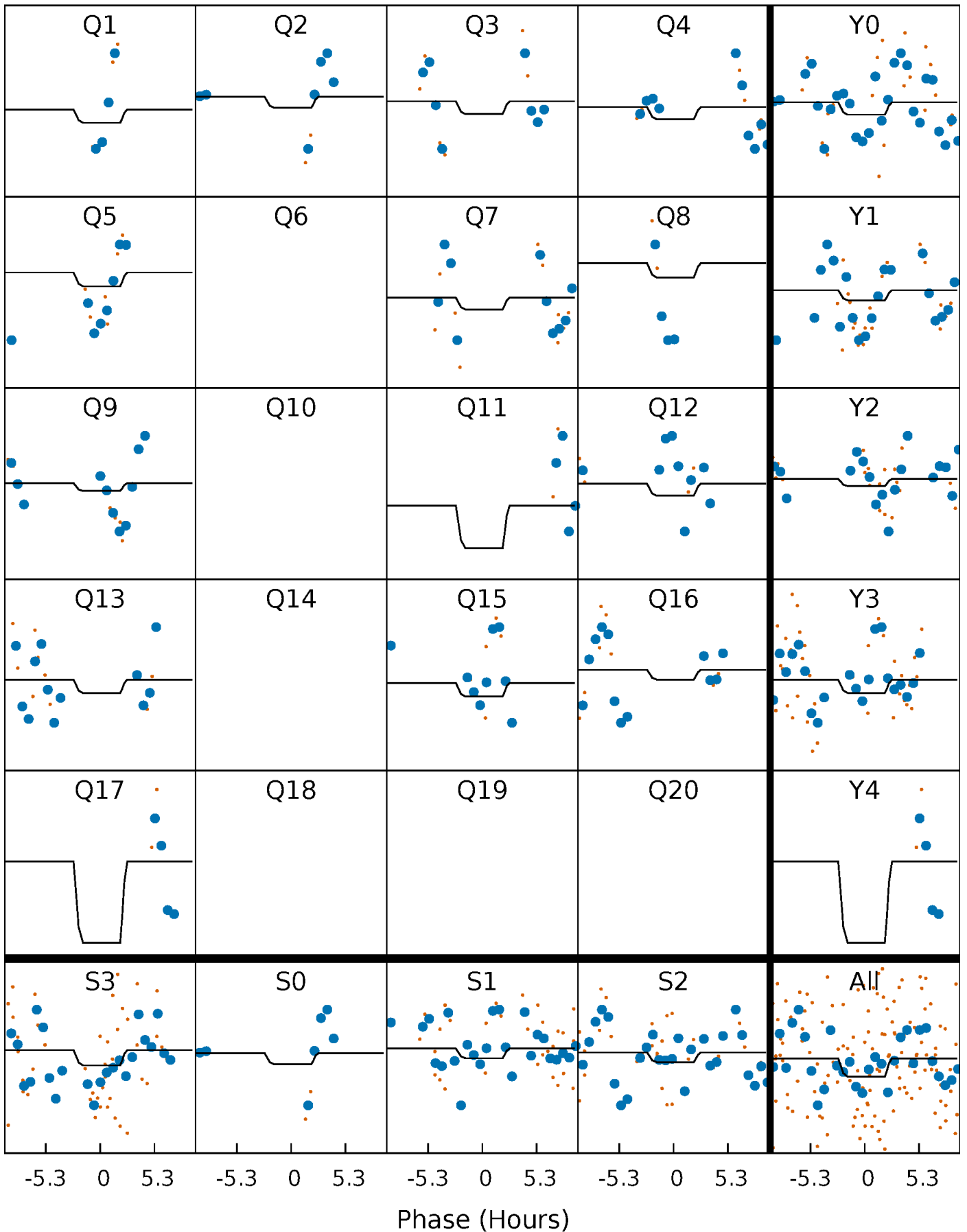
DV Quarter-Phased Transit Curves

TCE 003967268-04 P= 32.353172 Days $T_0=163.057910$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

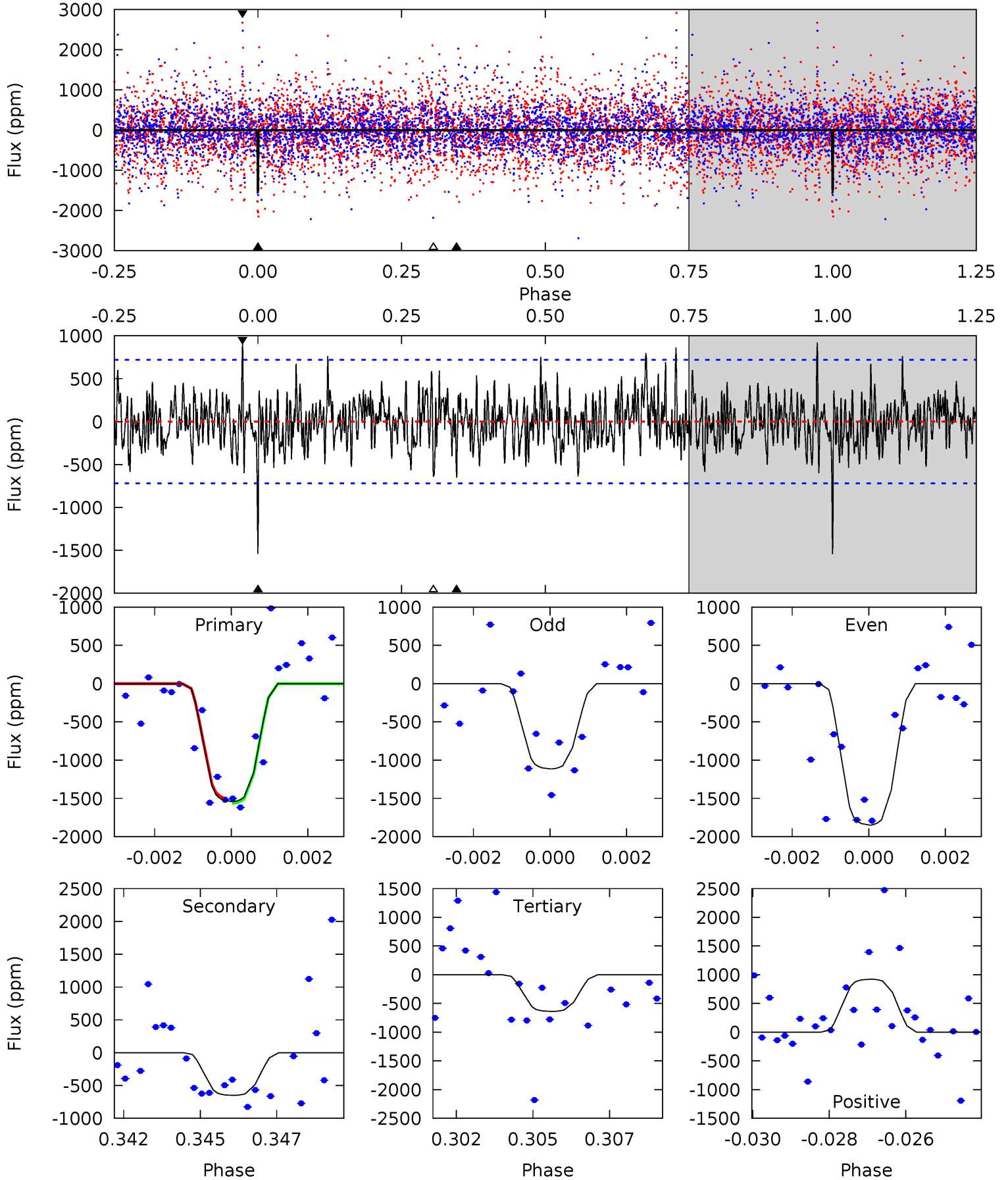
TCE 003967268-04 $P = 32.353857$ Days $T_0 = 163.052504$ (BKJD)



DV Model-Shift Uniqueness Test

003967268-04, P = 32.353172 Days, E = 130.704738 Days

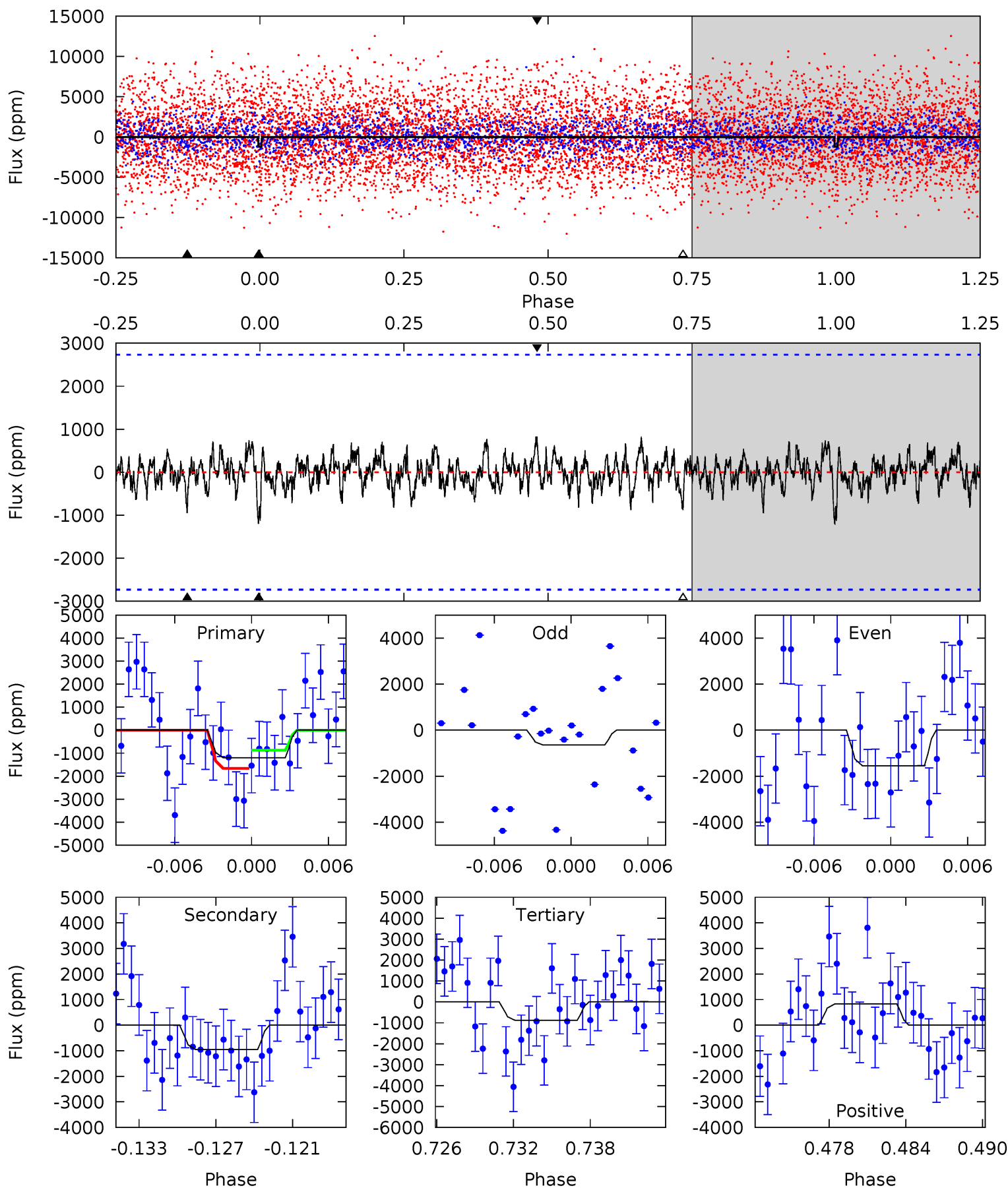
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.4	4.79	4.70	6.80	5.30	3.04	1.70	6.65	4.55	0.09	-2.01	2.70	0.79	0.37	0.26



Alt Model-Shift Uniqueness Test

003967268-04, P = 32.353857 Days, E = 130.698647 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.26	1.79	1.66	1.55	5.13	2.76	0.56	0.60	0.70	0.13	0.23	0.84	1.92	0.41	0.73



Stellar Parameters For KIC 003967268

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7232^{+226}_{-302}	$3.895^{+0.315}_{-0.135}$	$-0.160^{+0.250}_{-0.350}$	$2.413^{+0.578}_{-0.866}$	$1.666^{+0.196}_{-0.364}$	$0.167^{+0.365}_{-0.064}$
	+3%/-4%	+8%/-3%	+156%/-219%	+24%/-36%	+12%/-22%	+218%/-39%
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 003967268-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-651 ± 136	$10.28^{+4.31}_{-3.84}$	1398^{+105}_{-130}	5625^{+1253}_{-765}	190^{+295}_{-101}
Alt.	-951 ± 532	$8.95^{+4.49}_{-3.66}$	1399^{+116}_{-134}	6408^{+2686}_{-1458}	319^{+774}_{-226}

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

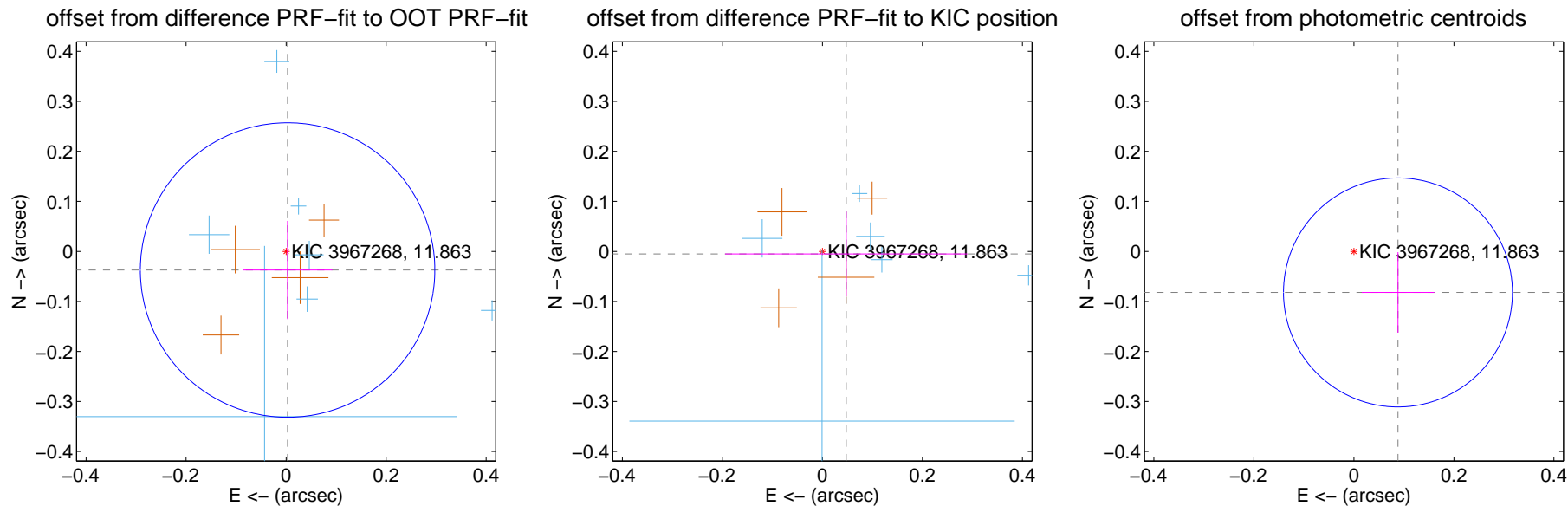
DV Centroid Data

Supplemental centroid analysis for 003967268-04. **Kepler magnitude: 11.86.** Transit SNR 11.82

There are 7 quarters with good PRF difference image offsets

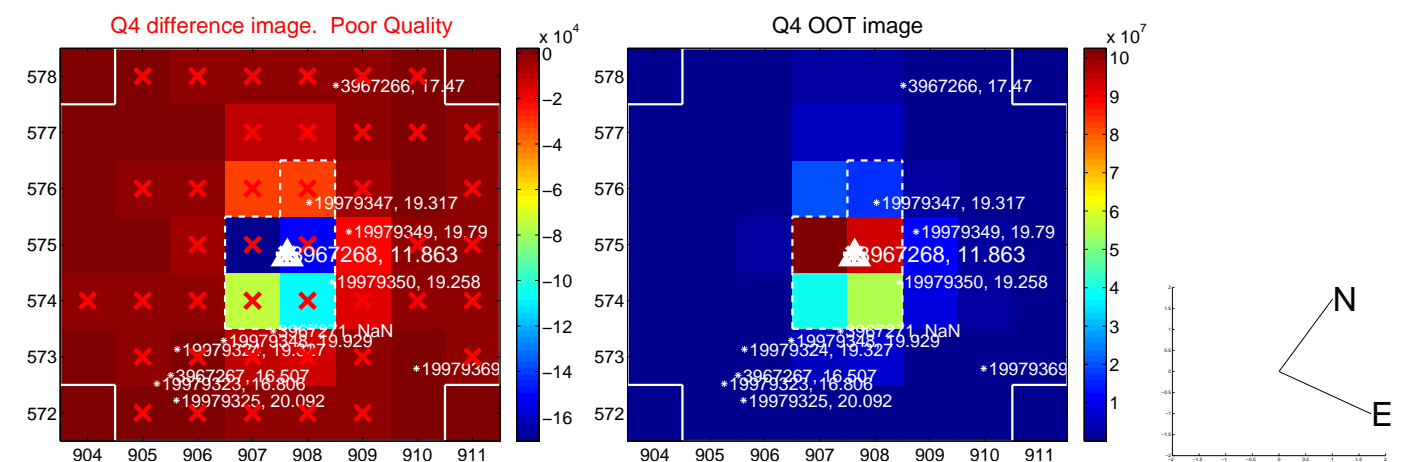
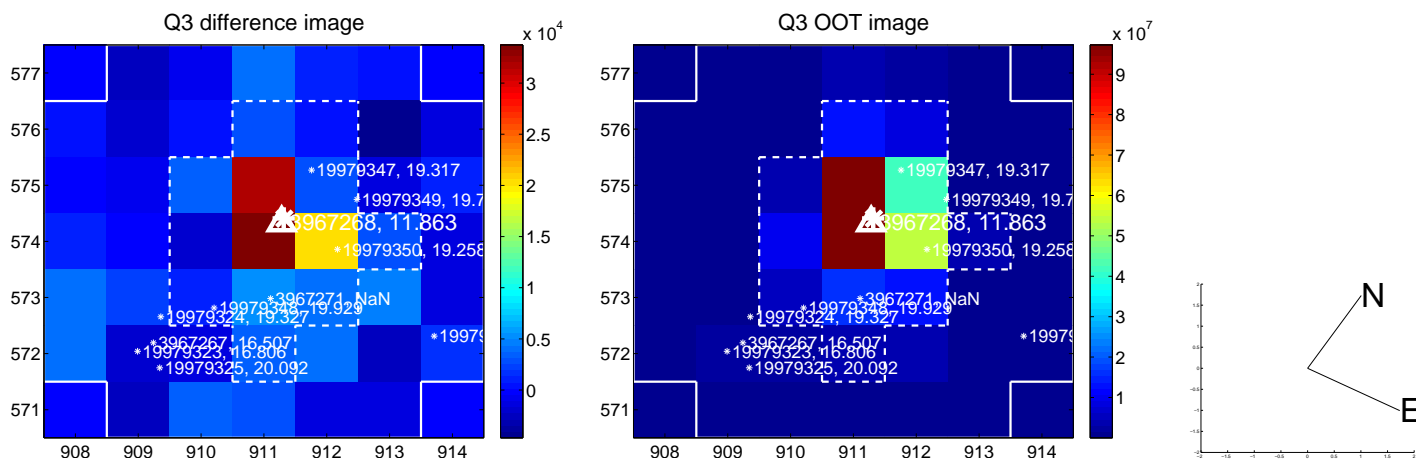
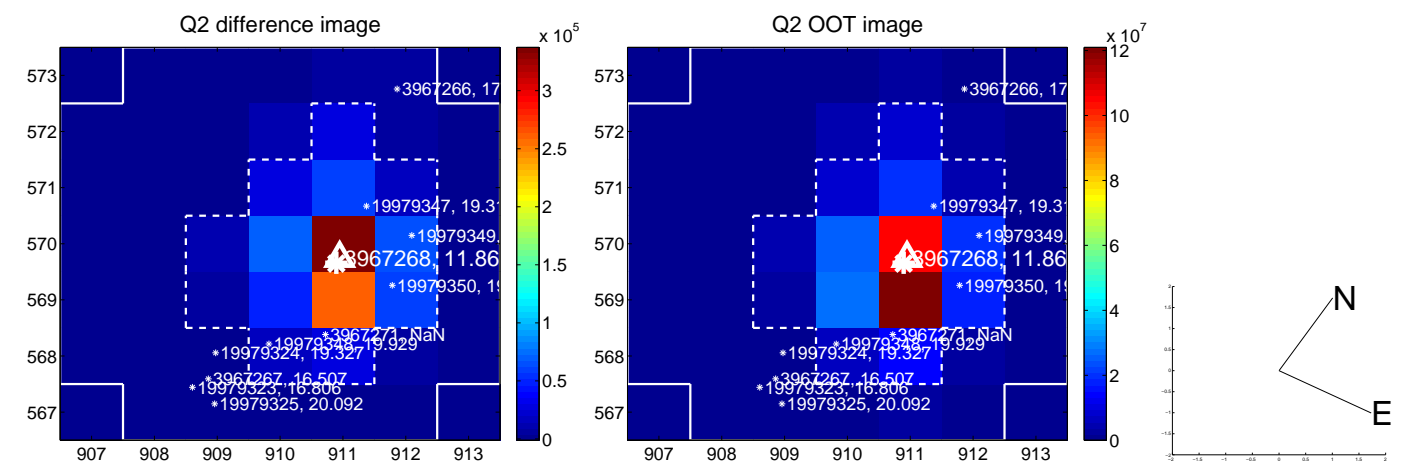
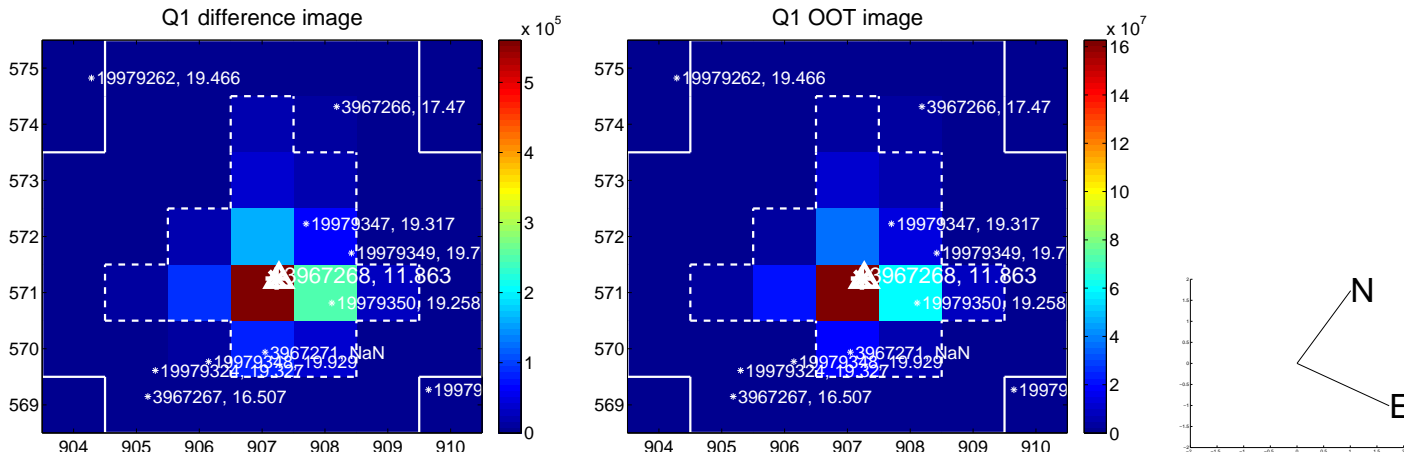
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.037 ± 0.098	0.38	-0.003 ± 0.089	-0.037 ± 0.098
PRF-fit source offset from KIC position	0.048 ± 0.244	0.20	-0.048 ± 0.242	-0.005 ± 0.085
photometric centroid source offset	0.12 ± 0.08	1.58	-0.09 ± 0.07	-0.08 ± 0.08

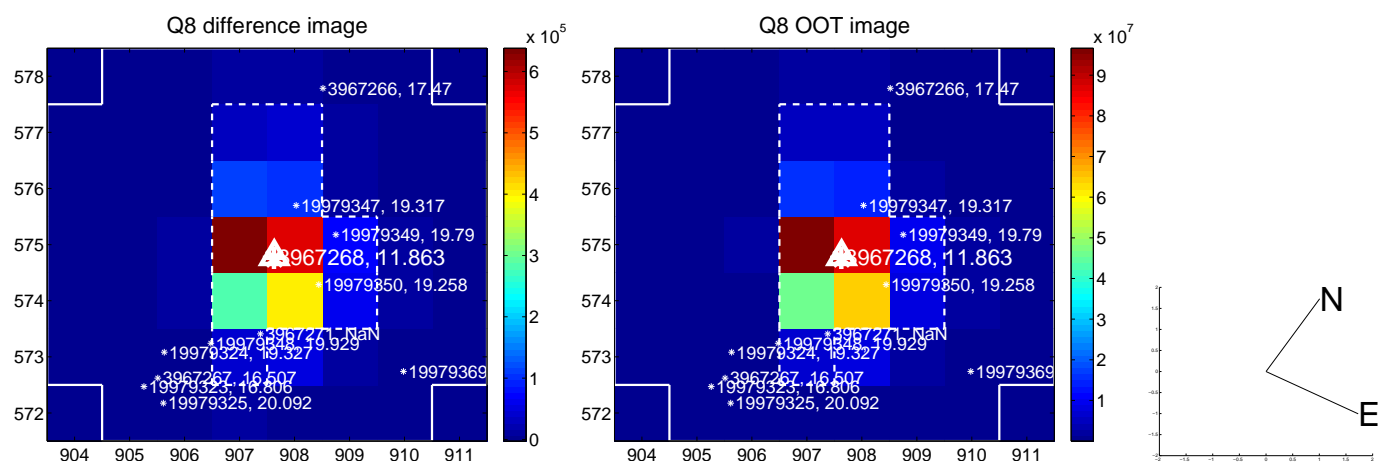
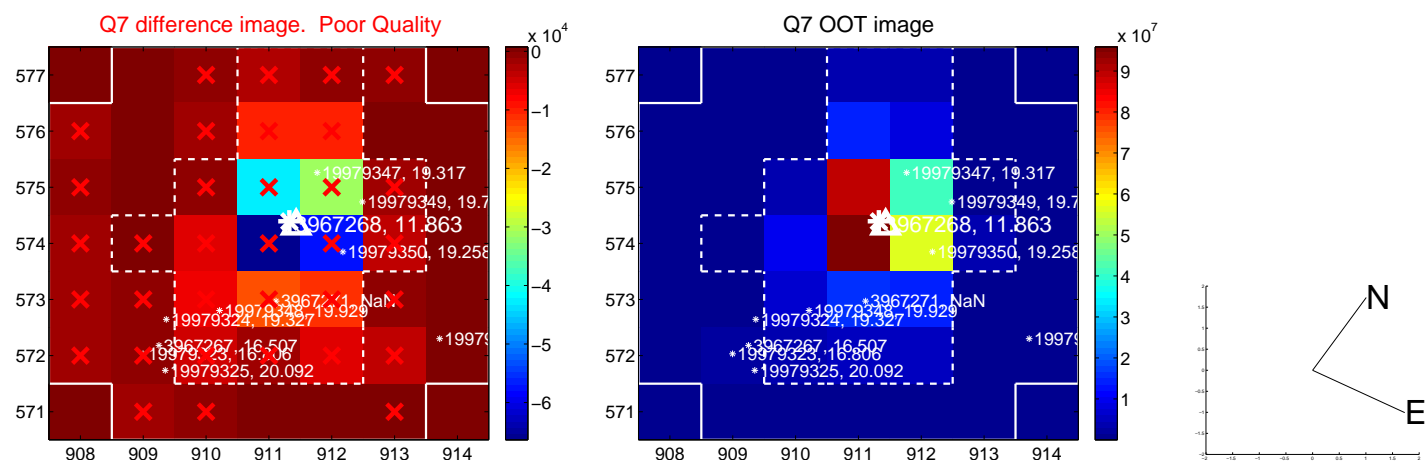
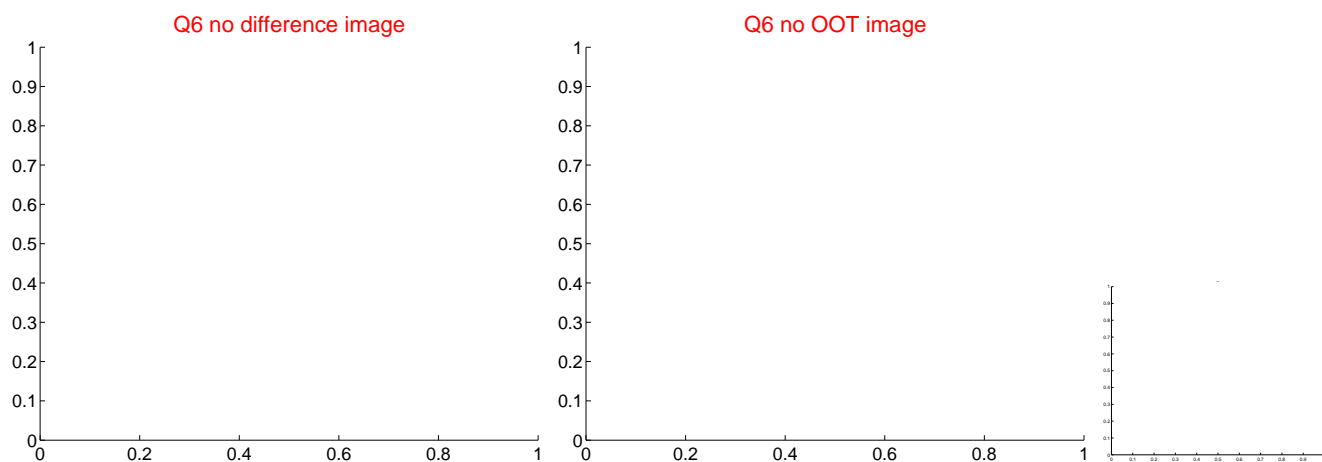
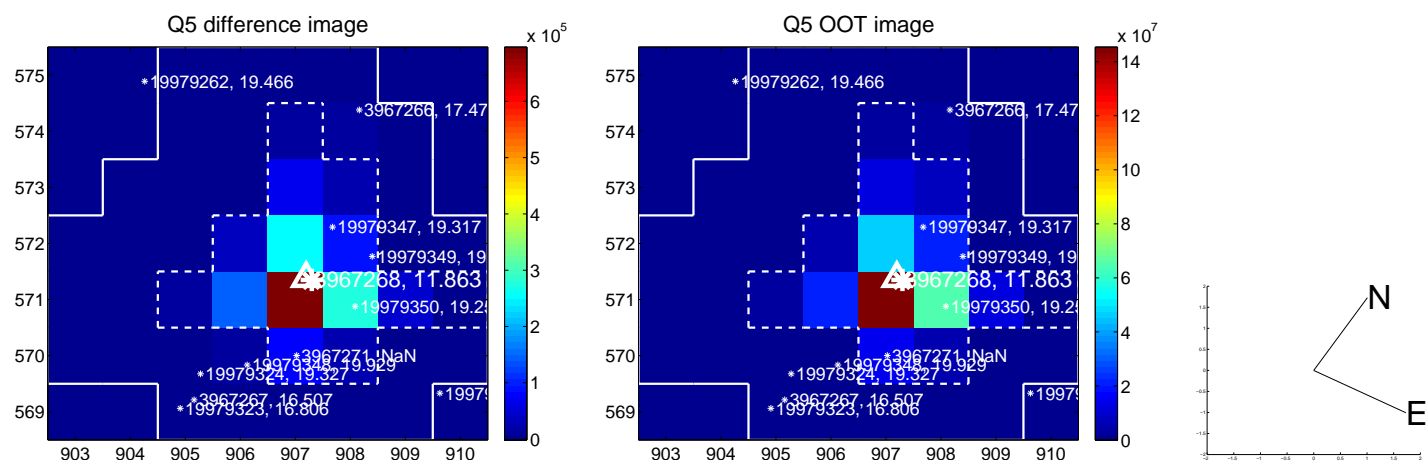


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

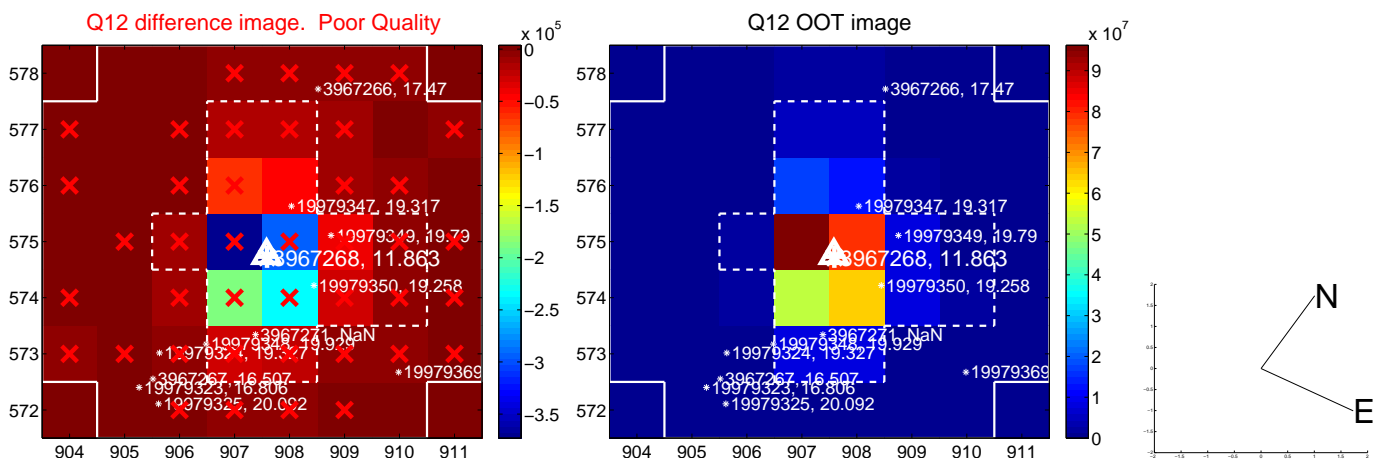
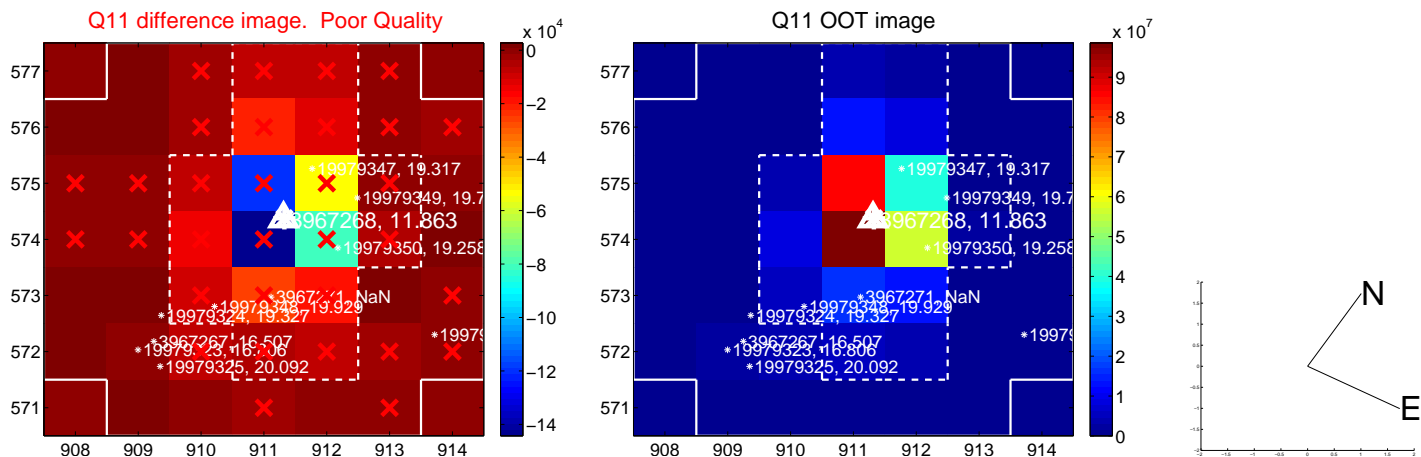
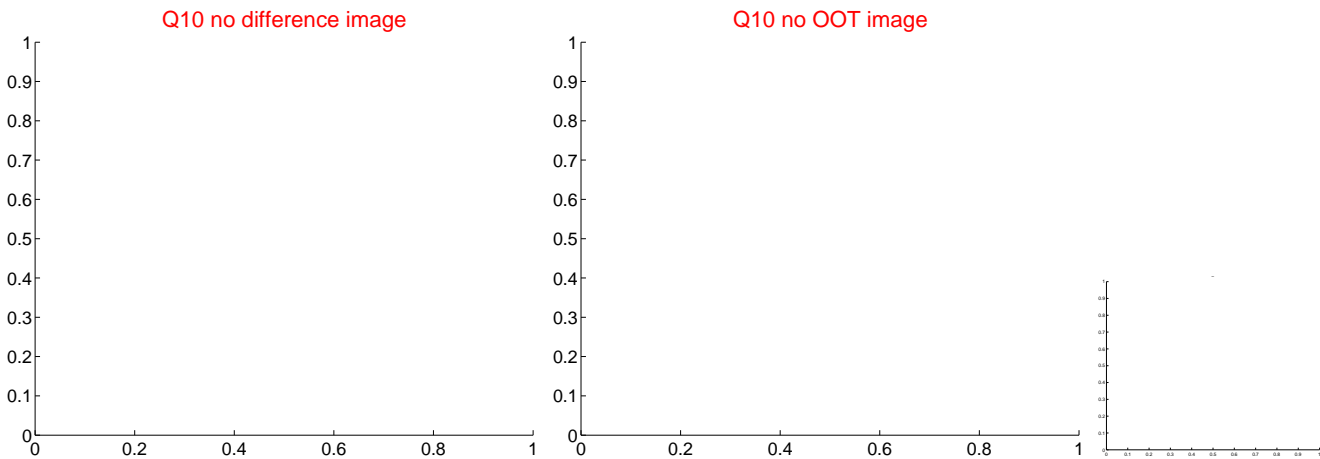
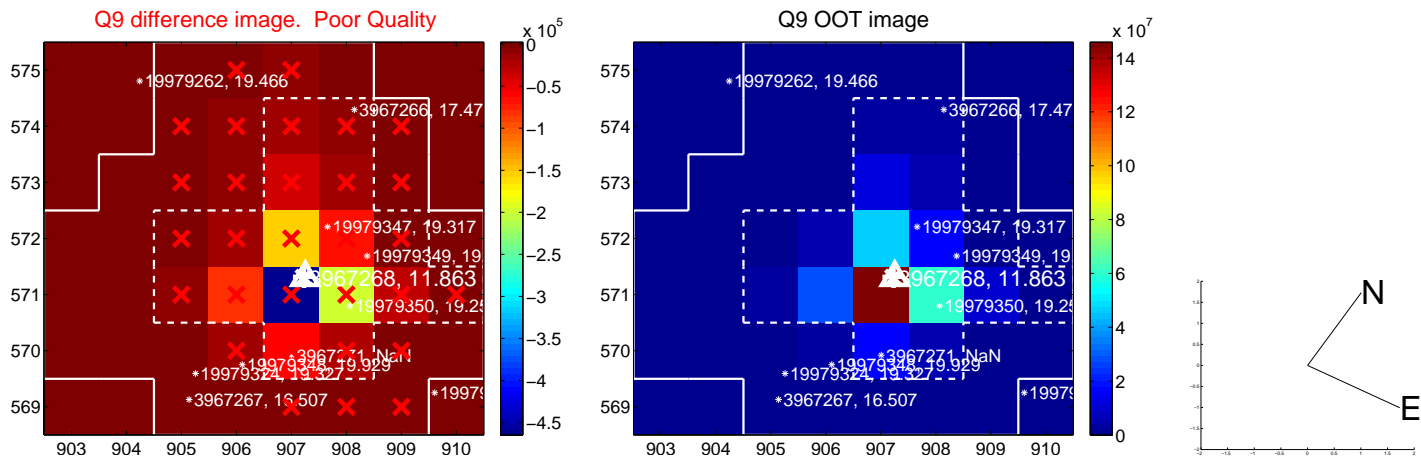
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



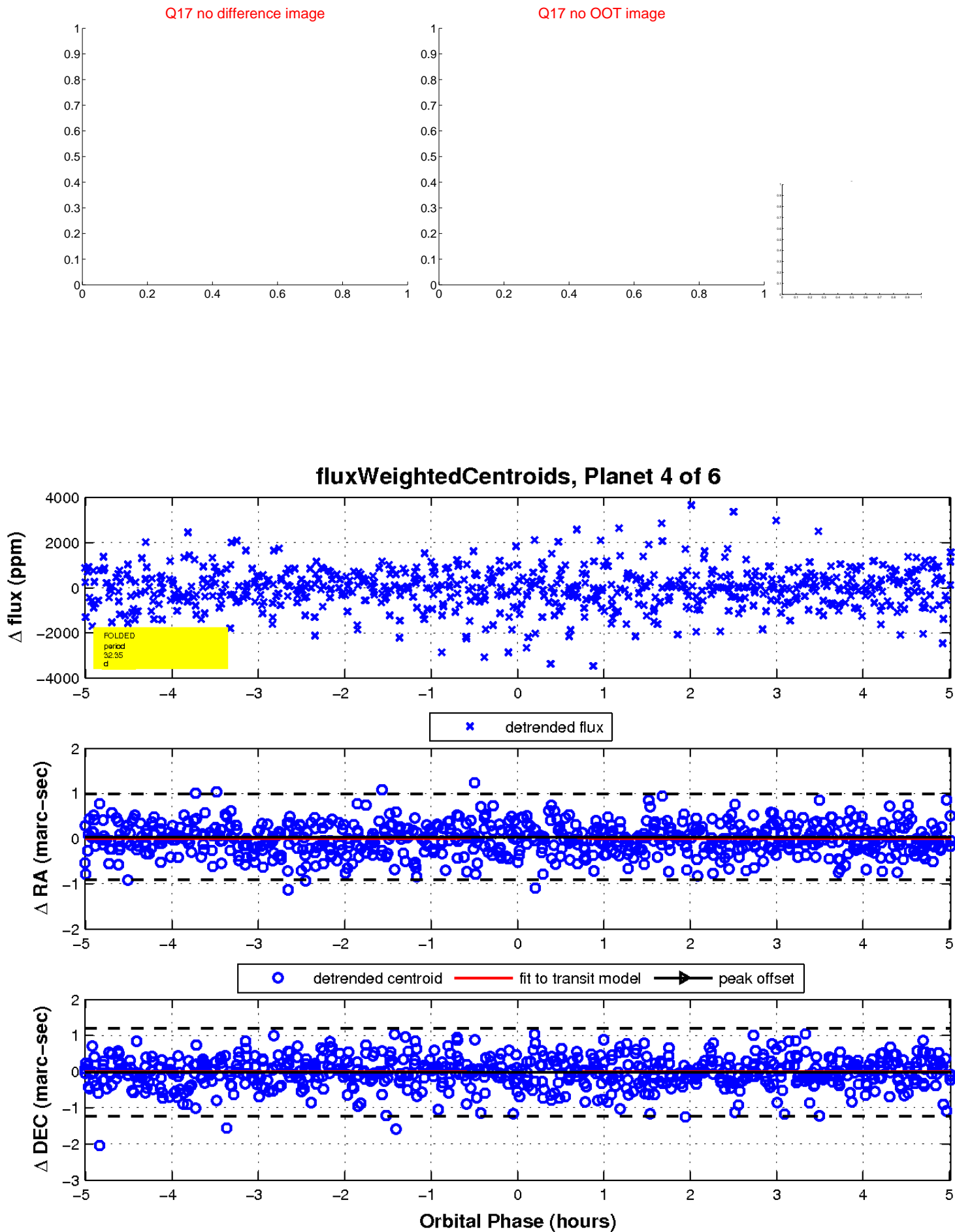
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

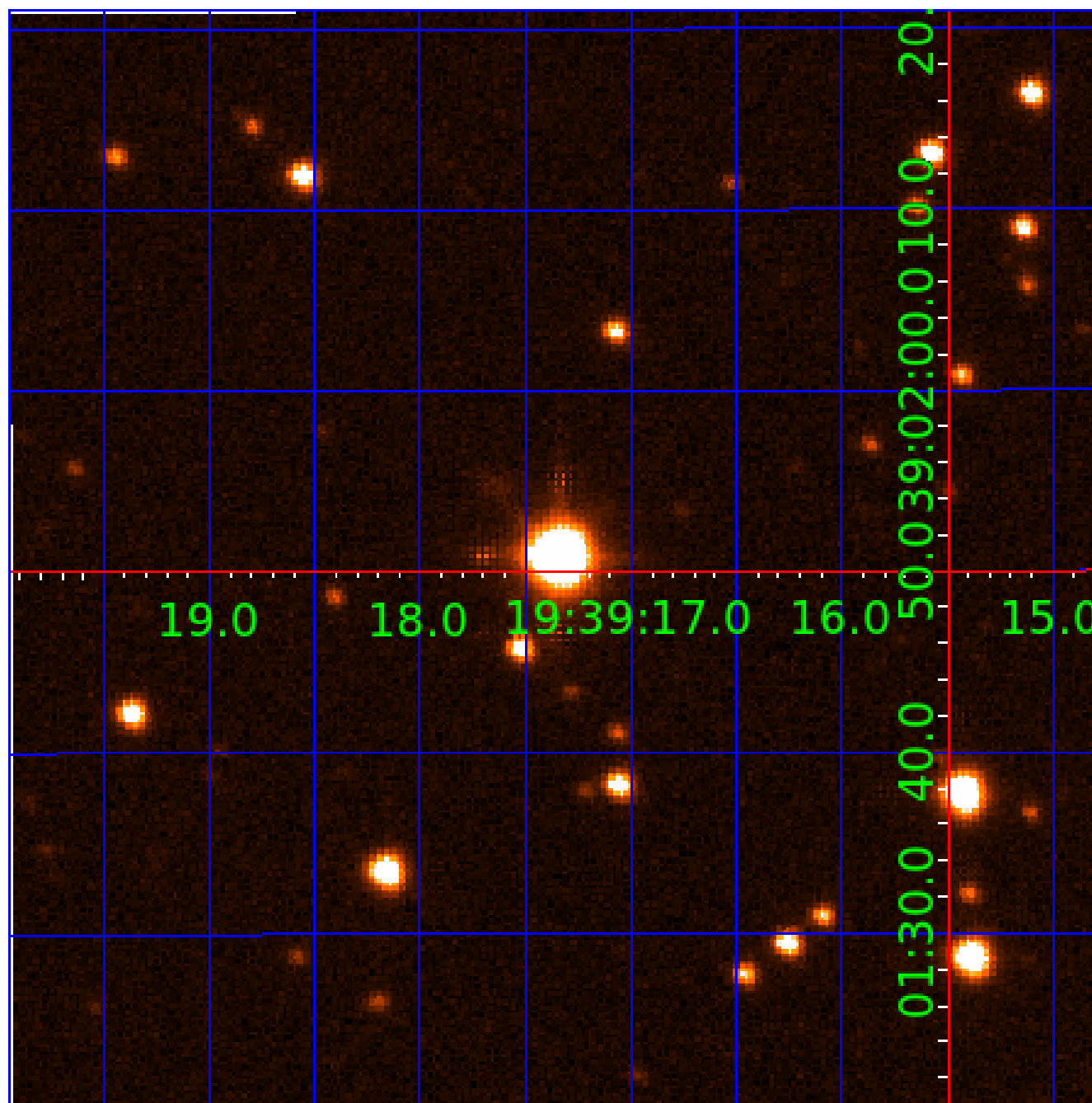


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 003967268

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})
003967268-01	OBS	No	0.912698	131.581129	69.7	6.249	11.5	6.0	2.41	7232	2.04	29913.25
003967268-02	OBS	No	38.456267	152.135736	2118.8	2.376	16.3	12.9	2.41	7232	11.23	204.02
003967268-03	OBS	No	49.378882	134.767014	2390.7	1.690	16.1	14.2	2.41	7232	12.08	146.19
003967268-04	OBS	No	32.353172	163.057910	1524.9	1.673	13.7	11.8	2.41	7232	10.84	256.89
003967268-05	OBS	No	12.637158	135.701476	1231.3	2.645	13.4	13.2	2.41	7232	15.81	899.71
003967268-06	OBS	No	32.638873	139.071766	526.5	16.356	9.9	6.5	2.41	7232	5.87	253.89

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003967268-01	OBS	FP	0.00	1	0	0	0	LPP_DV
003967268-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
003967268-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
003967268-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
003967268-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
003967268-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

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

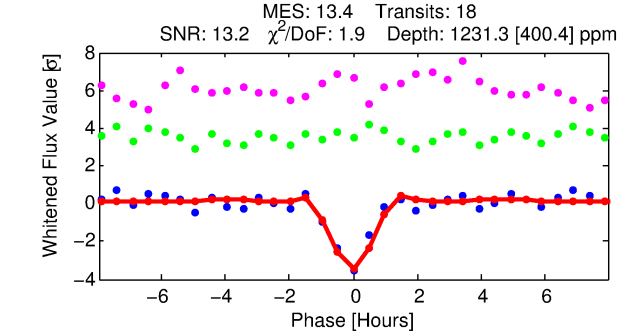
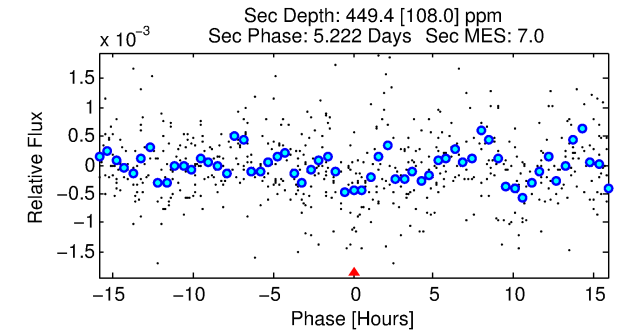
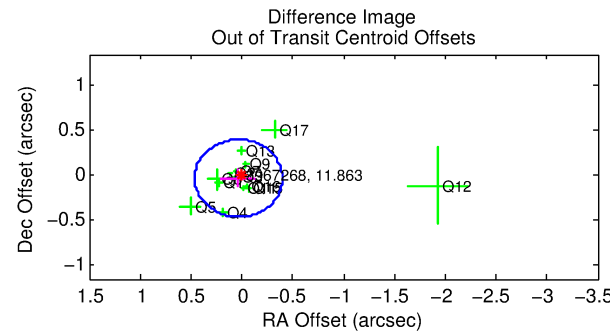
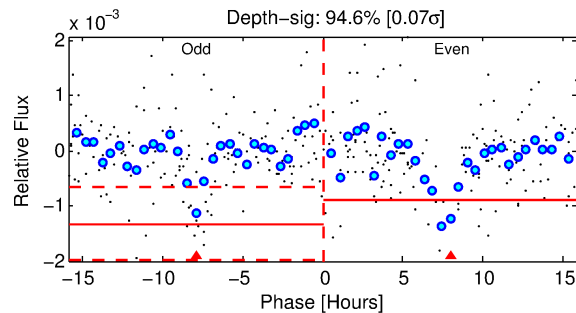
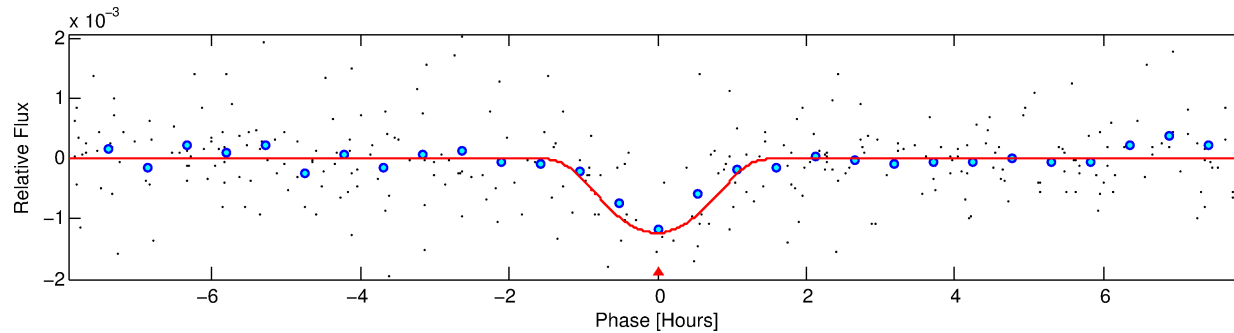
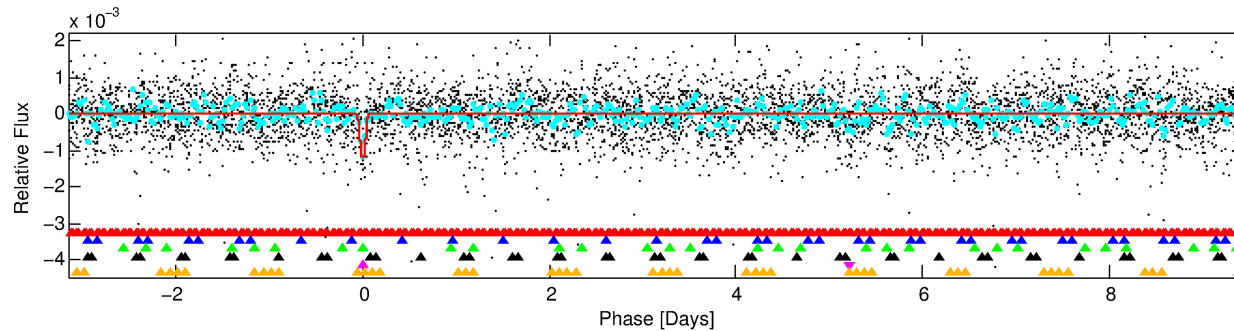
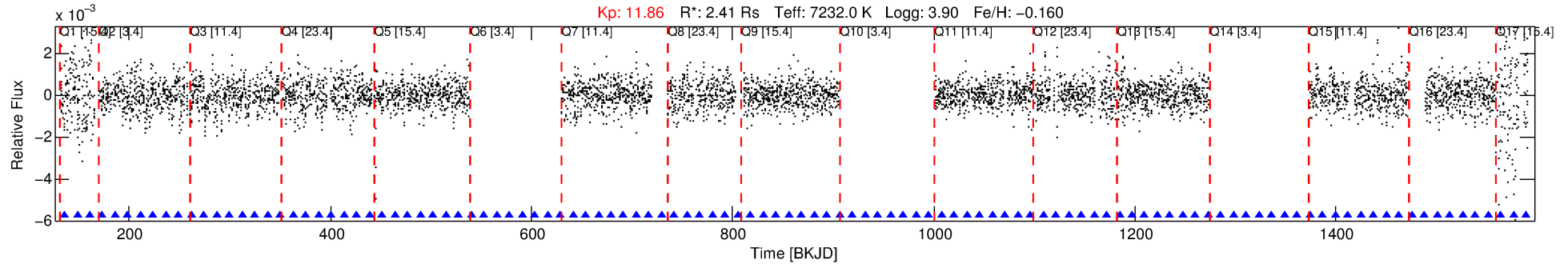
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003967268-05

No Significant Match Found

DV One-Page Summary

KIC: 3967268 Candidate: 5 of 6 Period: 12.637 d



DV Fit Results:

Period = 12.63716 [0.00008] d
Epoch = 135.7015 [0.0047] BKJD
Rp/R* = 0.0601 [0.2526]
a/R* = 12.90 [12.79]
b = 1.00 [0.35]
Seff = 899.71 [508.12]
Teq = 1397 [197] K
Rp = 15.81 [66.76] Re
a = 0.1259 [0.0428] AU
Ag = 15.68 [132.25] [0.11 σ]
Teffp = 4297 [9042] K [0.32 σ]

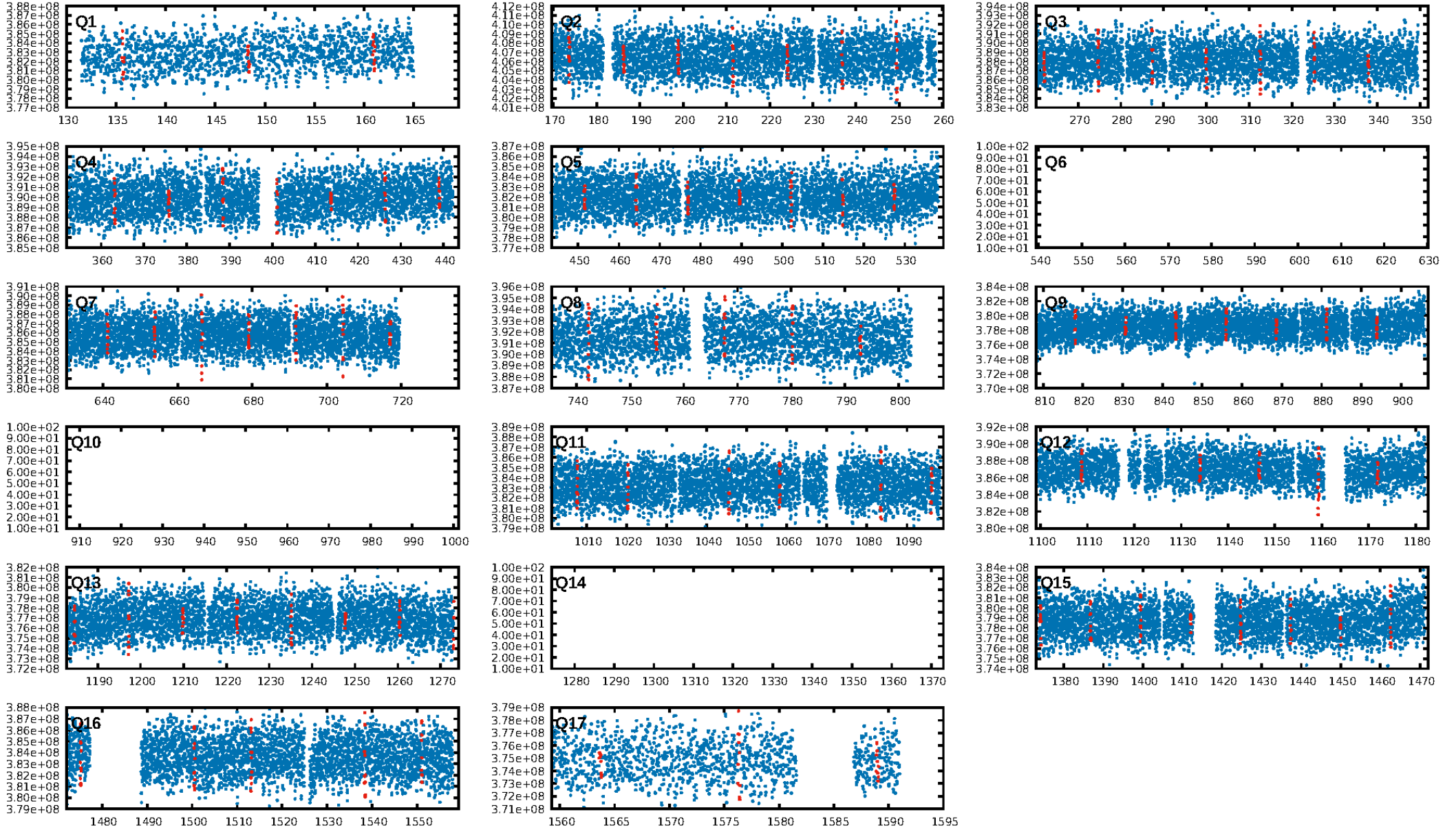
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [41.47 σ]
LongPeriod-sig: 100.0% [151.21 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 99.8%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [17/17]
GhostDiagnostic-chr: -1.816
Centroid-sig: 18.1%
Centroid-so: 0.118 arcsec [2.05 σ]
OotOffset-rm: 0.044 arcsec [0.30 σ]
KicOffset-rm: 0.012 arcsec [0.12 σ]
OotOffset-st: 1/4/4/5 [14]
KicOffset-st: 1/4/4/5 [14]
DiffImageQuality-fgm: 0.50 [7/14]
DiffImageOverlap-fno: 0.36 [5/14]

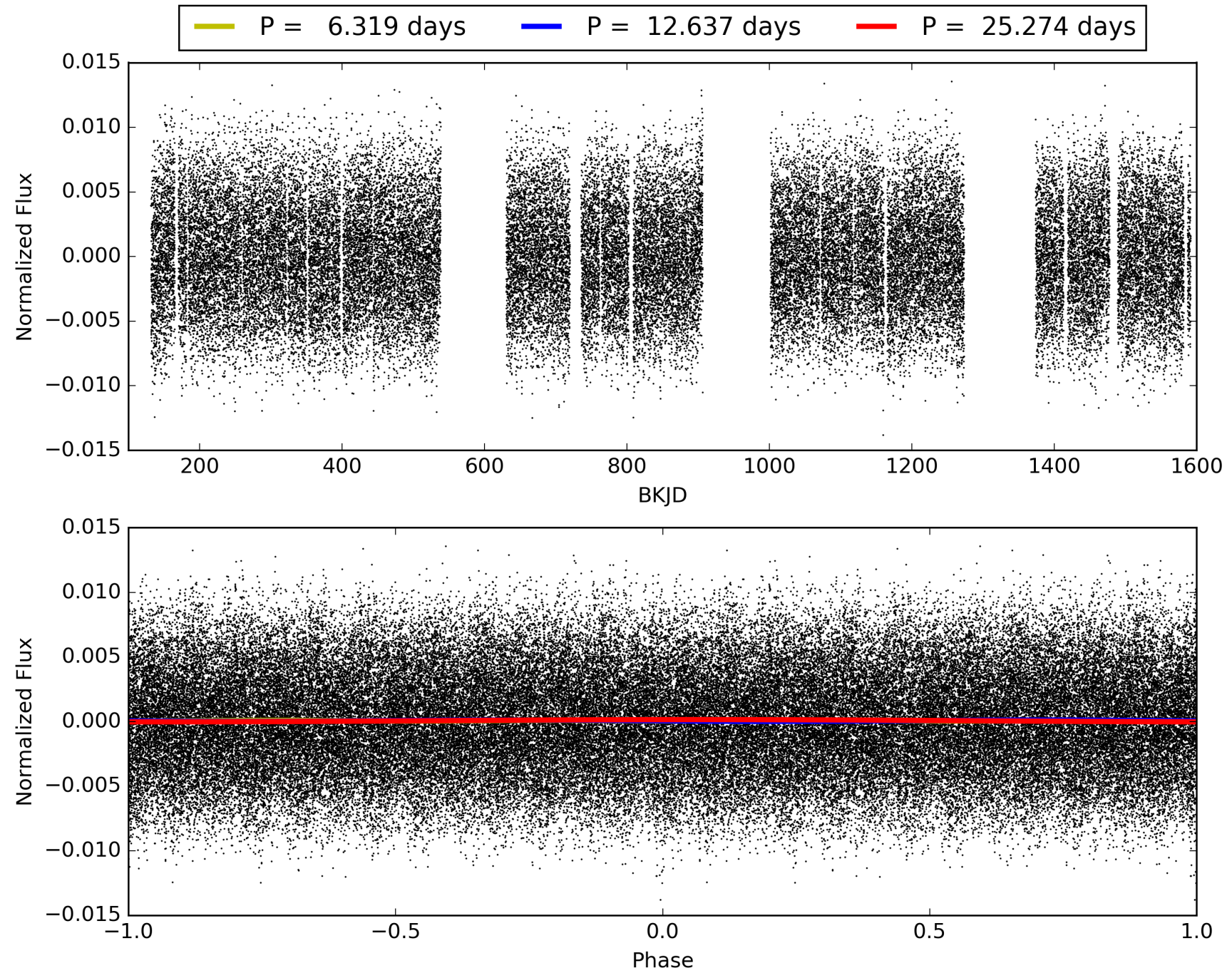
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:24:37 Z

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

TCE 003967268-05, PDC Light Curves

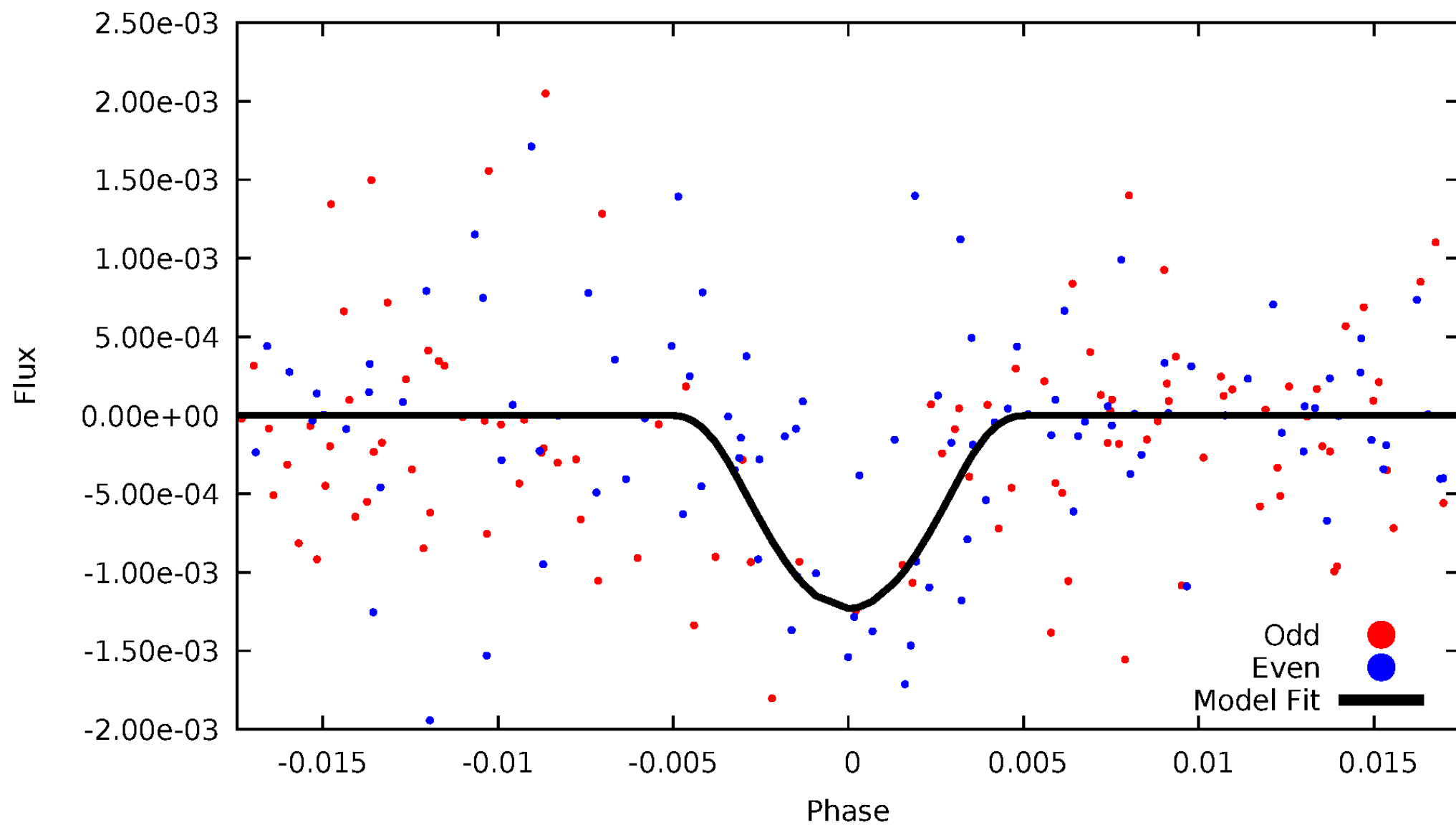


TCE 003967268-05



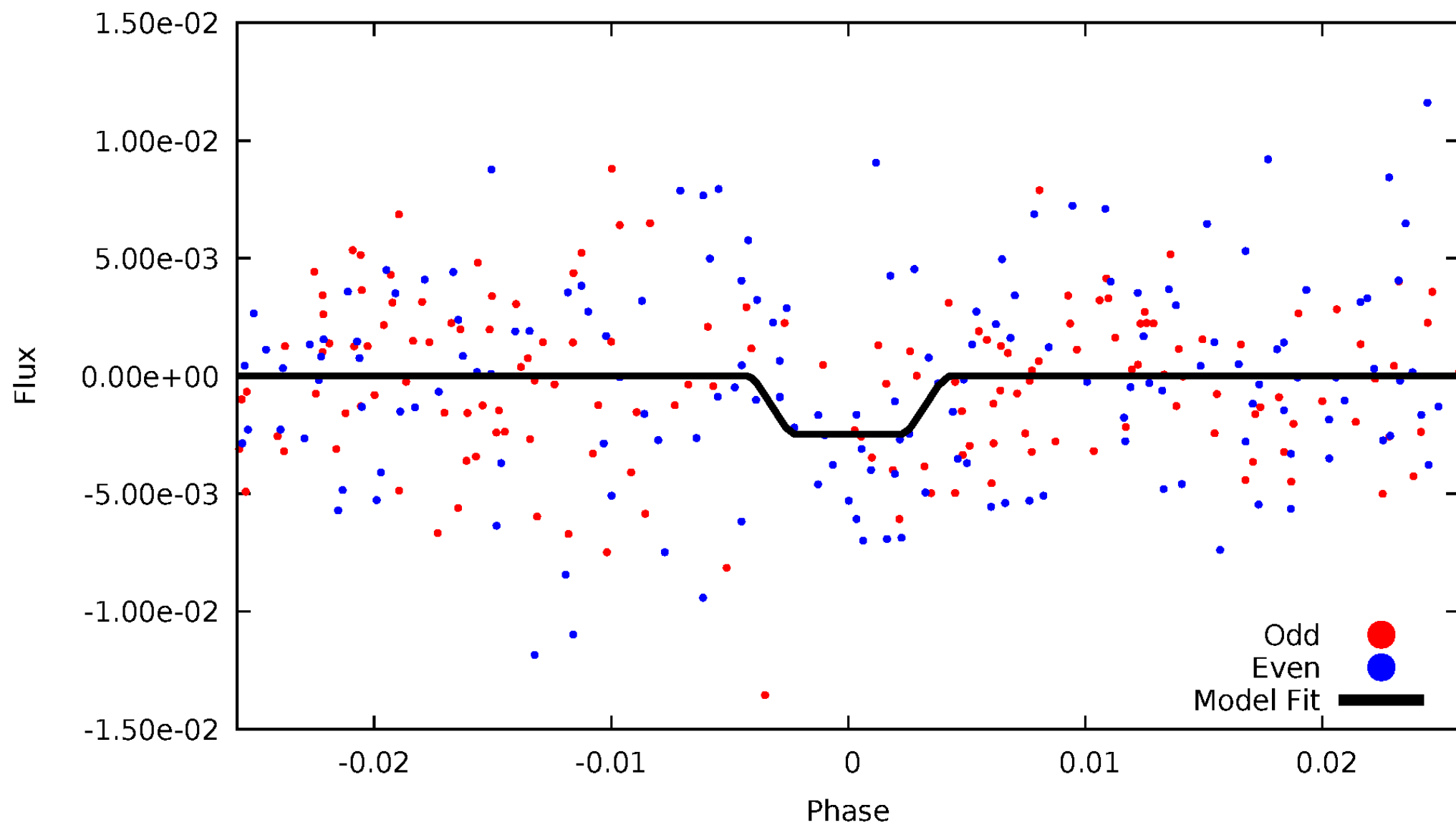
DV Odd/Even

TCE 003967268-05



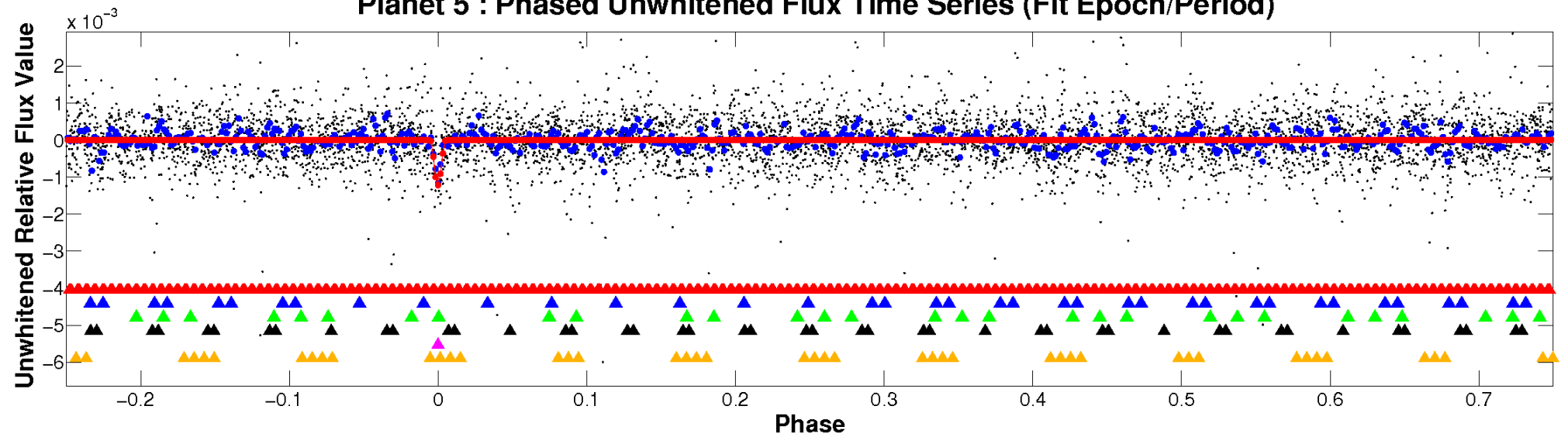
ALT Odd/Even

TCE 003967268-05

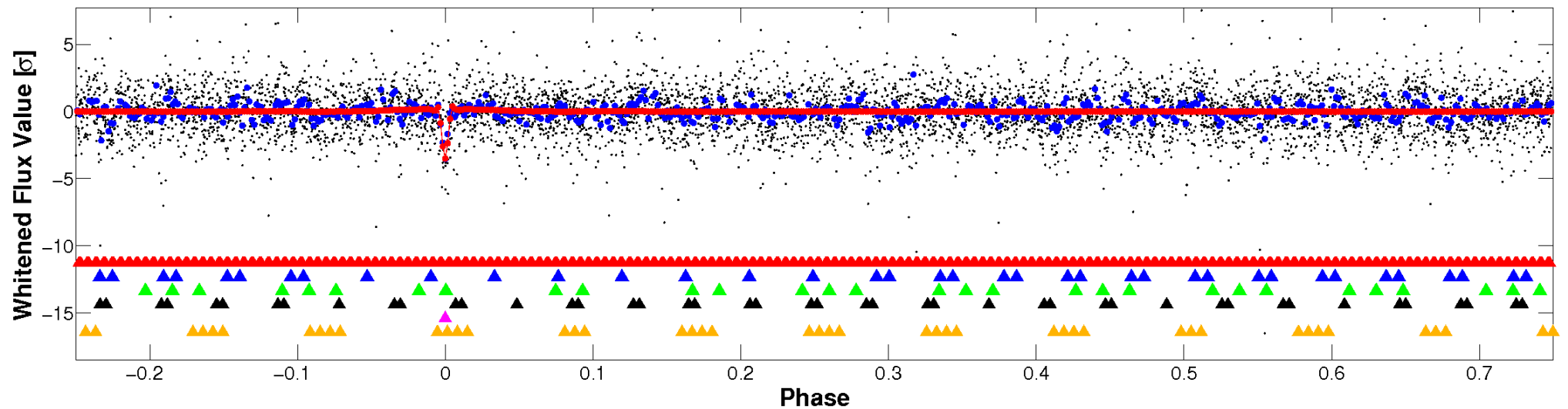


Non-Whitened Vs. Whitened Light Curve

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

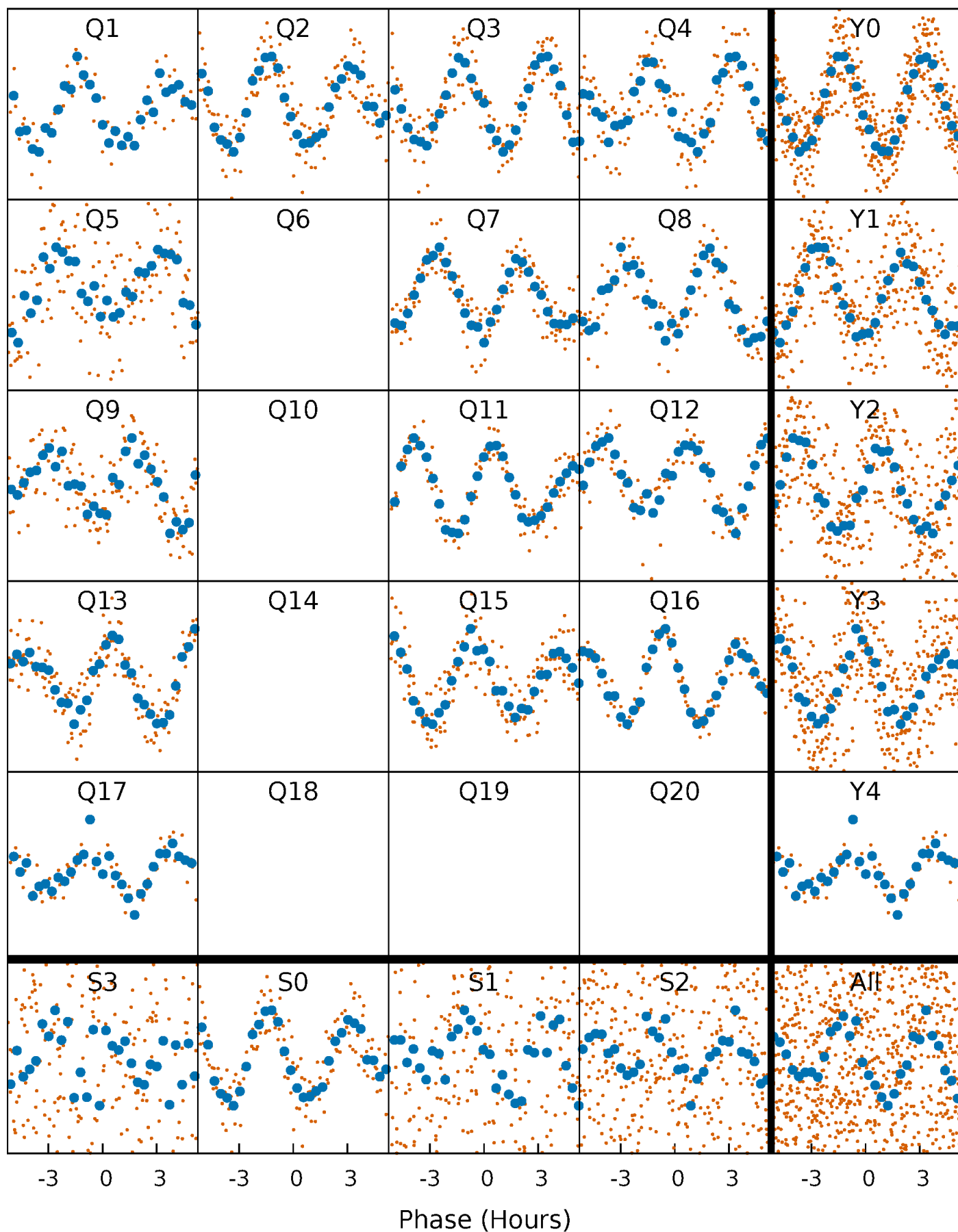


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



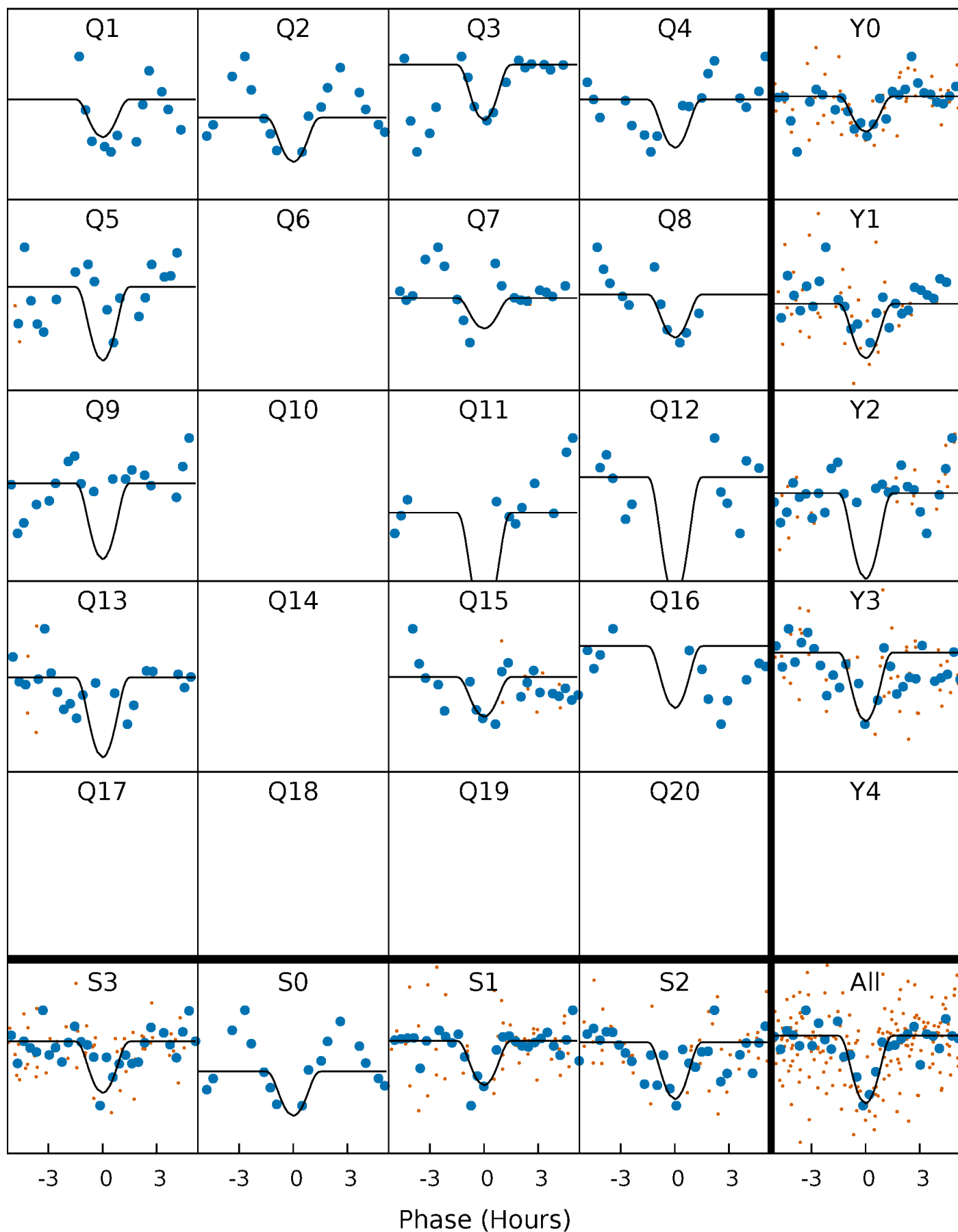
PDC Quarter-Phased Transit Curves

TCE 003967268-05 $P = 12.637158$ Days $T_0 = 135.701476$ (BKJD)



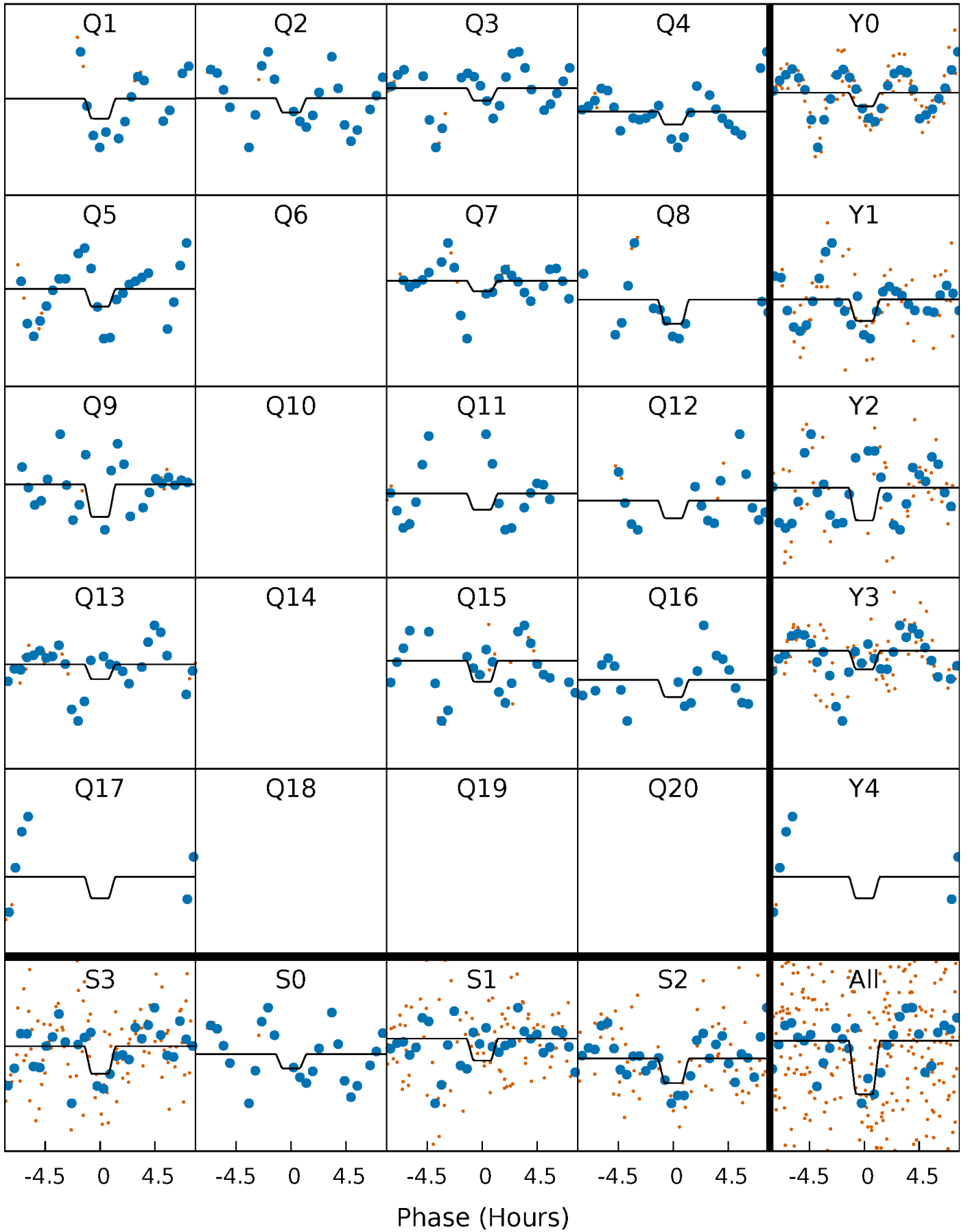
DV Quarter-Phased Transit Curves

TCE 003967268-05 P= 12.637158 Days $T_0=135.701476$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

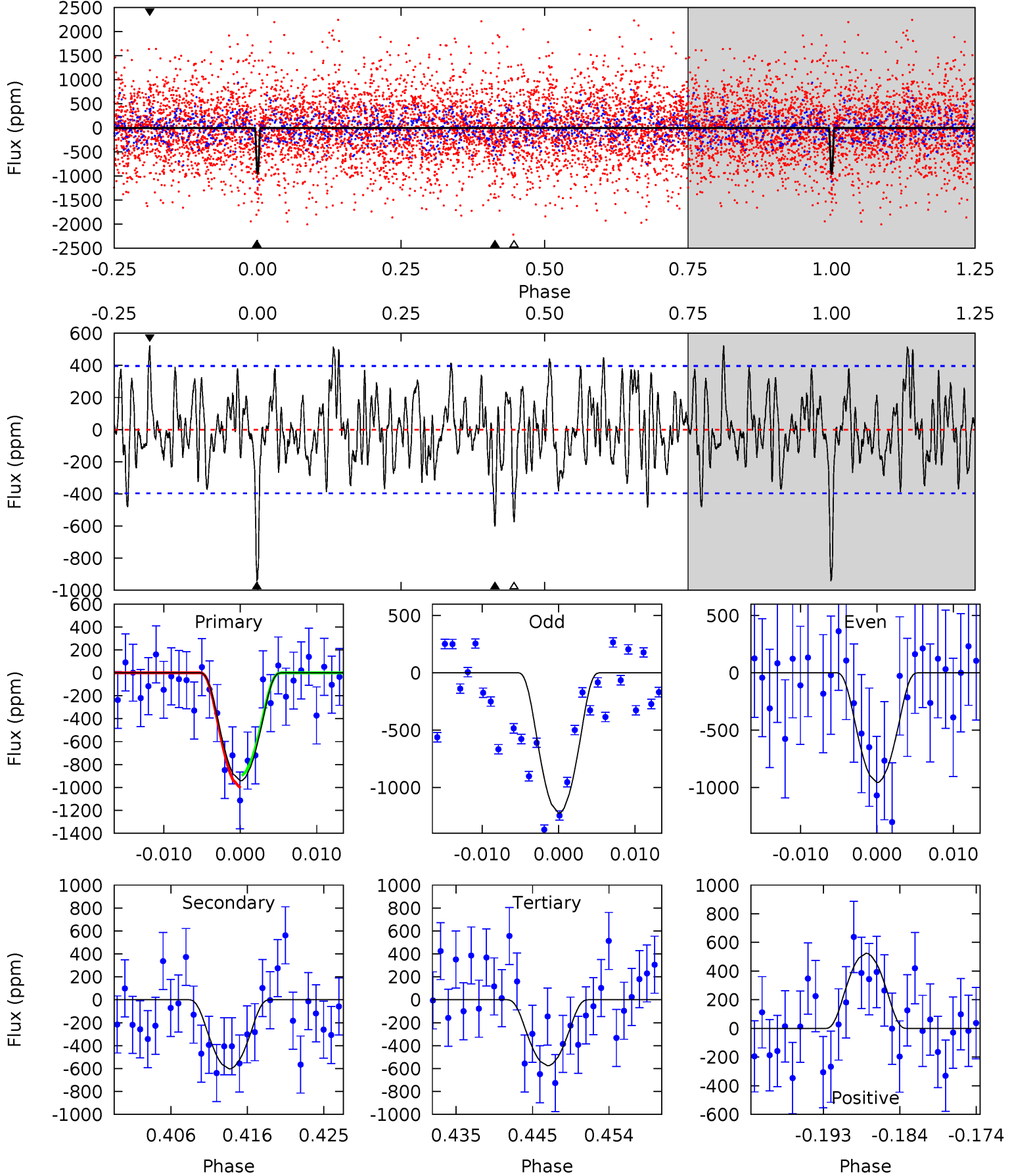
TCE 003967268-05 $P = 12.637178$ Days $T_0 = 135.717521$ (BKJD)



DV Model-Shift Uniqueness Test

003967268-05, $P = 12.637158$ Days, $E = 123.064318$ Days

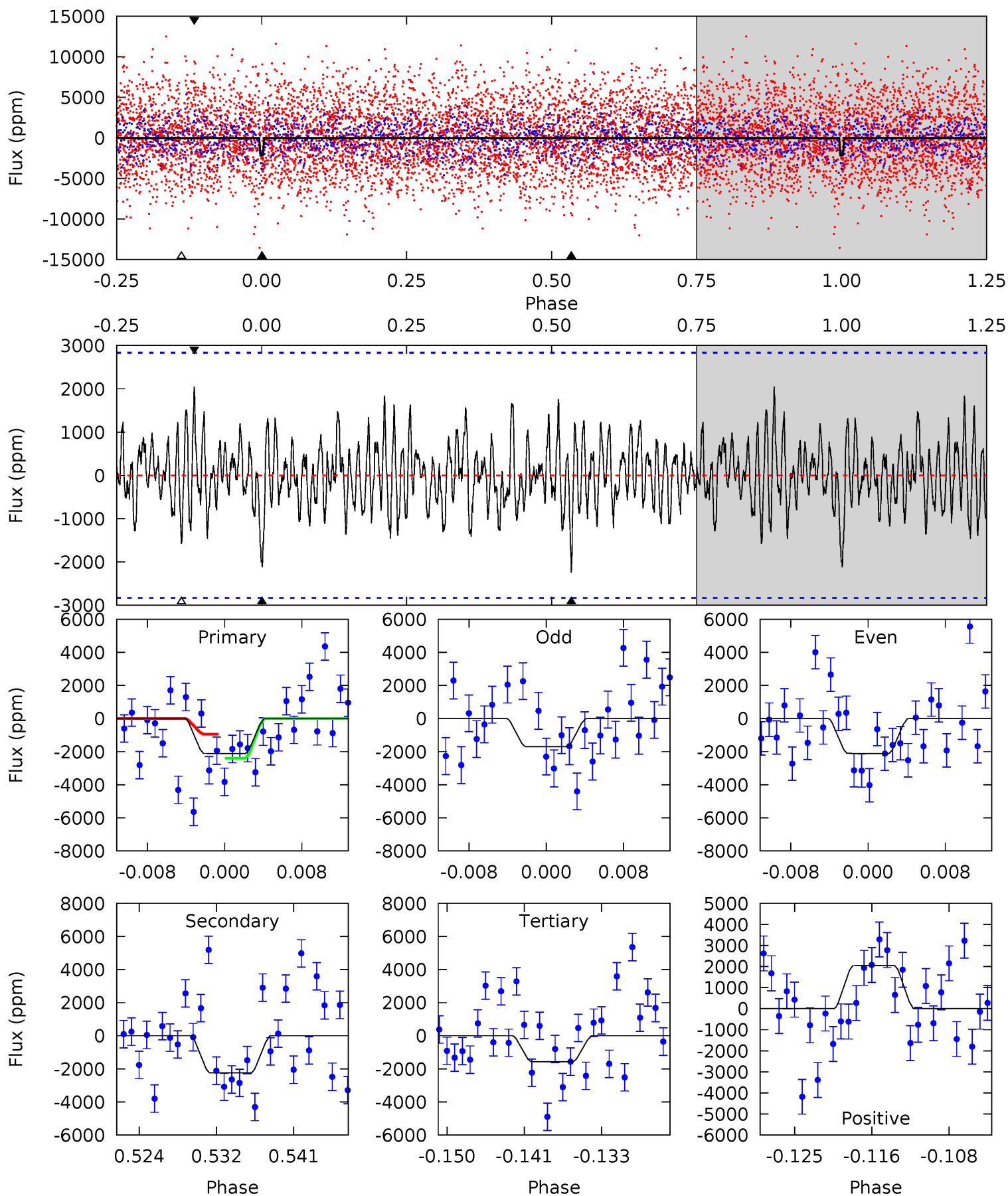
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.0	7.66	7.31	6.66	5.03	2.59	2.31	4.66	5.31	0.35	1.00	1.61	1.11	0.36	0.69



Alt Model-Shift Uniqueness Test

003967268-05, P = 12.637178 Days, E = 123.080343 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.78	4.01	2.82	3.65	5.06	2.64	1.15	0.96	0.12	1.19	0.36	0.33	0.76	0.48	1.21



Stellar Parameters For KIC 003967268

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7232^{+226}_{-302}	$3.895^{+0.315}_{-0.135}$	$-0.160^{+0.250}_{-0.350}$	$2.413^{+0.578}_{-0.866}$	$1.666^{+0.196}_{-0.364}$	$0.167^{+0.365}_{-0.064}$
	+3%/-4%	+8%/-3%	+156%/-219%	+24%/-36%	+12%/-22%	+218%/-39%
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 003967268-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-603 ± 79	$45.94^{+50.13}_{-33.02}$	1918^{+147}_{-182}	3118^{+1834}_{-712}	$2.440^{+29.448}_{-1.864}$
Alt.	-2244 ± 560	$49.27^{+50.74}_{-34.26}$	1910^{+136}_{-190}	3843^{+2591}_{-847}	$8.567^{+84.495}_{-6.711}$

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

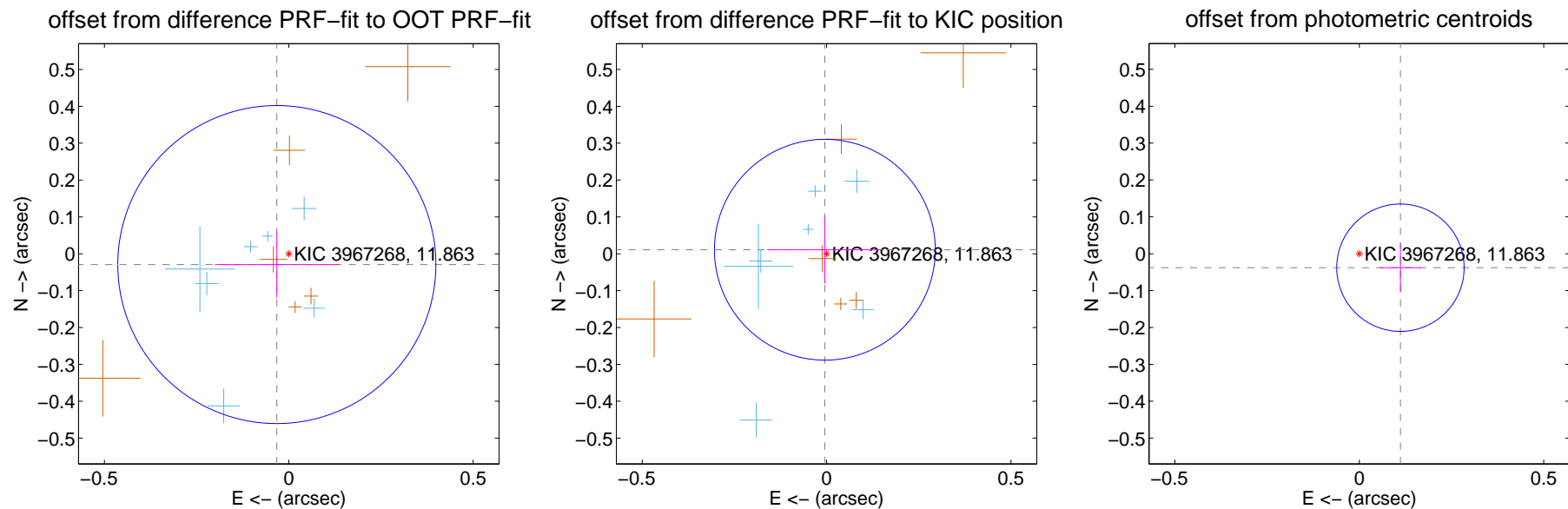
DV Centroid Data

Supplemental centroid analysis for 003967268-05. **Kepler magnitude: 11.86.** Transit SNR 13.22

There are 7 quarters with good PRF difference image offsets

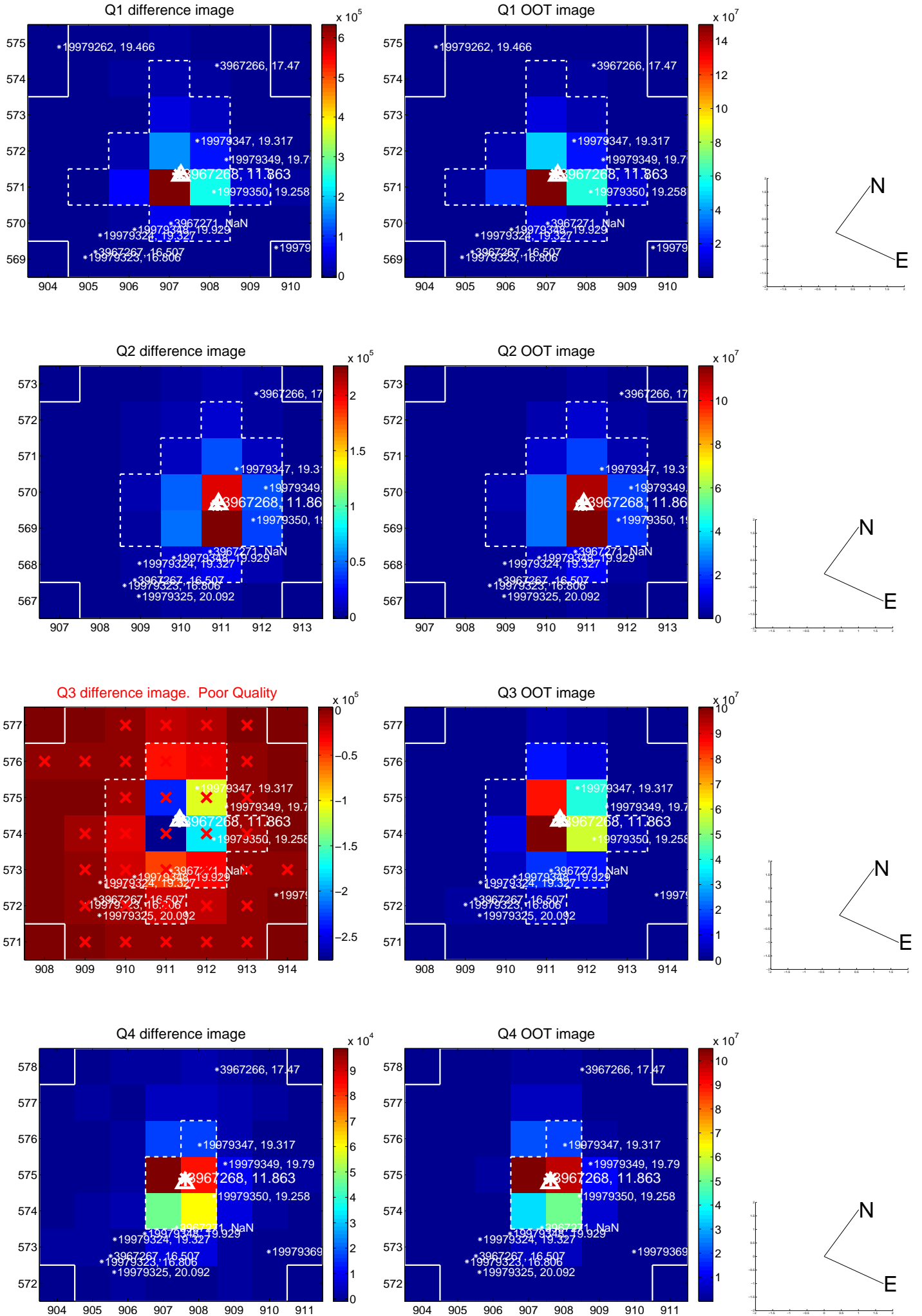
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.044 ± 0.144	0.30	0.032 ± 0.168	-0.029 ± 0.090
PRF-fit source offset from KIC position	0.012 ± 0.100	0.12	0.005 ± 0.156	0.011 ± 0.092
photometric centroid source offset	0.12 ± 0.06	2.05	-0.11 ± 0.06	-0.04 ± 0.07

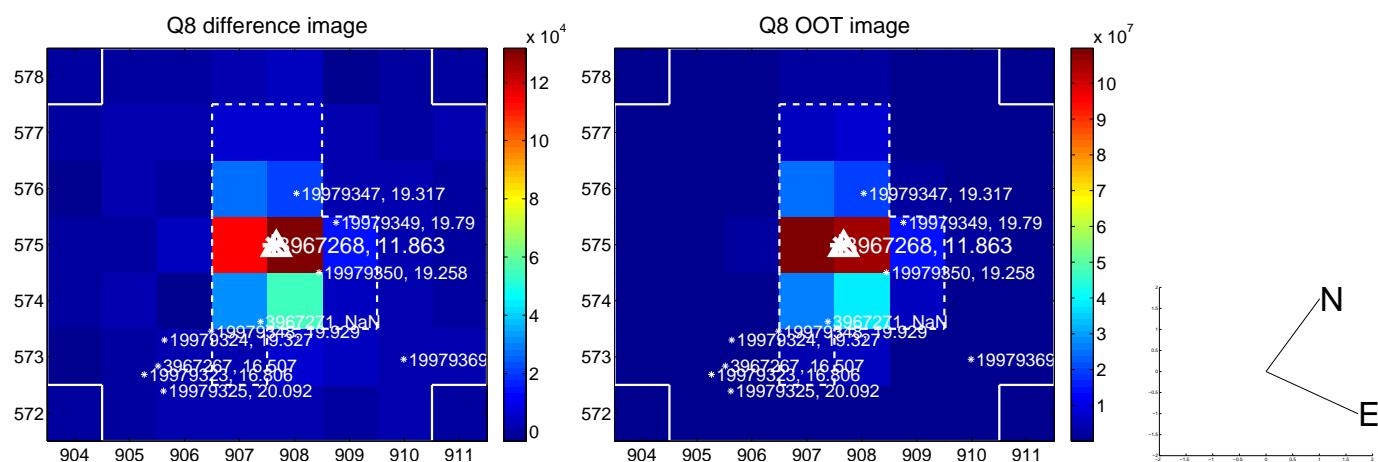
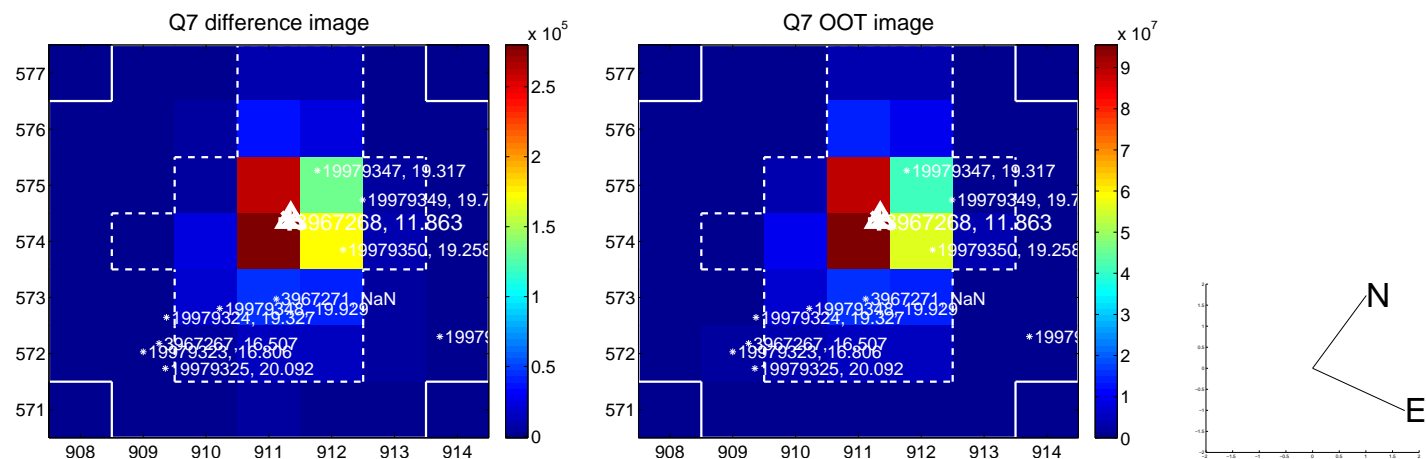
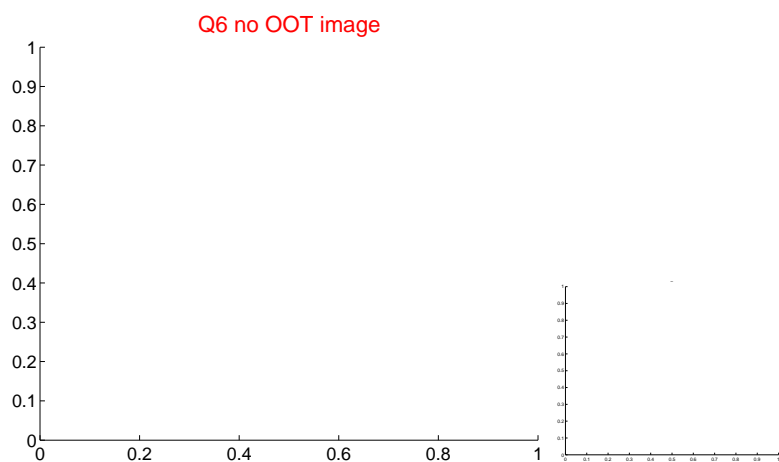
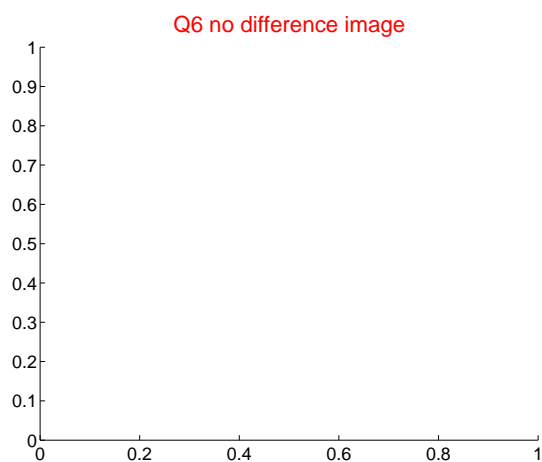
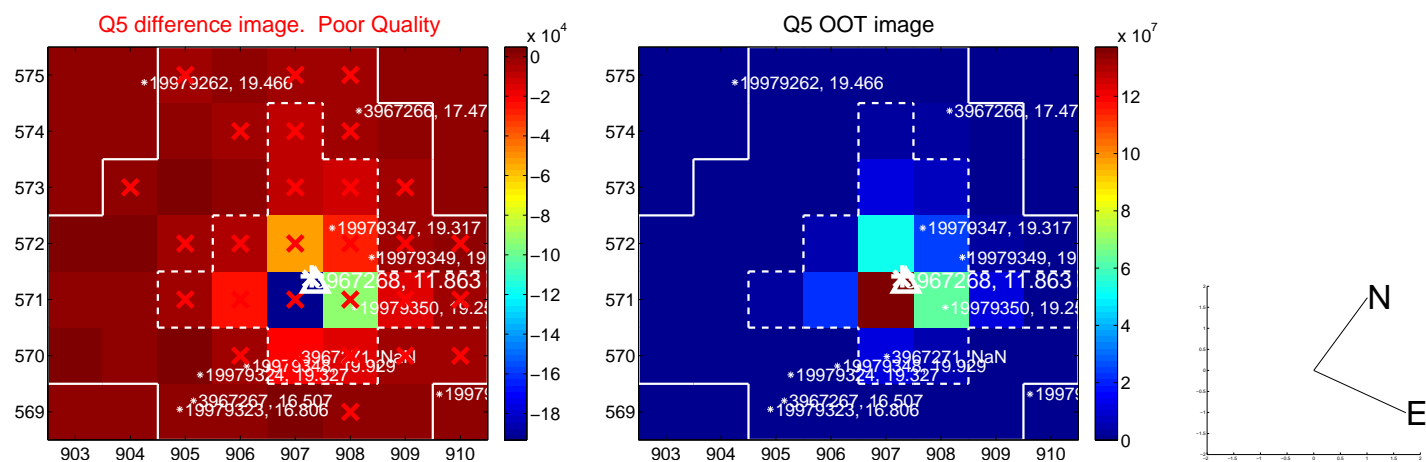


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

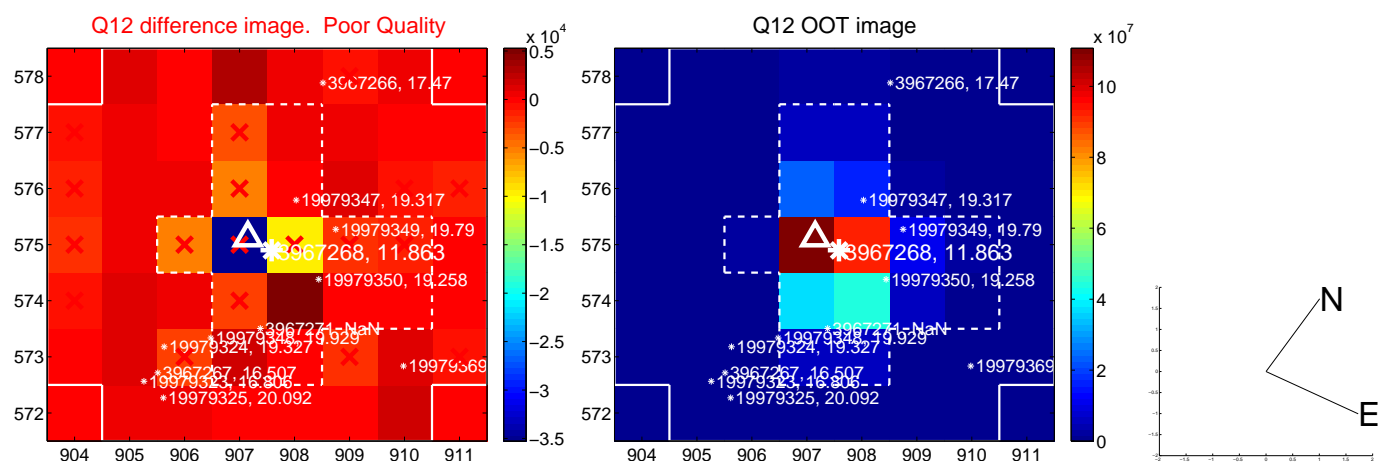
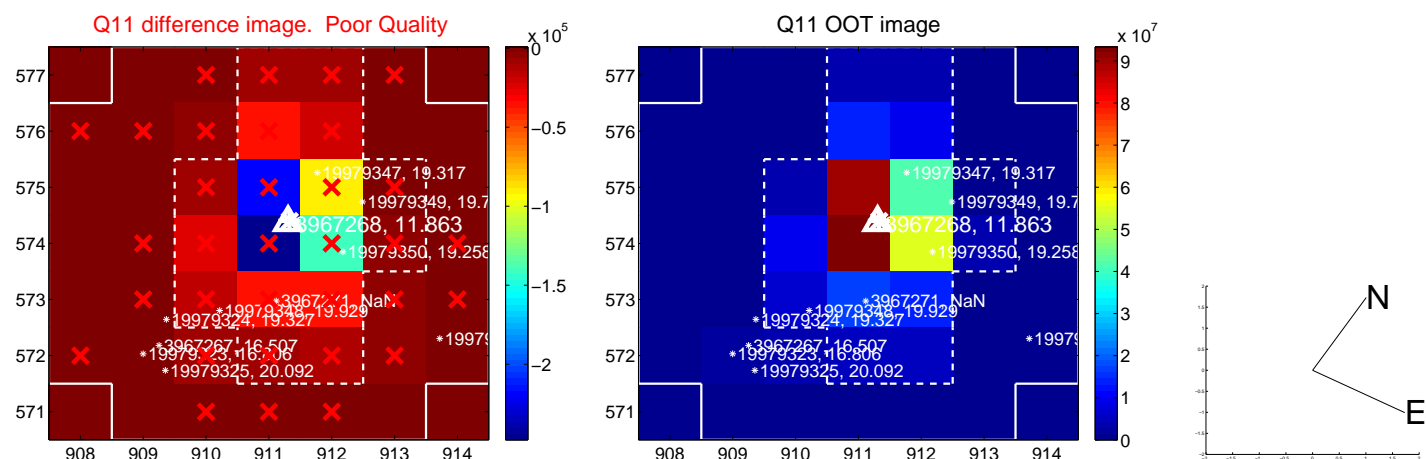
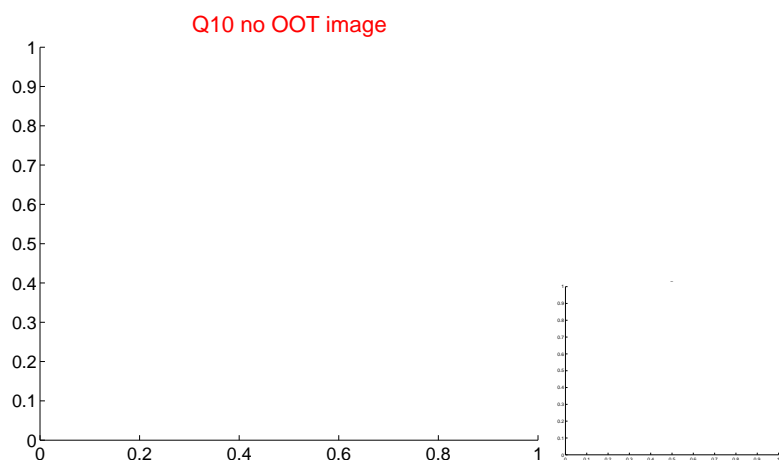
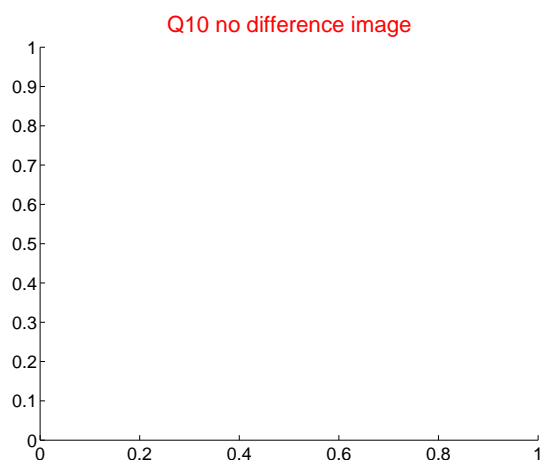
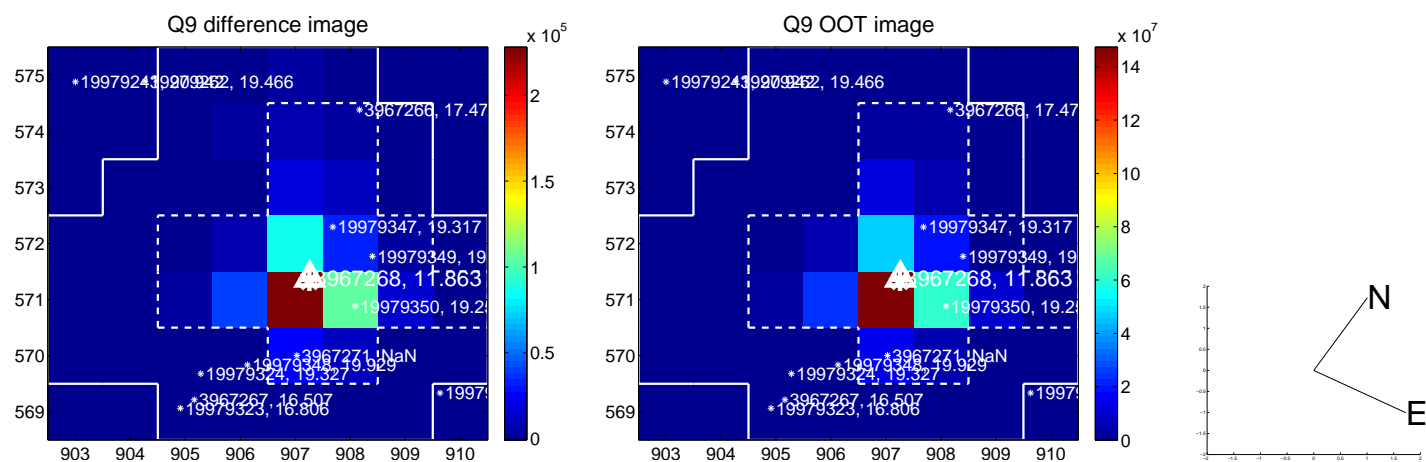
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



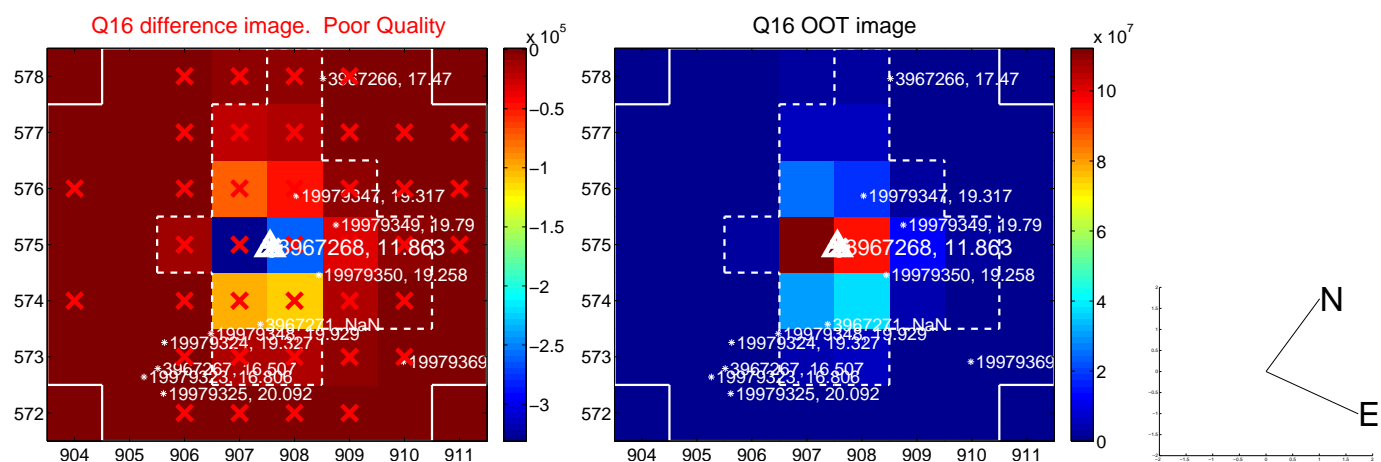
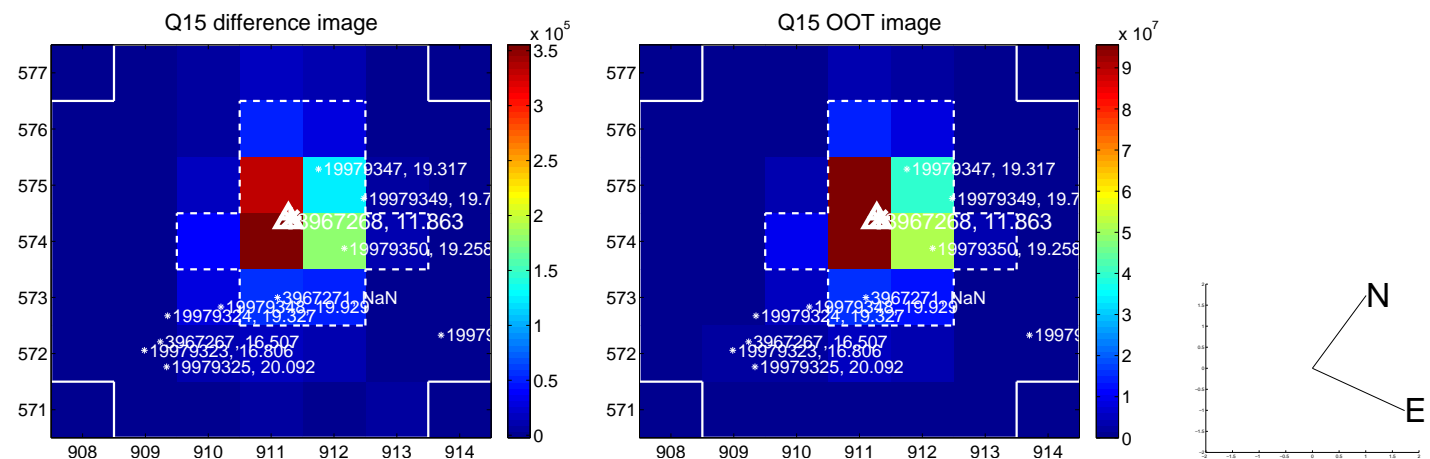
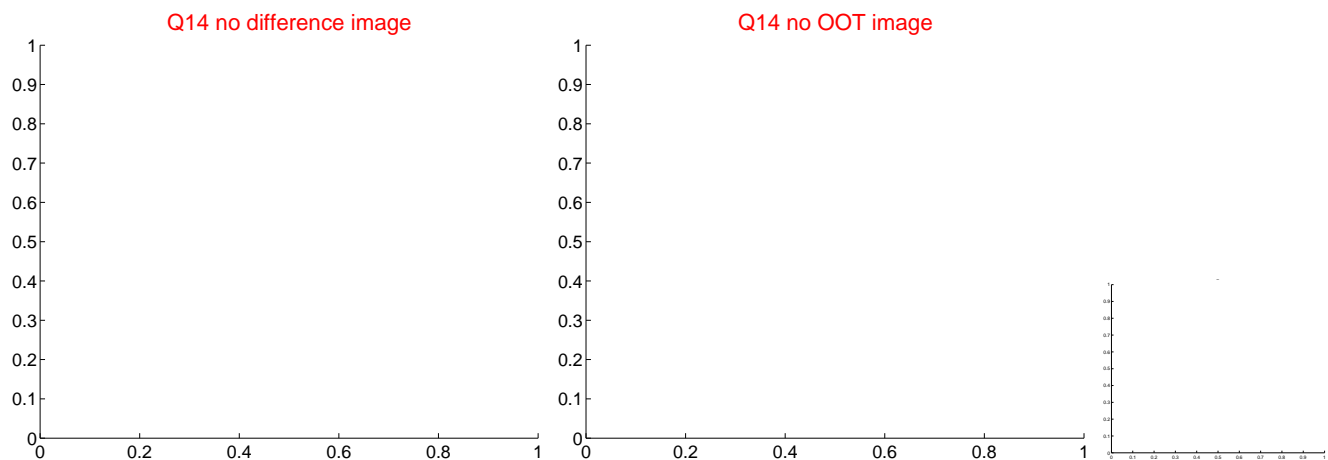
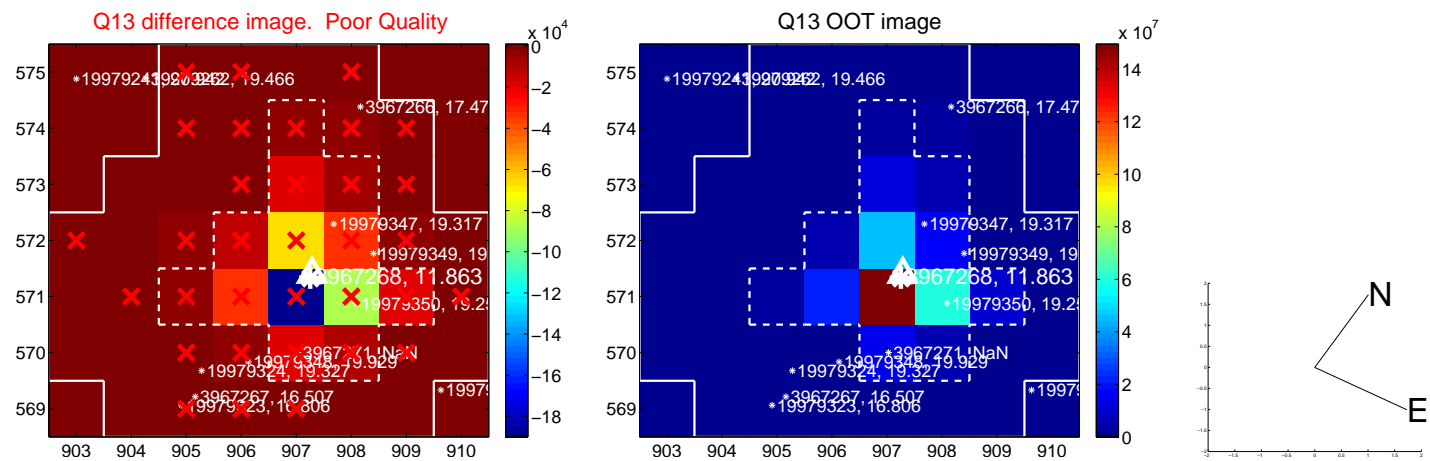
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



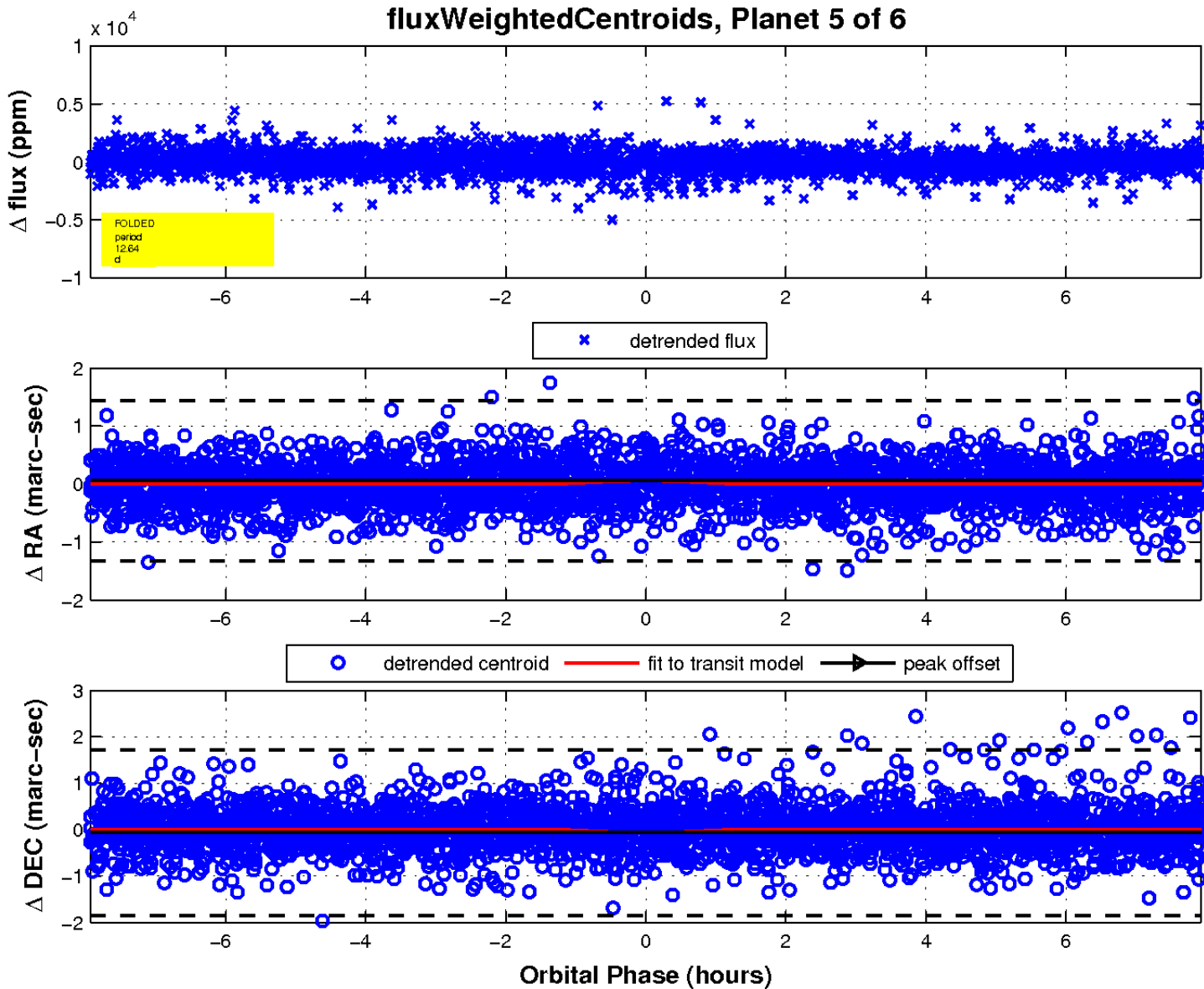
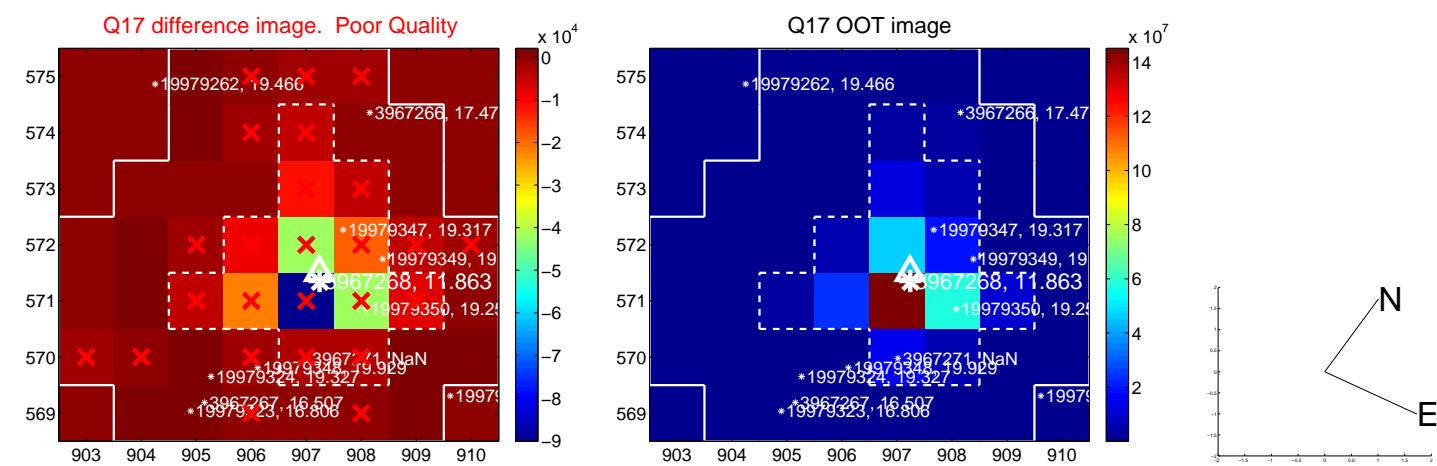
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

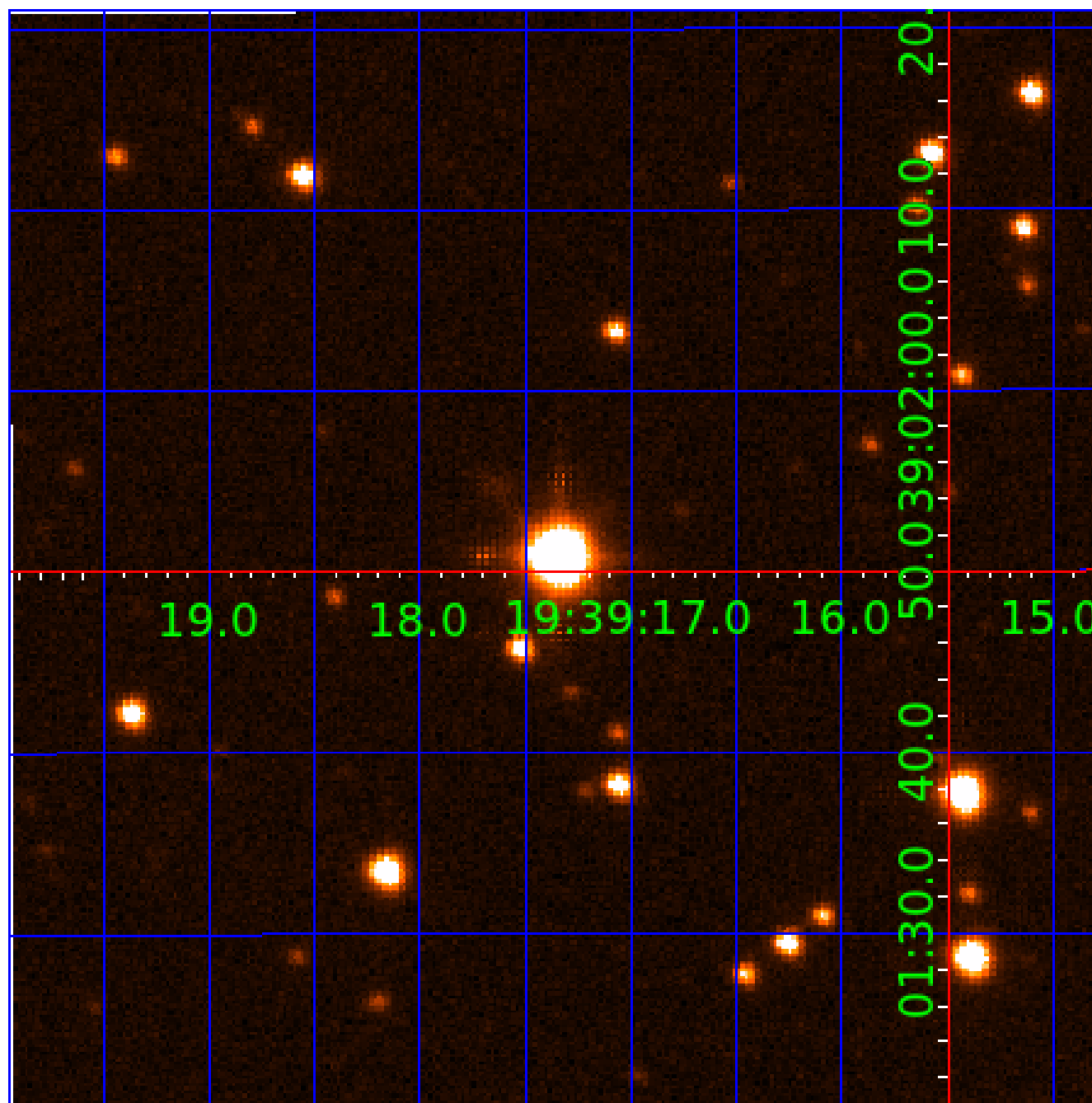


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 003967268

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})
003967268-01	OBS	No	0.912698	131.581129	69.7	6.249	11.5	6.0	2.41	7232	2.04	29913.25
003967268-02	OBS	No	38.456267	152.135736	2118.8	2.376	16.3	12.9	2.41	7232	11.23	204.02
003967268-03	OBS	No	49.378882	134.767014	2390.7	1.690	16.1	14.2	2.41	7232	12.08	146.19
003967268-04	OBS	No	32.353172	163.057910	1524.9	1.673	13.7	11.8	2.41	7232	10.84	256.89
003967268-05	OBS	No	12.637158	135.701476	1231.3	2.645	13.4	13.2	2.41	7232	15.81	899.71
003967268-06	OBS	No	32.638873	139.071766	526.5	16.356	9.9	6.5	2.41	7232	5.87	253.89

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003967268-01	OBS	FP	0.00	1	0	0	0	LPP_DV
003967268-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
003967268-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
003967268-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
003967268-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
003967268-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

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

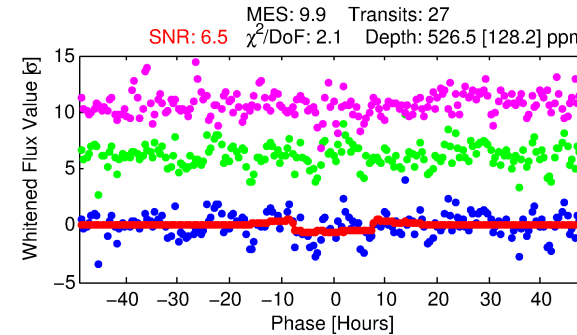
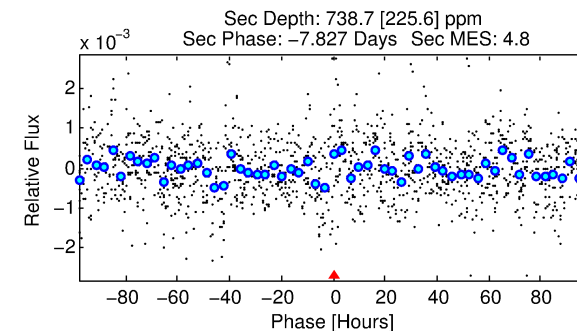
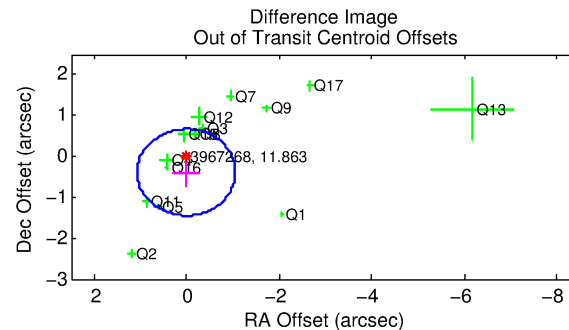
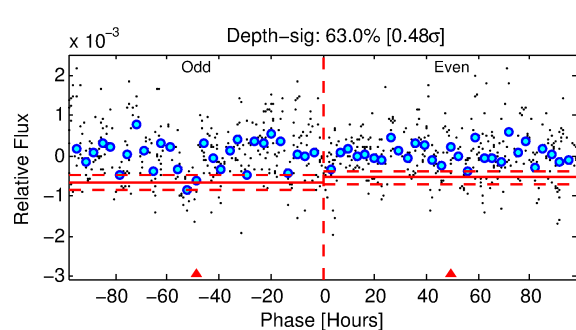
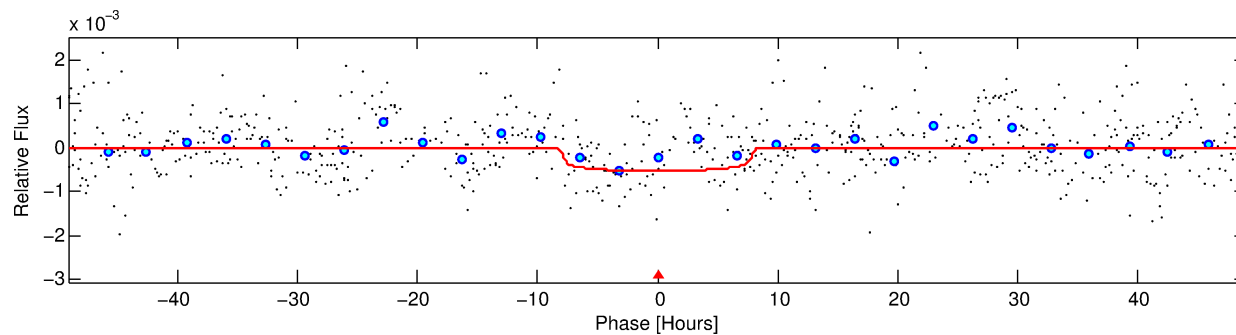
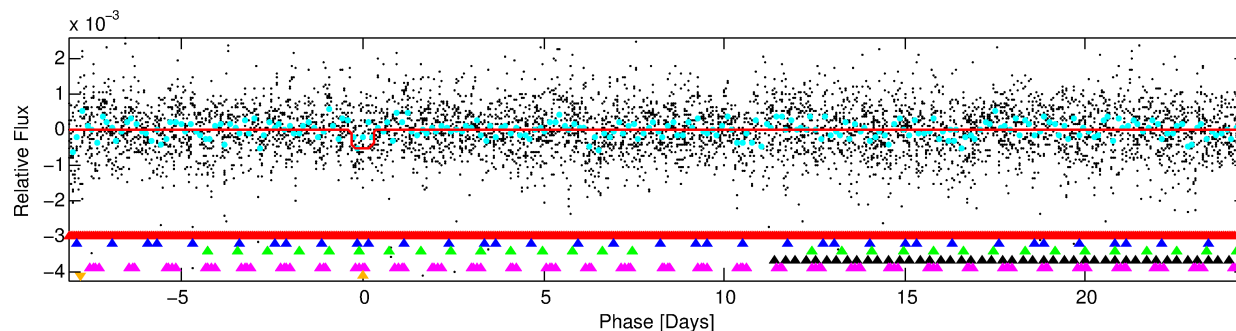
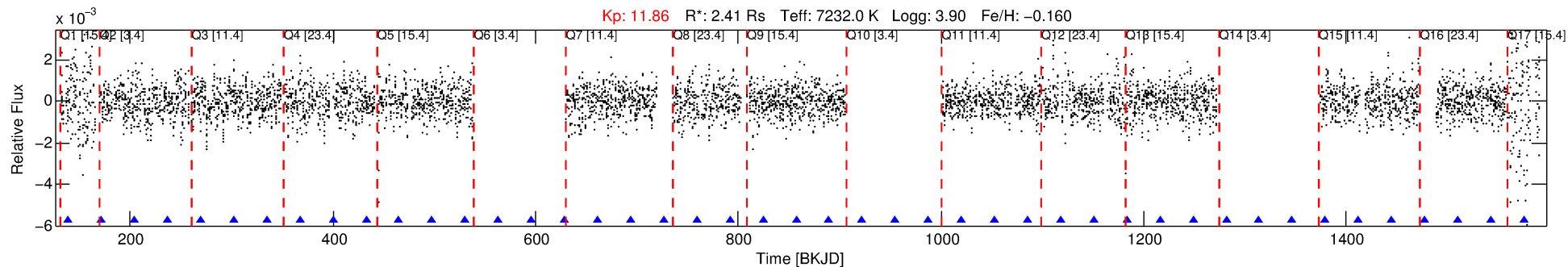
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003967268-06

No Significant Match Found

DV One-Page Summary

KIC: 3967268 Candidate: 6 of 6 Period: 32.639 d



DV Fit Results:

Period = 32.63887 [0.00134] d
Epoch = 139.0718 [0.0408] BKJD
Rp/R* = 0.0223 [0.0067]
a/R* = 12.04 [17.98]
b = 0.65 [1.34]
Seff = 253.89 [143.39]
Teq = 1018 [144] K
Rp = 5.87 [2.75] Re
a = 0.2371 [0.0806] AU
Ag = 663.78 [574.27] [1.15 σ]
Teffp = 7988 [1391] K [4.98 σ]

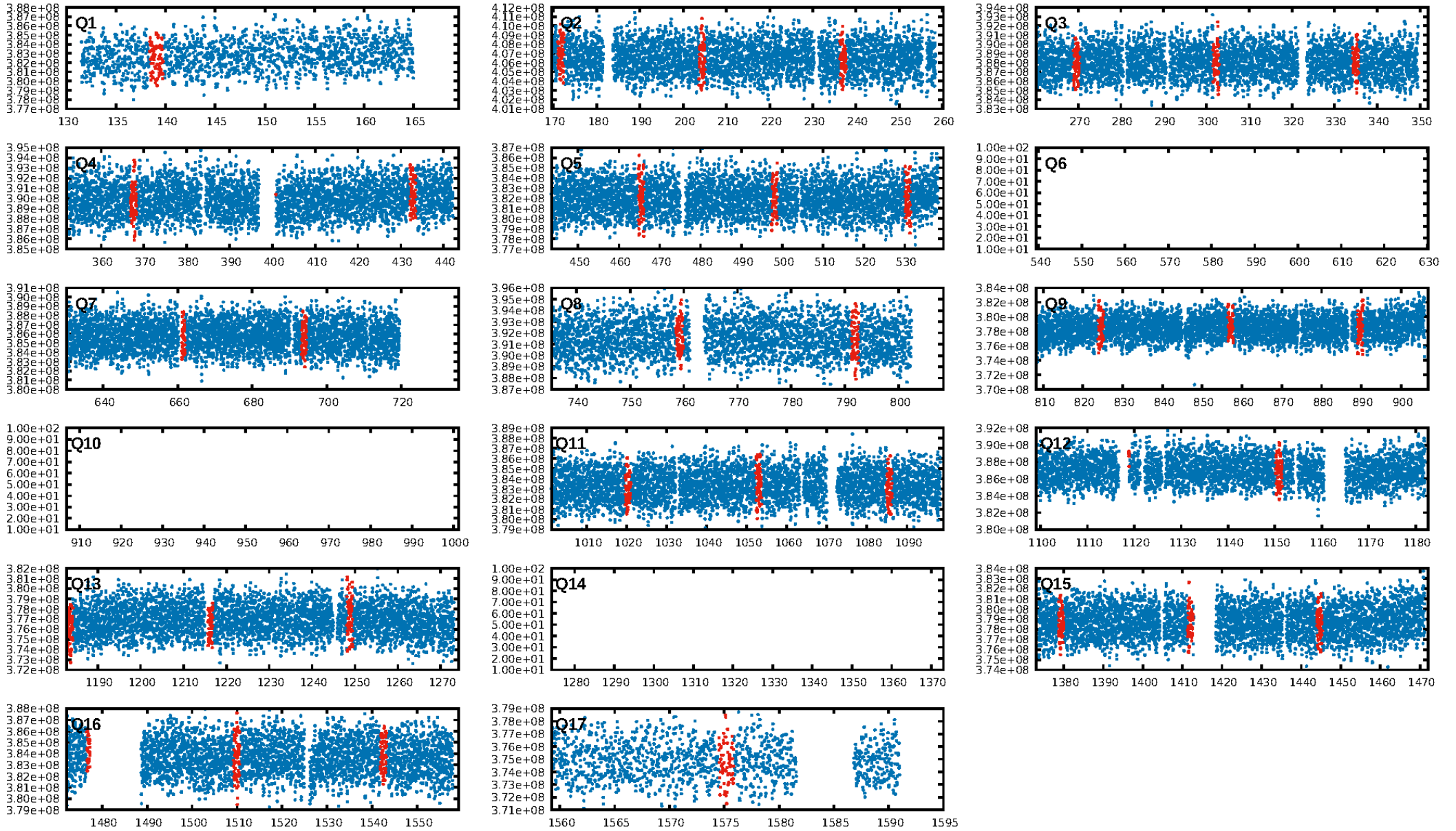
DV Diagnostic Results:

ShortPeriod-sig: 32.3% [0.42 σ]
LongPeriod-sig: 100.0% [8.45 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [26/26]
GhostDiagnostic-chr: -1.057
Centroid-sig: 73.4%
Centroid-so: 0.157 arcsec [1.53 σ]
OotOffset-rm: 0.389 arcsec [1.10 σ]
OotOffset-st: 1/4/4/5 [14]
KicOffset-rm: 0.346 arcsec [0.99 σ]
KicOffset-st: 1/4/4/5 [14]
DiffImageQuality-fgm: 0.64 [9/14]
DiffImageOverlap-fno: 0.00 [0/14]

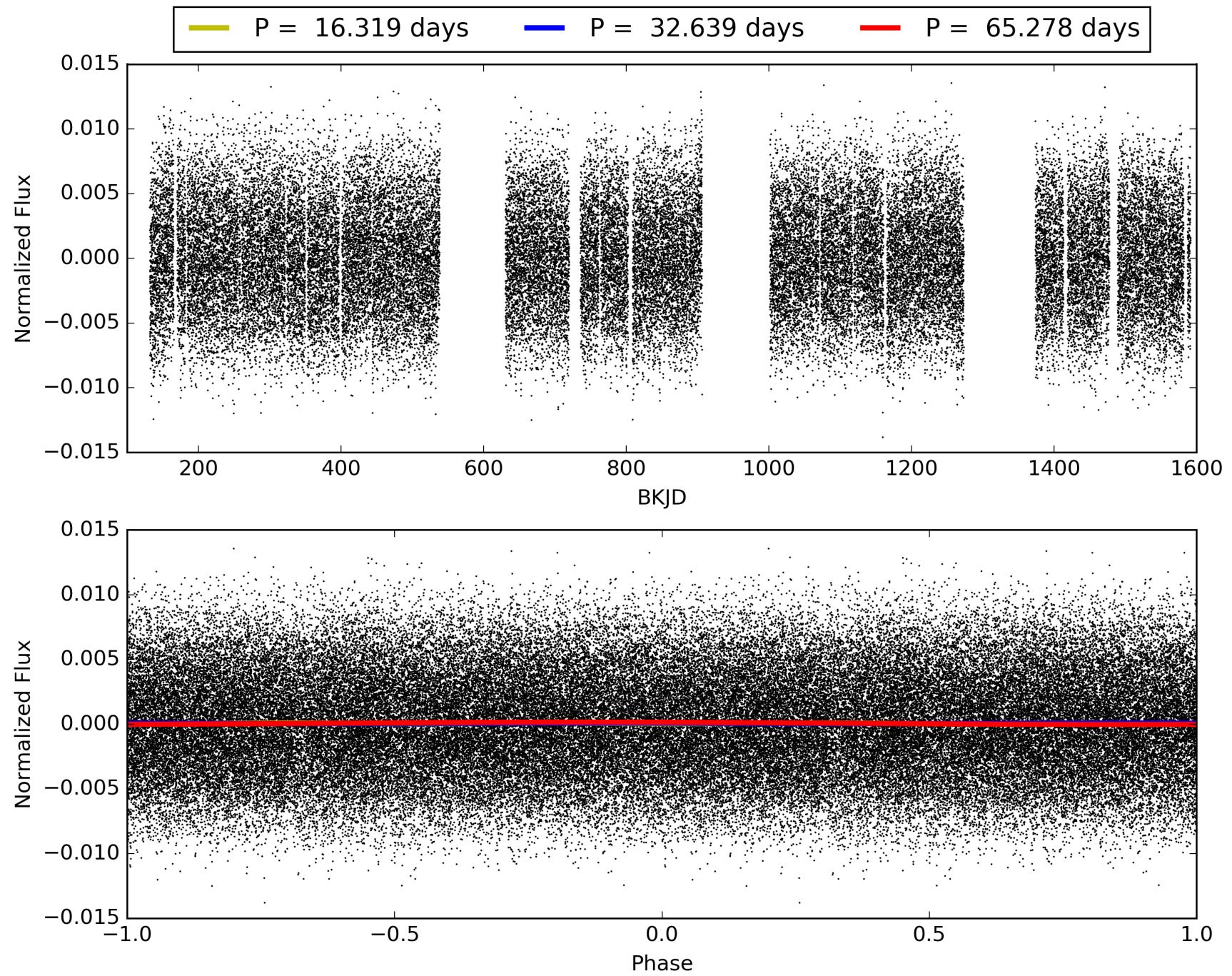
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:24:41 Z

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

TCE 003967268-06, PDC Light Curves

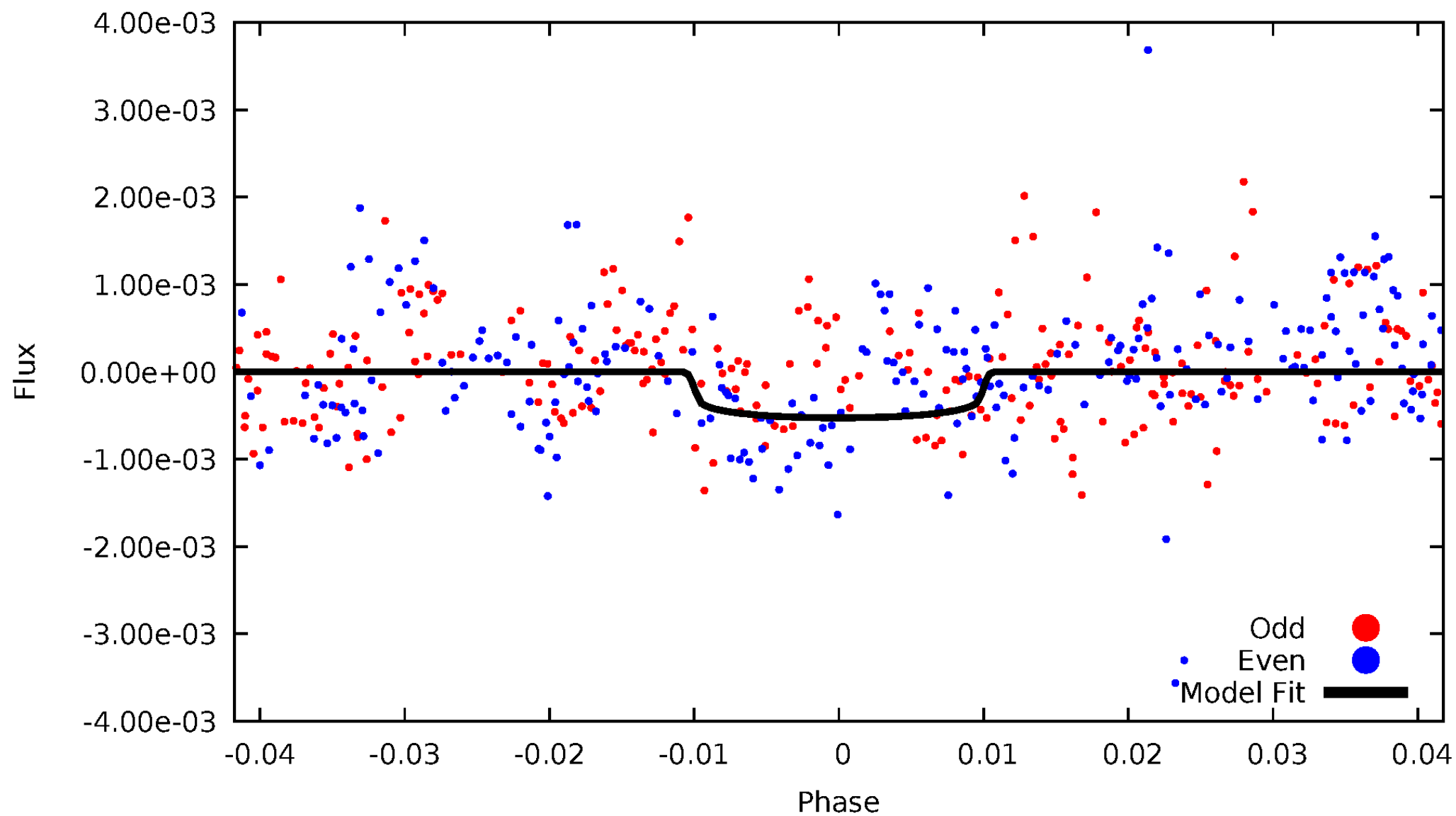


TCE 003967268-06



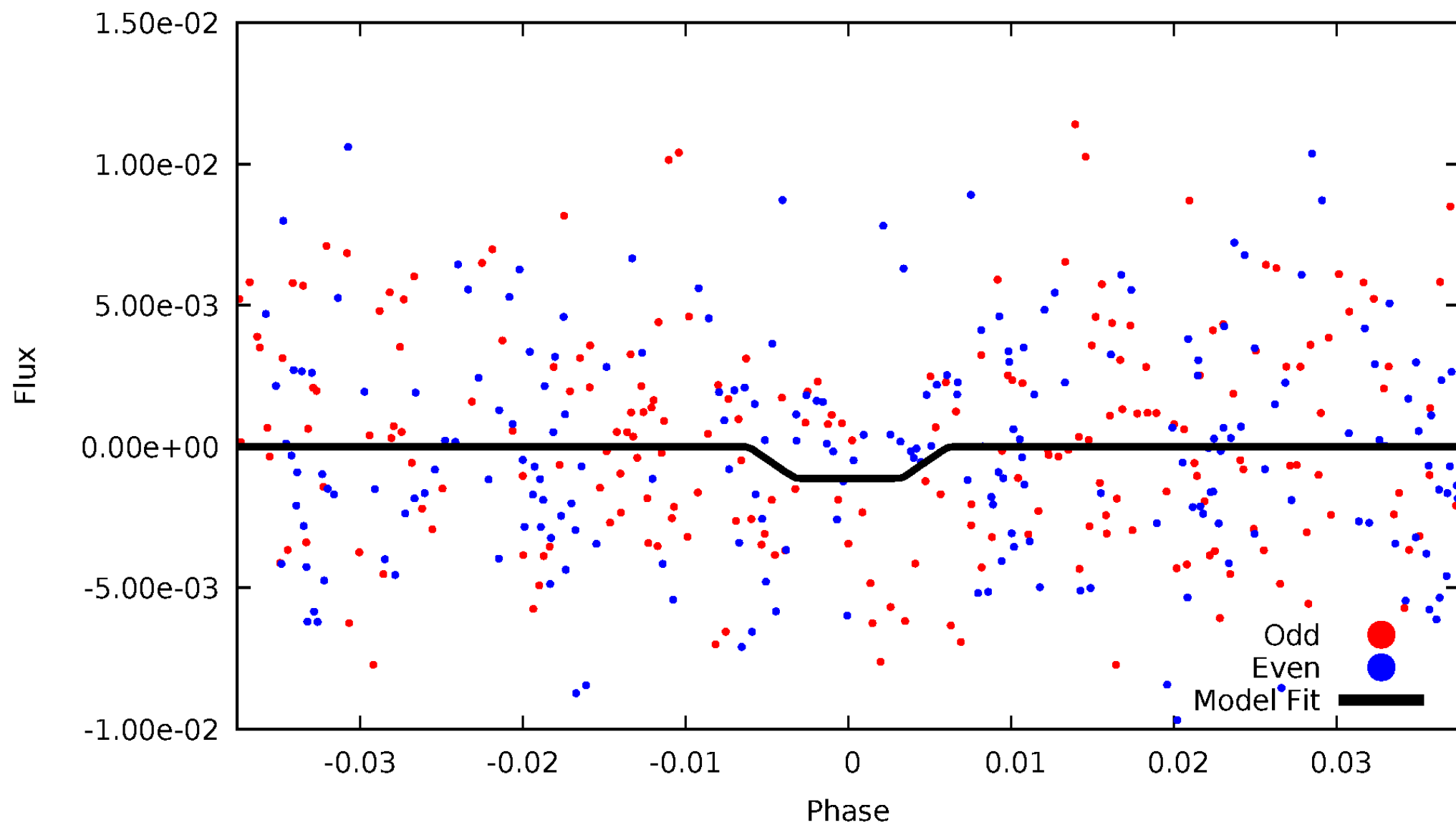
DV Odd/Even

TCE 003967268-06



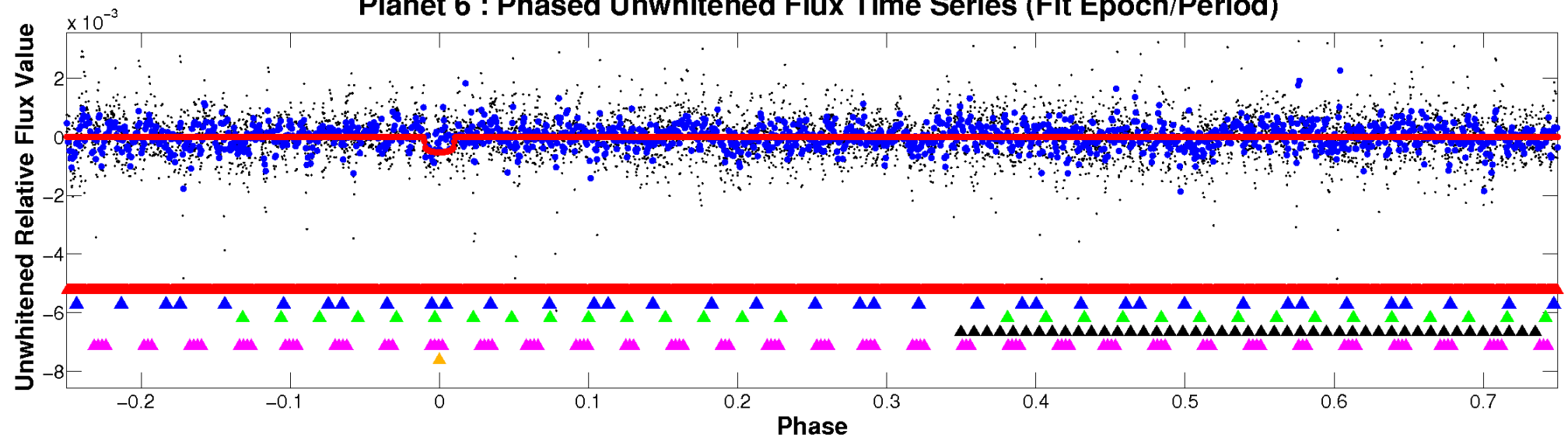
ALT Odd/Even

TCE 003967268-06

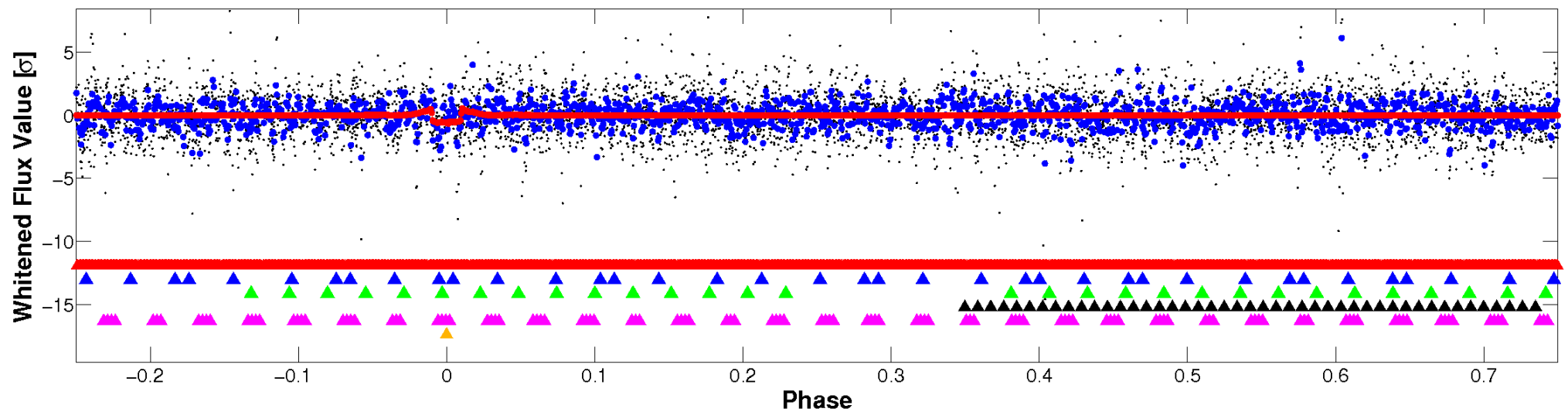


Non-Whitened Vs. Whitened Light Curve

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

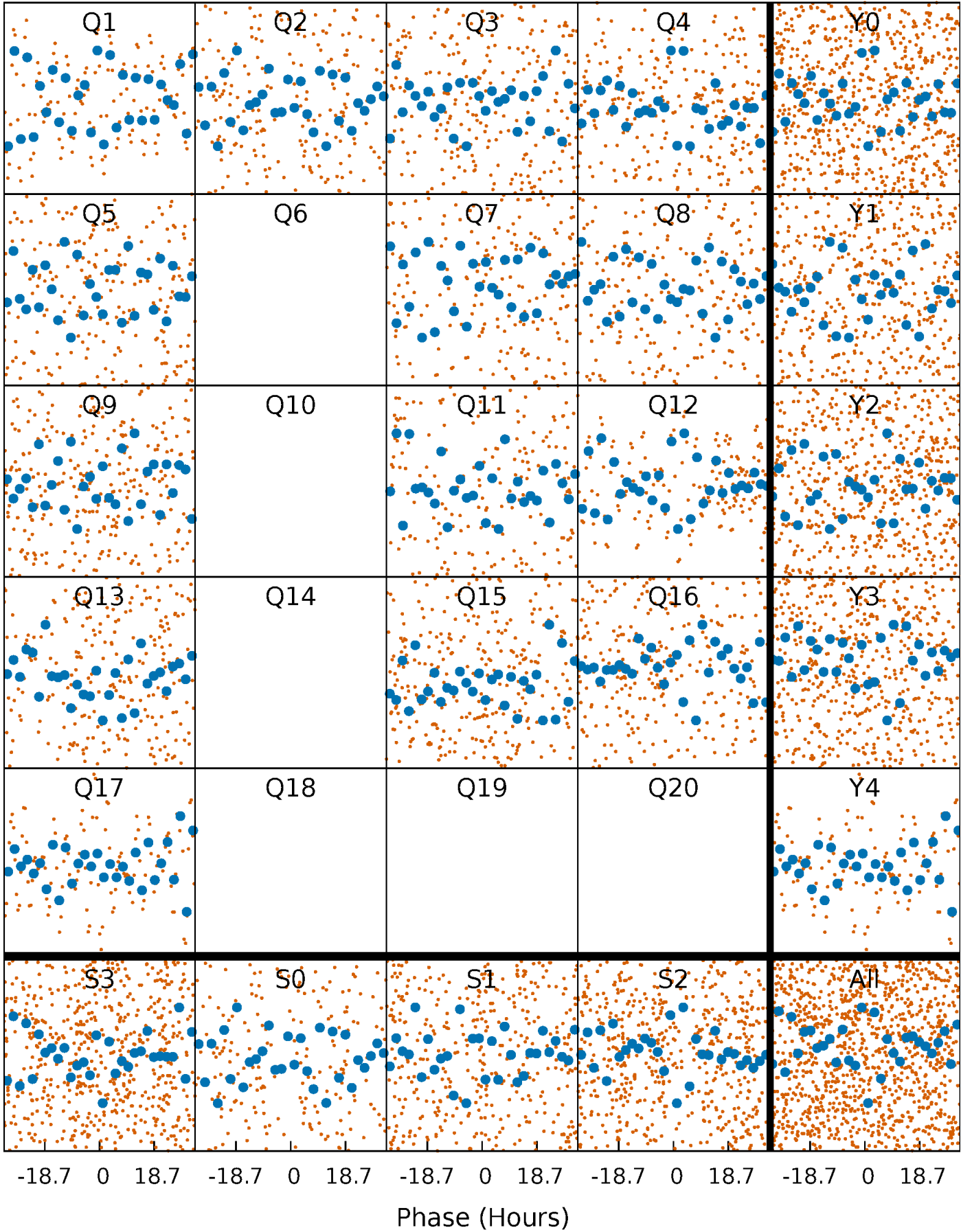


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



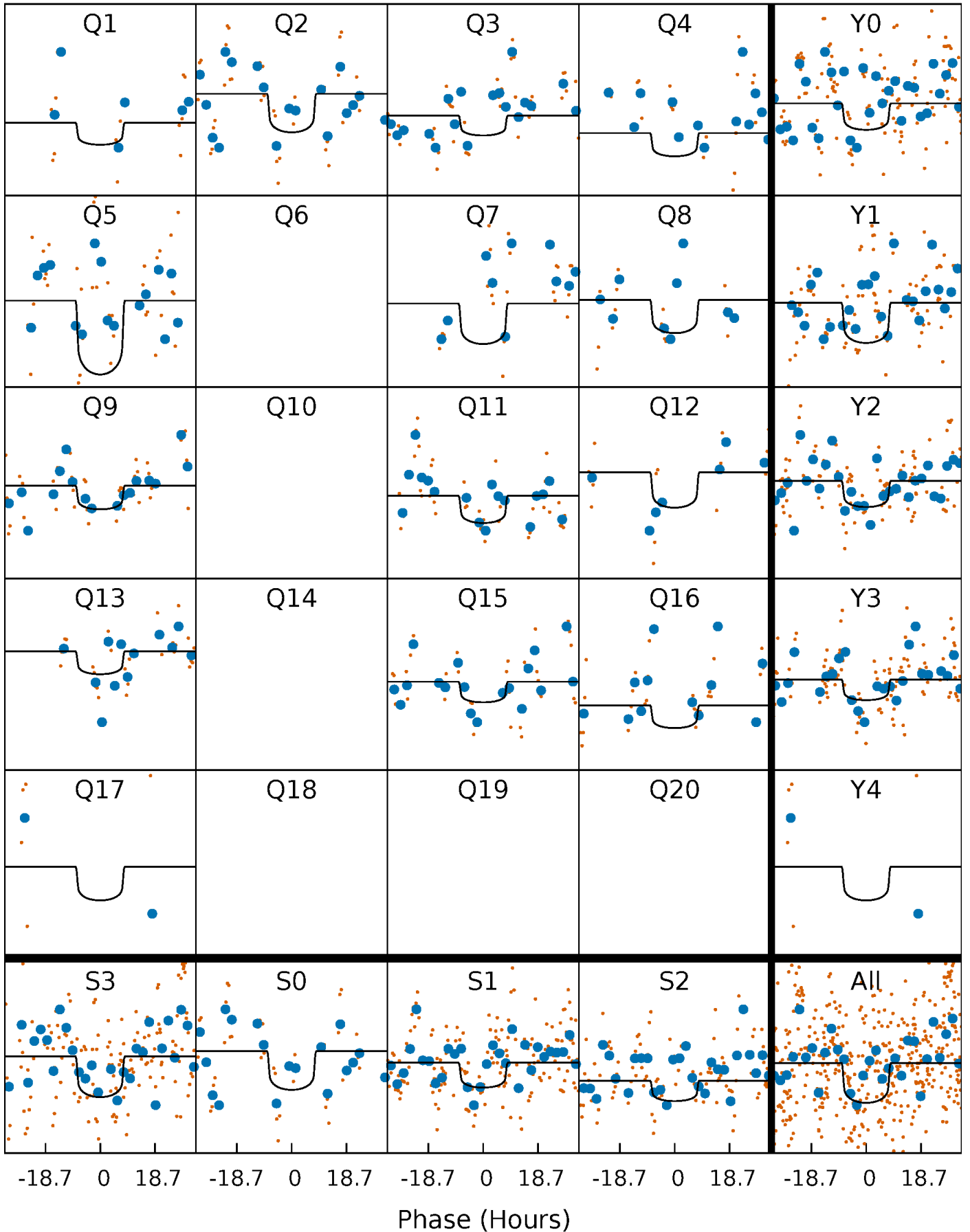
PDC Quarter-Phased Transit Curves

TCE 003967268-06 $P = 32.638873$ Days $T_0 = 139.071766$ (BKJD)



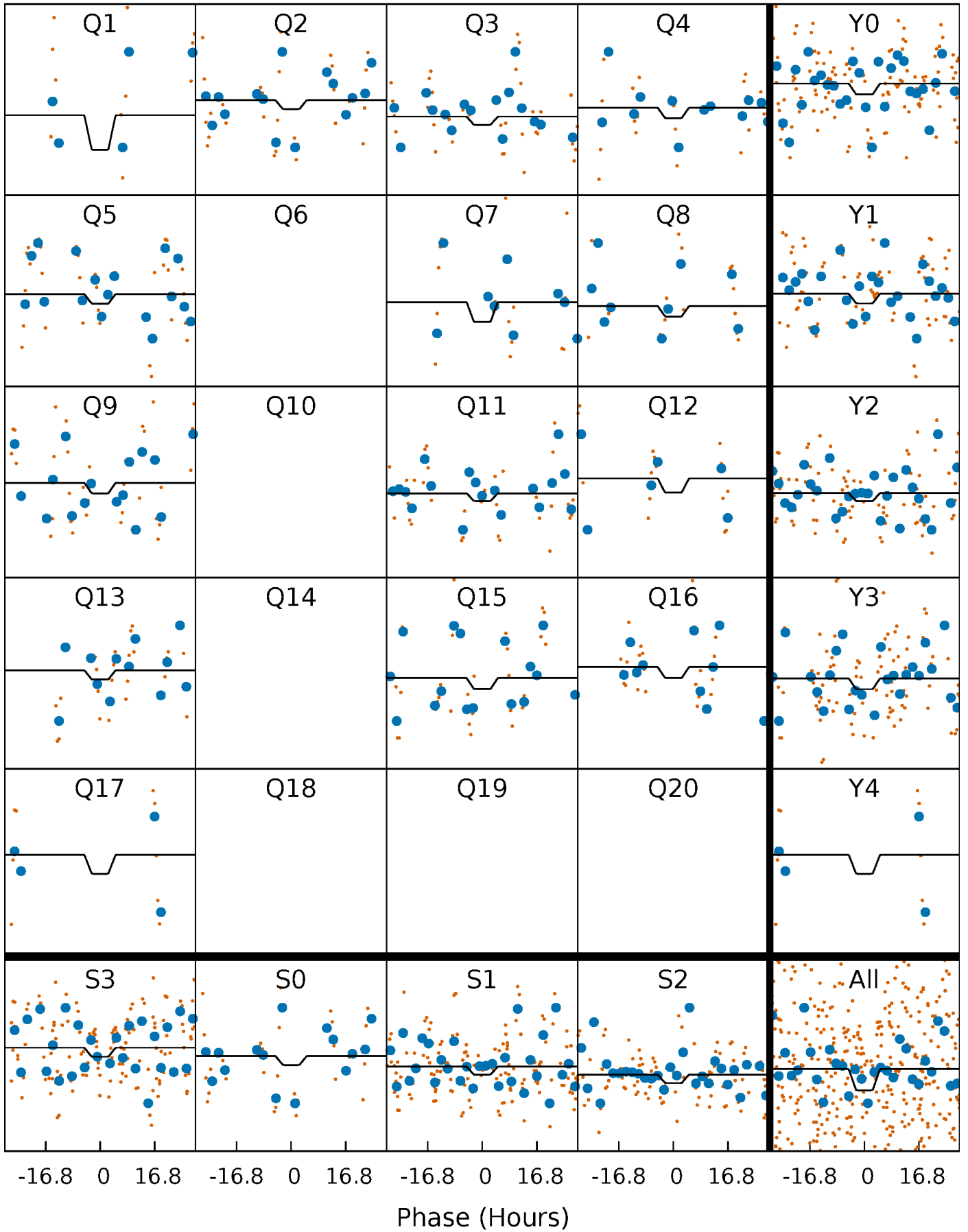
DV Quarter-Phased Transit Curves

TCE 003967268-06 P= 32.638873 Days $T_0=139.071766$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

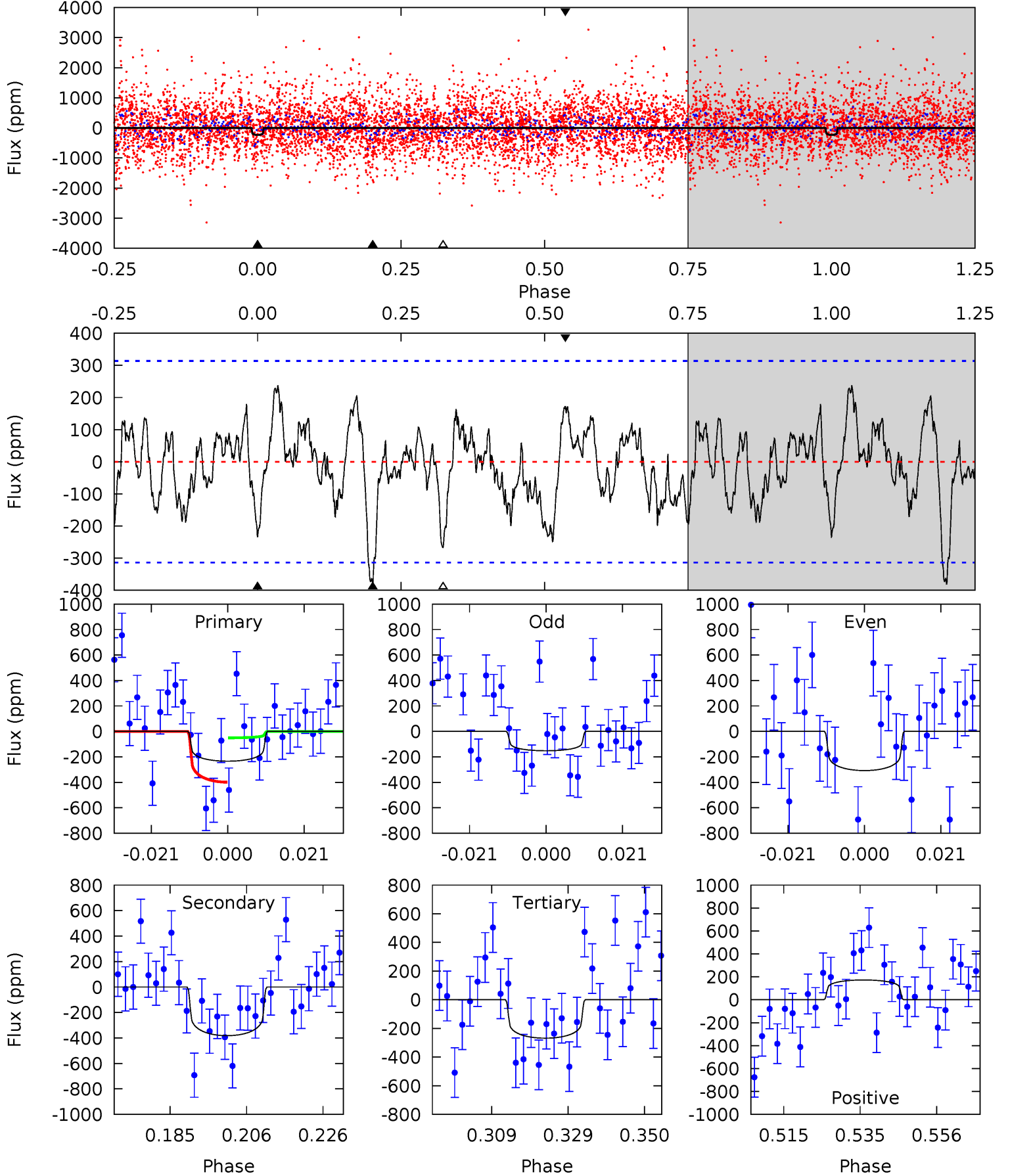
TCE 003967268-06 P= 32.640227 Days $T_0=139.028057$ (BKJD)



DV Model-Shift Uniqueness Test

003967268-06, $P = 32.638873$ Days, $E = 106.432893$ Days

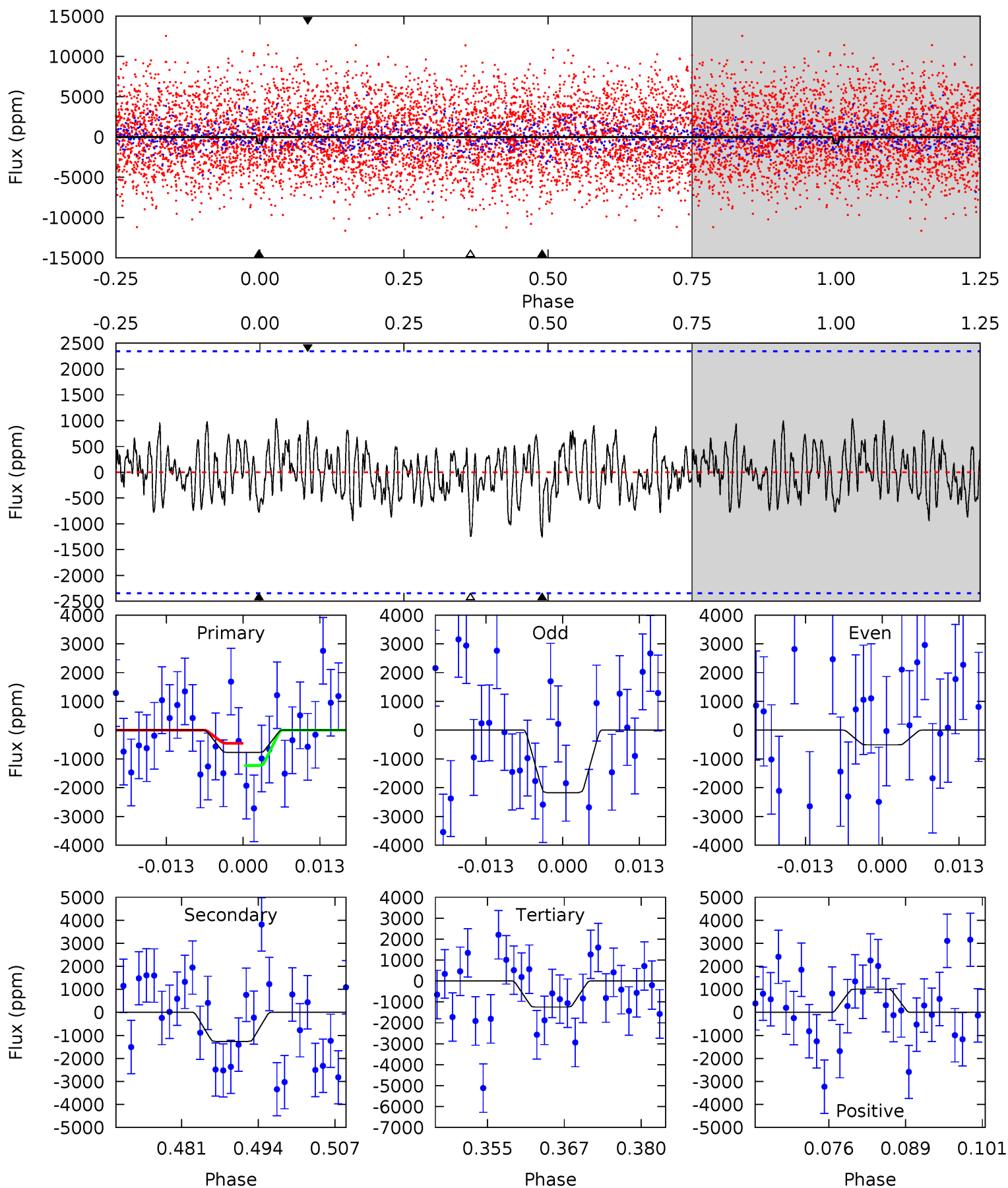
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.65	5.95	4.18	2.69	4.89	2.32	1.51	-0.53	0.96	1.77	3.26	1.20	0.84	0.38	2.76



Alt Model-Shift Uniqueness Test

003967268-06, P = 32.640227 Days, E = 106.387830 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.65	2.69	2.65	2.14	4.98	2.49	0.84	-1.01	-0.50	0.04	0.55	1.79	-0.89	0.45	0.81



Stellar Parameters For KIC 003967268

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7232^{+226}_{-302}	$3.895^{+0.315}_{-0.135}$	$-0.160^{+0.250}_{-0.350}$	$2.413^{+0.578}_{-0.866}$	$1.666^{+0.196}_{-0.364}$	$0.167^{+0.365}_{-0.064}$
	+3%/-4%	+8%/-3%	+156%/-219%	+24%/-36%	+12%/-22%	+218%/-39%
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 003967268-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-382 ± 64	$5.55^{+2.17}_{-1.86}$	1396^{+106}_{-128}	6686^{+1616}_{-939}	384^{+451}_{-188}
Alt.	-1265 ± 471	$8.25^{+2.49}_{-2.19}$	1392^{+109}_{-135}	7391^{+1636}_{-1114}	537^{+553}_{-261}

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

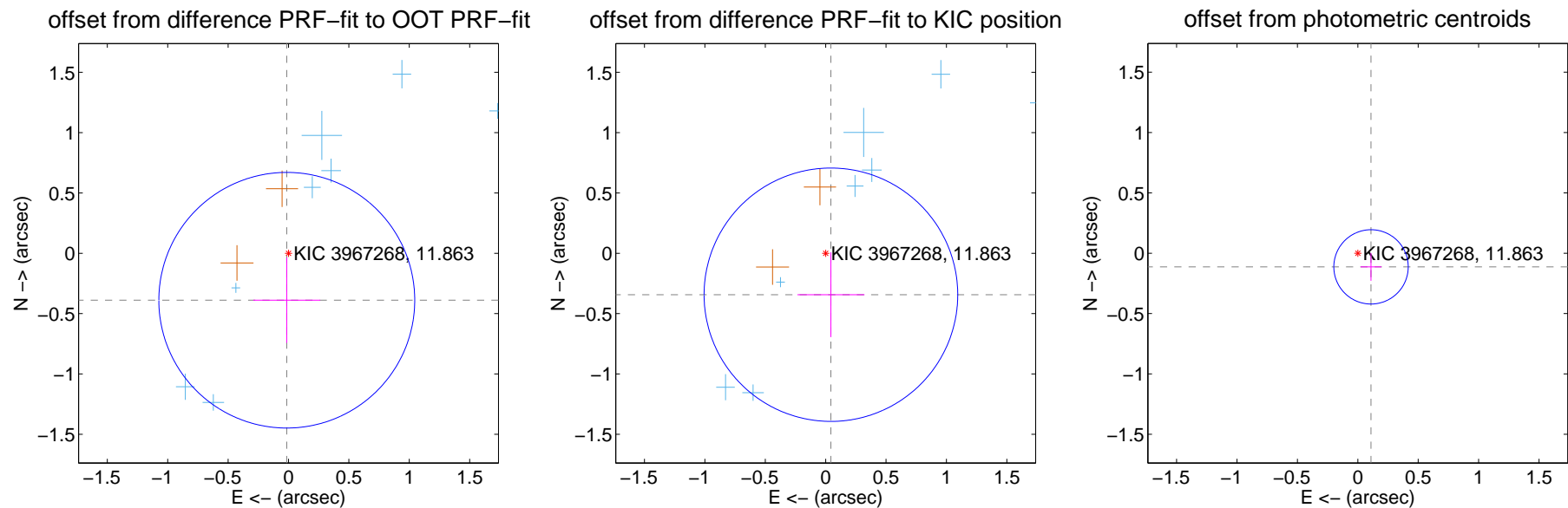
DV Centroid Data

Supplemental centroid analysis for 003967268-06. **Kepler magnitude: 11.86.** Transit SNR 6.49

There are 9 quarters with good PRF difference image offsets

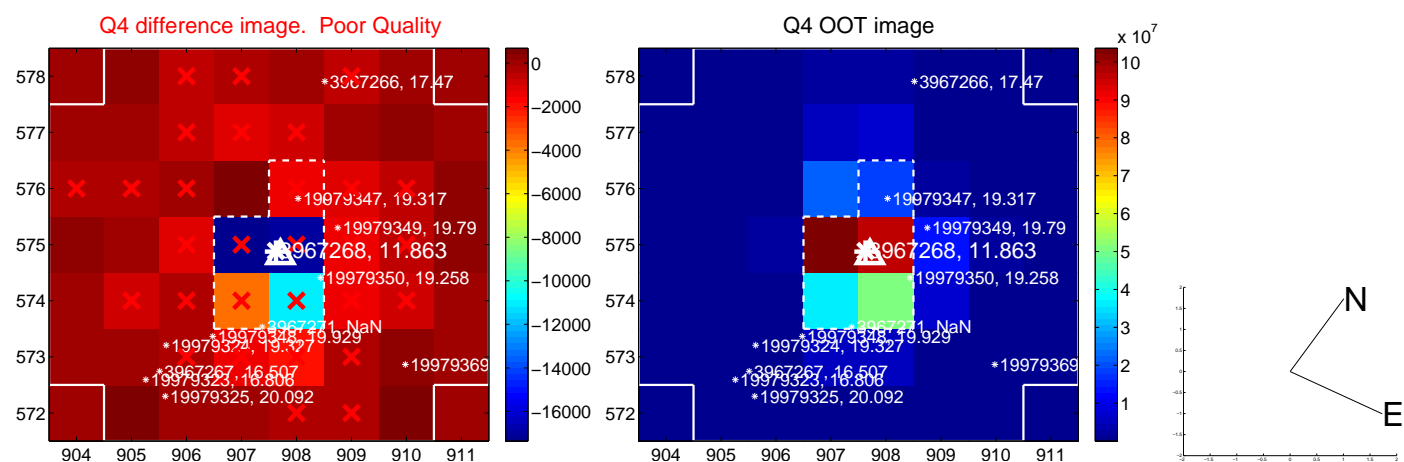
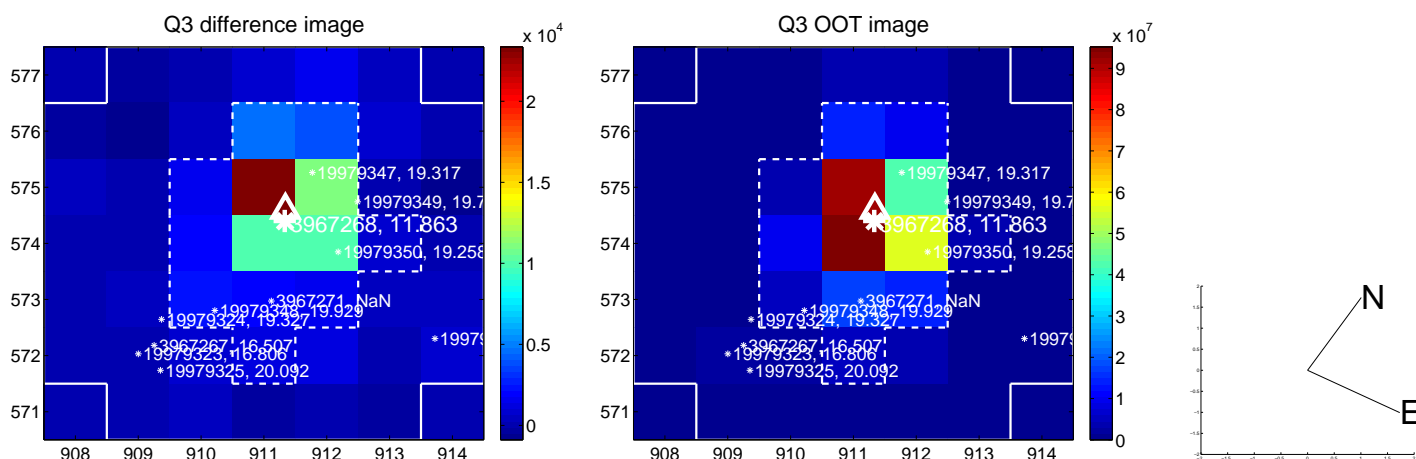
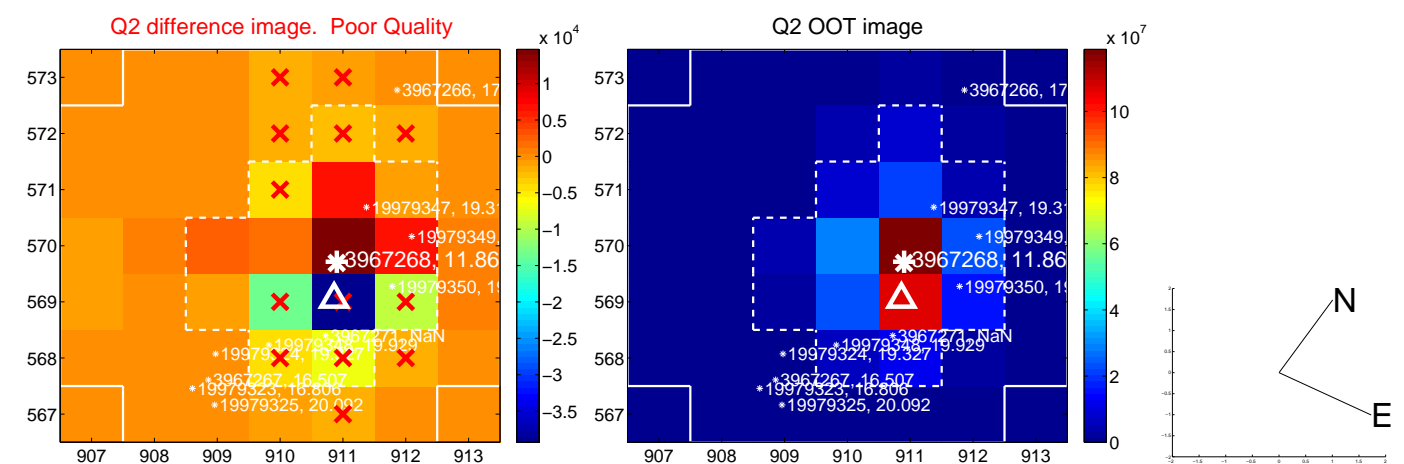
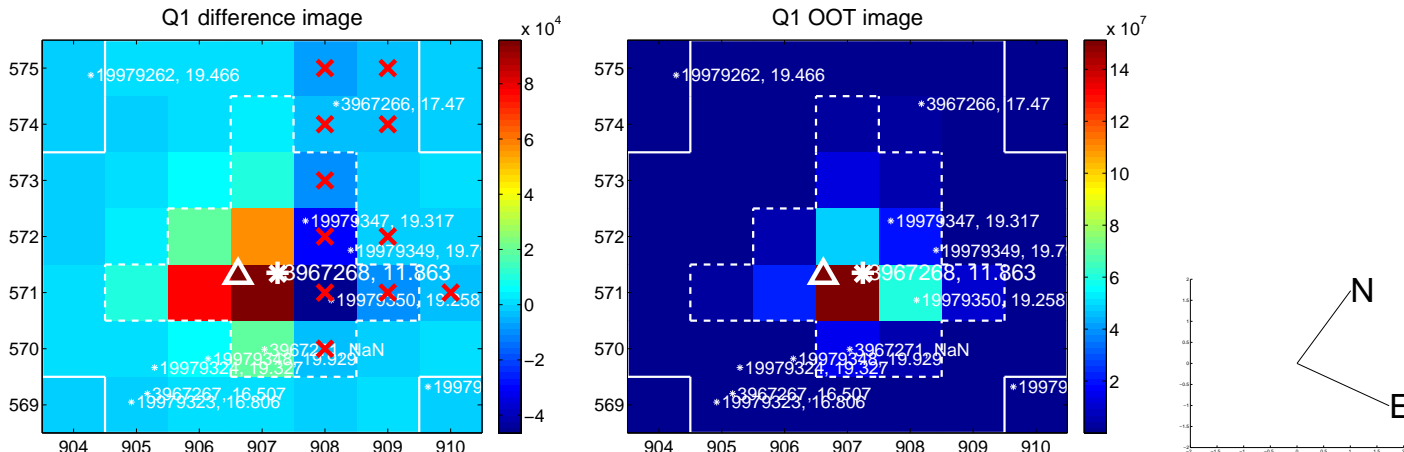
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.389 ± 0.353	1.10	0.014 ± 0.277	-0.389 ± 0.353
PRF-fit source offset from KIC position	0.346 ± 0.350	0.99	-0.043 ± 0.278	-0.343 ± 0.351
photometric centroid source offset	0.16 ± 0.10	1.53	-0.11 ± 0.09	-0.11 ± 0.12

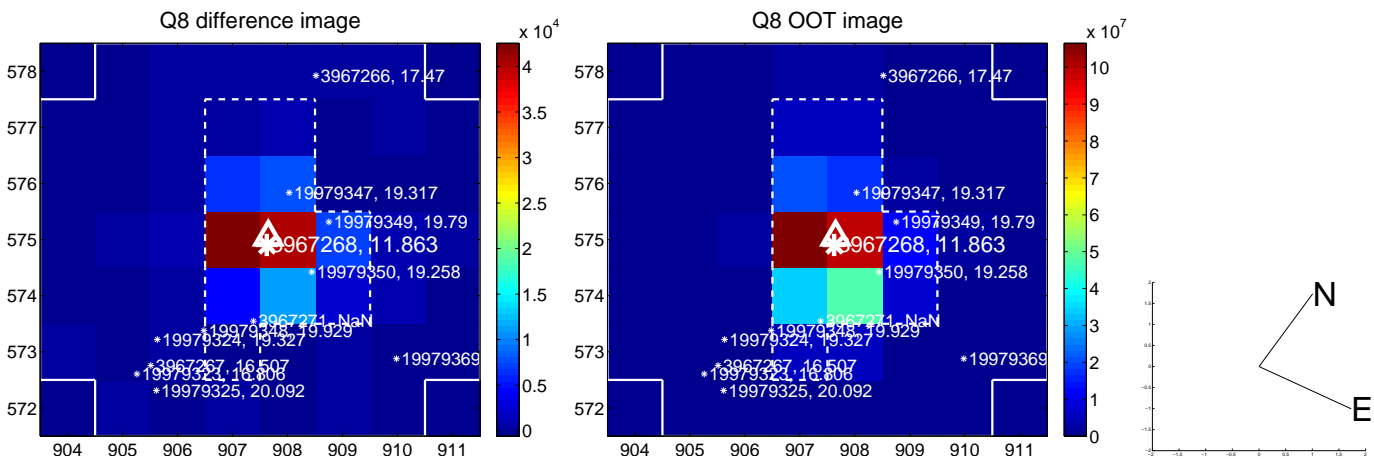
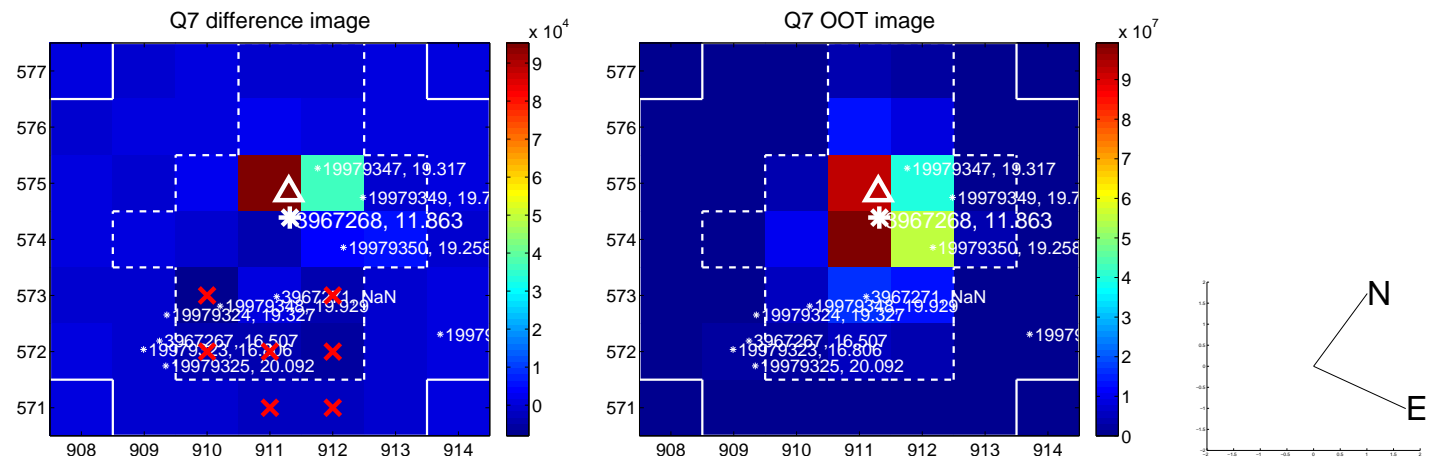
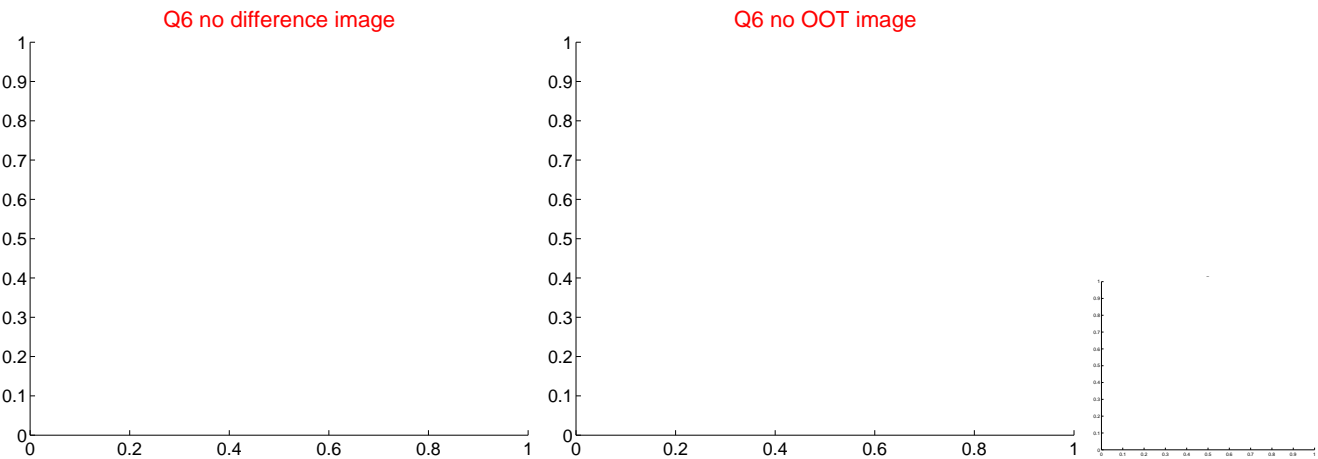
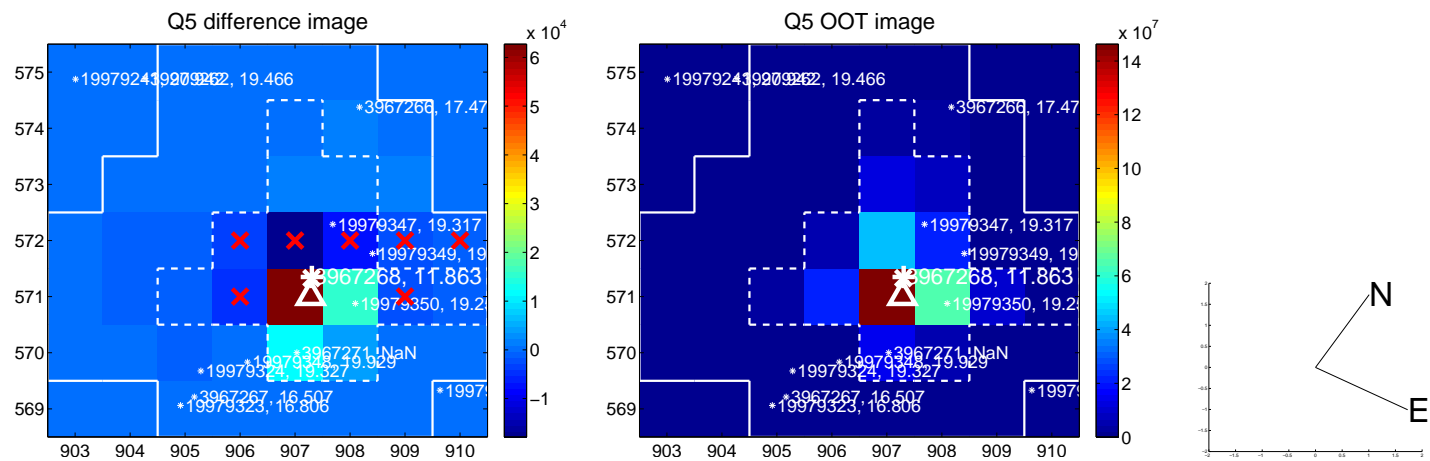


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

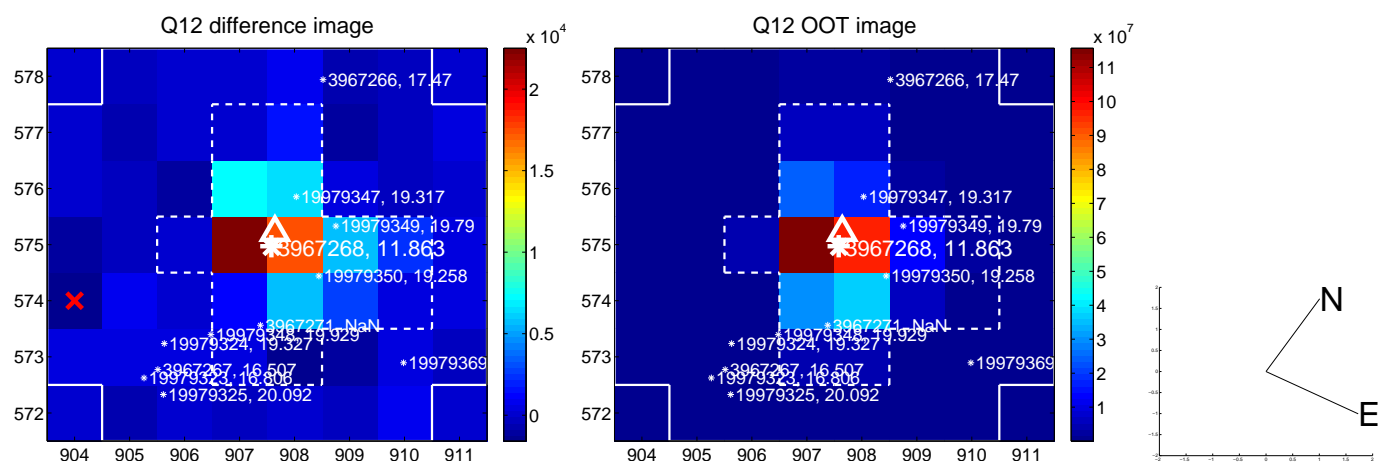
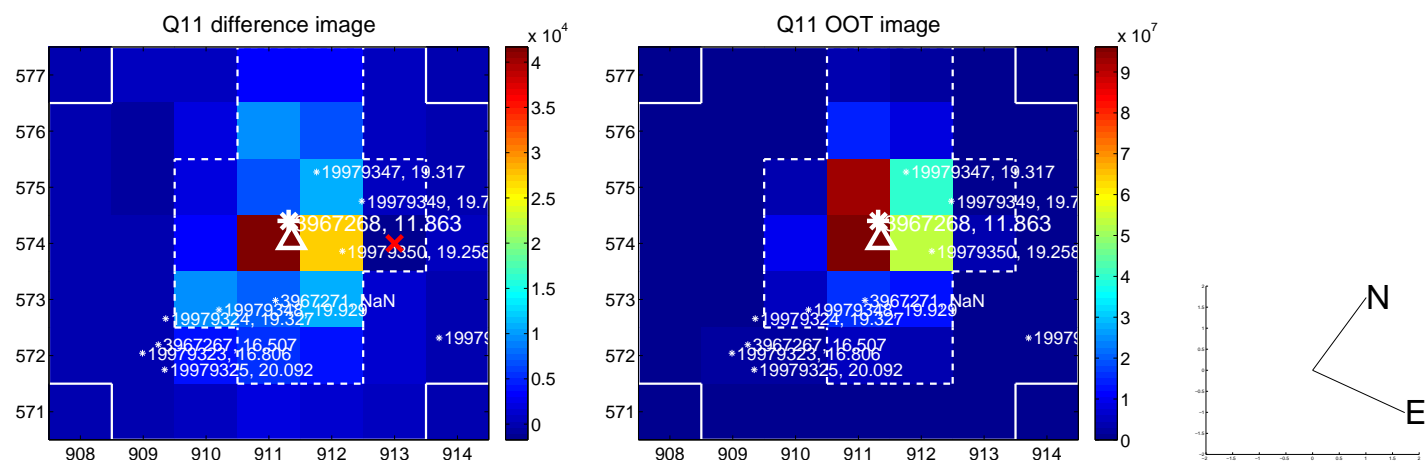
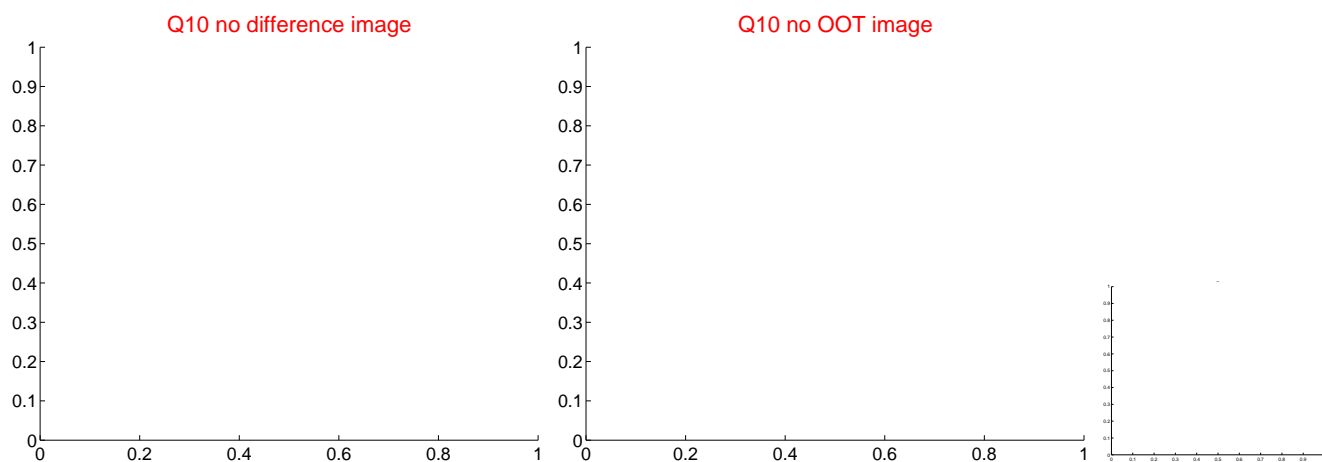
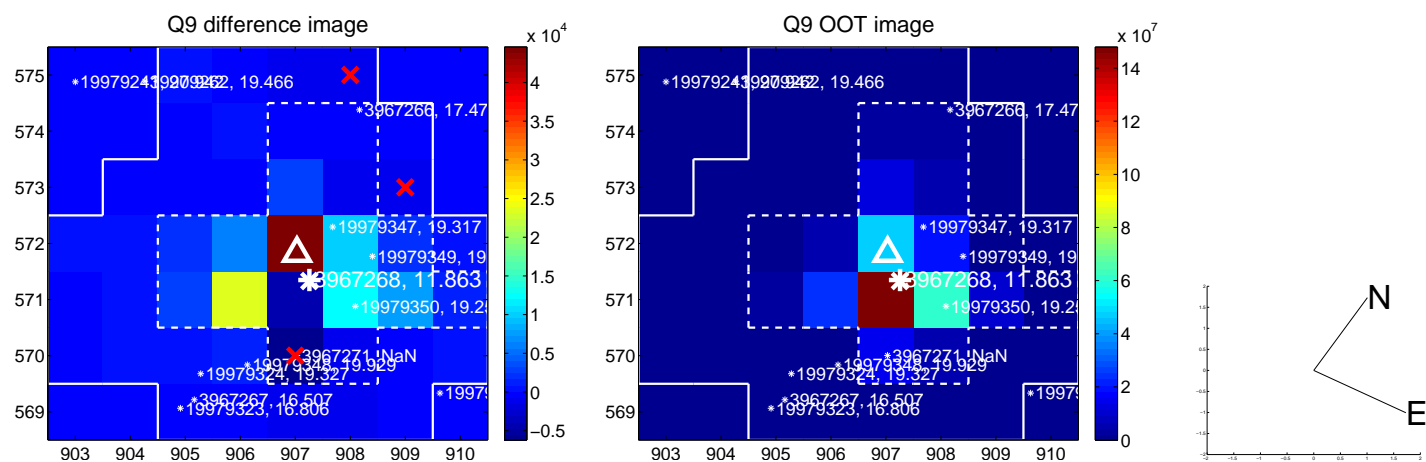
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



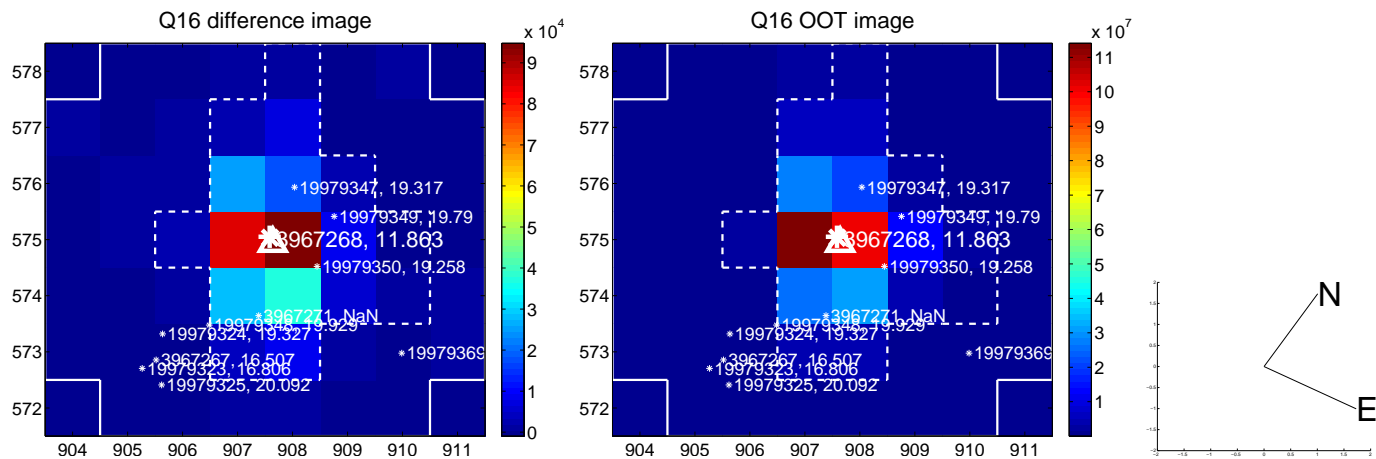
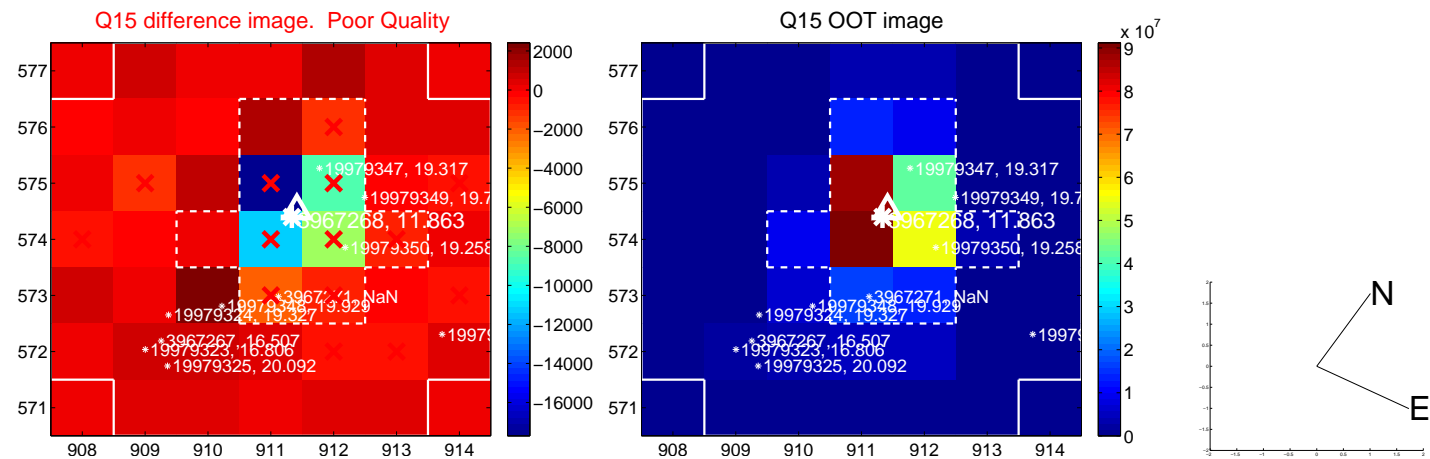
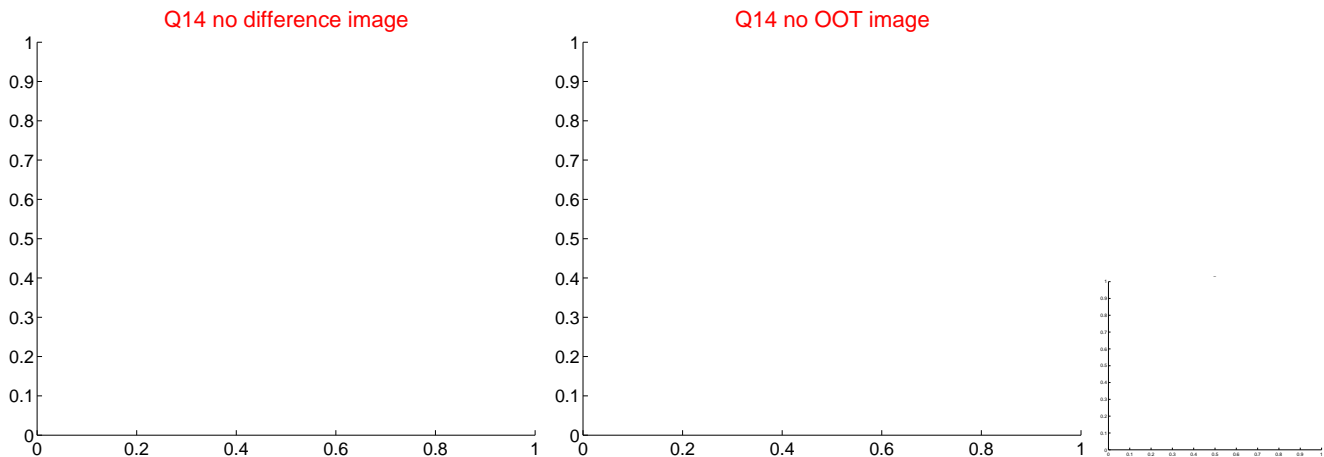
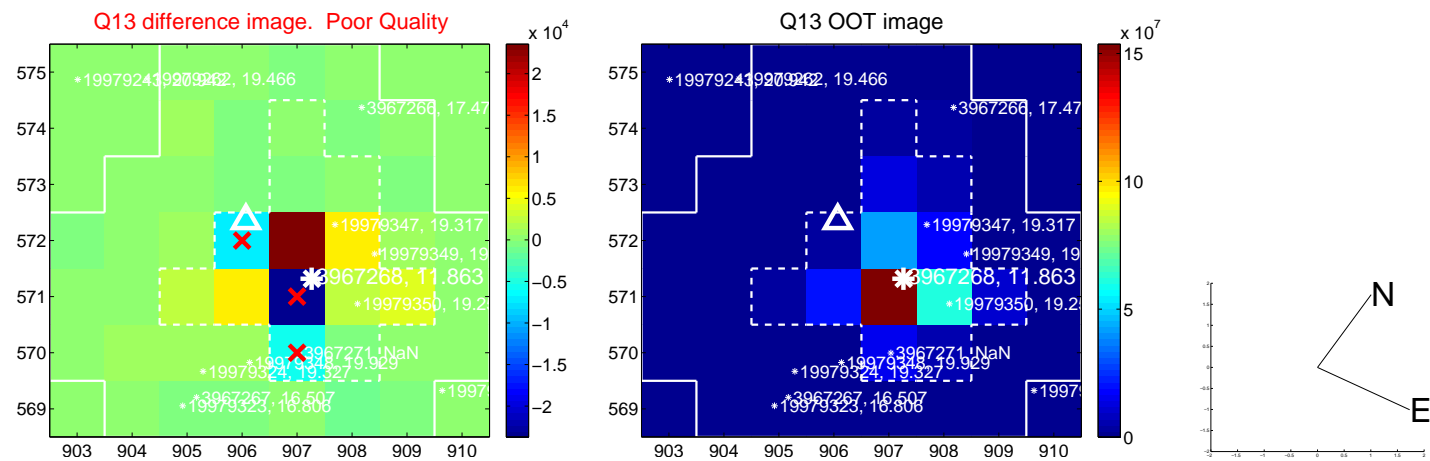
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



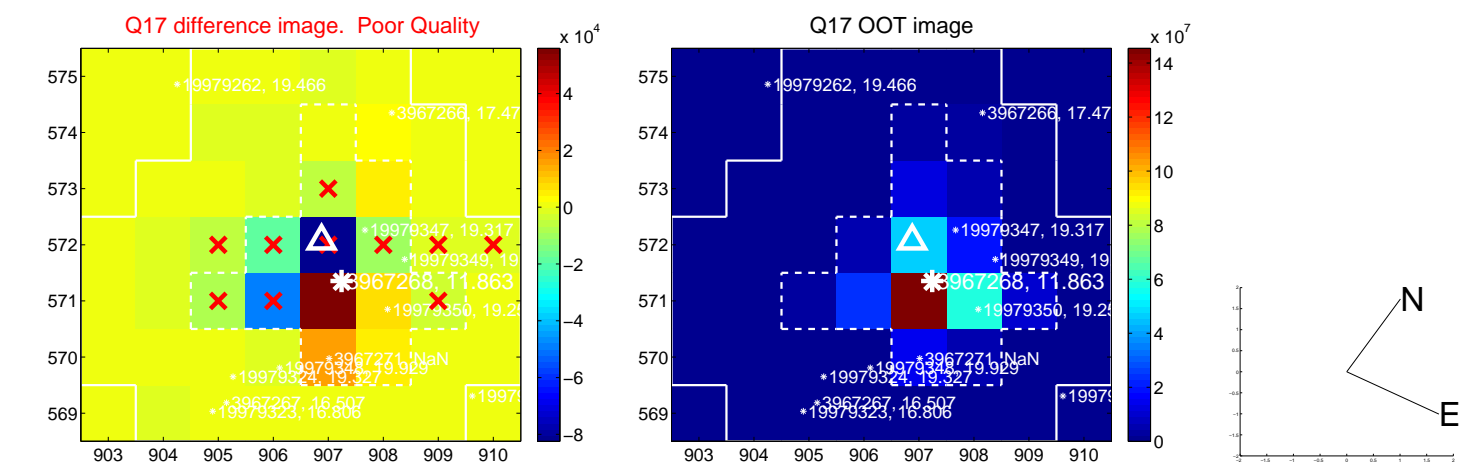
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



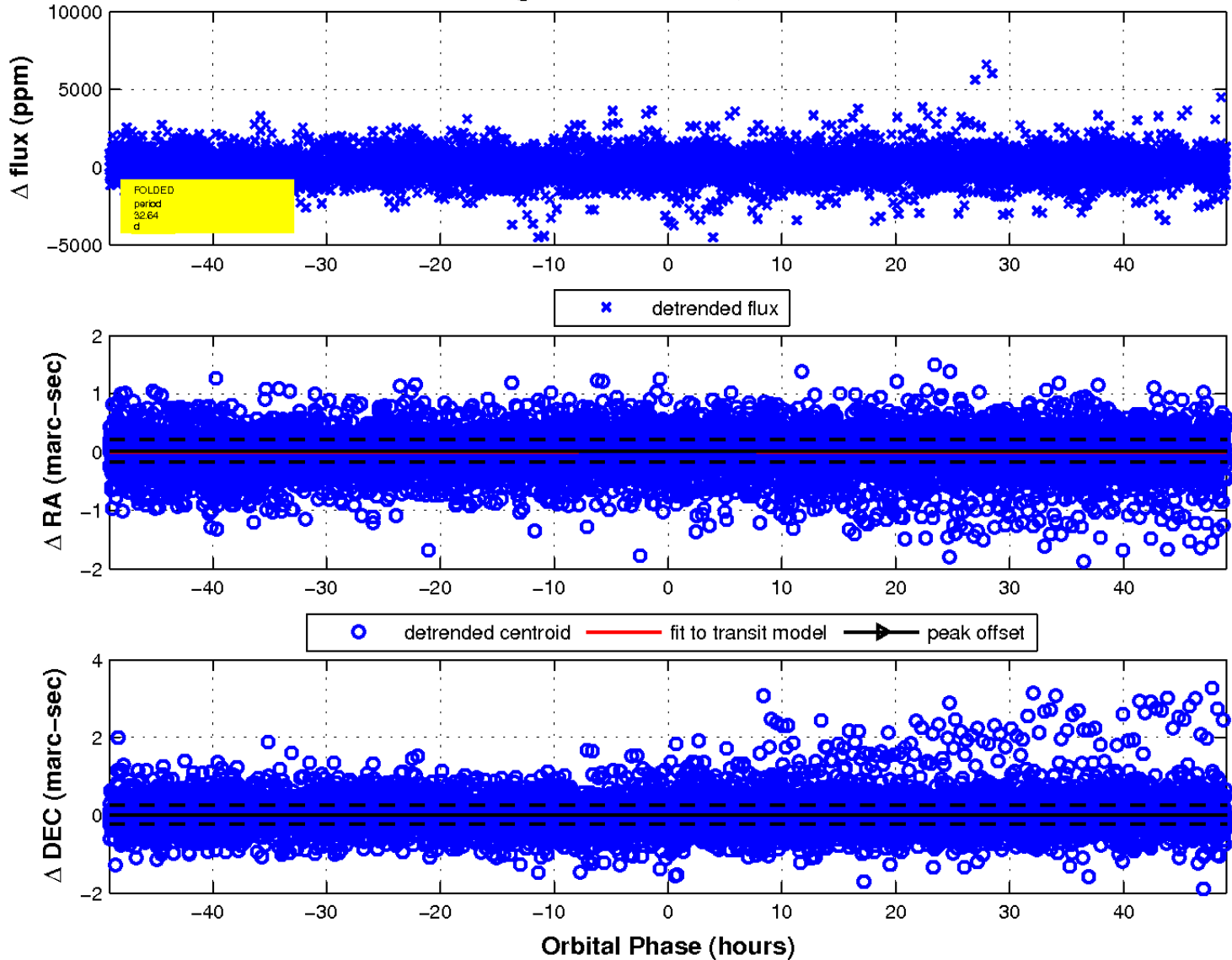
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 6 of 6



UKIRT Image

Declination

