

KIC 006207535

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})
006207535-01	OBS	No	0.657429	131.912277	16.9	4.879	10.1	7.6	0.99	5895	0.41	4540.25
006207535-02	OBS	No	14.440485	140.544234	1808.0	1.948	13.9	10.6	0.99	5895	4.22	73.81
006207535-03	OBS	No	24.441965	154.761875	2343.5	2.889	12.9	14.1	0.99	5895	8.09	36.59
006207535-04	OBS	No	15.298221	140.050115	2499.4	0.762	11.4	15.5	0.99	5895	5.03	68.34

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006207535-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
006207535-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—CENT_FEW_DIFFS—HALO_GHOST
006207535-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—CENT_FEW_MEAS
006207535-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—HALO_GHOST

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

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

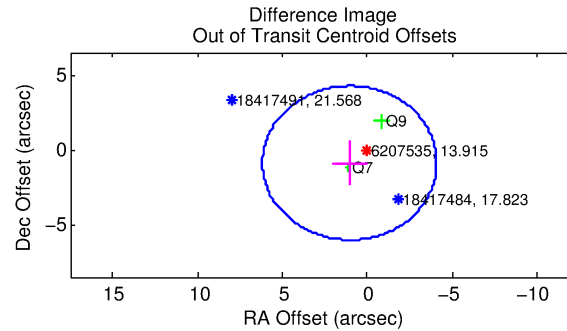
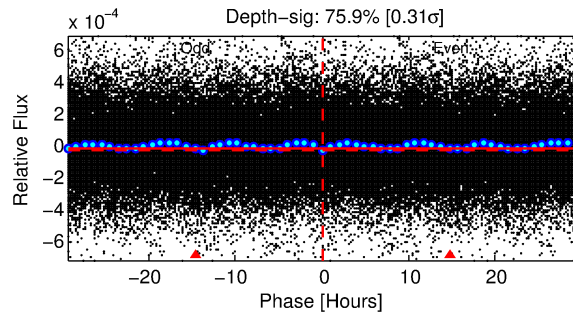
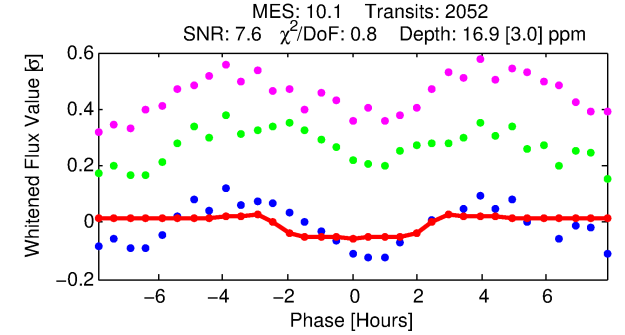
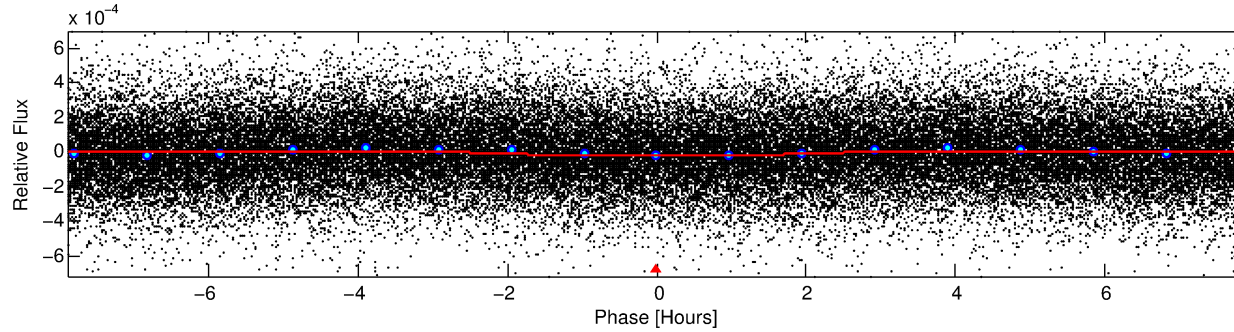
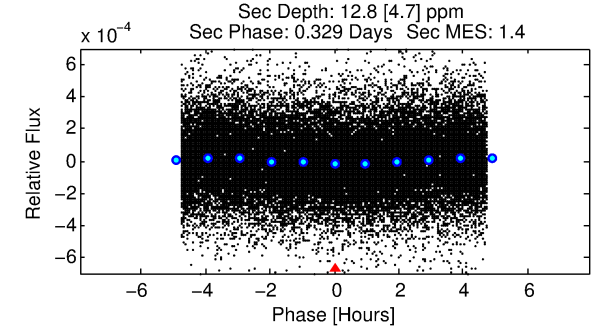
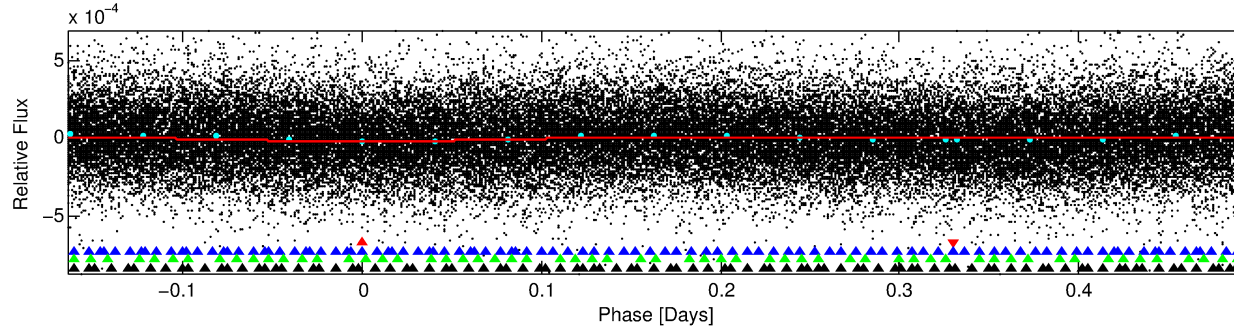
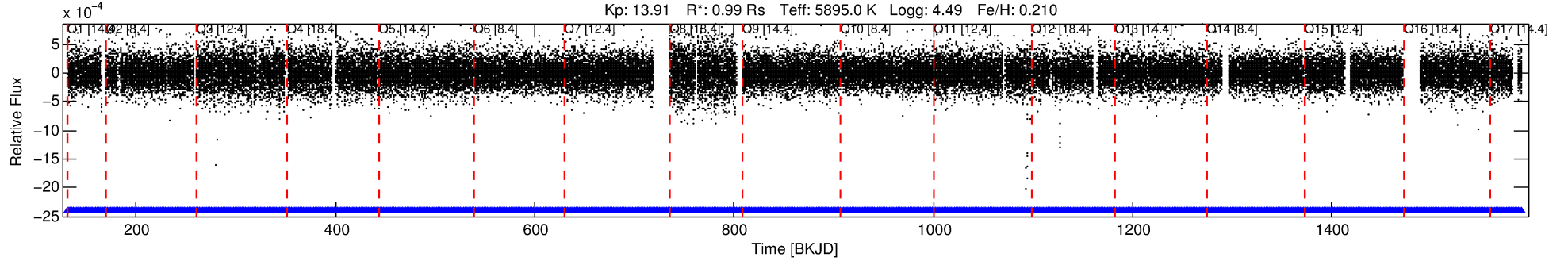
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006207535-01

No Significant Match Found

DV One-Page Summary

KIC: 6207535 Candidate: 1 of 4 Period: 0.657 d



DV Fit Results:

Period = 0.65743 [0.00001] d
Epoch = 131.9123 [0.0054] BKJD
Rp/R* = 0.0038 [0.0045]
a/R* = 1.19 [1.88]
b = 0.33 [14.41]
Seff = 4540.25 [1024.05]
Teq = 2093 [118] K
Rp = 0.41 [0.49] Re
a = 0.0153 [0.0022] AU
Ag = 9.85 [23.97] [0.37σ]
Teffp = 5733 [3474] K [1.05σ]

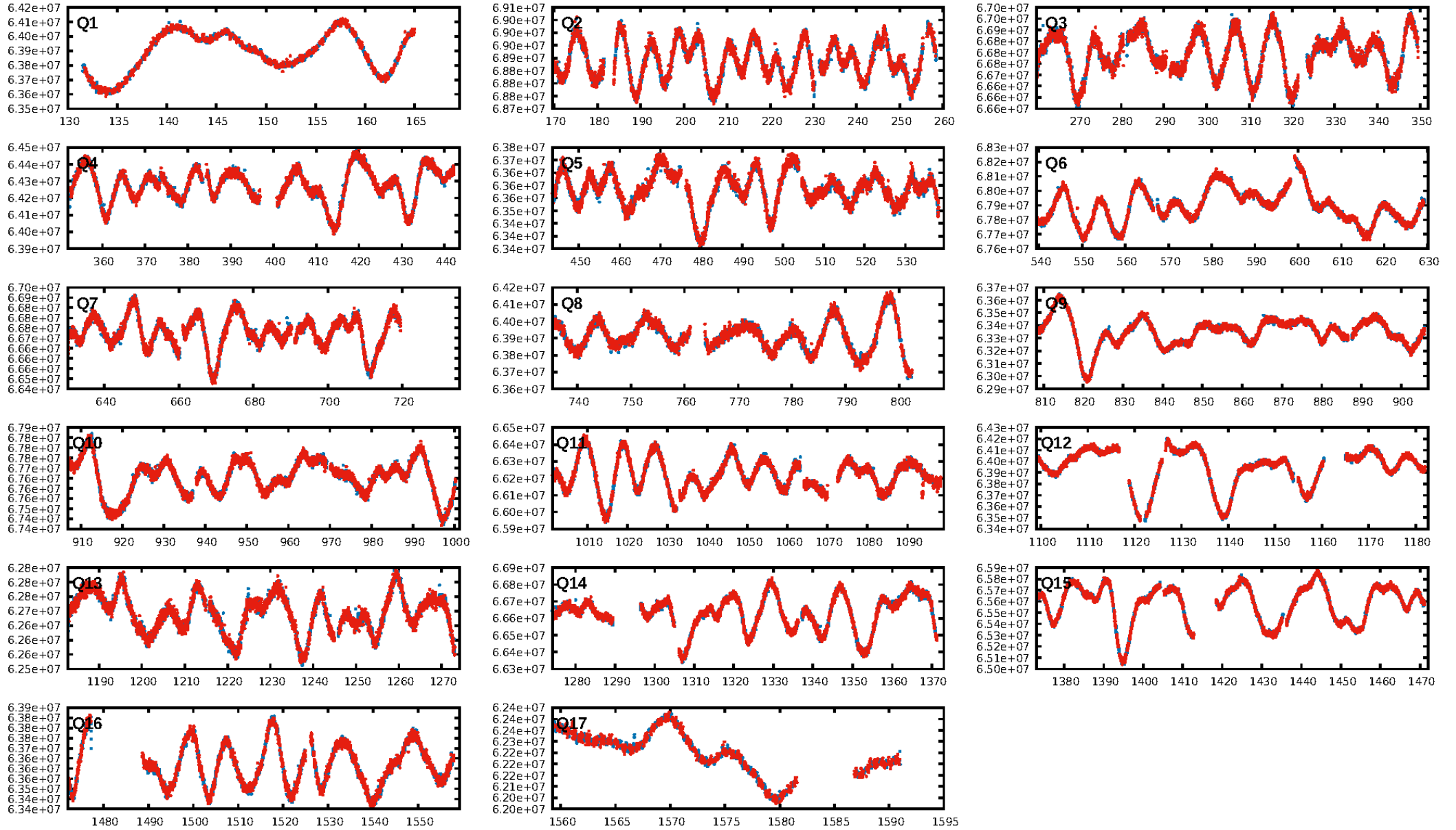
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [62.96σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.49e-24
RollingBand-fgt: 1.00 [1959/1959]
GhostDiagnostic-chr: -6.52
Centroid-sig: 23.4%
Centroid-so: 1.087 arcsec [0.90σ]
OotOffset-rm: 1.356 arcsec [0.79σ]
KicOffset-rm: 1.386 arcsec [1.57σ]
OotOffset-st: 0/1/0/1 [2]
KicOffset-st: 0/1/0/1 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [17/17]

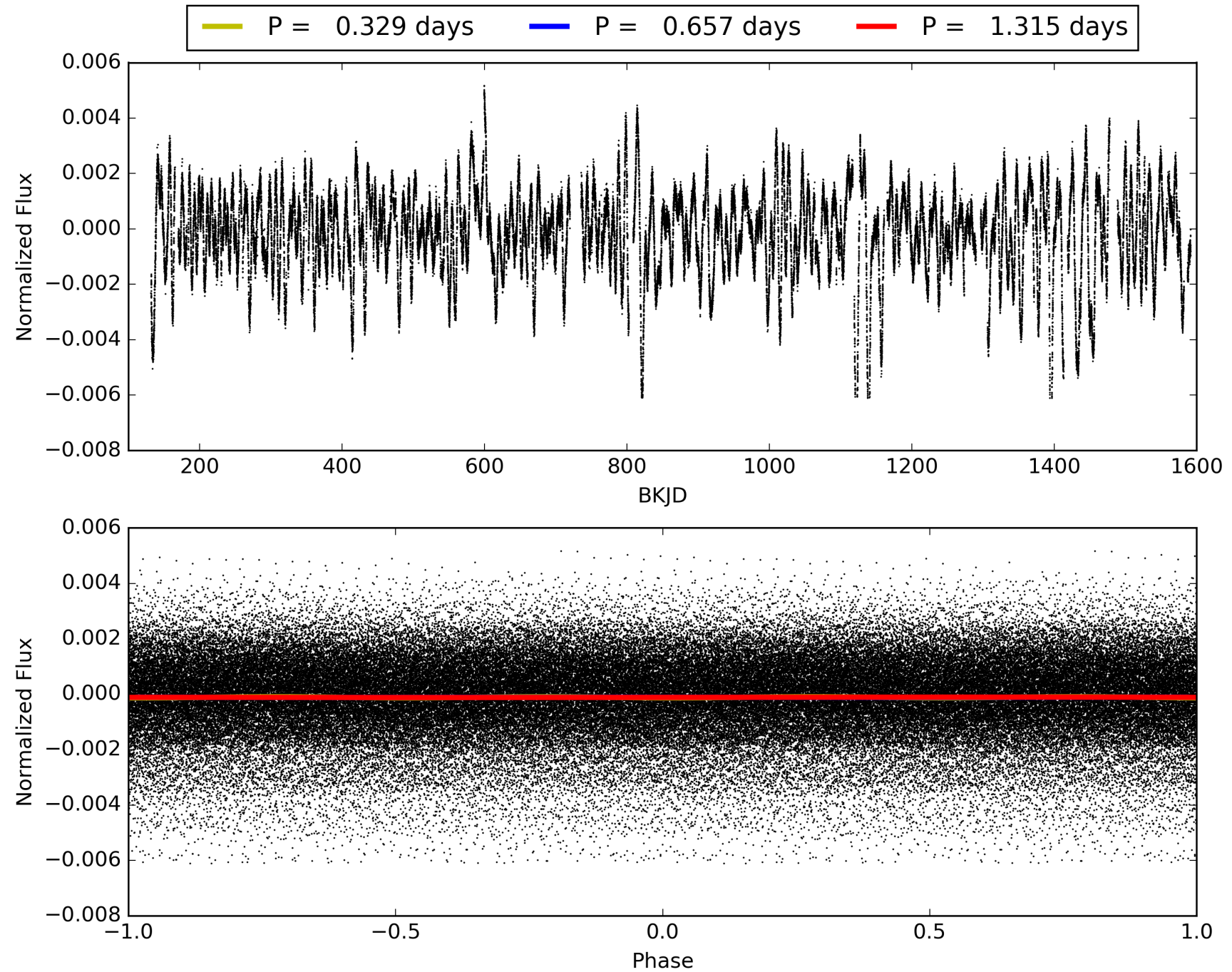
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 04:19:29 Z

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

TCE 006207535-01, PDC Light Curves

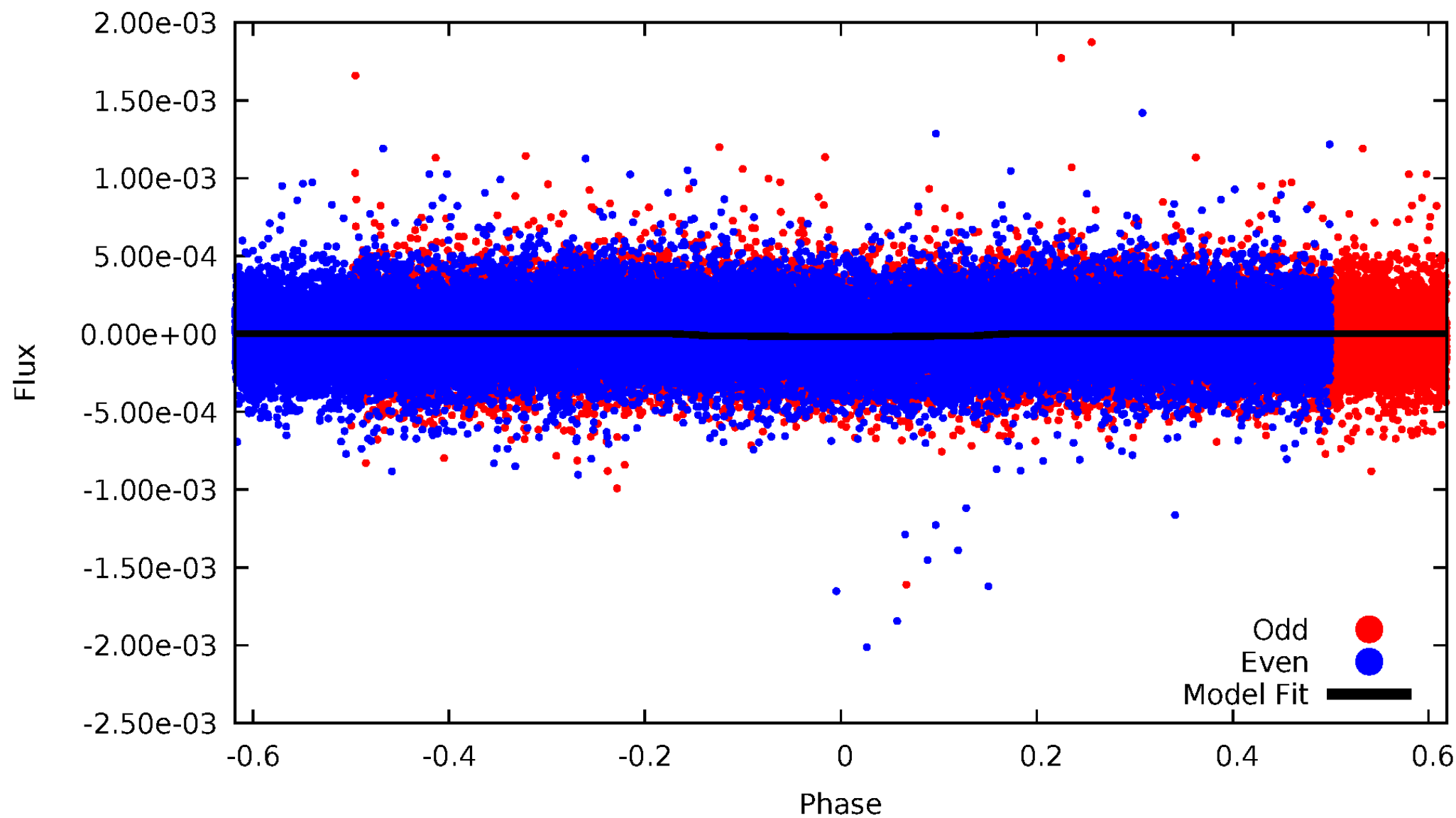


TCE 006207535-01



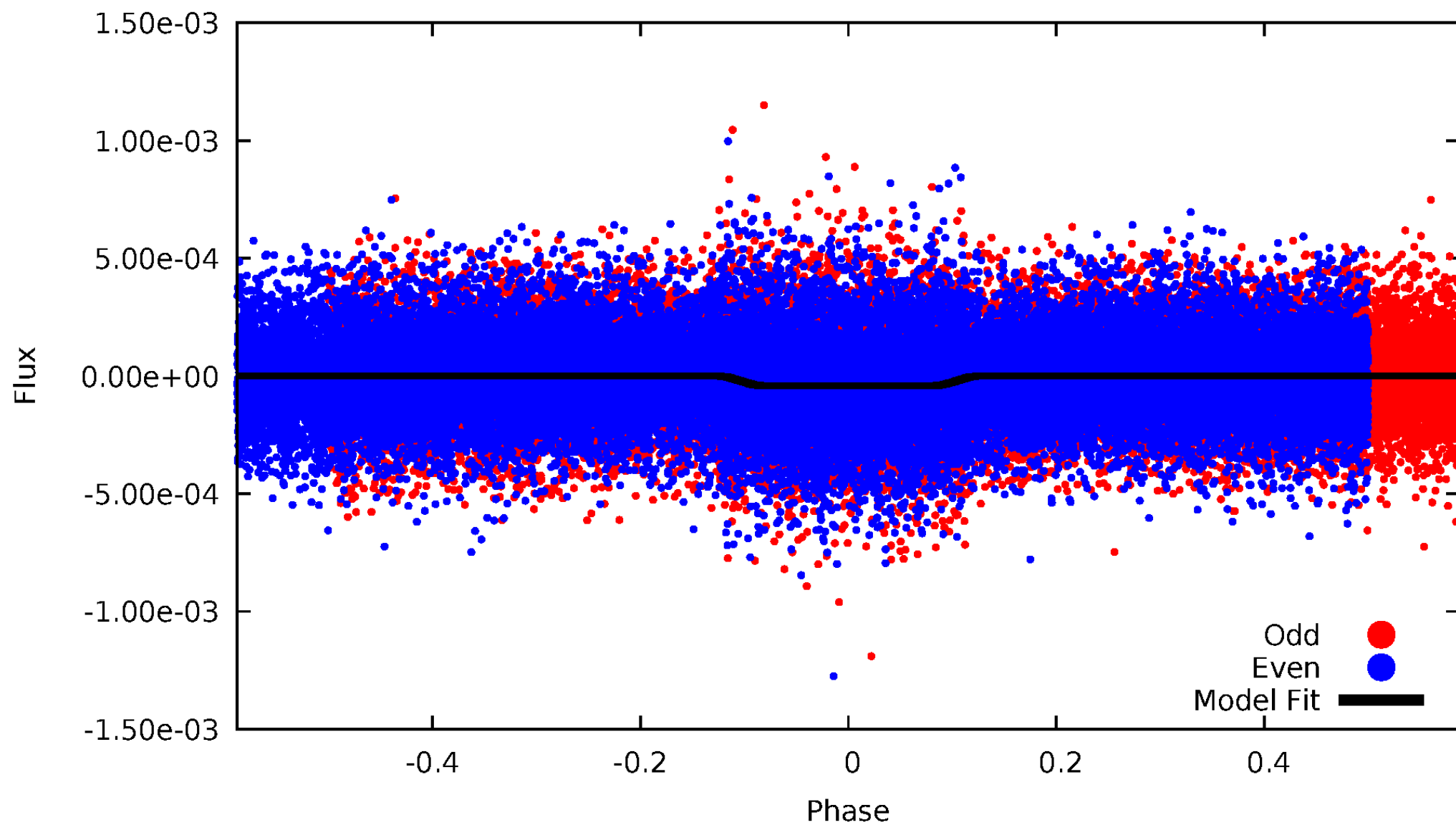
DV Odd/Even

TCE 006207535-01

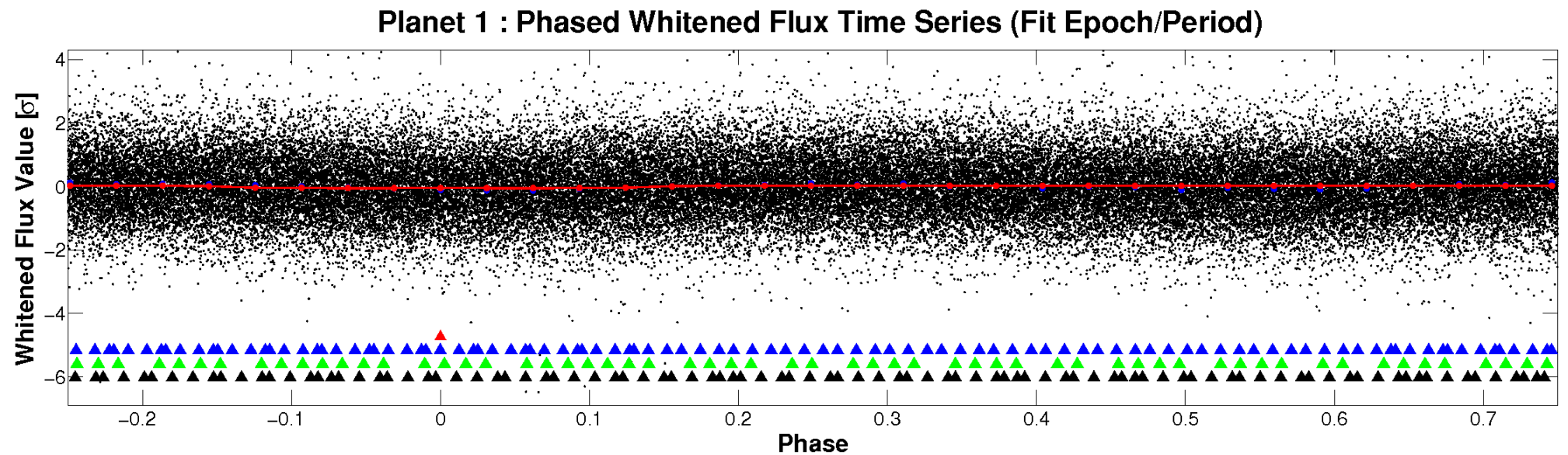
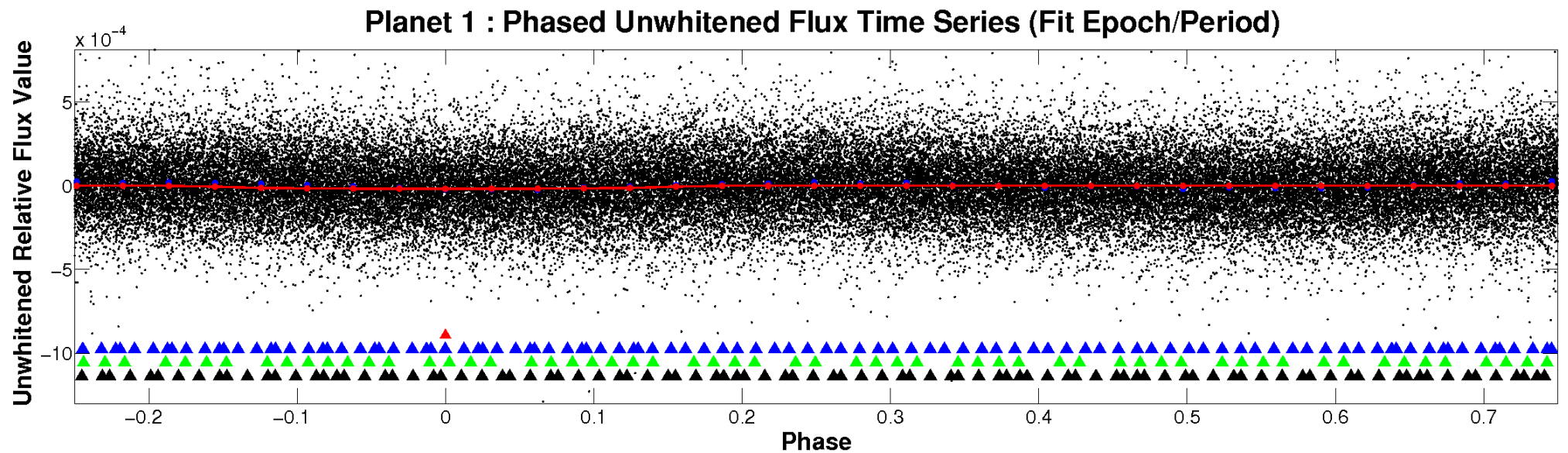


ALT Odd/Even

TCE 006207535-01

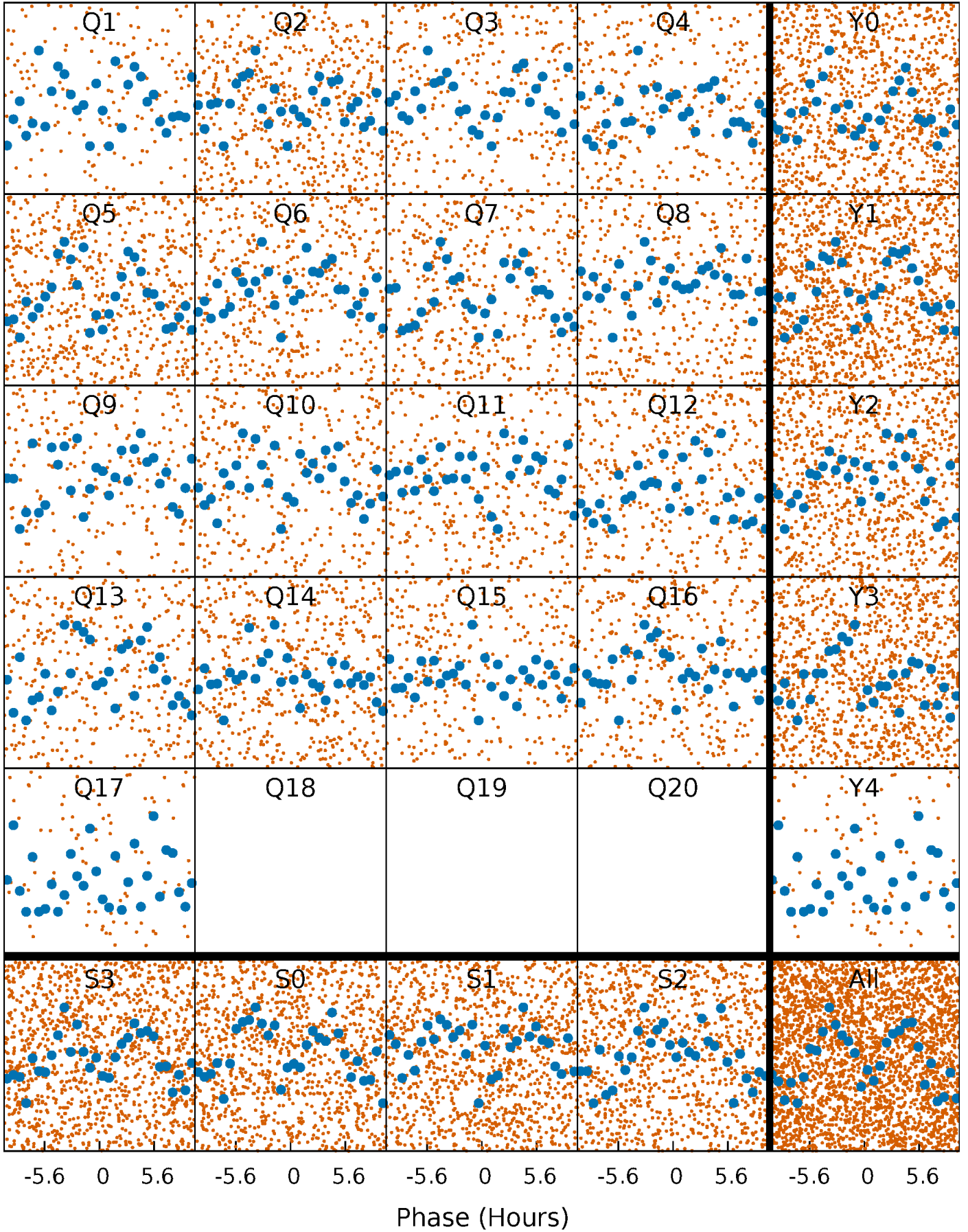


Non-Whitened Vs. Whitened Light Curve



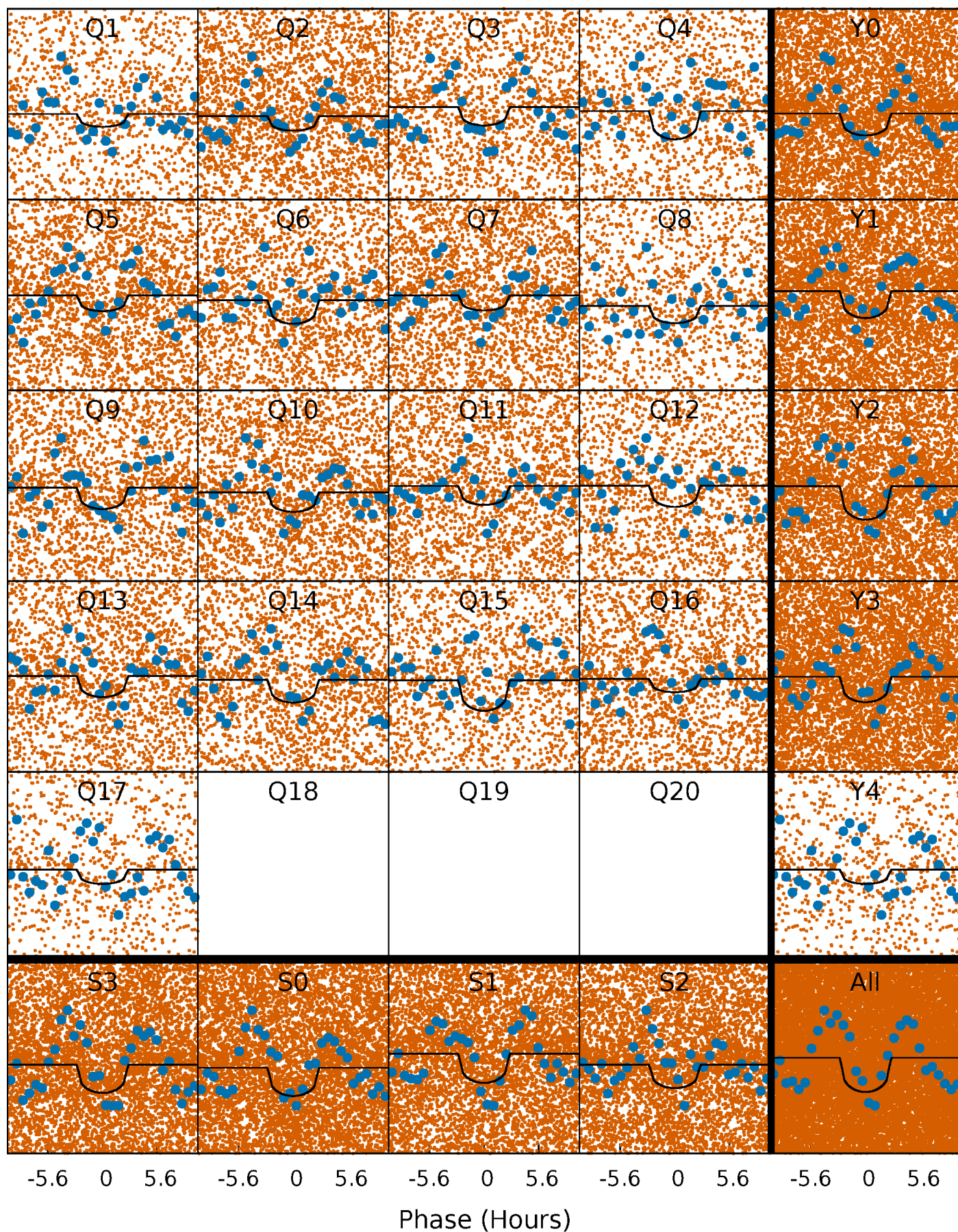
PDC Quarter-Phased Transit Curves

TCE 006207535-01 P= 0.657429 Days $T_0=131.912277$ (BKJD)



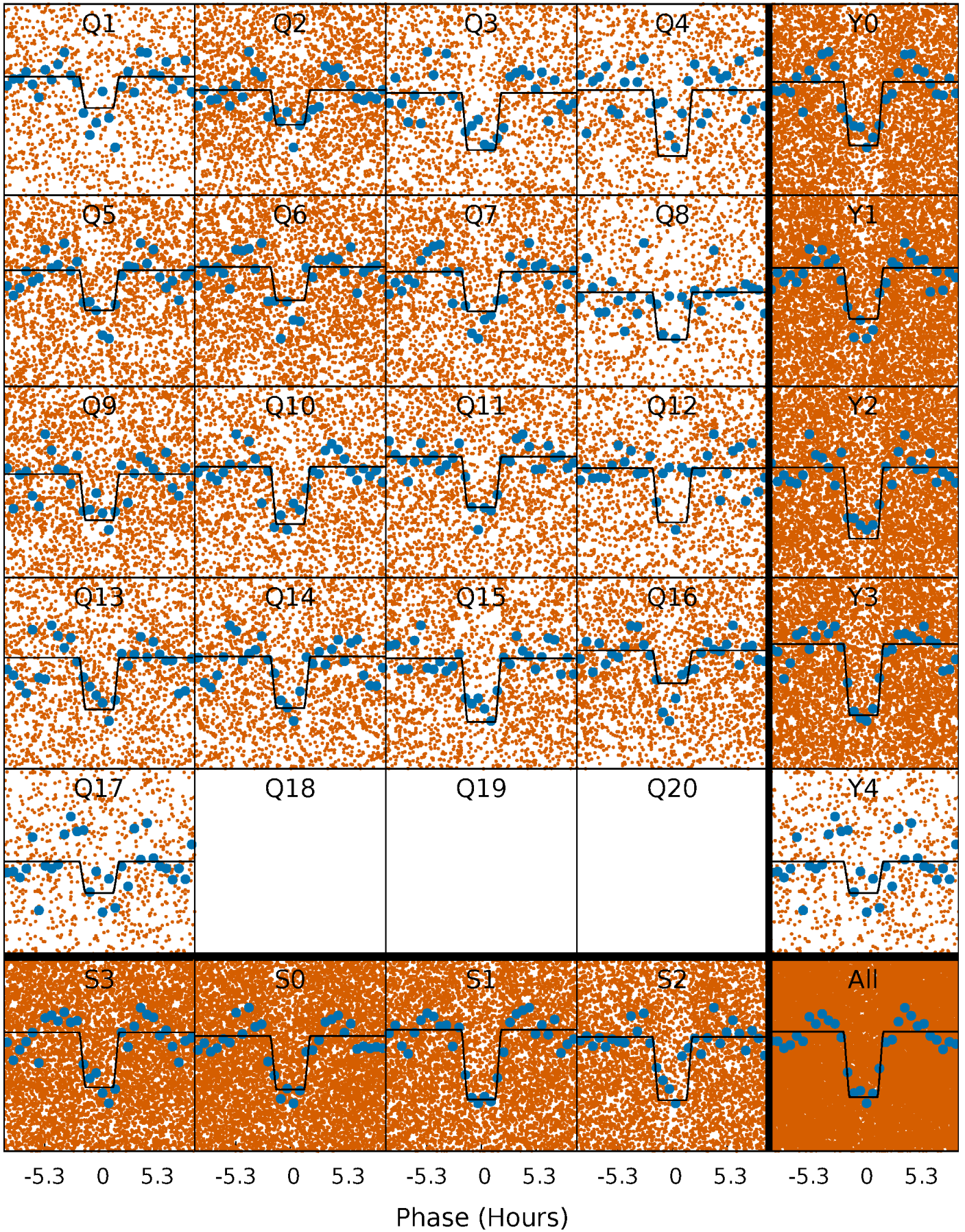
DV Quarter-Phased Transit Curves

TCE 006207535-01 P= 0.657429 Days $T_0=131.912277$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

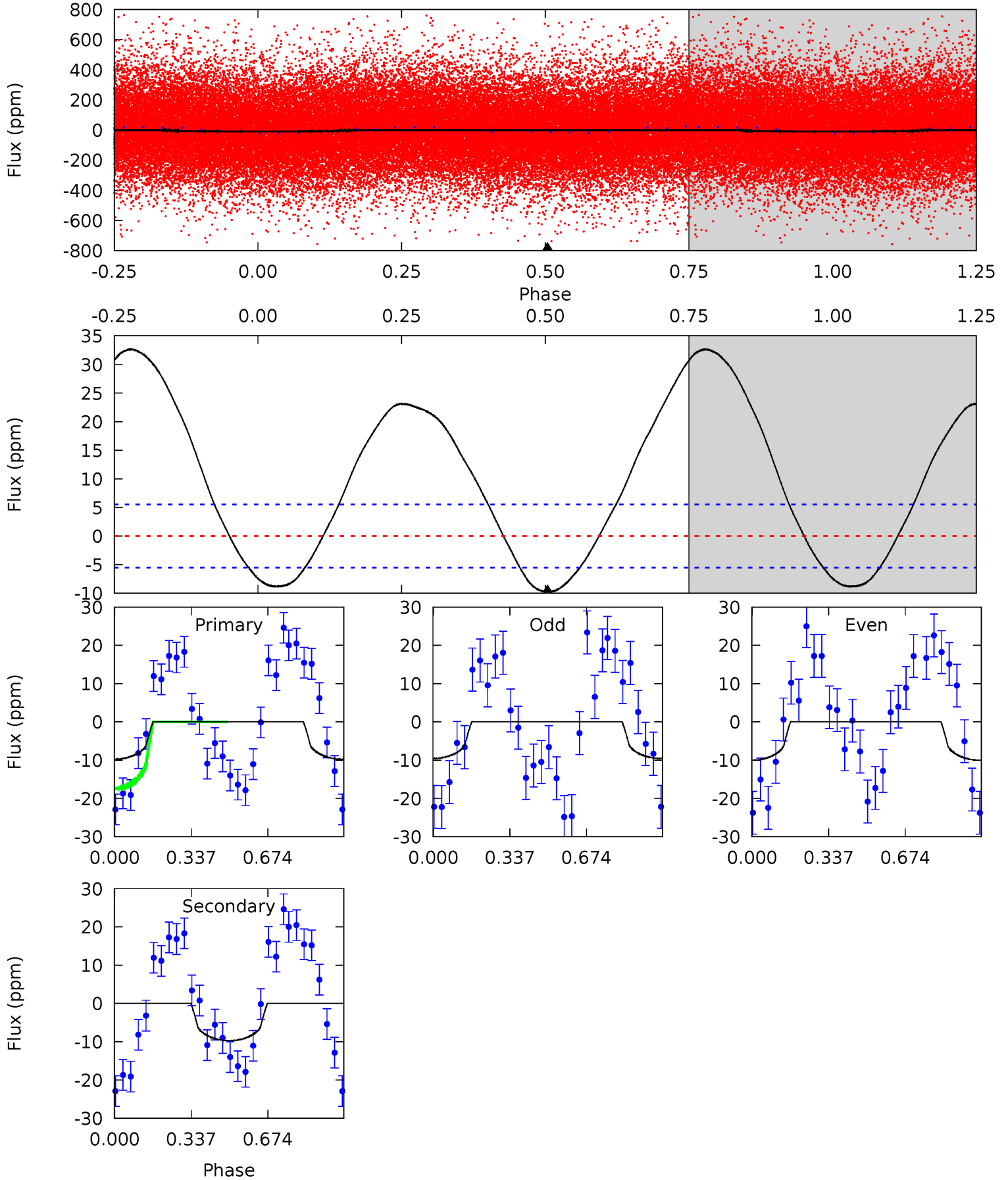
TCE 006207535-01 P= 0.657465 Days $T_0=131.883813$ (BKJD)



DV Model-Shift Uniqueness Test

006207535-01, P = 0.657429 Days, E = 131.254848 Days

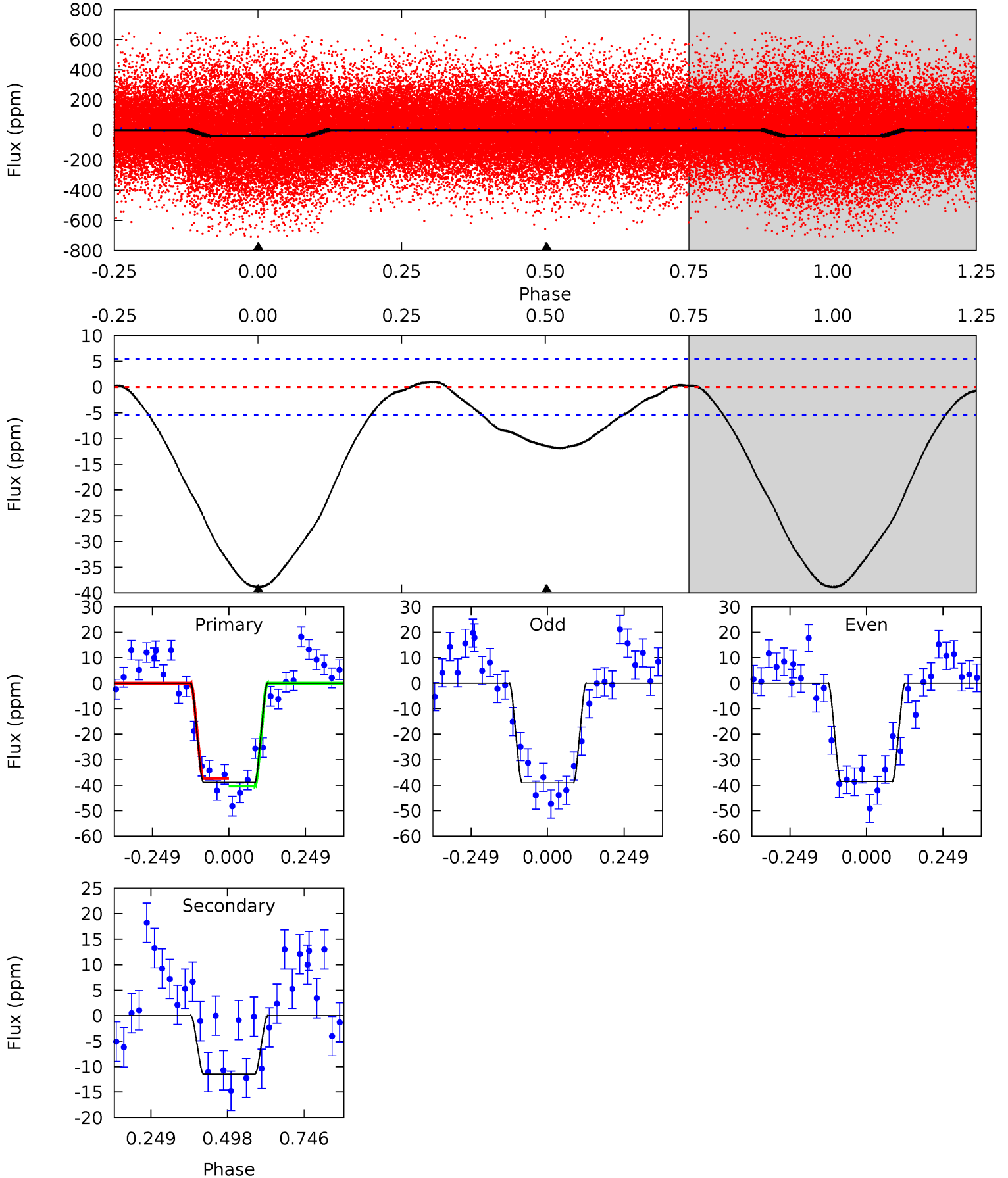
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.59	7.59	0	0	4.30	0.96	7.87	7.59	7.59	7.59	7.59	0.18	0.85	0.77	6.14



Alt Model-Shift Uniqueness Test

006207535-01, P = 0.657465 Days, E = 131.226348 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
31.0	9.13	0	0	4.37	1.15	0.52	31.0	31.0	9.13	9.13	0.19	1.00	0.02	1.18



Stellar Parameters For KIC 006207535

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5895^{+77}_{-77}	$4.489^{+0.021}_{-0.126}$	$0.210^{+0.150}_{-0.150}$	$0.991^{+0.154}_{-0.041}$	$1.105^{+0.050}_{-0.072}$	$1.597^{+0.131}_{-0.548}$
	+1%/-1%	+0%/-3%	+71%/-71%	+16%/-4%	+5%/-7%	+8%/-34%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 006207535-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-10 ± 1	$0.55^{+0.47}_{-0.34}$	2962^{+119}_{-68}	4738^{+3052}_{-1119}	$4.092^{+25.477}_{-2.934}$
Alt.	-11 ± 1	$0.76^{+0.51}_{-0.42}$	2962^{+111}_{-69}	4321^{+1853}_{-892}	$2.616^{+10.170}_{-1.710}$

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

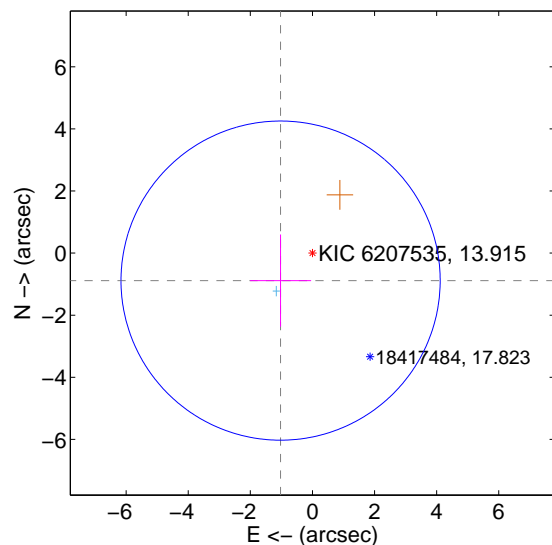
Supplemental centroid analysis for 006207535-01. Kepler magnitude: 13.91. Transit SNR 7.62

There are 1 quarters with good PRF difference image offsets

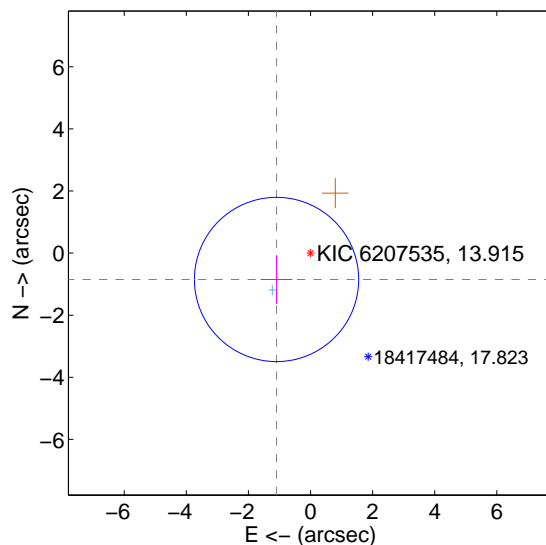
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.356 ± 1.714	0.79	1.026 ± 0.983	-0.886 ± 1.486
PRF-fit source offset from KIC position	1.386 ± 0.882	1.57	1.095 ± 0.512	-0.850 ± 0.784
photometric centroid source offset	1.09 ± 1.21	0.90	-0.85 ± 1.23	-0.67 ± 1.16

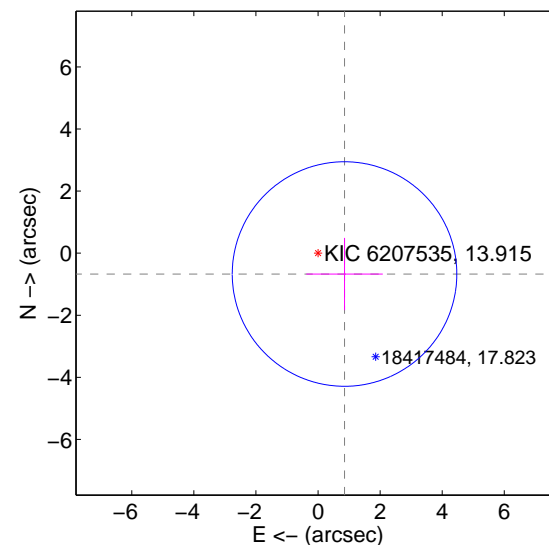
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

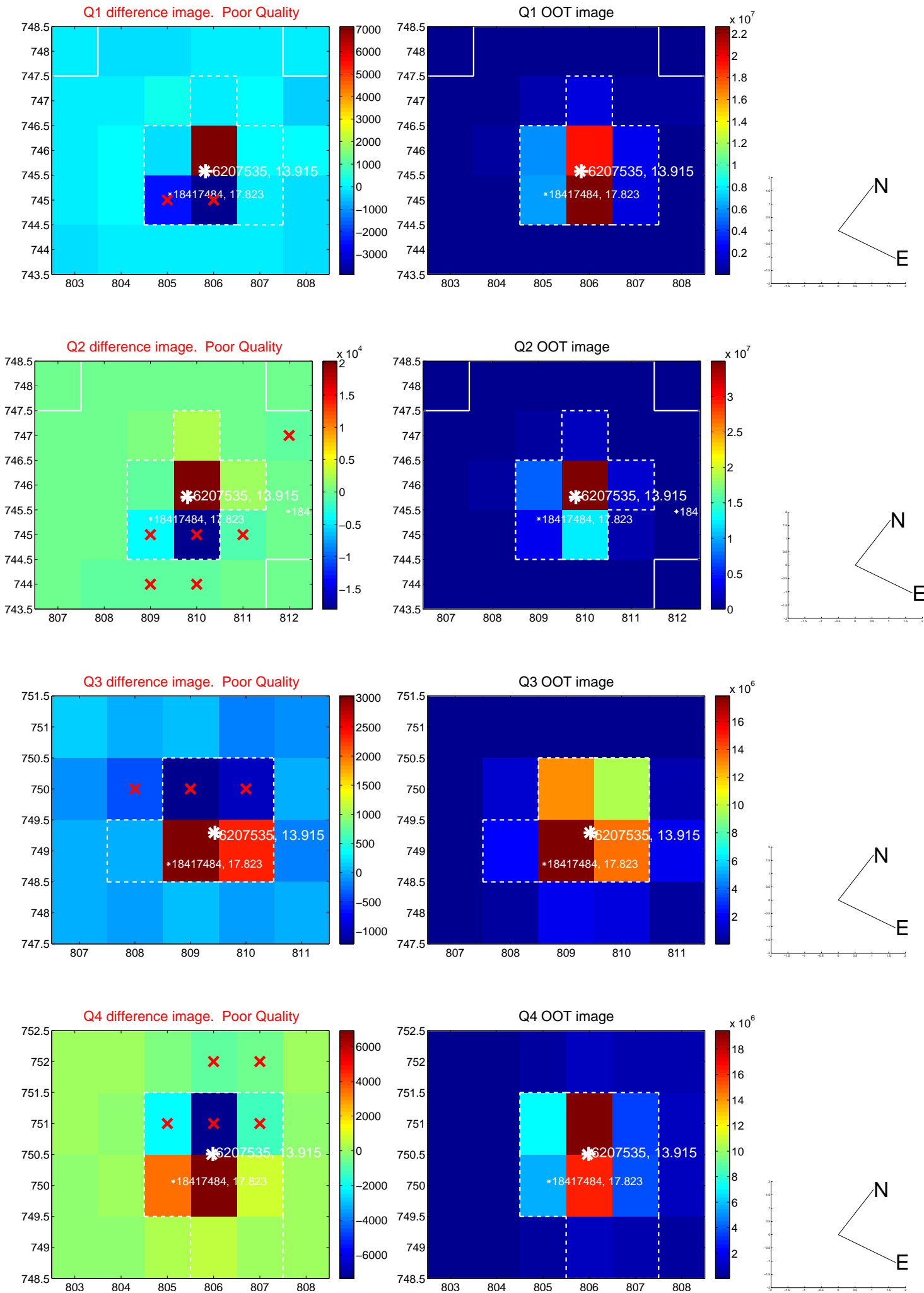


offset from photometric centroids

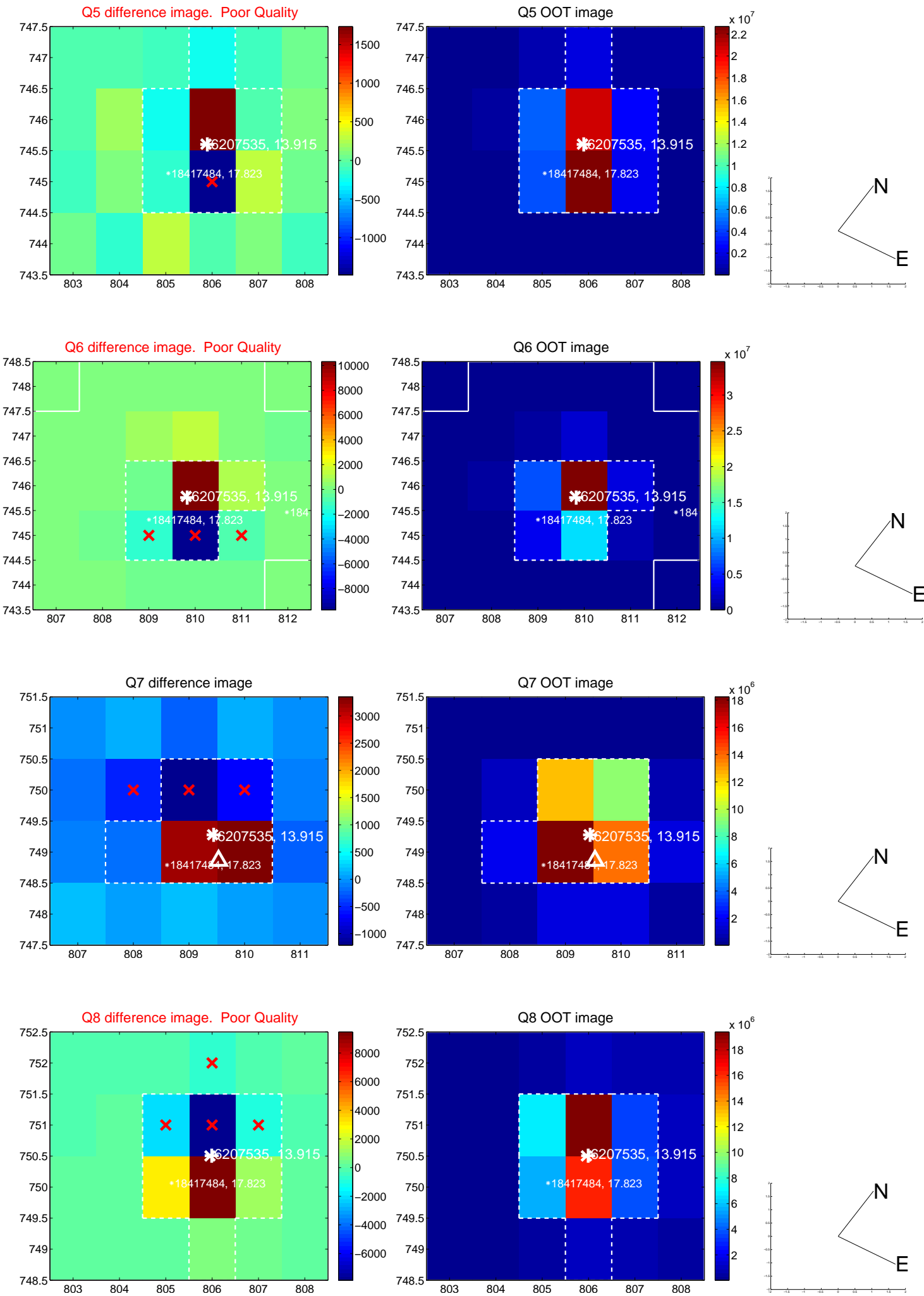


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

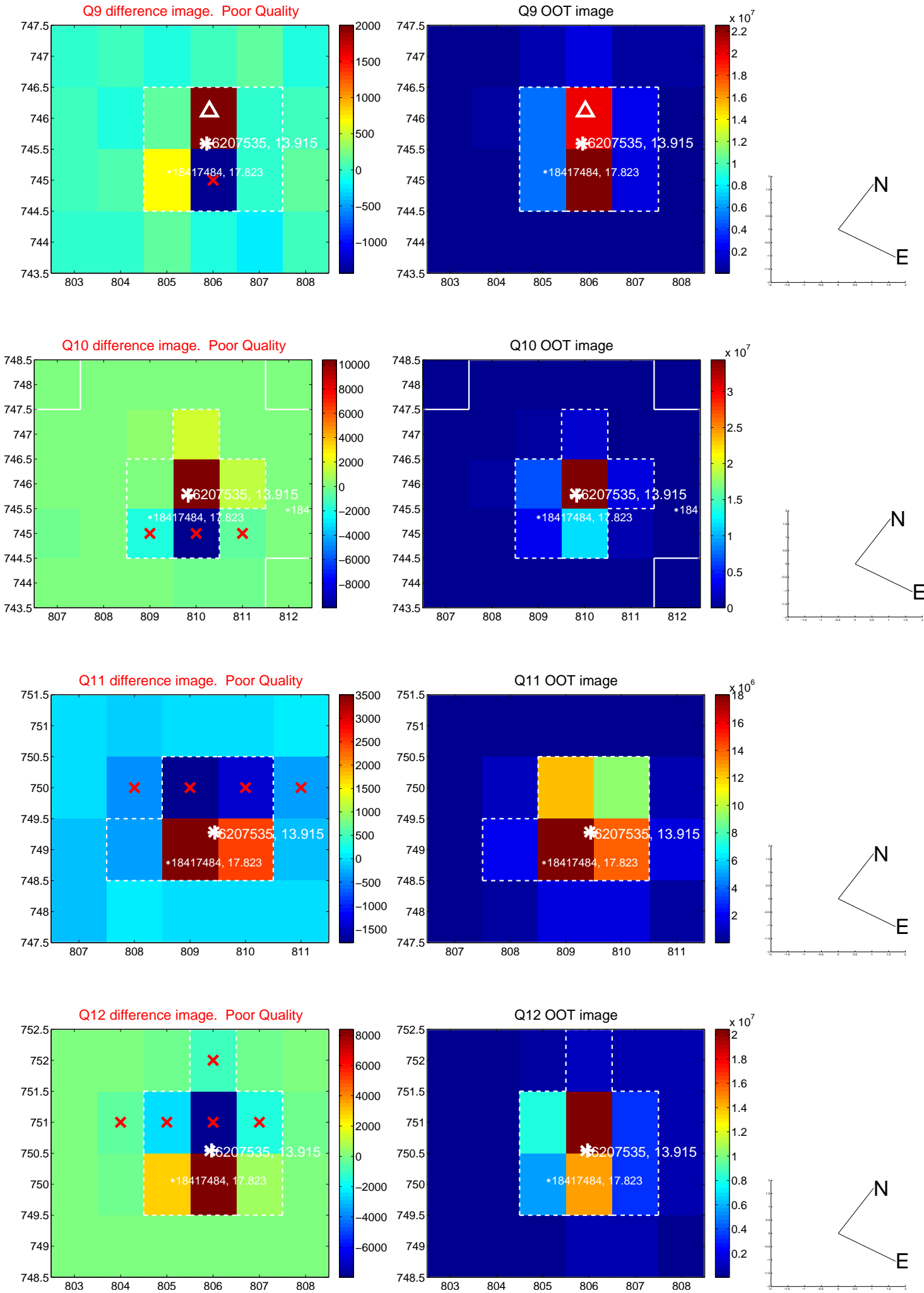
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



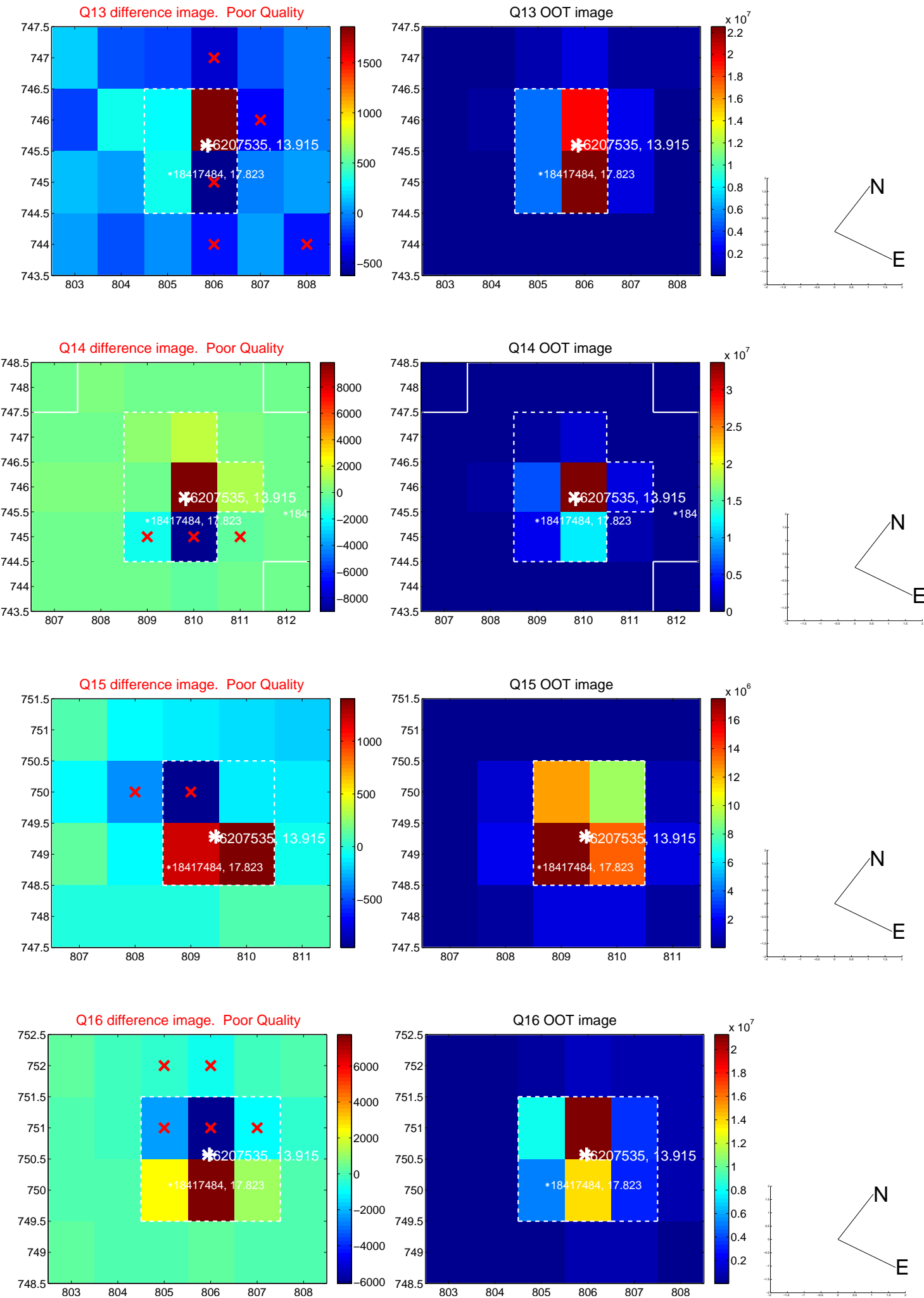
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



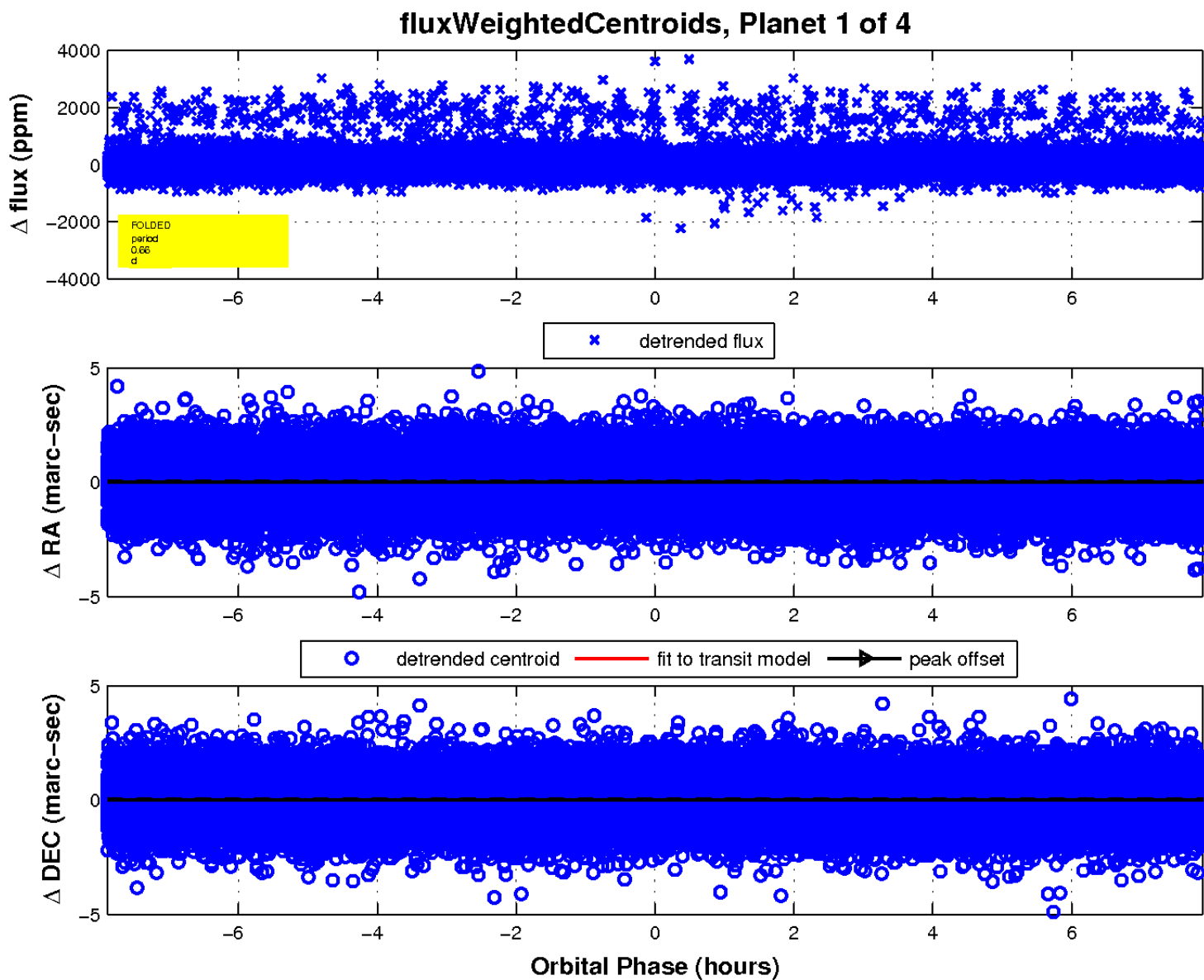
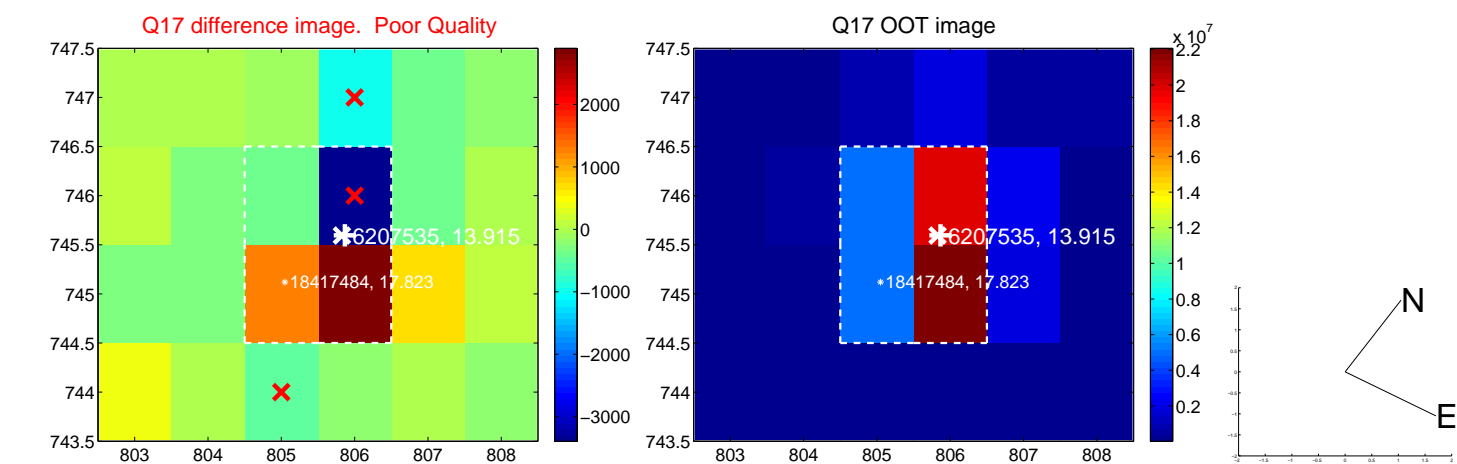
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

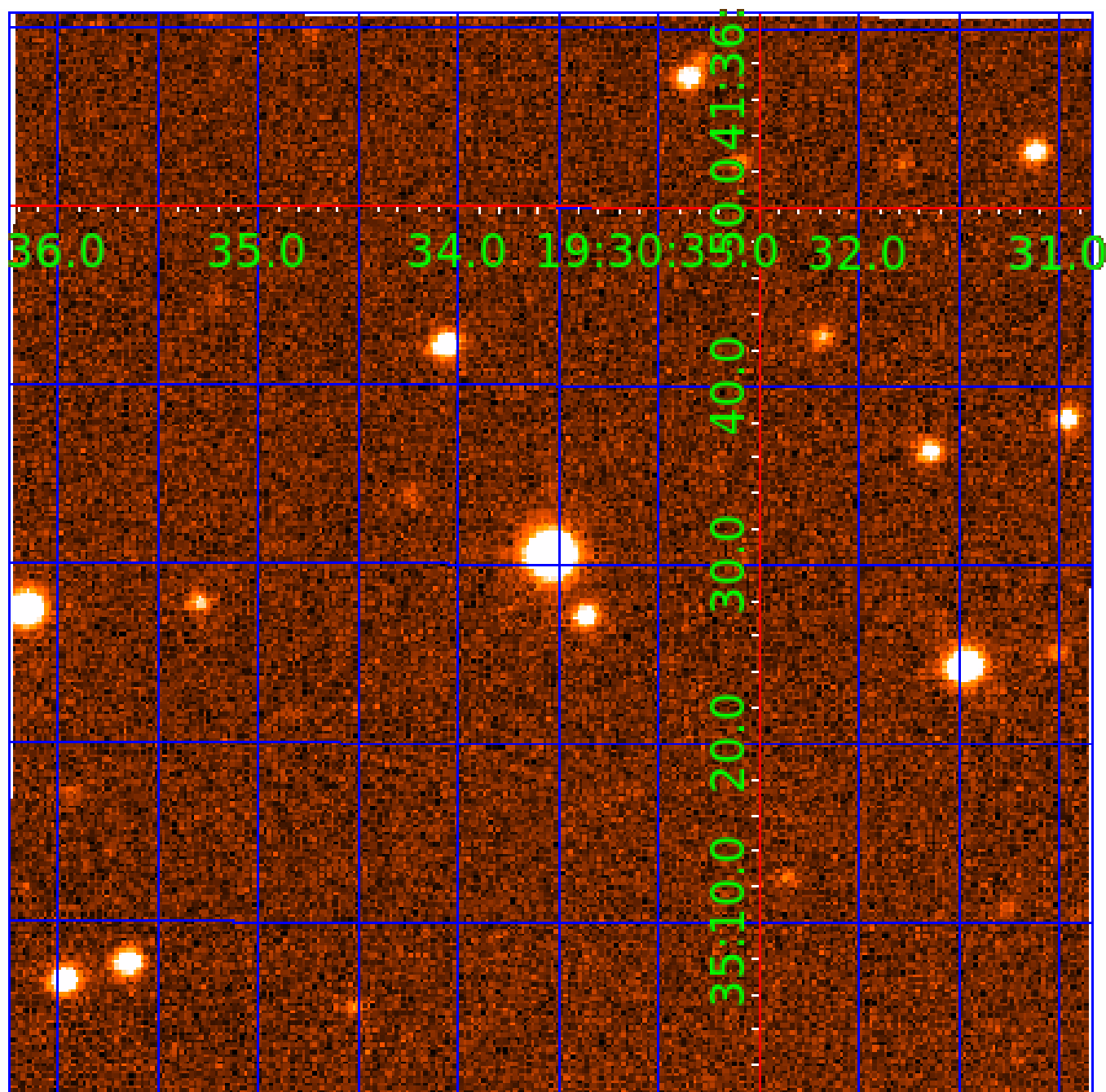


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006207535

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})
006207535-01	OBS	No	0.657429	131.912277	16.9	4.879	10.1	7.6	0.99	5895	0.41	4540.25
006207535-02	OBS	No	14.440485	140.544234	1808.0	1.948	13.9	10.6	0.99	5895	4.22	73.81
006207535-03	OBS	No	24.441965	154.761875	2343.5	2.889	12.9	14.1	0.99	5895	8.09	36.59
006207535-04	OBS	No	15.298221	140.050115	2499.4	0.762	11.4	15.5	0.99	5895	5.03	68.34

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006207535-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
006207535-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—CENT_FEW_DIFFS—HALO_GHOST
006207535-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—CENT_FEW_MEAS
006207535-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—HALO_GHOST

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

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

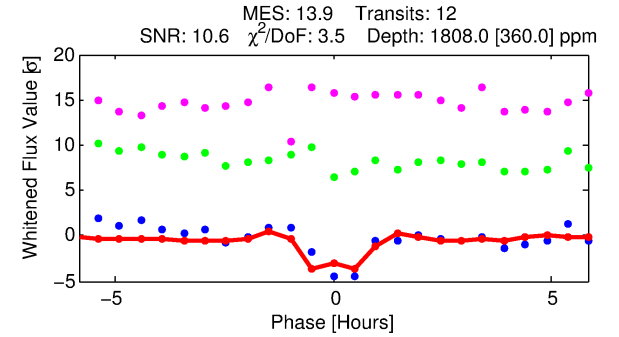
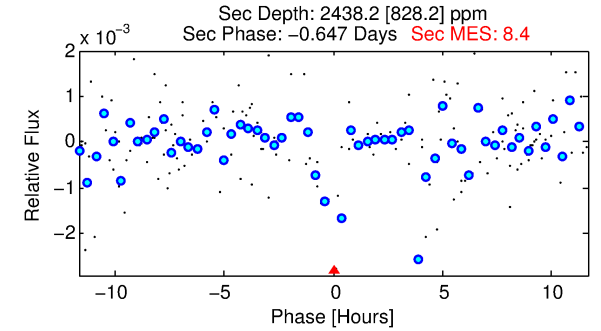
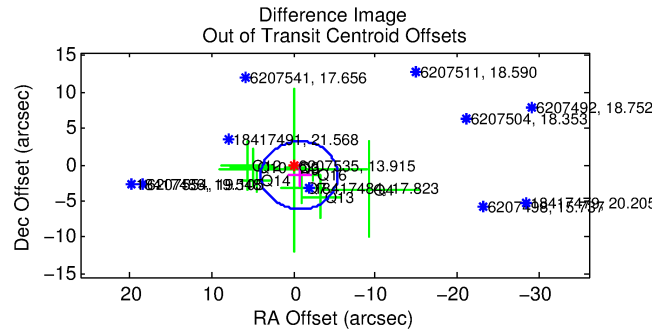
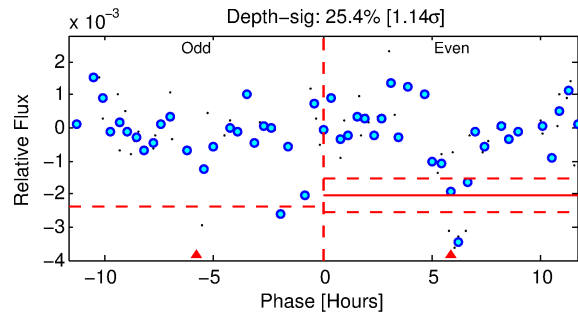
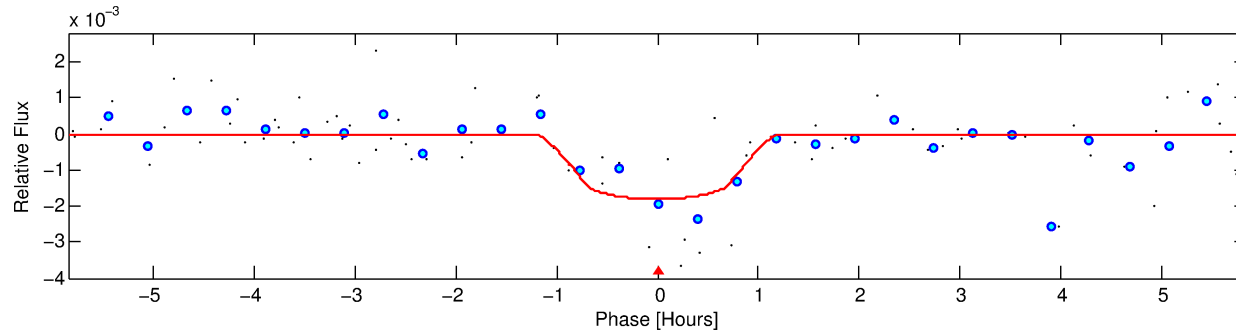
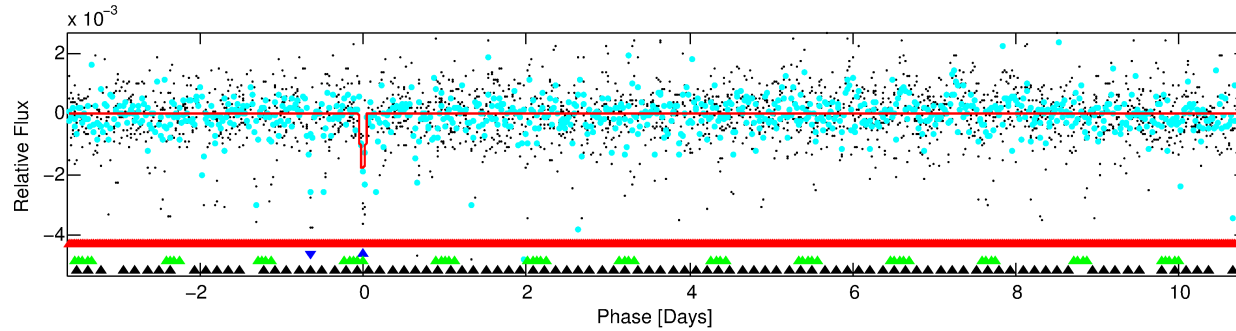
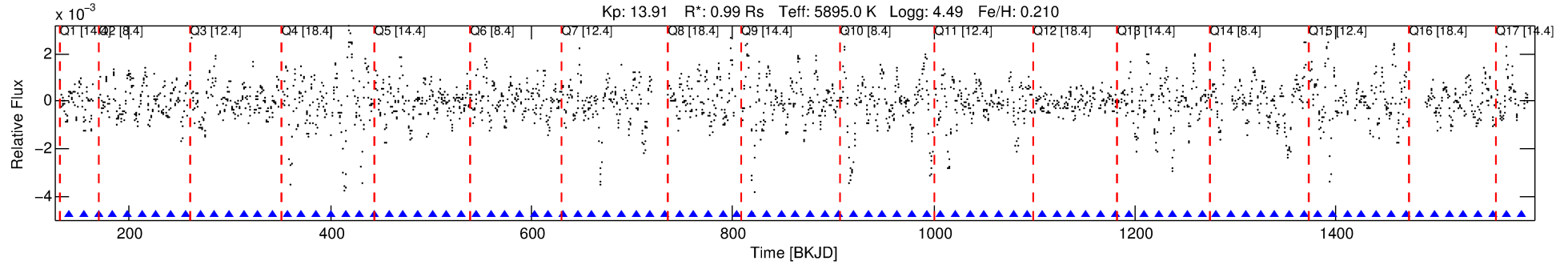
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006207535-02

No Significant Match Found

DV One-Page Summary

KIC: 6207535 Candidate: 2 of 4 Period: 14.440 d



DV Fit Results:

Period = 14.44048 [0.00019] d
Epoch = 140.5442 [0.0109] BKJD
Rp/R* = 0.0391 [0.0892]
a/R* = 56.27 [554.79]
b = 0.30 [29.83]
Seff = 73.81 [16.65]
Teq = 747 [42] K
Rp = 4.22 [9.67] Re
a = 0.1200 [0.0170] AU
Ag = 1081.89 [4959.55] [0.22 σ]
Teffp = 6627 [7587] K [0.77 σ]

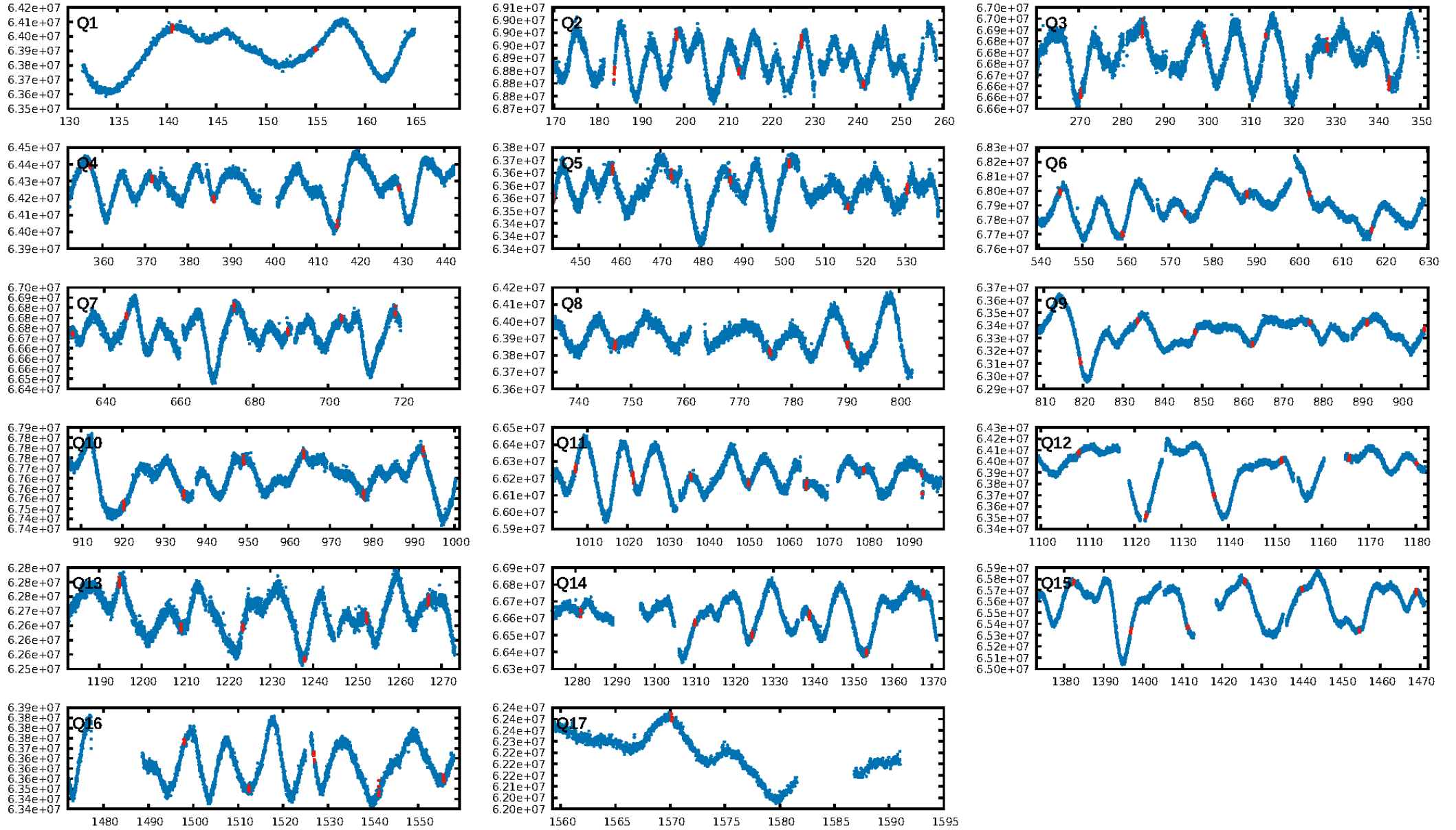
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [62.96 σ]
LongPeriod-sig: 100.0% [9.84 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 80.5%
Bootstrap-pfa: 5.41e-30
RollingBand-fgt: 1.00 [12/12]
GhostDiagnostic-chr: -0.241
Centroid-sig: 23.1%
Centroid-so: 0.260 arcsec [3.11 σ]
OotOffset-rm: 1.625 arcsec [1.04 σ]
KicOffset-rm: 1.520 arcsec [0.97 σ]
OotOffset-st: 2/2/3/2 [9]
KicOffset-st: 2/2/3/2 [9]
DiffImageQuality-fgm: 0.00 [0/9]
DiffImageOverlap-fno: 0.00 [0/17]

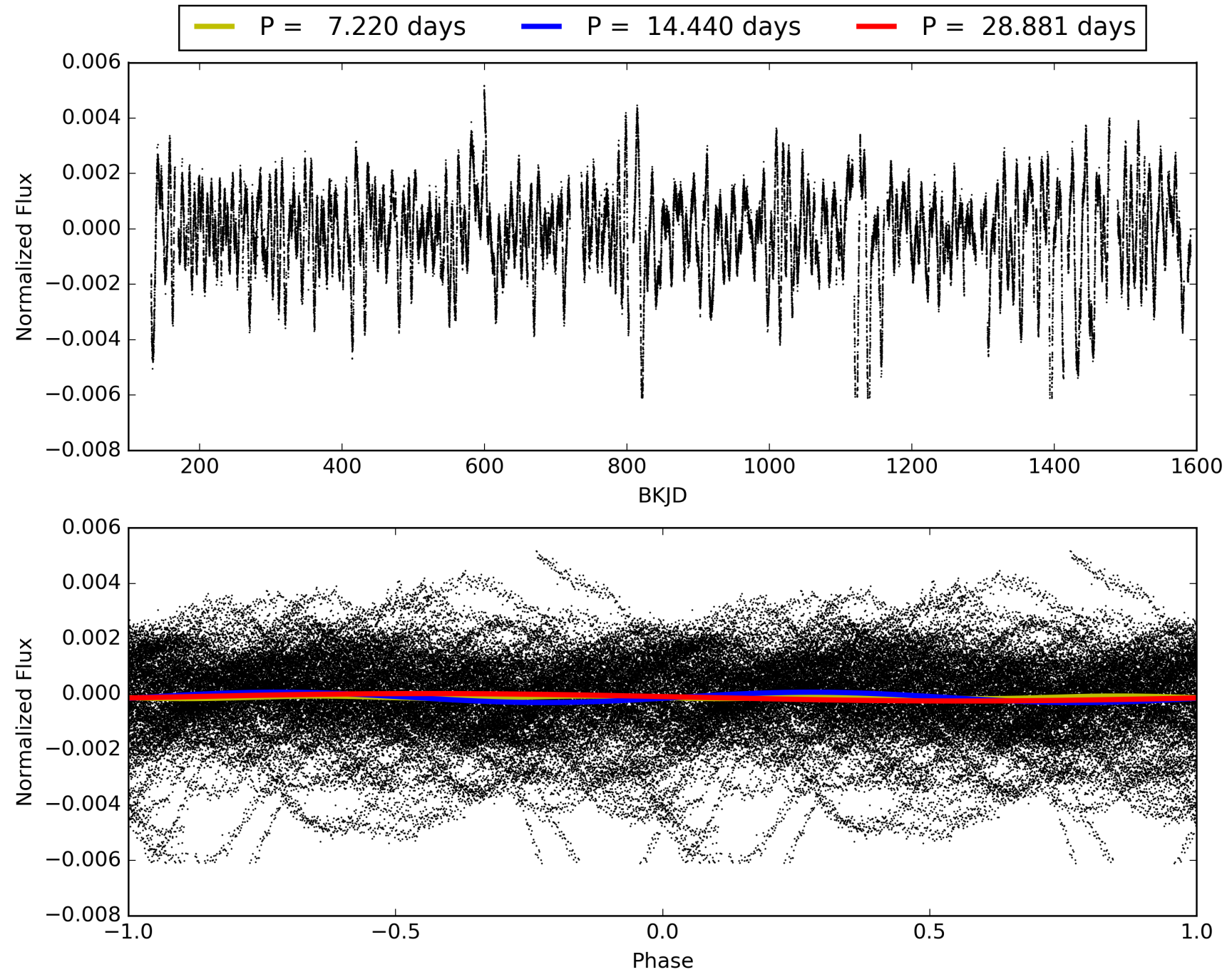
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 04:19:40 Z

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

TCE 006207535-02, PDC Light Curves

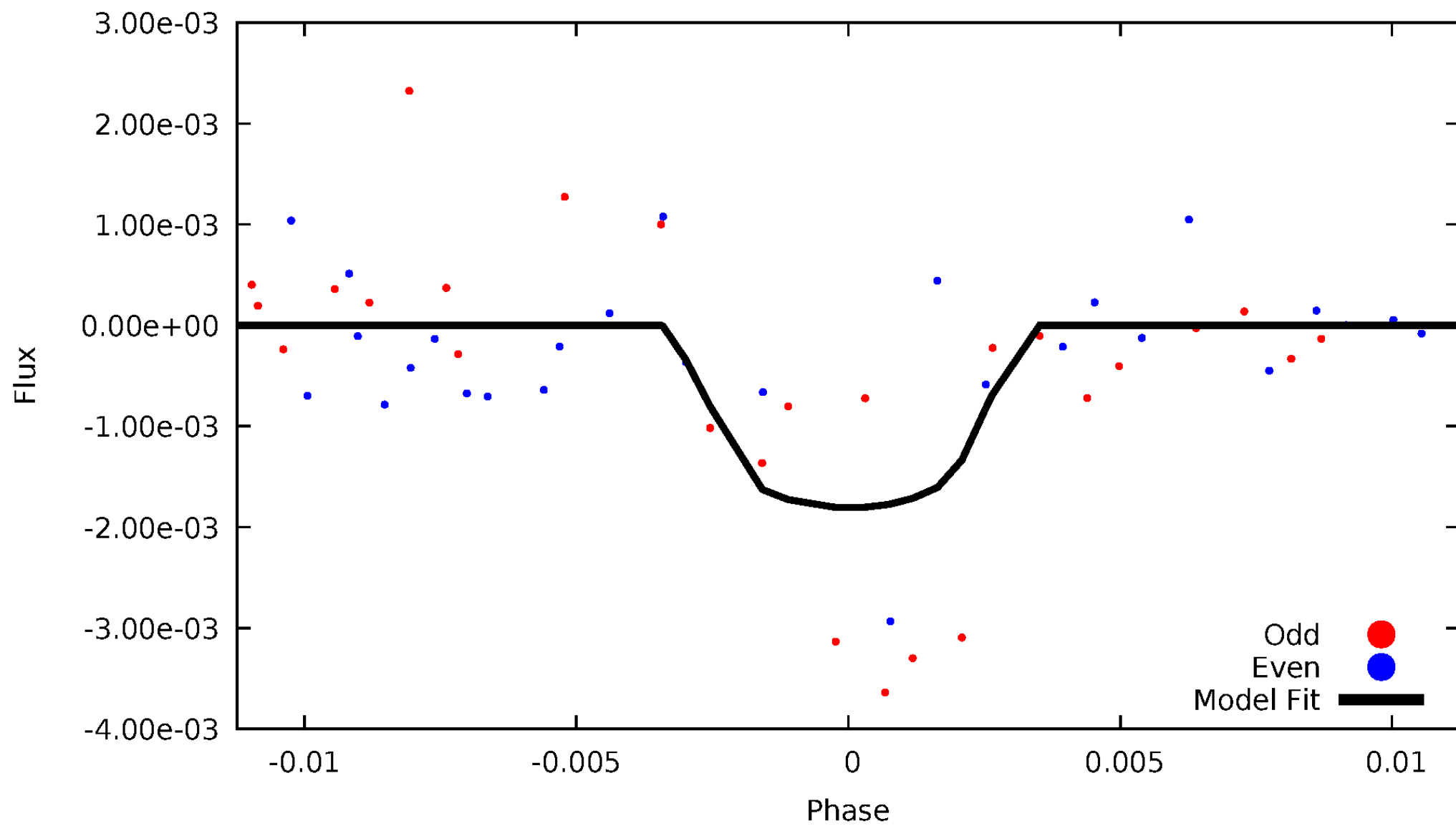


TCE 006207535-02



DV Odd/Even

TCE 006207535-02

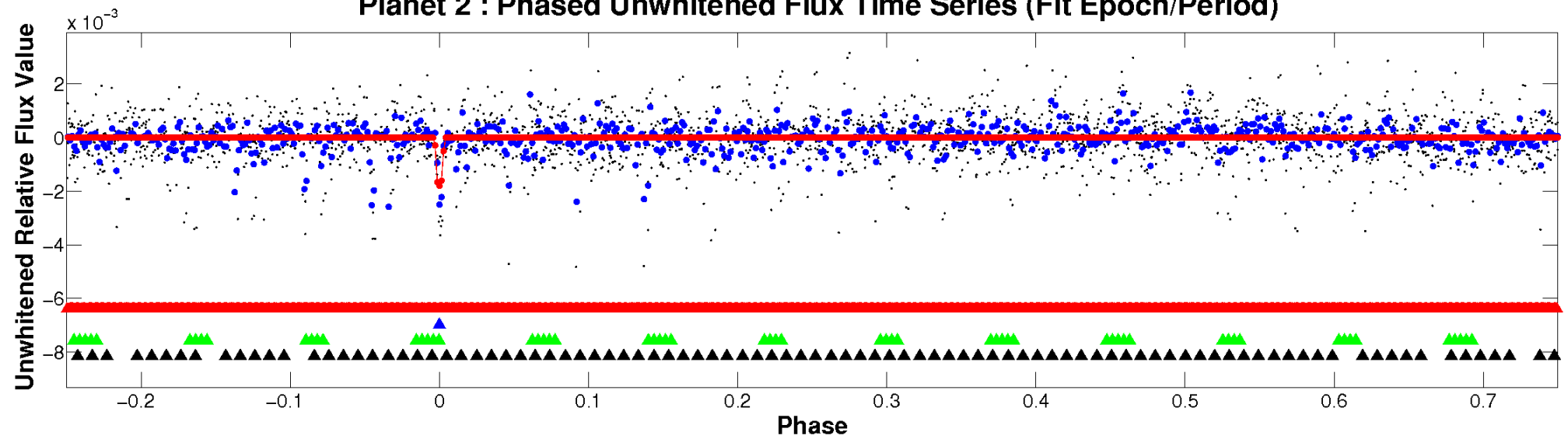


ALT Odd/Even

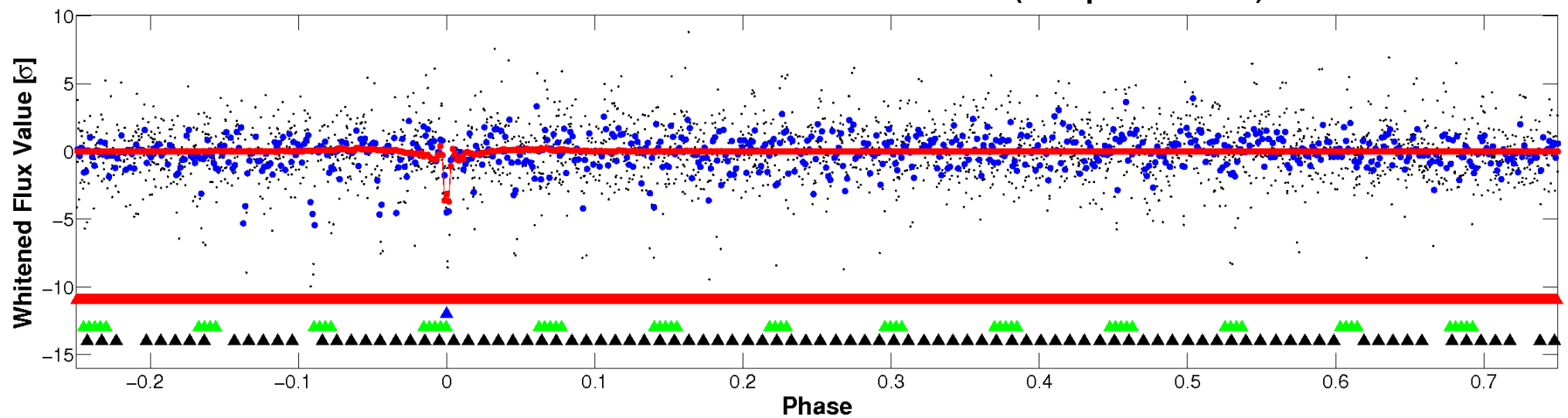
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

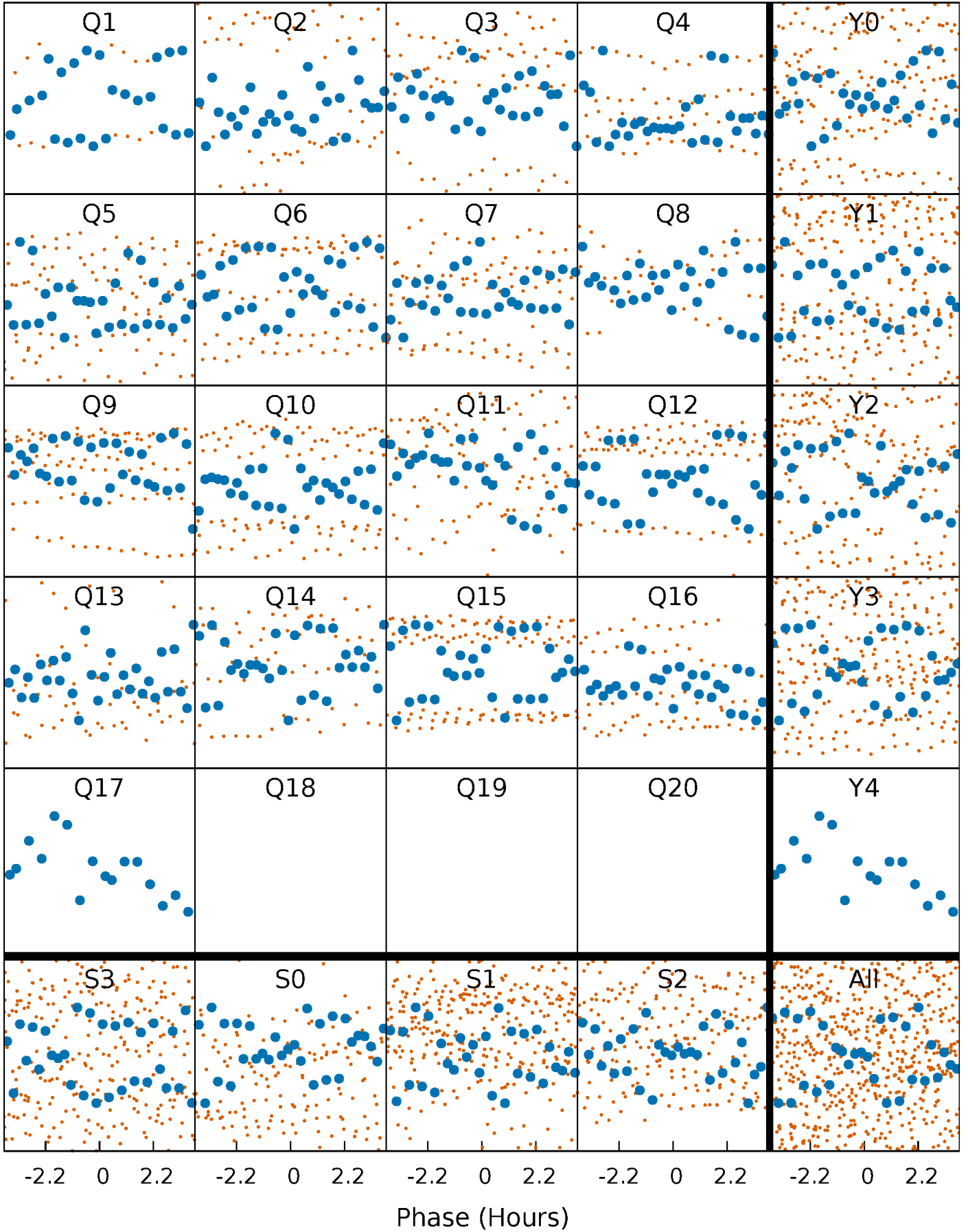


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



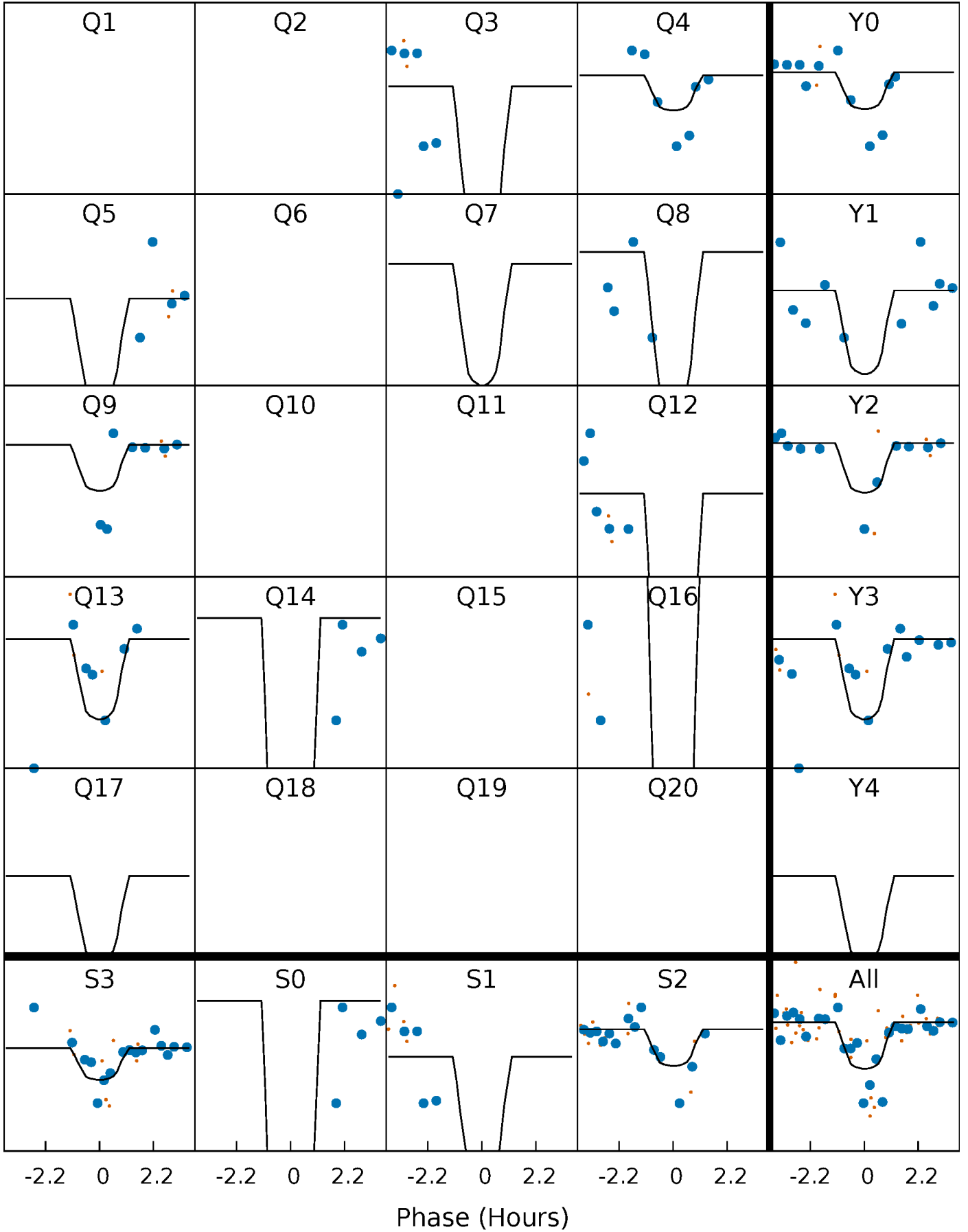
PDC Quarter-Phased Transit Curves

TCE 006207535-02 P= 14.440485 Days $T_0=140.544234$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 006207535-02 P= 14.440485 Days $T_0=140.544234$ (BKJD)

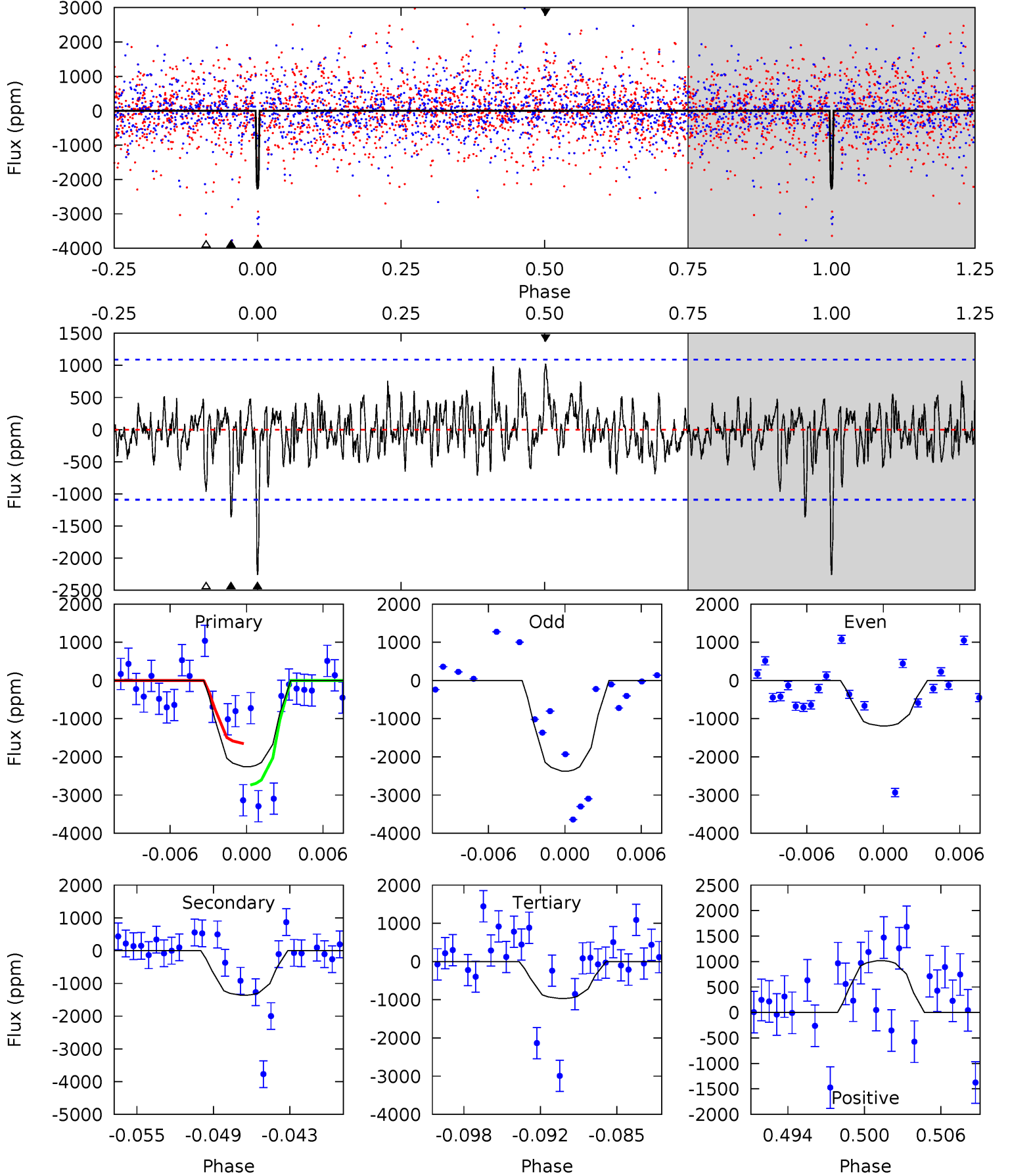


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

006207535-02, P = 14.440485 Days, E = 126.103749 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.6	6.40	4.54	4.78	5.12	2.74	1.33	6.07	5.84	1.85	1.61	2.83	1.07	0.31	2.57



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 006207535

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5895^{+77}_{-77}	$4.489^{+0.021}_{-0.126}$	$0.210^{+0.150}_{-0.150}$	$0.991^{+0.154}_{-0.041}$	$1.105^{+0.050}_{-0.072}$	$1.597^{+0.131}_{-0.548}$
	+1%/-1%	+0%/-3%	+71%/-71%	+16%/-4%	+5%/-7%	+8%/-34%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 006207535-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1360 ± 213	$8.33^{+8.35}_{-5.85}$	1058^{+41}_{-23}	4362^{+3269}_{-937}	151^{+1551}_{-114}
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 $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

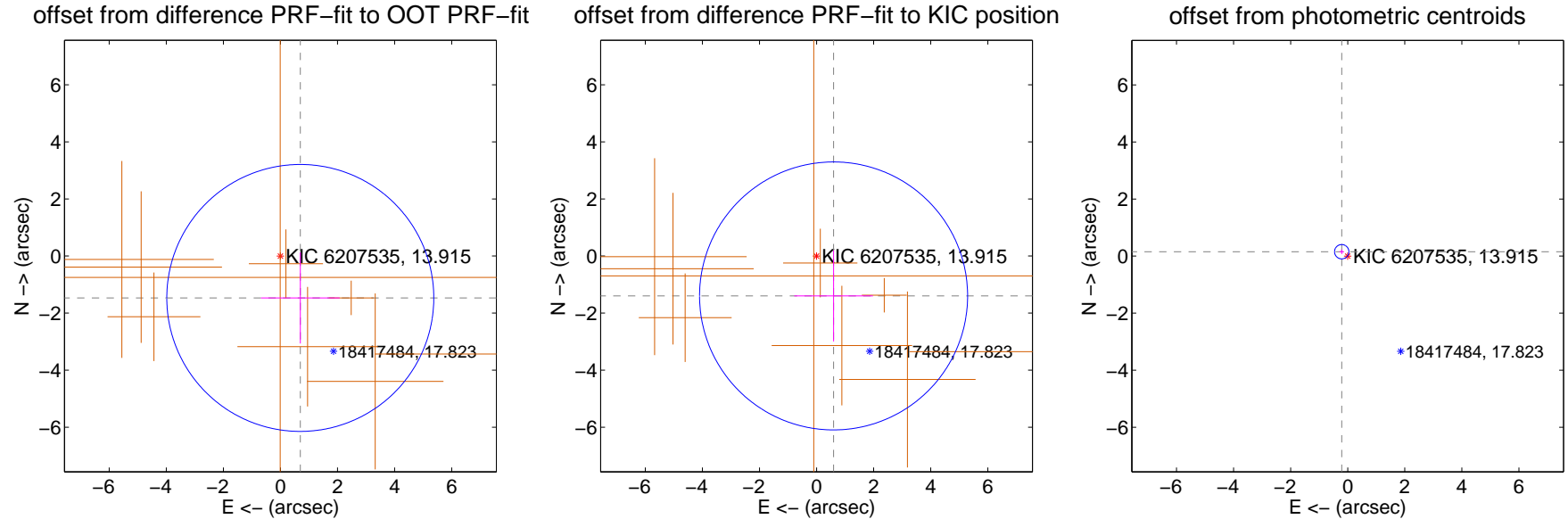
DV Centroid Data

Supplemental centroid analysis for 006207535-02. Kepler magnitude: 13.91. Transit SNR 10.64

There are 0 quarters with good PRF difference image offsets

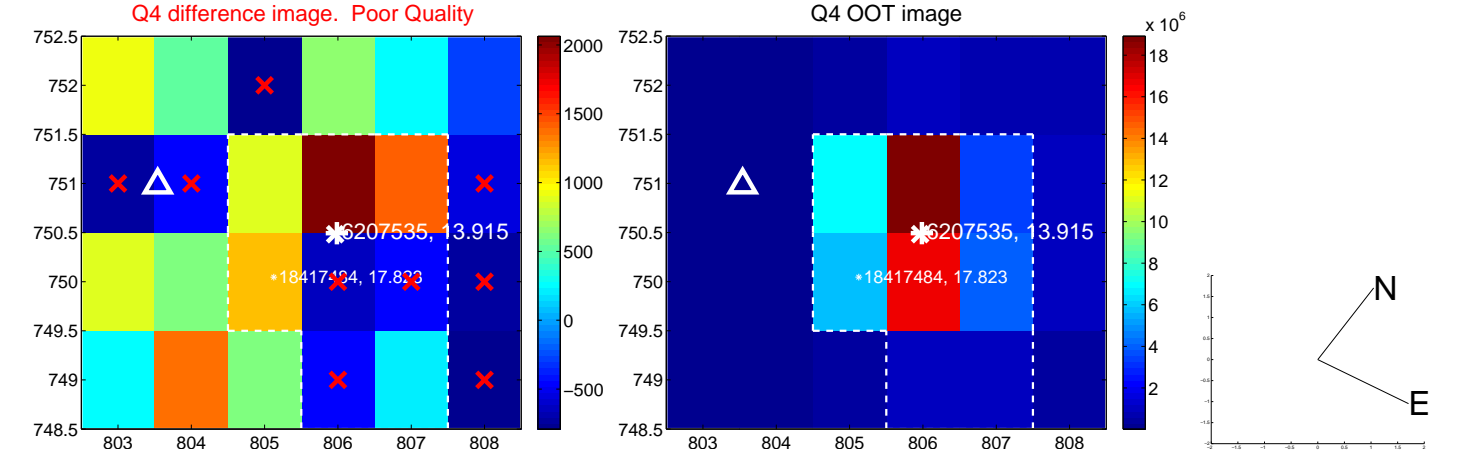
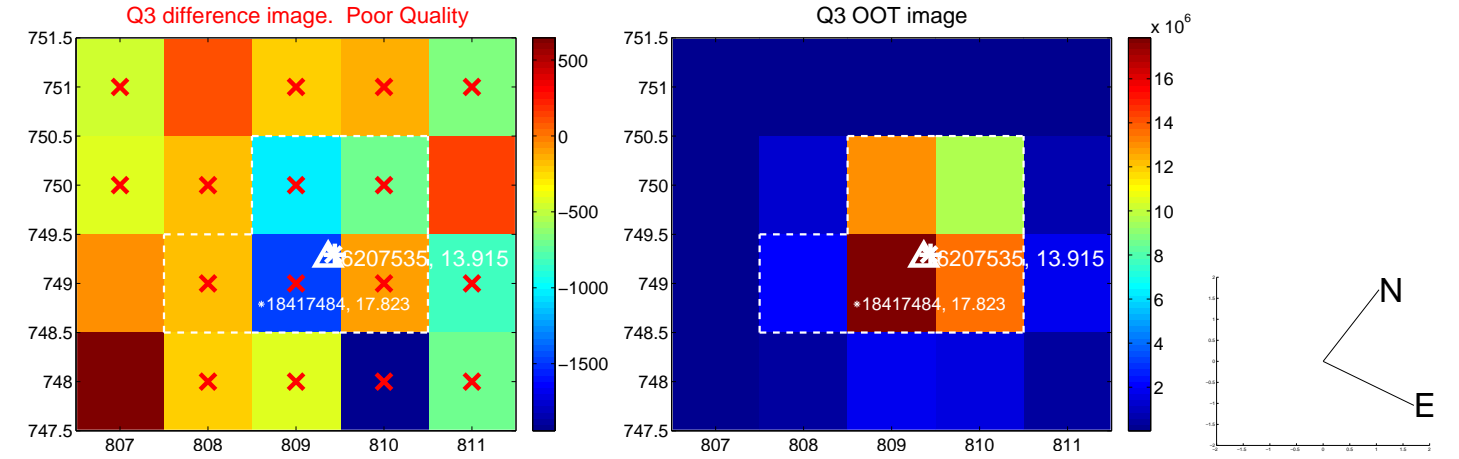
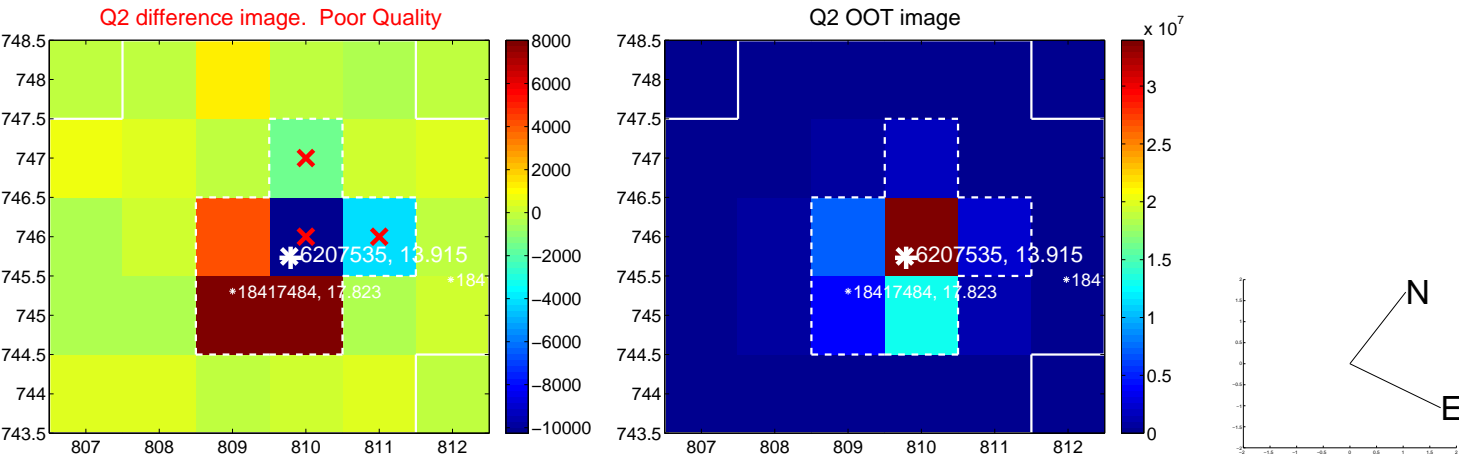
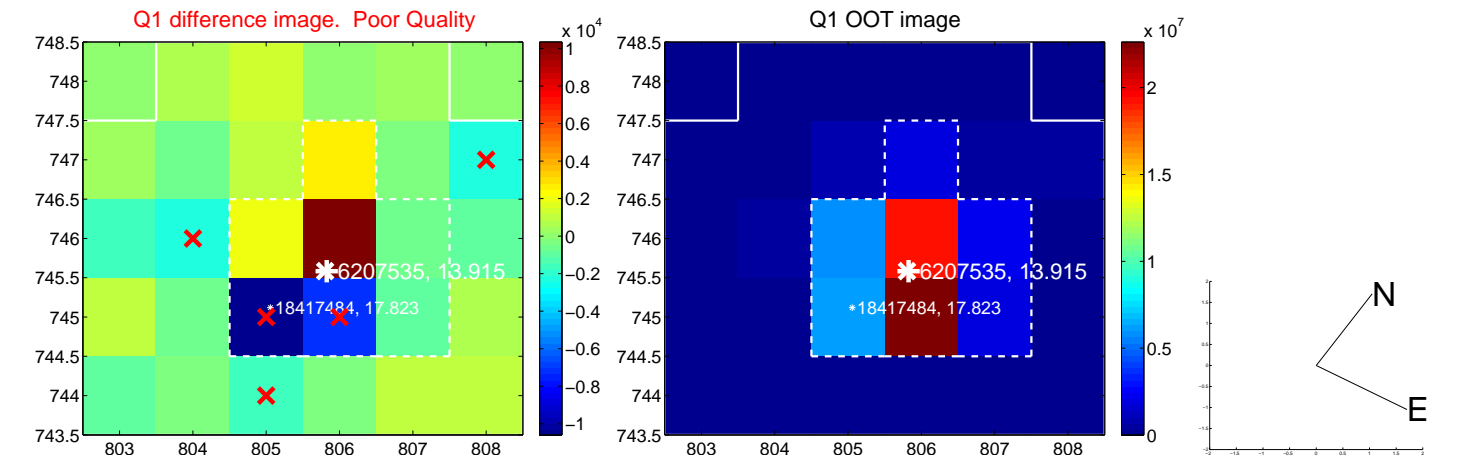
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.625 ± 1.559	1.04	-0.695 ± 1.378	-1.469 ± 1.597
PRF-fit source offset from KIC position	1.520 ± 1.565	0.97	-0.596 ± 1.378	-1.398 ± 1.597
photometric centroid source offset	0.26 ± 0.08	3.11	0.21 ± 0.08	0.15 ± 0.08

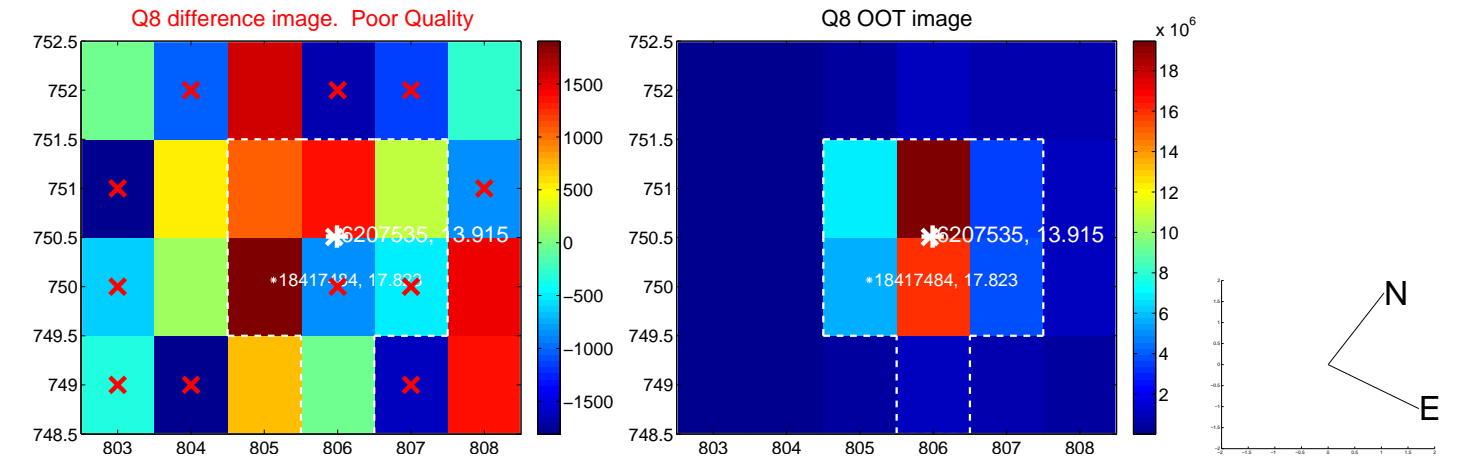
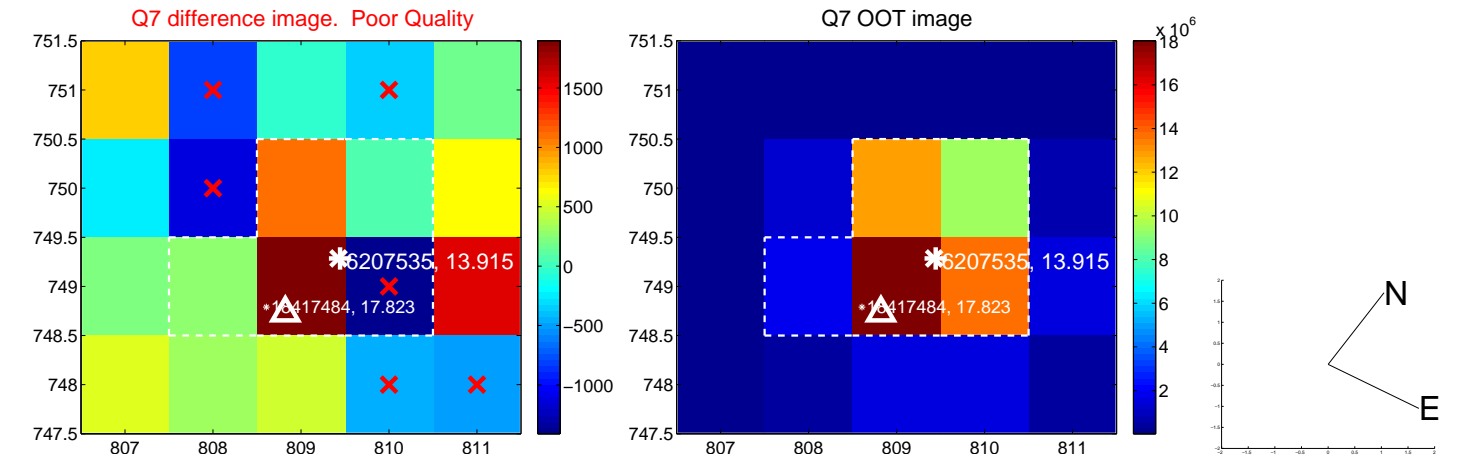
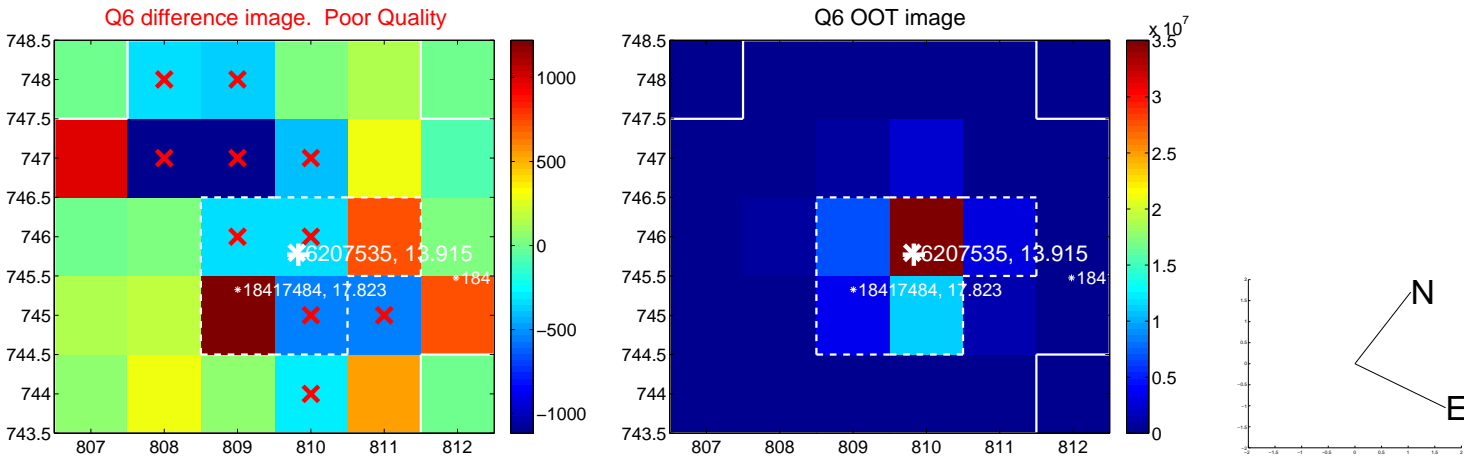
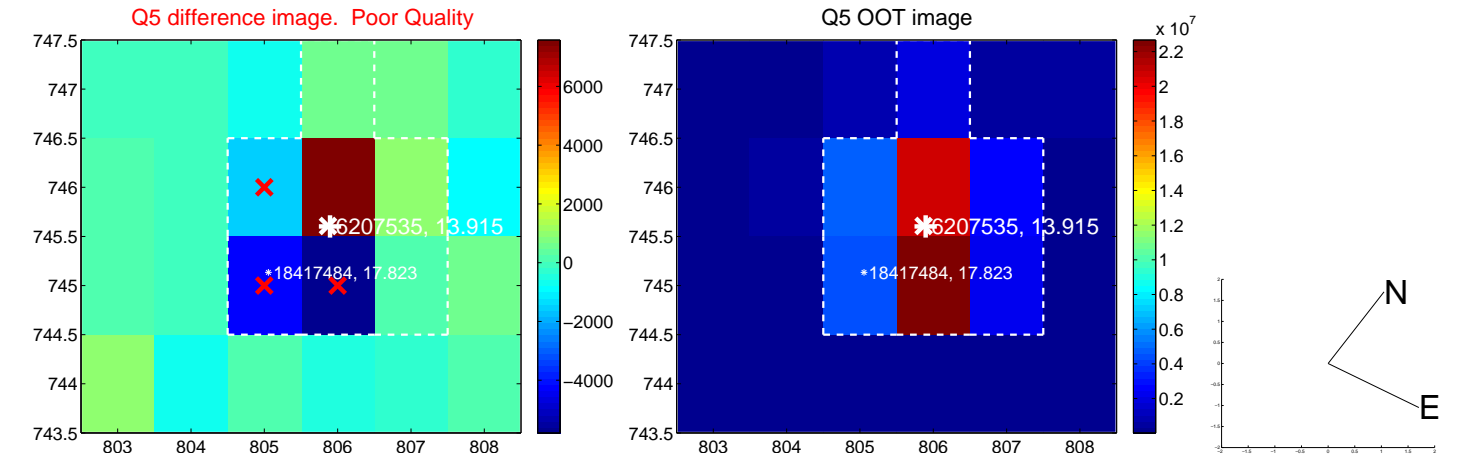


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

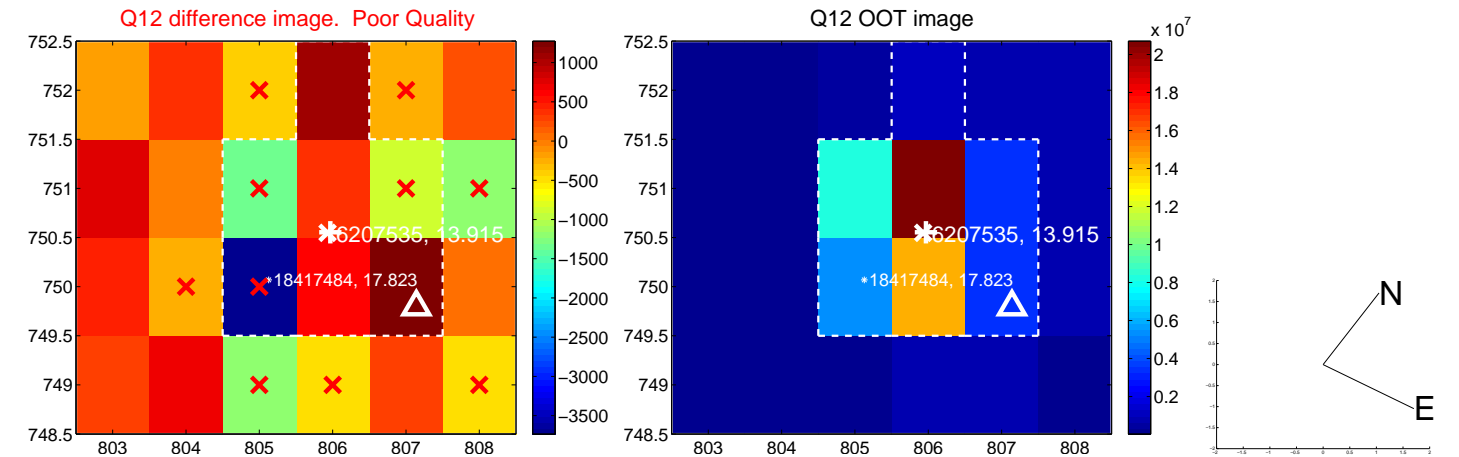
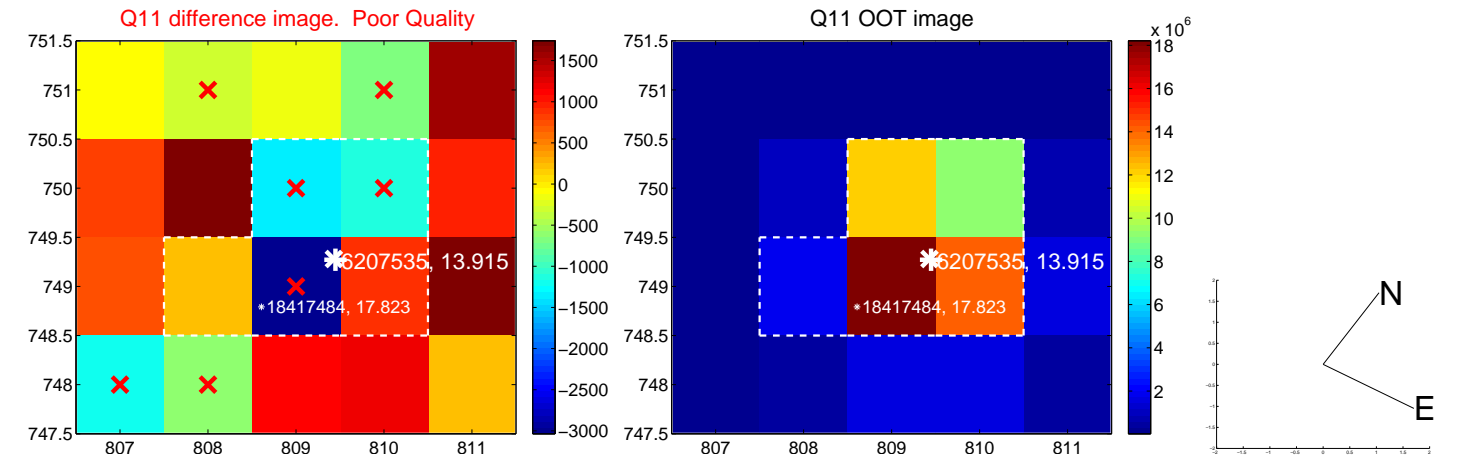
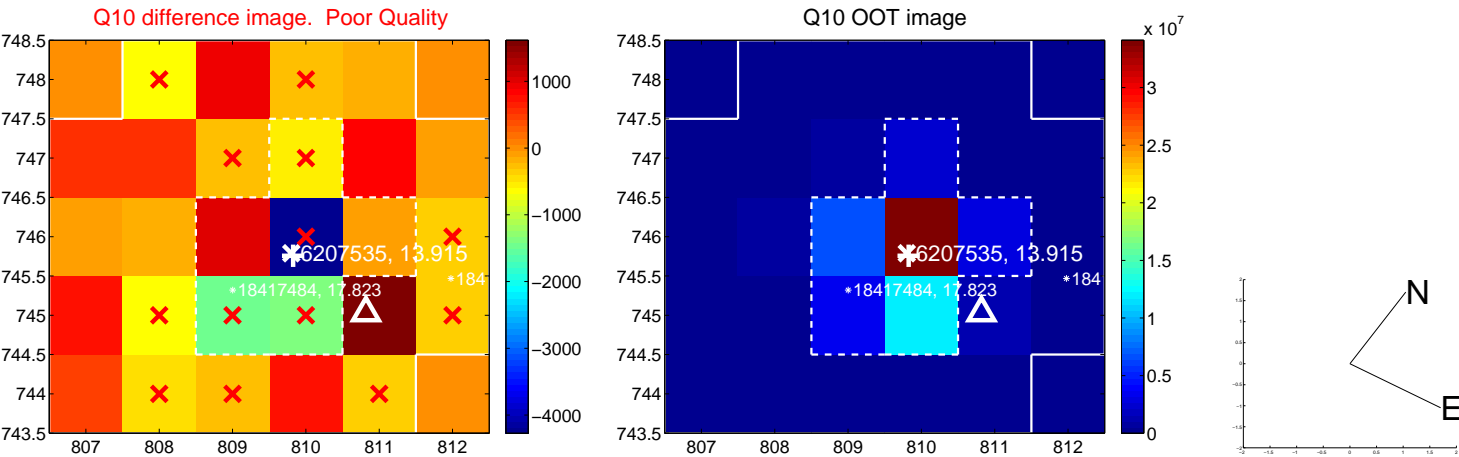
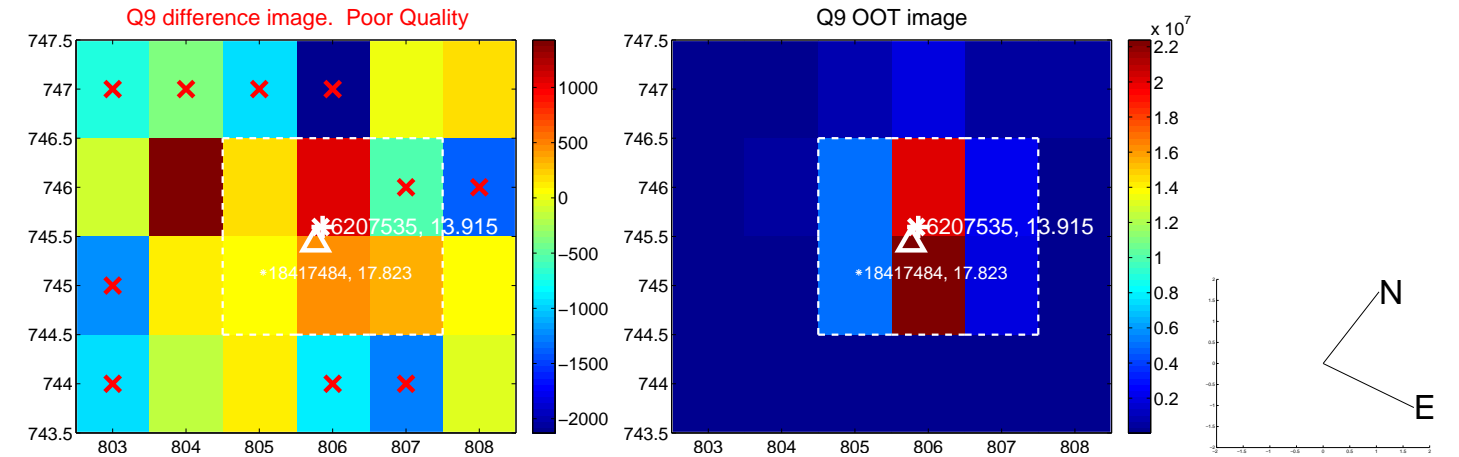
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



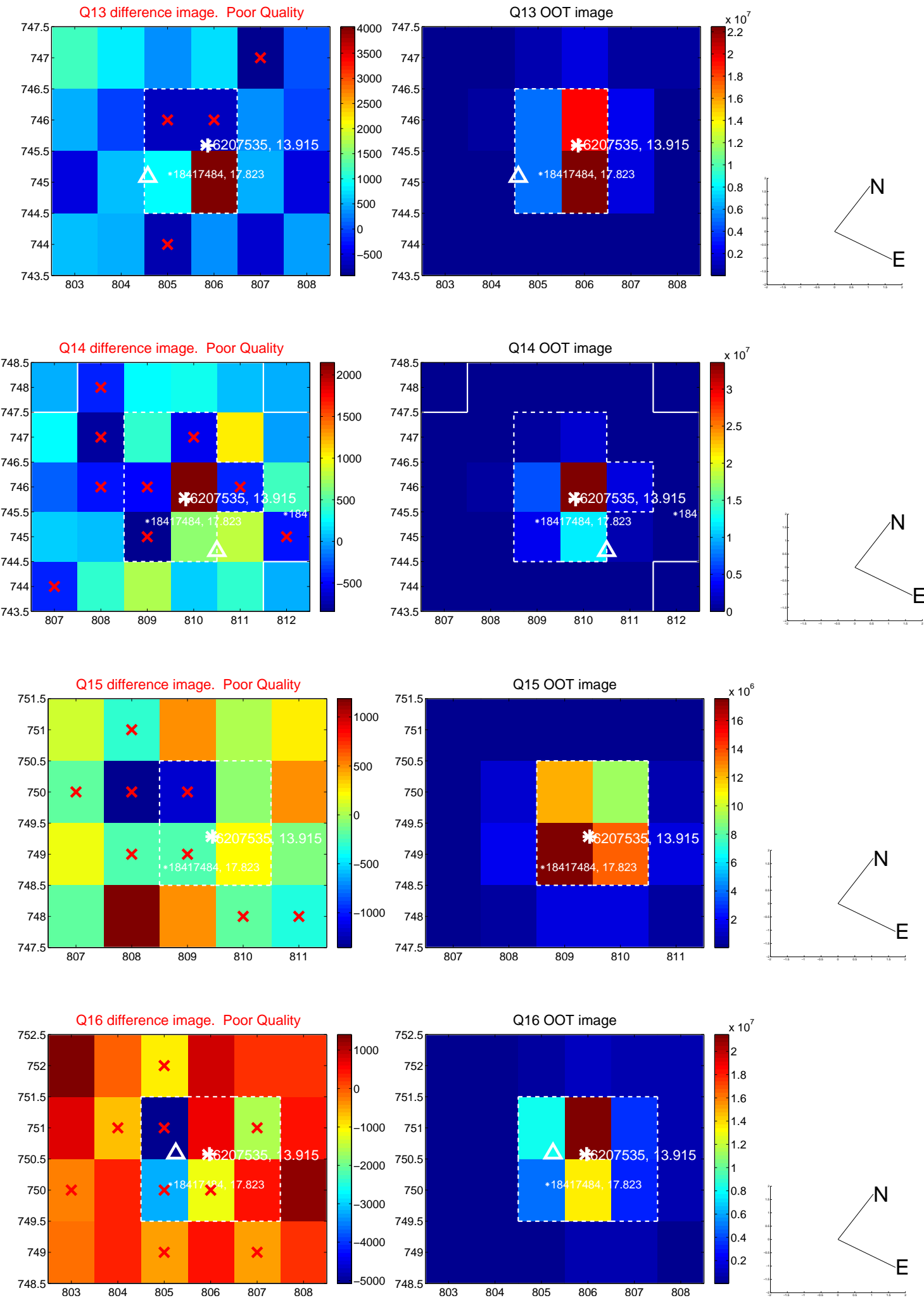
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



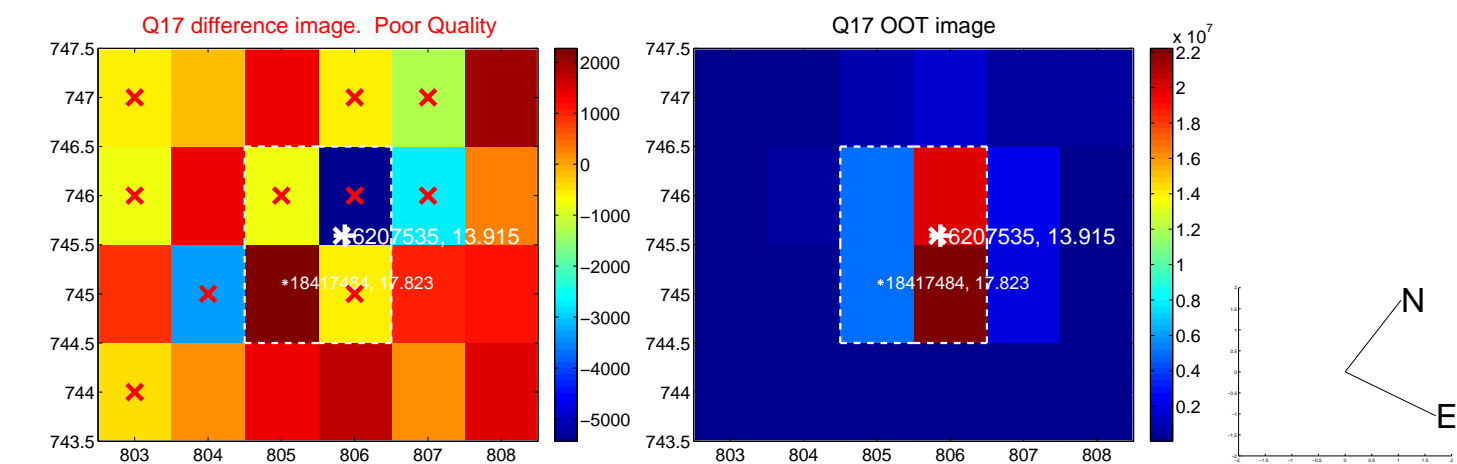
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



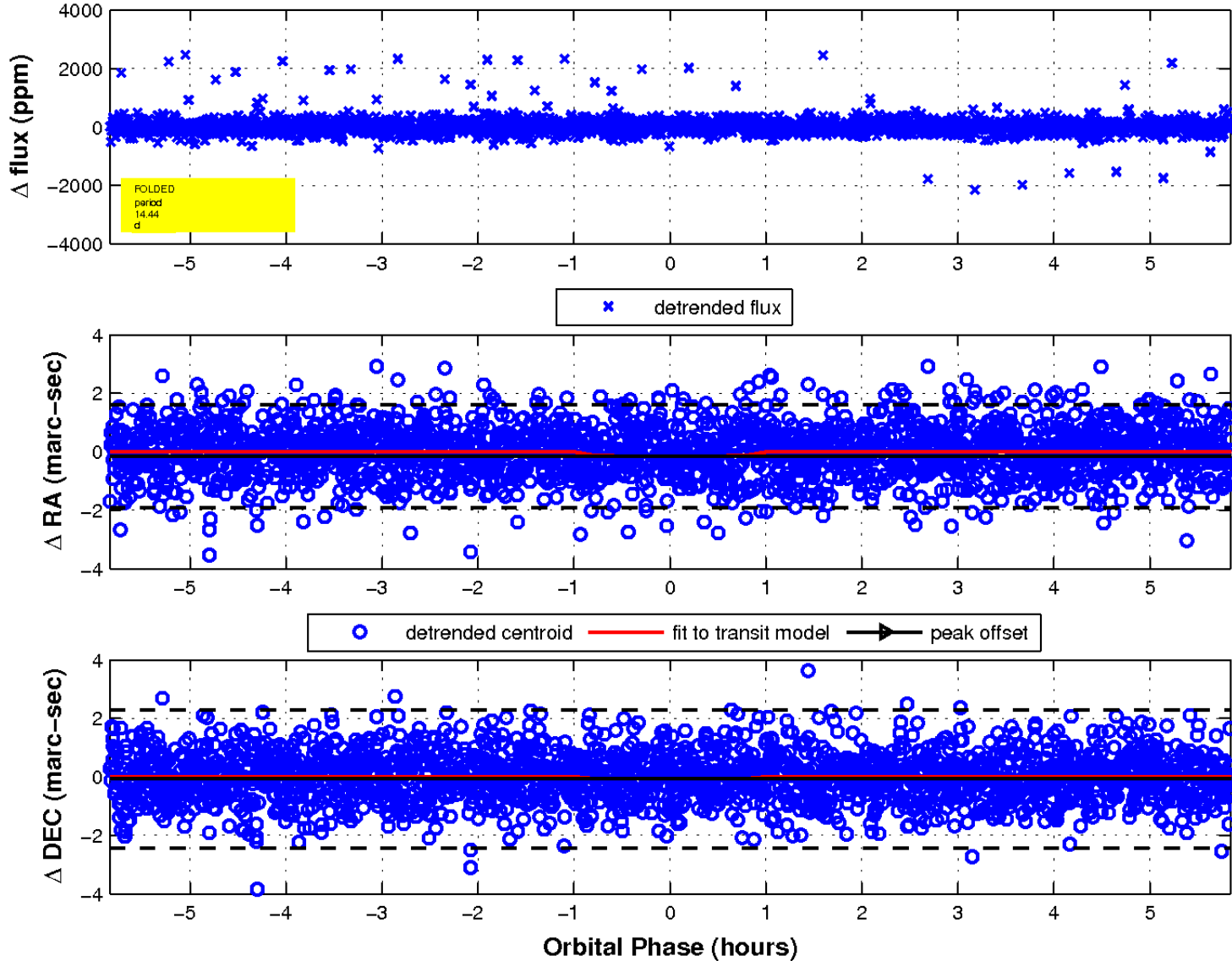
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

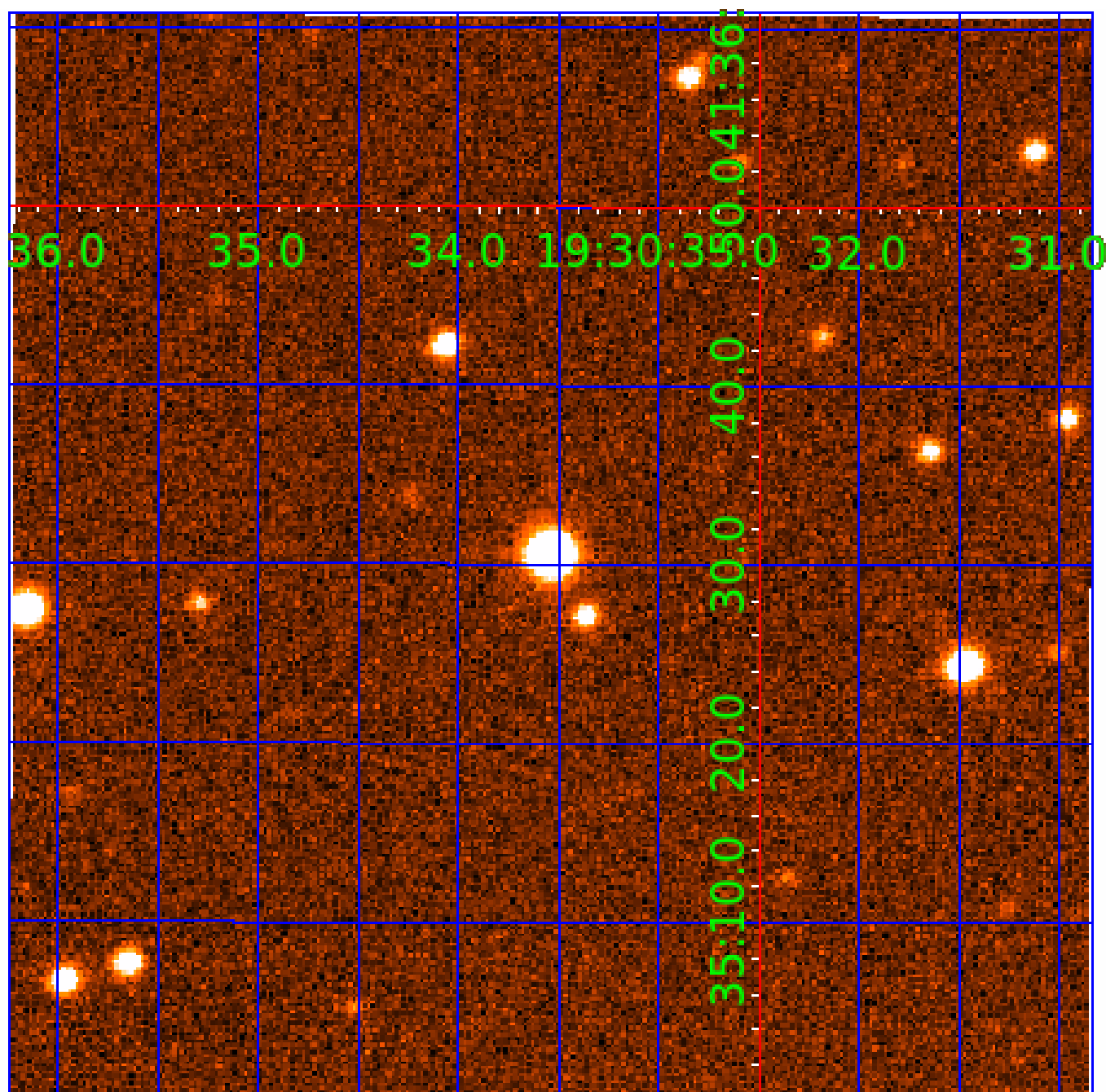


fluxWeightedCentroids, Planet 2 of 4



UKIRT Image

Declination



KIC 006207535

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})
006207535-01	OBS	No	0.657429	131.912277	16.9	4.879	10.1	7.6	0.99	5895	0.41	4540.25
006207535-02	OBS	No	14.440485	140.544234	1808.0	1.948	13.9	10.6	0.99	5895	4.22	73.81
006207535-03	OBS	No	24.441965	154.761875	2343.5	2.889	12.9	14.1	0.99	5895	8.09	36.59
006207535-04	OBS	No	15.298221	140.050115	2499.4	0.762	11.4	15.5	0.99	5895	5.03	68.34

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006207535-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
006207535-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—CENT_FEW_DIFFS—HALO_GHOST
006207535-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—CENT_FEW_MEAS
006207535-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—HALO_GHOST

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

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

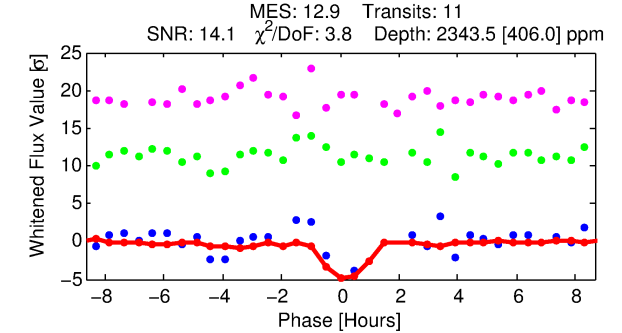
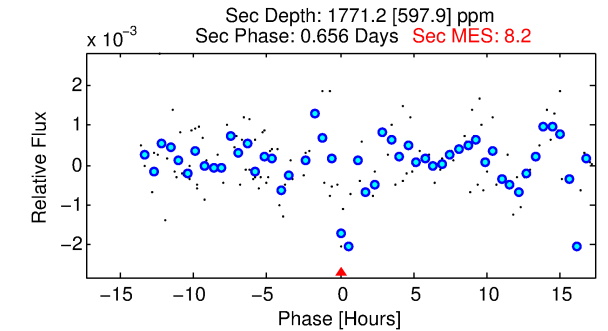
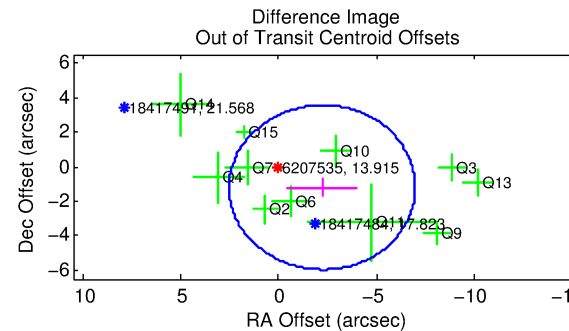
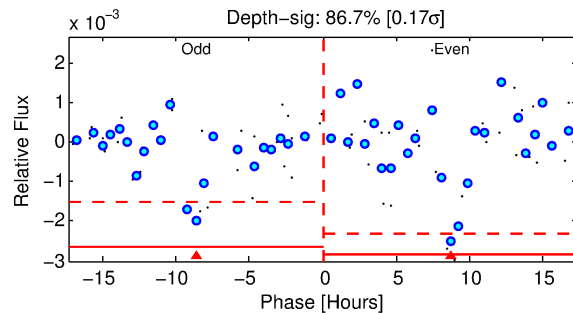
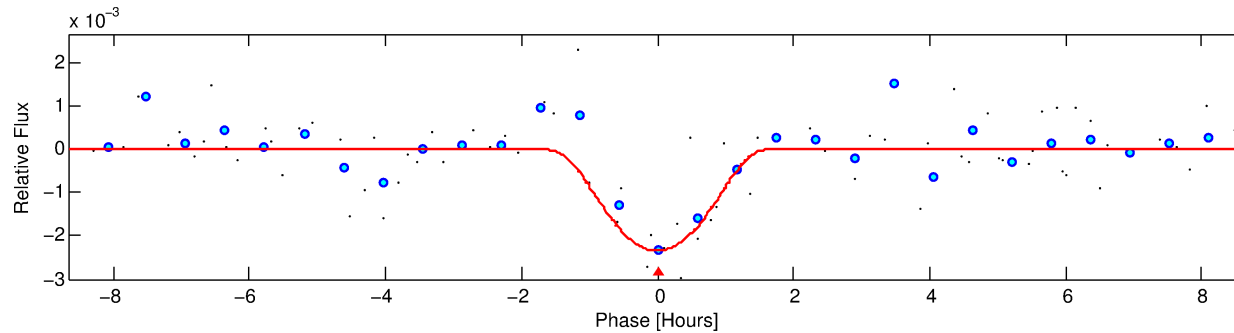
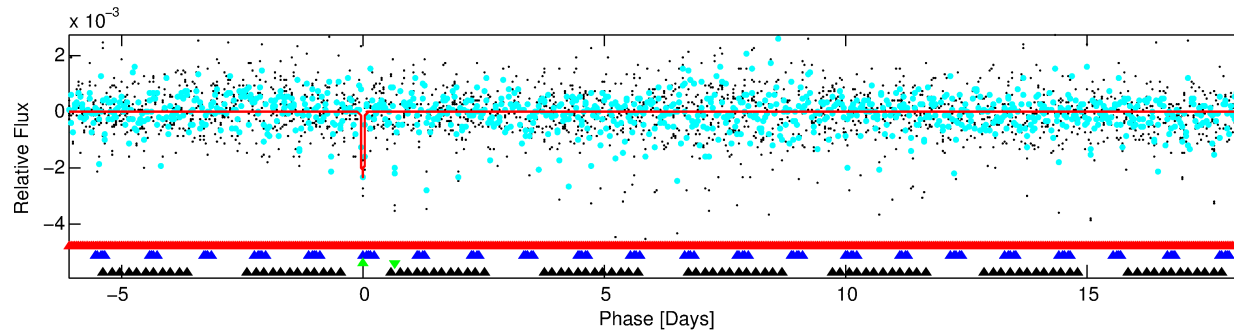
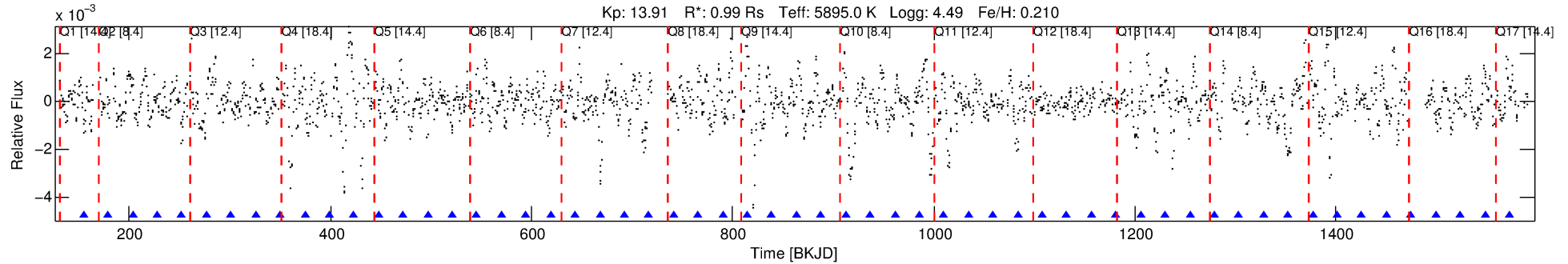
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006207535-03

No Significant Match Found

DV One-Page Summary

KIC: 6207535 Candidate: 3 of 4 Period: 24.442 d



DV Fit Results:

Period = 24.44197 [0.00042] d
Epoch = 154.7619 [0.0155] BKJD
Rp/R* = 0.0748 [0.2641]
a/R* = 27.83 [26.53]
b = 0.98 [0.43]
Seff = 36.59 [8.25]
Teq = 627 [35] K
Rp = 8.09 [28.58] Re
a = 0.1704 [0.0242] AU
Ag = 432.31 [3056.67] [0.14 σ]
Teffp = 4421 [7812] K [0.49 σ]

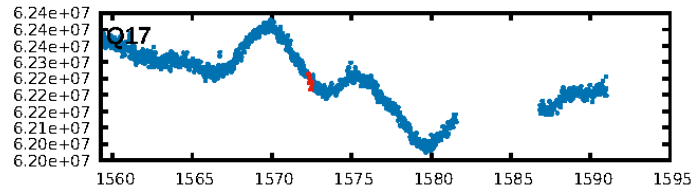
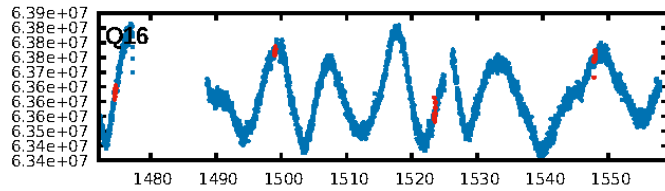
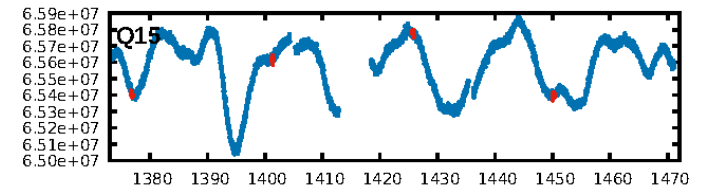
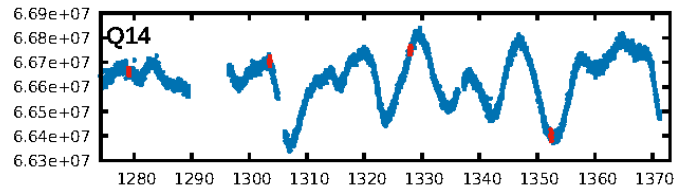
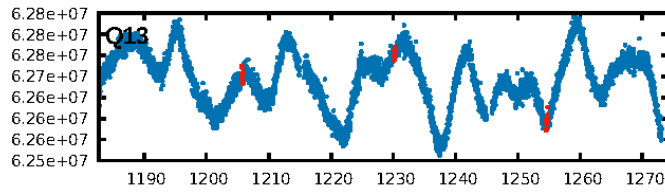
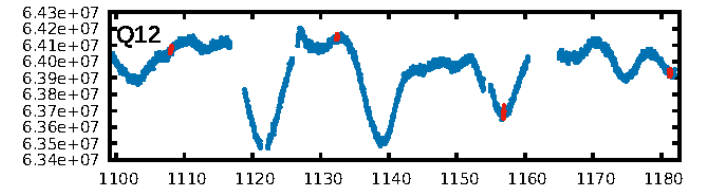
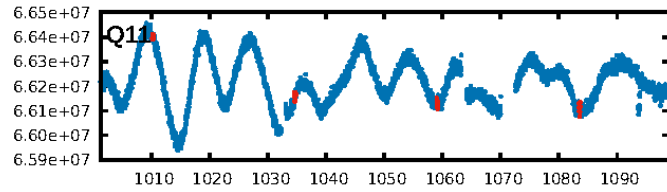
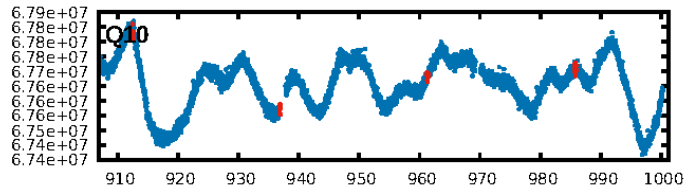
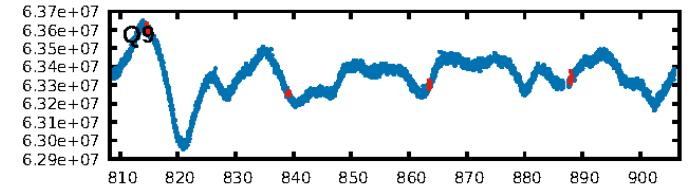
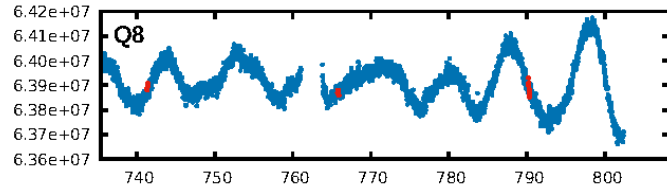
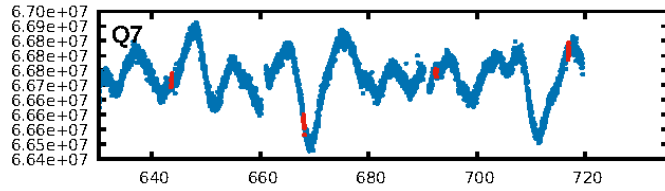
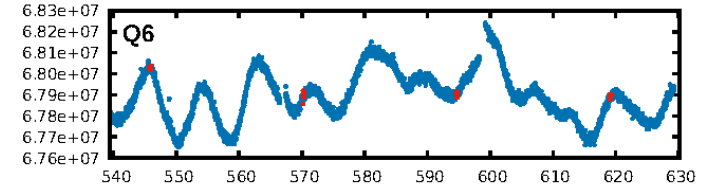
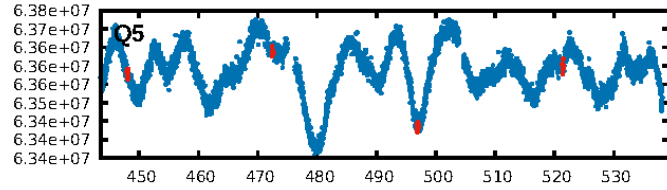
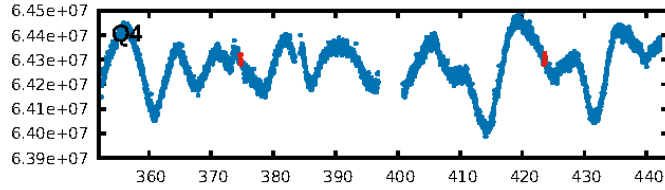
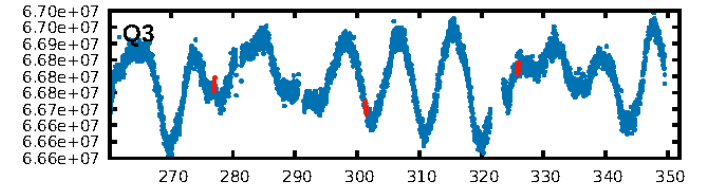
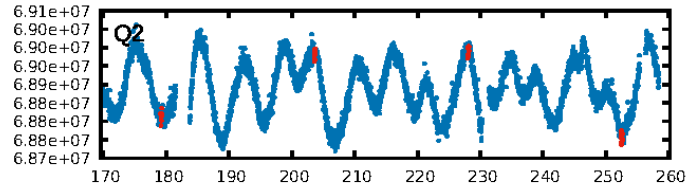
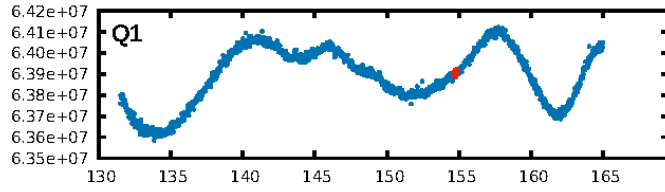
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [73.46 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.83e-26
RollingBand-fgt: 1.00 [11/11]
GhostDiagnostic-chr: -2.146
Centroid-sig: 25.1%
Centroid-so: 0.235 arcsec [2.75 σ]
OotOffset-rm: 2.534 arcsec [1.60 σ]
OotOffset-st: 4/4/1/2 [11]
KicOffset-rm: 2.442 arcsec [1.56 σ]
KicOffset-st: 4/4/1/2 [11]
DiffImageQuality-fgm: 0.27 [3/11]
DiffImageOverlap-fno: 0.00 [0/17]

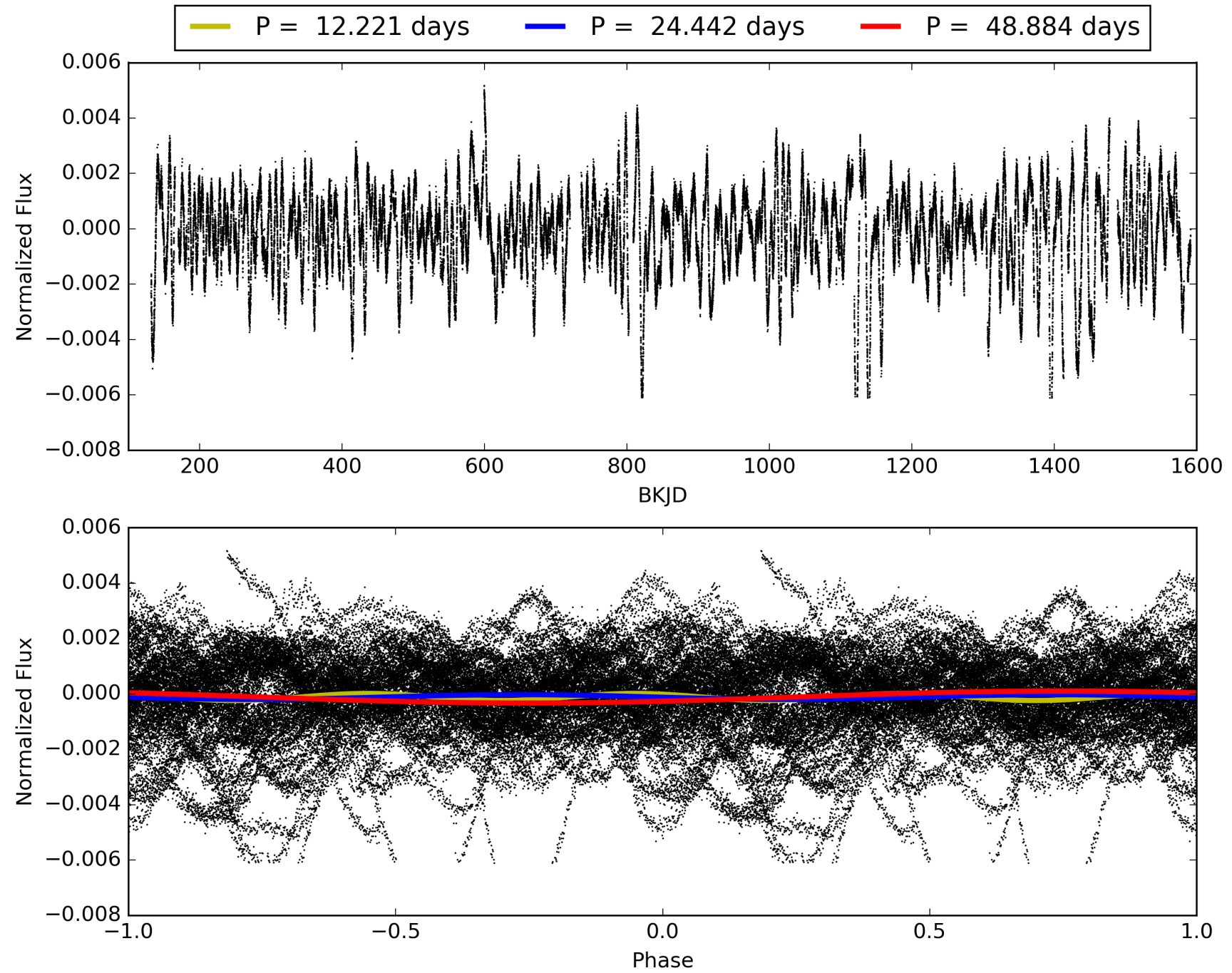
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 04:19:43 Z

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

TCE 006207535-03, PDC Light Curves

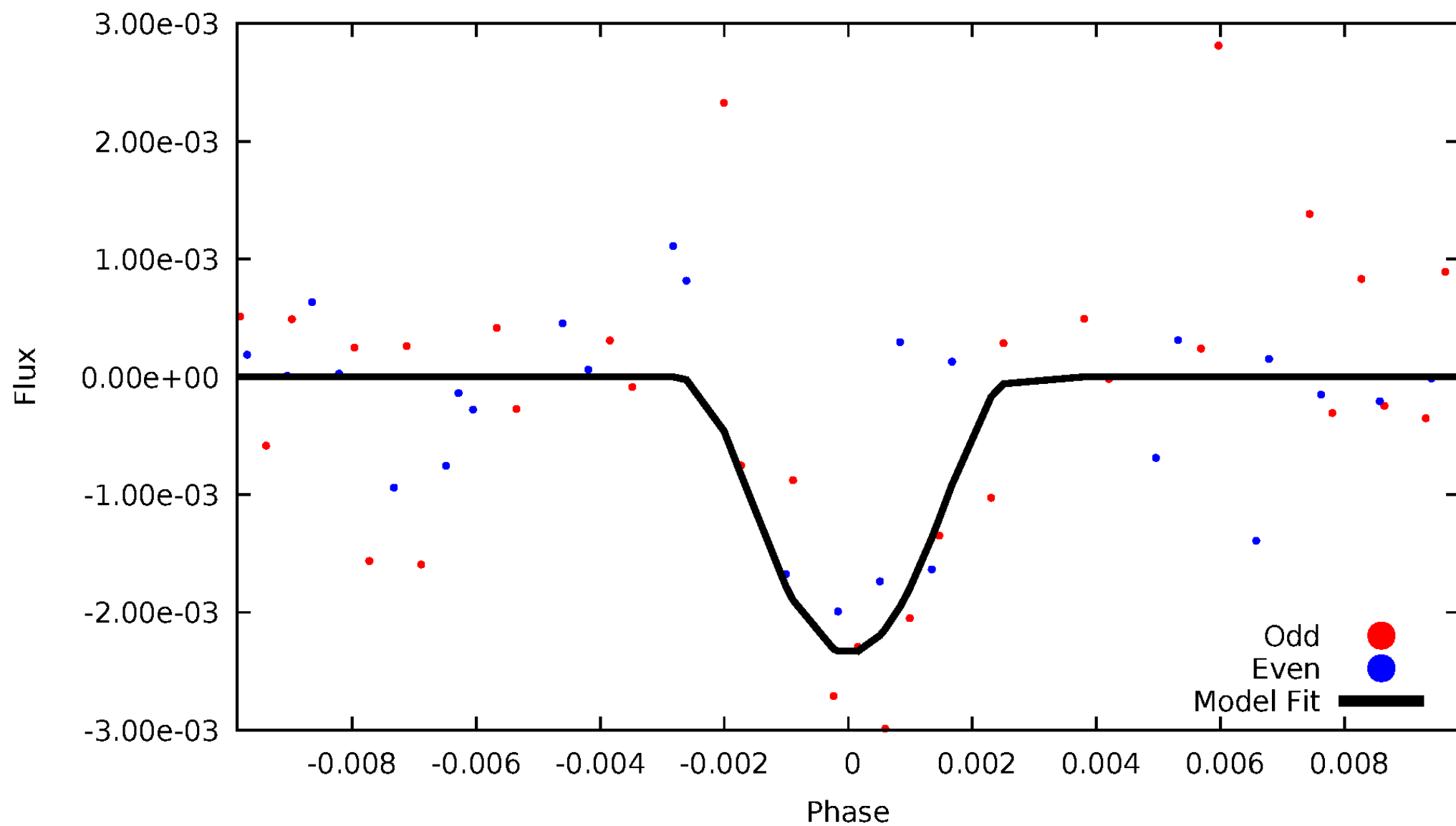


TCE 006207535-03



DV Odd/Even

TCE 006207535-03

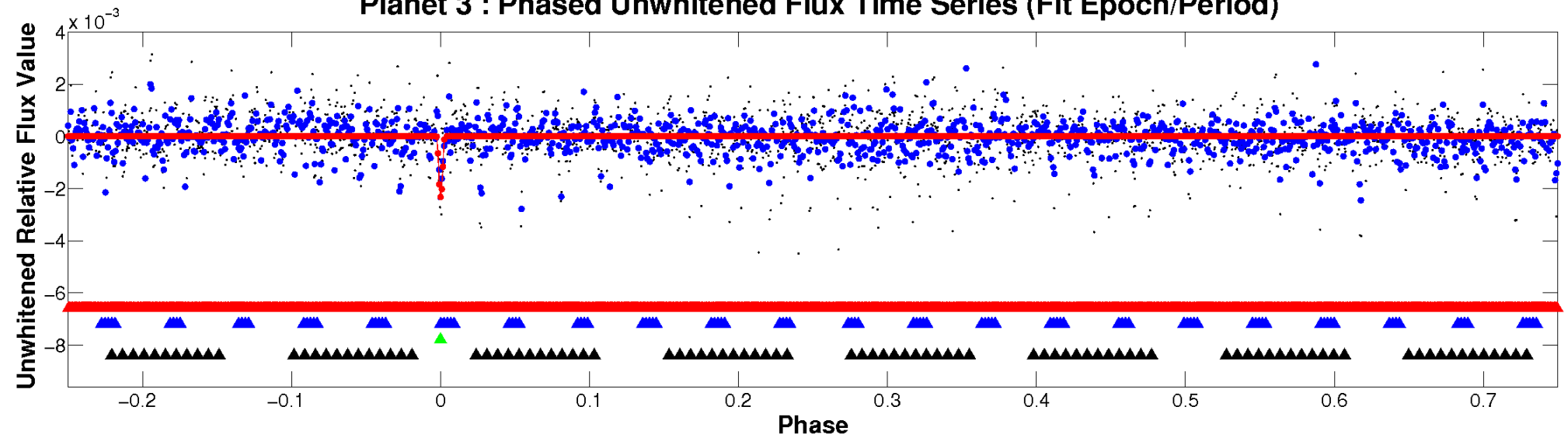


ALT Odd/Even

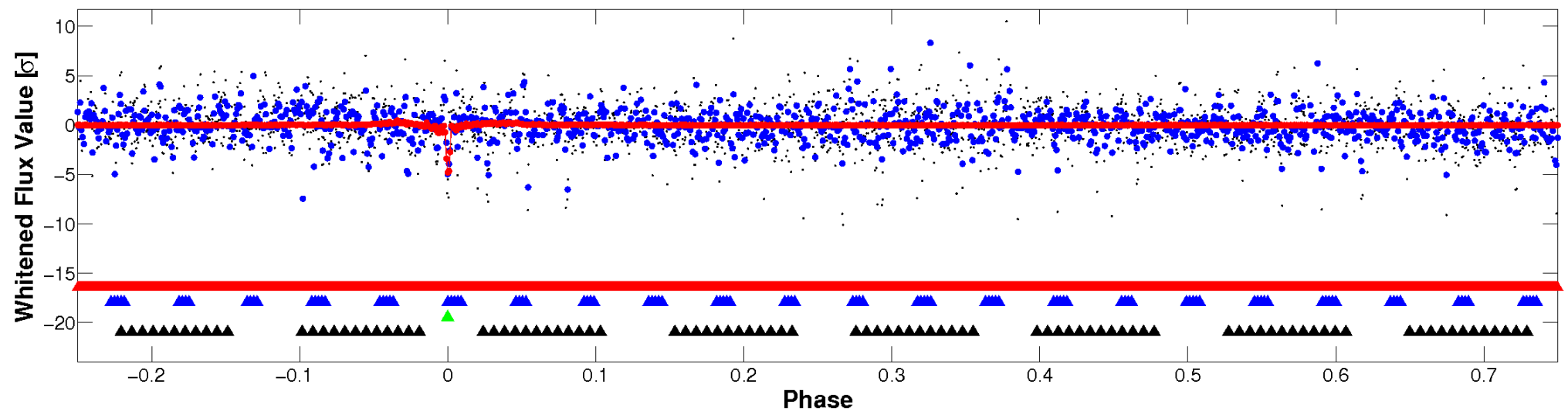
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

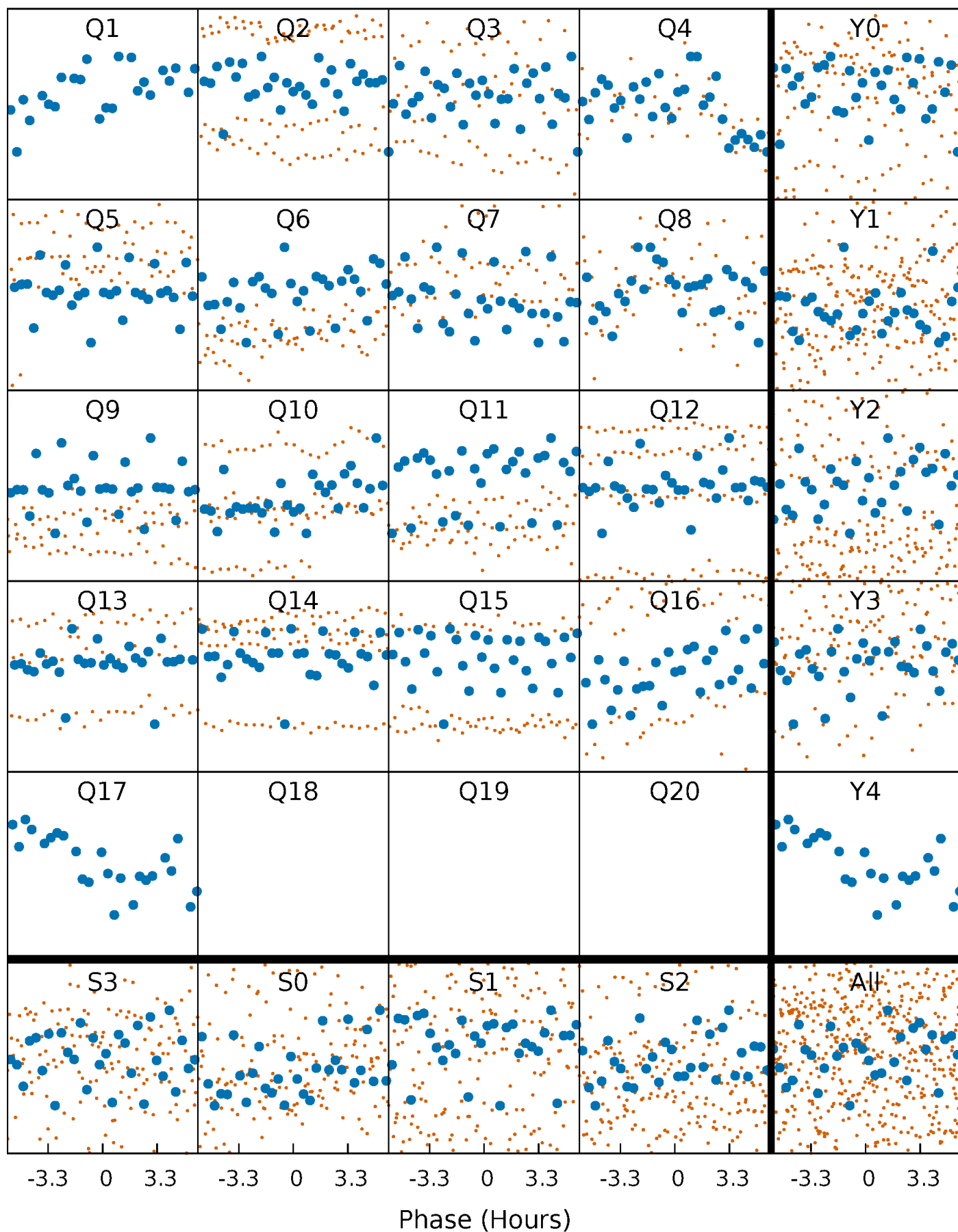


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



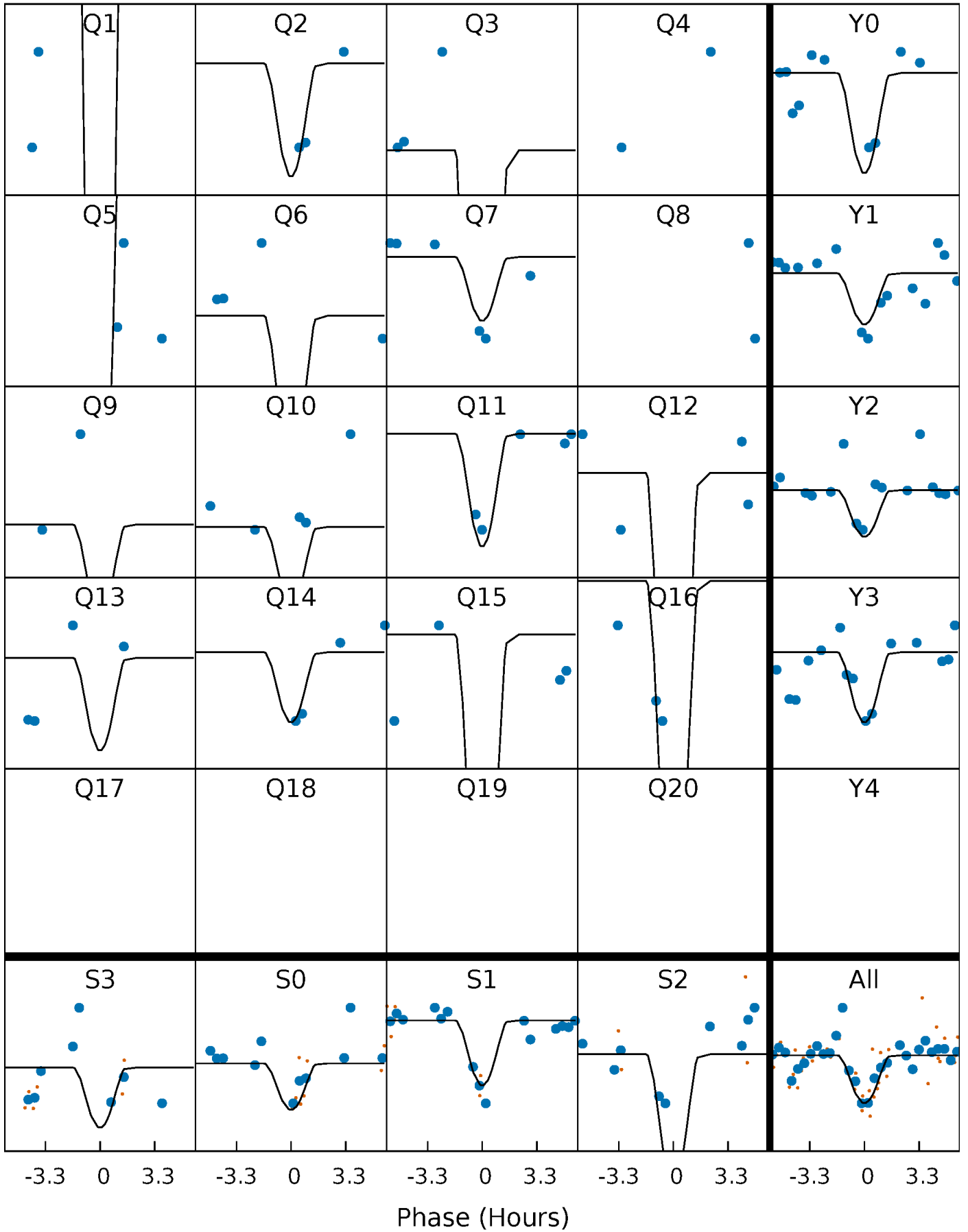
PDC Quarter-Phased Transit Curves

TCE 006207535-03 P= 24.441965 Days $T_0=154.761875$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 006207535-03 P= 24.441965 Days $T_0=154.761875$ (BKJD)

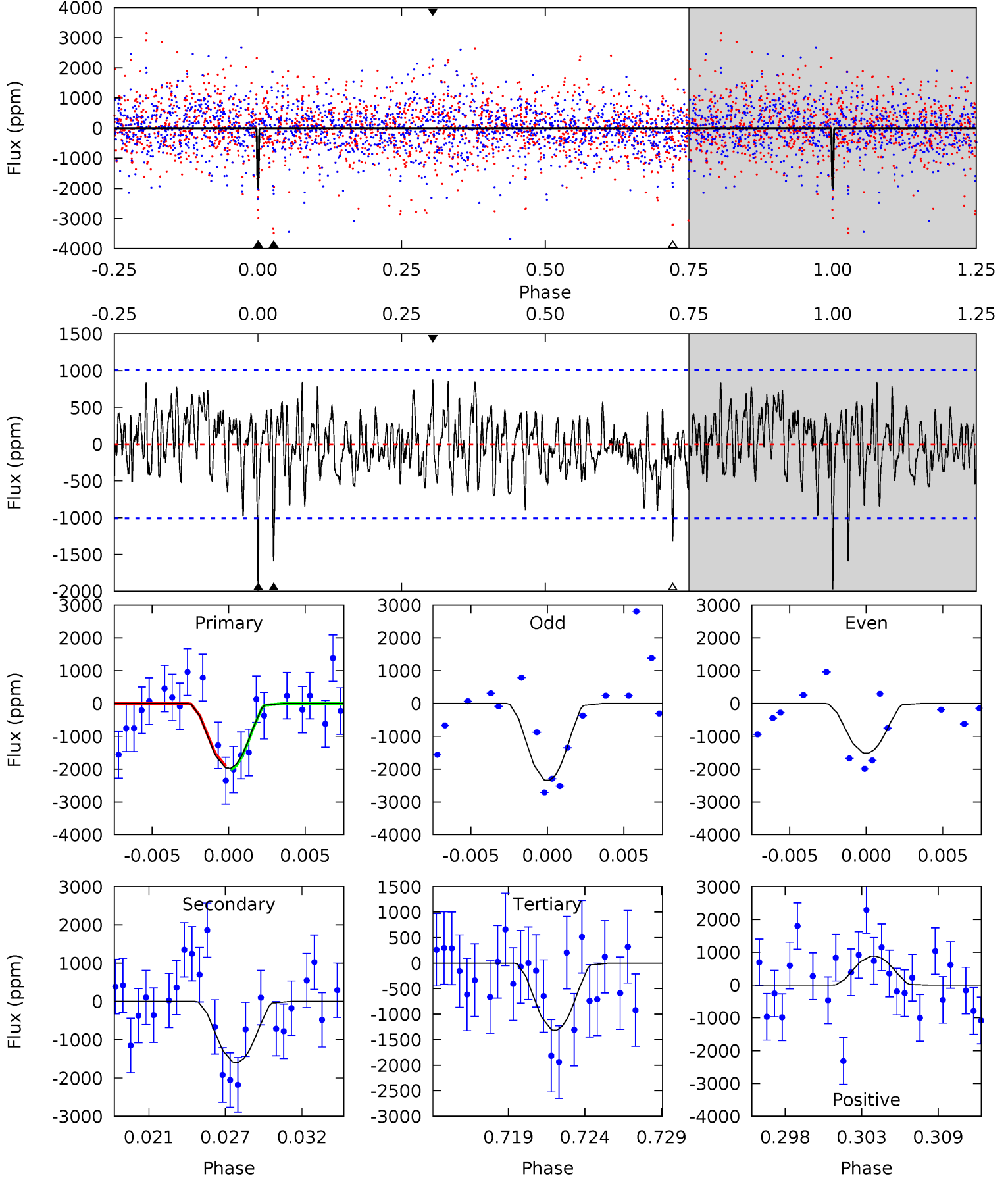


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

006207535-03, P = 24.441965 Days, E = 130.319910 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.0	8.11	6.68	4.48	5.15	2.79	1.69	3.36	5.56	1.43	3.63	2.03	0.90	0.31	0.29



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 006207535

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5895^{+77}_{-77}	$4.489^{+0.021}_{-0.126}$	$0.210^{+0.150}_{-0.150}$	$0.991^{+0.154}_{-0.041}$	$1.105^{+0.050}_{-0.072}$	$1.597^{+0.131}_{-0.548}$
	+1%/-1%	+0%/-3%	+71%/-71%	+16%/-4%	+5%/-7%	+8%/-34%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 006207535-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1592 ± 196	$21.77^{+23.55}_{-15.48}$	887^{+31}_{-20}	3237^{+1696}_{-607}	54^{+551}_{-42}
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

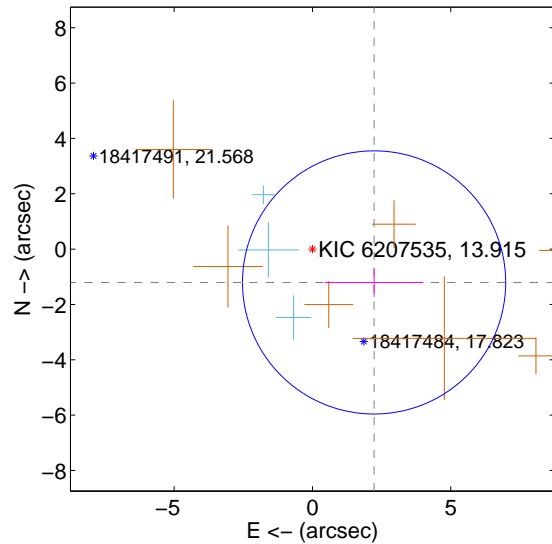
Supplemental centroid analysis for 006207535-03. Kepler magnitude: 13.91. Transit SNR 14.11

There are 3 quarters with good PRF difference image offsets

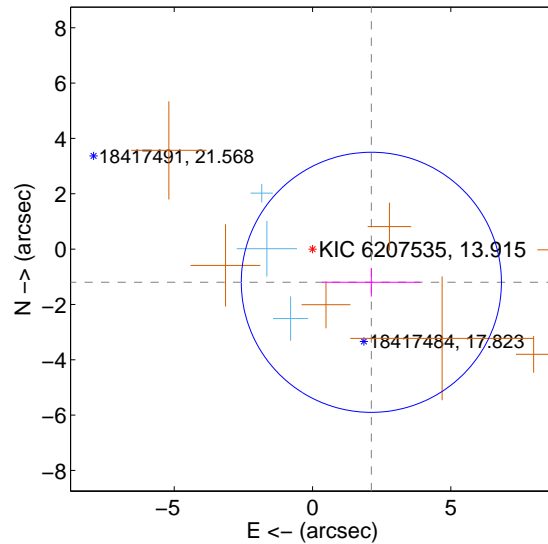
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.534 ± 1.586	1.60	-2.229 ± 1.781	-1.205 ± 0.517
PRF-fit source offset from KIC position	2.442 ± 1.567	1.56	-2.127 ± 1.776	-1.200 ± 0.514
photometric centroid source offset	0.24 ± 0.09	2.75	0.22 ± 0.09	0.09 ± 0.08

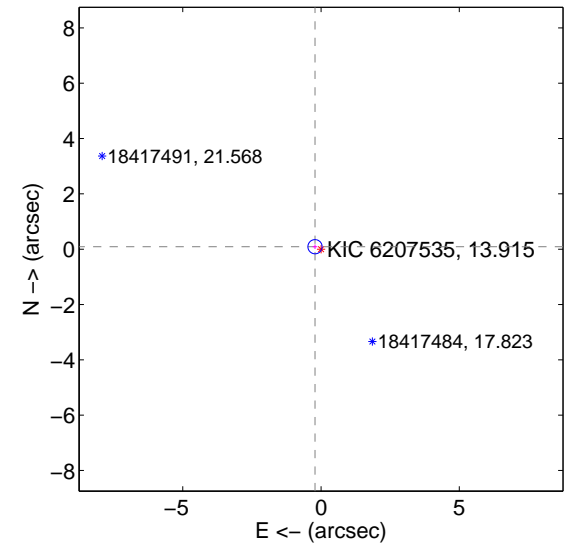
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

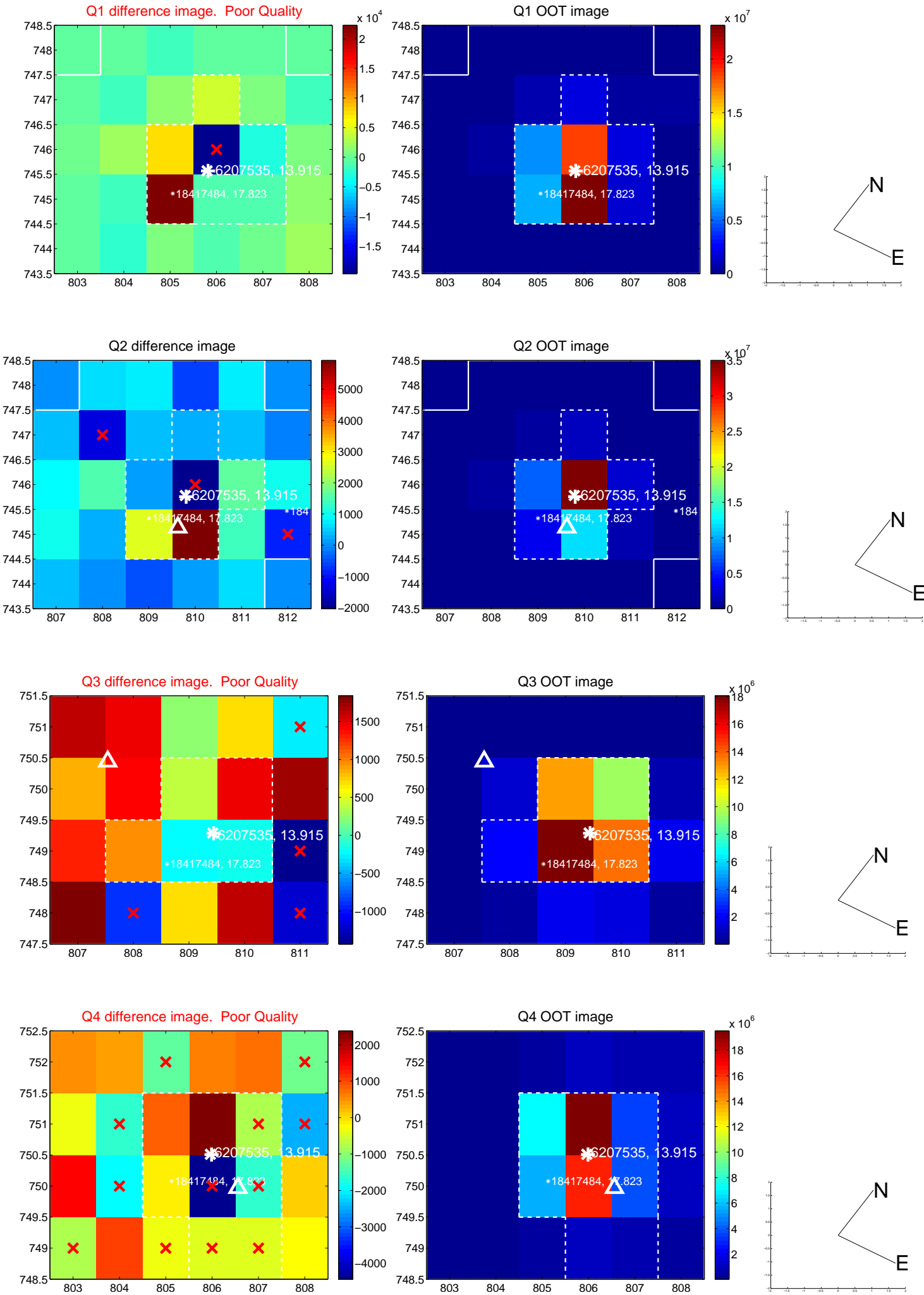


offset from photometric centroids

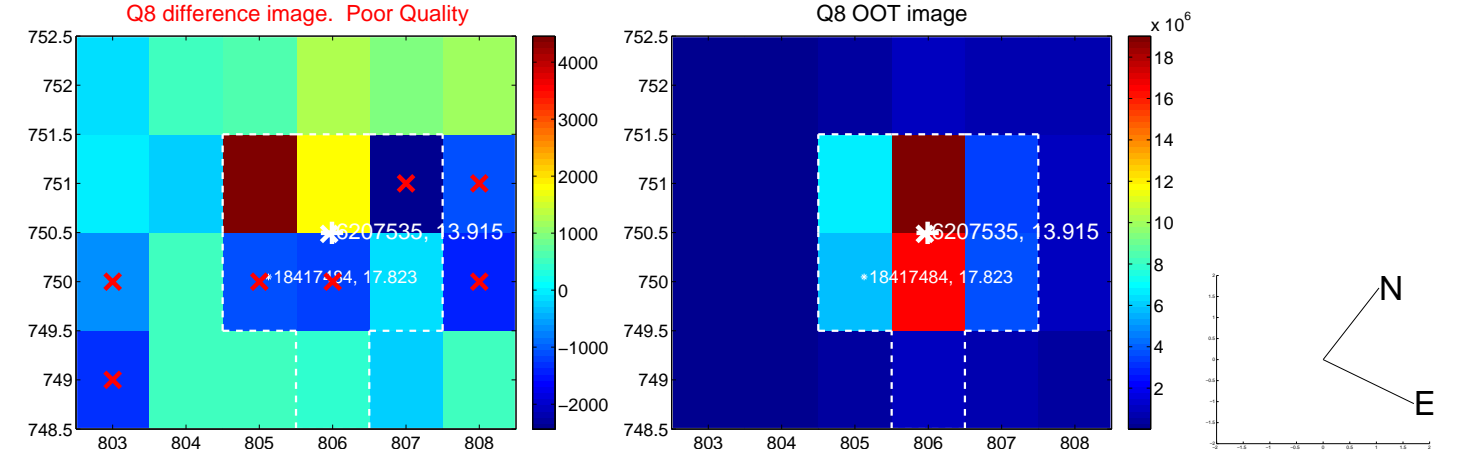
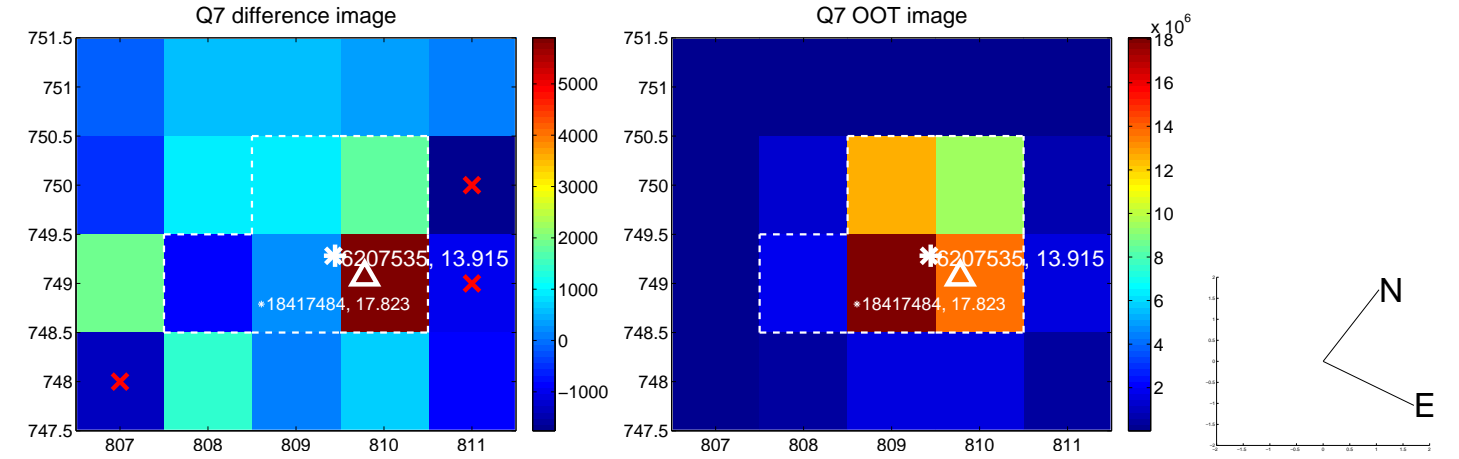
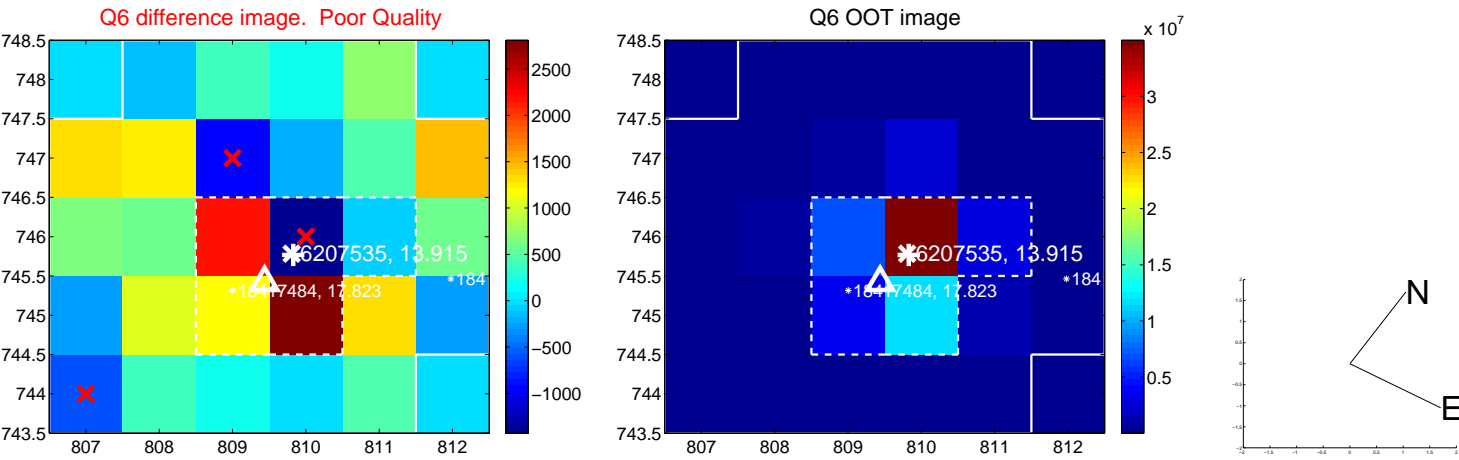
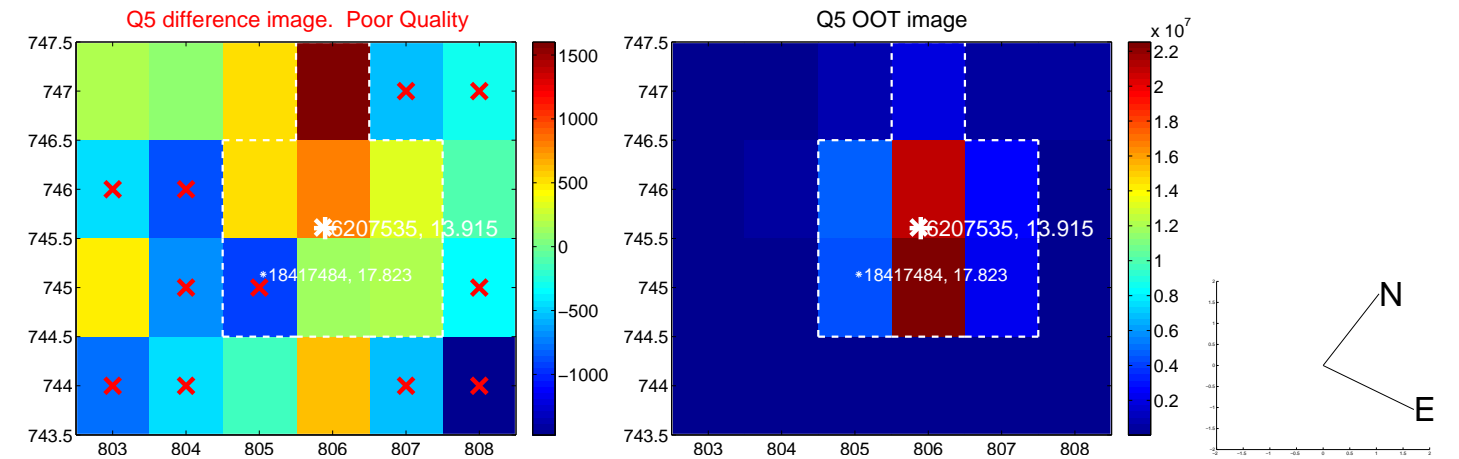


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

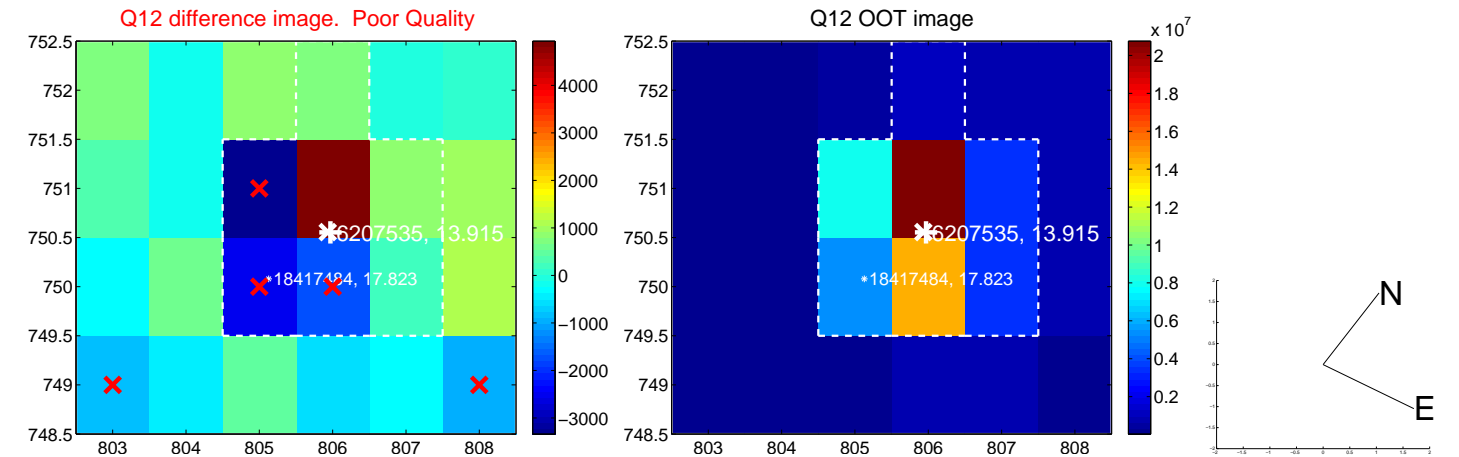
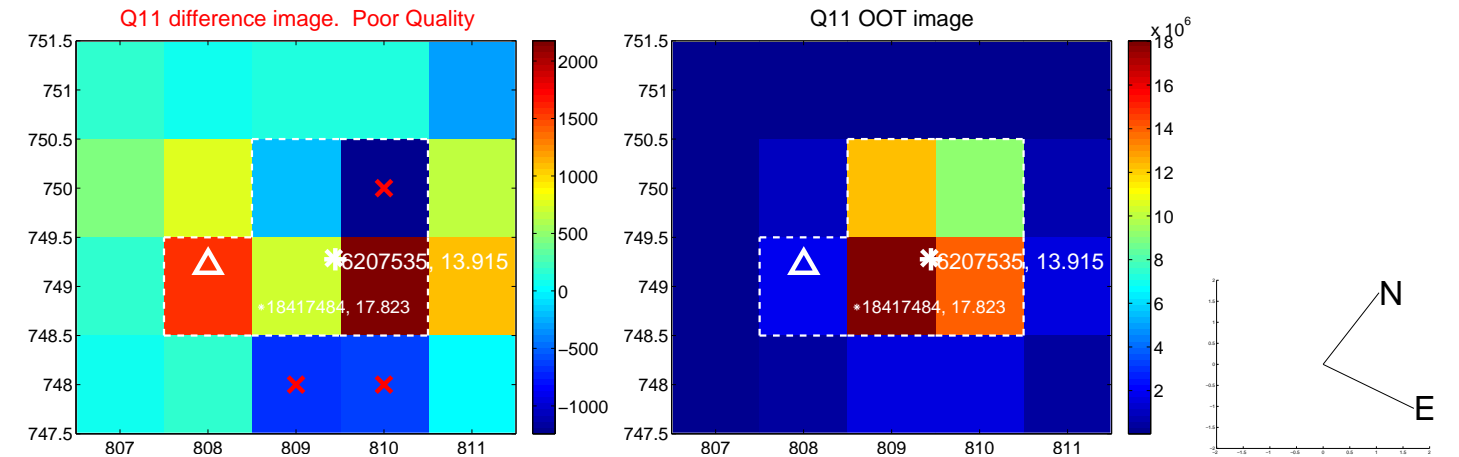
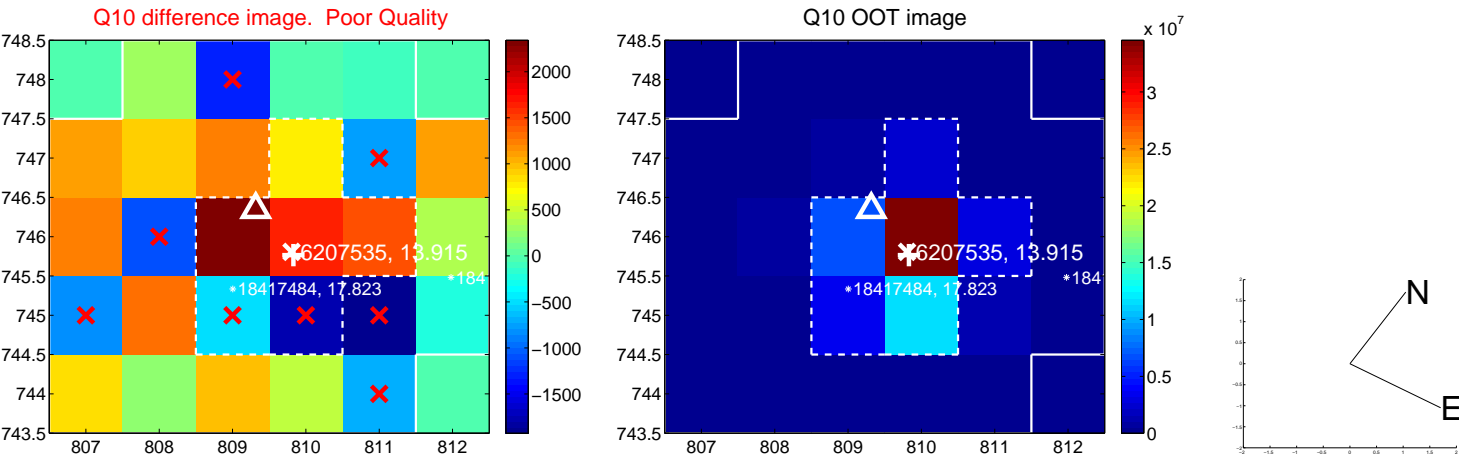
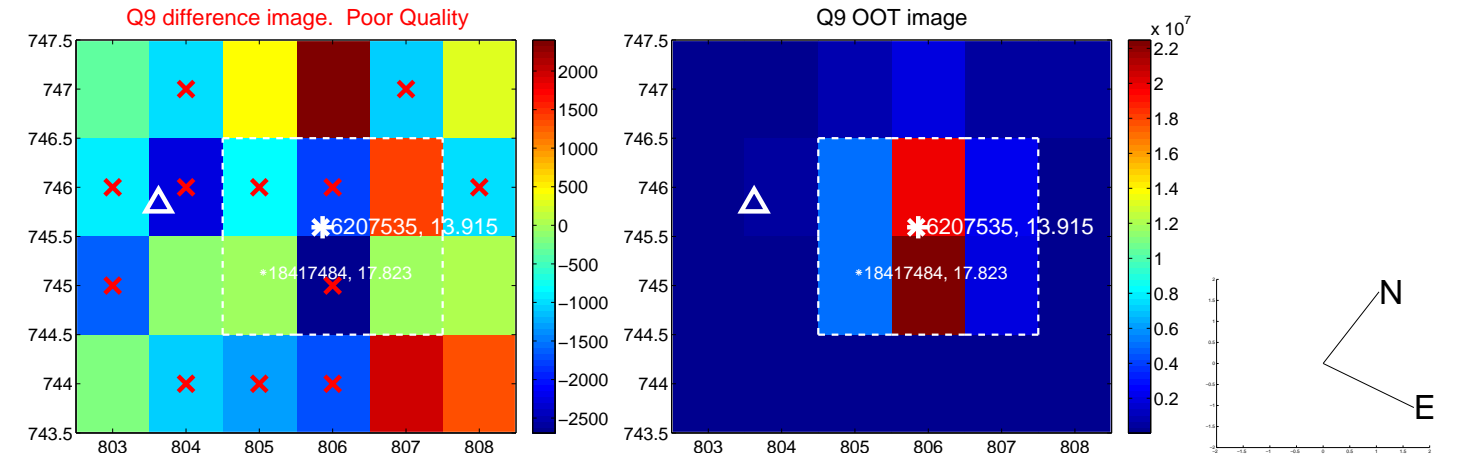
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



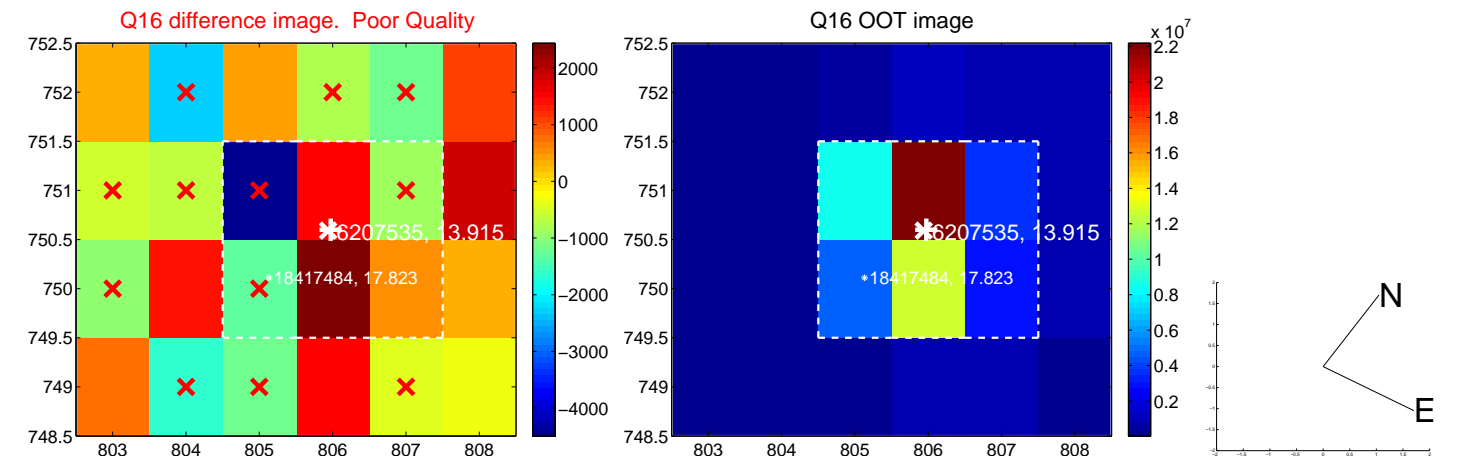
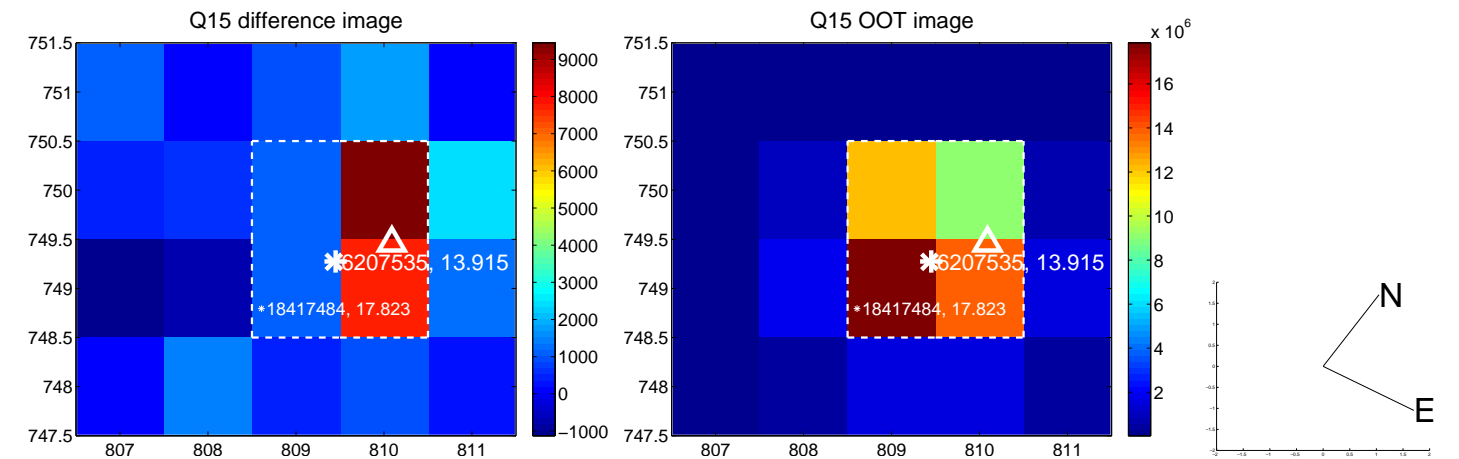
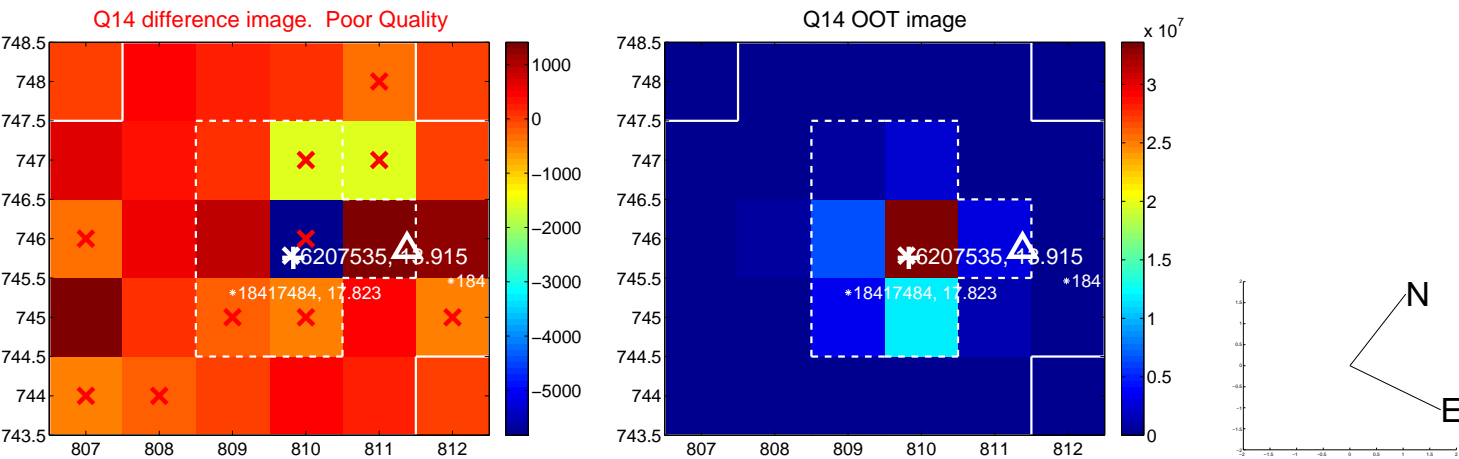
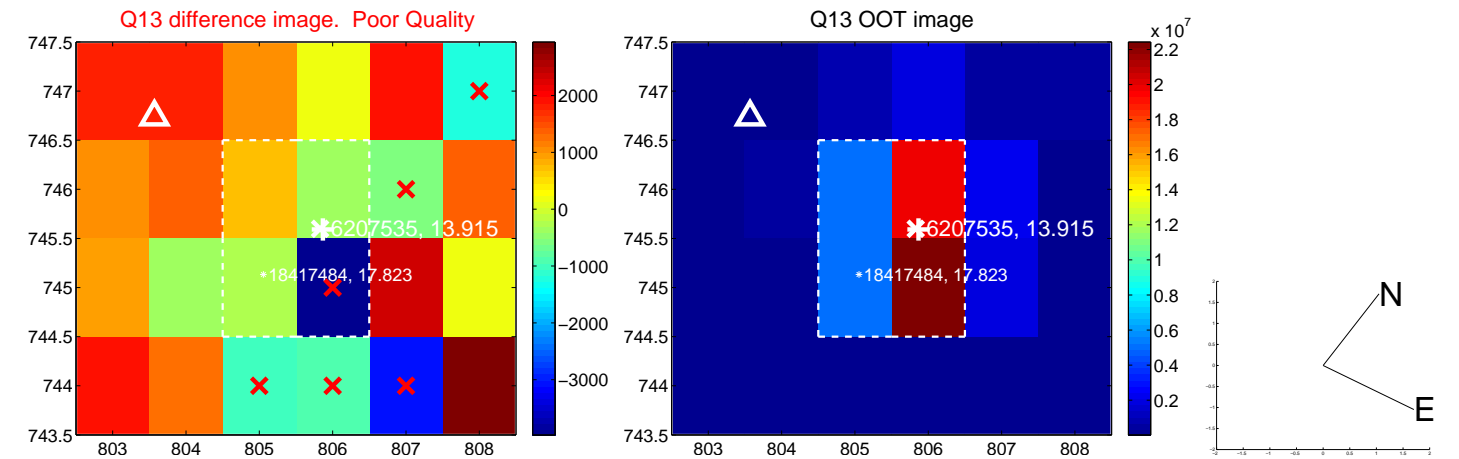
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



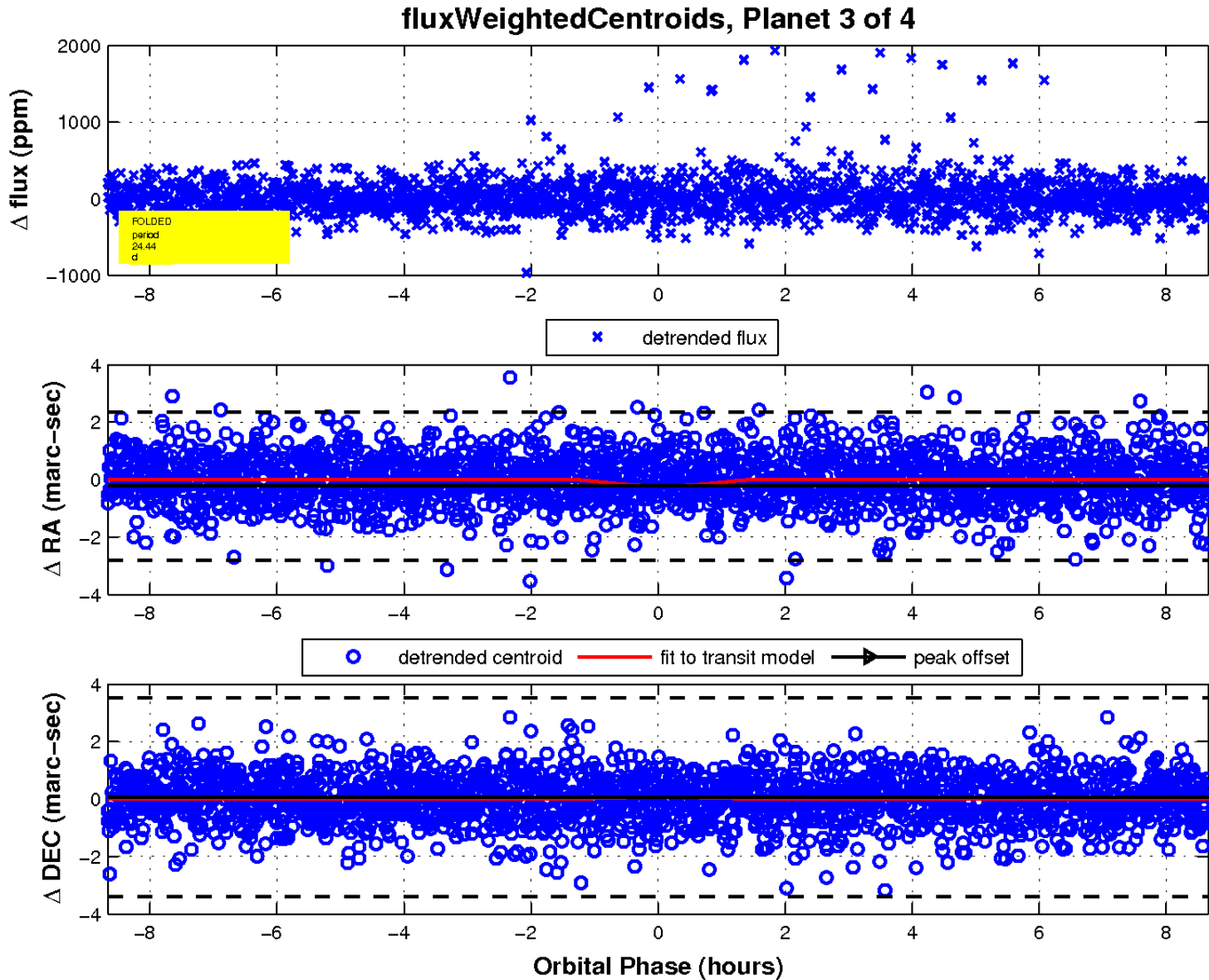
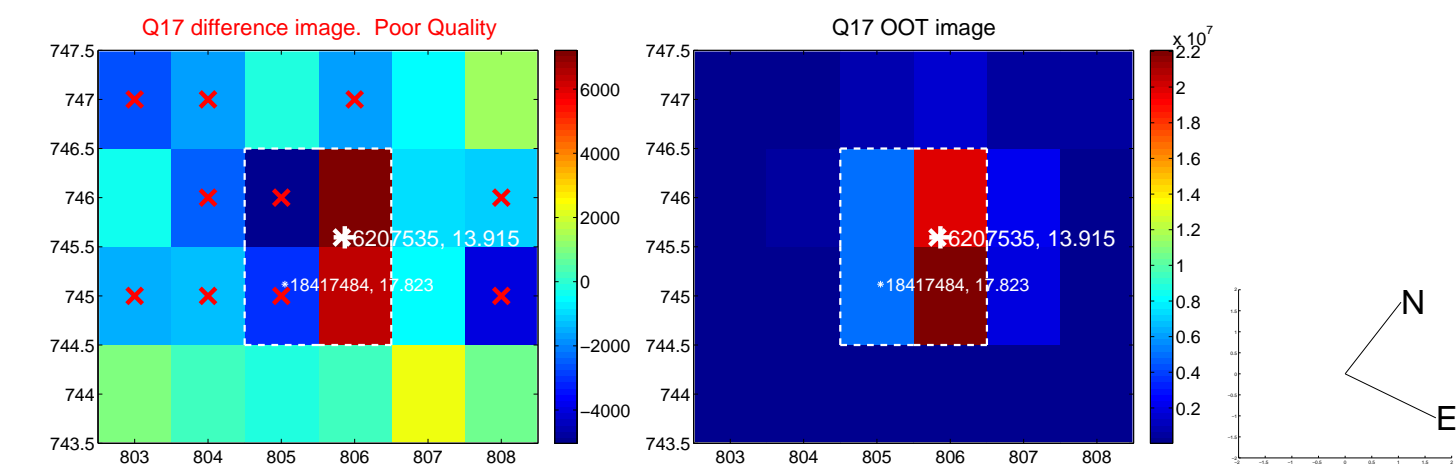
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

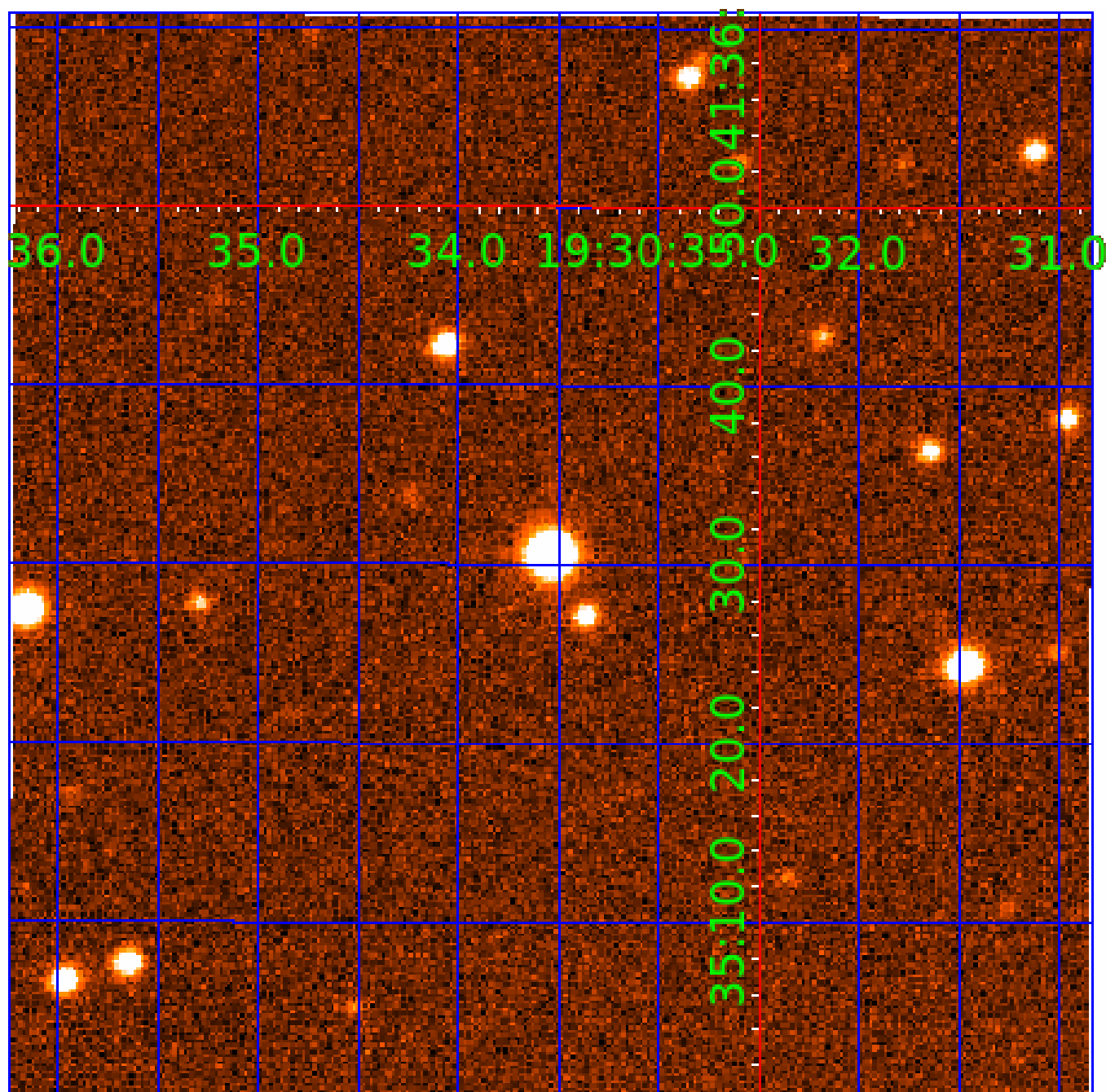


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006207535

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})
006207535-01	OBS	No	0.657429	131.912277	16.9	4.879	10.1	7.6	0.99	5895	0.41	4540.25
006207535-02	OBS	No	14.440485	140.544234	1808.0	1.948	13.9	10.6	0.99	5895	4.22	73.81
006207535-03	OBS	No	24.441965	154.761875	2343.5	2.889	12.9	14.1	0.99	5895	8.09	36.59
006207535-04	OBS	No	15.298221	140.050115	2499.4	0.762	11.4	15.5	0.99	5895	5.03	68.34

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006207535-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
006207535-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—CENT_FEW_DIFFS—HALO_GHOST
006207535-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—CENT_FEW_MEAS
006207535-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—HALO_GHOST

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

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

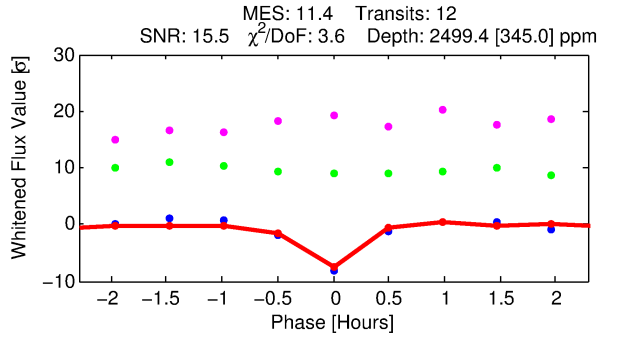
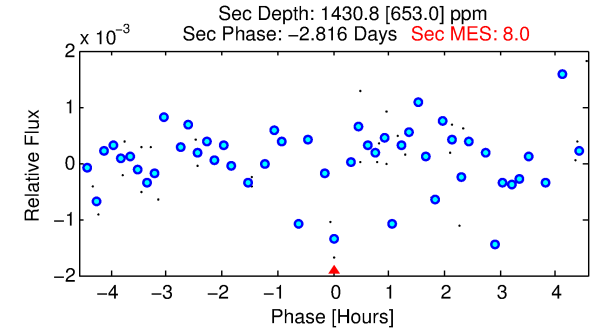
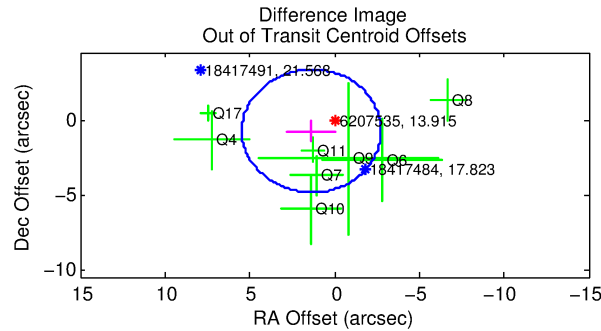
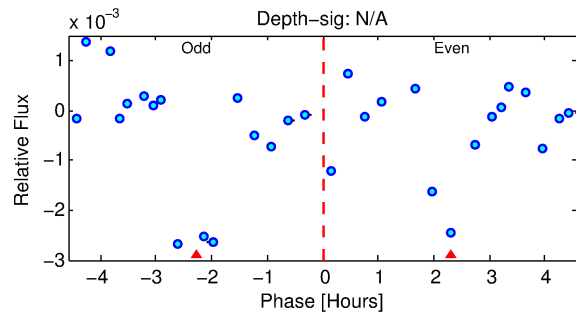
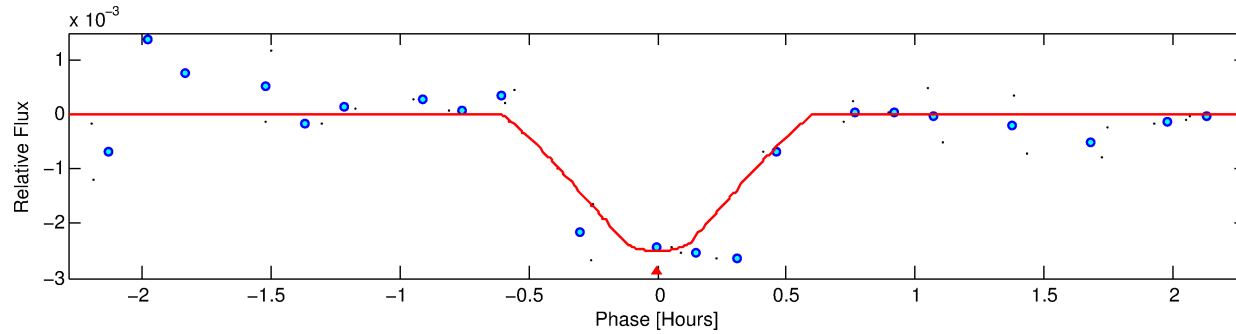
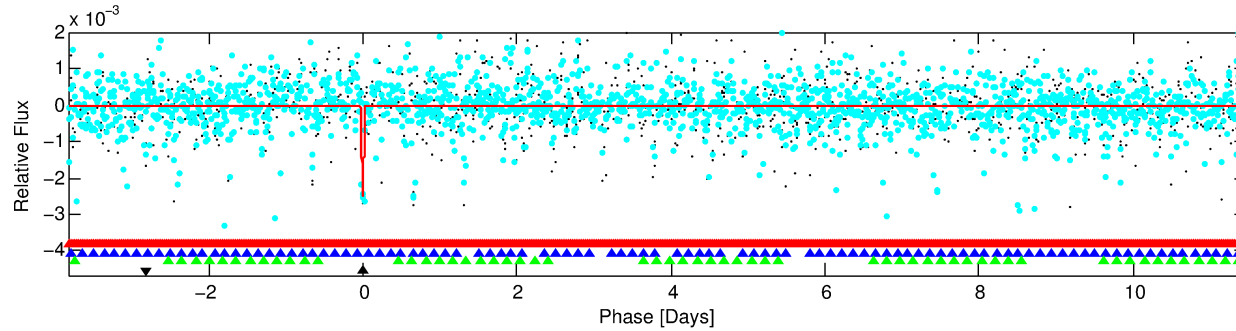
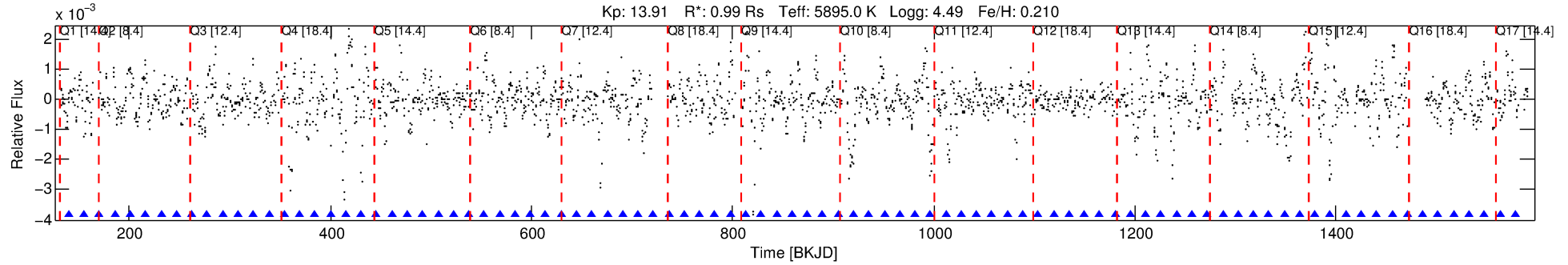
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006207535-04

No Significant Match Found

DV One-Page Summary

KIC: 6207535 Candidate: 4 of 4 Period: 15.298 d



DV Fit Results:

Period = 15.29822 [0.00010] d
Epoch = 140.0501 [0.0067] BKJD
Rp/R* = 0.0465 [0.0644]
a/R* = 157.26 [951.30]
b = 0.21 [28.45]
Seff = 68.34 [15.41]
Teq = 733 [41] K
Rp = 5.02 [7.01] Re
a = 0.1247 [0.0177] AU
Ag = 484.72 [1366.82] [0.35σ]
Teffp = 5319 [3739] K [1.23σ]

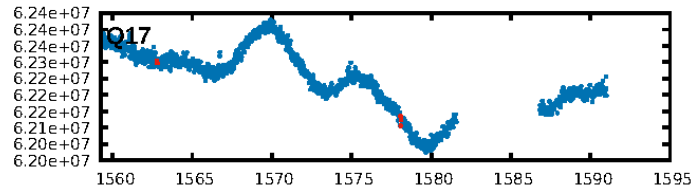
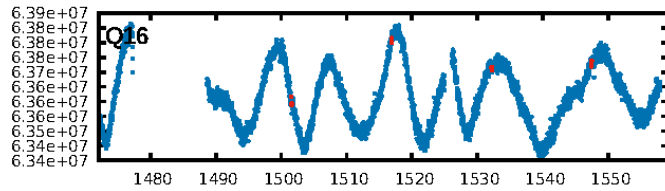
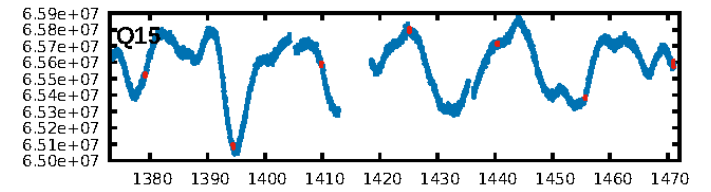
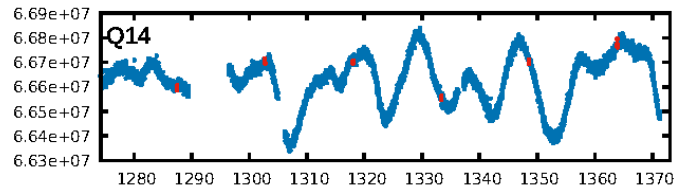
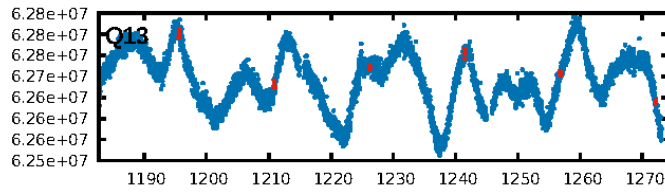
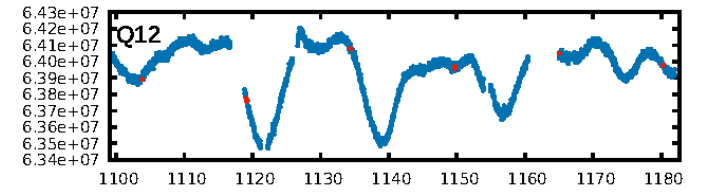
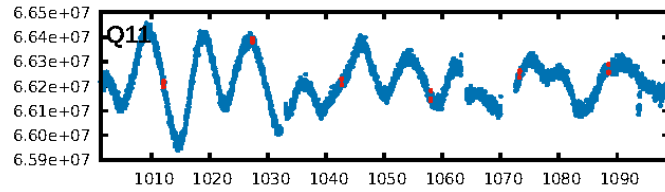
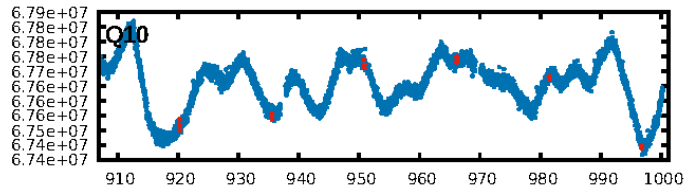
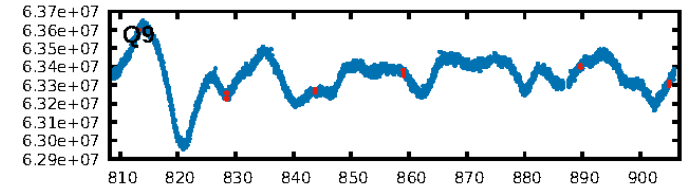
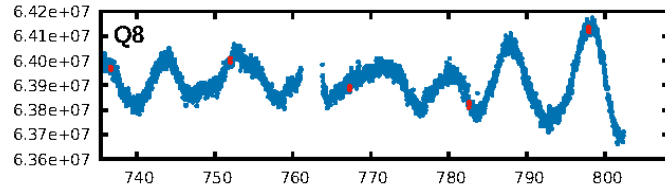
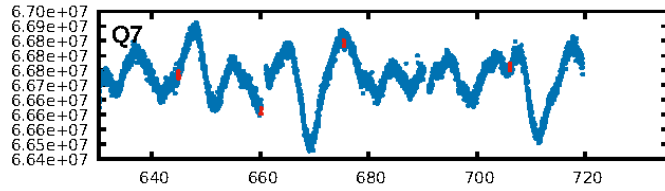
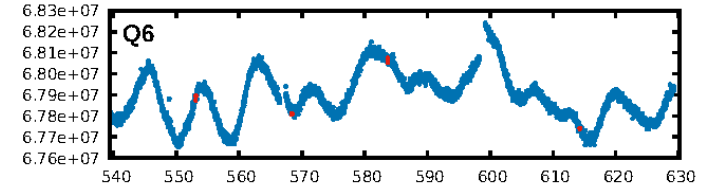
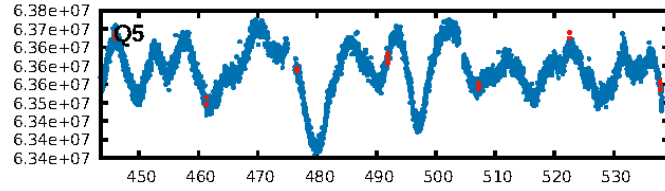
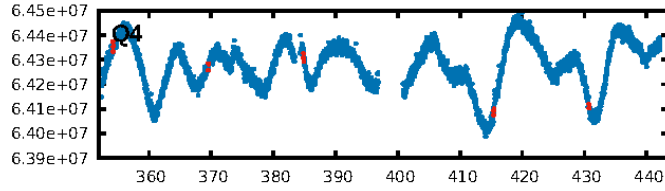
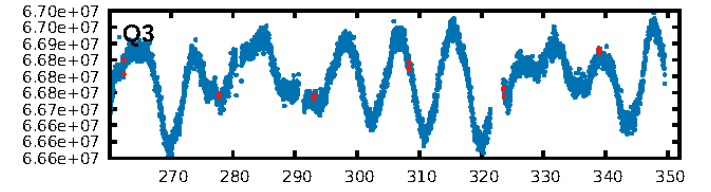
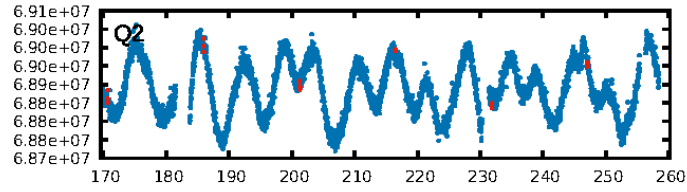
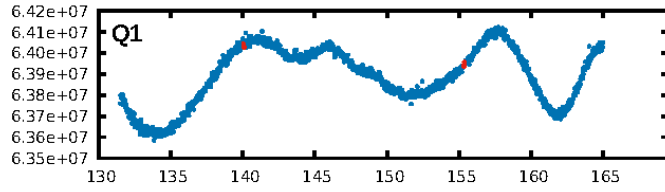
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [9.84σ]
LongPeriod-sig: 100.0% [73.46σ]
ModelChiSquare2-sig: 11.7%
ModelChiSquareGof-sig: 97.6%
Bootstrap-pfa: 9.66e-21
RollingBand-fgt: 1.00 [11/11]
GhostDiagnostic-chr: -0.1409
Centroid-sig: 12.1%
Centroid-so: 0.046 arcsec [0.46σ]
OotOffset-rm: 1.555 arcsec [1.14σ]
KicOffset-rm: 1.595 arcsec [1.04σ]
OotOffset-st: 2/2/2/2 [8]
KicOffset-st: 2/2/2/2 [8]
DiffImageQuality-fgm: 0.00 [0/8]
DiffImageOverlap-fno: 0.00 [0/16]

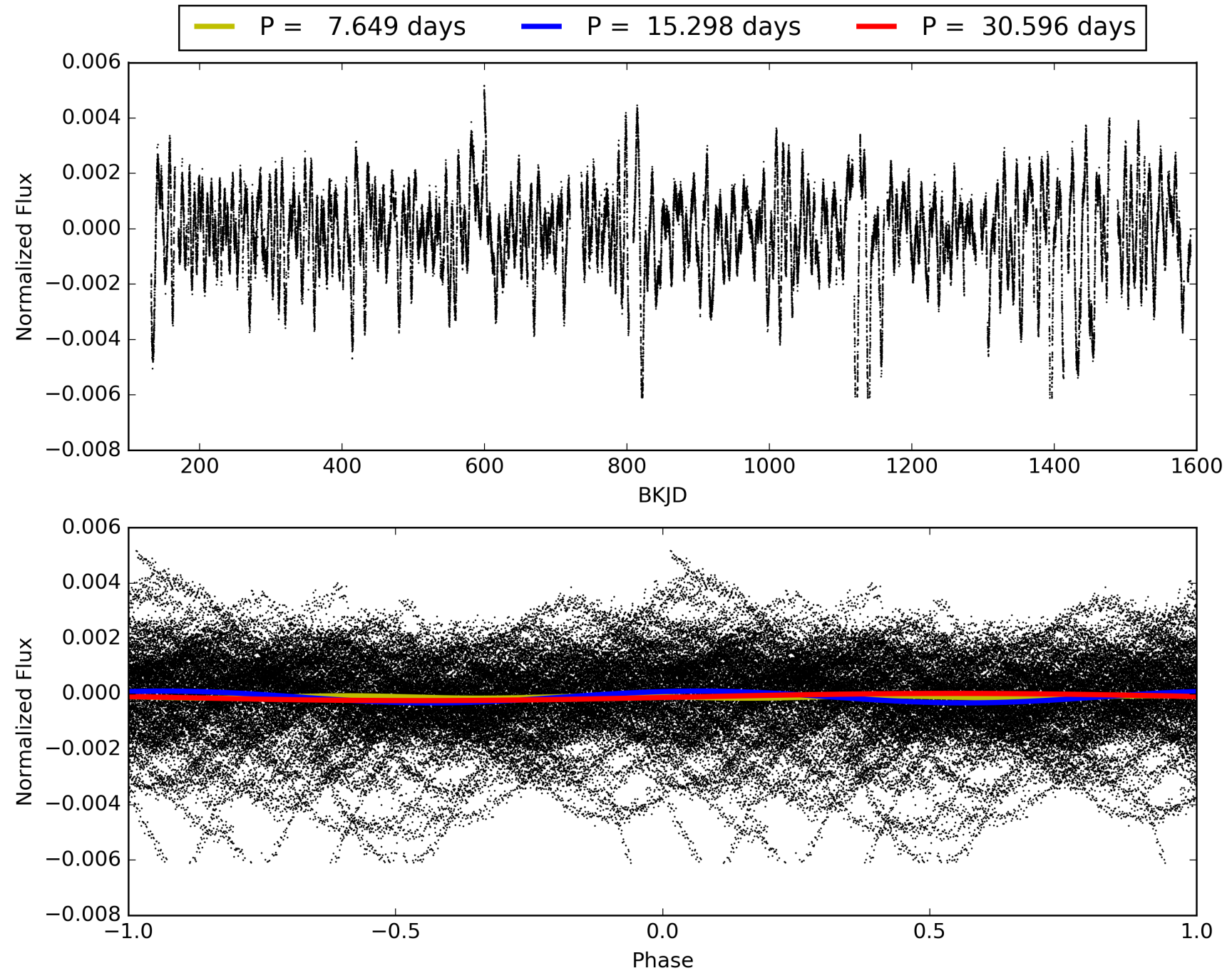
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 04:19:46 Z

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

TCE 006207535-04, PDC Light Curves

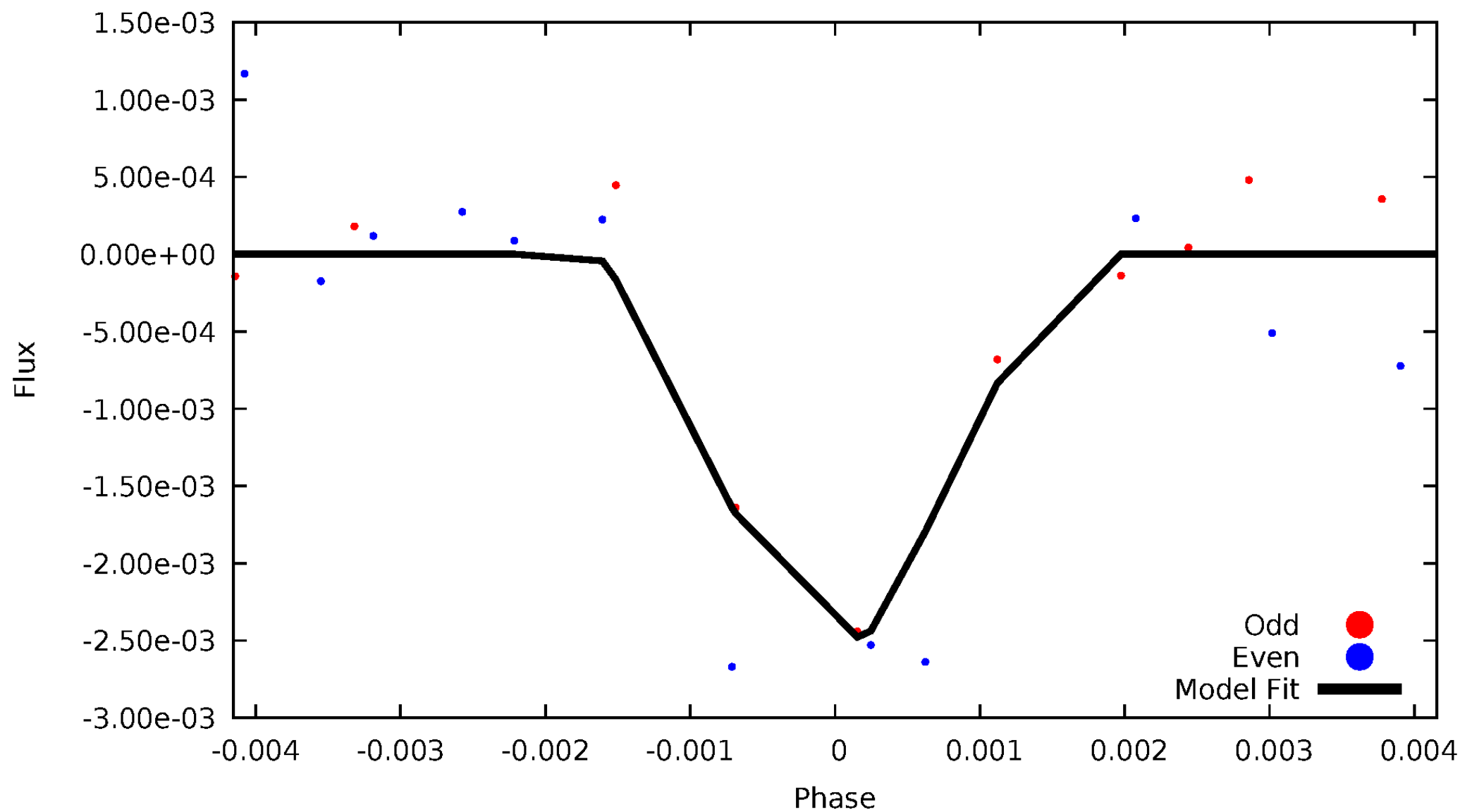


TCE 006207535-04



DV Odd/Even

TCE 006207535-04

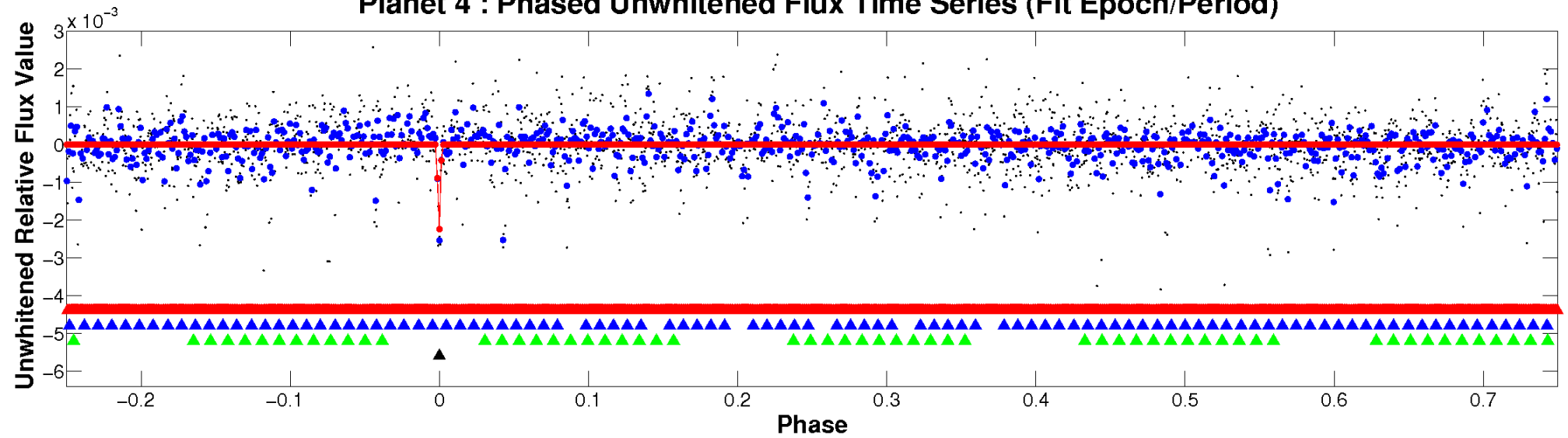


ALT Odd/Even

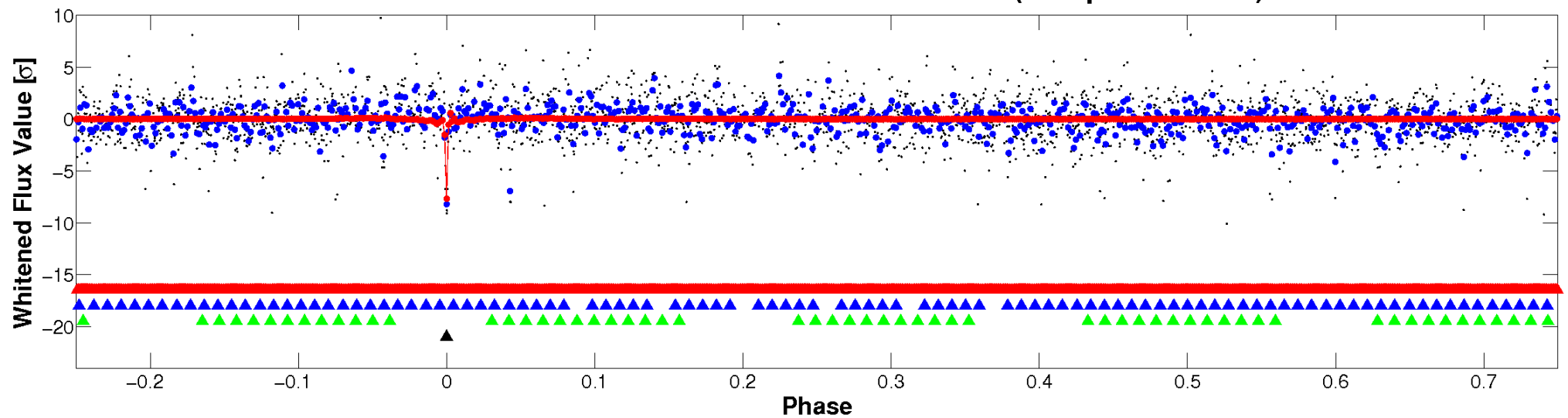
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

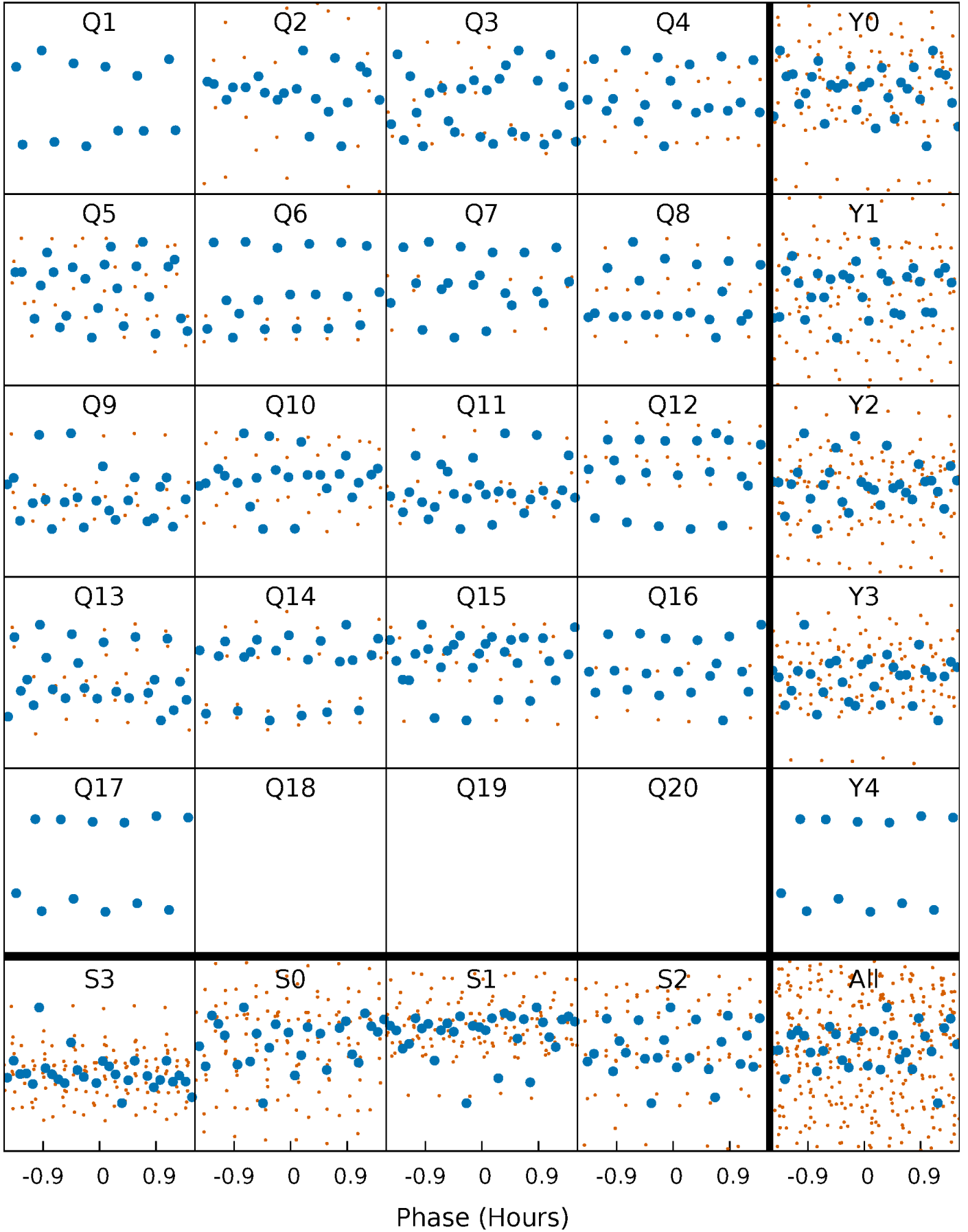


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



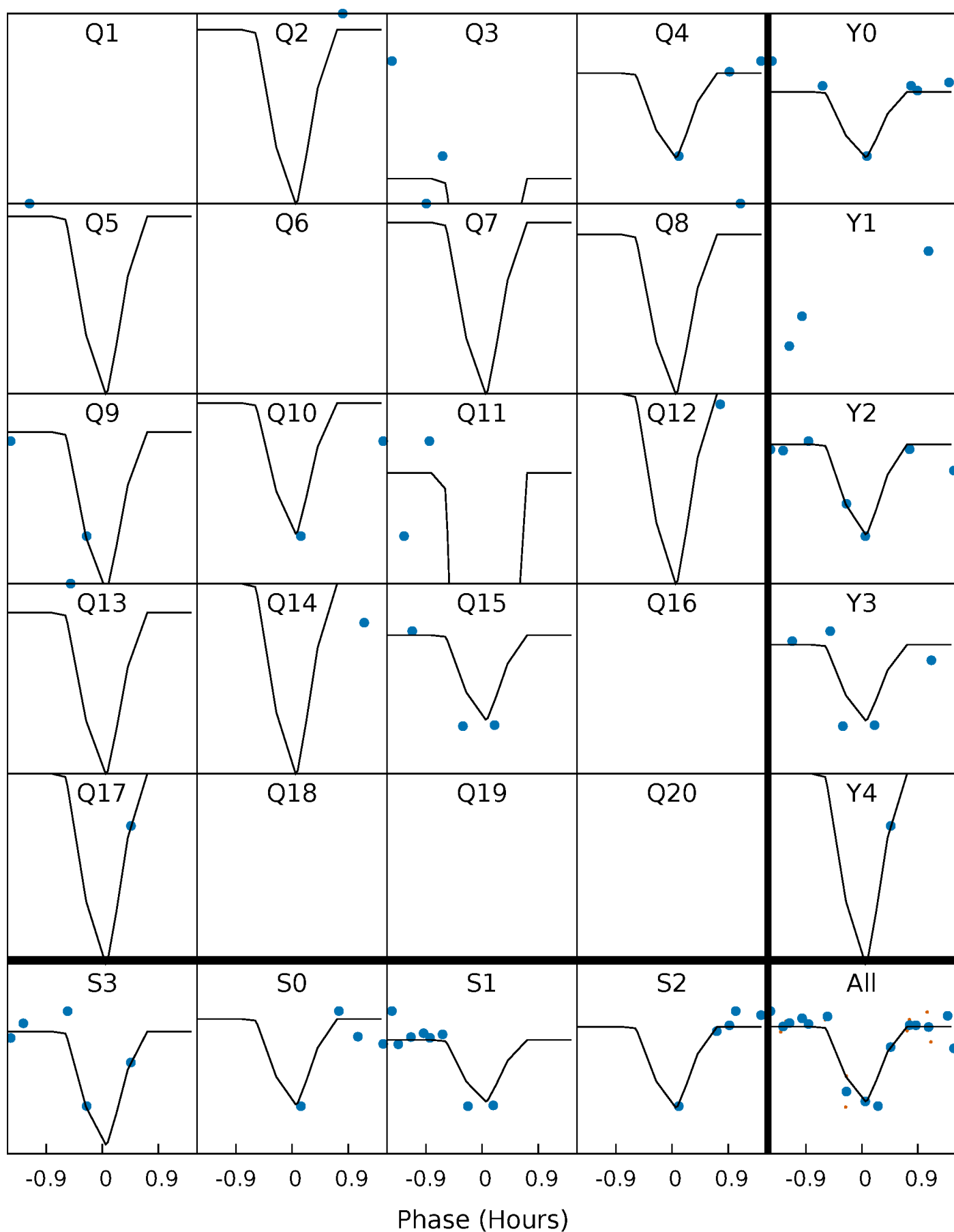
PDC Quarter-Phased Transit Curves

TCE 006207535-04 P= 15.298221 Days $T_0=140.050115$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 006207535-04 P= 15.298221 Days $T_0=140.050115$ (BKJD)

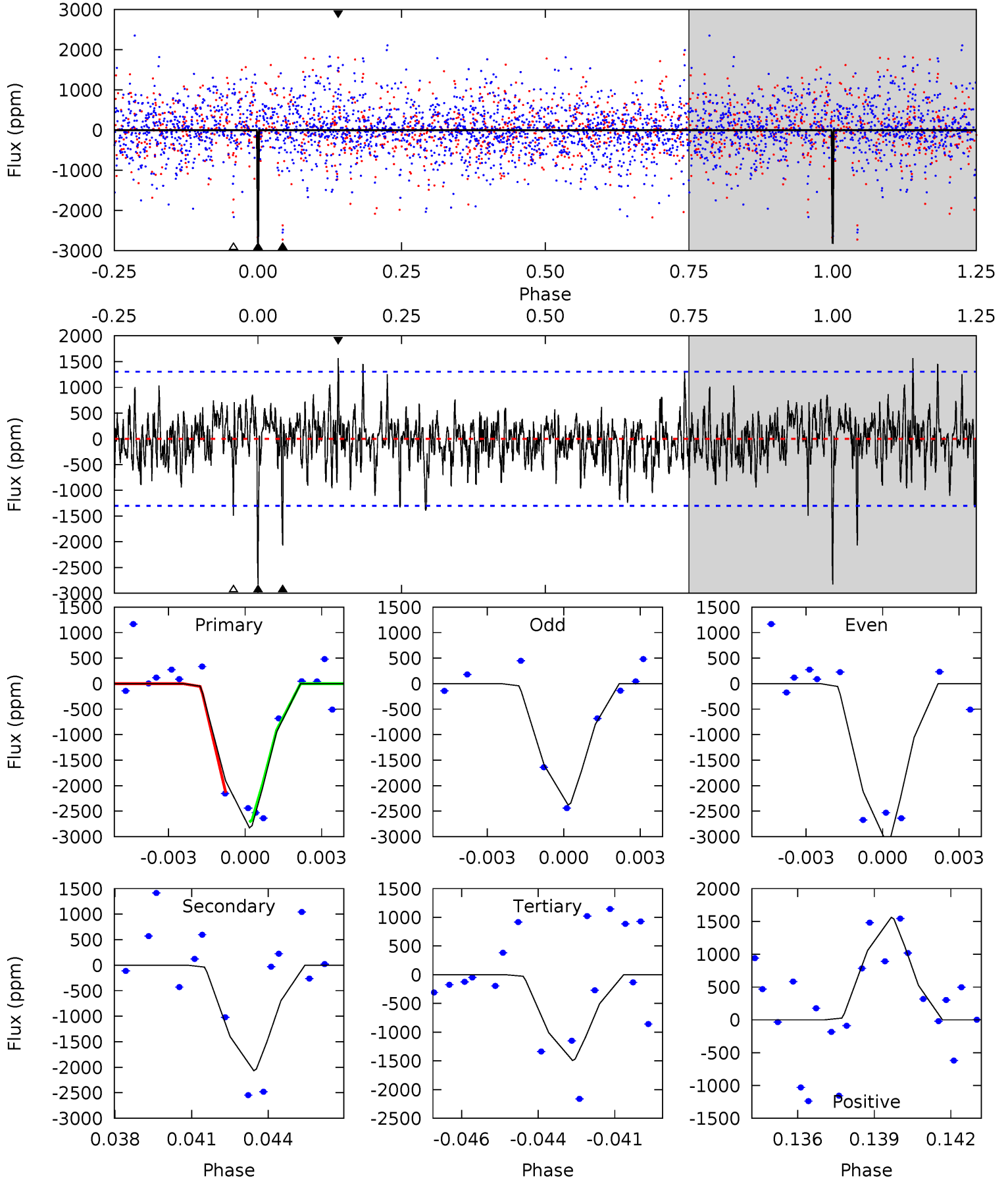


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

006207535-04, P = 15.298221 Days, E = 124.751894 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.4	8.37	6.05	6.33	5.27	3.00	1.50	5.40	5.12	2.32	2.04	1.50	1.00	0.36	1.18



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 006207535

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5895^{+77}_{-77}	$4.489^{+0.021}_{-0.126}$	$0.210^{+0.150}_{-0.150}$	$0.991^{+0.154}_{-0.041}$	$1.105^{+0.050}_{-0.072}$	$1.597^{+0.131}_{-0.548}$
	+1%/-1%	+0%/-3%	+71%/-71%	+16%/-4%	+5%/-7%	+8%/-34%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 006207535-04 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-2068 ± 247	$7.21^{+6.82}_{-4.58}$	1037^{+41}_{-22}	5067^{+3353}_{-1182}	346^{+2134}_{-257}
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 $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

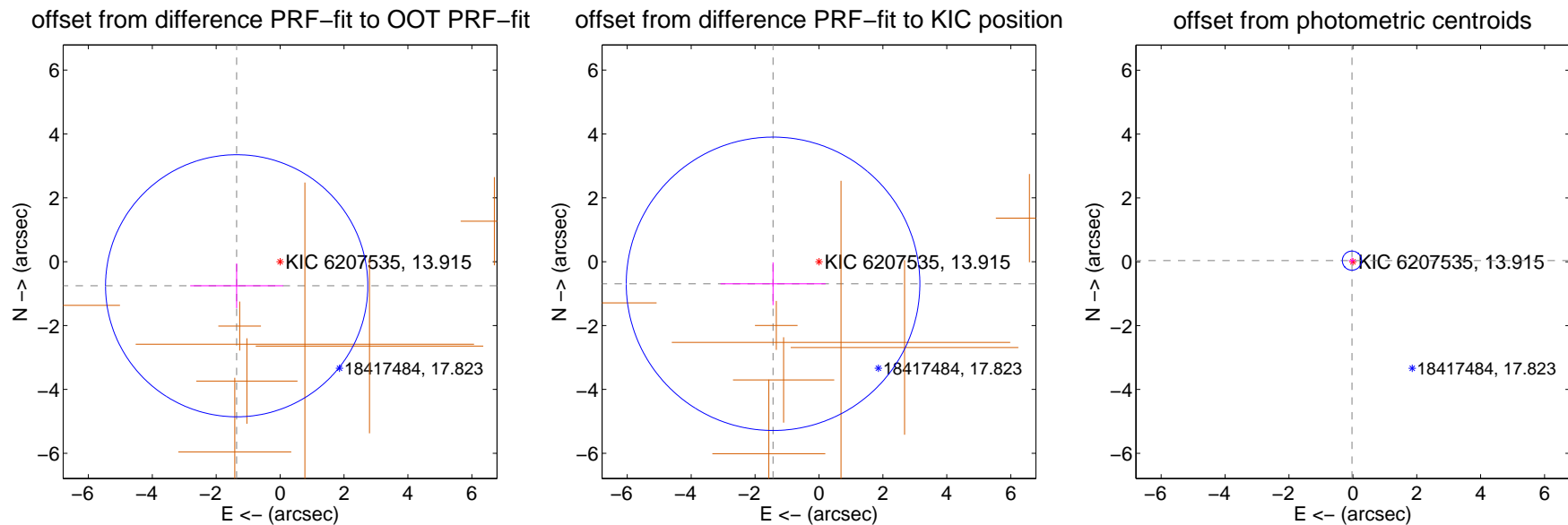
DV Centroid Data

Supplemental centroid analysis for 006207535-04. Kepler magnitude: 13.91. Transit SNR 15.51

There are 0 quarters with good PRF difference image offsets

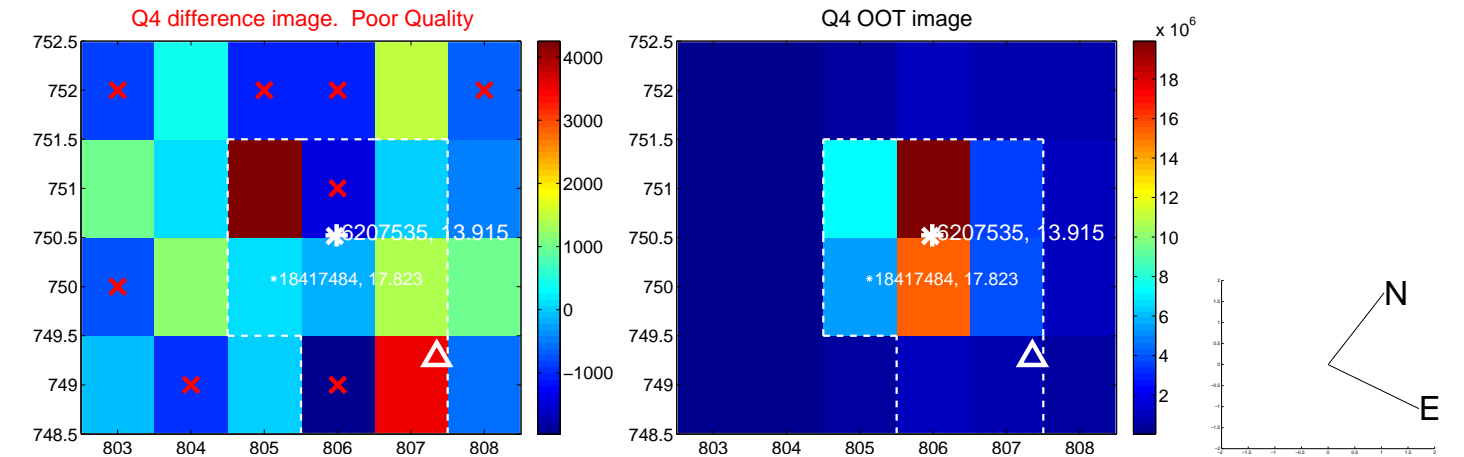
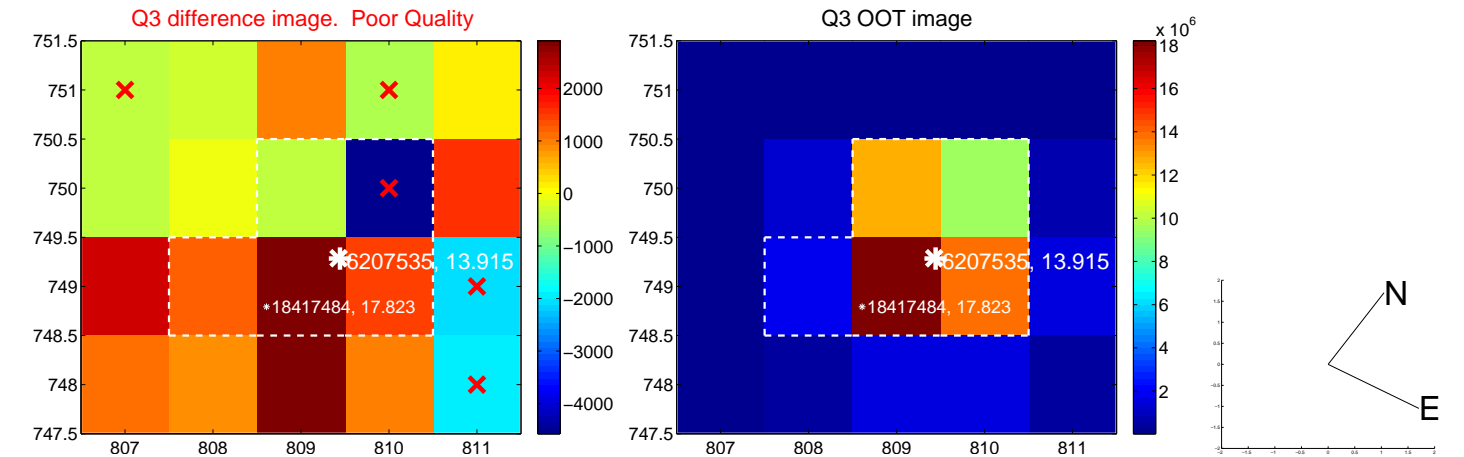
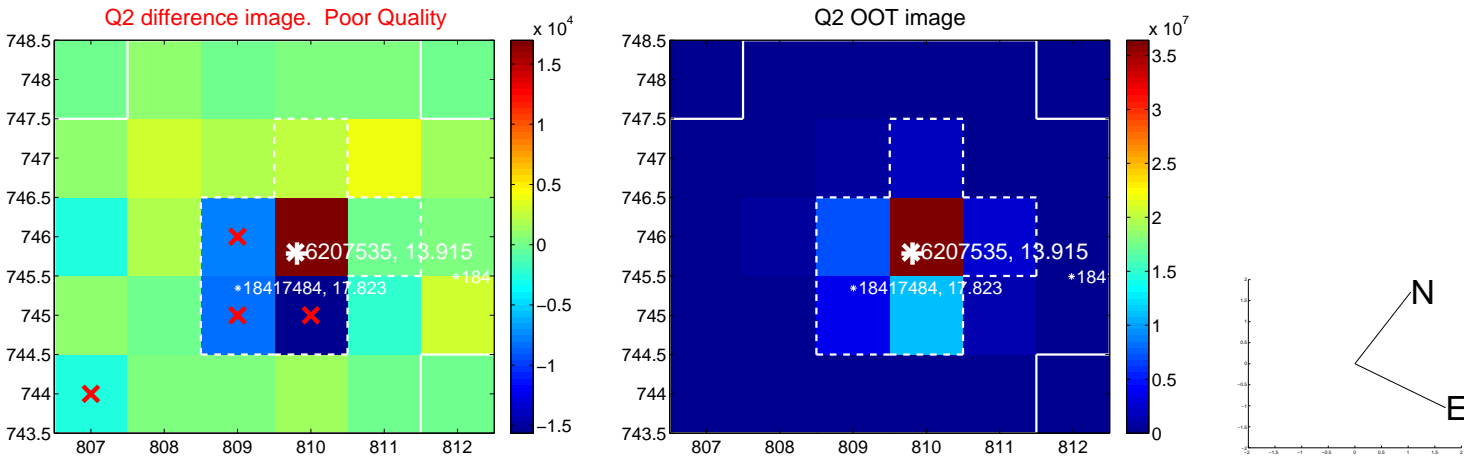
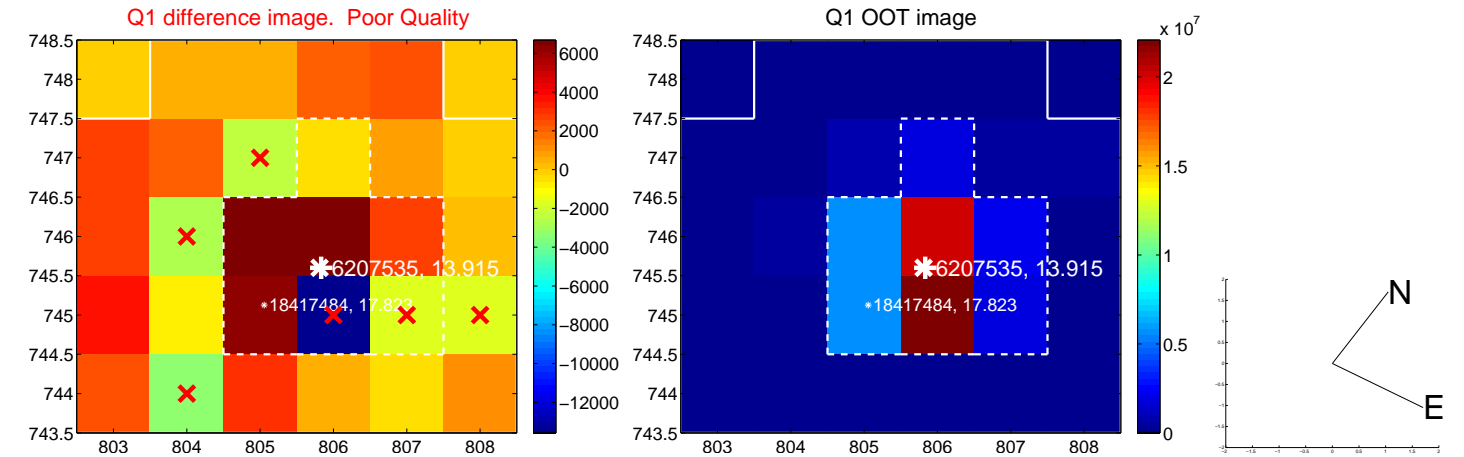
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.555 ± 1.368	1.14	1.359 ± 1.454	-0.754 ± 0.701
PRF-fit source offset from KIC position	1.595 ± 1.531	1.04	1.437 ± 1.643	-0.692 ± 0.670
photometric centroid source offset	0.05 ± 0.10	0.46	0.03 ± 0.10	0.04 ± 0.10

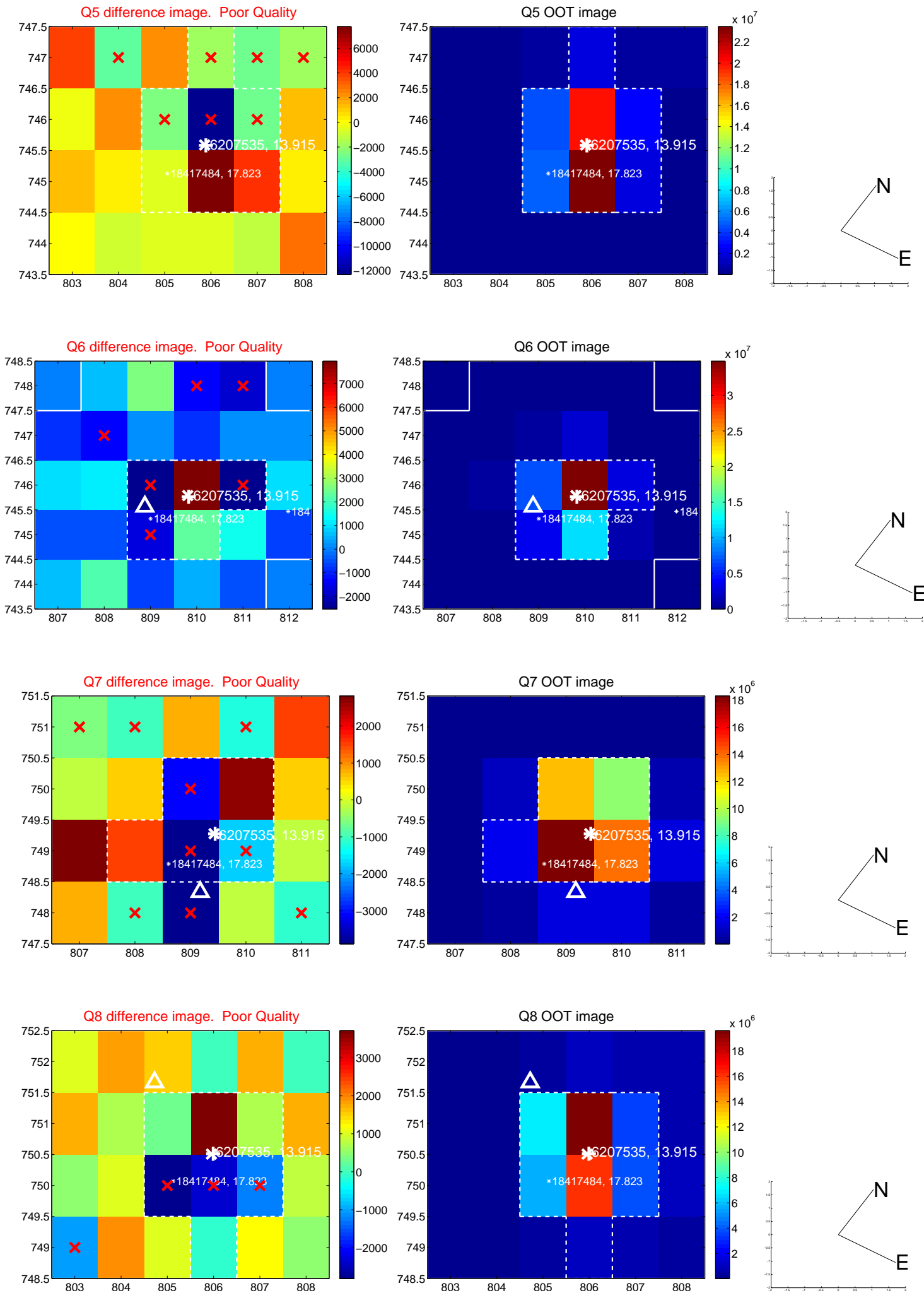


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

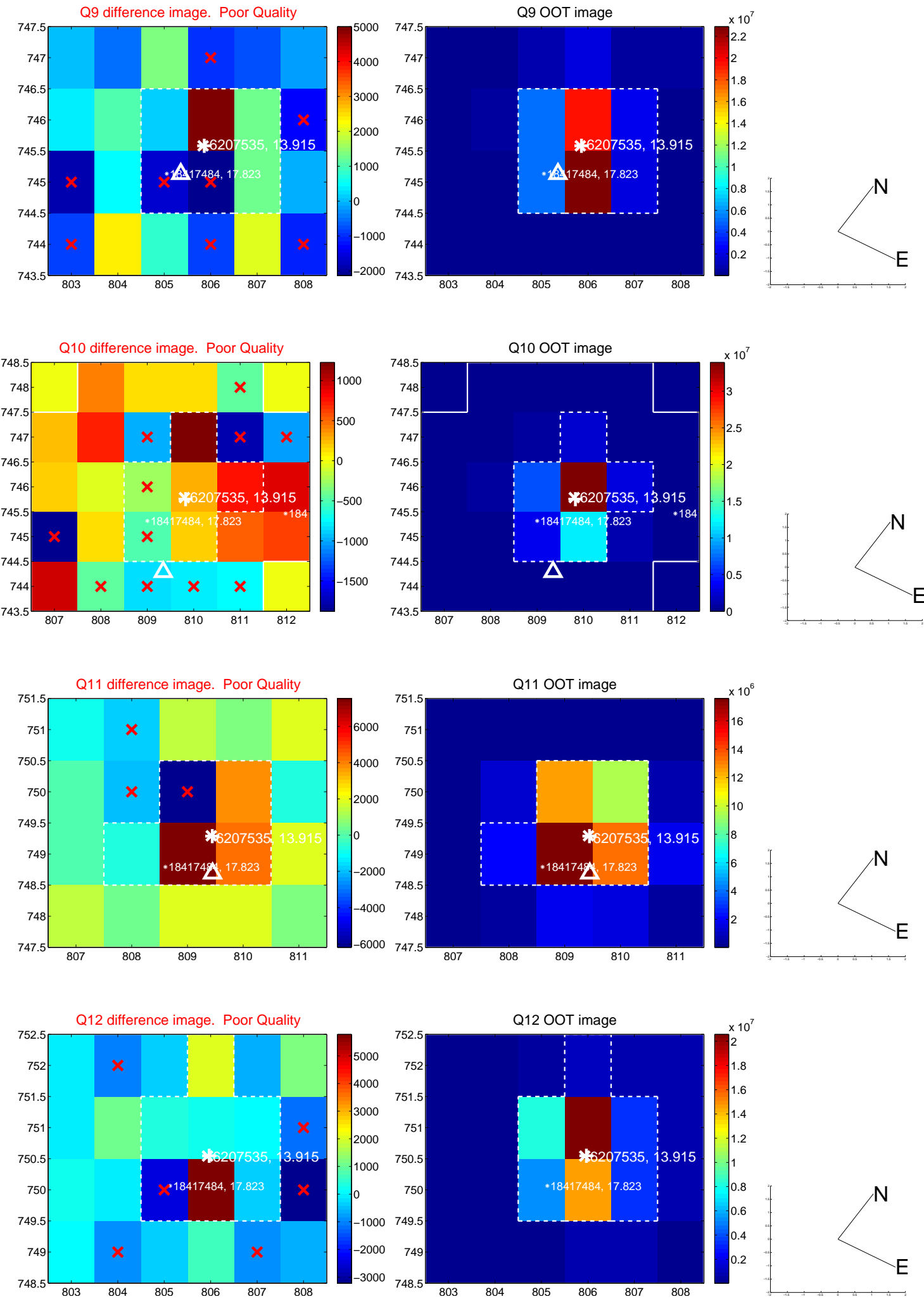
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



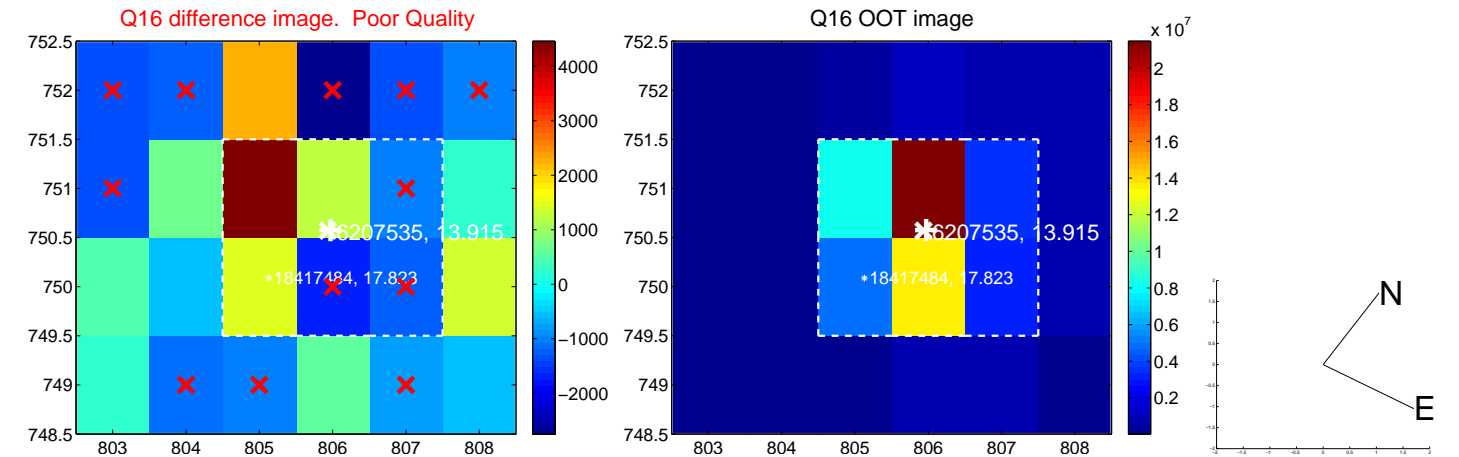
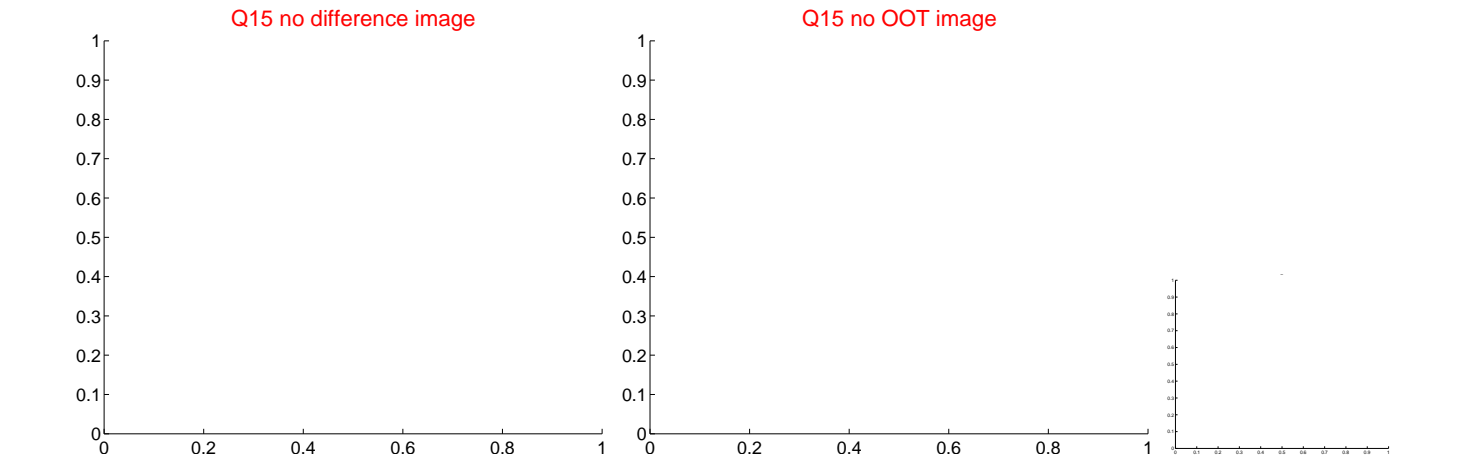
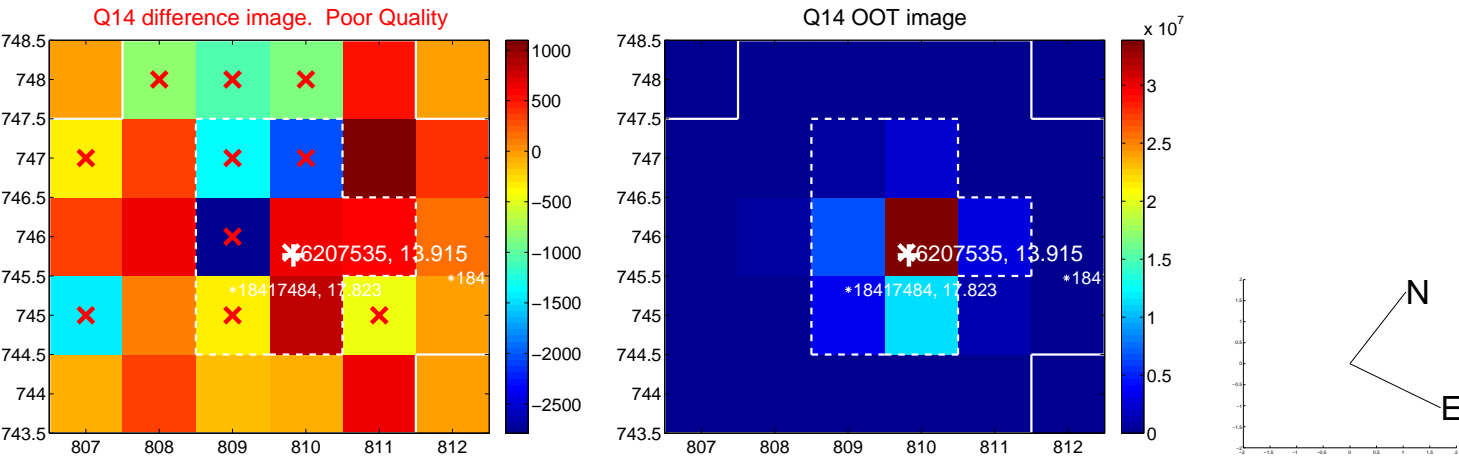
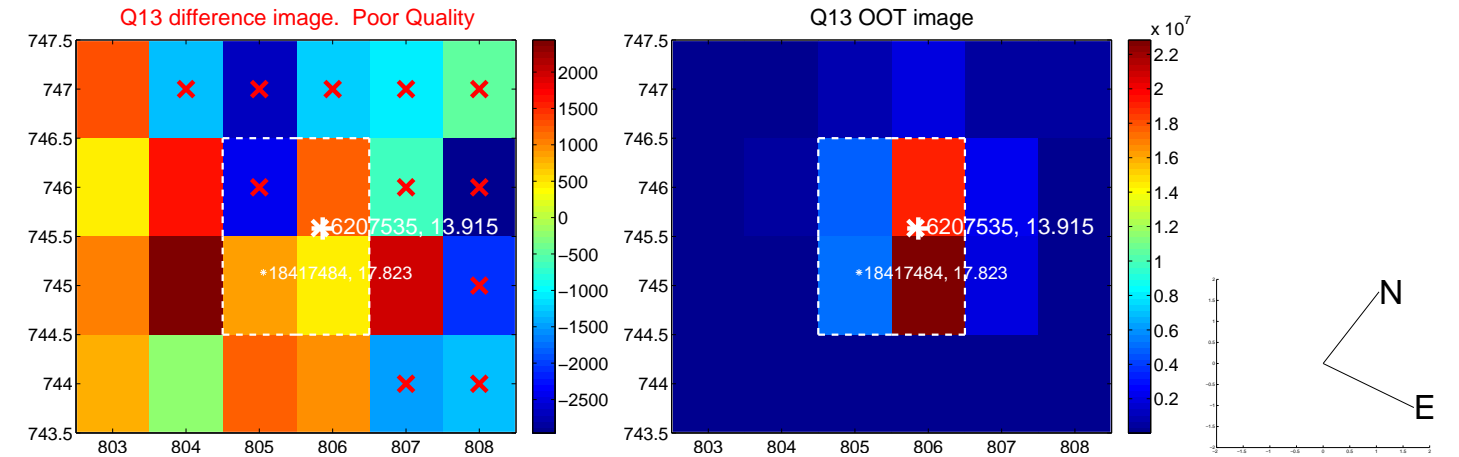
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



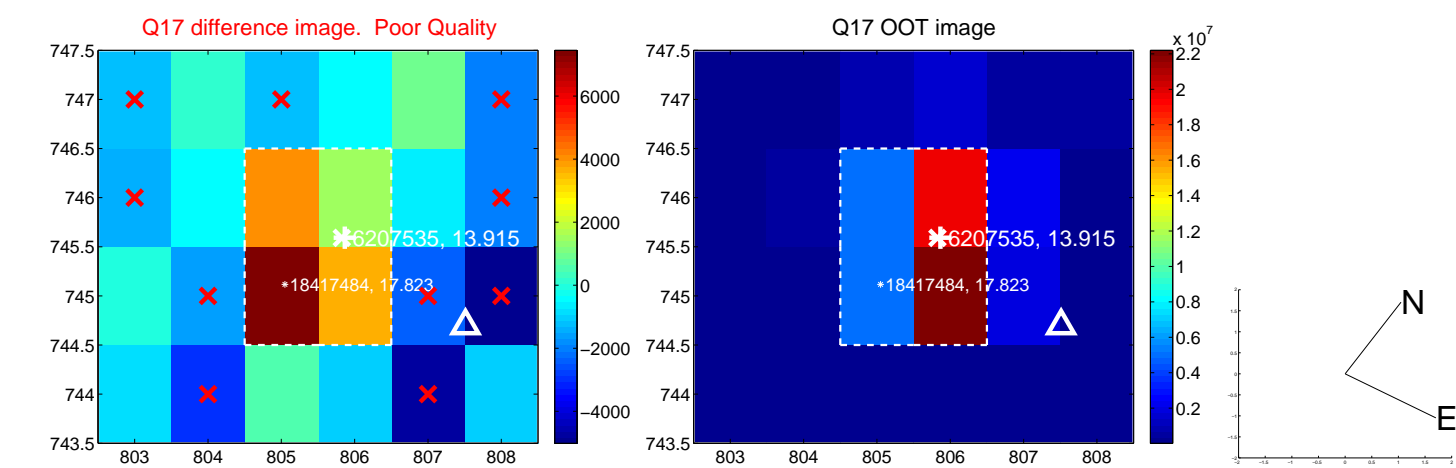
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



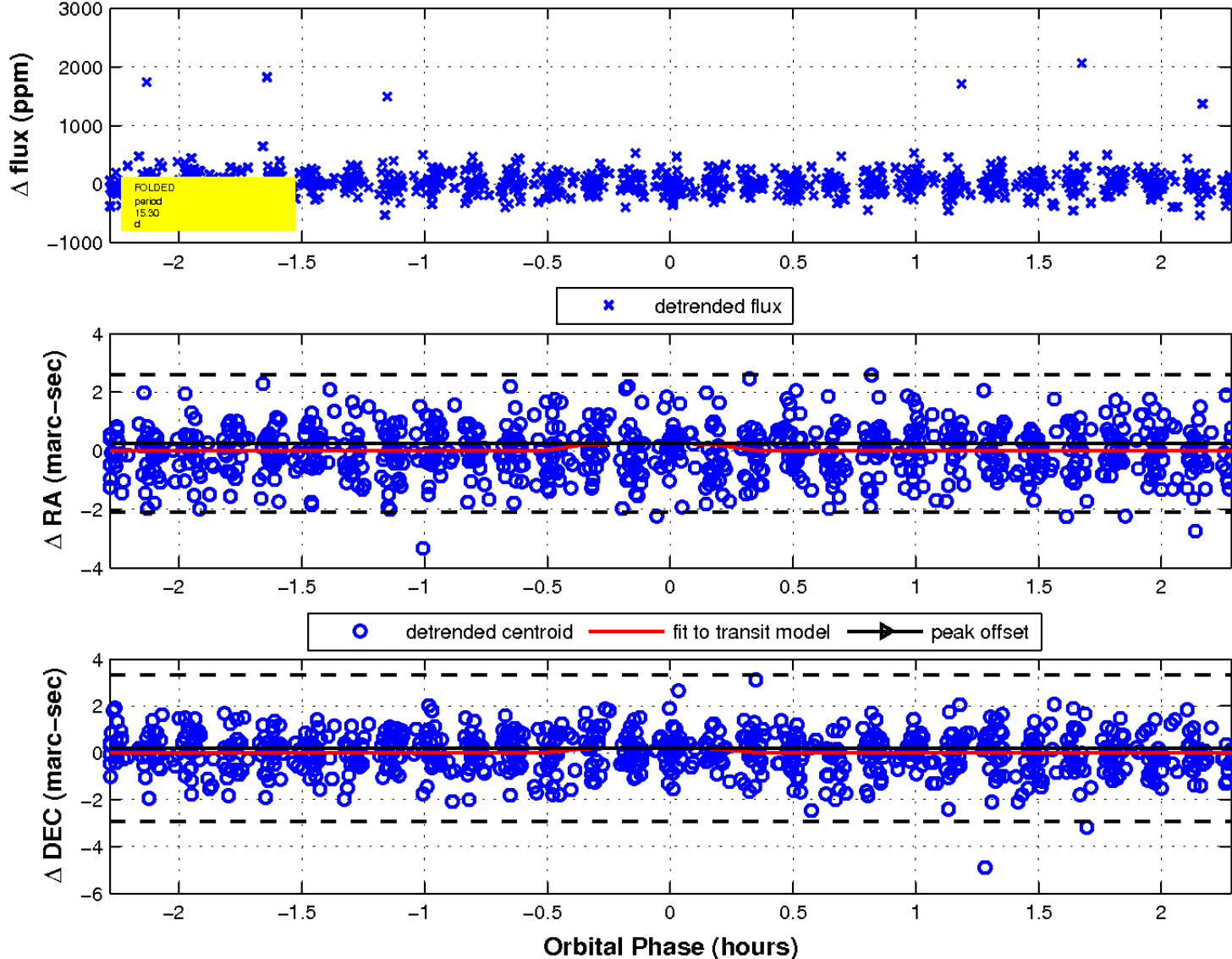
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 4 of 4



UKIRT Image

Declination

