

KIC 005960484

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})
005960484-01	OBS	No	0.605539	131.731623	8.1	4.423	7.8	3.7	1.57	7310	0.46	24999.93
005960484-02	OBS	No	23.027039	132.003375	234.1	2.066	12.6	11.4	1.57	7310	2.59	195.50
005960484-03	OBS	No	42.152393	150.182373	397.2	1.746	13.1	12.5	1.57	7310	3.62	87.30
005960484-04	OBS	No	10.007999	134.561131	317.1	0.878	13.3	15.0	1.57	7310	2.86	593.83
005960484-05	OBS	No	42.861399	146.723757	200.3	7.103	14.7	9.2	1.57	7310	2.44	85.38
005960484-06	OBS	No	12.454749	143.278310	317.6	0.930	12.9	11.0	1.57	7310	2.86	443.62
005960484-07	OBS	No	14.552426	137.006597	240.3	2.723	13.9	12.0	1.57	7310	2.54	360.48
005960484-08	OBS	No	13.469643	131.932116	65.8	0.979	11.6	2.3	1.57	7310	1.34	399.62

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005960484-01	OBS	FP	0.00	1	0	1	0	LPP_DV—MOD_NONUNIQ_ALT—CENT_UNRESOLVED_OFFSET
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Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

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

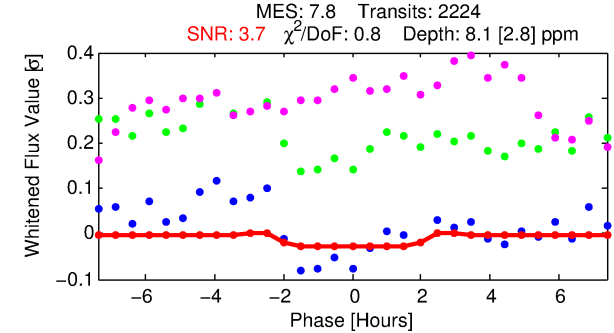
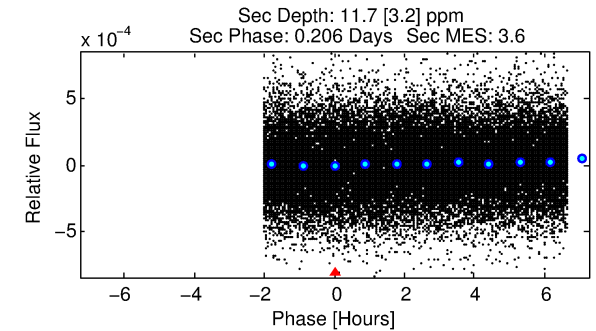
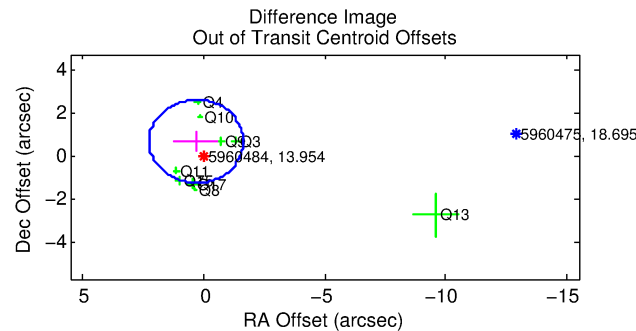
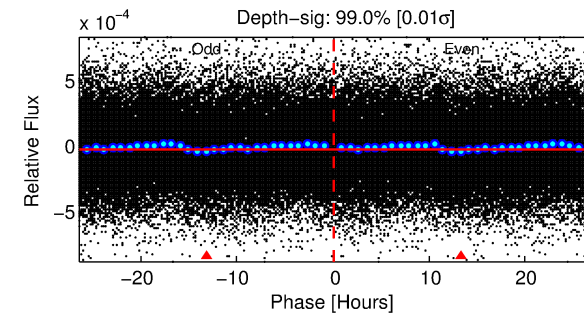
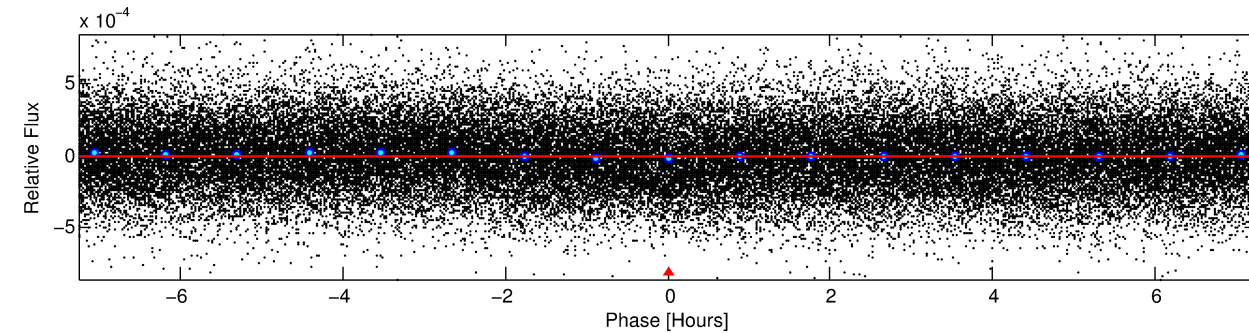
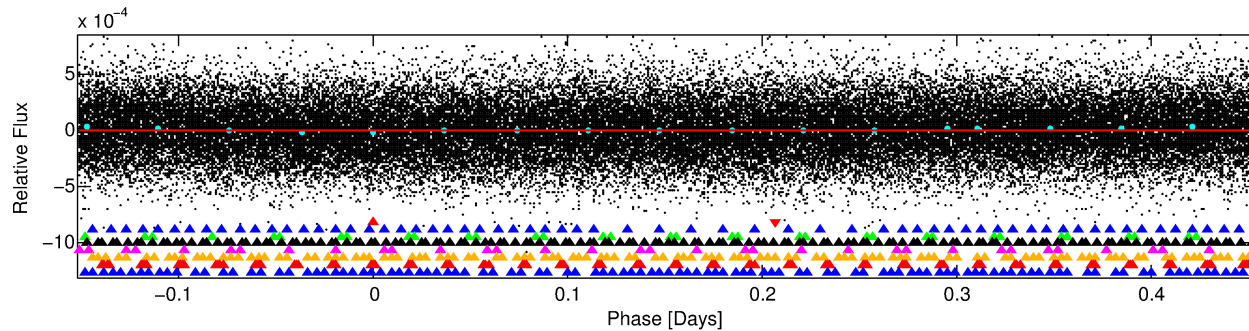
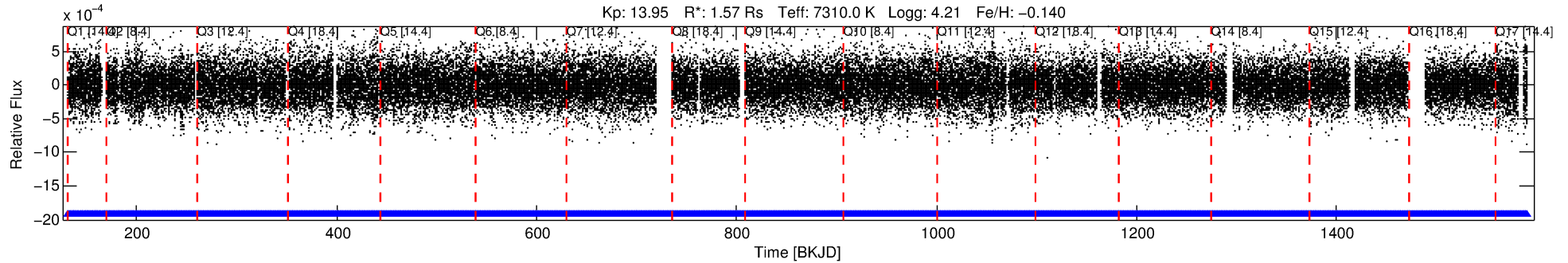
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005960484-01

No Significant Match Found

DV One-Page Summary

KIC: 5960484 Candidate: 1 of 8 Period: 0.606 d



DV Fit Results:

Period = 0.60554 [0.00003] d
Epoch = 131.7316 [0.0101] BKJD
Rp/R* = 0.0027 [0.0050]
a/R* = 1.21 [4.31]
b = 0.30 [34.24]
Seff = 24999.93 [10273.10]
Teq = 3206 [329] K
Rp = 0.46 [0.87] Re
a = 0.0159 [0.0042] AU
Ag = 7.75 [29.27] [0.23 σ]
Teffp = 8273 [7777] K [0.65 σ]

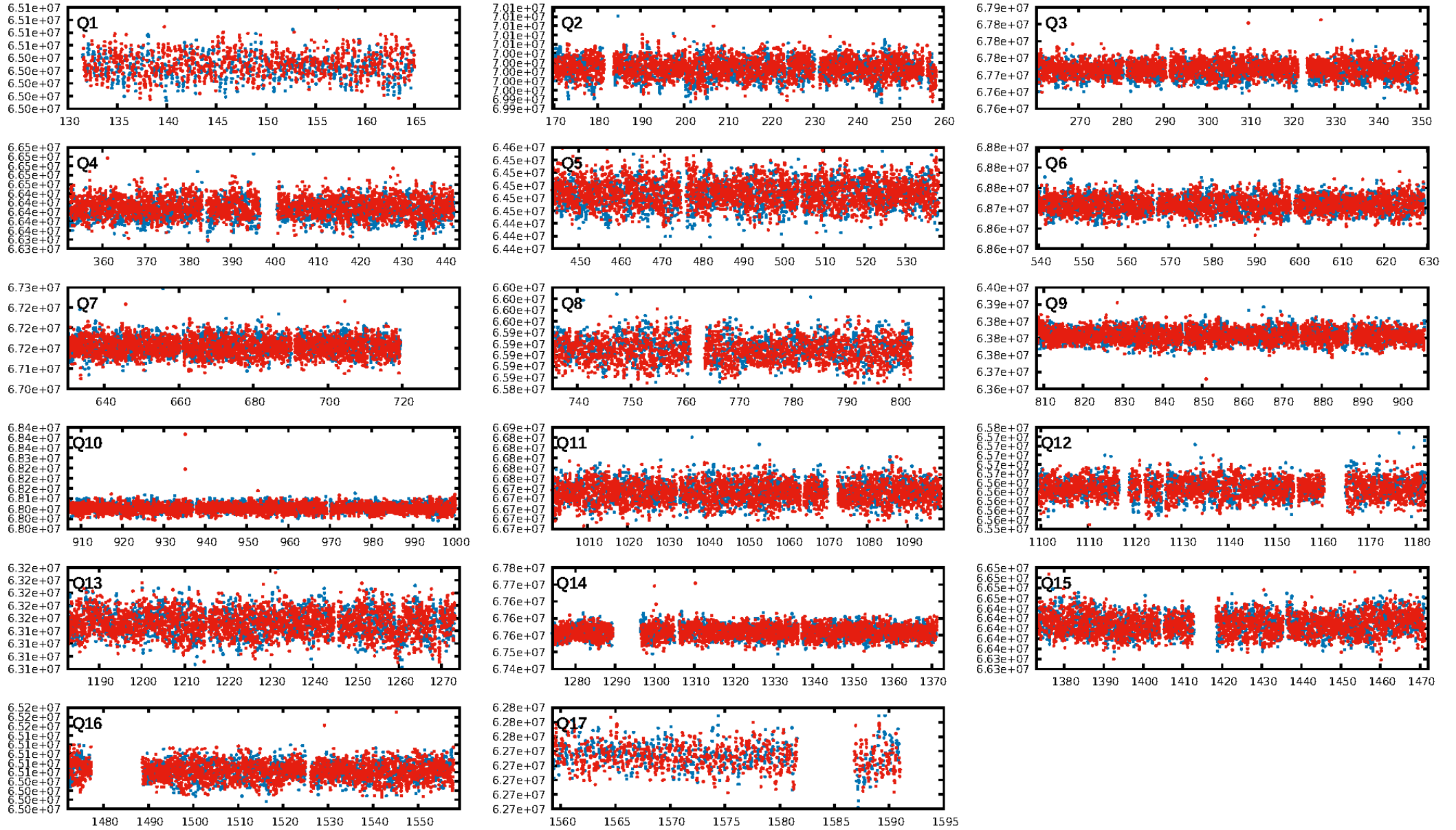
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [50.04 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGoF-sig: N/A
Bootstrap-pfa: 6.84e-07
RollingBand-fgt: 1.00 [2123/2123]
GhostDiagnostic-chr: 1.214
Centroid-sig: 0.1%
Centroid-so: 6.049 arcsec [2.34 σ]
OotOffset-rm: 0.745 arcsec [1.15 σ]
KicOffset-rm: 0.800 arcsec [1.12 σ]
OotOffset-st: 1/4/2/3 [10]
KicOffset-st: 1/4/2/3 [10]
DiffImageQuality-fgm: 0.70 [7/10]
DiffImageOverlap-fno: 1.00 [17/17]

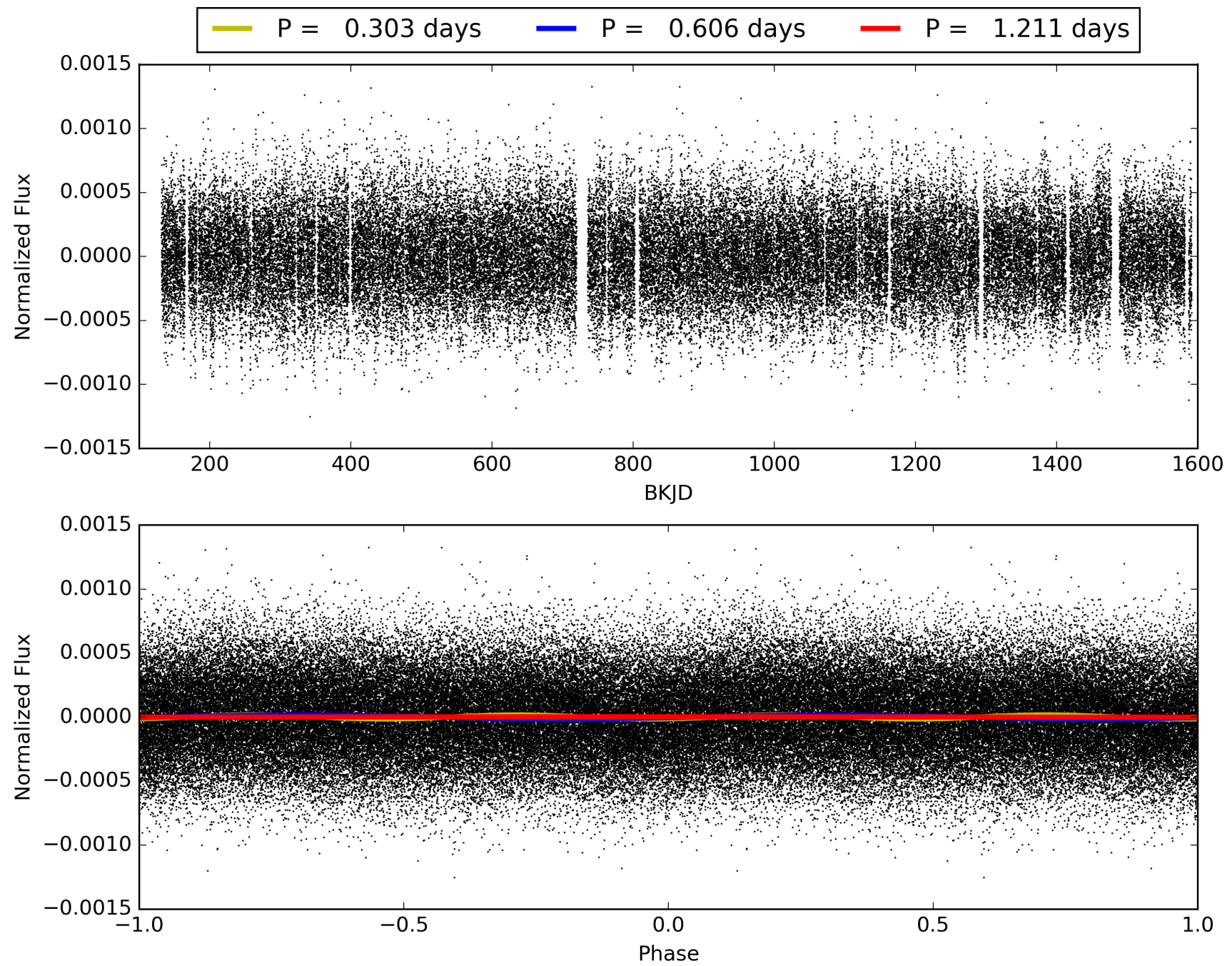
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 07:12:08 Z

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

TCE 005960484-01, PDC Light Curves

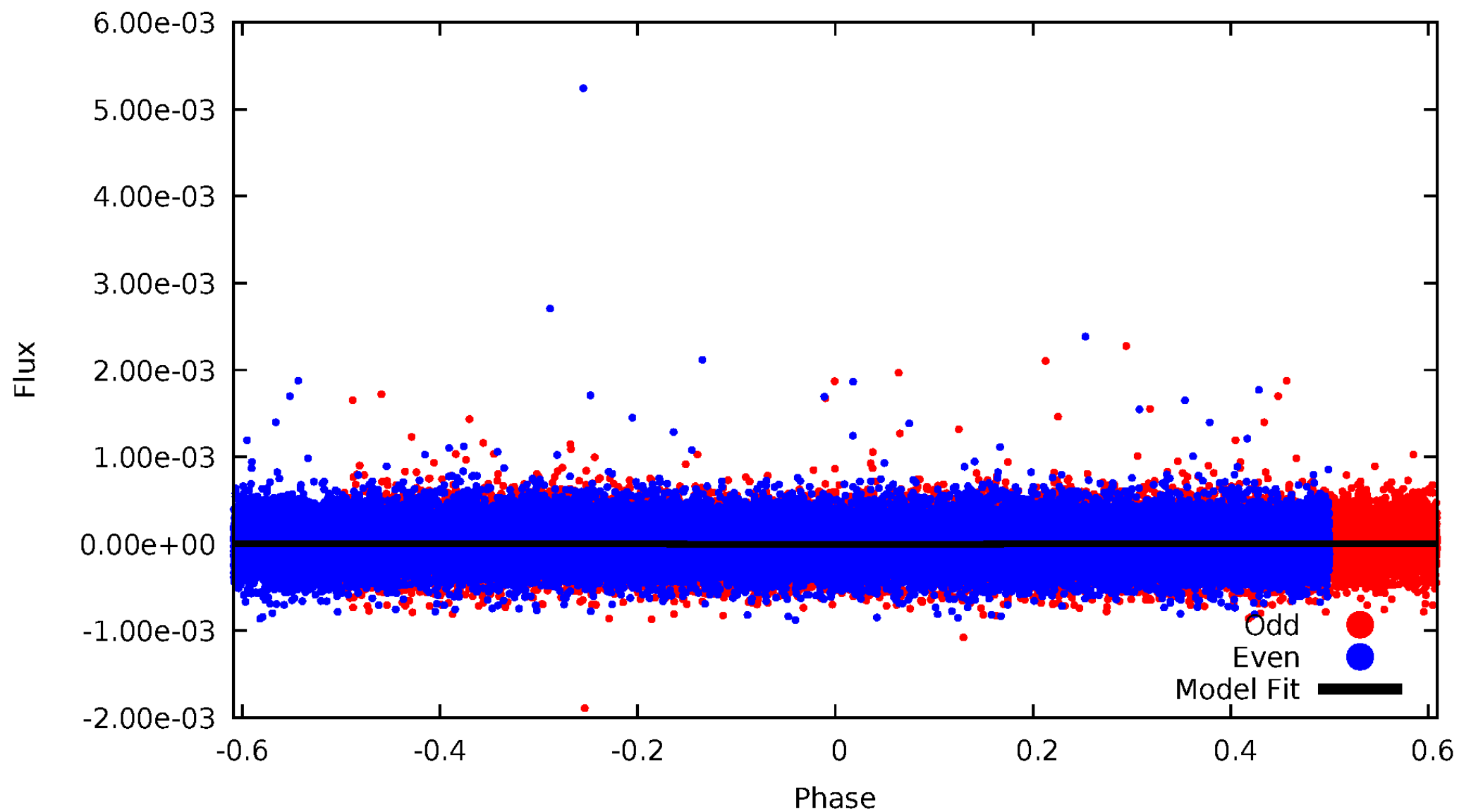


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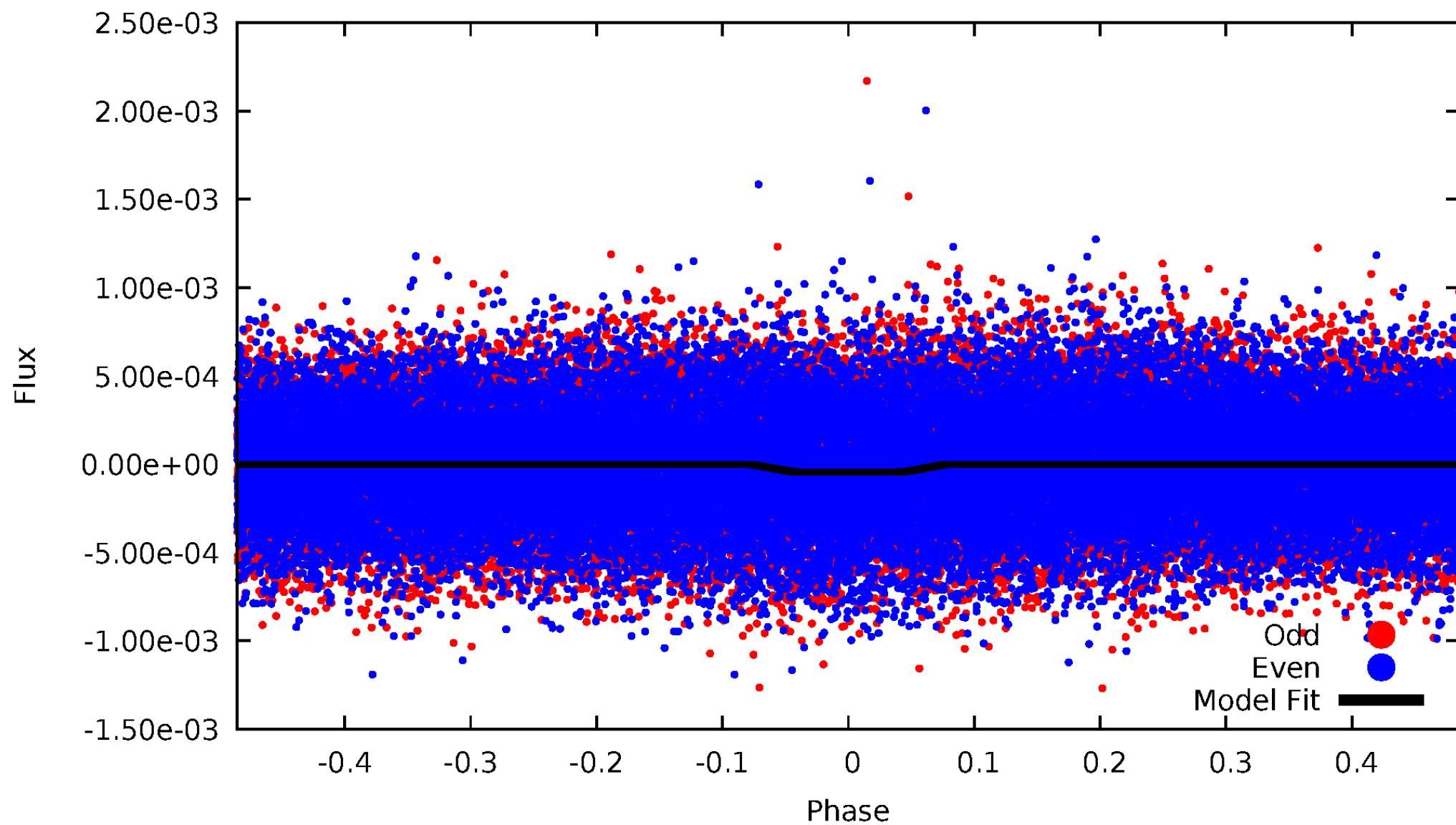
DV Odd/Even

TCE 005960484-01



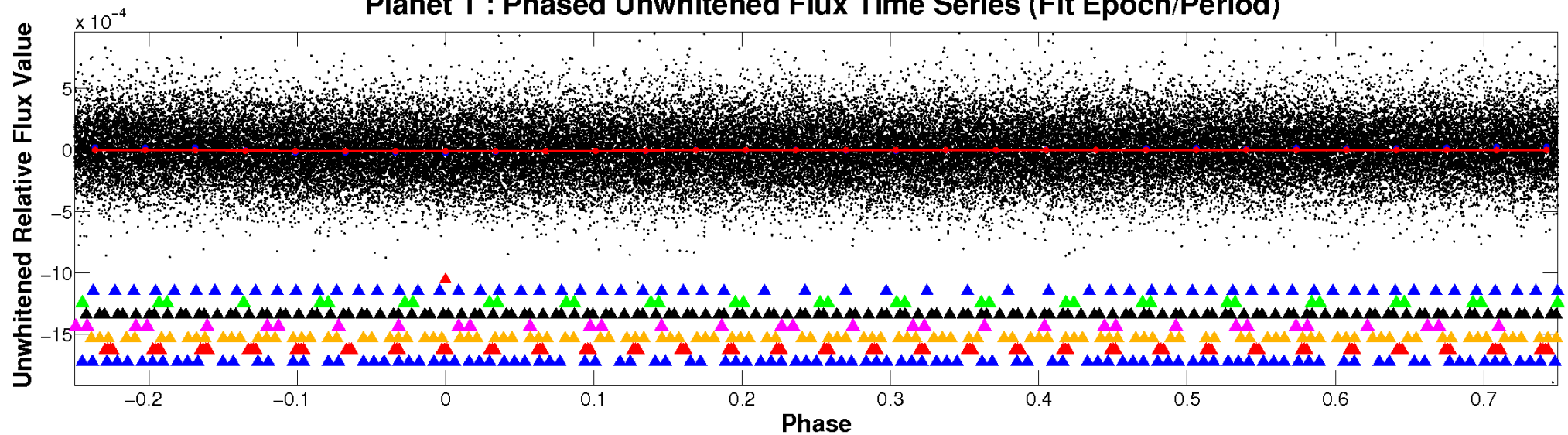
ALT Odd/Even

TCE 005960484-01

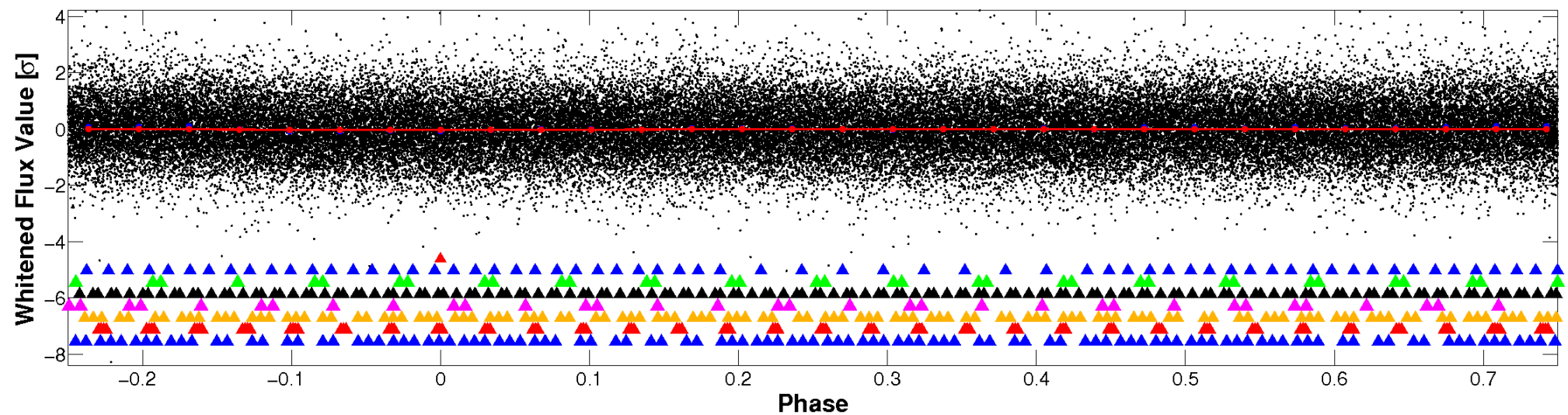


Non-Whitened Vs. Whitened Light Curve

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

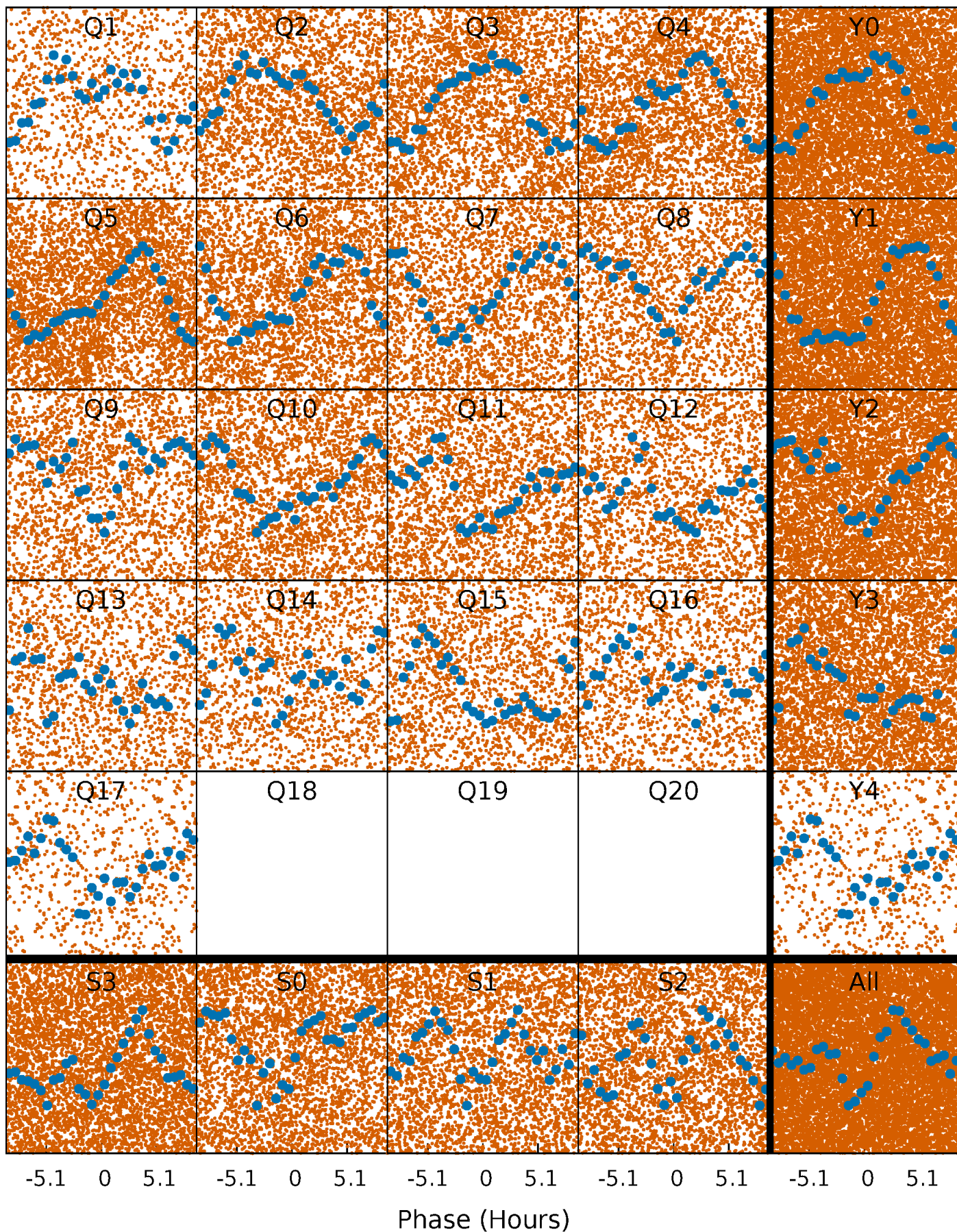


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



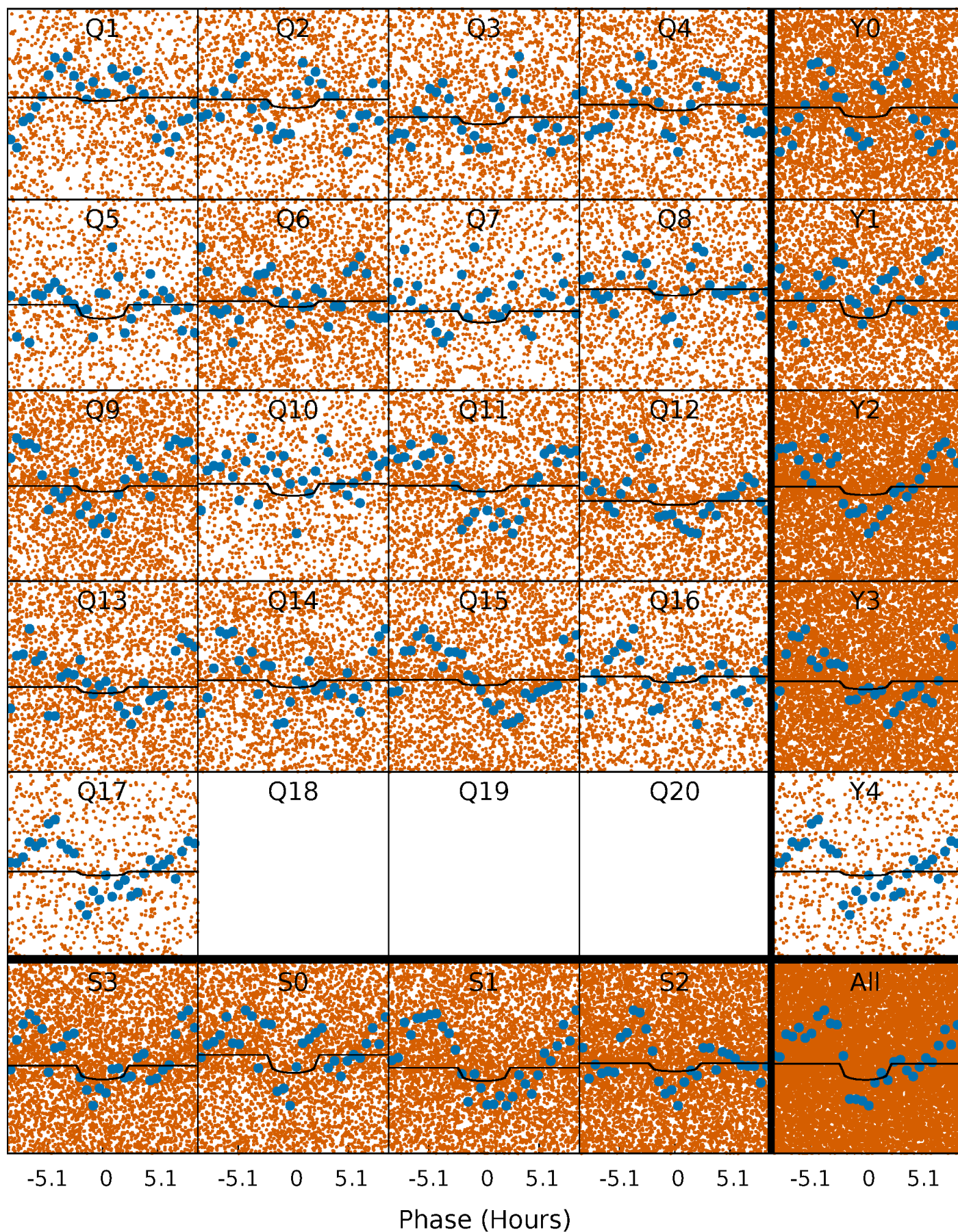
PDC Quarter-Phased Transit Curves

TCE 005960484-01 P= 0.605539 Days $T_0=131.731622$ (BKJD)



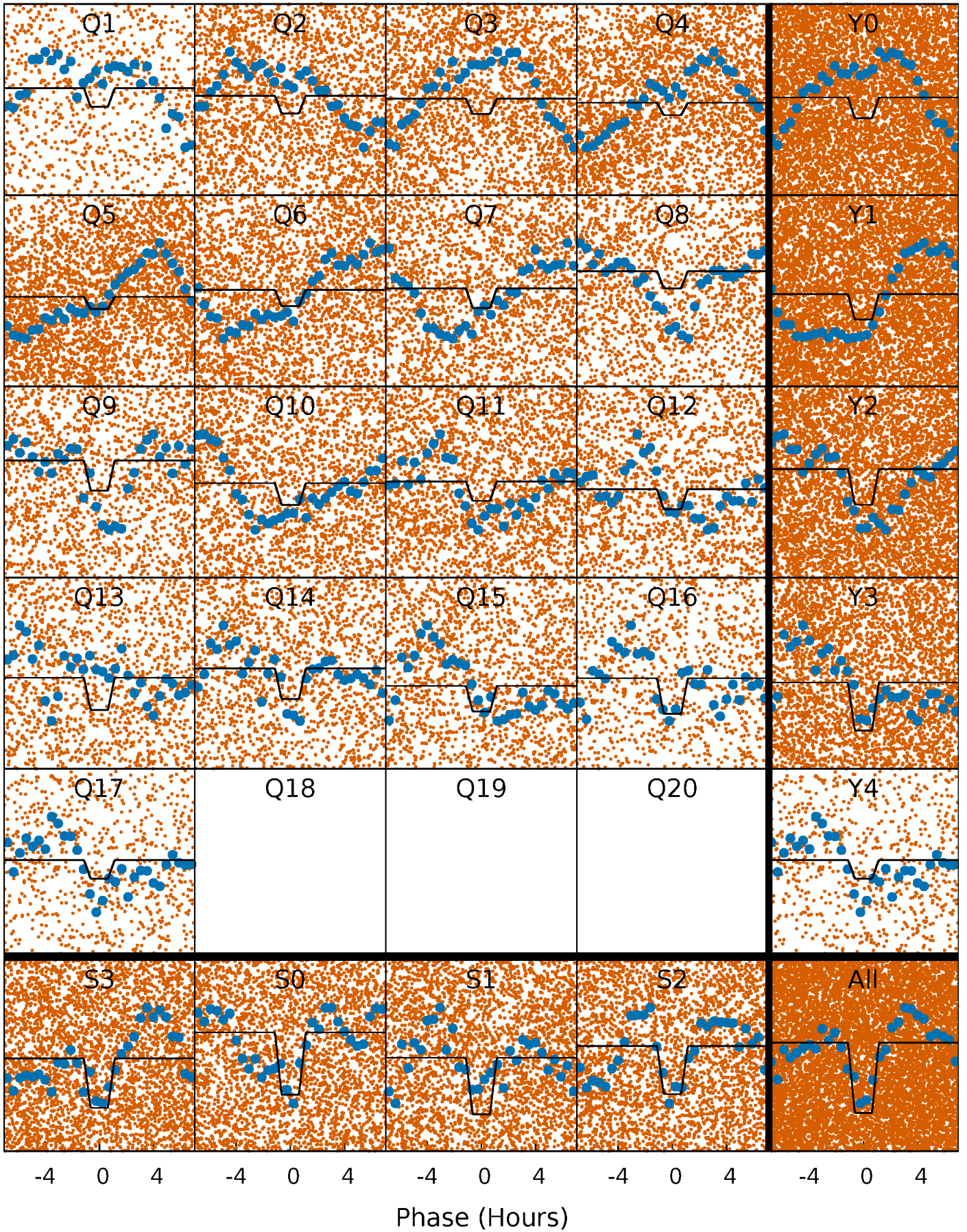
DV Quarter-Phased Transit Curves

TCE 005960484-01 P= 0.605539 Days $T_0=131.731622$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

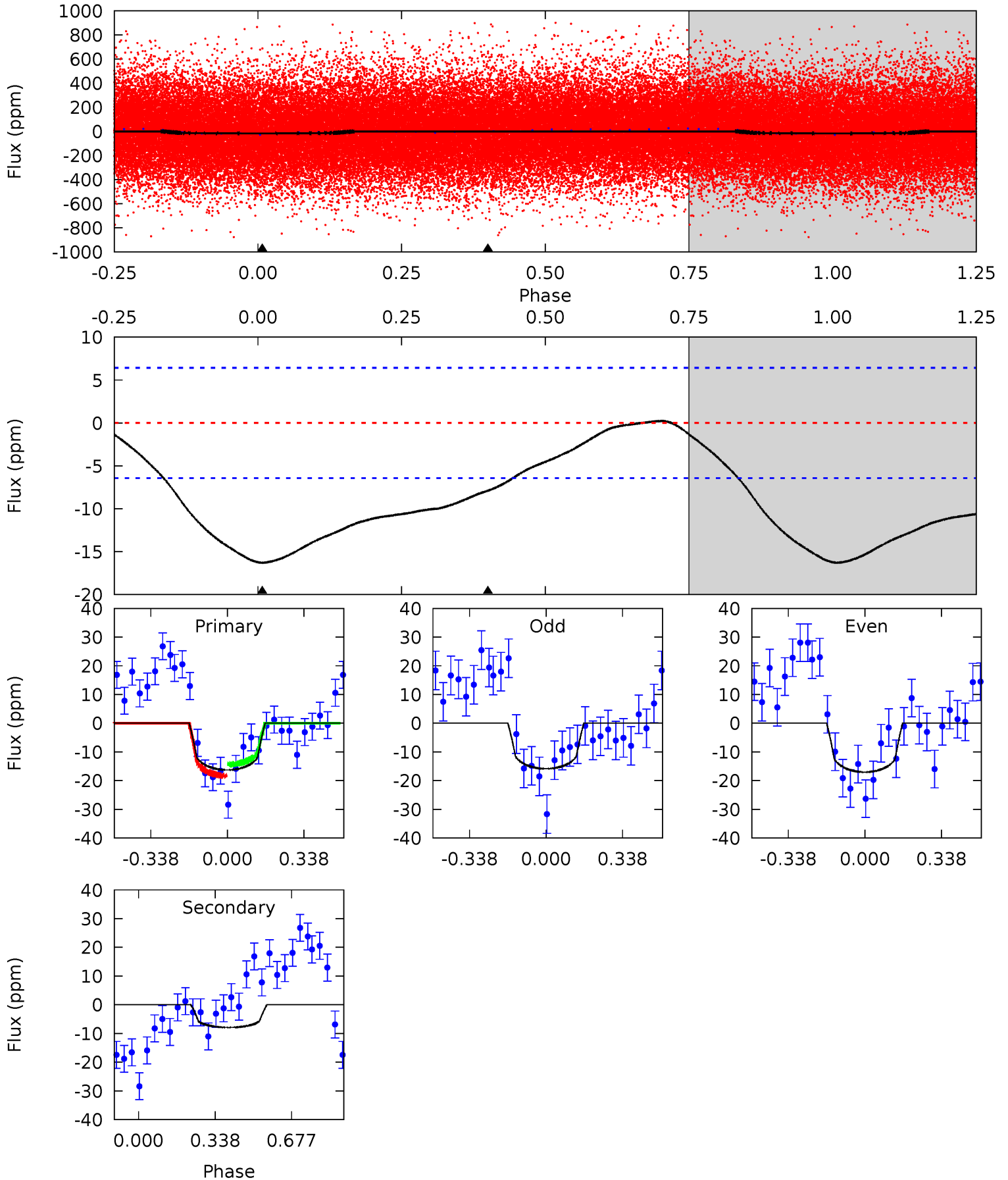
TCE 005960484-01 P= 0.605517 Days $T_0=131.722796$ (BKJD)



DV Model-Shift Uniqueness Test

005960484-01, P = 0.605539 Days, E = 131.126083 Days

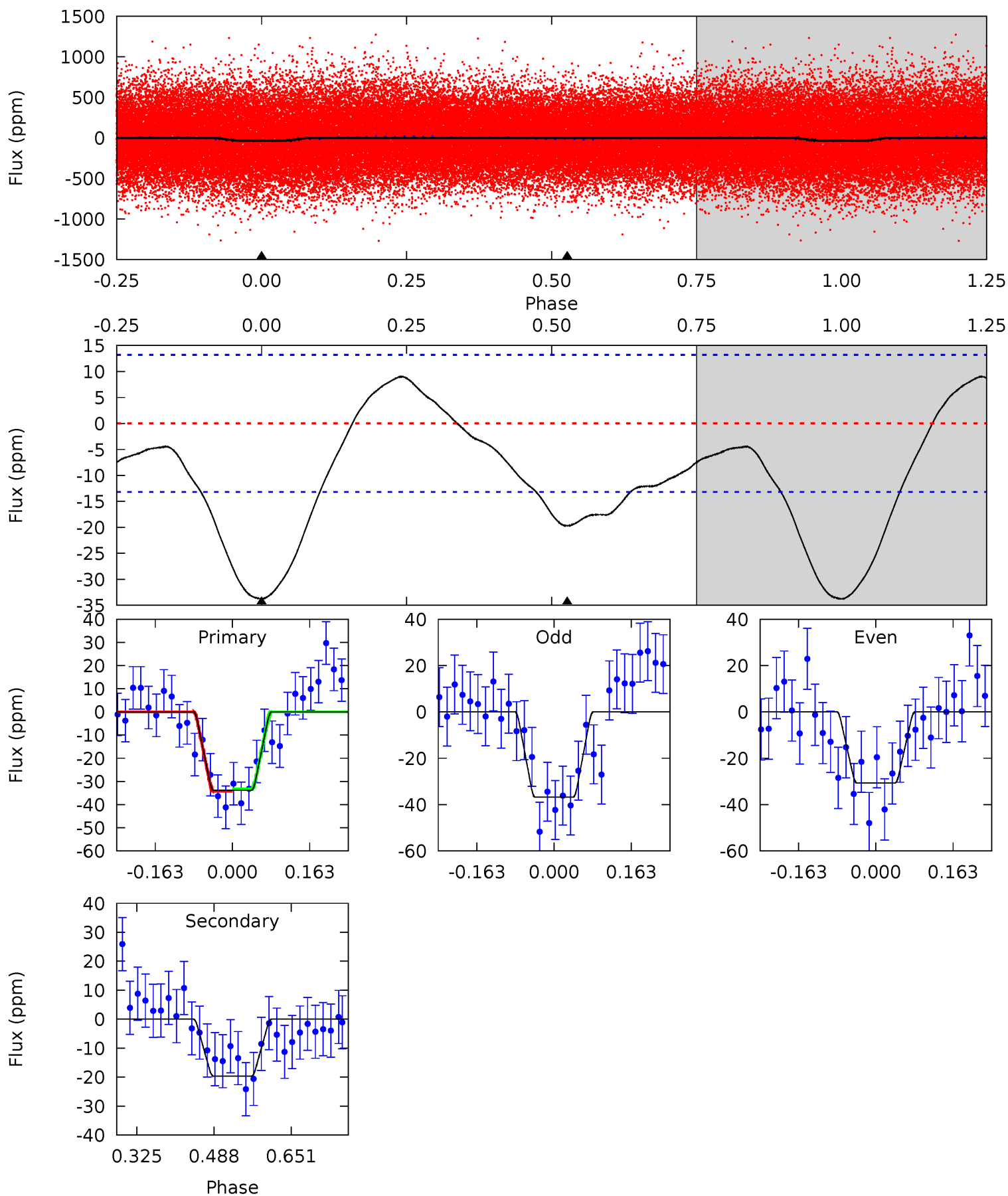
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.9	5.29	0	0	4.30	0.96	0.33	10.9	10.9	5.29	5.29	0.39	0.93	0.01	1.34



Alt Model-Shift Uniqueness Test

005960484-01, P = 0.605517 Days, E = 131.117279 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	6.66	0	0	4.46	1.40	2.20	11.4	11.4	6.66	6.66	1.03	0.81	0.21	0.16



Stellar Parameters For KIC 005960484

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7310^{+228}_{-330}	$4.209^{+0.105}_{-0.195}$	$-0.140^{+0.250}_{-0.350}$	$1.568^{+0.508}_{-0.274}$	$1.452^{+0.211}_{-0.211}$	$0.531^{+0.265}_{-0.278}$
	+3%/-5%	+2%/-5%	+179%/-250%	+32%/-17%	+15%/-15%	+50%/-52%
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 005960484-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-8 ± 1	$0.79^{+0.74}_{-0.51}$	4523^{+353}_{-288}	5491^{+4770}_{-1963}	$1.726^{+12.334}_{-1.285}$
Alt.	-20 ± 3	$1.26^{+0.87}_{-0.75}$	4541^{+343}_{-277}	5400^{+4107}_{-1462}	$1.665^{+8.532}_{-1.091}$

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

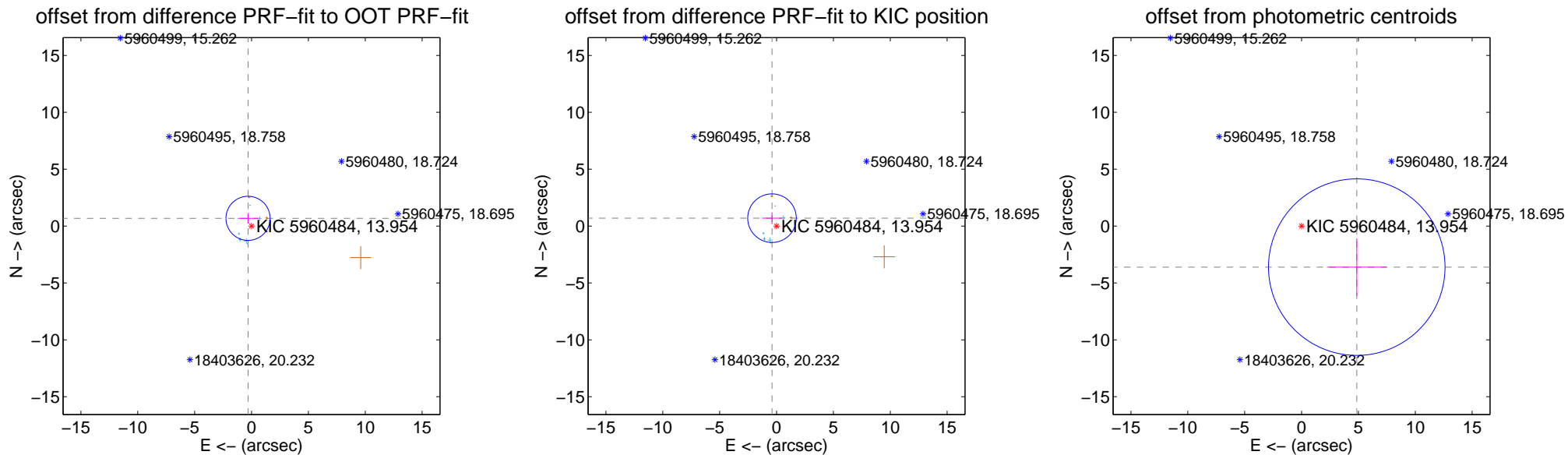
DV Centroid Data

Supplemental centroid analysis for 005960484-01. Kepler magnitude: 13.95. Transit SNR 3.71

There are 7 quarters with good PRF difference image offsets

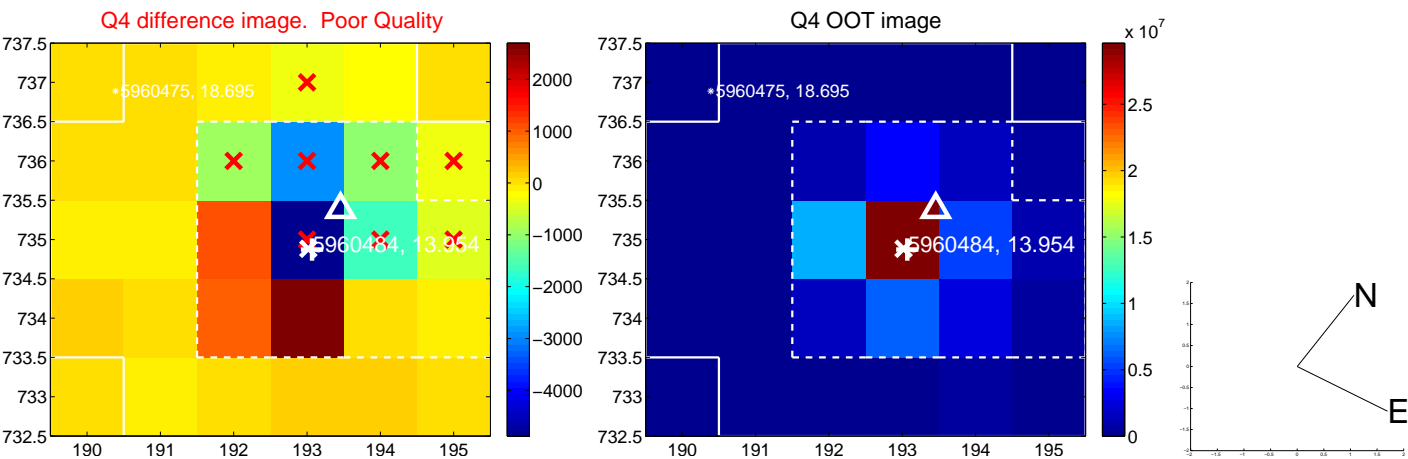
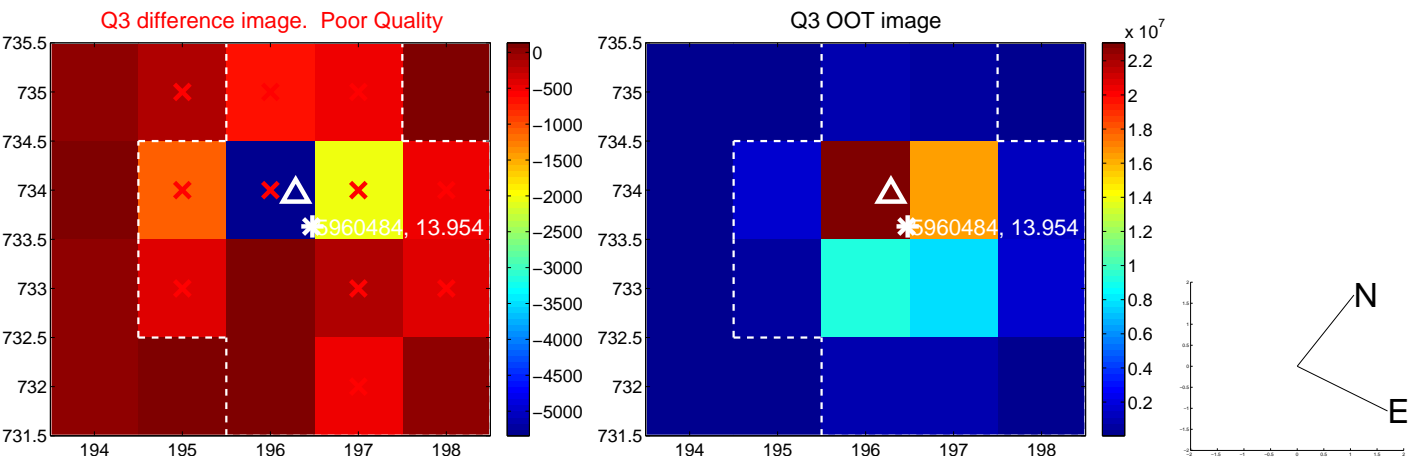
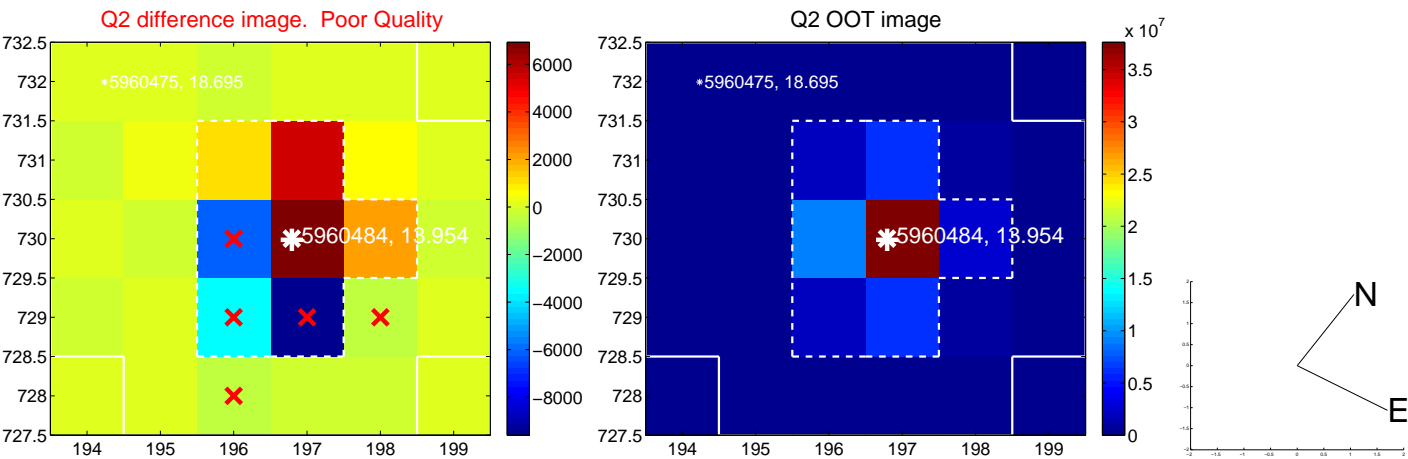
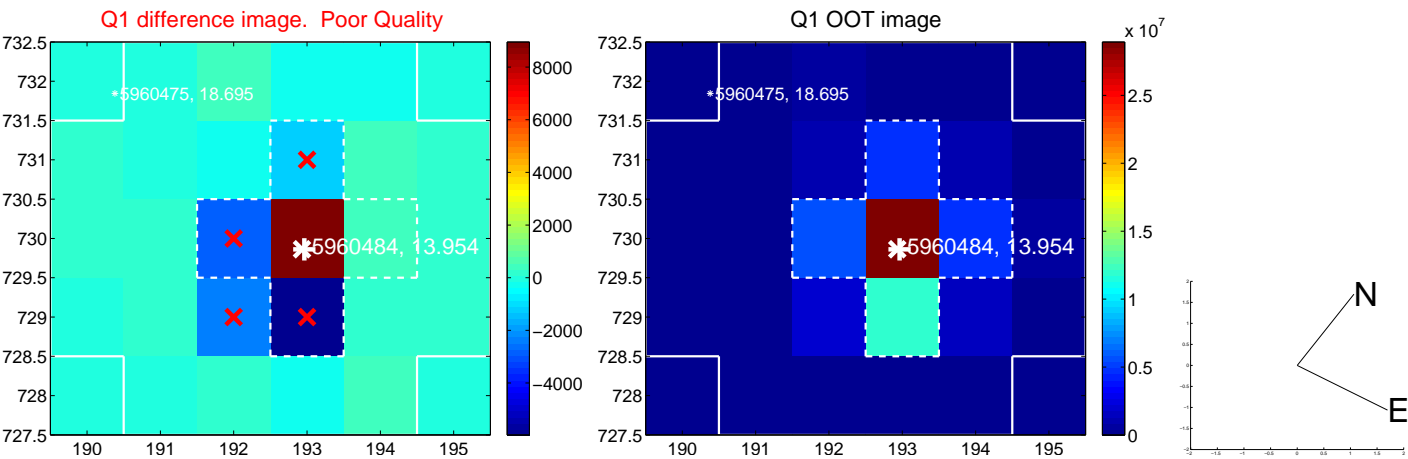
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.745 ± 0.647	1.15	0.306 ± 0.902	0.680 ± 0.461
PRF-fit source offset from KIC position	0.800 ± 0.712	1.12	0.398 ± 0.863	0.694 ± 0.516
photometric centroid source offset	6.05 ± 2.59	2.34	-4.85 ± 2.62	-3.61 ± 2.53

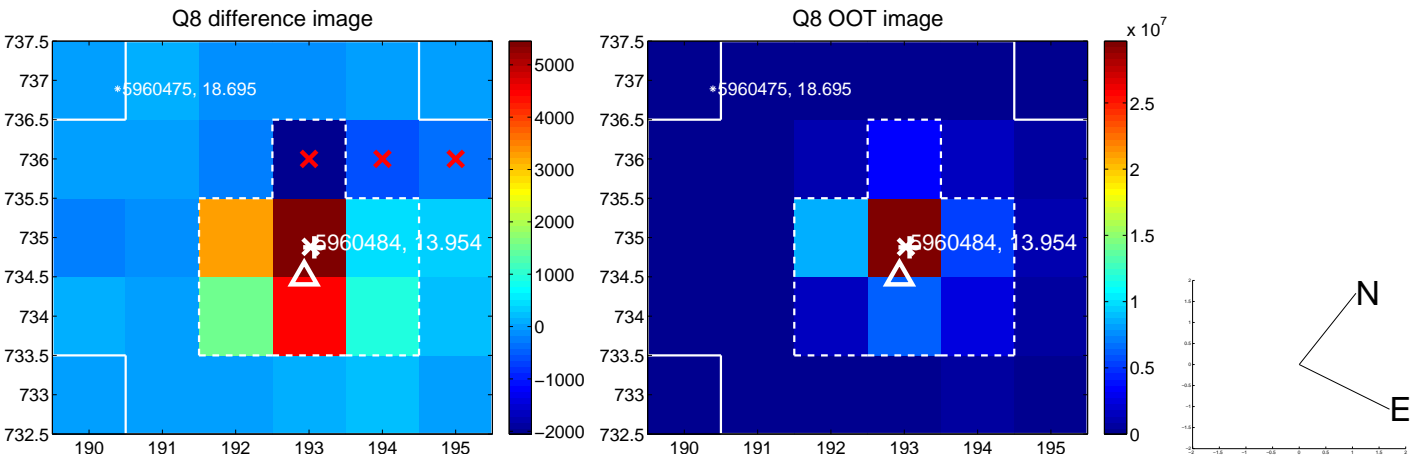
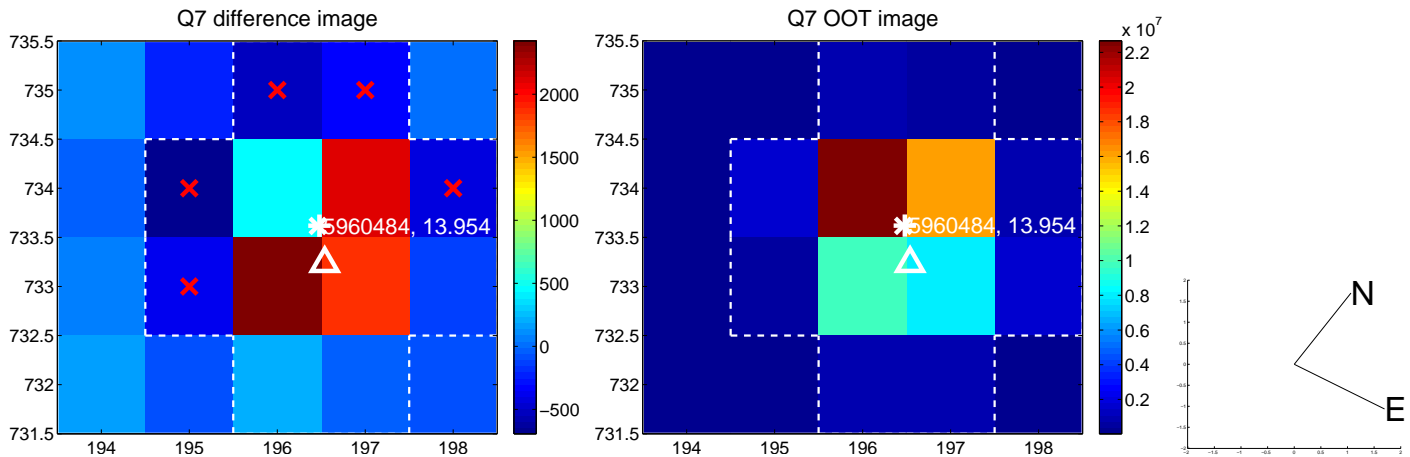
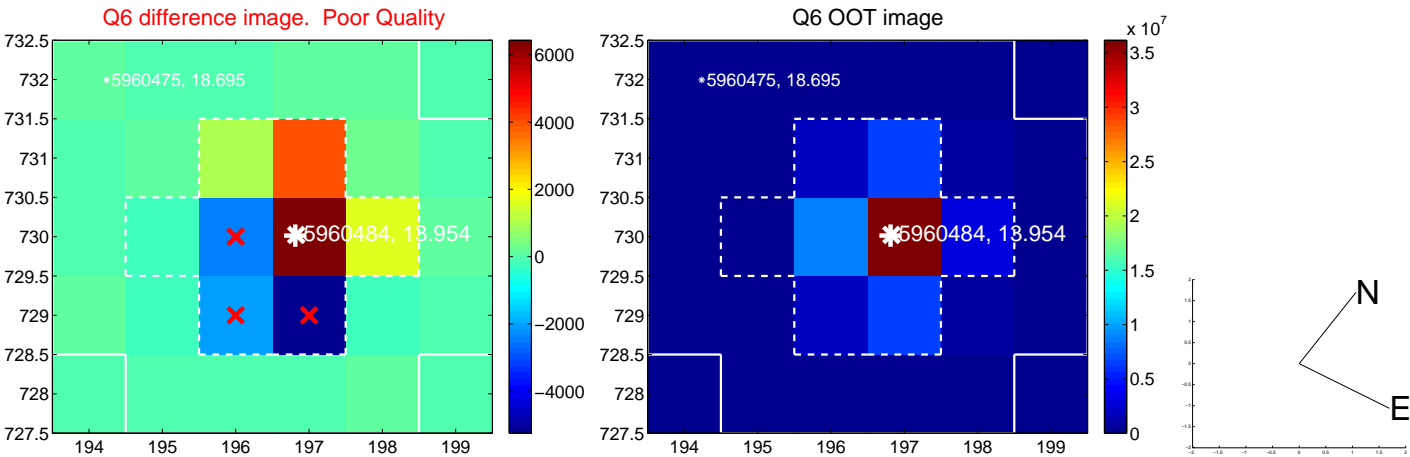
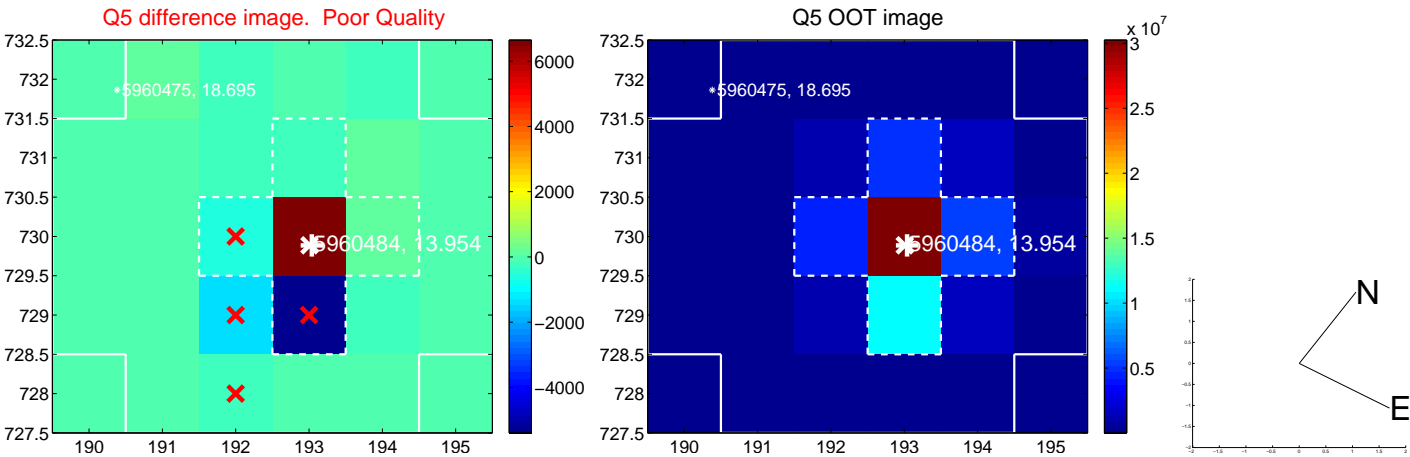


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

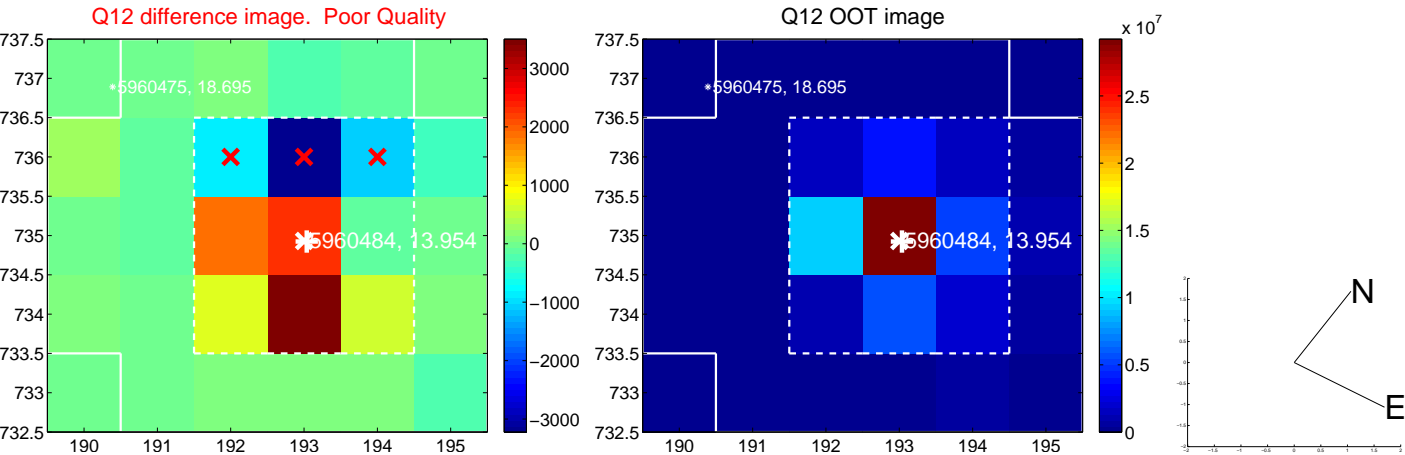
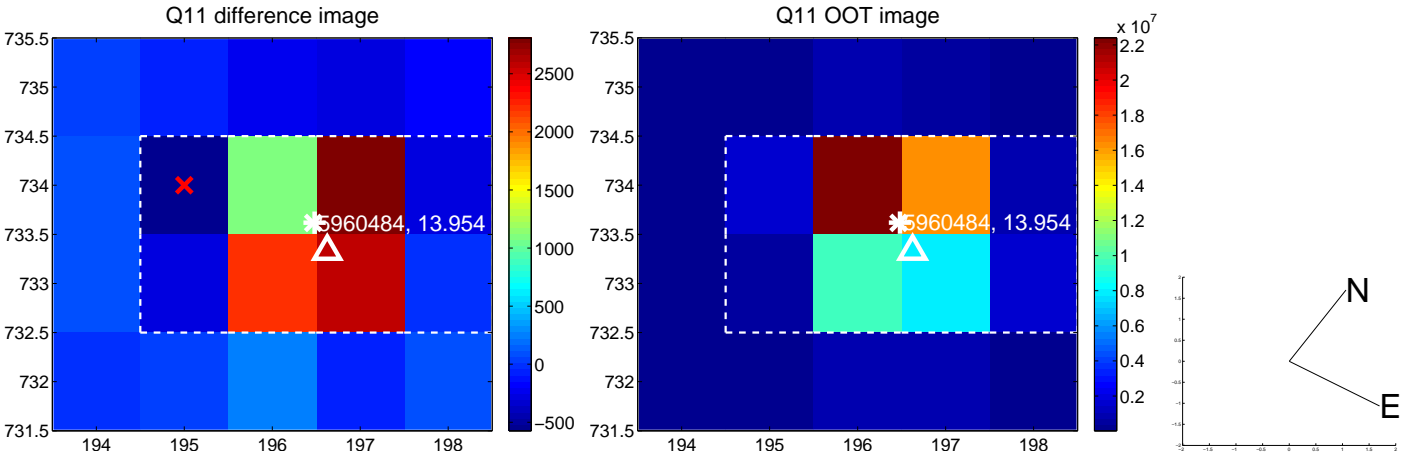
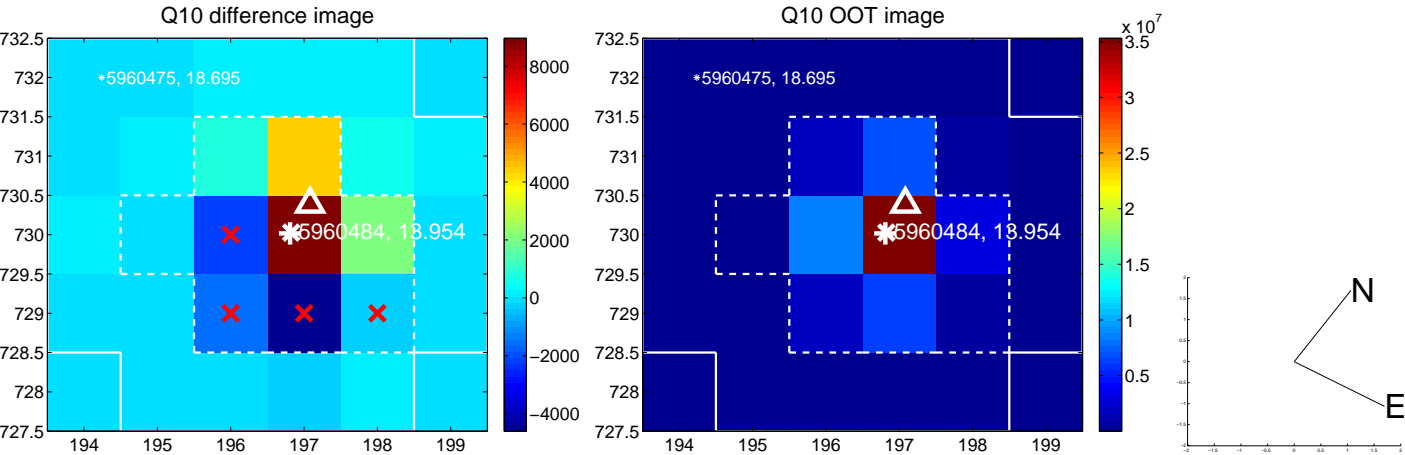
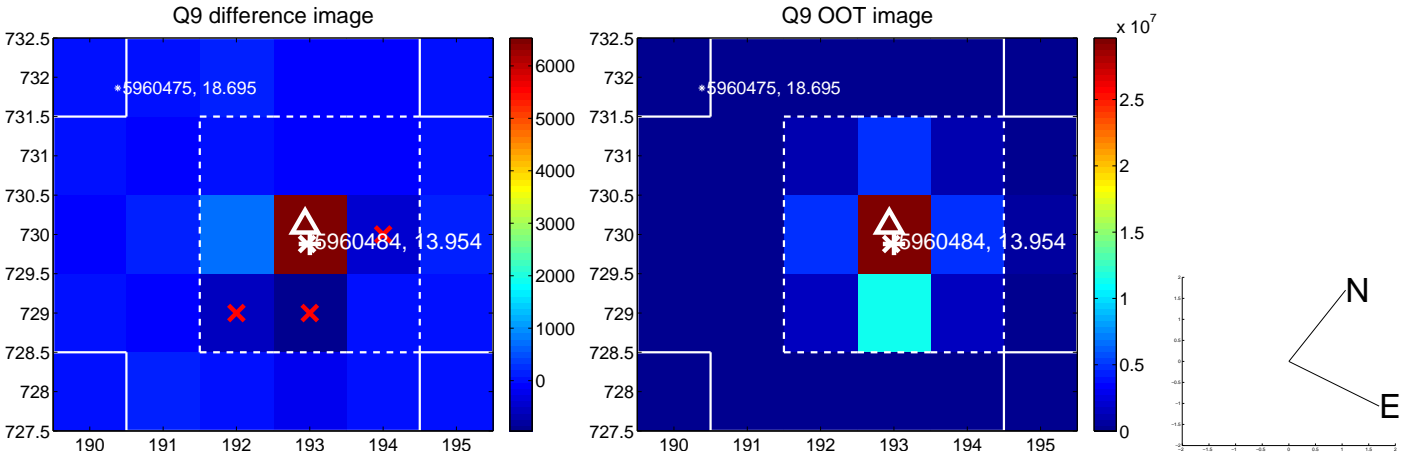
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



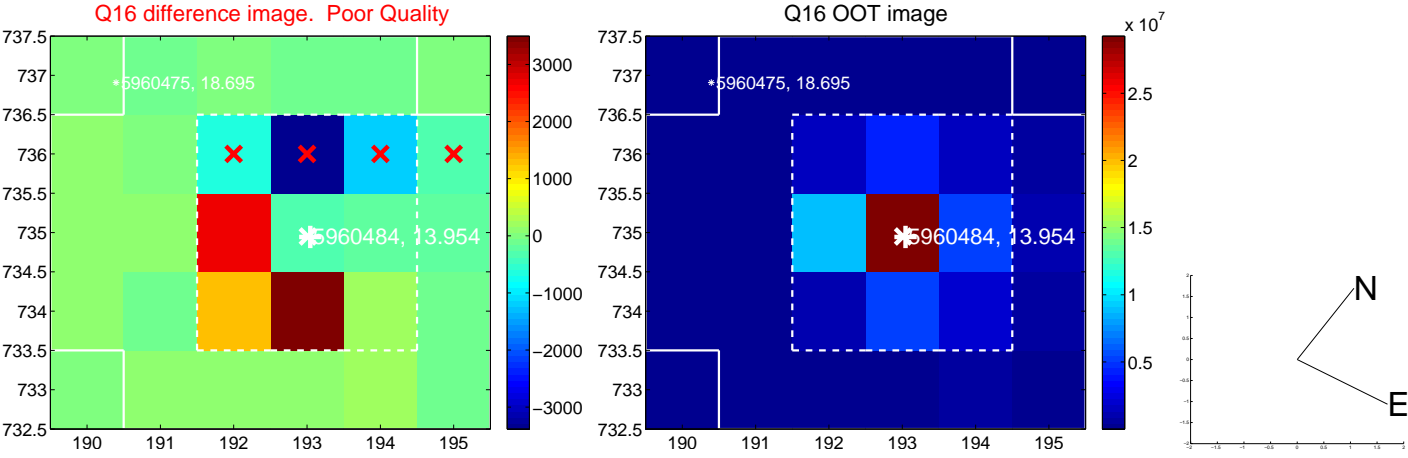
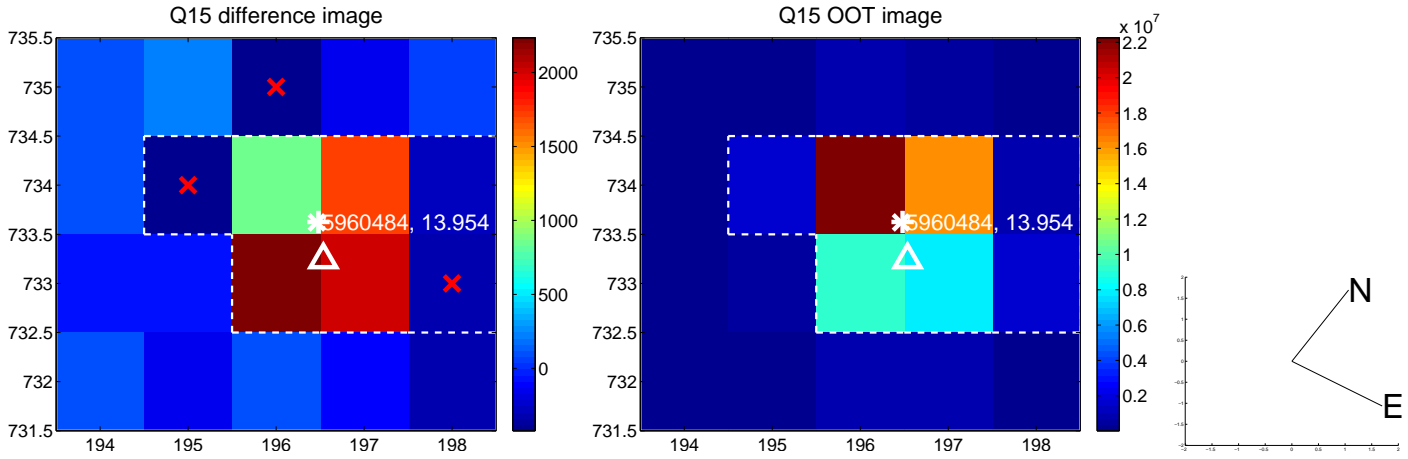
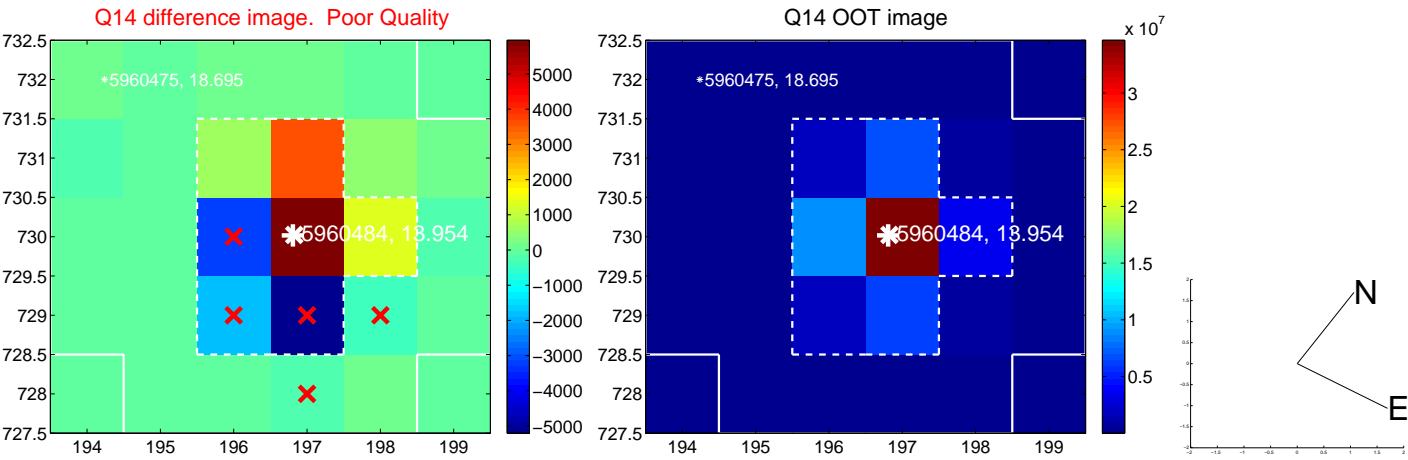
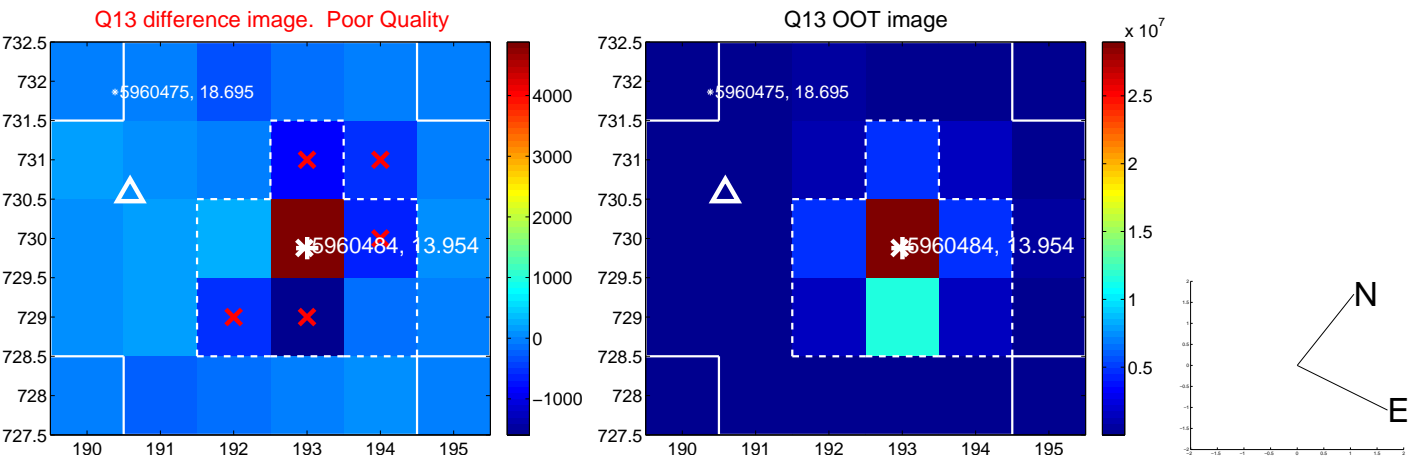
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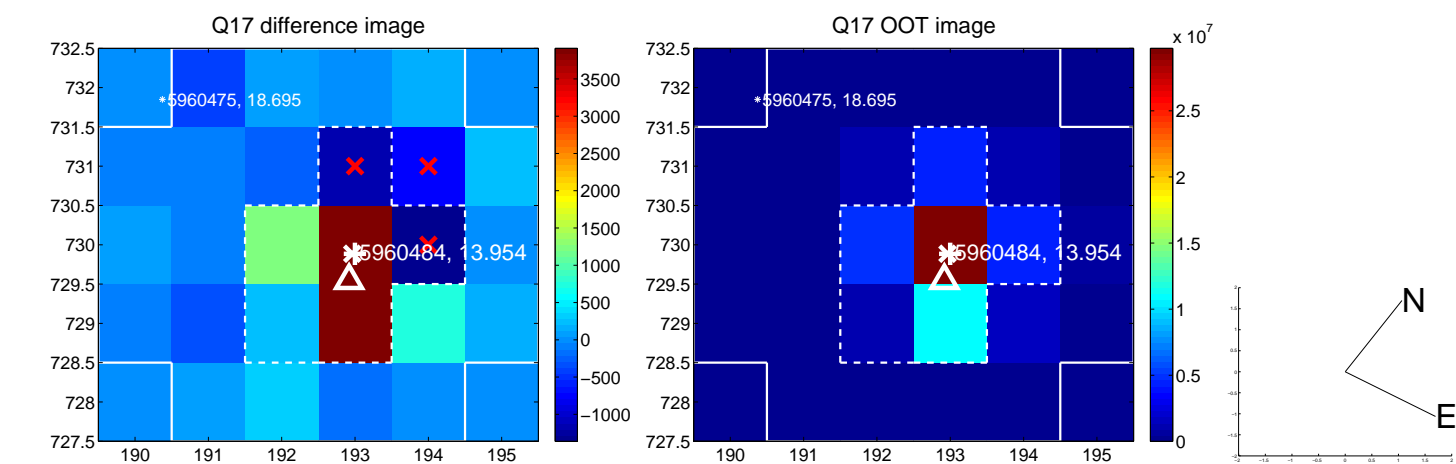
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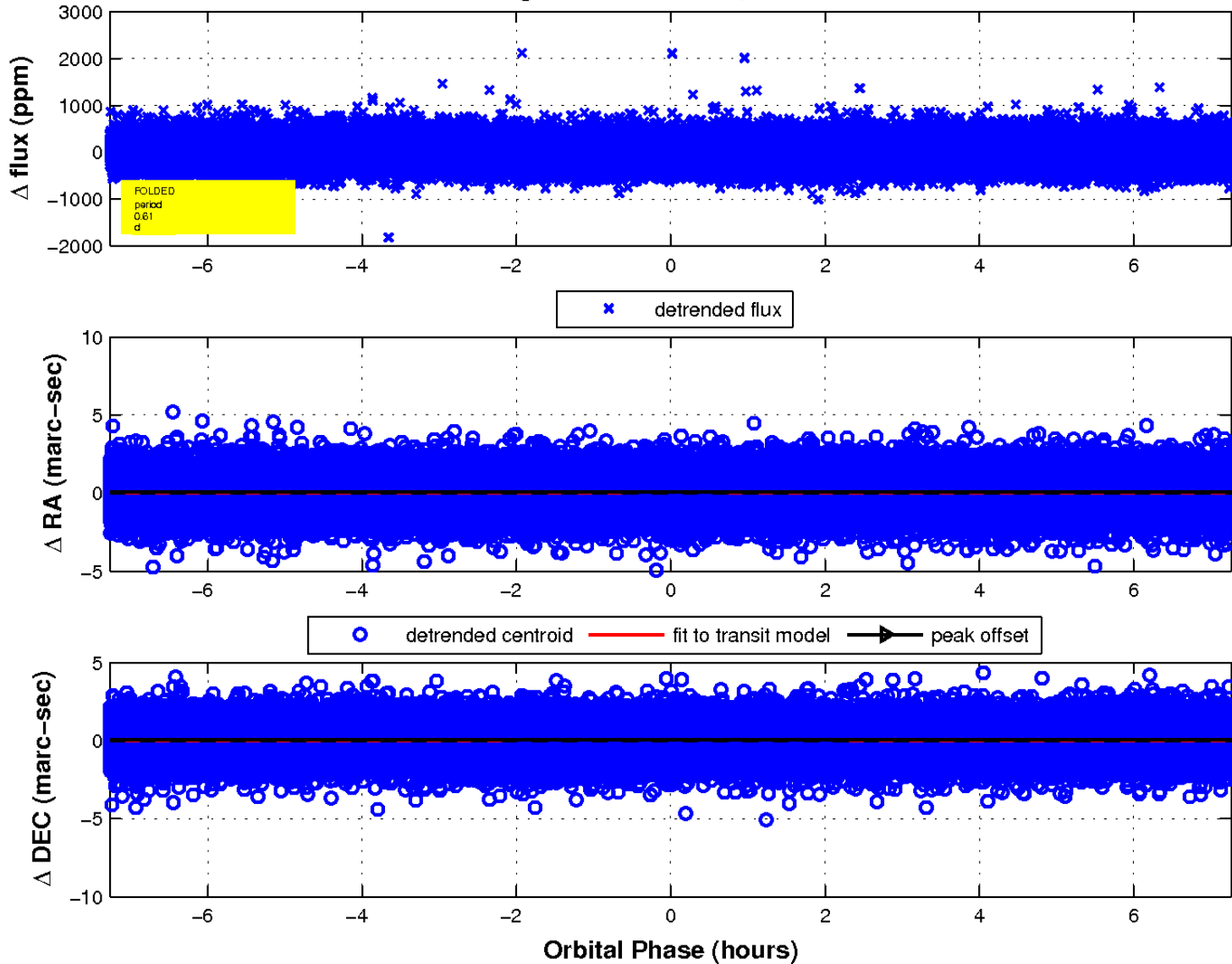
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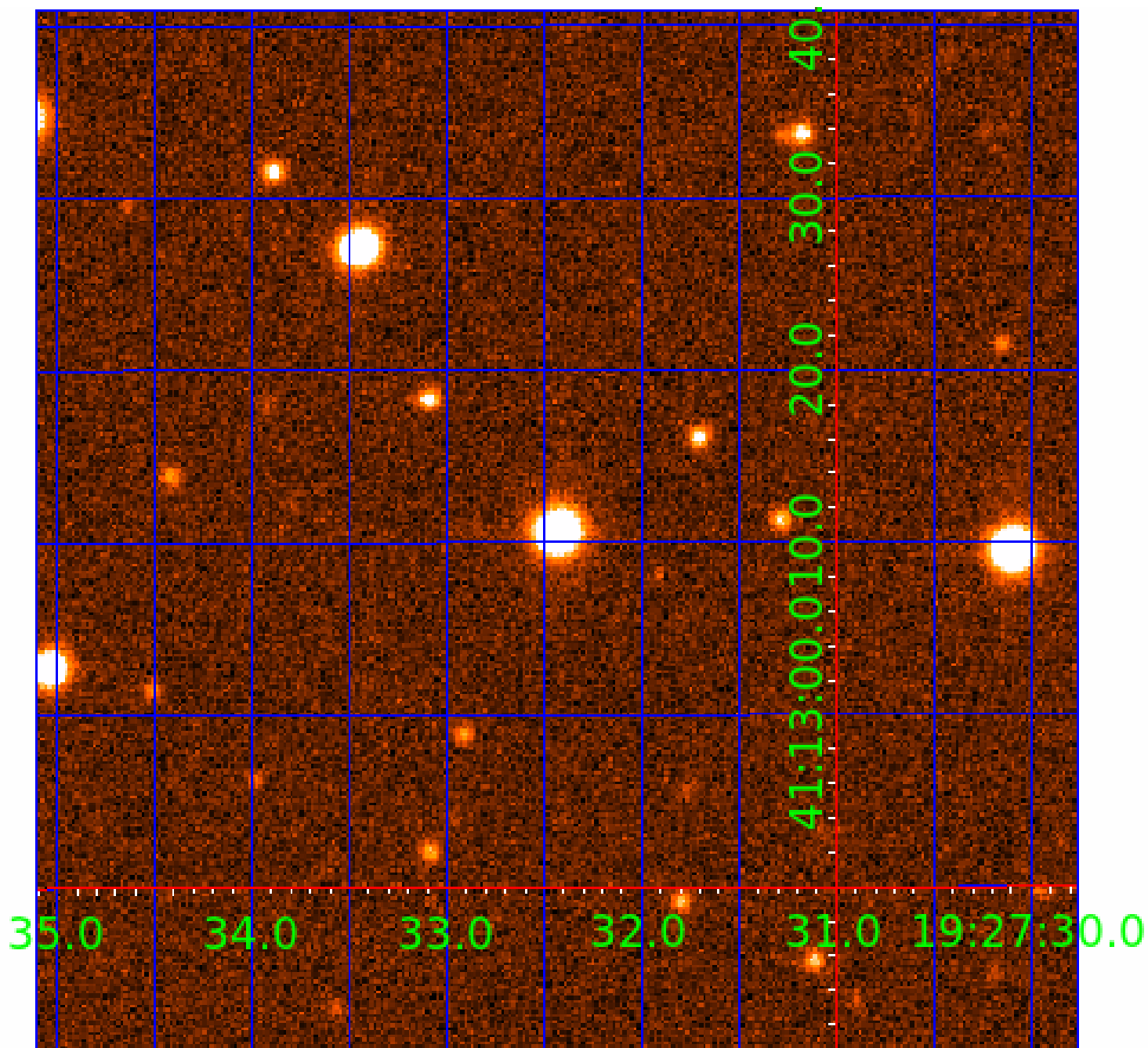


fluxWeightedCentroids, Planet 1 of 8



UKIRT Image

Declination



KIC 005960484

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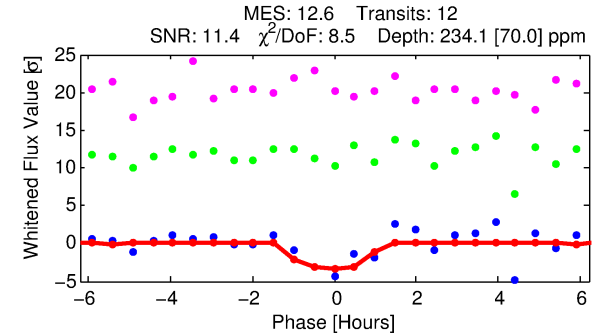
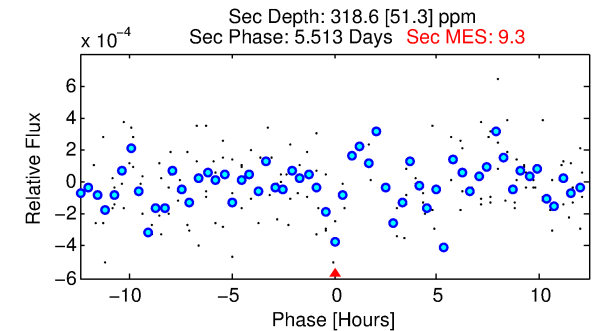
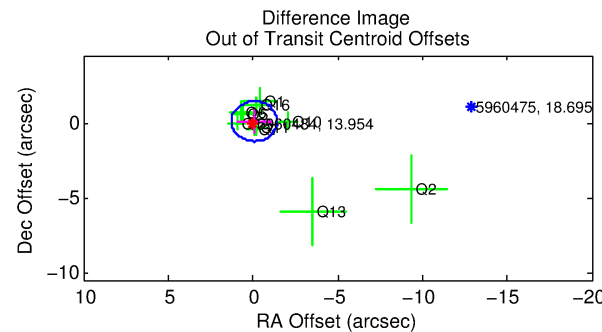
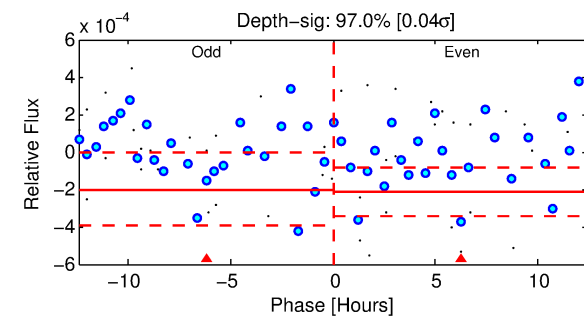
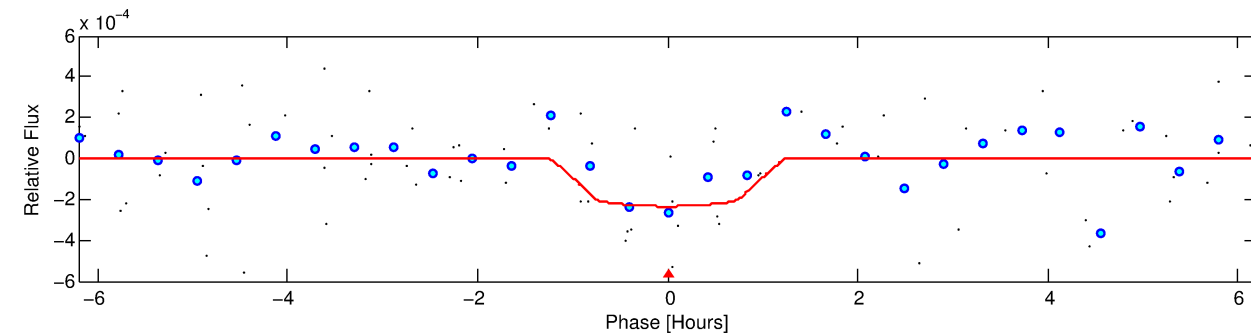
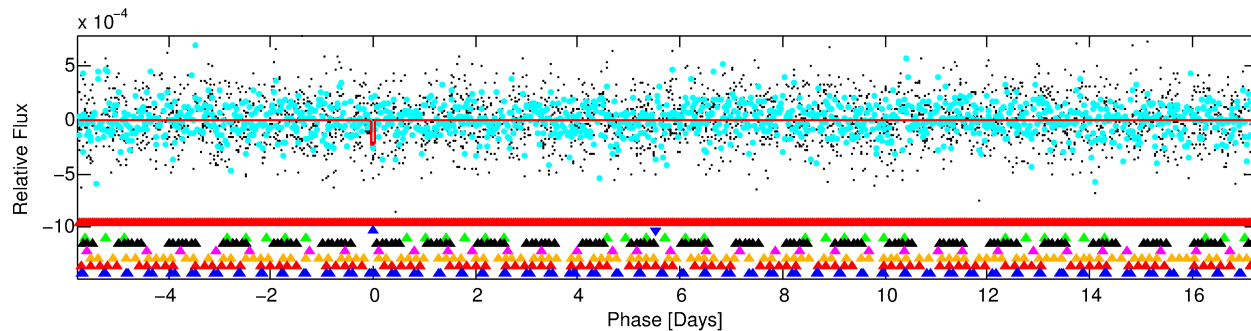
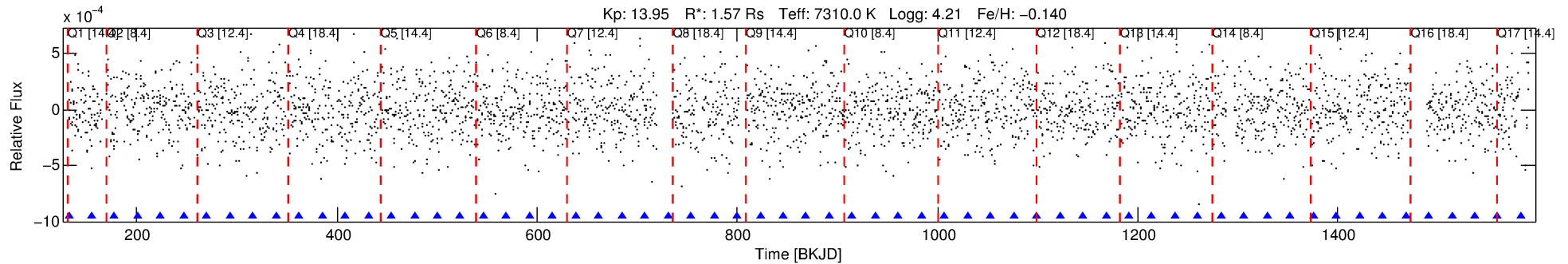
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005960484-02

No Significant Match Found

DV One-Page Summary

KIC: 5960484 Candidate: 2 of 8 Period: 23.027 d



DV Fit Results:

Period = 23.02704 [0.00043] d
Epoch = 132.0034 [0.0115] BKJD
Rp/R* = 0.0151 [0.0541]
a/R* = 61.01 [1332.84]
b = 0.72 [14.93]
Seff = 195.50 [80.34]
Teff = 953 [98] K
Rp = 2.59 [9.29] Re
a = 0.1794 [0.0471] AU
Ag = 843.64 [6049.72] [0.14 σ]
Teffp = 7945 [14229] K [0.49 σ]

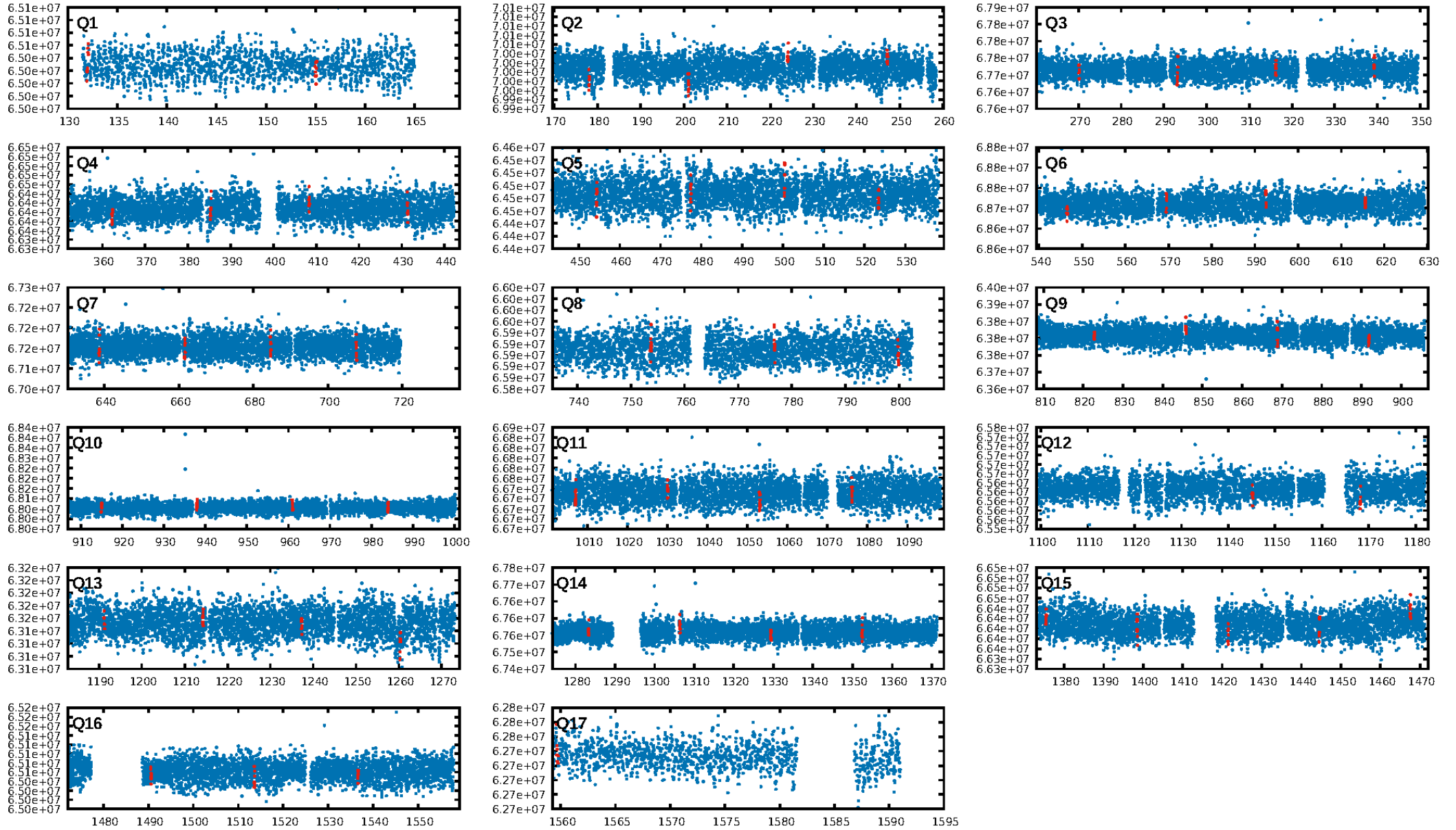
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [59.50 σ]
LongPeriod-sig: 100.0% [169.68 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: 1.10e-12
RollingBand-fgt: 1.00 [10/10]
GhostDiagnostic-chr: 0.07483
Centroid-sig: 13.8%
Centroid-so: 1.160 arcsec [1.46 σ]
OotOffset-rm: 0.122 arcsec [0.27 σ]
OotOffset-st: 3/2/2/3 [10]
KicOffset-rm: 0.152 arcsec [0.15 σ]
KicOffset-st: 3/2/2/3 [10]
DiffImageQuality-fgm: 0.50 [5/10]
DiffImageOverlap-fno: 0.00 [0/16]

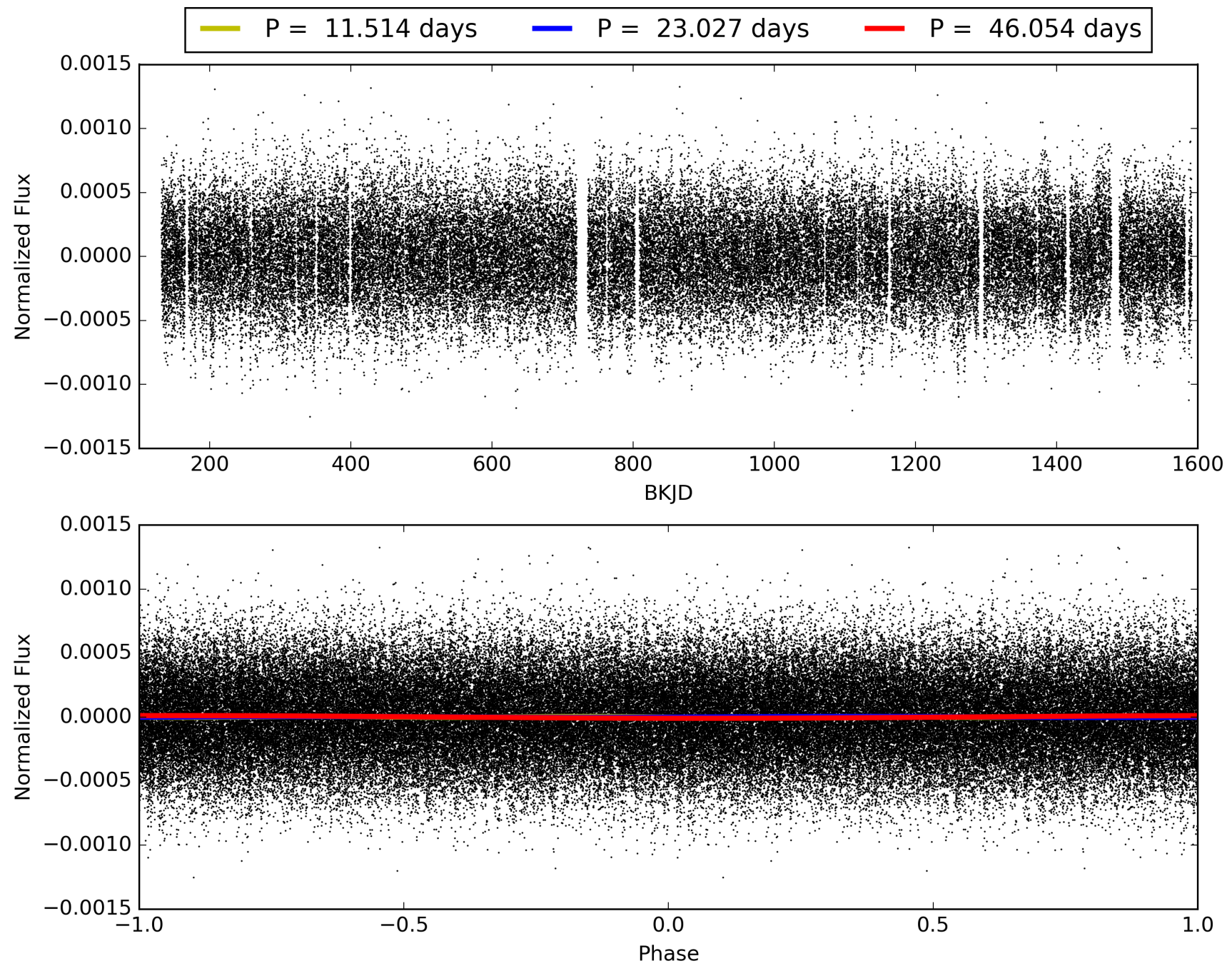
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 07:12:19 Z

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

TCE 005960484-02, PDC Light Curves

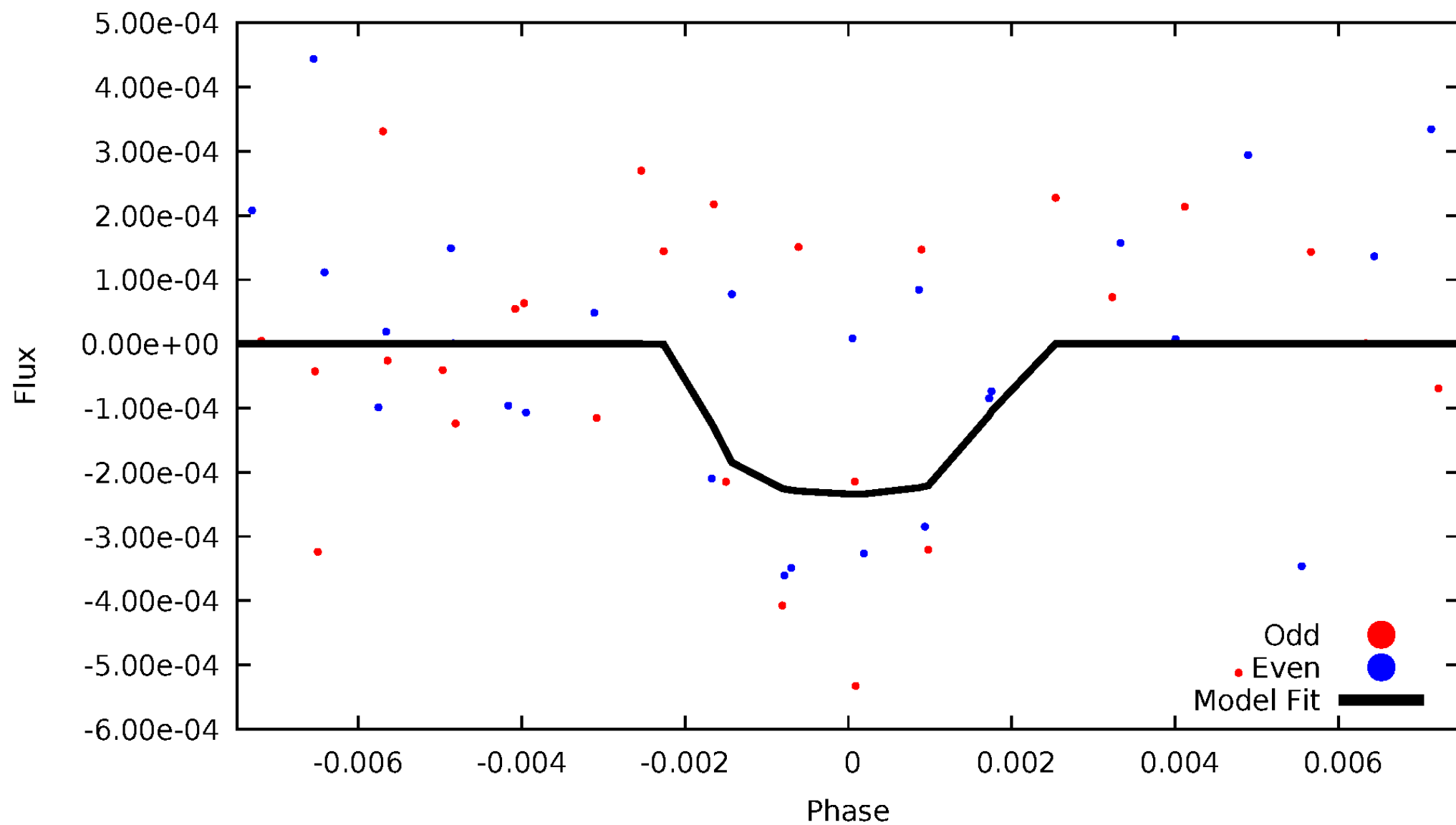


TCE 005960484-02



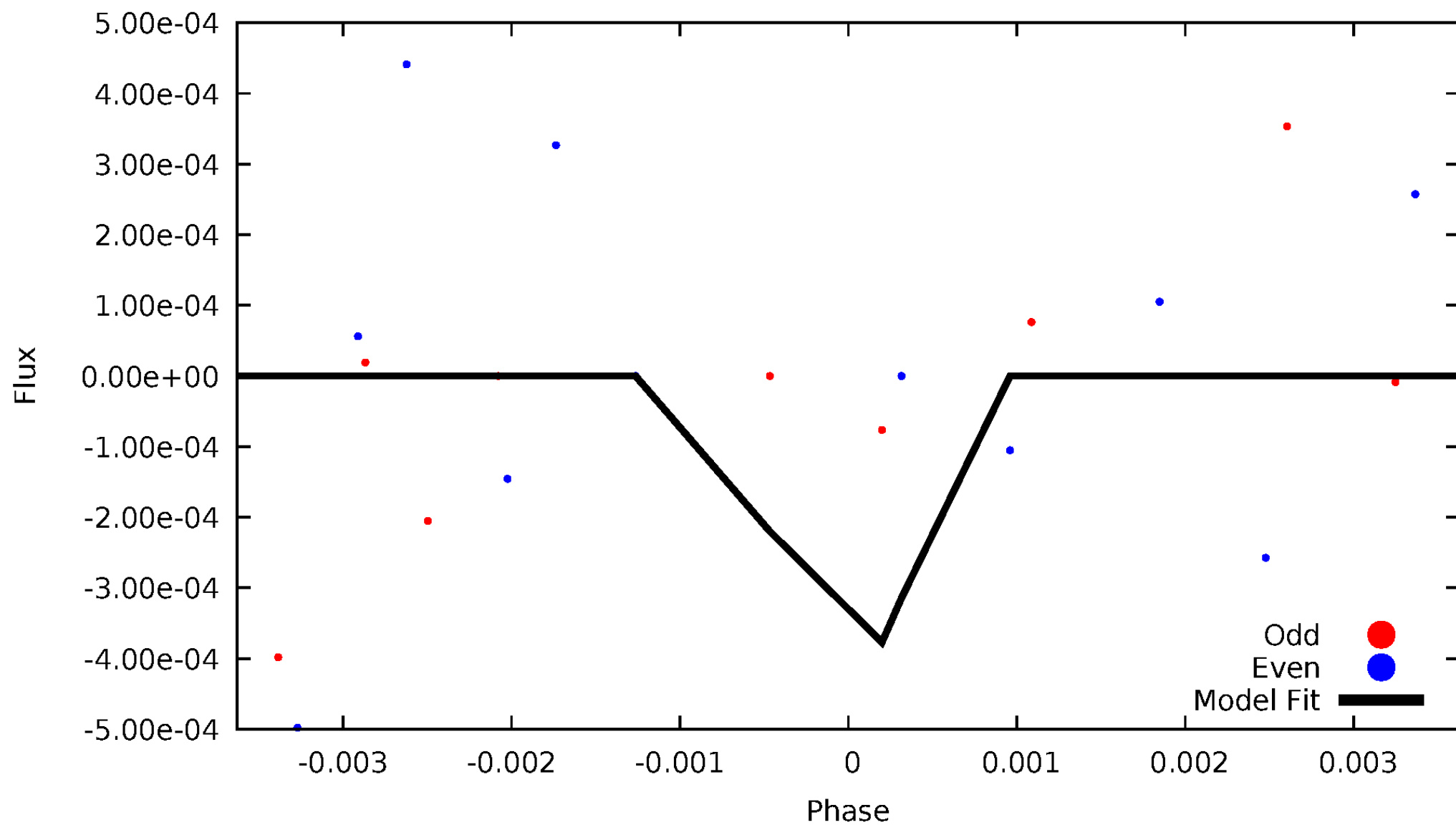
DV Odd/Even

TCE 005960484-02



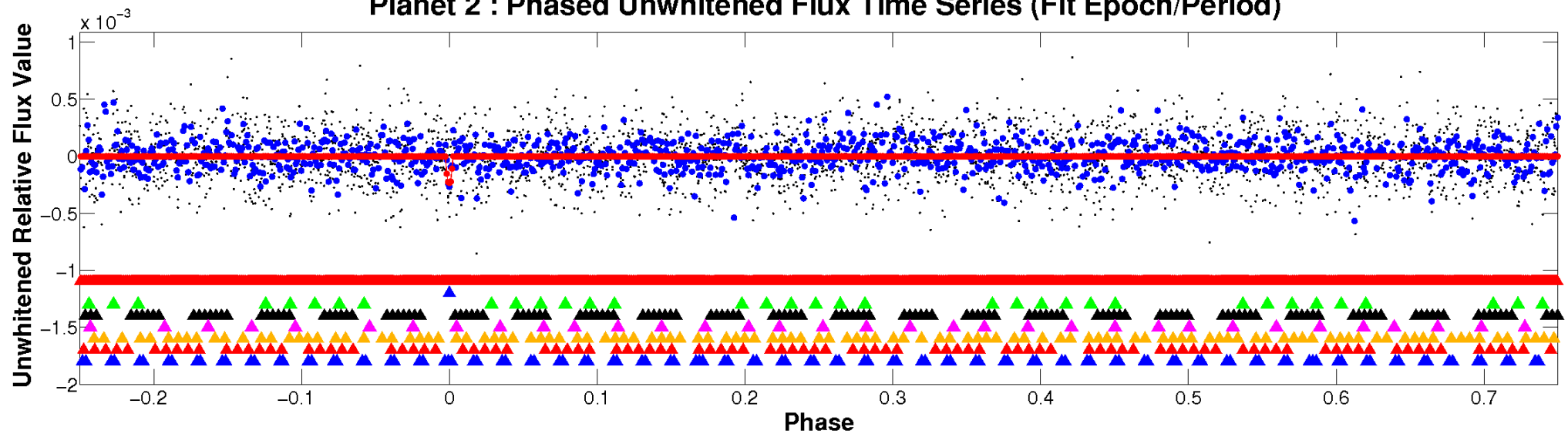
ALT Odd/Even

TCE 005960484-02

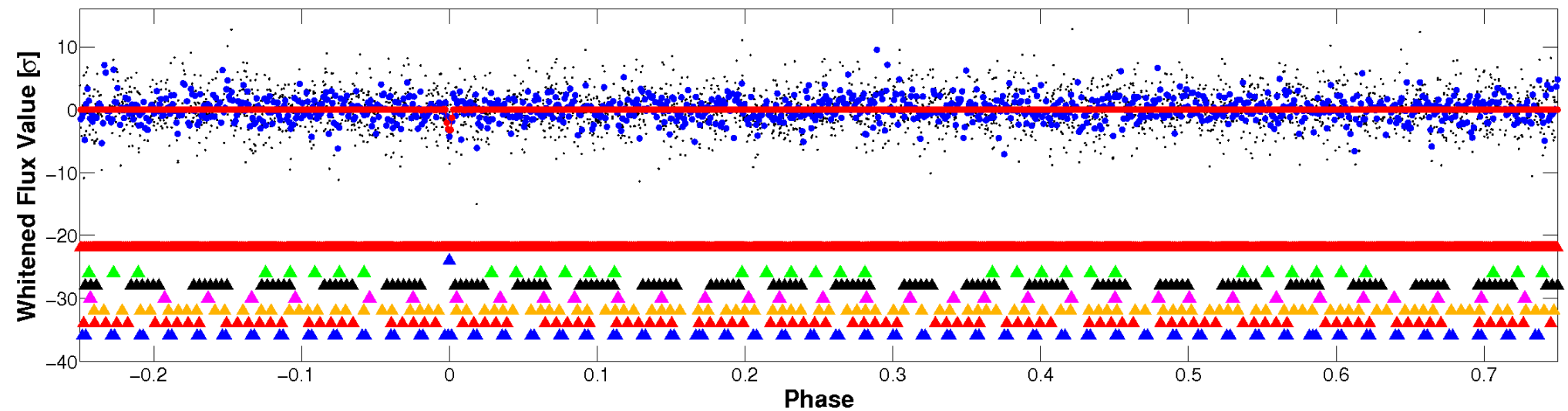


Non-Whitened Vs. Whitened Light Curve

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

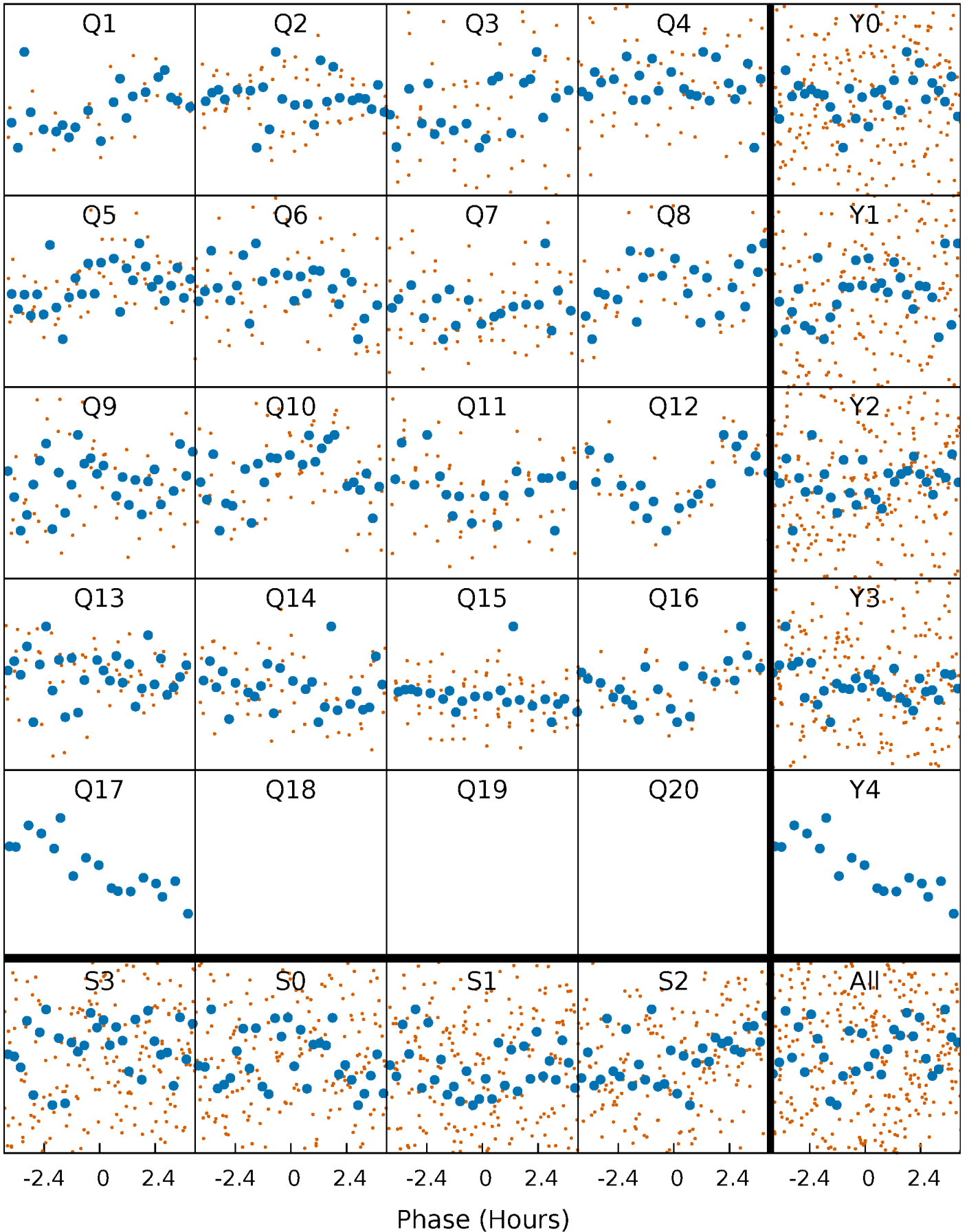


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



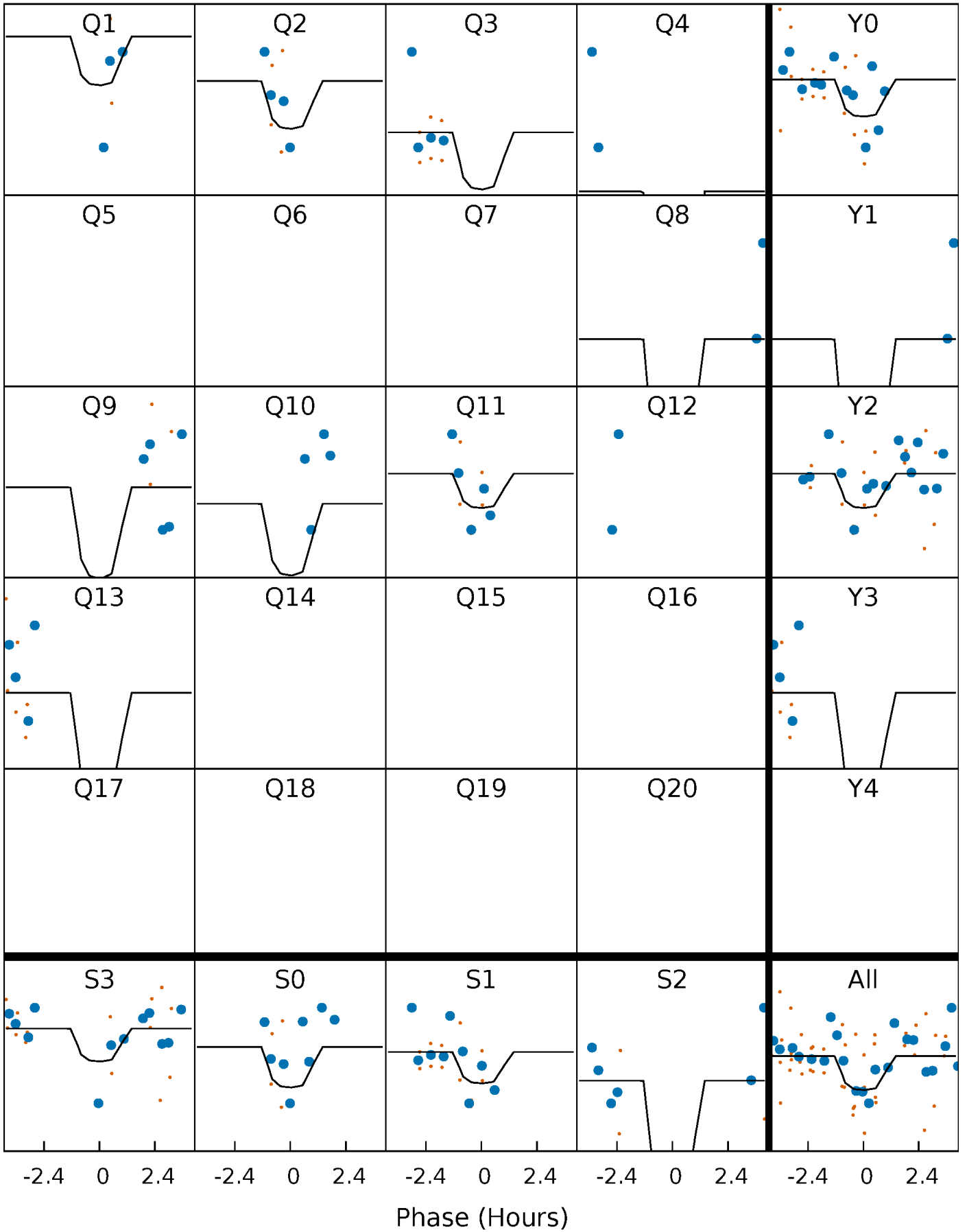
PDC Quarter-Phased Transit Curves

TCE 005960484-02 P= 23.027039 Days $T_0=132.003375$ (BKJD)



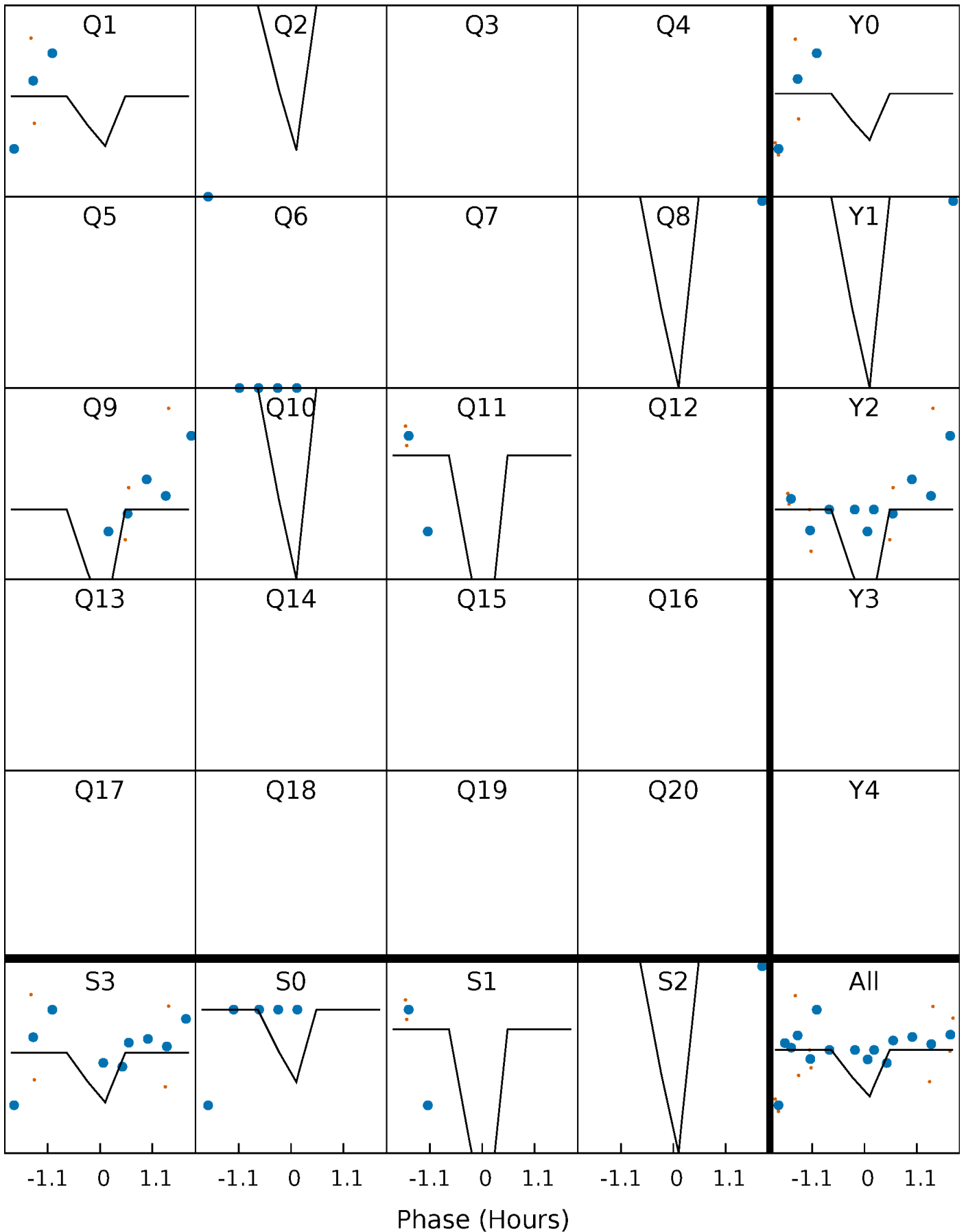
DV Quarter-Phased Transit Curves

TCE 005960484-02 P= 23.027039 Days $T_0=132.003375$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

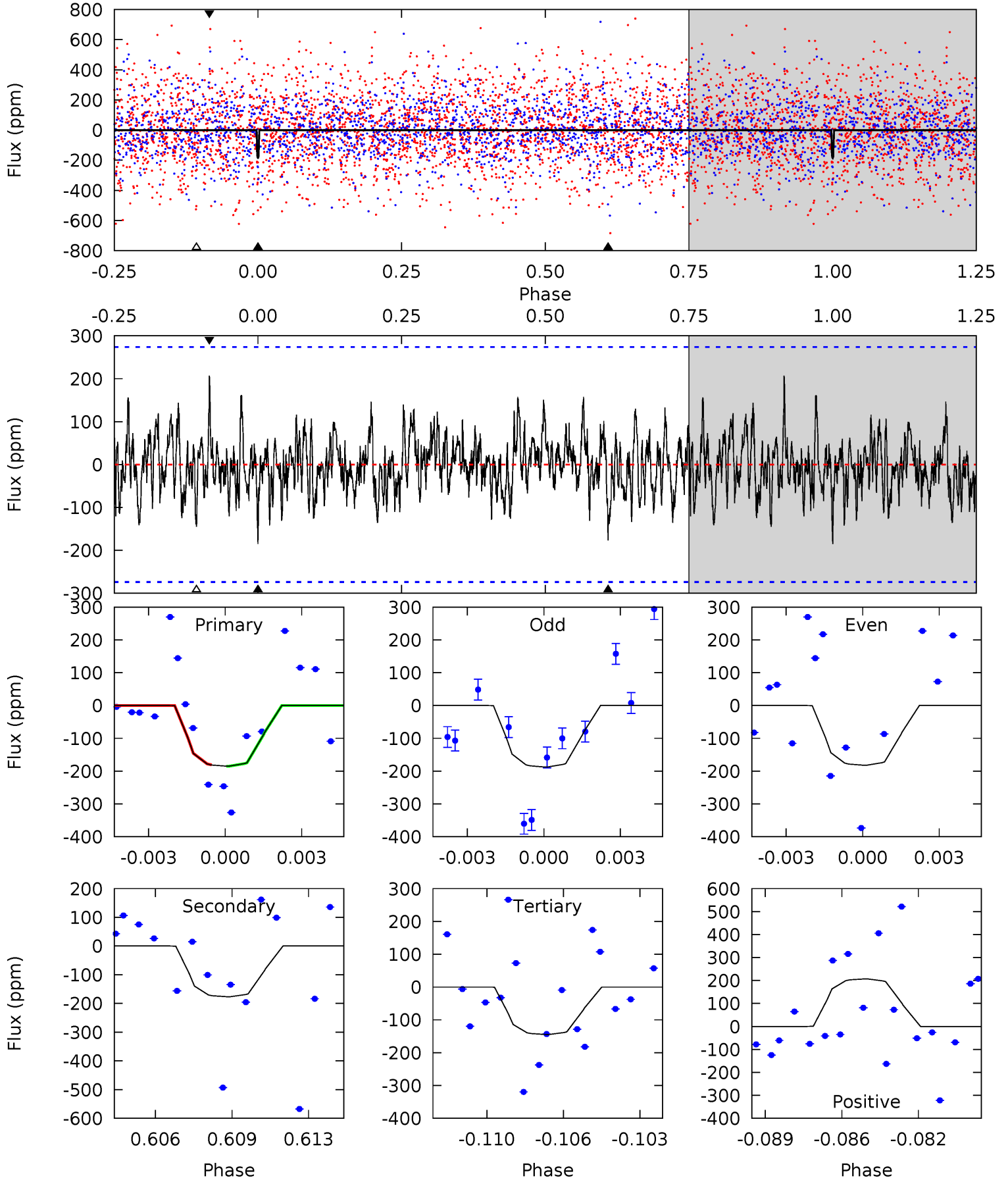
TCE 005960484-02 $P = 23.026719$ Days $T_0 = 132.083699$ (BKJD)



DV Model-Shift Uniqueness Test

005960484-02, $P = 23.027039$ Days, $E = 132.003375$ Days

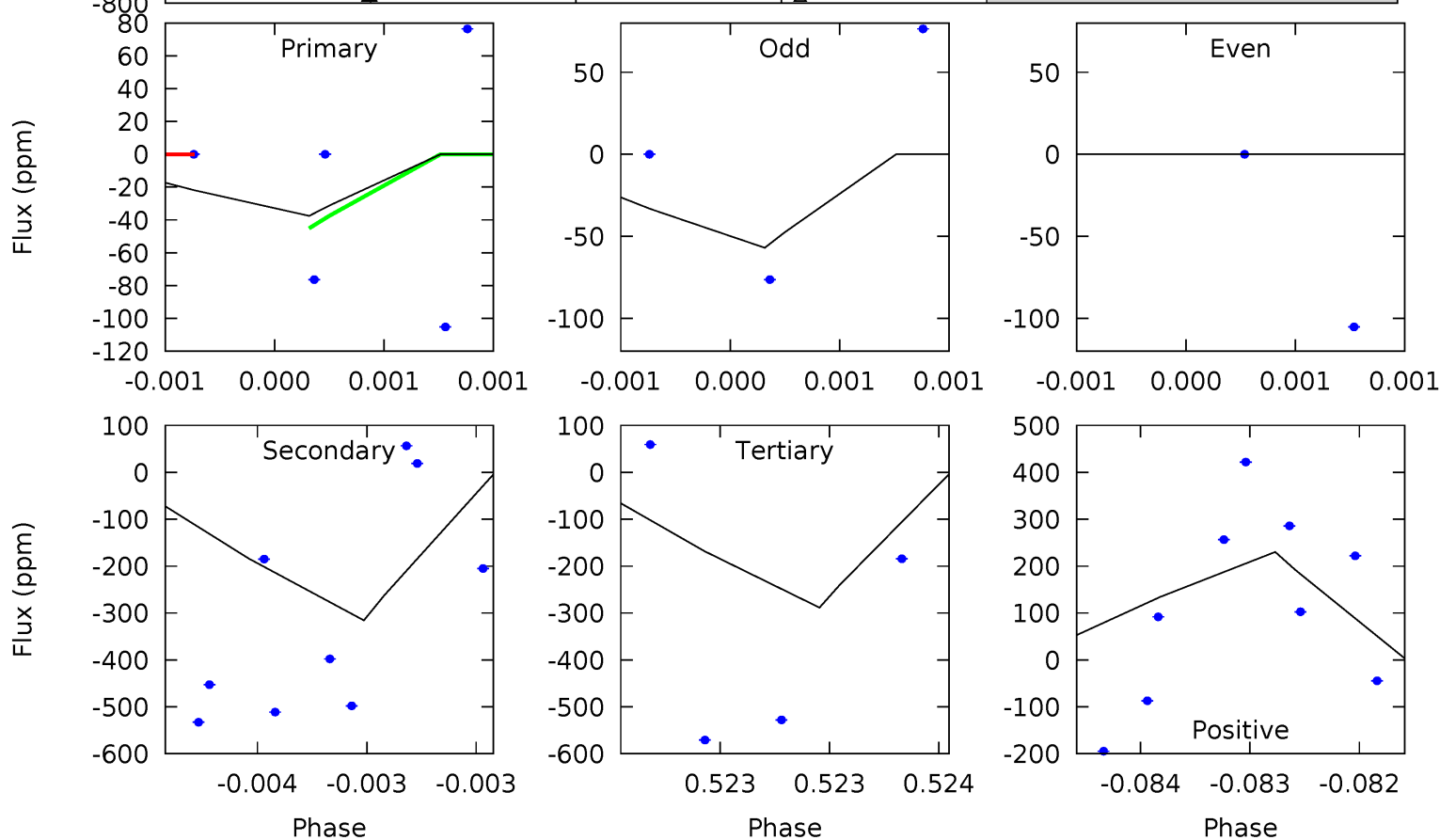
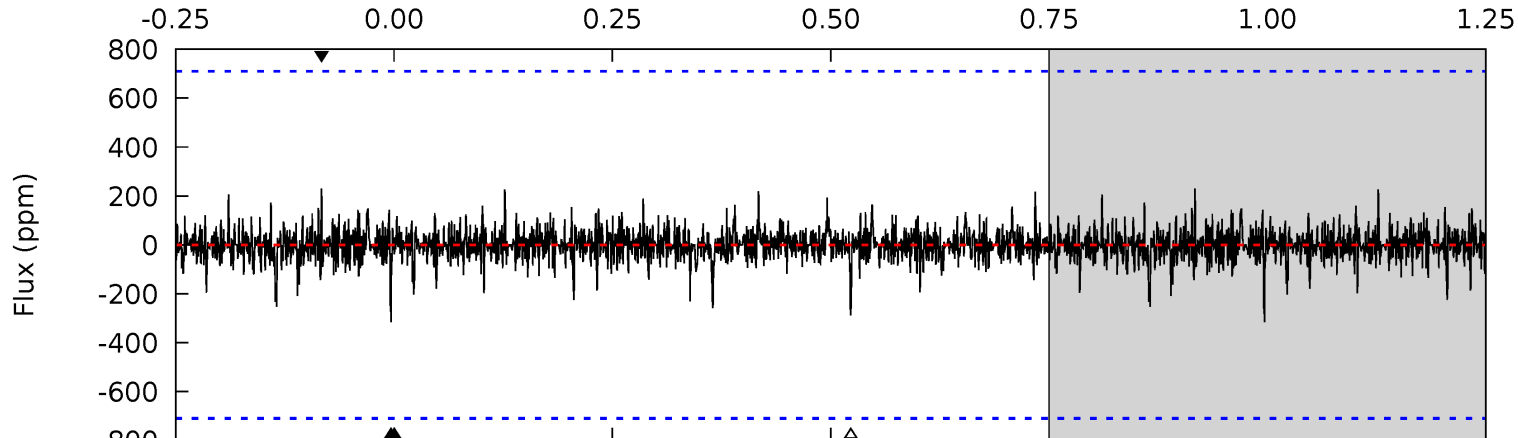
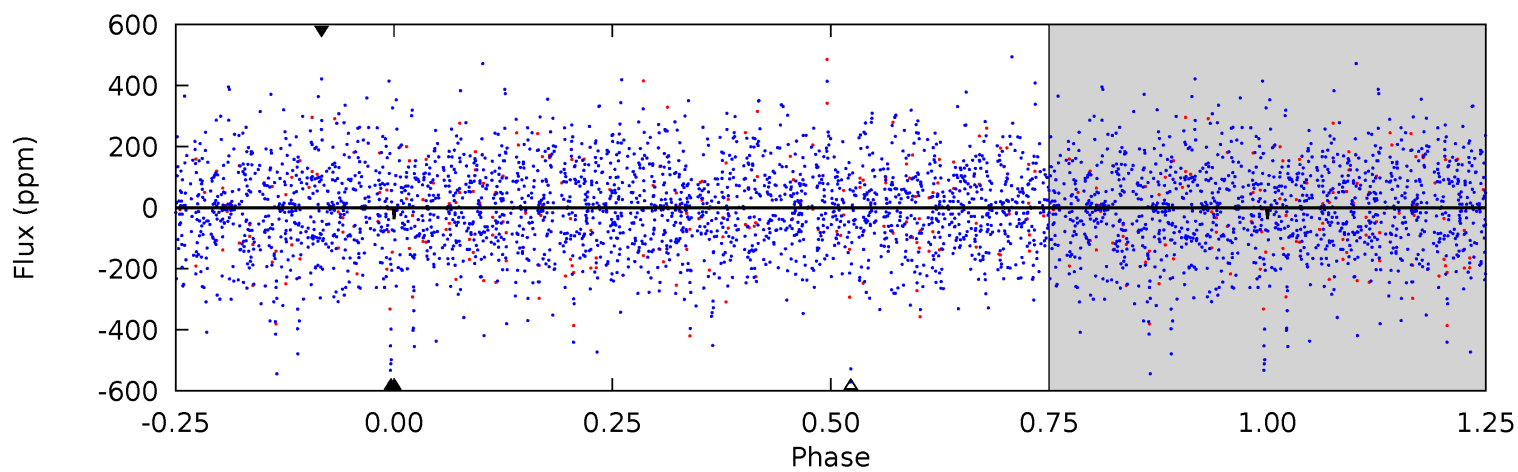
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.53	3.37	2.76	3.95	5.23	2.93	1.06	0.77	-0.42	0.61	-0.58	0.05	0.72	0.53	0.04



Alt Model-Shift Uniqueness Test

005960484-02, P = 23.026719 Days, E = 109.056980 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.29	2.46	2.25	1.79	5.53	3.42	0.44	-1.96	-1.50	0.21	0.67	0	0	0.42	0



Stellar Parameters For KIC 005960484

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7310^{+228}_{-330}	$4.209^{+0.105}_{-0.195}$	$-0.140^{+0.250}_{-0.350}$	$1.568^{+0.508}_{-0.274}$	$1.452^{+0.211}_{-0.211}$	$0.531^{+0.265}_{-0.278}$
	+3%/-5%	+2%/-5%	+179%/-250%	+32%/-17%	+15%/-15%	+50%/-52%
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 005960484-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-177 ± 52	$7.42^{+7.98}_{-5.23}$	1340^{+102}_{-88}	4263^{+3197}_{-966}	55^{+583}_{-43}
Alt.	-316 ± 128	$8.24^{+7.37}_{-5.77}$	1349^{+97}_{-83}	4537^{+3701}_{-1014}	76^{+731}_{-57}

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

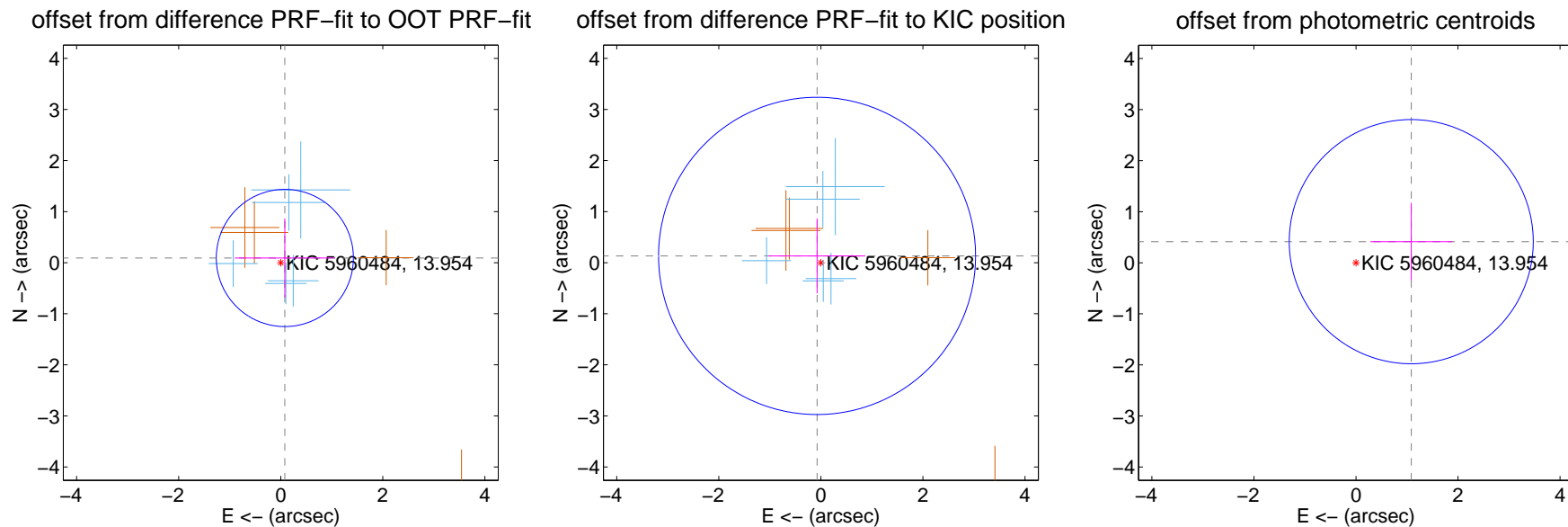
DV Centroid Data

Supplemental centroid analysis for 005960484-02. Kepler magnitude: 13.95. Transit SNR 11.36

There are 5 quarters with good PRF difference image offsets

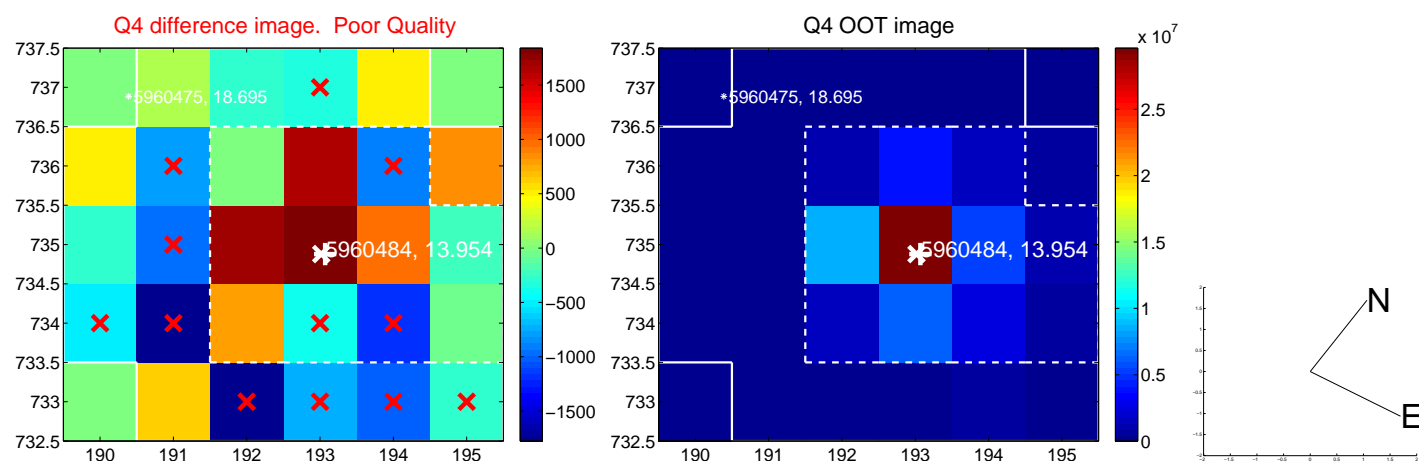
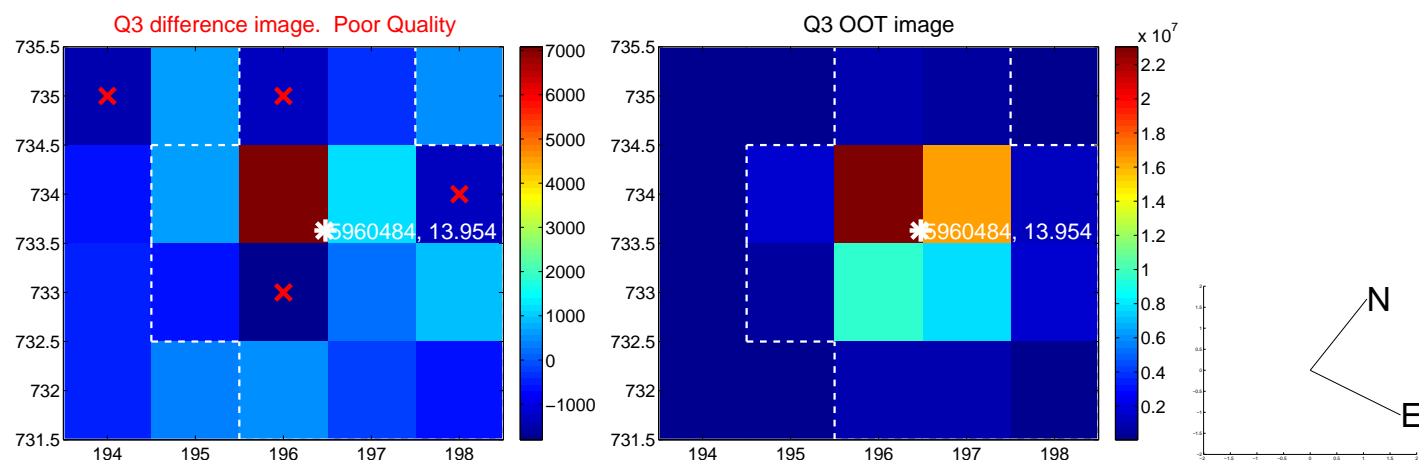
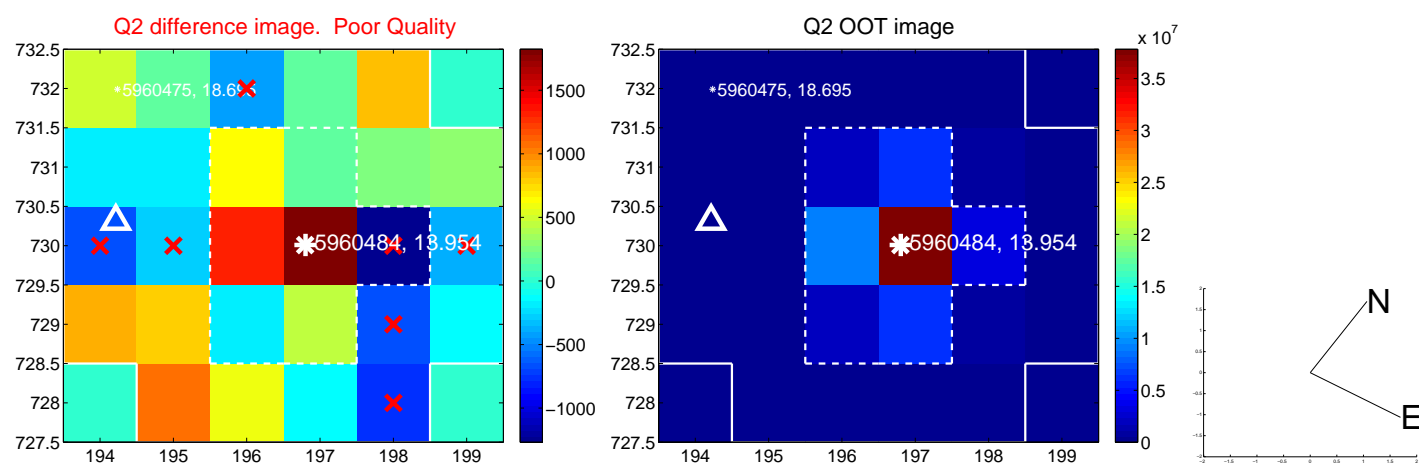
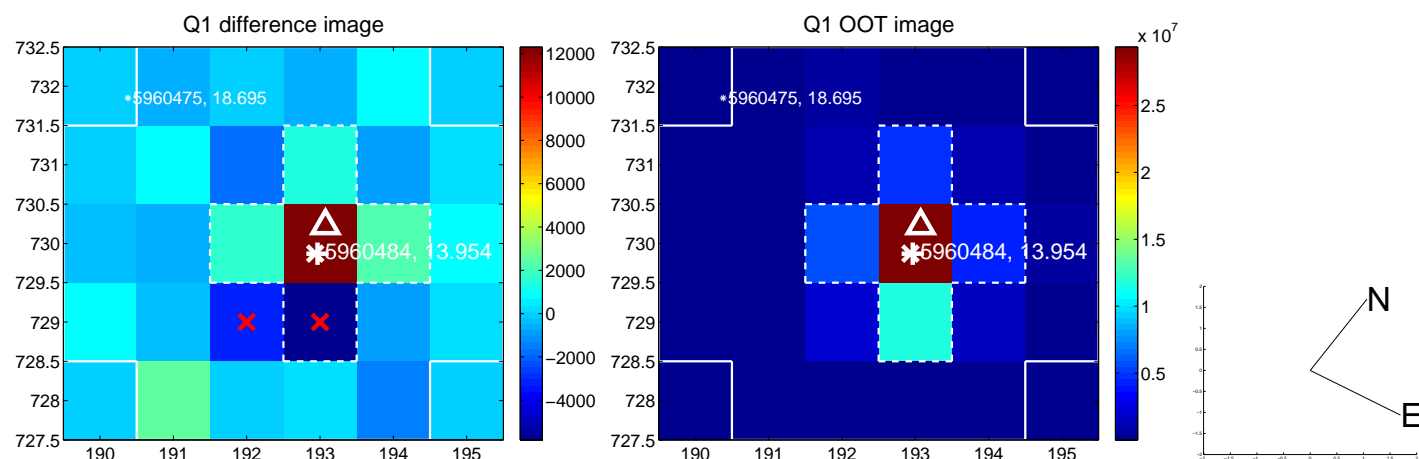
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.122 ± 0.448	0.27	-0.080 ± 0.980	0.092 ± 0.773
PRF-fit source offset from KIC position	0.152 ± 1.035	0.15	0.075 ± 0.946	0.133 ± 0.735
photometric centroid source offset	1.16 ± 0.80	1.46	-1.08 ± 0.80	0.41 ± 0.76

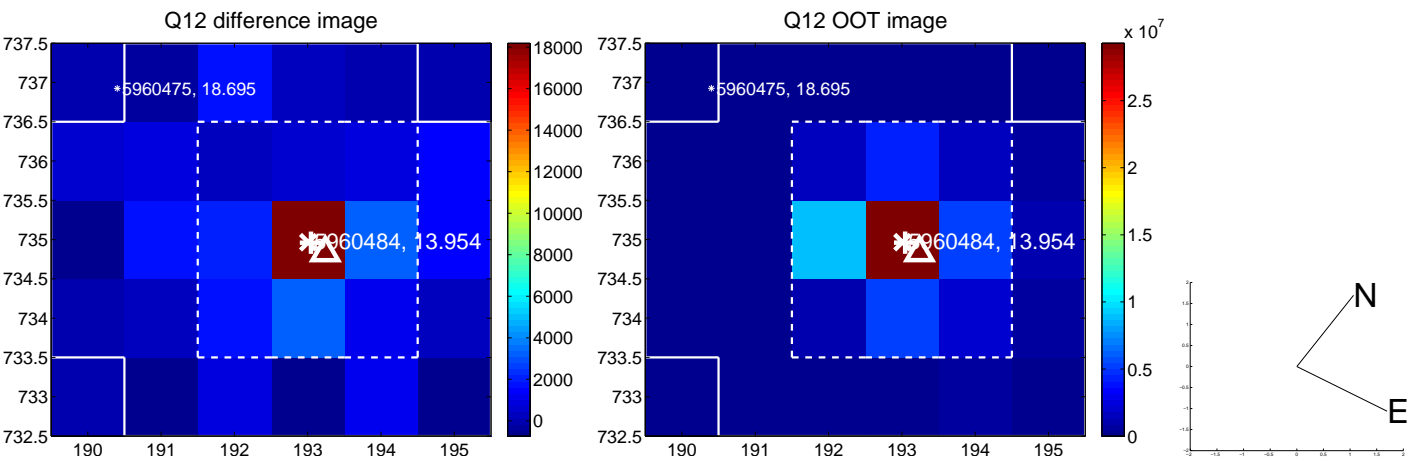
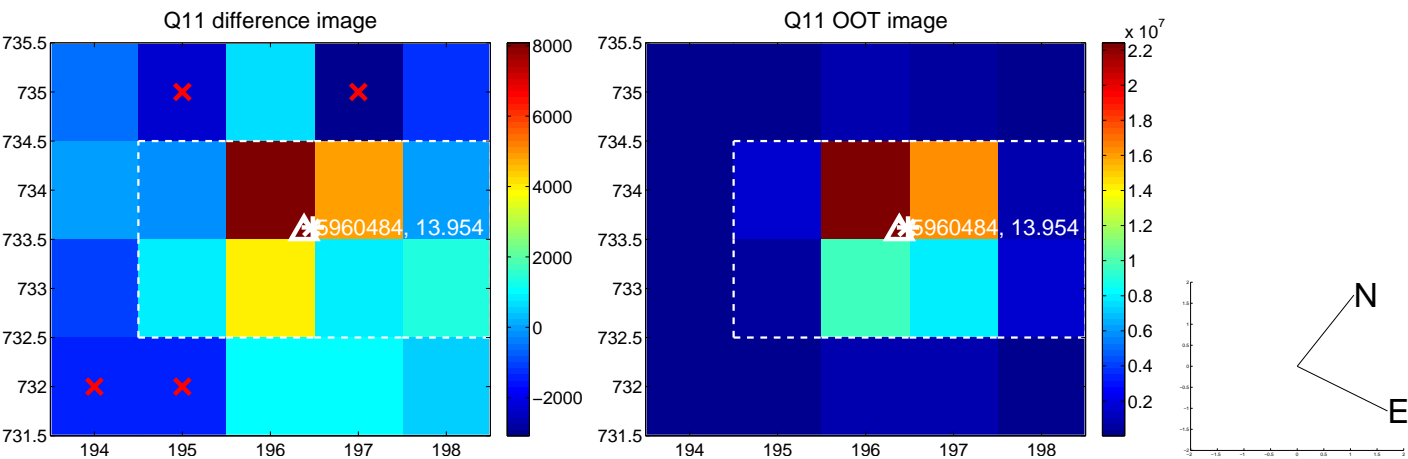
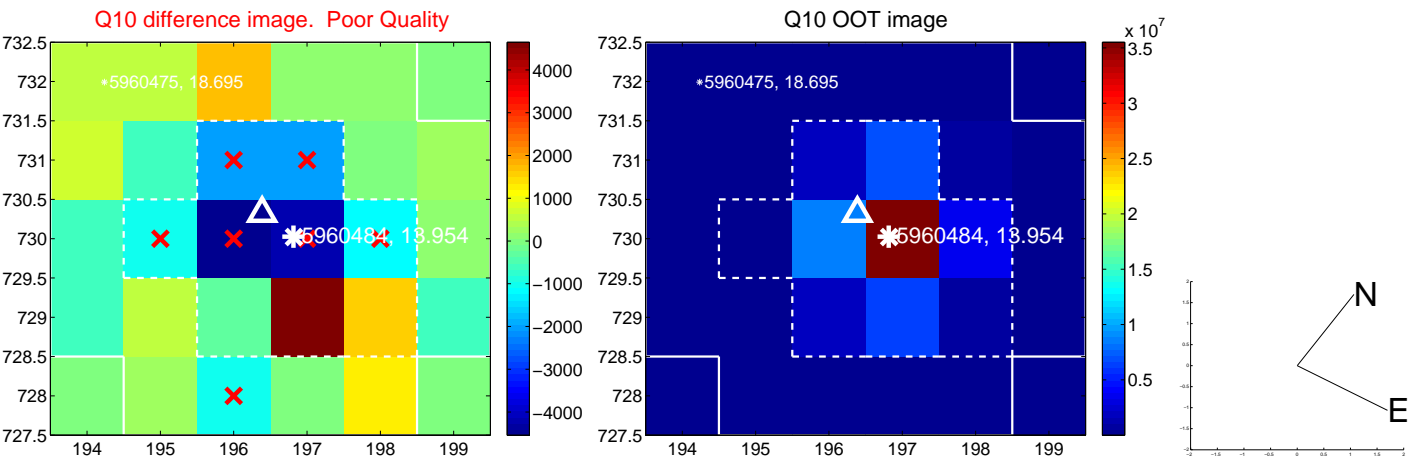
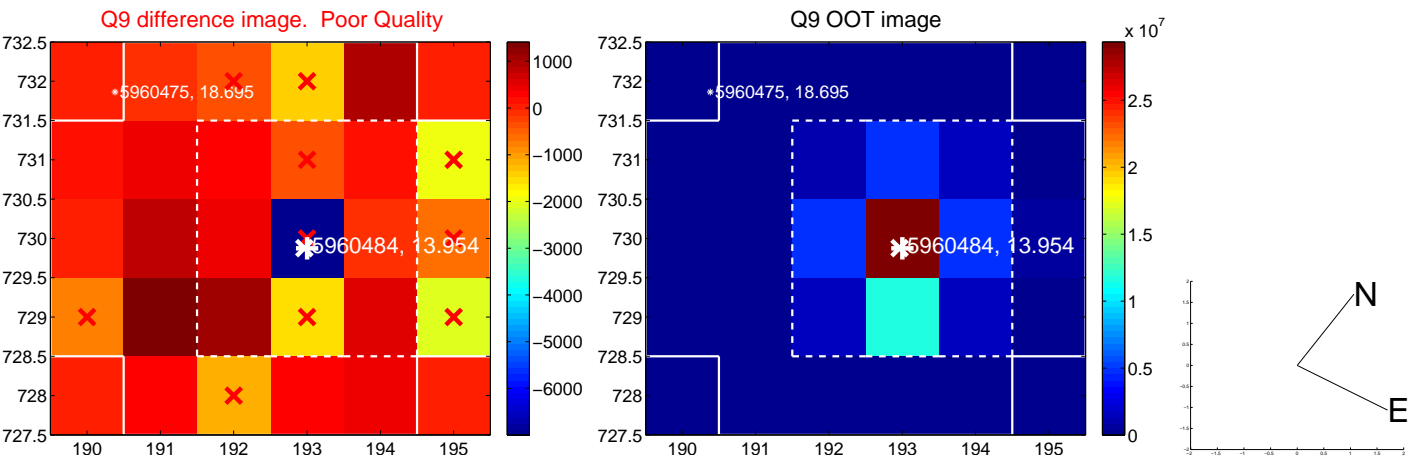


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

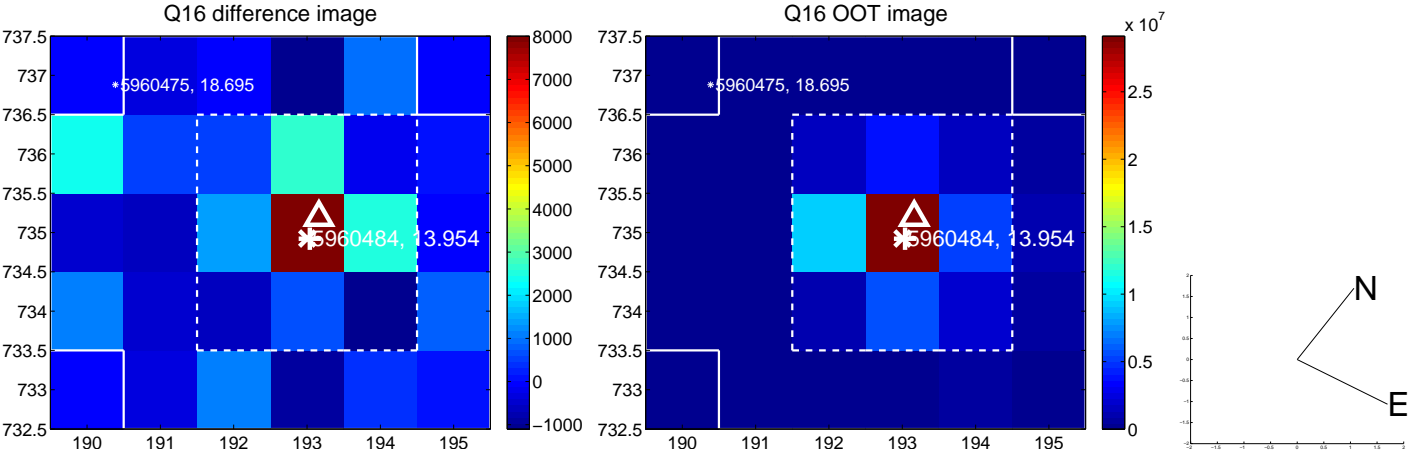
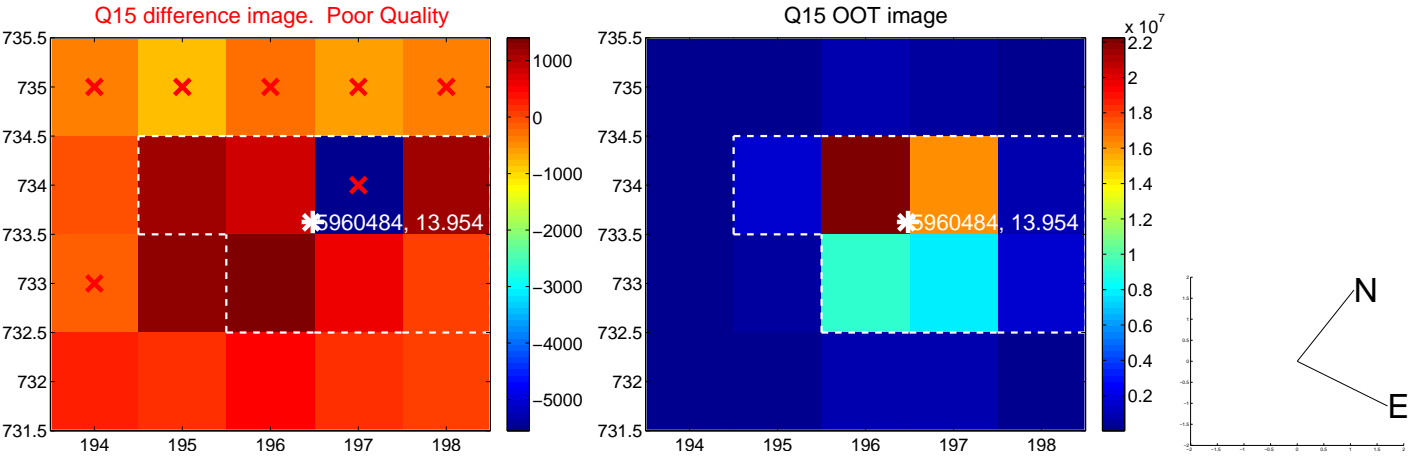
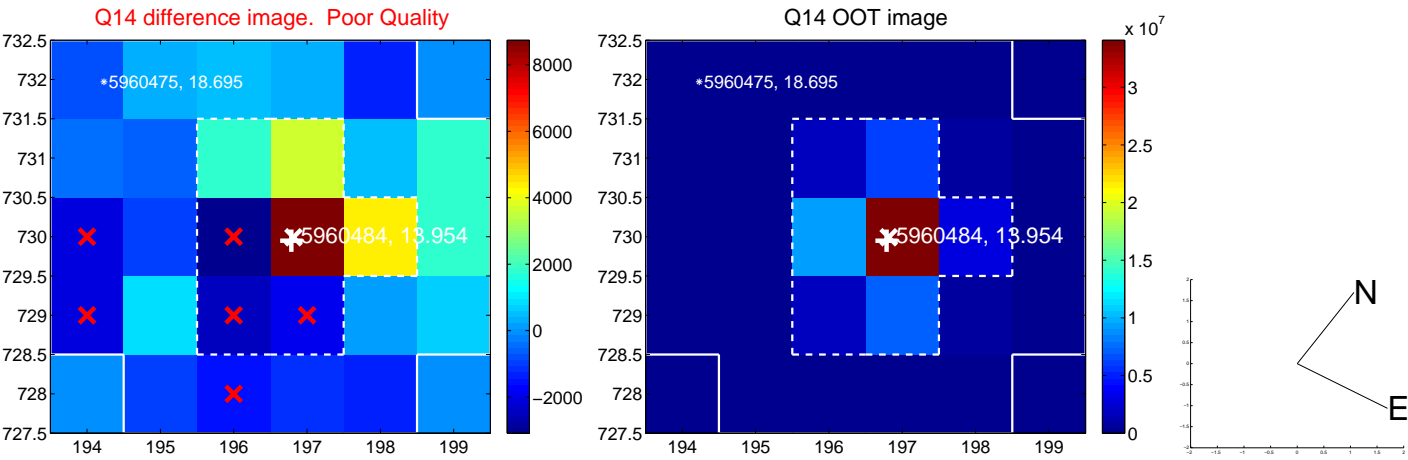
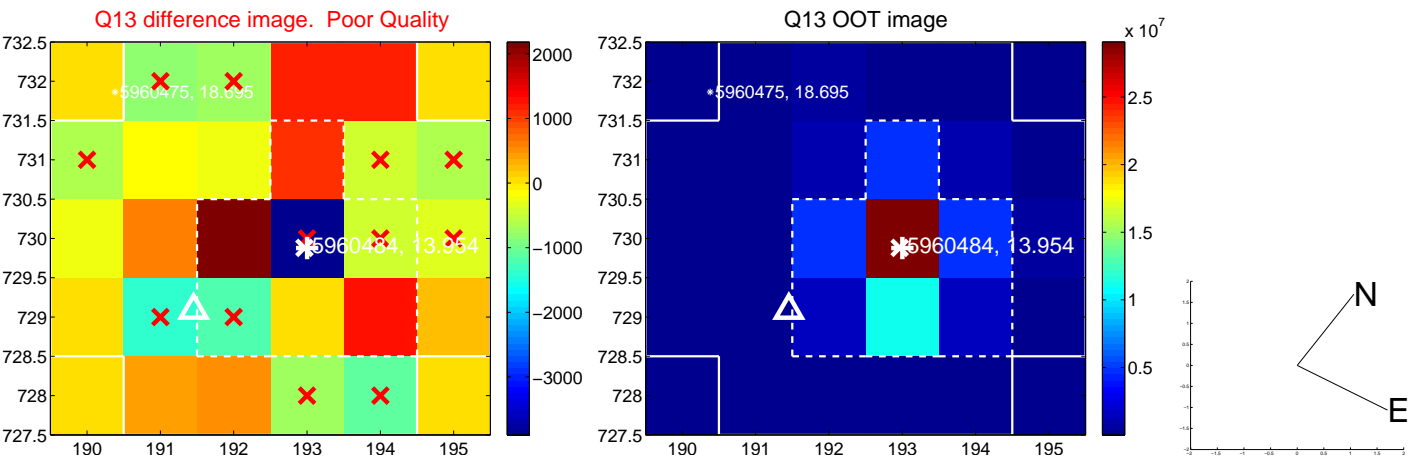
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



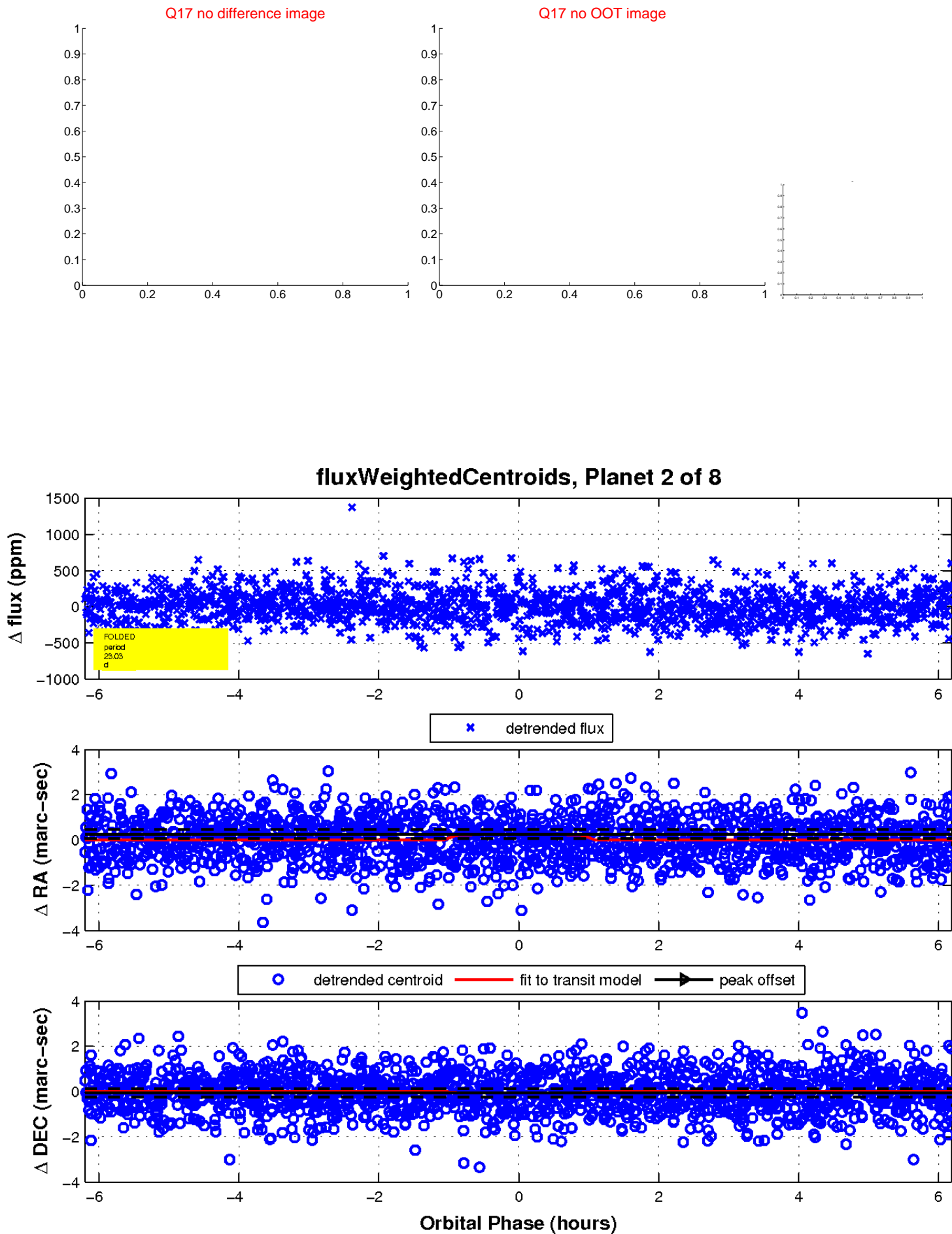
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

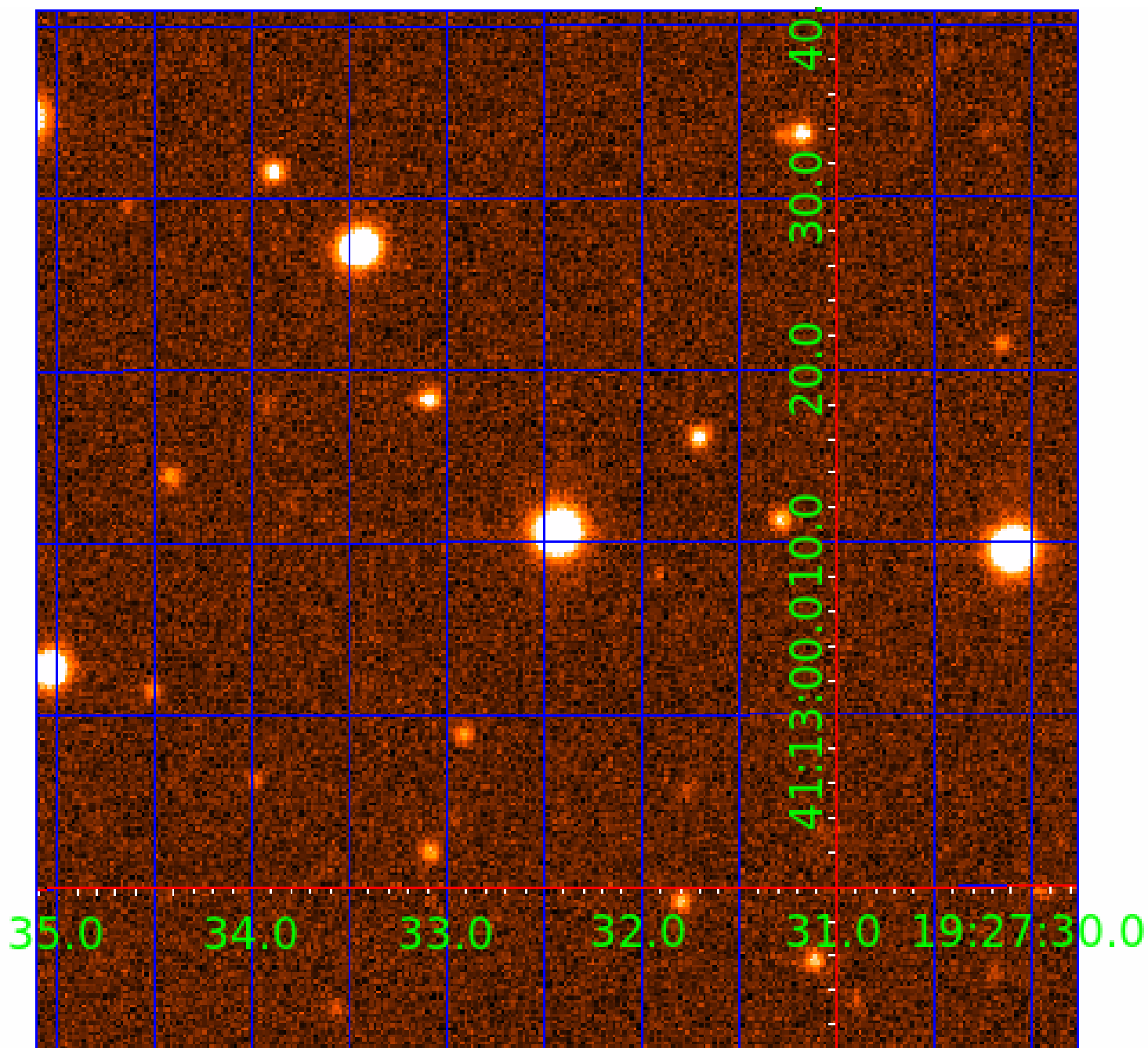


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005960484

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})
005960484-01	OBS	No	0.605539	131.731623	8.1	4.423	7.8	3.7	1.57	7310	0.46	24999.93
005960484-02	OBS	No	23.027039	132.003375	234.1	2.066	12.6	11.4	1.57	7310	2.59	195.50
005960484-03	OBS	No	42.152393	150.182373	397.2	1.746	13.1	12.5	1.57	7310	3.62	87.30
005960484-04	OBS	No	10.007999	134.561131	317.1	0.878	13.3	15.0	1.57	7310	2.86	593.83
005960484-05	OBS	No	42.861399	146.723757	200.3	7.103	14.7	9.2	1.57	7310	2.44	85.38
005960484-06	OBS	No	12.454749	143.278310	317.6	0.930	12.9	11.0	1.57	7310	2.86	443.62
005960484-07	OBS	No	14.552426	137.006597	240.3	2.723	13.9	12.0	1.57	7310	2.54	360.48
005960484-08	OBS	No	13.469643	131.932116	65.8	0.979	11.6	2.3	1.57	7310	1.34	399.62

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005960484-01	OBS	FP	0.00	1	0	1	0	LPP_DV—MOD_NONUNIQ_ALT—CENT_UNRESOLVED_OFFSET
005960484-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
005960484-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV
005960484-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005960484-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV
005960484-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
005960484-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
005960484-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

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

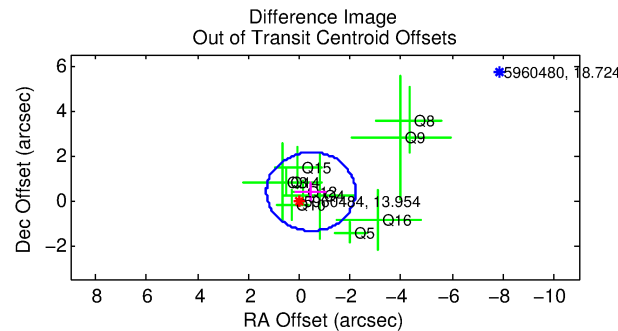
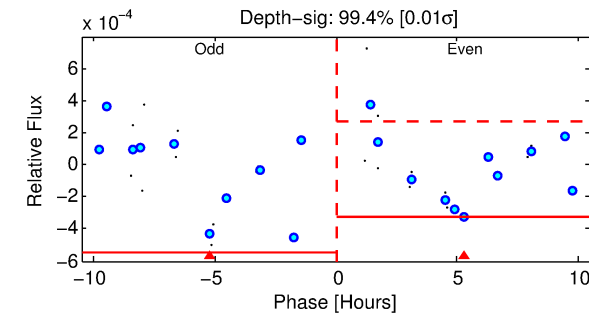
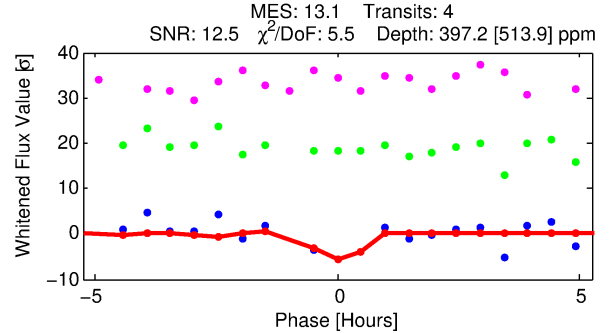
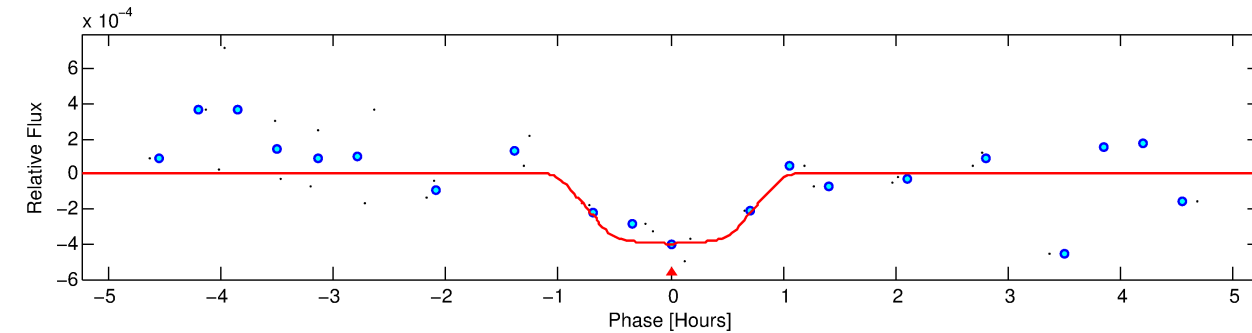
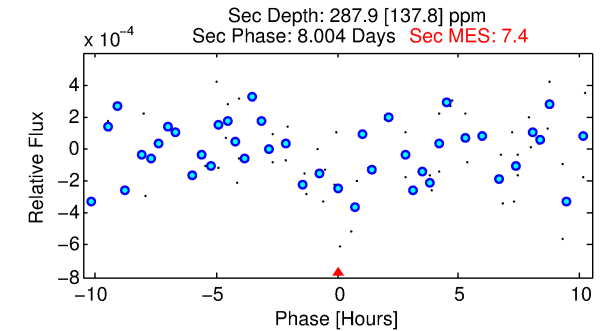
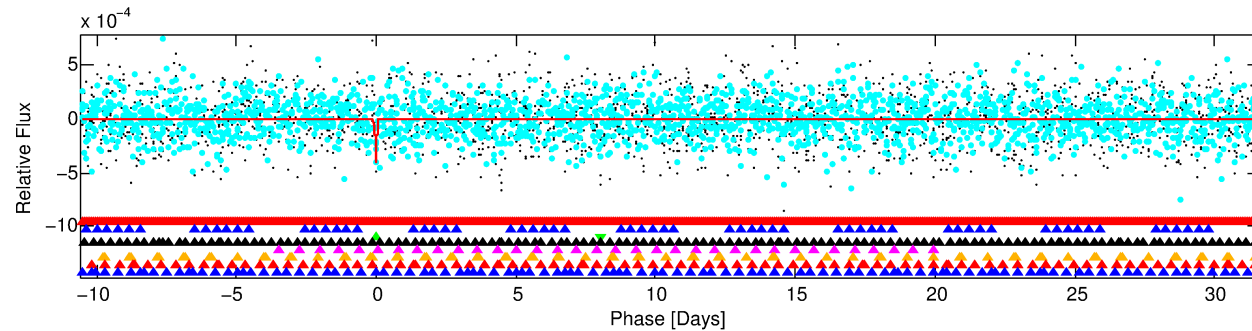
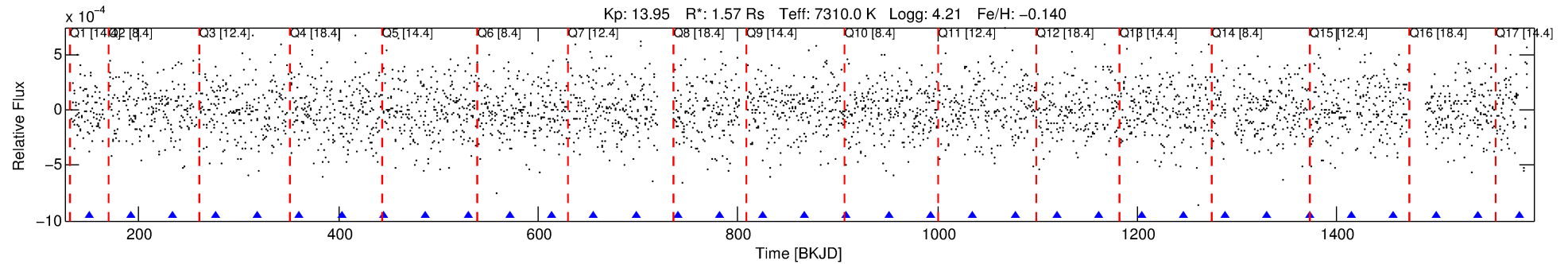
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005960484-03

No Significant Match Found

DV One-Page Summary

KIC: 5960484 Candidate: 3 of 8 Period: 42.152 d



DV Fit Results:

Period = 42.15239 [0.00293] d
Epoch = 150.1824 [0.0500] BKJD
Rp/R* = 0.0212 [0.3994]
a/R* = 89.83 [10791.59]
b = 0.90 [26.36]
Seff = 87.30 [35.88]
Teq = 779 [80] K
Rp = 3.62 [68.35] Re
a = 0.2684 [0.0705] AU
Ag = 869.60 [32812.07] [0.03 σ]
Teffp = 6544 [61729] K [0.09 σ]

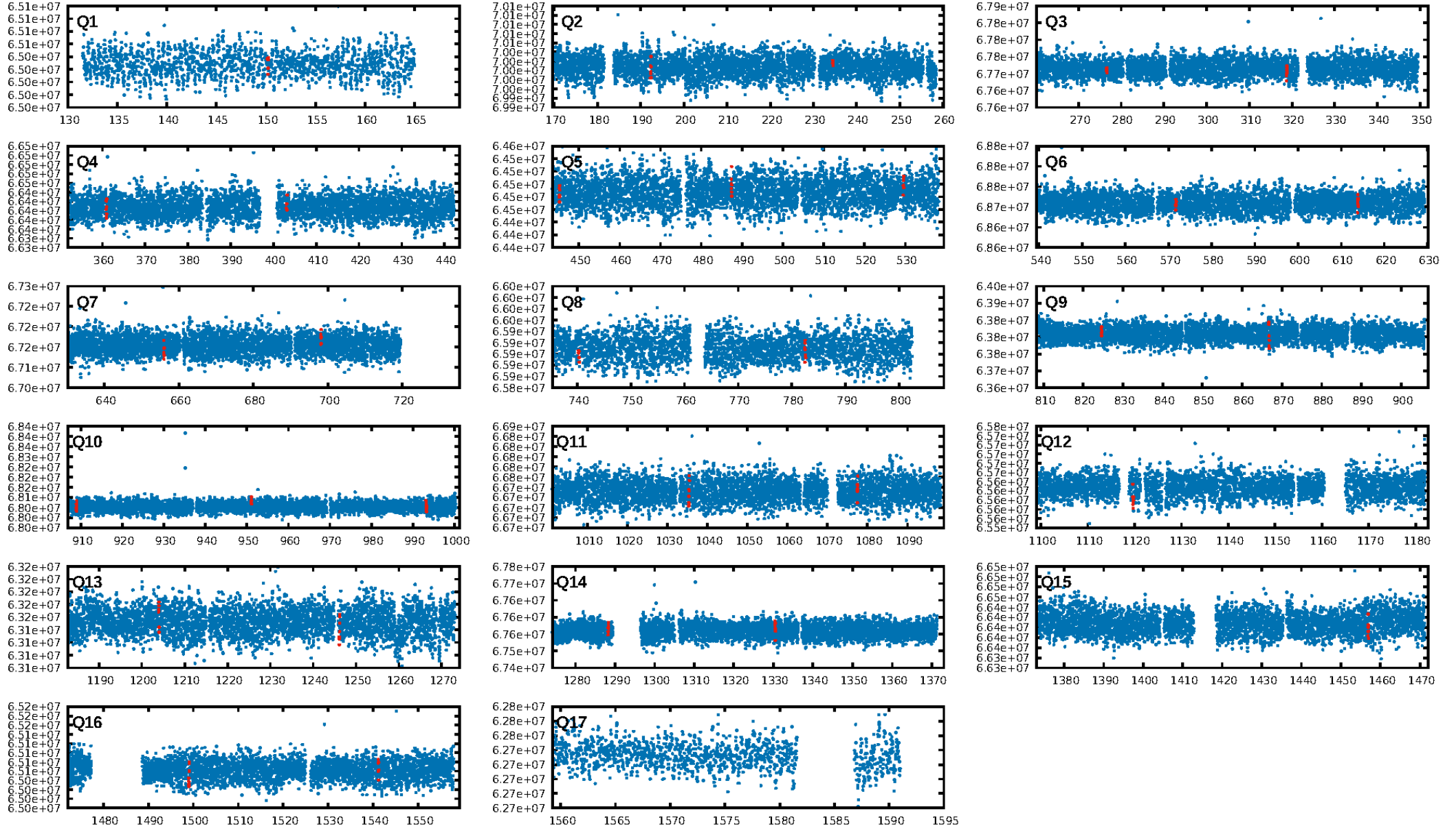
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [169.68 σ]
LongPeriod-sig: 98.0% [2.33 σ]
ModelChiSquare2-sig: 32.5%
ModelChiSquareGof-sig: 99.8%
Bootstrap-pfa: 1.59e-13
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 2.34
Centroid-sig: 24.4%
Centroid-so: 0.955 arcsec [1.30 σ]
OotOffset-rm: 0.603 arcsec [1.03 σ]
KicOffset-rm: 0.559 arcsec [0.92 σ]
OotOffset-st: 2/2/4/2 [10]
KicOffset-st: 2/2/4/2 [10]
DiffImageQuality-fgm: 0.40 [4/10]
DiffImageOverlap-fno: 0.00 [0/16]

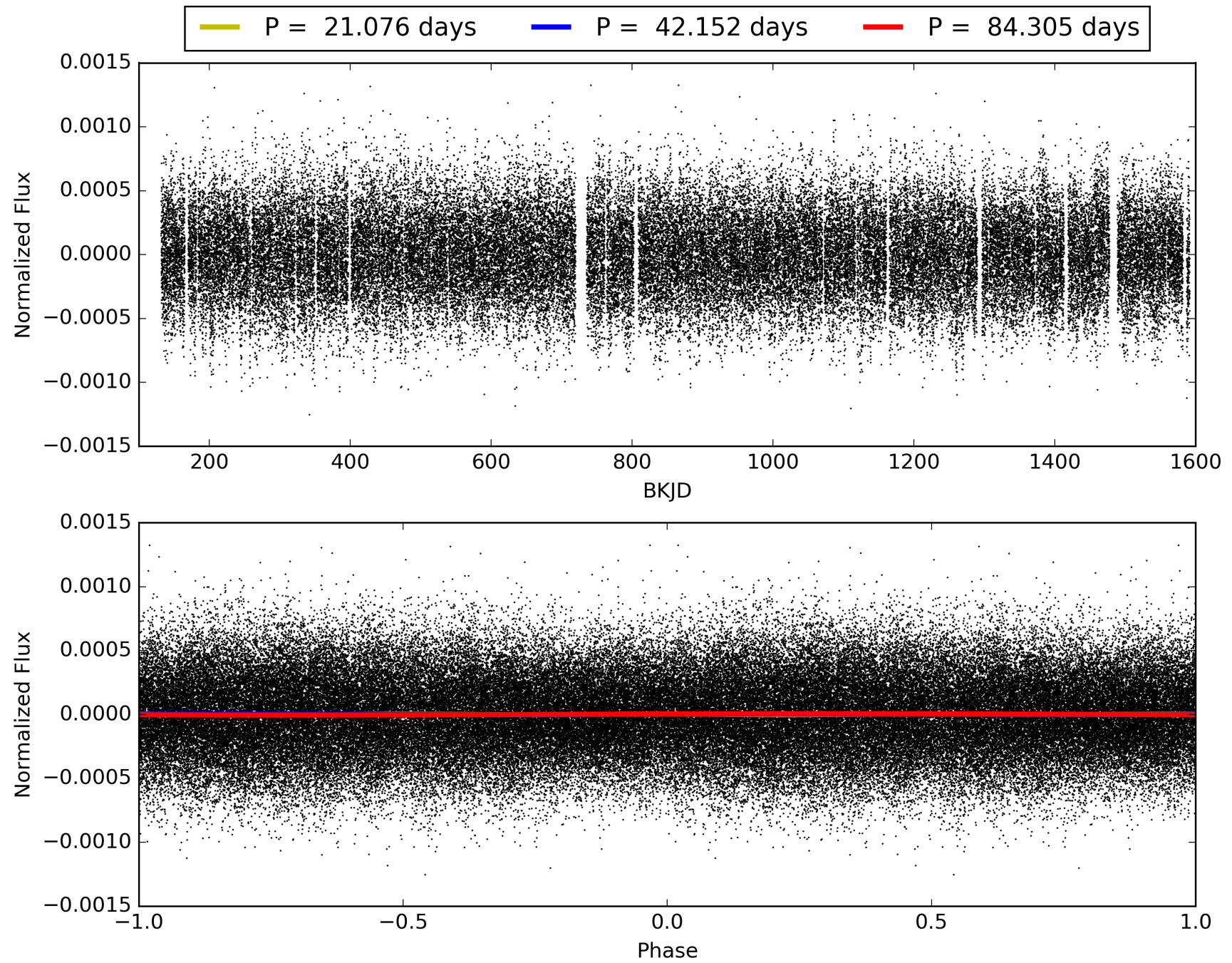
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 07:12:21 Z

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

TCE 005960484-03, PDC Light Curves

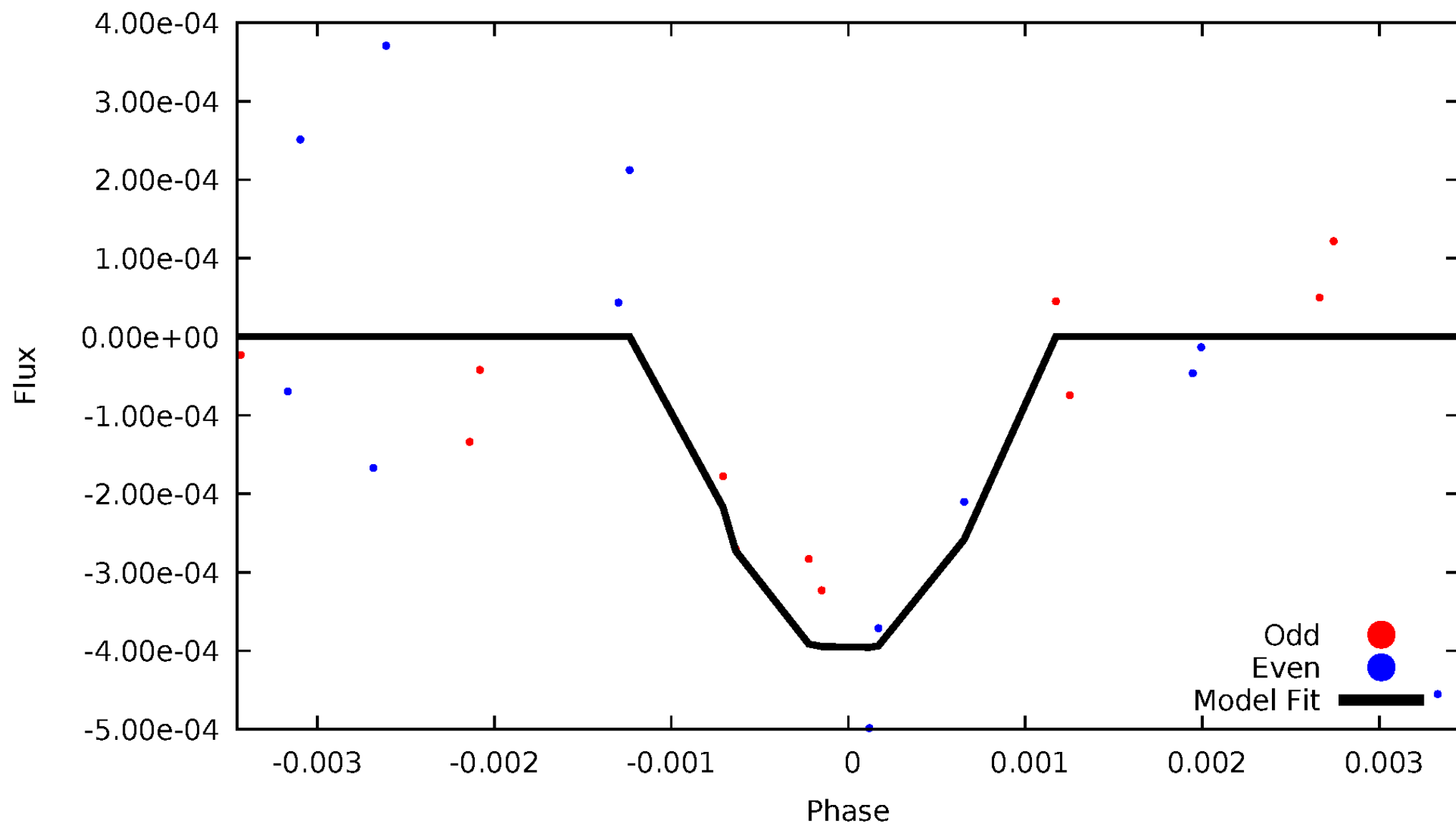


TCE 005960484-03



DV Odd/Even

TCE 005960484-03

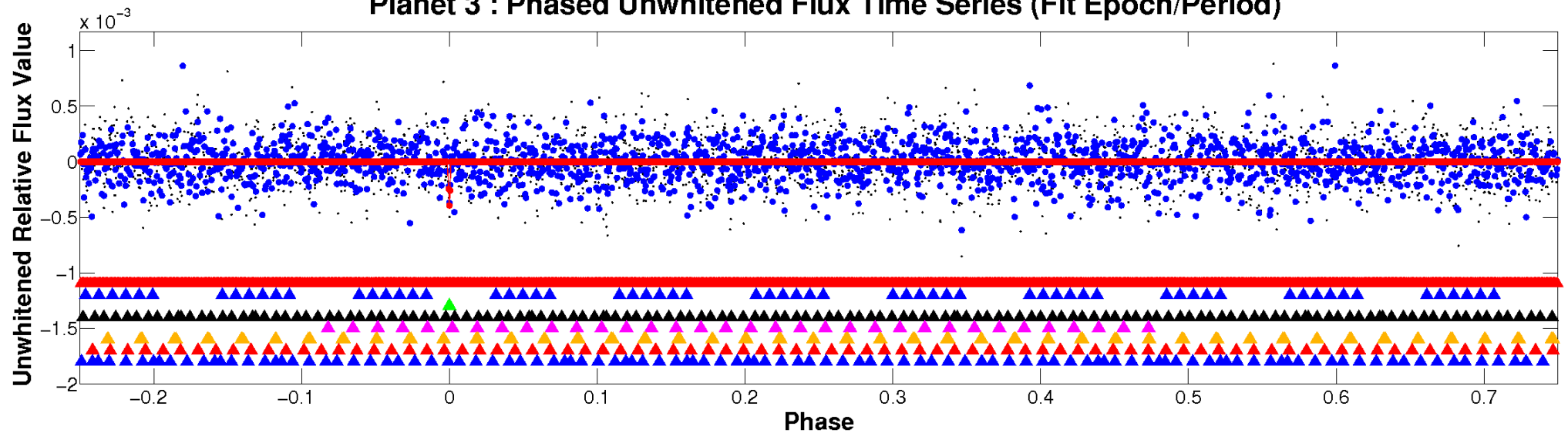


ALT Odd/Even

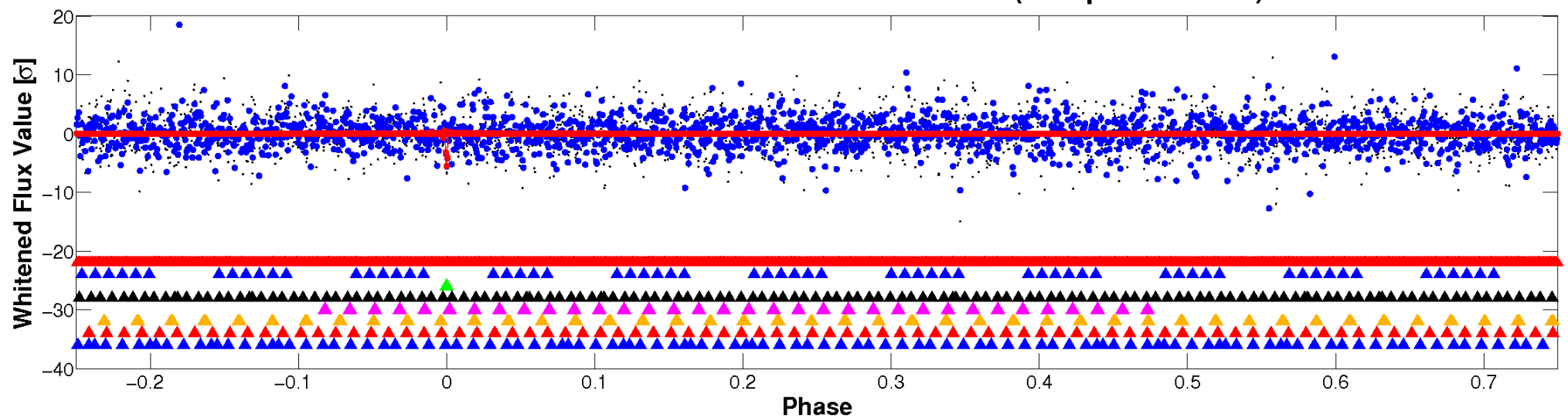
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

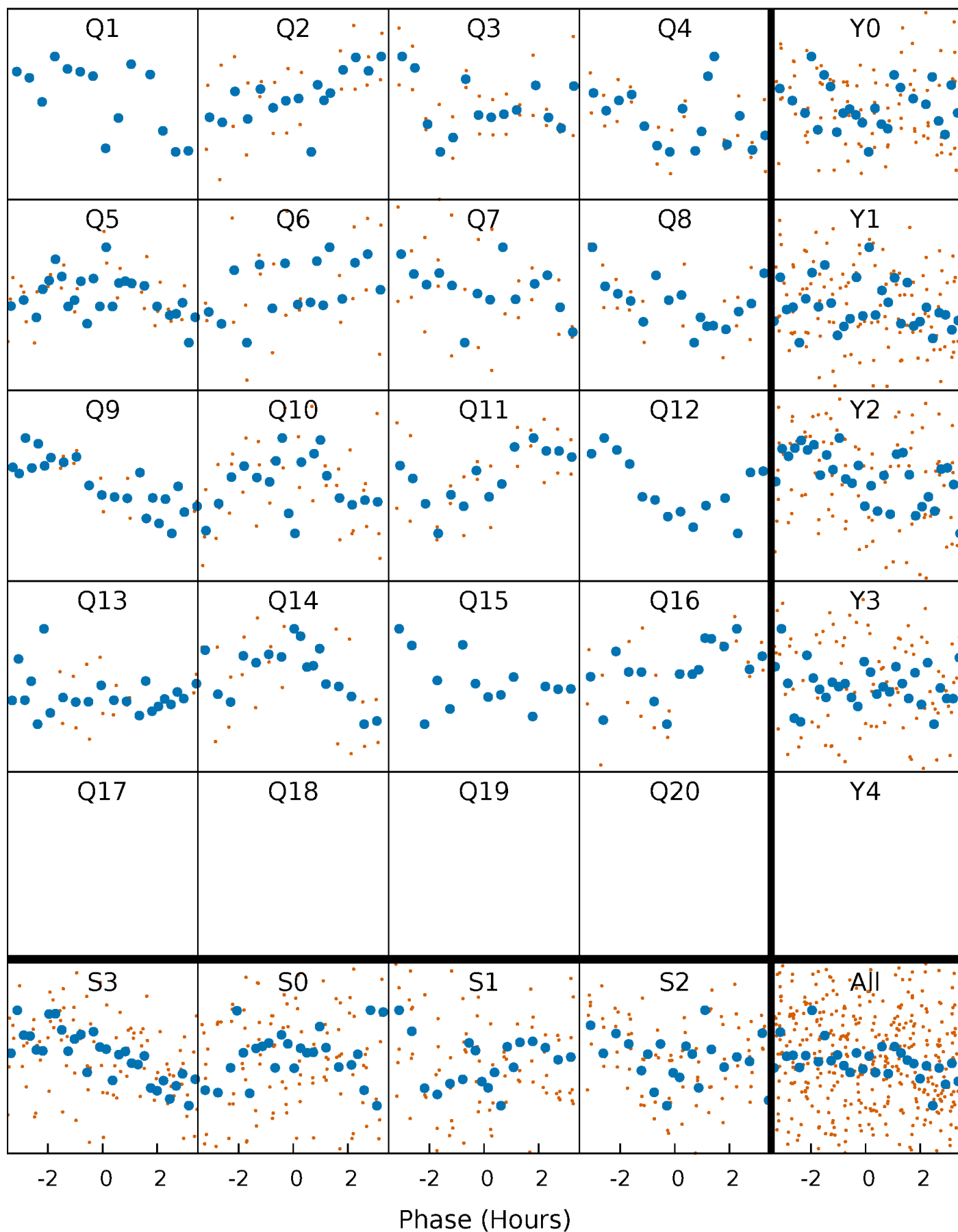


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



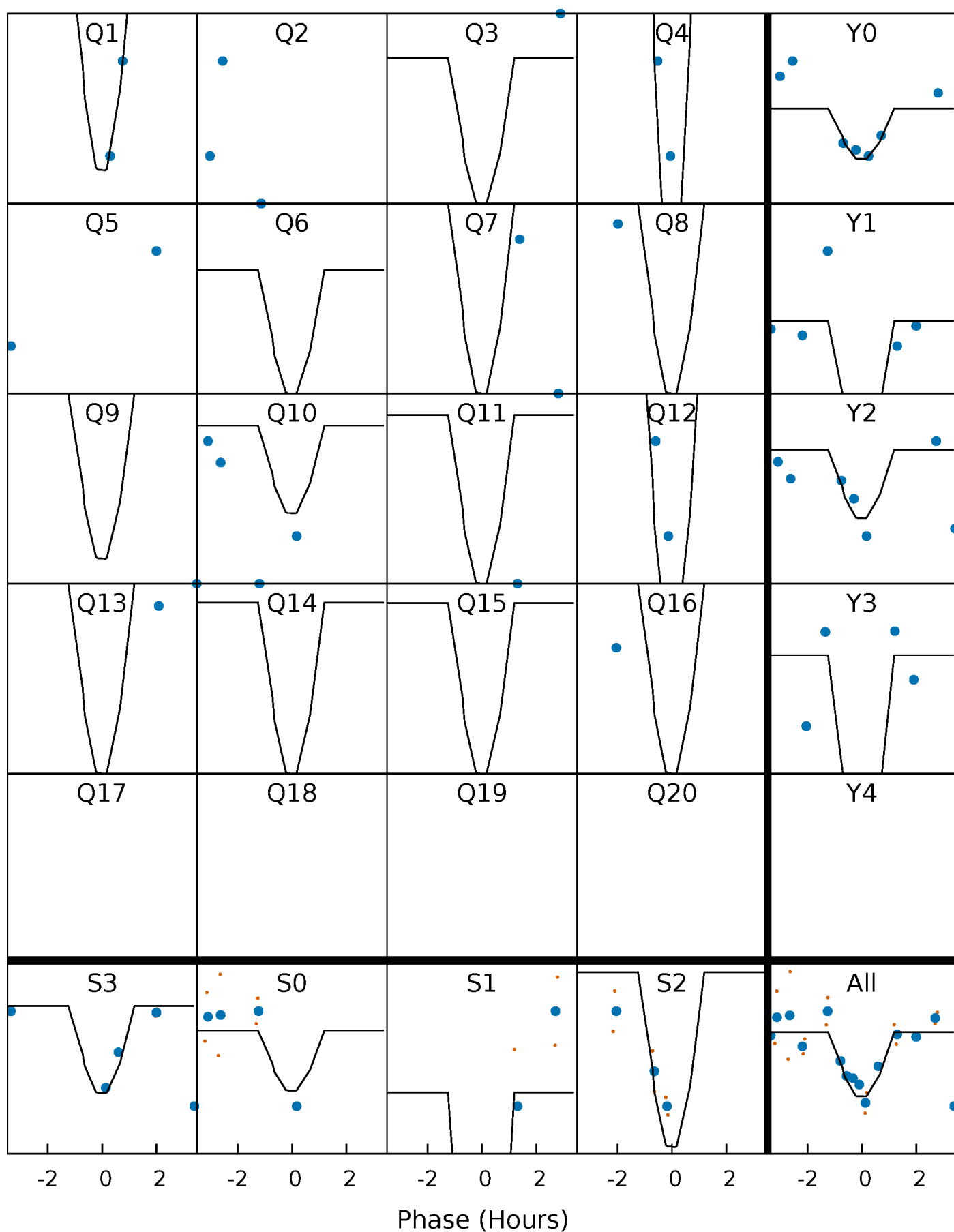
PDC Quarter-Phased Transit Curves

TCE 005960484-03 P= 42.152393 Days $T_0=150.182373$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 005960484-03 P= 42.152393 Days $T_0=150.182373$ (BKJD)

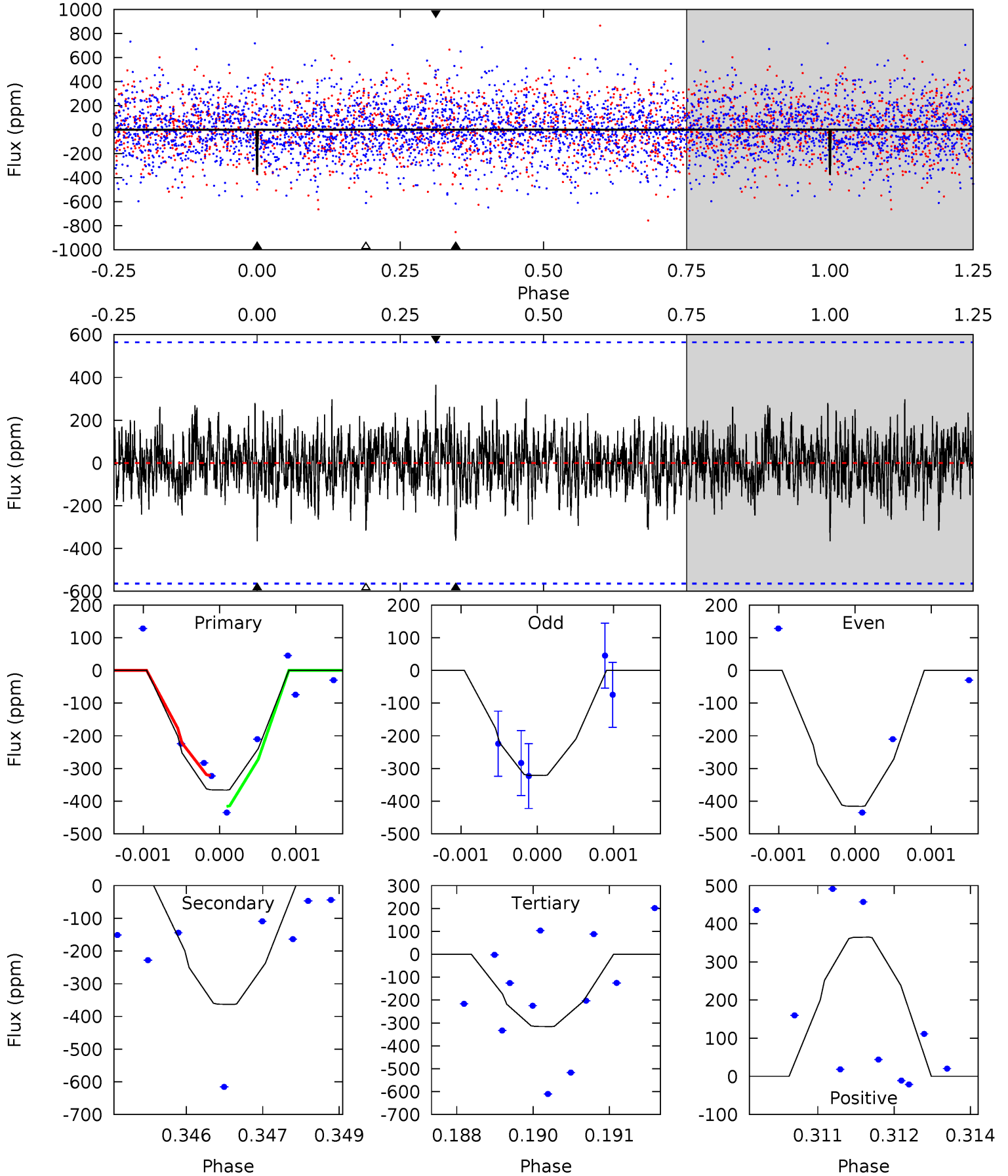


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

005960484-03, P = 42.152393 Days, E = 108.029980 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.51	3.48	3.03	3.50	5.41	3.22	0.96	0.48	0.01	0.45	-0.01	0.50	0.96	0.50	0.45



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 005960484

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7310^{+228}_{-330}	$4.209^{+0.105}_{-0.195}$	$-0.140^{+0.250}_{-0.350}$	$1.568^{+0.508}_{-0.274}$	$1.452^{+0.211}_{-0.211}$	$0.531^{+0.265}_{-0.278}$
	+3%/-5%	+2%/-5%	+179%/-250%	+32%/-17%	+15%/-15%	+50%/-52%
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 005960484-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-364 ± 104	$46.77^{+56.08}_{-31.75}$	1103^{+73}_{-74}	2659^{+1139}_{-490}	$5.864^{+60.830}_{-4.570}$
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 $A_{\text{obs}} \gg 1.0$

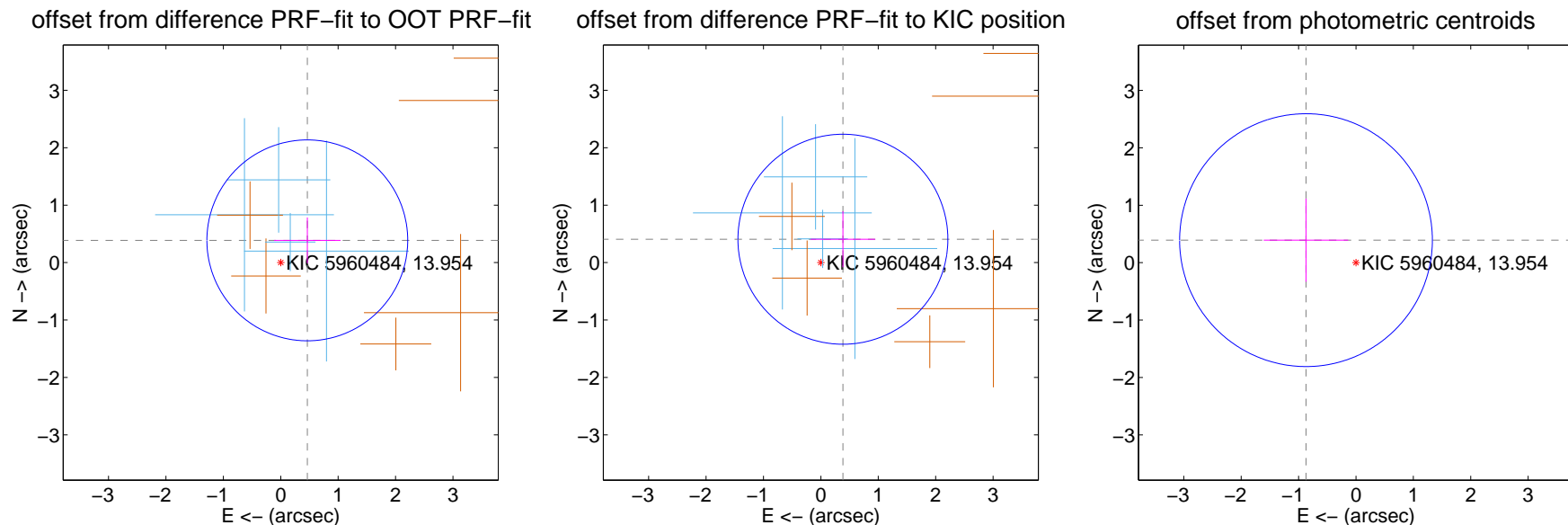
DV Centroid Data

Supplemental centroid analysis for 005960484-03. Kepler magnitude: 13.95. Transit SNR 12.50

There are 4 quarters with good PRF difference image offsets

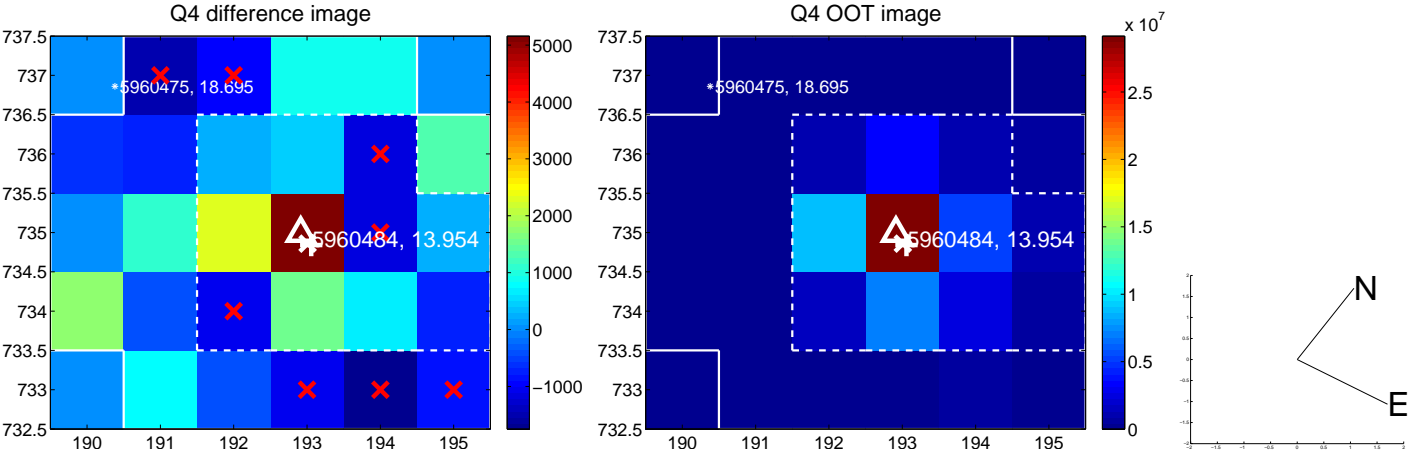
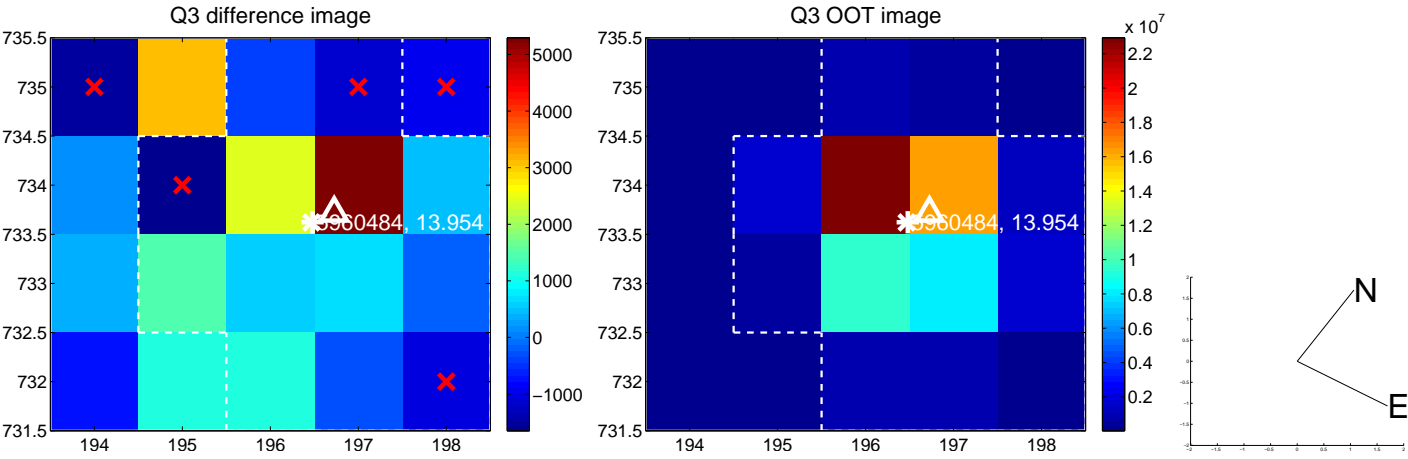
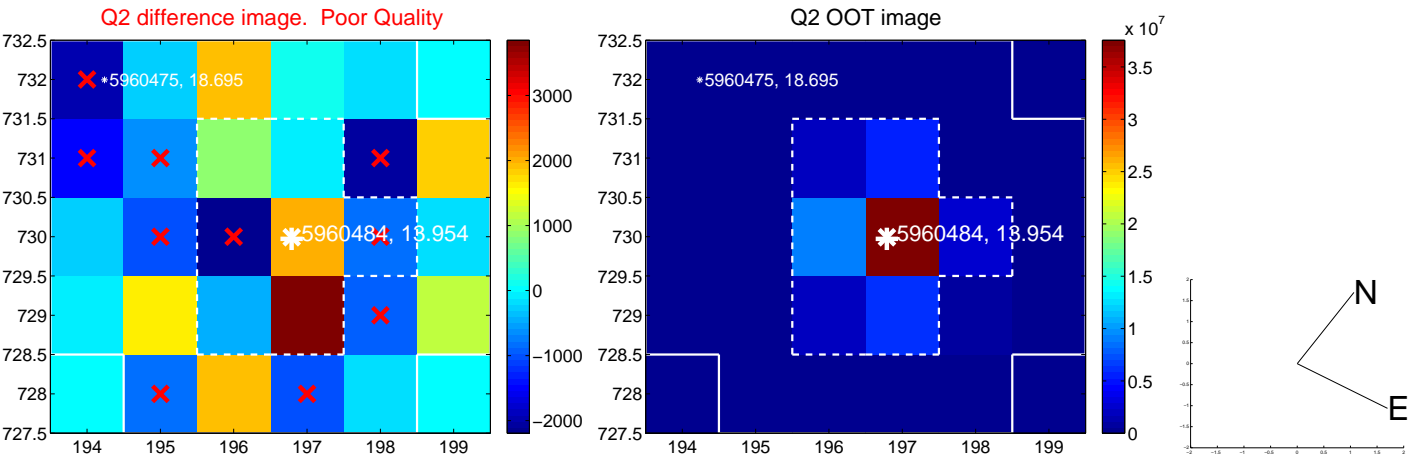
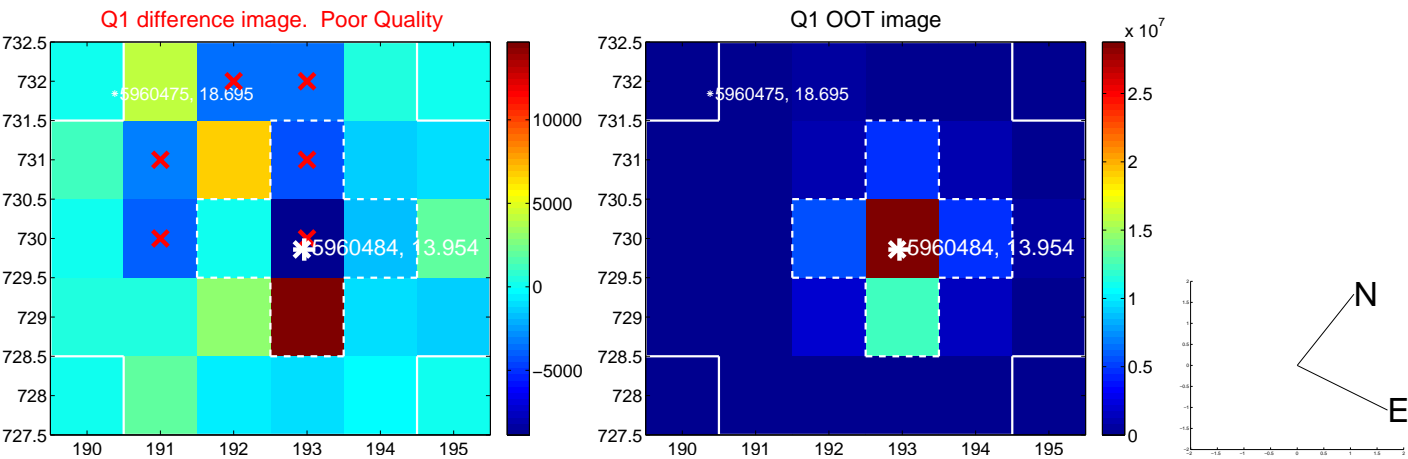
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.603 ± 0.583	1.03	-0.463 ± 0.579	0.387 ± 0.398
PRF-fit source offset from KIC position	0.559 ± 0.609	0.92	-0.384 ± 0.562	0.406 ± 0.487
photometric centroid source offset	0.95 ± 0.73	1.30	0.87 ± 0.74	0.39 ± 0.72

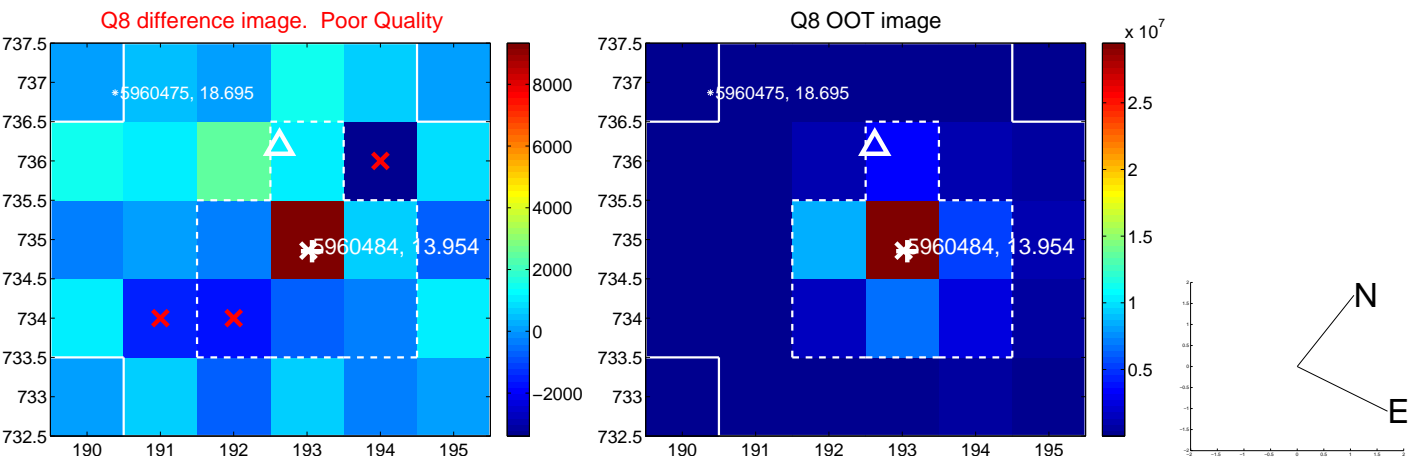
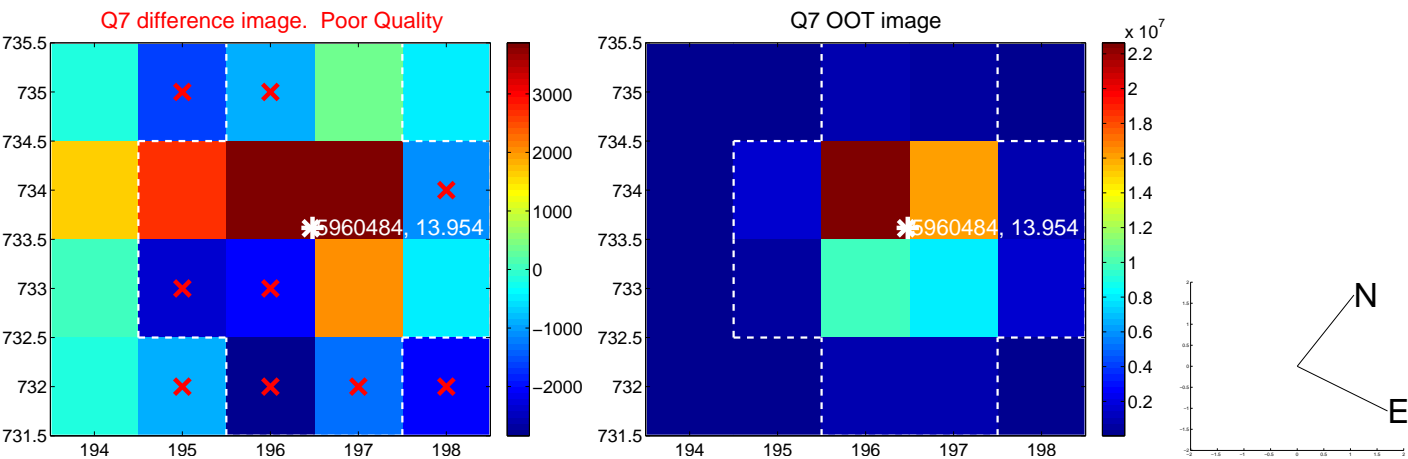
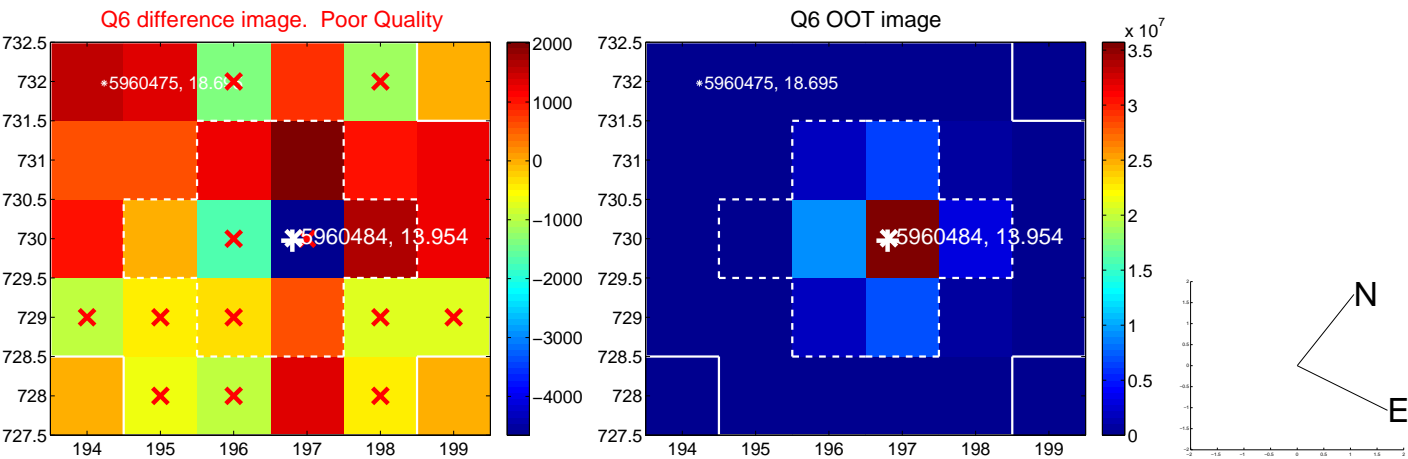
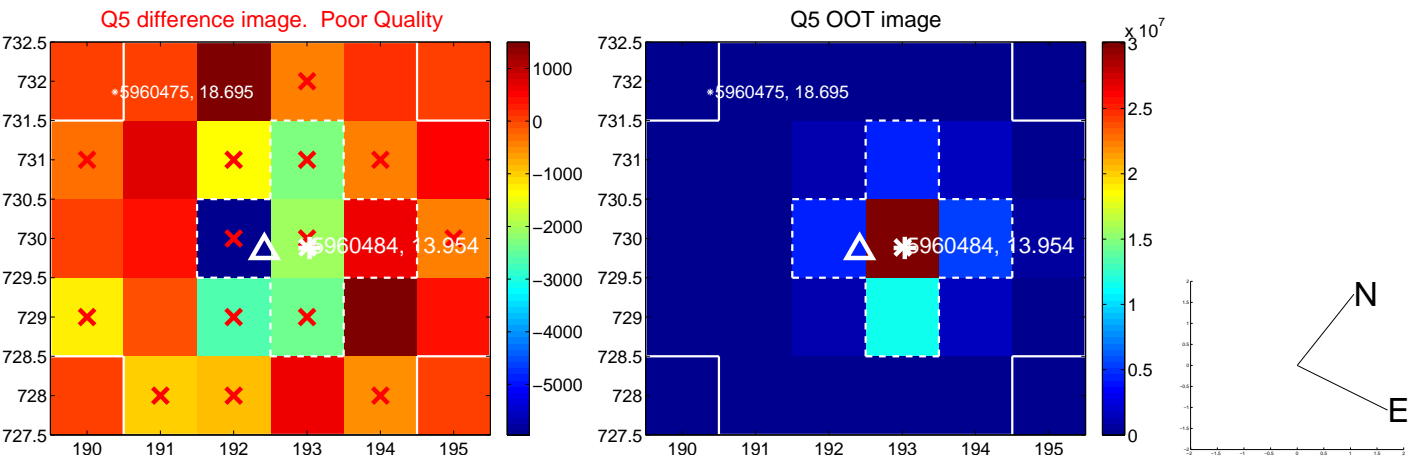


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

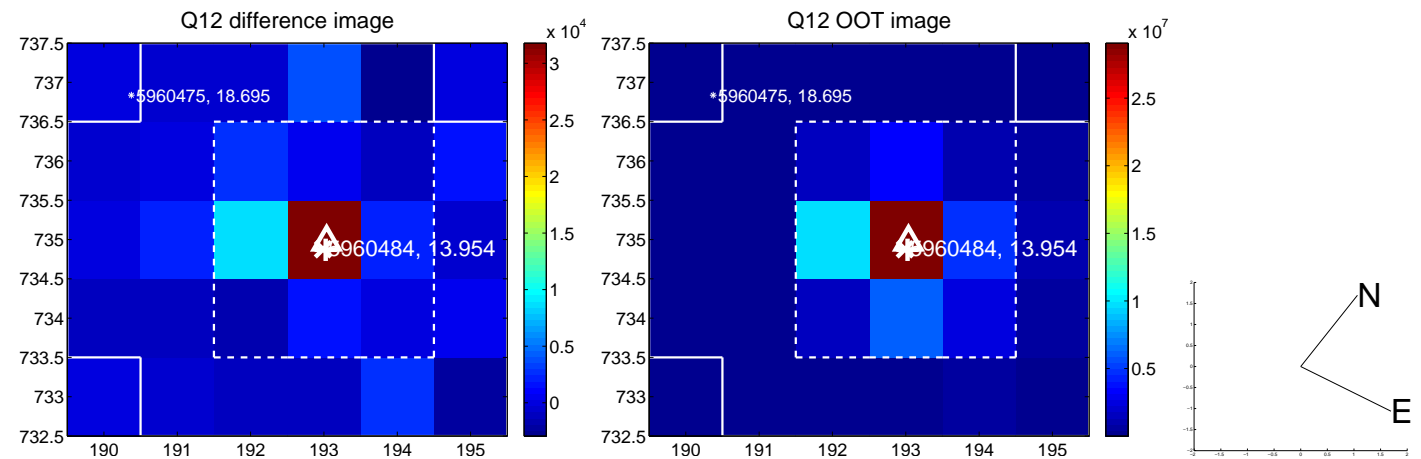
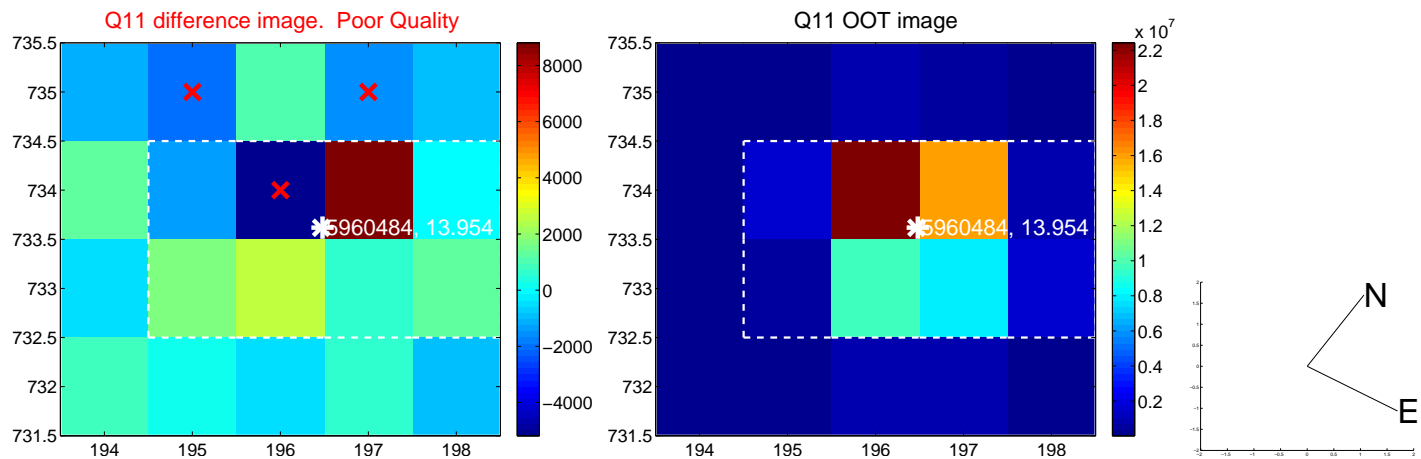
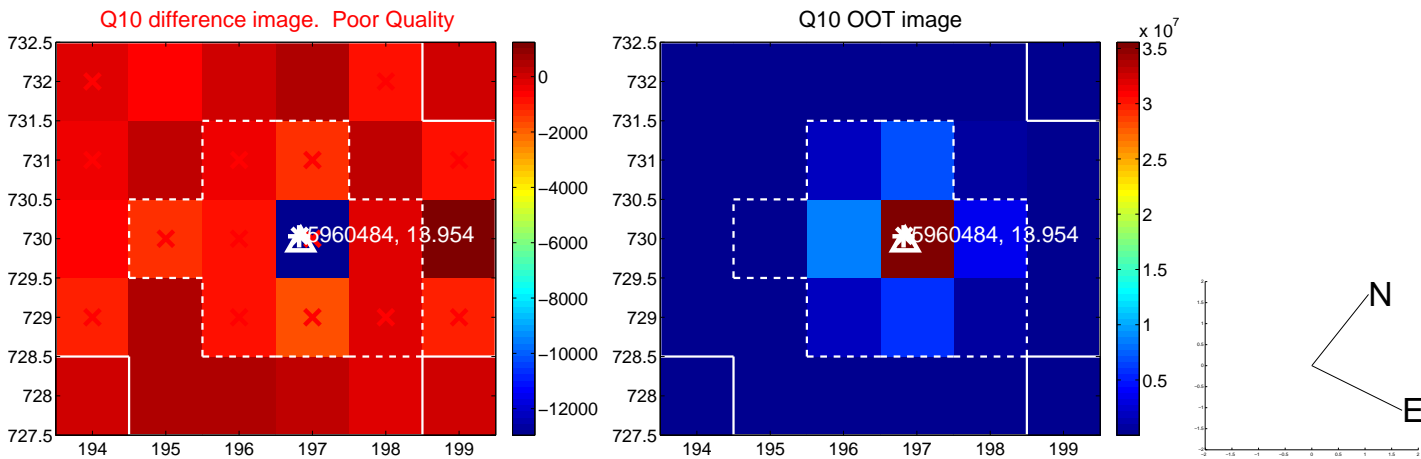
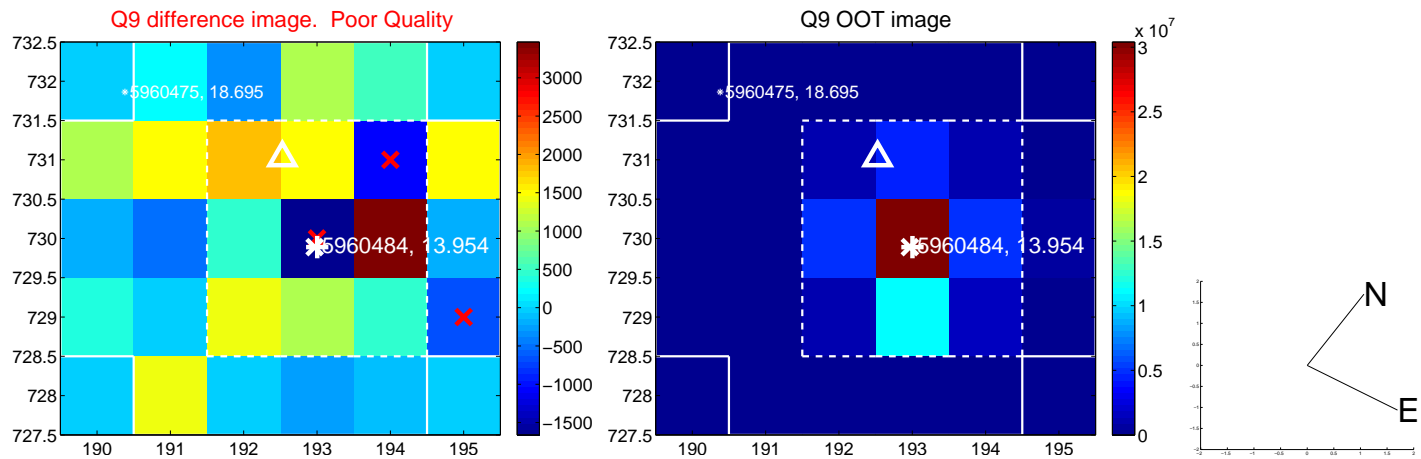
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



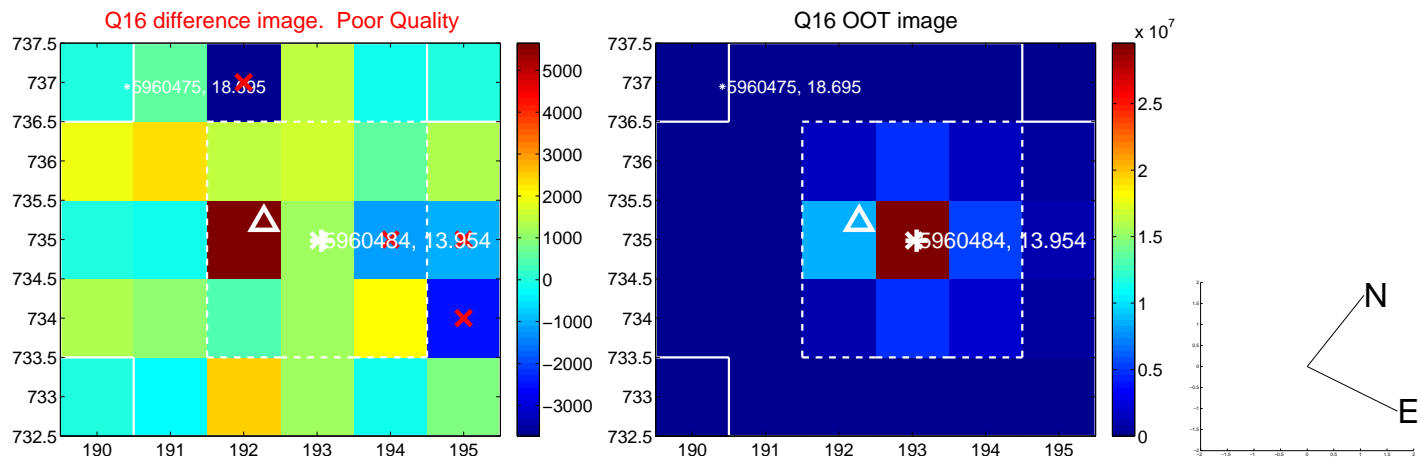
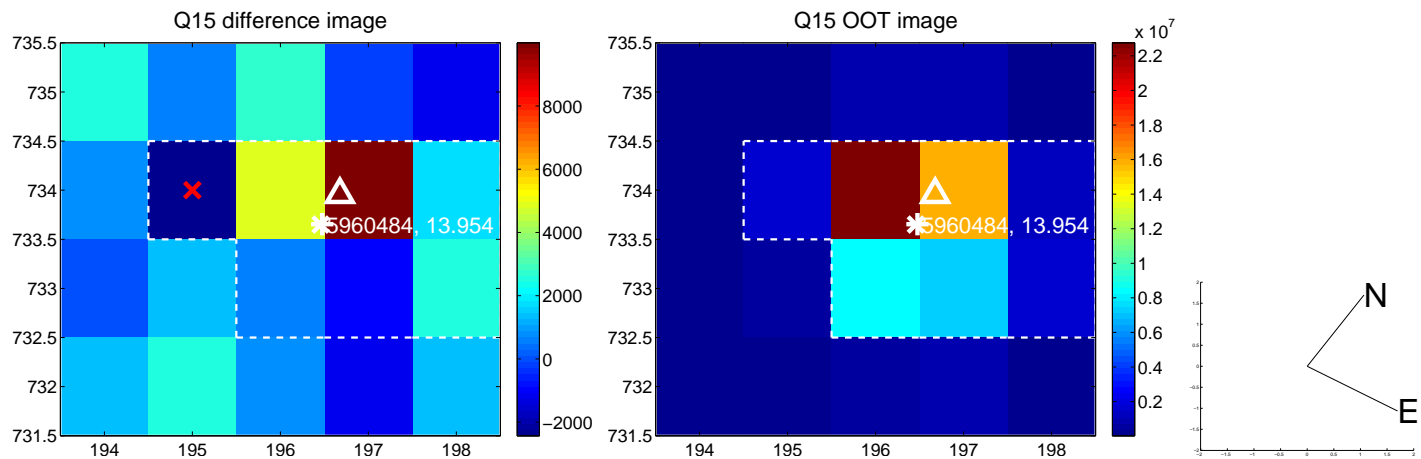
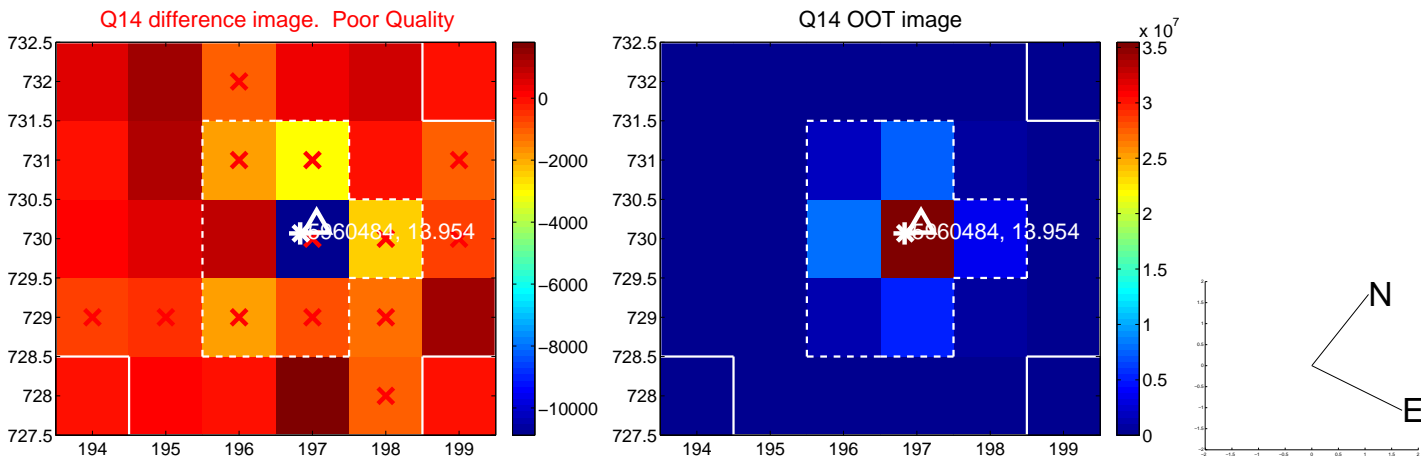
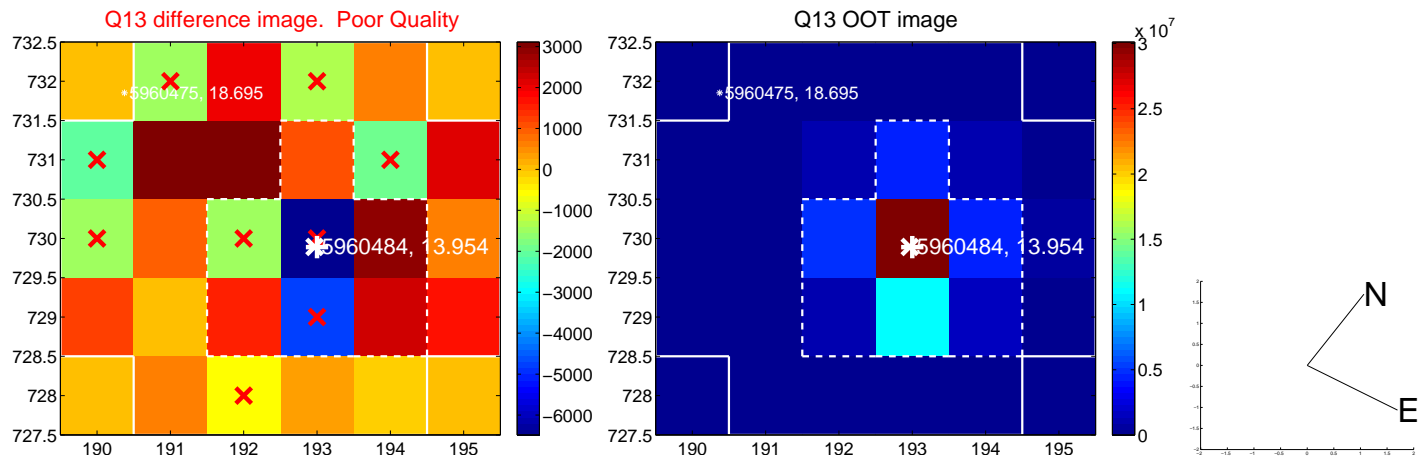
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



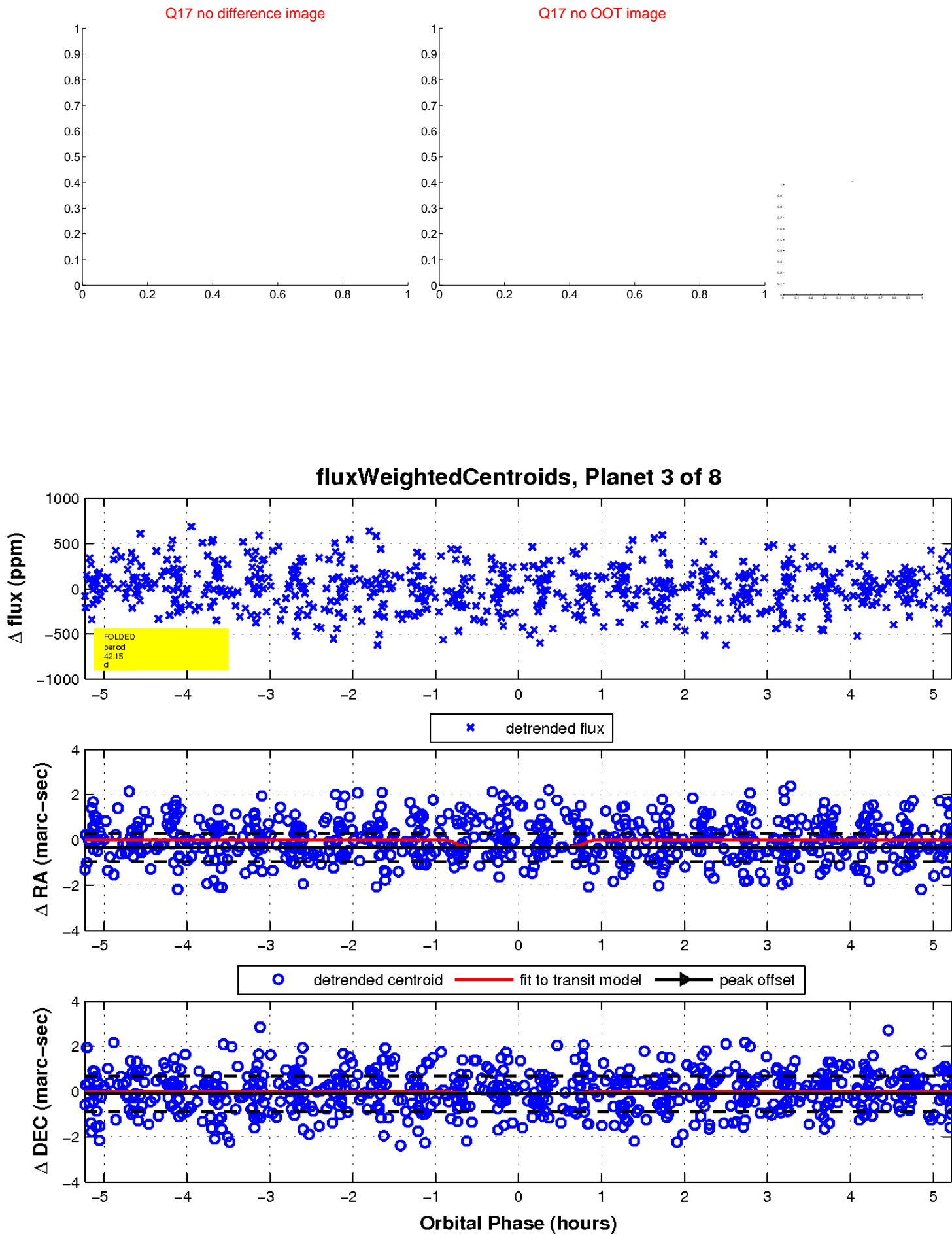
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

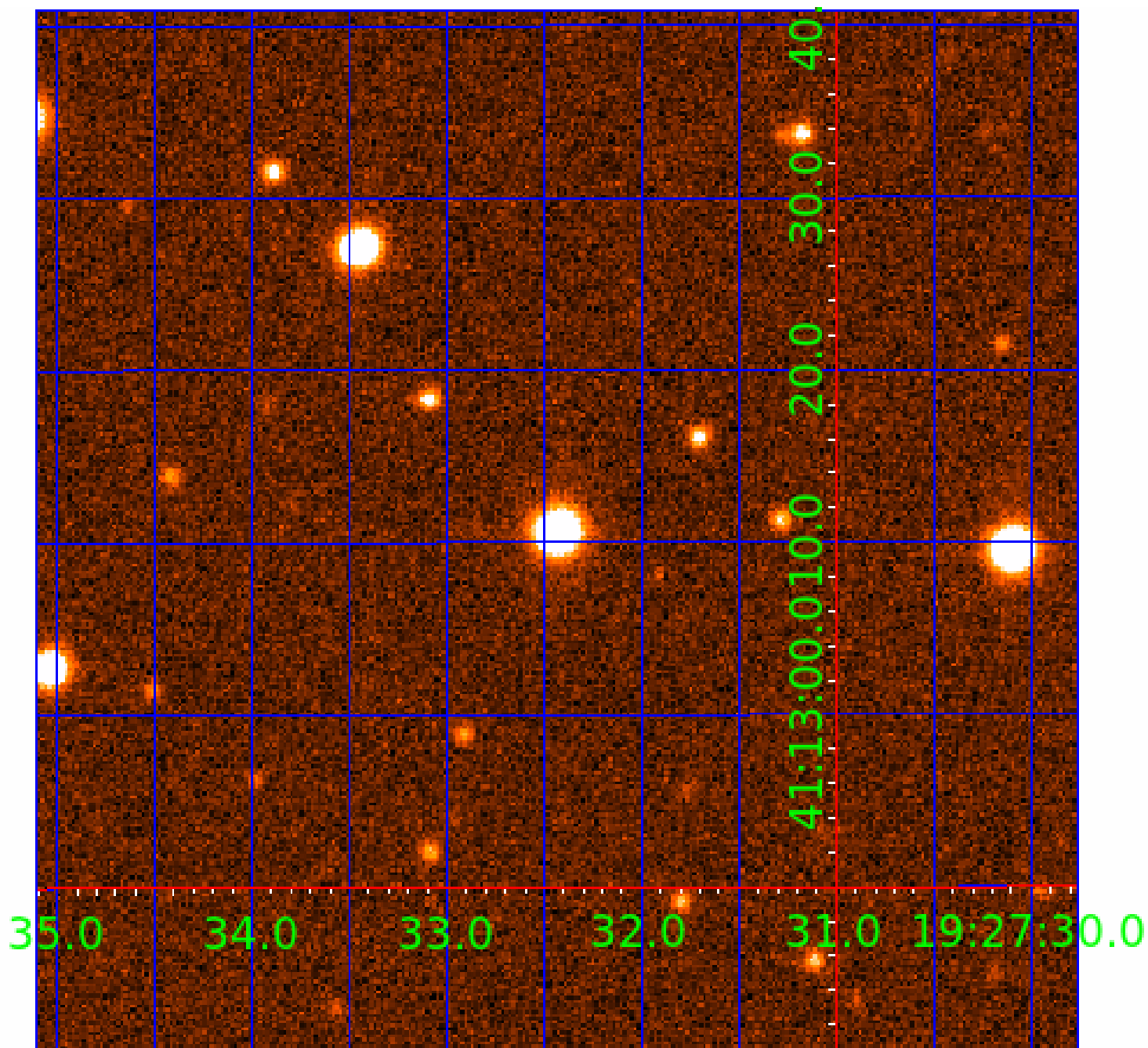


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005960484

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})
005960484-01	OBS	No	0.605539	131.731623	8.1	4.423	7.8	3.7	1.57	7310	0.46	24999.93
005960484-02	OBS	No	23.027039	132.003375	234.1	2.066	12.6	11.4	1.57	7310	2.59	195.50
005960484-03	OBS	No	42.152393	150.182373	397.2	1.746	13.1	12.5	1.57	7310	3.62	87.30
005960484-04	OBS	No	10.007999	134.561131	317.1	0.878	13.3	15.0	1.57	7310	2.86	593.83
005960484-05	OBS	No	42.861399	146.723757	200.3	7.103	14.7	9.2	1.57	7310	2.44	85.38
005960484-06	OBS	No	12.454749	143.278310	317.6	0.930	12.9	11.0	1.57	7310	2.86	443.62
005960484-07	OBS	No	14.552426	137.006597	240.3	2.723	13.9	12.0	1.57	7310	2.54	360.48
005960484-08	OBS	No	13.469643	131.932116	65.8	0.979	11.6	2.3	1.57	7310	1.34	399.62

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005960484-01	OBS	FP	0.00	1	0	1	0	LPP_DV—MOD_NONUNIQ_ALT—CENT_UNRESOLVED_OFFSET
005960484-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
005960484-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV
005960484-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005960484-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV
005960484-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
005960484-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
005960484-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

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

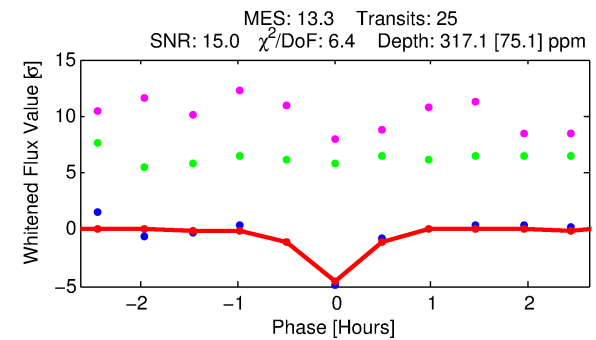
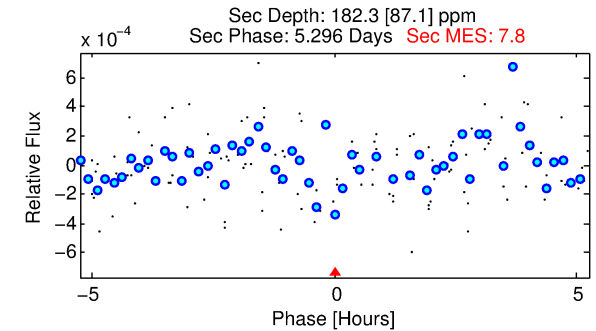
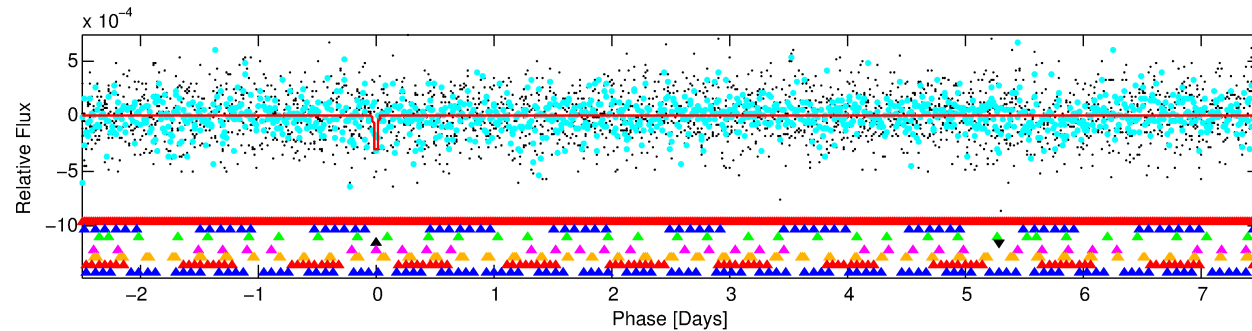
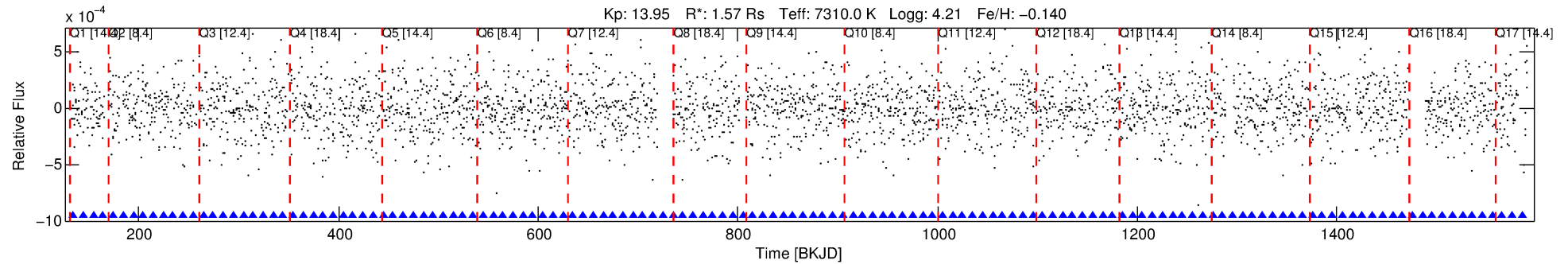
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005960484-04

No Significant Match Found

DV One-Page Summary

KIC: 5960484 Candidate: 4 of 8 Period: 10.008 d

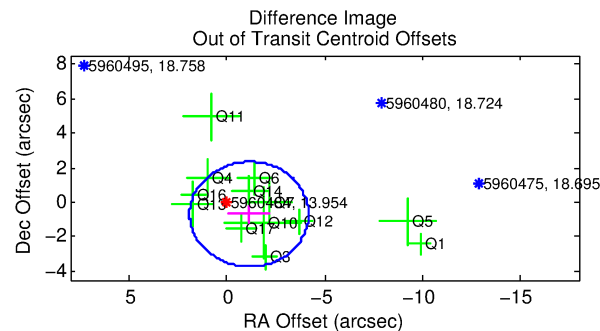
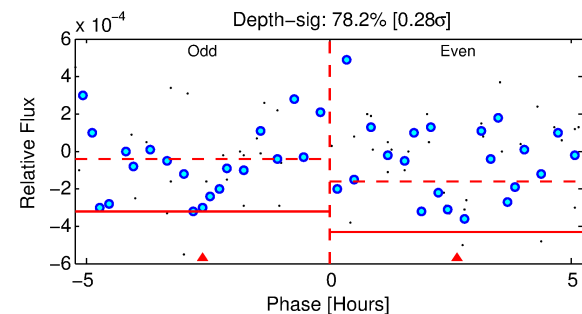
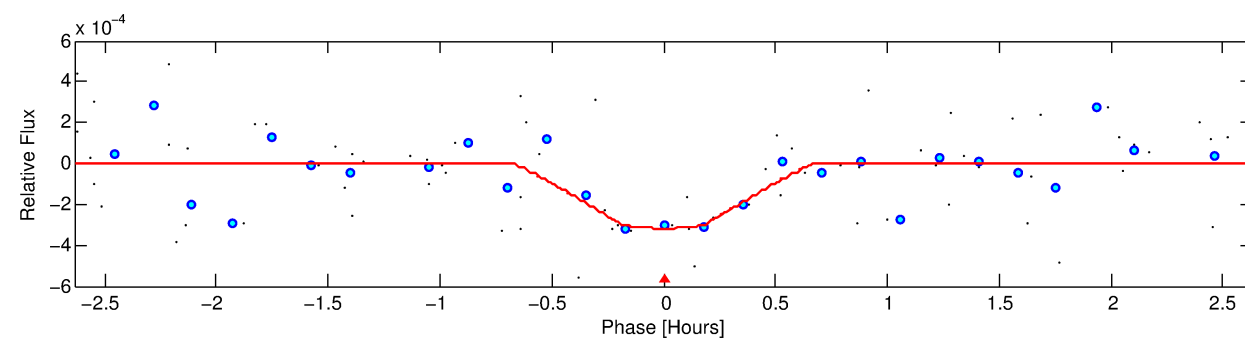


DV Fit Results:

Period = 10.00800 [0.00010] d
Epoch = 134.5611 [0.0072] BKJD
Rp/R* = 0.0167 [0.0300]
a/R* = 88.53 [925.22]
b = 0.00 [5782.58]
Seff = 593.83 [244.02]
Teff = 1259 [129] K
Rp = 2.86 [5.21] Re
a = 0.1029 [0.0270] AU
Ag = 130.18 [474.15] [0.27σ]
Teffp = 6574 [5962] K [0.89σ]

DV Diagnostic Results:

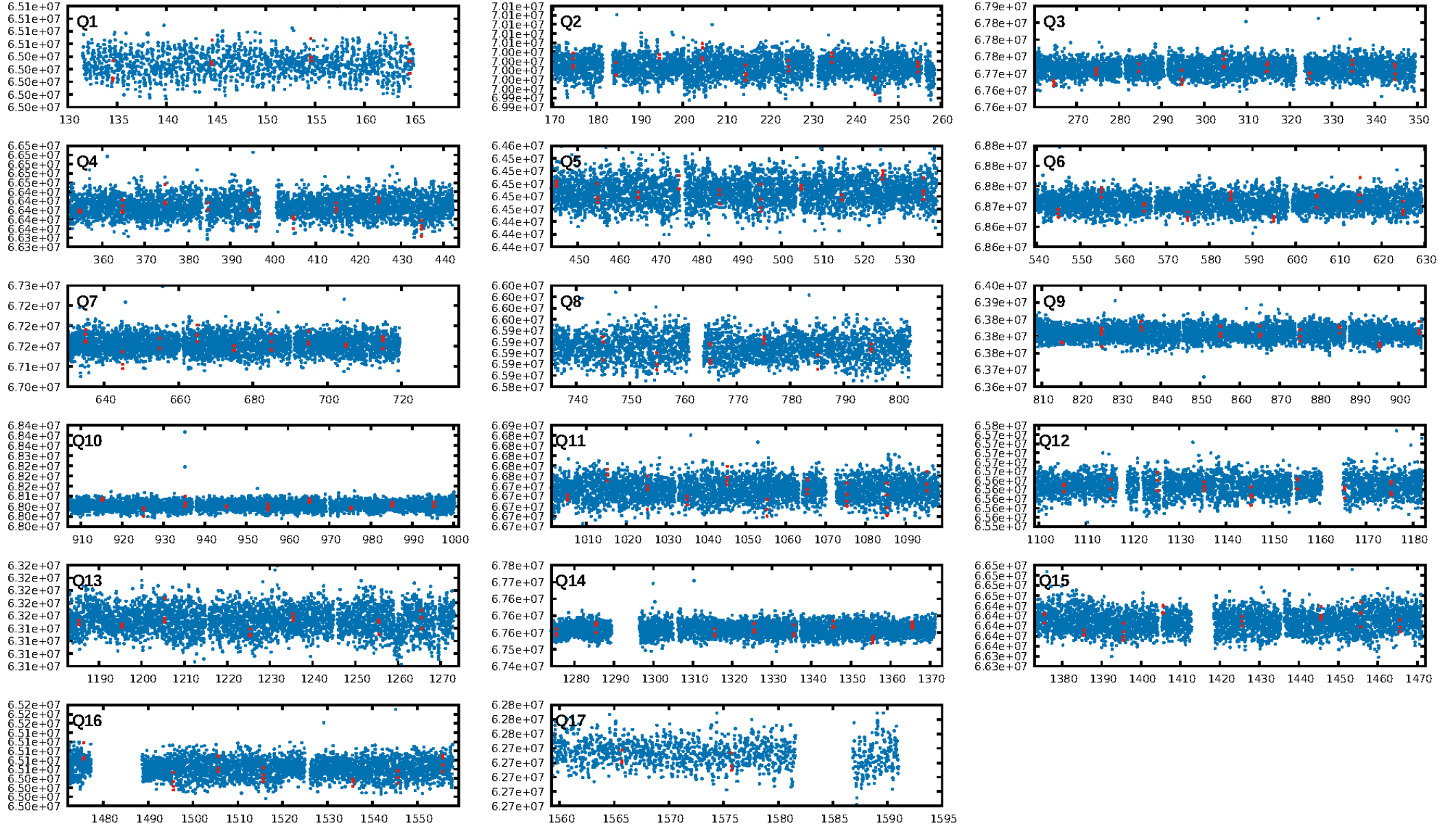
ShortPeriod-sig: 100.0% [50.04σ]
LongPeriod-sig: 100.0% [45.90σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.9%
Bootstrap-pfa: 1.03e-13
RollingBand-fgt: 1.00 [25/25]
GhostDiagnostic-chr: 7.738
Centroid-sig: 25.9%
Centroid-so: 0.830 arcsec [1.32σ]
OotOffset-rm: 1.339 arcsec [1.32σ]
KicOffset-rm: 1.271 arcsec [1.30σ]
OotOffset-st: 3/3/3/4 [13]
KicOffset-st: 3/3/3/4 [13]
DiffImageQuality-fgm: 0.38 [5/13]
DiffImageOverlap-fno: 0.00 [0/17]



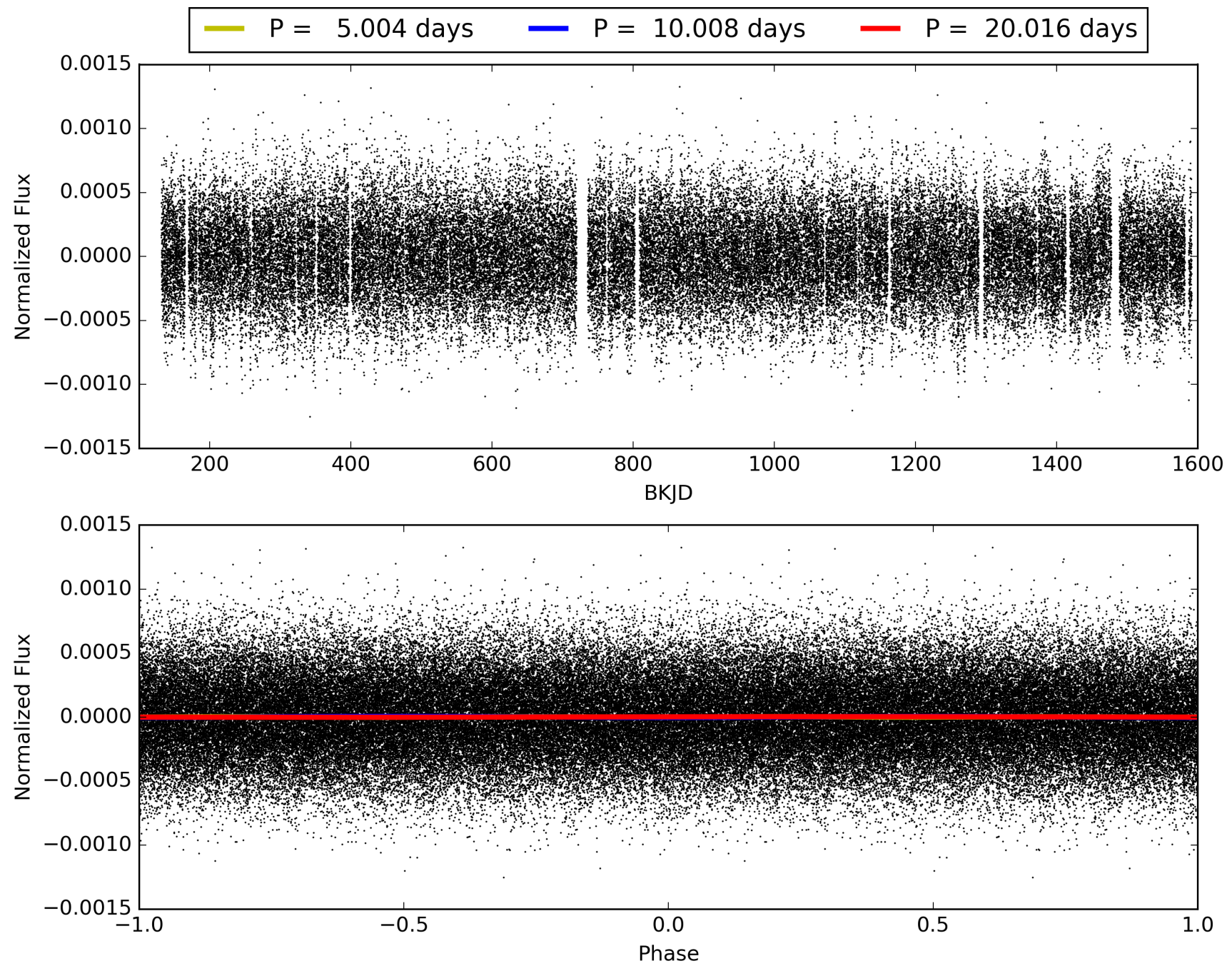
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 07:12:24 Z

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

TCE 005960484-04, PDC Light Curves

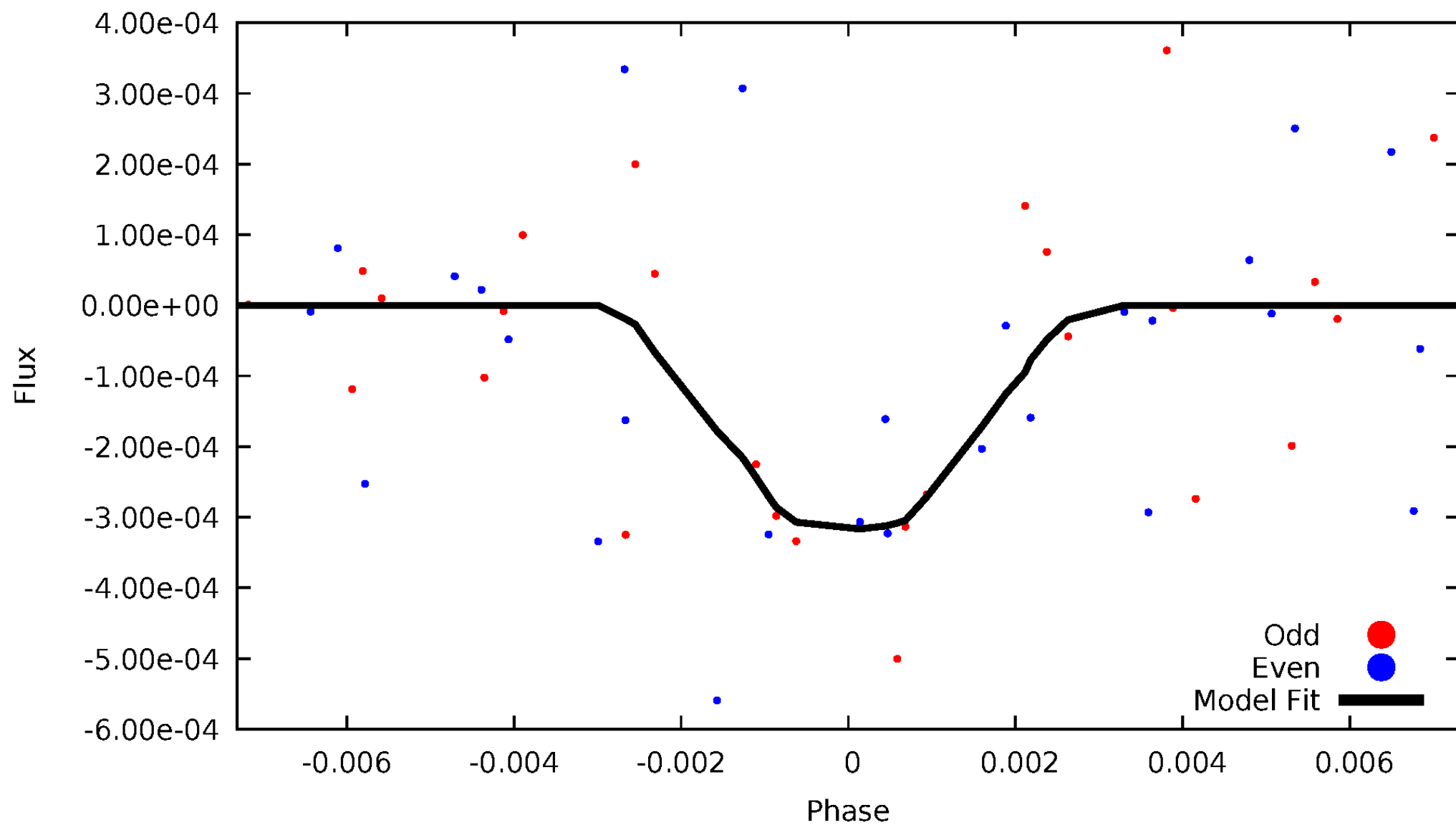


TCE 005960484-04



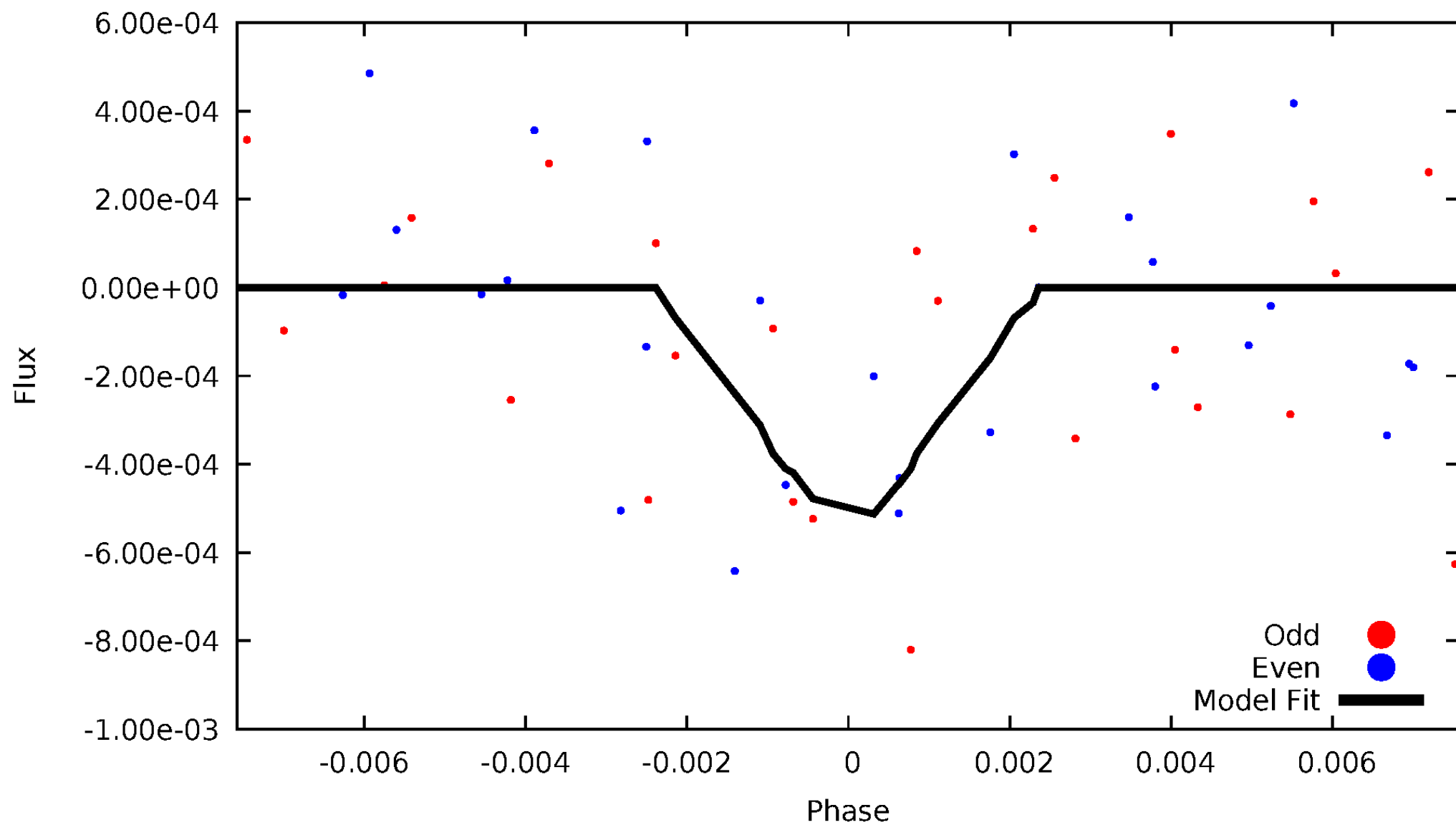
DV Odd/Even

TCE 005960484-04



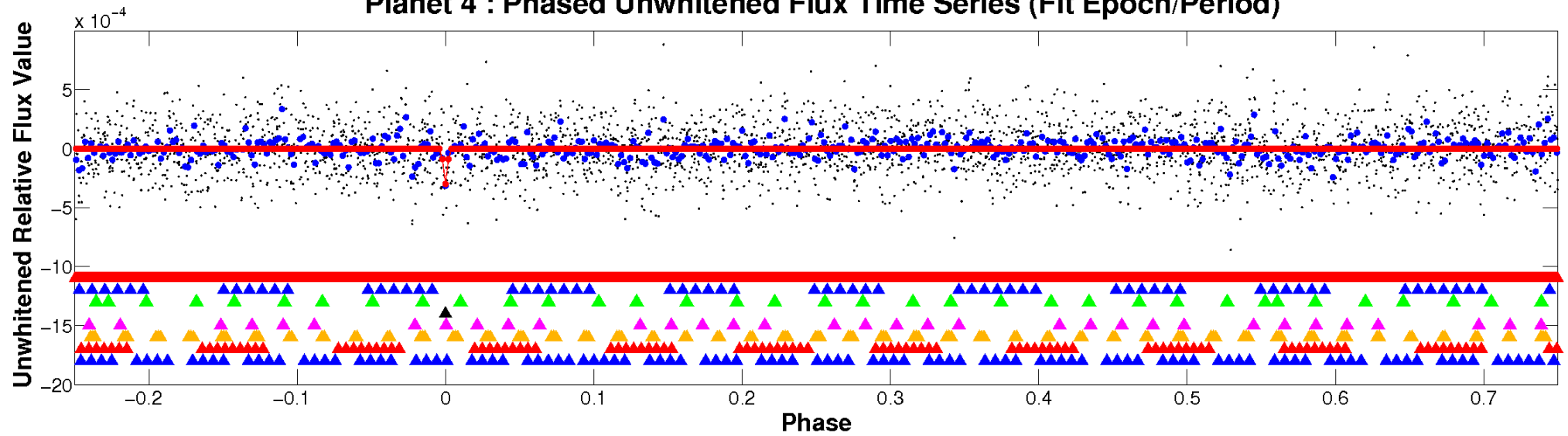
ALT Odd/Even

TCE 005960484-04

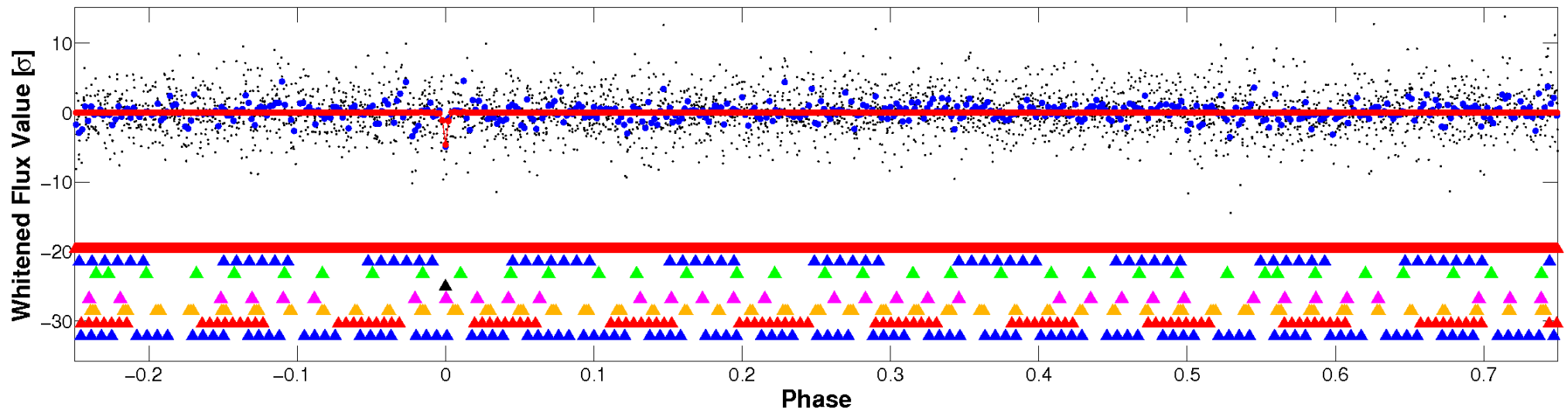


Non-Whitened Vs. Whitened Light Curve

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

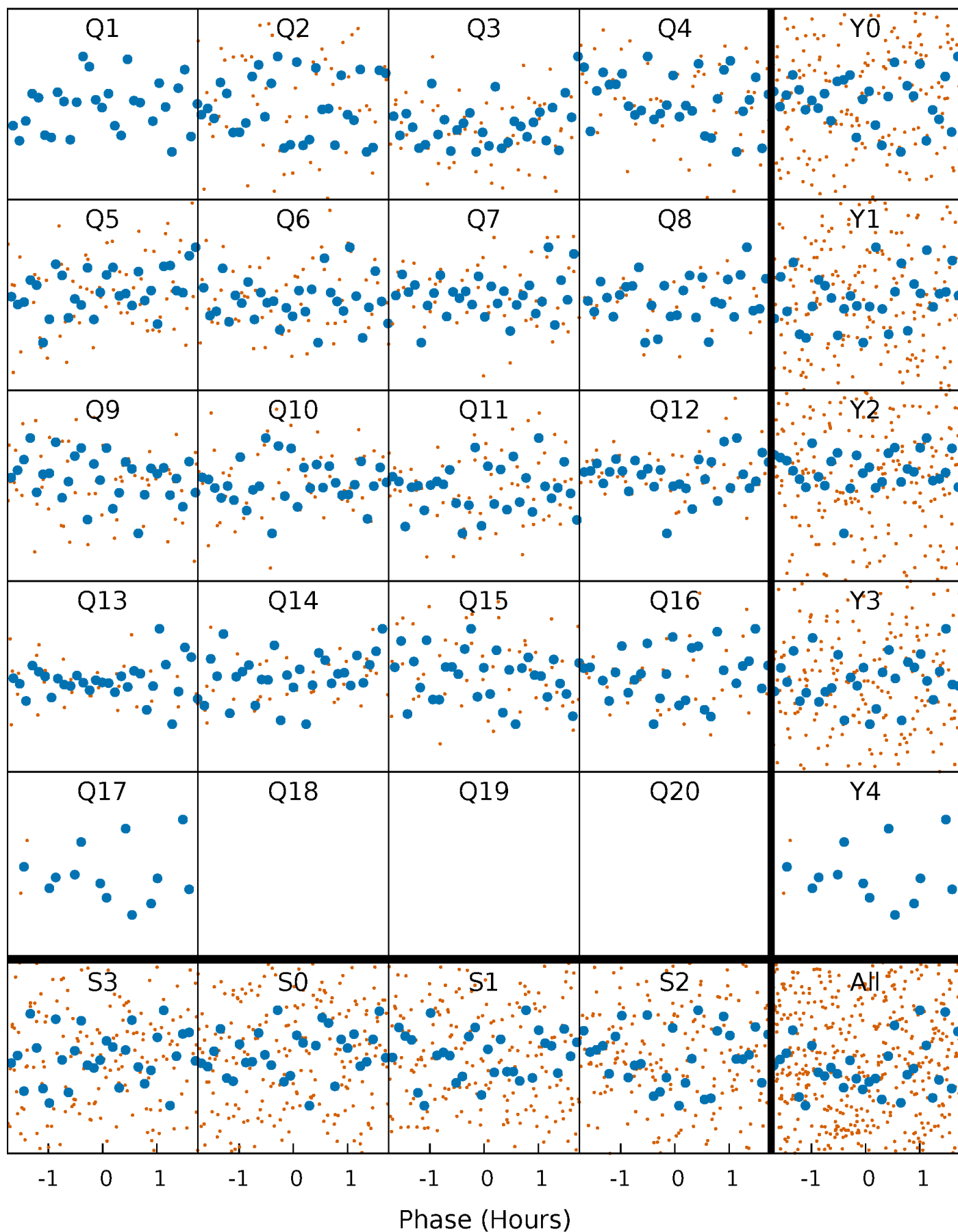


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



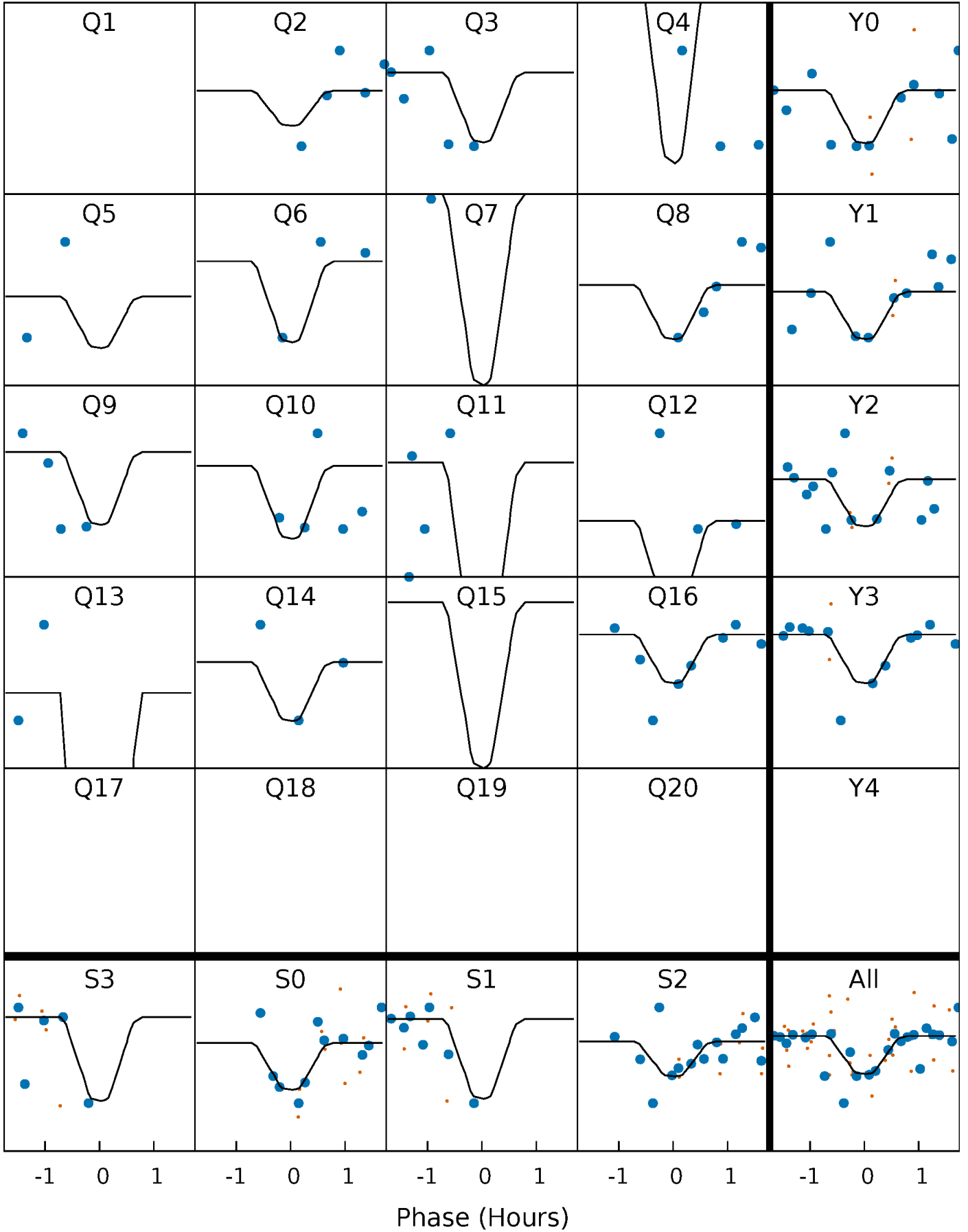
PDC Quarter-Phased Transit Curves

TCE 005960484-04 P= 10.007999 Days $T_0=134.561131$ (BKJD)



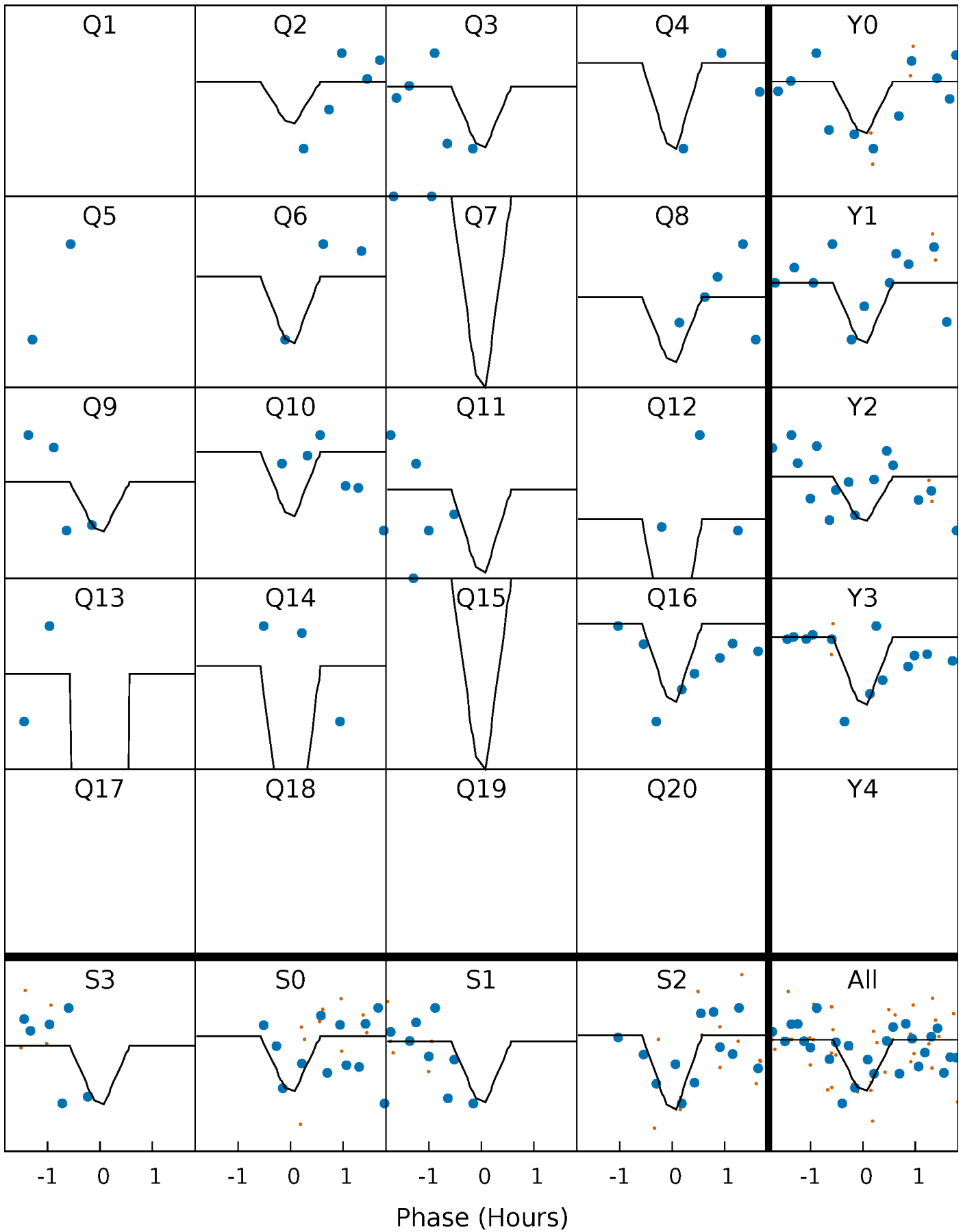
DV Quarter-Phased Transit Curves

TCE 005960484-04 P= 10.007999 Days $T_0=134.561131$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

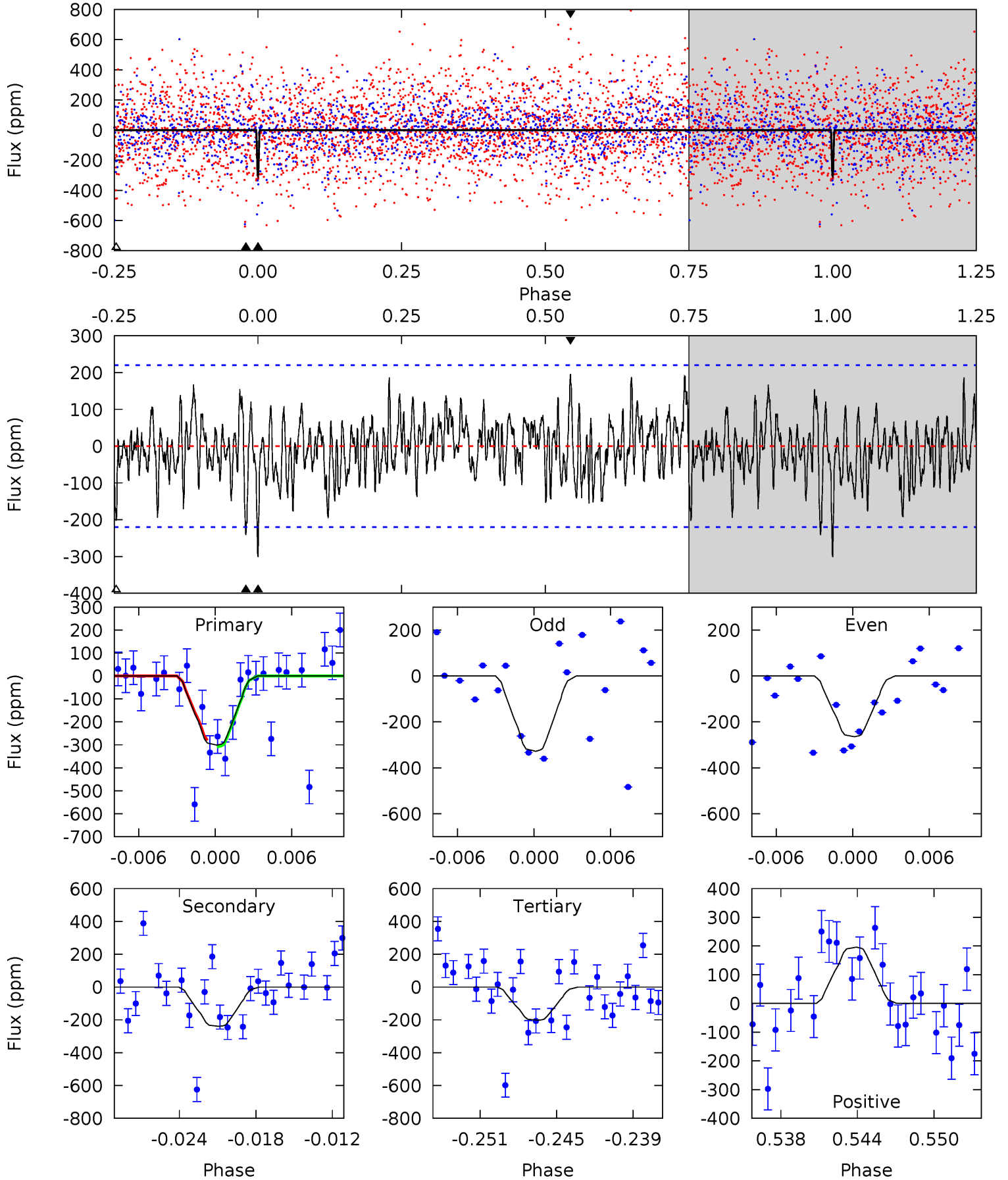
TCE 005960484-04 P= 10.008001 Days $T_0=134.559246$ (BKJD)



DV Model-Shift Uniqueness Test

005960484-04, P = 10.007999 Days, E = 124.553132 Days

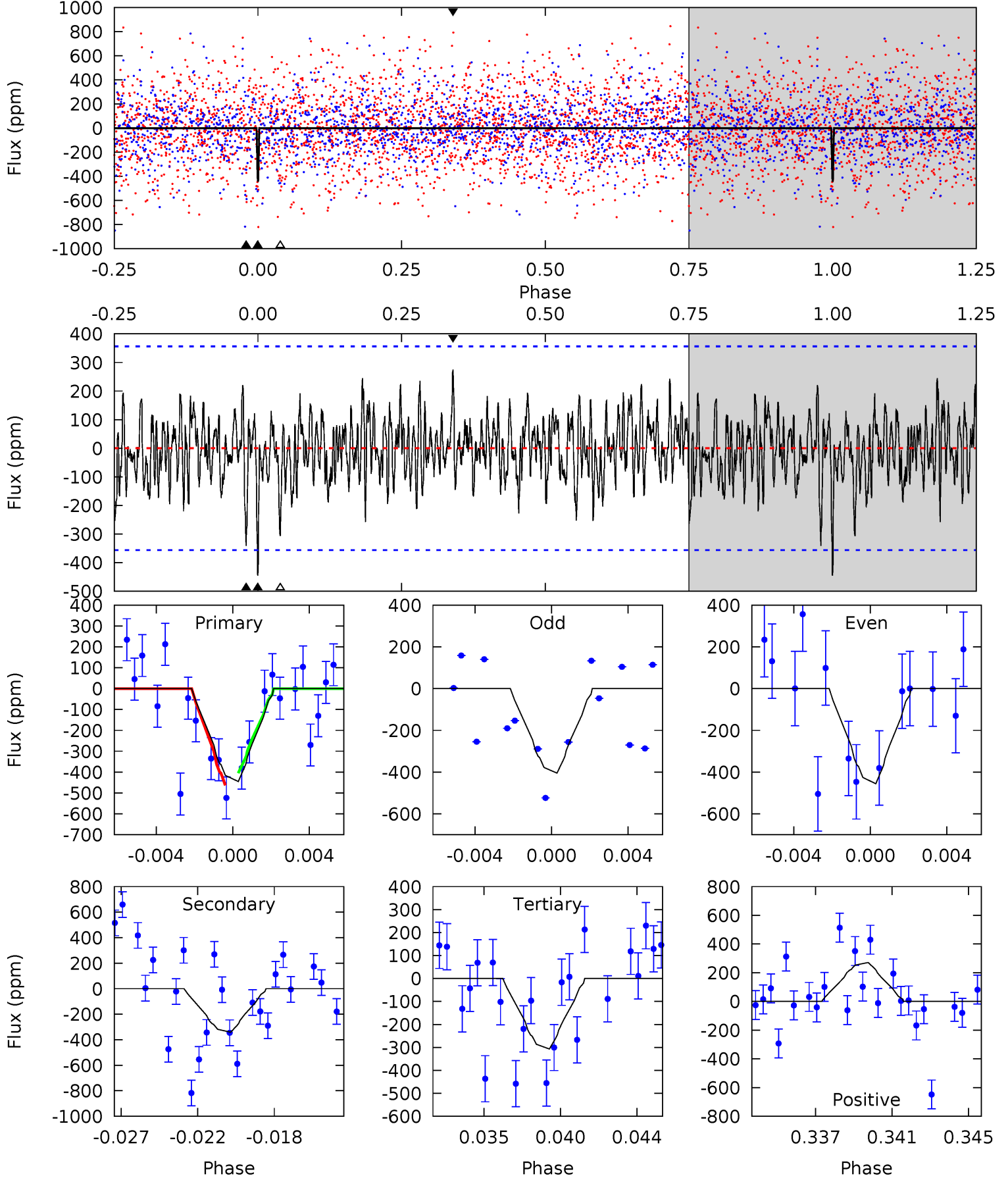
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.02	5.58	4.71	4.56	5.12	2.75	1.56	2.30	2.45	0.87	1.02	0.74	1.10	0.39	0.34



Alt Model-Shift Uniqueness Test

005960484-04, P = 10.008001 Days, E = 124.551245 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.48	4.96	4.47	3.95	5.18	2.85	1.34	2.01	2.53	0.49	1.01	0.37	1.00	0.38	0.42



Stellar Parameters For KIC 005960484

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7310^{+228}_{-330}	$4.209^{+0.105}_{-0.195}$	$-0.140^{+0.250}_{-0.350}$	$1.568^{+0.508}_{-0.274}$	$1.452^{+0.211}_{-0.211}$	$0.531^{+0.265}_{-0.278}$
	+3%/-5%	+2%/-5%	+179%/-250%	+32%/-17%	+15%/-15%	+50%/-52%
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 005960484-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-240 ± 43	$4.97^{+4.23}_{-3.31}$	1771^{+150}_{-109}	5356^{+4505}_{-1185}	55^{+397}_{-38}
Alt.	-341 ± 69	$5.71^{+4.70}_{-3.73}$	1774^{+132}_{-108}	5423^{+4360}_{-1189}	60^{+427}_{-42}

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

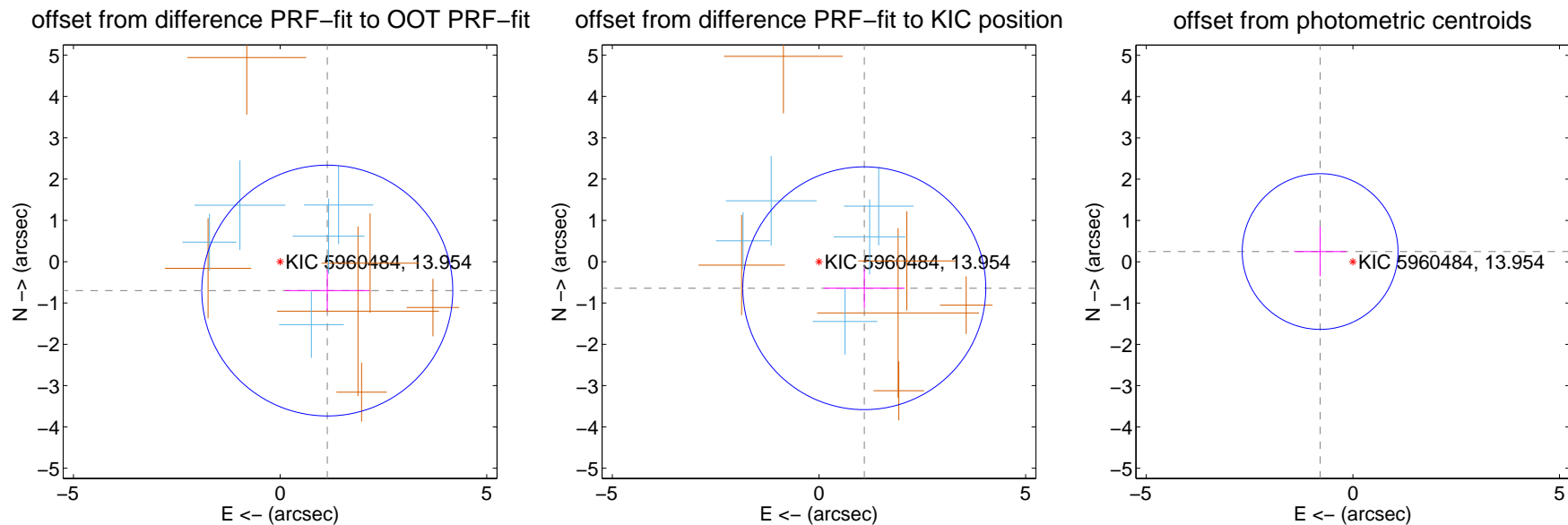
DV Centroid Data

Supplemental centroid analysis for 005960484-04. Kepler magnitude: 13.95. Transit SNR 15.03

There are 5 quarters with good PRF difference image offsets

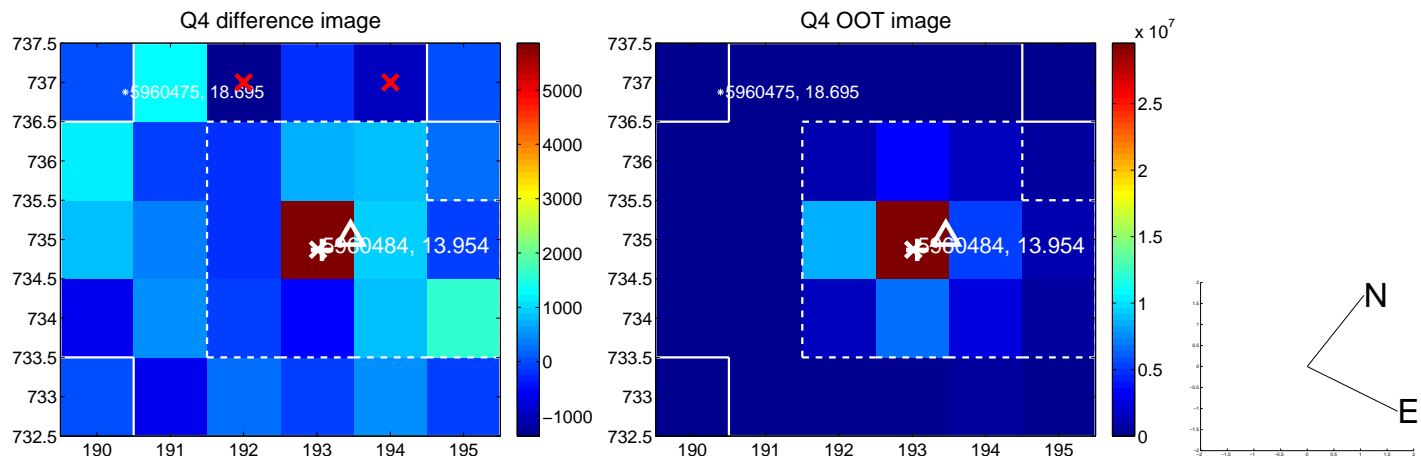
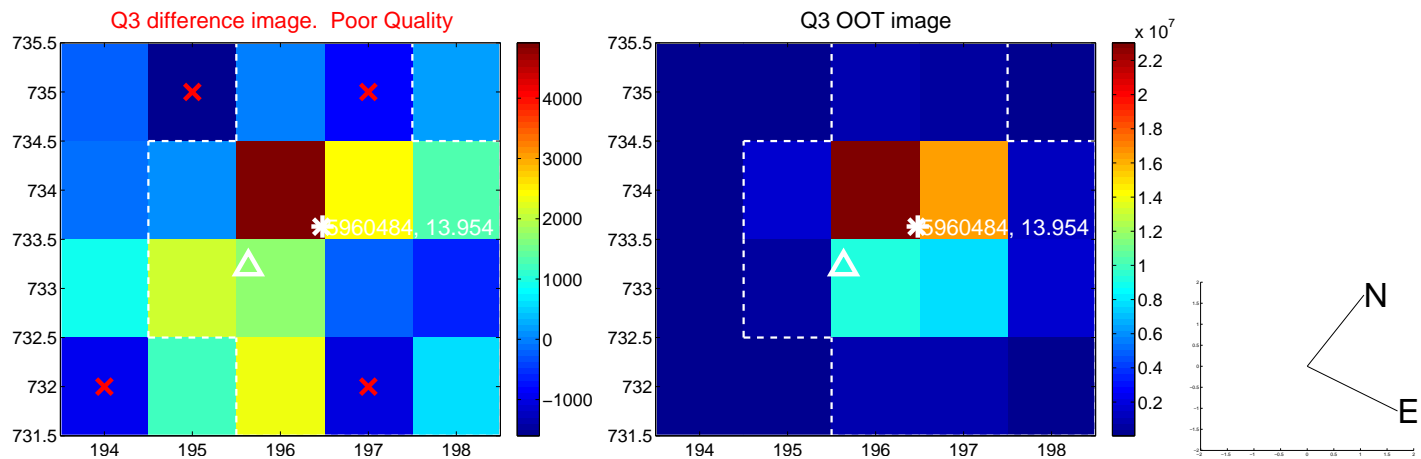
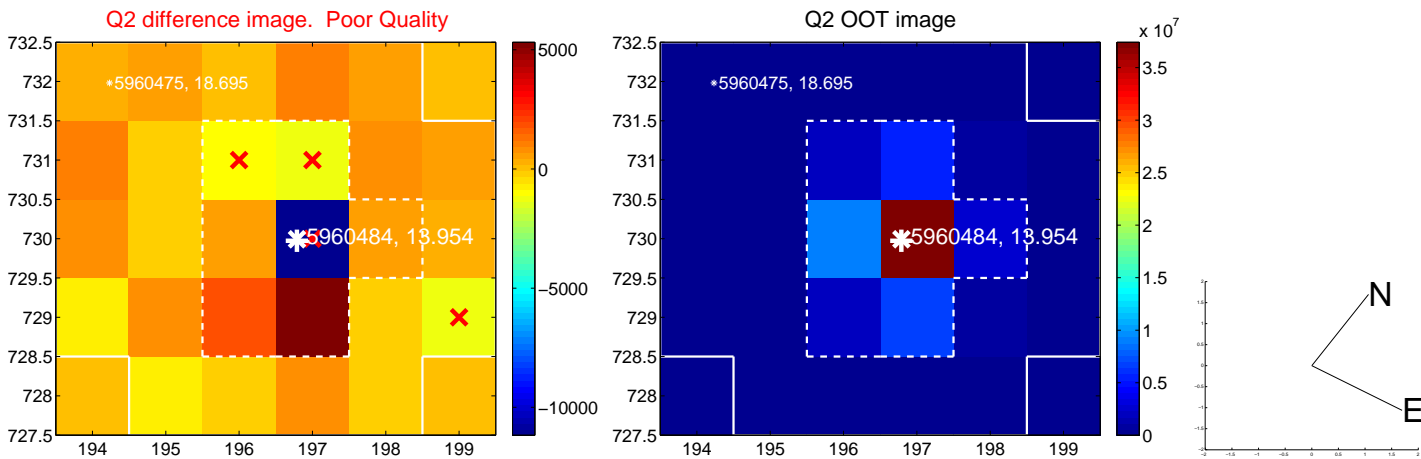
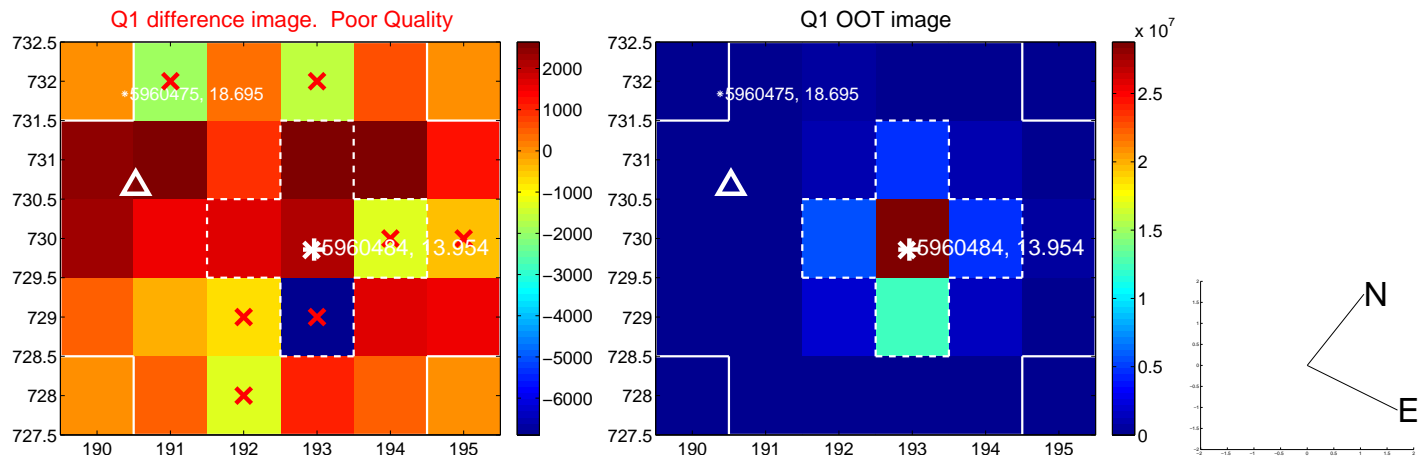
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.339 ± 1.012	1.32	-1.142 ± 1.022	-0.699 ± 0.498
PRF-fit source offset from KIC position	1.271 ± 0.980	1.30	-1.096 ± 0.975	-0.643 ± 0.480
photometric centroid source offset	0.83 ± 0.63	1.32	0.79 ± 0.63	0.25 ± 0.60

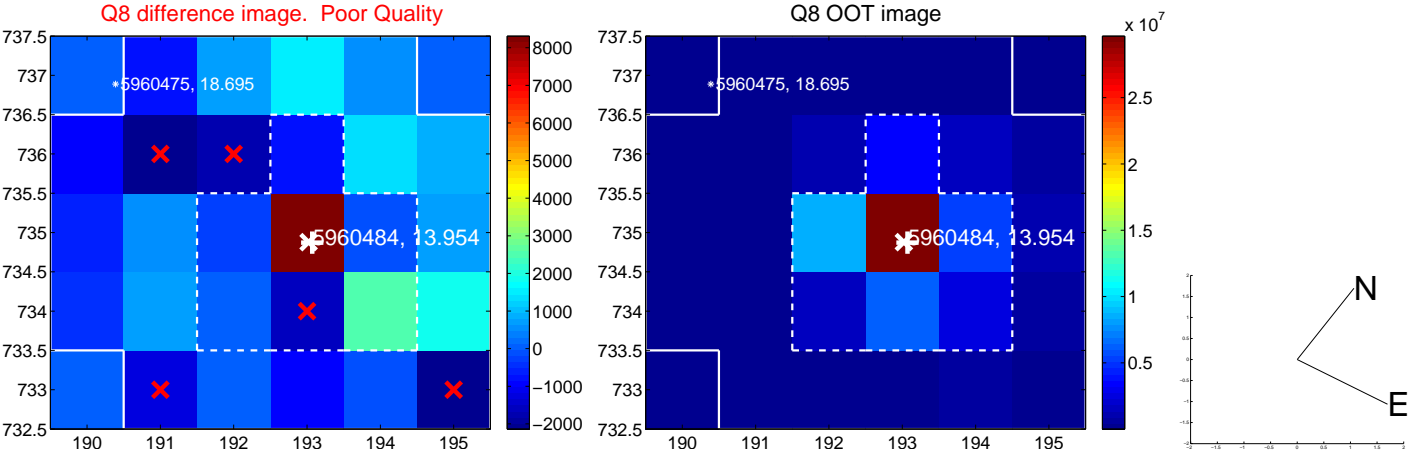
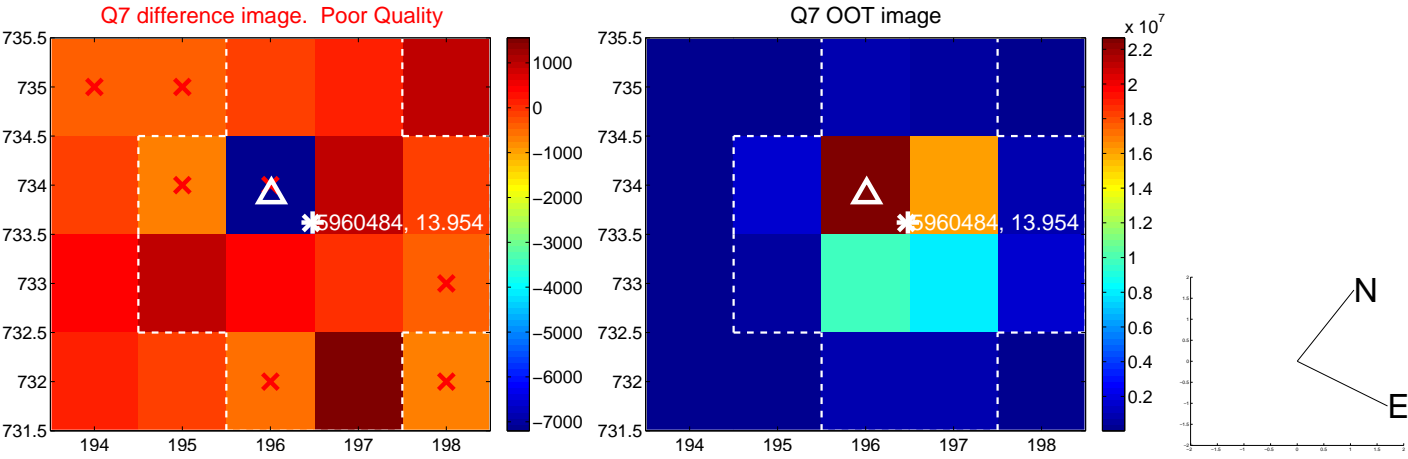
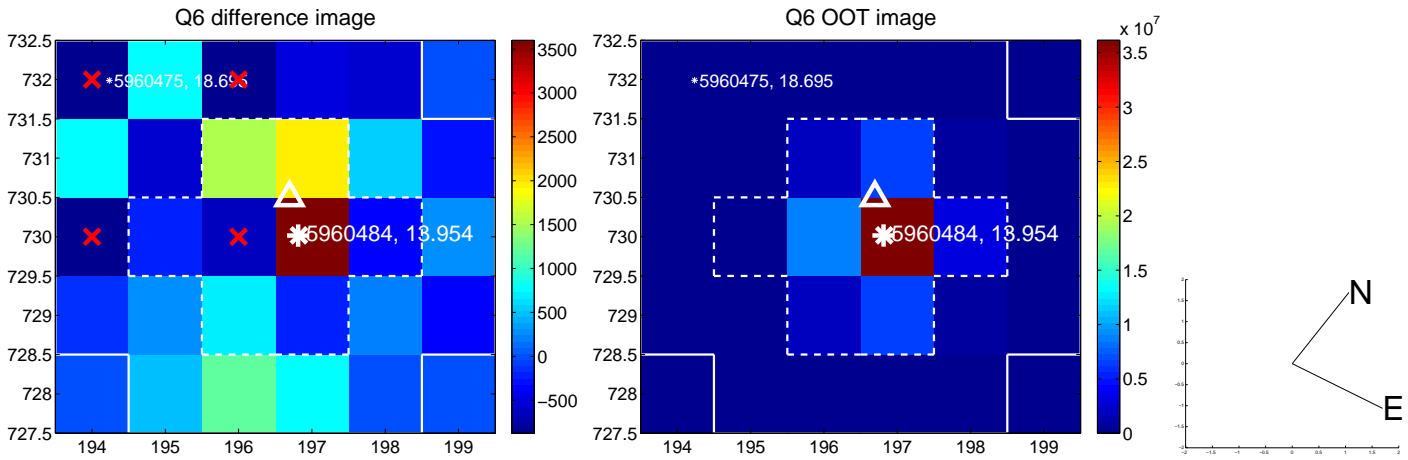
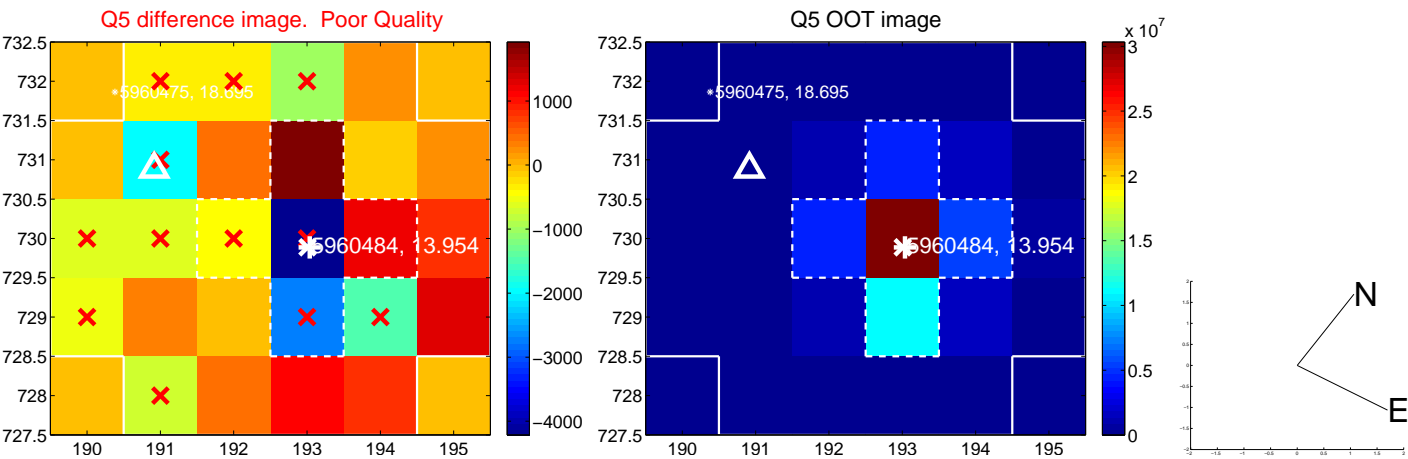


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

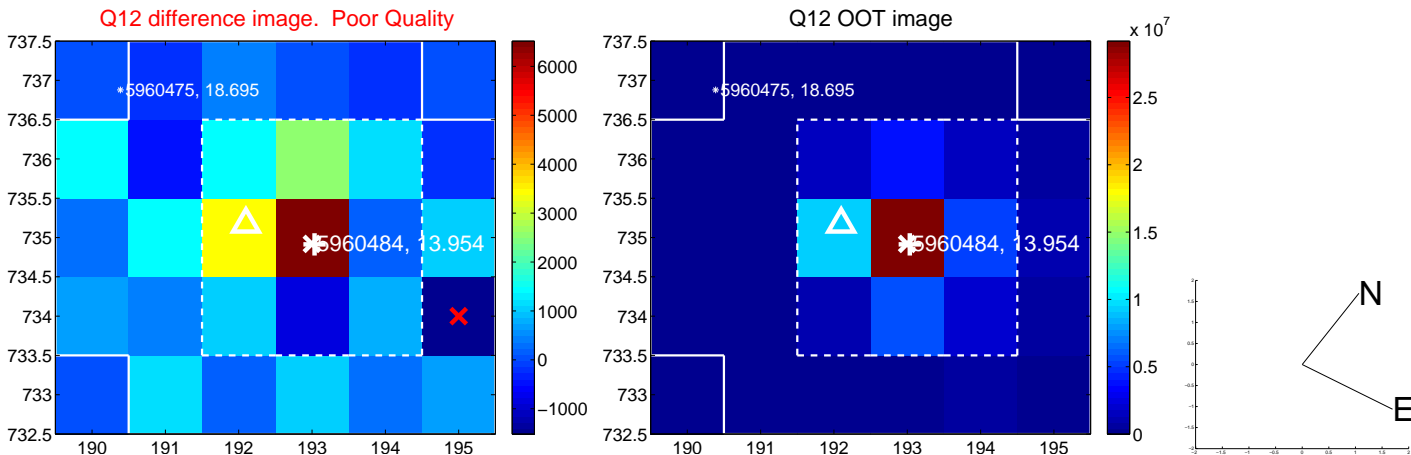
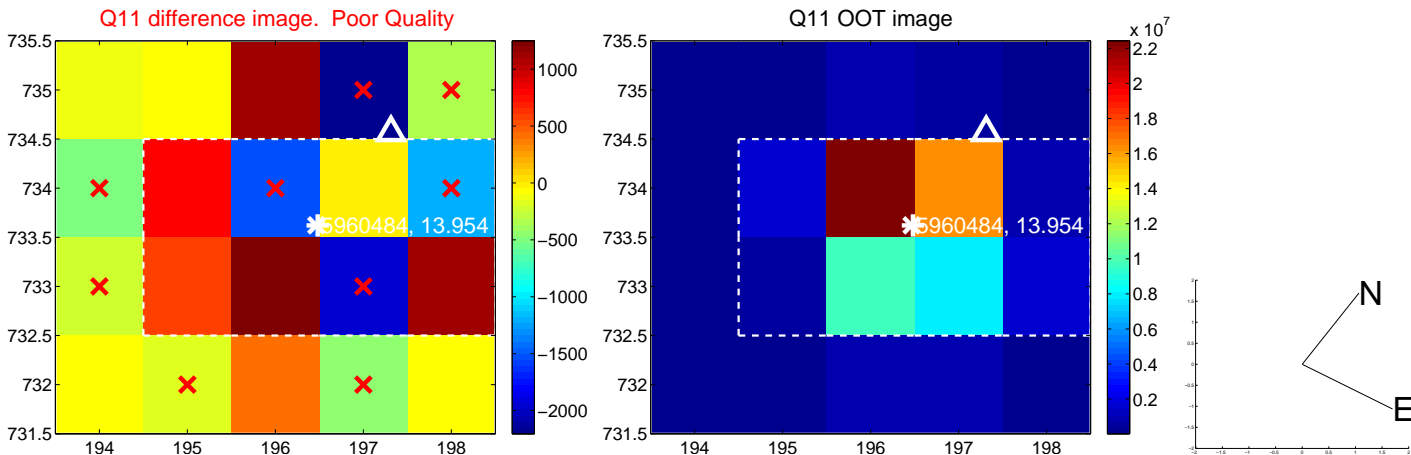
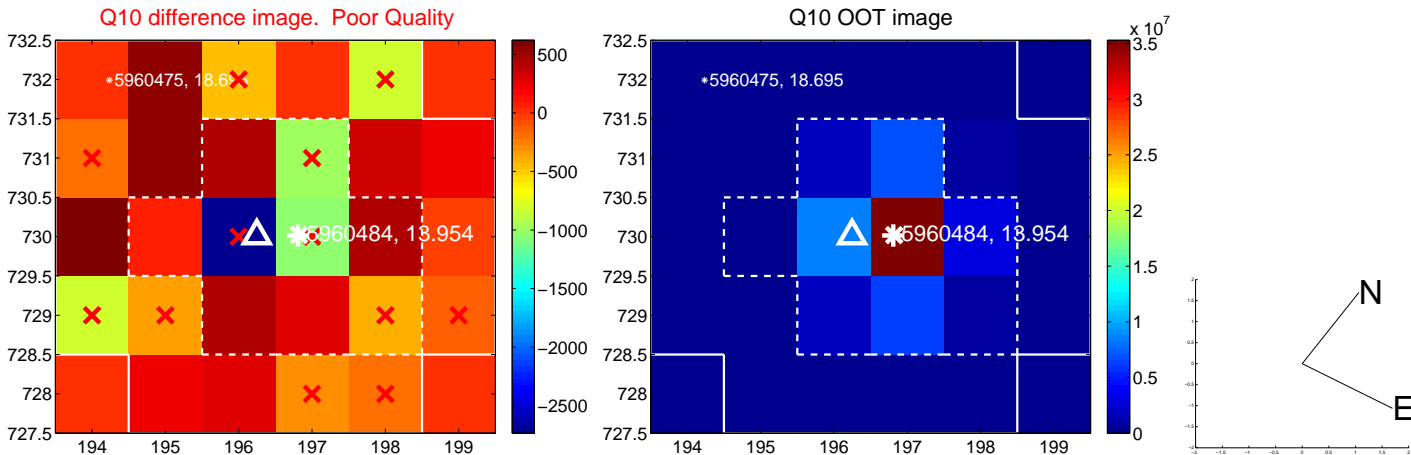
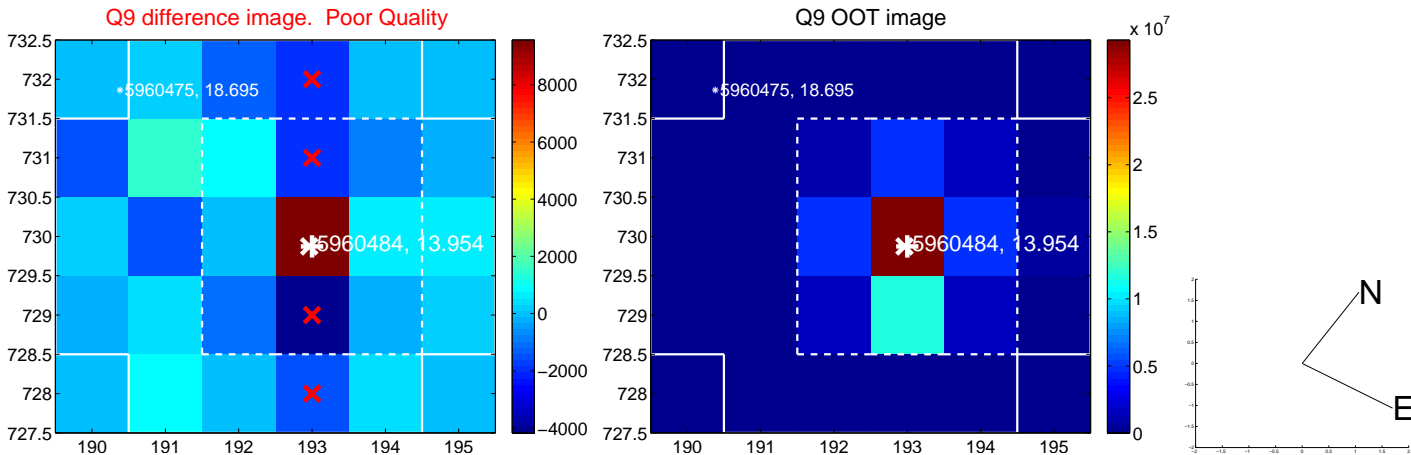
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



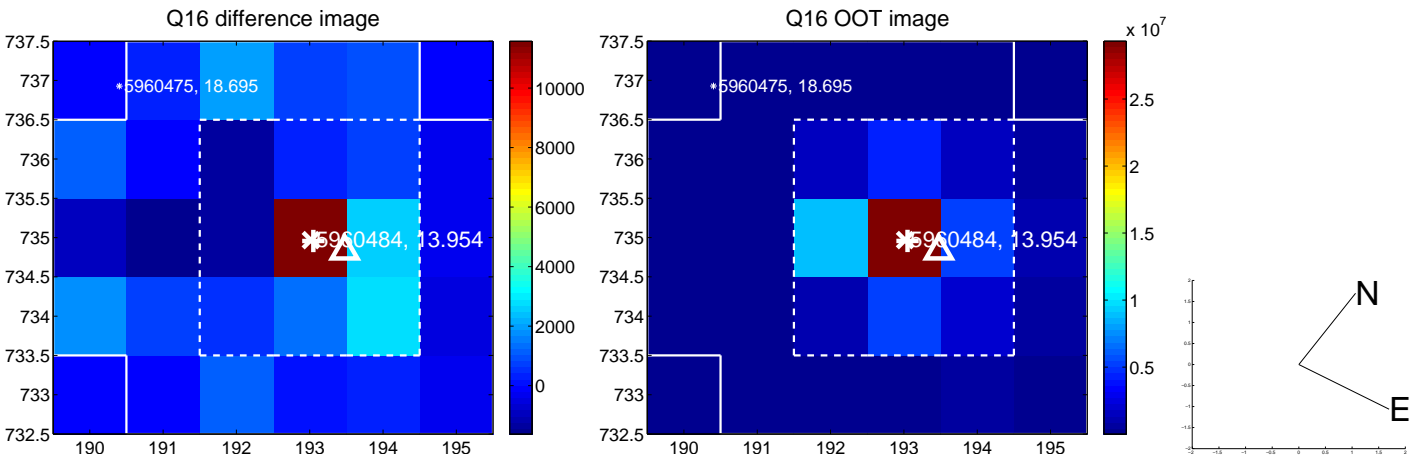
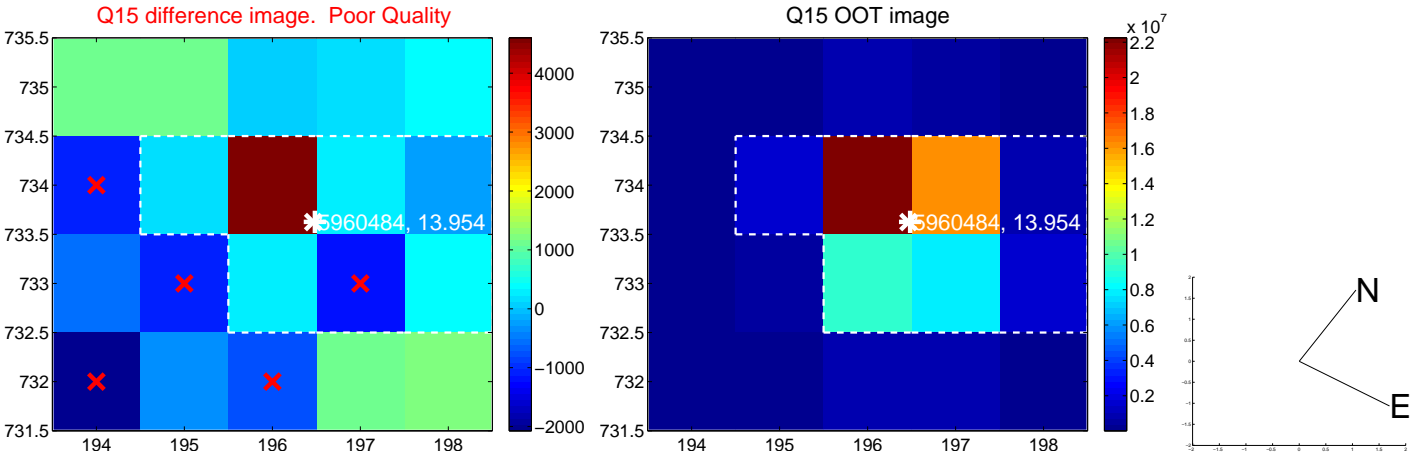
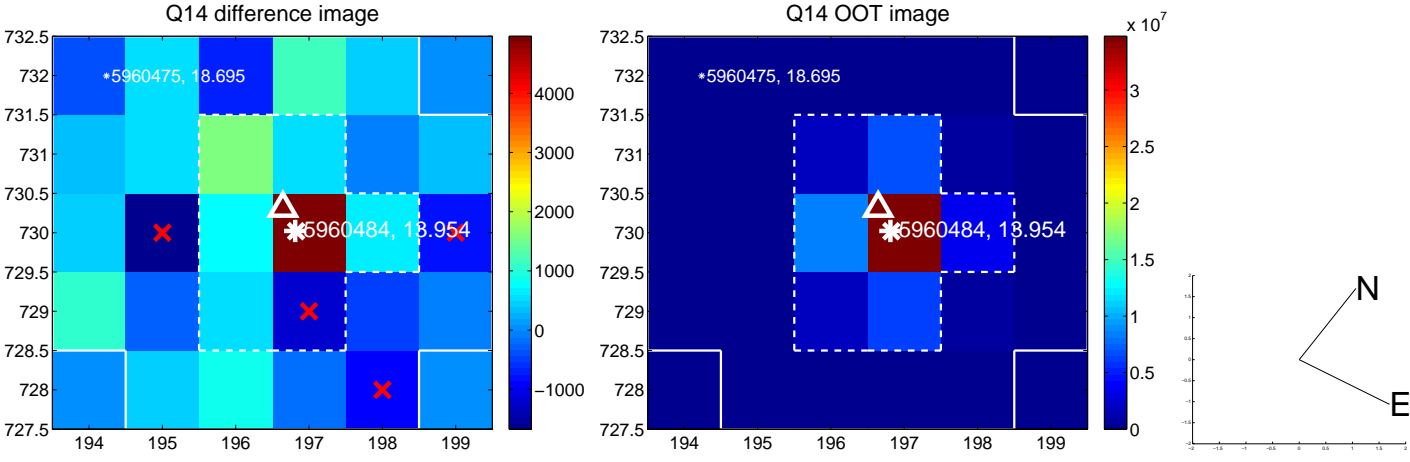
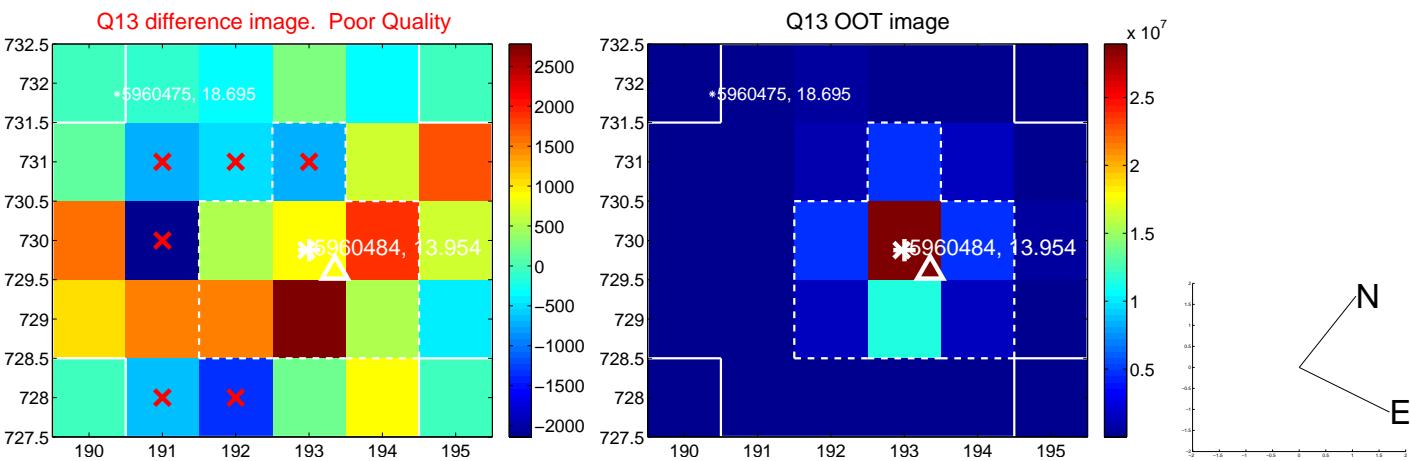
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



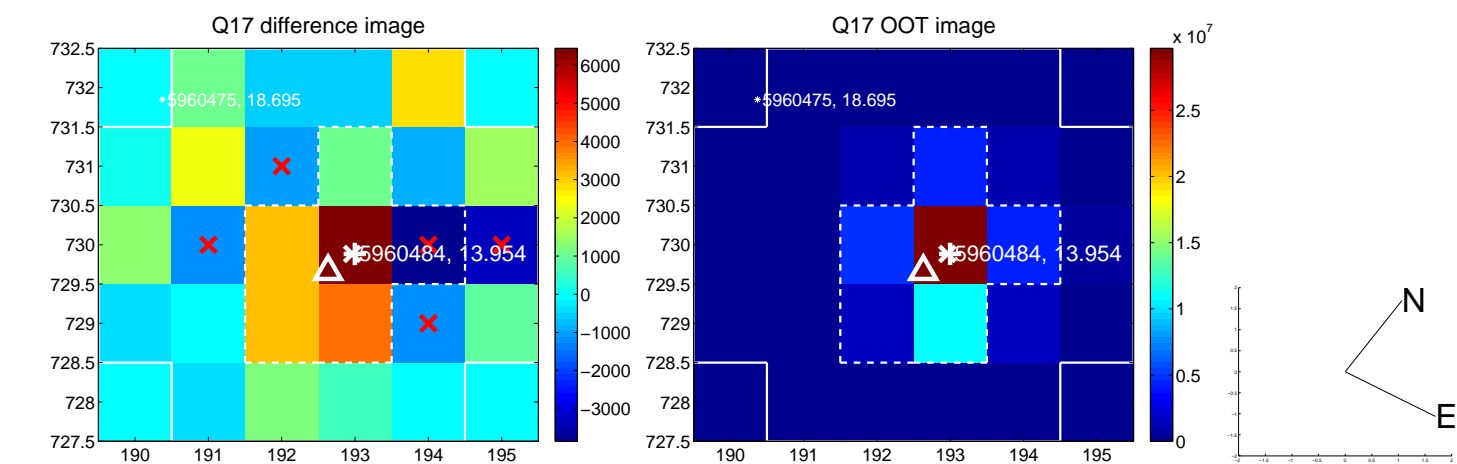
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



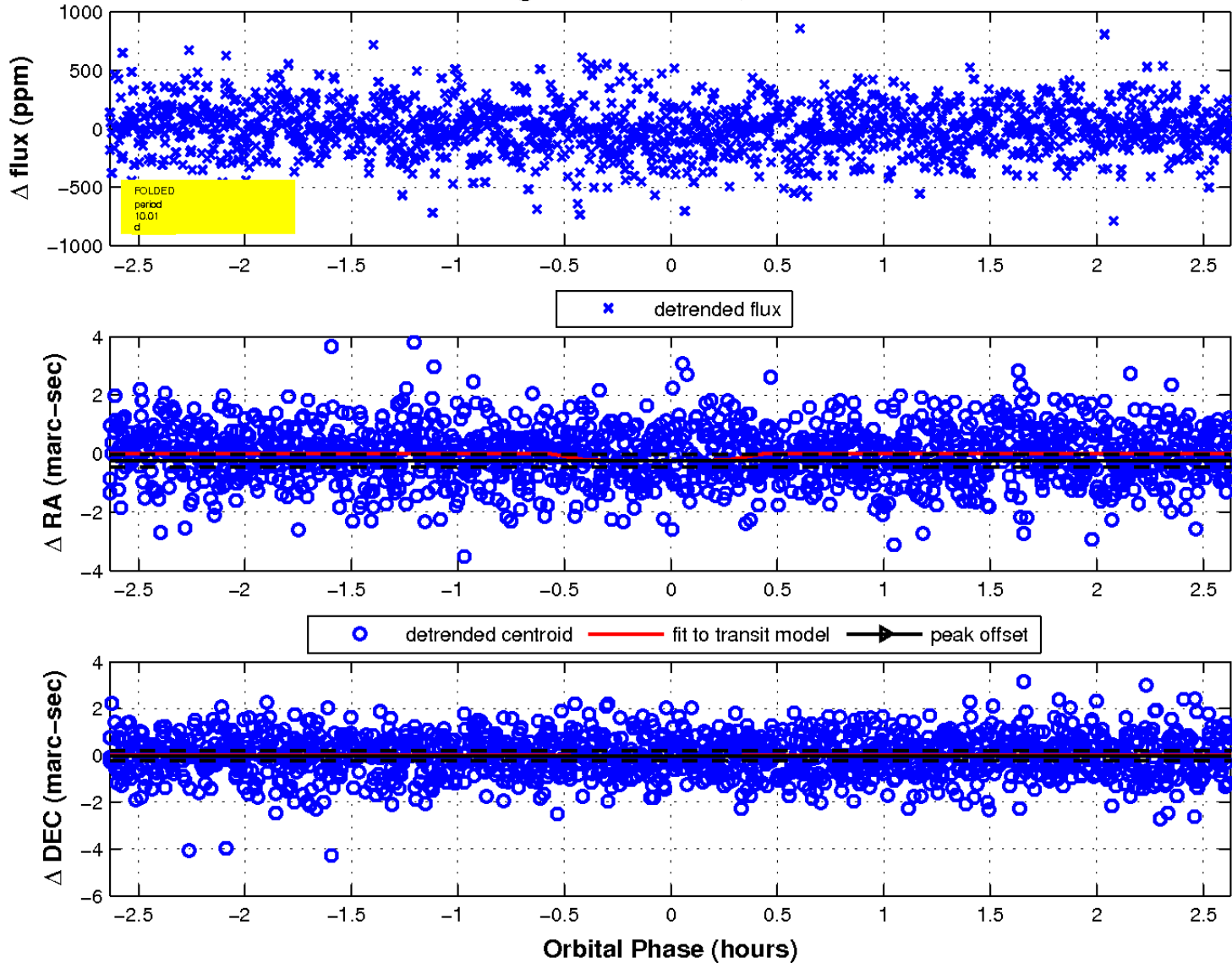
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

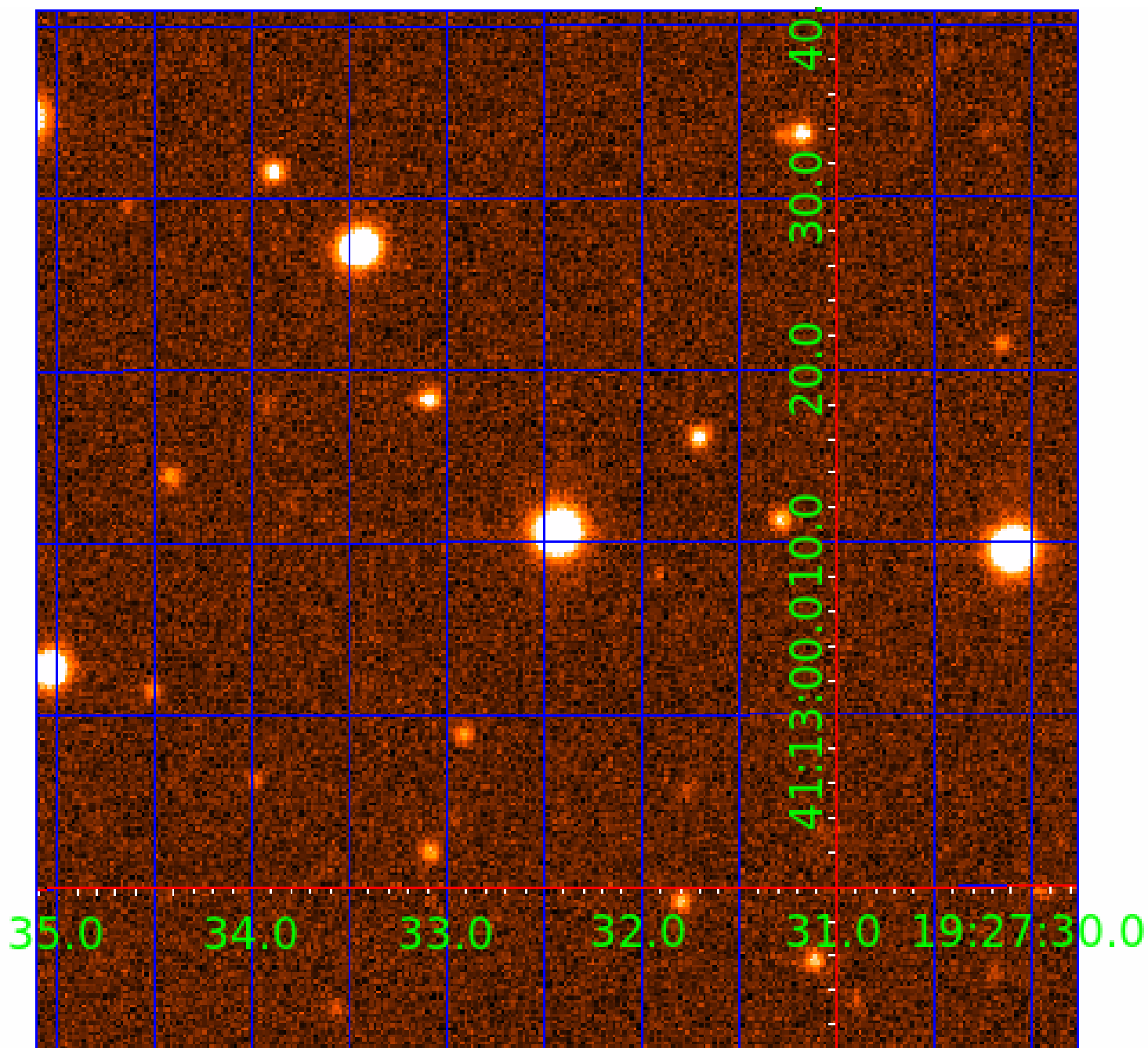


fluxWeightedCentroids, Planet 4 of 8



UKIRT Image

Declination



KIC 005960484

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})
005960484-01	OBS	No	0.605539	131.731623	8.1	4.423	7.8	3.7	1.57	7310	0.46	24999.93
005960484-02	OBS	No	23.027039	132.003375	234.1	2.066	12.6	11.4	1.57	7310	2.59	195.50
005960484-03	OBS	No	42.152393	150.182373	397.2	1.746	13.1	12.5	1.57	7310	3.62	87.30
005960484-04	OBS	No	10.007999	134.561131	317.1	0.878	13.3	15.0	1.57	7310	2.86	593.83
005960484-05	OBS	No	42.861399	146.723757	200.3	7.103	14.7	9.2	1.57	7310	2.44	85.38
005960484-06	OBS	No	12.454749	143.278310	317.6	0.930	12.9	11.0	1.57	7310	2.86	443.62
005960484-07	OBS	No	14.552426	137.006597	240.3	2.723	13.9	12.0	1.57	7310	2.54	360.48
005960484-08	OBS	No	13.469643	131.932116	65.8	0.979	11.6	2.3	1.57	7310	1.34	399.62

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005960484-01	OBS	FP	0.00	1	0	1	0	LPP_DV—MOD_NONUNIQ_ALT—CENT_UNRESOLVED_OFFSET
005960484-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
005960484-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV
005960484-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005960484-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV
005960484-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
005960484-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
005960484-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

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

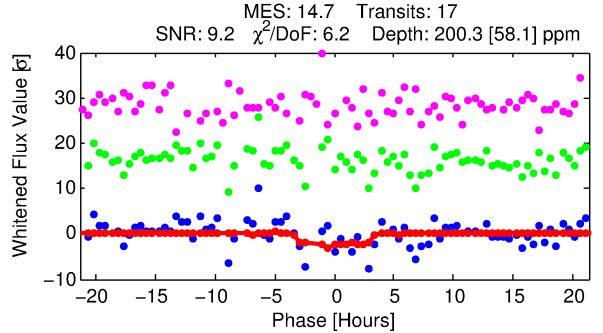
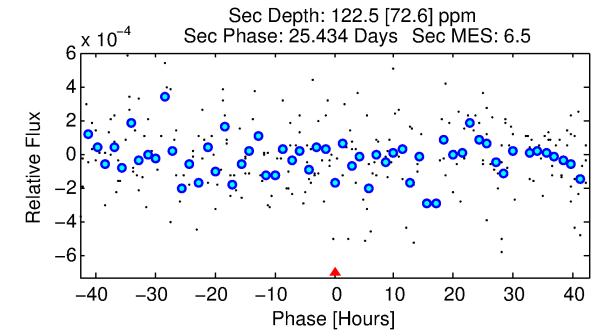
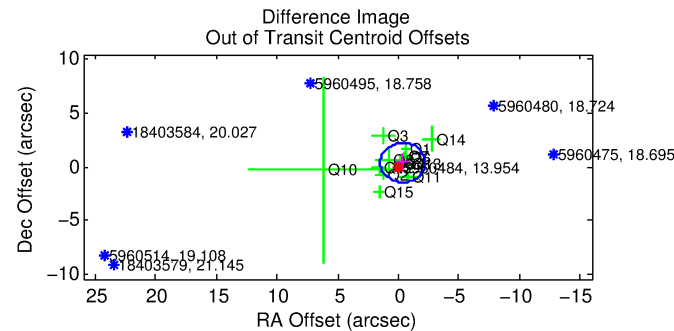
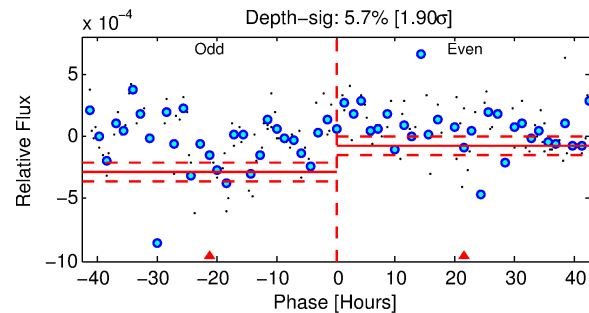
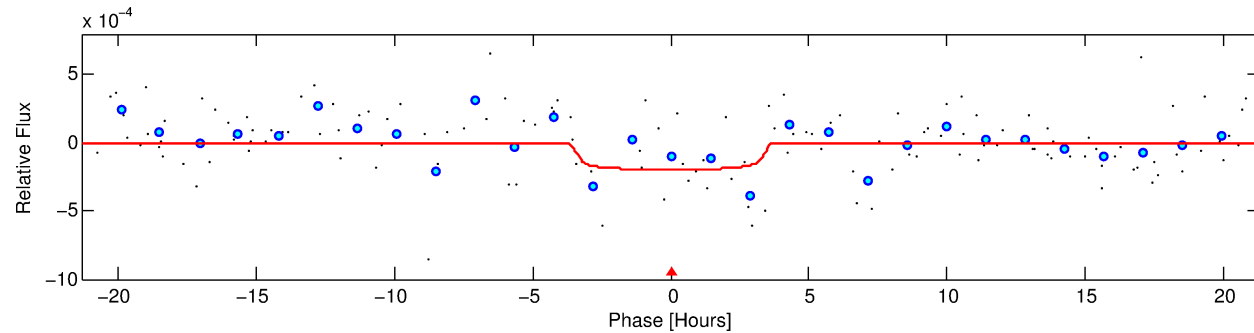
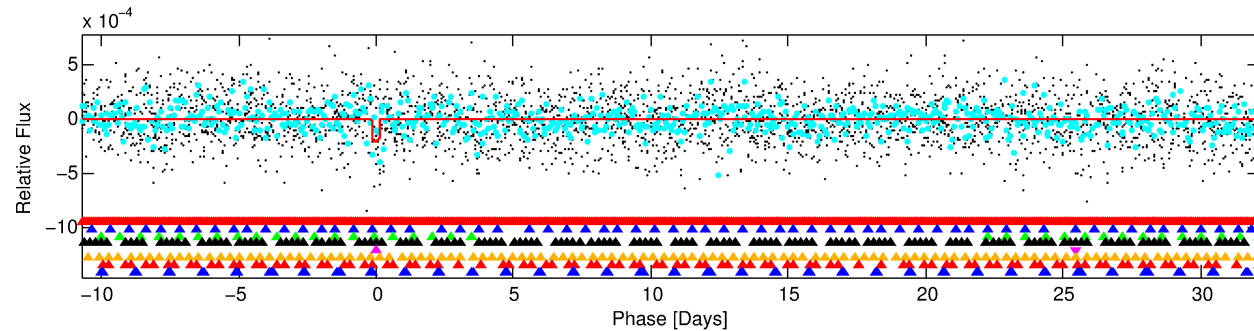
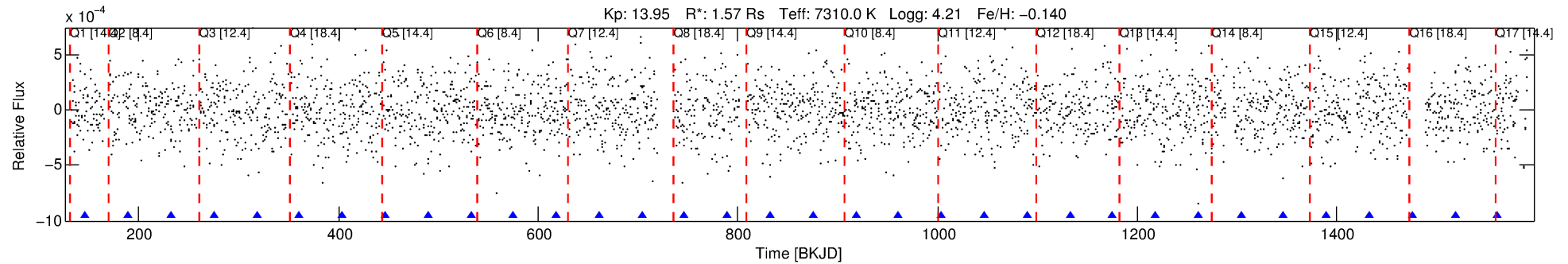
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005960484-05

No Significant Match Found

DV One-Page Summary

KIC: 5960484 Candidate: 5 of 8 Period: 42.861 d



DV Fit Results:

Period = 42.86140 [0.00240] d
Epoch = 146.7238 [0.0372] BKJD
Rp/R* = 0.0142 [0.0155]
a/R* = 29.40 [196.01]
b = 0.79 [3.24]
Seff = 85.38 [35.09]
Teq = 775 [80] K
Rp = 2.44 [2.77] Re
a = 0.2714 [0.0713] AU
Ag = 836.86 [1916.66] [0.44 σ]
Teffp = 6446 [3654] K [1.55 σ]

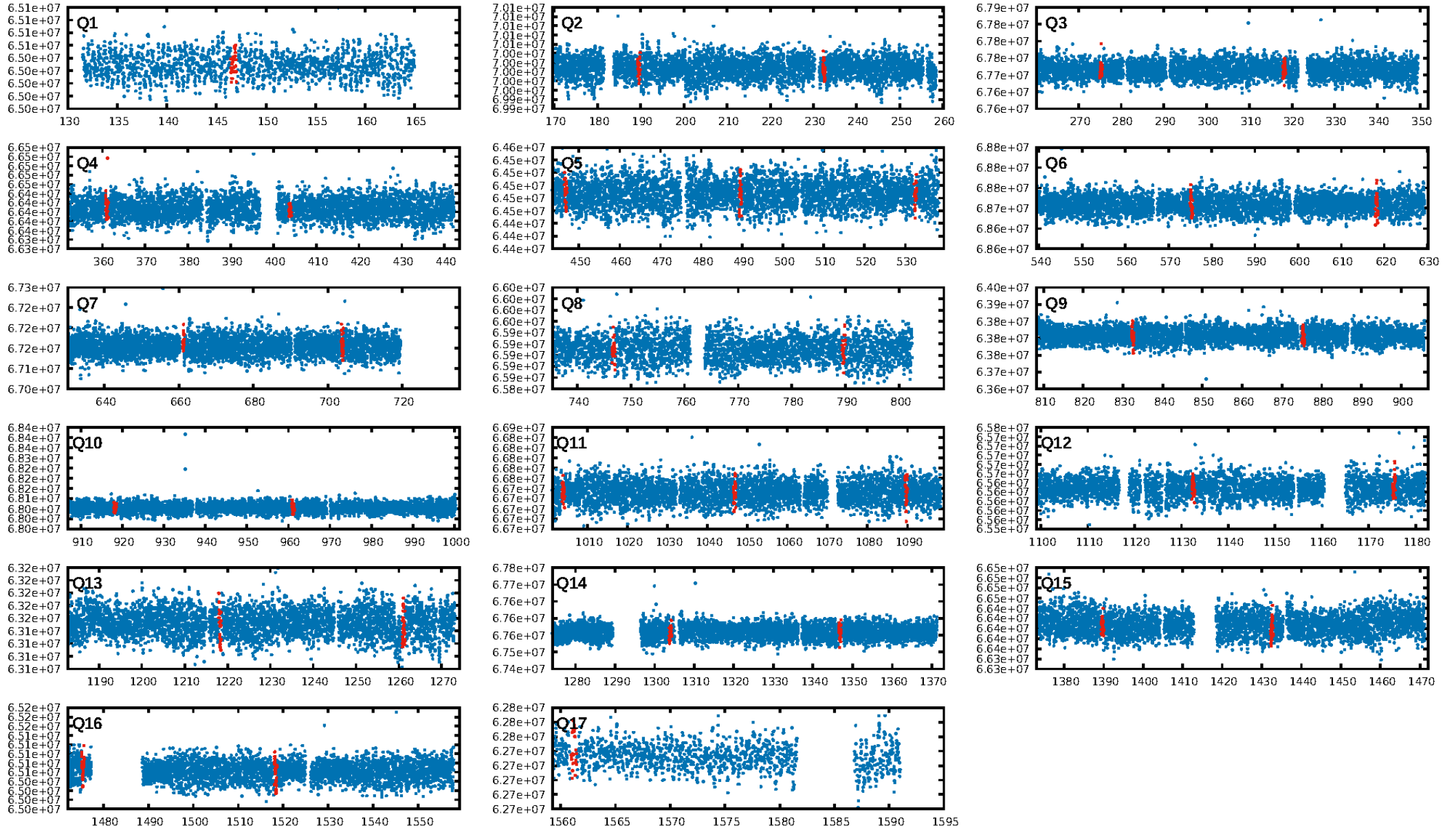
DV Diagnostic Results:

ShortPeriod-sig: 98.0% [2.33 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 7.68e-14
RollingBand-fgt: 1.00 [15/15]
GhostDiagnostic-chr: 3.221
Centroid-sig: 5.1%
Centroid-so: 1.229 arcsec [1.84 σ]
OotOffset-rm: 0.517 arcsec [0.84 σ]
OotOffset-st: 4/4/3/2 [13]
KicOffset-rm: 0.473 arcsec [0.72 σ]
KicOffset-st: 4/4/3/2 [13]
DiffImageQuality-fgm: 0.31 [4/13]
DiffImageOverlap-fno: 0.00 [0/16]

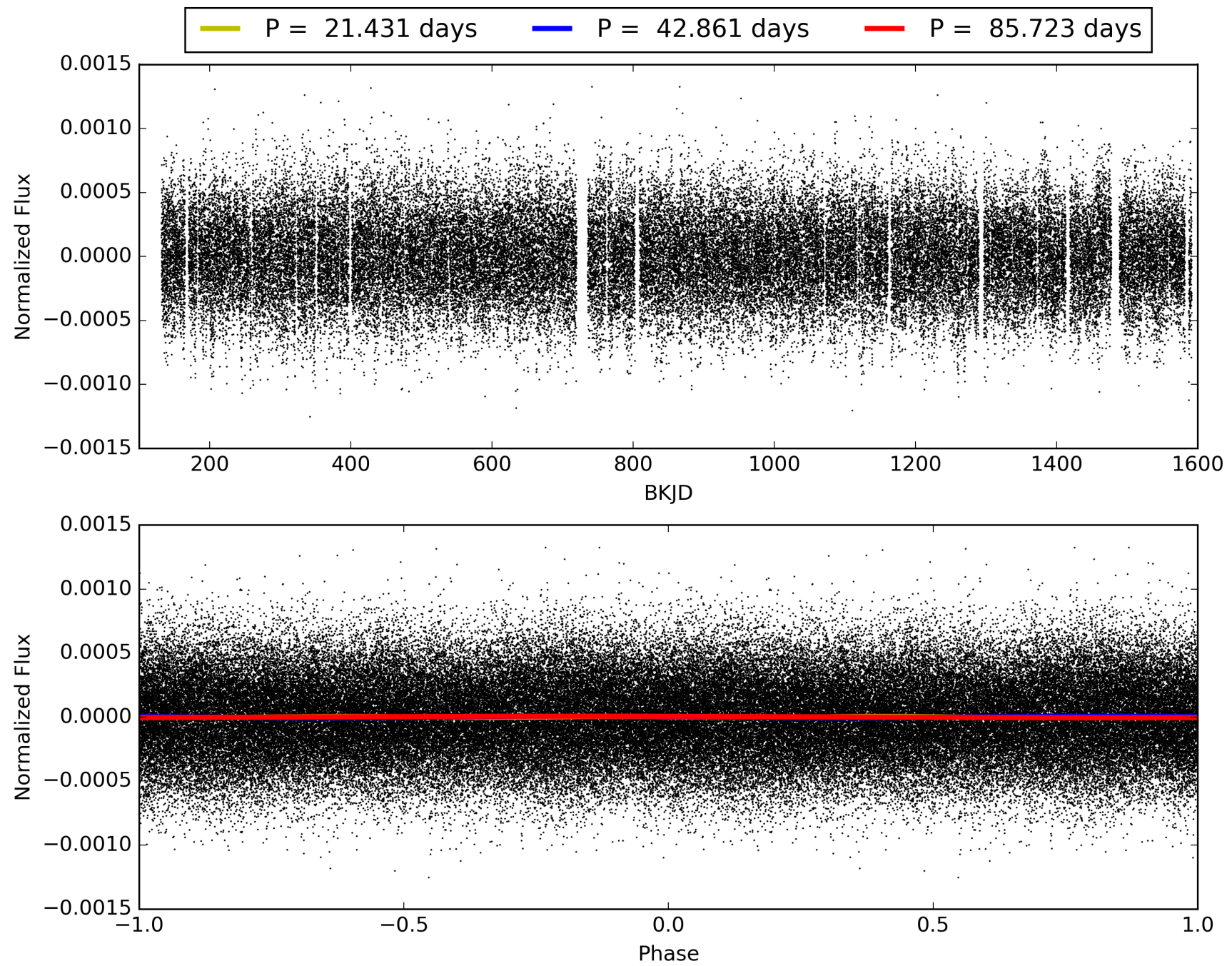
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 07:12:27 Z

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

TCE 005960484-05, PDC Light Curves

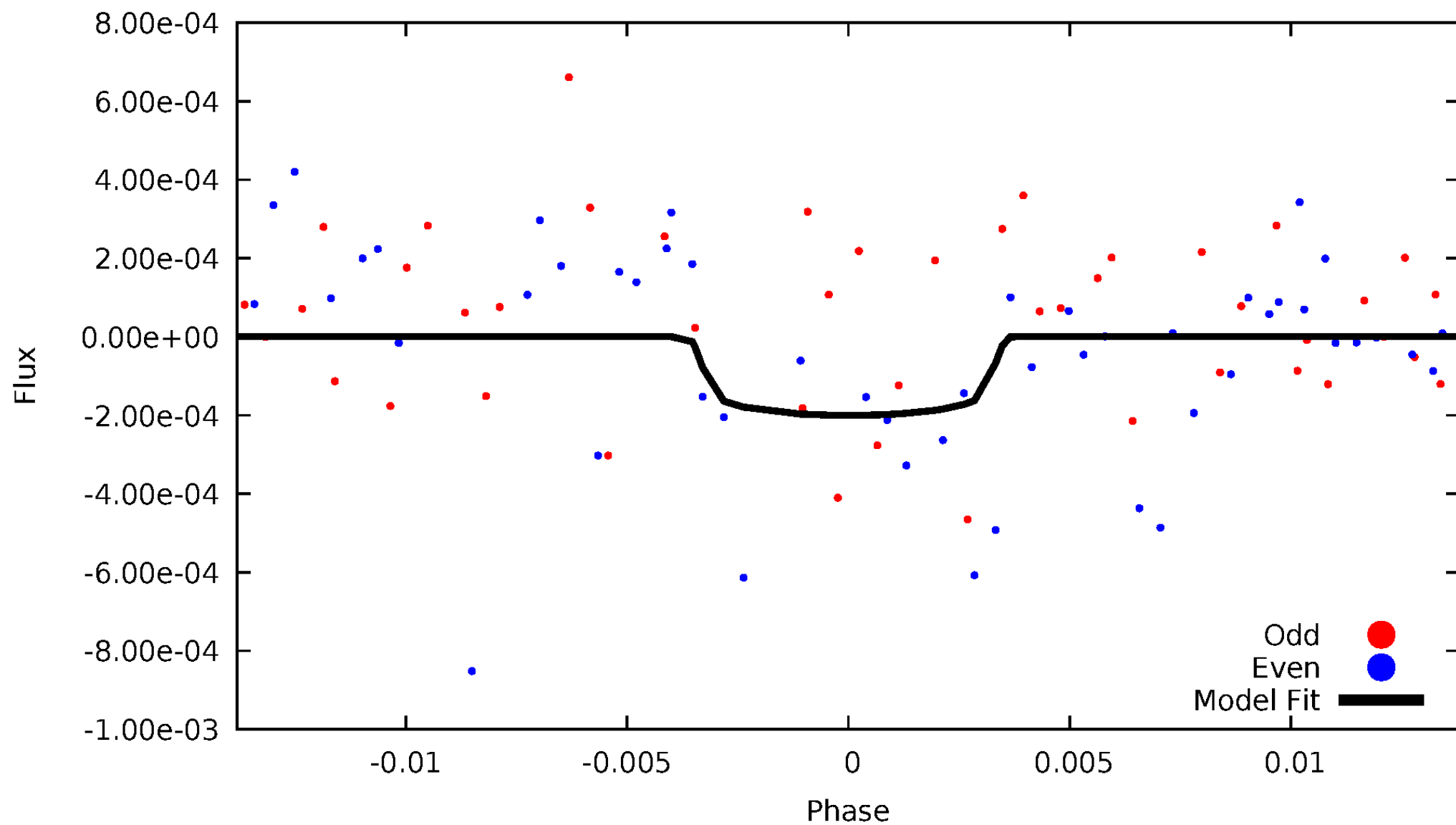


TCE 005960484-05



DV Odd/Even

TCE 005960484-05

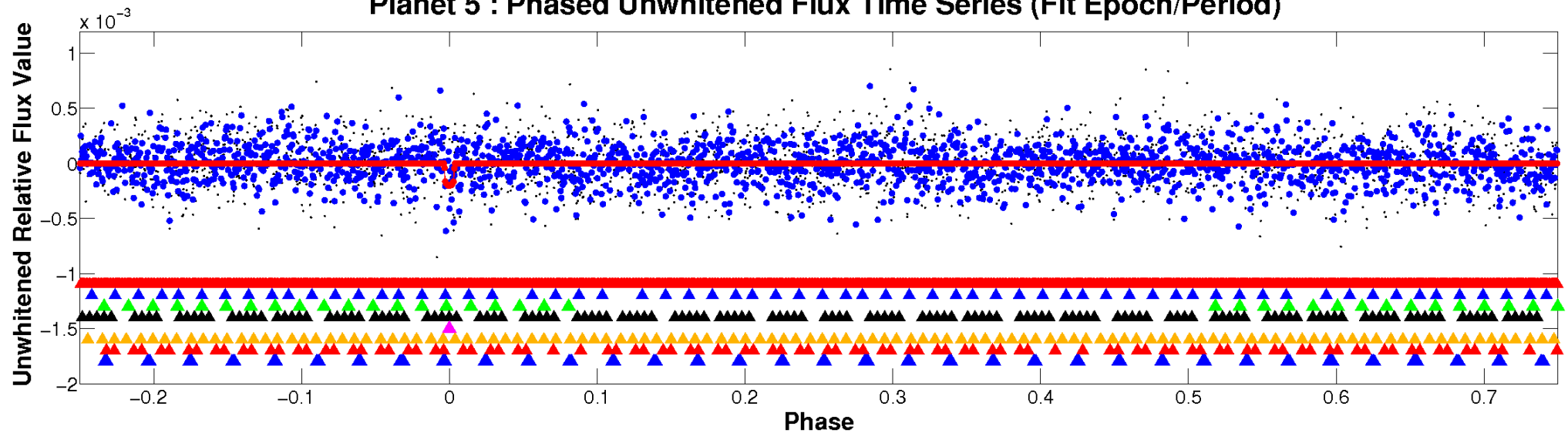


ALT Odd/Even

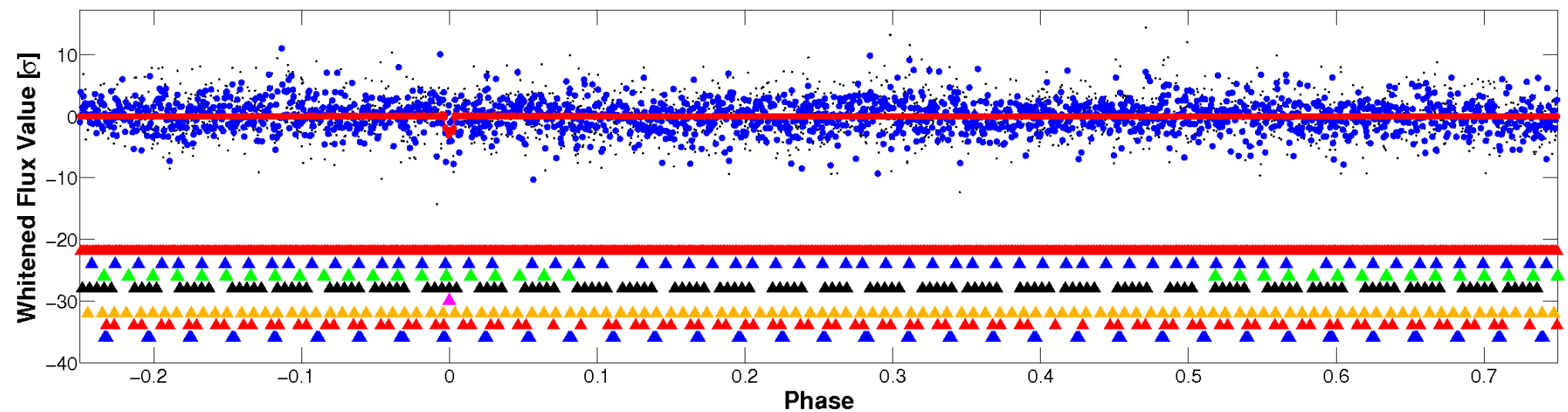
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

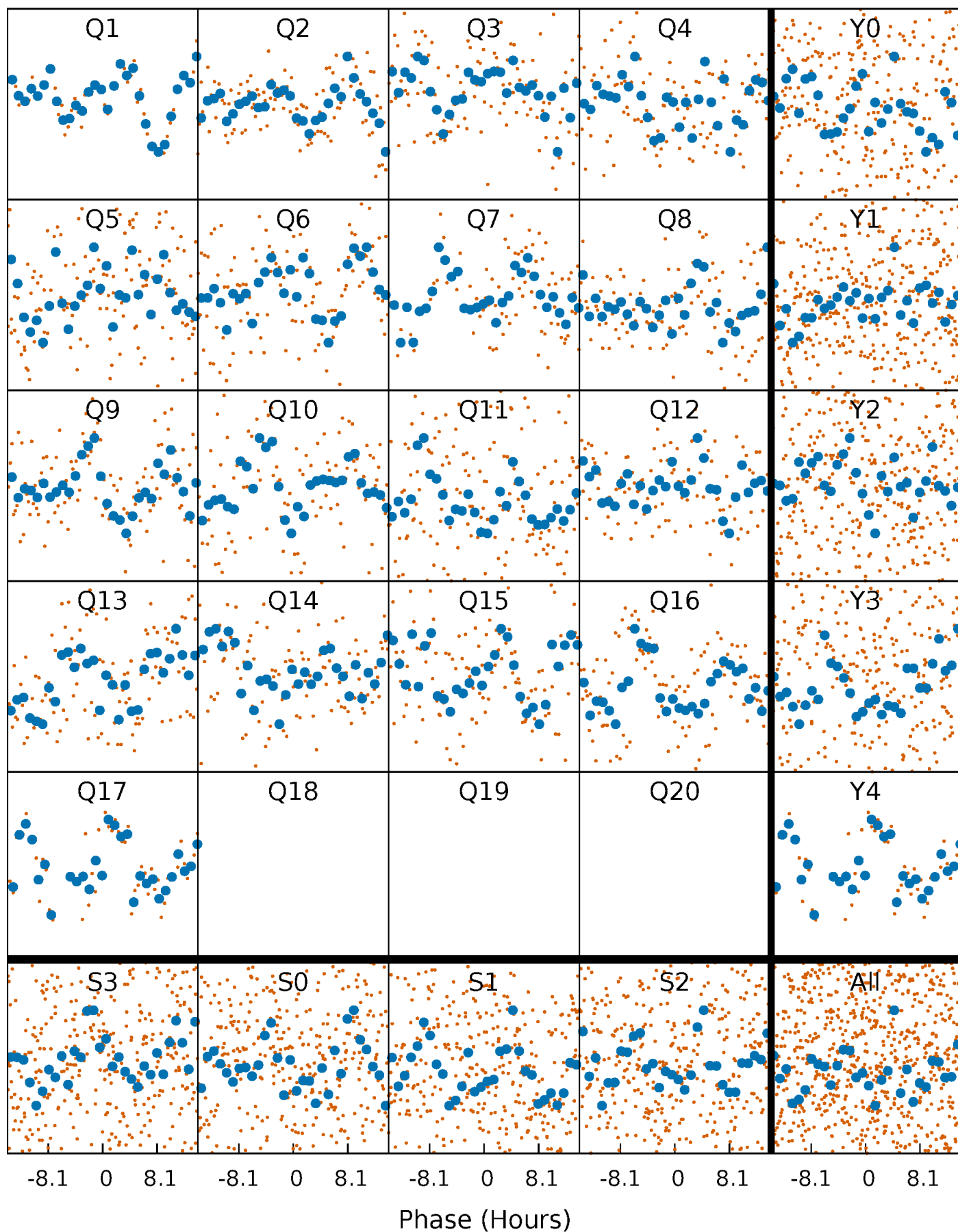


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



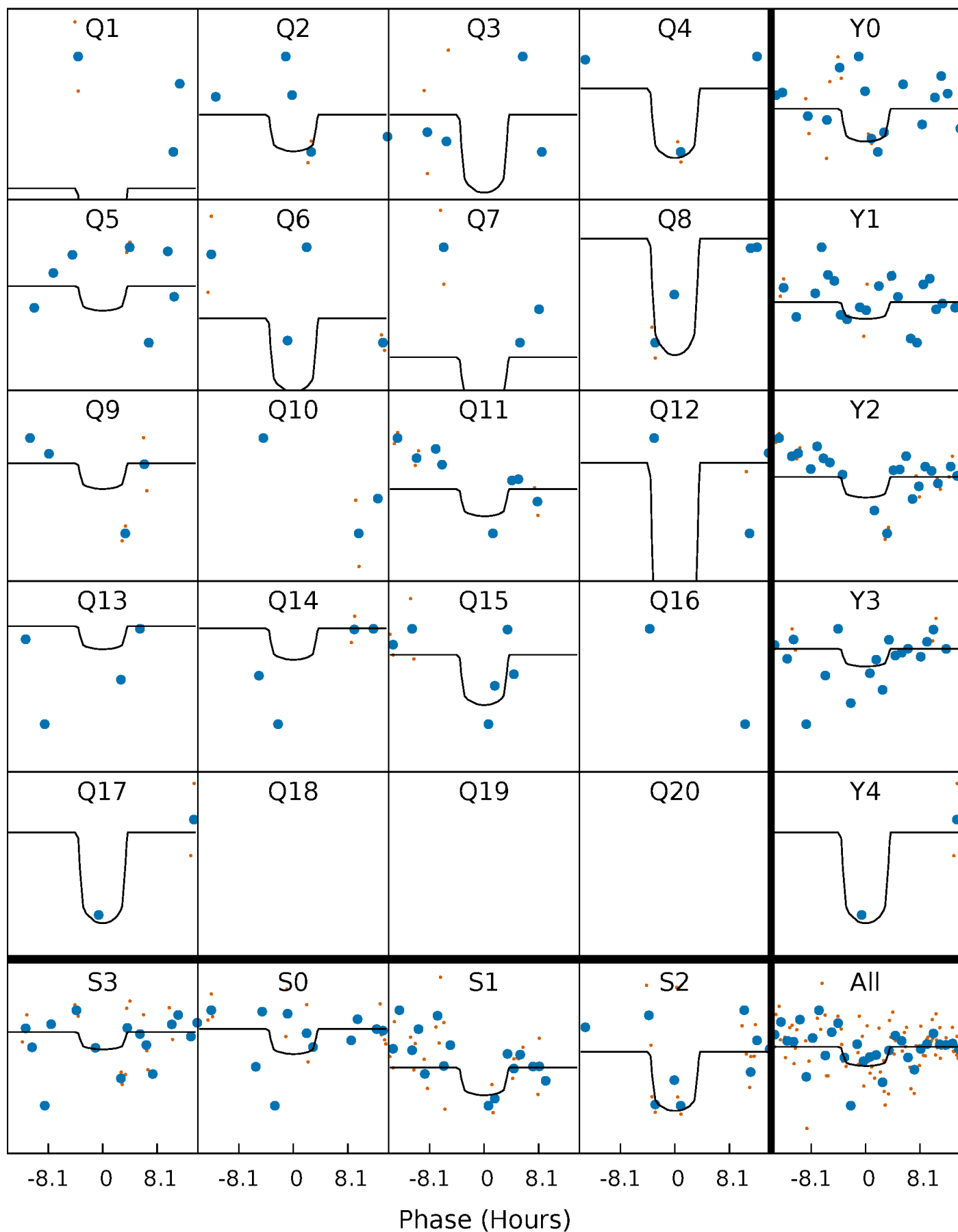
PDC Quarter-Phased Transit Curves

TCE 005960484-05 $P = 42.861399$ Days $T_0 = 146.723757$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 005960484-05 P= 42.861399 Days $T_0=146.723757$ (BKJD)

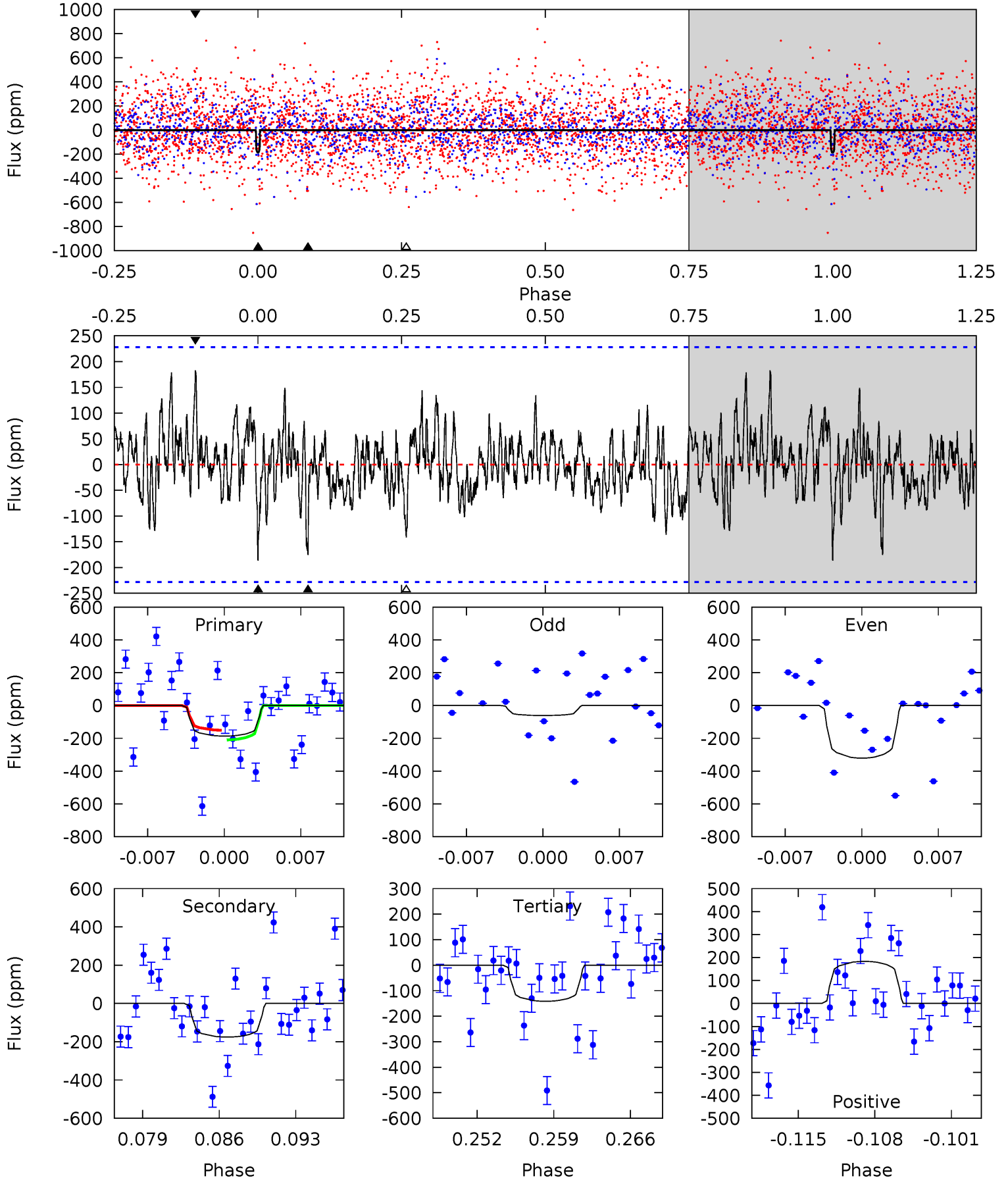


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

005960484-05, P = 42.861399 Days, E = 103.862358 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.16	3.92	3.16	4.09	5.09	2.69	1.14	1.00	0.07	0.76	-0.17	2.93	1.14	0.50	0.65



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 005960484

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7310^{+228}_{-330}	$4.209^{+0.105}_{-0.195}$	$-0.140^{+0.250}_{-0.350}$	$1.568^{+0.508}_{-0.274}$	$1.452^{+0.211}_{-0.211}$	$0.531^{+0.265}_{-0.278}$
	+3%/-5%	+2%/-5%	+179%/-250%	+32%/-17%	+15%/-15%	+50%/-52%
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 005960484-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-175 ± 45	$3.09^{+2.64}_{-1.96}$	1092^{+84}_{-65}	6255^{+5470}_{-1573}	752^{+4590}_{-554}
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

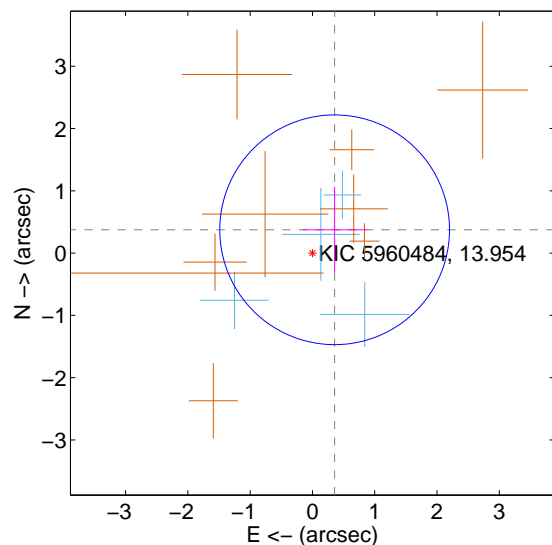
Supplemental centroid analysis for 005960484-05. Kepler magnitude: 13.95. Transit SNR 9.17

There are 4 quarters with good PRF difference image offsets

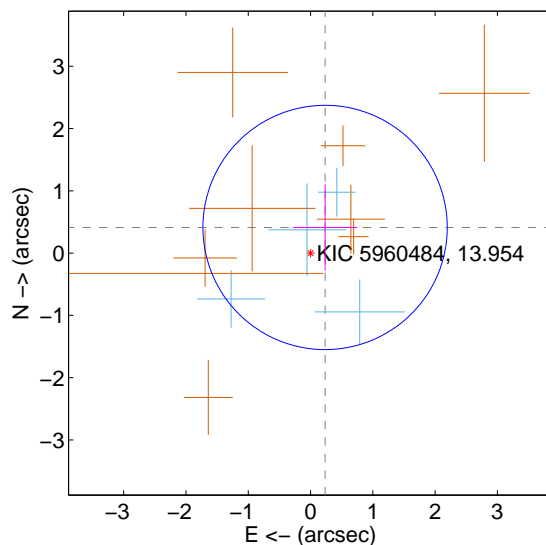
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.517 ± 0.615	0.84	-0.356 ± 0.516	0.374 ± 0.692
PRF-fit source offset from KIC position	0.473 ± 0.654	0.72	-0.234 ± 0.516	0.412 ± 0.692
photometric centroid source offset	1.23 ± 0.67	1.84	1.23 ± 0.67	0.08 ± 0.65

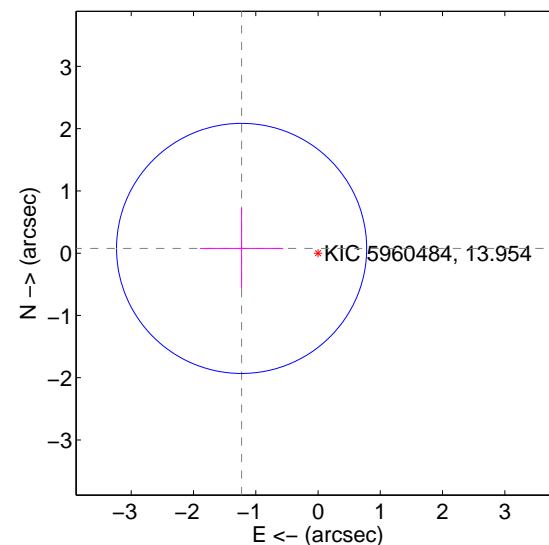
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

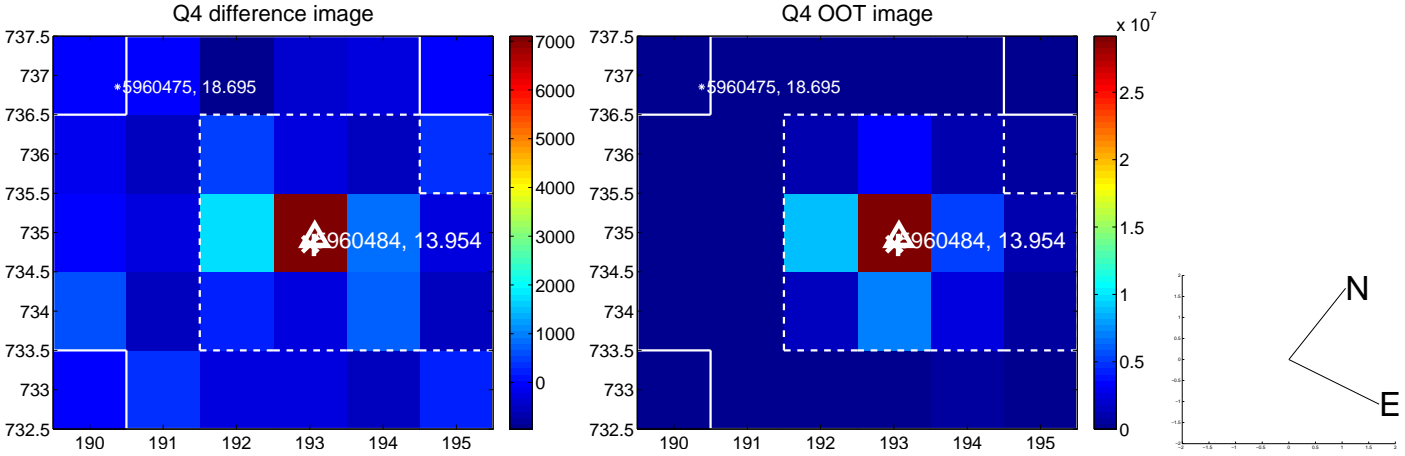
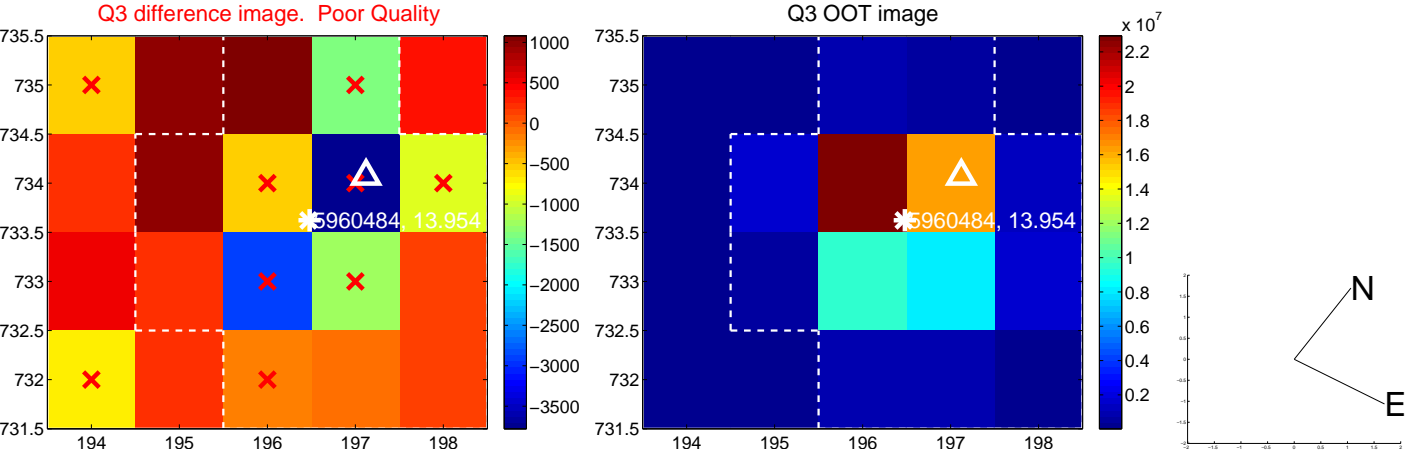
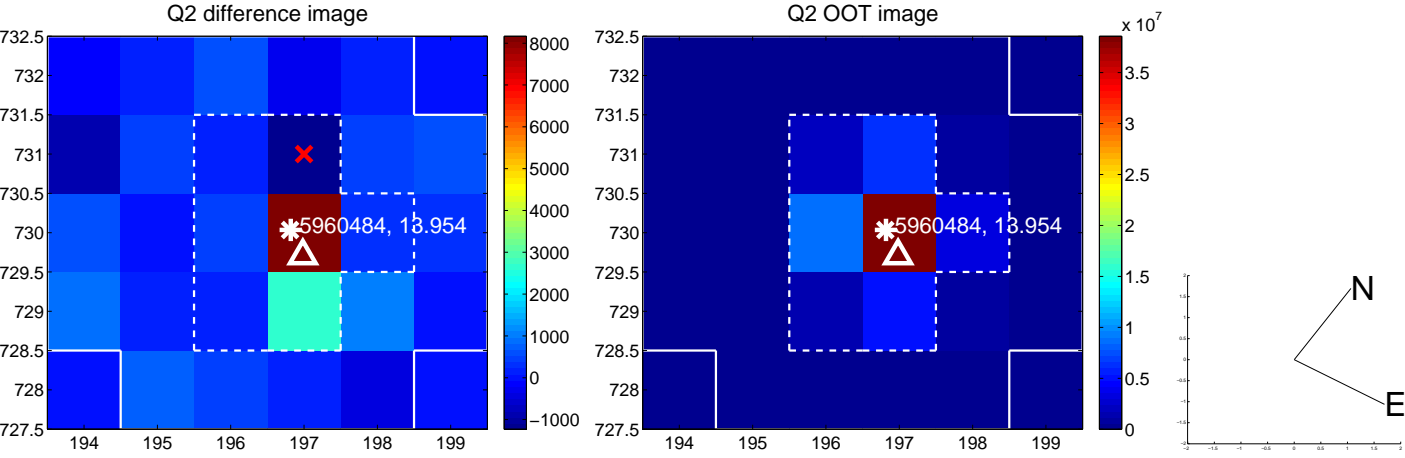
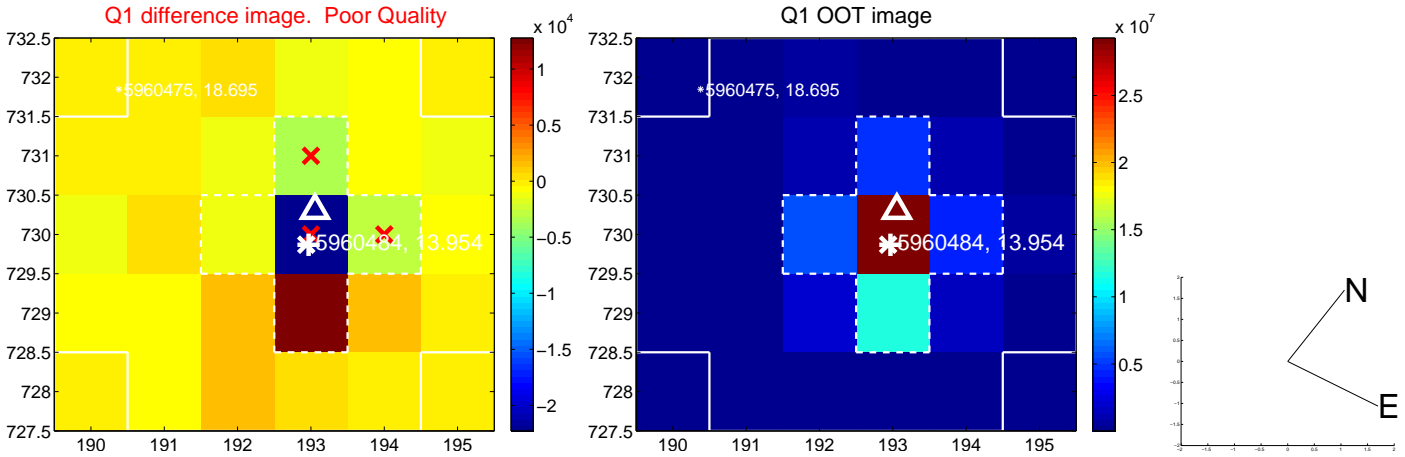


offset from photometric centroids

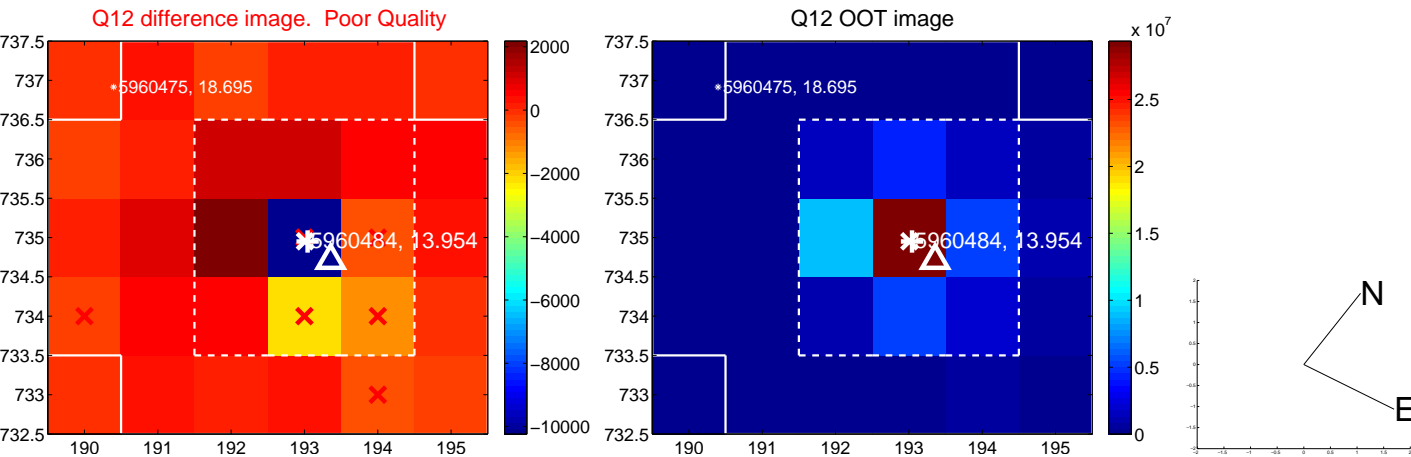
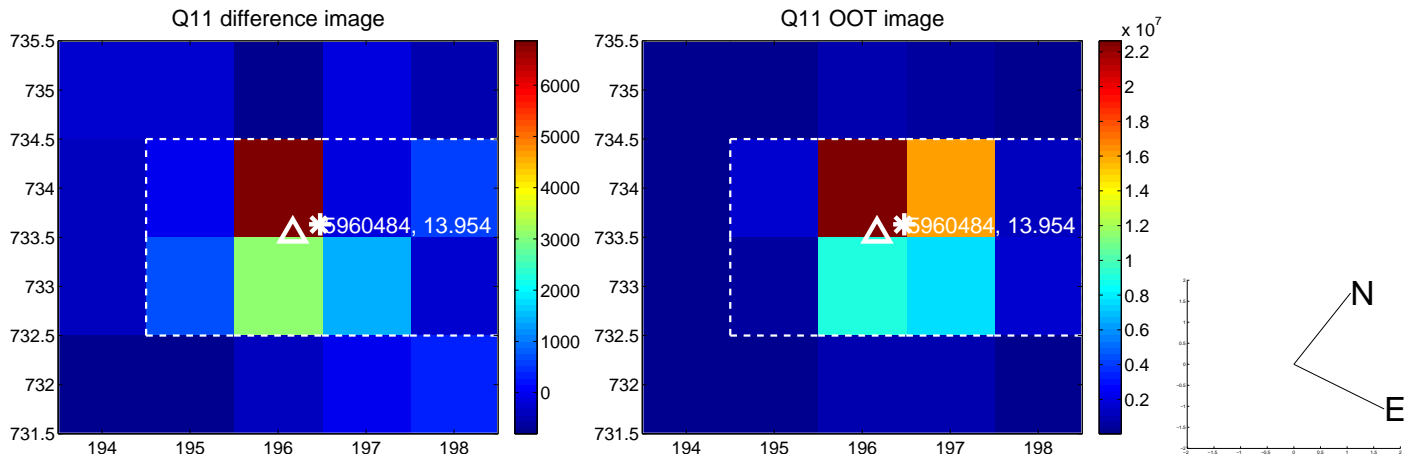
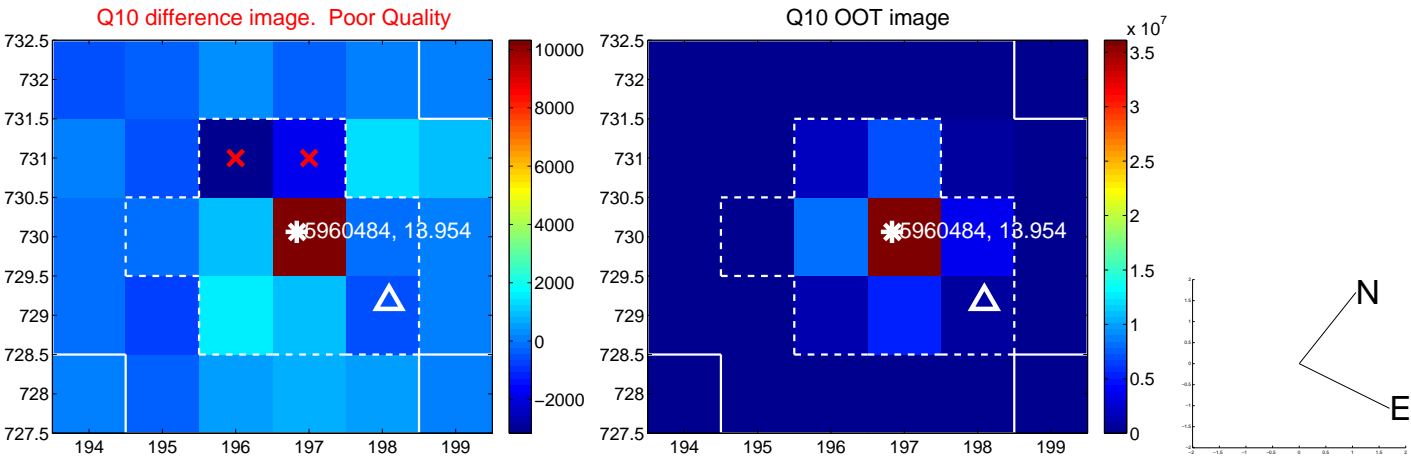
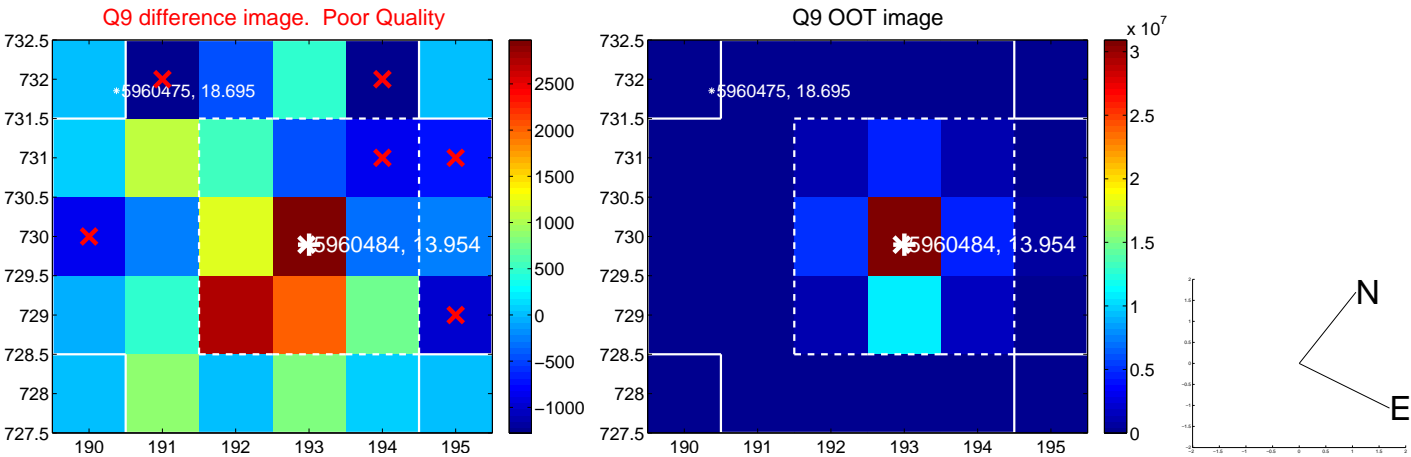


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

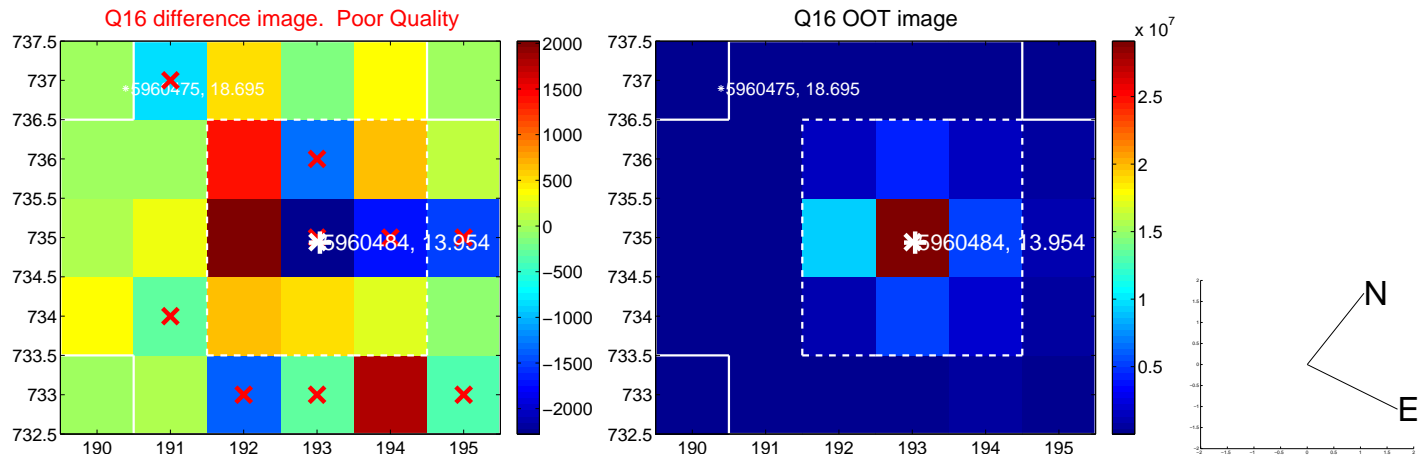
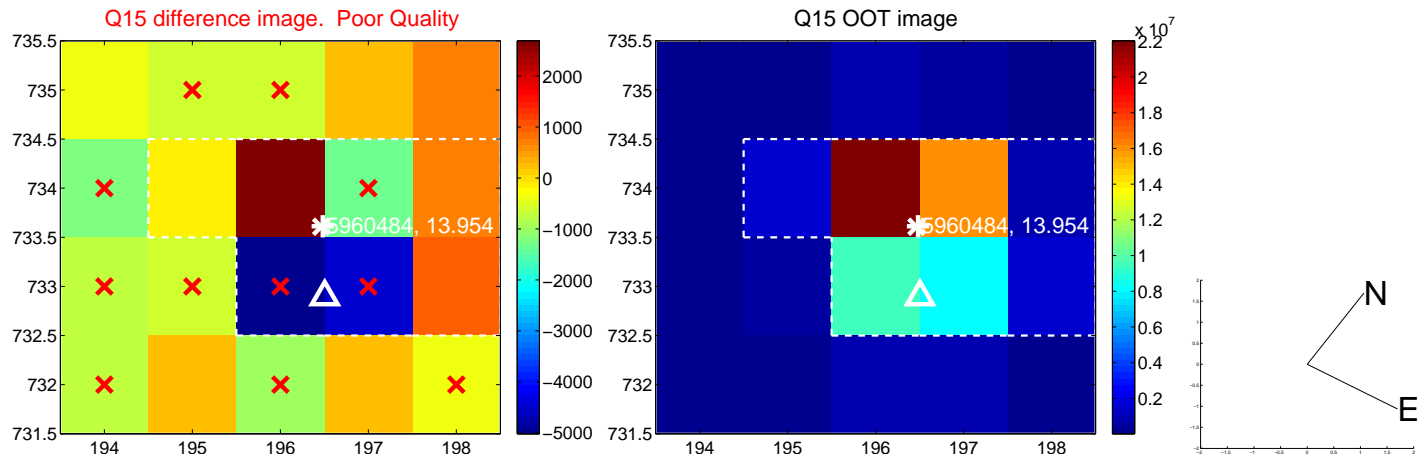
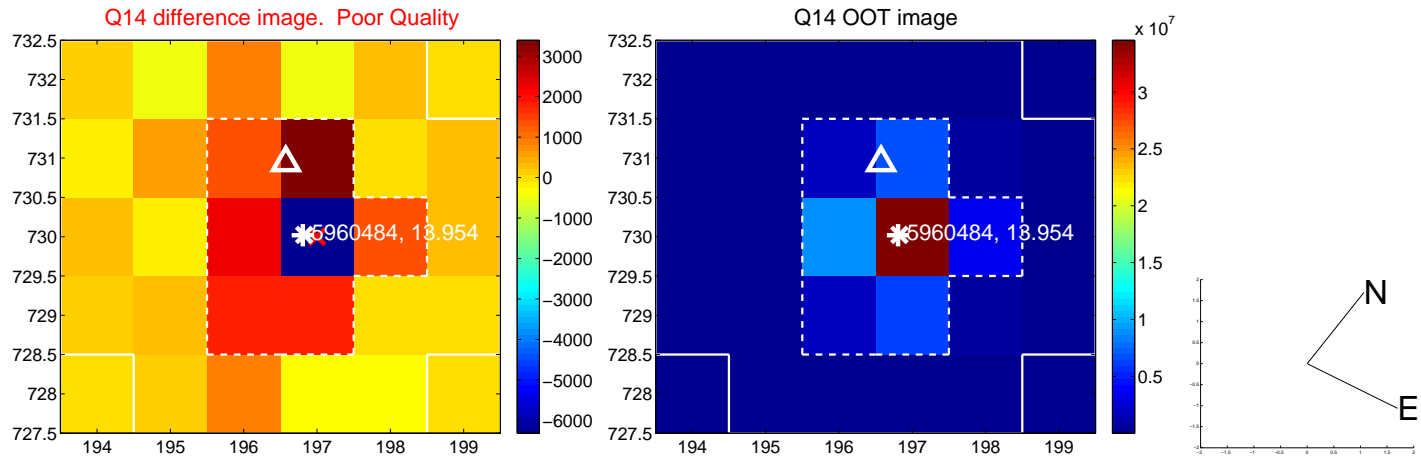
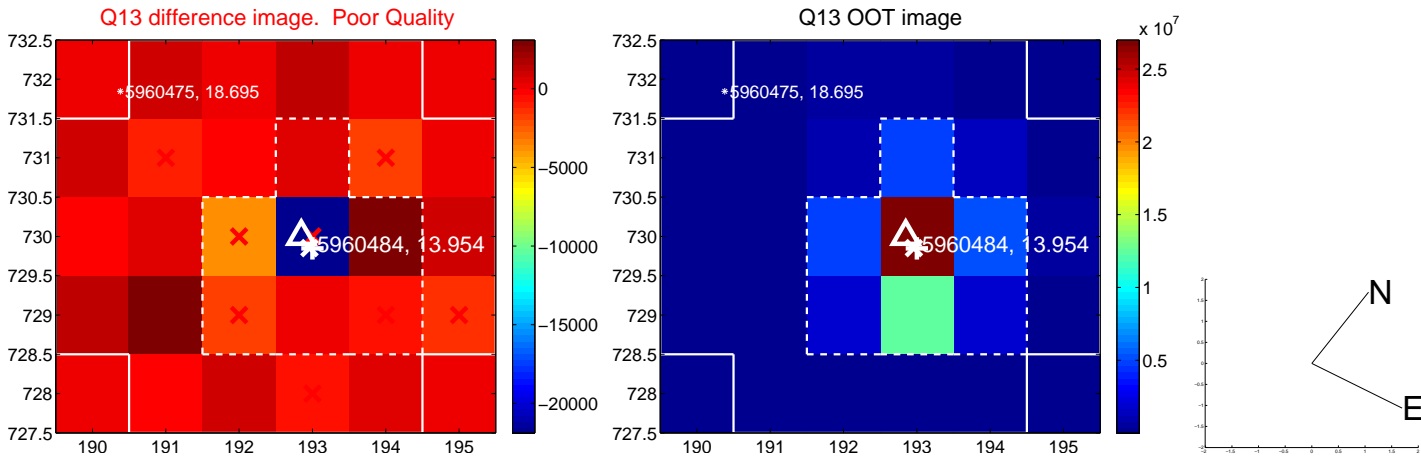
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



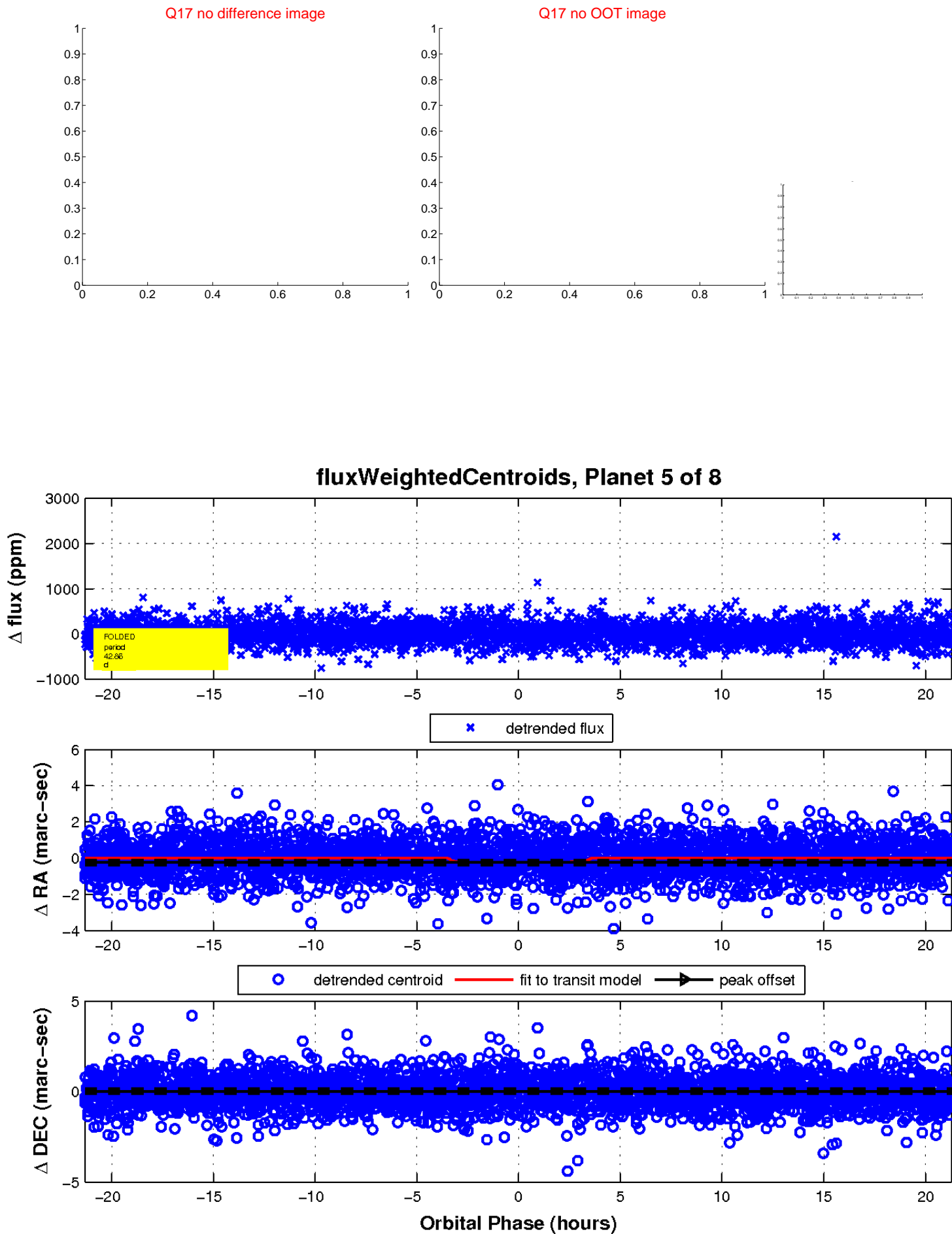
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

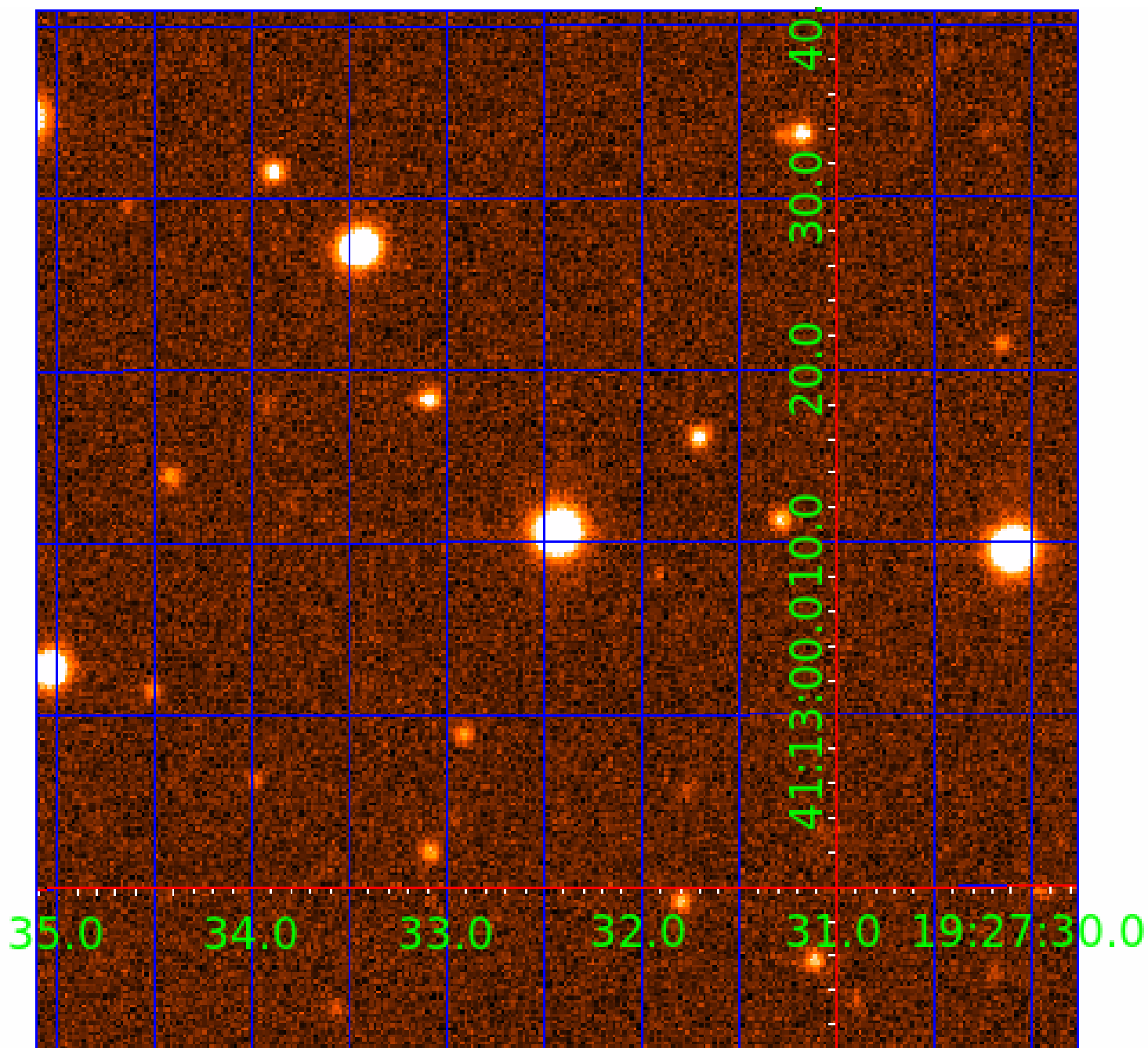


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005960484

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})
005960484-01	OBS	No	0.605539	131.731623	8.1	4.423	7.8	3.7	1.57	7310	0.46	24999.93
005960484-02	OBS	No	23.027039	132.003375	234.1	2.066	12.6	11.4	1.57	7310	2.59	195.50
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005960484-06	OBS	No	12.454749	143.278310	317.6	0.930	12.9	11.0	1.57	7310	2.86	443.62
005960484-07	OBS	No	14.552426	137.006597	240.3	2.723	13.9	12.0	1.57	7310	2.54	360.48
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Robovetter Results

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005960484-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
005960484-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV
005960484-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005960484-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV
005960484-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
005960484-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
005960484-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

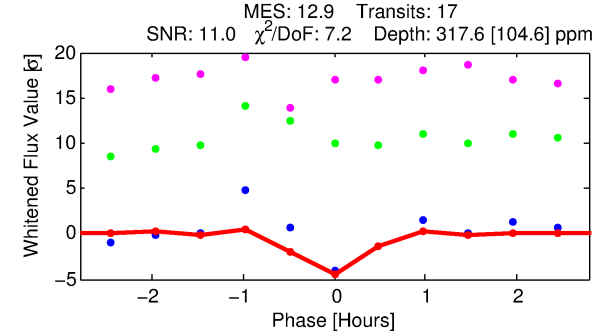
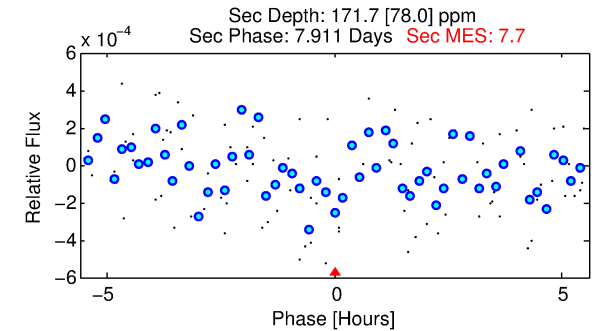
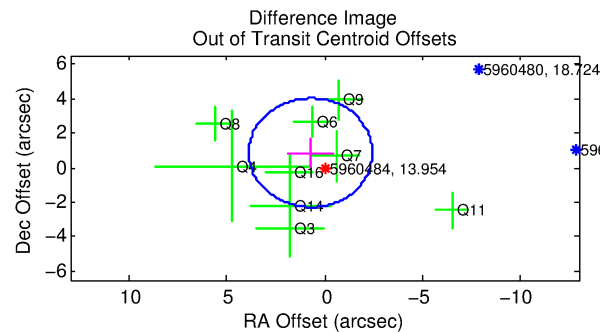
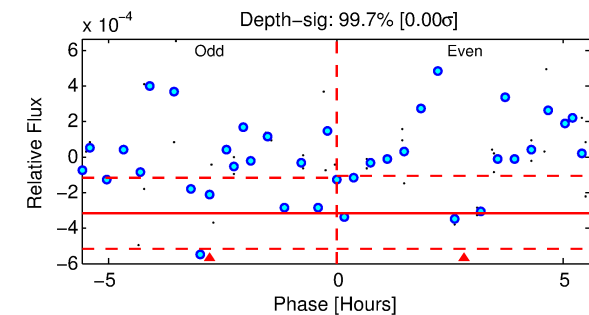
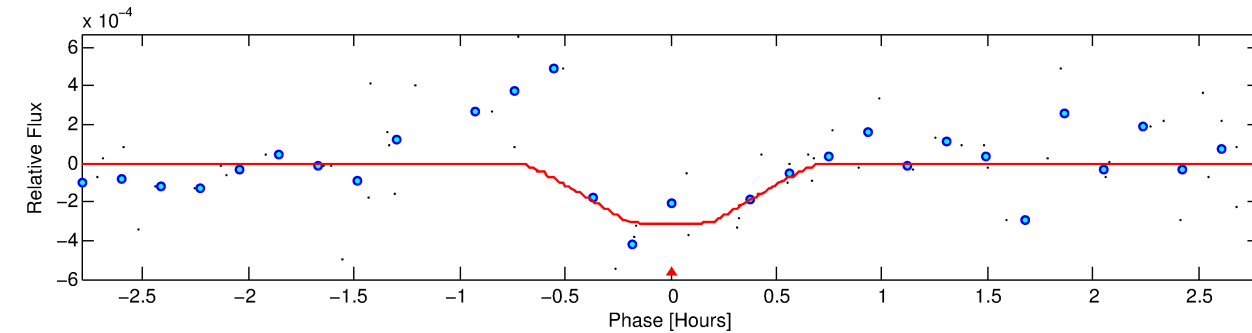
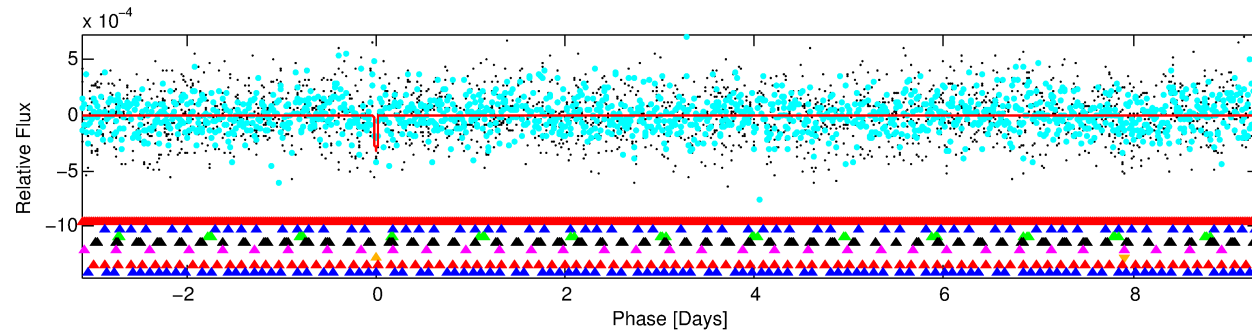
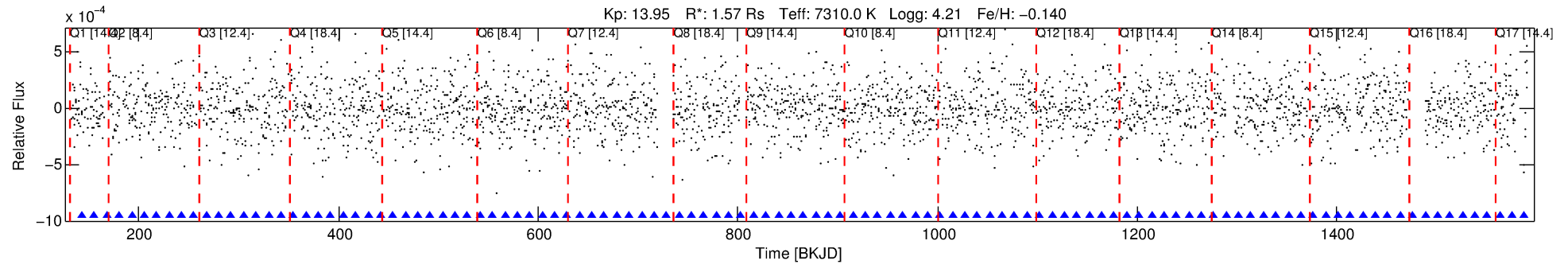
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005960484-06

No Significant Match Found

DV One-Page Summary

KIC: 5960484 Candidate: 6 of 8 Period: 12.455 d



DV Fit Results:

Period = 12.45475 [0.00016] d
Epoch = 143.2783 [0.0094] BKJD
Rp/R* = 0.0167 [0.0448]
a/R* = 103.95 [1629.26]
b = 0.01 [1549.59]
Seff = 443.62 [182.30]
Teq = 1170 [120] K
Rp = 2.86 [7.72] Re
a = 0.1191 [0.0313] AU
Ag = 164.25 [886.63] [0.18σ]
Teffp = 6477 [8726] K [0.61σ]

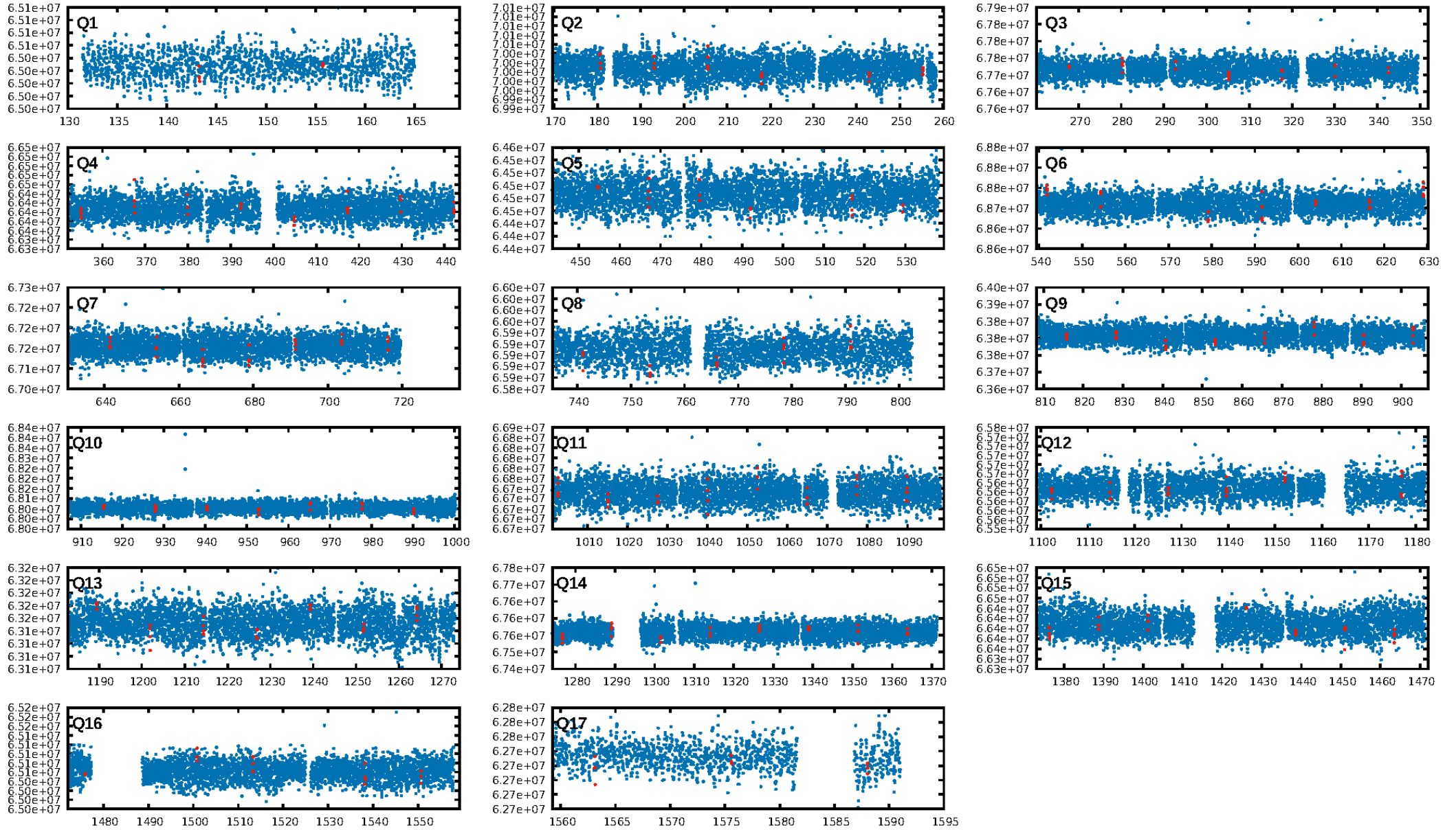
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [45.90σ]
LongPeriod-sig: 100.0% [18.03σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 18.1%
Bootstrap-pfa: 1.08e-11
RollingBand-fgt: 1.00 [17/17]
GhostDiagnostic-chr: -0.9981
Centroid-sig: 0.5%
Centroid-so: 1.764 arcsec [2.61σ]
OotOffset-rm: 1.122 arcsec [1.07σ]
KicOffset-rm: 1.190 arcsec [1.16σ]
OotOffset-st: 2/3/3/1 [9]
KicOffset-st: 2/3/3/1 [9]
DiffImageQuality-fgm: 0.11 [1/9]
DiffImageOverlap-fno: 0.00 [0/17]

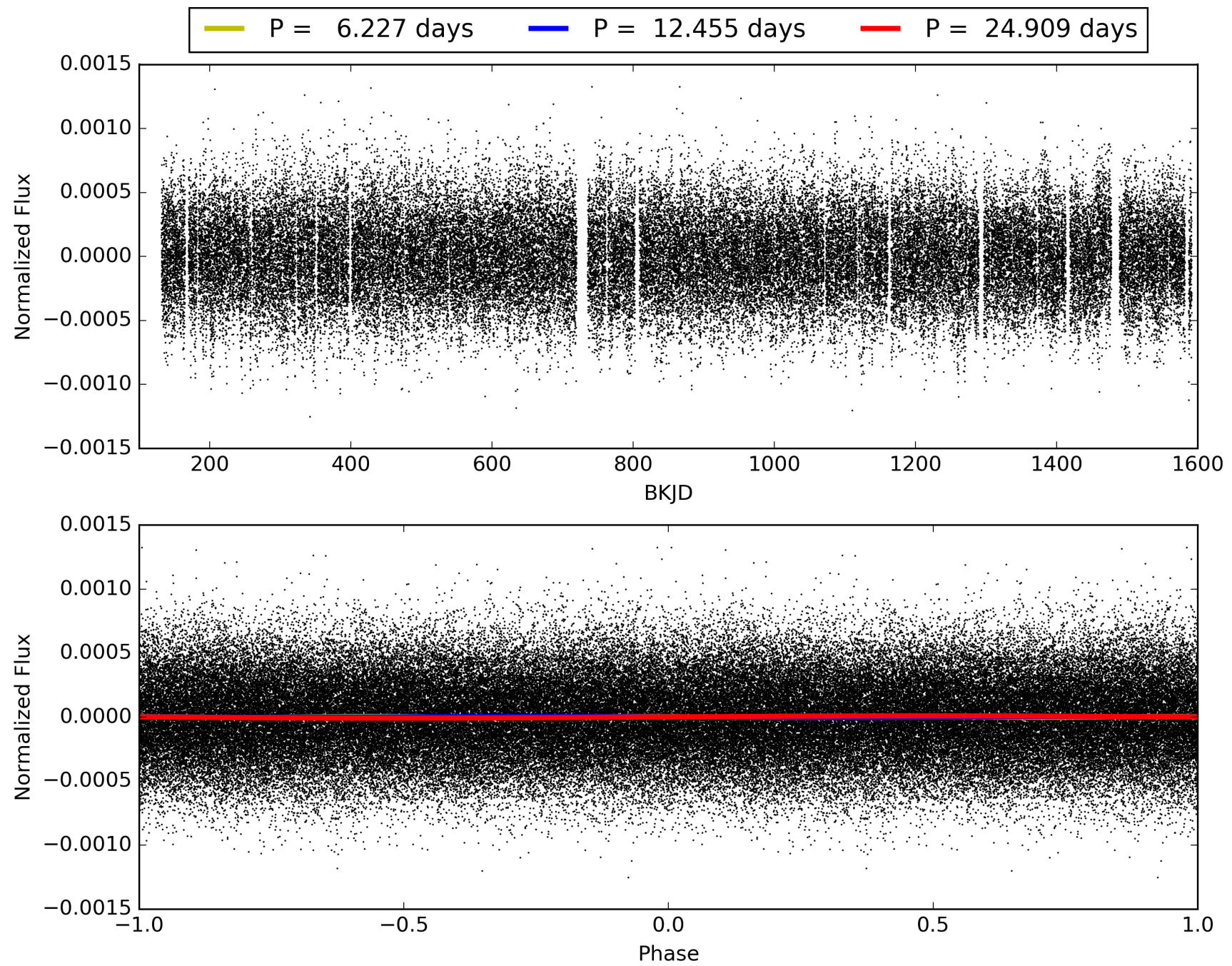
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 07:12:30 Z

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

TCE 005960484-06, PDC Light Curves

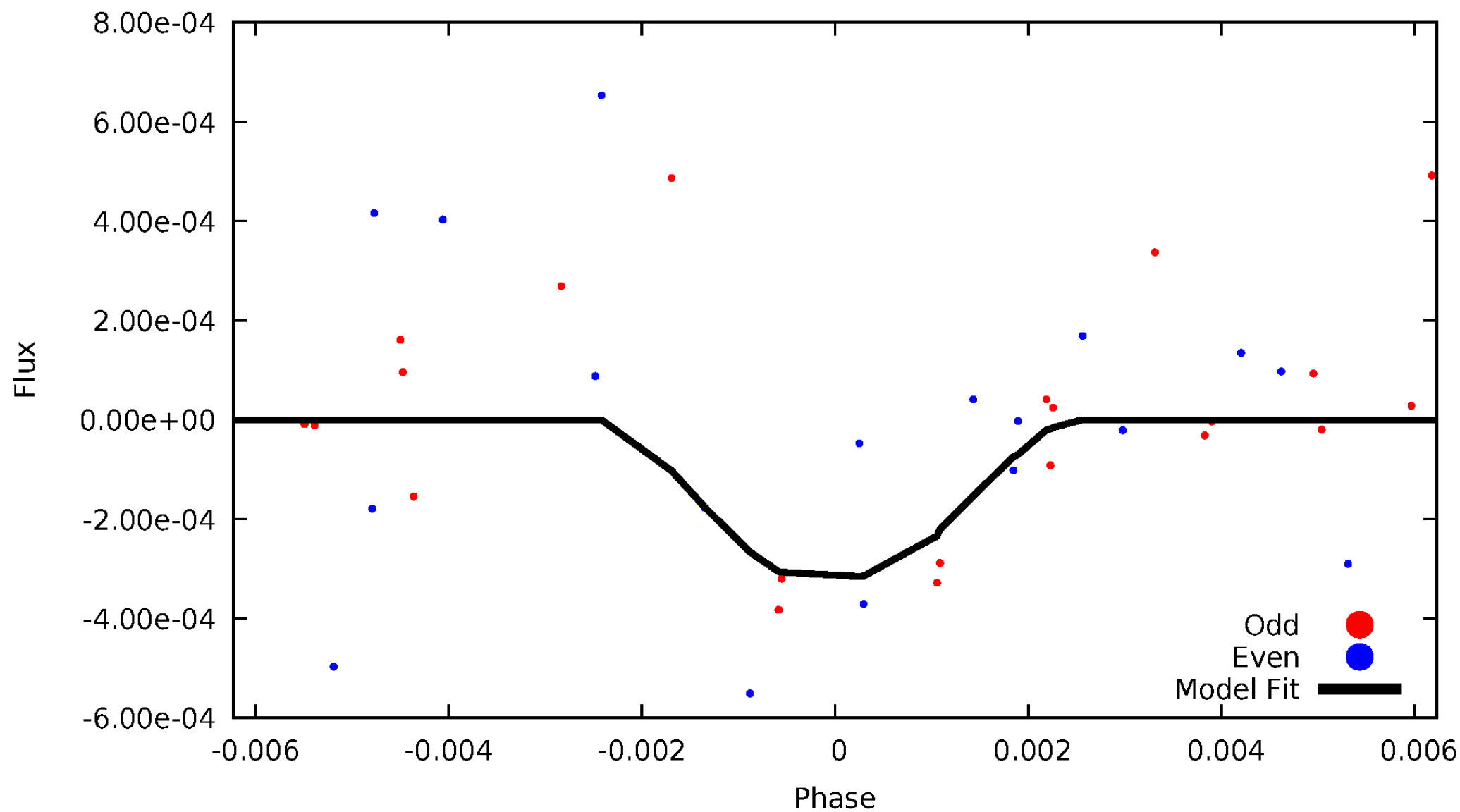


TCE 005960484-06



DV Odd/Even

TCE 005960484-06

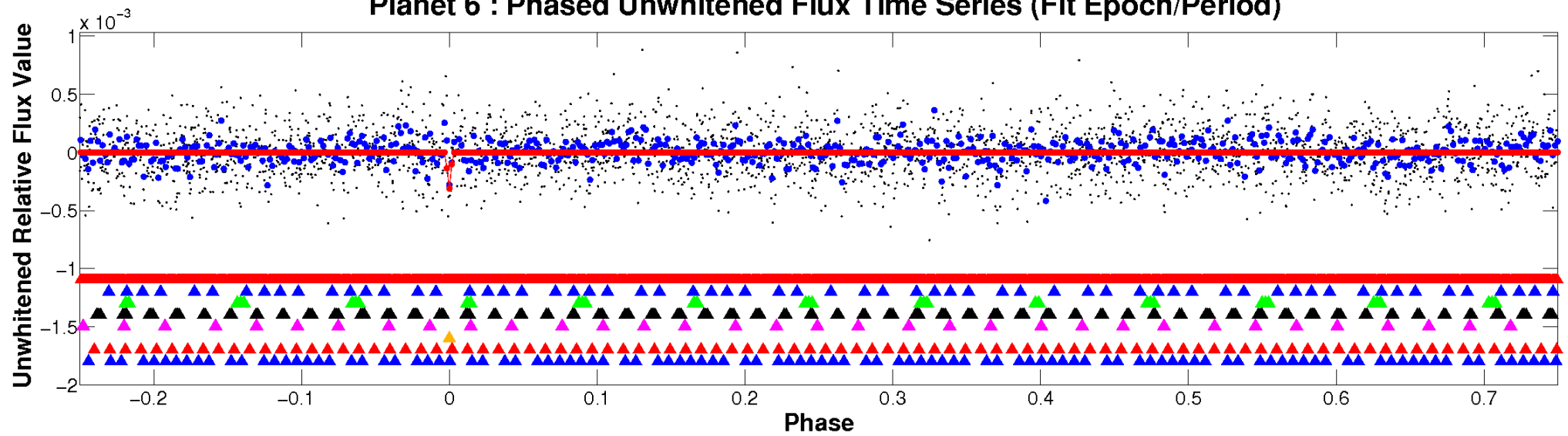


ALT Odd/Even

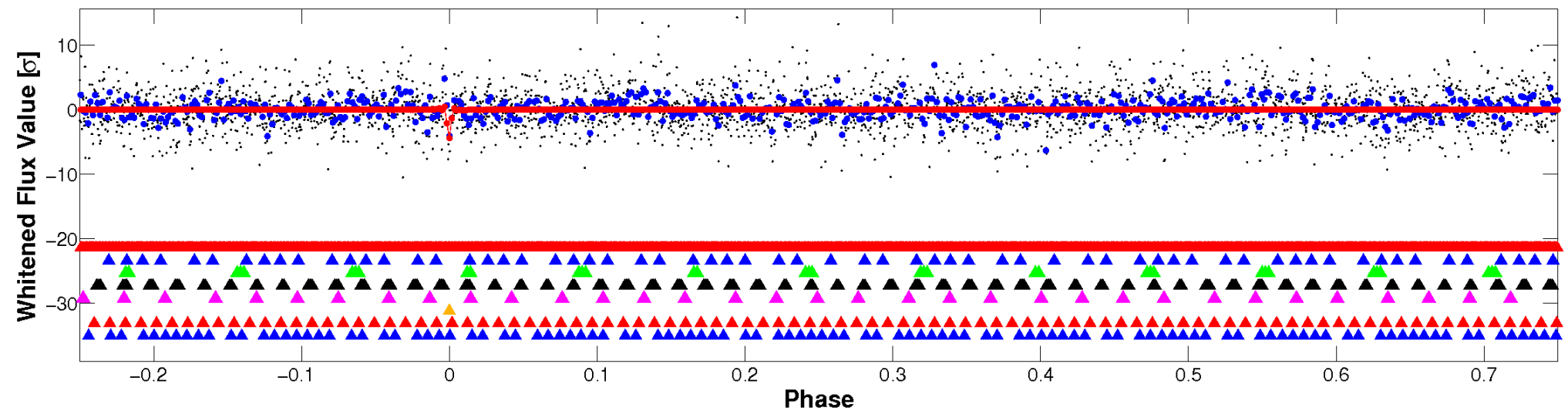
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

Planet 6 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

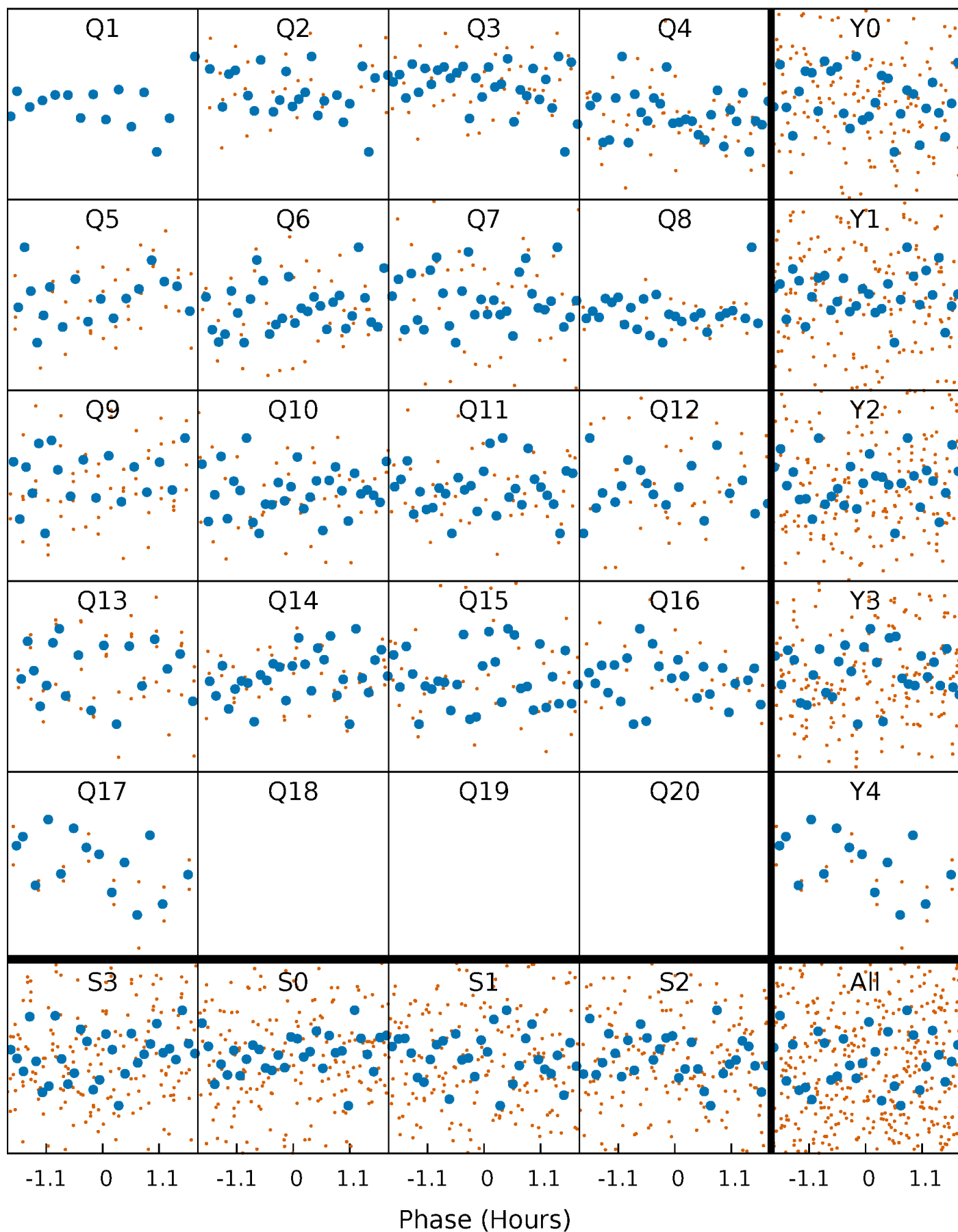


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



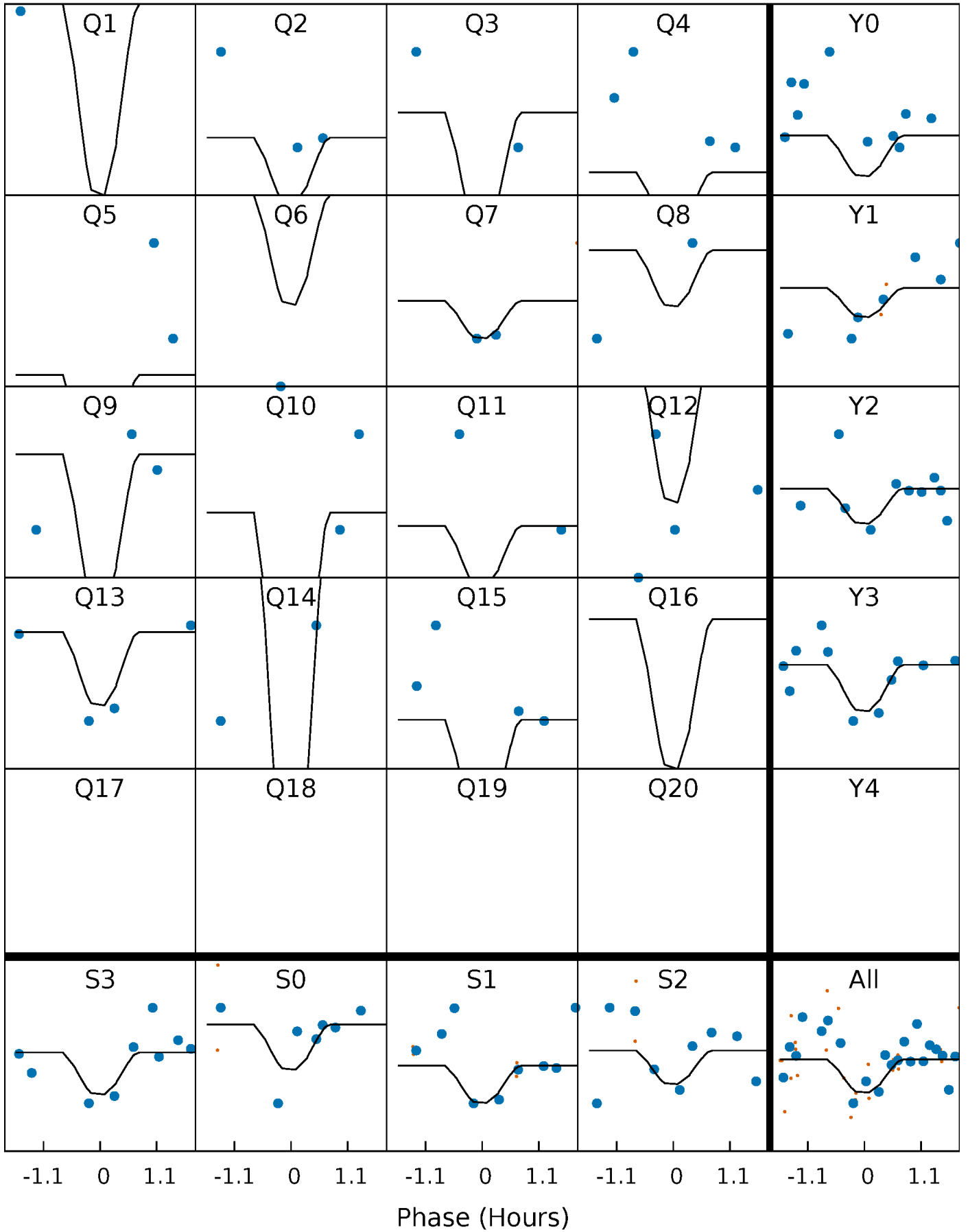
PDC Quarter-Phased Transit Curves

TCE 005960484-06 P= 12.454749 Days $T_0=143.278310$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 005960484-06 P= 12.454749 Days $T_0=143.278310$ (BKJD)

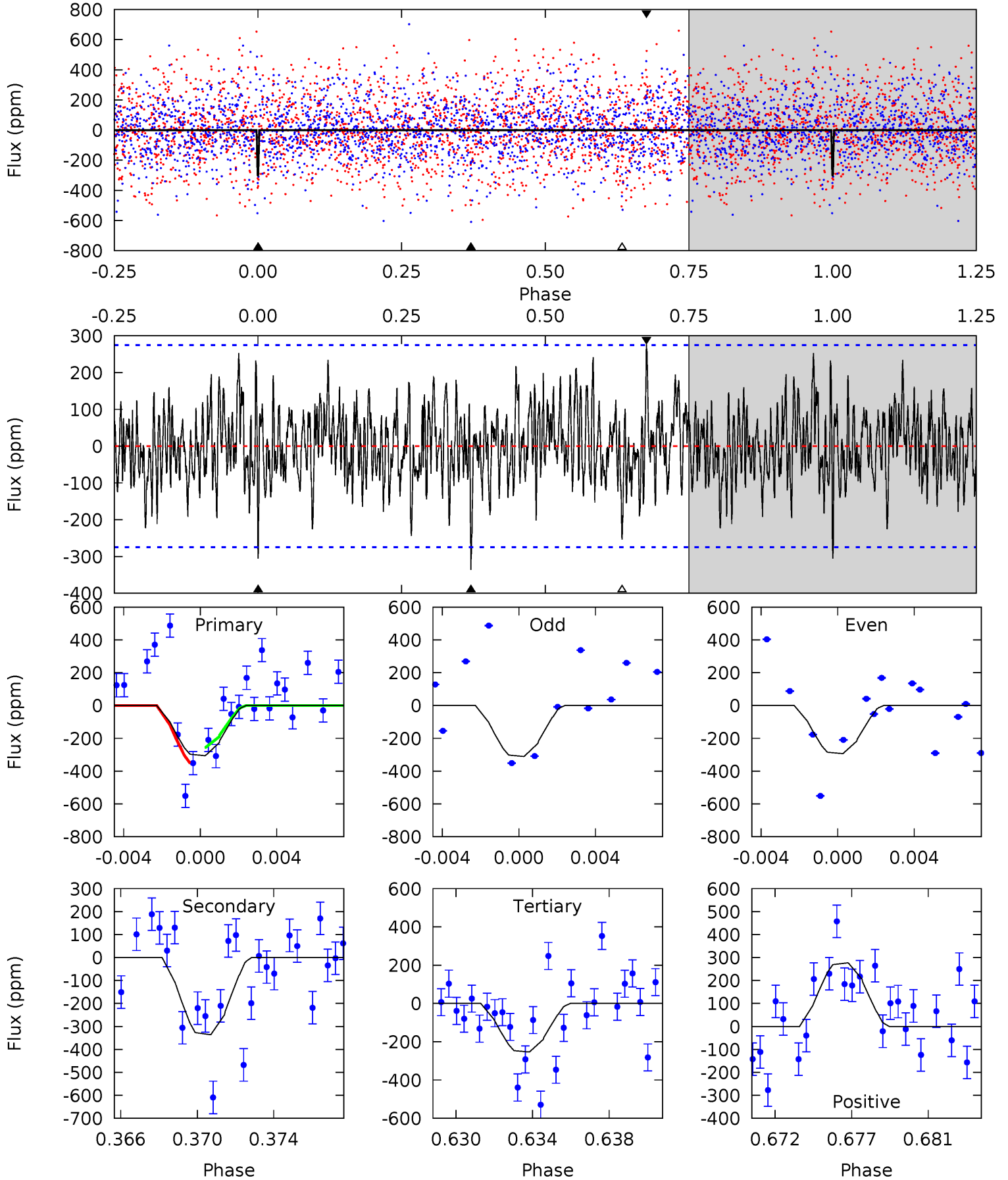


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

005960484-06, P = 12.454749 Days, E = 130.823561 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.78	6.35	4.79	5.23	5.19	2.86	1.62	0.99	0.55	1.56	1.12	0.16	0.82	0.45	0.80



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 005960484

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7310^{+228}_{-330}	$4.209^{+0.105}_{-0.195}$	$-0.140^{+0.250}_{-0.350}$	$1.568^{+0.508}_{-0.274}$	$1.452^{+0.211}_{-0.211}$	$0.531^{+0.265}_{-0.278}$
	+3%/-5%	+2%/-5%	+179%/-250%	+32%/-17%	+15%/-15%	+50%/-52%
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 005960484-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-336 ± 53	$6.03^{+7.03}_{-3.96}$	1652^{+134}_{-108}	5300^{+4371}_{-1326}	71^{+524}_{-55}
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 $A_{obs} \gg 1.0$

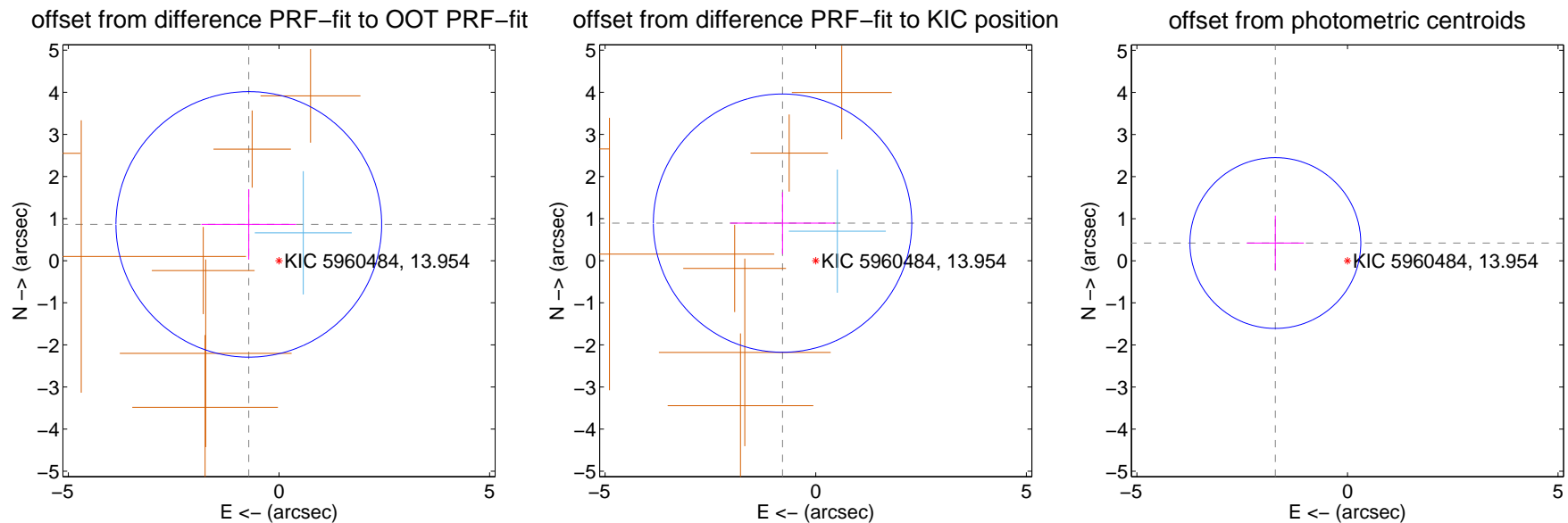
DV Centroid Data

Supplemental centroid analysis for 005960484-06. Kepler magnitude: 13.95. Transit SNR 10.98

There are 1 quarters with good PRF difference image offsets

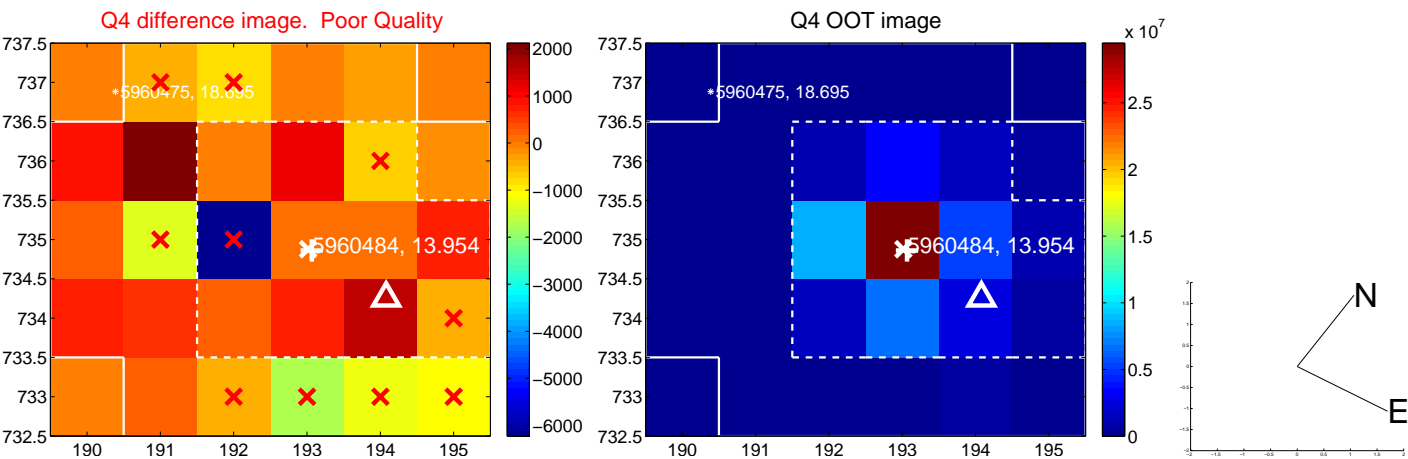
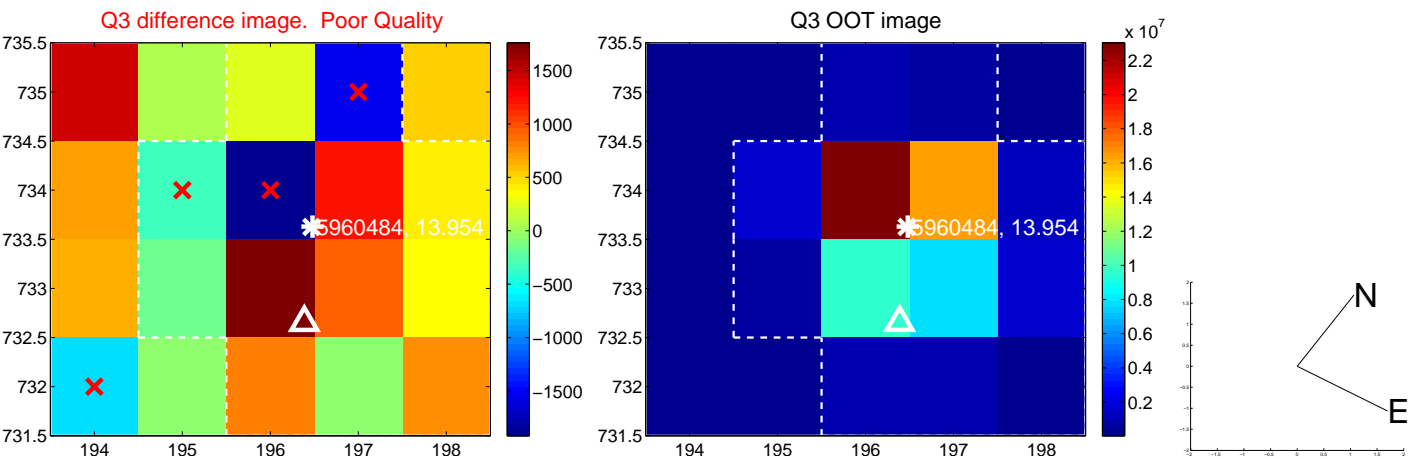
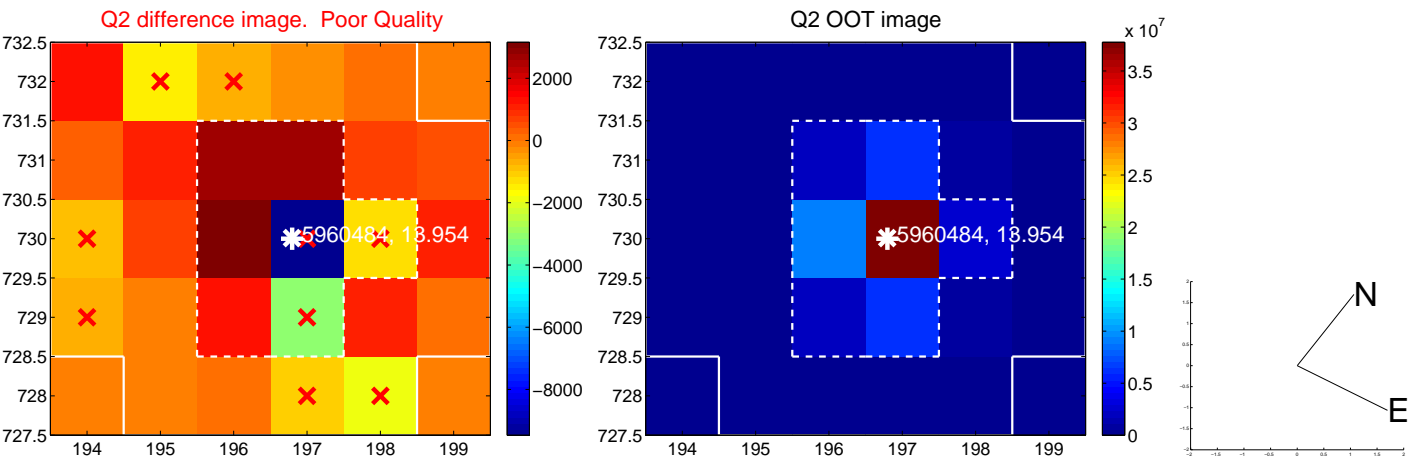
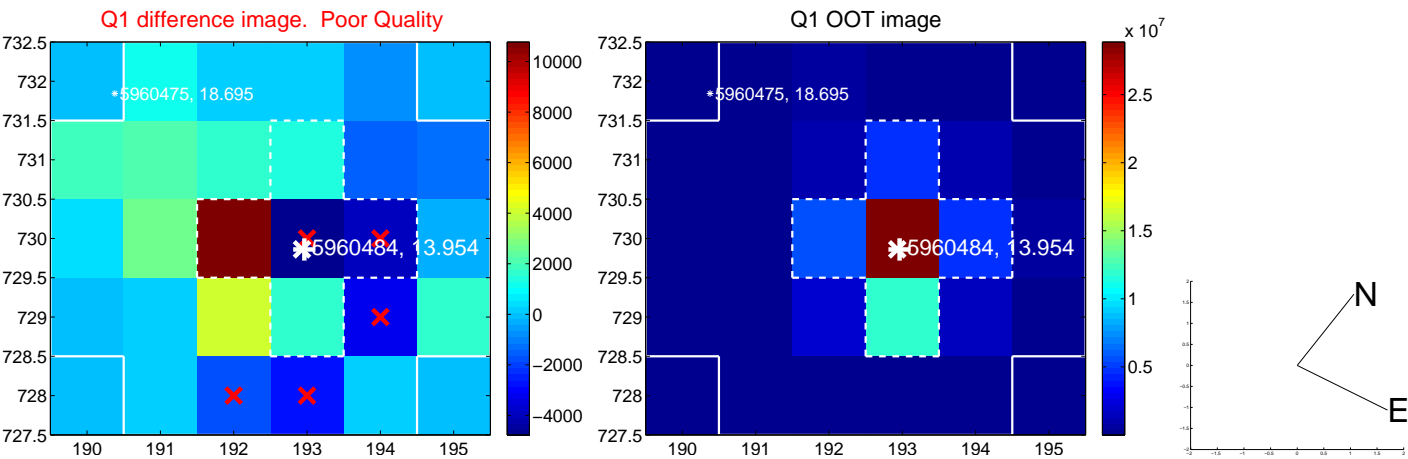
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.122 ± 1.051	1.07	0.717 ± 1.125	0.863 ± 0.837
PRF-fit source offset from KIC position	1.190 ± 1.023	1.16	0.787 ± 1.246	0.893 ± 0.734
photometric centroid source offset	1.76 ± 0.68	2.61	1.71 ± 0.68	0.42 ± 0.65

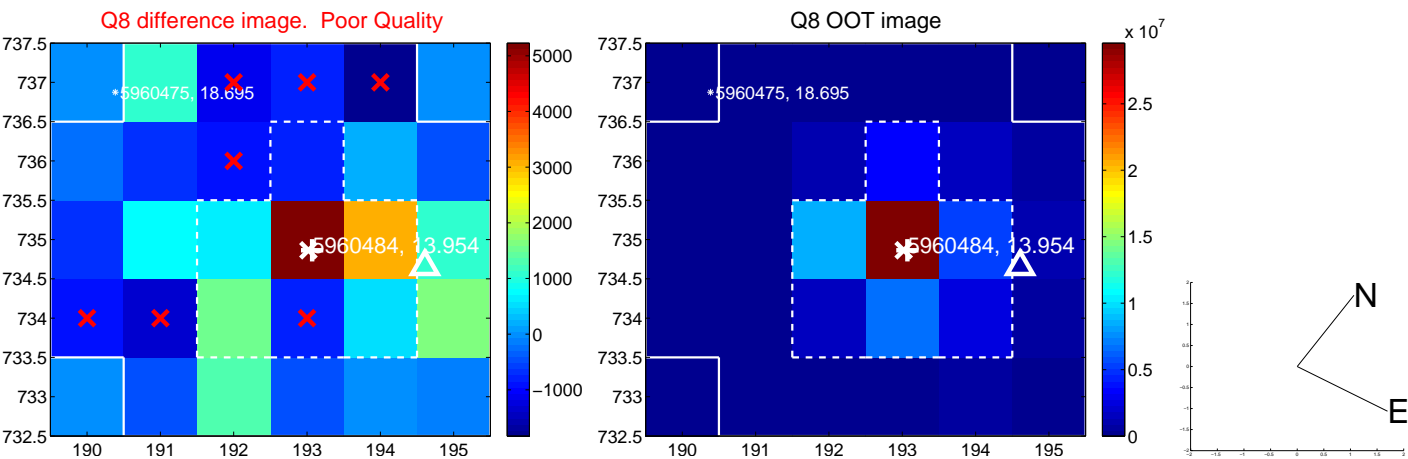
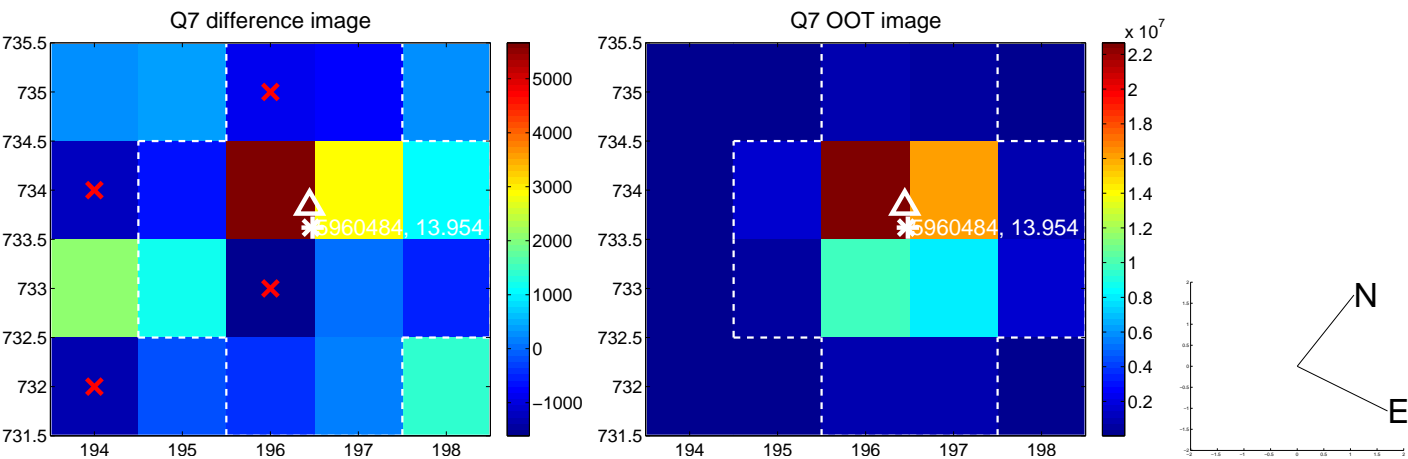
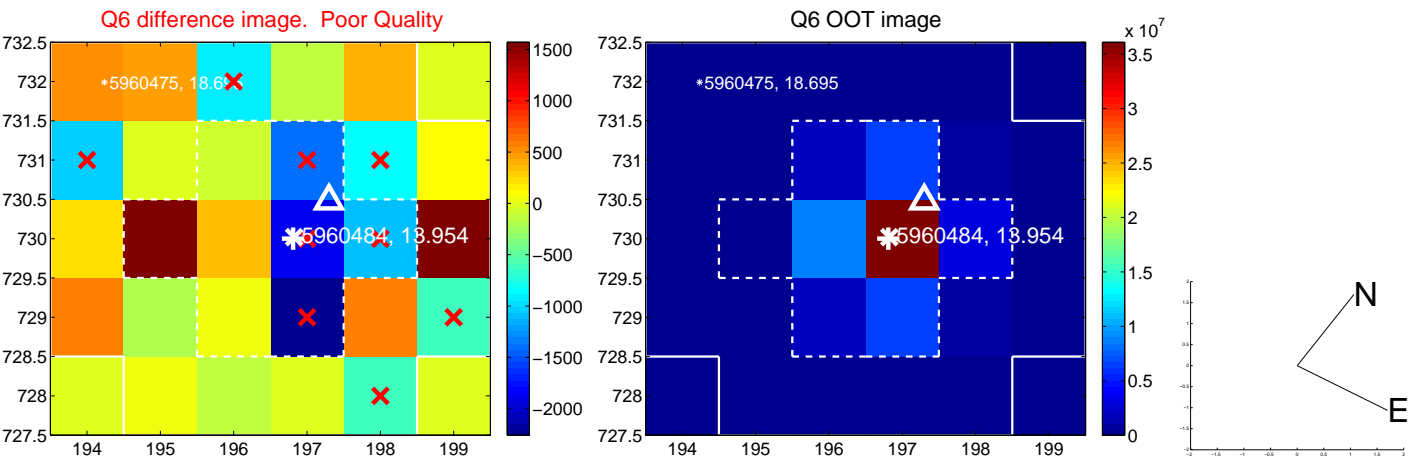
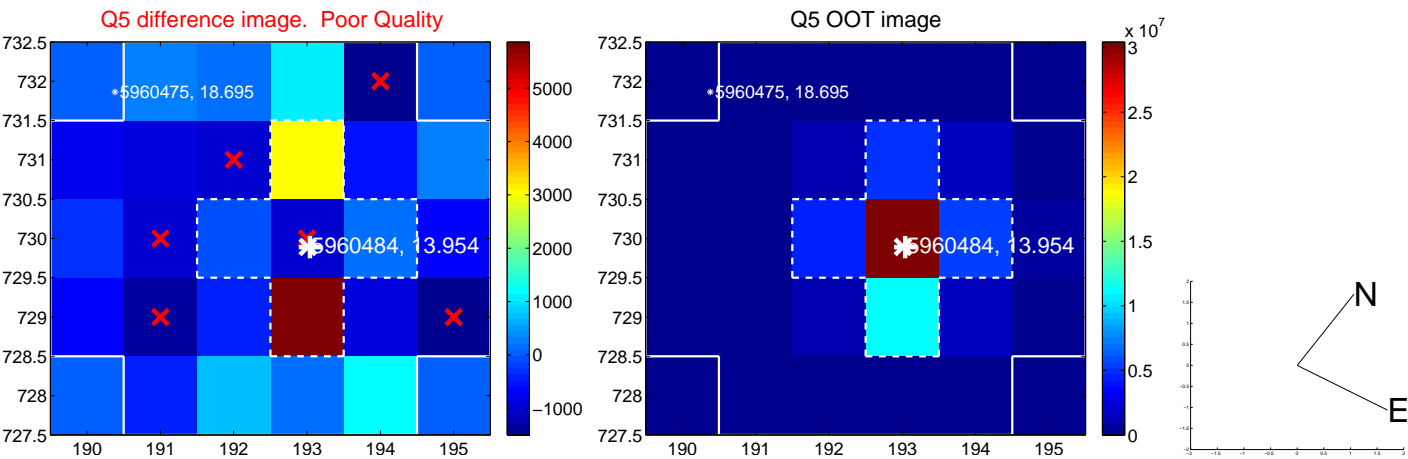


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

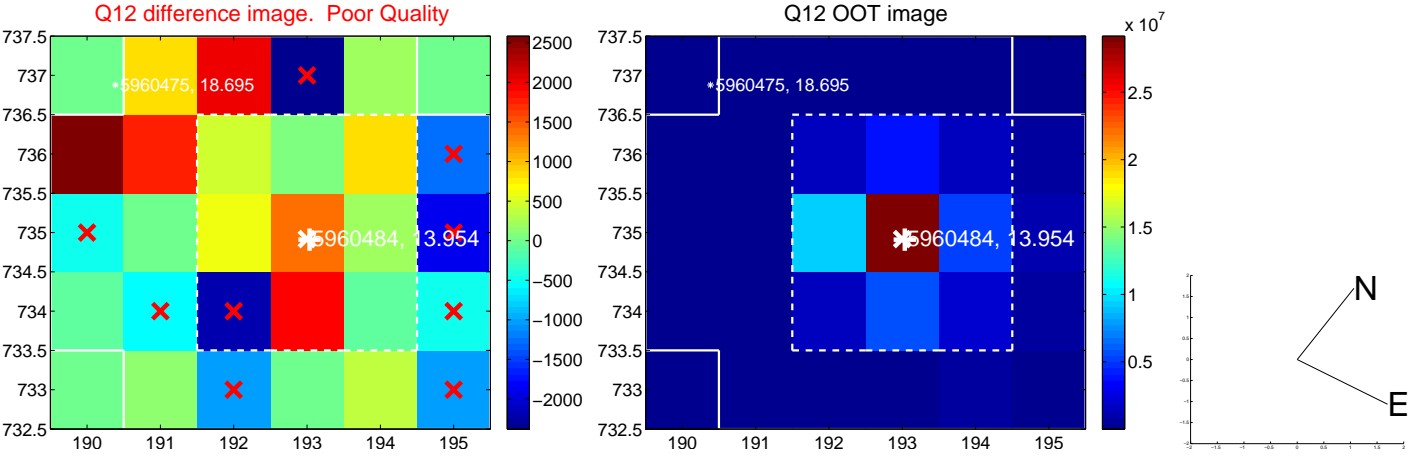
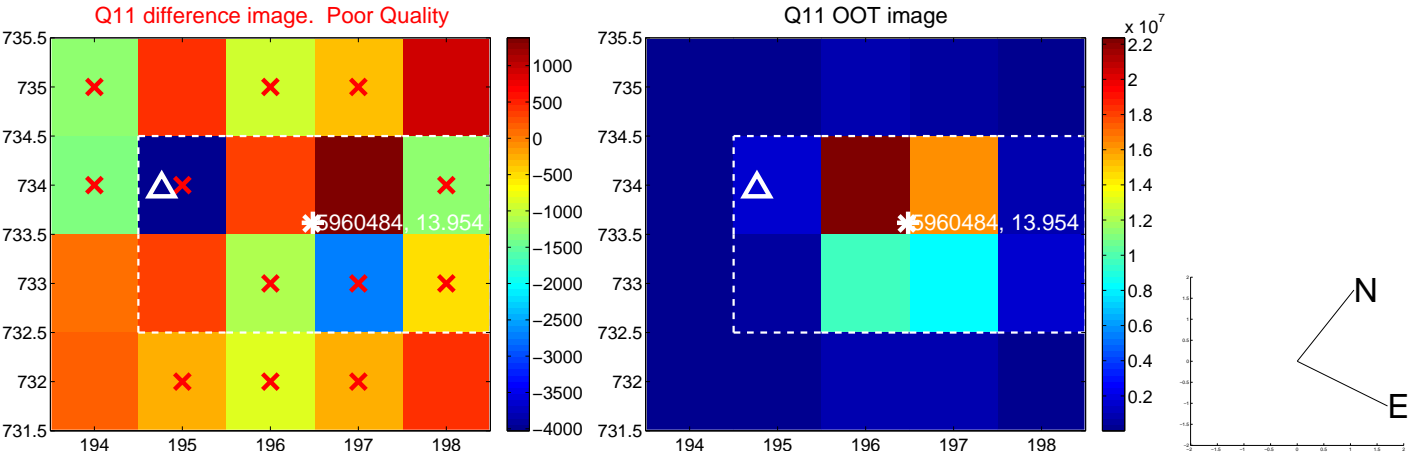
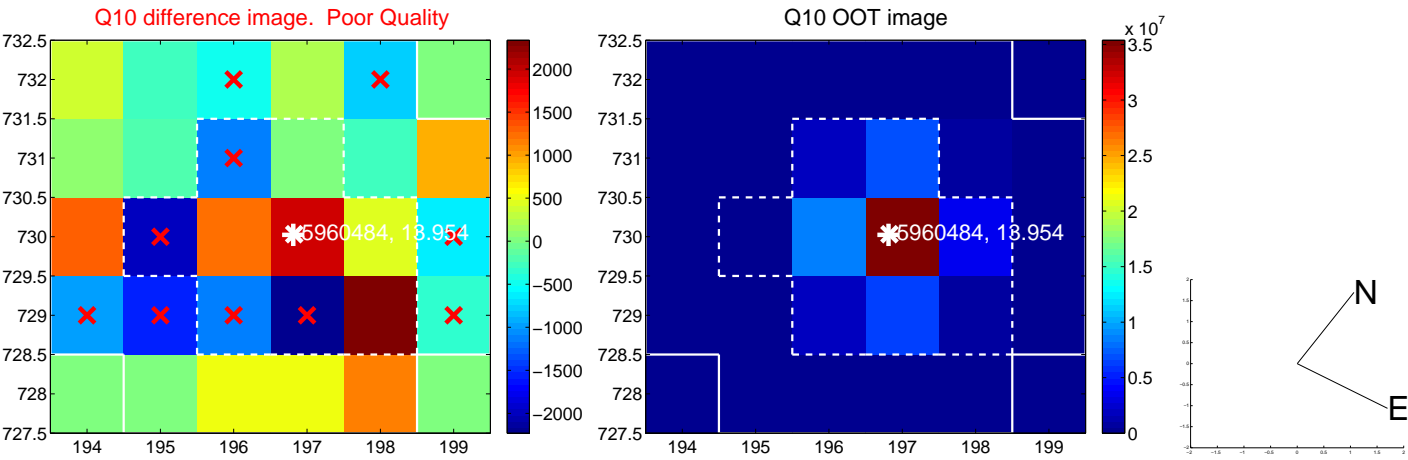
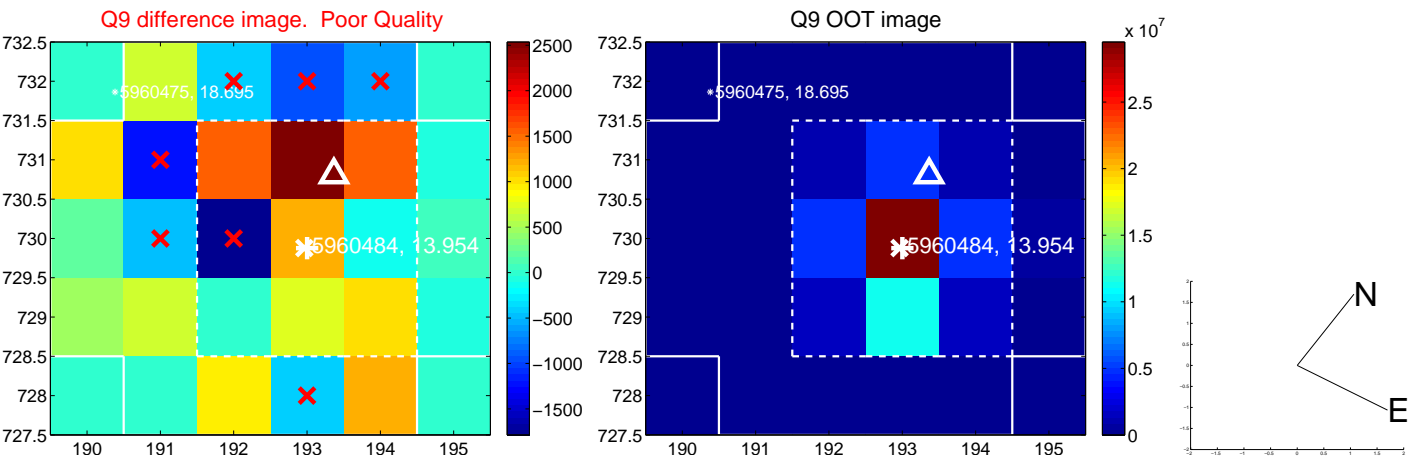
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



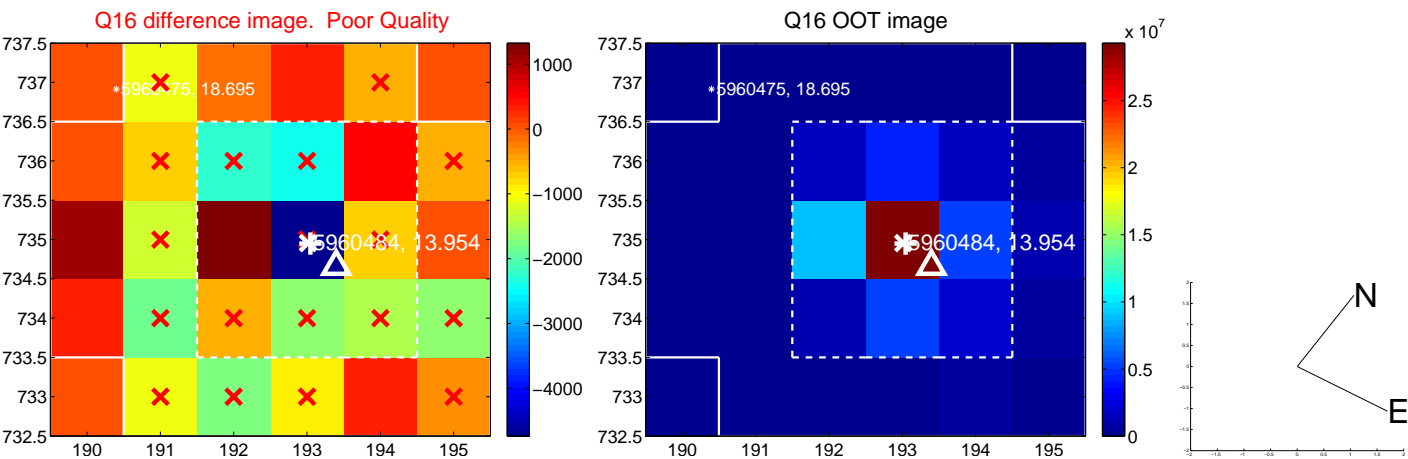
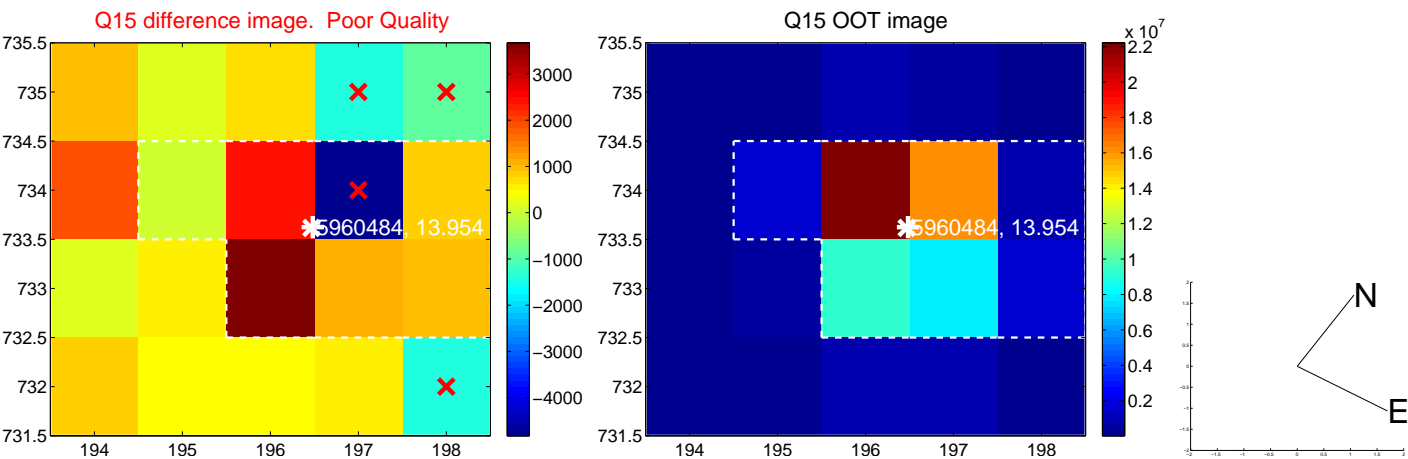
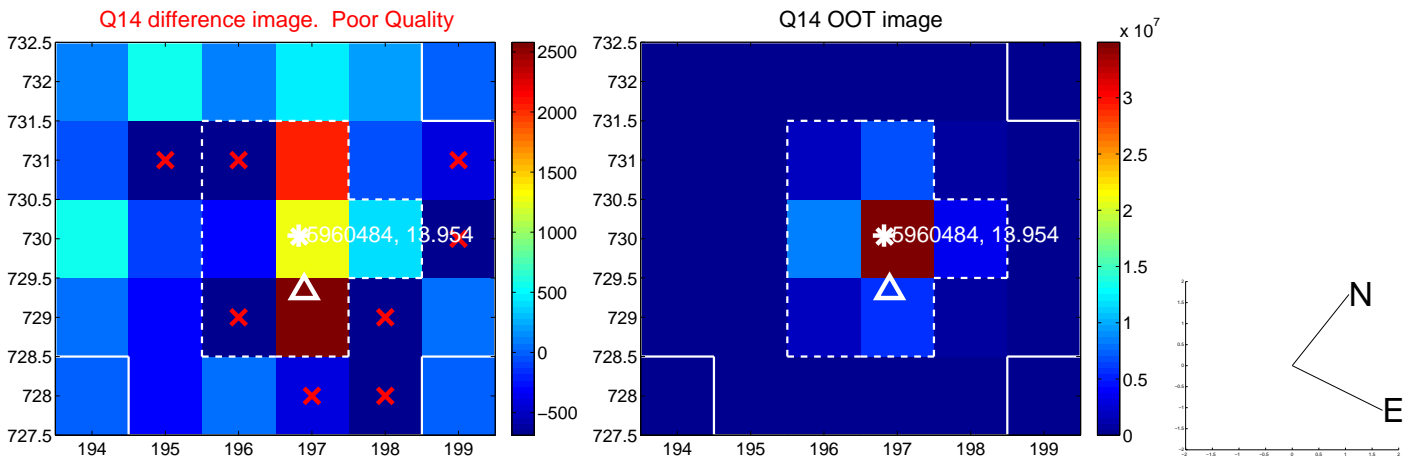
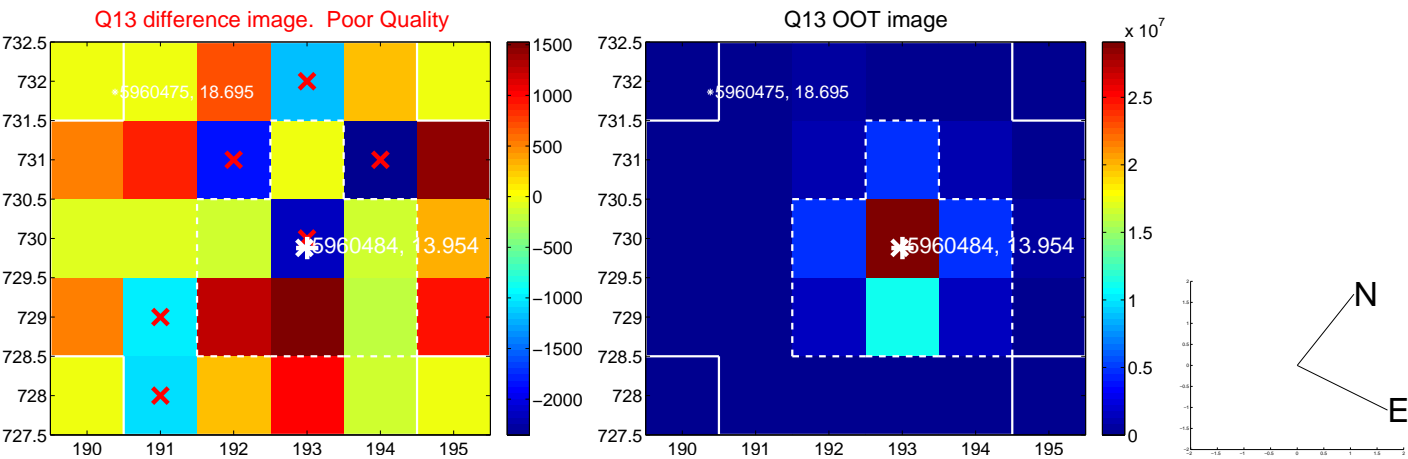
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



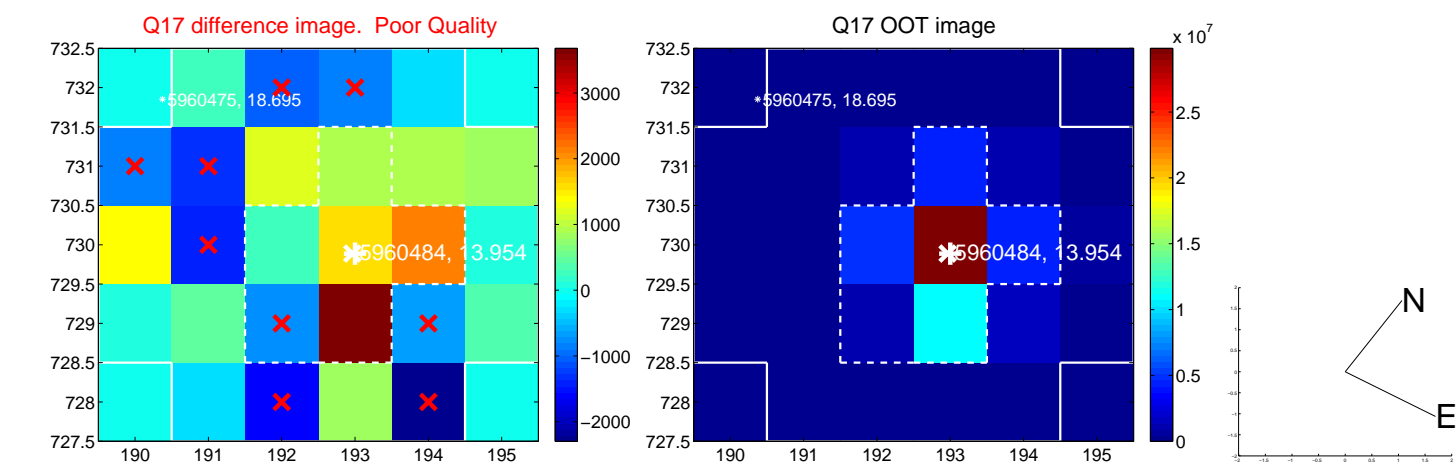
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



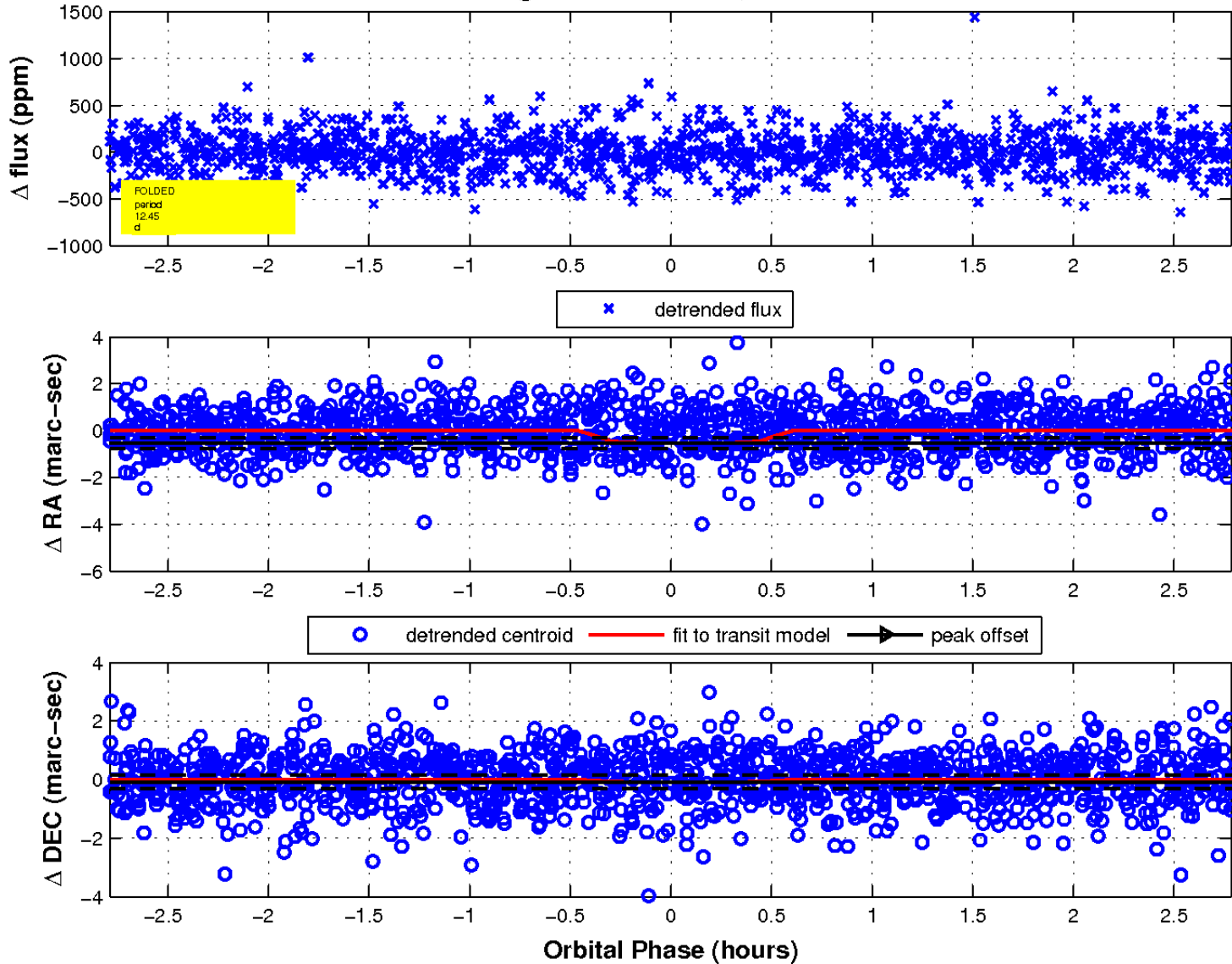
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

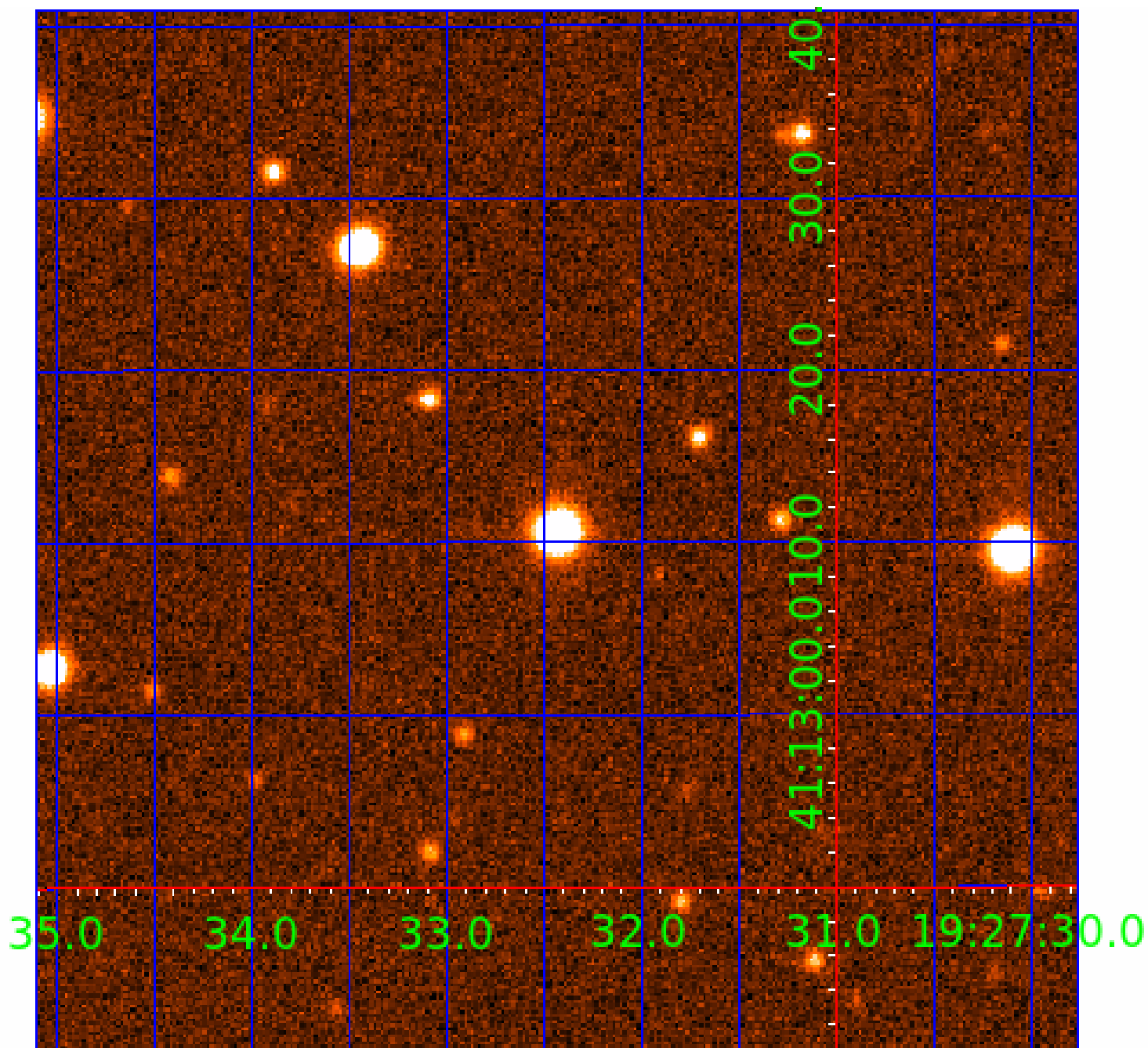


fluxWeightedCentroids, Planet 6 of 8



UKIRT Image

Declination



KIC 005960484

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})
005960484-01	OBS	No	0.605539	131.731623	8.1	4.423	7.8	3.7	1.57	7310	0.46	24999.93
005960484-02	OBS	No	23.027039	132.003375	234.1	2.066	12.6	11.4	1.57	7310	2.59	195.50
005960484-03	OBS	No	42.152393	150.182373	397.2	1.746	13.1	12.5	1.57	7310	3.62	87.30
005960484-04	OBS	No	10.007999	134.561131	317.1	0.878	13.3	15.0	1.57	7310	2.86	593.83
005960484-05	OBS	No	42.861399	146.723757	200.3	7.103	14.7	9.2	1.57	7310	2.44	85.38
005960484-06	OBS	No	12.454749	143.278310	317.6	0.930	12.9	11.0	1.57	7310	2.86	443.62
005960484-07	OBS	No	14.552426	137.006597	240.3	2.723	13.9	12.0	1.57	7310	2.54	360.48
005960484-08	OBS	No	13.469643	131.932116	65.8	0.979	11.6	2.3	1.57	7310	1.34	399.62

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005960484-01	OBS	FP	0.00	1	0	1	0	LPP_DV—MOD_NONUNIQ_ALT—CENT_UNRESOLVED_OFFSET
005960484-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
005960484-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV
005960484-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005960484-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV
005960484-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
005960484-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
005960484-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

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

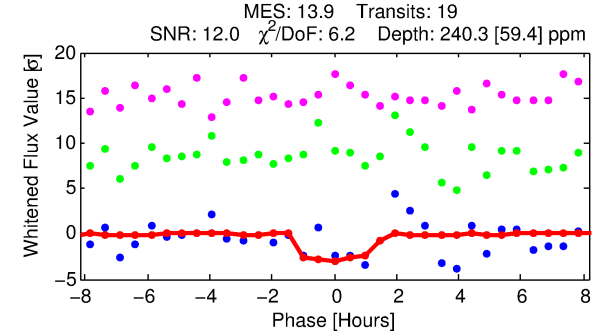
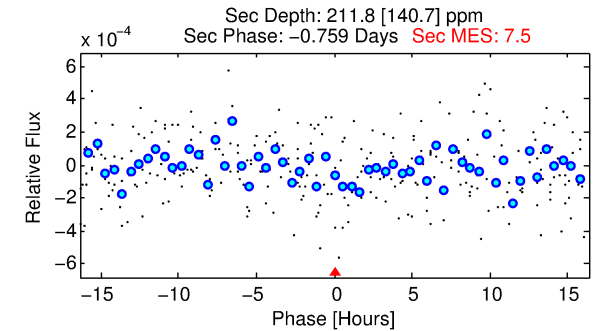
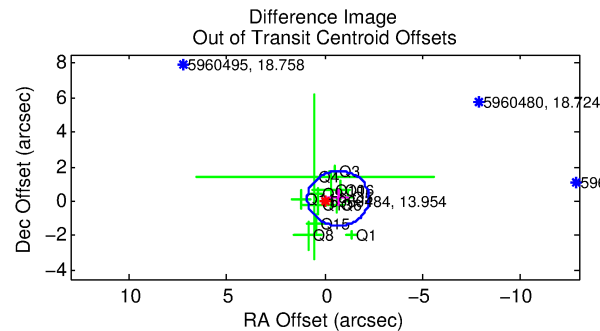
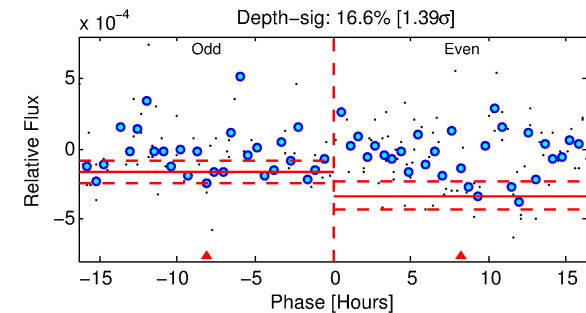
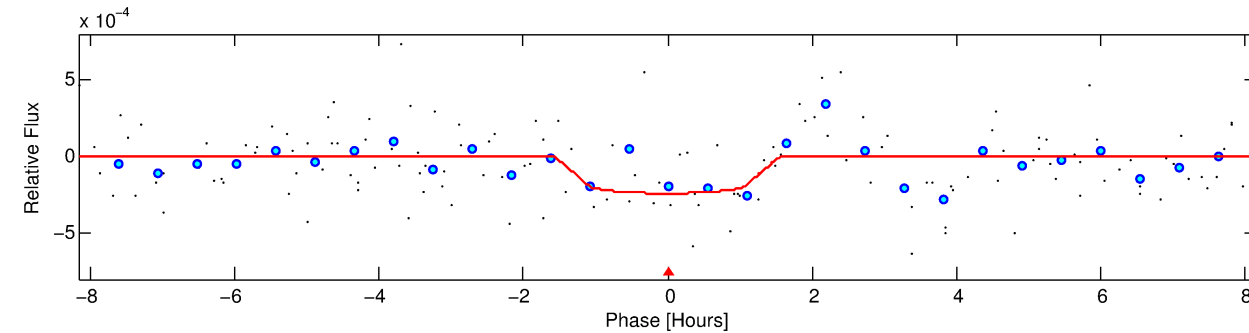
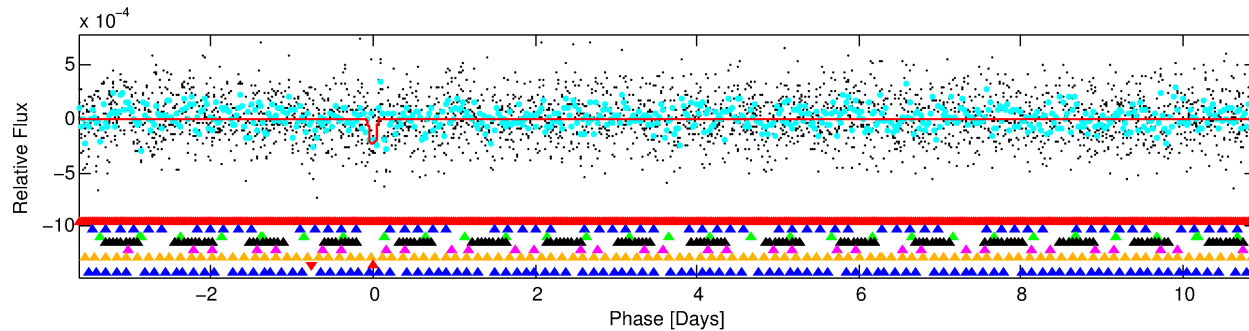
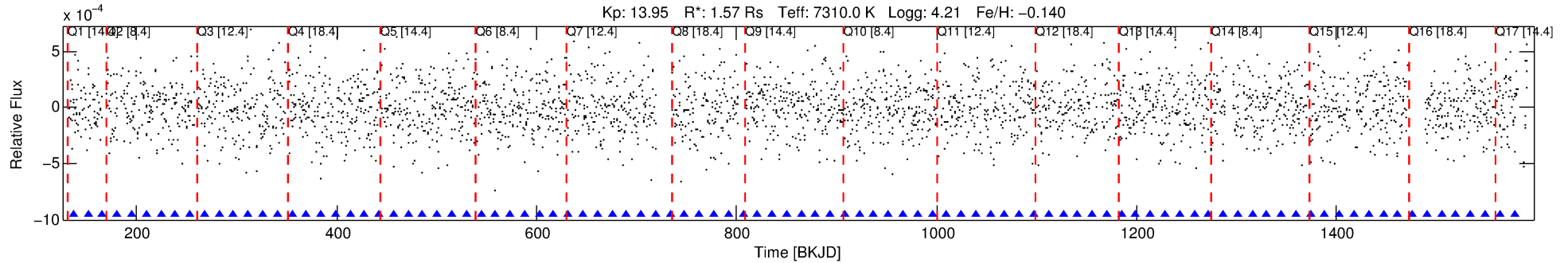
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005960484-07

No Significant Match Found

DV One-Page Summary

KIC: 5960484 Candidate: 7 of 8 Period: 14.552 d



DV Fit Results:

Period = 14.55243 [0.00043] d
Epoch = 137.0066 [0.0237] BKJD
Rp/R* = 0.0148 [0.0284]
a/R* = 35.04 [411.09]
b = 0.54 [15.25]
Seff = 360.48 [148.13]
Teq = 1111 [114] K
Rp = 2.54 [4.93] Re
a = 0.1321 [0.0347] AU
Ag = 315.66 [1233.12] [0.26 σ]
Teffp = 7241 [7048] K [0.87 σ]

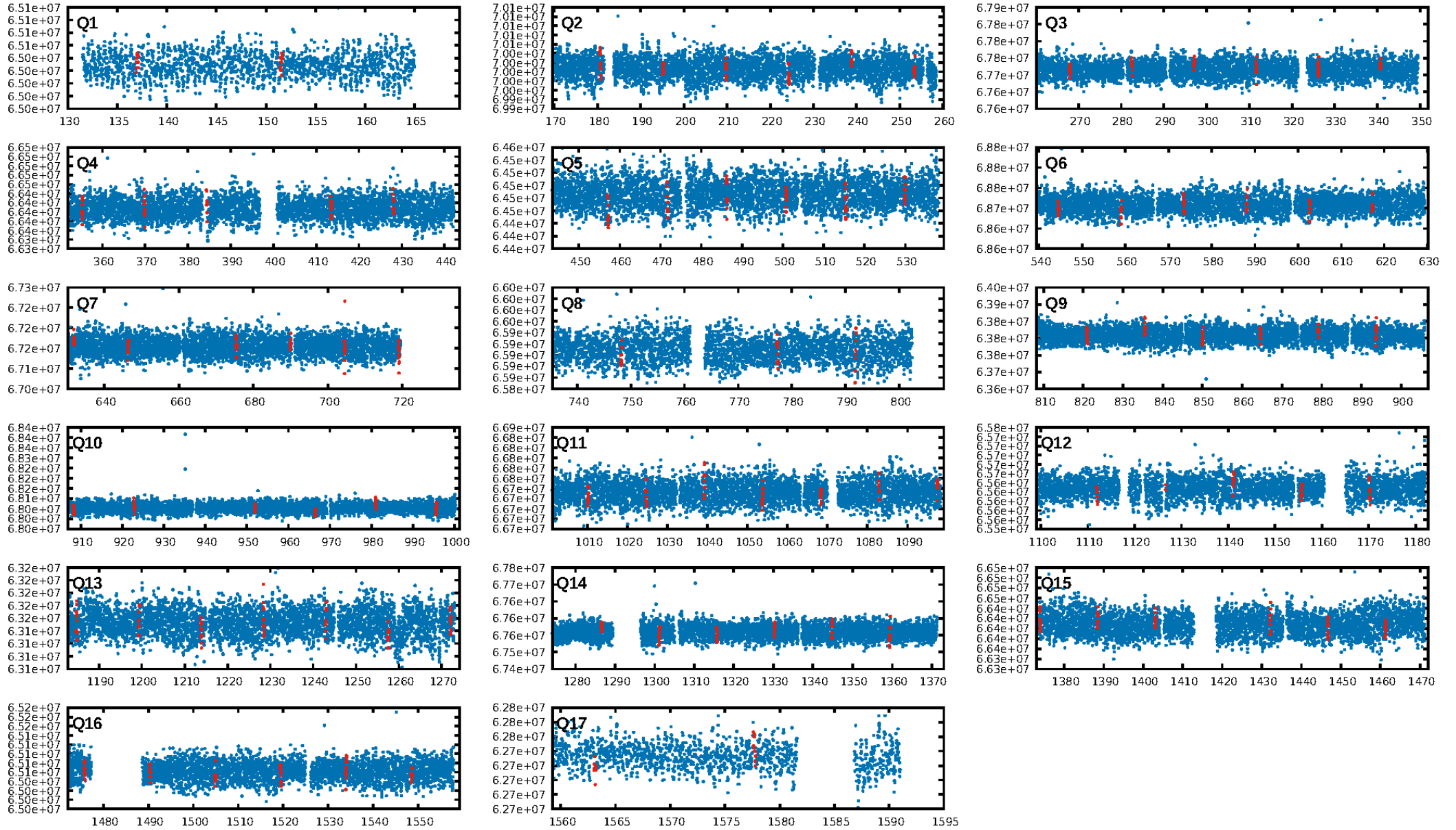
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [8.98 σ]
LongPeriod-sig: 100.0% [59.50 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.72e-13
RollingBand-fgt: 1.00 [19/19]
GhostDiagnostic-chr: -87.06
Centroid-sig: 87.3%
Centroid-so: 0.152 arcsec [0.28 σ]
OotOffset-rm: 0.709 arcsec [1.35 σ]
KicOffset-rm: 0.661 arcsec [1.28 σ]
OotOffset-st: 3/2/3/4 [12]
KicOffset-st: 3/2/3/4 [12]
DiffImageQuality-fgm: 0.33 [4/12]
DiffImageOverlap-fno: 0.00 [0/17]

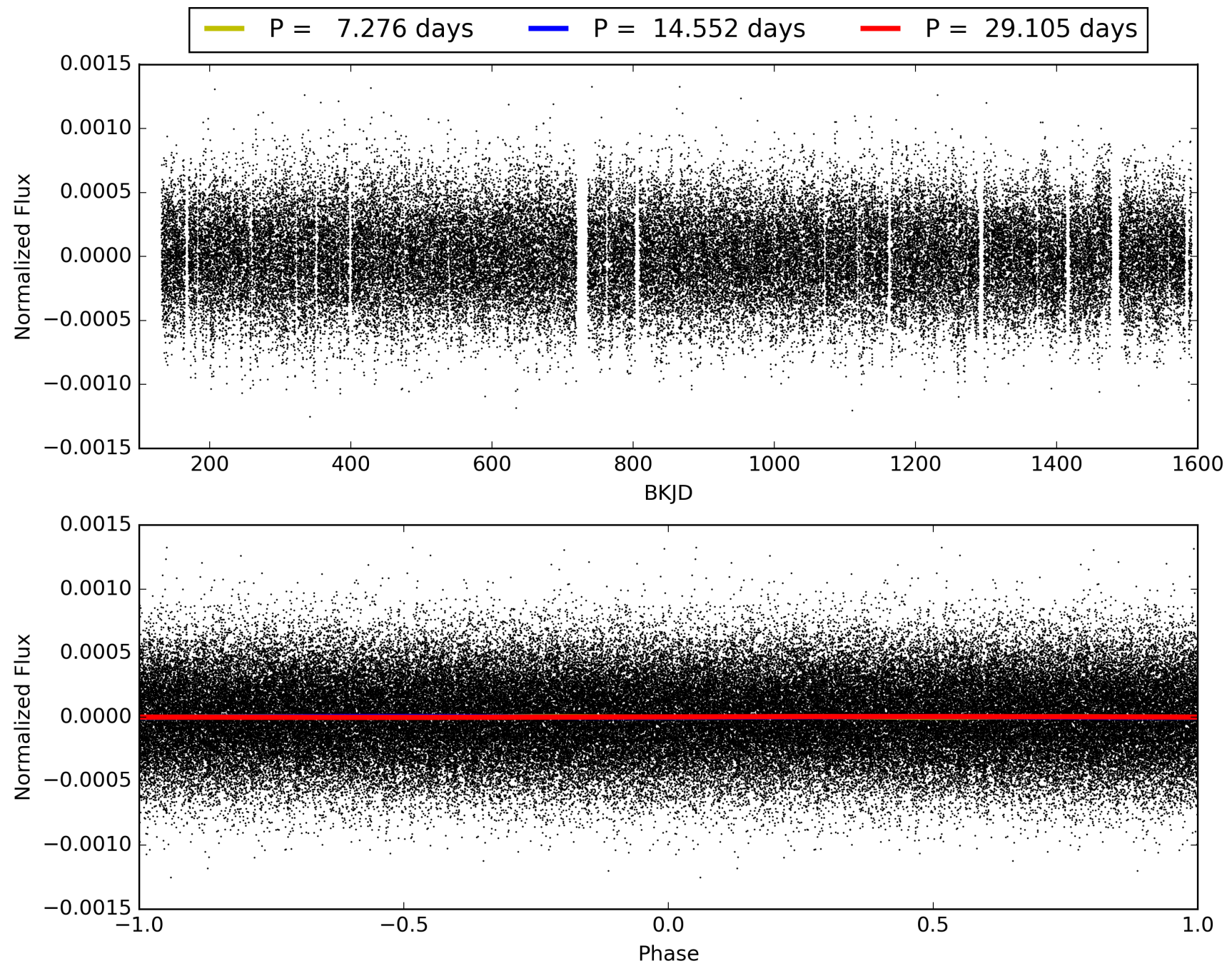
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 07:12:33 Z

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

TCE 005960484-07, PDC Light Curves

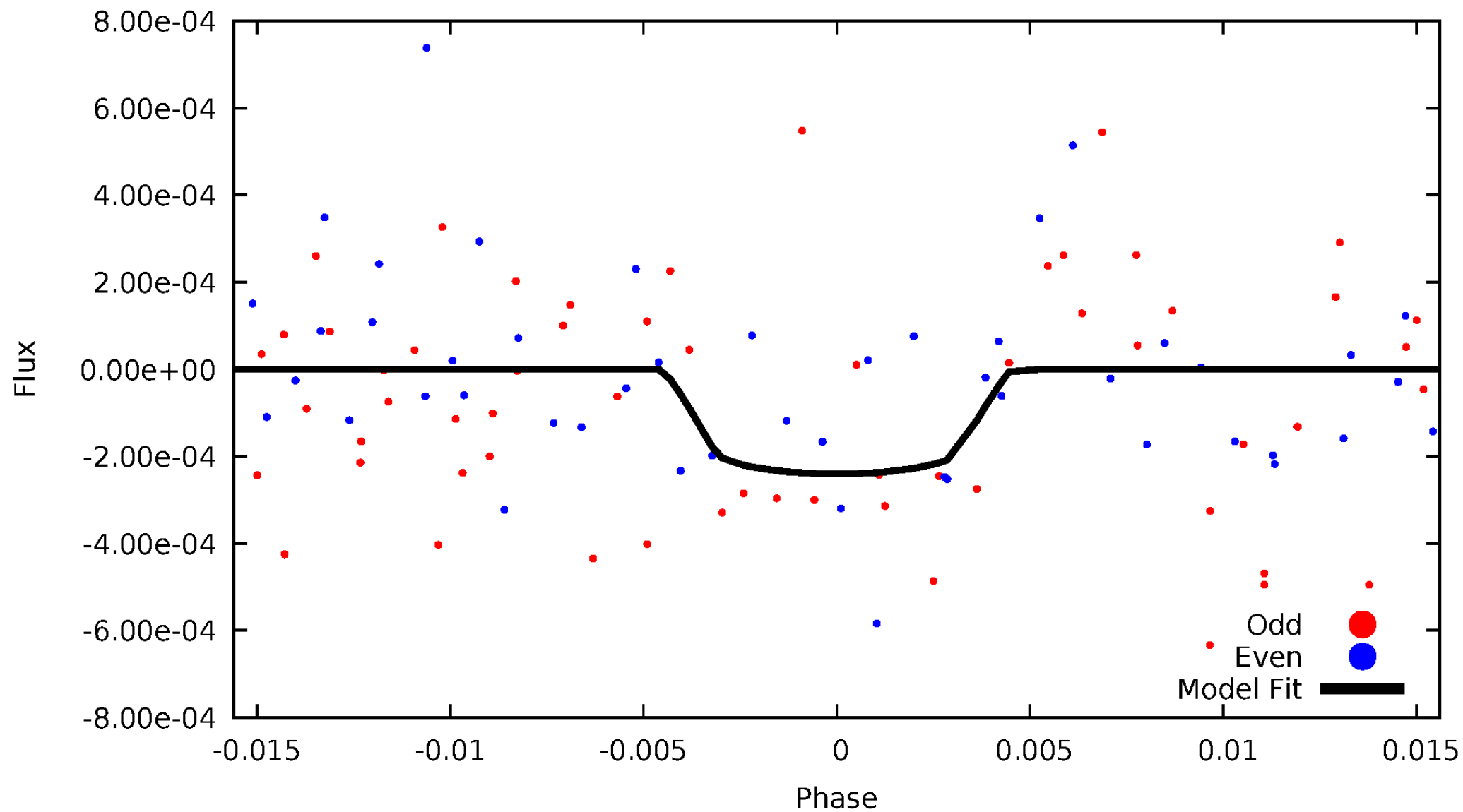


TCE 005960484-07



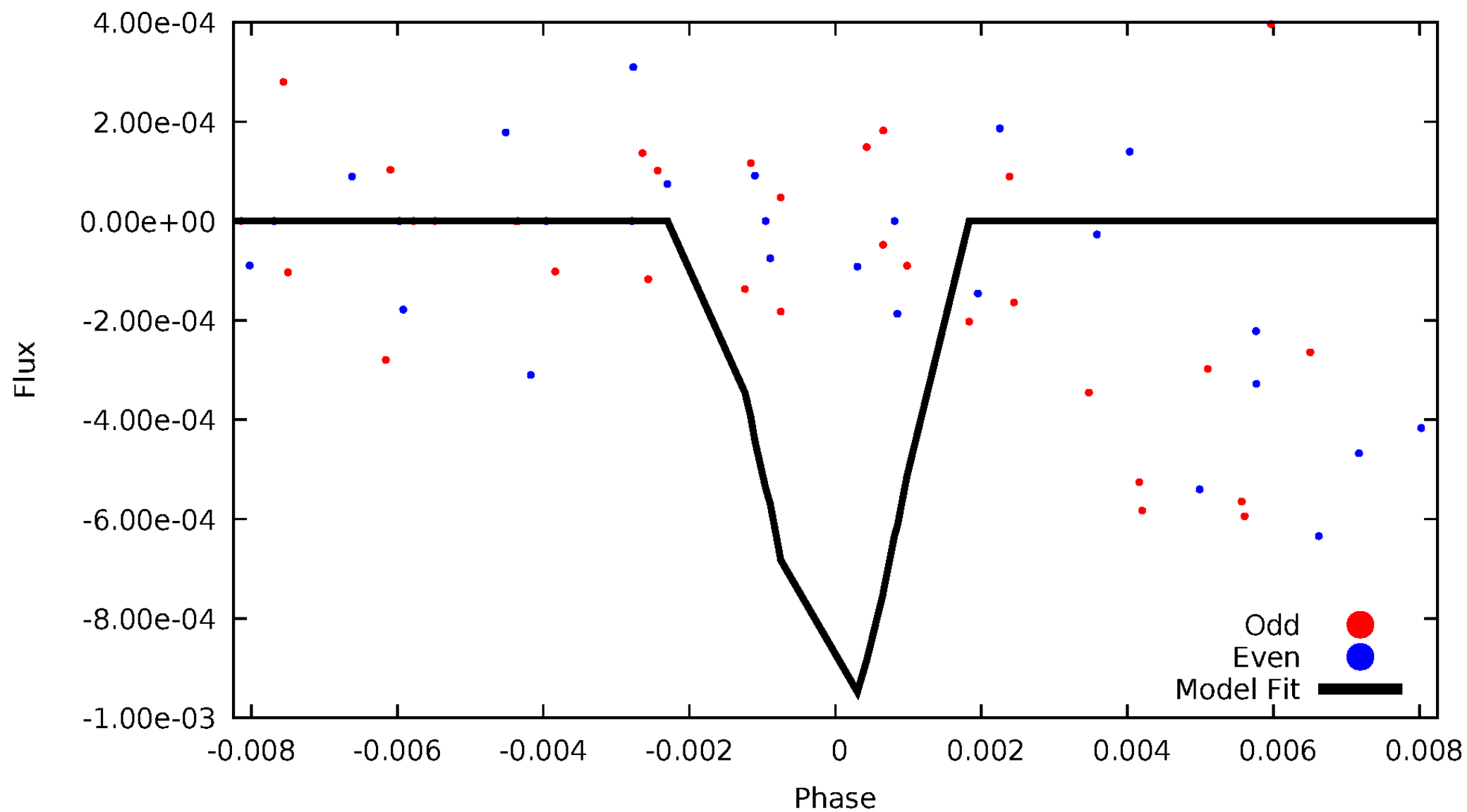
DV Odd/Even

TCE 005960484-07



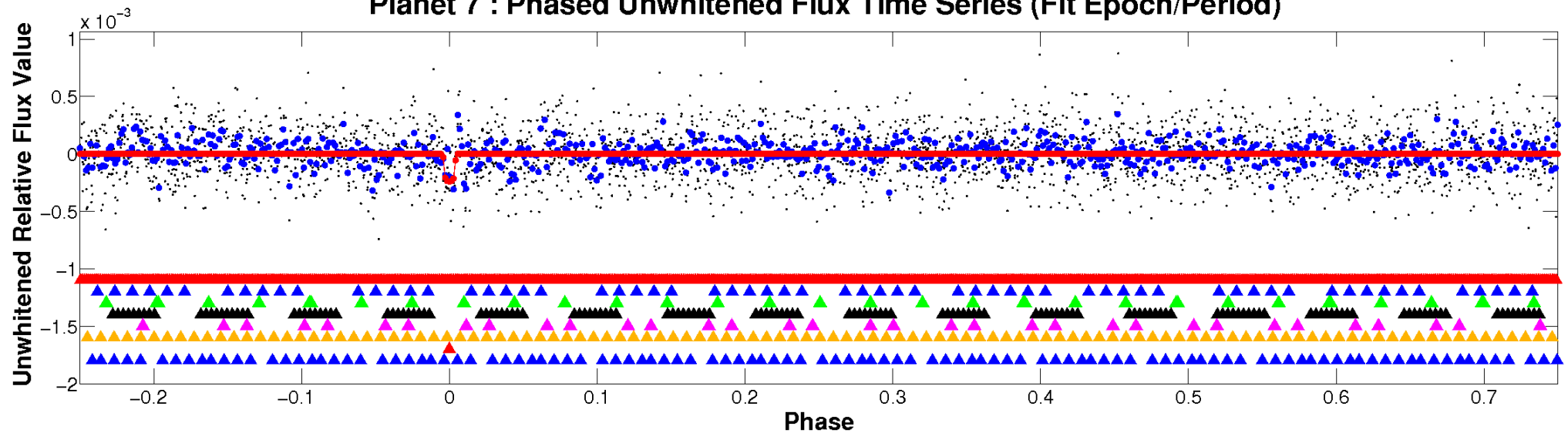
ALT Odd/Even

TCE 005960484-07

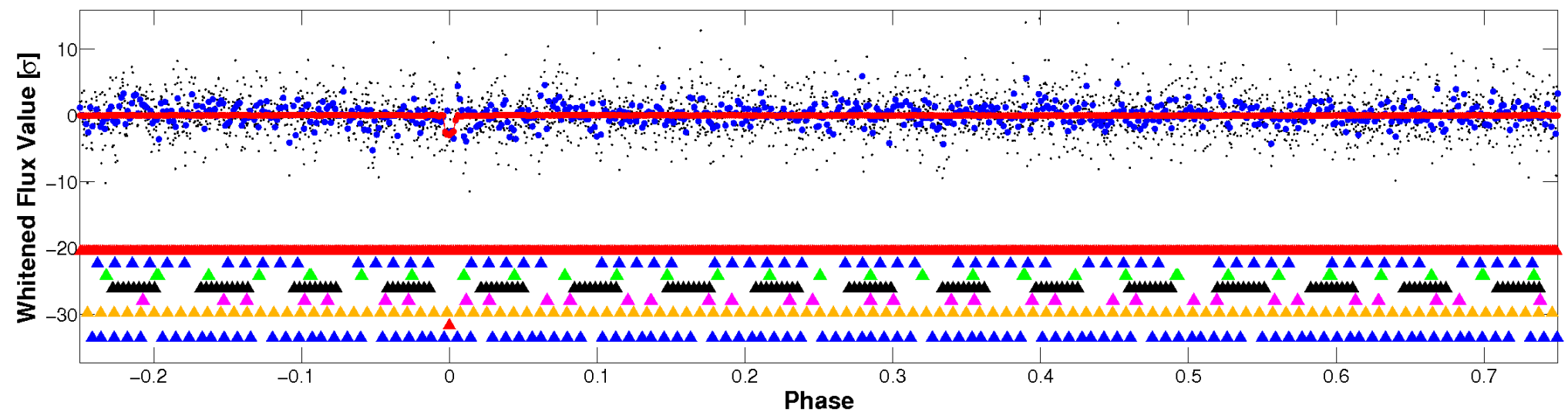


Non-Whitened Vs. Whitened Light Curve

Planet 7 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

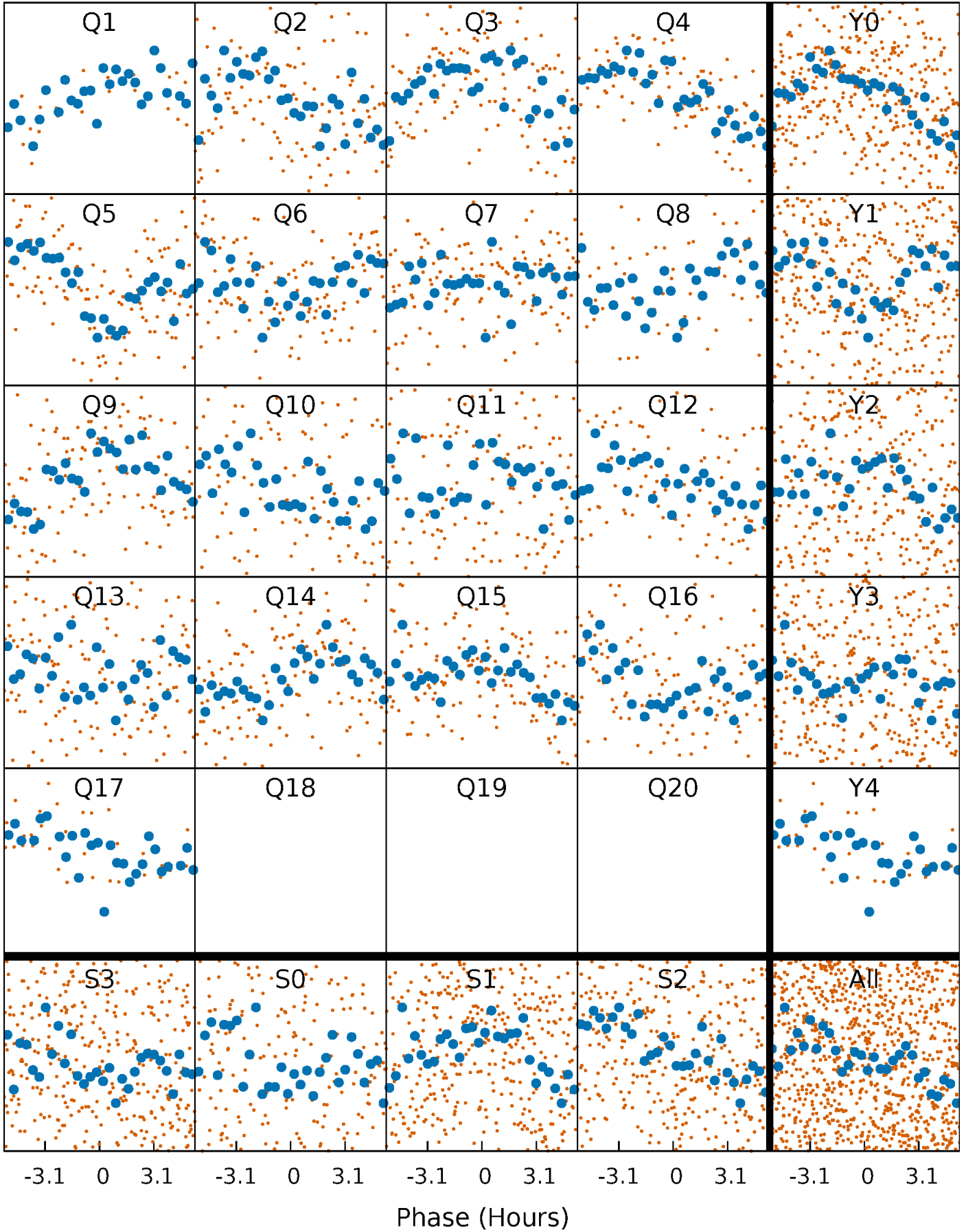


Planet 7 : Phased Whitened Flux Time Series (Fit Epoch/Period)



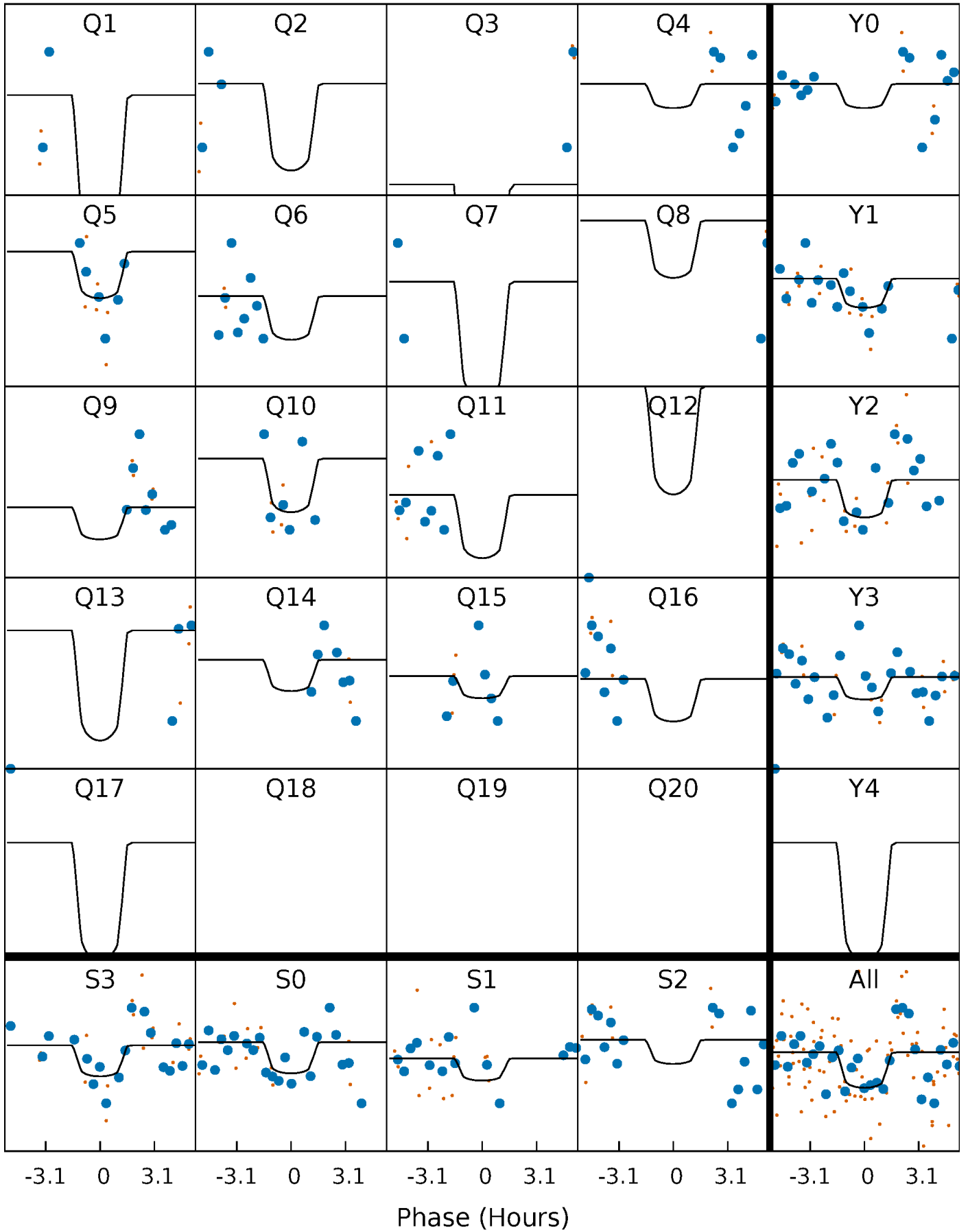
PDC Quarter-Phased Transit Curves

TCE 005960484-07 P= 14.552426 Days $T_0=137.006597$ (BKJD)



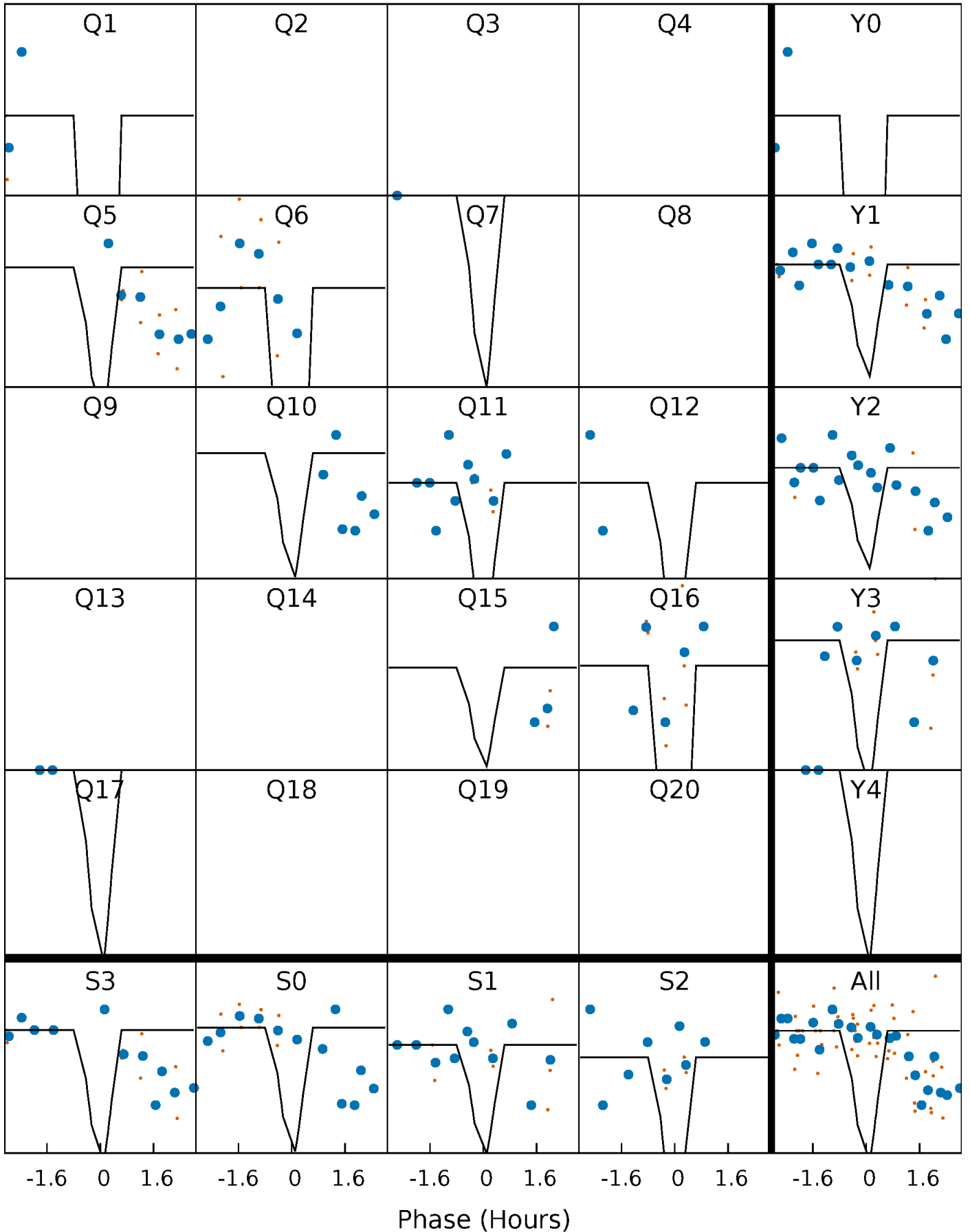
DV Quarter-Phased Transit Curves

TCE 005960484-07 P= 14.552426 Days $T_0=137.006597$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

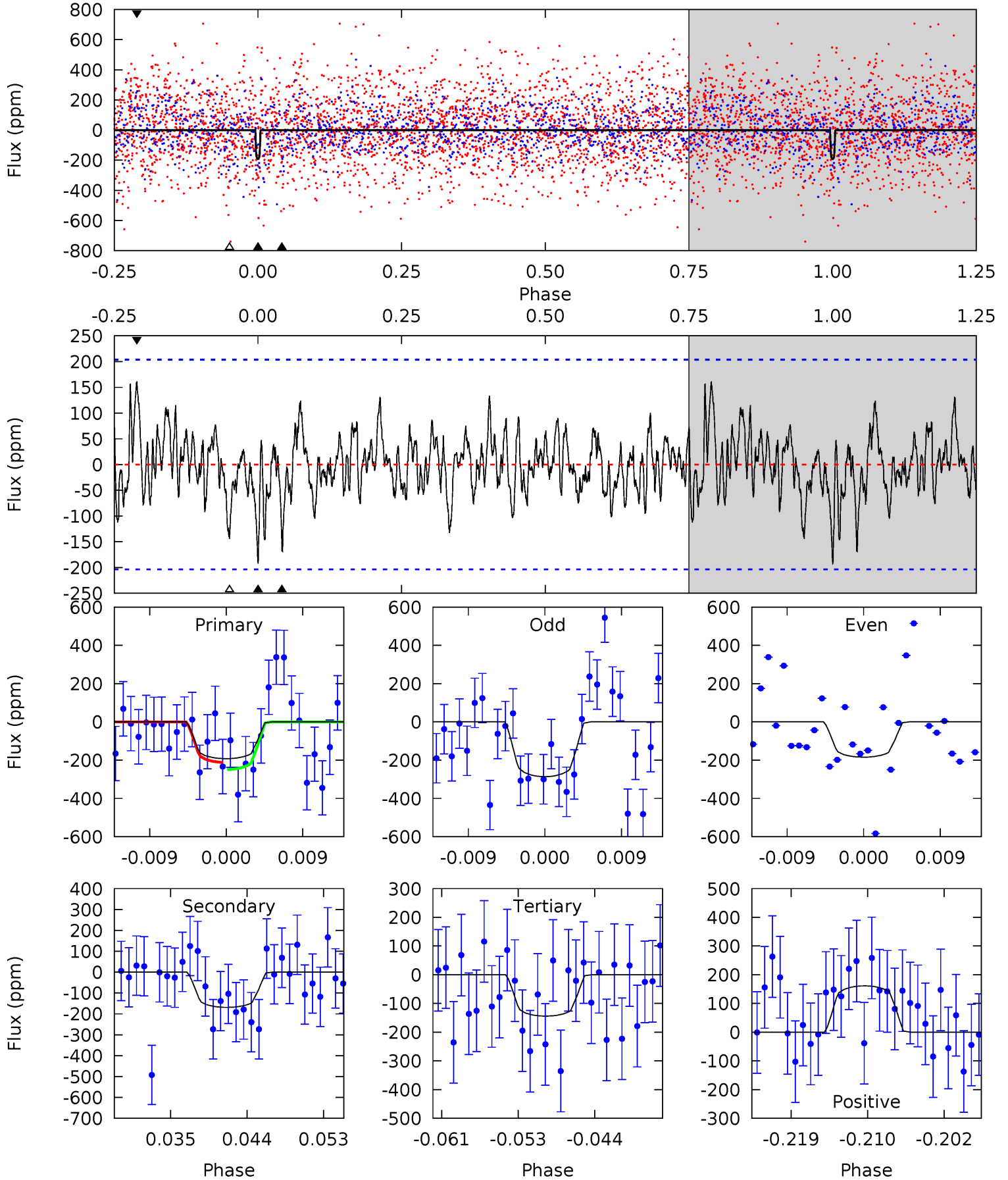
TCE 005960484-07 $P = 14.551011$ Days $T_0 = 136.983034$ (BKJD)



DV Model-Shift Uniqueness Test

005960484-07, P = 14.552426 Days, E = 122.454171 Days

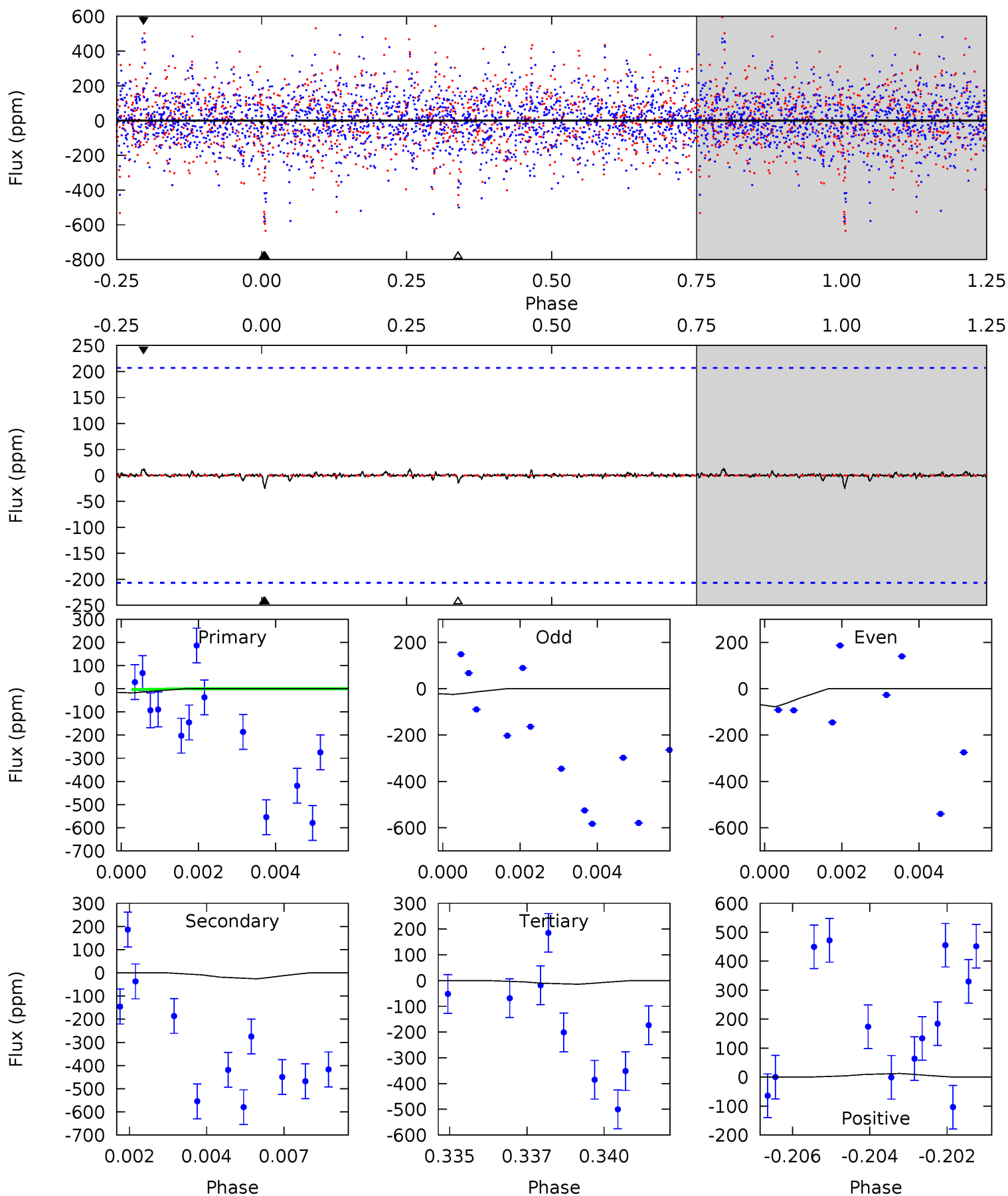
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.77	4.19	3.57	4.00	5.05	2.62	1.24	1.19	0.76	0.61	0.19	1.24	0.81	0.46	0.45



Alt Model-Shift Uniqueness Test

005960484-07, P = 14.551011 Days, E = 122.432023 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.46	0.66	0.37	0.32	5.31	3.06	0.06	0.09	0.14	0.29	0.34	0.65	3.45	0.33	0.37



Stellar Parameters For KIC 005960484

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7310^{+228}_{-330}	$4.209^{+0.105}_{-0.195}$	$-0.140^{+0.250}_{-0.350}$	$1.568^{+0.508}_{-0.274}$	$1.452^{+0.211}_{-0.211}$	$0.531^{+0.265}_{-0.278}$
	+3%/-5%	+2%/-5%	+179%/-250%	+32%/-17%	+15%/-15%	+50%/-52%
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 005960484-07 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-169 ± 40	$4.37^{+4.22}_{-2.88}$	1570^{+119}_{-98}	5259^{+3959}_{-1267}	87^{+598}_{-66}
Alt.	-26 ± 39	$6.00^{+5.19}_{-3.63}$	1567^{+115}_{-90}	3070^{+1326}_{-6108}	$4.115^{+32.249}_{-7.533}$

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 $A_{obs} \gg 1.0$

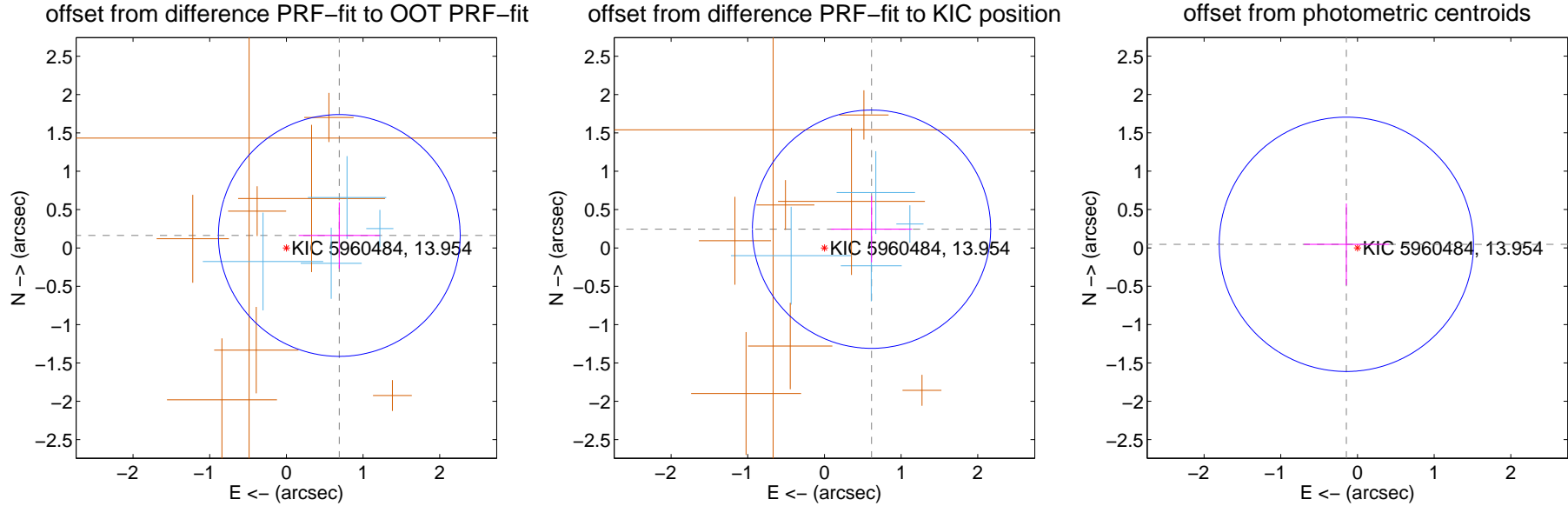
DV Centroid Data

Supplemental centroid analysis for 005960484-07. Kepler magnitude: 13.95. Transit SNR 12.00

There are 4 quarters with good PRF difference image offsets

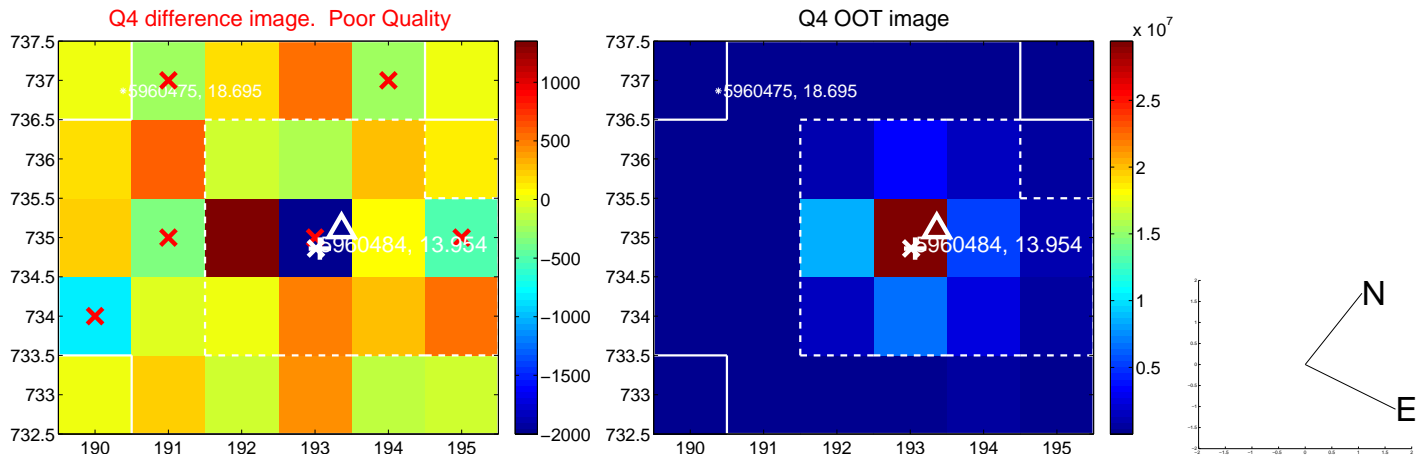
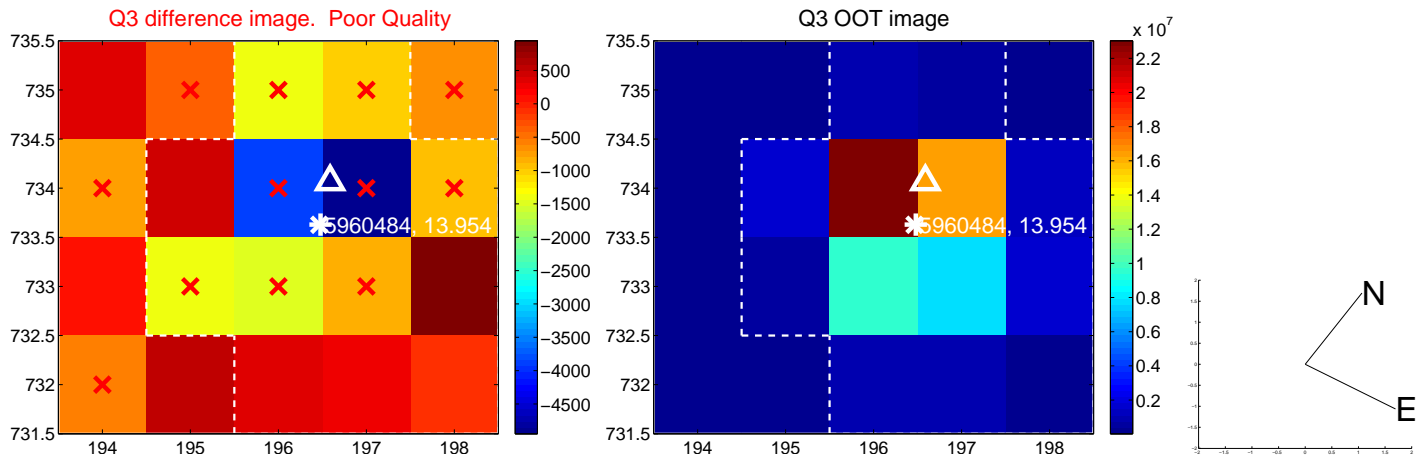
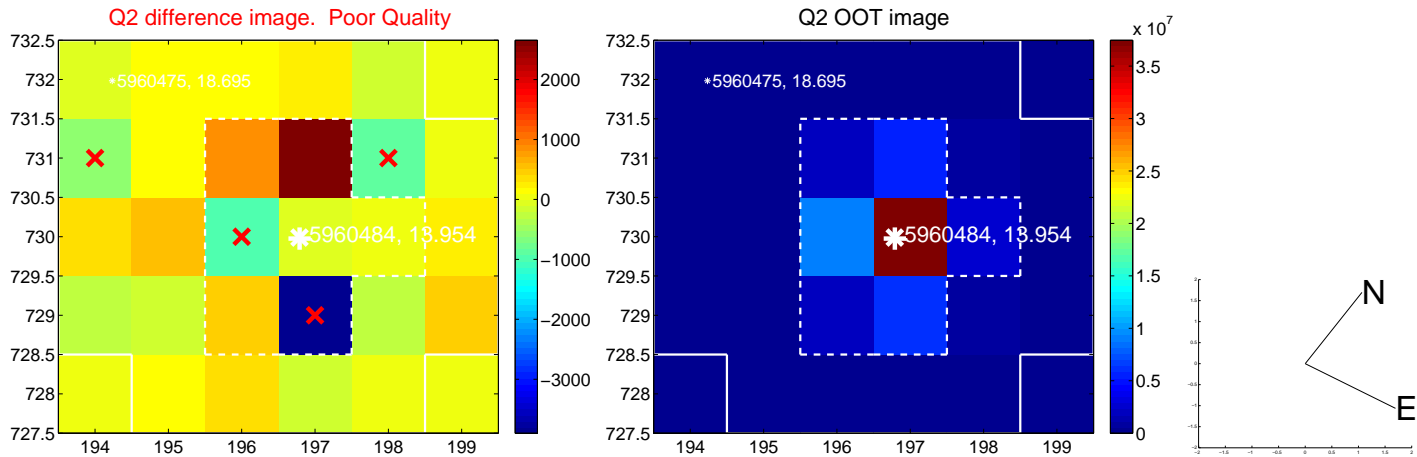
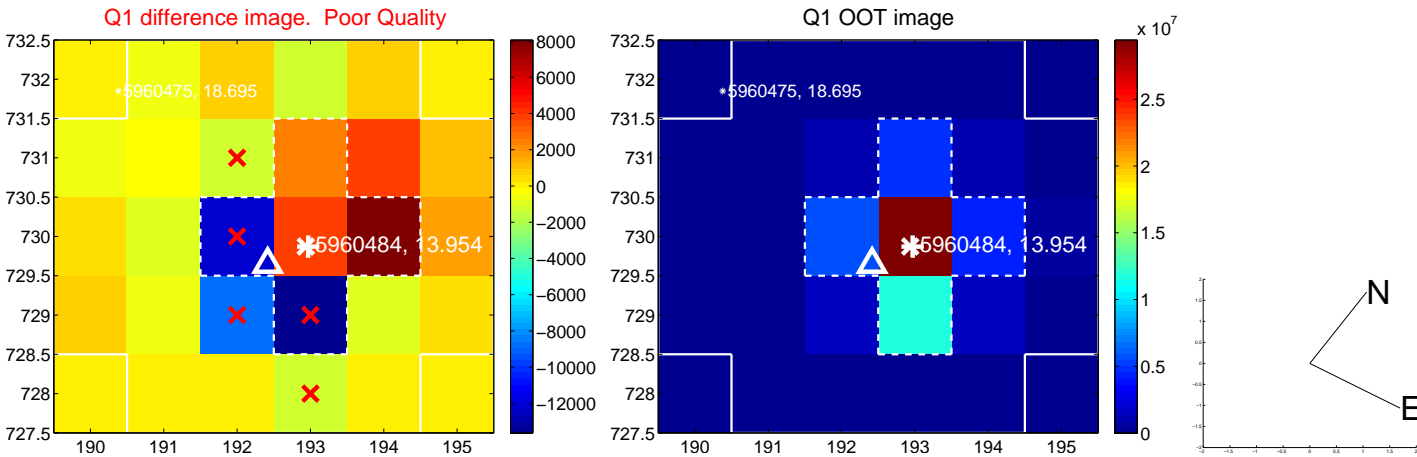
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.709 ± 0.525	1.35	-0.690 ± 0.530	0.163 ± 0.432
PRF-fit source offset from KIC position	0.661 ± 0.518	1.28	-0.614 ± 0.530	0.244 ± 0.432
photometric centroid source offset	0.15 ± 0.55	0.28	0.14 ± 0.55	0.05 ± 0.53

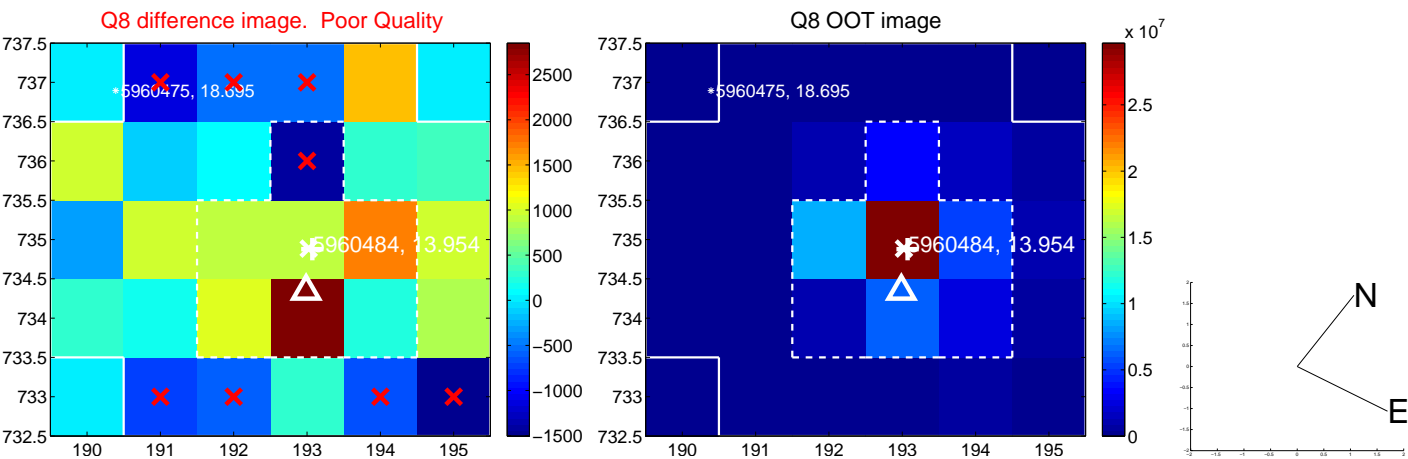
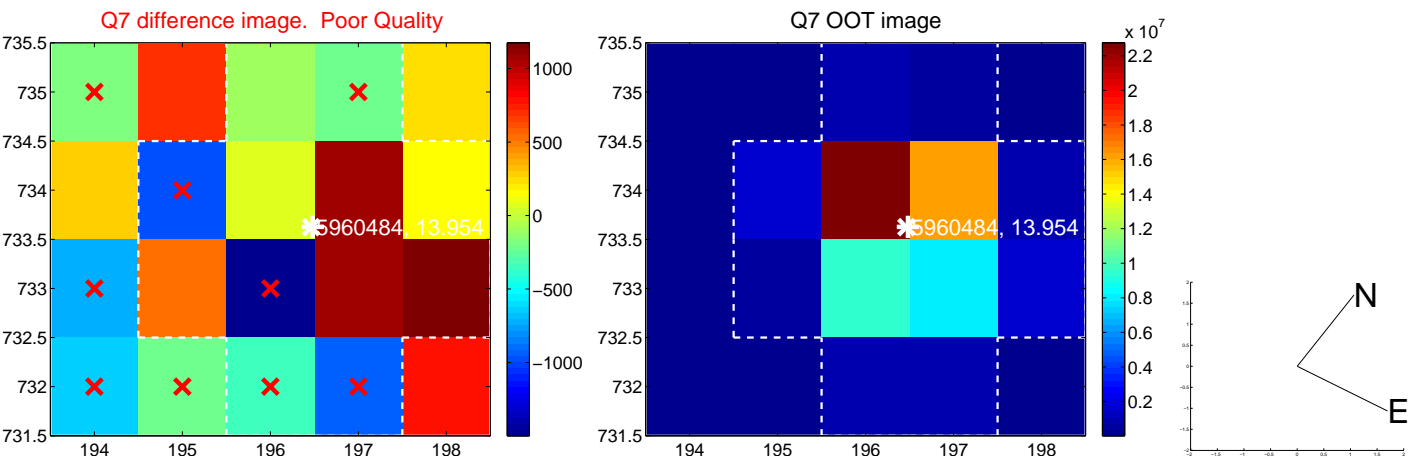
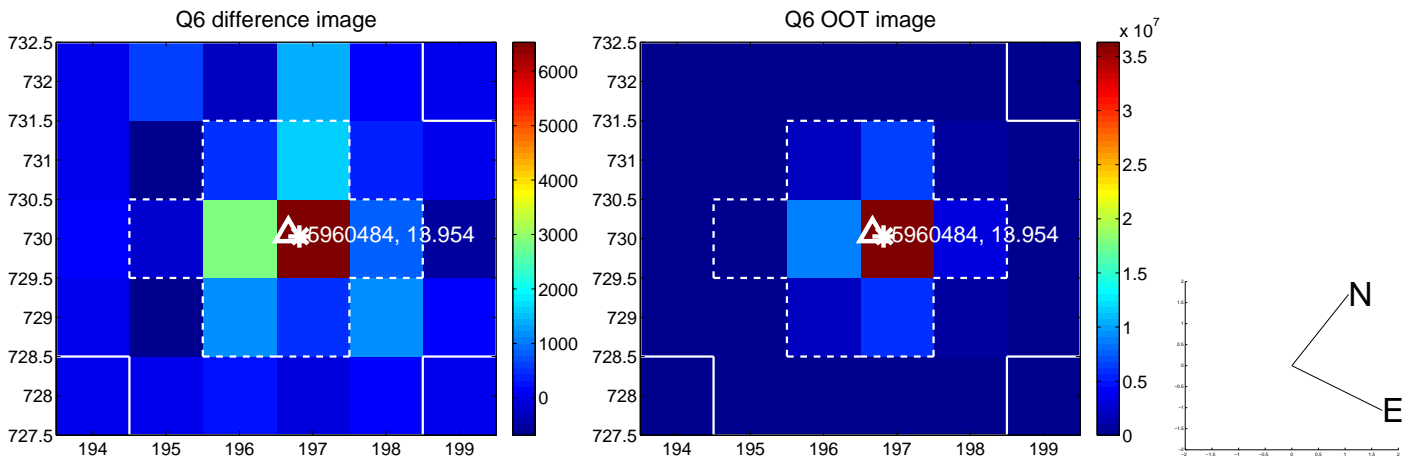
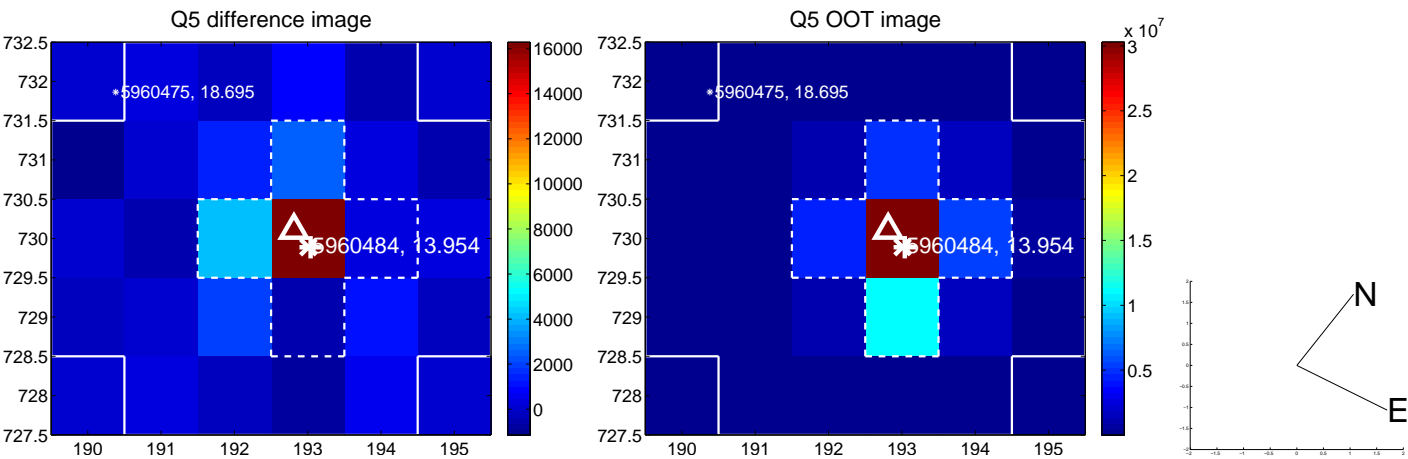


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

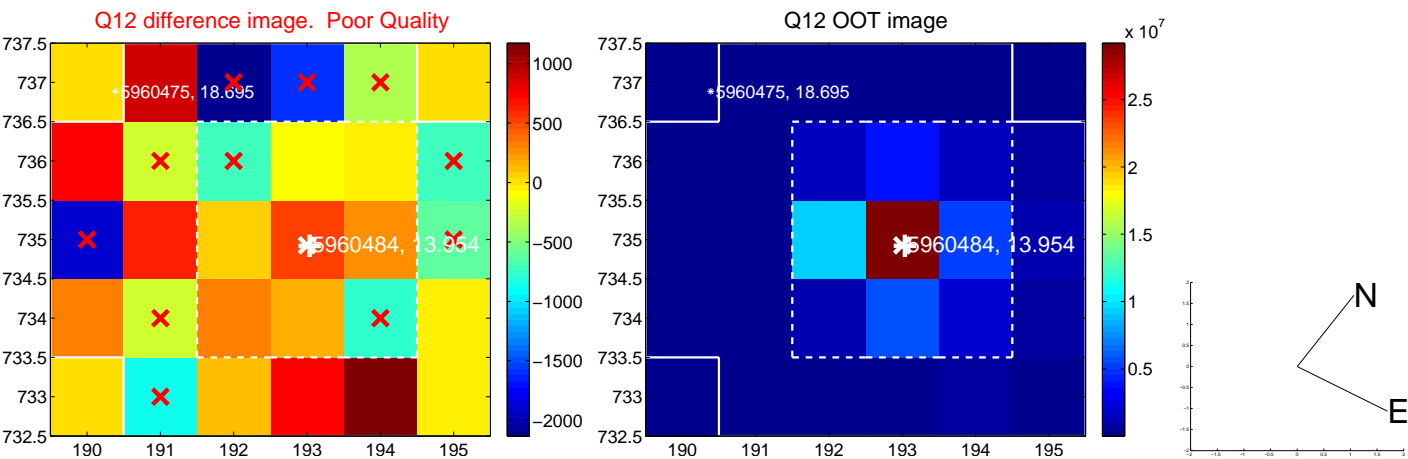
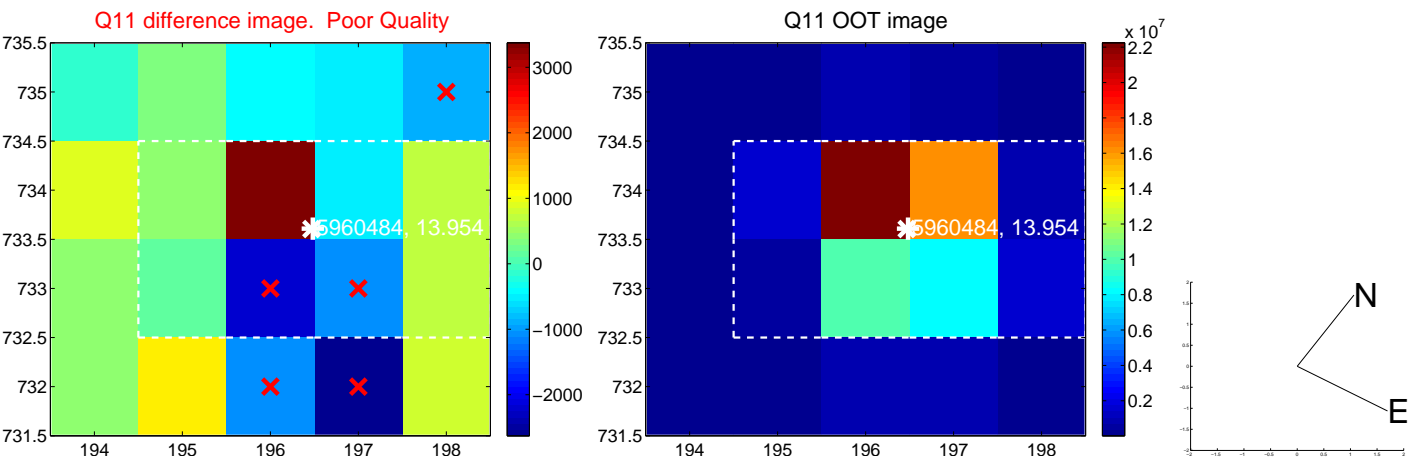
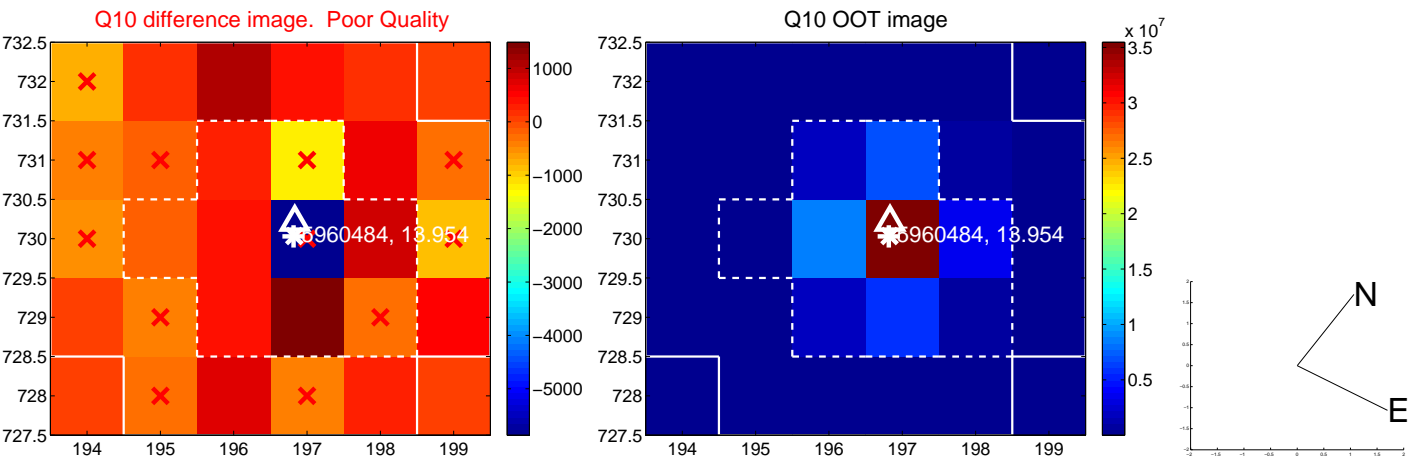
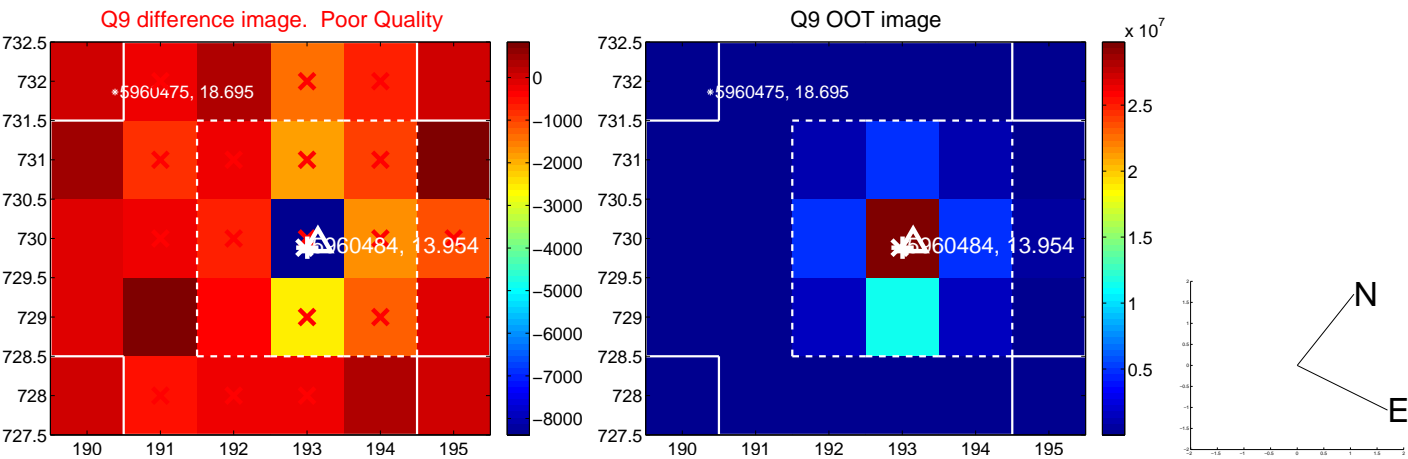
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



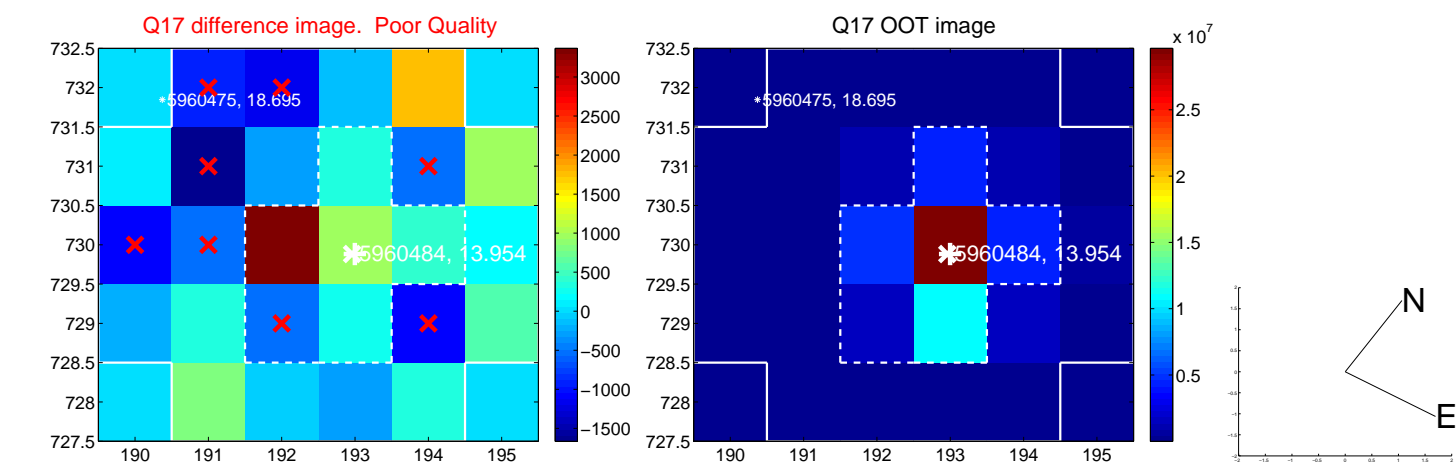
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



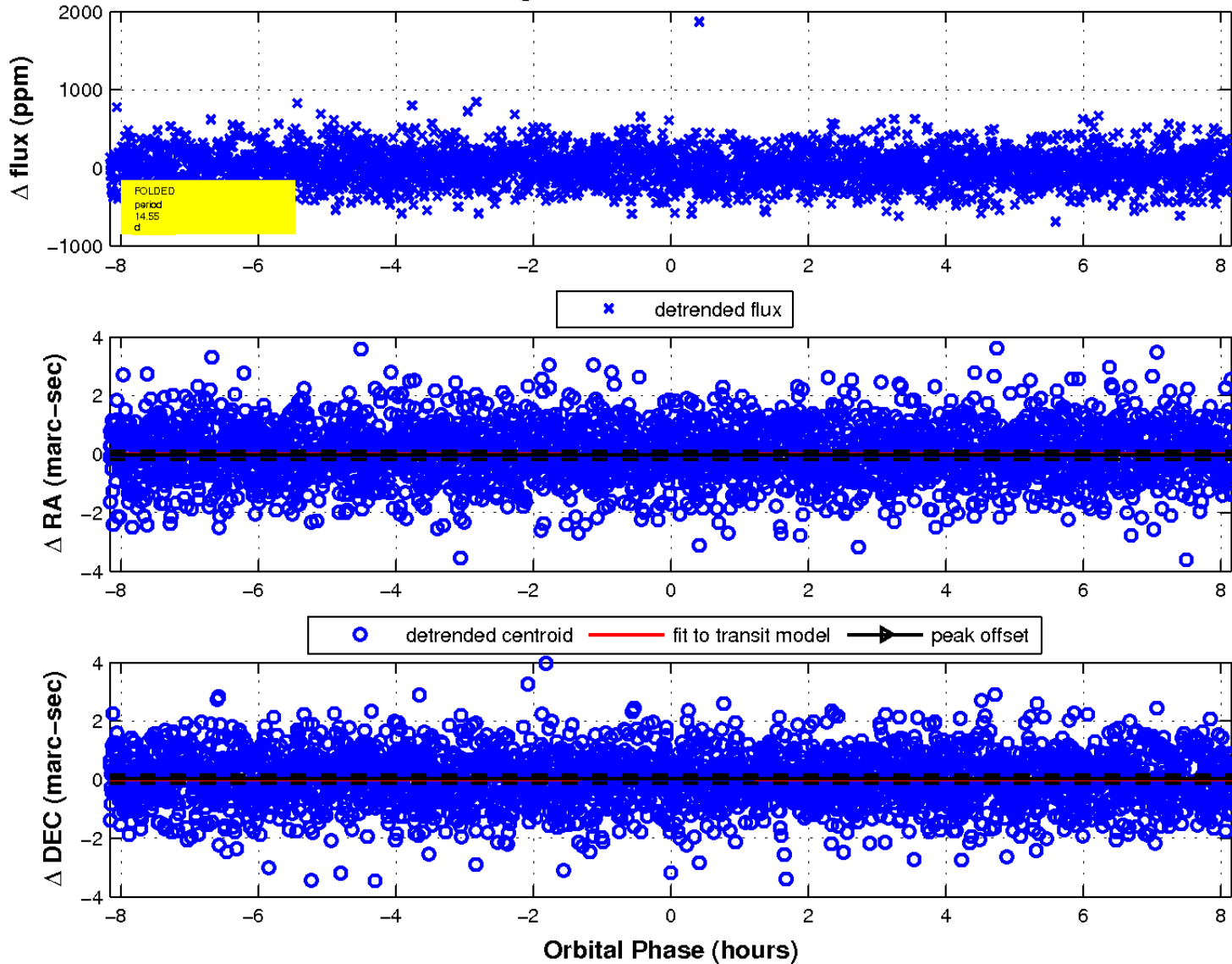
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

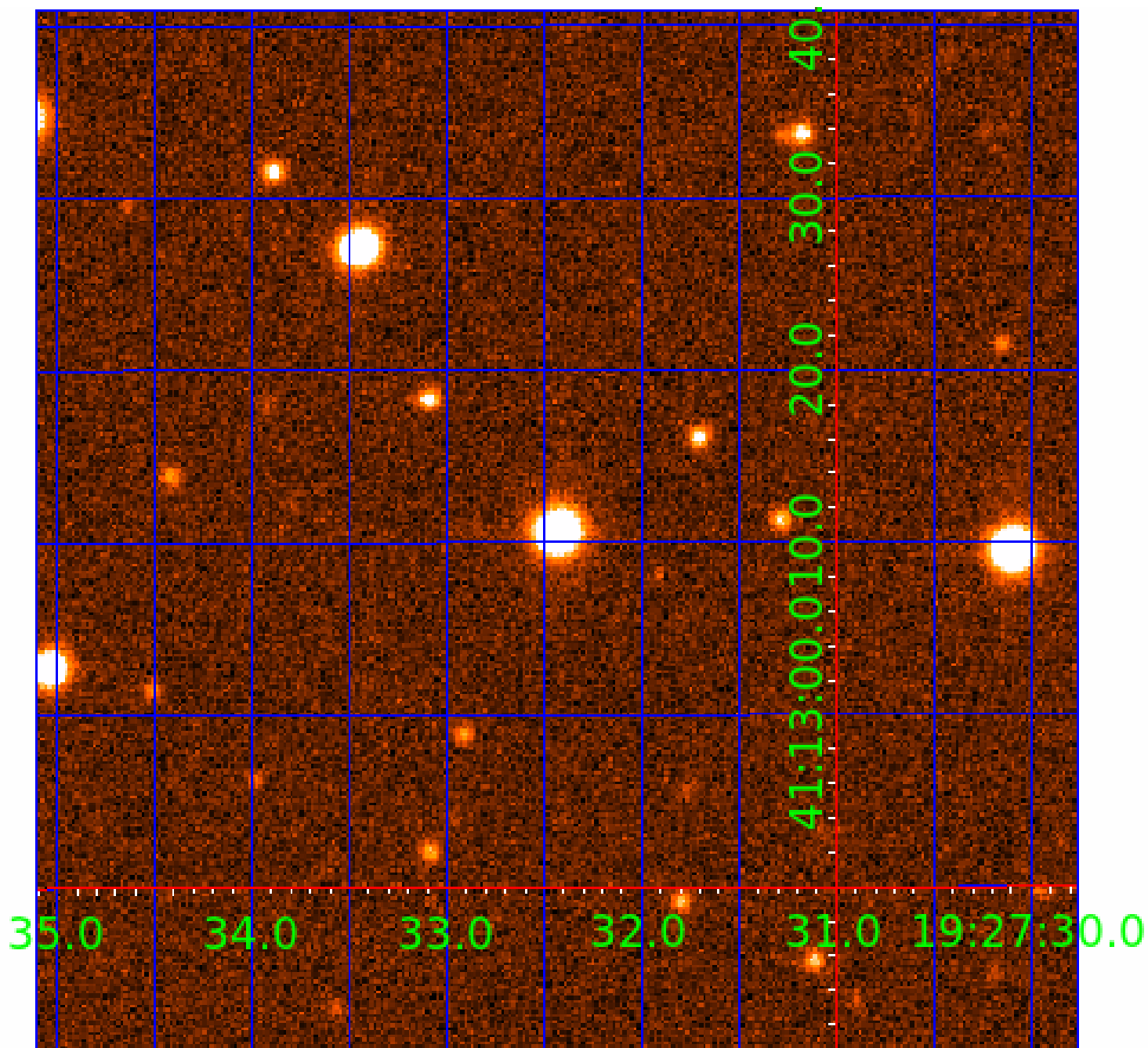


fluxWeightedCentroids, Planet 7 of 8



UKIRT Image

Declination



KIC 005960484

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})
005960484-01	OBS	No	0.605539	131.731623	8.1	4.423	7.8	3.7	1.57	7310	0.46	24999.93
005960484-02	OBS	No	23.027039	132.003375	234.1	2.066	12.6	11.4	1.57	7310	2.59	195.50
005960484-03	OBS	No	42.152393	150.182373	397.2	1.746	13.1	12.5	1.57	7310	3.62	87.30
005960484-04	OBS	No	10.007999	134.561131	317.1	0.878	13.3	15.0	1.57	7310	2.86	593.83
005960484-05	OBS	No	42.861399	146.723757	200.3	7.103	14.7	9.2	1.57	7310	2.44	85.38
005960484-06	OBS	No	12.454749	143.278310	317.6	0.930	12.9	11.0	1.57	7310	2.86	443.62
005960484-07	OBS	No	14.552426	137.006597	240.3	2.723	13.9	12.0	1.57	7310	2.54	360.48
005960484-08	OBS	No	13.469643	131.932116	65.8	0.979	11.6	2.3	1.57	7310	1.34	399.62

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005960484-01	OBS	FP	0.00	1	0	1	0	LPP_DV—MOD_NONUNIQ_ALT—CENT_UNRESOLVED_OFFSET
005960484-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
005960484-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV
005960484-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005960484-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV
005960484-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
005960484-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
005960484-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

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

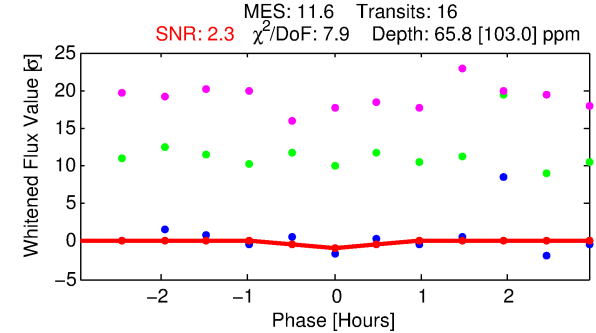
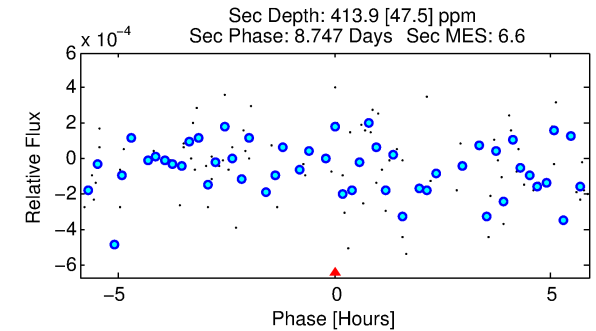
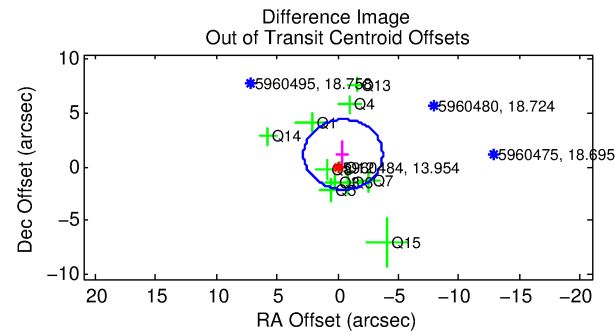
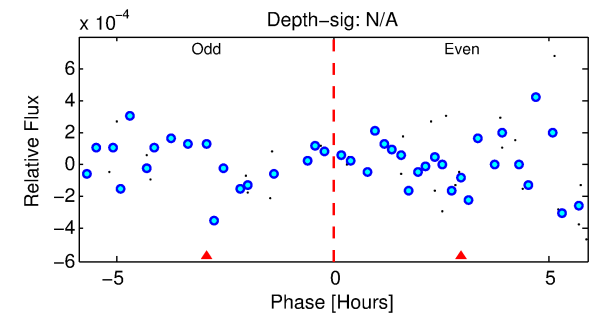
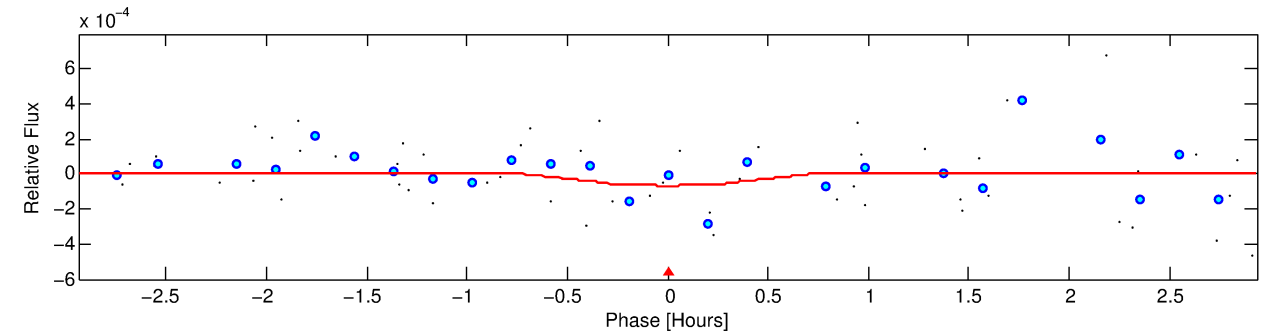
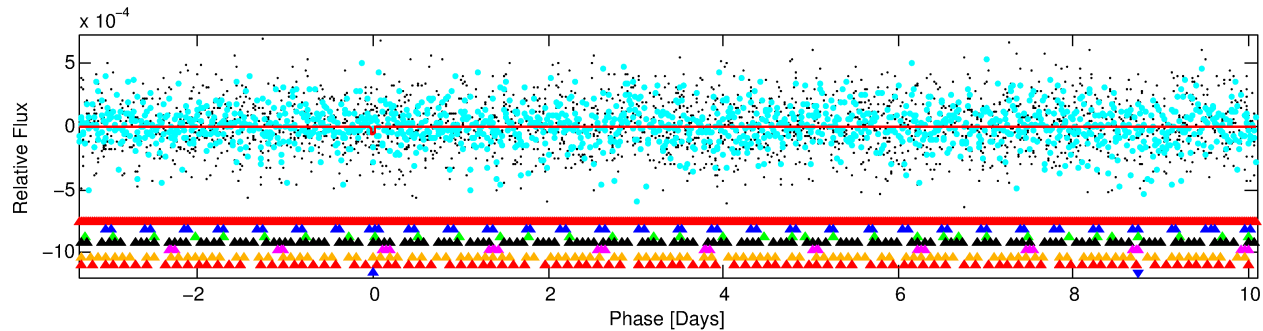
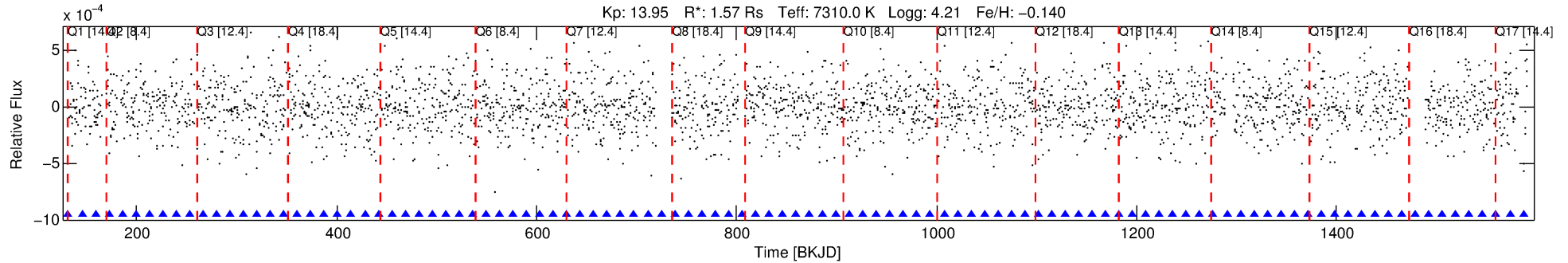
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005960484-08

No Significant Match Found

DV One-Page Summary

KIC: 5960484 Candidate: 8 of 8 Period: 13.470 d



DV Fit Results:

Period = 13.46964 [0.00084] d
Epoch = 131.9321 [0.0624] BKJD
Rp/R* = 0.0078 [0.0575]
a/R* = 87.55 [3650.27]
b = 0.57 [53.24]
Seff = 399.63 [164.22]
Teq = 1140 [117] K
Rp = 1.34 [9.85] Re
a = 0.1255 [0.0330] AU
Ag = 1990.92 [29215.76] [0.07σ]
Teffp = 11775 [43186] K [0.25σ]

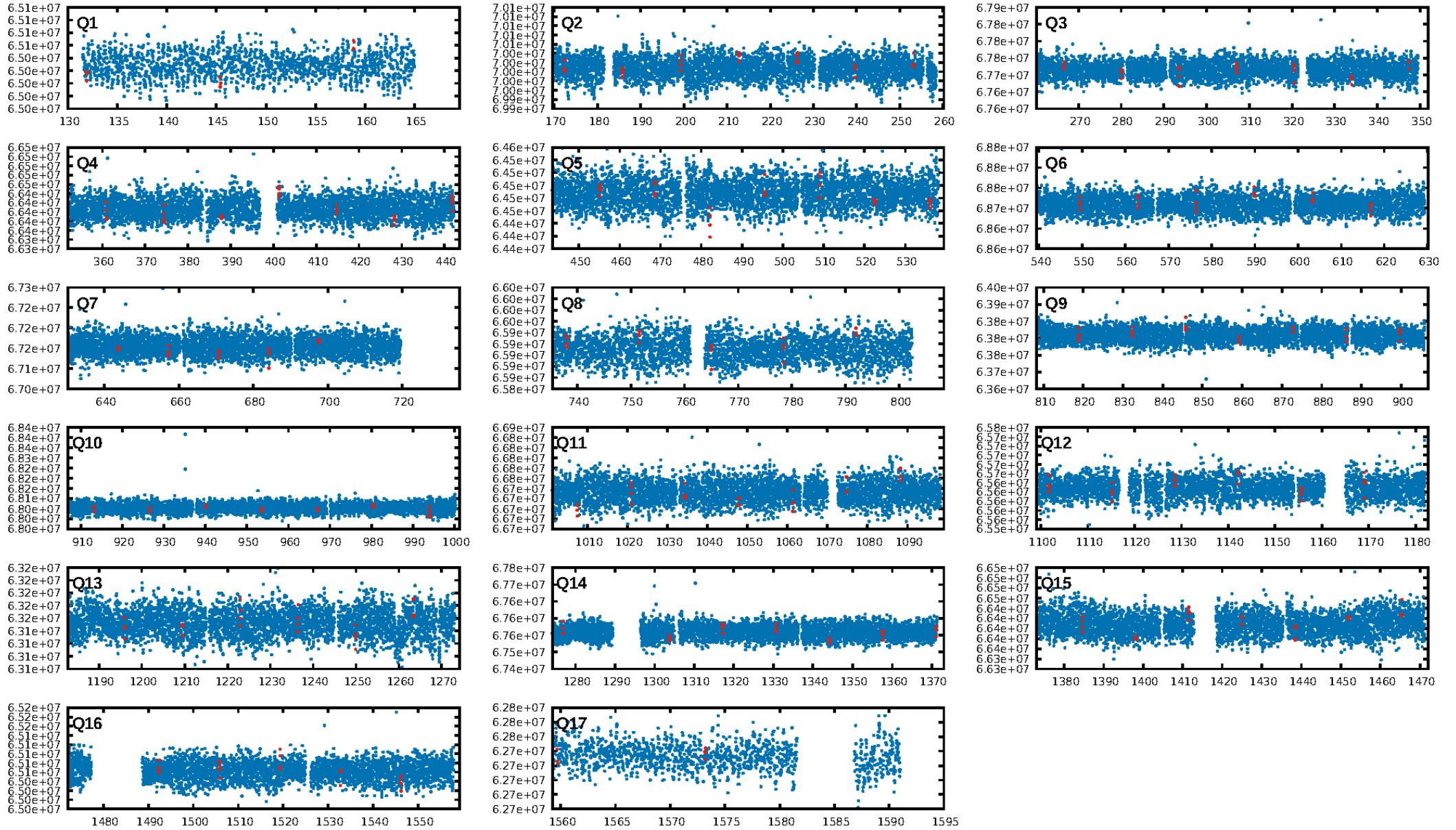
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [18.03σ]
LongPeriod-sig: 100.0% [8.98σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.2%
Bootstrap-pfa: 6.89e-10
RollingBand-fgt: 1.00 [14/14]
GhostDiagnostic-chr: -12.14
Centroid-sig: 0.1%
Centroid-so: 6.265 arcsec [2.02σ]
OotOffset-rm: 1.222 arcsec [1.12σ]
KicOffset-rm: 1.203 arcsec [1.07σ]
OotOffset-st: 2/3/3/3 [11]
KicOffset-st: 2/3/3/3 [11]
DiffImageQuality-fgm: 0.18 [2/11]
DiffImageOverlap-fno: 0.00 [0/17]

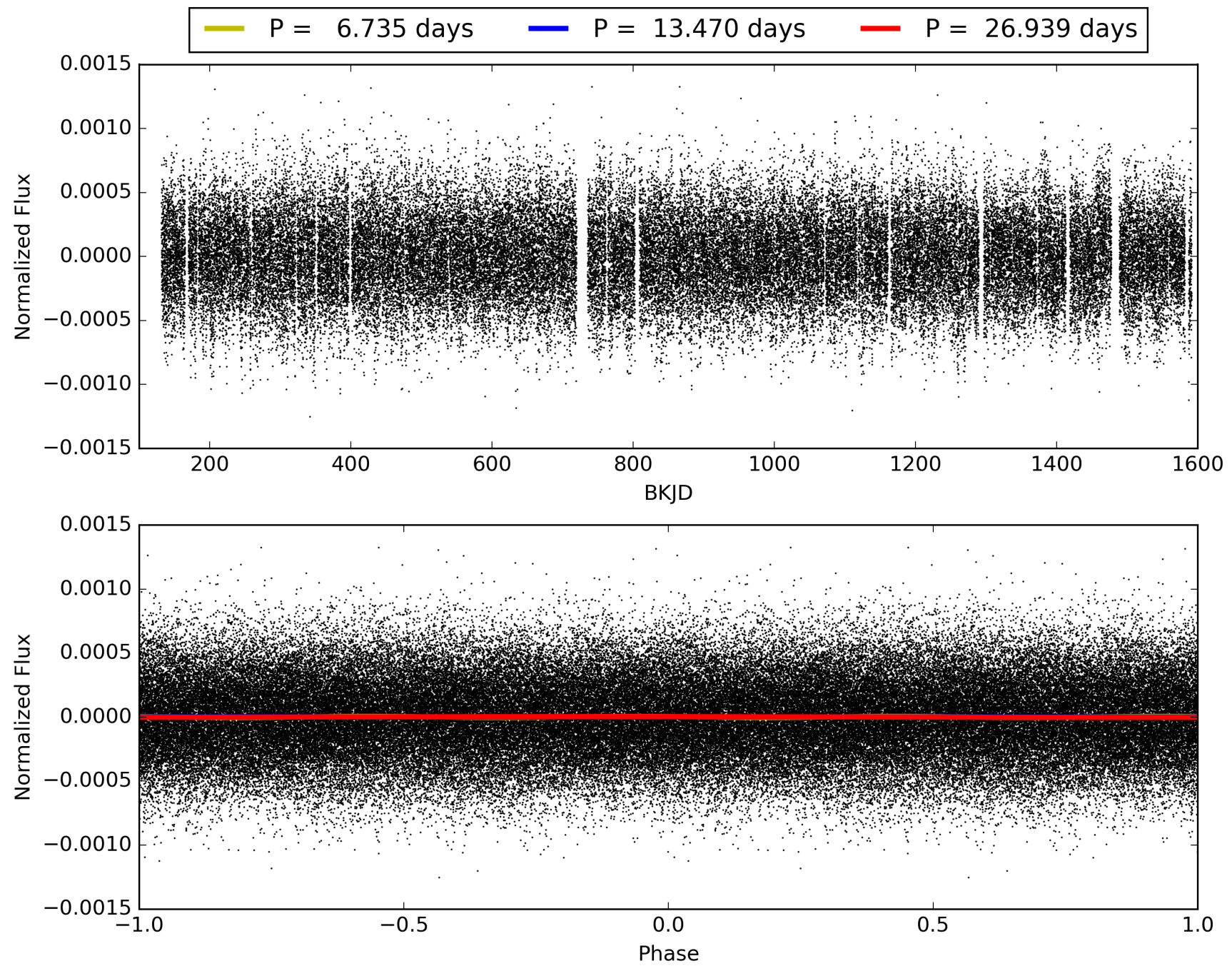
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 07:12:36 Z

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

TCE 005960484-08, PDC Light Curves

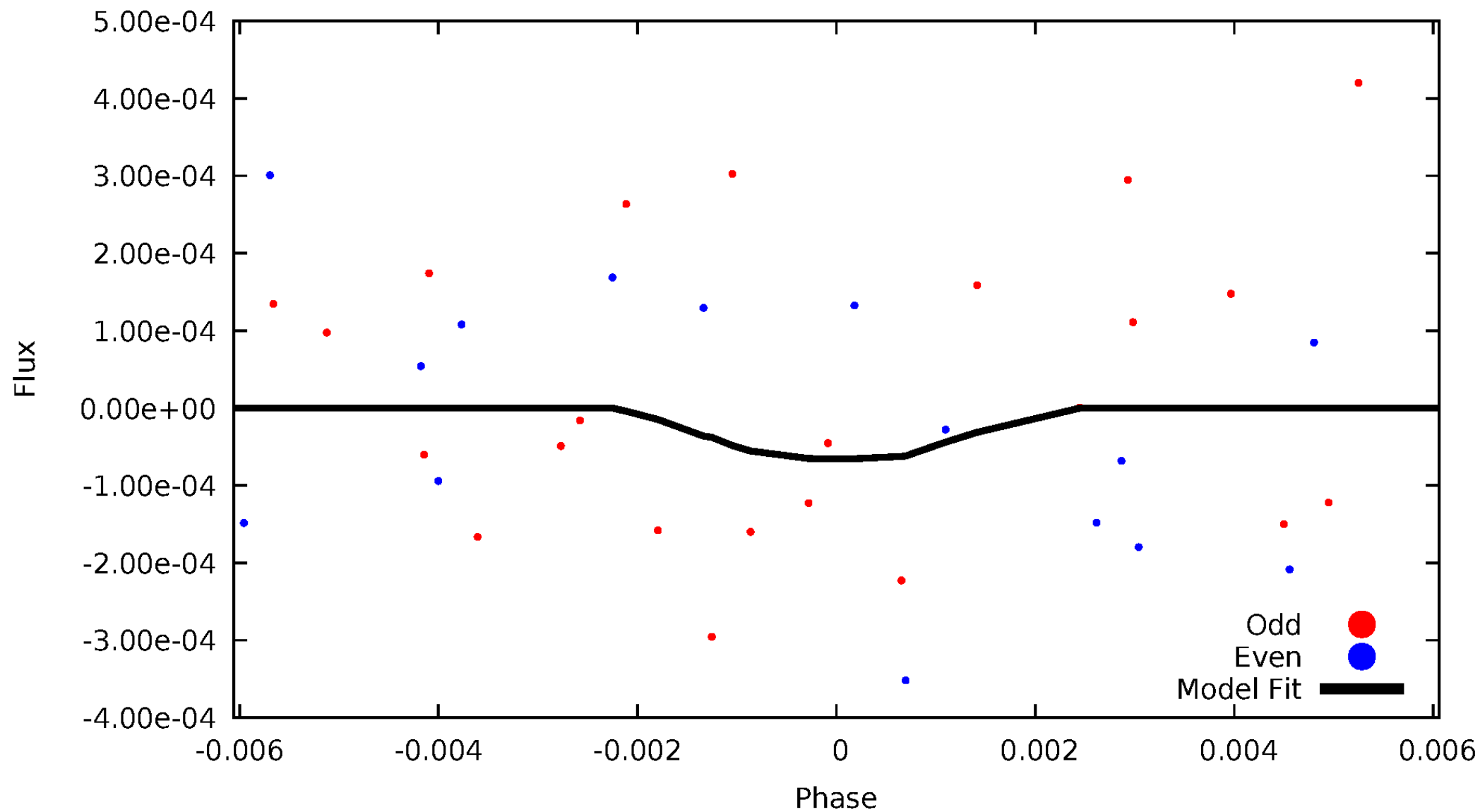


TCE 005960484-08



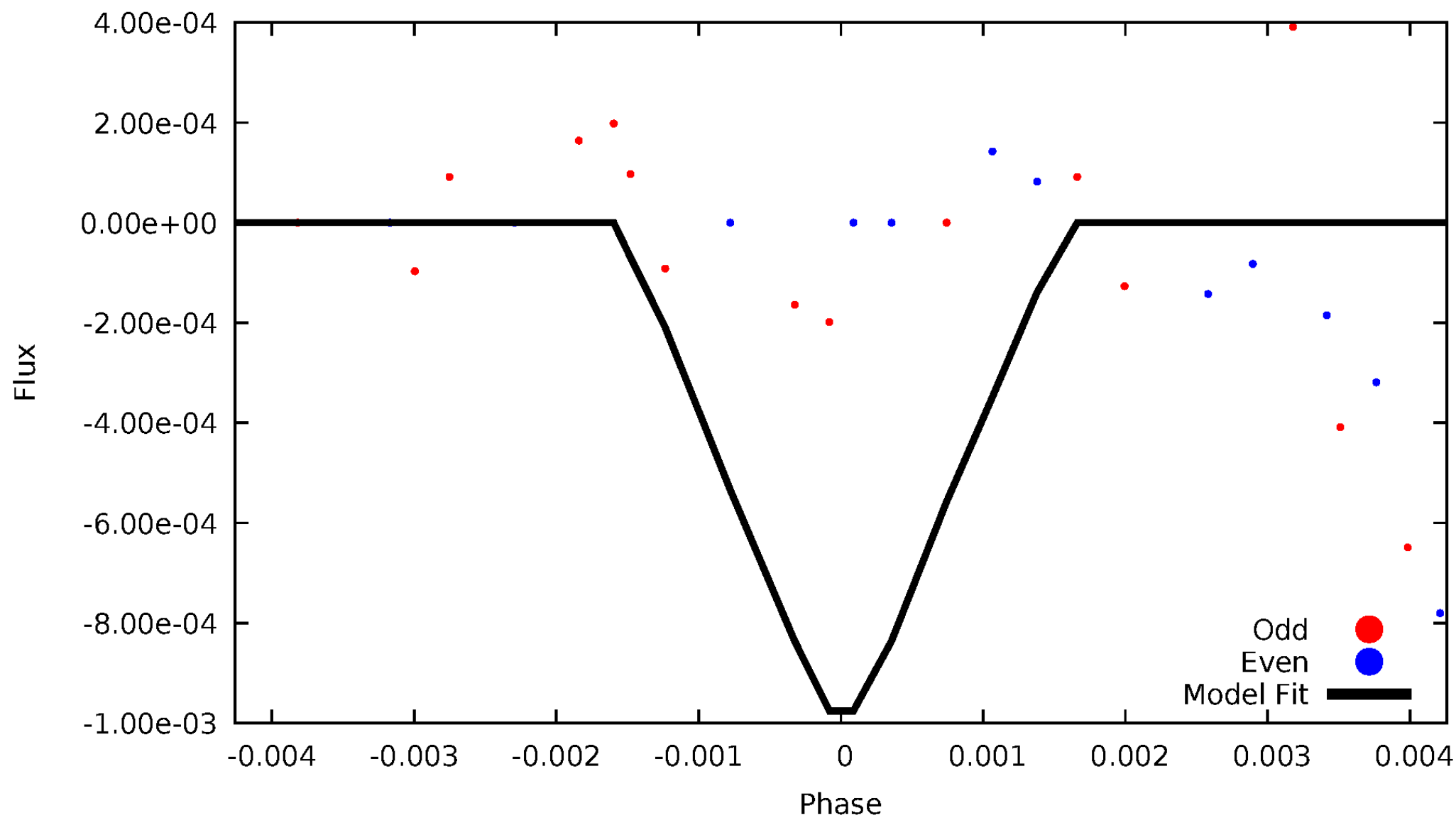
DV Odd/Even

TCE 005960484-08



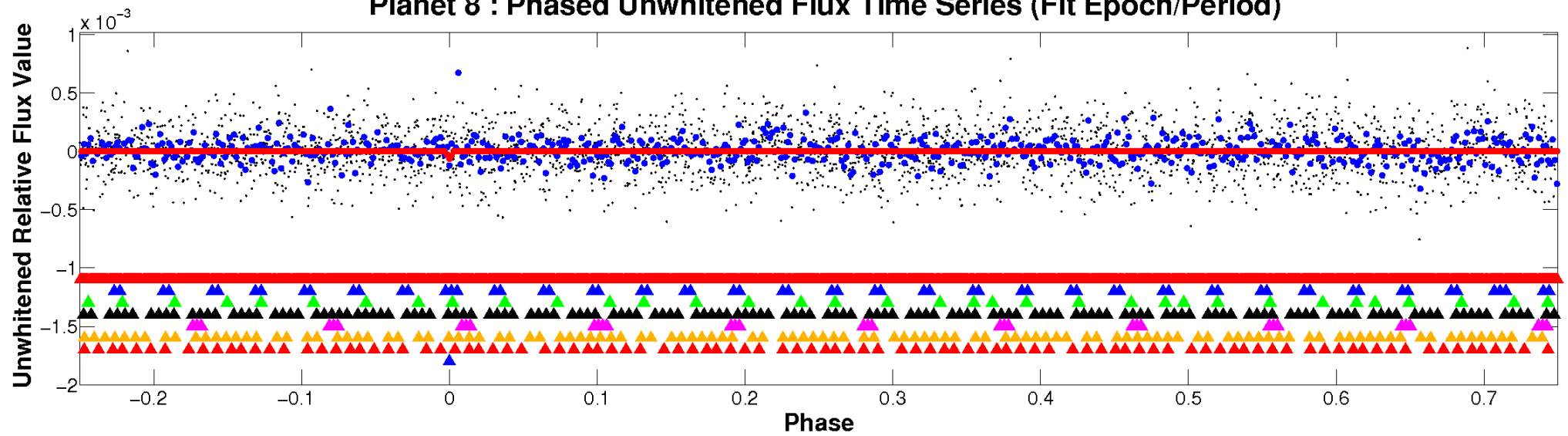
ALT Odd/Even

TCE 005960484-08

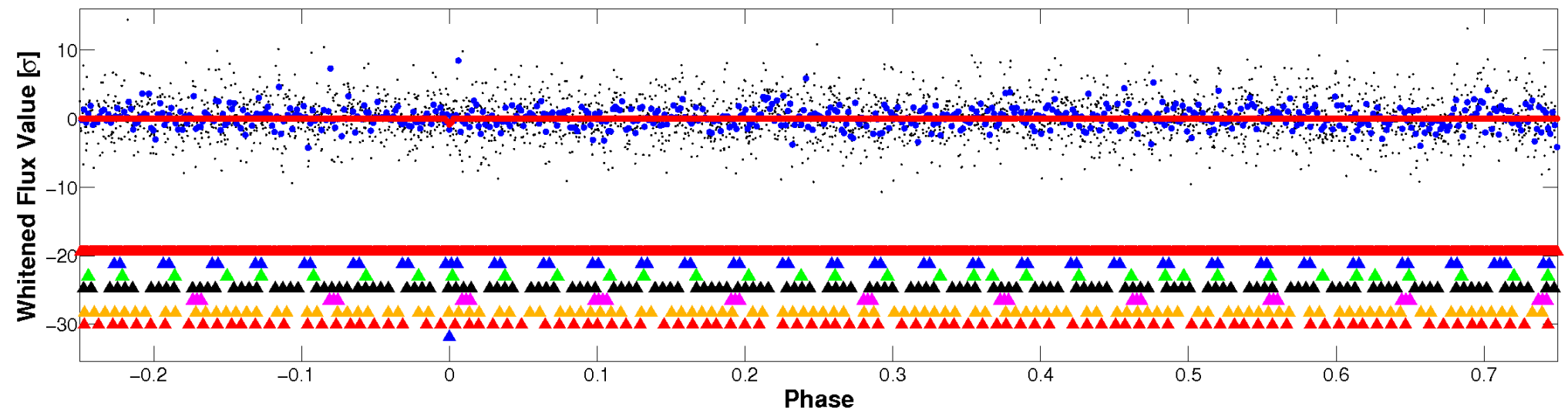


Non-Whitened Vs. Whitened Light Curve

Planet 8 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

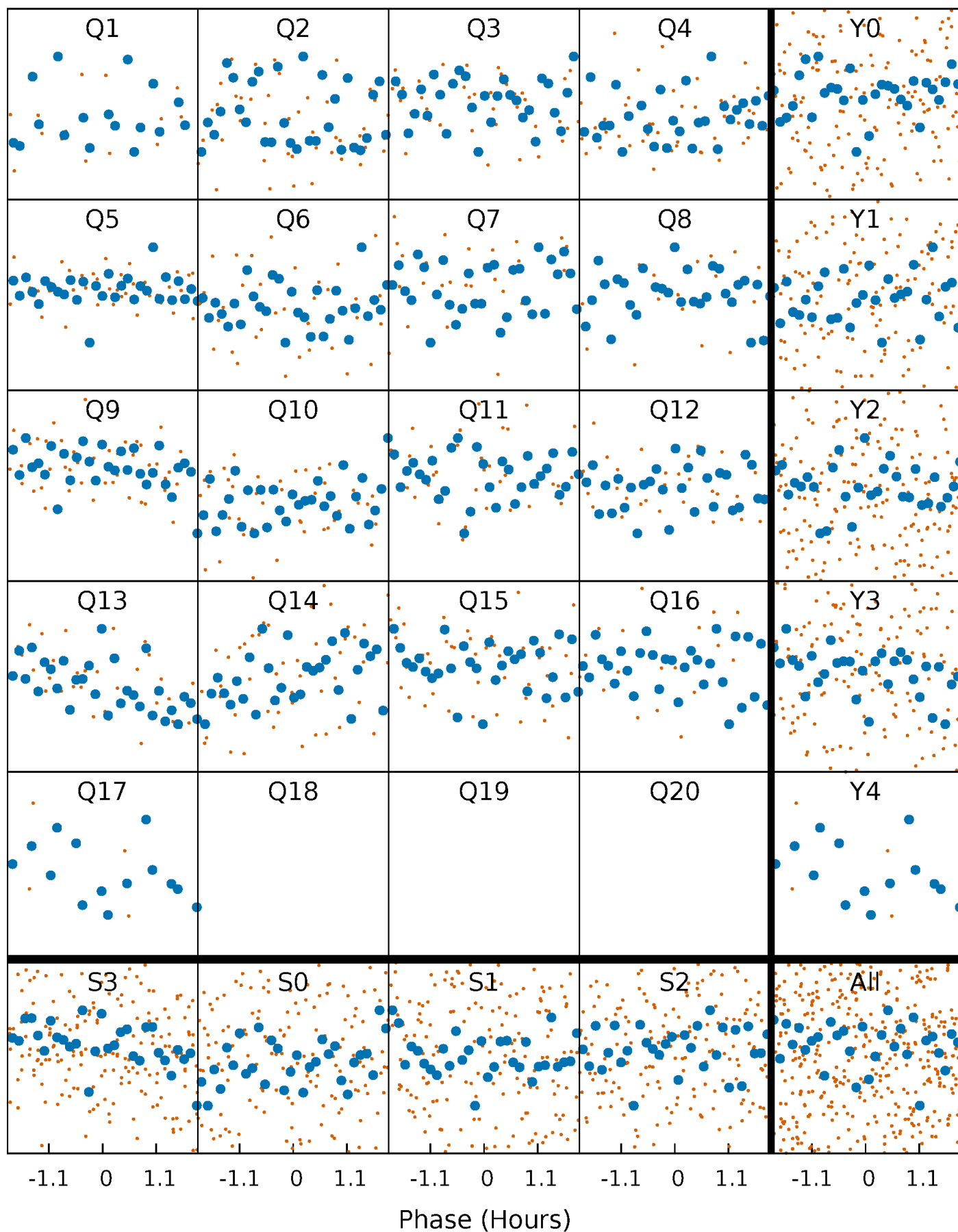


Planet 8 : Phased Whitened Flux Time Series (Fit Epoch/Period)



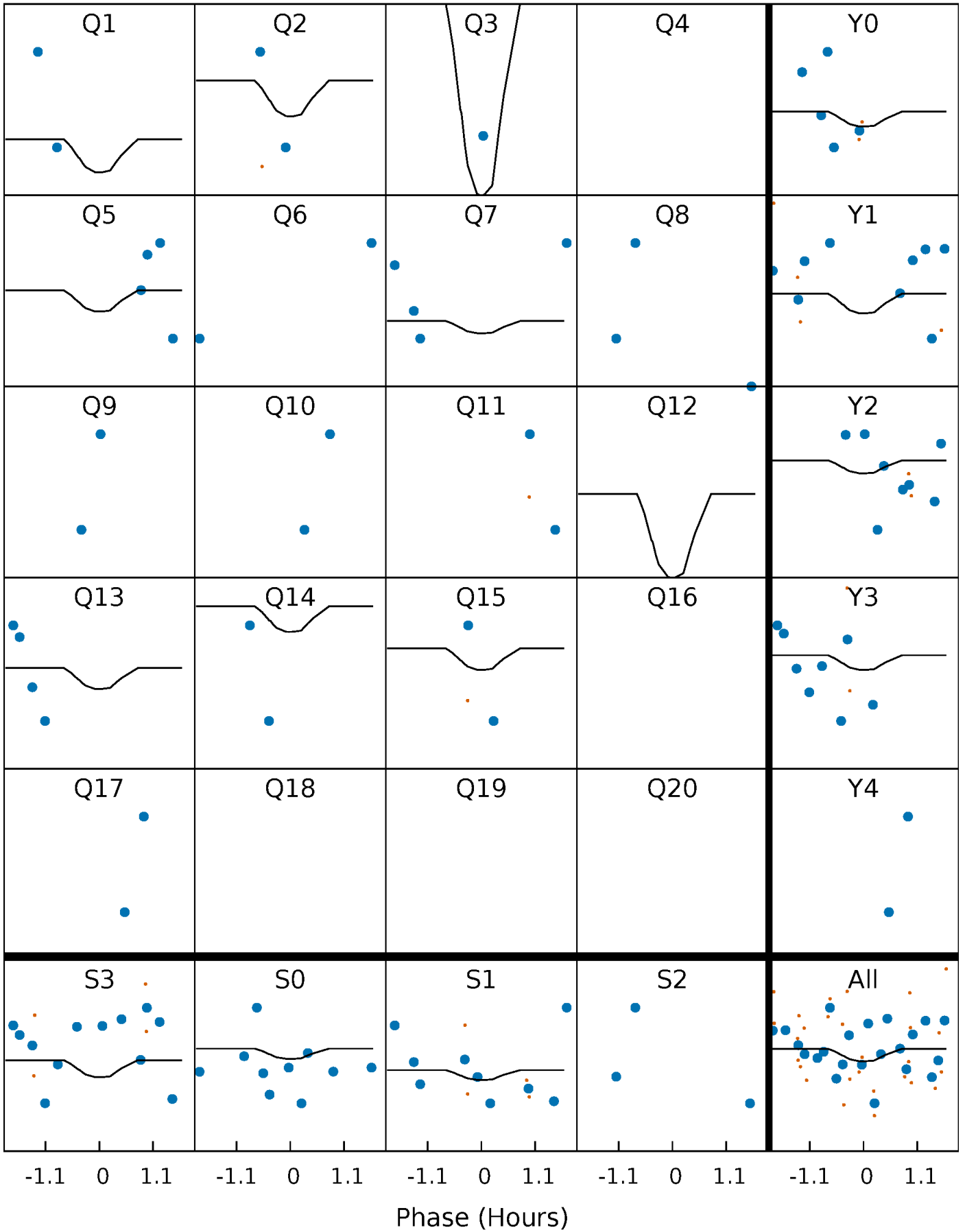
PDC Quarter-Phased Transit Curves

TCE 005960484-08 P= 13.469643 Days $T_0=131.932116$ (BKJD)



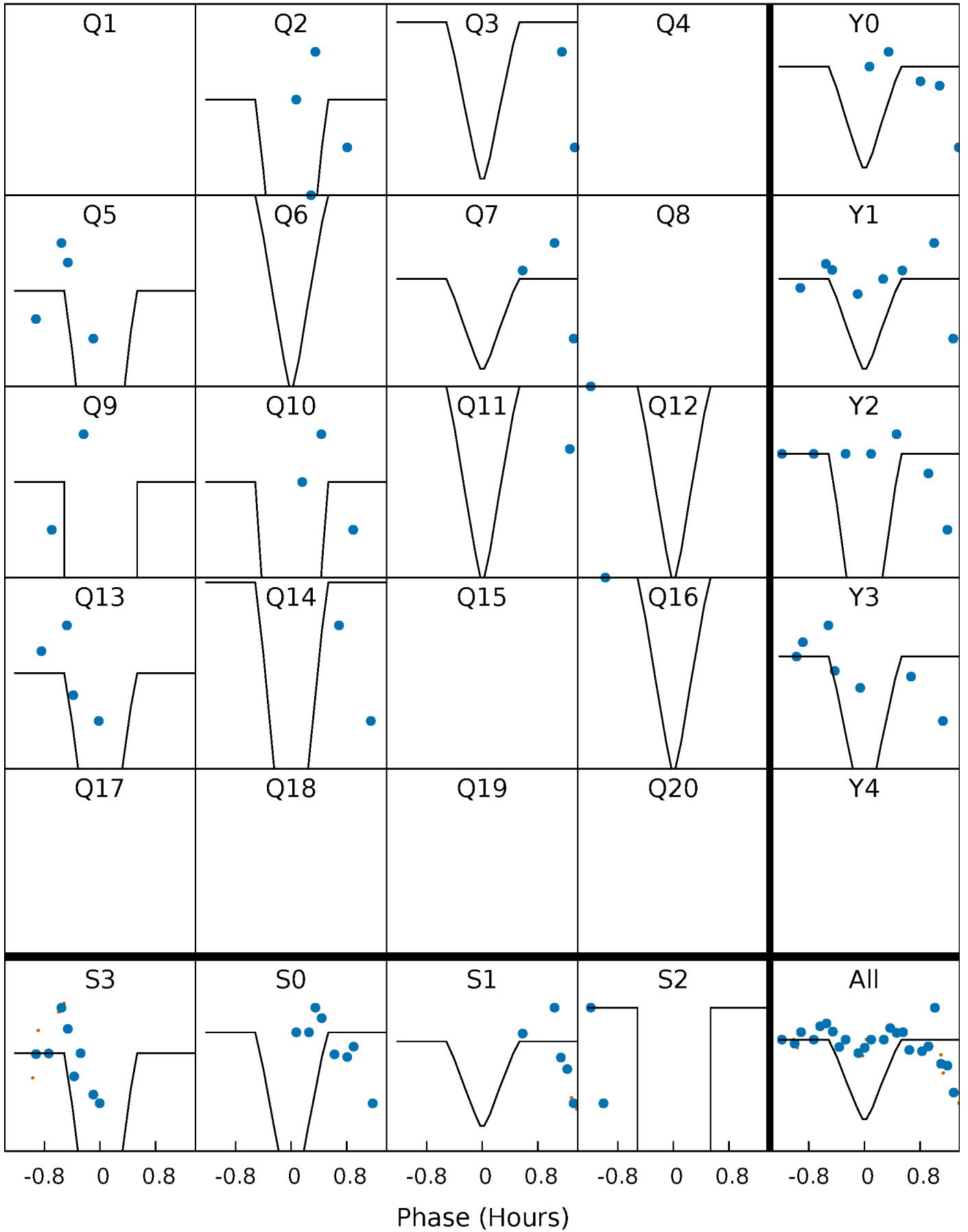
DV Quarter-Phased Transit Curves

TCE 005960484-08 P= 13.469643 Days $T_0=131.932116$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

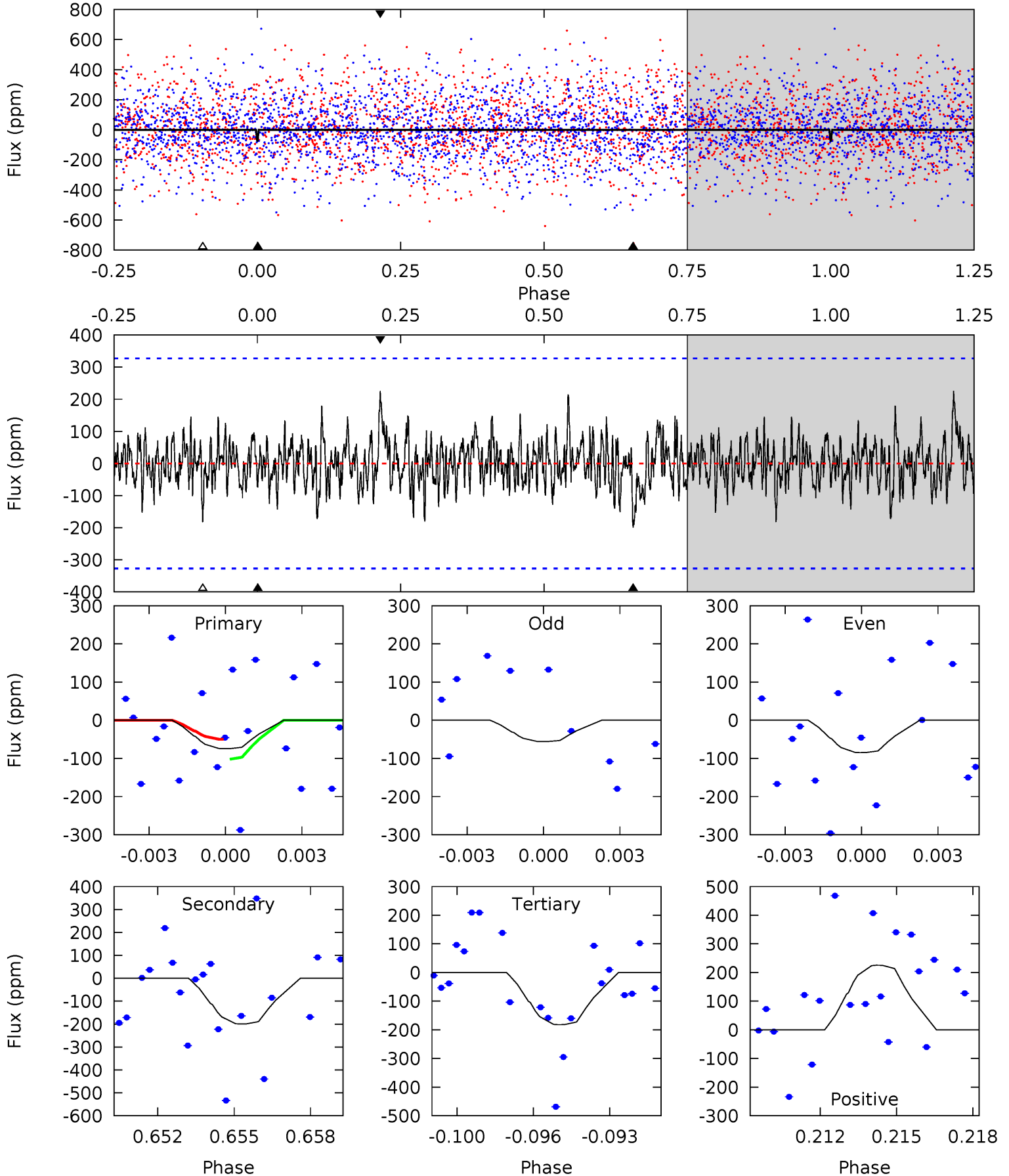
TCE 005960484-08 P= 13.467560 Days $T_0=132.057523$ (BKJD)



DV Model-Shift Uniqueness Test

005960484-08, P = 13.469643 Days, E = 131.932116 Days

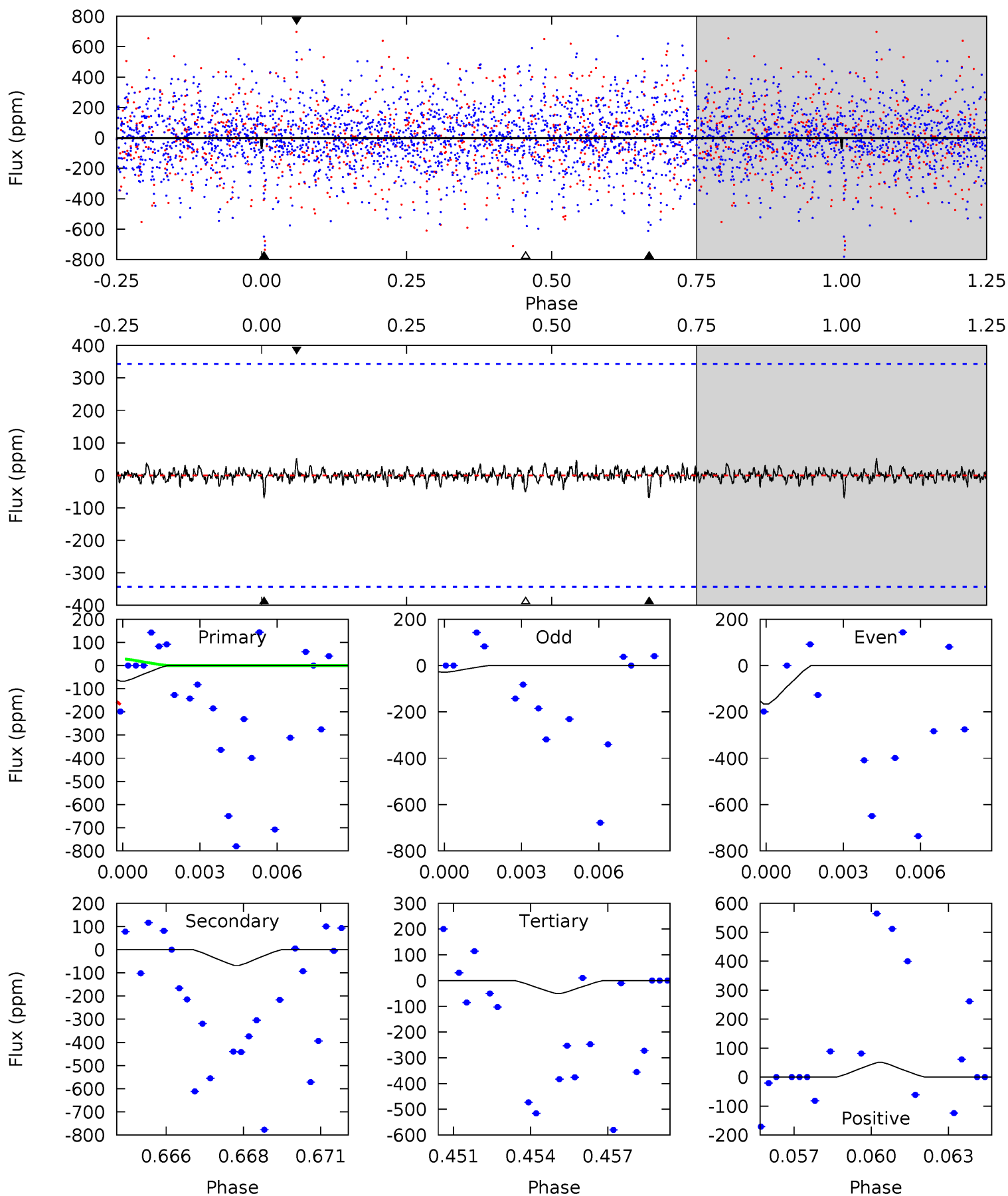
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.19	3.20	2.92	3.61	5.24	2.95	1.00	-1.72	-2.42	0.28	-0.42	0.24	0.46	0.53	0.41



Alt Model-Shift Uniqueness Test

005960484-08, P = 13.467560 Days, E = 132.057523 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.03	1.05	0.77	0.78	5.26	2.98	0.19	0.26	0.25	0.27	0.26	1.03	0	0.43	1.10



Stellar Parameters For KIC 005960484

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7310^{+228}_{-330}	$4.209^{+0.105}_{-0.195}$	$-0.140^{+0.250}_{-0.350}$	$1.568^{+0.508}_{-0.274}$	$1.452^{+0.211}_{-0.211}$	$0.531^{+0.265}_{-0.278}$
	+3%/-5%	+2%/-5%	+179%/-250%	+32%/-17%	+15%/-15%	+50%/-52%
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 005960484-08 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-199 ± 62	$7.39^{+8.01}_{-5.19}$	1607^{+121}_{-98}	4393^{+3328}_{-995}	31^{+335}_{-24}
Alt.	-68 ± 65	$9.39^{+8.54}_{-6.14}$	1607^{+132}_{-104}	3182^{+1540}_{-1327}	$4.856^{+42.503}_{-4.520}$

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 $A_{obs} \gg 1.0$

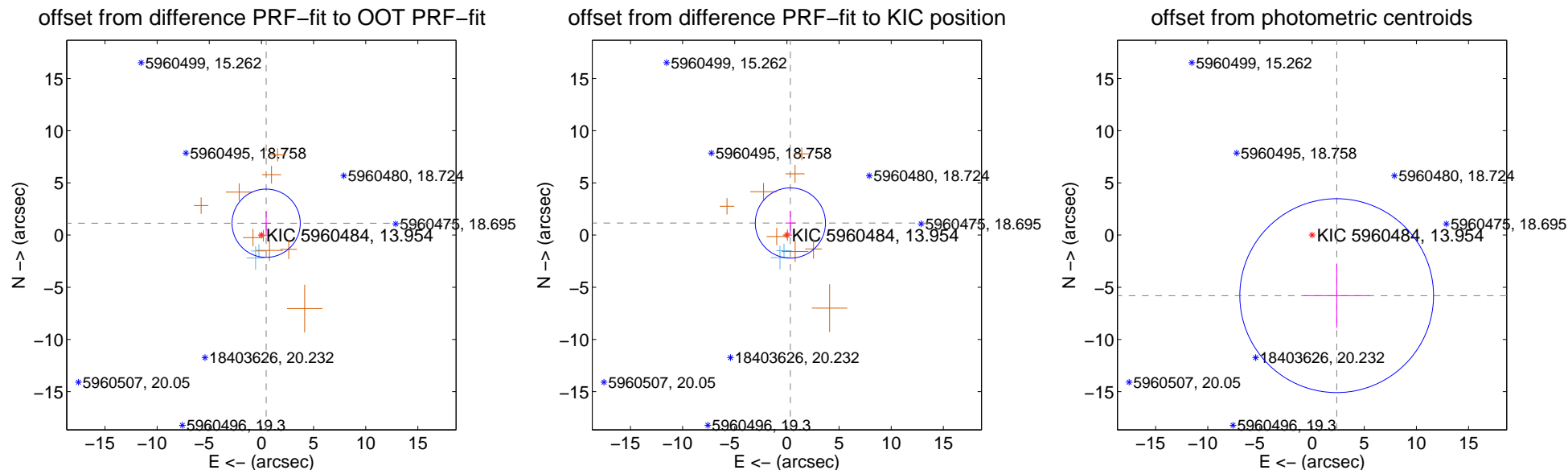
DV Centroid Data

Supplemental centroid analysis for 005960484-08. Kepler magnitude: 13.95. Transit SNR 2.32

There are 2 quarters with good PRF difference image offsets

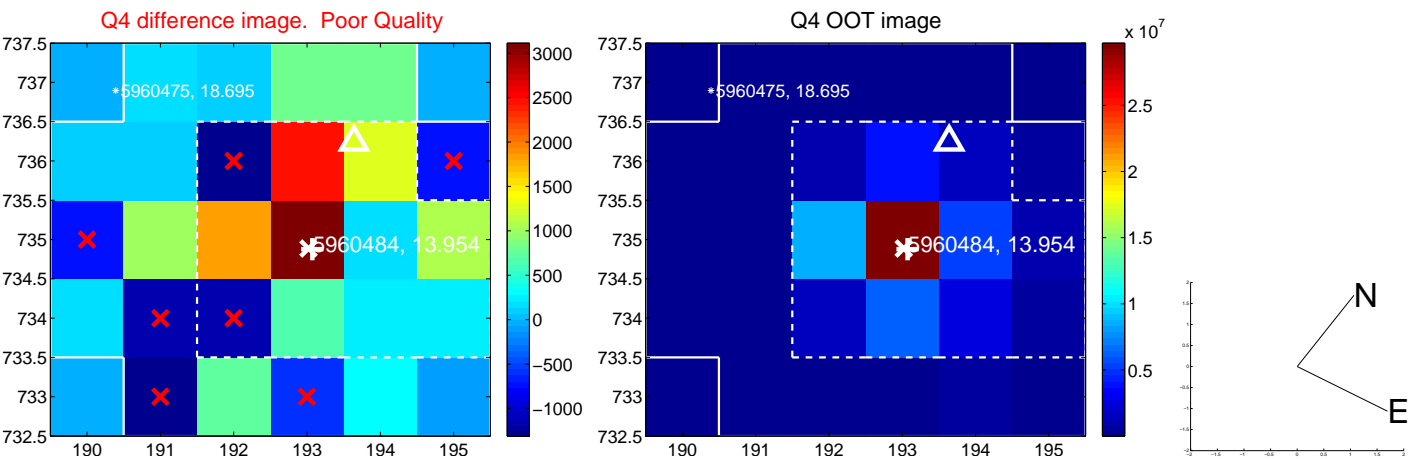
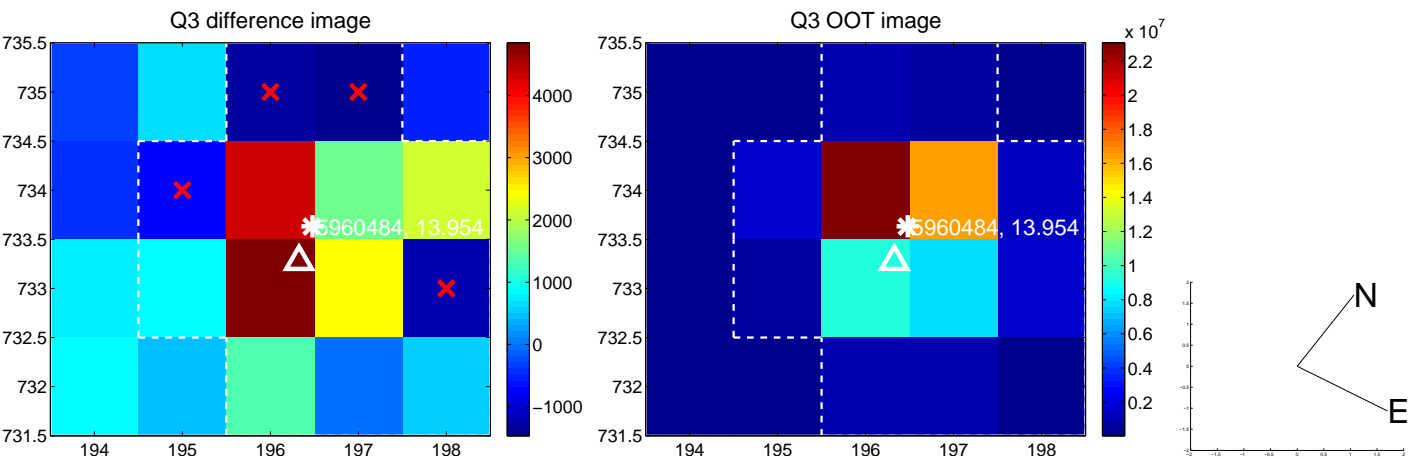
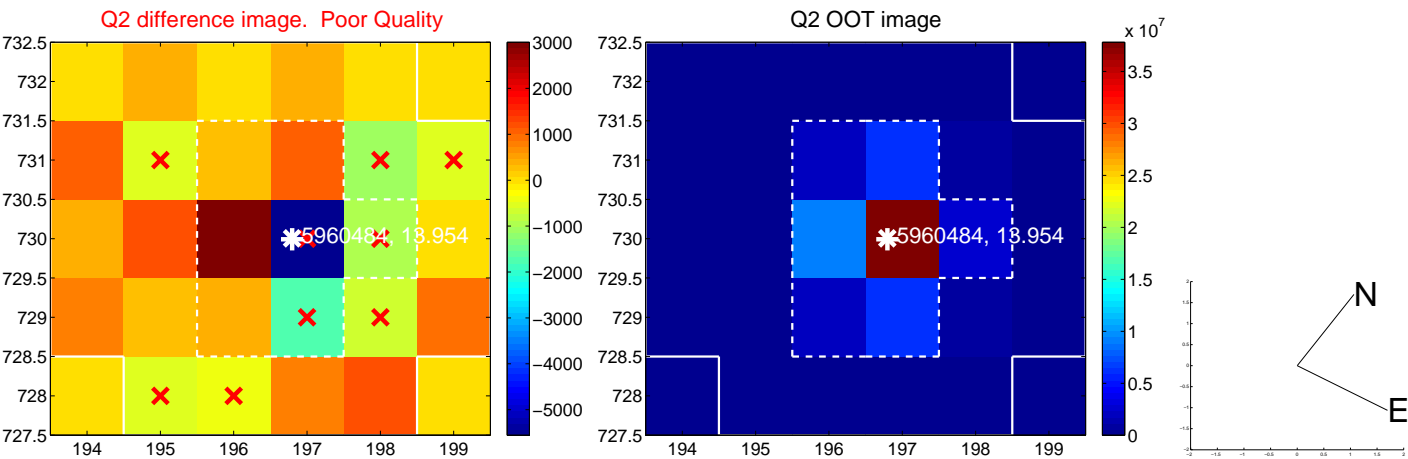
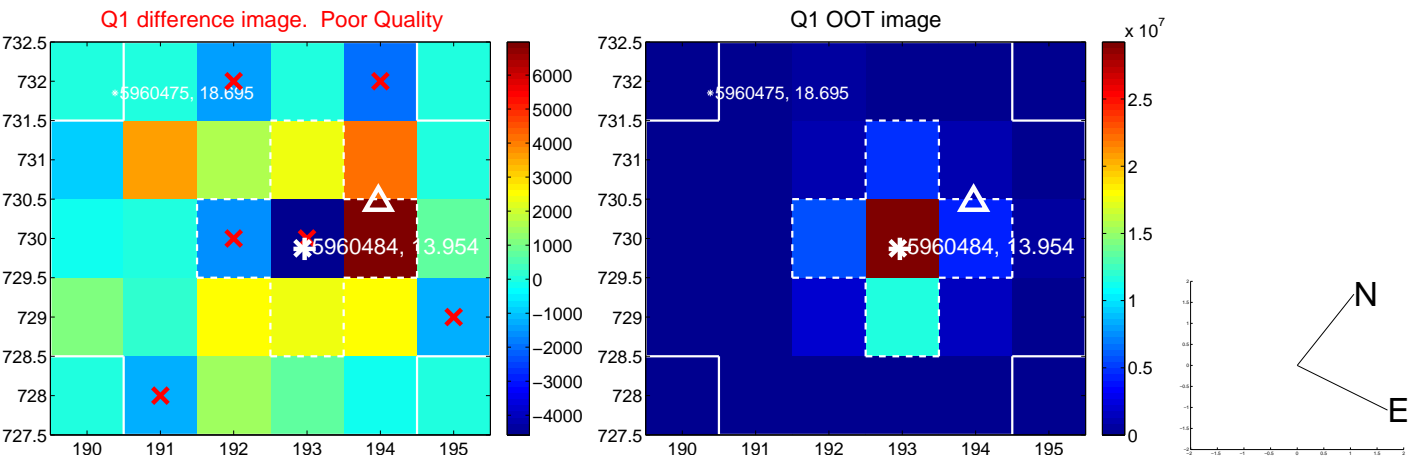
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.222 ± 1.090	1.12	-0.452 ± 0.473	1.136 ± 1.158
PRF-fit source offset from KIC position	1.203 ± 1.122	1.07	-0.333 ± 0.489	1.156 ± 1.159
photometric centroid source offset	6.26 ± 3.10	2.02	-2.36 ± 3.21	-5.80 ± 3.08

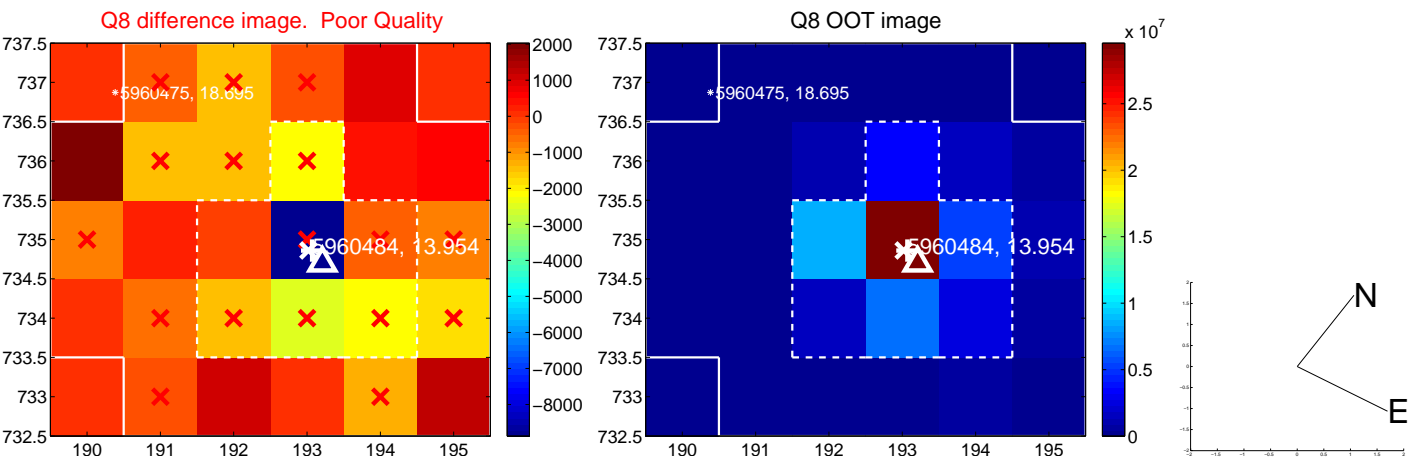
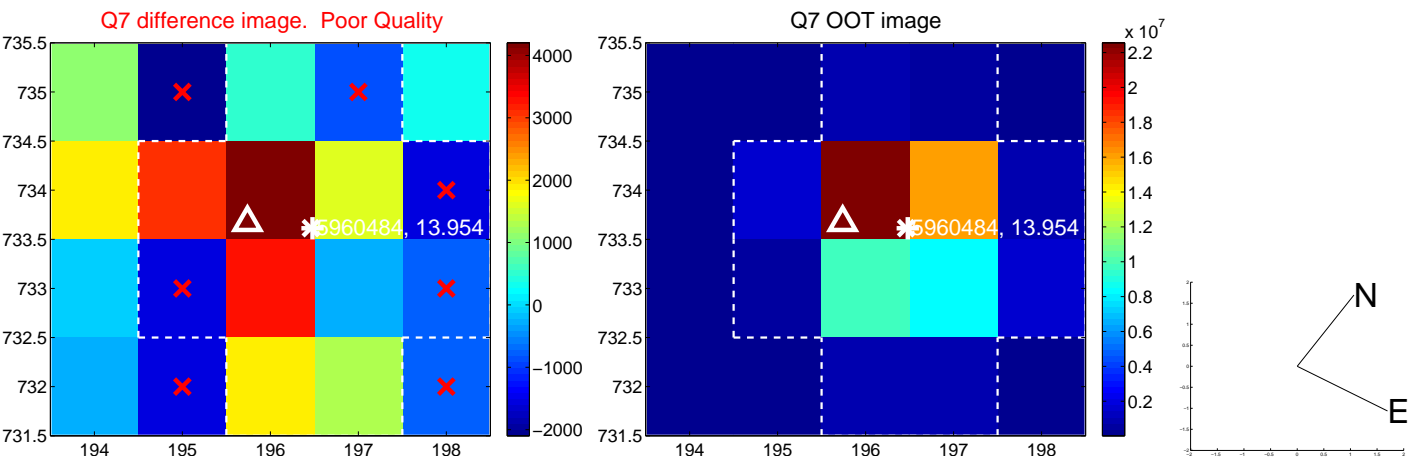
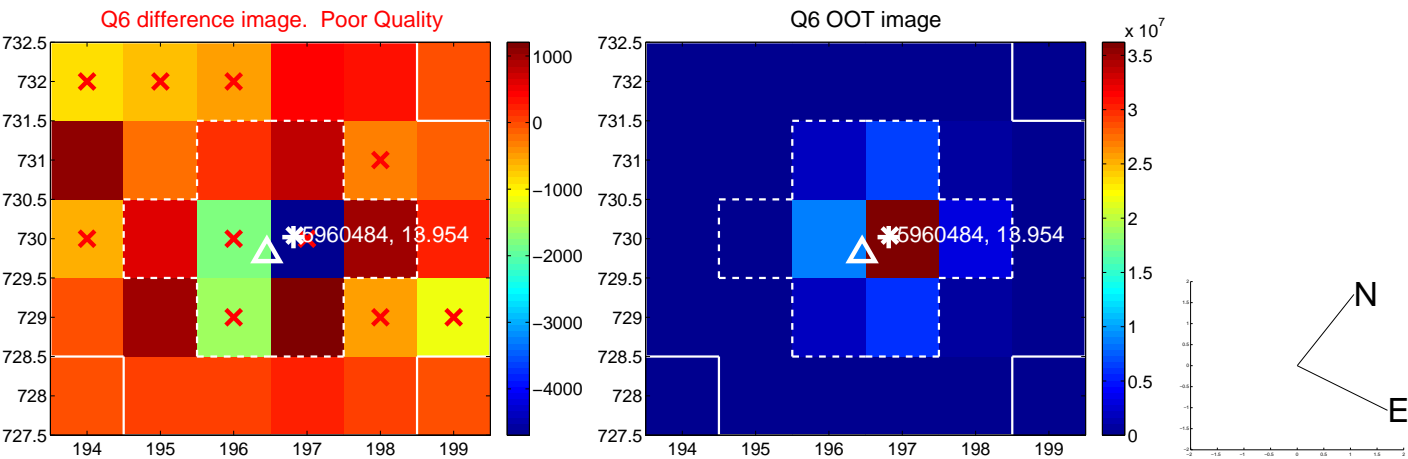
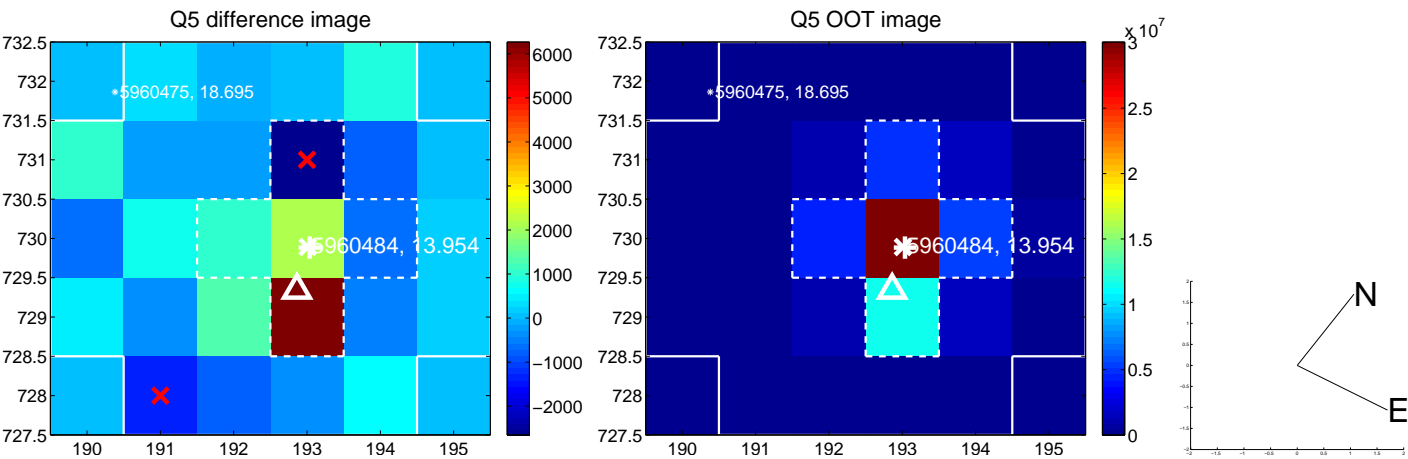


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

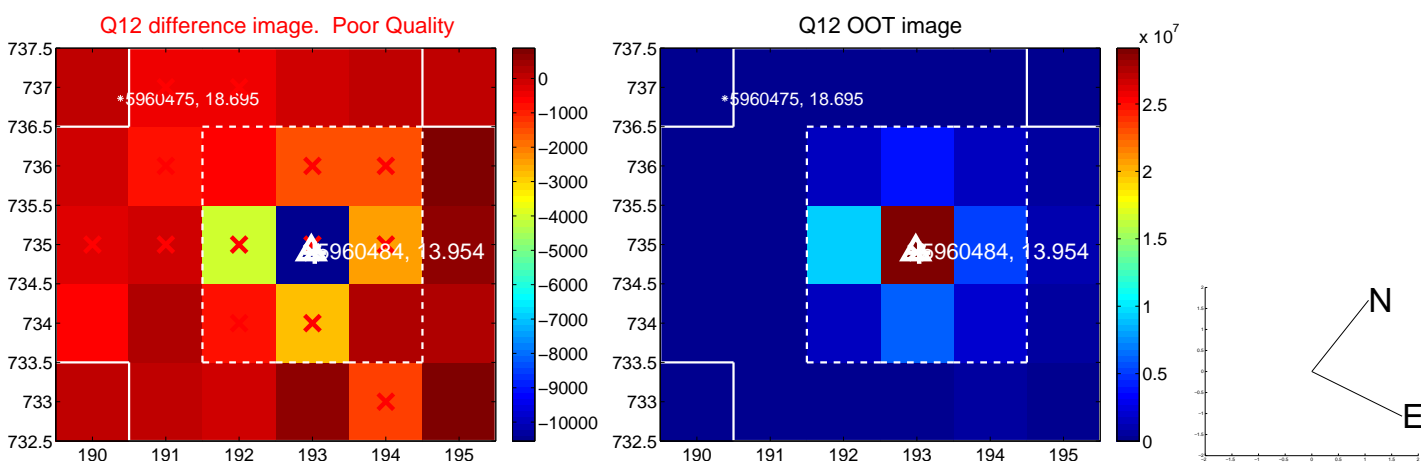
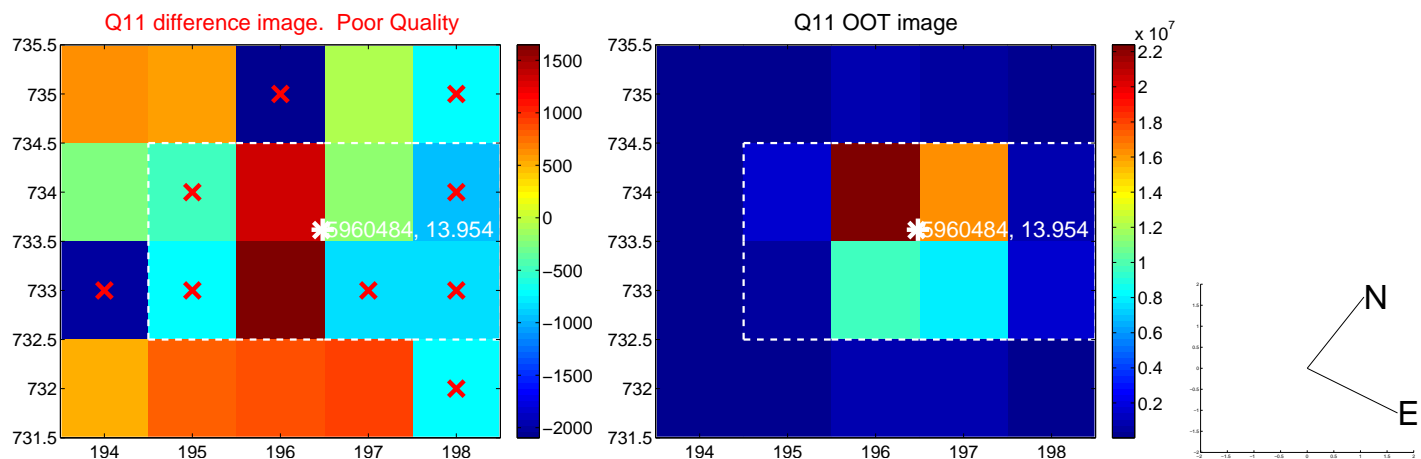
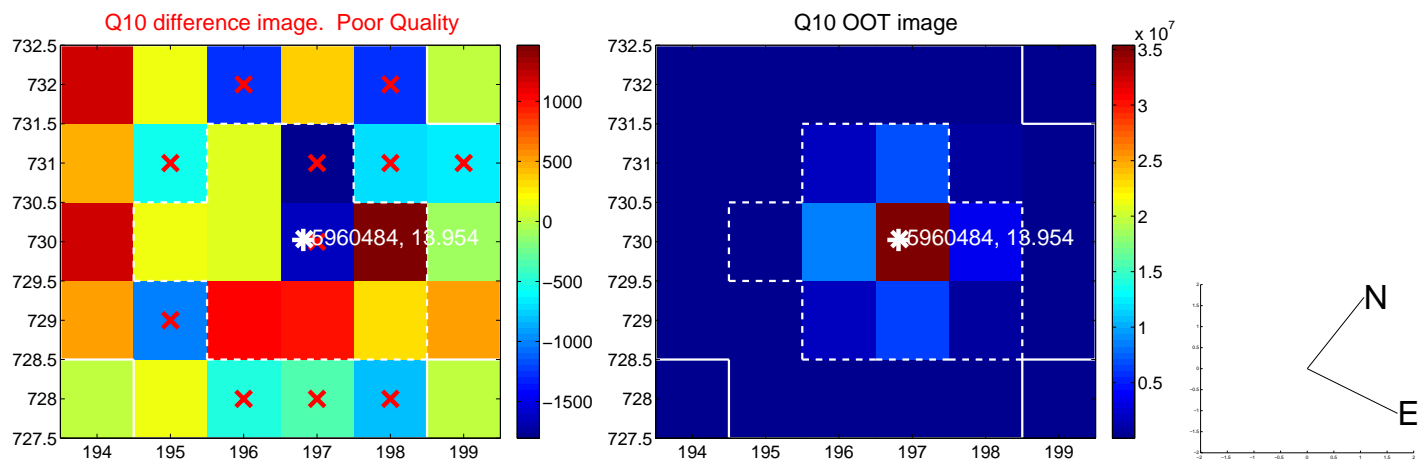
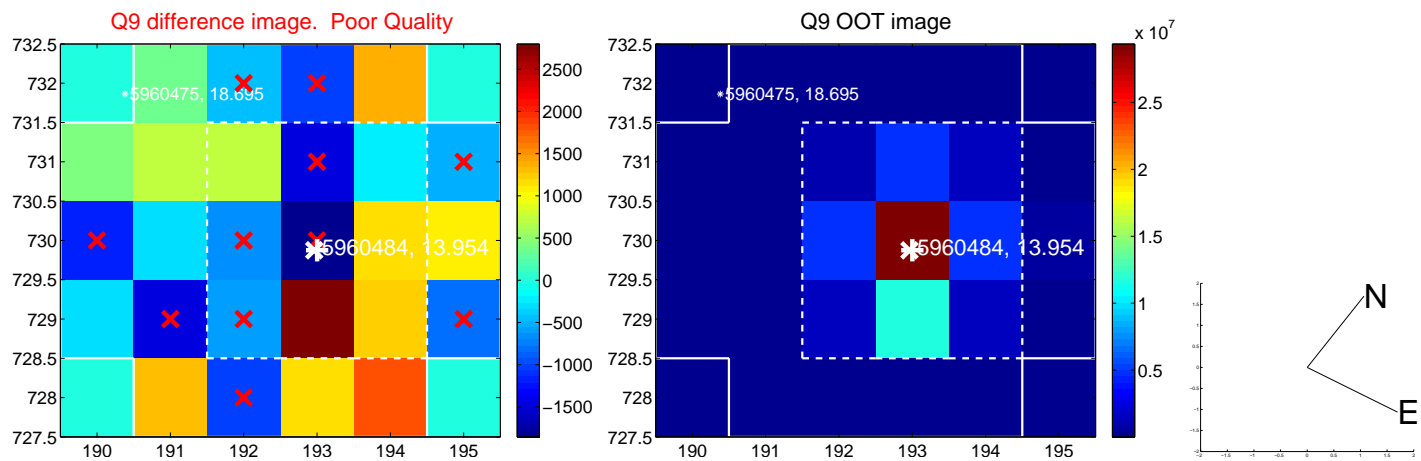
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



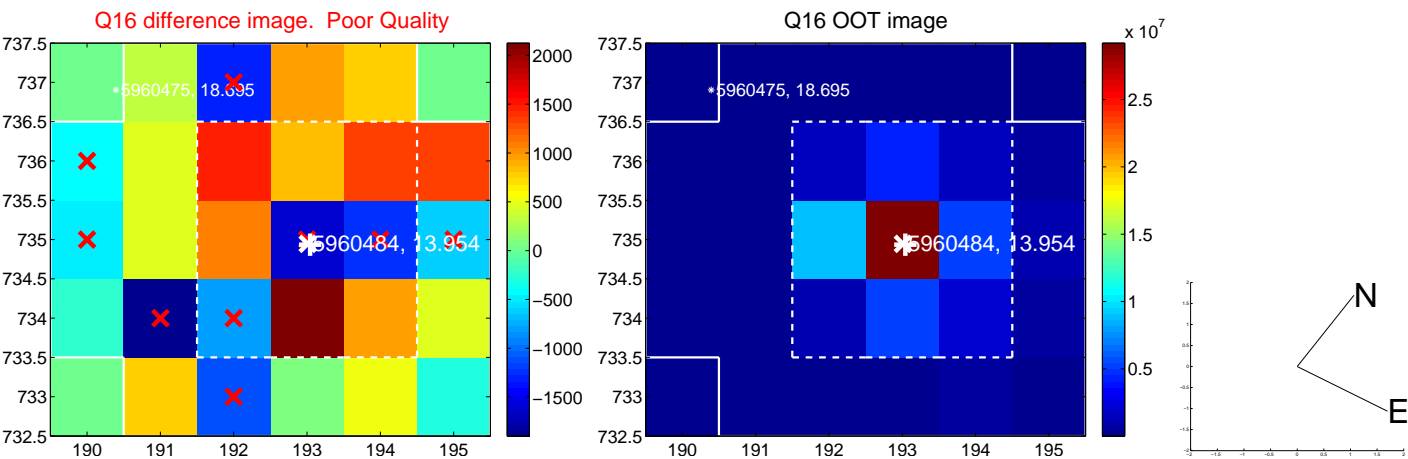
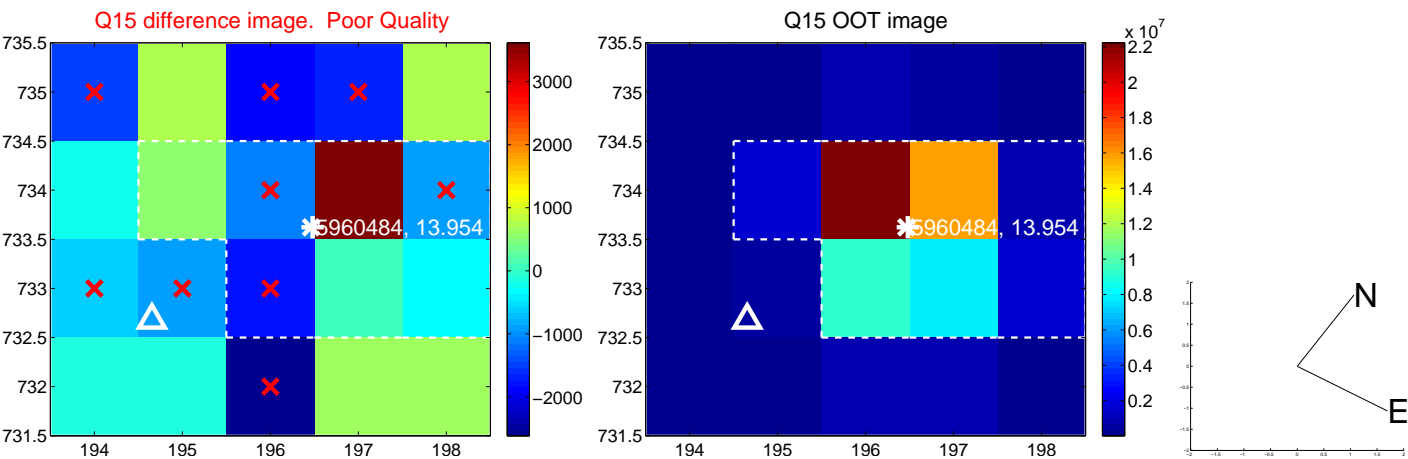
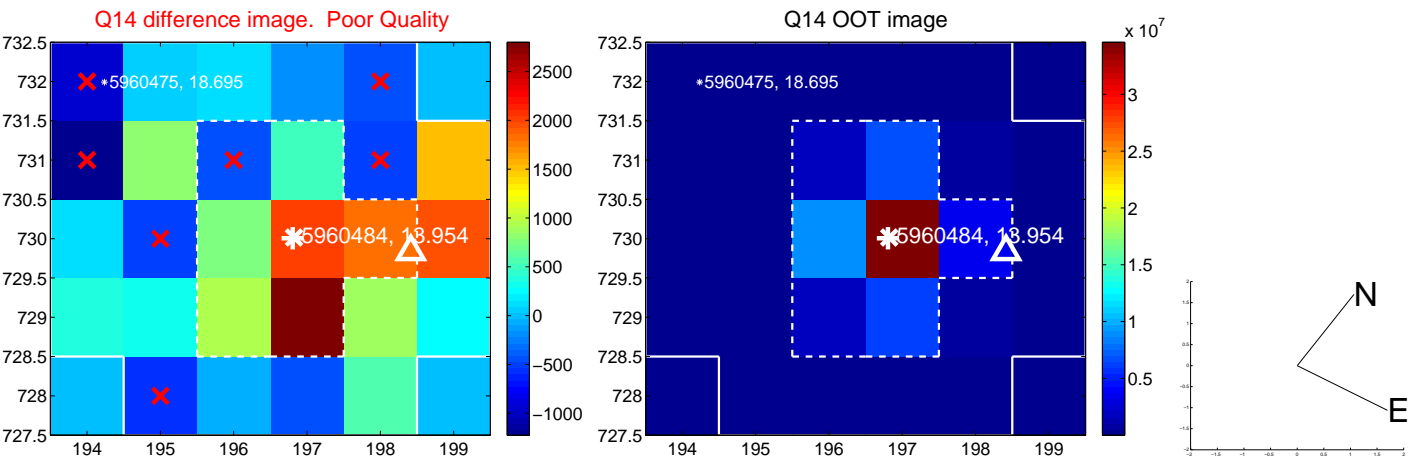
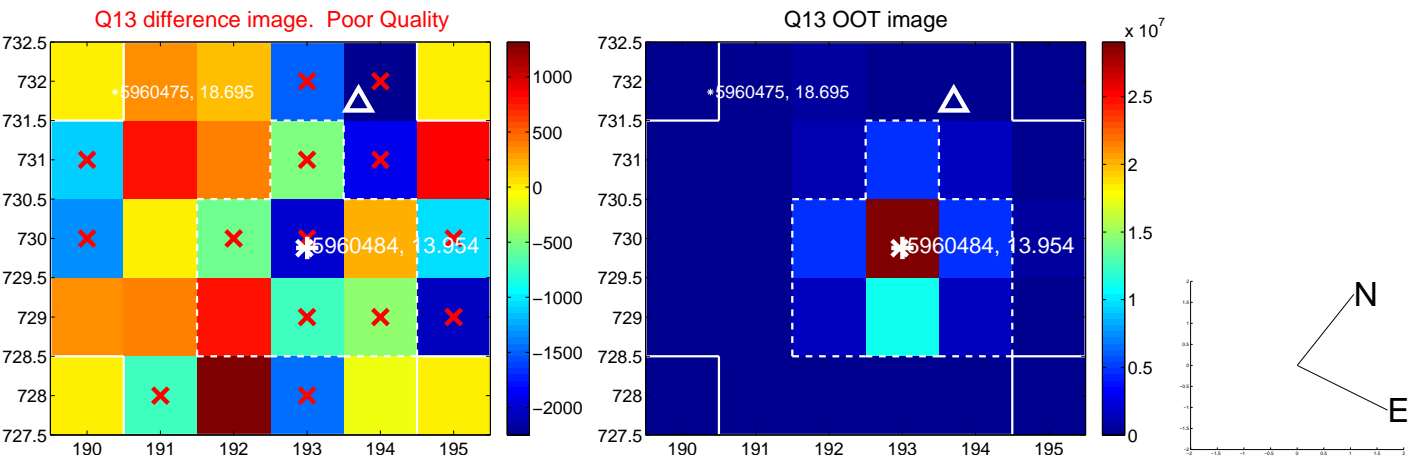
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



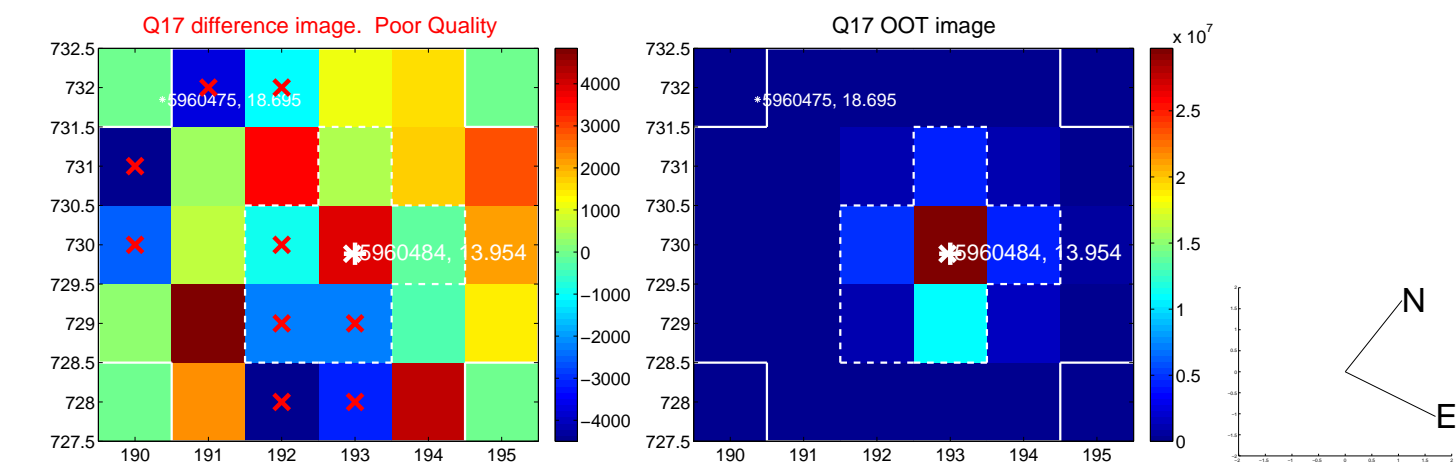
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



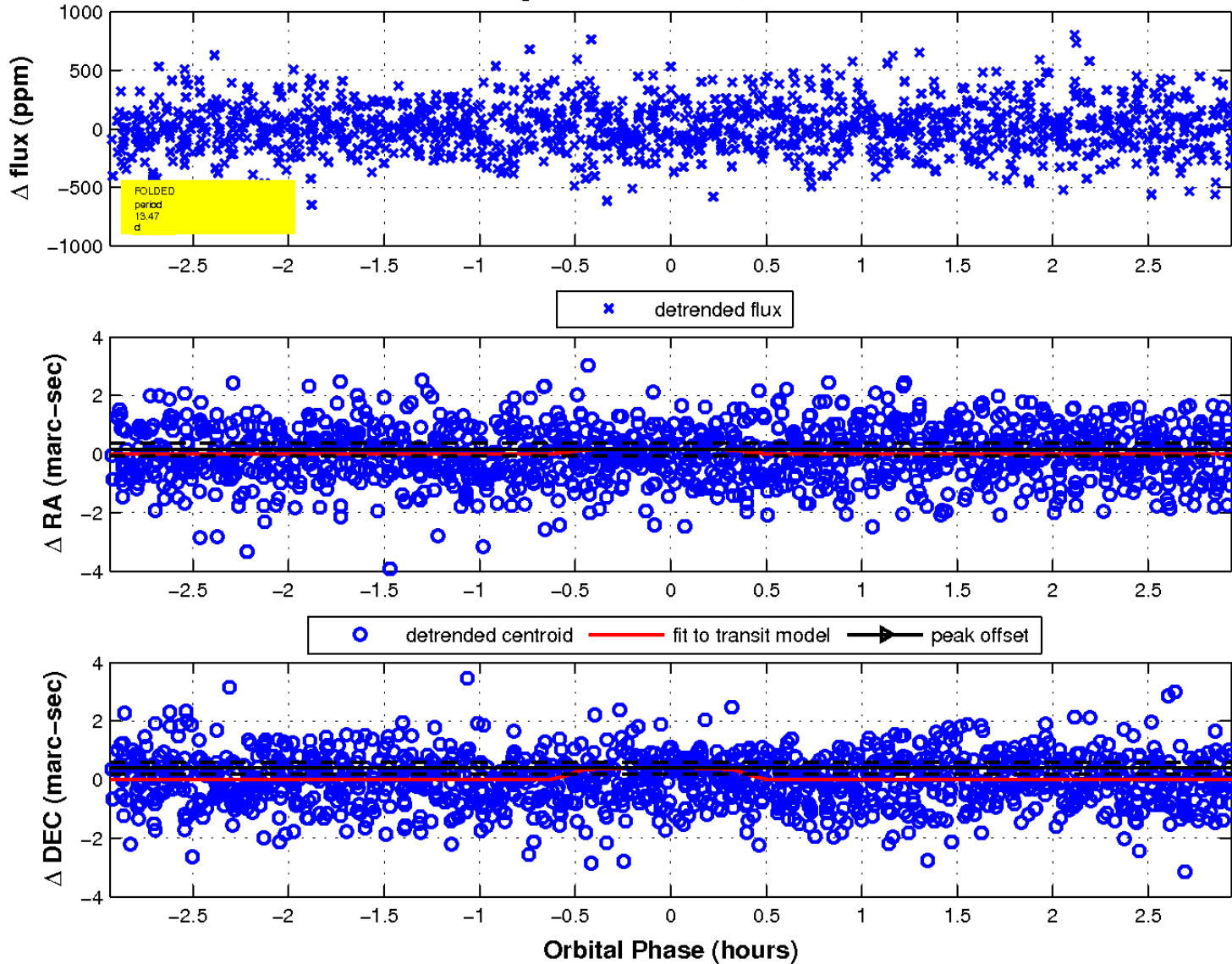
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 8 of 8



UKIRT Image

Declination

