

KIC 011232111

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})
011232111-01	OBS	No	2.514071	132.576242	17.1	16.302	12.9	13.6	2.91	7843	1.22	13432.26
011232111-02	OBS	No	105.415417	185.088874	91.0	15.509	10.5	8.7	2.91	7843	3.14	92.21
011232111-03	OBS	No	44.682538	148.825781	224.2	3.000	8.9	-1.0	2.91	7843	4.41	289.60

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011232111-01	OBS	FP	0.00	1	0	0	0	LPP_DV
011232111-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_FEW_DIFFS
011232111-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

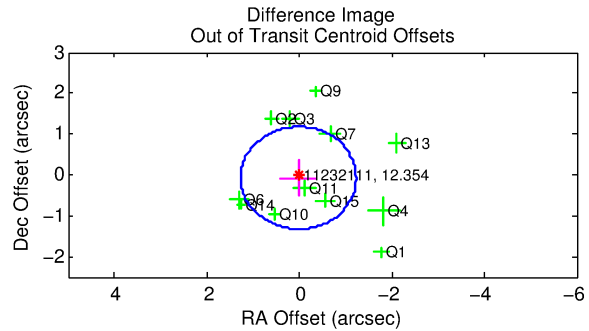
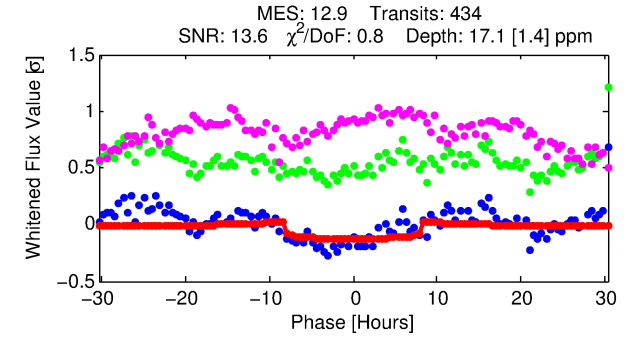
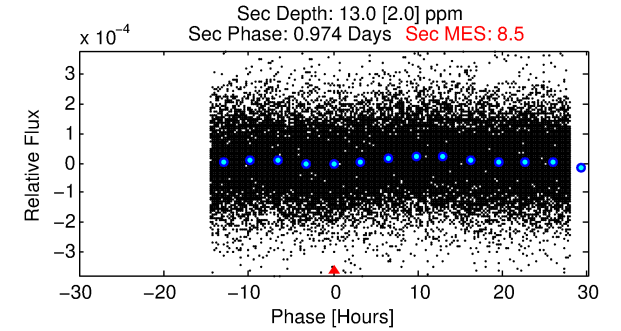
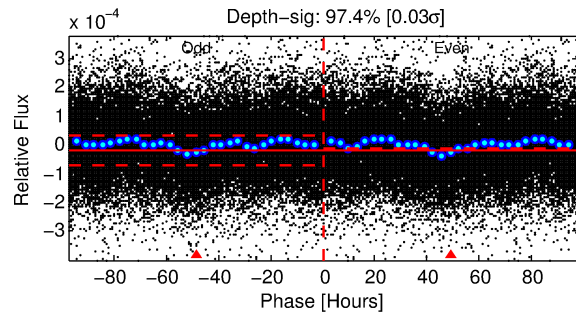
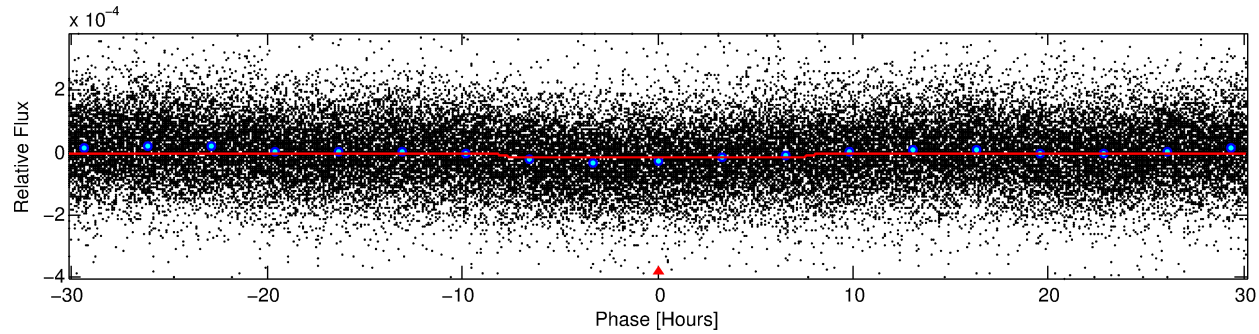
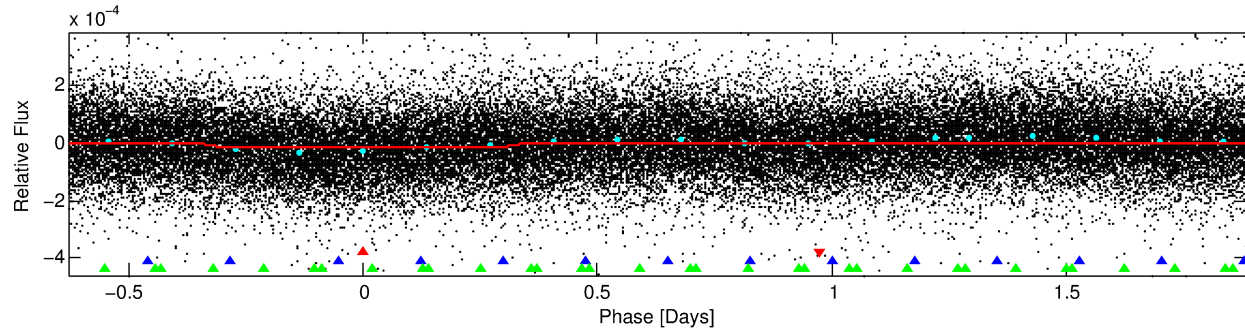
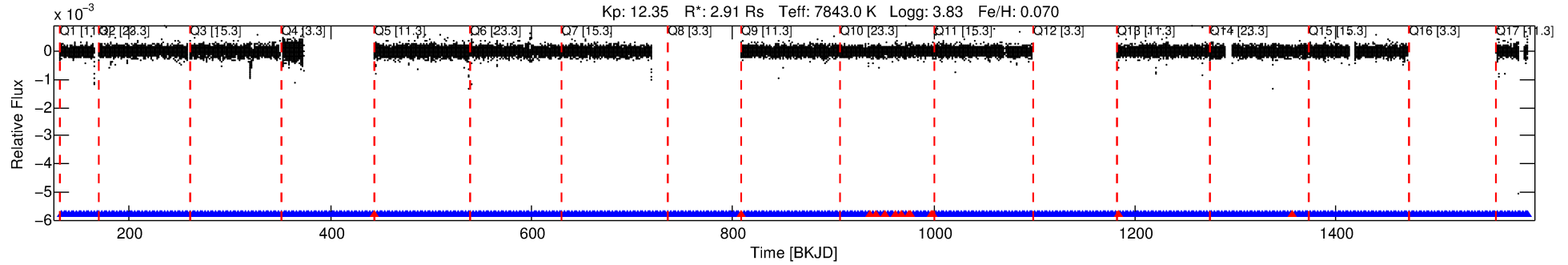
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011232111-01

No Significant Match Found

DV One-Page Summary

KIC: 11232111 Candidate: 1 of 3 Period: 2.514 d



DV Fit Results:

Period = 2.51407 [0.00004] d
Epoch = 132.5762 [0.0079] BKJD
Rp/R* = 0.0038 [0.0032]
a/R* = 1.34 [2.85]
b = 0.00 [4977.57]
Seff = 13432.26 [7898.62]
Teq = 2745 [404] K
Rp = 1.22 [1.12] Re
a = 0.0462 [0.0166] AU
Ag = 10.33 [18.22] [0.51σ]
Teffp = 7610 [3200] K [1.51σ]

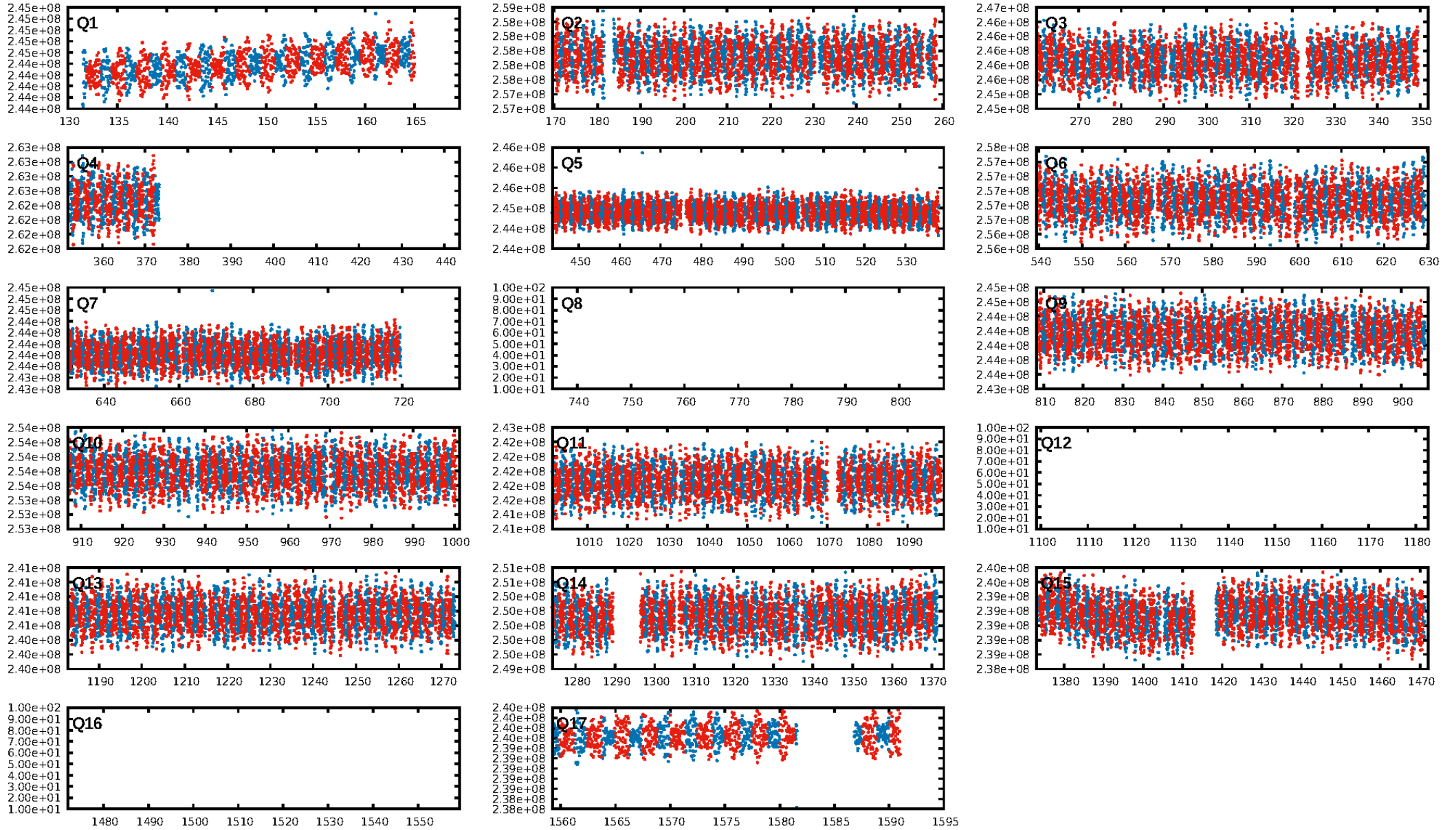
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [61.06σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.06e-17
RollingBand-fgt: 0.97 [388/401]
GhostDiagnostic-chr: 2.849
Centroid-sig: 8.1%
Centroid-so: 1.165 arcsec [1.31σ]
OotOffset-rm: 0.080 arcsec [0.19σ]
KicOffset-rm: 0.125 arcsec [0.30σ]
OotOffset-st: 4/4/1/3 [12]
KicOffset-st: 4/4/1/3 [12]
DiffImageQuality-fgm: 1.00 [12/12]
DiffImageOverlap-fno: 1.00 [14/14]

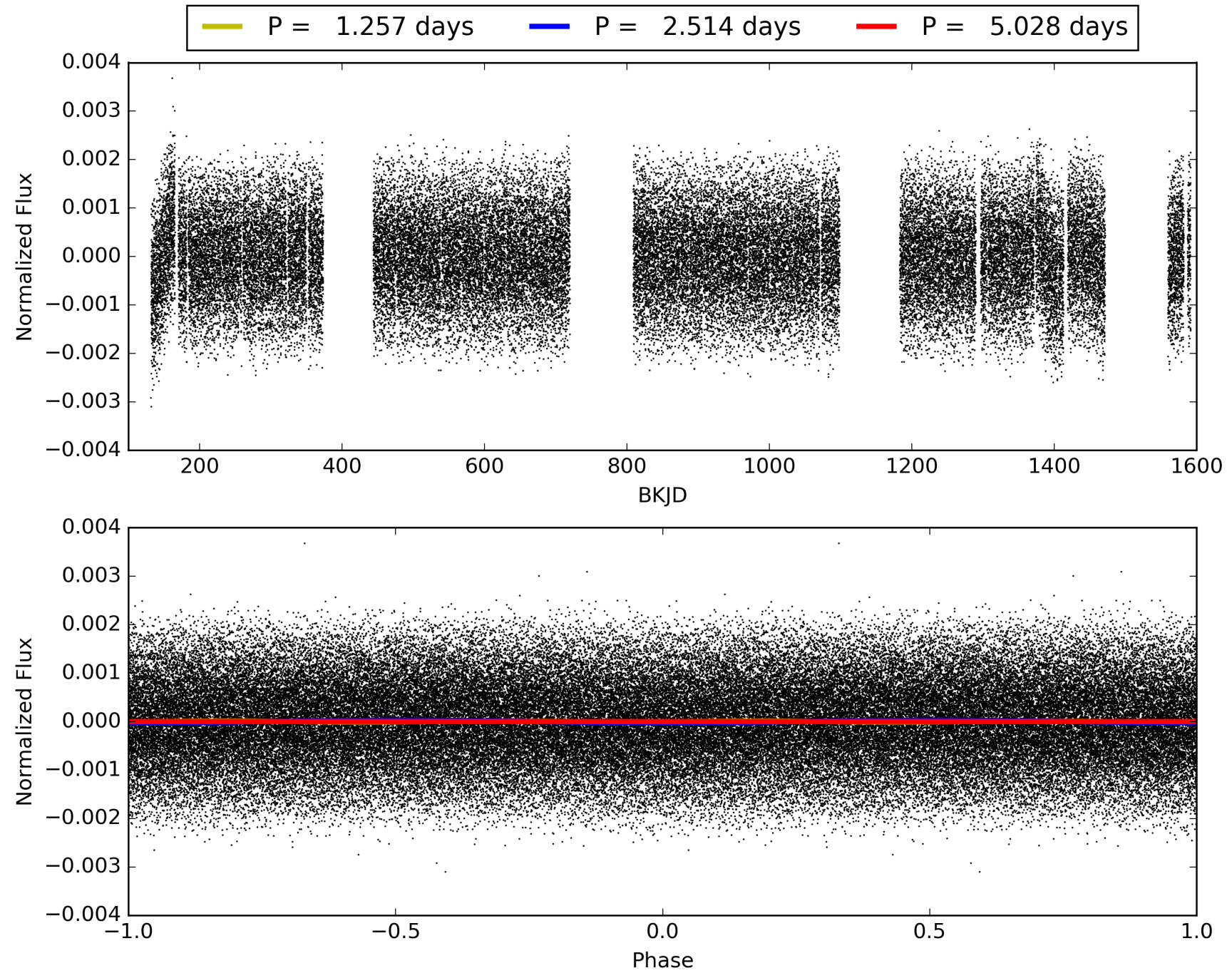
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 011232111-01, PDC Light Curves

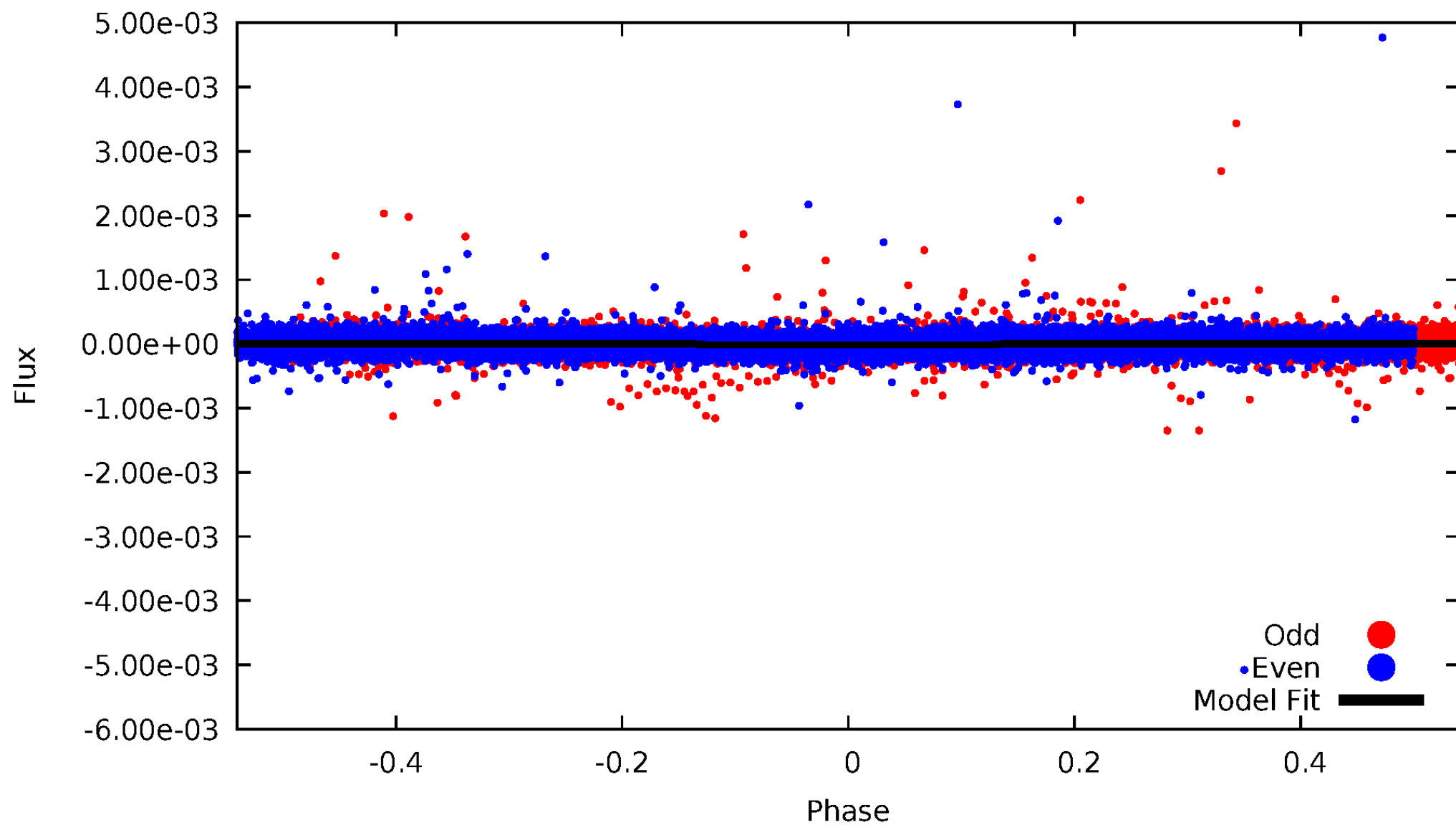


TCE 011232111-01



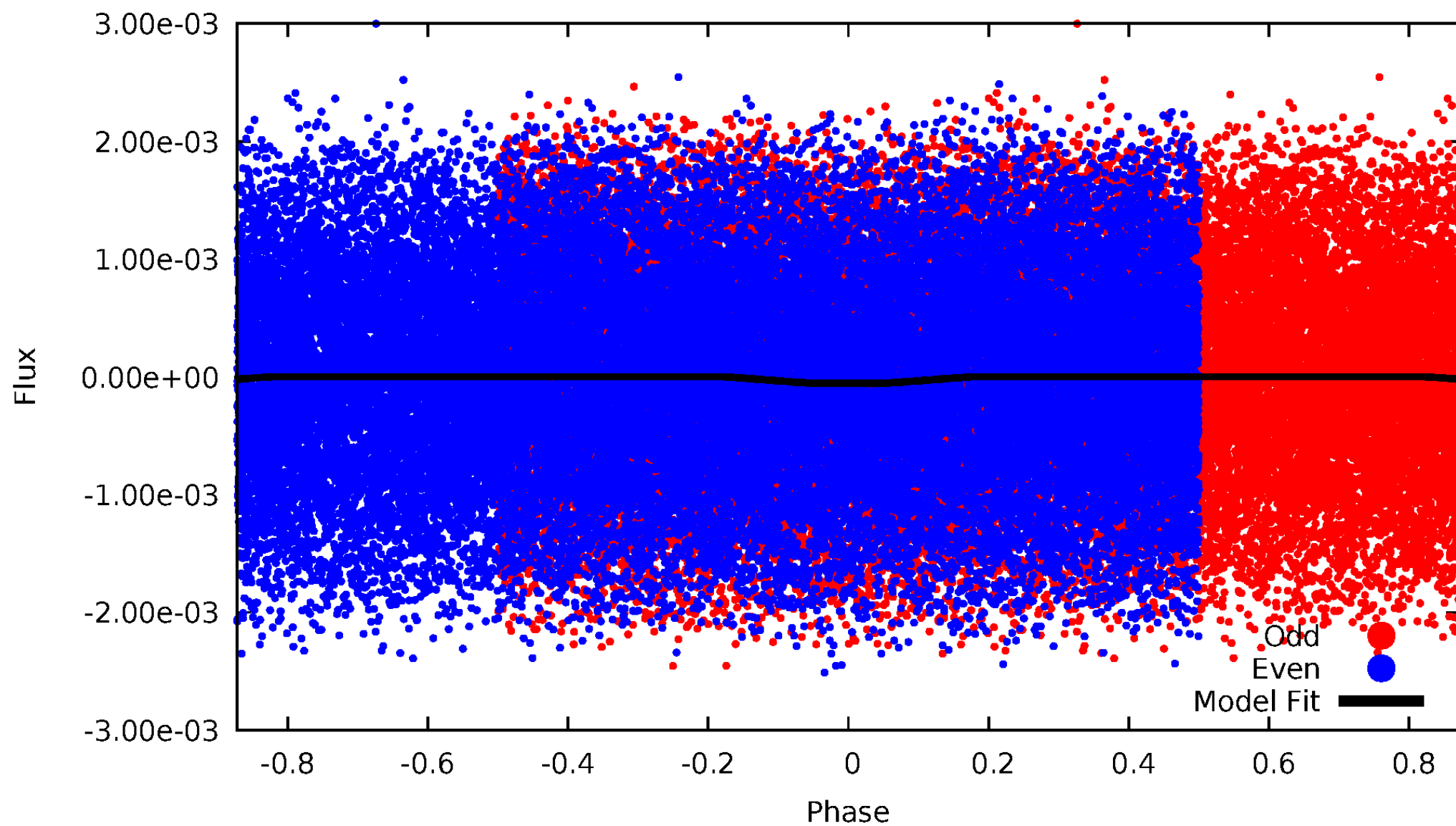
DV Odd/Even

TCE 011232111-01



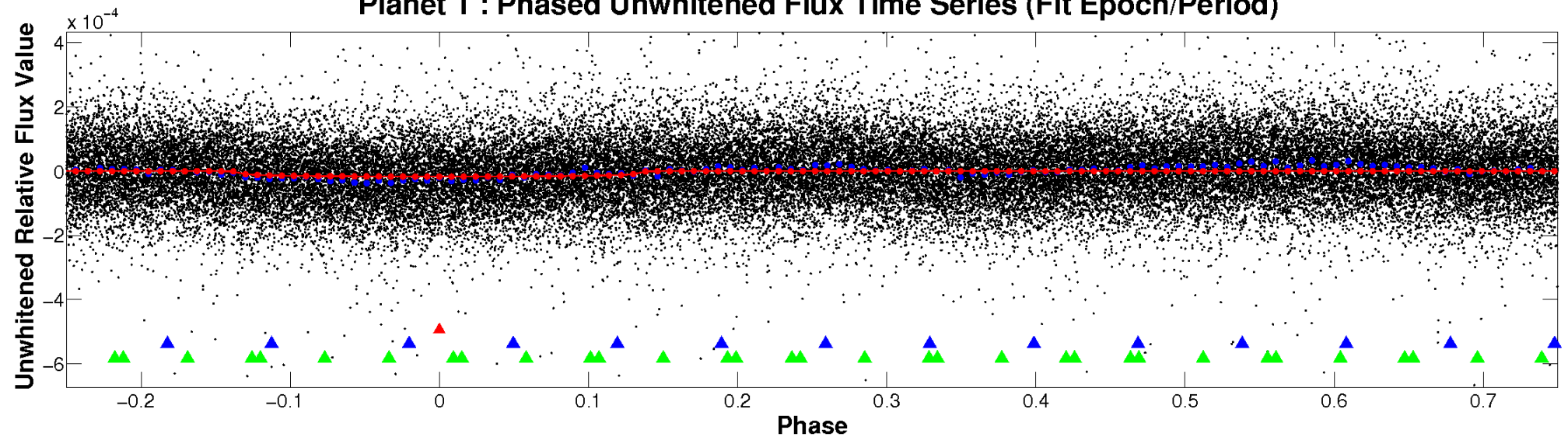
ALT Odd/Even

TCE 011232111-01

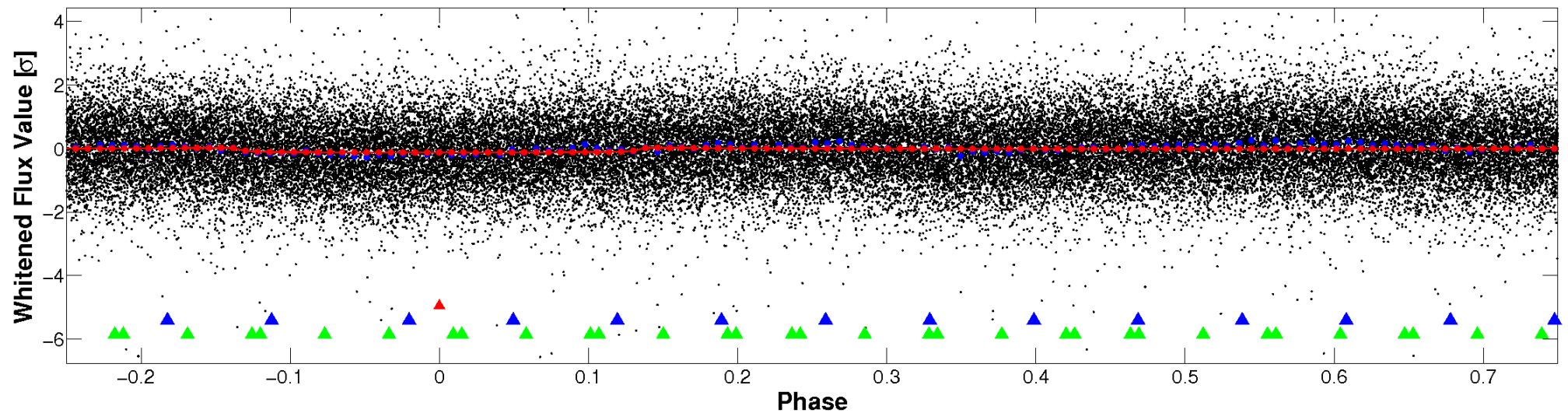


Non-Whitened Vs. Whitened Light Curve

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

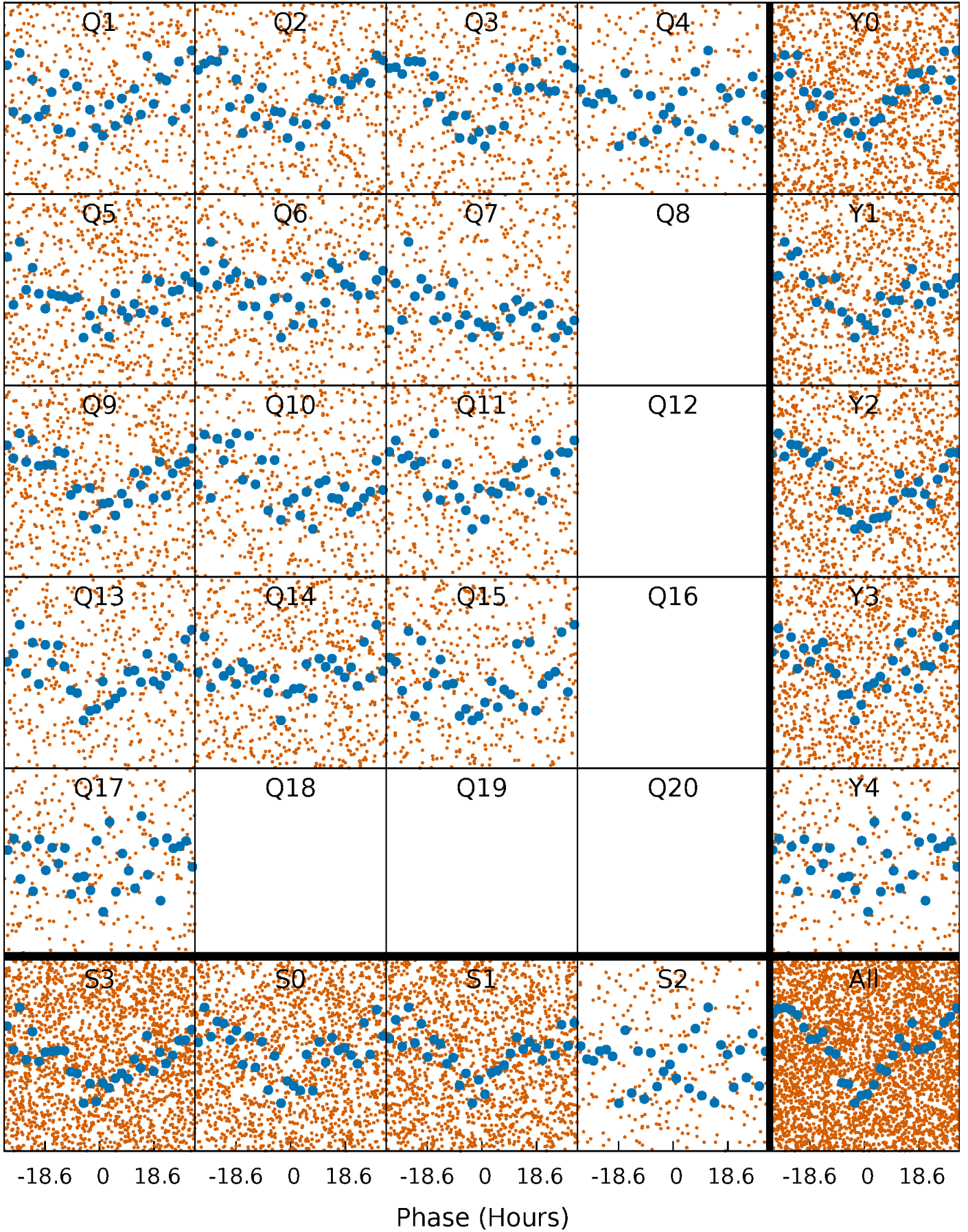


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



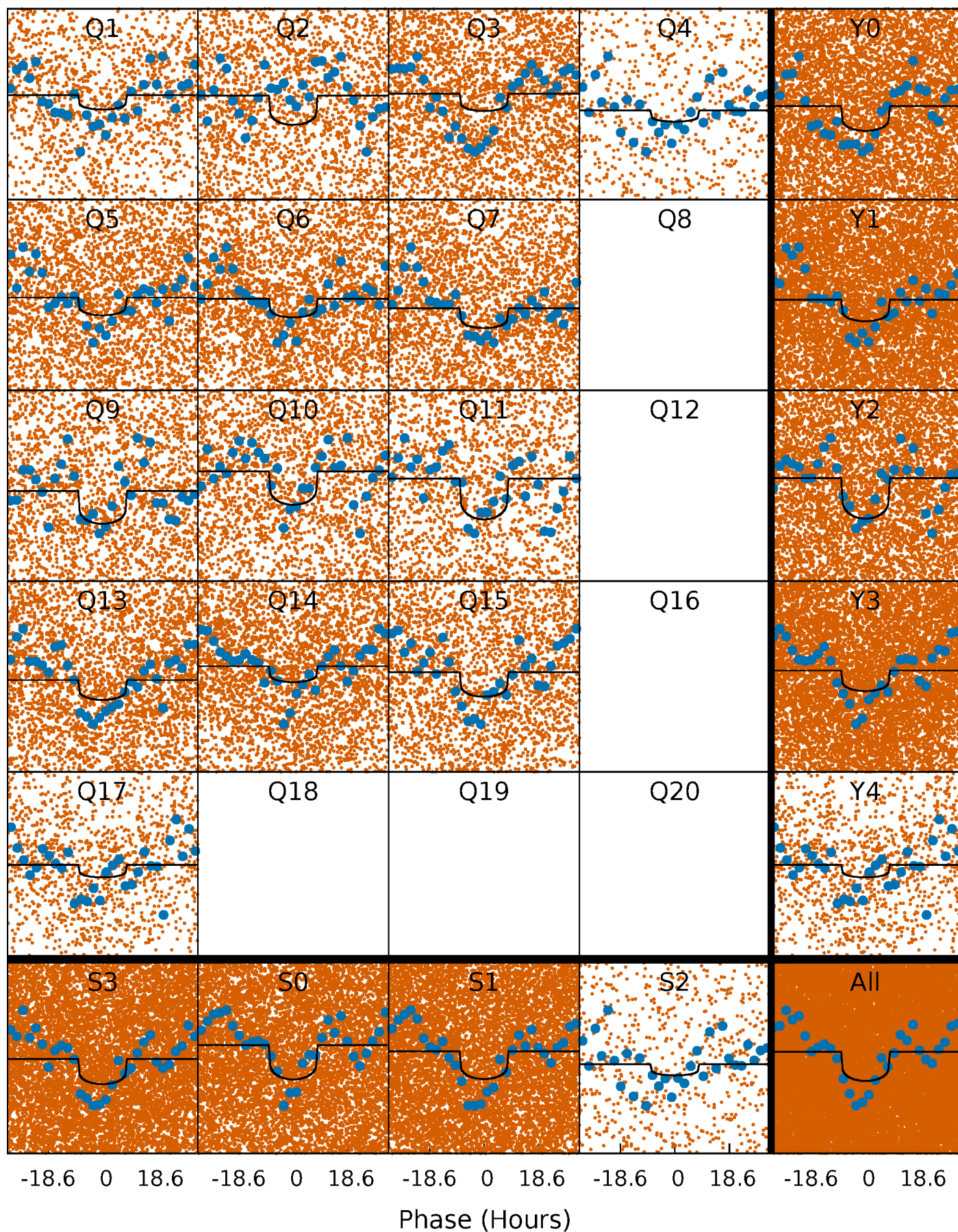
PDC Quarter-Phased Transit Curves

TCE 011232111-01 P= 2.514071 Days $T_0=132.576242$ (BKJD)



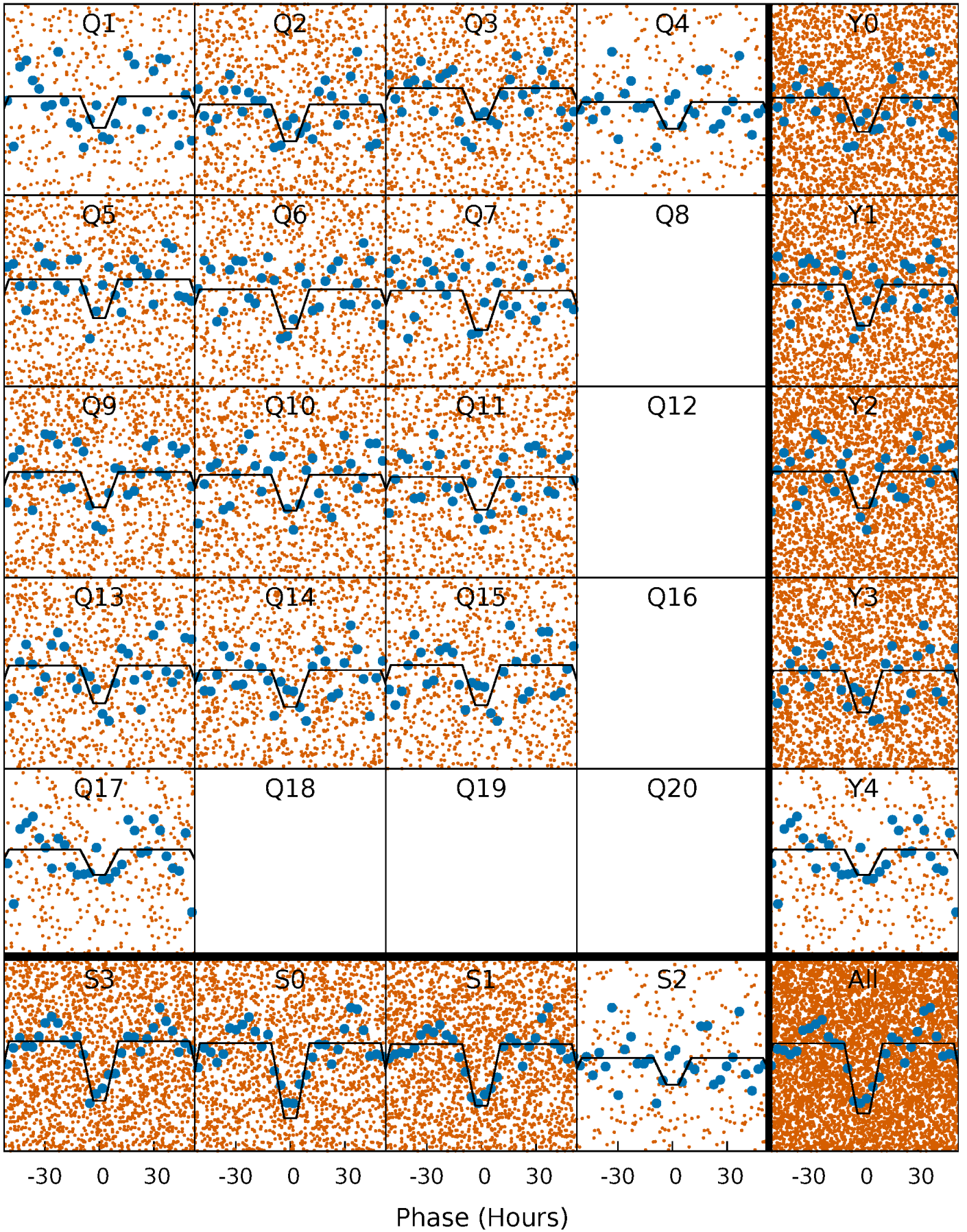
DV Quarter-Phased Transit Curves

TCE 011232111-01 P= 2.514071 Days $T_0=132.576242$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

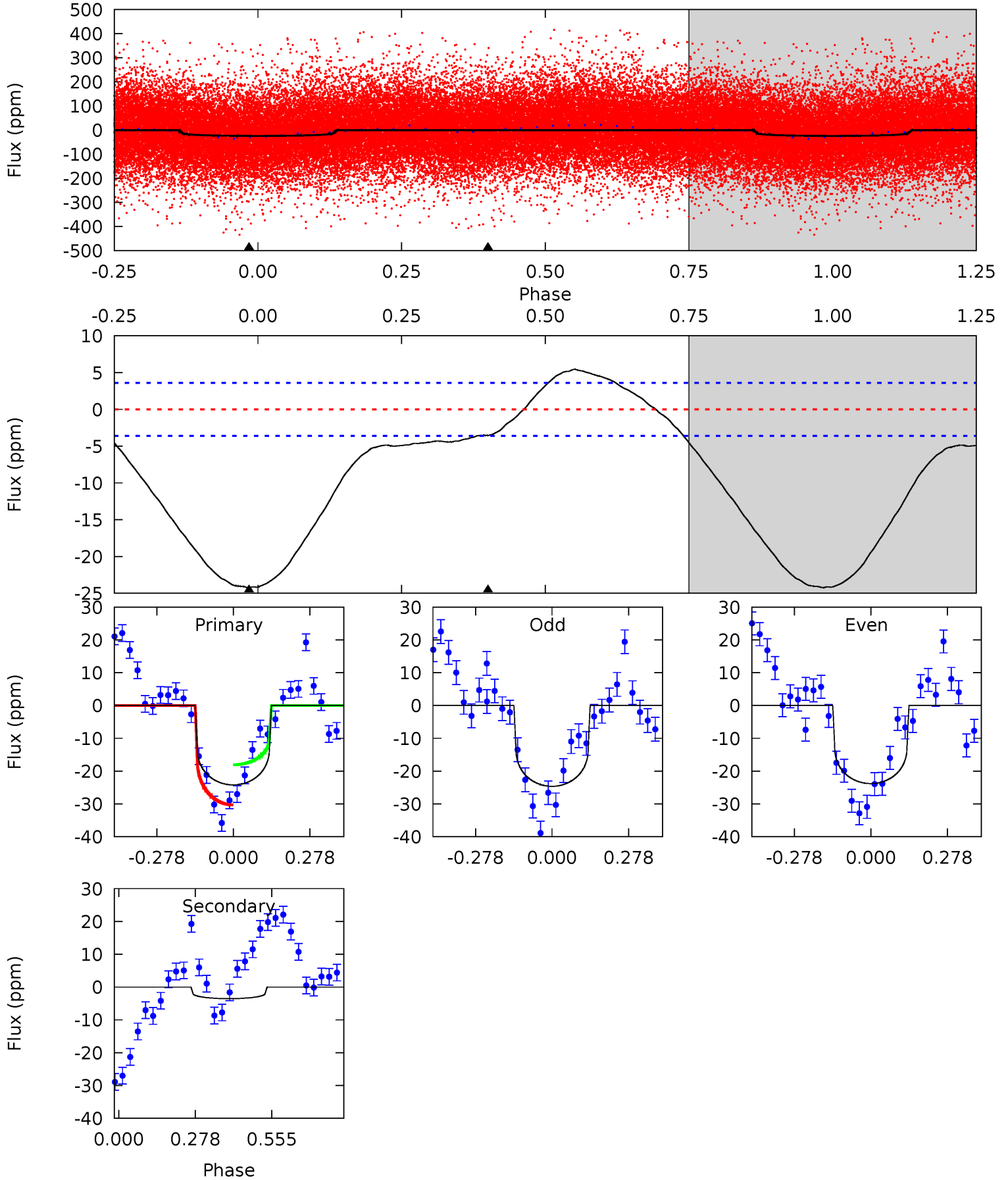
TCE 011232111-01 P= 2.513901 Days $T_0=132.586979$ (BKJD)



DV Model-Shift Uniqueness Test

011232111-01, P = 2.514071 Days, E = 130.062171 Days

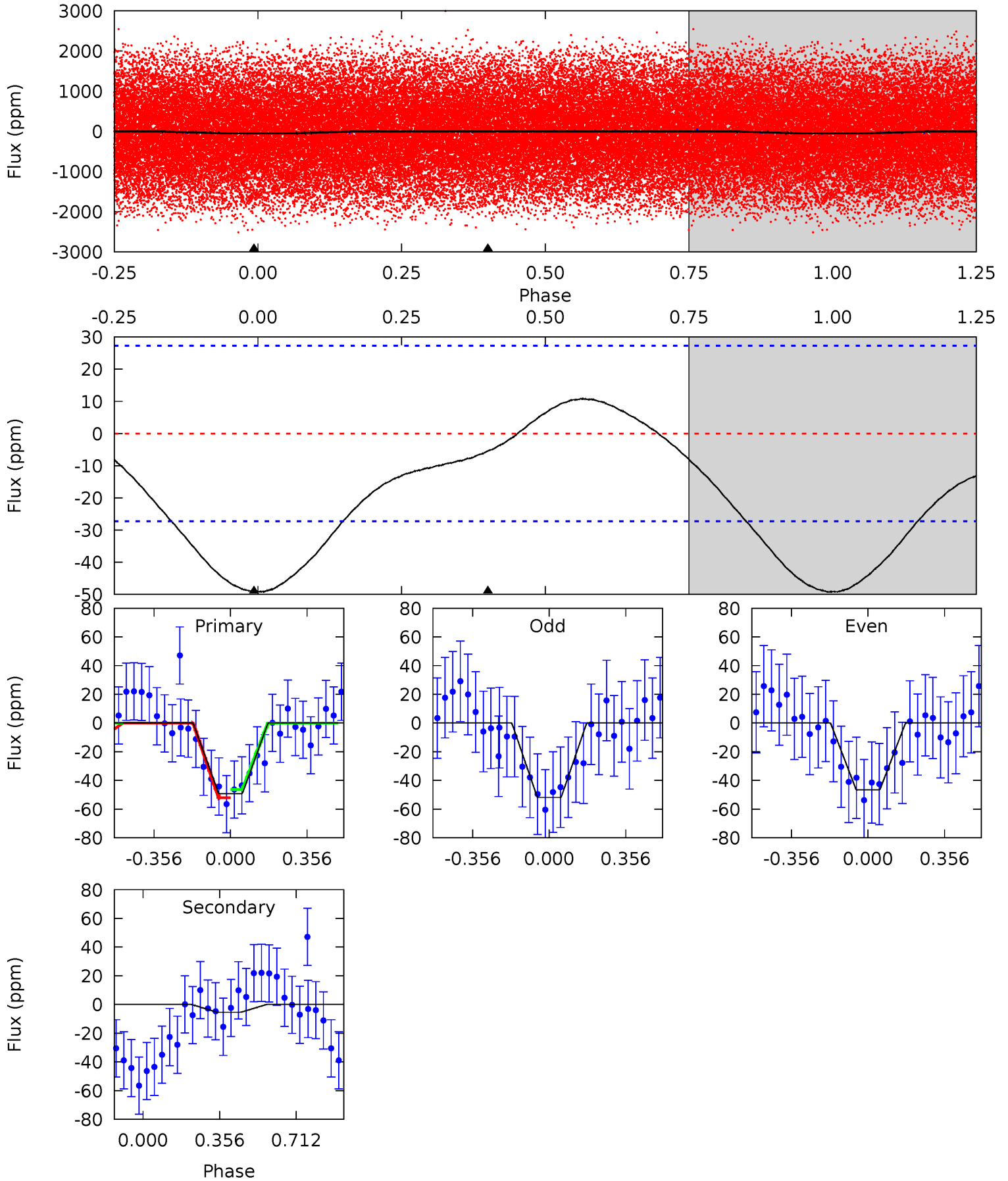
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.2	4.26	0	0	4.35	1.09	2.25	29.2	29.2	4.26	4.26	0.51	1.00	0.18	7.40



Alt Model-Shift Uniqueness Test

011232111-01, P = 2.513901 Days, E = 130.073078 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.74	0.85	0	0	4.29	0.92	0.61	7.74	7.74	0.85	0.85	0.42	0.36	0.18	0.45



Stellar Parameters For KIC 011232111

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7843^{+216}_{-351}	$3.829^{+0.323}_{-0.108}$	$0.070^{+0.200}_{-0.400}$	$2.909^{+0.487}_{-1.137}$	$2.081^{+0.287}_{-0.532}$	$0.119^{+0.289}_{-0.040}$
	+3%/-4%	+8%/-3%	+286%/-571%	+17%/-39%	+14%/-26%	+243%/-33%
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 011232111-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-4 ± 1	$1.29^{+0.98}_{-0.78}$	3740^{+256}_{-356}	5009^{+2921}_{-1268}	$2.497^{+11.489}_{-1.714}$
Alt.	-5 ± 6	$2.20^{+1.06}_{-1.02}$	3742^{+271}_{-335}	4112^{+1777}_{-7979}	$1.102^{+4.204}_{-1.328}$

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

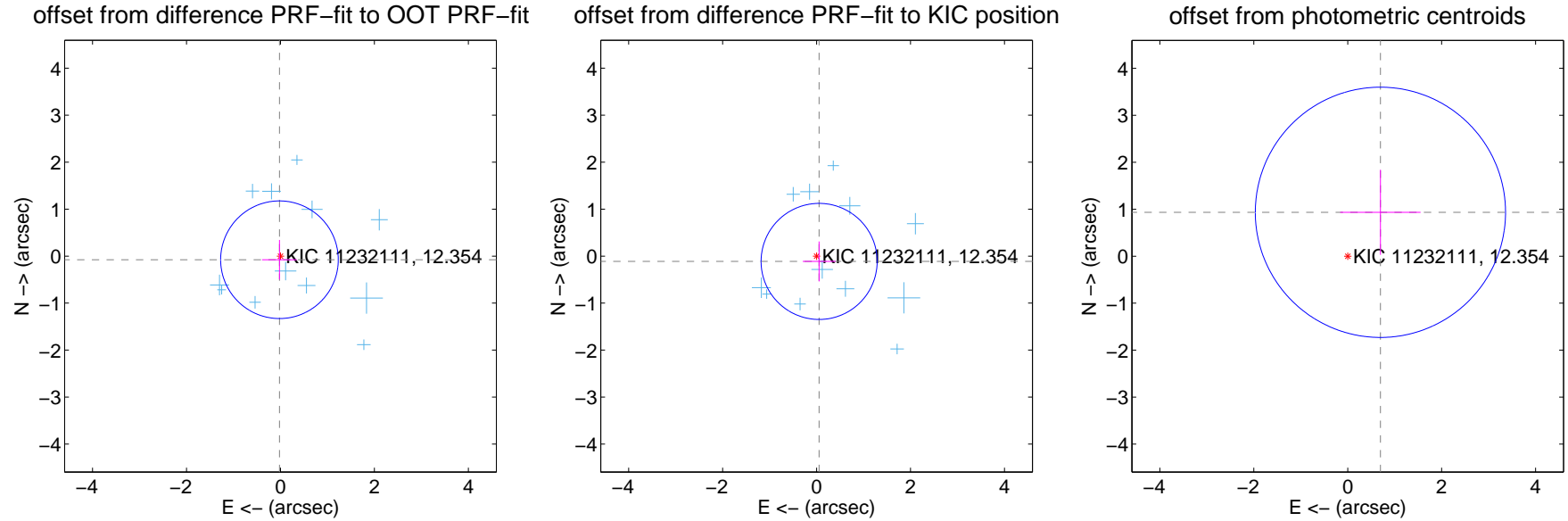
DV Centroid Data

Supplemental centroid analysis for 011232111-01. Kepler magnitude: 12.35. Transit SNR 13.60

There are 12 quarters with good PRF difference image offsets

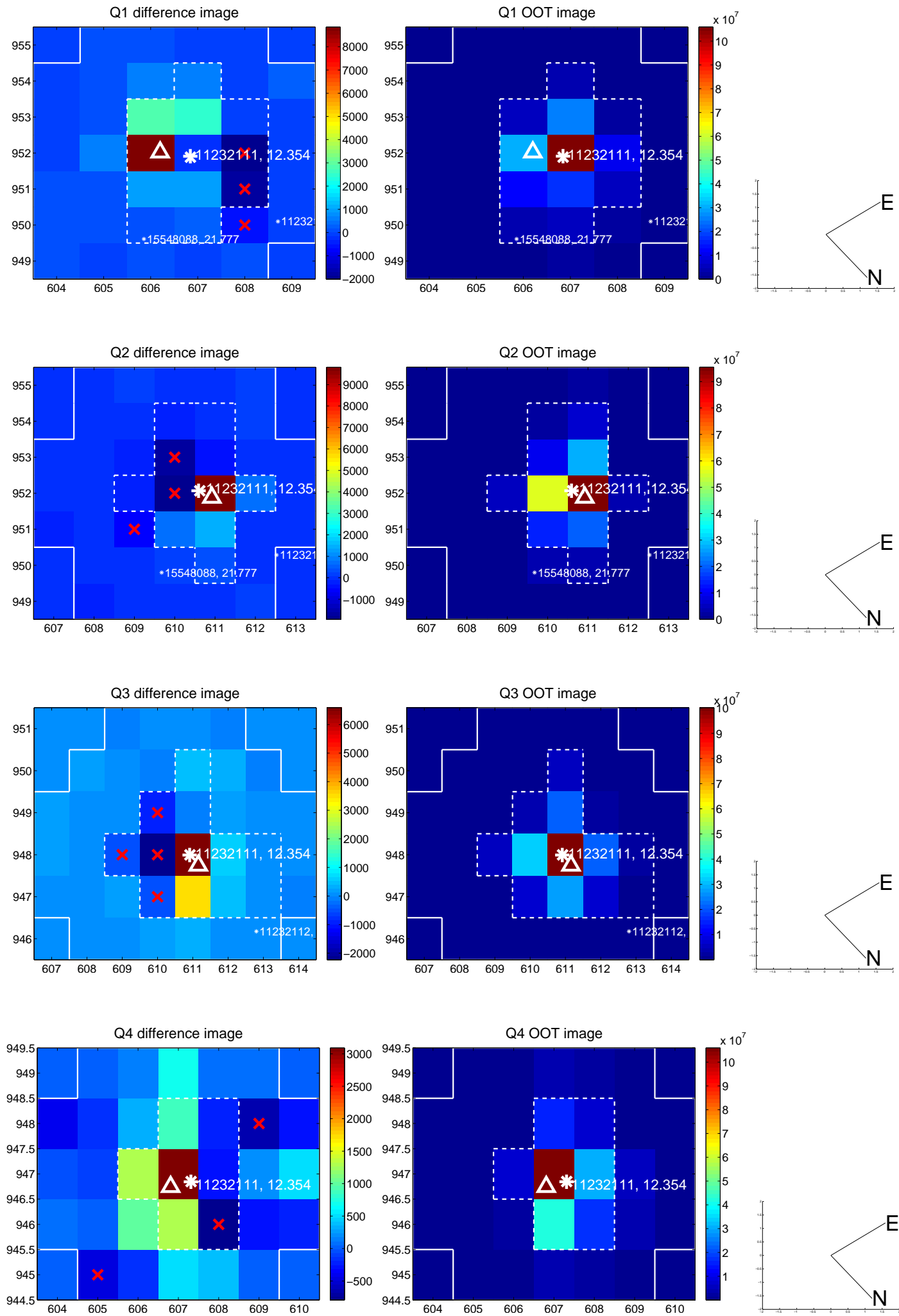
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.080 ± 0.417	0.19	0.021 ± 0.368	-0.077 ± 0.421
PRF-fit source offset from KIC position	0.125 ± 0.412	0.30	-0.054 ± 0.350	-0.113 ± 0.425
photometric centroid source offset	1.17 ± 0.89	1.31	-0.70 ± 0.86	0.93 ± 0.91

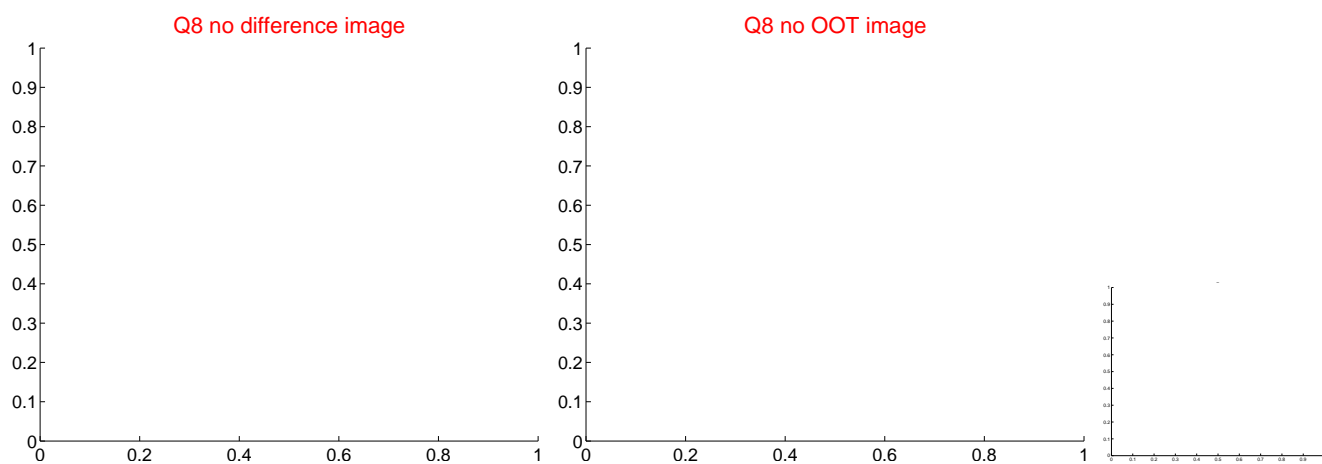
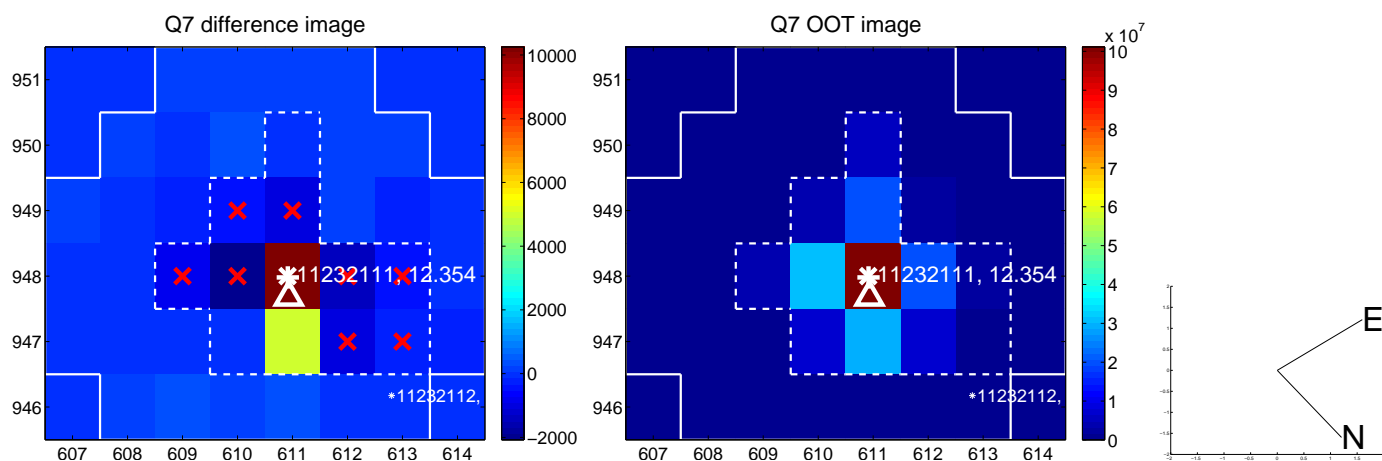
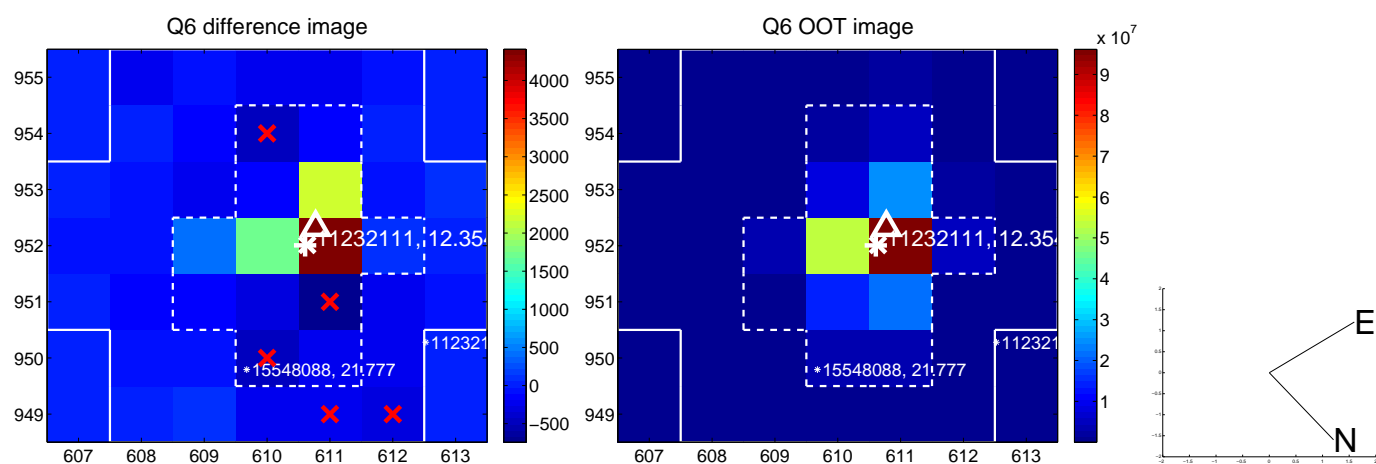
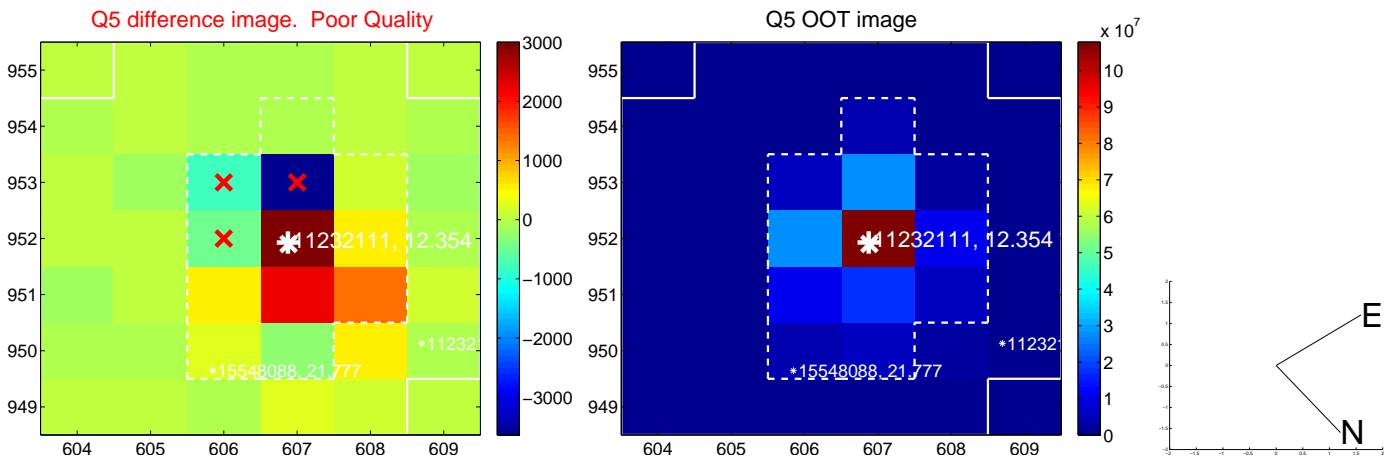


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

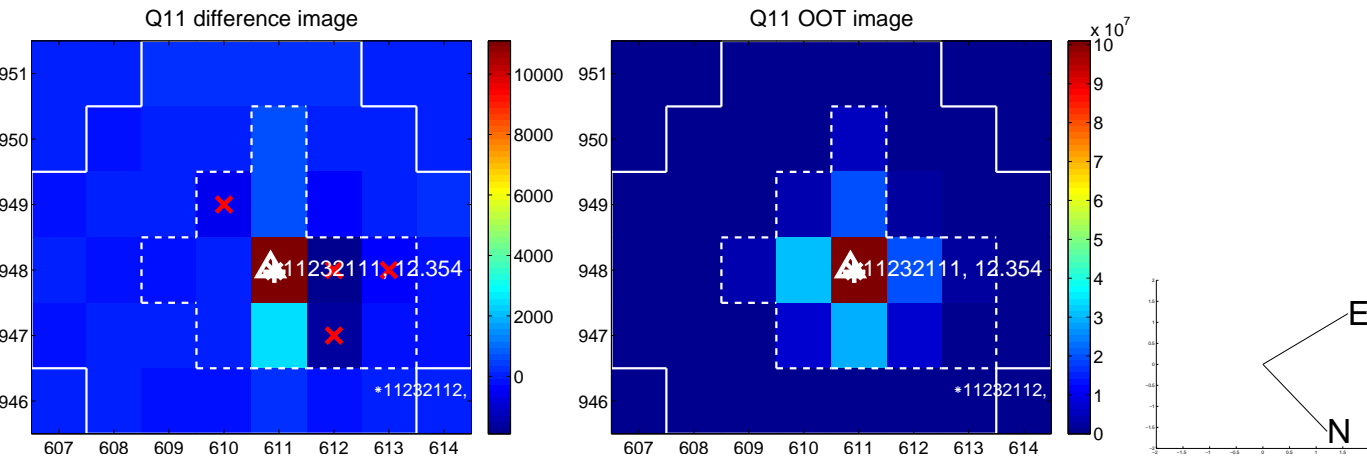
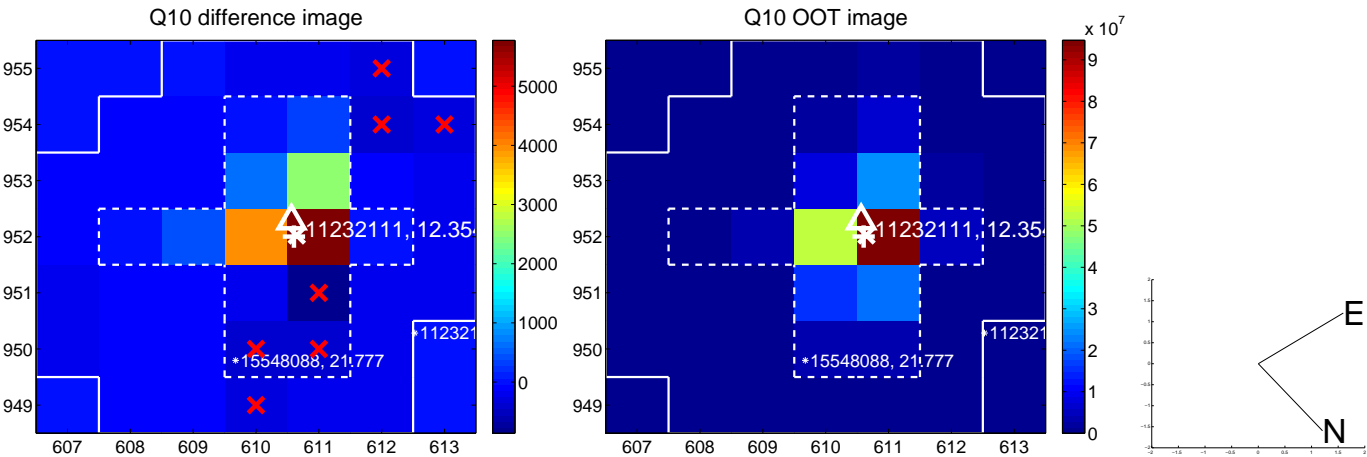
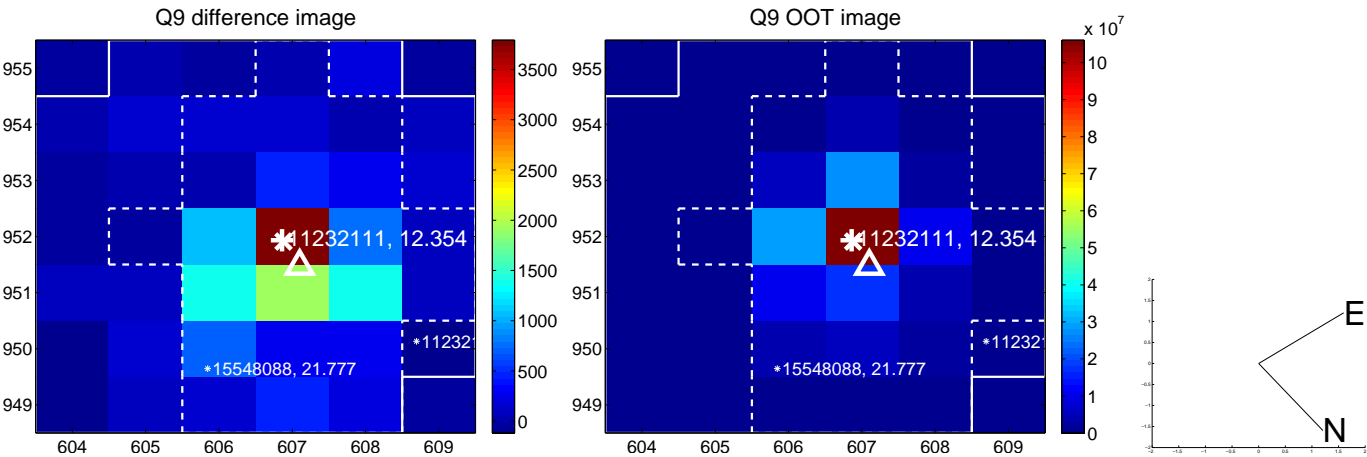
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



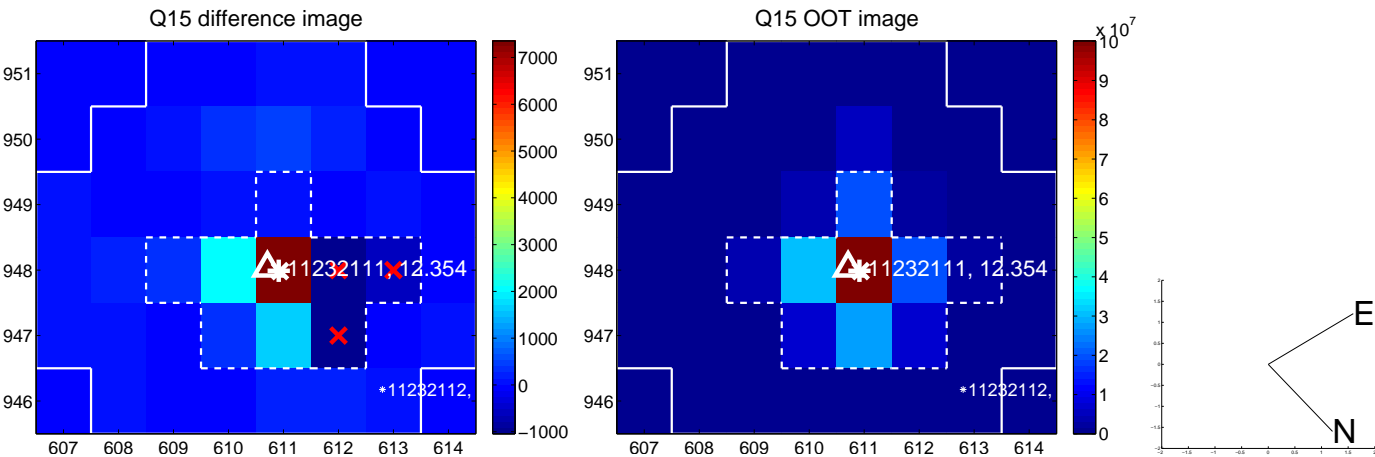
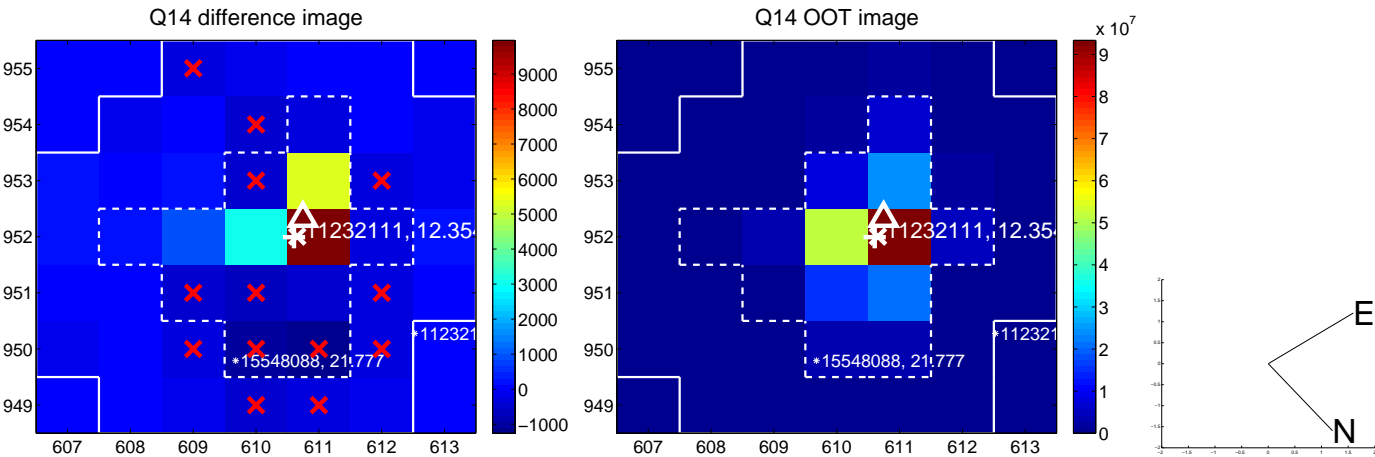
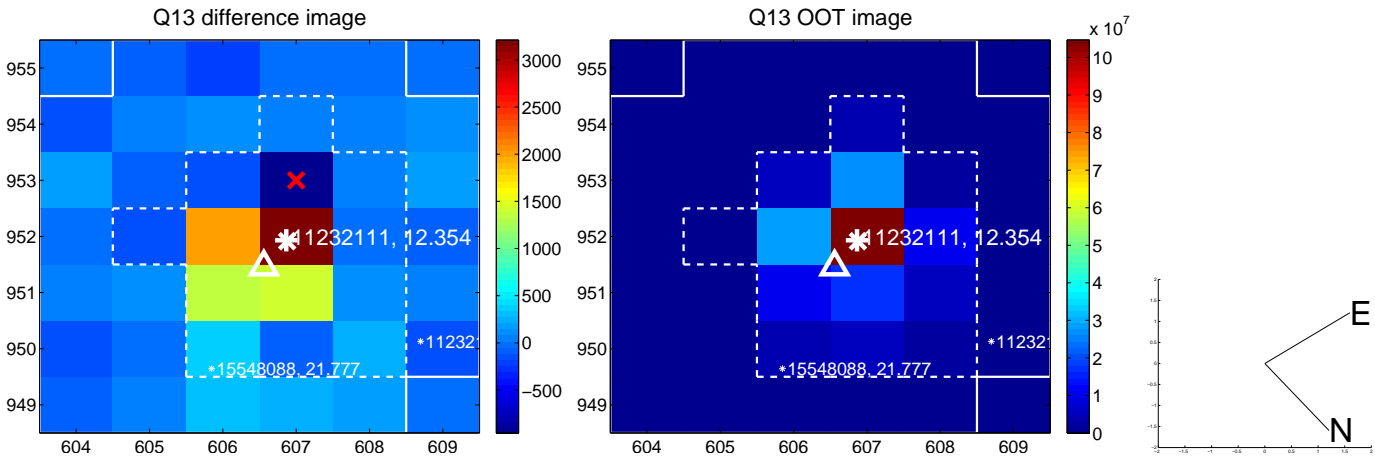
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



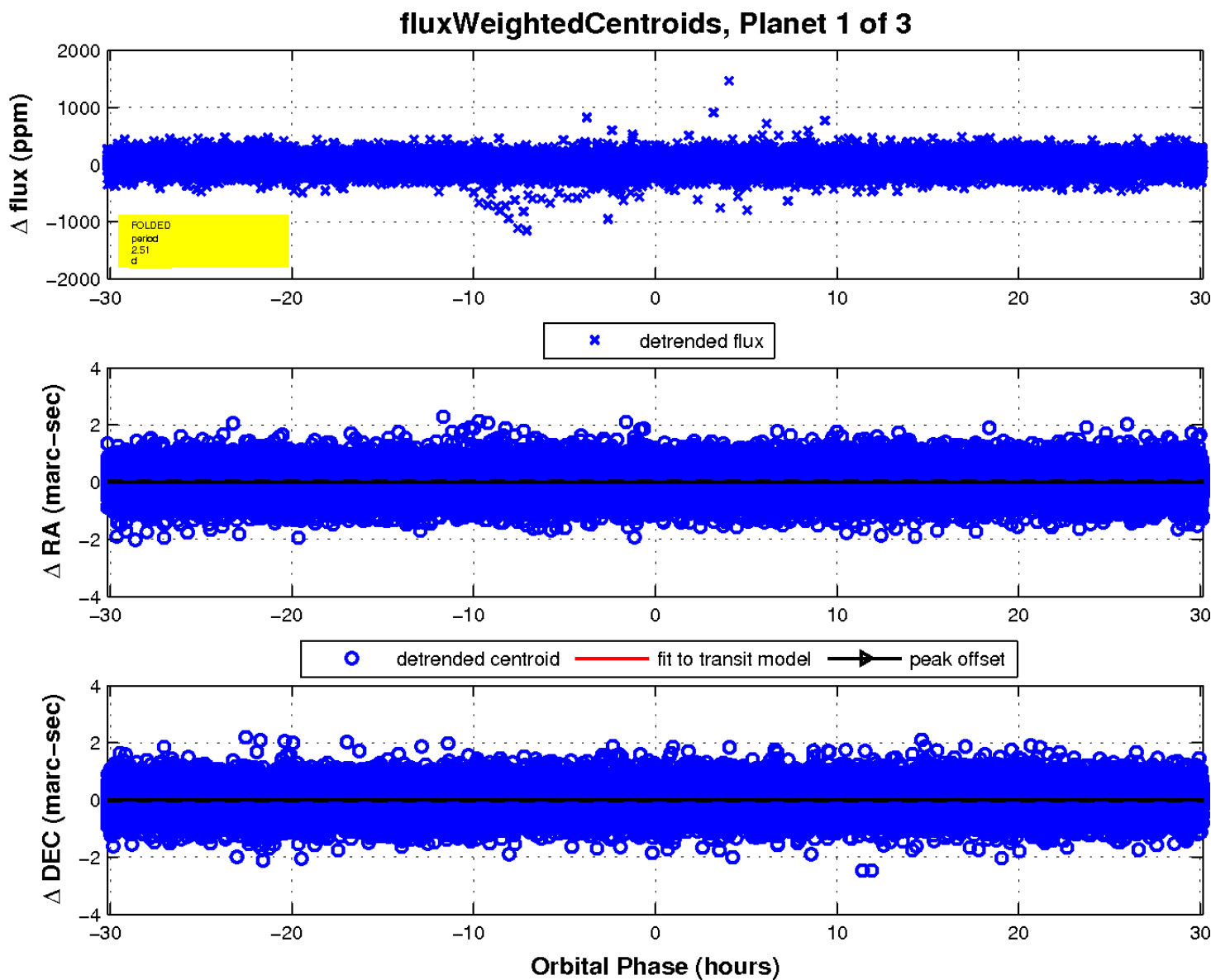
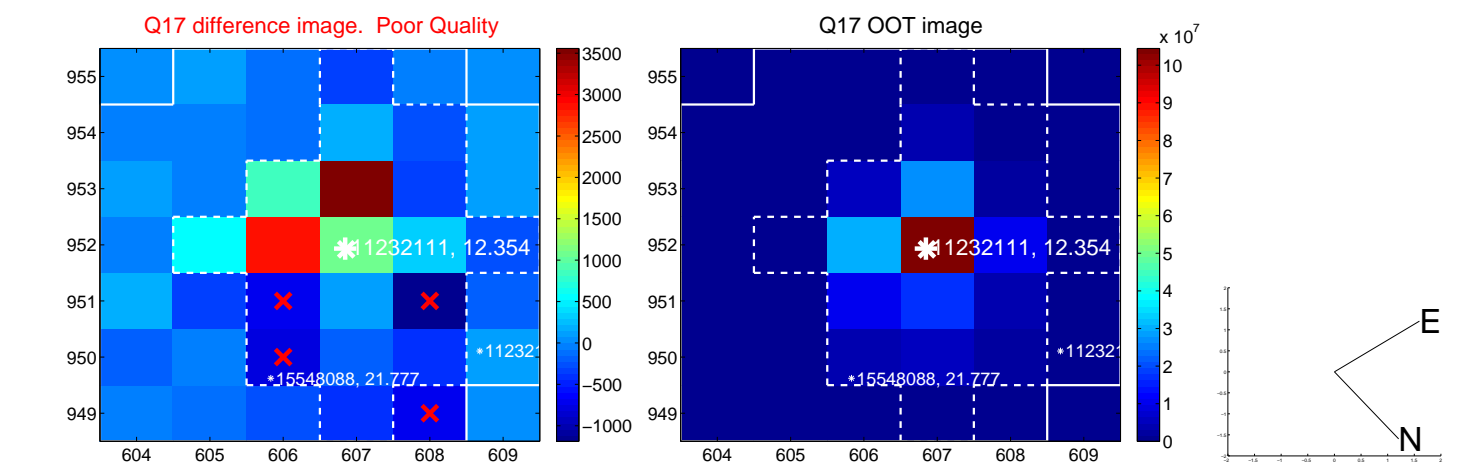
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



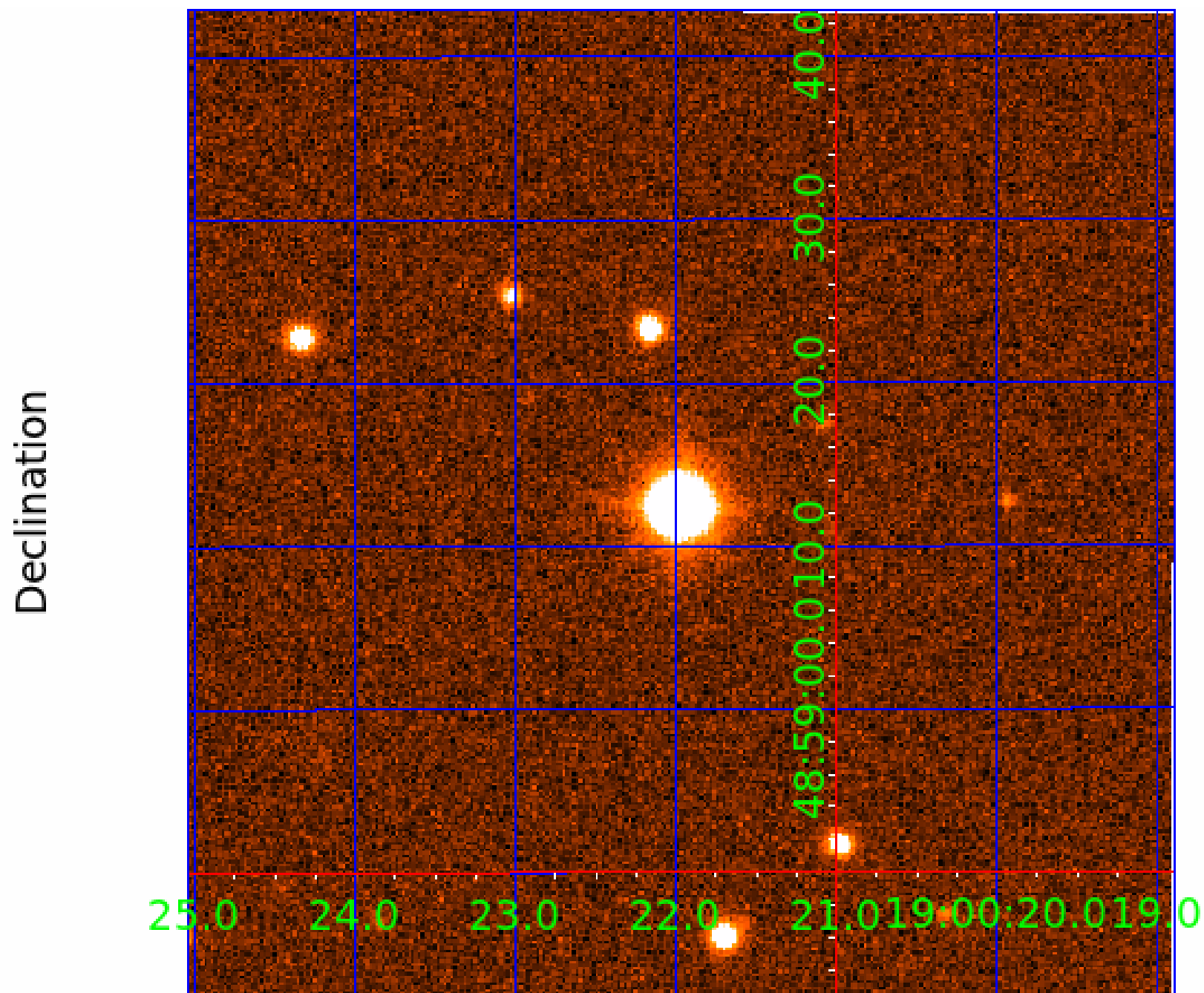
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 011232111

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})
011232111-01	OBS	No	2.514071	132.576242	17.1	16.302	12.9	13.6	2.91	7843	1.22	13432.26
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011232111-03	OBS	No	44.682538	148.825781	224.2	3.000	8.9	-1.0	2.91	7843	4.41	289.60

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011232111-01	OBS	FP	0.00	1	0	0	0	LPP_DV
011232111-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_FEW_DIFFS
011232111-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

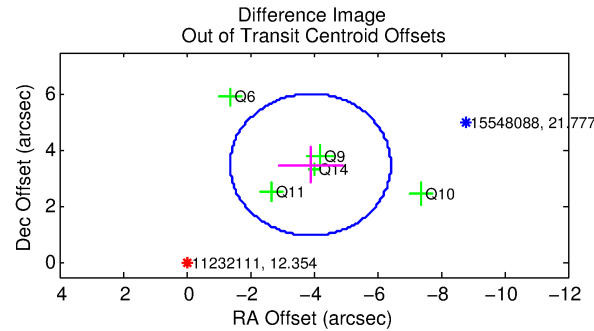
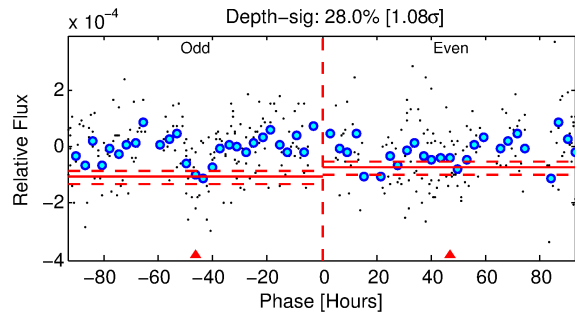
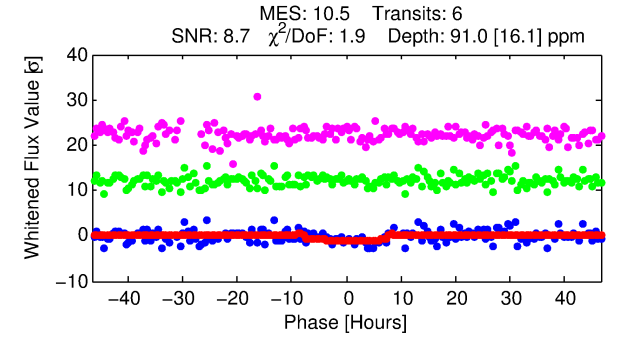
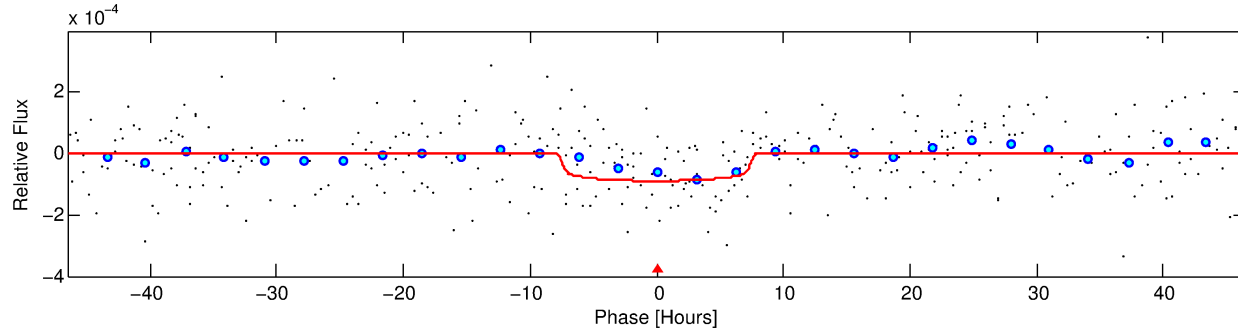
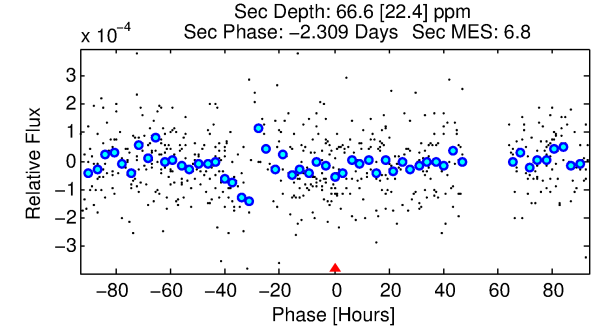
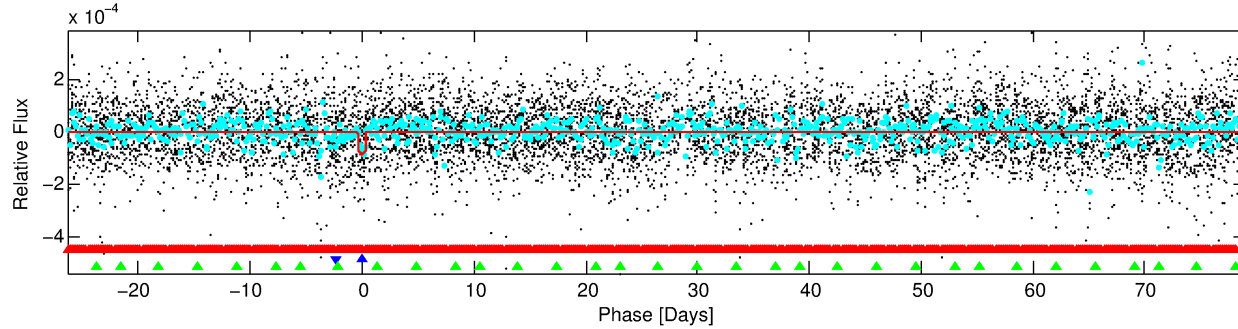
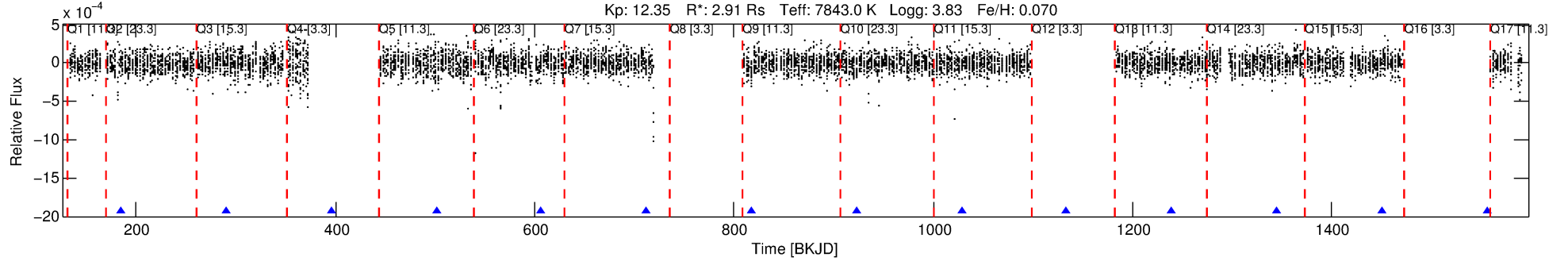
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011232111-02

No Significant Match Found

DV One-Page Summary

KIC: 11232111 Candidate: 2 of 3 Period: 105.415 d



DV Fit Results:

Period = 105.41542 [0.02379] d
Epoch = 185.0889 [0.1379] BKJD
Rp/R* = 0.0099 [0.0028]
a/R* = 27.82 [44.36]
b = 0.86 [0.53]
Seff = 92.21 [54.22]
Teq = 790 [116] K
Rp = 3.14 [1.52] Re
a = 0.5578 [0.2006] AU
Ag = 1158.40 [1004.84] [1.15 σ]
Teffp = 7127 [1223] K [5.16 σ]

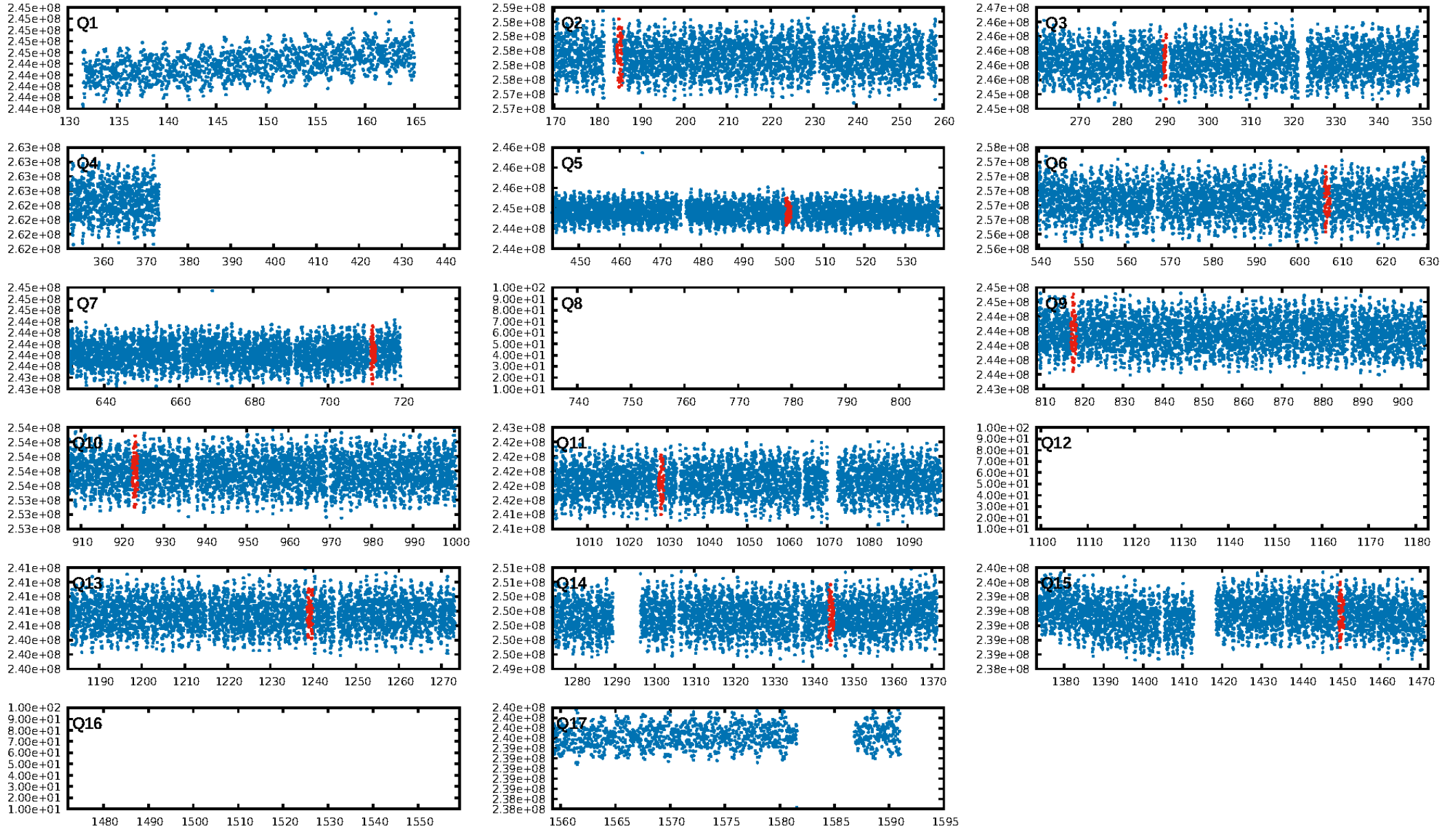
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [92.27 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 2.6%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.04e-16
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: 4.399
Centroid-sig: 1.5%
Centroid-so: 2.015 arcsec [1.56 σ]
OotOffset-rm: 5.238 arcsec [6.21 σ]
KicOffset-rm: 5.302 arcsec [6.32 σ]
OotOffset-st: 3/1/0/1 [5]
KicOffset-st: 3/1/0/1 [5]
DiffImageQuality-fgm: 0.20 [1/5]
DiffImageOverlap-fno: 0.00 [0/7]

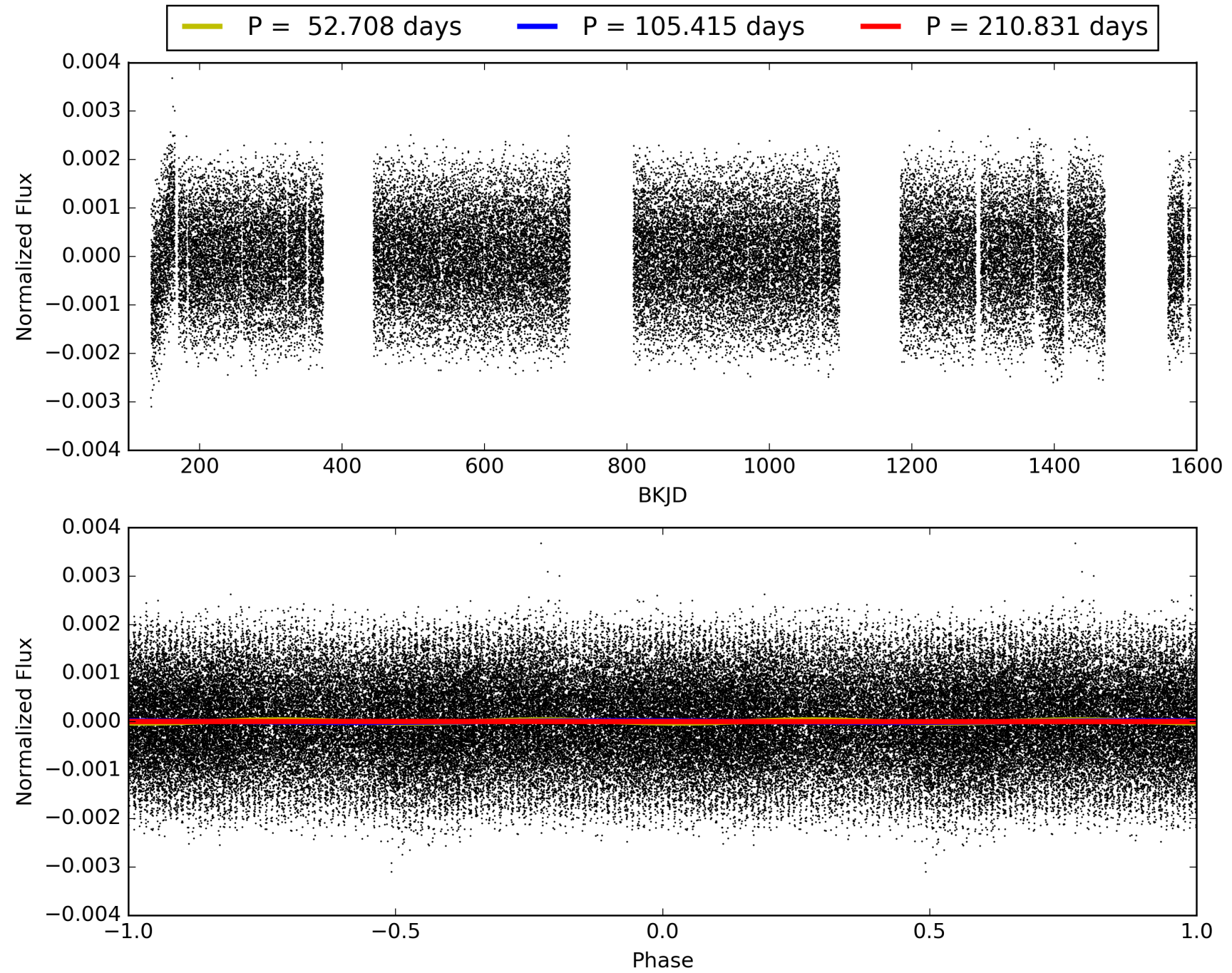
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 07:38:33 Z

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

TCE 011232111-02, PDC Light Curves

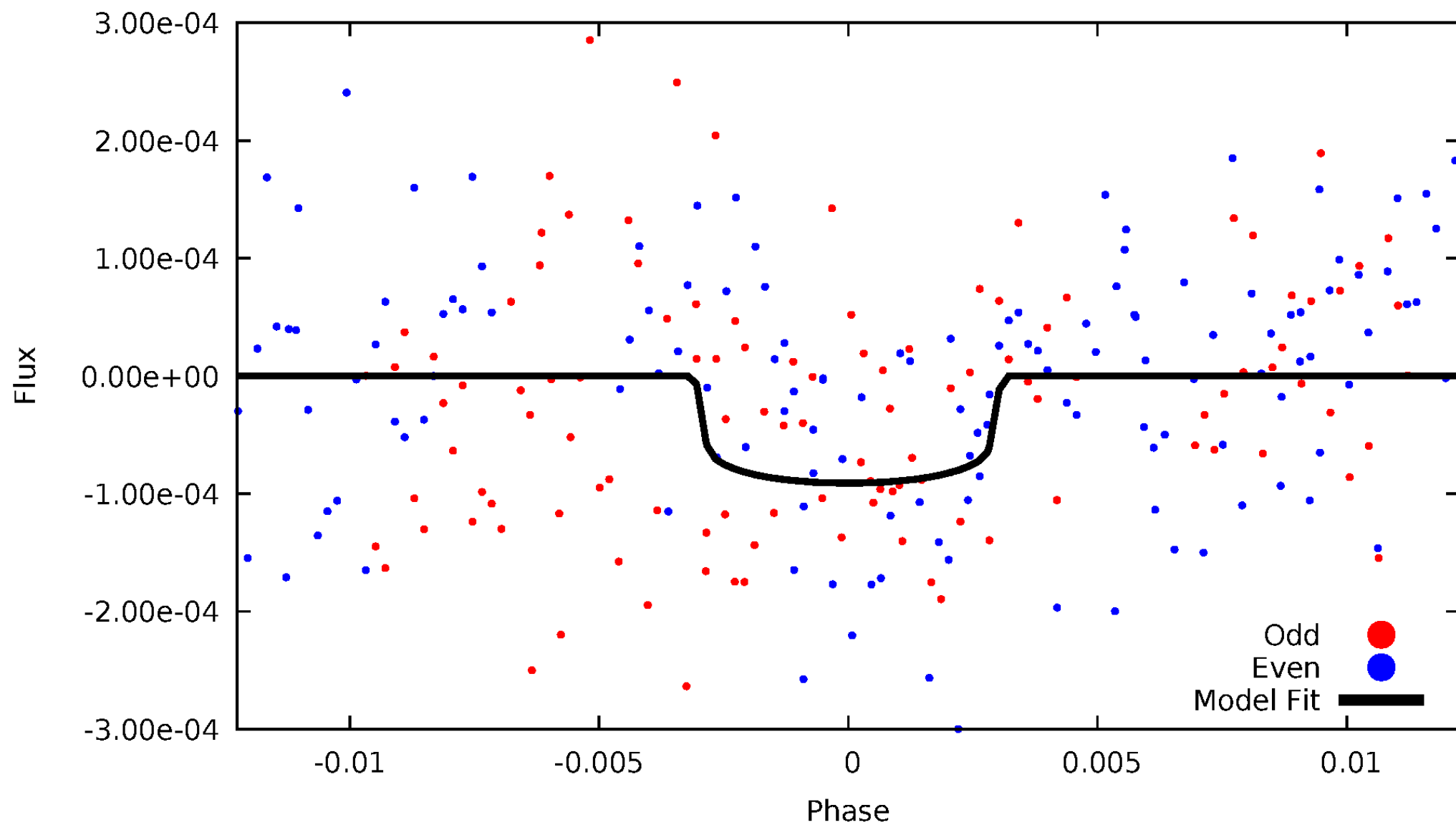


TCE 011232111-02



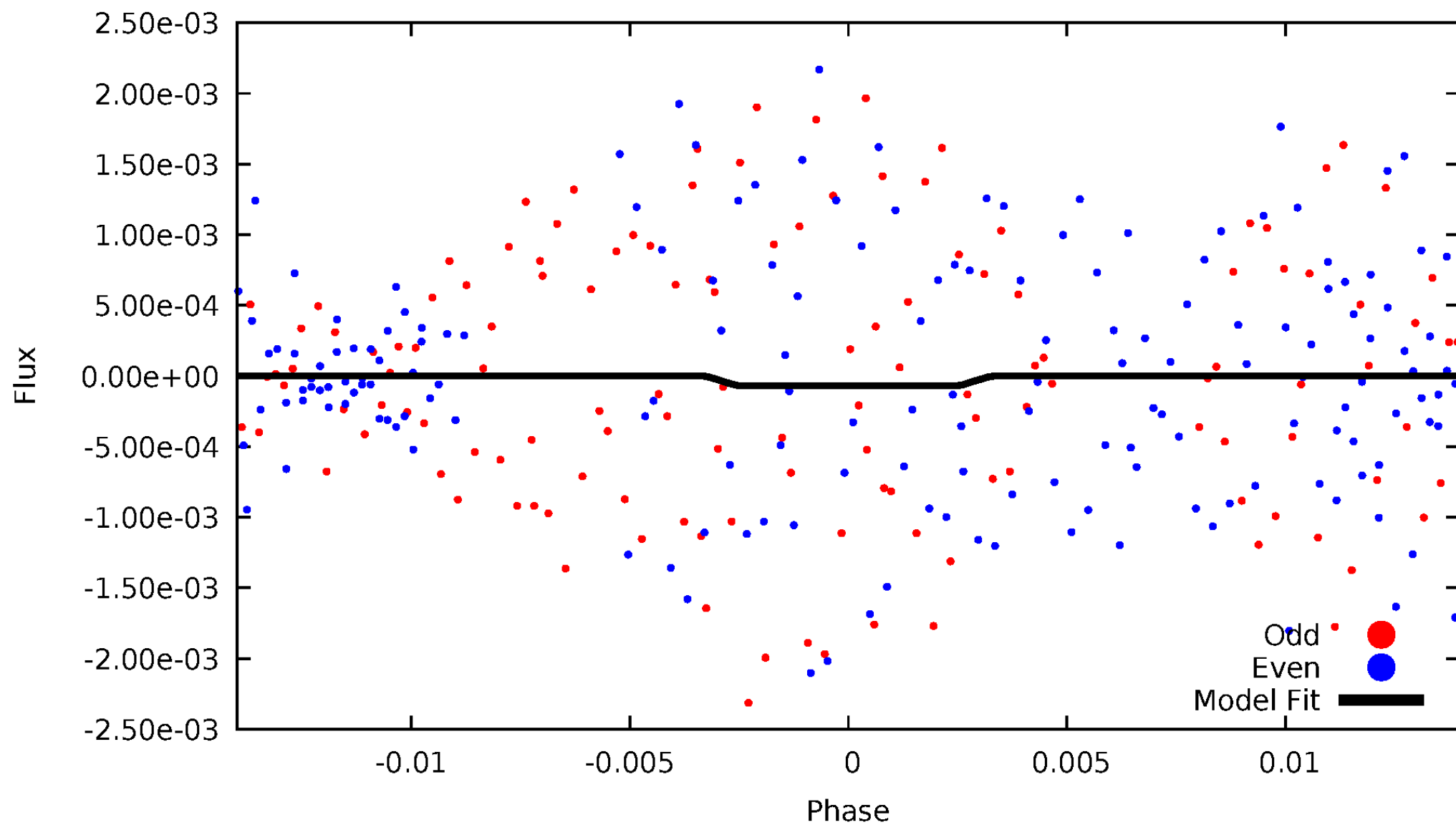
DV Odd/Even

TCE 011232111-02



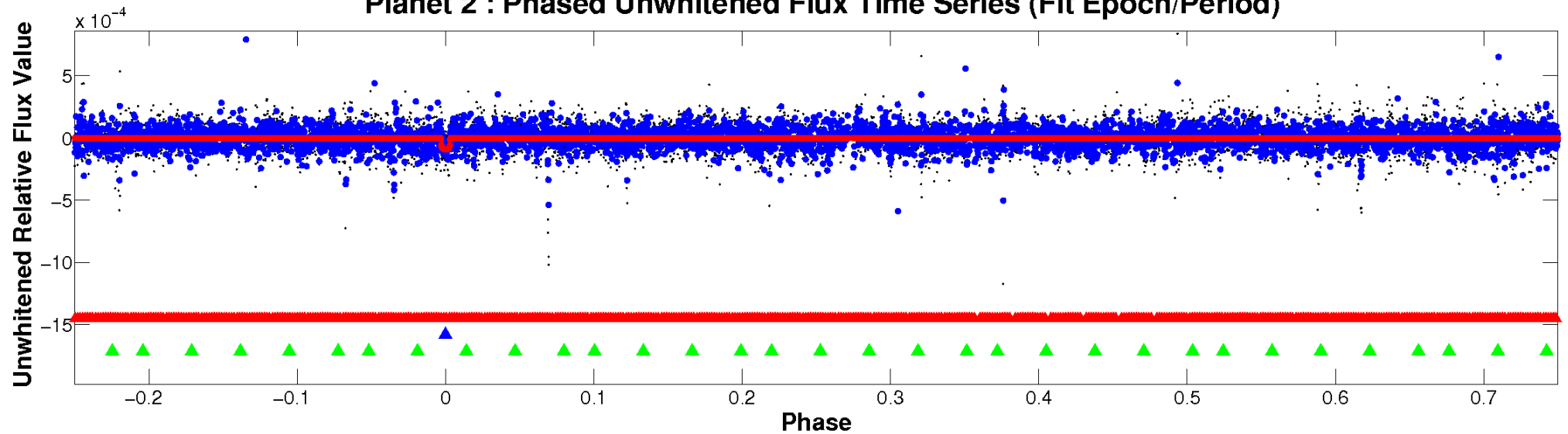
ALT Odd/Even

TCE 011232111-02

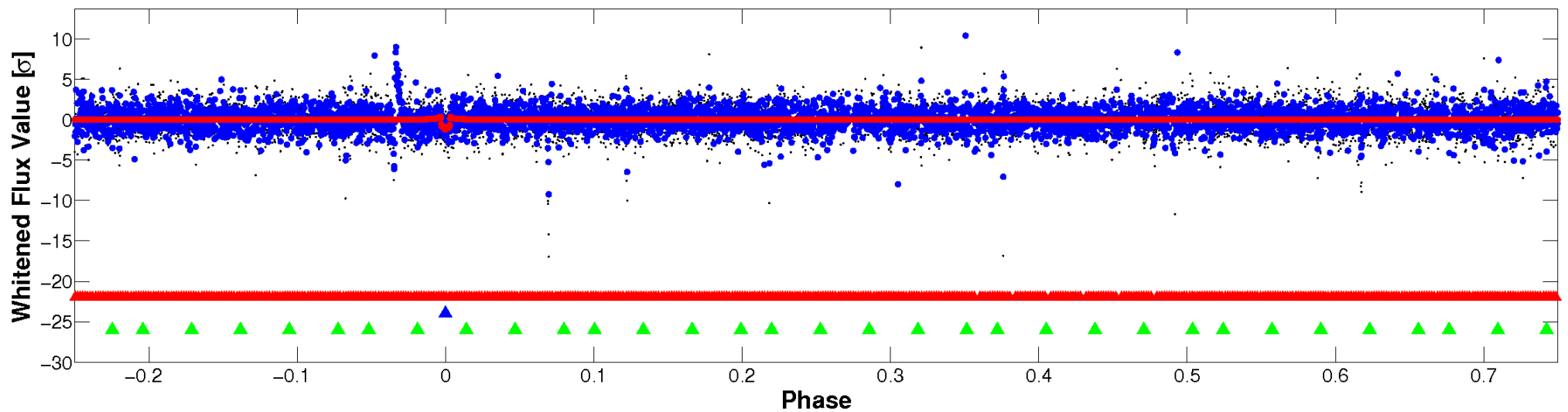


Non-Whitened Vs. Whitened Light Curve

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

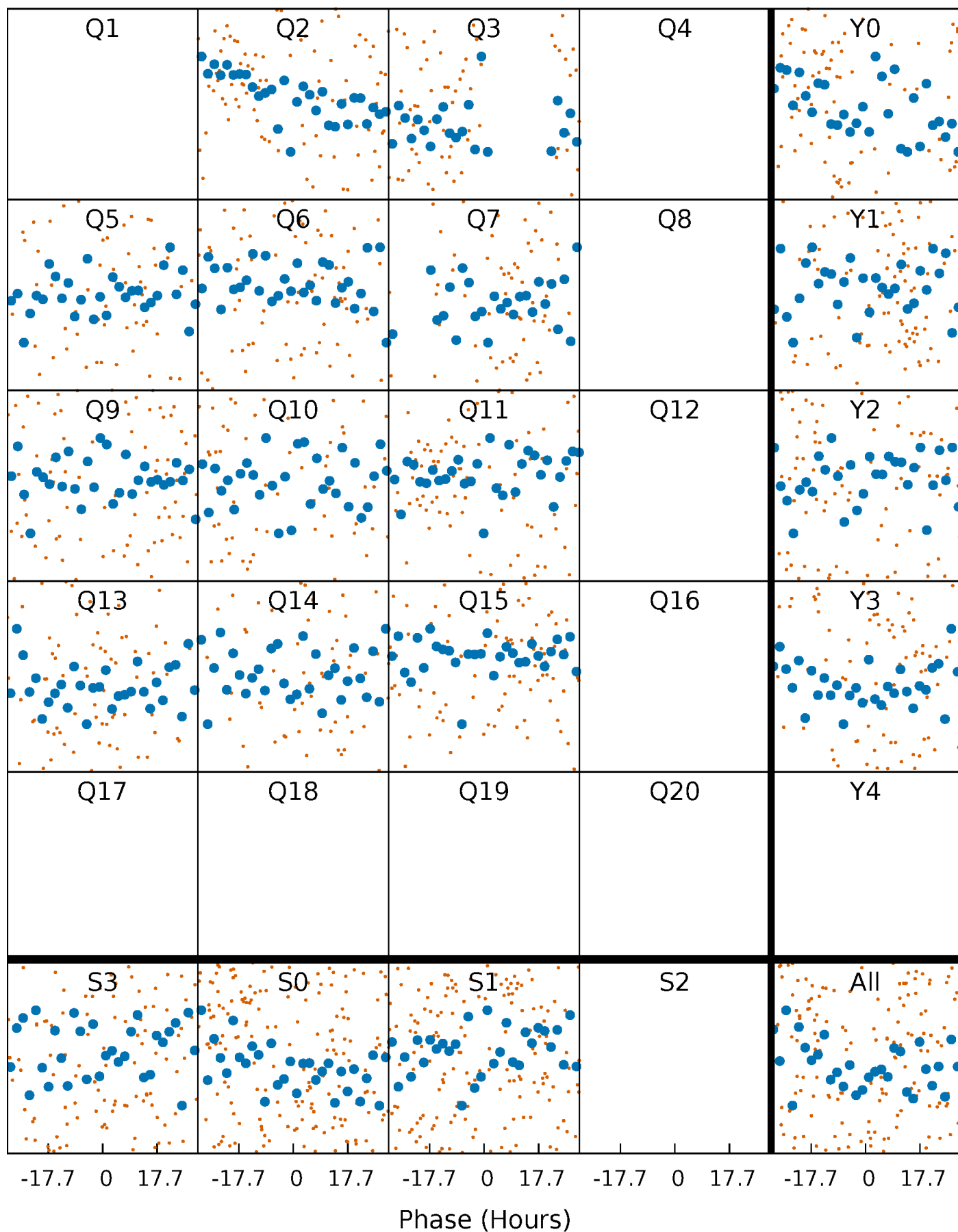


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



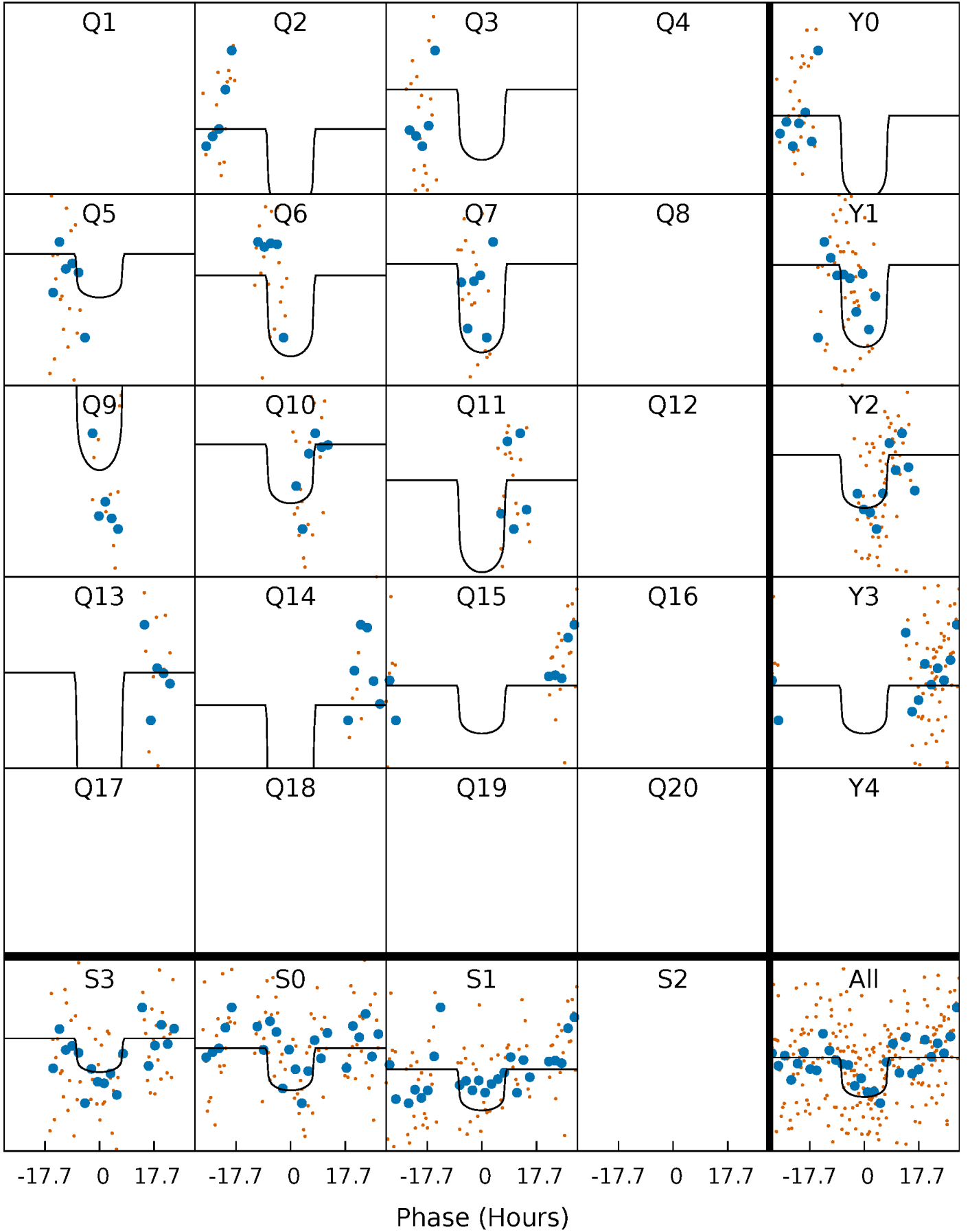
PDC Quarter-Phased Transit Curves

TCE 011232111-02 P=105.415417 Days $T_0=185.088874$ (BKJD)



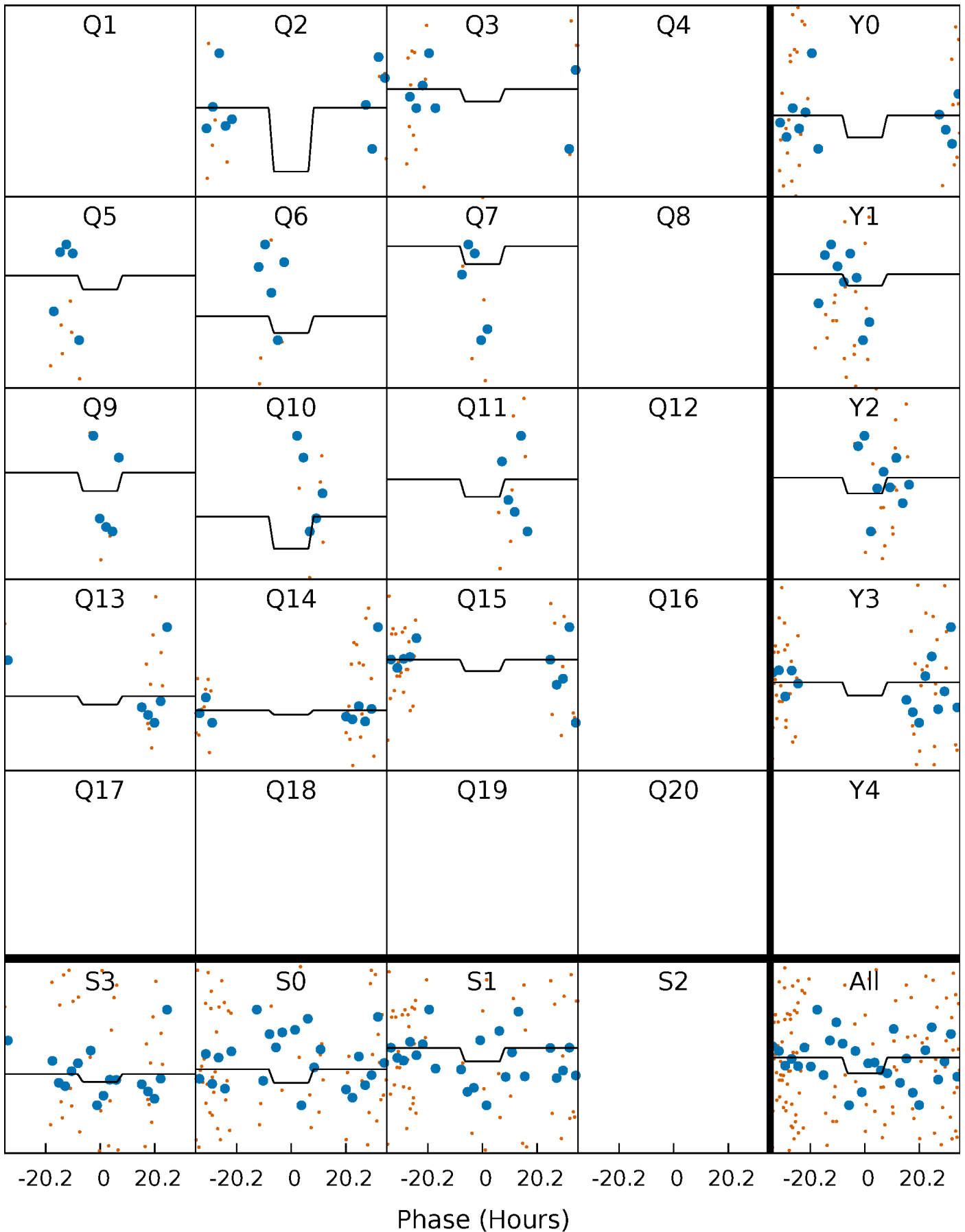
DV Quarter-Phased Transit Curves

TCE 011232111-02 P=105.415417 Days $T_0=185.088874$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

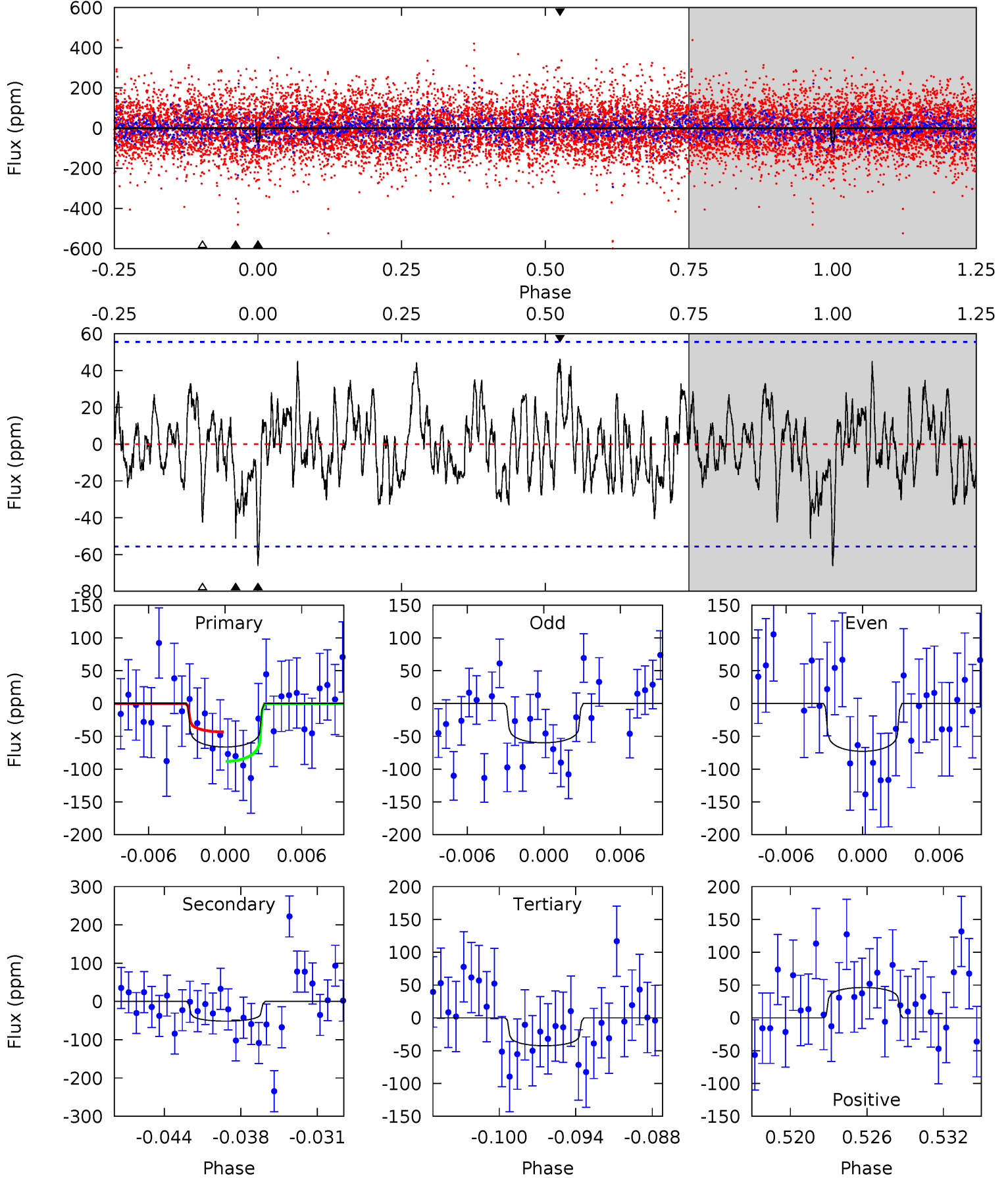
TCE 011232111-02 P=105.389491 Days $T_0=185.261122$ (BKJD)



DV Model-Shift Uniqueness Test

011232111-02, P = 105.415417 Days, E = 79.673457 Days

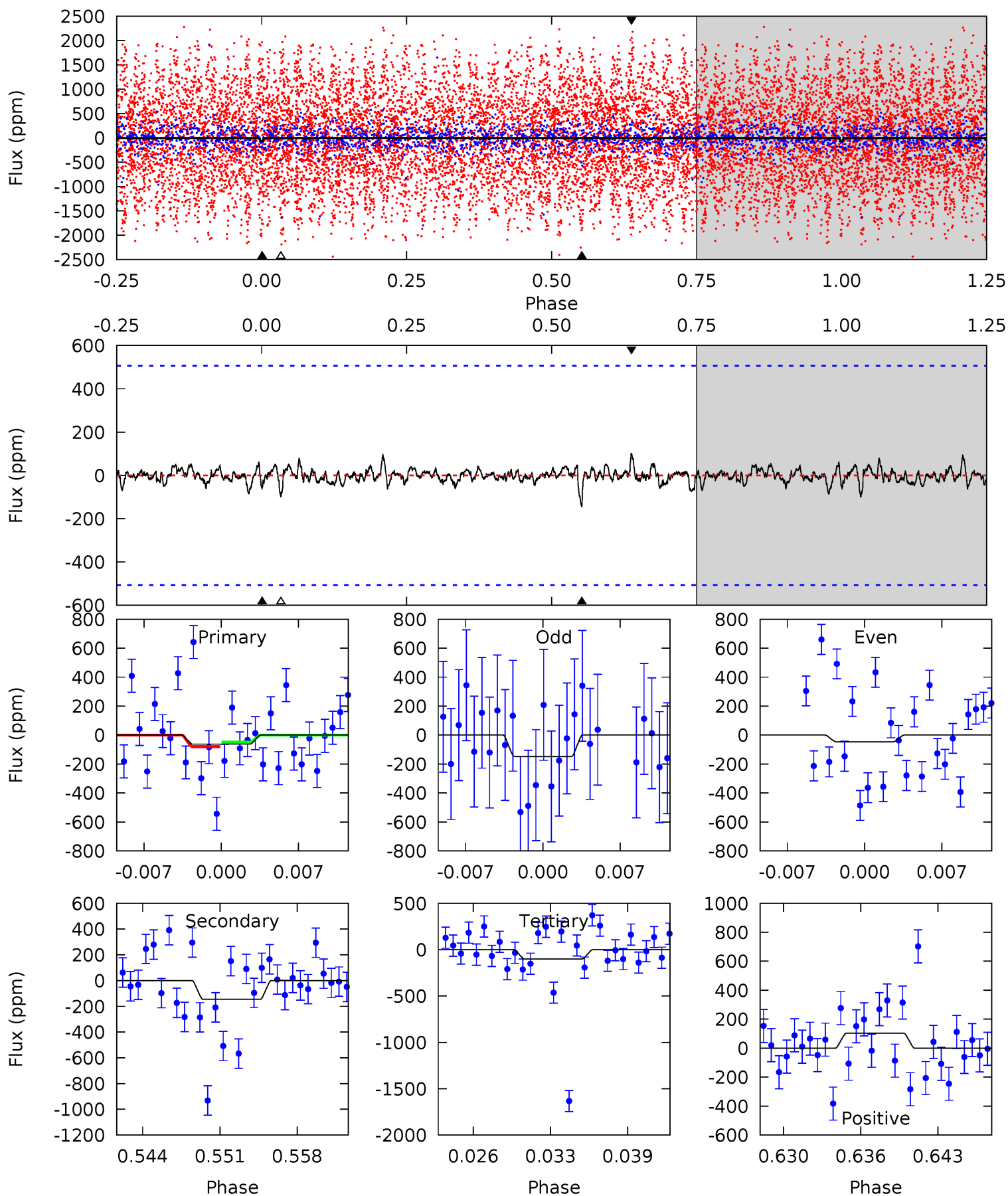
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.09	4.73	3.91	4.26	5.12	2.73	1.52	2.19	1.84	0.82	0.47	0.60	1.07	0.41	2.07



Alt Model-Shift Uniqueness Test

011232111-02, $P = 105.389491$ Days, $E = 79.871631$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.63	1.47	1.02	1.04	5.11	2.72	0.25	-0.39	-0.41	0.45	0.43	0.52	1.51	0.41	0.16



Stellar Parameters For KIC 011232111

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7843^{+216}_{-351}	$3.829^{+0.323}_{-0.108}$	$0.070^{+0.200}_{-0.400}$	$2.909^{+0.487}_{-1.137}$	$2.081^{+0.287}_{-0.532}$	$0.119^{+0.289}_{-0.040}$
	+3%/-4%	+8%/-3%	+286%/-571%	+17%/-39%	+14%/-26%	+243%/-33%
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 011232111-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-51±11	$2.93^{+1.08}_{-0.98}$	1084^{+71}_{-94}	6554^{+1479}_{-926}	990^{+1143}_{-458}
Alt.	-146±99	$2.44^{+1.00}_{-0.94}$	1076^{+73}_{-105}	9672^{+5044}_{-2906}	3782^{+7464}_{-2674}

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 $A_{obs} \gg 1.0$

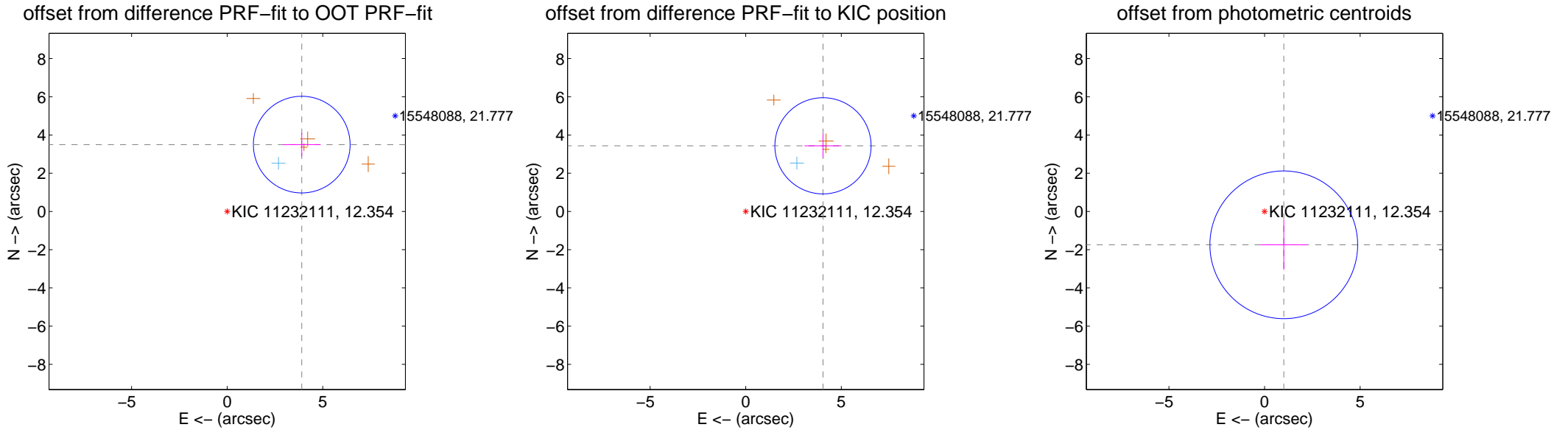
DV Centroid Data

Supplemental centroid analysis for 011232111-02. Kepler magnitude: 12.35. Transit SNR 8.72

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.238 ± 0.843	6.21	-3.900 ± 0.989	3.497 ± 0.615
PRF-fit source offset from KIC position	5.302 ± 0.839	6.32	-4.041 ± 0.970	3.433 ± 0.612
photometric centroid source offset	2.01 ± 1.29	1.56	-1.01 ± 1.23	-1.75 ± 1.31

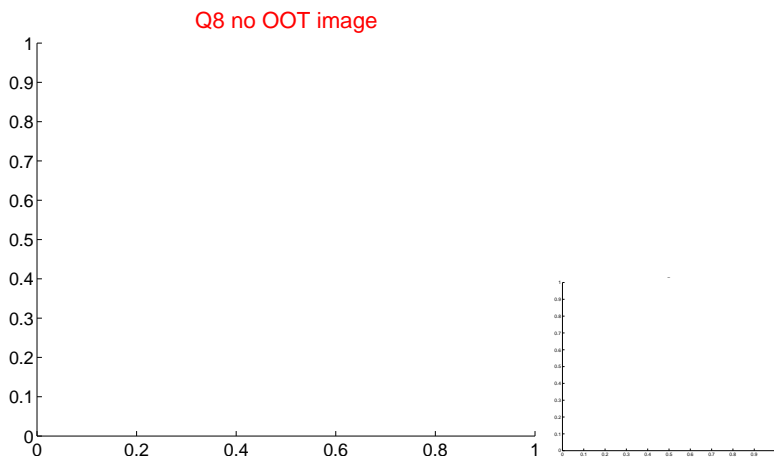
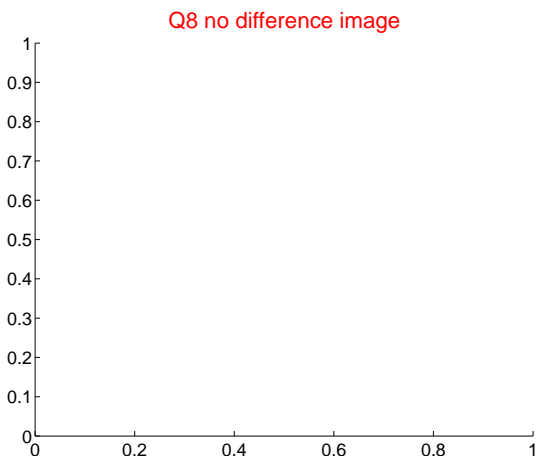
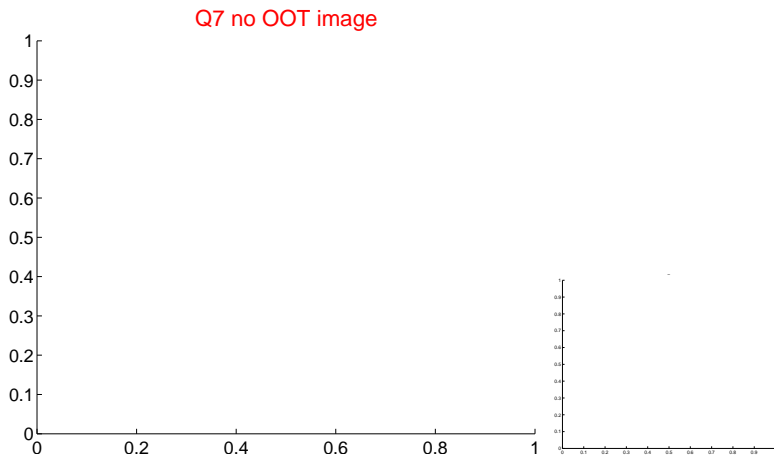
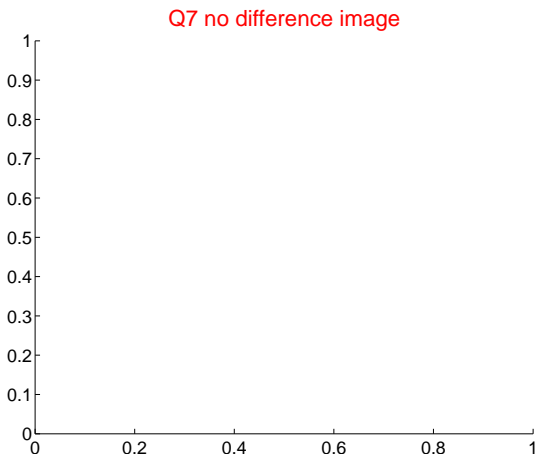
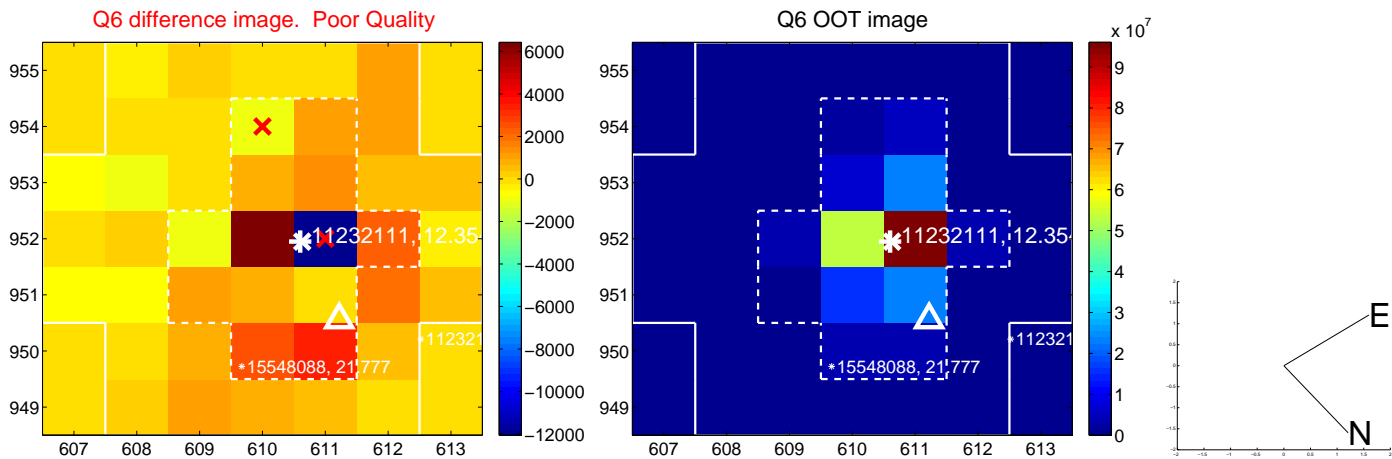
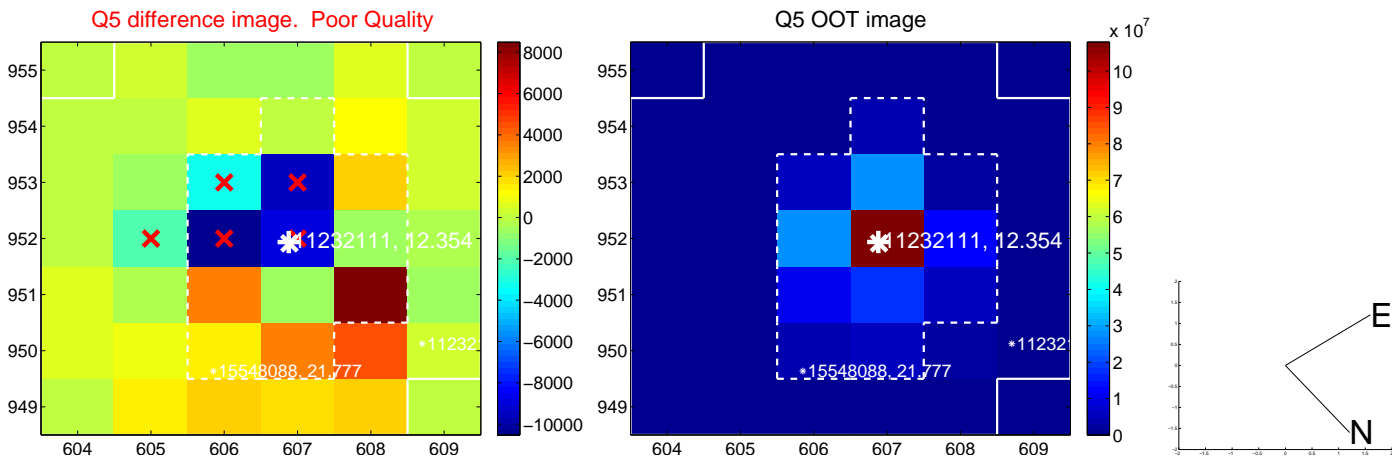


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

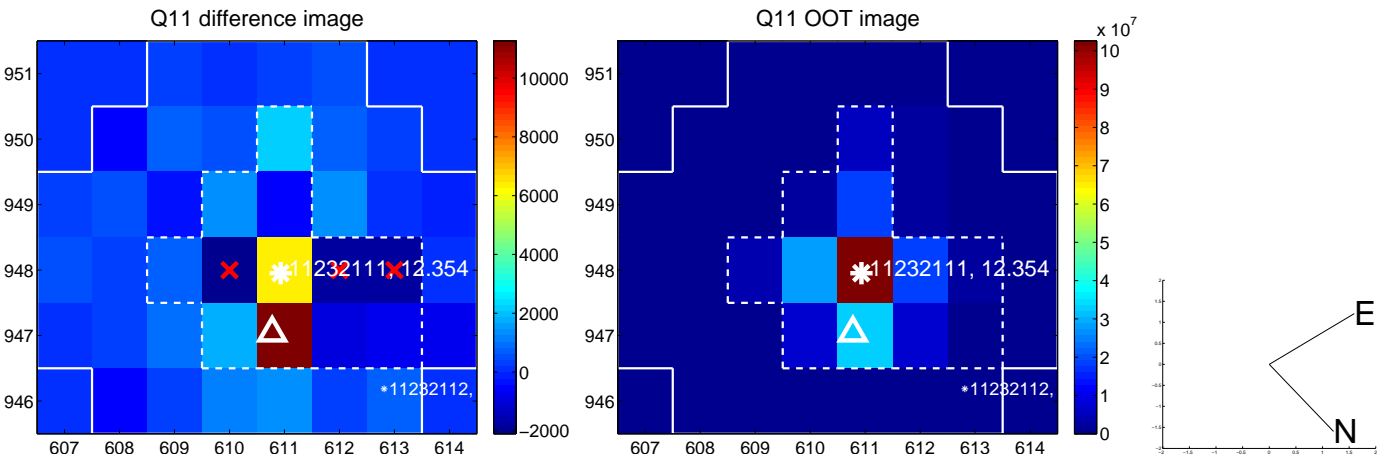
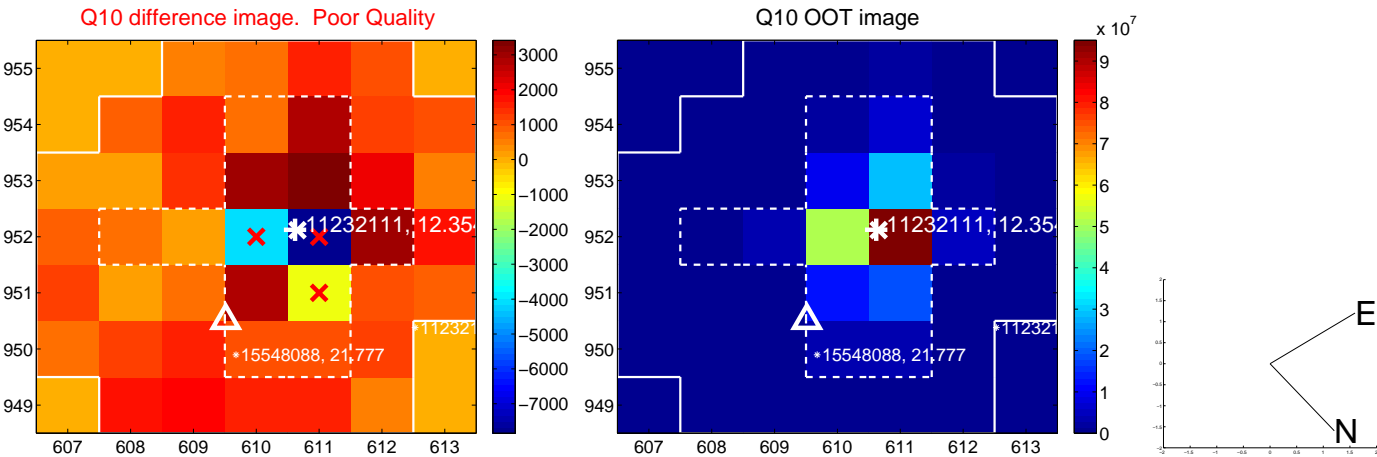
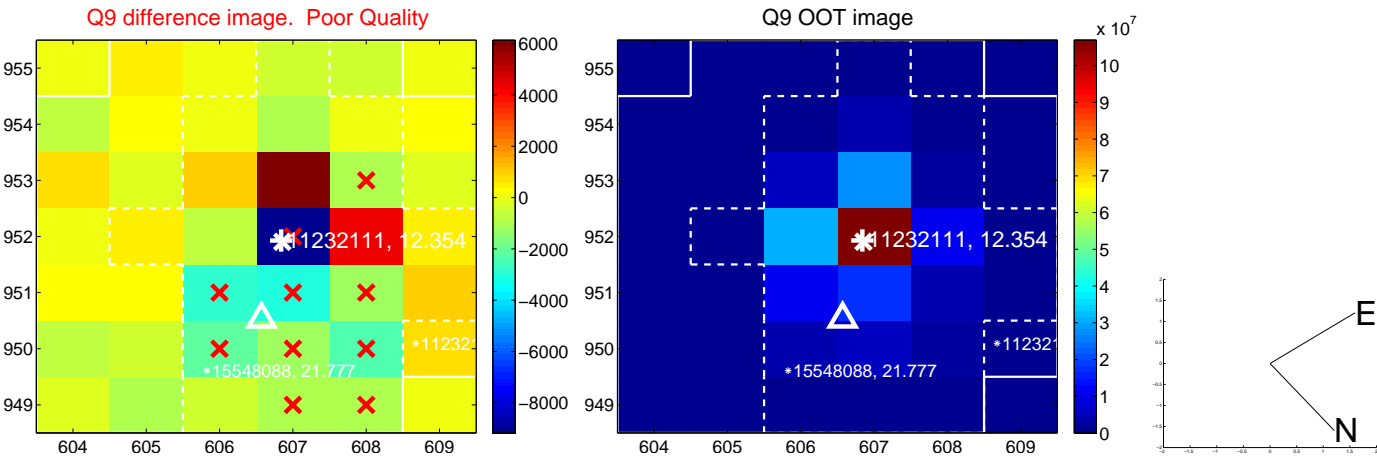
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



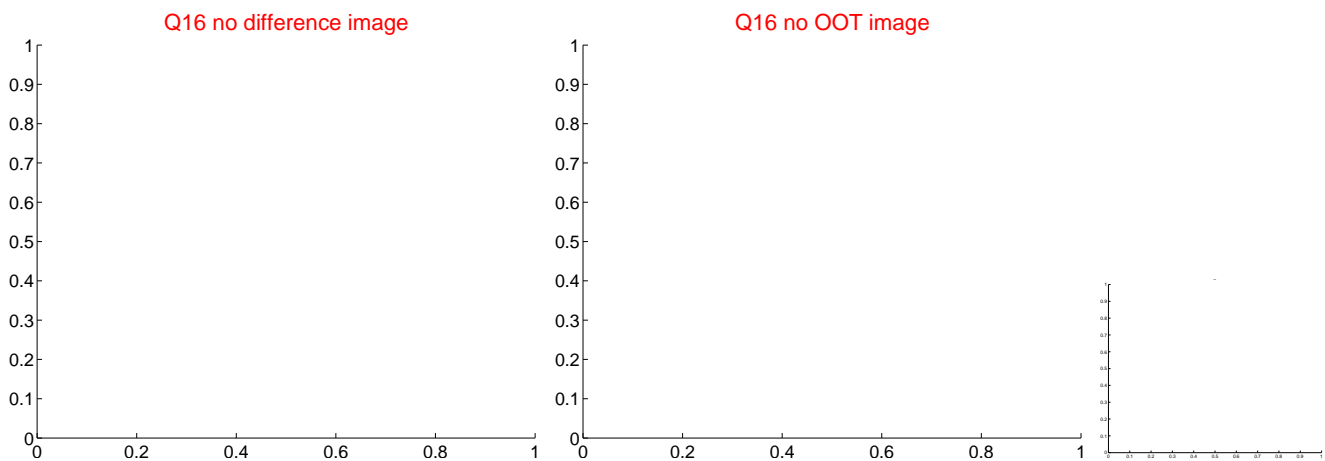
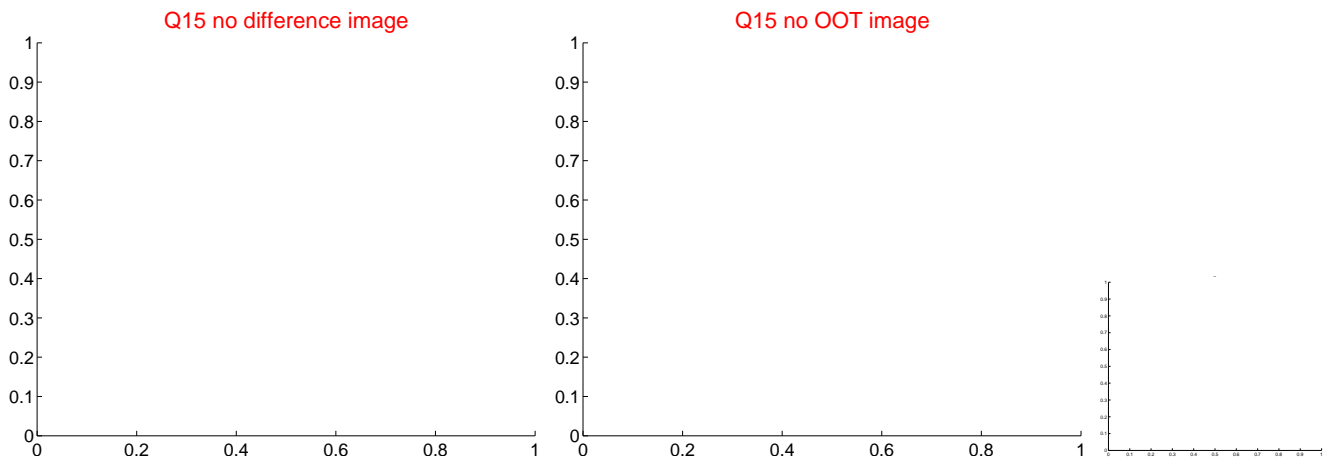
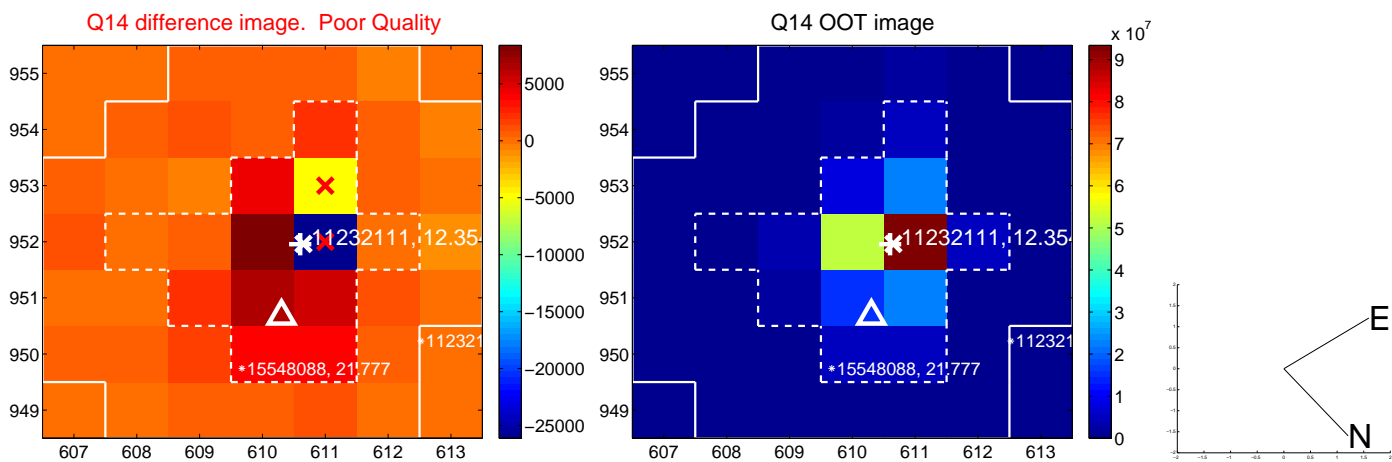
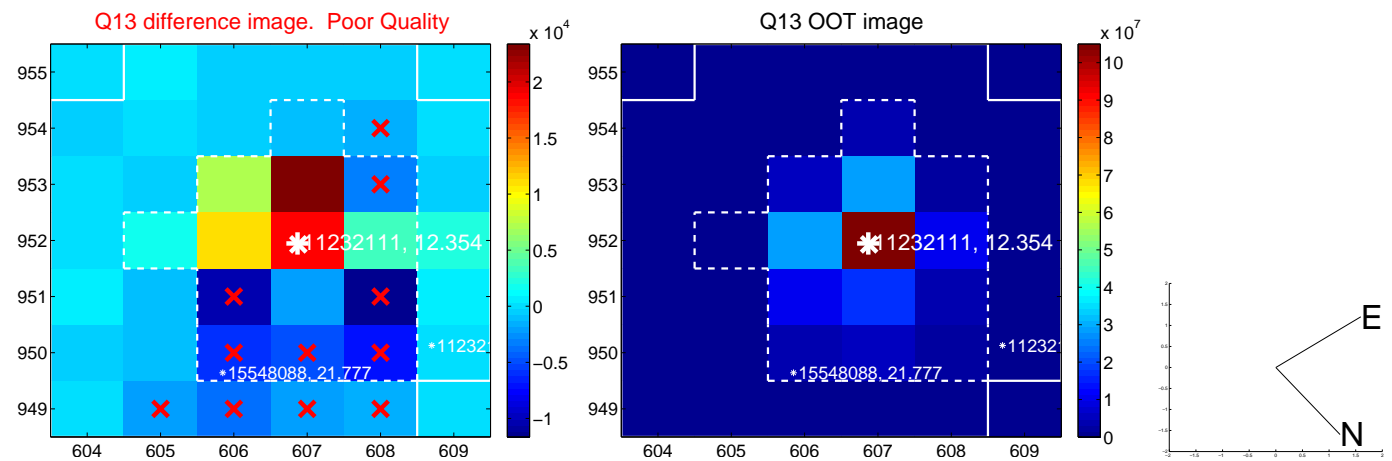
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



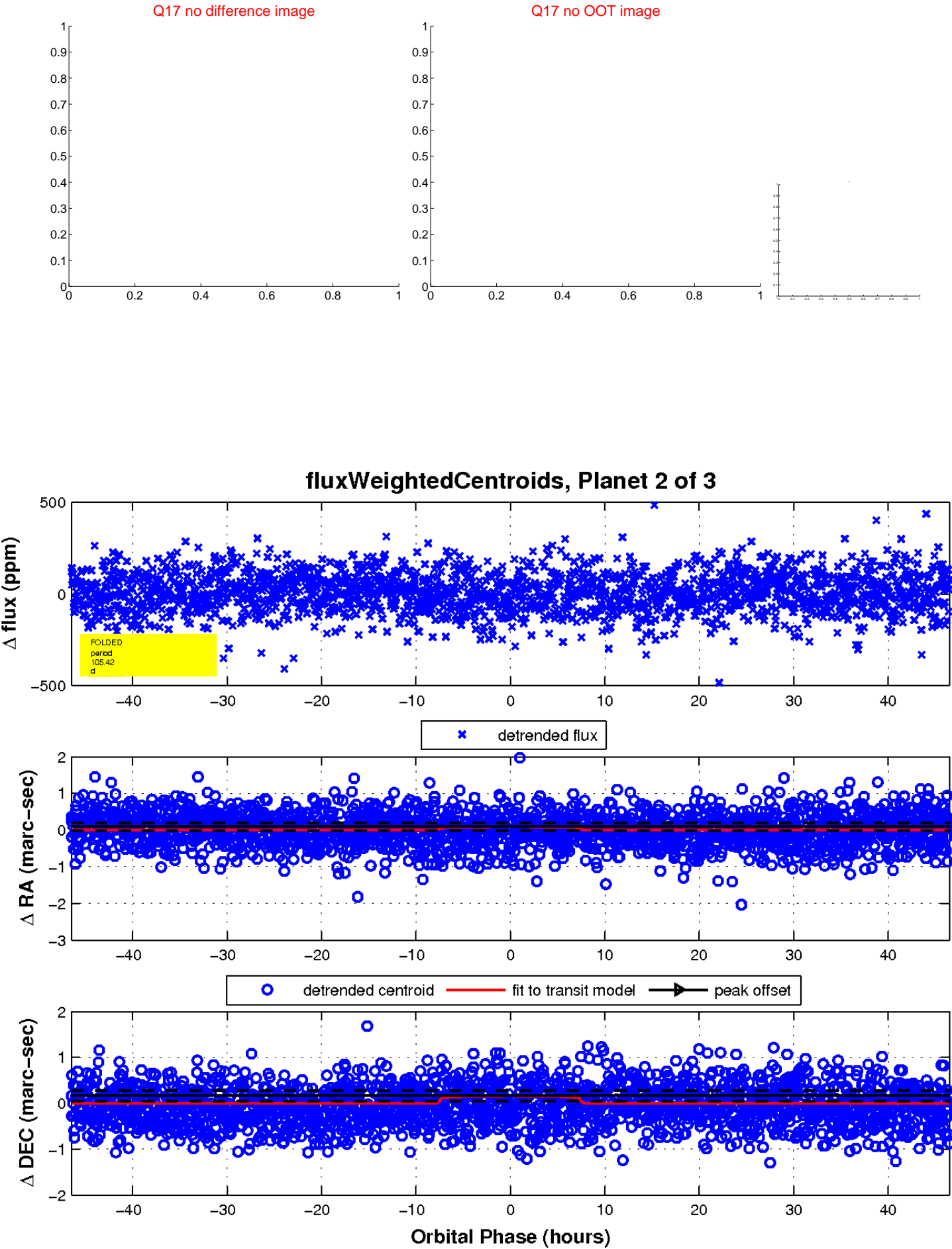
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



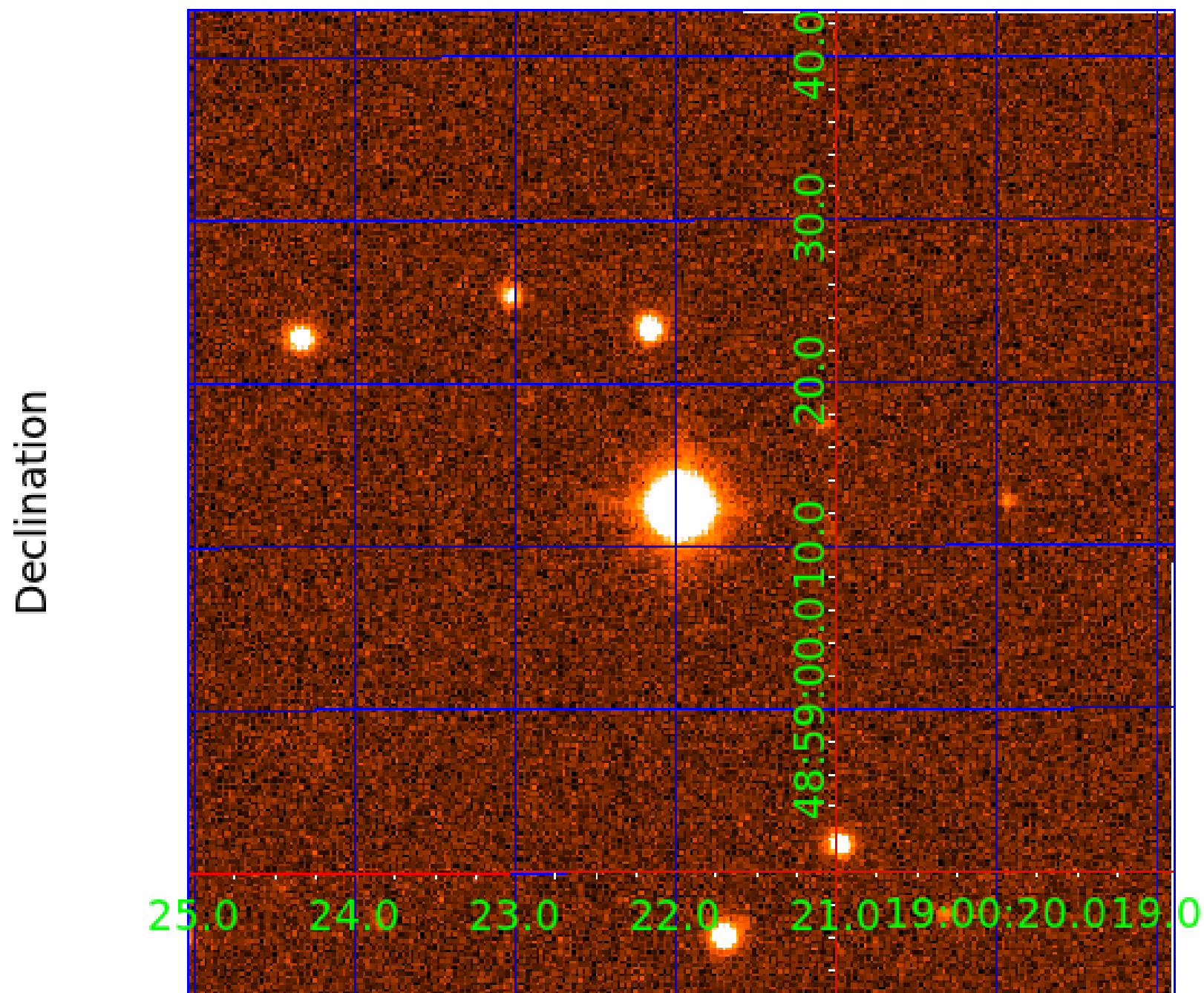
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 011232111

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})
011232111-01	OBS	No	2.514071	132.576242	17.1	16.302	12.9	13.6	2.91	7843	1.22	13432.26
011232111-02	OBS	No	105.415417	185.088874	91.0	15.509	10.5	8.7	2.91	7843	3.14	92.21
011232111-03	OBS	No	44.682538	148.825781	224.2	3.000	8.9	-1.0	2.91	7843	4.41	289.60

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011232111-01	OBS	FP	0.00	1	0	0	0	LPP_DV
011232111-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_FEW_DIFFS
011232111-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

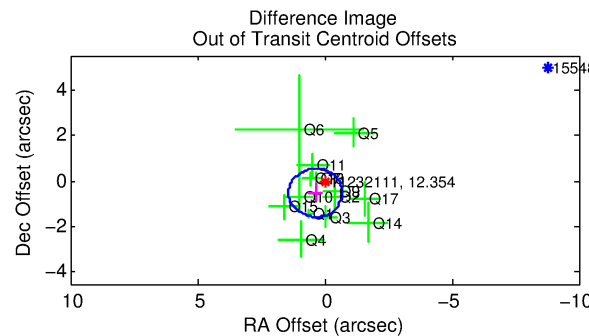
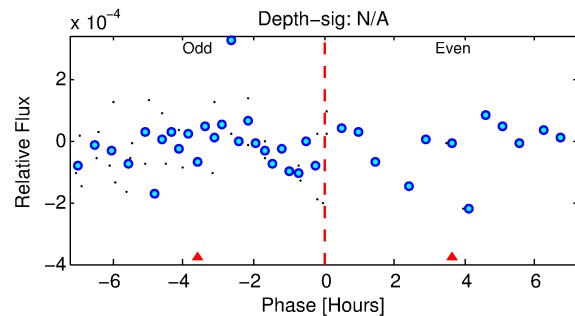
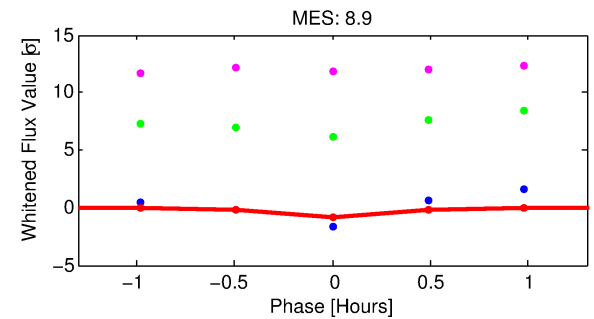
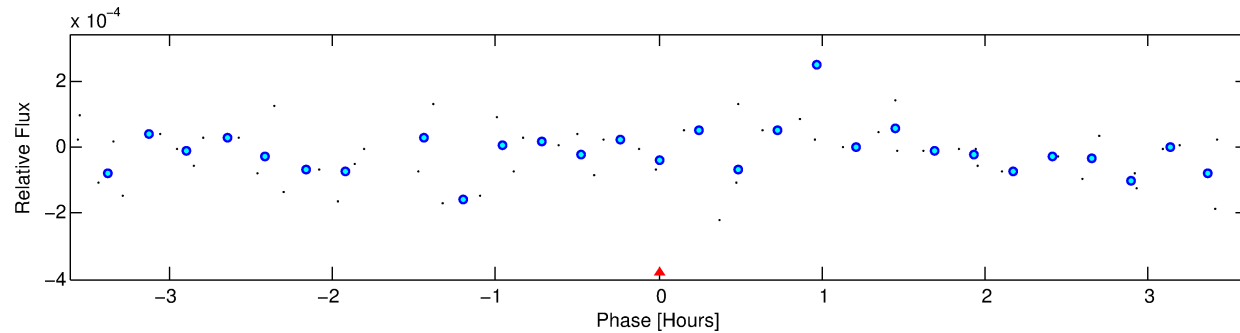
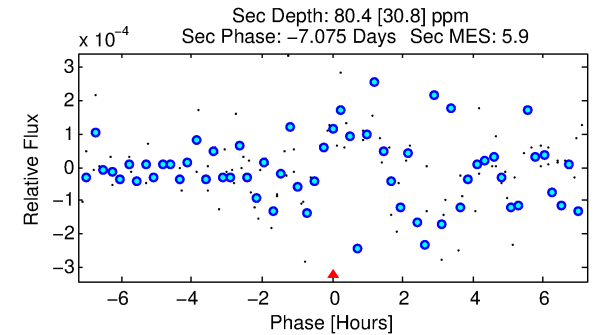
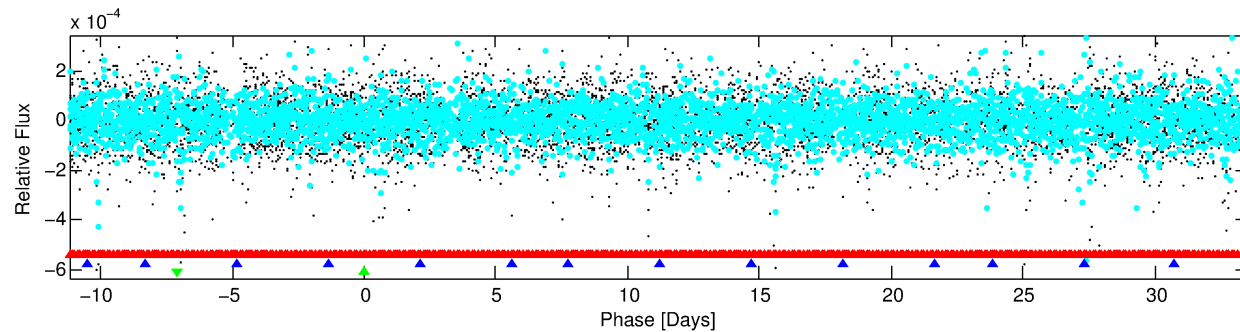
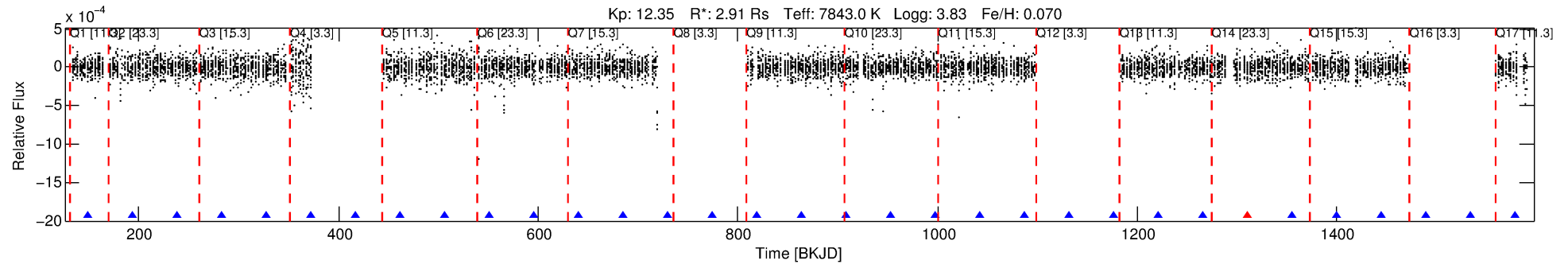
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011232111-03

No Significant Match Found

DV One-Page Summary

KIC: 11232111 Candidate: 3 of 3 Period: 44.683 d



TPS TCE Results:

Period = 44.68254 d
Epoch = 148.8258 BKJD

DV fit results are unavailable

DV Diagnostic Results:

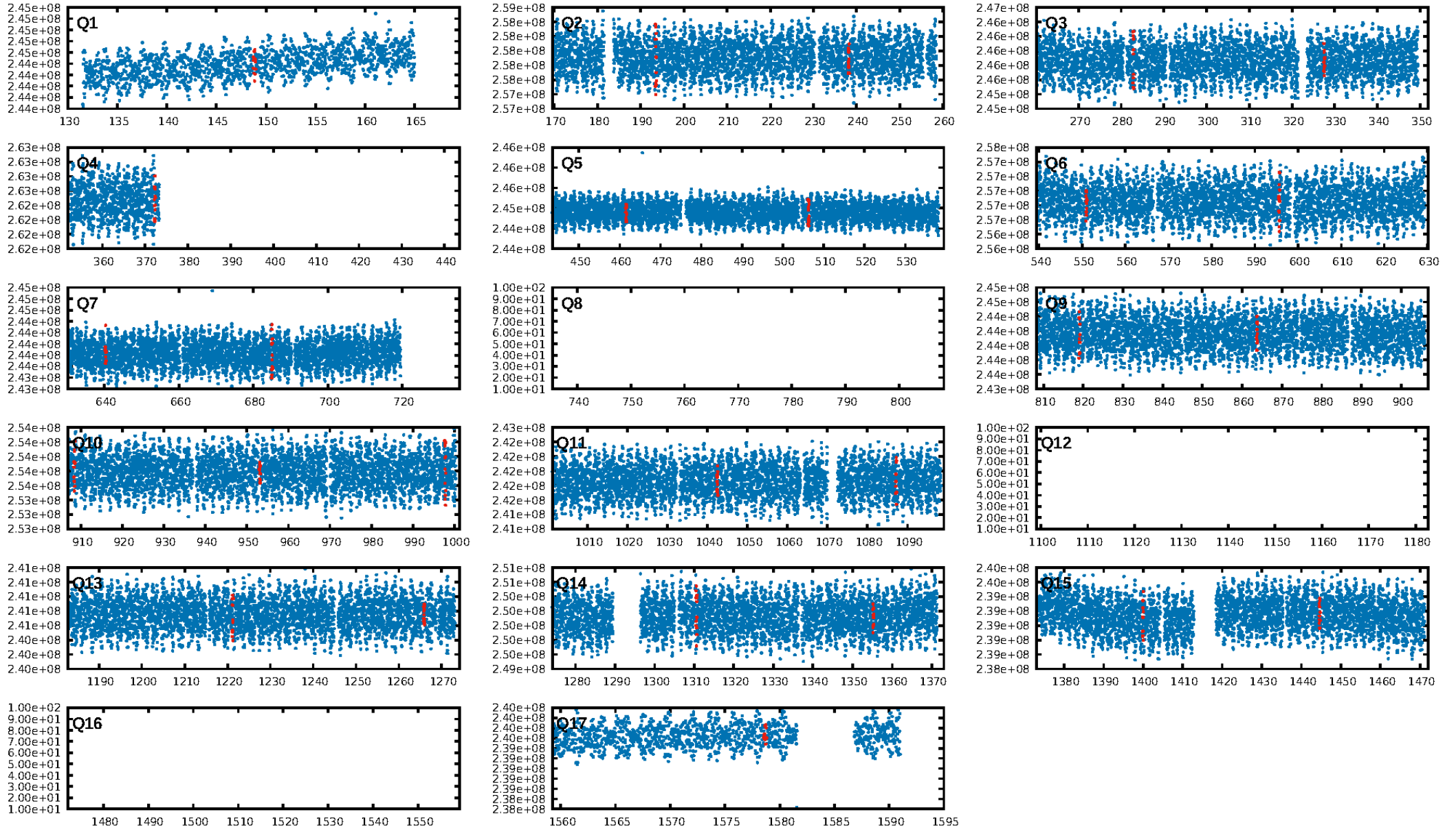
ShortPeriod-sig: 100.0% [61.06σ]
LongPeriod-sig: 100.0% [92.27σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.18e-08
RollingBand-fgt: 0.75 [3/4]
GhostDiagnostic-chr: -131.5

Centroid-sig: 25.3%
Centroid-so: 0.753 arcsec [0.96σ]
OotOffset-rm: 0.624 arcsec [1.77σ]
KicOffset-rm: 0.546 arcsec [1.63σ]
OotOffset-st: 4/4/1/5 [14]
KicOffset-st: 4/4/1/5 [14]
DiffImageQuality-fgm: 0.29 [4/14]
DiffImageOverlap-fno: 0.71 [10/14]

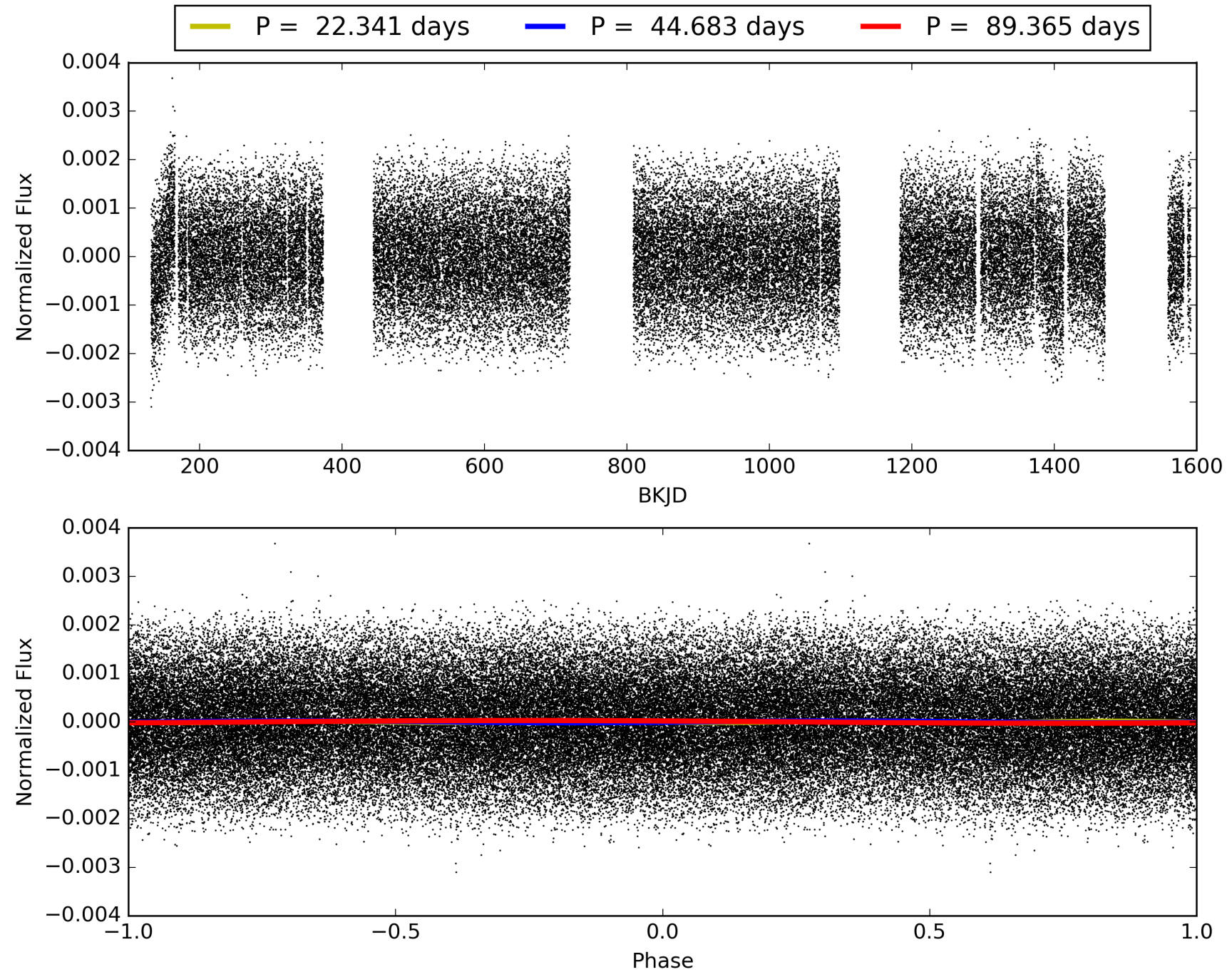
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 07:38:37 Z

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

TCE 011232111-03, PDC Light Curves

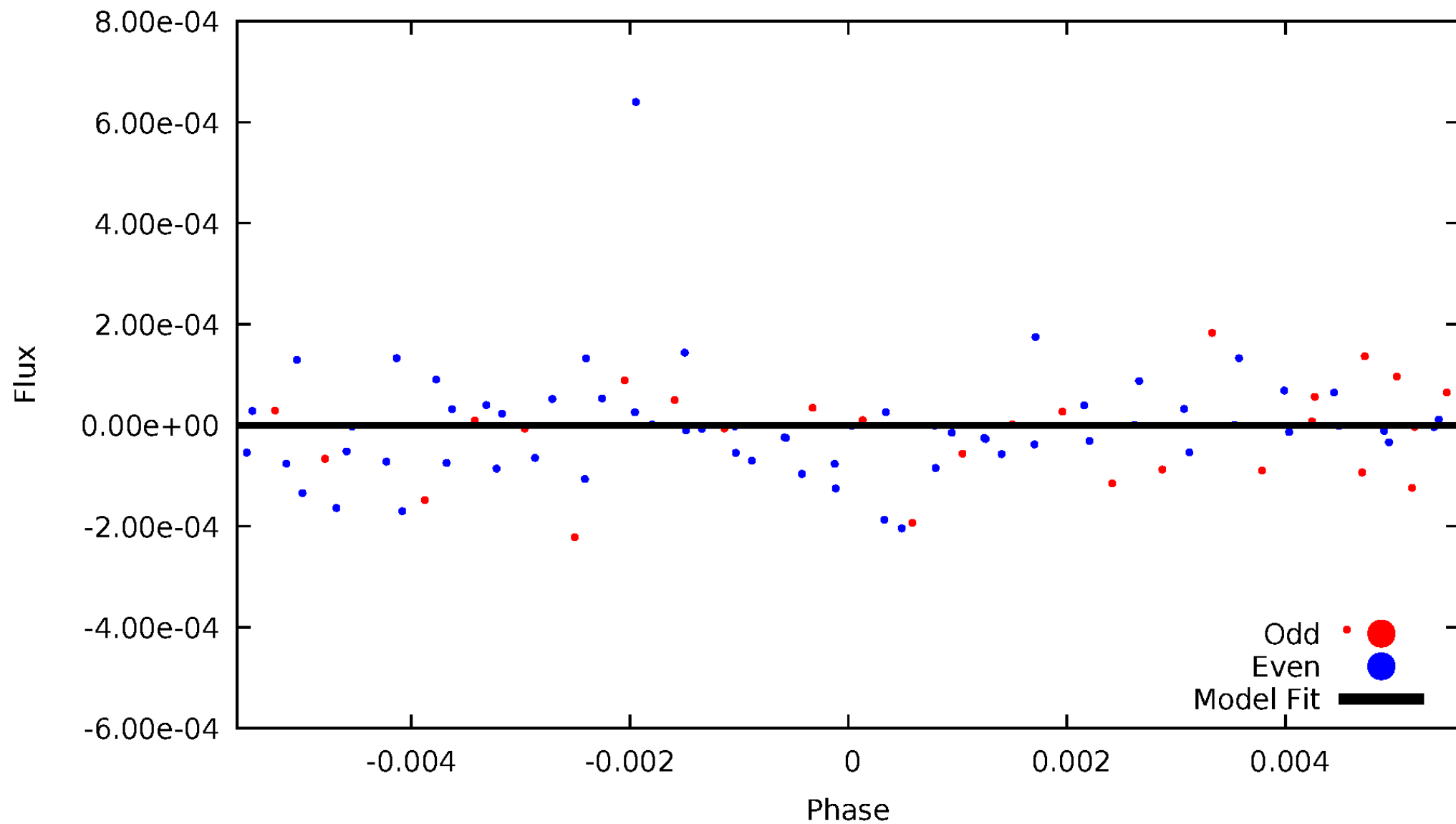


TCE 011232111-03



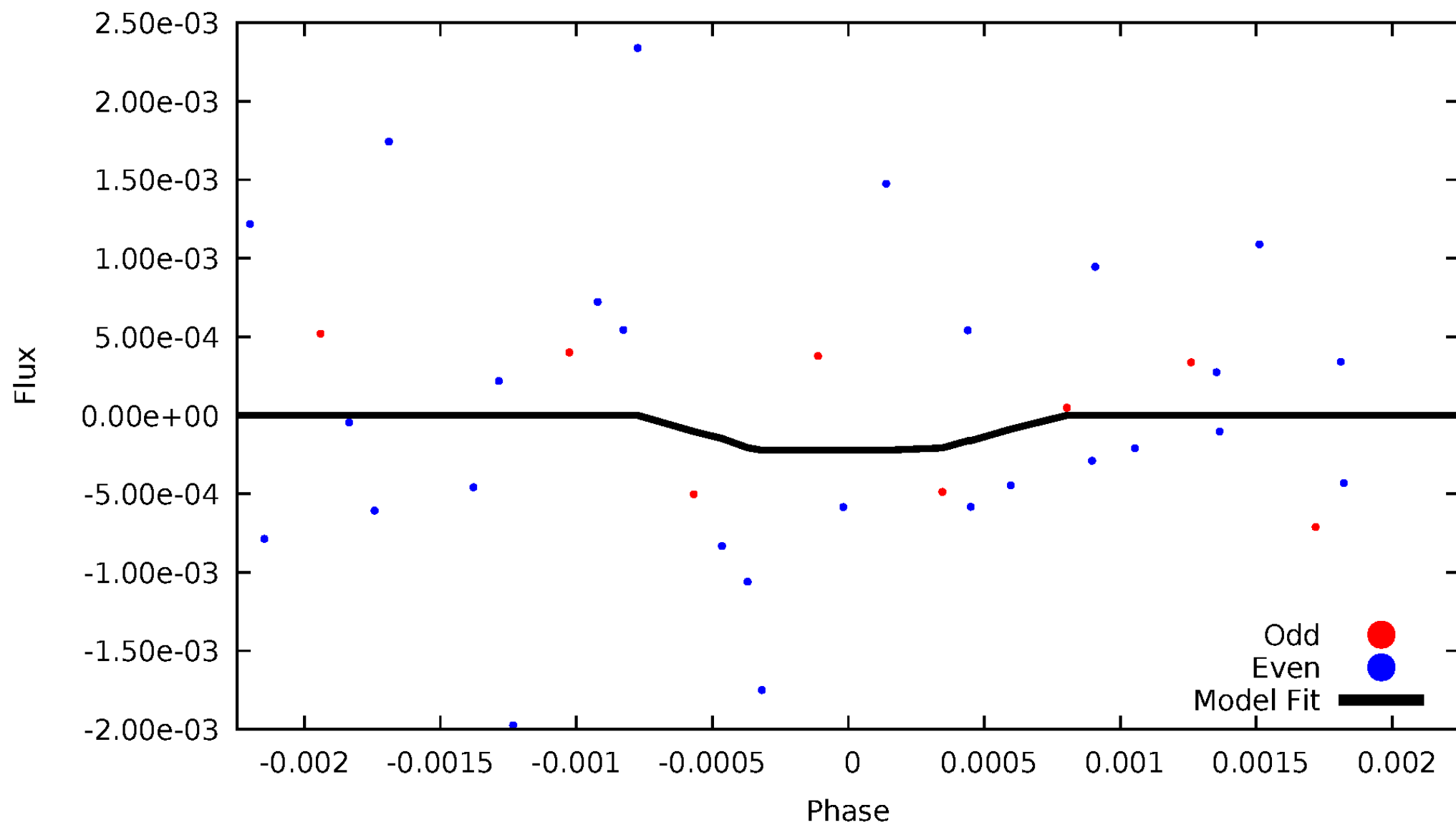
DV Odd/Even

TCE 011232111-03

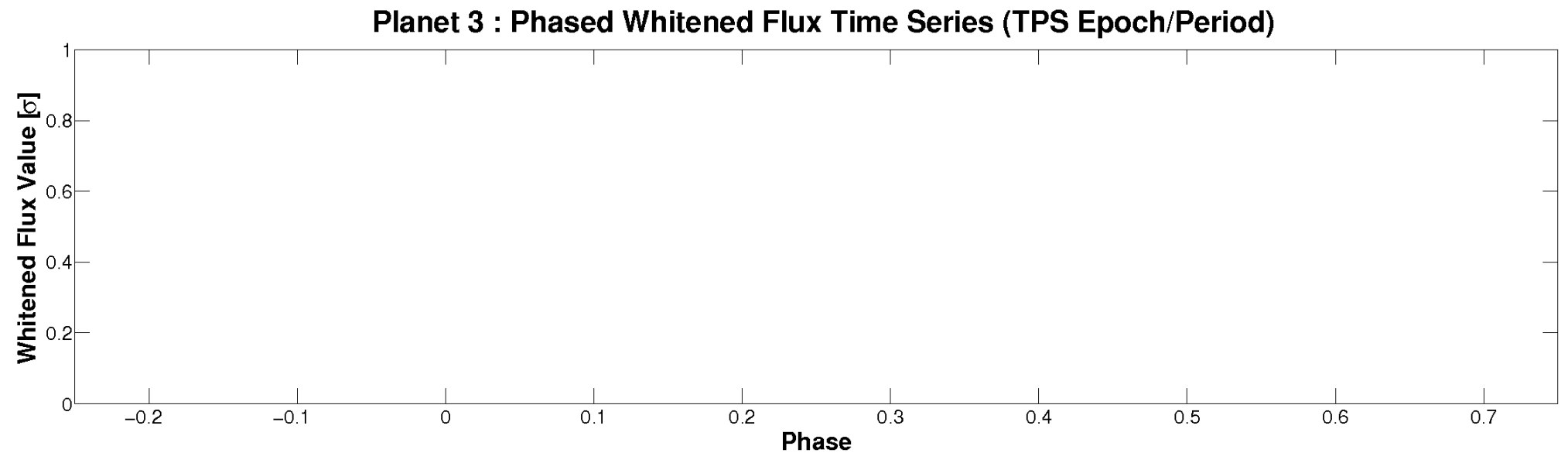
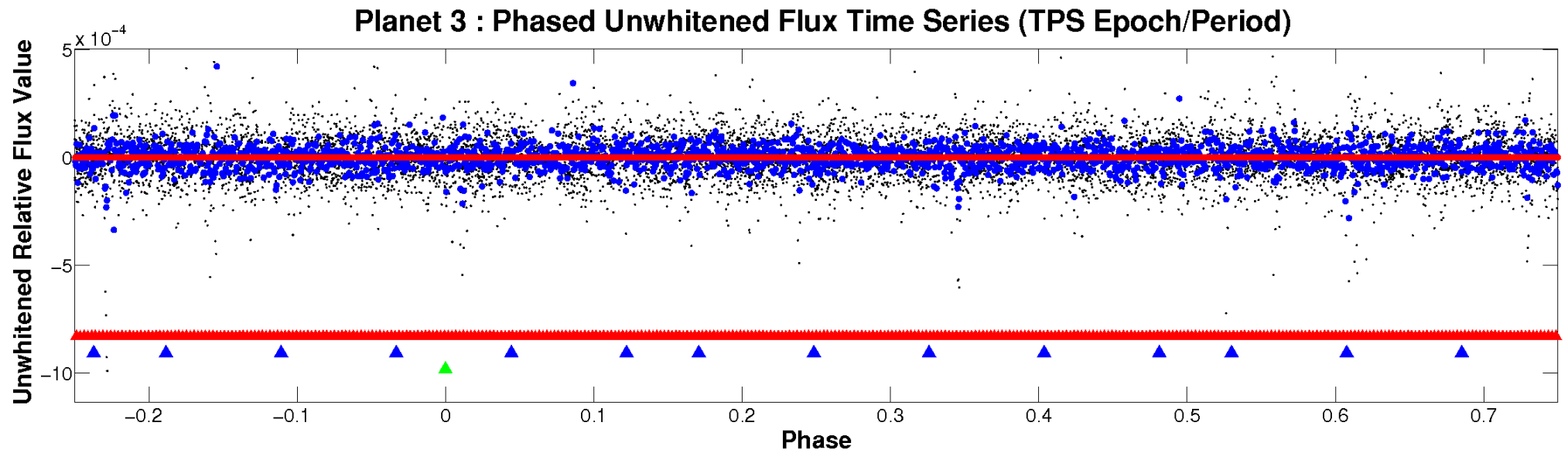


ALT Odd/Even

TCE 011232111-03

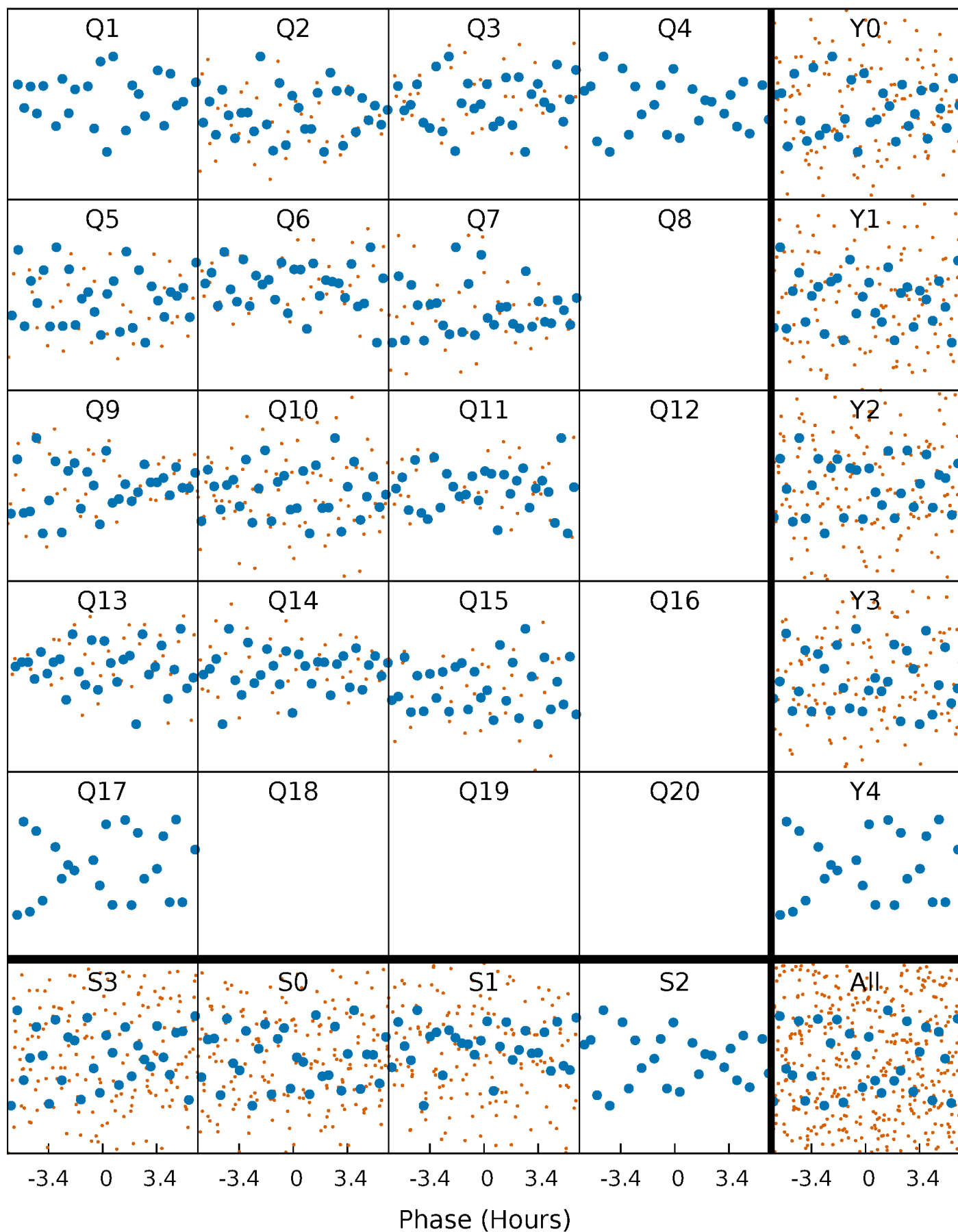


Non-Whitened Vs. Whitened Light Curve



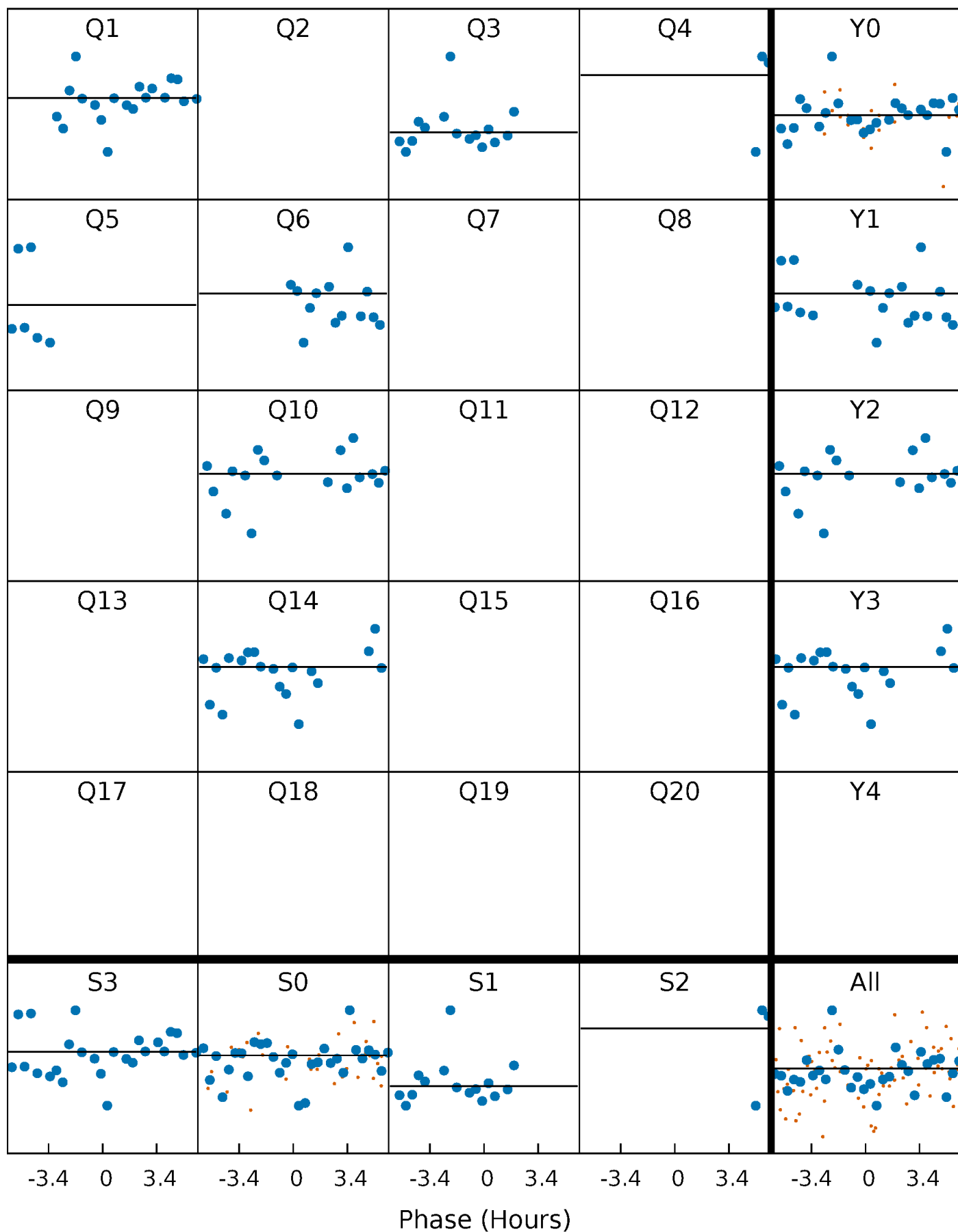
PDC Quarter-Phased Transit Curves

TCE 011232111-03 P= 44.682538 Days $T_0=148.825781$ (BKJD)



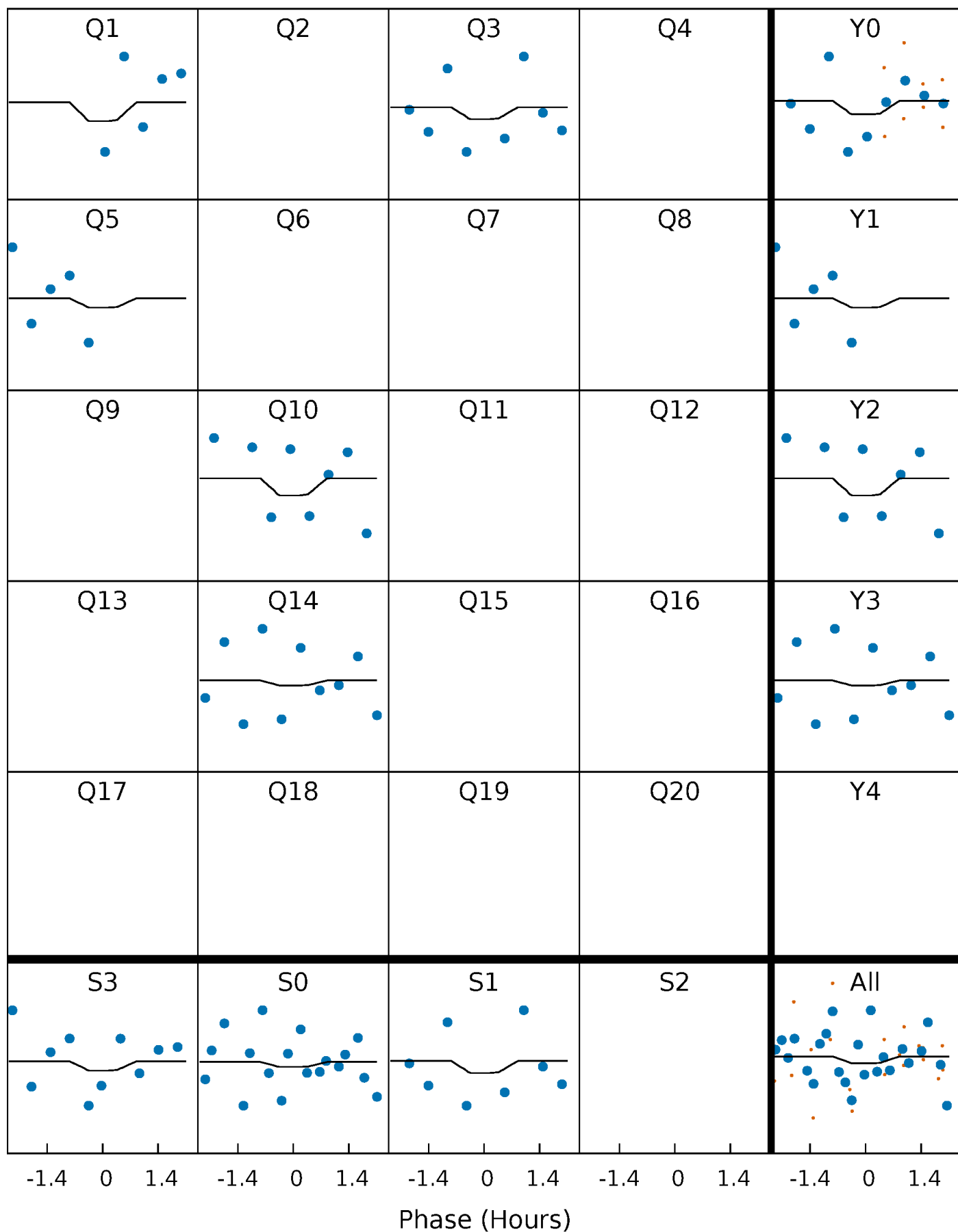
DV Quarter-Phased Transit Curves

TCE 011232111-03 P= 44.682538 Days $T_0=148.825781$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

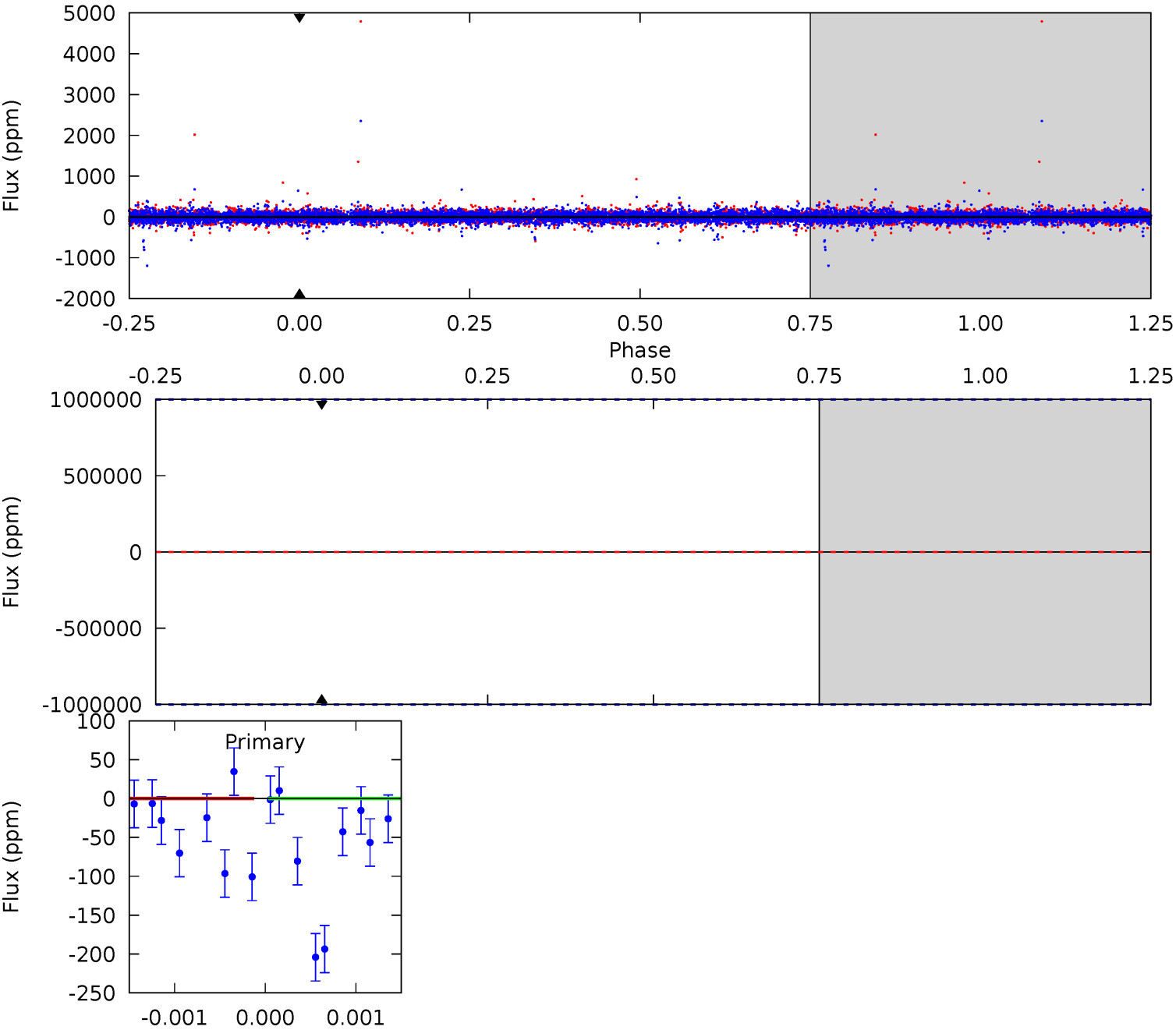
TCE 011232111-03 P= 44.682538 Days $T_0=148.698381$ (BKJD)



DV Model-Shift Uniqueness Test

011232111-03, P = 44.682538 Days, E = 104.143243 Days

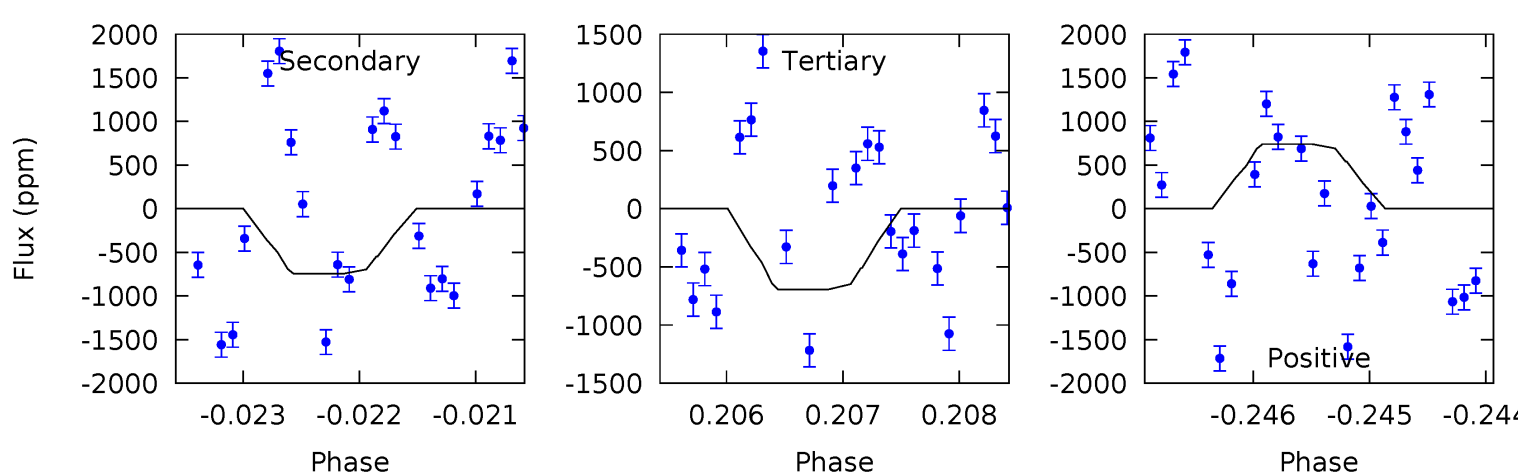
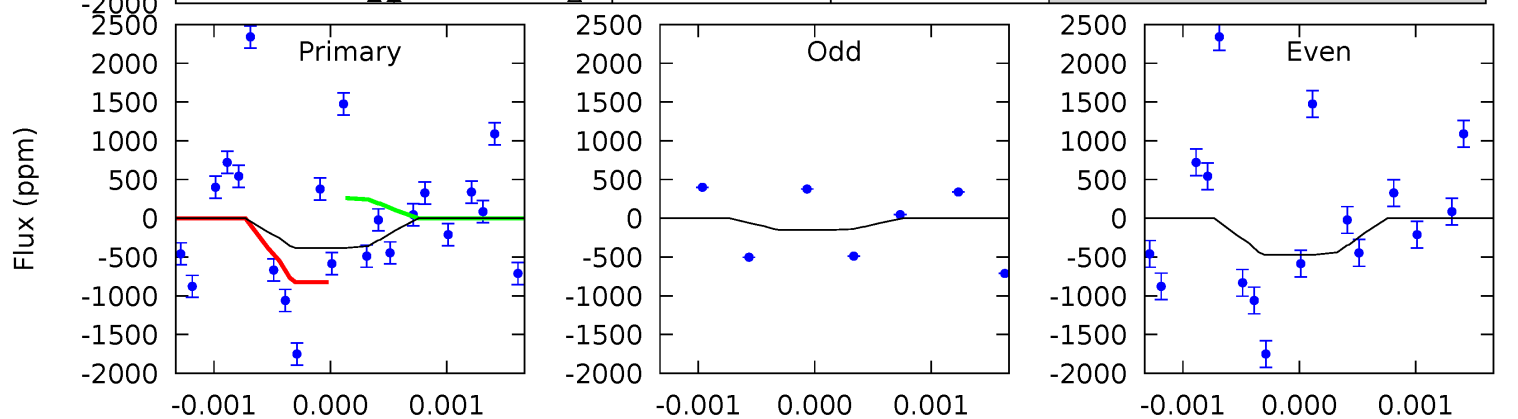
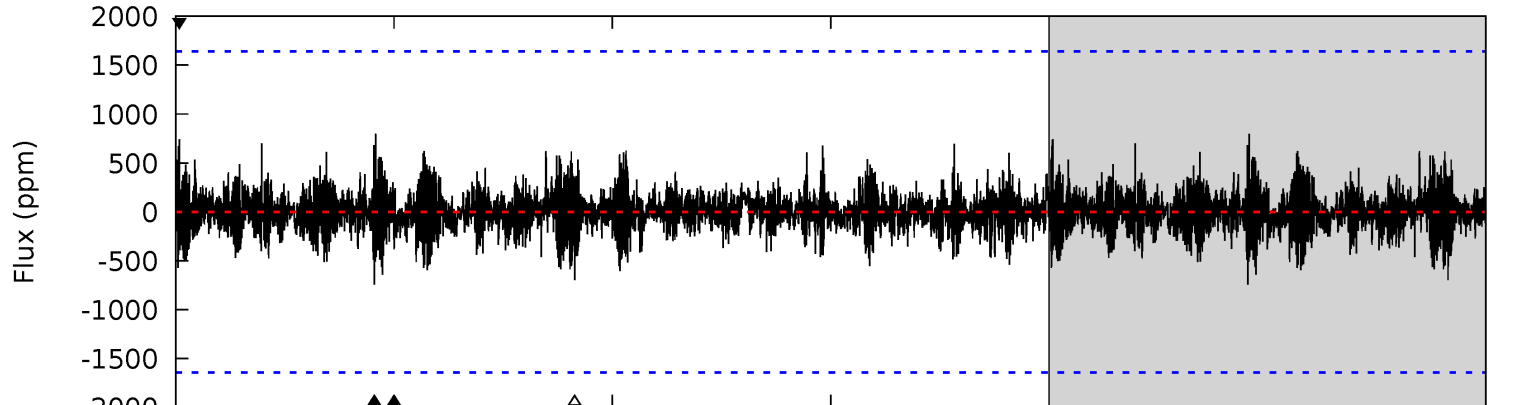
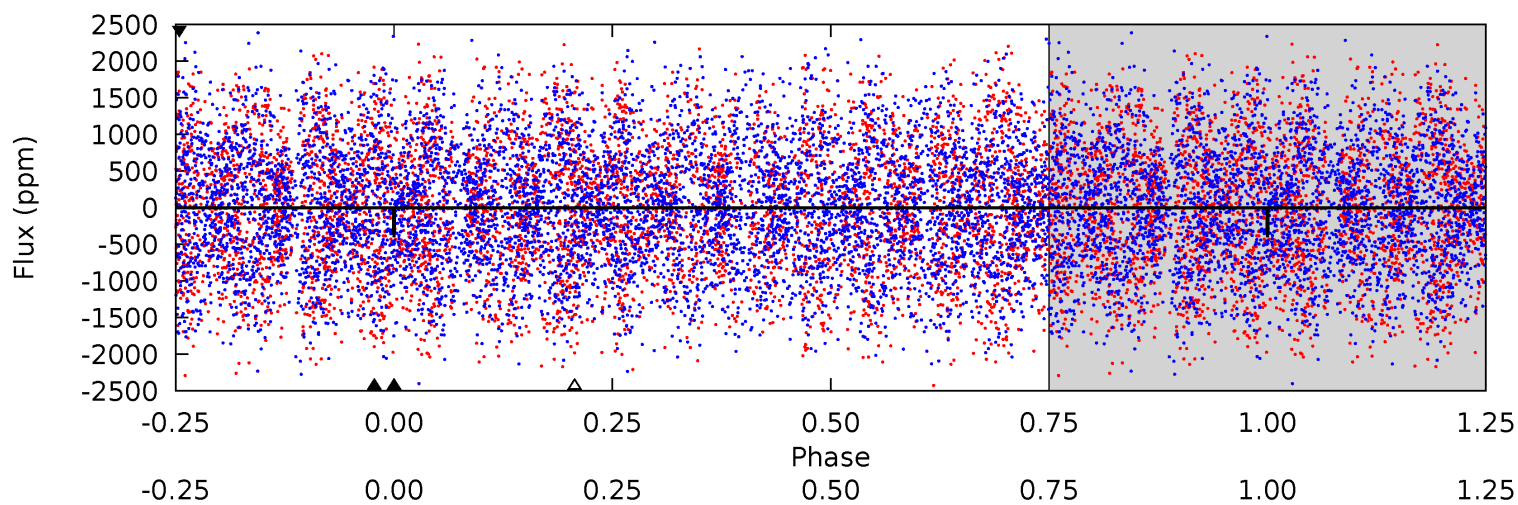
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

011232111-03, P = 44.682538 Days, E = 104.015843 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.27	2.47	2.30	2.45	5.44	3.27	0.58	-1.03	-1.18	0.17	0.02	0.48	2.06	0.52	0.94



Stellar Parameters For KIC 011232111

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7843^{+216}_{-351}	$3.829^{+0.323}_{-0.108}$	$0.070^{+0.200}_{-0.400}$	$2.909^{+0.487}_{-1.137}$	$2.081^{+0.287}_{-0.532}$	$0.119^{+0.289}_{-0.040}$
	+3%/-4%	+8%/-3%	+286%/-571%	+17%/-39%	+14%/-26%	+243%/-33%
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 011232111-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$20.91^{+22.52}_{-14.42}$	1430^{+99}_{-138}	6173^{+39532}_{-48021}	266^{+21410}_{-18822}
Alt.	-745 ± 302	$22.54^{+23.43}_{-15.57}$	1441^{+97}_{-129}	4642^{+3989}_{-1134}	69^{+751}_{-54}

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 $A_{obs} \gg 1.0$

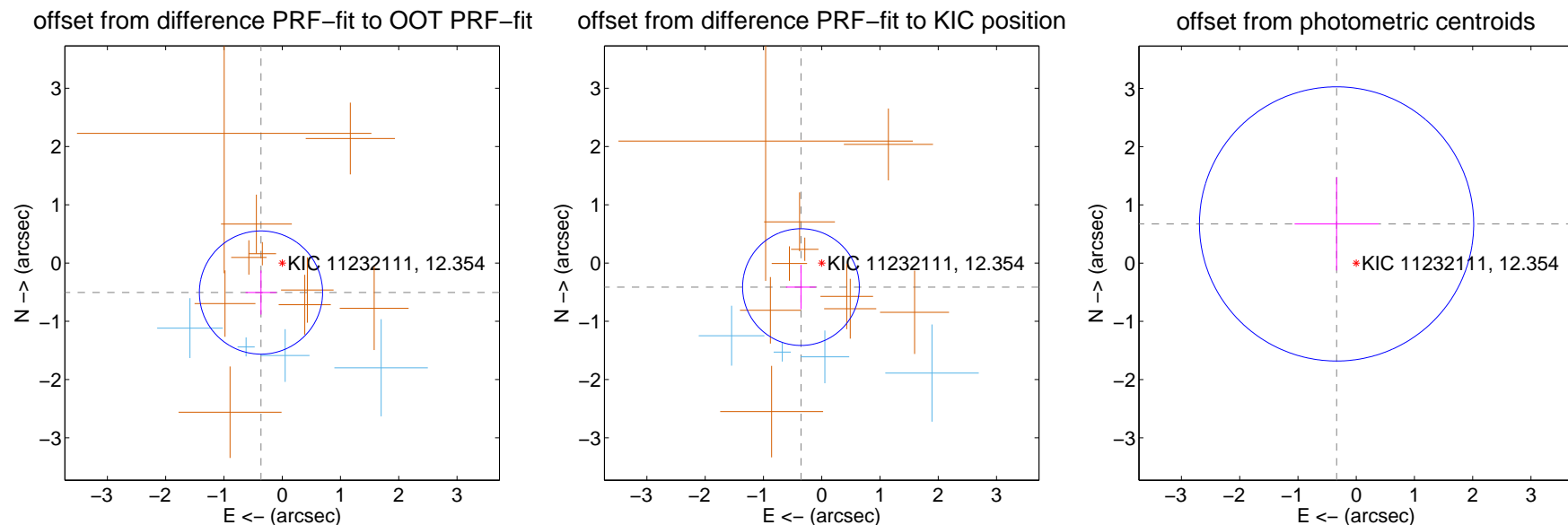
DV Centroid Data

Supplemental centroid analysis for 011232111-03. Kepler magnitude: 12.35. Transit SNR -1.00

There are 4 quarters with good PRF difference image offsets

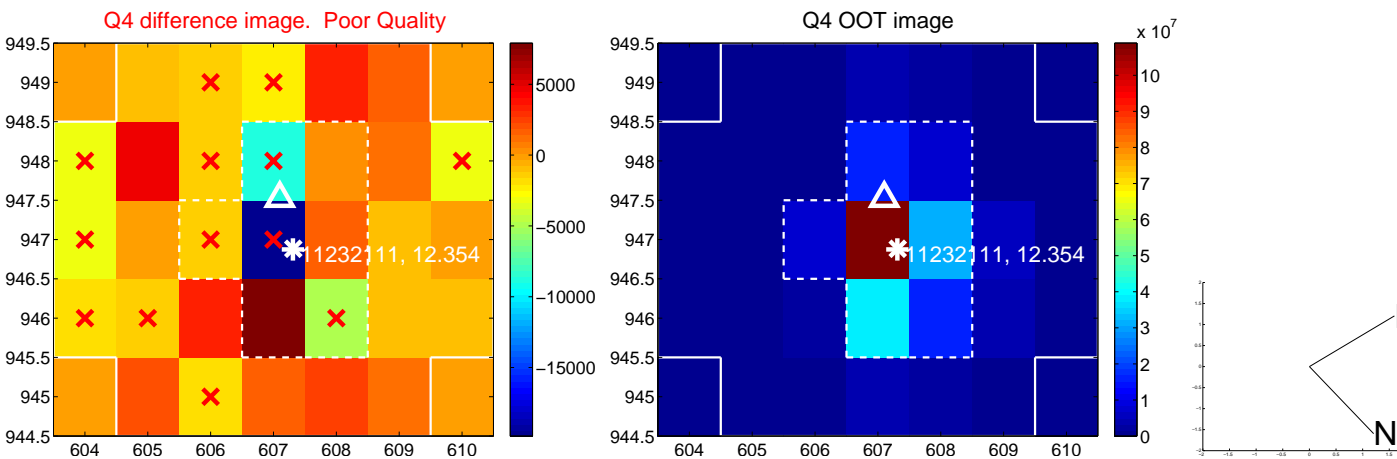
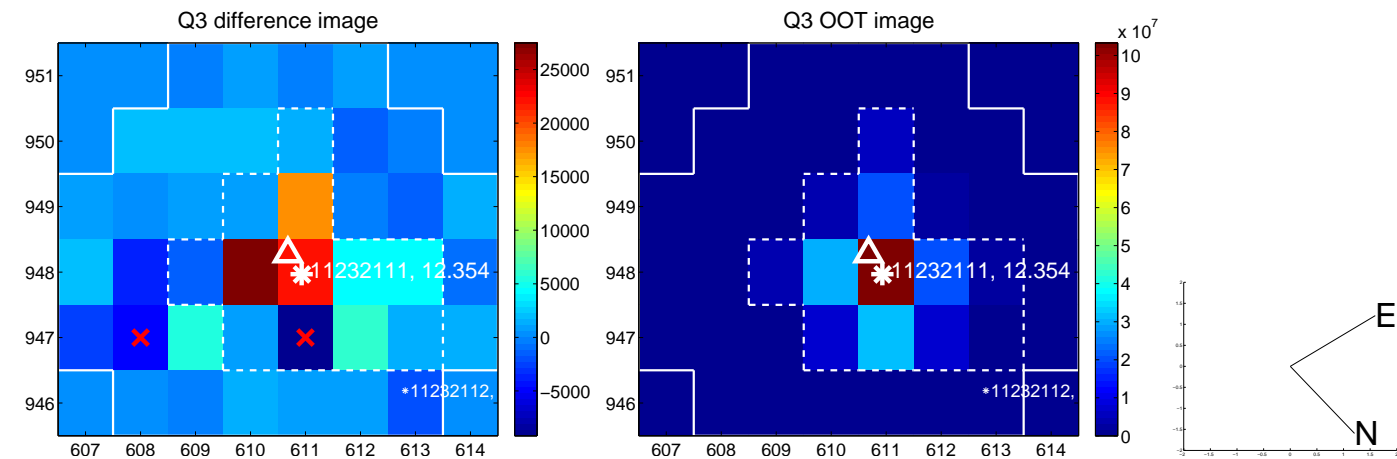
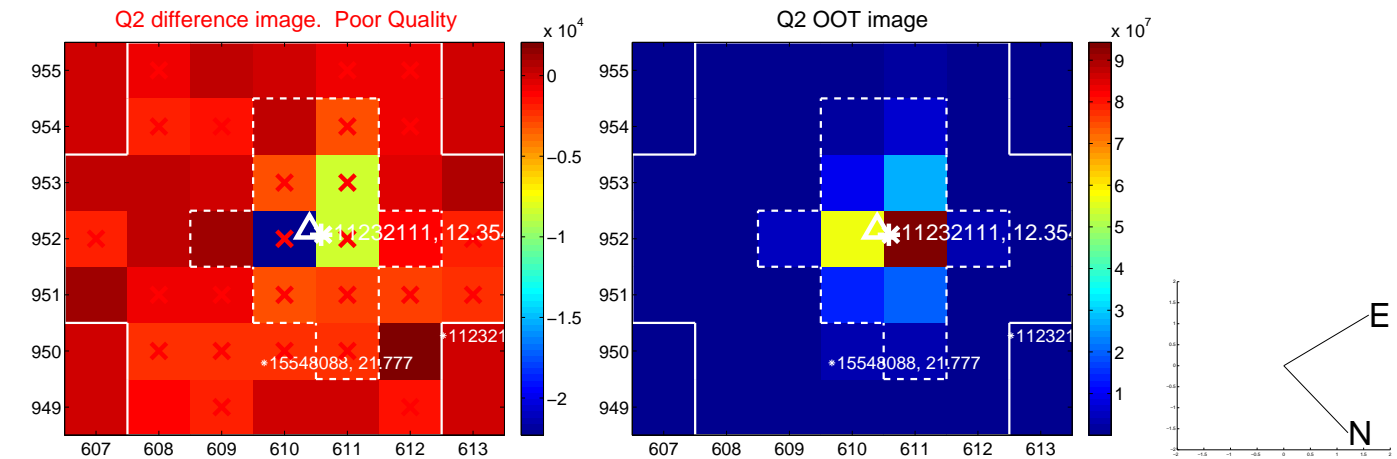
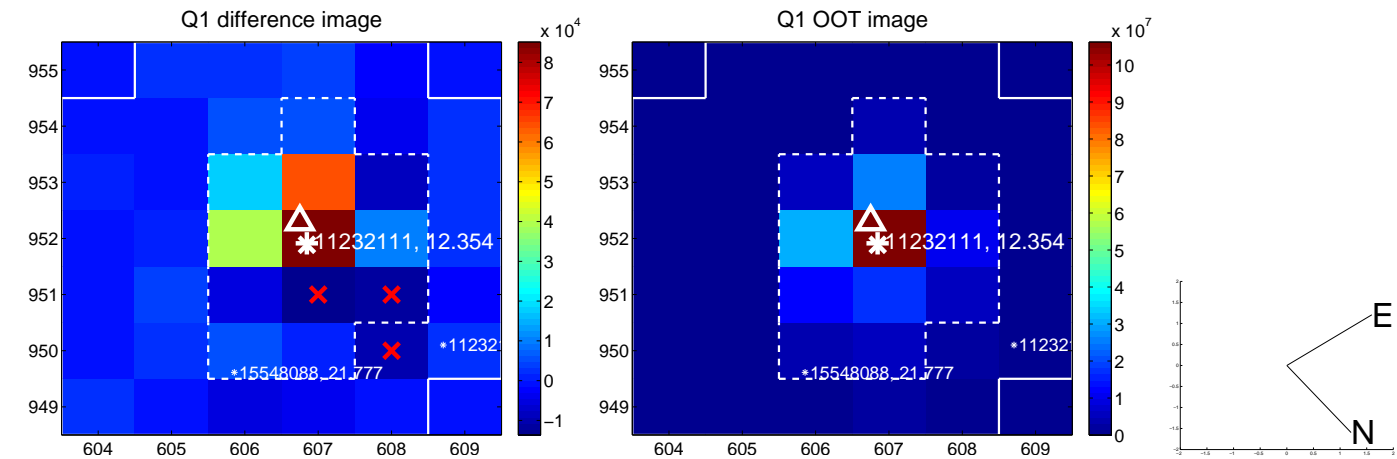
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.624 ± 0.353	1.77	0.364 ± 0.265	-0.506 ± 0.379
PRF-fit source offset from KIC position	0.546 ± 0.334	1.63	0.356 ± 0.256	-0.413 ± 0.383
photometric centroid source offset	0.75 ± 0.78	0.96	0.34 ± 0.72	0.67 ± 0.80

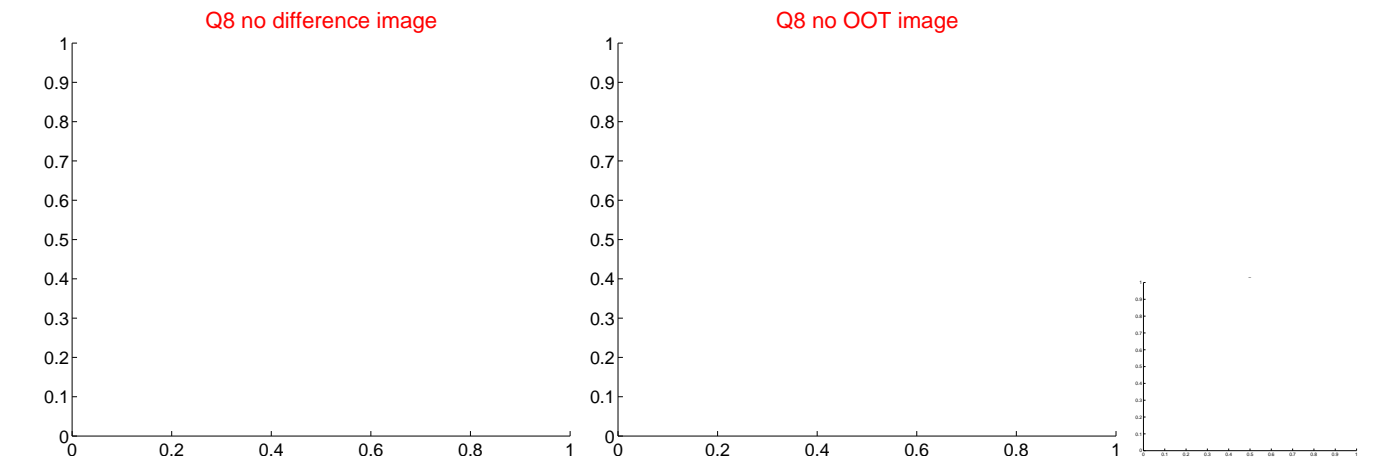
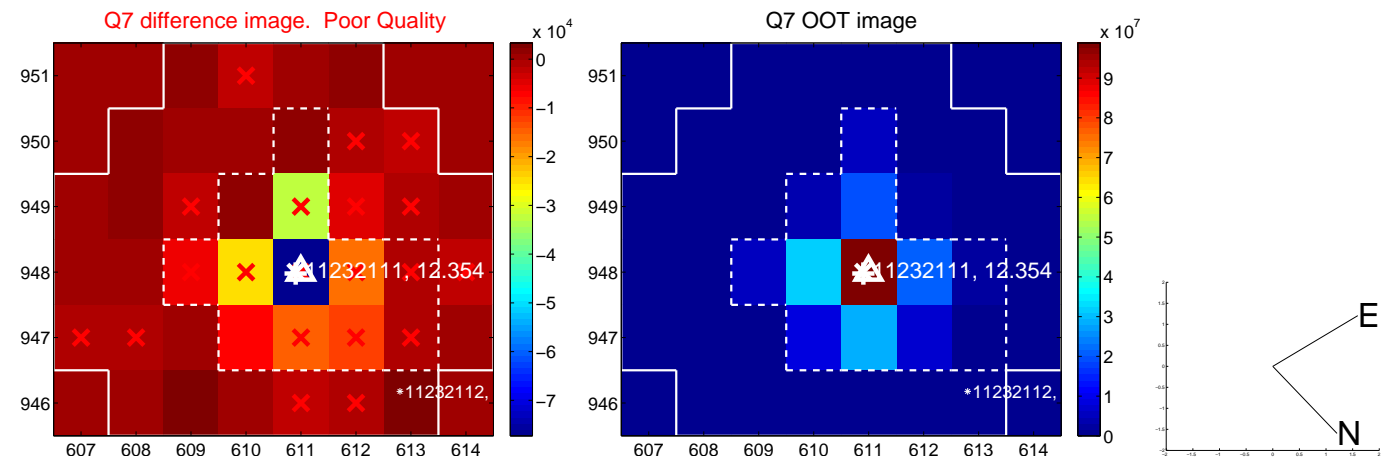
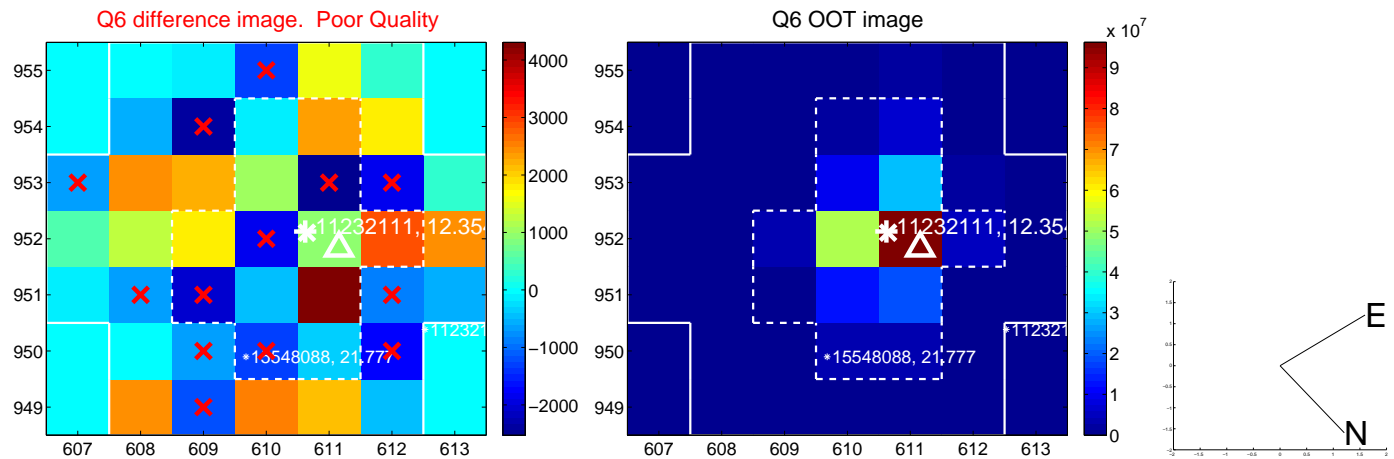
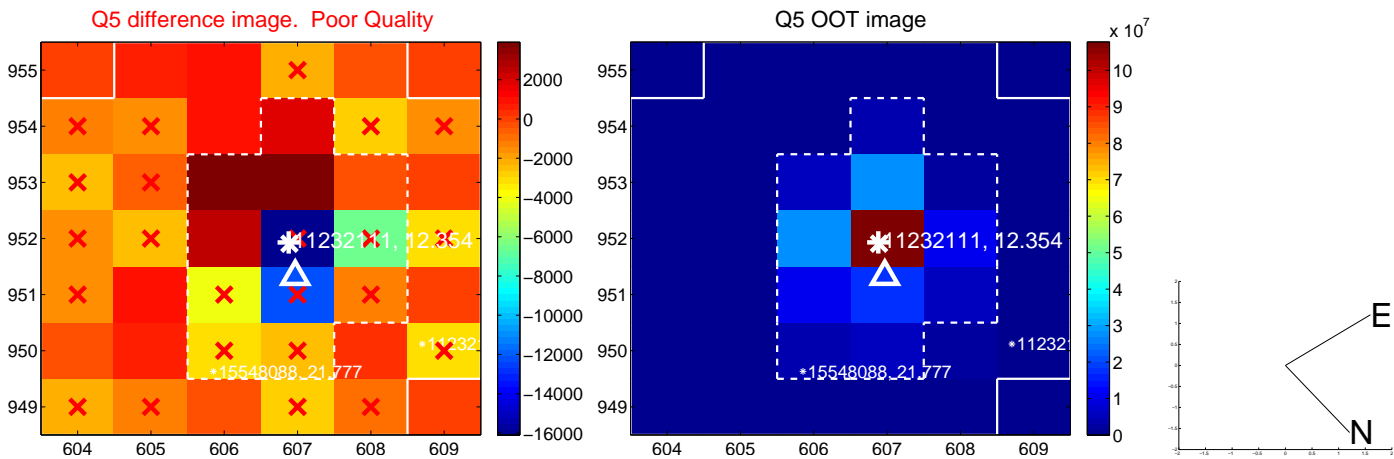


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

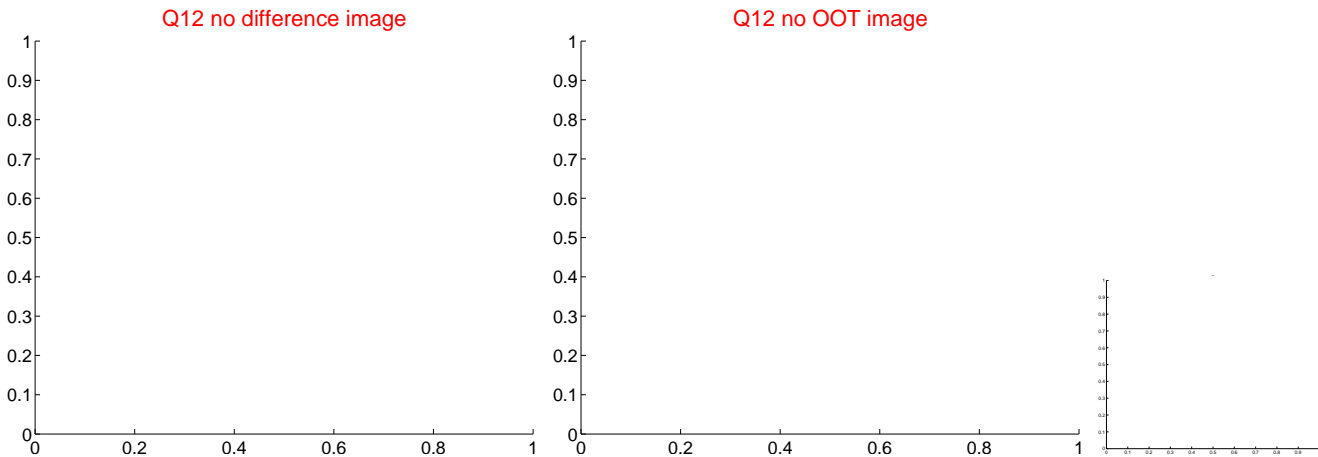
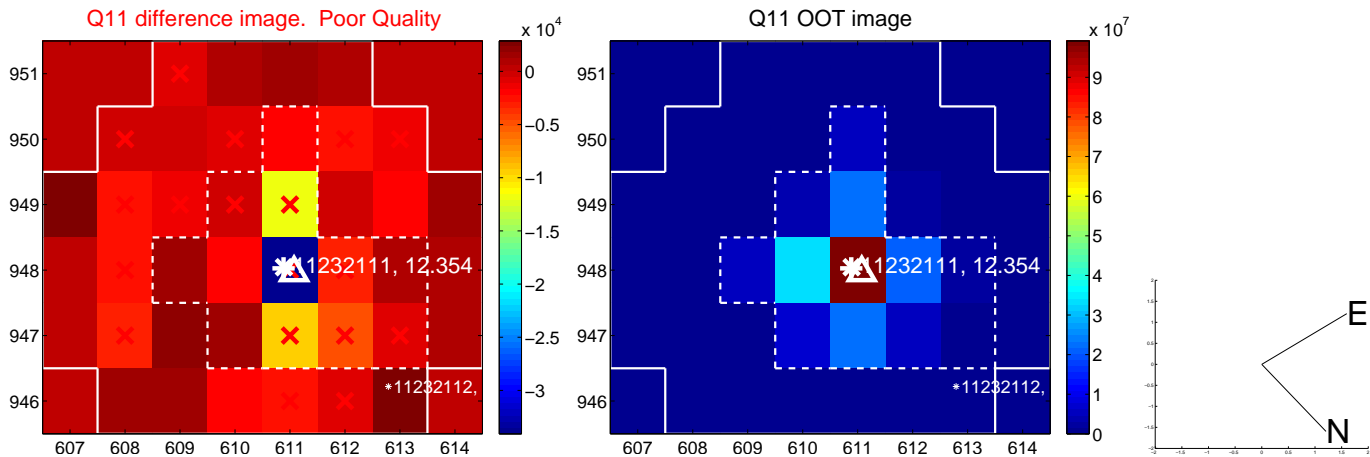
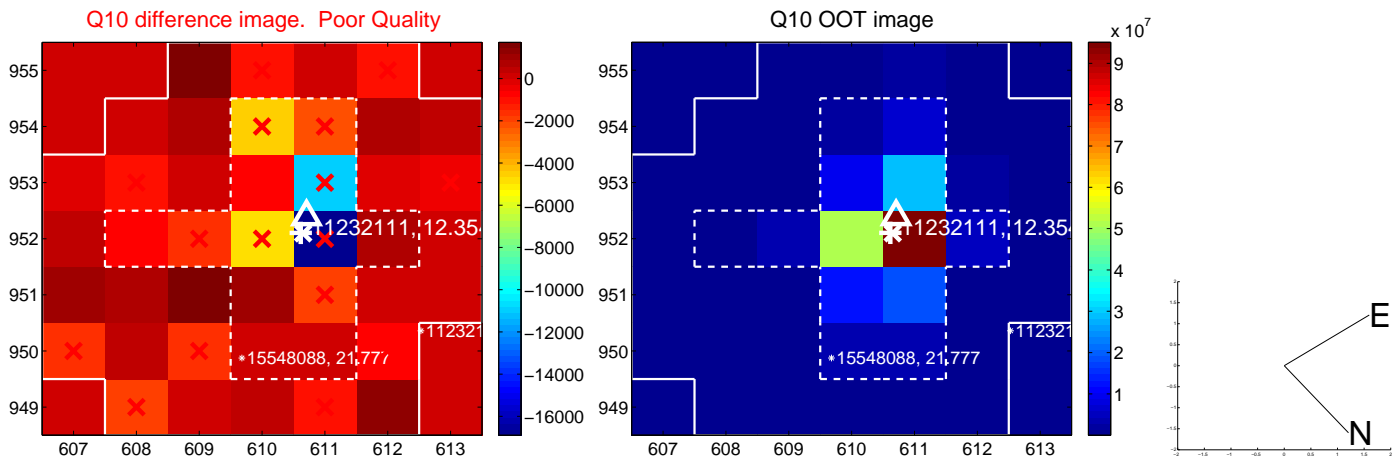
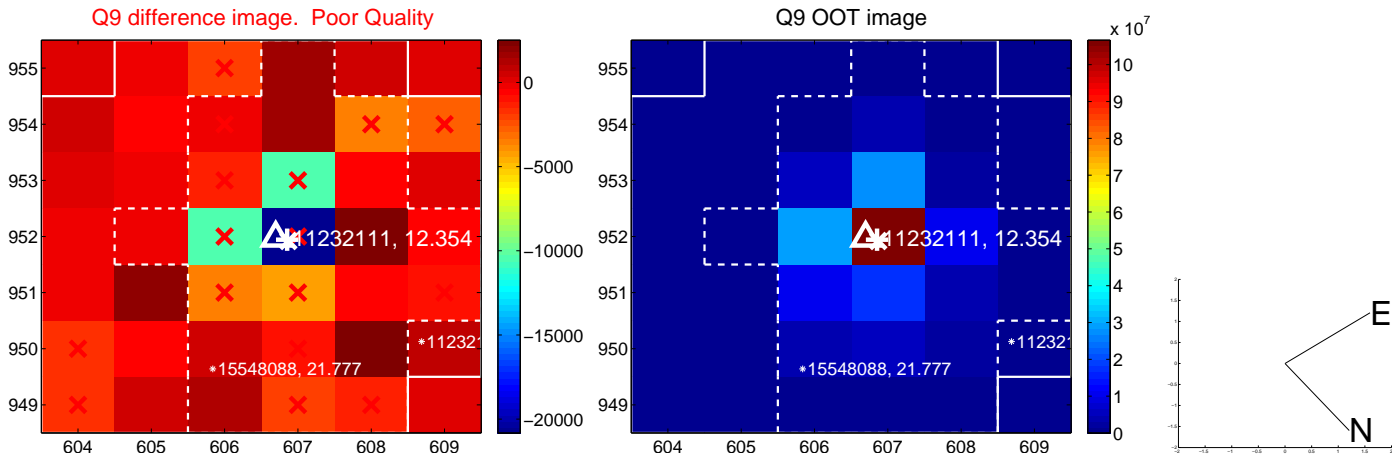
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



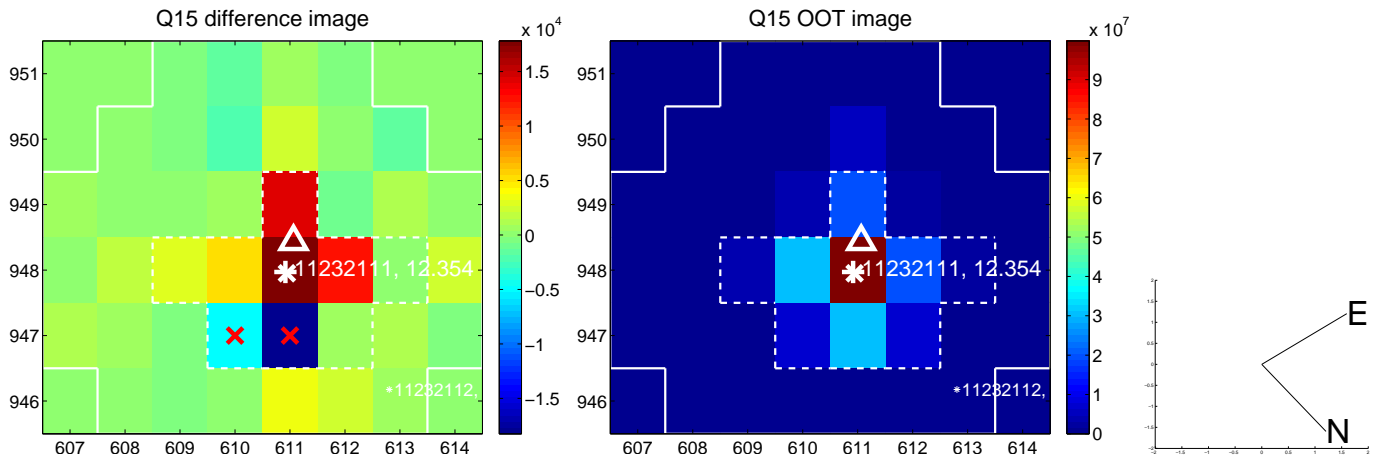
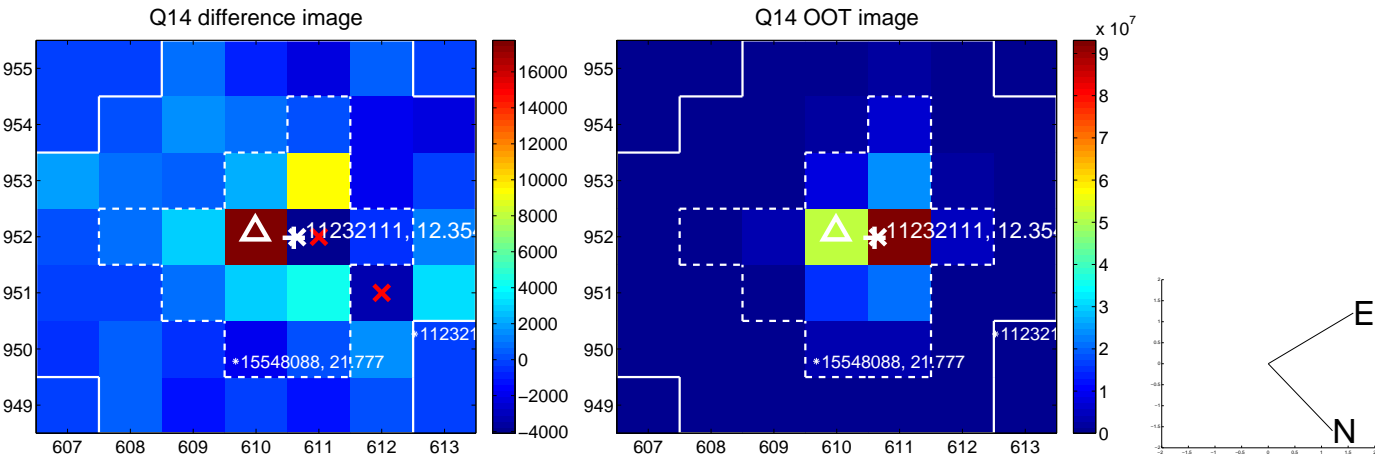
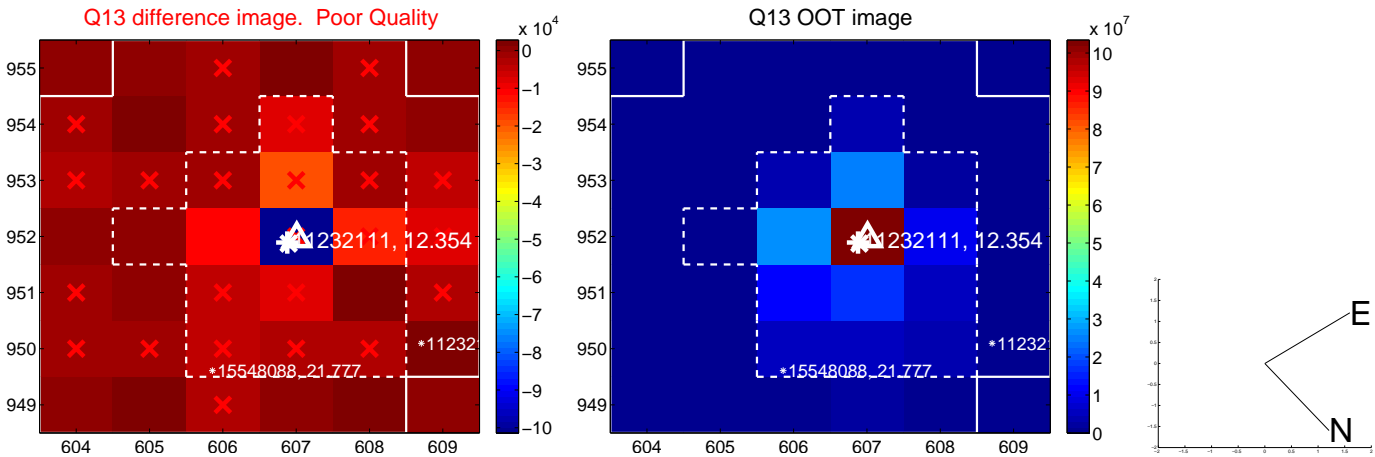
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



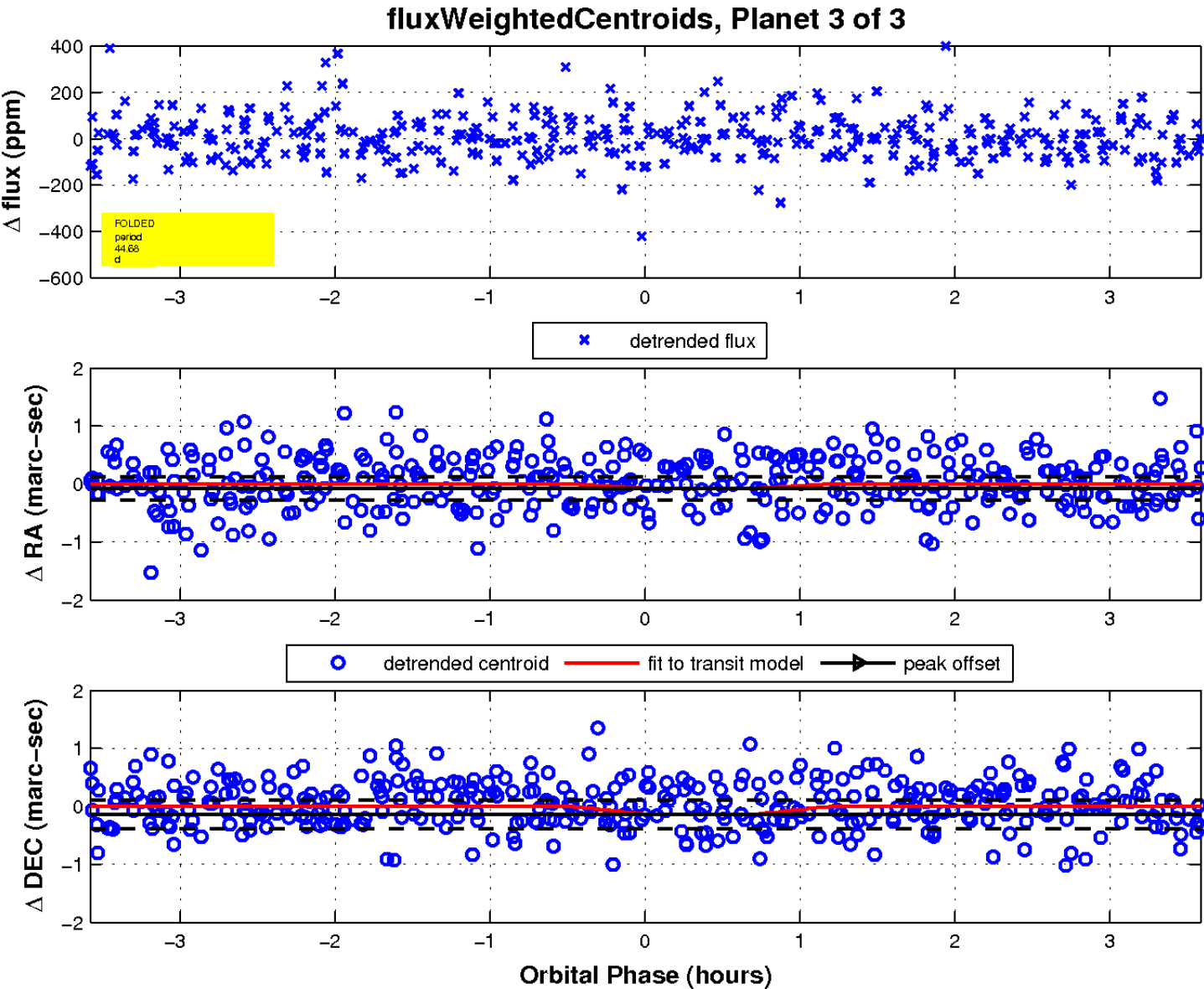
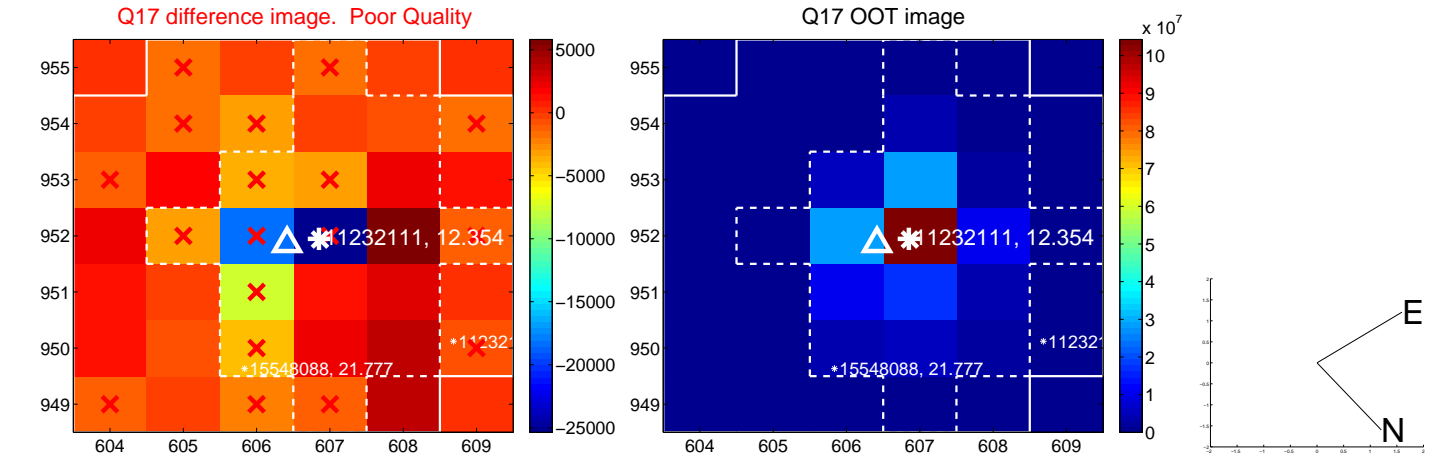
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

