

KIC 006633452

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})
006633452-01	OBS	No	0.678725	131.876865	31.6	1.480	11.2	8.7	1.79	7640	1.16	30672.51
006633452-02	OBS	No	0.678733	132.057456	37.4	1.366	9.6	9.9	1.79	7640	1.27	30672.03
006633452-03	OBS	No	3.176836	134.594060	50.5	10.223	7.9	7.7	1.79	7640	1.64	3917.55

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006633452-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
006633452-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
006633452-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT

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

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

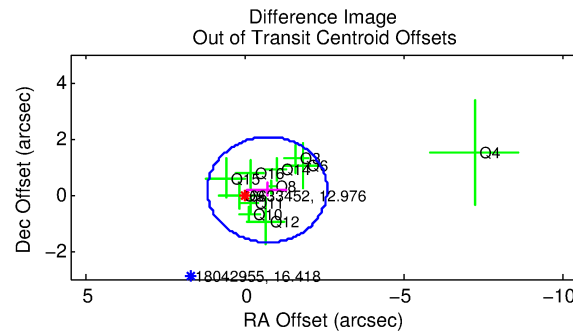
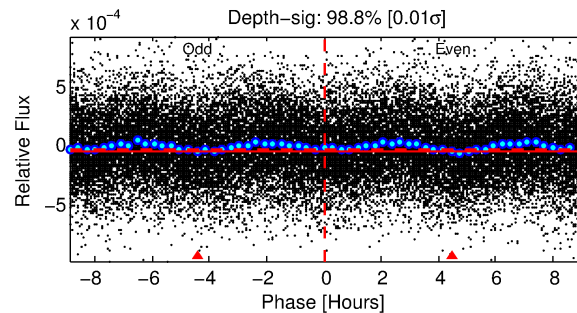
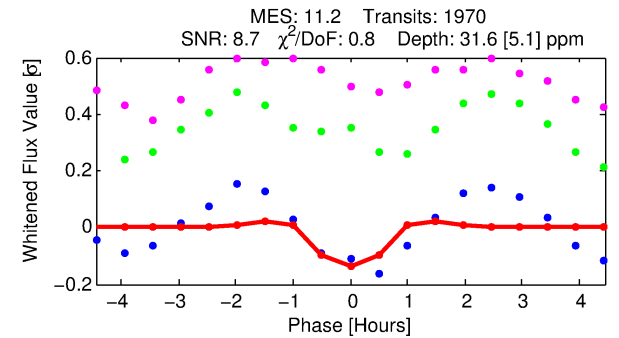
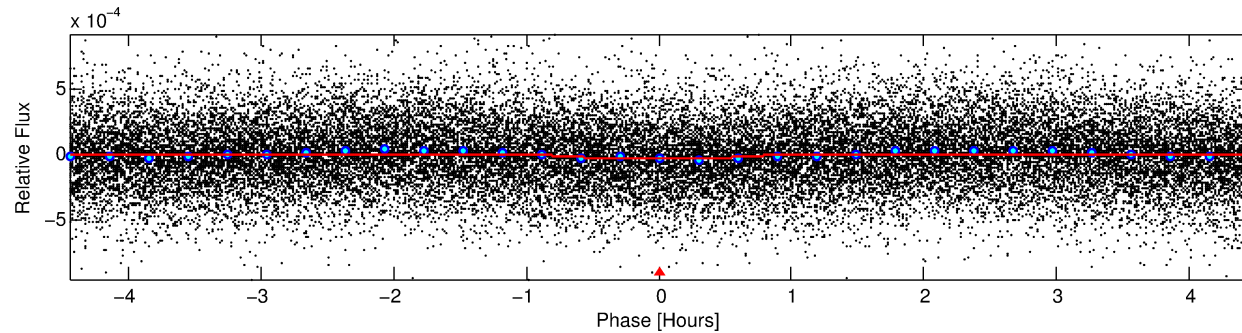
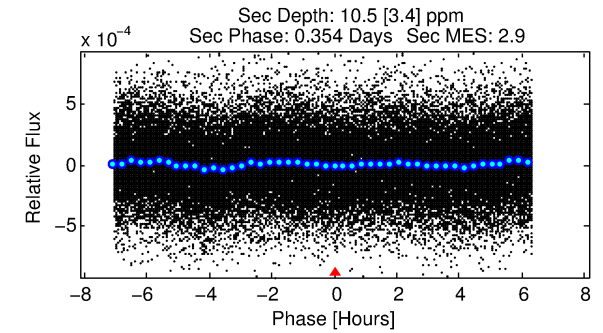
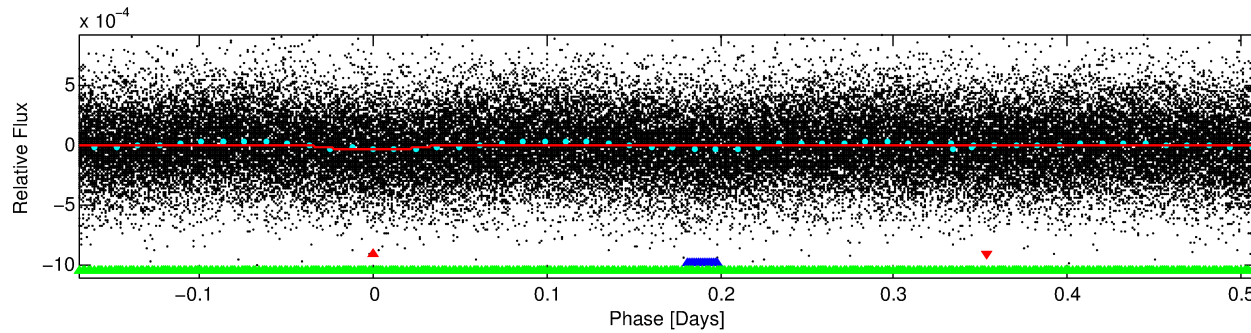
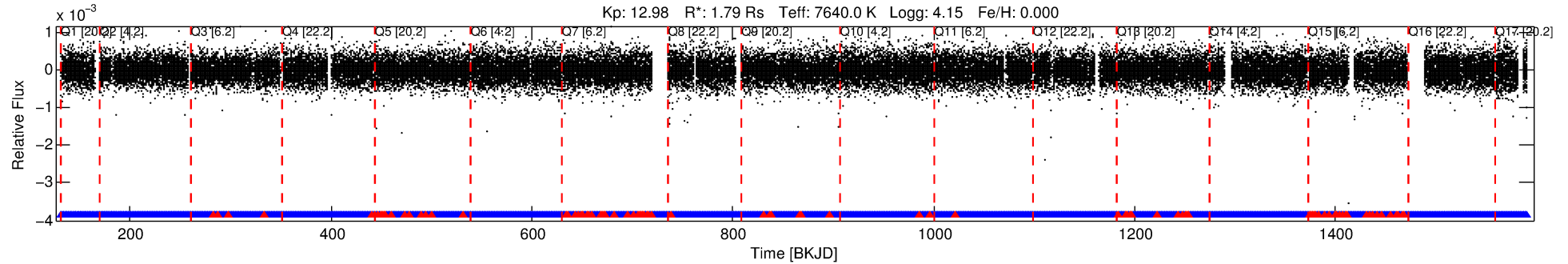
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006633452-01

No Significant Match Found

DV One-Page Summary

KIC: 6633452 Candidate: 1 of 3 Period: 0.679 d



DV Fit Results:

Period = 0.67873 [0.00001] d
Epoch = 131.8769 [0.0025] BKJD
Rp/R* = 0.0059 [0.0016]
a/R* = 1.91 [2.37]
b = 0.89 [0.42]
Seff = 30672.51 [12313.17]
Teff = 3375 [339] K
Rp = 1.16 [0.46] Re
a = 0.0178 [0.0044] AU
Ag = 1.38 [1.00] [0.38σ]
Teffp = 5654 [930] K [2.30σ]

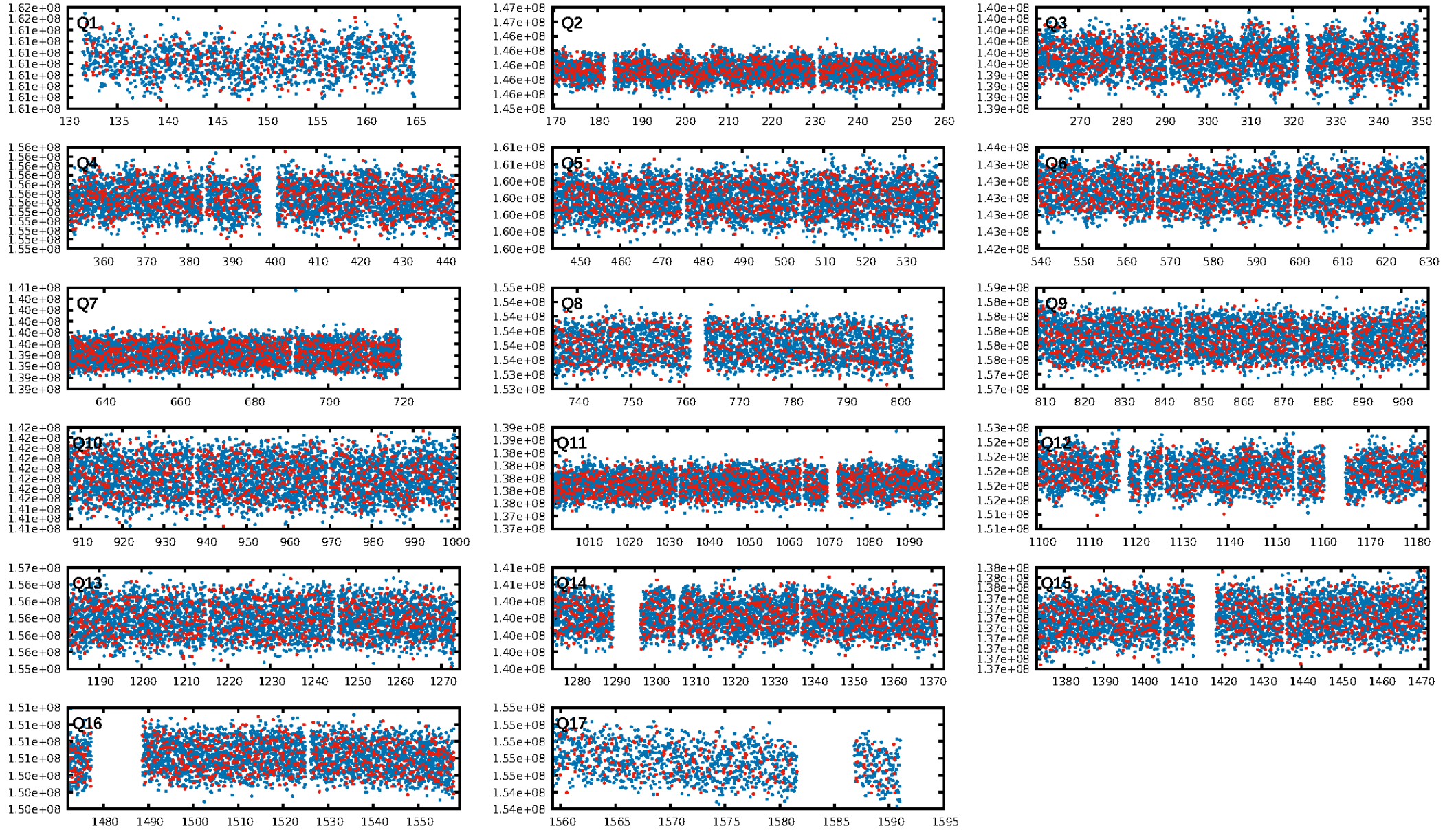
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.98e-23
RollingBand-fgt: 0.95 [1779/1882]
GhostDiagnostic-chr: 0.6213
Centroid-sig: 62.4%
Centroid-so: 0.368 arcsec [0.40σ]
OotOffset-rm: 0.719 arcsec [1.15σ]
OotOffset-st: 3/3/4/1 [11]
KicOffset-rm: 0.800 arcsec [1.39σ]
KicOffset-st: 3/3/4/1 [11]
DiffImageQuality-fgm: 0.91 [10/11]
DiffImageOverlap-fno: 0.00 [0/17]

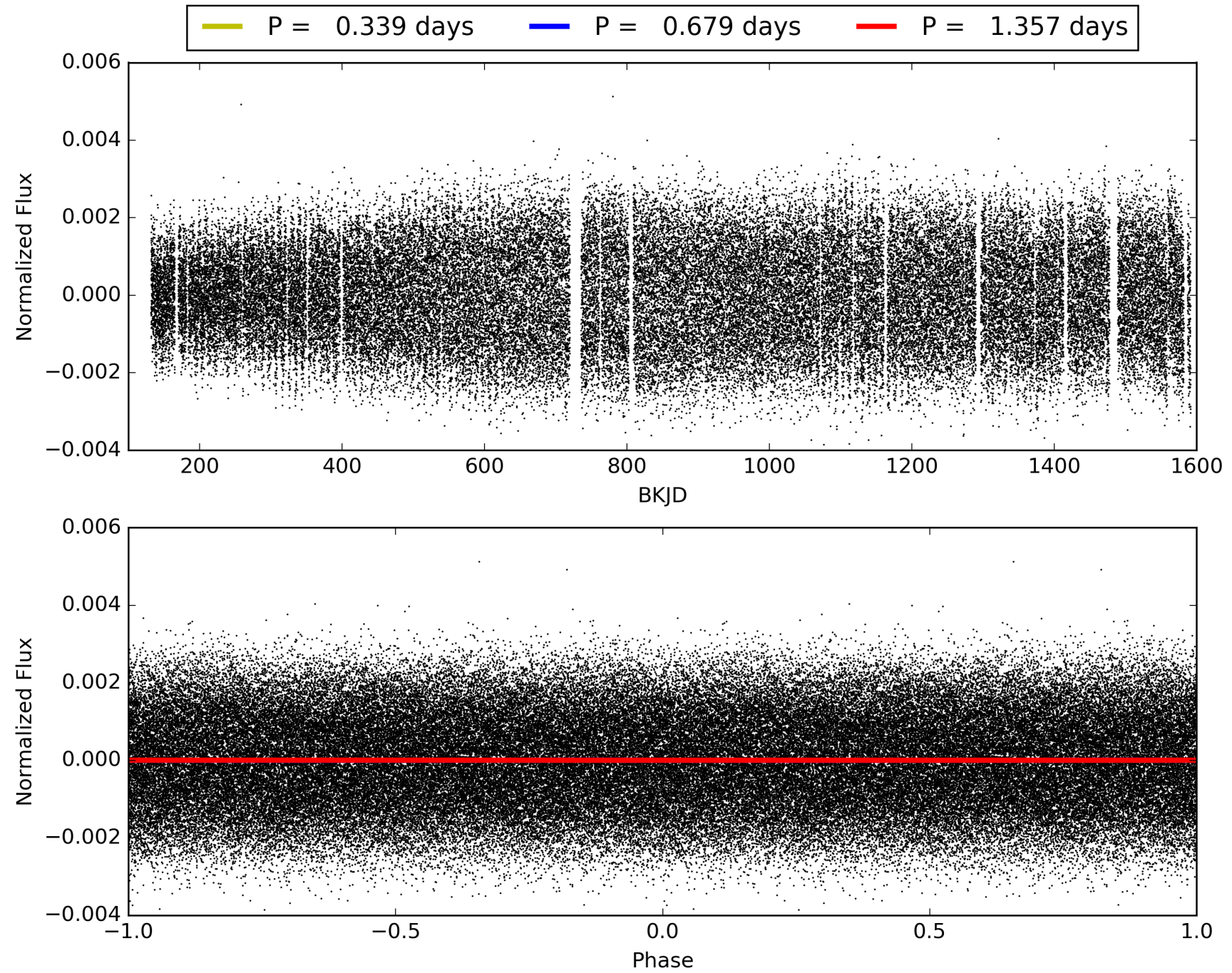
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 16:01:33 Z

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

TCE 006633452-01, PDC Light Curves

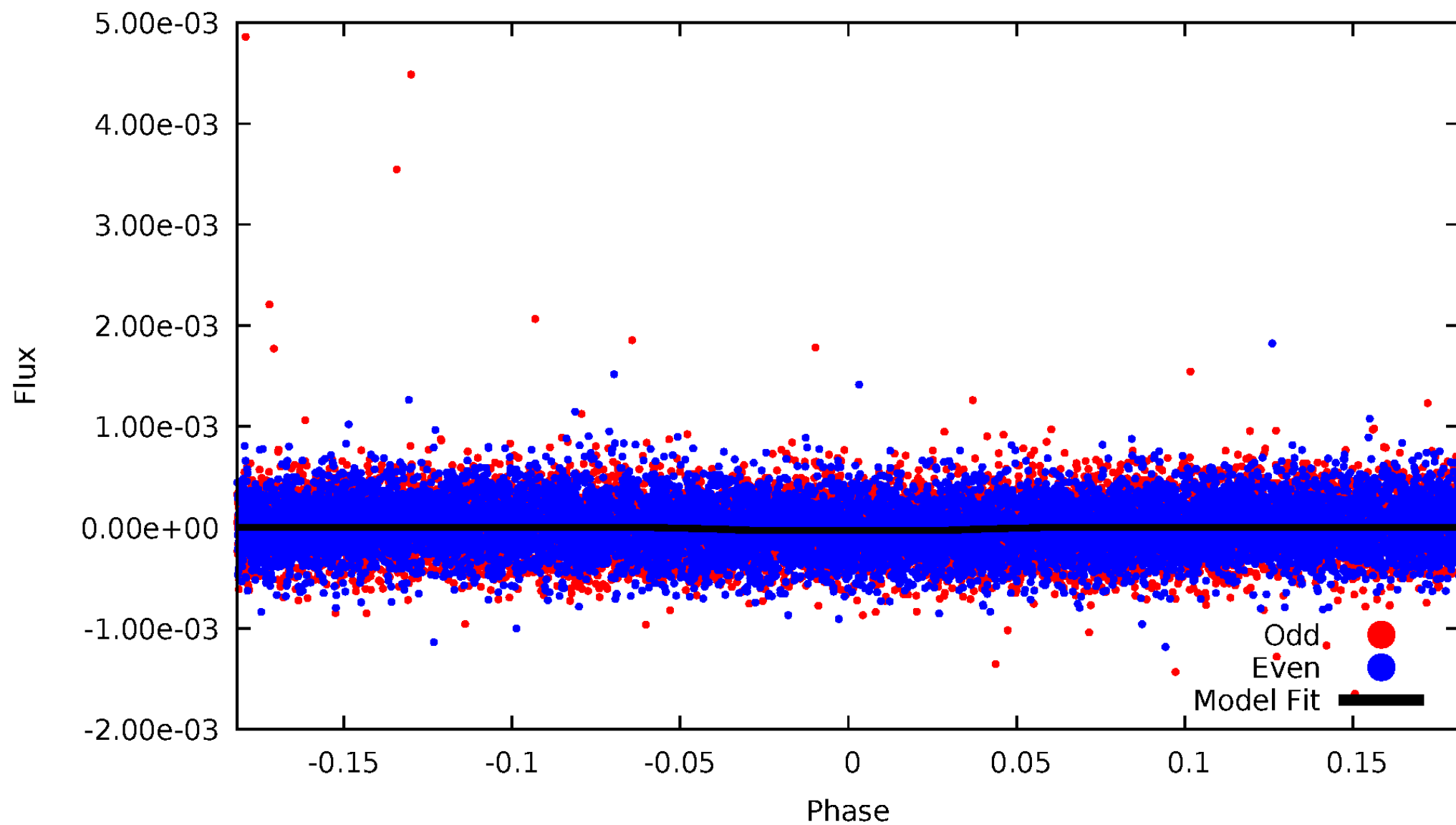


TCE 006633452-01



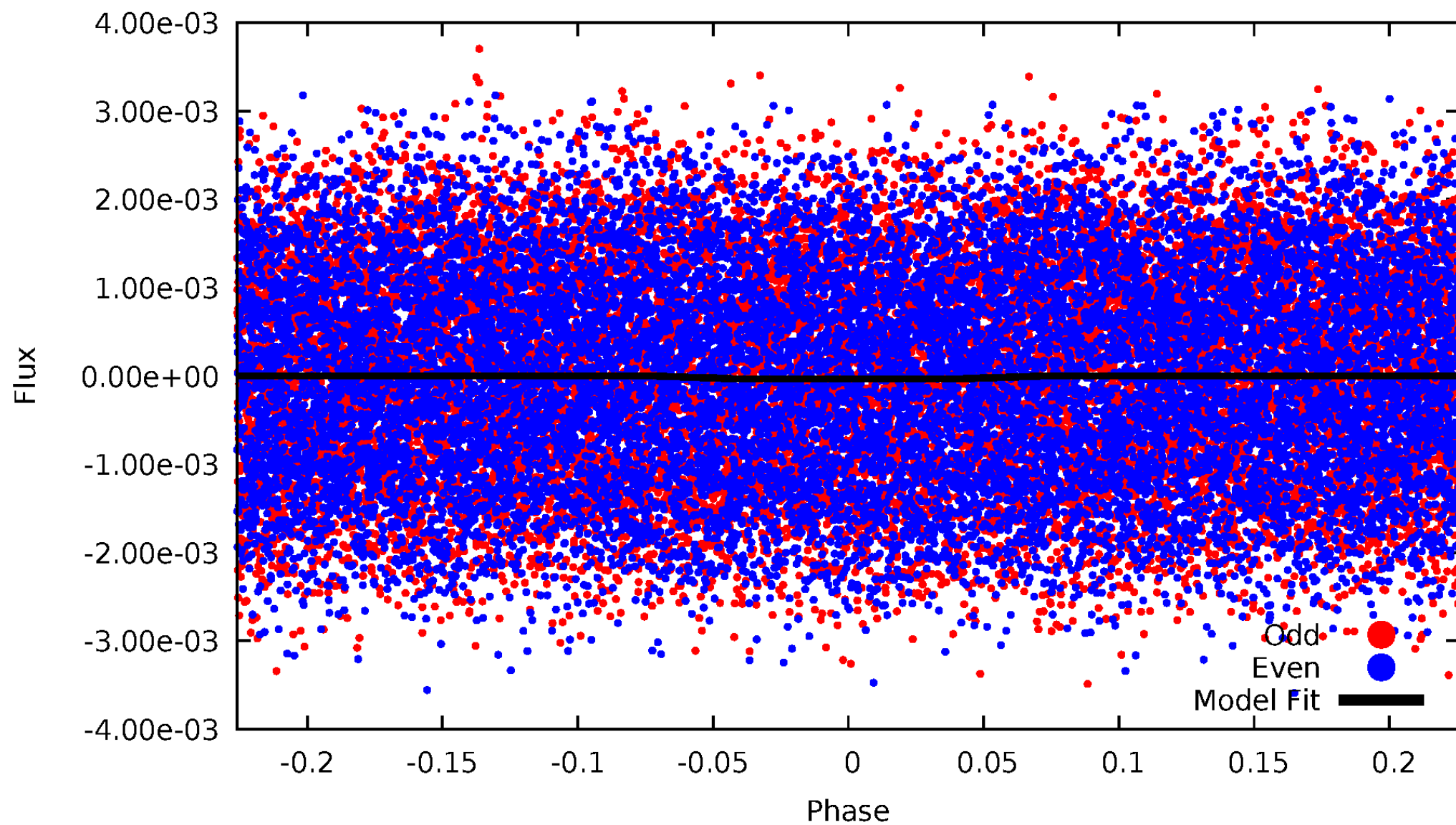
DV Odd/Even

TCE 006633452-01



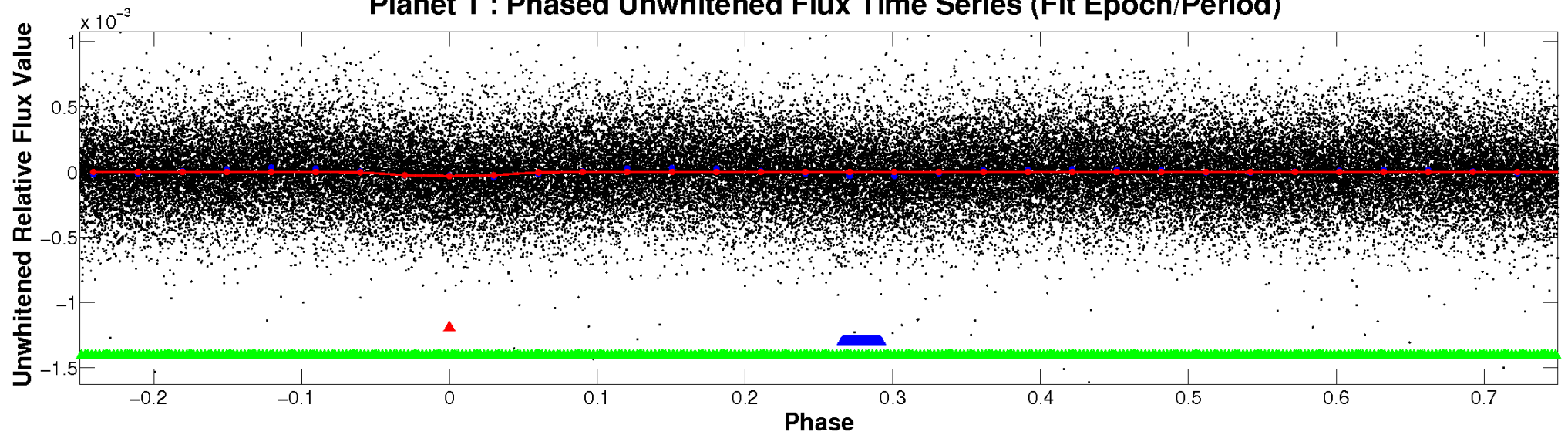
ALT Odd/Even

TCE 006633452-01

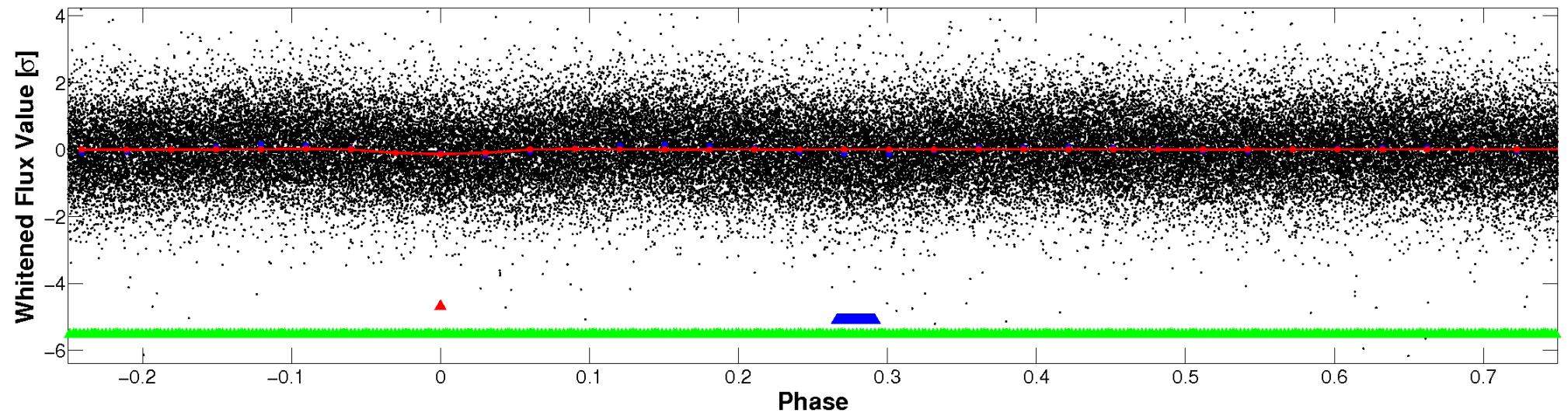


Non-Whitened Vs. Whitened Light Curve

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

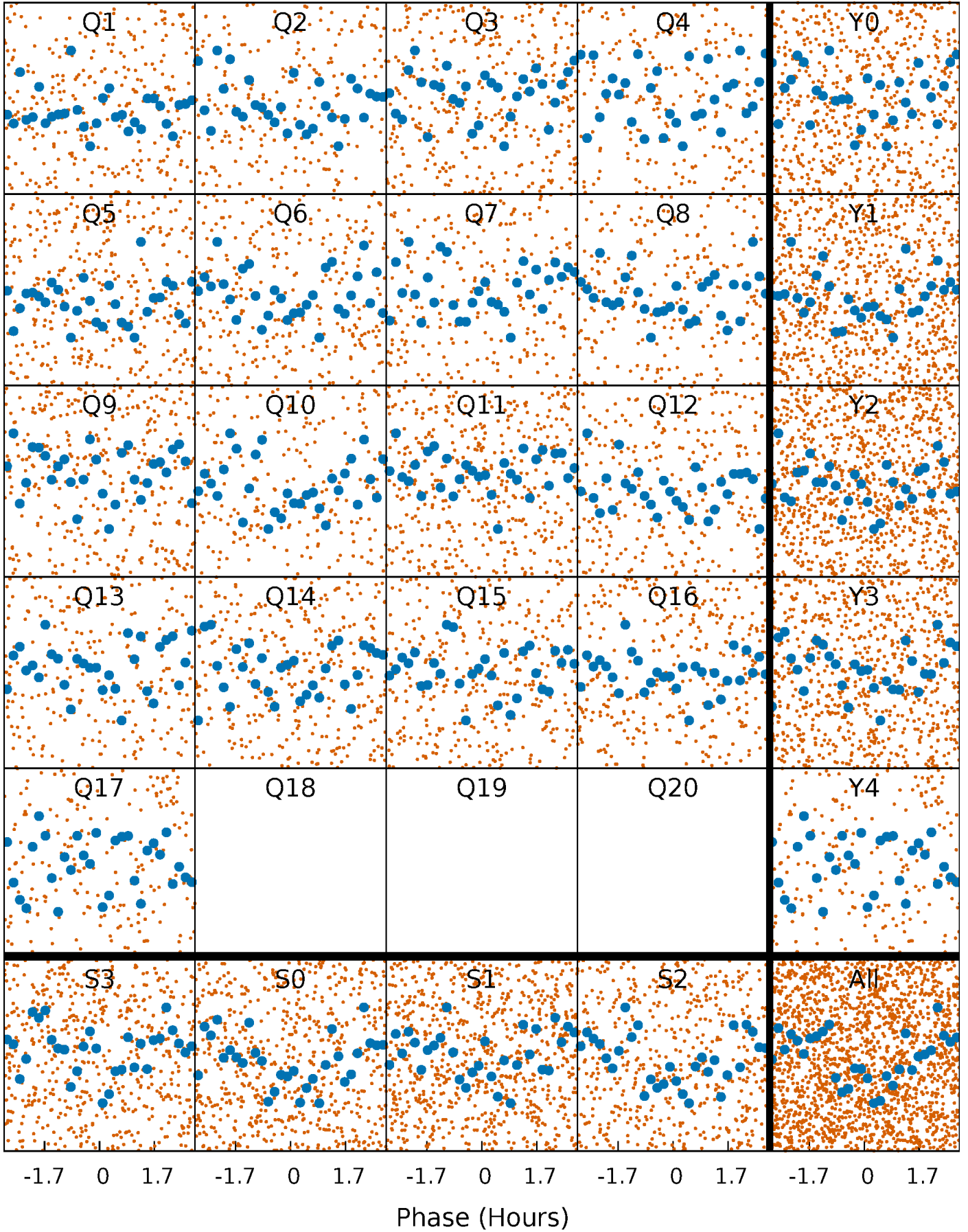


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



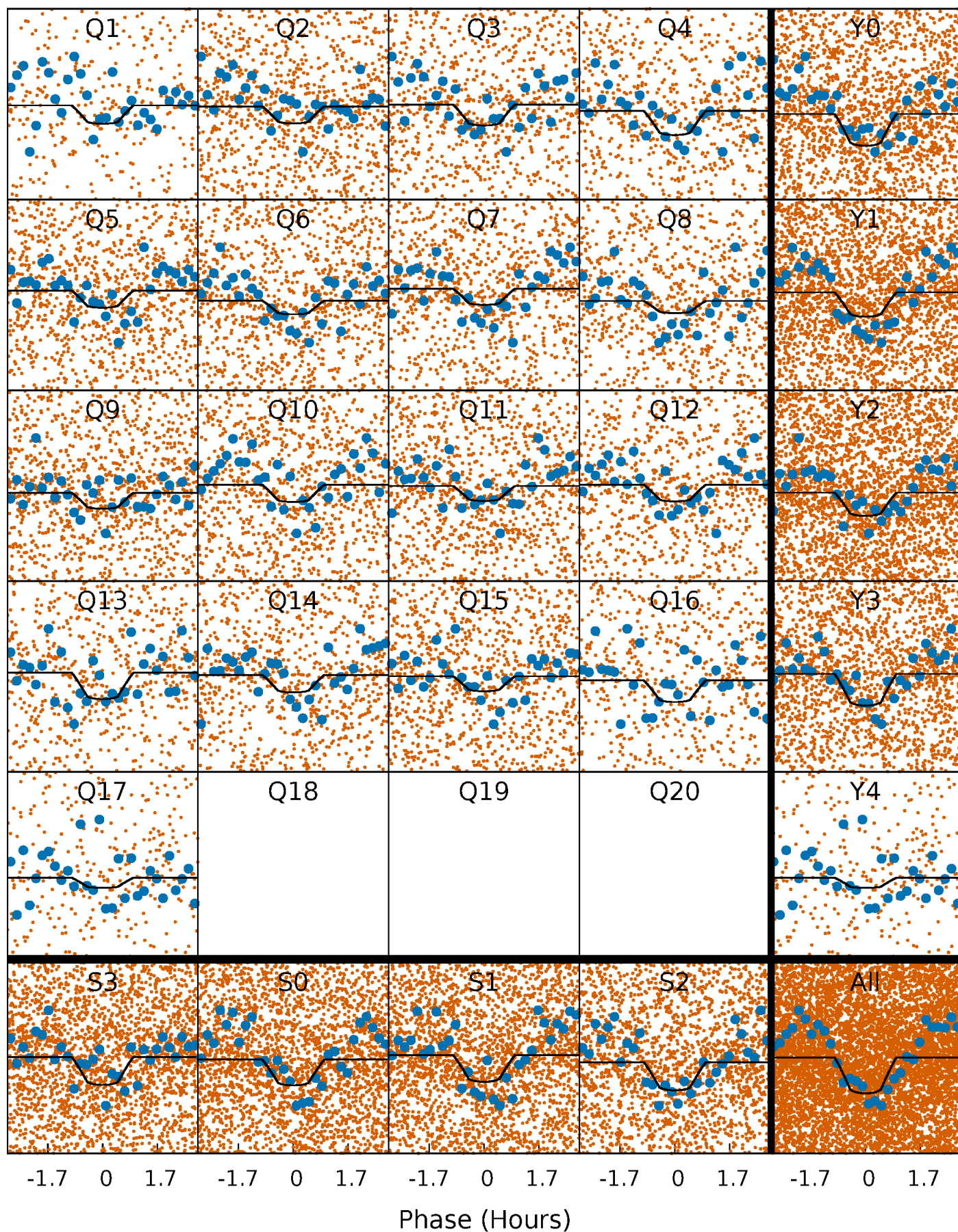
PDC Quarter-Phased Transit Curves

TCE 006633452-01 P= 0.678725 Days $T_0=131.876865$ (BKJD)



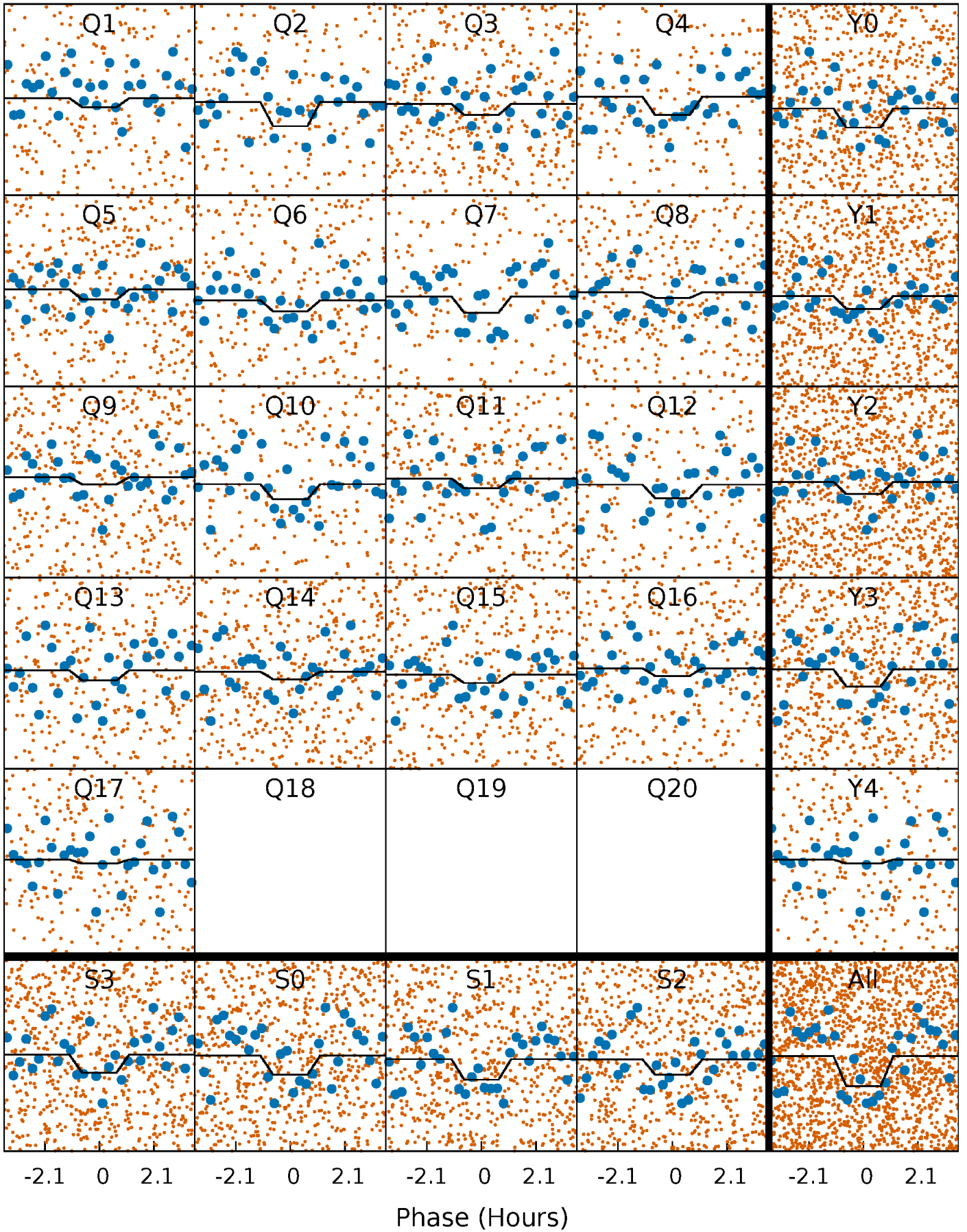
DV Quarter-Phased Transit Curves

TCE 006633452-01 P= 0.678725 Days $T_0=131.876865$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

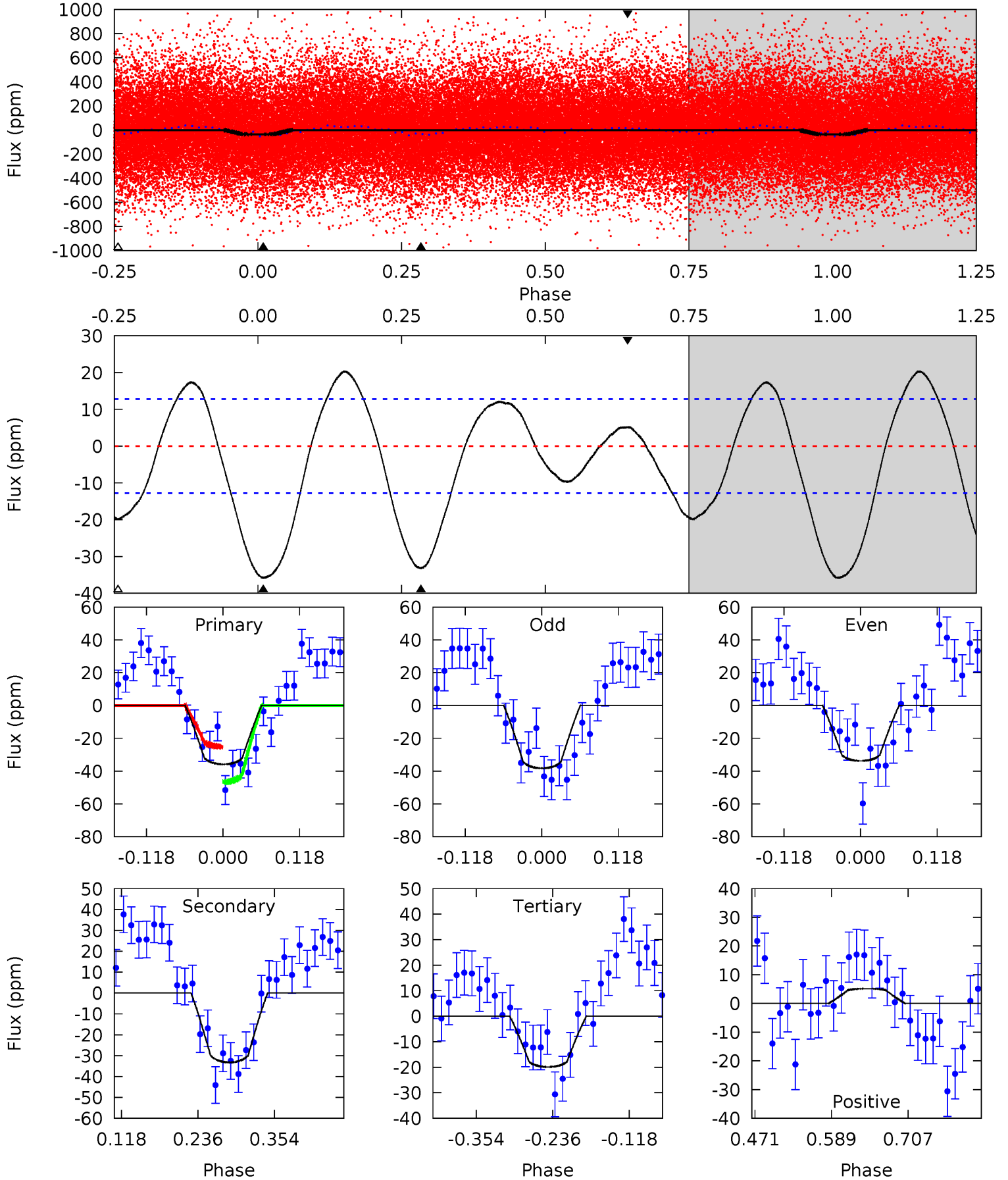
TCE 006633452-01 P= 0.678731 Days $T_0=131.875400$ (BKJD)



DV Model-Shift Uniqueness Test

006633452-01, P = 0.678725 Days, E = 131.198140 Days

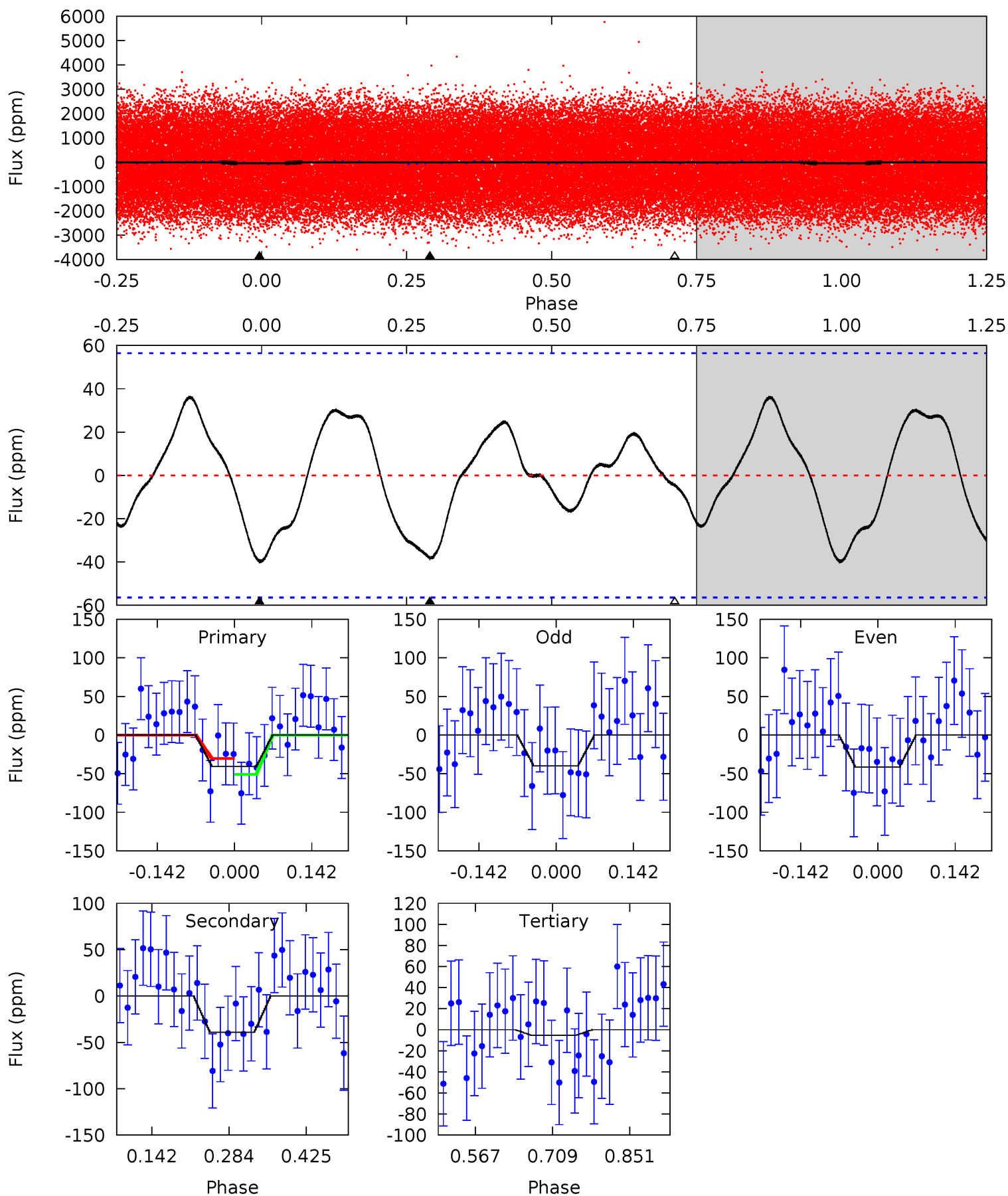
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.7	11.8	7.05	1.83	4.53	1.56	3.96	5.65	10.9	4.73	9.95	0.80	0.94	0.36	3.80



Alt Model-Shift Uniqueness Test

006633452-01, P = 0.678731 Days, E = 131.196669 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.23	3.12	0.42	0	4.49	1.47	0.97	2.81	3.23	2.70	3.12	0.05	1.06	0.47	0.82



Stellar Parameters For KIC 006633452

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7640^{+211}_{-343}	$4.149^{+0.105}_{-0.195}$	$0.000^{+0.200}_{-0.350}$	$1.789^{+0.532}_{-0.310}$	$1.644^{+0.210}_{-0.257}$	$0.405^{+0.235}_{-0.200}$
	+3%/-4%	+3%/-5%	+inf%/-inf%	+30%/-17%	+13%/-16%	+58%/-50%
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 006633452-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-33 ± 3	$1.18^{+0.39}_{-0.35}$	4766^{+378}_{-310}	7351^{+1702}_{-1104}	$4.069^{+4.067}_{-1.778}$
Alt.	-39 ± 13	$1.19^{+0.35}_{-0.35}$	4769^{+350}_{-314}	7631^{+2137}_{-1328}	$4.795^{+4.980}_{-2.359}$

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 $A_{obs} \gg 1.0$

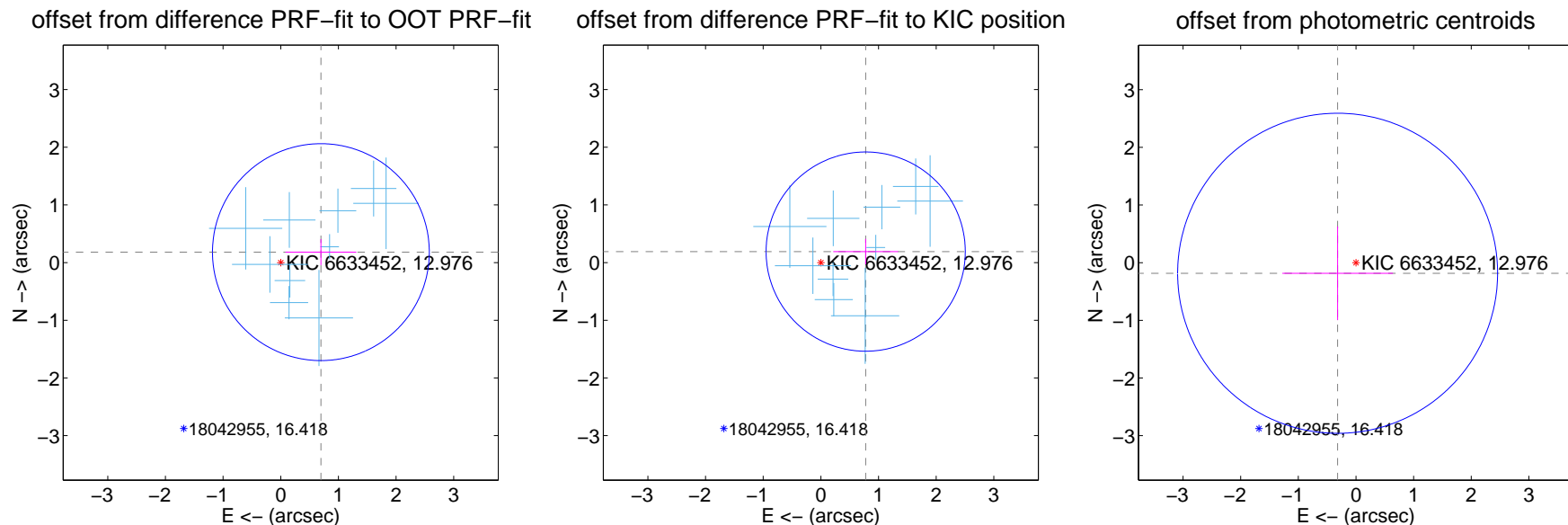
DV Centroid Data

Supplemental centroid analysis for 006633452-01. Kepler magnitude: 12.98. Transit SNR 8.66

There are 10 quarters with good PRF difference image offsets

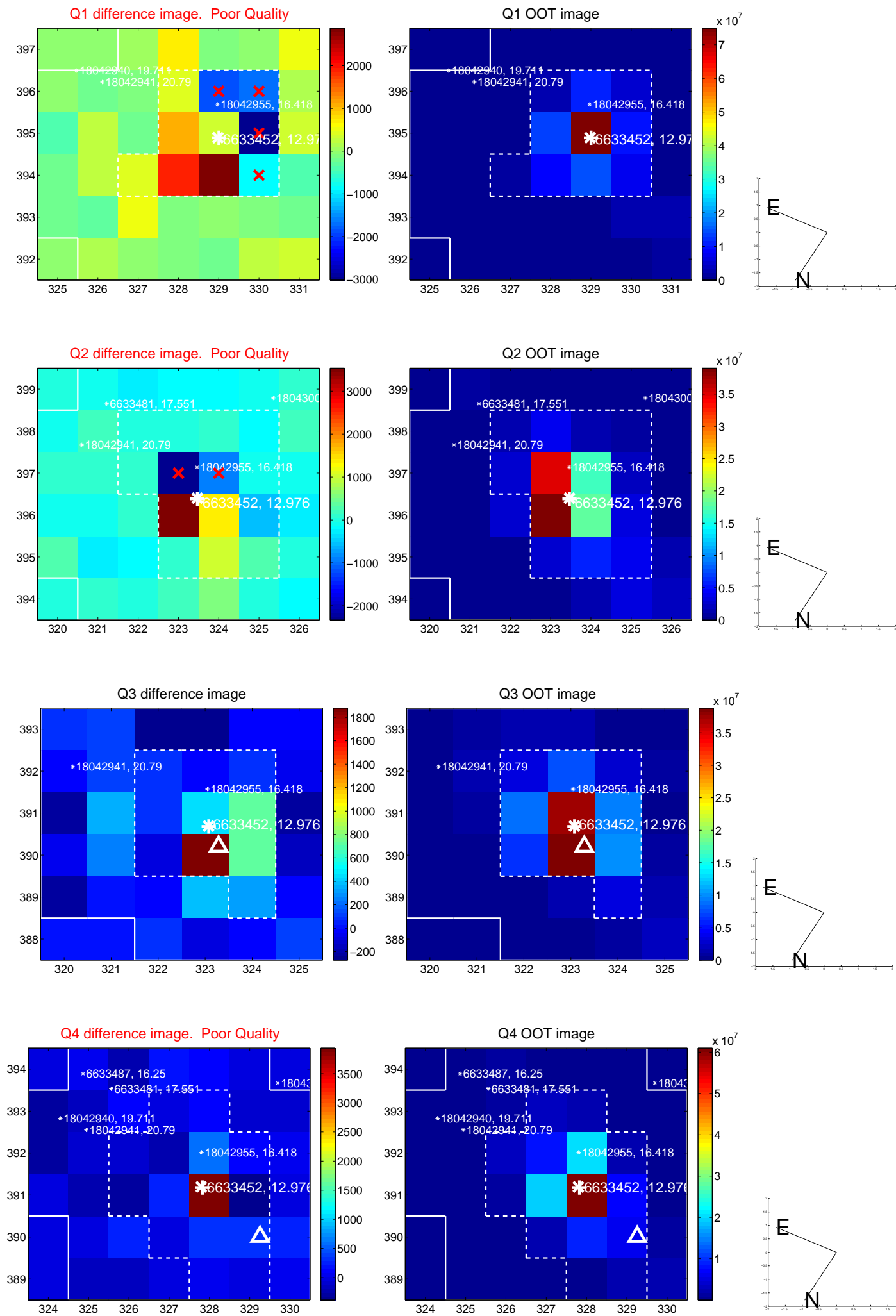
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.719 ± 0.627	1.15	-0.696 ± 0.614	0.181 ± 0.225
PRF-fit source offset from KIC position	0.800 ± 0.576	1.39	-0.777 ± 0.562	0.191 ± 0.221
photometric centroid source offset	0.37 ± 0.93	0.40	0.32 ± 0.96	-0.18 ± 0.81

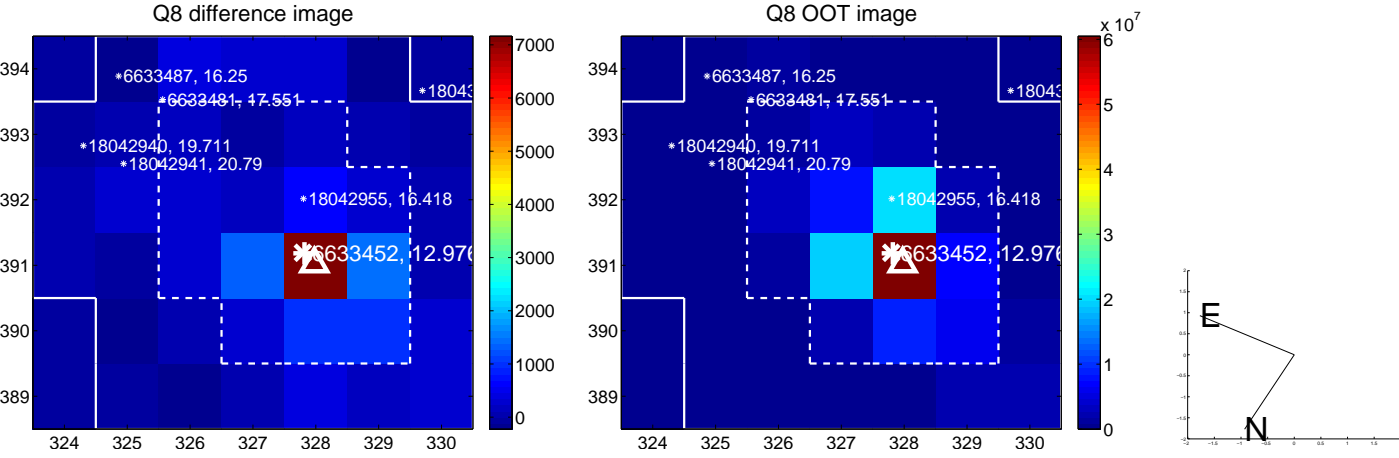
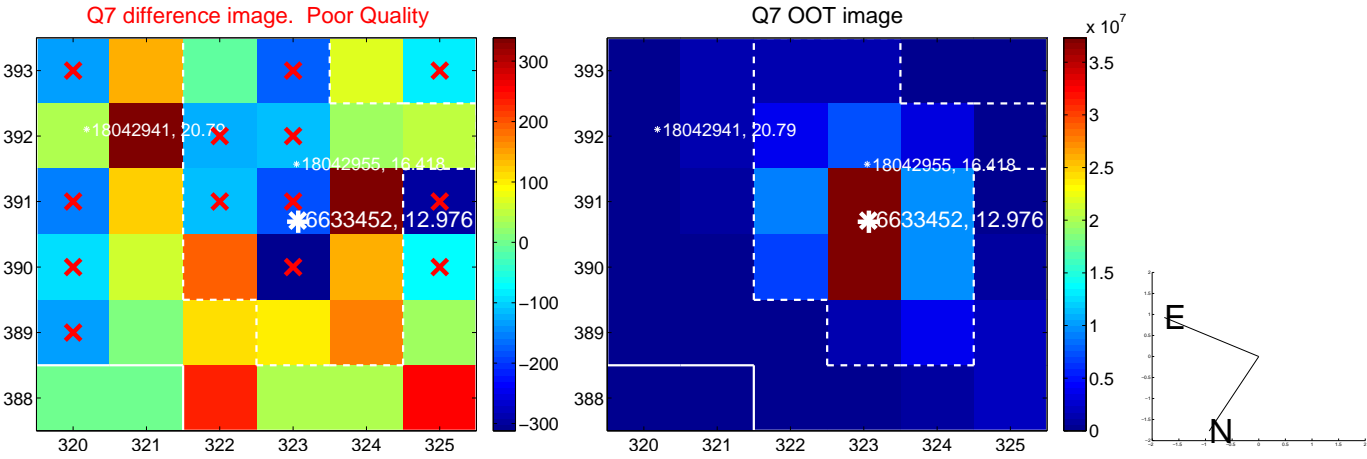
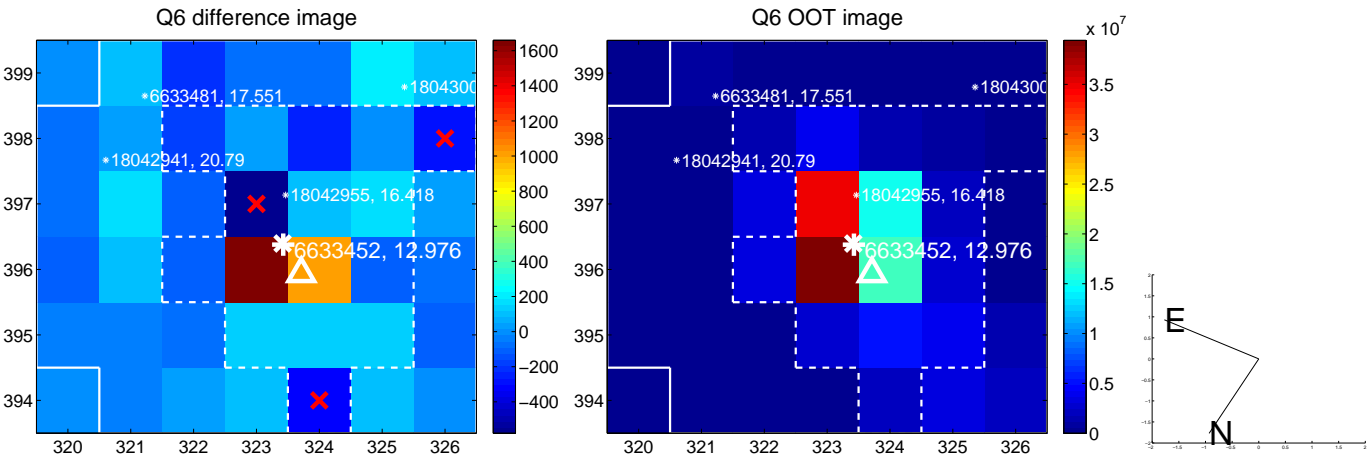
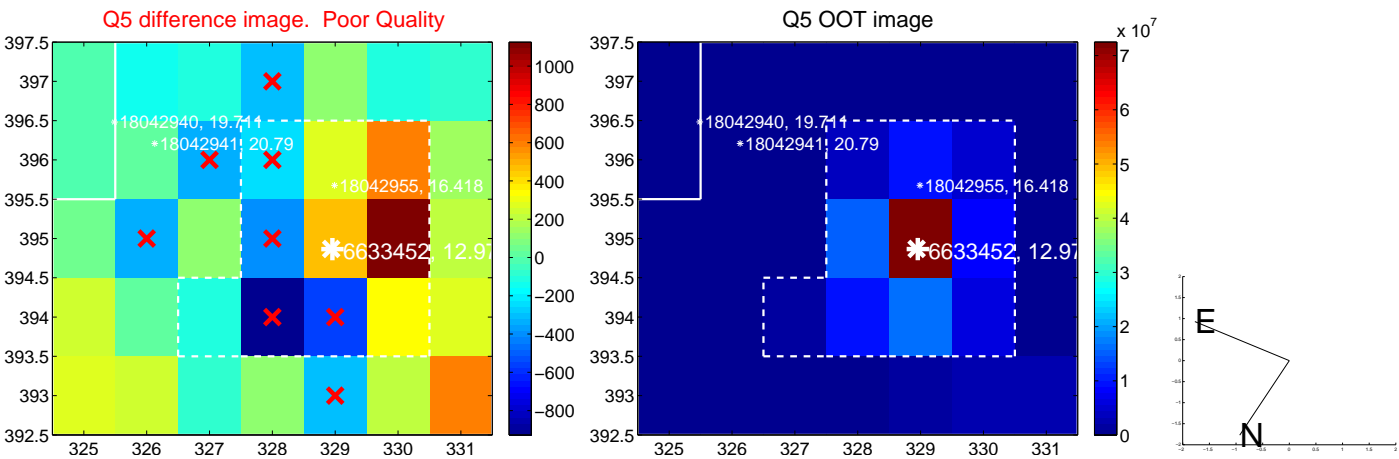


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

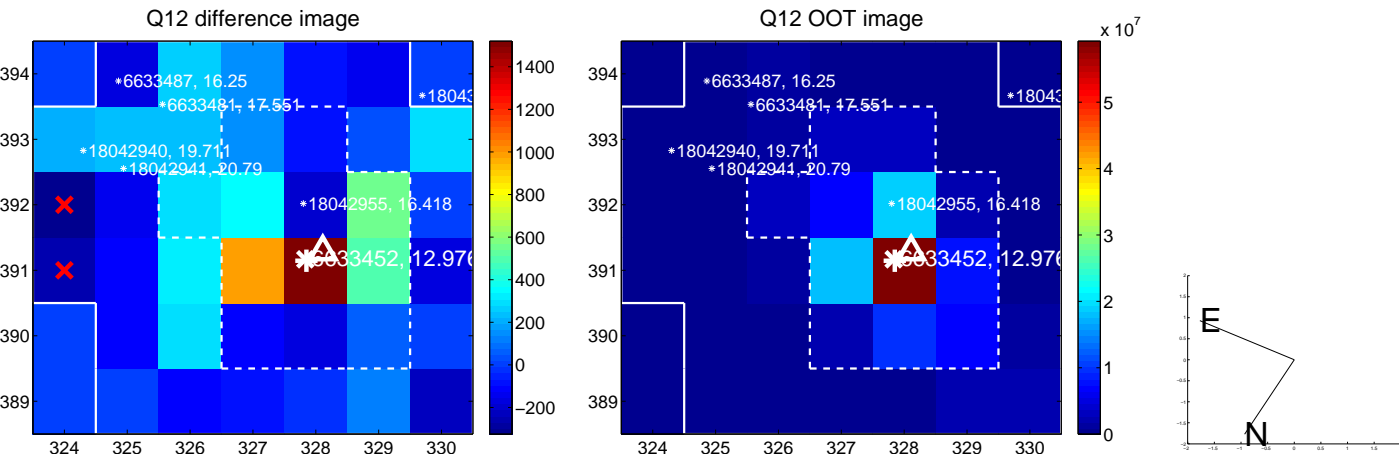
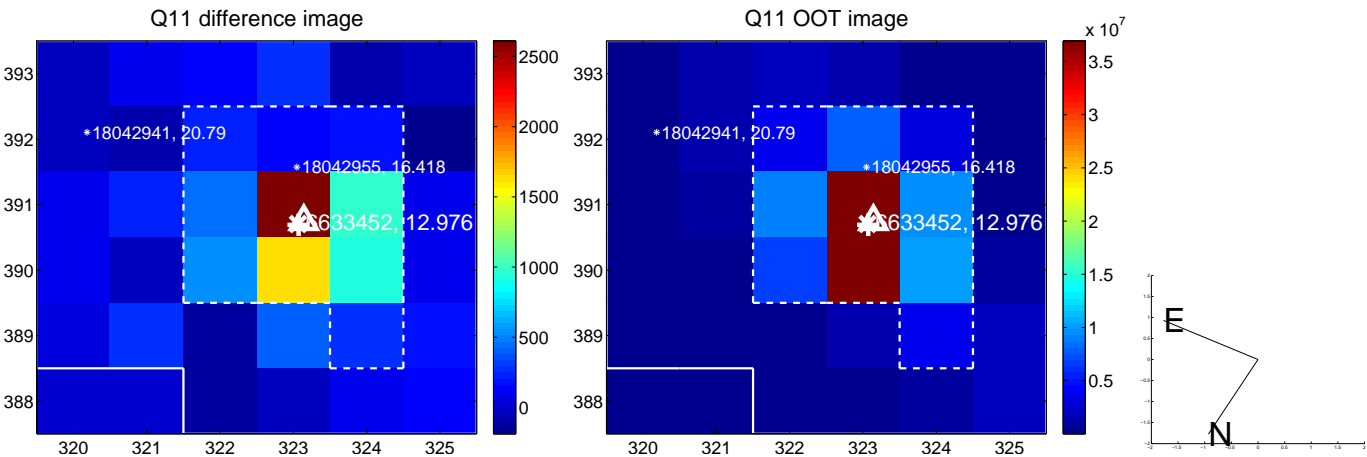
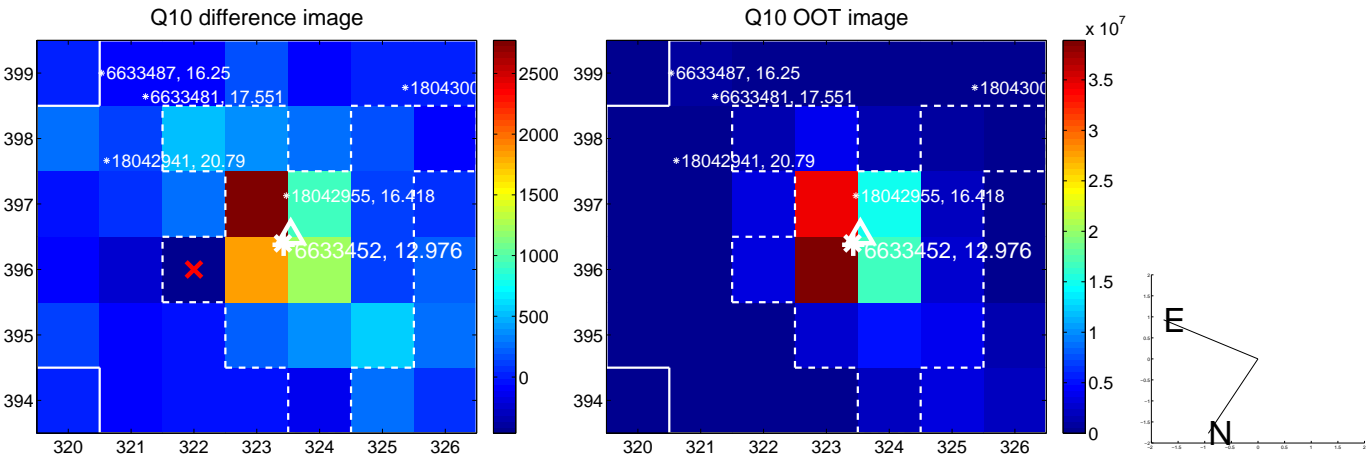
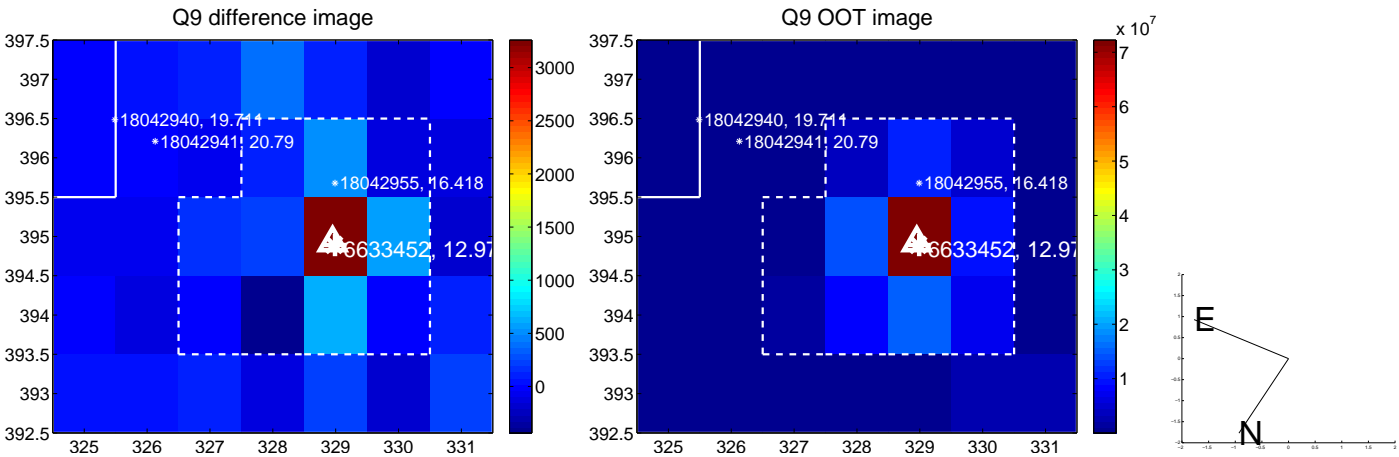
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



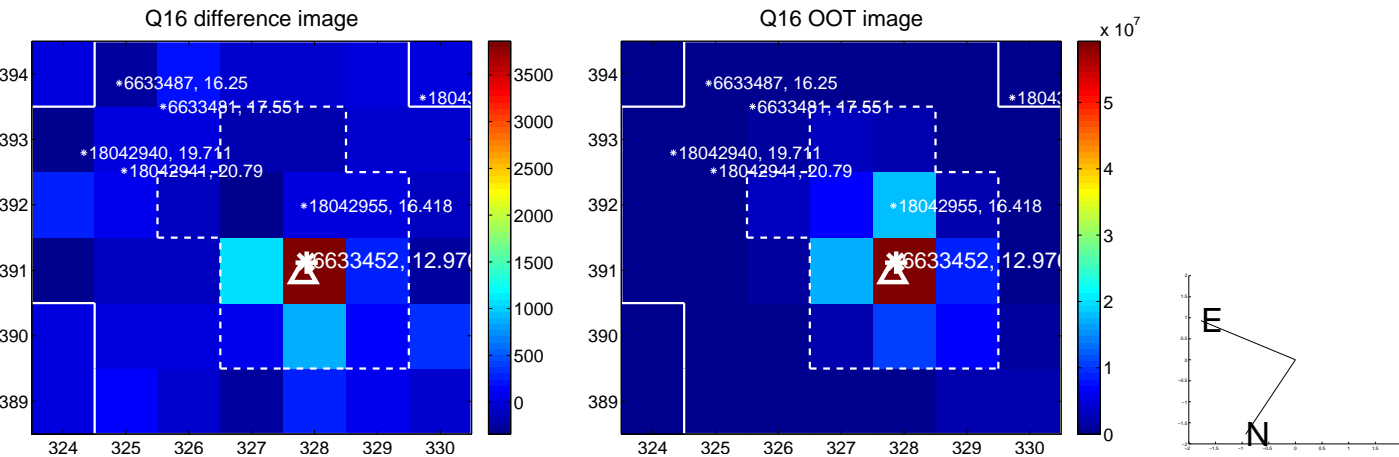
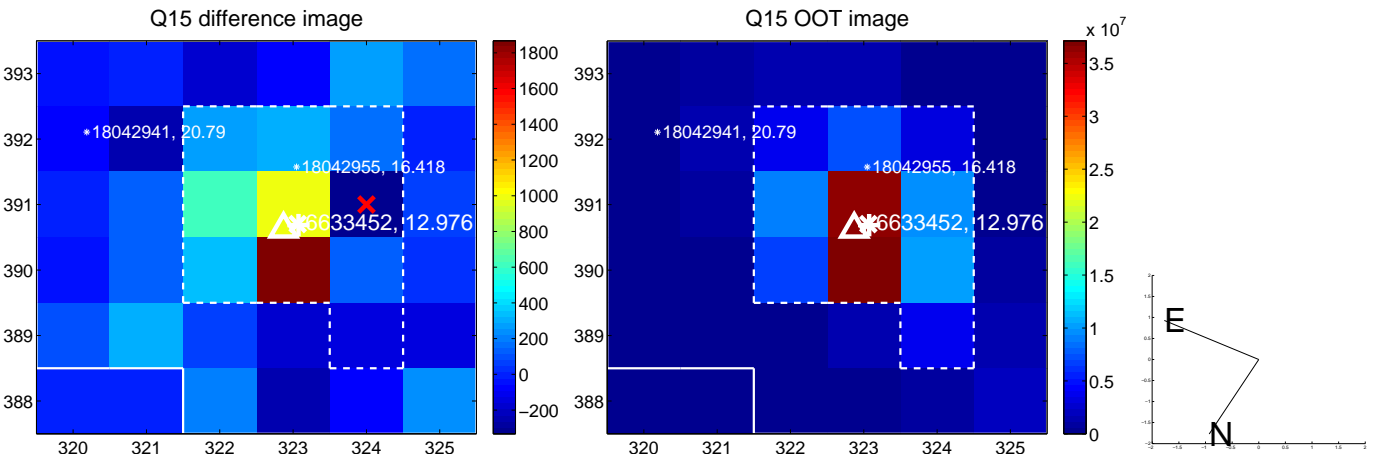
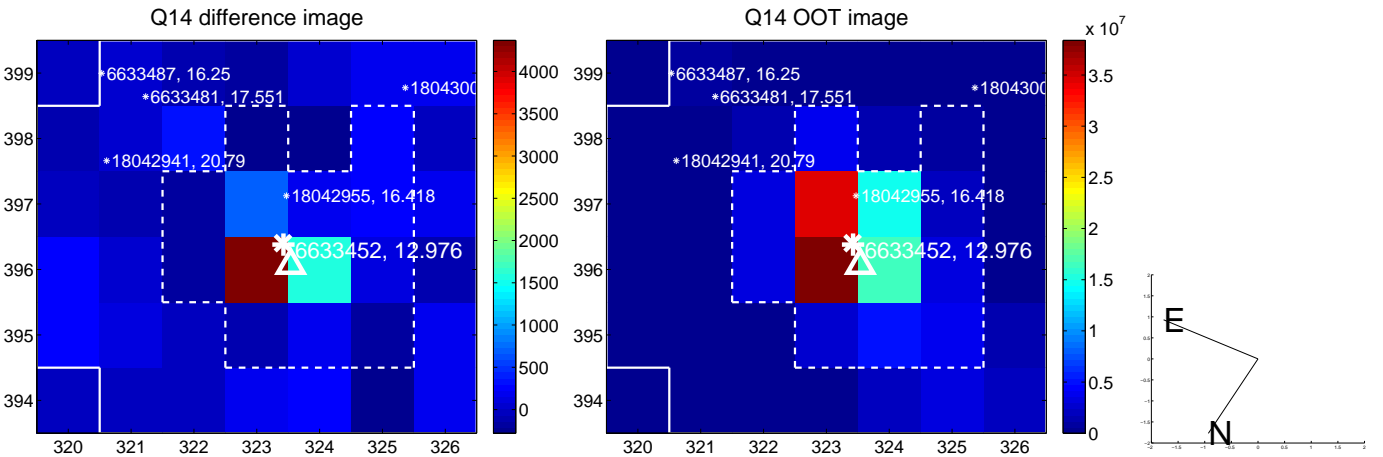
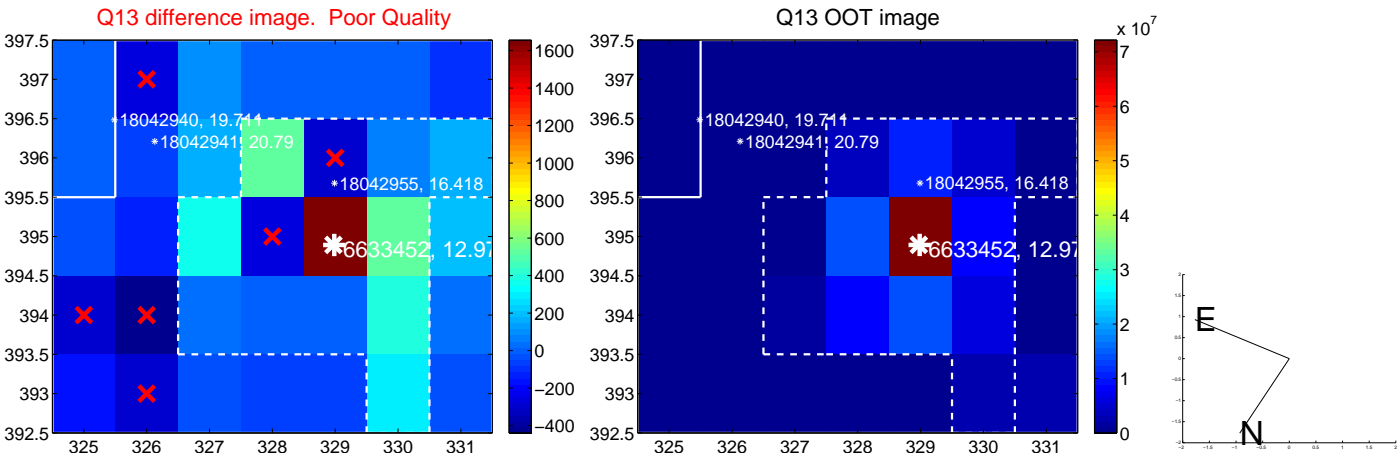
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



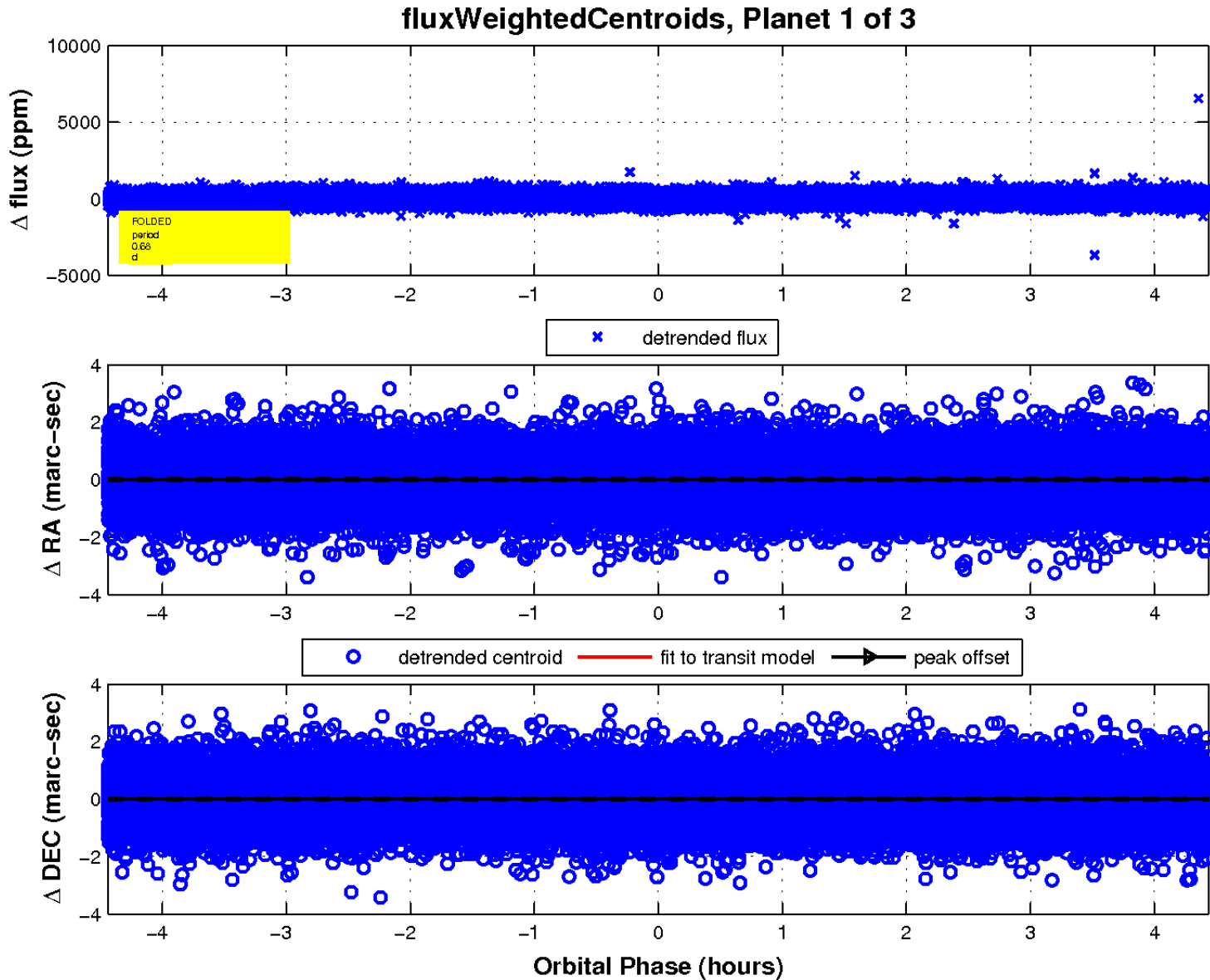
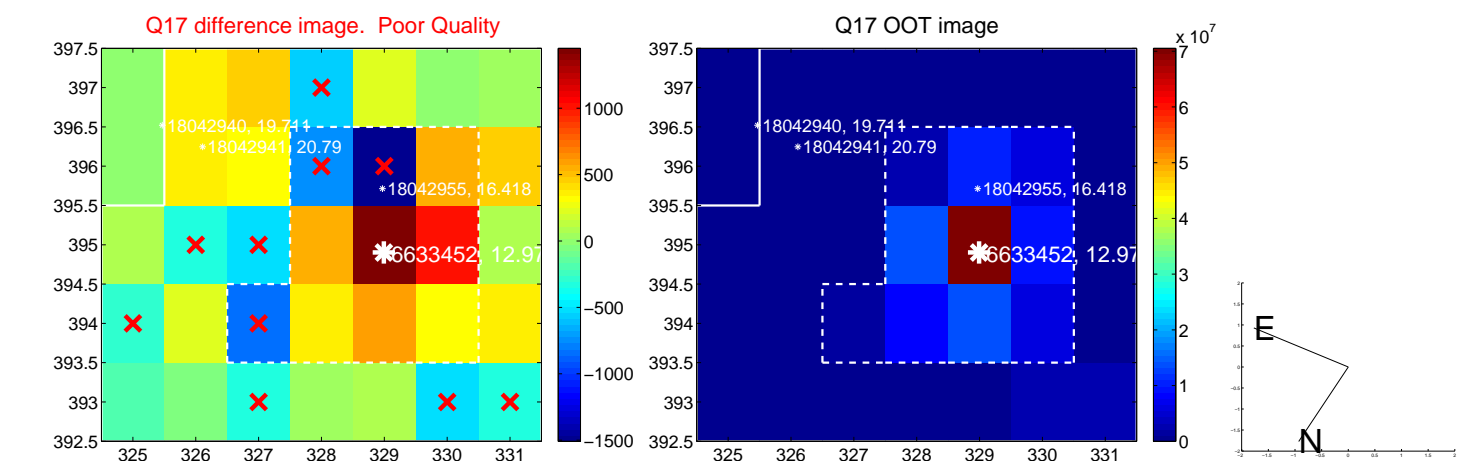
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

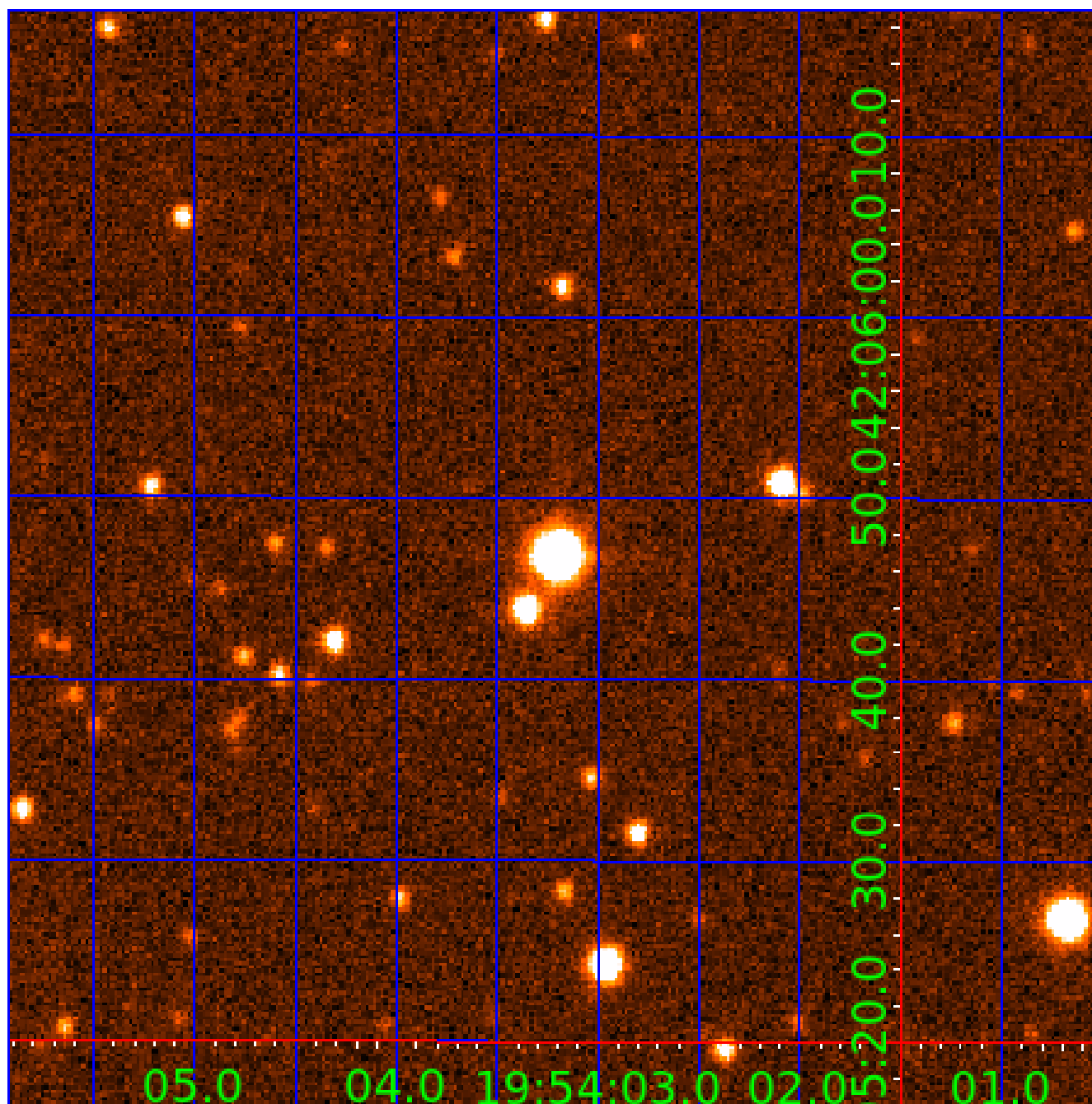


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006633452

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})
006633452-01	OBS	No	0.678725	131.876865	31.6	1.480	11.2	8.7	1.79	7640	1.16	30672.51
006633452-02	OBS	No	0.678733	132.057456	37.4	1.366	9.6	9.9	1.79	7640	1.27	30672.03
006633452-03	OBS	No	3.176836	134.594060	50.5	10.223	7.9	7.7	1.79	7640	1.64	3917.55

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006633452-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
006633452-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
006633452-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT

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

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

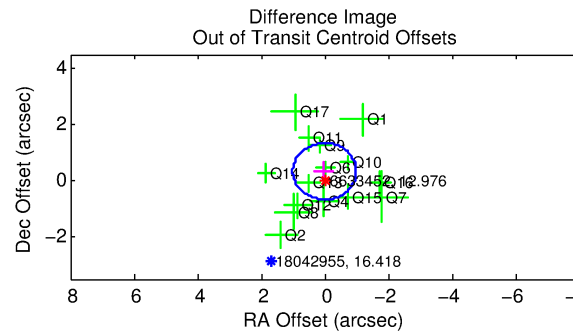
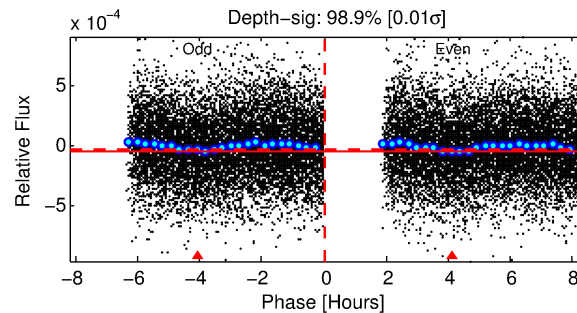
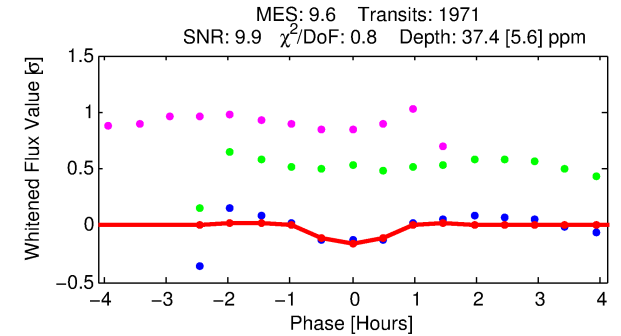
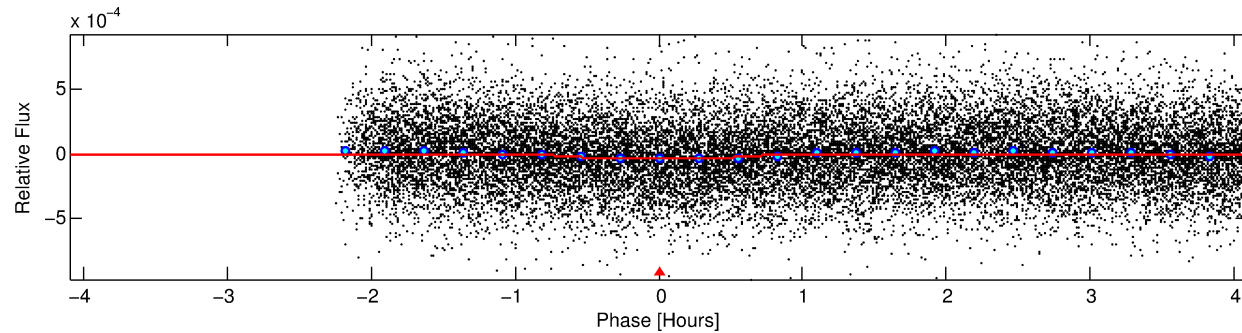
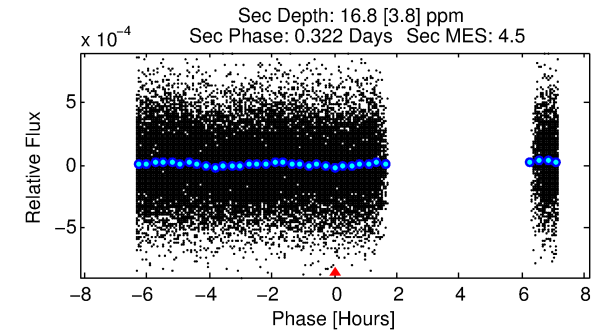
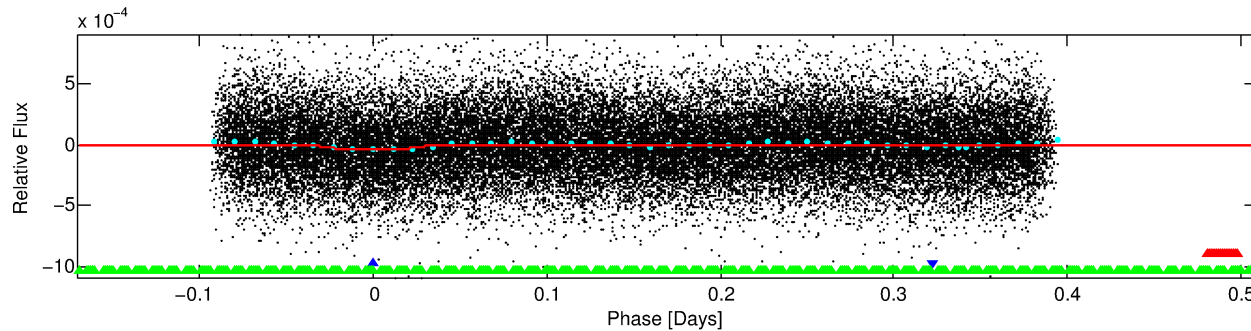
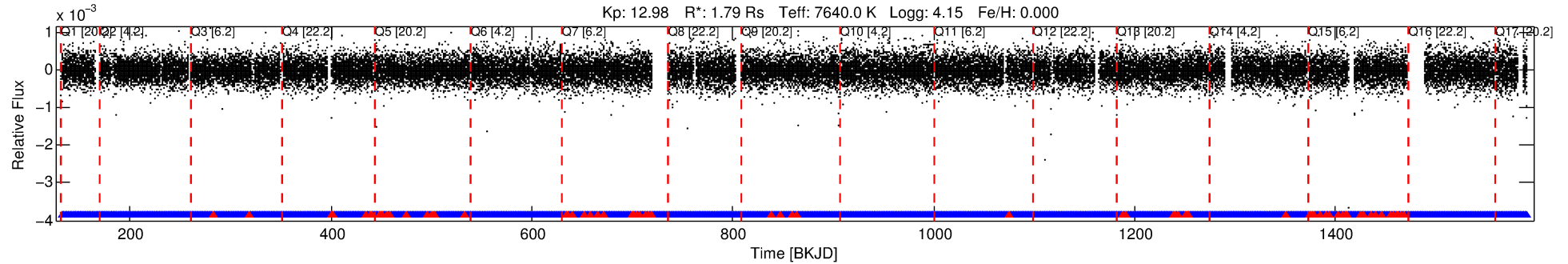
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006633452-02

No Significant Match Found

DV One-Page Summary

KIC: 6633452 Candidate: 2 of 3 Period: 0.679 d



DV Fit Results:

Period = 0.67873 [0.00001] d
Epoch = 132.0575 [0.0021] BKJD
Rp/R* = 0.0065 [0.0019]
a/R* = 1.96 [2.68]
b = 0.90 [0.40]
Seff = 30672.03 [12312.97]
Teq = 3375 [339] K
Rp = 1.27 [0.52] Re
a = 0.0178 [0.0044] AU
Ag = 1.83 [1.31] [0.64σ]
Teffp = 6070 [975] K [2.61σ]

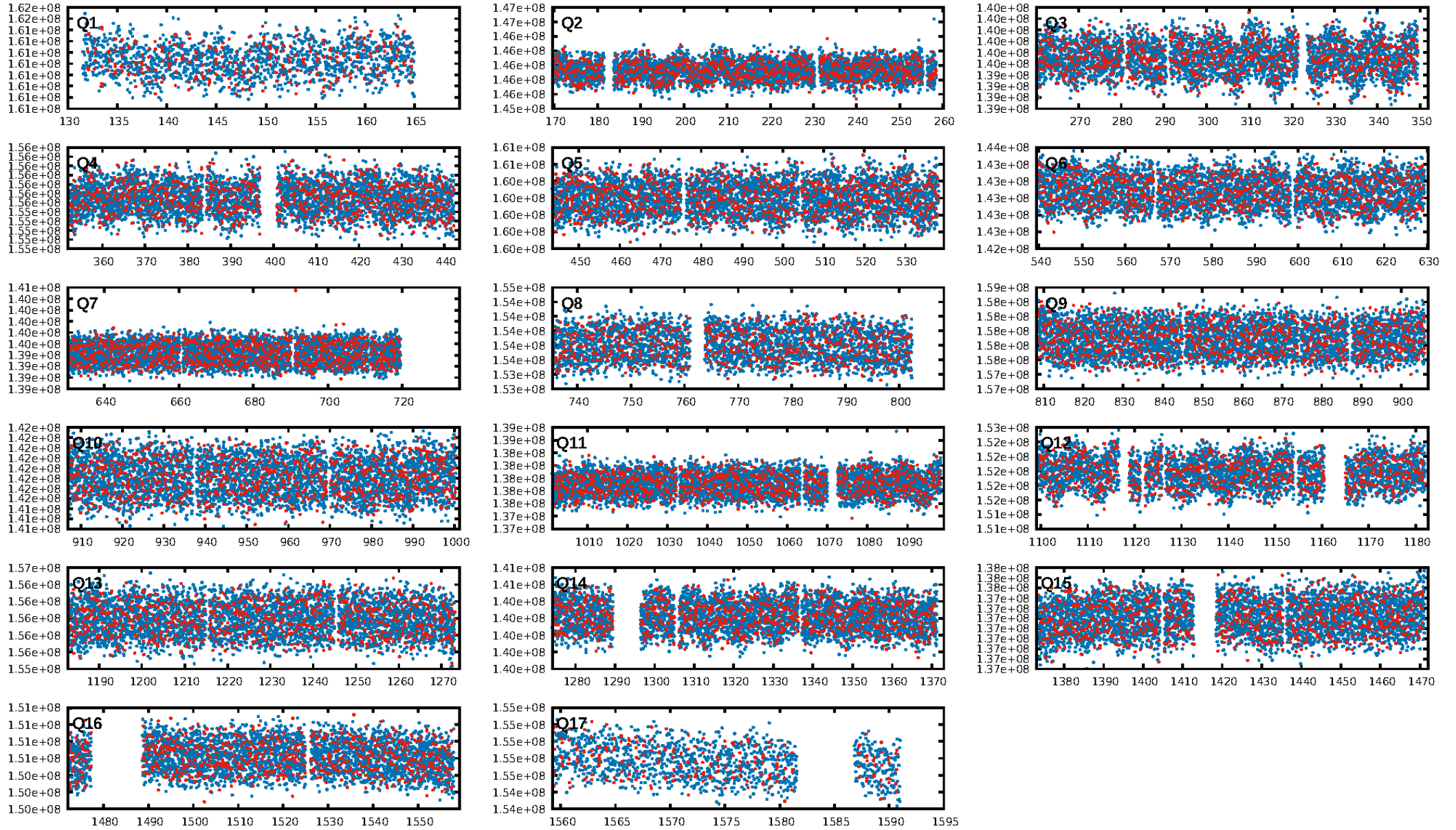
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 100.0% [5.81σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 8.32e-19
RollingBand-fgt: 0.96 [1804/1883]
GhostDiagnostic-chr: 3.848
Centroid-sig: 1.8%
Centroid-so: 1.187 arcsec [1.47σ]
OotOffset-rm: 0.333 arcsec [1.00σ]
KicOffset-rm: 0.362 arcsec [1.07σ]
OotOffset-st: 4/3/4/4 [15]
KicOffset-st: 4/3/4/4 [15]
DiffImageQuality-fgm: 0.73 [11/15]
DiffImageOverlap-fno: 0.00 [0/17]

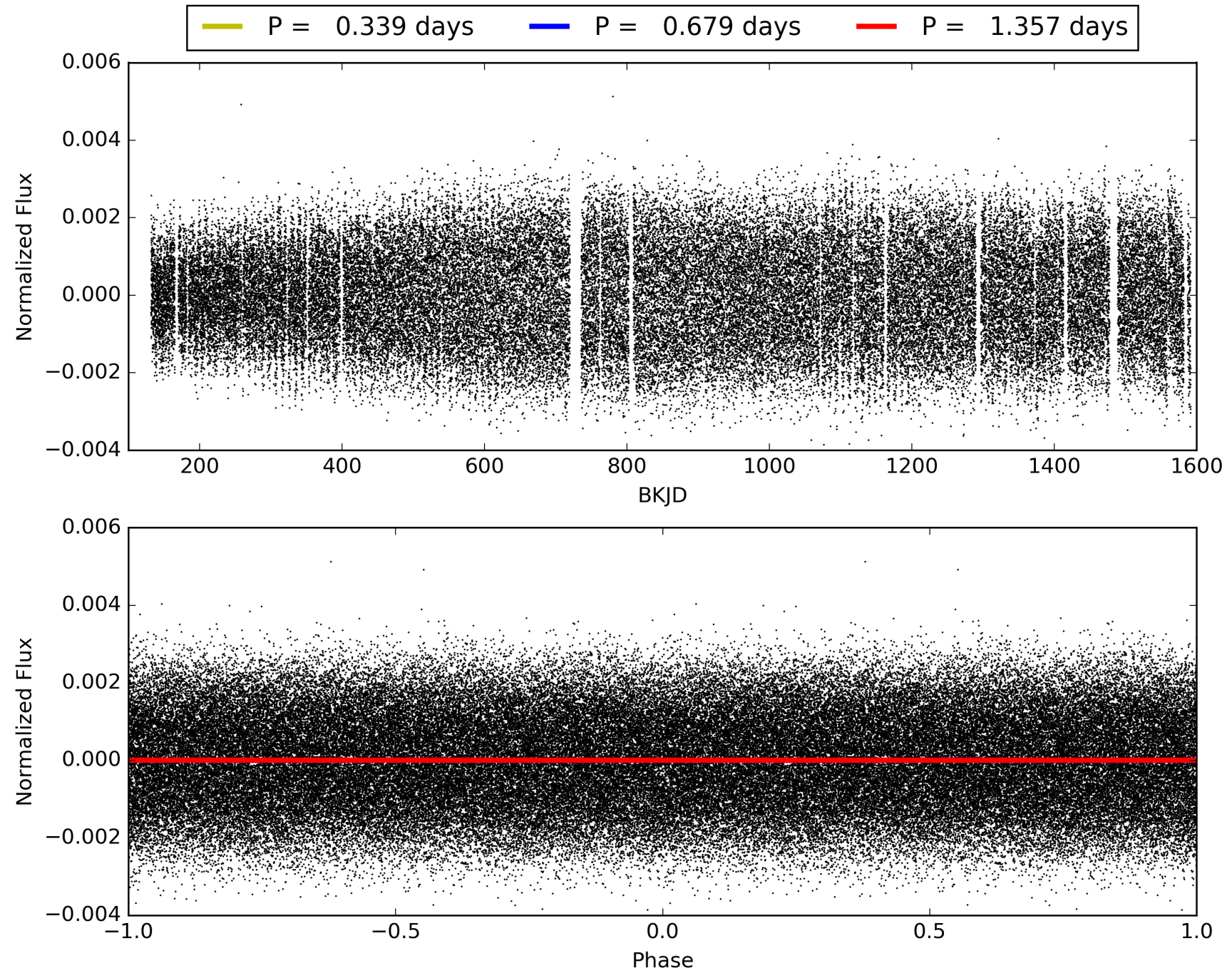
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 16:01:44 Z

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

TCE 006633452-02, PDC Light Curves

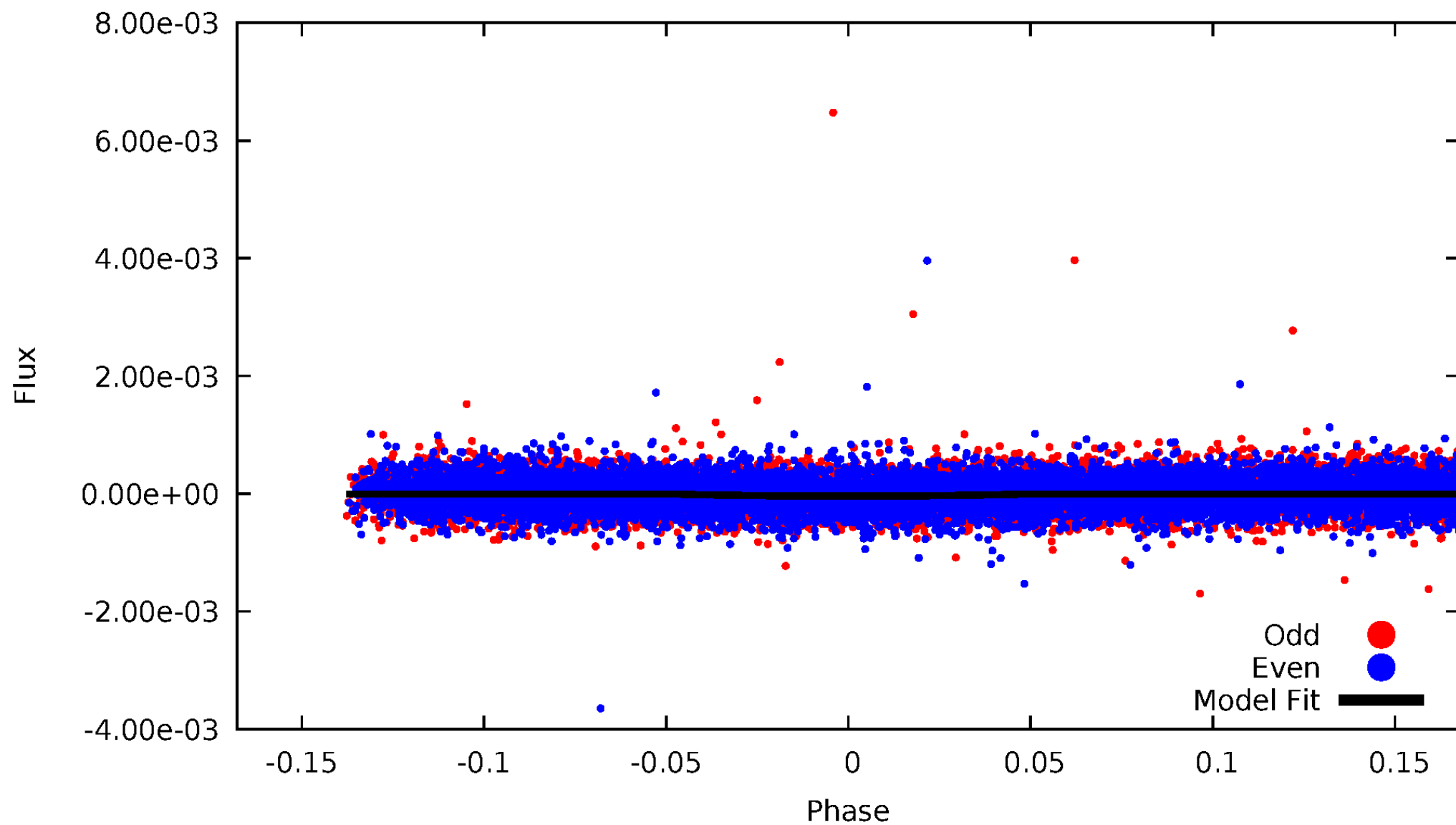


TCE 006633452-02



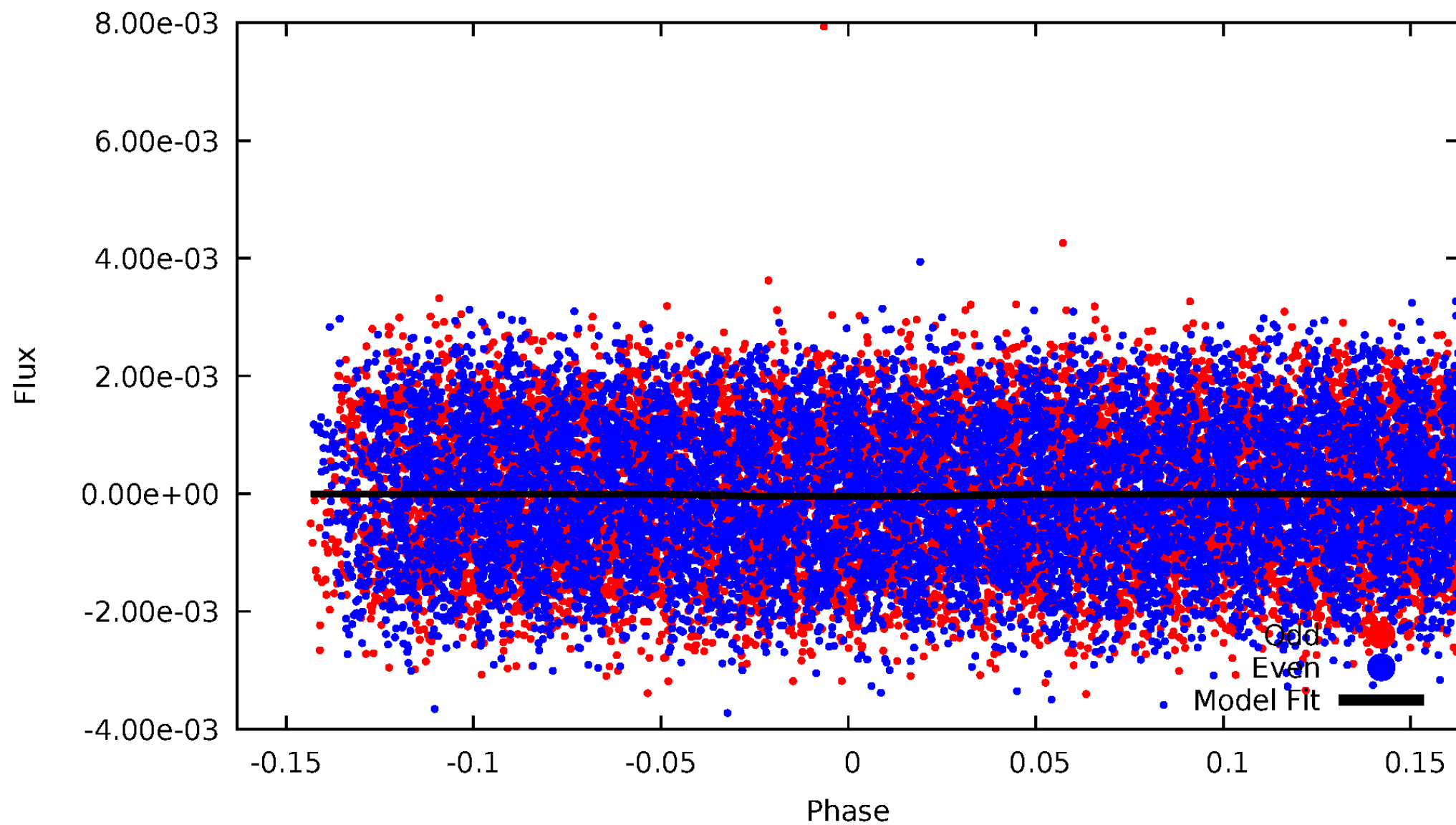
DV Odd/Even

TCE 006633452-02



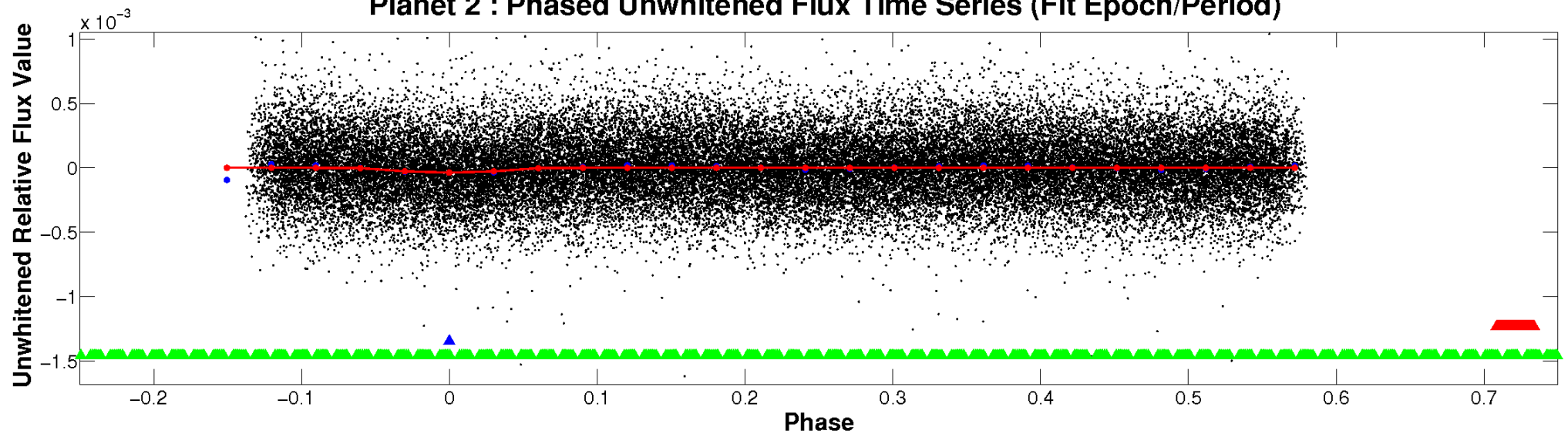
ALT Odd/Even

TCE 006633452-02

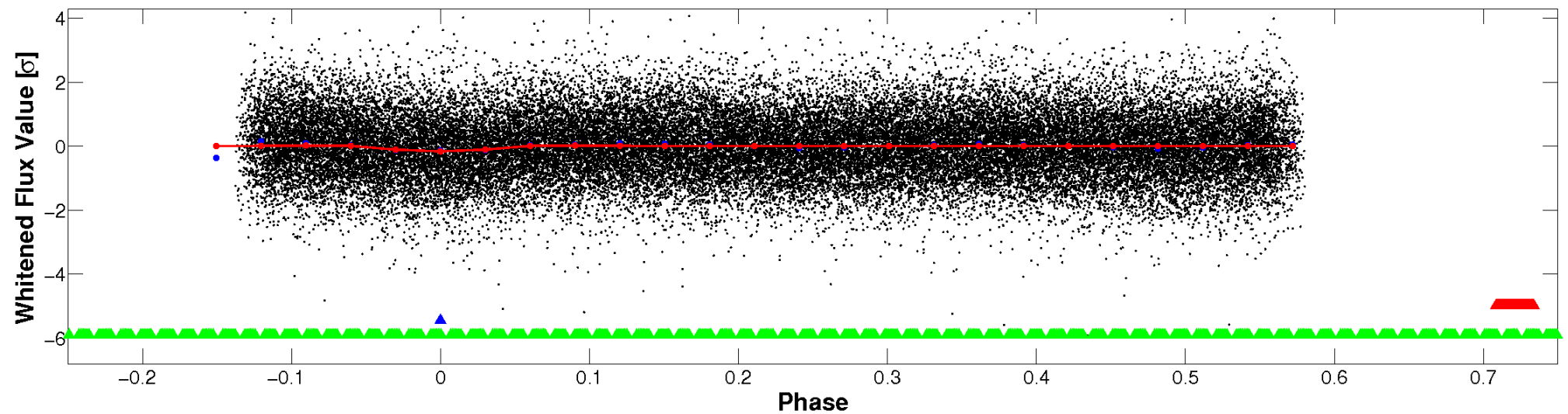


Non-Whitened Vs. Whitened Light Curve

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

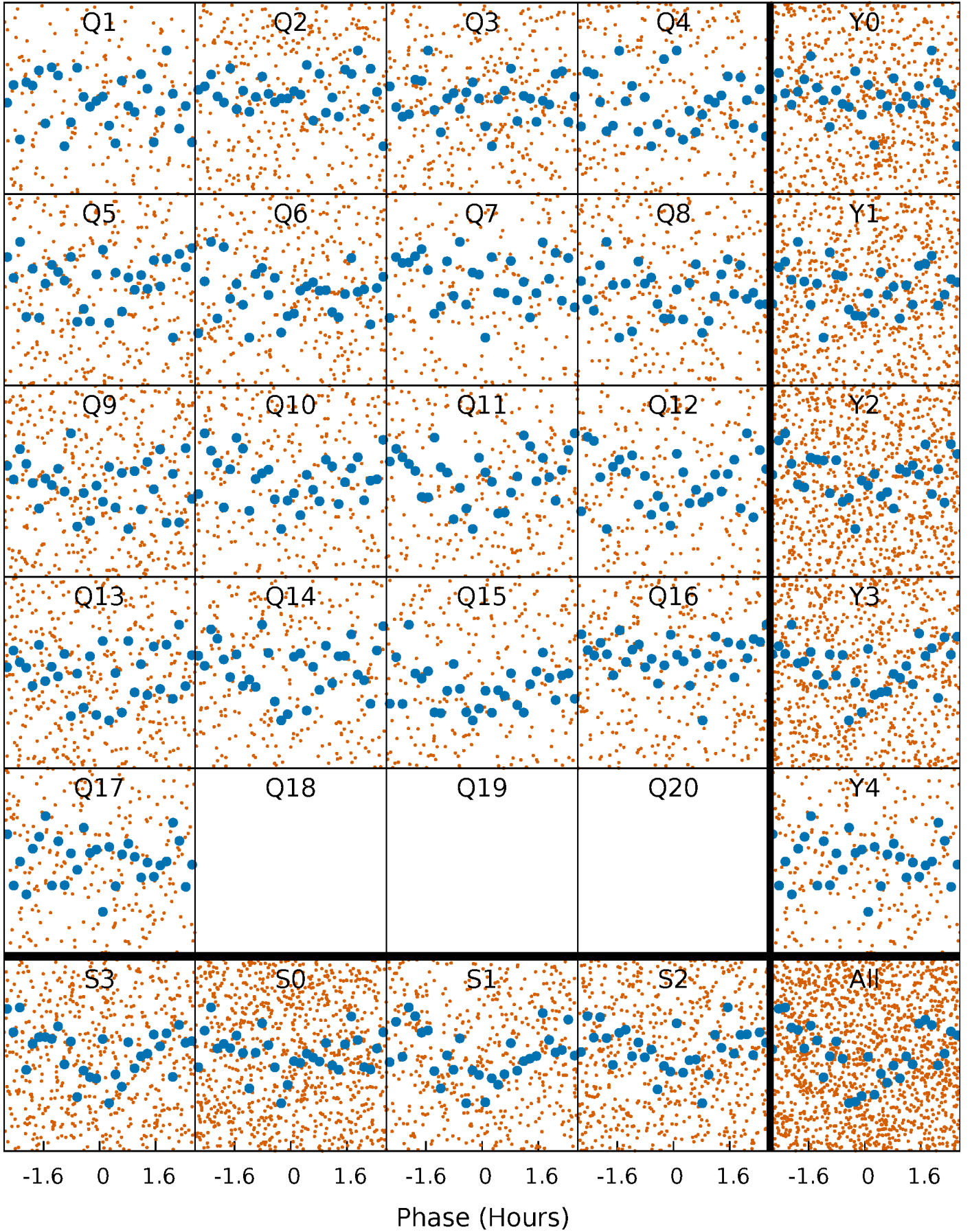


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



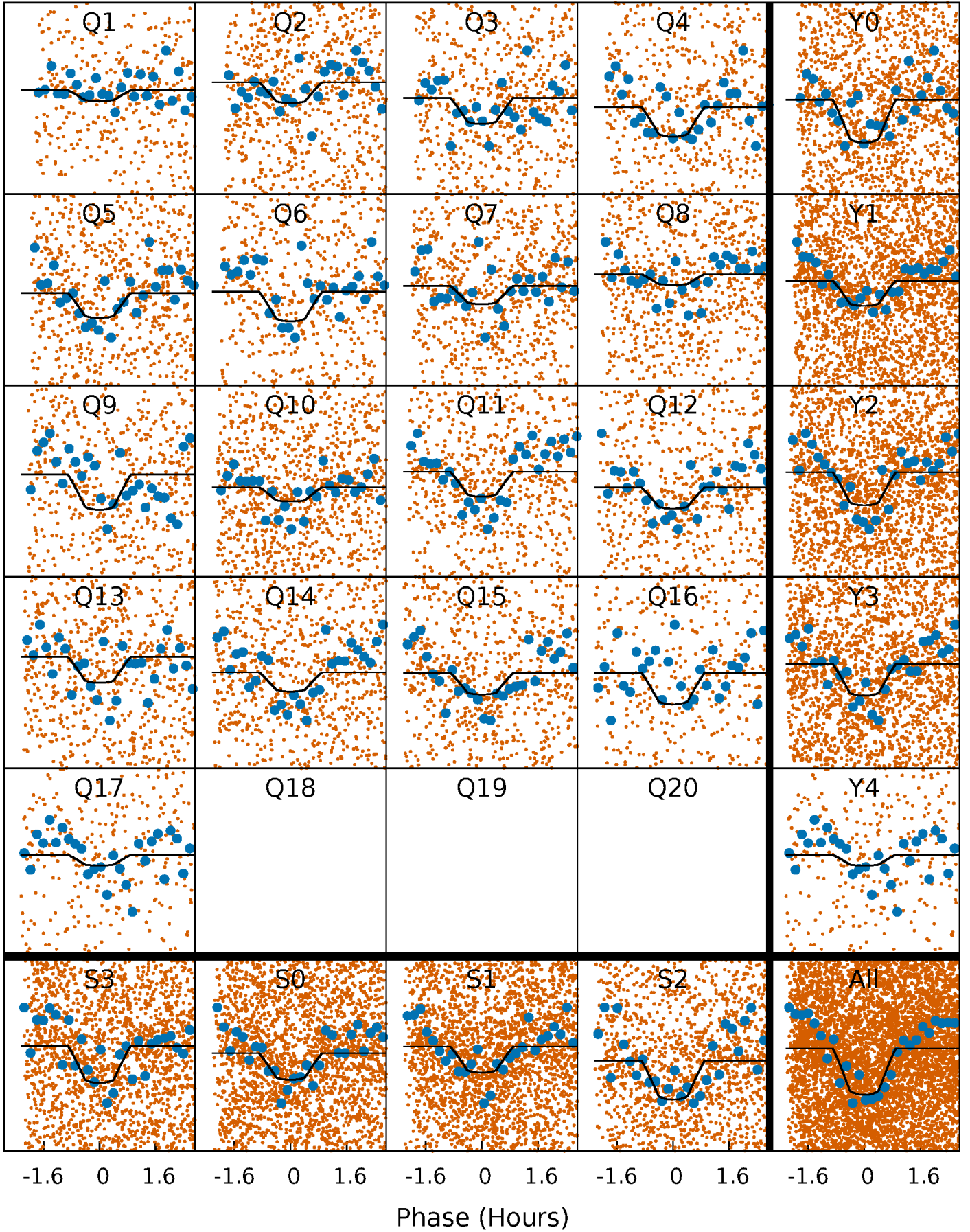
PDC Quarter-Phased Transit Curves

TCE 006633452-02 $P = 0.678733$ Days $T_0 = 132.057457$ (BKJD)



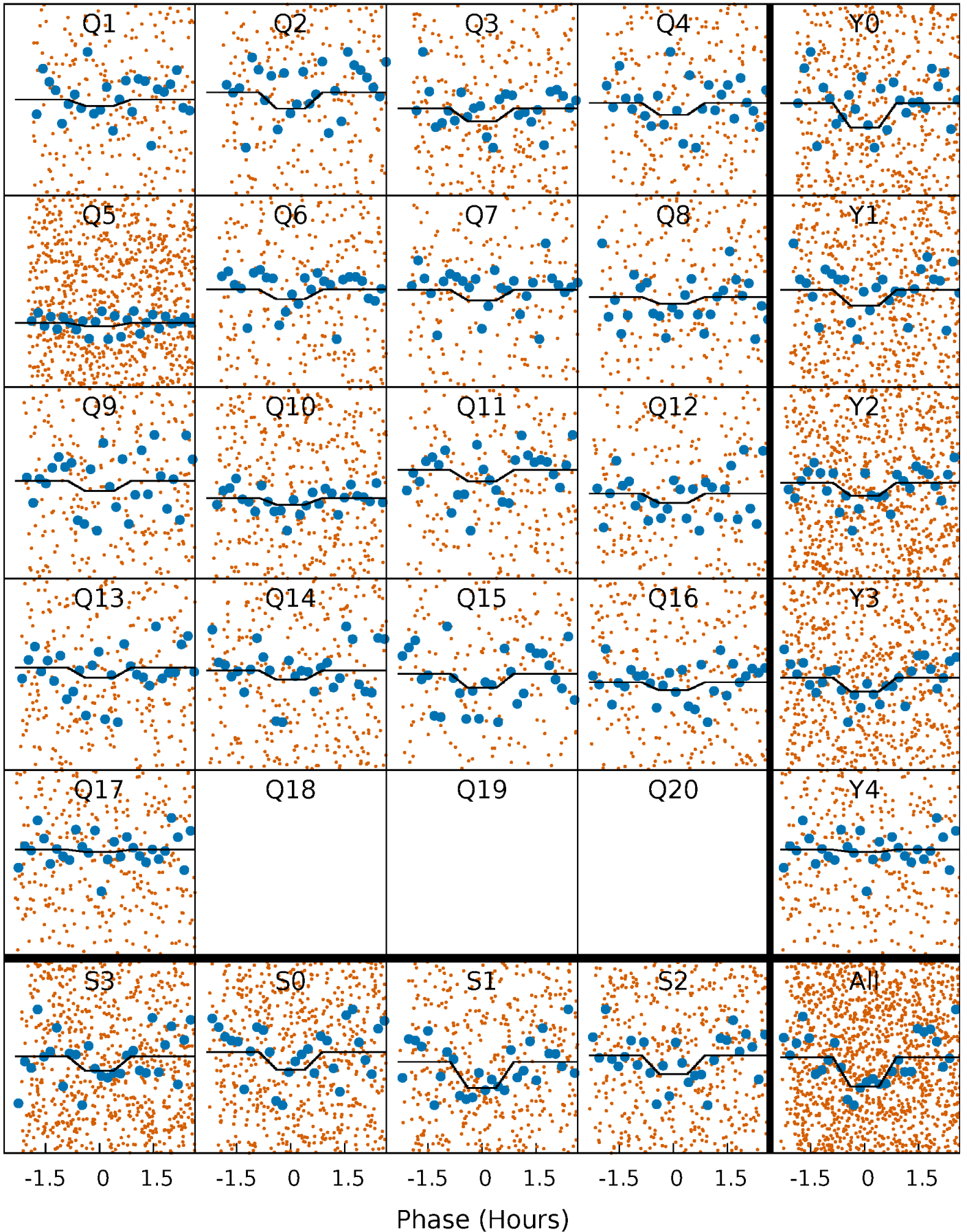
DV Quarter-Phased Transit Curves

TCE 006633452-02 P= 0.678733 Days $T_0=132.057457$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

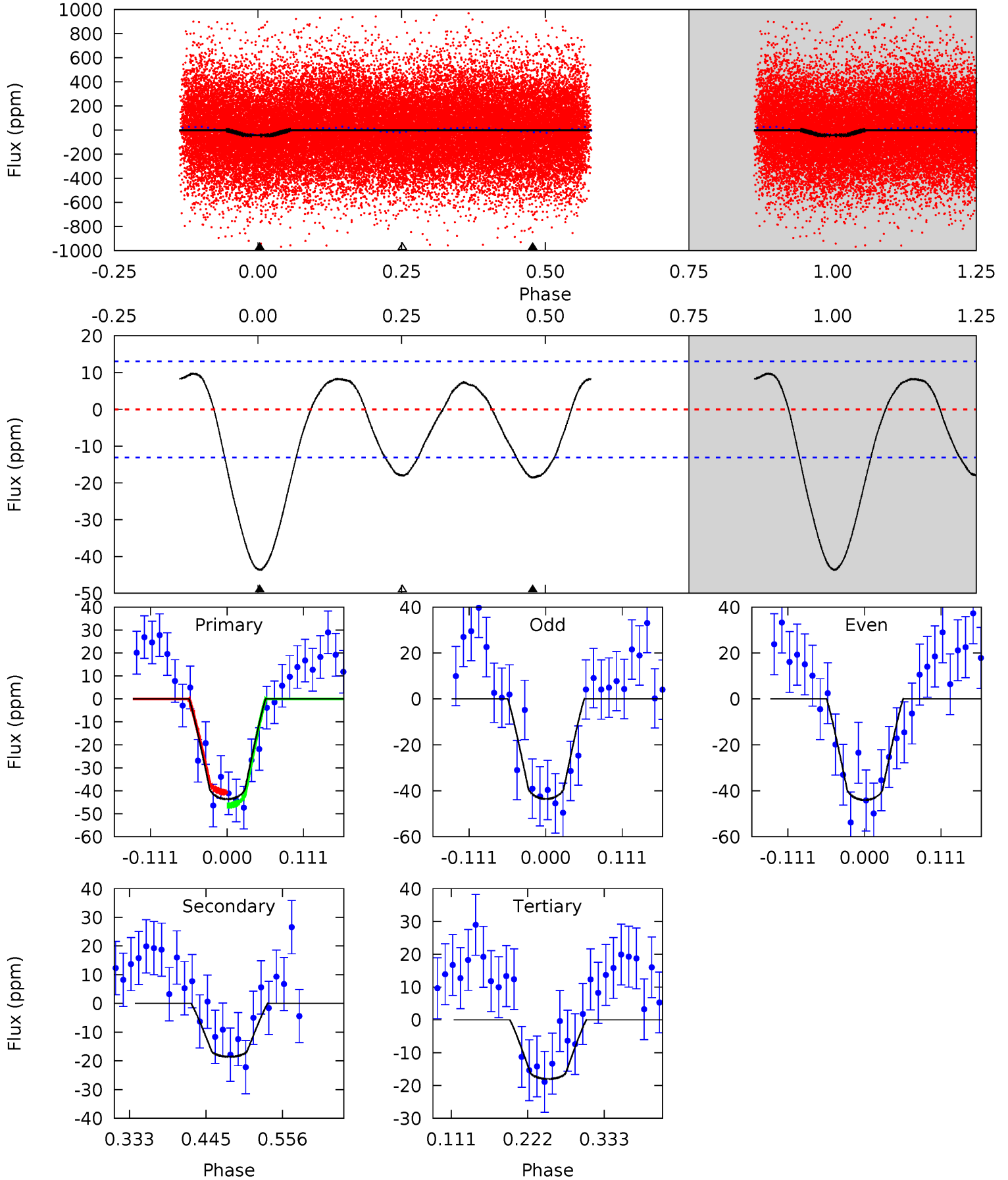
TCE 006633452-02 P= 0.678735 Days $T_0=132.057613$ (BKJD)



DV Model-Shift Uniqueness Test

006633452-02, P = 0.678733 Days, E = 131.378724 Days

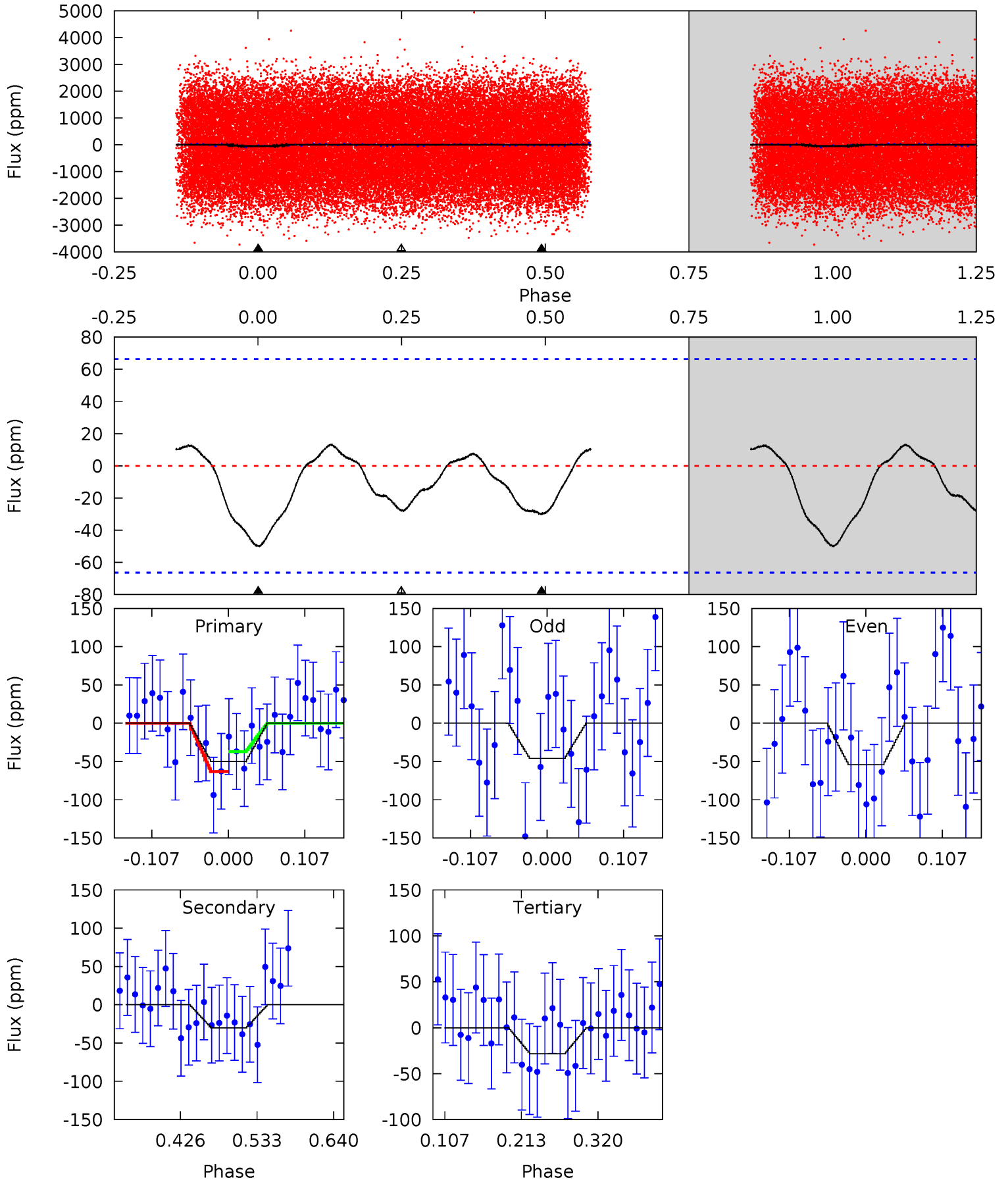
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.2	6.45	6.26	0	4.54	1.59	3.33	8.91	15.2	0.19	6.45	0.08	0.82	0.18	0.98



Alt Model-Shift Uniqueness Test

006633452-02, P = 0.678735 Days, E = 131.378878 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.44	2.08	1.94	0	4.55	1.61	0.89	1.50	3.44	0.14	2.08	0.28	1.06	0.21	0.89



Stellar Parameters For KIC 006633452

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7640^{+211}_{-343}	$4.149^{+0.105}_{-0.195}$	$0.000^{+0.200}_{-0.350}$	$1.789^{+0.532}_{-0.310}$	$1.644^{+0.210}_{-0.257}$	$0.405^{+0.235}_{-0.200}$
	+3%/-4%	+3%/-5%	+inf%/-inf%	+30%/-17%	+13%/-16%	+58%/-50%
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 006633452-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-19 ± 3	$1.30^{+0.41}_{-0.40}$	4740^{+362}_{-279}	5777^{+1339}_{-804}	$1.909^{+1.944}_{-0.836}$
Alt.	-30 ± 15	$1.28^{+0.45}_{-0.37}$	4742^{+350}_{-288}	6618^{+1920}_{-1390}	$2.987^{+3.564}_{-1.699}$

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

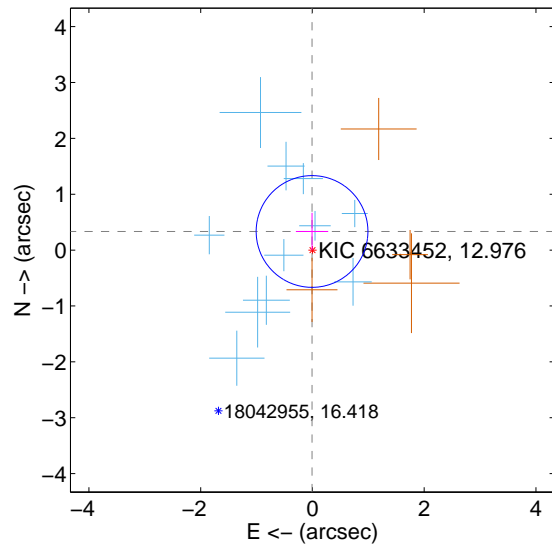
Supplemental centroid analysis for 006633452-02. Kepler magnitude: 12.98. Transit SNR 9.94

There are 11 quarters with good PRF difference image offsets

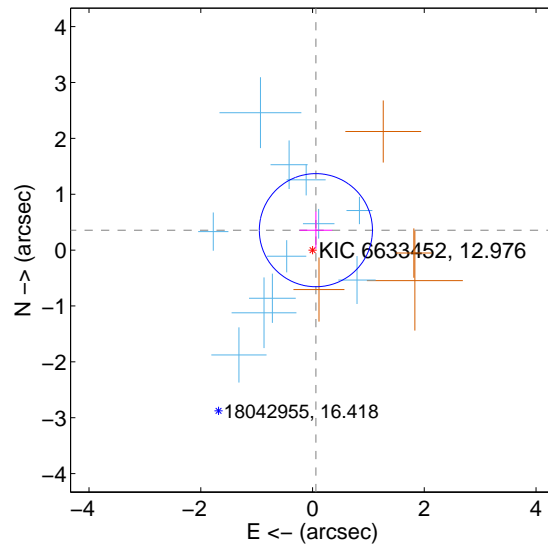
The direct PRF centroid is offset from the target star catalog position by about 0.00 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.333 ± 0.333	1.00	0.007 ± 0.289	0.333 ± 0.334
PRF-fit source offset from KIC position	0.362 ± 0.337	1.07	-0.060 ± 0.291	0.357 ± 0.333
photometric centroid source offset	1.19 ± 0.81	1.47	0.98 ± 0.85	-0.66 ± 0.72

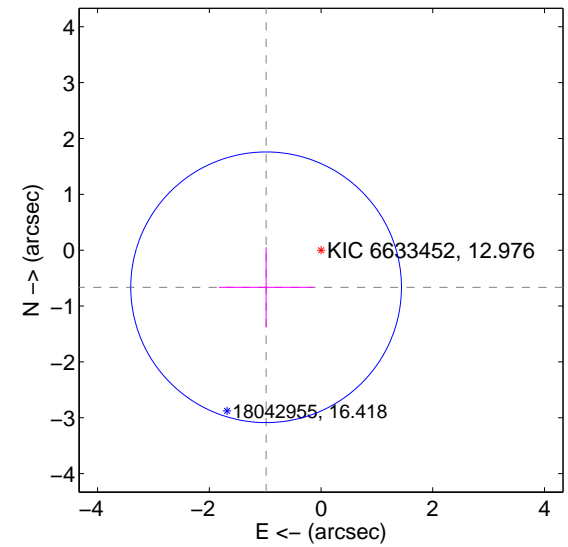
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

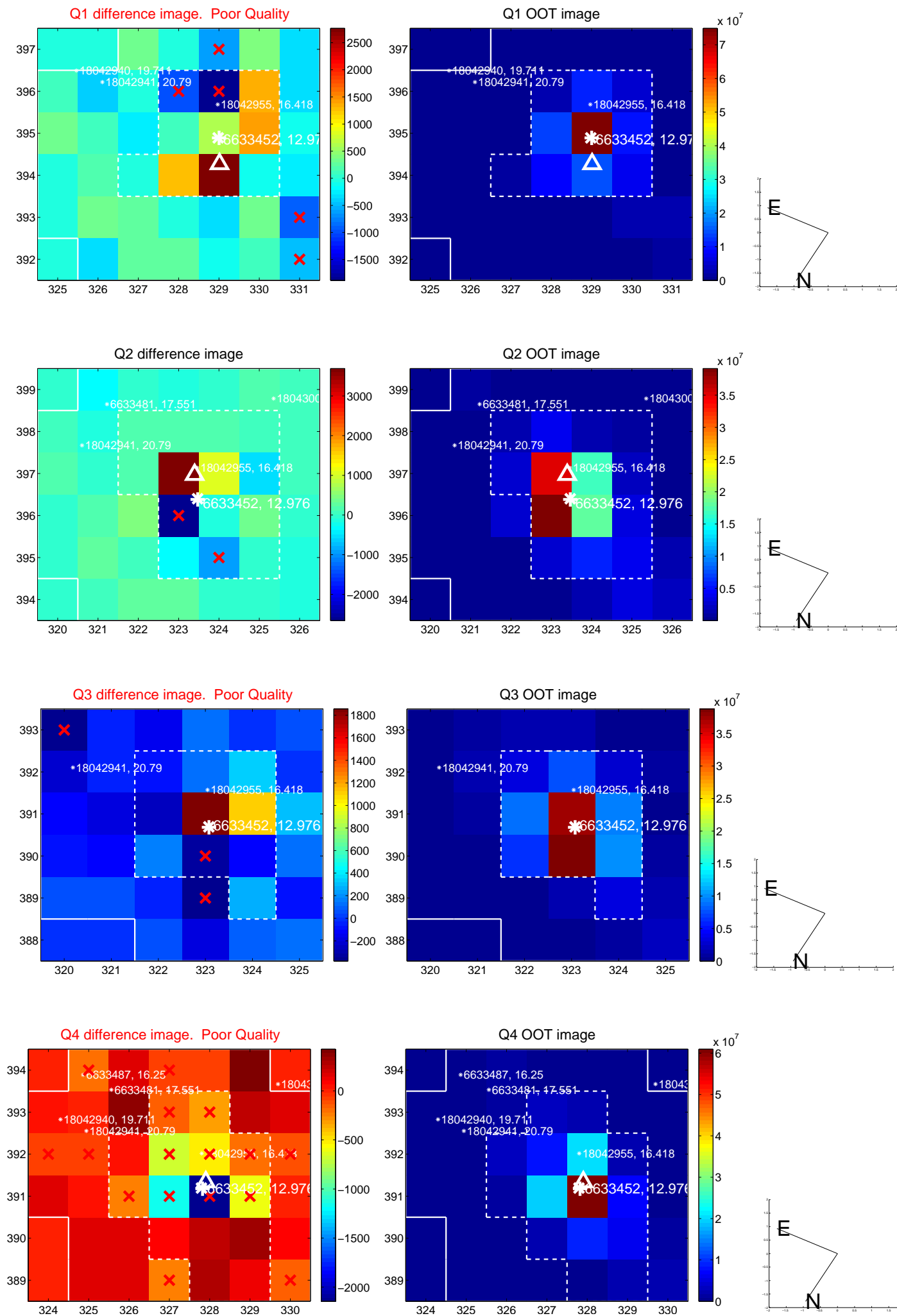


offset from photometric centroids

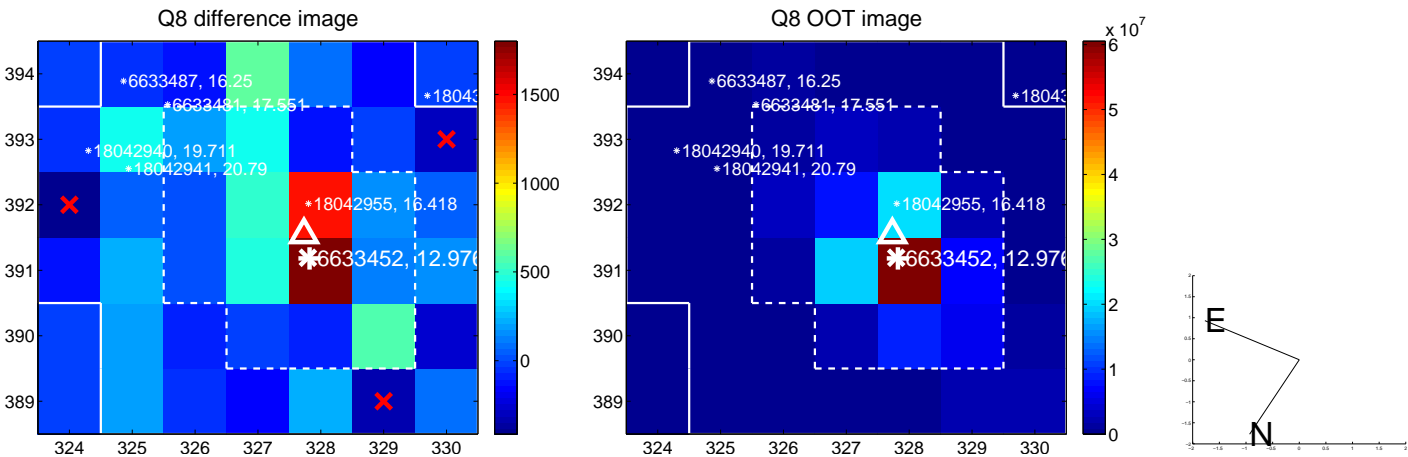
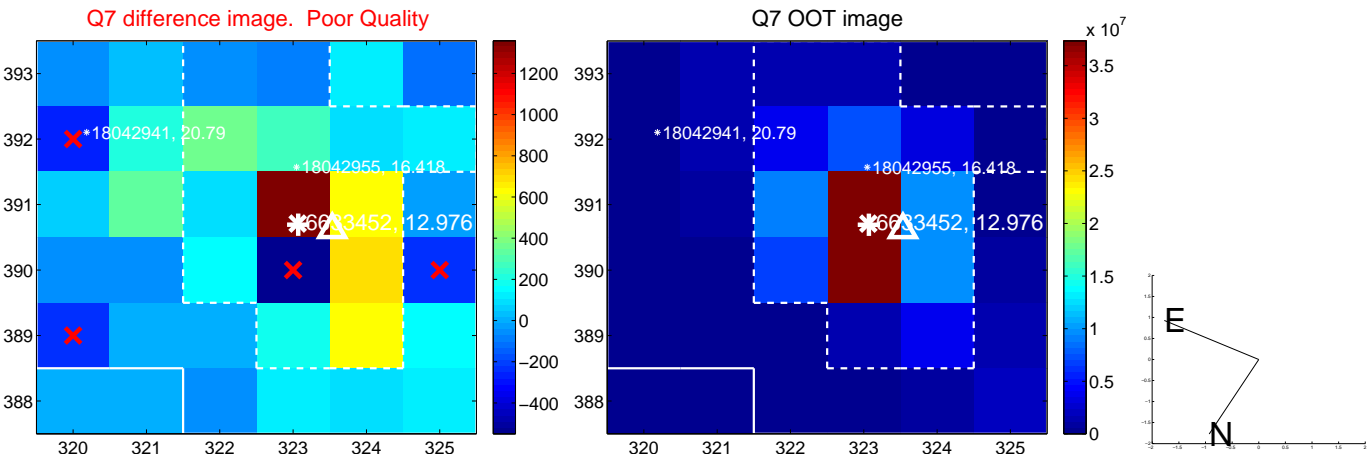
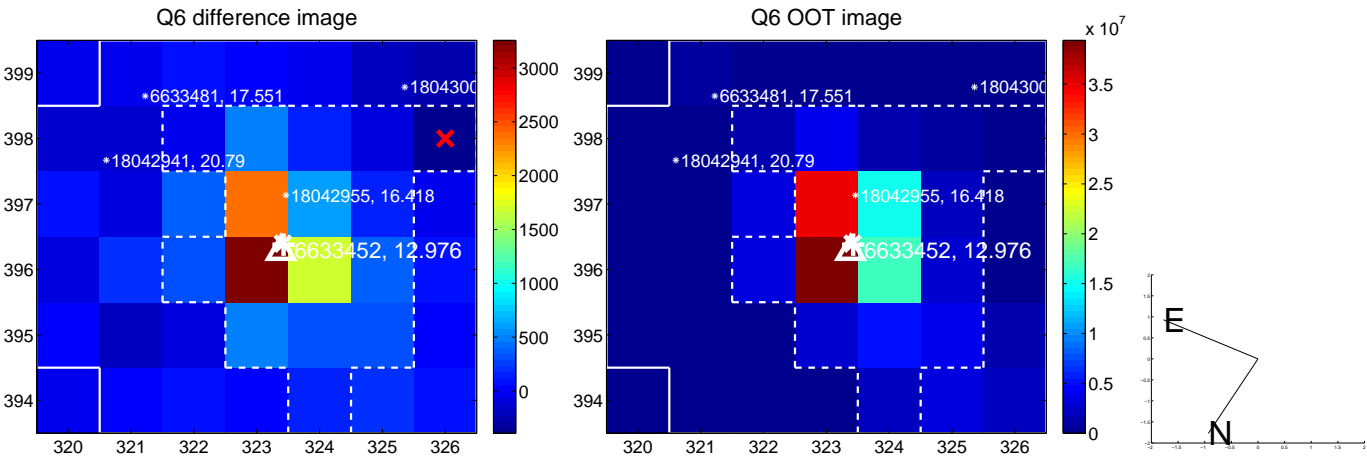
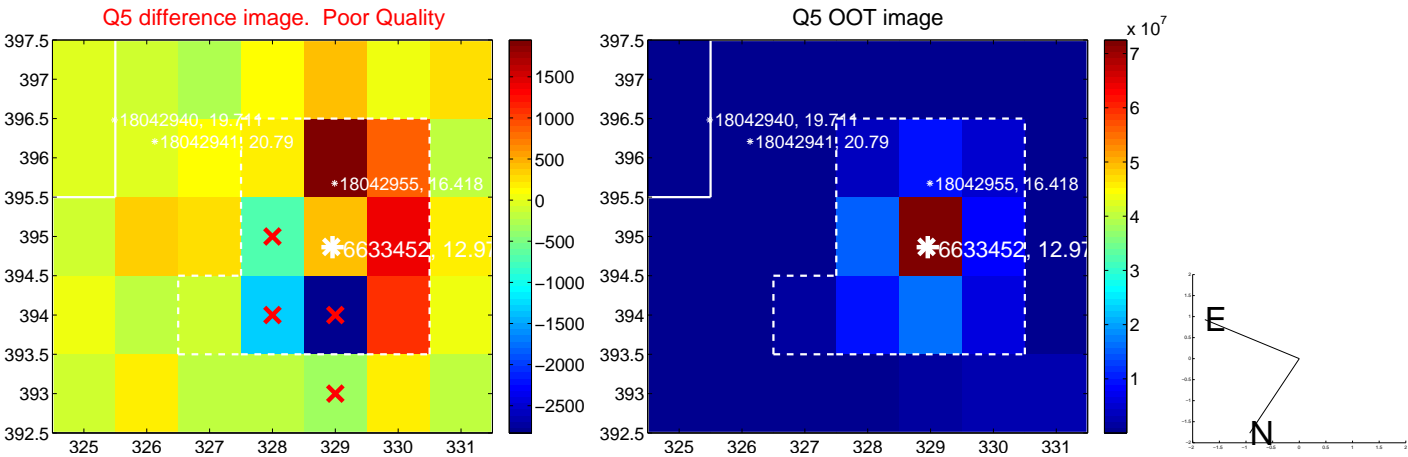


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

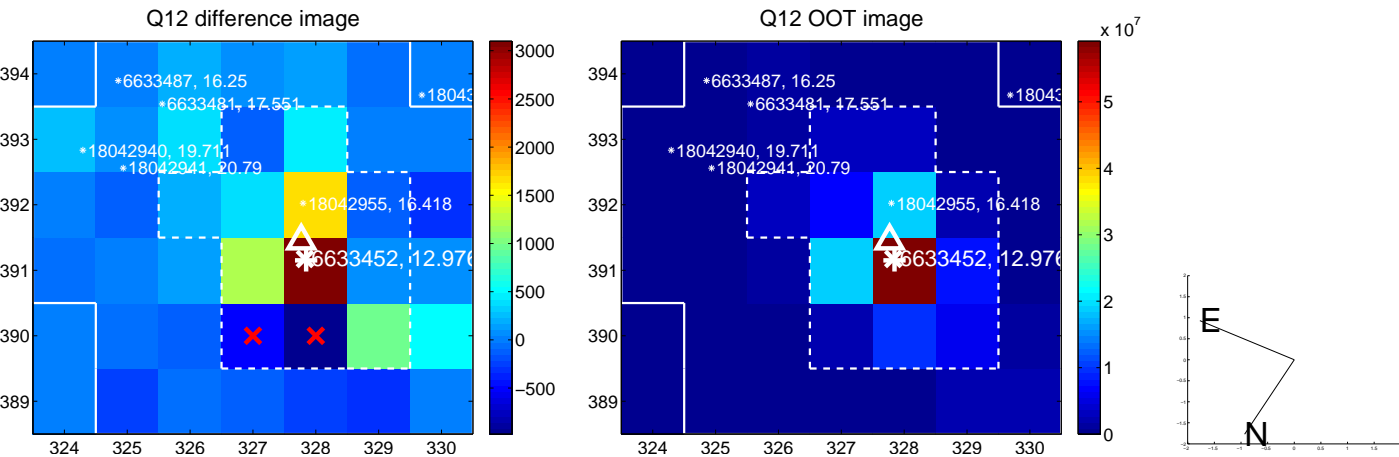
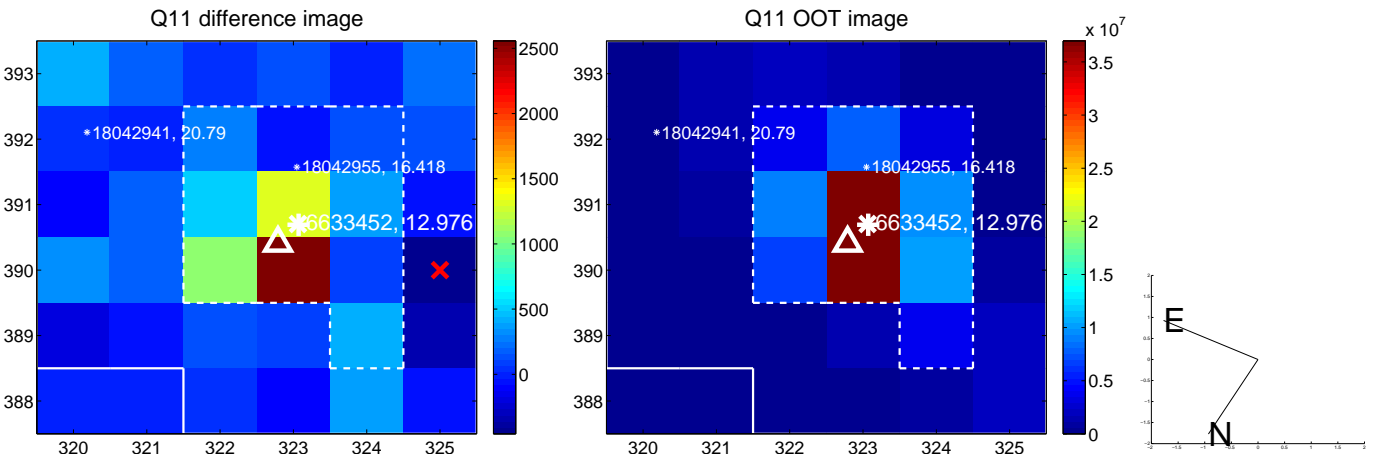
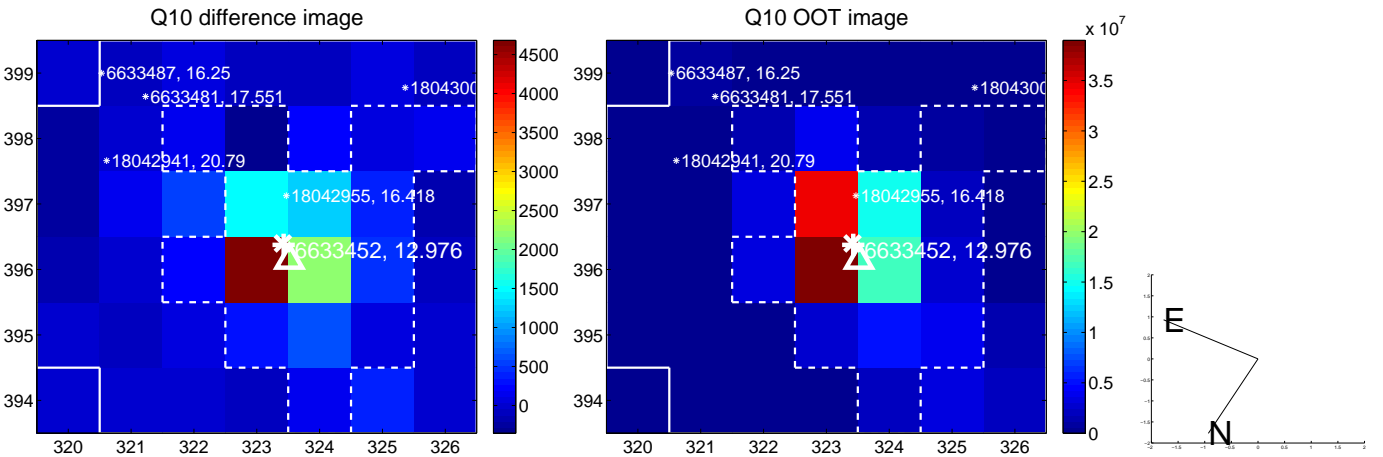
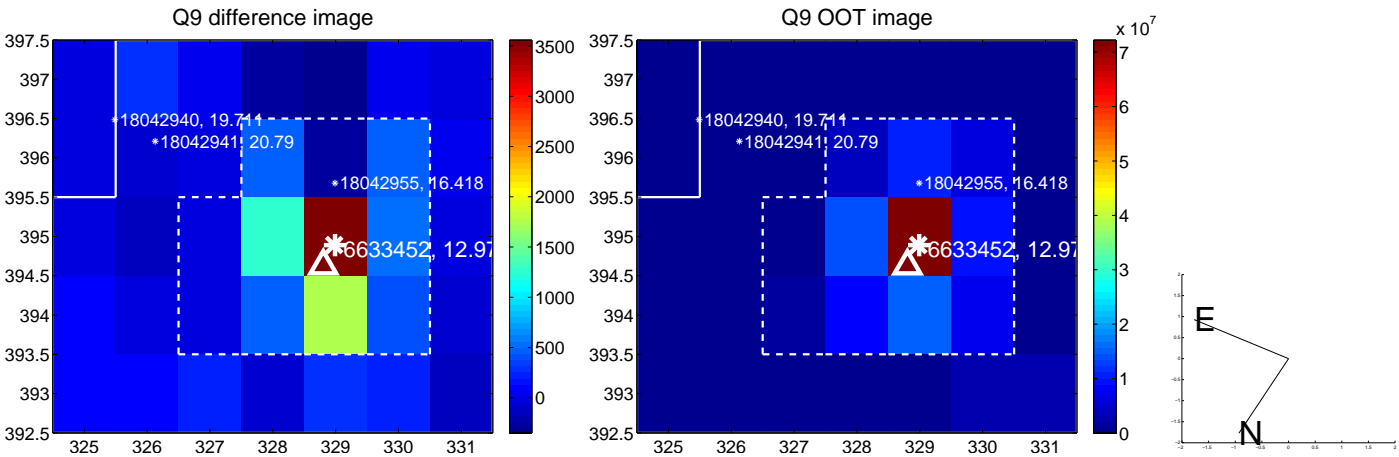
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



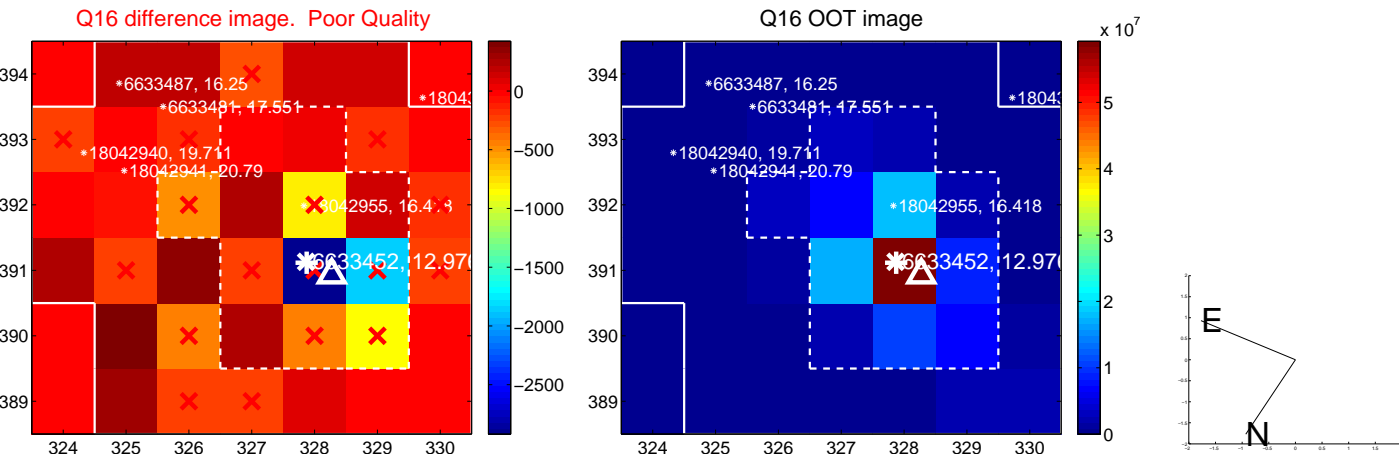
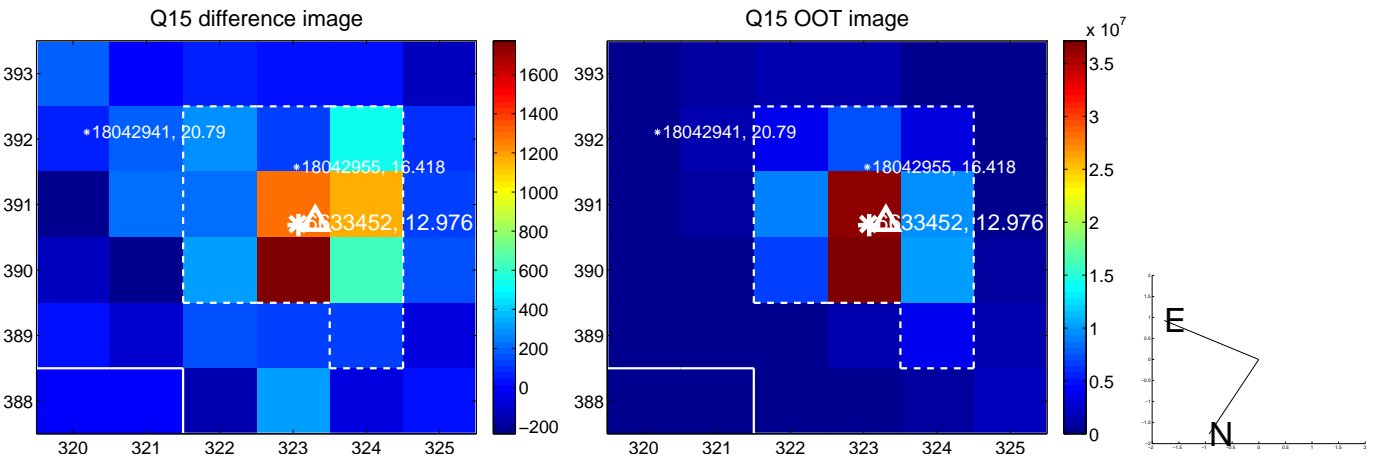
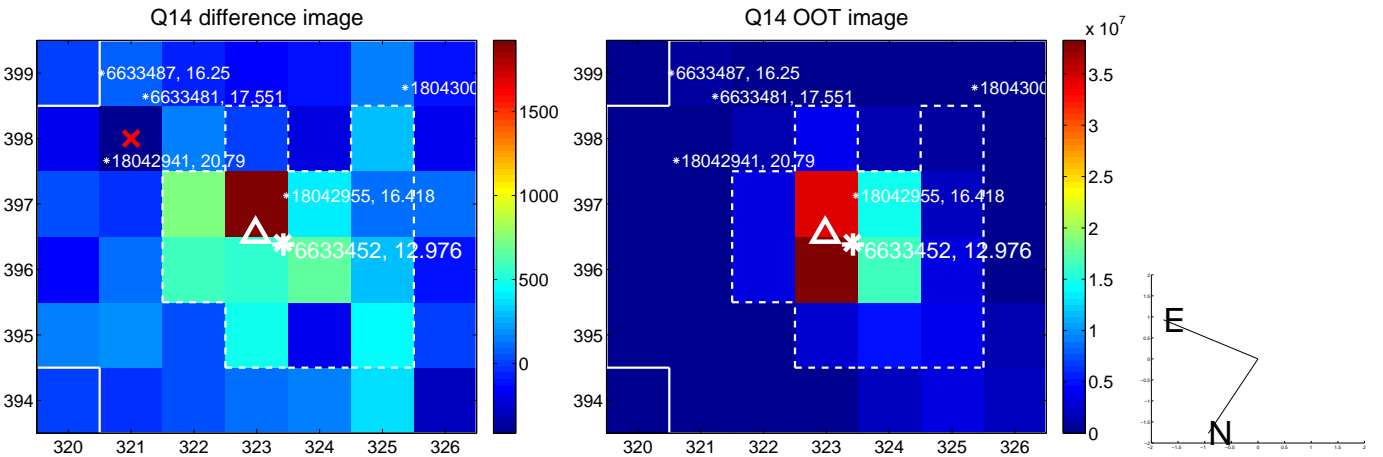
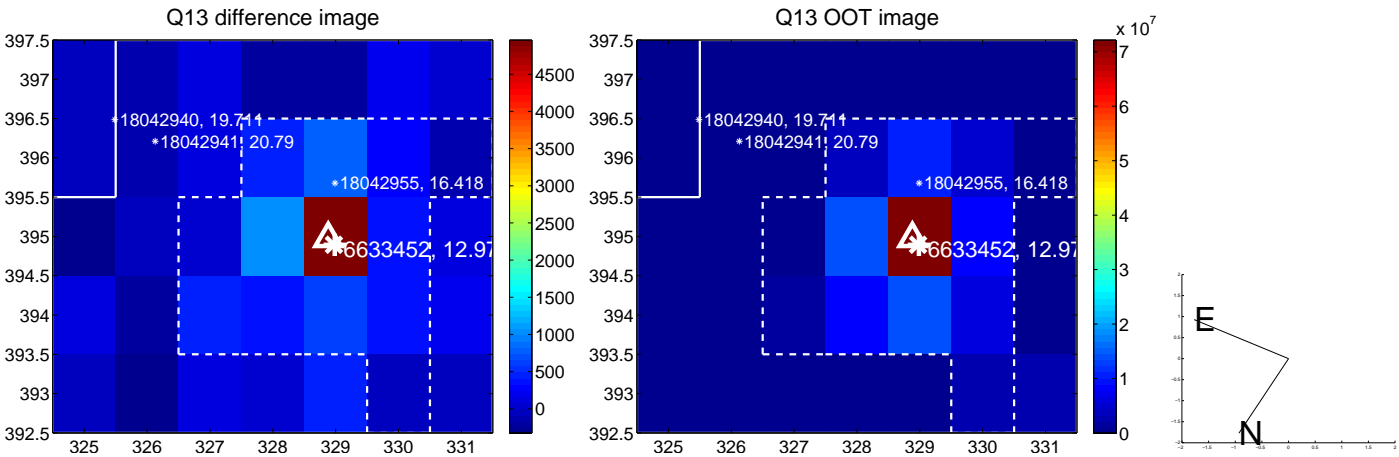
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



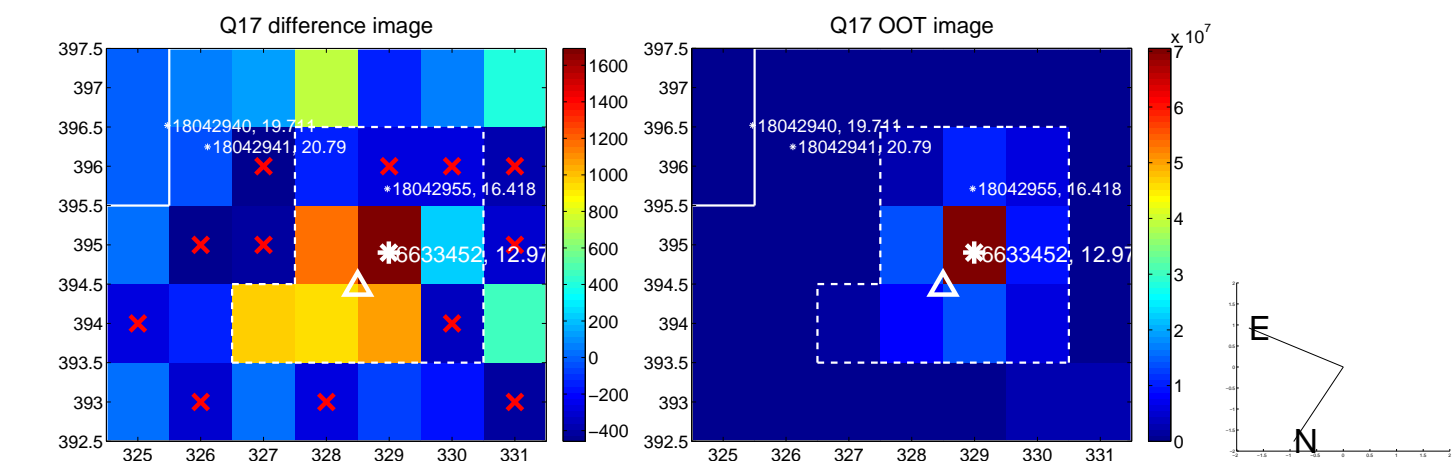
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



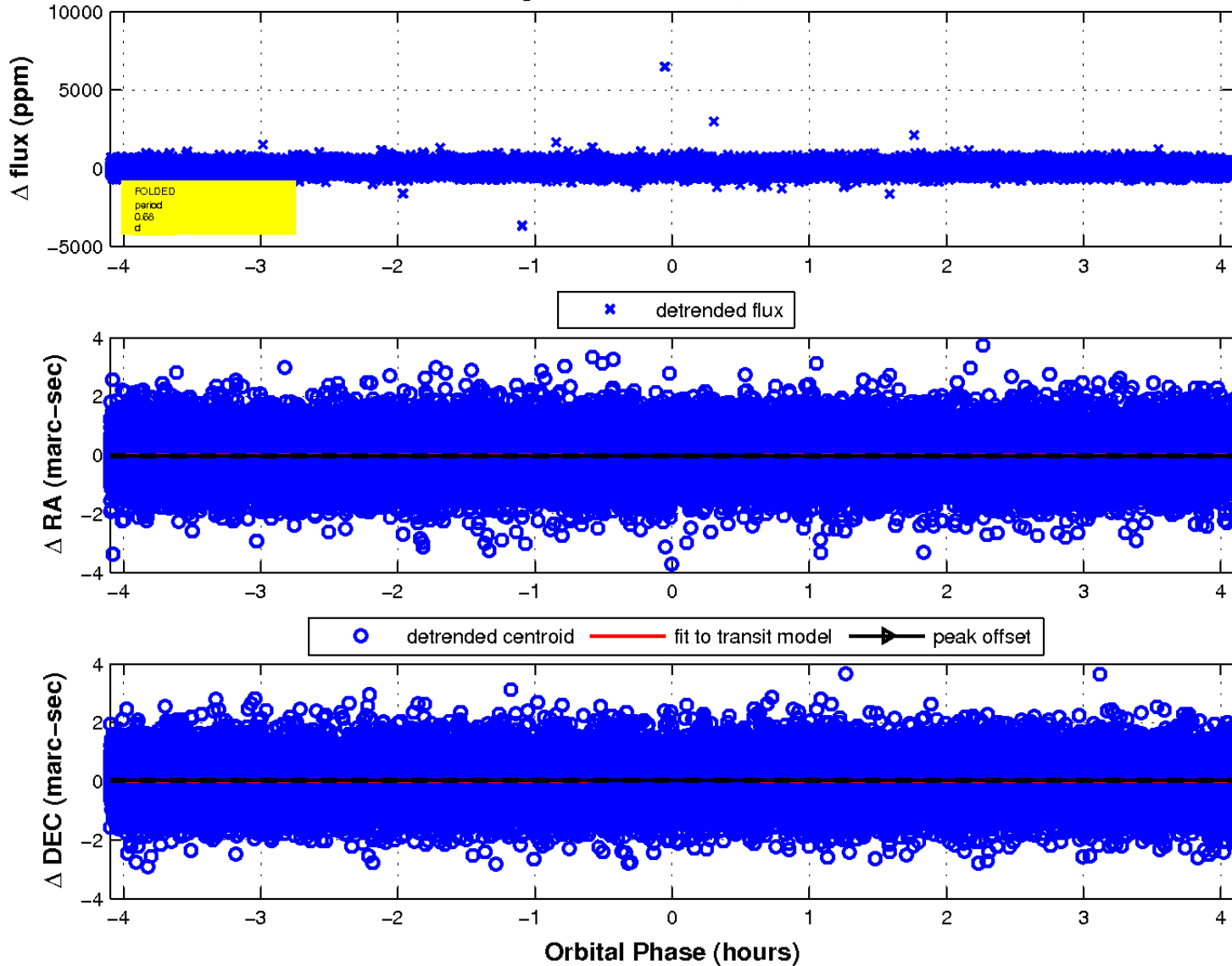
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

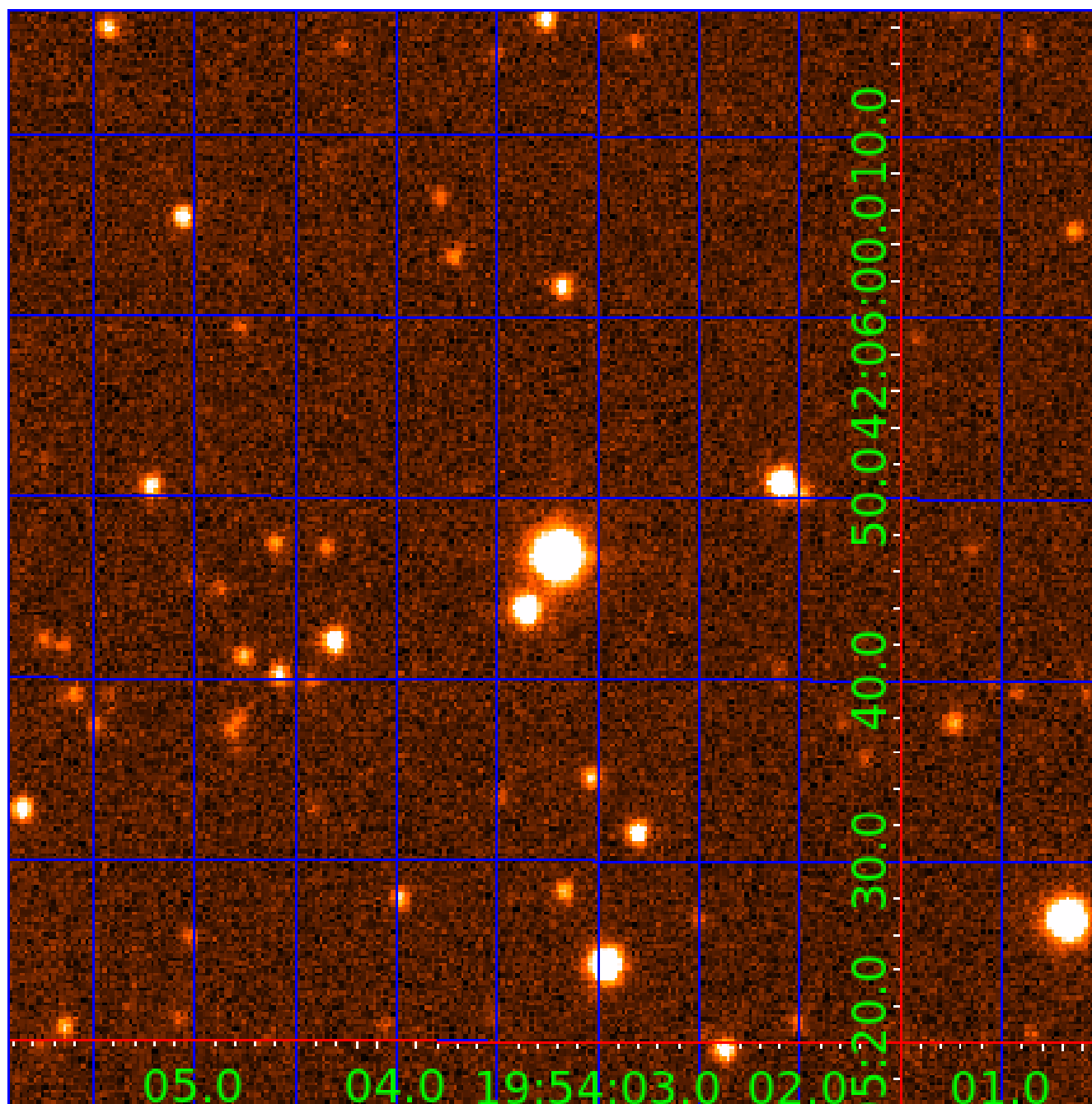


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 006633452

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})
006633452-01	OBS	No	0.678725	131.876865	31.6	1.480	11.2	8.7	1.79	7640	1.16	30672.51
006633452-02	OBS	No	0.678733	132.057456	37.4	1.366	9.6	9.9	1.79	7640	1.27	30672.03
006633452-03	OBS	No	3.176836	134.594060	50.5	10.223	7.9	7.7	1.79	7640	1.64	3917.55

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006633452-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
006633452-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
006633452-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT

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

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

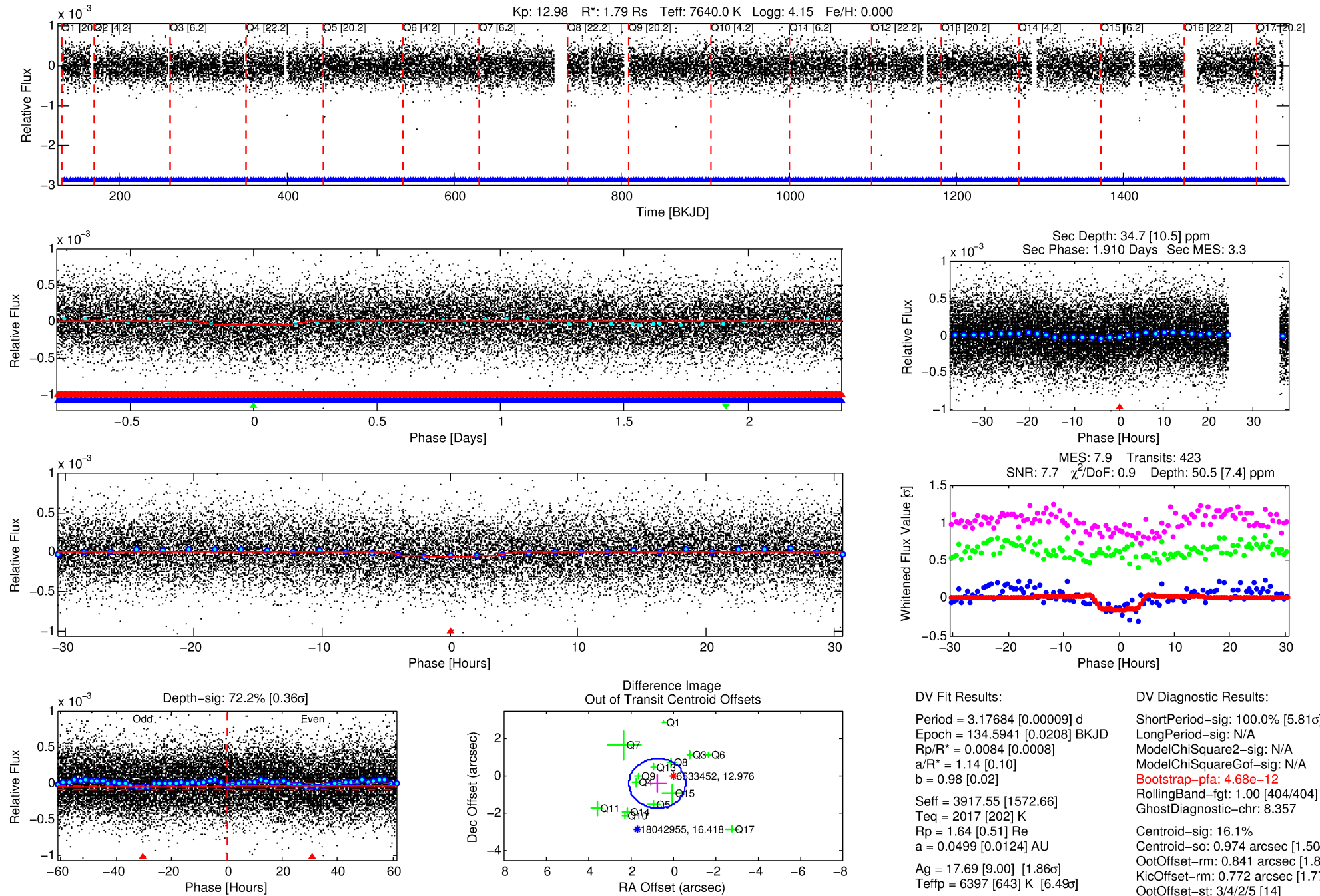
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006633452-03

No Significant Match Found

DV One-Page Summary

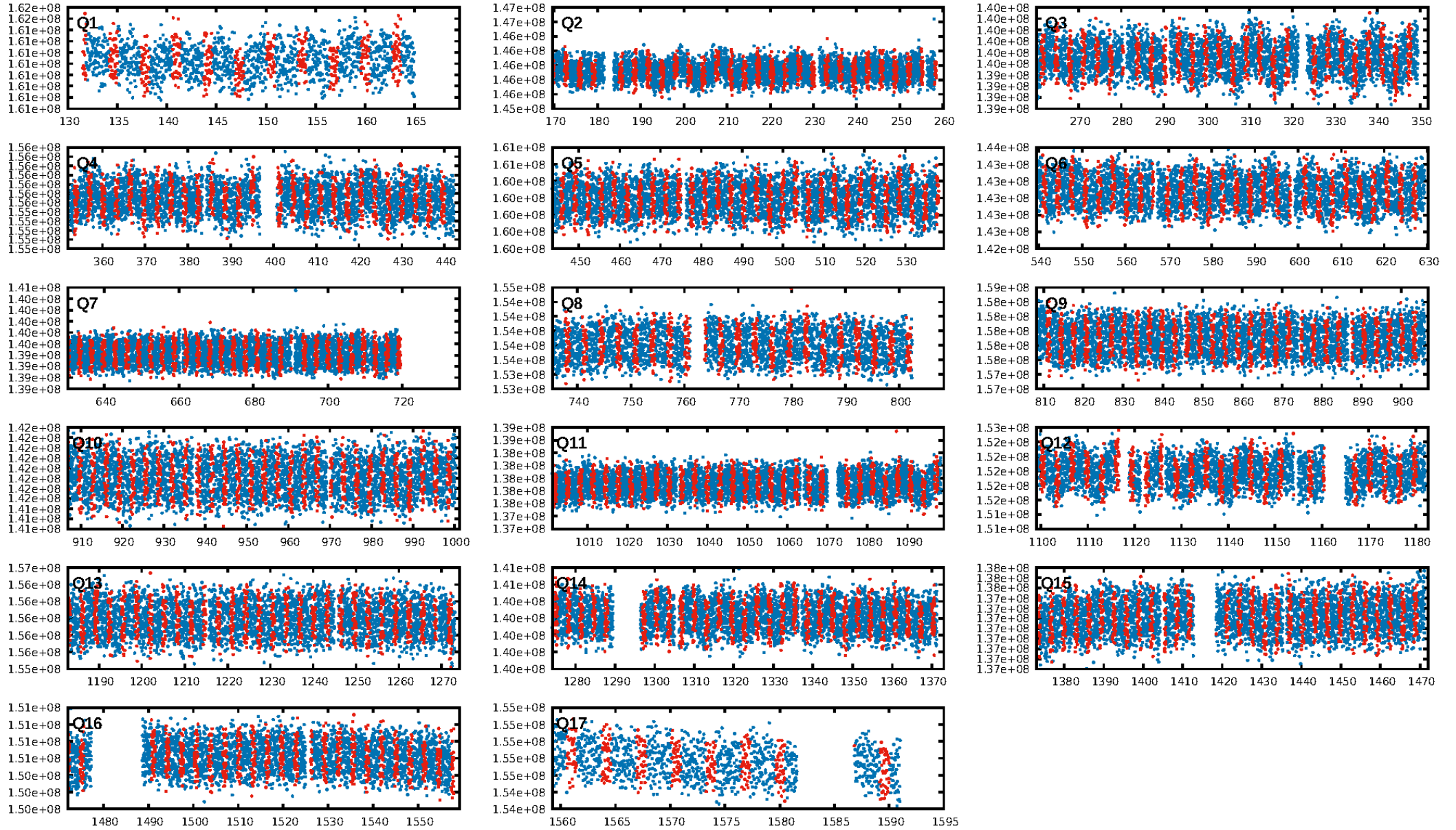
KIC: 6633452 Candidate: 3 of 3 Period: 3.177 d



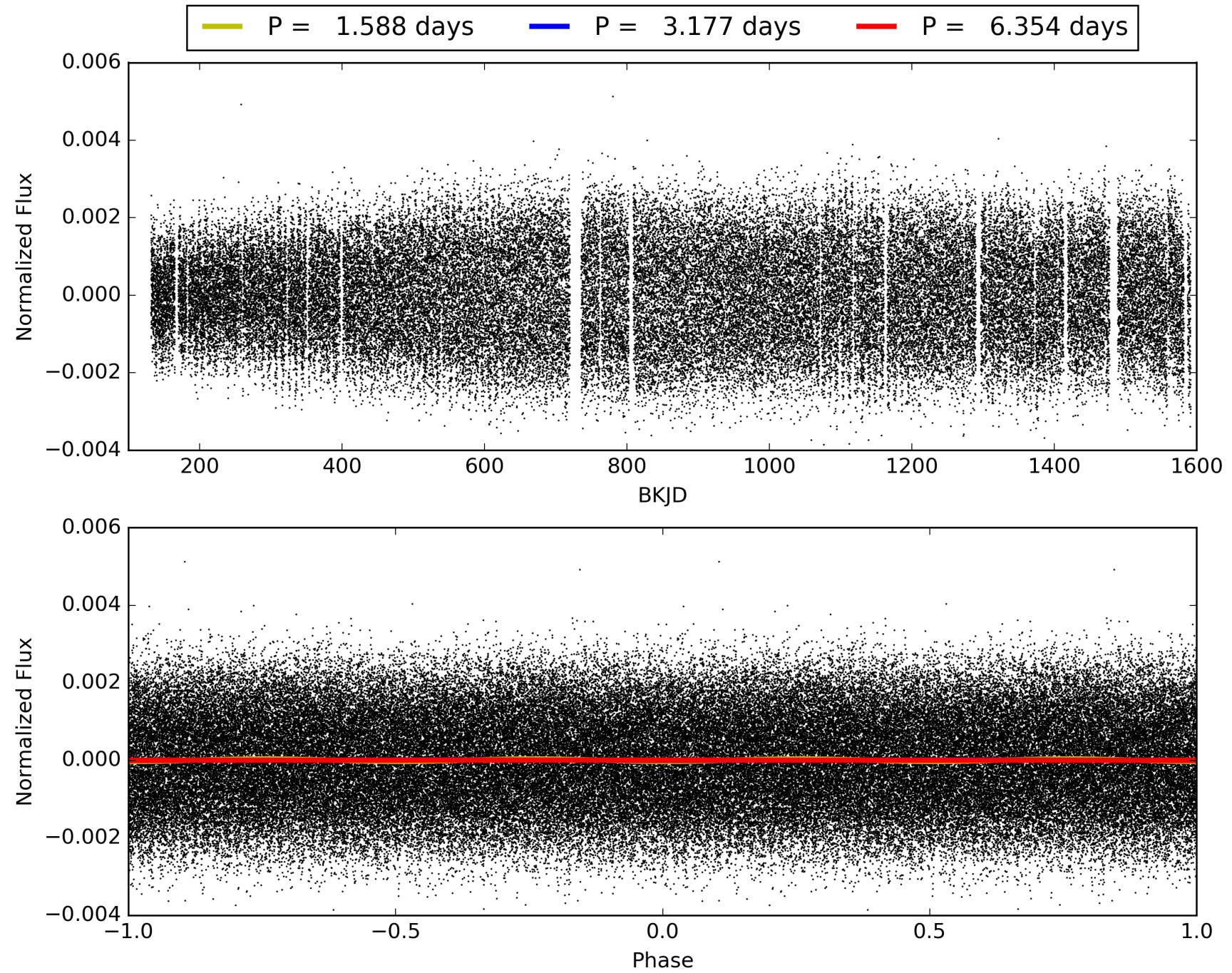
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 16:01:53 Z

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

TCE 006633452-03, PDC Light Curves

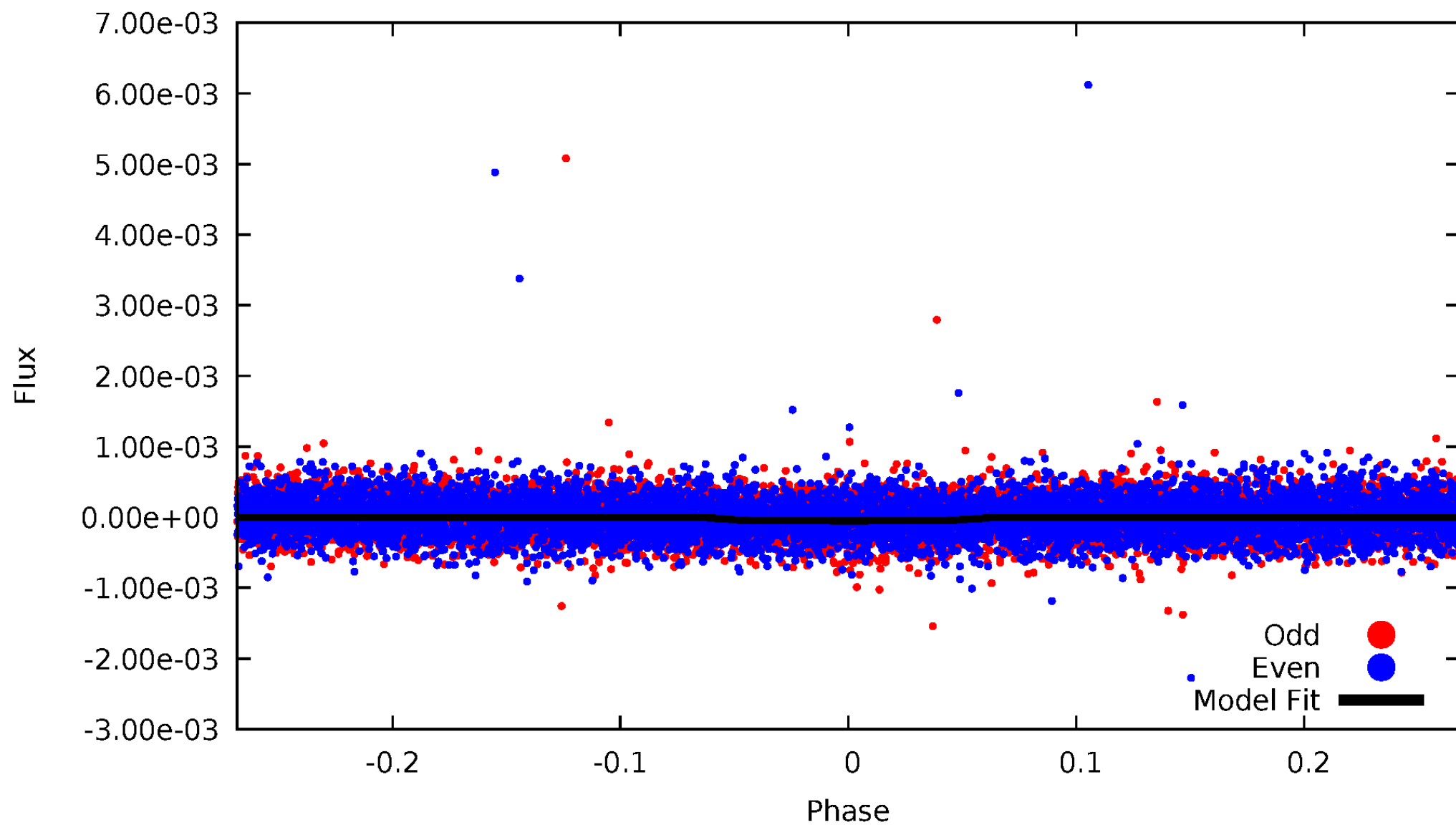


TCE 006633452-03



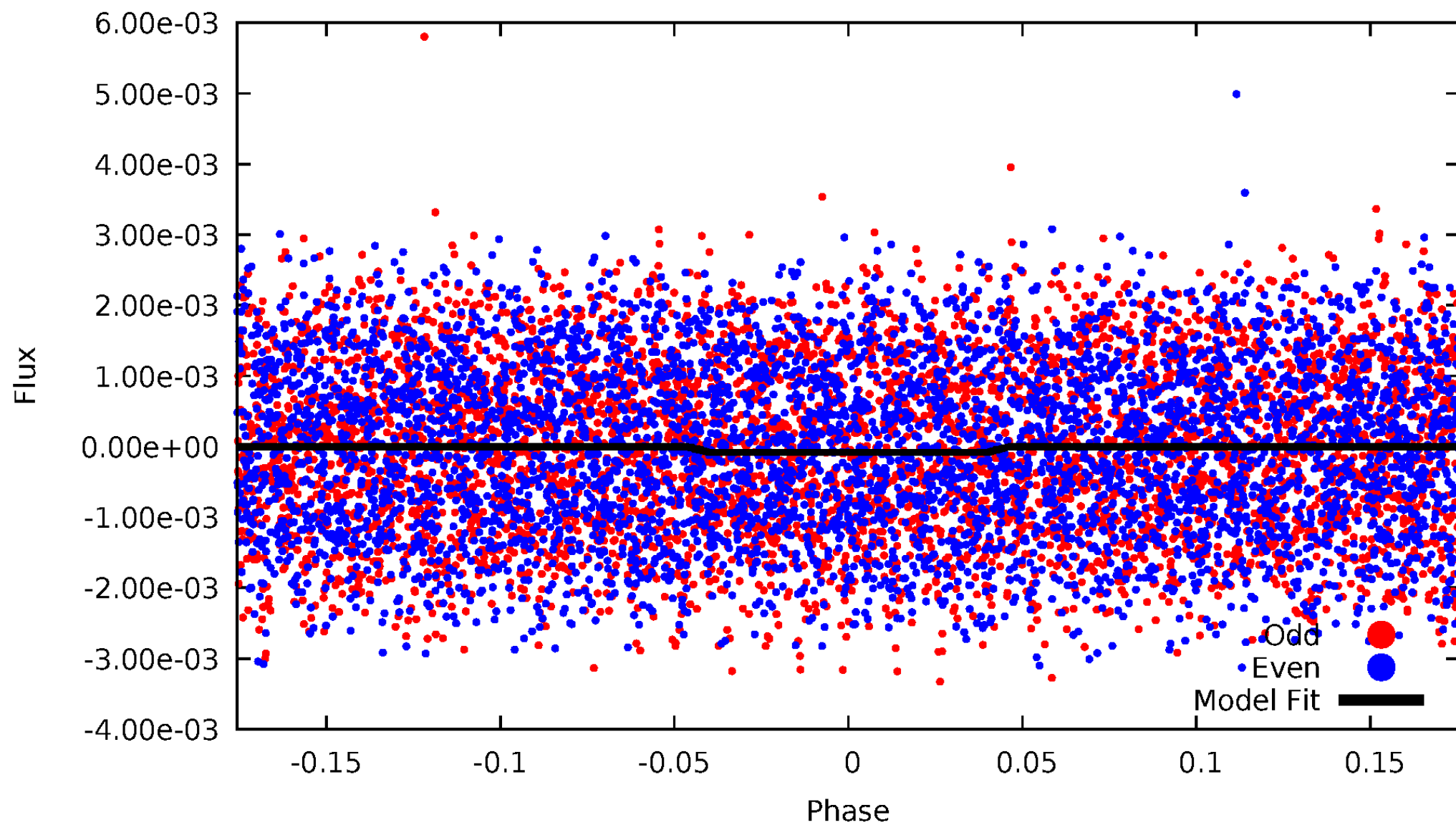
DV Odd/Even

TCE 006633452-03

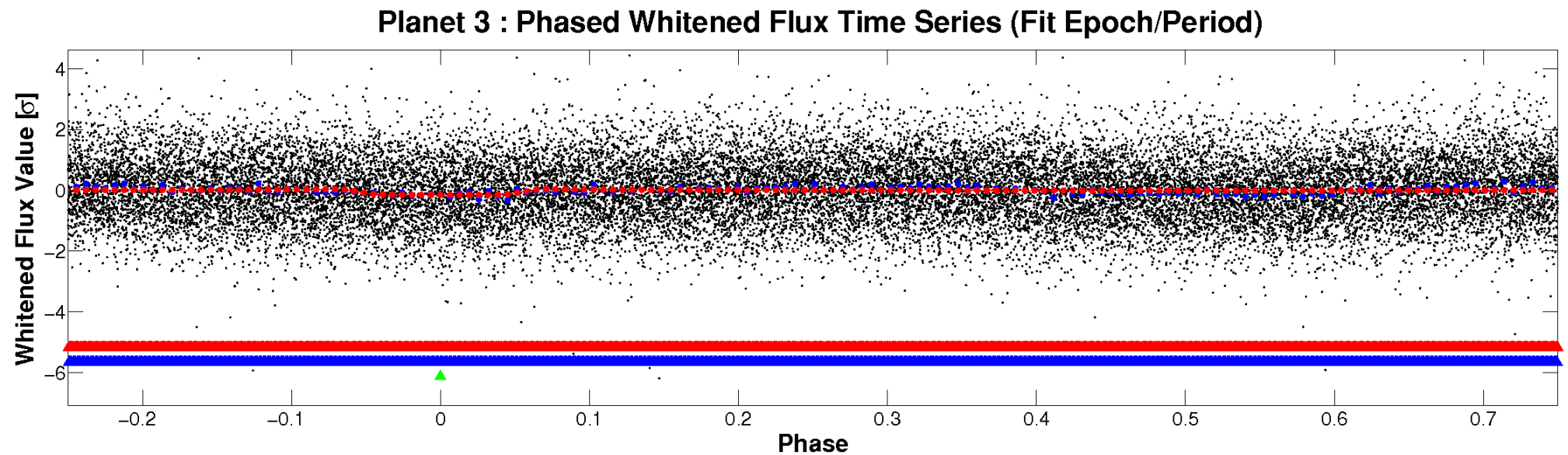
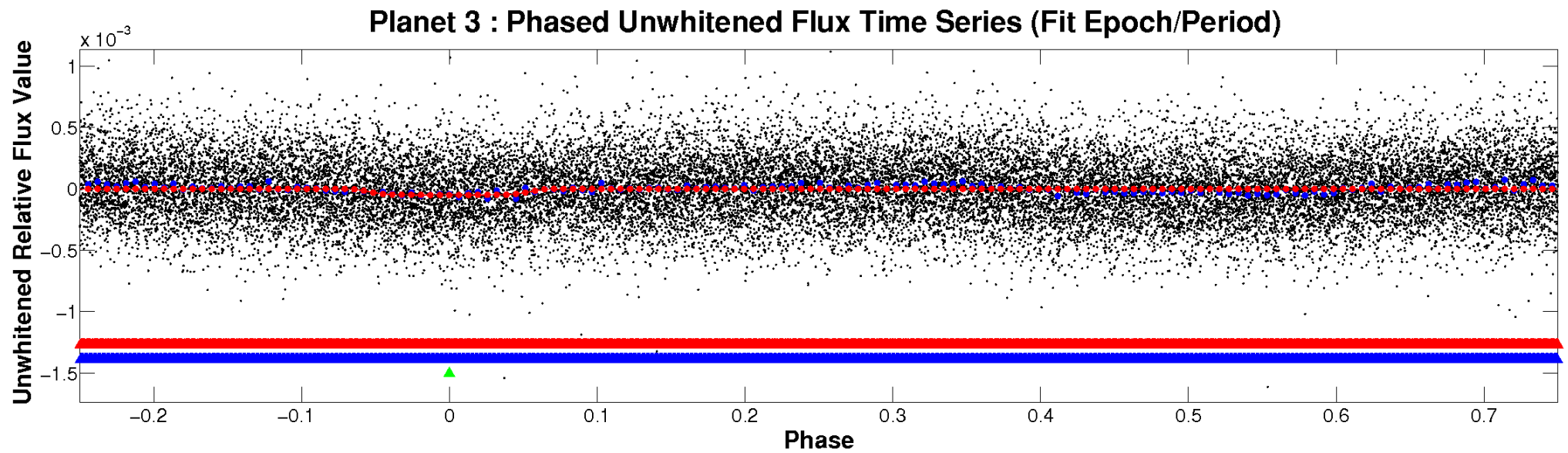


ALT Odd/Even

TCE 006633452-03

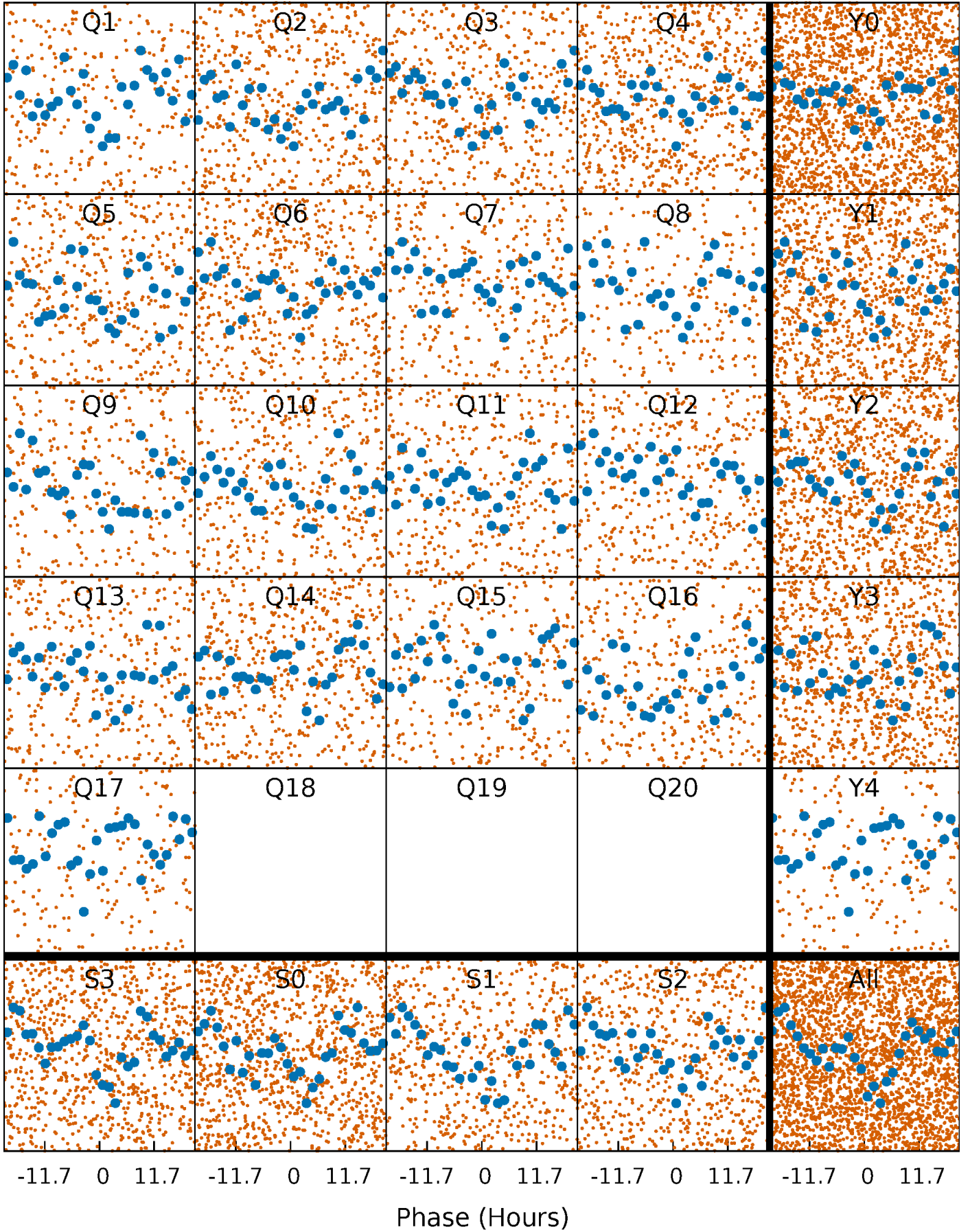


Non-Whitened Vs. Whitened Light Curve



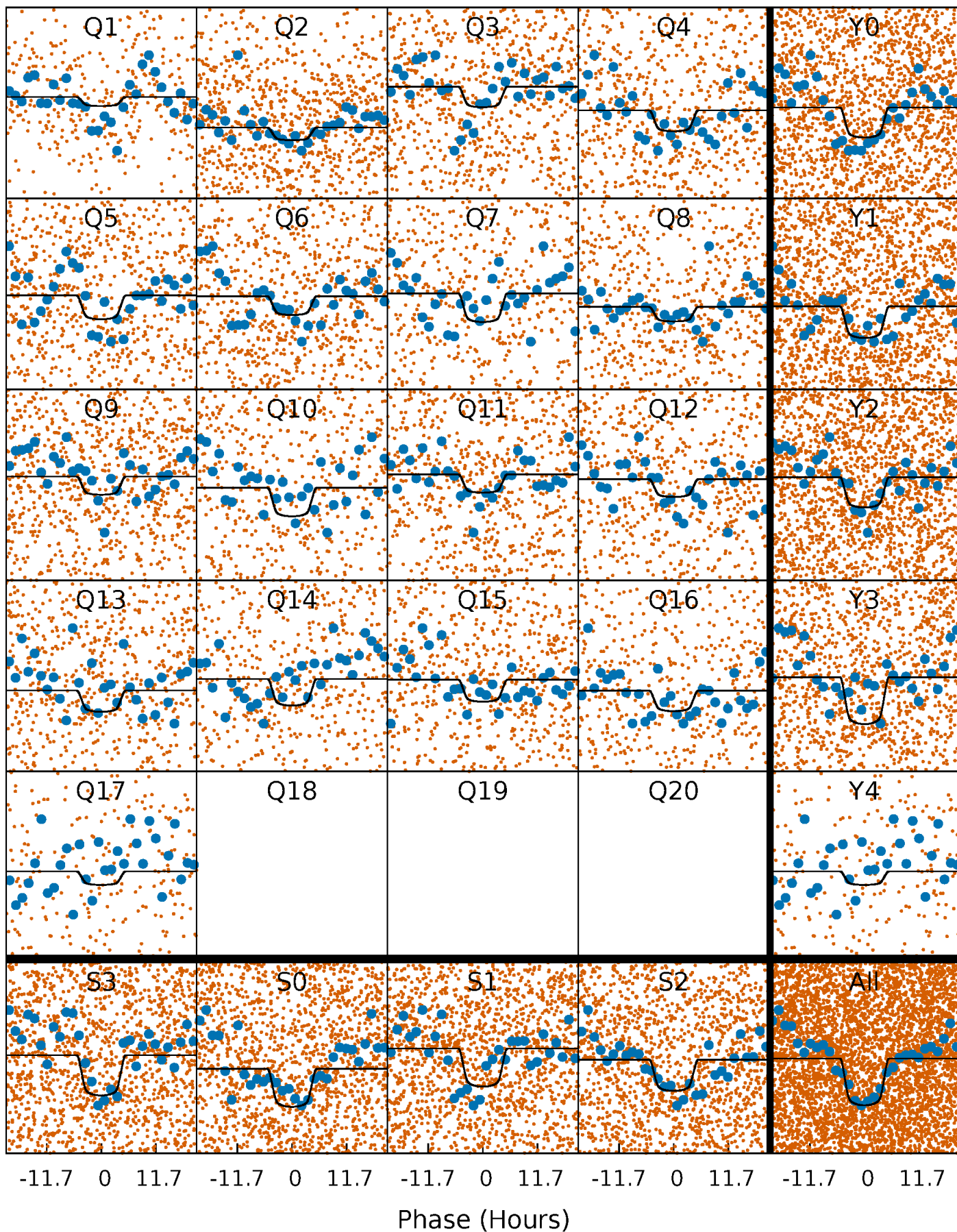
PDC Quarter-Phased Transit Curves

TCE 006633452-03 P= 3.176836 Days $T_0=134.594060$ (BKJD)



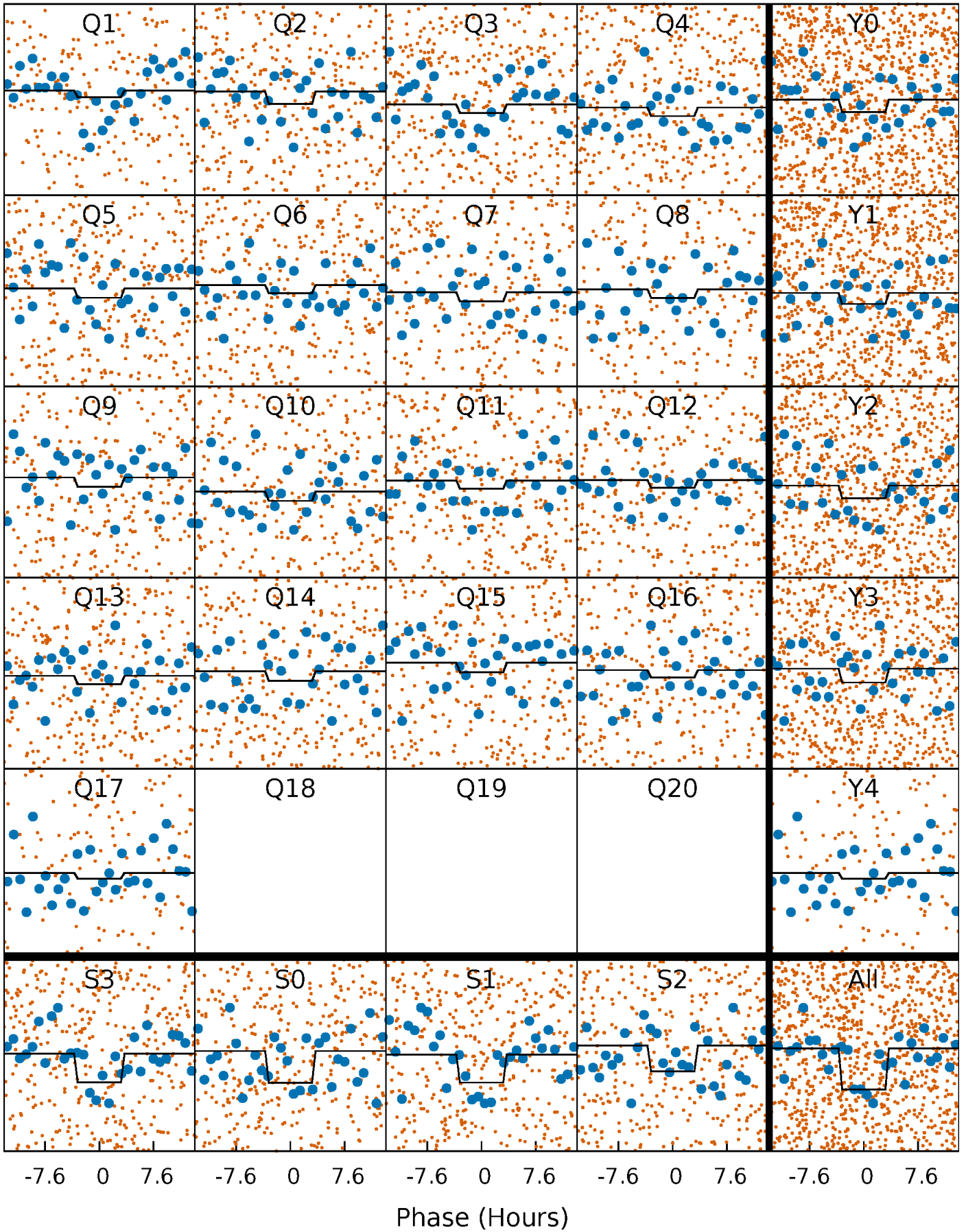
DV Quarter-Phased Transit Curves

TCE 006633452-03 P= 3.176836 Days $T_0=134.594060$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

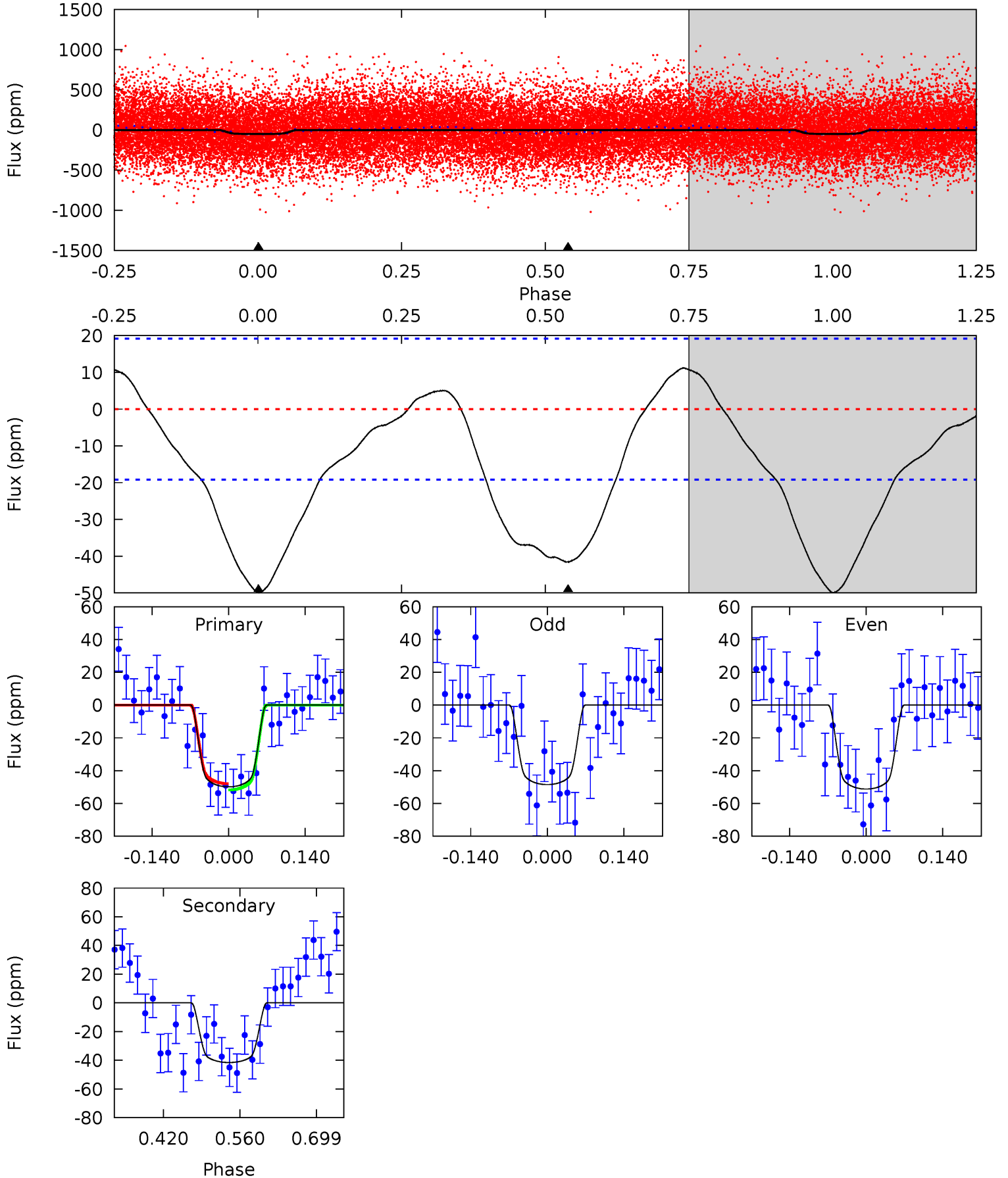
TCE 006633452-03 P= 3.176972 Days $T_0=134.546469$ (BKJD)



DV Model-Shift Uniqueness Test

006633452-03, P = 3.176836 Days, E = 131.417224 Days

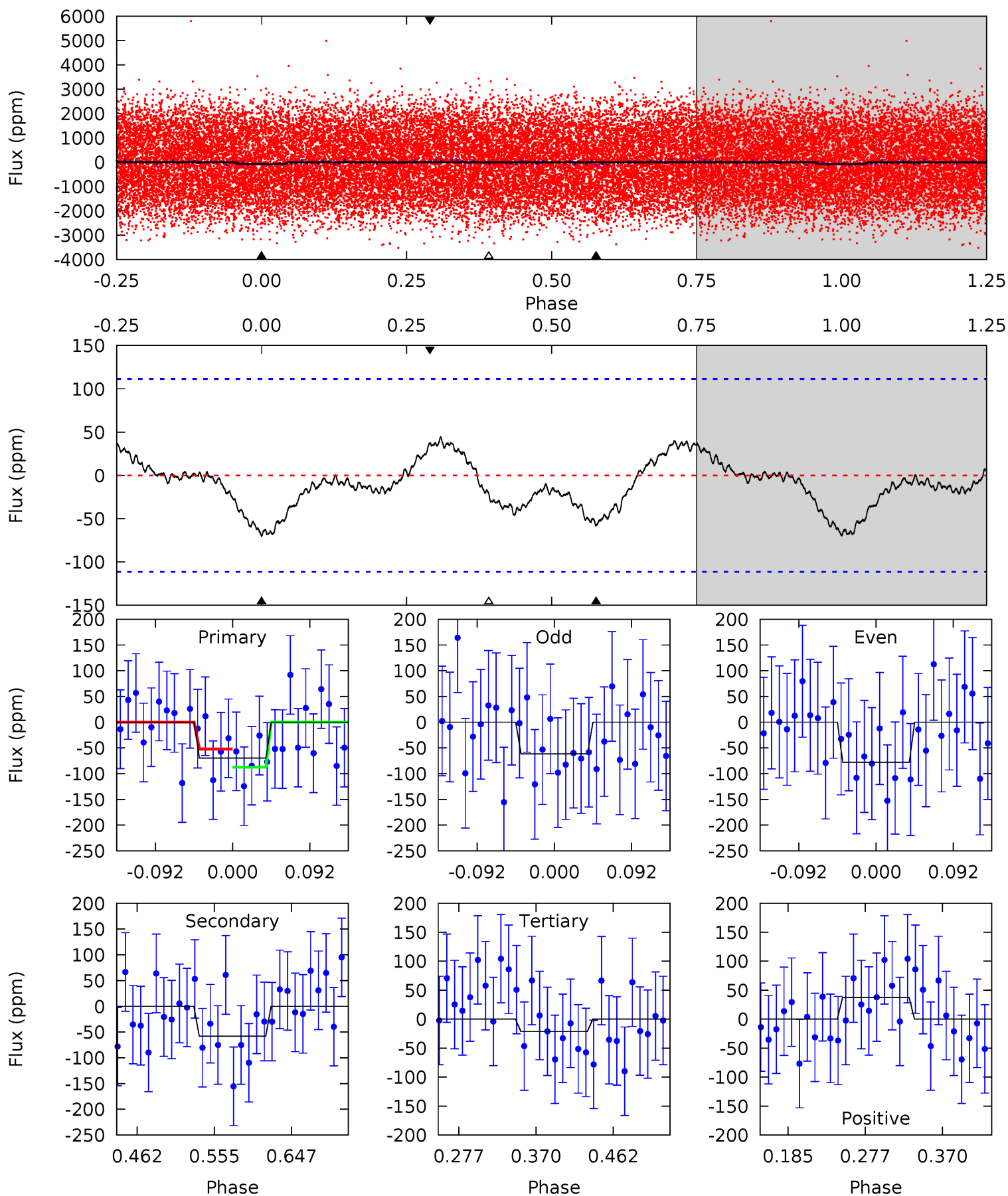
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.7	9.75	0	0	4.49	1.48	1.78	11.7	11.7	9.75	9.75	0.32	1.00	0.18	0.45



Alt Model-Shift Uniqueness Test

006633452-03, P = 3.176972 Days, E = 131.369497 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.87	2.38	0.88	1.55	4.58	1.68	0.92	1.99	1.32	1.50	0.83	0.34	0.74	0.39	0.73



Stellar Parameters For KIC 006633452

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7640^{+211}_{-343}	$4.149^{+0.105}_{-0.195}$	$0.000^{+0.200}_{-0.350}$	$1.789^{+0.532}_{-0.310}$	$1.644^{+0.210}_{-0.257}$	$0.405^{+0.235}_{-0.200}$
	+3%/-4%	+3%/-5%	+inf%/-inf%	+30%/-17%	+13%/-16%	+58%/-50%
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 006633452-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-42 ± 4	$1.66^{+0.33}_{-0.24}$	2839^{+215}_{-188}	6540^{+428}_{-420}	20^{+8}_{-5}
Alt.	-58 ± 24	$1.84^{+0.34}_{-0.24}$	2847^{+216}_{-195}	6758^{+907}_{-964}	23^{+14}_{-11}

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 $A_{obs} \gg 1.0$

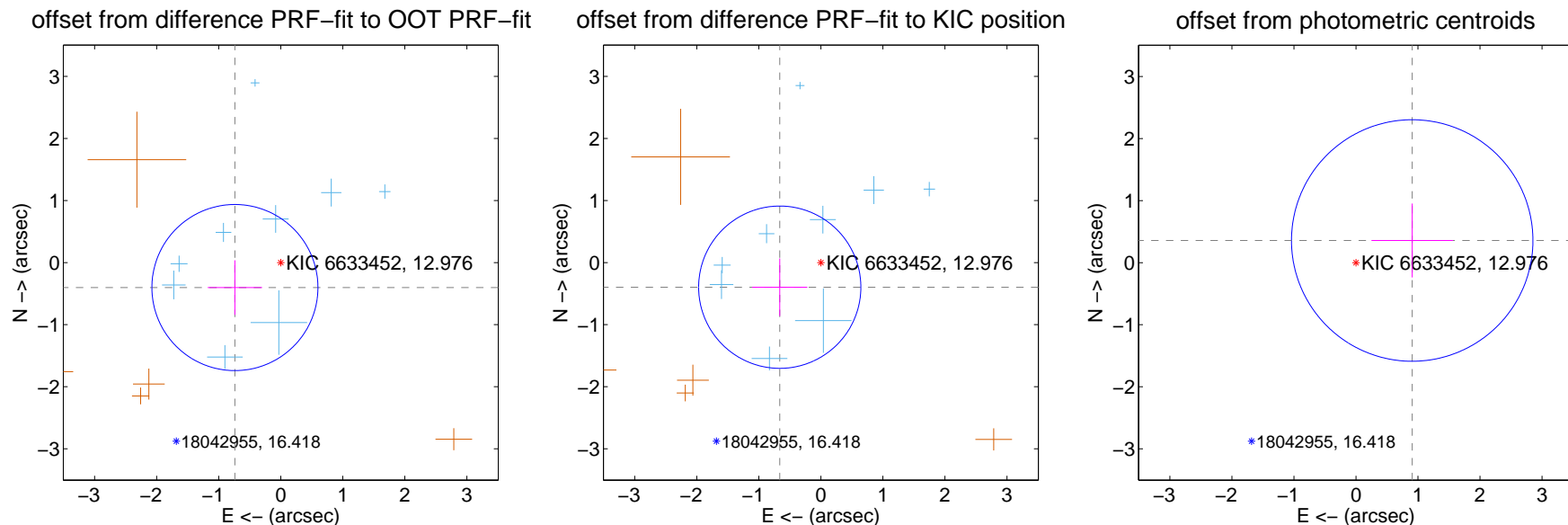
DV Centroid Data

Supplemental centroid analysis for 006633452-03. Kepler magnitude: 12.98. Transit SNR 7.70

There are 9 quarters with good PRF difference image offsets

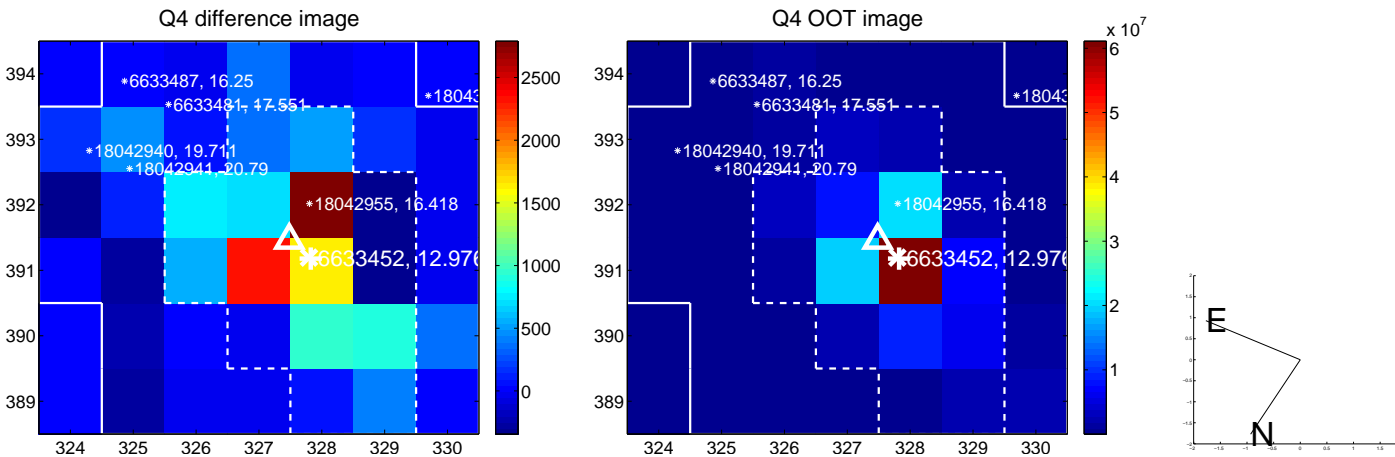
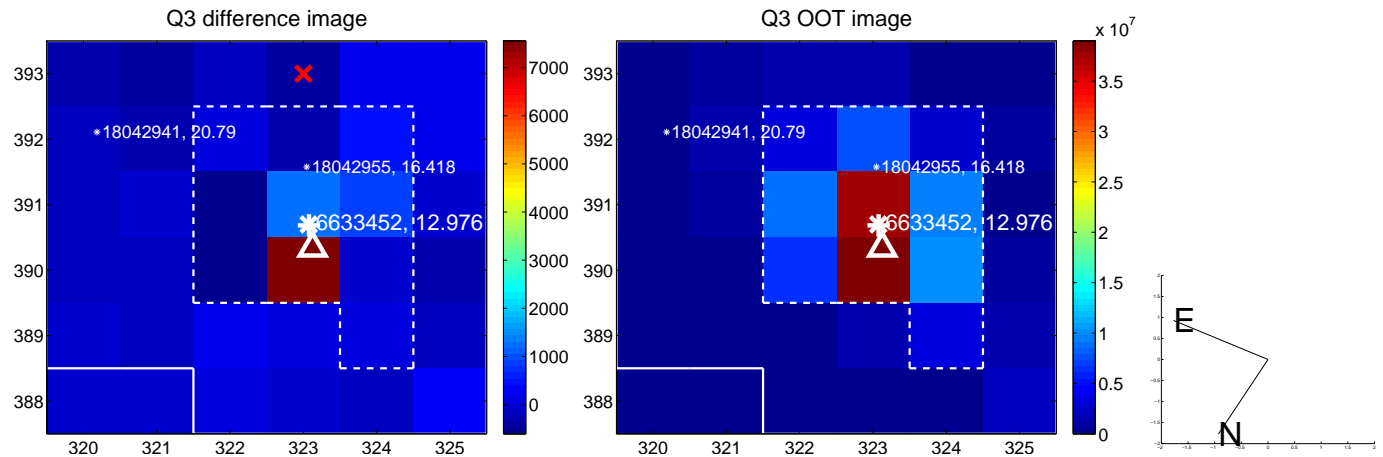
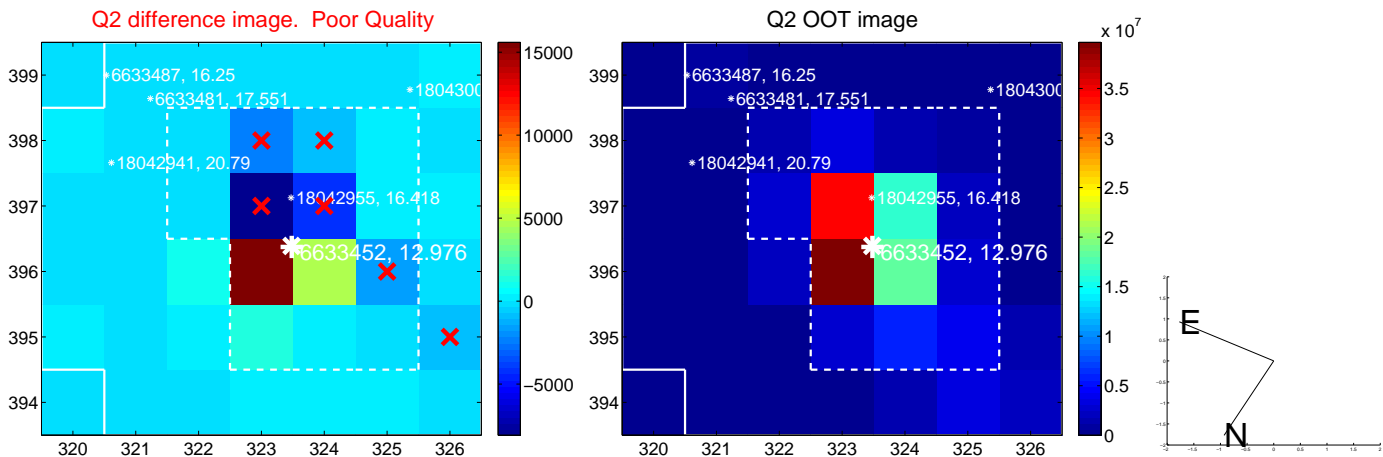
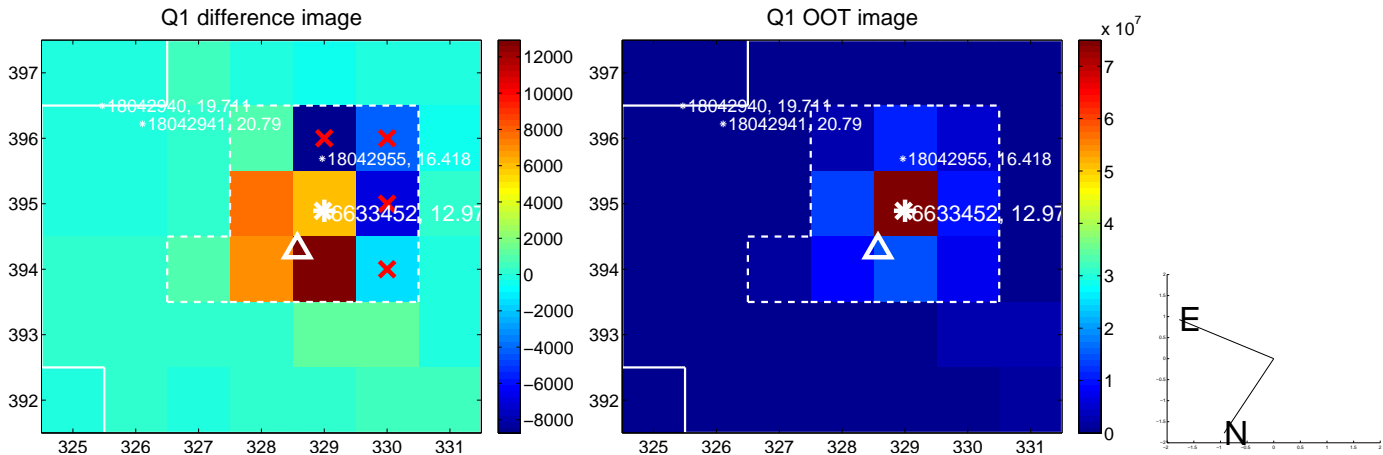
The direct PRF centroid is offset from the target star catalog position by about 0.00 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.841 ± 0.446	1.89	0.739 ± 0.438	-0.402 ± 0.440
PRF-fit source offset from KIC position	0.772 ± 0.436	1.77	0.663 ± 0.445	-0.397 ± 0.464
photometric centroid source offset	0.97 ± 0.65	1.50	-0.91 ± 0.66	0.36 ± 0.60

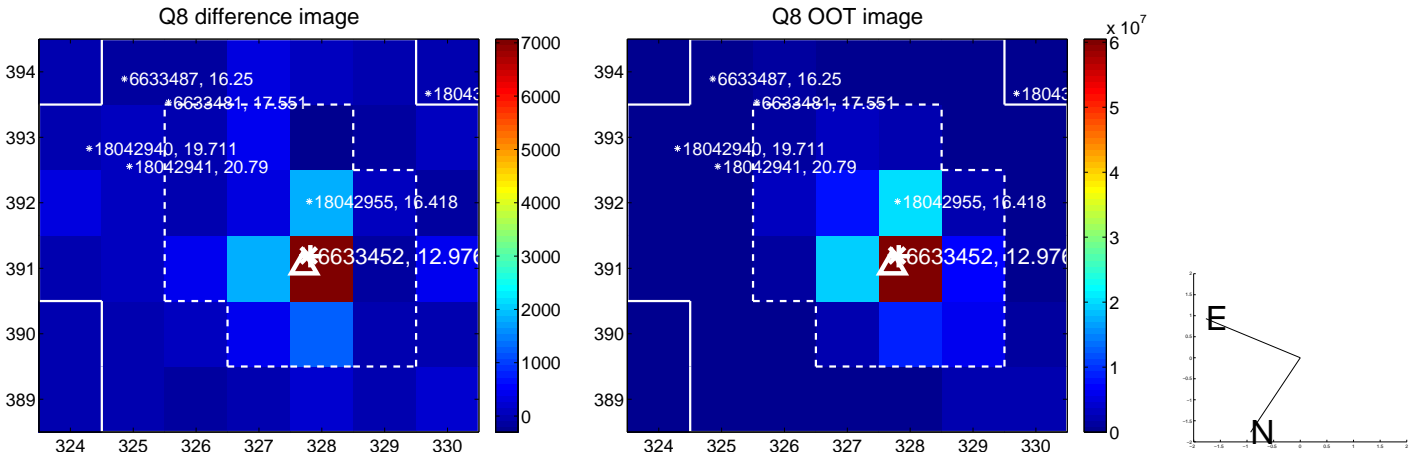
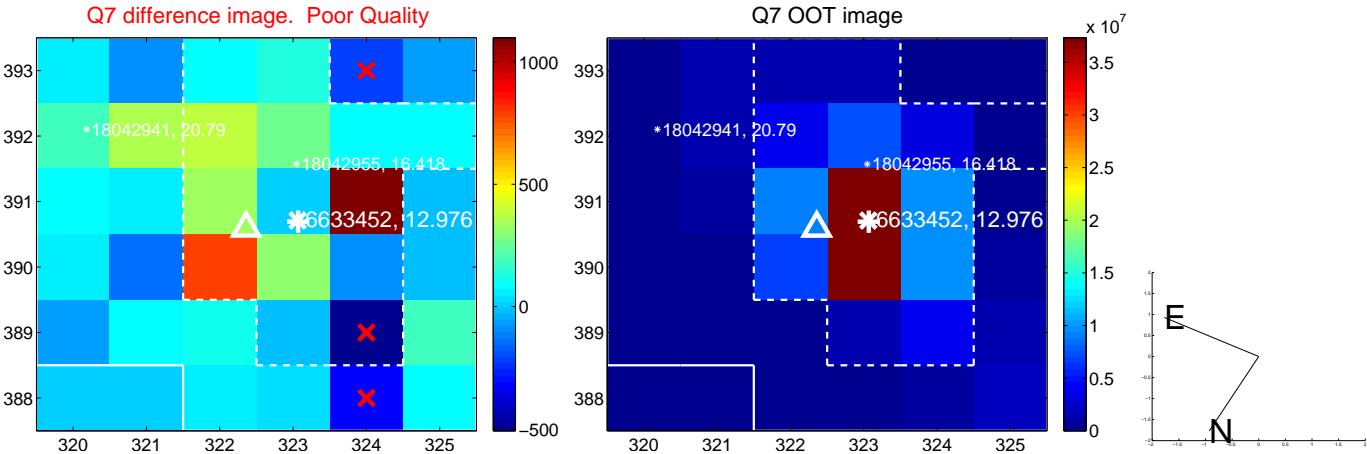
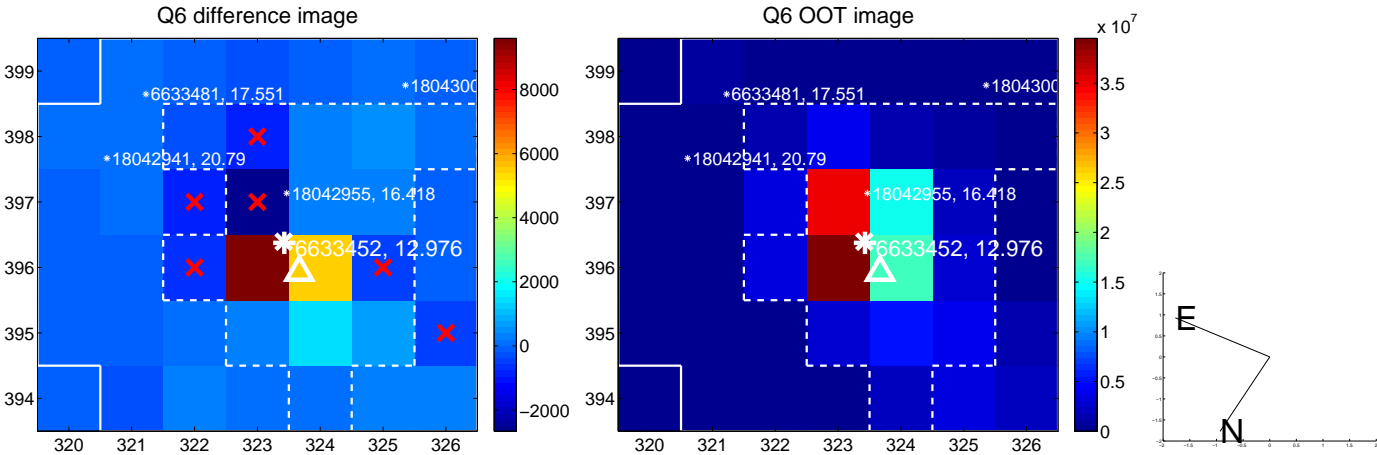
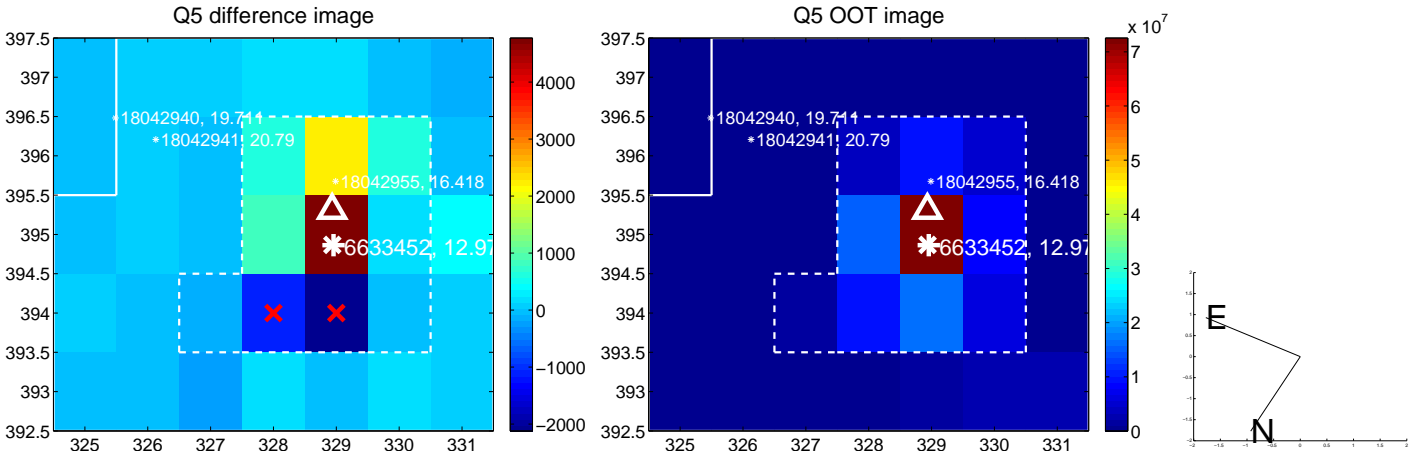


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

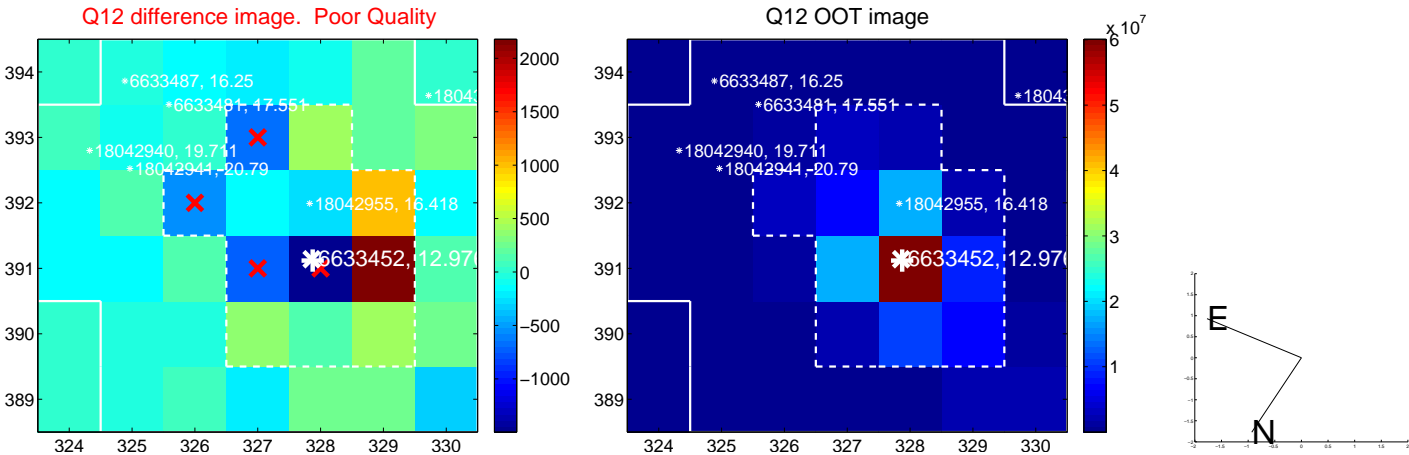
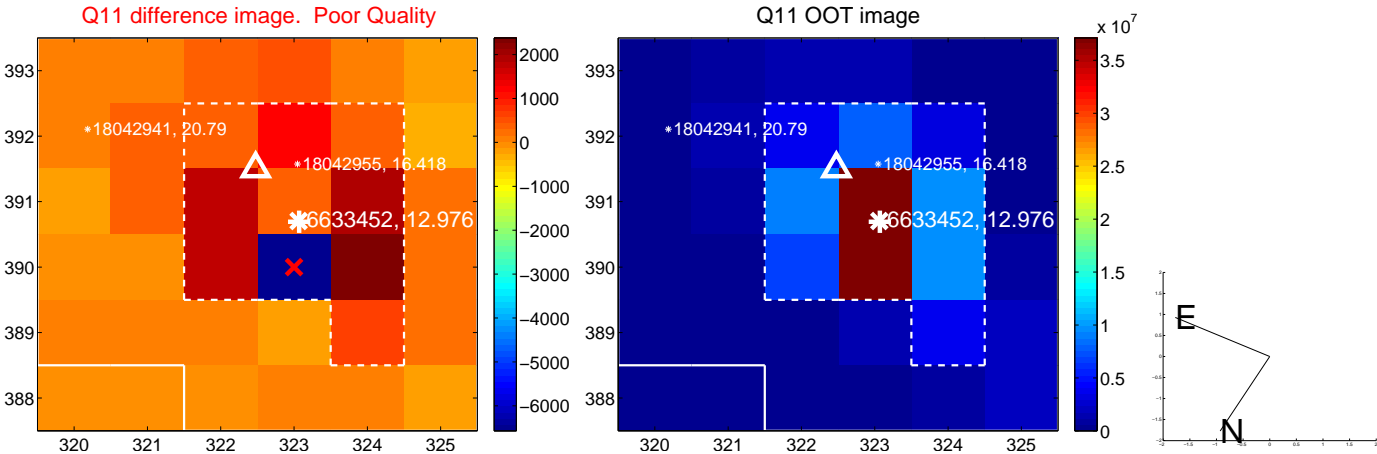
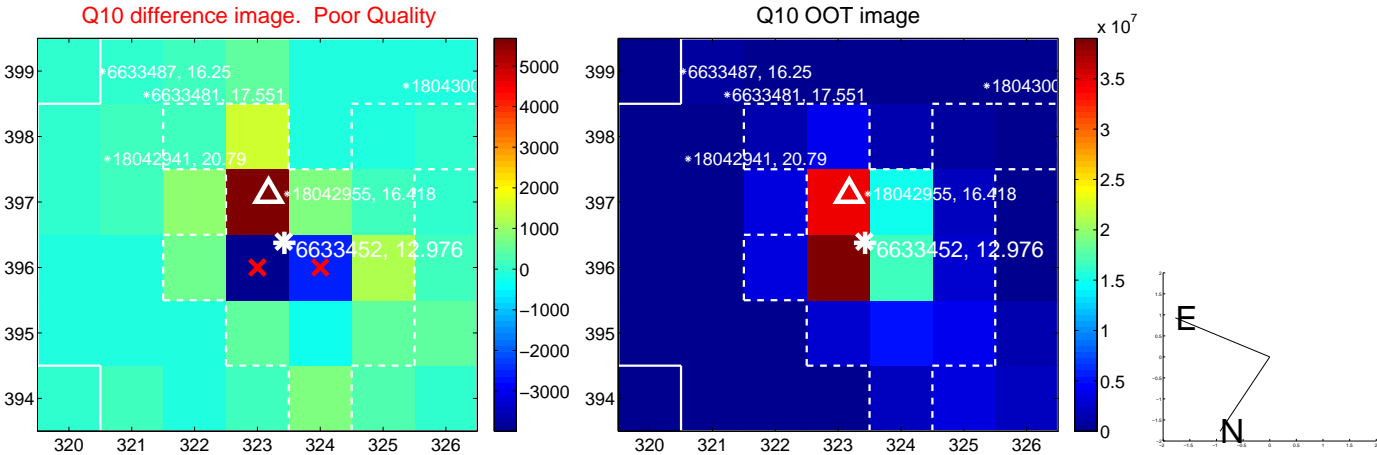
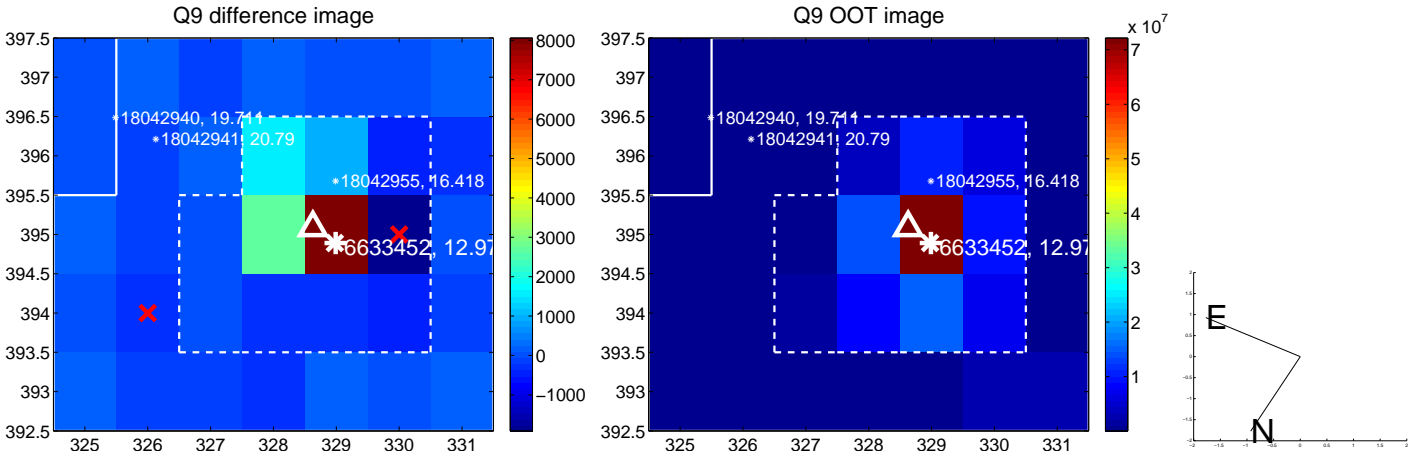
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



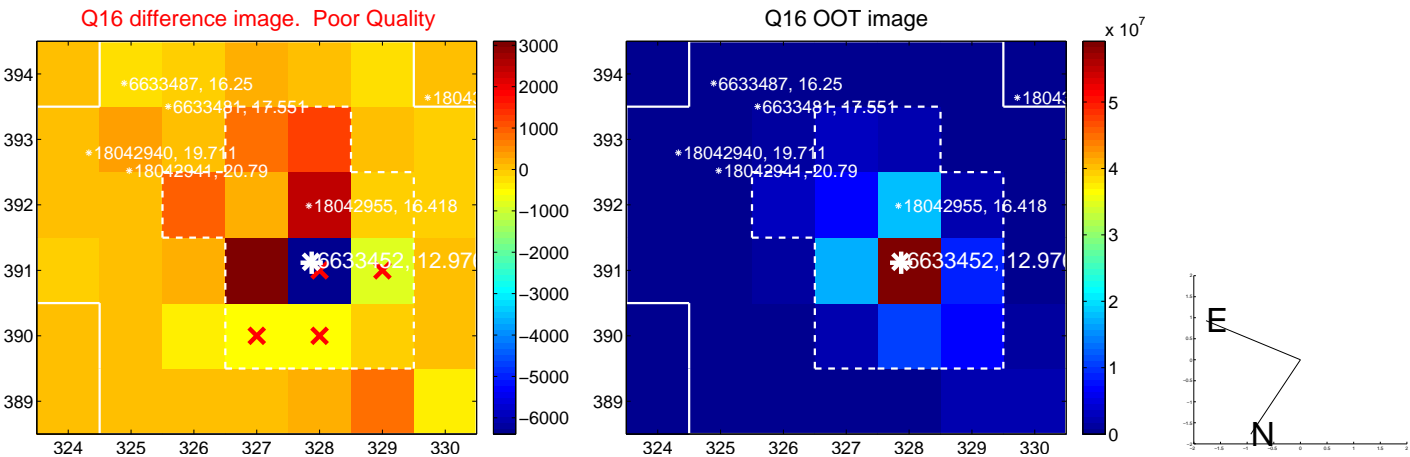
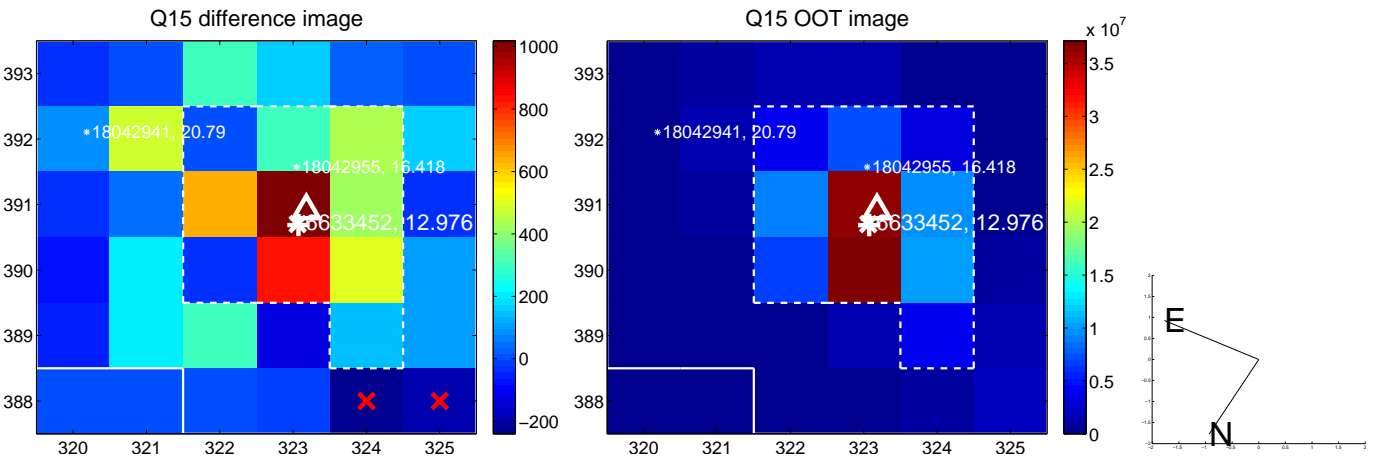
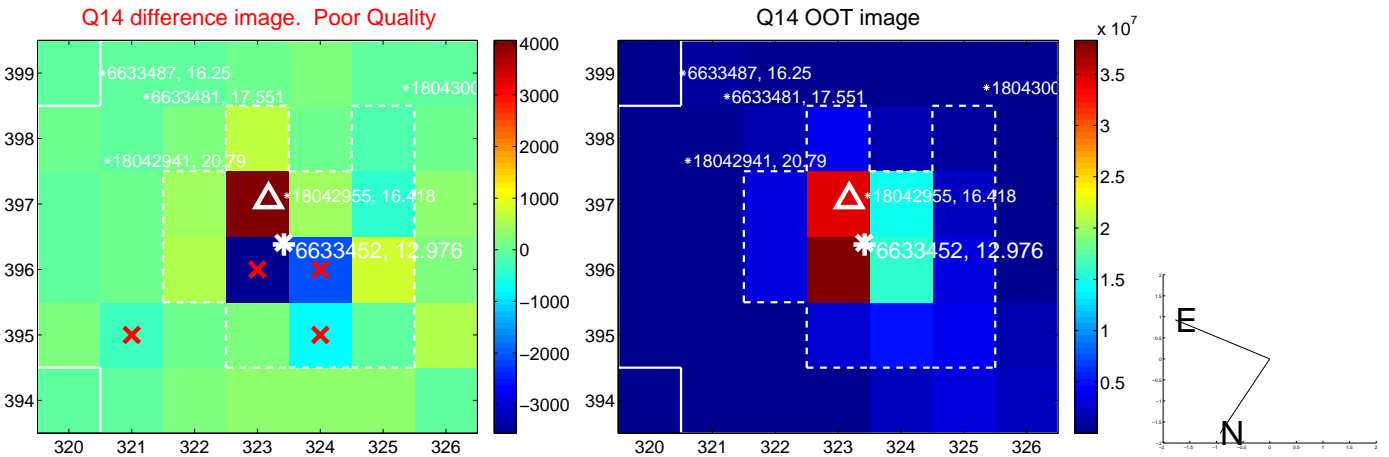
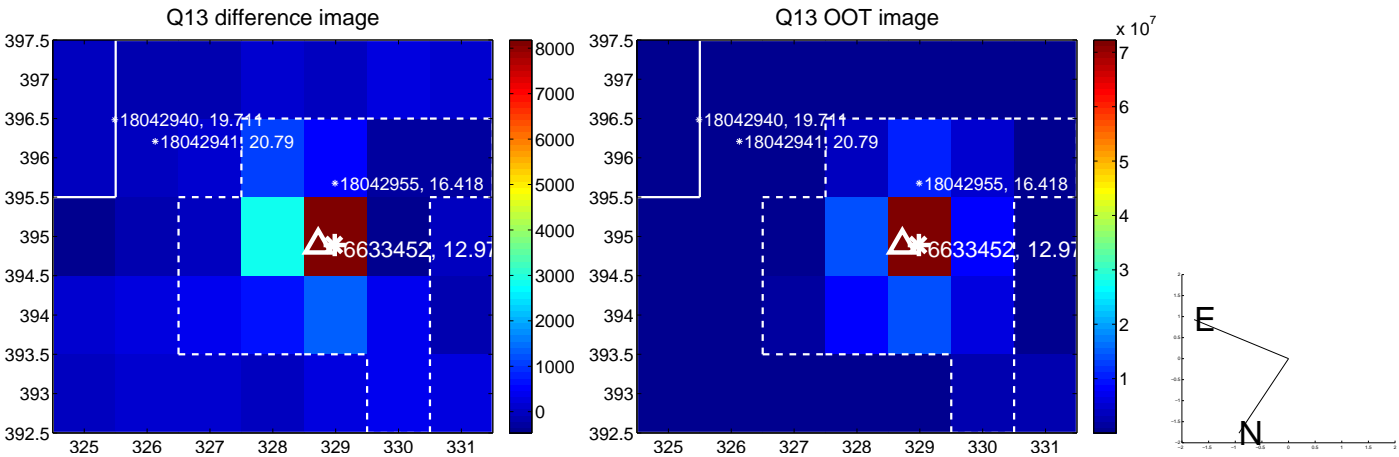
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



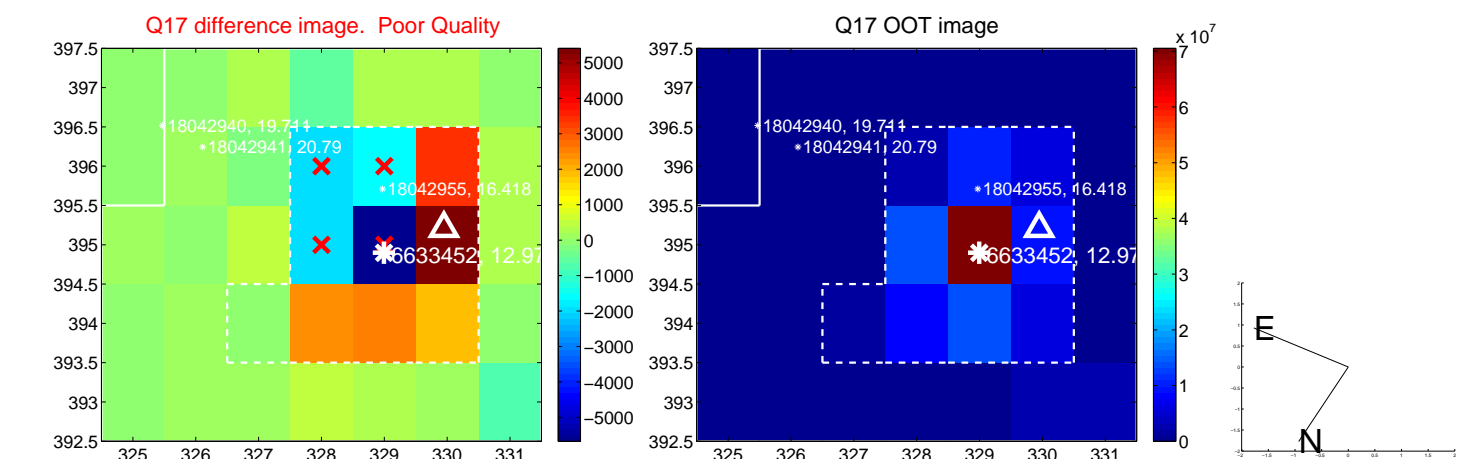
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



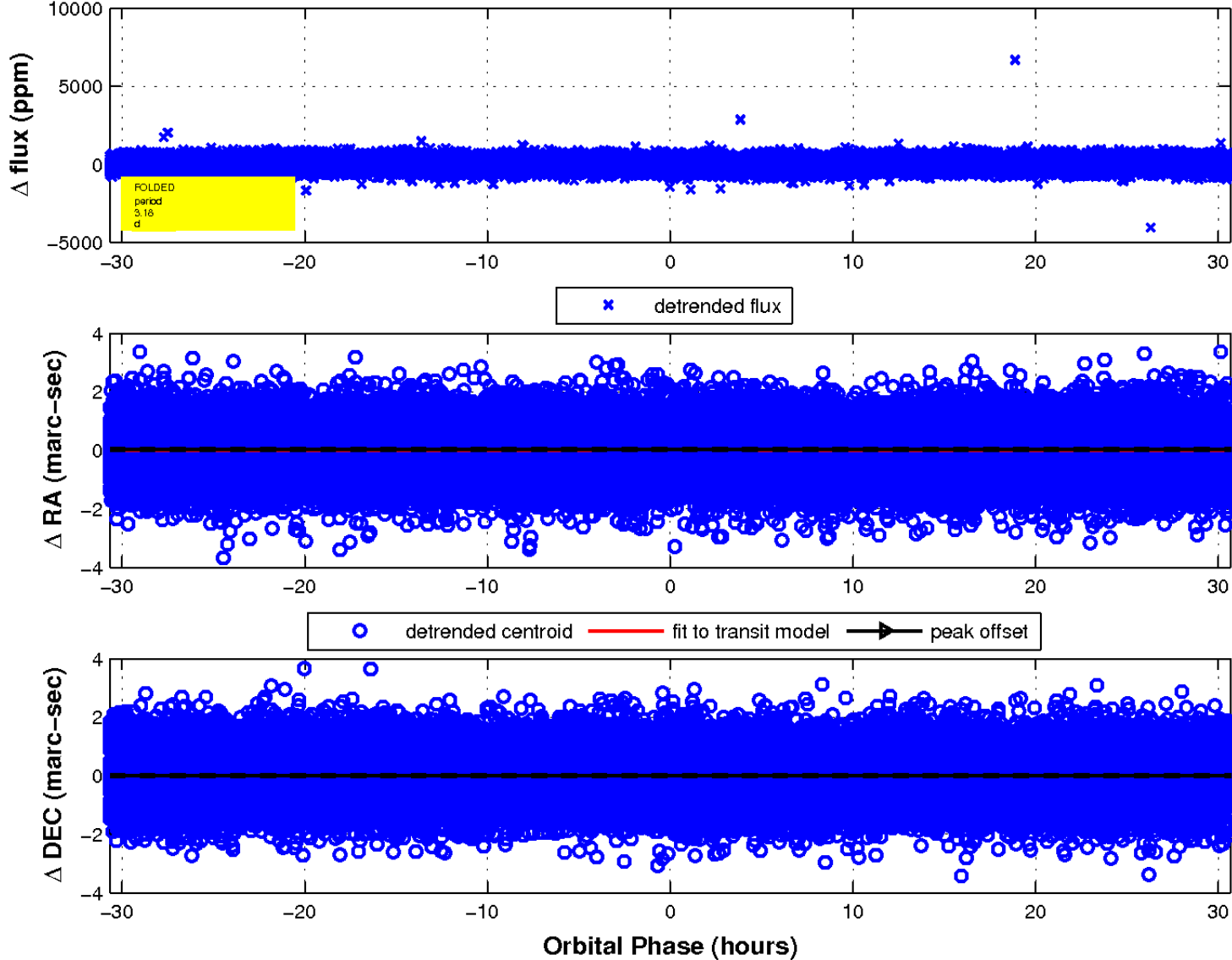
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 3 of 3



UKIRT Image

Declination

