

KIC 007547573

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})
007547573-01	OBS	No	1.778862	131.535924	105.3	4.757	9.0	9.7	3.72	7733	4.47	34006.24
007547573-02	OBS	No	1.778787	132.987481	149.6	3.912	10.5	11.2	3.72	7733	6.08	34008.13
007547573-03	OBS	No	62.530864	176.522823	413.6	8.135	8.1	7.5	3.72	7733	8.55	295.32

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007547573-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
007547573-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
007547573-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE

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

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

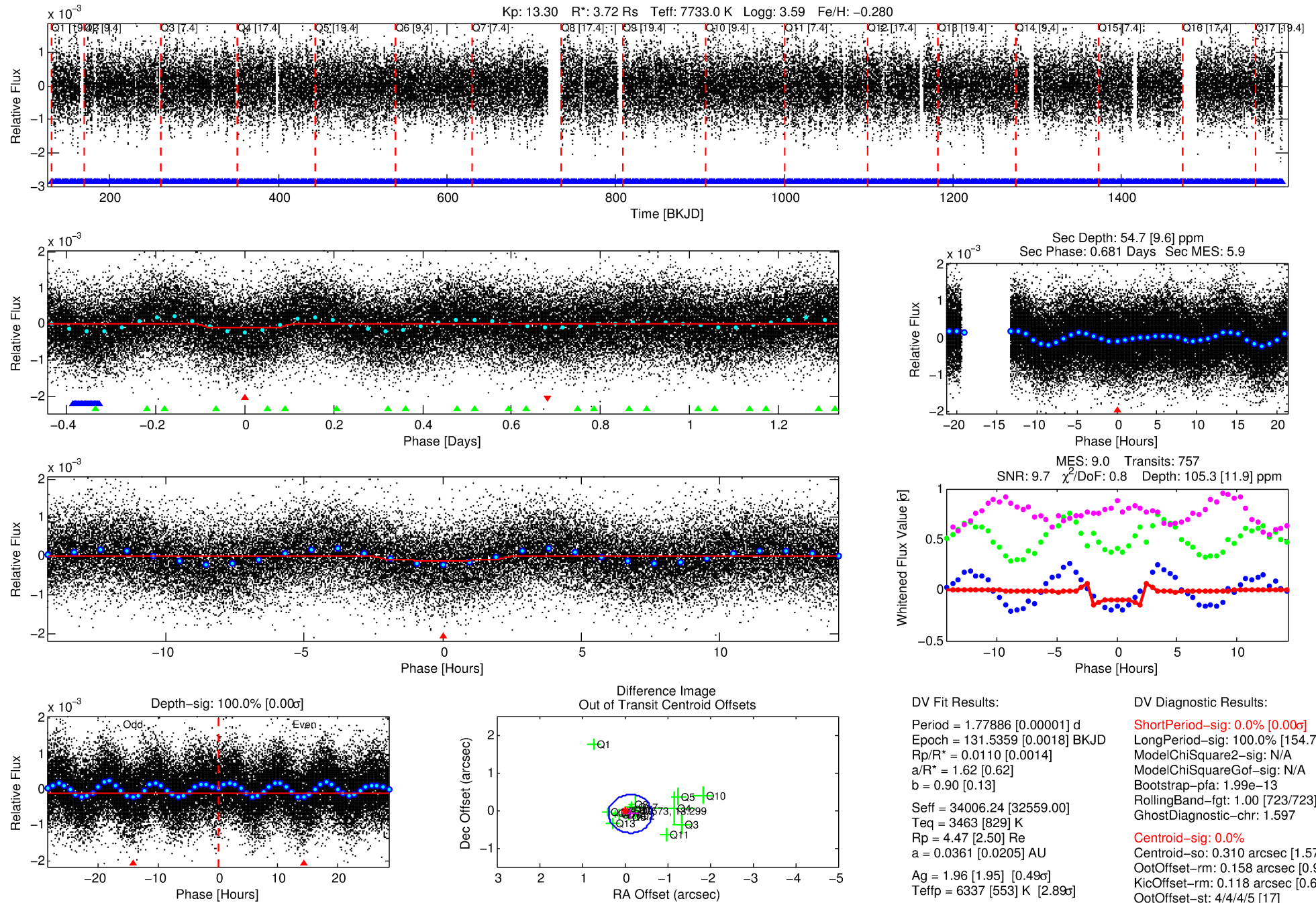
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007547573-01

No Significant Match Found

DV One-Page Summary

KIC: 7547573 Candidate: 1 of 3 Period: 1.779 d



DV Fit Results:

Period = 1.77886 [0.00001] d
Epoch = 131.5359 [0.0018] BKJD
Rp/R* = 0.0110 [0.0014]
a/R* = 1.62 [0.62]
b = 0.90 [0.13]
Seff = 34006.24 [32559.00]
Teq = 3463 [829] K
Rp = 4.47 [2.50] Re
a = 0.0361 [0.0205] AU
Ag = 1.96 [1.95] [0.49 σ]
Teffp = 6337 [553] K [2.89 σ]

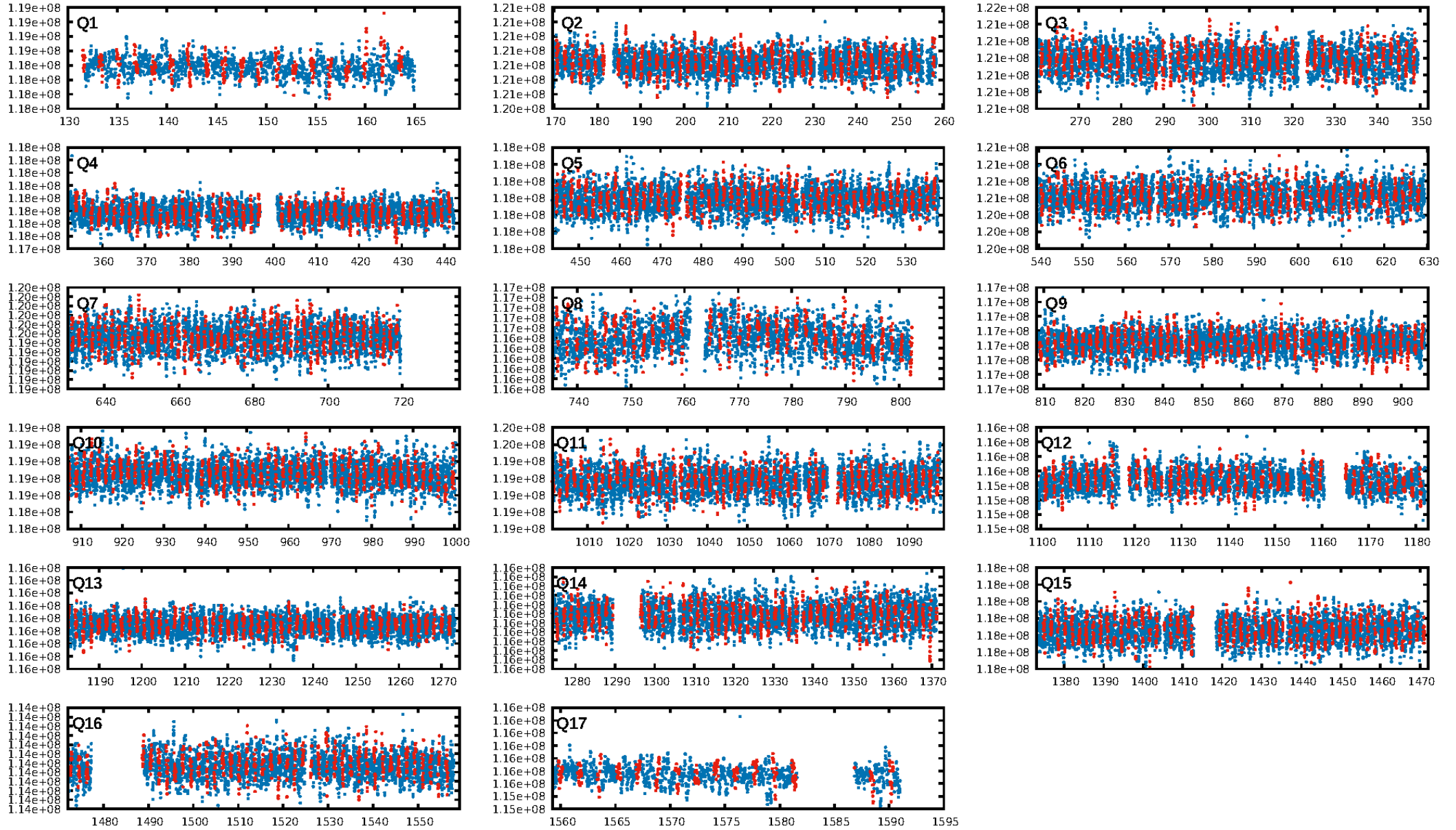
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00 σ]
LongPeriod-sig: 100.0% [154.72 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.99e-13
RollingBand-fgt: 1.00 [723/723]
GhostDiagnostic-chr: 1.597
Centroid-sig: 0.0%
Centroid-so: 0.310 arcsec [1.57 σ]
OotOffset-rm: 0.158 arcsec [0.93 σ]
KicOffset-rm: 0.118 arcsec [0.68 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

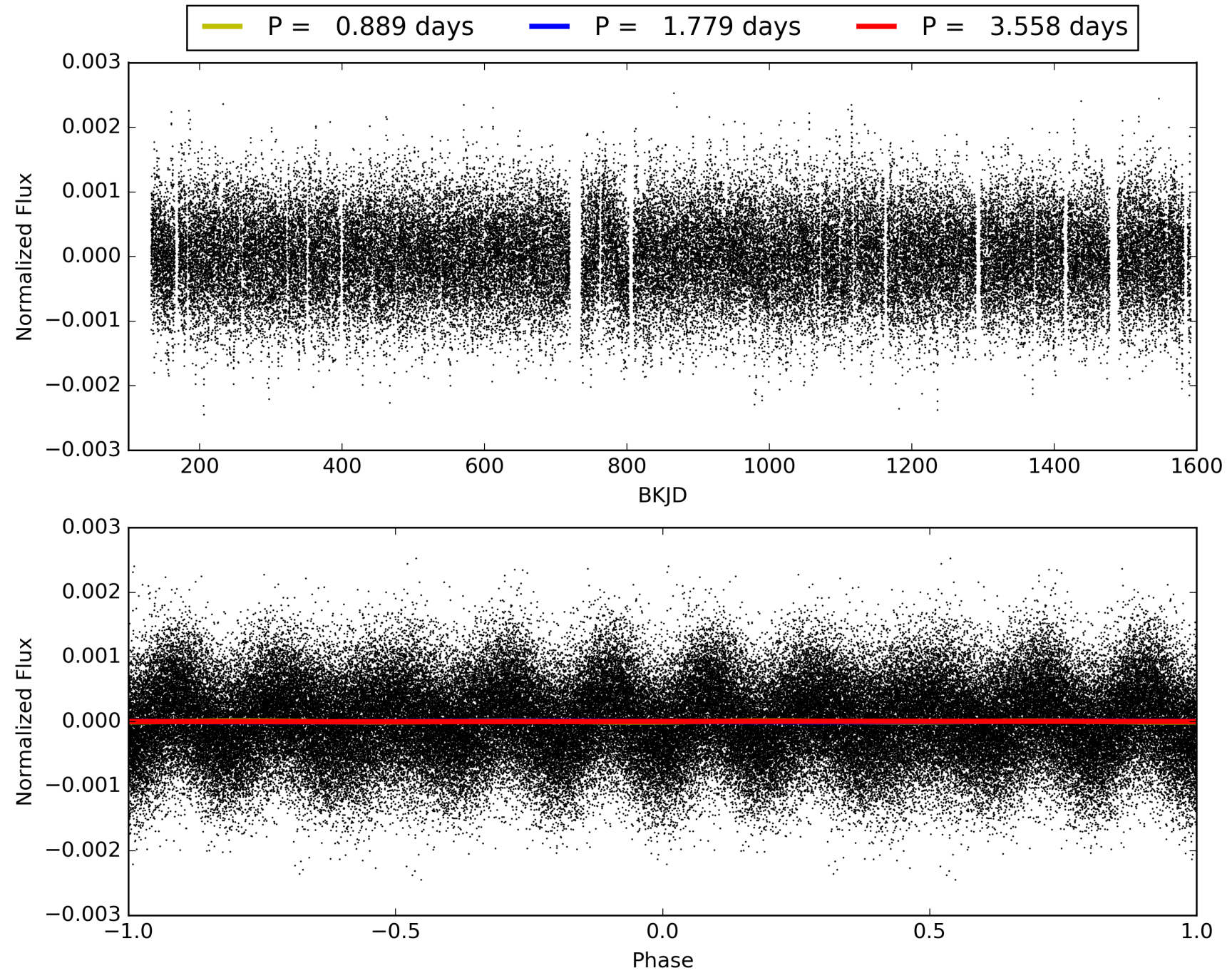
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 05:42:50 Z

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

TCE 007547573-01, PDC Light Curves

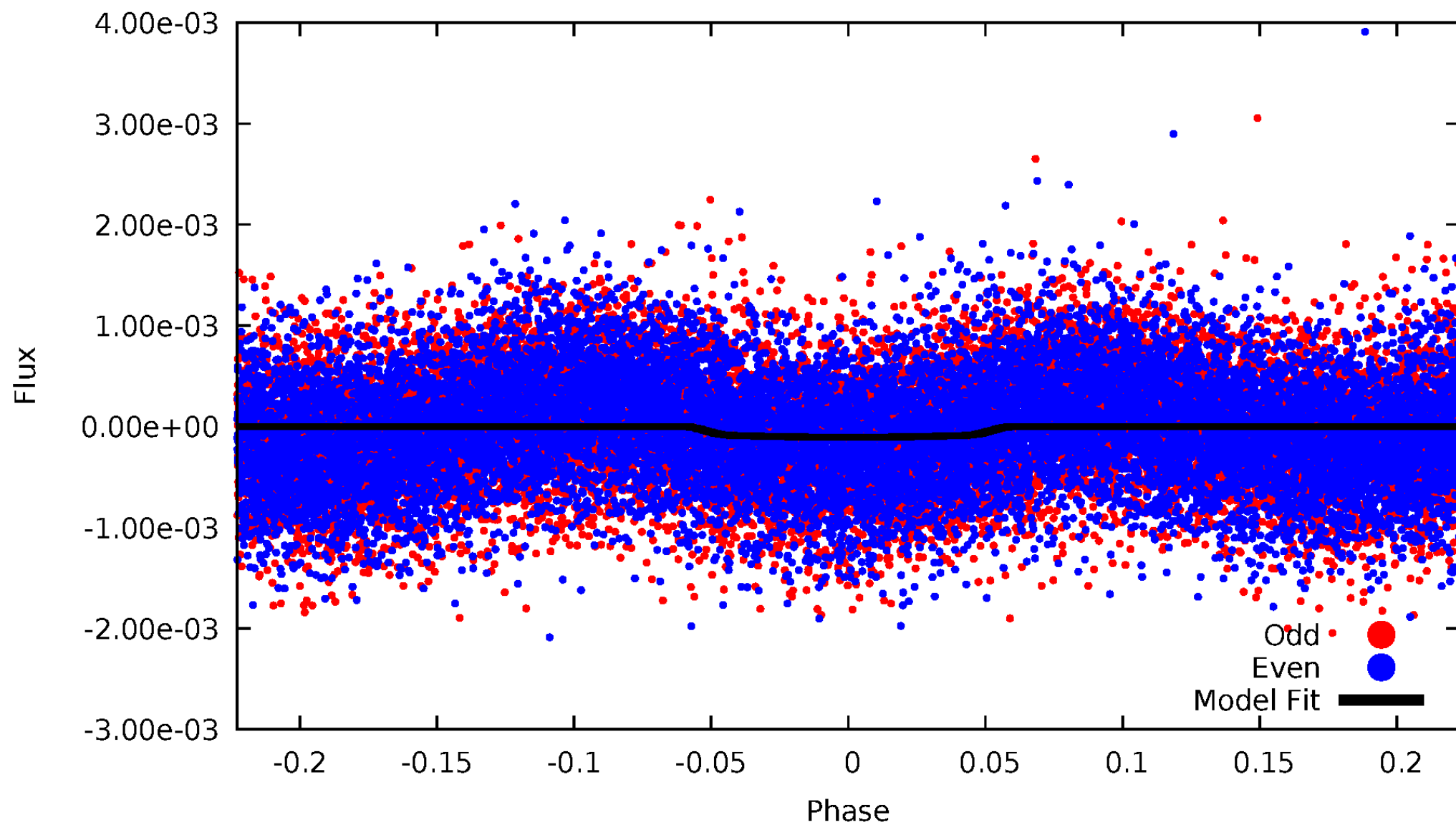


TCE 007547573-01



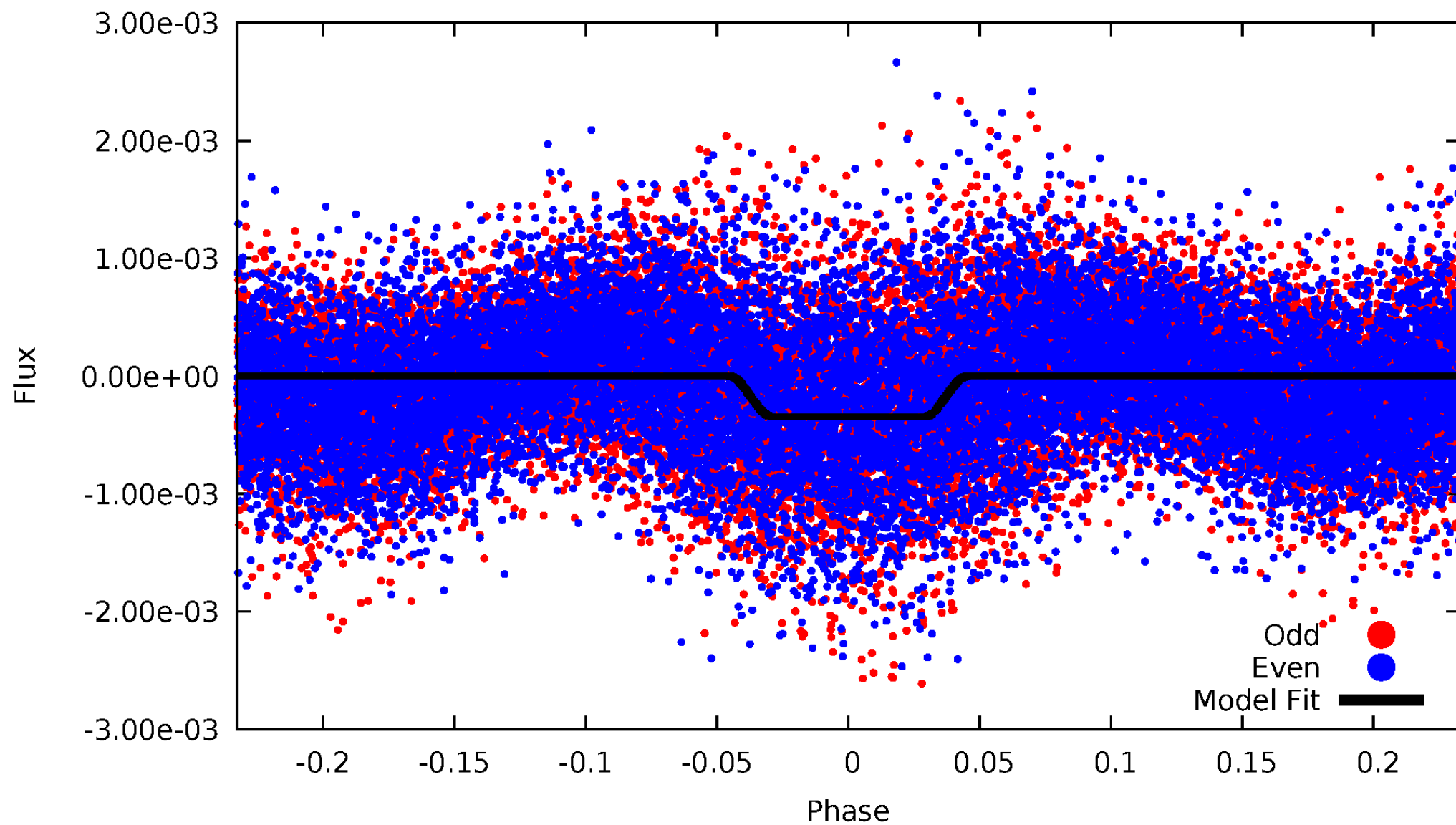
DV Odd/Even

TCE 007547573-01

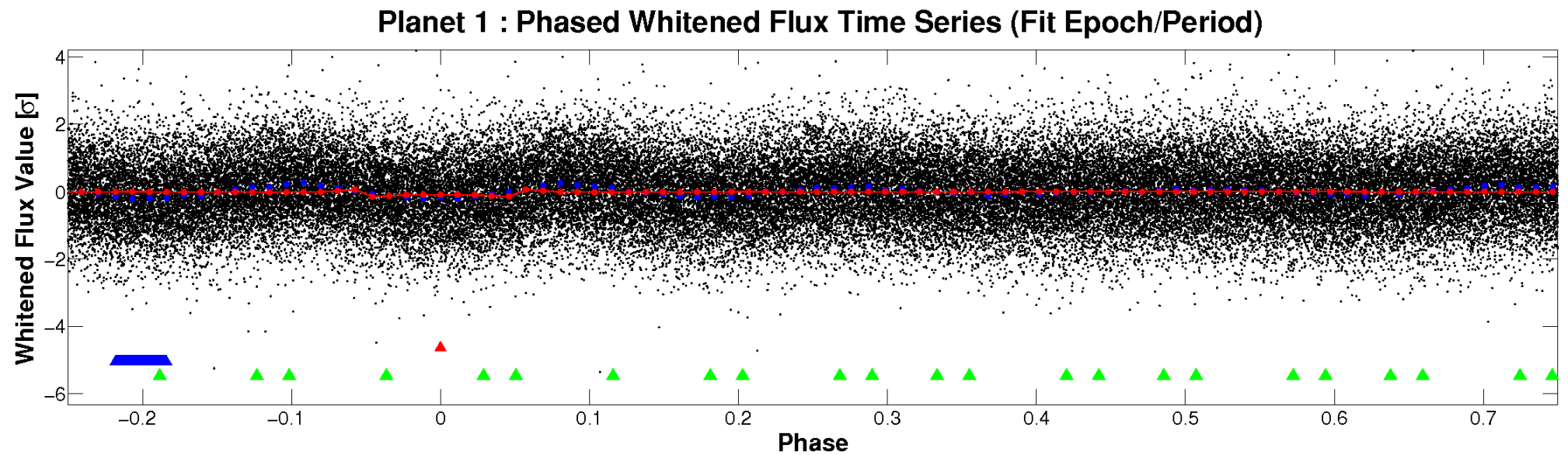
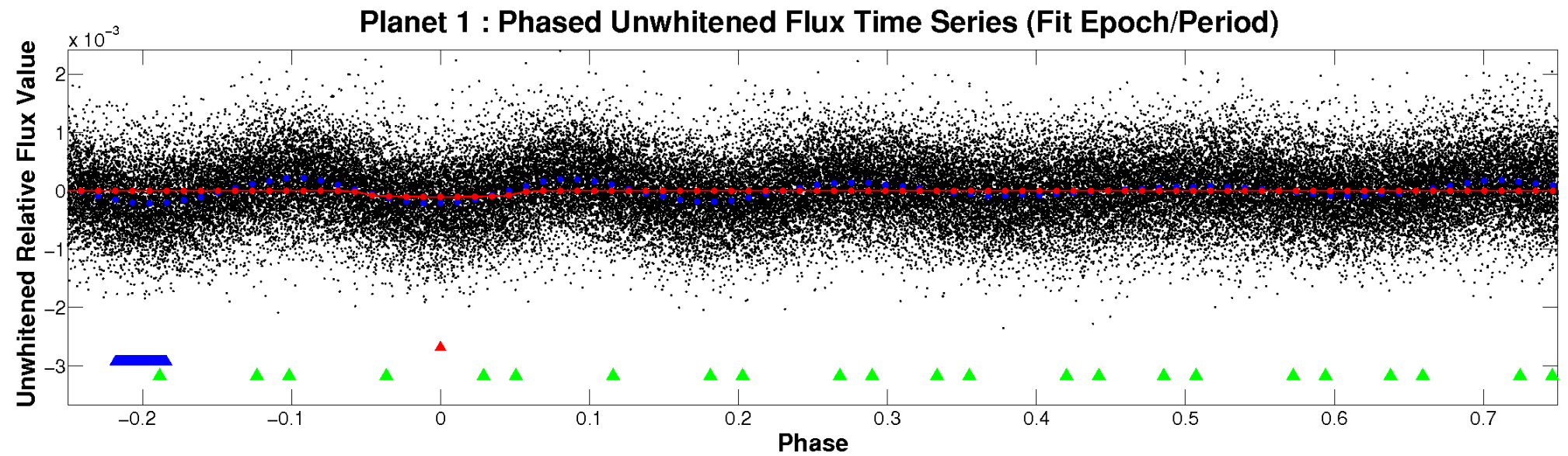


ALT Odd/Even

TCE 007547573-01

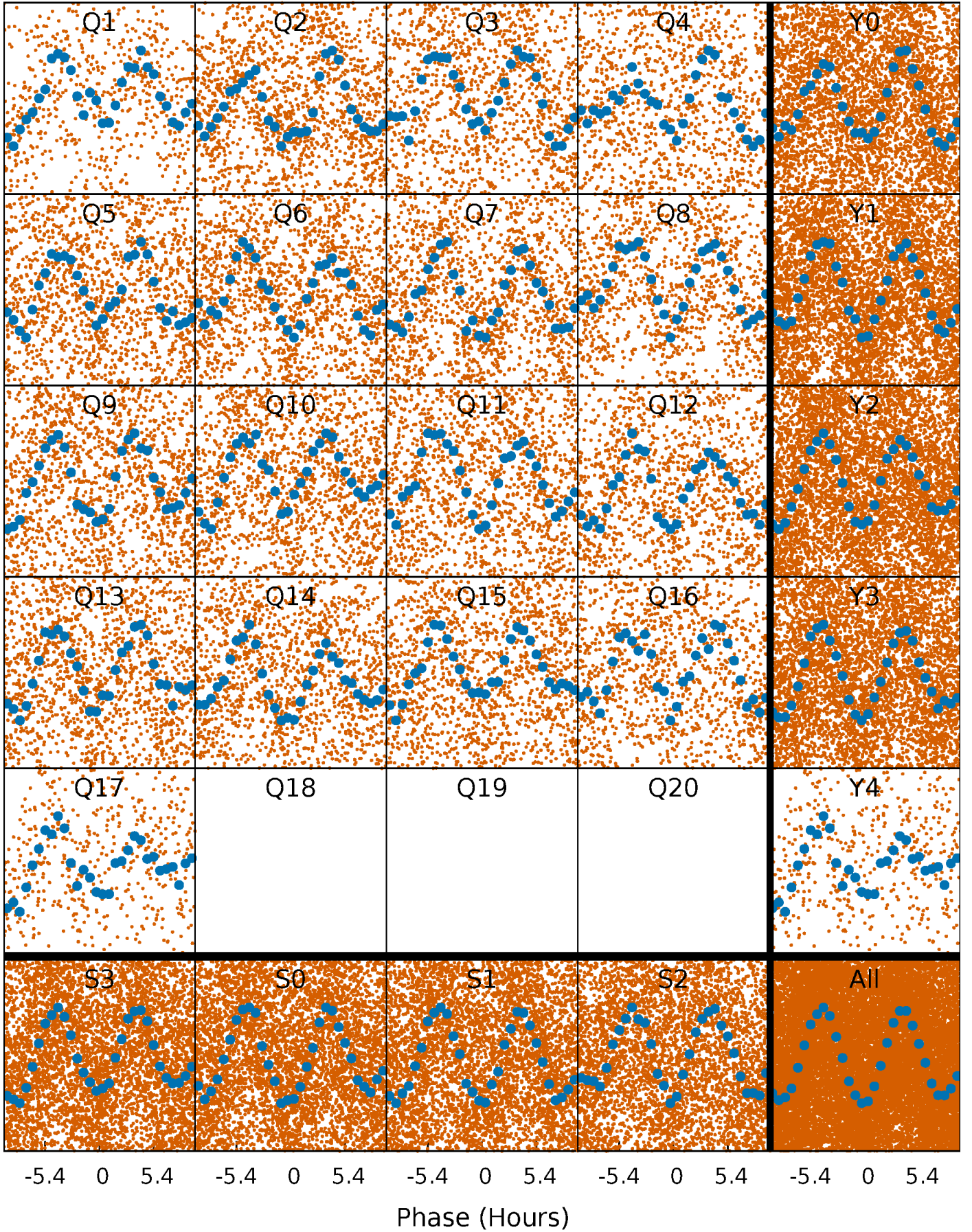


Non-Whitened Vs. Whitened Light Curve



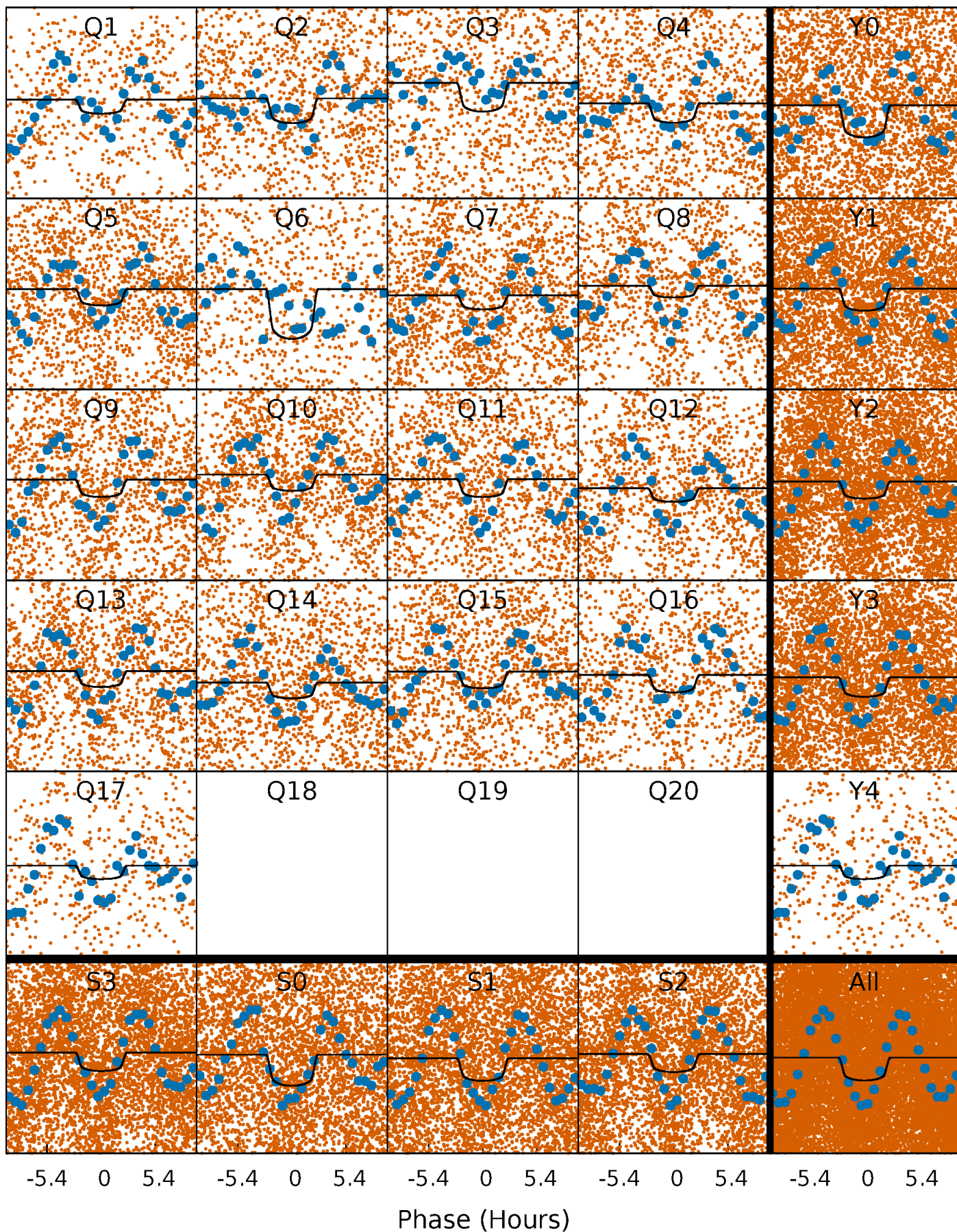
PDC Quarter-Phased Transit Curves

TCE 007547573-01 P= 1.778862 Days $T_0=131.535924$ (BKJD)



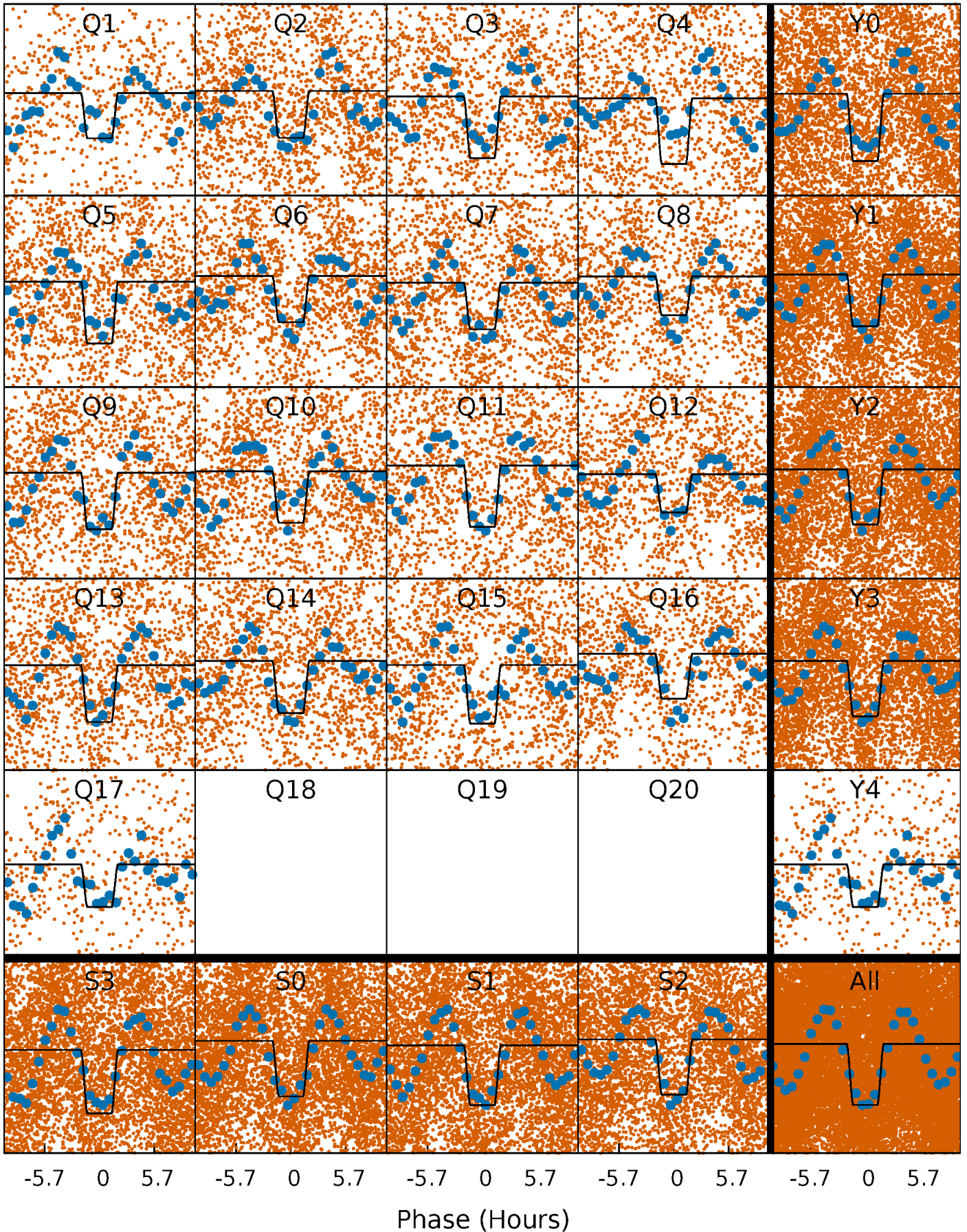
DV Quarter-Phased Transit Curves

TCE 007547573-01 P= 1.778862 Days $T_0=131.535924$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

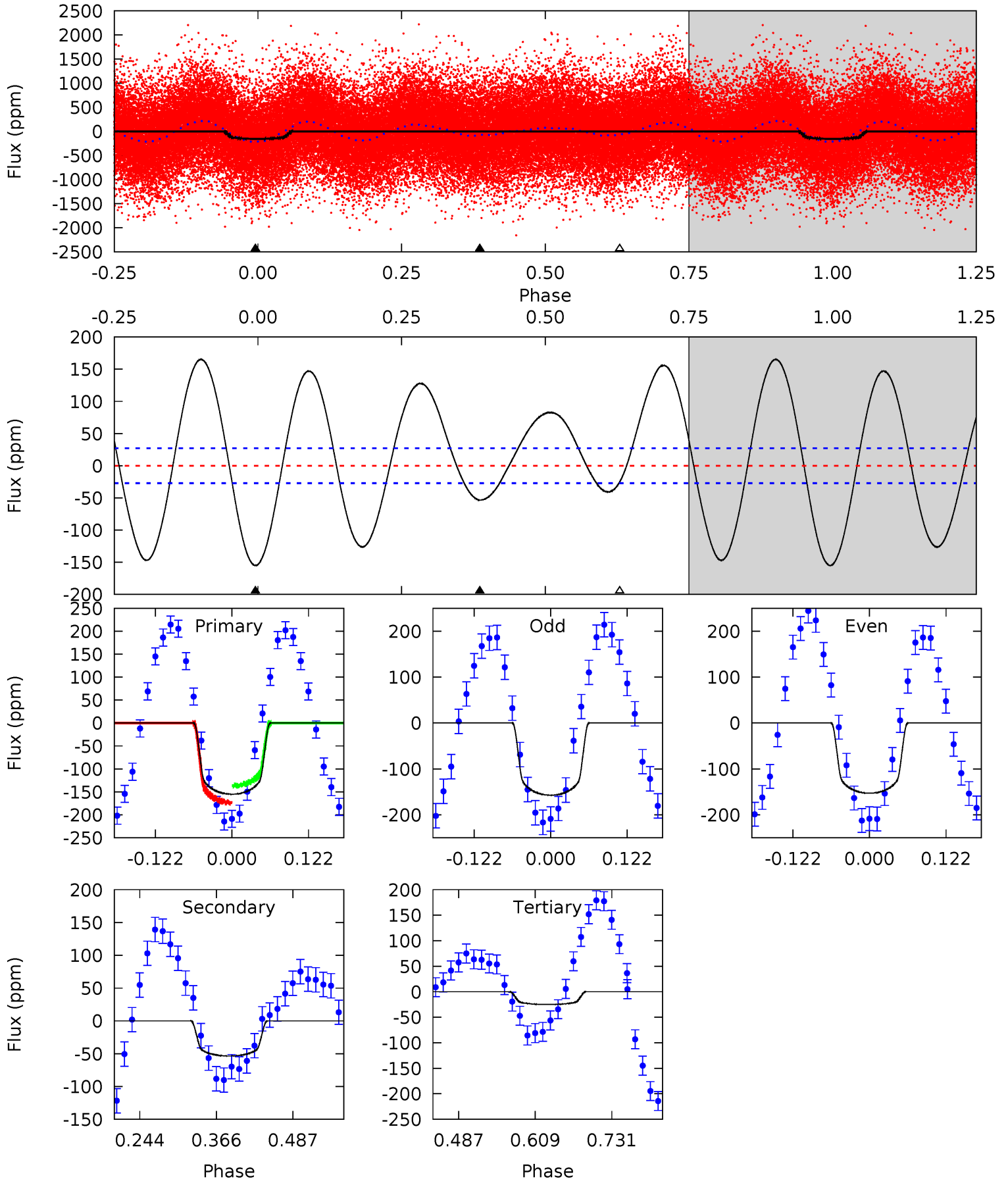
TCE 007547573-01 P= 1.778845 Days $T_0=131.534161$ (BKJD)



DV Model-Shift Uniqueness Test

007547573-01, P = 1.778862 Days, E = 129.757062 Days

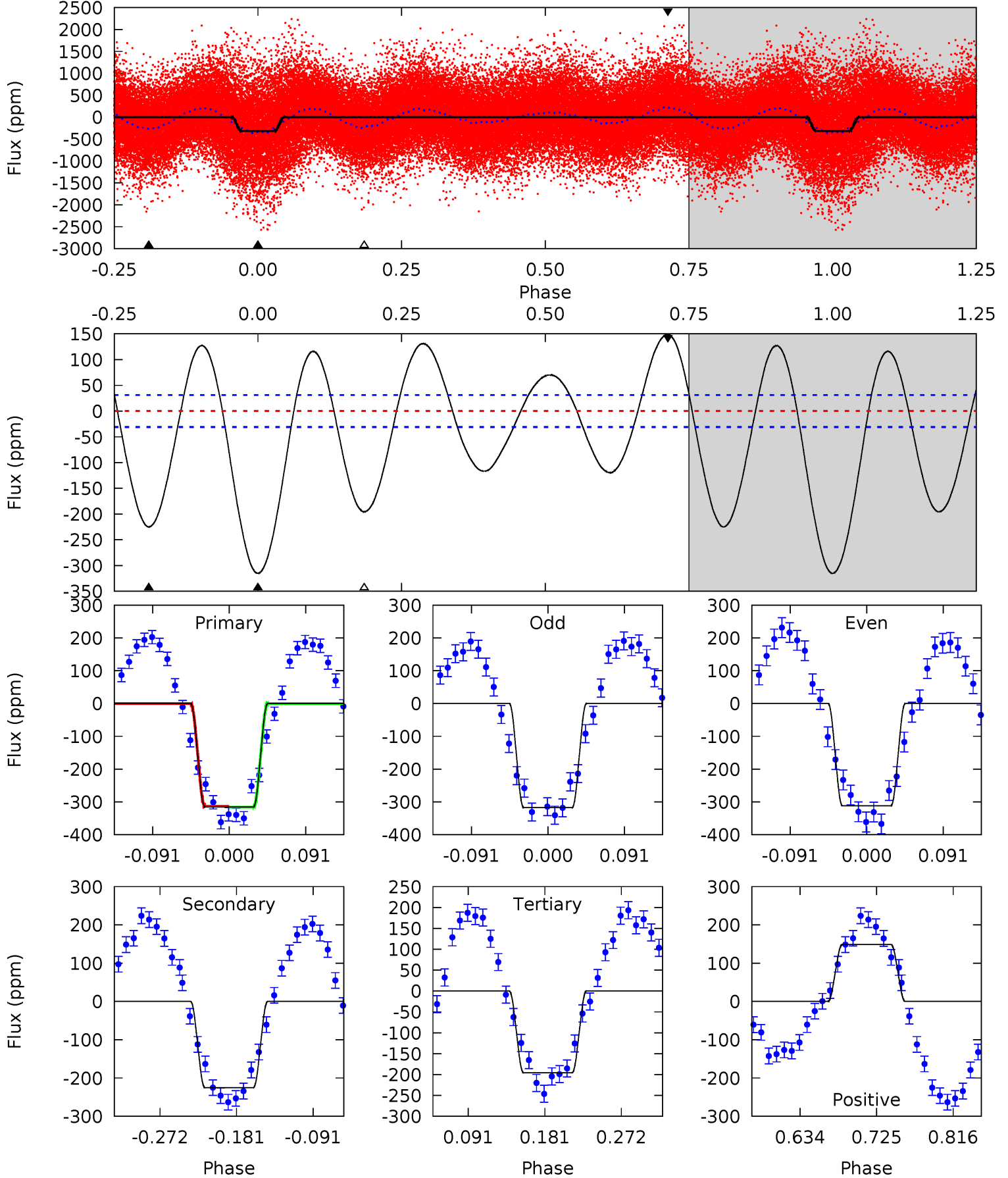
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.7	8.87	4.15	0	4.52	1.55	14.0	21.6	25.7	4.72	8.87	0.36	1.00	0.52	3.12



Alt Model-Shift Uniqueness Test

007547573-01, P = 1.778845 Days, E = 129.755316 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
46.5	33.2	28.9	22.0	4.59	1.69	14.2	17.6	24.5	4.33	11.2	0.42	1.06	0.32	0.19



Stellar Parameters For KIC 007547573

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7733^{+212}_{-319}	$3.594^{+0.567}_{-0.063}$	$-0.280^{+0.200}_{-0.300}$	$3.717^{+0.506}_{-2.025}$	$1.980^{+0.062}_{-0.530}$	$0.054^{+0.394}_{-0.011}$
	+3%/-4%	+16%/-2%	+71%/-107%	+14%/-54%	+3%/-27%	+725%/-21%
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 007547573-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-53 ± 6	$3.90^{+0.86}_{-1.05}$	4609^{+356}_{-620}	5954^{+515}_{-466}	$2.407^{+1.755}_{-0.798}$
Alt.	-225 ± 7	$6.69^{+1.22}_{-1.84}$	4568^{+372}_{-681}	6649^{+392}_{-347}	$3.468^{+2.925}_{-0.912}$

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 $A_{obs} \gg 1.0$

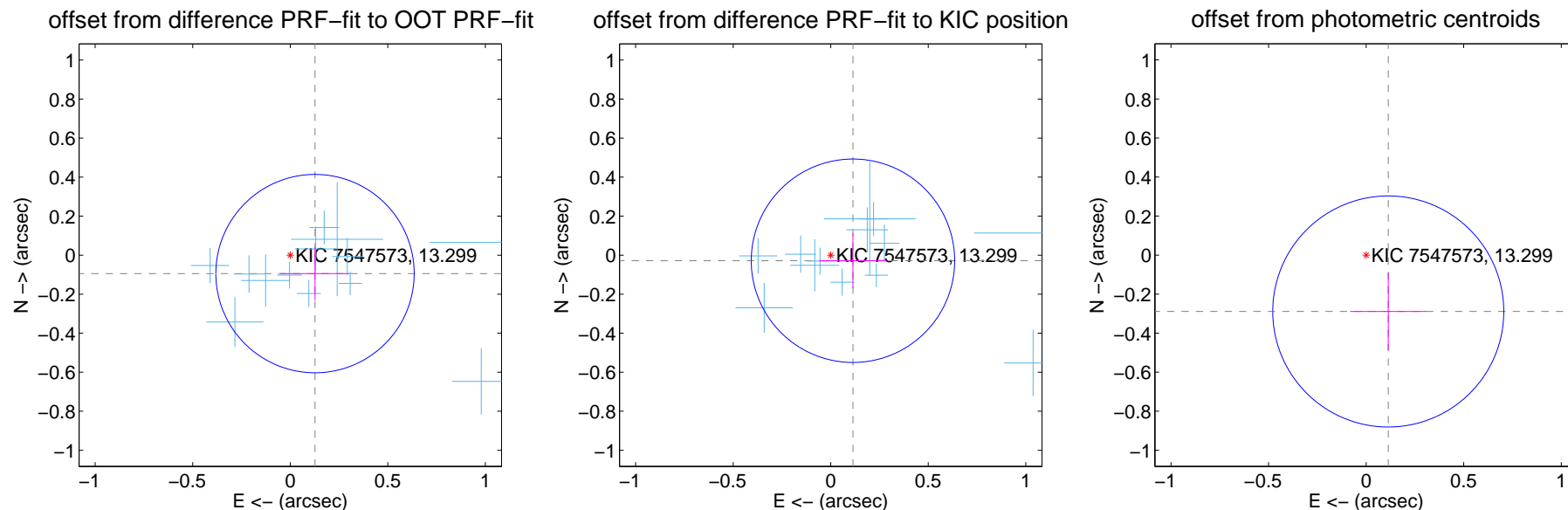
DV Centroid Data

Supplemental centroid analysis for 007547573-01. Kepler magnitude: 13.30. Transit SNR 9.75

There are 17 quarters with good PRF difference image offsets

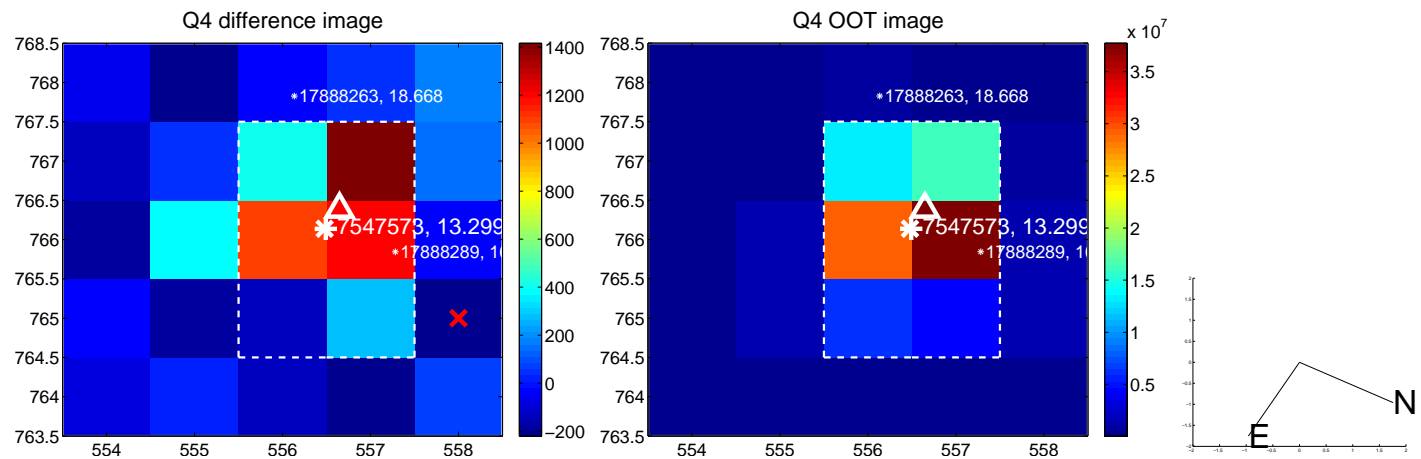
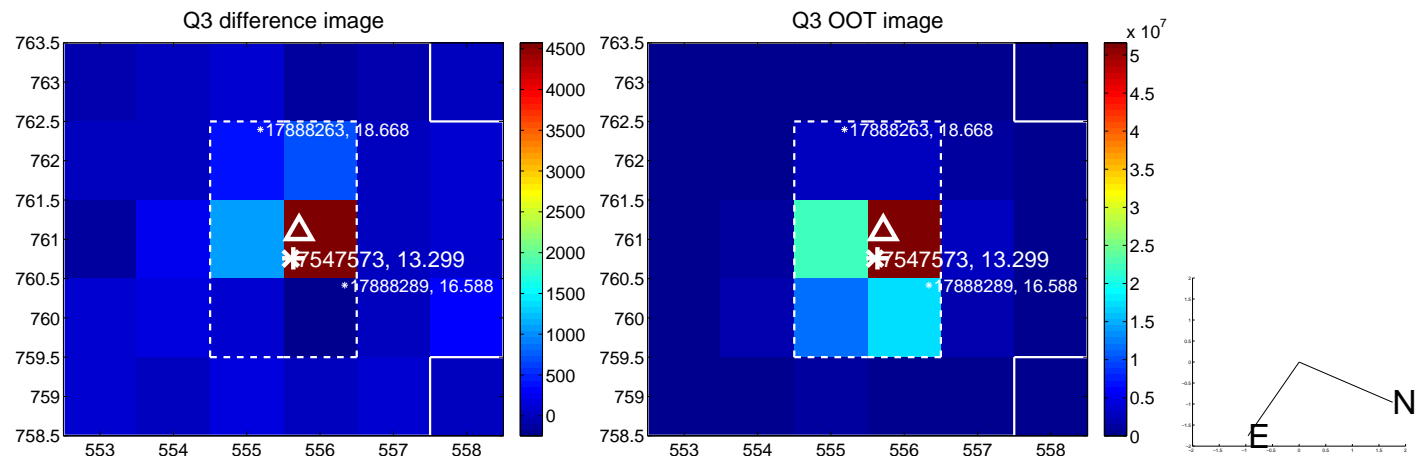
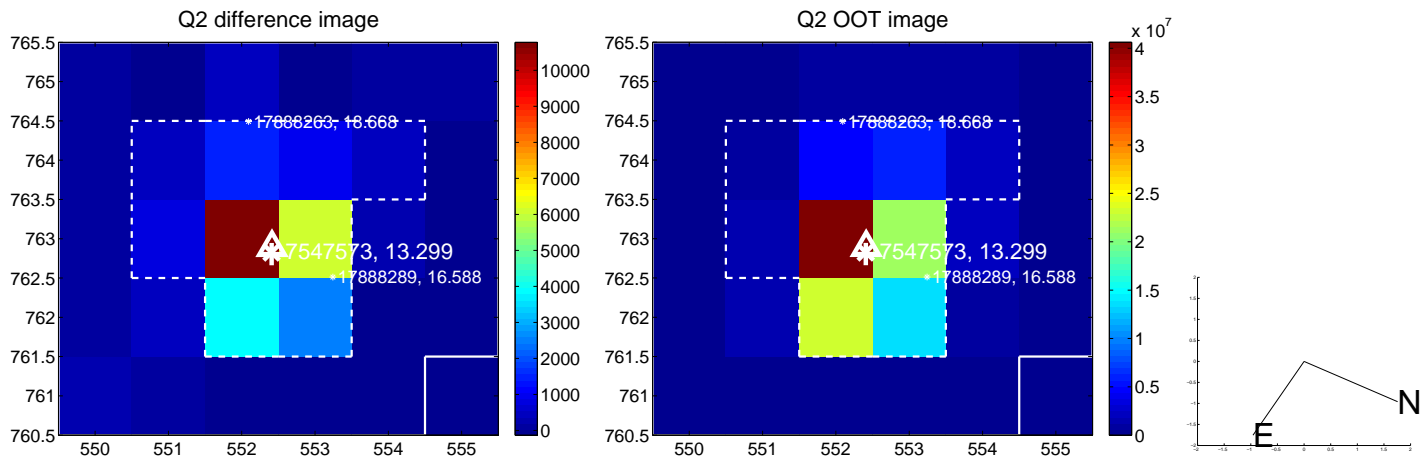
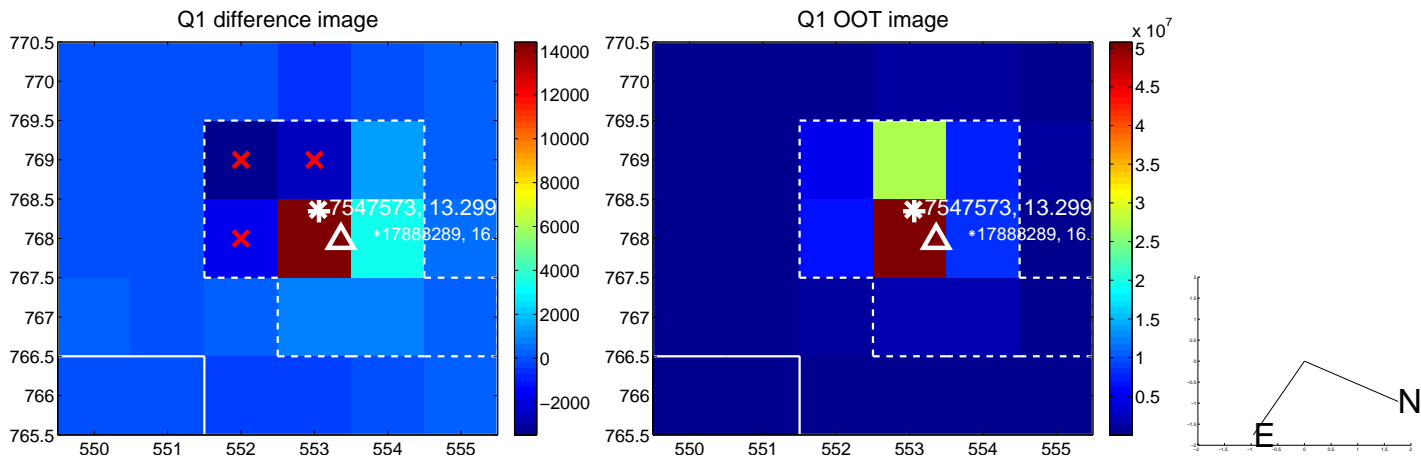
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.158 ± 0.169	0.93	-0.127 ± 0.177	-0.095 ± 0.136
PRF-fit source offset from KIC position	0.118 ± 0.174	0.68	-0.114 ± 0.172	-0.029 ± 0.142
photometric centroid source offset	0.31 ± 0.20	1.57	-0.11 ± 0.20	-0.29 ± 0.20

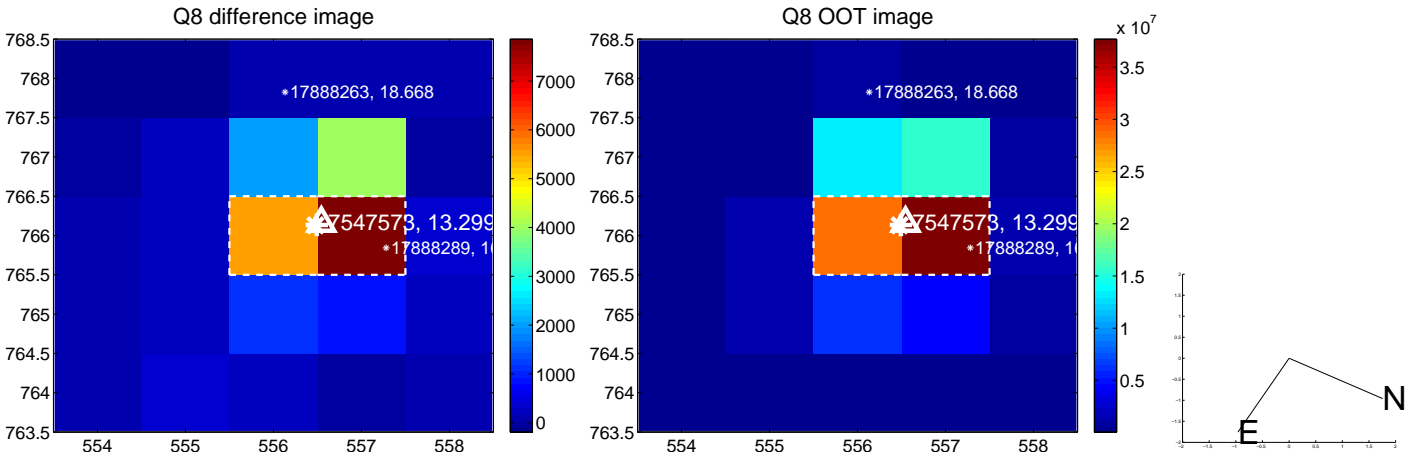
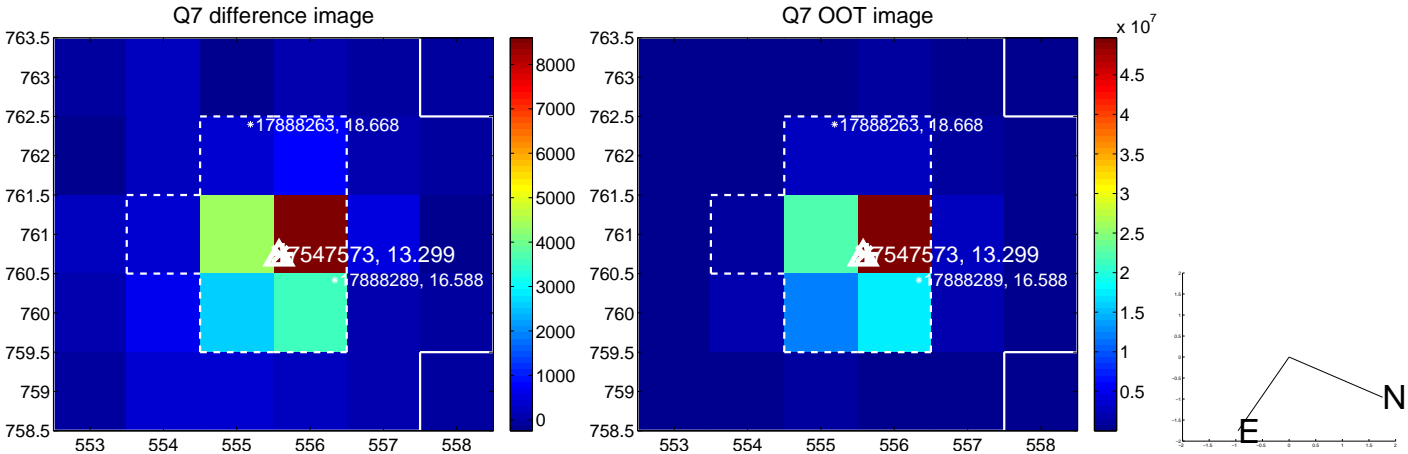
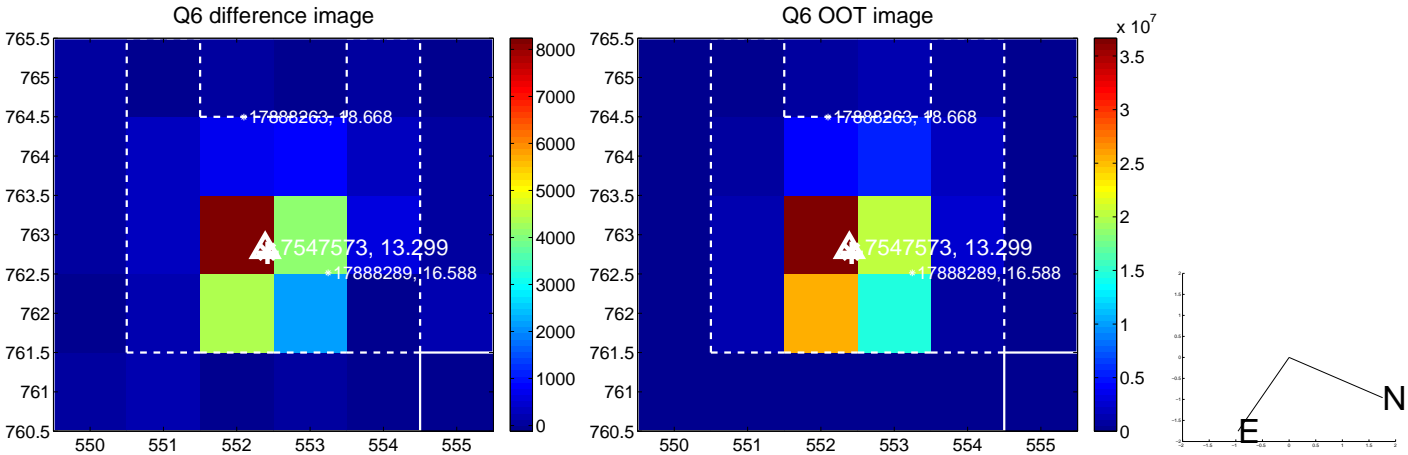
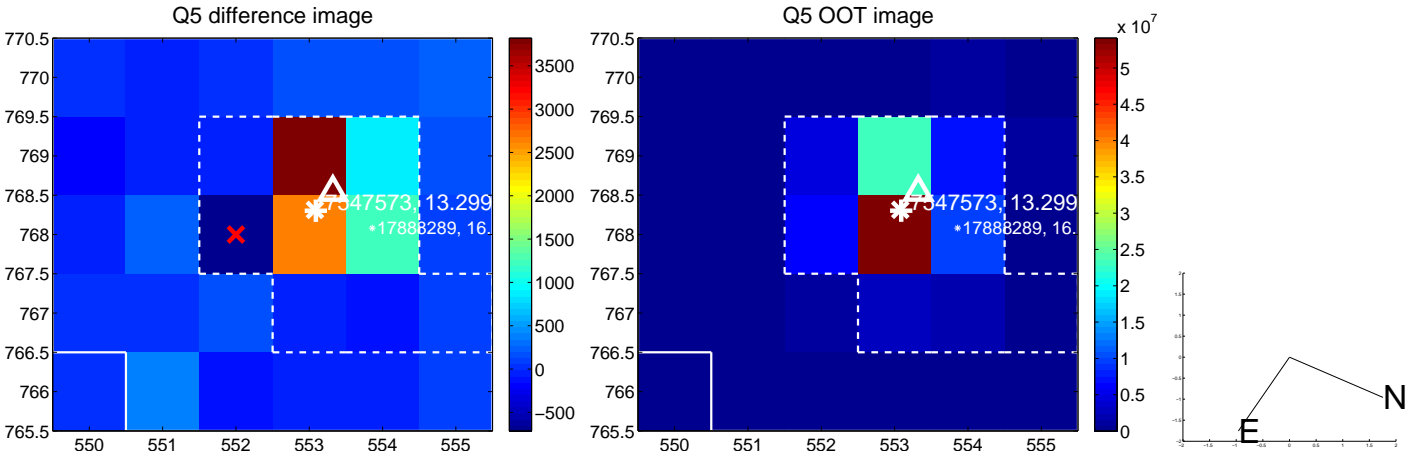


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

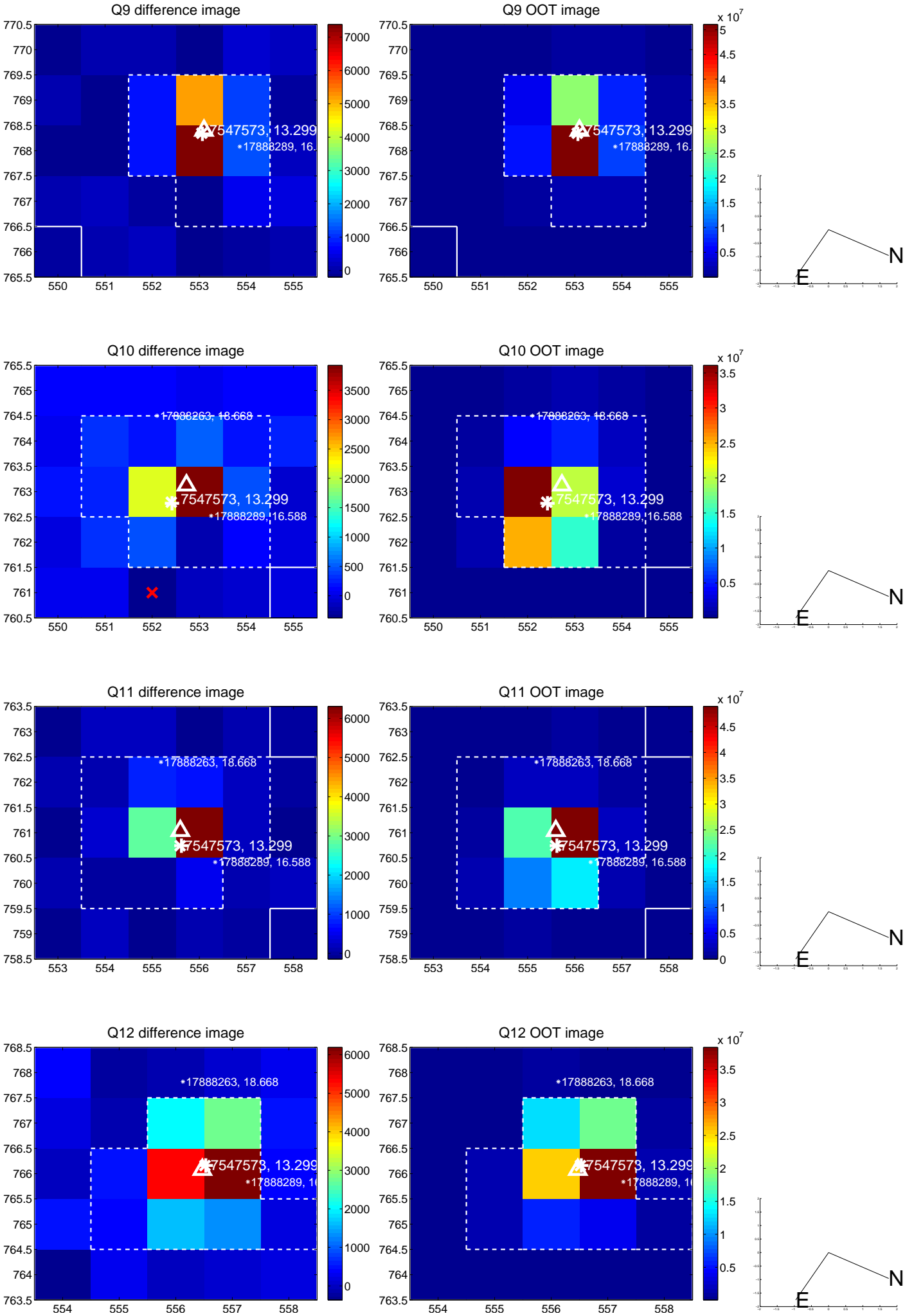
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



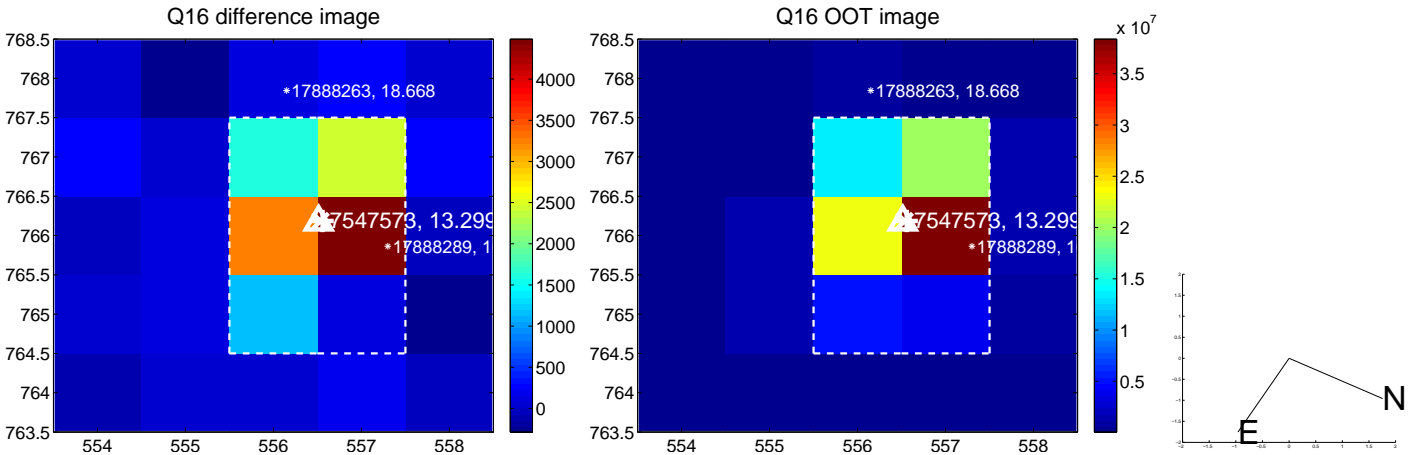
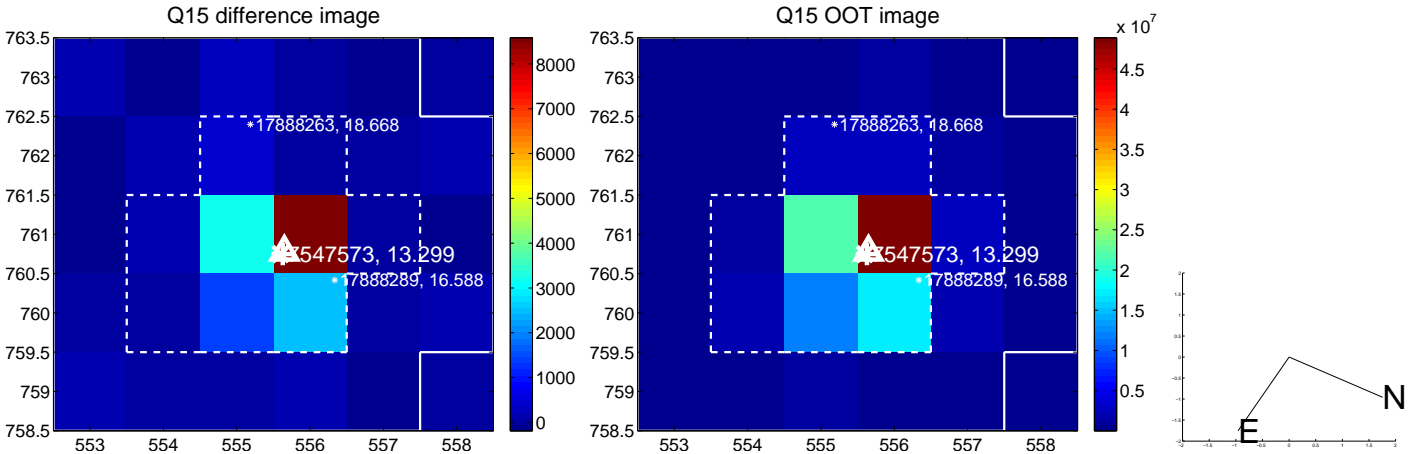
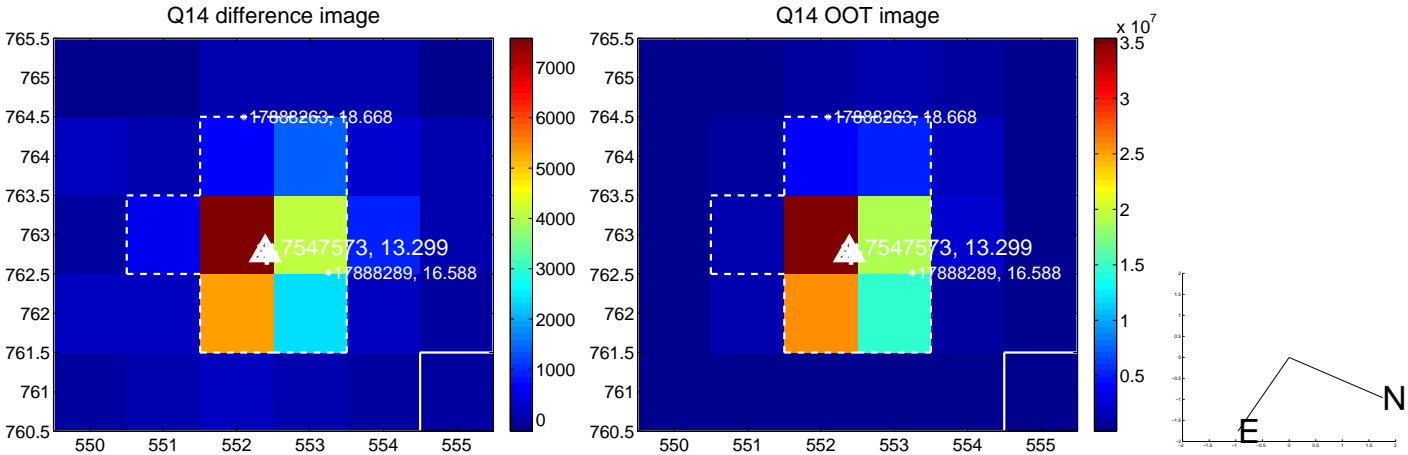
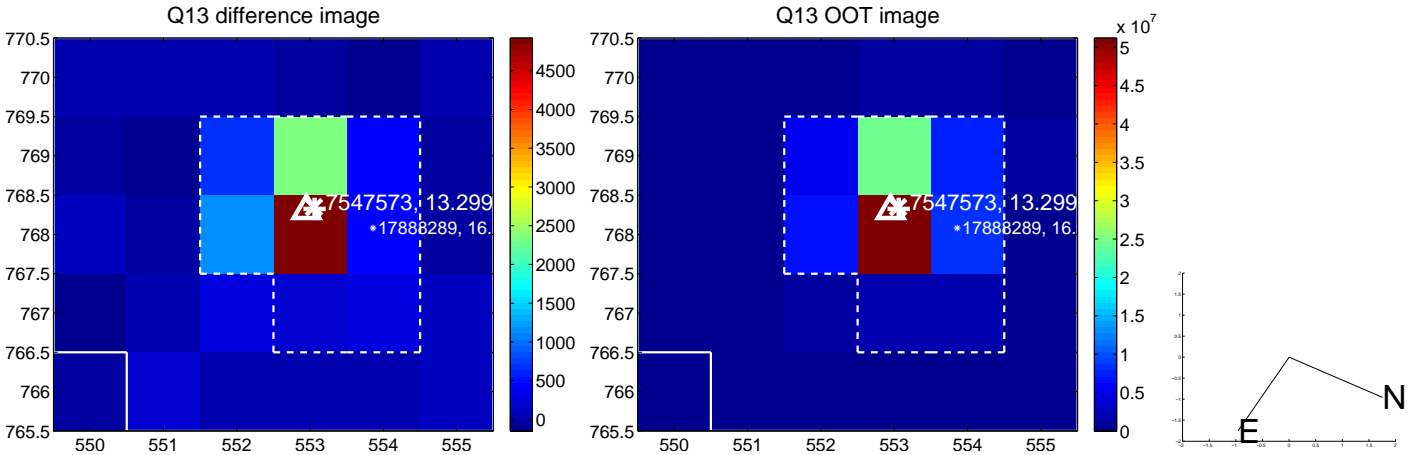
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



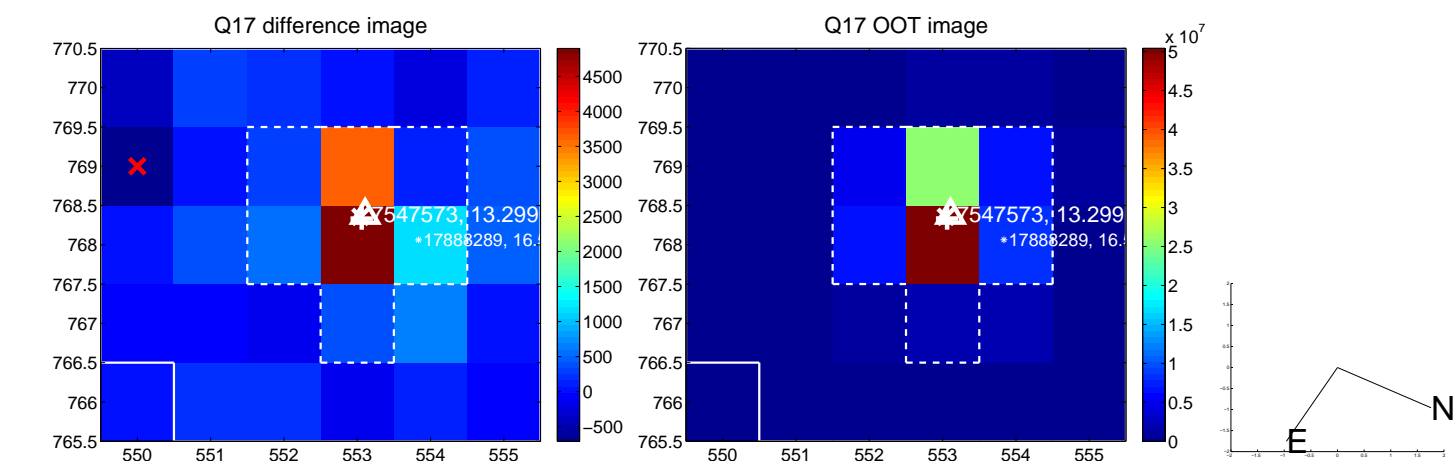
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



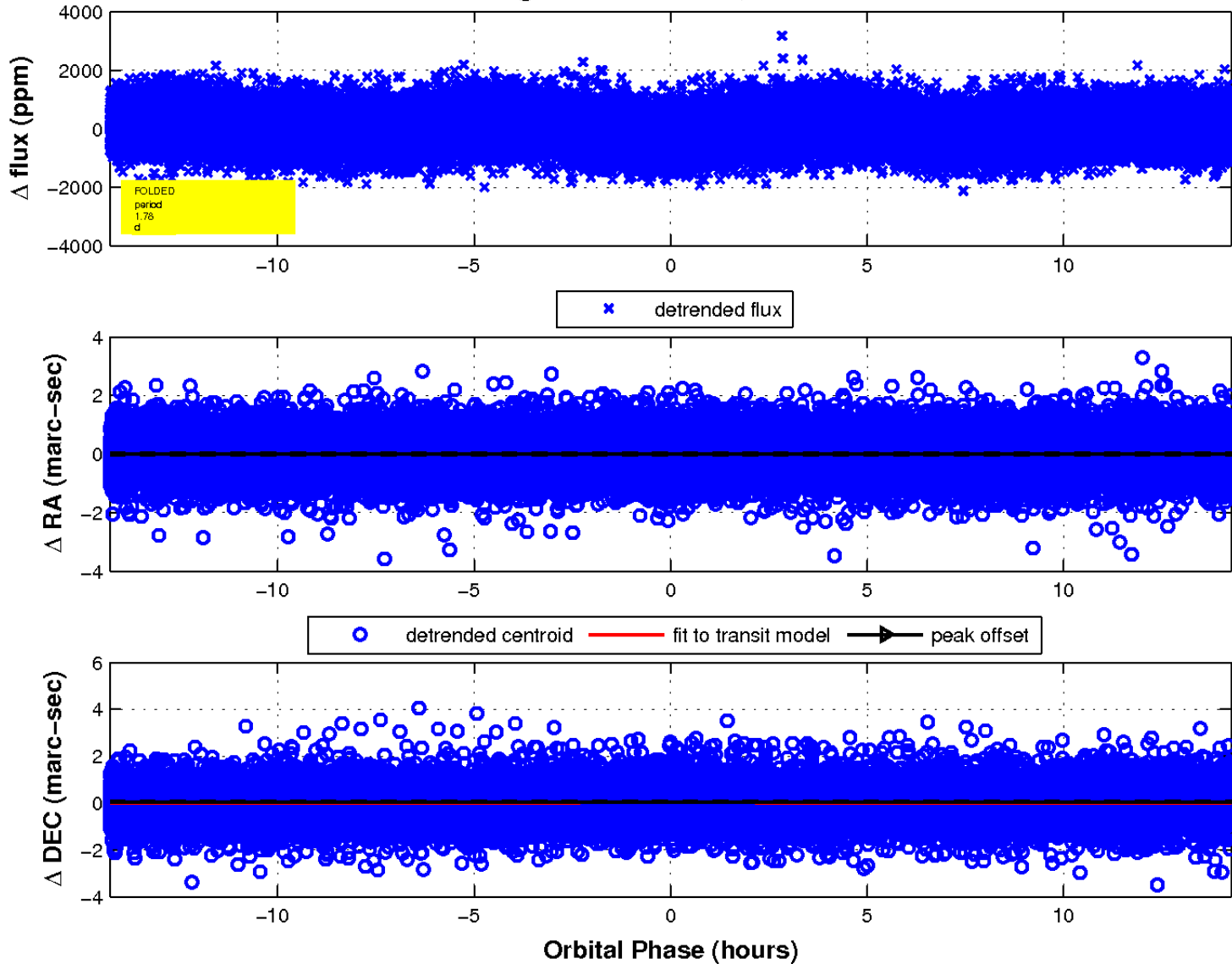
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

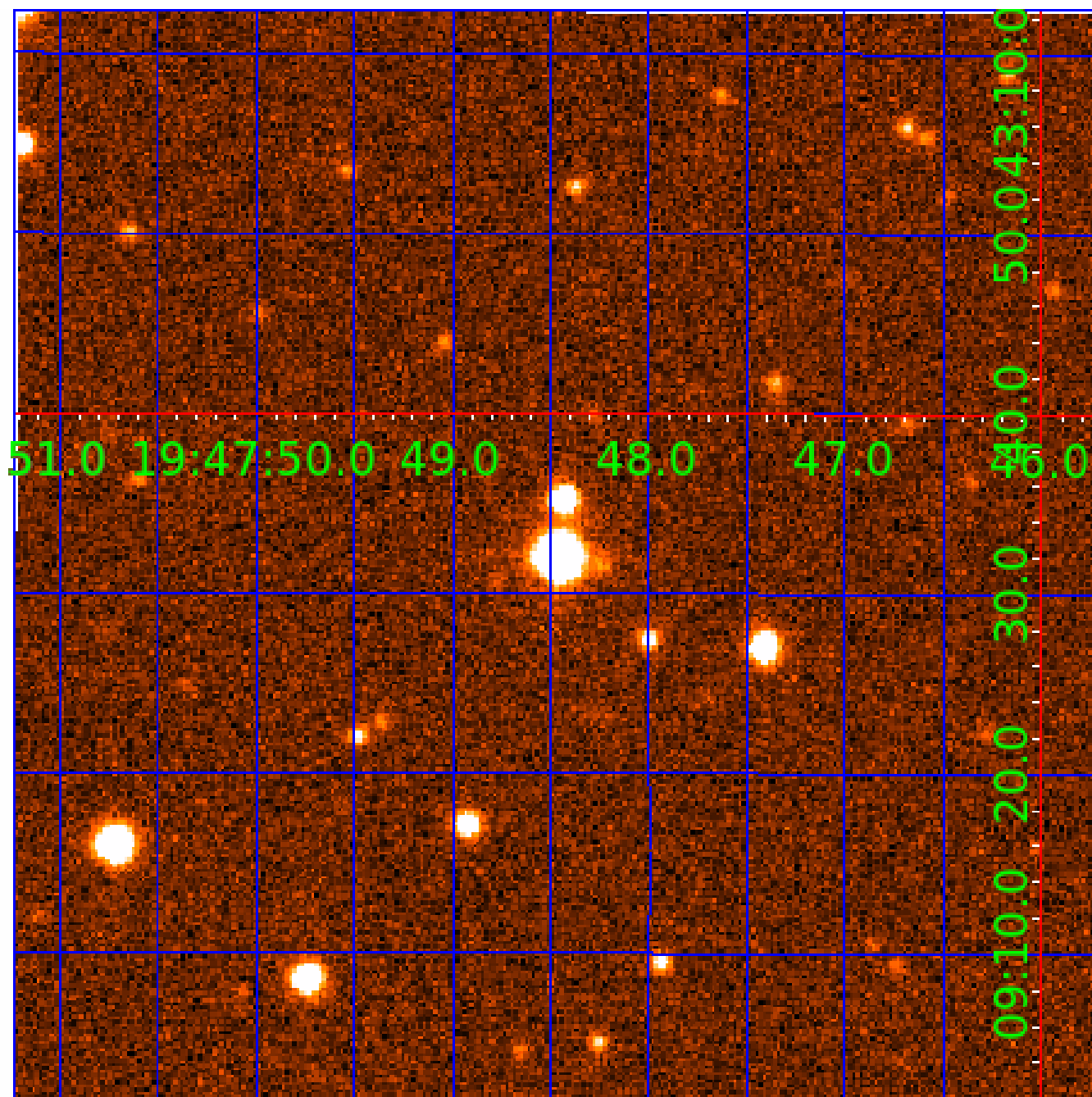


fluxWeightedCentroids, Planet 1 of 3



UKIRT Image

Declination



KIC 007547573

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})
007547573-01	OBS	No	1.778862	131.535924	105.3	4.757	9.0	9.7	3.72	7733	4.47	34006.24
007547573-02	OBS	No	1.778787	132.987481	149.6	3.912	10.5	11.2	3.72	7733	6.08	34008.13
007547573-03	OBS	No	62.530864	176.522823	413.6	8.135	8.1	7.5	3.72	7733	8.55	295.32

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007547573-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
007547573-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
007547573-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE

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

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

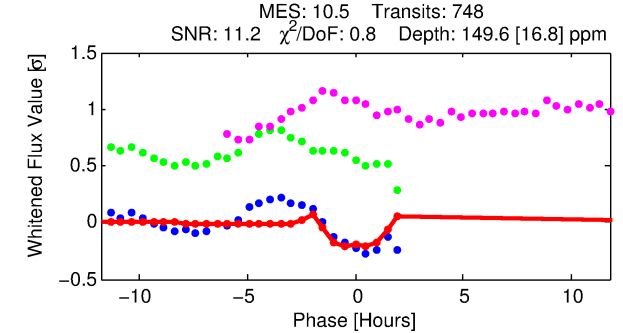
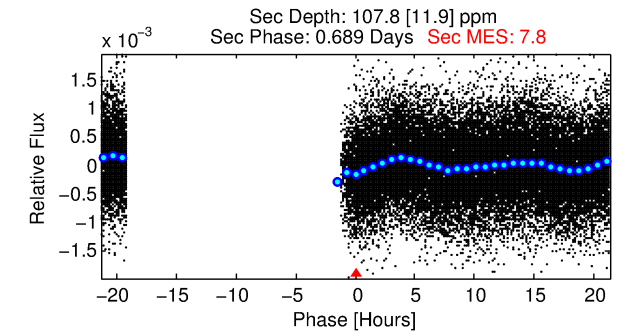
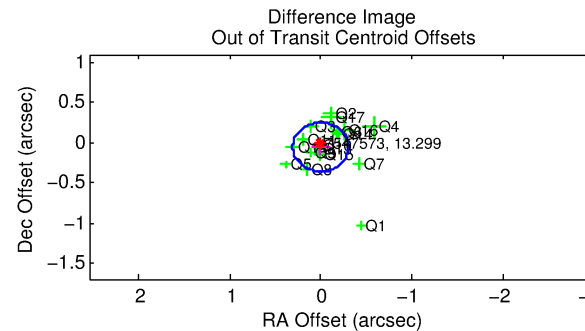
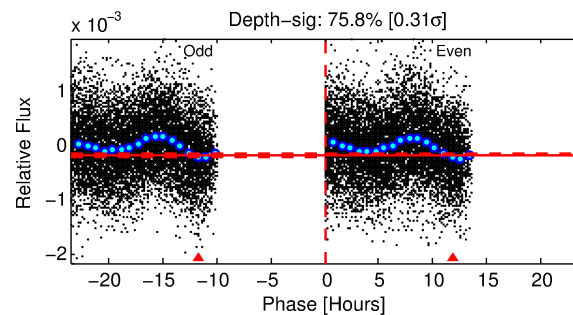
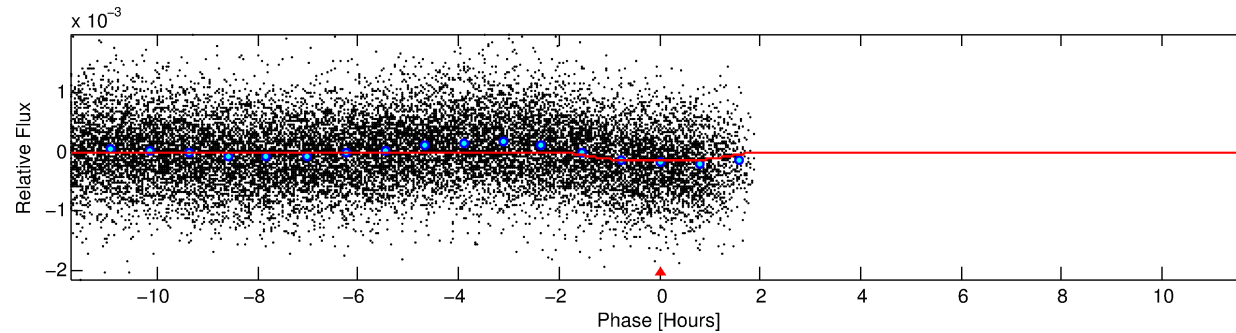
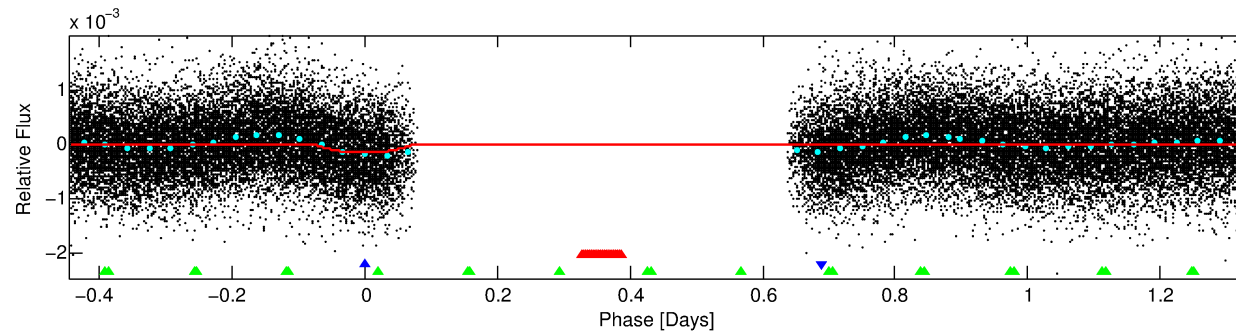
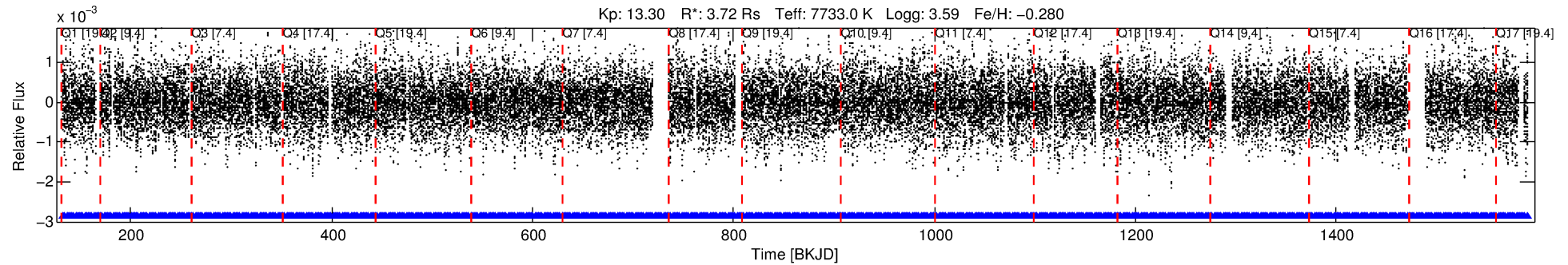
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007547573-02

No Significant Match Found

DV One-Page Summary

KIC: 7547573 Candidate: 2 of 3 Period: 1.779 d



DV Fit Results:

Period = 1.77879 [0.00002] d
Epoch = 132.9875 [0.0045] BKJD
Rp/R* = 0.0150 [0.0009]
a/R* = 1.33 [0.06]
b = 0.98 [0.00]
Seff = 34008.13 [32560.81]
Teq = 3463 [829] K
Rp = 6.08 [3.33] Re
a = 0.0361 [0.0205] AU
Ag = 2.09 [2.00] [0.54 σ]
Teffp = 6437 [372] K [3.27 σ]

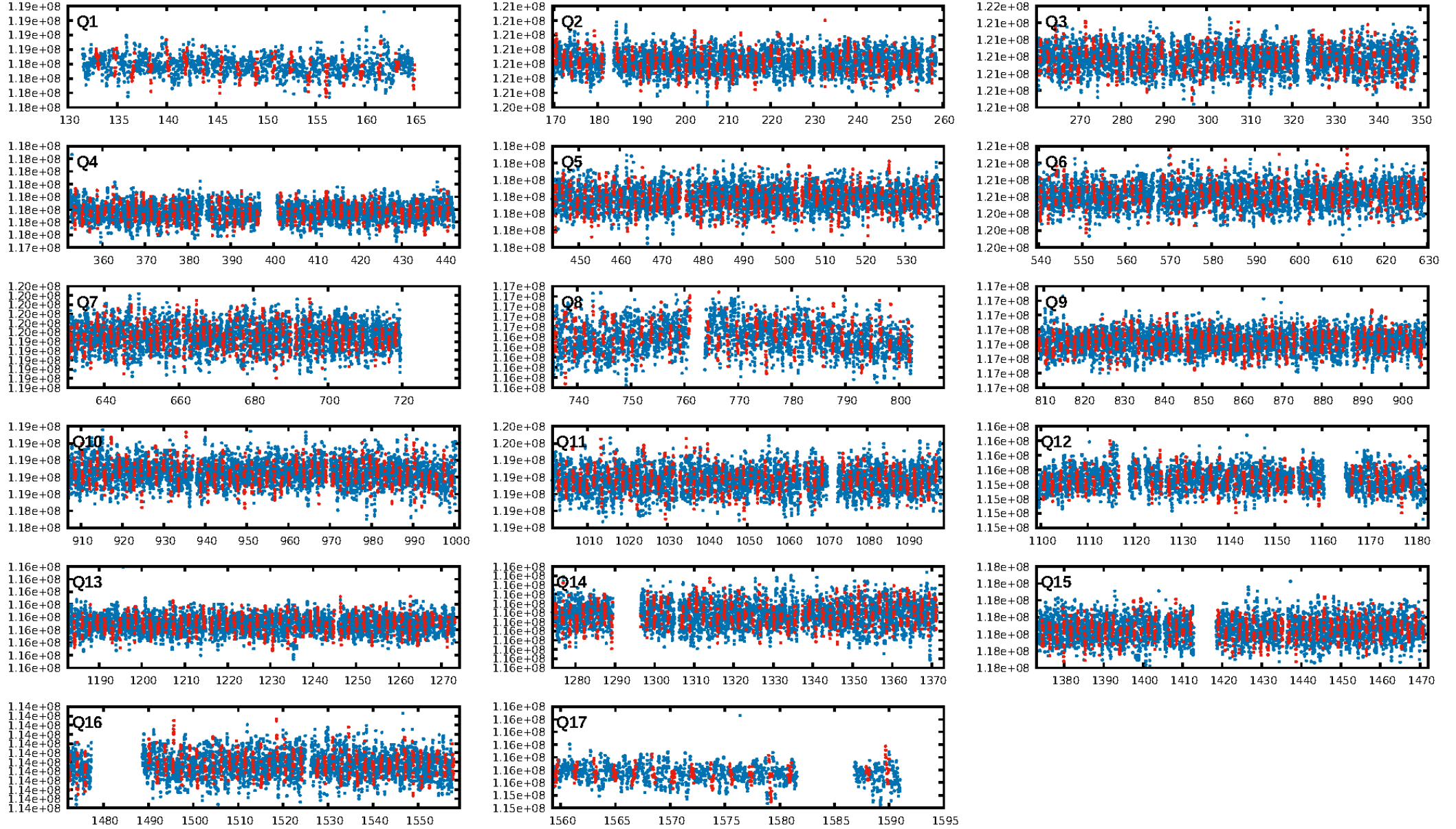
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.77e-18
RollingBand-fgt: 1.00 [714/714]
GhostDiagnostic-chr: 2.025
Centroid-sig: 98.4%
Centroid-so: 0.144 arcsec [0.80 σ]
OotOffset-rm: 0.056 arcsec [0.55 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.023 arcsec [0.22 σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

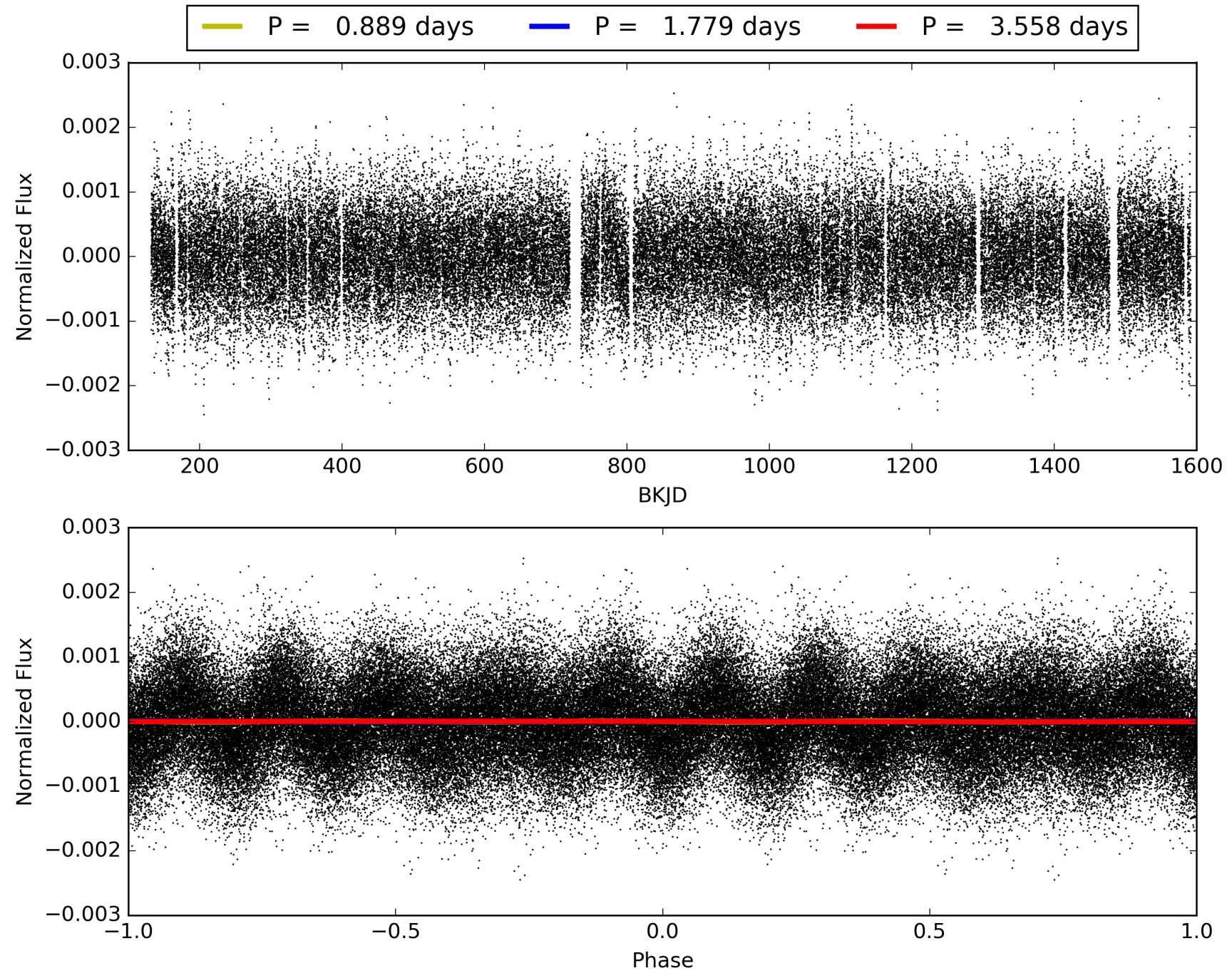
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 05:43:01 Z

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

TCE 007547573-02, PDC Light Curves

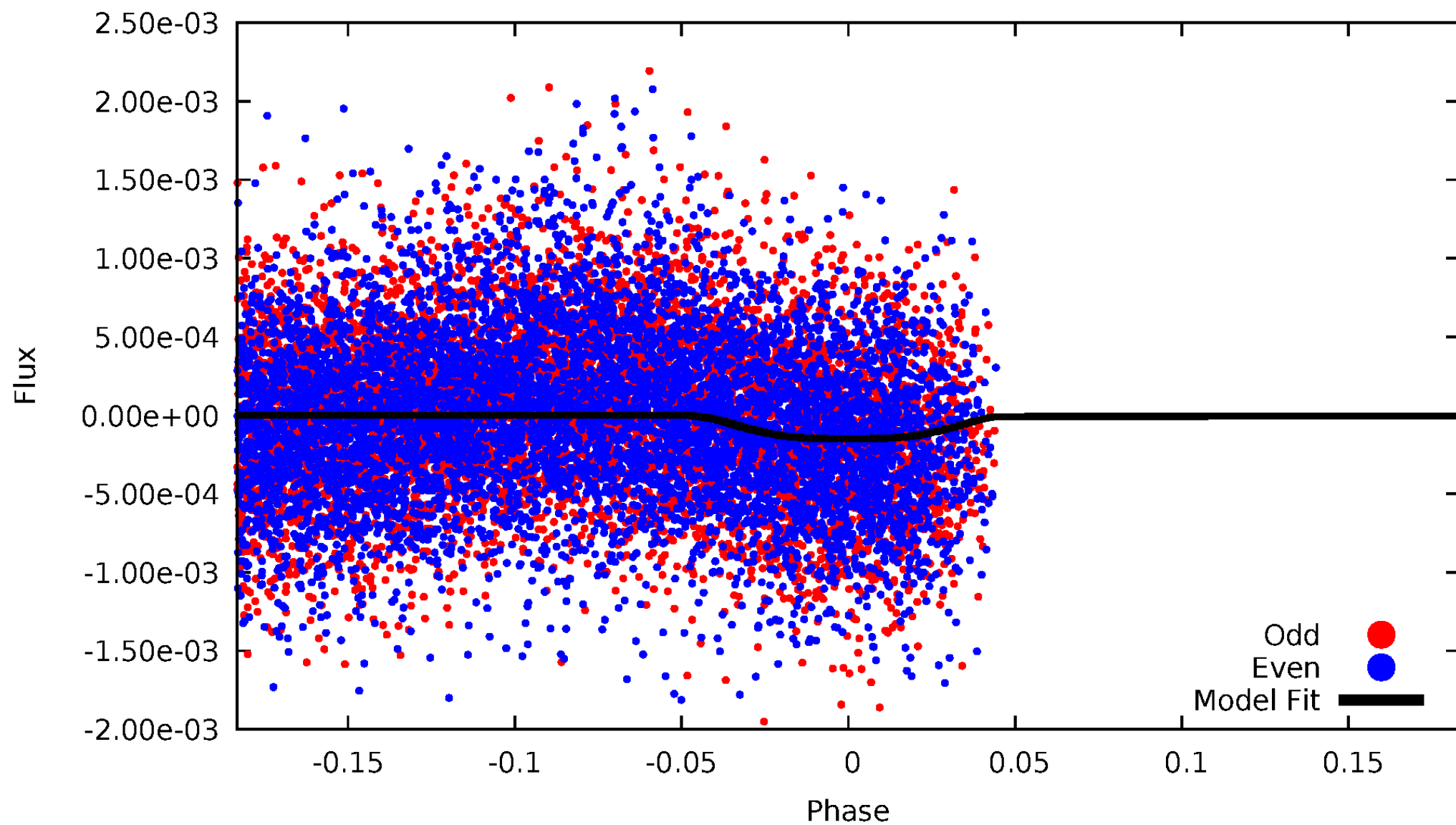


TCE 007547573-02



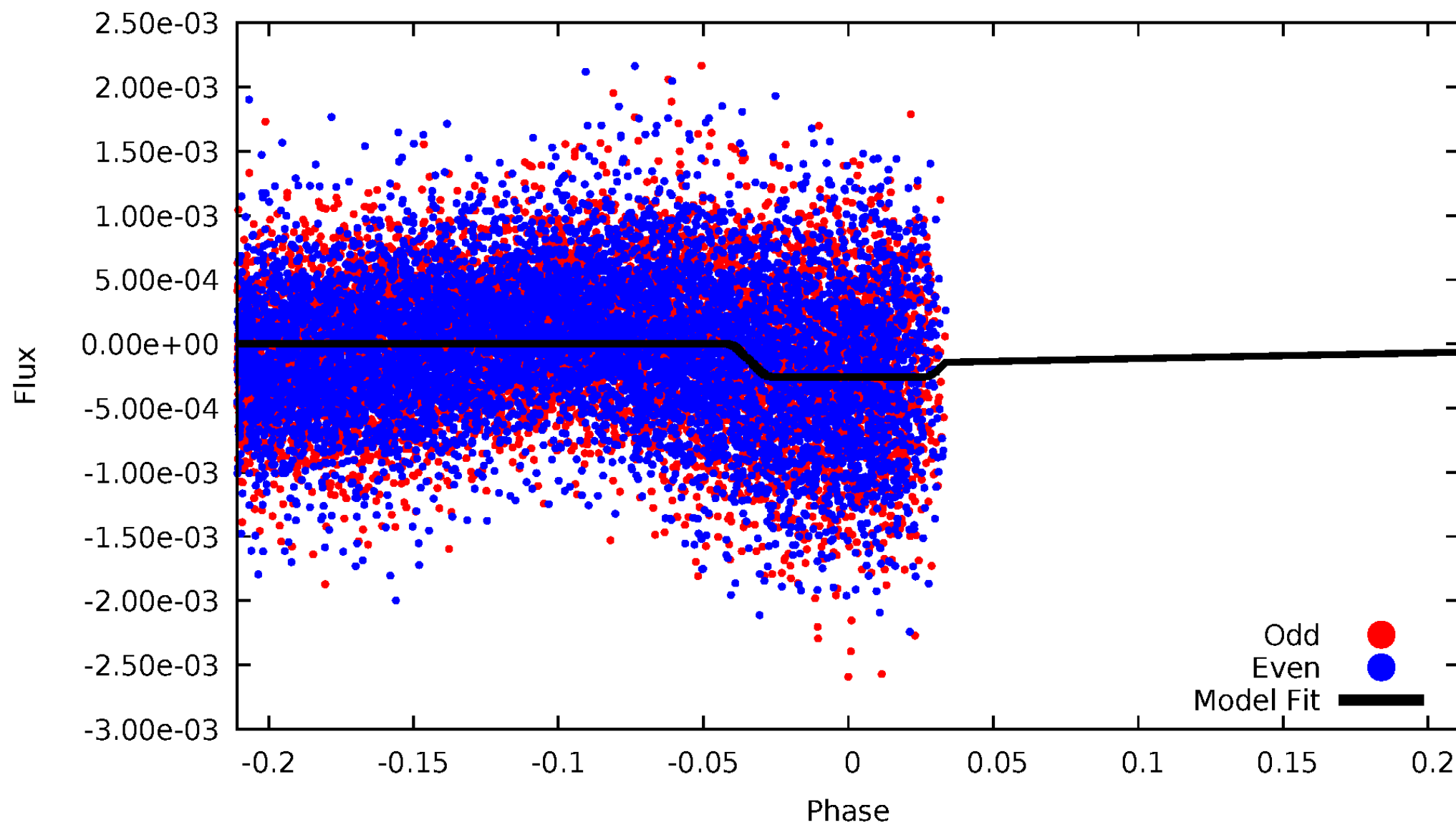
DV Odd/Even

TCE 007547573-02



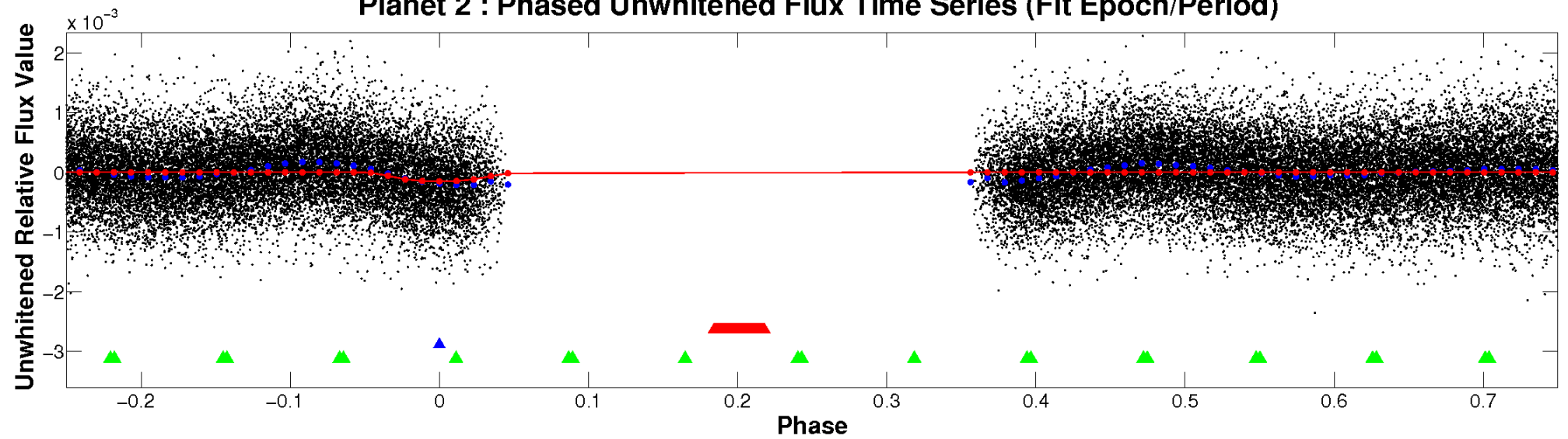
ALT Odd/Even

TCE 007547573-02

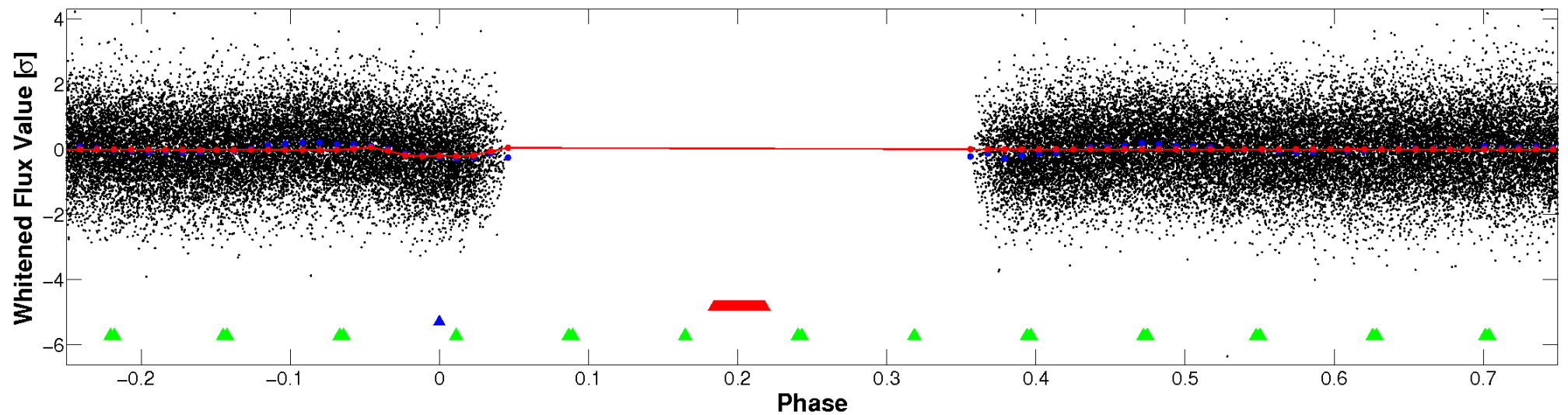


Non-Whitened Vs. Whitened Light Curve

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

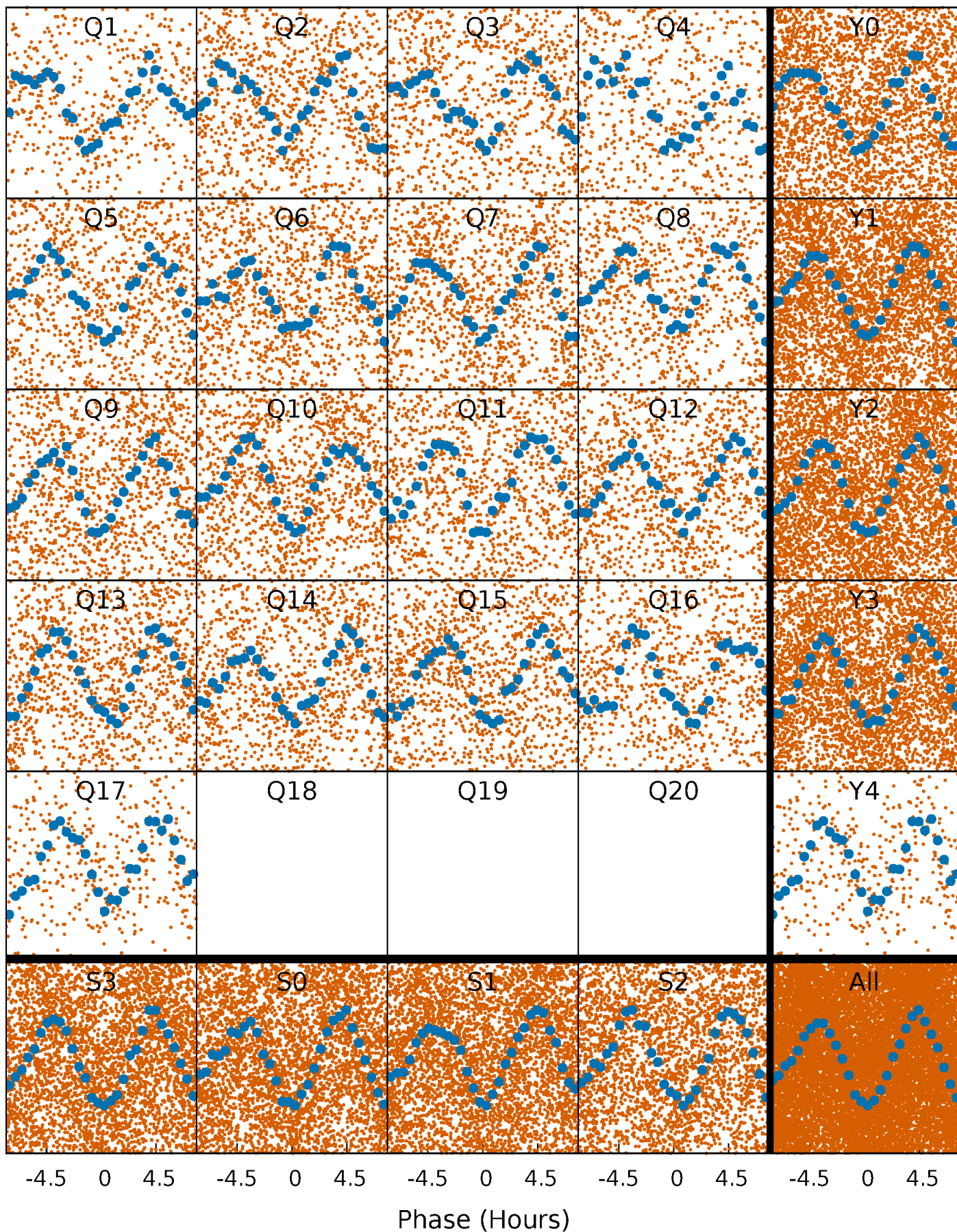


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



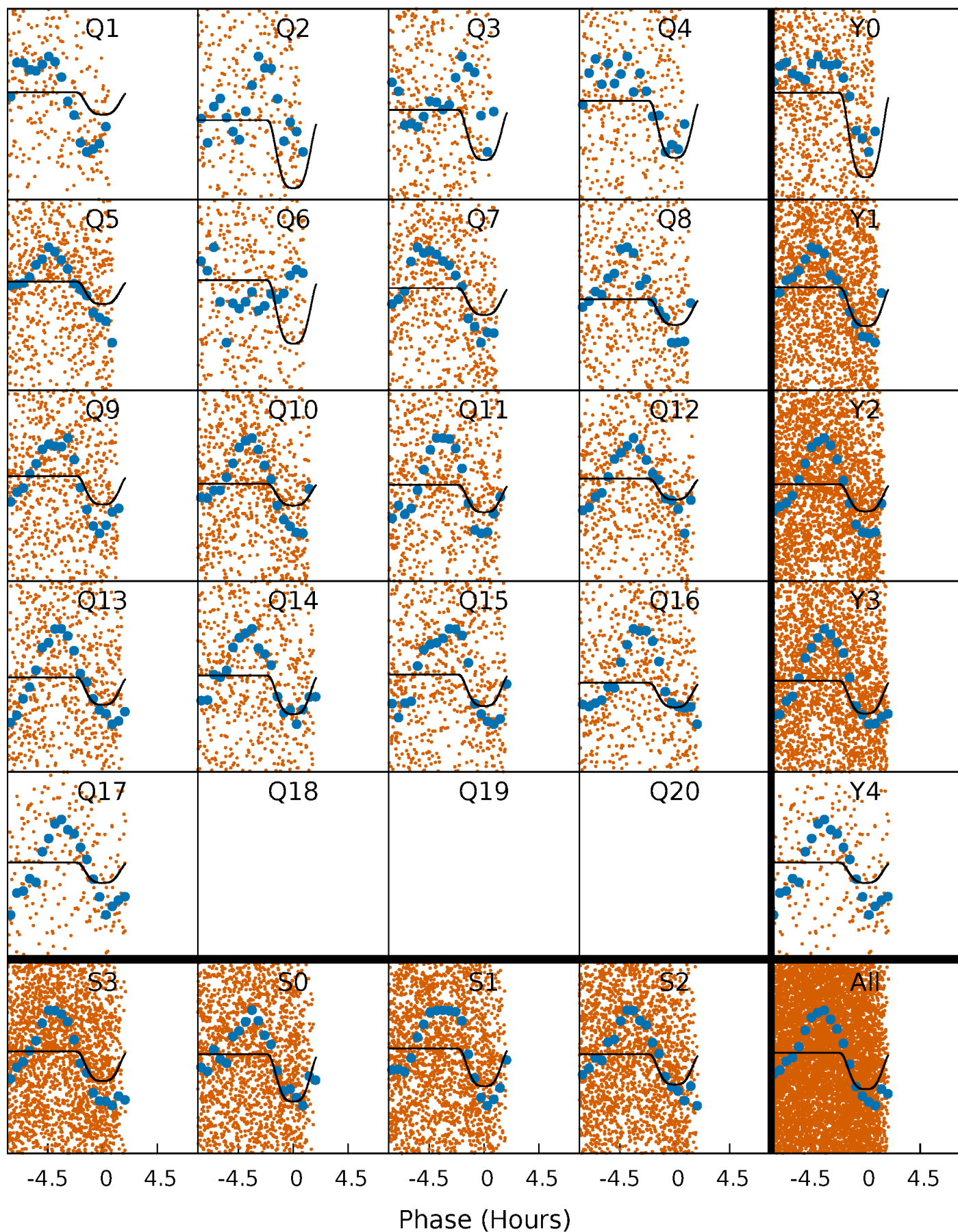
PDC Quarter-Phased Transit Curves

TCE 007547573-02 P= 1.778787 Days $T_0=132.987482$ (BKJD)



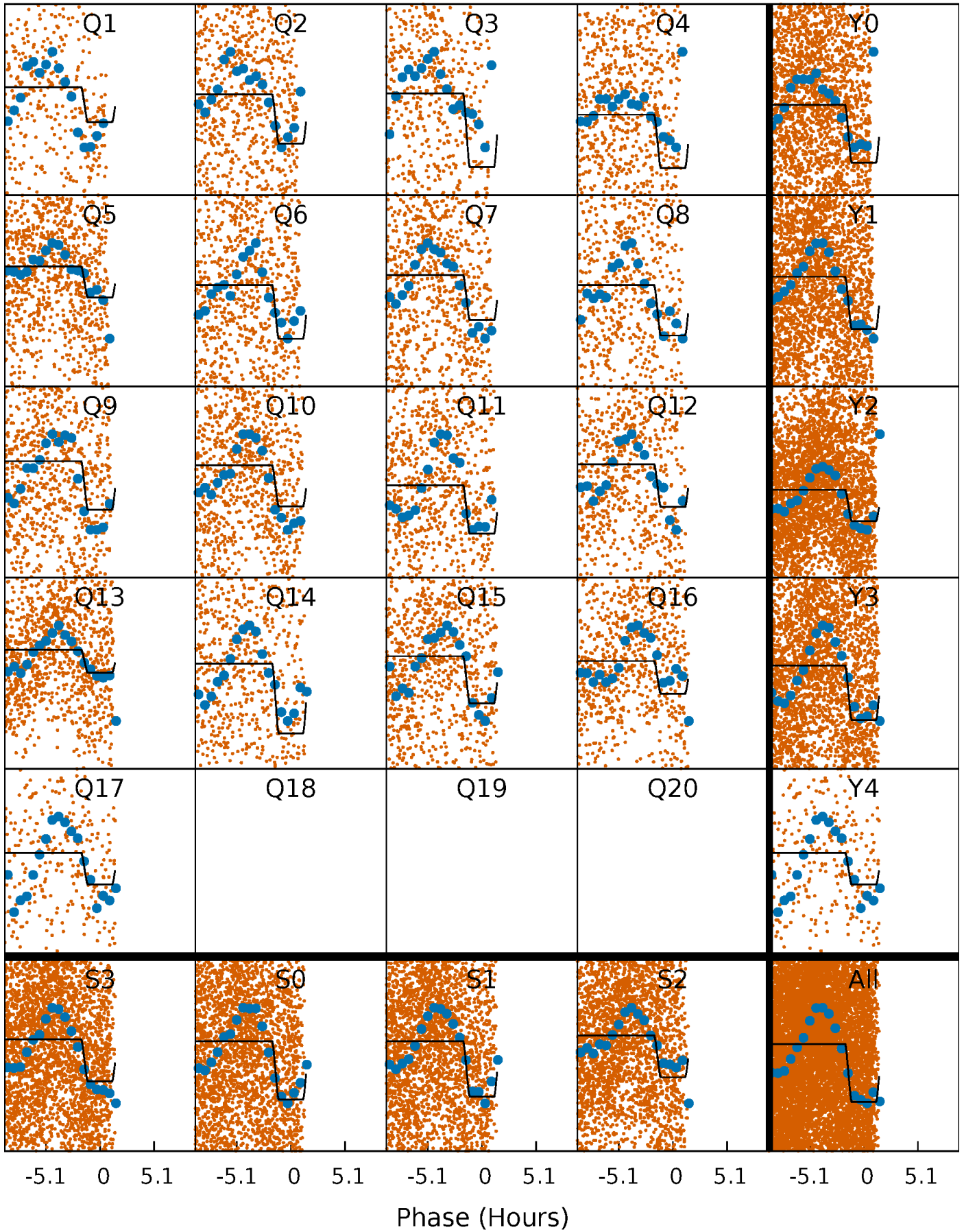
DV Quarter-Phased Transit Curves

TCE 007547573-02 P= 1.778787 Days $T_0=132.987482$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

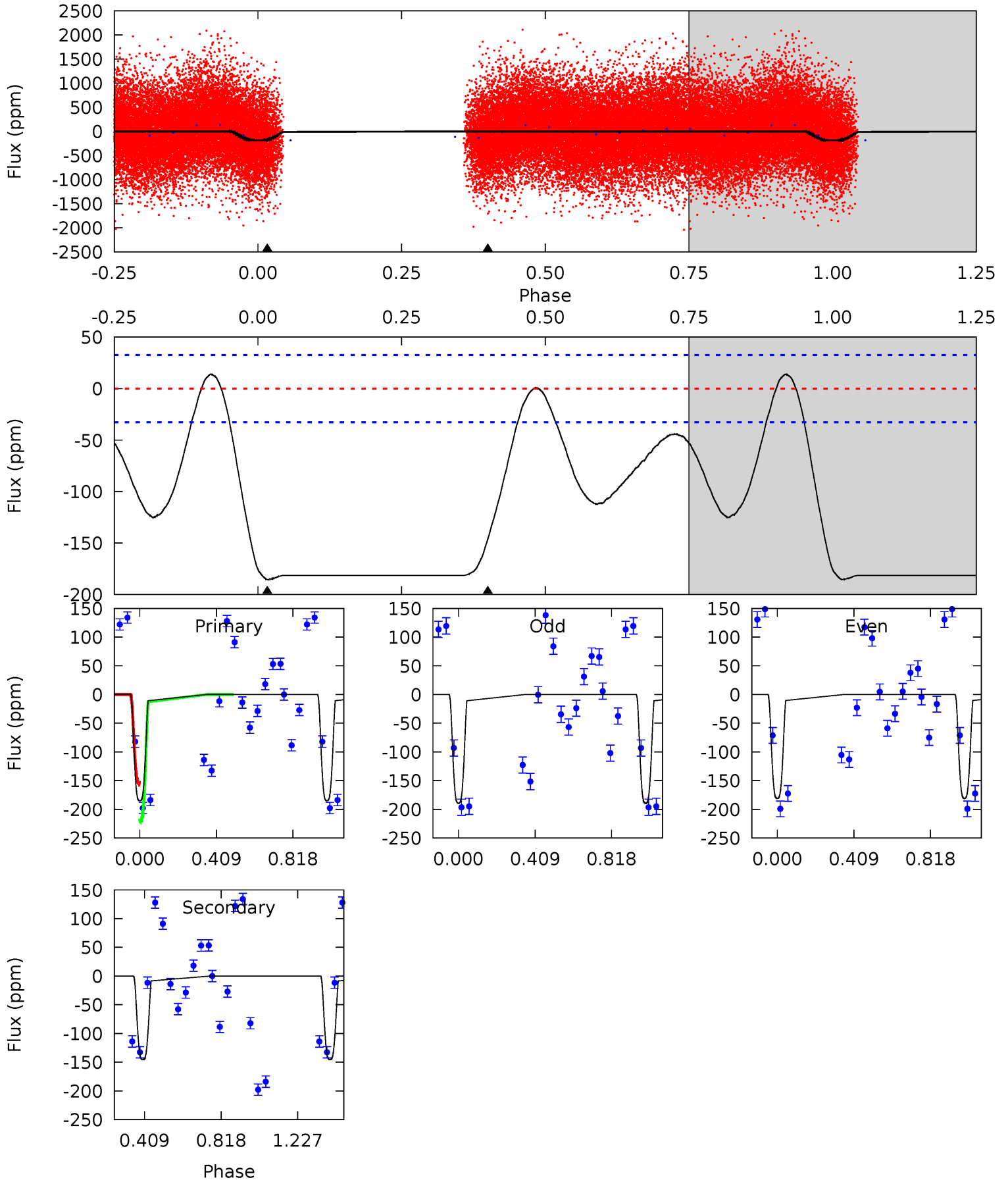
TCE 007547573-02 P= 1.778816 Days $T_0=132.983558$ (BKJD)



DV Model-Shift Uniqueness Test

007547573-02, P = 1.778787 Days, E = 131.208695 Days

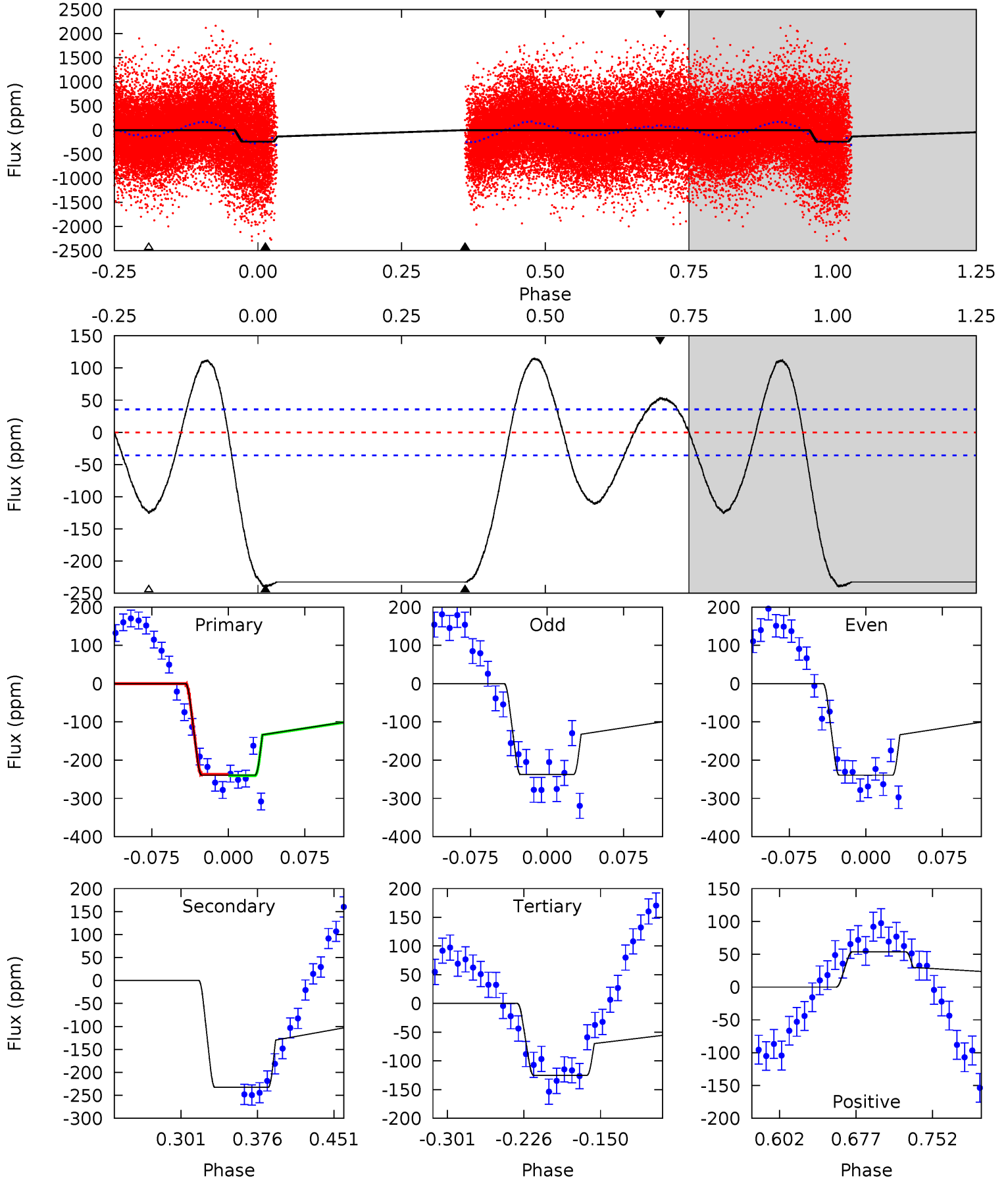
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.2	19.0	0	0	4.26	0.83	2.10	24.2	24.2	19.0	19.0	0.55	1.03	0.07	4.22



Alt Model-Shift Uniqueness Test

007547573-02, P = 1.778816 Days, E = 131.204742 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	30.1	16.2	6.96	4.62	1.78	9.57	14.8	24.0	13.9	23.2	0.14	1.00	0.32	0.20



Stellar Parameters For KIC 007547573

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7733^{+212}_{-319}	$3.594^{+0.567}_{-0.063}$	$-0.280^{+0.200}_{-0.300}$	$3.717^{+0.506}_{-2.025}$	$1.980^{+0.062}_{-0.530}$	$0.054^{+0.394}_{-0.011}$
	+3%/-4%	+16%/-2%	+71%/-107%	+14%/-54%	+3%/-27%	+725%/-21%
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 007547573-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-146 ± 8	$5.45^{+0.96}_{-1.49}$	4591^{+340}_{-662}	6652^{+330}_{-346}	$3.372^{+3.006}_{-0.822}$
Alt.	-233 ± 8	$5.76^{+1.07}_{-1.50}$	4597^{+359}_{-632}	7348^{+369}_{-350}	$4.805^{+3.655}_{-1.215}$

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

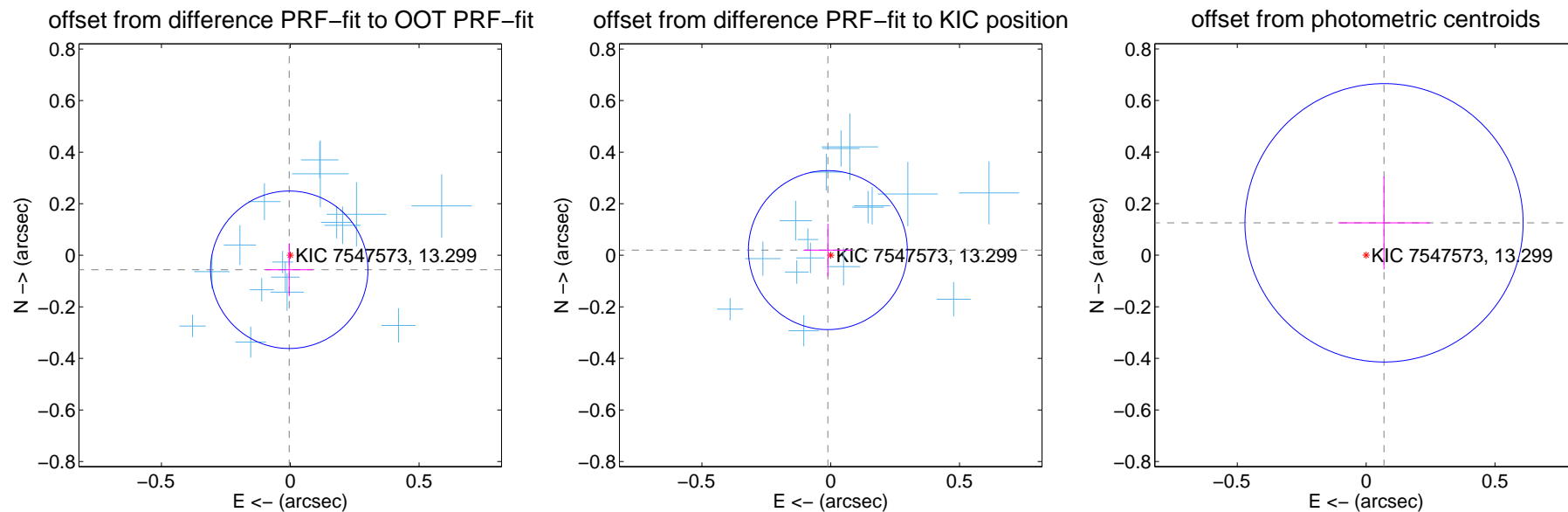
DV Centroid Data

Supplemental centroid analysis for 007547573-02. Kepler magnitude: 13.30. Transit SNR 11.22

There are 17 quarters with good PRF difference image offsets

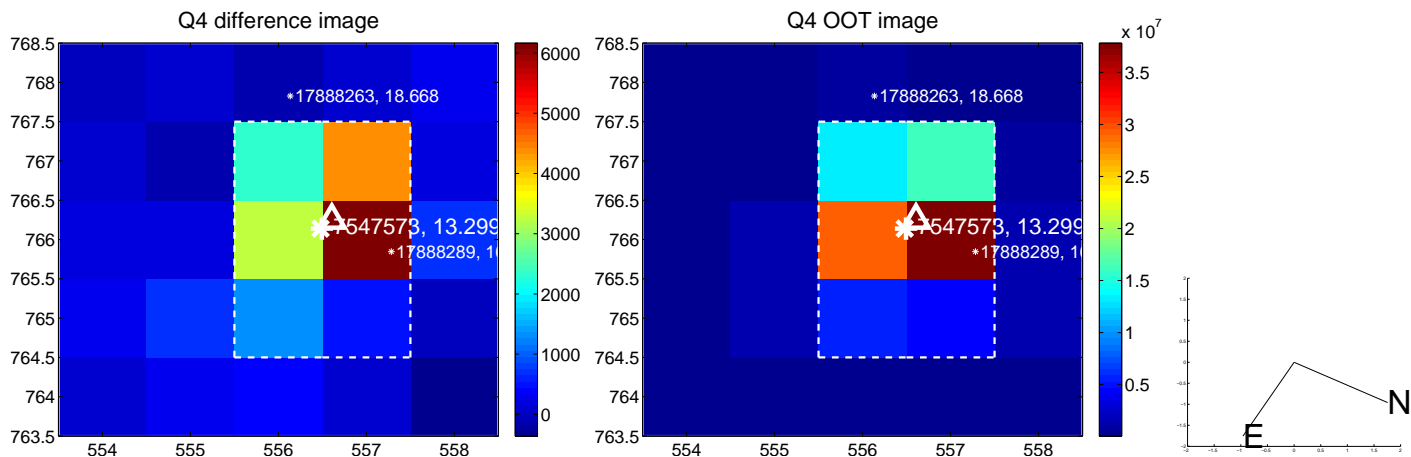
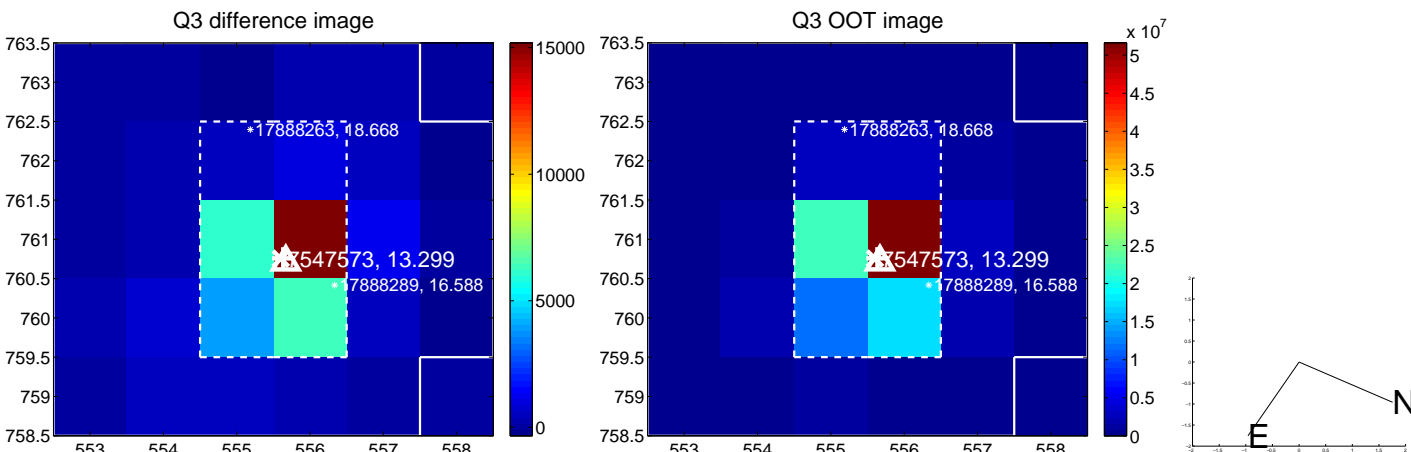
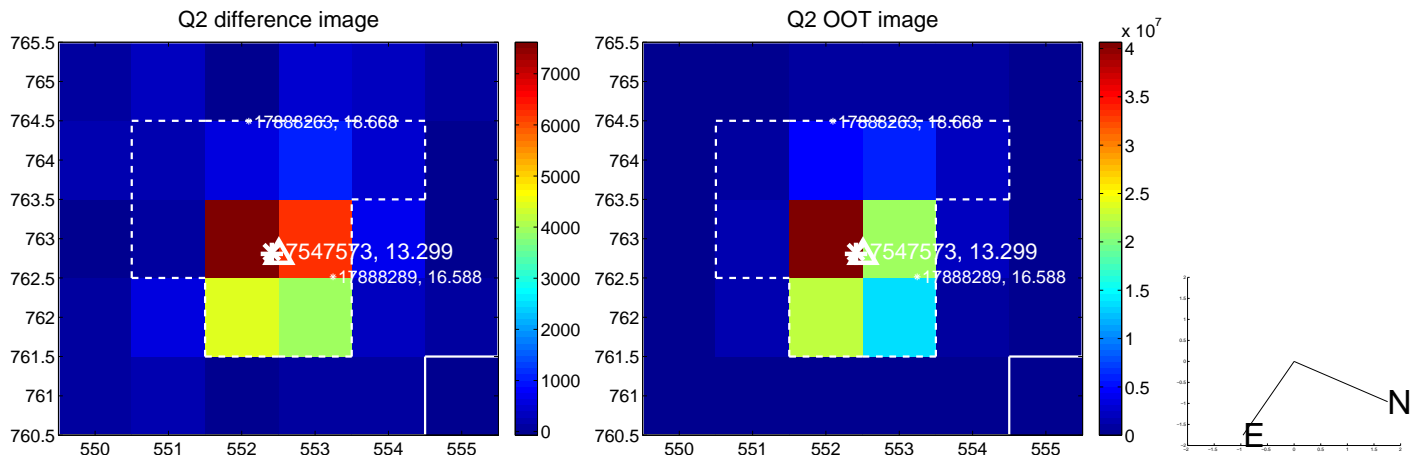
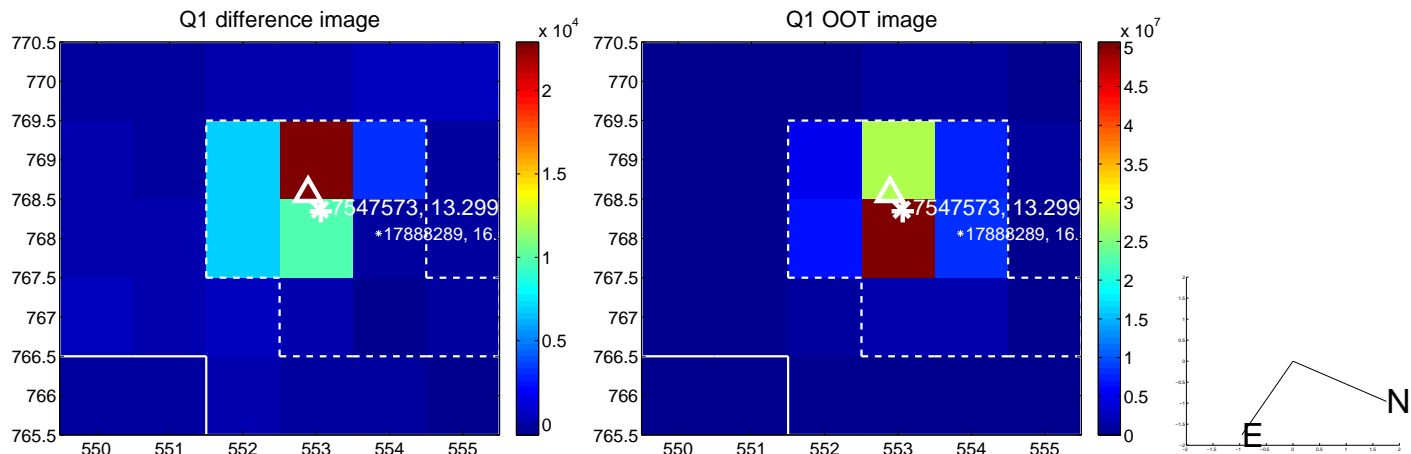
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.056 ± 0.102	0.55	0.004 ± 0.091	-0.056 ± 0.102
PRF-fit source offset from KIC position	0.023 ± 0.103	0.22	0.011 ± 0.095	0.020 ± 0.103
photometric centroid source offset	0.14 ± 0.18	0.80	-0.07 ± 0.18	0.13 ± 0.18

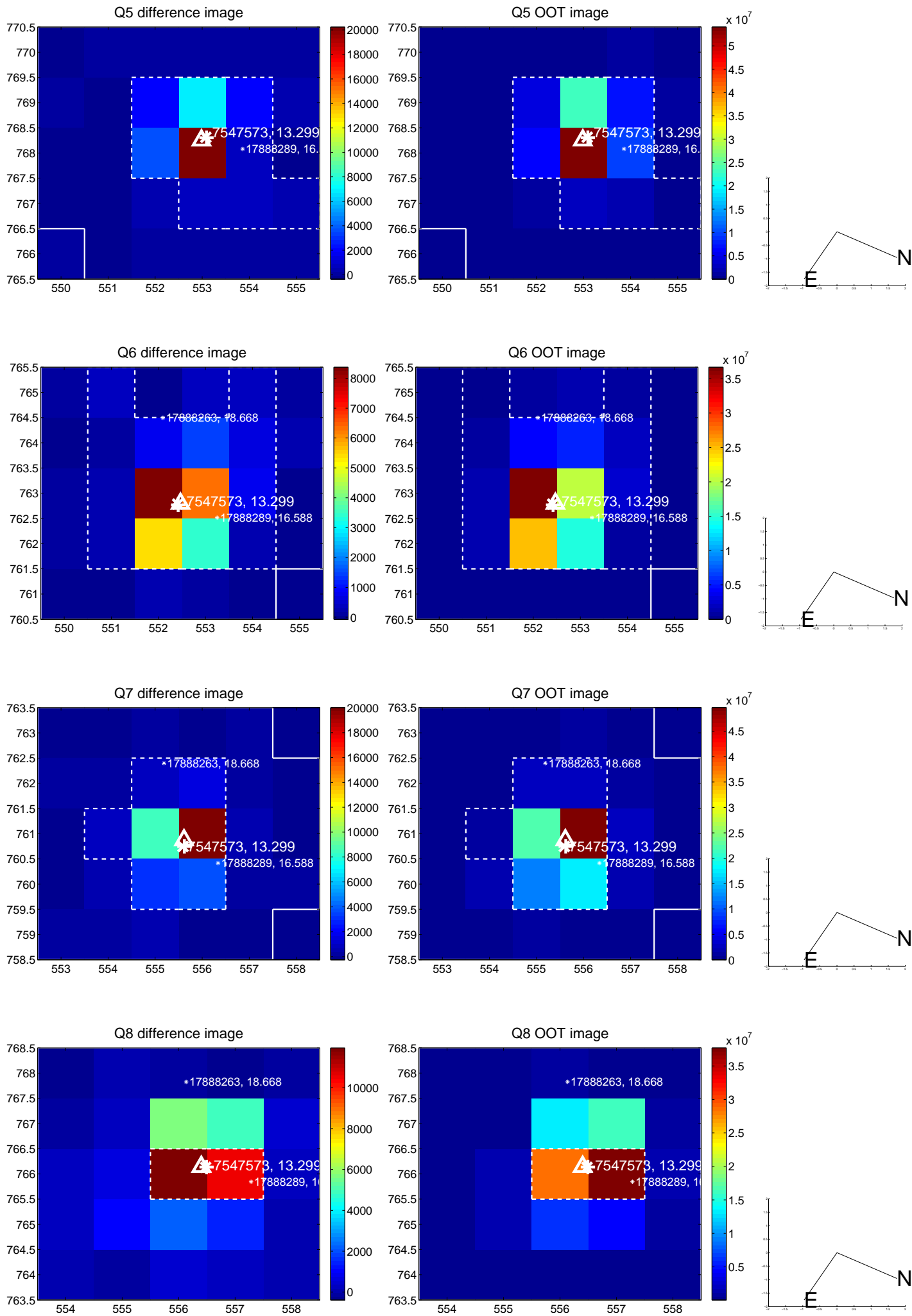


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

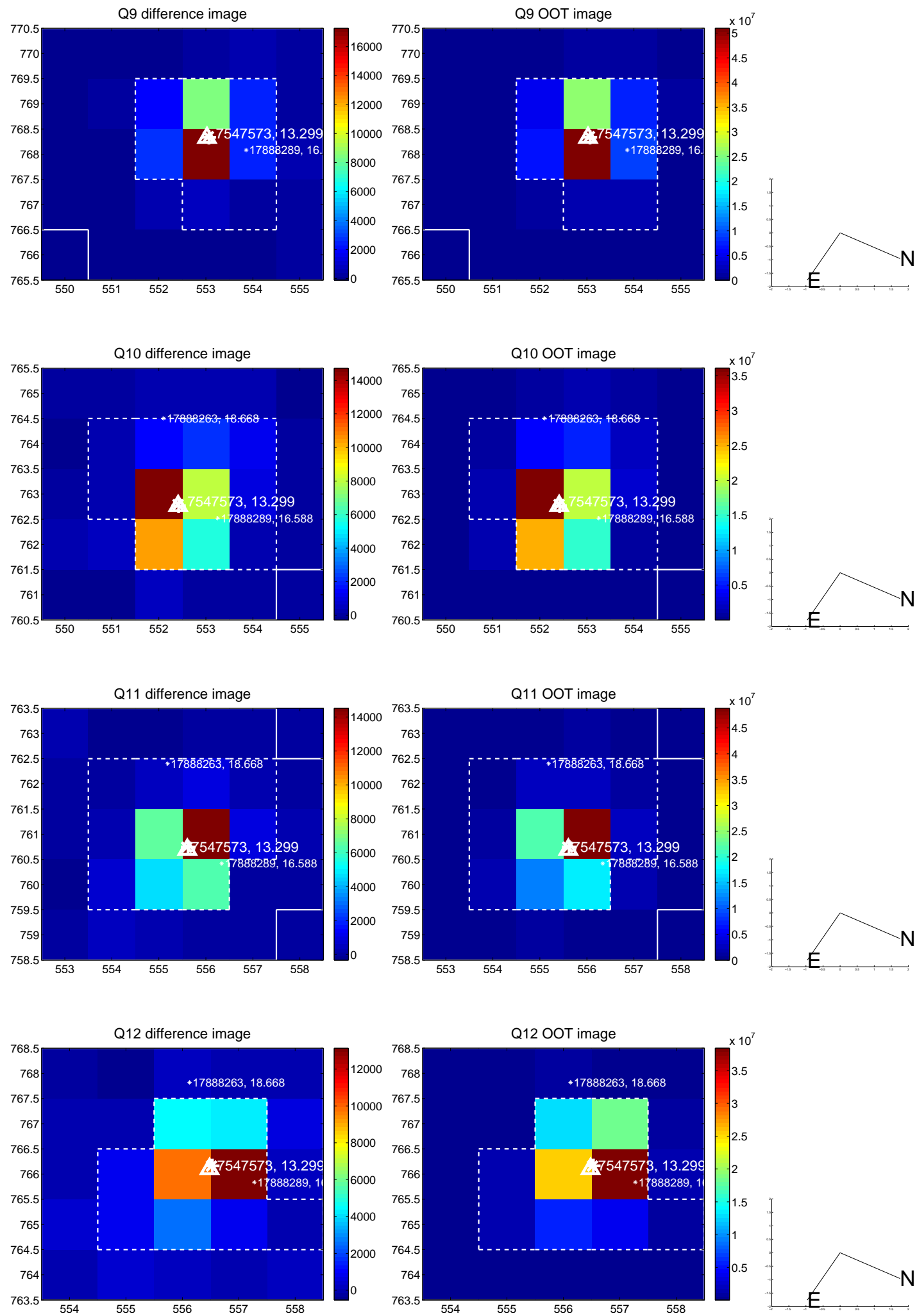
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



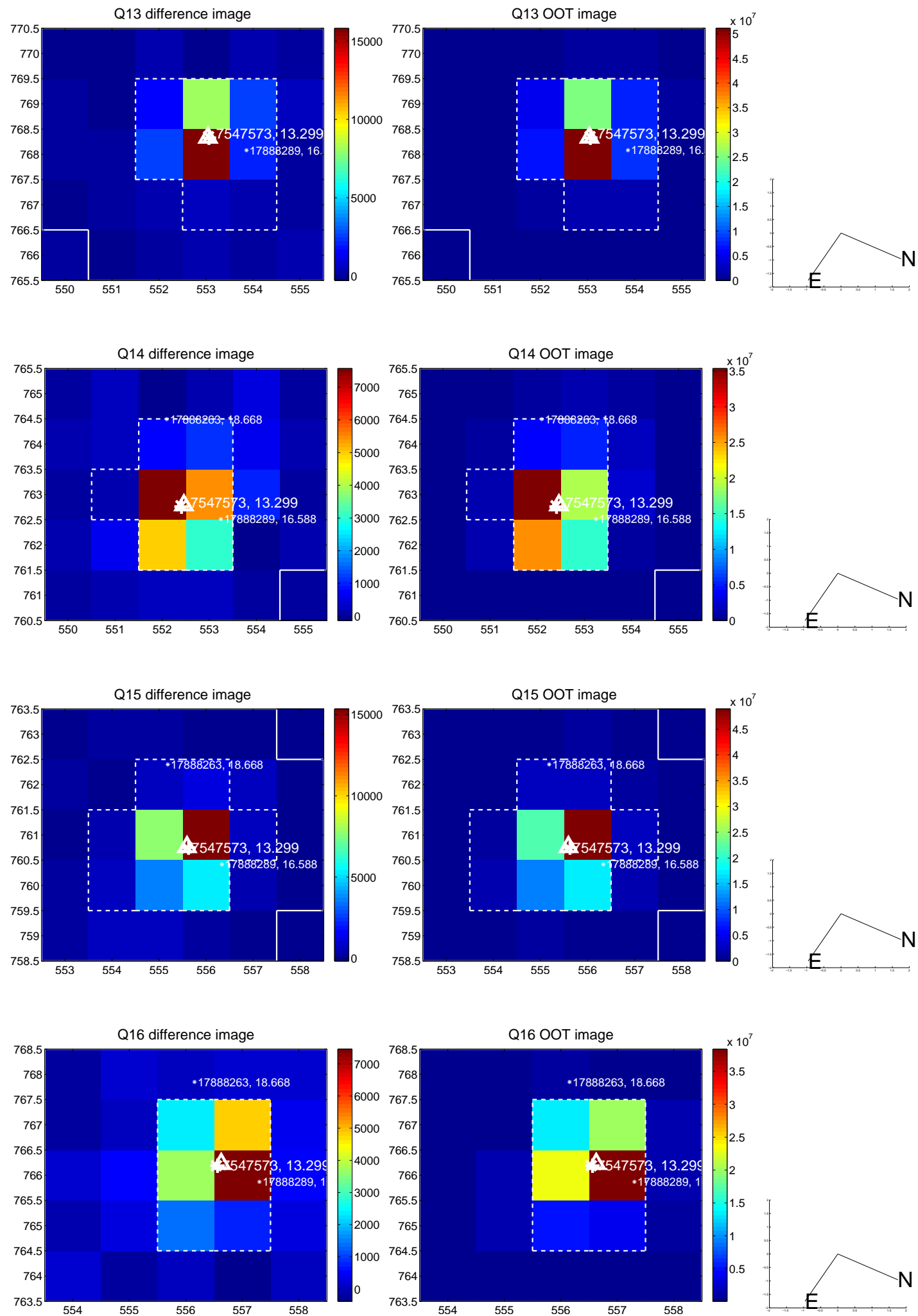
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



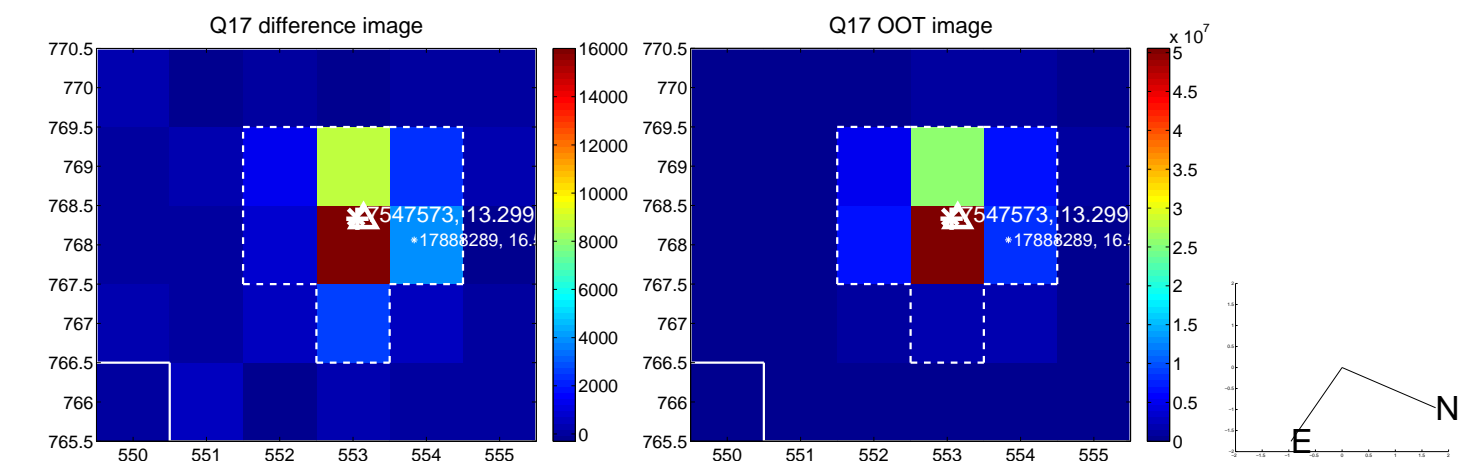
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



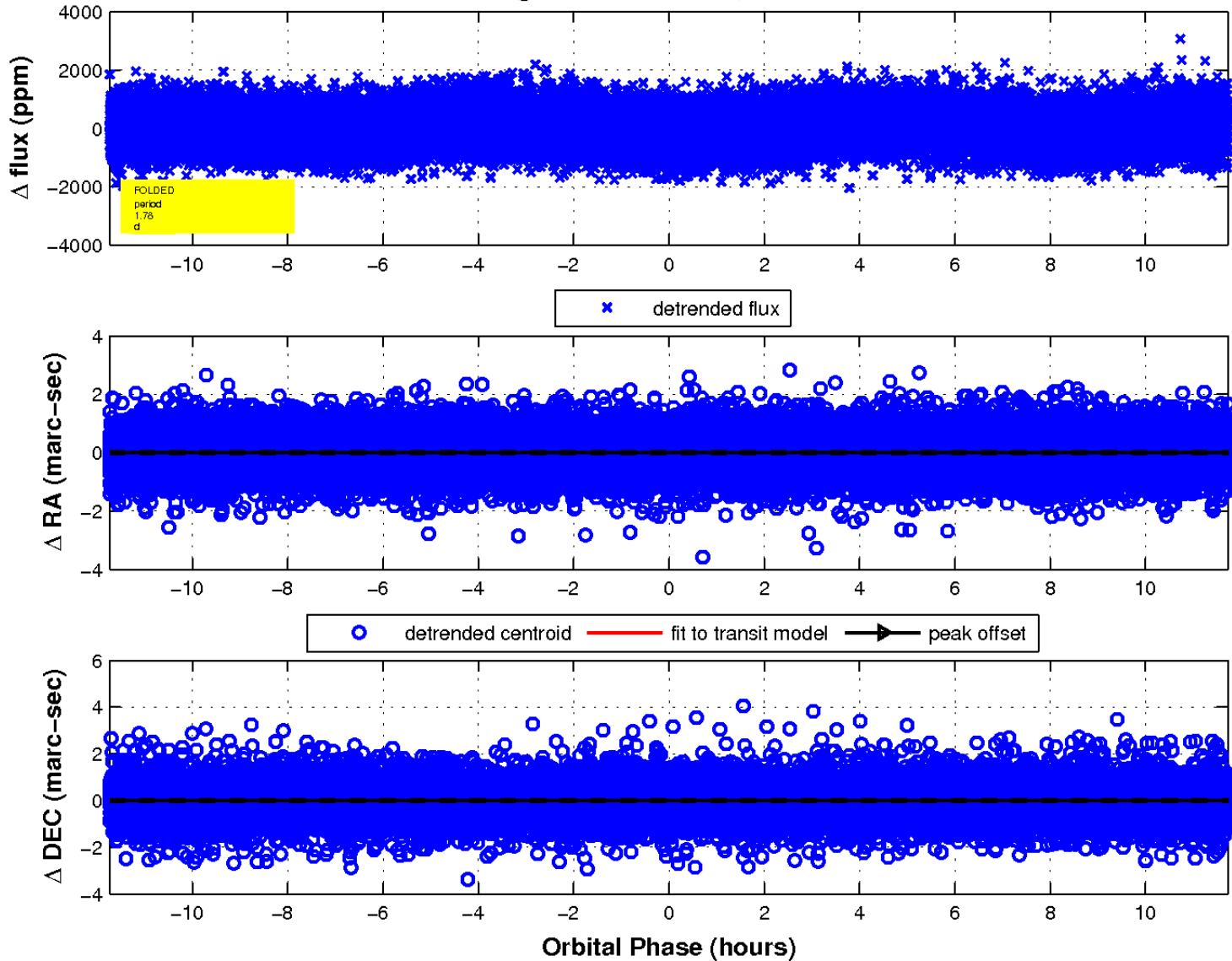
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

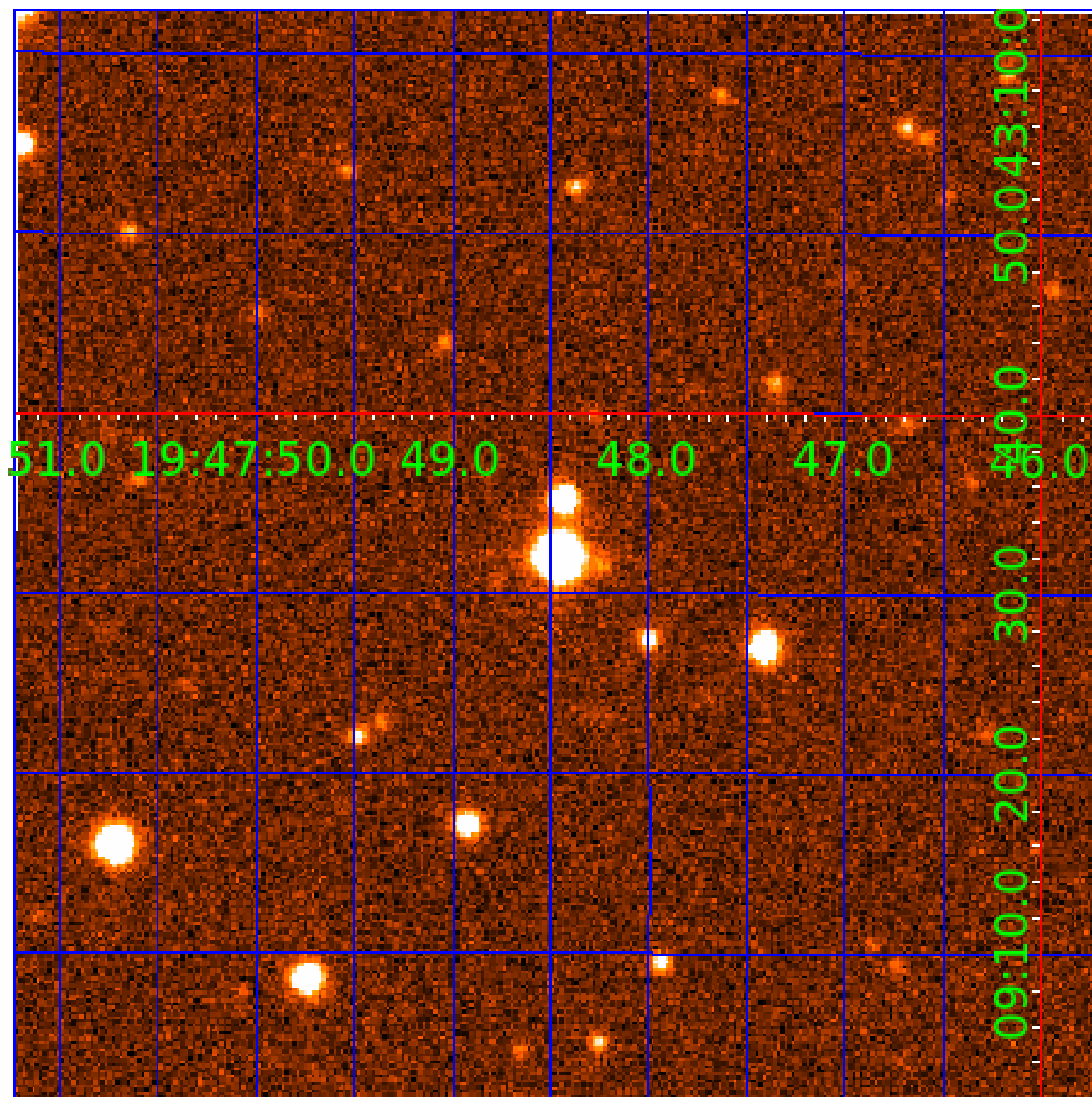


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 007547573

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})
007547573-01	OBS	No	1.778862	131.535924	105.3	4.757	9.0	9.7	3.72	7733	4.47	34006.24
007547573-02	OBS	No	1.778787	132.987481	149.6	3.912	10.5	11.2	3.72	7733	6.08	34008.13
007547573-03	OBS	No	62.530864	176.522823	413.6	8.135	8.1	7.5	3.72	7733	8.55	295.32

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007547573-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
007547573-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
007547573-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE

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

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

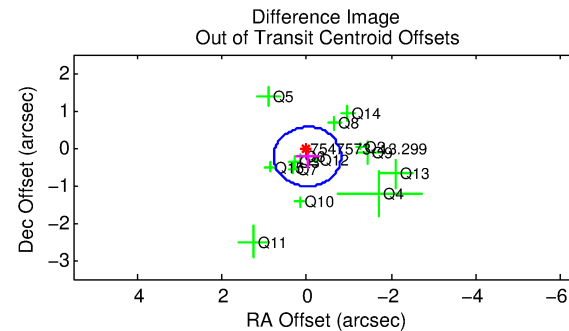
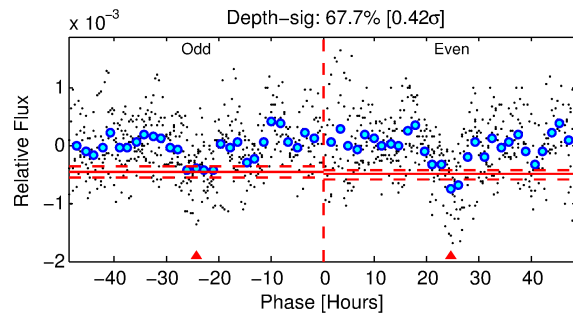
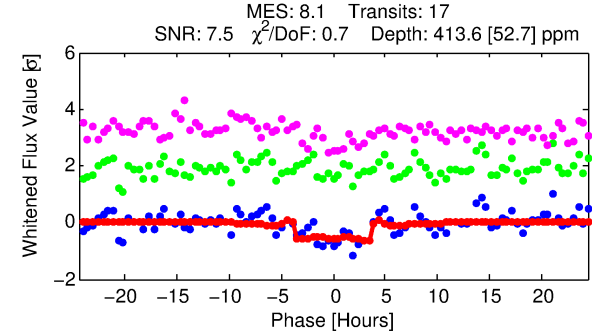
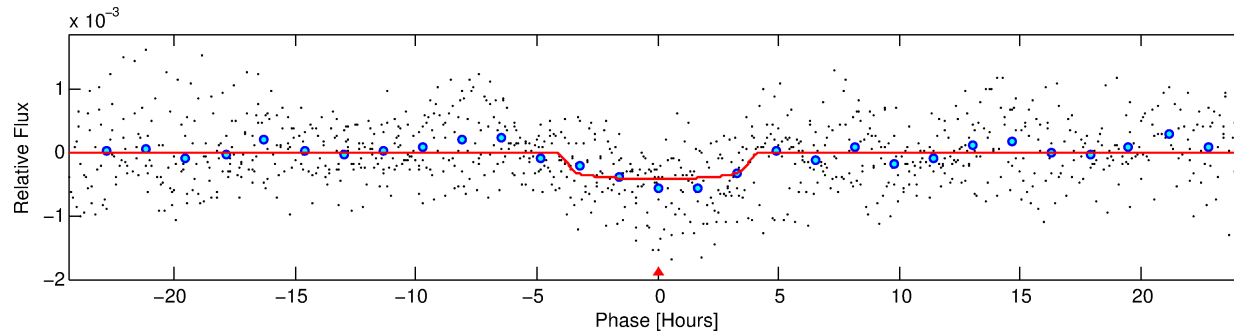
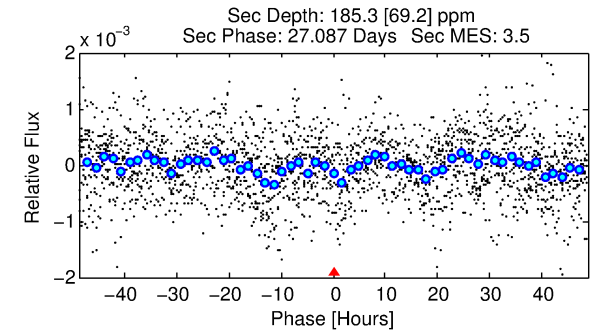
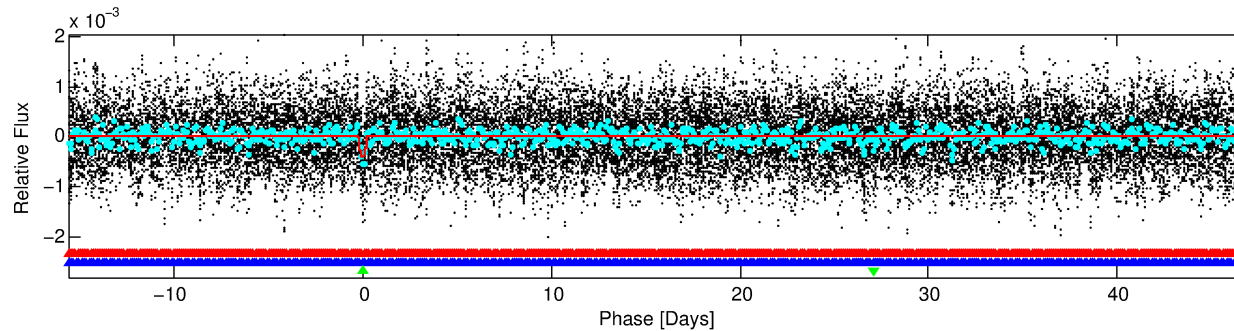
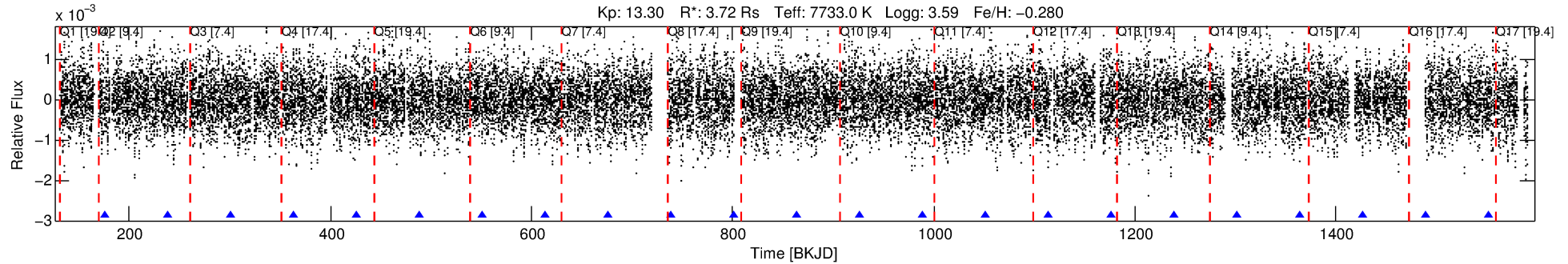
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007547573-03

No Significant Match Found

DV One-Page Summary

KIC: 7547573 Candidate: 3 of 3 Period: 62.531 d



DV Fit Results:

Period = 62.53086 [0.00074] d
Epoch = 176.5228 [0.0102] BKJD
Rp/R* = 0.0211 [0.0027]
a/R* = 33.53 [19.17]
b = 0.85 [0.19]
Seff = 295.32 [282.75]
Teq = 1057 [253] K
Rp = 8.55 [4.79] Re
a = 0.3872 [0.2195] AU
Ag = 209.15 [218.99] [0.95σ]
Teffp = 6215 [752] K [6.50σ]

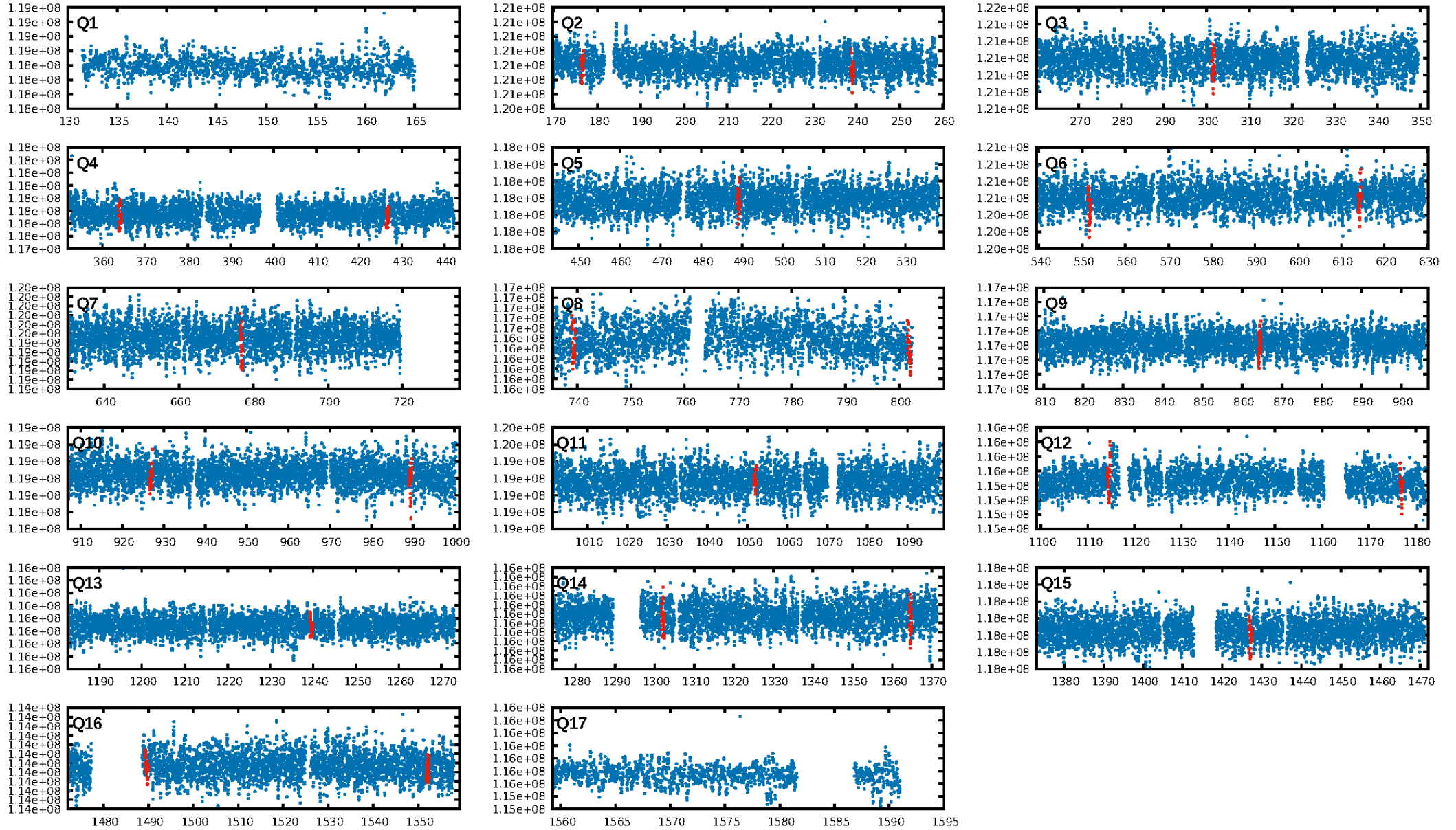
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [154.72σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 90.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.40e-11
RollingBand-fgt: 1.00 [17/17]
GhostDiagnostic-chr: -3.685
Centroid-sig: 4.0%
Centroid-so: 0.385 arcsec [1.62σ]
OotOffset-rm: 0.234 arcsec [0.88σ]
KicOffset-rm: 0.162 arcsec [0.61σ]
OotOffset-st: 4/4/3/3 [14]
KicOffset-st: 4/4/3/3 [14]
DiffImageQuality-fgm: 0.86 [12/14]
DiffImageOverlap-fno: 0.00 [0/15]

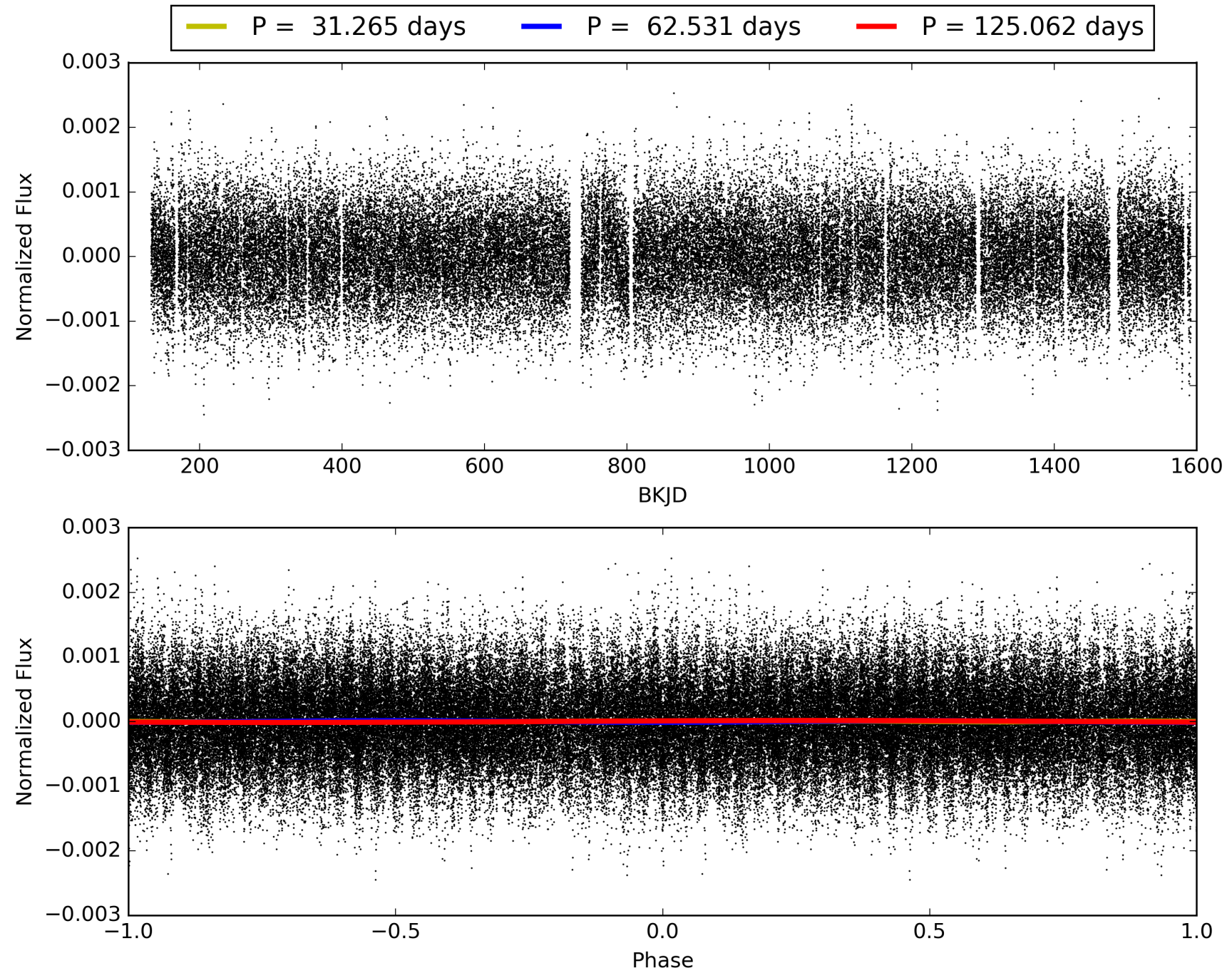
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 05:43:08 Z

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

TCE 007547573-03, PDC Light Curves

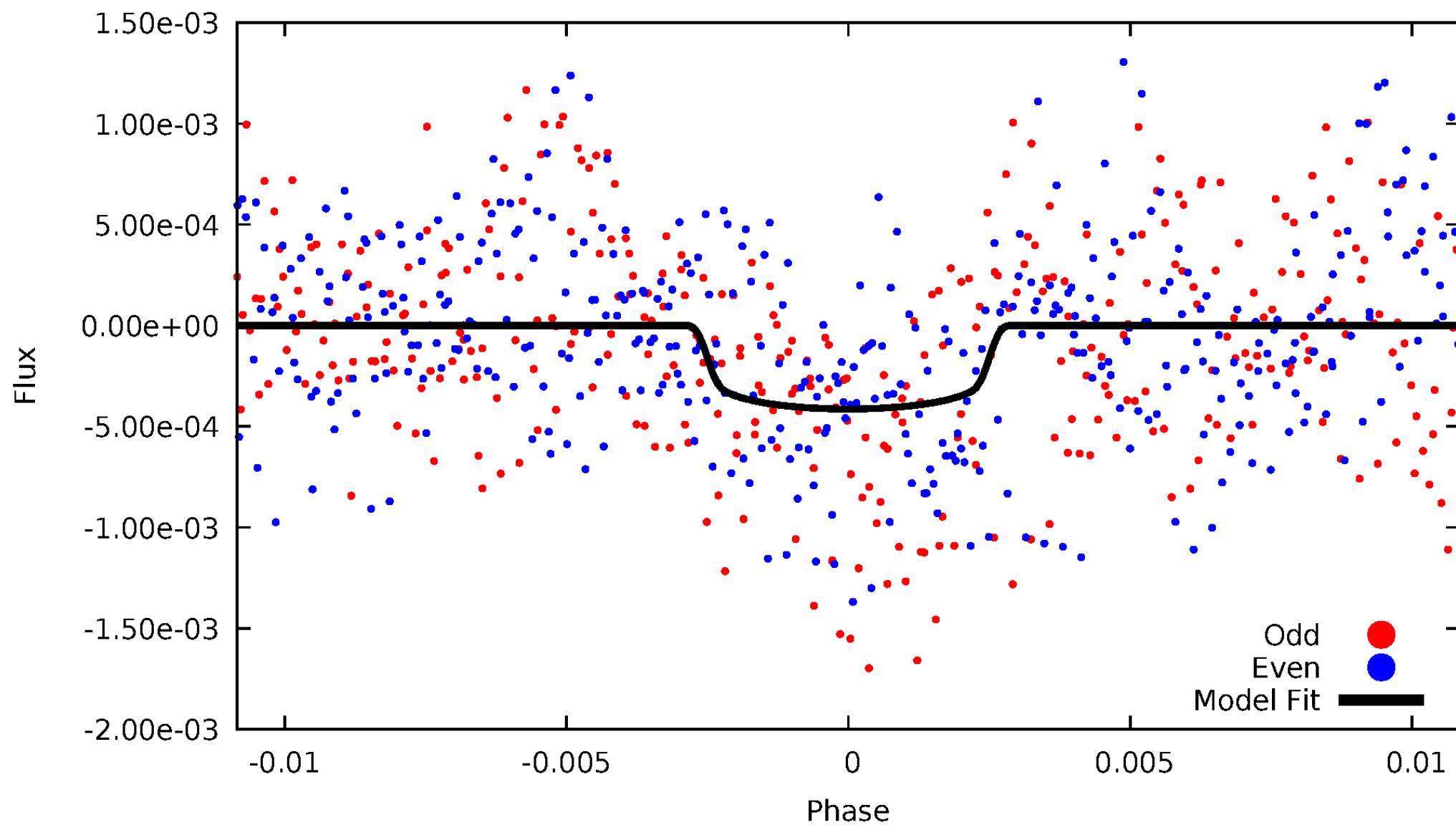


TCE 007547573-03



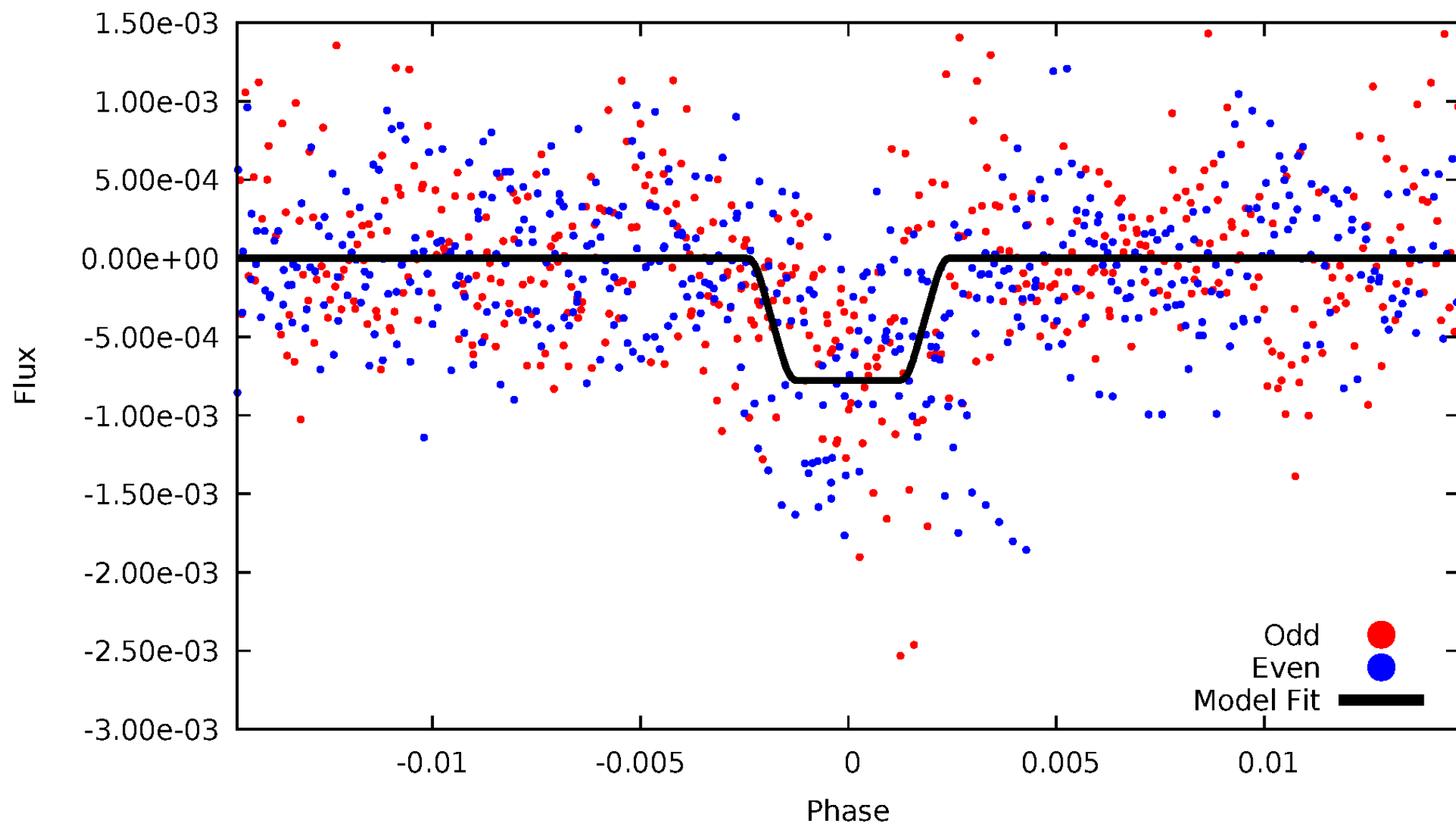
DV Odd/Even

TCE 007547573-03



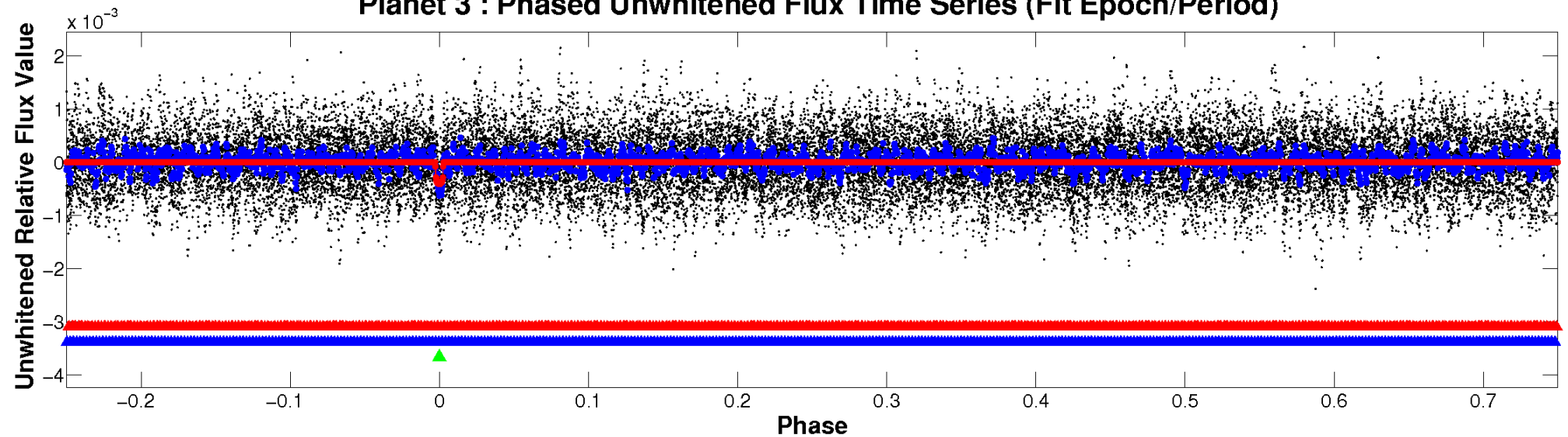
ALT Odd/Even

TCE 007547573-03

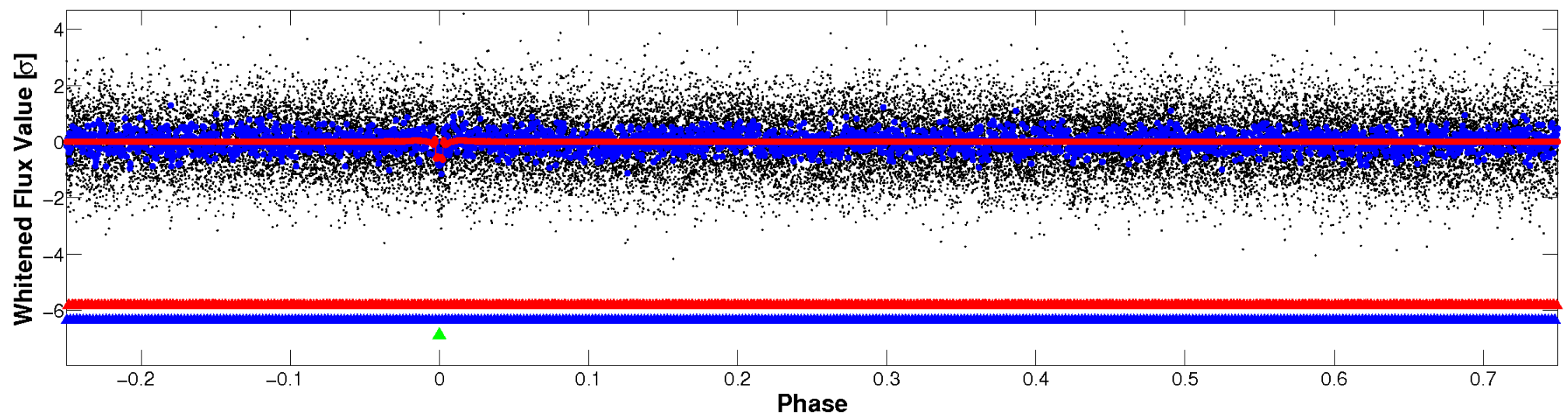


Non-Whitened Vs. Whitened Light Curve

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

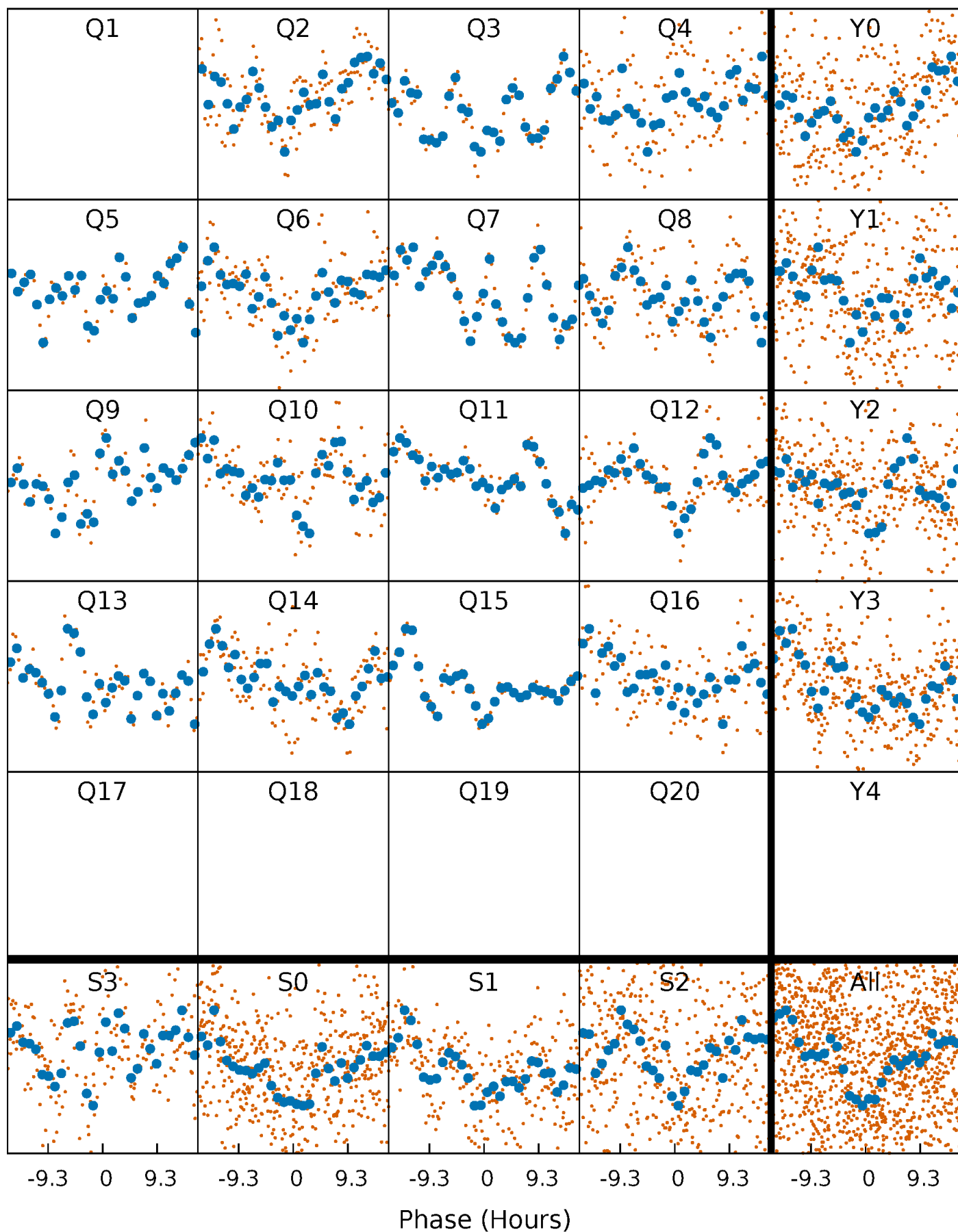


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



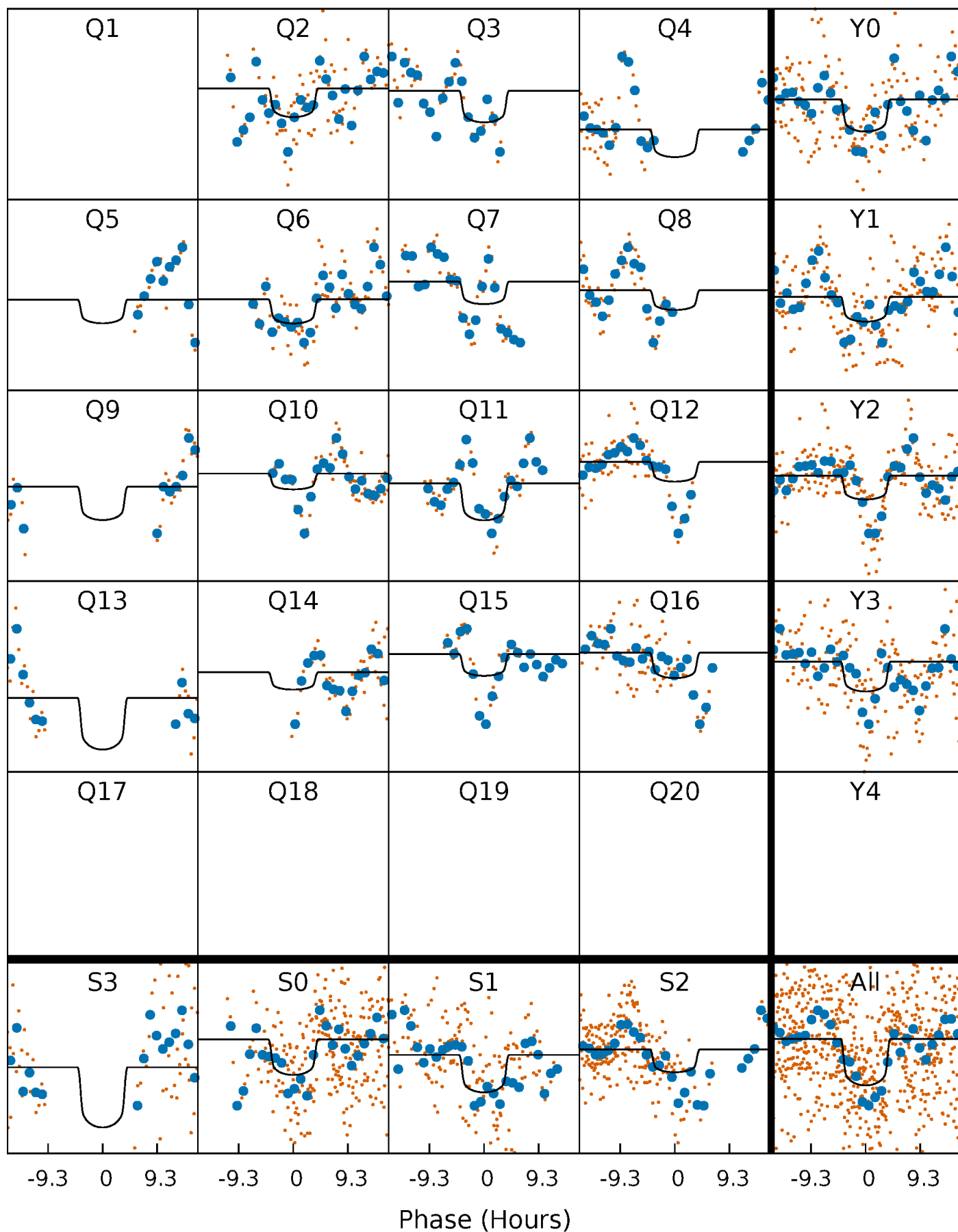
PDC Quarter-Phased Transit Curves

TCE 007547573-03 $P = 62.530864$ Days $T_0 = 176.522823$ (BKJD)



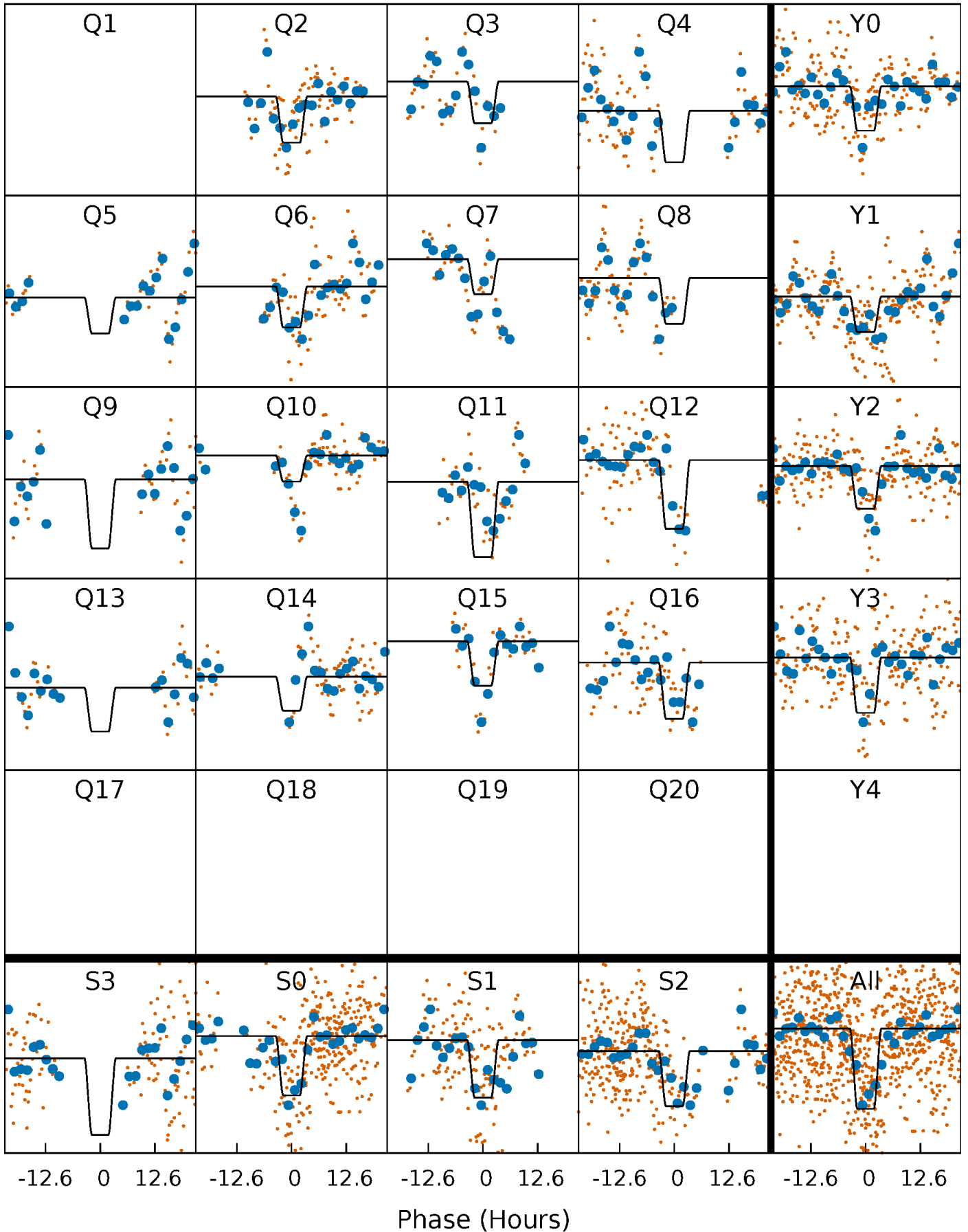
DV Quarter-Phased Transit Curves

TCE 007547573-03 P= 62.530864 Days $T_0=176.522823$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

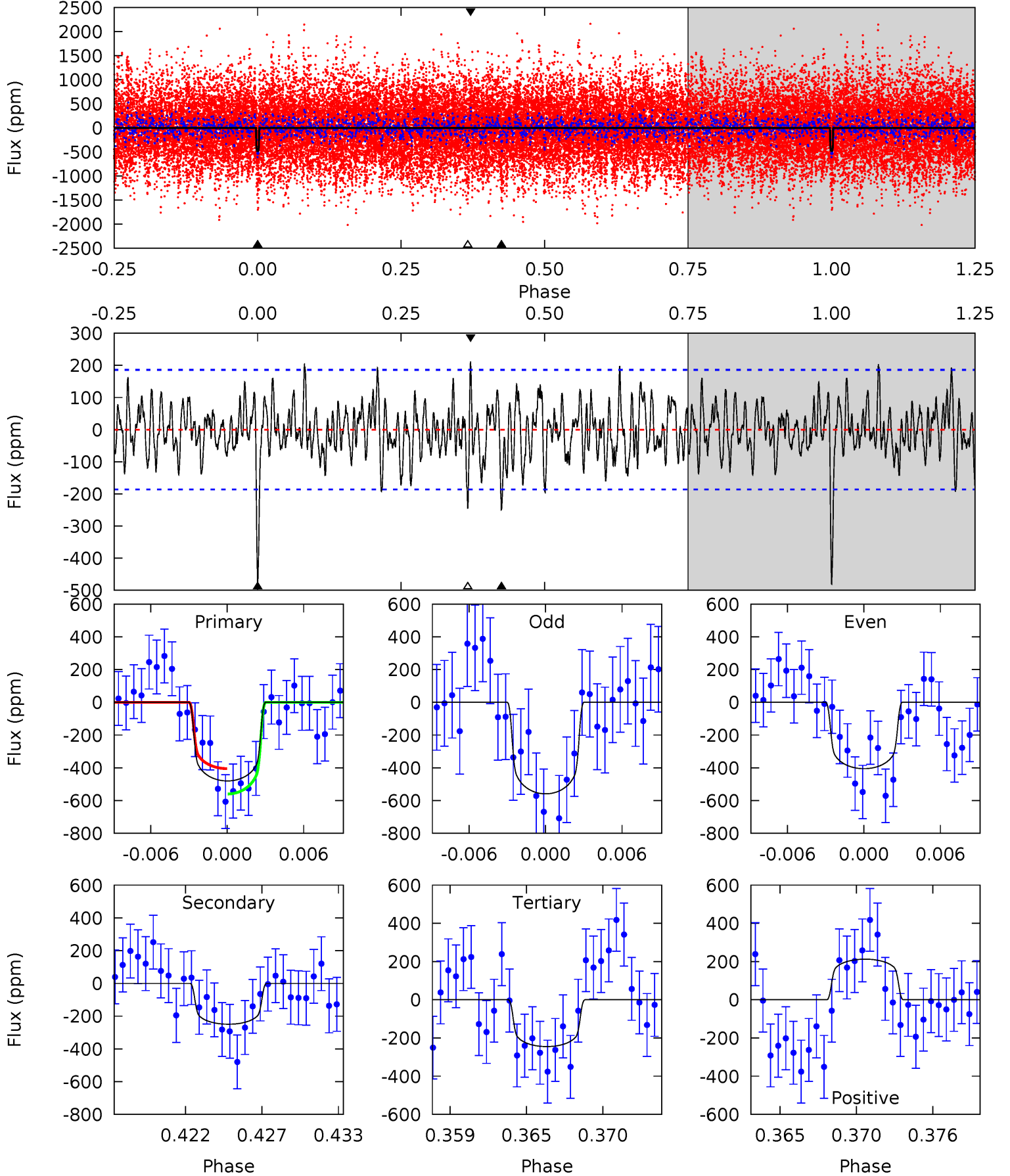
TCE 007547573-03 P= 62.532391 Days $T_0=176.501254$ (BKJD)



DV Model-Shift Uniqueness Test

007547573-03, P = 62.530864 Days, E = 113.991959 Days

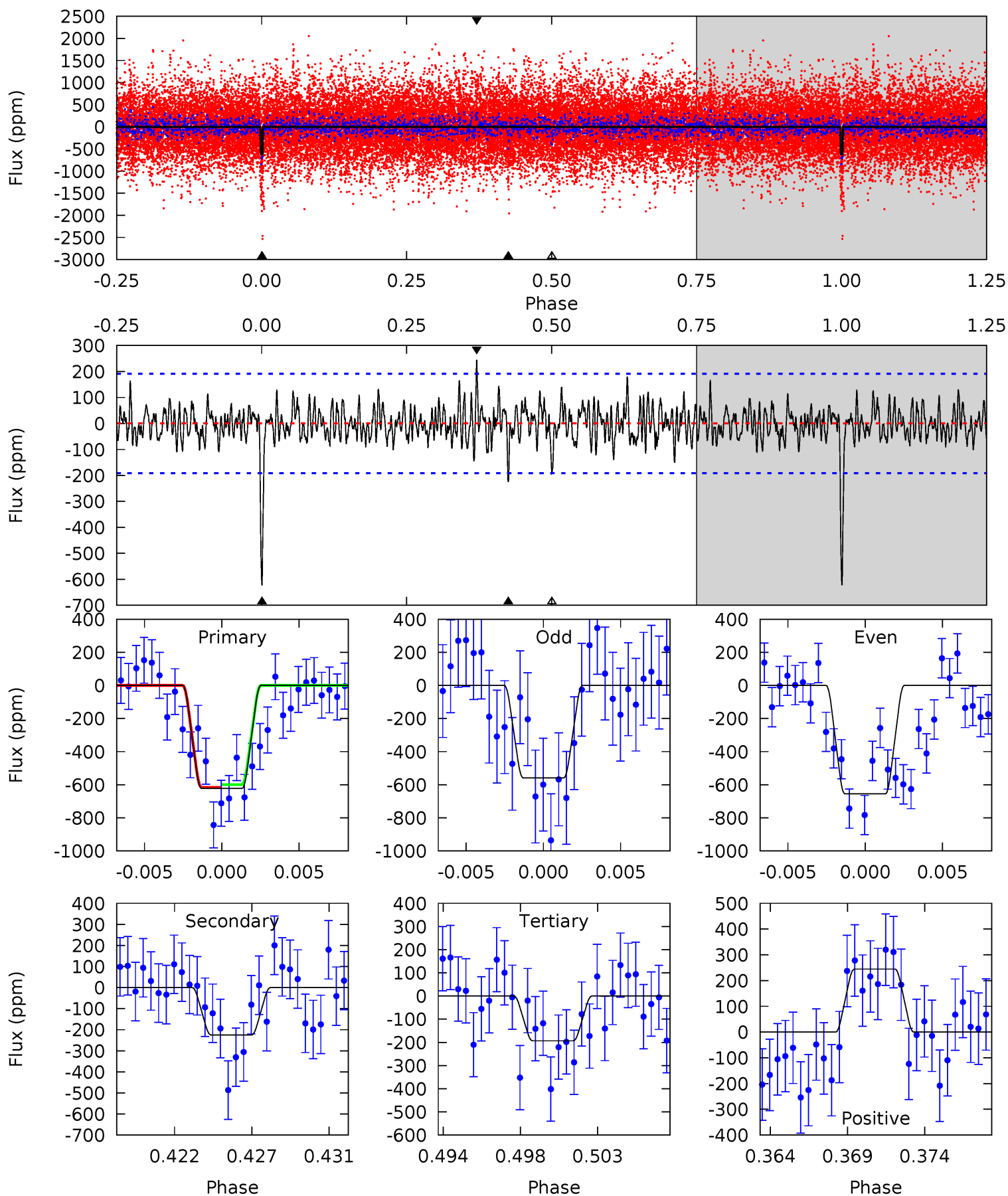
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.2	6.87	6.75	5.85	5.13	2.76	1.96	6.48	7.38	0.12	1.02	2.11	1.03	0.31	2.13



Alt Model-Shift Uniqueness Test

007547573-03, P = 62.532391 Days, E = 113.968863 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.8	6.07	5.22	6.61	5.17	2.82	1.49	11.6	10.2	0.85	-0.54	1.30	1.14	0.28	0.23



Stellar Parameters For KIC 007547573

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7733^{+212}_{-319}	$3.594^{+0.567}_{-0.063}$	$-0.280^{+0.200}_{-0.300}$	$3.717^{+0.506}_{-2.025}$	$1.980^{+0.062}_{-0.530}$	$0.054^{+0.394}_{-0.011}$
	+3%/-4%	+16%/-2%	+71%/-107%	+14%/-54%	+3%/-27%	+725%/-21%
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 007547573-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-250 ± 36	$7.45^{+1.81}_{-2.18}$	1399^{+114}_{-208}	6537^{+628}_{-492}	359^{+333}_{-127}
Alt.	-225 ± 37	$10.08^{+2.07}_{-2.91}$	1404^{+115}_{-201}	5541^{+388}_{-352}	179^{+149}_{-59}

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

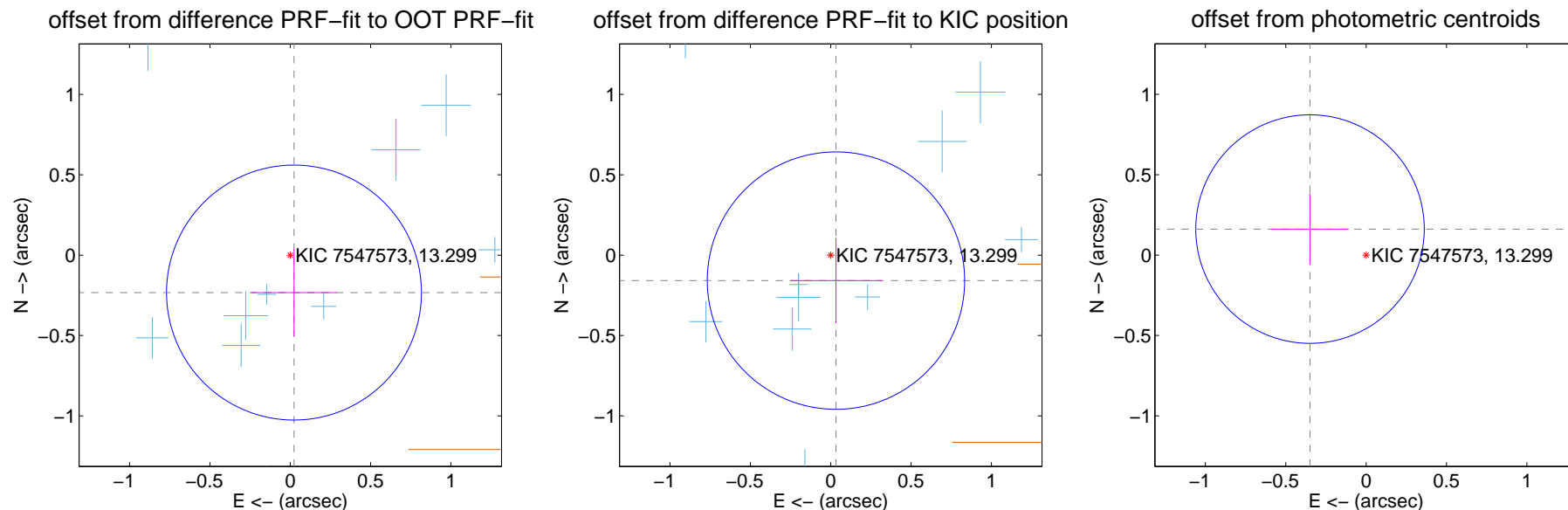
DV Centroid Data

Supplemental centroid analysis for 007547573-03. Kepler magnitude: 13.30. Transit SNR 7.51

There are 12 quarters with good PRF difference image offsets

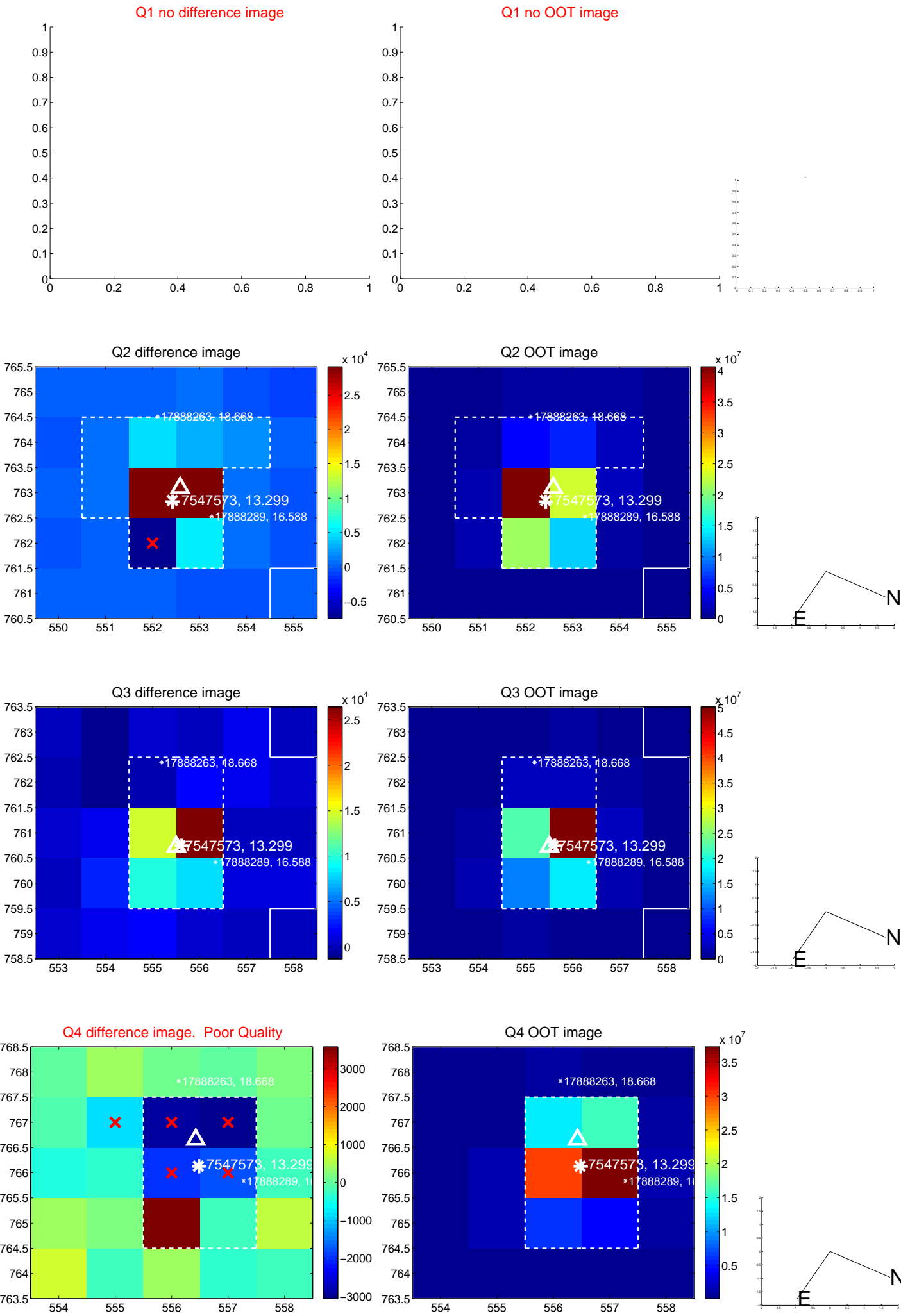
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.234 ± 0.264	0.88	-0.023 ± 0.266	-0.233 ± 0.272
PRF-fit source offset from KIC position	0.162 ± 0.267	0.61	-0.033 ± 0.284	-0.158 ± 0.265
photometric centroid source offset	0.38 ± 0.24	1.62	0.35 ± 0.24	0.16 ± 0.22

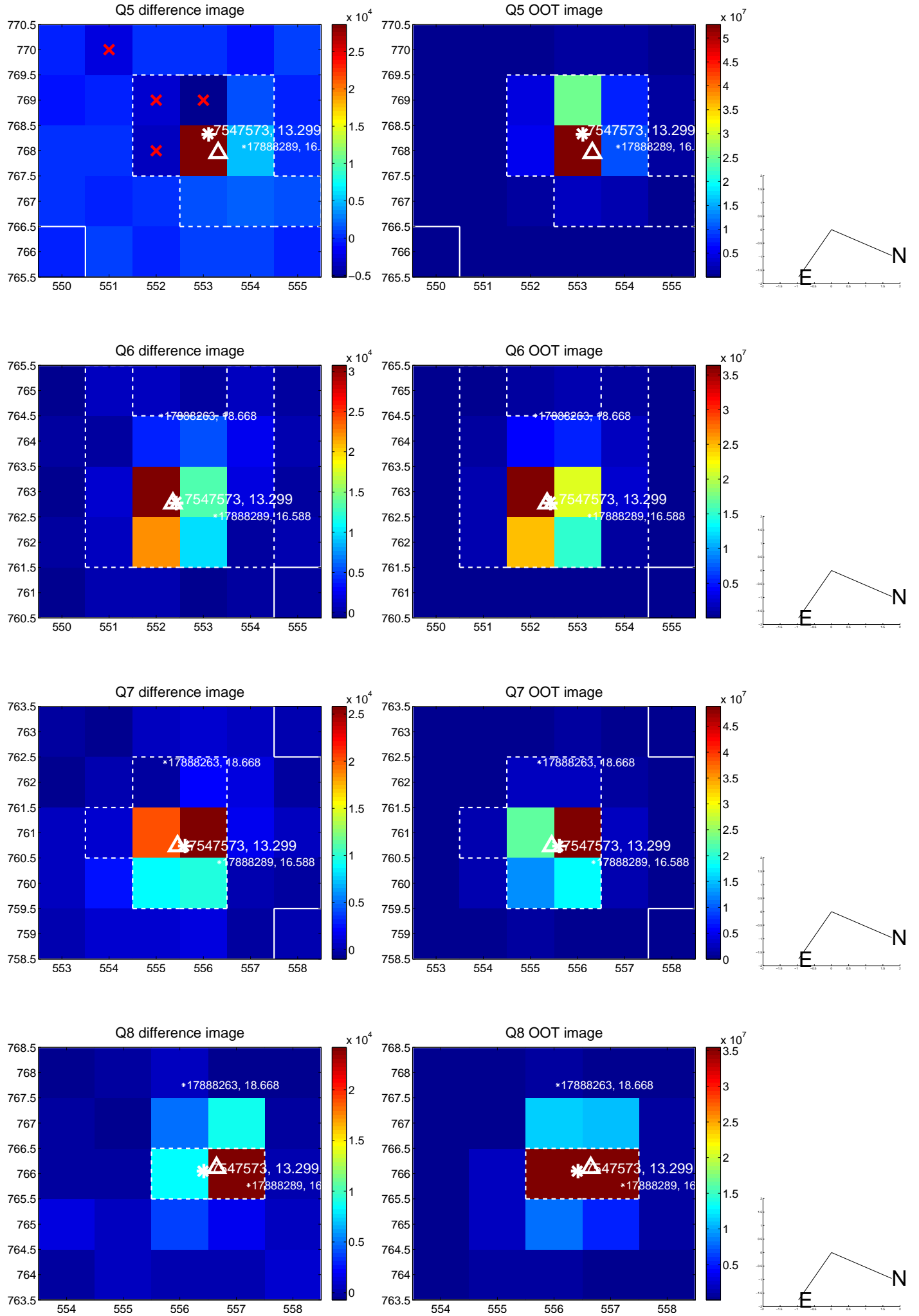


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

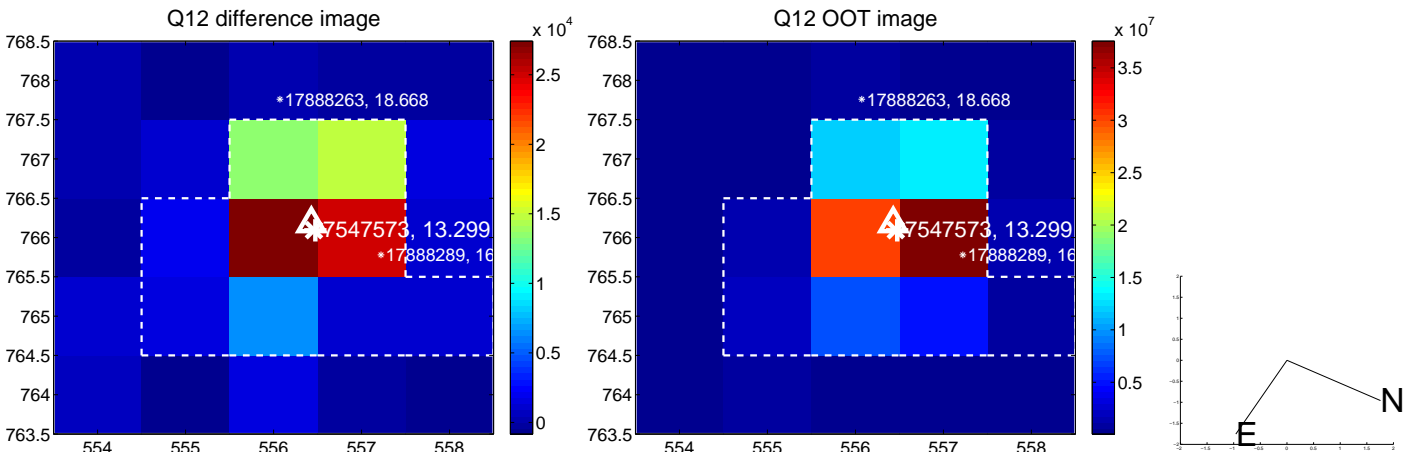
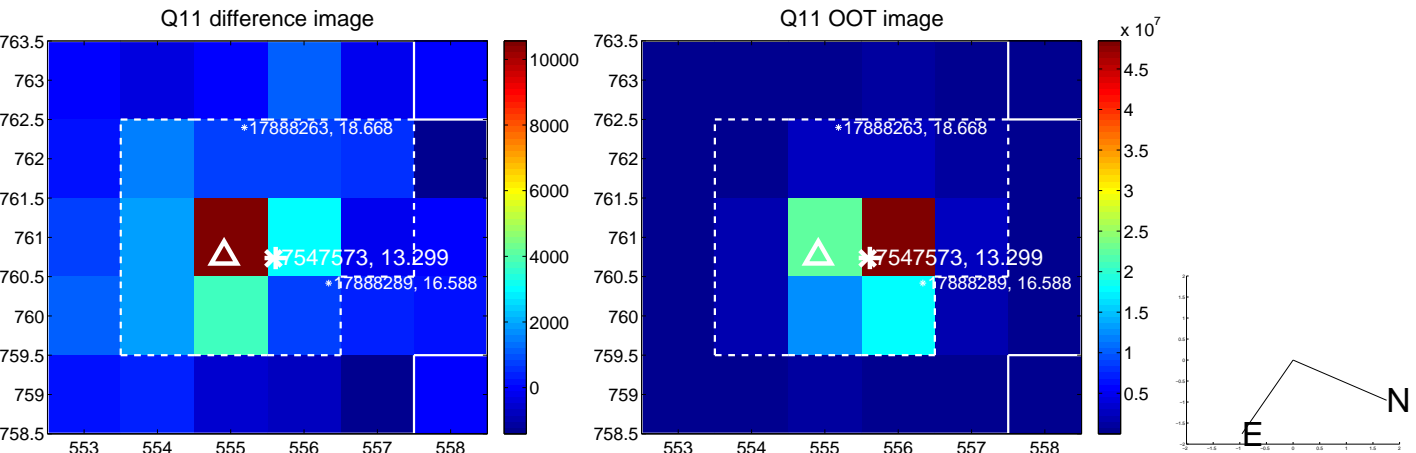
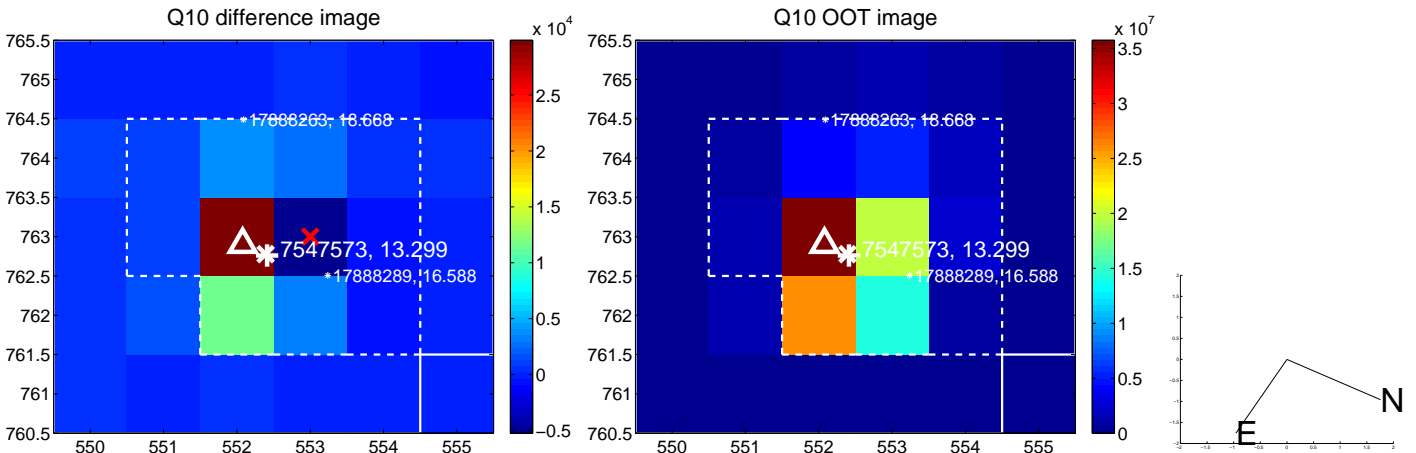
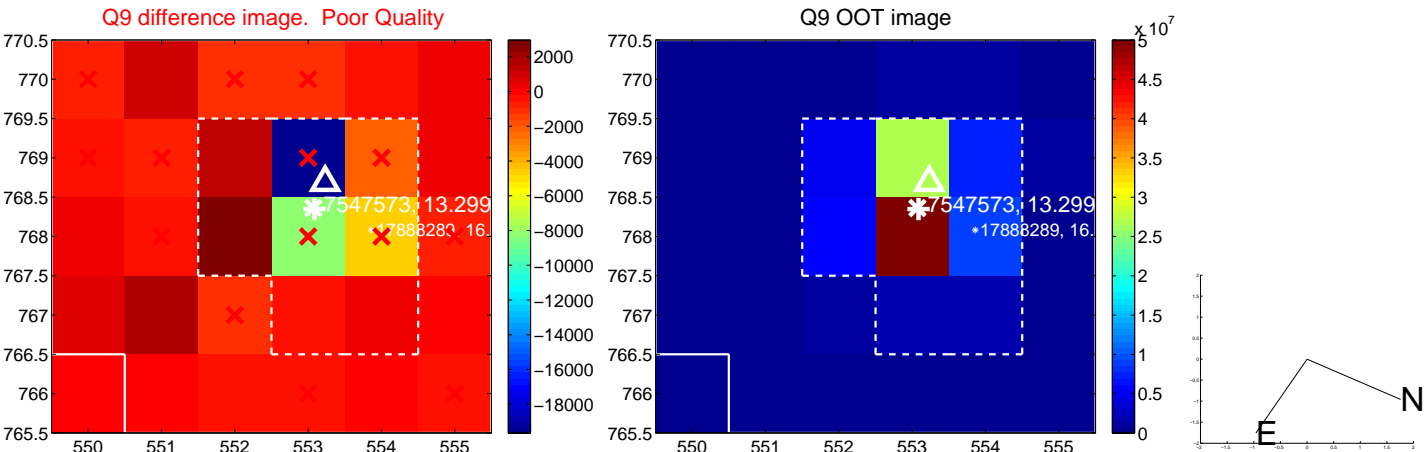
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



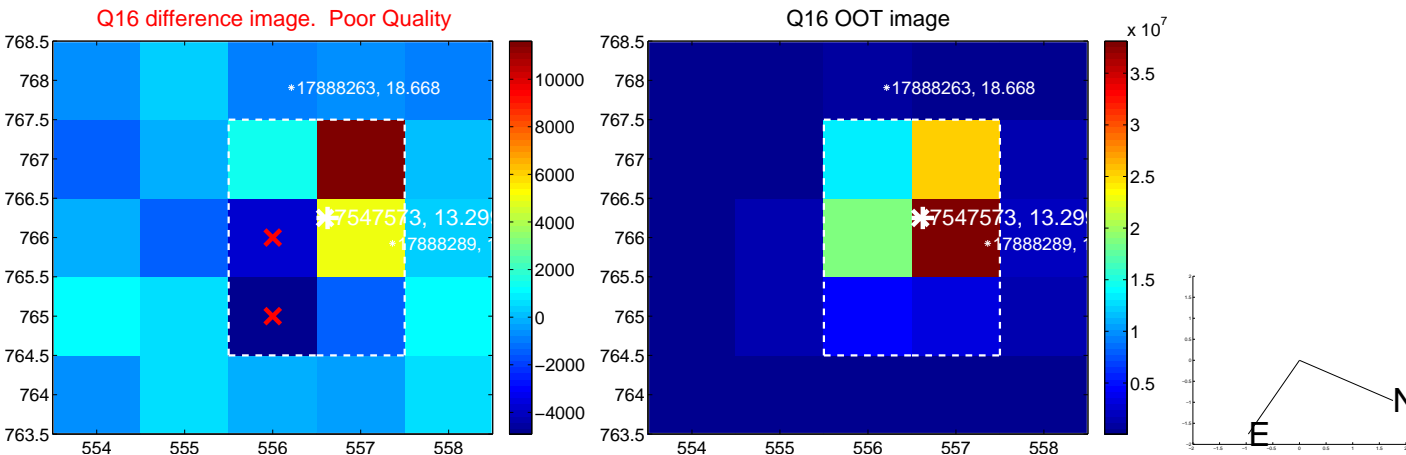
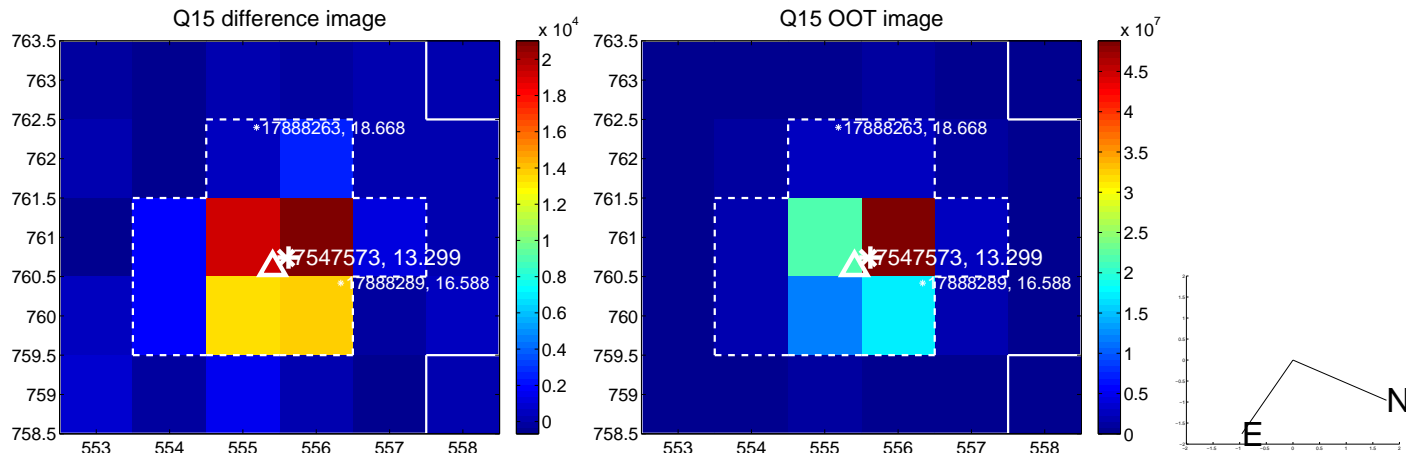
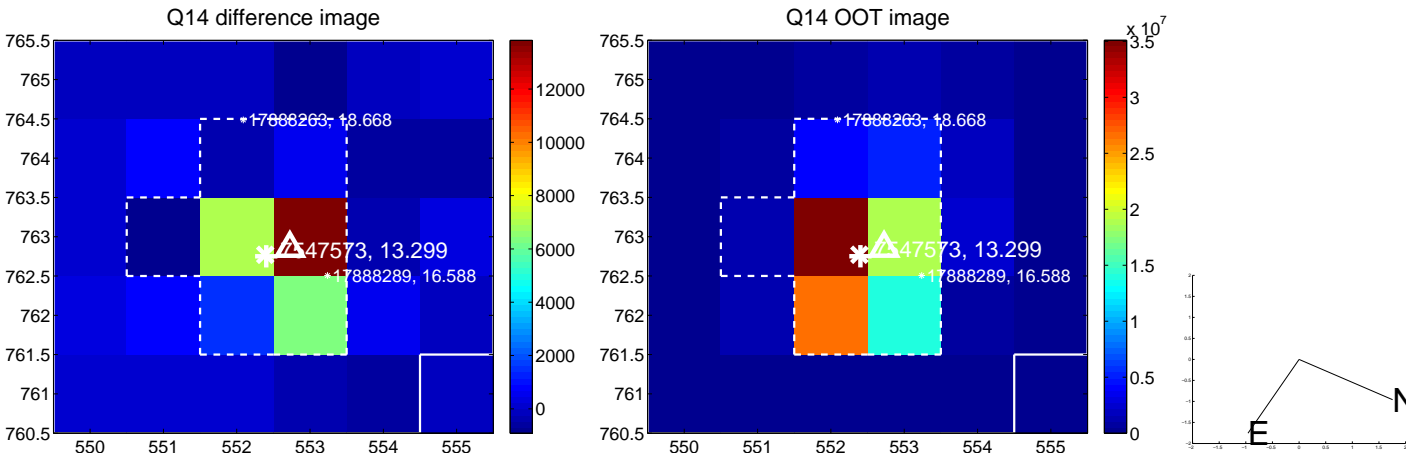
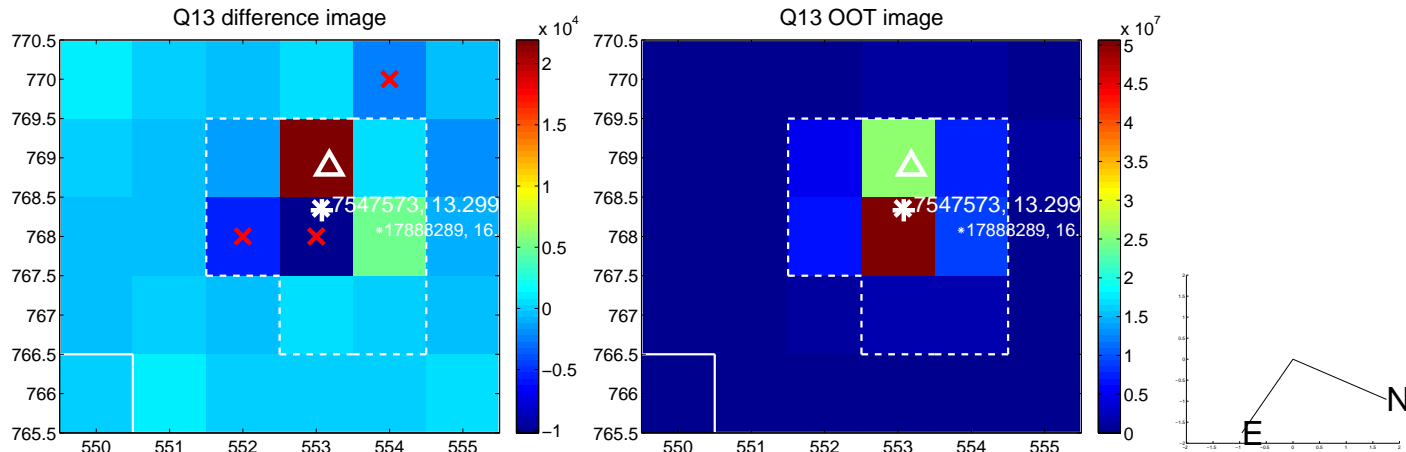
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



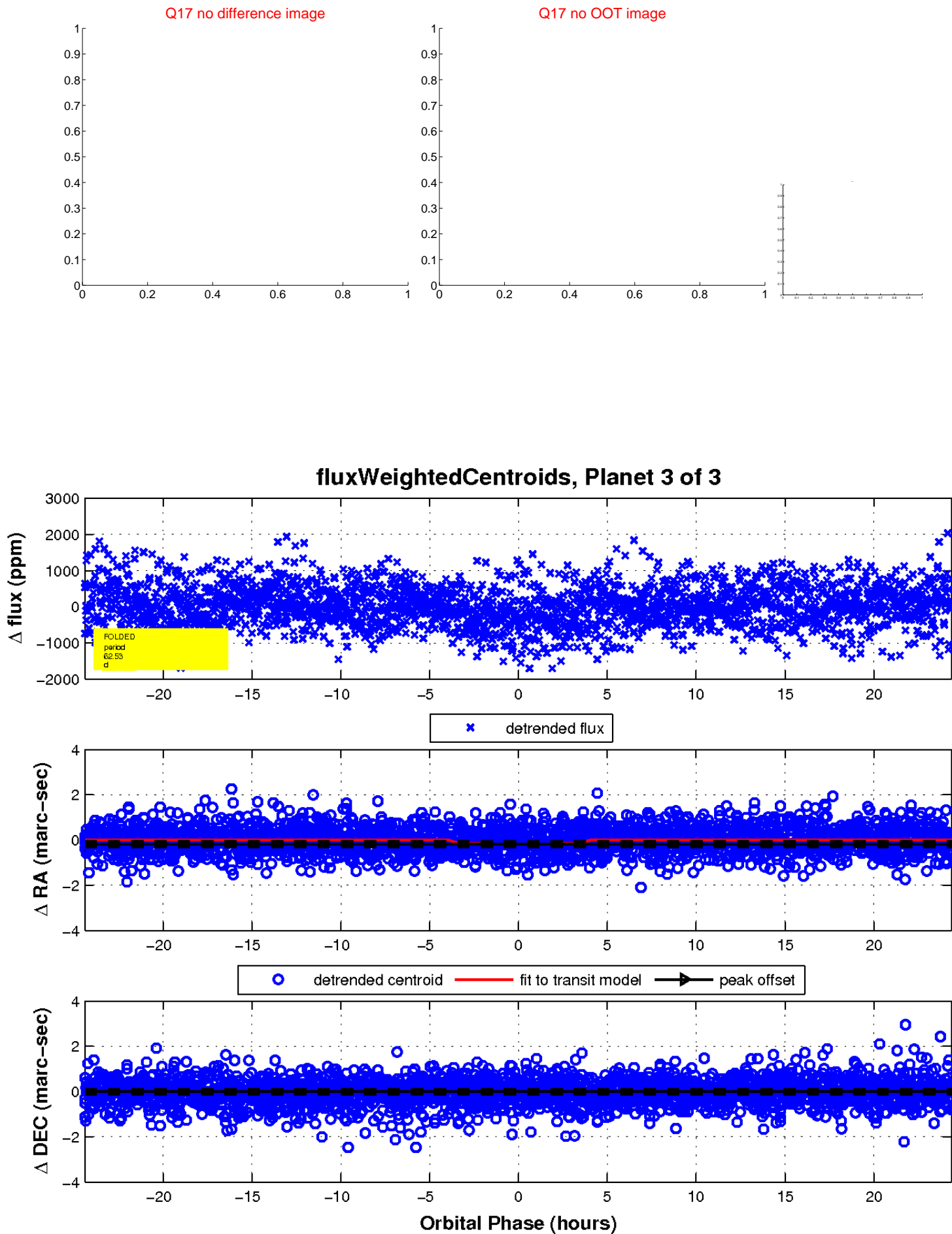
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

