

KIC 007031477

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})
007031477-01	OBS	No	0.566801	131.803901	53.2	3.748	9.5	10.3	0.78	5447	0.61	3306.04
007031477-02	OBS	No	15.269755	136.692603	463.7	2.274	9.1	7.5	0.78	5447	1.88	40.94
007031477-03	OBS	No	39.784727	136.796823	776.3	3.456	8.5	8.6	0.78	5447	4.17	11.42

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007031477-01	OBS	FP	0.00	1	0	1	1	LPP_DV—CENT_KIC_POS—HALO_GHOST—EPHEM_MATCH
007031477-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
007031477-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

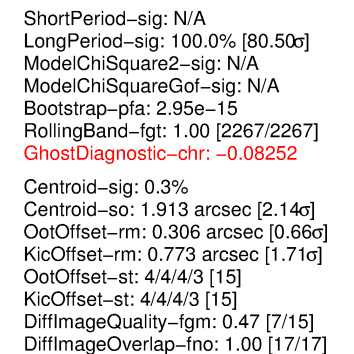
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007031477-01

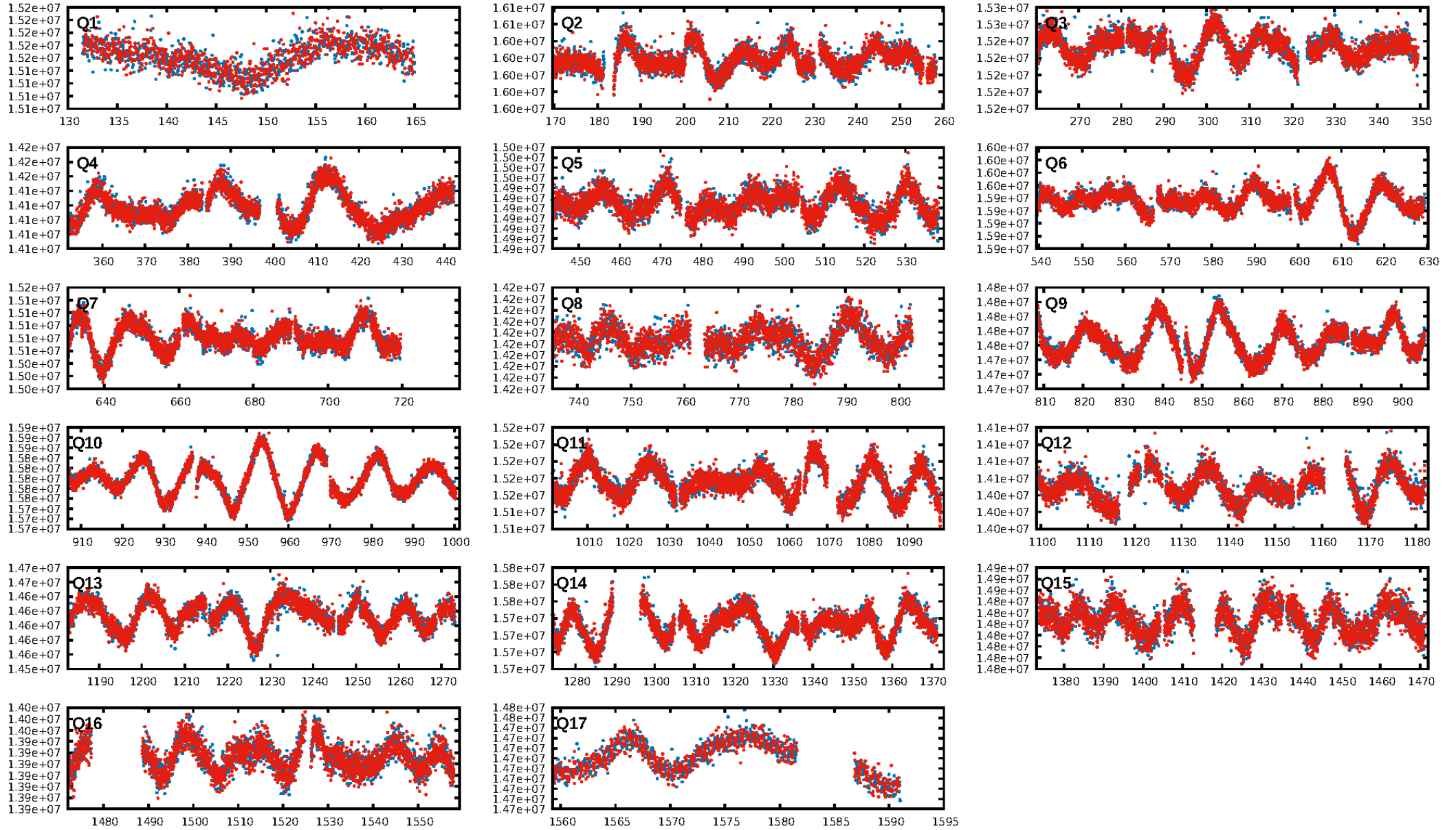
TCE (1)	KIC	Parent (2)	Parent KIC	P ₁ :P ₂	Dist (μ)	Δ Row	Δ Col	m ₂	m ₁	D ₂ /D ₁	Mechanism	Flag	σ_P	σ_T
007031477-01	7031477	RR-Lyr-pri	7198959	1:1	1142.3	98	-271	7.86	15.49	11760.00	Direct-PRF	0	0.66	21.02

Notes: P₁:P₂ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m₂ and m₁ are the magnitudes of the parent and child. D₂/D₁ is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

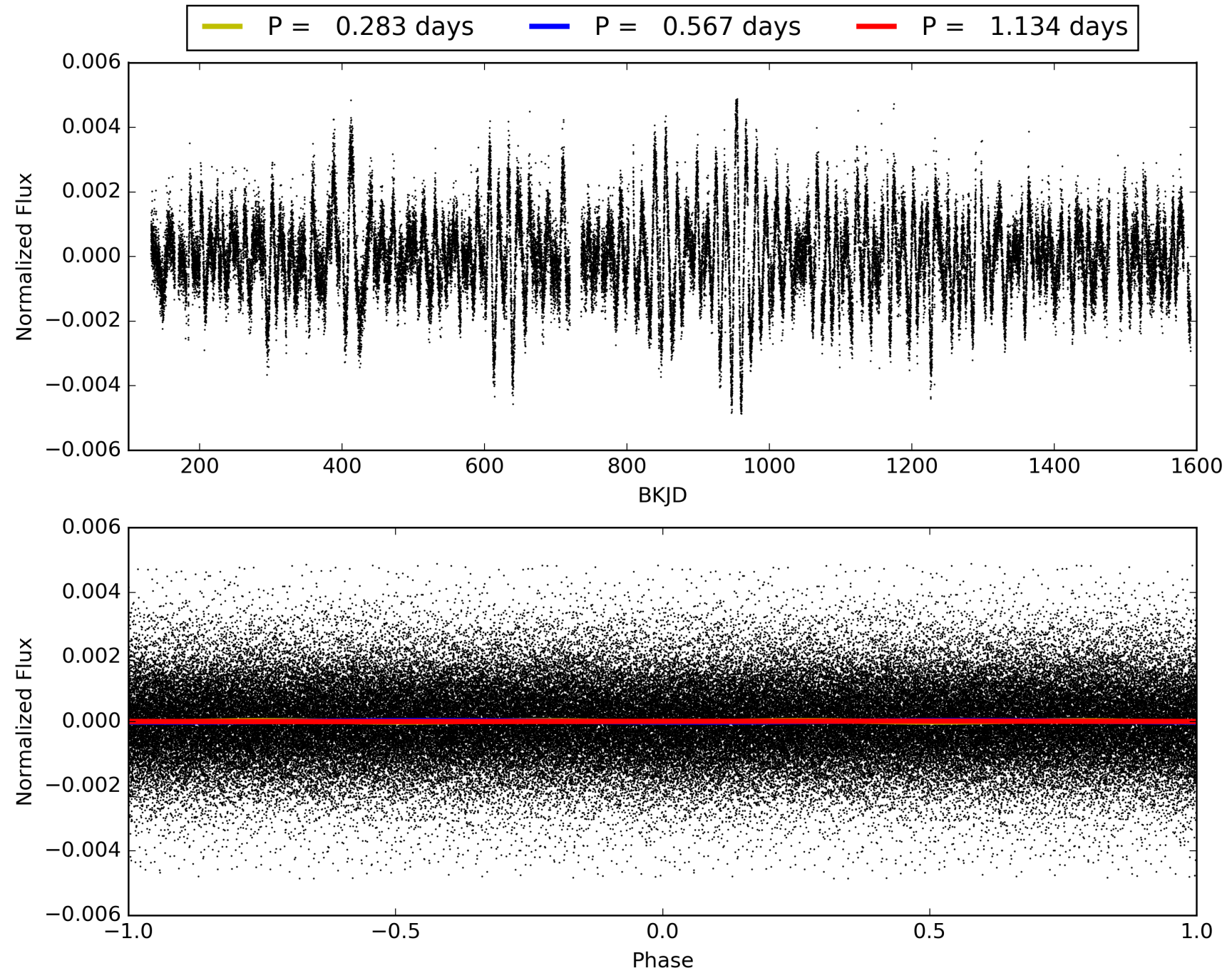
KIC: 7031477 Candidate: 1 of 3 Period: 0.567 d



TCE 007031477-01, PDC Light Curves

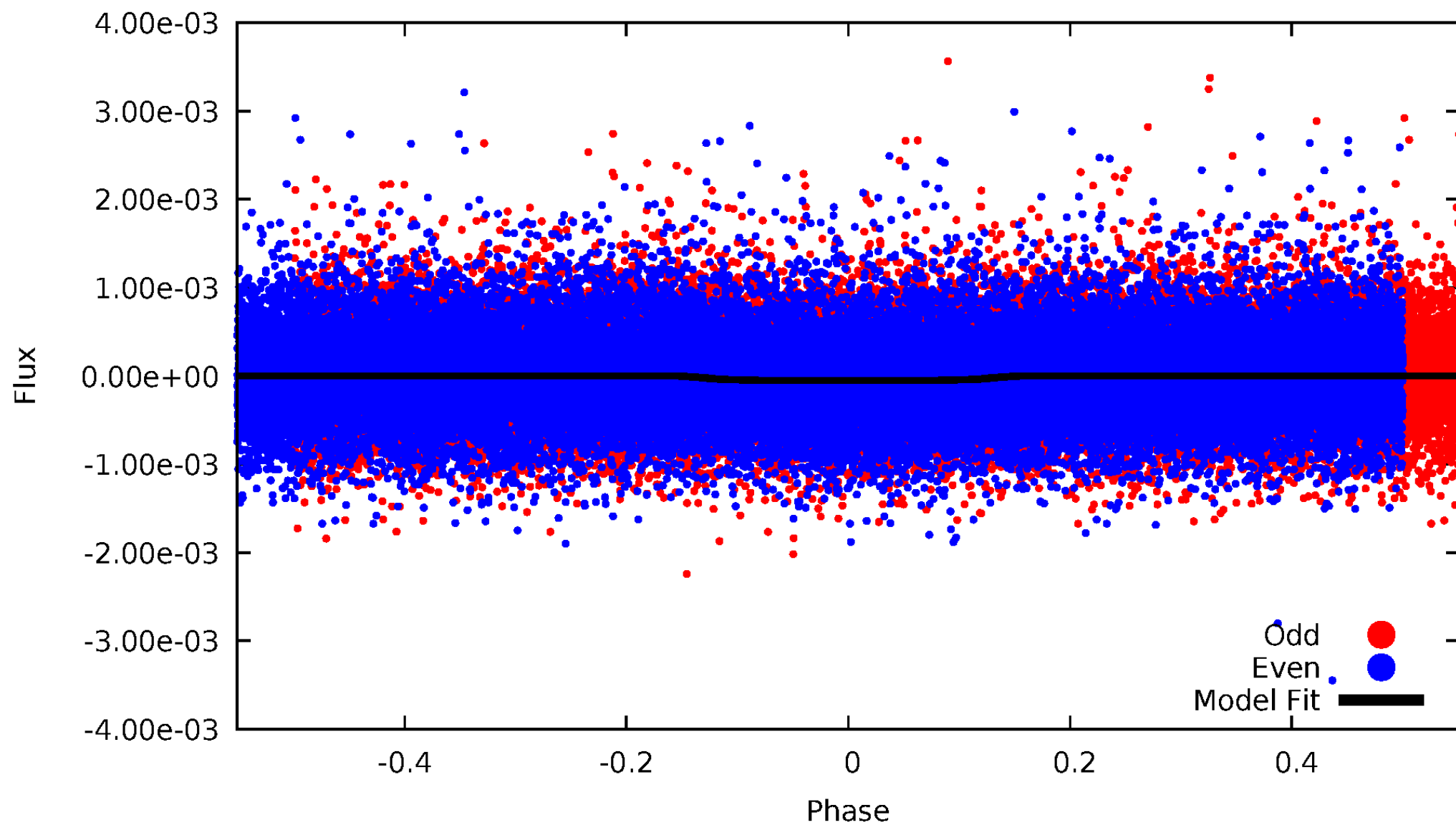


TCE 007031477-01



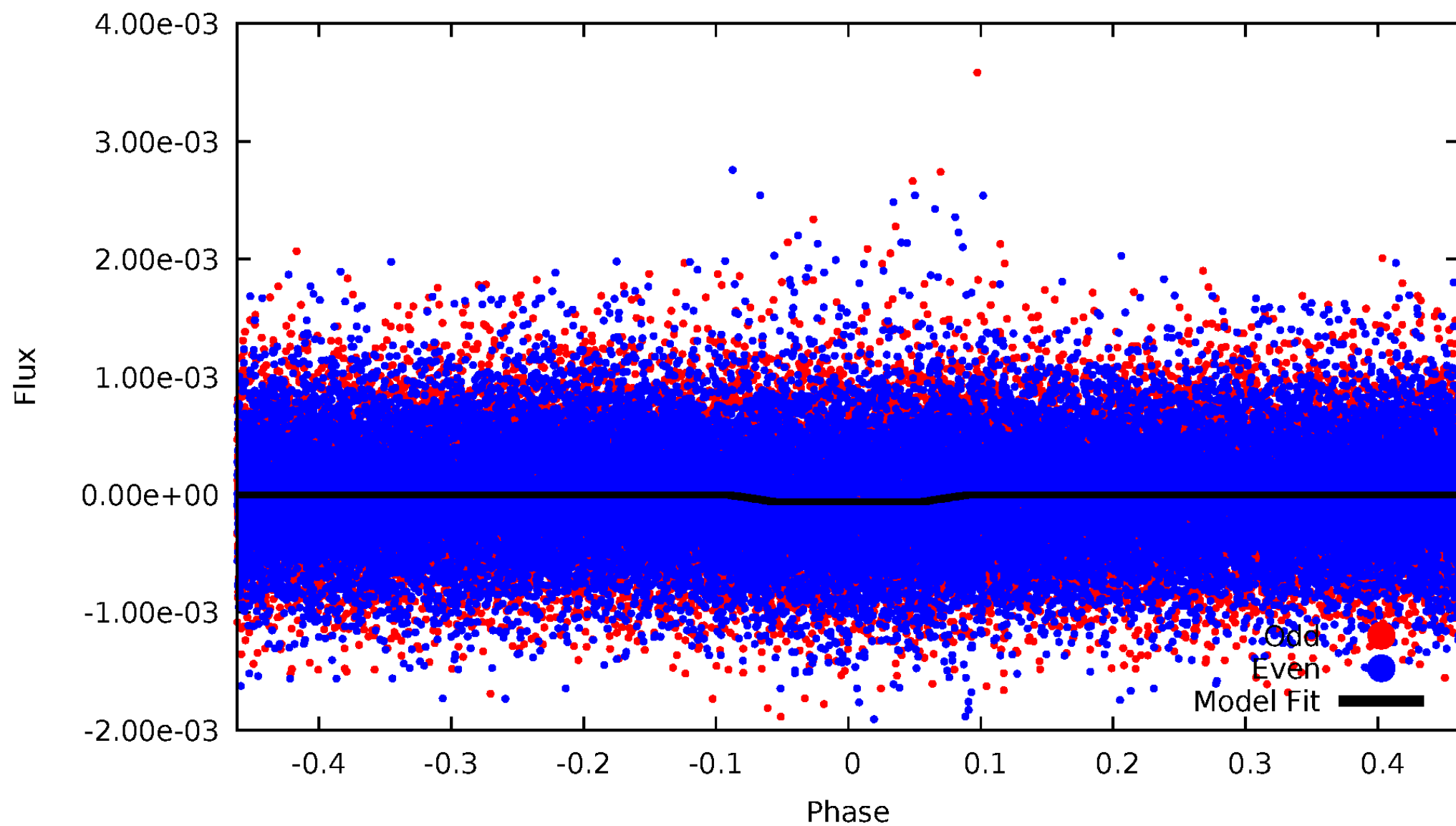
DV Odd/Even

TCE 007031477-01



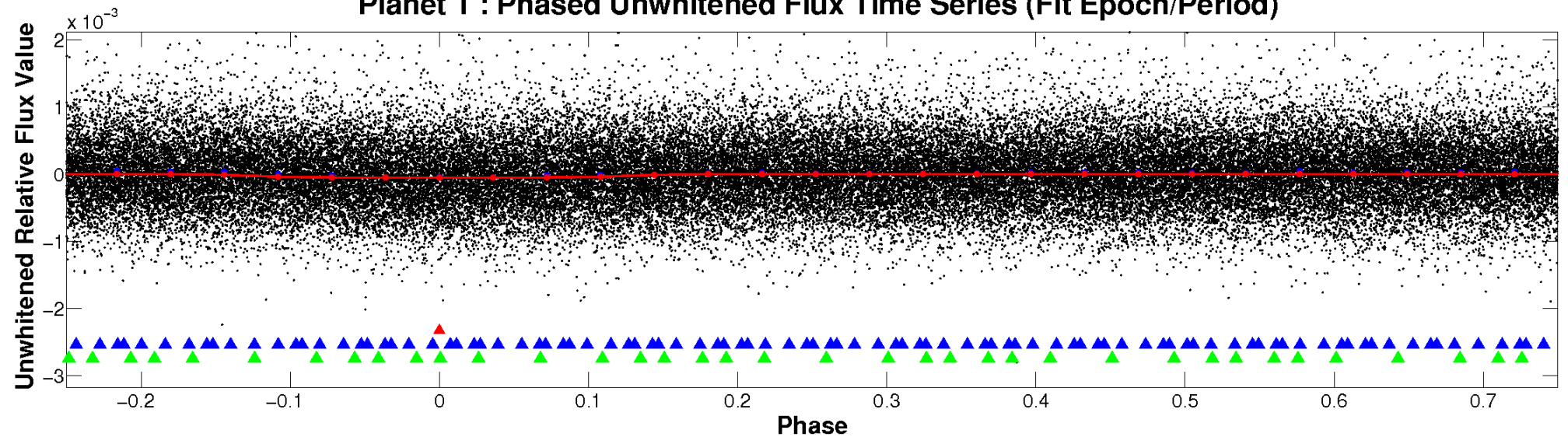
ALT Odd/Even

TCE 007031477-01

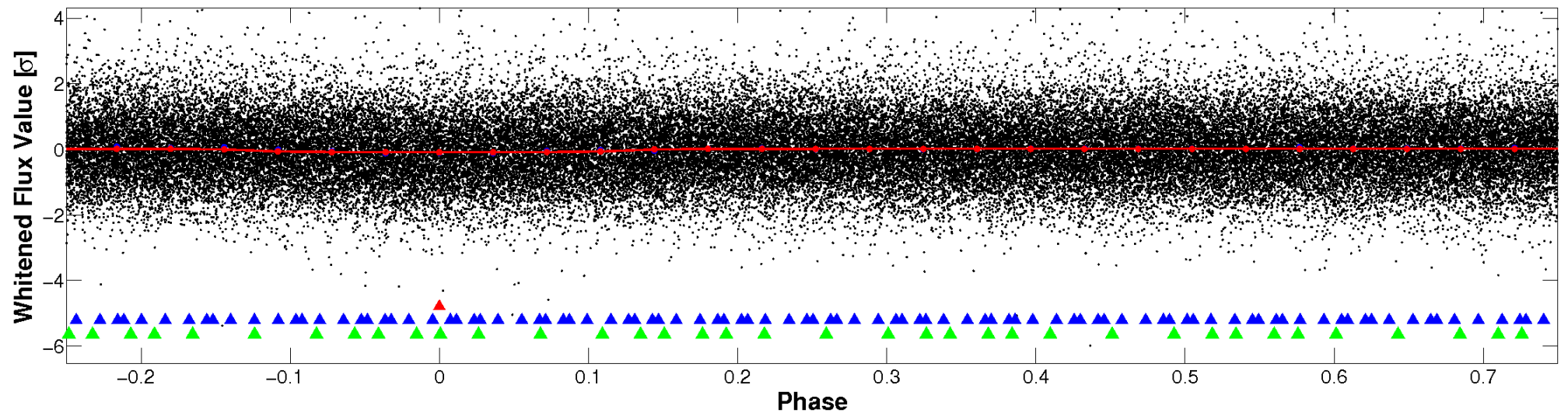


Non-Whitened Vs. Whitened Light Curve

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

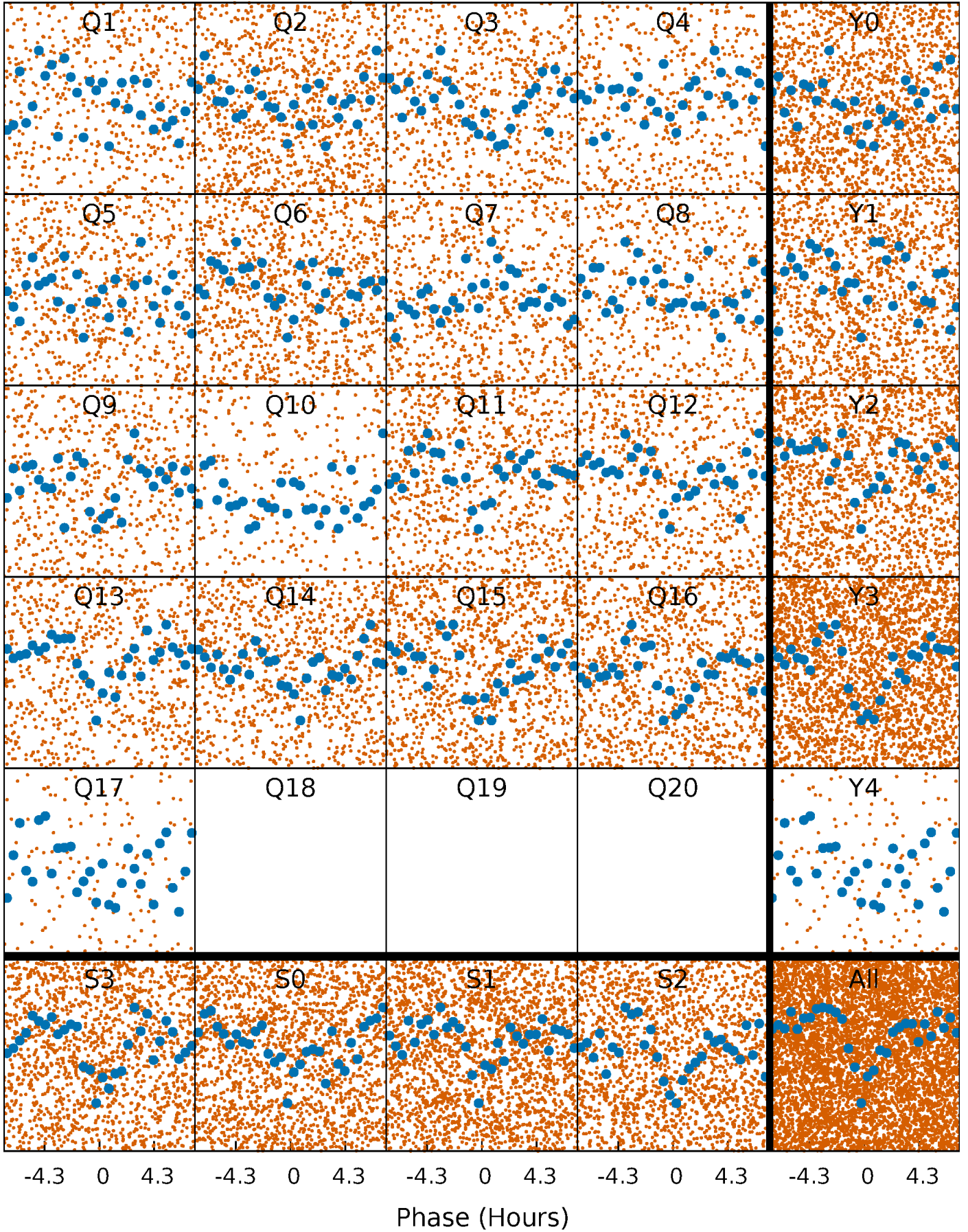


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



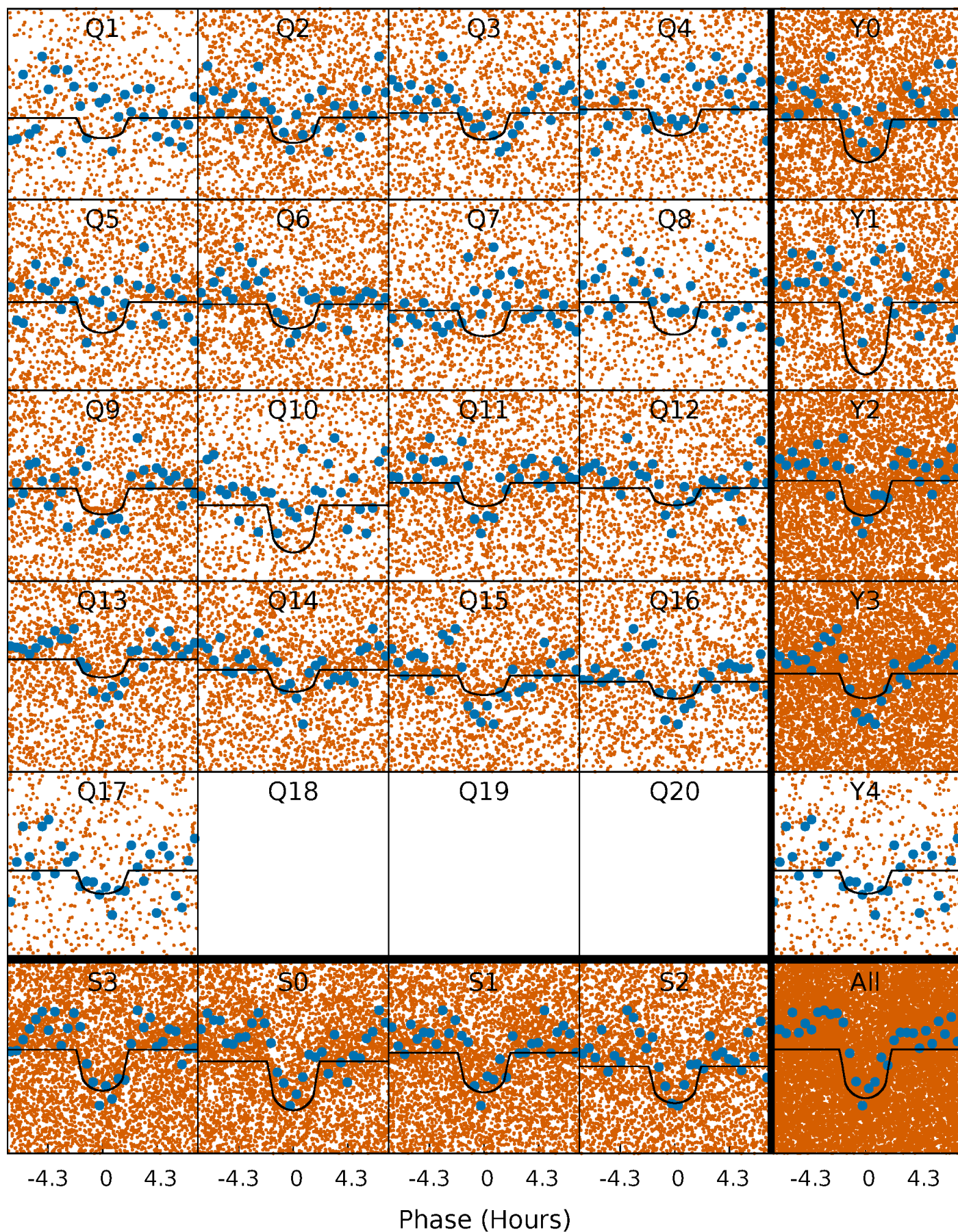
PDC Quarter-Phased Transit Curves

TCE 007031477-01 P= 0.566801 Days $T_0=131.803901$ (BKJD)



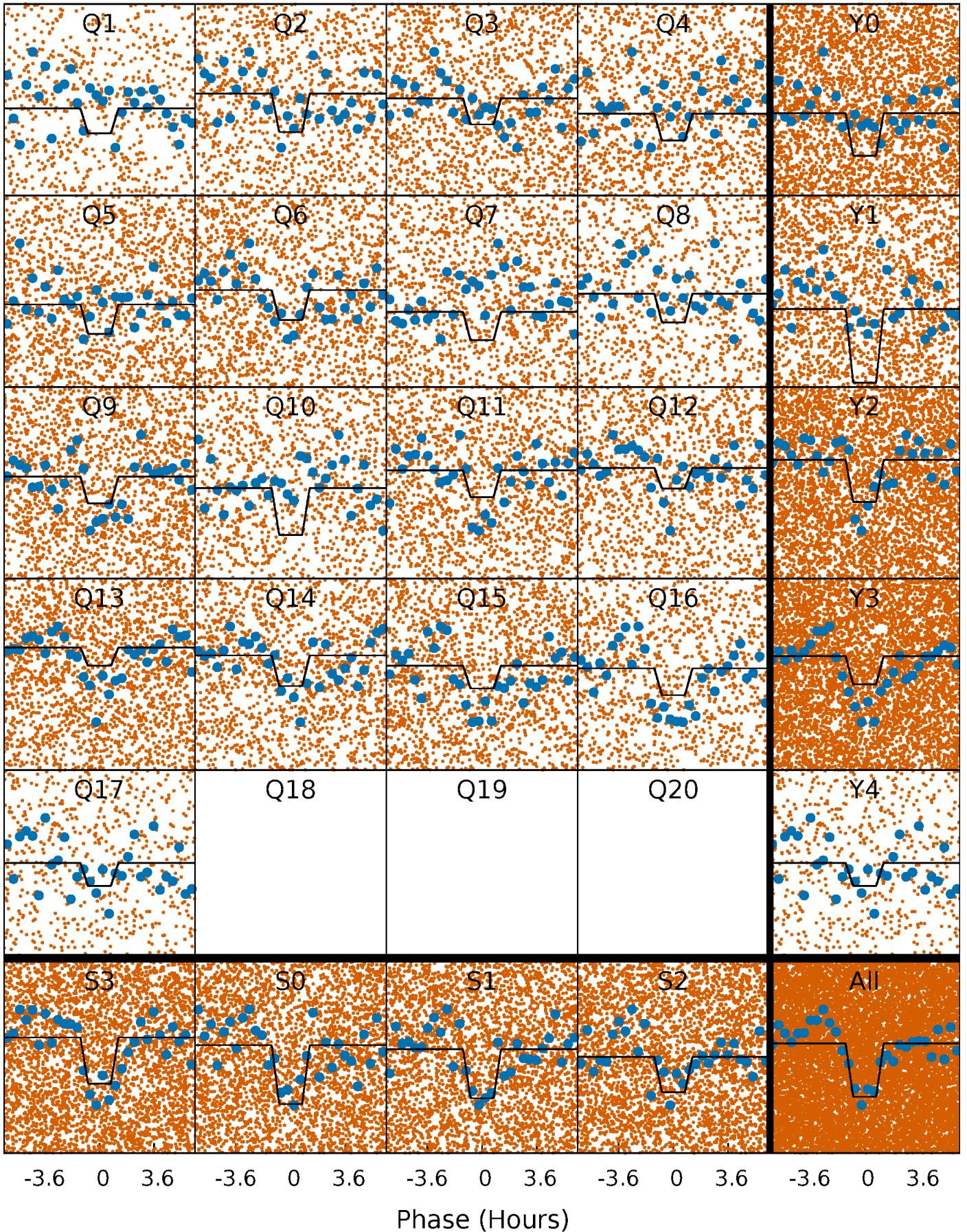
DV Quarter-Phased Transit Curves

TCE 007031477-01 P= 0.566801 Days $T_0=131.803901$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

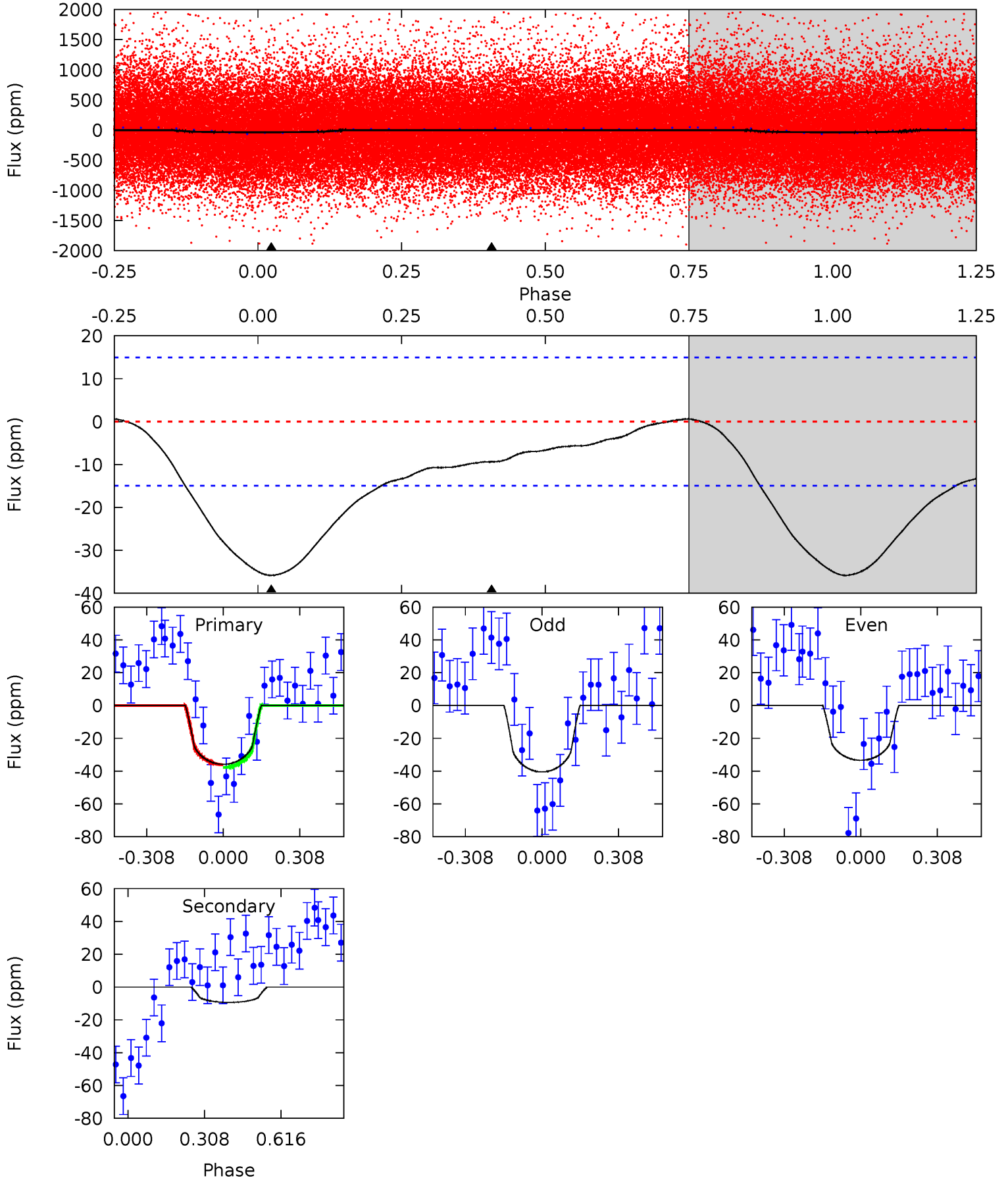
TCE 007031477-01 P= 0.566808 Days $T_0=131.793386$ (BKJD)



DV Model-Shift Uniqueness Test

007031477-01, P = 0.566801 Days, E = 131.237100 Days

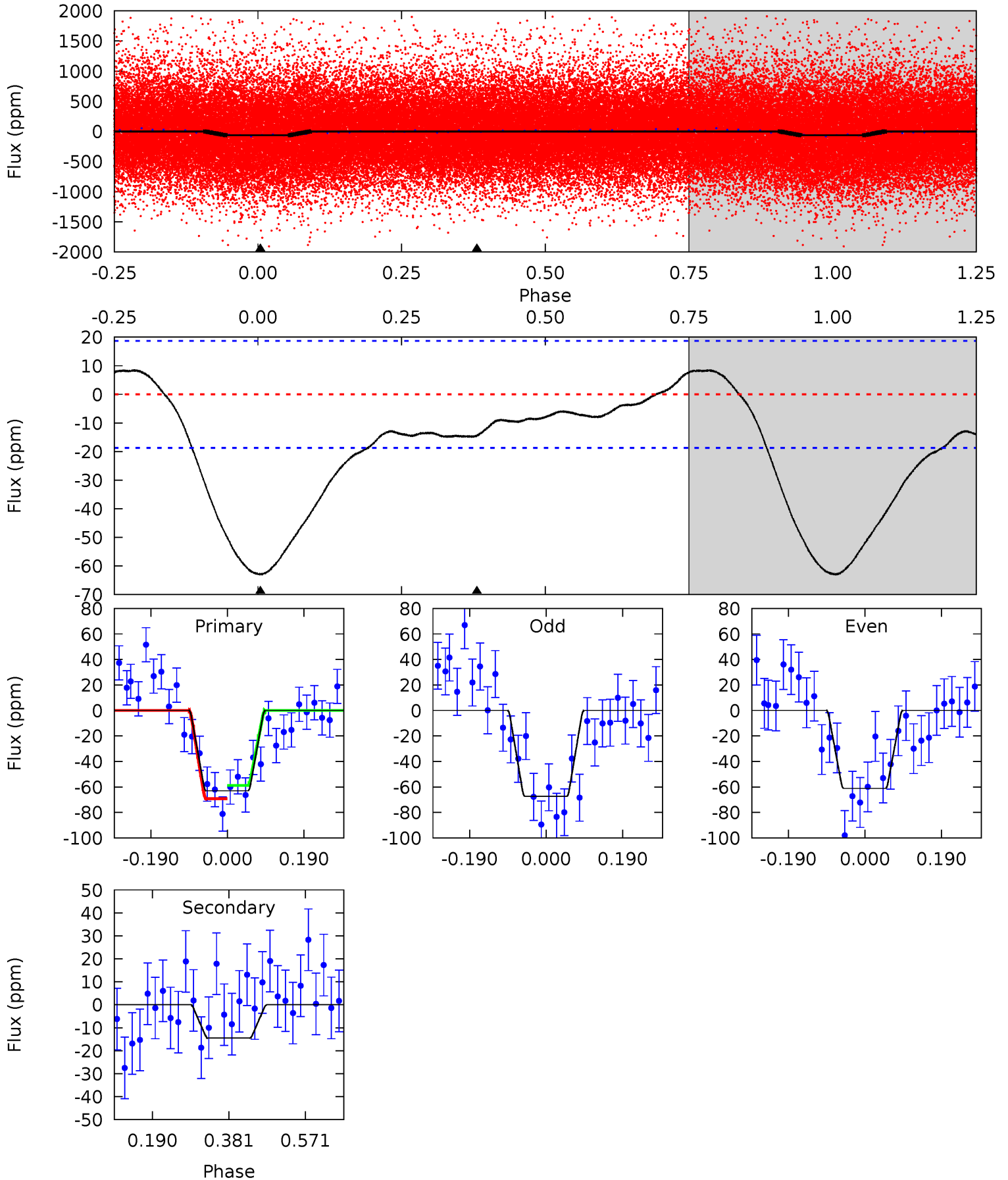
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.4	2.71	0	0	4.32	1.02	0.18	10.4	10.4	2.71	2.71	1.03	0.86	0.02	0.24



Alt Model-Shift Uniqueness Test

007031477-01, P = 0.566808 Days, E = 131.226578 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.9	3.43	0	0	4.43	1.31	1.38	14.9	14.9	3.43	3.43	0.75	0.84	0.12	1.24



Stellar Parameters For KIC 007031477

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5447^{+178}_{-162}	$4.514^{+0.105}_{-0.094}$	$-0.520^{+0.300}_{-0.300}$	$0.779^{+0.117}_{-0.096}$	$0.722^{+0.105}_{-0.045}$	$2.149^{+1.016}_{-0.634}$
	+3%/-3%	+2%/-2%	+58%/-58%	+15%/-12%	+15%/-6%	+47%/-30%
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 007031477-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-9 ± 3	$0.74^{+0.54}_{-0.46}$	2708^{+134}_{-132}	3508^{+1711}_{-863}	$1.377^{+8.033}_{-0.935}$
Alt.	-14 ± 4	$0.78^{+0.60}_{-0.45}$	2695^{+137}_{-121}	3714^{+1689}_{-838}	$1.843^{+9.320}_{-1.259}$

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 $A_{obs} \gg 1.0$

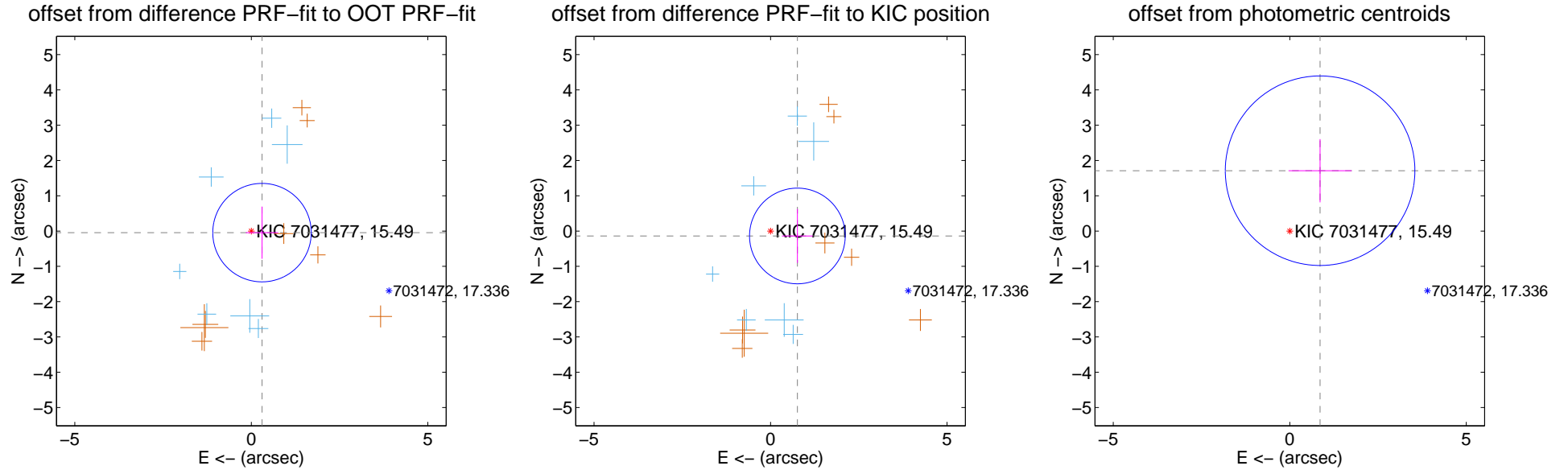
DV Centroid Data

Supplemental centroid analysis for 007031477-01. Kepler magnitude: 15.49. Transit SNR 10.33

There are 7 quarters with good PRF difference image offsets

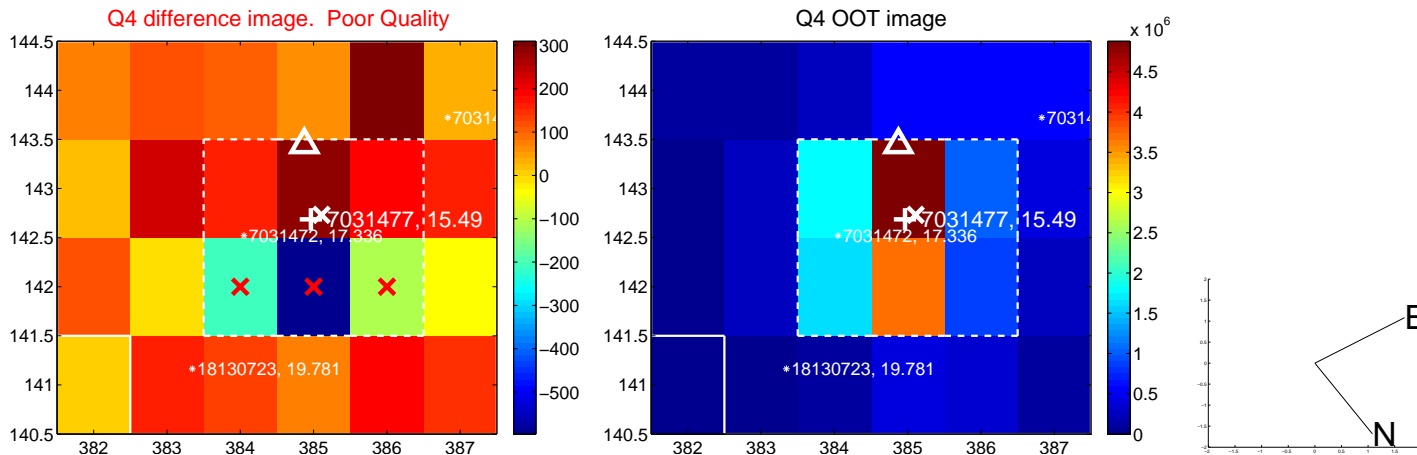
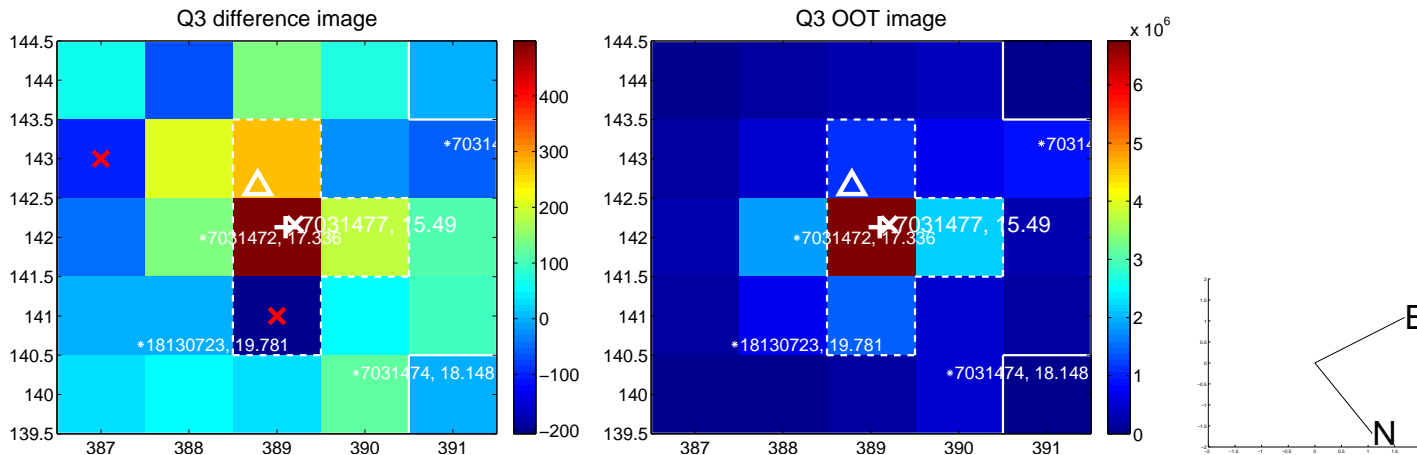
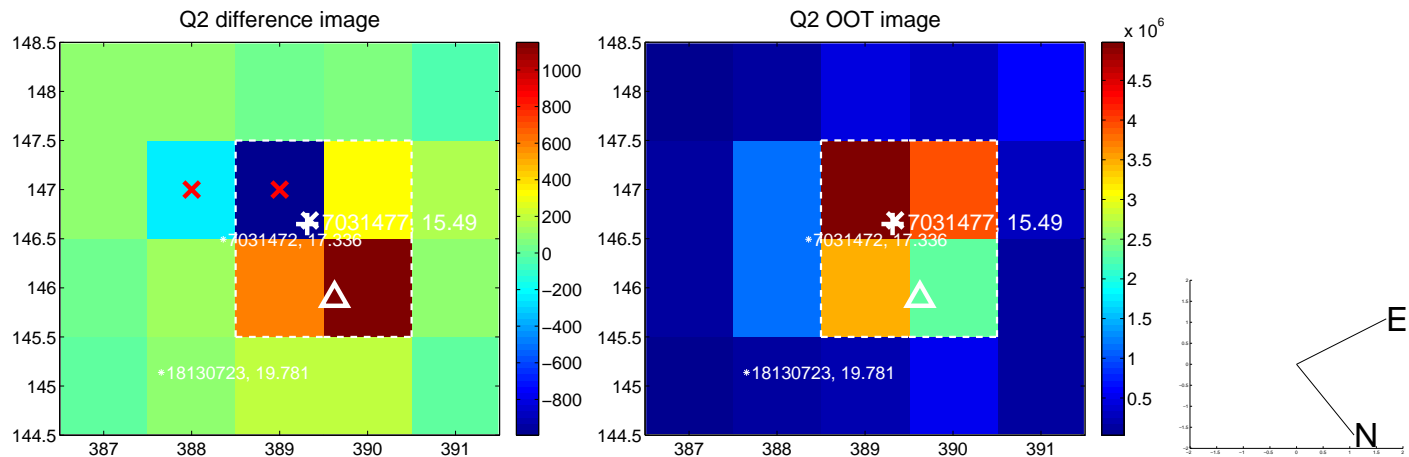
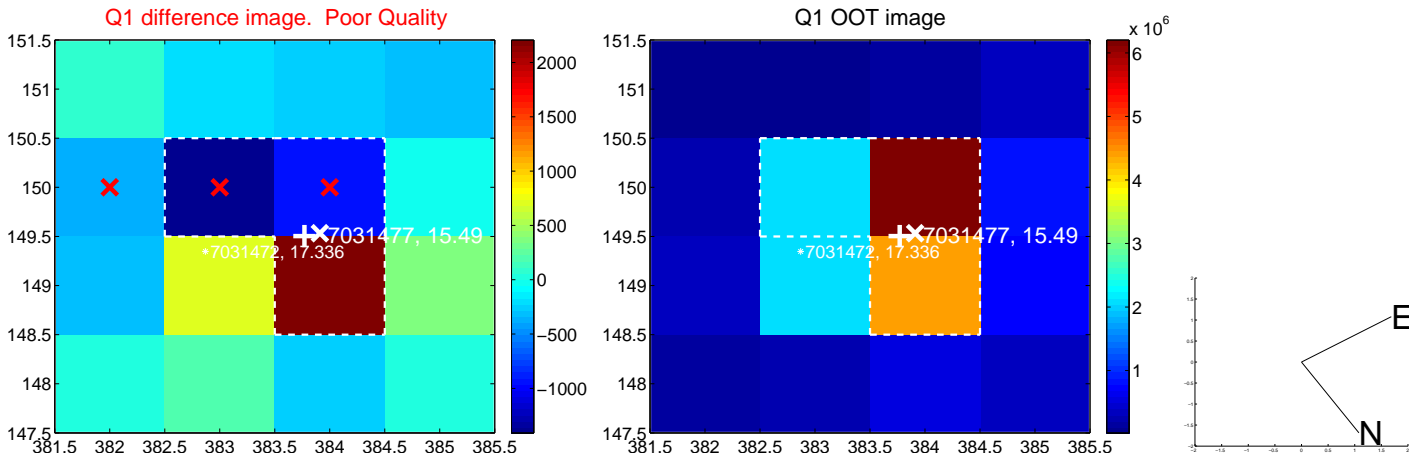
The direct PRF centroid is offset from the target star catalog position by about 0.63 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.306 ± 0.465	0.66	-0.303 ± 0.457	-0.045 ± 0.739
PRF-fit source offset from KIC position	0.773 ± 0.452	1.71	-0.760 ± 0.437	-0.139 ± 0.764
photometric centroid source offset	1.91 ± 0.90	2.14	-0.86 ± 0.89	1.71 ± 0.90

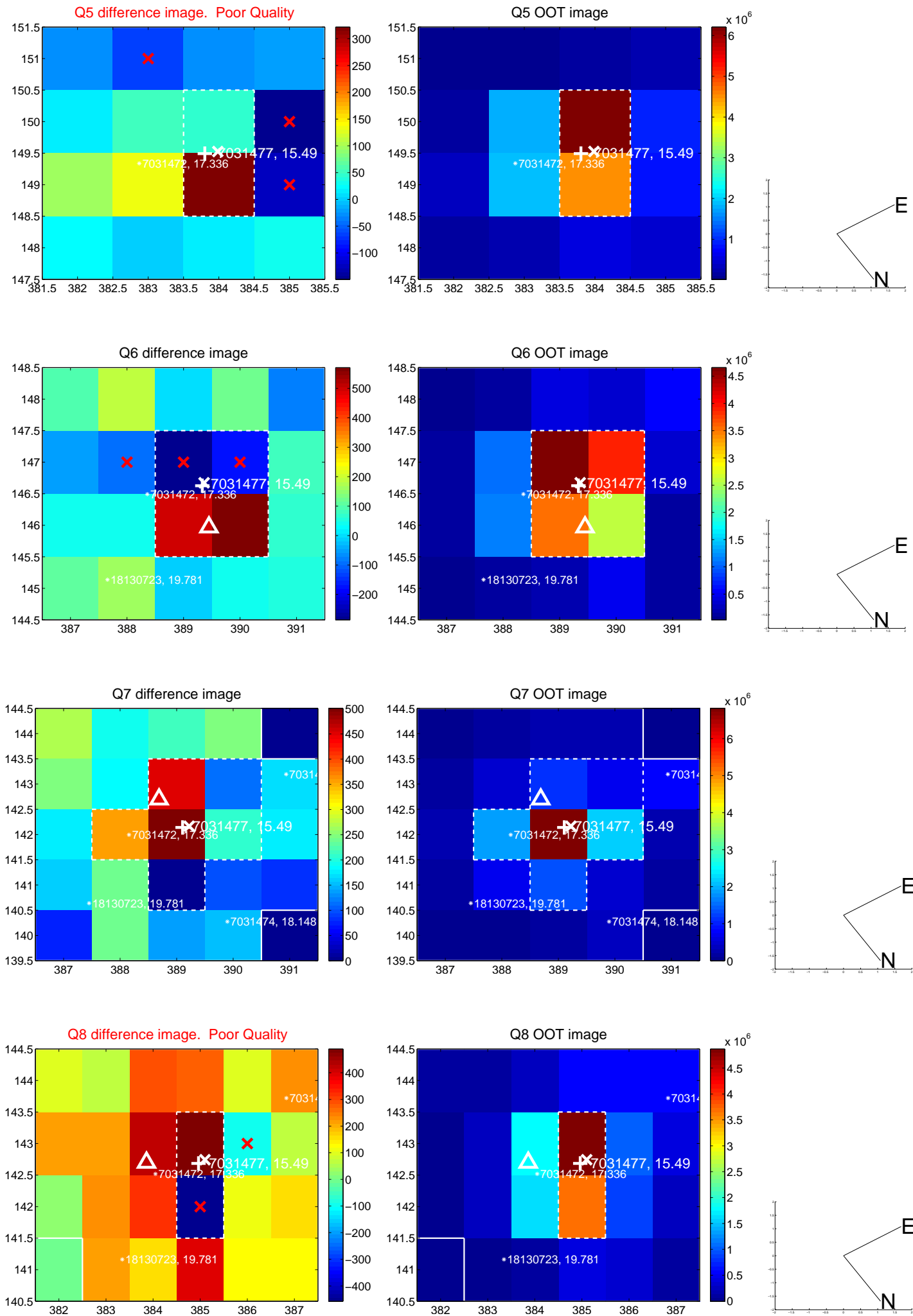


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

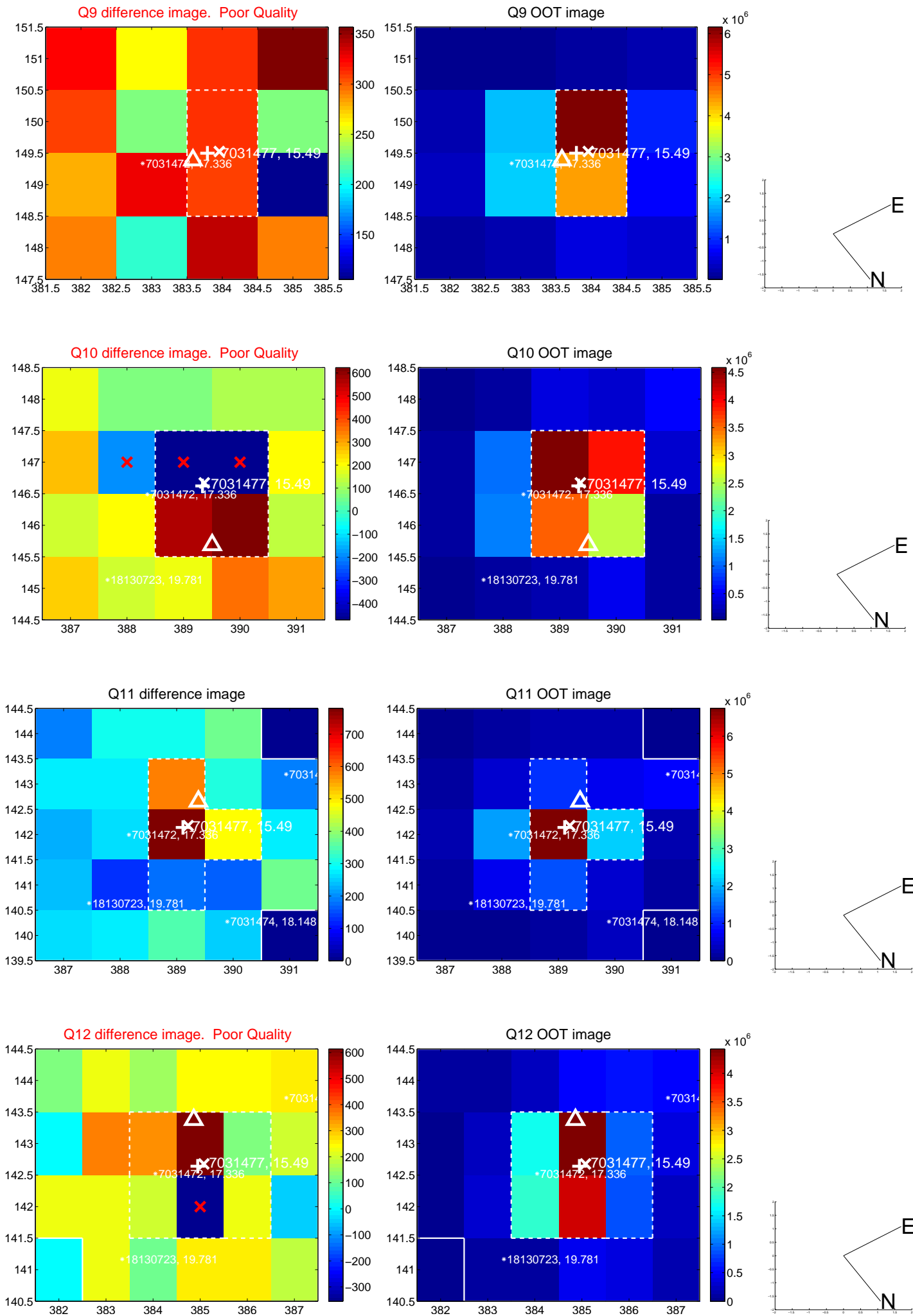
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



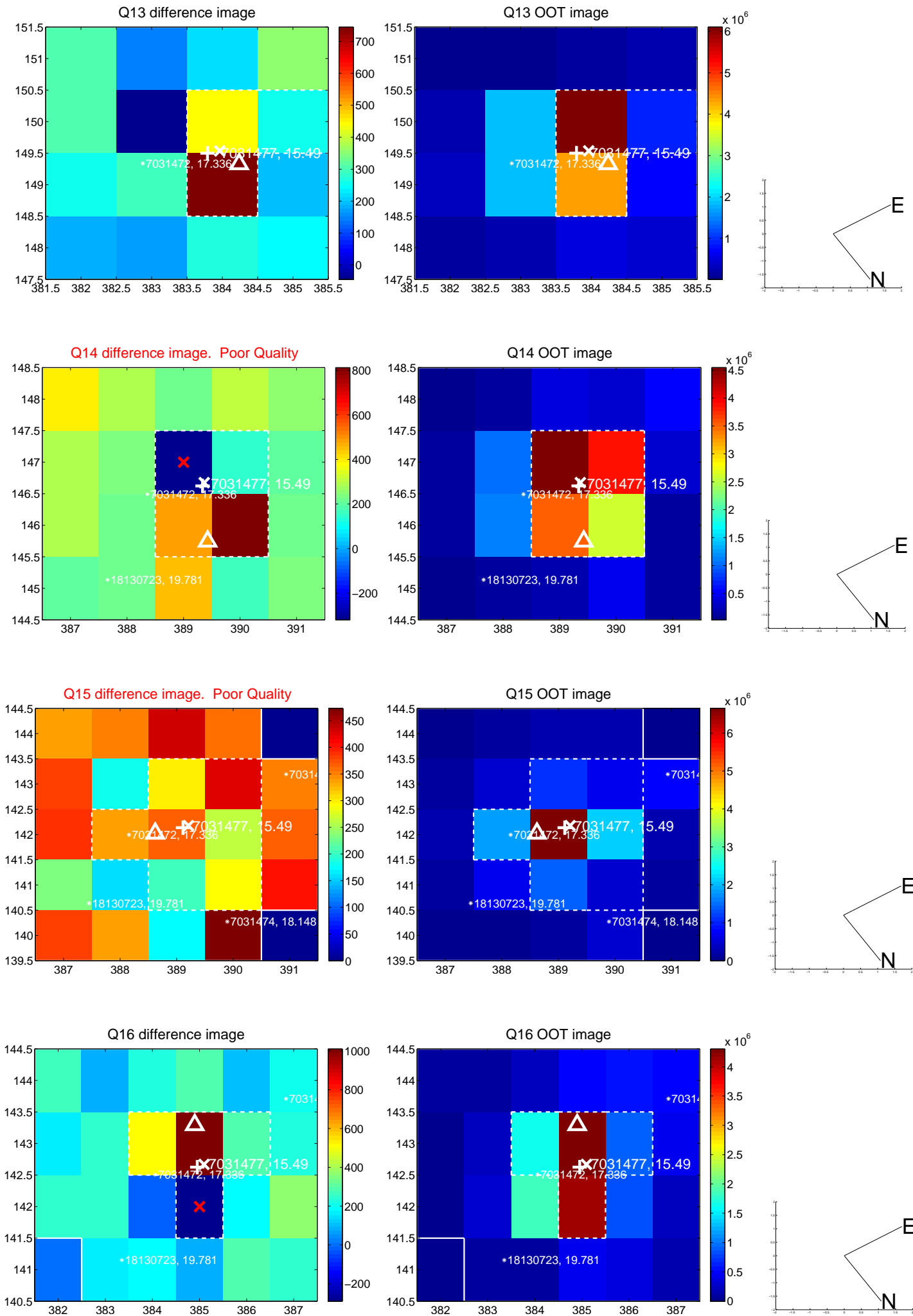
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



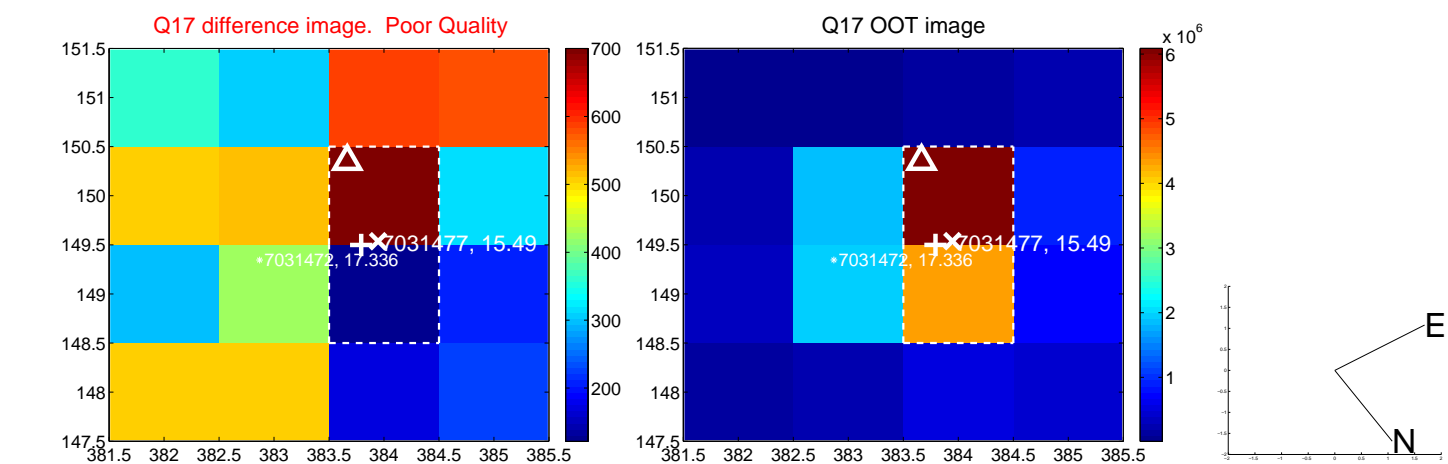
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



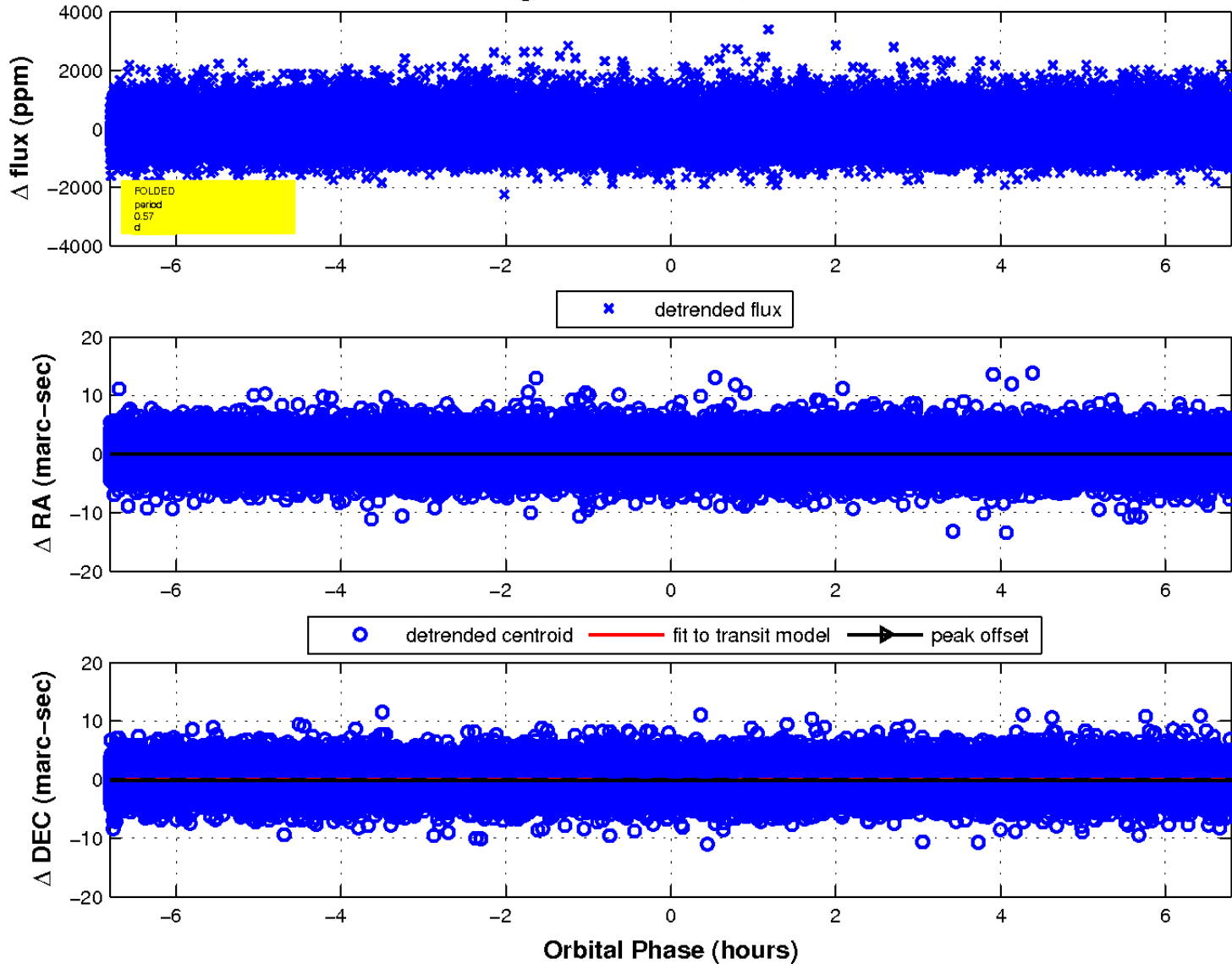
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

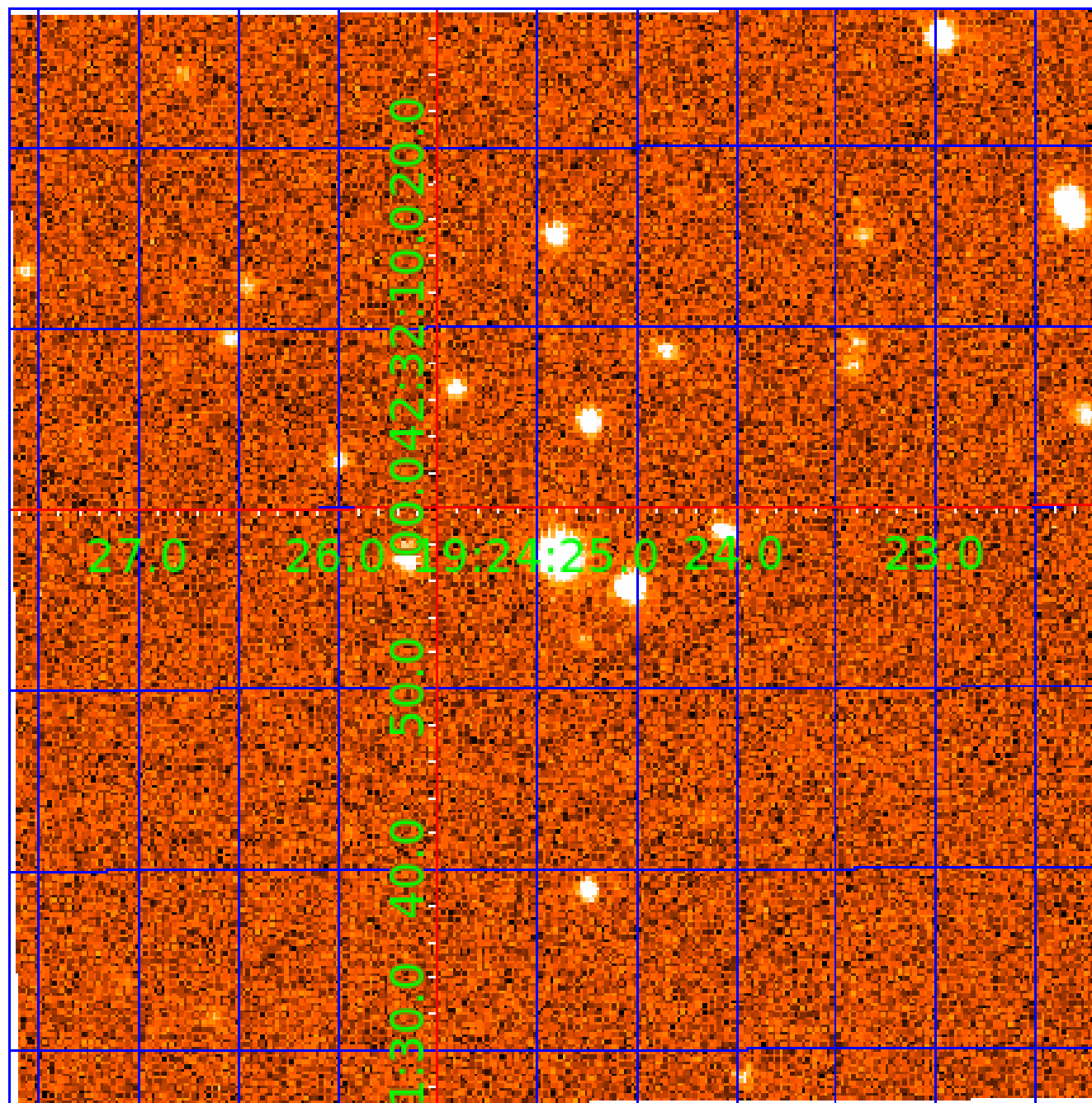


fluxWeightedCentroids, Planet 1 of 3



UKIRT Image

Declination



KIC 007031477

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})
007031477-01	OBS	No	0.566801	131.803901	53.2	3.748	9.5	10.3	0.78	5447	0.61	3306.04
007031477-02	OBS	No	15.269755	136.692603	463.7	2.274	9.1	7.5	0.78	5447	1.88	40.94
007031477-03	OBS	No	39.784727	136.796823	776.3	3.456	8.5	8.6	0.78	5447	4.17	11.42

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007031477-01	OBS	FP	0.00	1	0	1	1	LPP_DV—CENT_KIC_POS—HALO_GHOST—EPHEM_MATCH
007031477-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
007031477-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

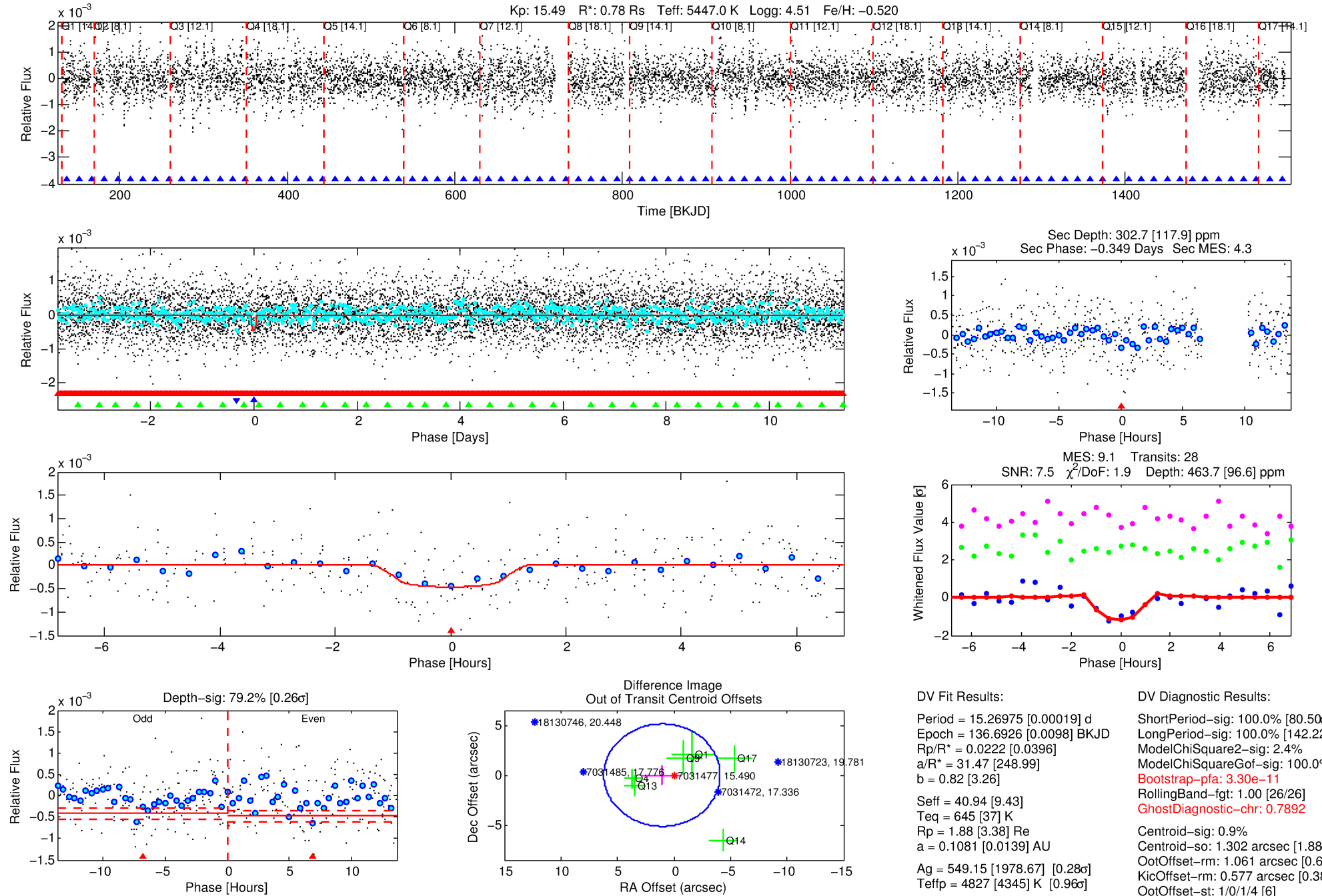
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007031477-02

No Significant Match Found

DV One-Page Summary

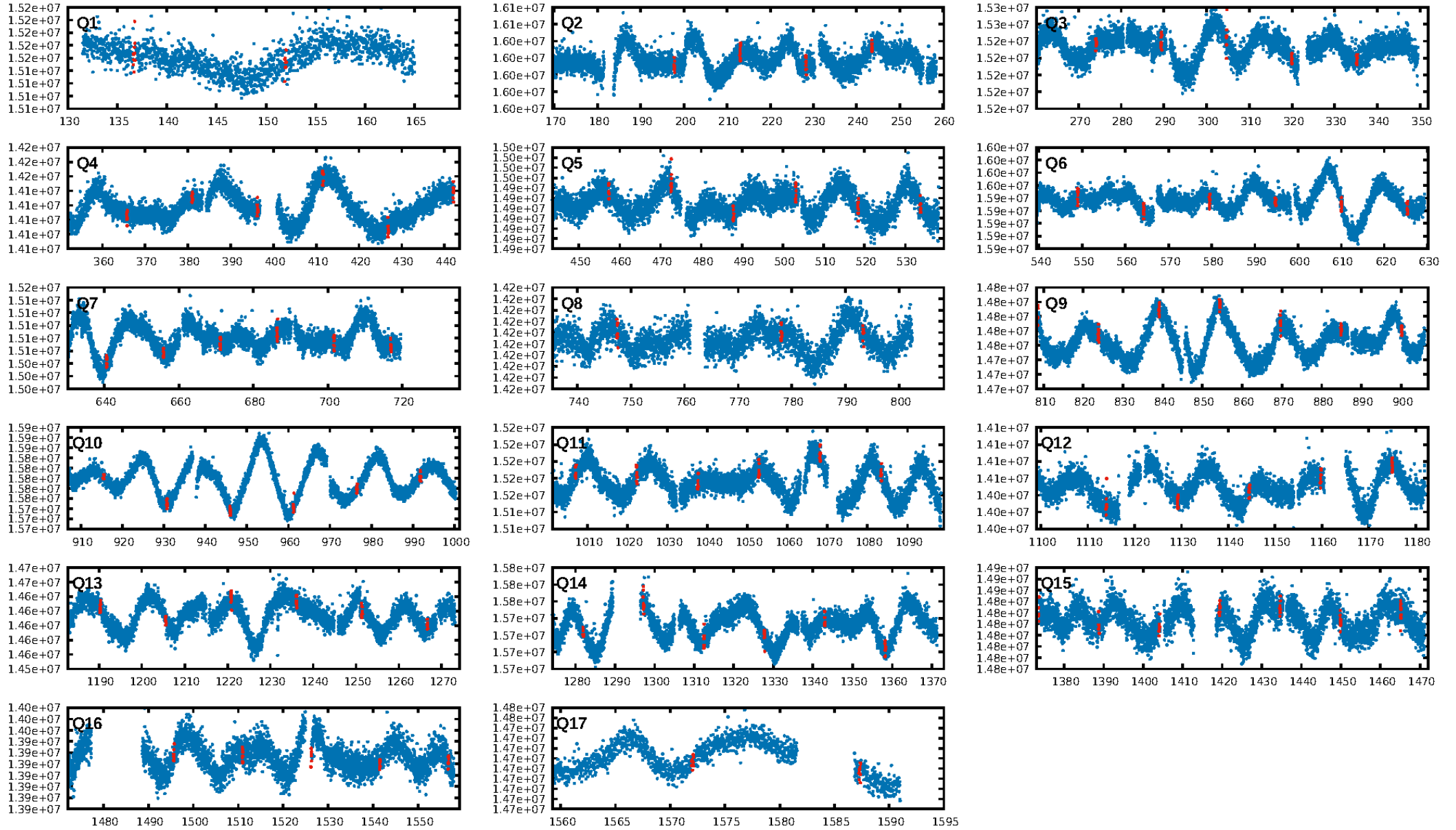
KIC: 7031477 Candidate: 2 of 3 Period: 15.270 d



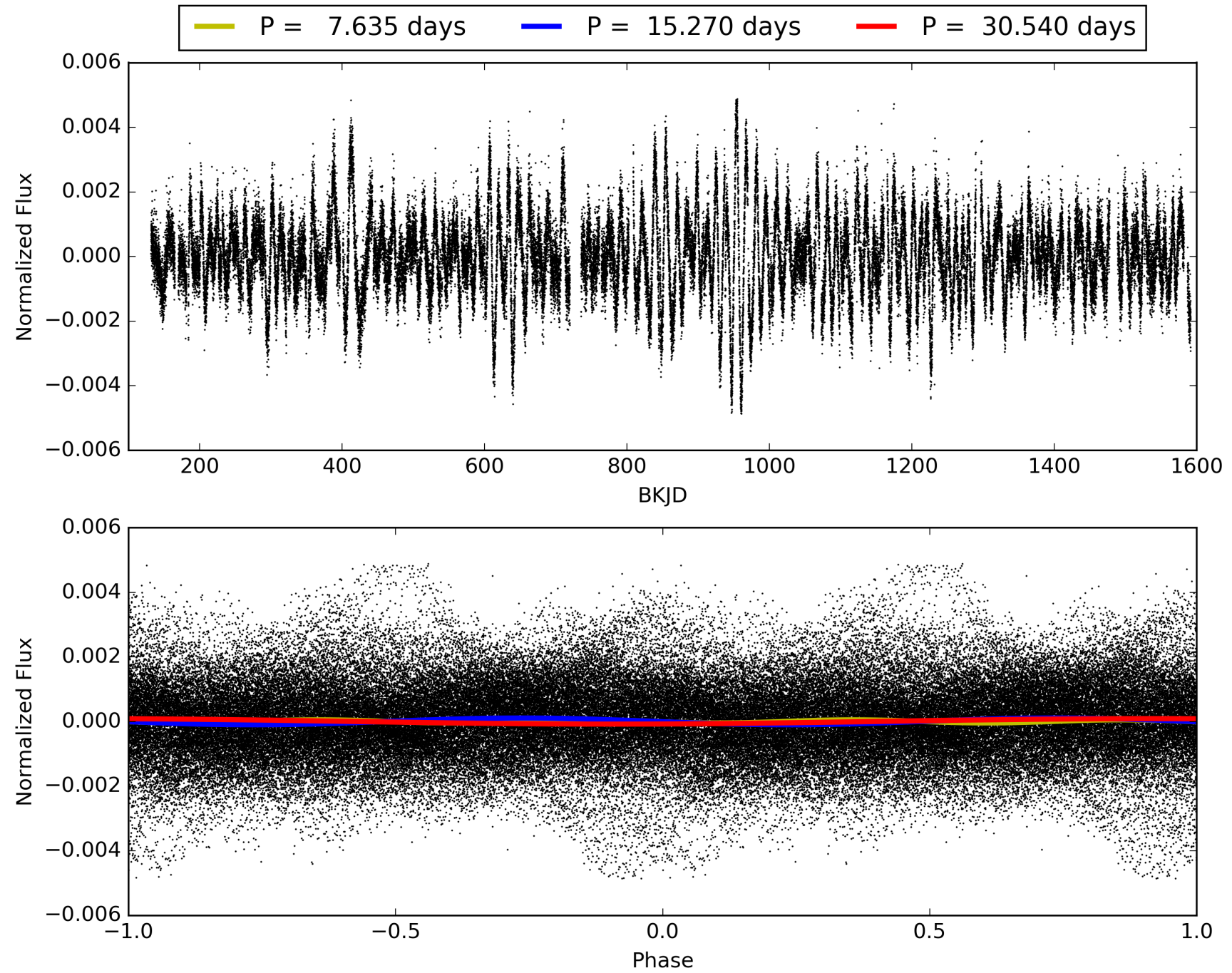
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 16:22:25 Z

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

TCE 007031477-02, PDC Light Curves

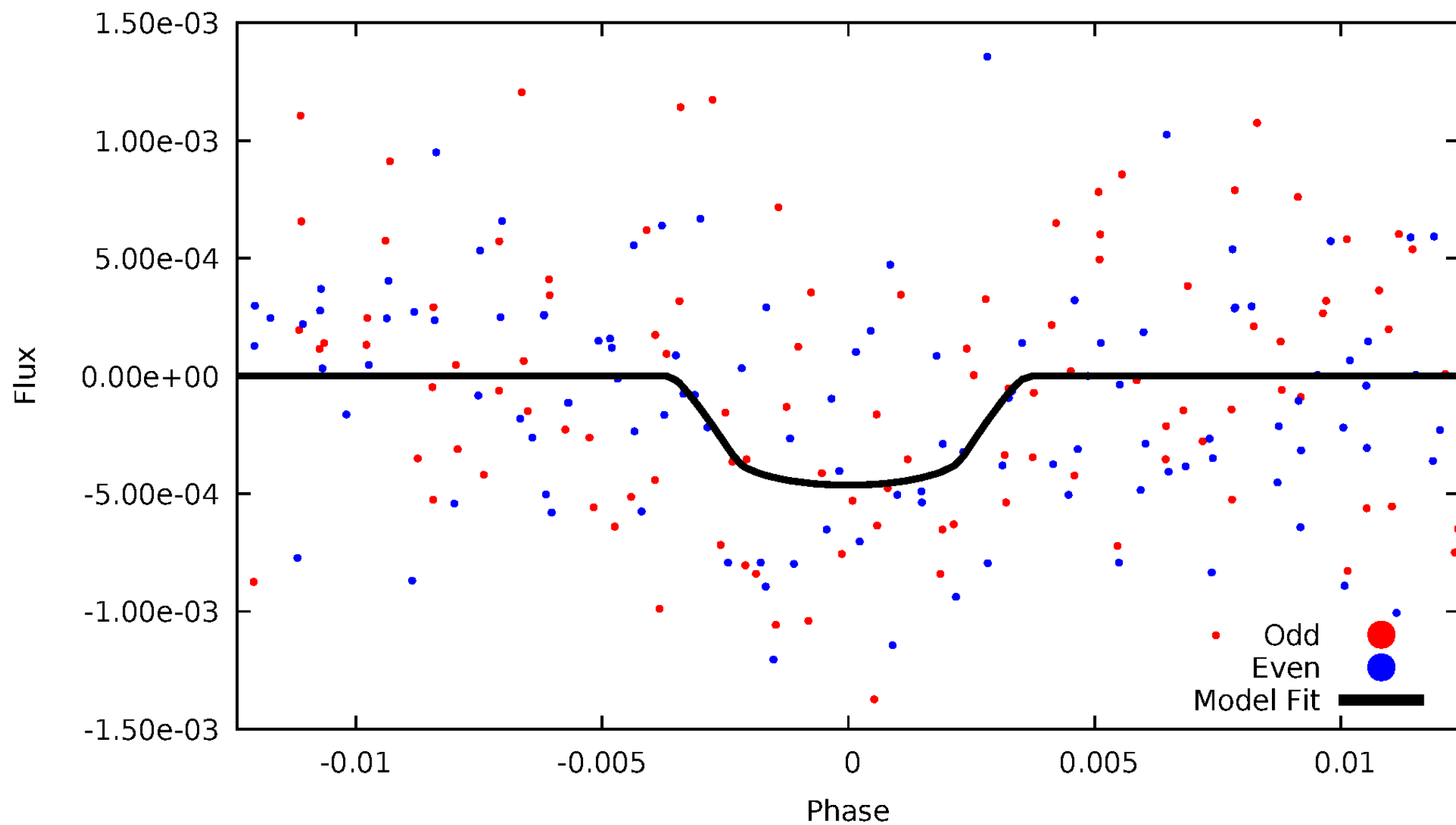


TCE 007031477-02



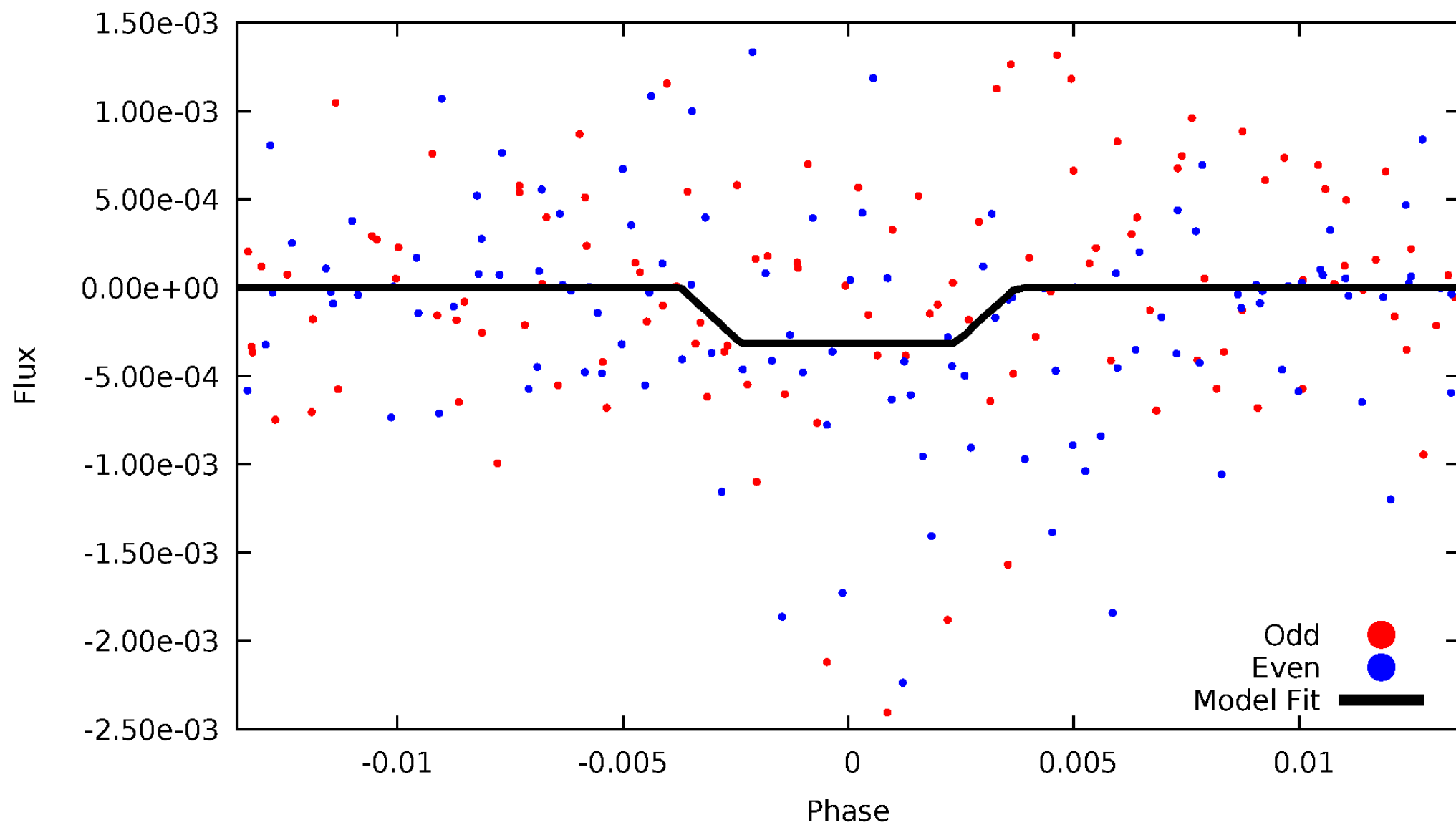
DV Odd/Even

TCE 007031477-02



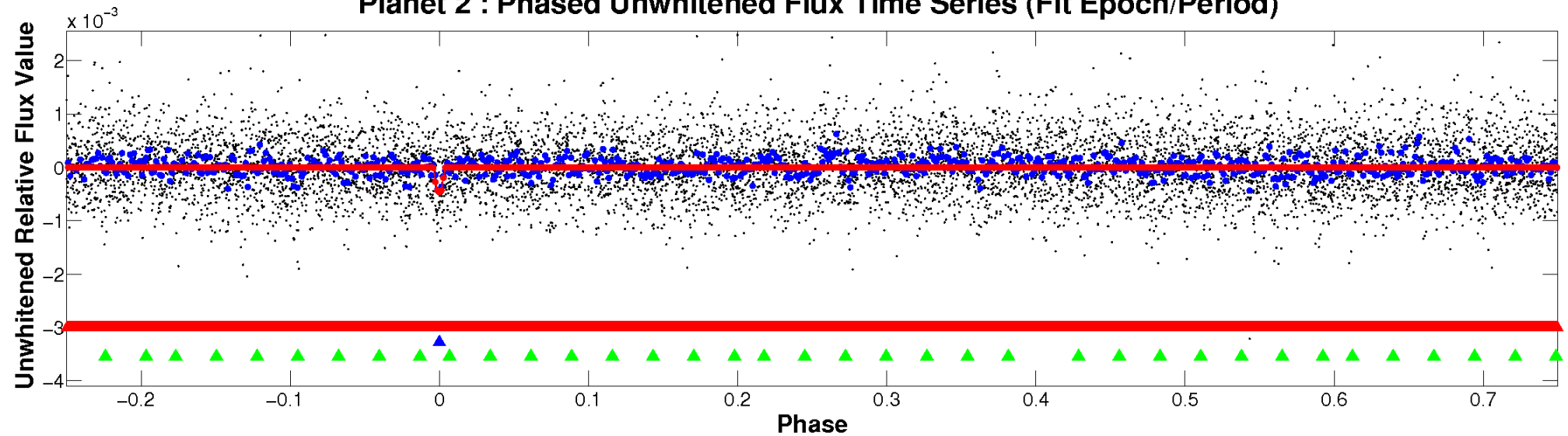
ALT Odd/Even

TCE 007031477-02

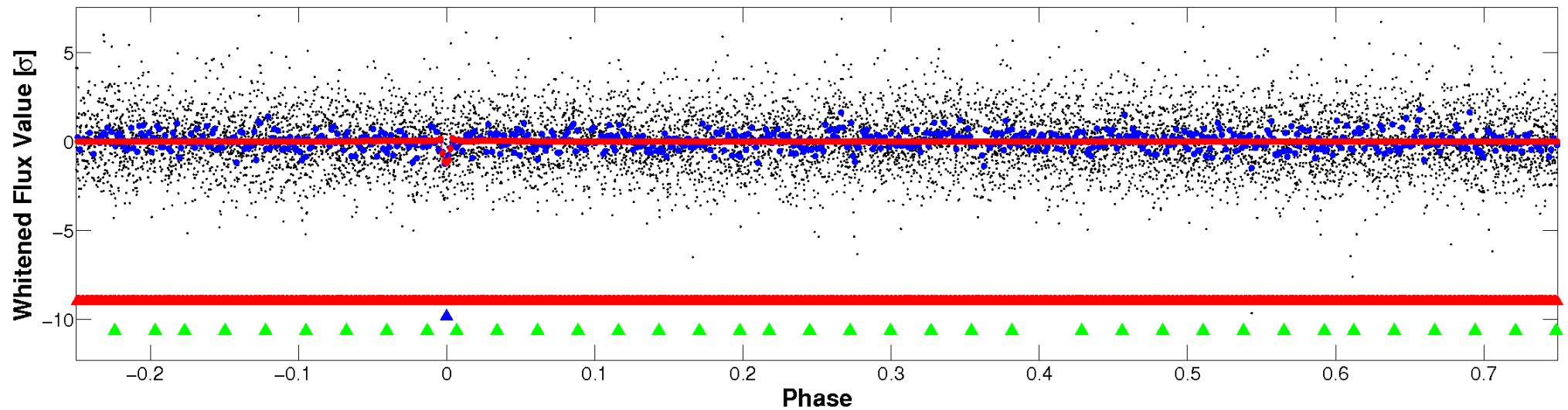


Non-Whitened Vs. Whitened Light Curve

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

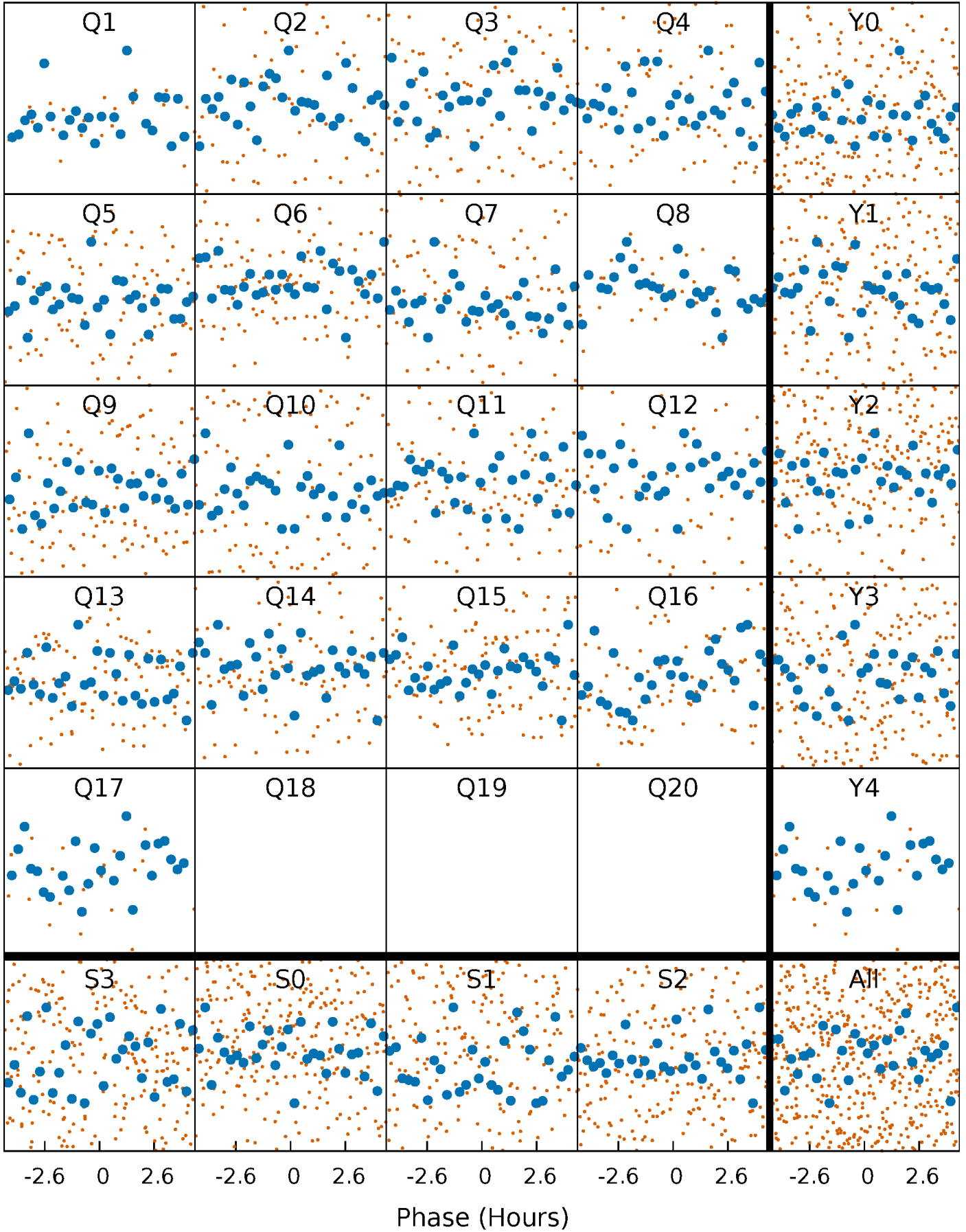


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



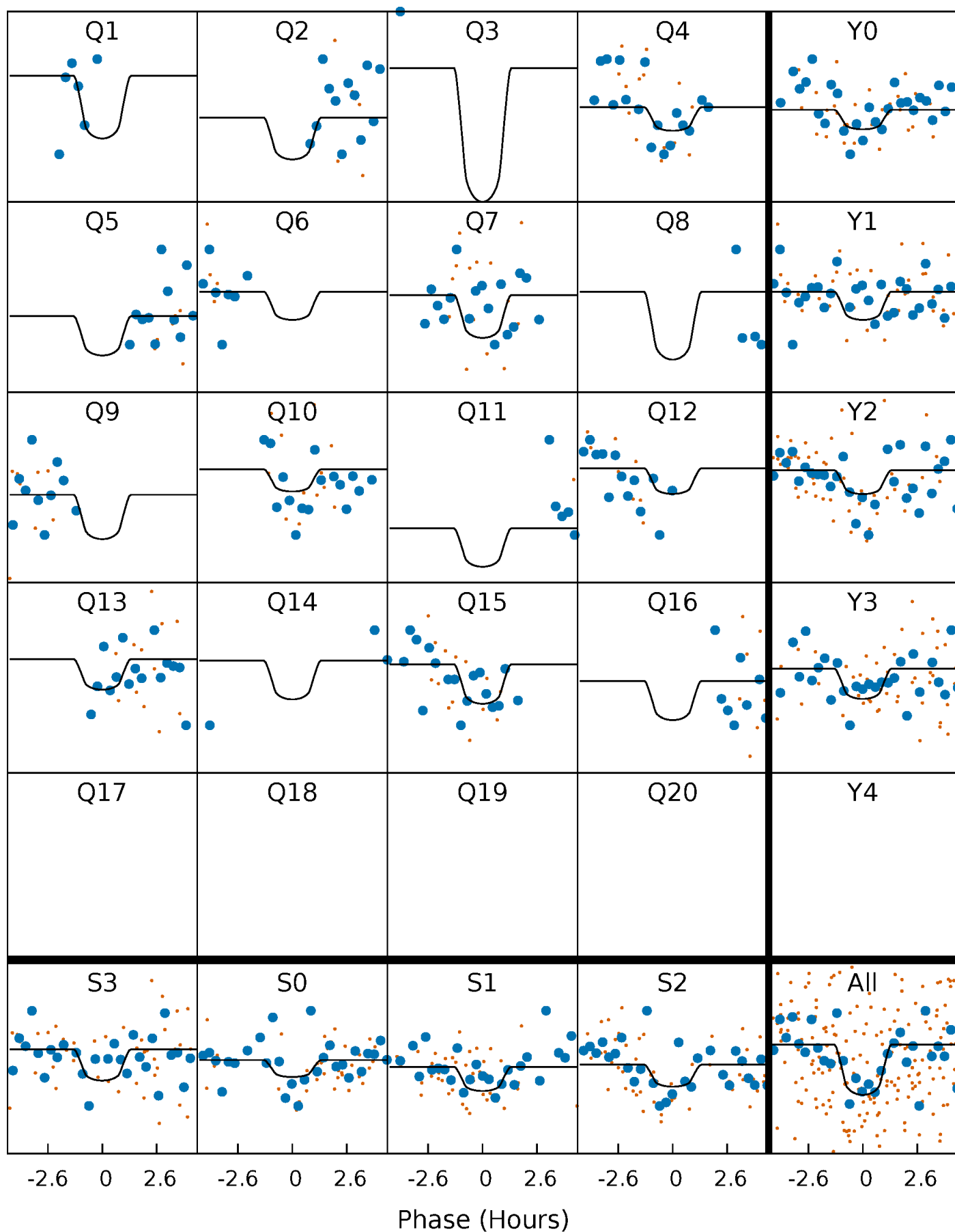
PDC Quarter-Phased Transit Curves

TCE 007031477-02 P= 15.269755 Days $T_0=136.692603$ (BKJD)



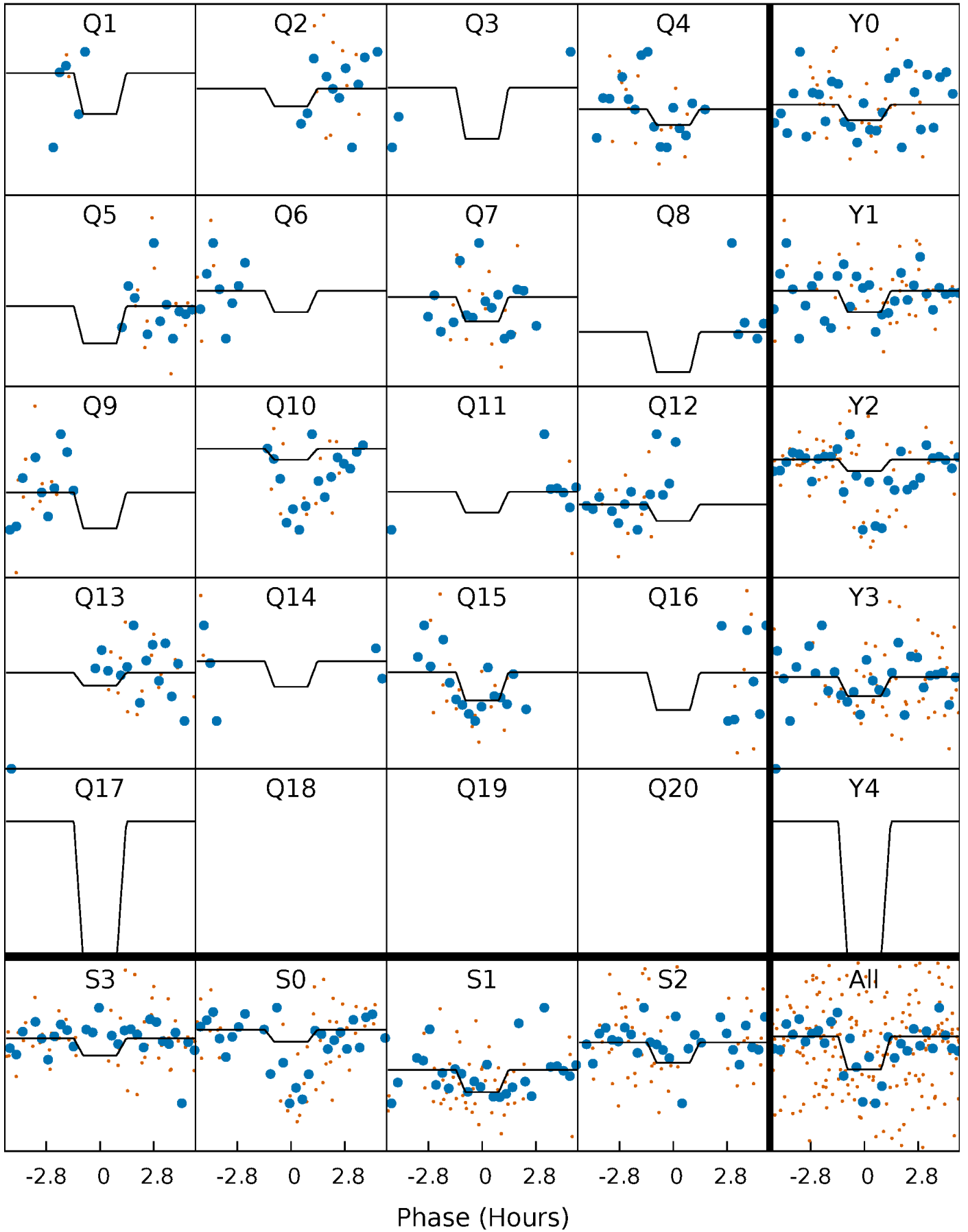
DV Quarter-Phased Transit Curves

TCE 007031477-02 P= 15.269755 Days $T_0=136.692603$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

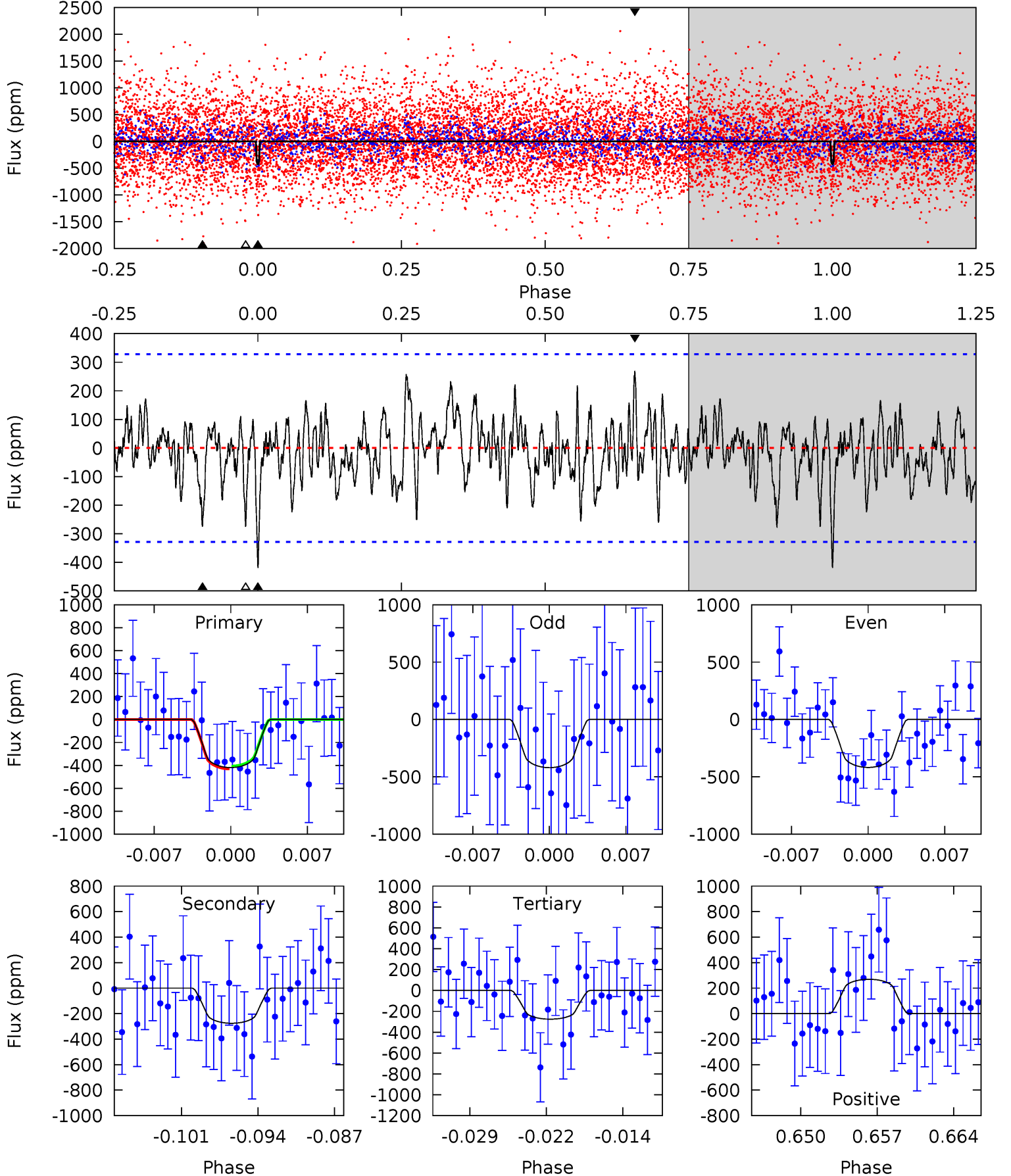
TCE 007031477-02 P= 15.269351 Days $T_0=136.708846$ (BKJD)



DV Model-Shift Uniqueness Test

007031477-02, P = 15.269755 Days, E = 121.422848 Days

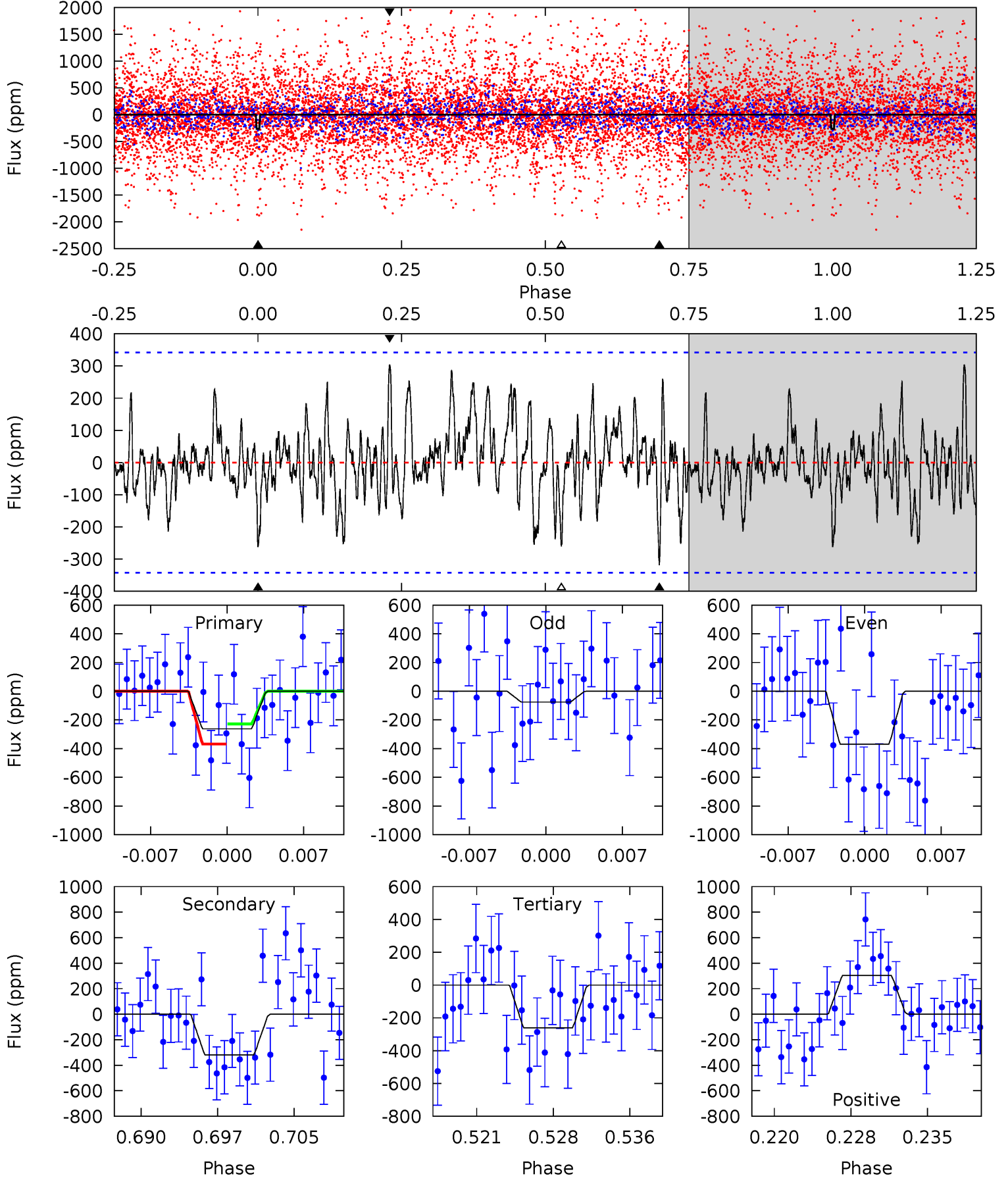
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.50	4.27	4.27	4.18	5.09	2.69	1.40	2.23	2.32	0.00	0.10	0.02	0.82	0.39	0.19



Alt Model-Shift Uniqueness Test

007031477-02, P = 15.269351 Days, E = 121.439495 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.90	4.73	3.87	4.52	5.09	2.68	1.43	0.03	-0.62	0.86	0.21	2.17	0.97	0.49	1.06



Stellar Parameters For KIC 007031477

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5447^{+178}_{-162}	$4.514^{+0.105}_{-0.094}$	$-0.520^{+0.300}_{-0.300}$	$0.779^{+0.117}_{-0.096}$	$0.722^{+0.105}_{-0.045}$	$2.149^{+1.016}_{-0.634}$
	+3%/-3%	+2%/-2%	+58%/-58%	+15%/-12%	+15%/-6%	+47%/-30%
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 007031477-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-276 ± 65	$3.08^{+3.01}_{-2.11}$	898^{+45}_{-43}	3943^{+2581}_{-754}	176^{+1733}_{-128}
Alt.	-319 ± 67	$2.88^{+2.98}_{-1.93}$	902^{+43}_{-42}	4217^{+2498}_{-918}	249^{+1853}_{-189}

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 $A_{obs} \gg 1.0$

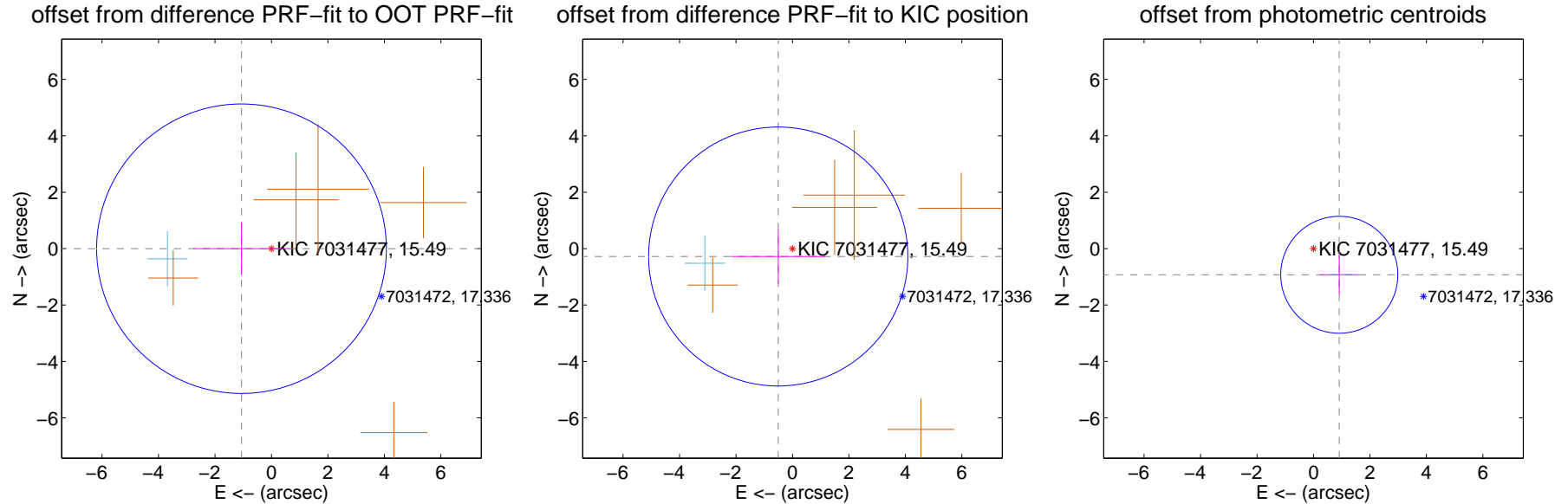
DV Centroid Data

Supplemental centroid analysis for 007031477-02. Kepler magnitude: 15.49. Transit SNR 7.53

There are 1 quarters with good PRF difference image offsets

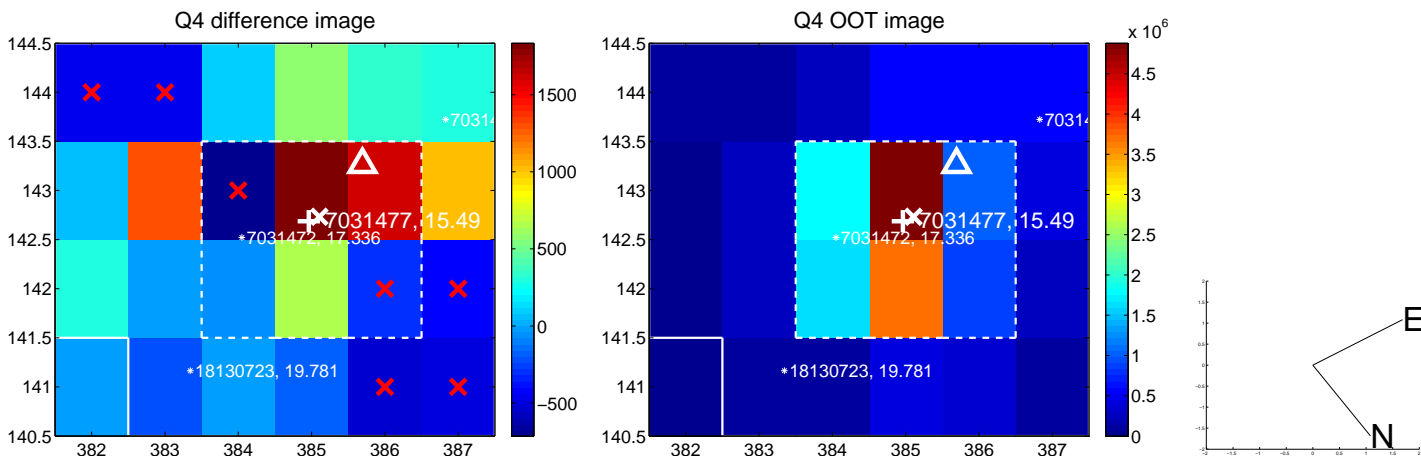
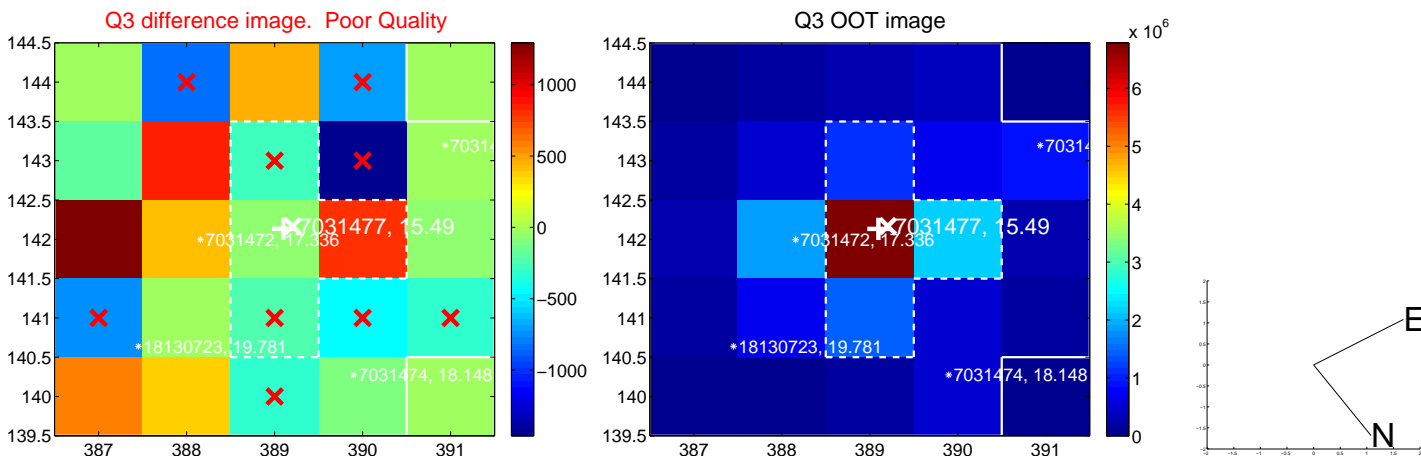
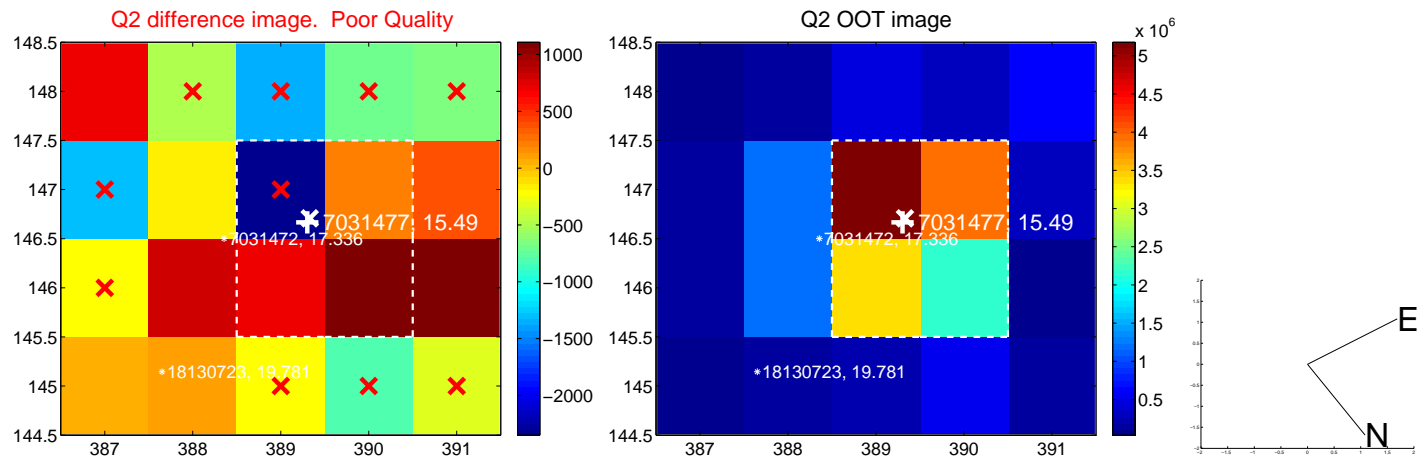
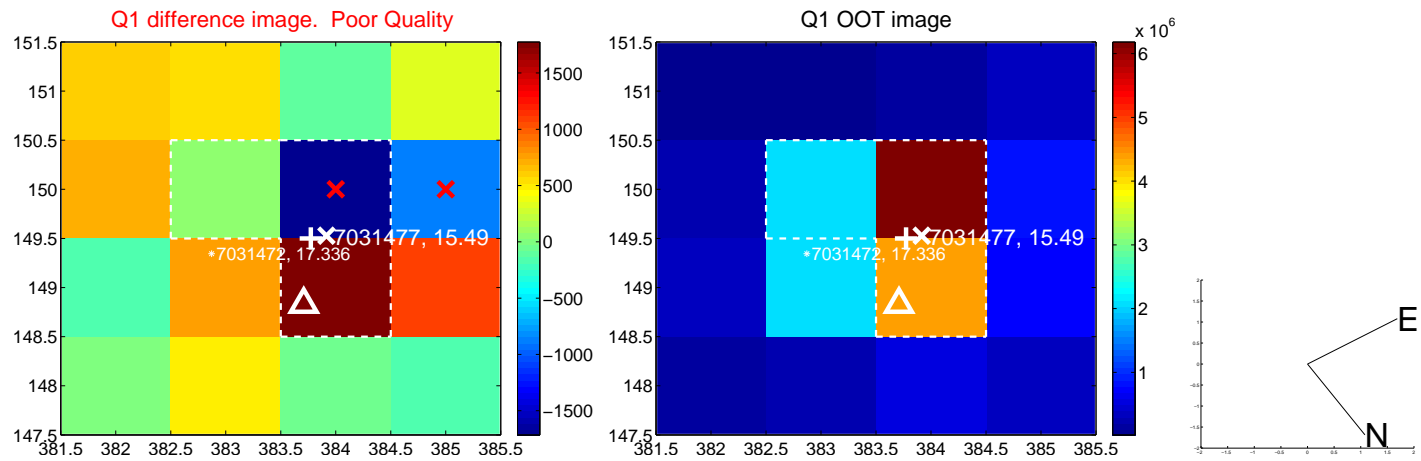
The direct PRF centroid is offset from the target star catalog position by about 0.63 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.061 ± 1.711	0.62	1.061 ± 1.711	-0.003 ± 0.937
PRF-fit source offset from KIC position	0.577 ± 1.530	0.38	0.504 ± 1.666	-0.280 ± 0.964
photometric centroid source offset	1.30 ± 0.69	1.88	-0.91 ± 0.69	-0.93 ± 0.69

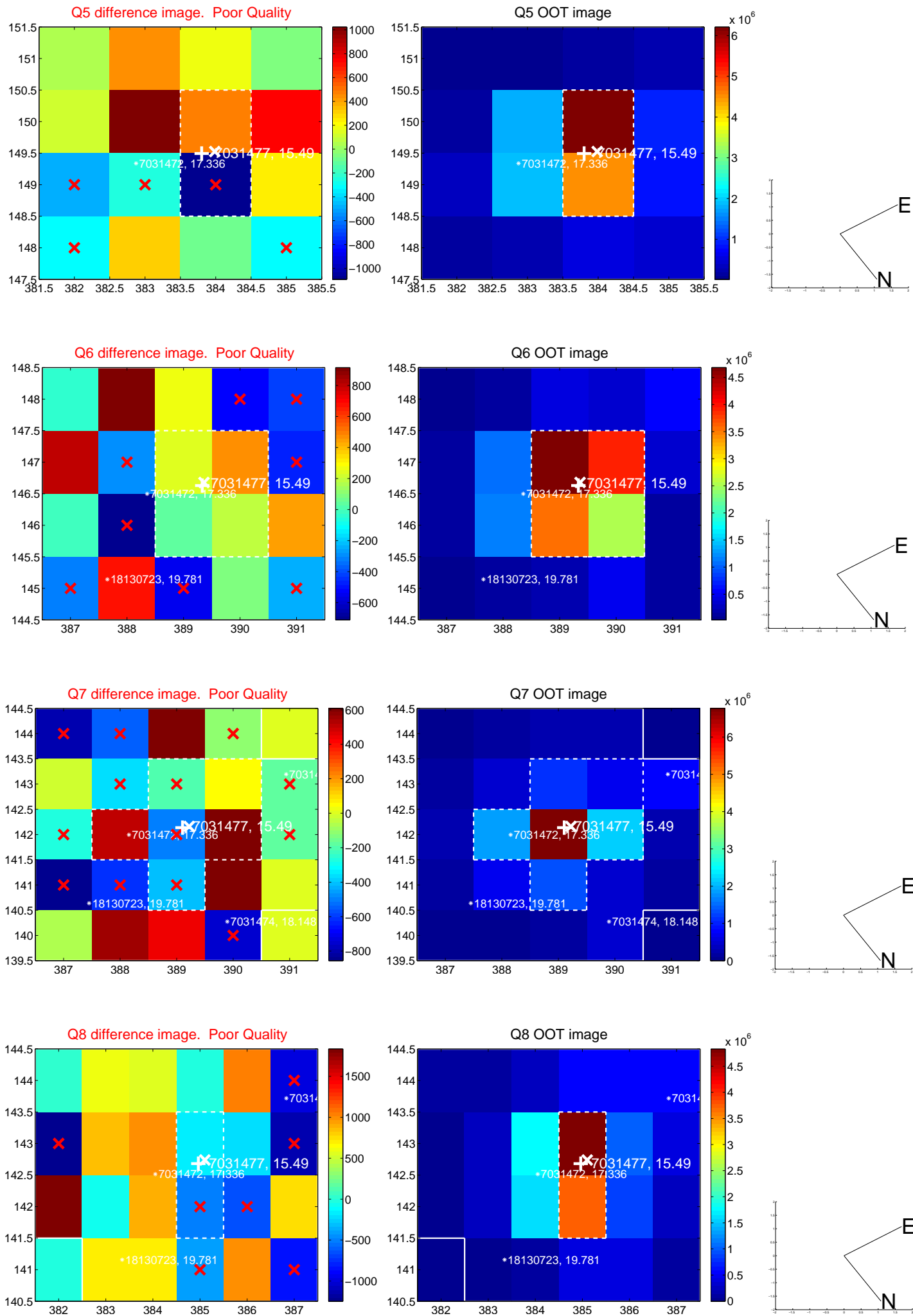


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

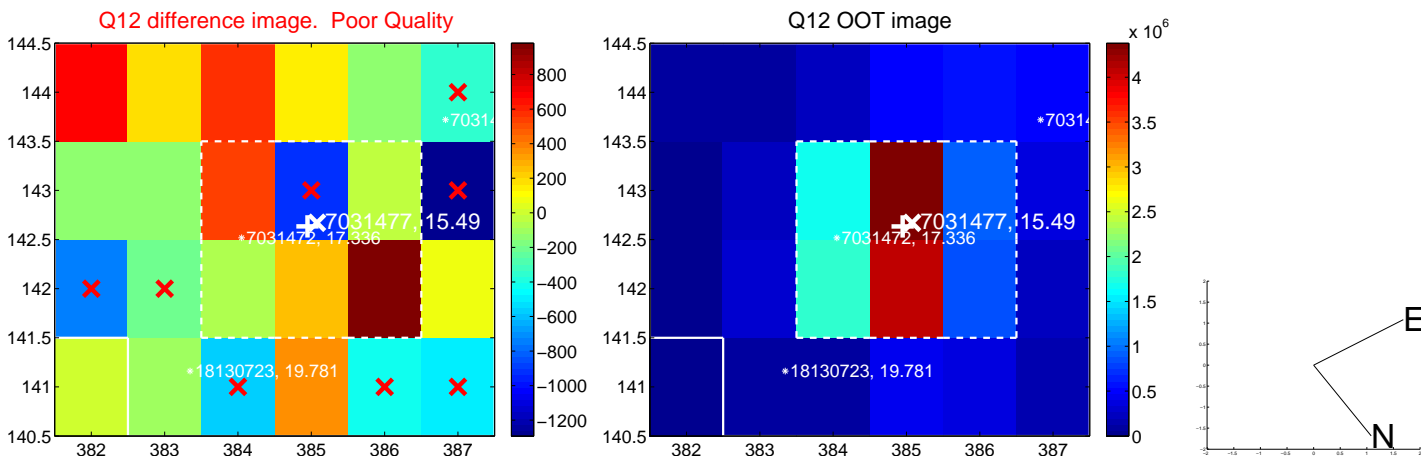
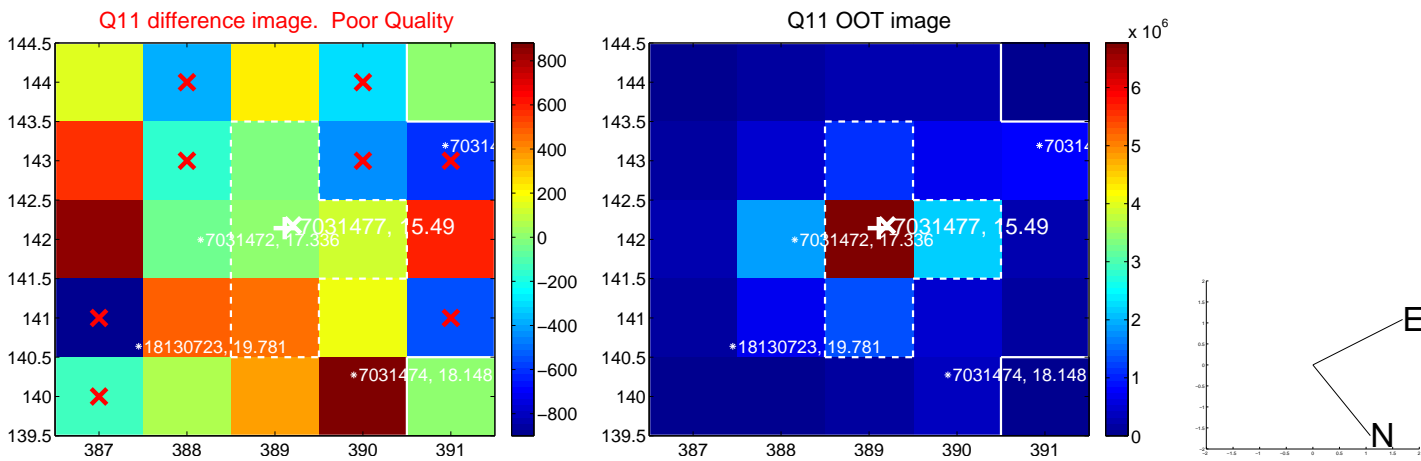
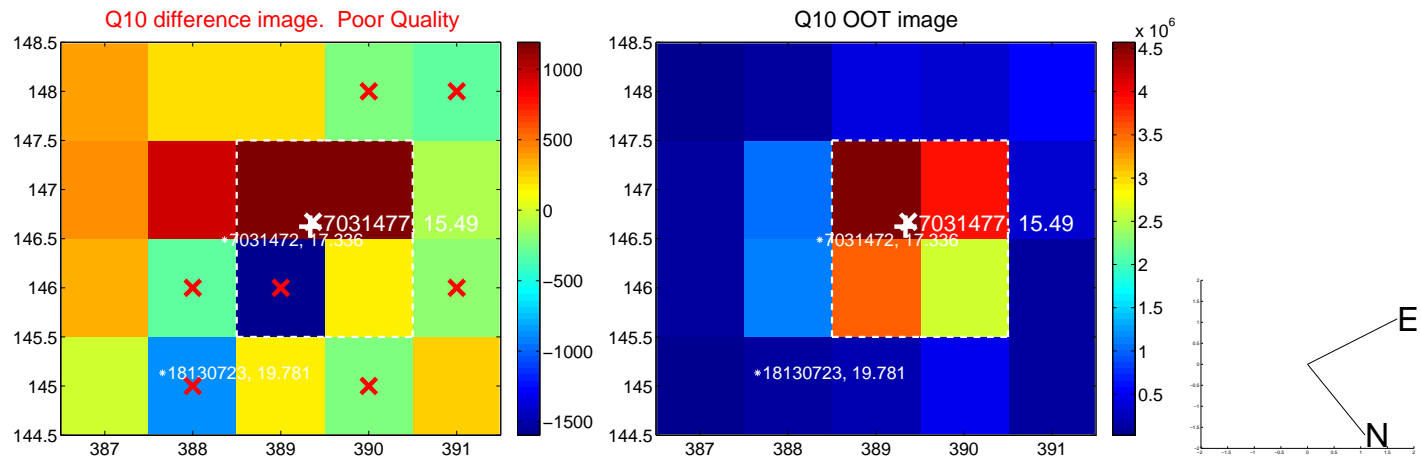
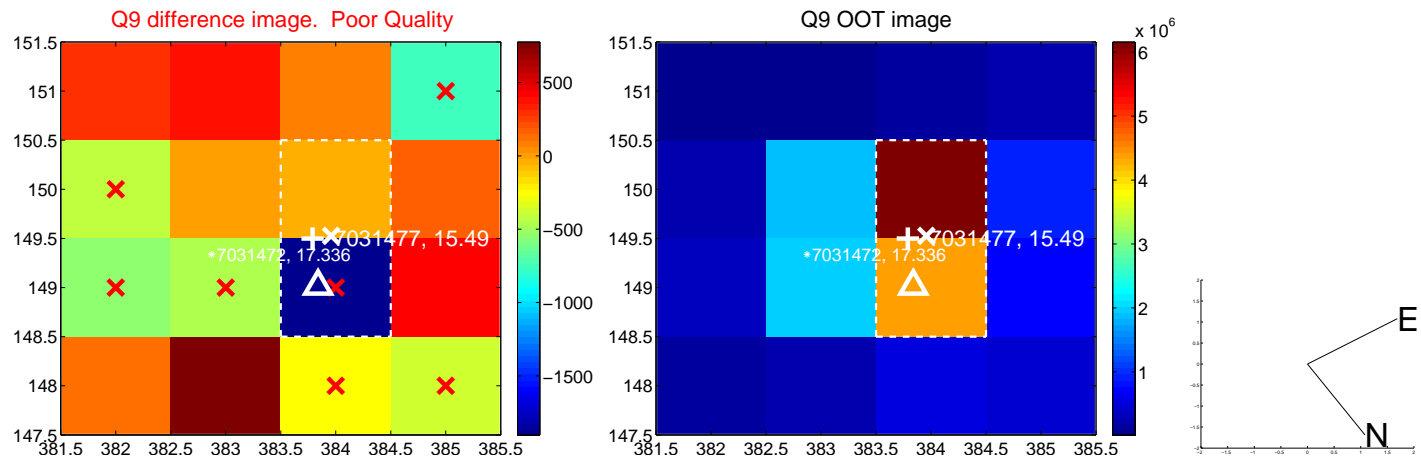
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



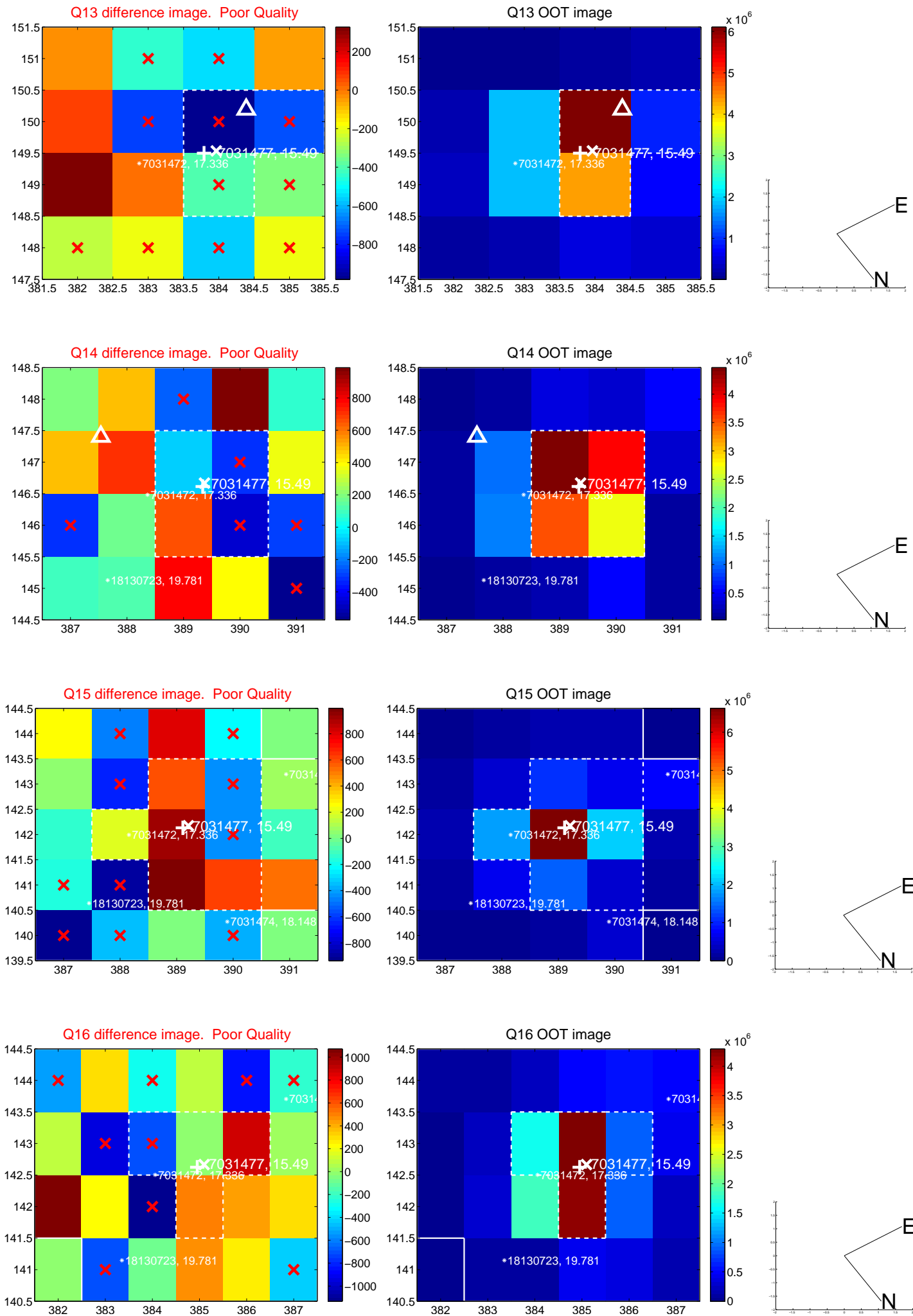
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



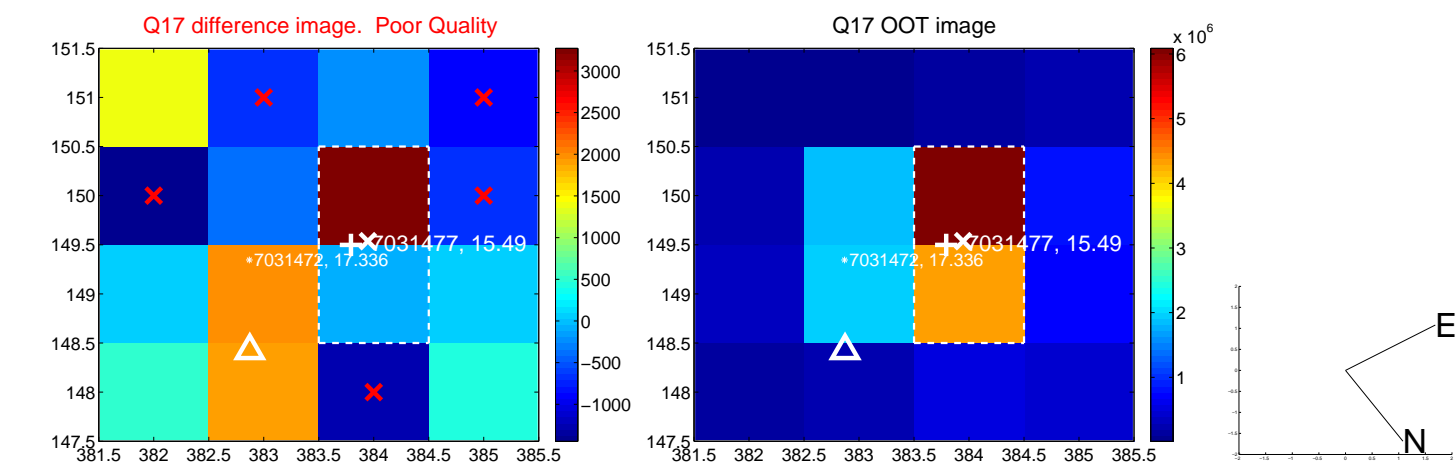
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



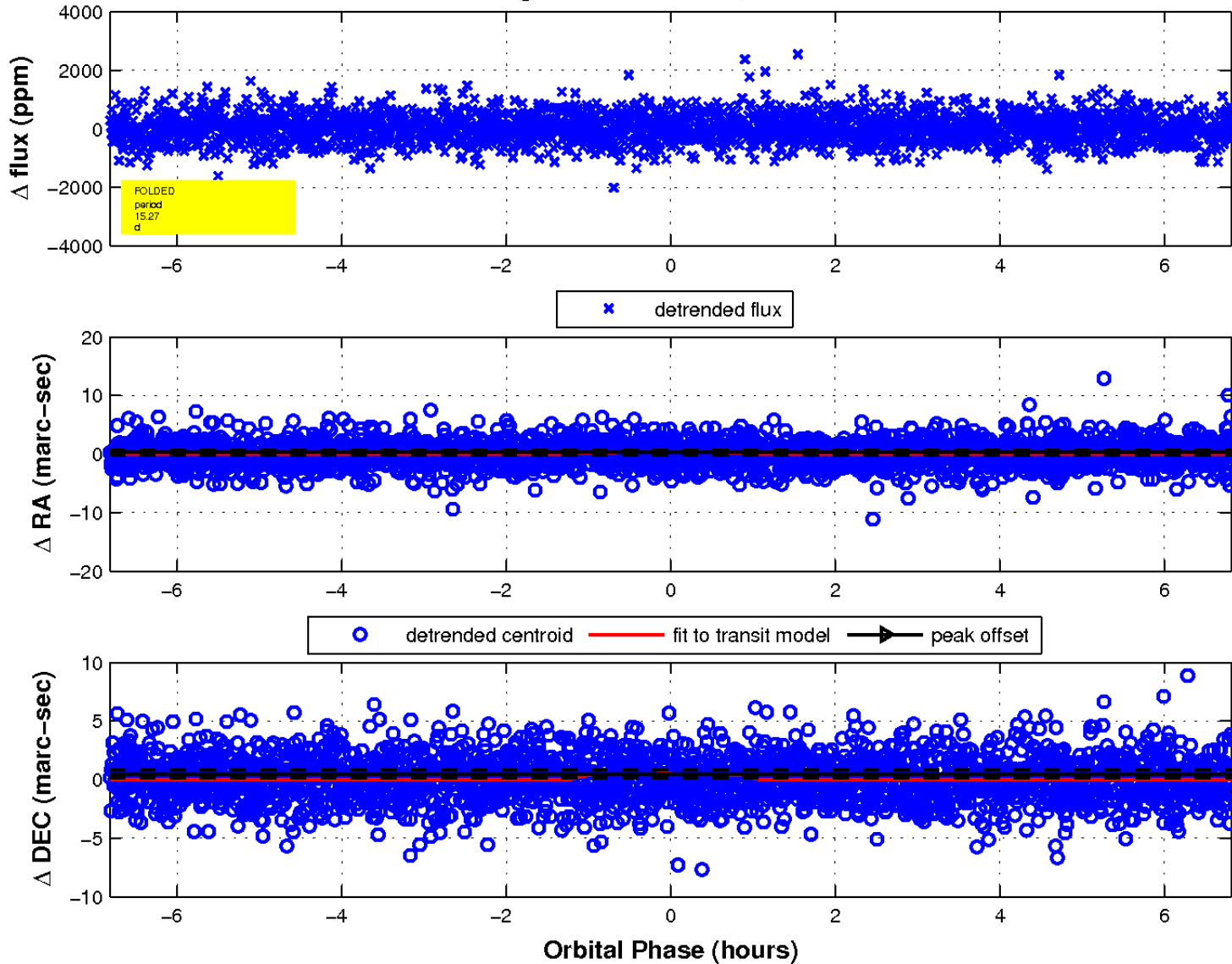
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

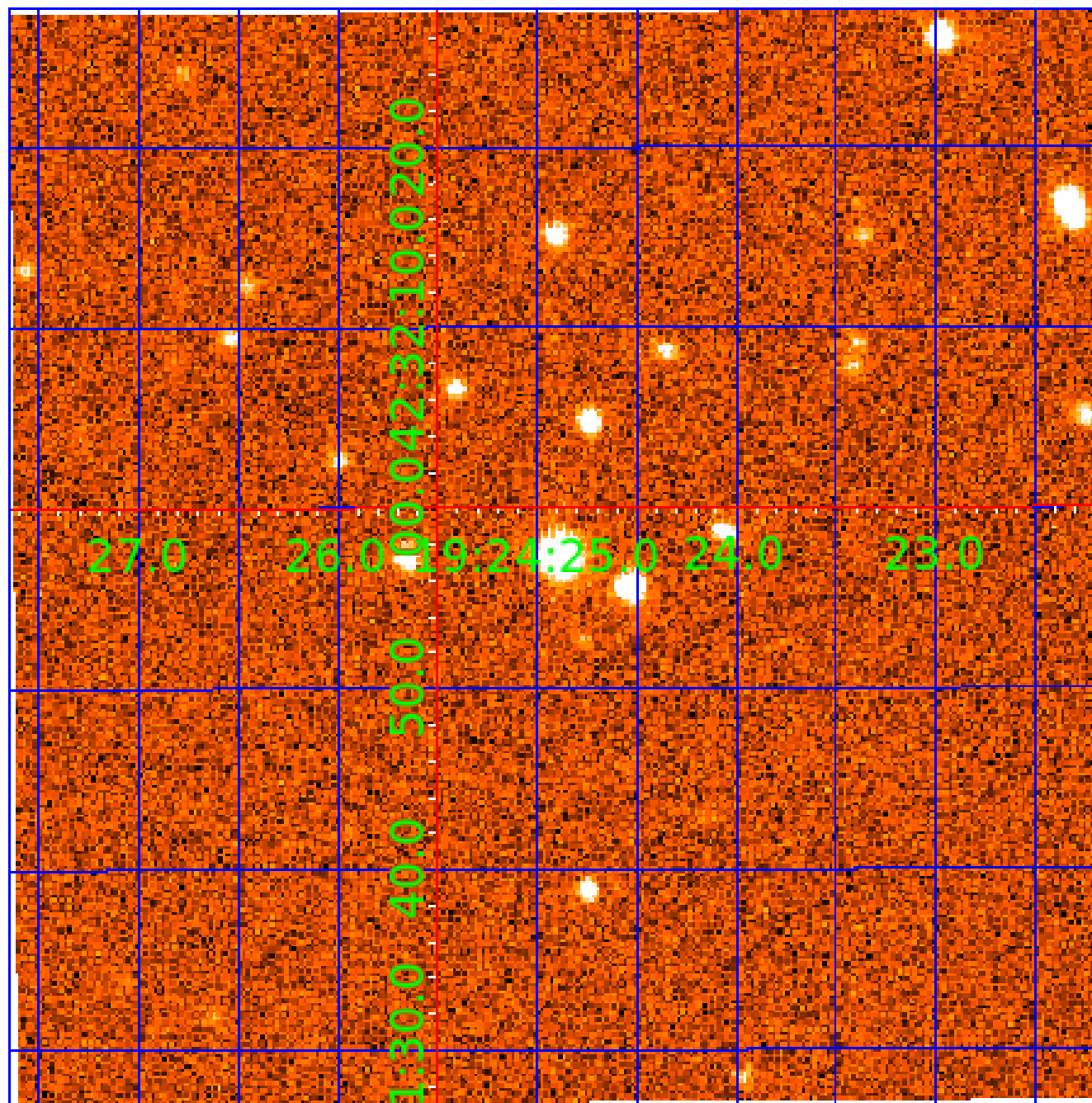


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 007031477

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})
007031477-01	OBS	No	0.566801	131.803901	53.2	3.748	9.5	10.3	0.78	5447	0.61	3306.04
007031477-02	OBS	No	15.269755	136.692603	463.7	2.274	9.1	7.5	0.78	5447	1.88	40.94
007031477-03	OBS	No	39.784727	136.796823	776.3	3.456	8.5	8.6	0.78	5447	4.17	11.42

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007031477-01	OBS	FP	0.00	1	0	1	1	LPP_DV—CENT_KIC_POS—HALO_GHOST—EPHEM_MATCH
007031477-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
007031477-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

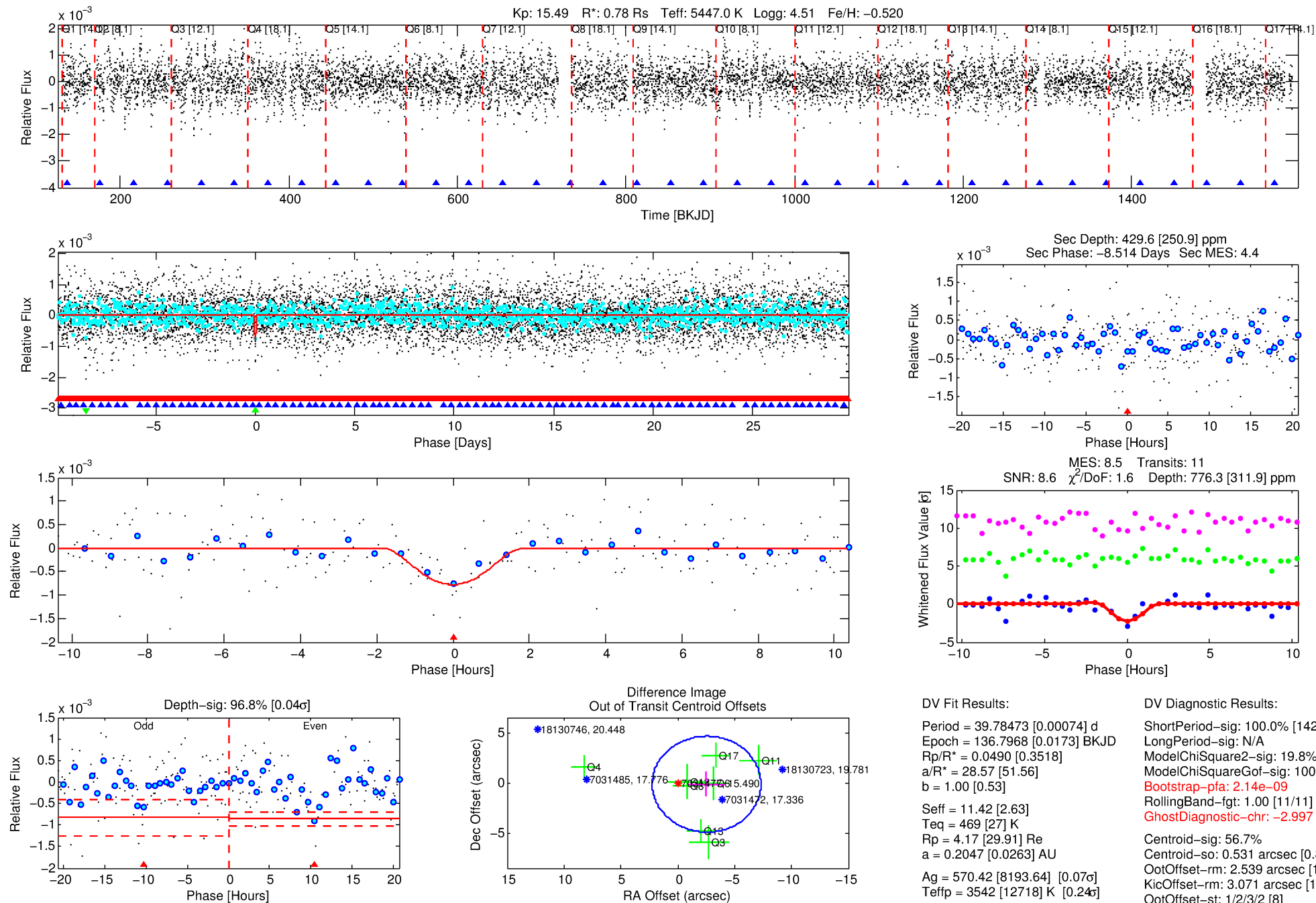
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007031477-03

No Significant Match Found

DV One-Page Summary

KIC: 7031477 Candidate: 3 of 3 Period: 39.785 d



DV Fit Results:

Period = 39.78473 [0.00074] d
Epoch = 136.7968 [0.0173] BKJD
Rp/R* = 0.0490 [0.3518]
a/R* = 28.57 [51.56]
b = 1.00 [0.53]
Seff = 11.42 [2.63]
Teq = 469 [27] K
Rp = 4.17 [29.91] Re
a = 0.2047 [0.0263] AU
Ag = 570.42 [8193.64] [0.07 σ]
Teff = 3542 [12718] K [0.24 σ]

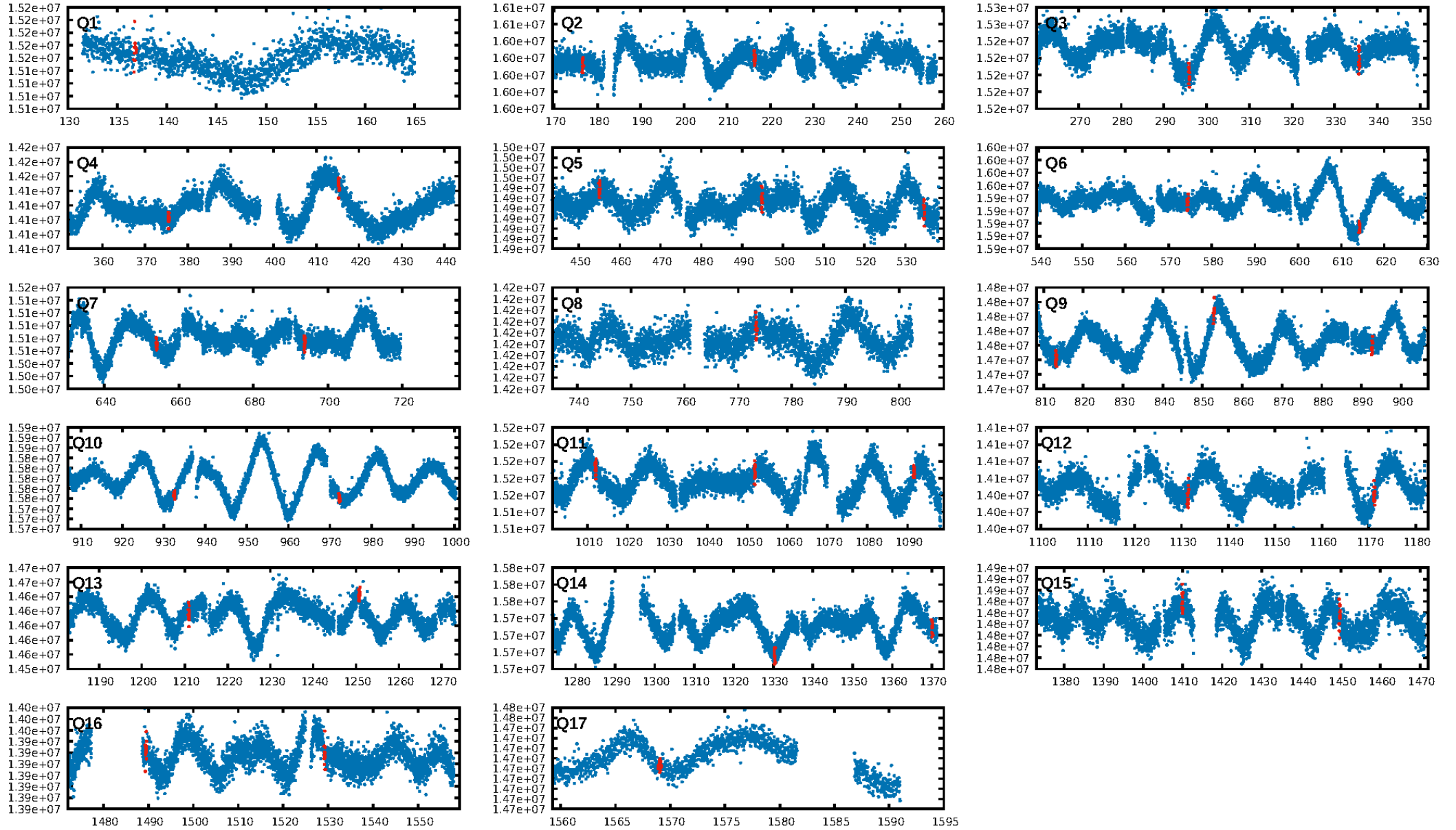
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [142.22 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 19.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.14e-09
RollingBand-fgt: 1.00 [11/11]
GhostDiagnostic-chr: -2.997
Centroid-sig: 56.7%
Centroid-so: 0.531 arcsec [0.80 σ]
OotOffset-rm: 2.539 arcsec [1.60 σ]
KicOffset-rm: 3.071 arcsec [1.86 σ]
OotOffset-st: 1/2/3/2 [8]
KicOffset-st: 1/2/3/2 [8]
DiffImageQuality-fgm: 0.00 [0/8]
DiffImageOverlap-fno: 0.00 [0/17]

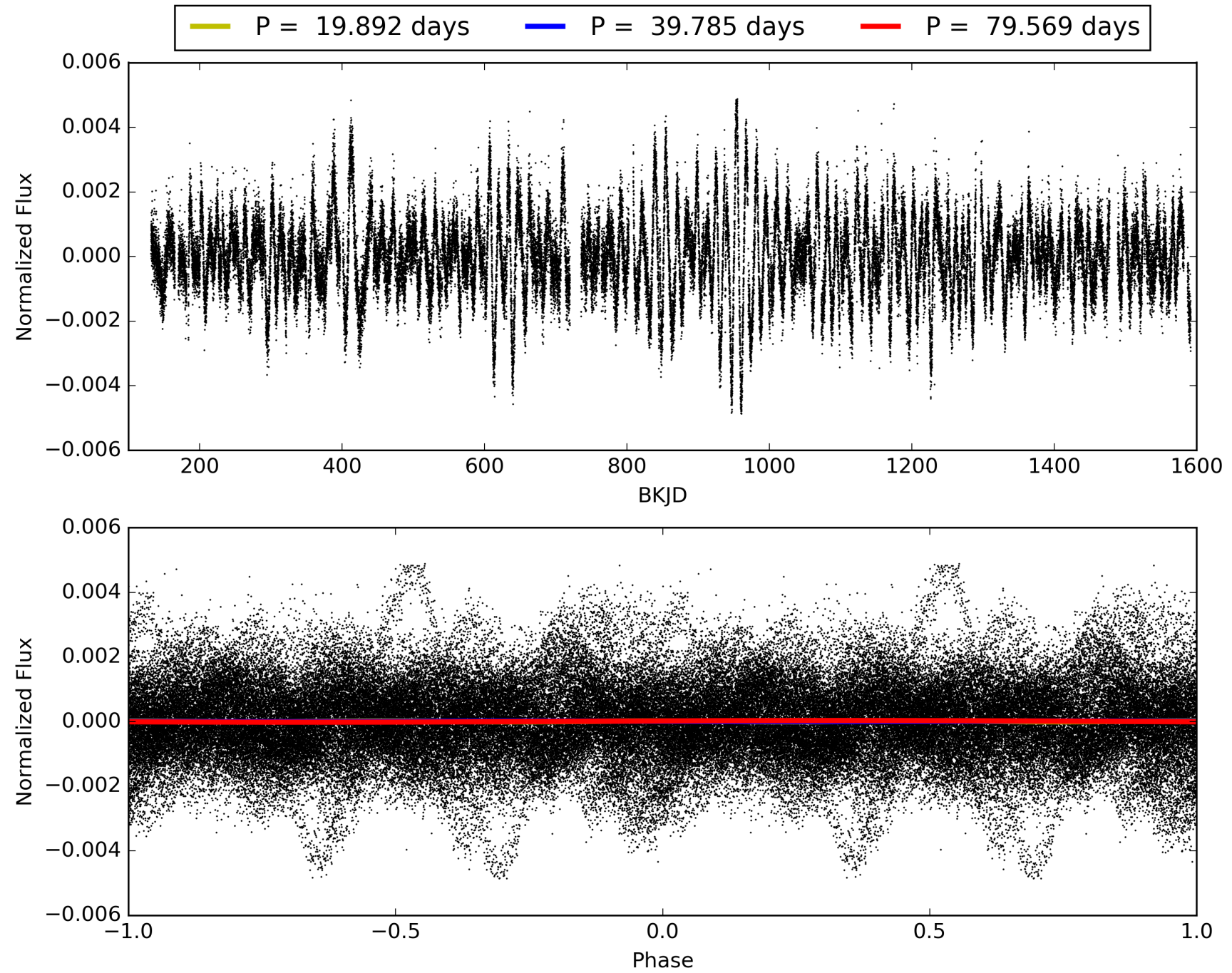
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 16:22:31 Z

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

TCE 007031477-03, PDC Light Curves

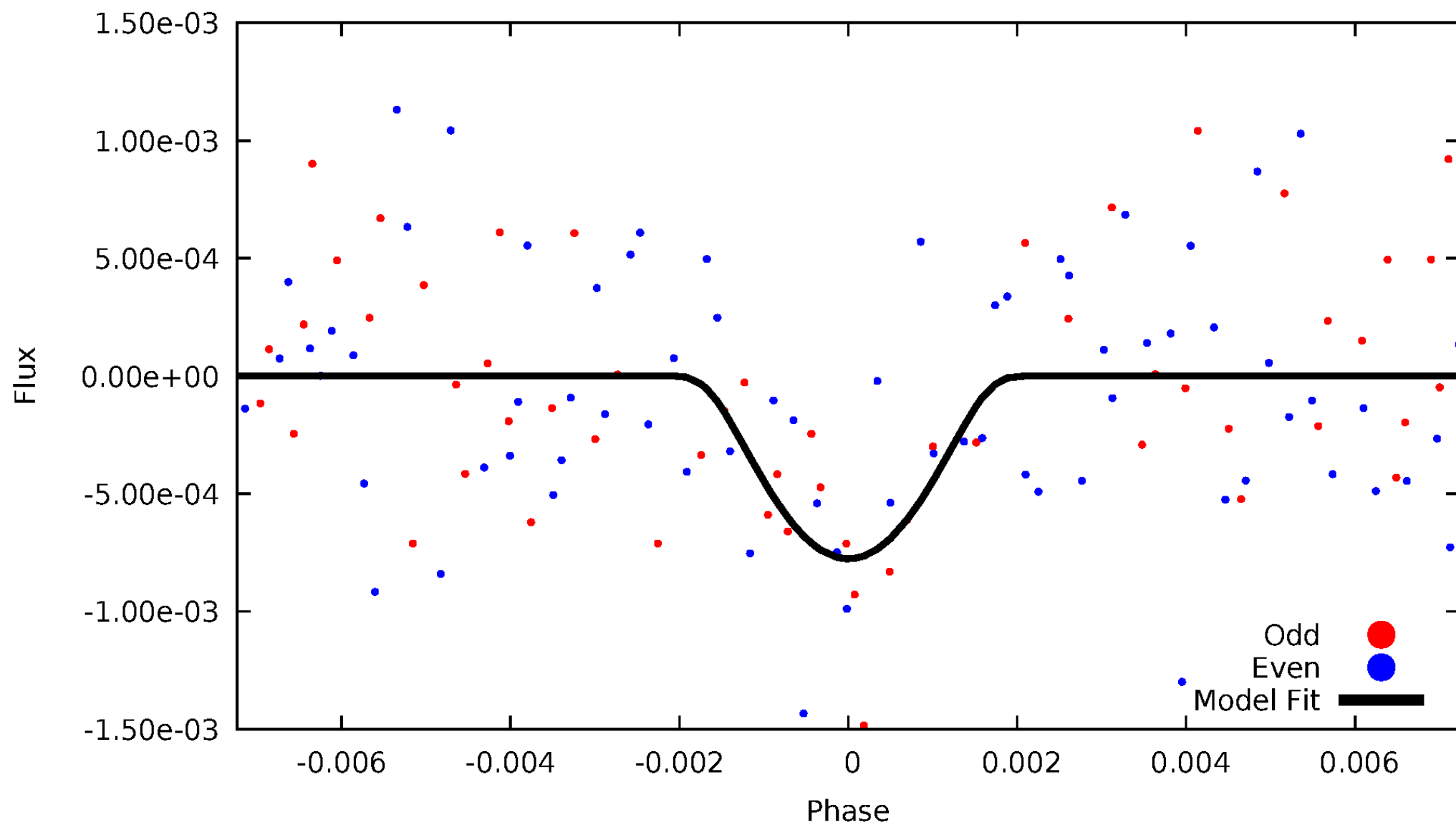


TCE 007031477-03



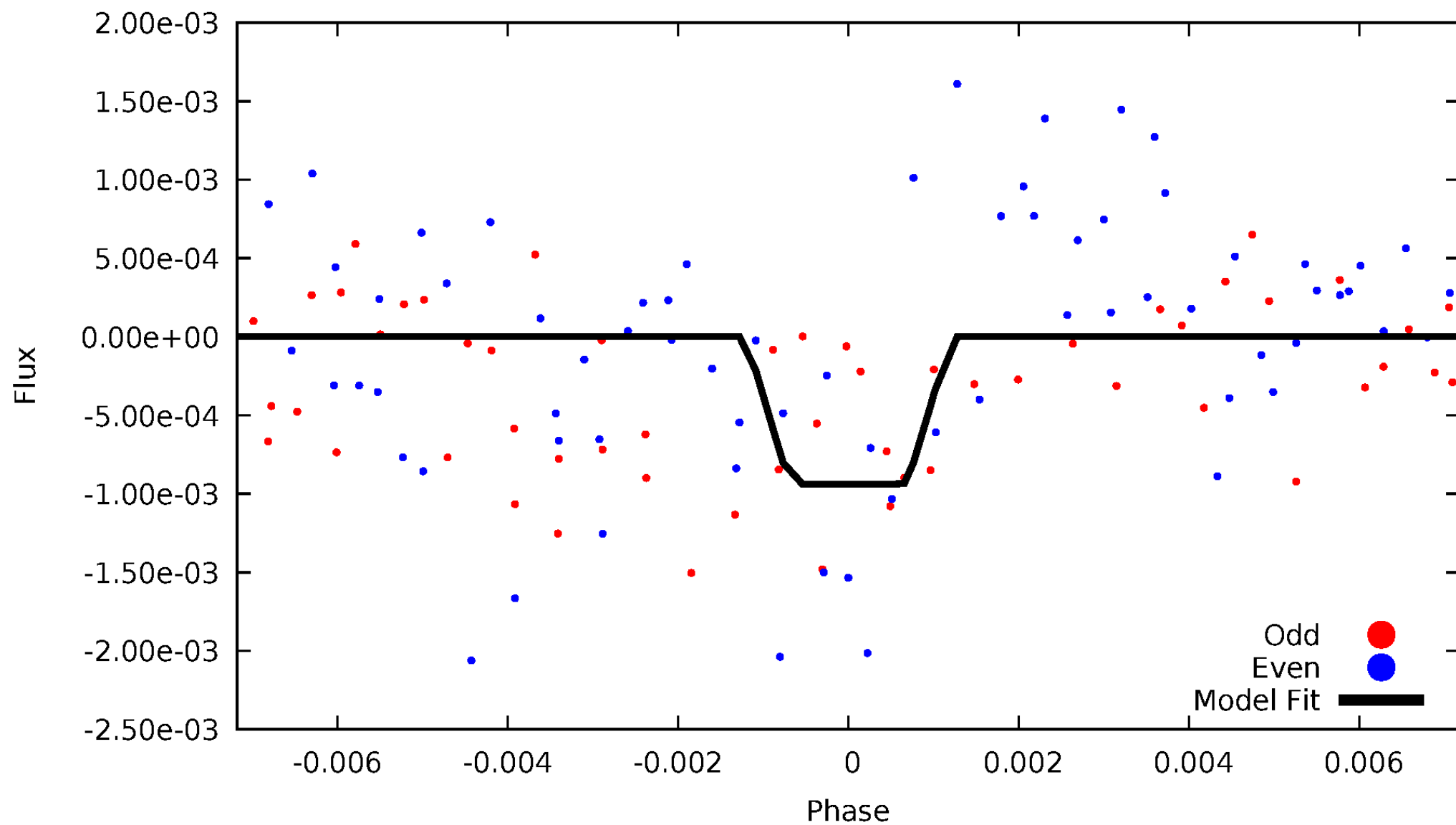
DV Odd/Even

TCE 007031477-03



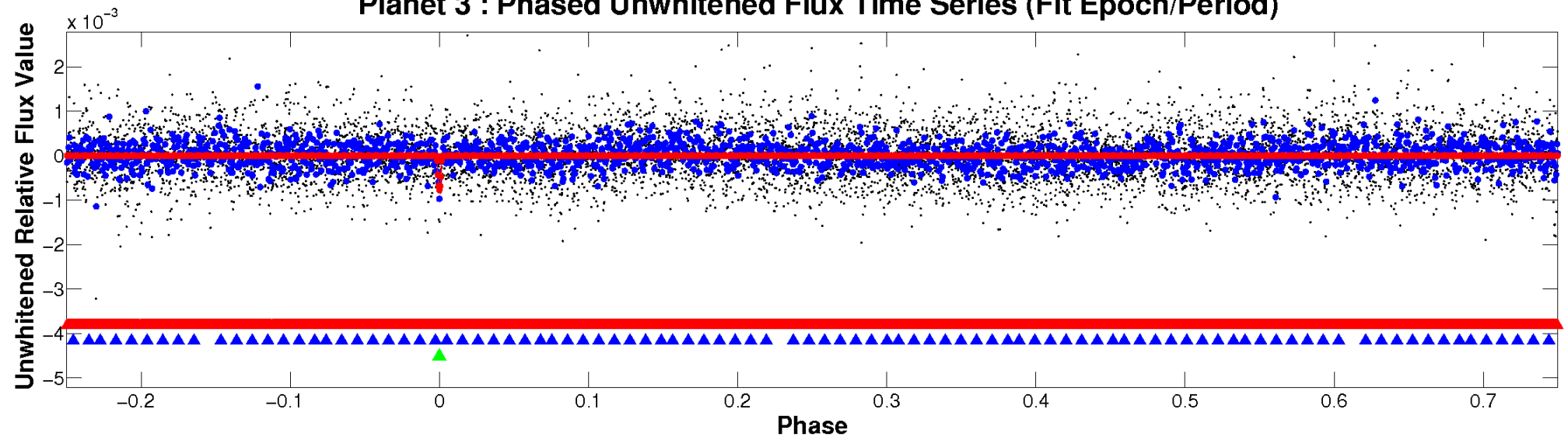
ALT Odd/Even

TCE 007031477-03

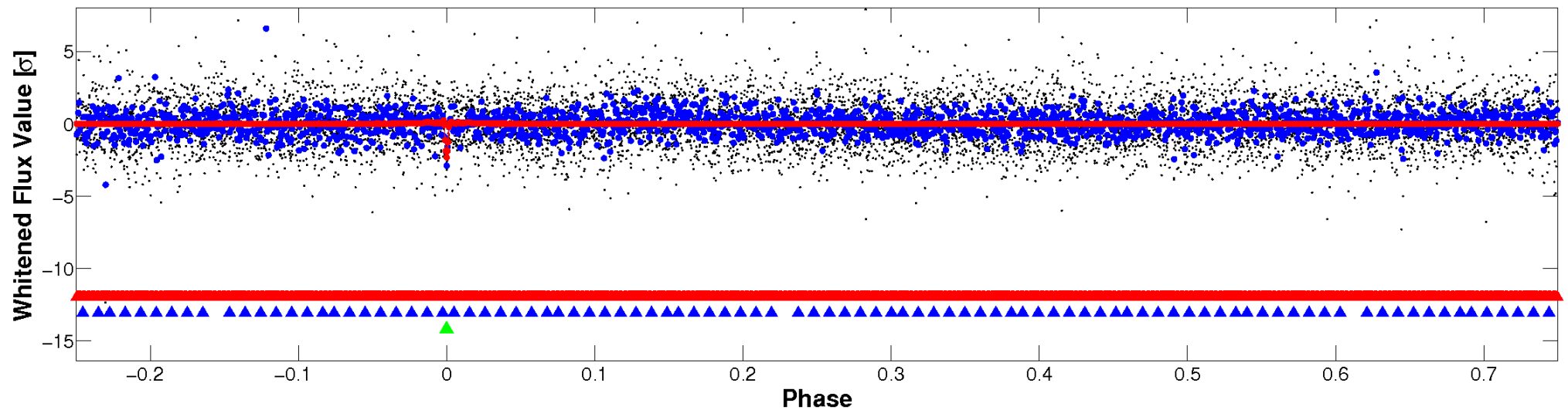


Non-Whitened Vs. Whitened Light Curve

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

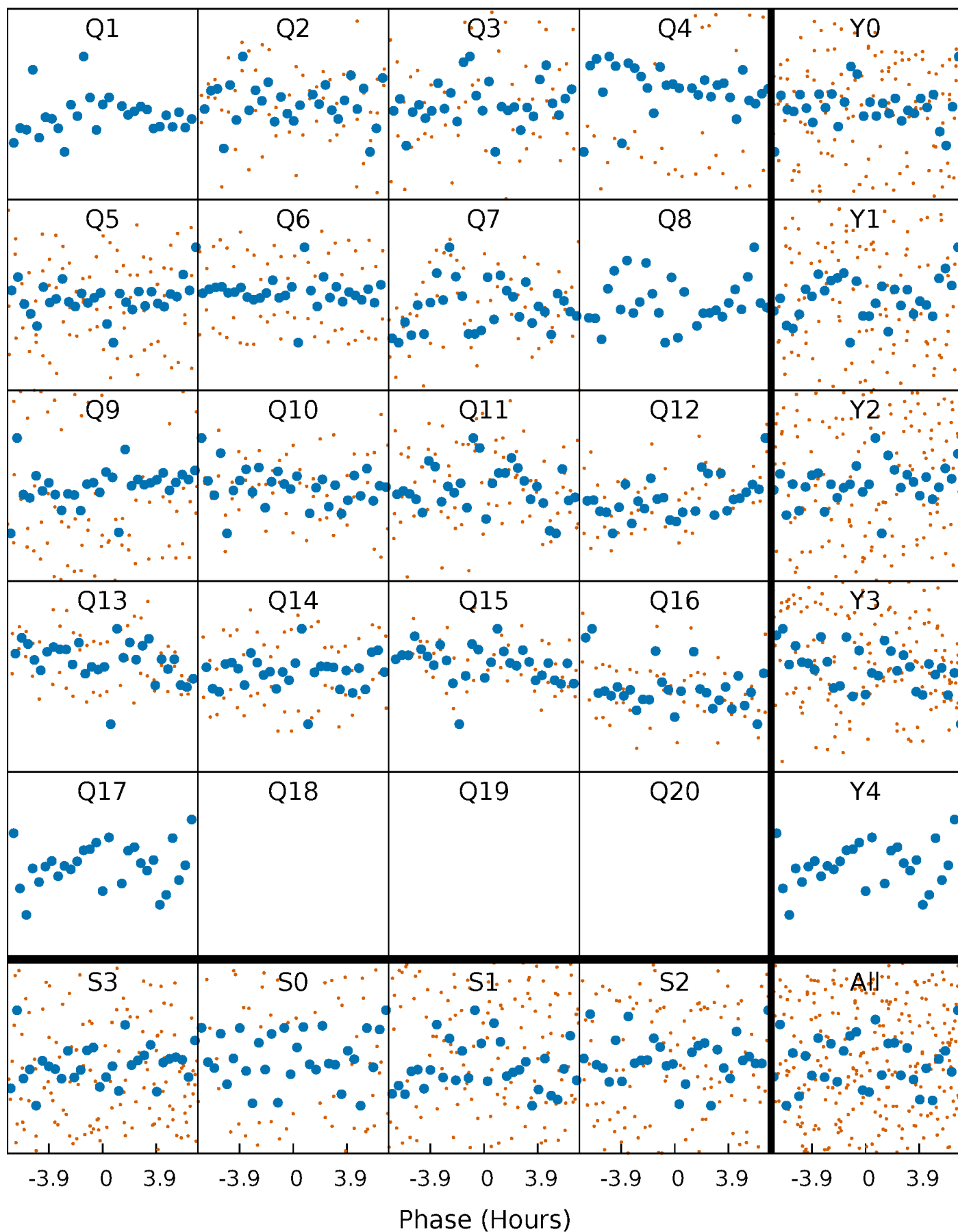


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



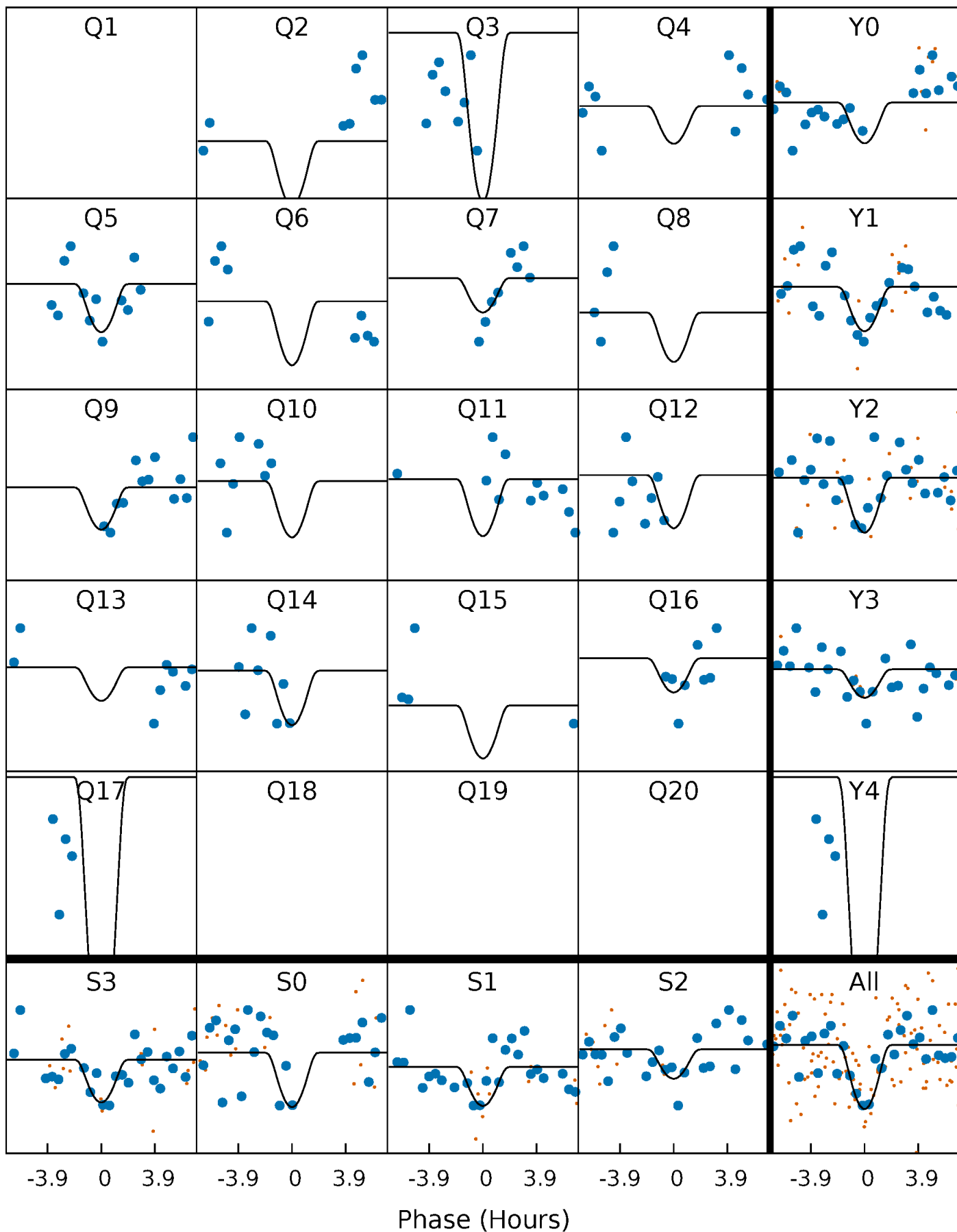
PDC Quarter-Phased Transit Curves

TCE 007031477-03 P= 39.784727 Days $T_0=136.796823$ (BKJD)



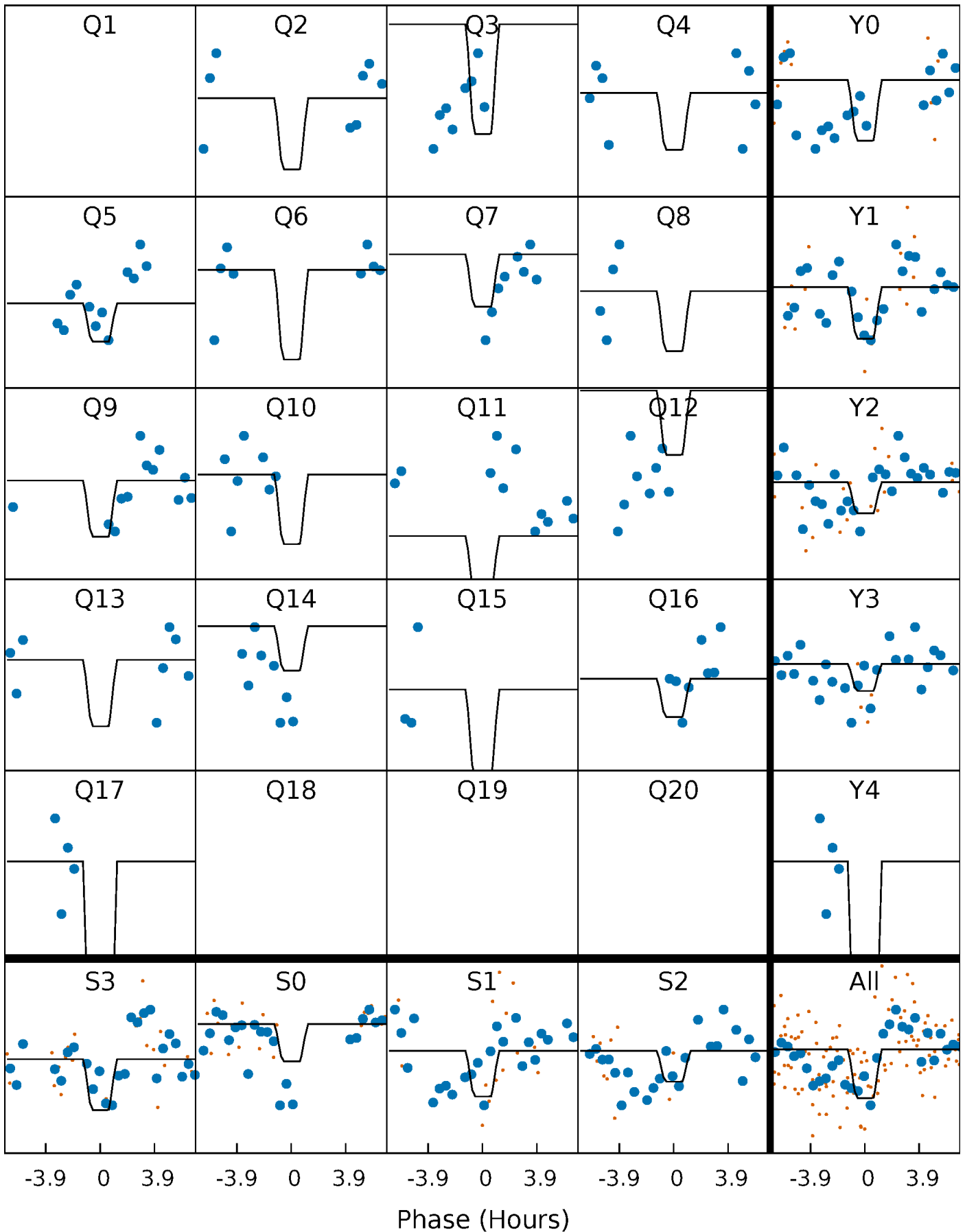
DV Quarter-Phased Transit Curves

TCE 007031477-03 $P = 39.784727$ Days $T_0 = 136.796823$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

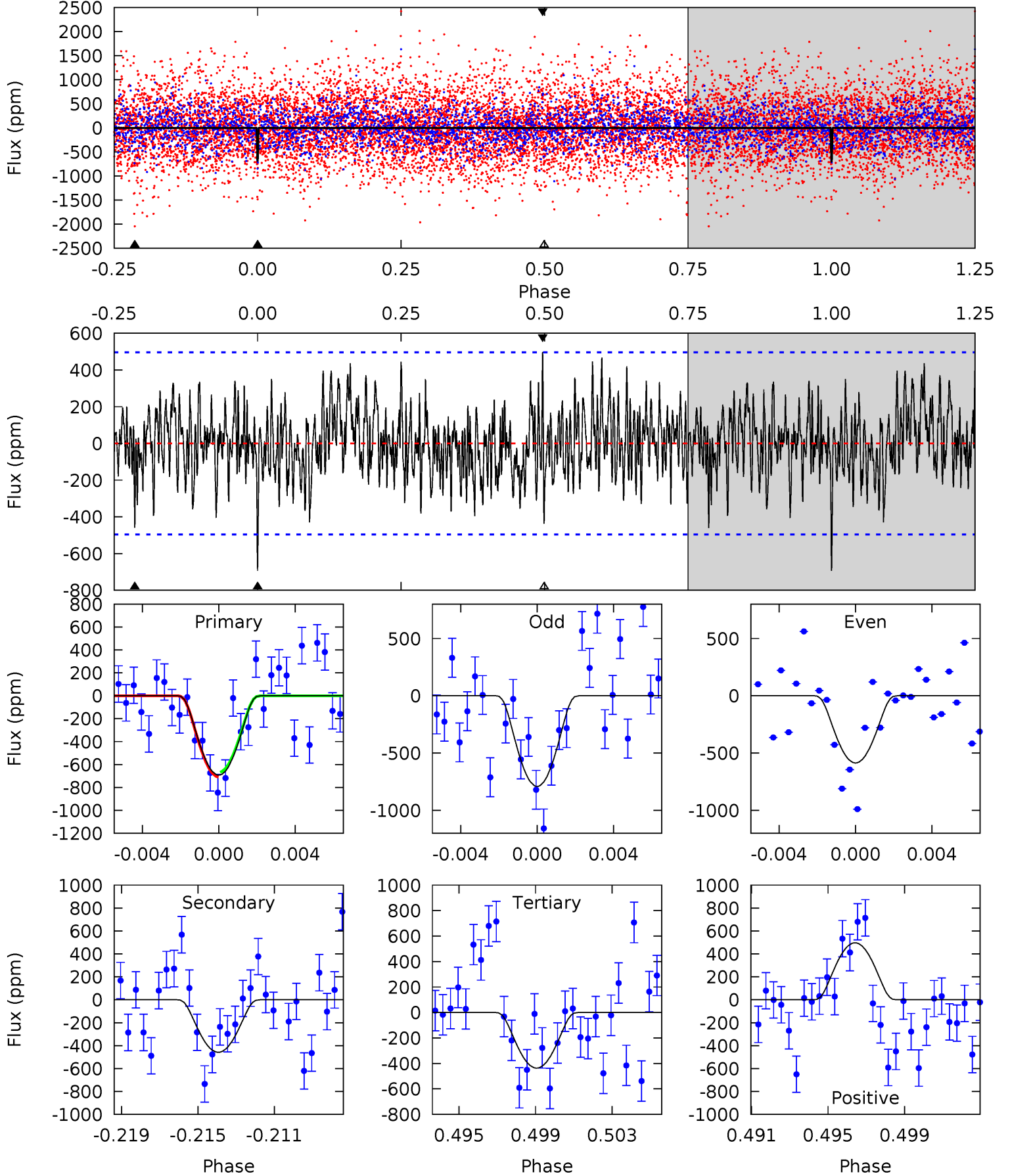
TCE 007031477-03 P= 39.785146 Days $T_0=136.769923$ (BKJD)



DV Model-Shift Uniqueness Test

007031477-03, P = 39.784727 Days, E = 97.012096 Days

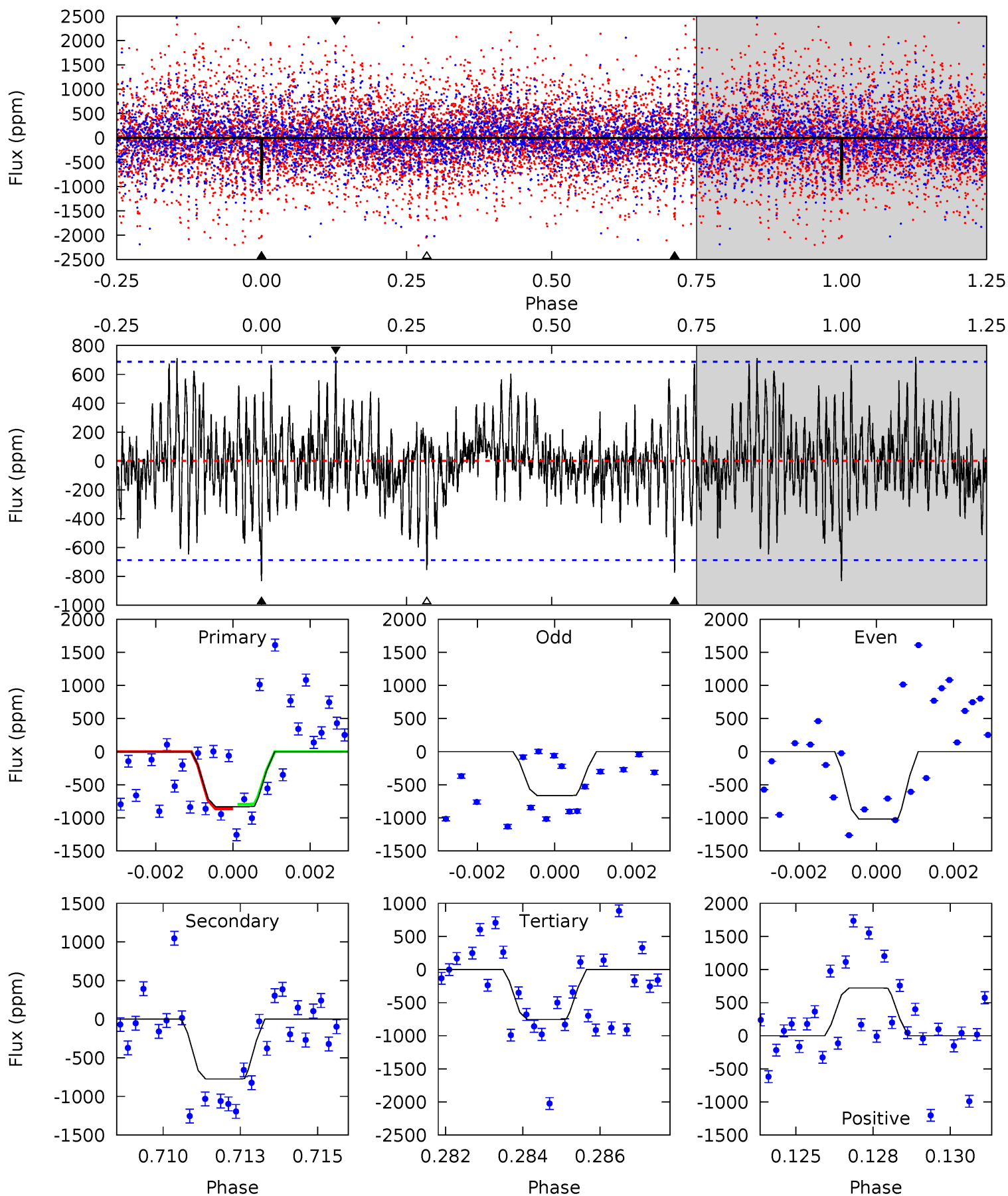
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.27	4.81	4.58	5.21	5.21	2.89	1.65	2.69	2.05	0.22	-0.41	1.07	0.89	0.42	0.22



Alt Model-Shift Uniqueness Test

007031477-03, P = 39.785146 Days, E = 96.984777 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.41	5.97	5.82	5.56	5.30	3.04	1.59	0.59	0.85	0.15	0.41	1.36	1.07	0.46	0.27



Stellar Parameters For KIC 007031477

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5447^{+178}_{-162}	$4.514^{+0.105}_{-0.094}$	$-0.520^{+0.300}_{-0.300}$	$0.779^{+0.117}_{-0.096}$	$0.722^{+0.105}_{-0.045}$	$2.149^{+1.016}_{-0.634}$
	+3%/-3%	+2%/-2%	+58%/-58%	+15%/-12%	+15%/-6%	+47%/-30%
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 007031477-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-458 ± 95	$22.20^{+22.82}_{-14.98}$	652^{+33}_{-29}	2422^{+931}_{-369}	22^{+206}_{-16}
Alt.	-774 ± 130	$21.04^{+24.10}_{-14.59}$	654^{+32}_{-30}	2636^{+1052}_{-438}	40^{+366}_{-31}

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 $A_{obs} \gg 1.0$

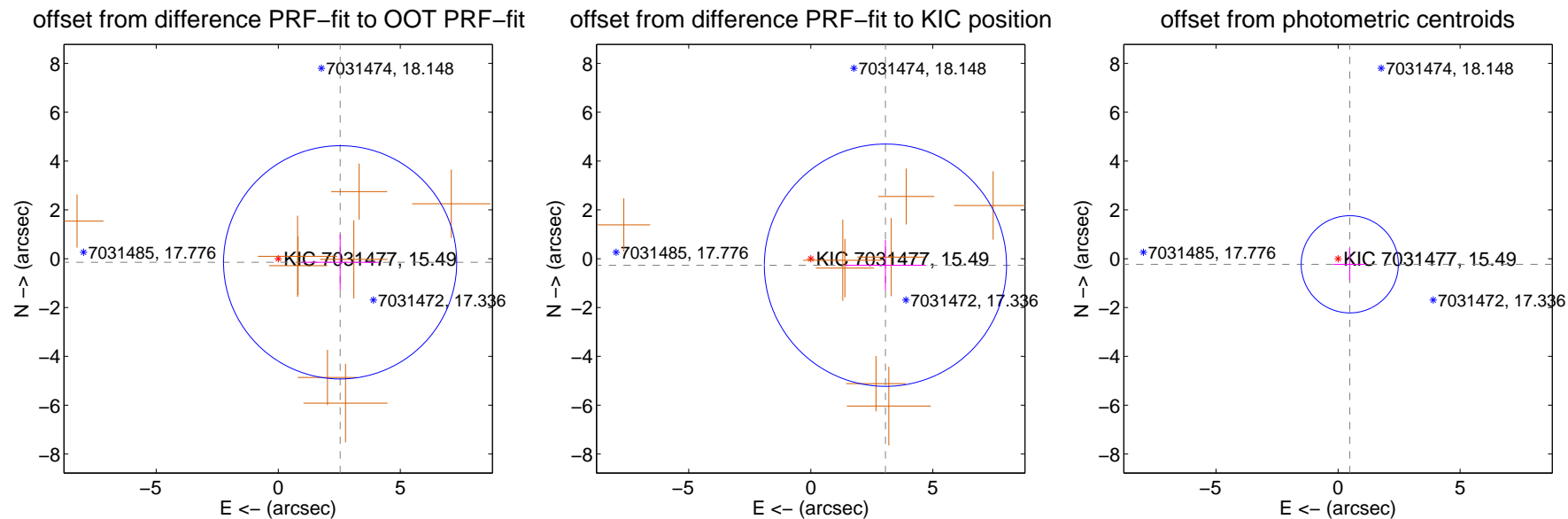
DV Centroid Data

Supplemental centroid analysis for 007031477-03. Kepler magnitude: 15.49. Transit SNR 8.57

There are 0 quarters with good PRF difference image offsets

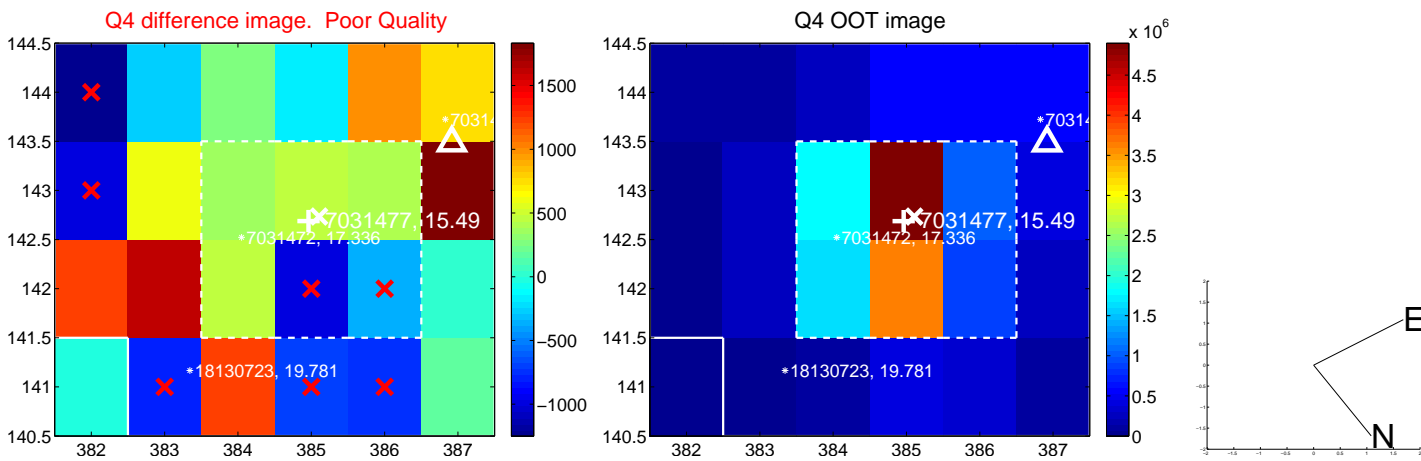
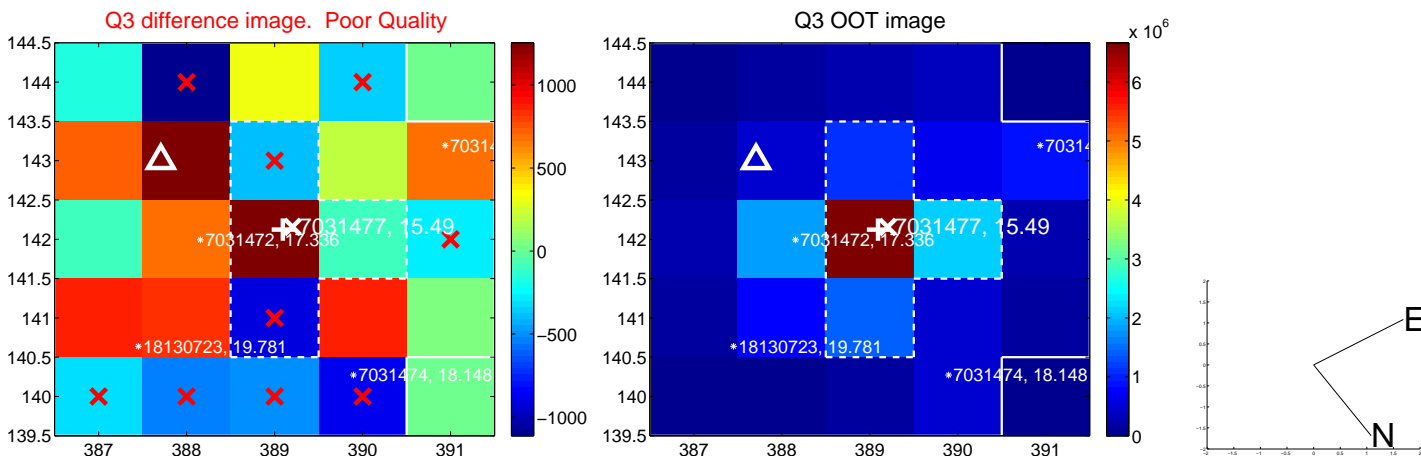
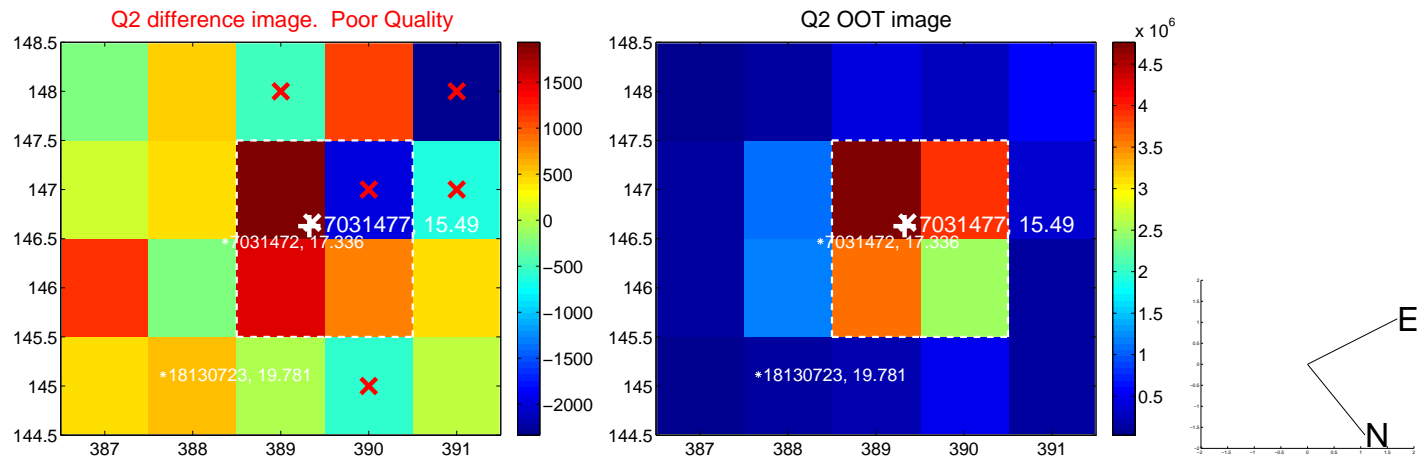
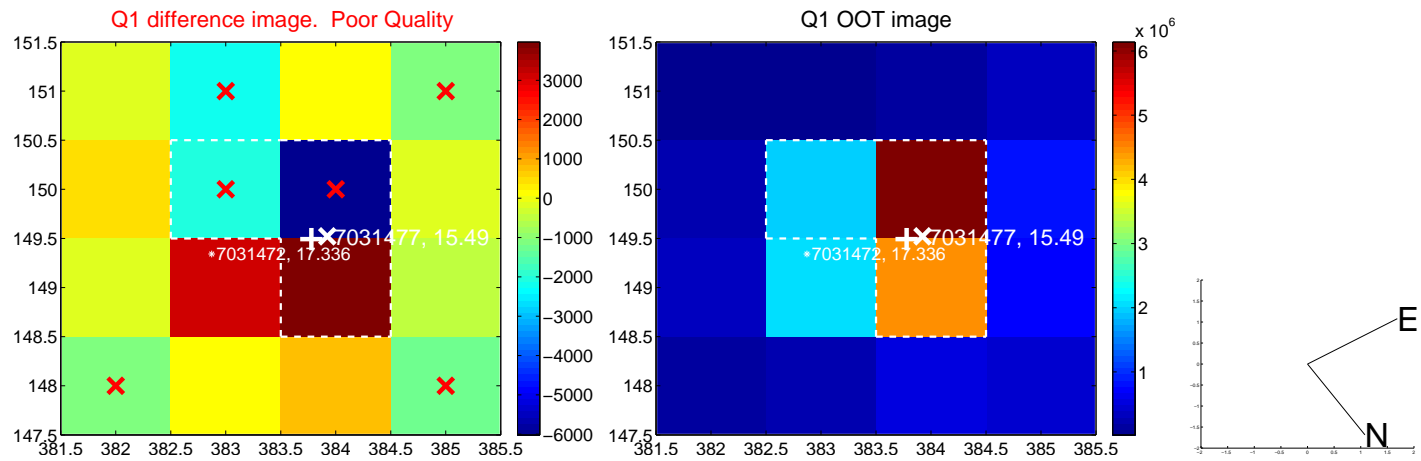
The direct PRF centroid is offset from the target star catalog position by about 0.63 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.539 ± 1.592	1.60	-2.535 ± 1.597	-0.149 ± 1.150
PRF-fit source offset from KIC position	3.071 ± 1.654	1.86	-3.060 ± 1.659	-0.266 ± 1.033
photometric centroid source offset	0.53 ± 0.66	0.80	-0.48 ± 0.66	-0.23 ± 0.67

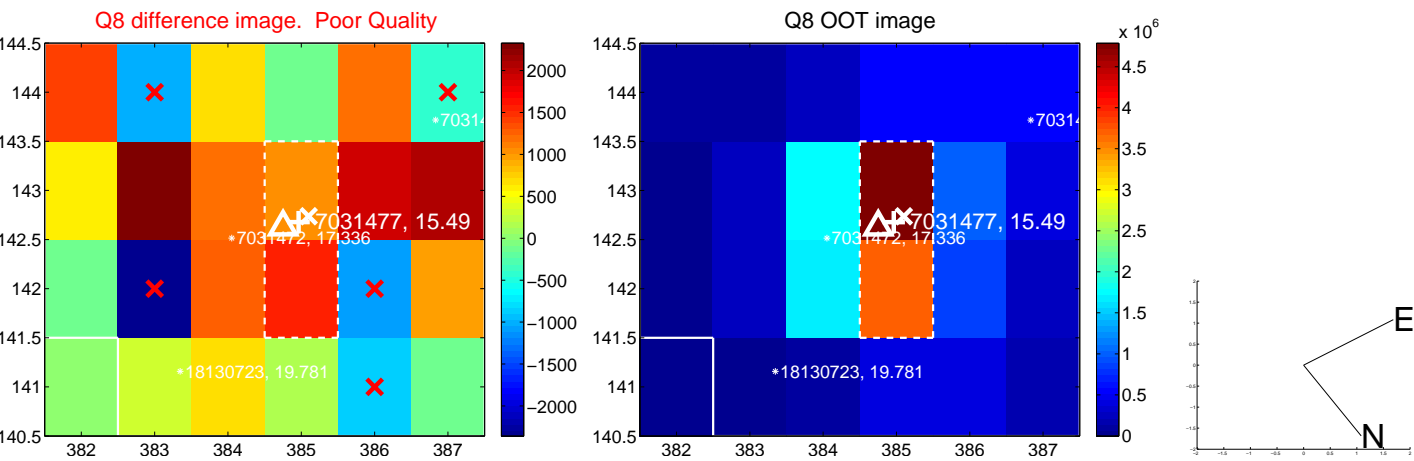
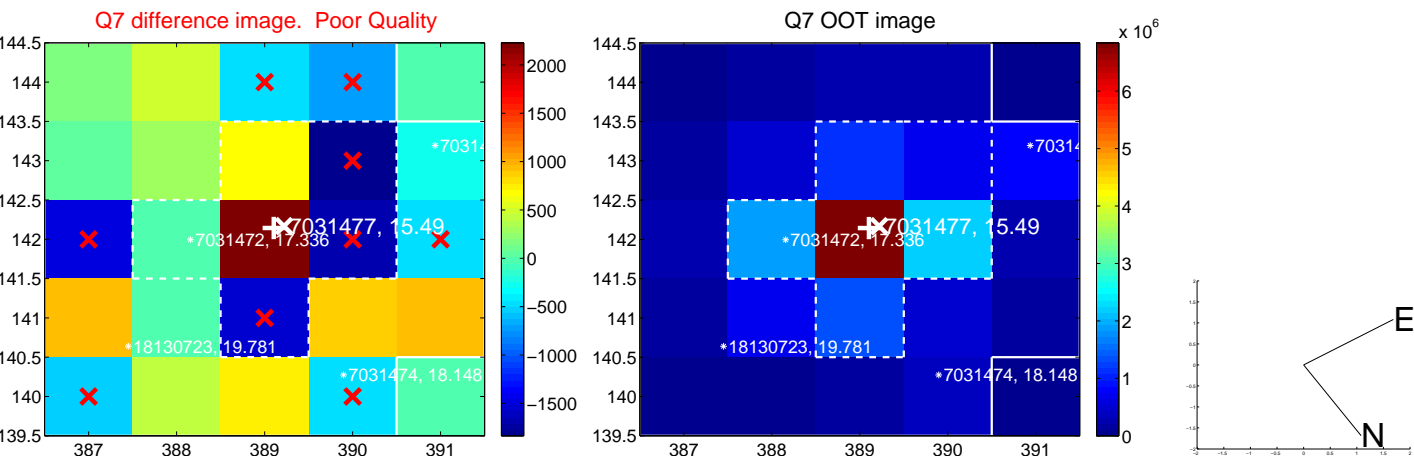
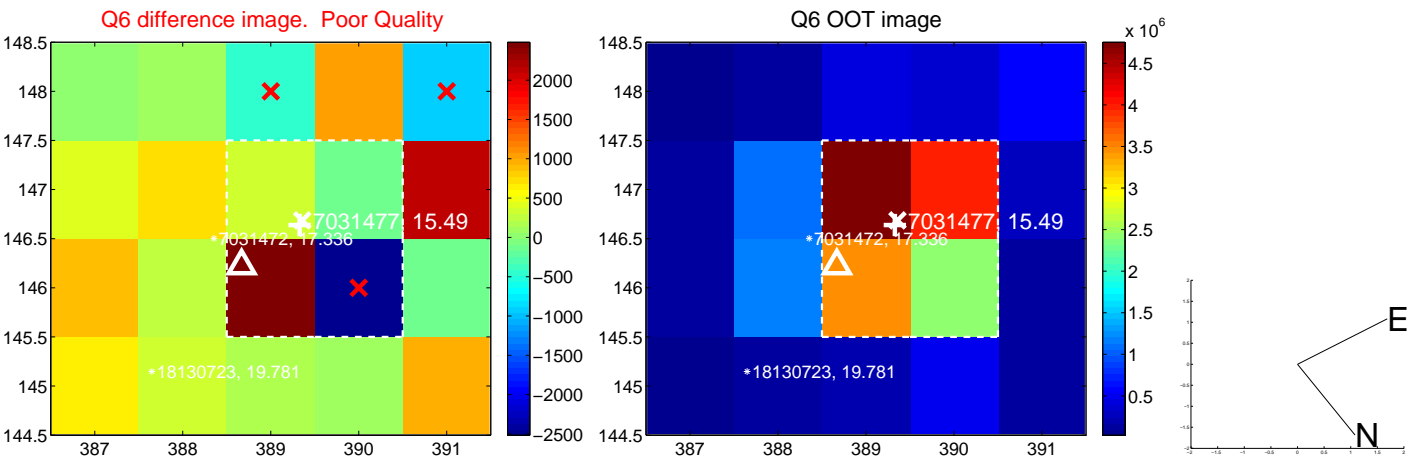
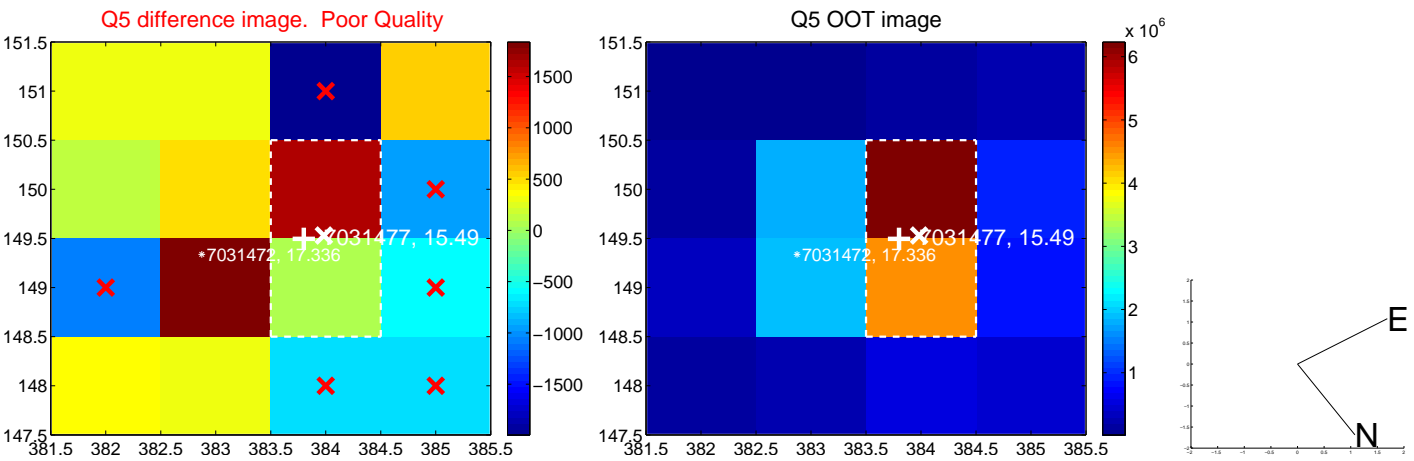


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

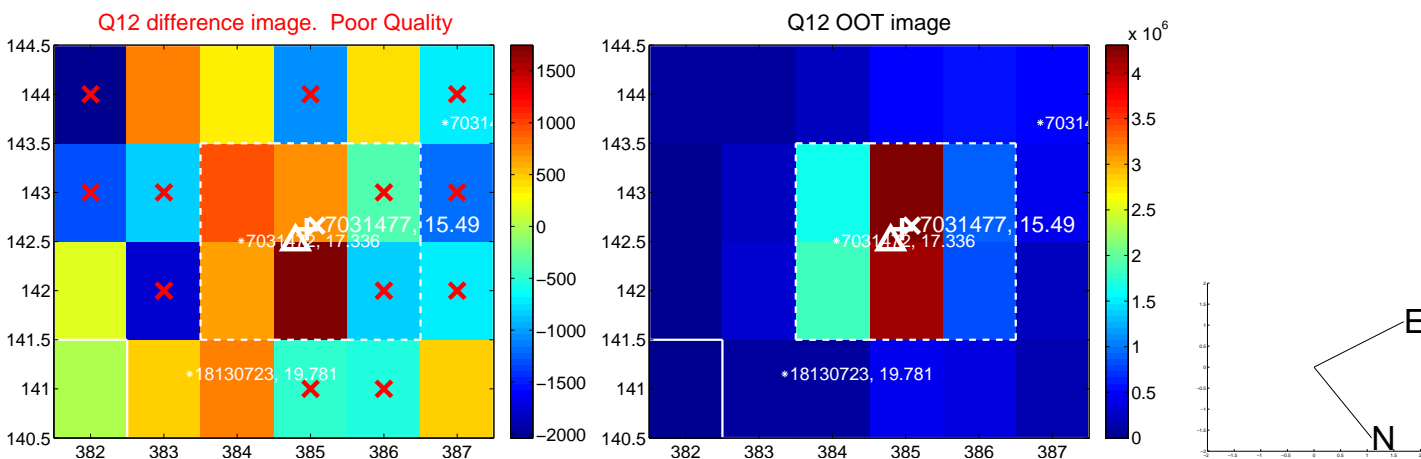
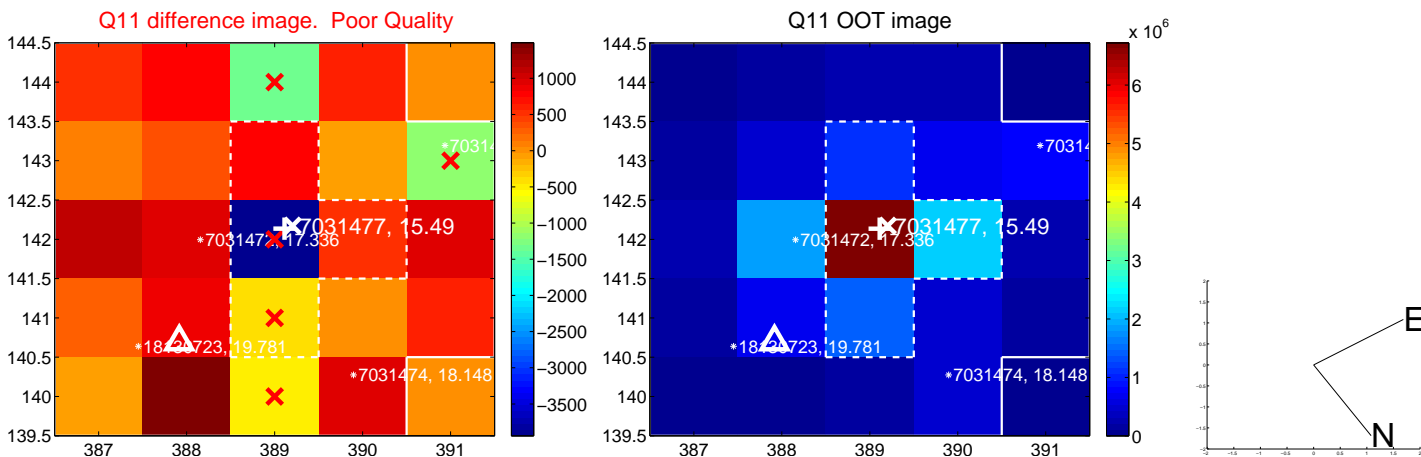
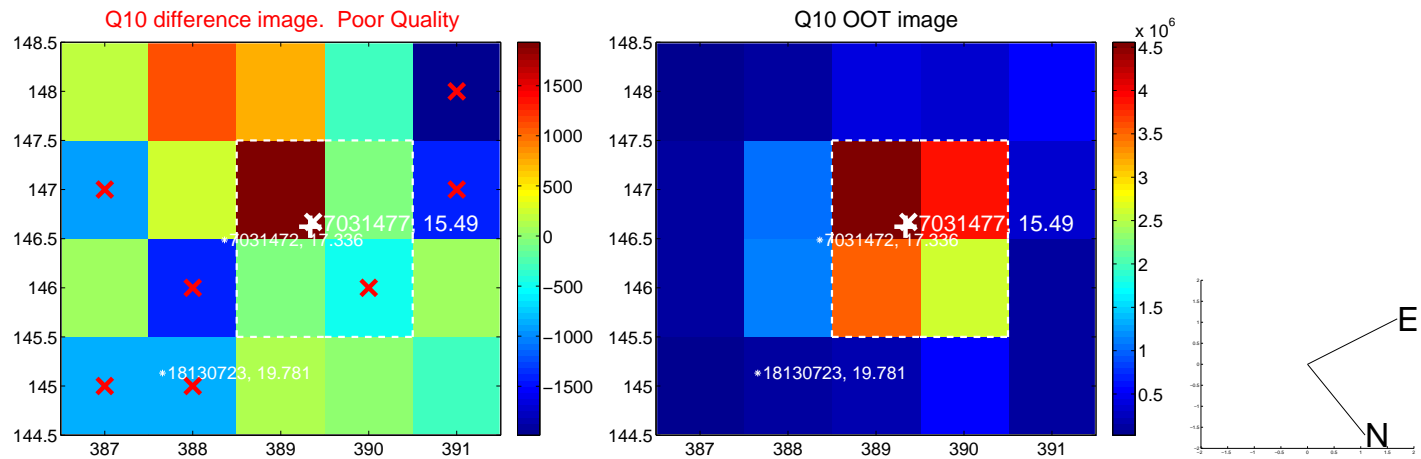
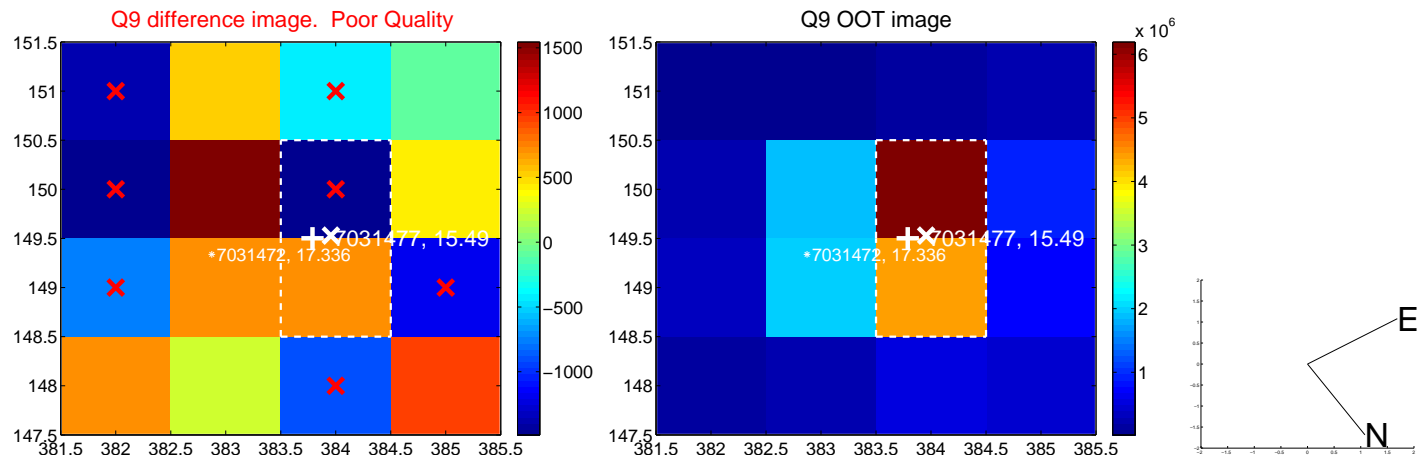
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



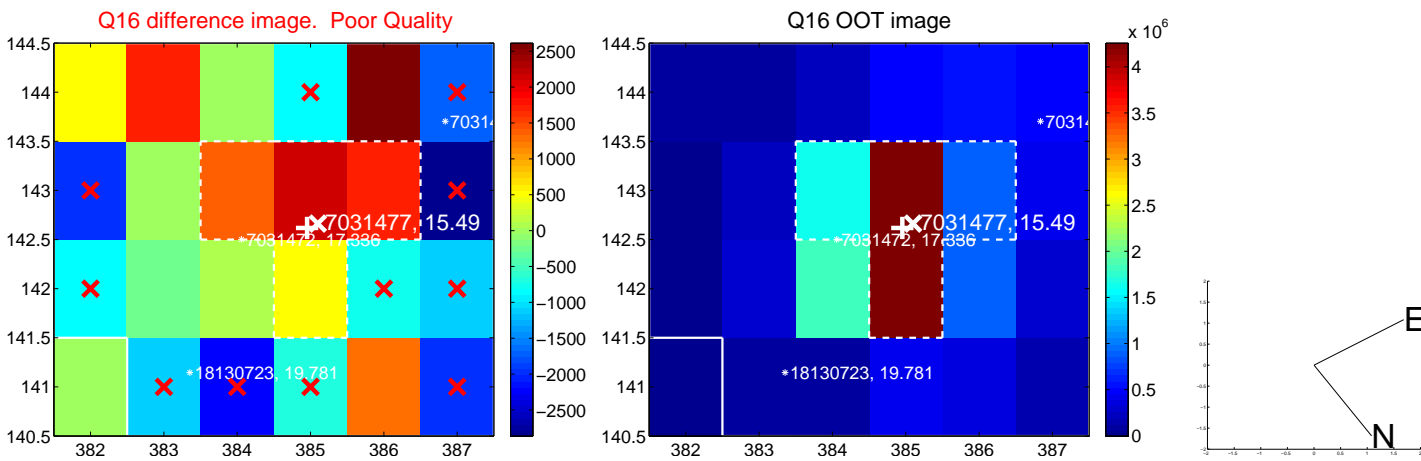
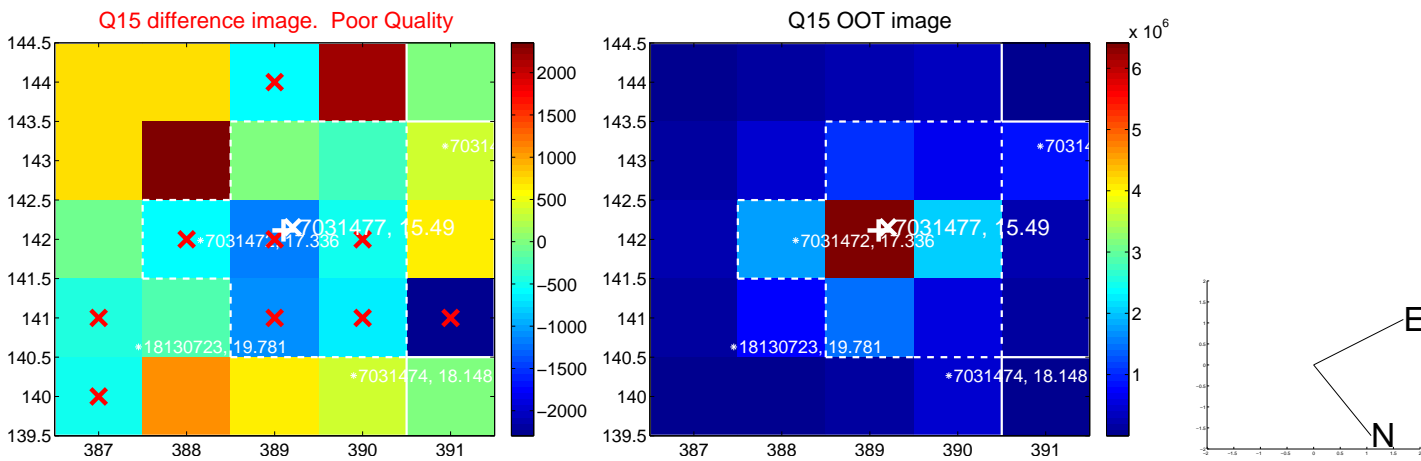
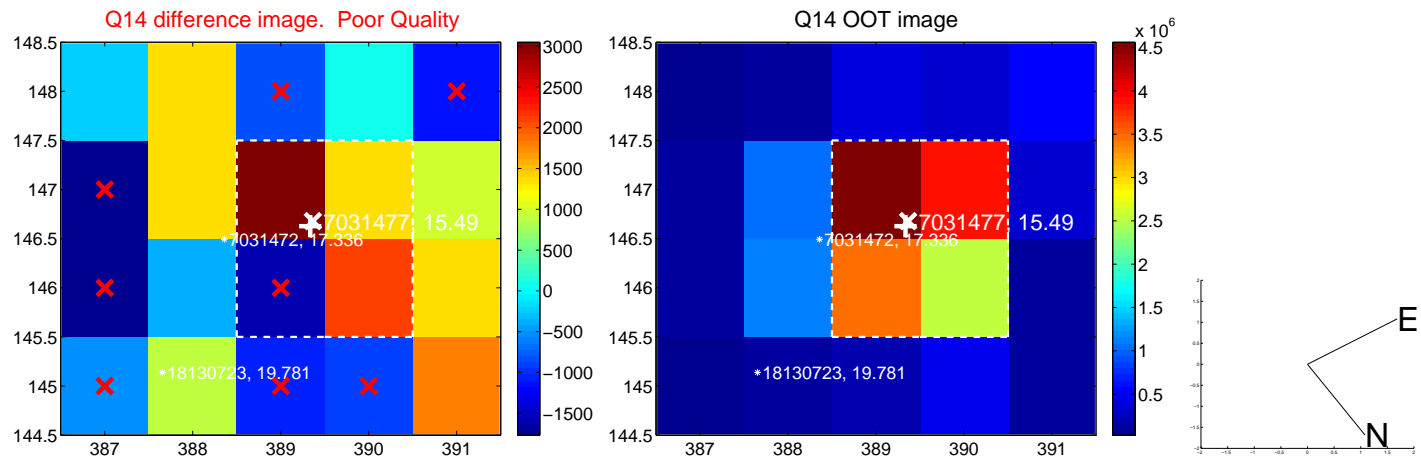
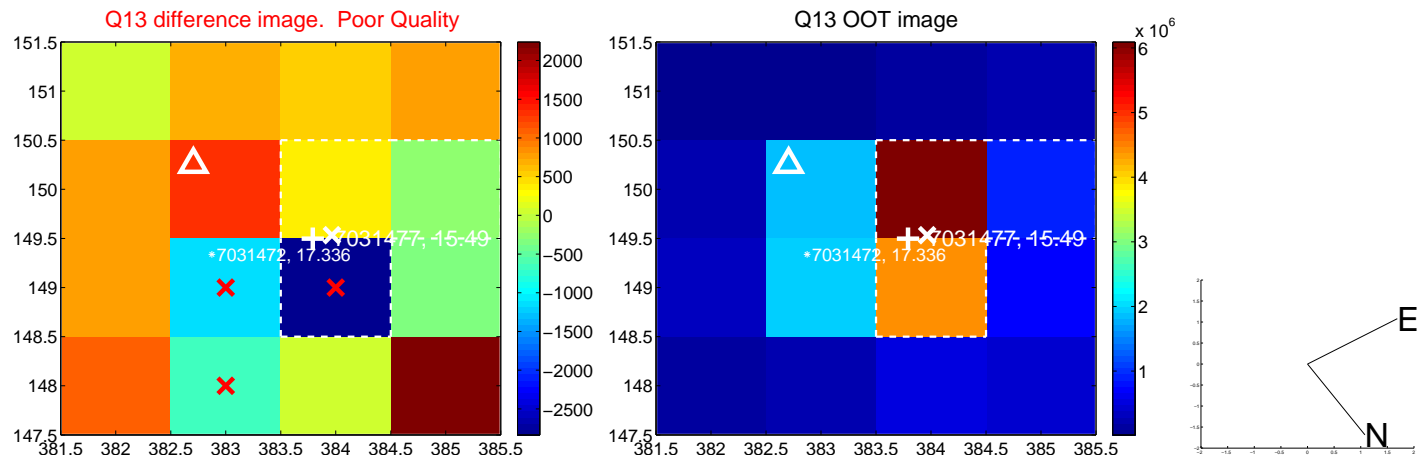
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

