

KIC 007917485

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})
007917485-01	OBS	No	1.874999	132.158181	66.9	1.617	11.2	7.6	1.83	7390	1.55	7782.24
007917485-02	OBS	No	1.879853	133.309522	5.4	4.085	11.0	0.7	1.83	7390	0.47	7755.46
007917485-03	OBS	No	0.625012	131.719286	62.8	2.442	10.5	11.0	1.83	7390	1.69	33670.94
007917485-04	OBS	No	222.108073	342.119737	985.7	2.585	7.9	7.9	1.83	7390	6.15	13.38
007917485-05	OBS	No	76.791250	137.141142	549.6	7.142	7.5	7.4	1.83	7390	5.28	55.13

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007917485-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007917485-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
007917485-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
007917485-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES
007917485-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

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

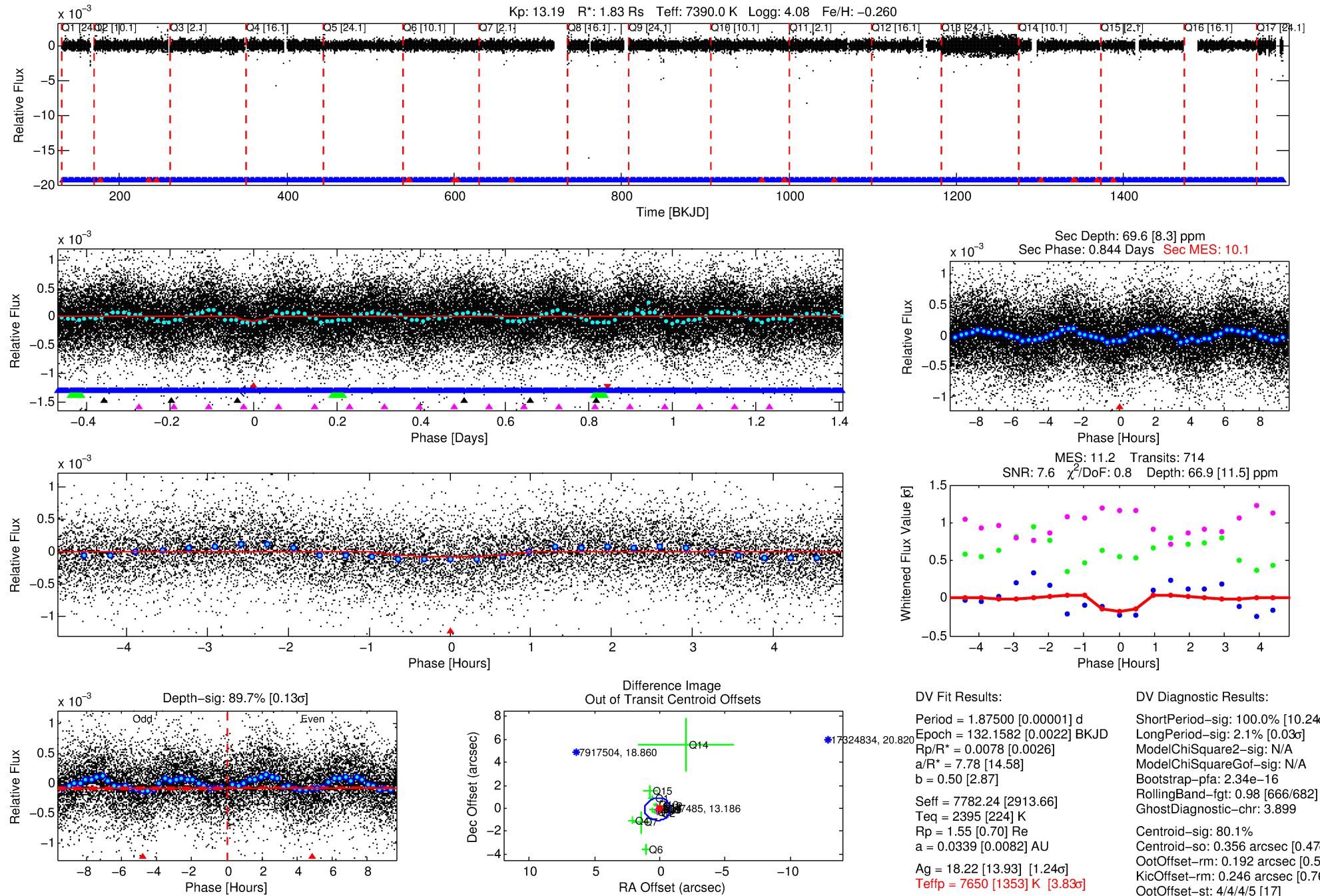
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007917485-01

No Significant Match Found

DV One-Page Summary

KIC: 7917485 Candidate: 1 of 5 Period: 1.875 d



DV Fit Results:

Period = 1.87500 [0.00001] d
Epoch = 132.1582 [0.0022] BKJD
Rp/R* = 0.0078 [0.0026]
a/R* = 7.78 [14.58]
b = 0.50 [2.87]
Seff = 7782.24 [2913.66]
Teff = 2395 [224] K
Rp = 1.55 [0.70] Re
a = 0.0339 [0.0082] AU
Ag = 18.22 [13.93] [1.24 σ]
Teffp = 7650 [1353] K [3.83 σ]

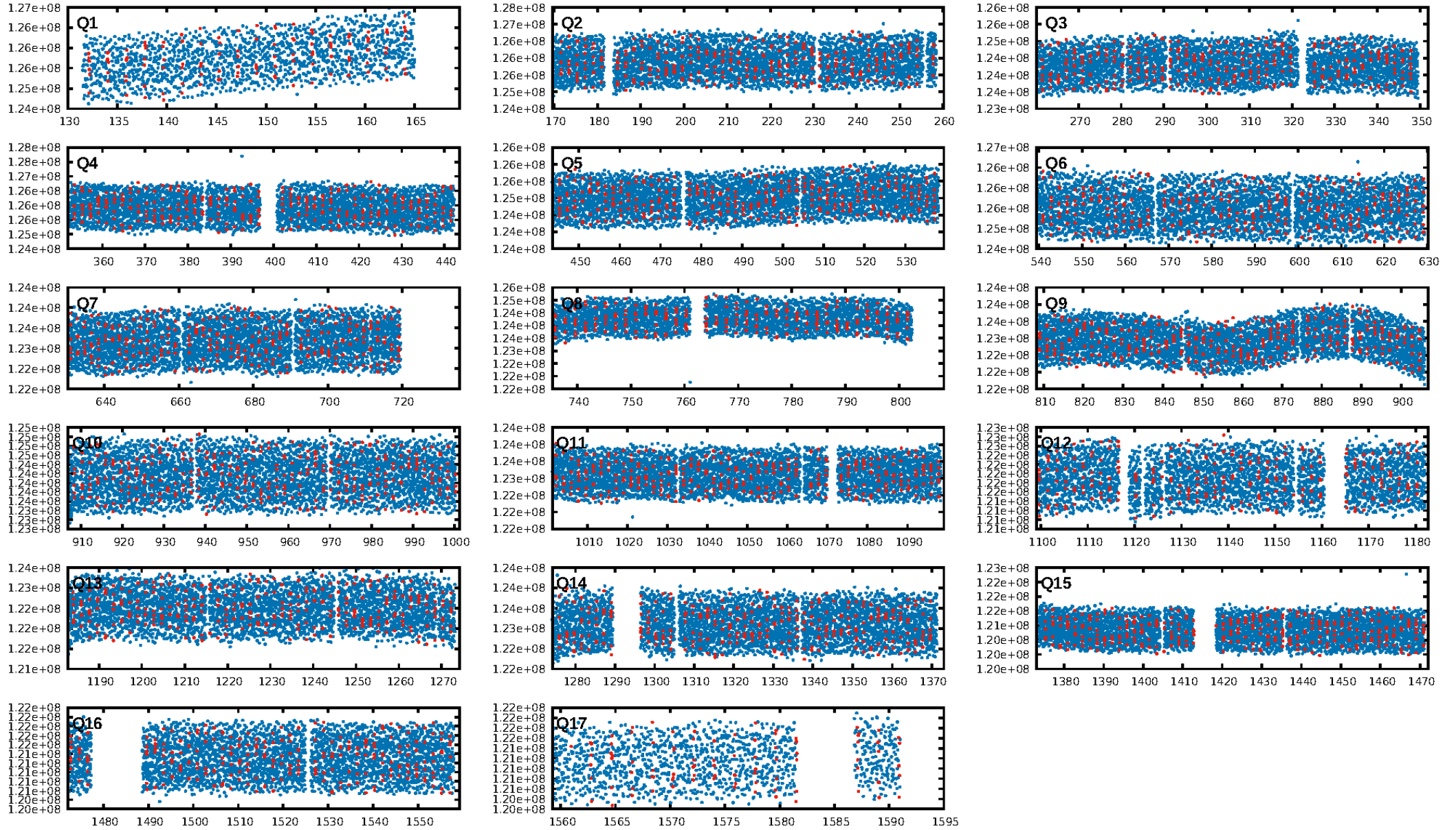
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [10.24 σ]
LongPeriod-sig: 2.1% [0.03 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.34e-16
RollingBand-fgt: 0.98 [666/682]
GhostDiagnostic-chr: 3.899
Centroid-sig: 80.1%
Centroid-so: 0.356 arcsec [0.47 σ]
OotOffset-rm: 0.192 arcsec [0.59 σ]
KicOffset-rm: 0.246 arcsec [0.76 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.71 [12/17]
DiffImageOverlap-fno: 0.00 [0/17]

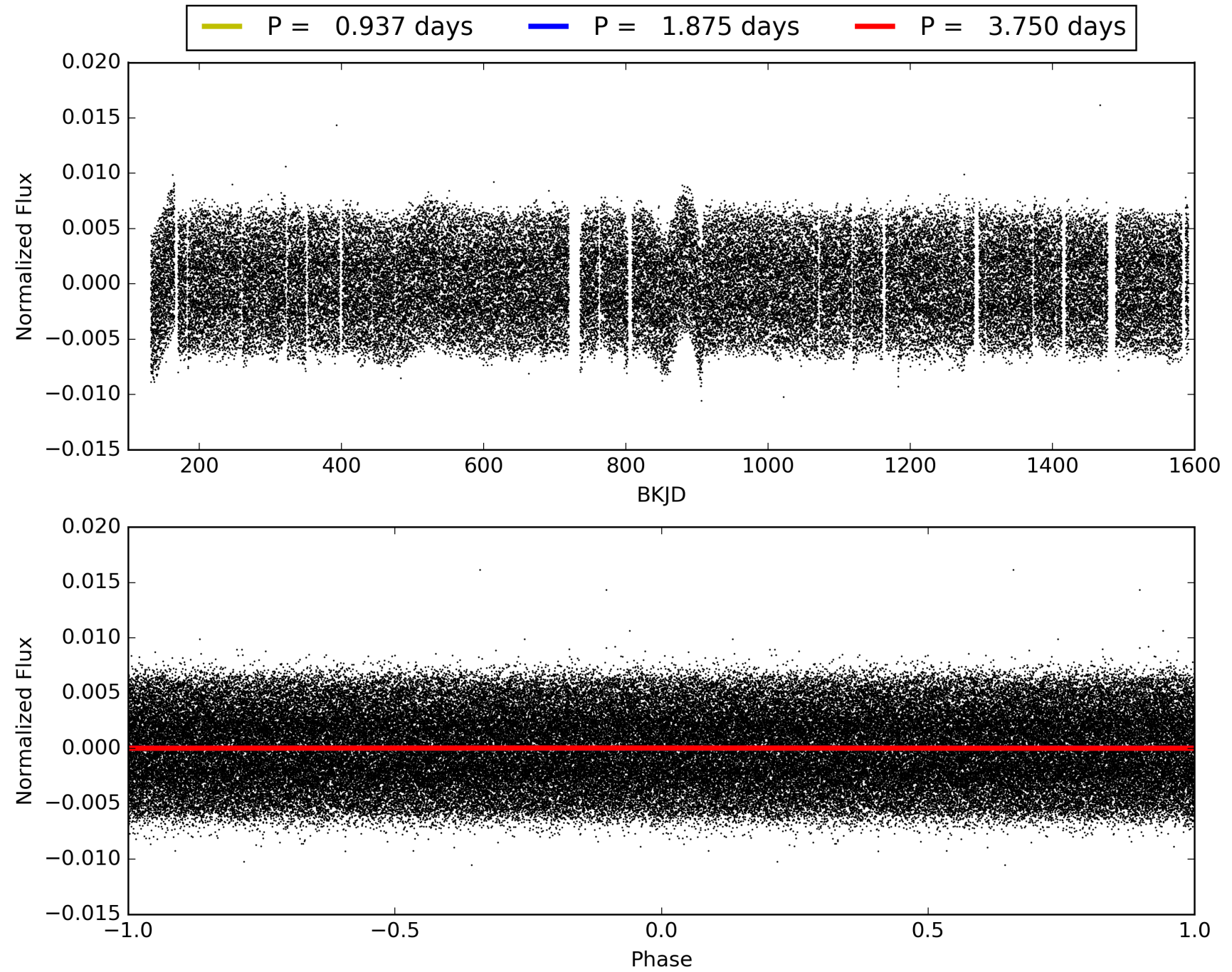
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 23:22:55 Z

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

TCE 007917485-01, PDC Light Curves

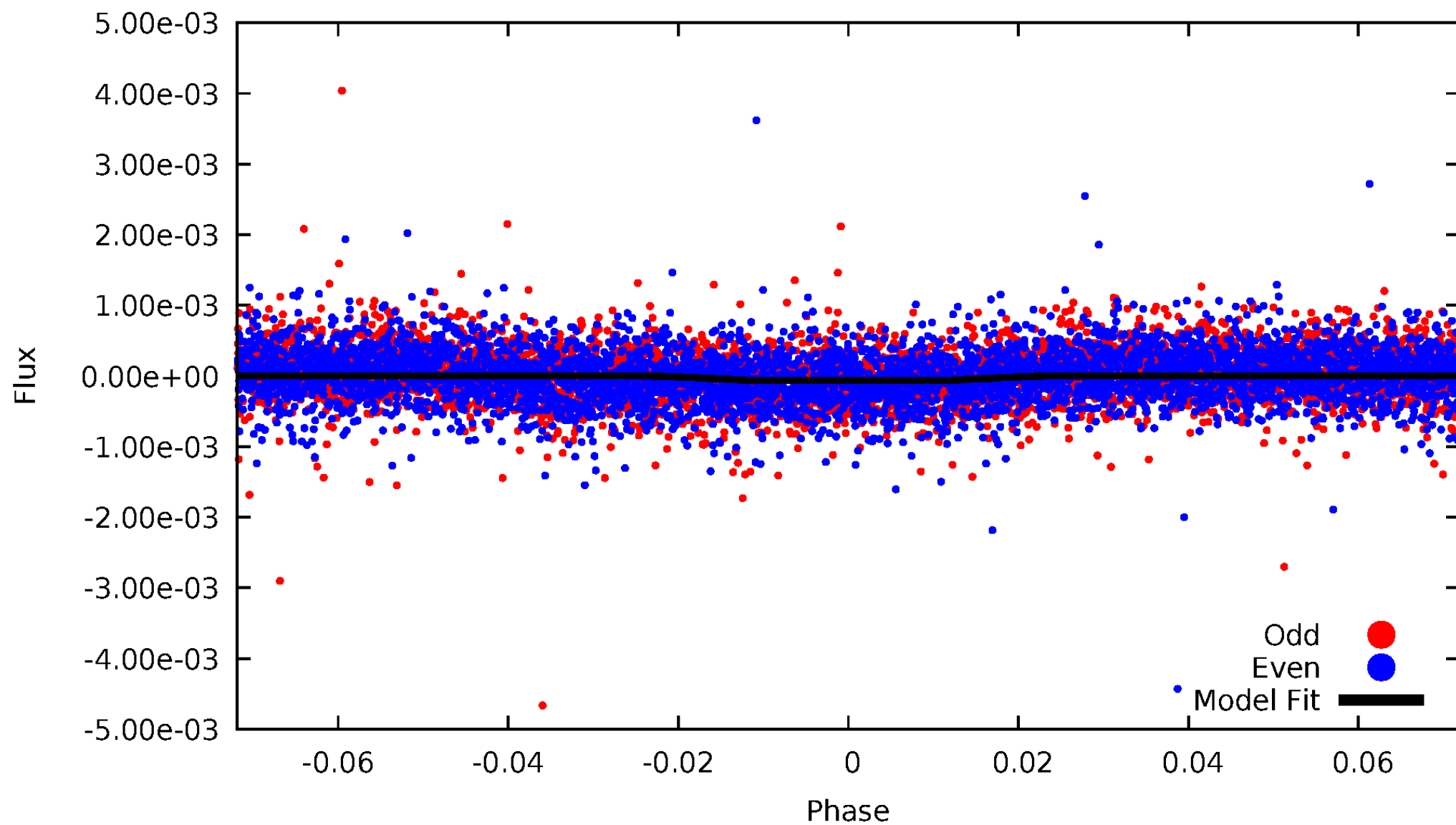


TCE 007917485-01



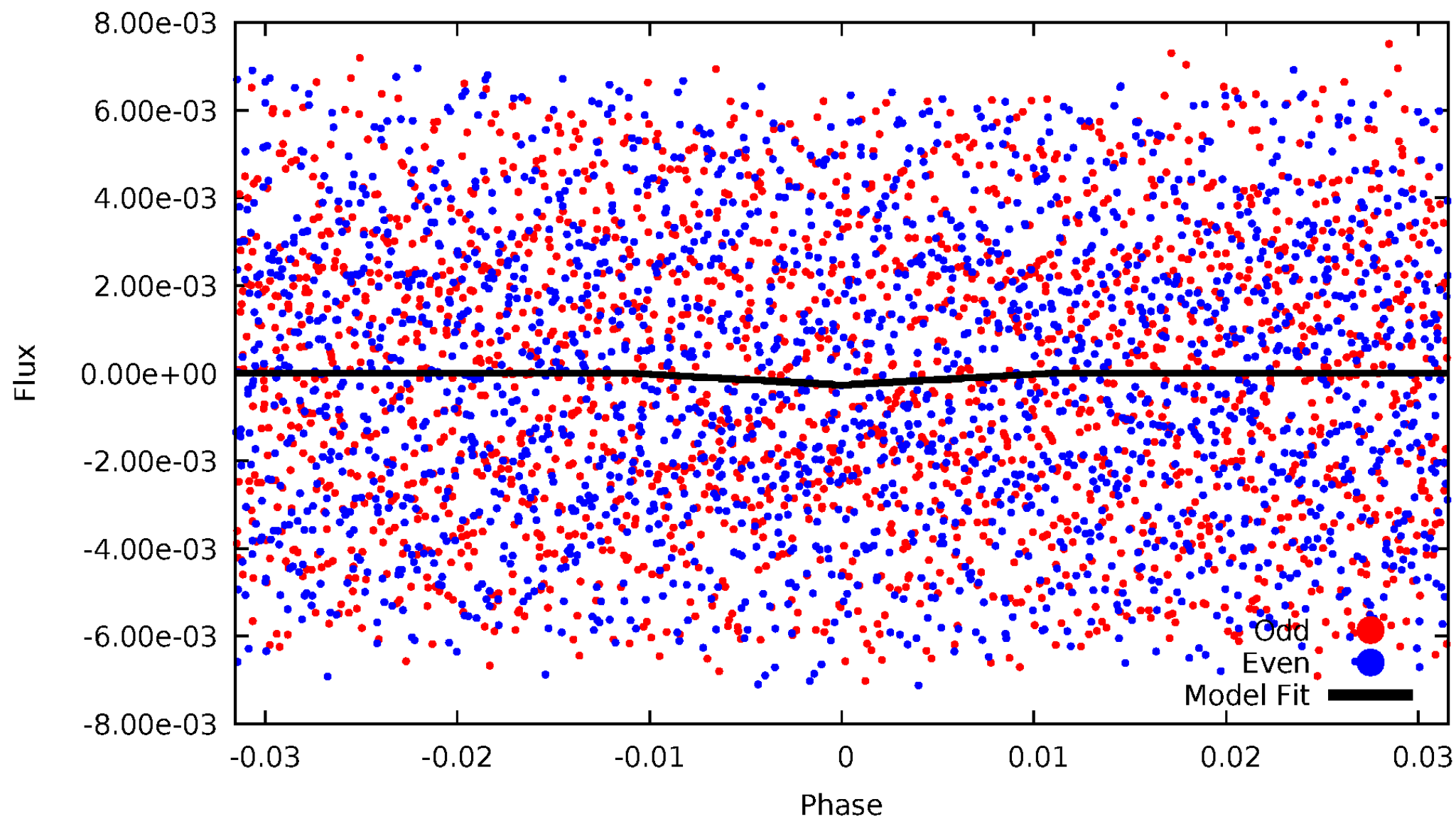
DV Odd/Even

TCE 007917485-01



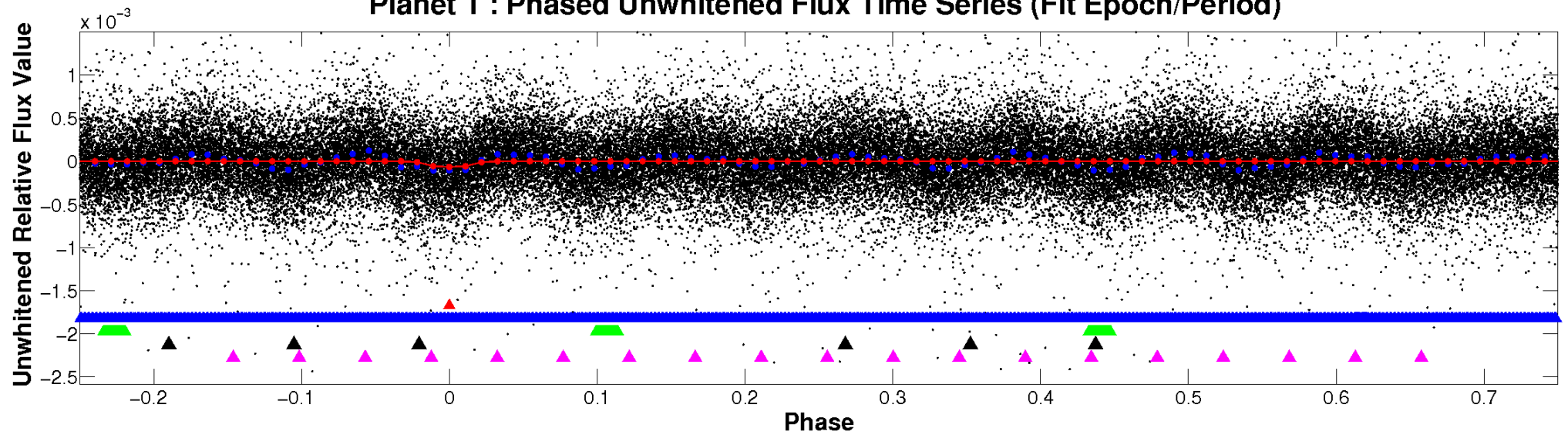
ALT Odd/Even

TCE 007917485-01

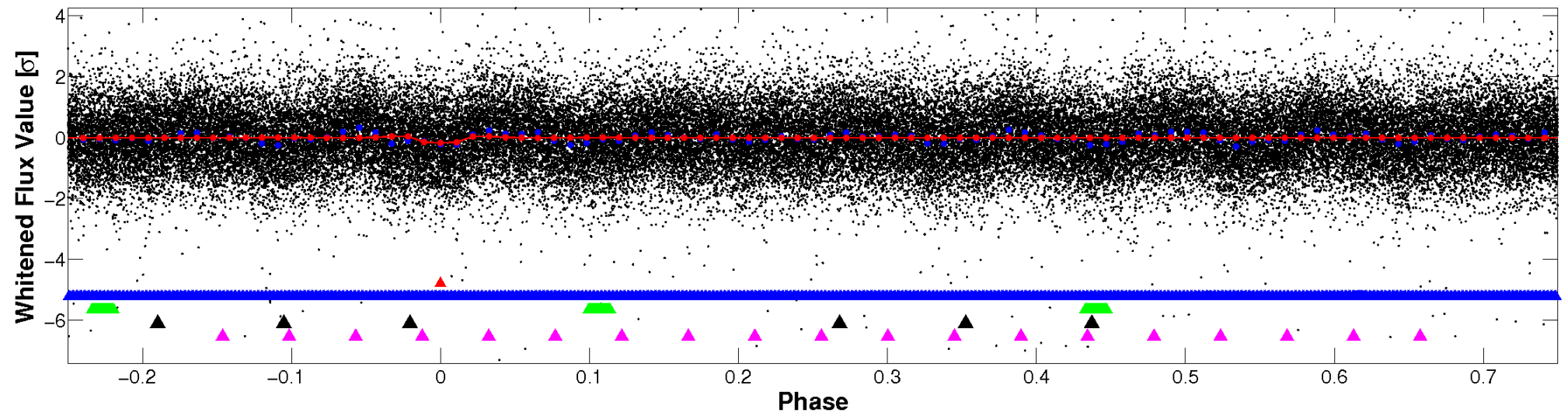


Non-Whitened Vs. Whitened Light Curve

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

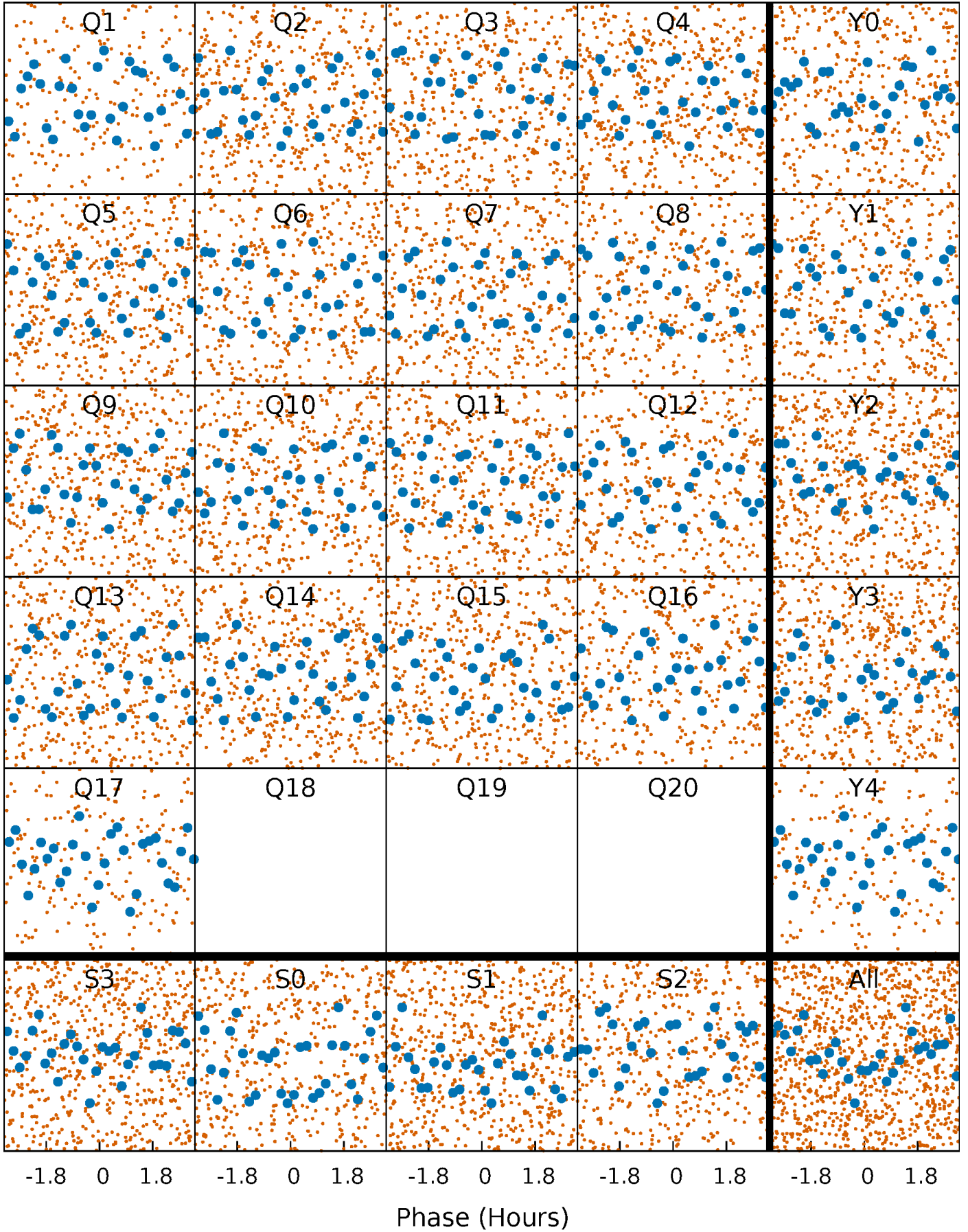


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



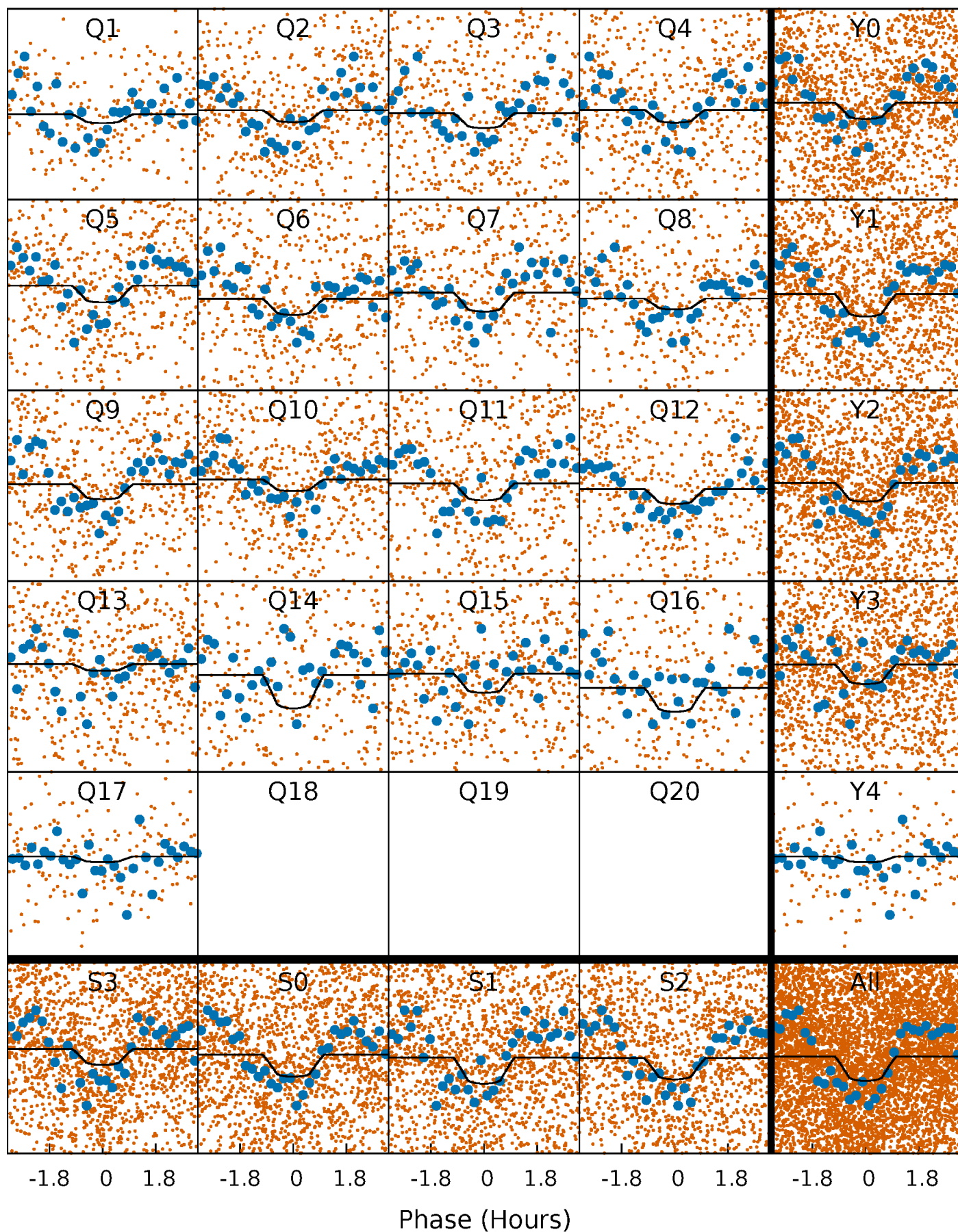
PDC Quarter-Phased Transit Curves

TCE 007917485-01 P= 1.874999 Days $T_0=132.158181$ (BKJD)



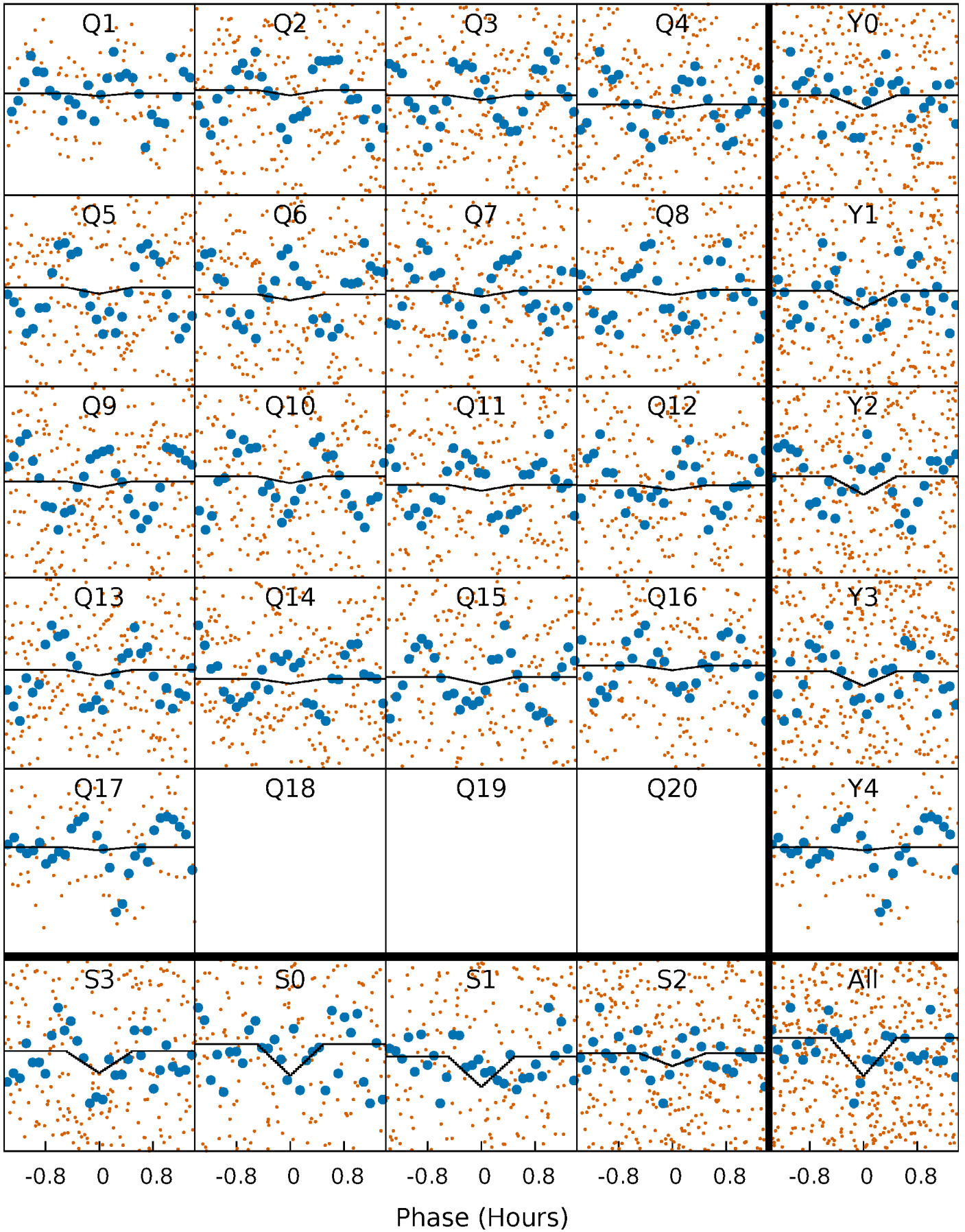
DV Quarter-Phased Transit Curves

TCE 007917485-01 P= 1.874999 Days $T_0=132.158181$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

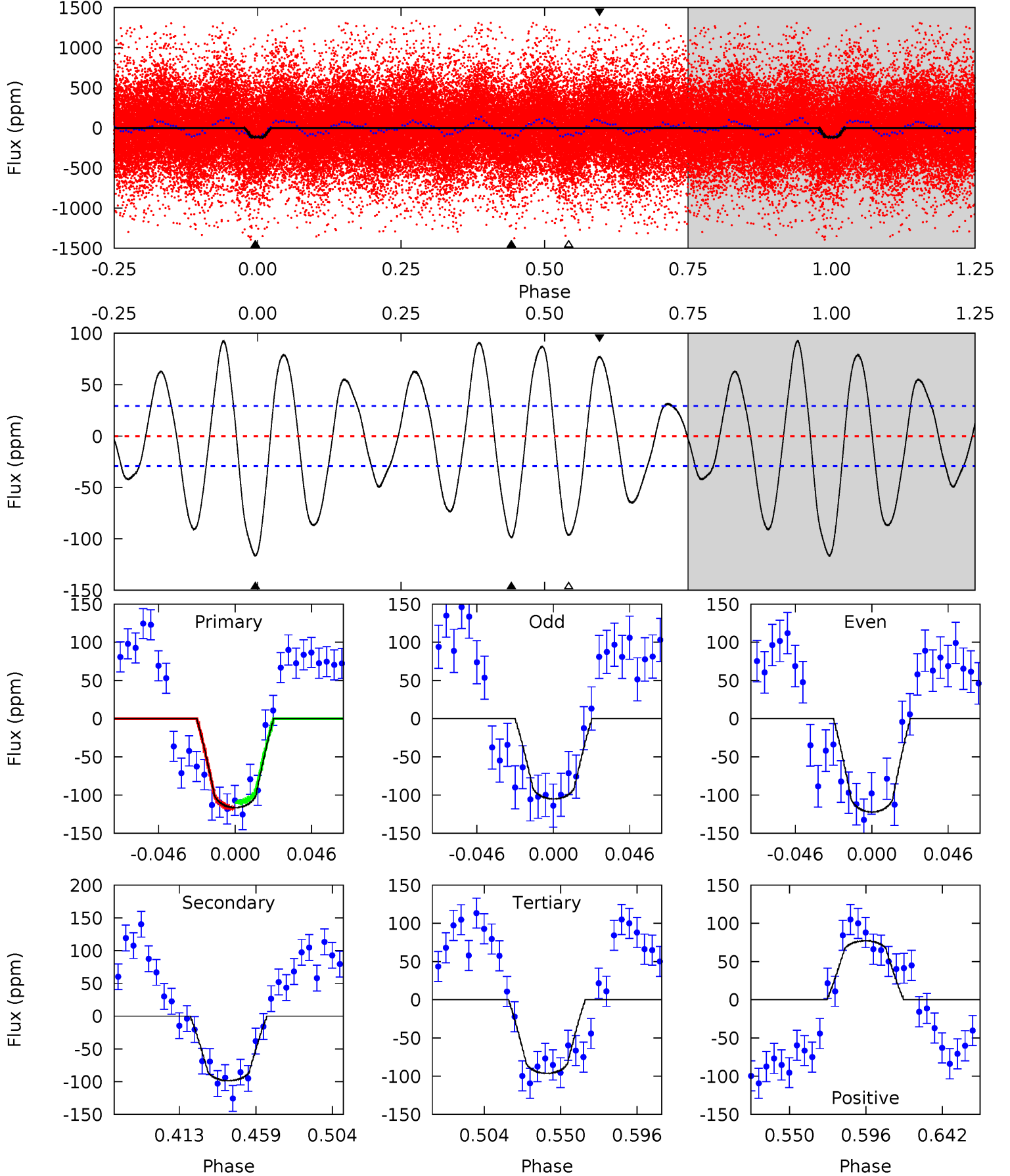
TCE 007917485-01 P= 1.874986 Days $T_0=132.148682$ (BKJD)



DV Model-Shift Uniqueness Test

007917485-01, P = 1.874999 Days, E = 130.283182 Days

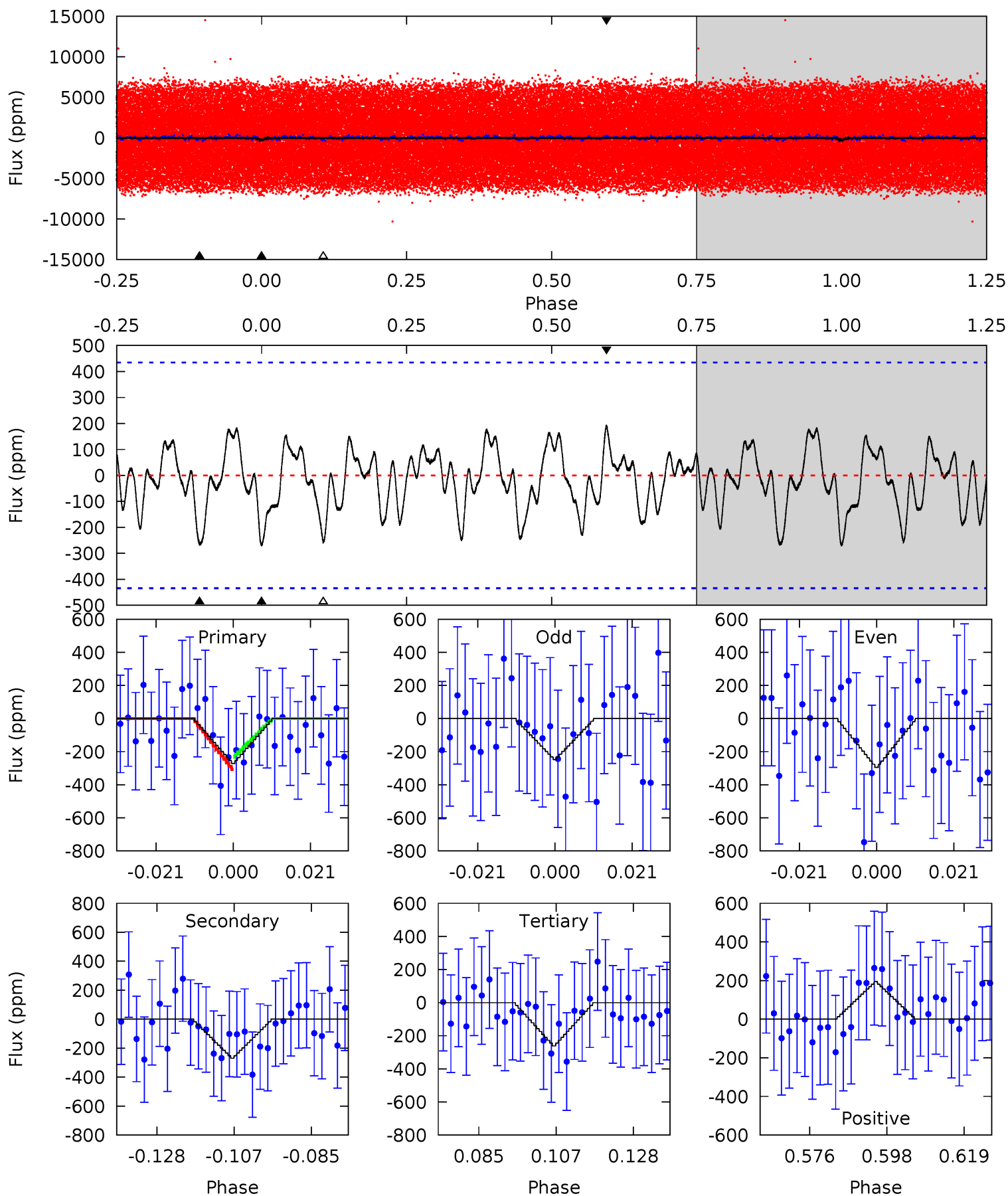
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.8	15.9	15.6	12.5	4.73	2.00	8.34	3.24	6.35	0.36	3.47	1.39	1.00	0.44	0.58



Alt Model-Shift Uniqueness Test

007917485-01, P = 1.874986 Days, E = 130.273696 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.05	3.03	2.94	2.18	4.88	2.30	1.10	0.12	0.87	0.09	0.85	0.27	0.74	0.42	0.42



Stellar Parameters For KIC 007917485

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7390^{+232}_{-310}	$4.083^{+0.175}_{-0.175}$	$-0.260^{+0.250}_{-0.350}$	$1.830^{+0.548}_{-0.448}$	$1.477^{+0.230}_{-0.230}$	$0.339^{+0.327}_{-0.154}$
	+3%/-4%	+4%/-4%	+96%/-135%	+30%/-24%	+16%/-16%	+96%/-45%
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 007917485-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-99 ± 6	$1.54^{+0.64}_{-0.53}$	3331^{+268}_{-237}	8431^{+3021}_{-1319}	26^{+34}_{-13}
Alt.	-270 ± 89	$3.24^{+0.71}_{-0.64}$	3347^{+252}_{-241}	7347^{+1178}_{-988}	16^{+10}_{-7}

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

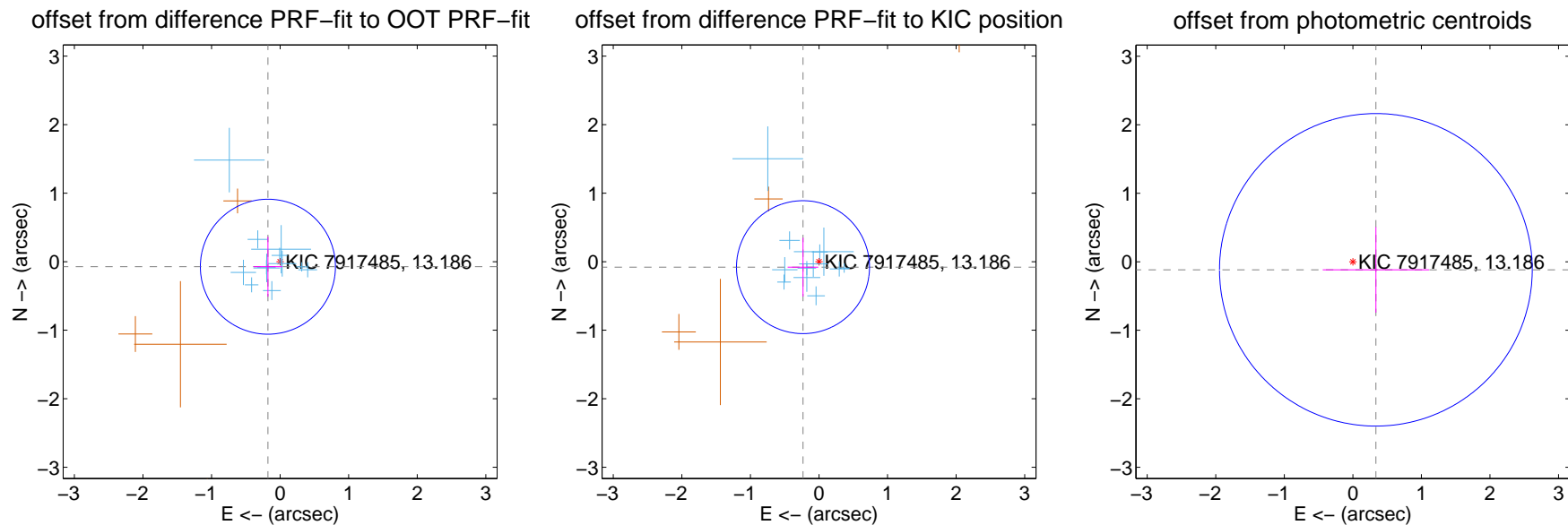
DV Centroid Data

Supplemental centroid analysis for 007917485-01. Kepler magnitude: 13.19. Transit SNR 7.58

There are 12 quarters with good PRF difference image offsets

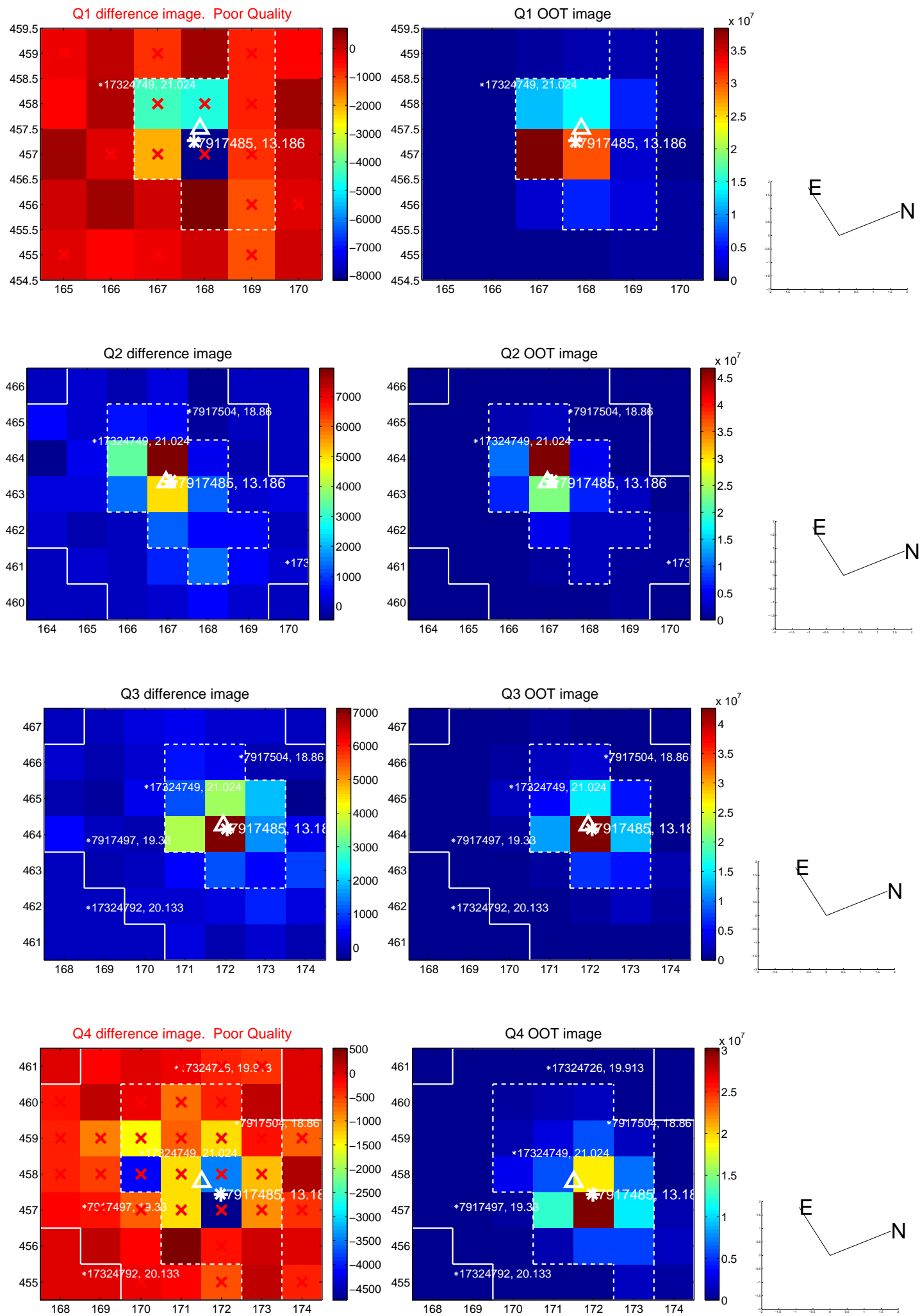
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.192 ± 0.328	0.59	0.178 ± 0.209	-0.073 ± 0.436
PRF-fit source offset from KIC position	0.246 ± 0.323	0.76	0.233 ± 0.224	-0.080 ± 0.429
photometric centroid source offset	0.36 ± 0.76	0.47	-0.34 ± 0.78	-0.12 ± 0.62

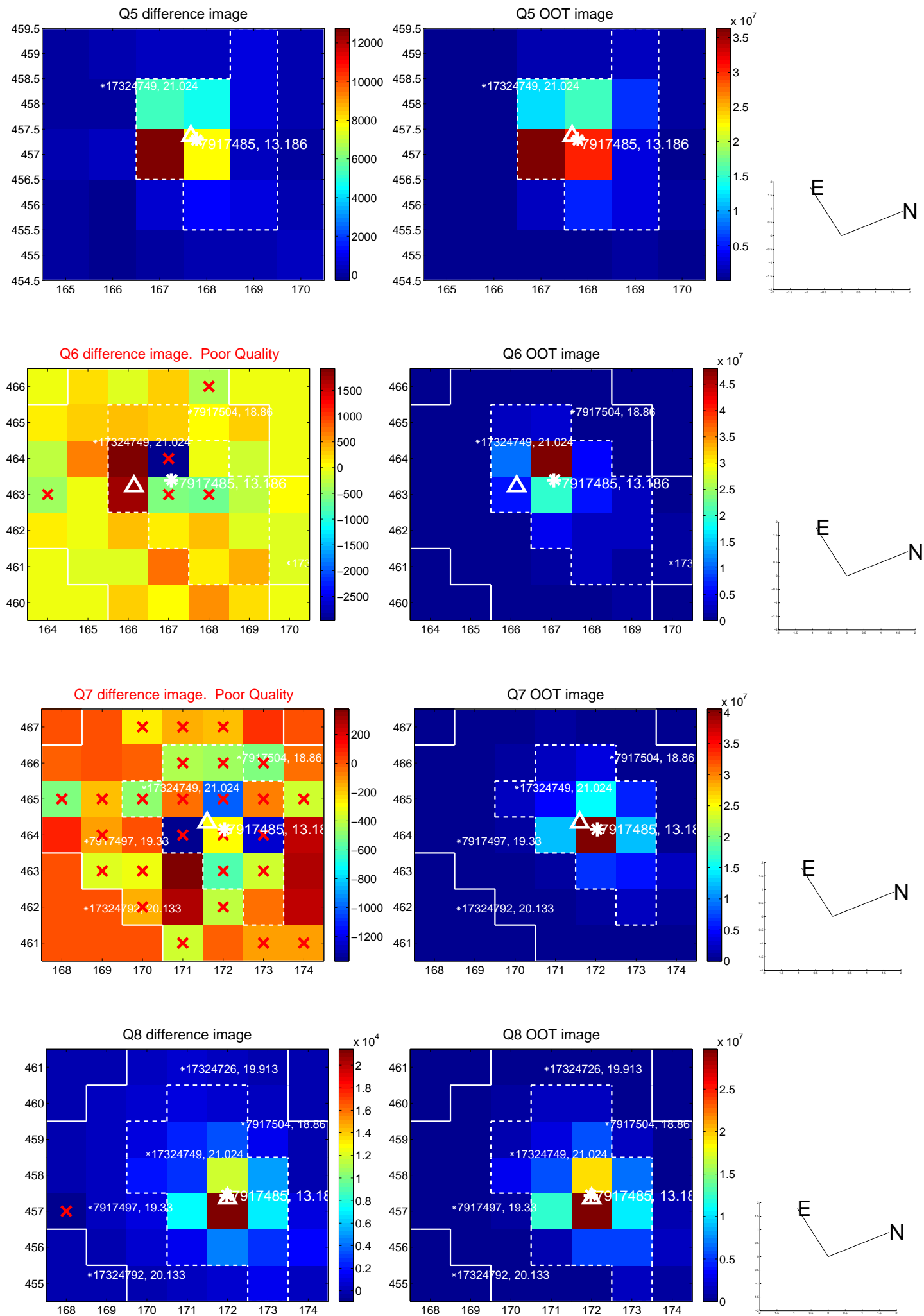


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

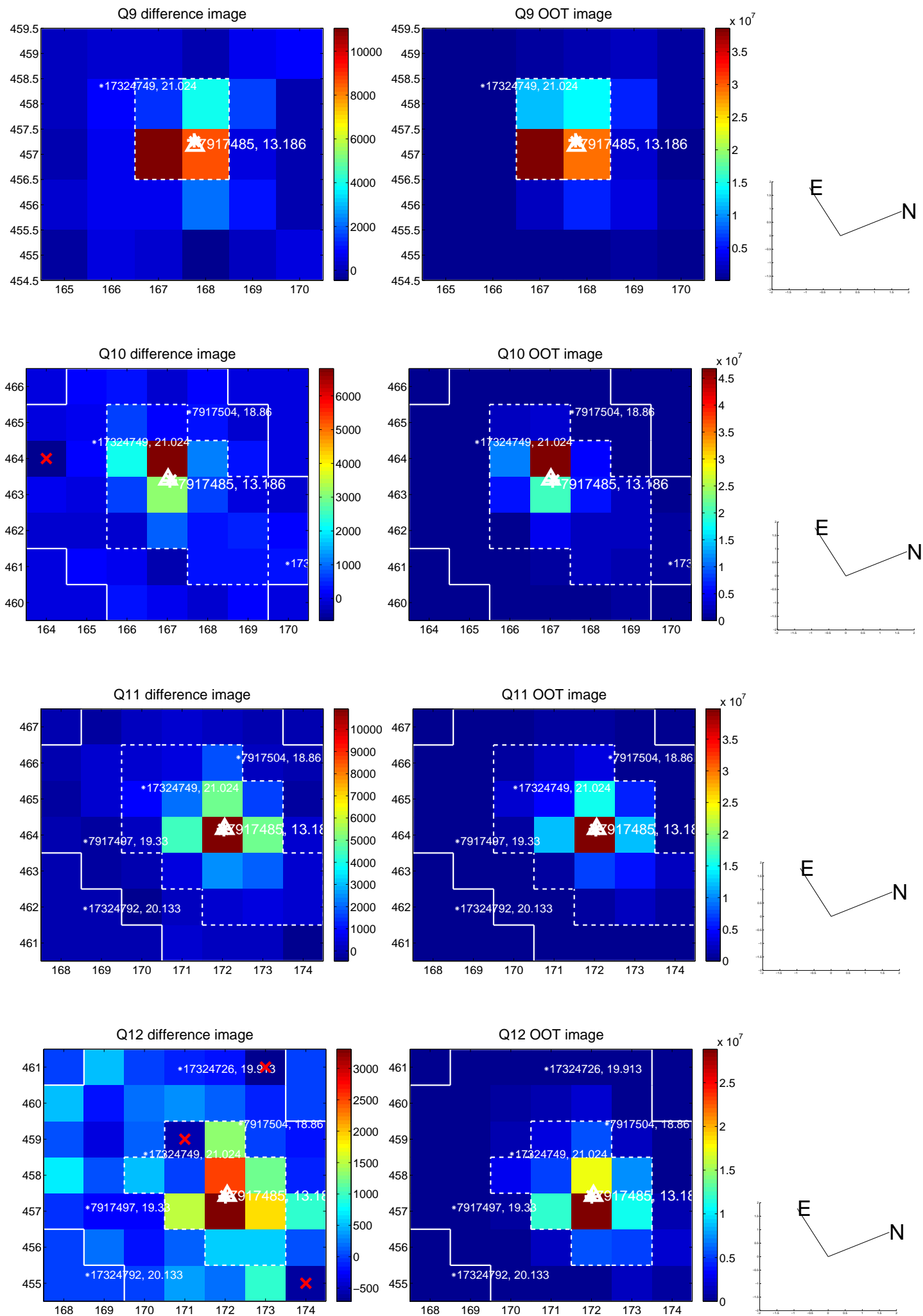
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



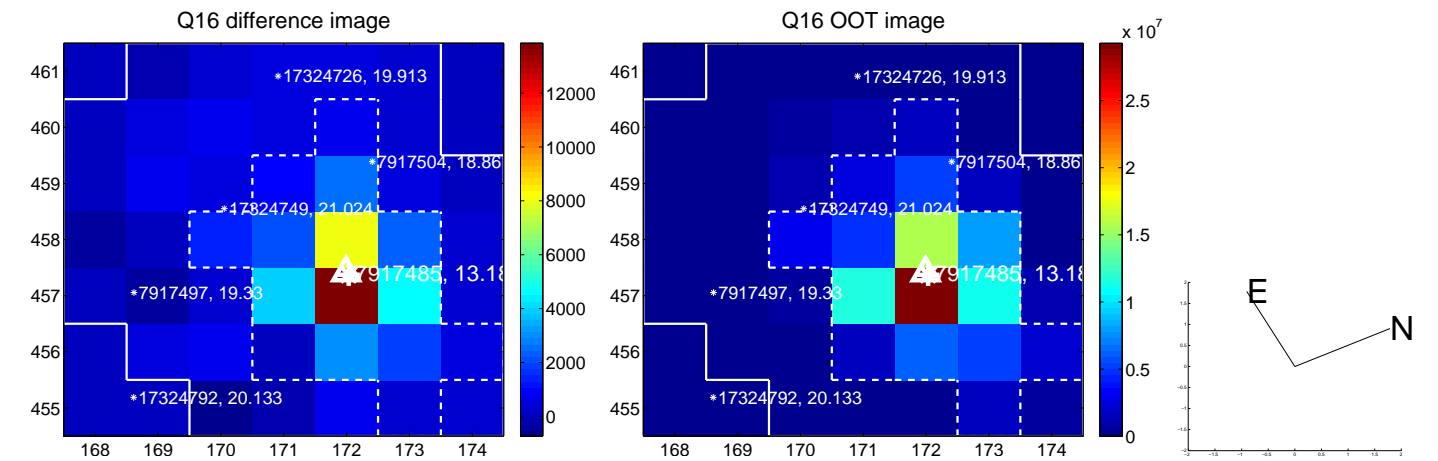
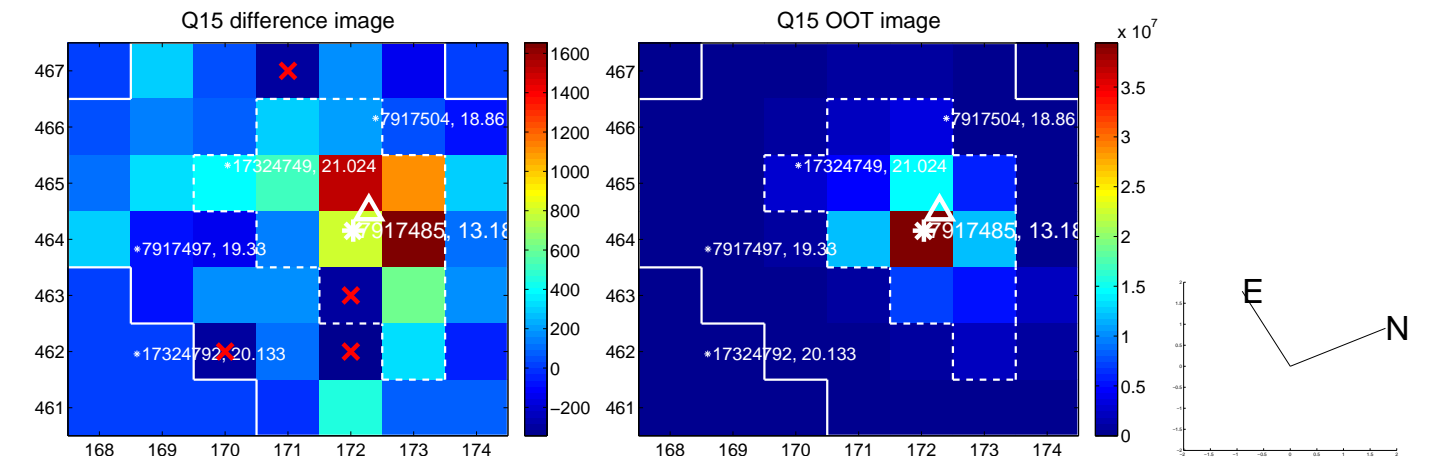
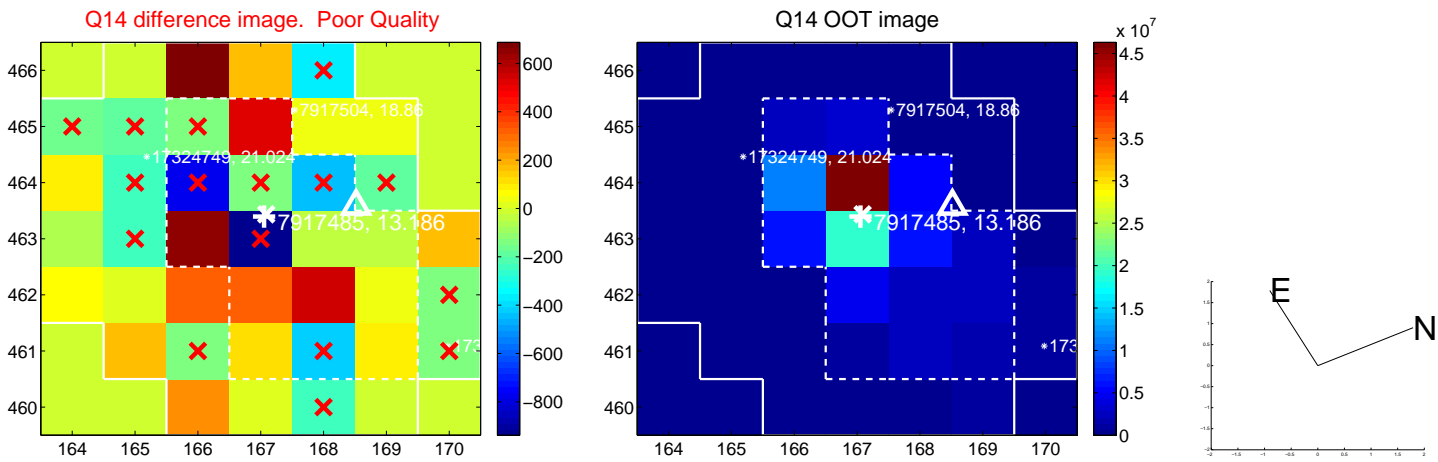
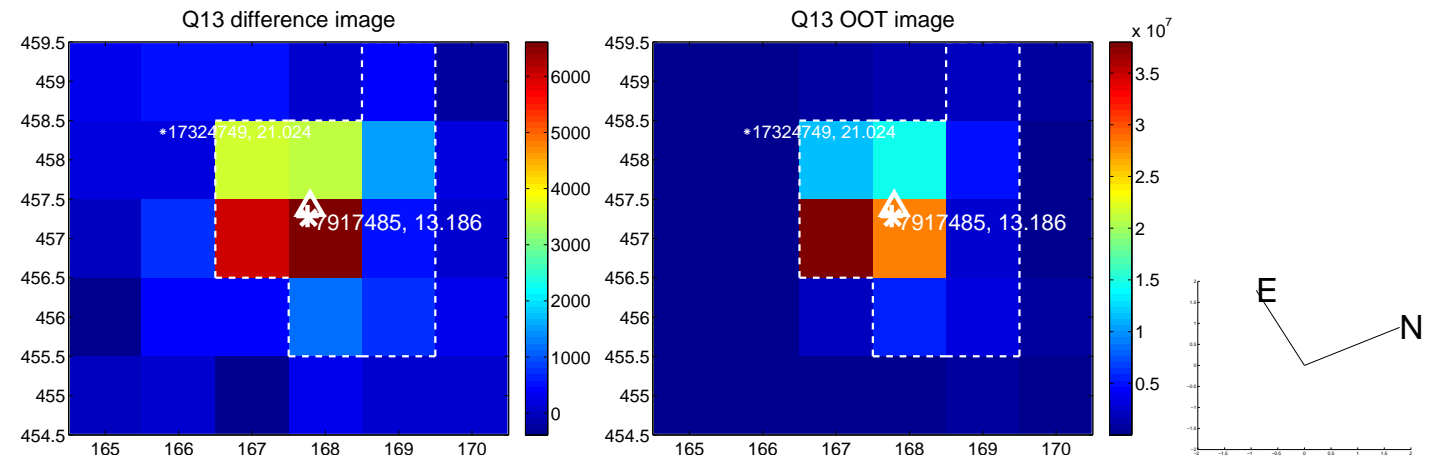
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



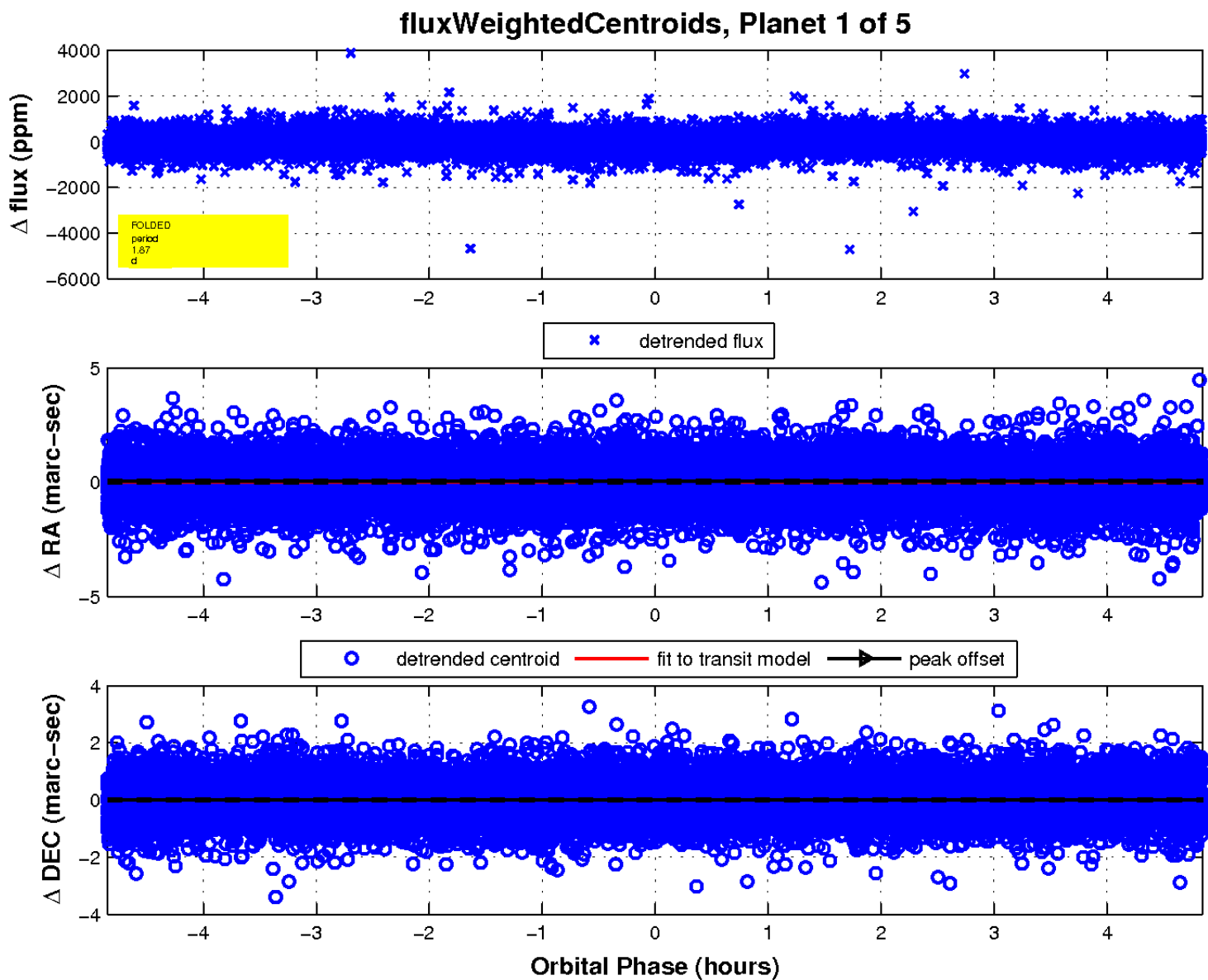
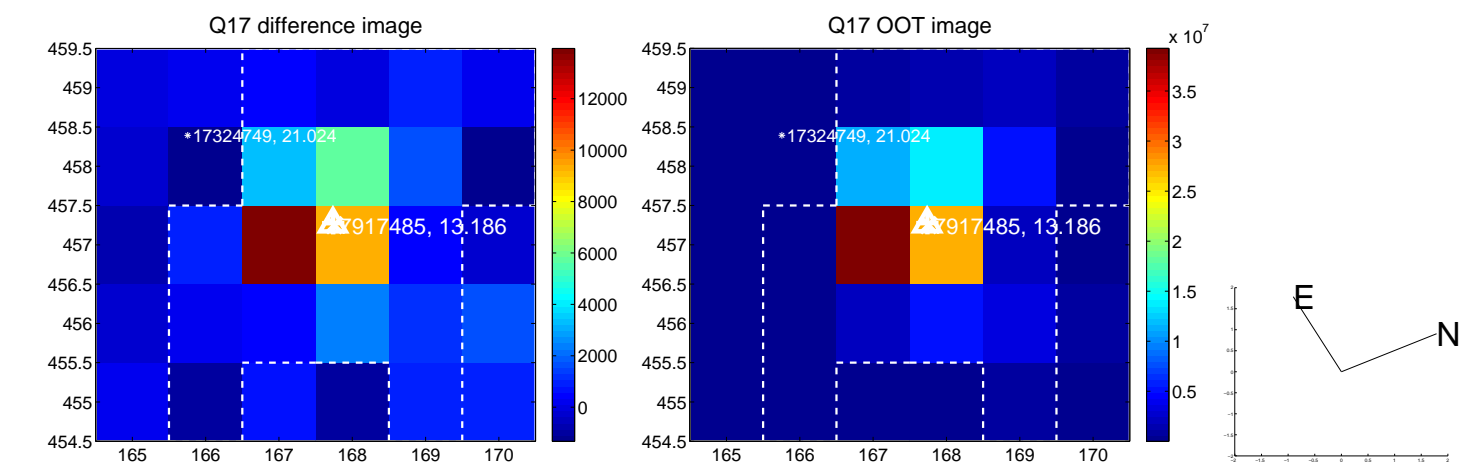
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white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

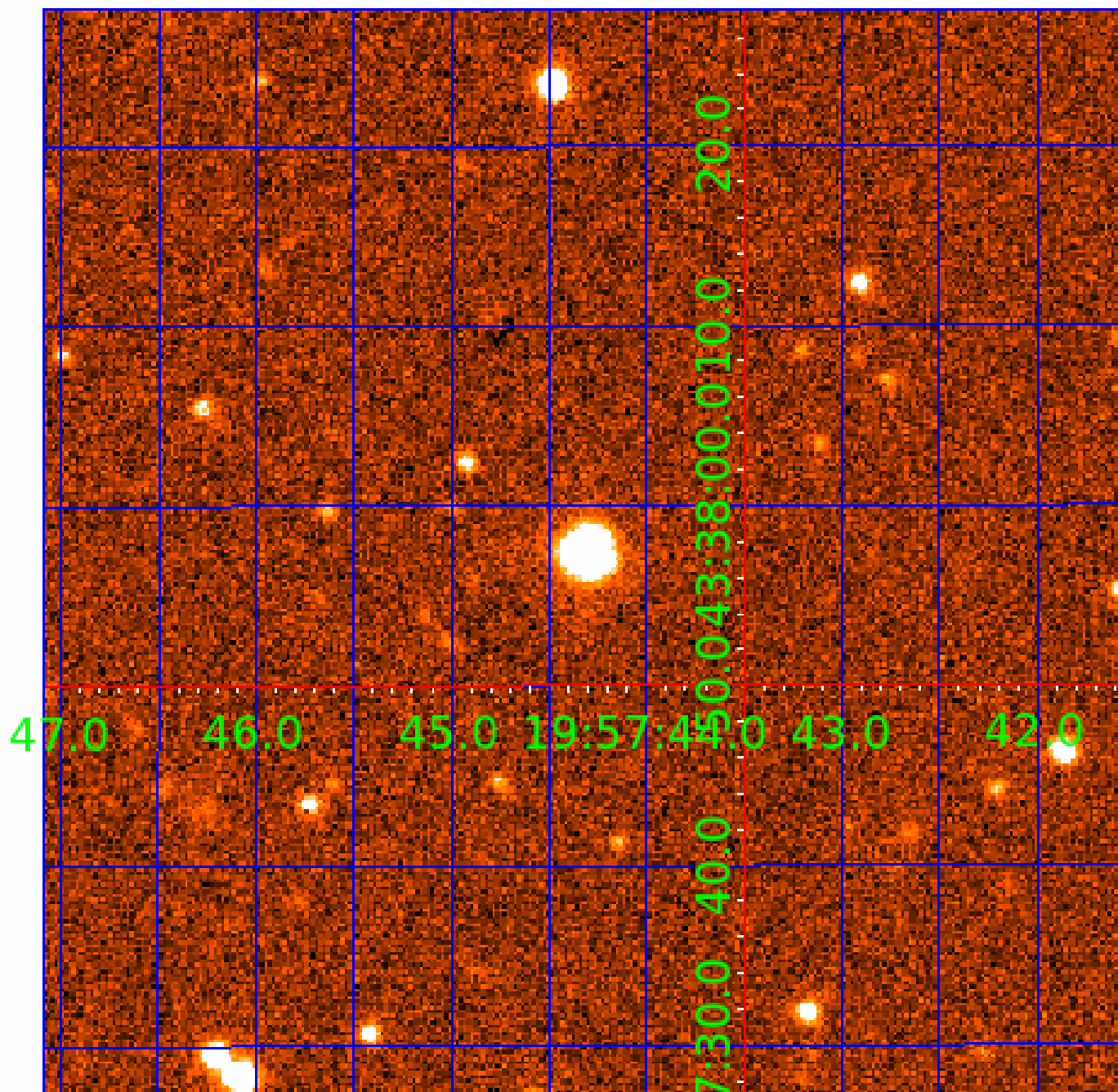


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007917485

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})
007917485-01	OBS	No	1.874999	132.158181	66.9	1.617	11.2	7.6	1.83	7390	1.55	7782.24
007917485-02	OBS	No	1.879853	133.309522	5.4	4.085	11.0	0.7	1.83	7390	0.47	7755.46
007917485-03	OBS	No	0.625012	131.719286	62.8	2.442	10.5	11.0	1.83	7390	1.69	33670.94
007917485-04	OBS	No	222.108073	342.119737	985.7	2.585	7.9	7.9	1.83	7390	6.15	13.38
007917485-05	OBS	No	76.791250	137.141142	549.6	7.142	7.5	7.4	1.83	7390	5.28	55.13

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007917485-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007917485-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
007917485-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
007917485-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES
007917485-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

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

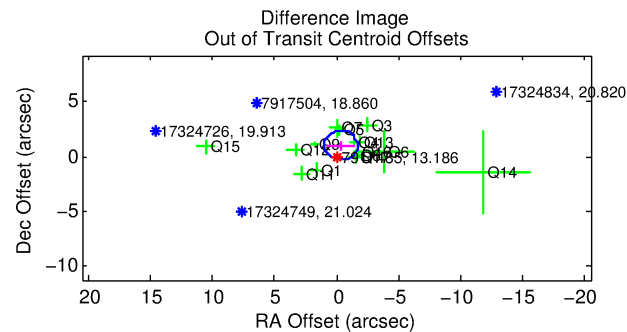
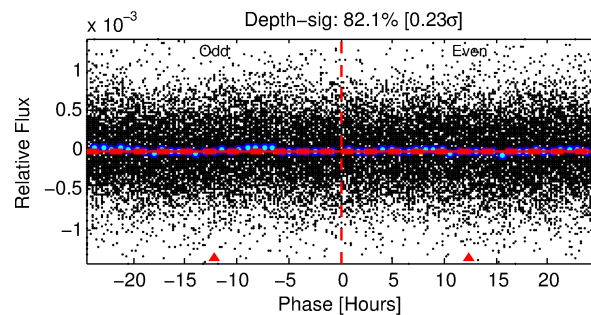
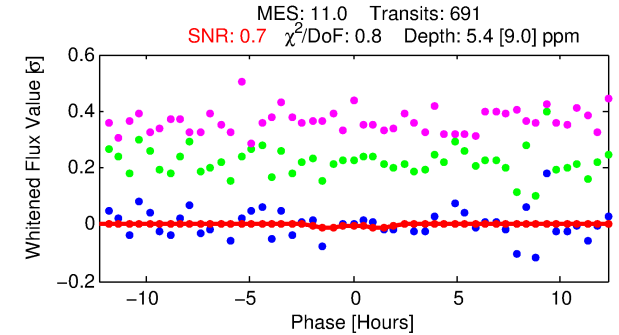
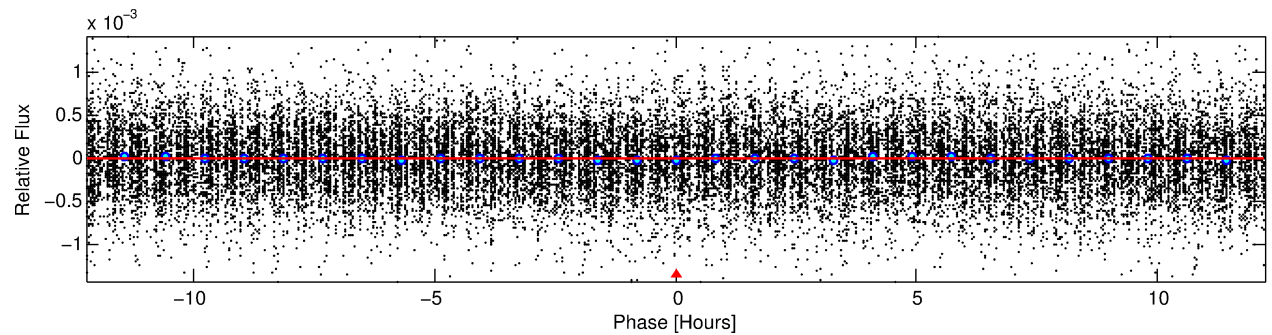
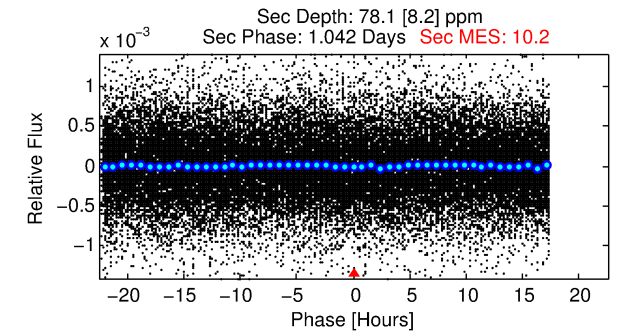
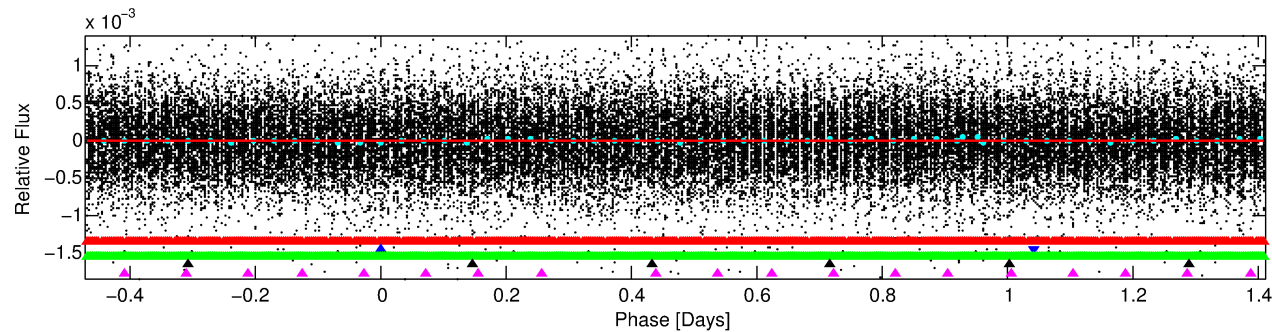
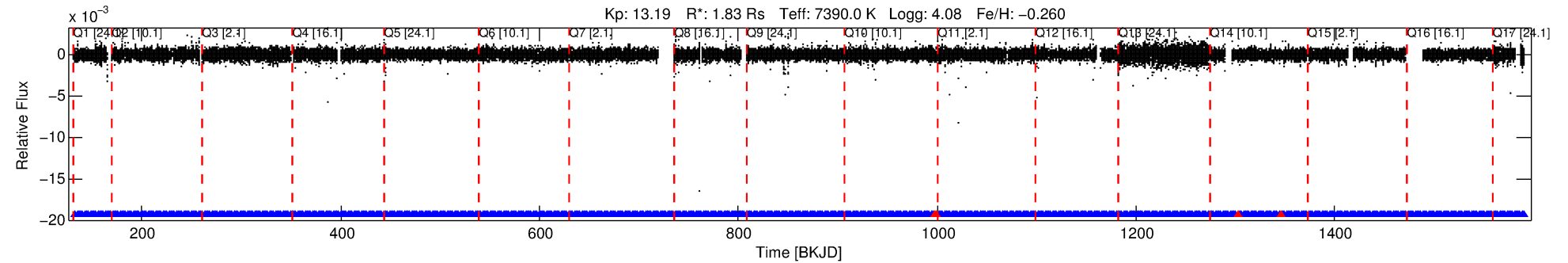
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007917485-02

No Significant Match Found

DV One-Page Summary

KIC: 7917485 Candidate: 2 of 5 Period: 1.880 d



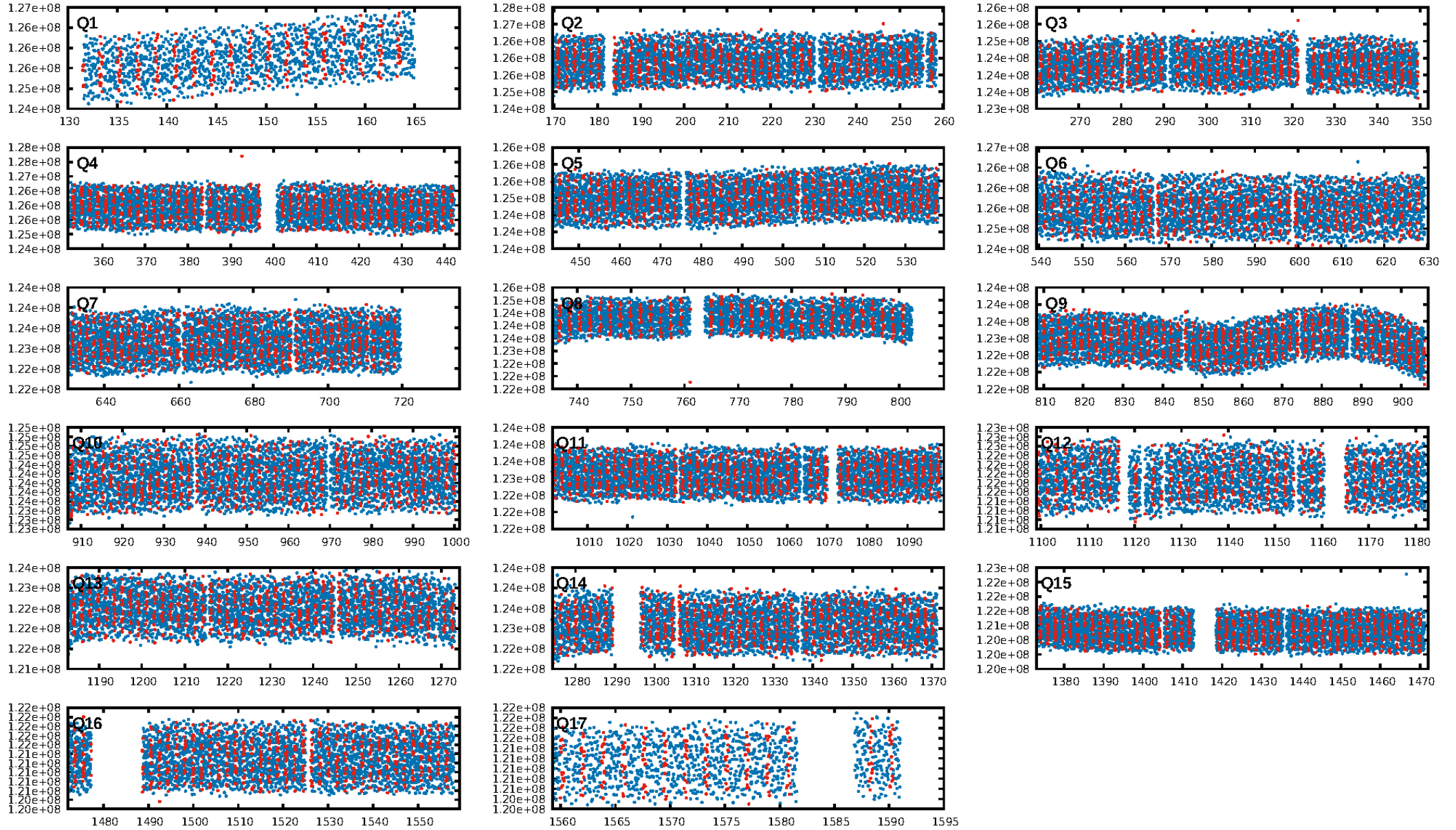
DV Fit Results:

Period = 1.87985 [0.00019] d
Epoch = 133.3095 [0.0351] BKJD
Rp/R* = 0.0024 [0.0023]
a/R* = 2.25 [5.62]
b = 0.81 [1.31]
Seff = 7755.46 [2903.63]
Teq = 2393 [224] K
Rp = 0.47 [0.48] Re
a = 0.0340 [0.0082] AU
Ag = 221.31 [439.48] [0.50σ]
Teffp = 14270 [7009] K [1.69σ]

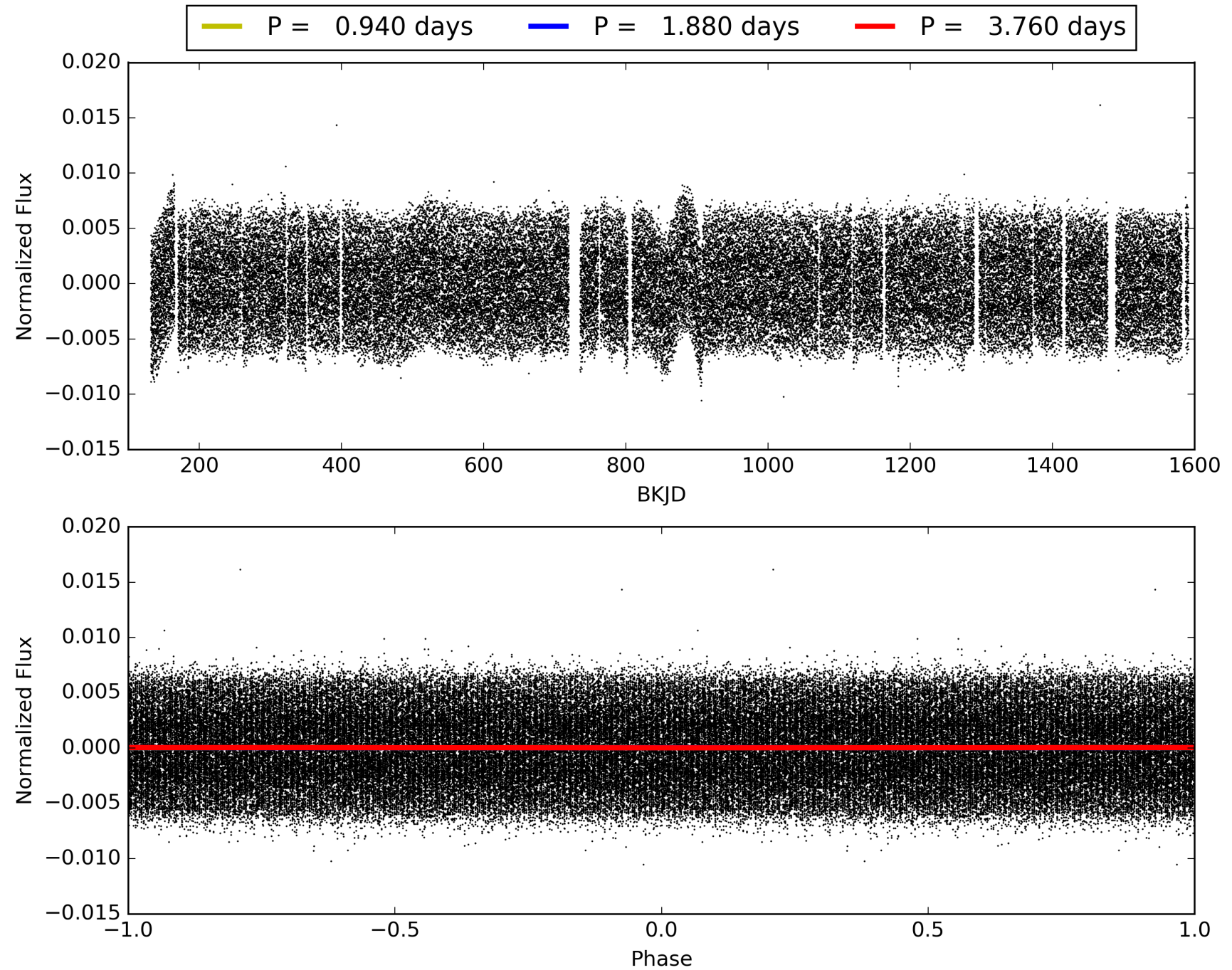
DV Diagnostic Results:

ShortPeriod-sig: 2.1% [0.03σ]
LongPeriod-sig: 100.0% [218.52σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.34e-16
RollingBand-fgt: 0.99 [655/659]
GhostDiagnostic-chr: 0.6038
Centroid-sig: 23.2%
Centroid-so: 4.840 arcsec [0.98σ]
OotOffset-rm: 1.093 arcsec [2.46σ]
KicOffset-rm: 1.096 arcsec [2.58σ]
OotOffset-st: 2/4/4/5 [15]
KicOffset-st: 2/4/4/5 [15]
DiffImageQuality-fgm: 0.33 [5/15]
DiffImageOverlap-fno: 0.00 [0/17]

TCE 007917485-02, PDC Light Curves

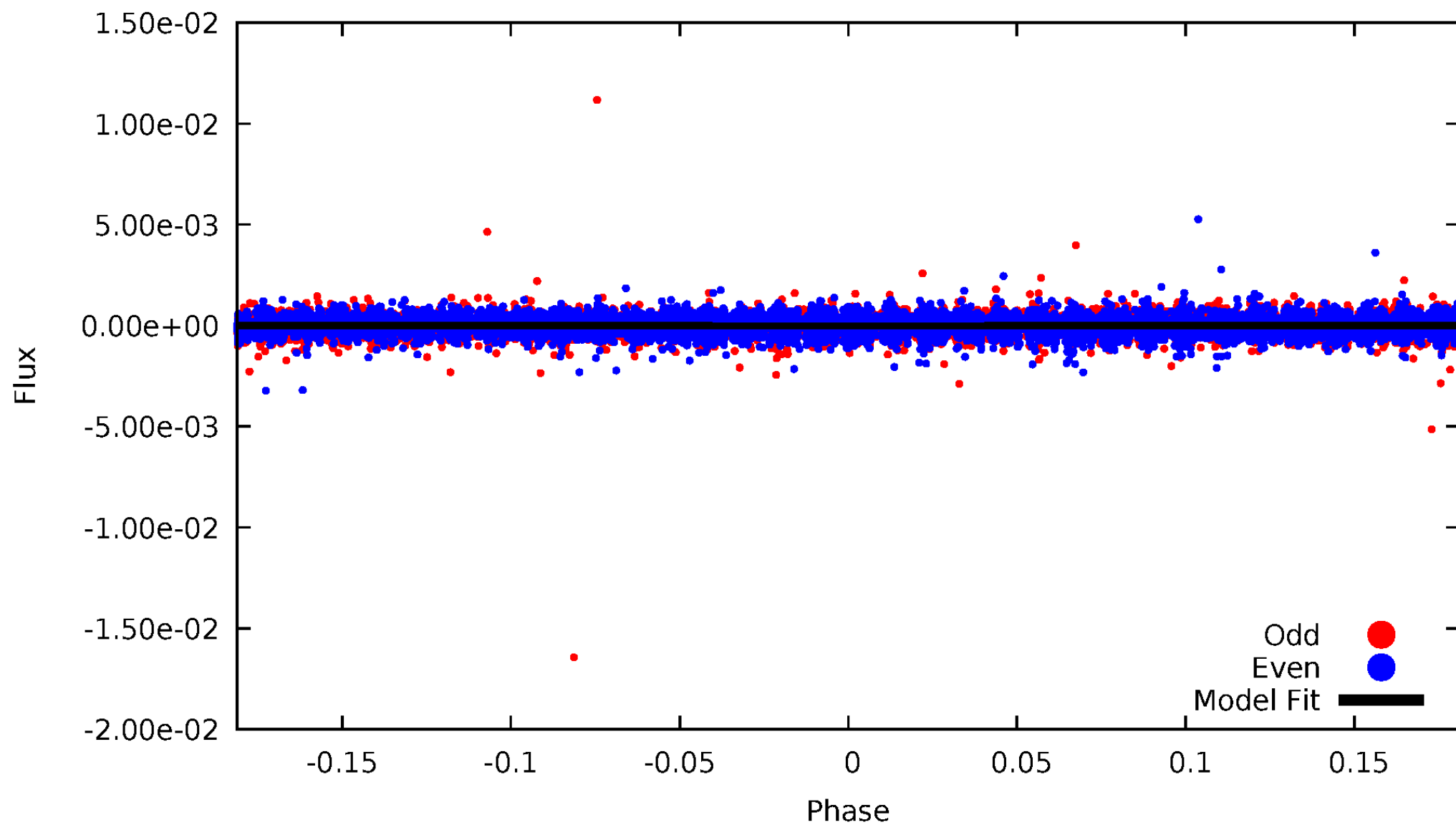


TCE 007917485-02



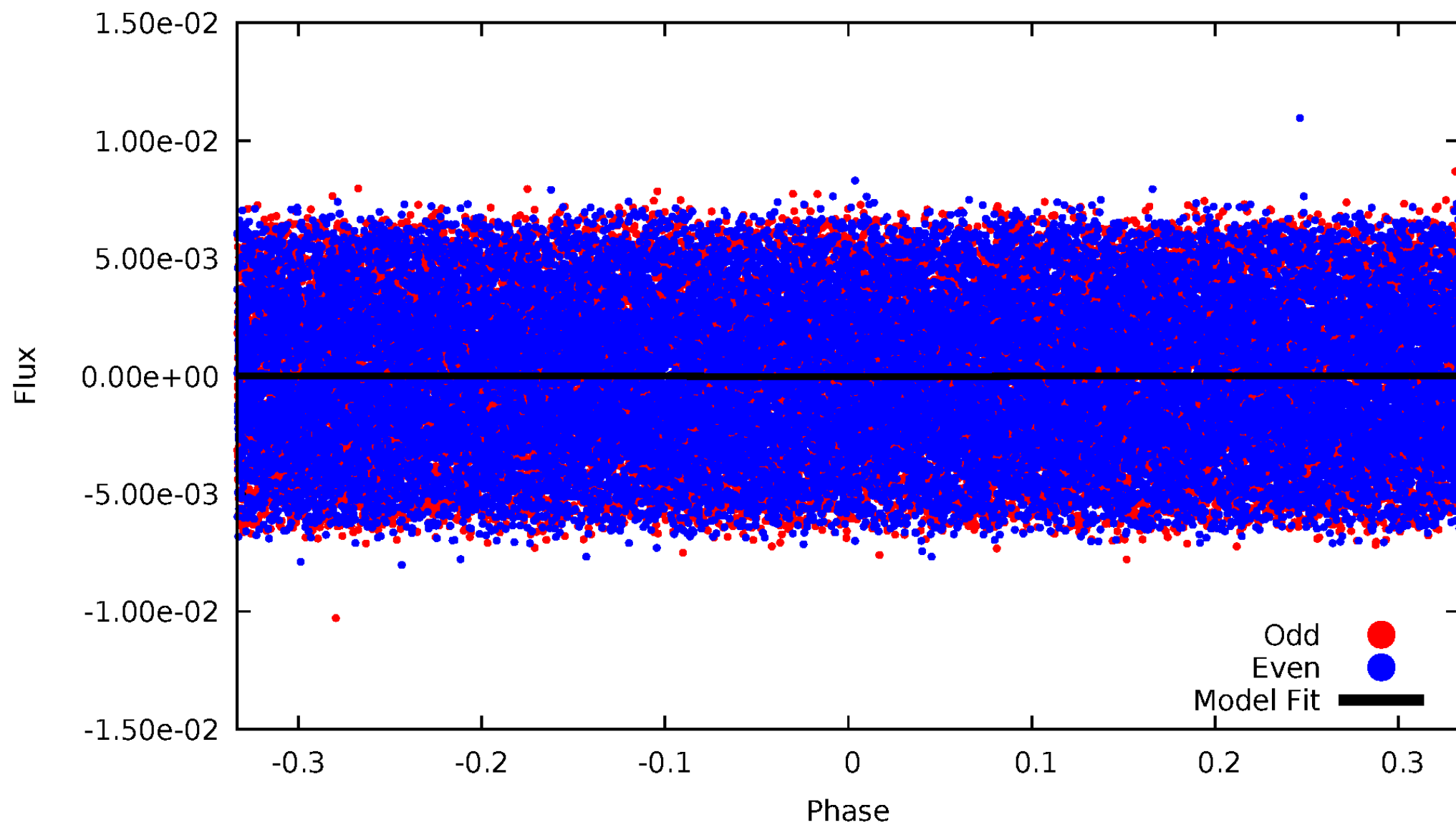
DV Odd/Even

TCE 007917485-02



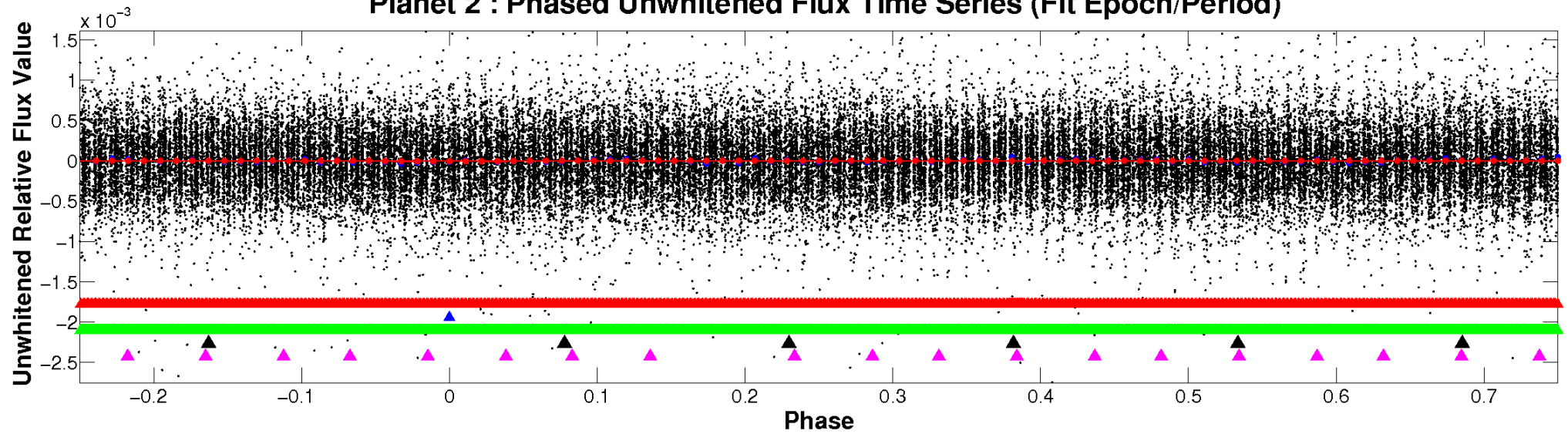
ALT Odd/Even

TCE 007917485-02

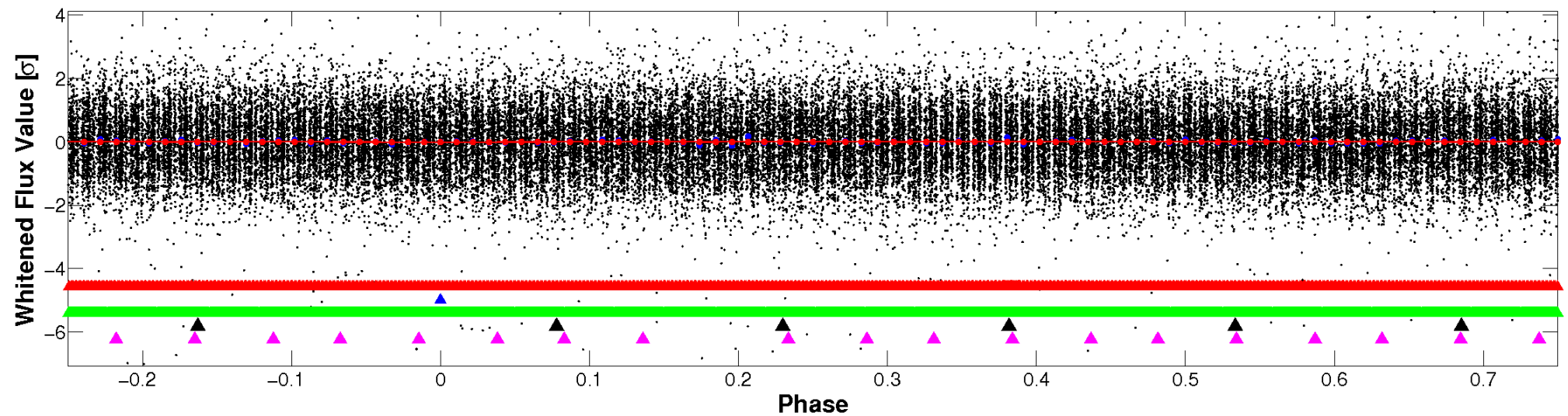


Non-Whitened Vs. Whitened Light Curve

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

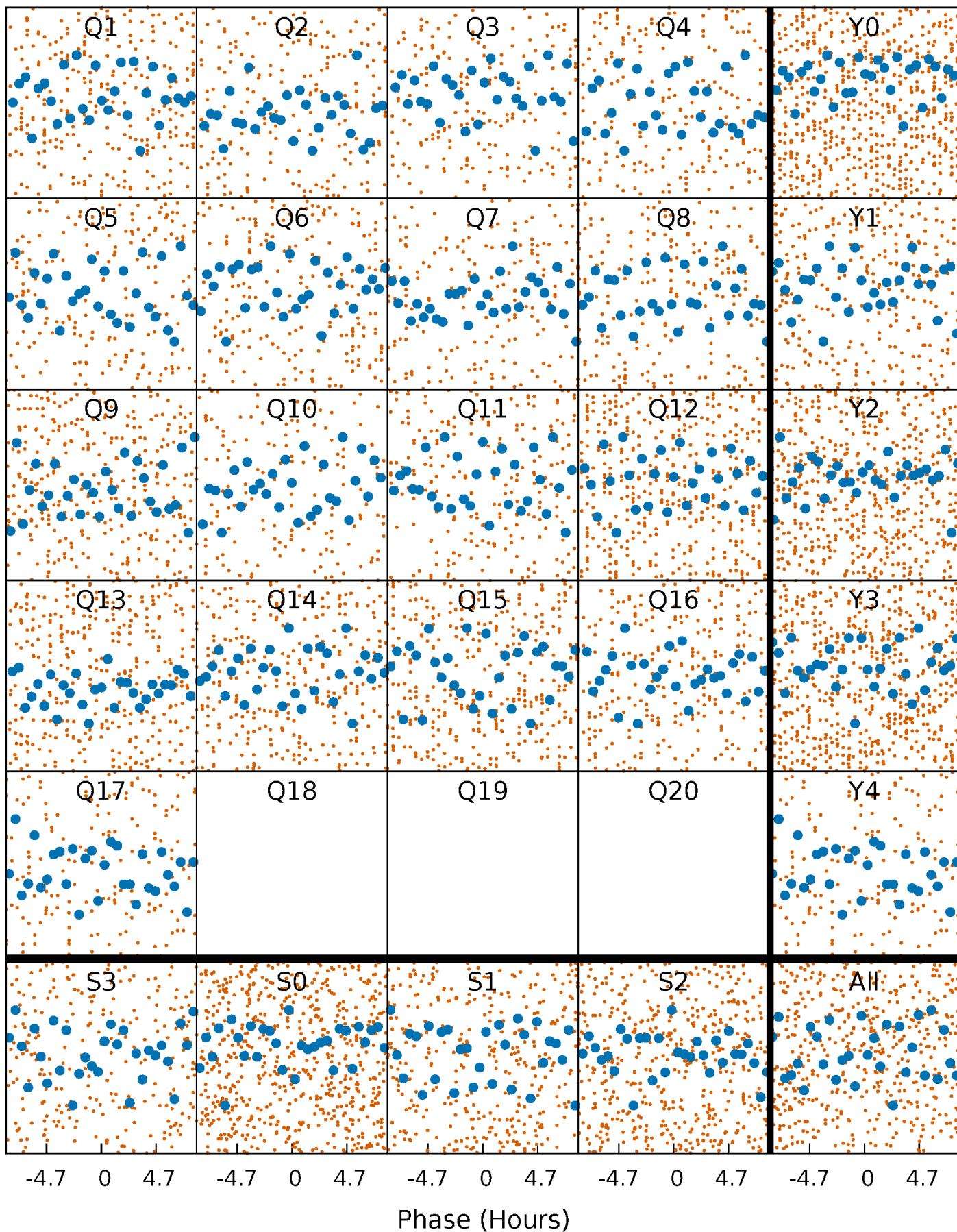


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



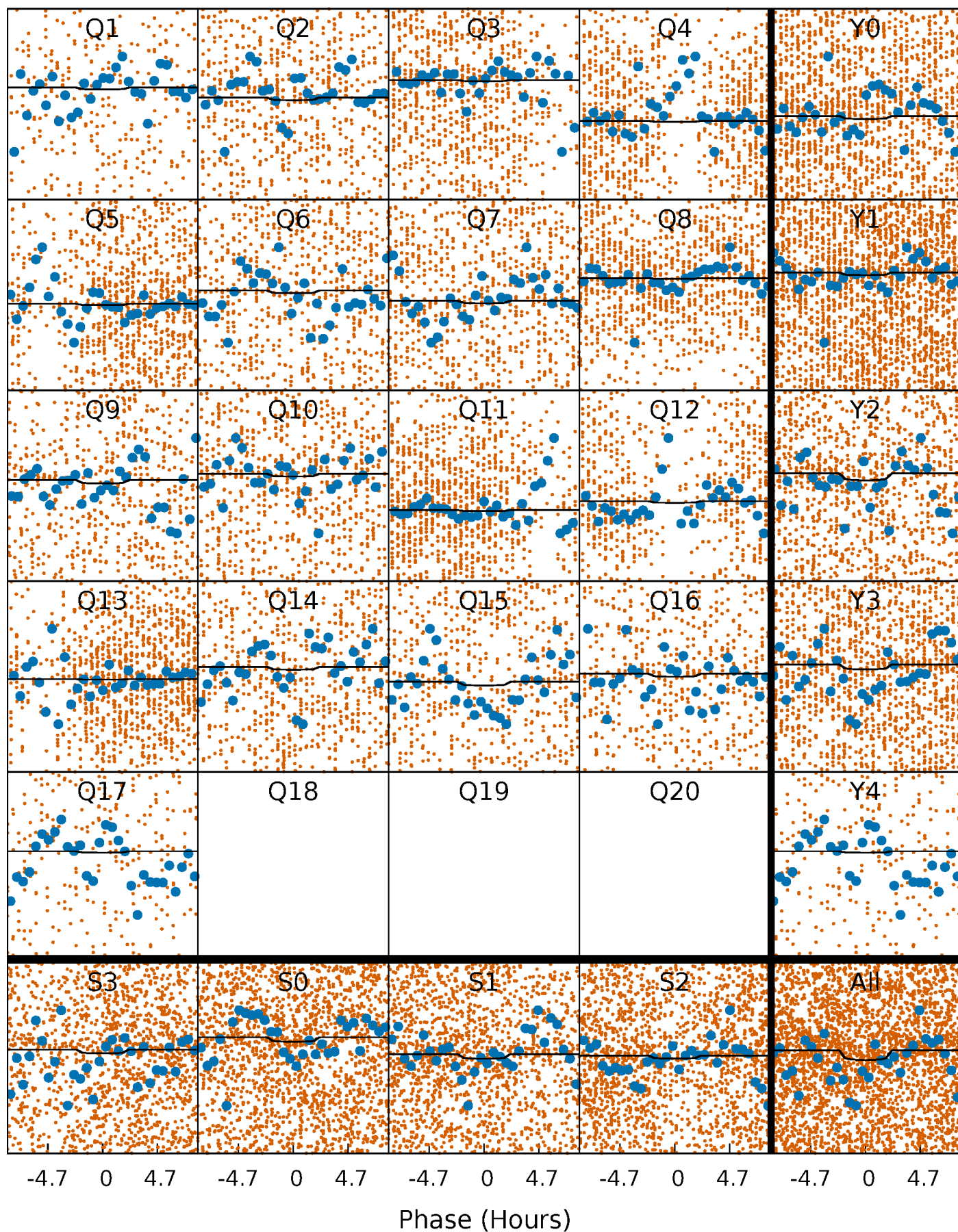
PDC Quarter-Phased Transit Curves

TCE 007917485-02 P= 1.879853 Days $T_0=133.309522$ (BKJD)



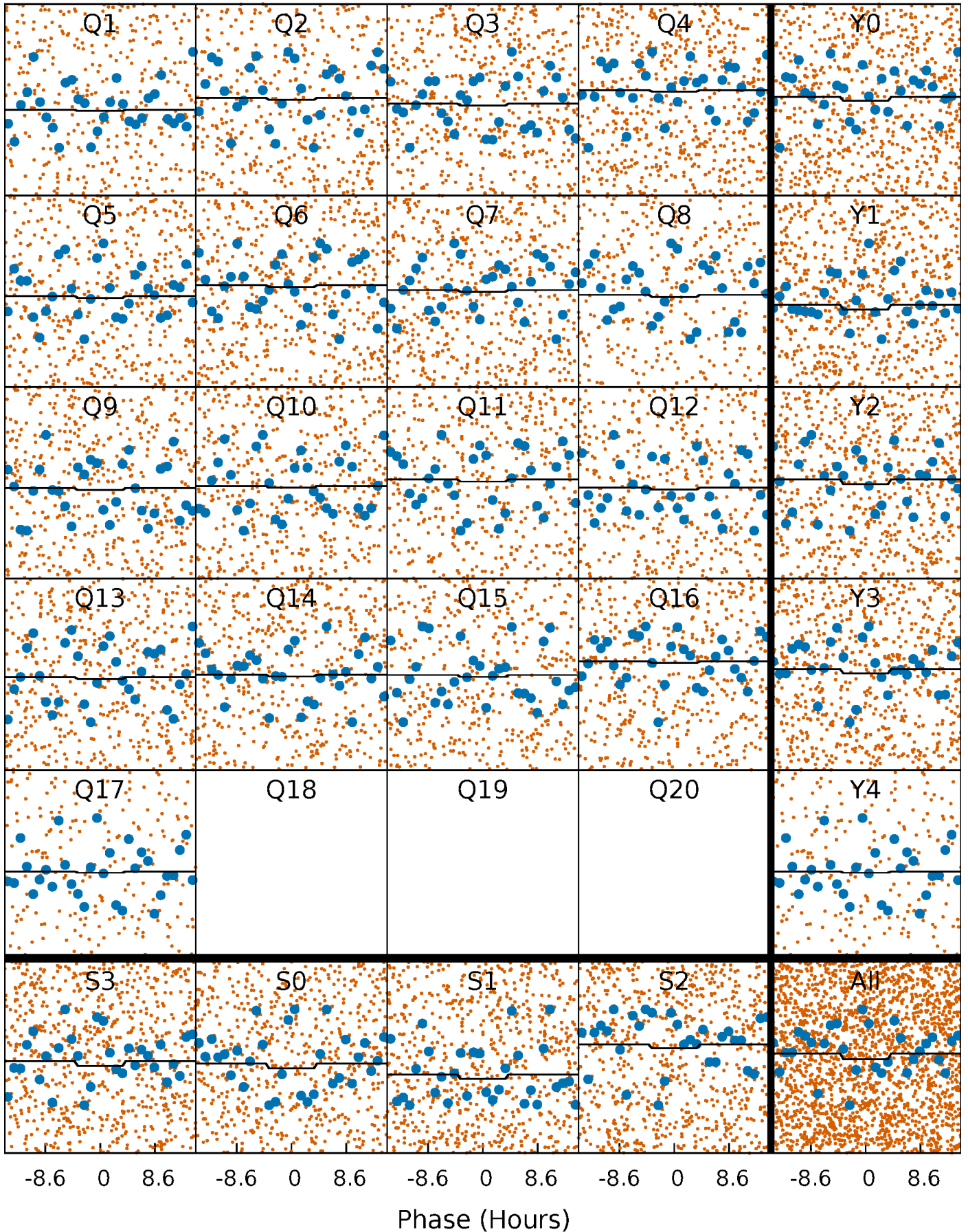
DV Quarter-Phased Transit Curves

TCE 007917485-02 P= 1.879853 Days $T_0=133.309522$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

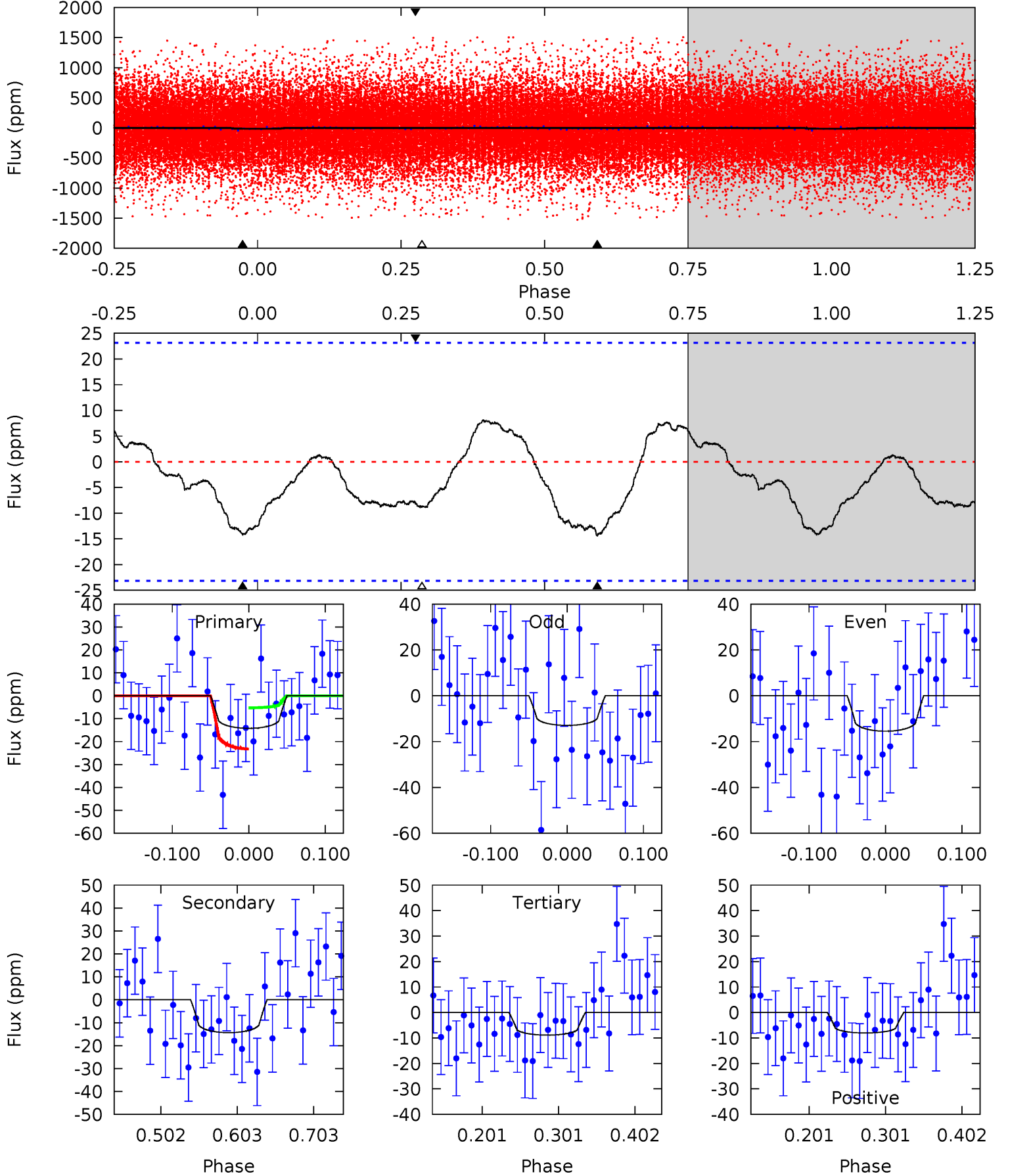
TCE 007917485-02 P= 1.875004 Days $T_0=133.087048$ (BKJD)



DV Model-Shift Uniqueness Test

007917485-02, P = 1.879853 Days, E = 131.429669 Days

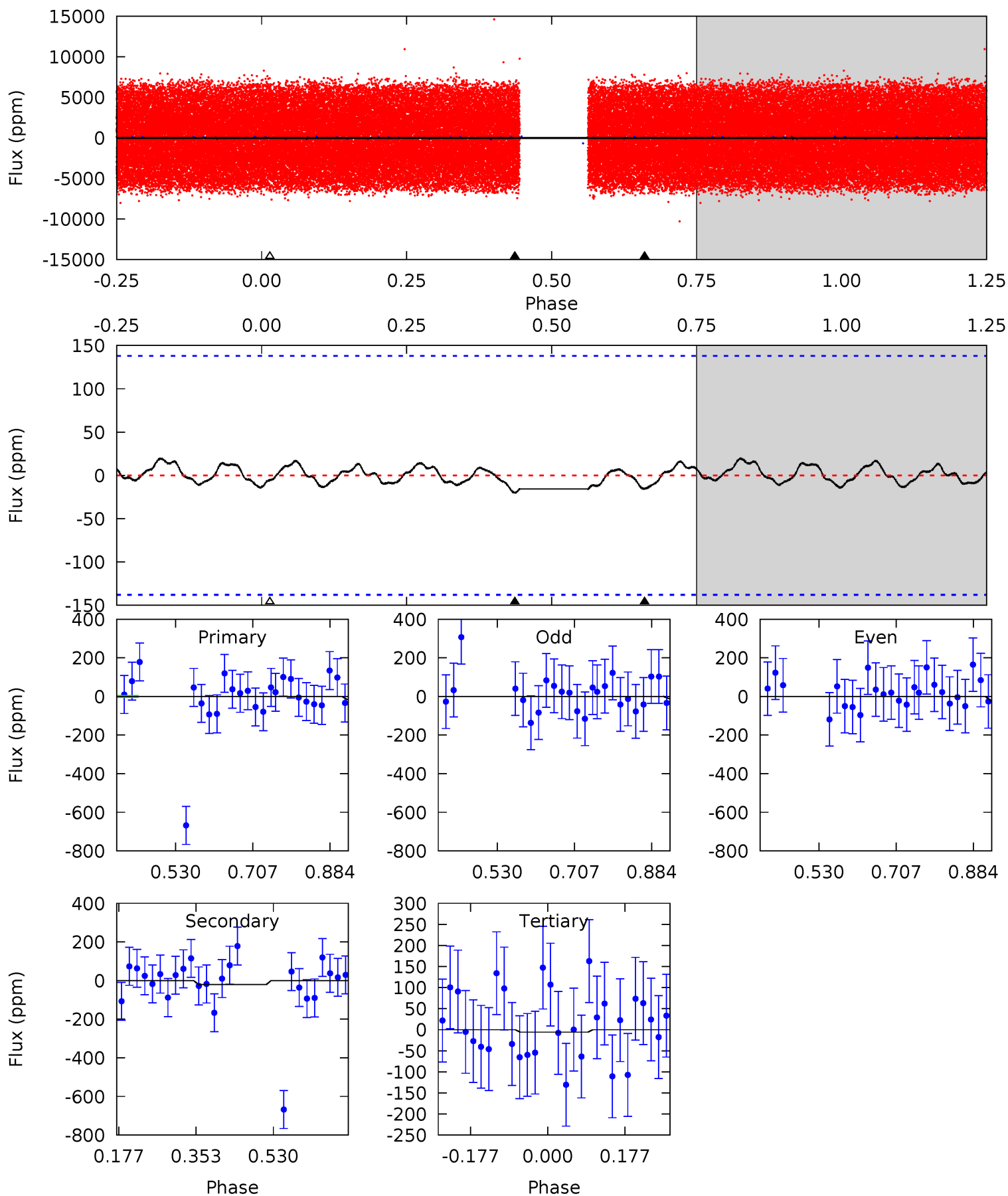
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.80	2.83	1.75	-1.58	4.56	1.64	1.10	1.05	4.38	1.08	4.41	0.25	0.66	0.36	1.80



Alt Model-Shift Uniqueness Test

007917485-02, P = 1.875004 Days, E = 131.212044 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.50	0.65	0.18	0	4.44	1.35	0.28	0.32	0.50	0.47	0.65	0.15	3.62	0.49	0.18



Stellar Parameters For KIC 007917485

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7390^{+232}_{-310}	$4.083^{+0.175}_{-0.175}$	$-0.260^{+0.250}_{-0.350}$	$1.830^{+0.548}_{-0.448}$	$1.477^{+0.230}_{-0.230}$	$0.339^{+0.327}_{-0.154}$
	+3%/-4%	+4%/-4%	+96%/-135%	+30%/-24%	+16%/-16%	+96%/-45%
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 007917485-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-14 ± 5	$0.57^{+0.47}_{-0.37}$	3359^{+234}_{-260}	8501^{+13137}_{-2569}	27^{+191}_{-19}
Alt.	-20 ± 31	$0.84^{+0.54}_{-0.41}$	3358^{+275}_{-253}	6967^{+6080}_{-13799}	13^{+69}_{-24}

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 $A_{obs} \gg 1.0$

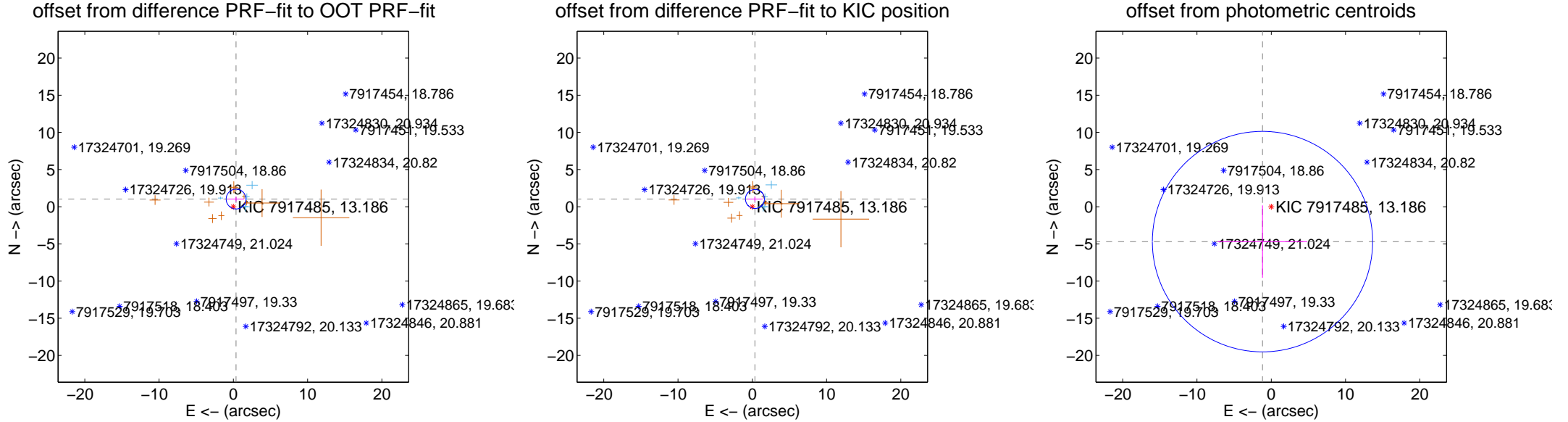
DV Centroid Data

Supplemental centroid analysis for 007917485-02. Kepler magnitude: 13.19. Transit SNR 0.65

There are 5 quarters with good PRF difference image offsets

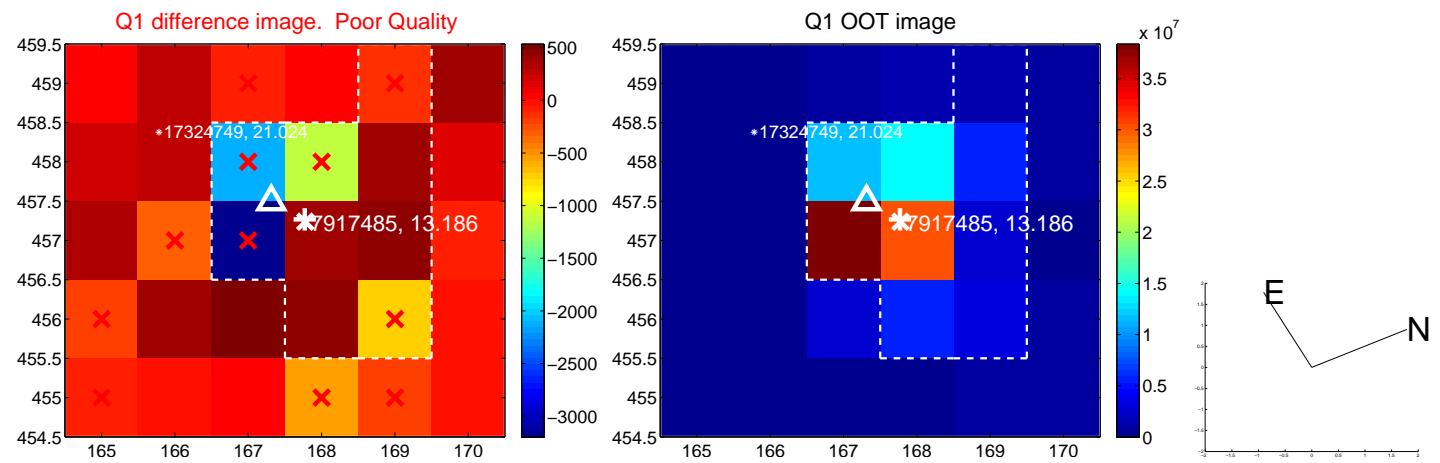
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.093 ± 0.444	2.46	-0.367 ± 1.094	1.030 ± 0.328
PRF-fit source offset from KIC position	1.096 ± 0.425	2.58	-0.355 ± 1.040	1.037 ± 0.352
photometric centroid source offset	4.84 ± 4.94	0.98	1.18 ± 6.03	-4.69 ± 4.87

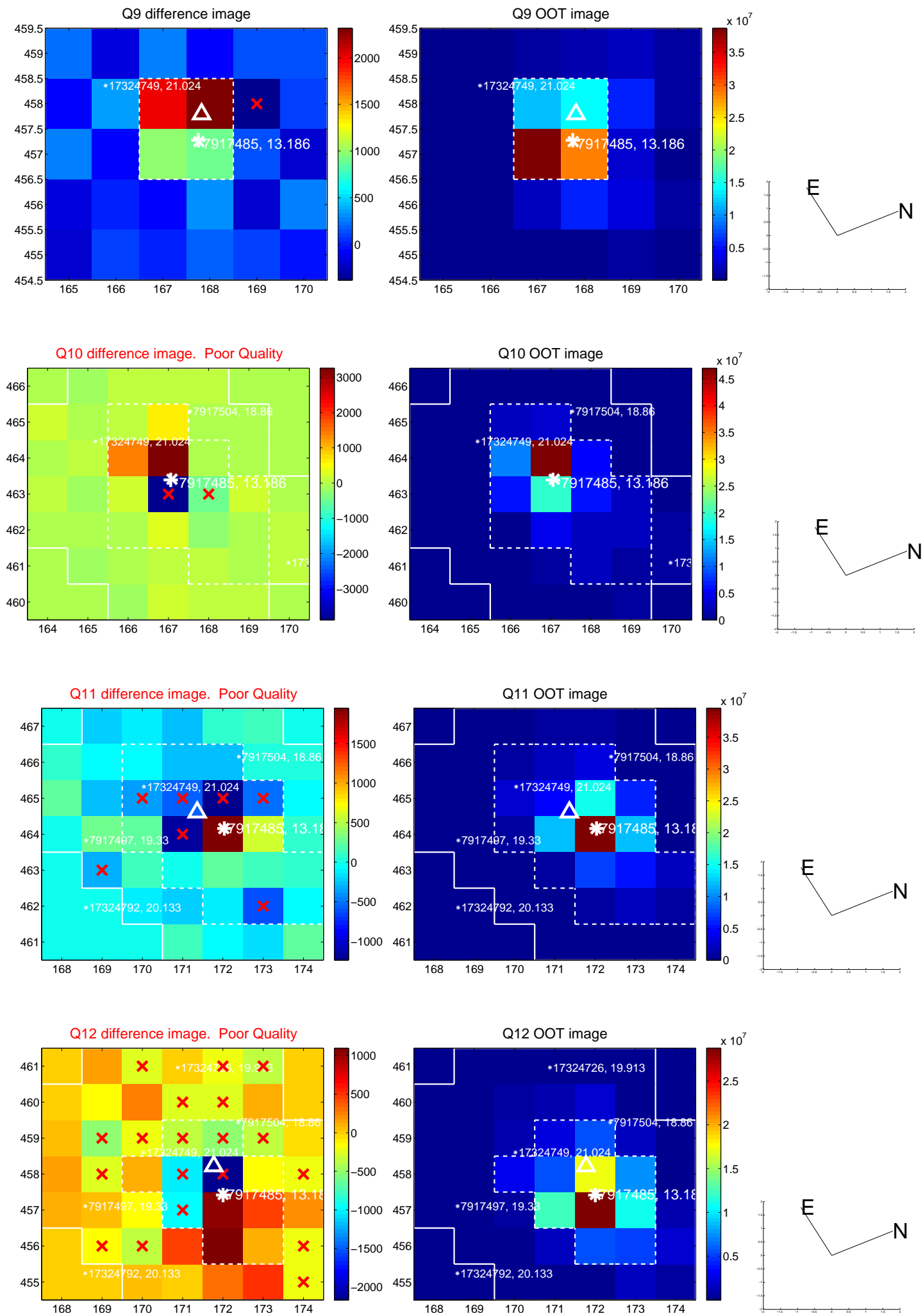


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

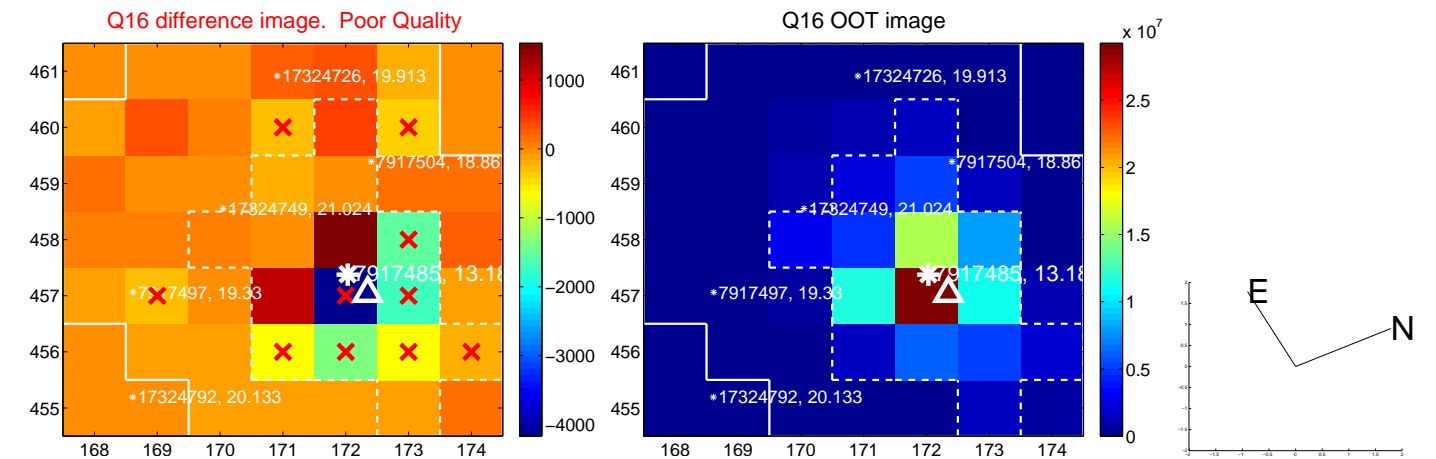
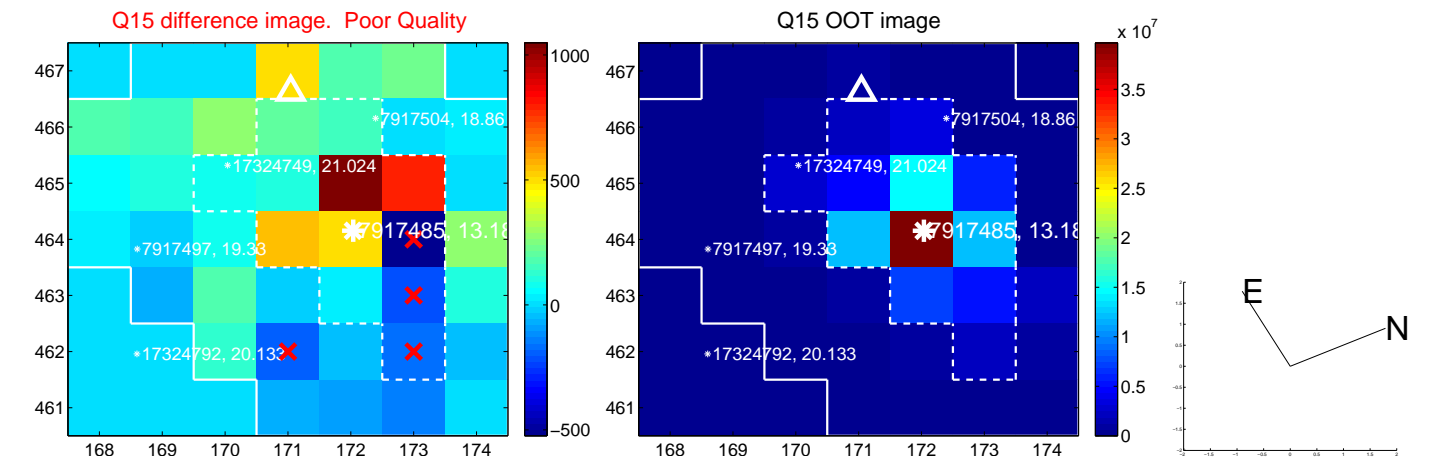
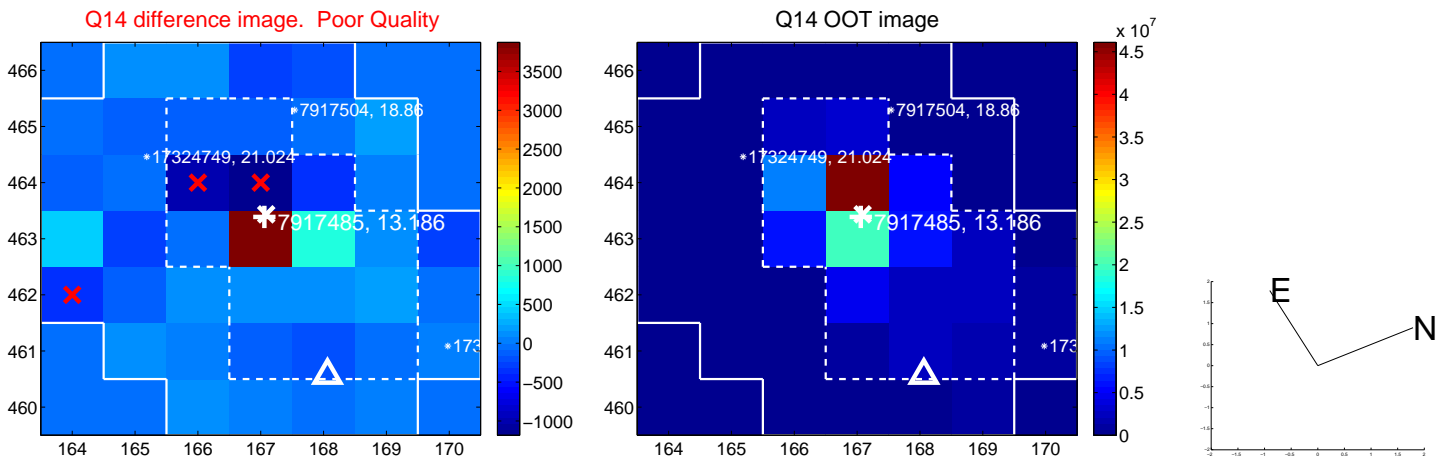
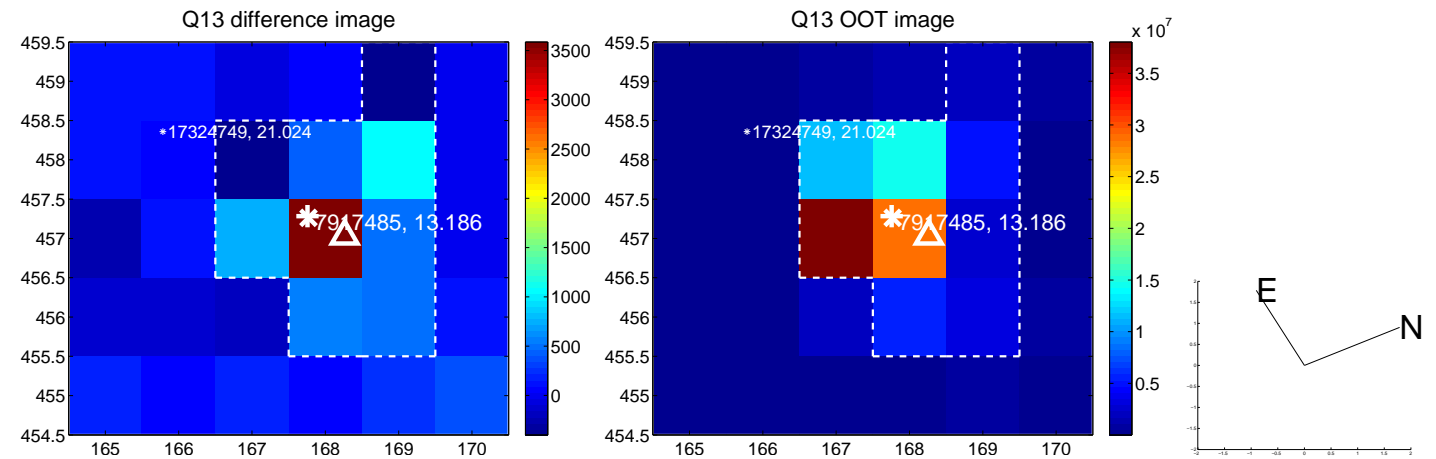
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



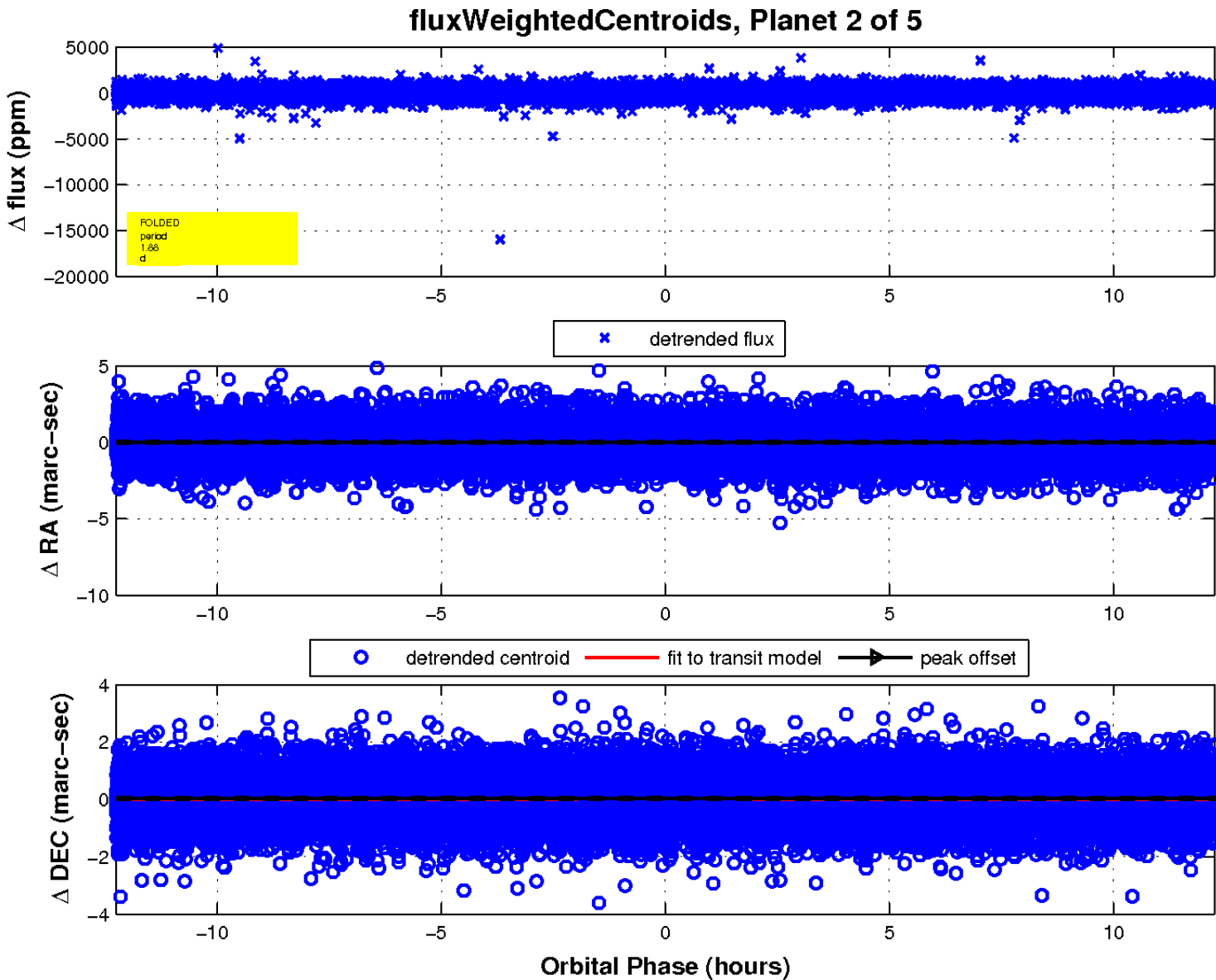
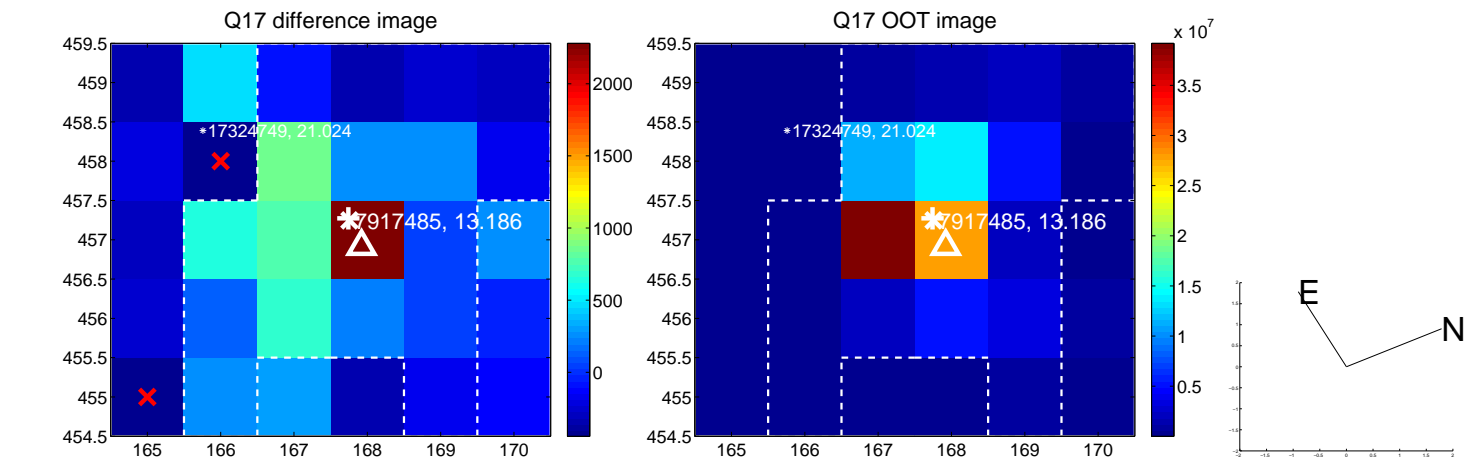
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

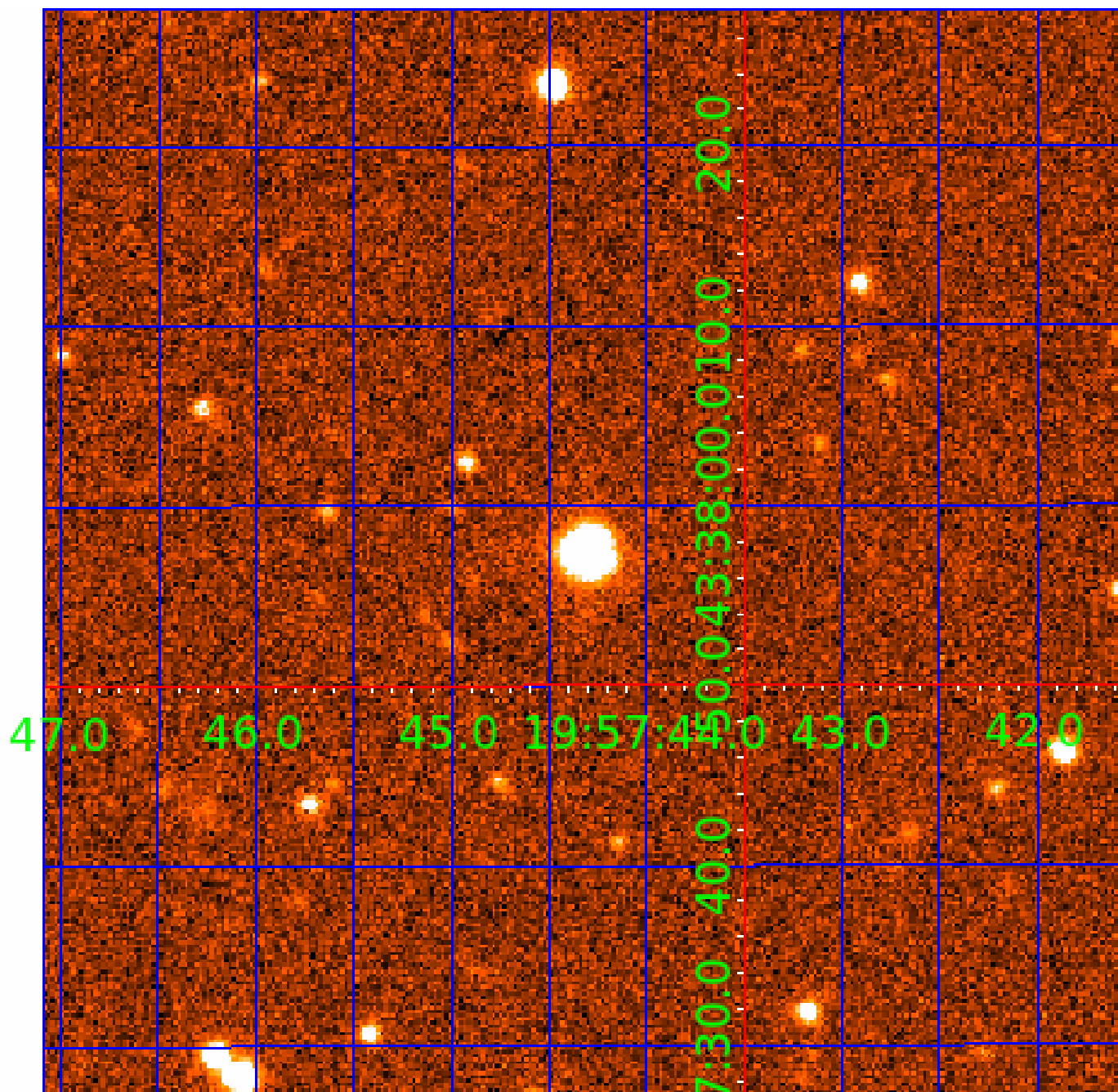


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007917485

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})
007917485-01	OBS	No	1.874999	132.158181	66.9	1.617	11.2	7.6	1.83	7390	1.55	7782.24
007917485-02	OBS	No	1.879853	133.309522	5.4	4.085	11.0	0.7	1.83	7390	0.47	7755.46
007917485-03	OBS	No	0.625012	131.719286	62.8	2.442	10.5	11.0	1.83	7390	1.69	33670.94
007917485-04	OBS	No	222.108073	342.119737	985.7	2.585	7.9	7.9	1.83	7390	6.15	13.38
007917485-05	OBS	No	76.791250	137.141142	549.6	7.142	7.5	7.4	1.83	7390	5.28	55.13

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007917485-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007917485-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
007917485-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
007917485-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES
007917485-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

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

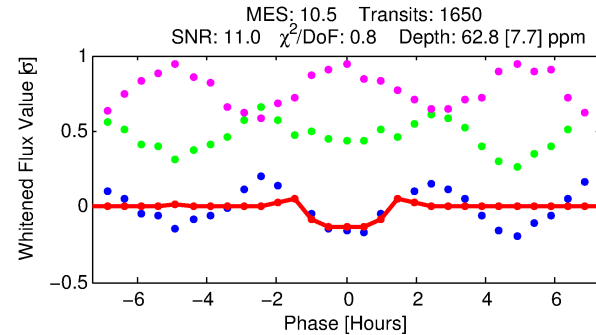
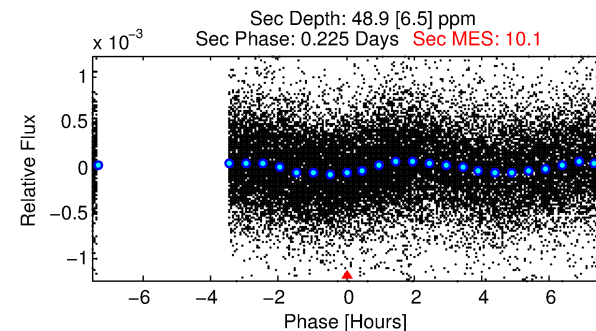
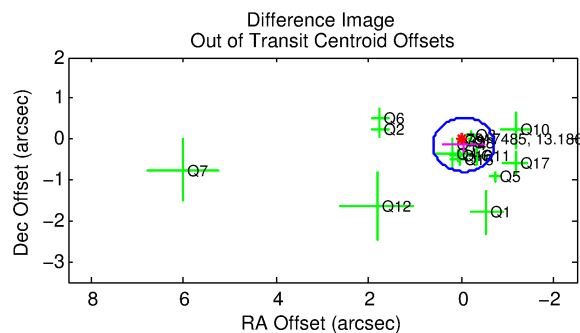
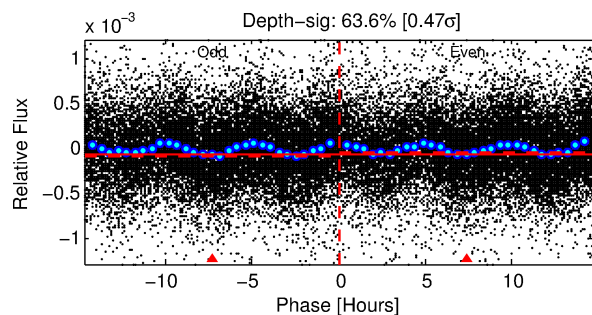
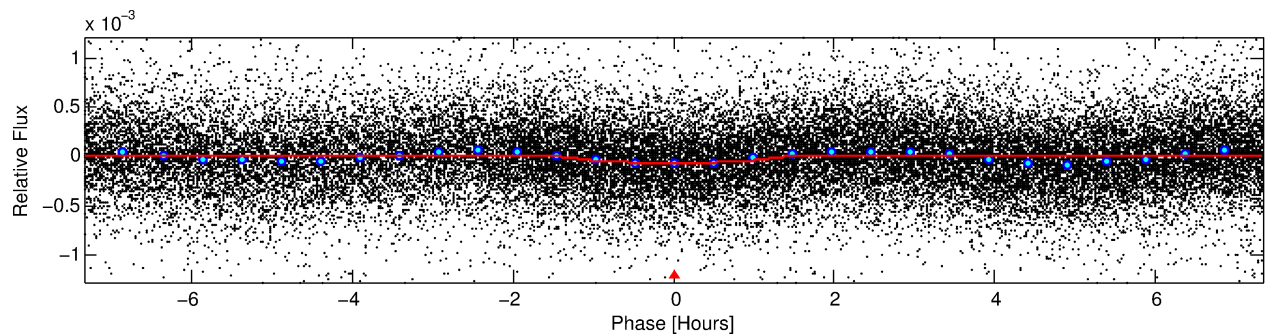
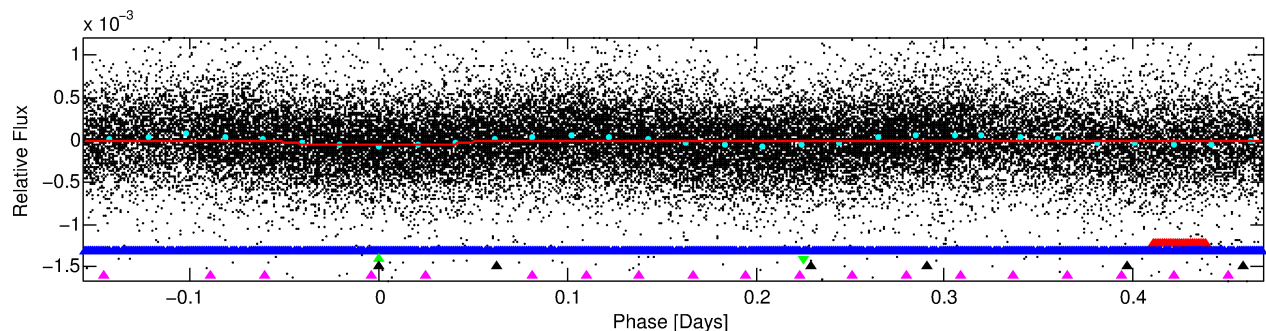
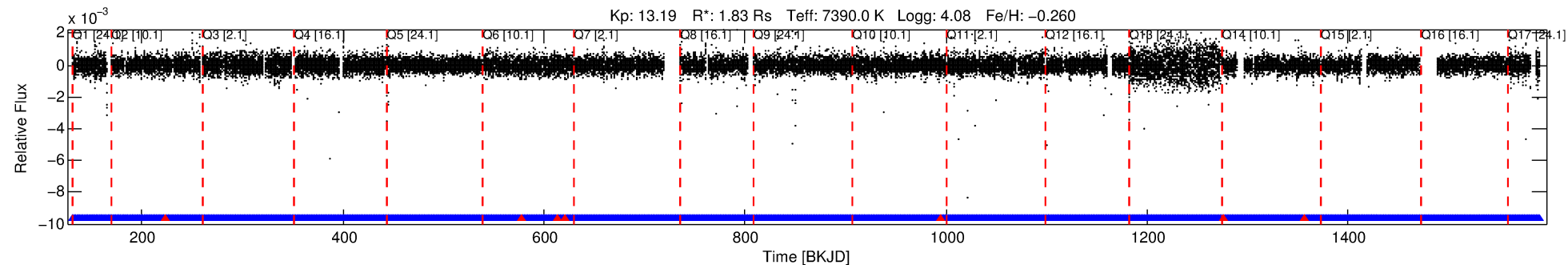
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007917485-03

No Significant Match Found

DV One-Page Summary

KIC: 7917485 Candidate: 3 of 5 Period: 0.625 d



DV Fit Results:

Period = 0.62501 [0.00001] d
Epoch = 131.7193 [0.0018] BKJD
Rp/R* = 0.0084 [0.0027]
a/R* = 1.29 [1.03]
b = 0.90 [0.42]
Seff = 33670.94 [12606.34]
Teq = 3454 [323] K
Rp = 1.69 [0.75] Re
a = 0.0163 [0.0039] AU
Ag = 2.52 [1.87] [0.81 σ]
Teffp = 6726 [1152] K [2.73 σ]

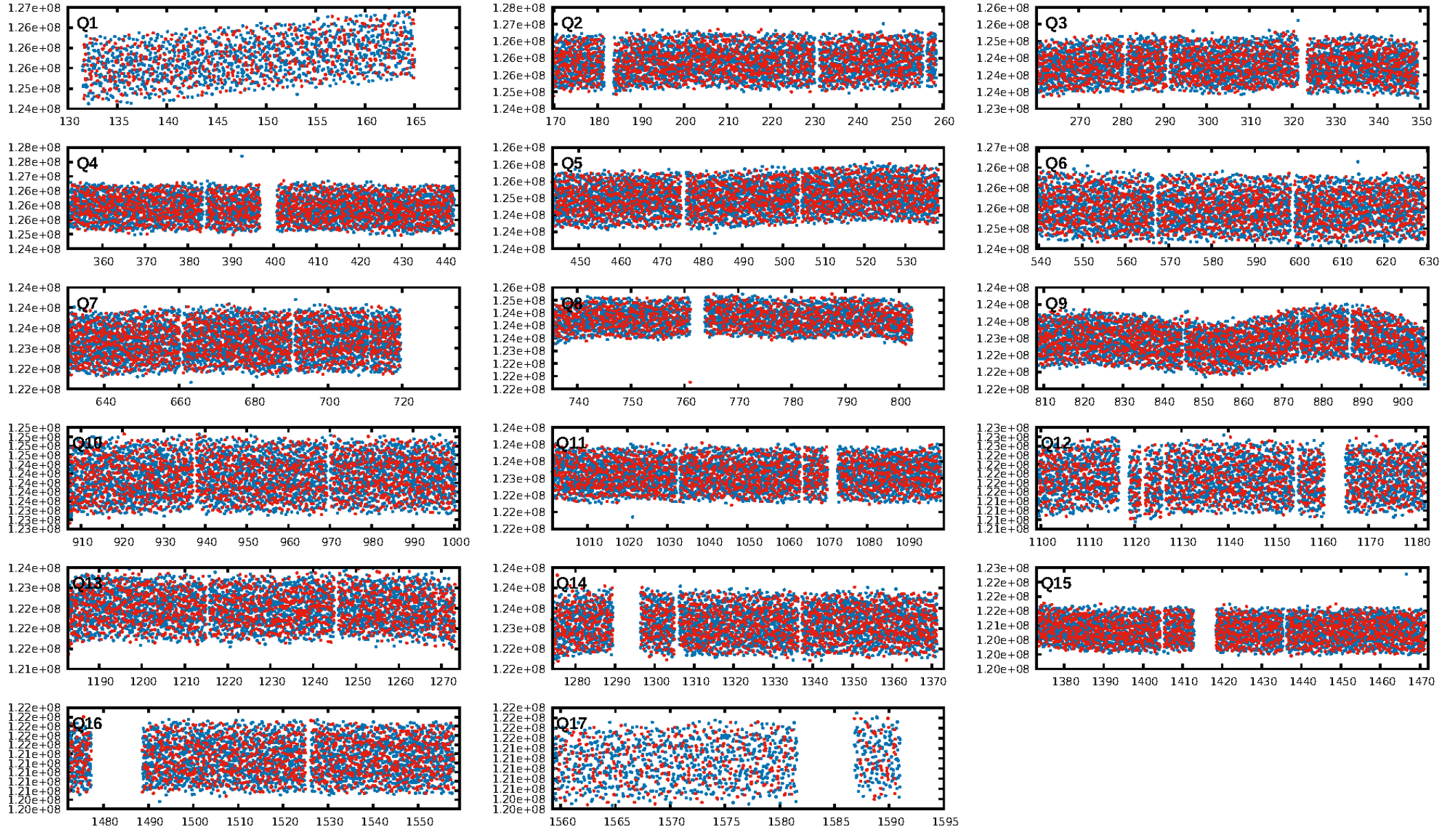
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [10.24 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.09e-14
RollingBand-fgt: 1.00 [1547/1554]
GhostDiagnostic-chr: 0.8148
Centroid-sig: 1.5%
Centroid-so: 0.764 arcsec [1.95 σ]
OotOffset-rm: 0.150 arcsec [0.68 σ]
KicOffset-rm: 0.179 arcsec [1.02 σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.44 [7/16]
DiffImageOverlap-fno: 1.00 [17/17]

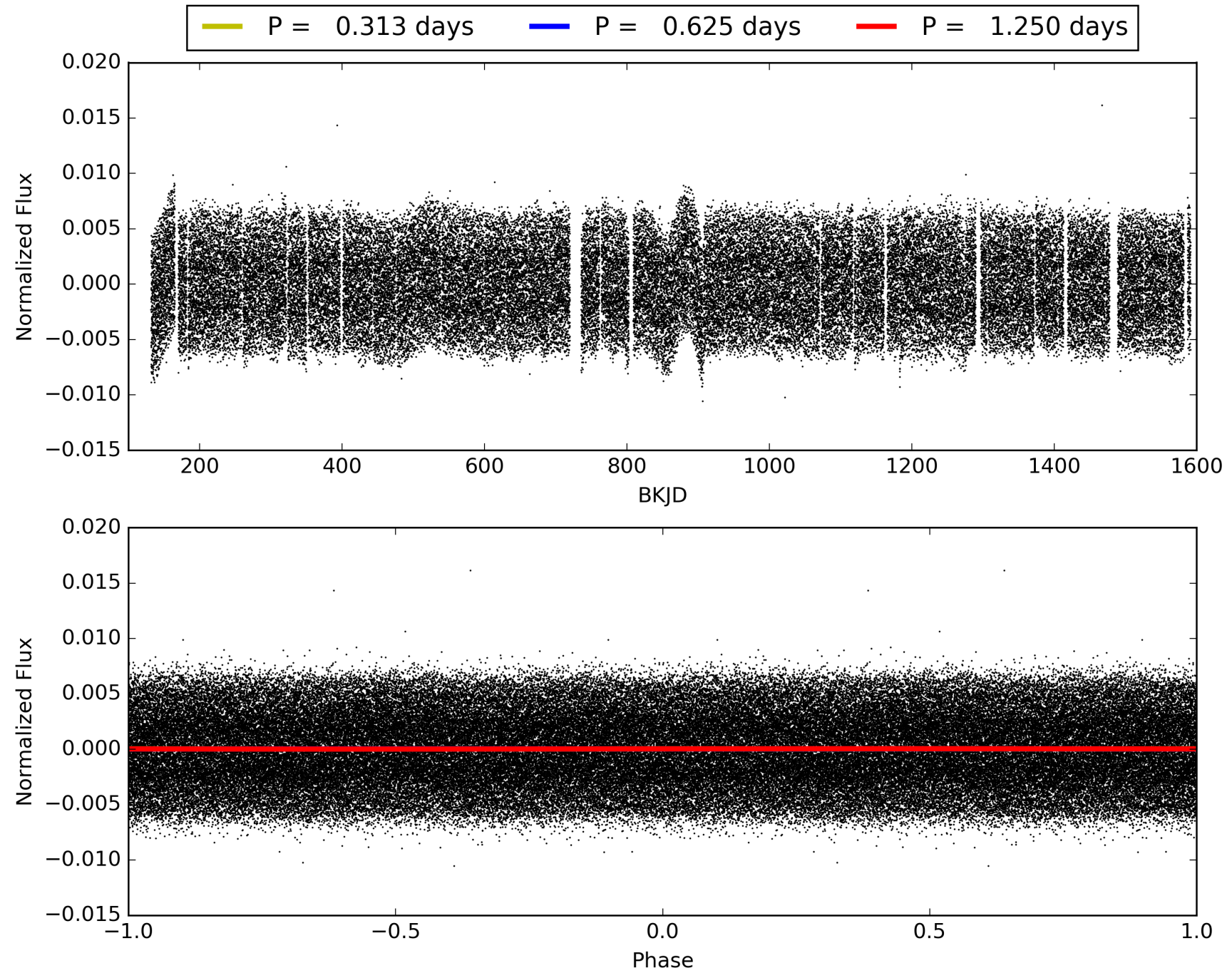
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 23:23:16 Z

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

TCE 007917485-03, PDC Light Curves

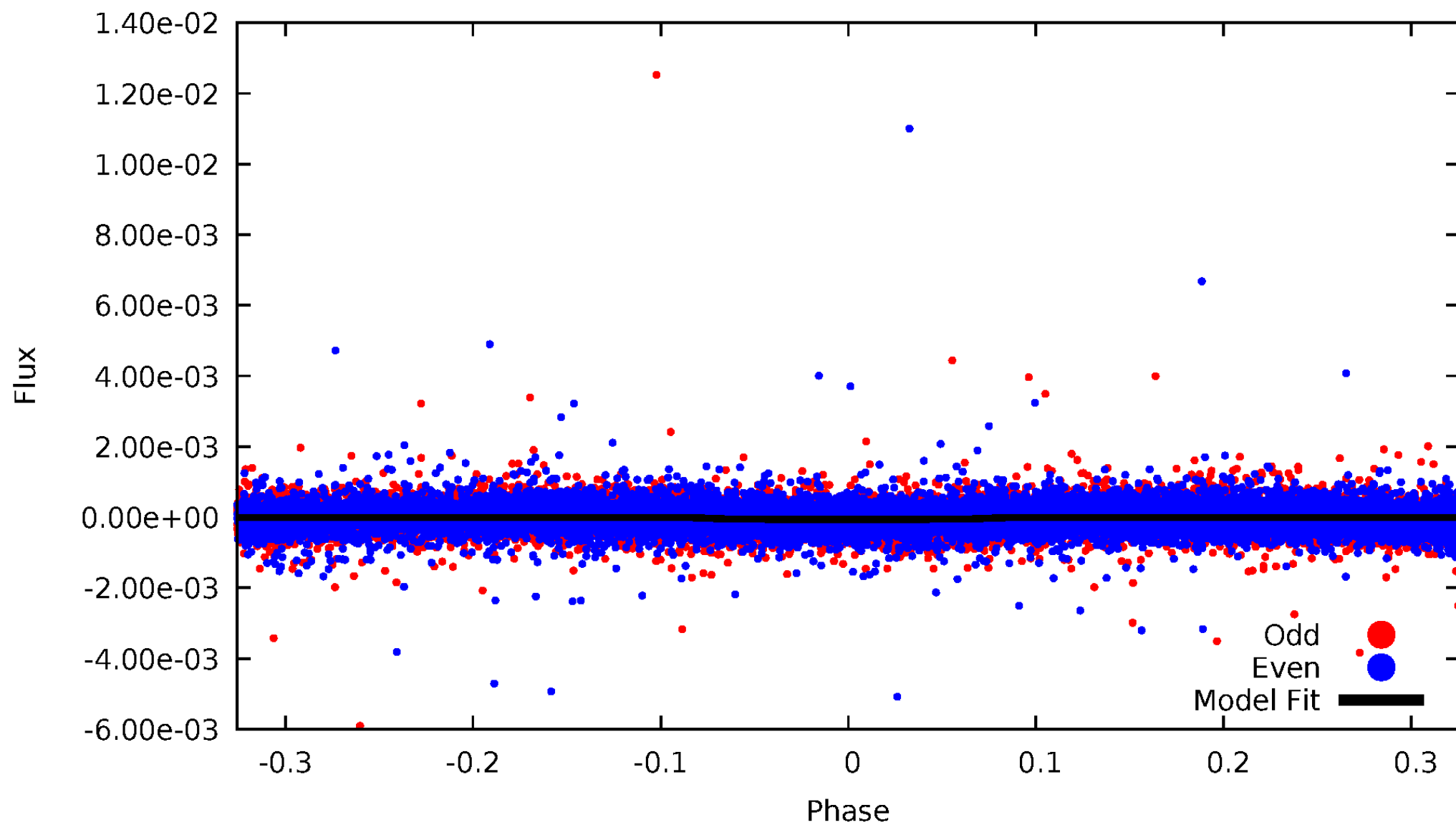


TCE 007917485-03



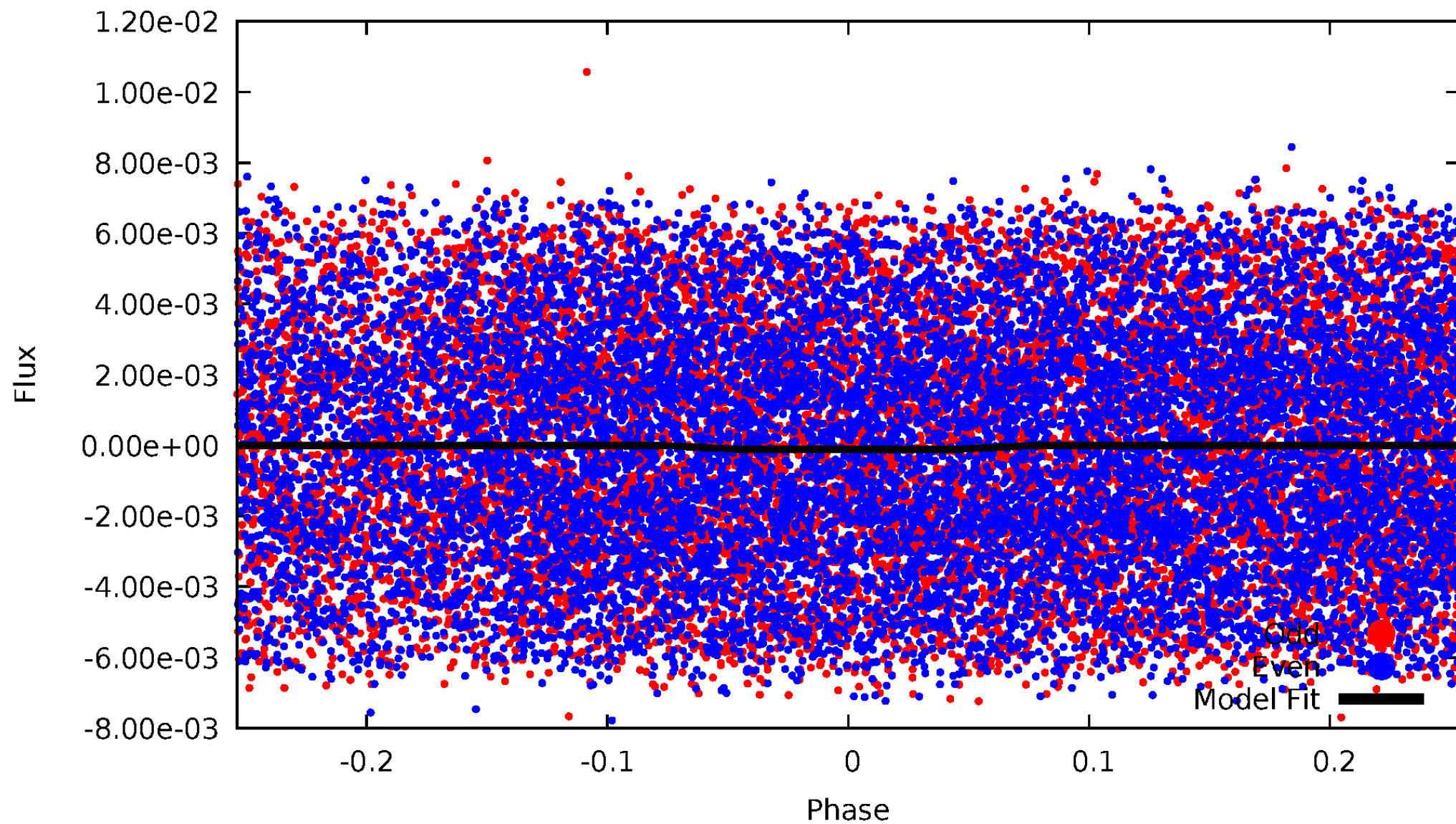
DV Odd/Even

TCE 007917485-03



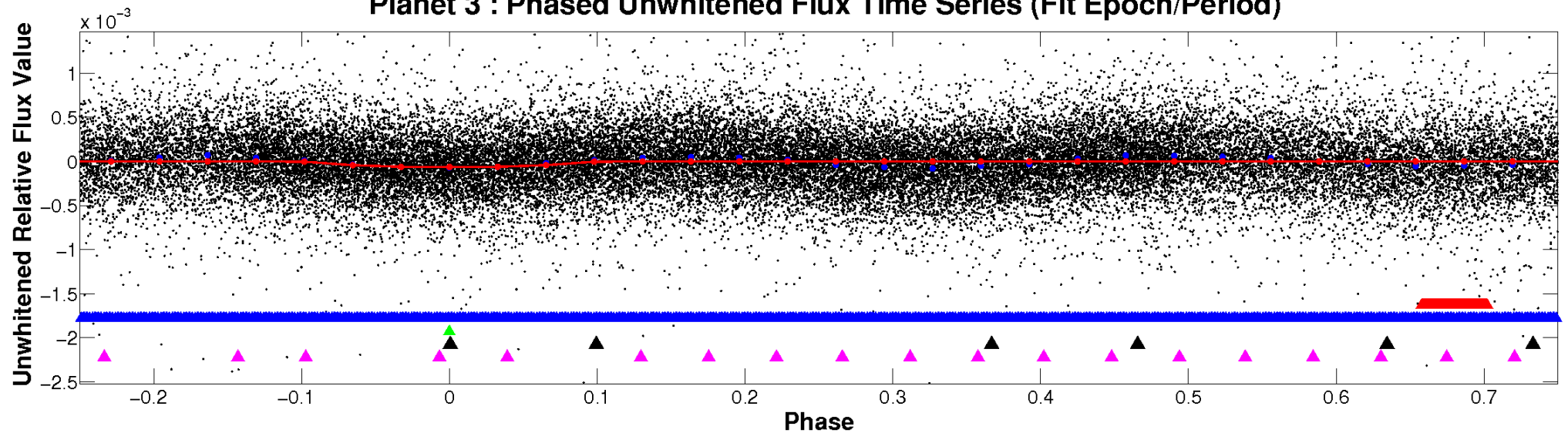
ALT Odd/Even

TCE 007917485-03

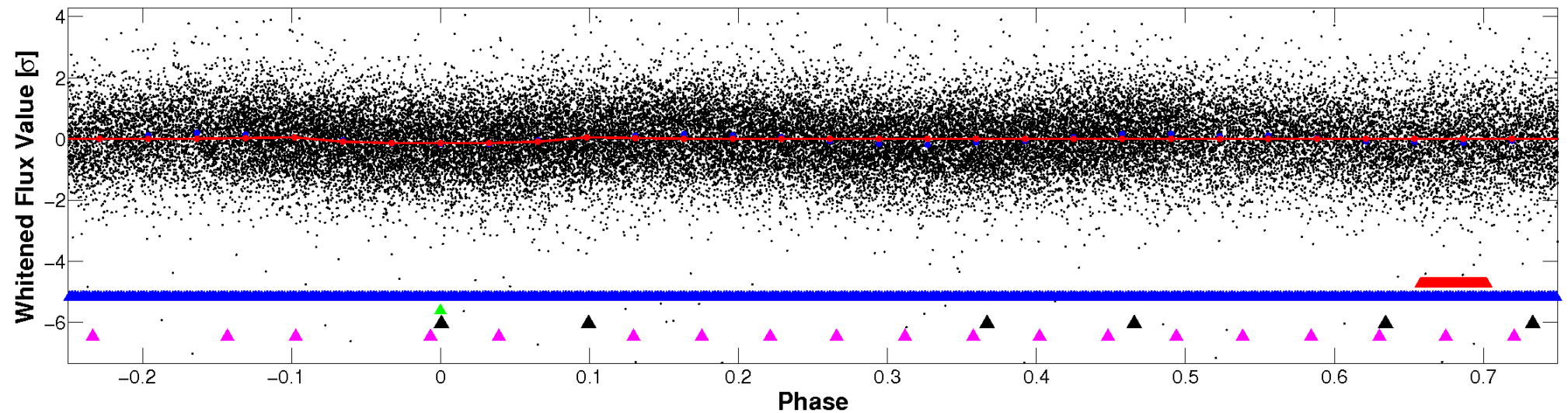


Non-Whitened Vs. Whitened Light Curve

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

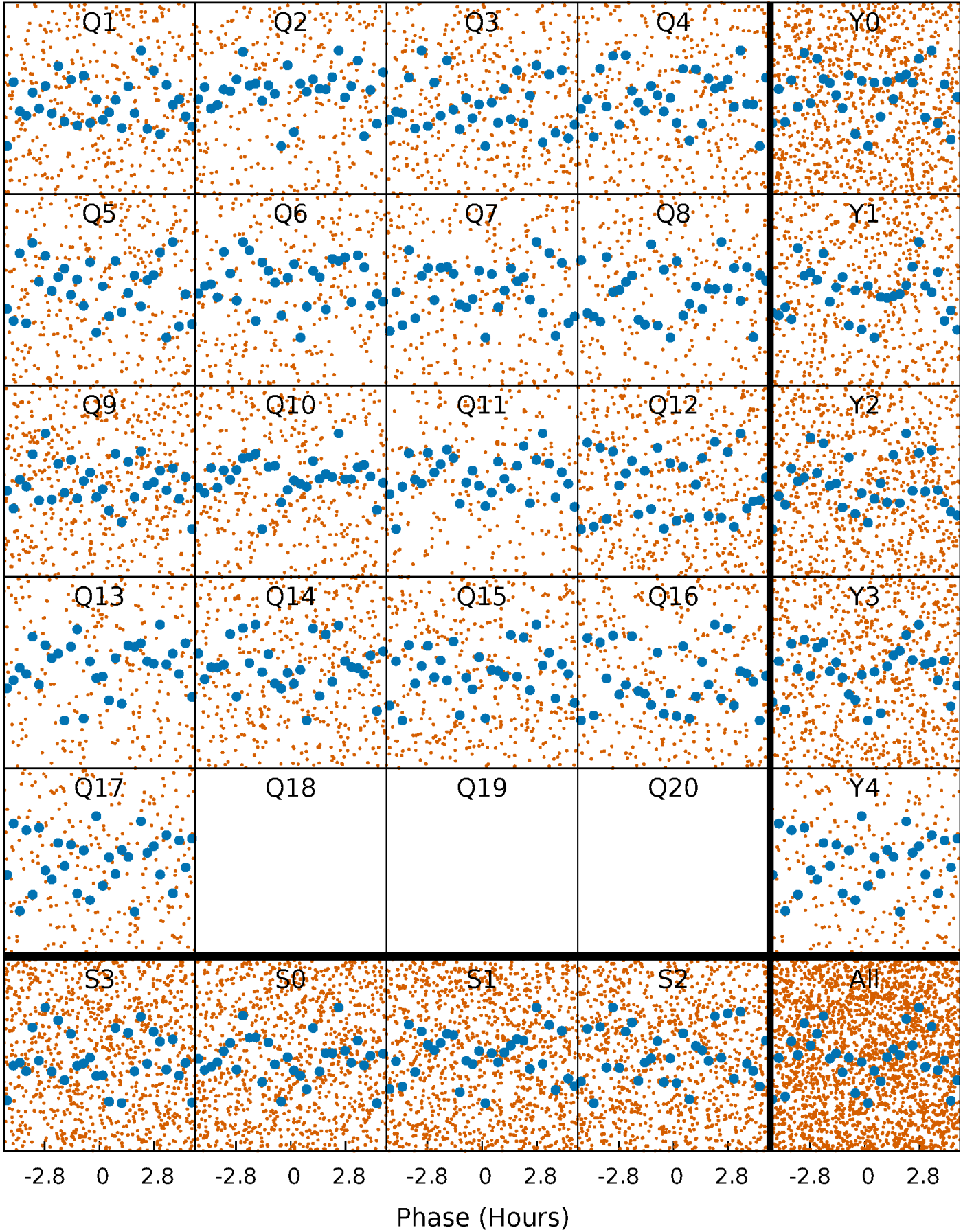


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



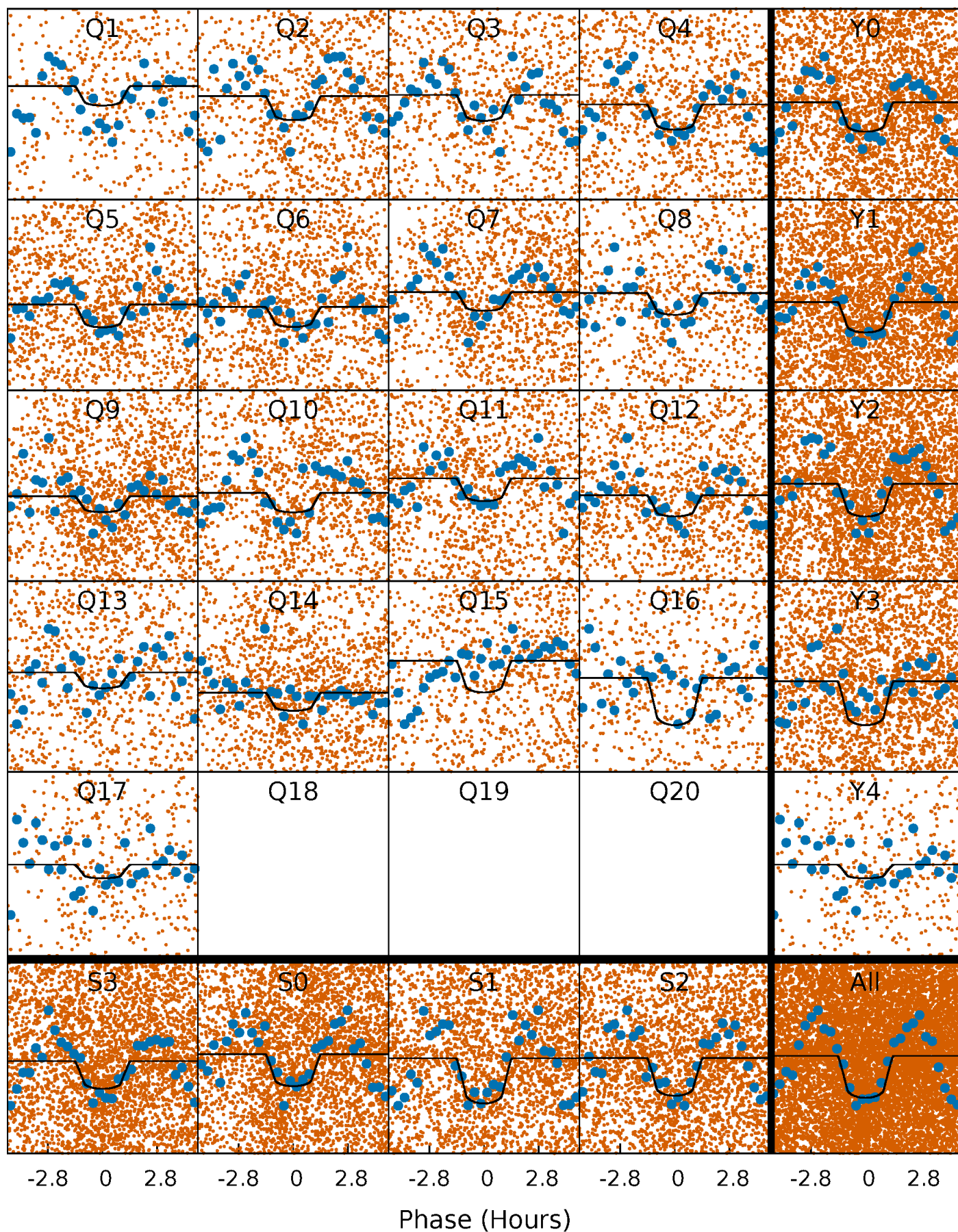
PDC Quarter-Phased Transit Curves

TCE 007917485-03 P= 0.625012 Days $T_0=131.719286$ (BKJD)



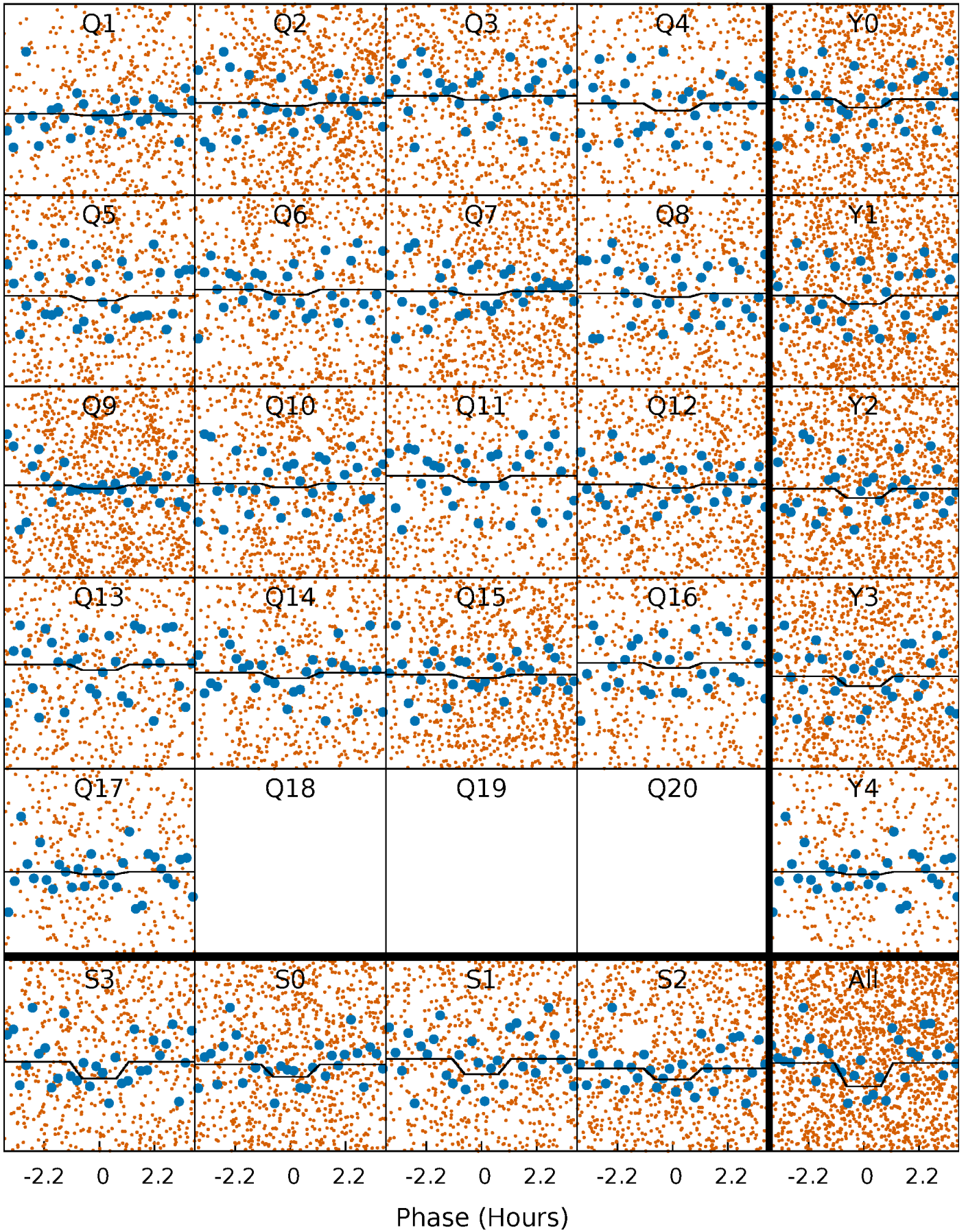
DV Quarter-Phased Transit Curves

TCE 007917485-03 P= 0.625012 Days $T_0=131.719286$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

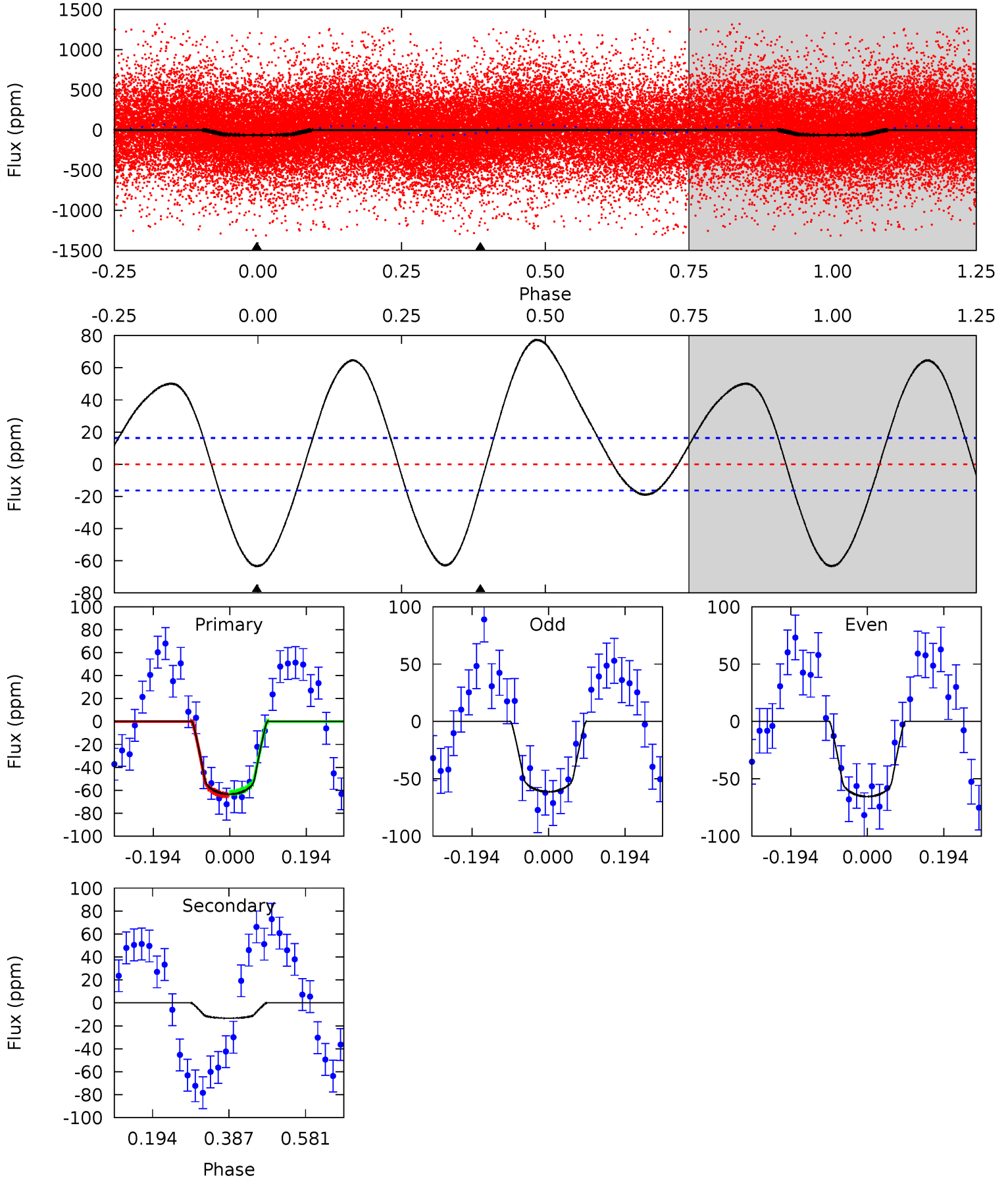
TCE 007917485-03 P= 0.625013 Days $T_0=131.721101$ (BKJD)



DV Model-Shift Uniqueness Test

007917485-03, P = 0.625012 Days, E = 131.094274 Days

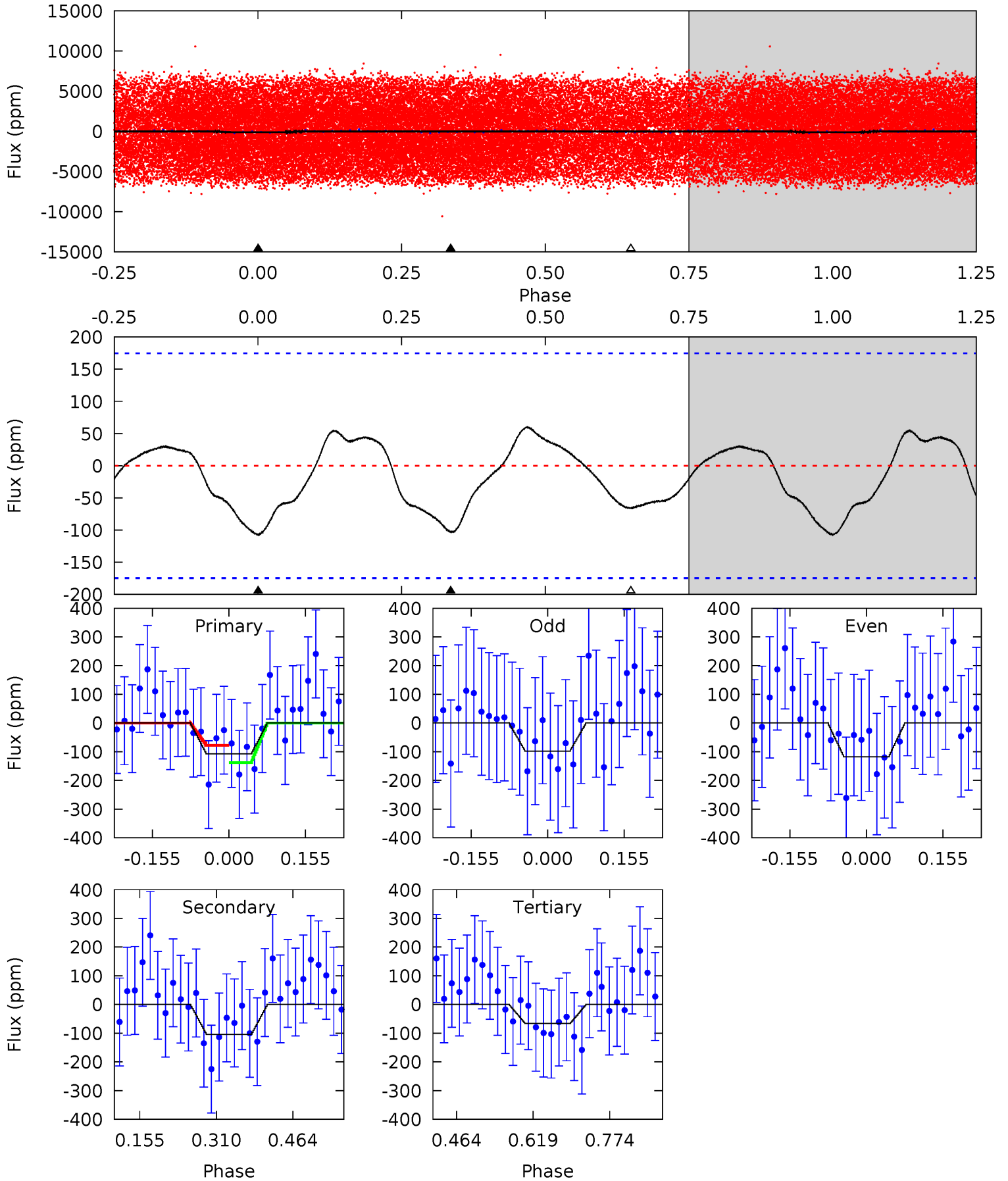
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.1	3.61	0	0	4.42	1.30	5.08	17.1	17.1	3.61	3.61	0.57	1.07	0.55	0.31



Alt Model-Shift Uniqueness Test

007917485-03, P = 0.625013 Days, E = 131.096088 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.76	2.66	1.70	0	4.47	1.42	0.98	1.06	2.76	0.96	2.66	0.26	1.36	0.36	0.77



Stellar Parameters For KIC 007917485

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7390^{+232}_{-310}	$4.083^{+0.175}_{-0.175}$	$-0.260^{+0.250}_{-0.350}$	$1.830^{+0.548}_{-0.448}$	$1.477^{+0.230}_{-0.230}$	$0.339^{+0.327}_{-0.154}$
	+3%/-4%	+4%/-4%	+96%/-135%	+30%/-24%	+16%/-16%	+96%/-45%
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 007917485-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-13 ± 4	$1.73^{+0.65}_{-0.61}$	4845^{+370}_{-377}	4291^{+1217}_{-1507}	$0.646^{+0.900}_{-0.322}$
Alt.	-104 ± 39	$2.08^{+0.63}_{-0.59}$	4814^{+391}_{-345}	7078^{+1575}_{-1294}	$3.415^{+3.484}_{-1.713}$

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

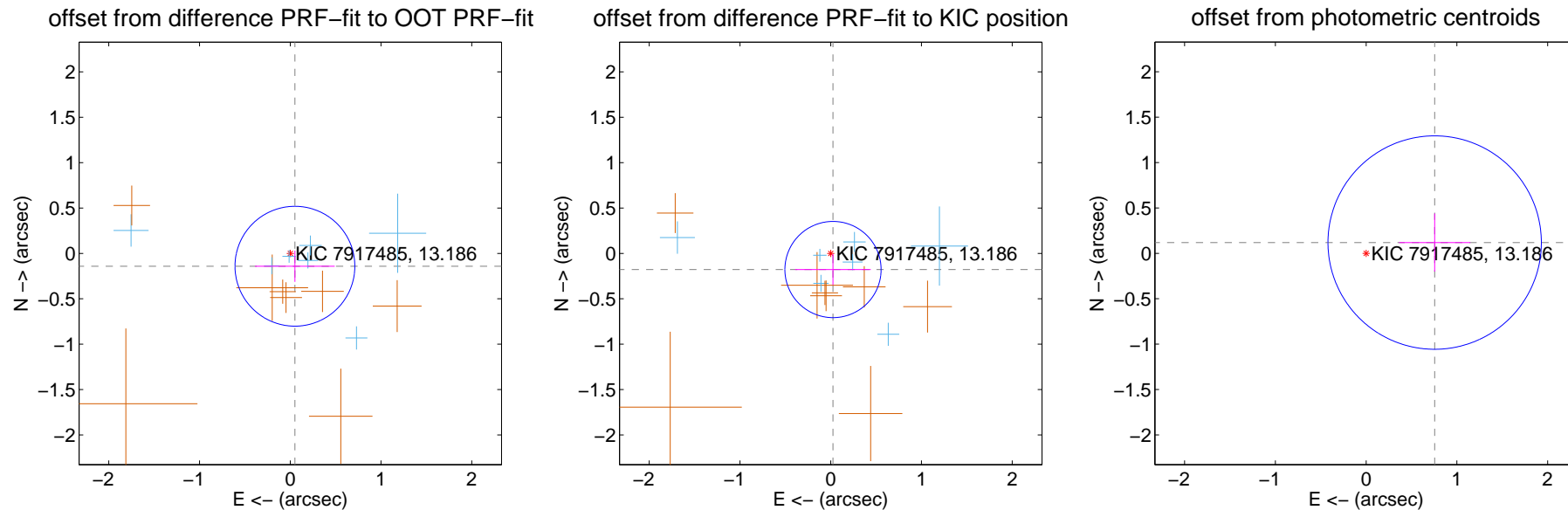
DV Centroid Data

Supplemental centroid analysis for 007917485-03. Kepler magnitude: 13.19. Transit SNR 11.00

There are 7 quarters with good PRF difference image offsets

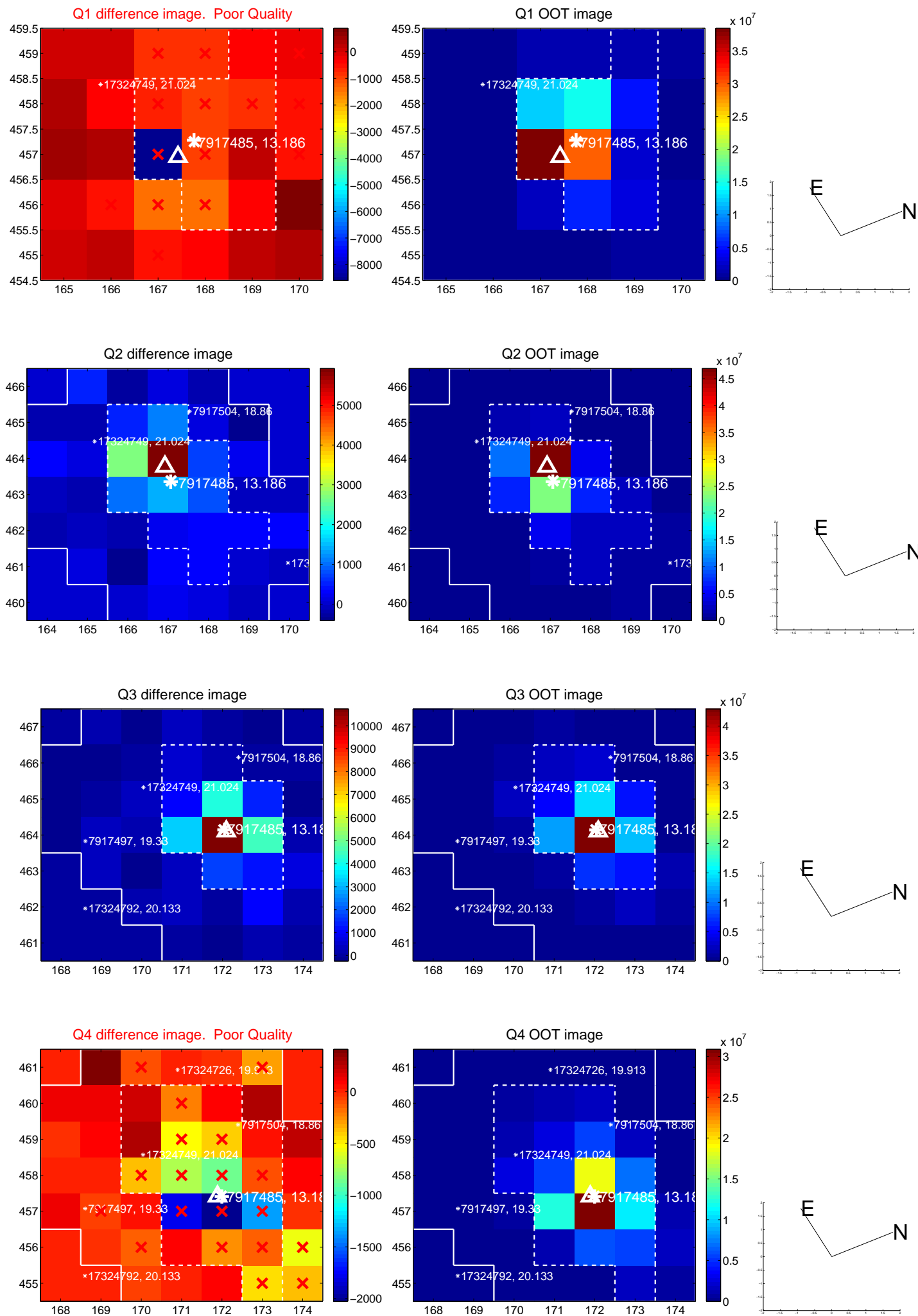
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.150 ± 0.220	0.68	-0.051 ± 0.439	-0.141 ± 0.172
PRF-fit source offset from KIC position	0.179 ± 0.177	1.02	-0.025 ± 0.417	-0.178 ± 0.170
photometric centroid source offset	0.76 ± 0.39	1.95	-0.76 ± 0.39	0.12 ± 0.32

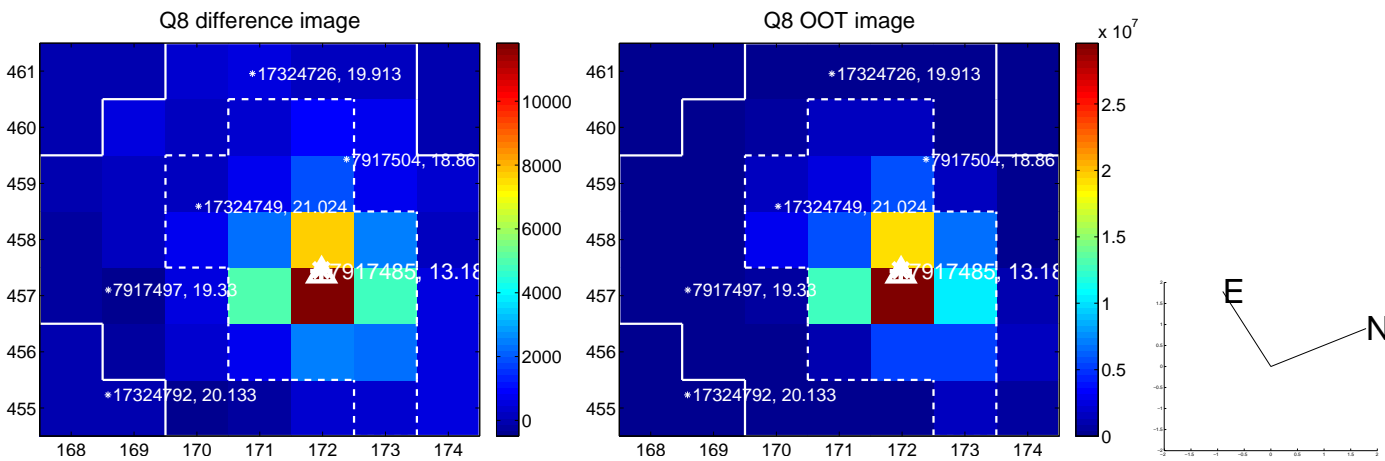
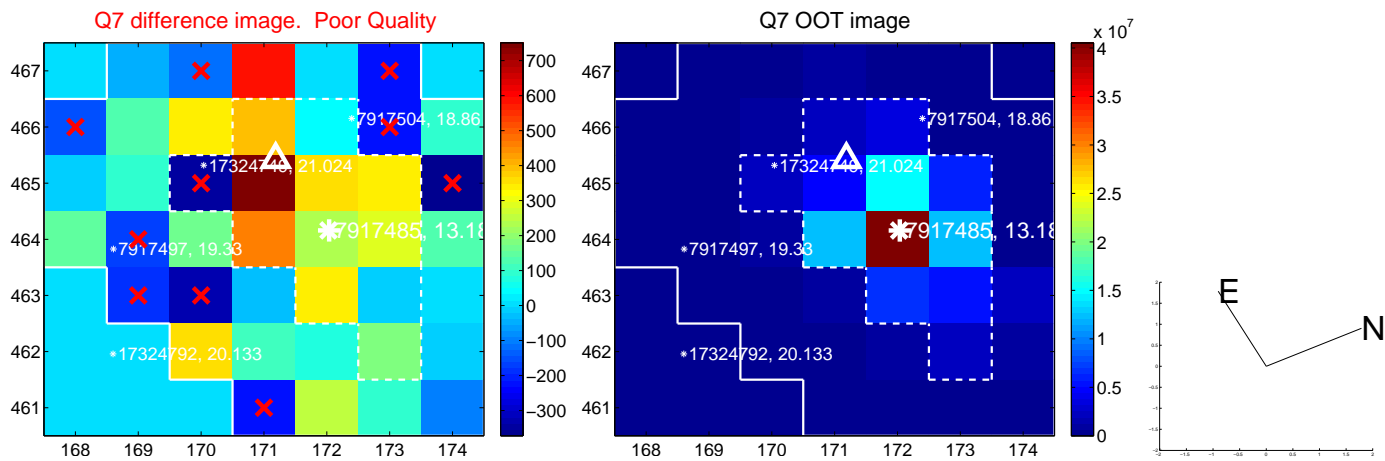
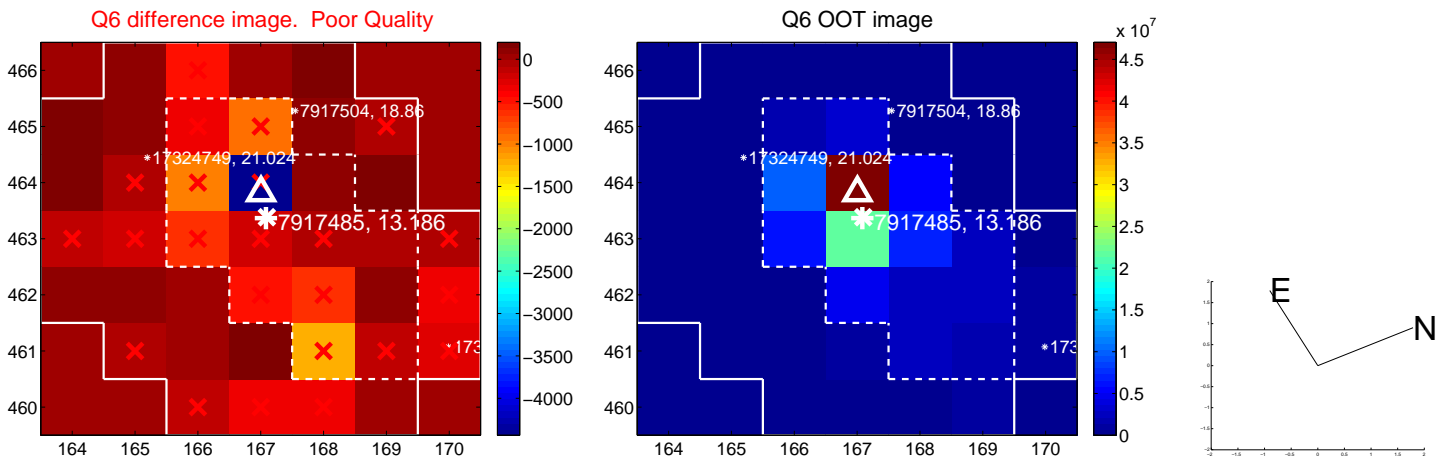
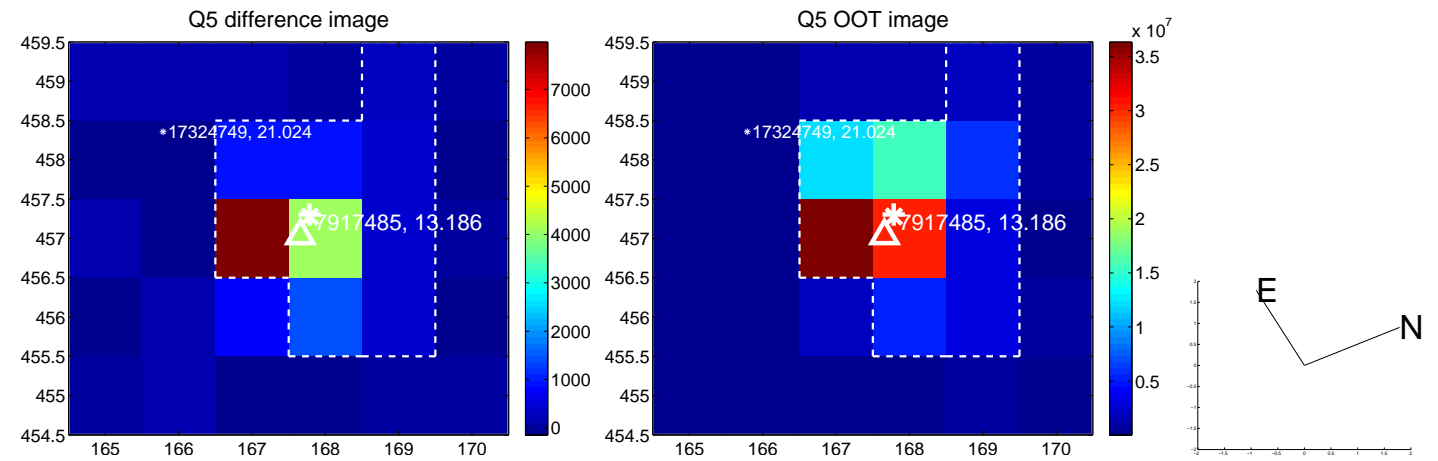


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

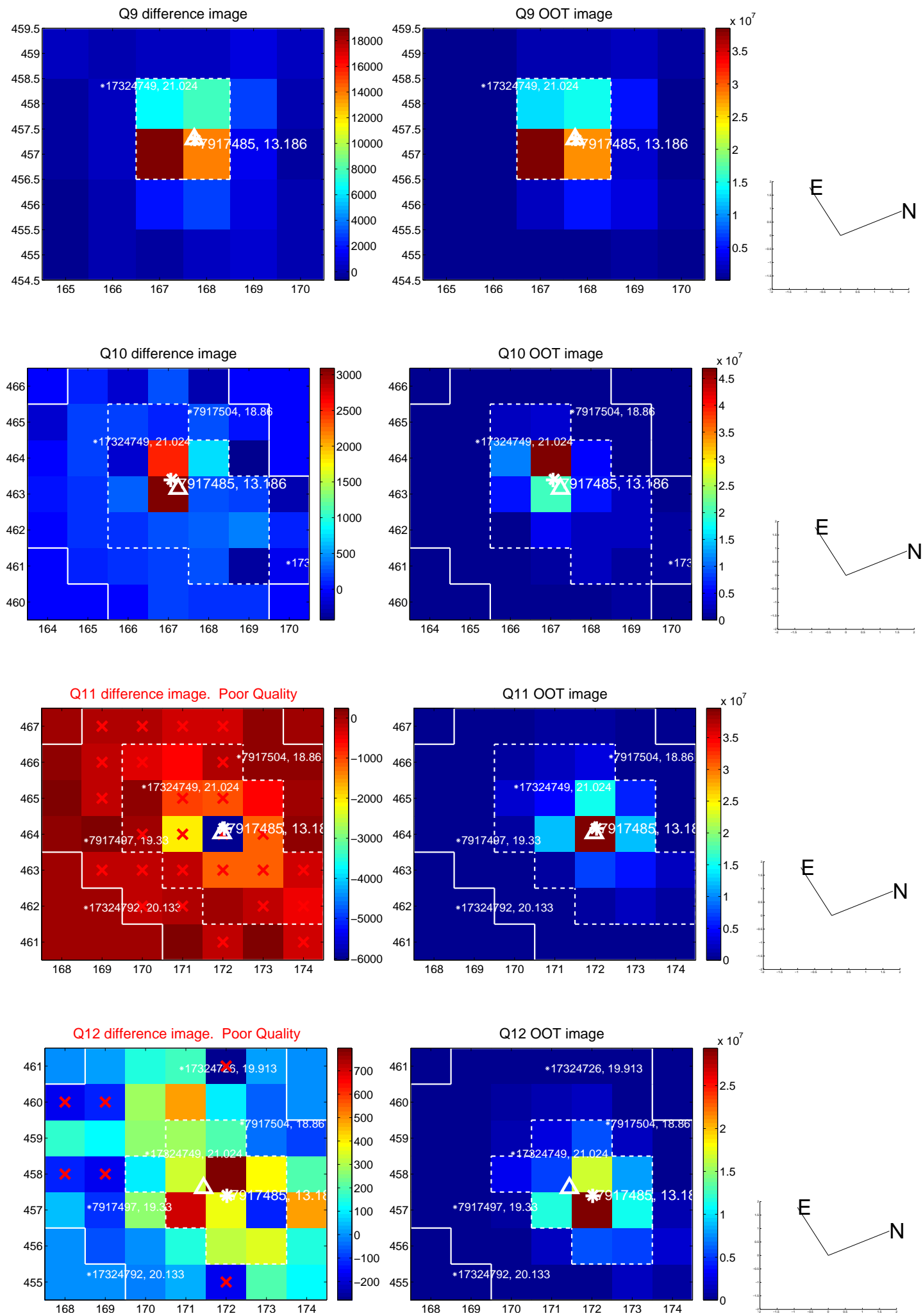
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



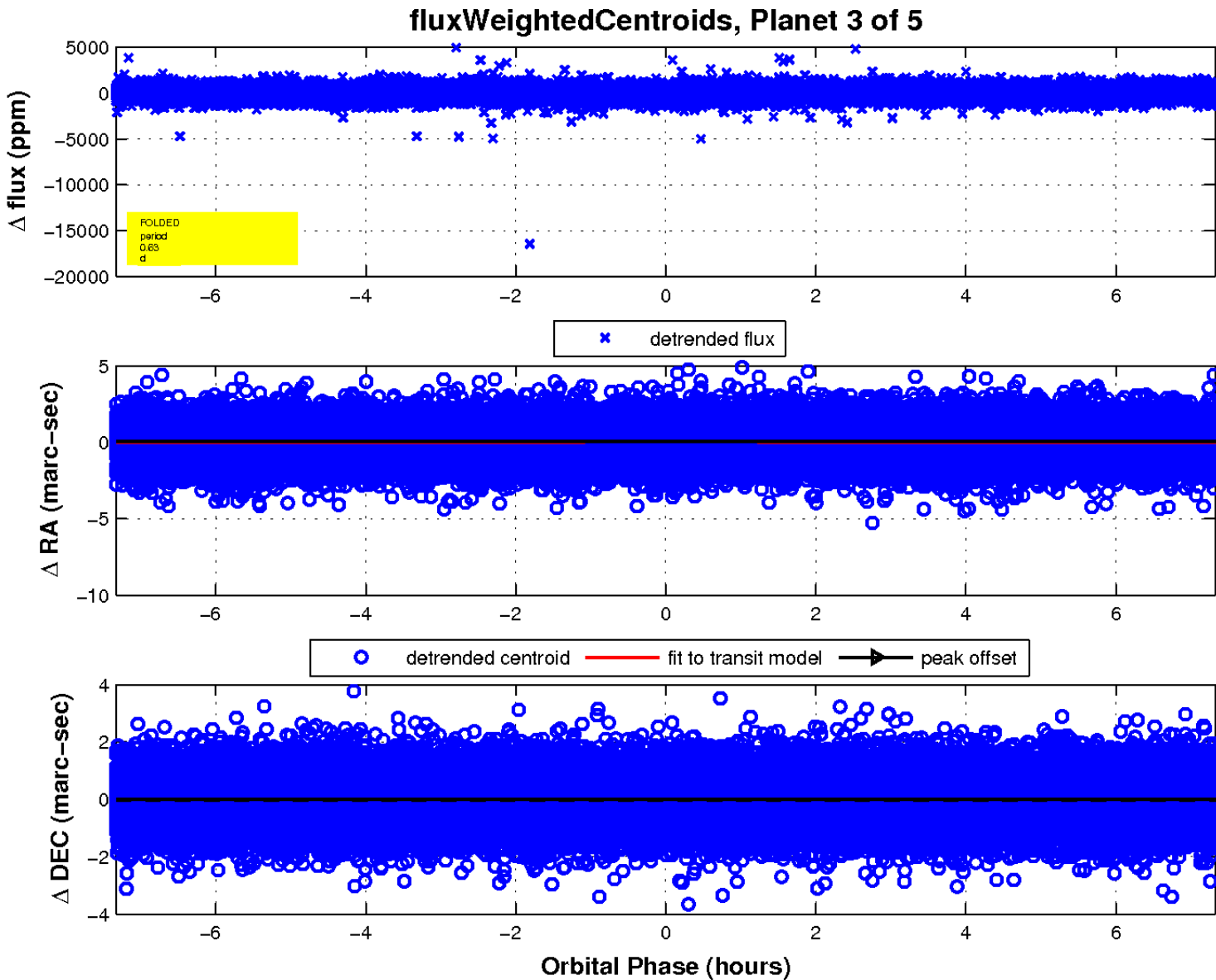
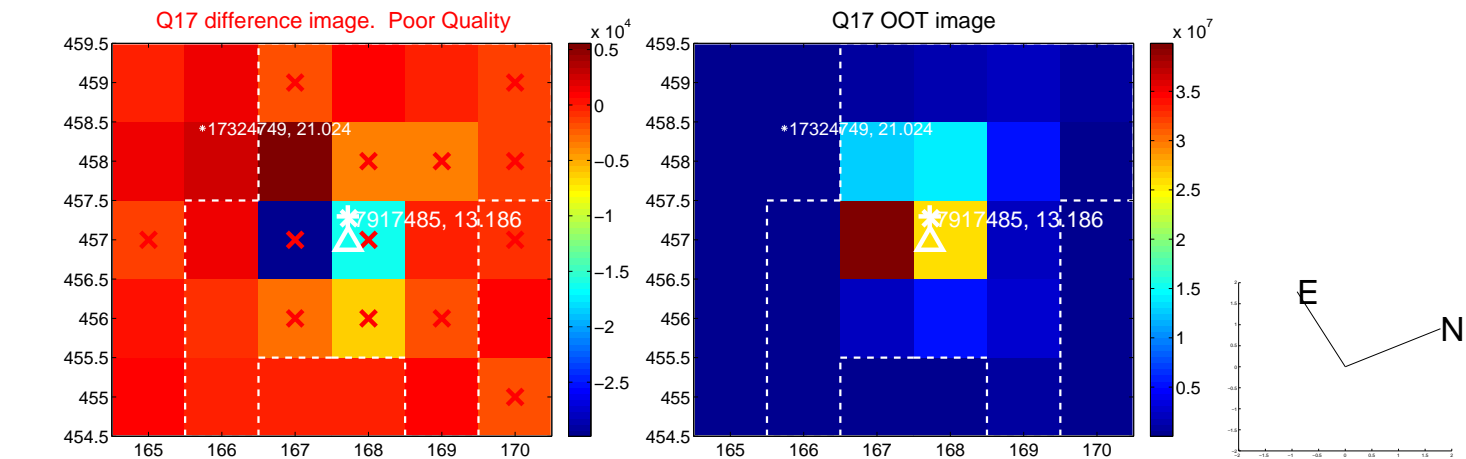
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

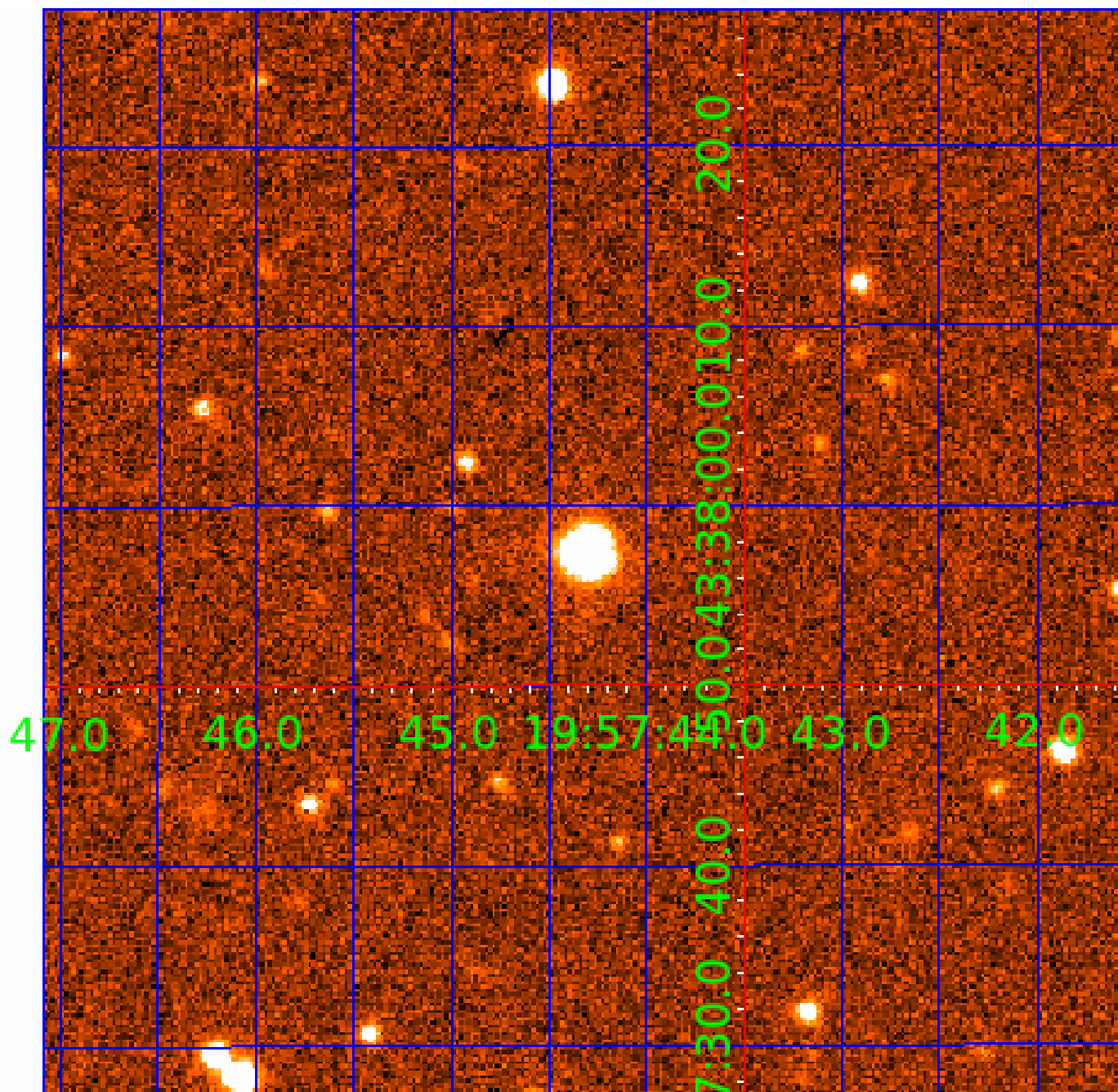


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007917485

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})
007917485-01	OBS	No	1.874999	132.158181	66.9	1.617	11.2	7.6	1.83	7390	1.55	7782.24
007917485-02	OBS	No	1.879853	133.309522	5.4	4.085	11.0	0.7	1.83	7390	0.47	7755.46
007917485-03	OBS	No	0.625012	131.719286	62.8	2.442	10.5	11.0	1.83	7390	1.69	33670.94
007917485-04	OBS	No	222.108073	342.119737	985.7	2.585	7.9	7.9	1.83	7390	6.15	13.38
007917485-05	OBS	No	76.791250	137.141142	549.6	7.142	7.5	7.4	1.83	7390	5.28	55.13

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007917485-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007917485-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
007917485-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
007917485-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES
007917485-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

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

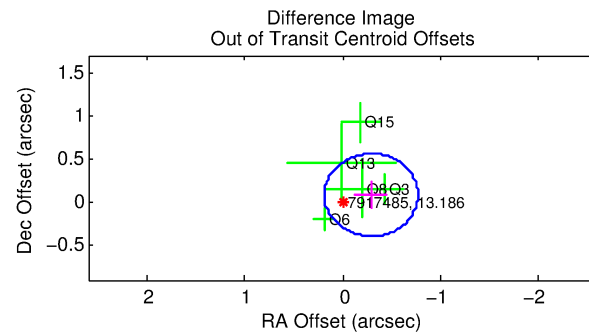
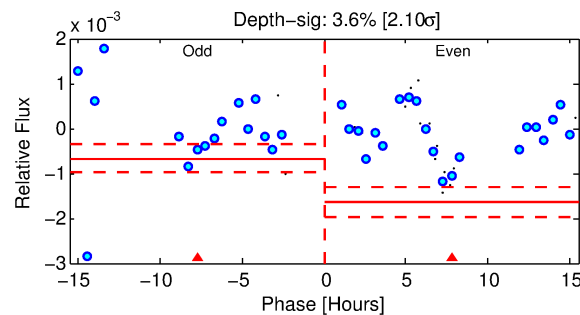
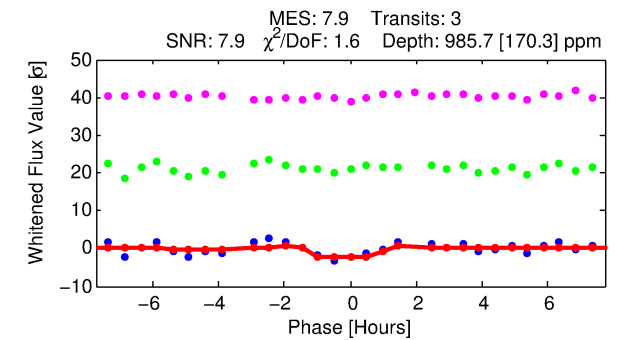
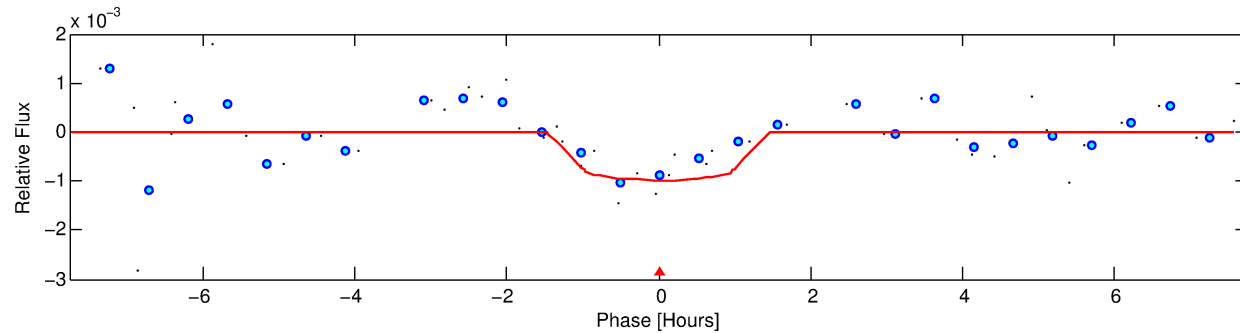
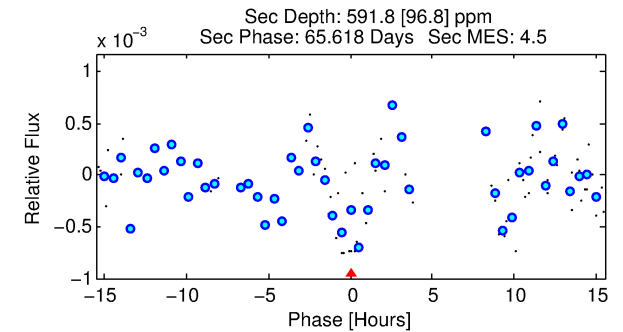
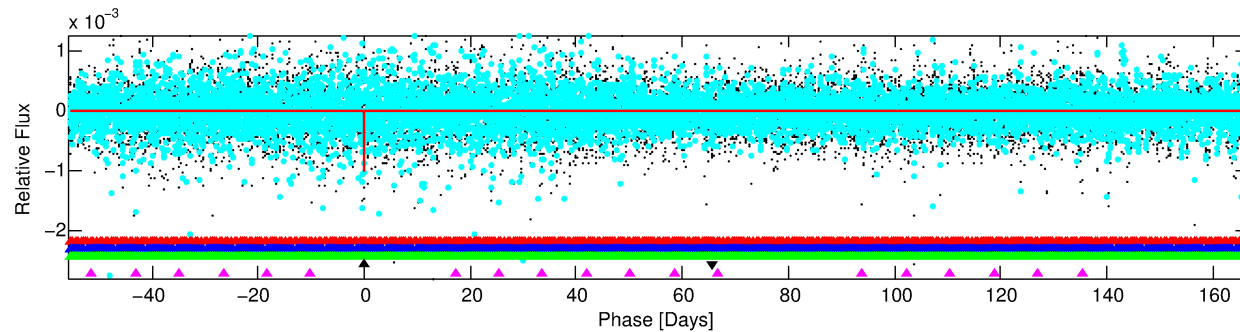
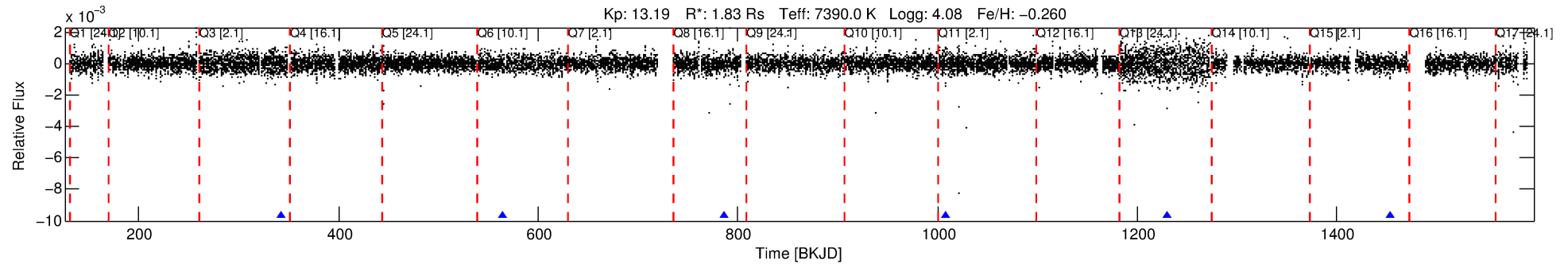
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007917485-04

No Significant Match Found

DV One-Page Summary

KIC: 7917485 Candidate: 4 of 5 Period: 222.108 d



DV Fit Results:

Period = 222.10807 [0.00463] d
Epoch = 342.1197 [0.0118] BKJD
Rp/R* = 0.0308 [0.0717]
a/R* = 500.31 [6863.42]
b = 0.69 [10.37]
Seff = 13.38 [5.01]
Teq = 488 [46] K
Rp = 6.15 [14.44] Re
a = 0.8179 [0.1968] AU
Ag = 5755.21 [26876.63] [0.21 σ]
Teffp = 6567 [7652] K [0.79 σ]

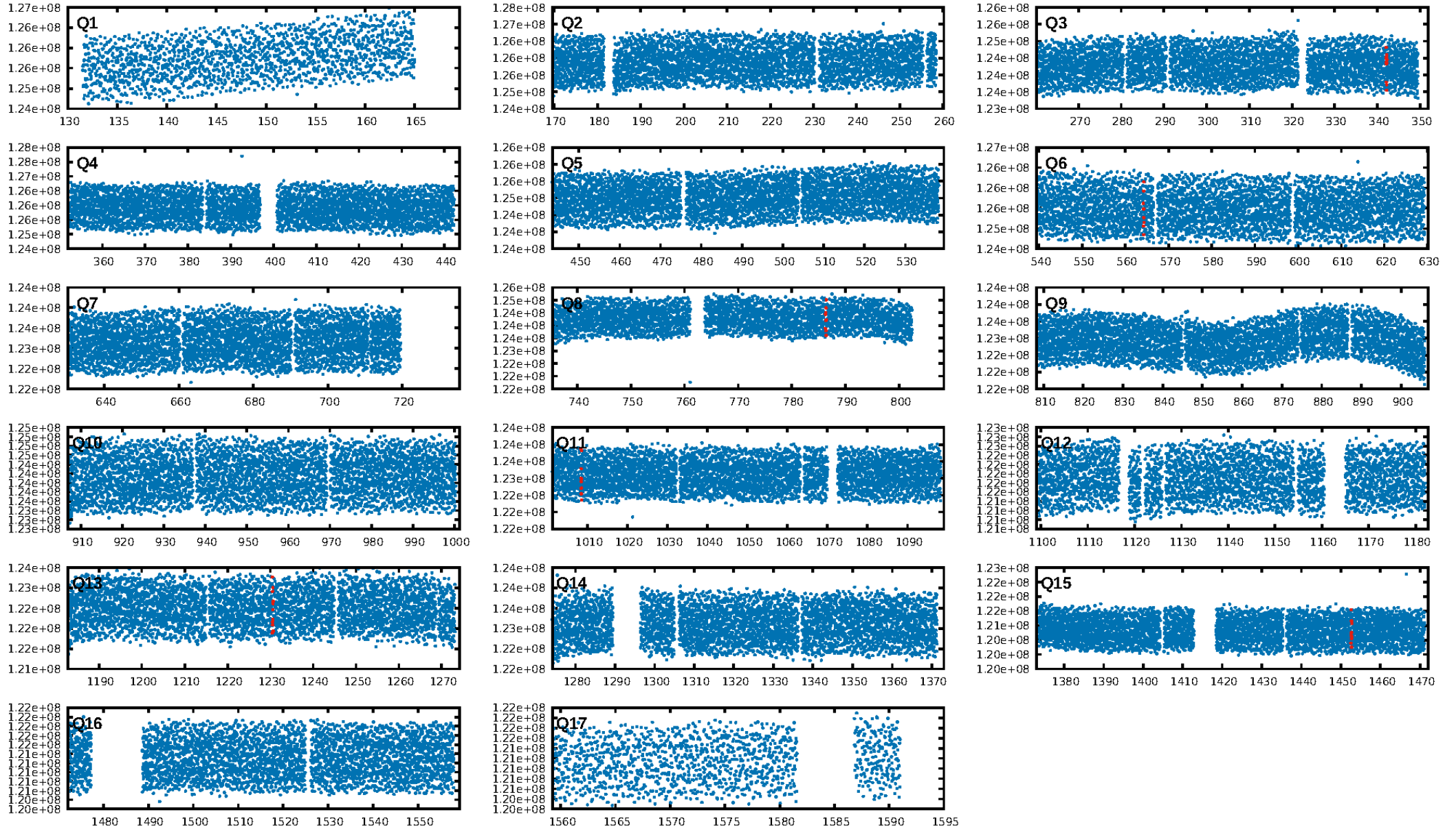
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [459.18 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 4.0%
ModelChiSquareGof-sig: 88.3%
Bootstrap-pfa: 1.89e-09
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -22.3
Centroid-sig: 0.0%
Centroid-so: 0.963 arcsec [2.39 σ]
OotOffset-rm: 0.303 arcsec [1.90 σ]
OotOffset-st: 1/2/1/1 [5]
KicOffset-rm: 0.381 arcsec [2.27 σ]
KicOffset-st: 1/2/1/1 [5]
DiffImageQuality-fgm: 0.60 [3/5]
DiffImageOverlap-fno: 0.00 [0/5]

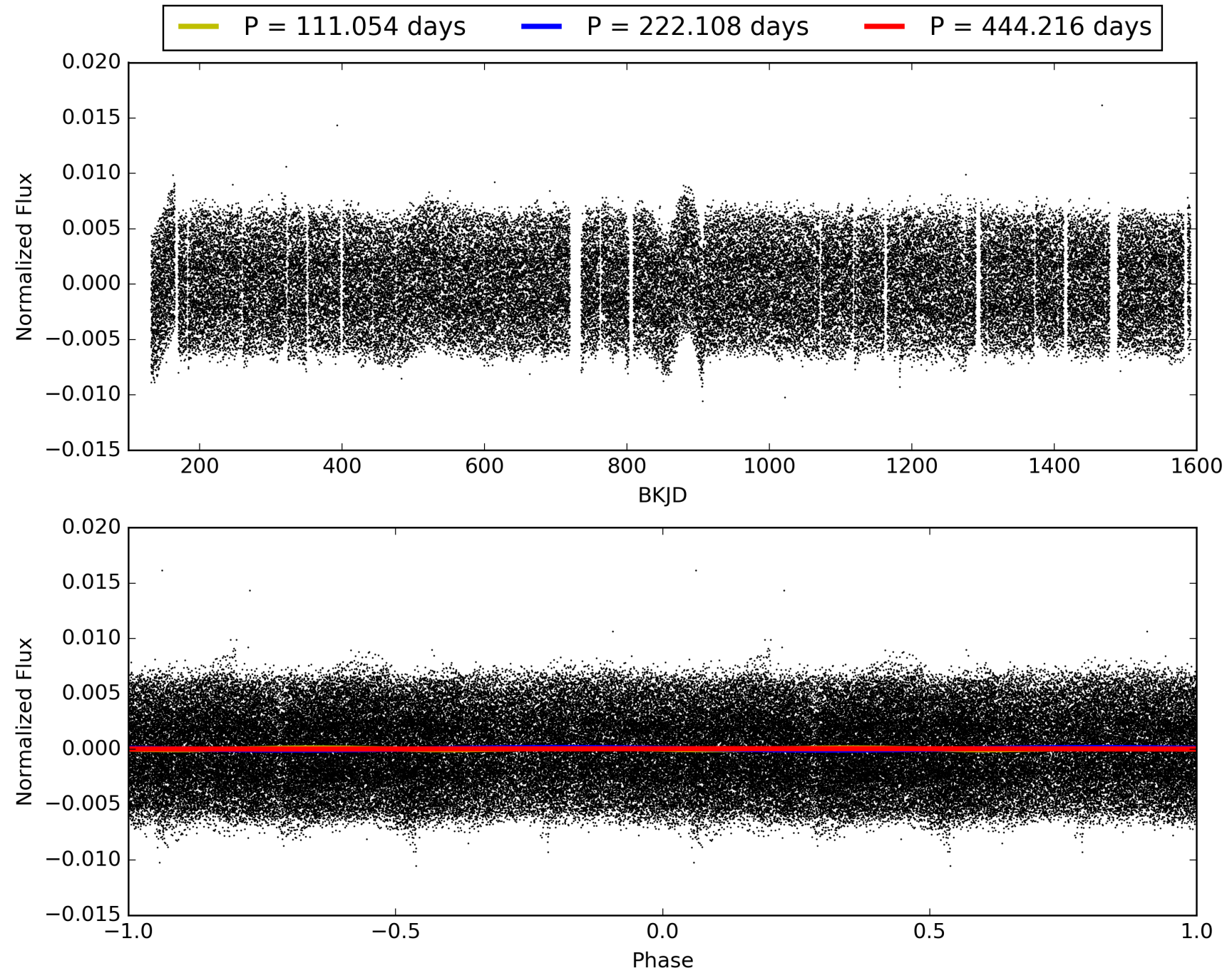
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 23:23:26 Z

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

TCE 007917485-04, PDC Light Curves

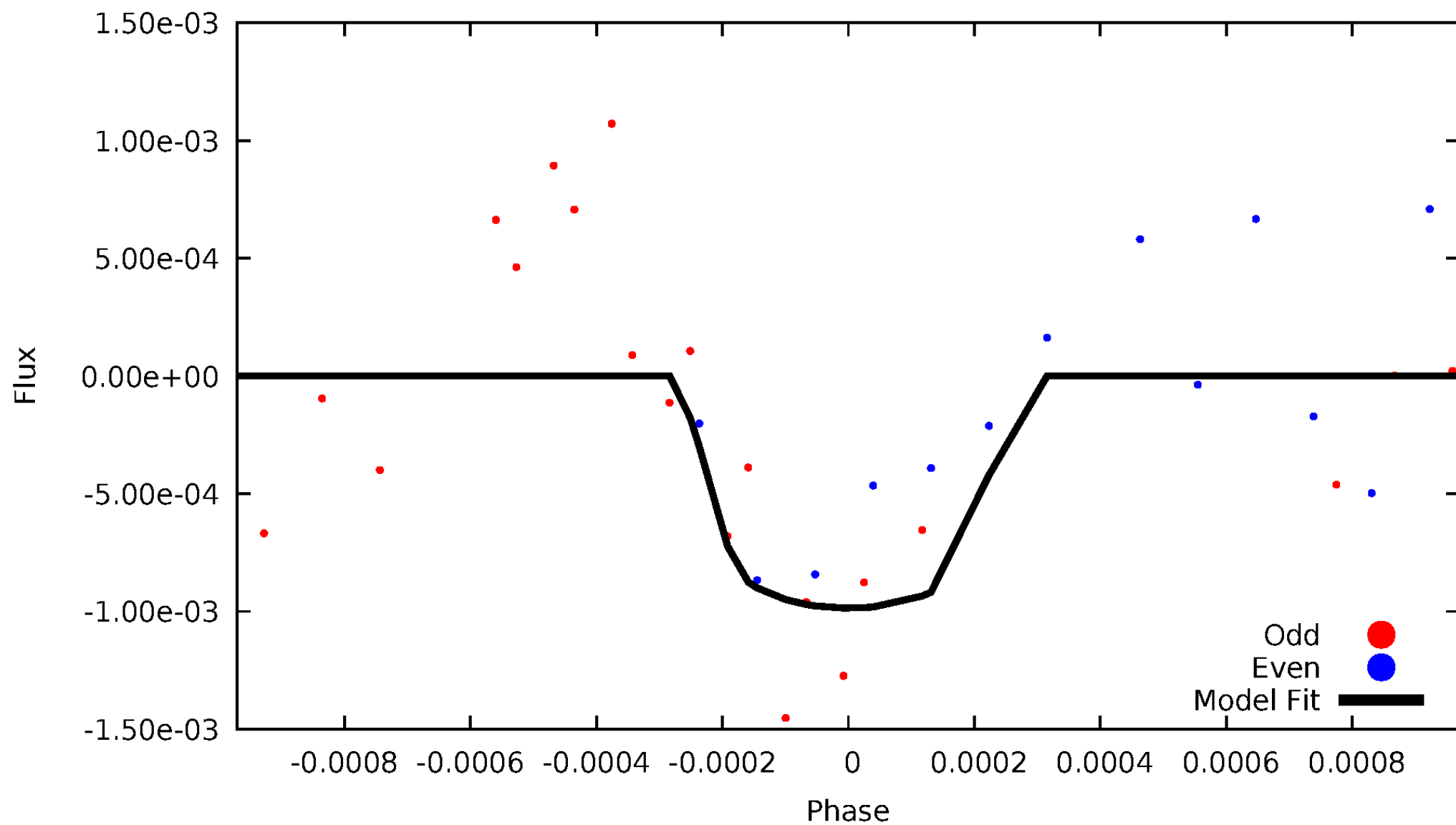


TCE 007917485-04



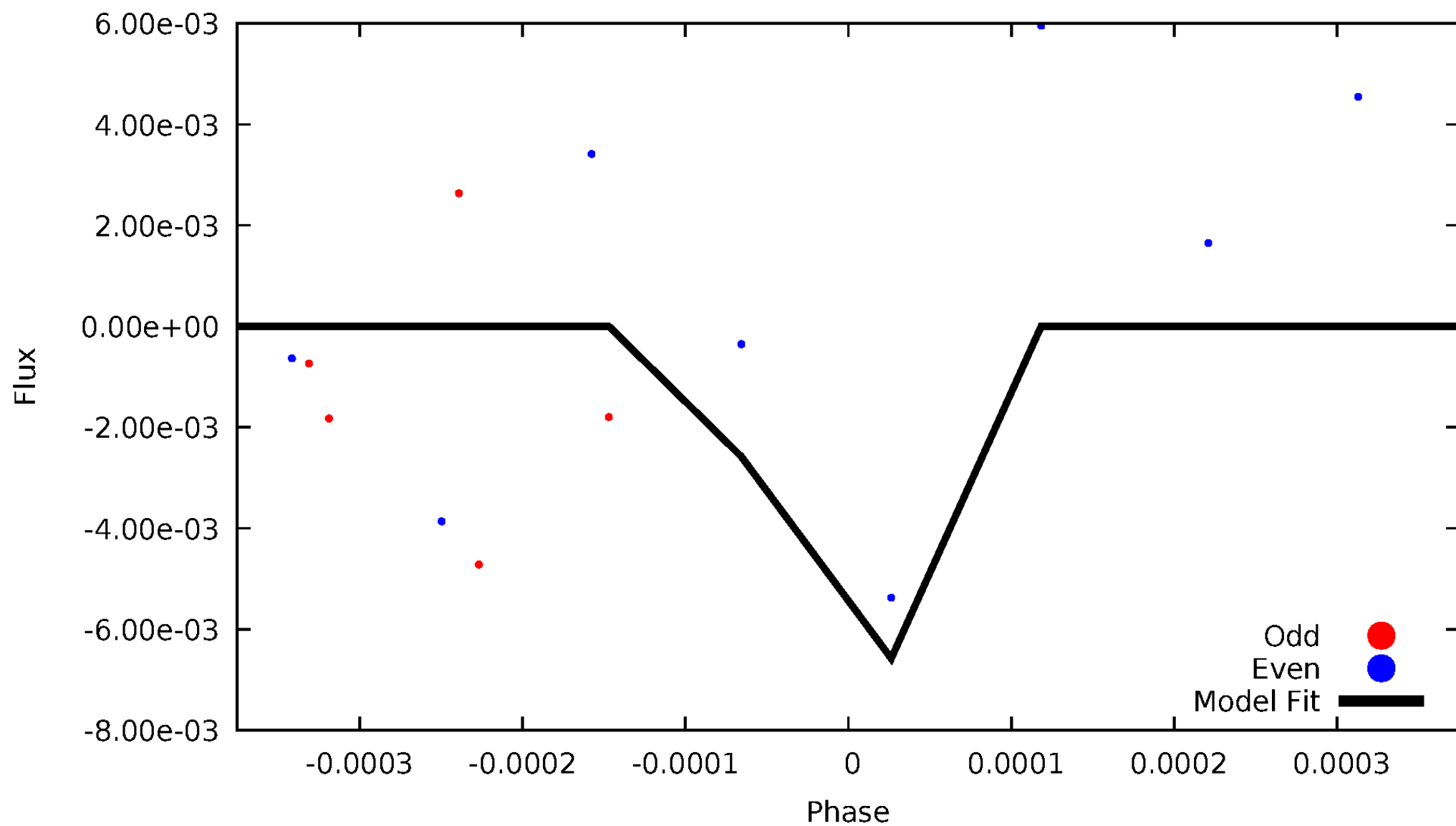
DV Odd/Even

TCE 007917485-04



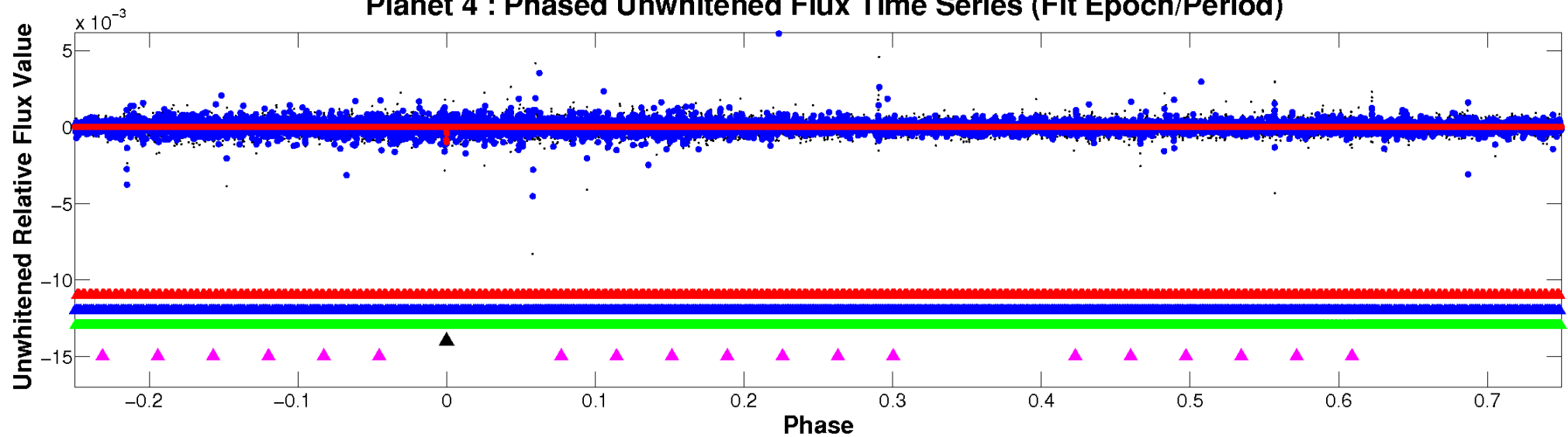
ALT Odd/Even

TCE 007917485-04

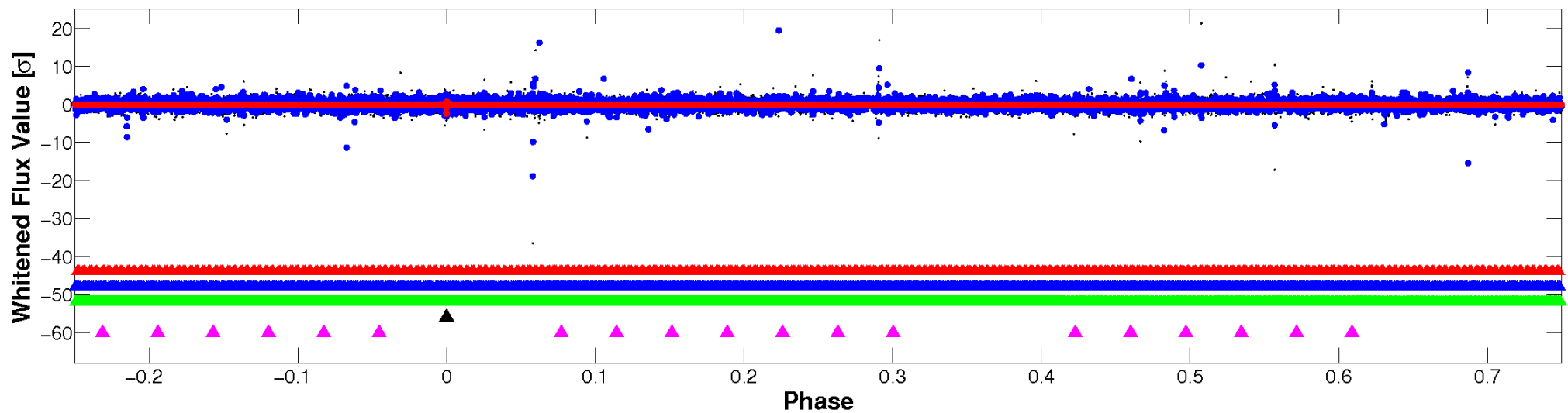


Non-Whitened Vs. Whitened Light Curve

Planet 4 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

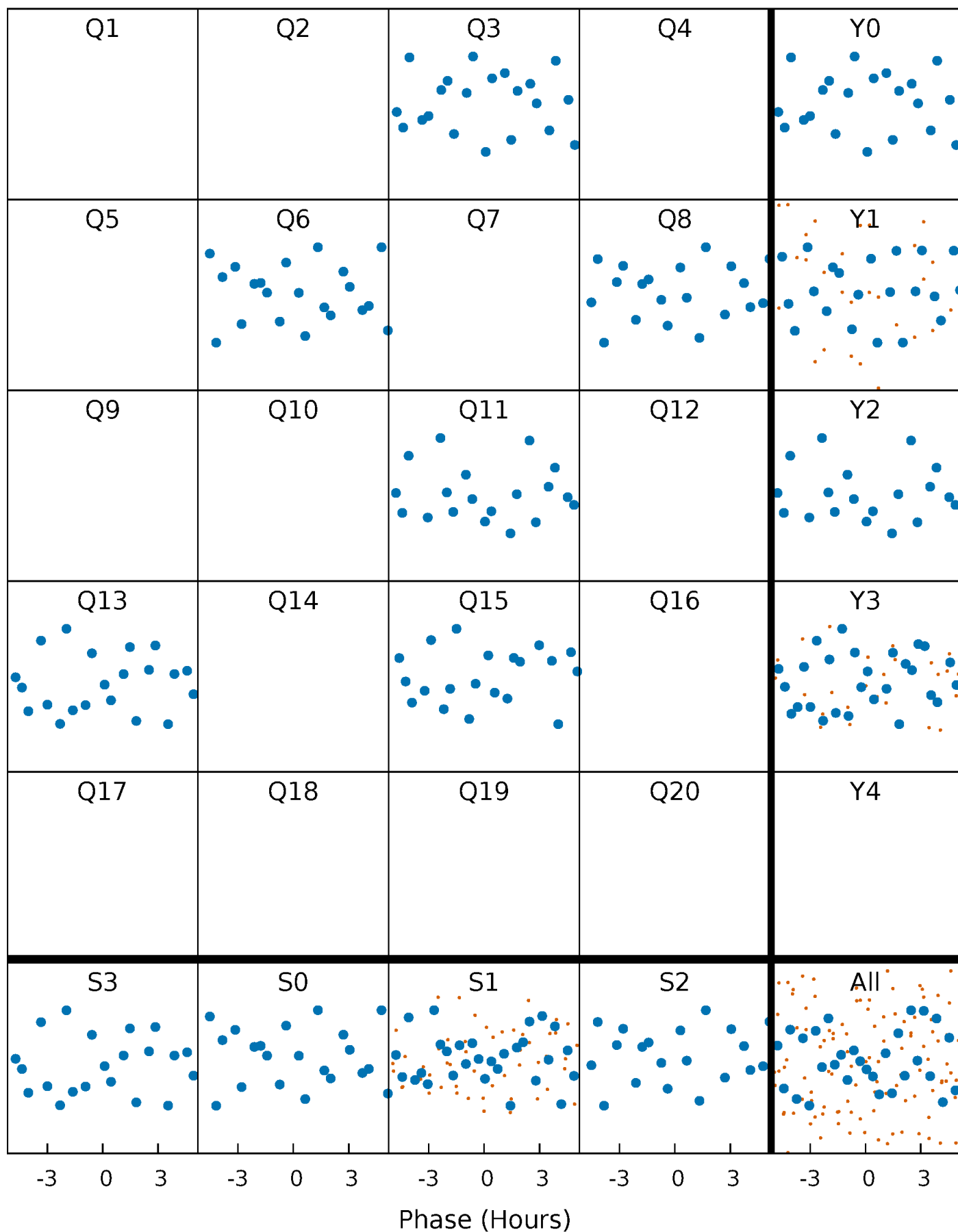


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



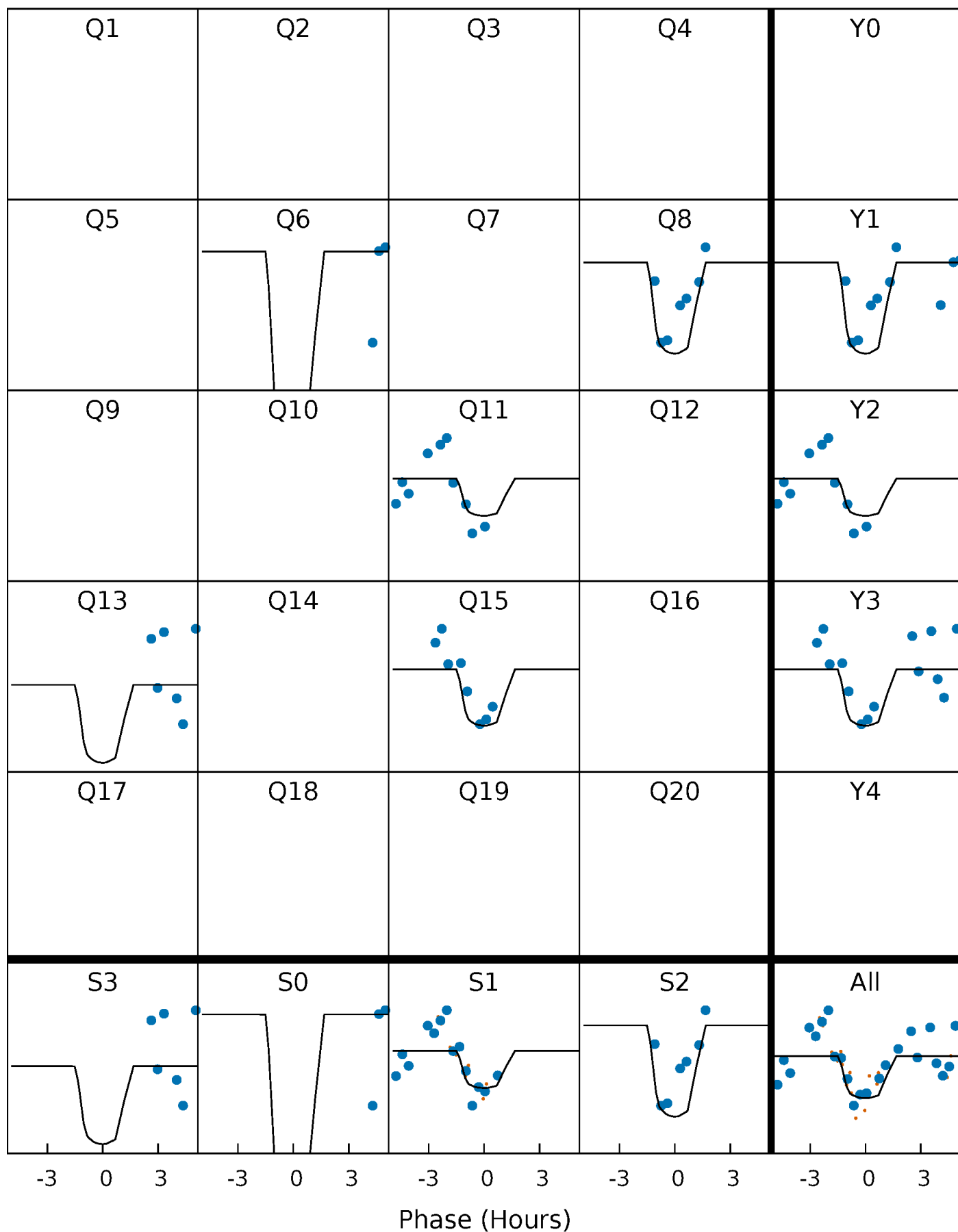
PDC Quarter-Phased Transit Curves

TCE 007917485-04 P=222.108073 Days $T_0=342.119737$ (BKJD)



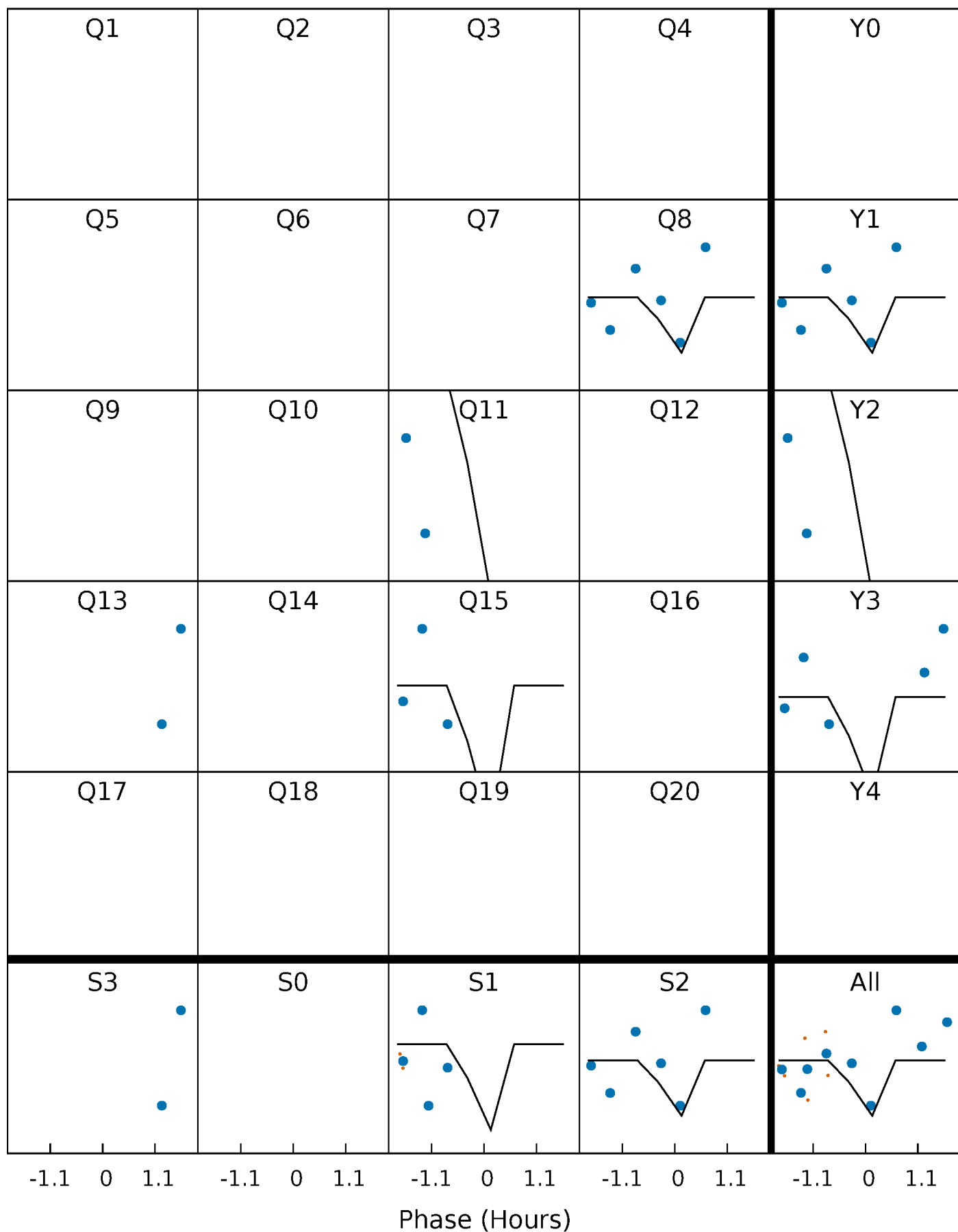
DV Quarter-Phased Transit Curves

TCE 007917485-04 P=222.108073 Days $T_0=342.119737$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

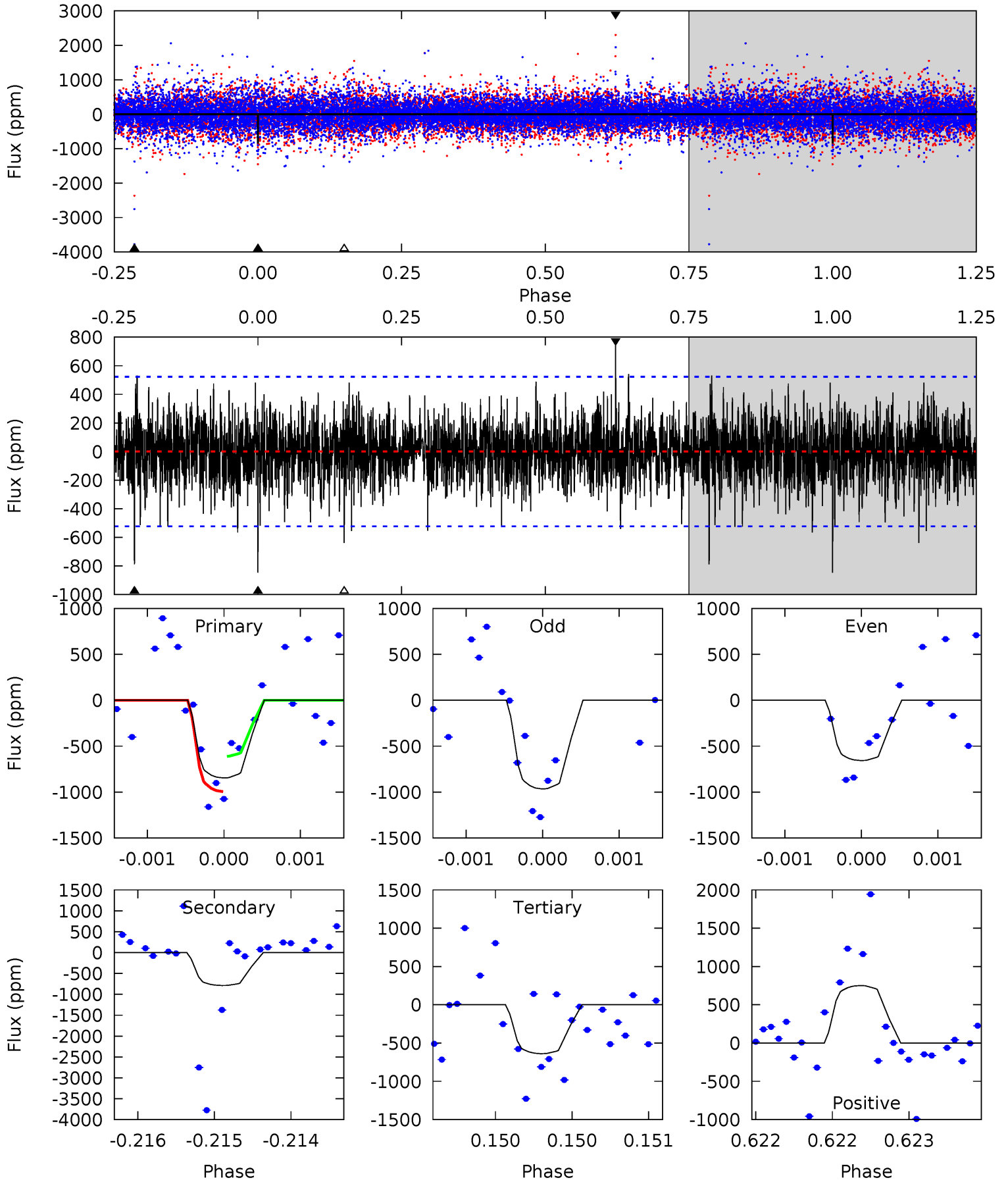
TCE 007917485-04 P=222.113053 Days $T_0=342.153512$ (BKJD)



DV Model-Shift Uniqueness Test

007917485-04, P = 222.108073 Days, E = 120.011664 Days

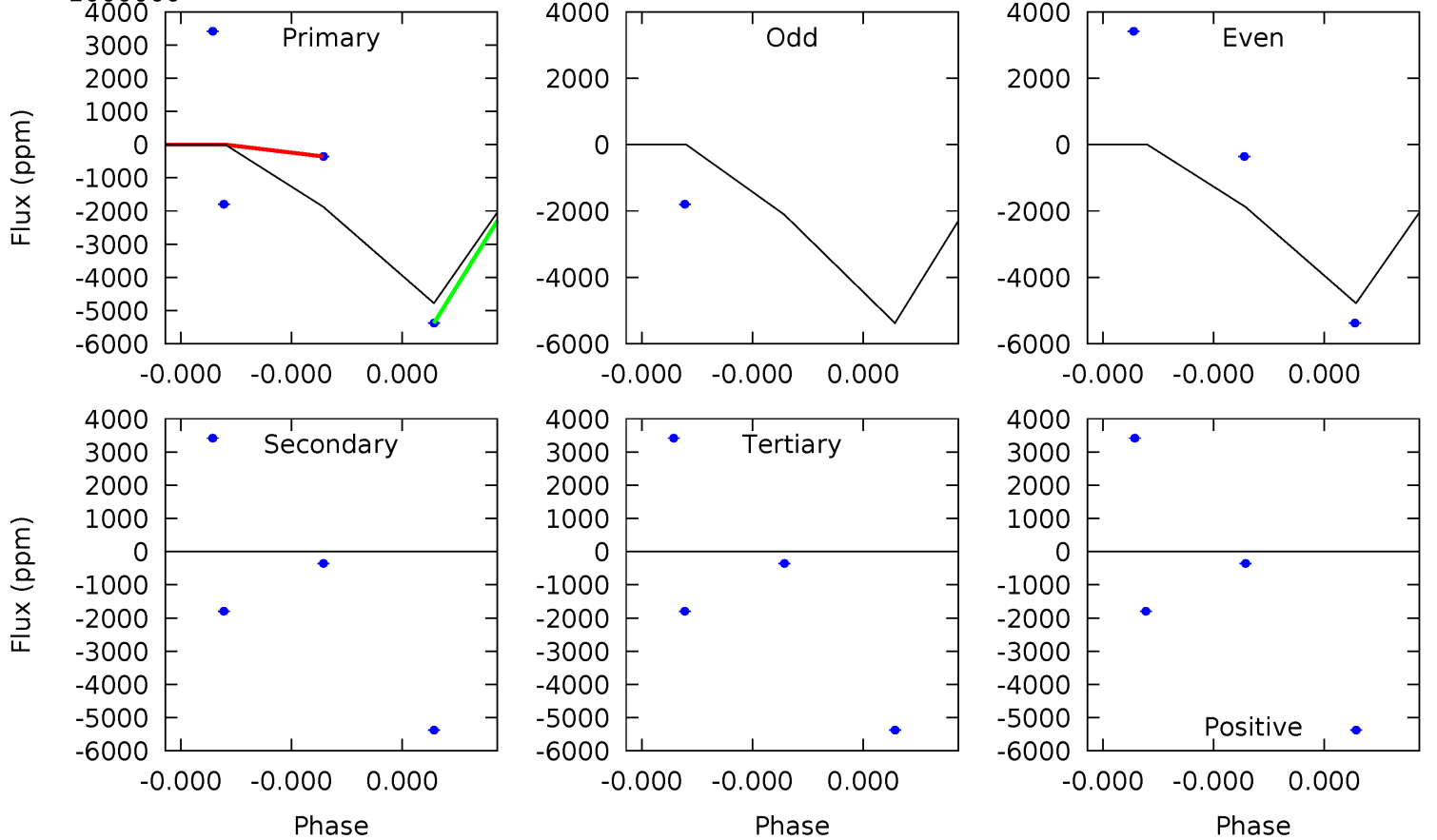
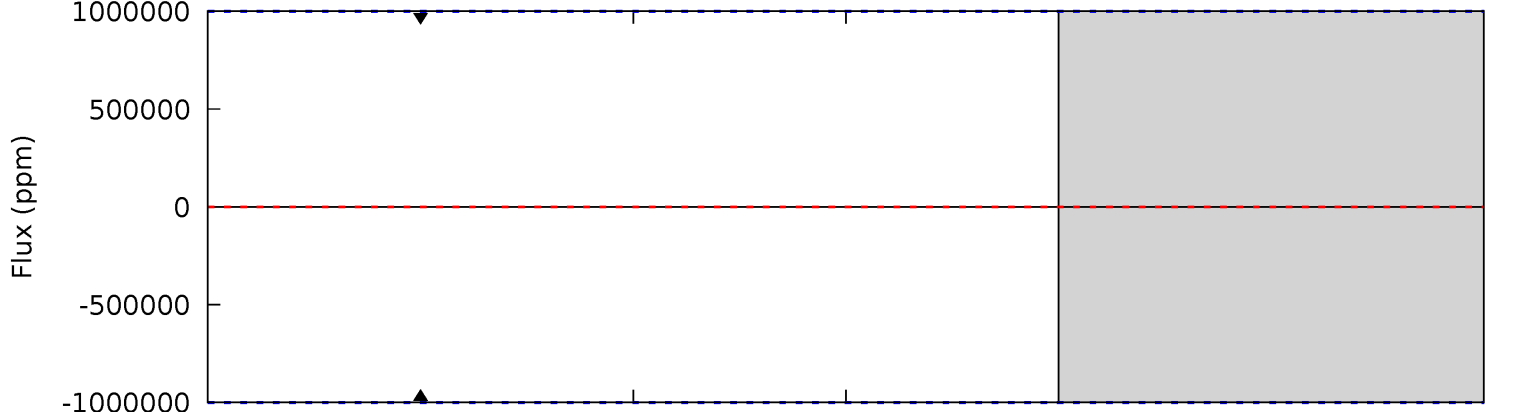
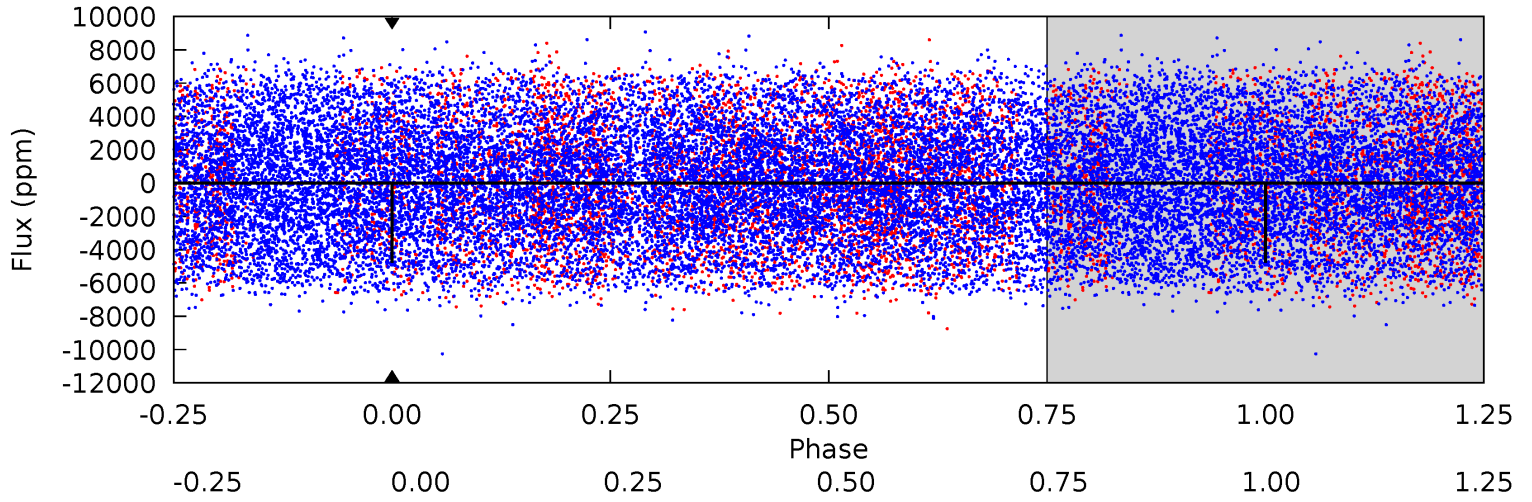
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.96	8.36	6.77	7.96	5.54	3.43	1.62	2.19	1.01	1.59	0.40	1.65	1.20	0.47	1.96



Alt Model-Shift Uniqueness Test

007917485-04, P = 222.113053 Days, E = 120.040459 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0.00	0	0	0.00



Stellar Parameters For KIC 007917485

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7390^{+232}_{-310}	$4.083^{+0.175}_{-0.175}$	$-0.260^{+0.250}_{-0.350}$	$1.830^{+0.548}_{-0.448}$	$1.477^{+0.230}_{-0.230}$	$0.339^{+0.327}_{-0.154}$
	+3%/-4%	+4%/-4%	+96%/-135%	+30%/-24%	+16%/-16%	+96%/-45%
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 007917485-04 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-789 \pm 94	$12.67^{+11.55}_{-8.56}$	679^{+53}_{-51}	4879^{+3835}_{-1008}	1728^{+14812}_{-1232}
Alt.	-0 \pm 1000000	$20.32^{+13.86}_{-12.05}$	683^{+49}_{-52}	-4478^{+26855}_{-16925}	$-877.210^{+132145.033}_{-126567.595}$

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

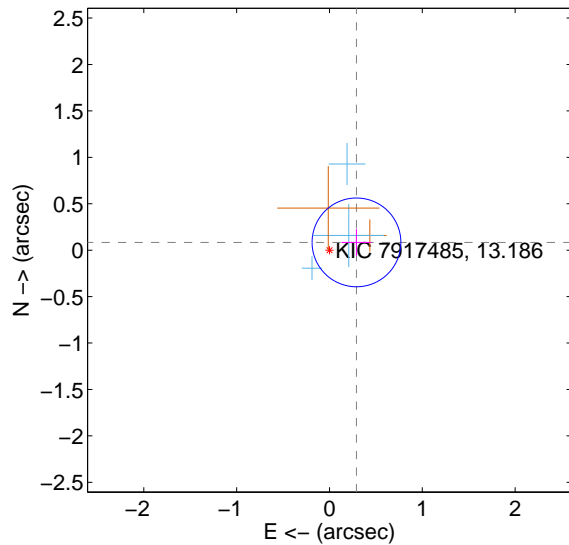
Supplemental centroid analysis for 007917485-04. Kepler magnitude: 13.19. Transit SNR 7.91

There are 3 quarters with good PRF difference image offsets

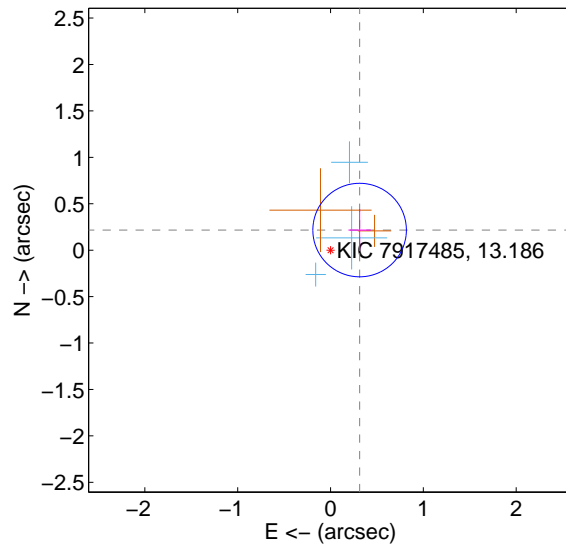
The direct PRF centroid is offset from the target star catalog position by about 0.02 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.303 ± 0.159	1.90	-0.291 ± 0.160	0.084 ± 0.145
PRF-fit source offset from KIC position	0.381 ± 0.168	2.27	-0.313 ± 0.120	0.217 ± 0.226
photometric centroid source offset	0.96 ± 0.40	2.39	0.34 ± 0.49	-0.90 ± 0.39

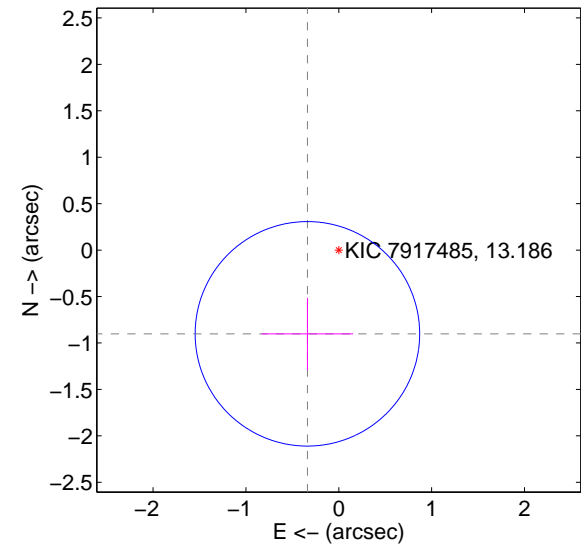
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

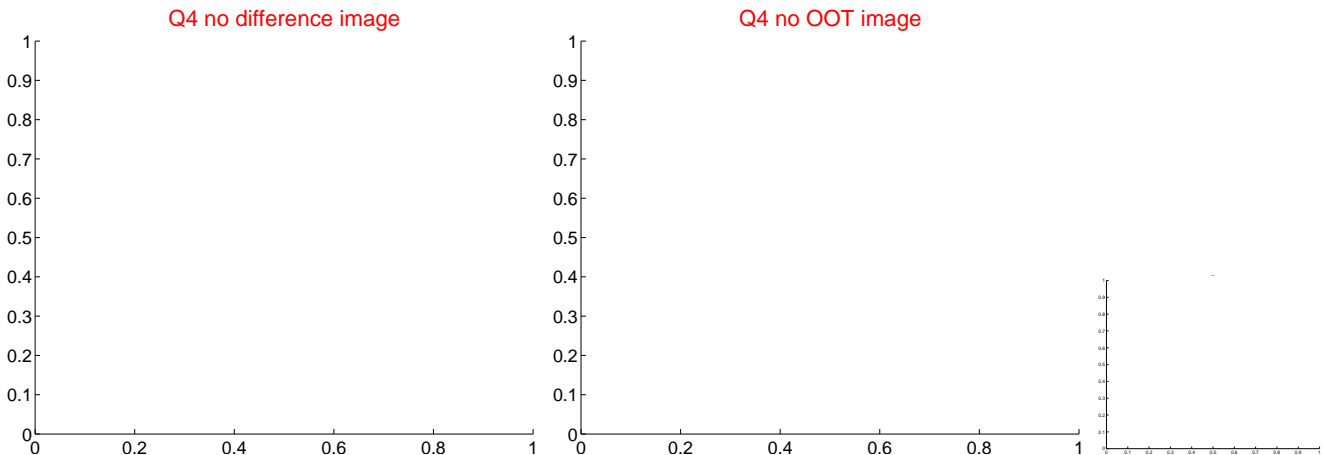
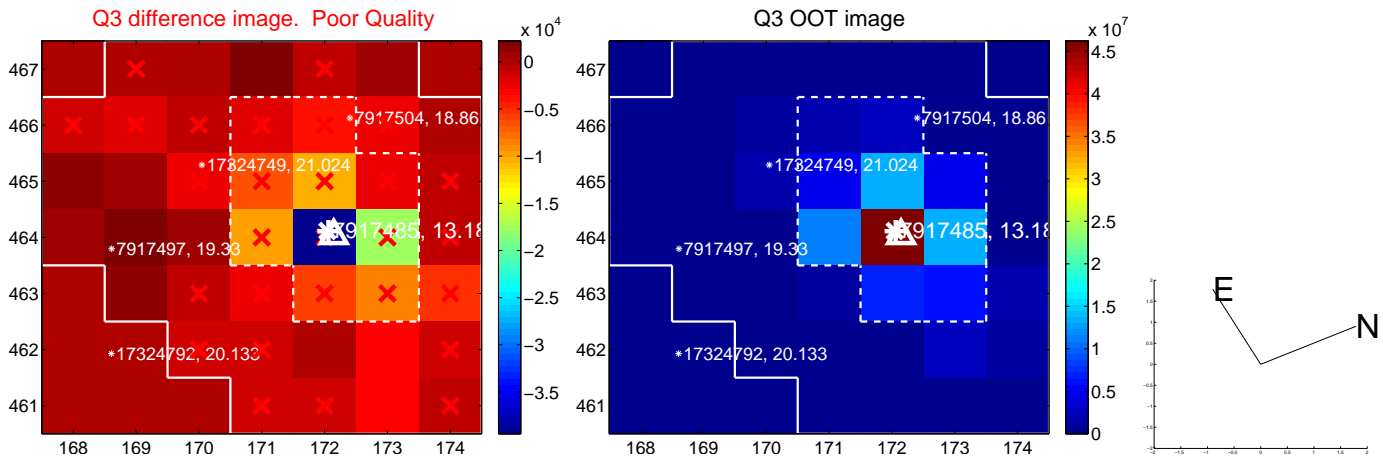
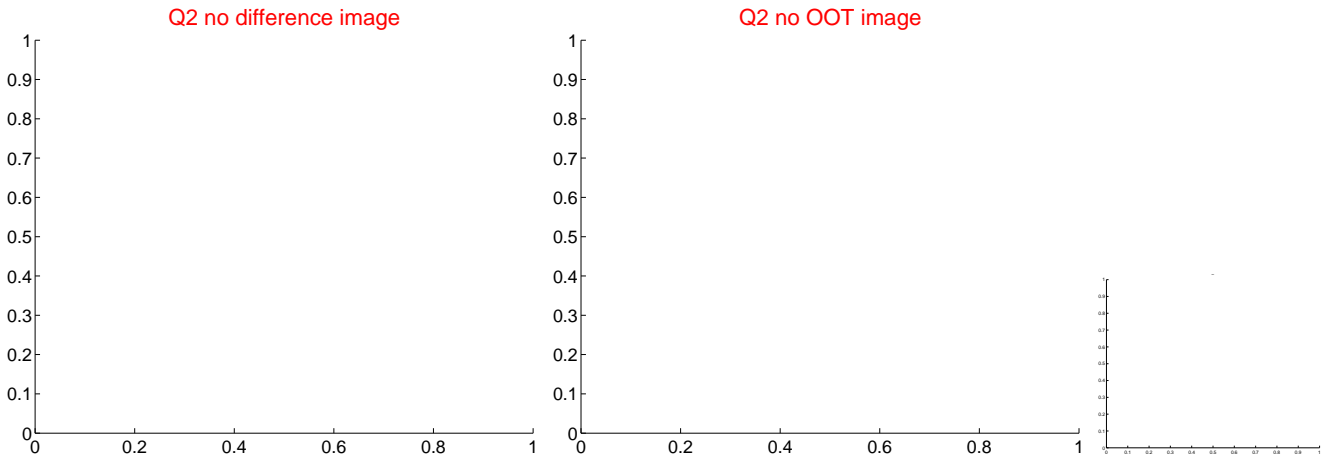
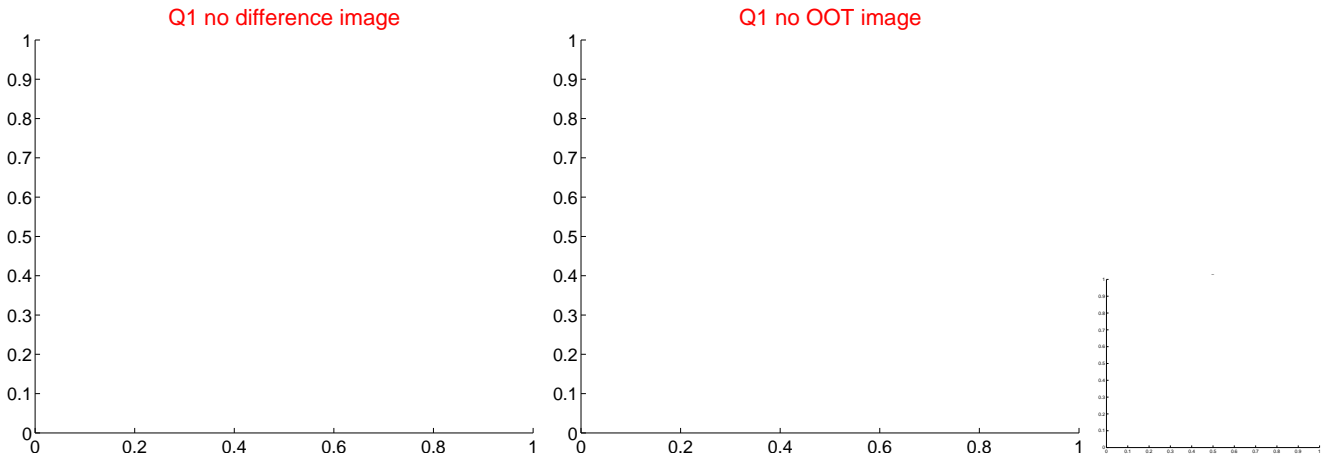


offset from photometric centroids

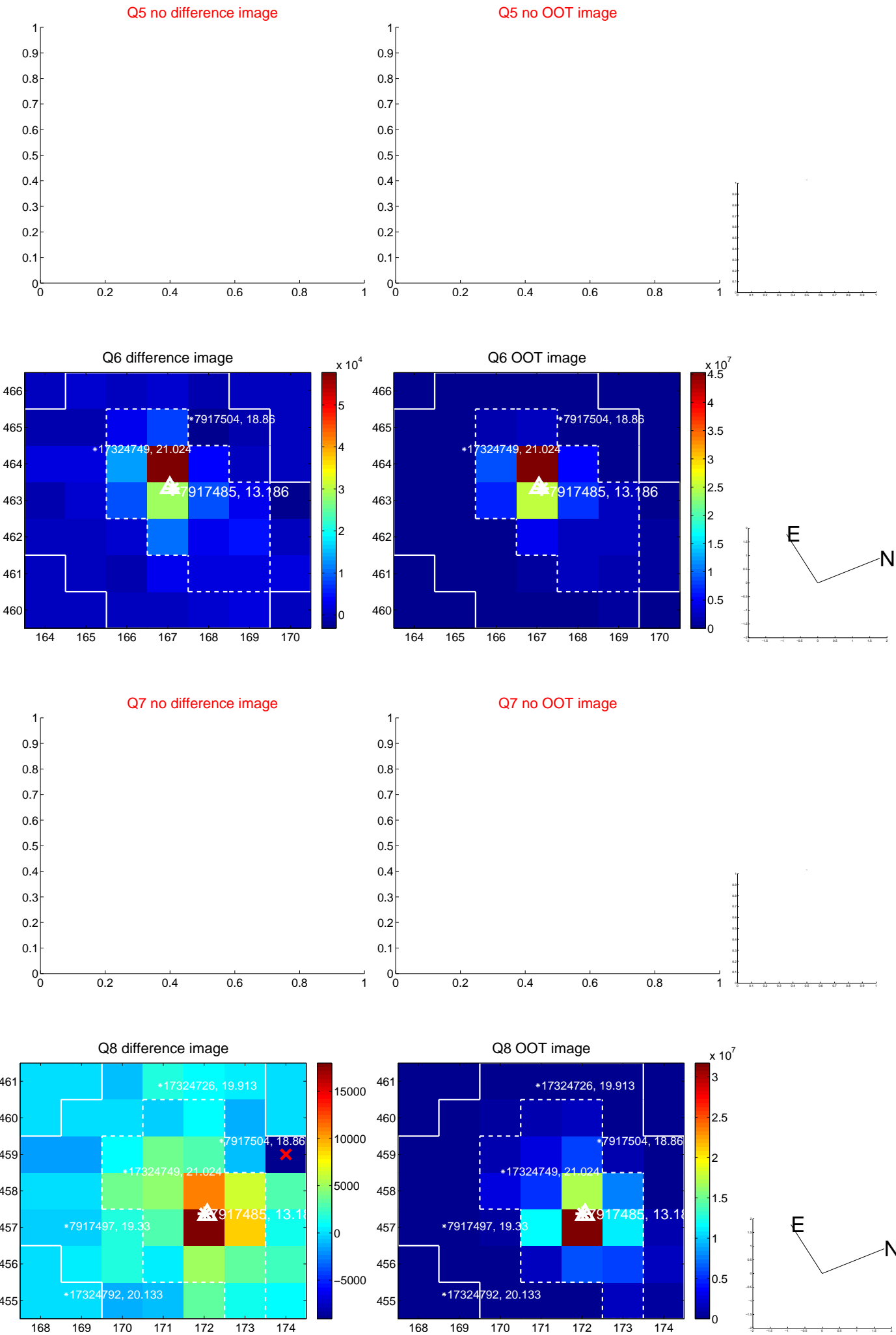


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



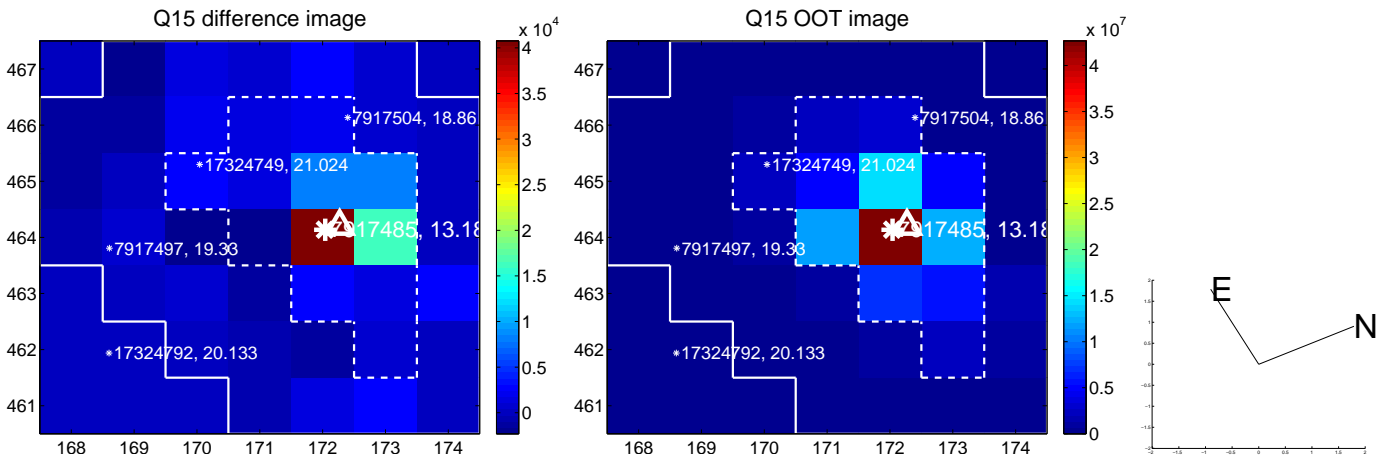
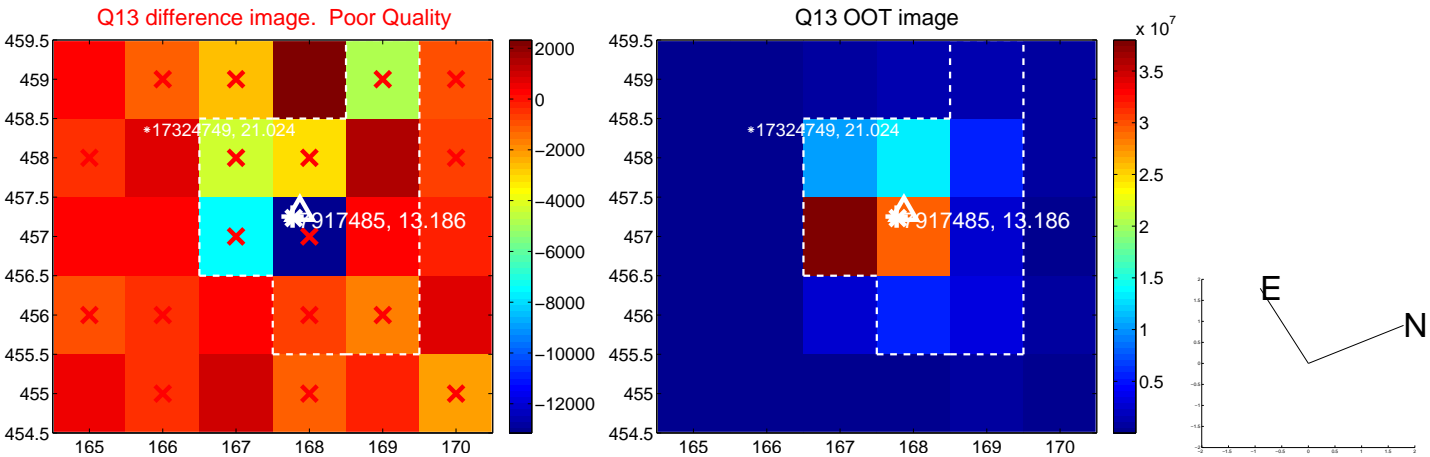
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



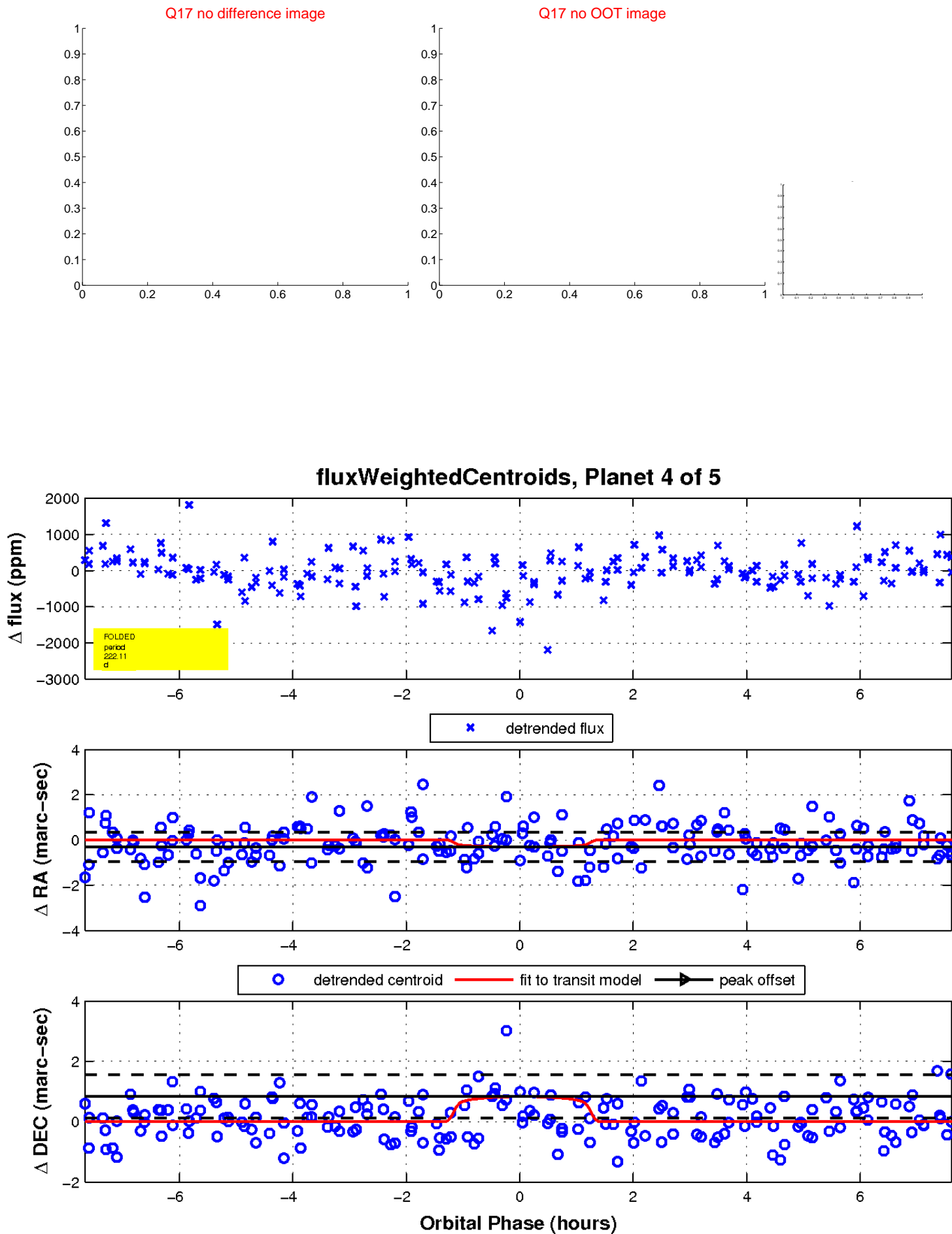
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

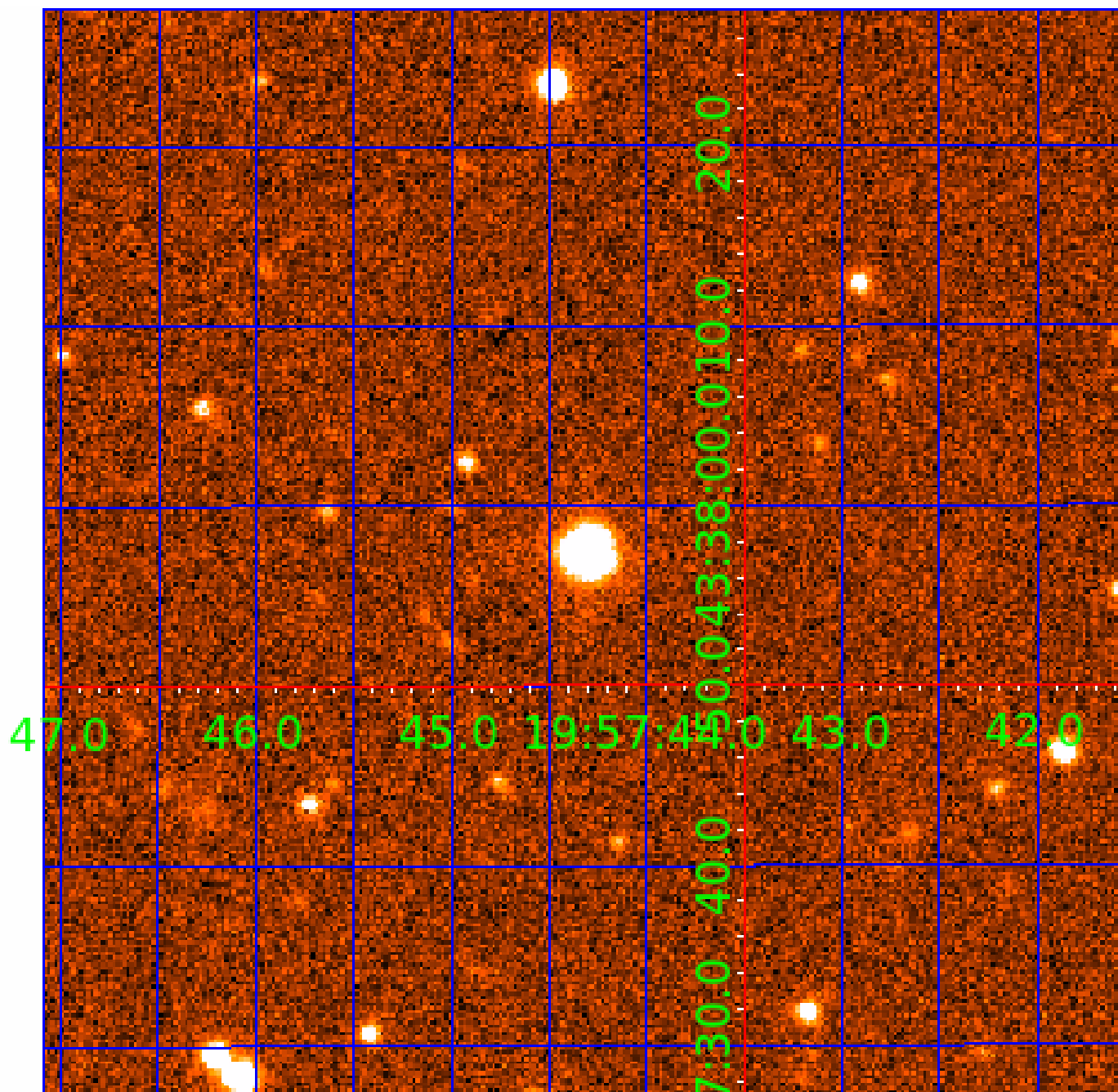


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007917485

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})
007917485-01	OBS	No	1.874999	132.158181	66.9	1.617	11.2	7.6	1.83	7390	1.55	7782.24
007917485-02	OBS	No	1.879853	133.309522	5.4	4.085	11.0	0.7	1.83	7390	0.47	7755.46
007917485-03	OBS	No	0.625012	131.719286	62.8	2.442	10.5	11.0	1.83	7390	1.69	33670.94
007917485-04	OBS	No	222.108073	342.119737	985.7	2.585	7.9	7.9	1.83	7390	6.15	13.38
007917485-05	OBS	No	76.791250	137.141142	549.6	7.142	7.5	7.4	1.83	7390	5.28	55.13

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007917485-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007917485-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
007917485-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
007917485-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES
007917485-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

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

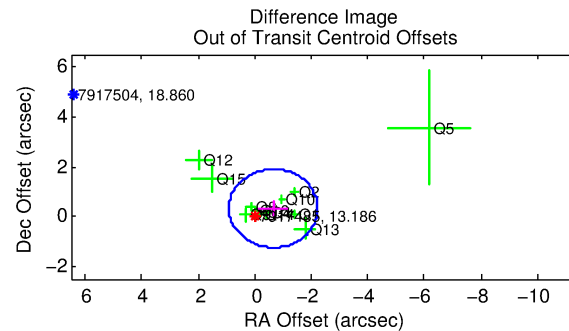
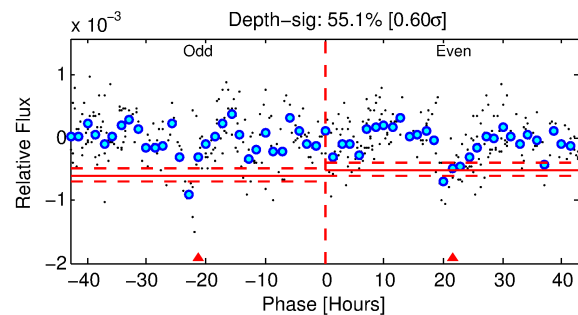
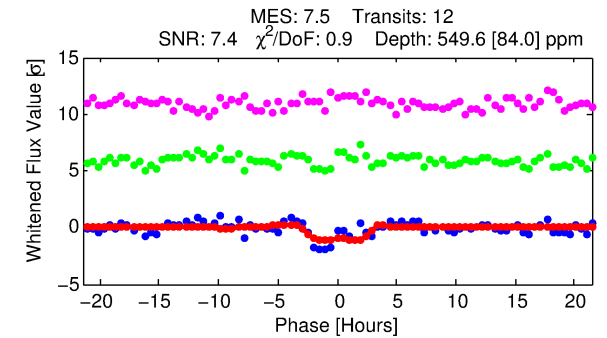
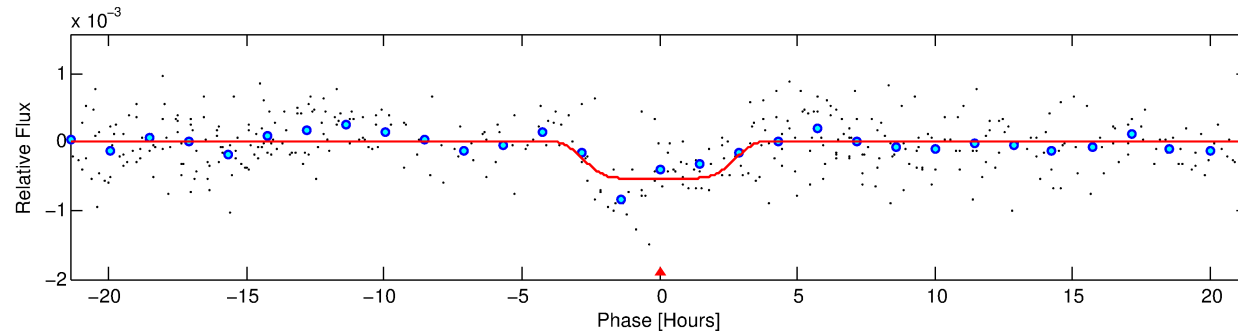
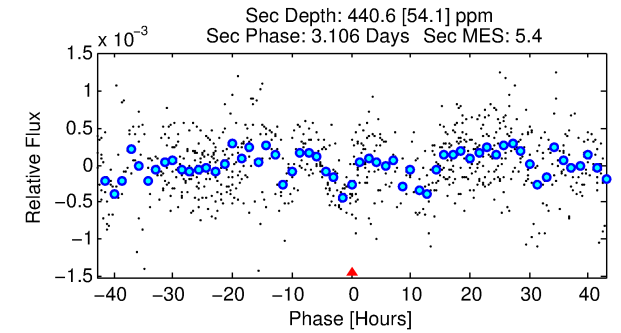
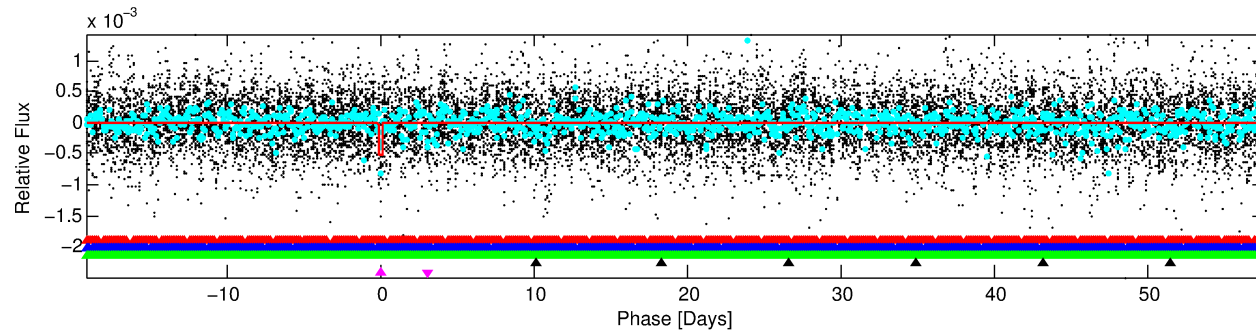
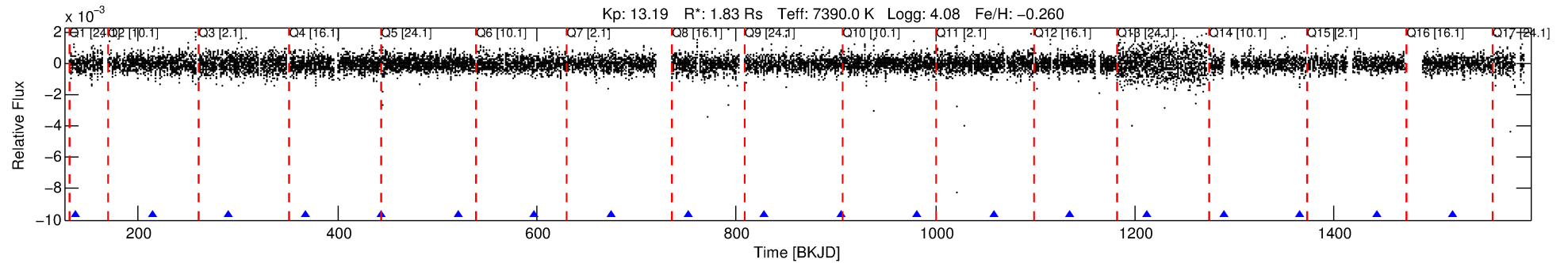
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007917485-05

No Significant Match Found

DV One-Page Summary

KIC: 7917485 Candidate: 5 of 5 Period: 76.791 d



DV Fit Results:

Period = 76.79125 [0.00161] d
Epoch = 137.1411 [0.0182] BKJD
Rp/R* = 0.0265 [0.0025]
a/R* = 31.31 [7.40]
b = 0.95 [0.02]
Seff = 55.13 [20.64]
Teff = 695 [65] K
Rp = 5.28 [1.66] Re
a = 0.4029 [0.0969] AU
Ag = 1409.39 [568.51] [2.48 σ]
Teffp = 6582 [462] K [12.62 σ]

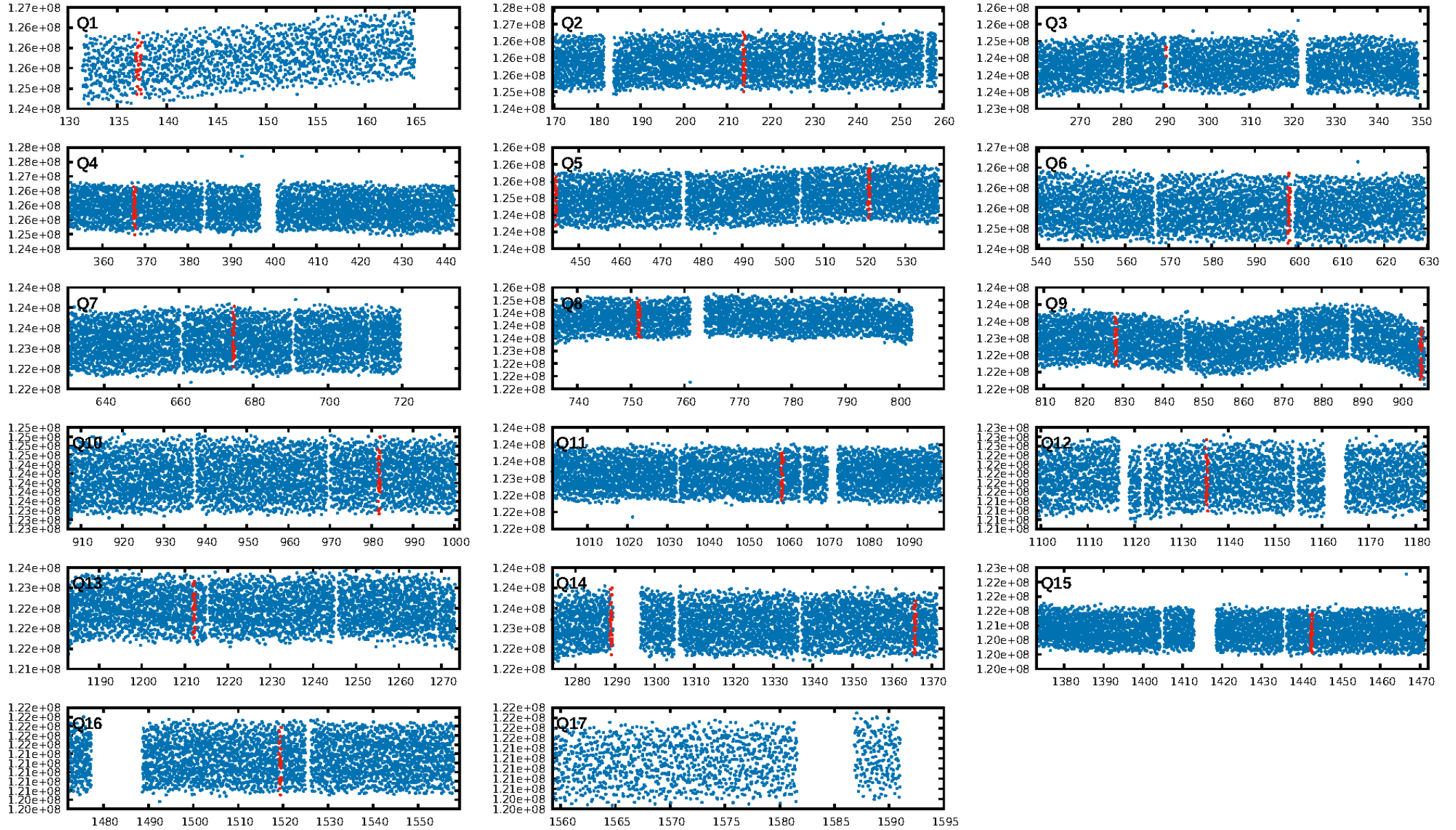
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [218.52 σ]
LongPeriod-sig: 100.0% [459.18 σ]
ModelChiSquare2-sig: 7.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 9.93e-09
RollingBand-fgt: 1.00 [12/12]
GhostDiagnostic-chr: -6.978
Centroid-sig: 31.7%
Centroid-so: 0.295 arcsec [1.07 σ]
OotOffset-rm: 0.730 arcsec [1.39 σ]
KicOffset-rm: 0.669 arcsec [1.20 σ]
OotOffset-st: 3/1/4/4 [12]
KicOffset-st: 3/1/4/4 [12]
DiffImageQuality-fgm: 0.75 [9/12]
DiffImageOverlap-fno: 0.00 [0/14]

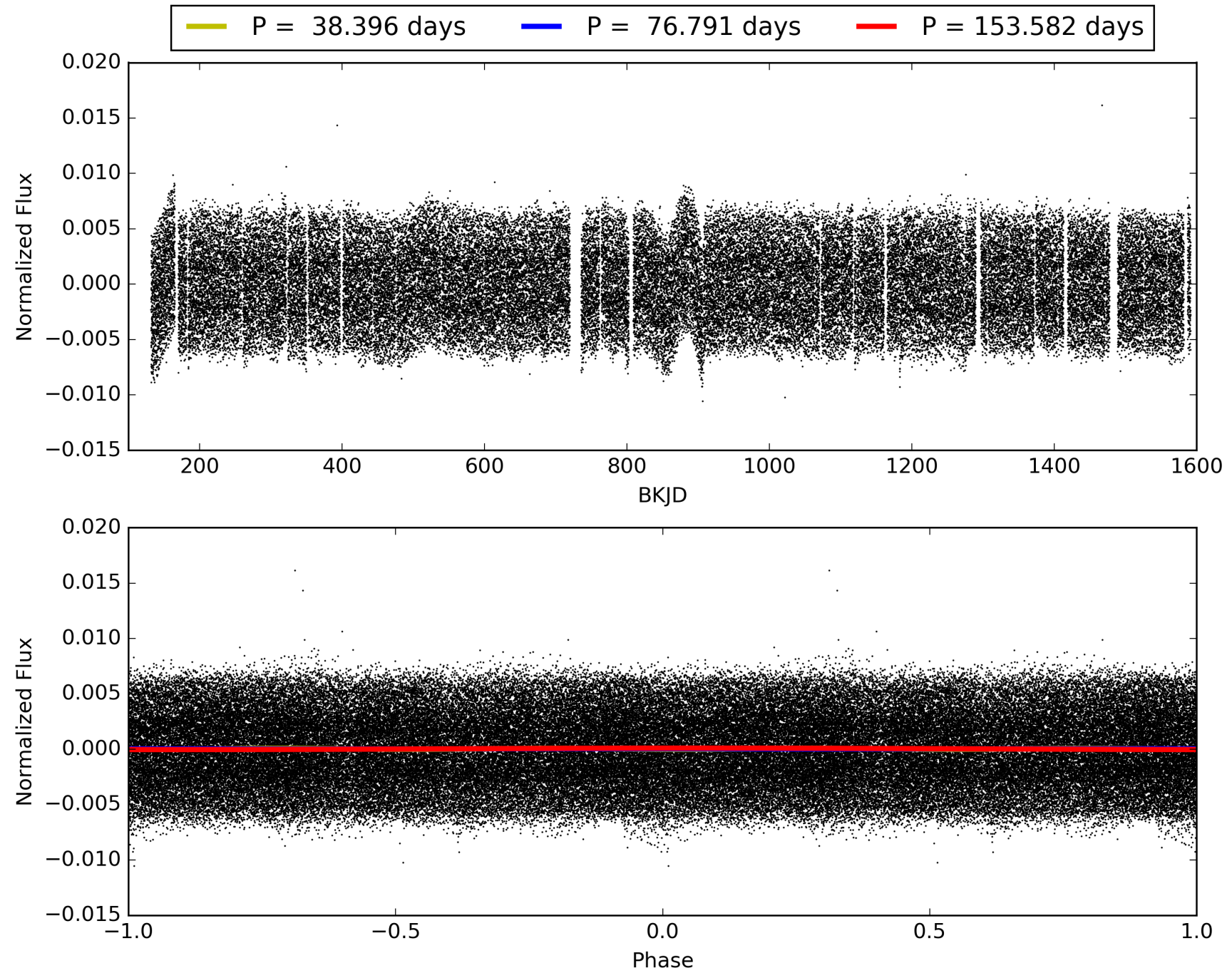
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 23:23:30 Z

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

TCE 007917485-05, PDC Light Curves

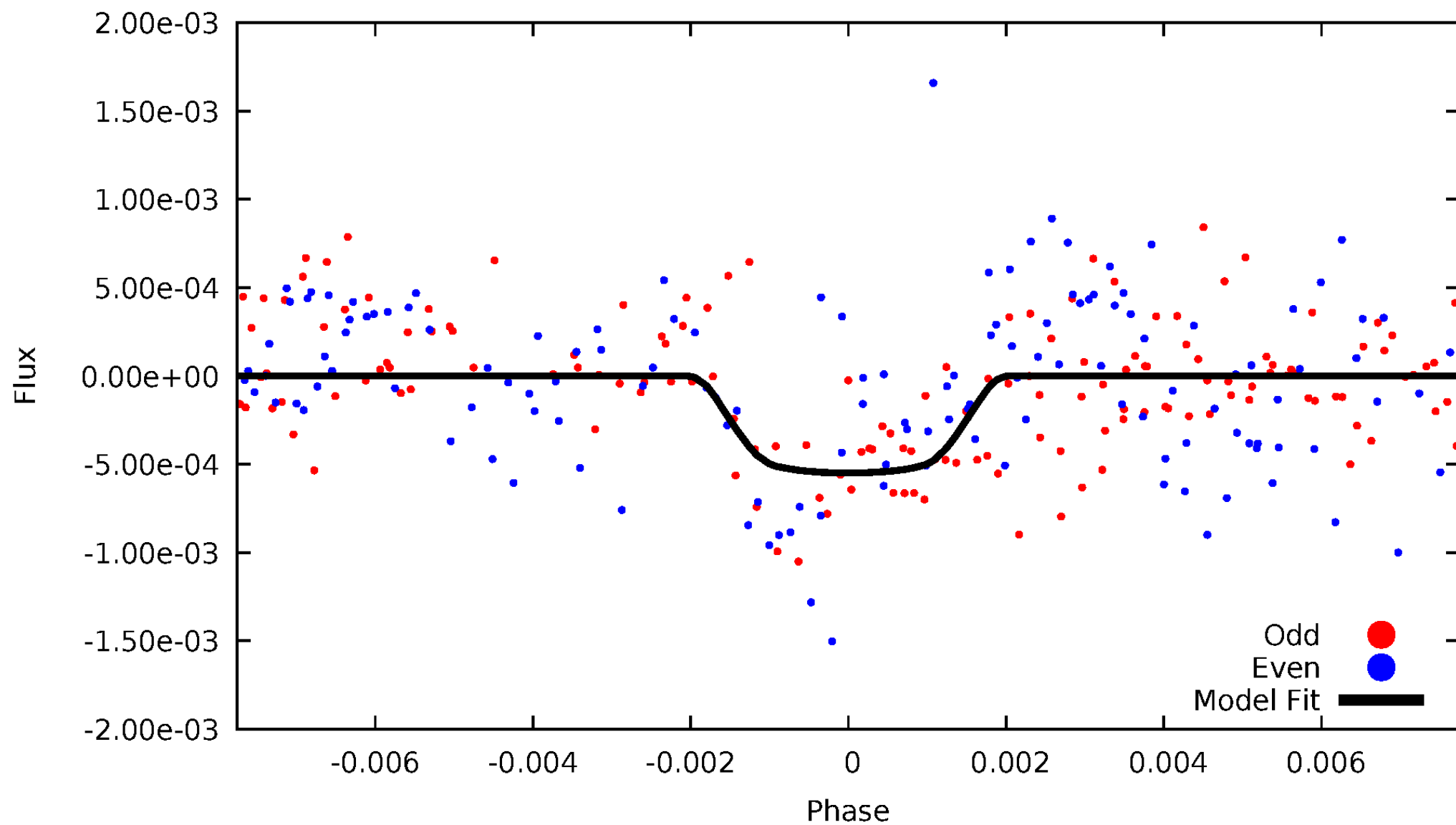


TCE 007917485-05



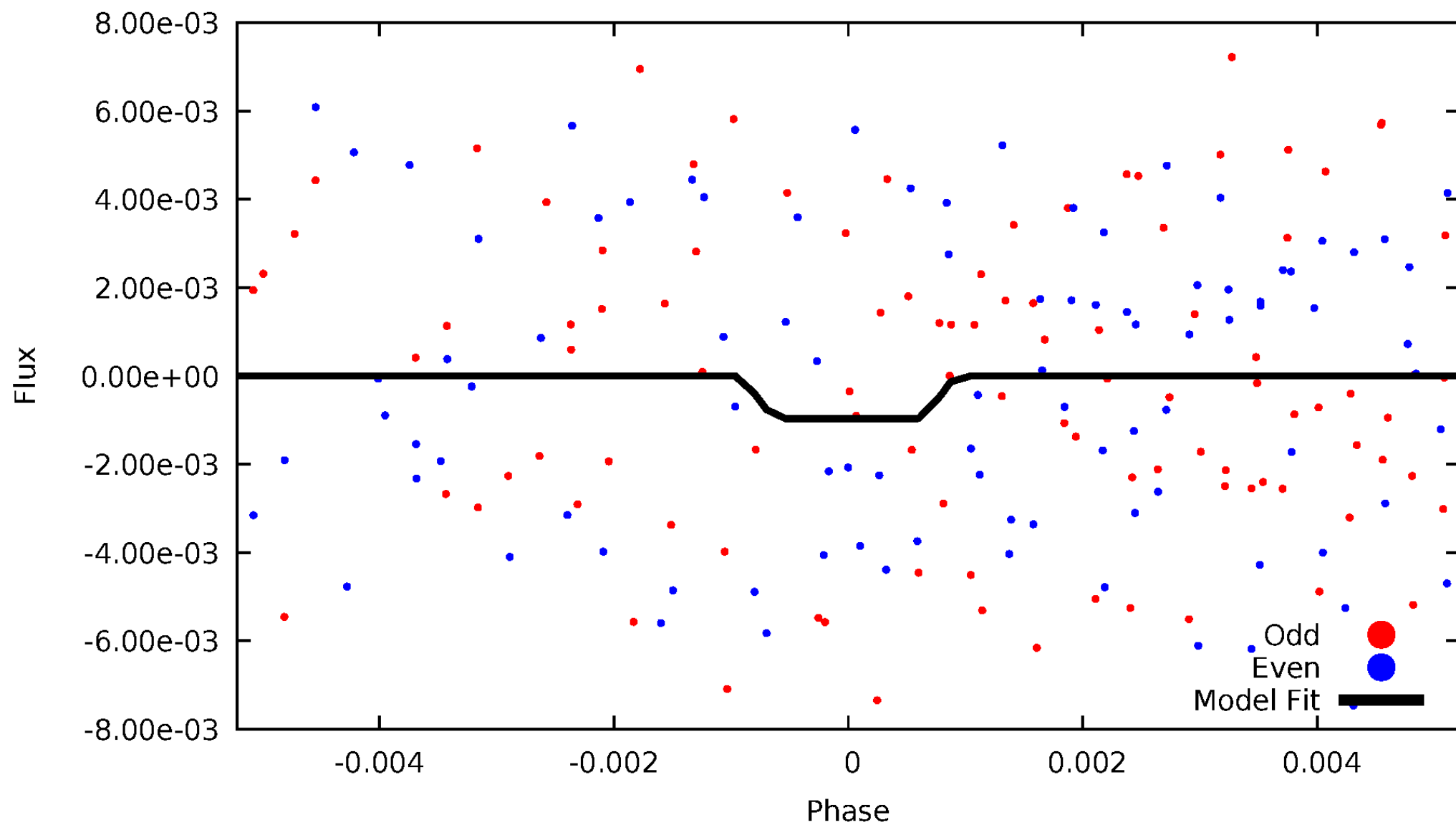
DV Odd/Even

TCE 007917485-05



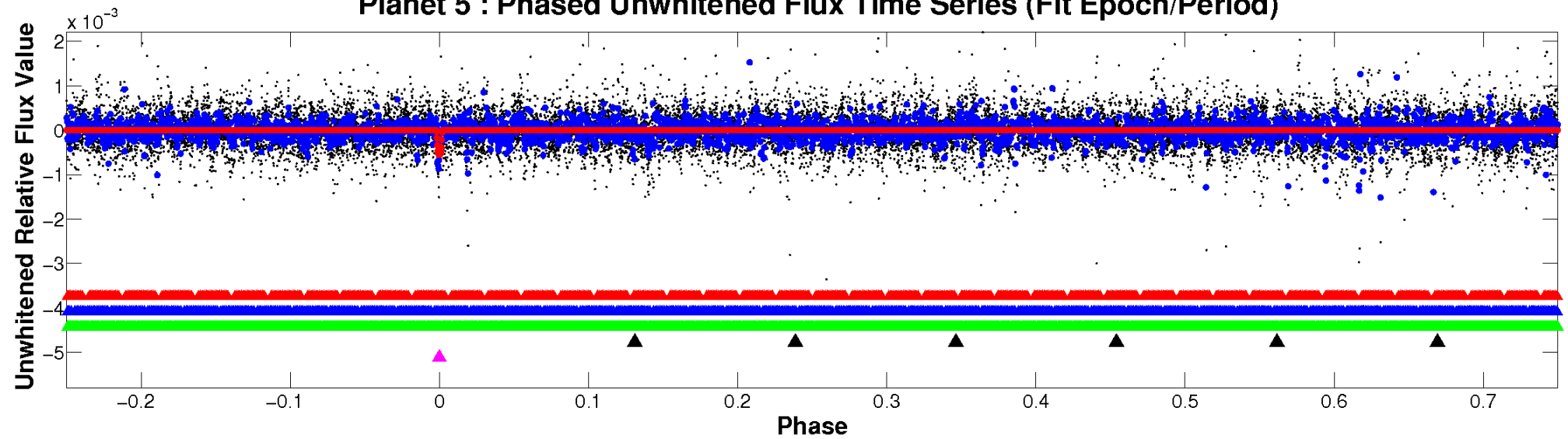
ALT Odd/Even

TCE 007917485-05

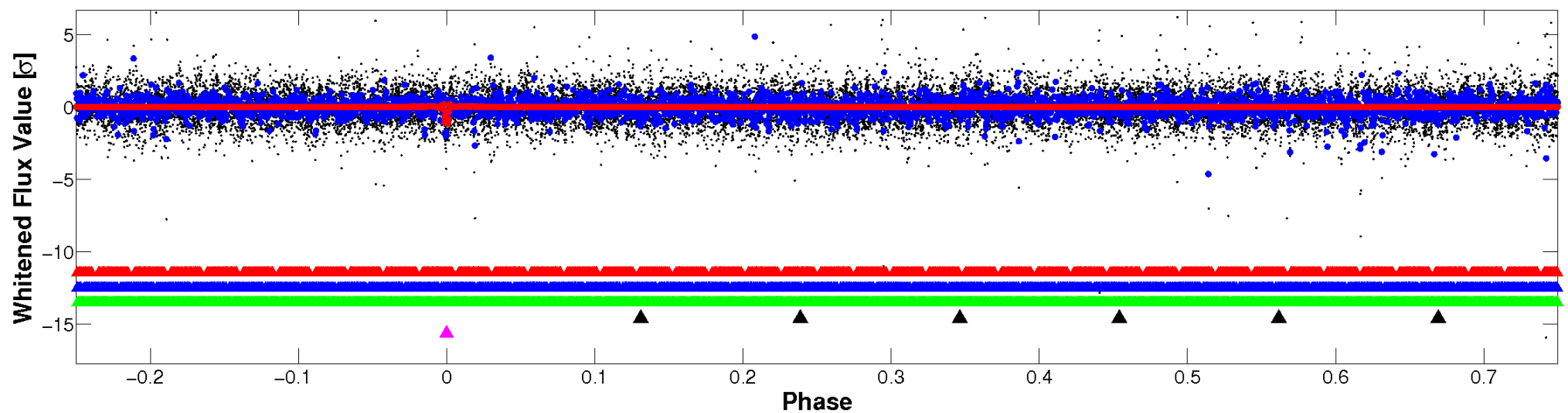


Non-Whitened Vs. Whitened Light Curve

Planet 5 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

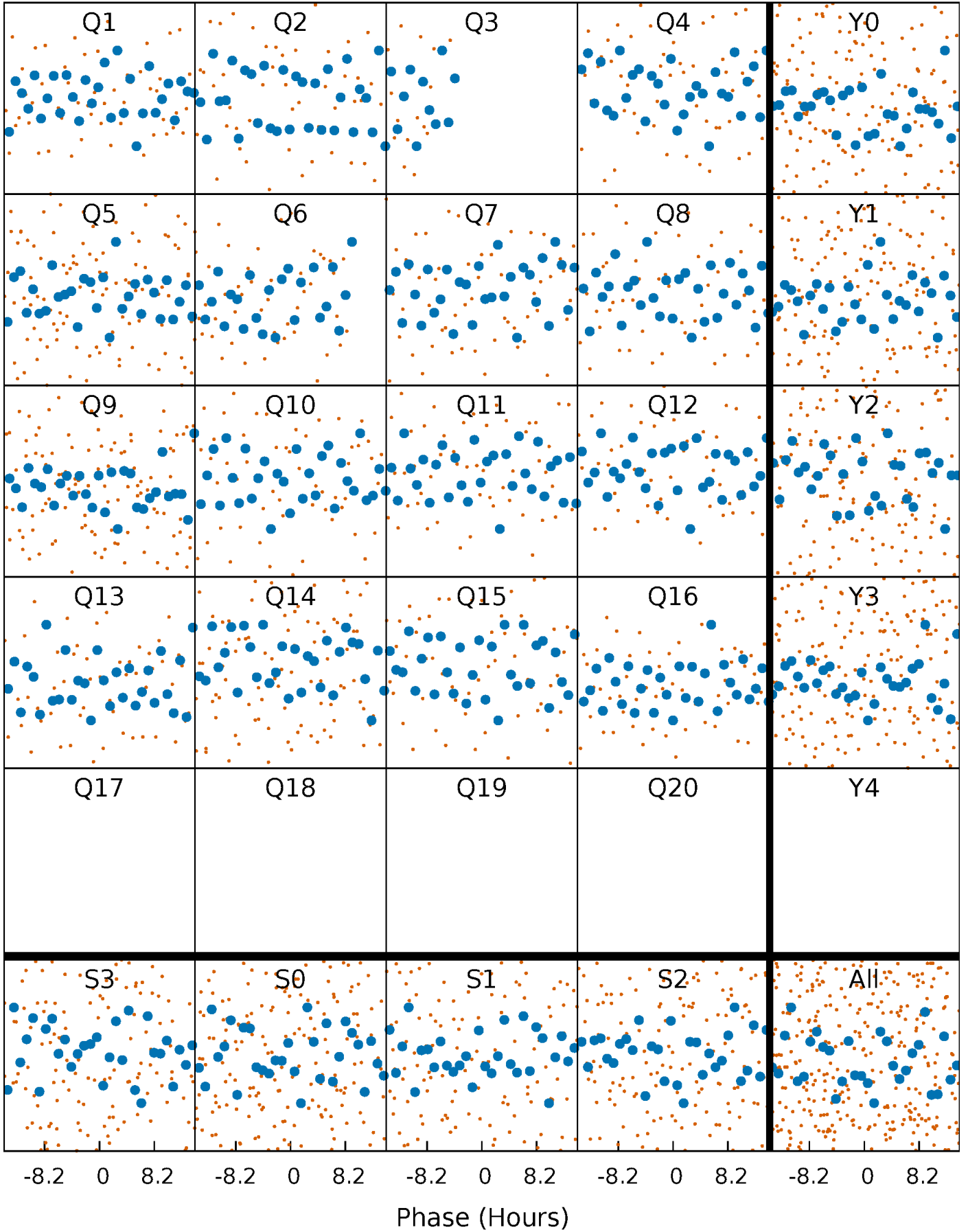


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



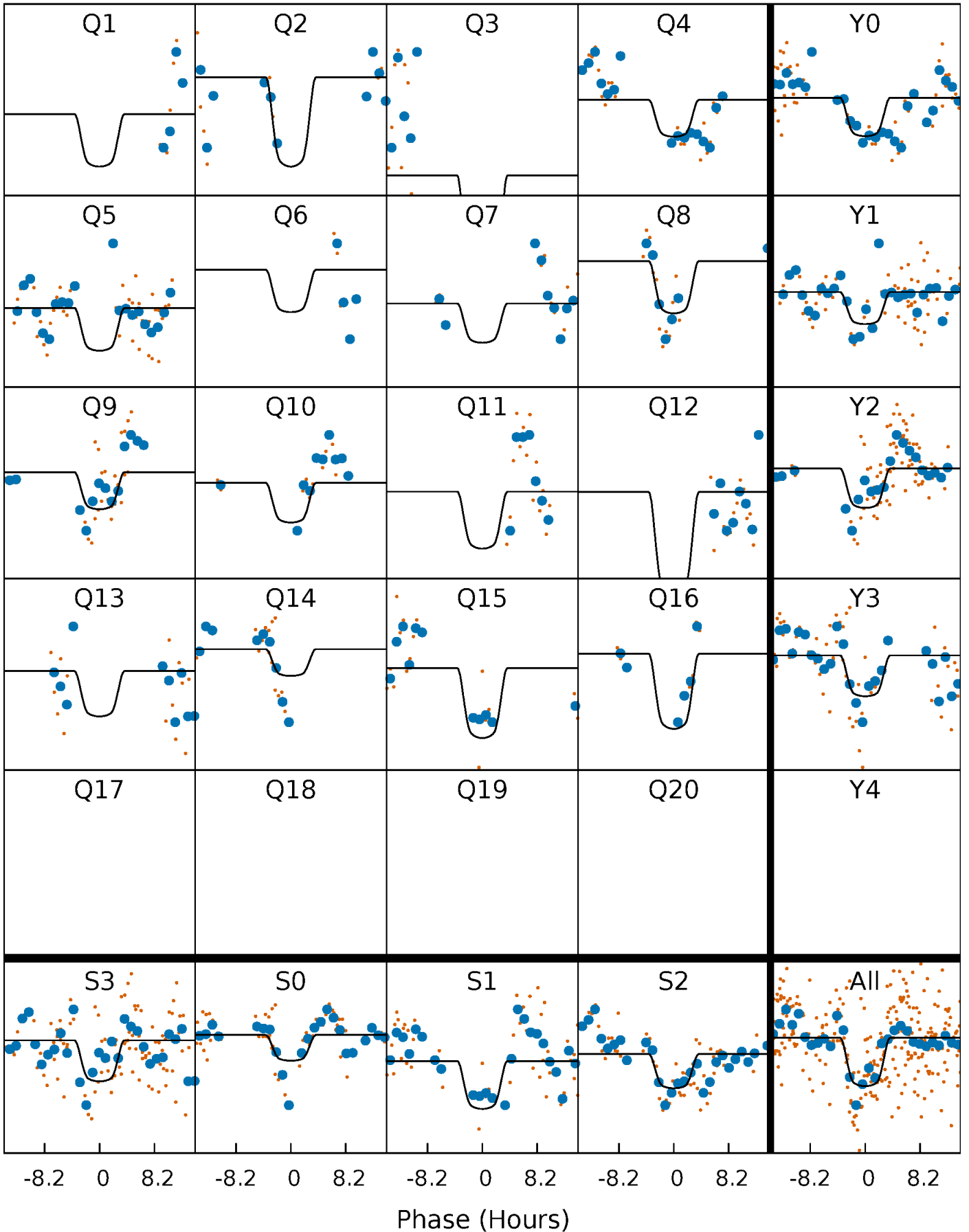
PDC Quarter-Phased Transit Curves

TCE 007917485-05 P= 76.791250 Days $T_0=137.141142$ (BKJD)



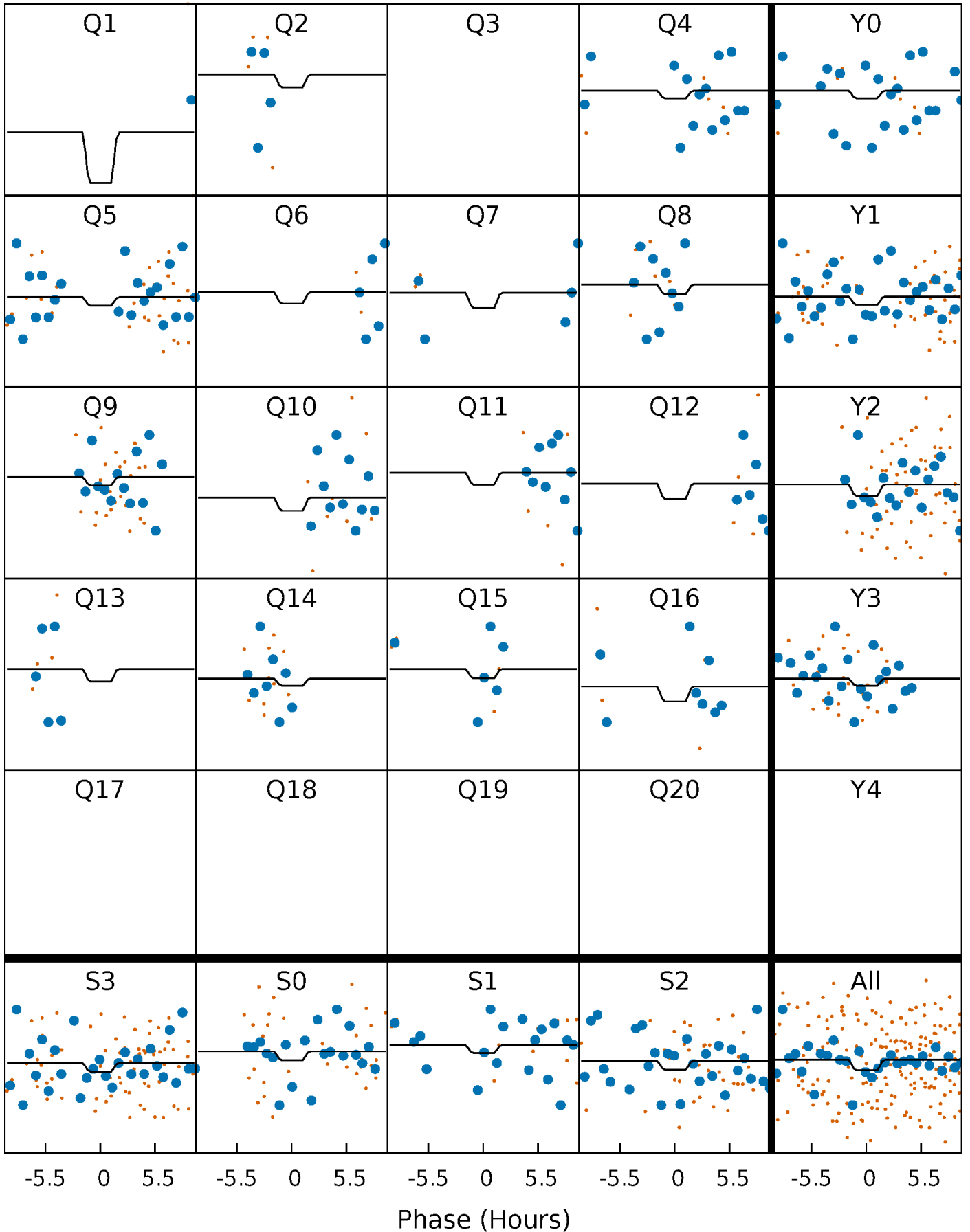
DV Quarter-Phased Transit Curves

TCE 007917485-05 P= 76.791250 Days $T_0=137.141142$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

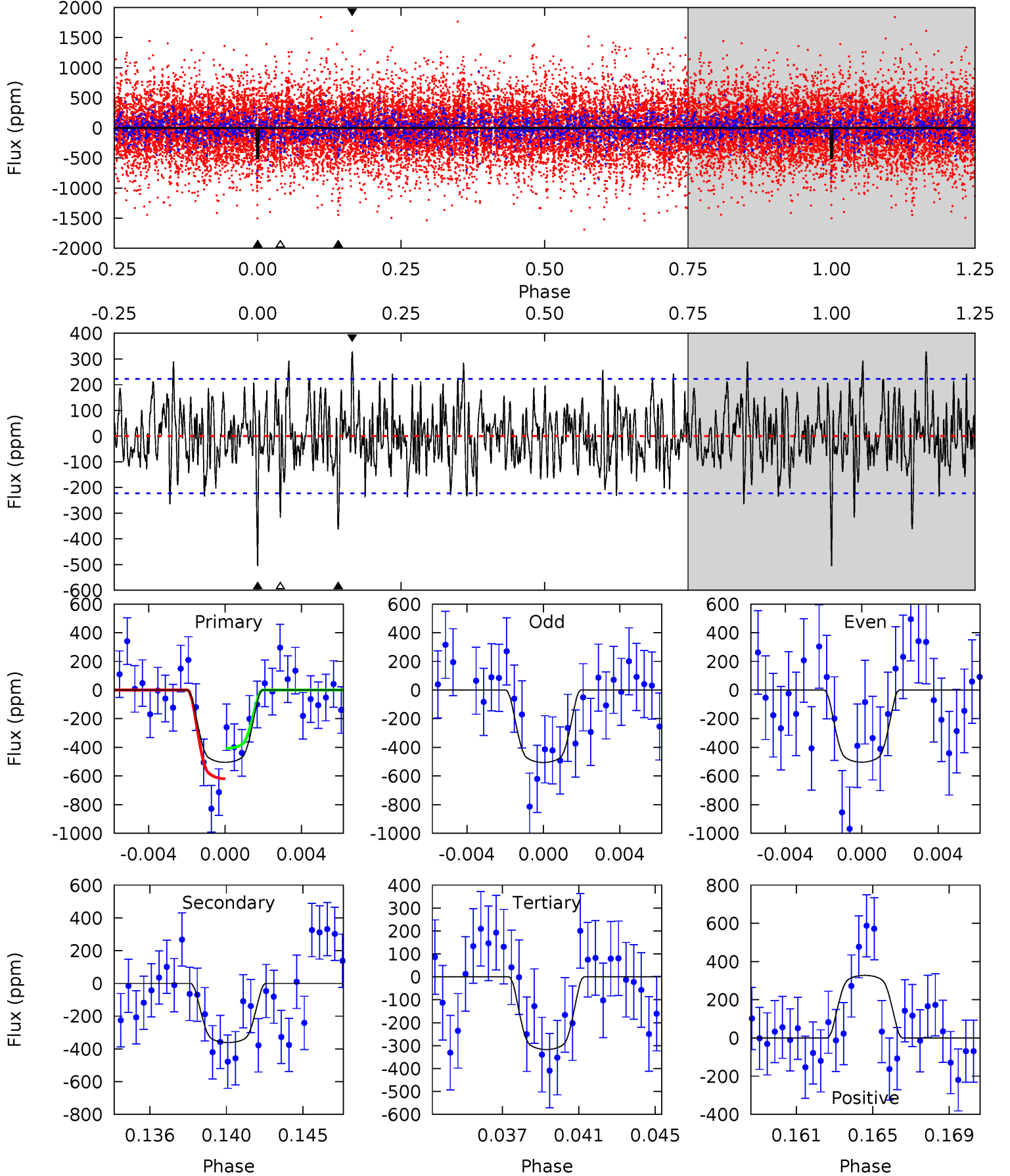
TCE 007917485-05 $P = 76.789105$ Days $T_0 = 137.152052$ (BKJD)



DV Model-Shift Uniqueness Test

007917485-05, P = 76.791250 Days, E = 60.349892 Days

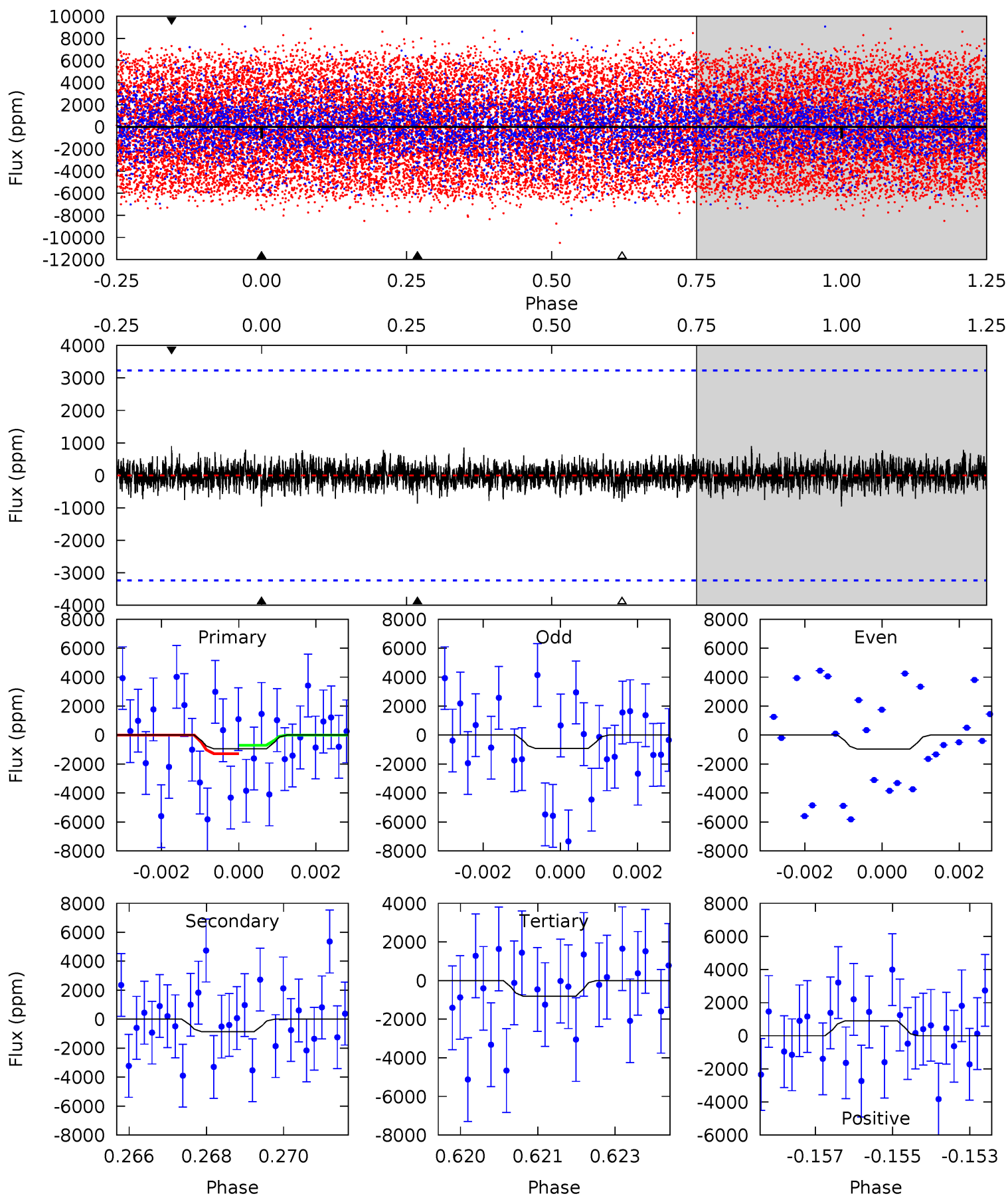
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.8	8.43	7.40	7.65	5.19	2.87	2.27	4.38	4.14	1.03	0.79	0.03	0.59	0.39	2.46



Alt Model-Shift Uniqueness Test

007917485-05, P = 76.789105 Days, E = 60.362947 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.58	1.43	1.35	1.49	5.36	3.14	0.38	0.23	0.09	0.09	-0.06	0.03	0.96	0.49	0.47



Stellar Parameters For KIC 007917485

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7390^{+232}_{-310}	$4.083^{+0.175}_{-0.175}$	$-0.260^{+0.250}_{-0.350}$	$1.830^{+0.548}_{-0.448}$	$1.477^{+0.230}_{-0.230}$	$0.339^{+0.327}_{-0.154}$
	+3%/-4%	+4%/-4%	+96%/-135%	+30%/-24%	+16%/-16%	+96%/-45%
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 007917485-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-361 ± 43	$5.27^{+0.98}_{-0.80}$	971^{+74}_{-65}	6178^{+416}_{-382}	1150^{+481}_{-341}
Alt.	-864 ± 603	$6.19^{+1.16}_{-0.95}$	968^{+77}_{-73}	7093^{+1419}_{-1702}	1963^{+1691}_{-1352}

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

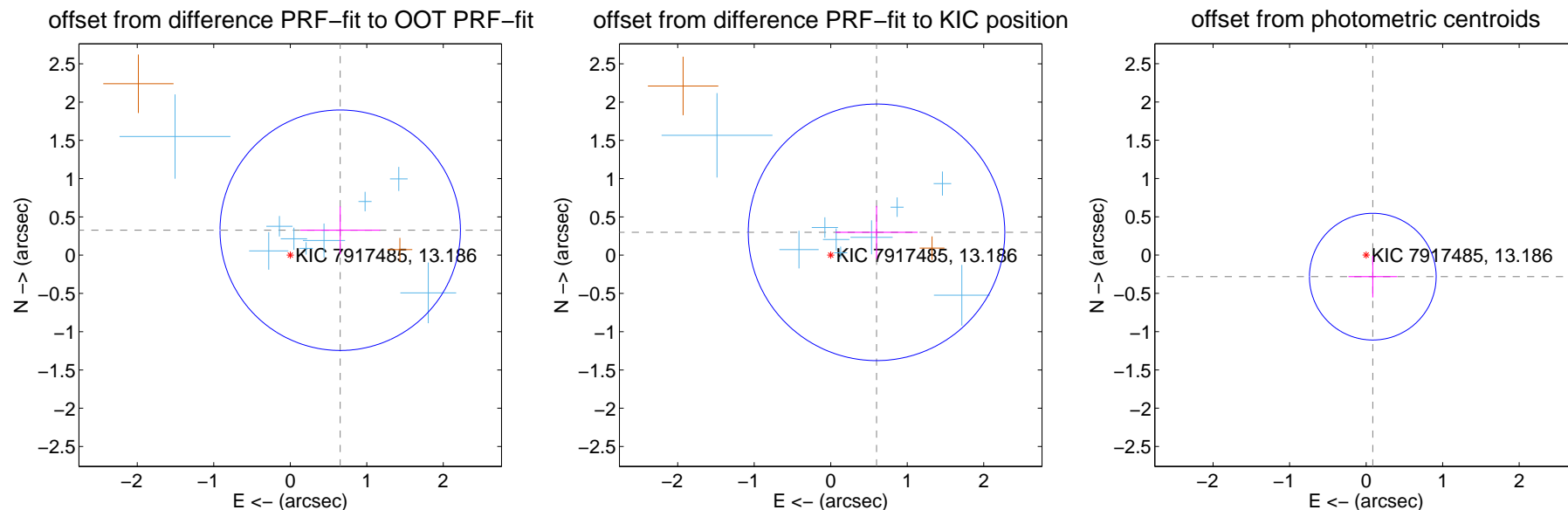
DV Centroid Data

Supplemental centroid analysis for 007917485-05. Kepler magnitude: 13.19. Transit SNR 7.39

There are 9 quarters with good PRF difference image offsets

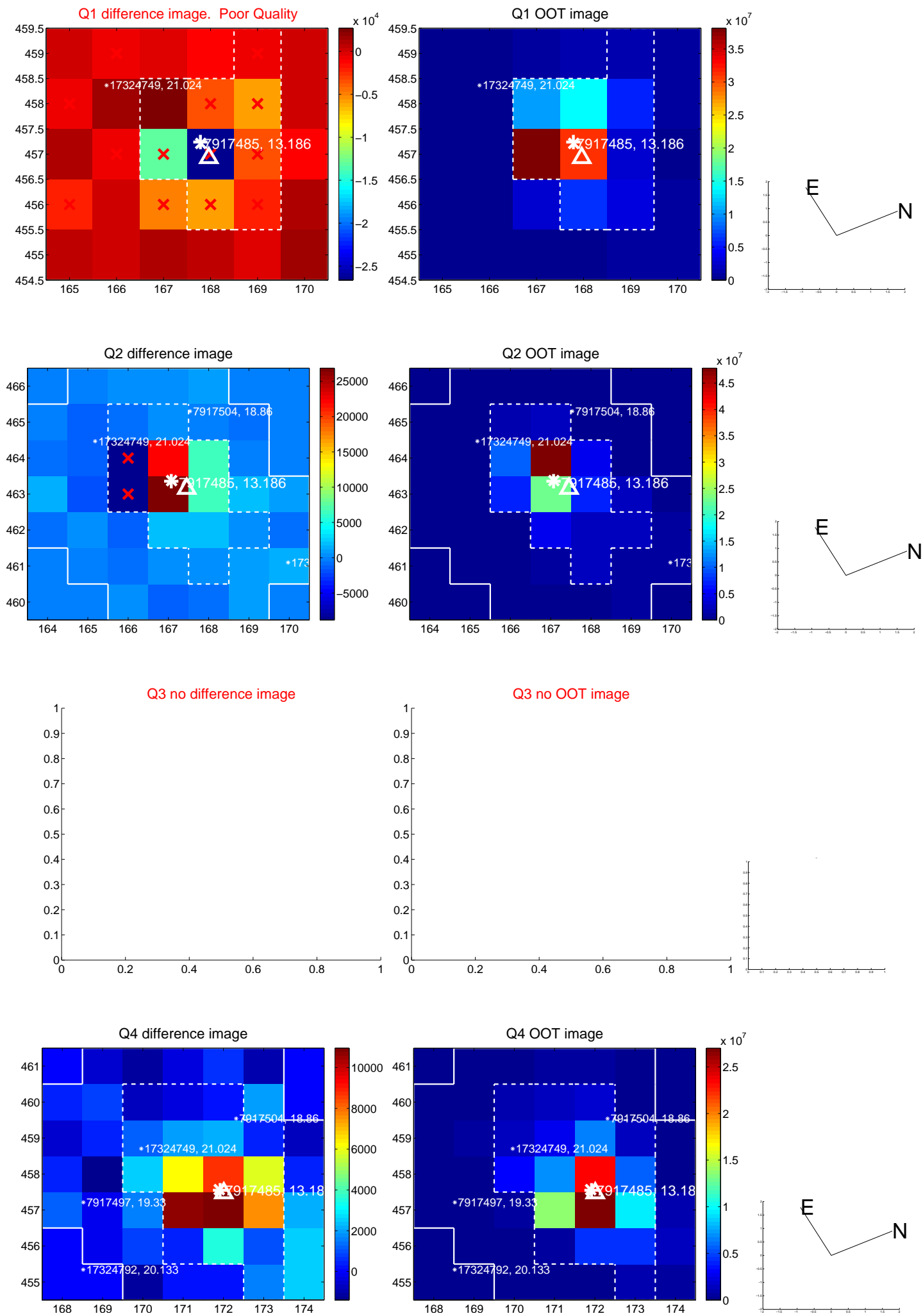
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.730 ± 0.524	1.39	-0.653 ± 0.522	0.326 ± 0.312
PRF-fit source offset from KIC position	0.669 ± 0.559	1.20	-0.599 ± 0.537	0.298 ± 0.345
photometric centroid source offset	0.29 ± 0.28	1.07	-0.09 ± 0.32	-0.28 ± 0.27

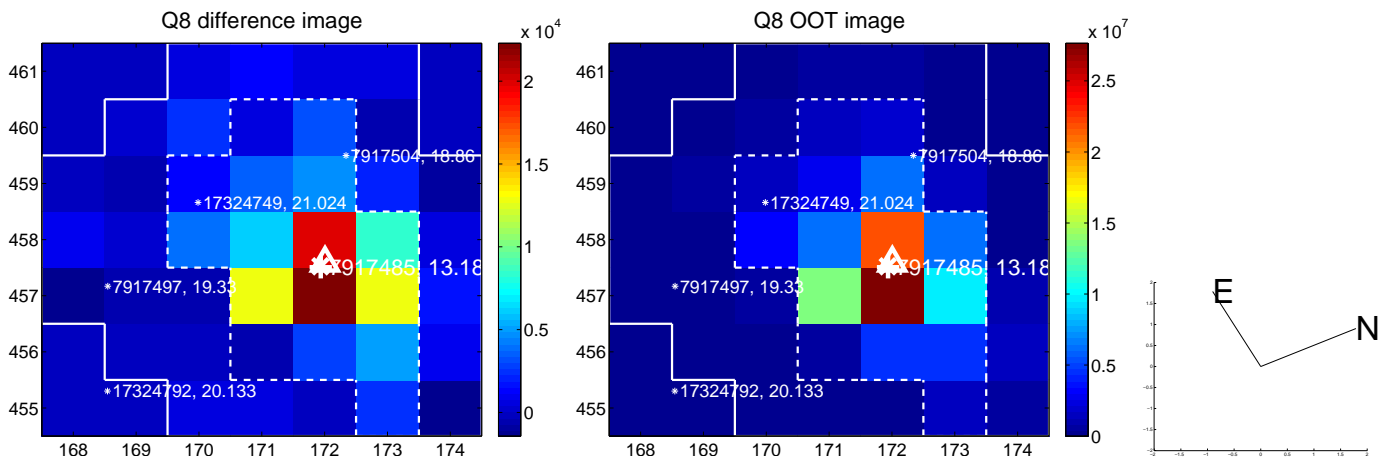
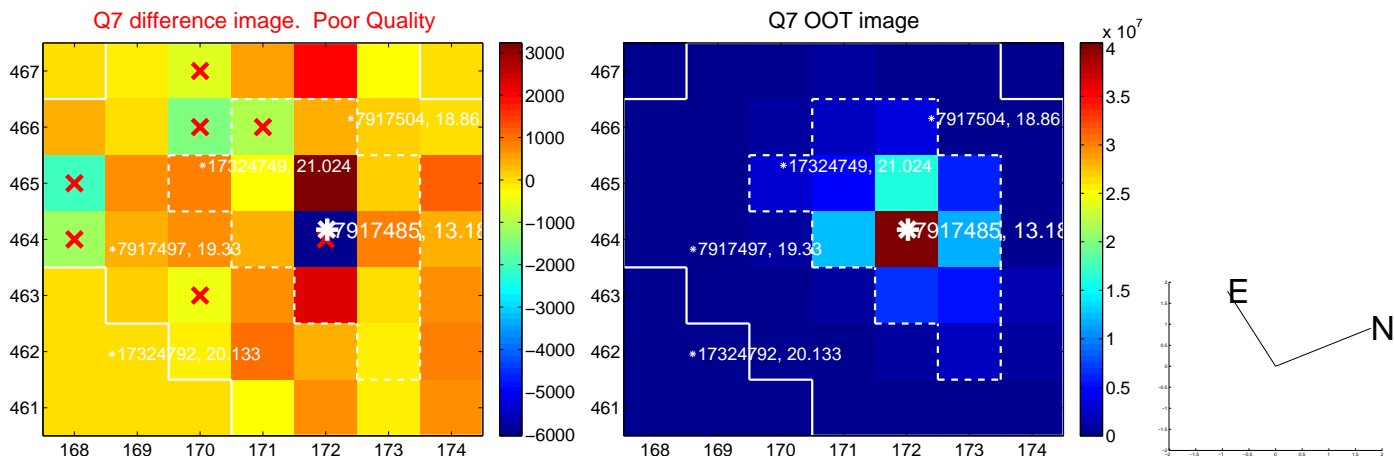
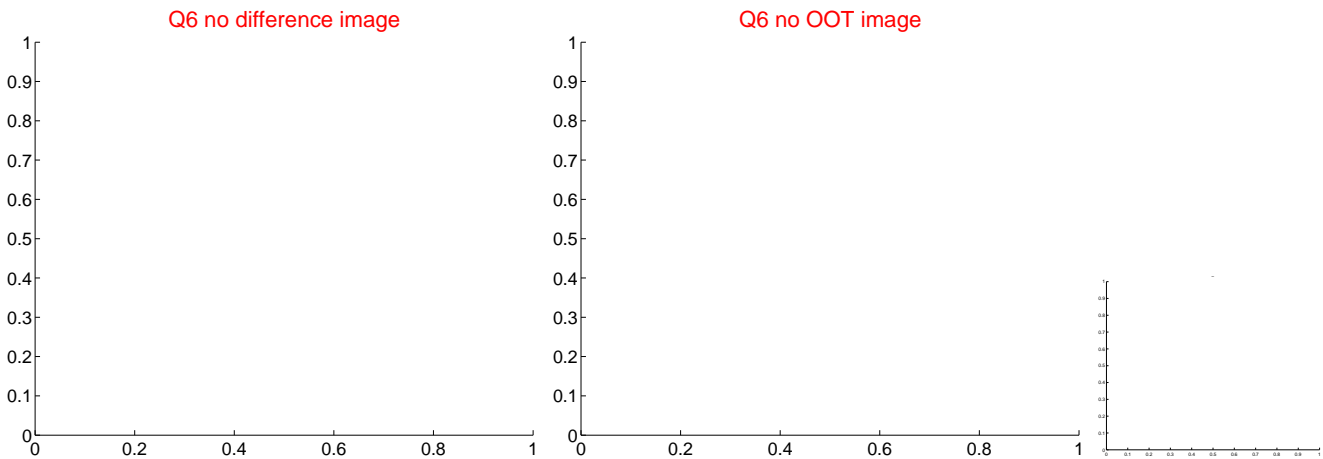
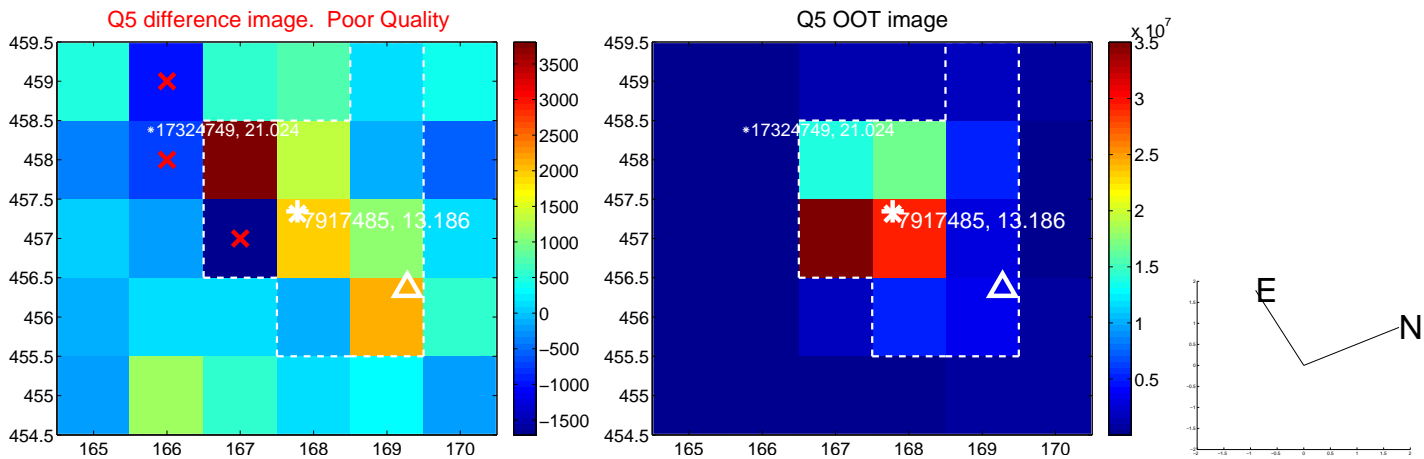


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

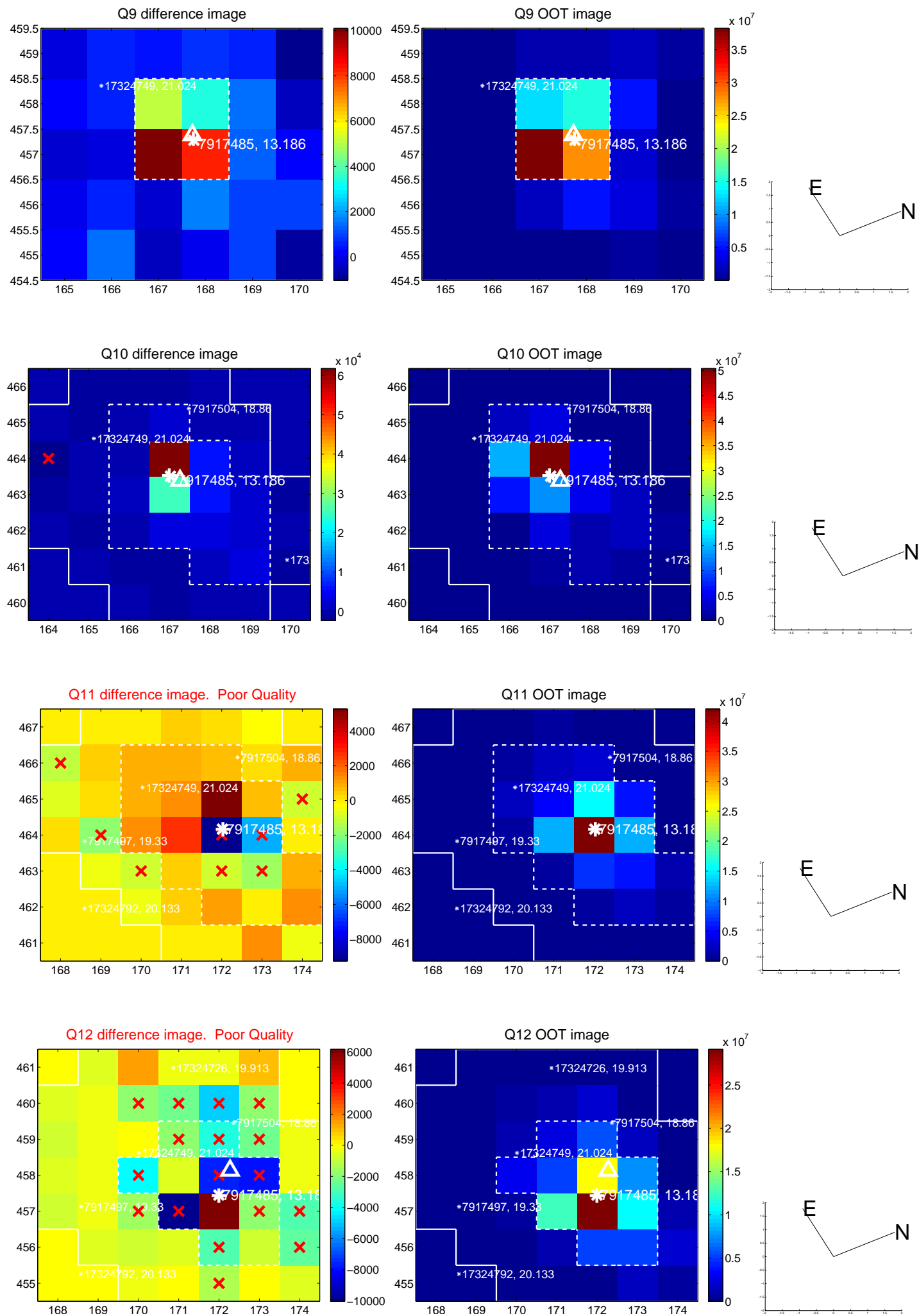
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



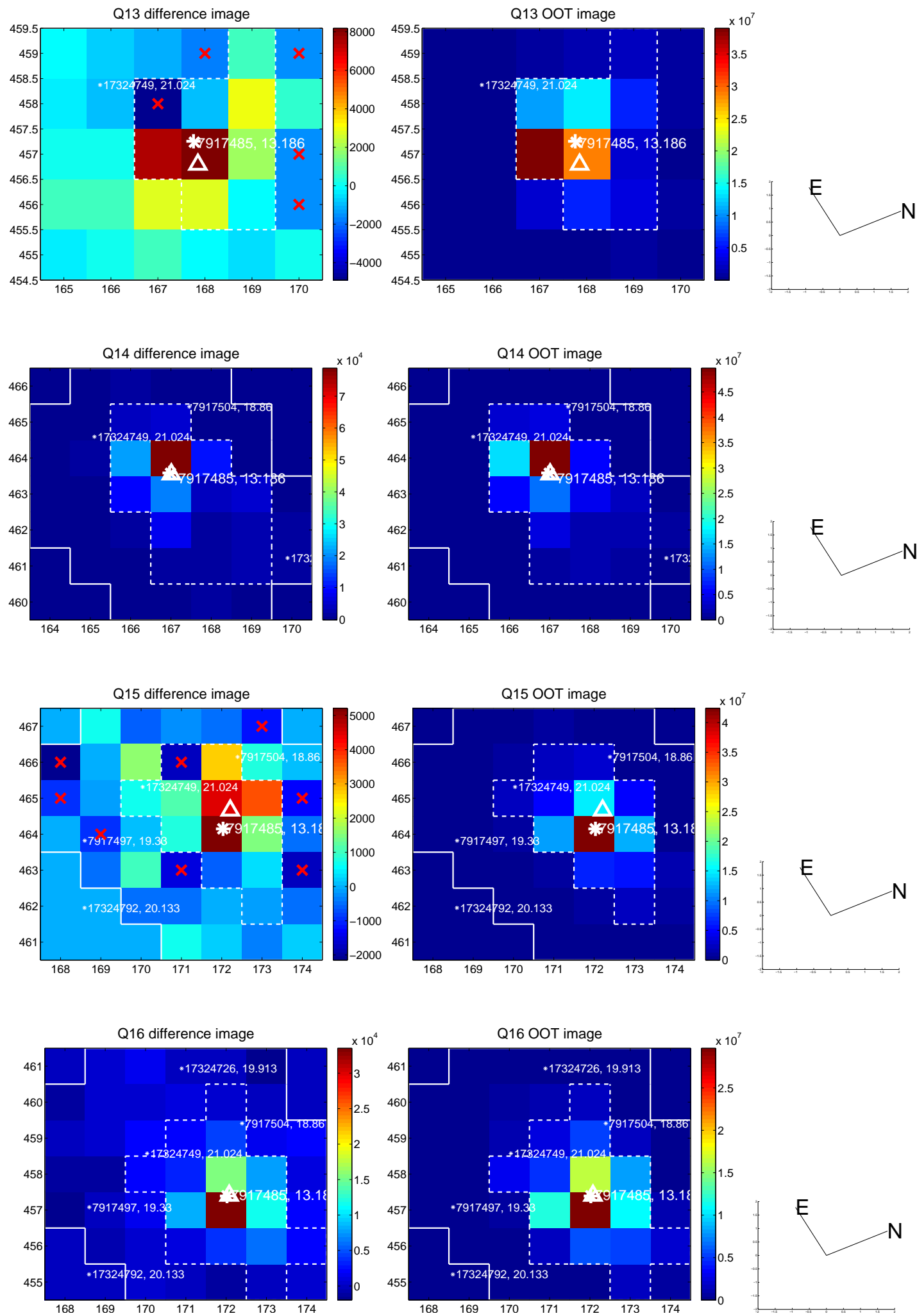
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



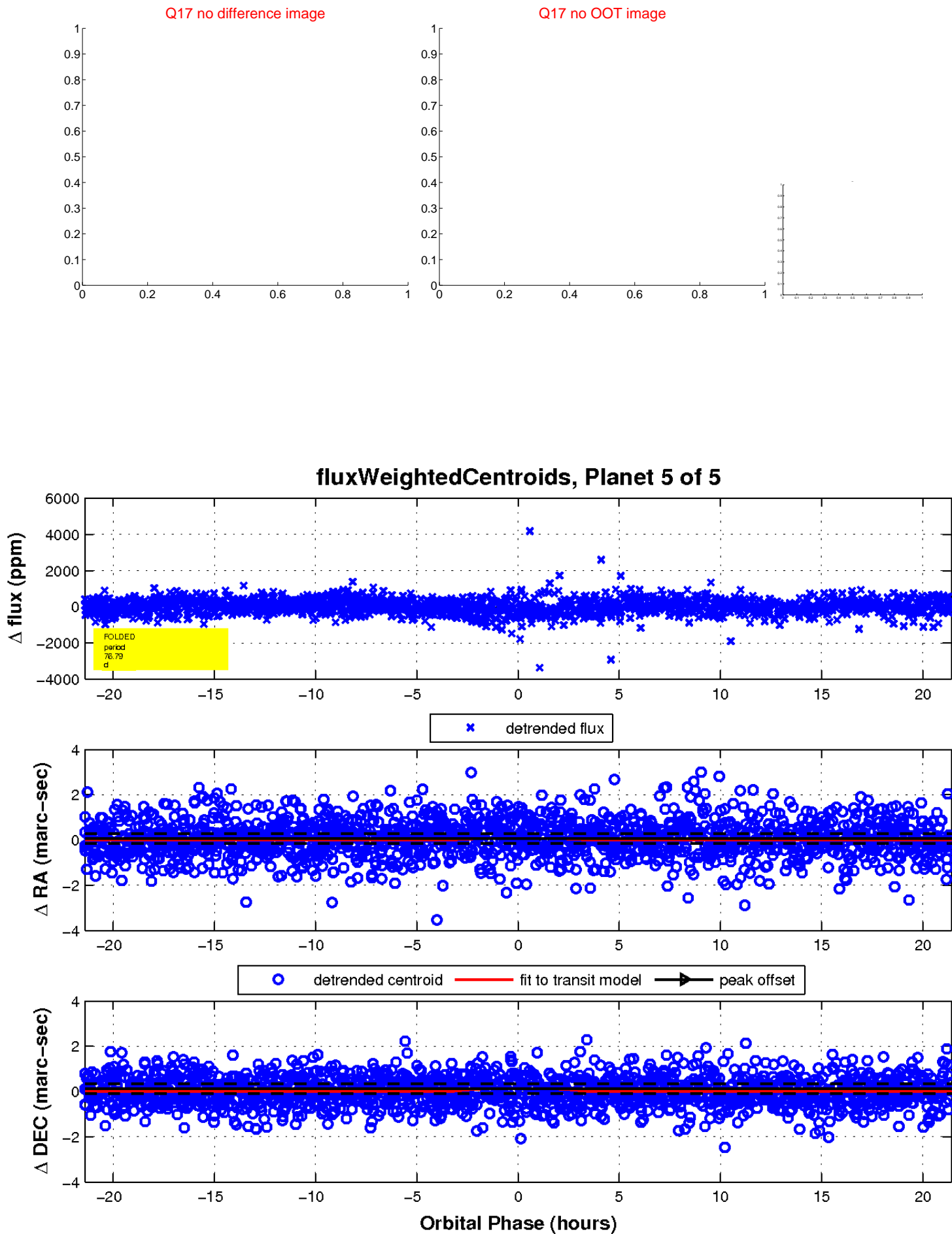
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

