

KIC 006230921

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})
006230921-01	OBS	No	0.538974	131.590503	239.9	1.667	10.1	11.6	1.66	7296	2.99	32439.29
006230921-02	OBS	No	0.566144	131.794802	257.9	1.641	8.9	9.0	1.66	7296	3.08	30380.33
006230921-03	OBS	No	0.566146	131.672745	309.3	2.758	7.3	8.4	1.66	7296	3.40	30380.18

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006230921-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
006230921-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
006230921-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—HALO_GHOST

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

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

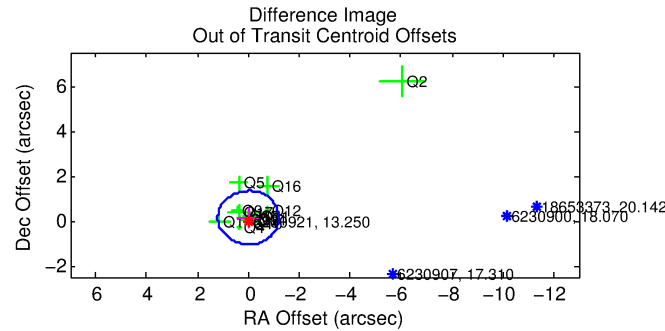
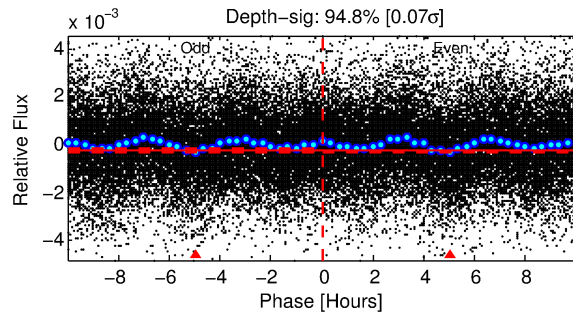
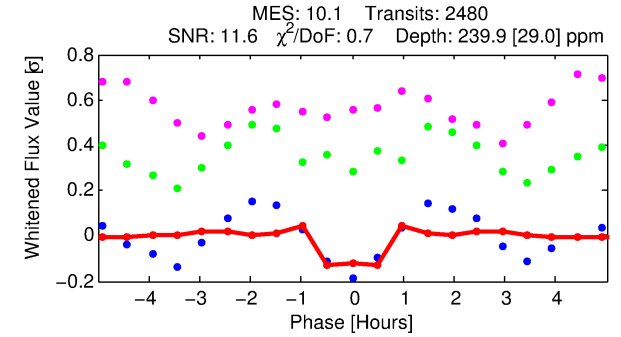
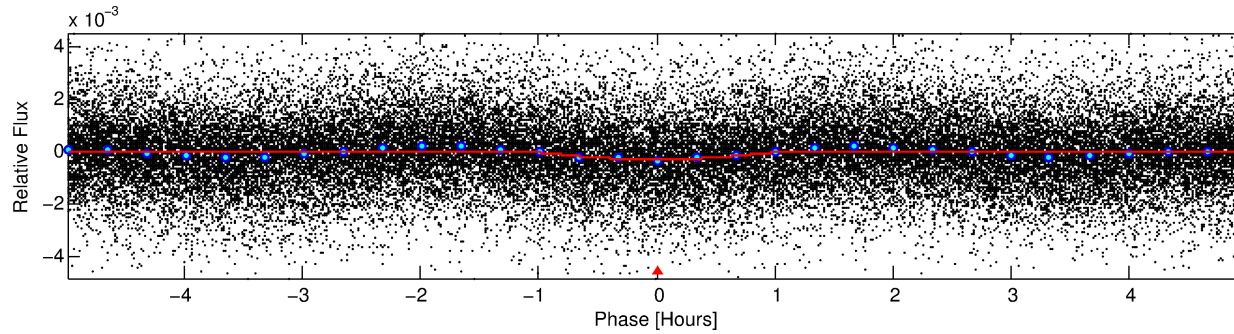
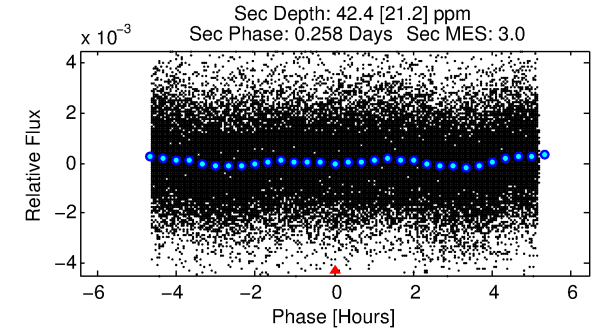
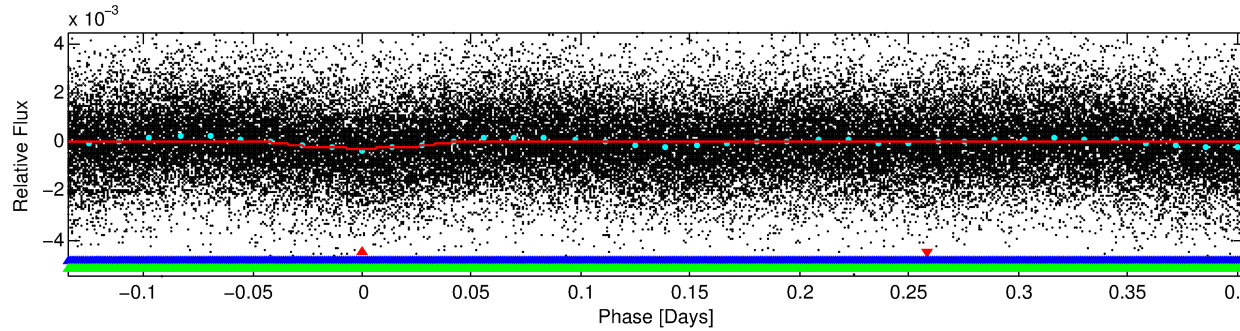
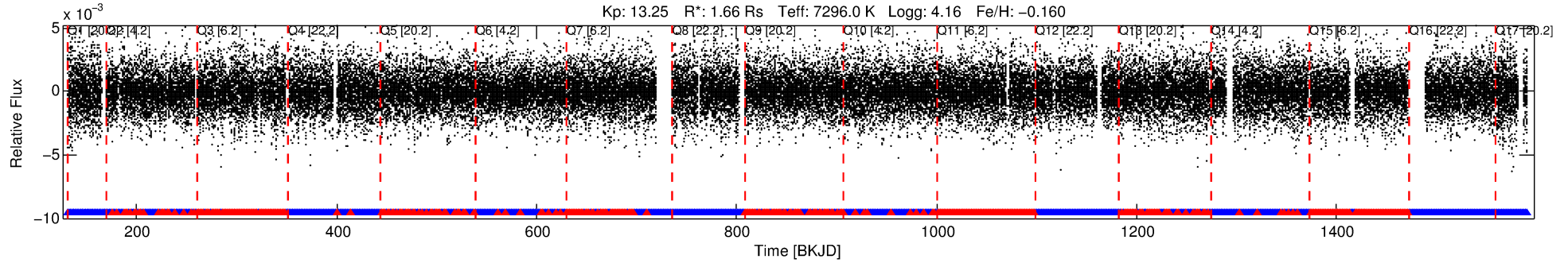
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006230921-01

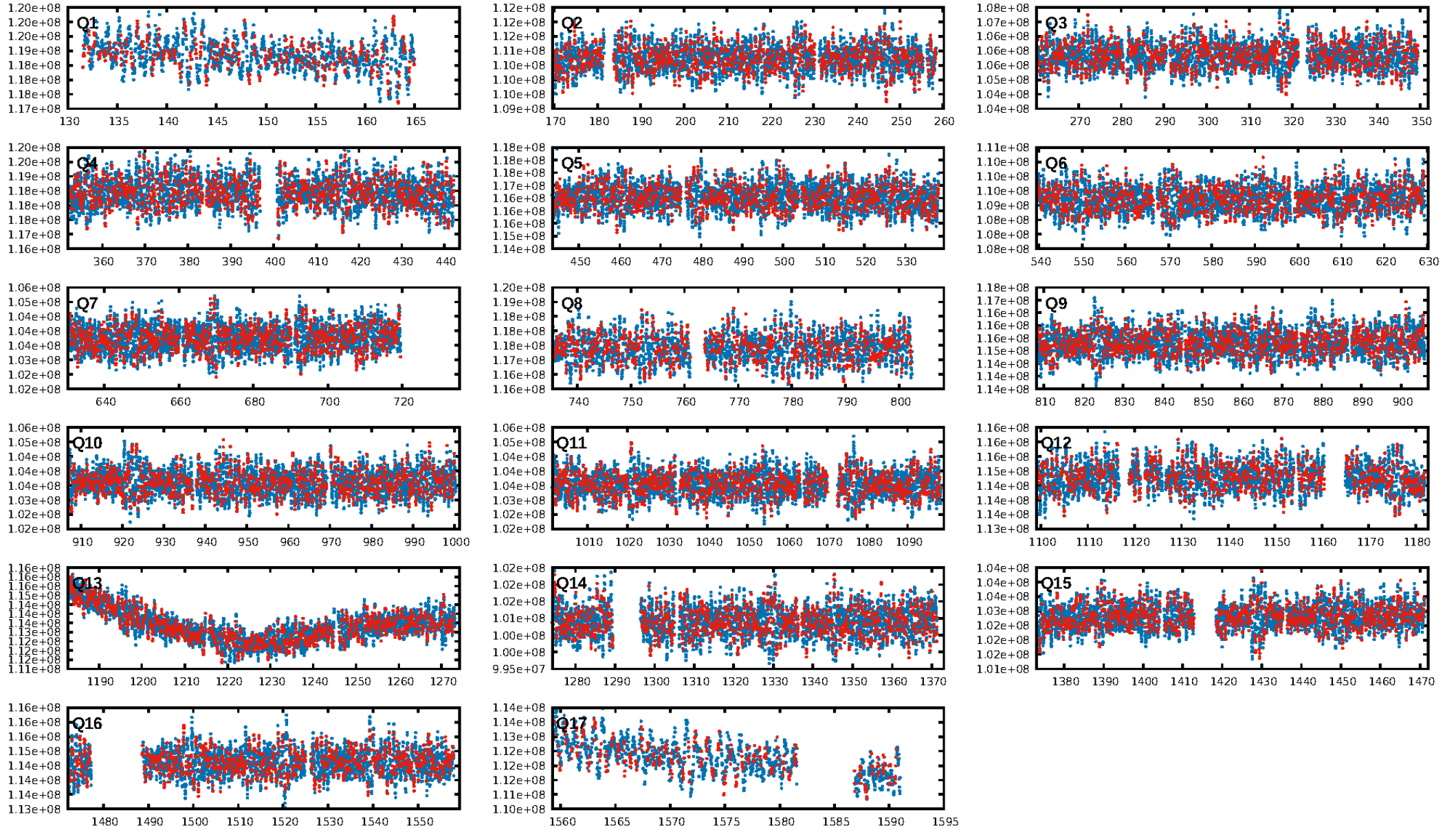
No Significant Match Found

DV One-Page Summary

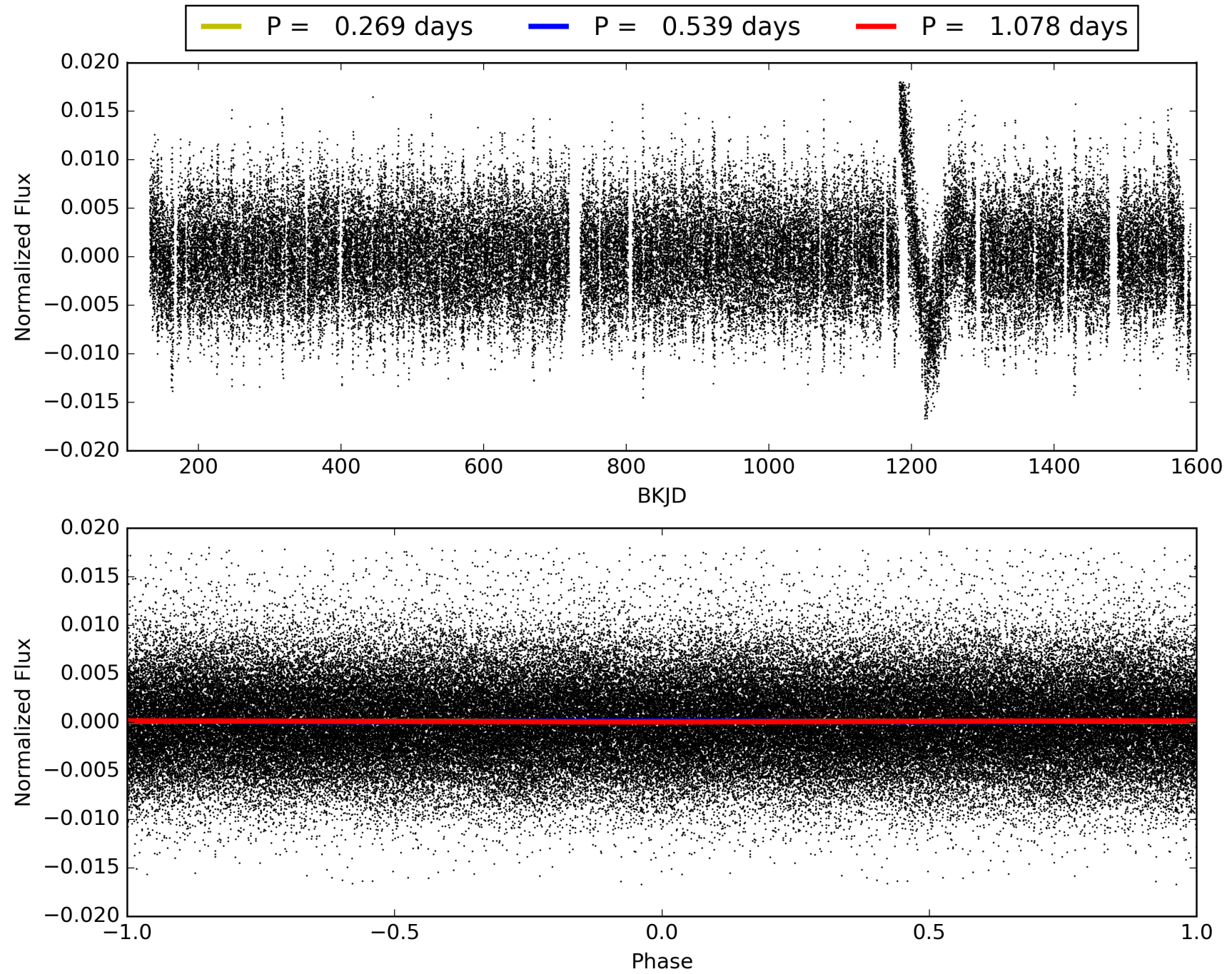
KIC: 6230921 Candidate: 1 of 3 Period: 0.539 d



TCE 006230921-01, PDC Light Curves

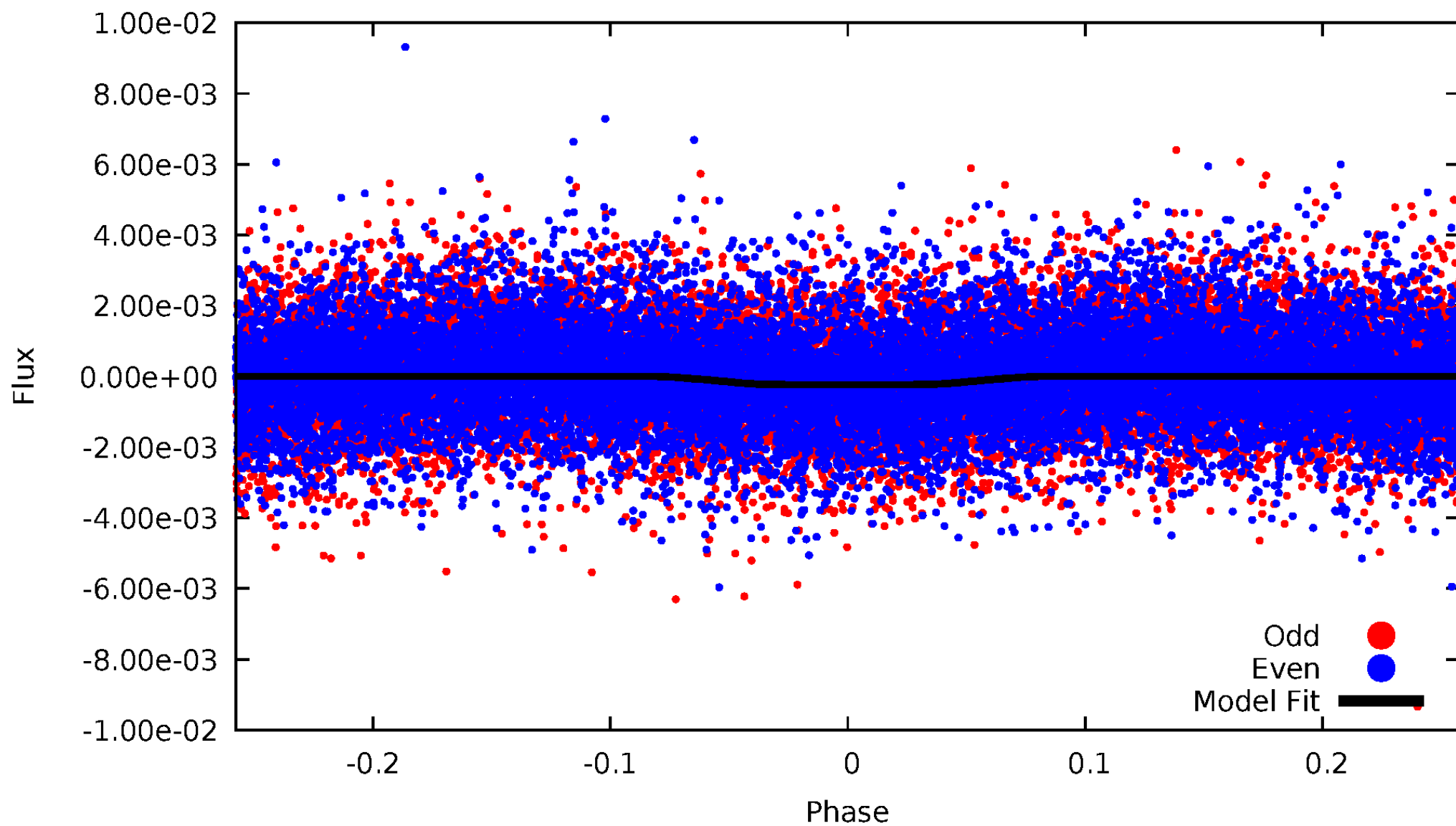


TCE 006230921-01



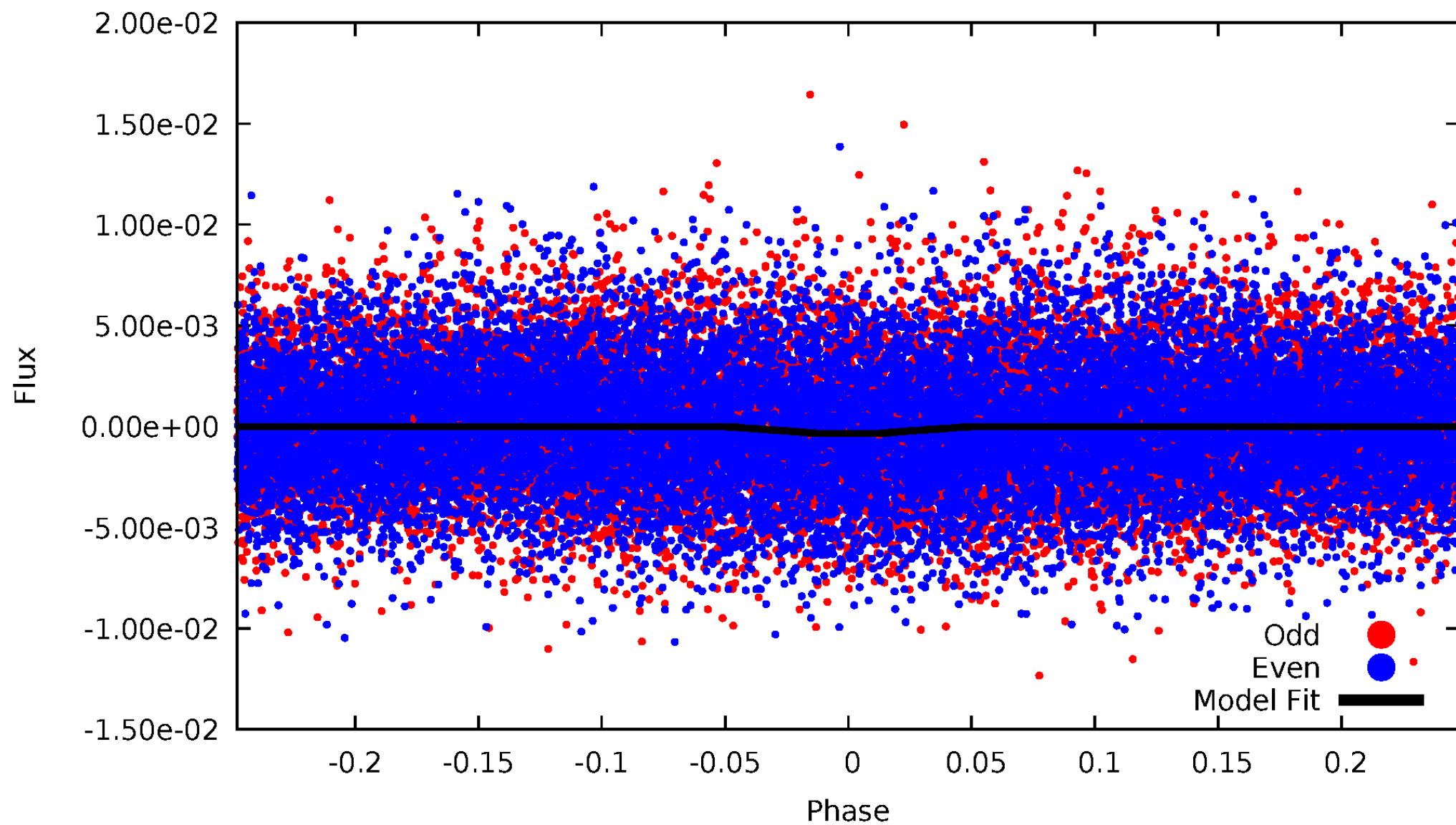
DV Odd/Even

TCE 006230921-01



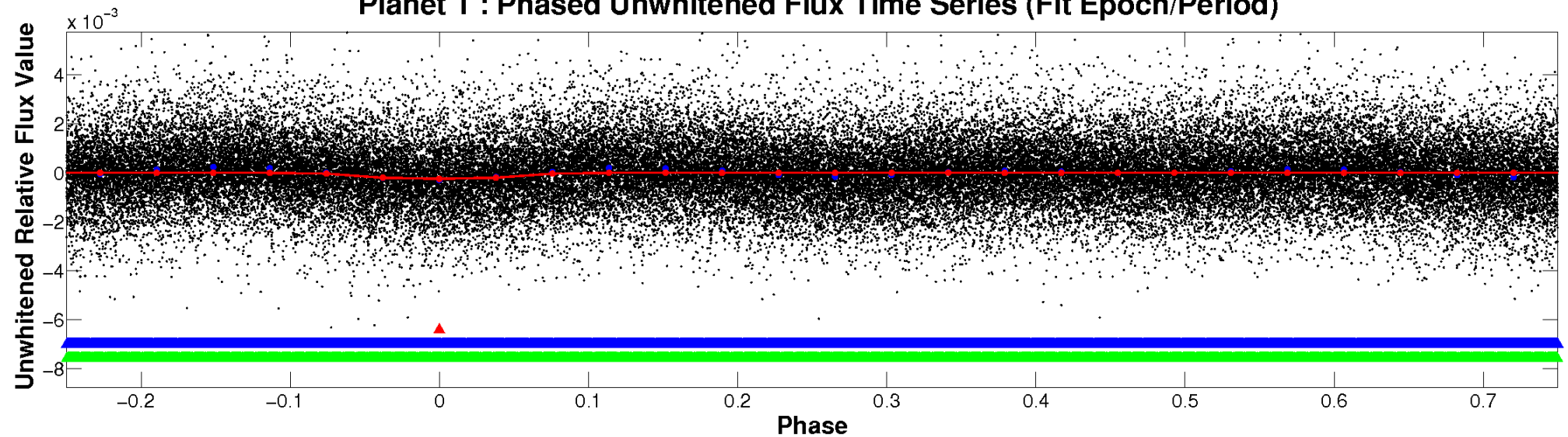
ALT Odd/Even

TCE 006230921-01

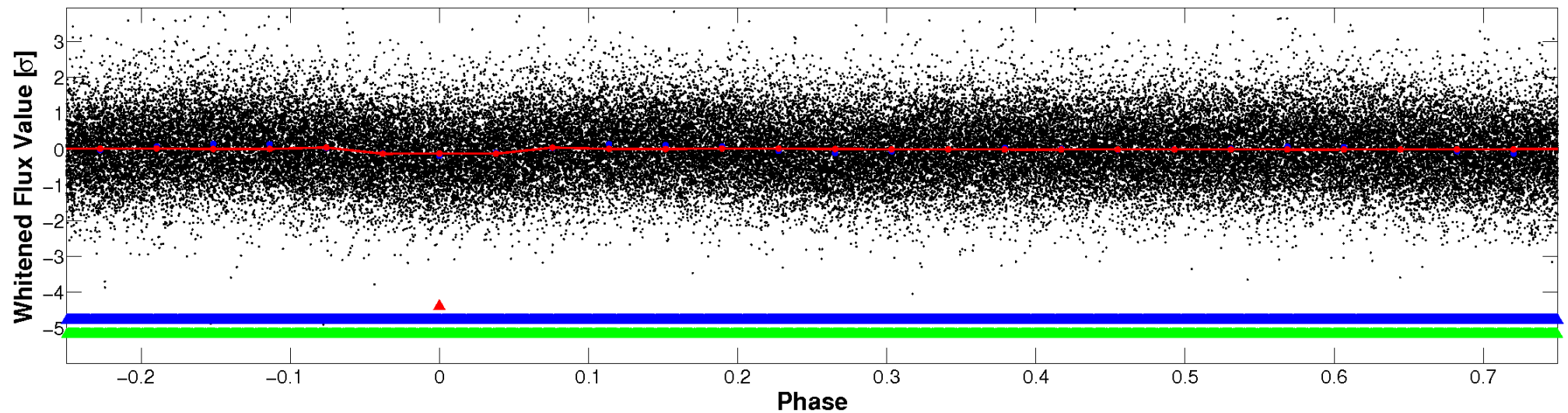


Non-Whitened Vs. Whitened Light Curve

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

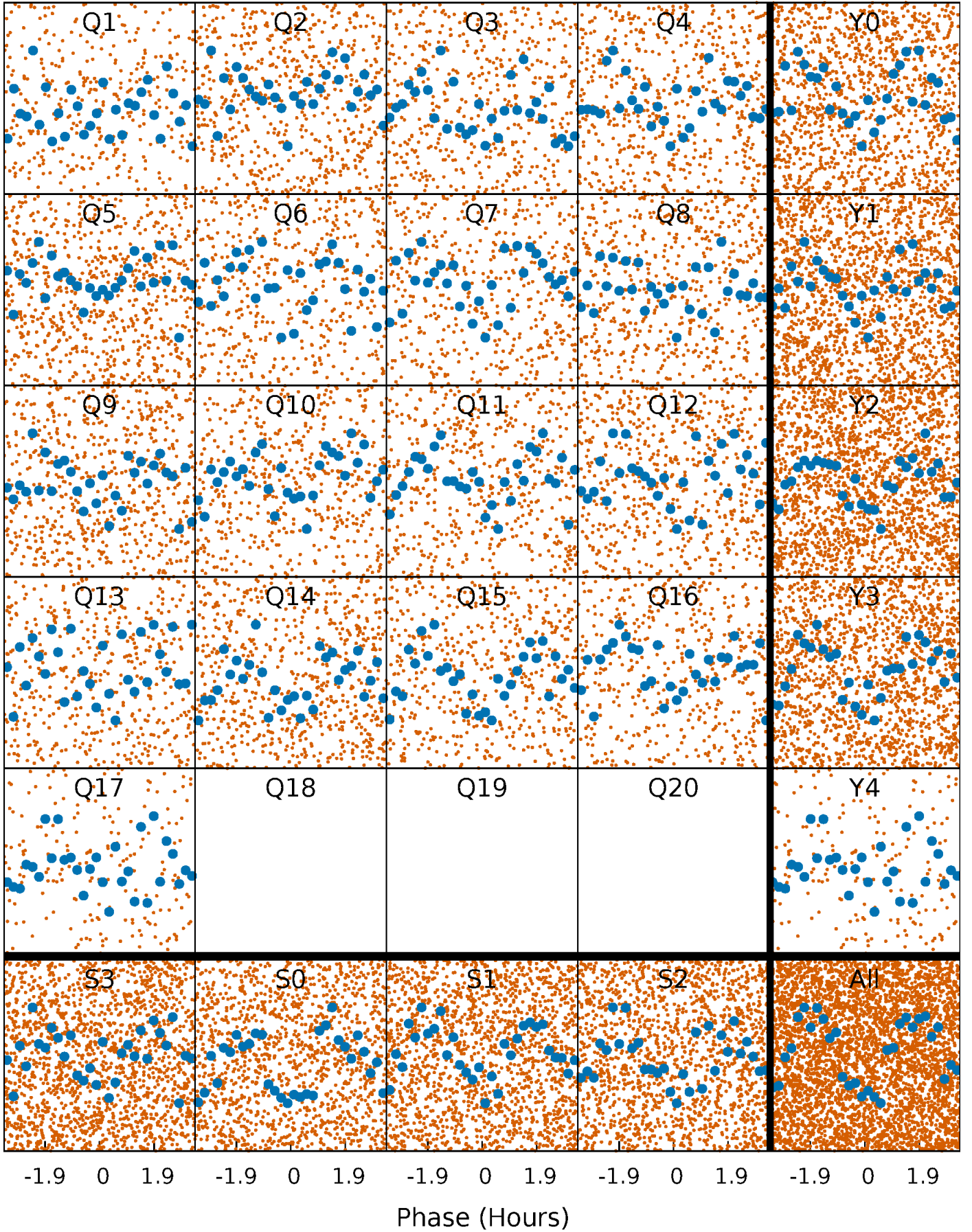


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



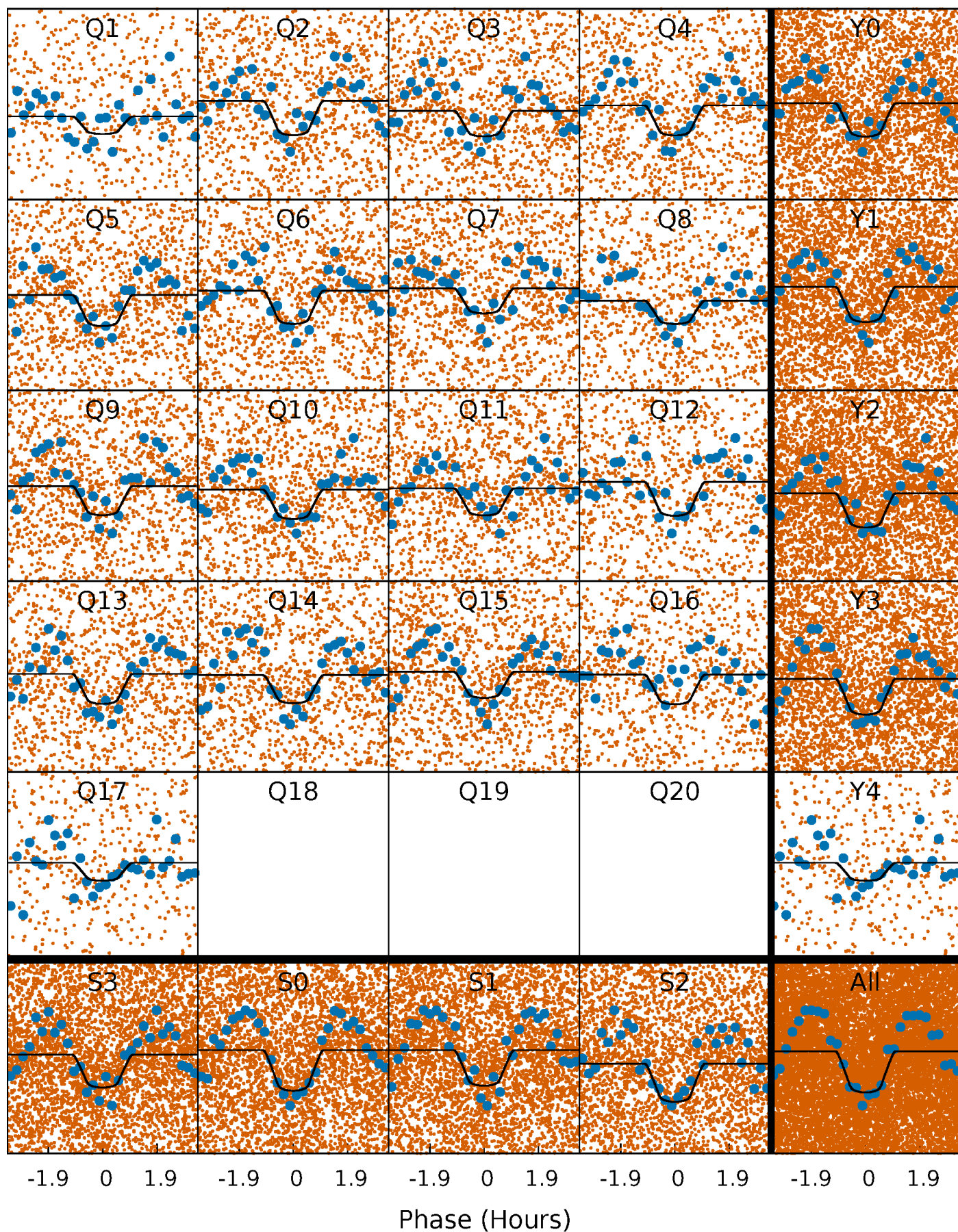
PDC Quarter-Phased Transit Curves

TCE 006230921-01 P= 0.538974 Days $T_0=131.590503$ (BKJD)



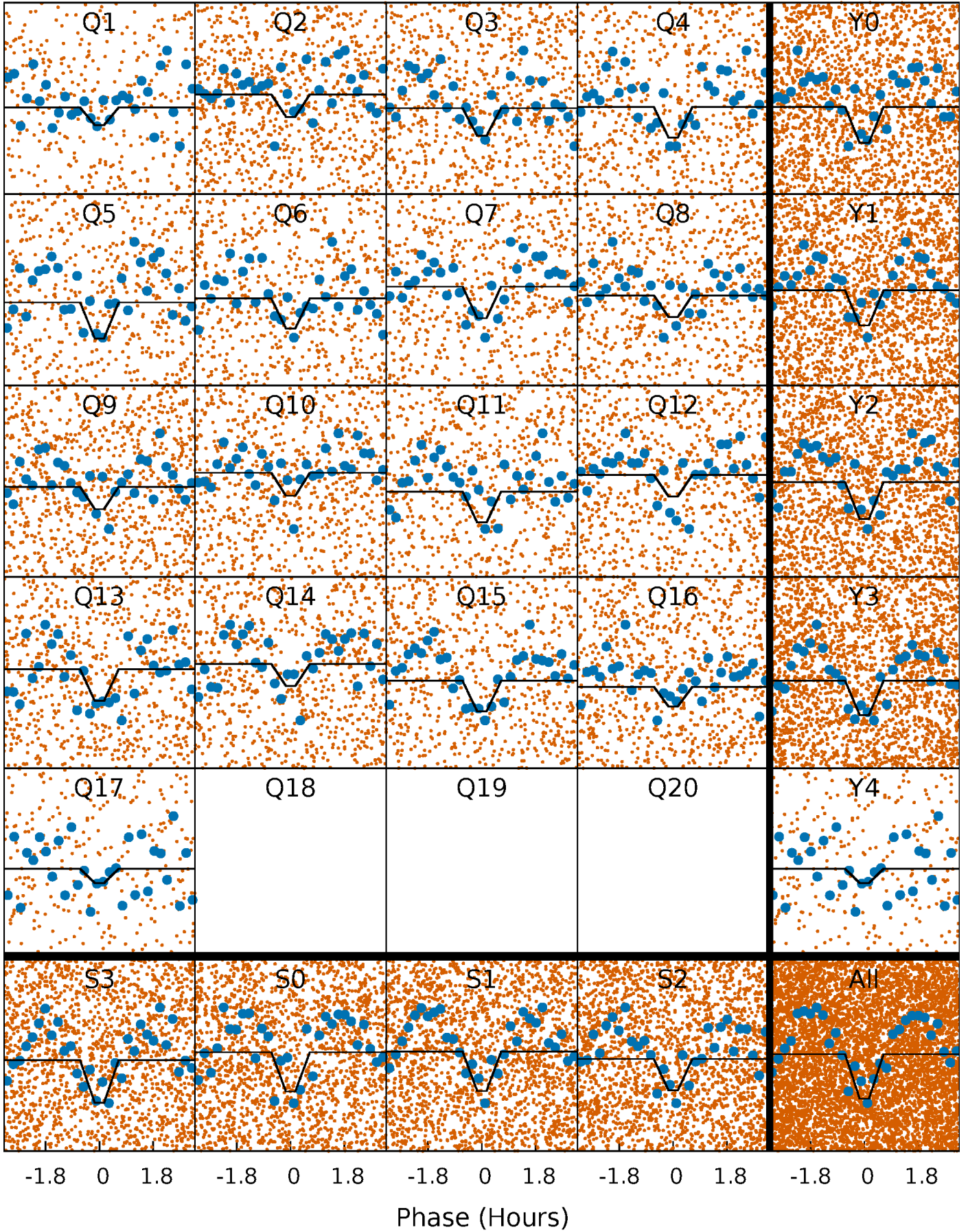
DV Quarter-Phased Transit Curves

TCE 006230921-01 P= 0.538974 Days $T_0=131.590503$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

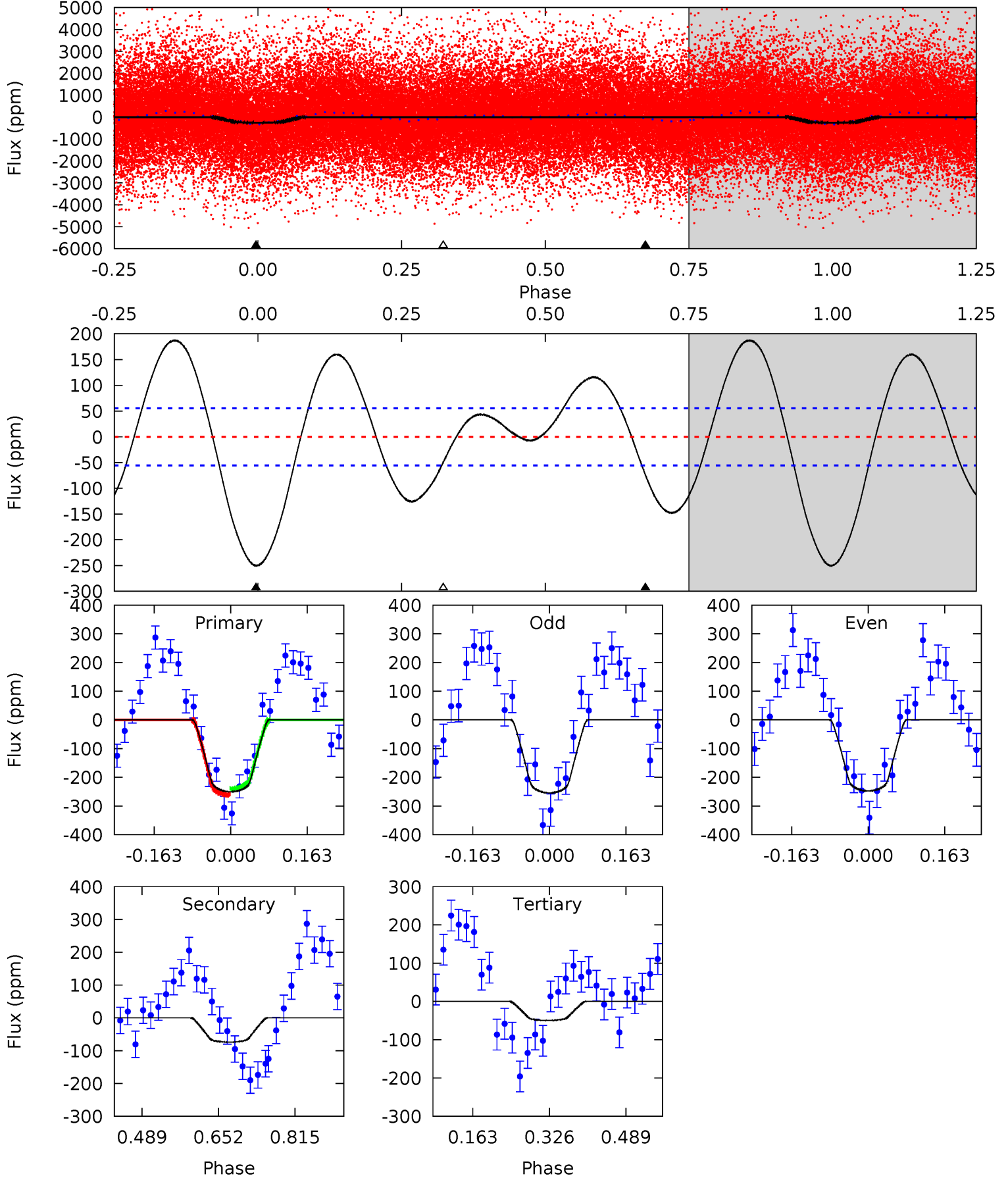
TCE 006230921-01 P= 0.538976 Days $T_0=131.587300$ (BKJD)



DV Model-Shift Uniqueness Test

006230921-01, P = 0.538974 Days, E = 131.051529 Days

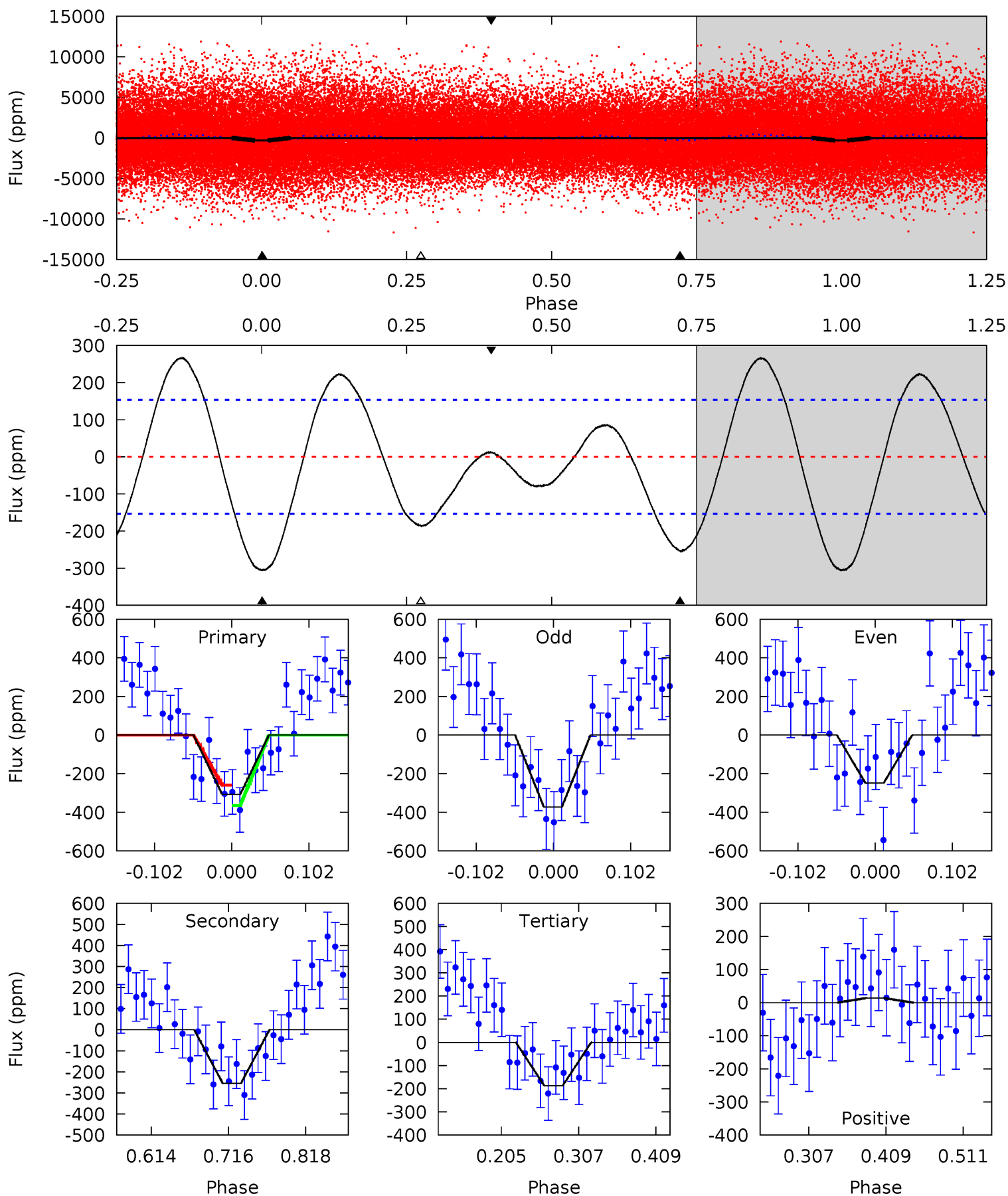
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.1	5.95	3.99	0	4.46	1.40	5.15	16.1	20.1	1.96	5.95	0.28	1.00	0.43	0.79



Alt Model-Shift Uniqueness Test

006230921-01, P = 0.538976 Days, E = 131.048324 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.14	7.58	5.58	0.41	4.56	1.63	3.87	3.56	8.73	2.00	7.18	1.85	0.61	0.47	1.57



Stellar Parameters For KIC 006230921

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7296^{+232}_{-348}	$4.161^{+0.128}_{-0.192}$	$-0.160^{+0.250}_{-0.350}$	$1.663^{+0.512}_{-0.341}$	$1.460^{+0.211}_{-0.234}$	$0.447^{+0.288}_{-0.235}$
	+3%/-5%	+3%/-5%	+156%/-219%	+31%/-21%	+14%/-16%	+64%/-53%
Source	PHO1	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 006230921-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-74 ± 12	$3.03^{+0.74}_{-0.67}$	4807^{+376}_{-335}	4801^{+653}_{-640}	$0.936^{+0.587}_{-0.357}$
Alt.	-255 ± 34	$3.45^{+0.80}_{-0.70}$	4818^{+376}_{-302}	6435^{+814}_{-642}	$2.576^{+1.305}_{-0.939}$

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 $A_{obs} \gg 1.0$

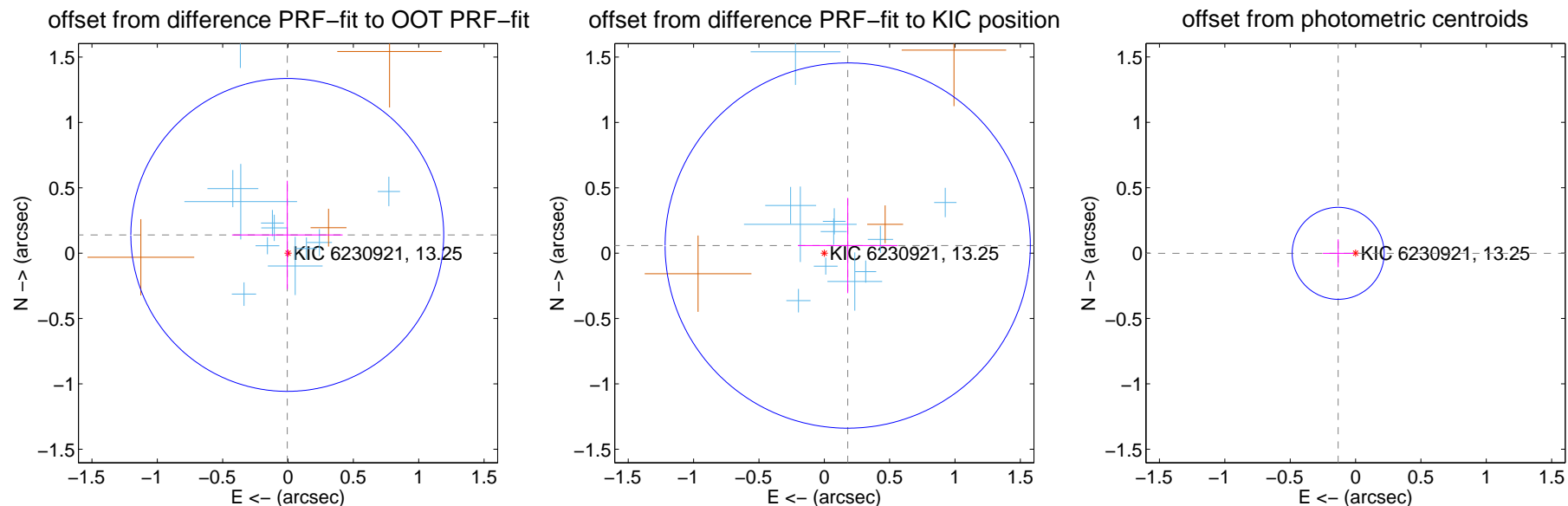
DV Centroid Data

Supplemental centroid analysis for 006230921-01. Kepler magnitude: 13.25. Transit SNR 11.61

There are 11 quarters with good PRF difference image offsets

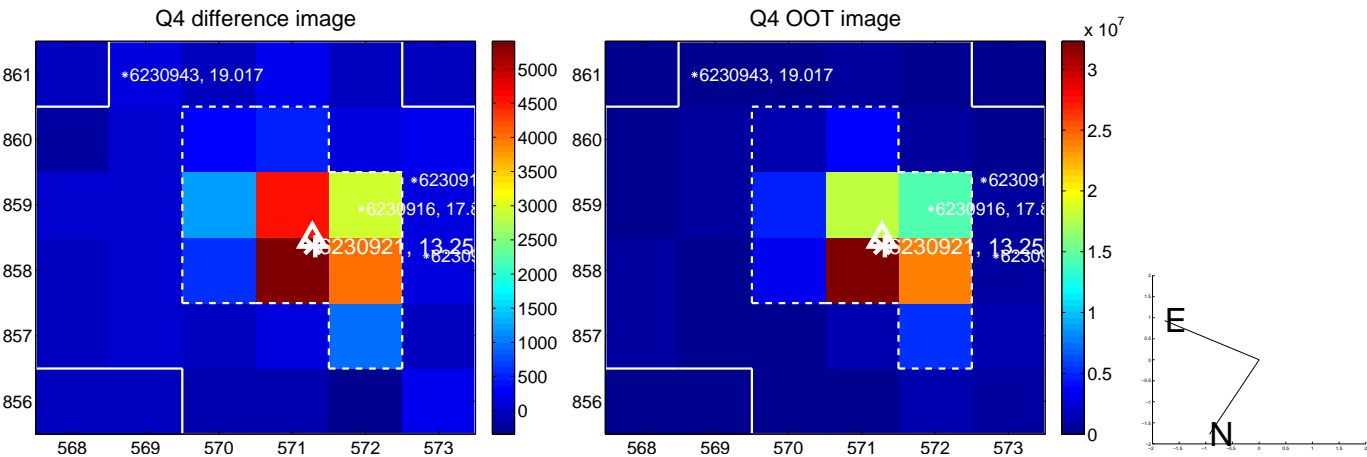
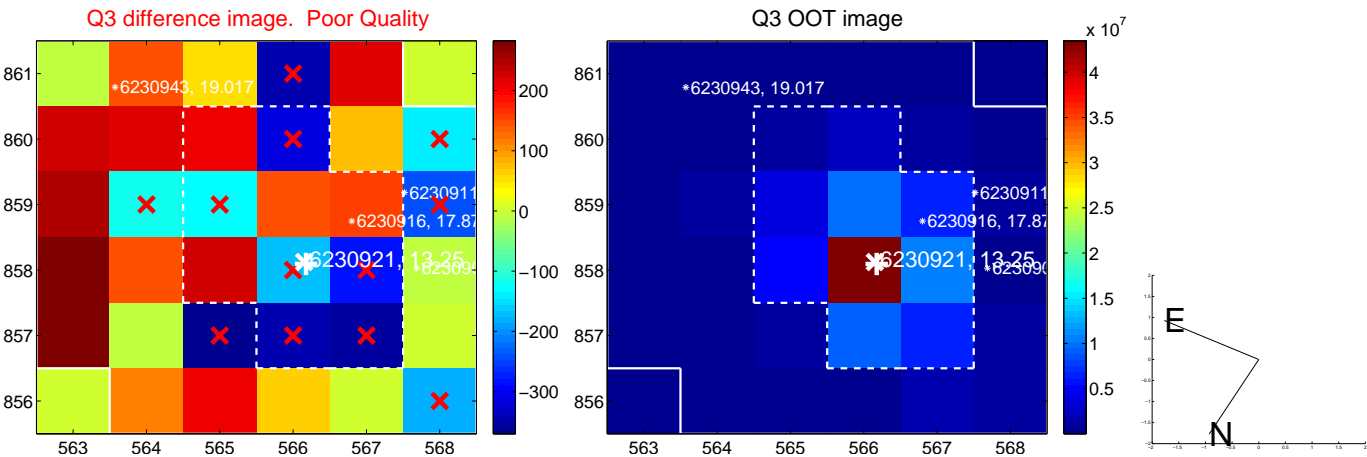
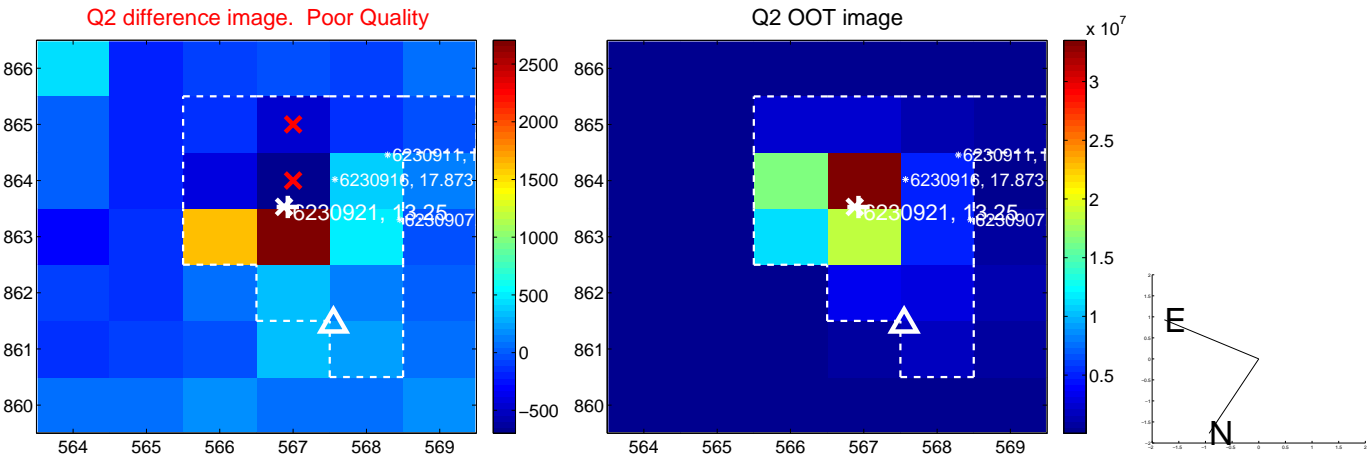
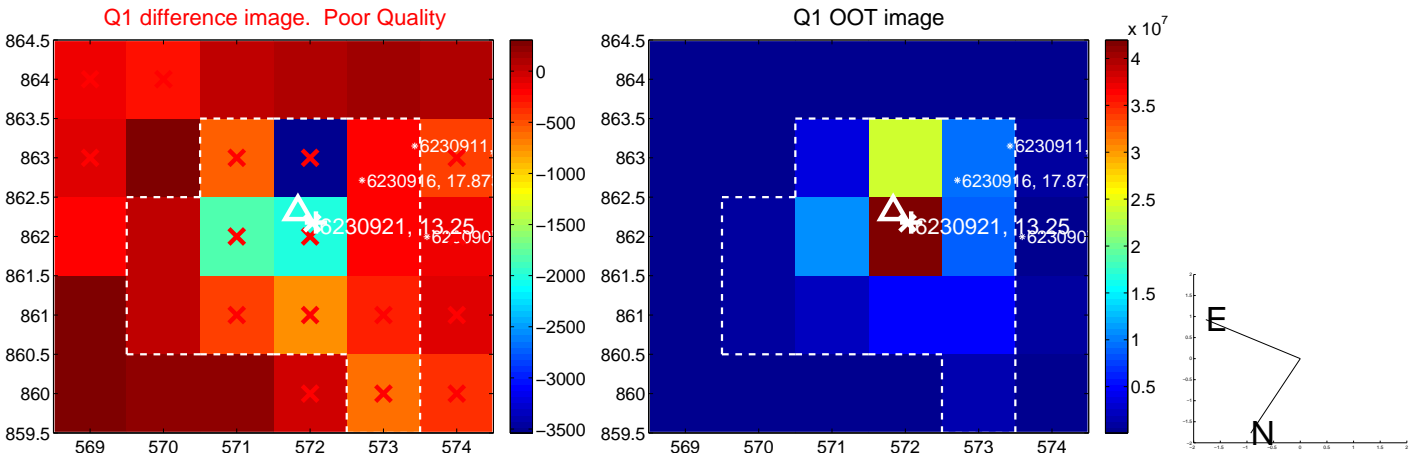
The direct PRF centroid is offset from the target star catalog position by about 0.25 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.140 ± 0.399	0.35	0.006 ± 0.423	0.139 ± 0.414
PRF-fit source offset from KIC position	0.188 ± 0.466	0.40	-0.179 ± 0.382	0.058 ± 0.364
photometric centroid source offset	0.13 ± 0.12	1.13	0.13 ± 0.12	-0.00 ± 0.11

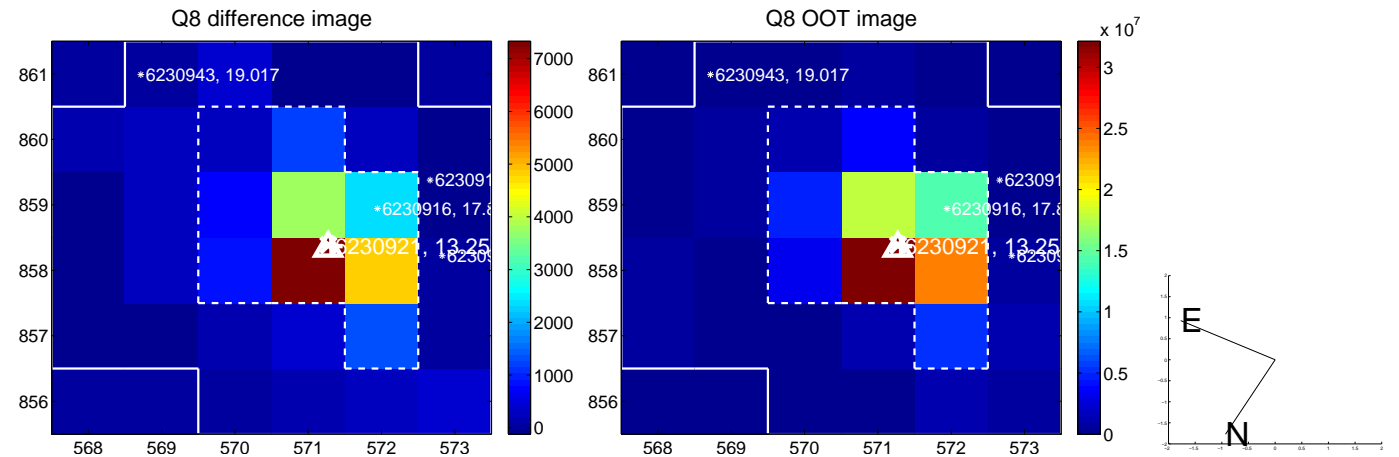
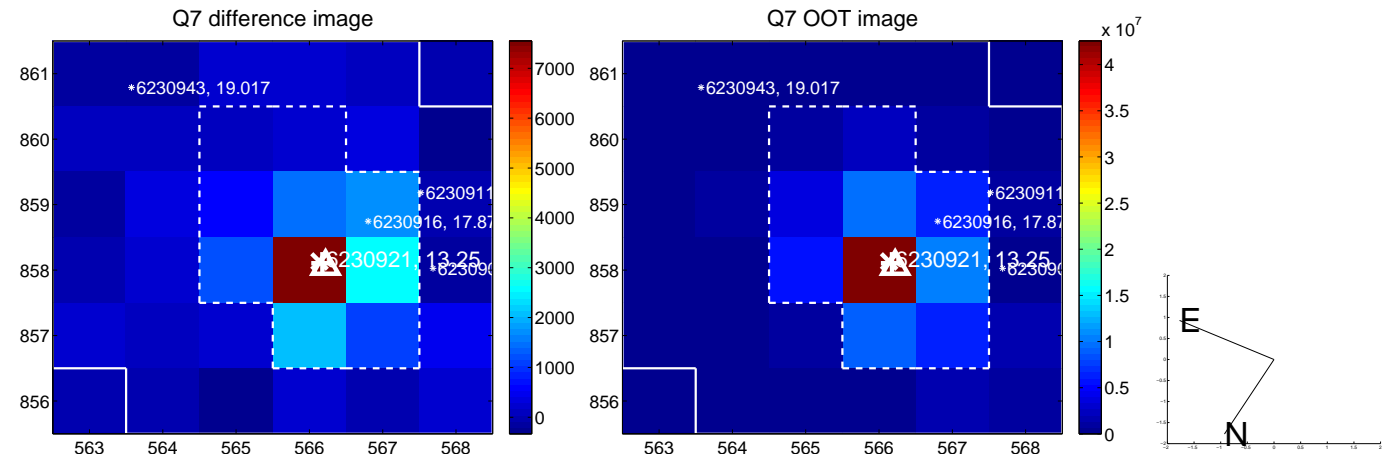
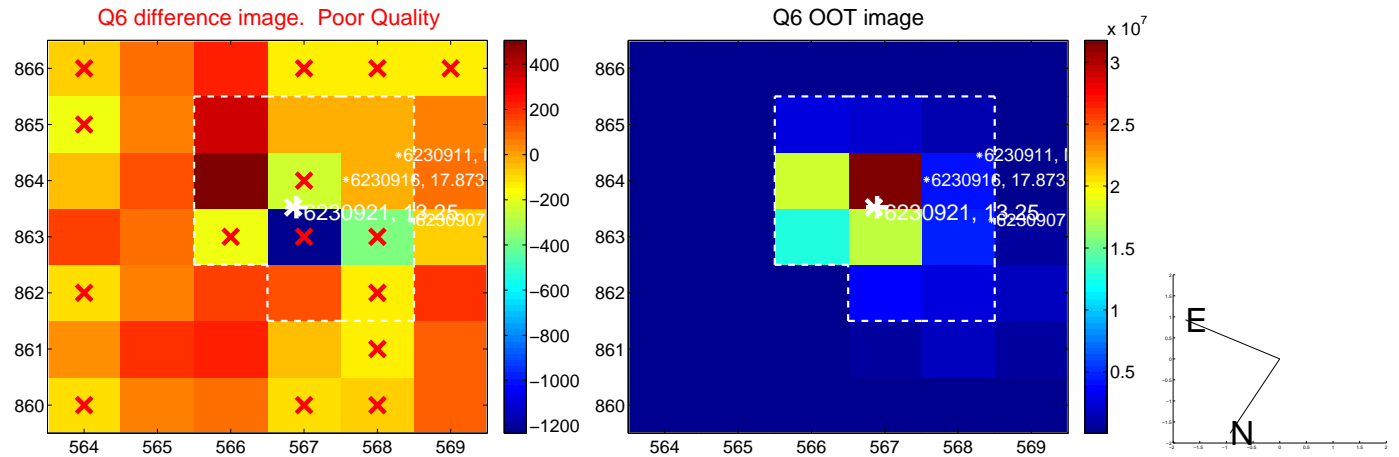
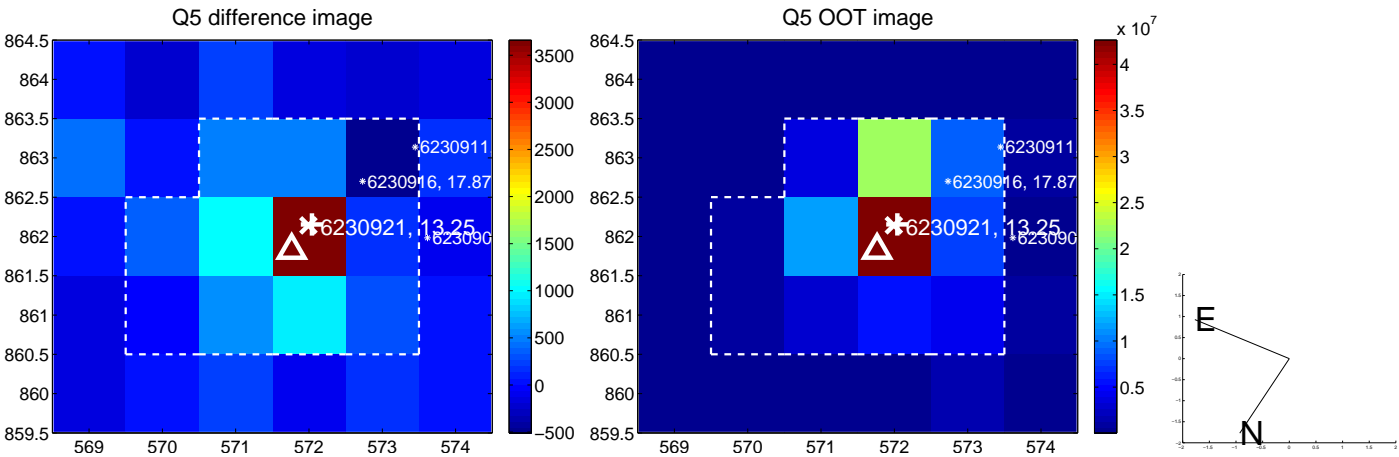


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

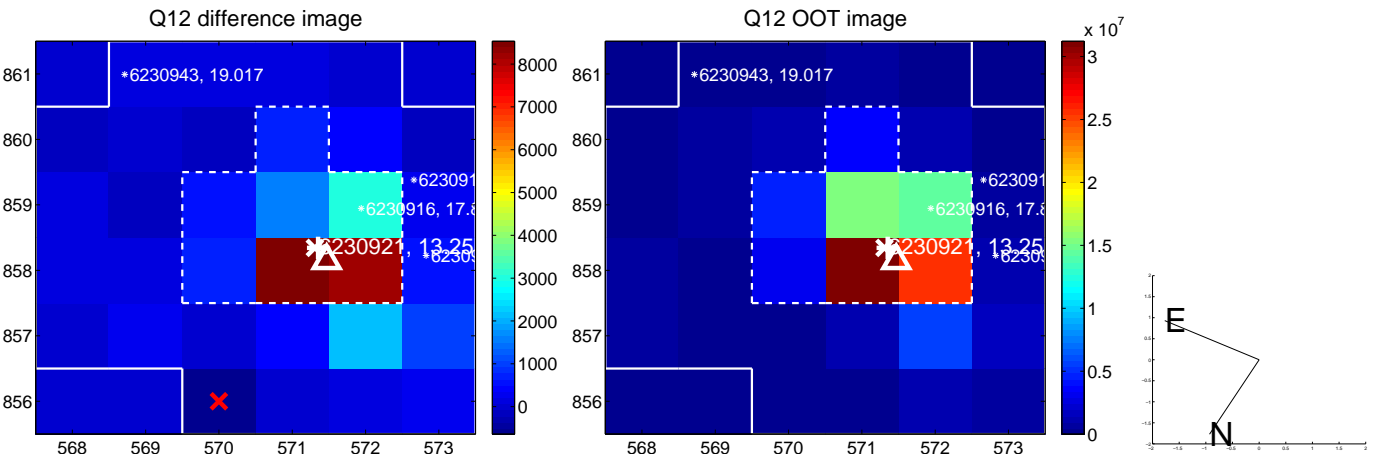
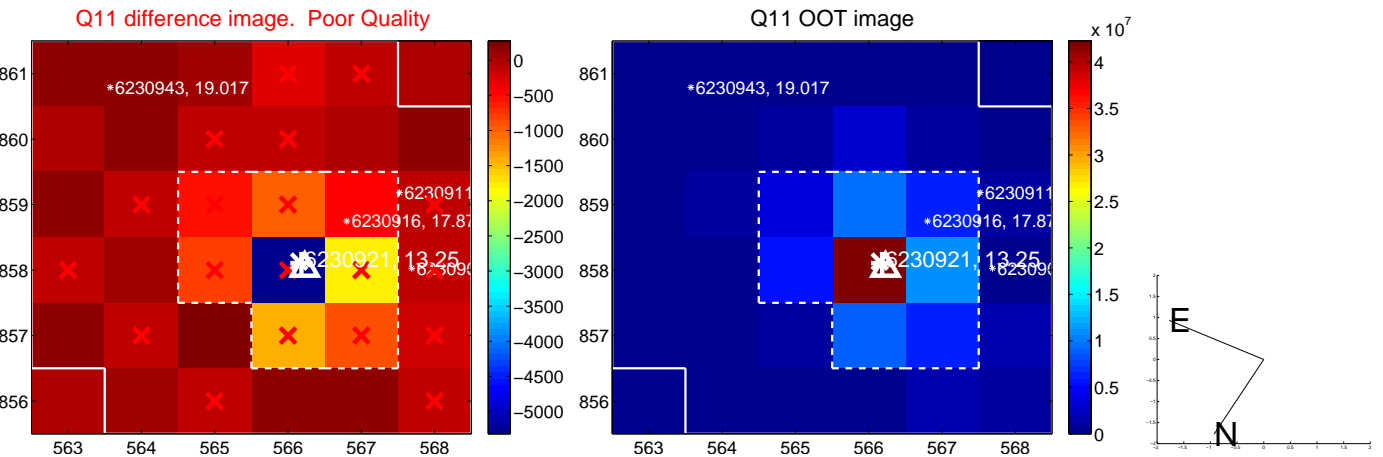
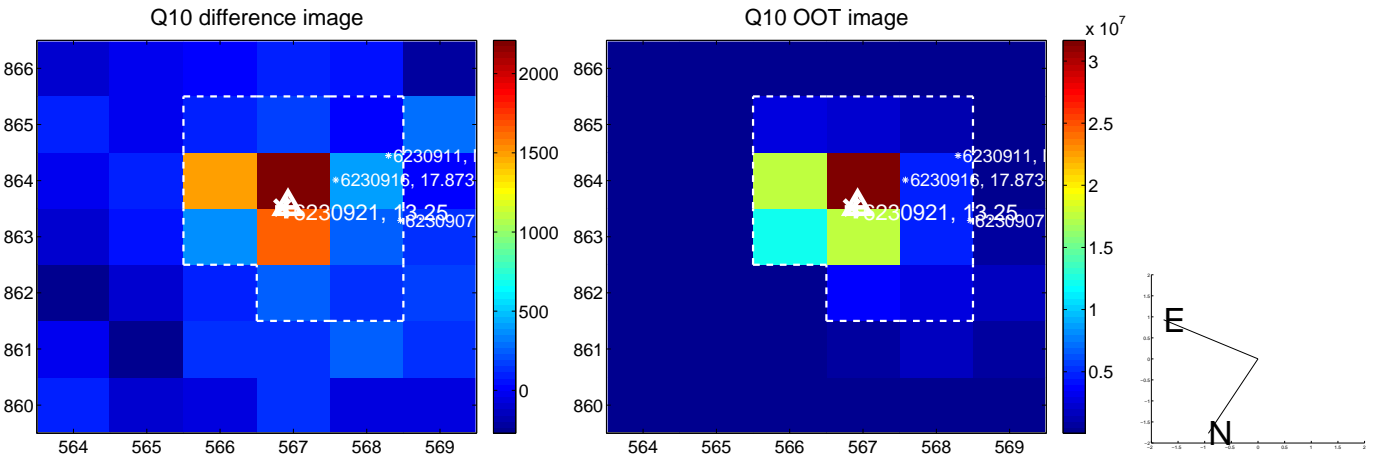
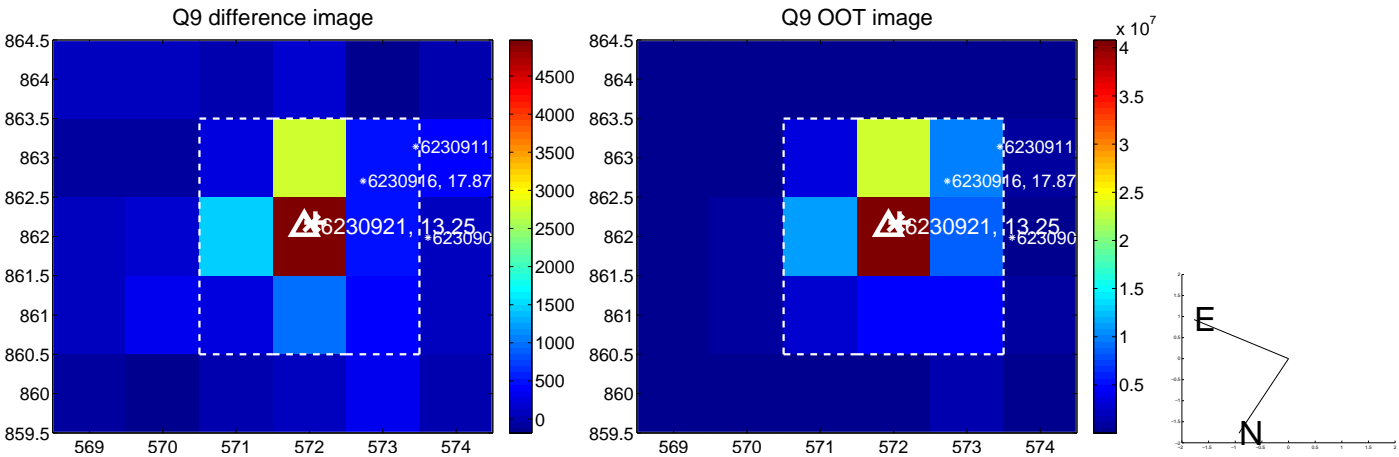
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



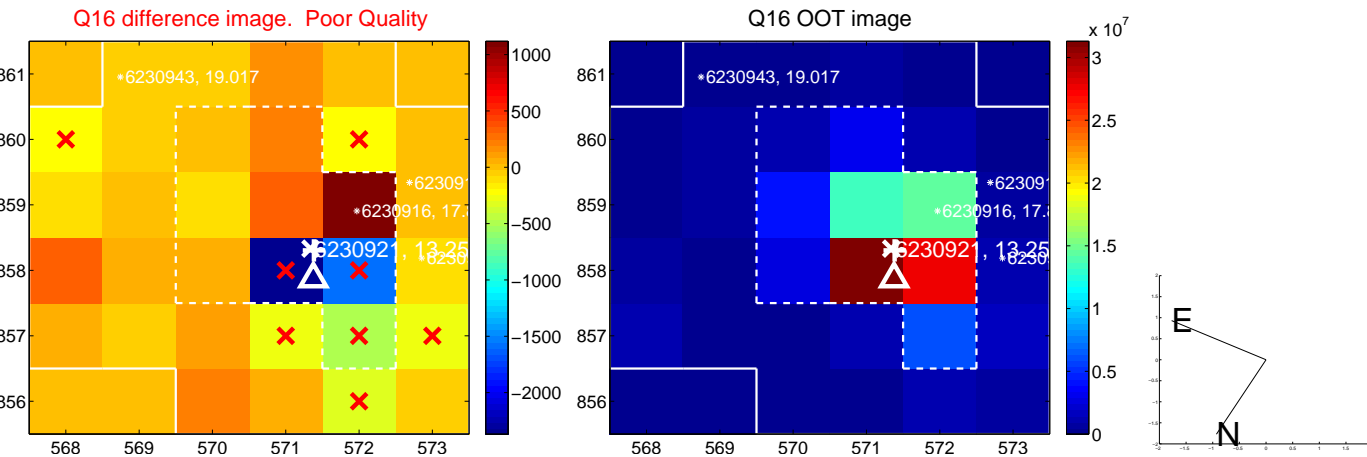
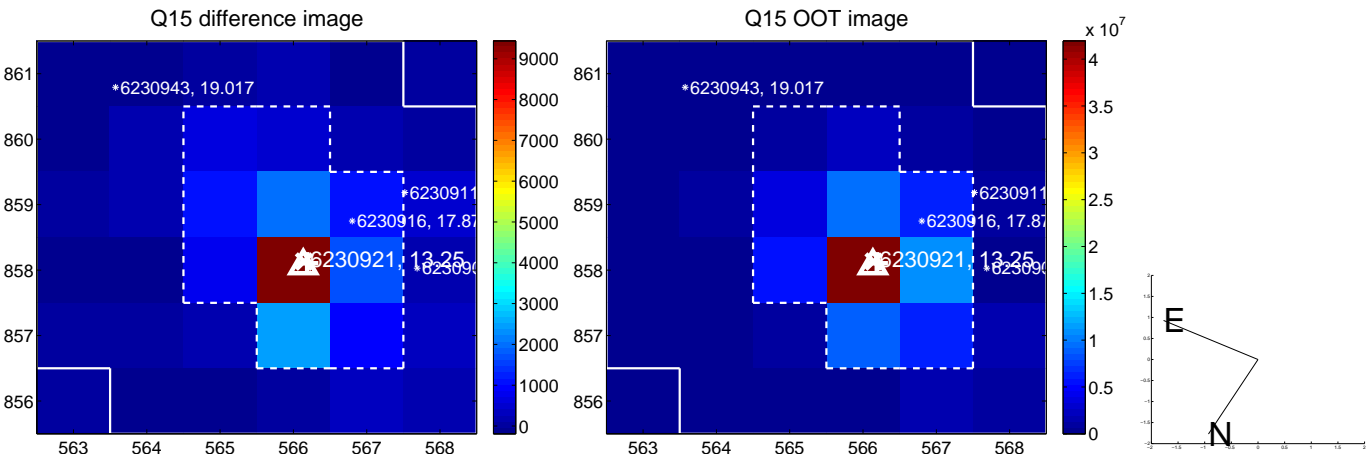
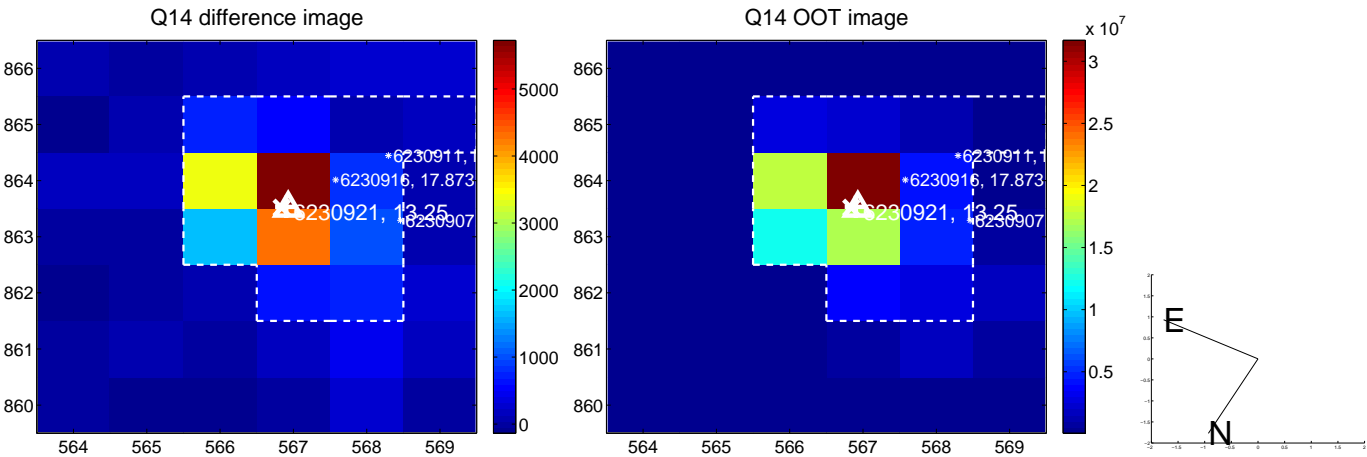
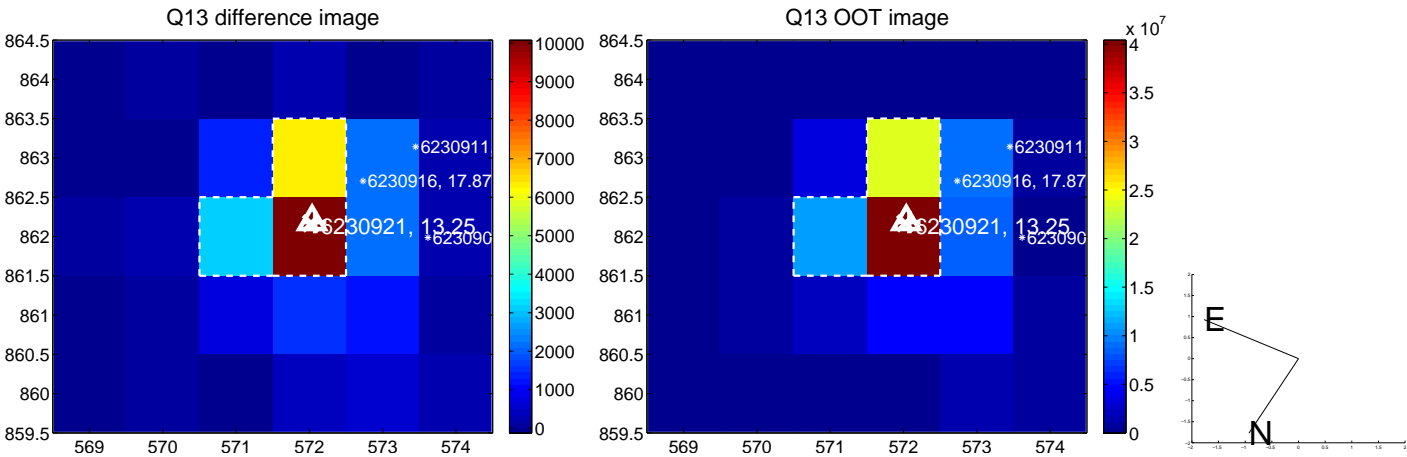
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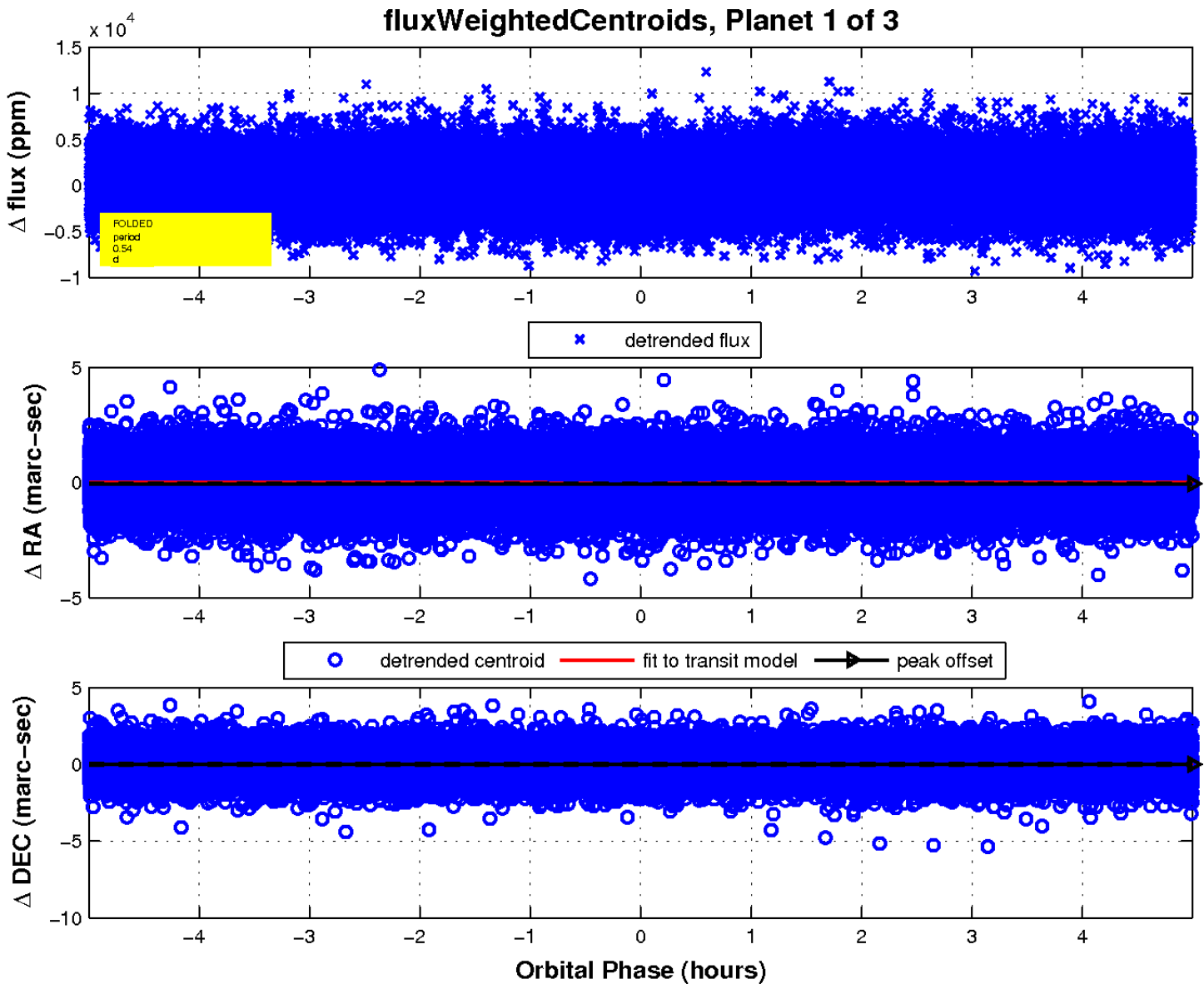
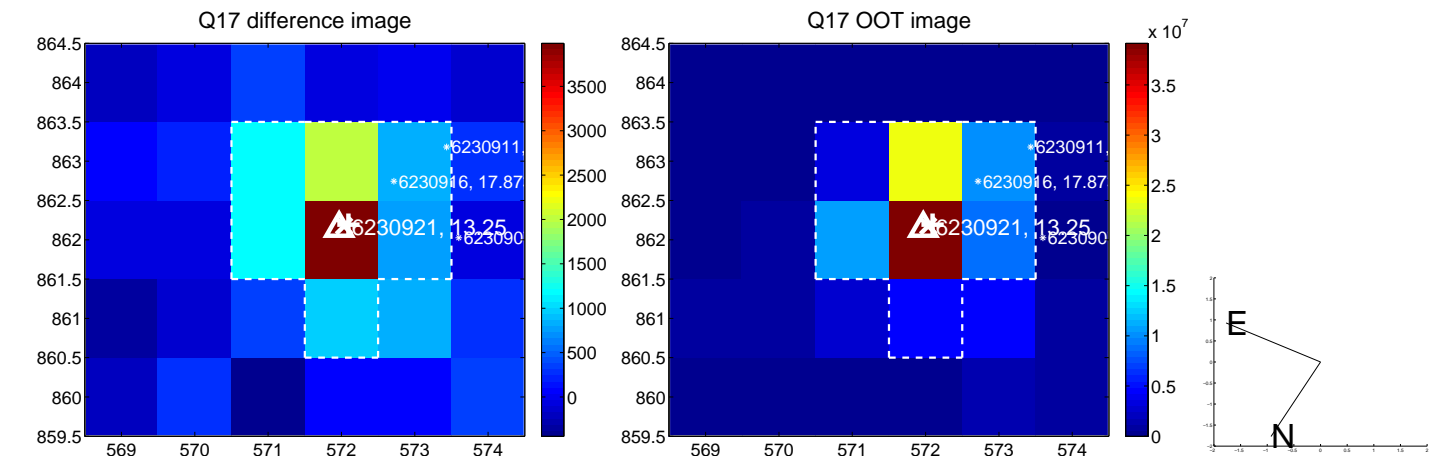
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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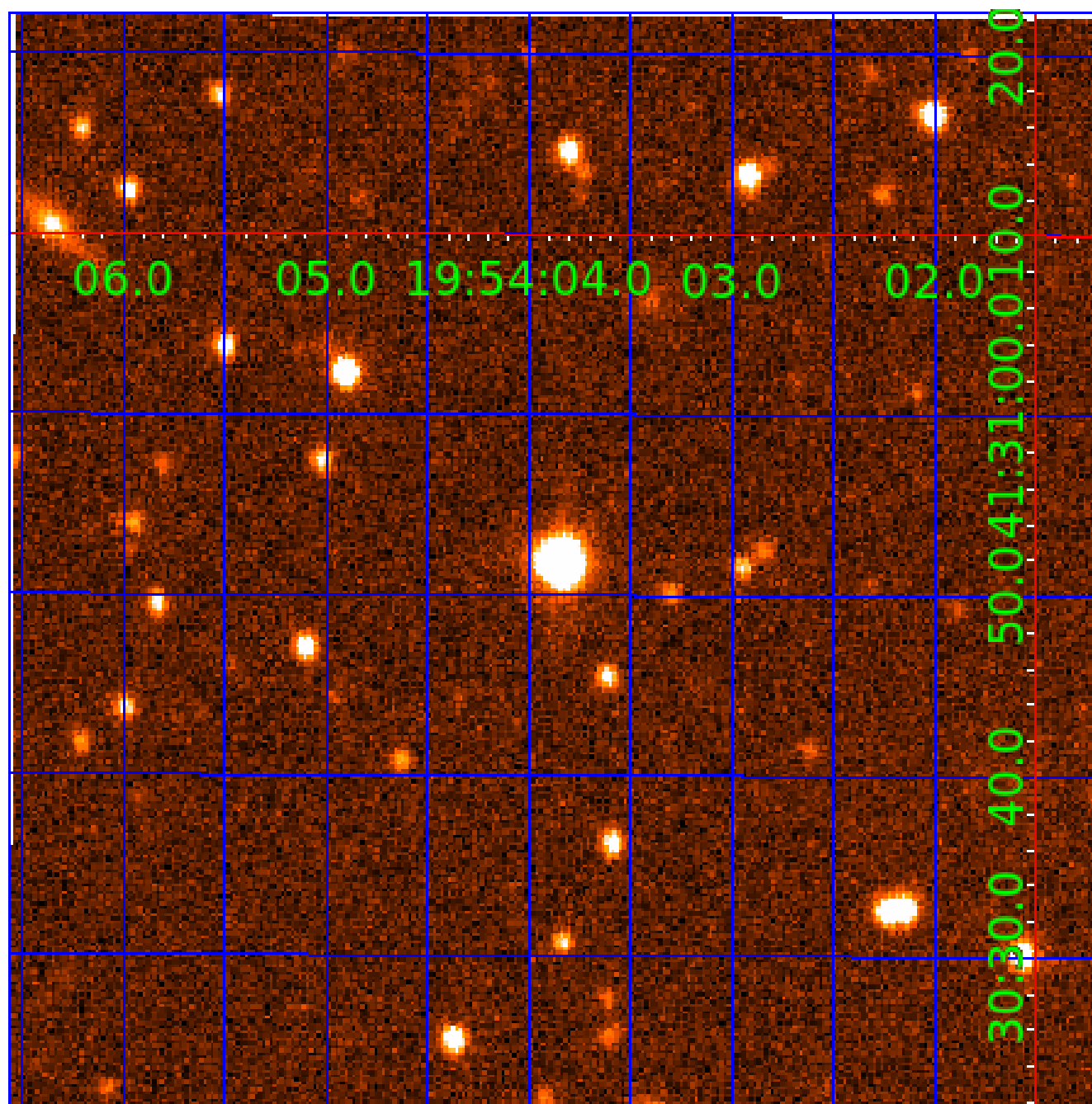


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006230921

Q1-17 DR25 TCE Parameters

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

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006230921-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
006230921-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—HALO_GHOST

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

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

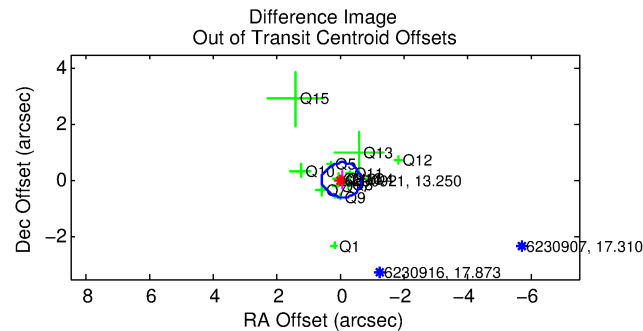
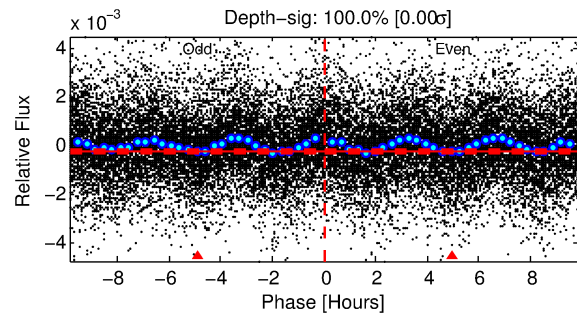
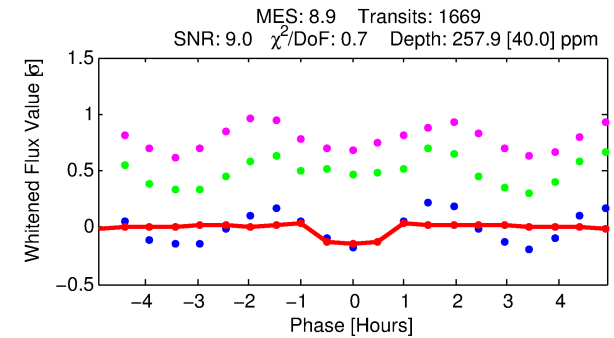
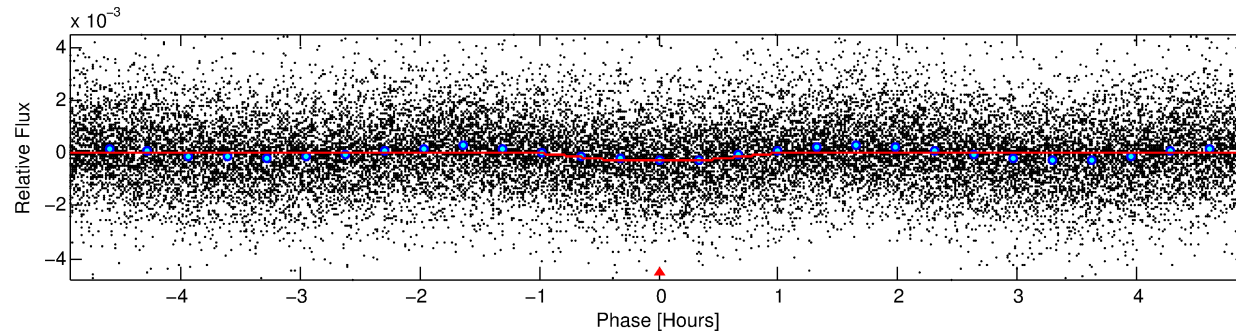
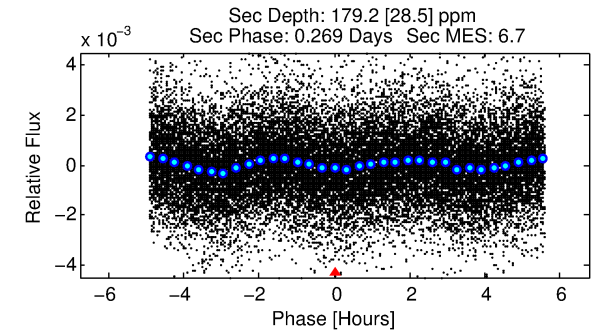
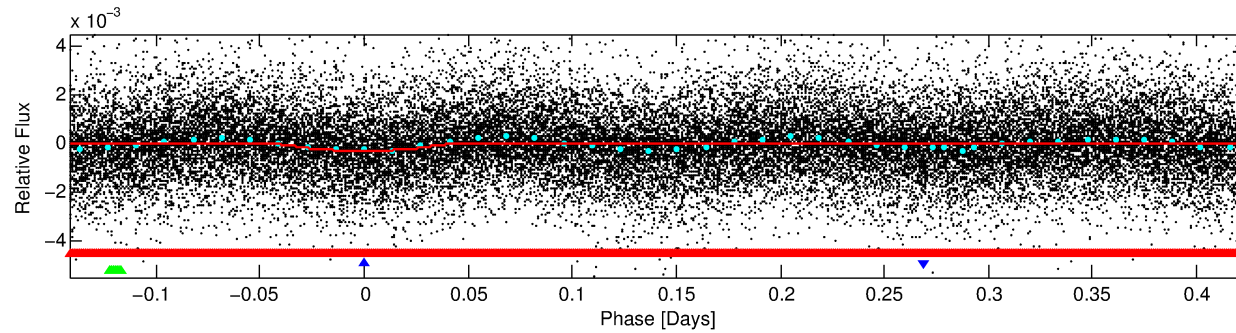
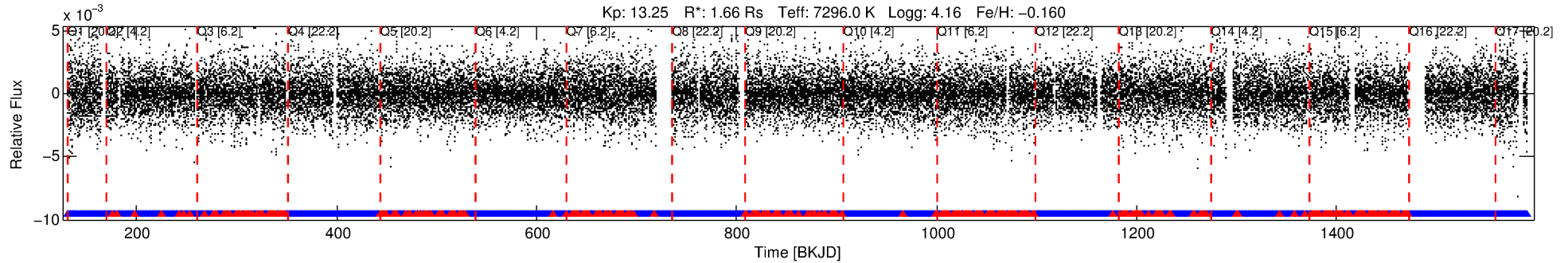
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006230921-02

No Significant Match Found

DV One-Page Summary

KIC: 6230921 Candidate: 2 of 3 Period: 0.566 d



DV Fit Results:

Period = 0.56614 [0.00001] d
Epoch = 131.7948 [0.0015] BKJD
Rp/R* = 0.0170 [0.0050]
a/R* = 1.60 [1.70]
b = 0.89 [0.41]
Seff = 30380.32 [12355.31]
Teq = 3366 [342] K
Rp = 3.08 [1.32] Re
a = 0.0152 [0.0038] AU
Ag = 2.40 [1.70] [0.82σ]
Teffp = 6476 [1038] K [2.84σ]

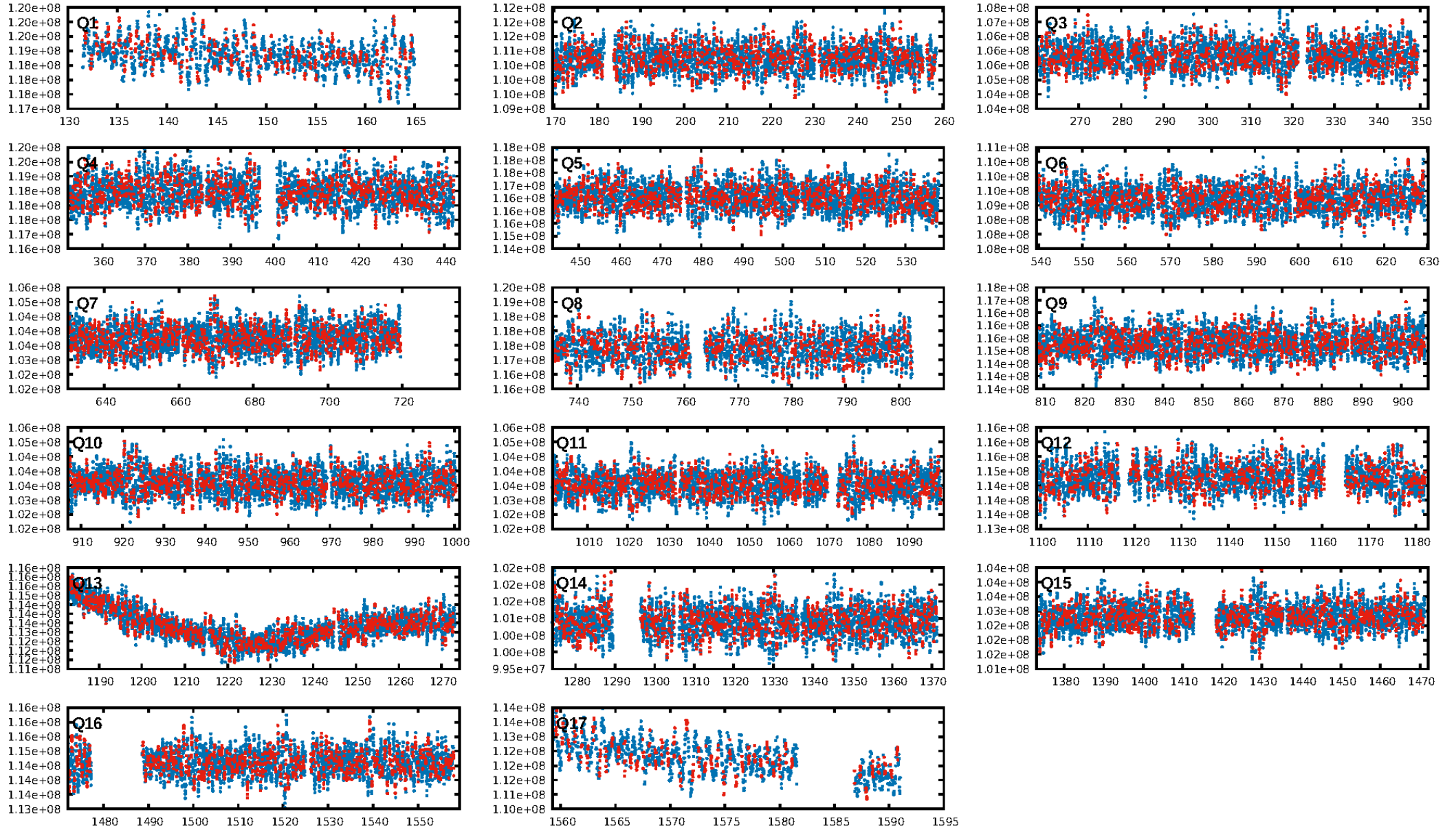
DV Diagnostic Results:

ShortPeriod-sig: 22.0% [0.28σ]
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.71 [1143/1600]
GhostDiagnostic-chr: 0.8644
Centroid-sig: 0.6%
Centroid-so: 0.198 arcsec [1.90σ]
OotOffset-rm: 0.044 arcsec [0.22σ]
KicOffset-rm: 0.220 arcsec [1.01σ]
OotOffset-st: 2/4/4/5 [15]
KicOffset-st: 2/4/4/5 [15]
DiffImageQuality-fgm: 0.60 [9/15]
DiffImageOverlap-fno: 0.00 [0/17]

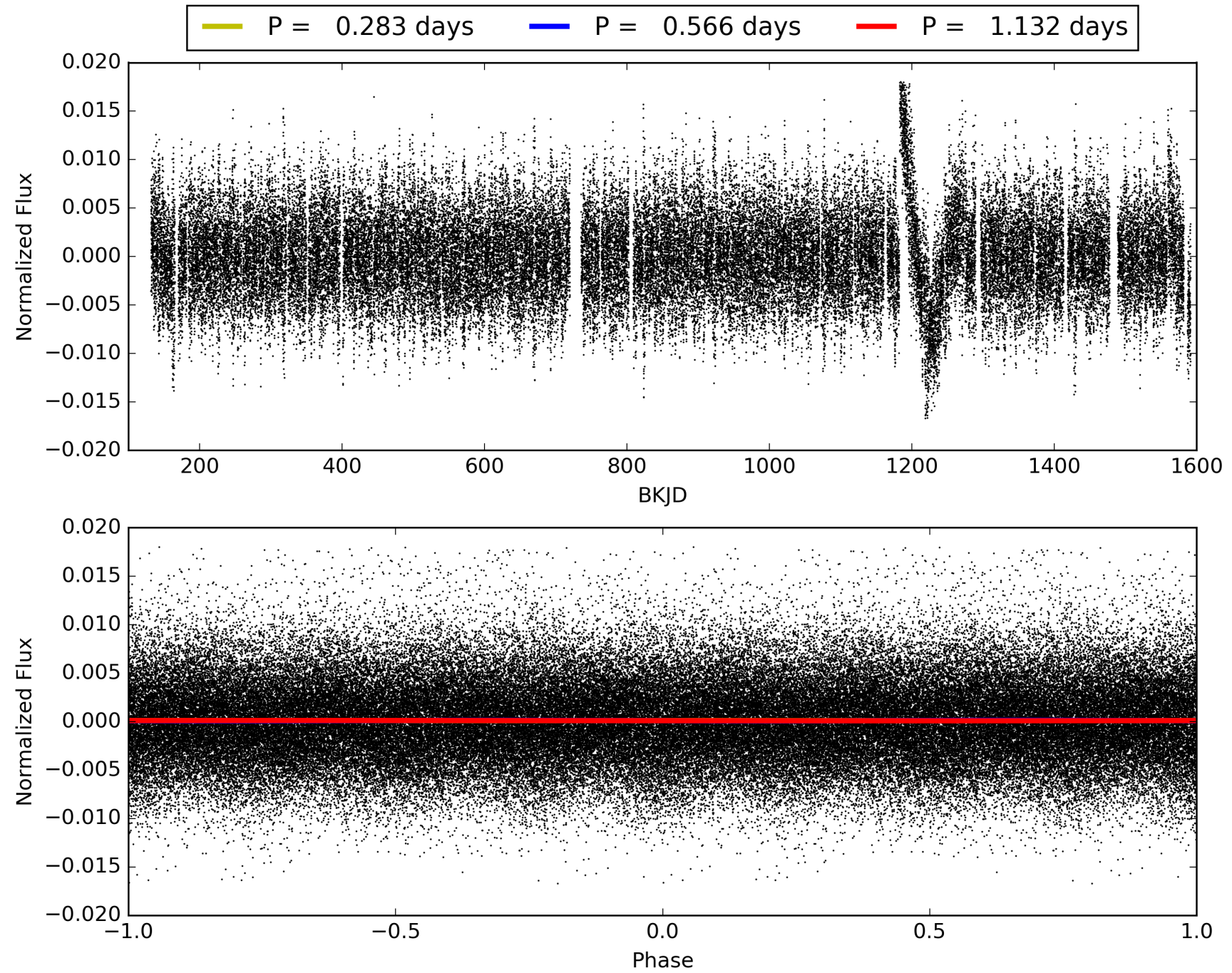
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 06:36:43 Z

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

TCE 006230921-02, PDC Light Curves

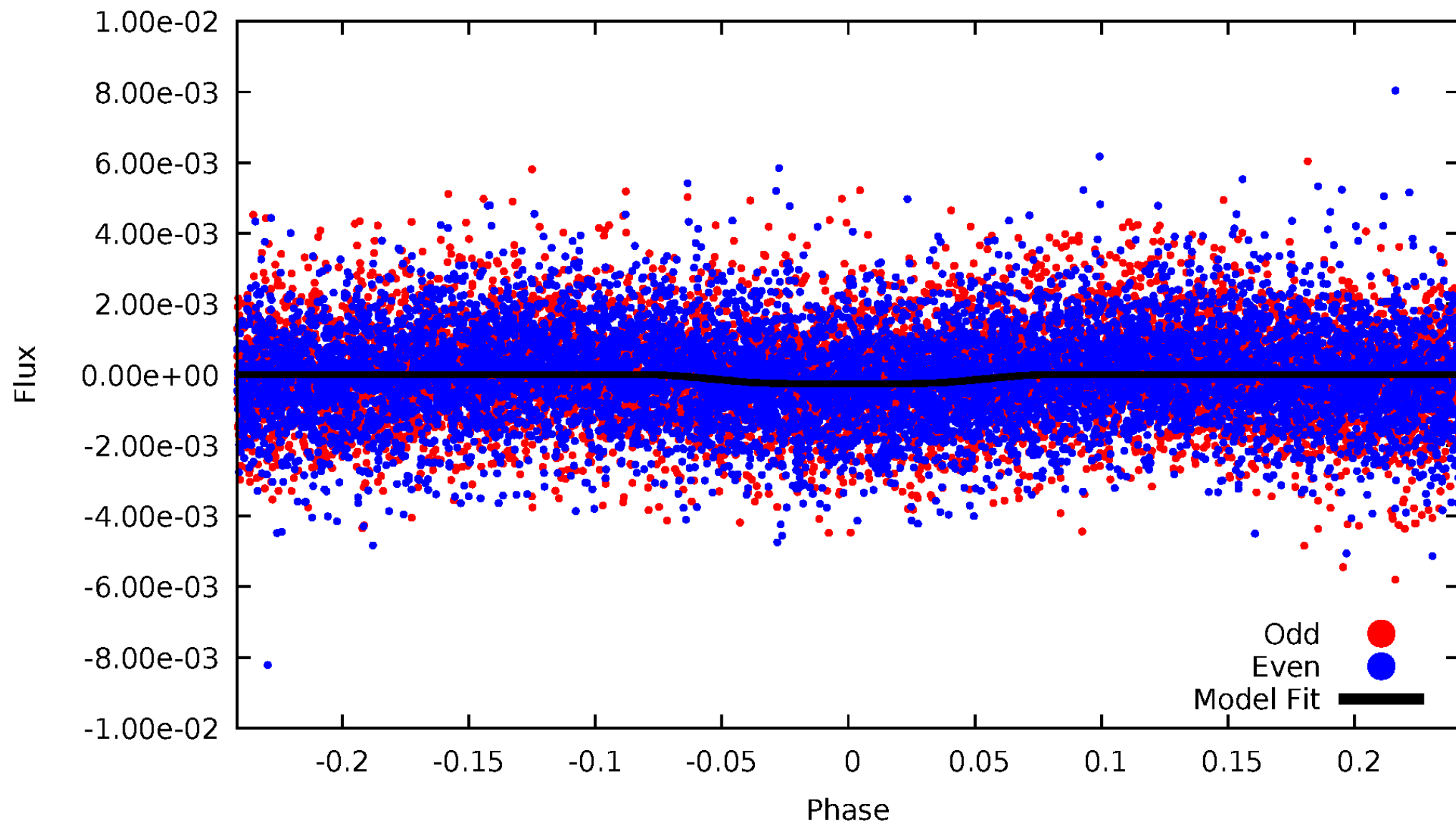


TCE 006230921-02



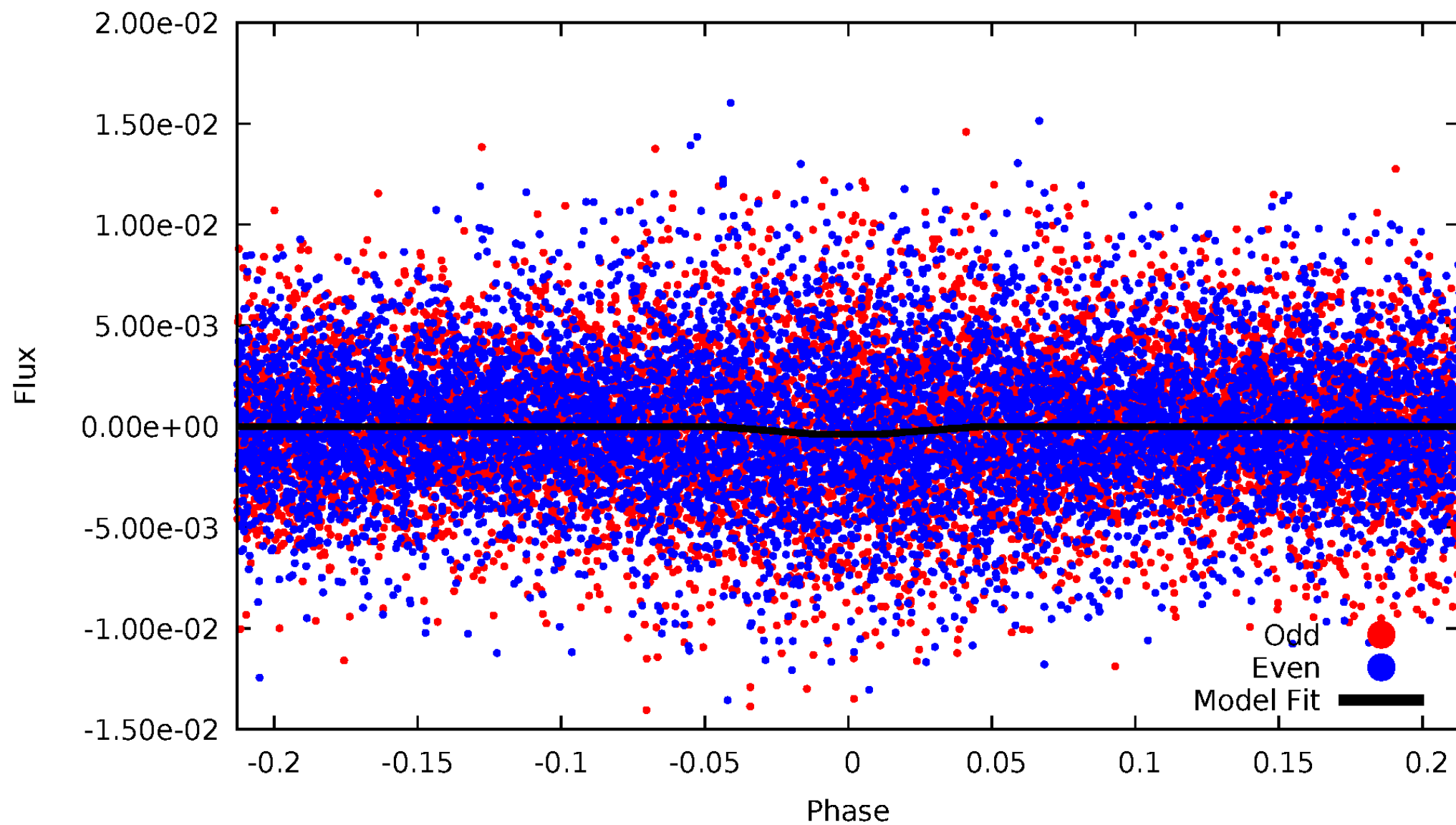
DV Odd/Even

TCE 006230921-02



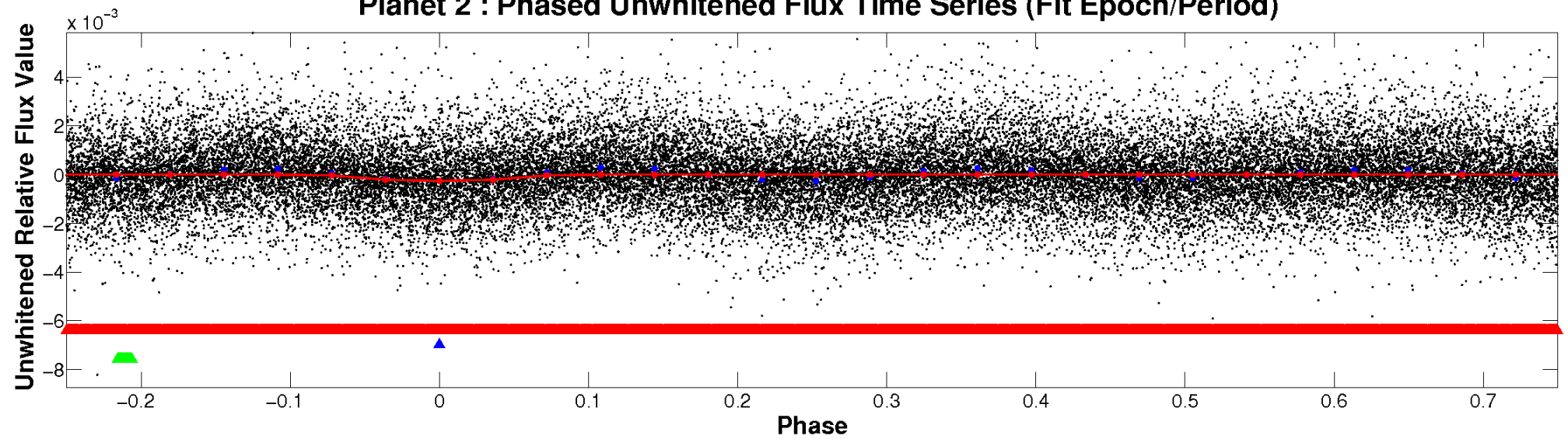
ALT Odd/Even

TCE 006230921-02

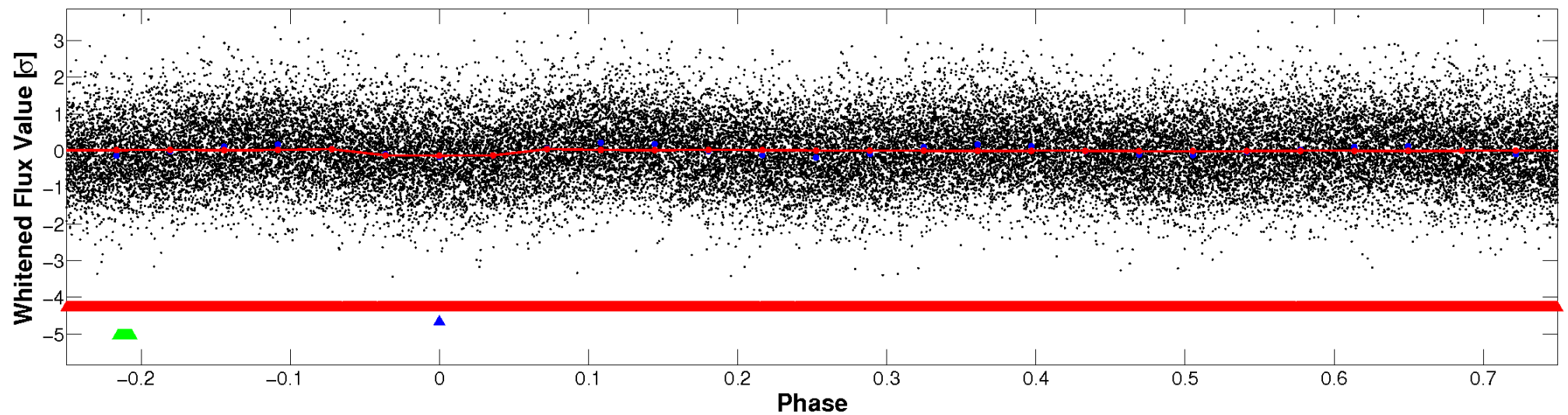


Non-Whitened Vs. Whitened Light Curve

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

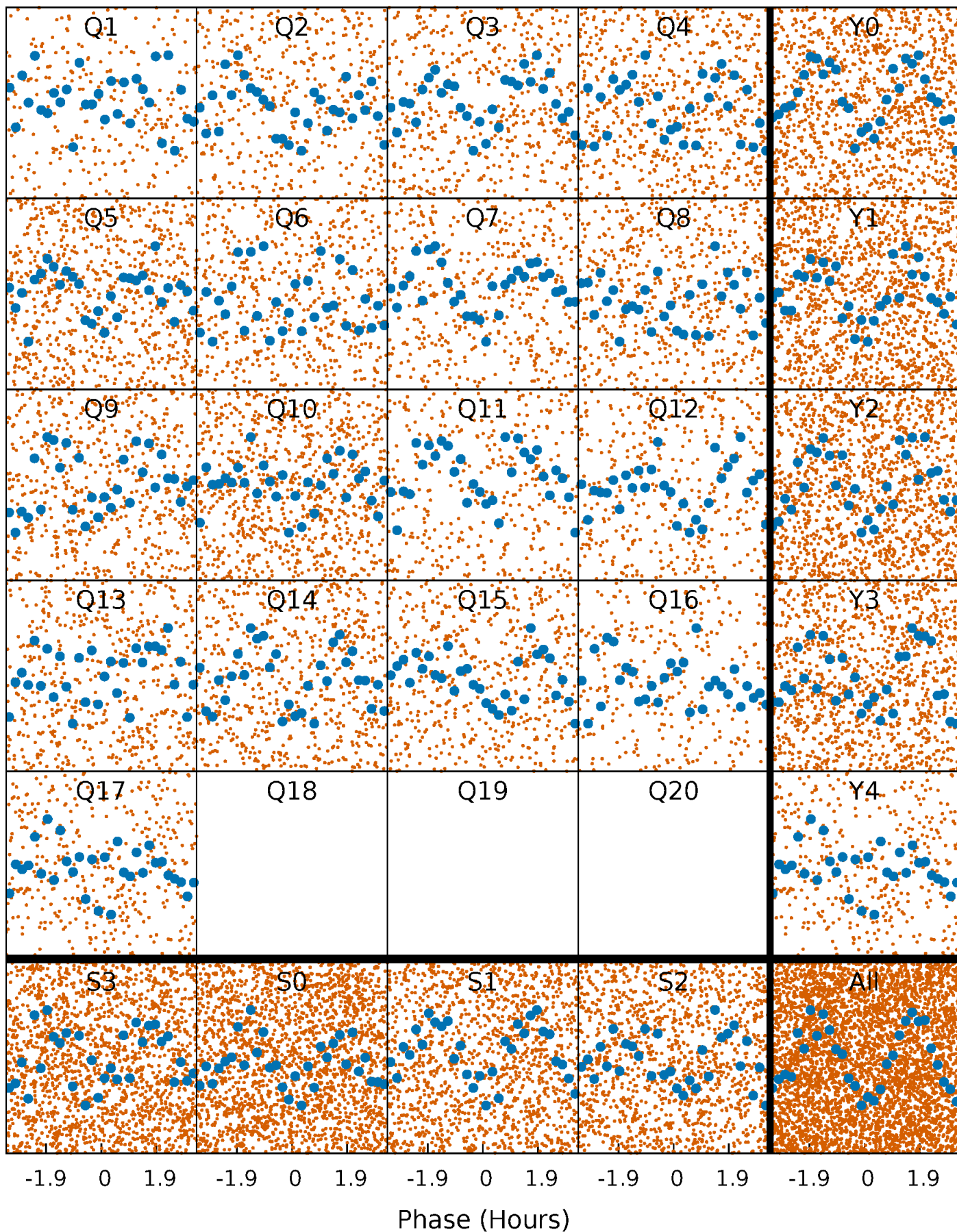


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



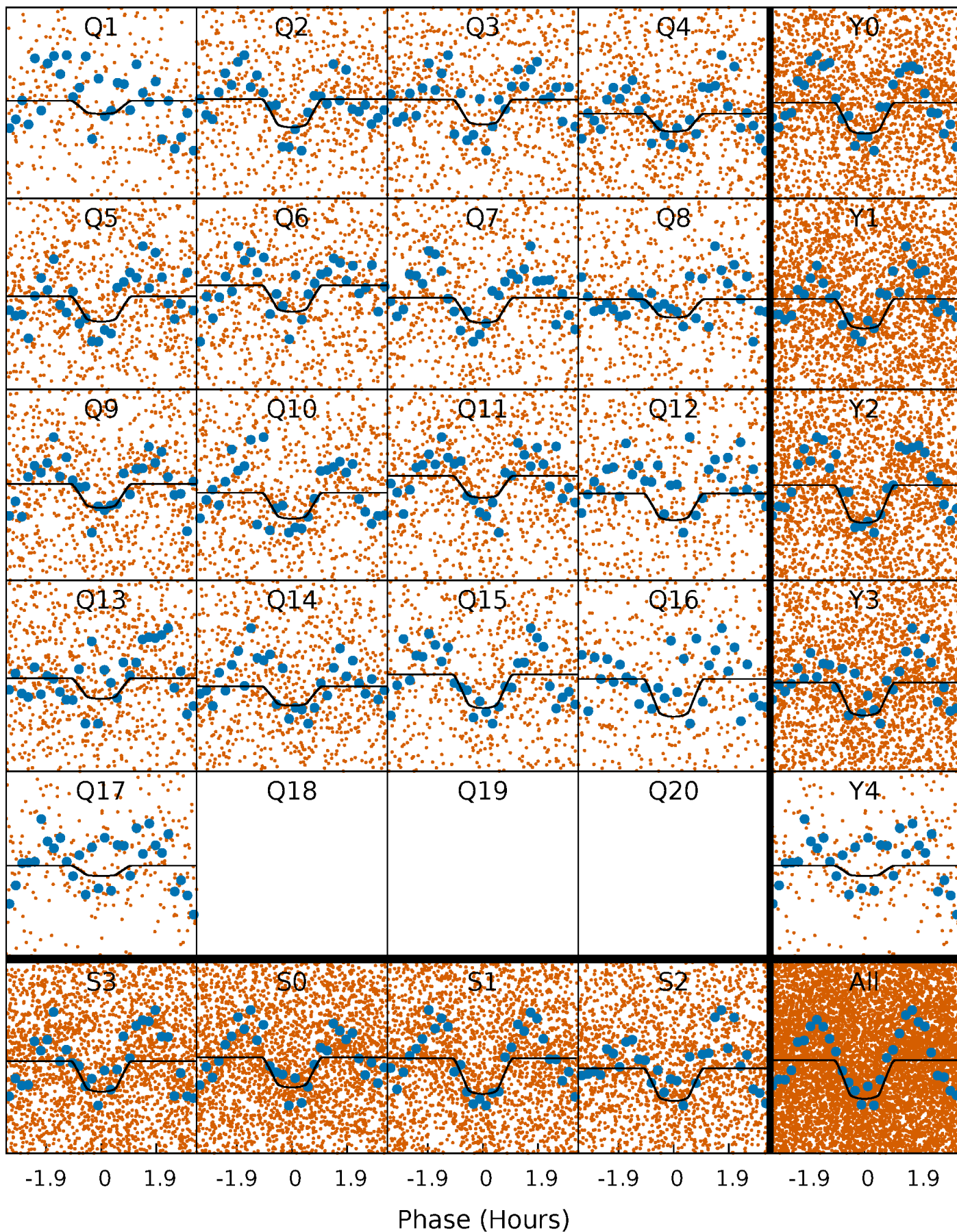
PDC Quarter-Phased Transit Curves

TCE 006230921-02 P= 0.566144 Days $T_0=131.794802$ (BKJD)



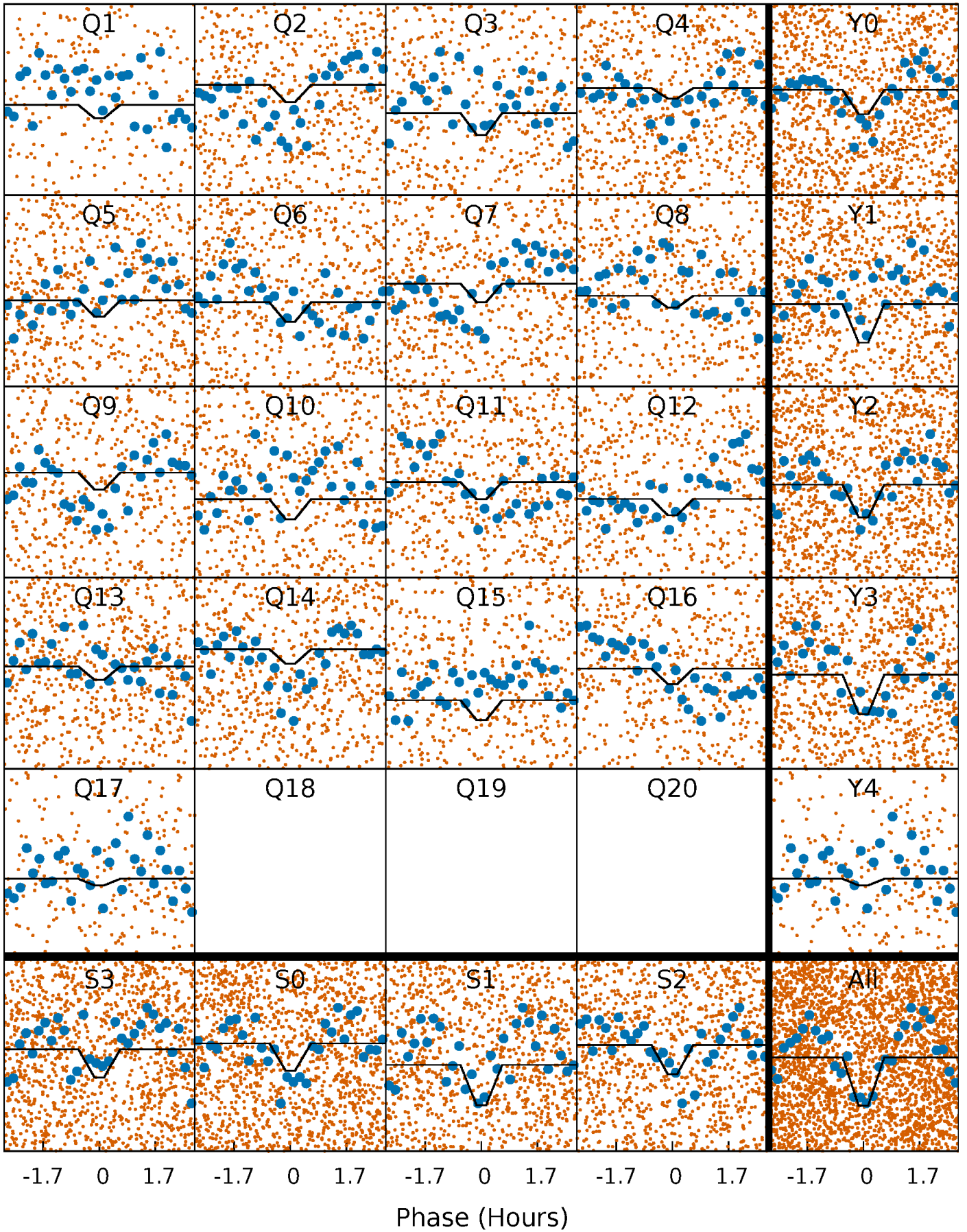
DV Quarter-Phased Transit Curves

TCE 006230921-02 P= 0.566144 Days $T_0=131.794802$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

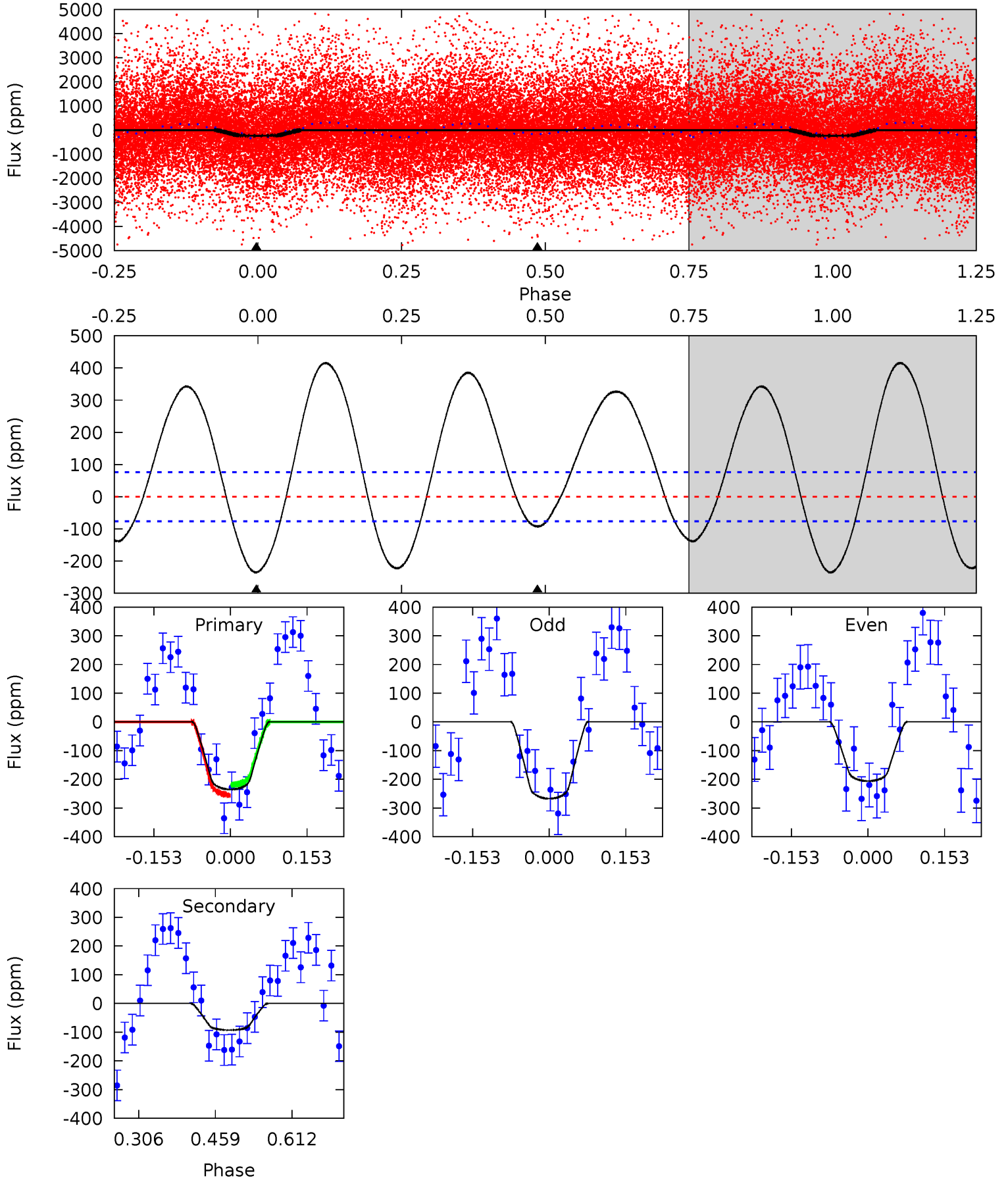
TCE 006230921-02 P= 0.566148 Days $T_0=131.793153$ (BKJD)



DV Model-Shift Uniqueness Test

006230921-02, P = 0.566144 Days, E = 131.228658 Days

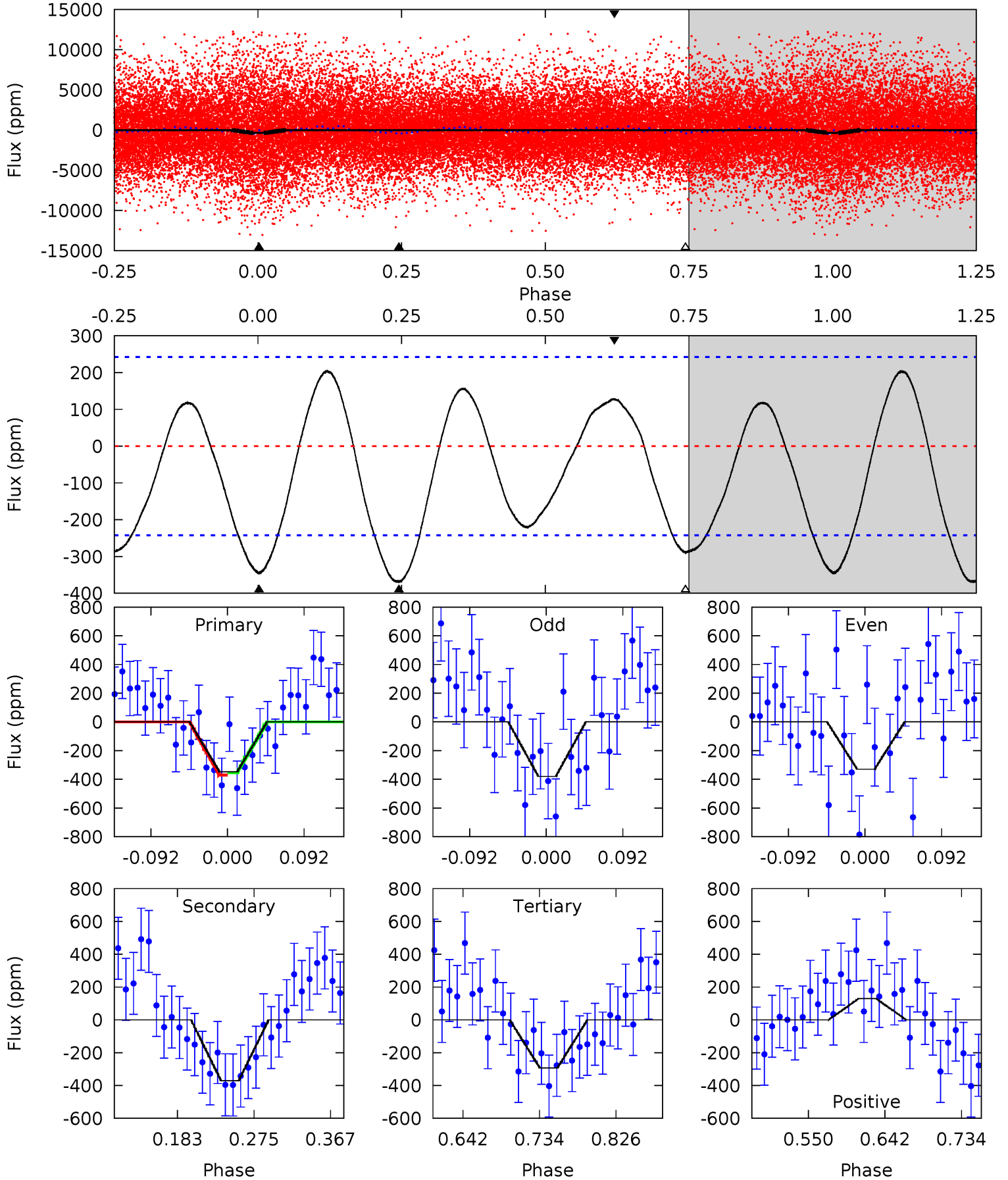
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.8	5.44	0	0	4.47	1.43	9.38	13.8	13.8	5.44	5.44	1.81	1.06	0.64	1.04



Alt Model-Shift Uniqueness Test

006230921-02, P = 0.566148 Days, E = 131.227005 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.59	7.02	5.54	2.45	4.58	1.69	2.81	1.04	4.13	1.48	4.57	0.47	0.69	0.36	0.16



Stellar Parameters For KIC 006230921

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7296^{+232}_{-348}	$4.161^{+0.128}_{-0.192}$	$-0.160^{+0.250}_{-0.350}$	$1.663^{+0.512}_{-0.341}$	$1.460^{+0.211}_{-0.234}$	$0.447^{+0.288}_{-0.235}$
	+3%/-5%	+3%/-5%	+156%/-219%	+31%/-21%	+14%/-16%	+64%/-53%
Source	PHO1	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 006230921-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-93 ± 17	$3.09^{+1.12}_{-0.98}$	4726^{+379}_{-333}	5060^{+1167}_{-834}	$1.217^{+1.228}_{-0.562}$
Alt.	-371 ± 53	$3.57^{+1.14}_{-0.95}$	4731^{+364}_{-341}	6987^{+1440}_{-949}	$3.579^{+3.142}_{-1.534}$

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

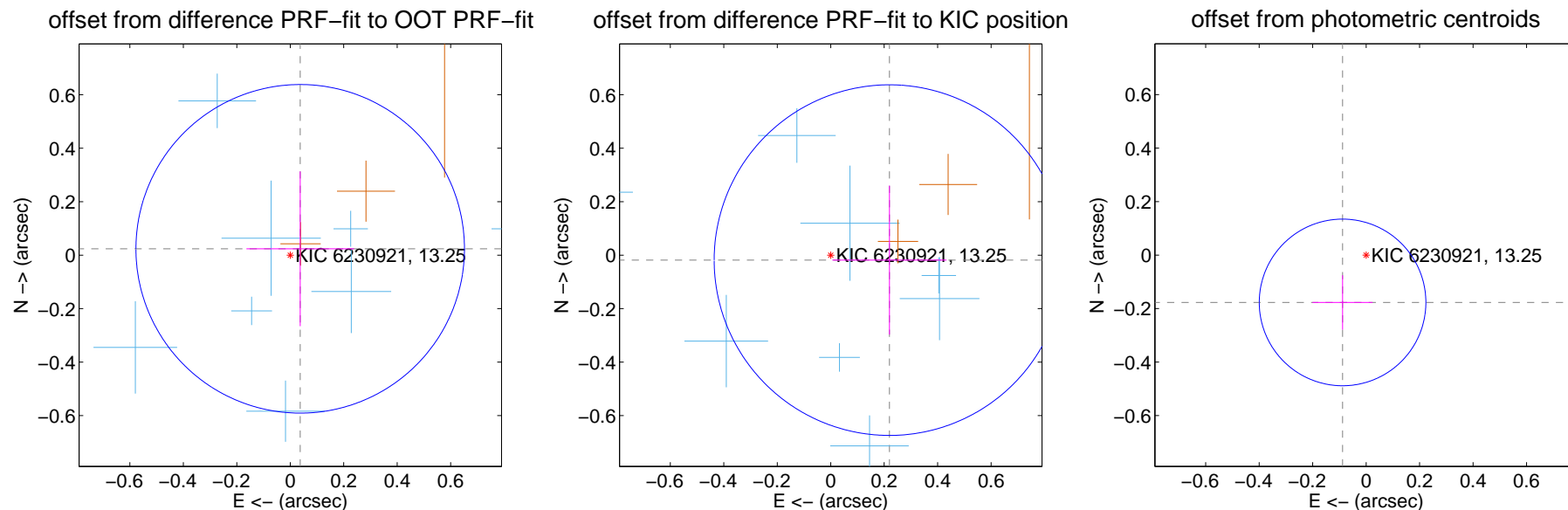
DV Centroid Data

Supplemental centroid analysis for 006230921-02. Kepler magnitude: 13.25. Transit SNR 9.04

There are 9 quarters with good PRF difference image offsets

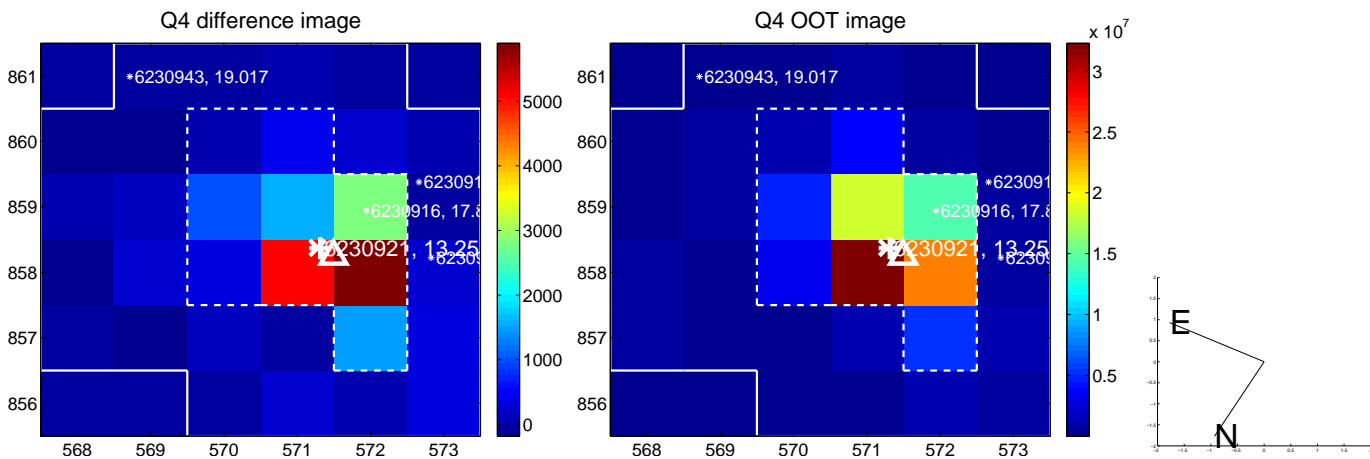
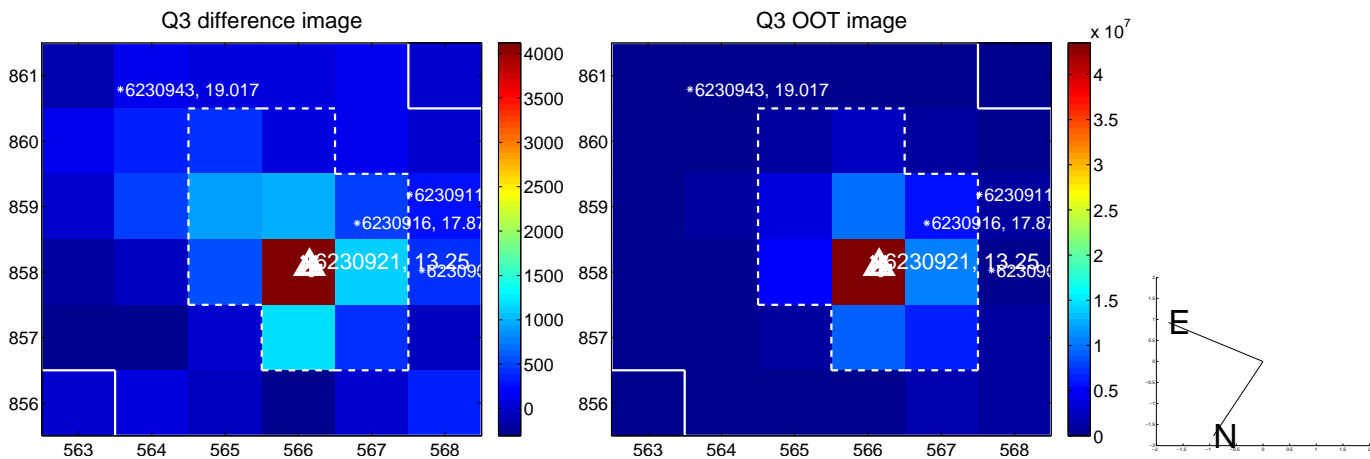
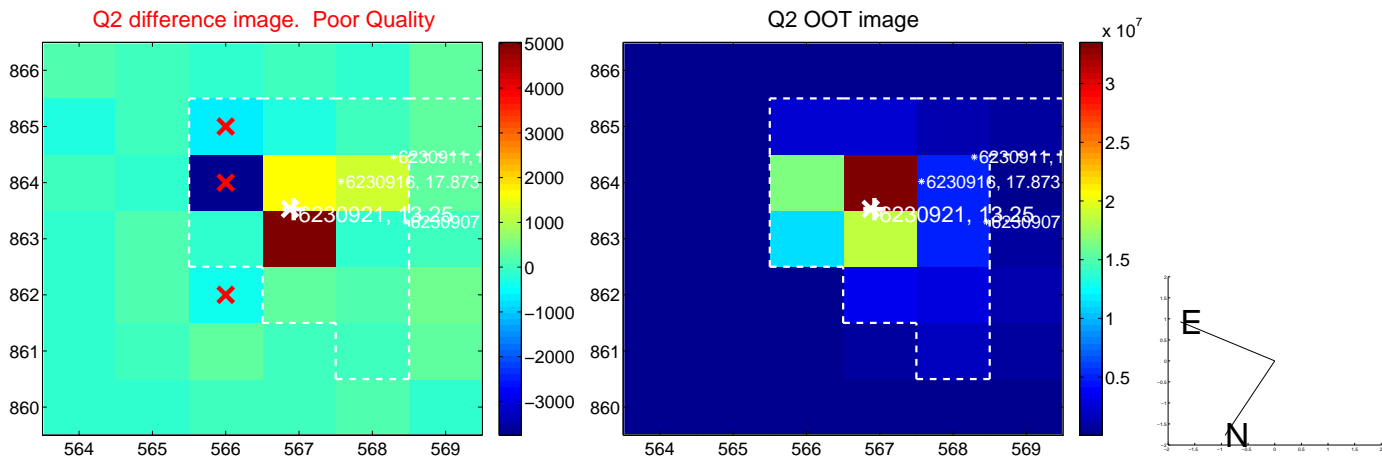
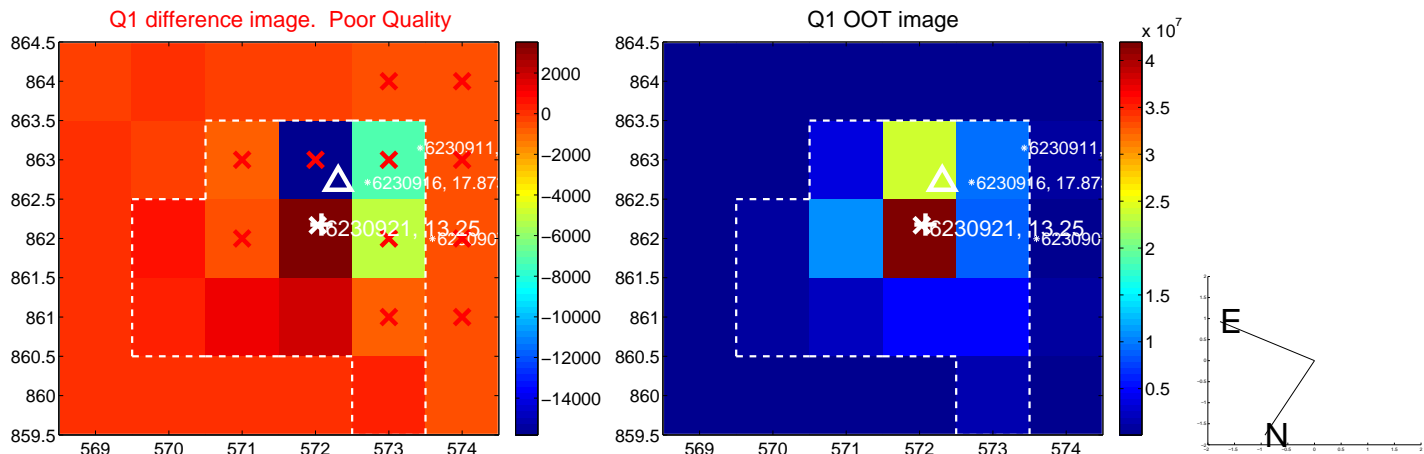
The direct PRF centroid is offset from the target star catalog position by about 0.25 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.044 ± 0.205	0.22	-0.037 ± 0.201	0.024 ± 0.289
PRF-fit source offset from KIC position	0.220 ± 0.219	1.01	-0.220 ± 0.214	-0.019 ± 0.278
photometric centroid source offset	0.20 ± 0.10	1.90	0.09 ± 0.11	-0.18 ± 0.10

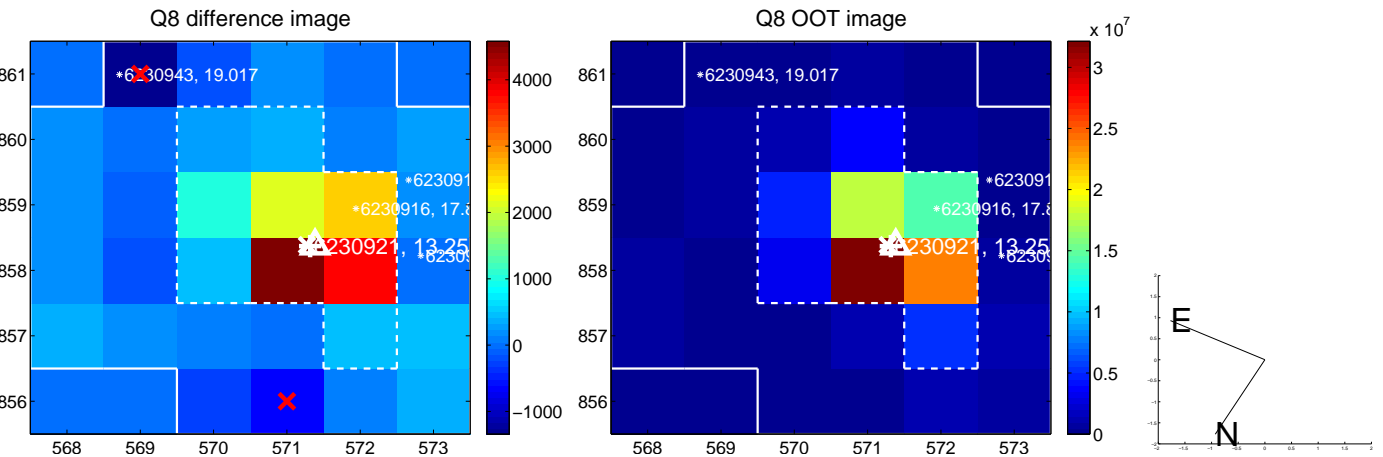
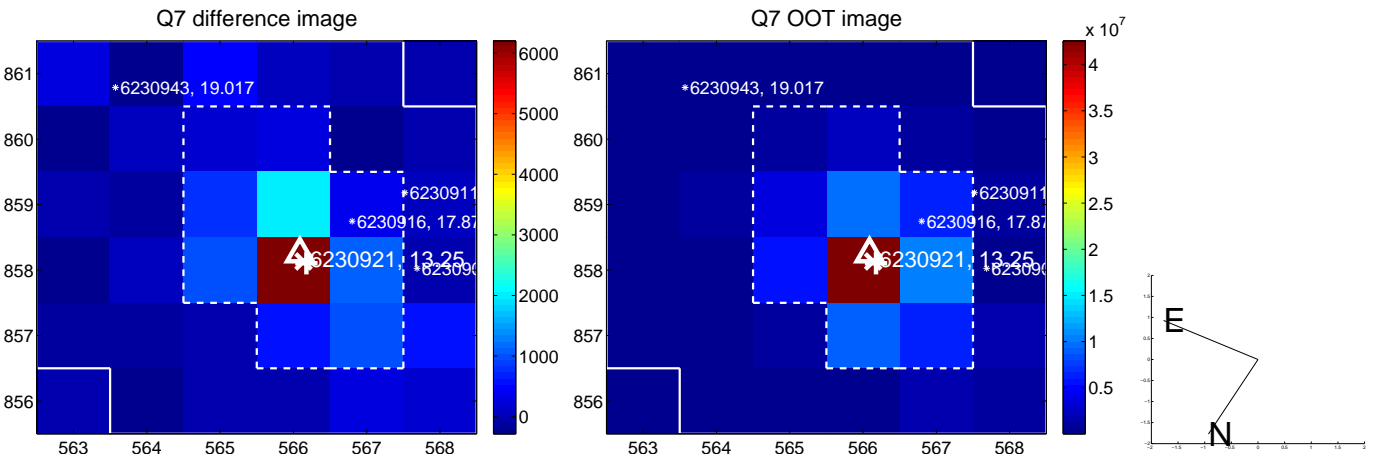
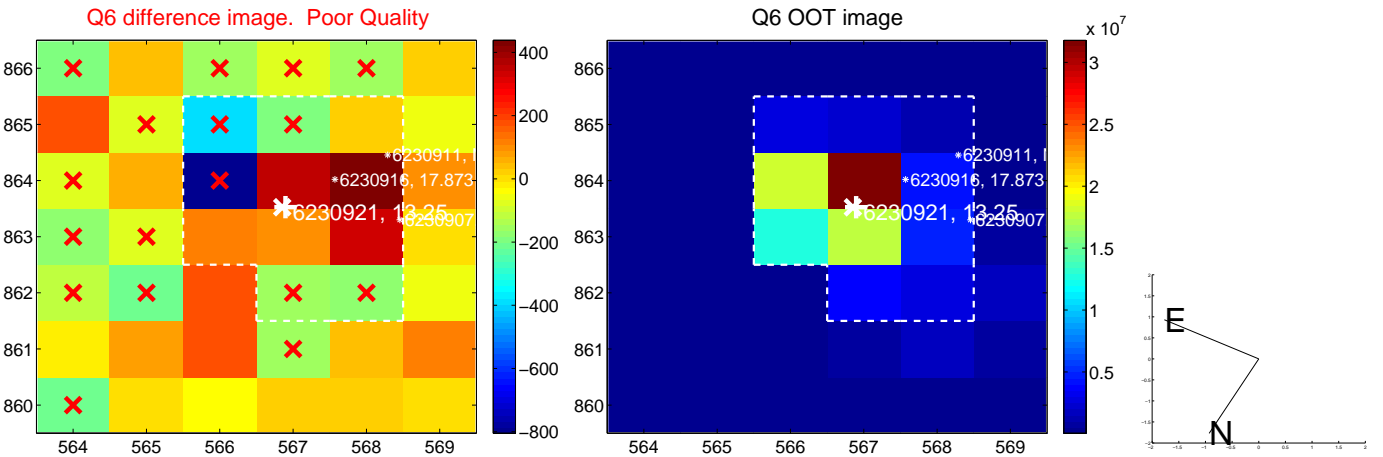
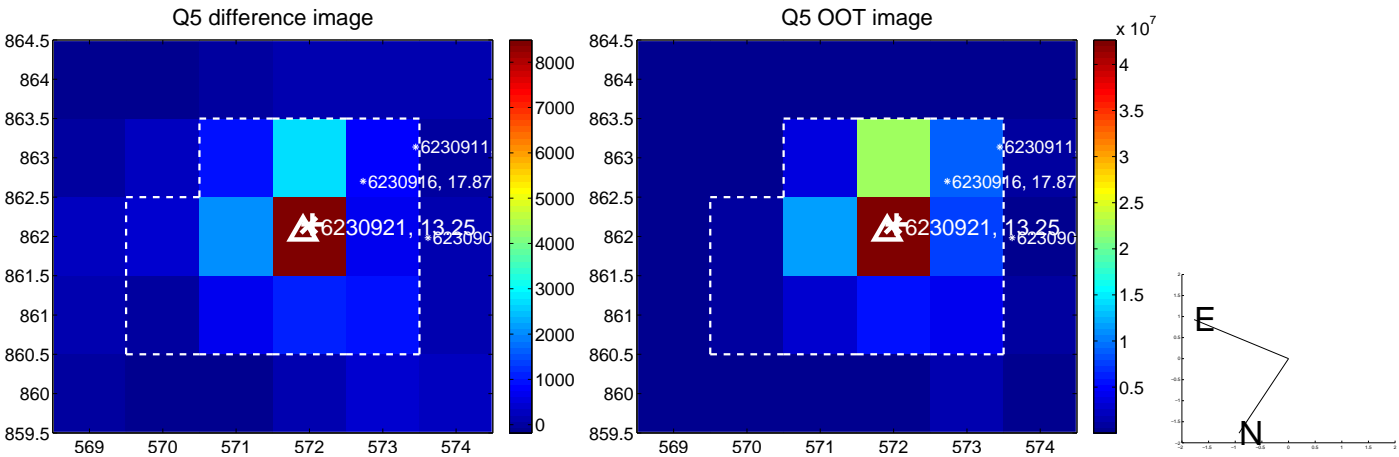


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

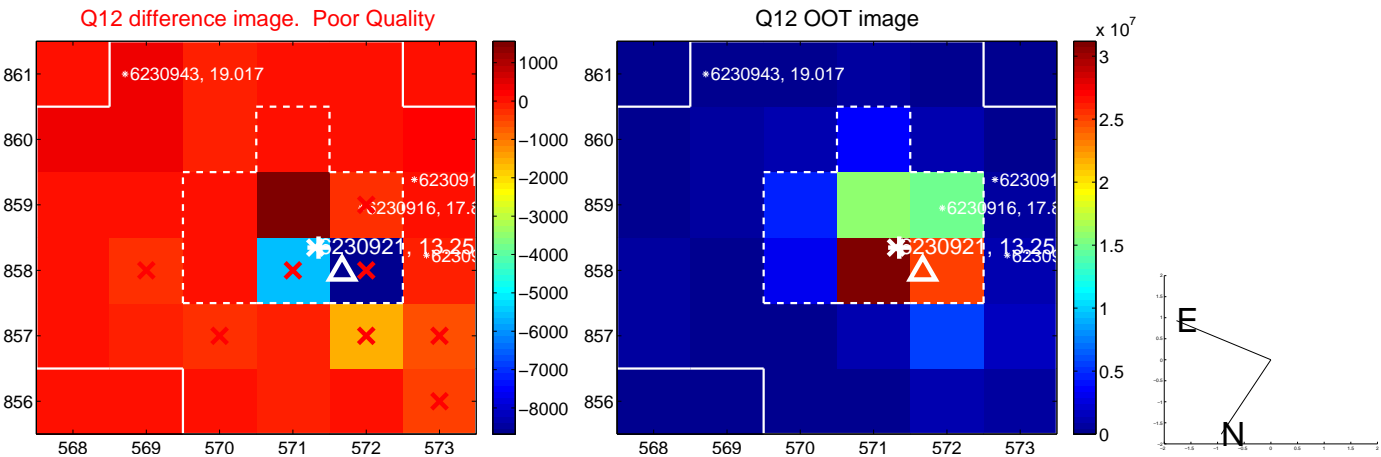
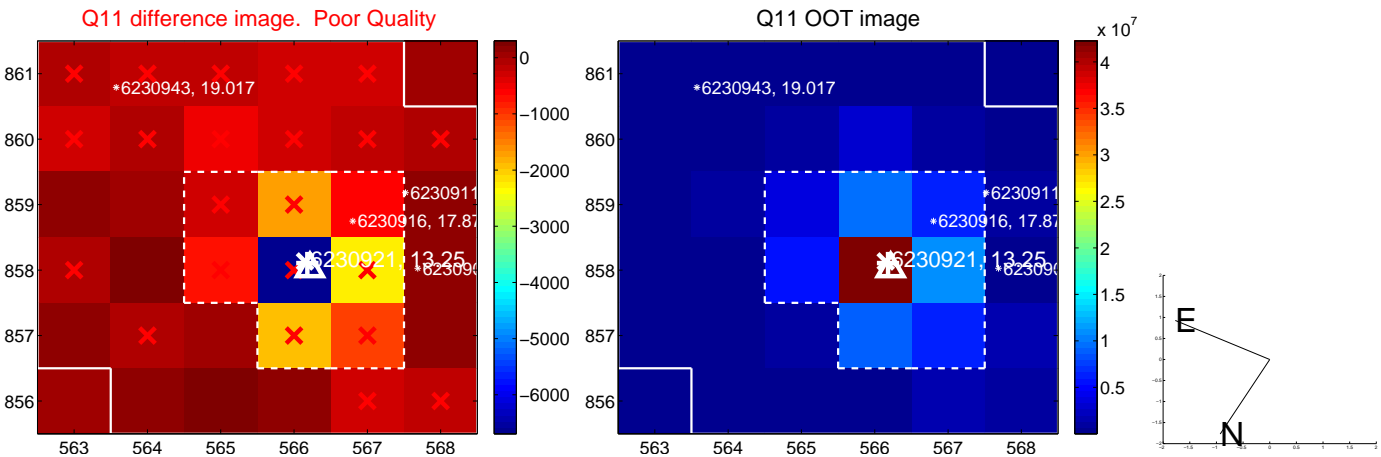
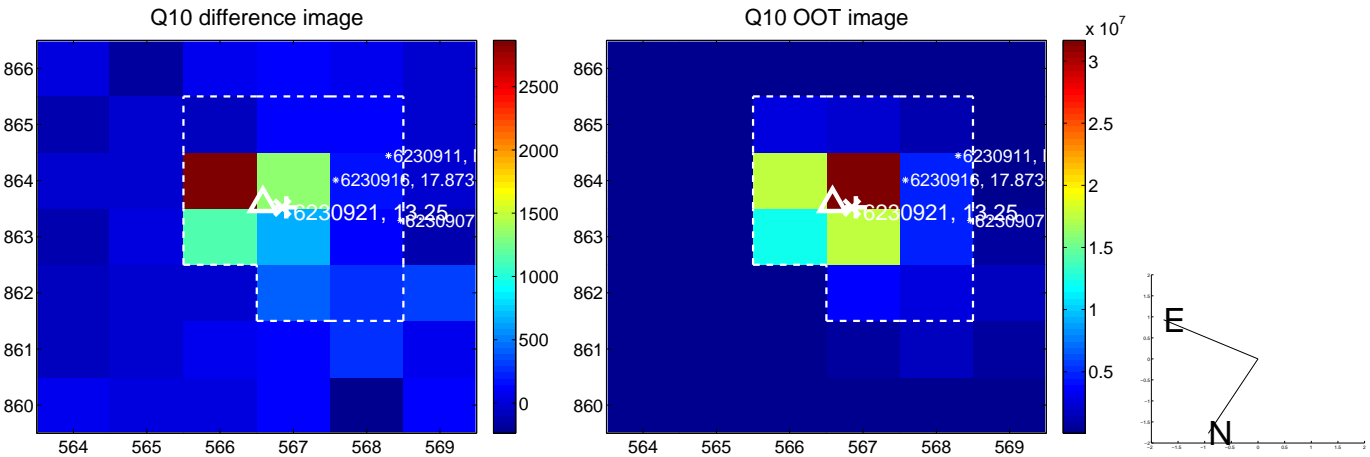
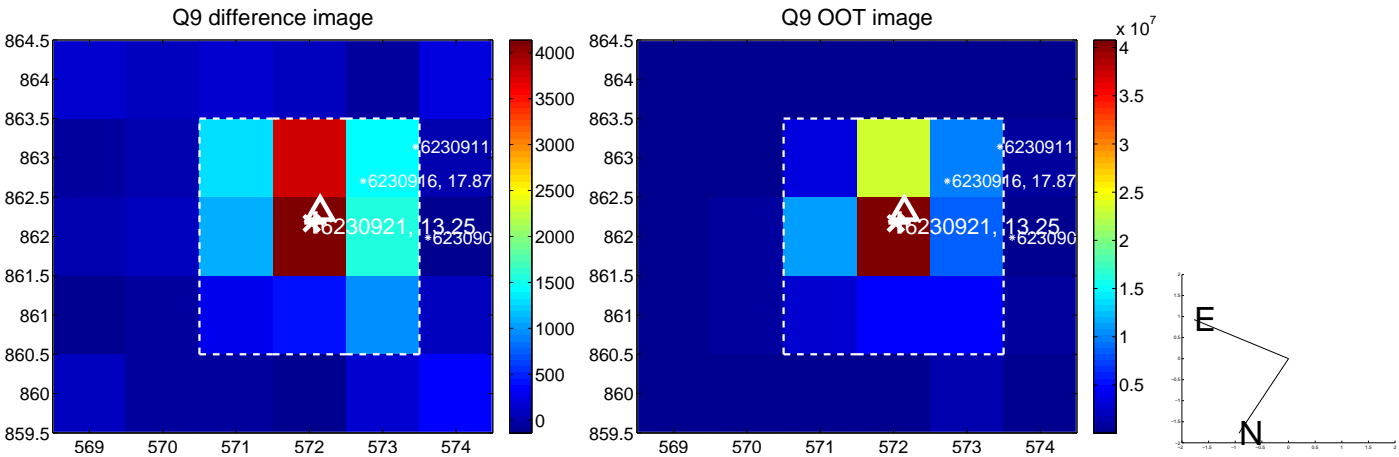
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



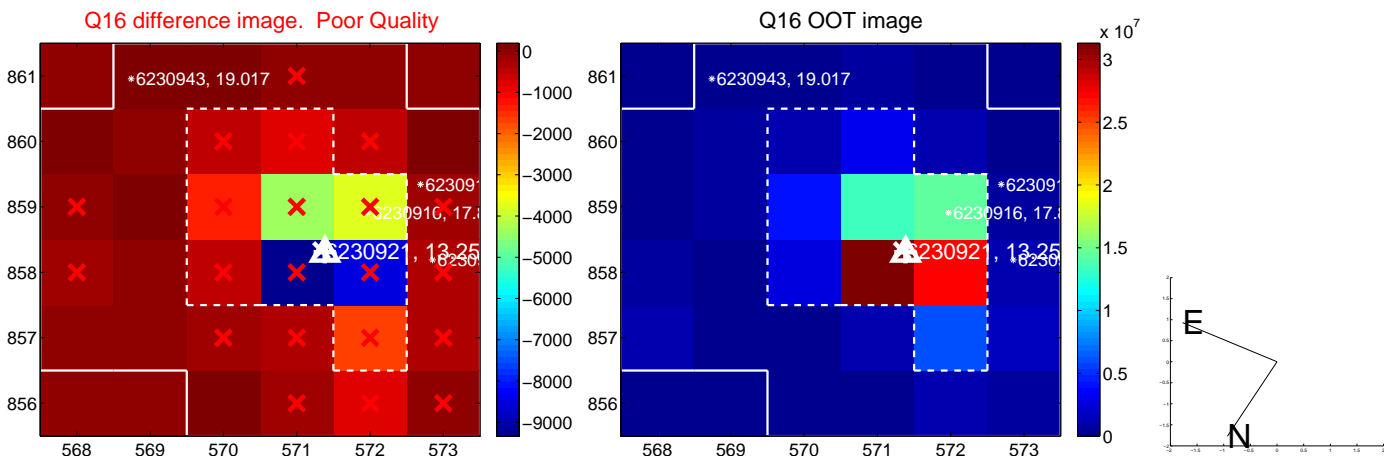
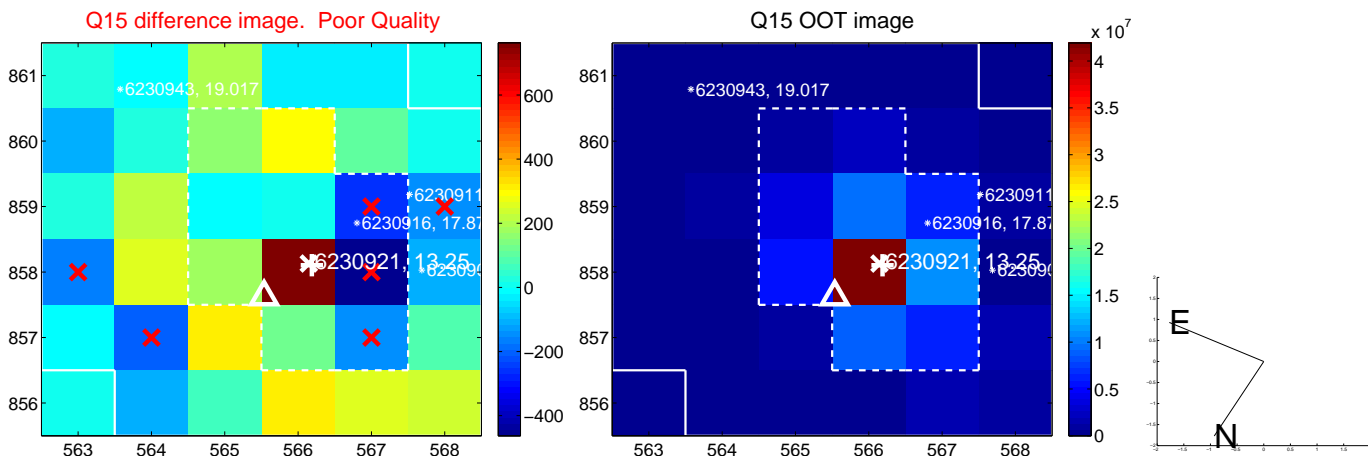
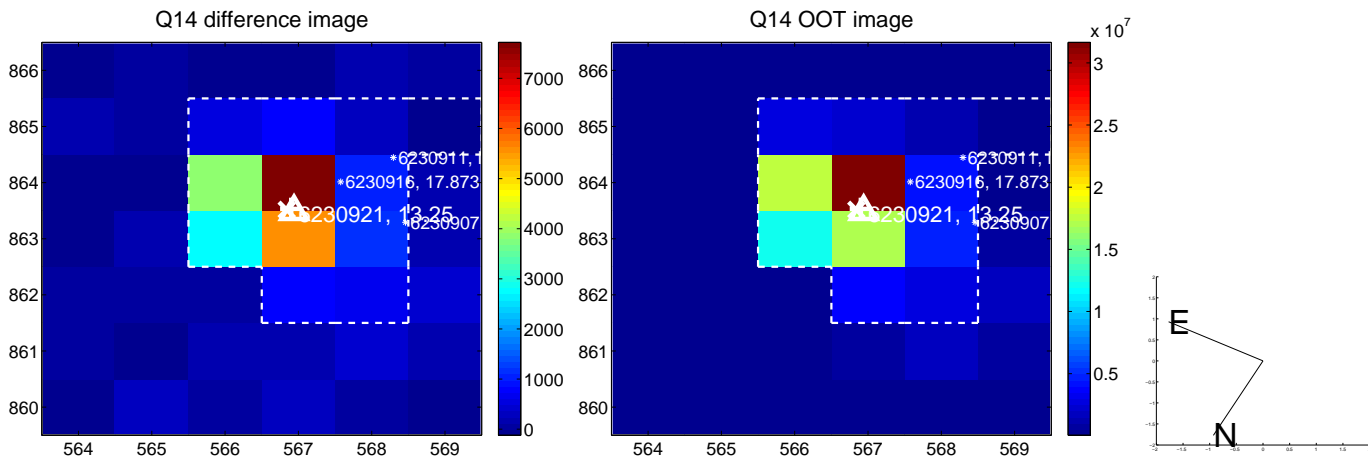
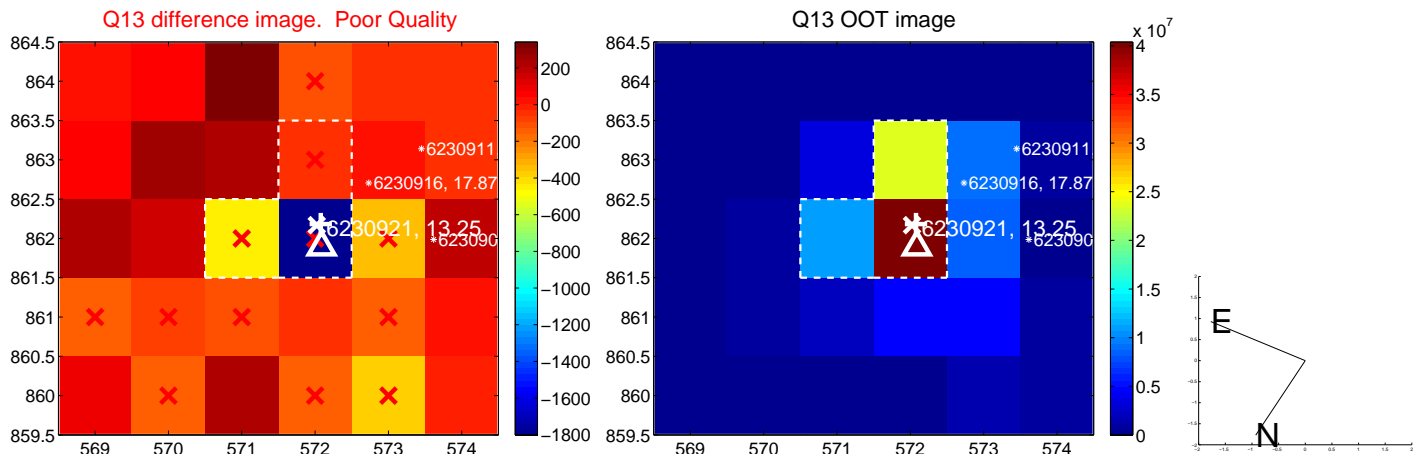
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



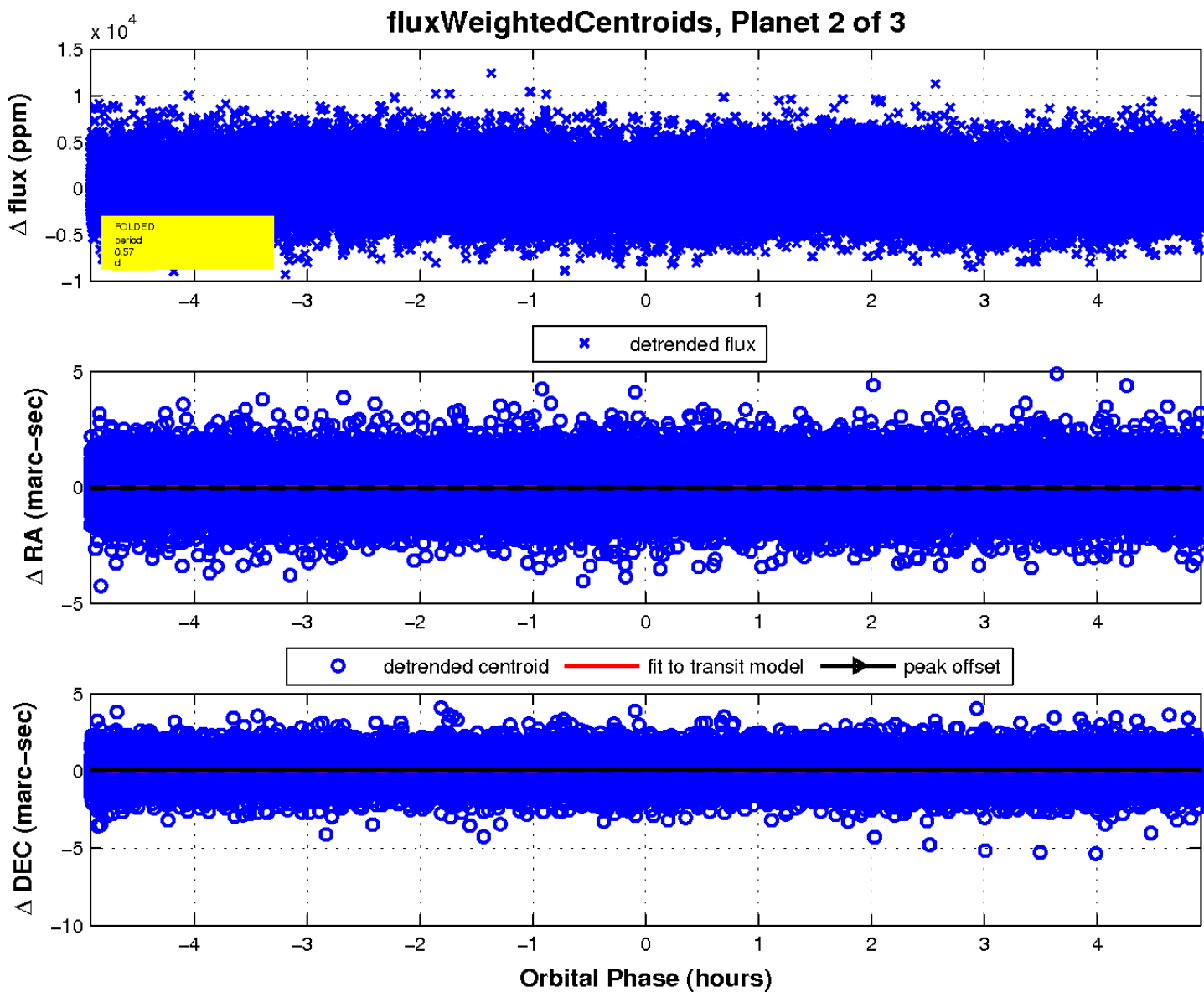
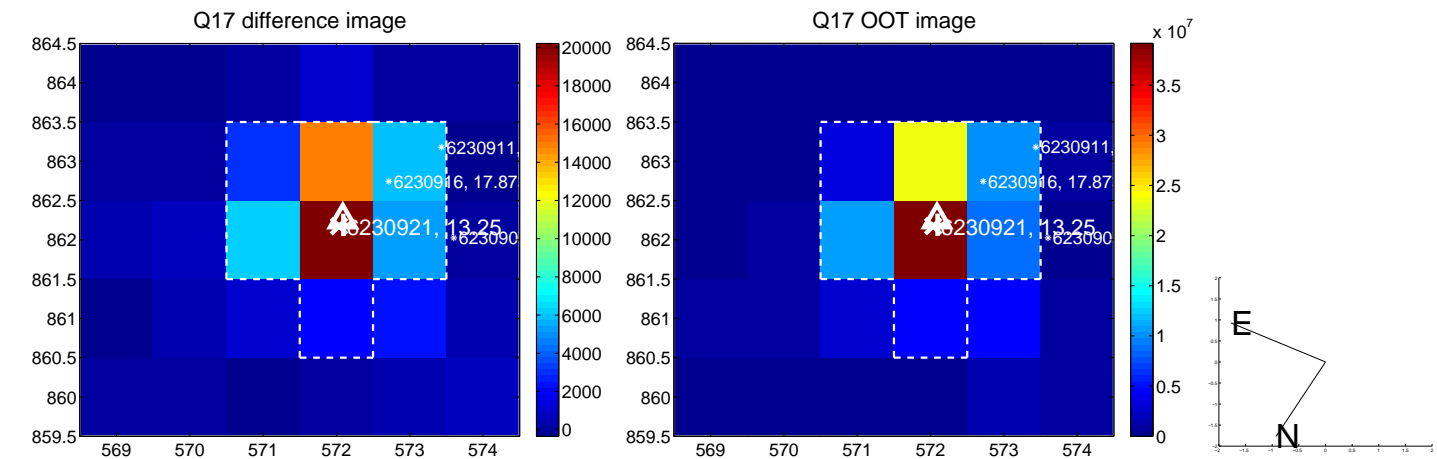
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

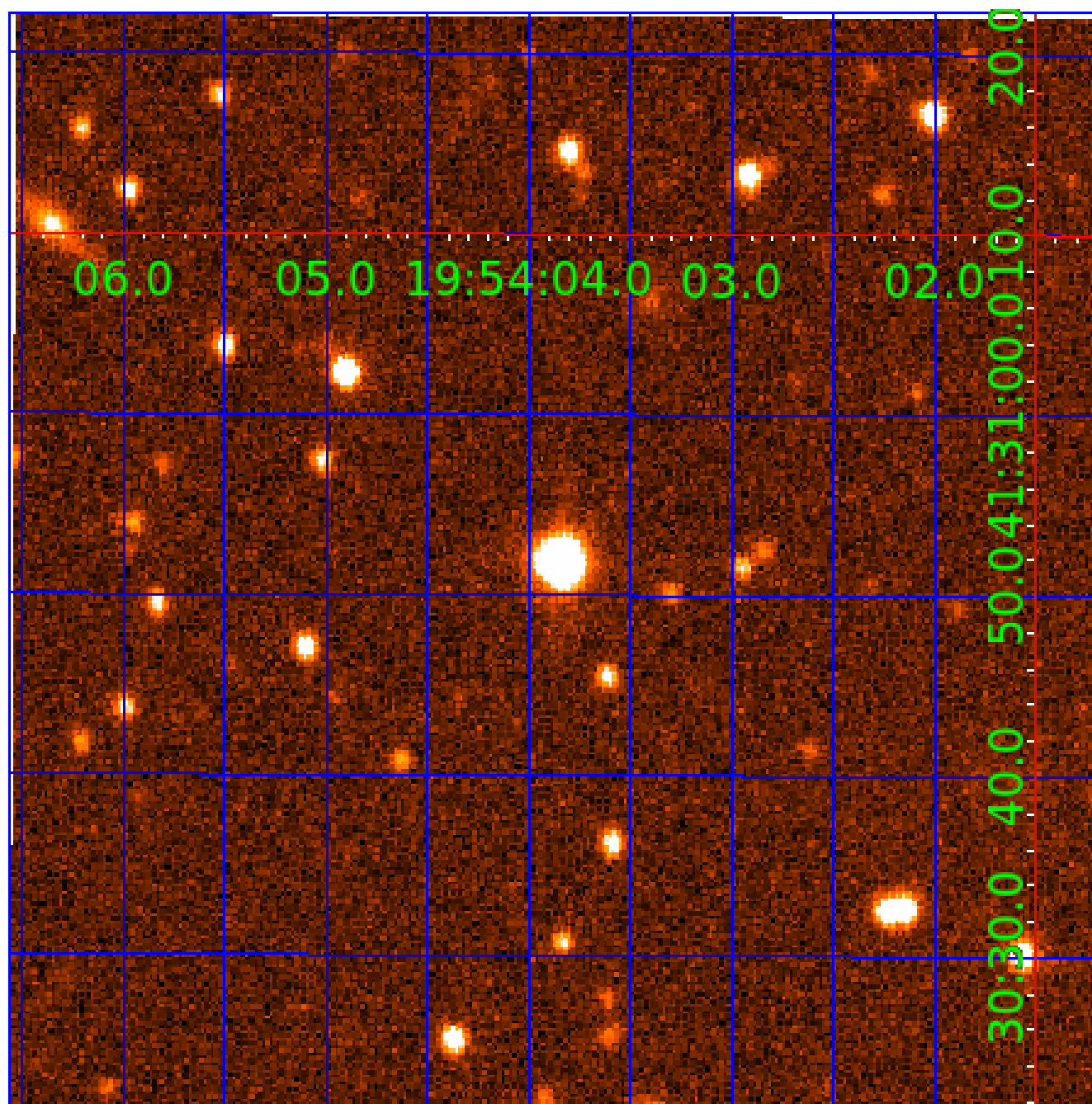


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006230921

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})
006230921-01	OBS	No	0.538974	131.590503	239.9	1.667	10.1	11.6	1.66	7296	2.99	32439.29
006230921-02	OBS	No	0.566144	131.794802	257.9	1.641	8.9	9.0	1.66	7296	3.08	30380.33
006230921-03	OBS	No	0.566146	131.672745	309.3	2.758	7.3	8.4	1.66	7296	3.40	30380.18

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006230921-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
006230921-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
006230921-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—HALO_GHOST

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

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

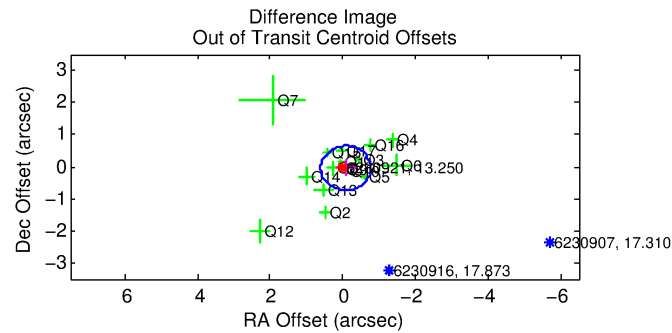
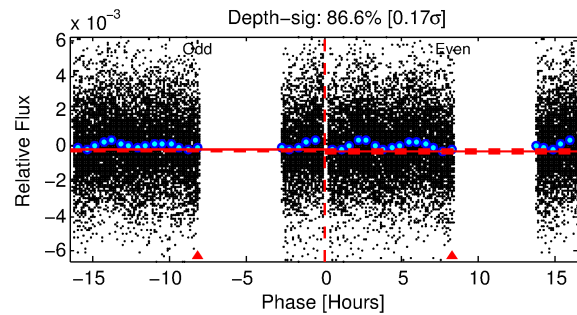
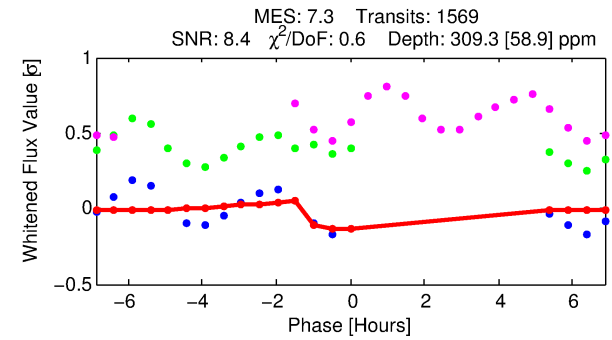
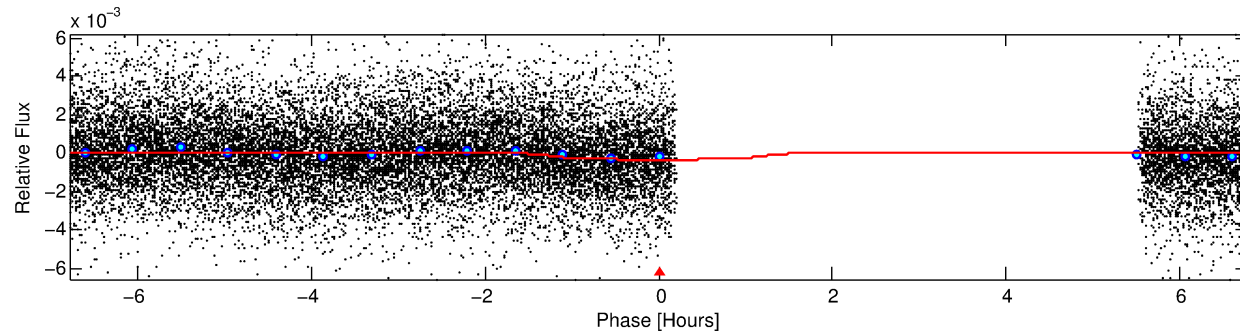
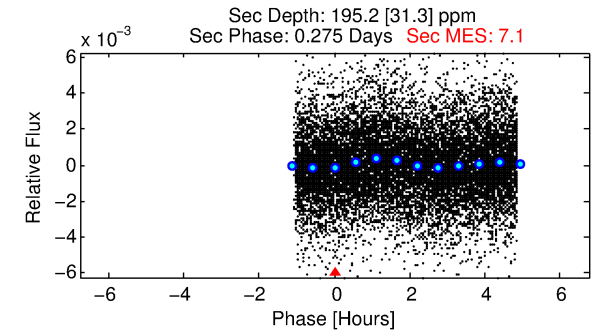
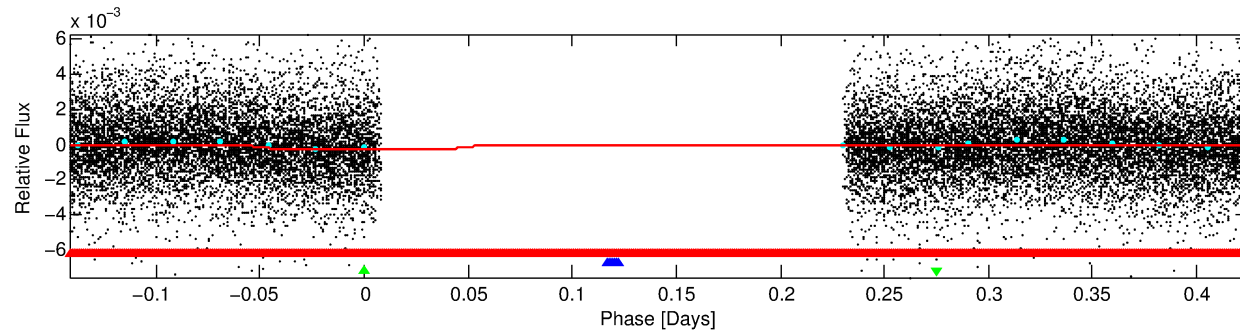
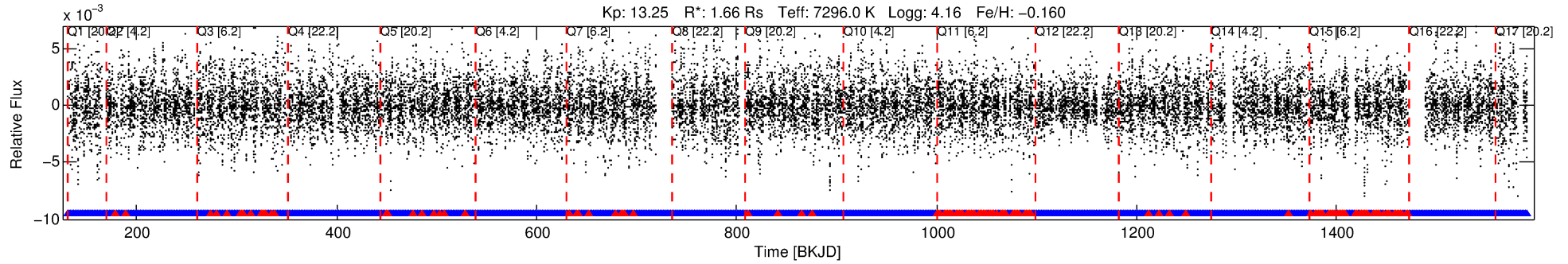
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006230921-03

No Significant Match Found

DV One-Page Summary

KIC: 6230921 Candidate: 3 of 3 Period: 0.566 d



DV Fit Results:

Period = 0.56615 [0.00002] d
Epoch = 131.6727 [0.0103] BKJD
Rp/R* = 0.0187 [0.0043]
a/R* = 1.20 [0.45]
b = 0.90 [0.28]
Seff = 30380.18 [12355.25]
Teq = 3366 [342] K
Rp = 3.40 [1.30] Re
a = 0.0152 [0.0038] AU
Ag = 2.15 [1.30] [0.89σ]
Teffp = 6302 [821] K [3.30σ]

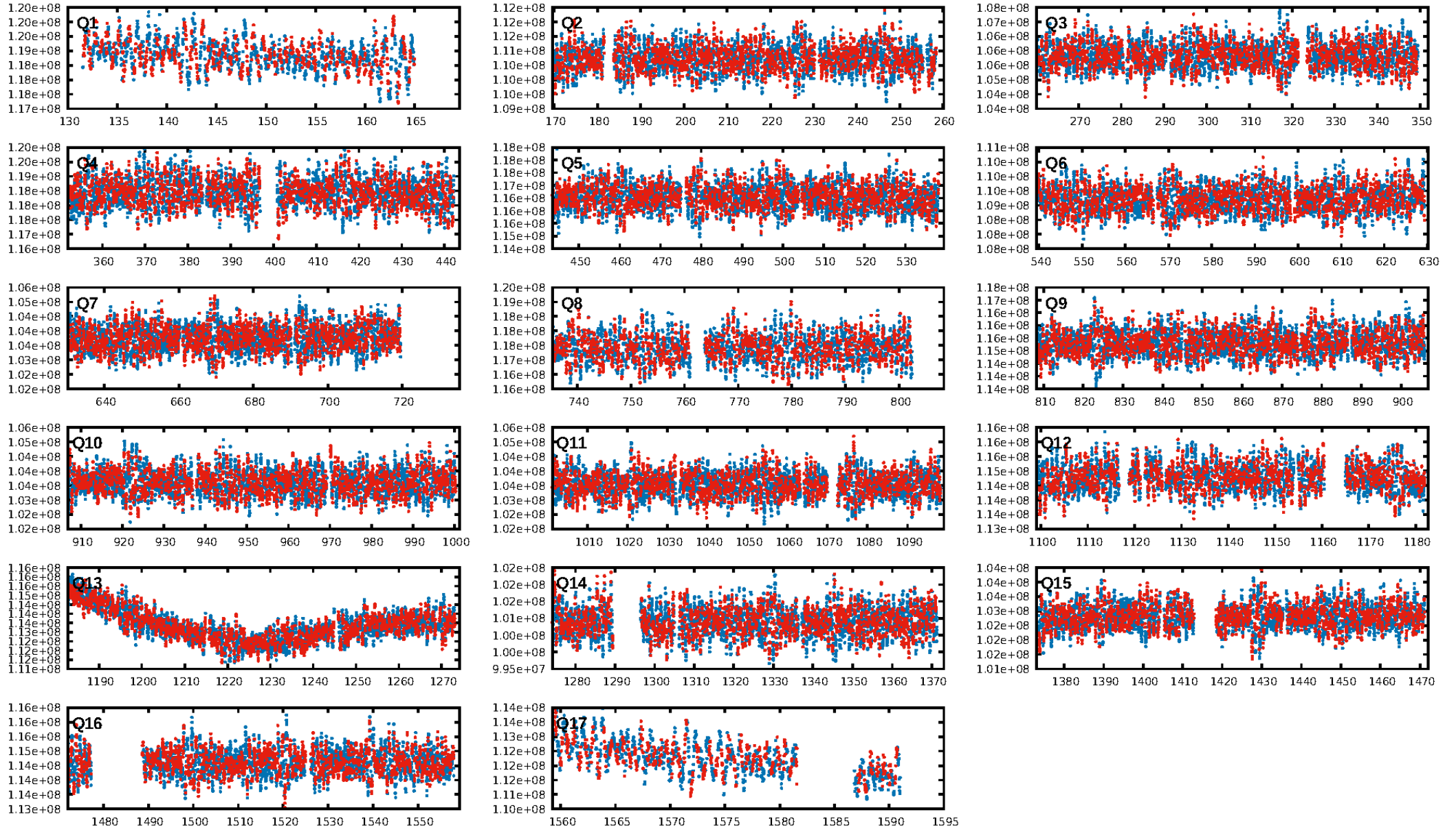
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGoF-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.86 [1289/1496]
GhostDiagnostic-chr: -0.1801
Centroid-sig: 1.4%
Centroid-so: 0.199 arcsec [2.65σ]
OotOffset-rm: 0.089 arcsec [0.39σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-rm: 0.282 arcsec [1.22σ]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.69 [11/16]
DiffImageOverlap-fno: 0.00 [0/17]

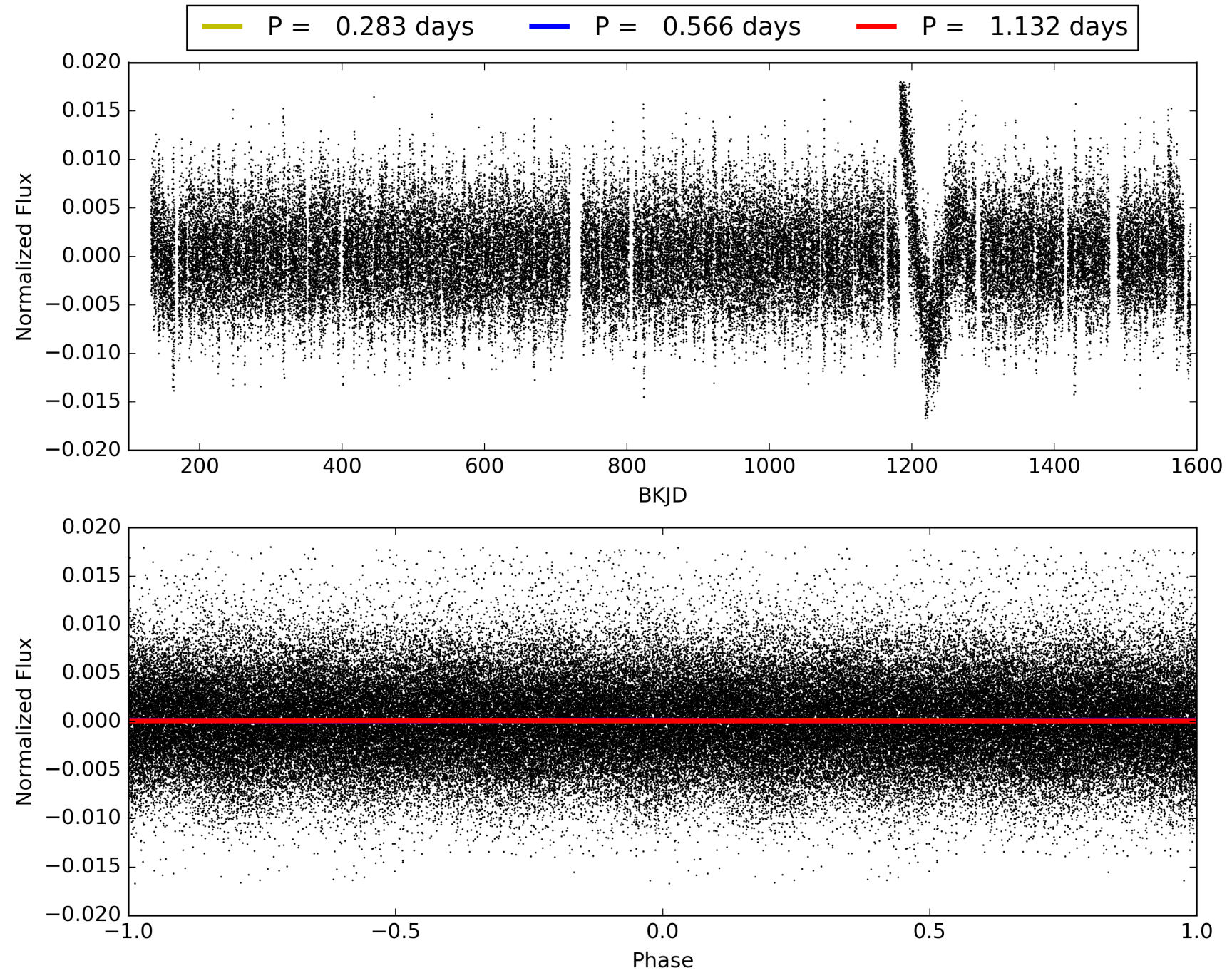
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 06:36:53 Z

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

TCE 006230921-03, PDC Light Curves

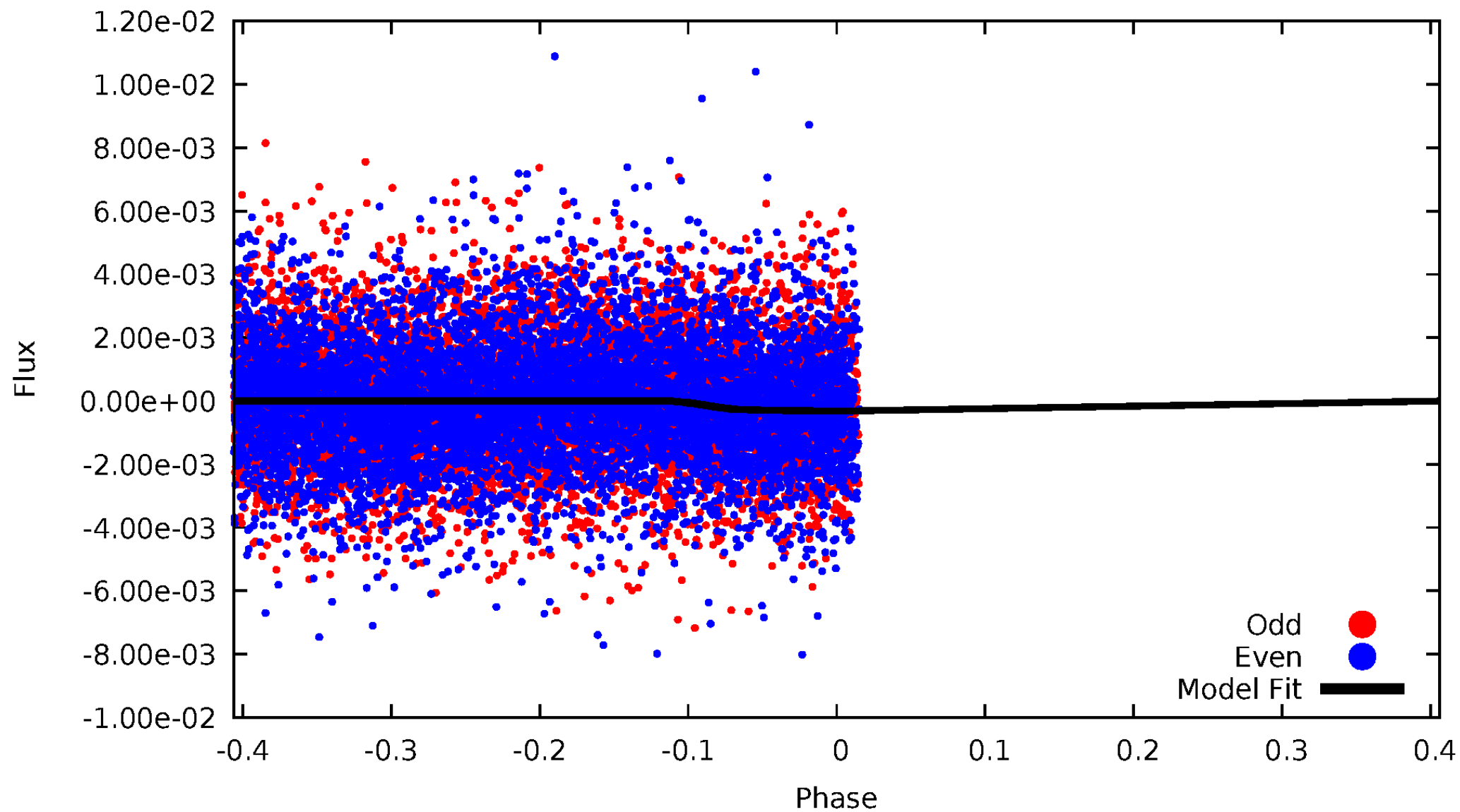


TCE 006230921-03



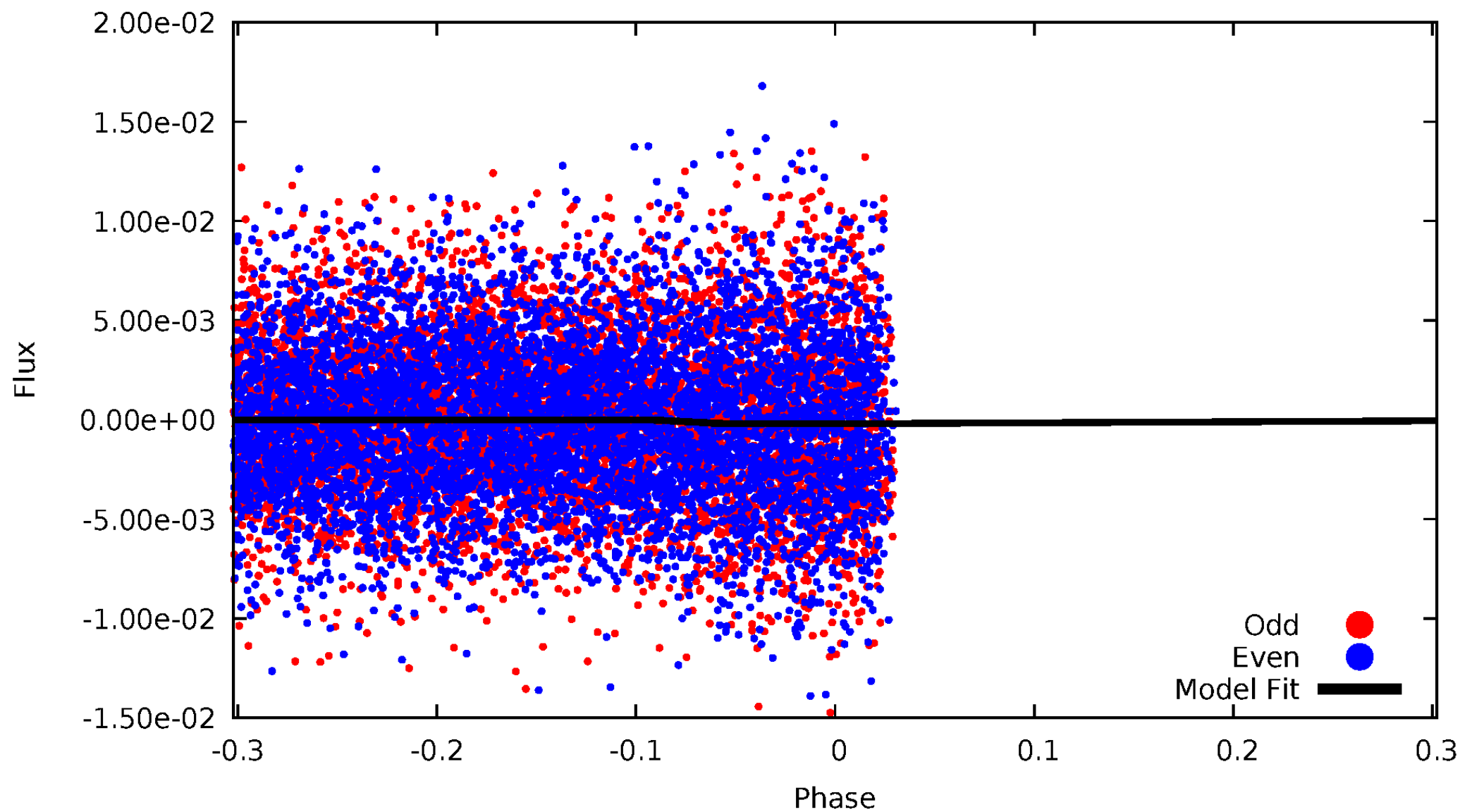
DV Odd/Even

TCE 006230921-03

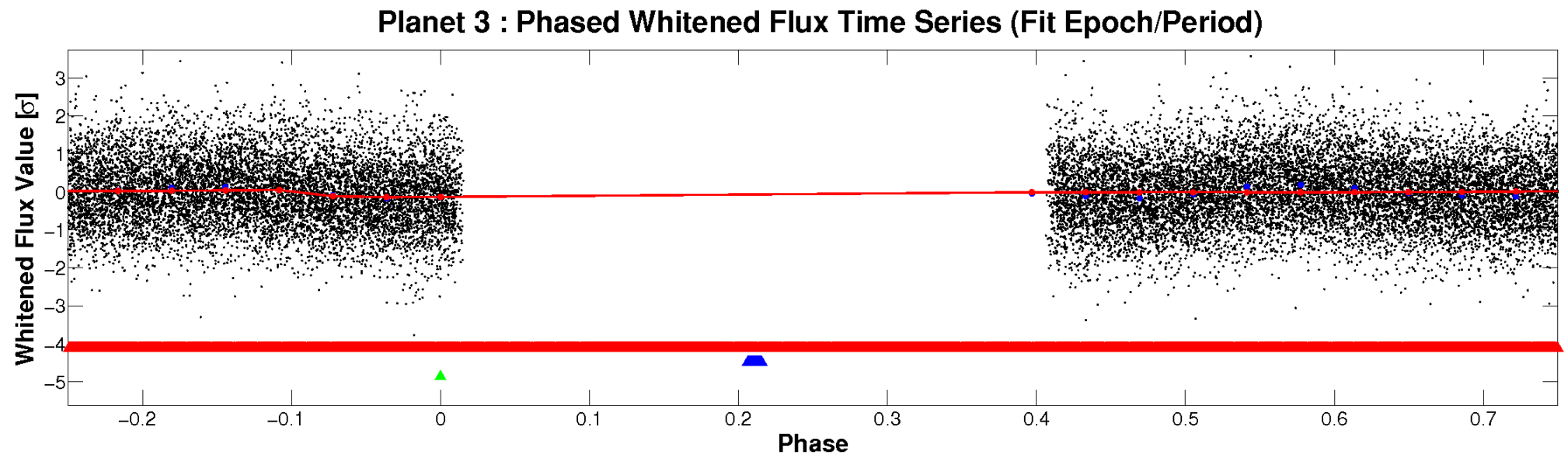
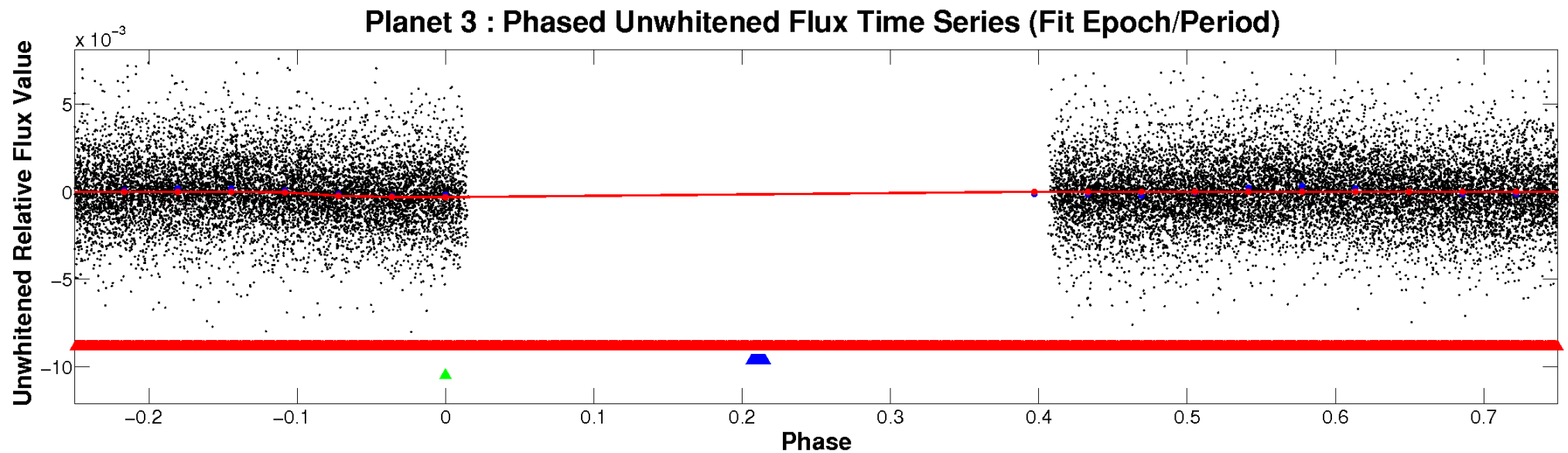


ALT Odd/Even

TCE 006230921-03

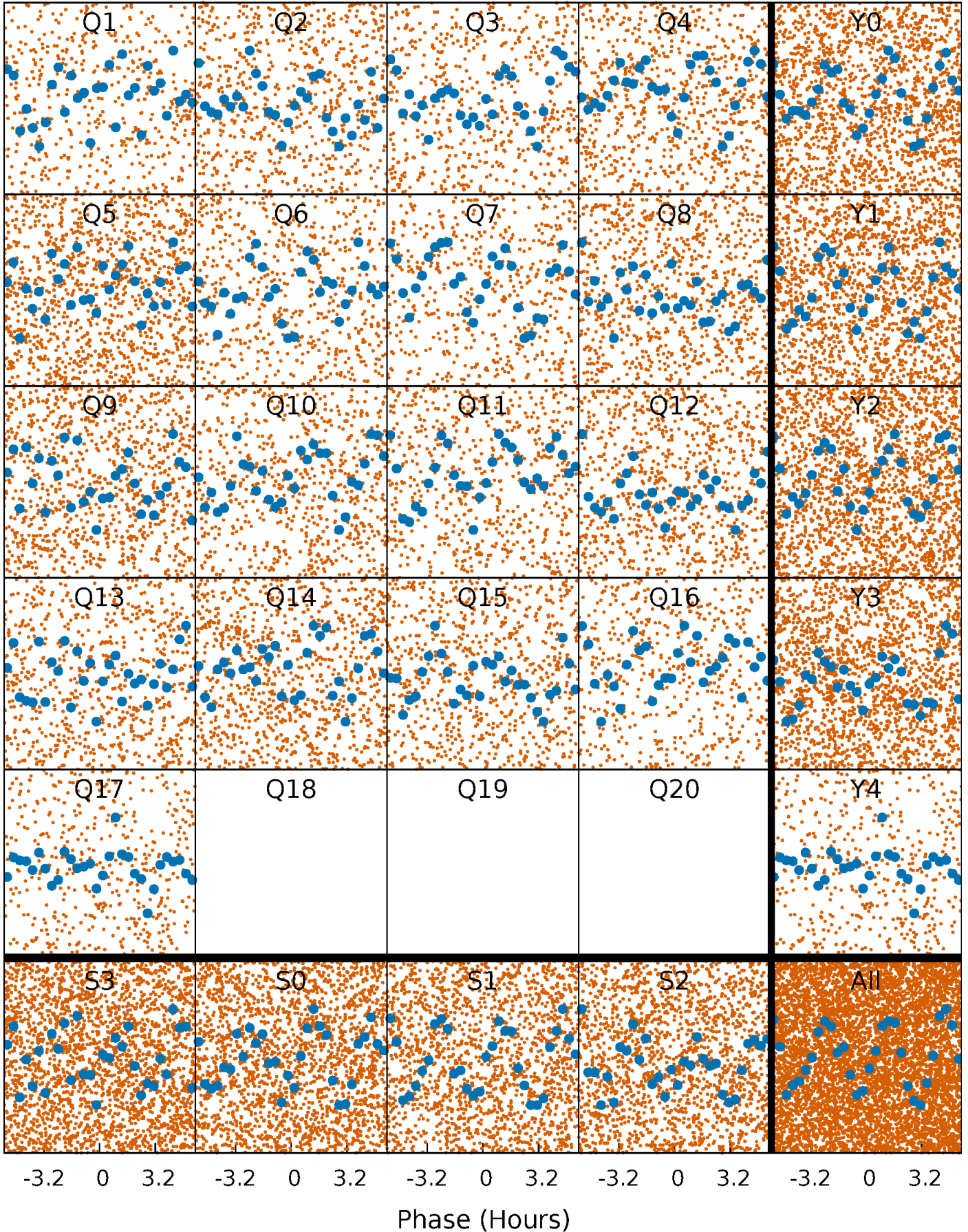


Non-Whitened Vs. Whitened Light Curve



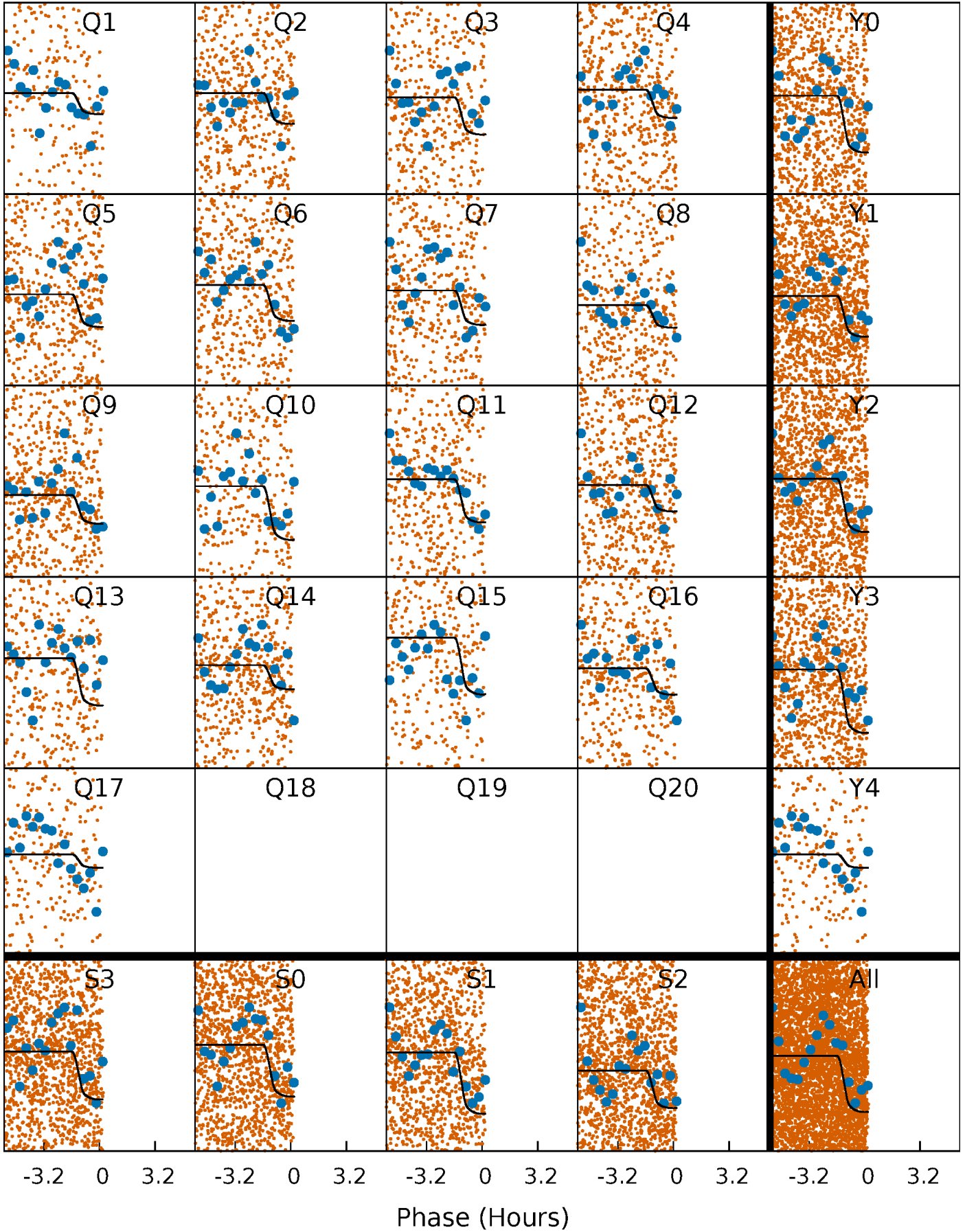
PDC Quarter-Phased Transit Curves

TCE 006230921-03 P= 0.566146 Days $T_0=131.672745$ (BKJD)



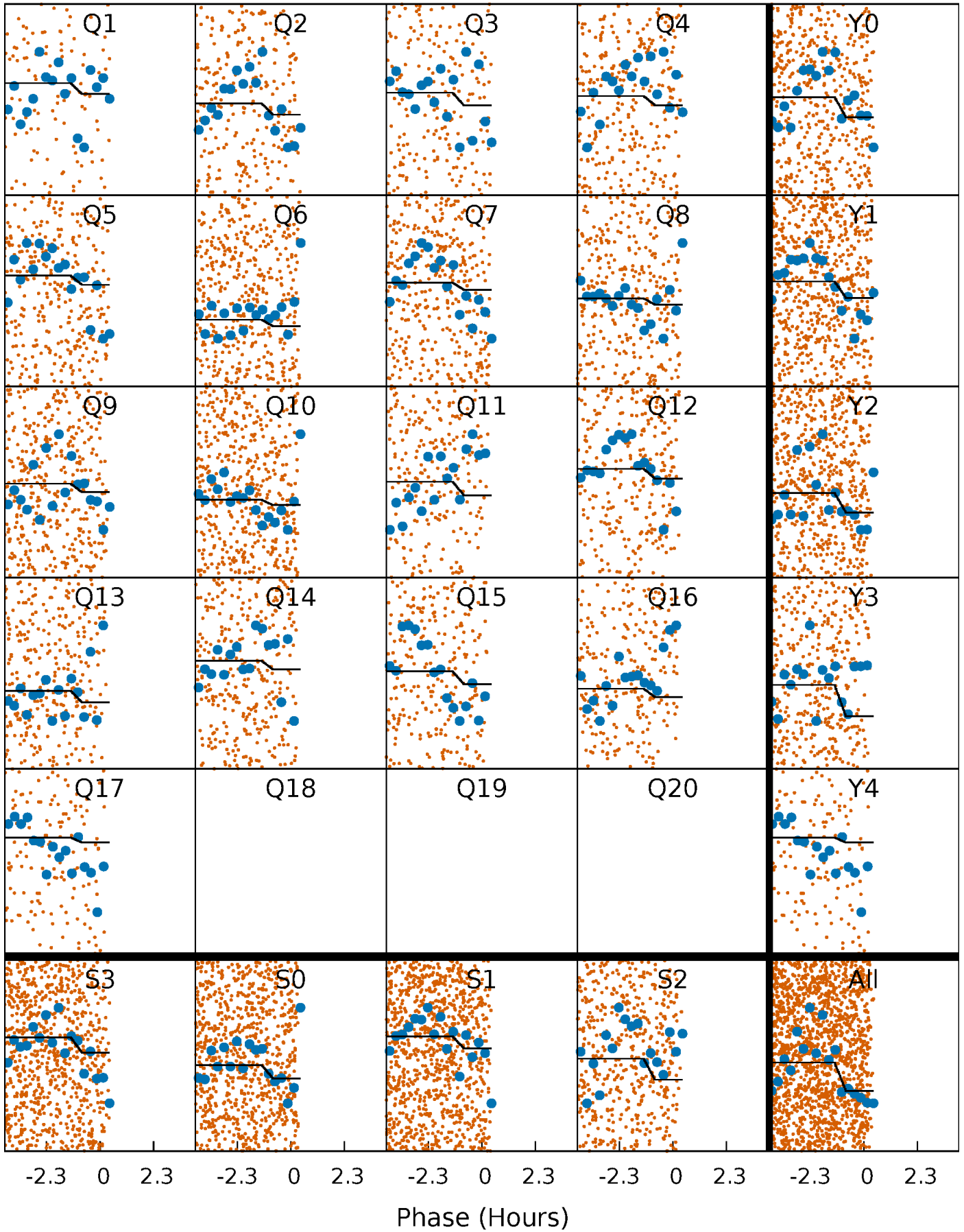
DV Quarter-Phased Transit Curves

TCE 006230921-03 P= 0.566146 Days $T_0=131.672745$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

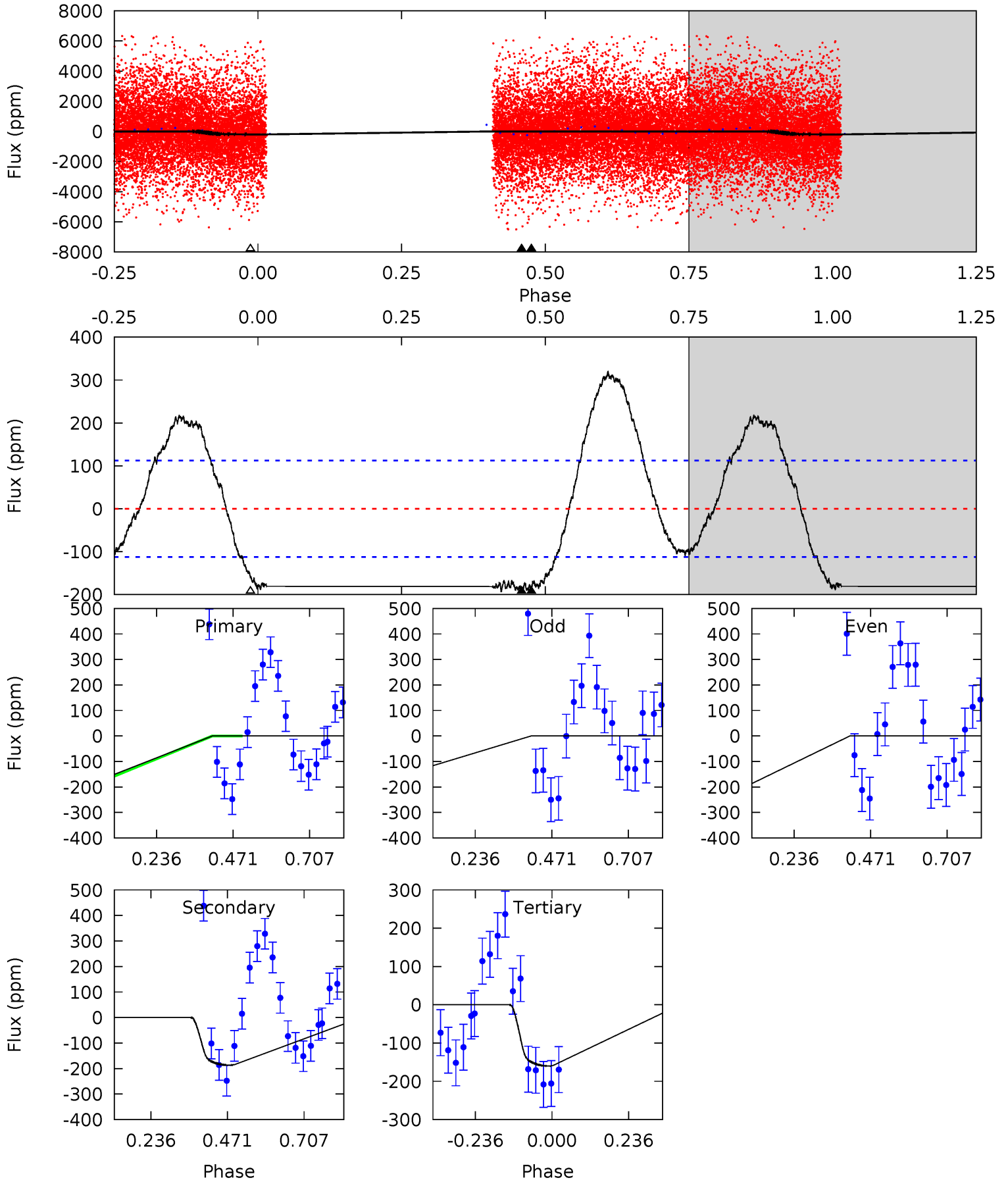
TCE 006230921-03 P= 0.566148 Days $T_0=131.664138$ (BKJD)



DV Model-Shift Uniqueness Test

006230921-03, P = 0.566146 Days, E = 131.672745 Days

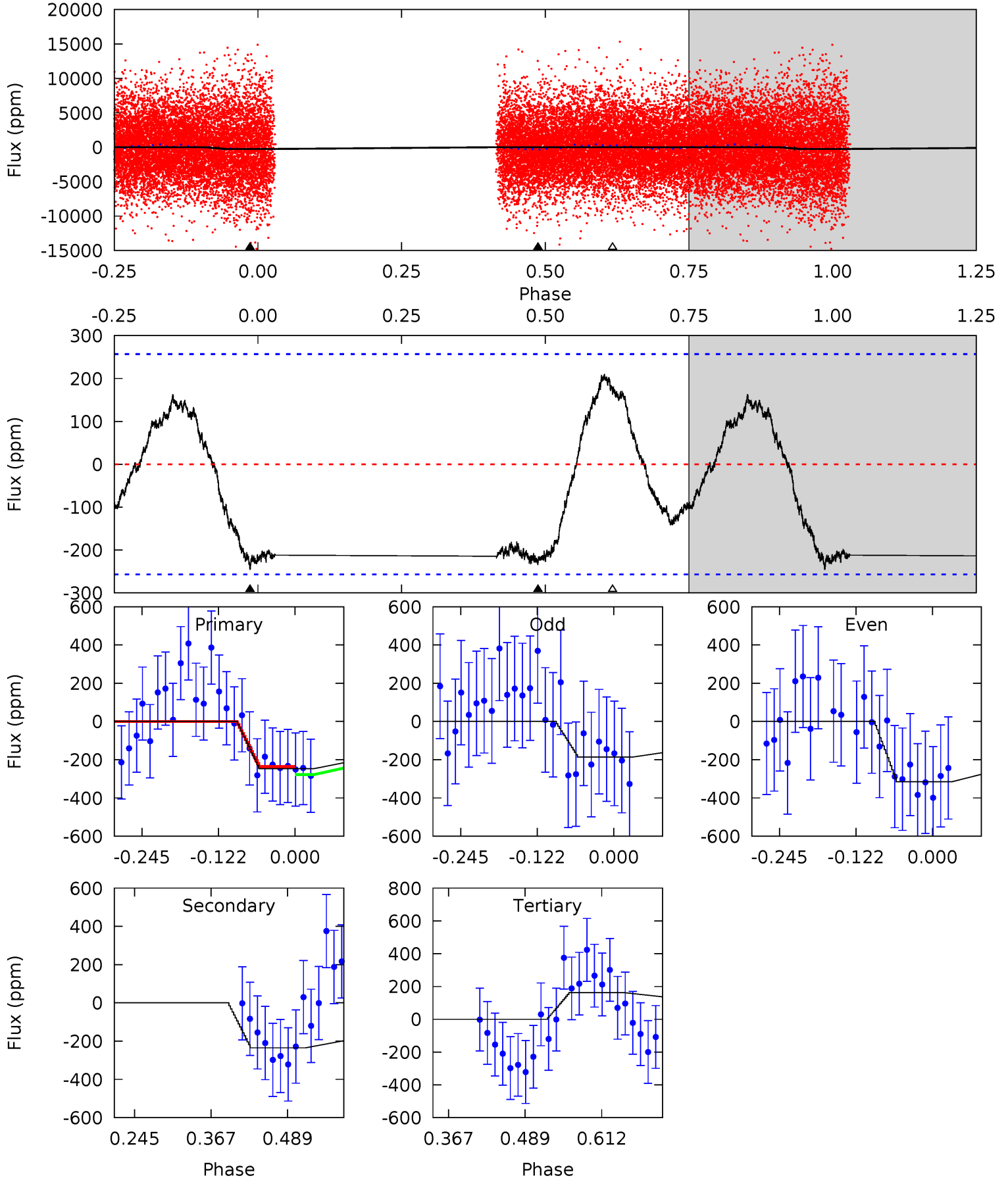
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.66	7.24	6.22	0	4.38	1.19	4.96	1.44	7.66	1.03	7.24	1.77	0.89	0.62	0.04



Alt Model-Shift Uniqueness Test

006230921-03, P = 0.566148 Days, E = 131.664138 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.34	4.14	-2.86	0	4.52	1.55	1.91	7.20	4.34	7.00	4.14	1.14	0.65	0.46	0.27



Stellar Parameters For KIC 006230921

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7296^{+232}_{-348}	$4.161^{+0.128}_{-0.192}$	$-0.160^{+0.250}_{-0.350}$	$1.663^{+0.512}_{-0.341}$	$1.460^{+0.211}_{-0.234}$	$0.447^{+0.288}_{-0.235}$
	+3%/-5%	+3%/-5%	+156%/-219%	+31%/-21%	+14%/-16%	+64%/-53%
Source	PHO1	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 006230921-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-186 ± 26	$3.47^{+1.05}_{-0.87}$	4760^{+387}_{-335}	5891^{+987}_{-767}	$1.934^{+1.524}_{-0.827}$
Alt.	-235 ± 57	$2.57^{+0.88}_{-0.84}$	4732^{+389}_{-328}	7509^{+2184}_{-1324}	$4.533^{+5.570}_{-2.160}$

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 $A_{obs} \gg 1.0$

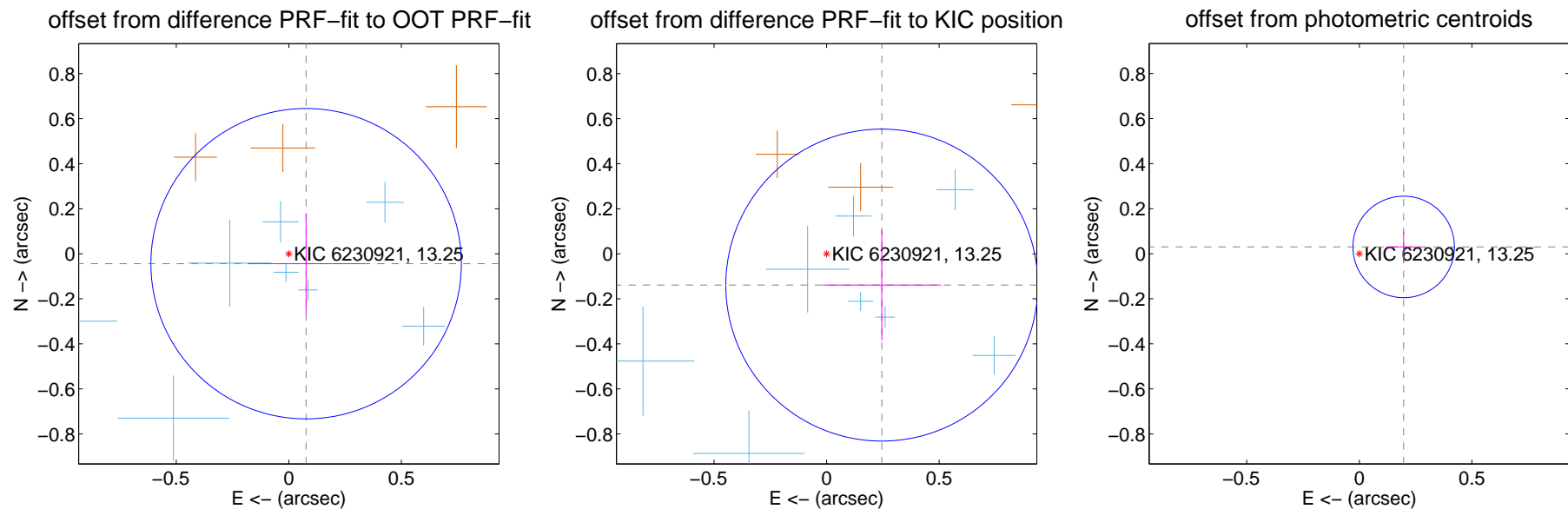
DV Centroid Data

Supplemental centroid analysis for 006230921-03. Kepler magnitude: 13.25. Transit SNR 8.42

There are 11 quarters with good PRF difference image offsets

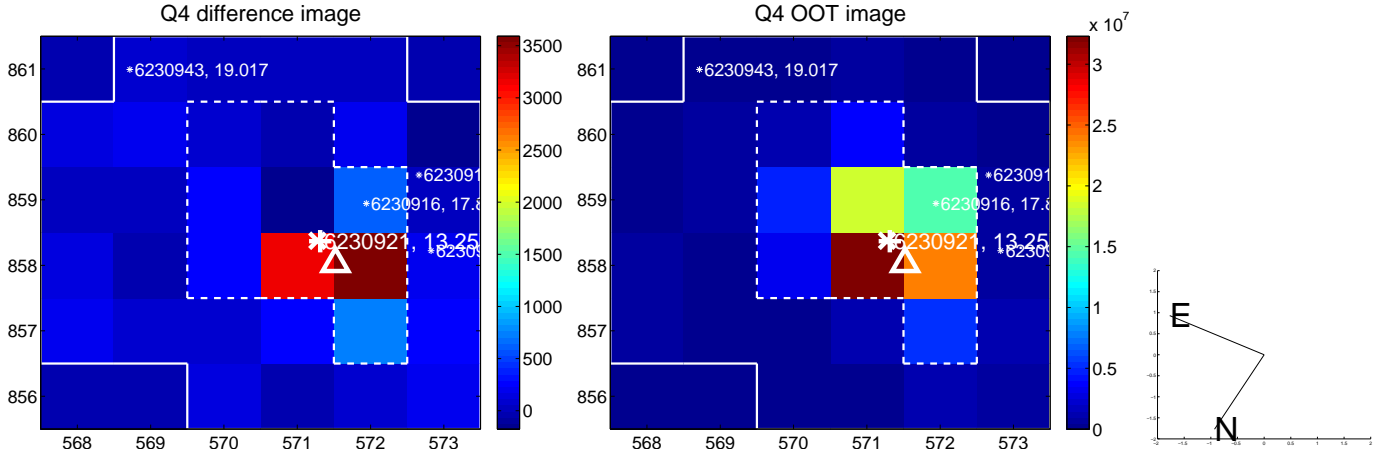
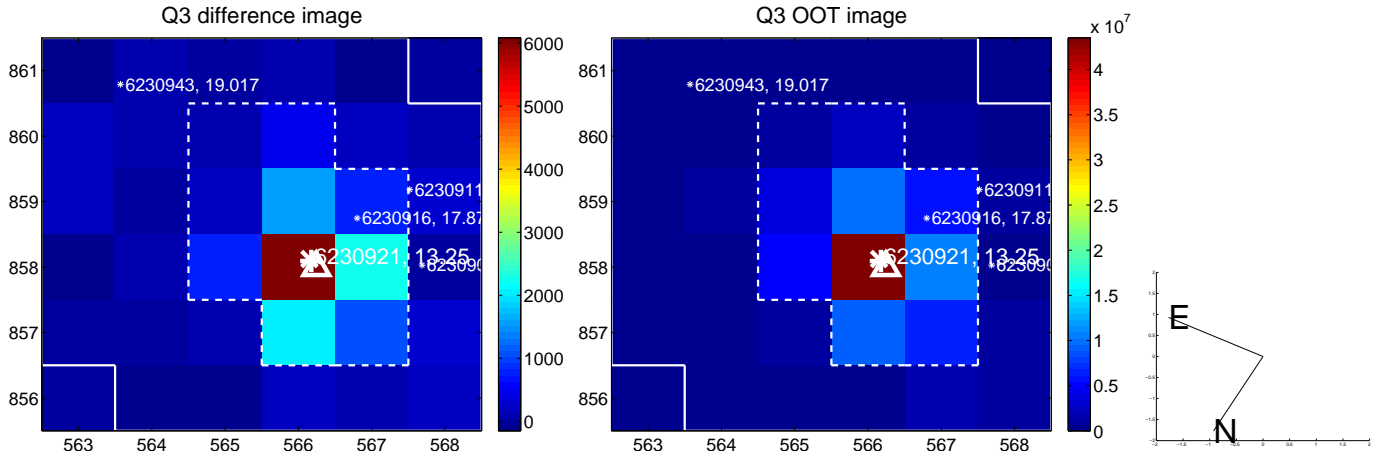
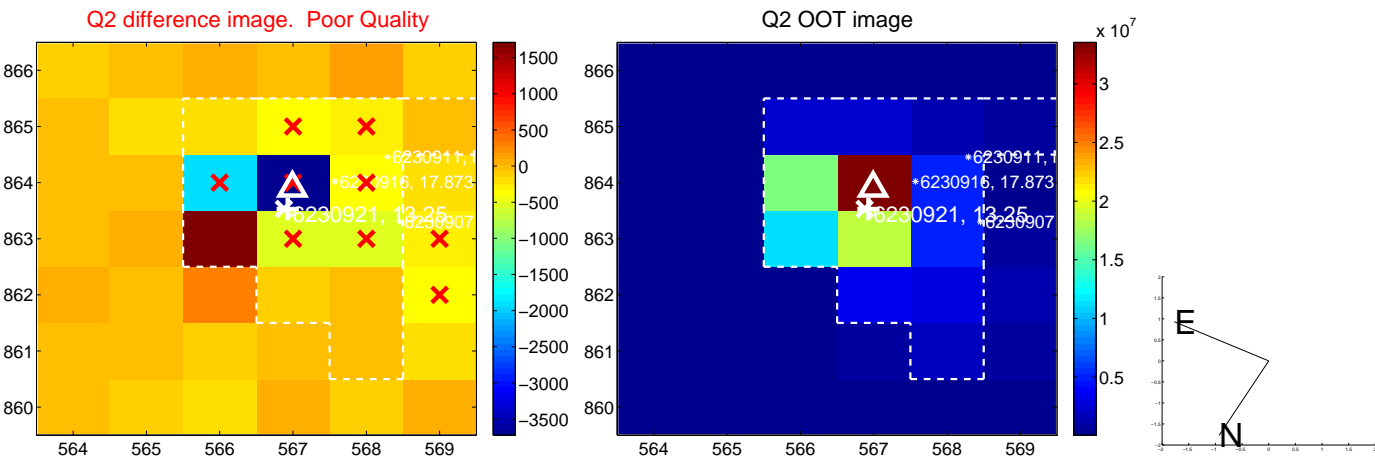
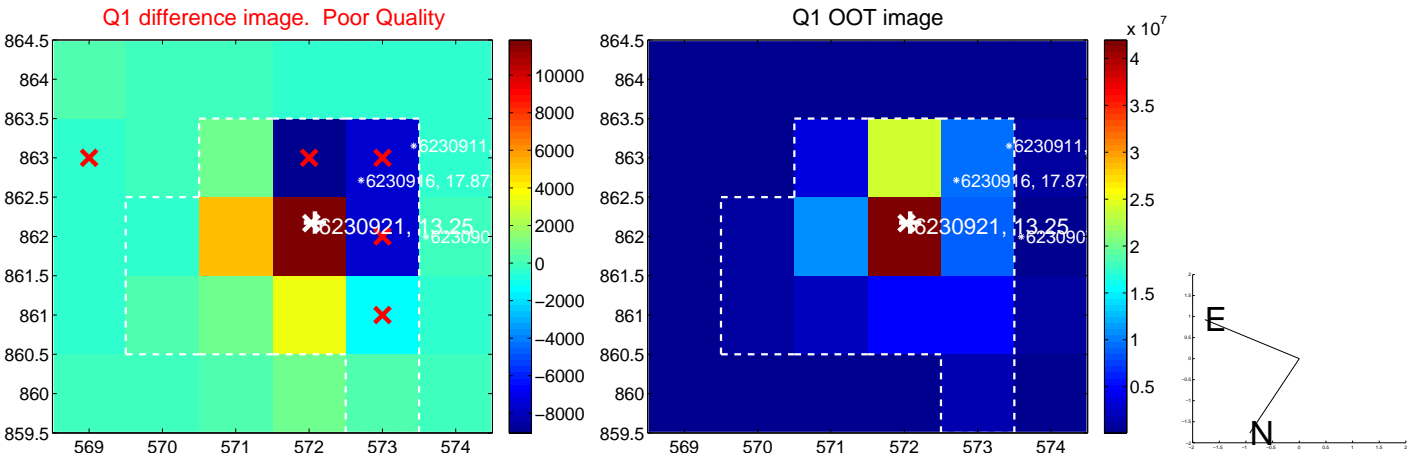
The direct PRF centroid is offset from the target star catalog position by about 0.25 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.089 ± 0.230	0.39	-0.077 ± 0.259	-0.044 ± 0.224
PRF-fit source offset from KIC position	0.282 ± 0.231	1.22	-0.245 ± 0.263	-0.139 ± 0.246
photometric centroid source offset	0.20 ± 0.08	2.65	-0.20 ± 0.08	0.03 ± 0.07

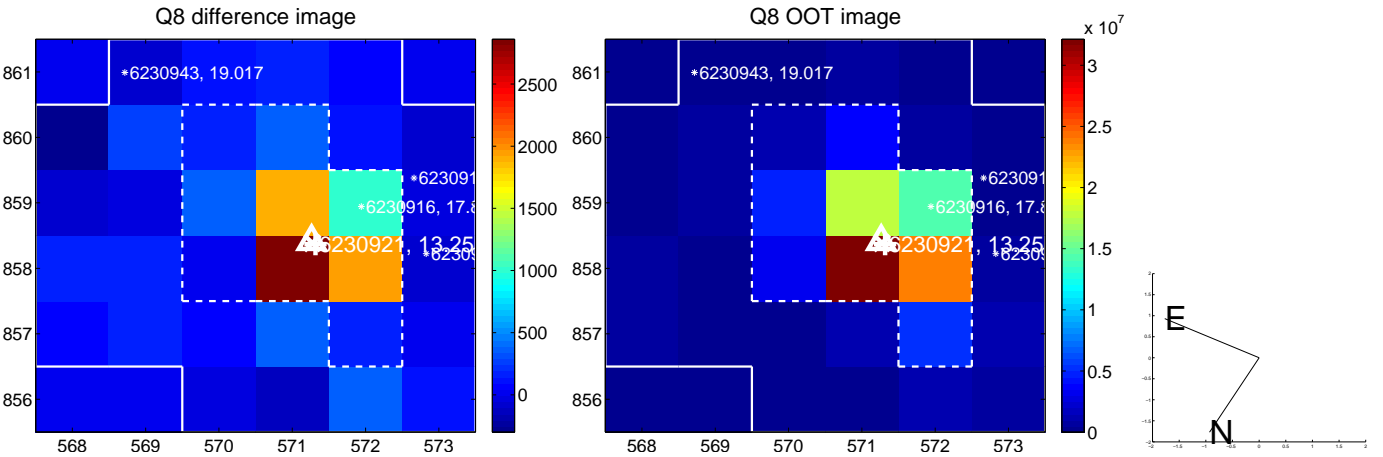
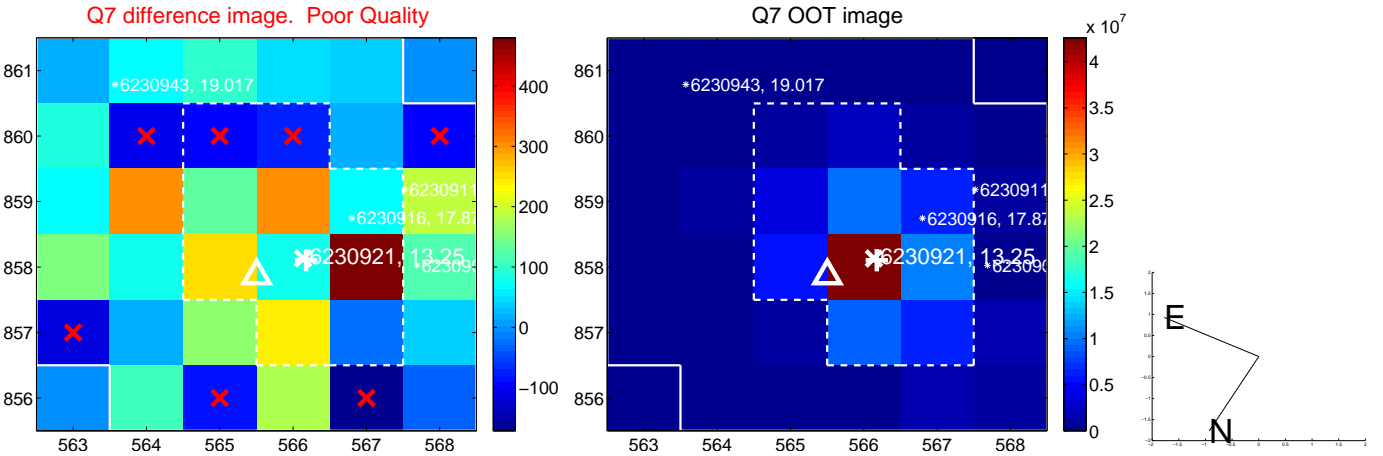
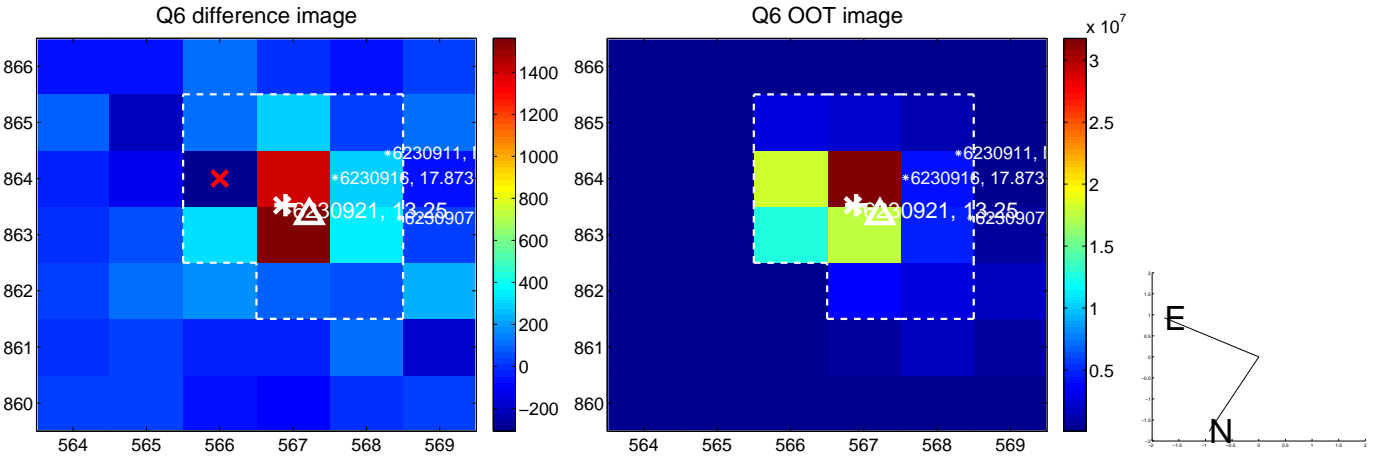
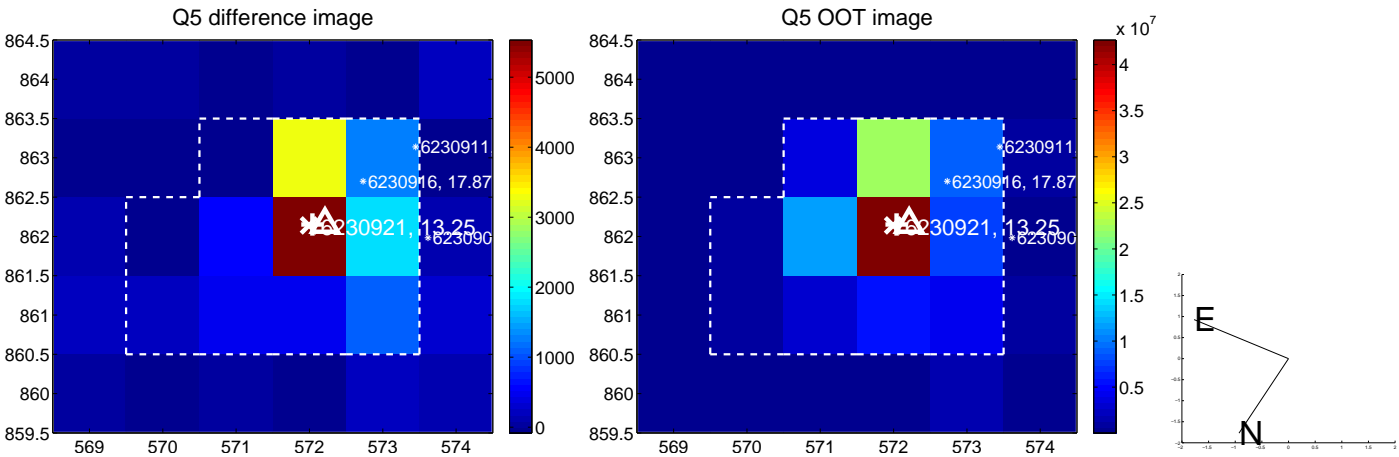


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

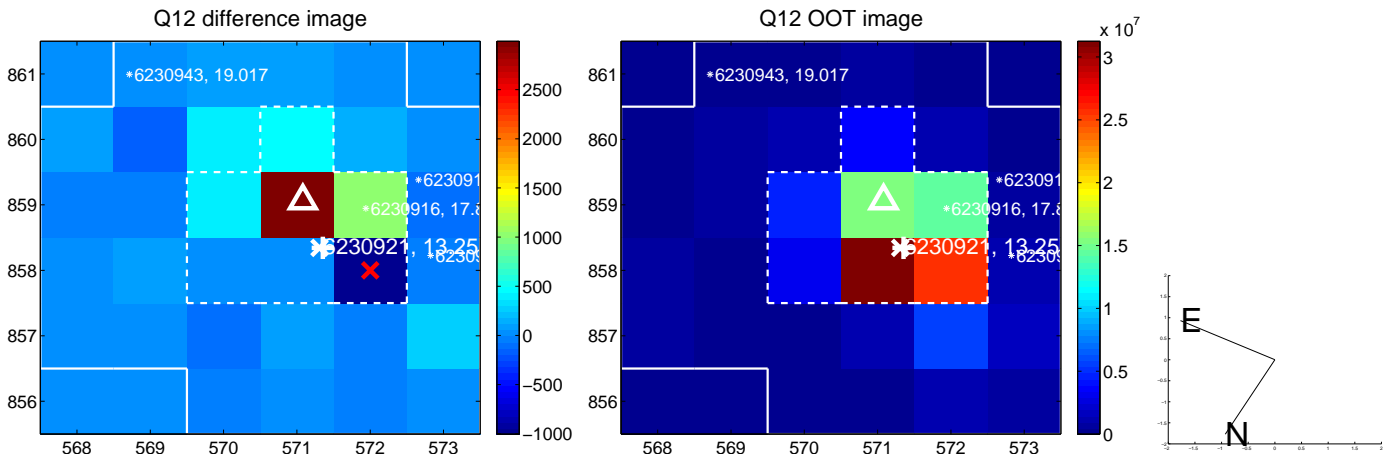
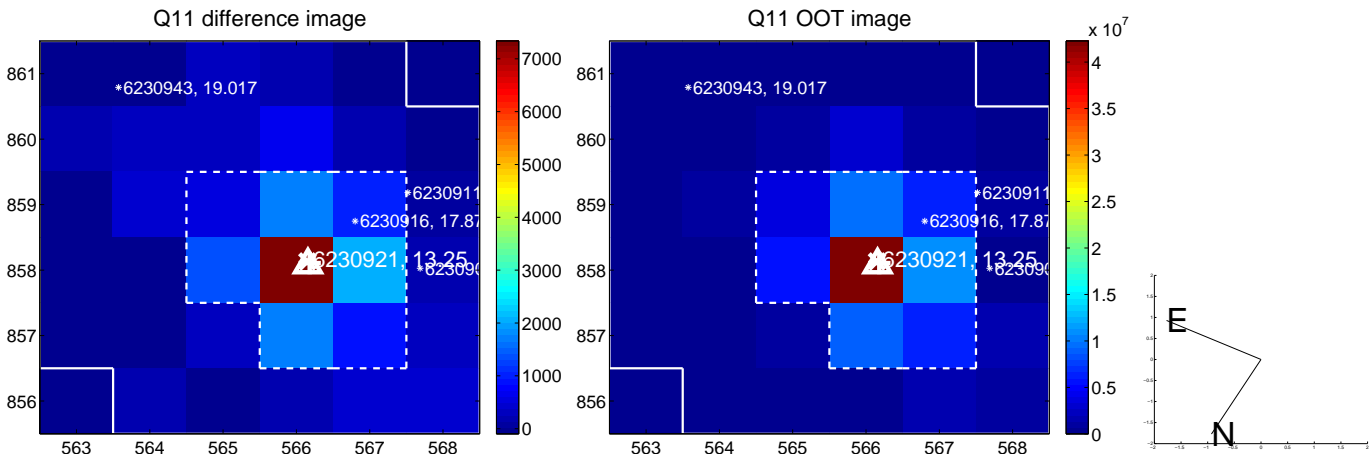
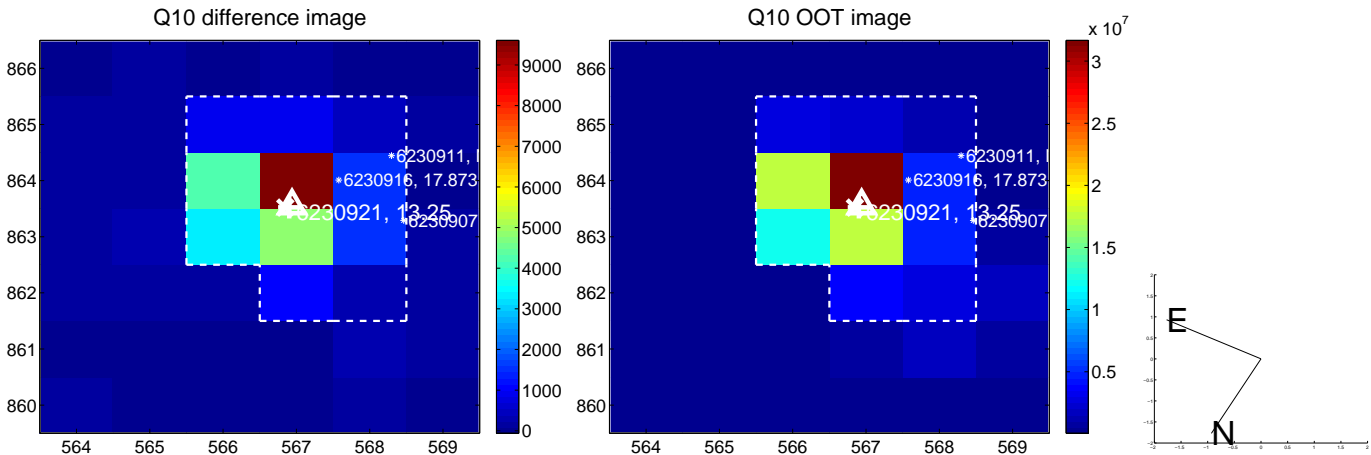
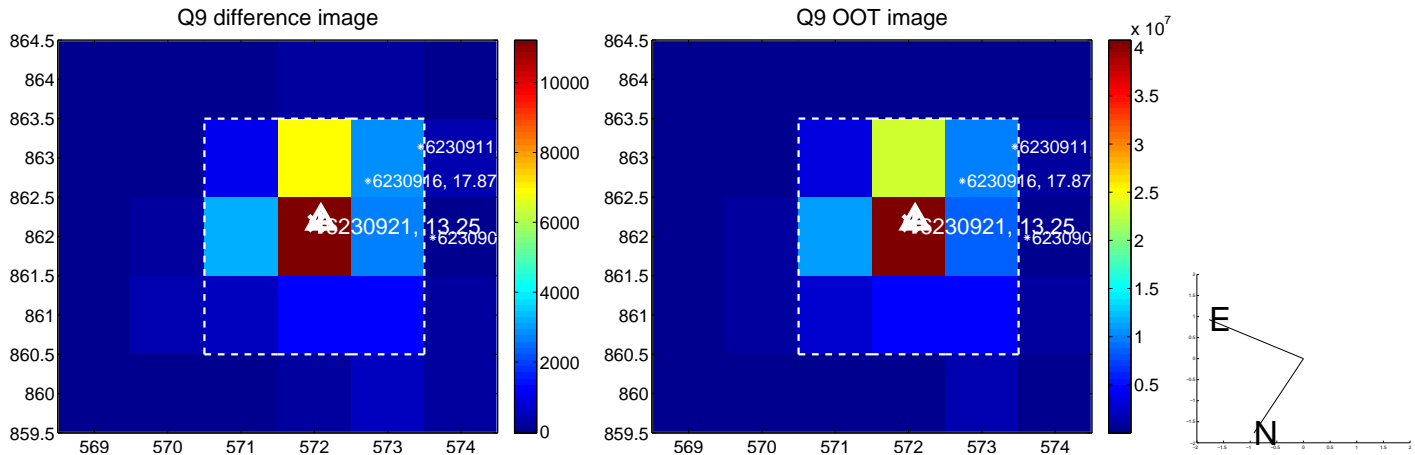
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



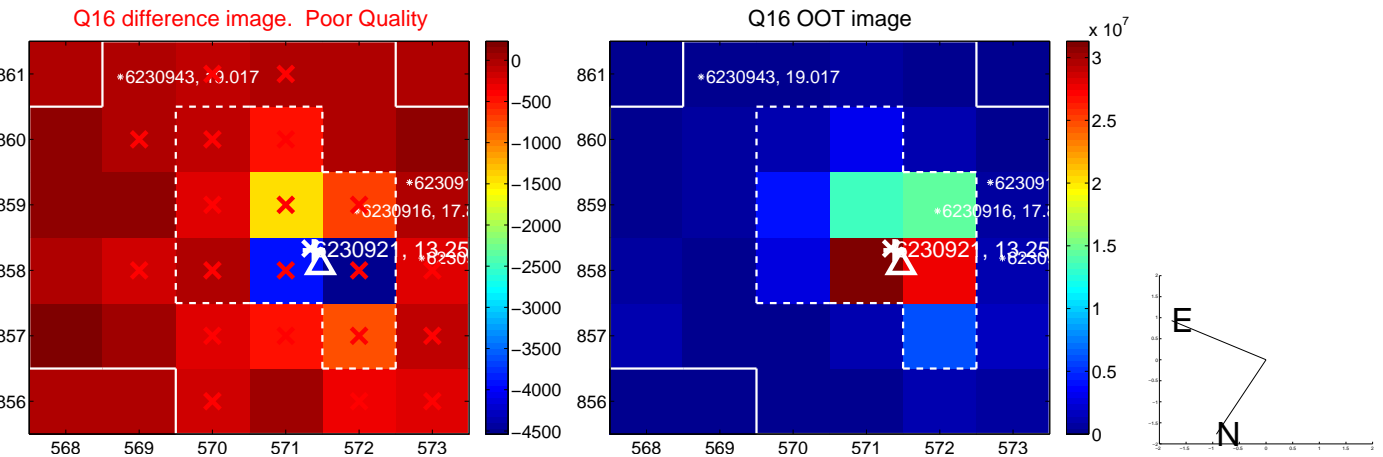
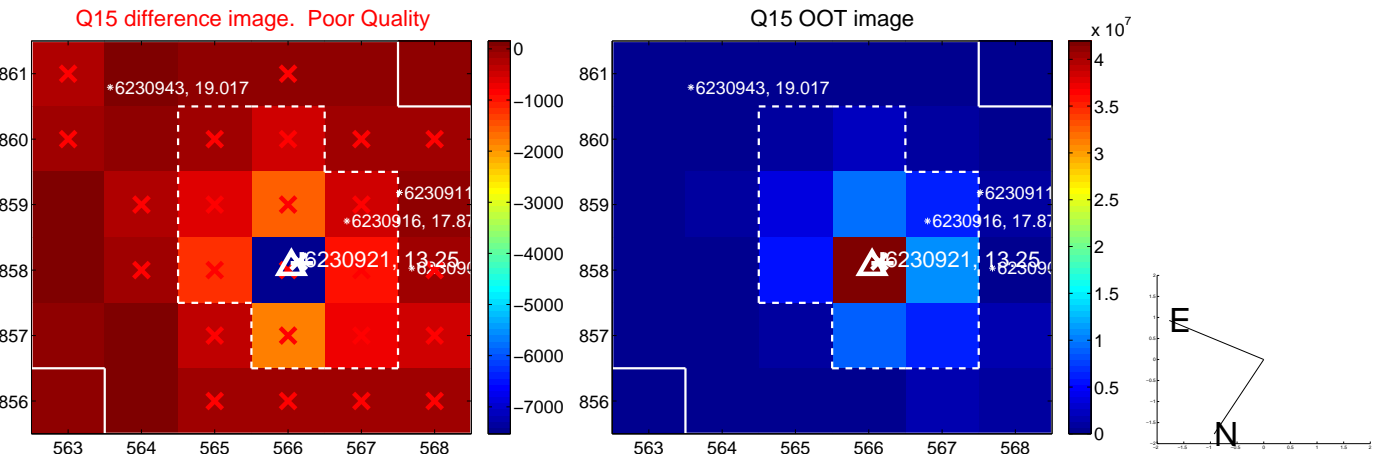
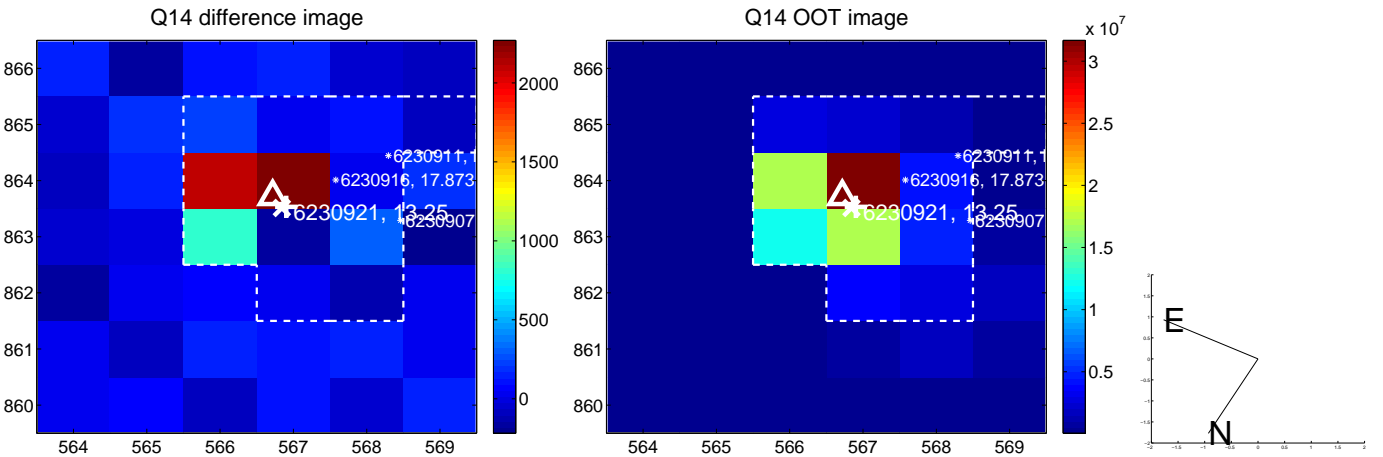
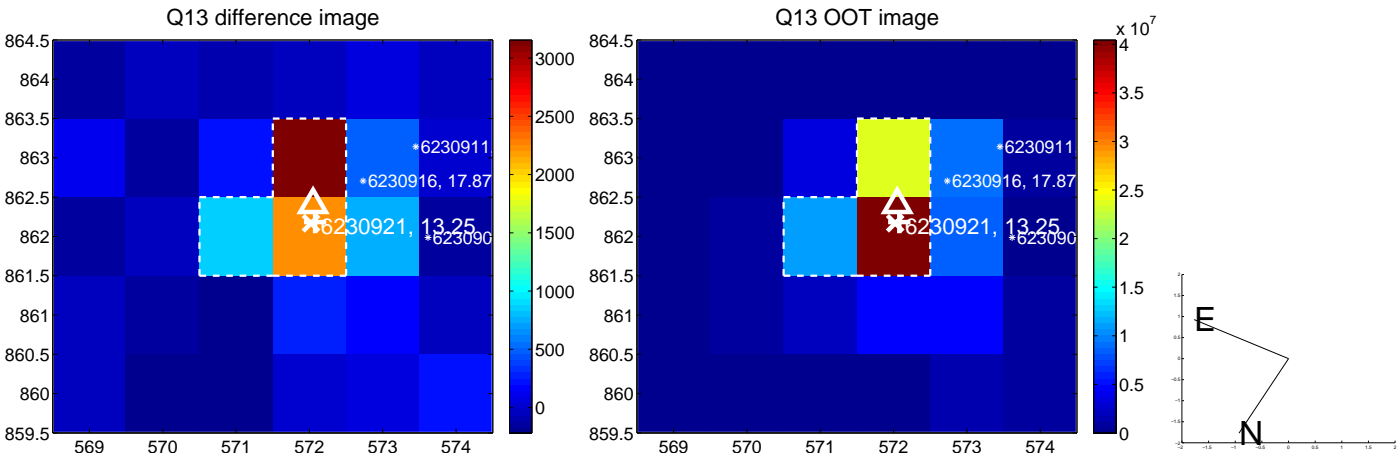
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



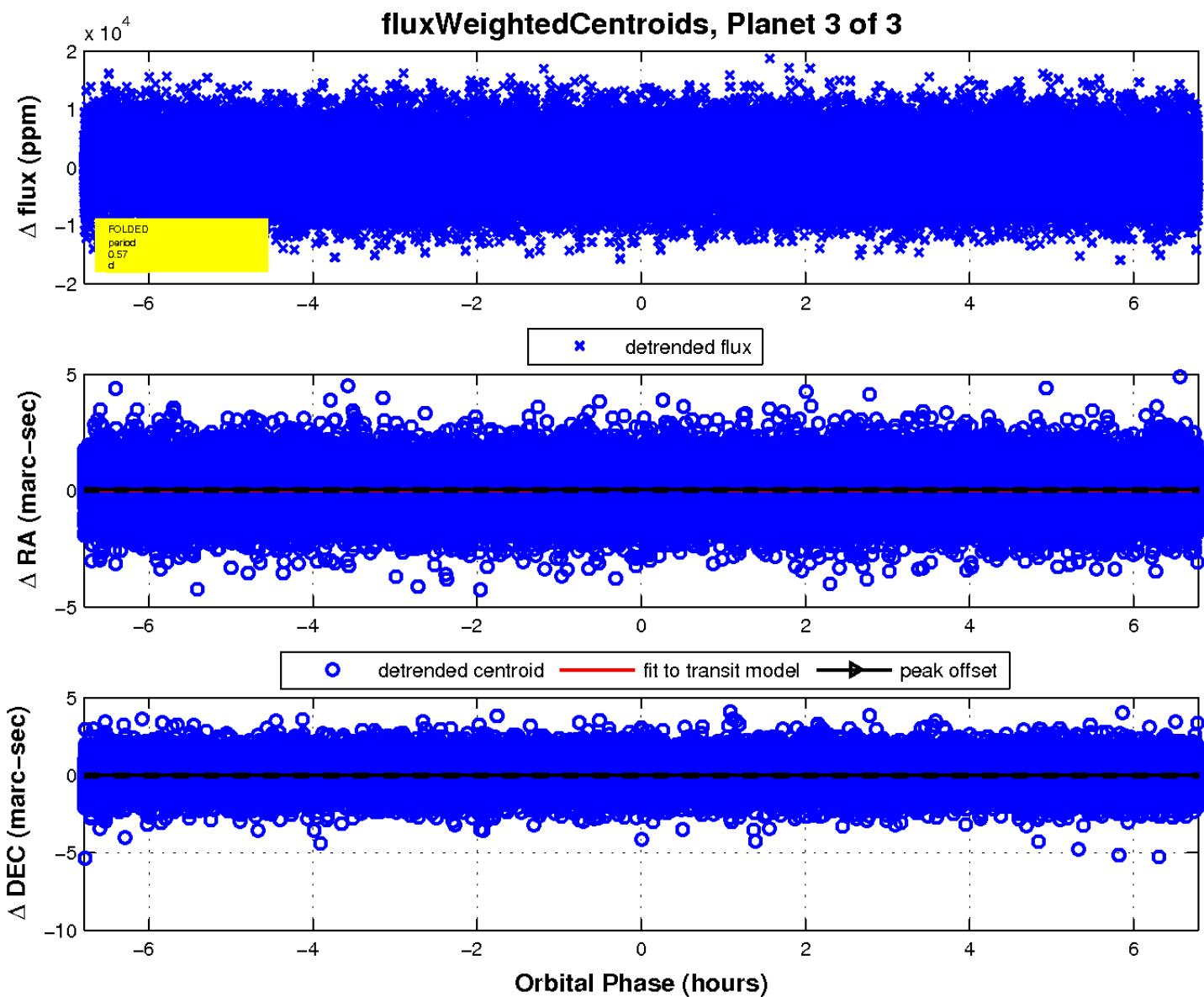
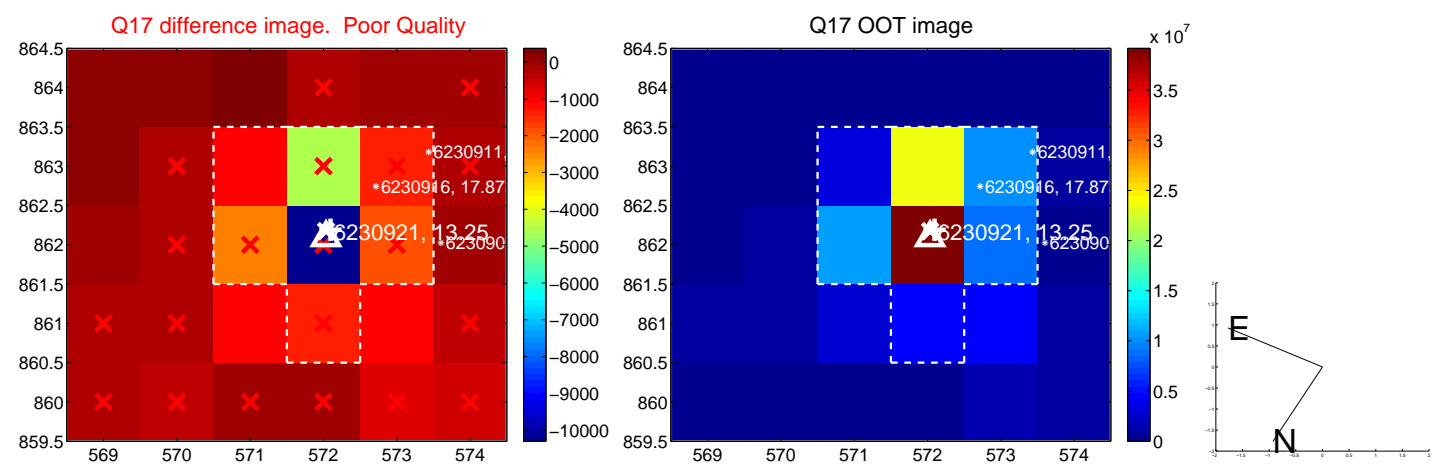
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

