

KIC 007281503

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})
007281503-01	OBS	No	0.566750	131.856056	30.4	3.450	11.7	5.5	1.03	6174	0.58	7179.11
007281503-02	OBS	No	38.072398	150.773764	1035.6	1.077	7.9	8.2	1.03	6174	3.46	26.29
007281503-03	OBS	No	134.351732	152.347683	765.4	2.556	7.4	7.6	1.03	6174	3.13	4.89

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007281503-01	OBS	FP	0.00	1	0	0	1	LPP_DV—EPHEM_MATCH
007281503-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
007281503-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_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.

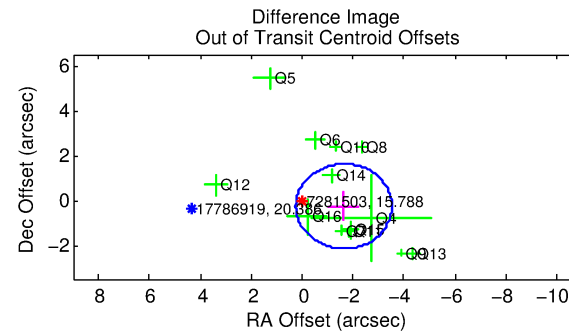
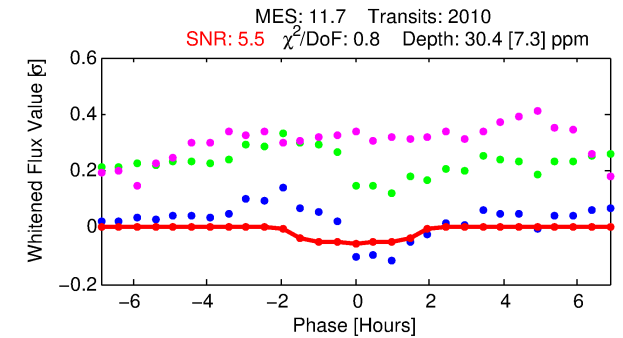
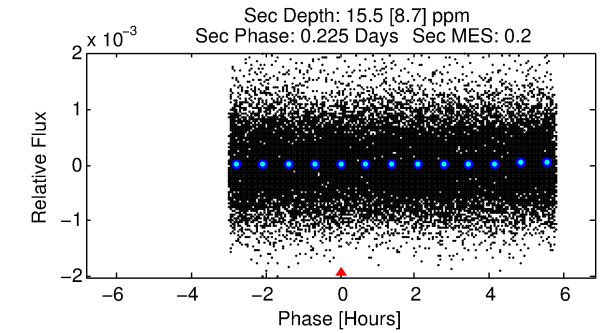
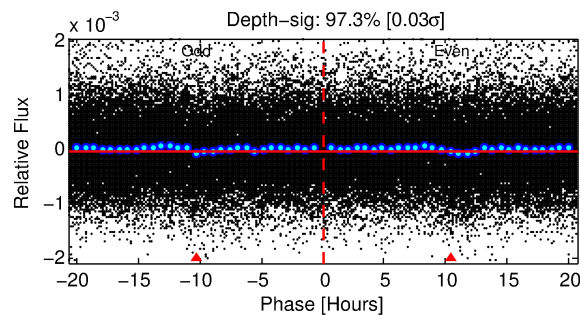
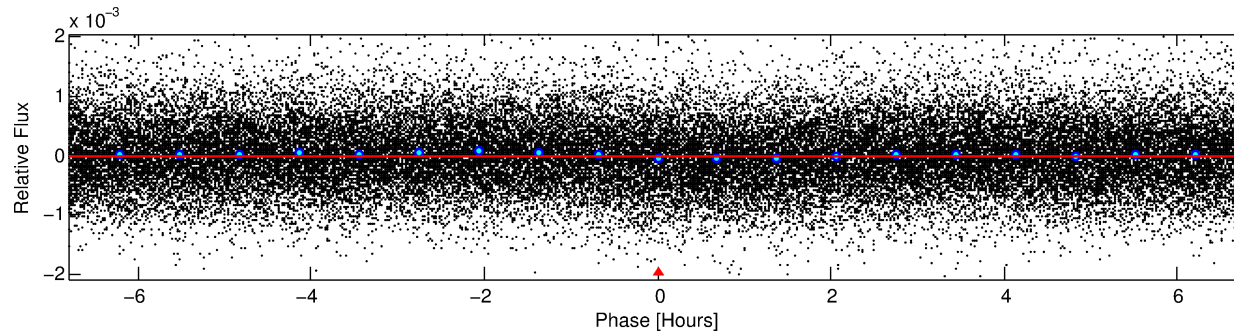
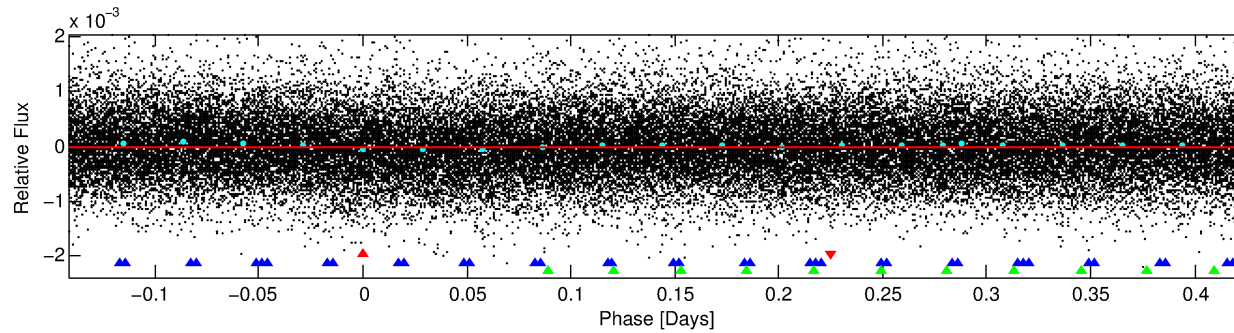
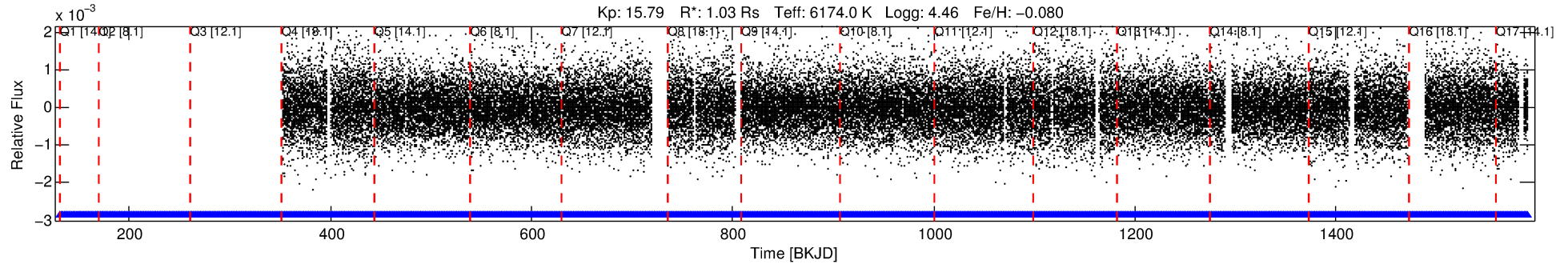
Ephemeris Match Information For 007281503-01

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
007281503-01	7281503	RR-Lyr-pri	7198959	1:1	664.8	76	148	7.86	15.79	20777.00	Direct-PRF	0	0.38	22.73

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.

DV One-Page Summary

KIC: 7281503 Candidate: 1 of 3 Period: 0.567 d



DV Fit Results:

Period = 0.56675 [0.00002] d
Epoch = 131.8561 [0.0076] BKJD
Rp/R* = 0.0052 [0.0083]
a/R* = 1.34 [4.76]
b = 0.43 [15.52]
Seff = 7179.11 [3062.59]
Teq = 2347 [250] K
Rp = 0.58 [0.95] Re
a = 0.0138 [0.0037] AU
Ag = 4.88 [16.12] [0.24σ]
Teffp = 5394 [4426] K [0.69σ]

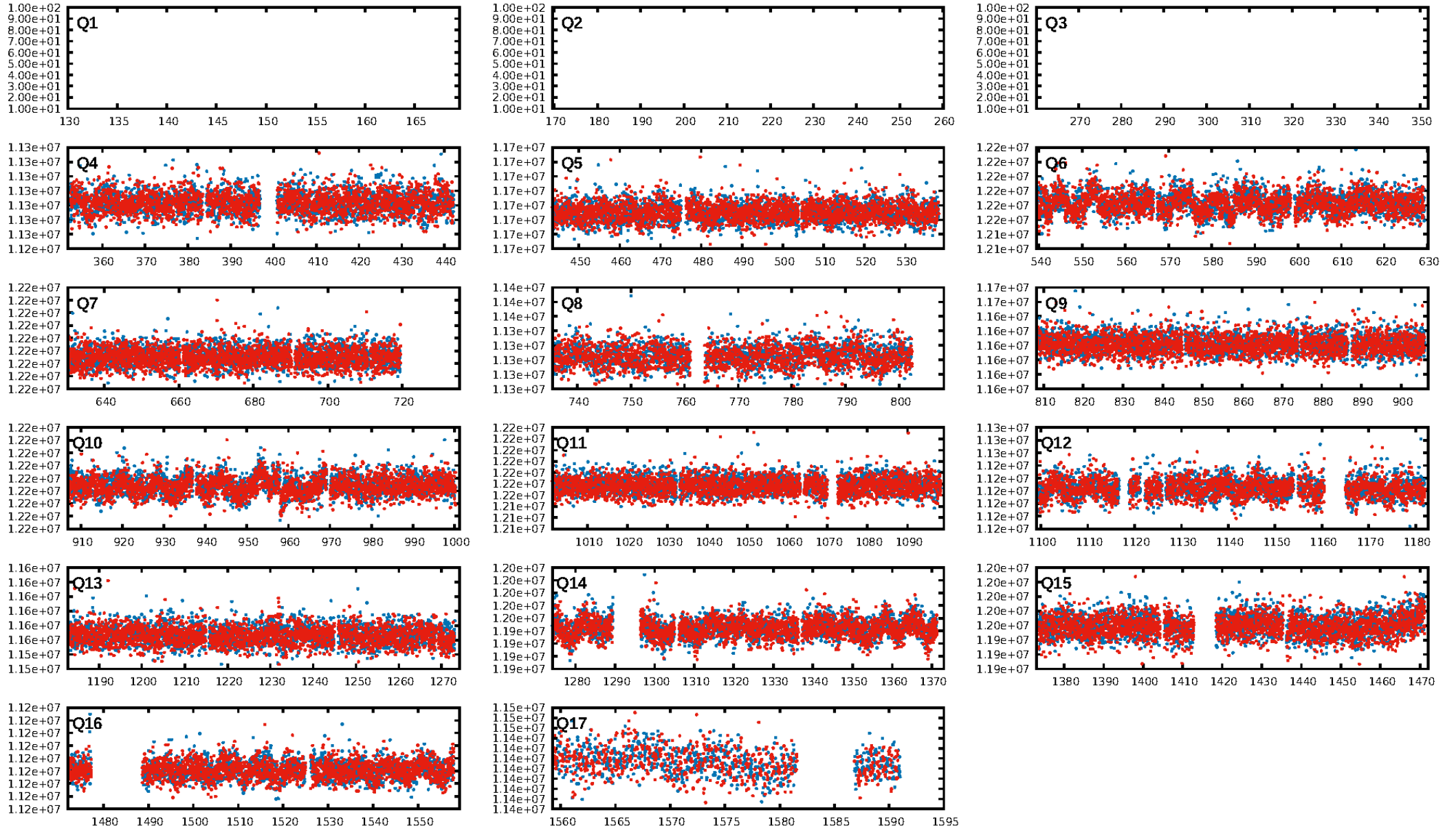
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [249.03σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.70e-25
RollingBand-fgt: 1.00 [1963/1963]
GhostDiagnostic-chr: 0.3725
Centroid-sig: N/A
Centroid-so: 9.787 arcsec [3.71σ]
OotOffset-rm: 1.658 arcsec [2.63σ]
KicOffset-rm: 1.880 arcsec [3.00σ]
OotOffset-st: 3/3/4/3 [13]
KicOffset-st: 3/3/4/3 [13]
DiffImageQuality-fgm: 0.15 [2/13]
DiffImageOverlap-fno: 1.00 [14/14]

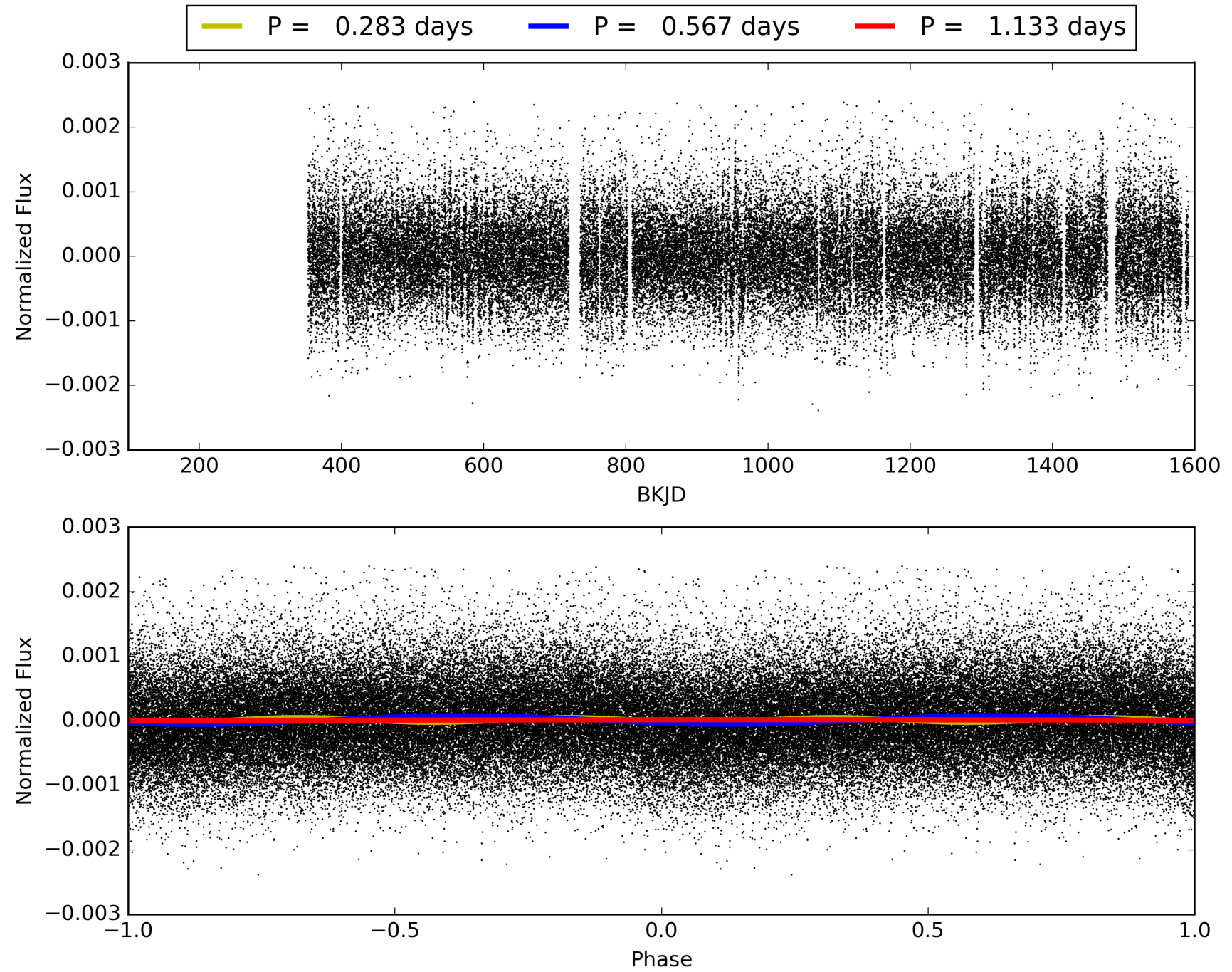
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 18:52:32 Z

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

TCE 007281503-01, PDC Light Curves

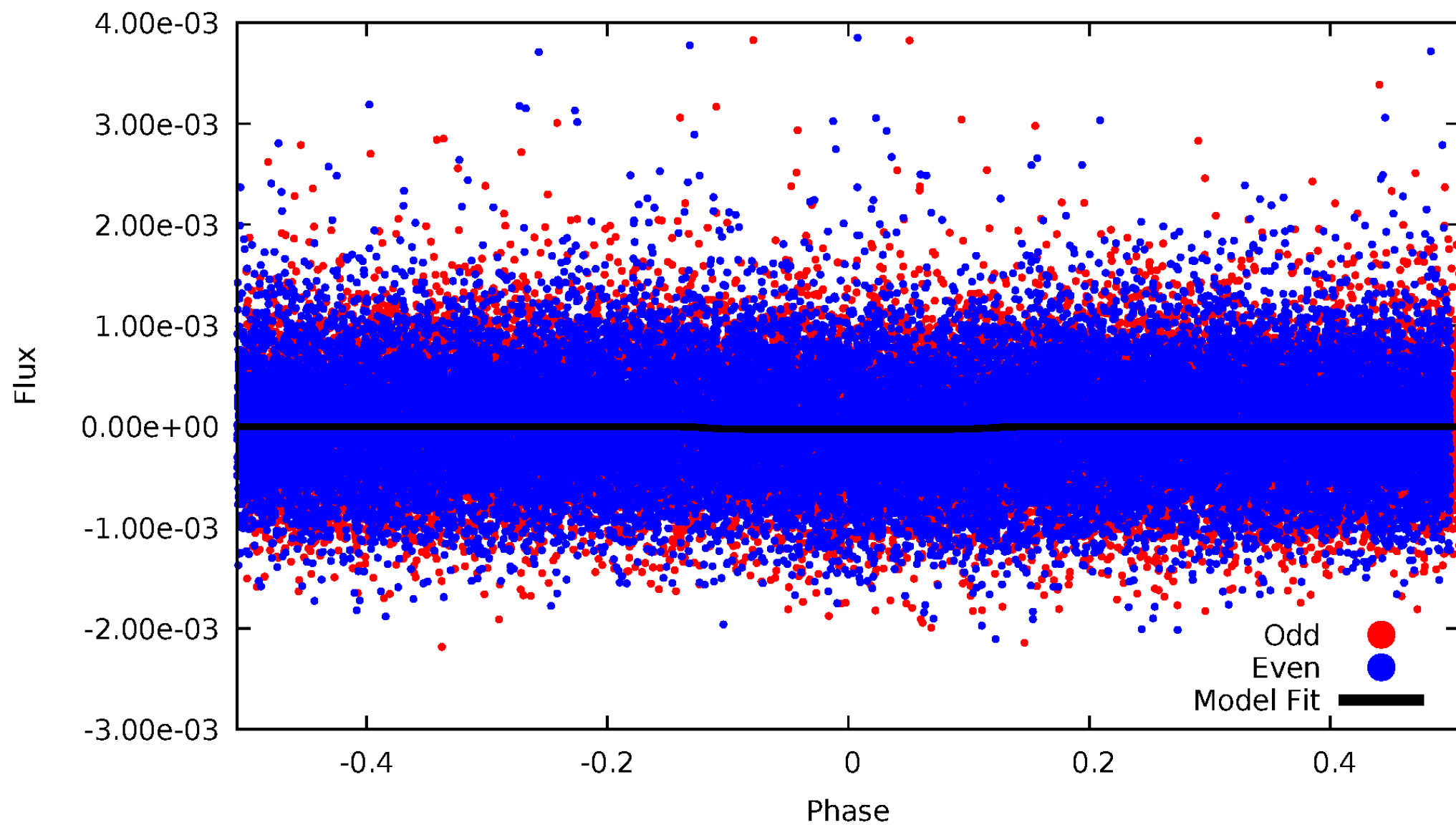


TCE 007281503-01



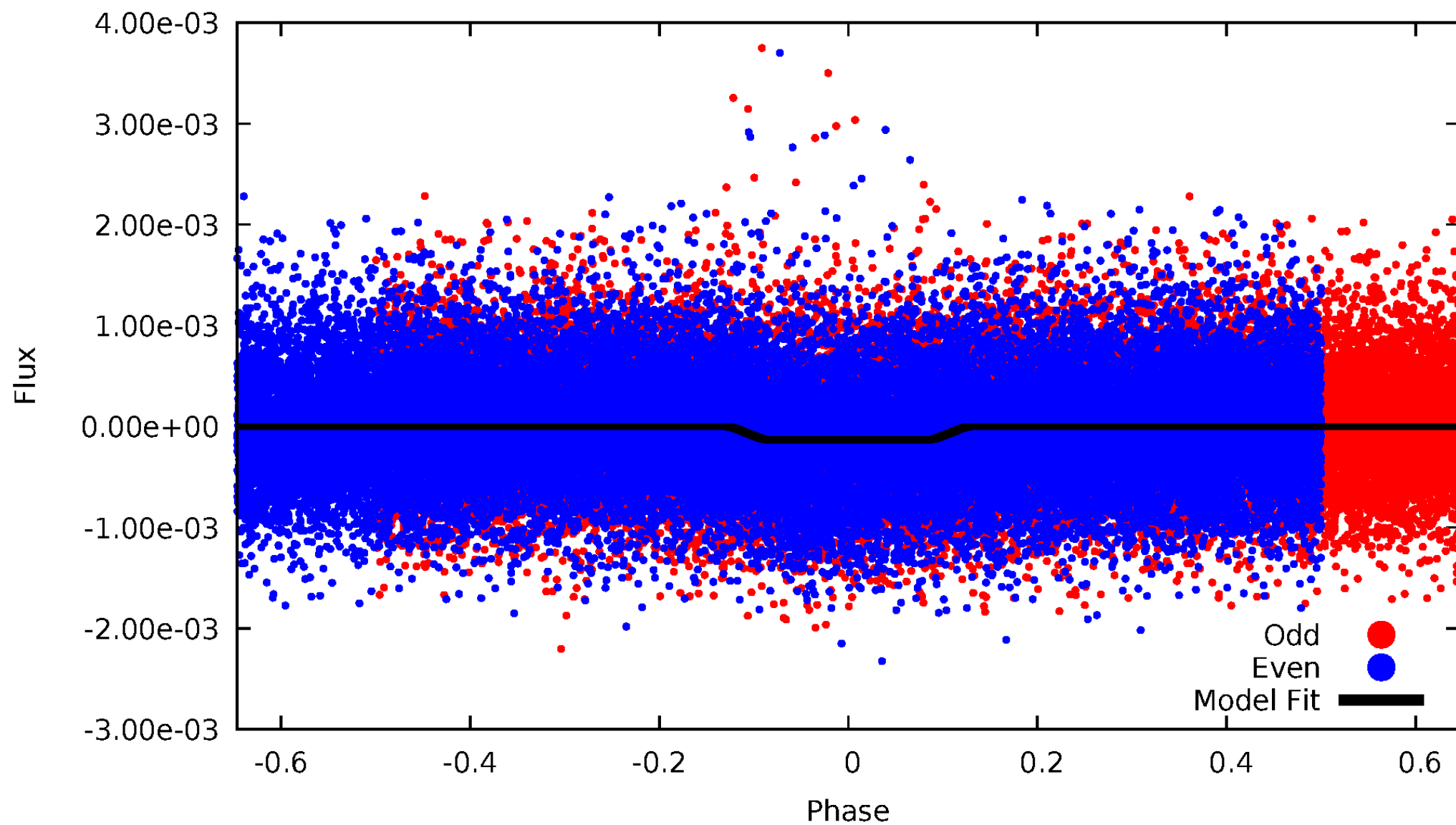
DV Odd/Even

TCE 007281503-01



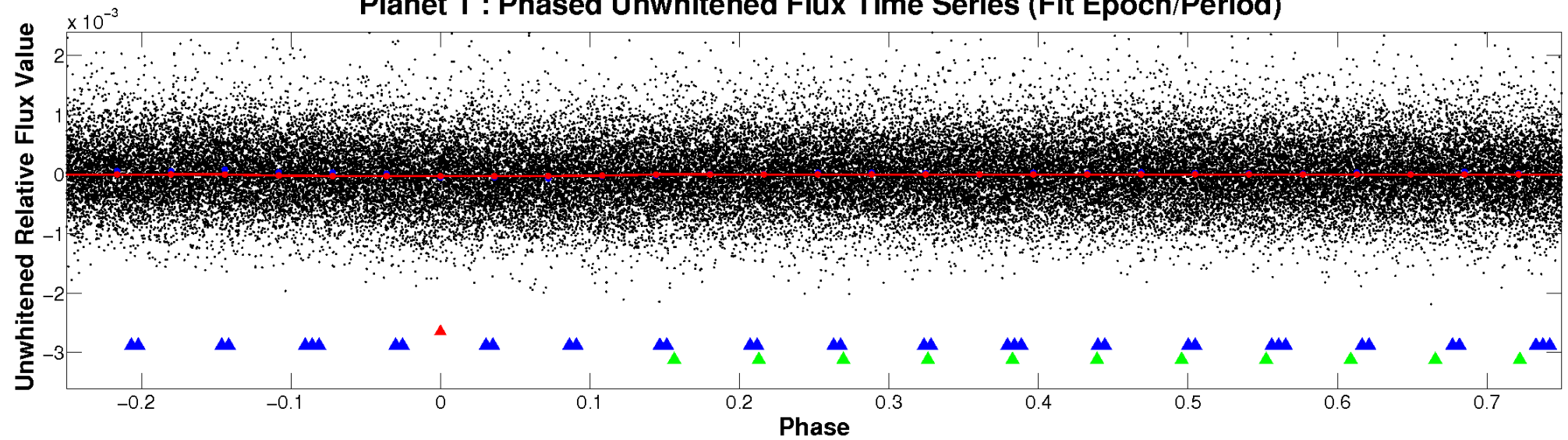
ALT Odd/Even

TCE 007281503-01

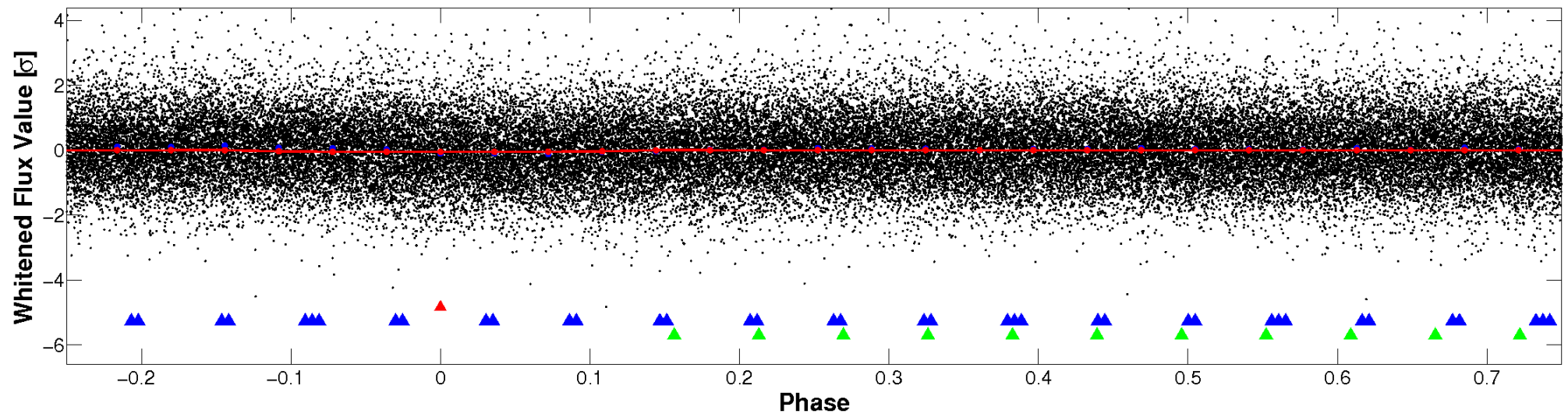


Non-Whitened Vs. Whitened Light Curve

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

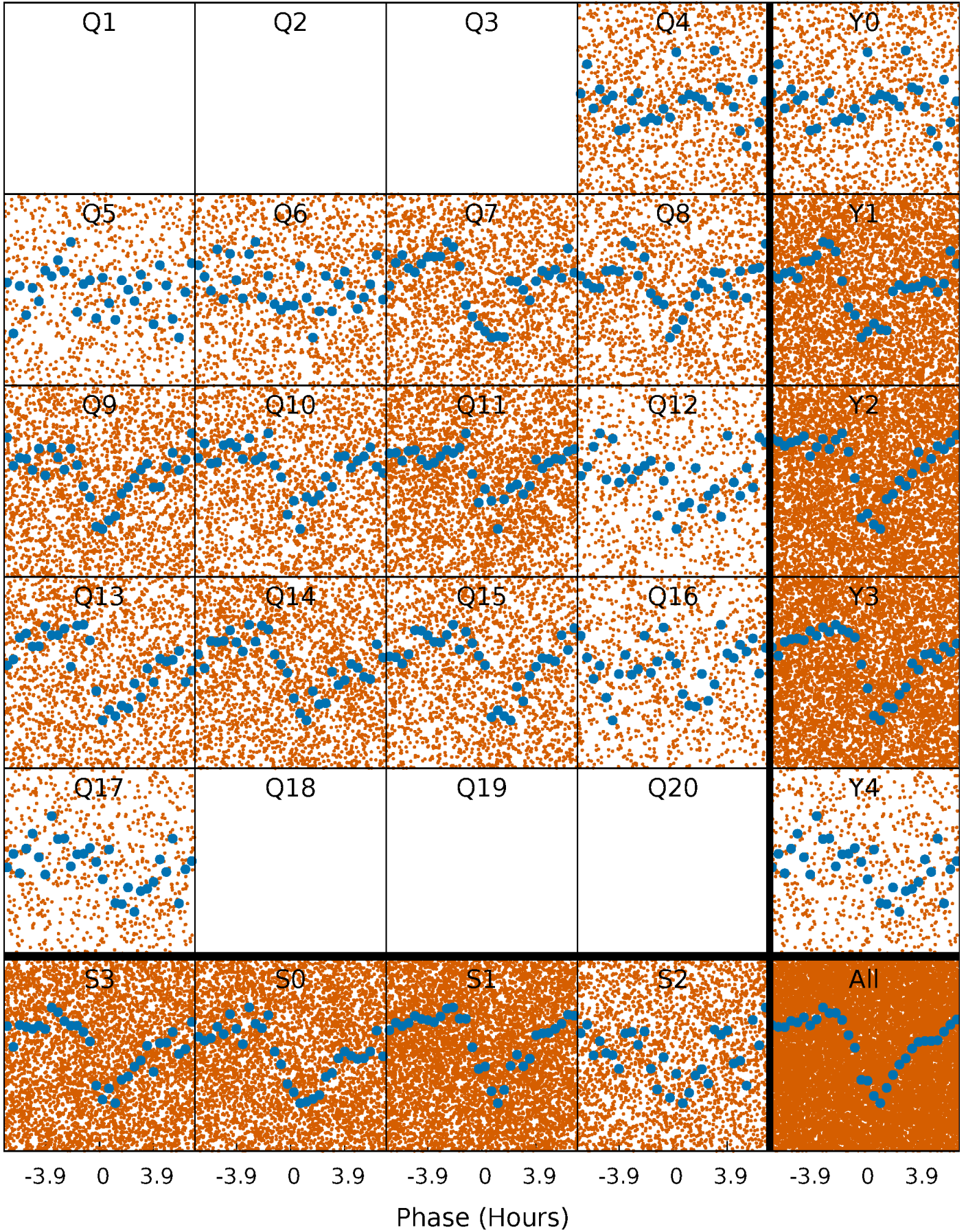


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



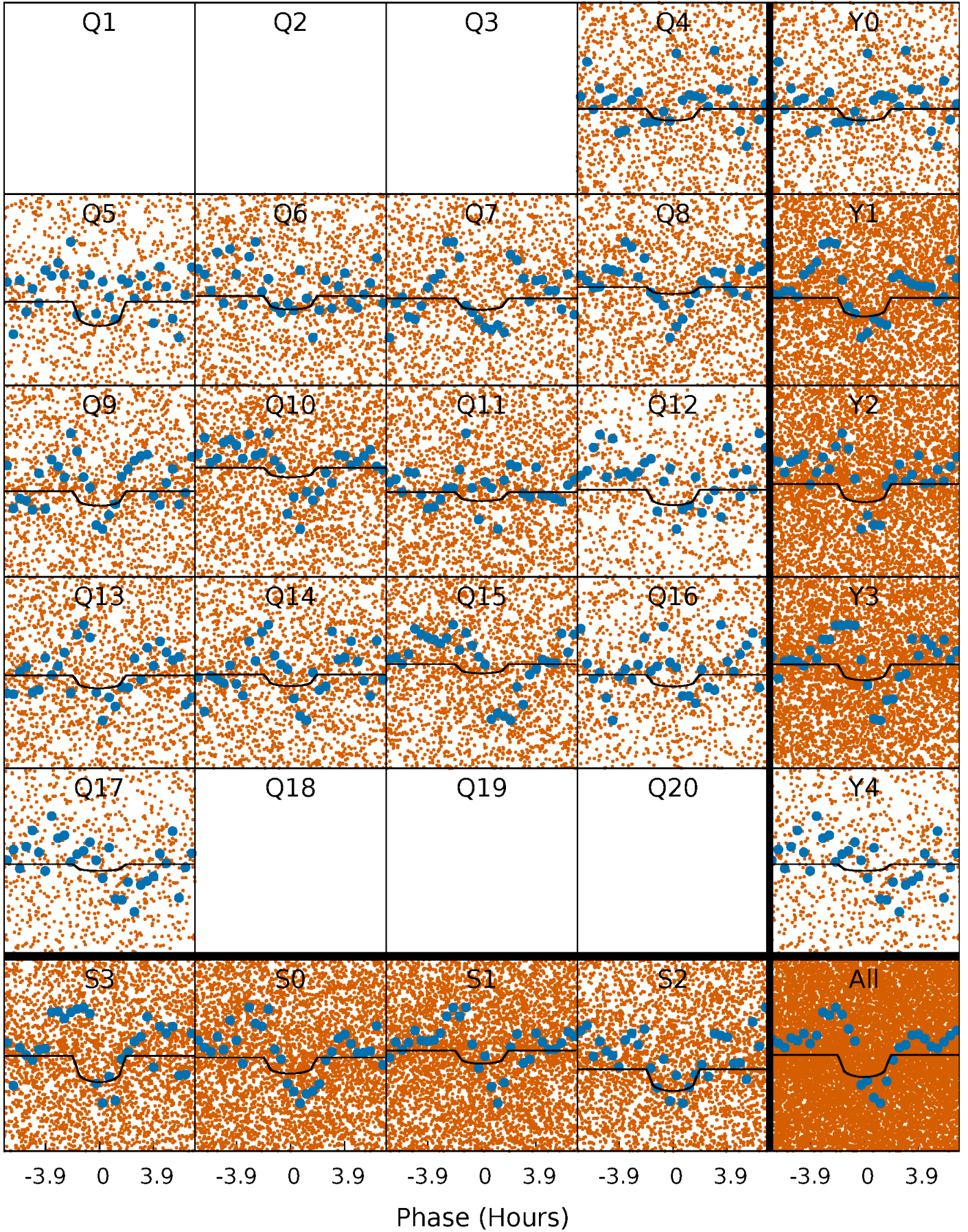
PDC Quarter-Phased Transit Curves

TCE 007281503-01 P= 0.566750 Days $T_0=131.856056$ (BKJD)



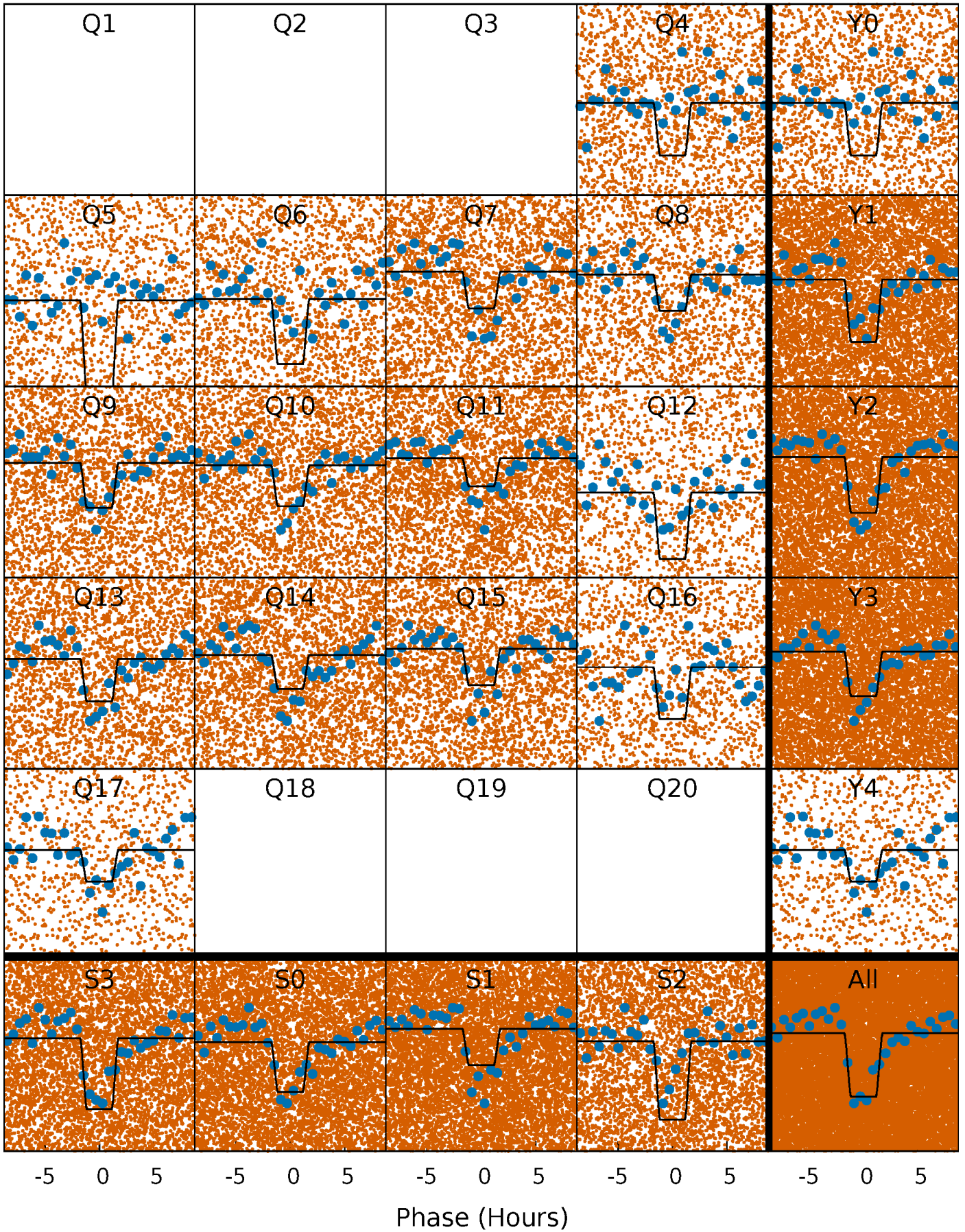
DV Quarter-Phased Transit Curves

TCE 007281503-01 P= 0.566750 Days $T_0=131.856056$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

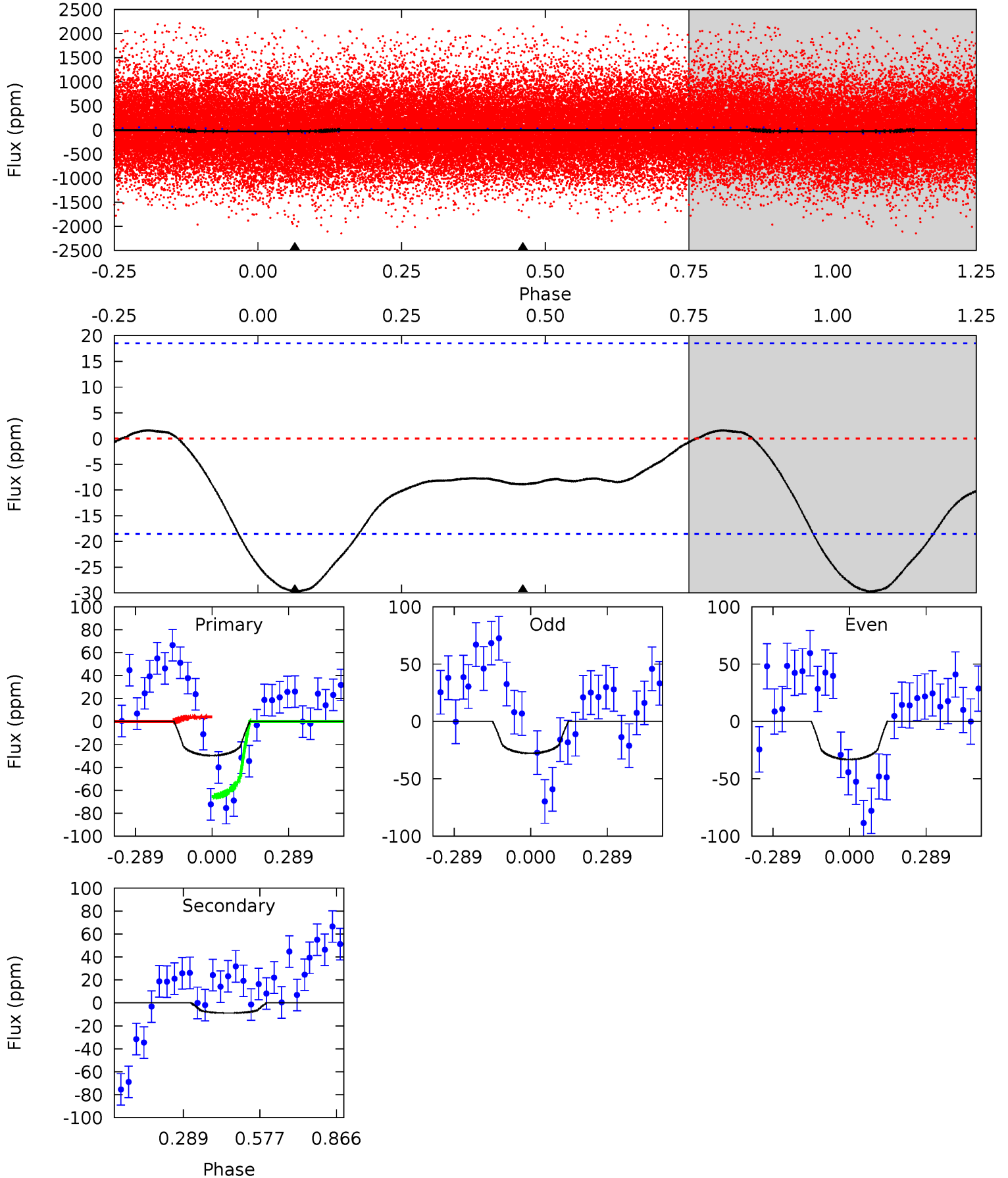
TCE 007281503-01 P= 0.566801 Days $T_0=131.814206$ (BKJD)



DV Model-Shift Uniqueness Test

007281503-01, P = 0.566750 Days, E = 131.856056 Days

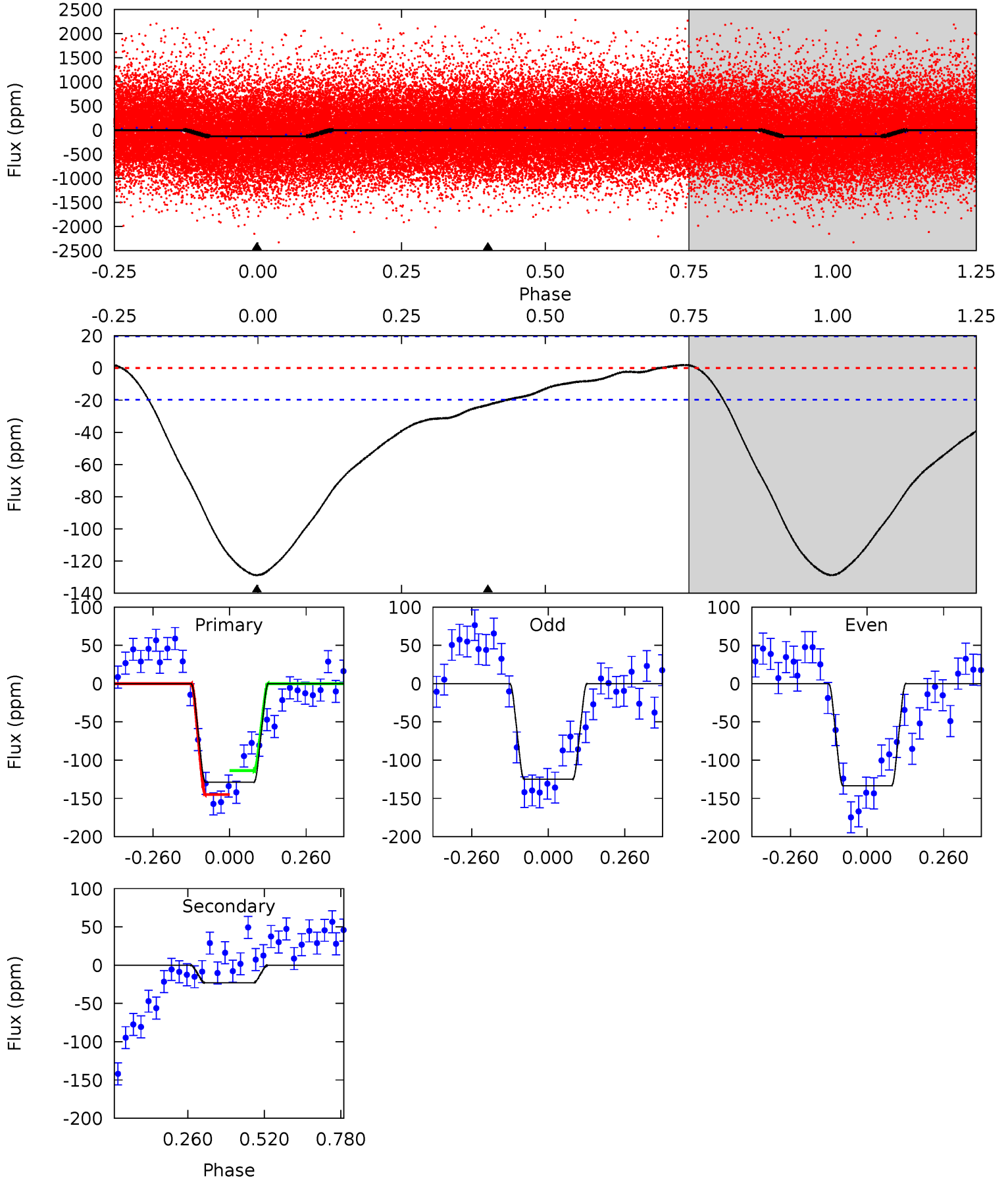
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.96	2.08	0	0	4.34	1.06	0.36	6.96	6.96	2.08	2.08	0.63	0.98	0.05	7.12



Alt Model-Shift Uniqueness Test

007281503-01, P = 0.566801 Days, E = 131.814206 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
28.5	5.08	0	0	4.36	1.13	0.36	28.5	28.5	5.08	5.08	0.95	0.92	0.01	3.43



Stellar Parameters For KIC 007281503

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6174^{+193}_{-257}	$4.455^{+0.054}_{-0.216}$	$-0.080^{+0.250}_{-0.300}$	$1.026^{+0.324}_{-0.130}$	$1.090^{+0.151}_{-0.166}$	$1.423^{+0.408}_{-0.753}$
	+3%/-4%	+1%/-5%	+312%/-375%	+32%/-13%	+14%/-15%	+29%/-53%
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 007281503-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-9 ± 4	$0.98^{+0.83}_{-0.63}$	3348^{+249}_{-182}	3659^{+2344}_{-6526}	$0.906^{+6.230}_{-0.714}$
Alt.	-23 ± 5	$1.46^{+0.95}_{-0.81}$	3370^{+256}_{-195}	3883^{+1763}_{-1147}	$1.101^{+4.226}_{-0.718}$

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 $A_{obs} \gg 1.0$

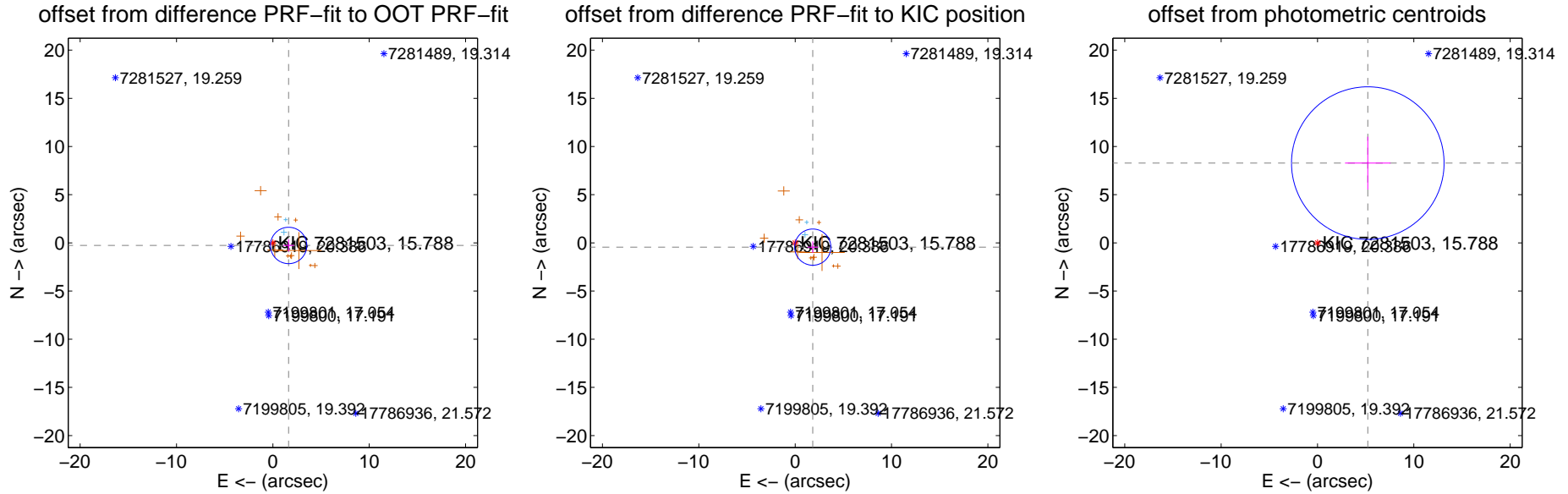
DV Centroid Data

Supplemental centroid analysis for 007281503-01. Kepler magnitude: 15.79. Transit SNR 5.54

There are 2 quarters with good PRF difference image offsets

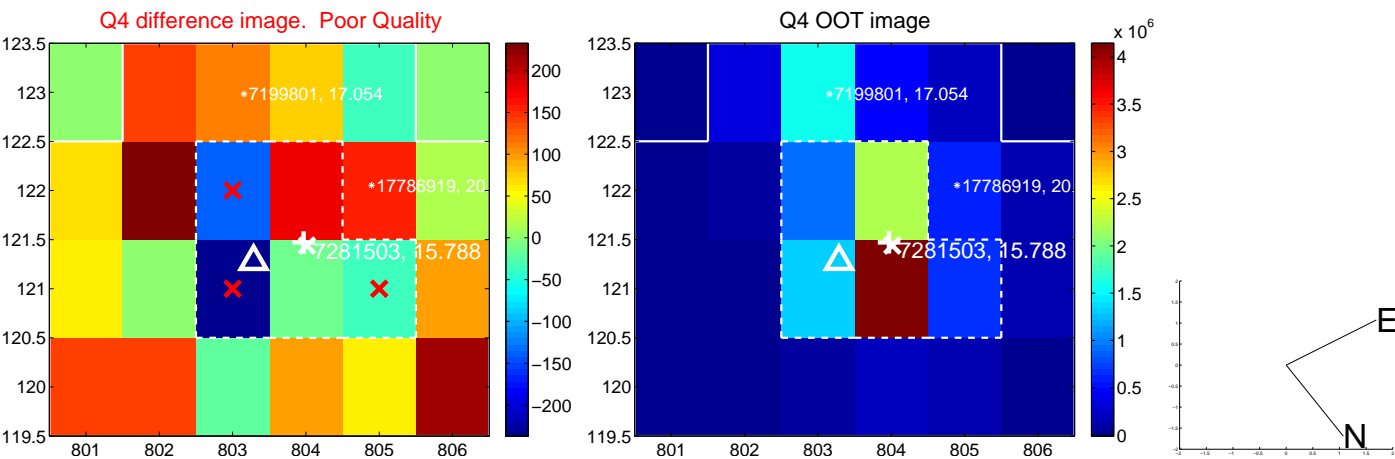
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.658 ± 0.629	2.63	-1.636 ± 0.569	-0.271 ± 0.634
PRF-fit source offset from KIC position	1.880 ± 0.627	3.00	-1.827 ± 0.552	-0.444 ± 0.598
photometric centroid source offset	9.79 ± 2.64	3.71	-5.22 ± 2.36	8.28 ± 2.74

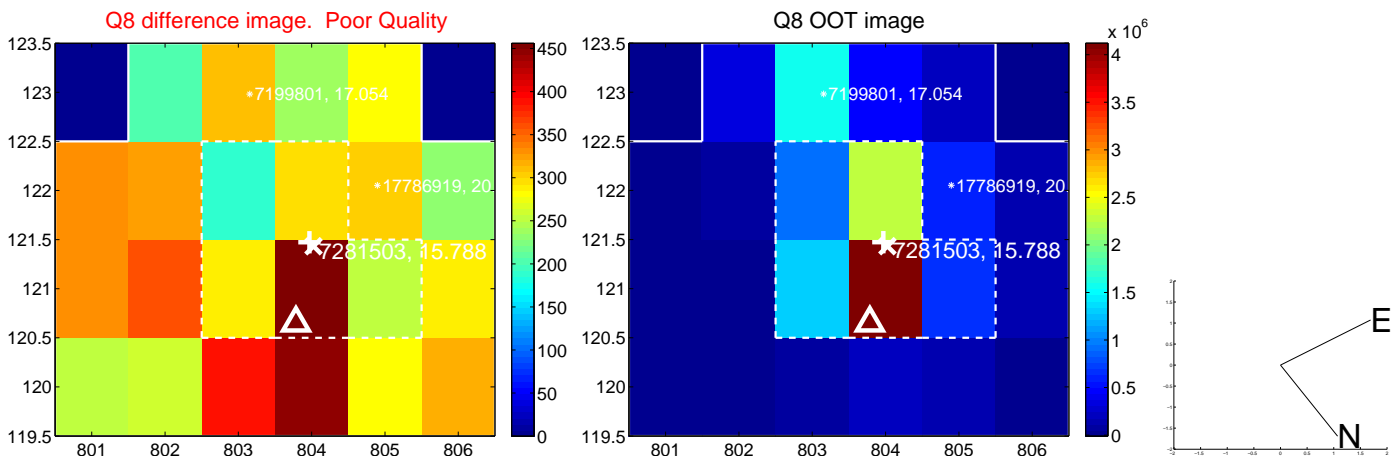
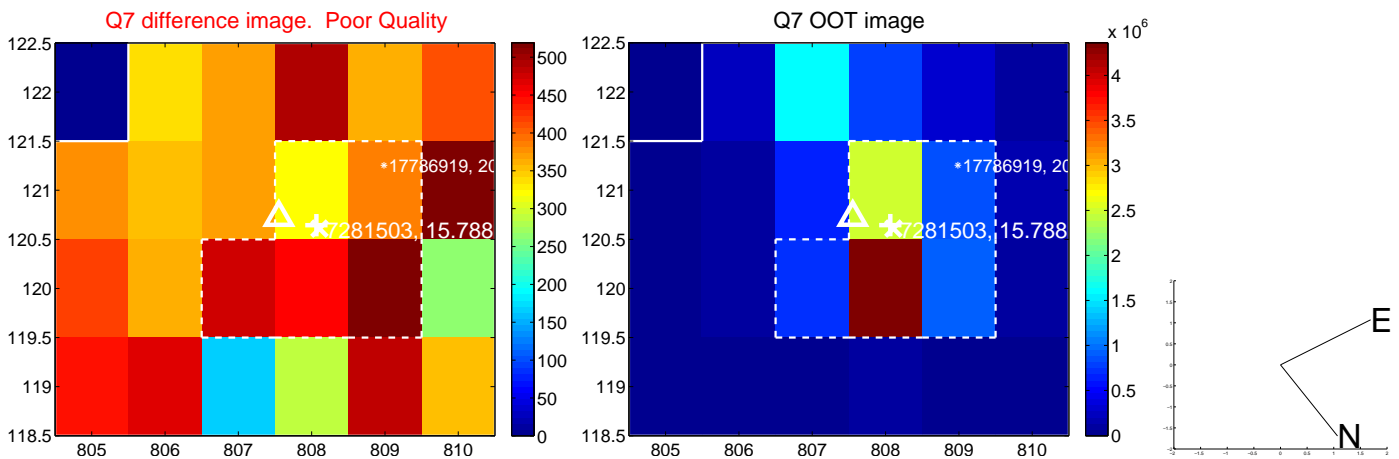
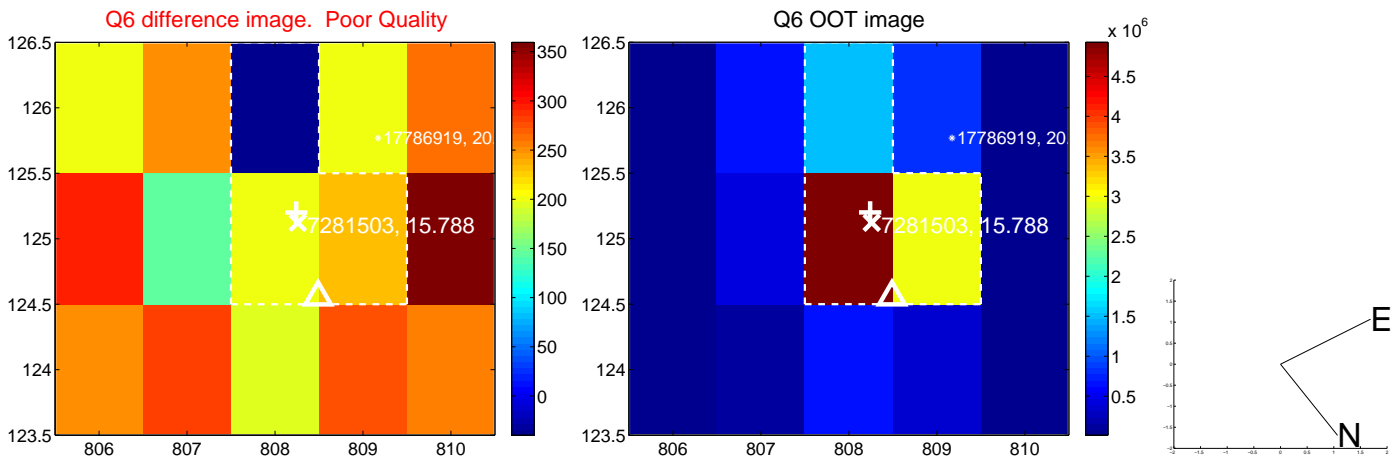
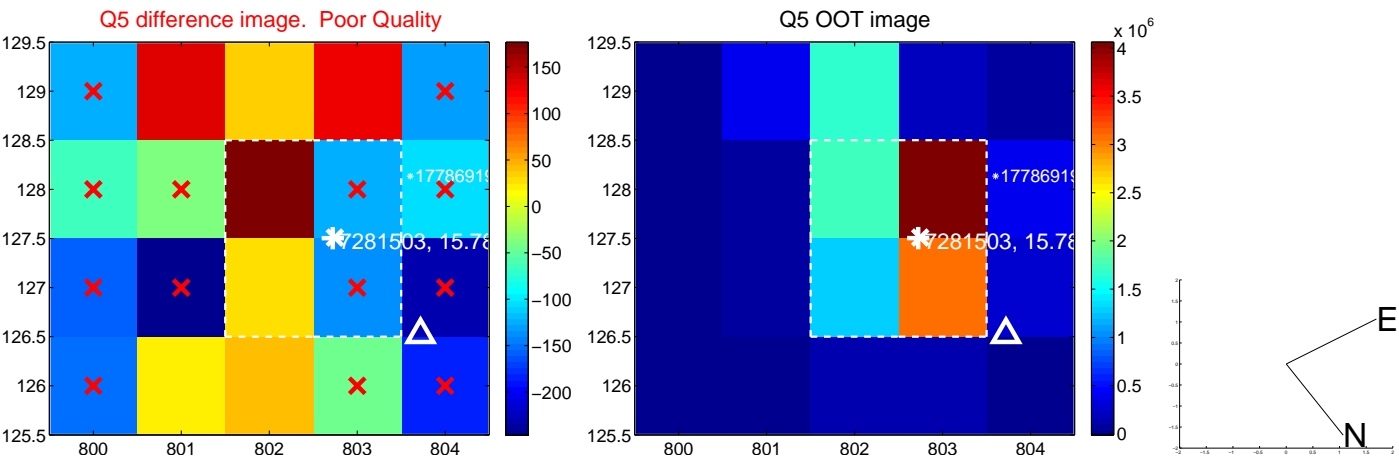


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

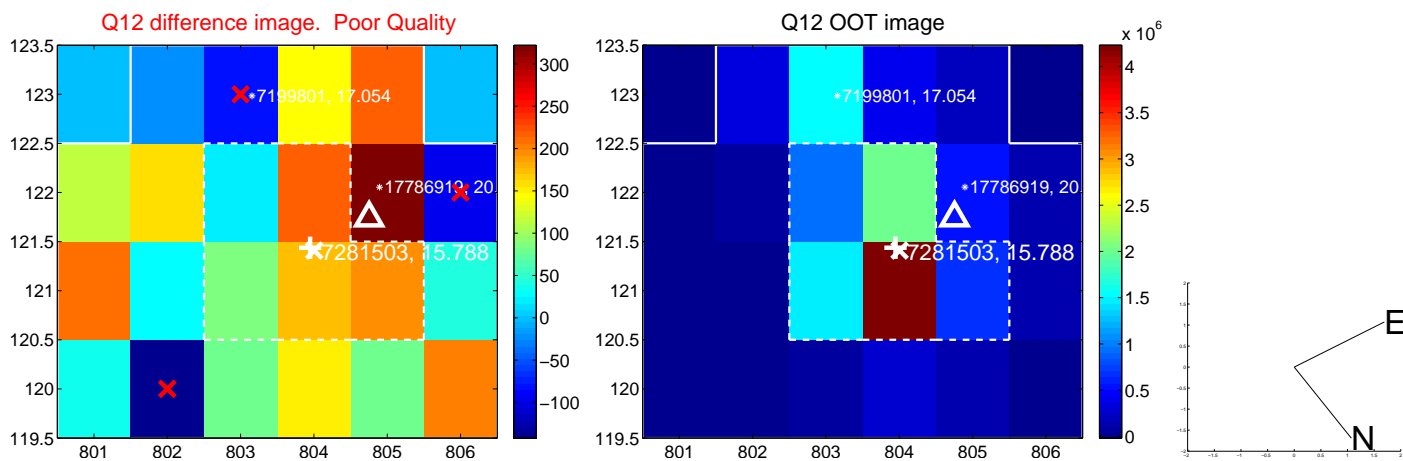
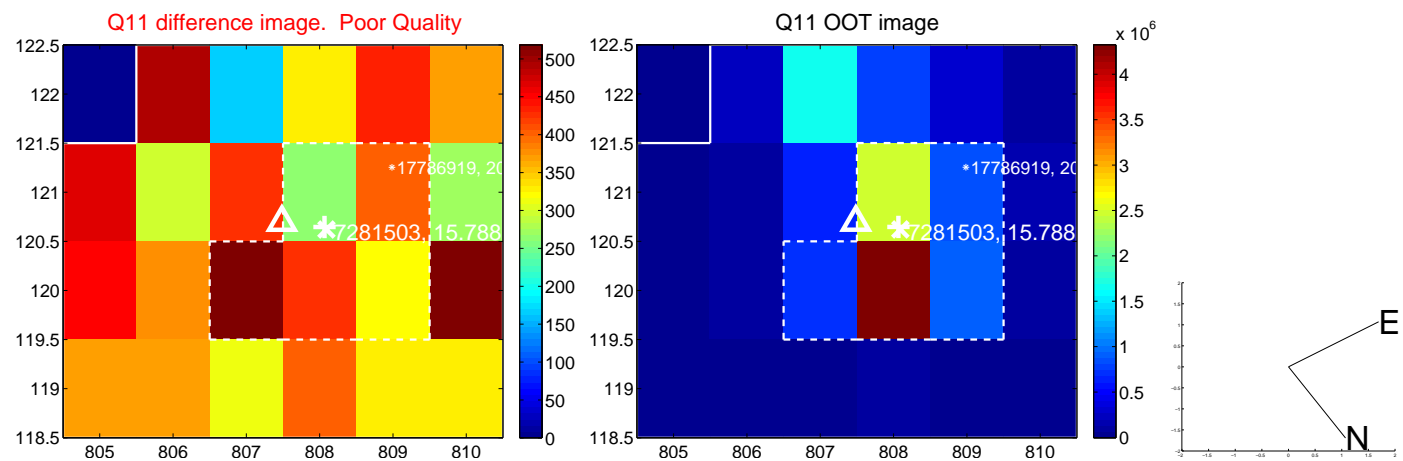
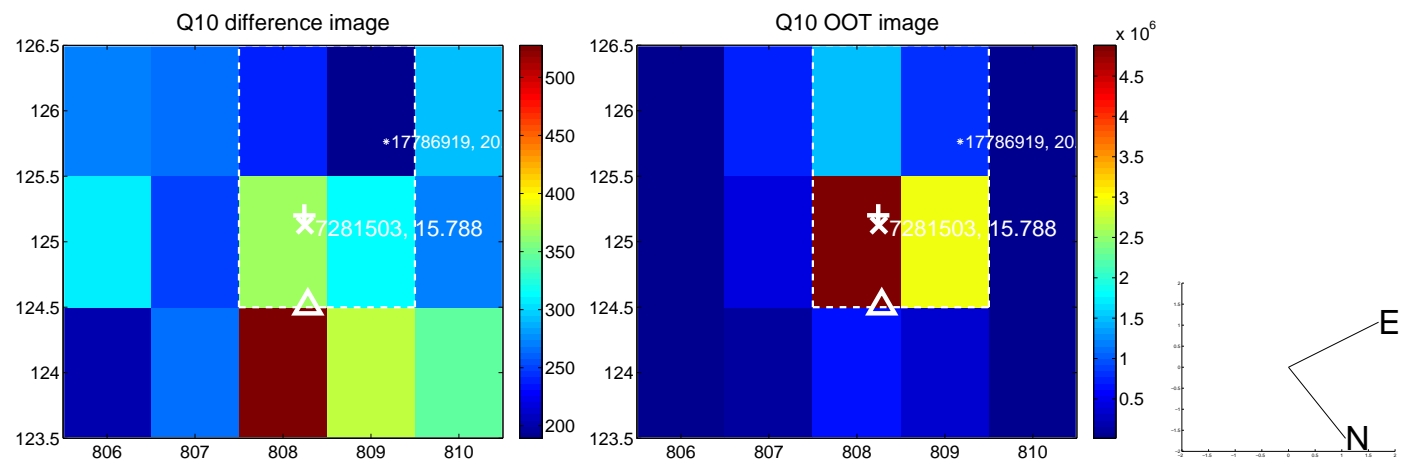
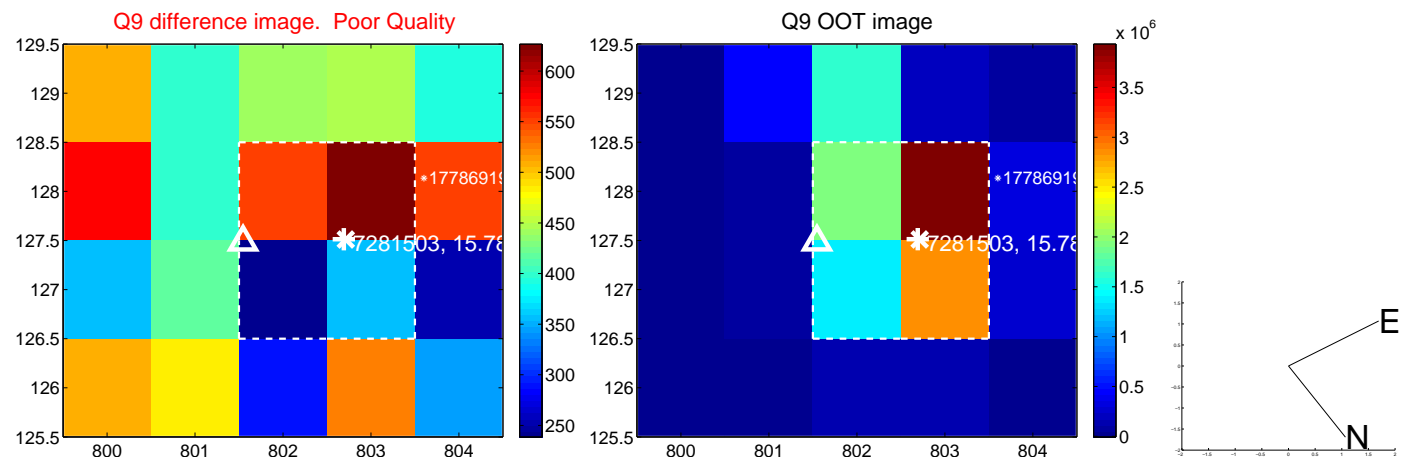
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



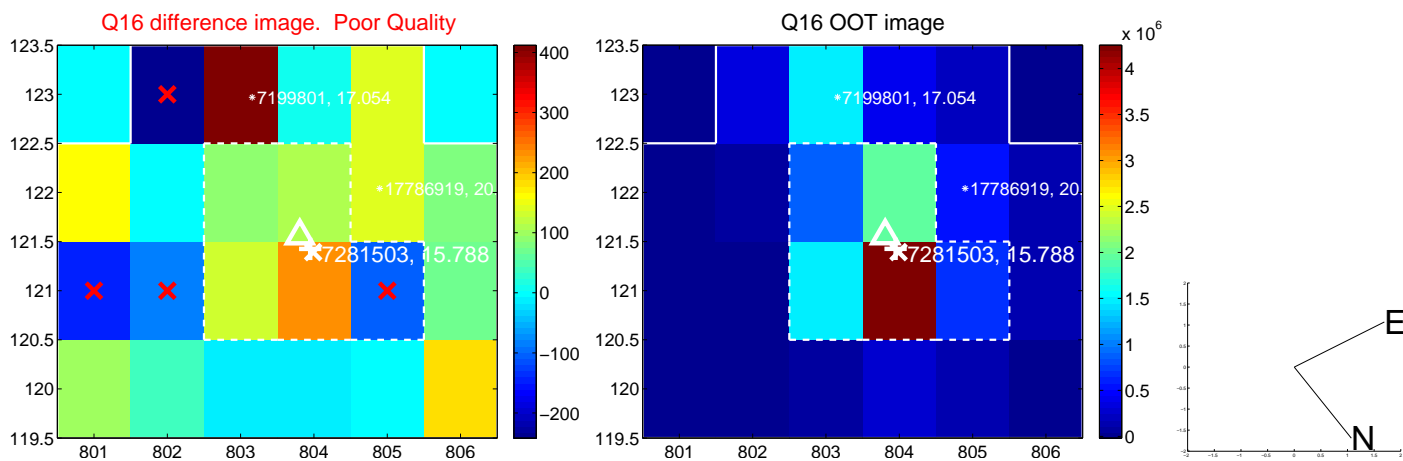
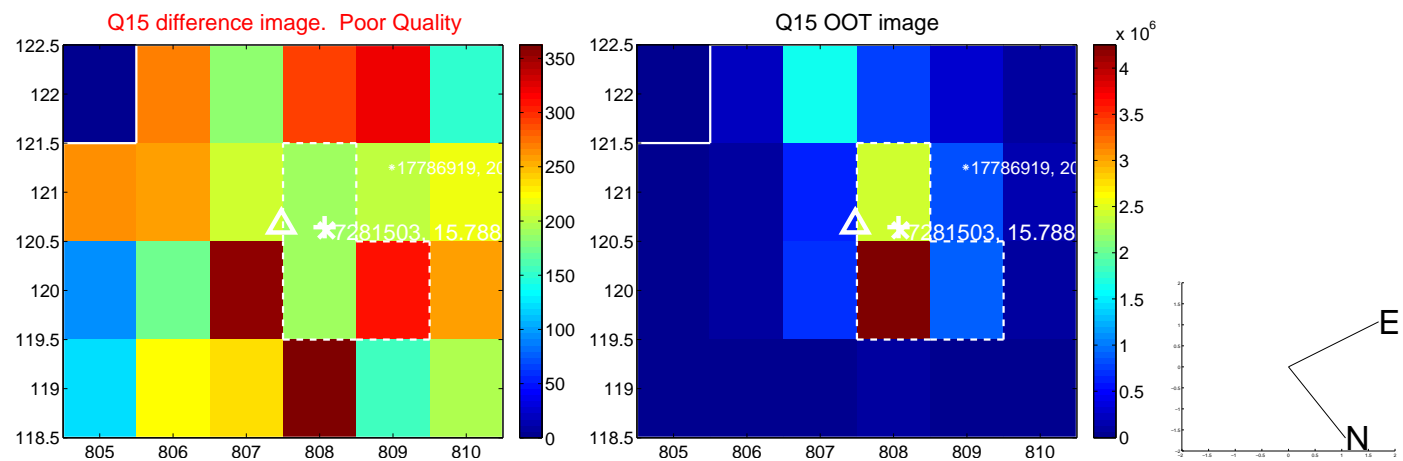
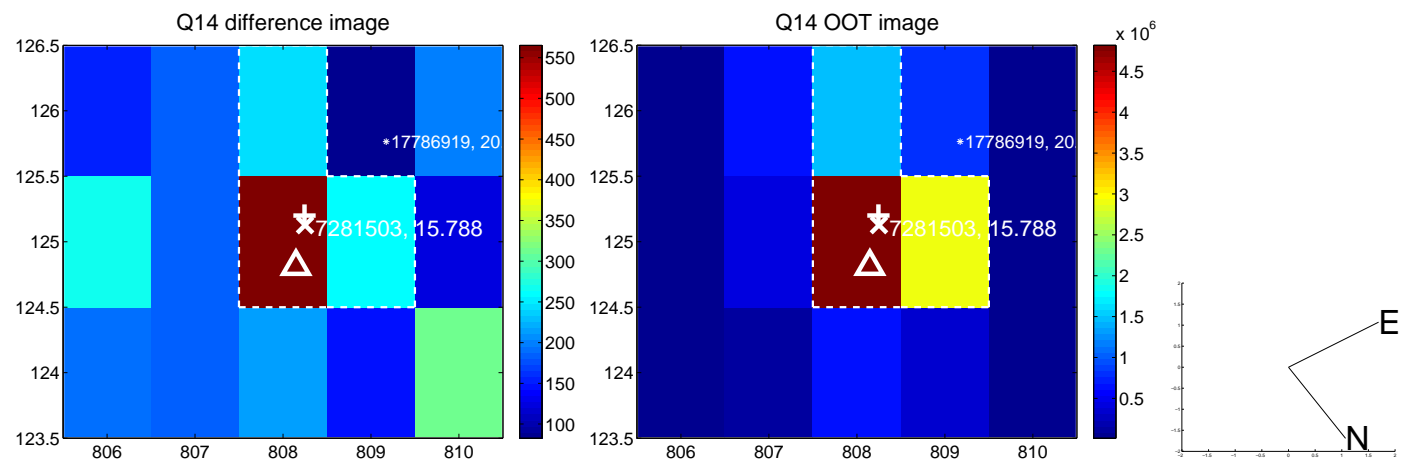
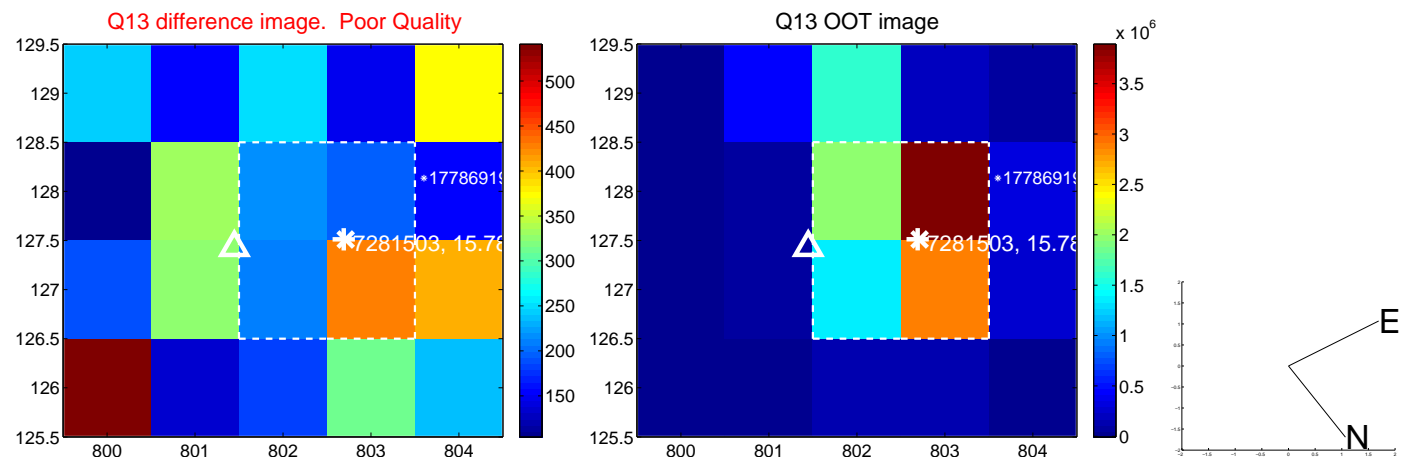
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

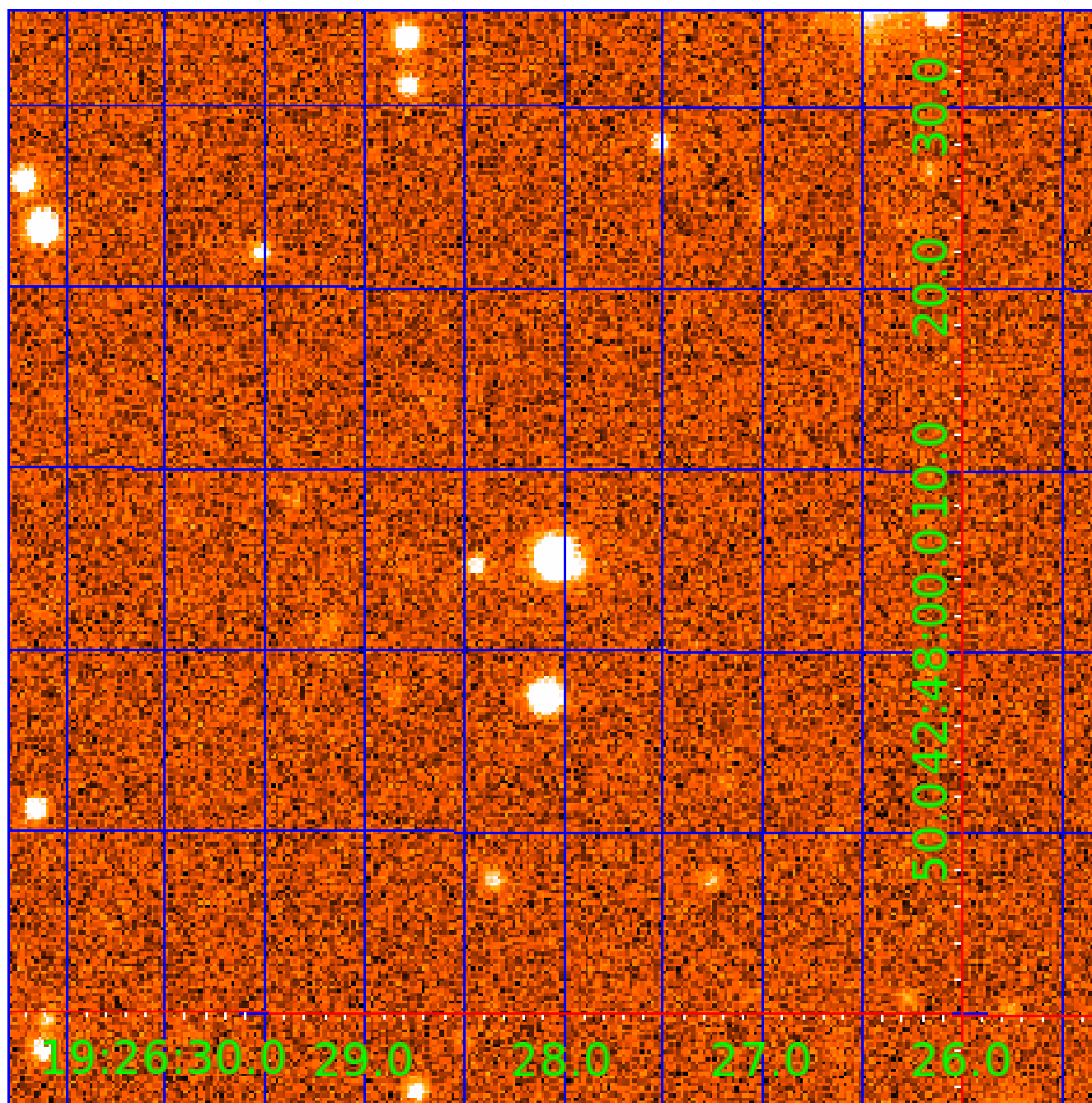


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007281503

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})
007281503-01	OBS	No	0.566750	131.856056	30.4	3.450	11.7	5.5	1.03	6174	0.58	7179.11
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007281503-03	OBS	No	134.351732	152.347683	765.4	2.556	7.4	7.6	1.03	6174	3.13	4.89

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007281503-01	OBS	FP	0.00	1	0	0	1	LPP_DV—EPHEM_MATCH
007281503-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
007281503-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_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.

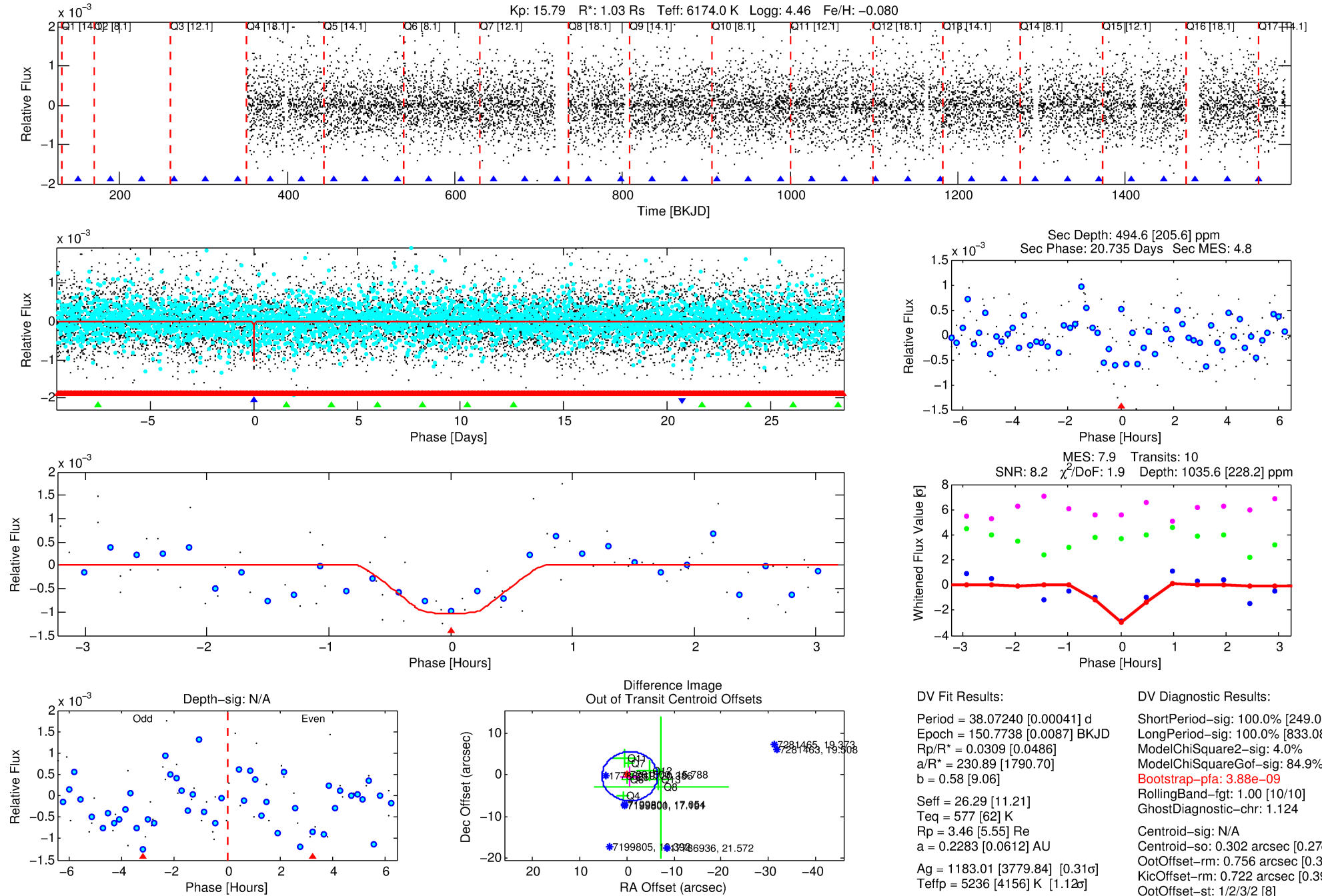
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007281503-02

No Significant Match Found

DV One-Page Summary

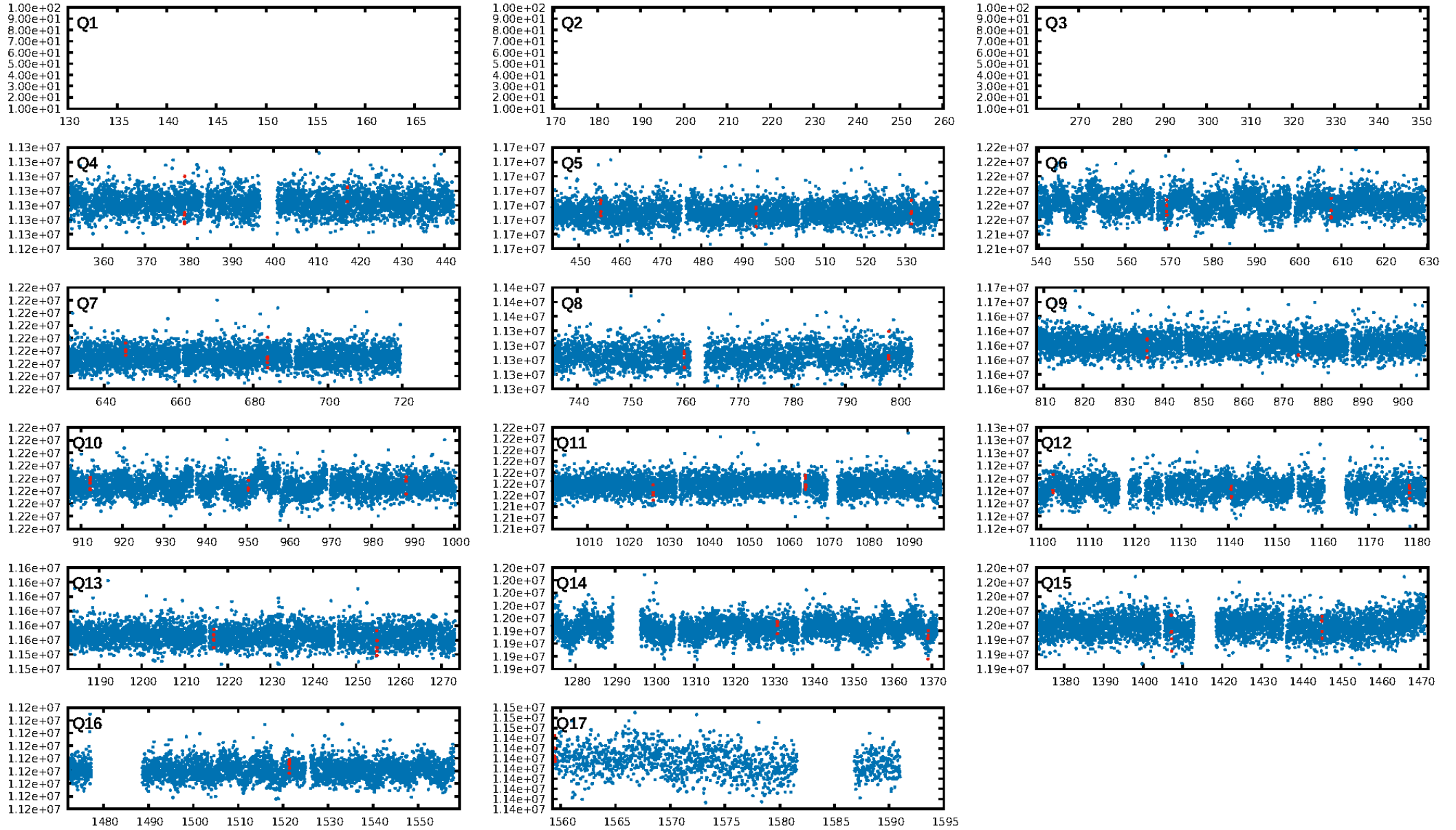
KIC: 7281503 Candidate: 2 of 3 Period: 38.072 d



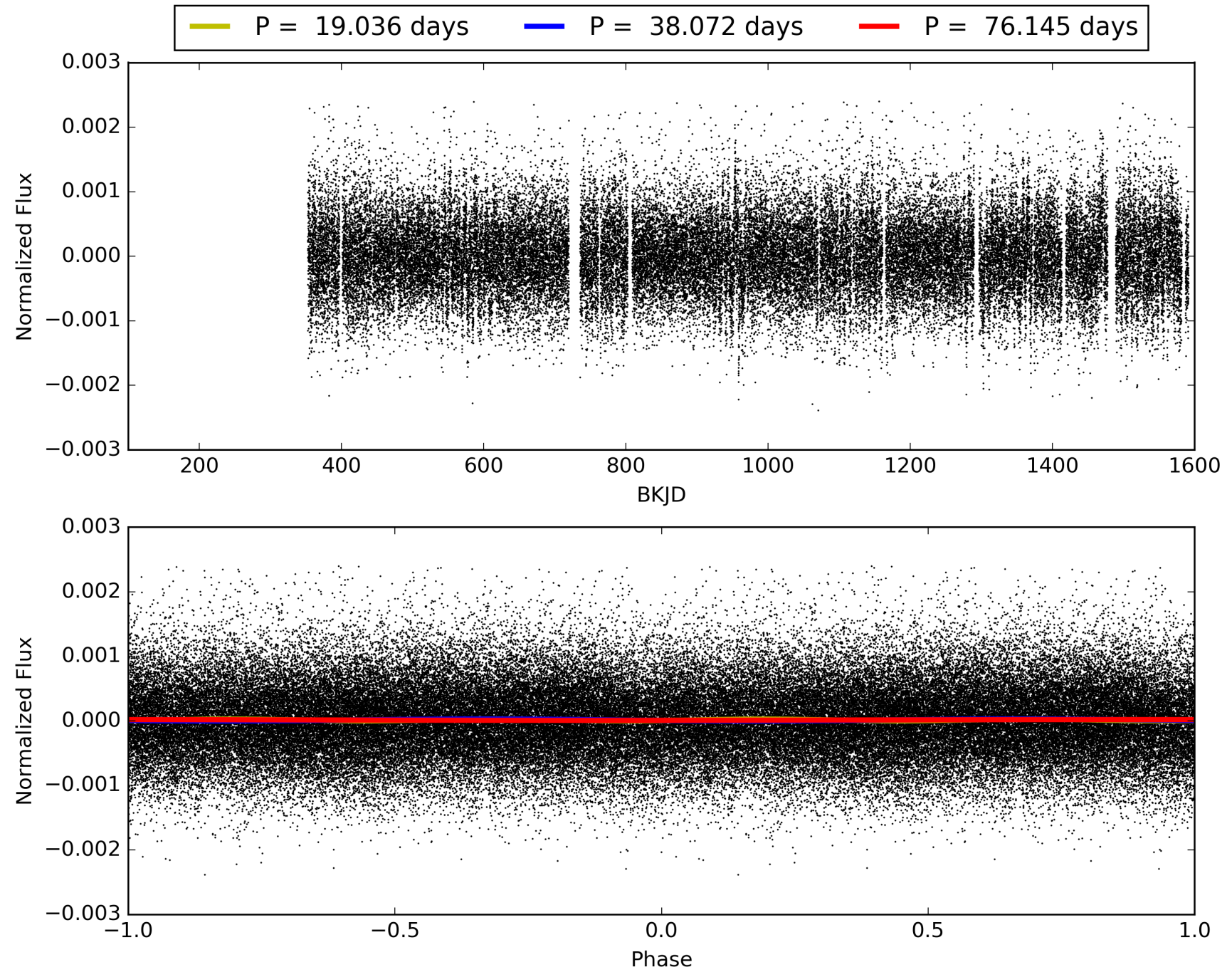
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 18:52:42 Z

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

TCE 007281503-02, PDC Light Curves

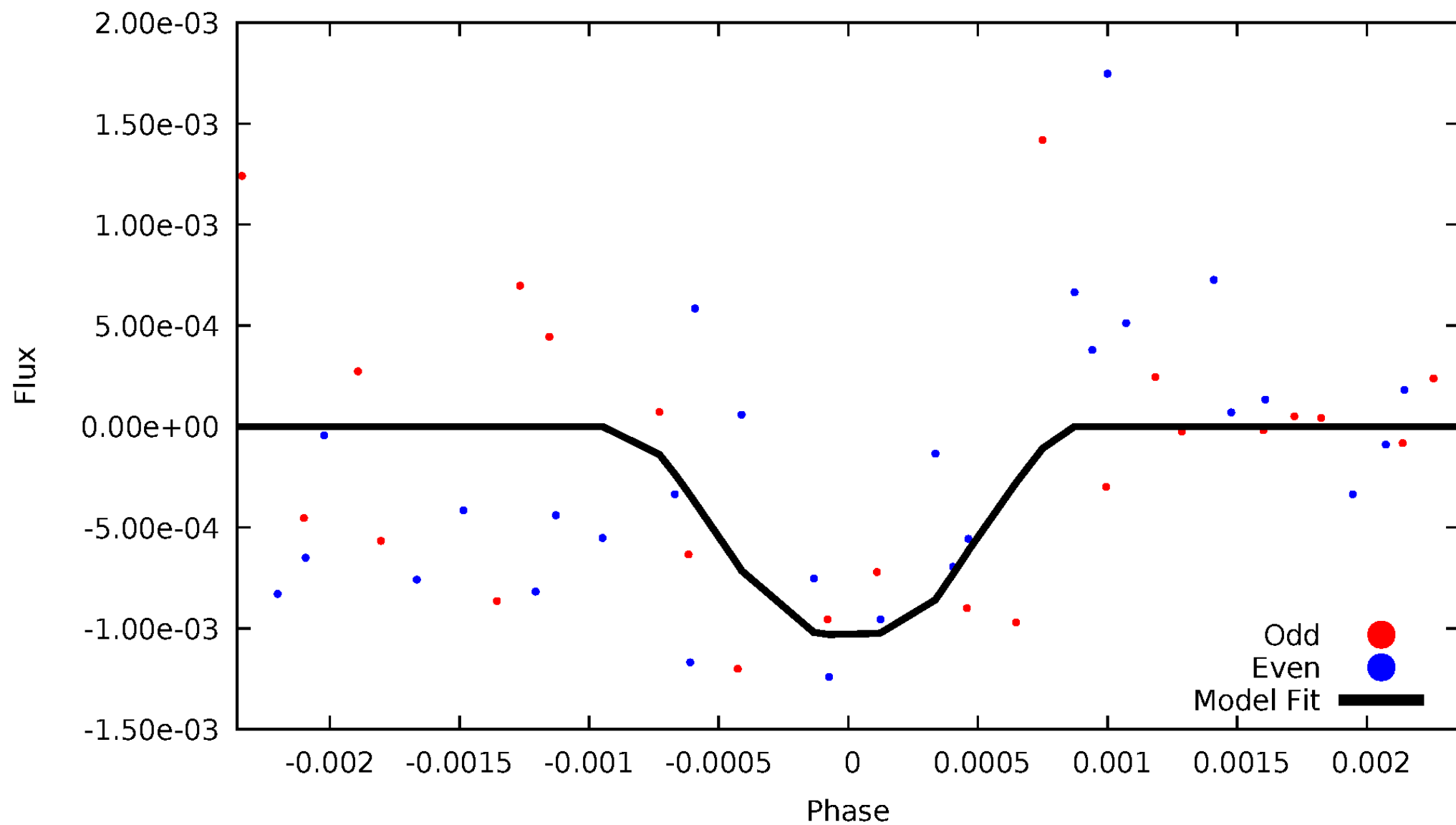


TCE 007281503-02



DV Odd/Even

TCE 007281503-02

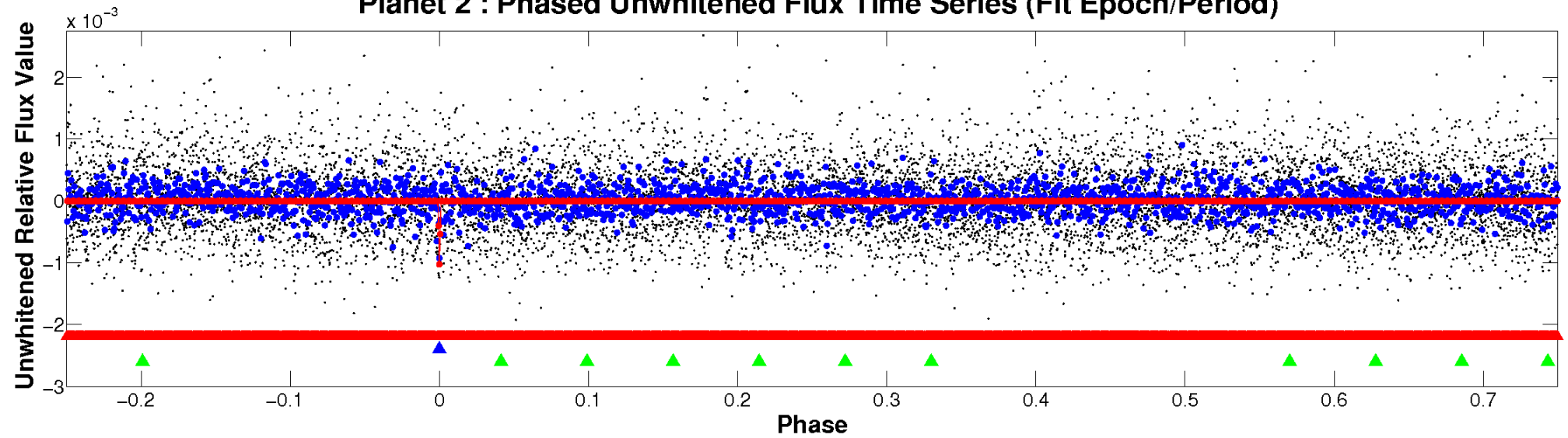


ALT Odd/Even

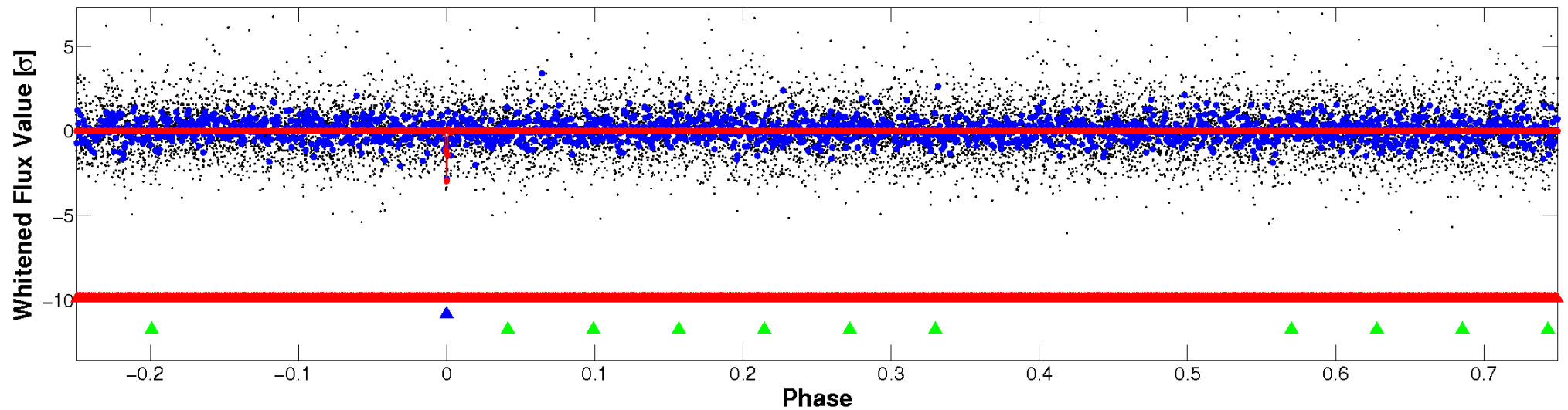
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

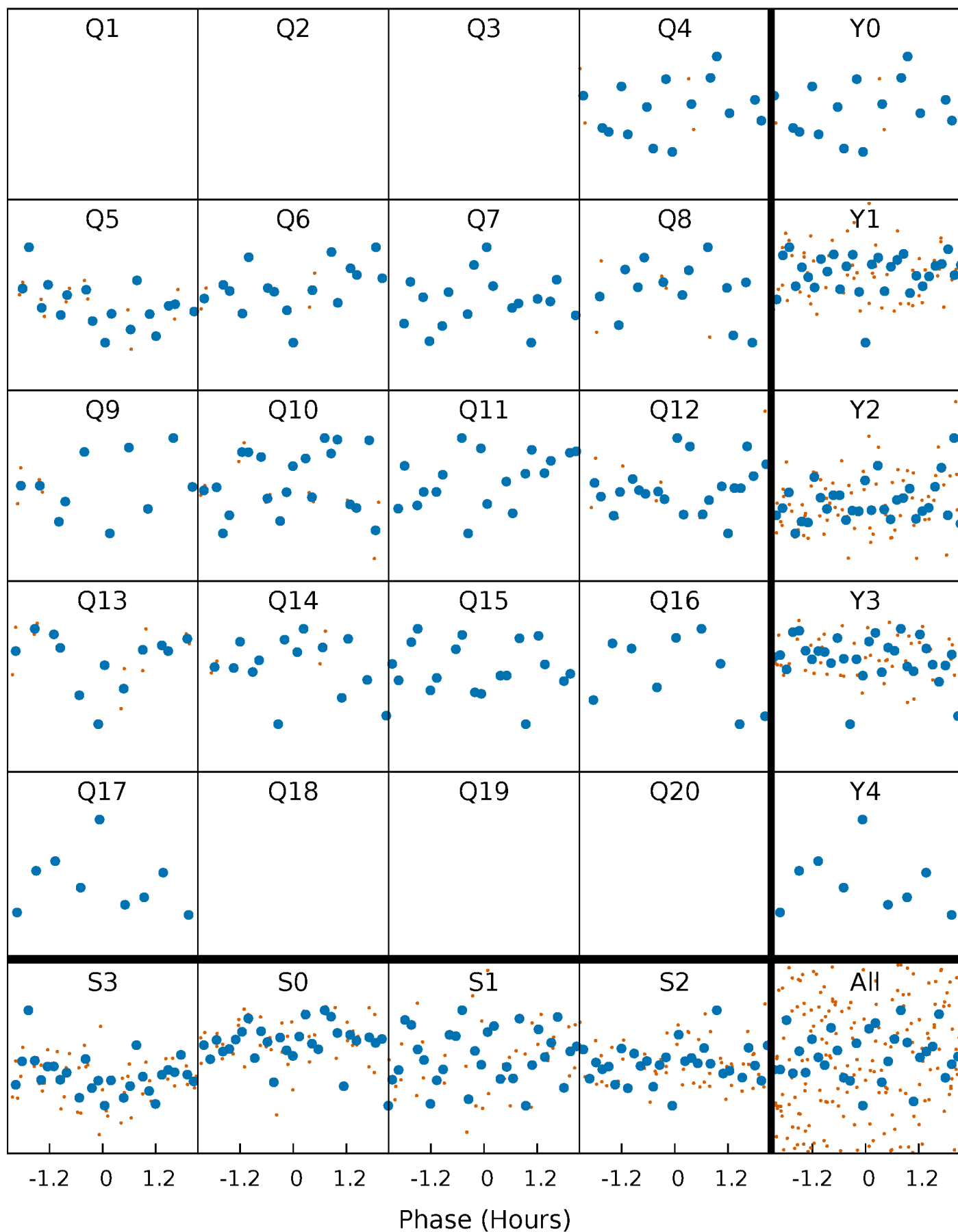


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



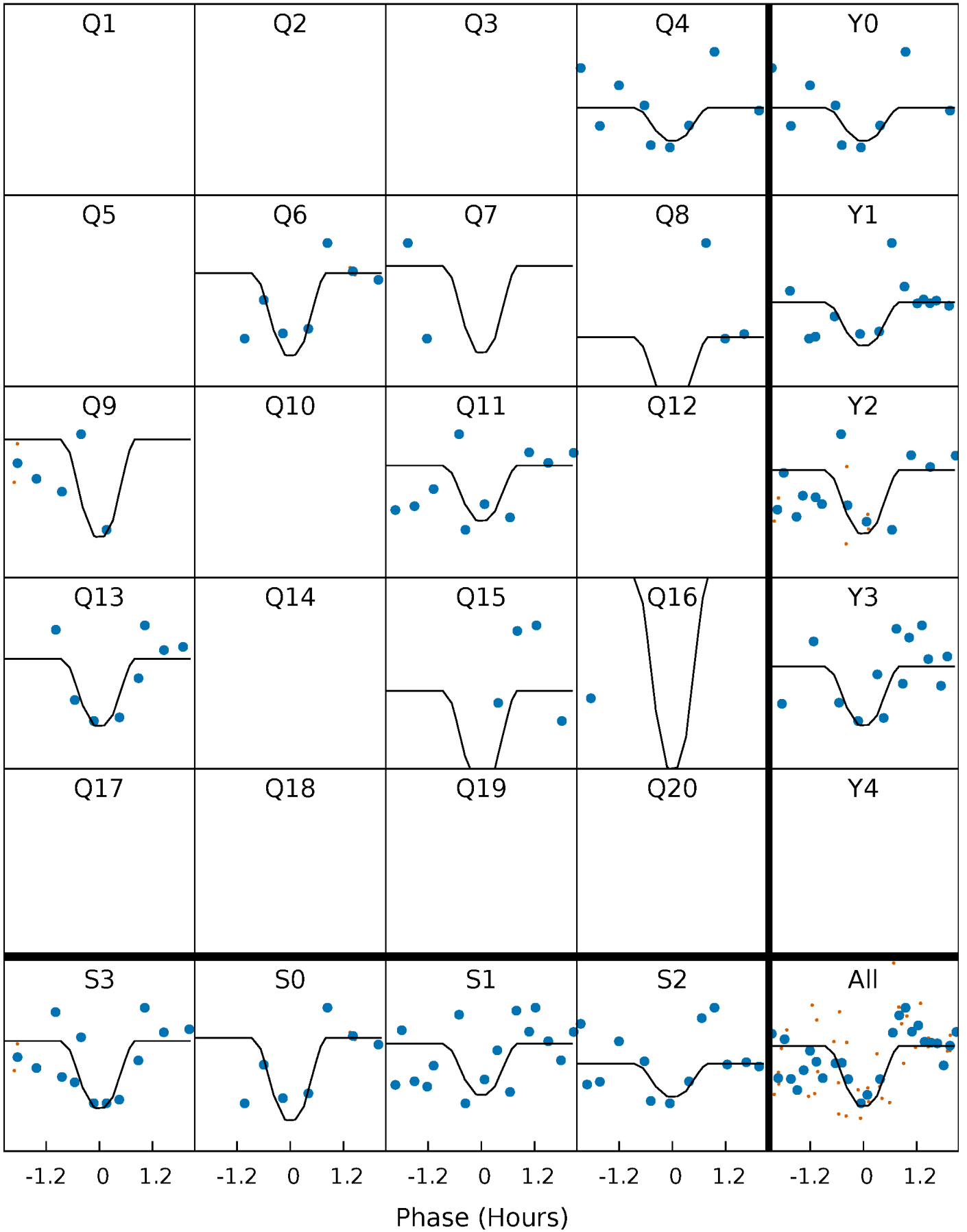
PDC Quarter-Phased Transit Curves

TCE 007281503-02 $P = 38.072398$ Days $T_0 = 150.773764$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 007281503-02 P= 38.072398 Days $T_0=150.773764$ (BKJD)

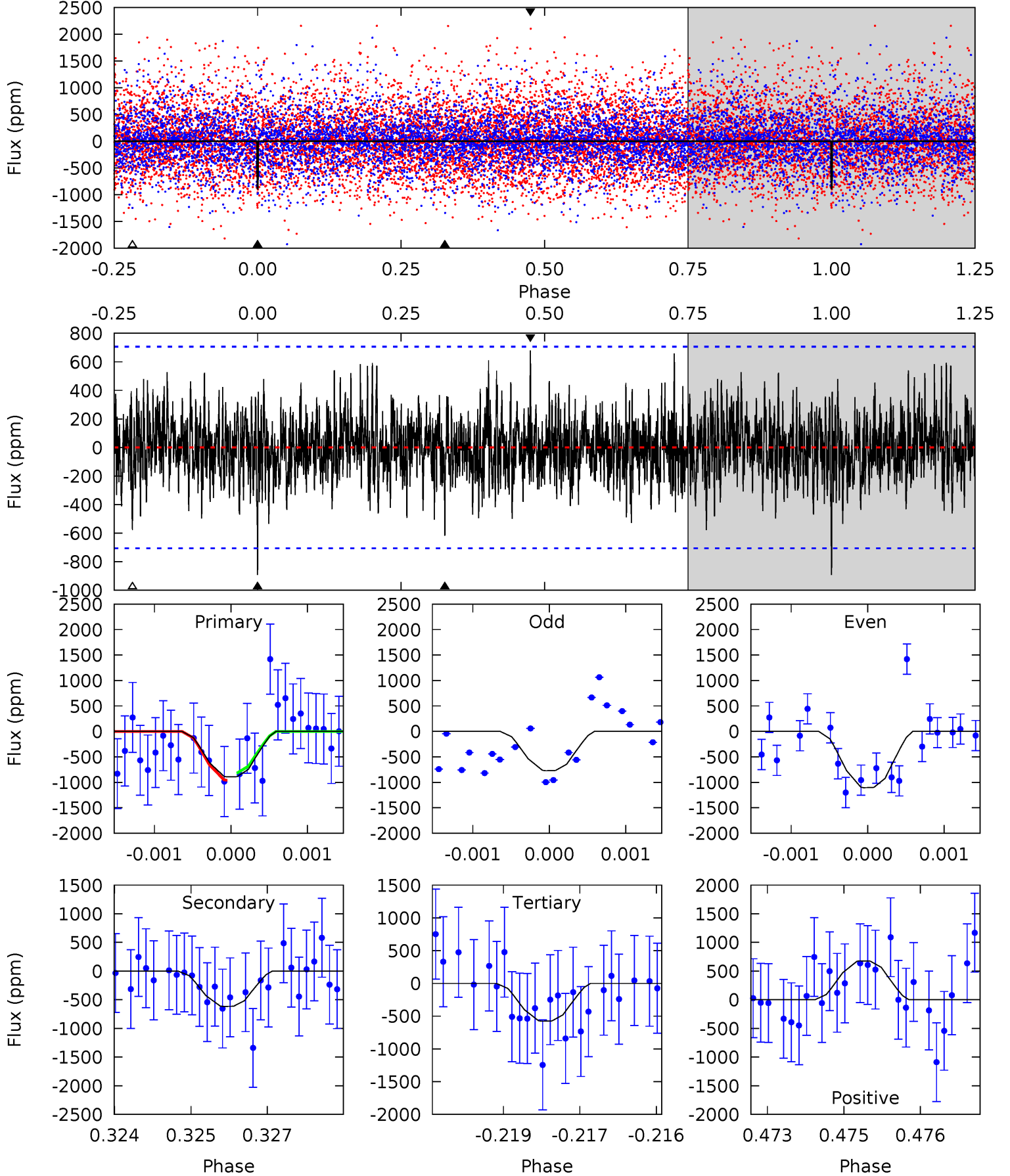


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

007281503-02, P = 38.072398 Days, E = 150.773764 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.80	4.70	4.40	5.17	5.38	3.18	1.36	2.40	1.63	0.30	-0.47	1.30	0.89	0.43	0.55



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 007281503

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6174^{+193}_{-257}	$4.455^{+0.054}_{-0.216}$	$-0.080^{+0.250}_{-0.300}$	$1.026^{+0.324}_{-0.130}$	$1.090^{+0.151}_{-0.166}$	$1.423^{+0.408}_{-0.753}$
	+3%/-4%	+1%/-5%	+312%/-375%	+32%/-13%	+14%/-15%	+29%/-53%
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 007281503-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-617 ± 131	$5.68^{+5.19}_{-3.93}$	828^{+59}_{-52}	4590^{+3209}_{-947}	535^{+4455}_{-393}
Alt.	N/A	N/A	N/A	N/A	N/A

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

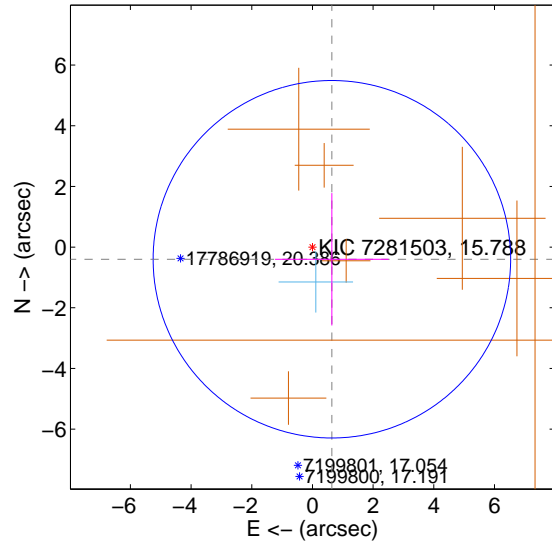
Supplemental centroid analysis for 007281503-02. Kepler magnitude: 15.79. Transit SNR 8.25

There are 1 quarters with good PRF difference image offsets

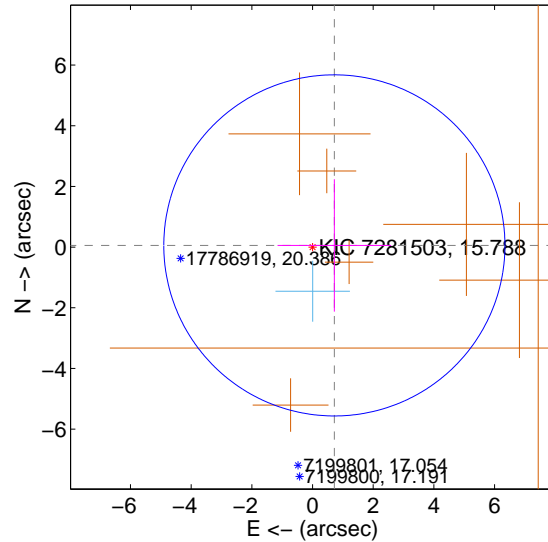
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.756 ± 1.964	0.38	-0.641 ± 1.872	-0.400 ± 2.182
PRF-fit source offset from KIC position	0.722 ± 1.874	0.39	-0.720 ± 1.872	0.056 ± 2.182
photometric centroid source offset	0.30 ± 1.12	0.27	0.26 ± 1.08	-0.15 ± 1.20

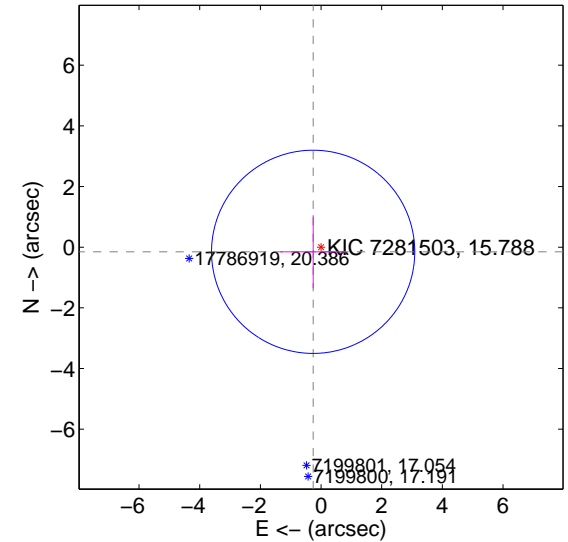
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

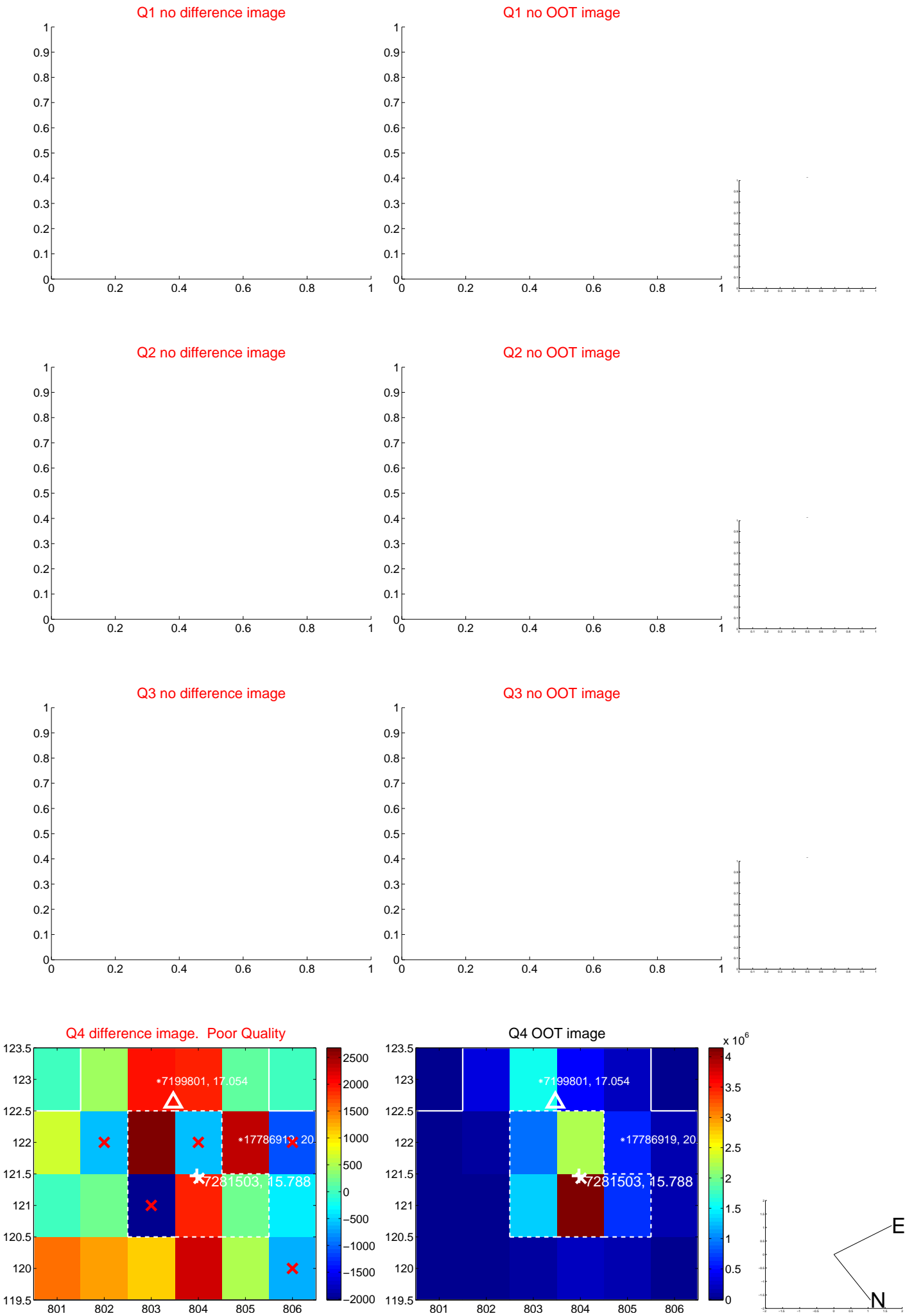


offset from photometric centroids

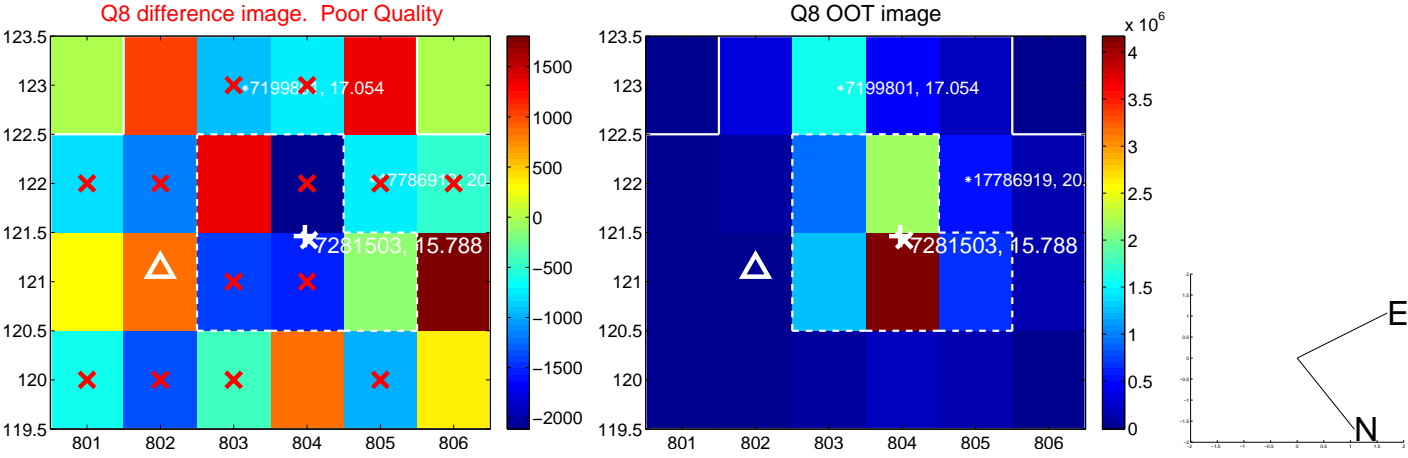
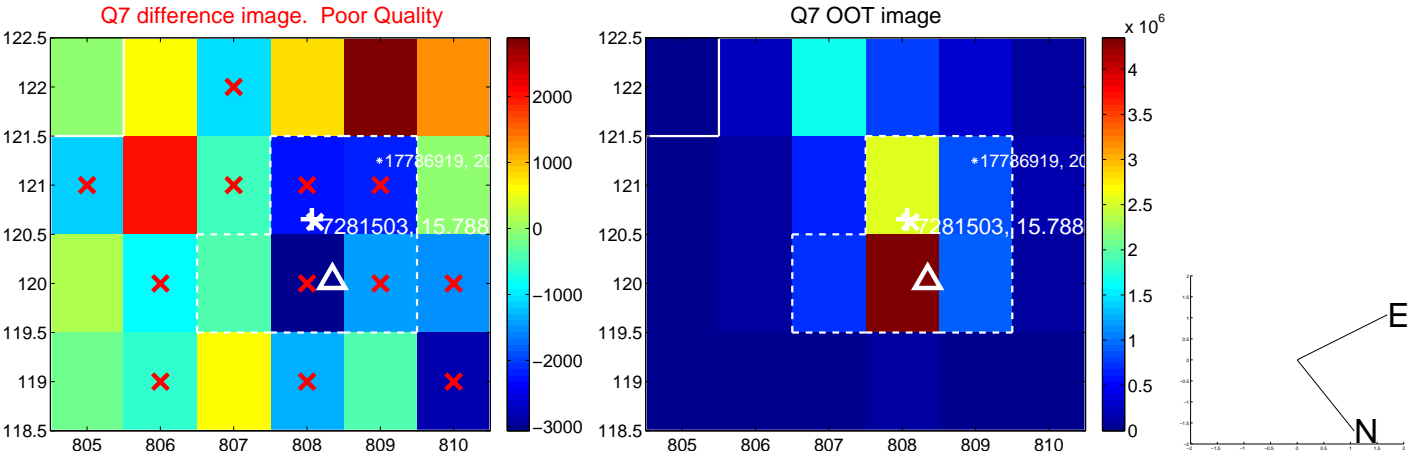
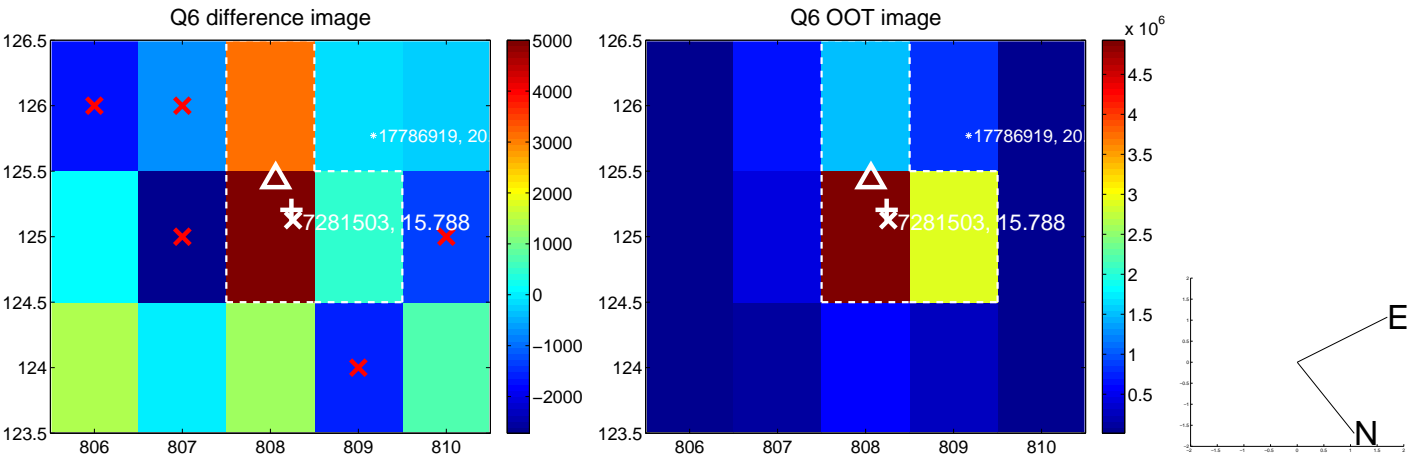
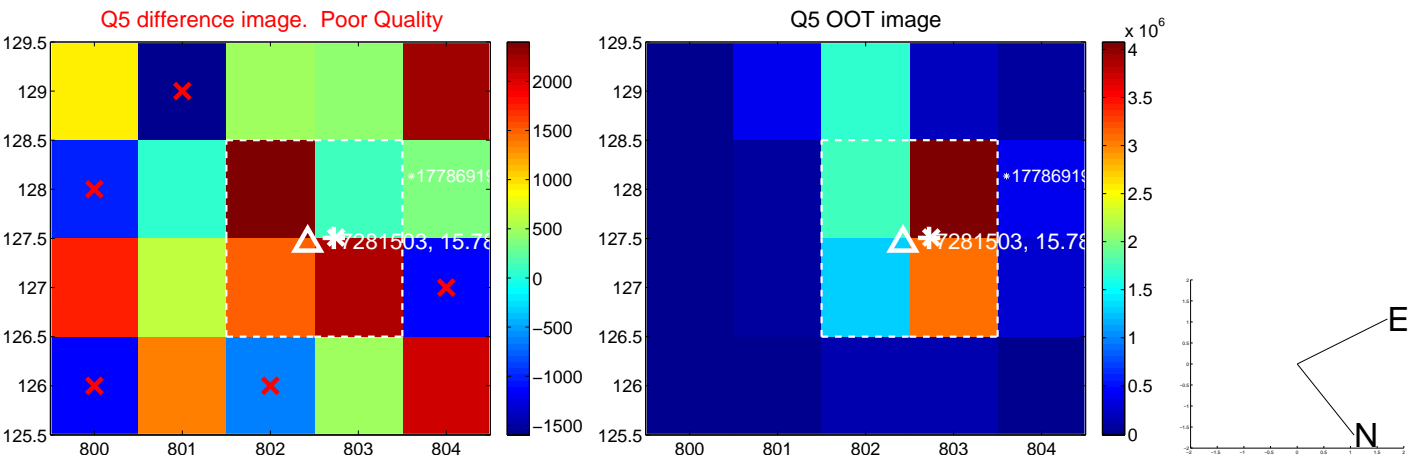


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

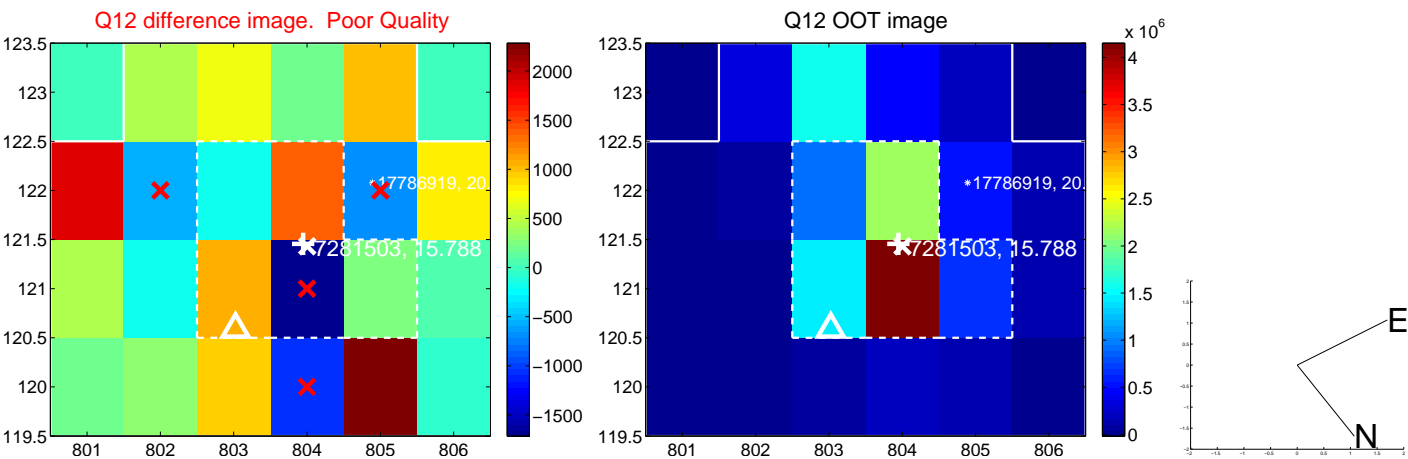
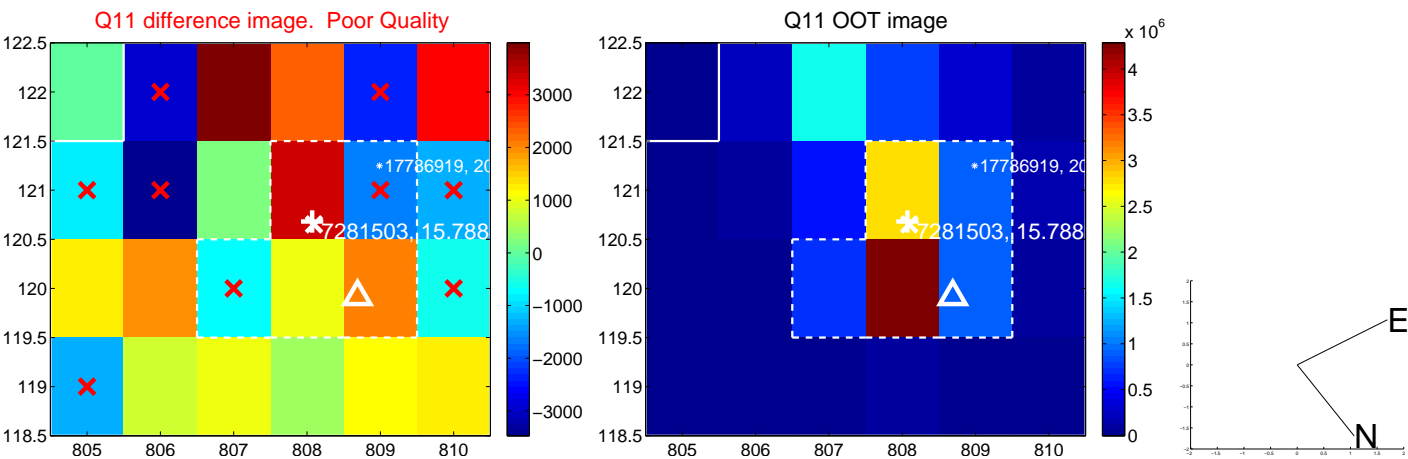
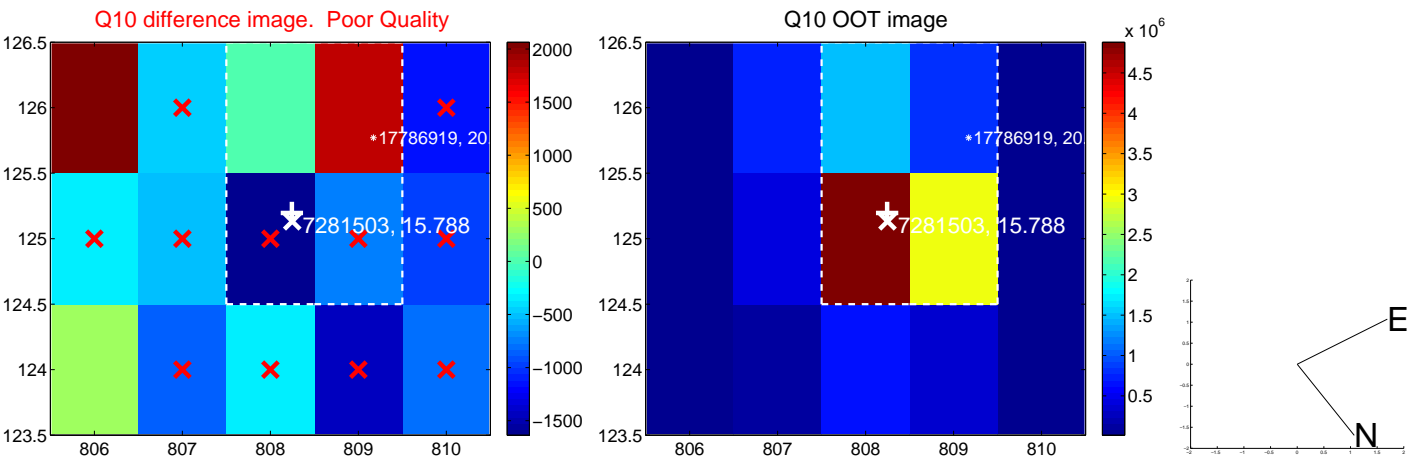
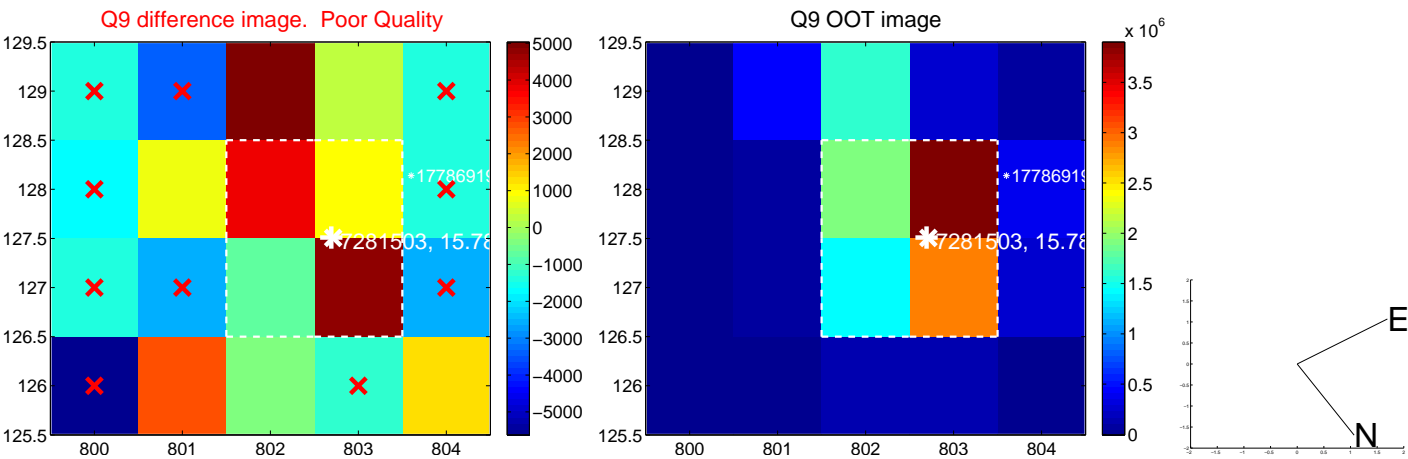
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



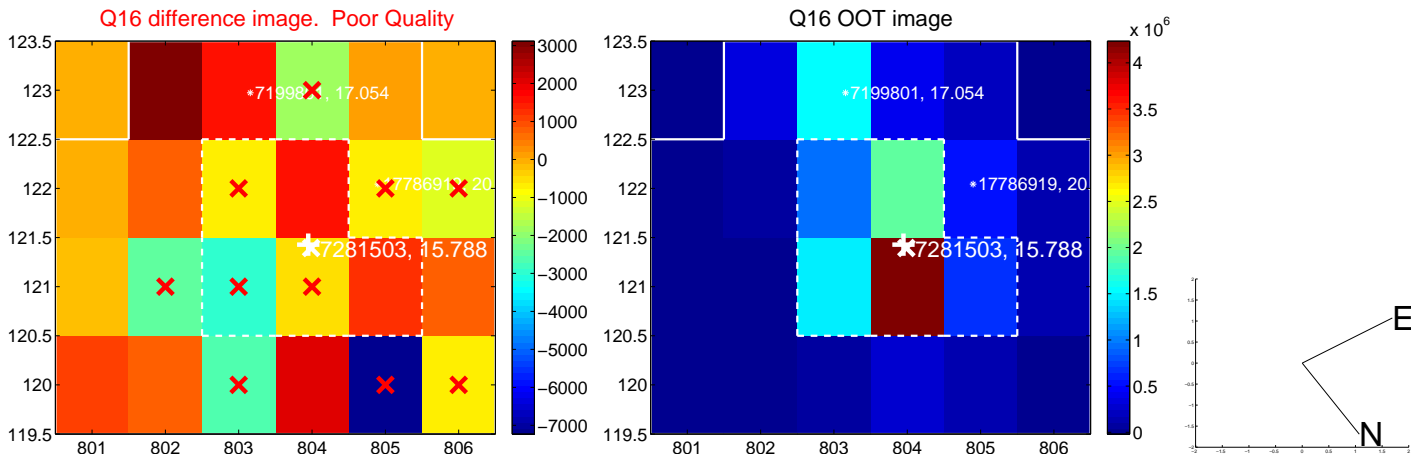
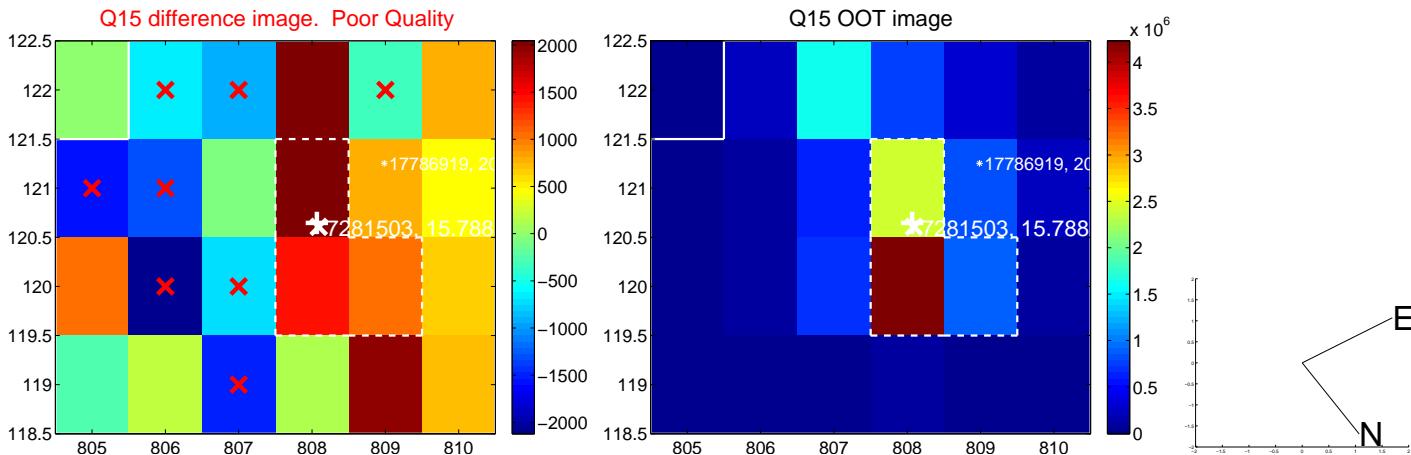
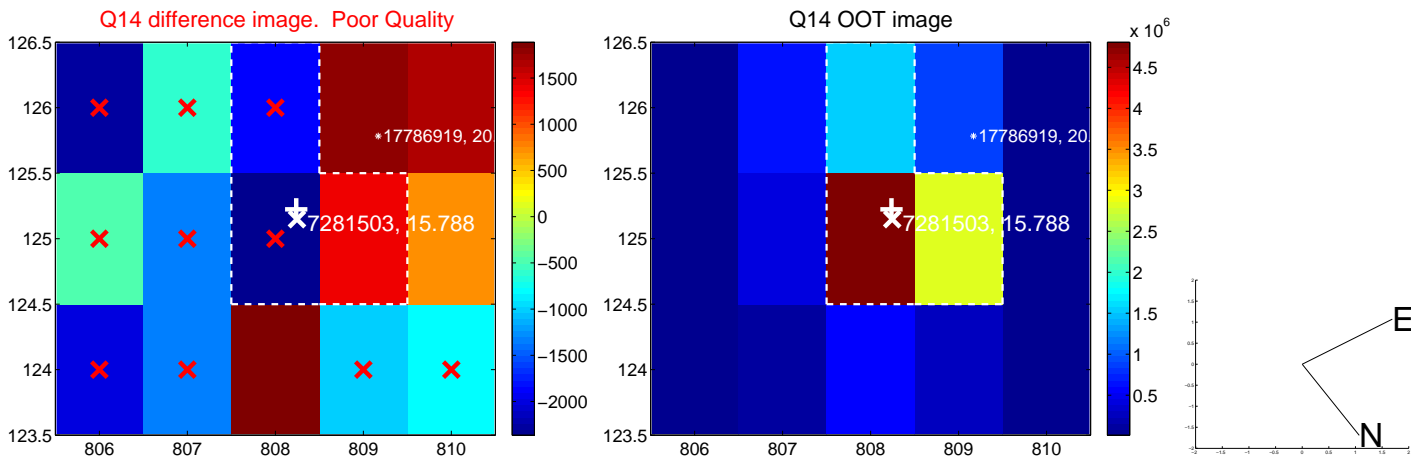
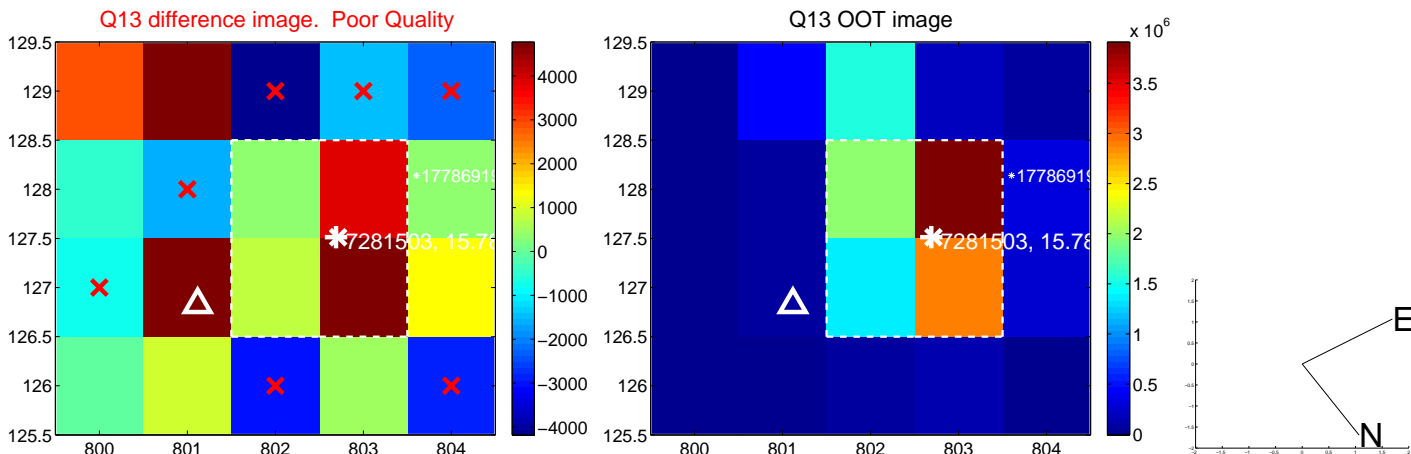
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



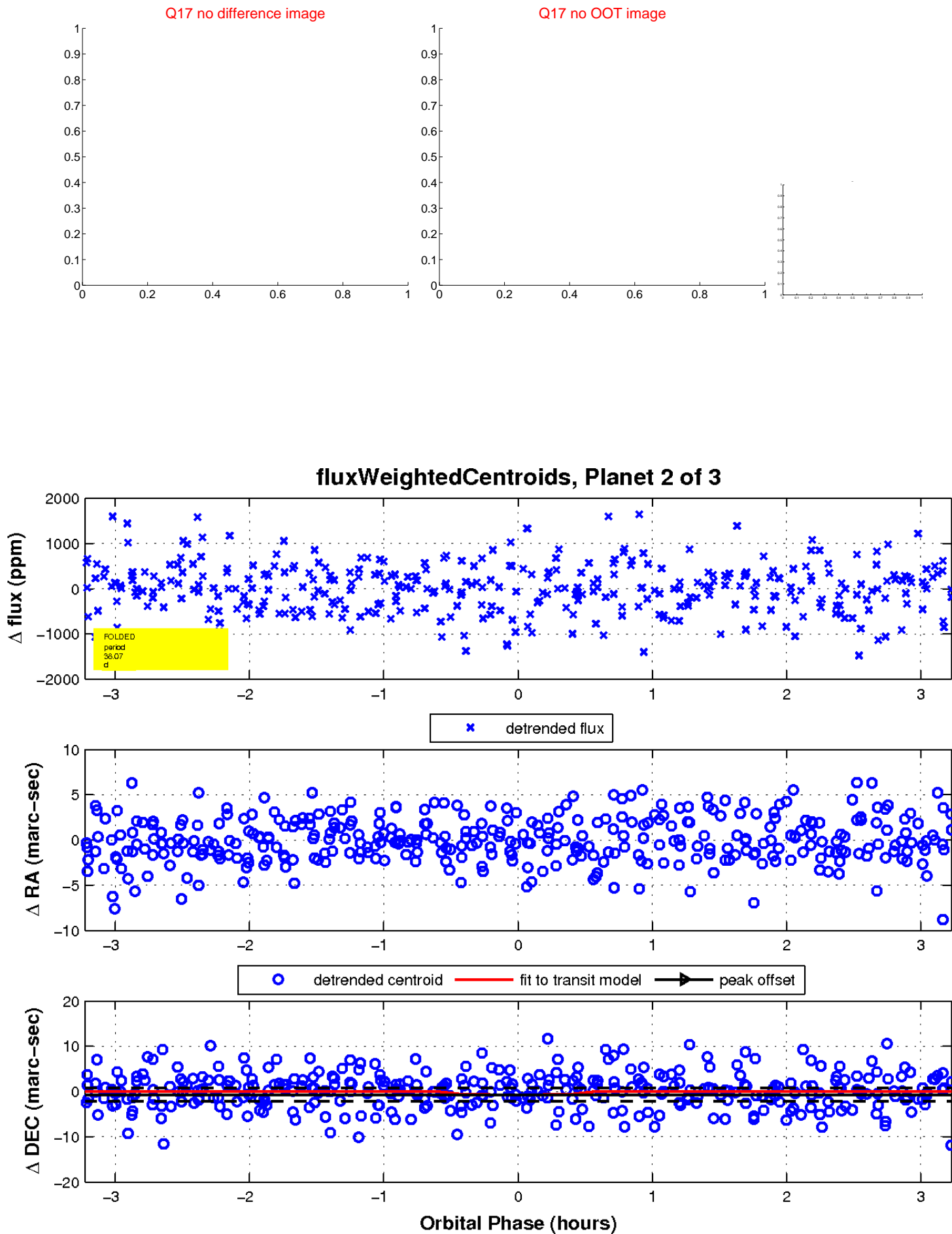
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

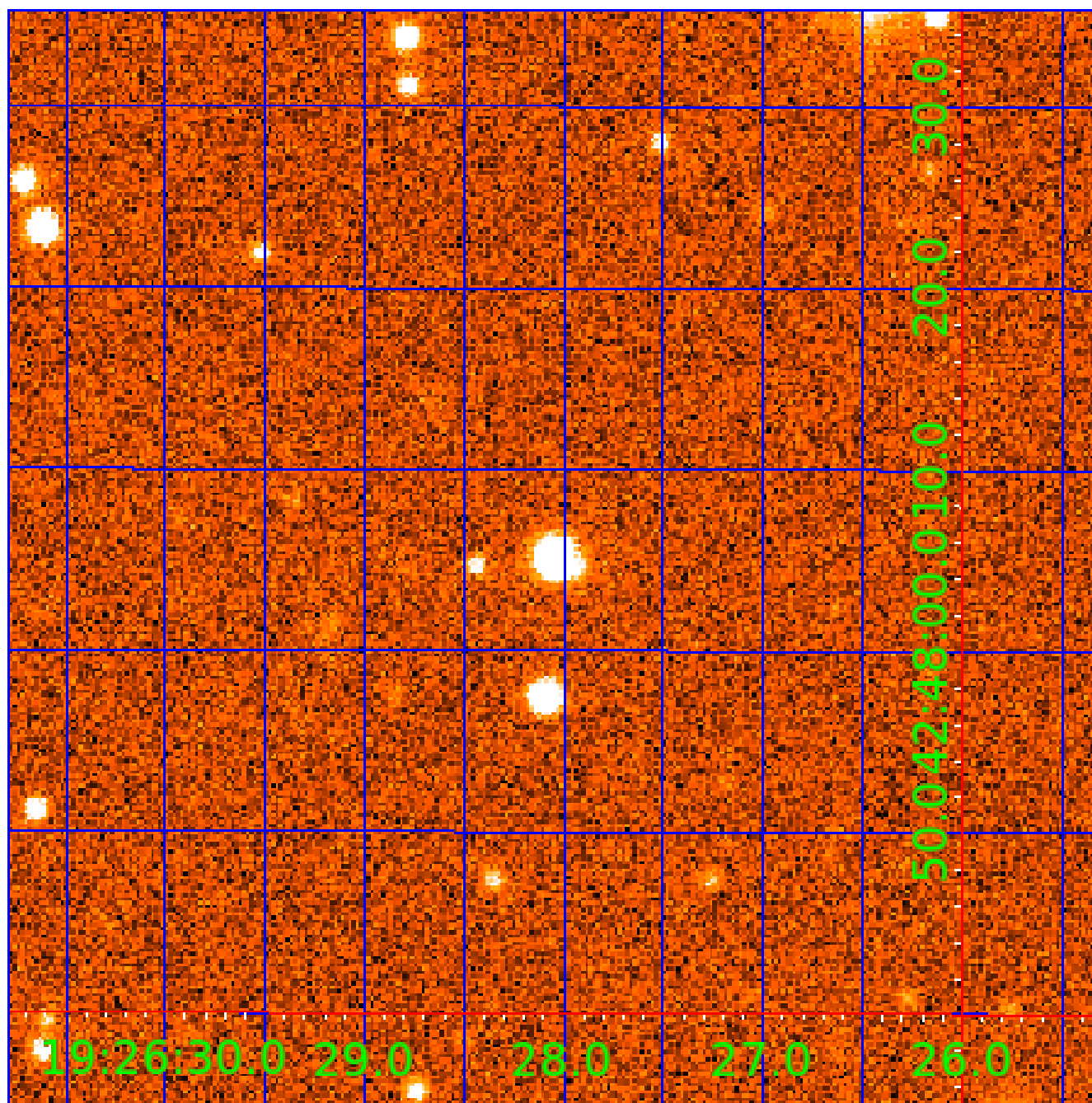


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007281503

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})
007281503-01	OBS	No	0.566750	131.856056	30.4	3.450	11.7	5.5	1.03	6174	0.58	7179.11
007281503-02	OBS	No	38.072398	150.773764	1035.6	1.077	7.9	8.2	1.03	6174	3.46	26.29
007281503-03	OBS	No	134.351732	152.347683	765.4	2.556	7.4	7.6	1.03	6174	3.13	4.89

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007281503-01	OBS	FP	0.00	1	0	0	1	LPP_DV—EPHEM_MATCH
007281503-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
007281503-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_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.

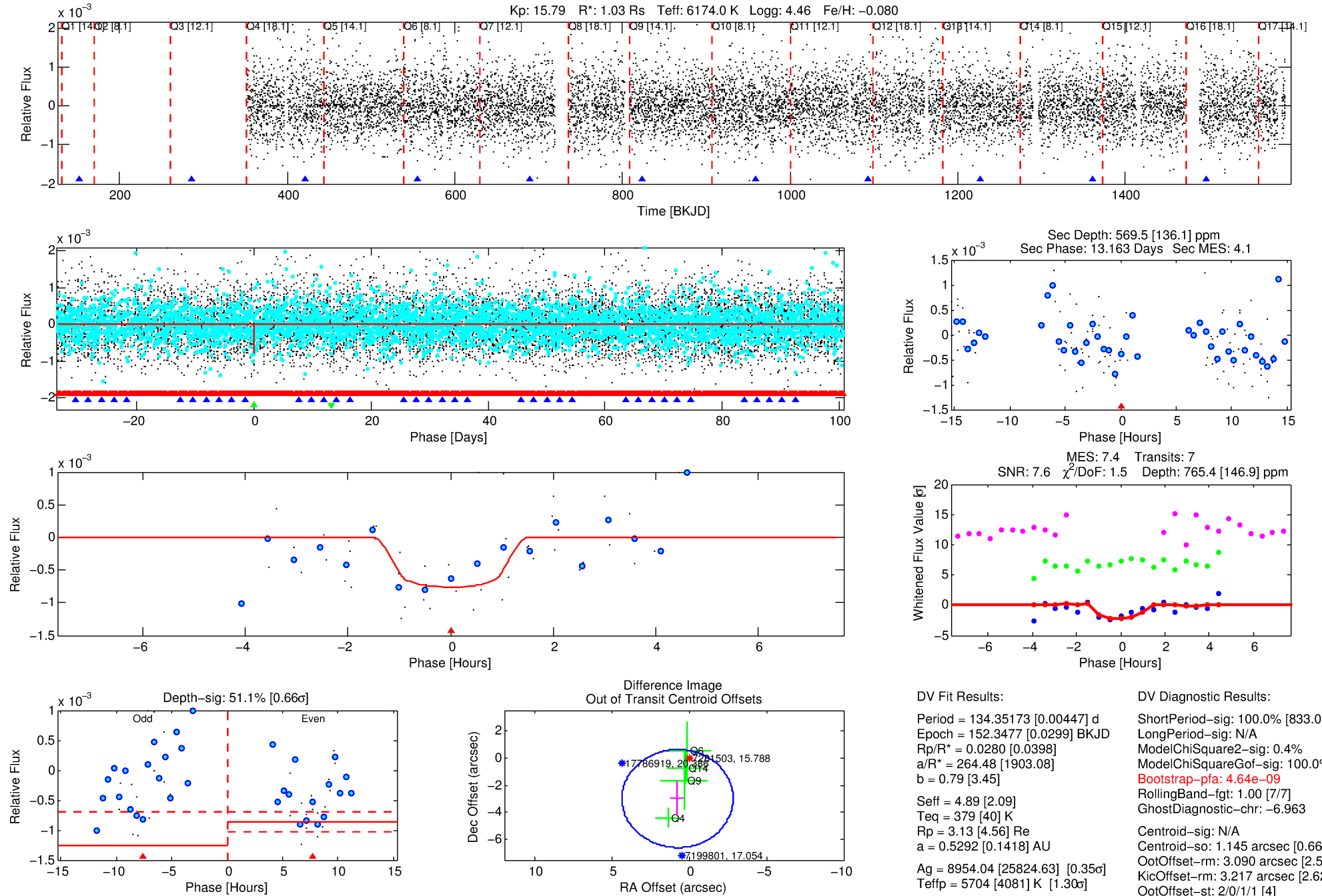
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007281503-03

No Significant Match Found

DV One-Page Summary

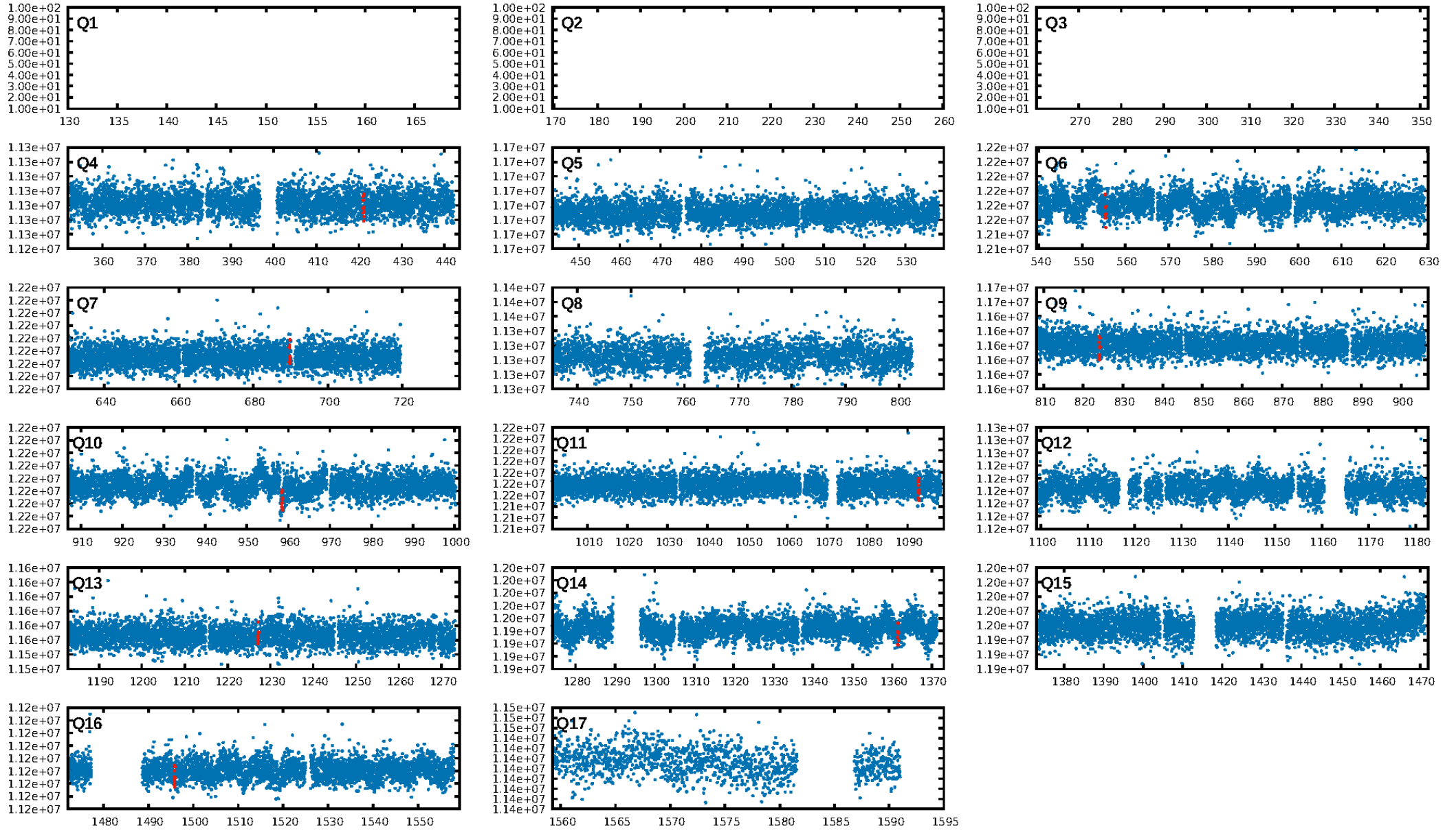
KIC: 7281503 Candidate: 3 of 3 Period: 134.352 d



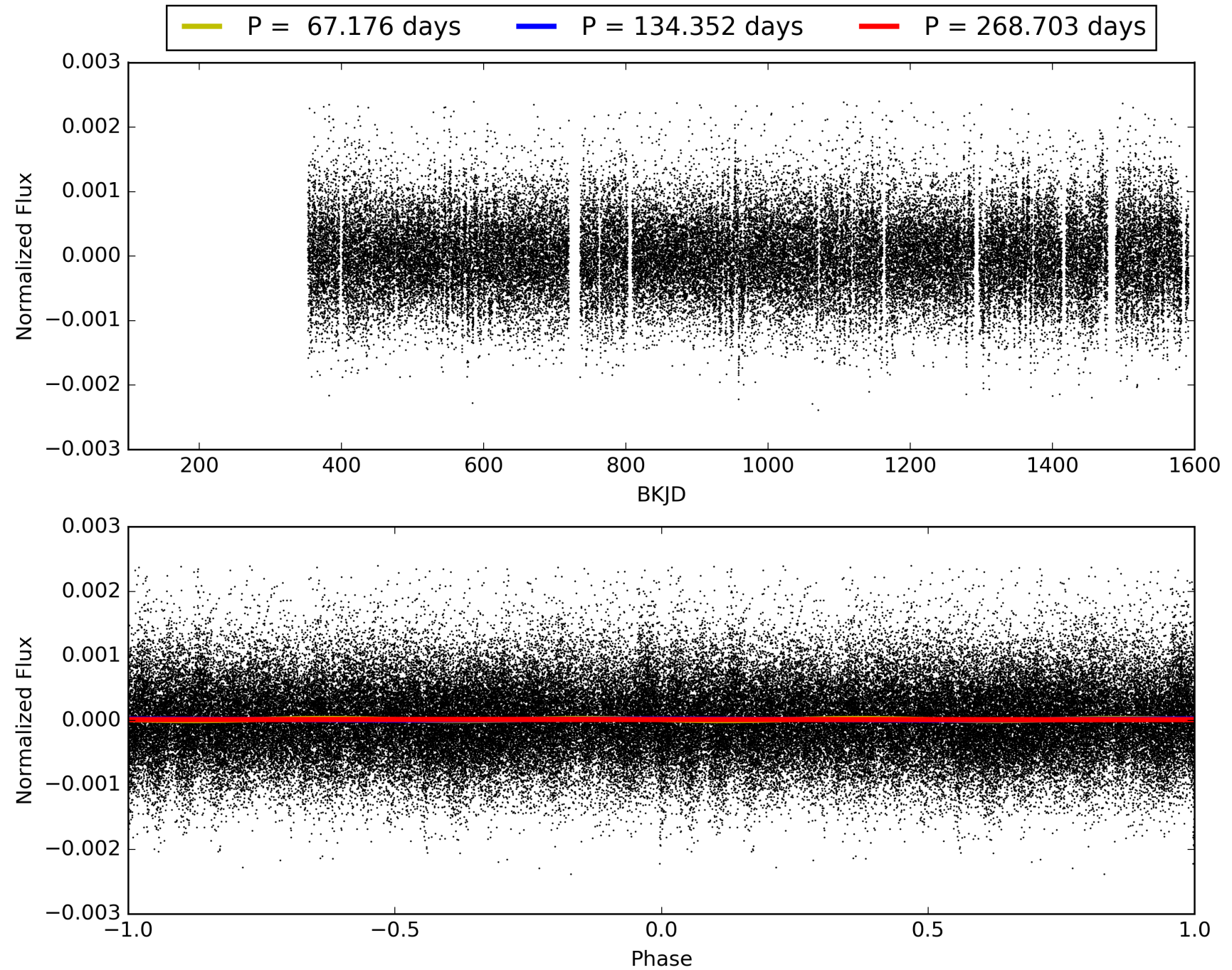
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 18:52:47 Z

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

TCE 007281503-03, PDC Light Curves

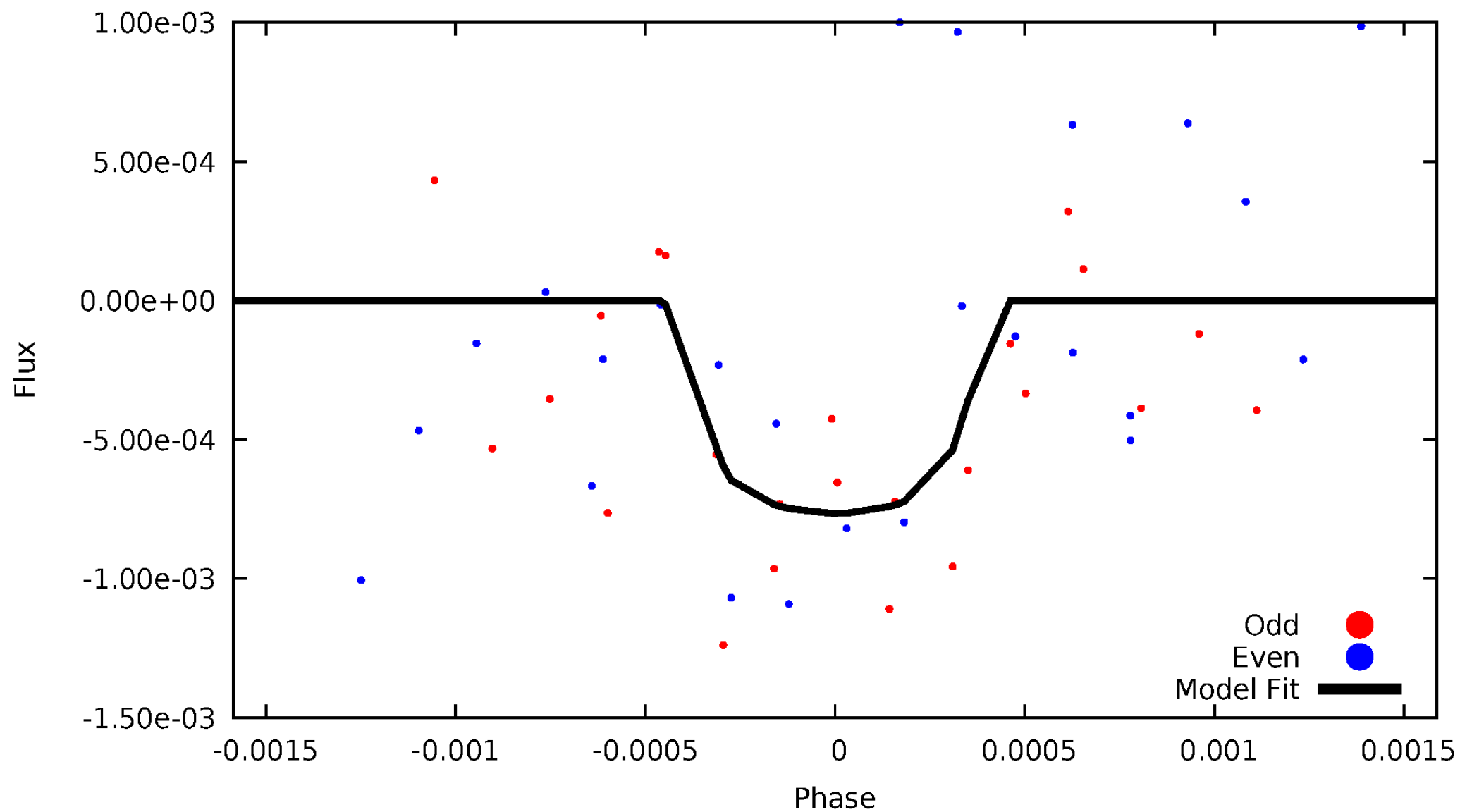


TCE 007281503-03



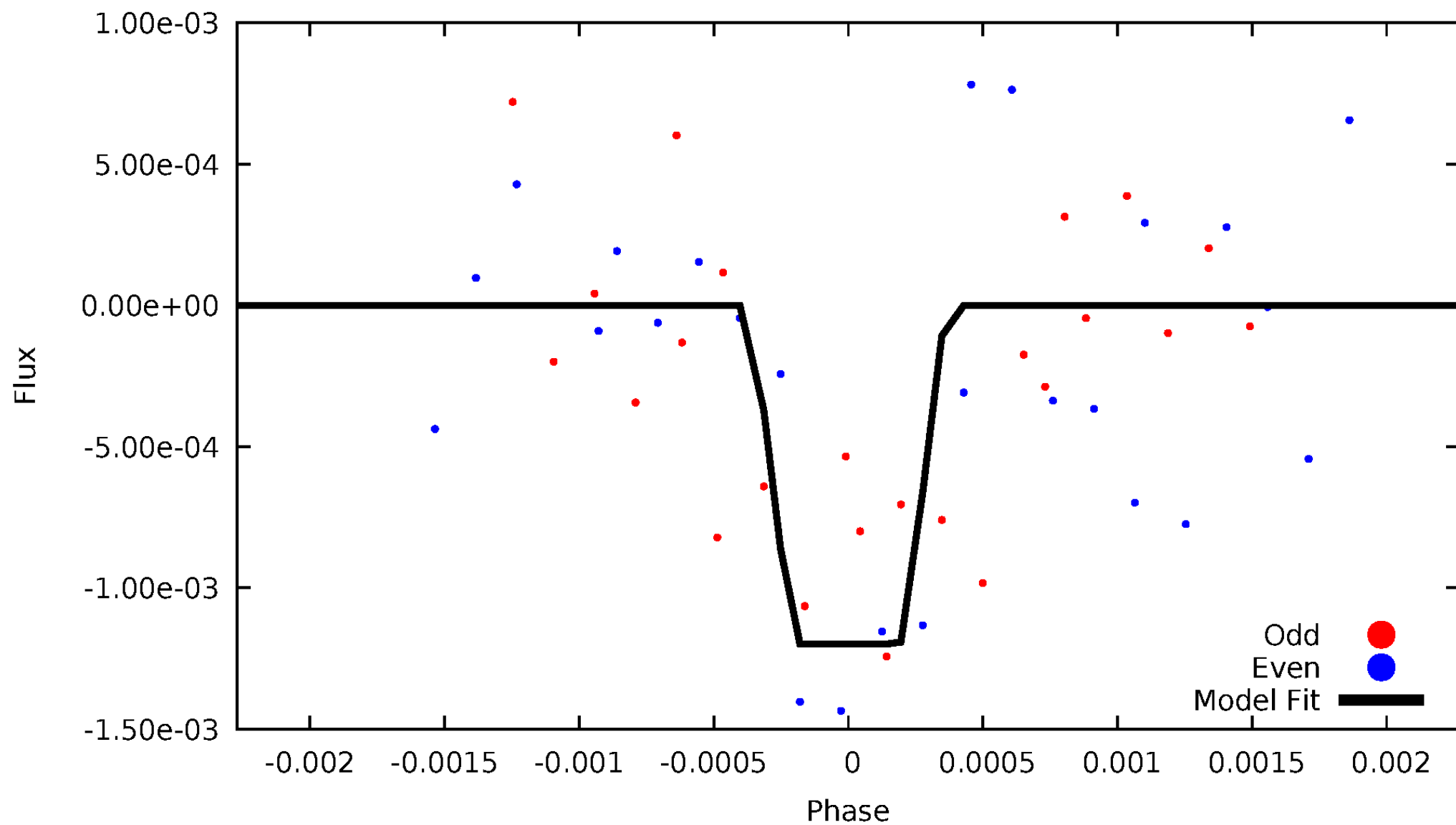
DV Odd/Even

TCE 007281503-03



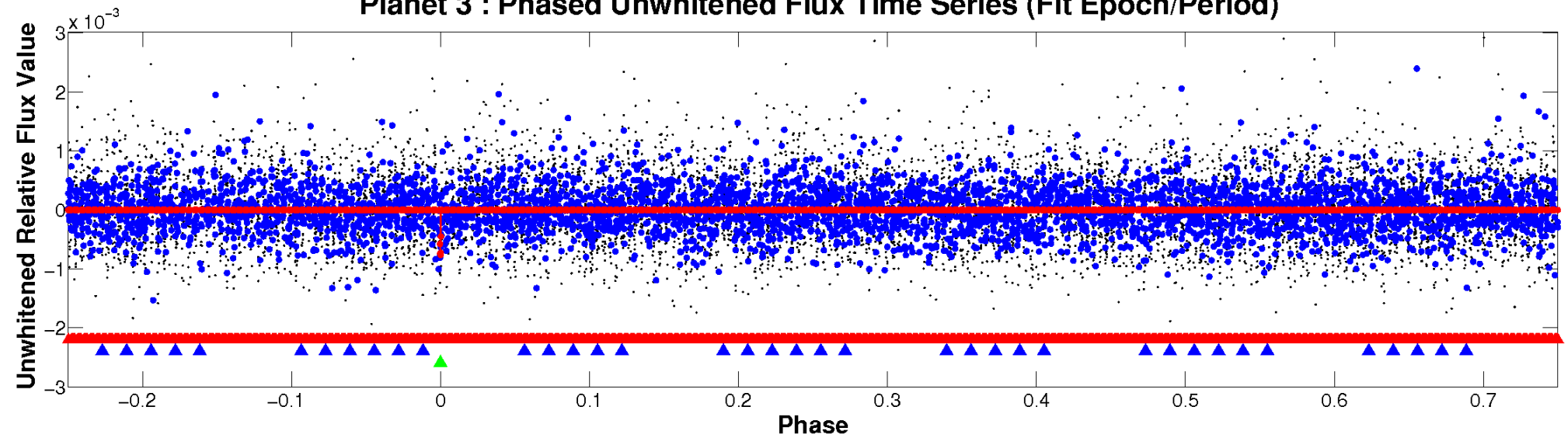
ALT Odd/Even

TCE 007281503-03

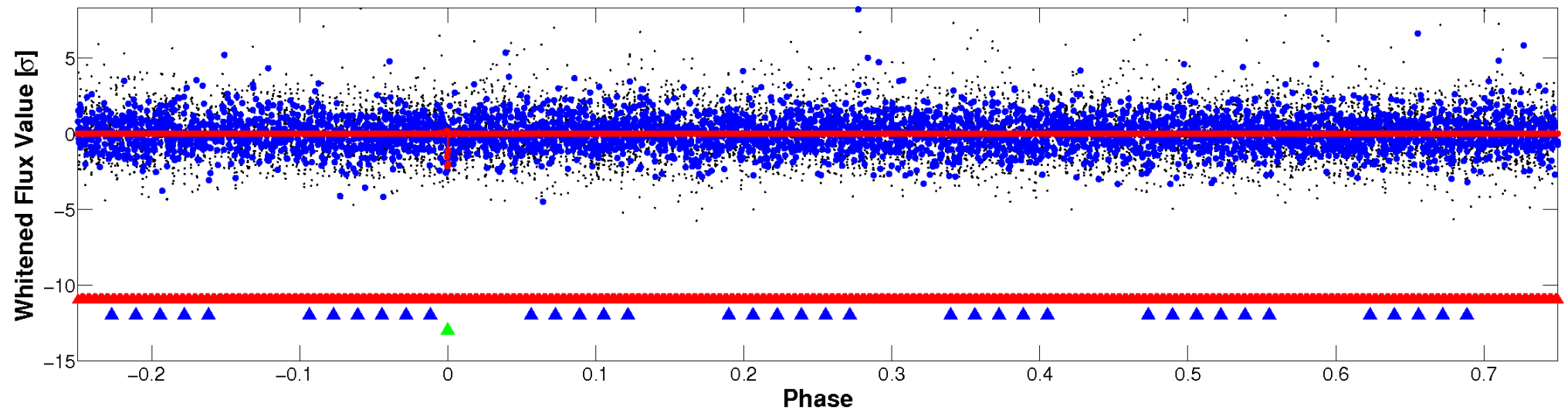


Non-Whitened Vs. Whitened Light Curve

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

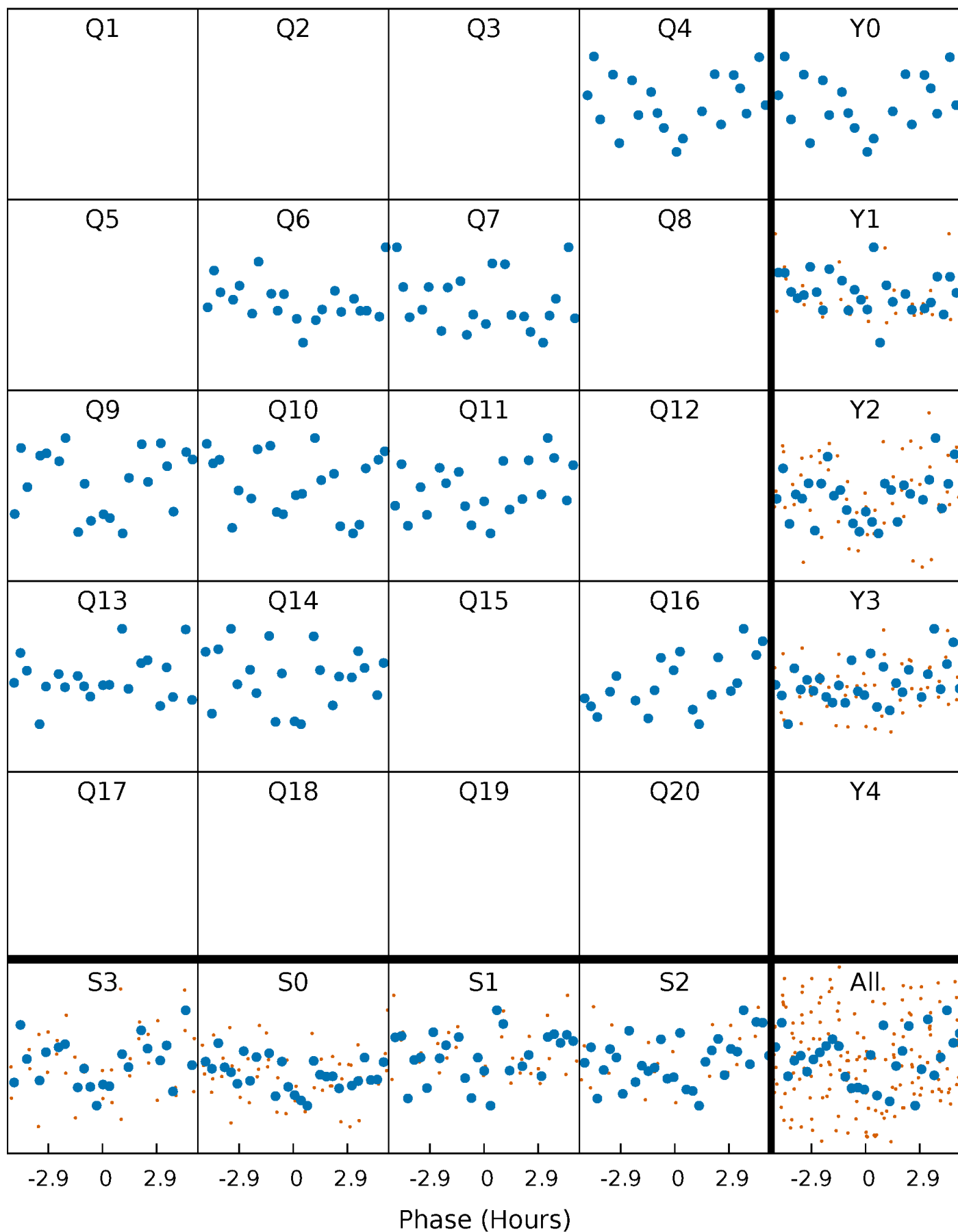


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



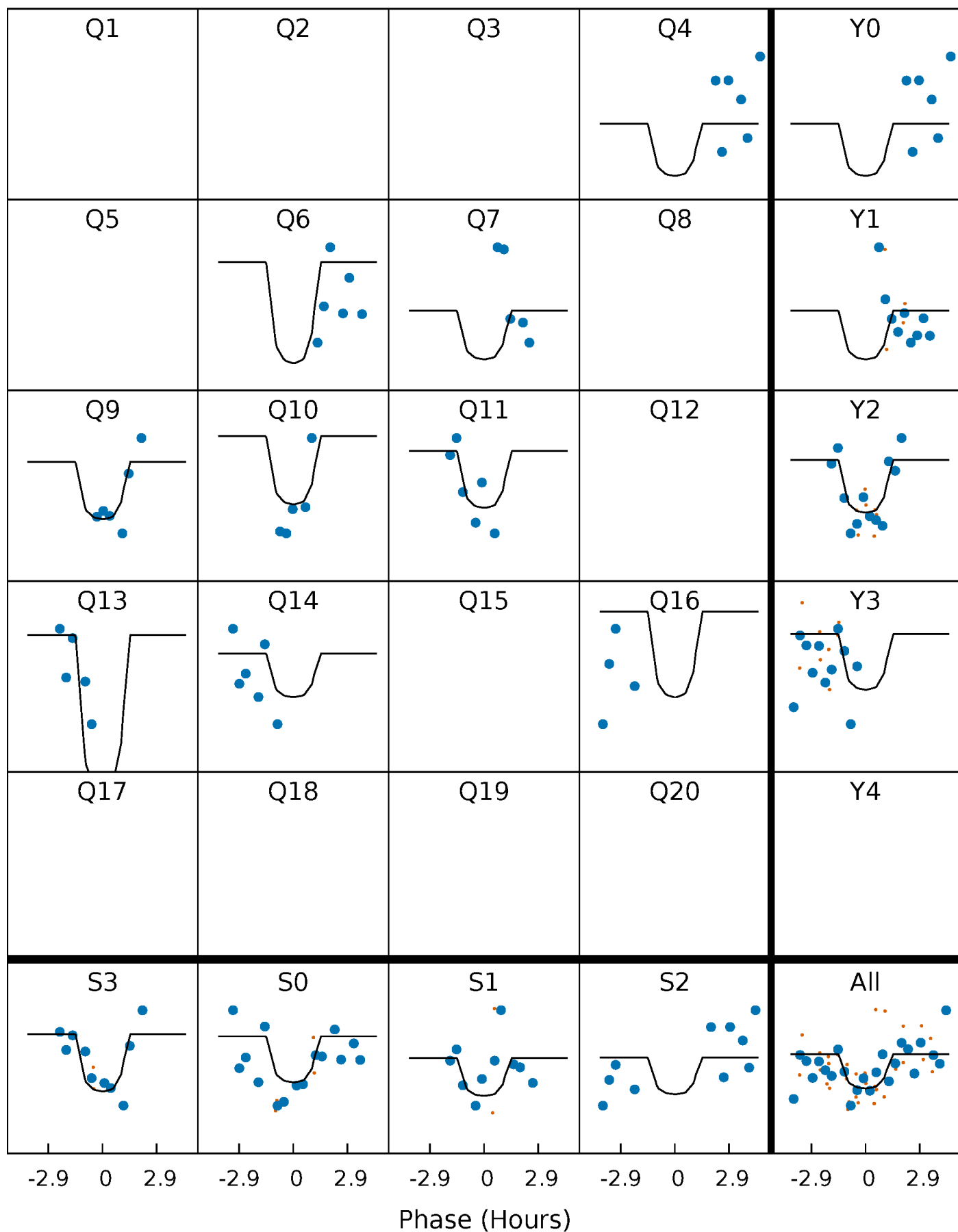
PDC Quarter-Phased Transit Curves

TCE 007281503-03 P=134.351732 Days $T_0=152.347683$ (BKJD)



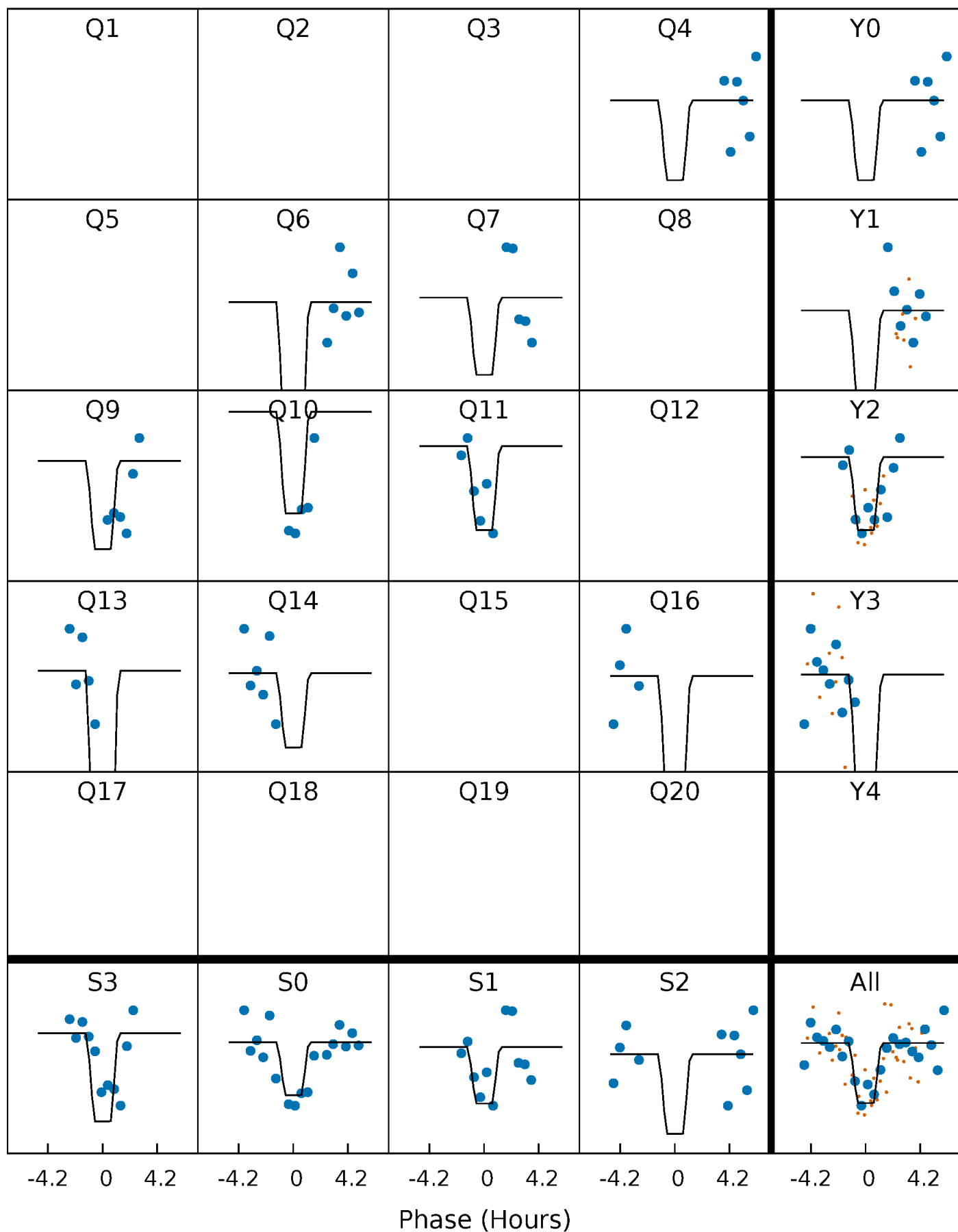
DV Quarter-Phased Transit Curves

TCE 007281503-03 P=134.351732 Days $T_0=152.347683$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

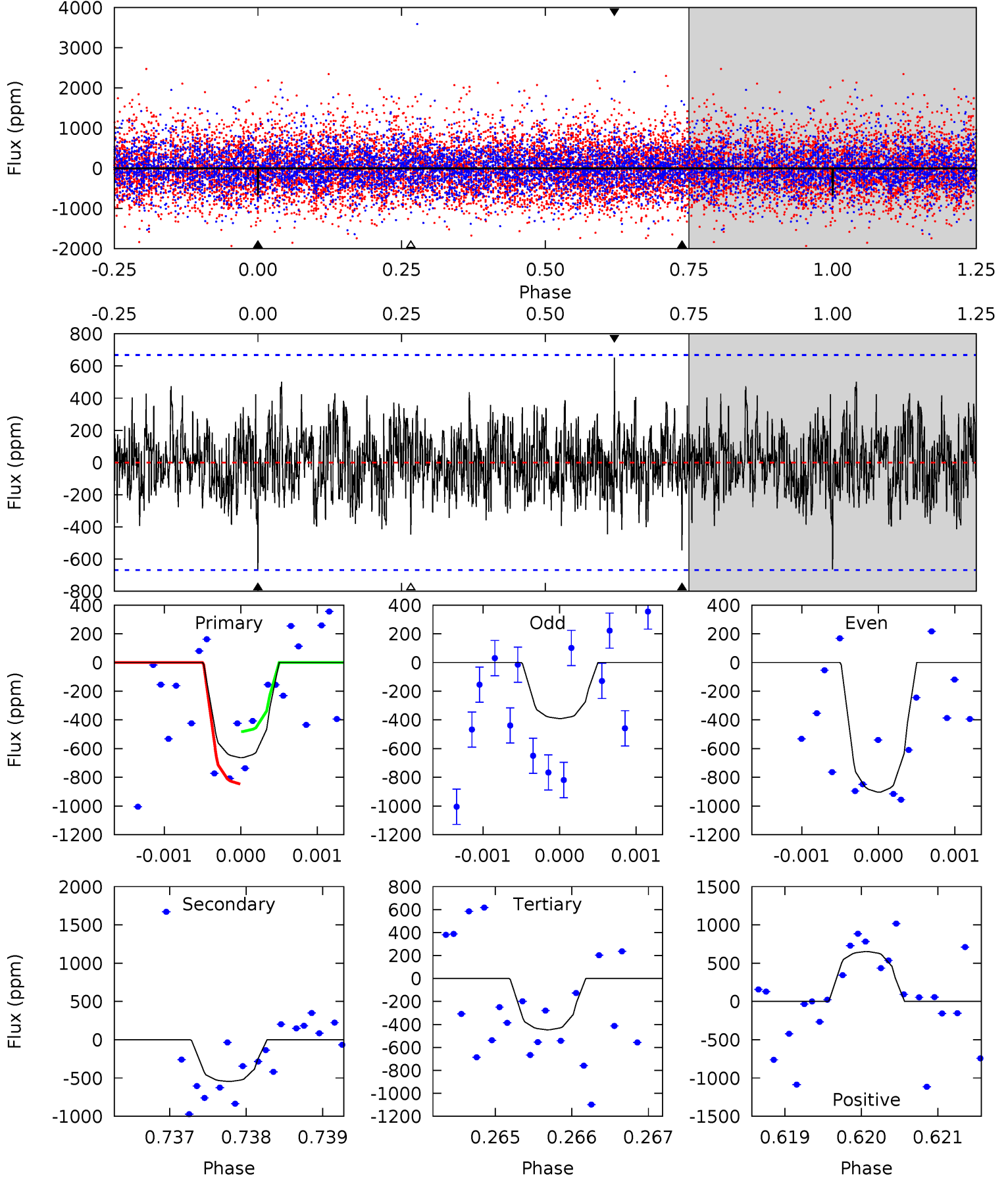
TCE 007281503-03 P=134.364546 Days $T_0=152.258115$ (BKJD)



DV Model-Shift Uniqueness Test

007281503-03, P = 134.351732 Days, E = 152.347683 Days

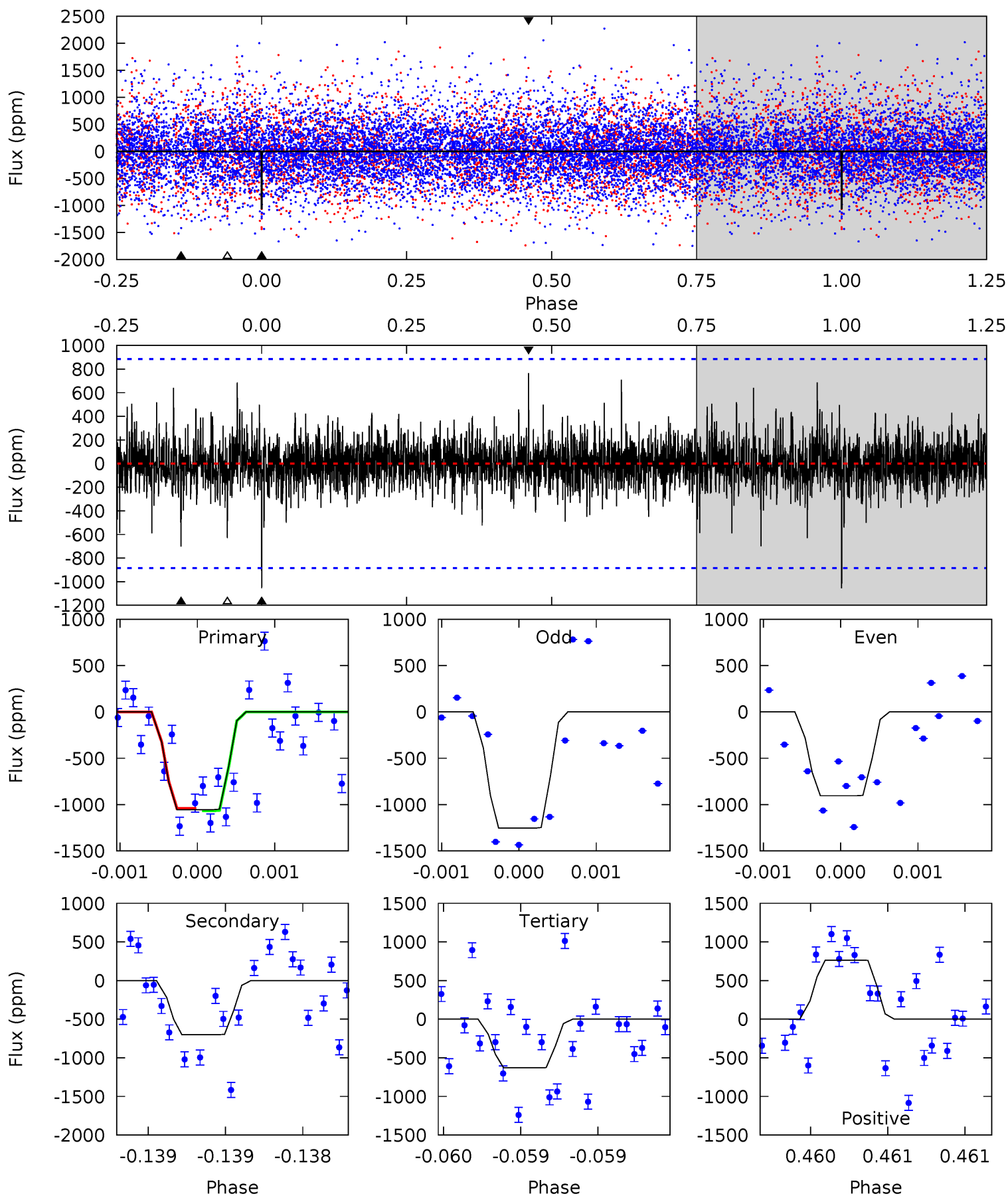
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.43	4.46	3.66	5.34	5.47	3.31	1.24	1.77	0.09	0.80	-0.88	2.09	0.68	0.50	1.51



Alt Model-Shift Uniqueness Test

007281503-03, P = 134.364546 Days, E = 152.258115 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.58	4.37	3.93	4.77	5.52	3.40	0.92	2.65	1.81	0.44	-0.40	1.07	1.07	0.42	0.08



Stellar Parameters For KIC 007281503

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6174^{+193}_{-257}	$4.455^{+0.054}_{-0.216}$	$-0.080^{+0.250}_{-0.300}$	$1.026^{+0.324}_{-0.130}$	$1.090^{+0.151}_{-0.166}$	$1.423^{+0.408}_{-0.753}$
	+3%/-4%	+1%/-5%	+312%/-375%	+32%/-13%	+14%/-15%	+29%/-53%
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 007281503-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-545 ± 122	$4.50^{+4.45}_{-2.75}$	541^{+40}_{-29}	4936^{+3037}_{-1172}	3967^{+23735}_{-2981}
Alt.	-700 ± 160	$5.10^{+4.45}_{-3.07}$	541^{+43}_{-30}	4912^{+2711}_{-1108}	4036^{+21588}_{-2969}

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

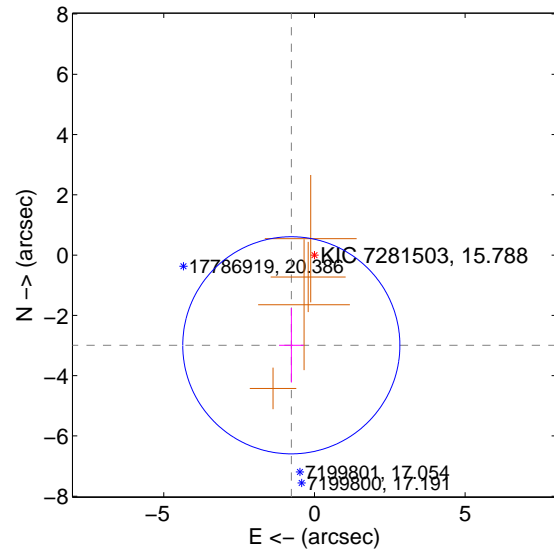
Supplemental centroid analysis for 007281503-03. Kepler magnitude: 15.79. Transit SNR 7.61

There are 0 quarters with good PRF difference image offsets

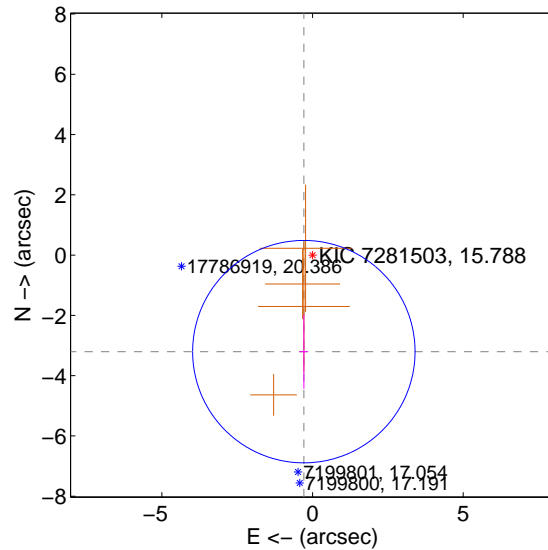
The direct PRF centroid is offset from the target star catalog position by about 0.26 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.090 ± 1.201	2.57	0.767 ± 0.410	-2.993 ± 1.235
PRF-fit source offset from KIC position	3.217 ± 1.230	2.62	0.288 ± 0.148	-3.204 ± 1.235
photometric centroid source offset	1.15 ± 1.73	0.66	0.85 ± 1.72	0.76 ± 1.73

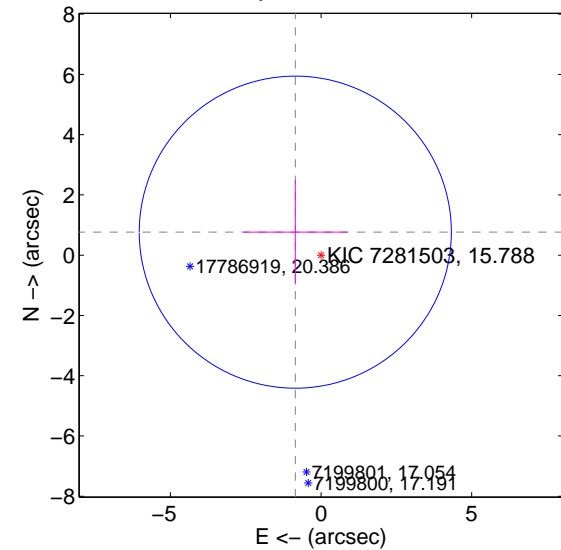
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

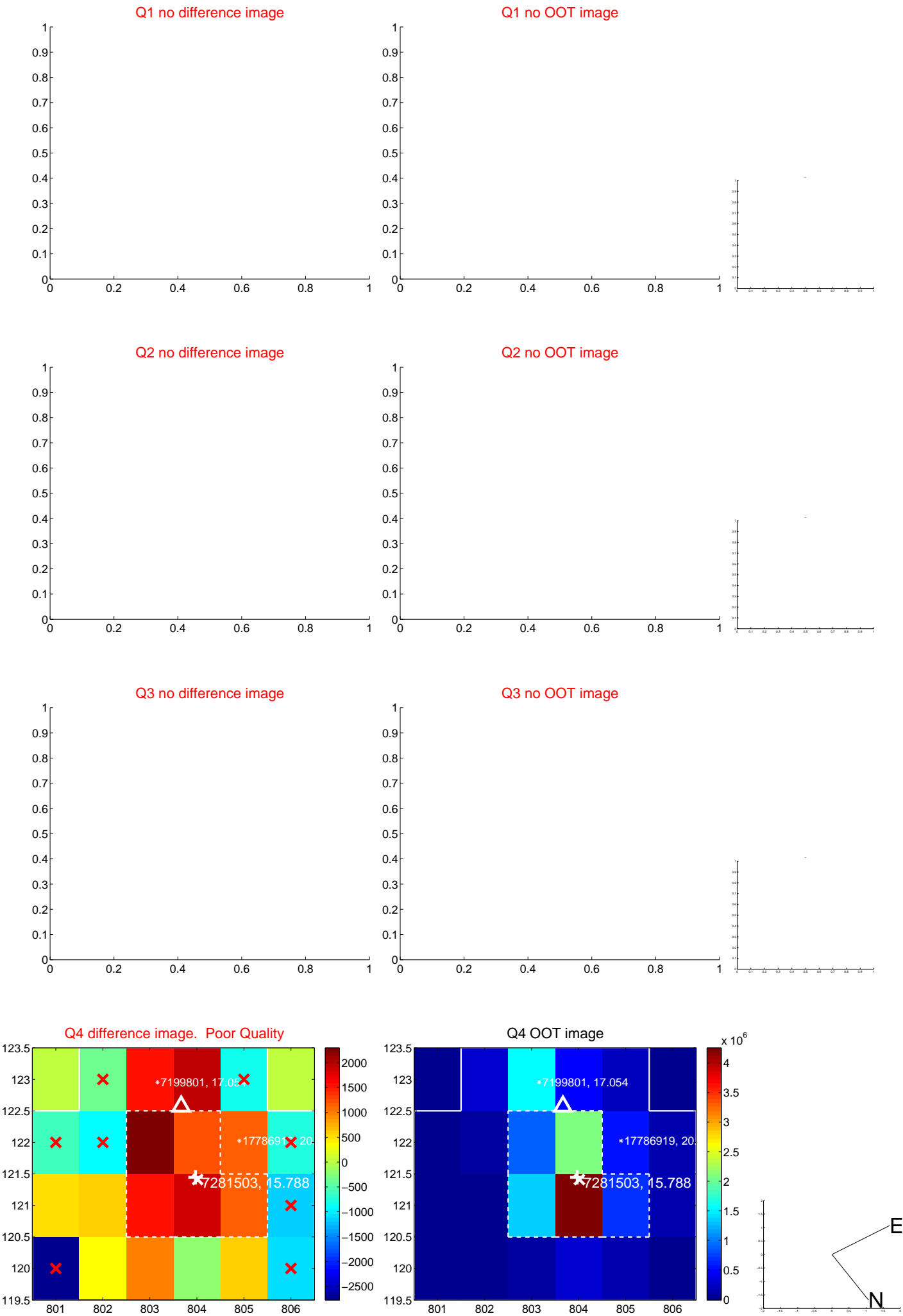


offset from photometric centroids

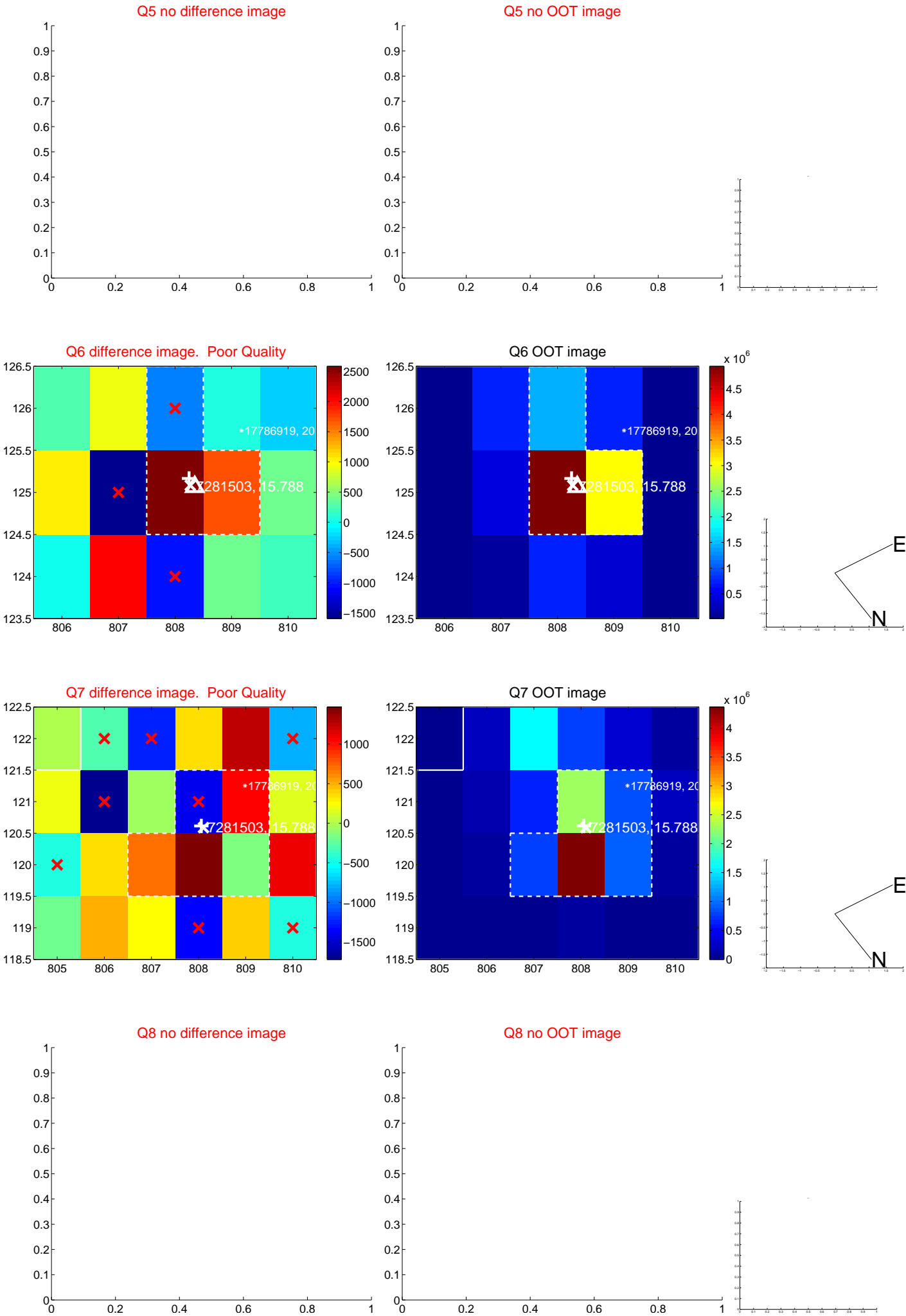


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

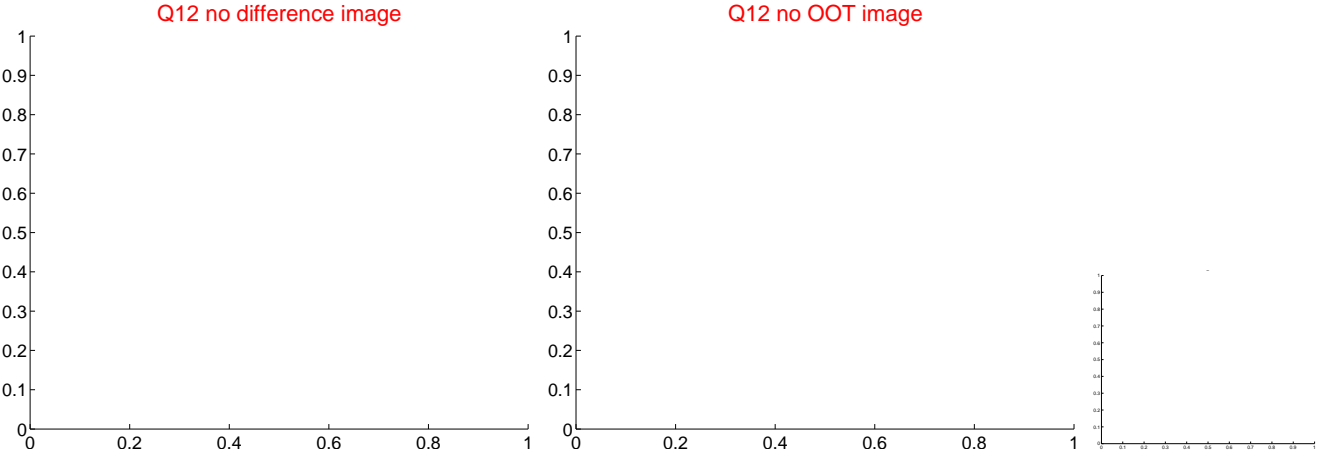
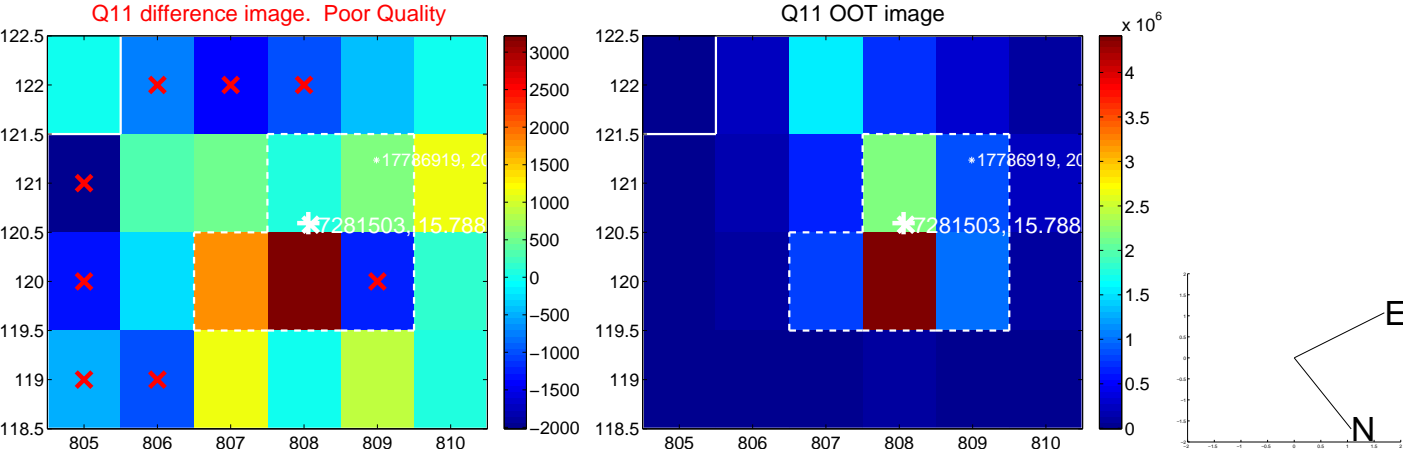
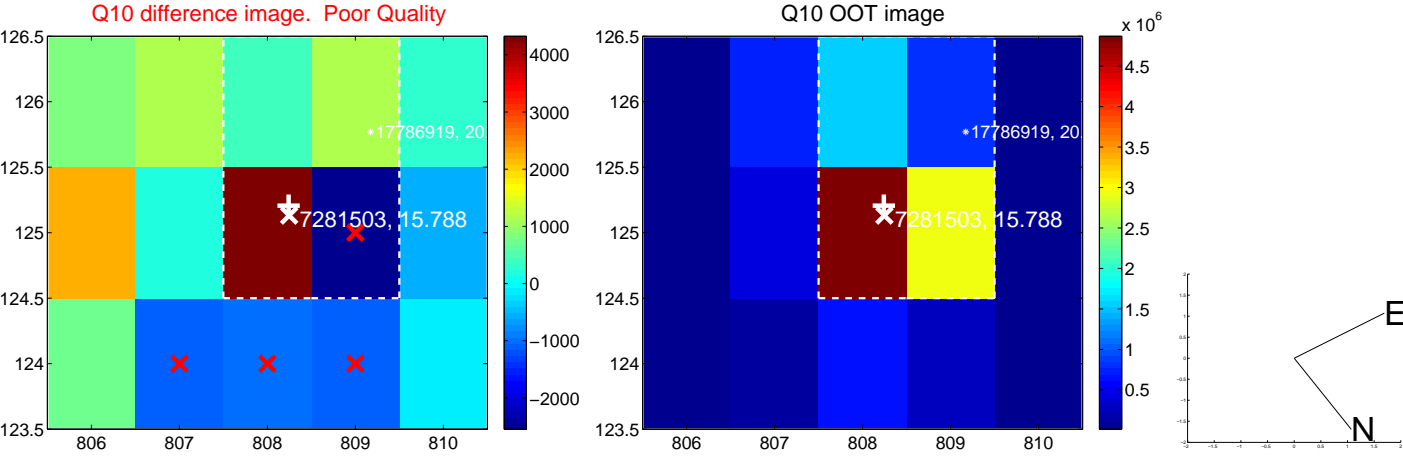
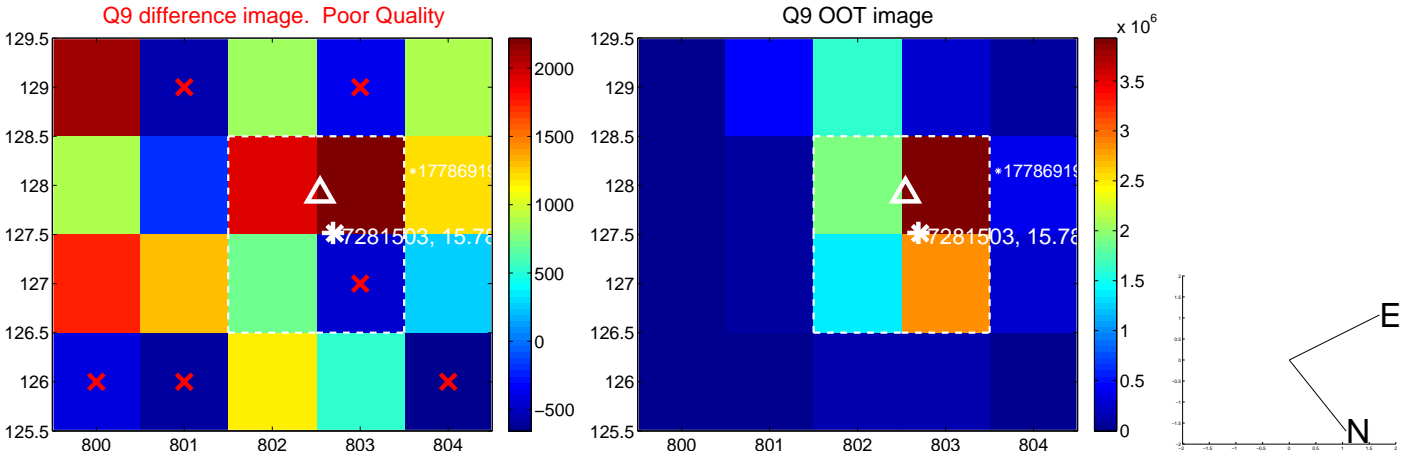
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



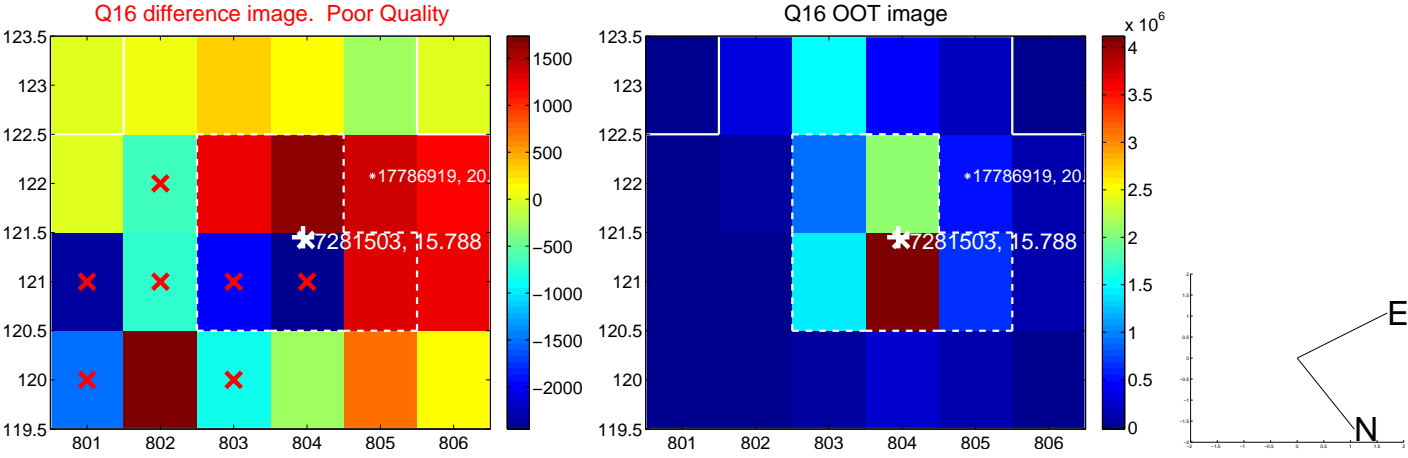
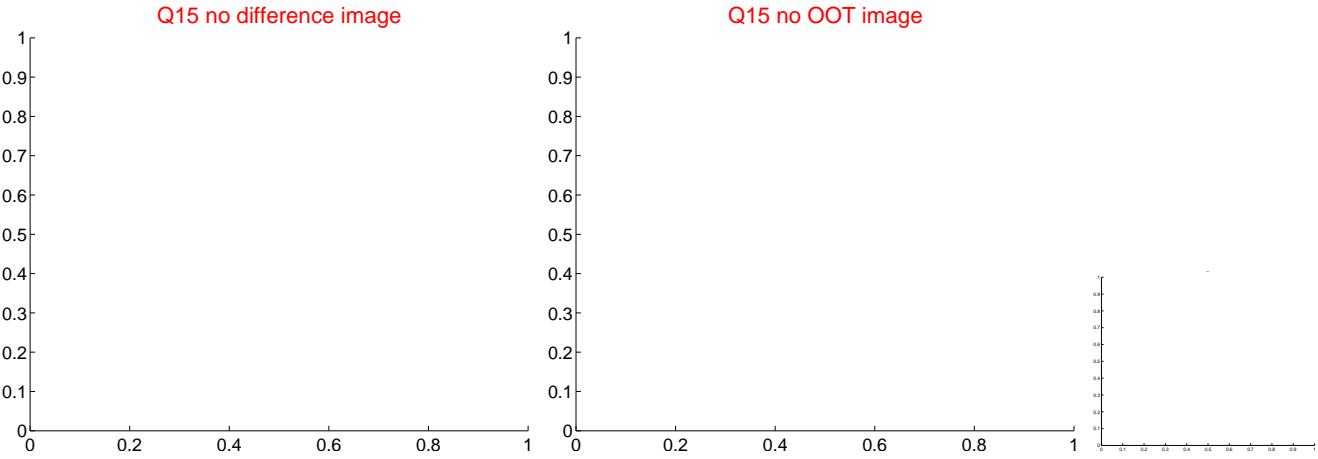
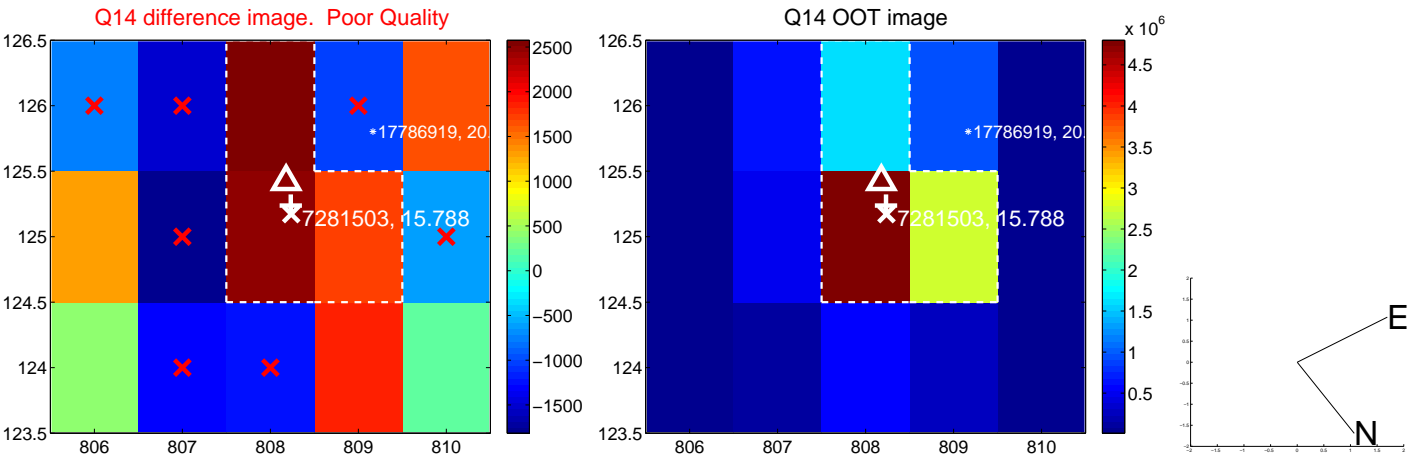
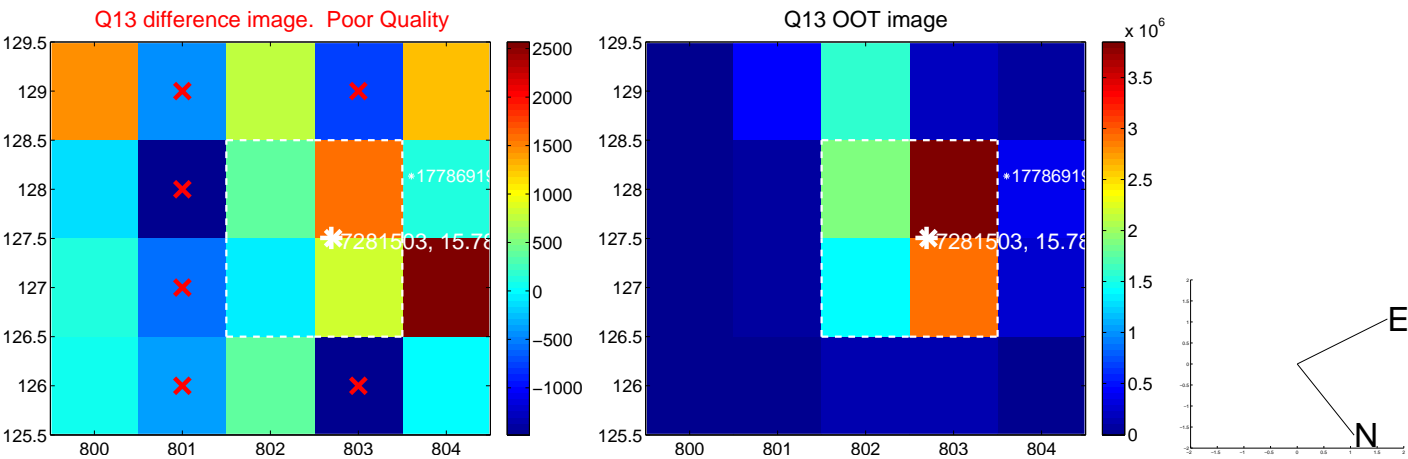
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



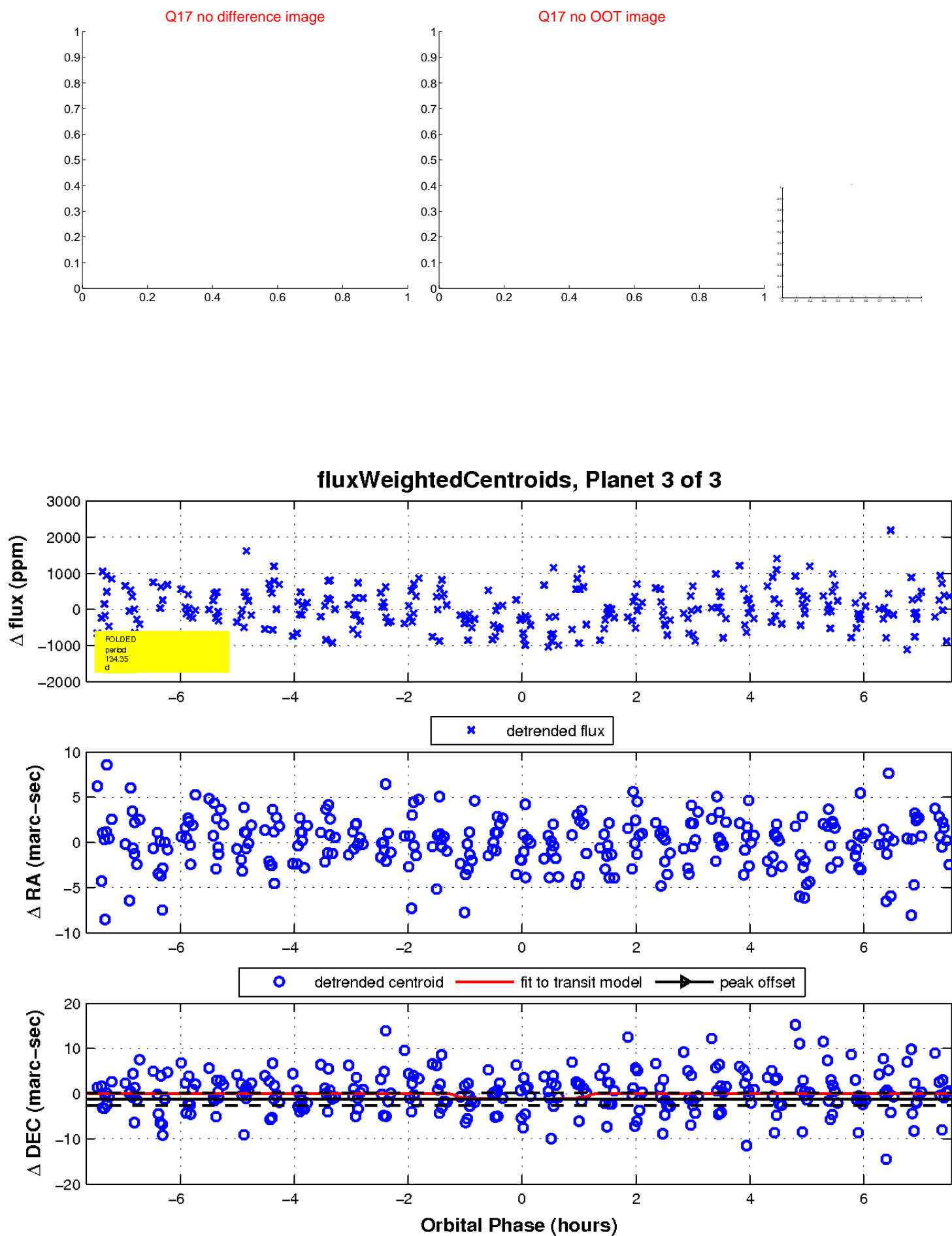
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

