

KIC 011414527

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})
011414527-01	OBS	No	3.141676	131.744329	106.9	4.483	11.3	11.3	2.04	7331	2.45	4344.04
011414527-02	OBS	No	0.652382	132.036339	45.6	3.735	9.6	8.4	2.04	7331	1.60	35326.97
011414527-03	OBS	No	6.283468	134.191255	240.2	3.433	8.4	10.0	2.04	7331	3.49	1723.89

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011414527-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
011414527-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED
011414527-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

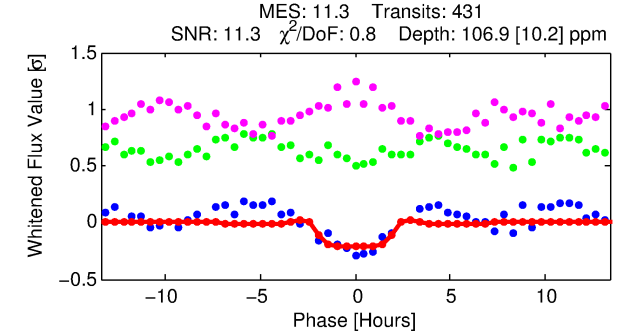
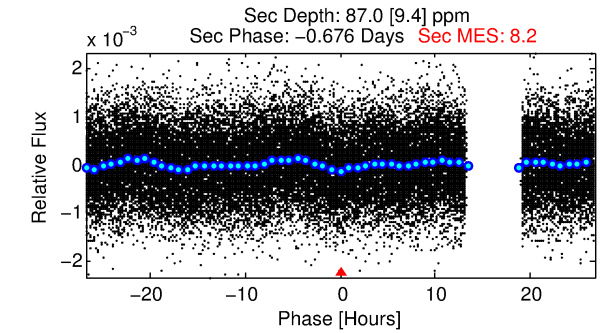
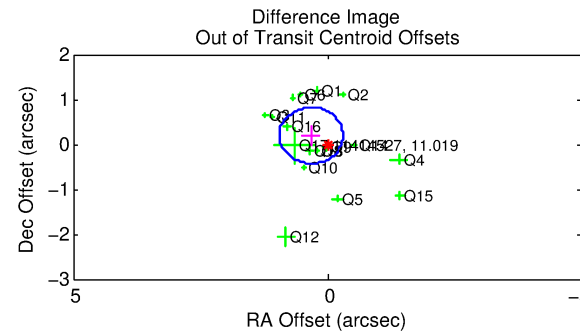
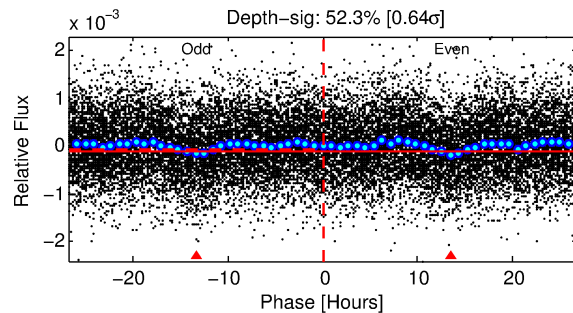
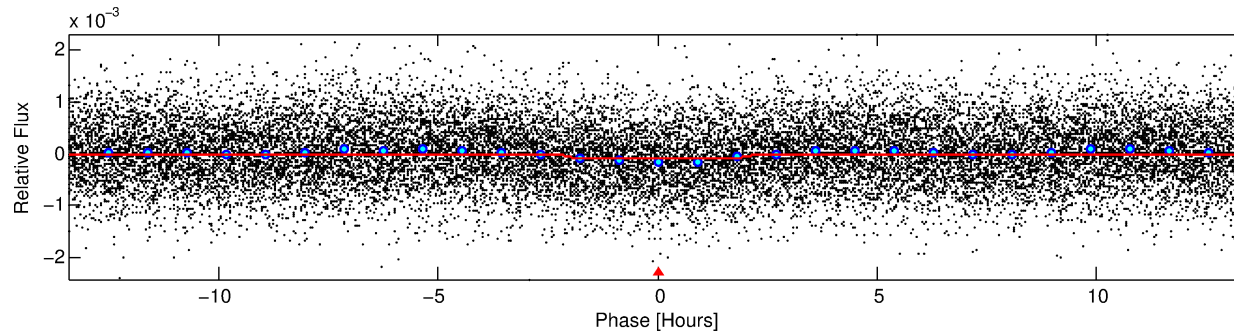
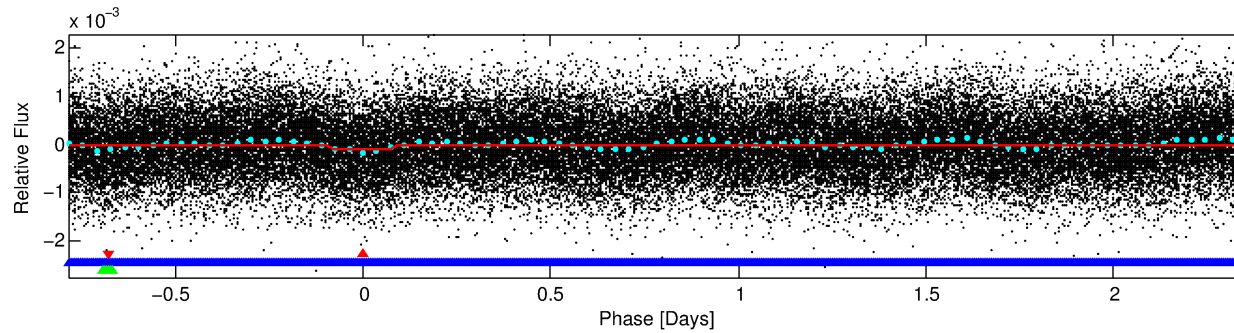
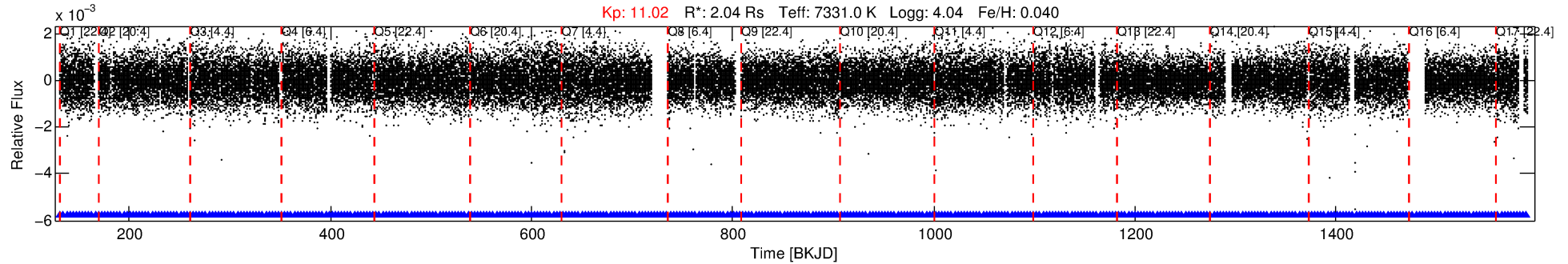
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011414527-01

No Significant Match Found

DV One-Page Summary

KIC: 11414527 Candidate: 1 of 3 Period: 3.142 d



DV Fit Results:

Period = 3.14168 [0.00003] d
Epoch = 131.7443 [0.0059] BKJD
Rp/R* = 0.0110 [0.0038]
a/R* = 2.60 [4.95]
b = 0.90 [0.46]
Seff = 4344.04 [1595.56]
Teq = 2070 [190] K
Rp = 2.45 [1.11] Re
a = 0.0498 [0.0115] AU
Ag = 19.77 [15.36] [1.22 σ]
Teffp = 6749 [1228] K [3.77 σ]

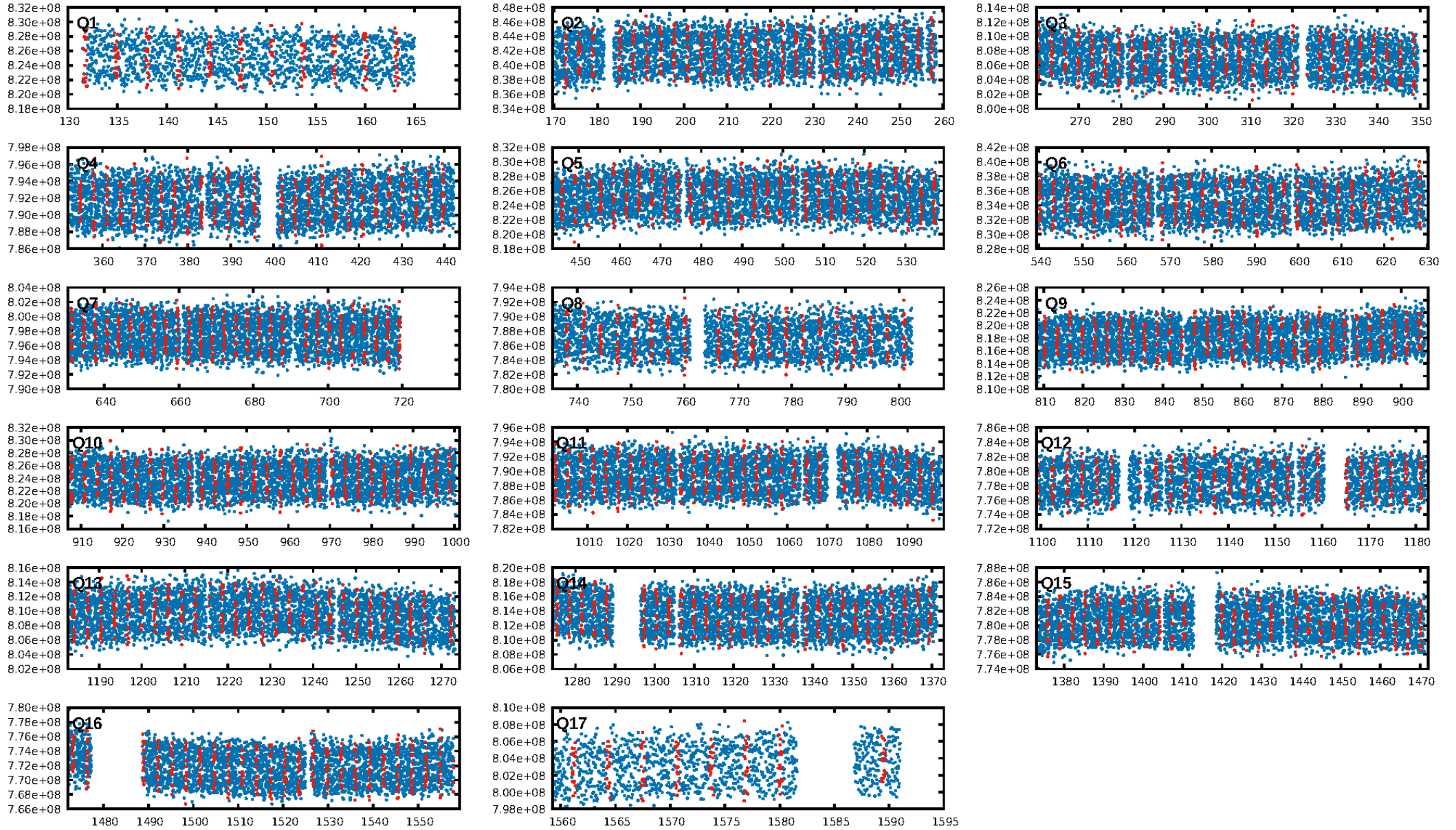
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [10.24 σ]
LongPeriod-sig: 100.0% [13.35 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.83e-28
RollingBand-fgt: 1.00 [412/412]
GhostDiagnostic-chr: 0.9876
Centroid-sig: N/A
Centroid-so: 0.102 arcsec [0.70 σ]
OotOffset-rm: 0.377 arcsec [1.81 σ]
KicOffset-rm: 0.398 arcsec [1.78 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.94 [16/17]
DiffImageOverlap-fno: 0.00 [0/17]

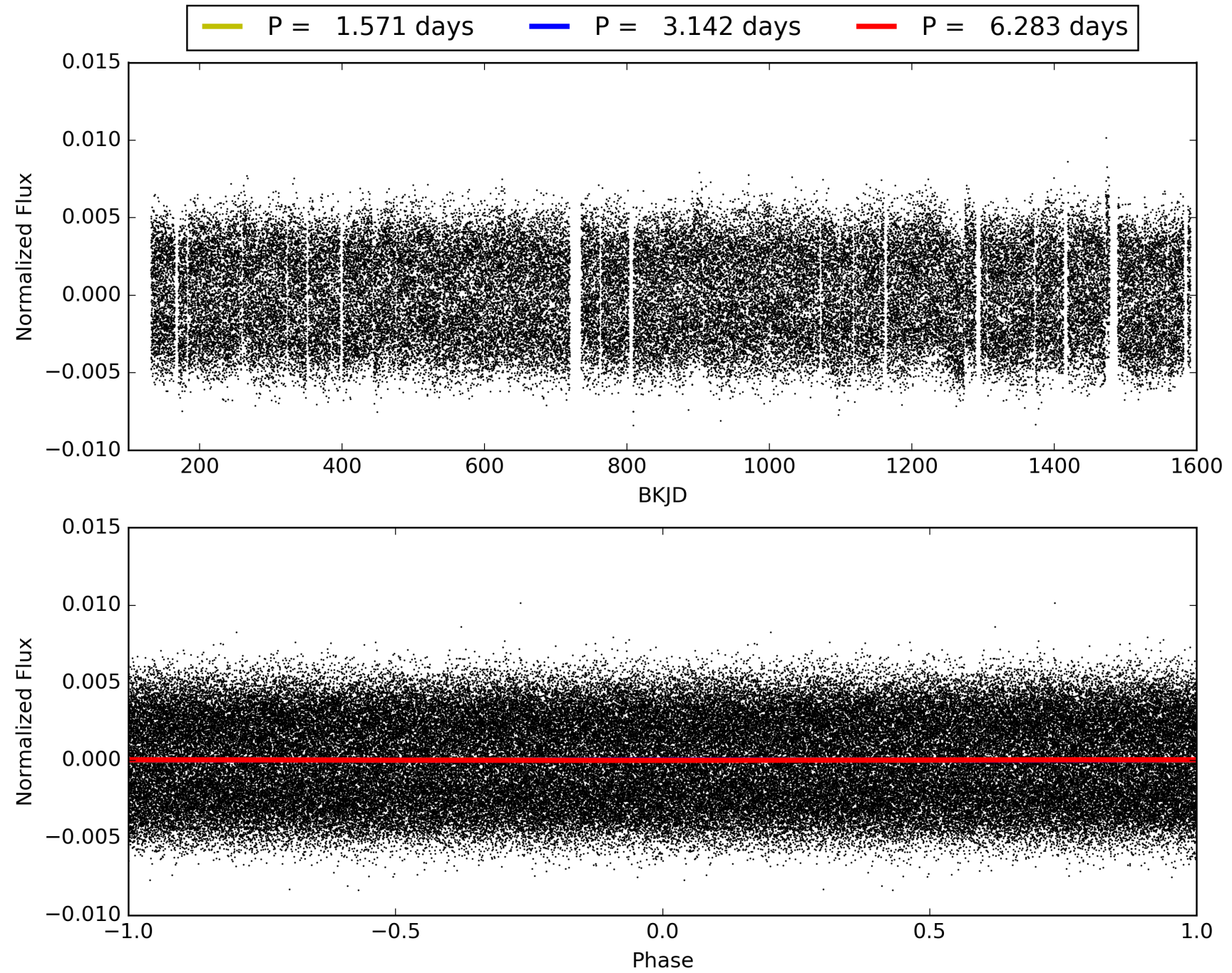
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 011414527-01, PDC Light Curves

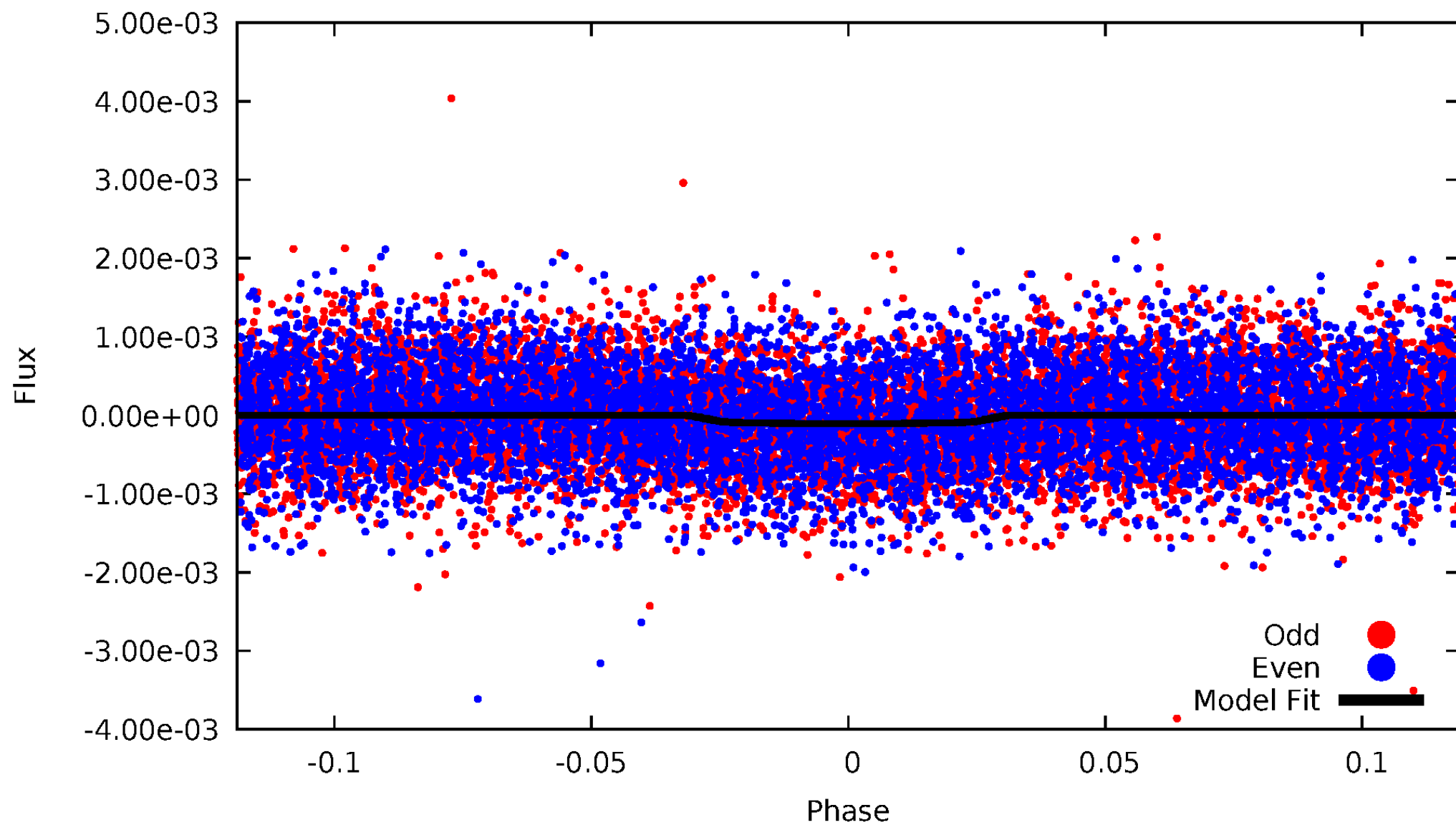


TCE 011414527-01



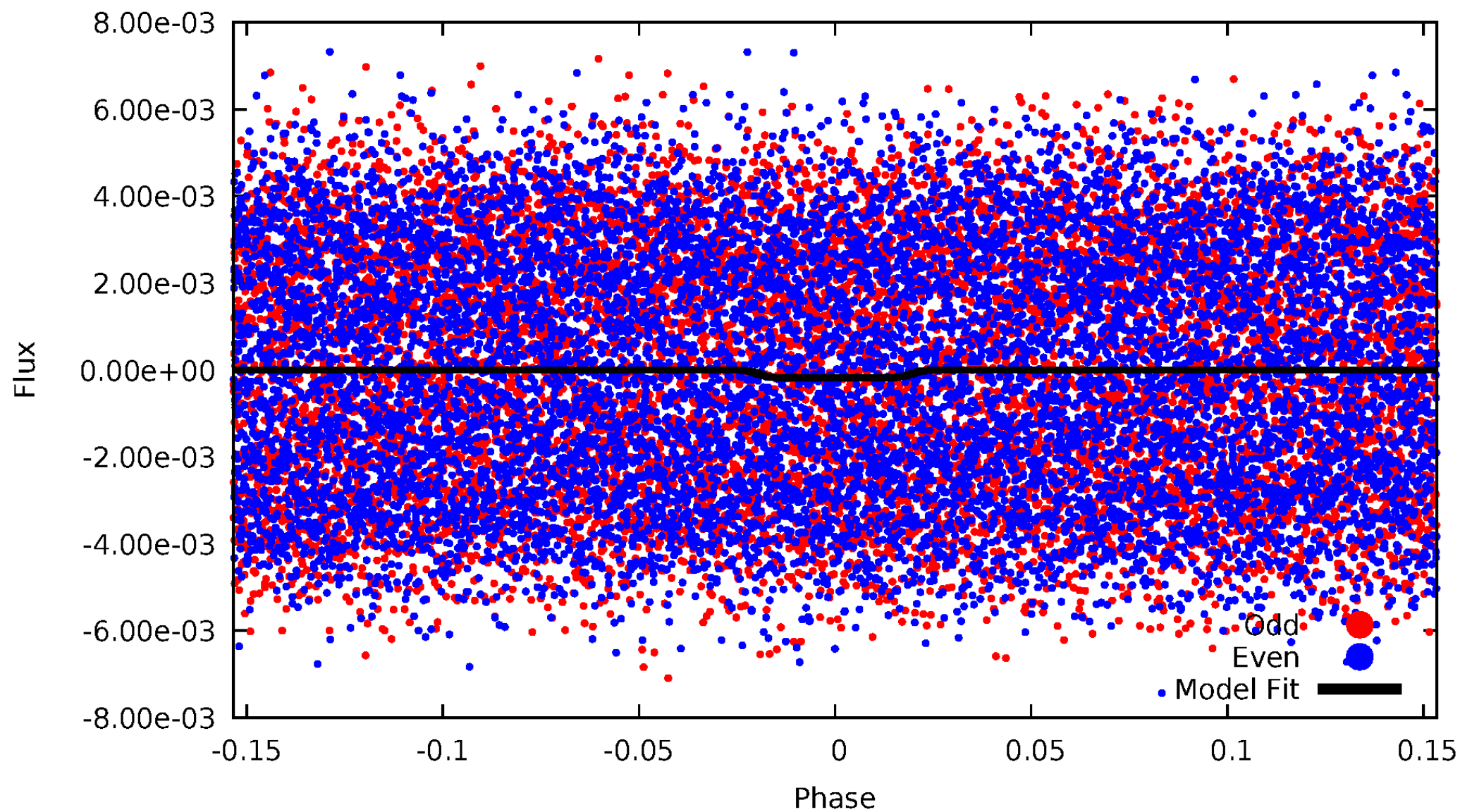
DV Odd/Even

TCE 011414527-01

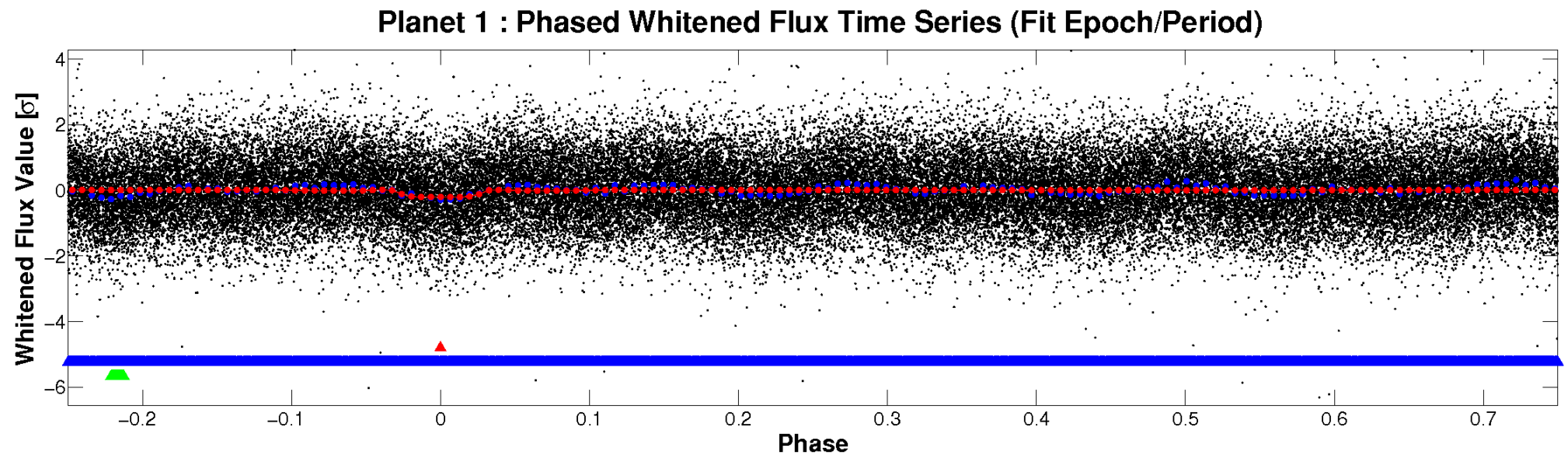
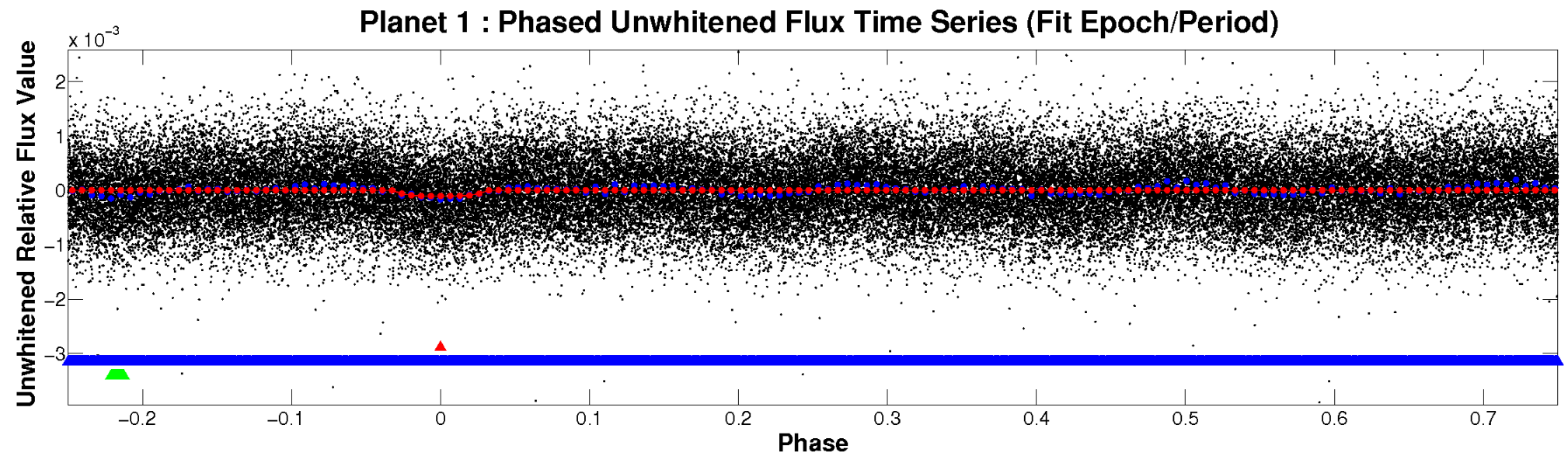


ALT Odd/Even

TCE 011414527-01

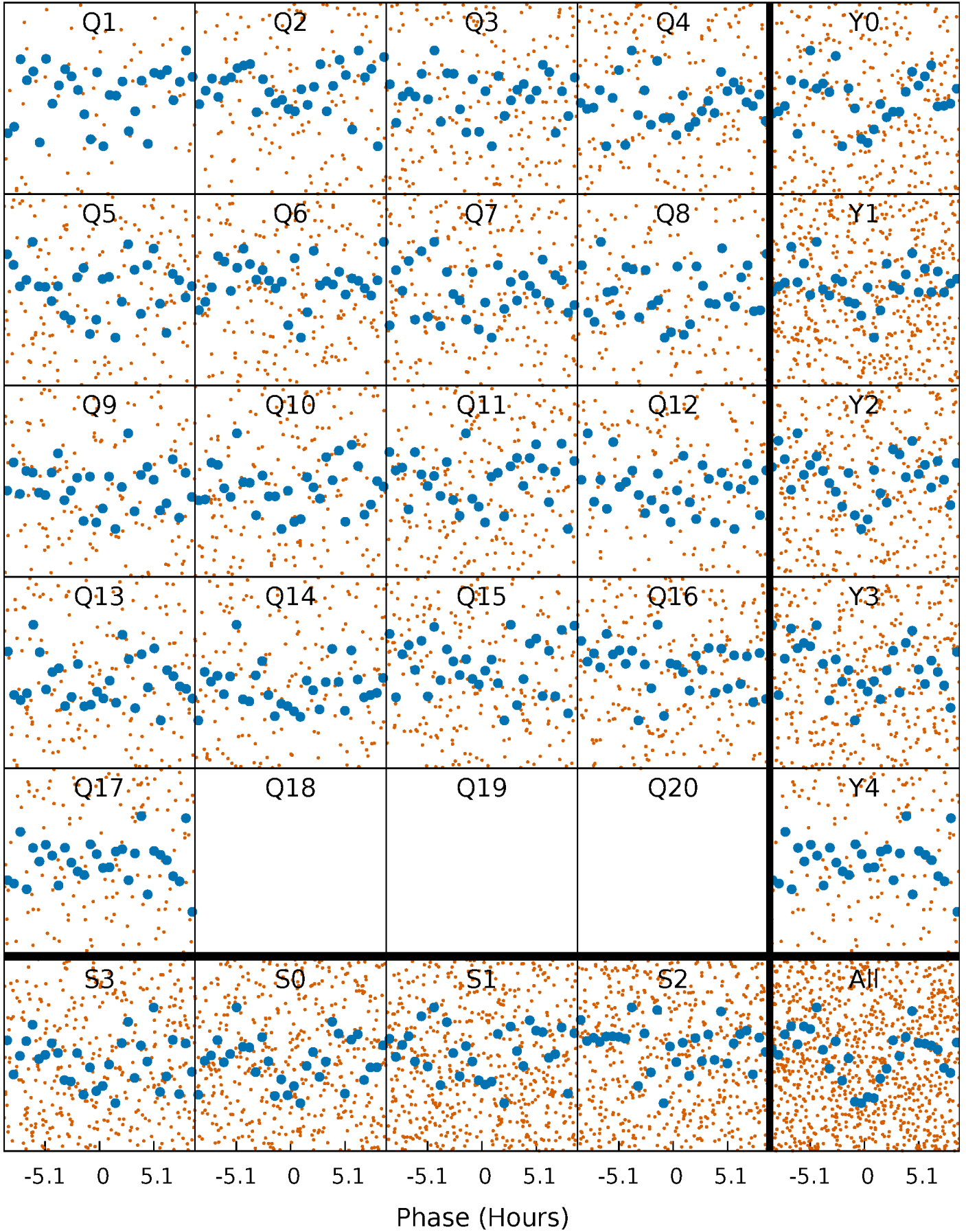


Non-Whitened Vs. Whitened Light Curve



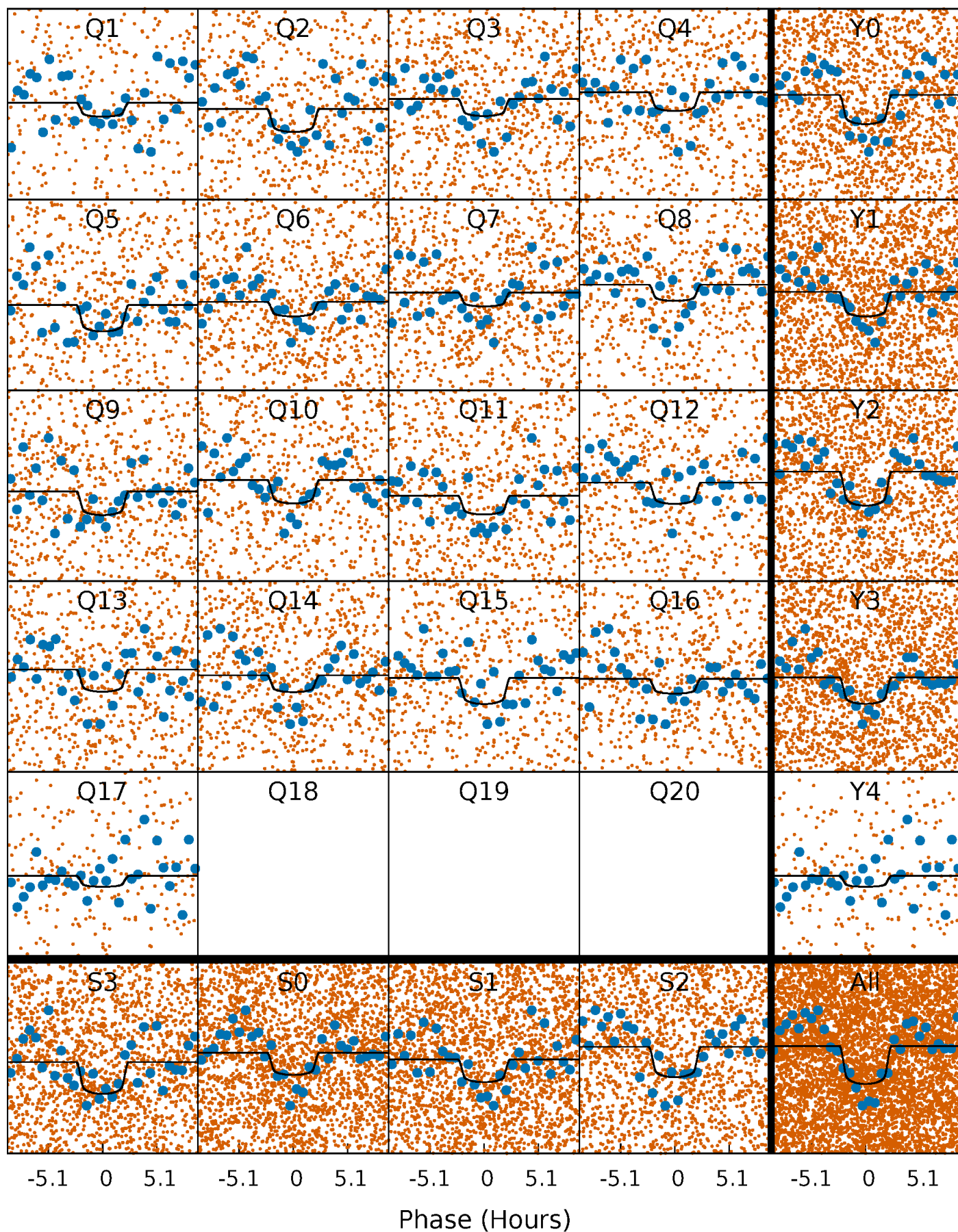
PDC Quarter-Phased Transit Curves

TCE 011414527-01 P= 3.141676 Days $T_0=131.744329$ (BKJD)



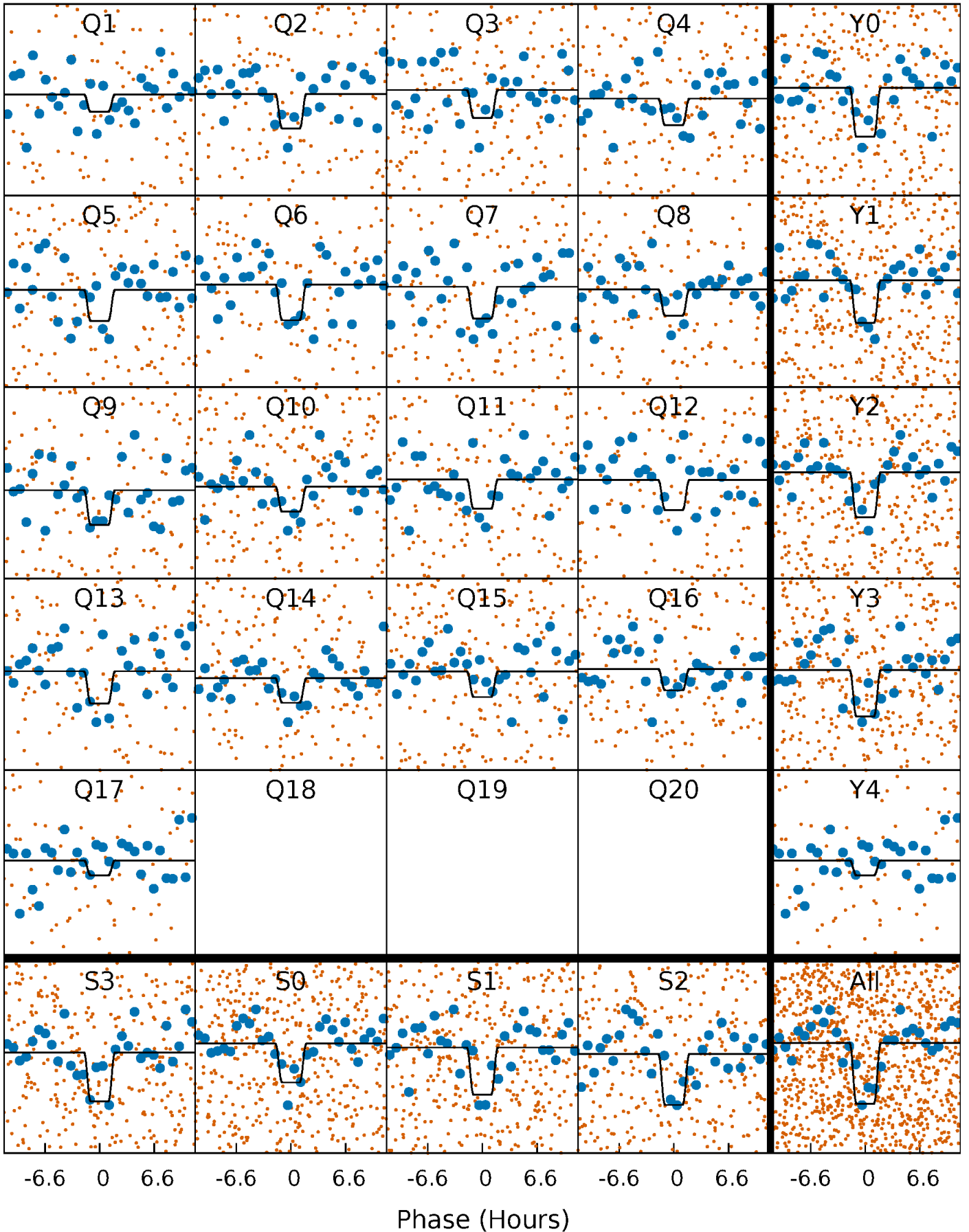
DV Quarter-Phased Transit Curves

TCE 011414527-01 P= 3.141676 Days $T_0=131.744329$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

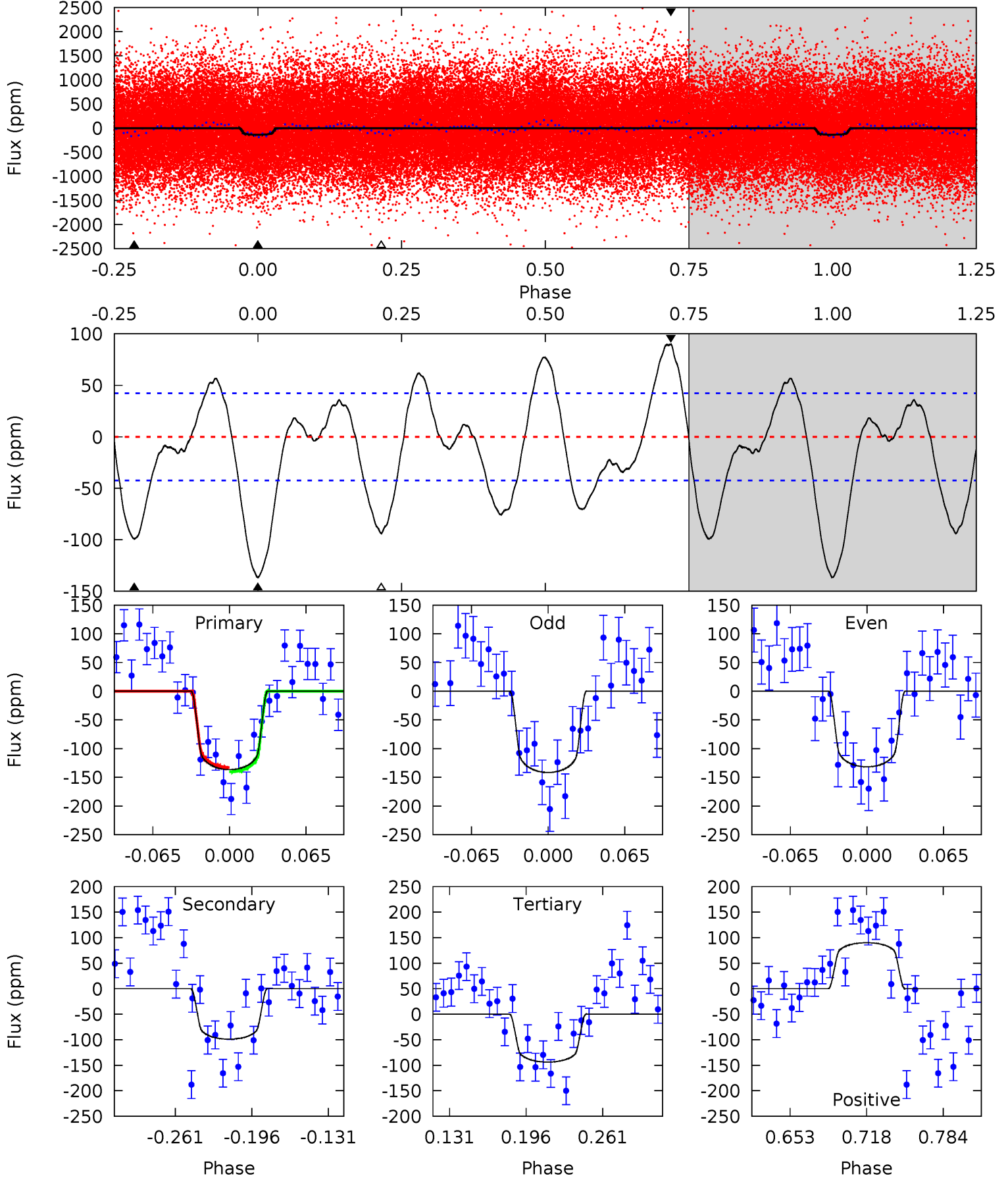
TCE 011414527-01 P= 3.141599 Days $T_0=131.756863$ (BKJD)



DV Model-Shift Uniqueness Test

011414527-01, P = 3.141676 Days, E = 128.602653 Days

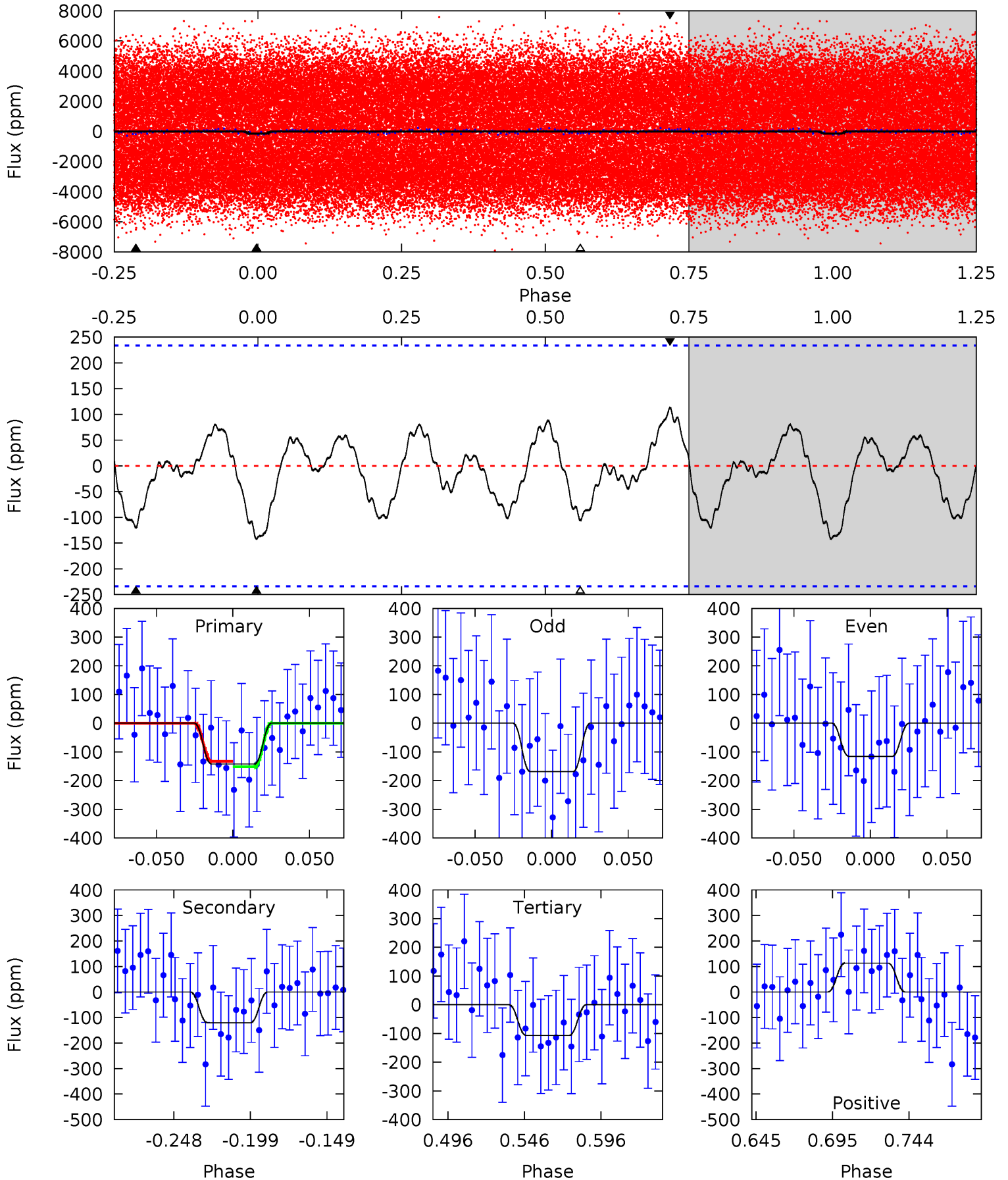
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.0	10.9	10.3	9.90	4.65	1.84	4.94	4.71	5.12	0.57	0.97	0.54	1.04	0.40	0.41



Alt Model-Shift Uniqueness Test

011414527-01, P = 3.141599 Days, E = 128.615264 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.86	2.43	2.15	2.28	4.71	1.96	1.05	0.71	0.58	0.27	0.14	0.53	0.83	0.44	0.19



Stellar Parameters For KIC 011414527

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7331^{+203}_{-319}	$4.041^{+0.170}_{-0.170}$	$0.040^{+0.200}_{-0.350}$	$2.041^{+0.585}_{-0.478}$	$1.668^{+0.193}_{-0.265}$	$0.276^{+0.246}_{-0.129}$
	+3%/-4%	+4%/-4%	+500%/-875%	+29%/-23%	+12%/-16%	+89%/-47%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 011414527-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-99 ± 9	$2.48^{+0.96}_{-0.86}$	2883^{+209}_{-194}	6794^{+1832}_{-999}	22^{+27}_{-10}
Alt.	-120 ± 50	$2.95^{+0.96}_{-0.94}$	2876^{+222}_{-194}	6489^{+1760}_{-1154}	18^{+25}_{-10}

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 $A_{obs} \gg 1.0$

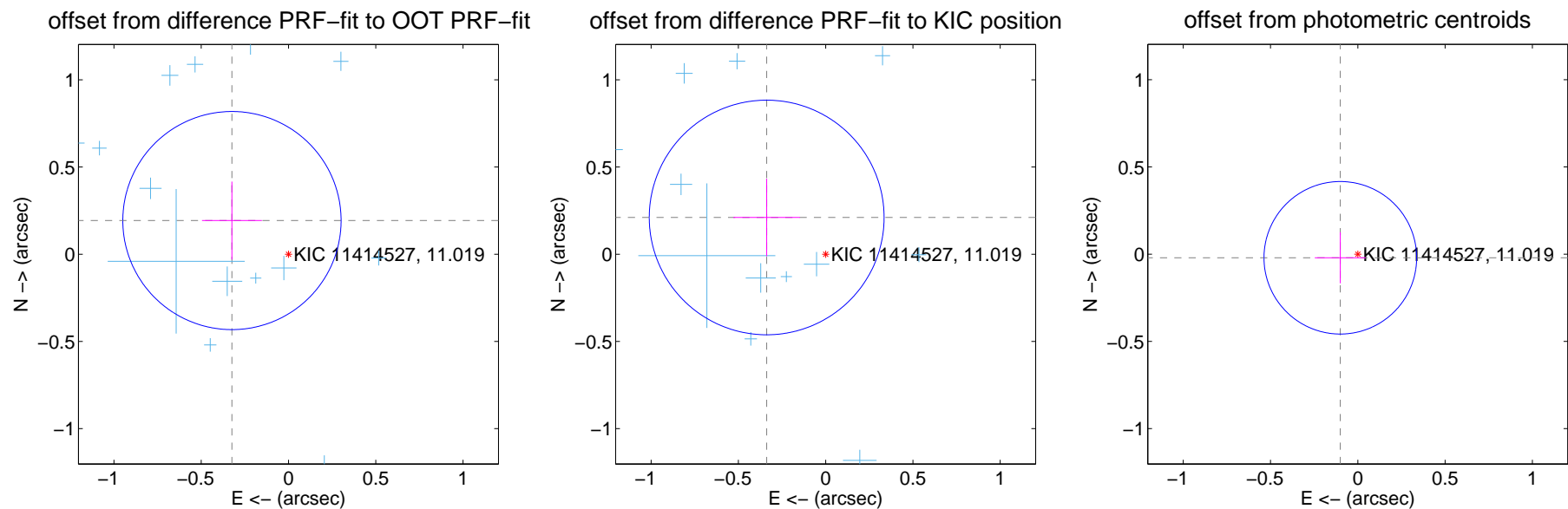
DV Centroid Data

Supplemental centroid analysis for 011414527-01. **Kepler magnitude: 11.02.** Transit SNR 11.29

There are 16 quarters with good PRF difference image offsets

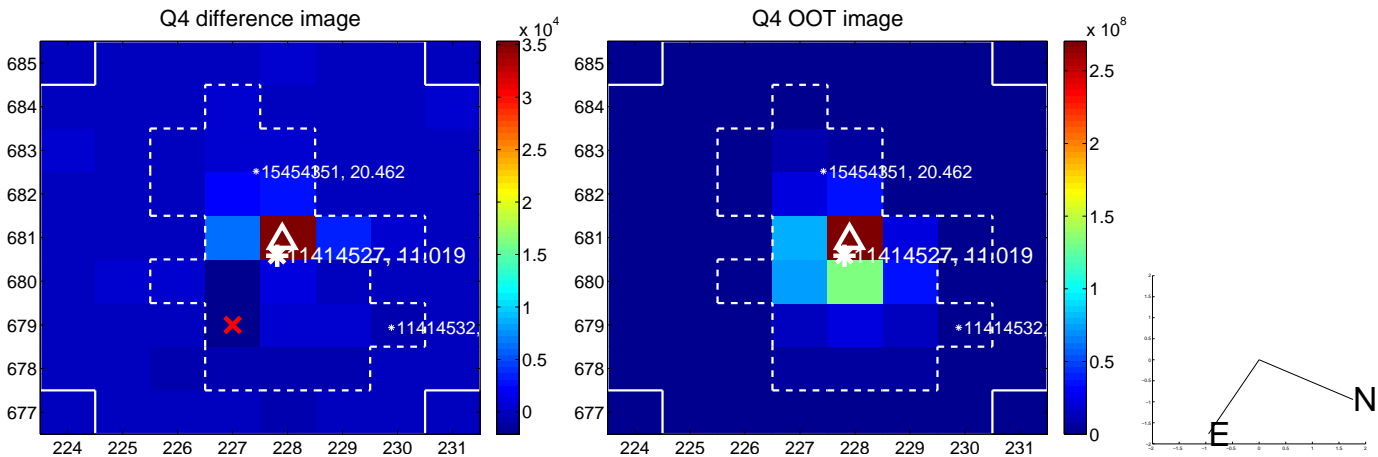
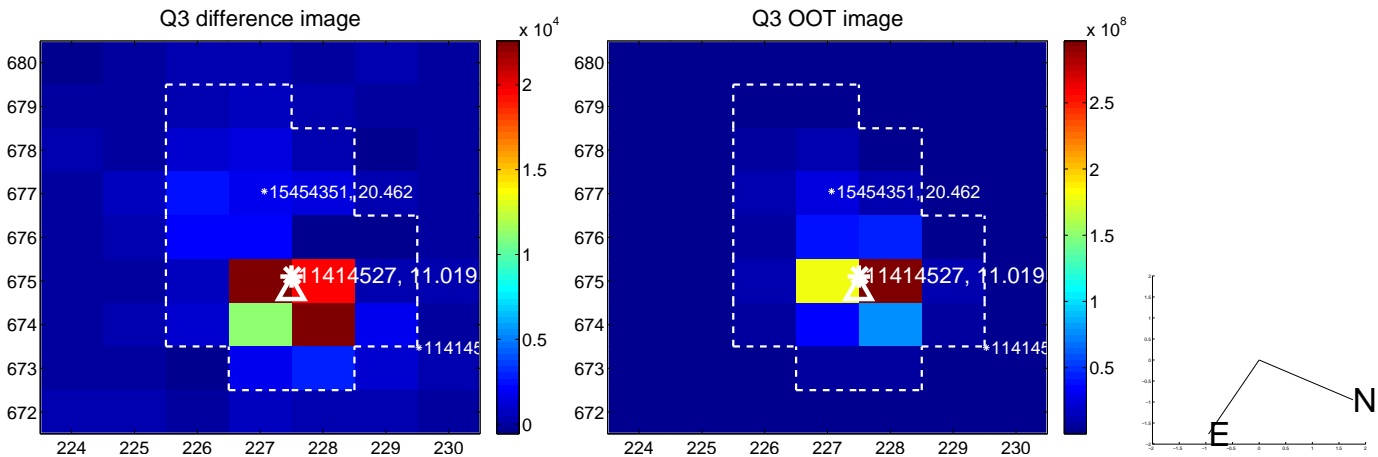
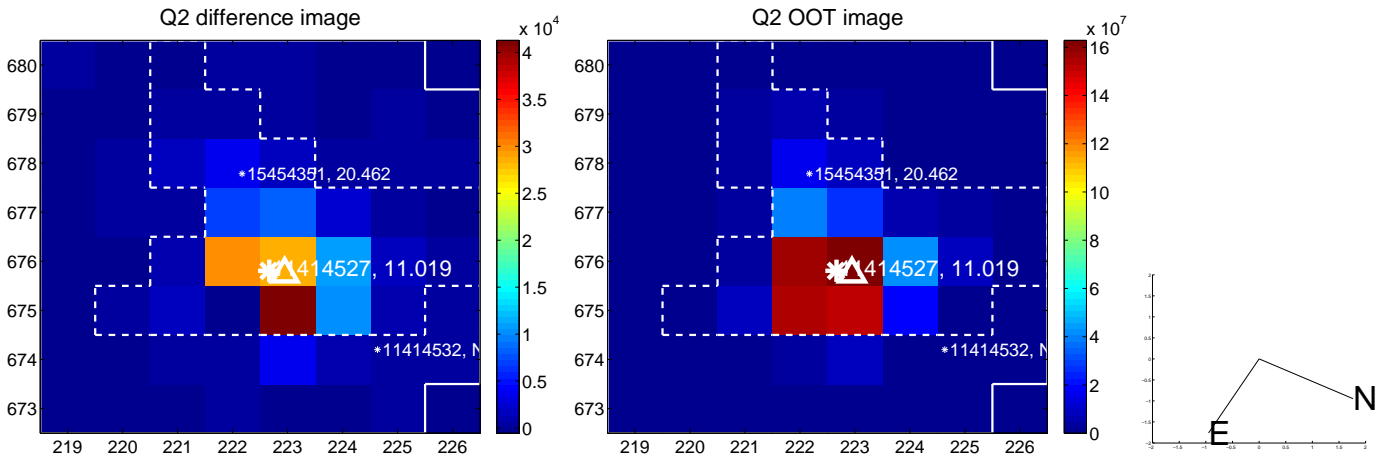
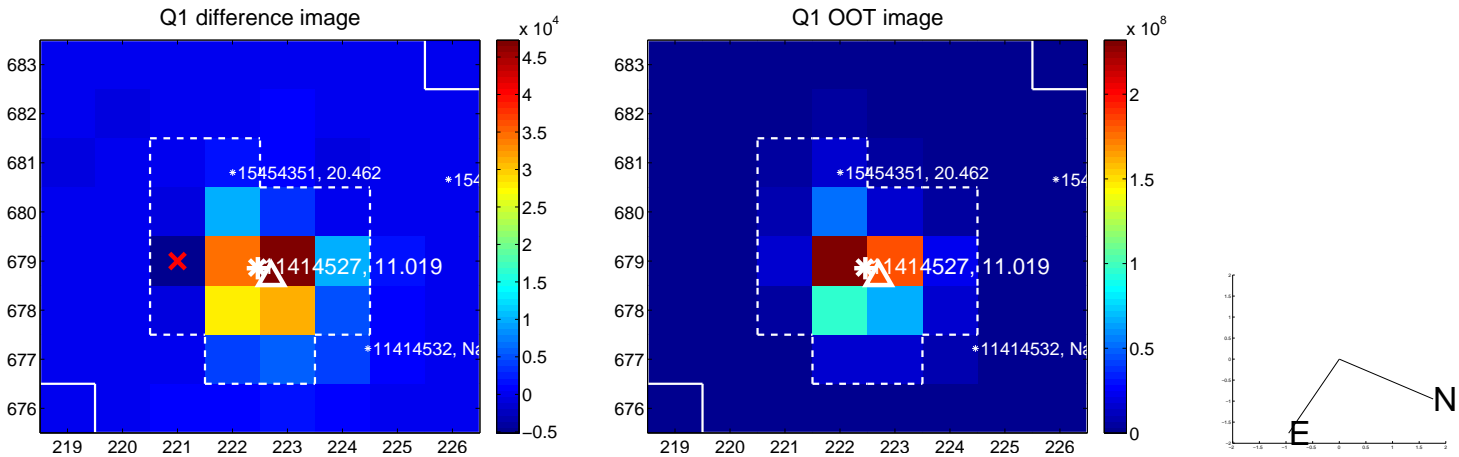
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.377 ± 0.208	1.81	0.324 ± 0.172	0.193 ± 0.223
PRF-fit source offset from KIC position	0.398 ± 0.224	1.78	0.338 ± 0.191	0.211 ± 0.223
photometric centroid source offset	0.10 ± 0.15	0.70	0.10 ± 0.15	-0.02 ± 0.15

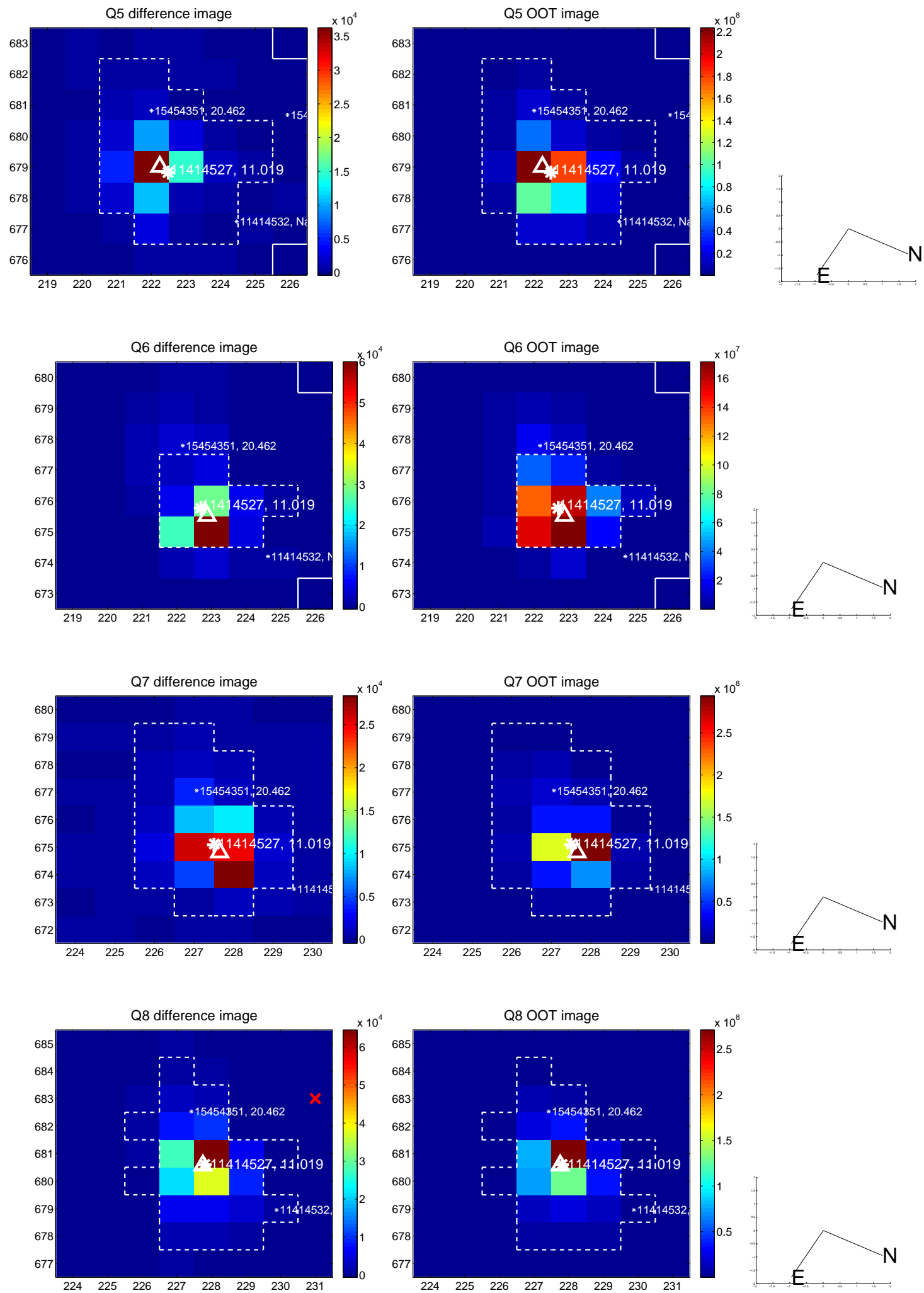


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

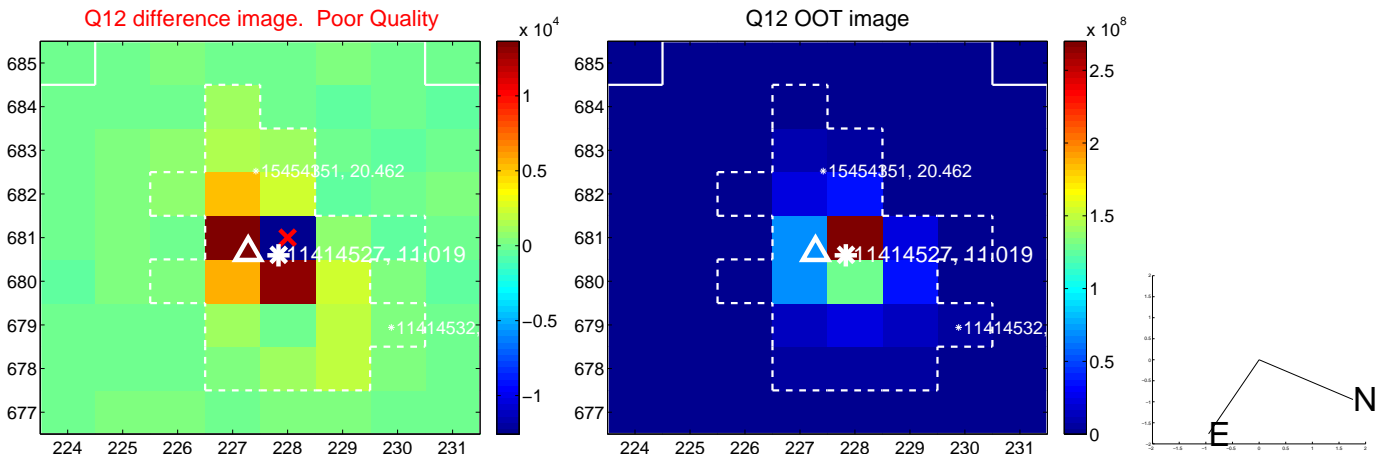
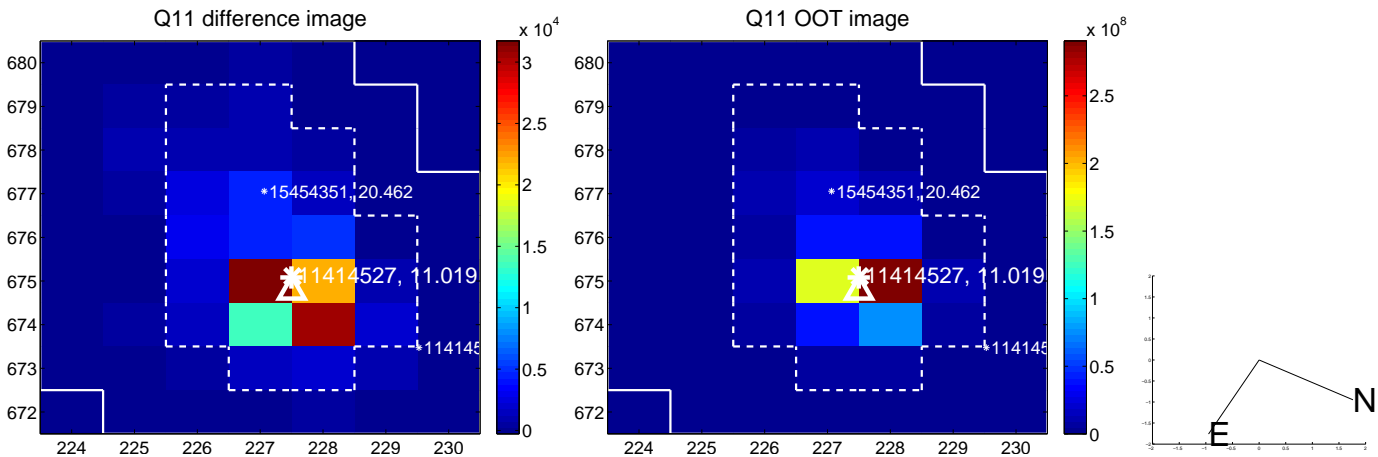
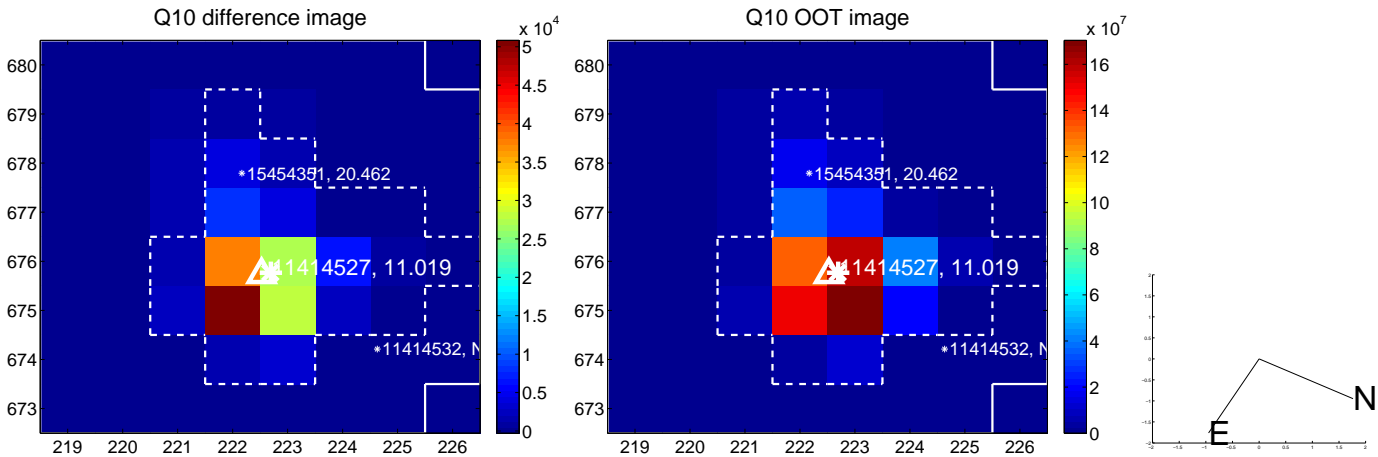
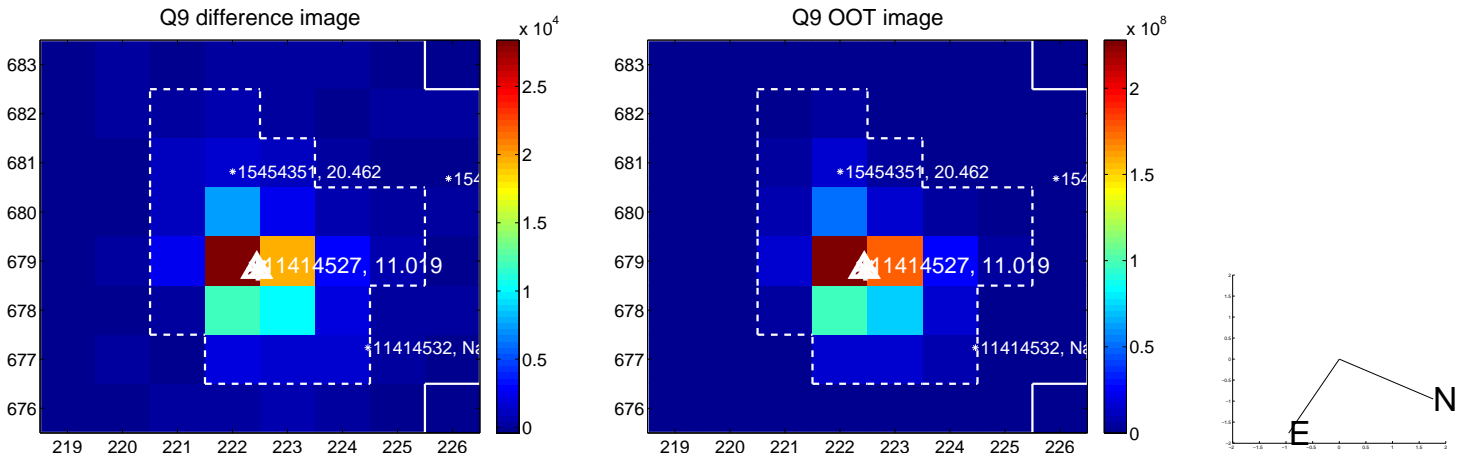
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



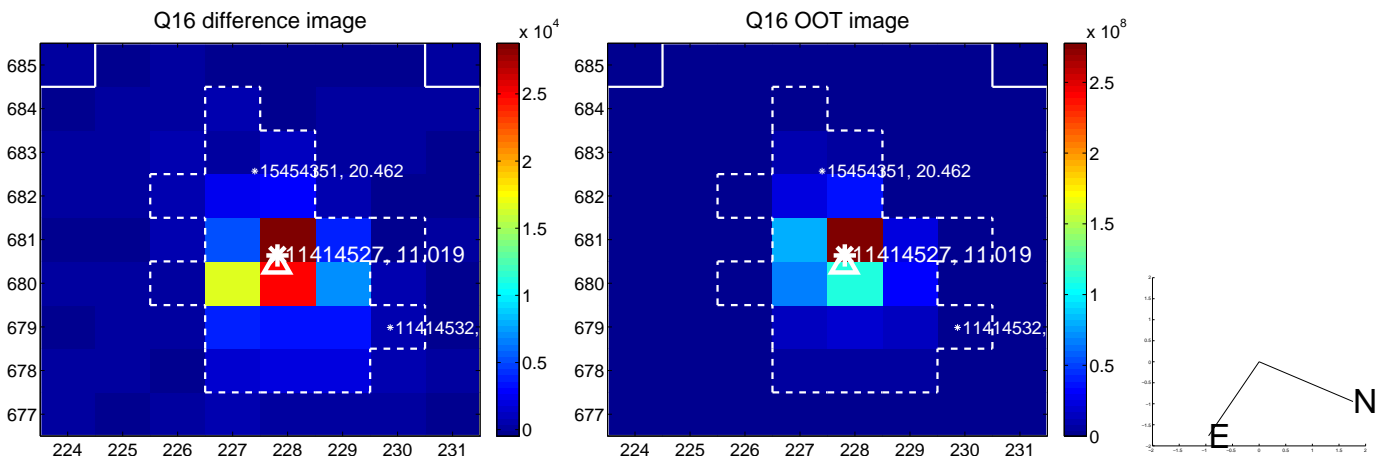
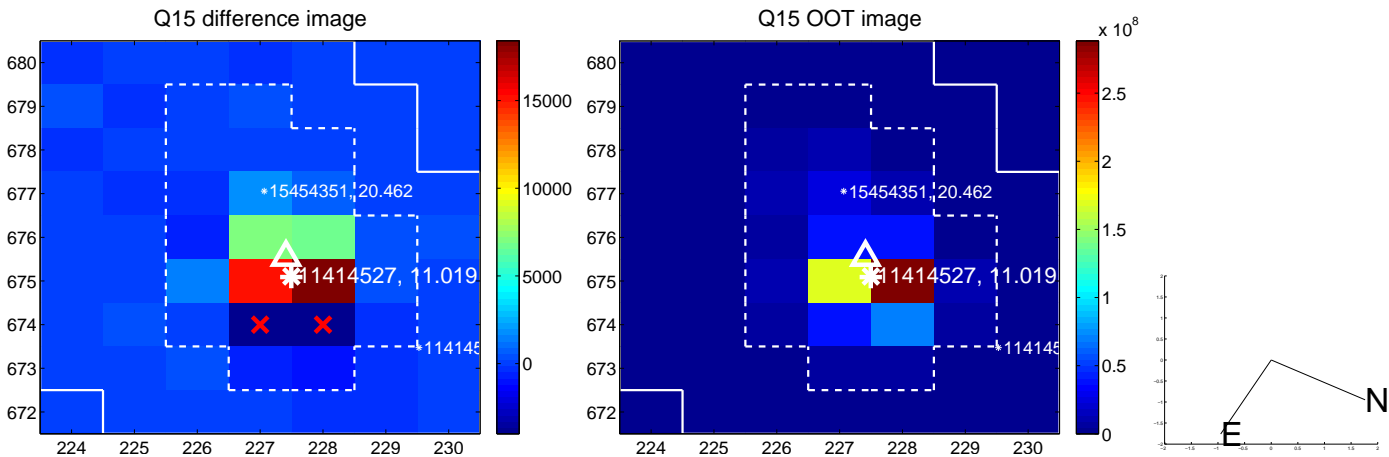
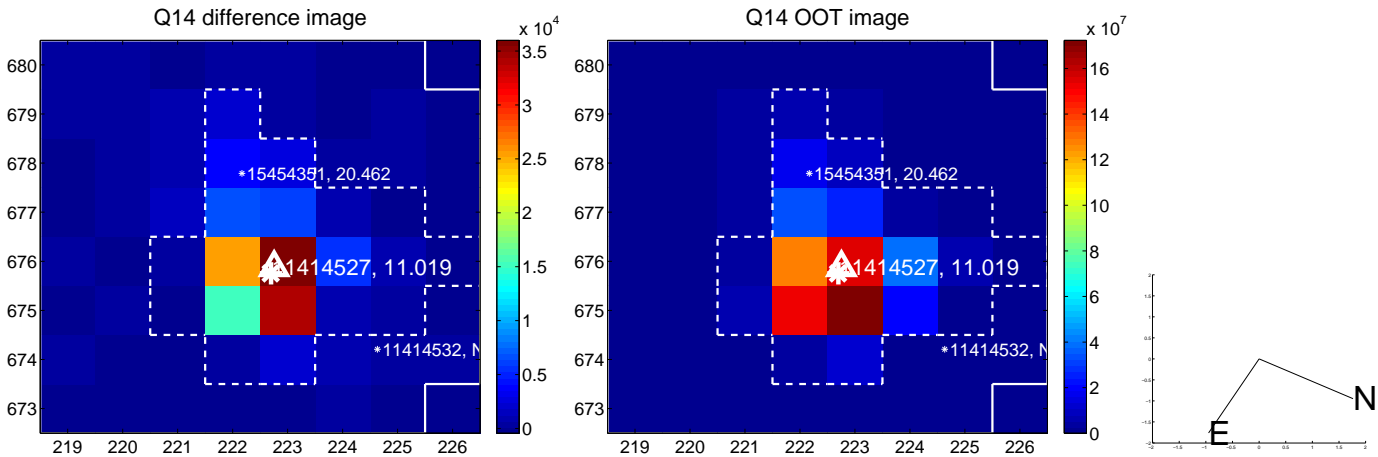
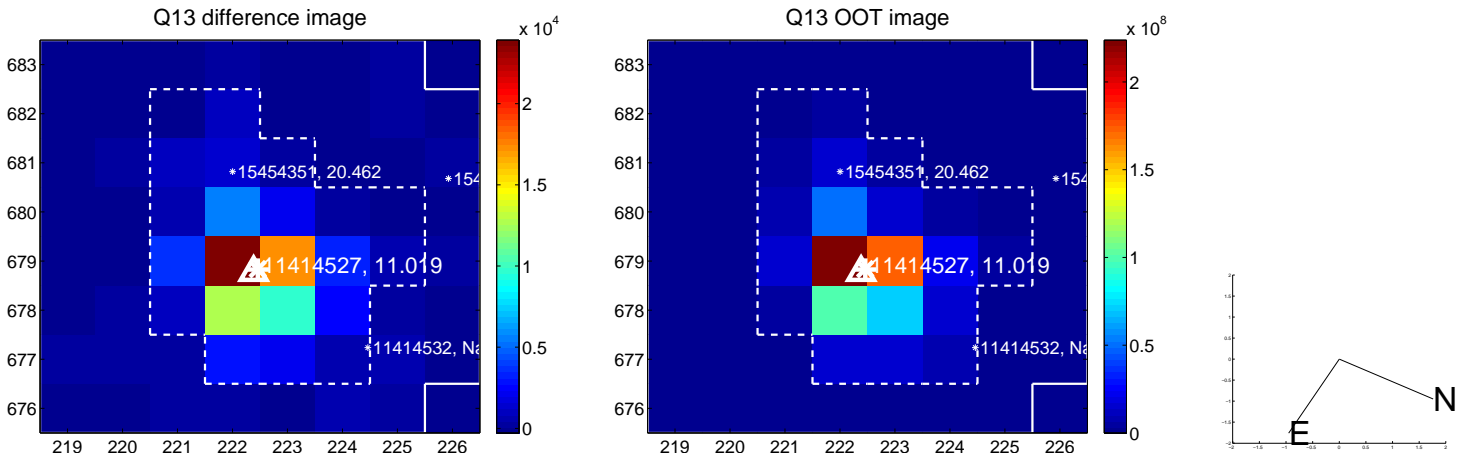
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



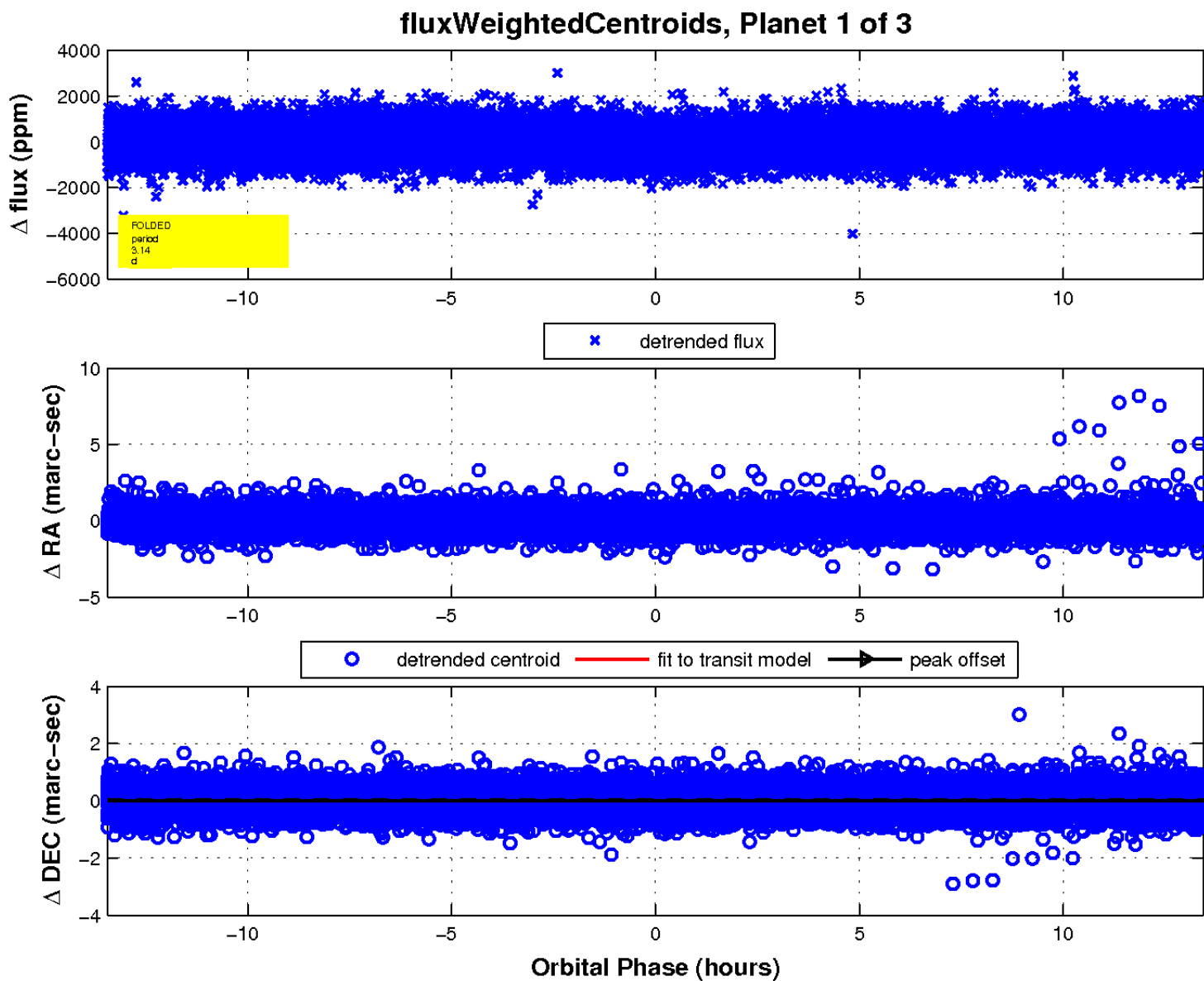
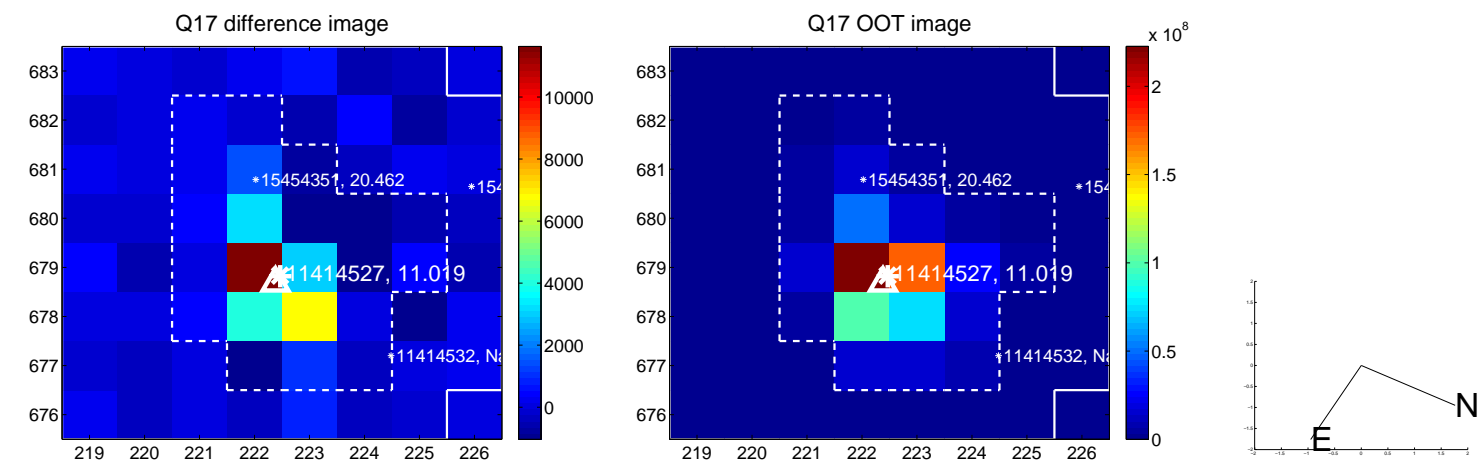
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

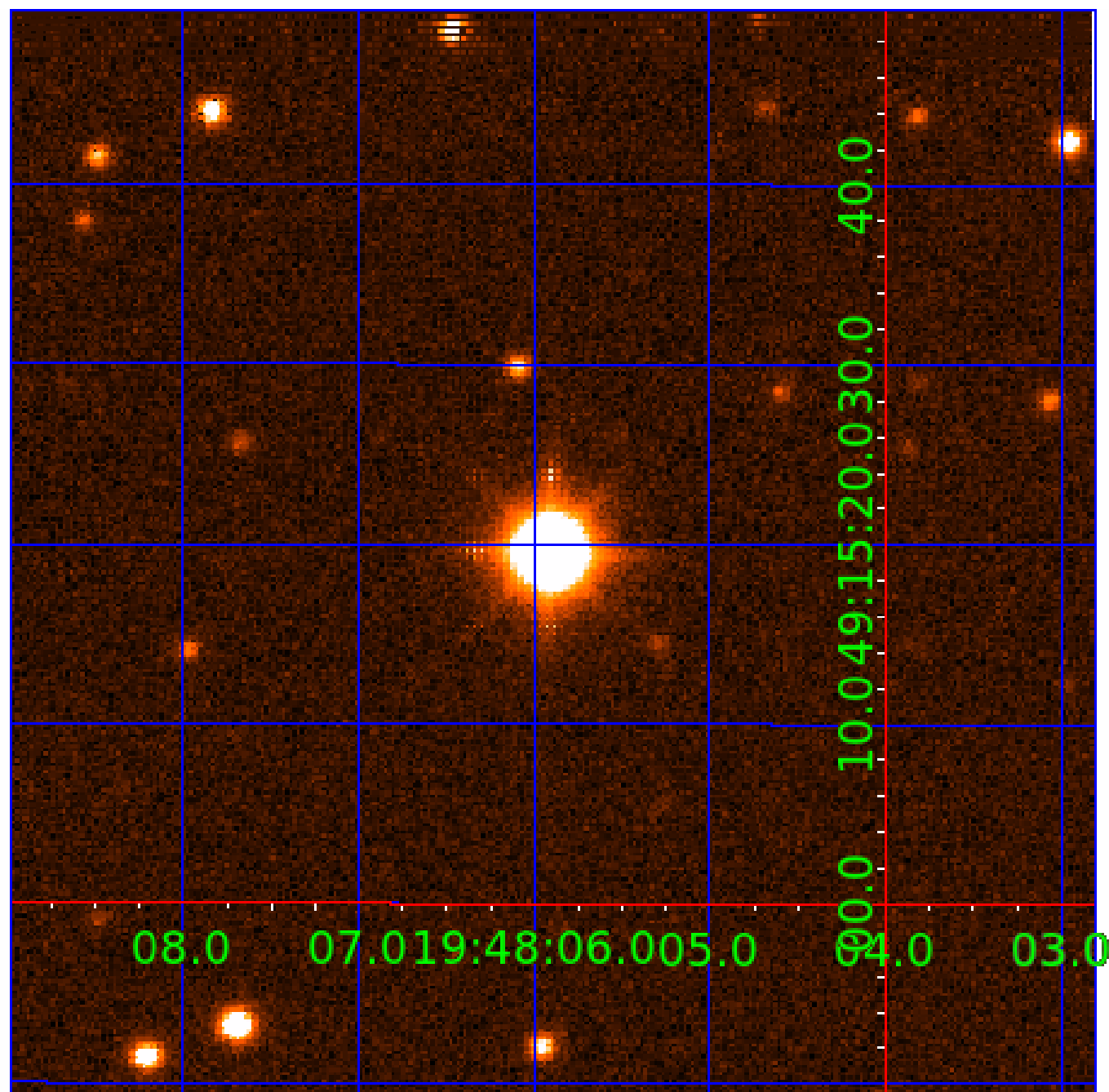


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011414527

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})
011414527-01	OBS	No	3.141676	131.744329	106.9	4.483	11.3	11.3	2.04	7331	2.45	4344.04
011414527-02	OBS	No	0.652382	132.036339	45.6	3.735	9.6	8.4	2.04	7331	1.60	35326.97
011414527-03	OBS	No	6.283468	134.191255	240.2	3.433	8.4	10.0	2.04	7331	3.49	1723.89

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011414527-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
011414527-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED
011414527-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

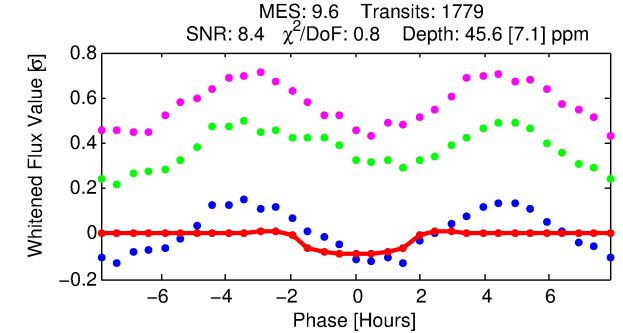
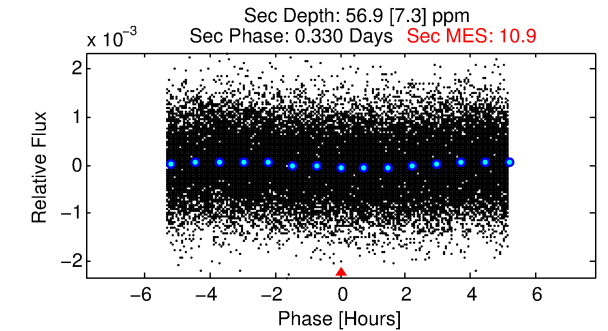
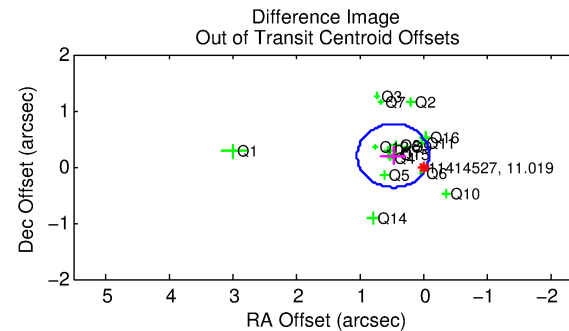
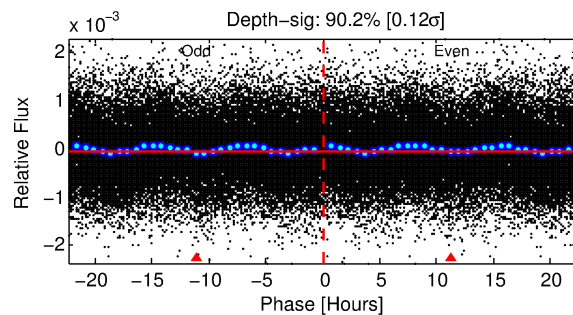
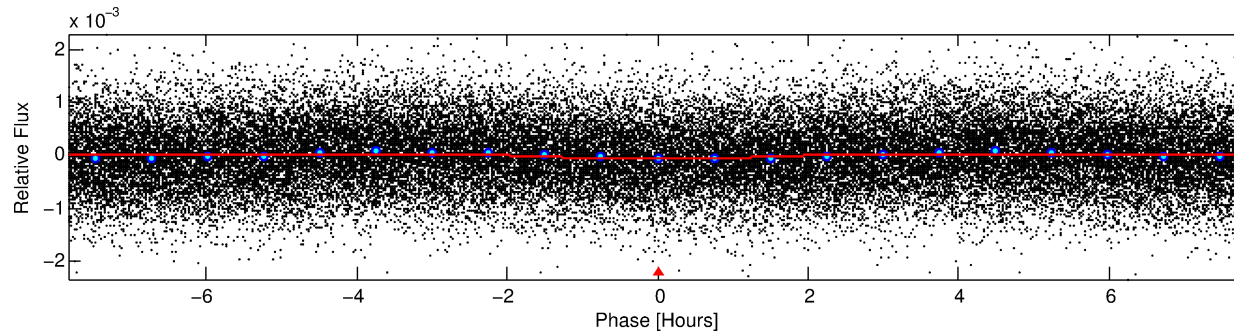
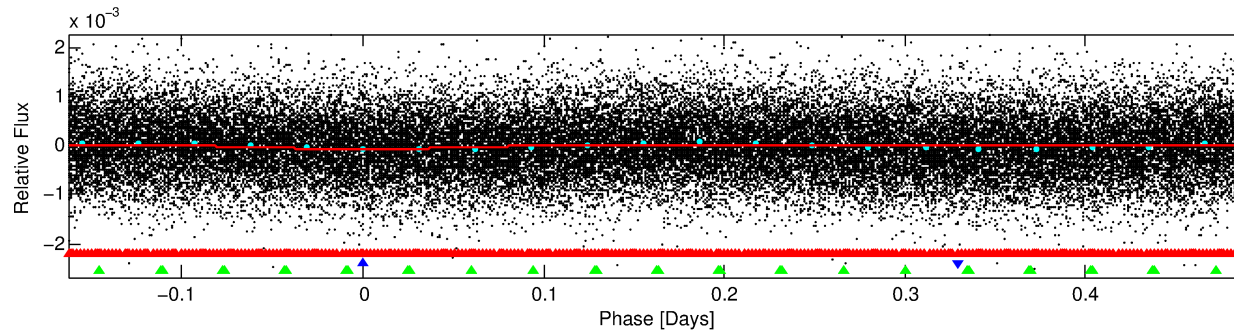
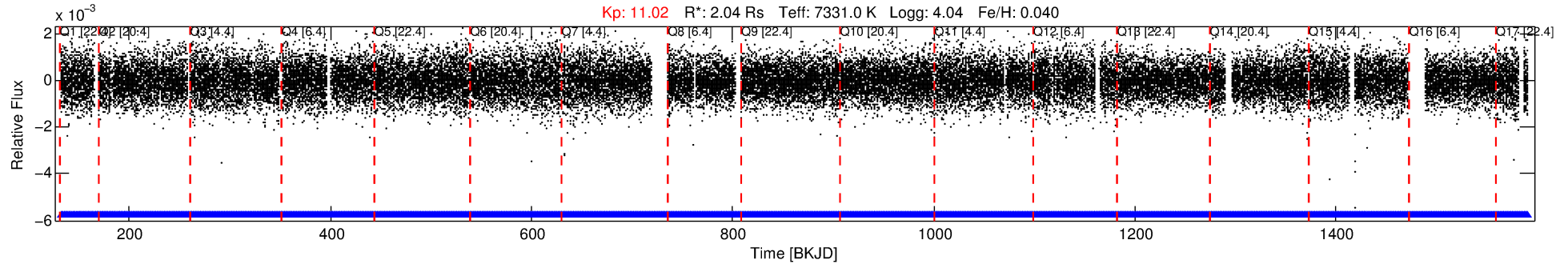
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011414527-02

No Significant Match Found

DV One-Page Summary

KIC: 11414527 Candidate: 2 of 3 Period: 0.652 d



DV Fit Results:

Period = 0.65238 [0.00001] d
Epoch = 132.0363 [0.0051] BKJD
Rp/R* = 0.0072 [0.0059]
a/R* = 1.12 [1.17]
b = 0.90 [1.12]
Seff = 35326.97 [12975.53]
Teq = 3496 [321] K
Rp = 1.60 [1.39] Re
a = 0.0175 [0.0040] AU
Ag = 3.74 [6.26] [0.44 σ]
Teffp = 7515 [3102] K [1.29 σ]

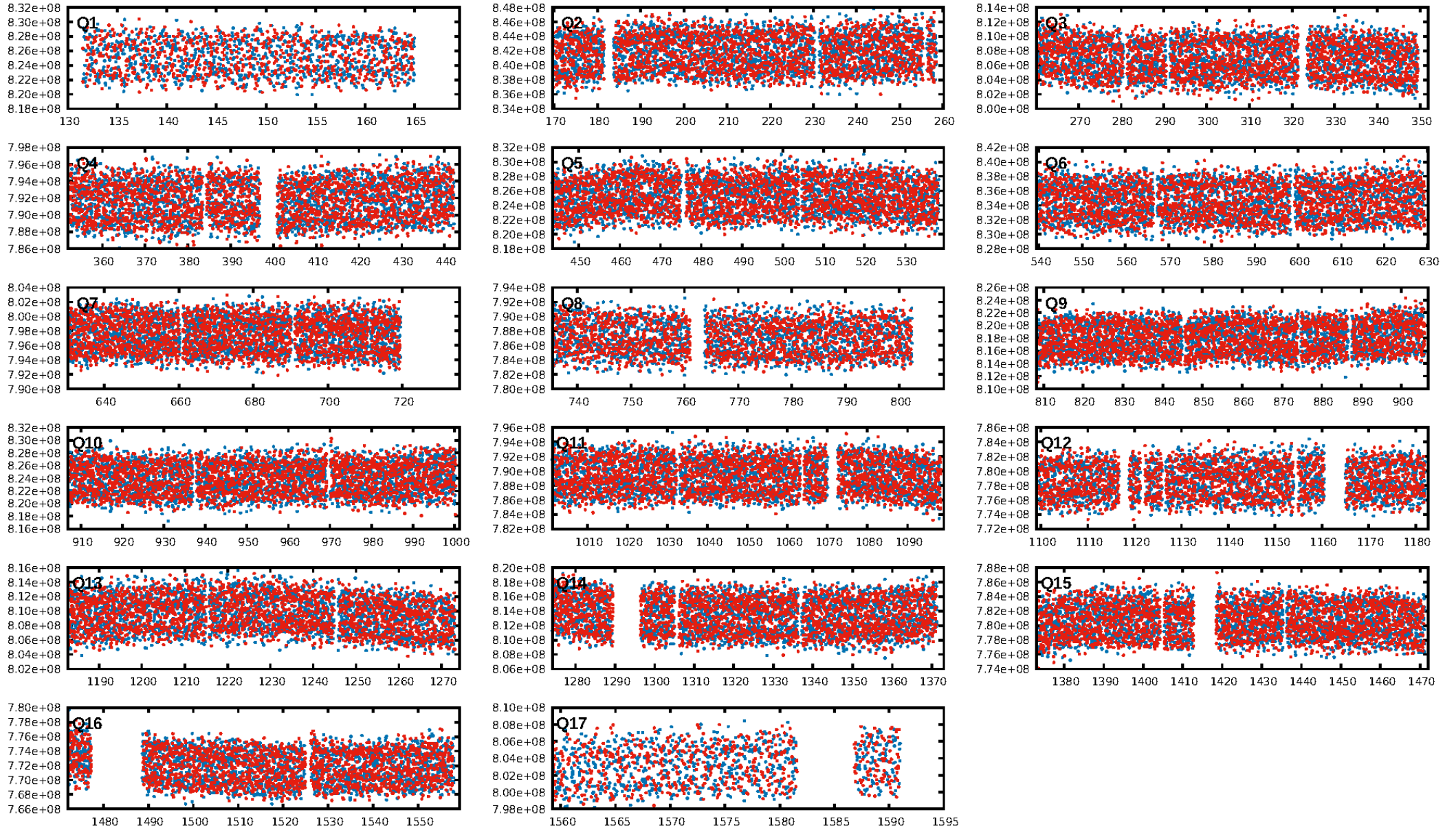
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [10.24 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.77e-18
RollingBand-fgt: 1.00 [1698/1698]
GhostDiagnostic-chr: 1.617
Centroid-sig: N/A
Centroid-so: 0.419 arcsec [2.61 σ]
OotOffset-rm: 0.509 arcsec [2.70 σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-rm: 0.569 arcsec [3.04 σ]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 1.00 [16/16]
DiffImageOverlap-fno: 1.00 [17/17]

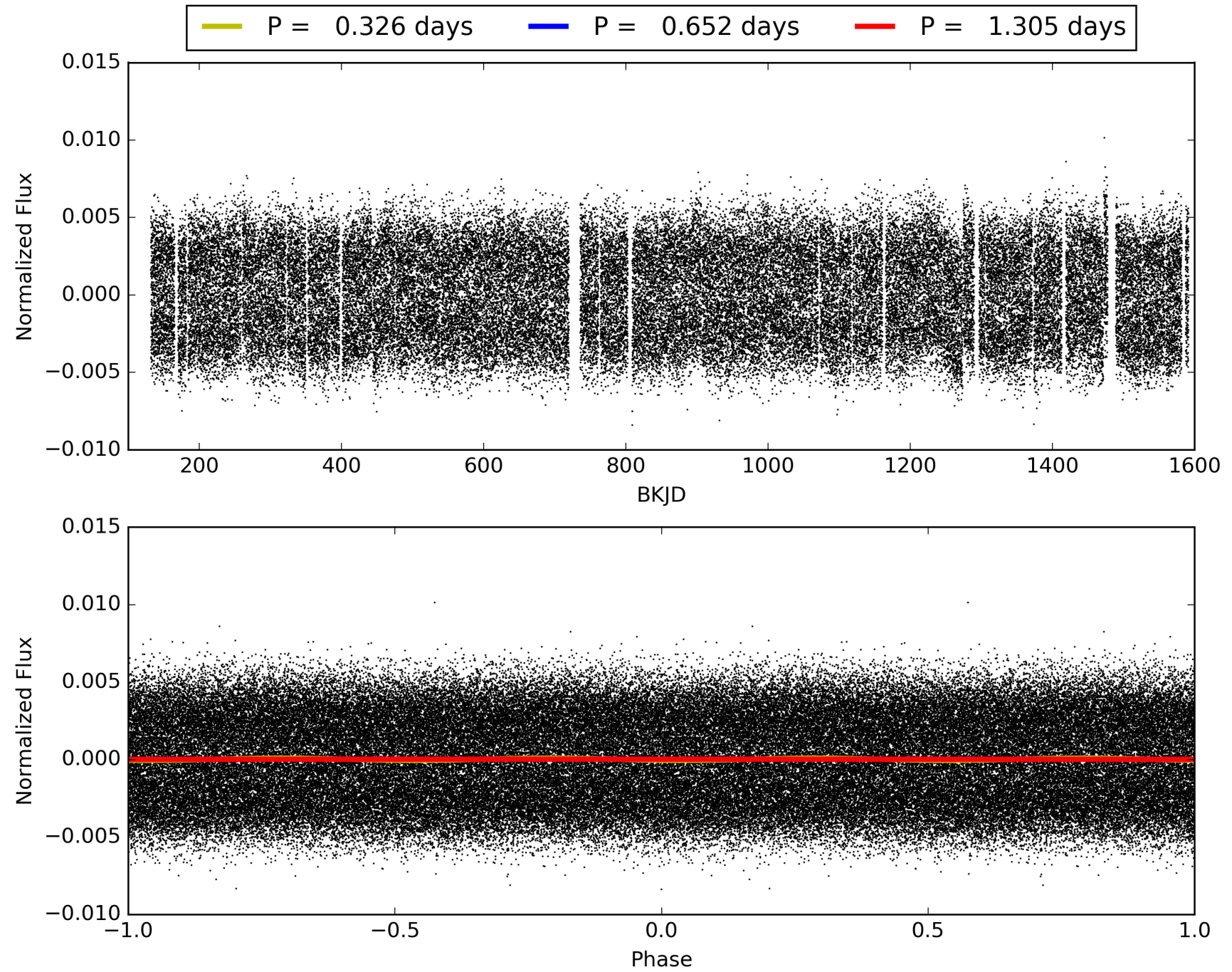
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 19:24:36 Z

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

TCE 011414527-02, PDC Light Curves

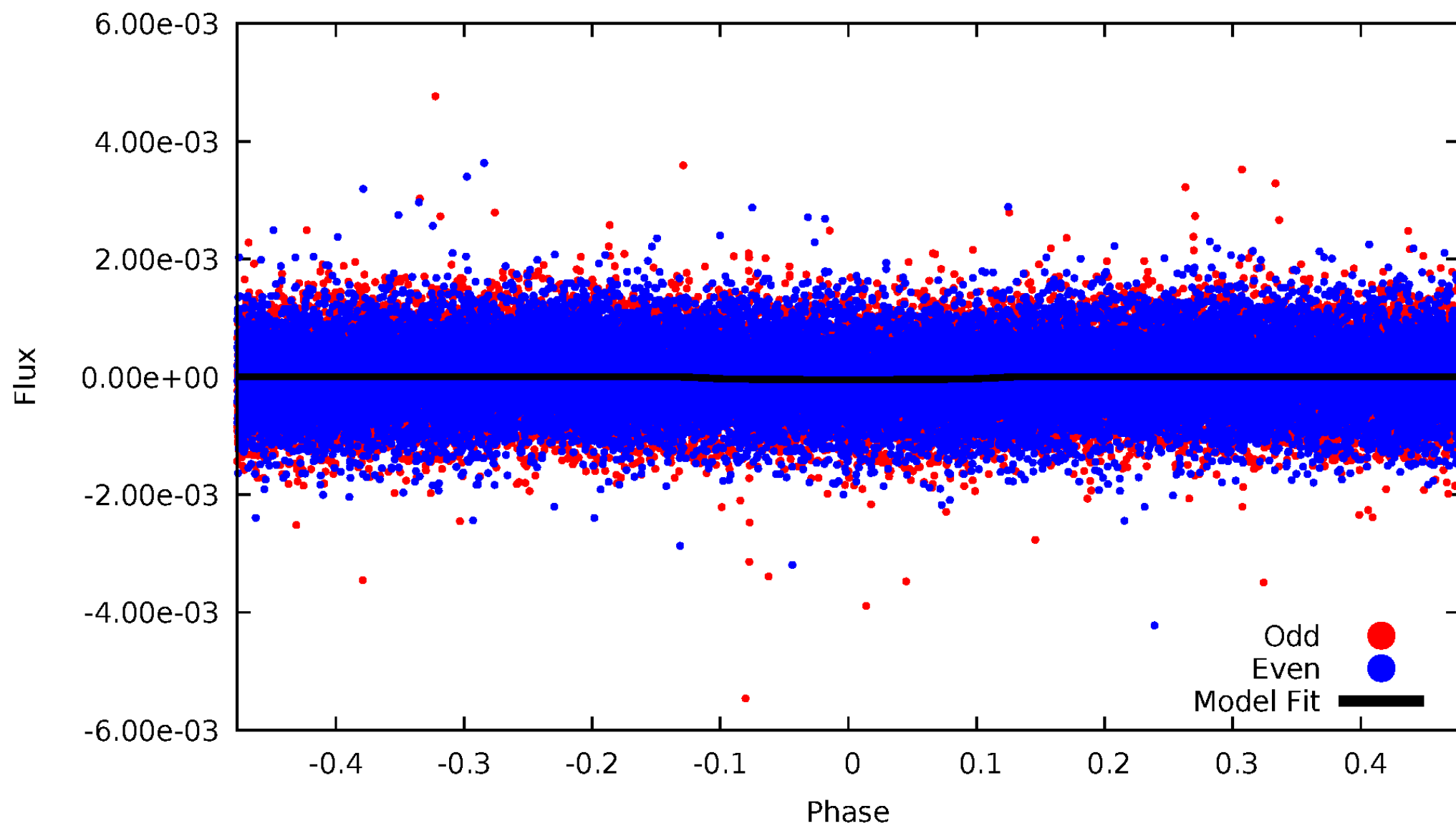


TCE 011414527-02



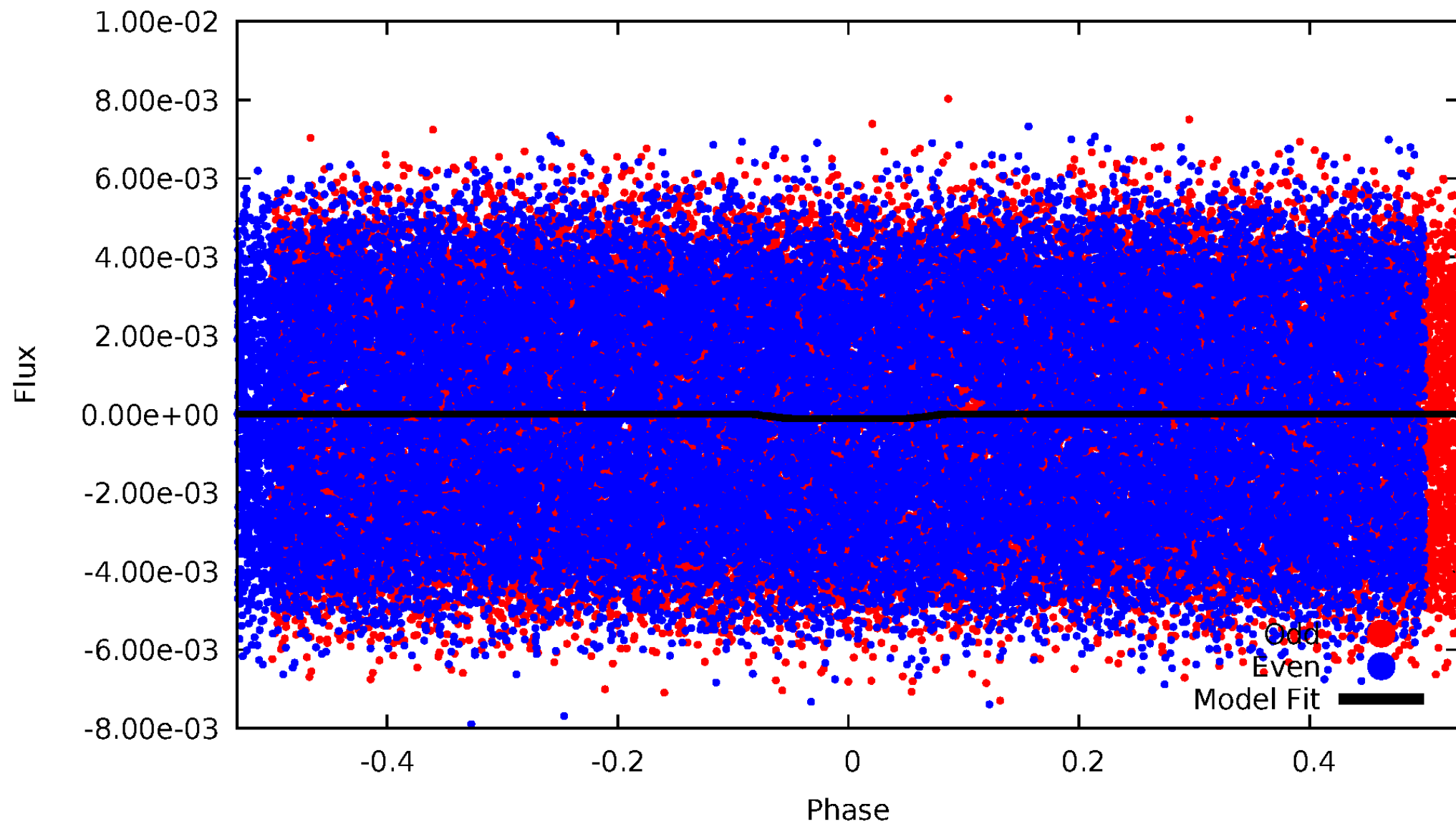
DV Odd/Even

TCE 011414527-02



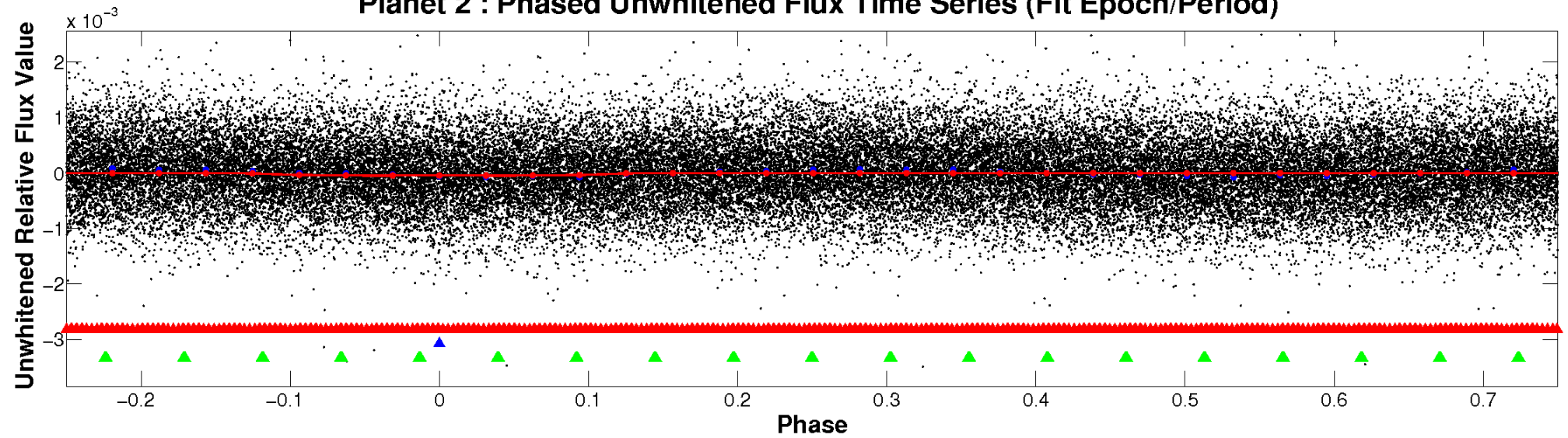
ALT Odd/Even

TCE 011414527-02

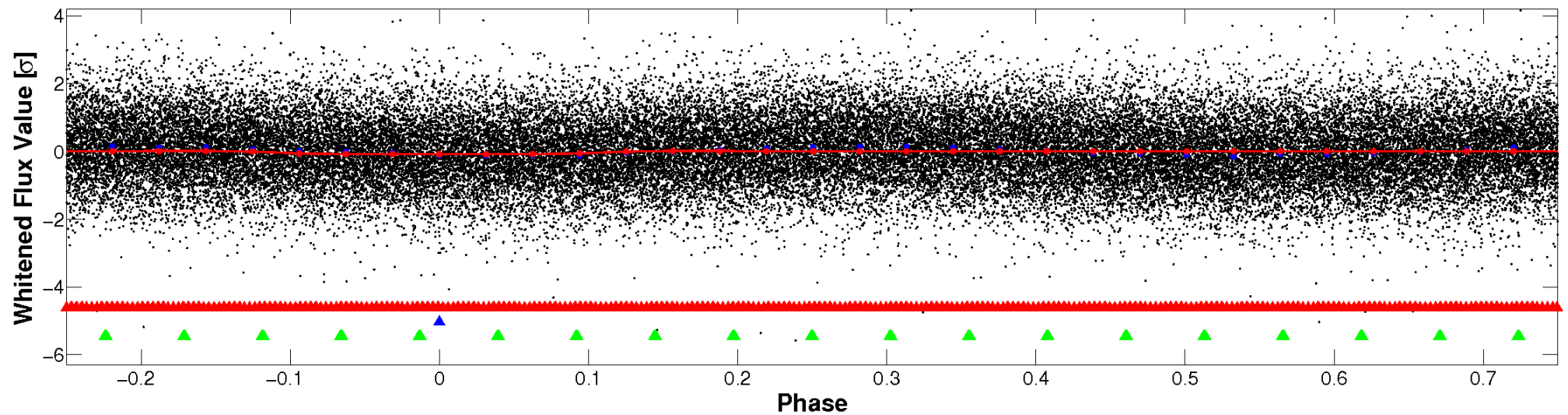


Non-Whitened Vs. Whitened Light Curve

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

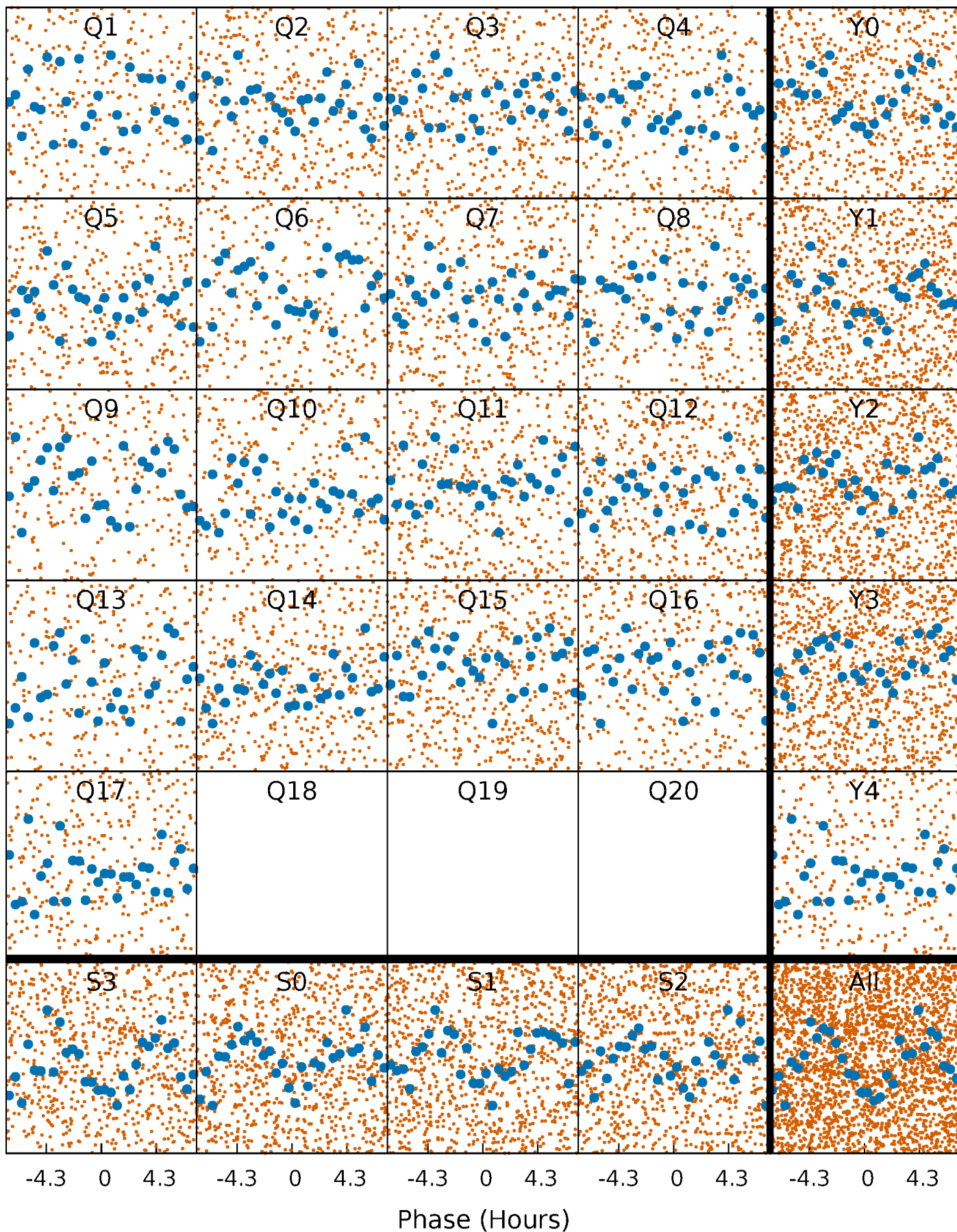


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



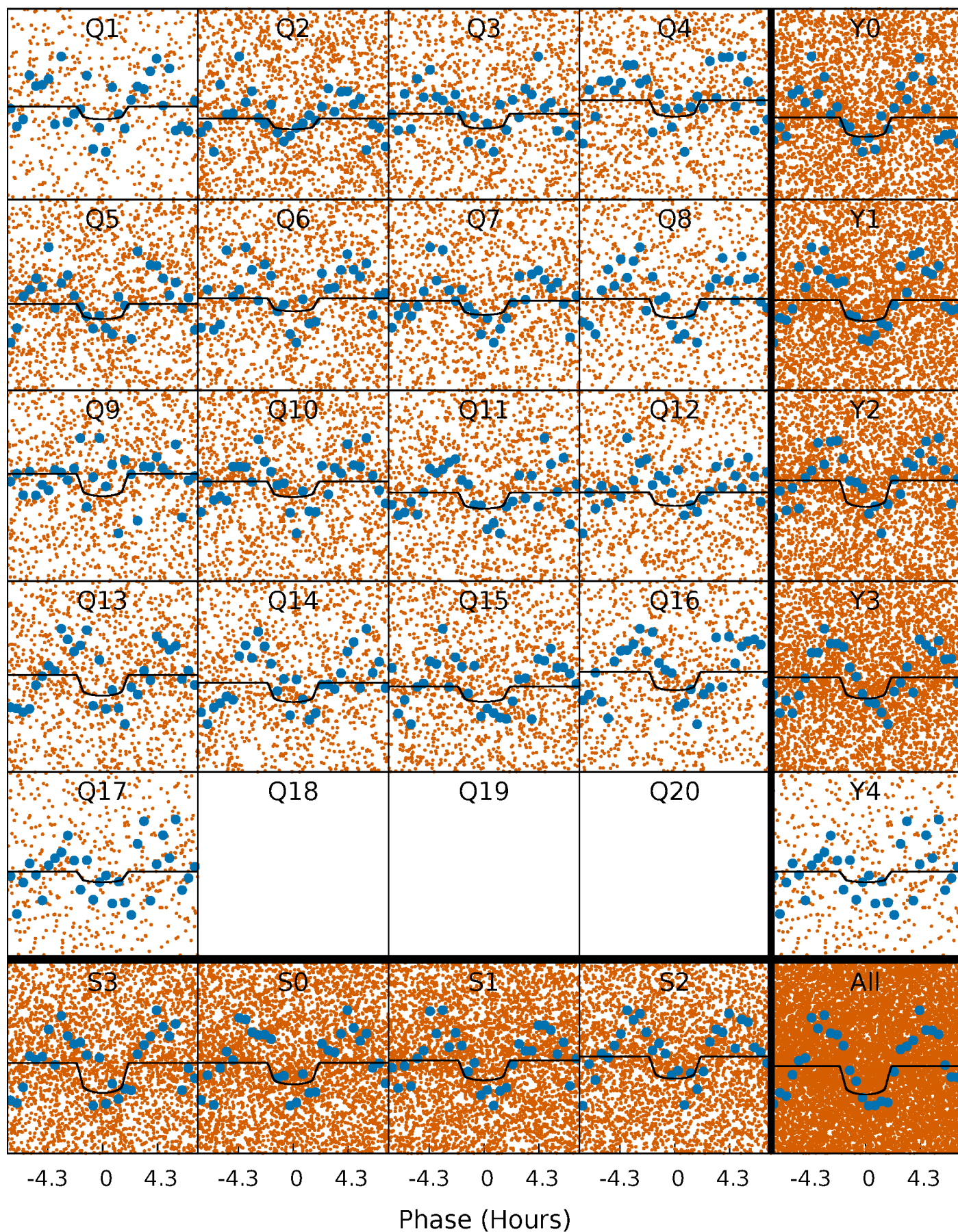
PDC Quarter-Phased Transit Curves

TCE 011414527-02 P= 0.652382 Days $T_0=132.036339$ (BKJD)



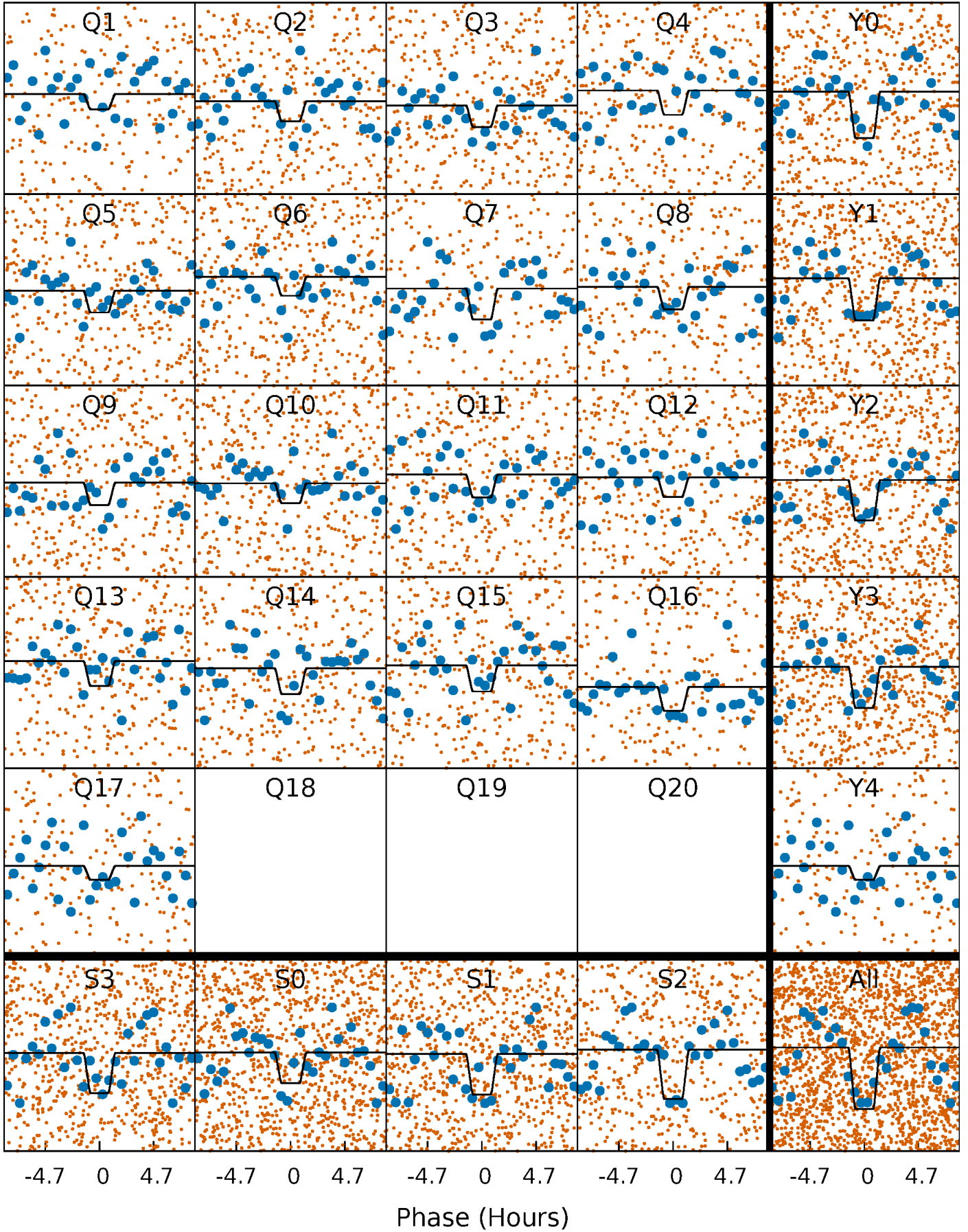
DV Quarter-Phased Transit Curves

TCE 011414527-02 P= 0.652382 Days $T_0=132.036339$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

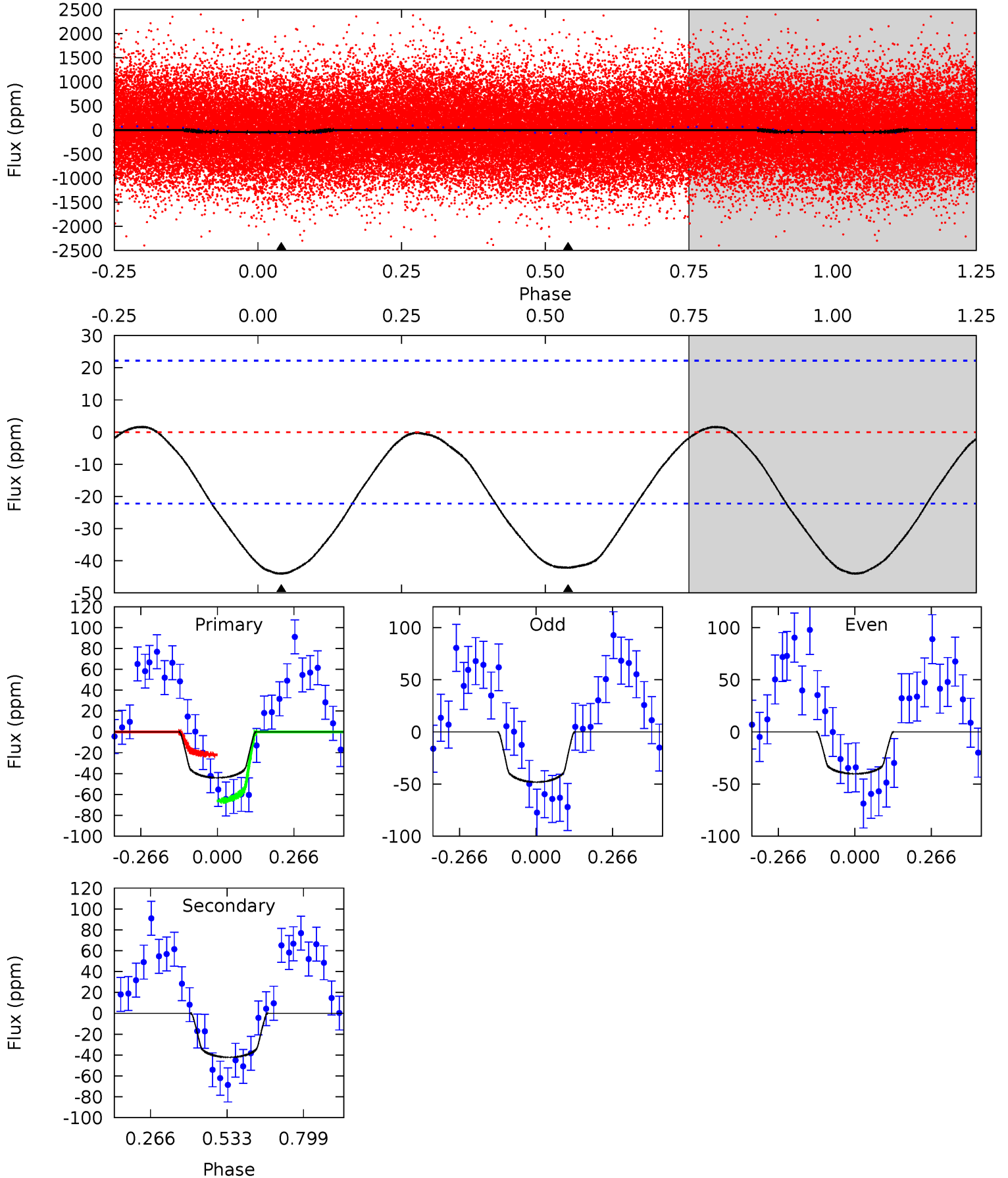
TCE 011414527-02 P= 0.652418 Days $T_0=132.020007$ (BKJD)



DV Model-Shift Uniqueness Test

011414527-02, P = 0.652382 Days, E = 132.036339 Days

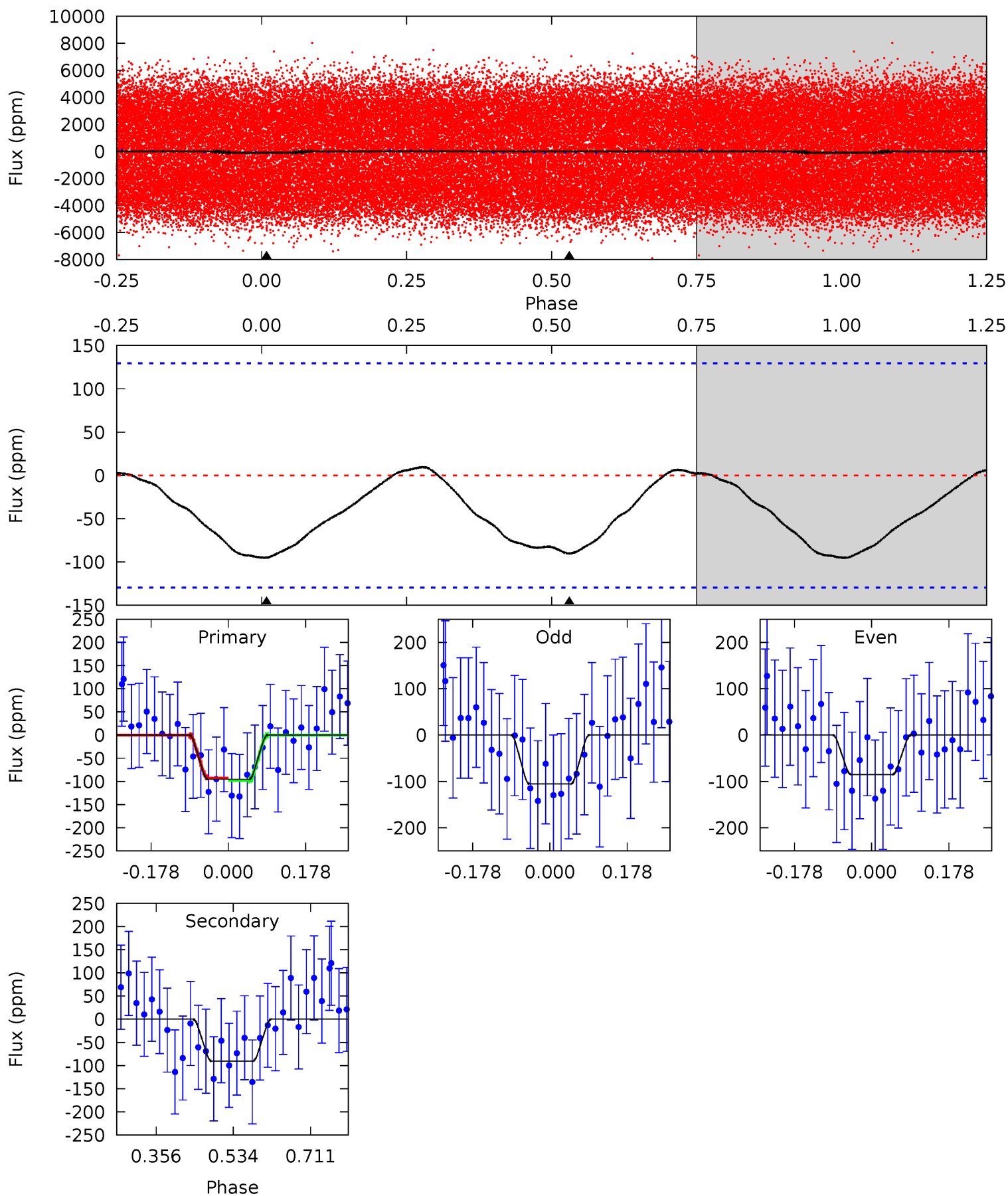
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.61	8.26	0	0	4.35	1.11	0.21	8.61	8.61	8.26	8.26	0.79	0.99	0.04	4.51



Alt Model-Shift Uniqueness Test

011414527-02, P = 0.652418 Days, E = 132.020007 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.27	3.10	0	0	4.44	1.35	0.34	3.27	3.27	3.10	3.10	0.35	1.00	0.09	0.09



Stellar Parameters For KIC 011414527

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7331^{+203}_{-319}	$4.041^{+0.170}_{-0.170}$	$0.040^{+0.200}_{-0.350}$	$2.041^{+0.585}_{-0.478}$	$1.668^{+0.193}_{-0.265}$	$0.276^{+0.246}_{-0.129}$
	+3%/-4%	+4%/-4%	+500%/-875%	+29%/-23%	+12%/-16%	+89%/-47%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 011414527-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-42 ± 5	$1.73^{+1.24}_{-0.99}$	4859^{+377}_{-352}	6360^{+5112}_{-1799}	$2.358^{+10.674}_{-1.608}$
Alt.	-90 ± 29	$2.44^{+1.39}_{-1.18}$	4850^{+376}_{-327}	6340^{+3554}_{-1498}	$2.473^{+6.596}_{-1.532}$

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 $A_{obs} \gg 1.0$

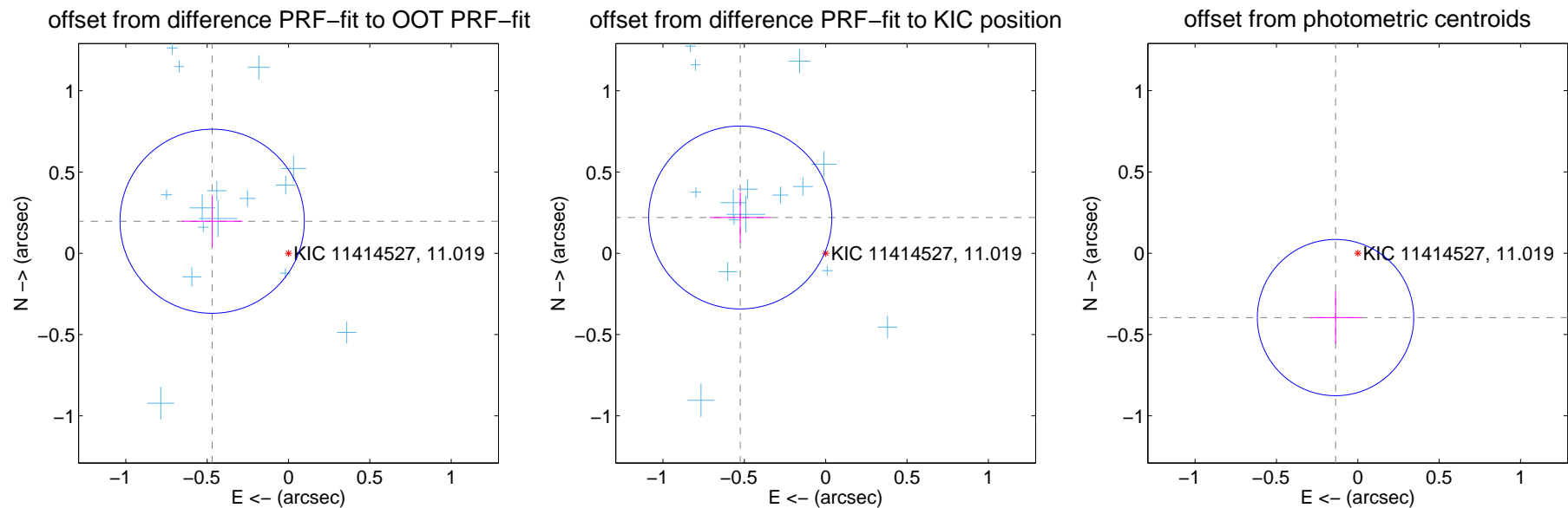
DV Centroid Data

Supplemental centroid analysis for 011414527-02. **Kepler magnitude: 11.02.** Transit SNR 8.39

There are 16 quarters with good PRF difference image offsets

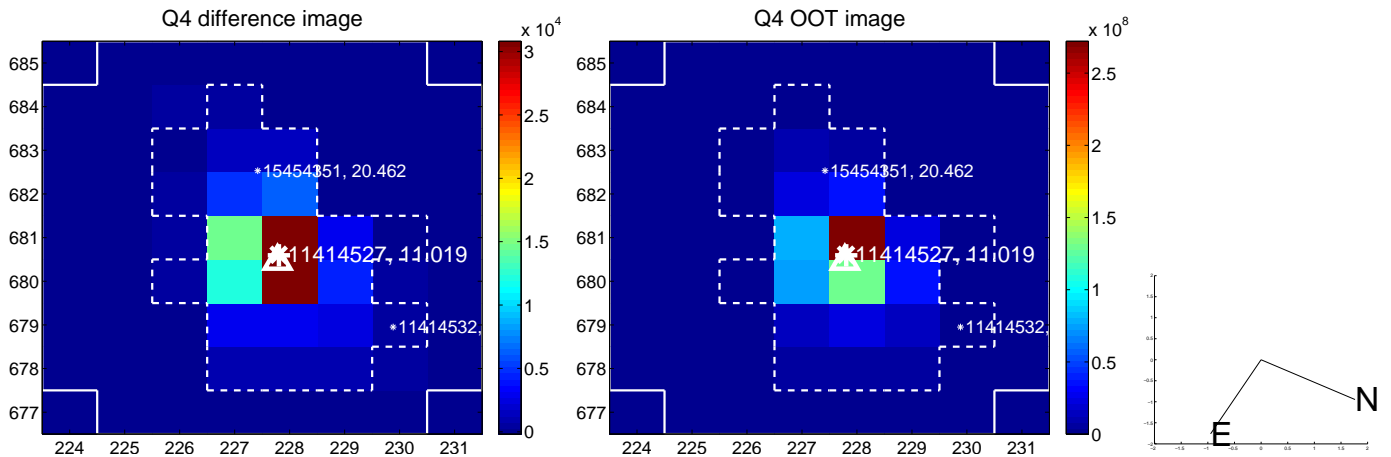
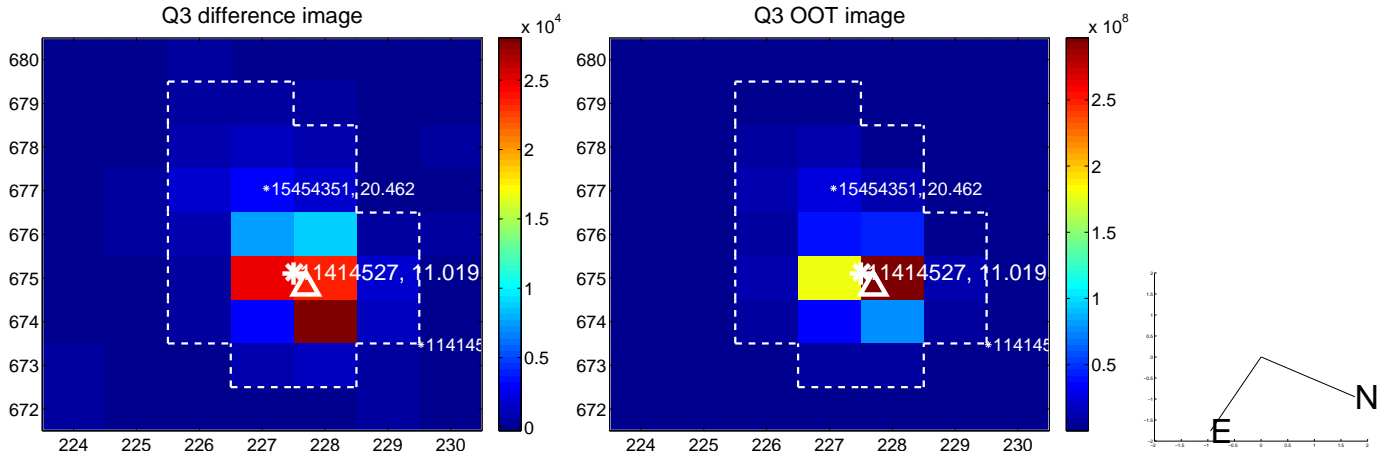
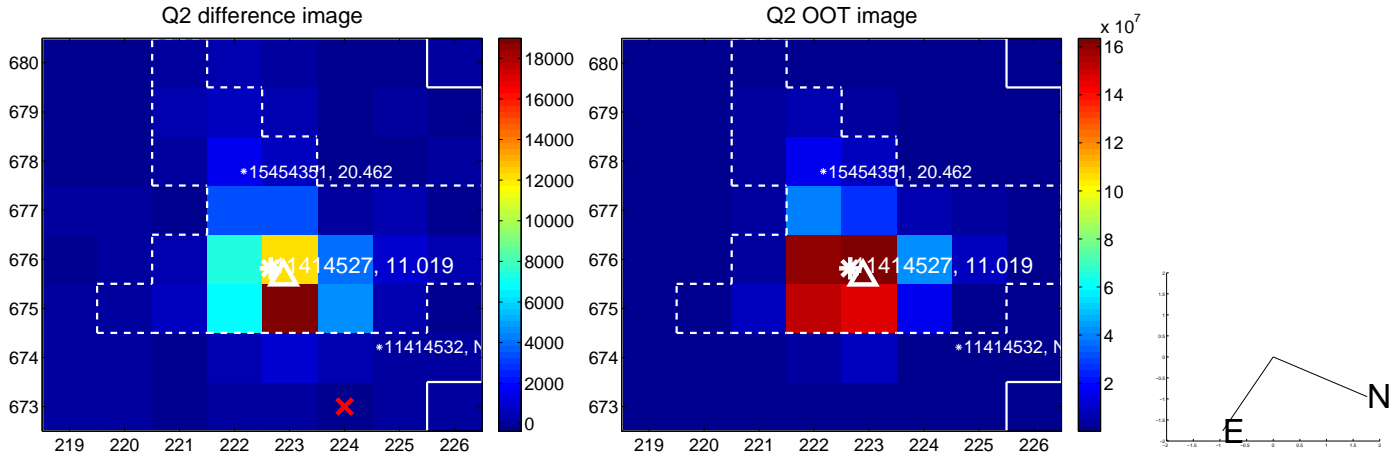
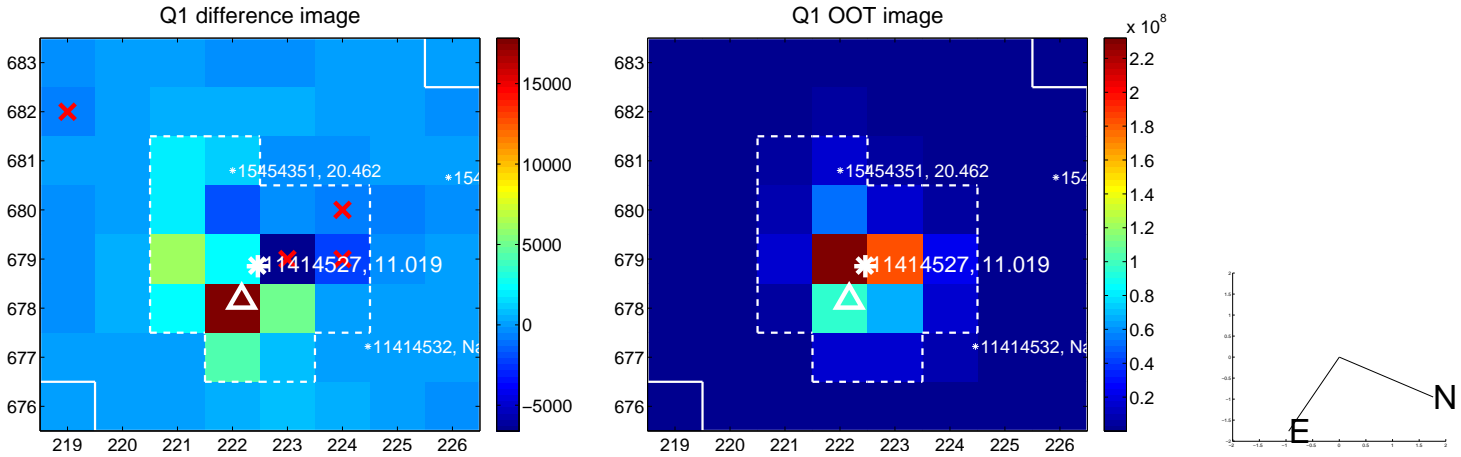
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.509 ± 0.189	2.70	0.469 ± 0.187	0.197 ± 0.160
PRF-fit source offset from KIC position	0.569 ± 0.188	3.04	0.525 ± 0.188	0.220 ± 0.155
photometric centroid source offset	0.42 ± 0.16	2.61	0.14 ± 0.16	-0.40 ± 0.16

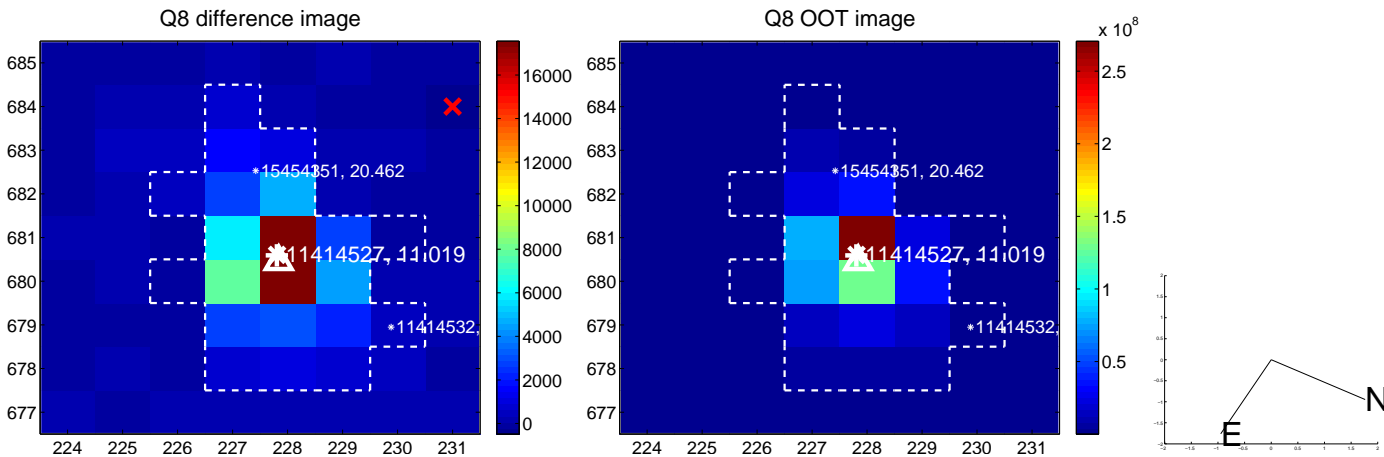
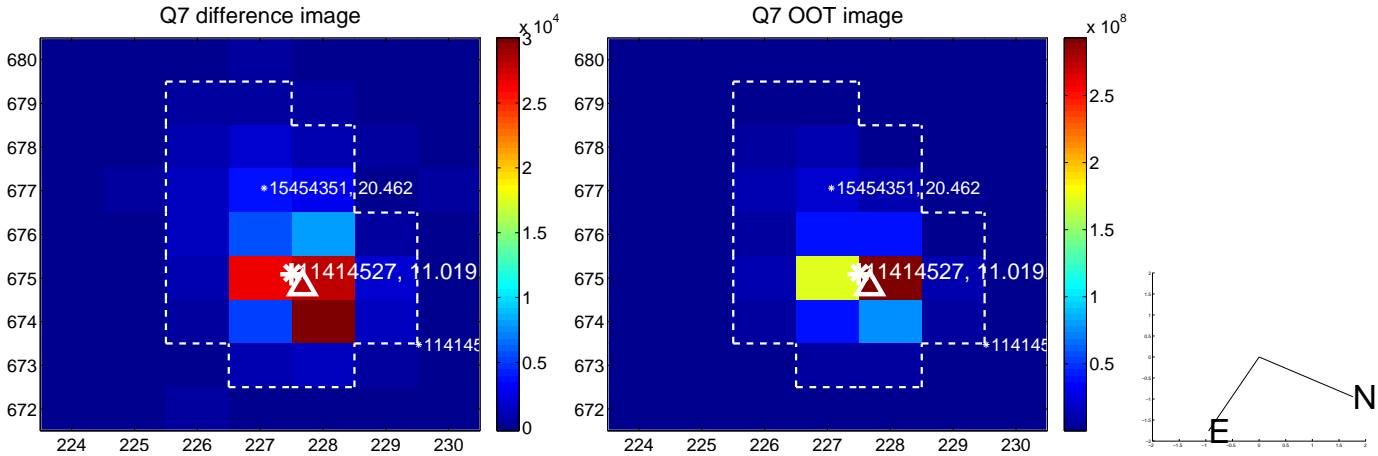
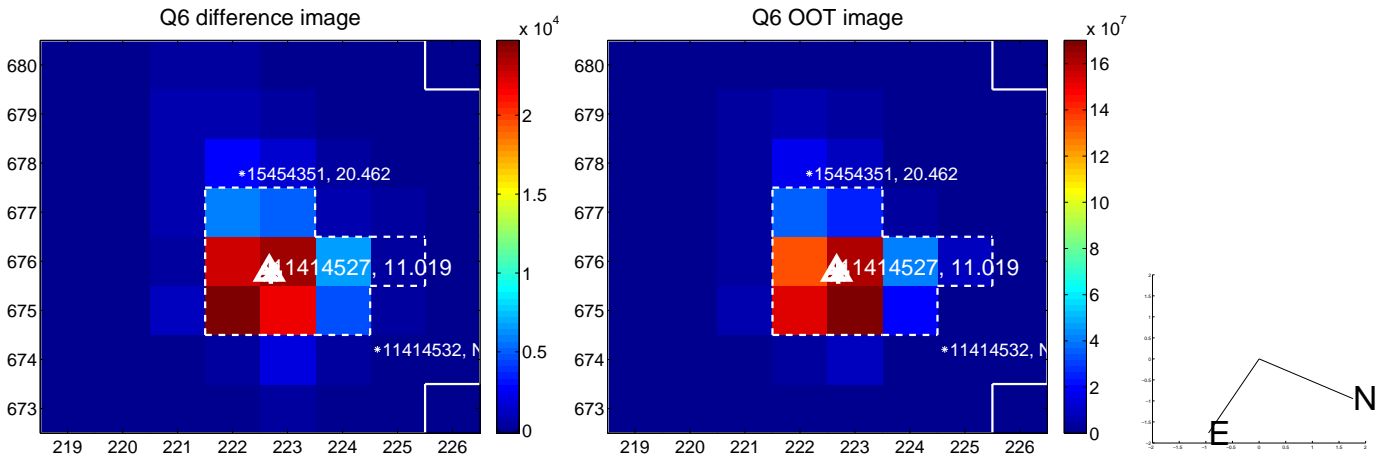
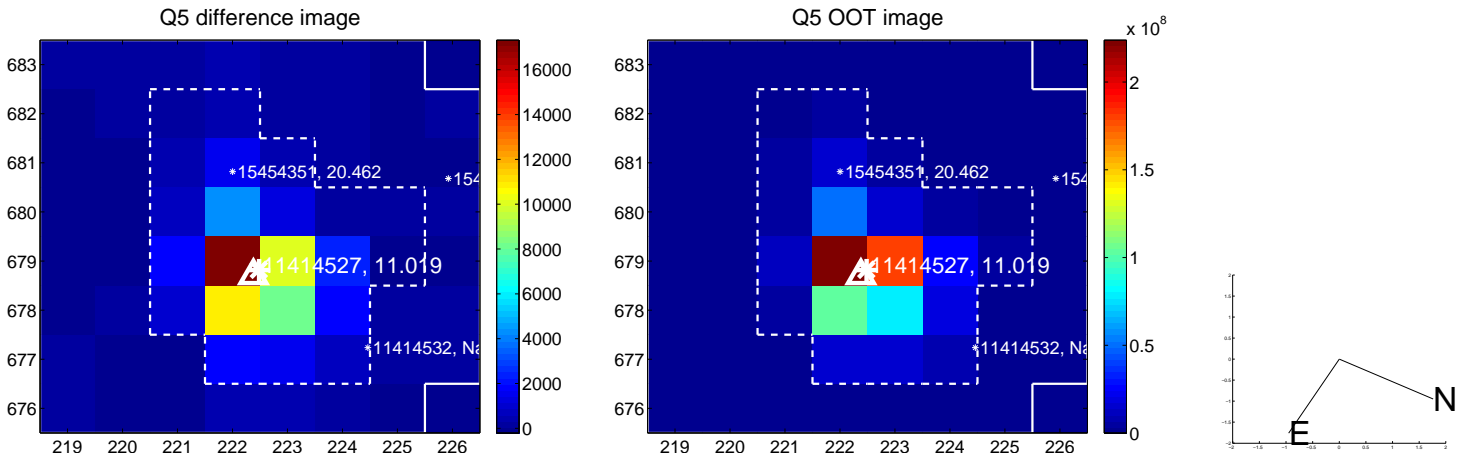


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

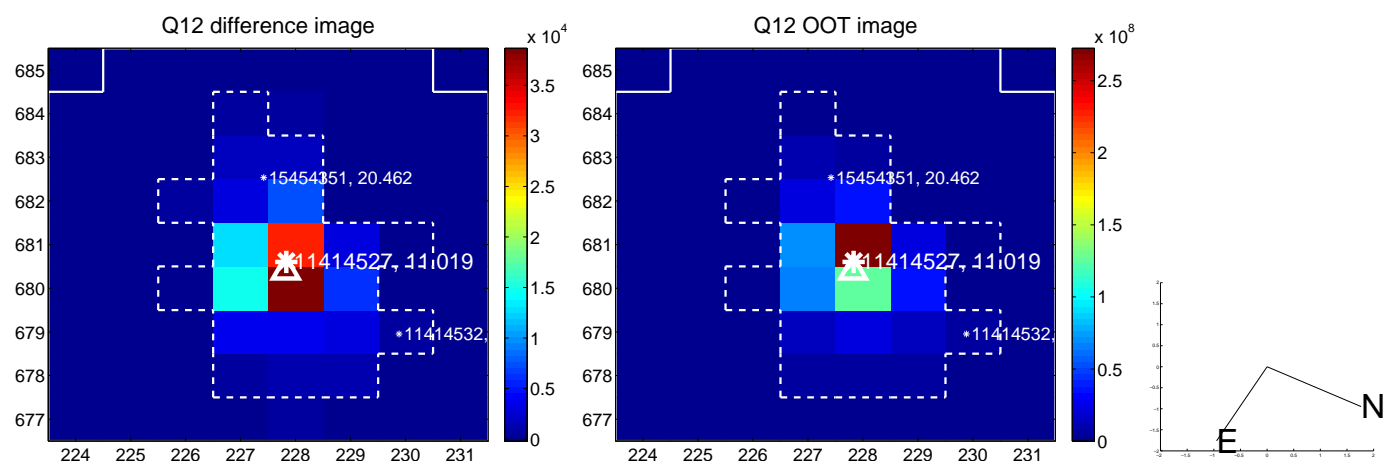
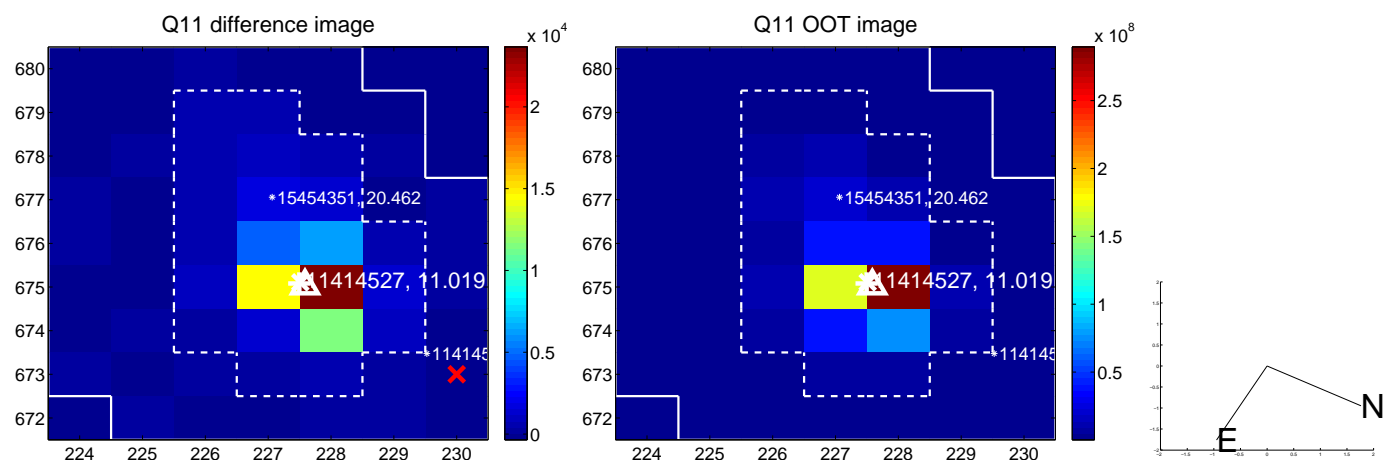
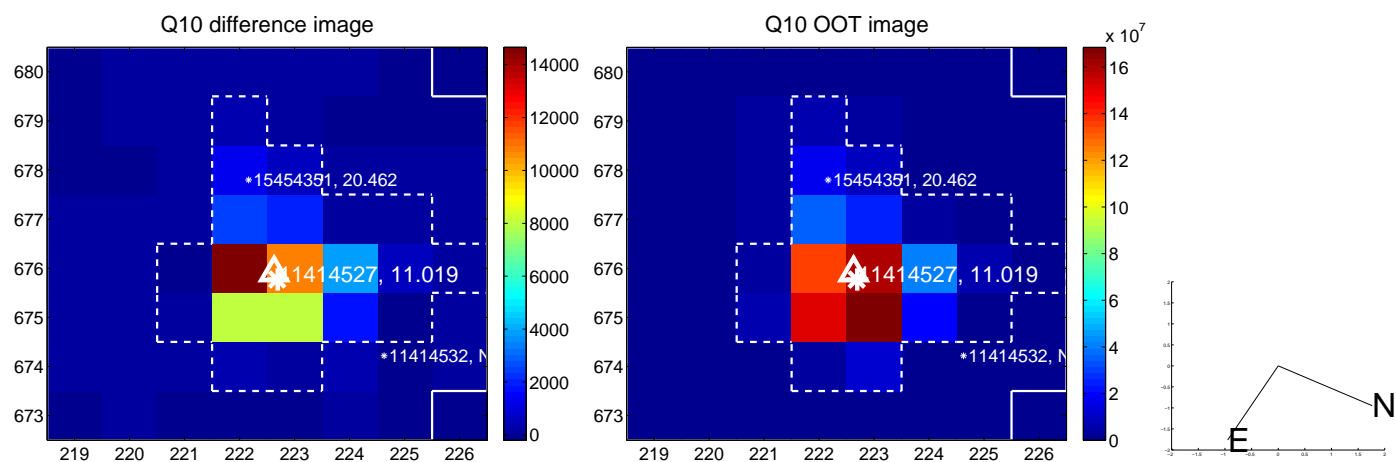
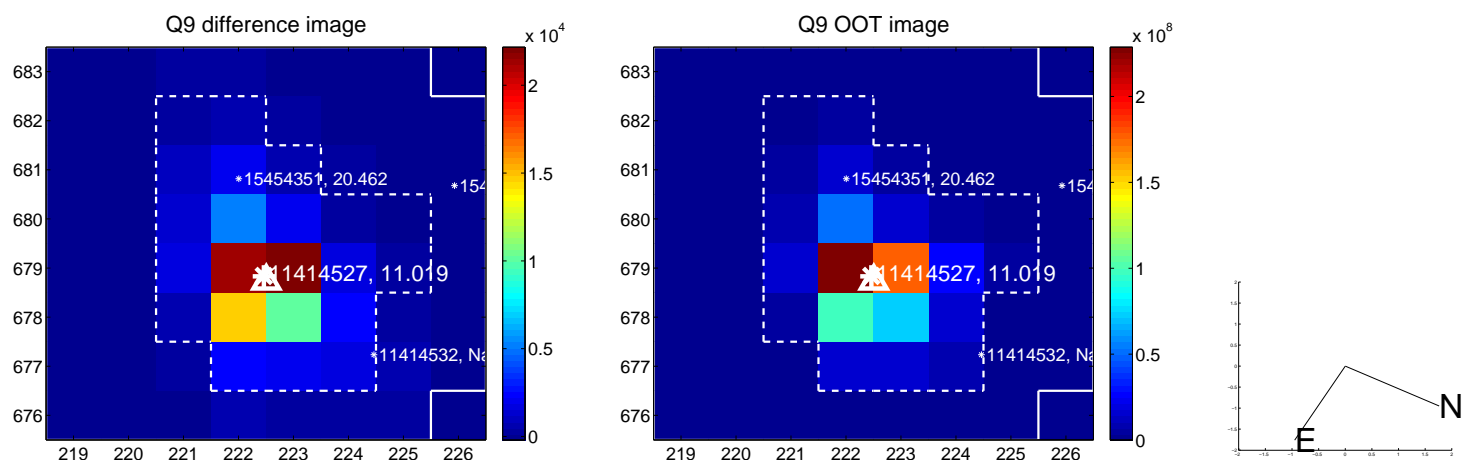
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



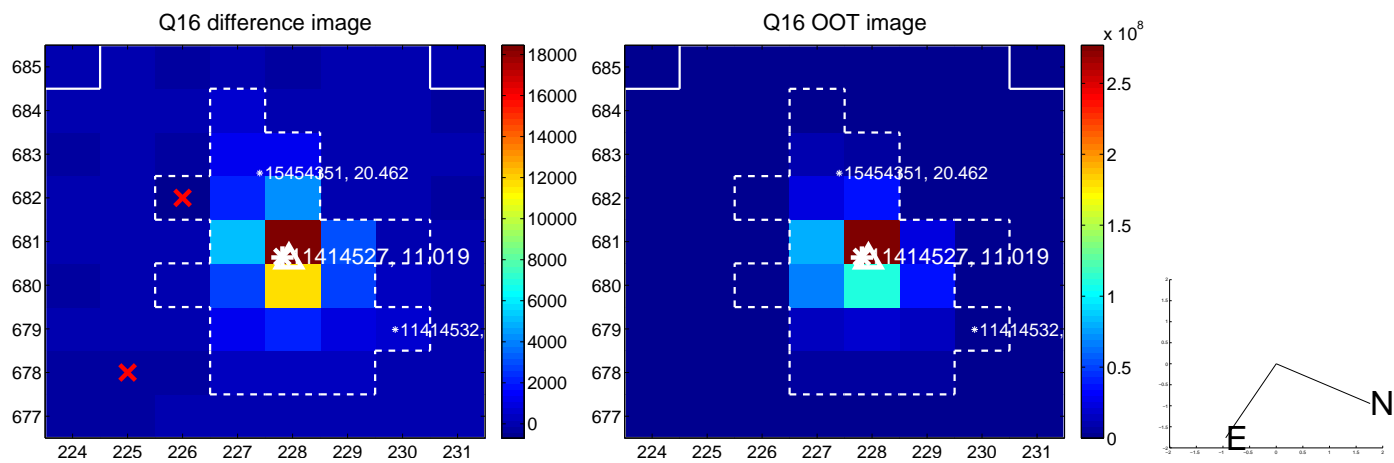
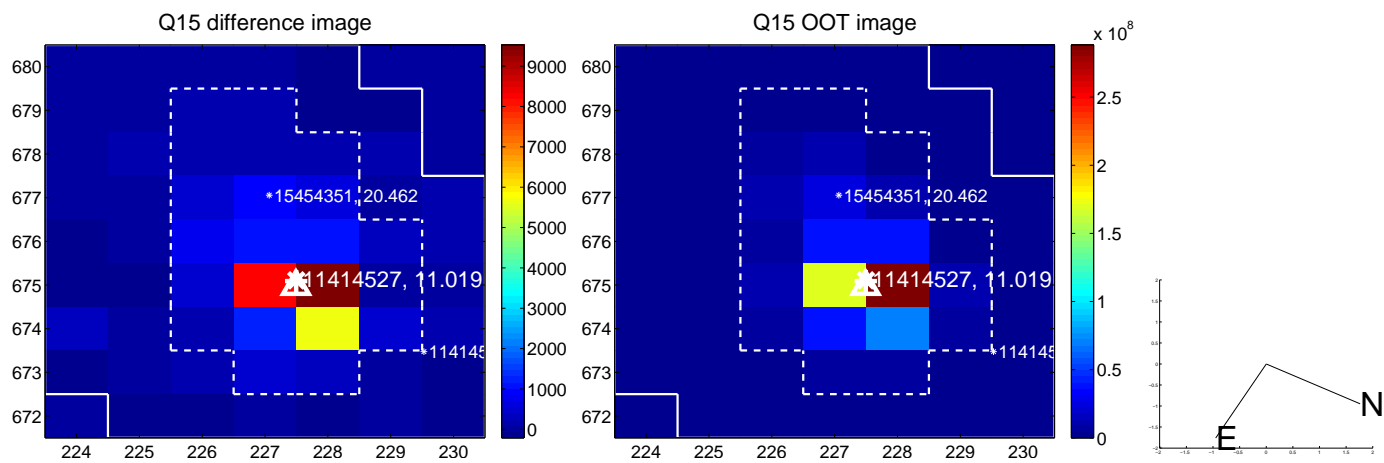
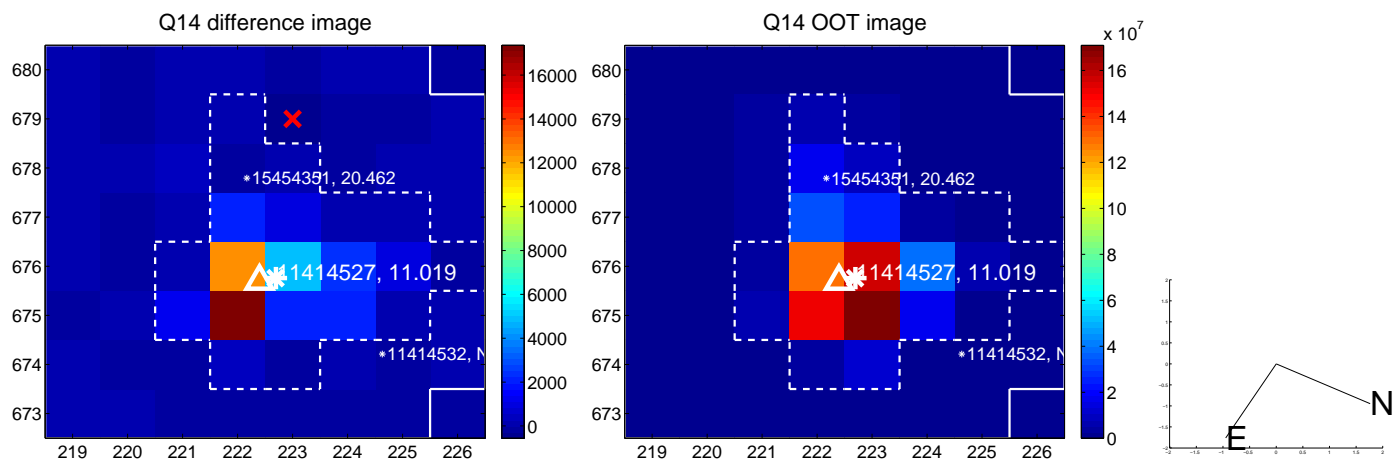
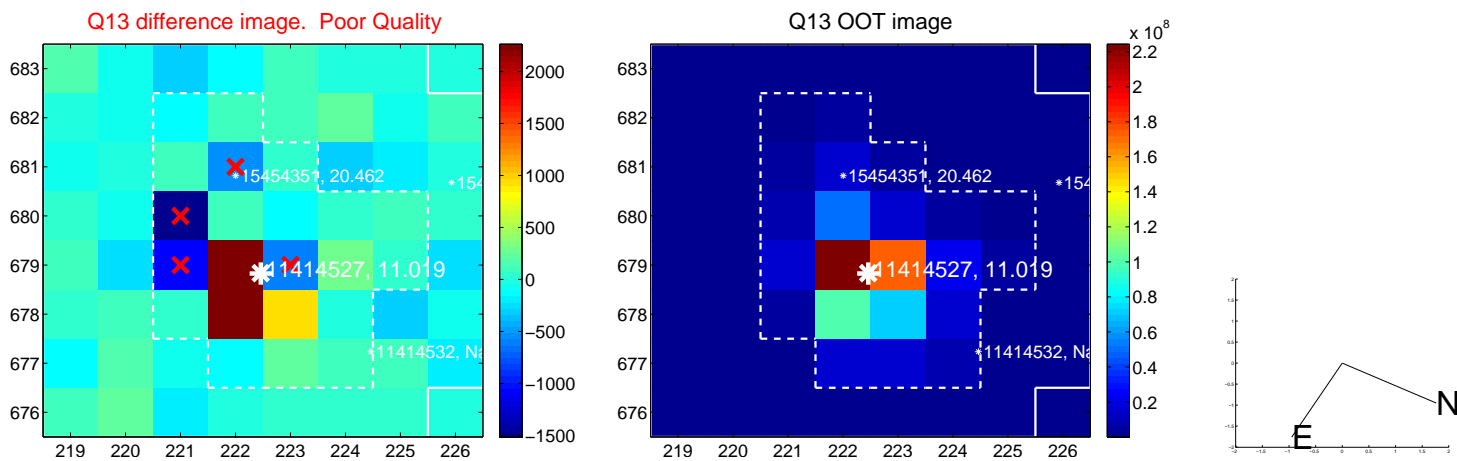
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



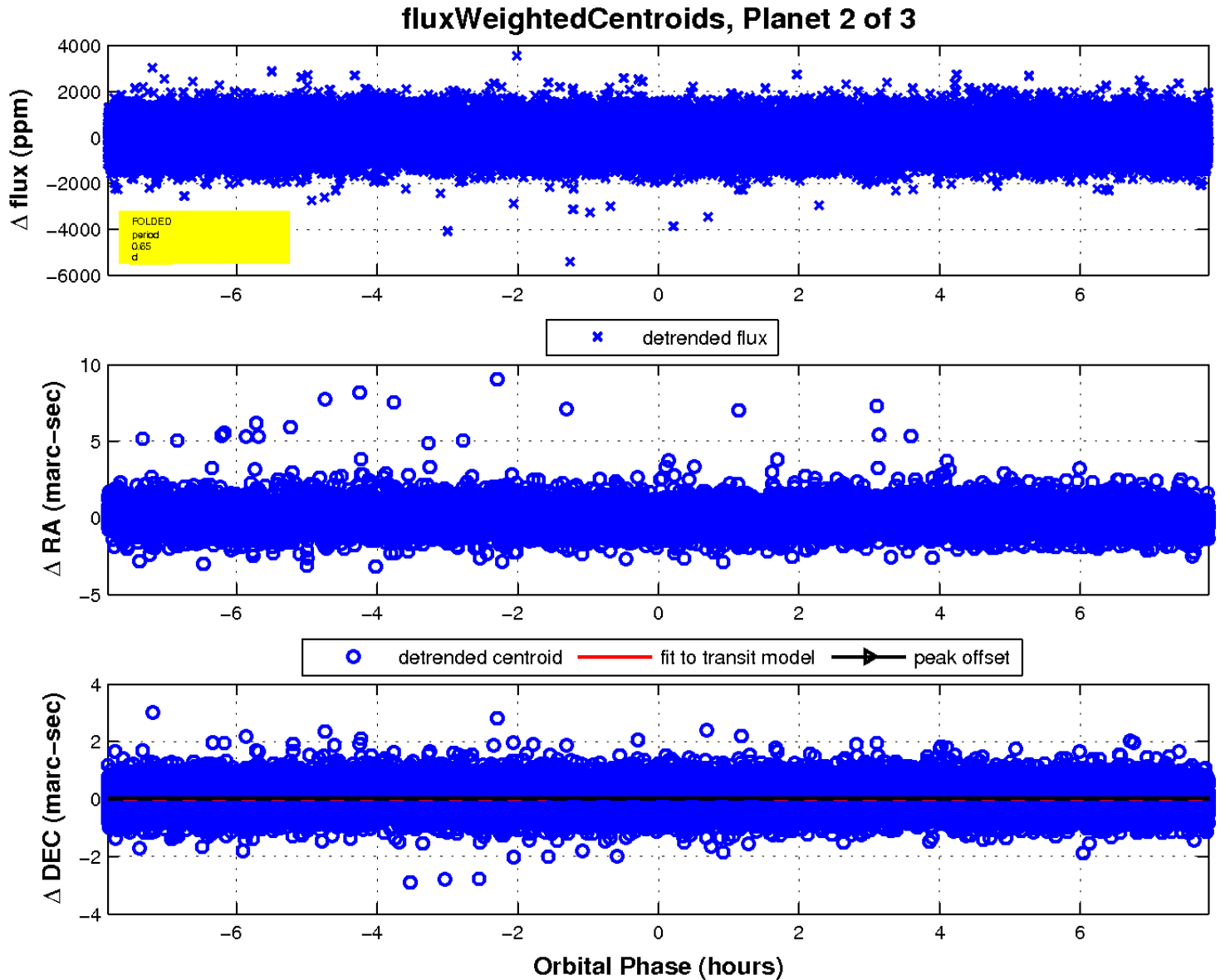
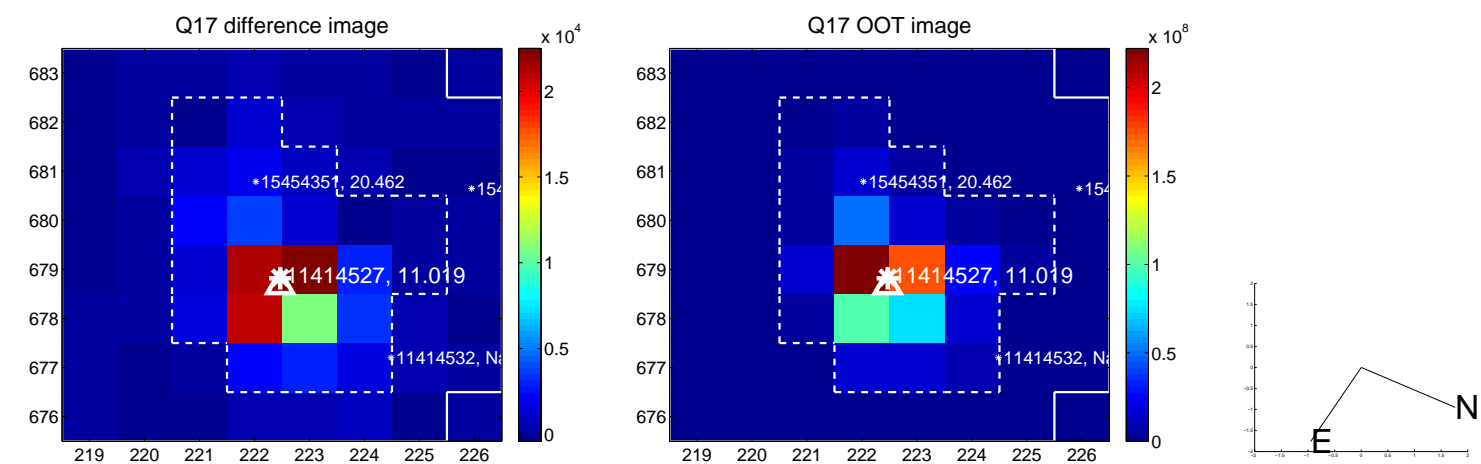
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

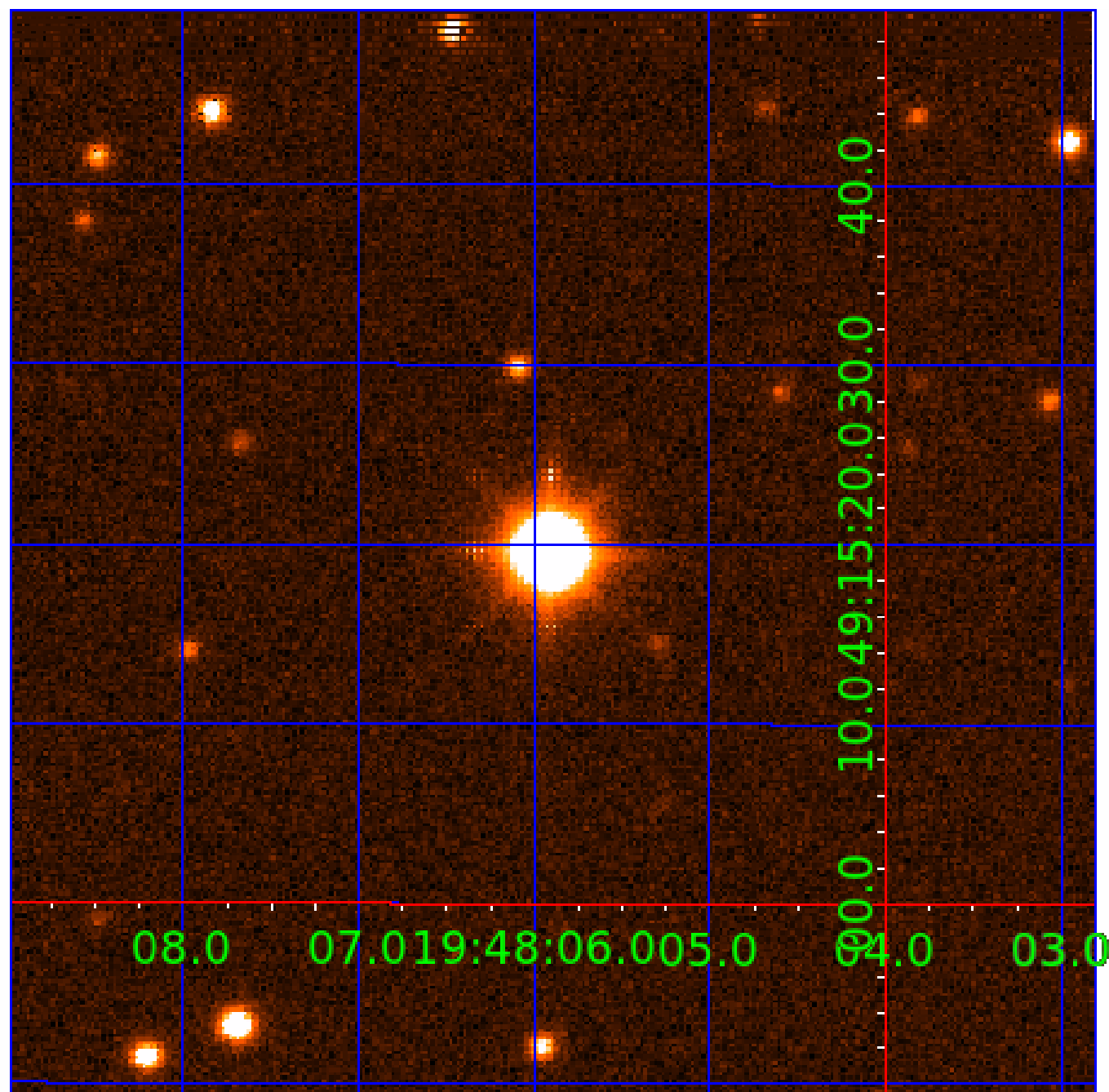


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011414527

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})
011414527-01	OBS	No	3.141676	131.744329	106.9	4.483	11.3	11.3	2.04	7331	2.45	4344.04
011414527-02	OBS	No	0.652382	132.036339	45.6	3.735	9.6	8.4	2.04	7331	1.60	35326.97
011414527-03	OBS	No	6.283468	134.191255	240.2	3.433	8.4	10.0	2.04	7331	3.49	1723.89

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011414527-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
011414527-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED
011414527-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— SAME_NTL_PERIOD—CENT_SATURATED

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

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

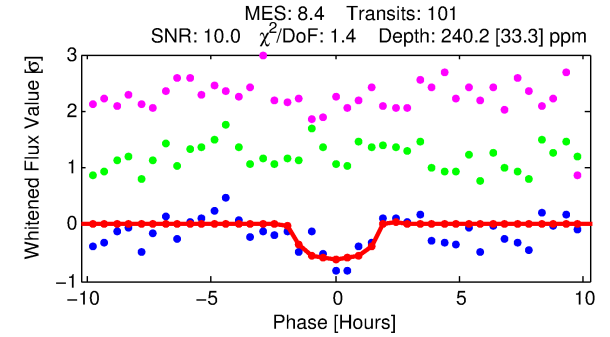
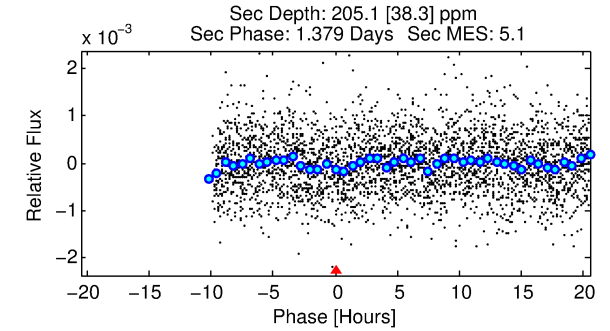
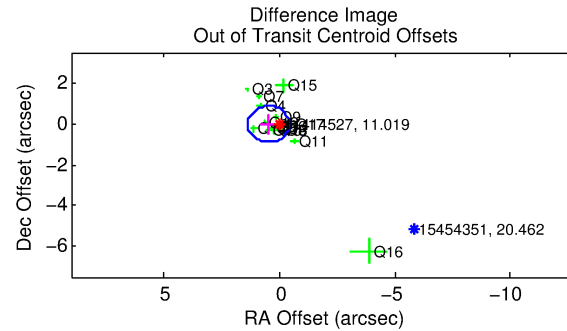
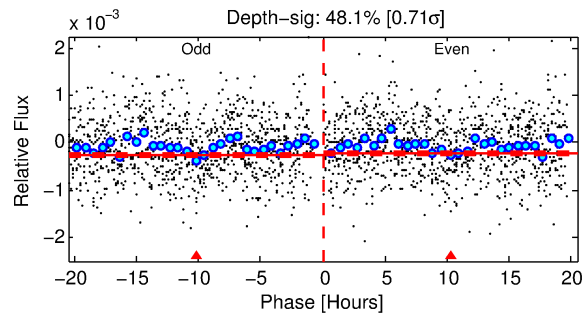
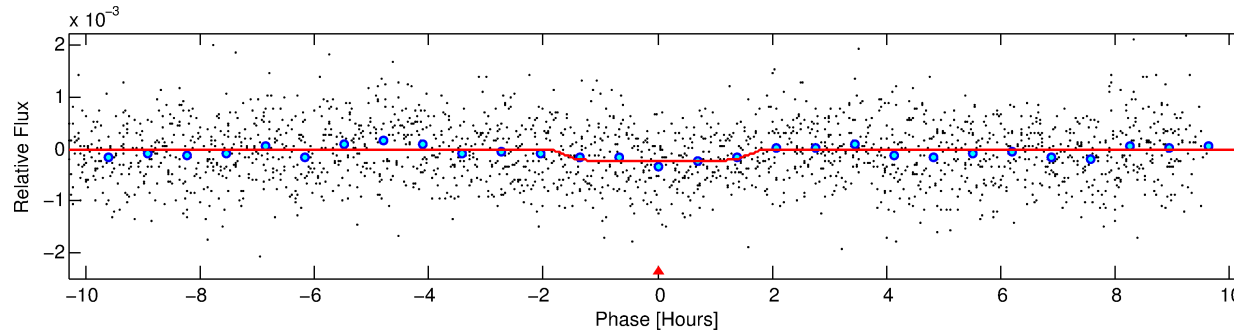
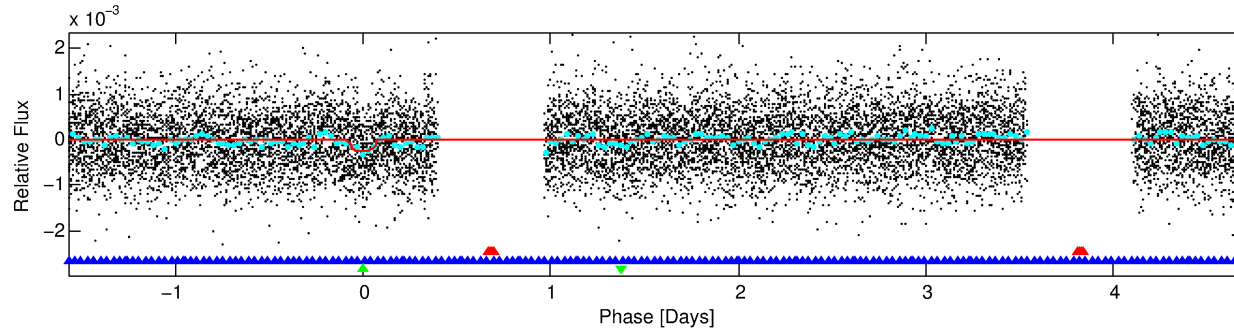
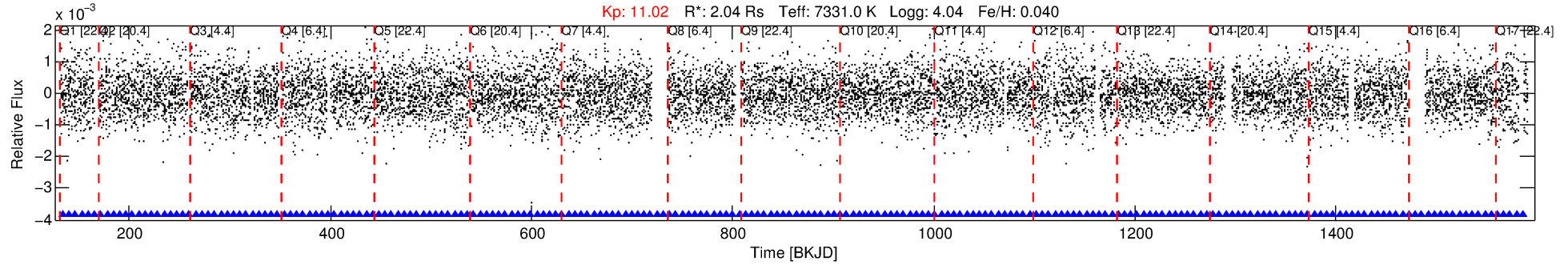
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011414527-03

No Significant Match Found

DV One-Page Summary

KIC: 11414527 Candidate: 3 of 3 Period: 6.283 d



DV Fit Results:

Period = 6.28347 [0.00007] d
Epoch = 134.1913 [0.0089] BKJD
 $R_p/R^* = 0.0157$ [0.0150]
 $a/R^* = 8.77$ [52.16]
 $b = 0.80$ [2.71]
 $S_{\text{eff}} = 1723.89$ [633.18]
 $T_{\text{eq}} = 1643$ [151] K
 $R_p = 3.49$ [3.49] R_e
 $a = 0.0791$ [0.0183] AU
 $A_g = 57.99$ [113.19] [0.50 σ]
 $T_{\text{eff}} = 7010$ [3387] K [1.58 σ]

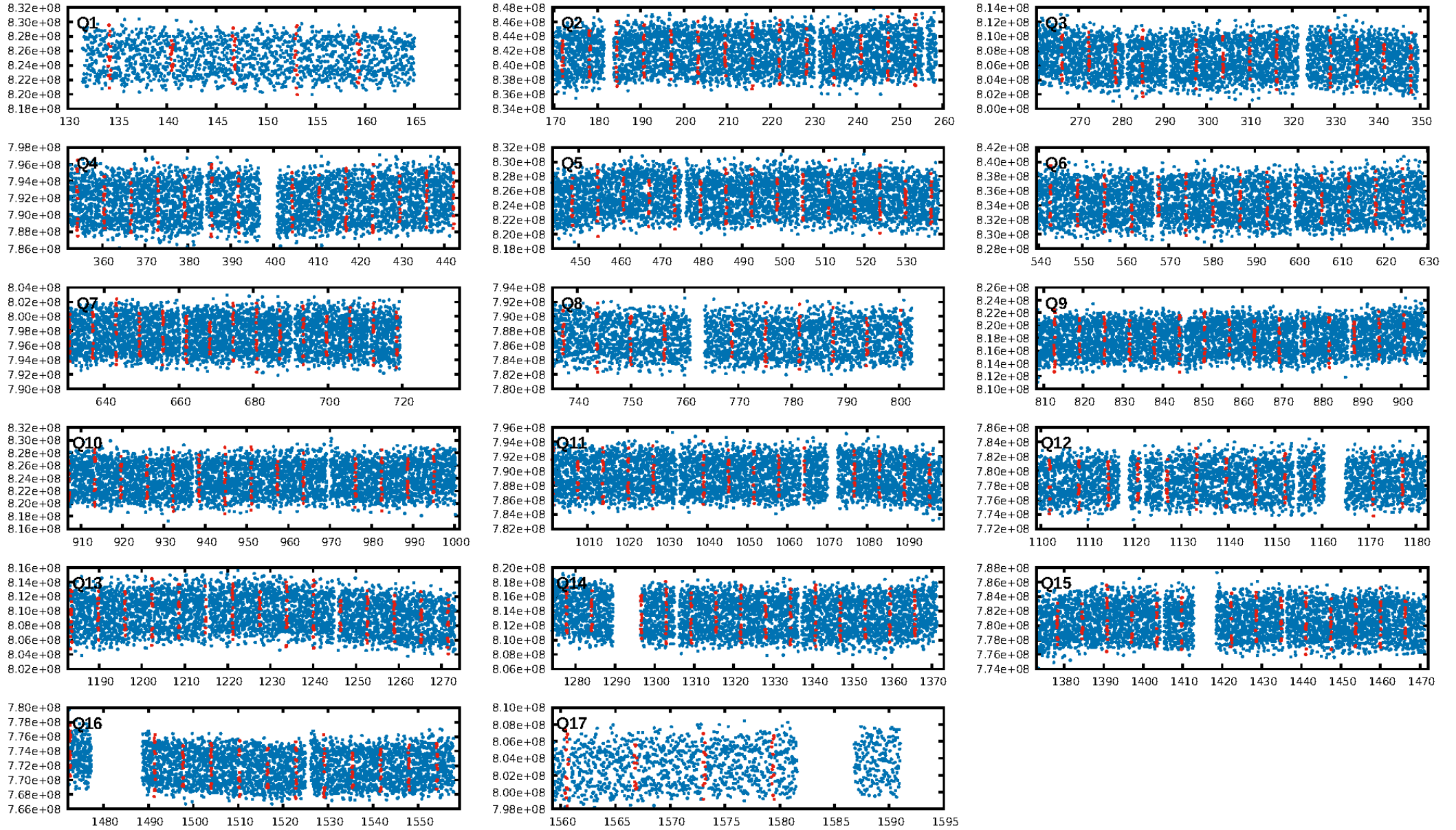
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [13.35 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 71.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.23e-13
RollingBand-fgt: 1.00 [96/96]
GhostDiagnostic-chr: 0.9614
Centroid-sig: N/A
Centroid-so: 0.146 arcsec [1.43 σ]
OotOffset-rm: 0.469 arcsec [1.58 σ]
KicOffset-rm: 0.491 arcsec [1.55 σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.81 [13/16]
DiffImageOverlap-fno: 0.00 [0/17]

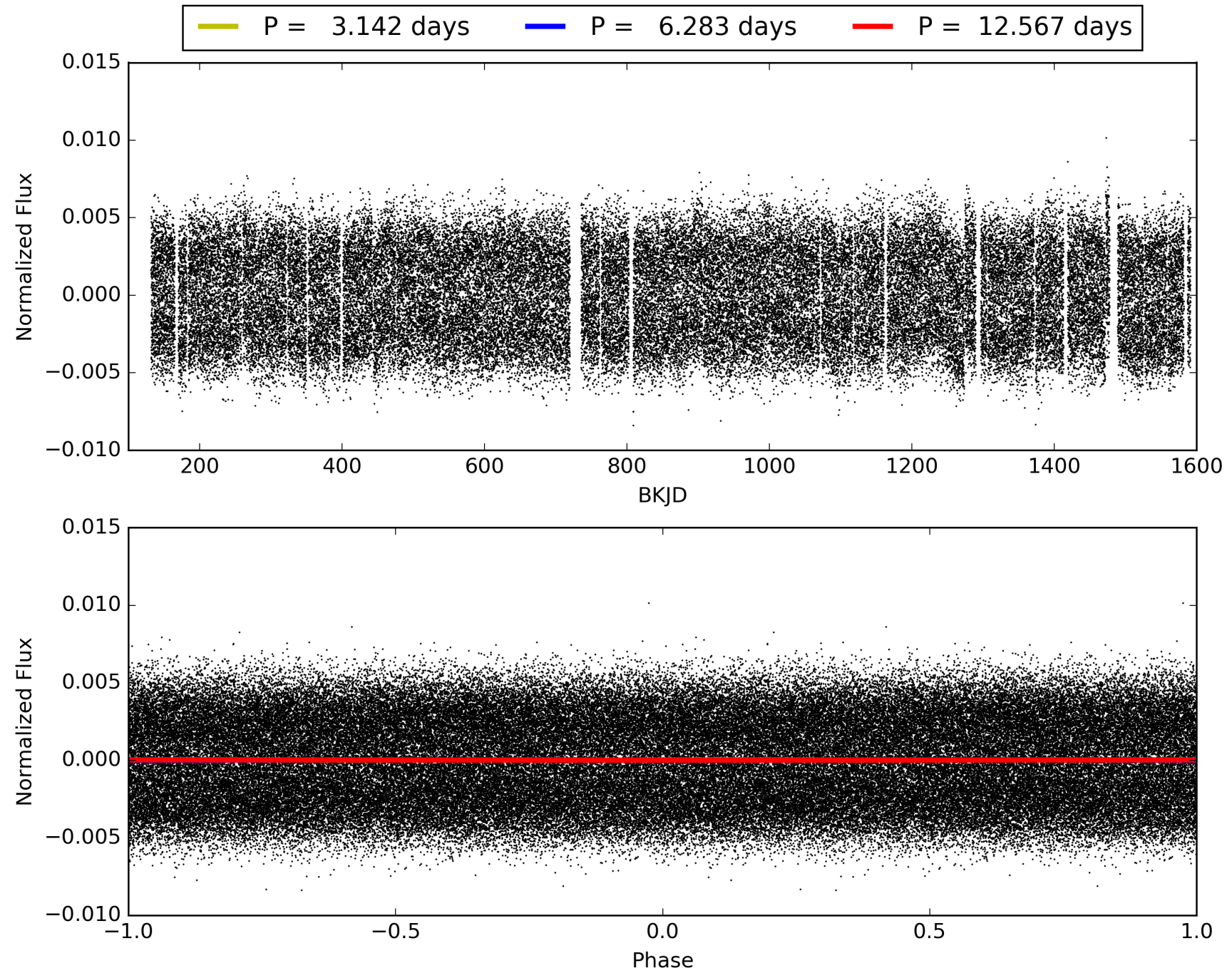
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 19:24:46 Z

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

TCE 011414527-03, PDC Light Curves

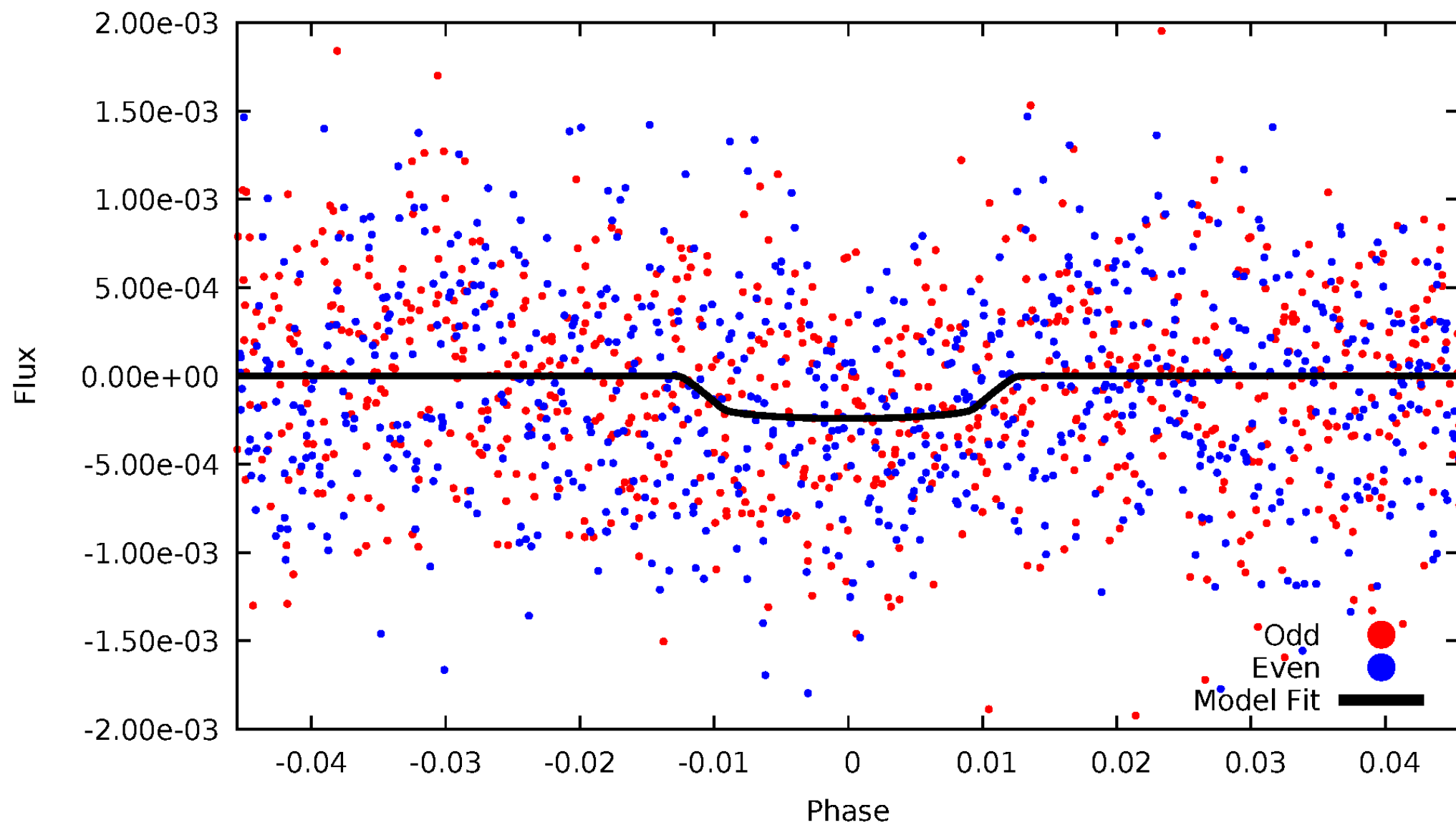


TCE 011414527-03



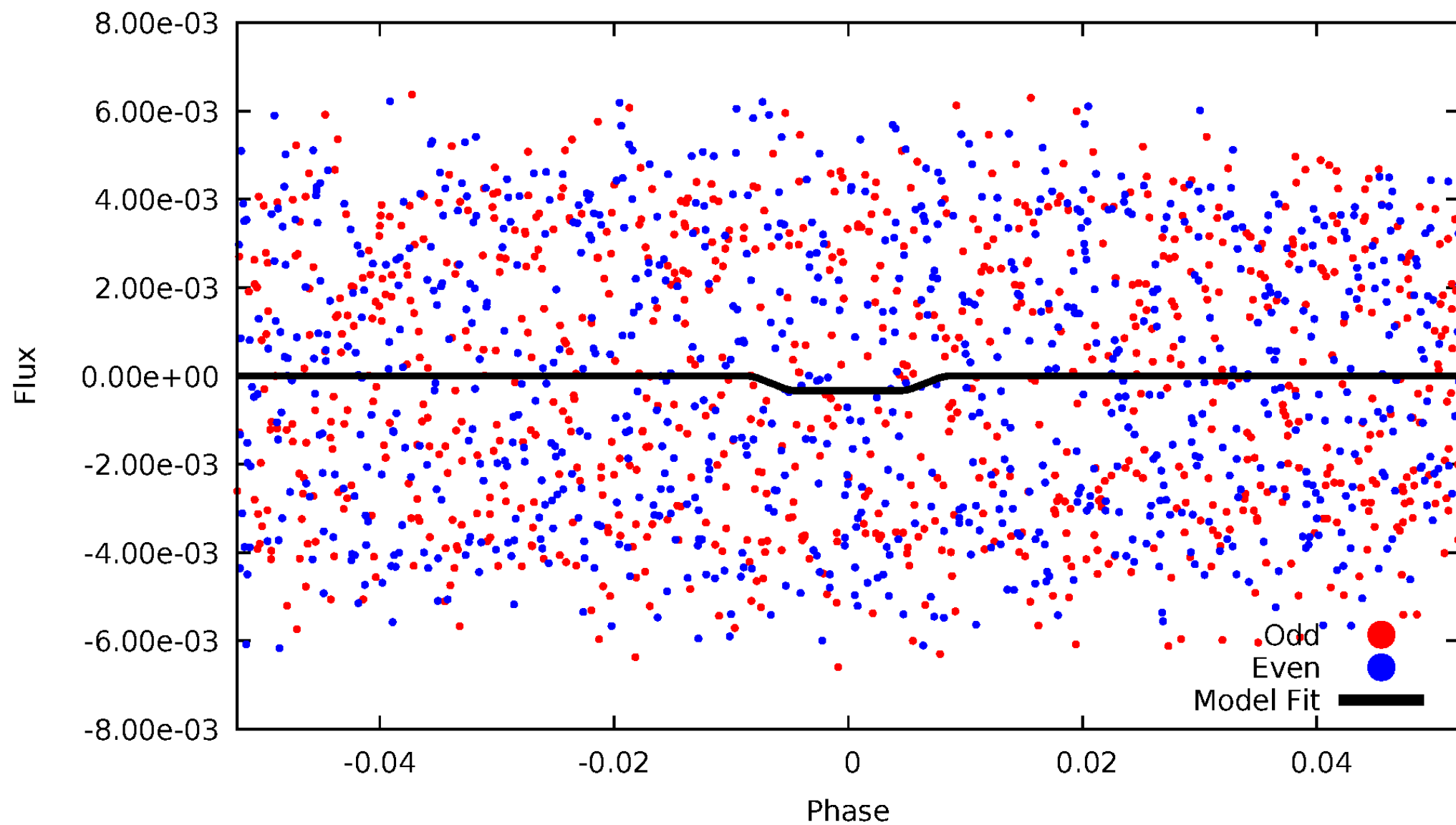
DV Odd/Even

TCE 011414527-03

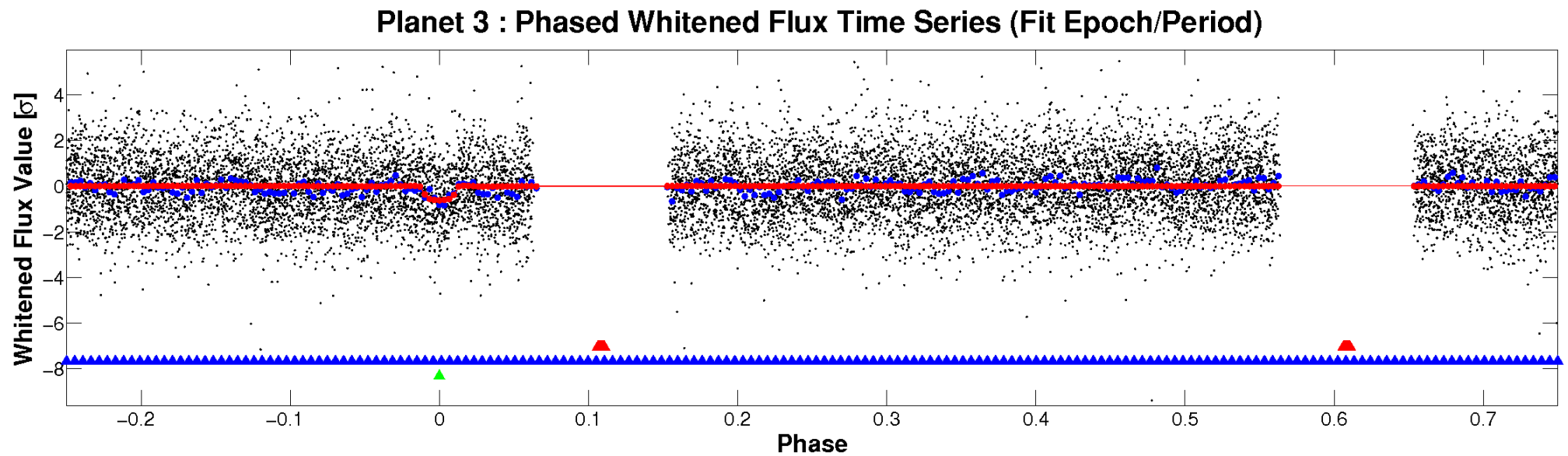
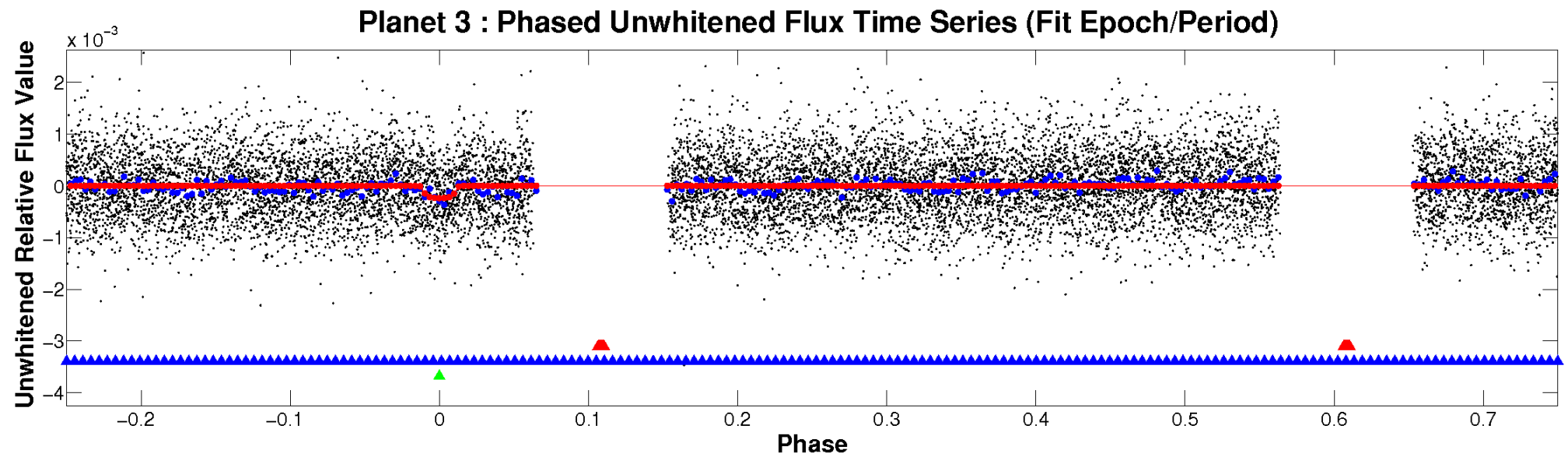


ALT Odd/Even

TCE 011414527-03

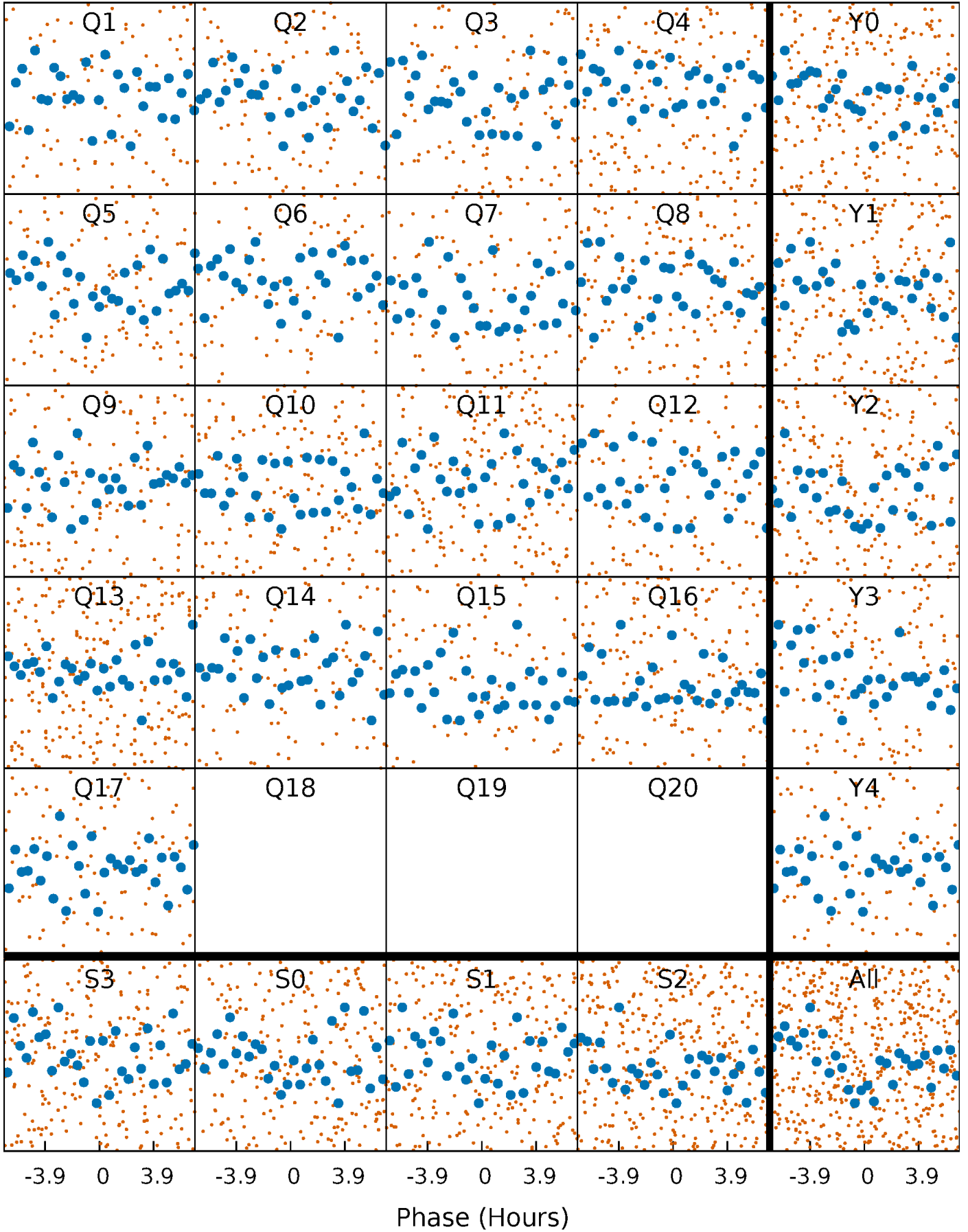


Non-Whitened Vs. Whitened Light Curve



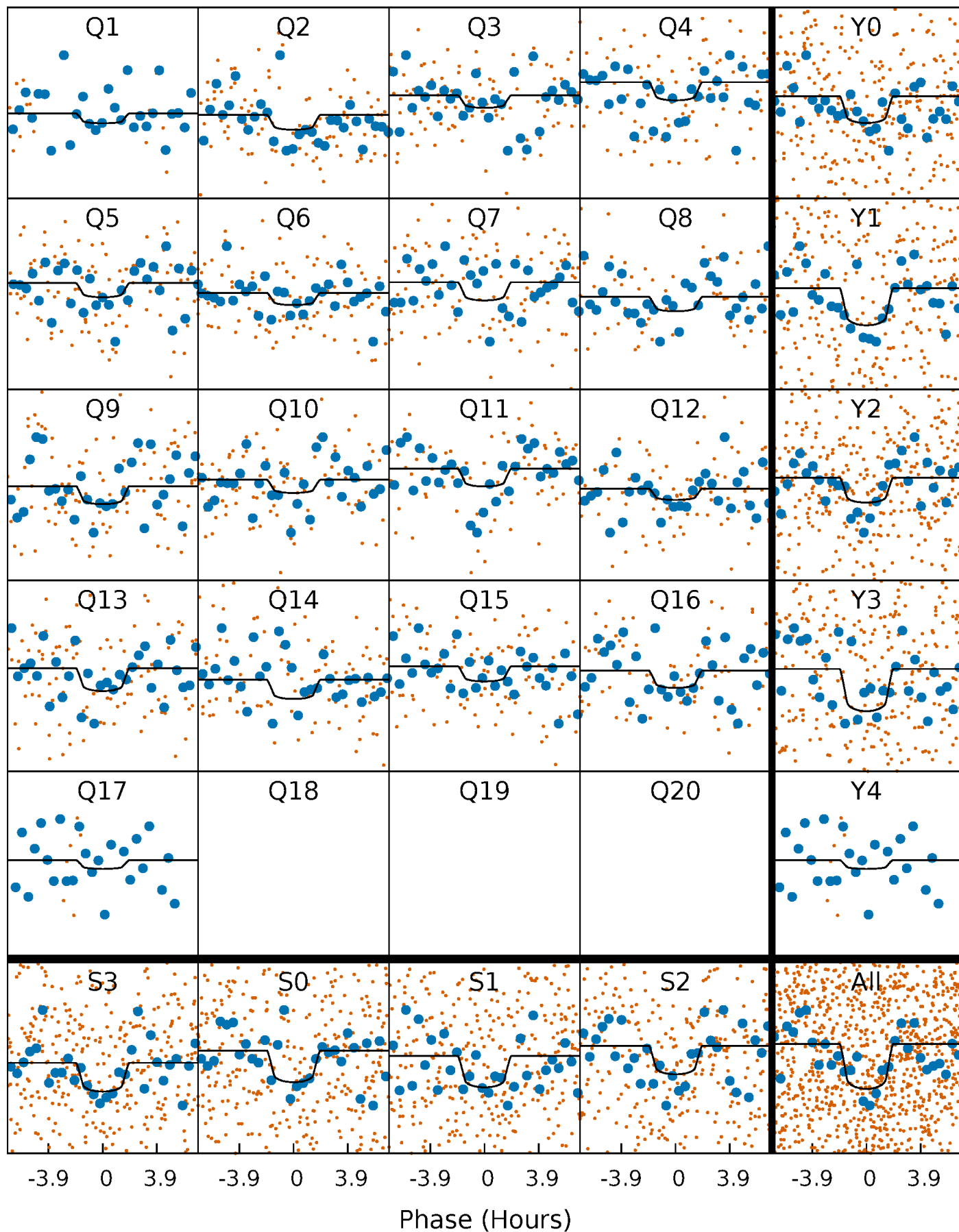
PDC Quarter-Phased Transit Curves

TCE 011414527-03 P= 6.283468 Days $T_0=134.191255$ (BKJD)



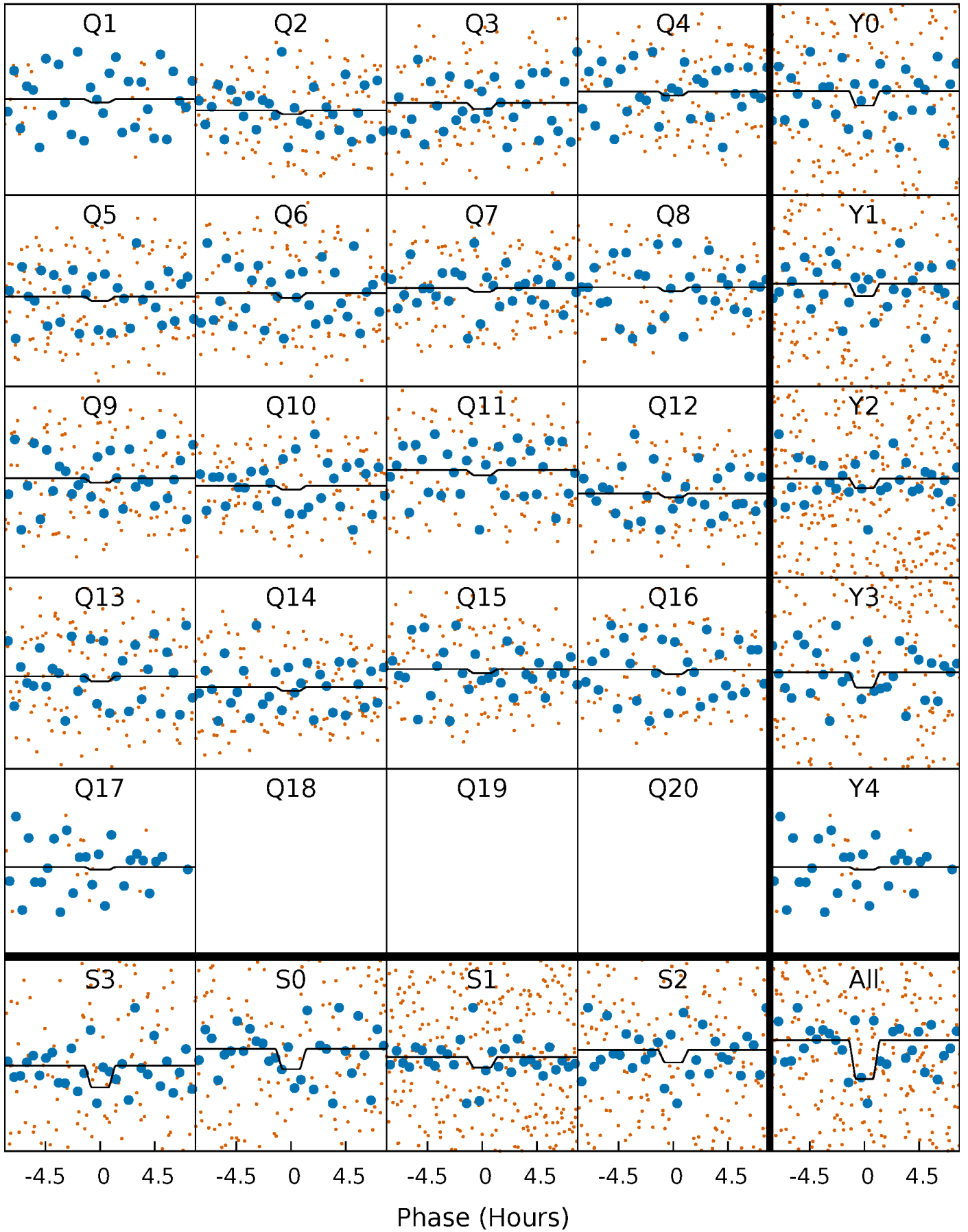
DV Quarter-Phased Transit Curves

TCE 011414527-03 P= 6.283468 Days $T_0=134.191255$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

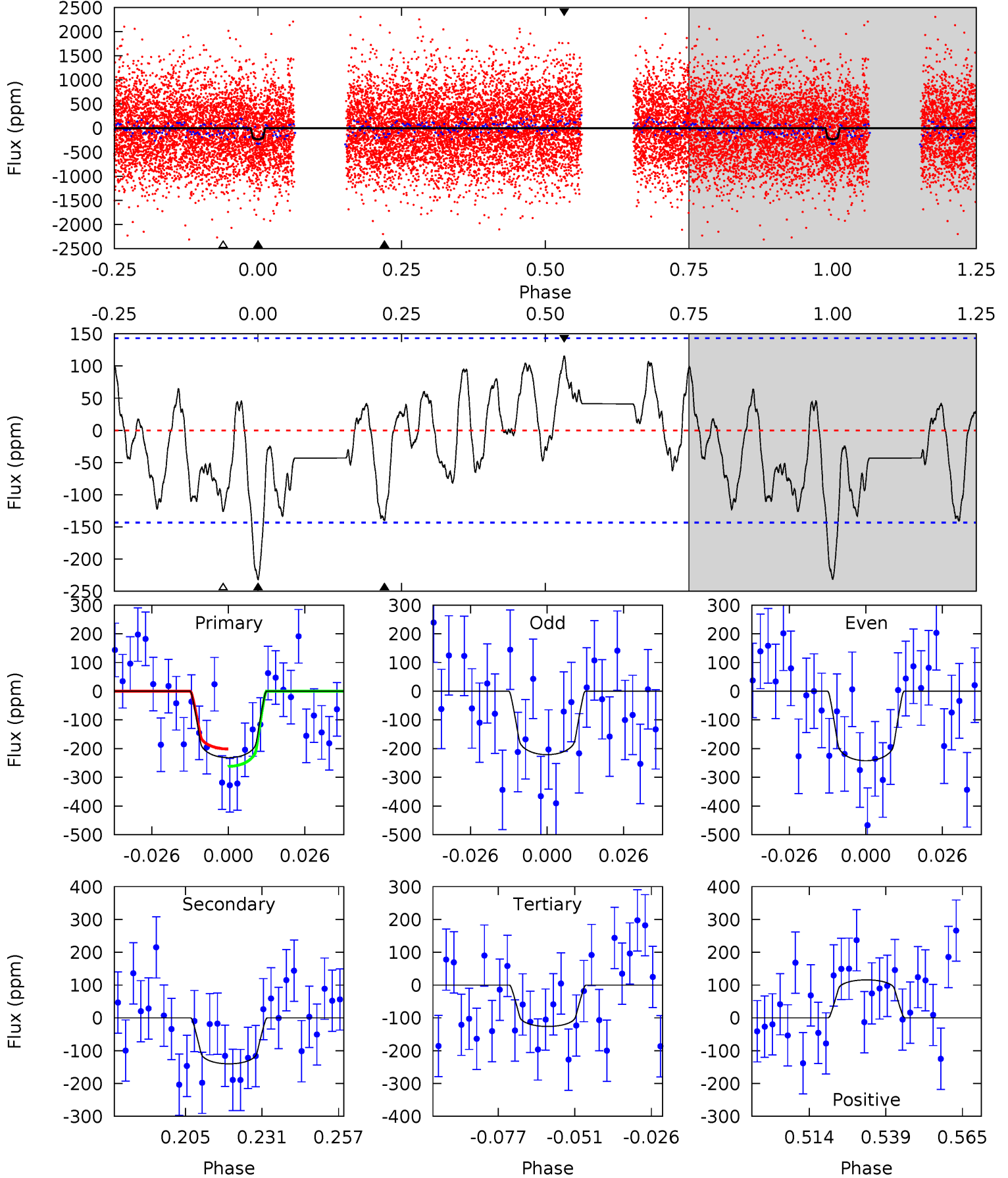
TCE 011414527-03 P= 6.283386 Days $T_0=134.199892$ (BKJD)



DV Model-Shift Uniqueness Test

011414527-03, P = 6.283468 Days, E = 127.907787 Days

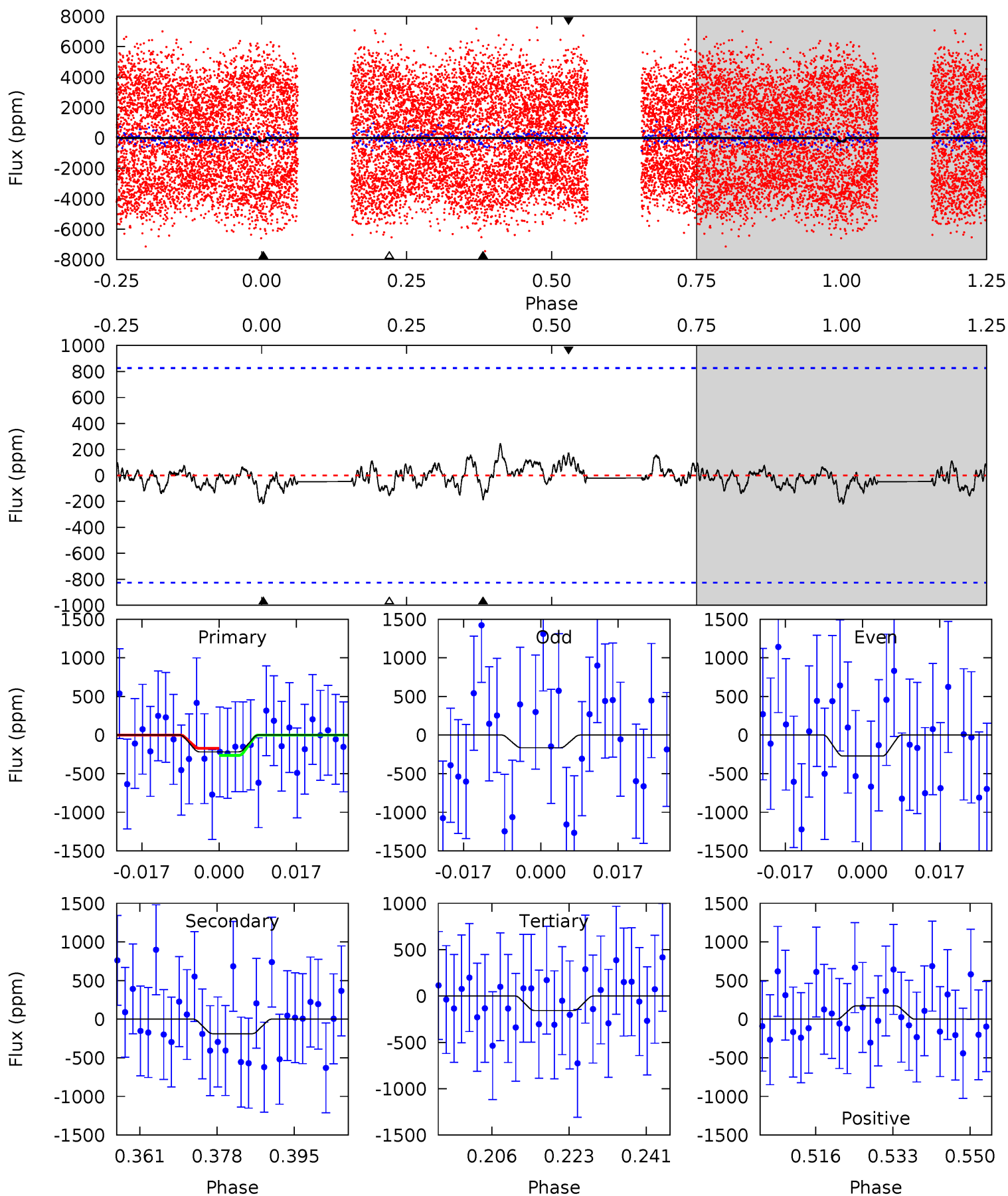
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.83	4.74	4.27	3.92	4.84	2.23	2.04	3.57	3.92	0.47	0.82	0.36	0.87	0.33	1.03



Alt Model-Shift Uniqueness Test

011414527-03, P = 6.283386 Days, E = 127.916506 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.29	1.12	0.93	1.02	4.92	2.38	0.41	0.36	0.27	0.19	0.10	0.32	1.87	0.53	0.27



Stellar Parameters For KIC 011414527

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7331^{+203}_{-319}	$4.041^{+0.170}_{-0.170}$	$0.040^{+0.200}_{-0.350}$	$2.041^{+0.585}_{-0.478}$	$1.668^{+0.193}_{-0.265}$	$0.276^{+0.246}_{-0.129}$
	+3%/-4%	+4%/-4%	+500%/-875%	+29%/-23%	+12%/-16%	+89%/-47%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 011414527-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-140 ± 30	$4.29^{+3.02}_{-2.66}$	2288^{+178}_{-163}	5616^{+4313}_{-1121}	25^{+160}_{-16}
Alt.	-187 ± 168	$4.49^{+3.38}_{-2.84}$	2275^{+170}_{-164}	5534^{+4344}_{-2330}	23^{+162}_{-21}

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

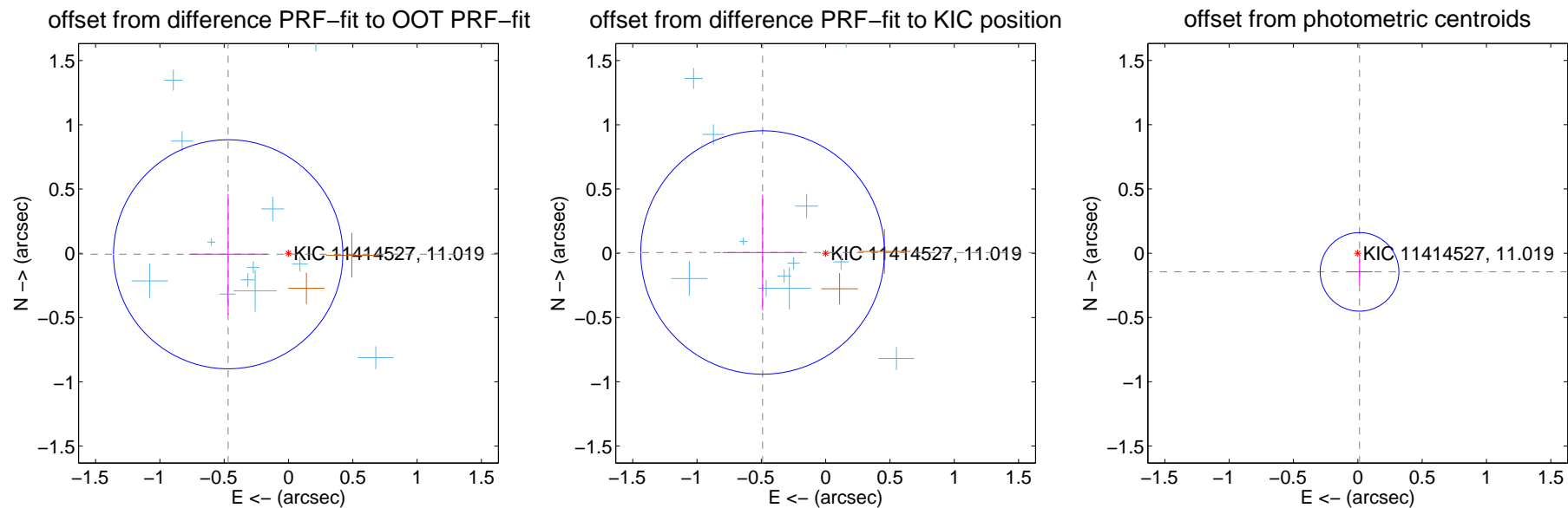
DV Centroid Data

Supplemental centroid analysis for 011414527-03. **Kepler magnitude: 11.02.** Transit SNR 10.01

There are 13 quarters with good PRF difference image offsets

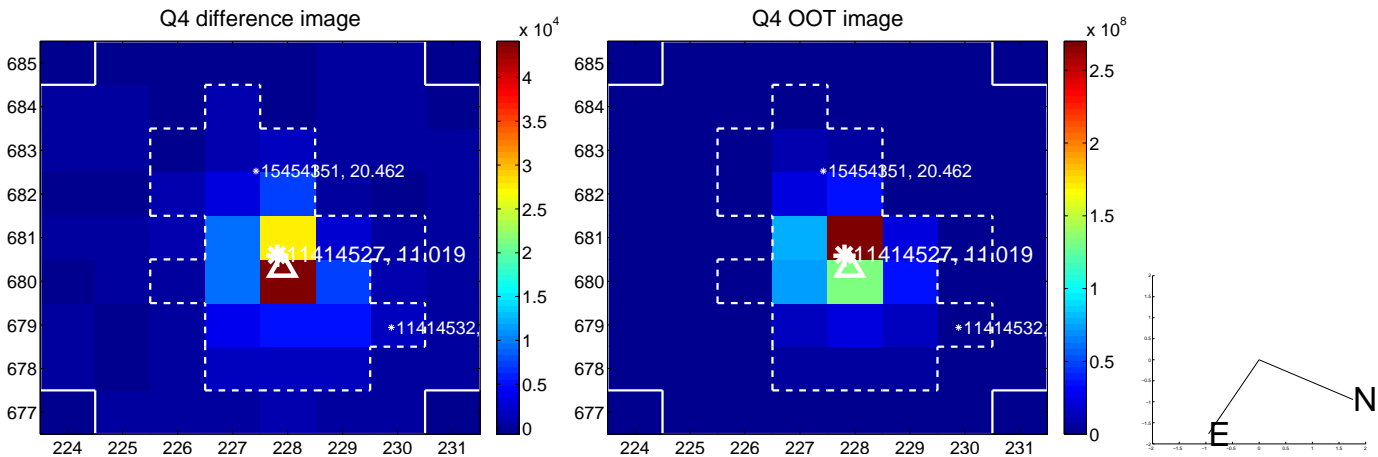
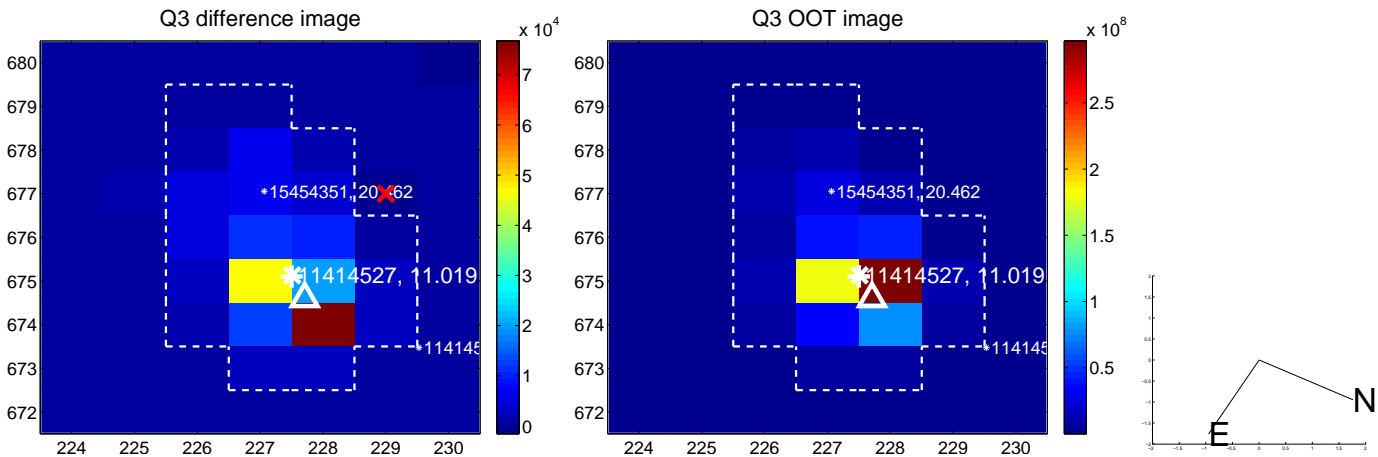
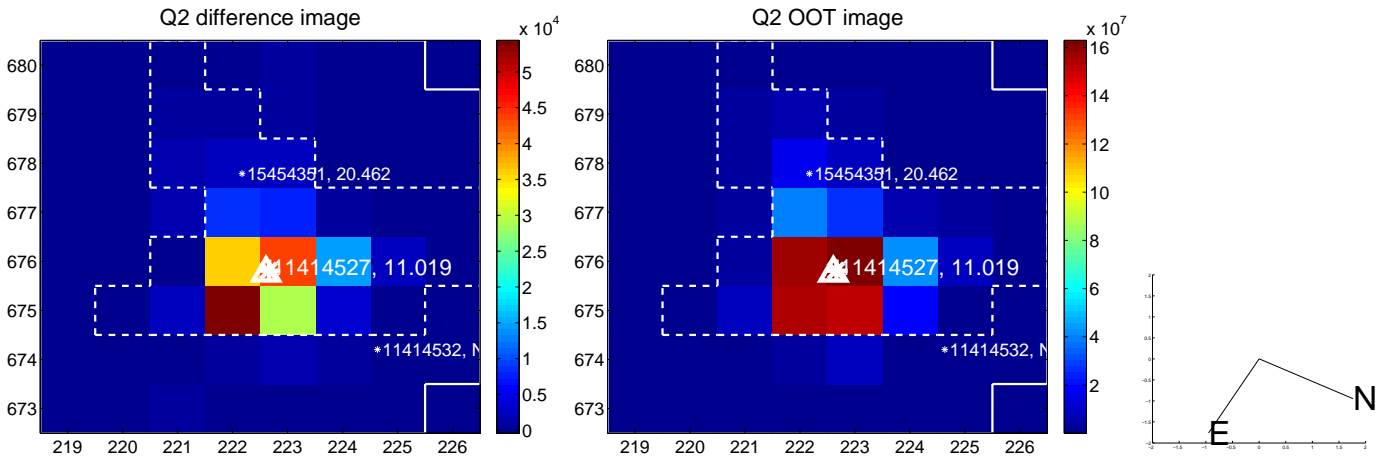
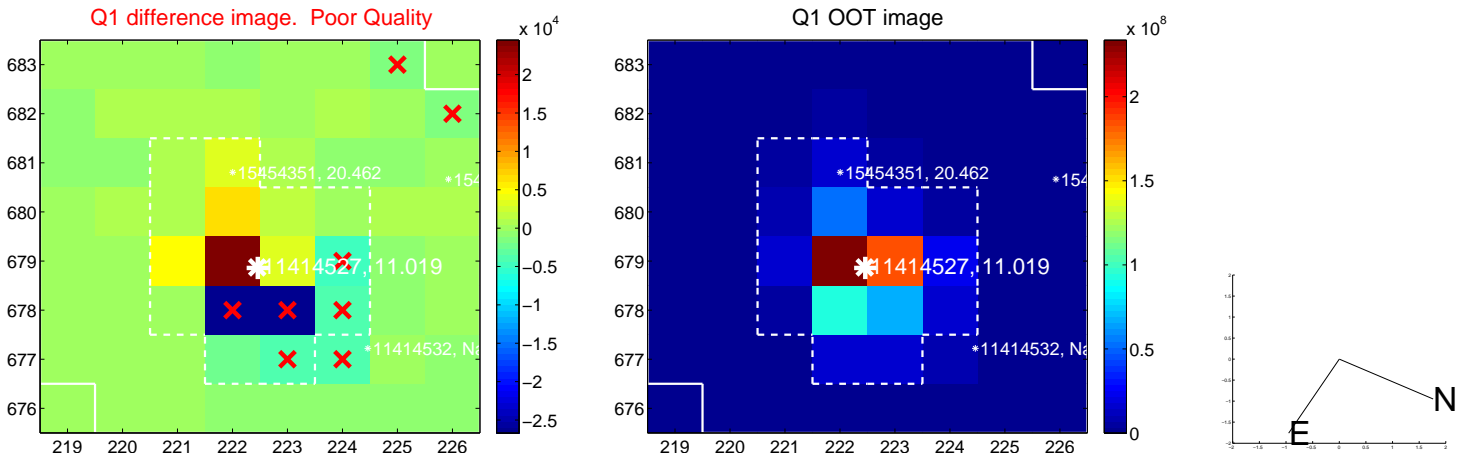
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.469 ± 0.297	1.58	0.469 ± 0.304	-0.008 ± 0.470
PRF-fit source offset from KIC position	0.491 ± 0.316	1.55	0.491 ± 0.311	0.006 ± 0.450
photometric centroid source offset	0.15 ± 0.10	1.43	-0.01 ± 0.10	-0.15 ± 0.10

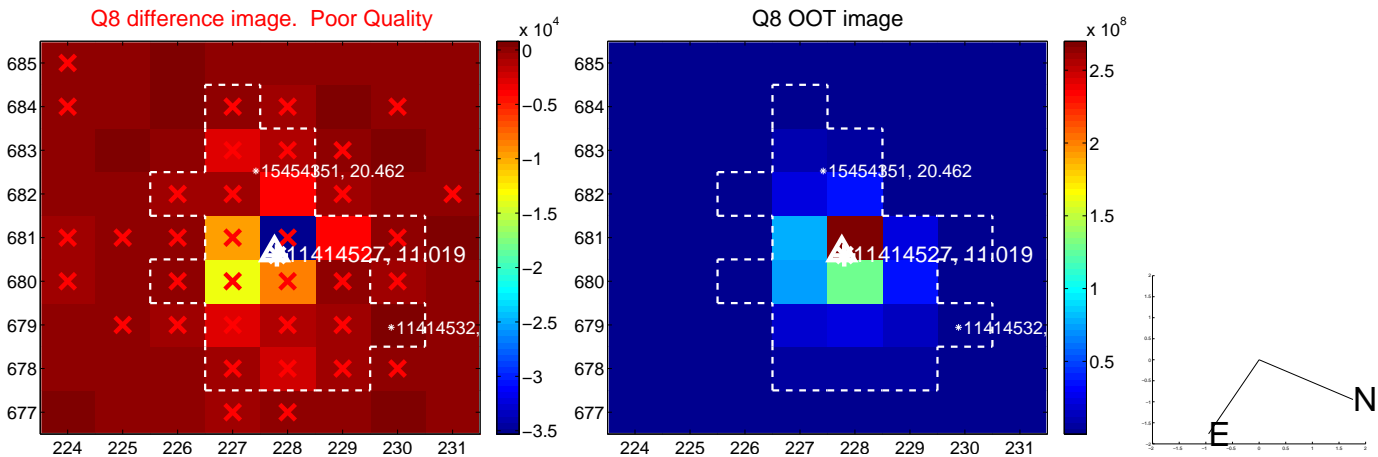
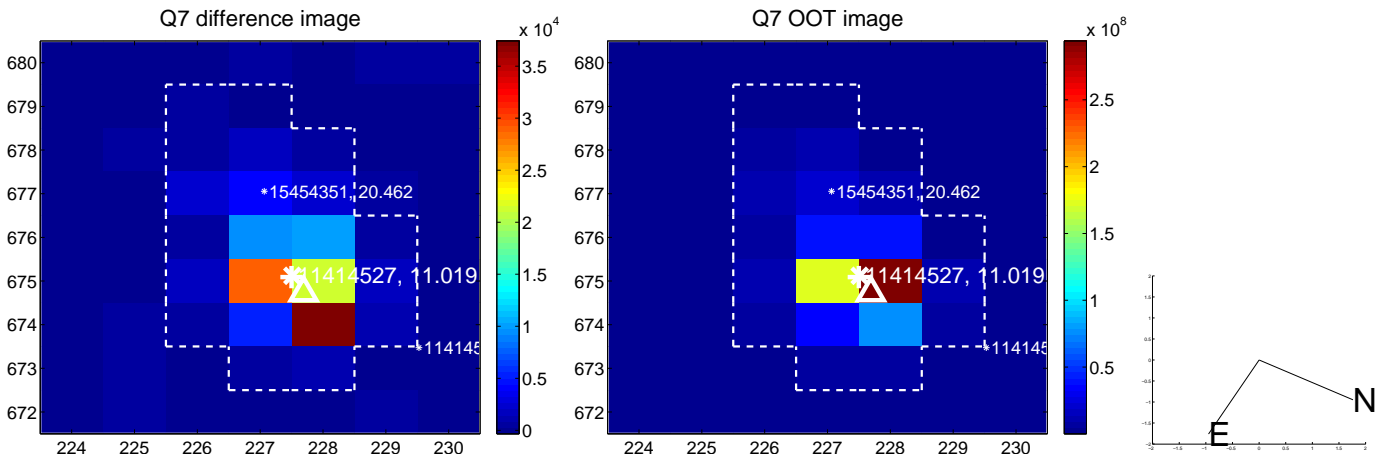
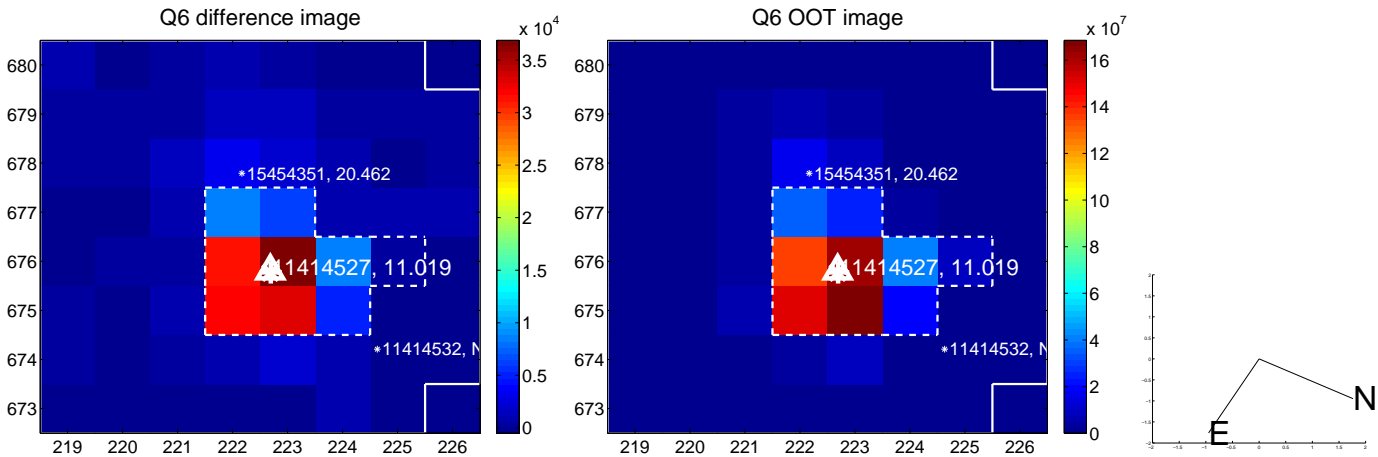
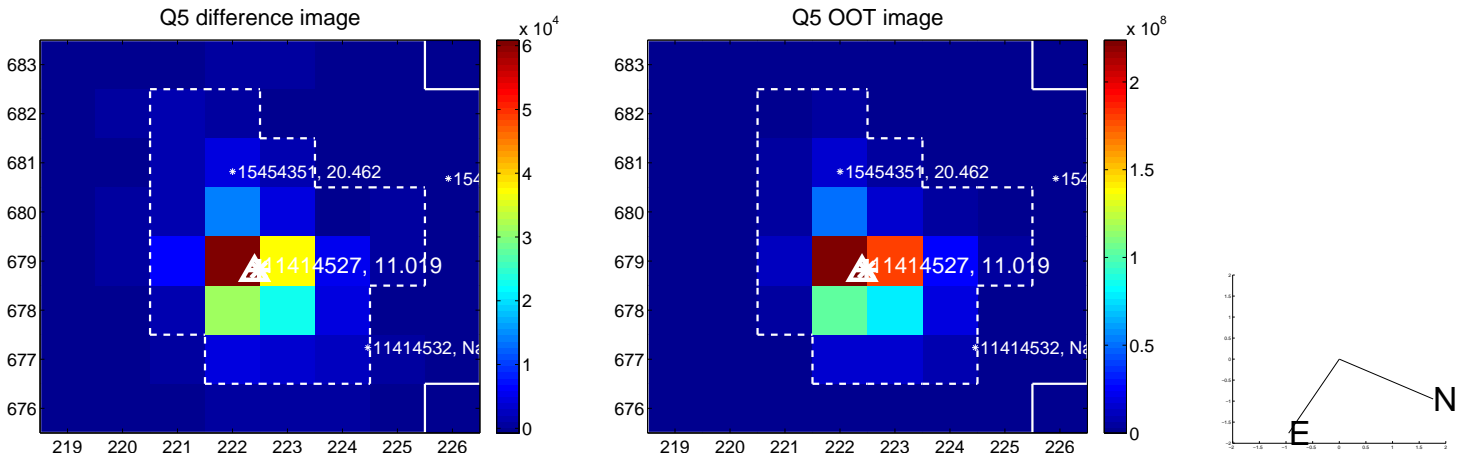


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

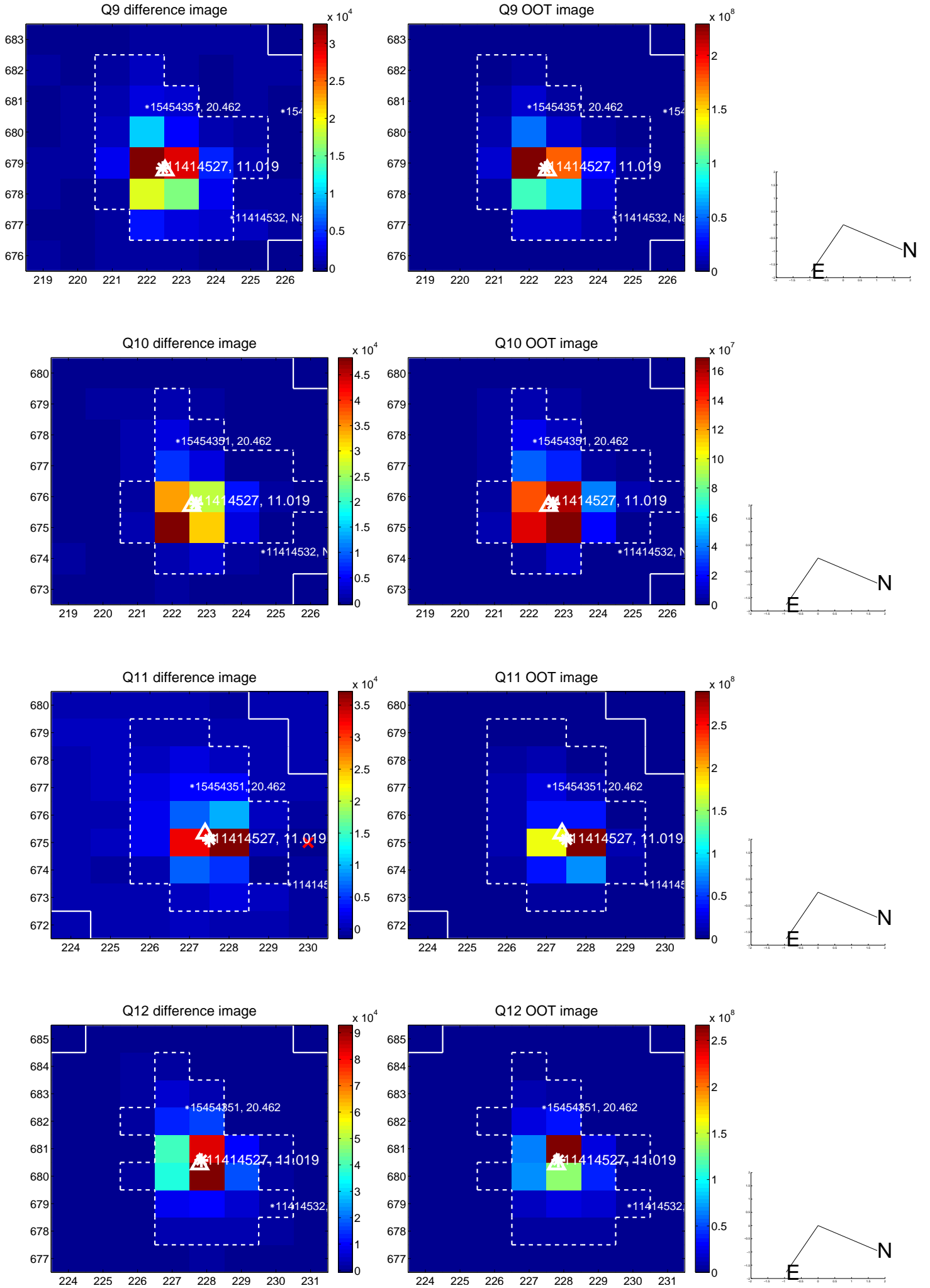
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



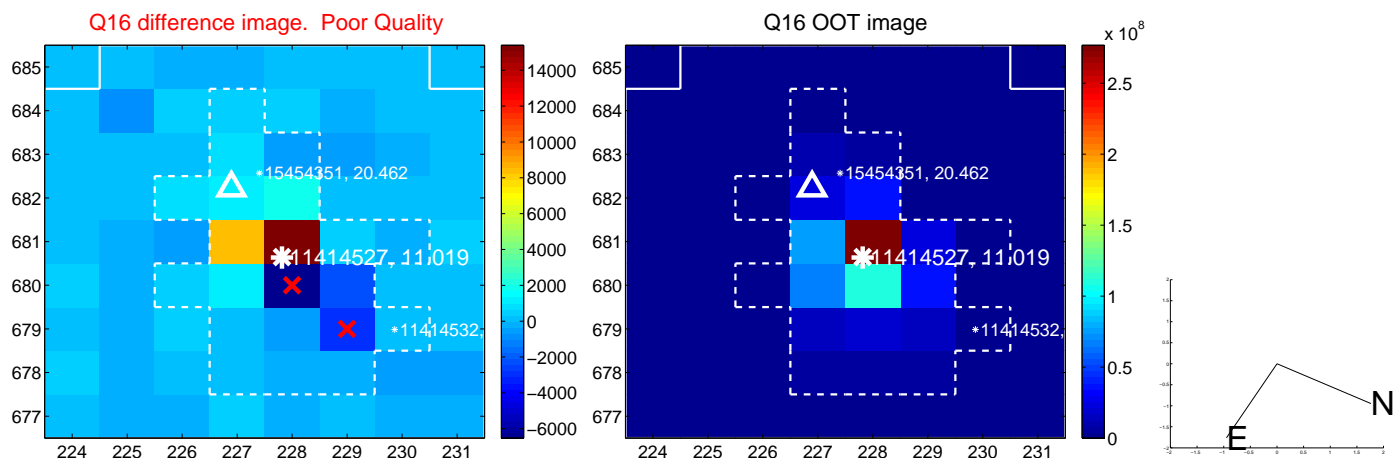
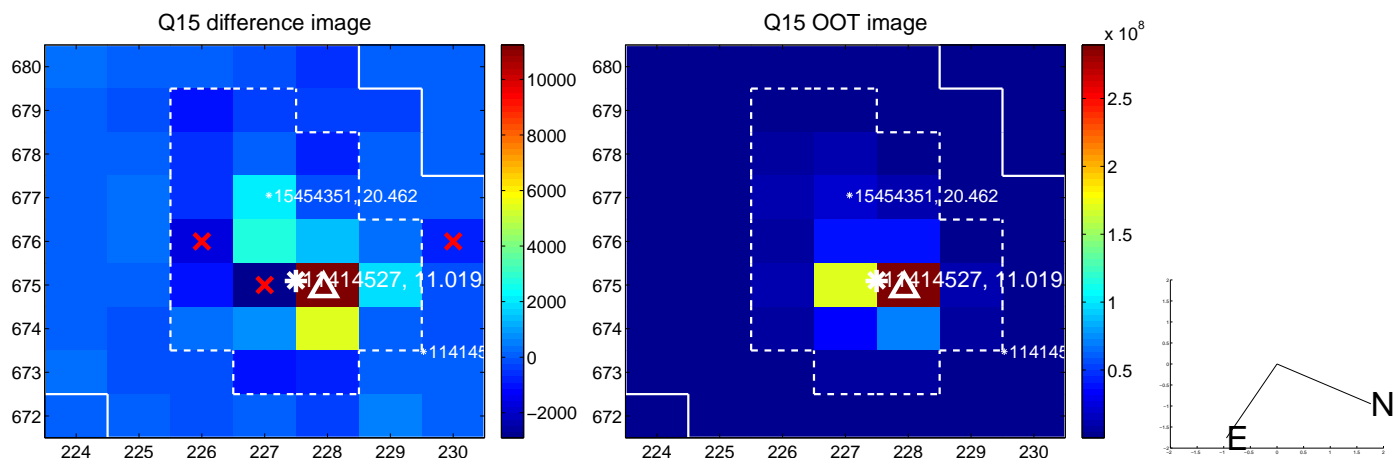
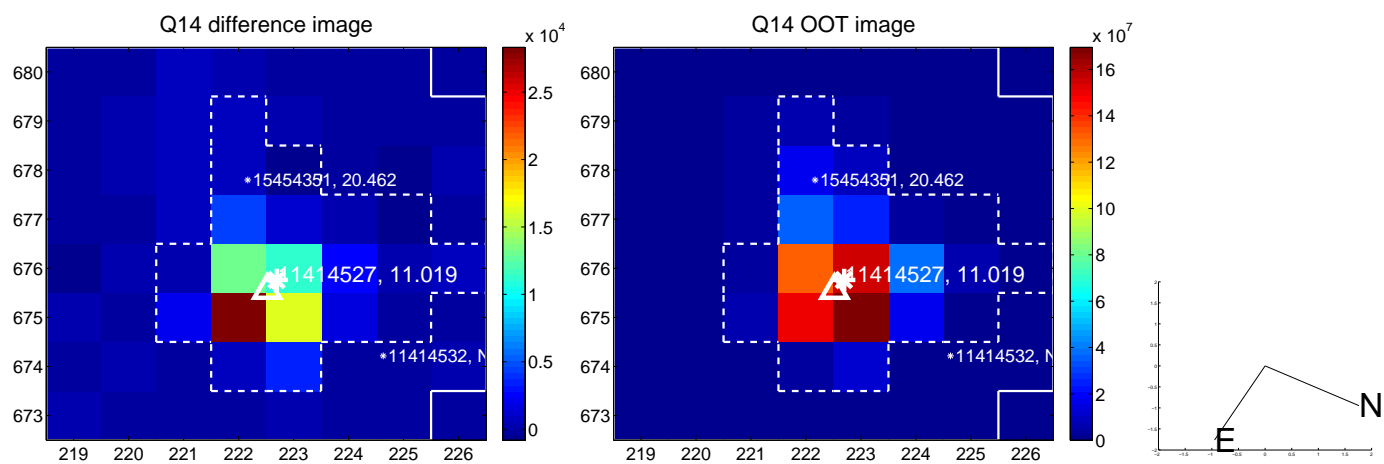
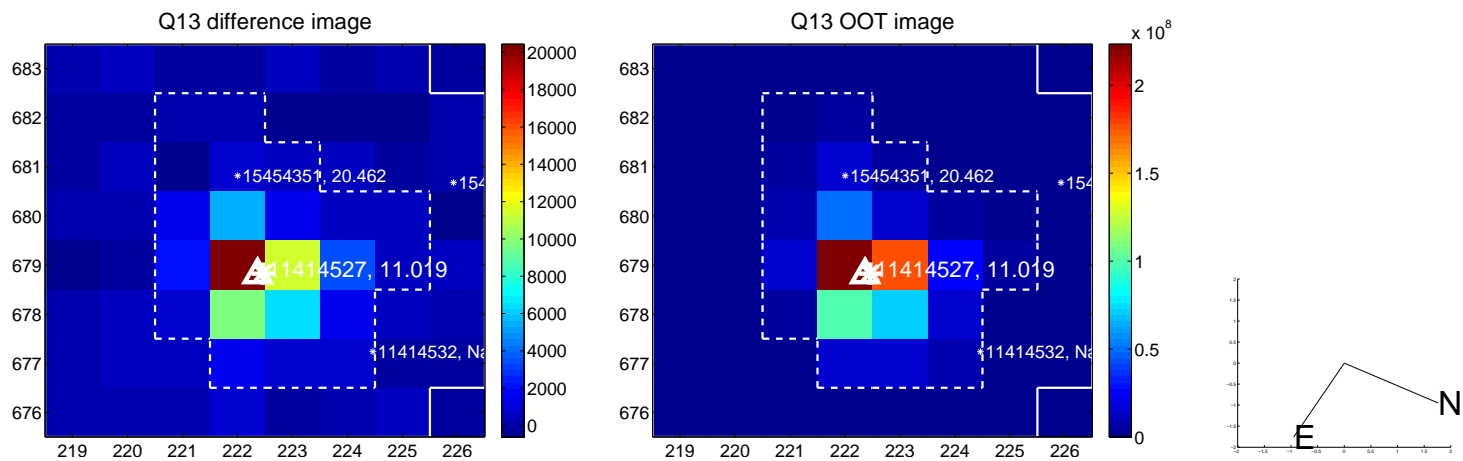
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



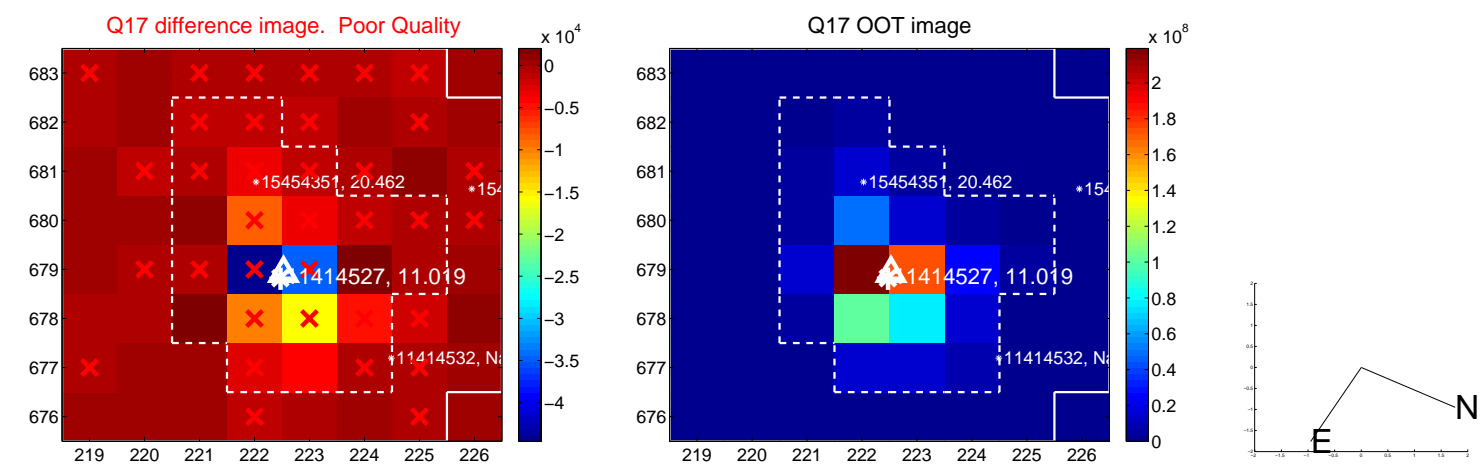
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



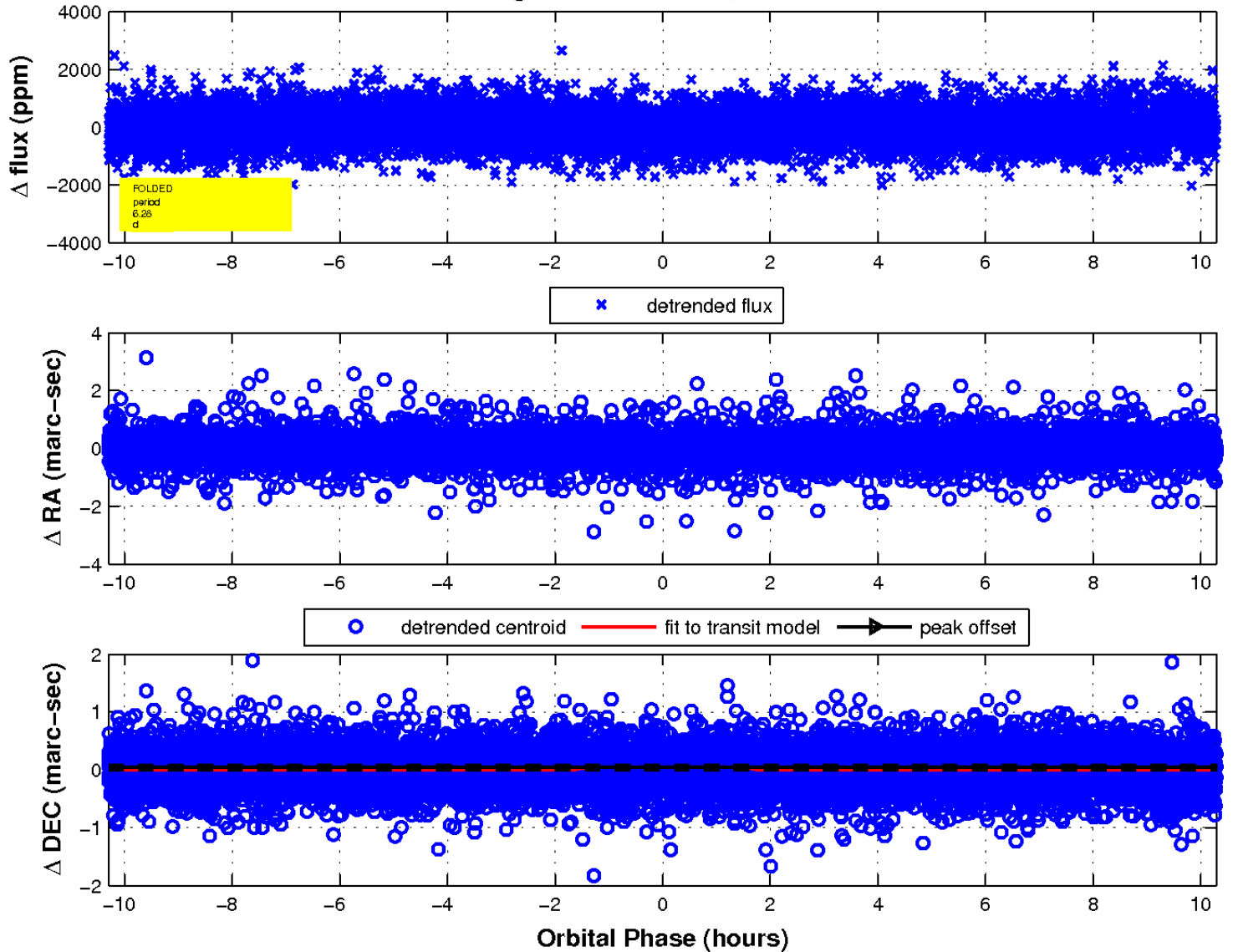
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 3 of 3



UKIRT Image

Declination

