

KIC 008569986

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})
008569986-01	OBS	No	1.566604	132.444642	45.0	4.732	13.6	14.7	2.79	9176	2.19	39404.87
008569986-02	OBS	No	3.133349	131.895826	156.9	6.000	11.4	-1.0	2.79	9176	3.56	15636.89
008569986-03	OBS	No	3.133531	132.547090	0.0	20.441	11.0	0.0	2.79	9176	0.02	15635.68

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008569986-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
008569986-02	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_NOFITS—HALO_GHOST
008569986-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD

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

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

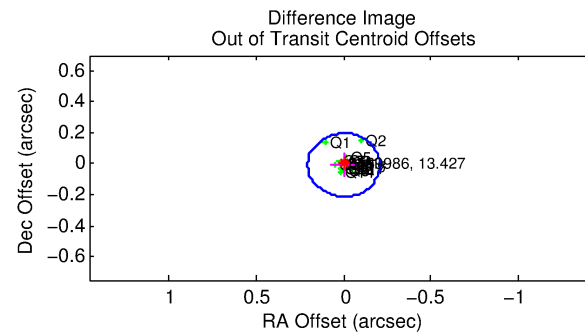
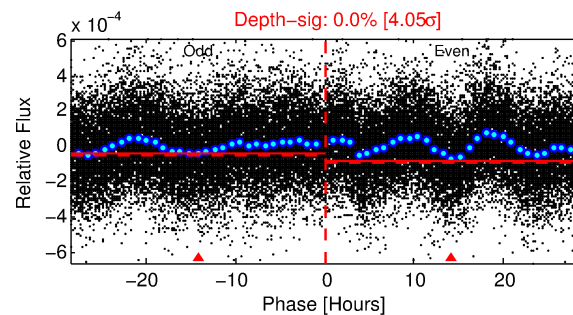
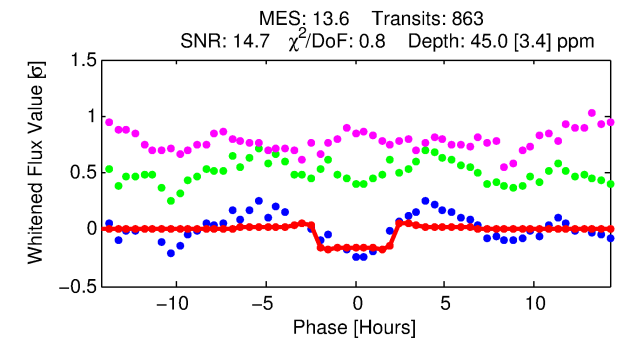
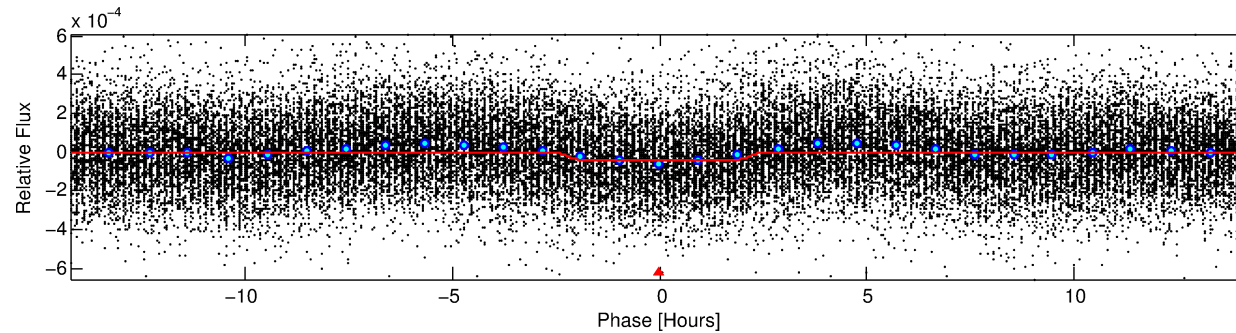
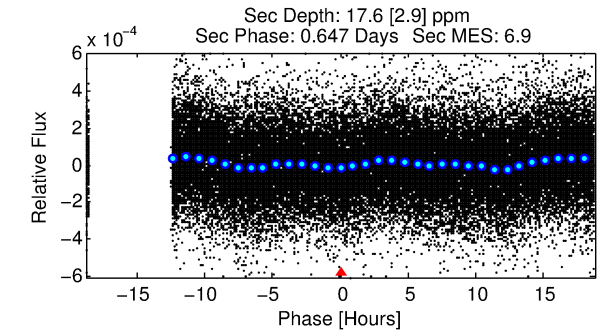
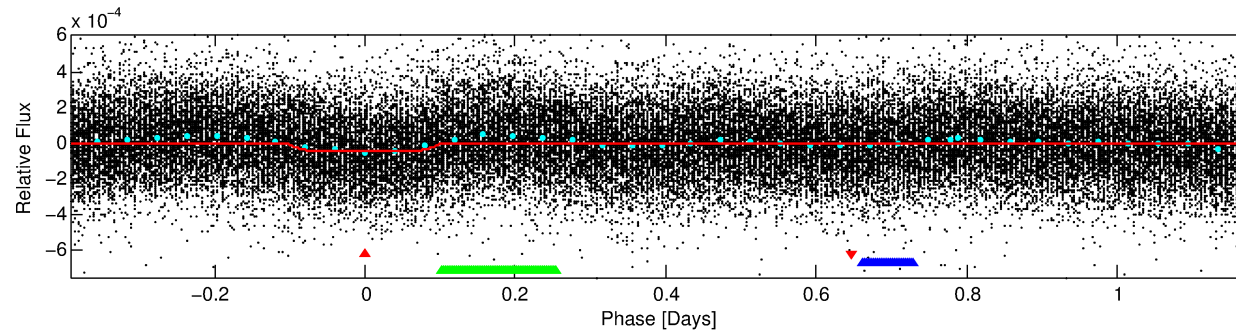
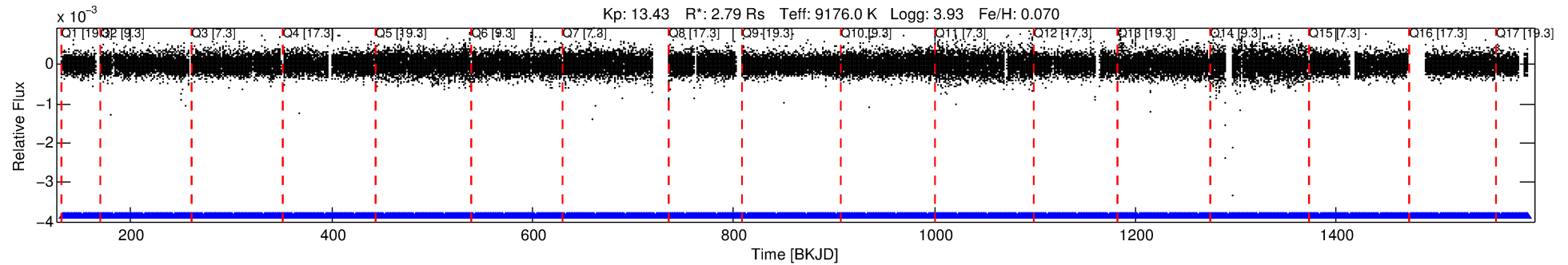
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008569986-01

No Significant Match Found

DV One-Page Summary

KIC: 8569986 Candidate: 1 of 3 Period: 1.567 d



DV Fit Results:

Period = 1.56660 [0.00001] d
Epoch = 132.4446 [0.0022] BKJD
Rp/R* = 0.0072 [0.0008]
a/R* = 1.40 [0.57]
b = 0.92 [0.14]
Seff = 39404.87 [20777.50]
Teq = 3593 [474] K
Rp = 2.19 [0.90] Re
a = 0.0354 [0.0119] AU
Ag = 2.54 [1.44] [1.07σ]
Teffp = 7011 [602] K [4.46σ]

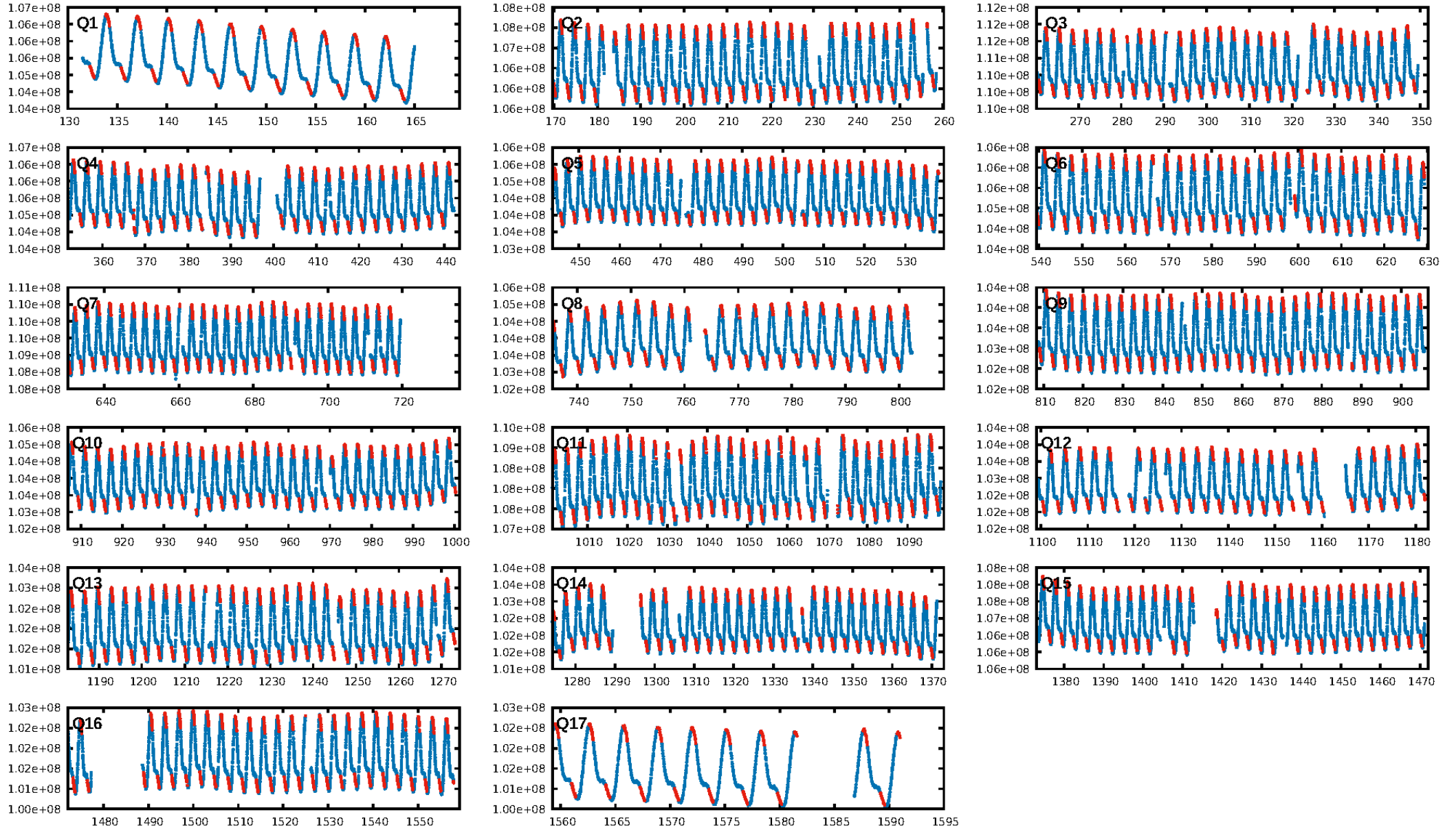
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [4.92σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [824/824]
GhostDiagnostic-chr: 1.324
Centroid-sig: 92.1%
Centroid-so: 0.076 arcsec [0.17σ]
OotOffset-rm: 0.008 arcsec [0.11σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.261 arcsec [3.62σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.00 [0/17]
DiffImageOverlap-fno: 1.00 [17/17]

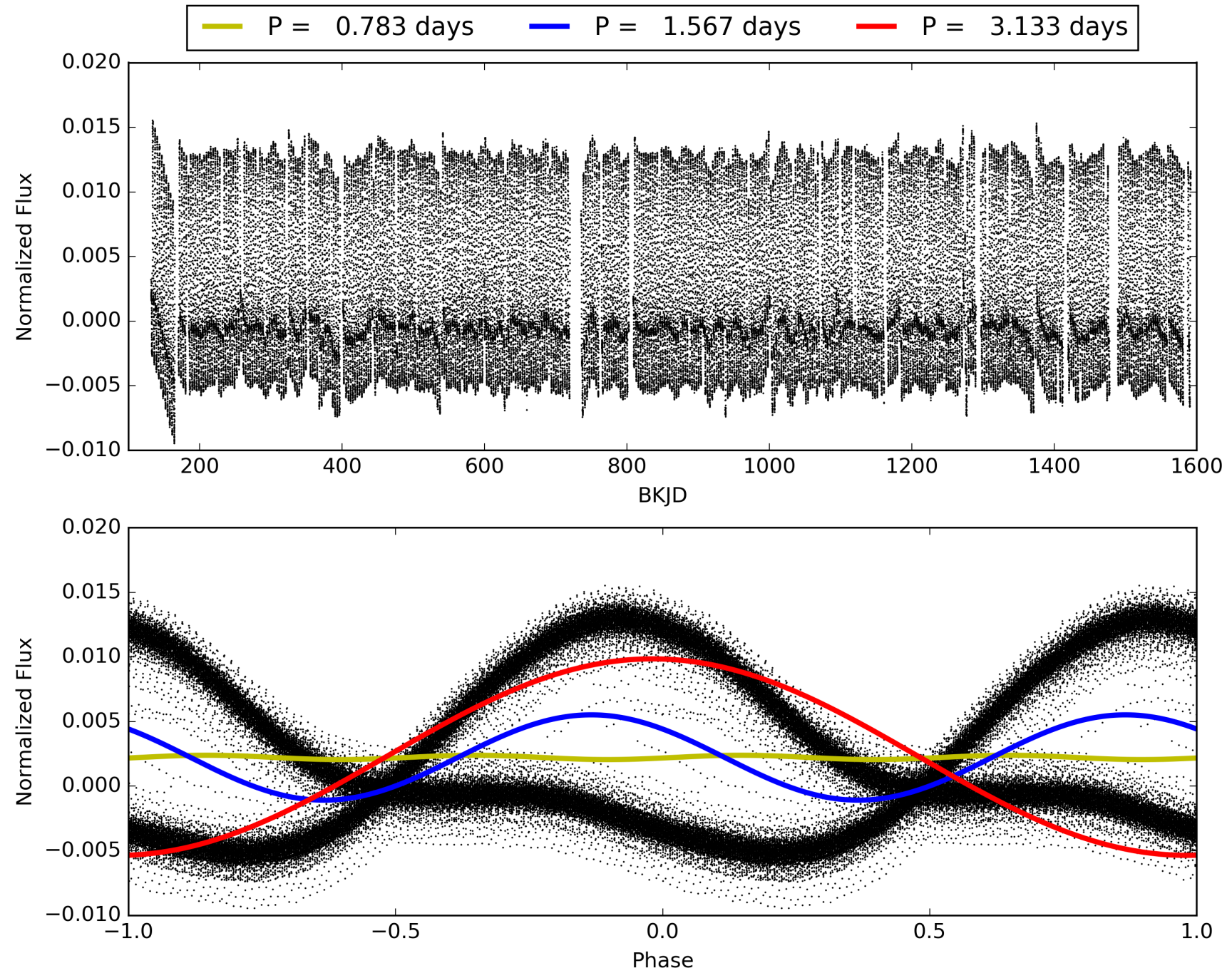
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 06:43:11 Z

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

TCE 008569986-01, PDC Light Curves

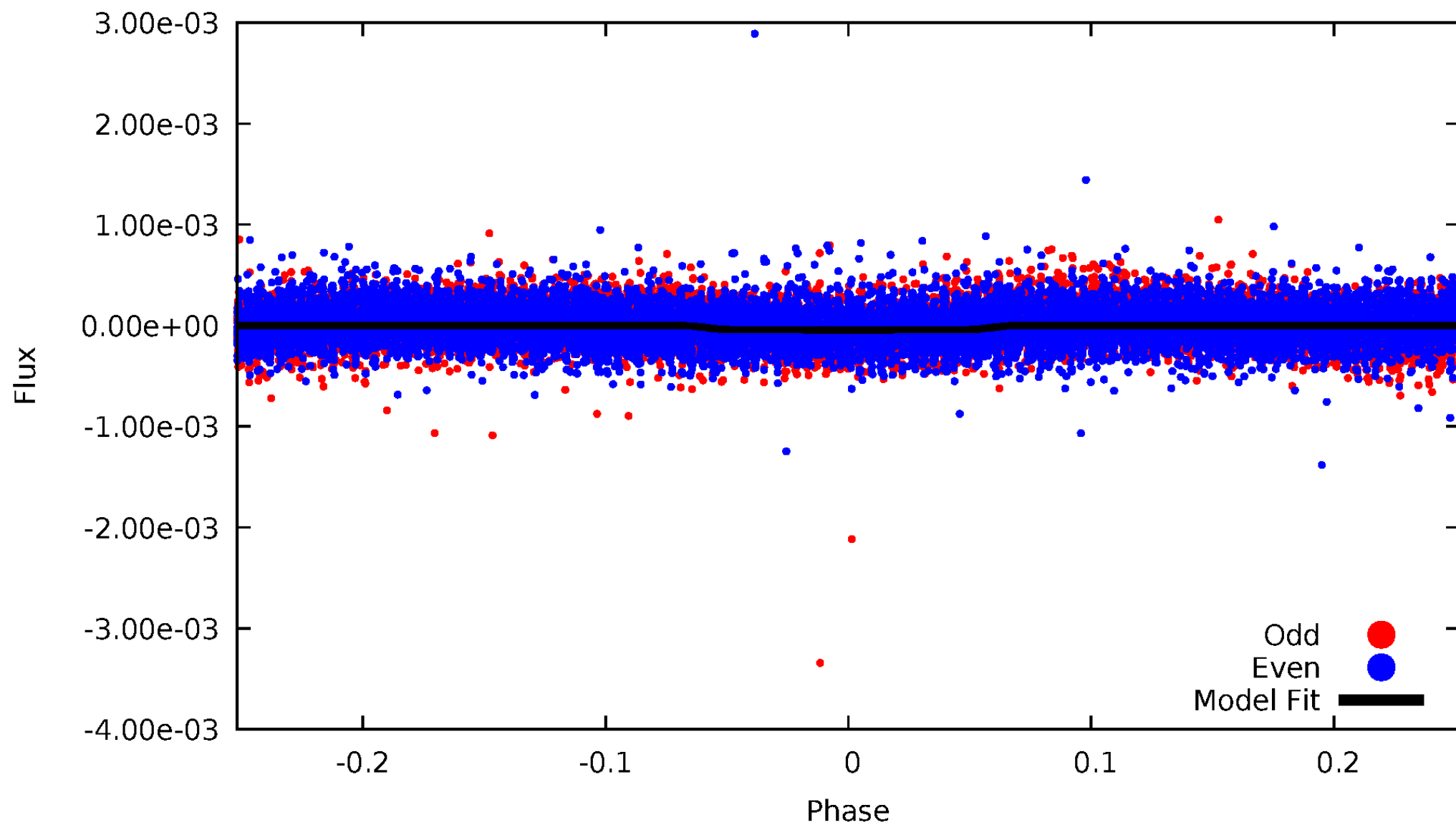


TCE 008569986-01



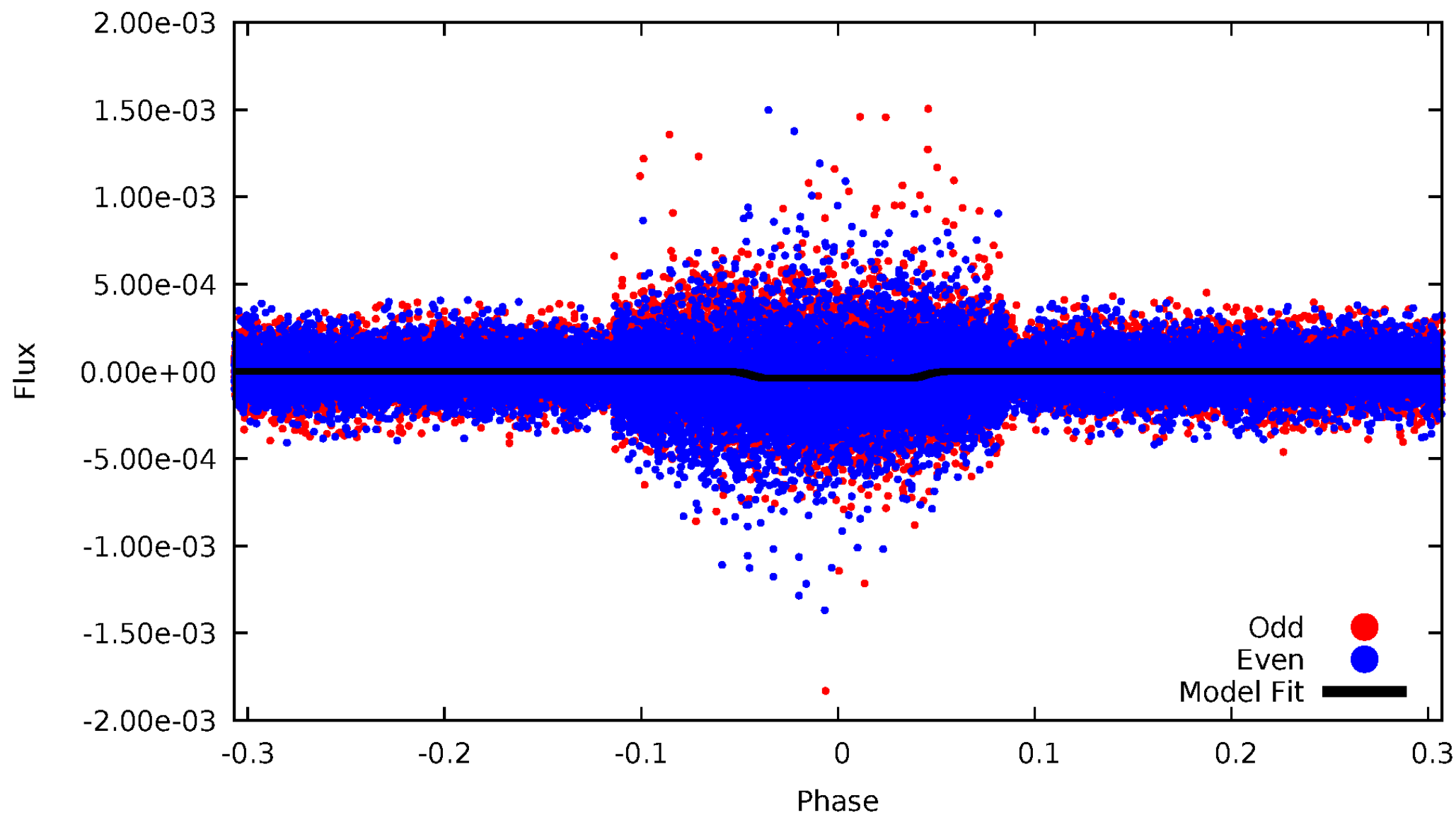
DV Odd/Even

TCE 008569986-01



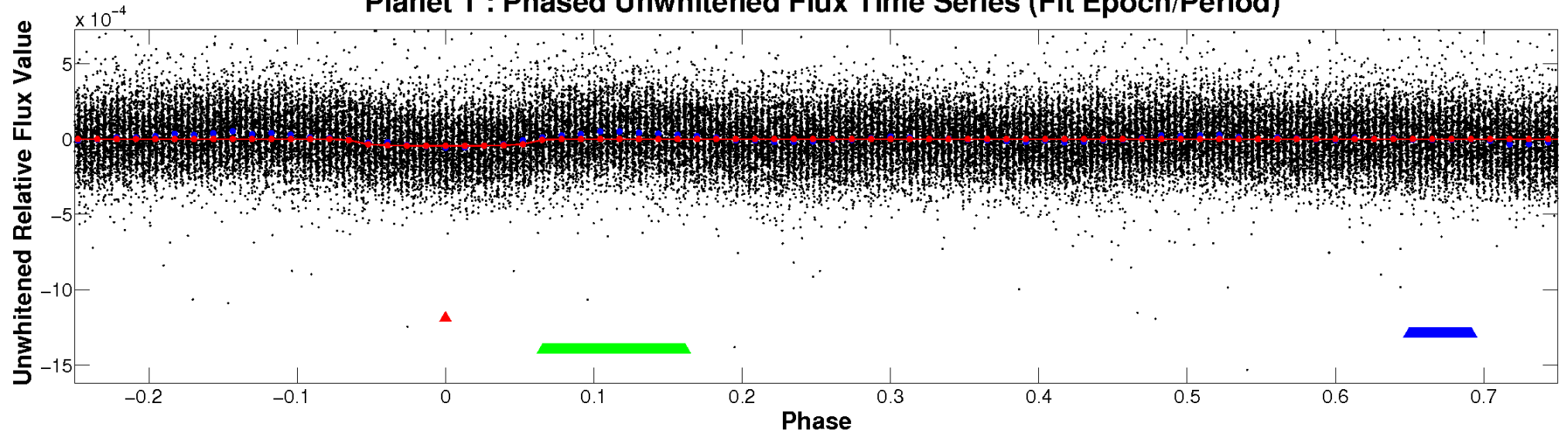
ALT Odd/Even

TCE 008569986-01

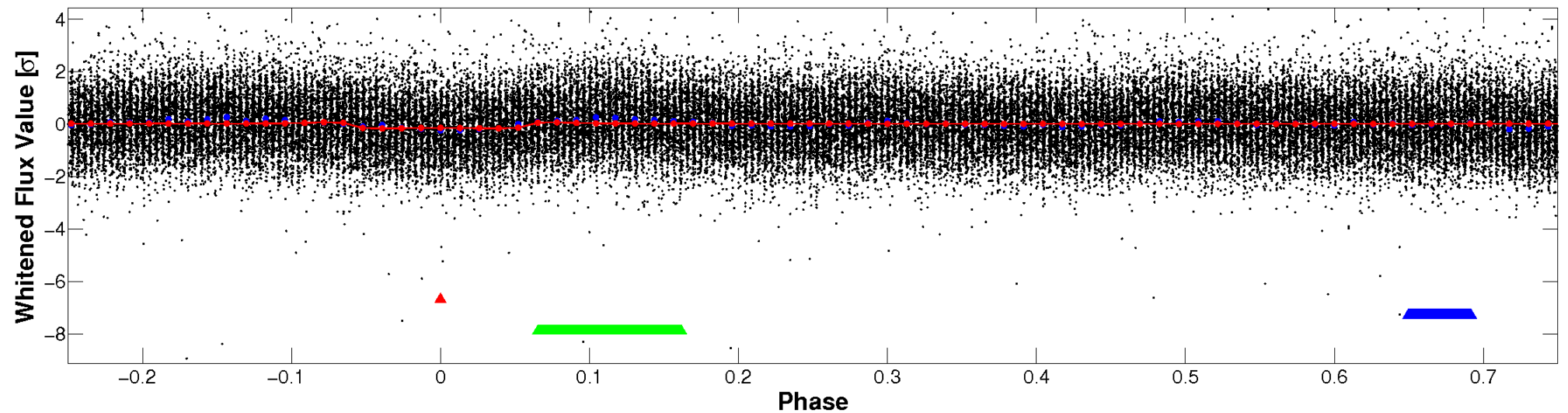


Non-Whitened Vs. Whitened Light Curve

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

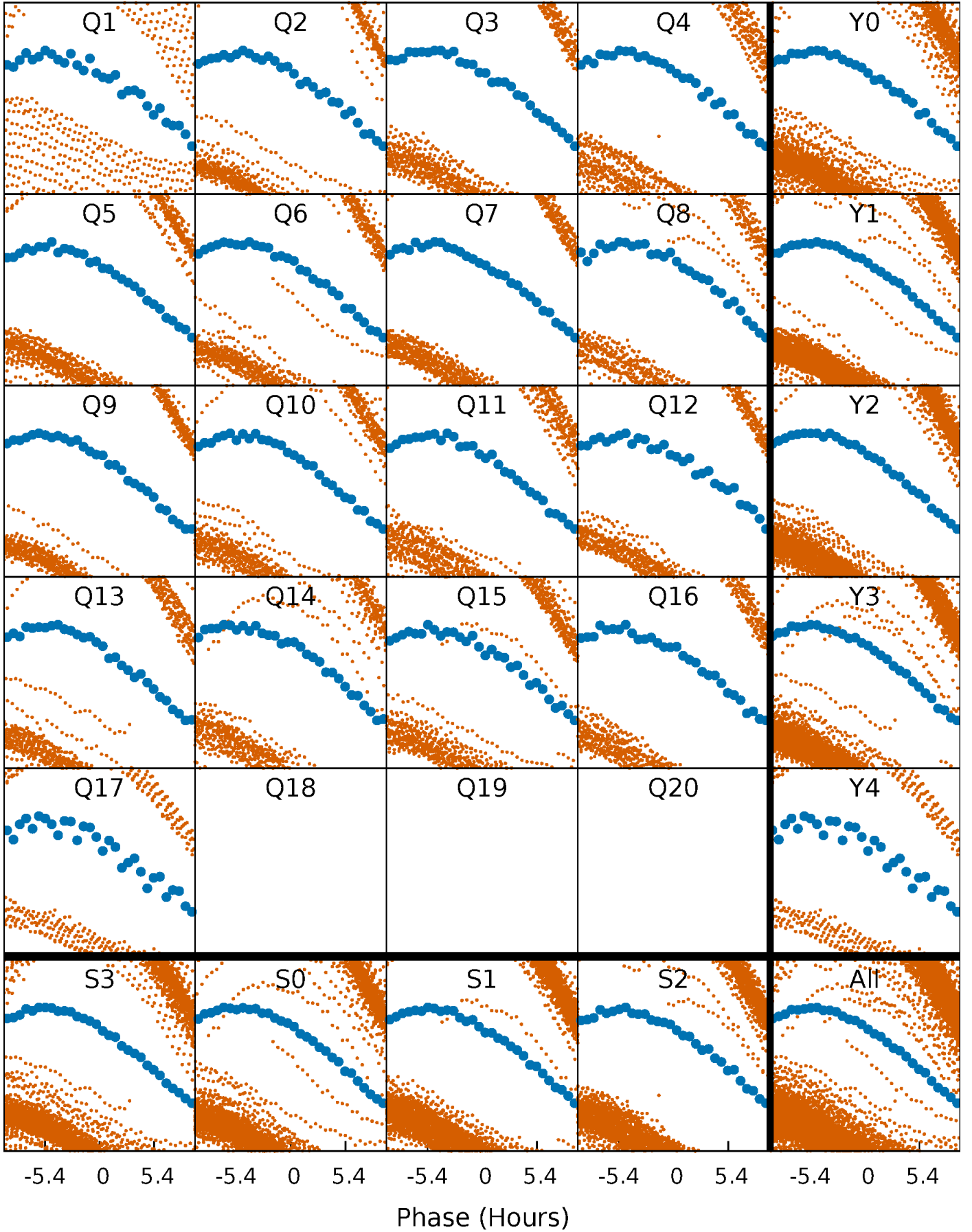


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



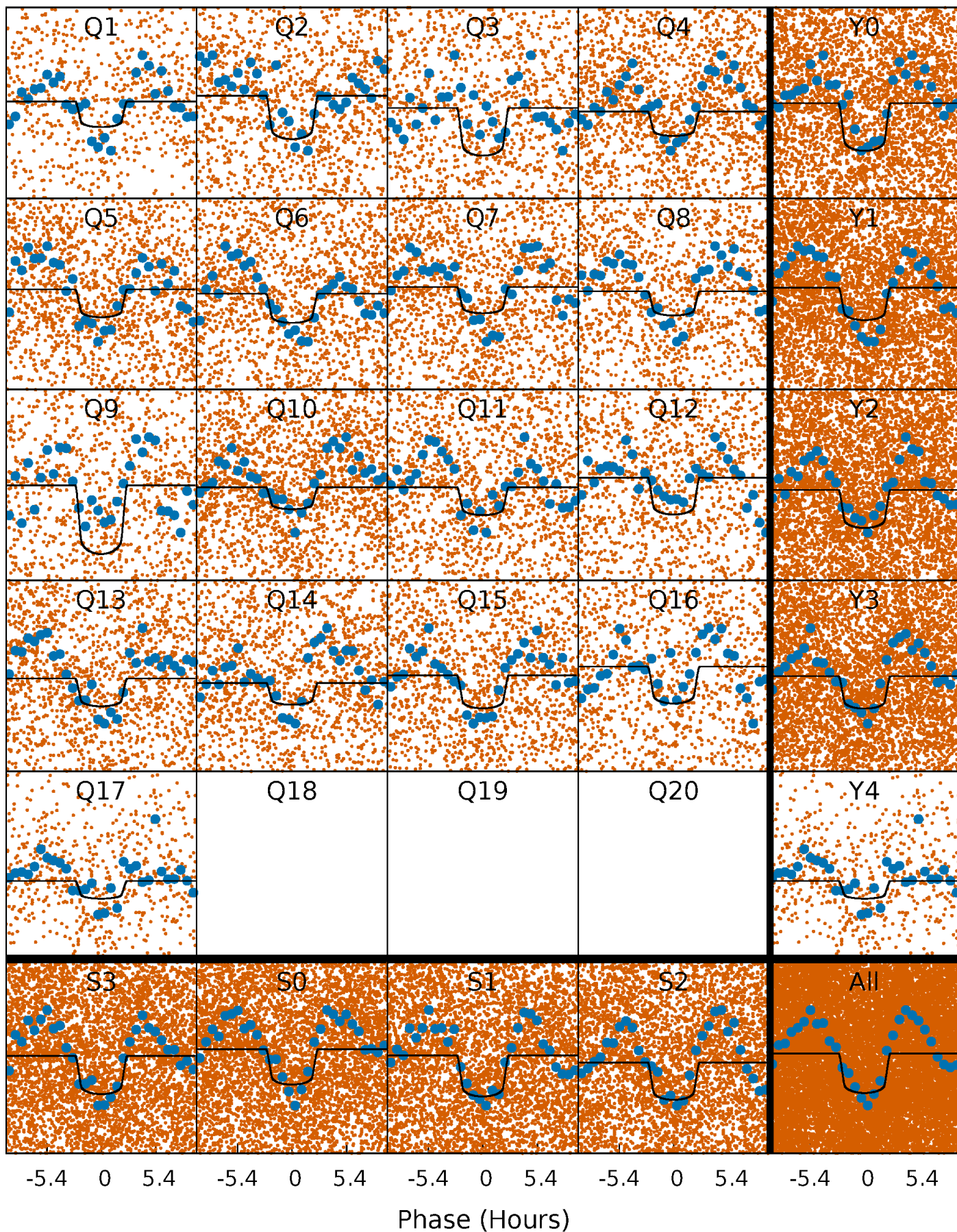
PDC Quarter-Phased Transit Curves

TCE 008569986-01 P= 1.566604 Days $T_0=132.444642$ (BKJD)



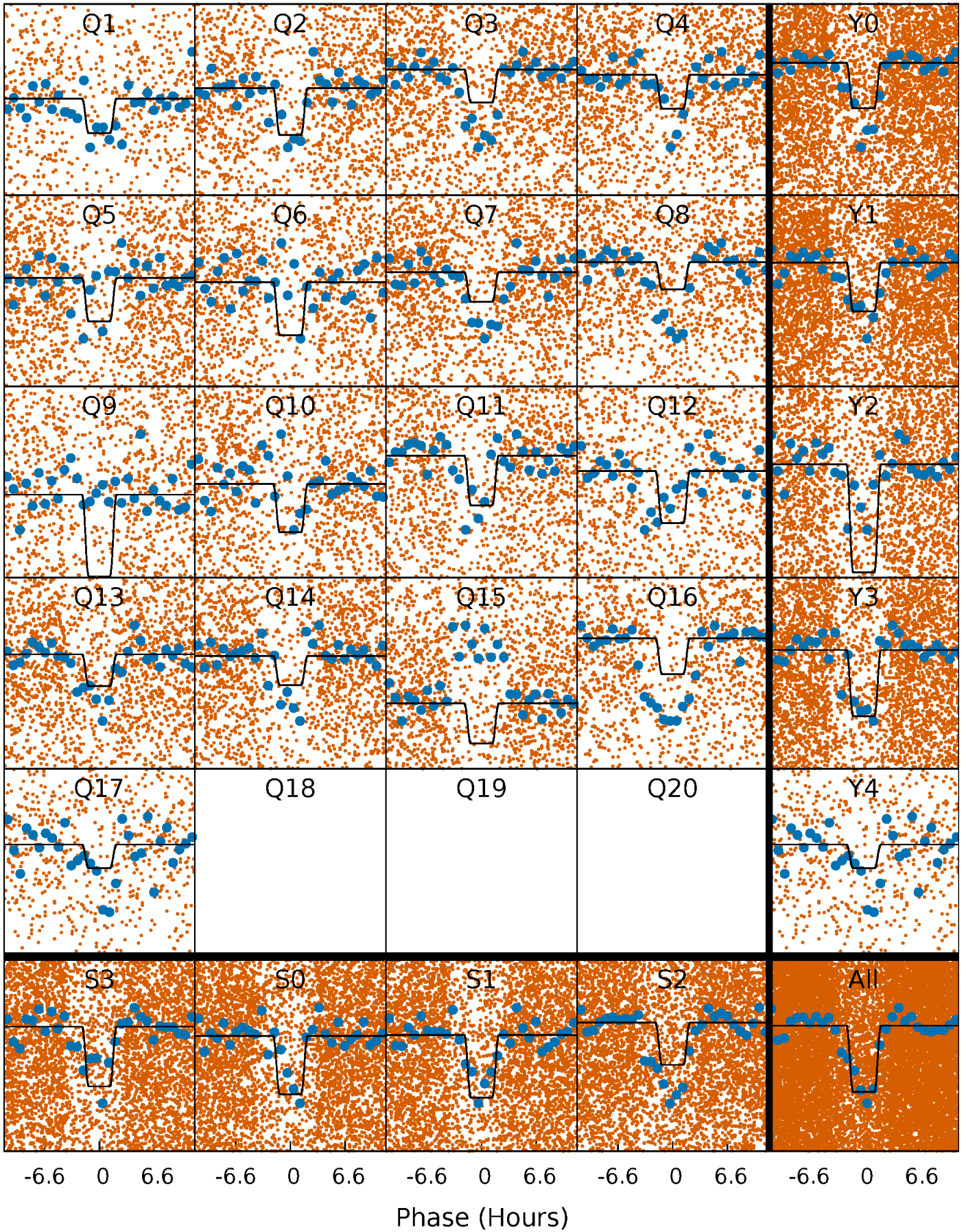
DV Quarter-Phased Transit Curves

TCE 008569986-01 P= 1.566604 Days $T_0=132.444642$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

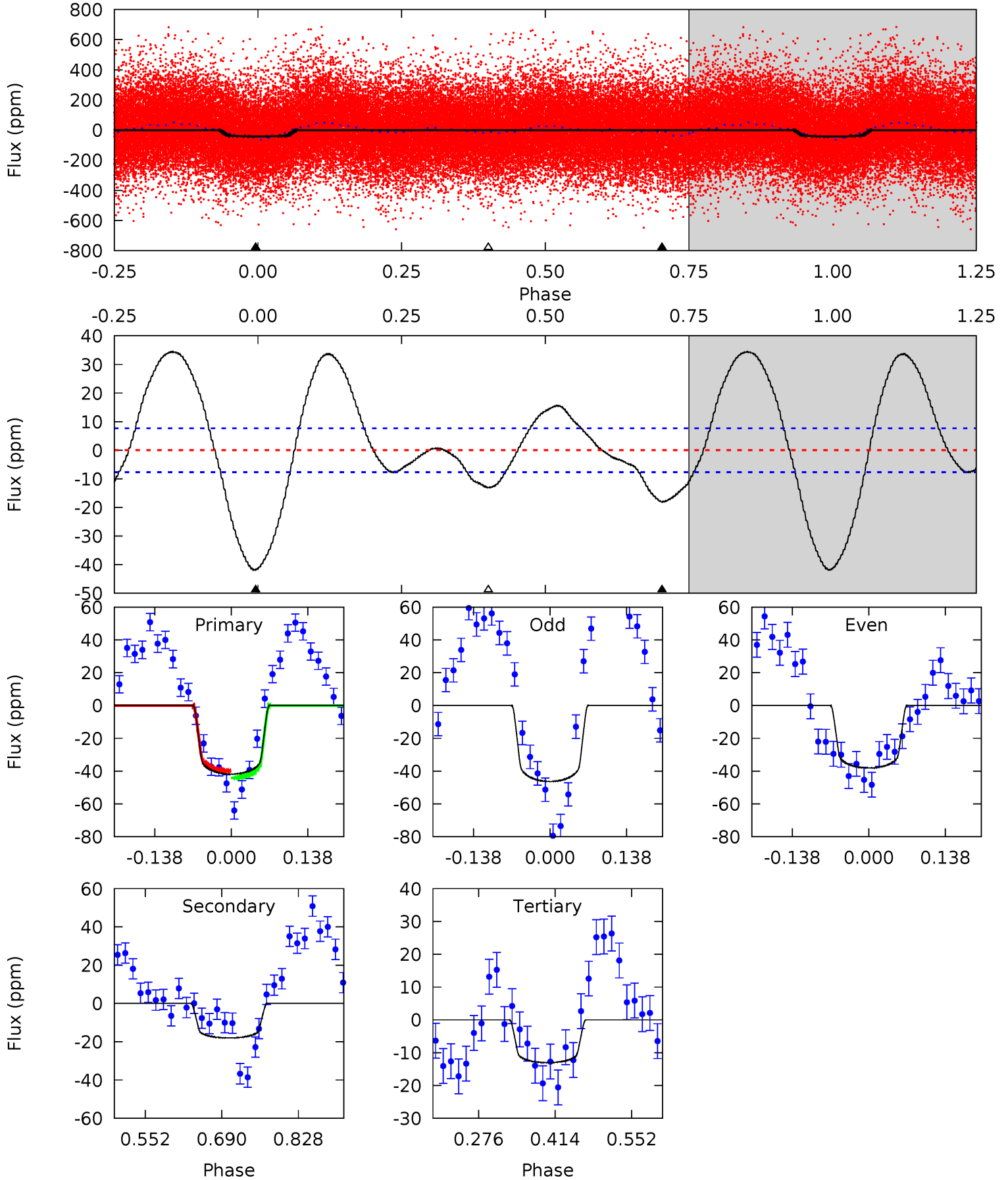
TCE 008569986-01 P= 1.566580 Days $T_0=132.453966$ (BKJD)



DV Model-Shift Uniqueness Test

008569986-01, P = 1.566604 Days, E = 130.878038 Days

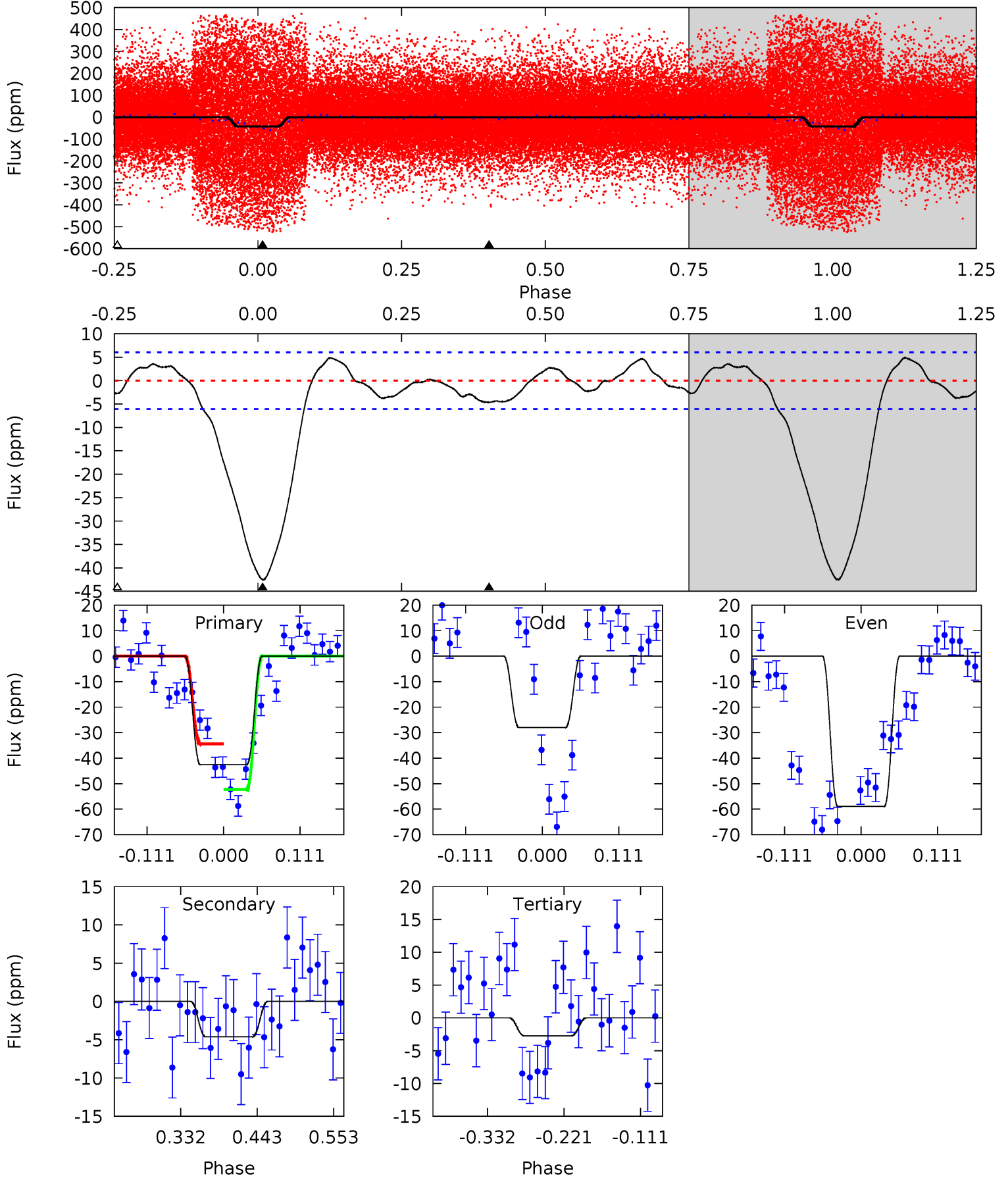
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.5	10.6	7.66	0	4.50	1.48	7.28	16.9	24.5	2.92	10.6	2.41	1.12	0.45	1.20



Alt Model-Shift Uniqueness Test

008569986-01, P = 1.566580 Days, E = 130.887386 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
31.9	3.47	2.07	0	4.54	1.60	1.76	29.9	31.9	1.40	3.47	11.5	1.02	0.10	6.75



Stellar Parameters For KIC 008569986

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot cm^{-3})$
	9176^{+255}_{-438}	$3.929^{+0.270}_{-0.180}$	$0.070^{+0.150}_{-0.700}$	$2.786^{+0.904}_{-1.104}$	$2.402^{+0.377}_{-0.753}$	$0.157^{+0.302}_{-0.081}$
	+3%/-5%	+7%/-5%	+214%/-1000%	+32%/-40%	+16%/-31%	+193%/-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 008569986-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-18 ± 2	$2.13^{+0.50}_{-0.45}$	4949^{+427}_{-449}	6406^{+523}_{-497}	$2.674^{+1.434}_{-0.852}$
Alt.	-5 ± 1	$1.85^{+0.45}_{-0.42}$	4942^{+461}_{-458}	4645^{+580}_{-632}	$0.881^{+0.611}_{-0.355}$

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

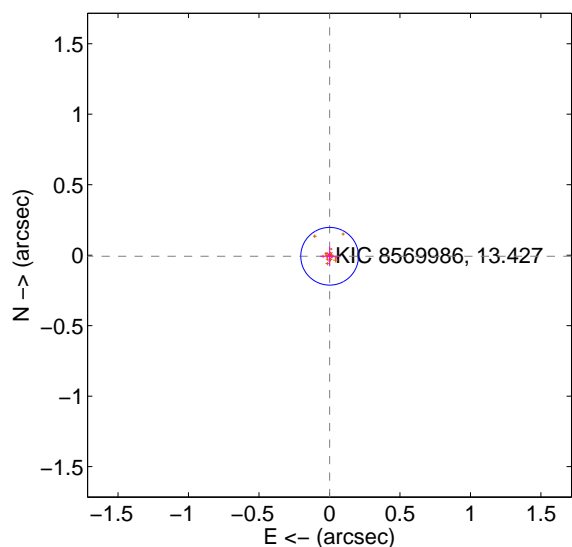
Supplemental centroid analysis for 008569986-01. Kepler magnitude: 13.43. Transit SNR 14.72

There are 0 quarters with good PRF difference image offsets

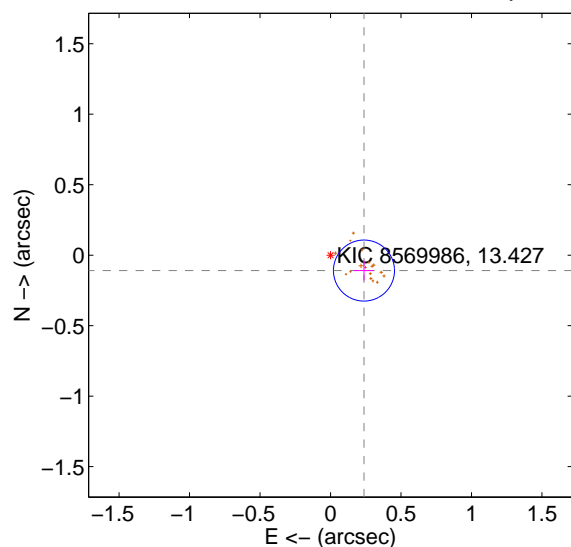
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.008 ± 0.068	0.11	-0.001 ± 0.068	-0.008 ± 0.068
PRF-fit source offset from KIC position	0.261 ± 0.072	3.62	-0.237 ± 0.071	-0.109 ± 0.071
photometric centroid source offset	0.08 ± 0.45	0.17	-0.07 ± 0.45	-0.02 ± 0.48

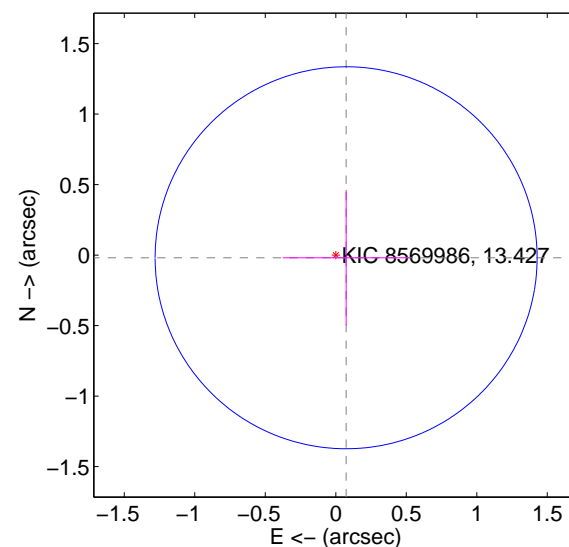
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

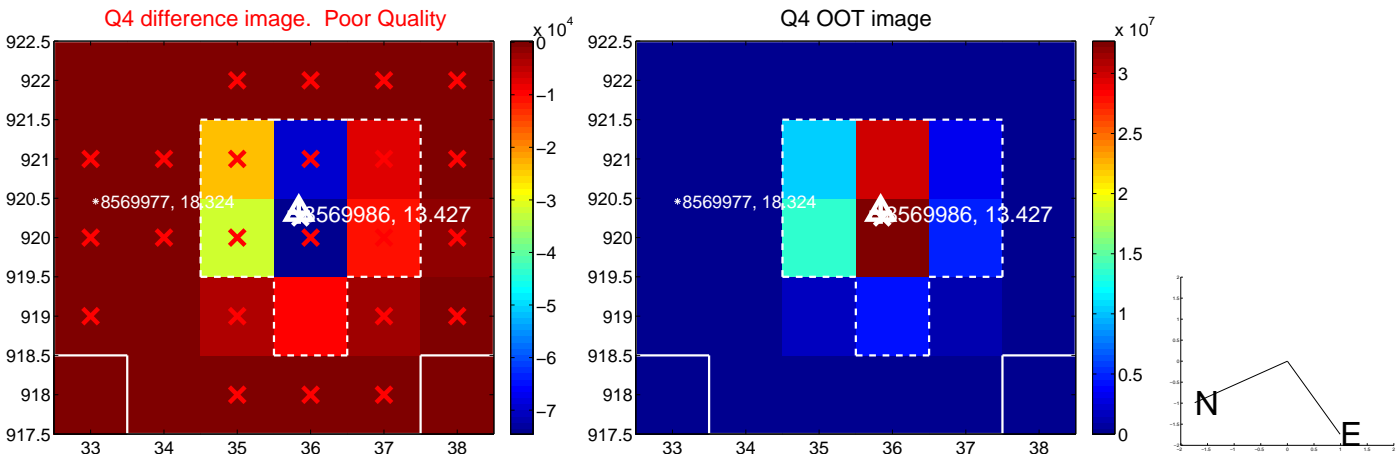
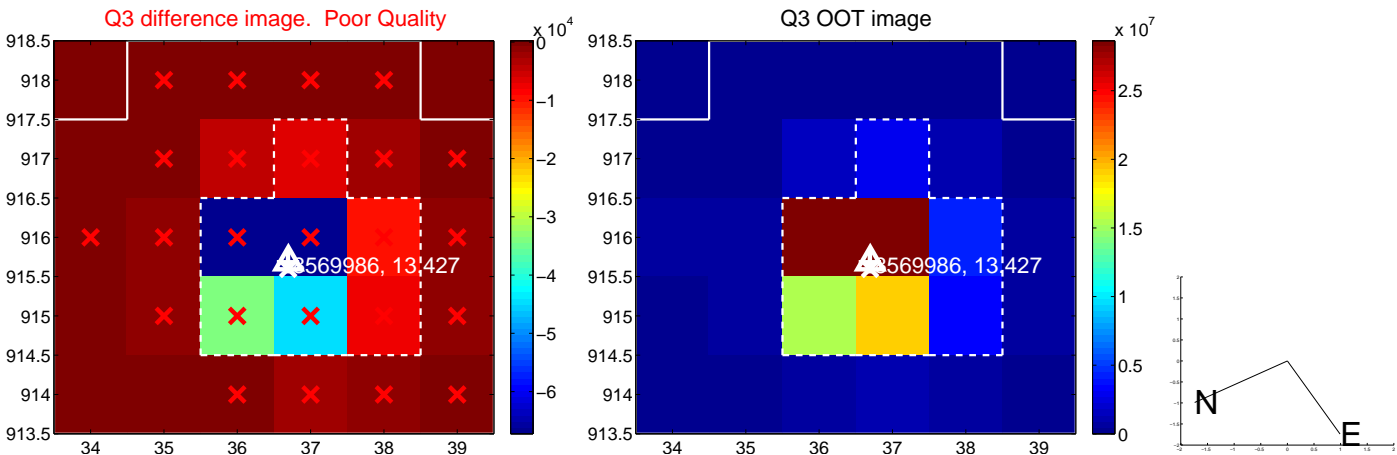
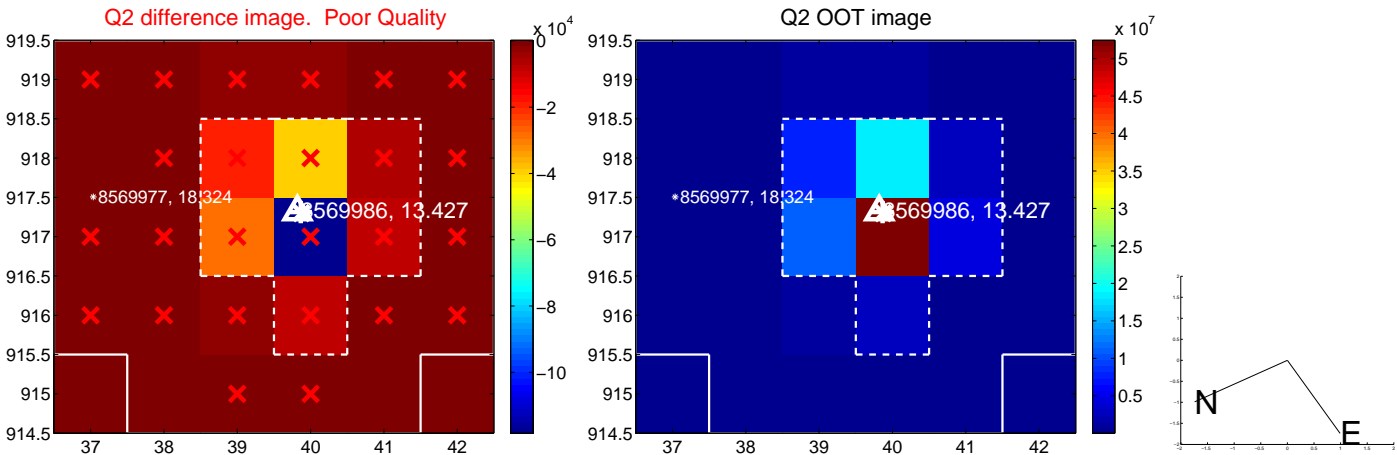
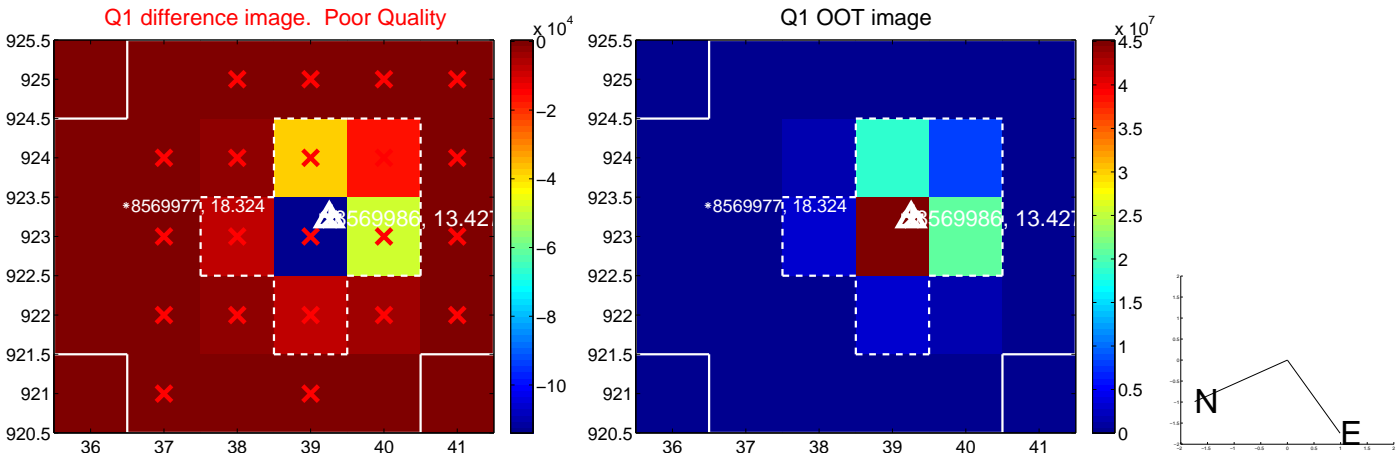


offset from photometric centroids

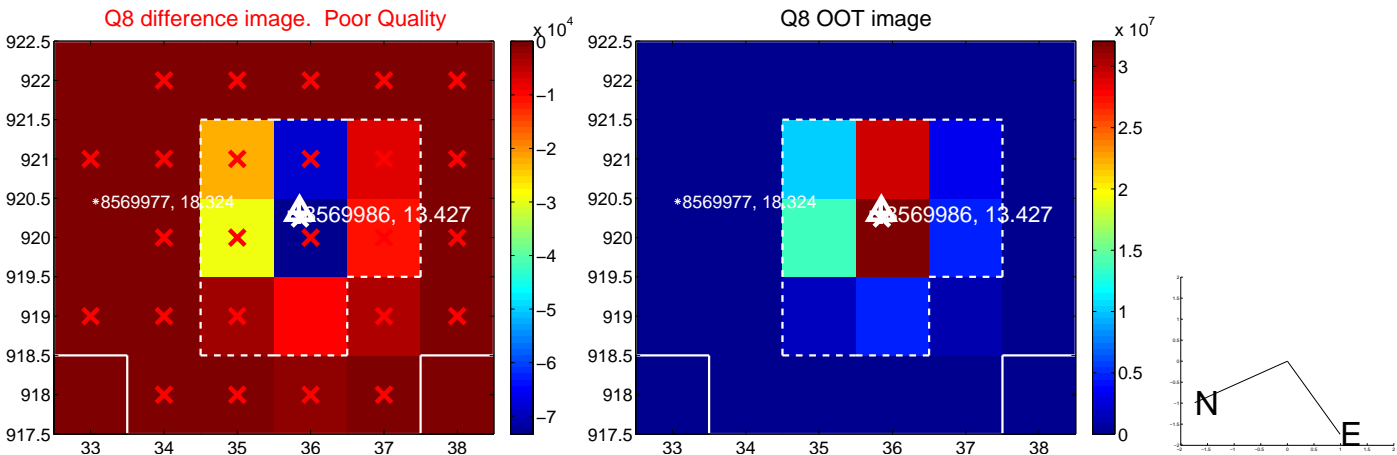
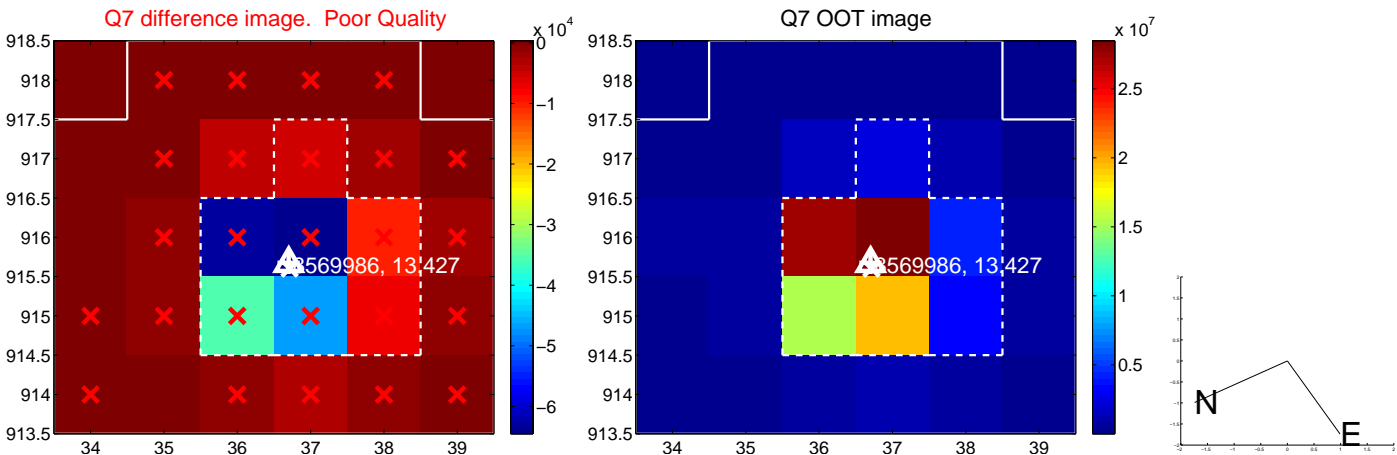
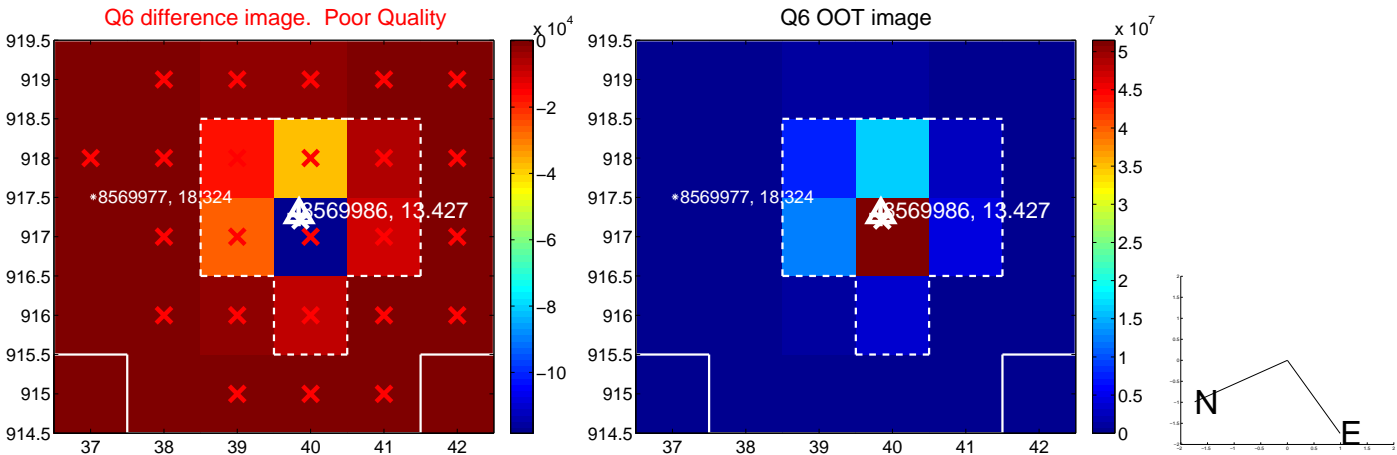
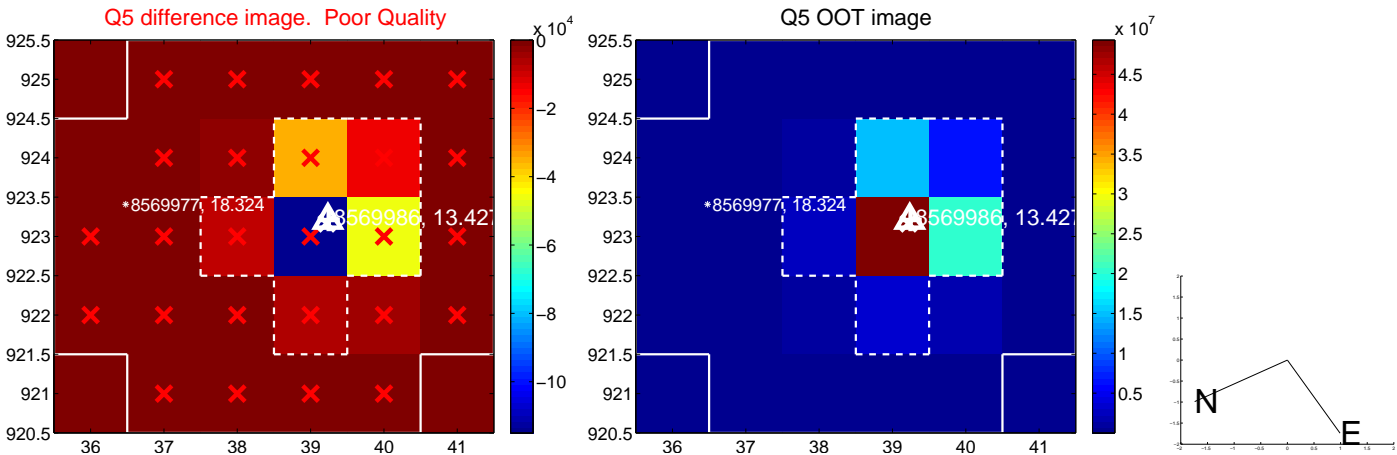


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

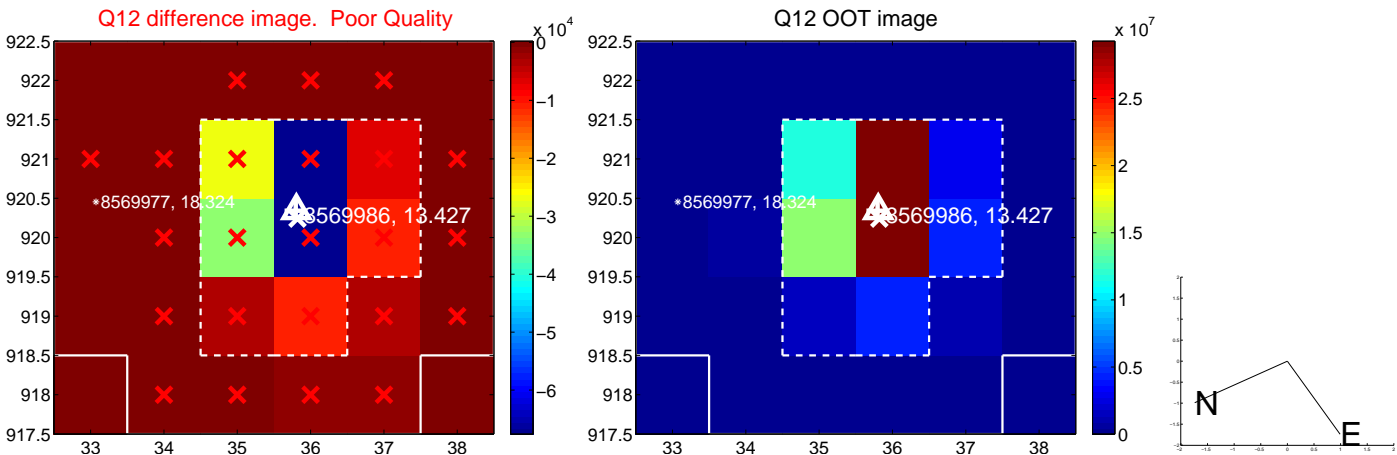
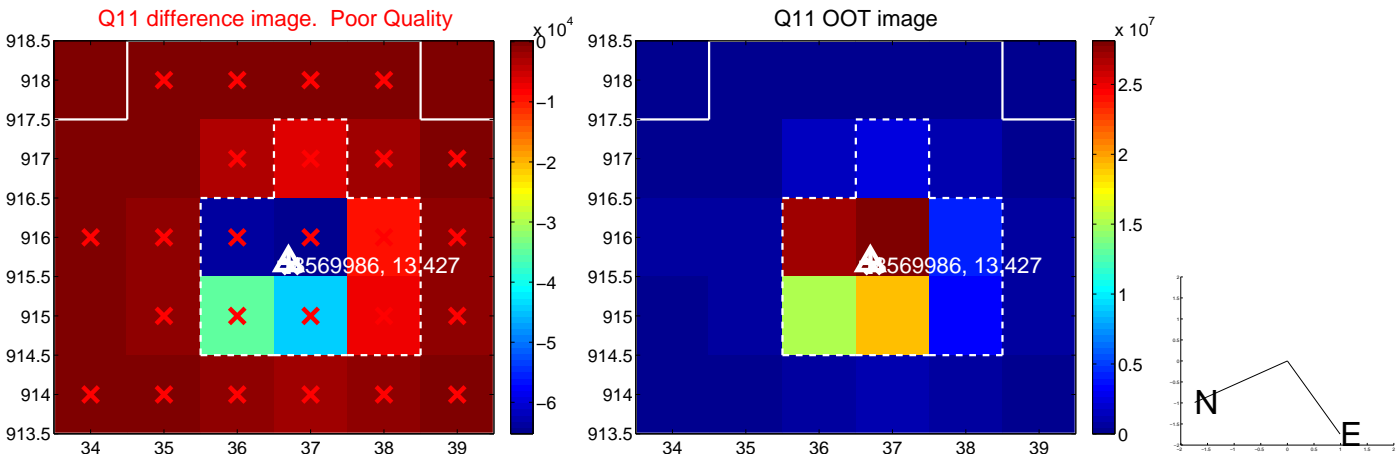
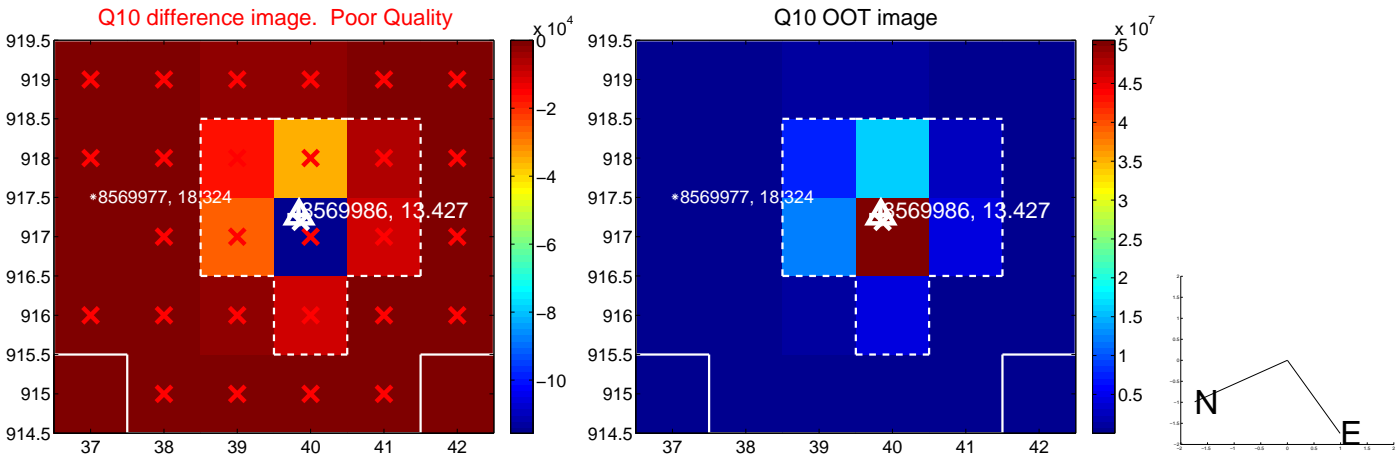
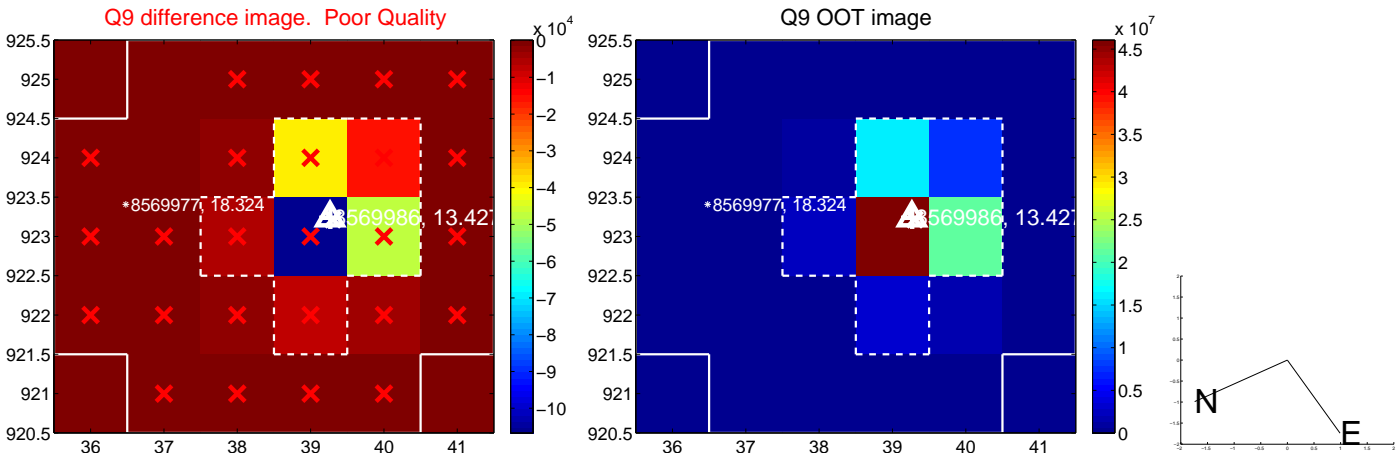
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



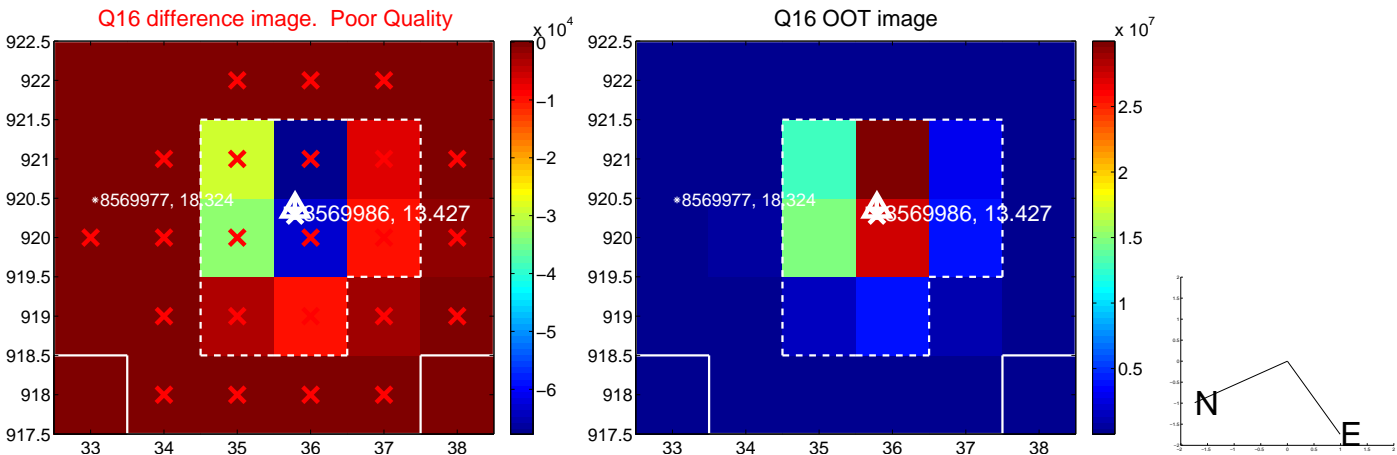
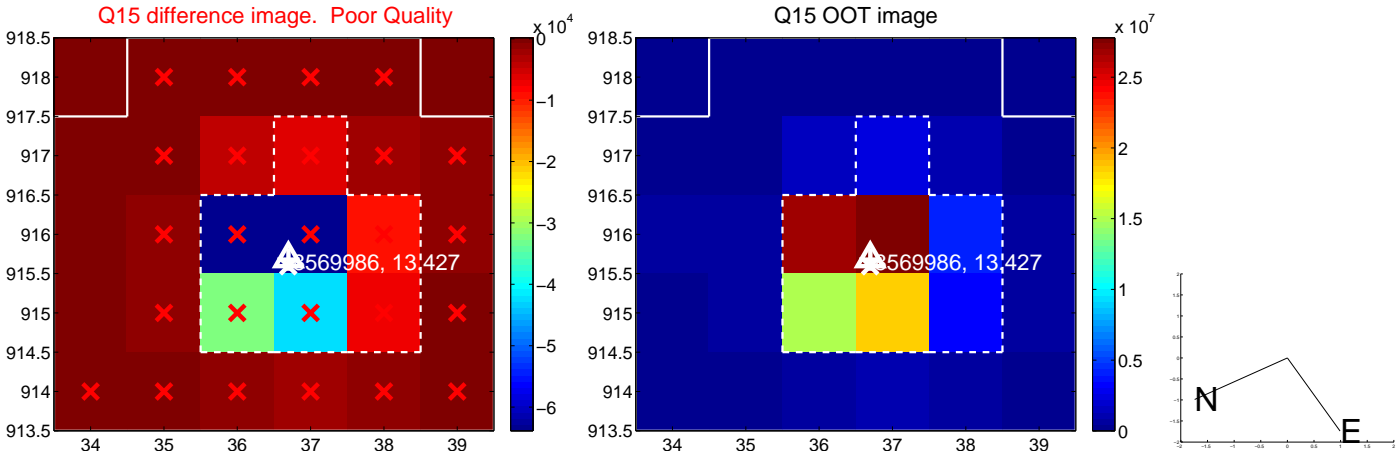
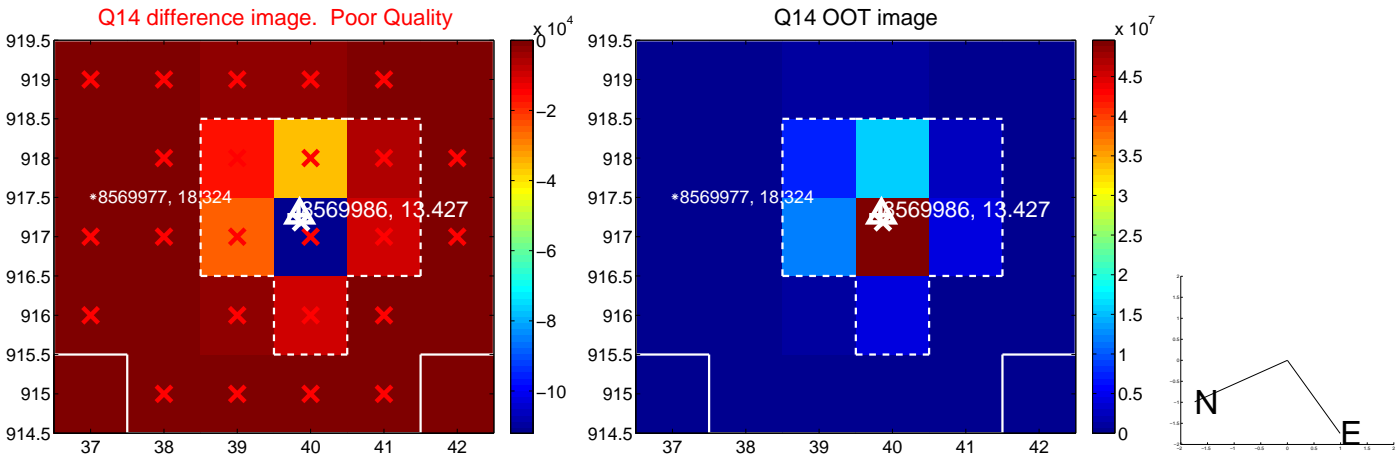
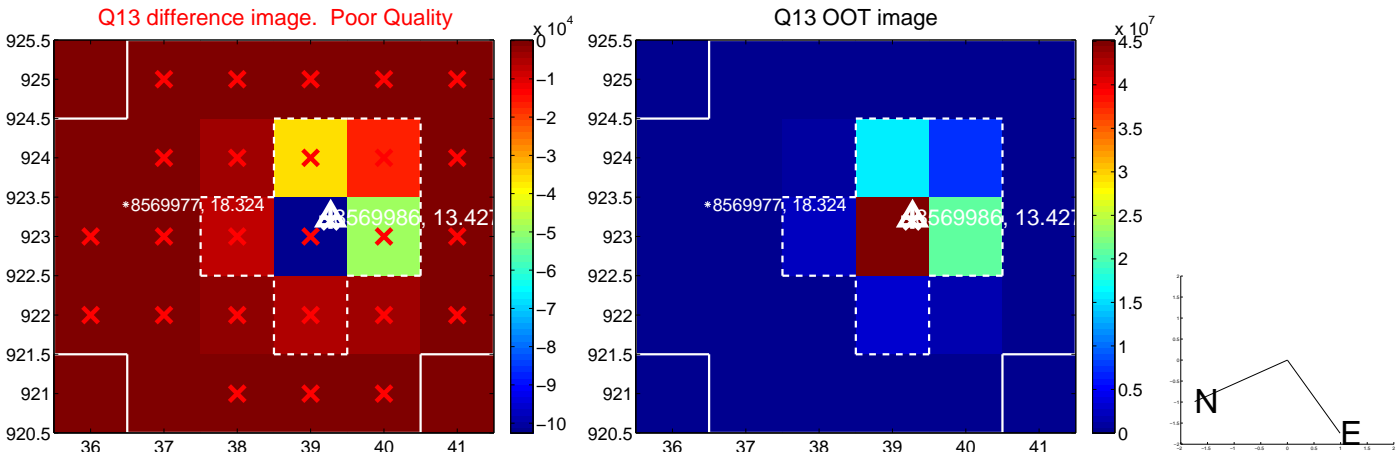
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



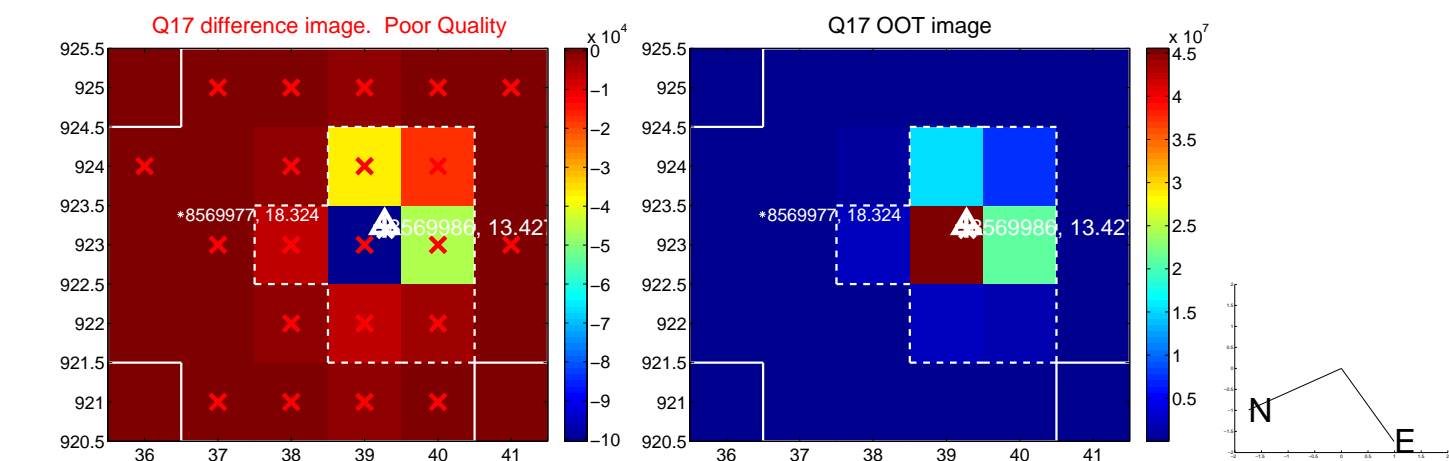
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



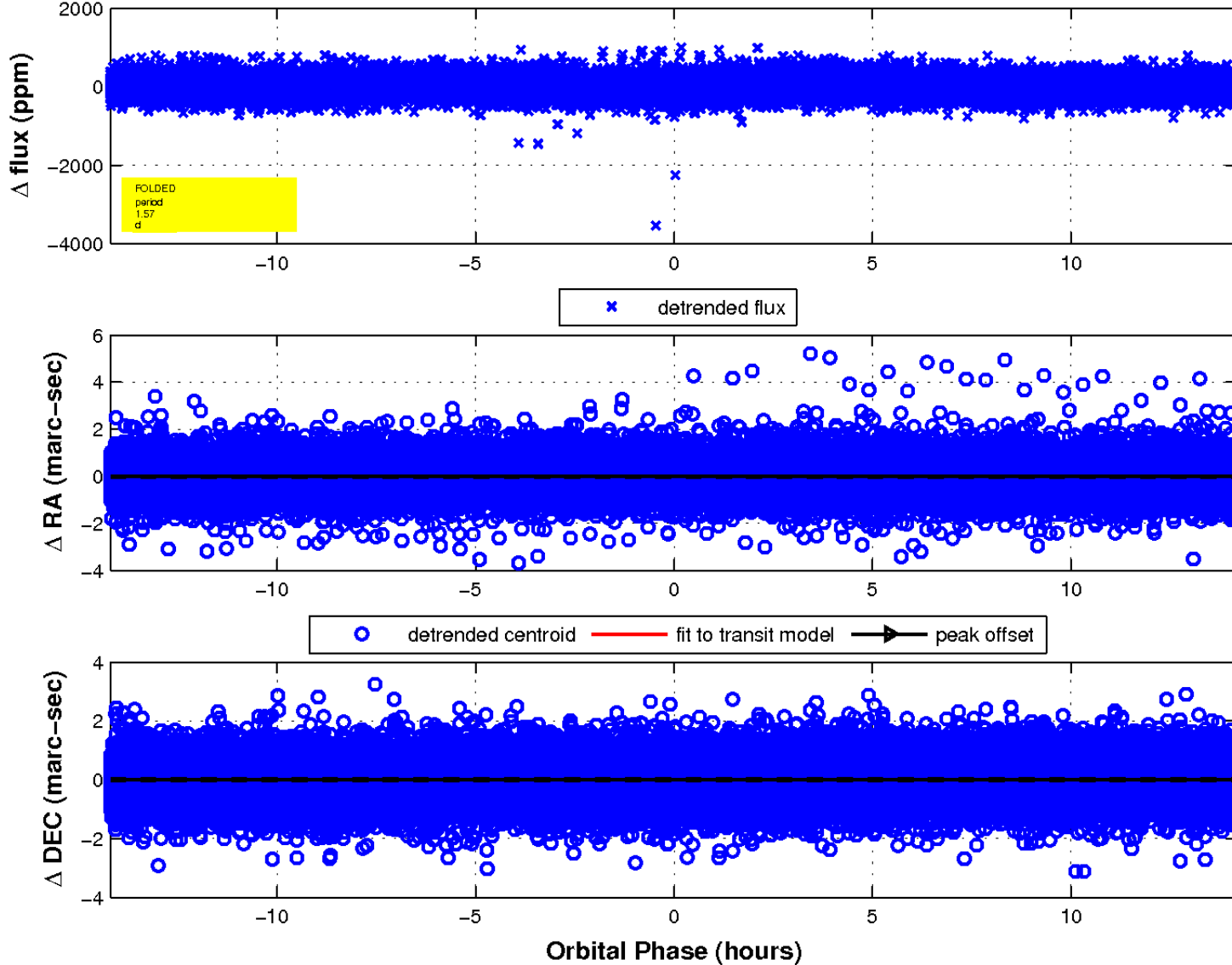
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

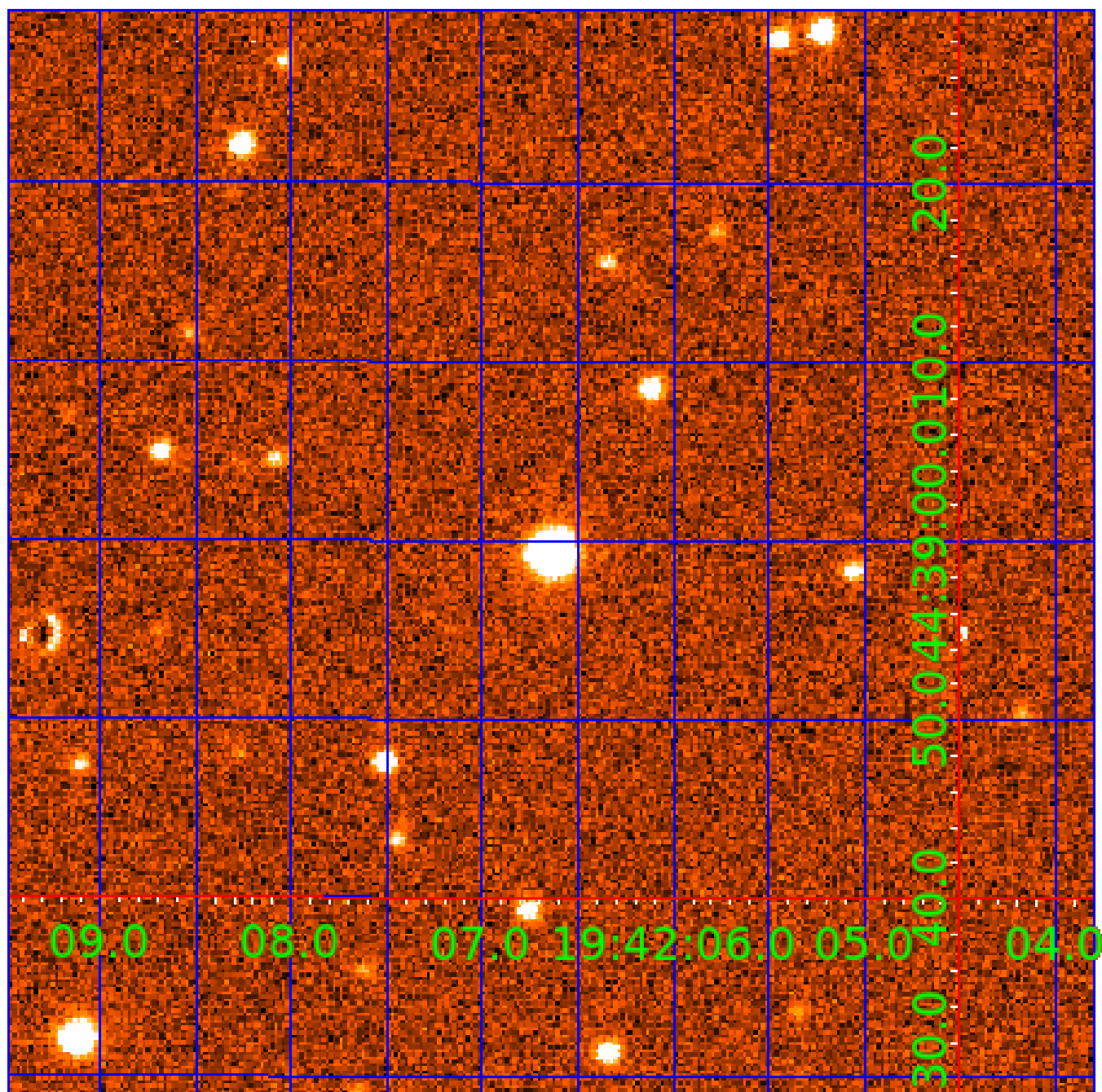


fluxWeightedCentroids, Planet 1 of 3



UKIRT Image

Declination



KIC 008569986

Q1-17 DR25 TCE Parameters

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008569986-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD

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

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

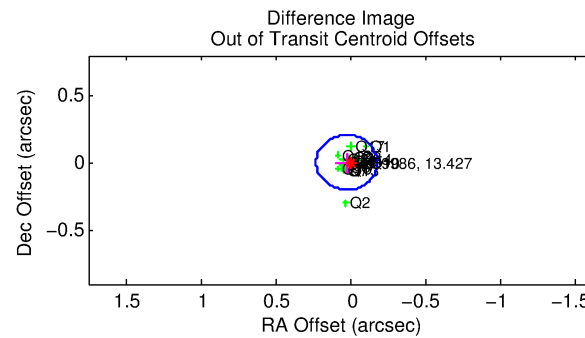
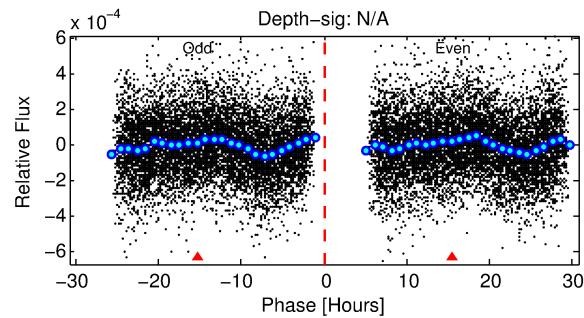
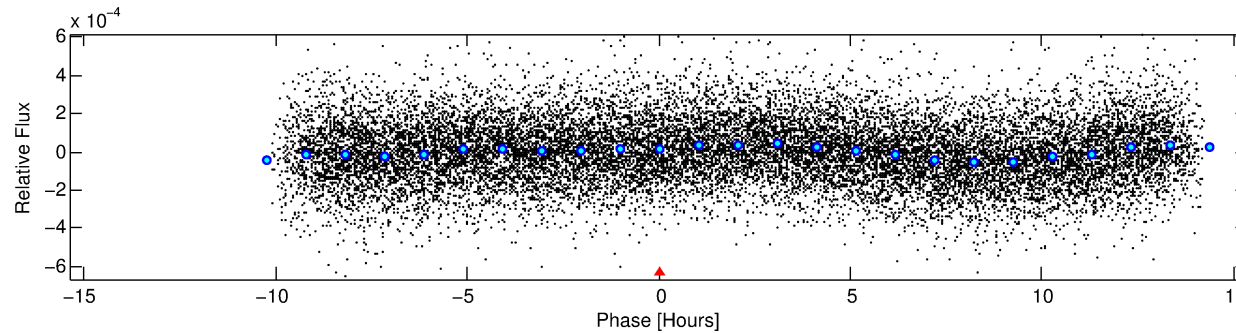
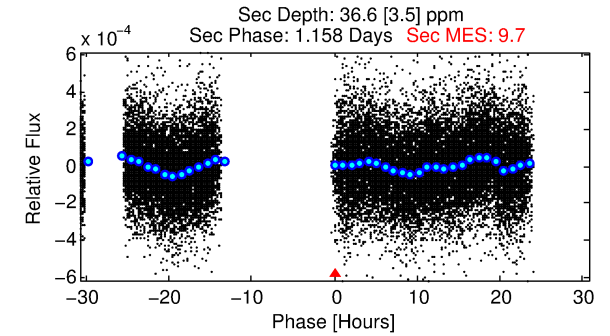
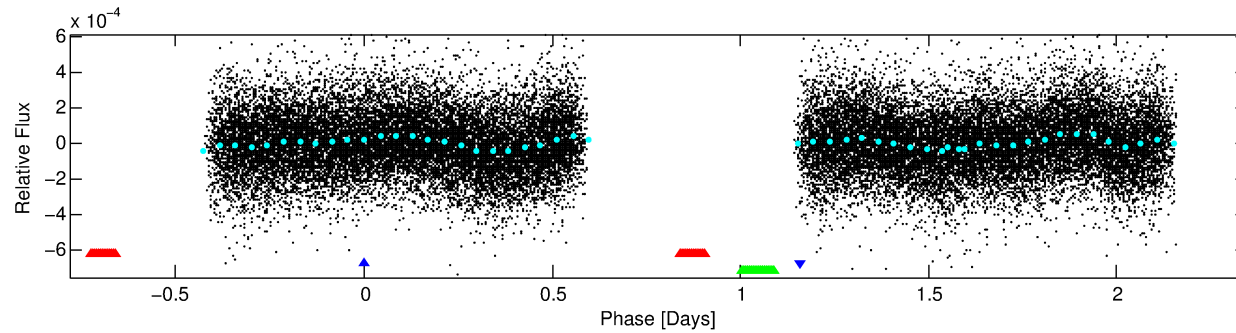
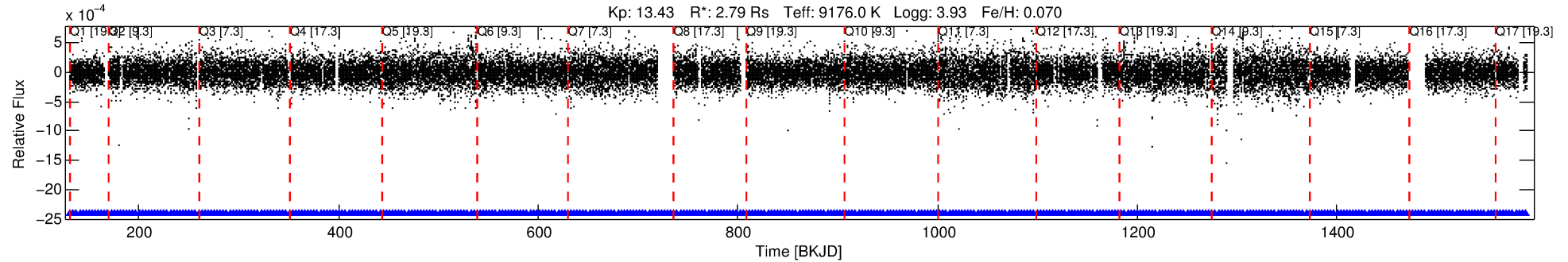
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008569986-02

No Significant Match Found

DV One-Page Summary

KIC: 8569986 Candidate: 2 of 3 Period: 3.133 d



TPS TCE Results:

Period = 3.13335 d
Epoch = 131.8958 BKJD

DV fit results are unavailable

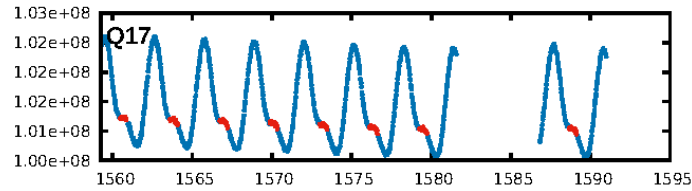
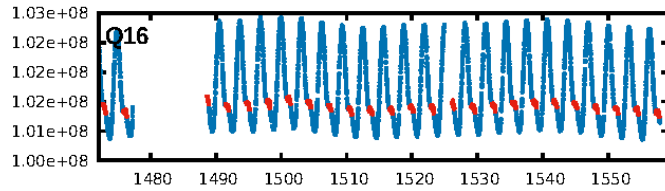
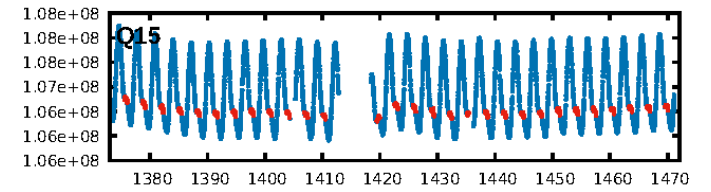
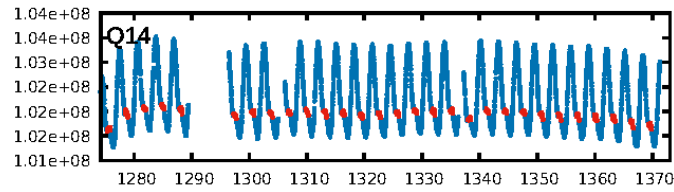
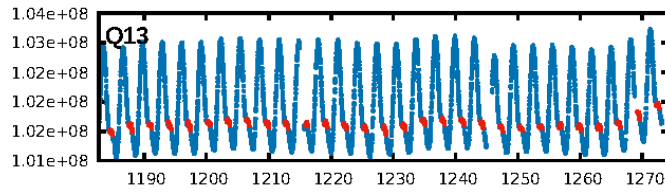
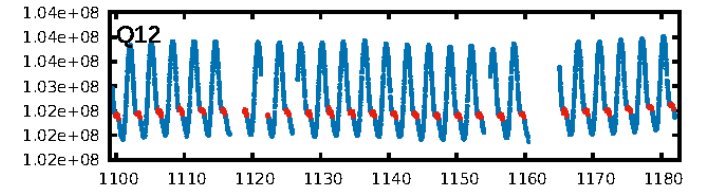
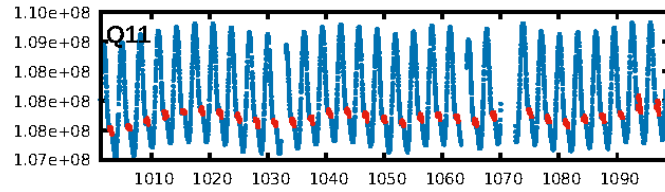
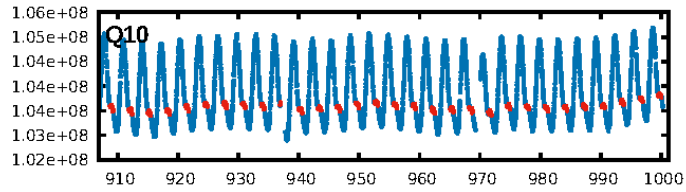
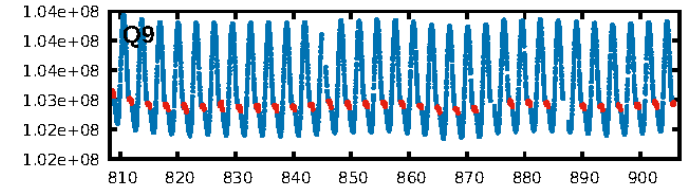
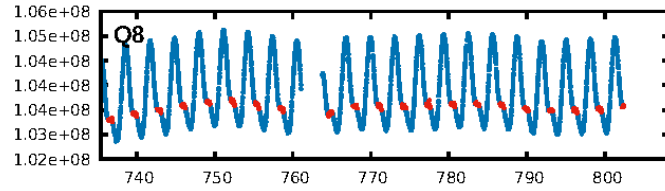
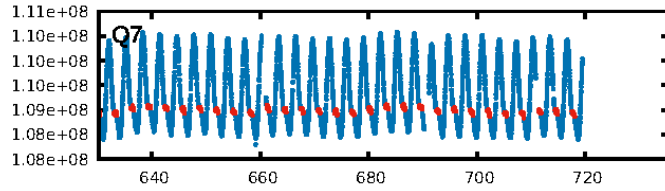
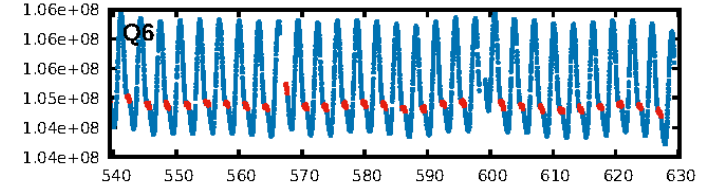
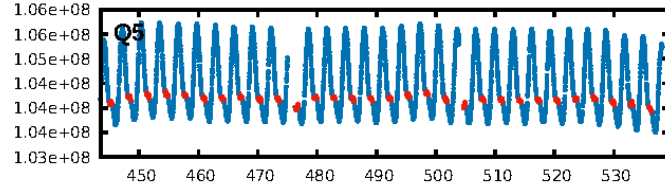
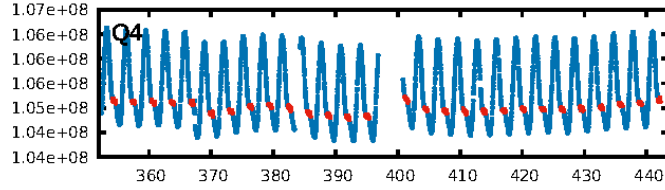
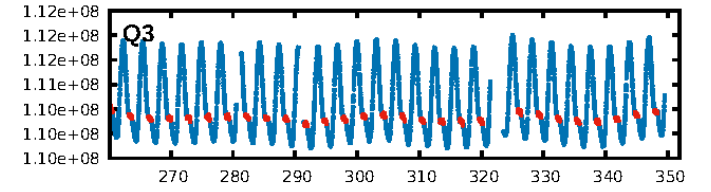
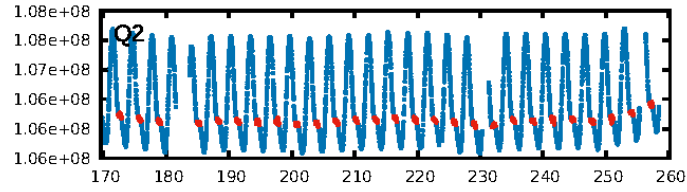
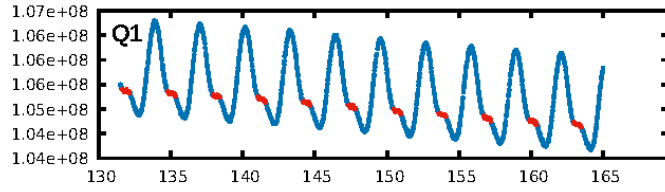
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [4.92 σ]
LongPeriod-sig: 0.0% [0.00 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [406/406]
GhostDiagnostic-chr: 0.04225
Centroid-sig: 0.3%
Centroid-so: 1.354 arcsec [1.88 σ]
OotOffset-rm: 0.024 arcsec [0.35 σ]
KicOffset-rm: 0.240 arcsec [3.32 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

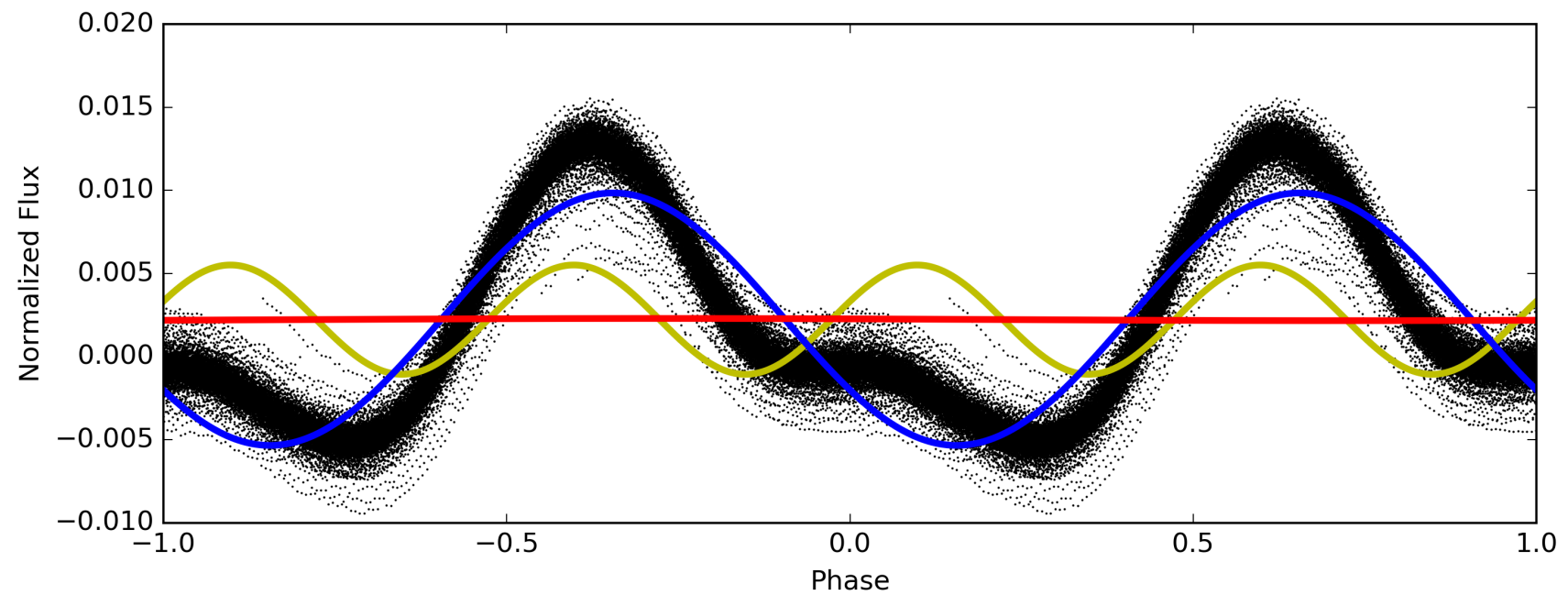
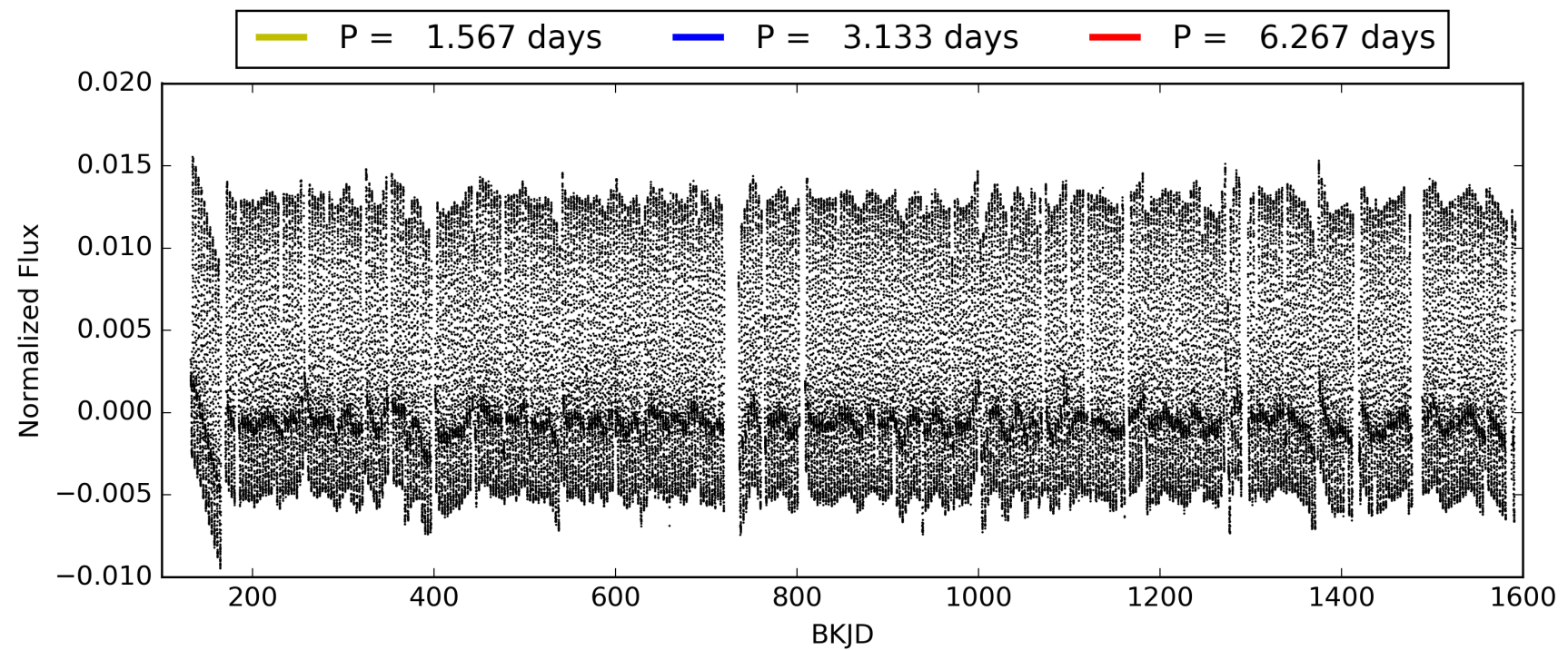
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 06:43:21 Z

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

TCE 008569986-02, PDC Light Curves

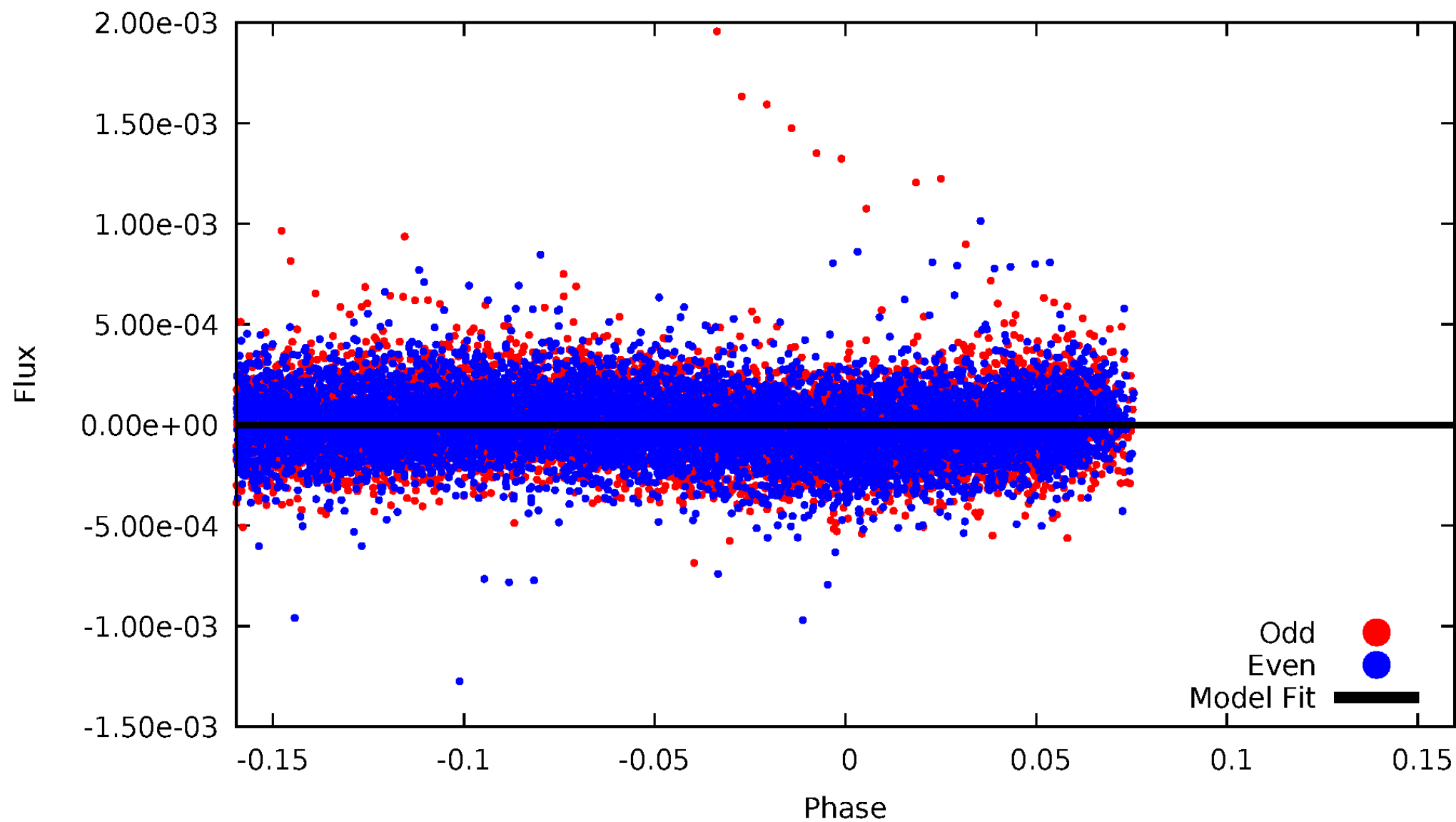


TCE 008569986-02



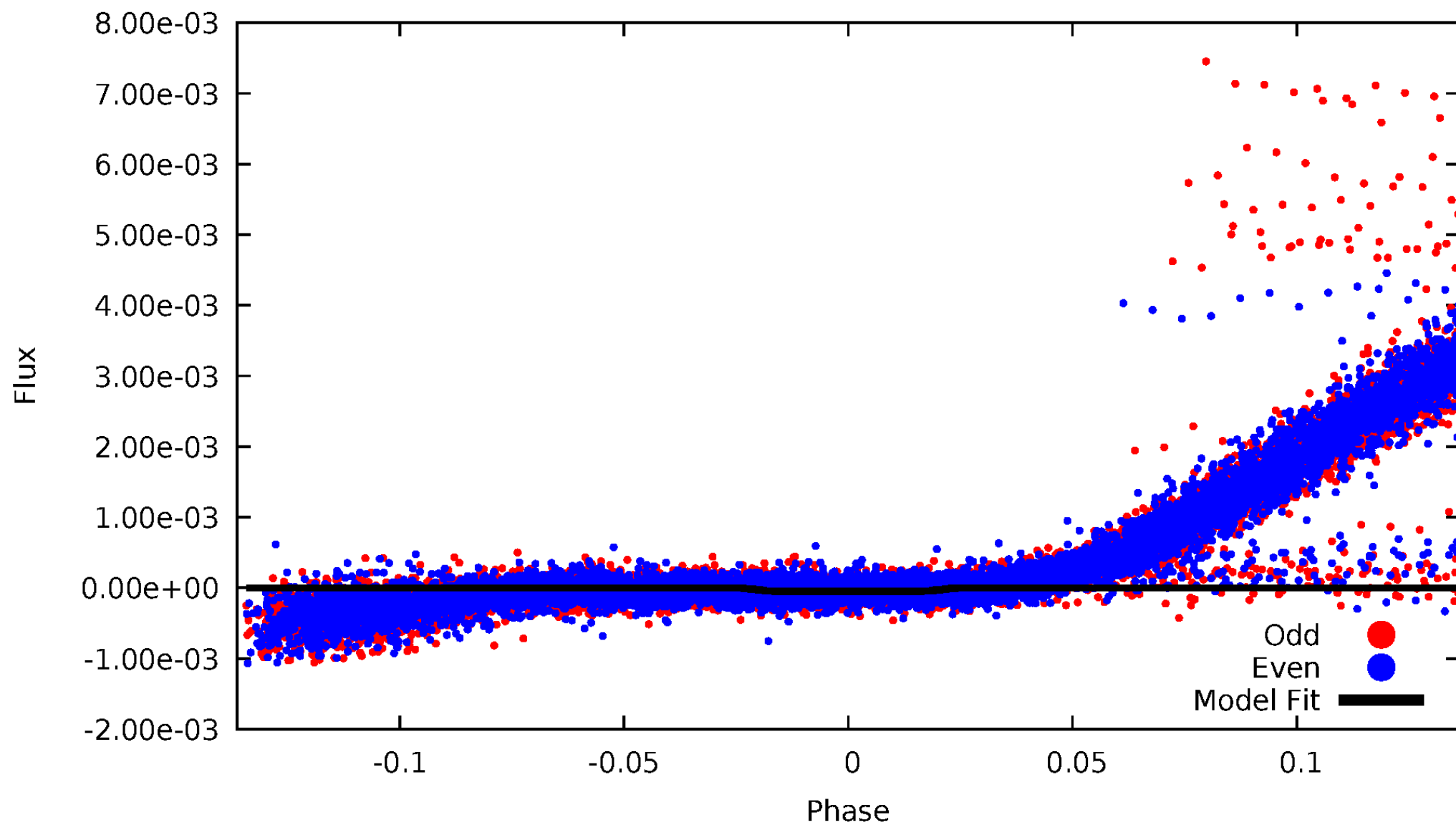
DV Odd/Even

TCE 008569986-02

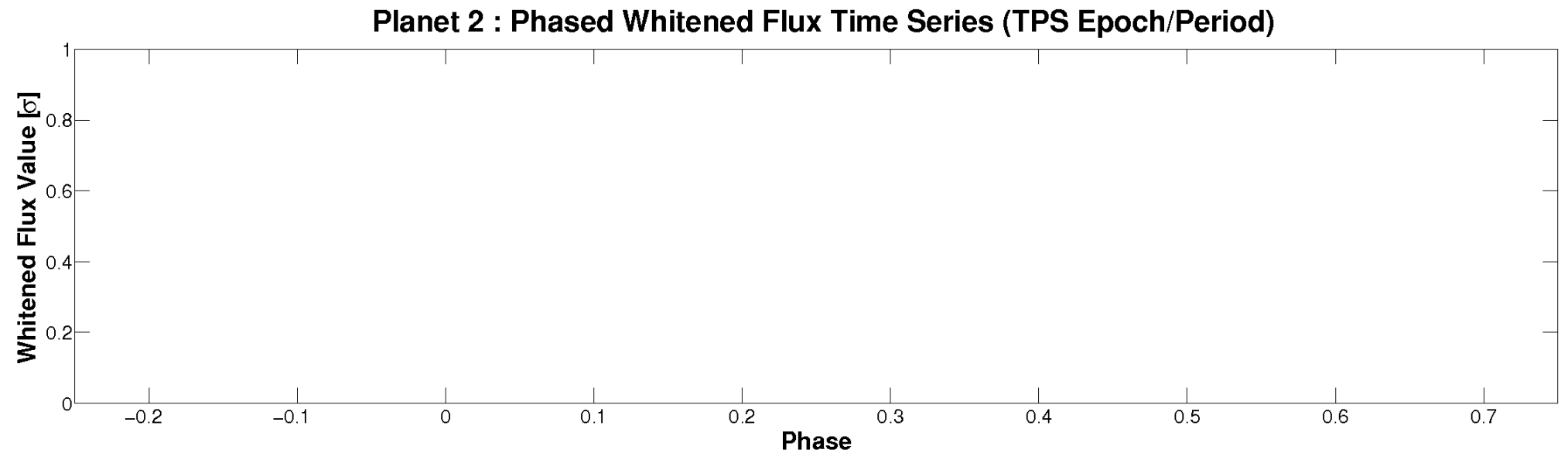
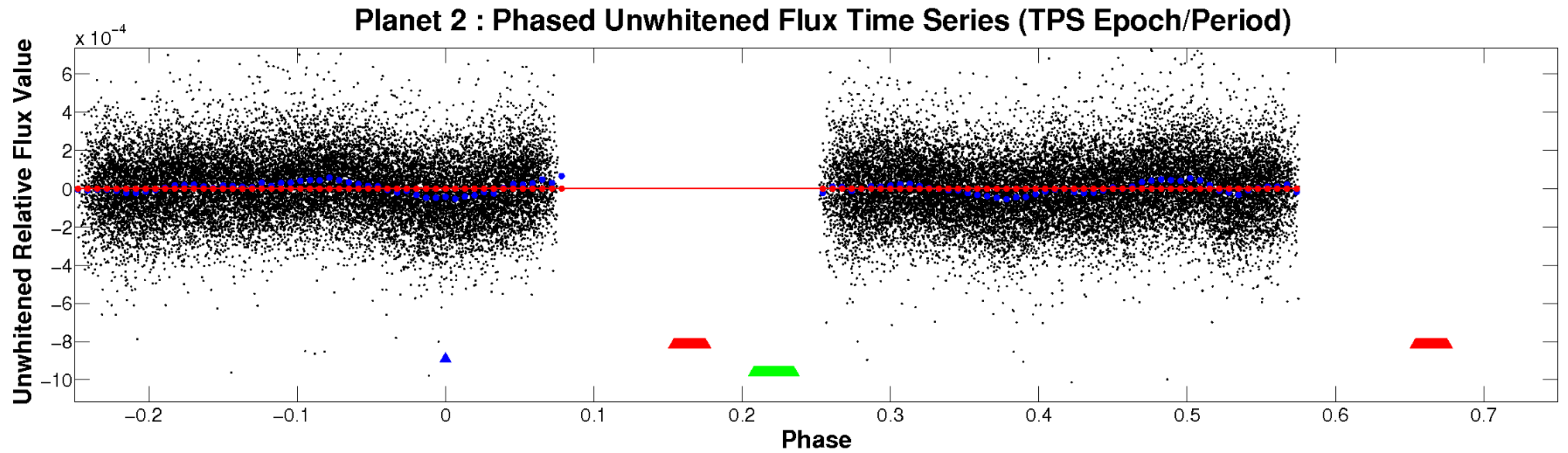


ALT Odd/Even

TCE 008569986-02

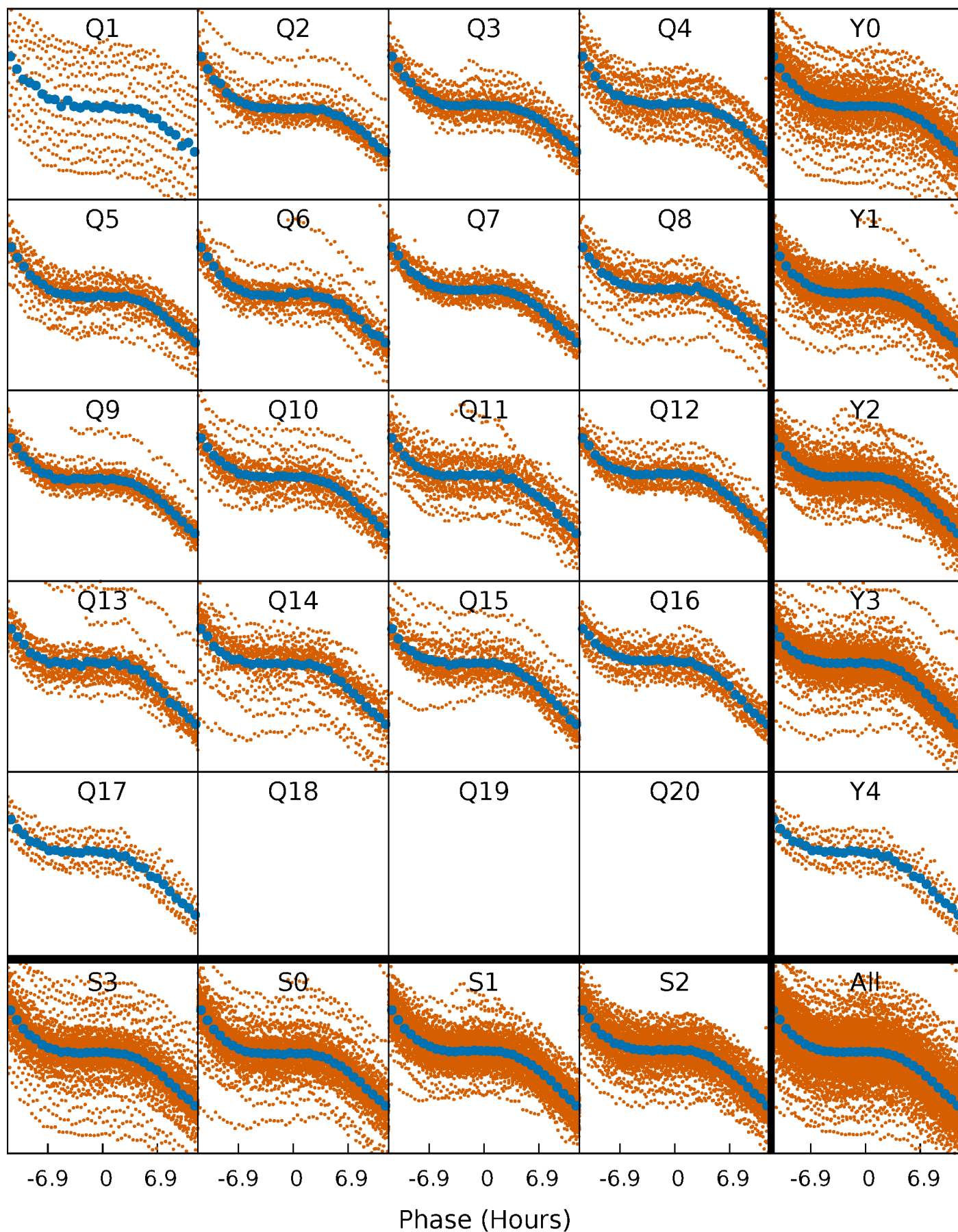


Non-Whitened Vs. Whitened Light Curve



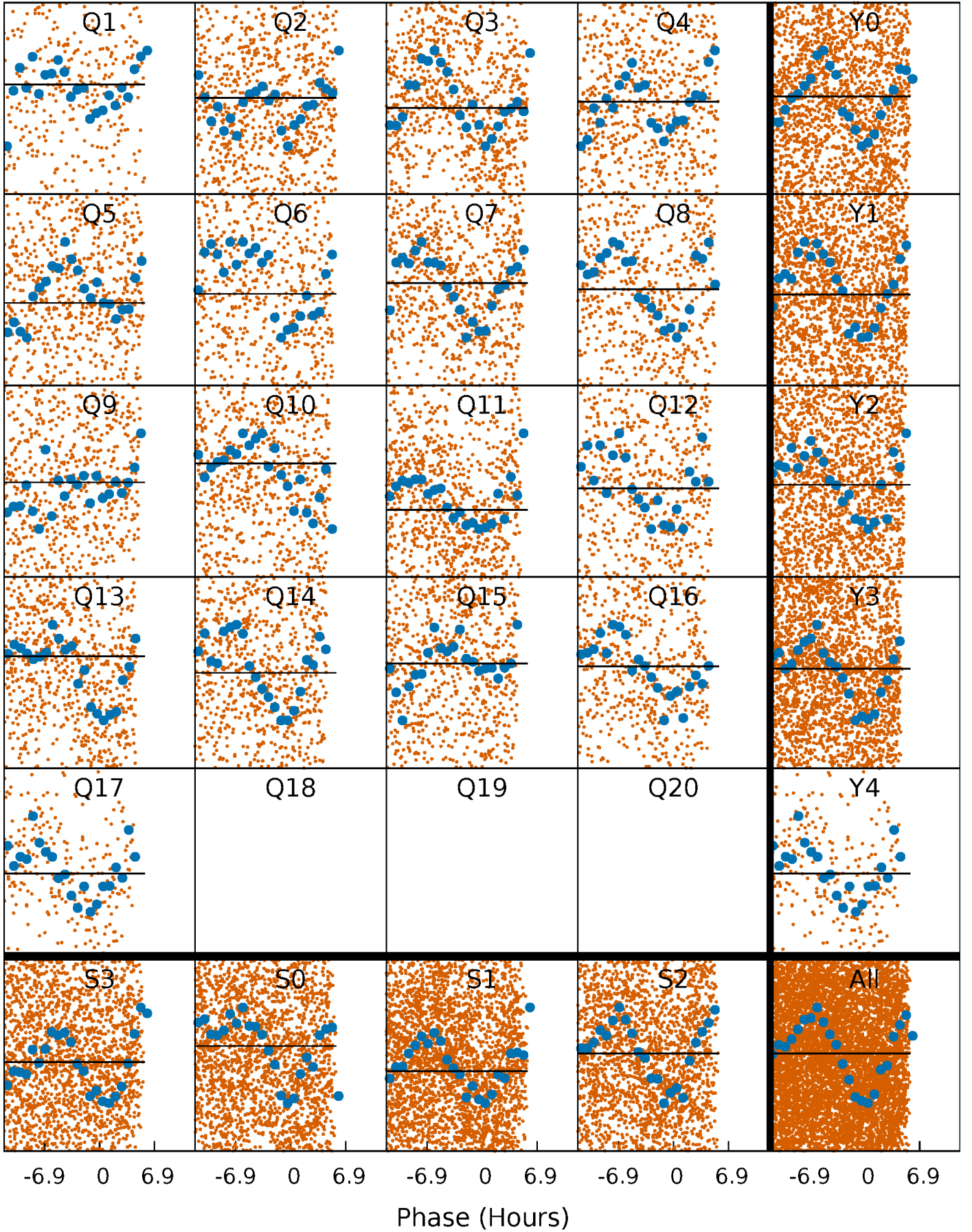
PDC Quarter-Phased Transit Curves

TCE 008569986-02 P= 3.133349 Days $T_0=131.895826$ (BKJD)



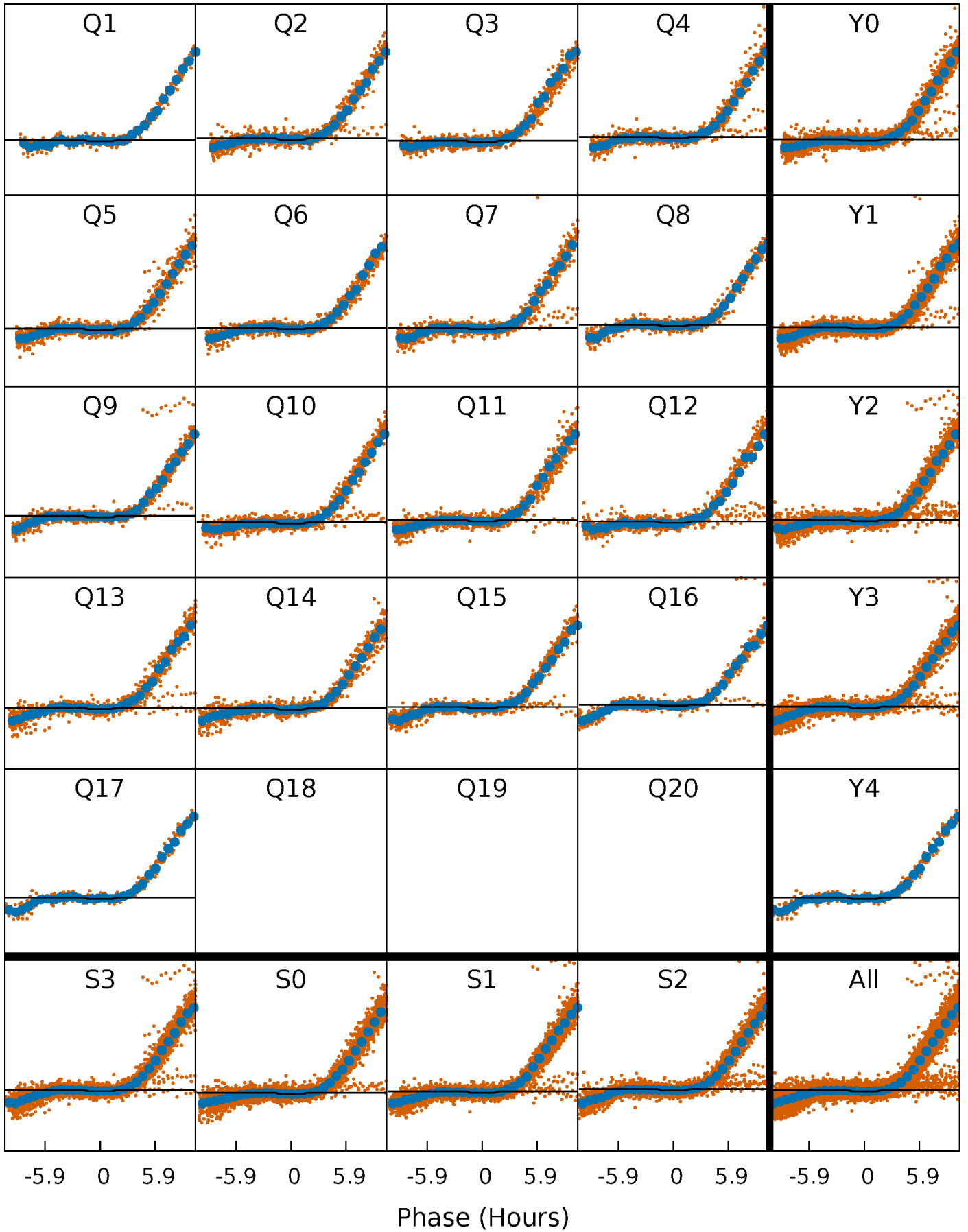
DV Quarter-Phased Transit Curves

TCE 008569986-02 $P = 3.133349$ Days $T_0 = 131.895826$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

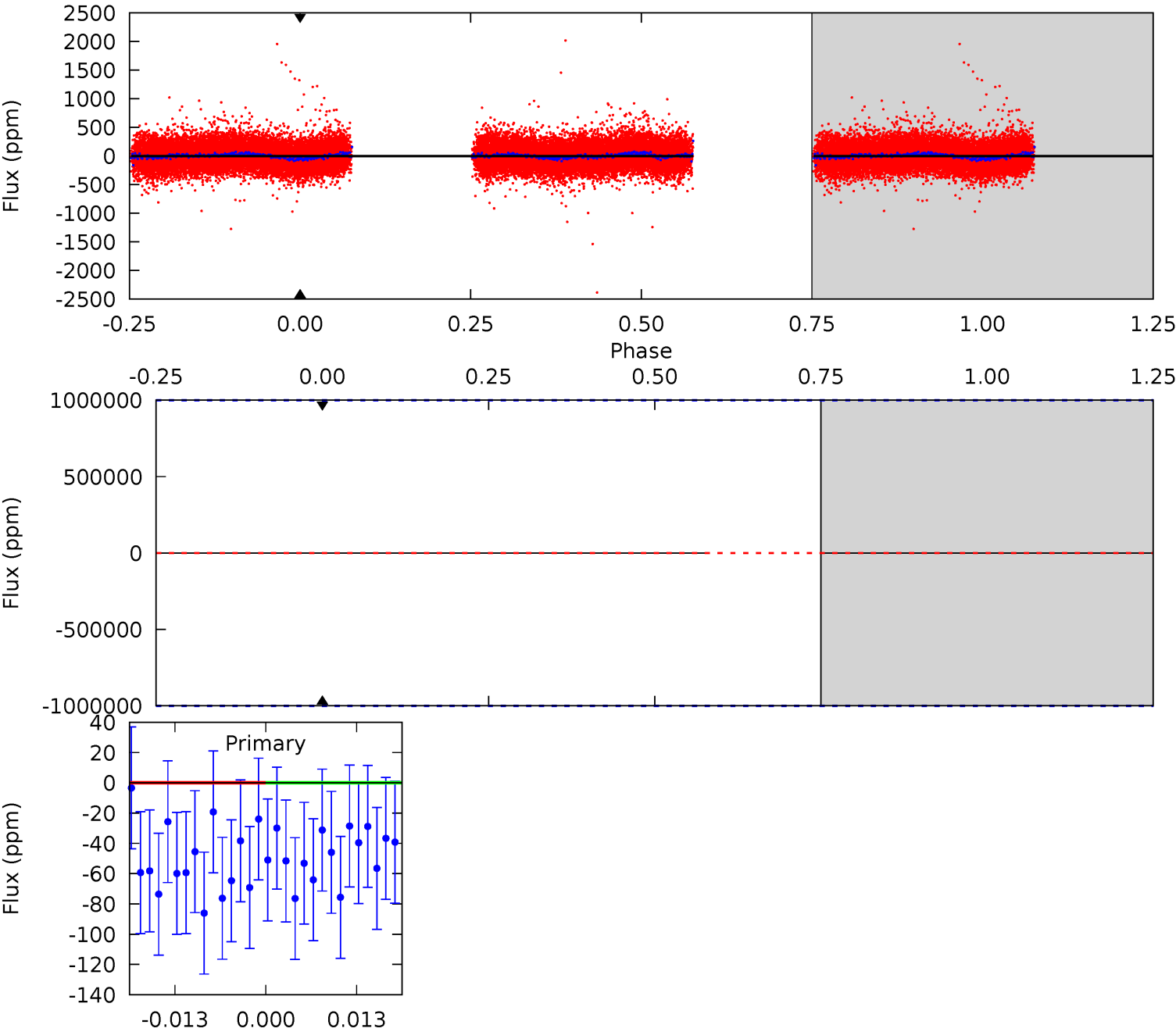
TCE 008569986-02 $P = 3.133349$ Days $T_0 = 131.540482$ (BKJD)



DV Model-Shift Uniqueness Test

008569986-02, P = 3.133349 Days, E = 128.762477 Days

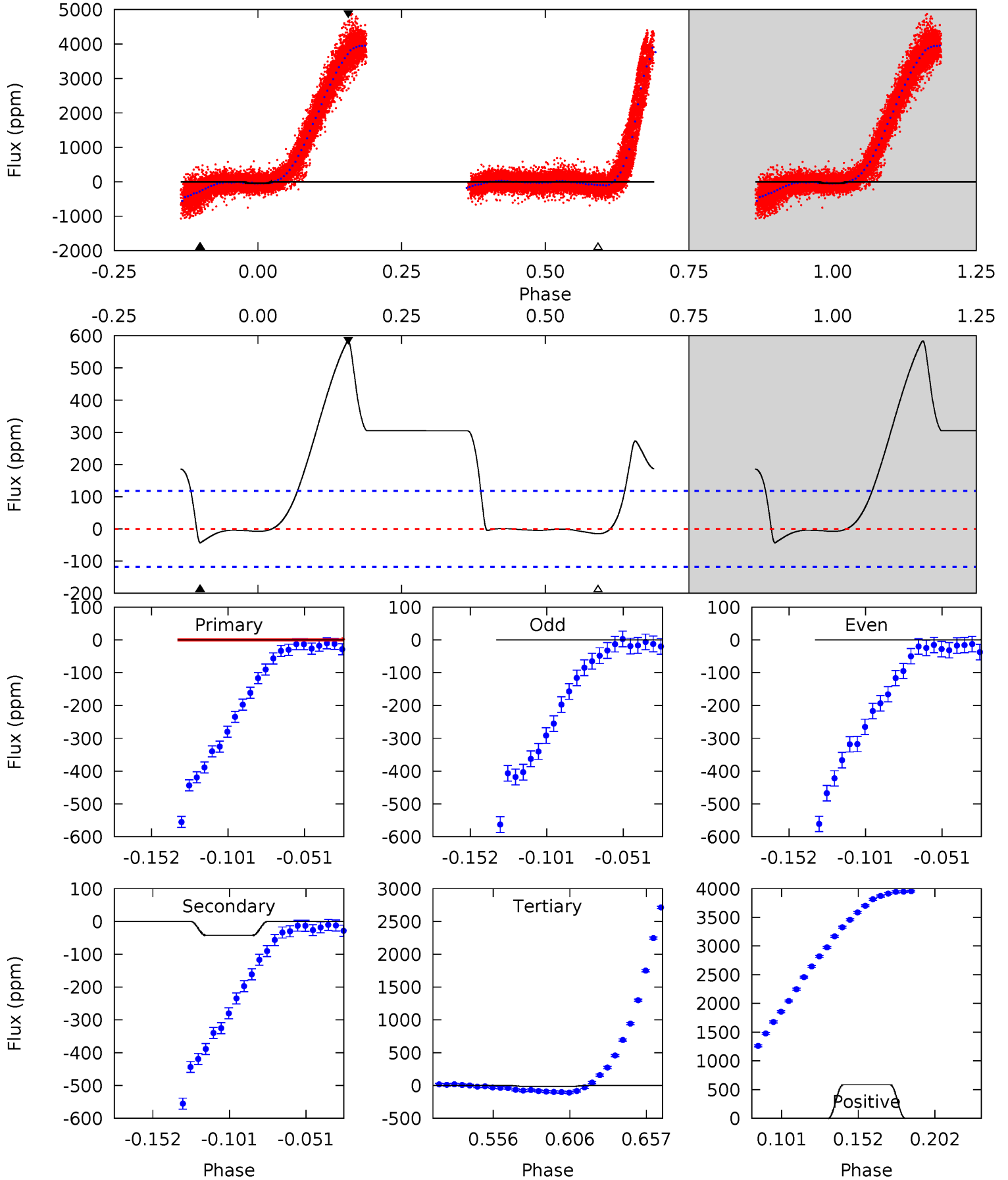
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

008569986-02, P = 3.133349 Days, E = 128.407133 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.72	1.69	0.61	23.3	4.71	1.96	6.77	1.11	-21.6	1.08	-21.6	0.05	1.08	0.93	0.07



Stellar Parameters For KIC 008569986

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	9176^{+255}_{-438}	$3.929^{+0.270}_{-0.180}$	$0.070^{+0.150}_{-0.700}$	$2.786^{+0.904}_{-1.104}$	$2.402^{+0.377}_{-0.753}$	$0.157^{+0.302}_{-0.081}$
	+3%/-5%	+7%/-5%	+214%/-1000%	+32%/-40%	+16%/-31%	+193%/-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 008569986-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$21.27^{+22.13}_{-14.56}$	3926^{+356}_{-393}	4686^{+57844}_{-66463}	$1.597^{+601.381}_{-640.802}$
Alt.	-42 ± 25	$20.33^{+23.20}_{-14.54}$	3940^{+347}_{-405}	-3099^{+7712}_{-457}	$0.139^{+1.553}_{-0.119}$

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

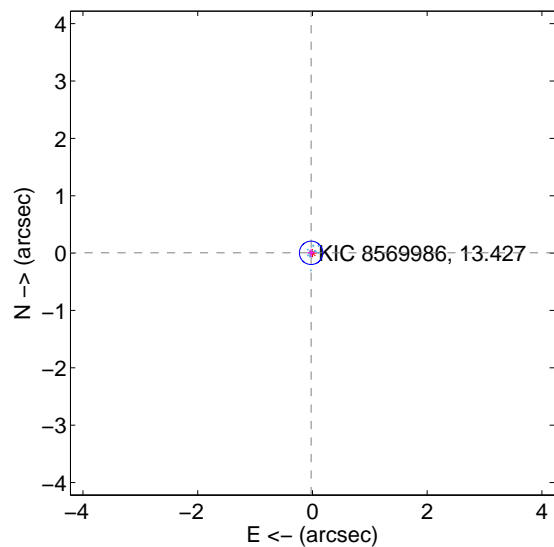
Supplemental centroid analysis for 008569986-02. Kepler magnitude: 13.43. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

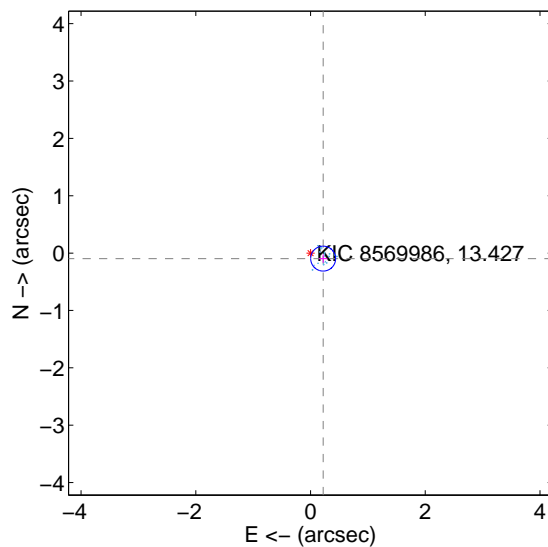
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.024 ± 0.068	0.35	0.023 ± 0.068	0.005 ± 0.069
PRF-fit source offset from KIC position	0.240 ± 0.072	3.32	-0.220 ± 0.072	-0.096 ± 0.073
photometric centroid source offset	1.35 ± 0.72	1.88	0.17 ± 0.68	-1.34 ± 0.72

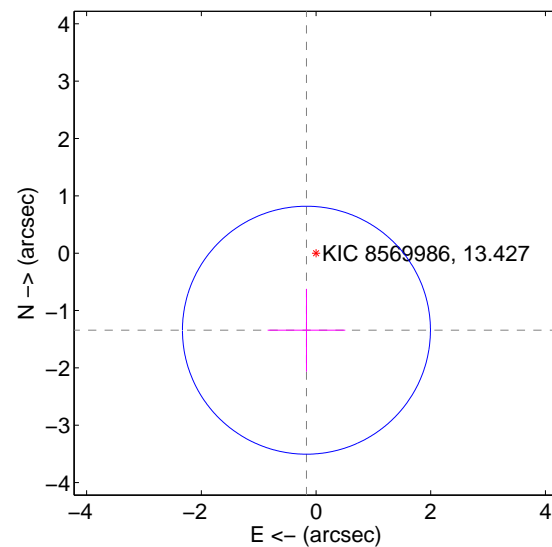
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

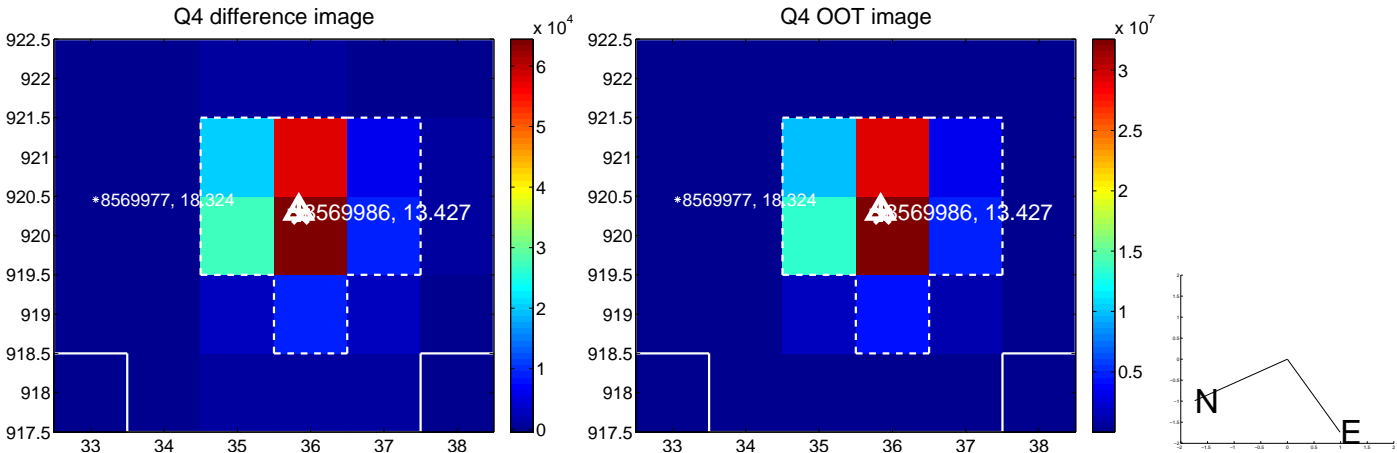
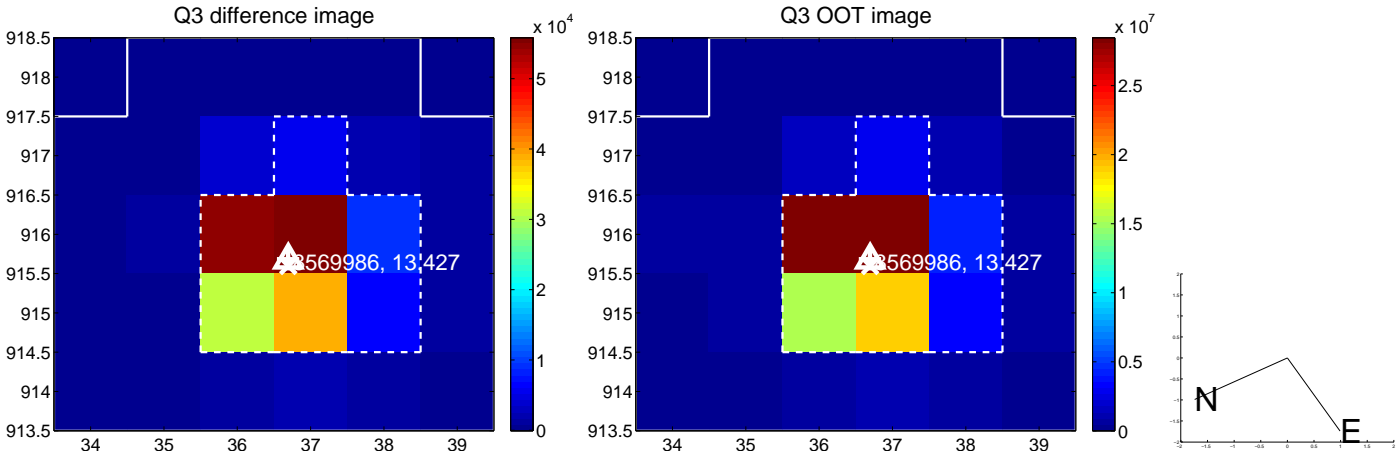
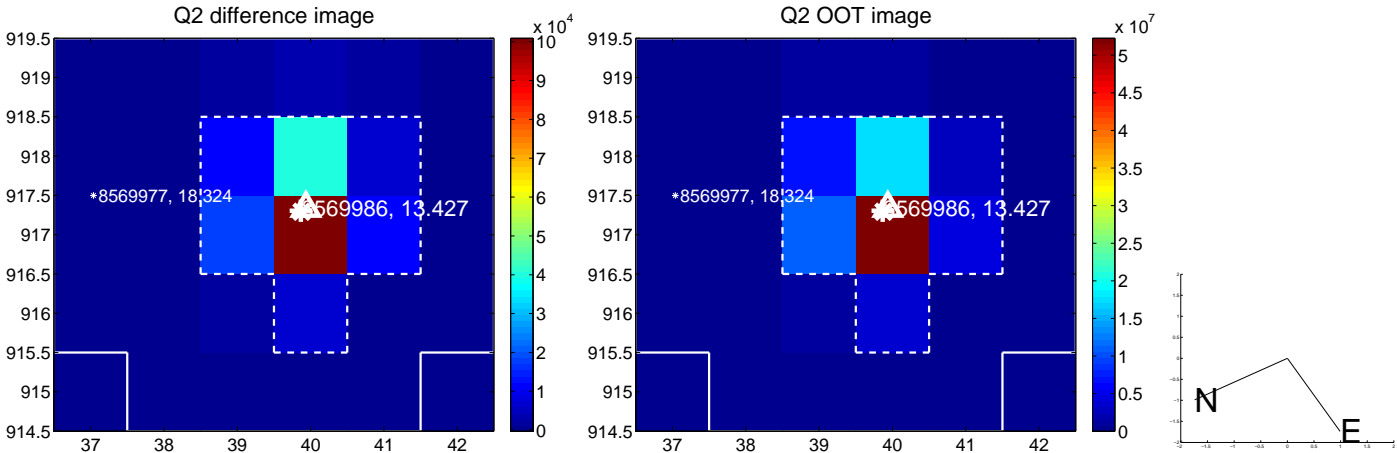
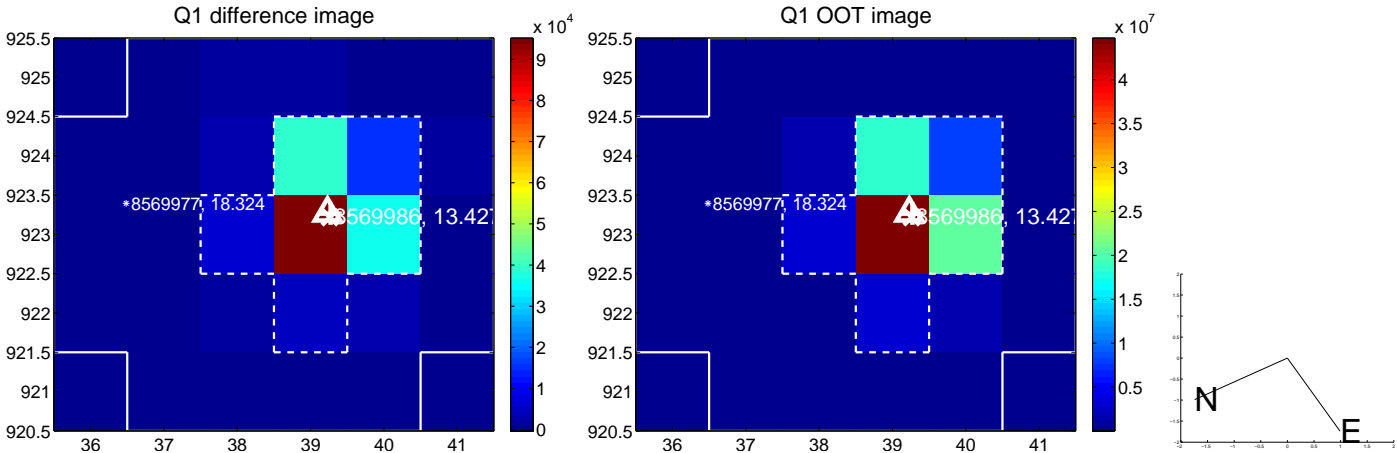


offset from photometric centroids

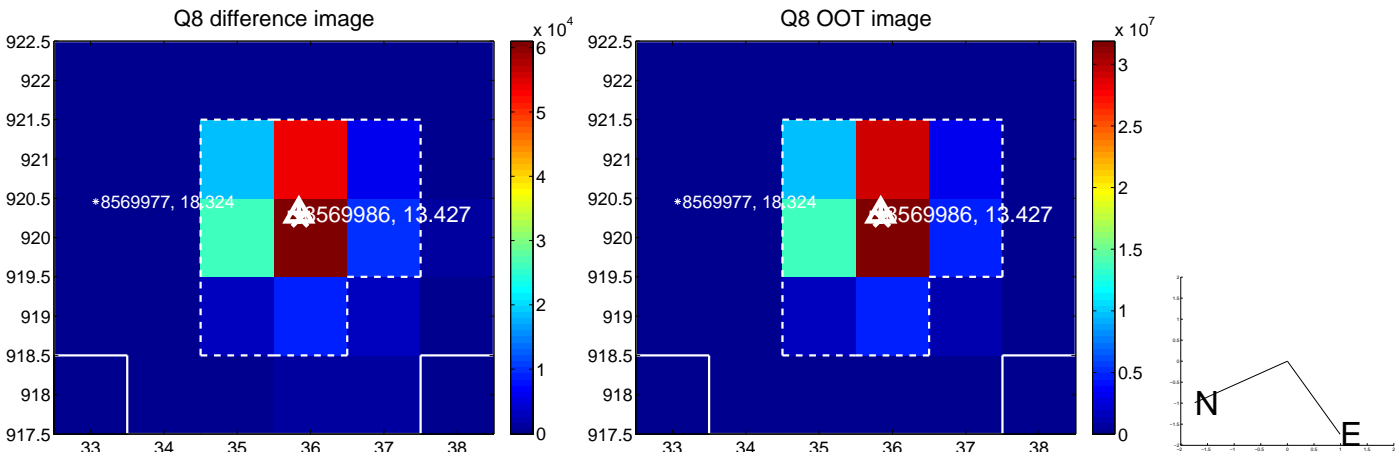
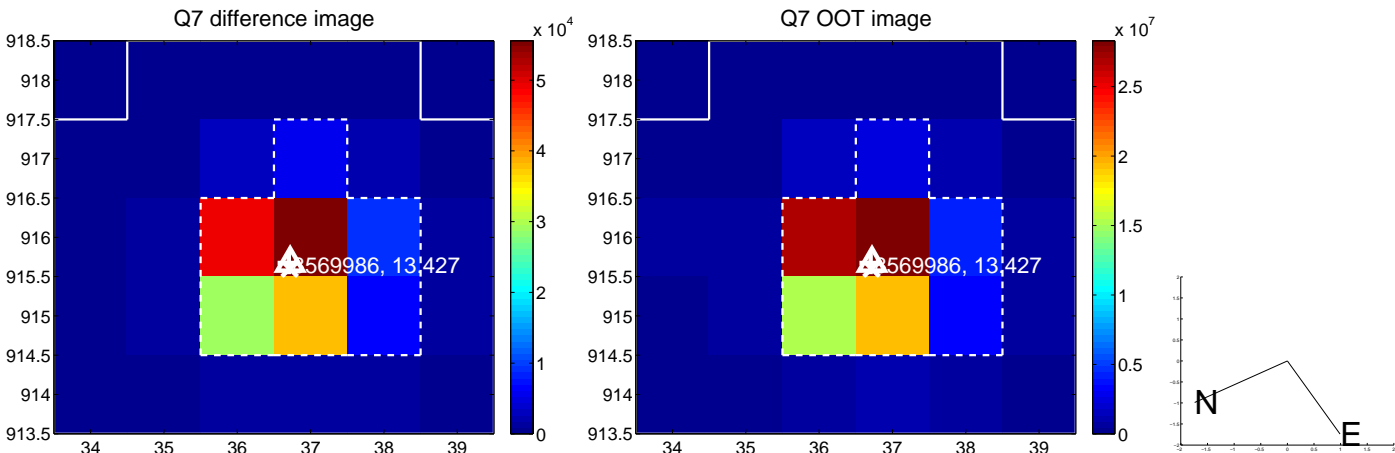
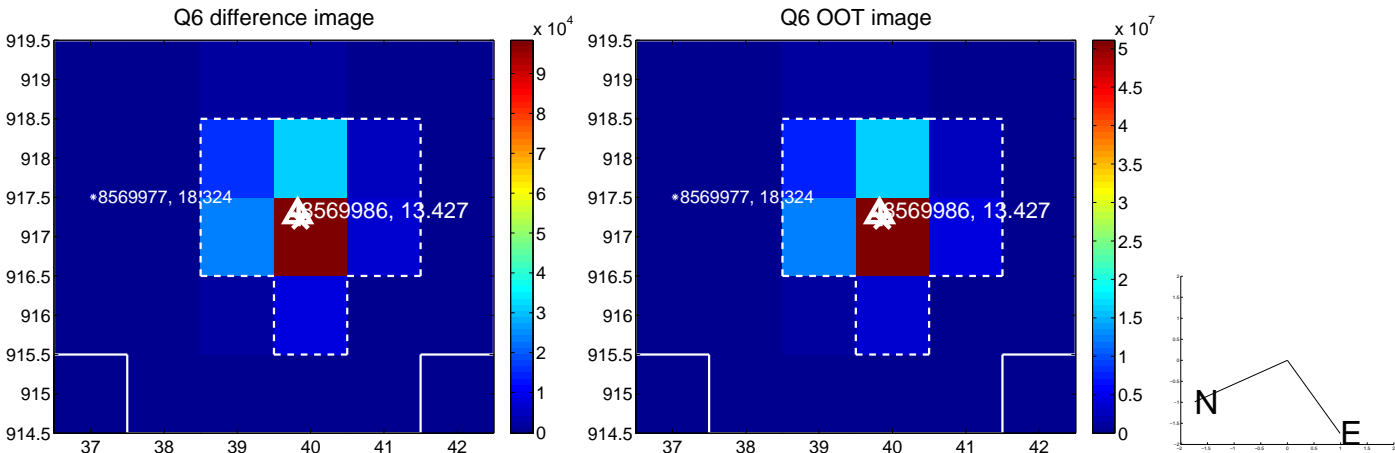
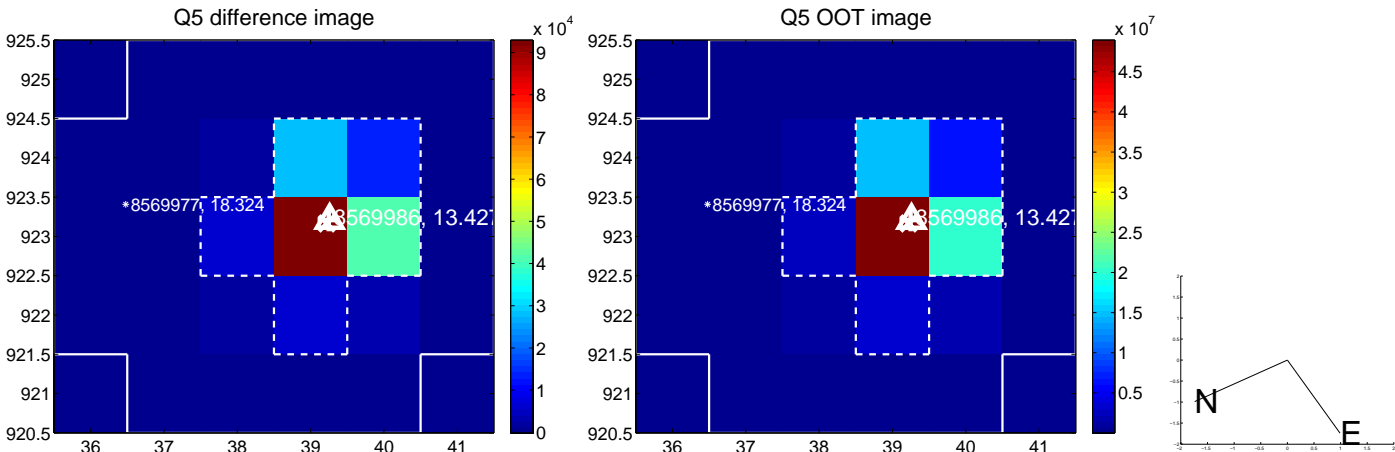


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

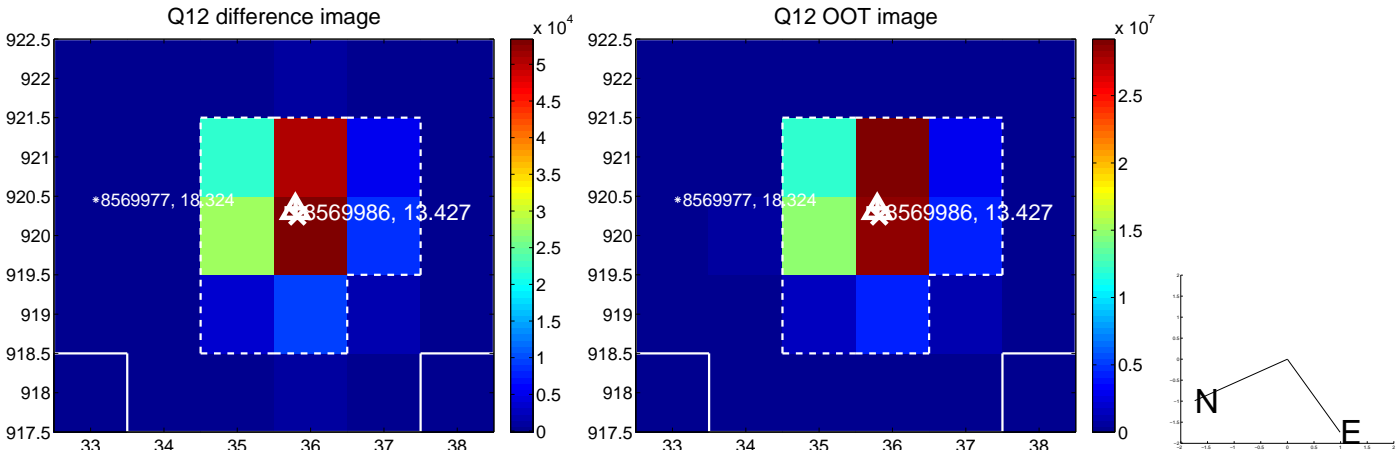
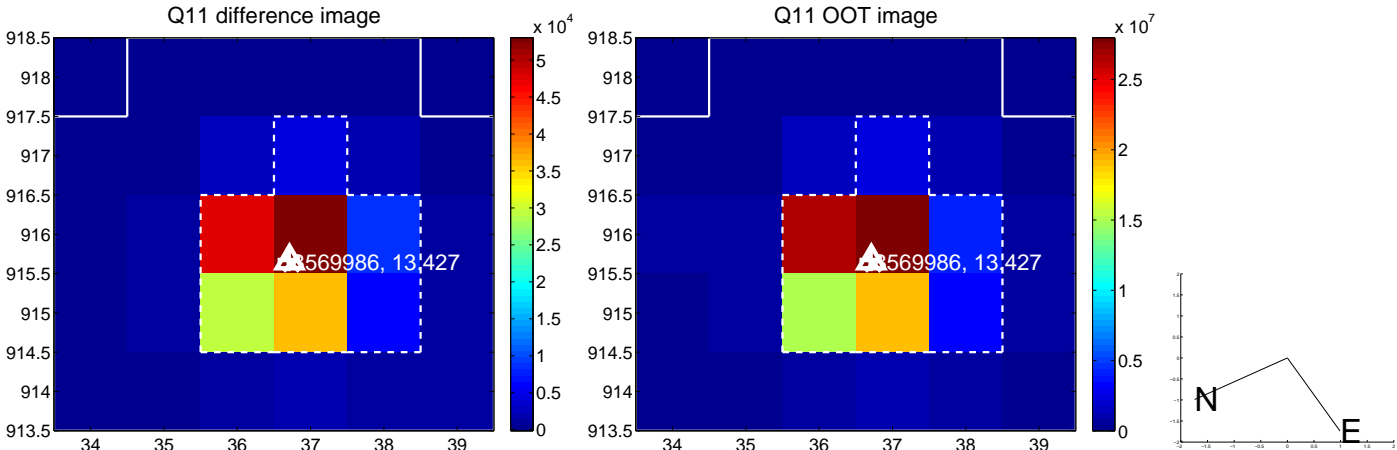
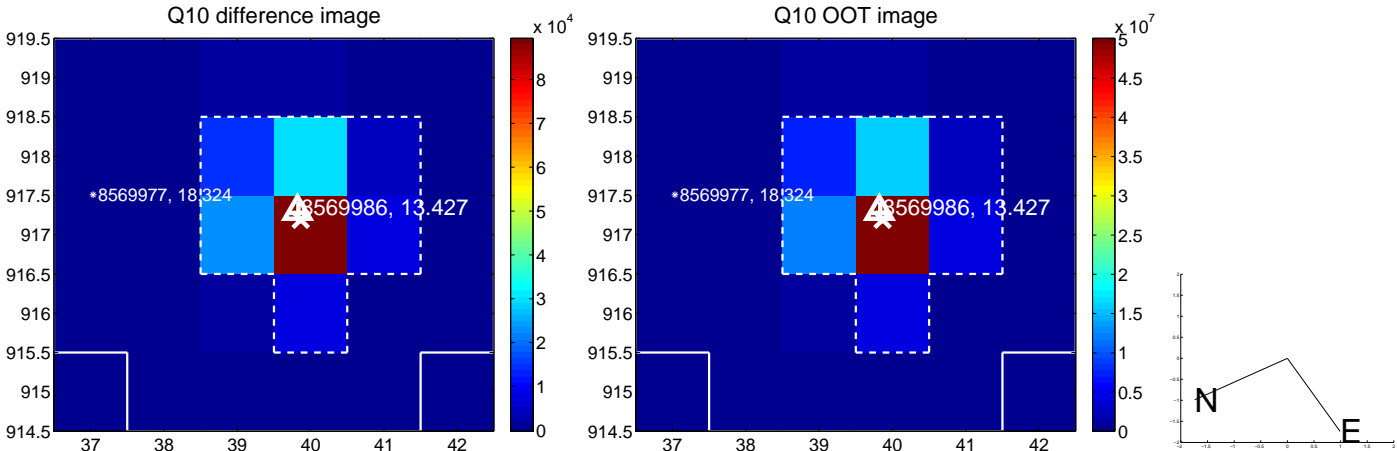
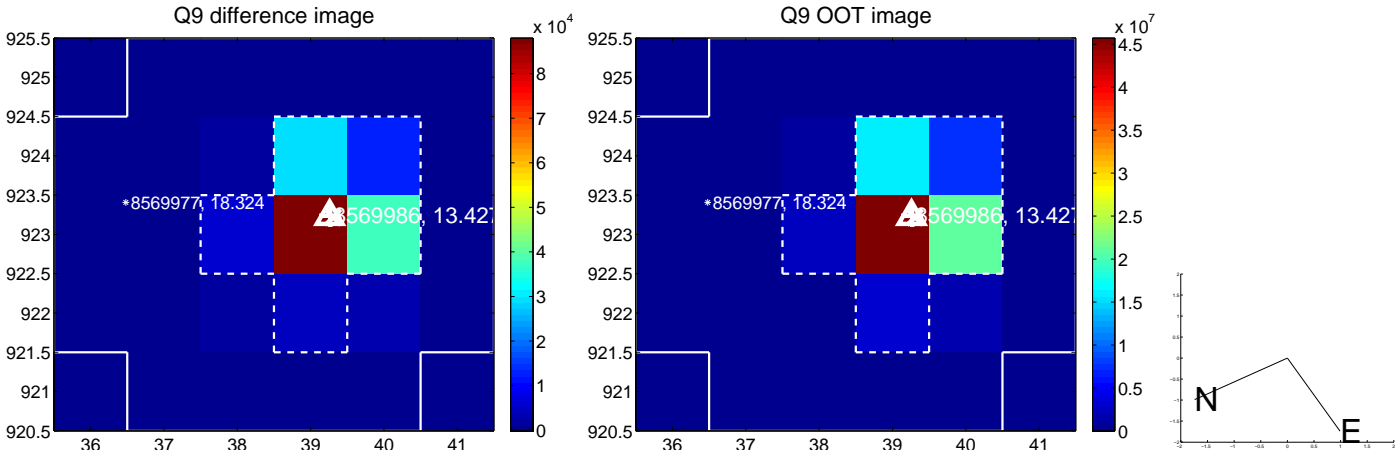
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



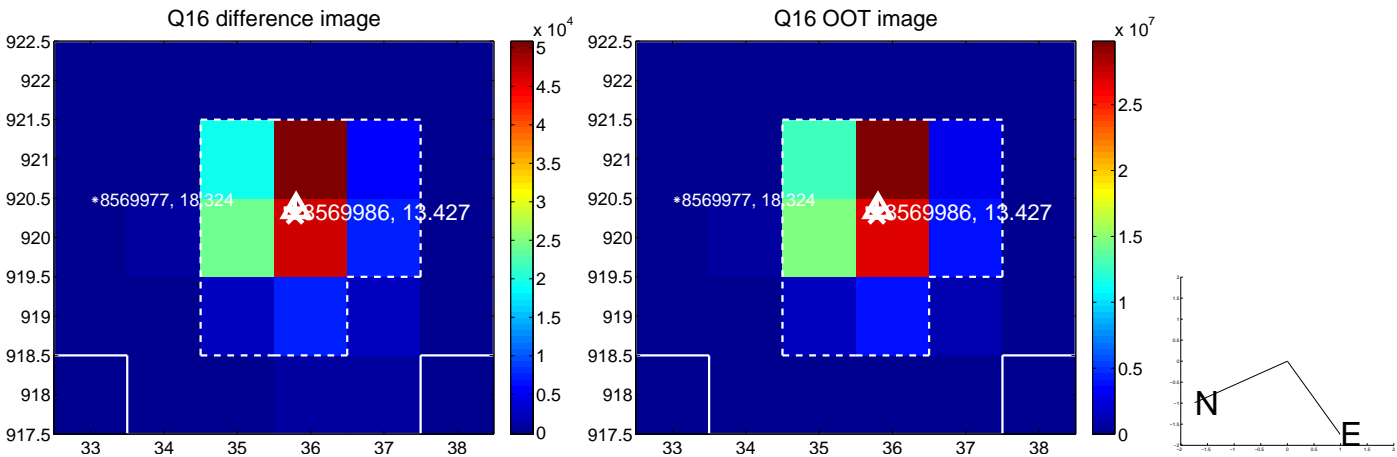
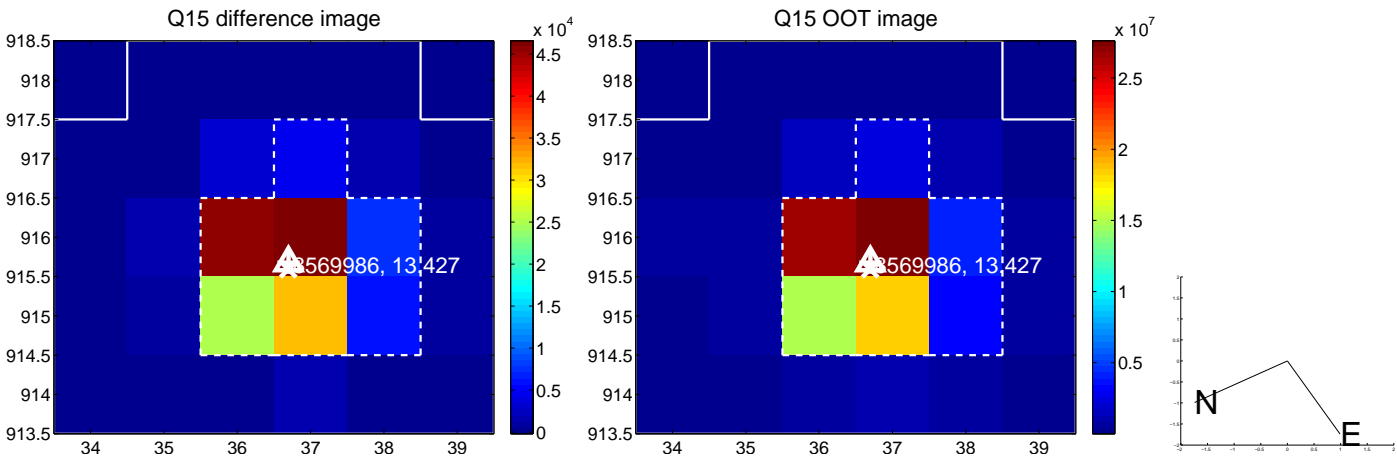
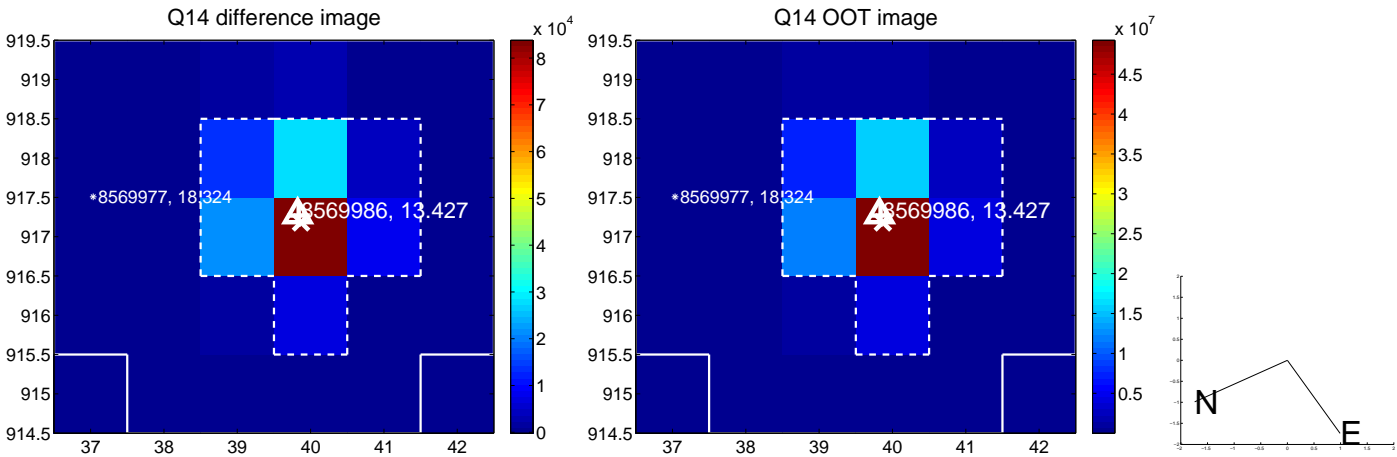
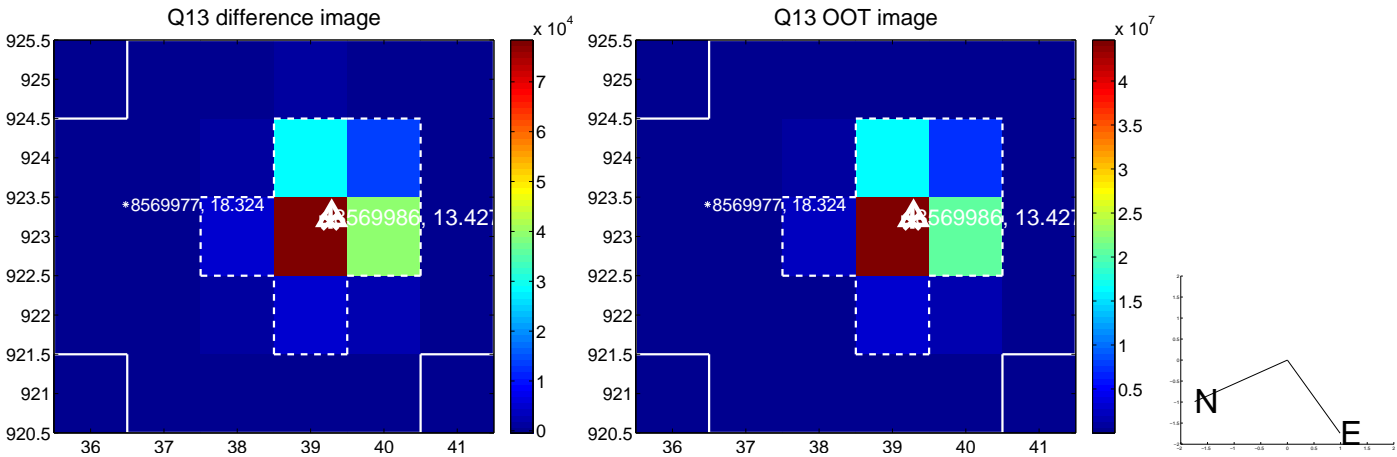
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



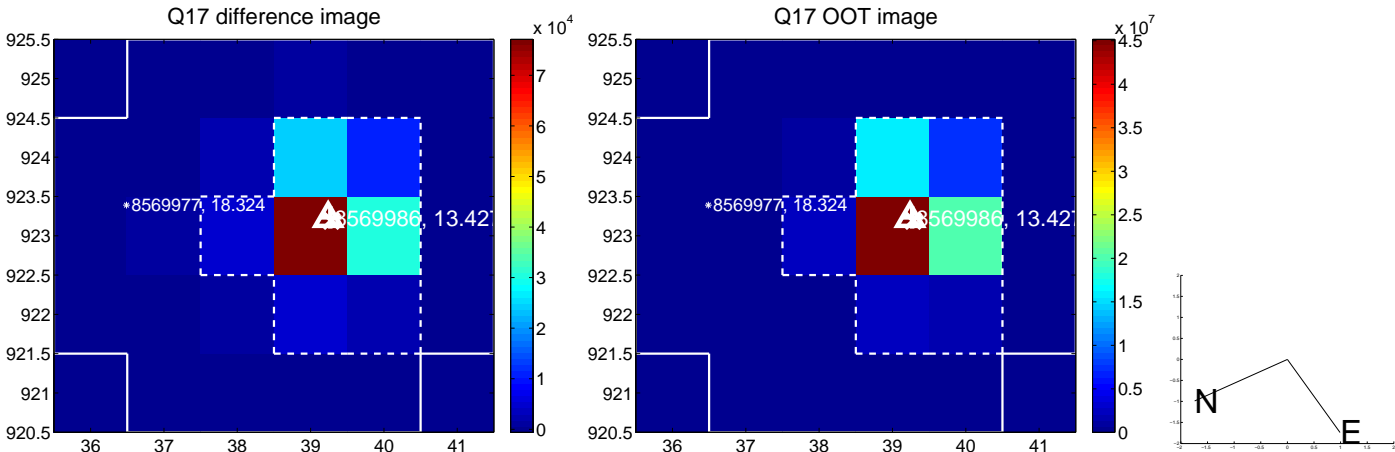
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



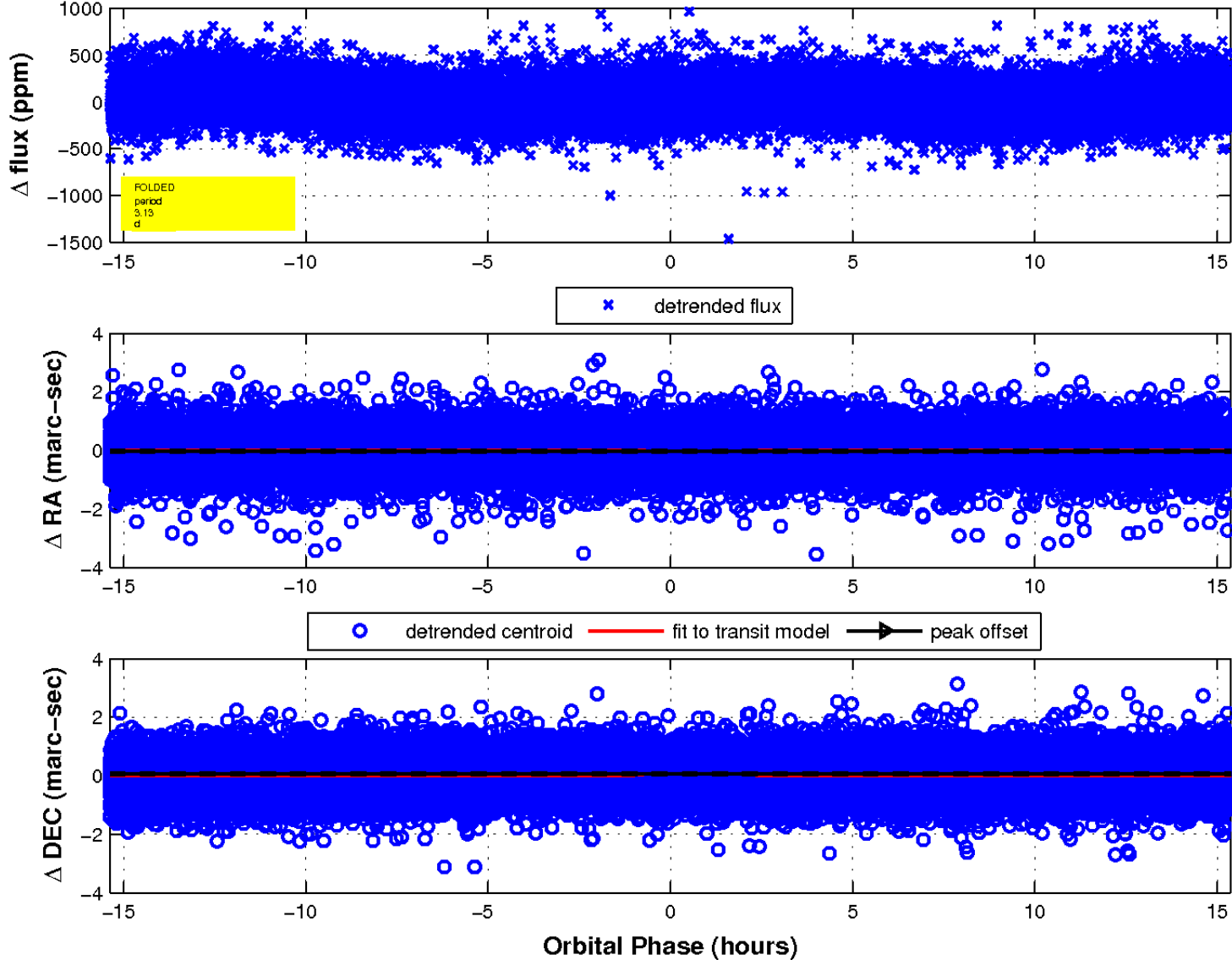
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

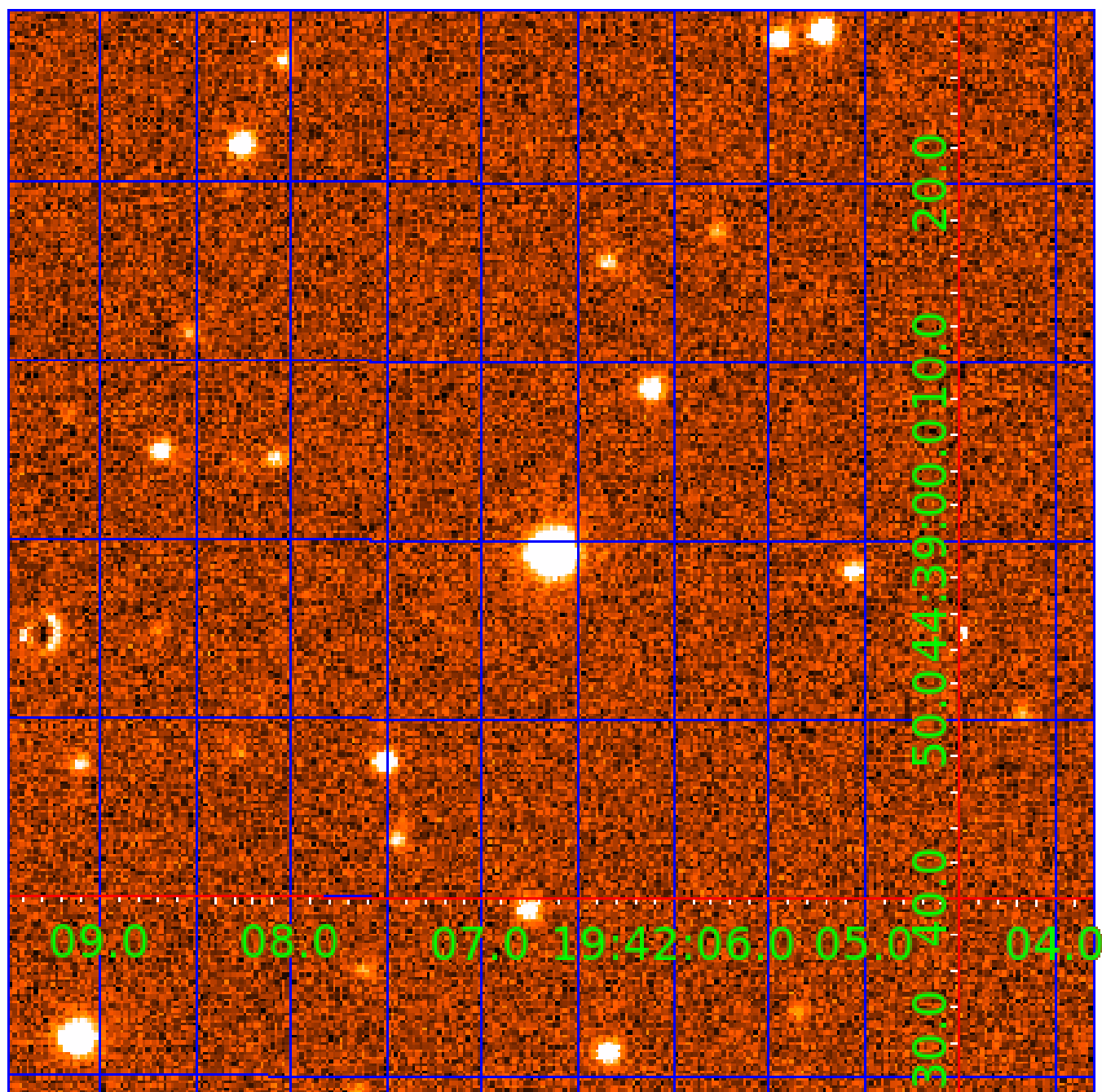


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 008569986

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})
008569986-01	OBS	No	1.566604	132.444642	45.0	4.732	13.6	14.7	2.79	9176	2.19	39404.87
008569986-02	OBS	No	3.133349	131.895826	156.9	6.000	11.4	-1.0	2.79	9176	3.56	15636.89
008569986-03	OBS	No	3.133531	132.547090	0.0	20.441	11.0	0.0	2.79	9176	0.02	15635.68

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008569986-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS
008569986-02	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_NOFITS—HALO_GHOST
008569986-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD

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

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

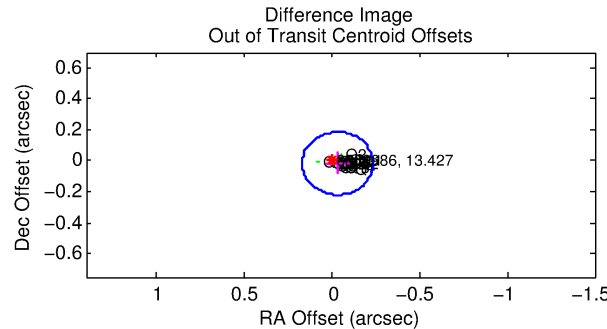
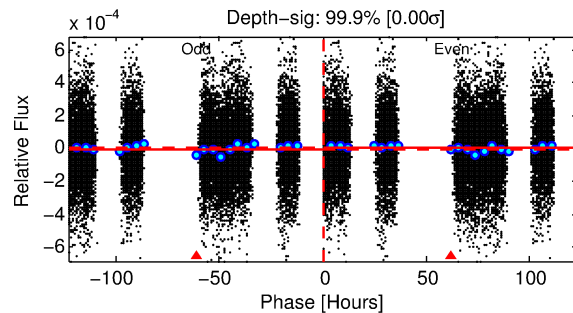
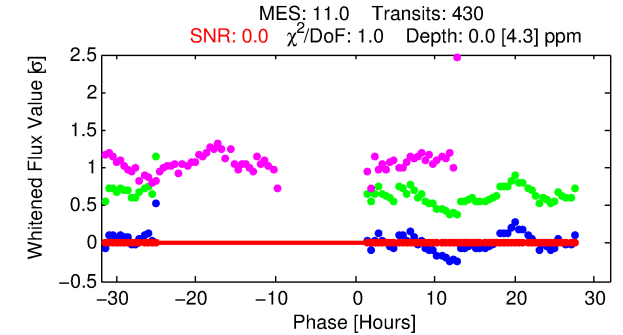
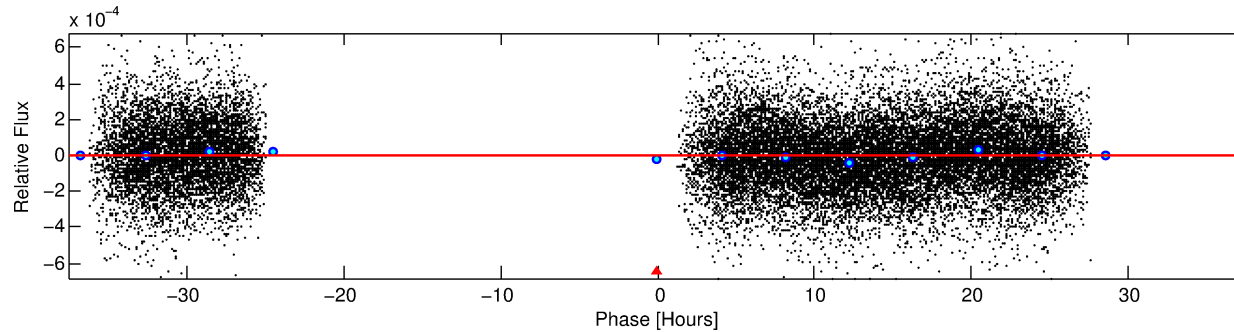
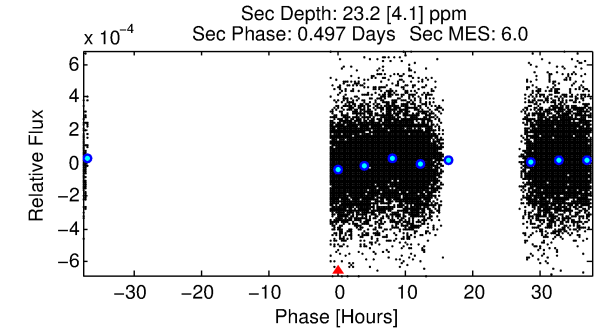
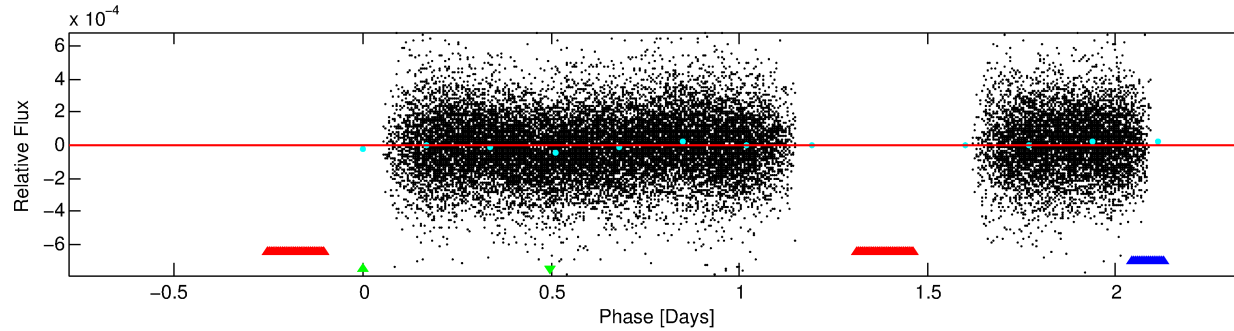
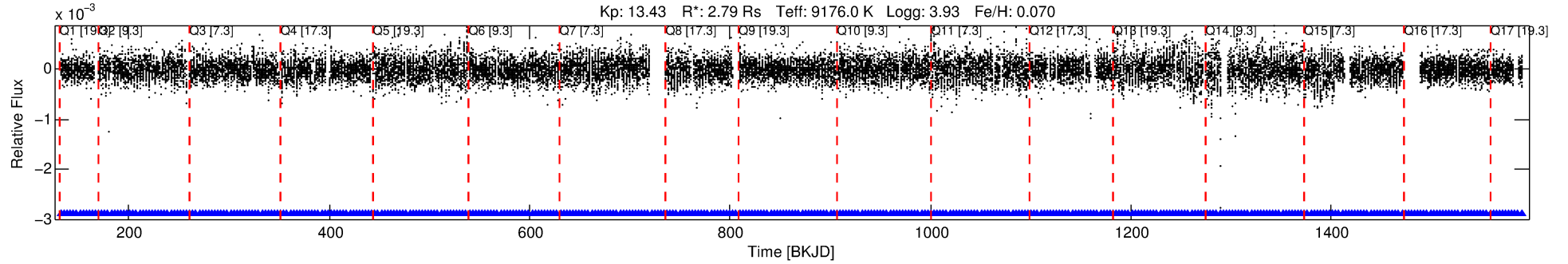
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008569986-03

No Significant Match Found

DV One-Page Summary

KIC: 8569986 Candidate: 3 of 3 Period: 3.134 d



DV Fit Results:

Period = 3.13353 [0.25582] d
Epoch = 132.5471 [52.3785] BKJD
Rp/R* = 0.0001 [0.0287]
a/R* = 1.18 [23.74]
b = 0.69 [74.66]
Seff = 15635.68 [8418.27]
Teq = 2851 [384] K
Rp = 0.02 [8.73] Re
a = 0.0562 [0.0191] AU
Ag = 81042.18 [63519843.18] [0.00σ]
Teffp = 74383 [14575338] K [0.00σ]

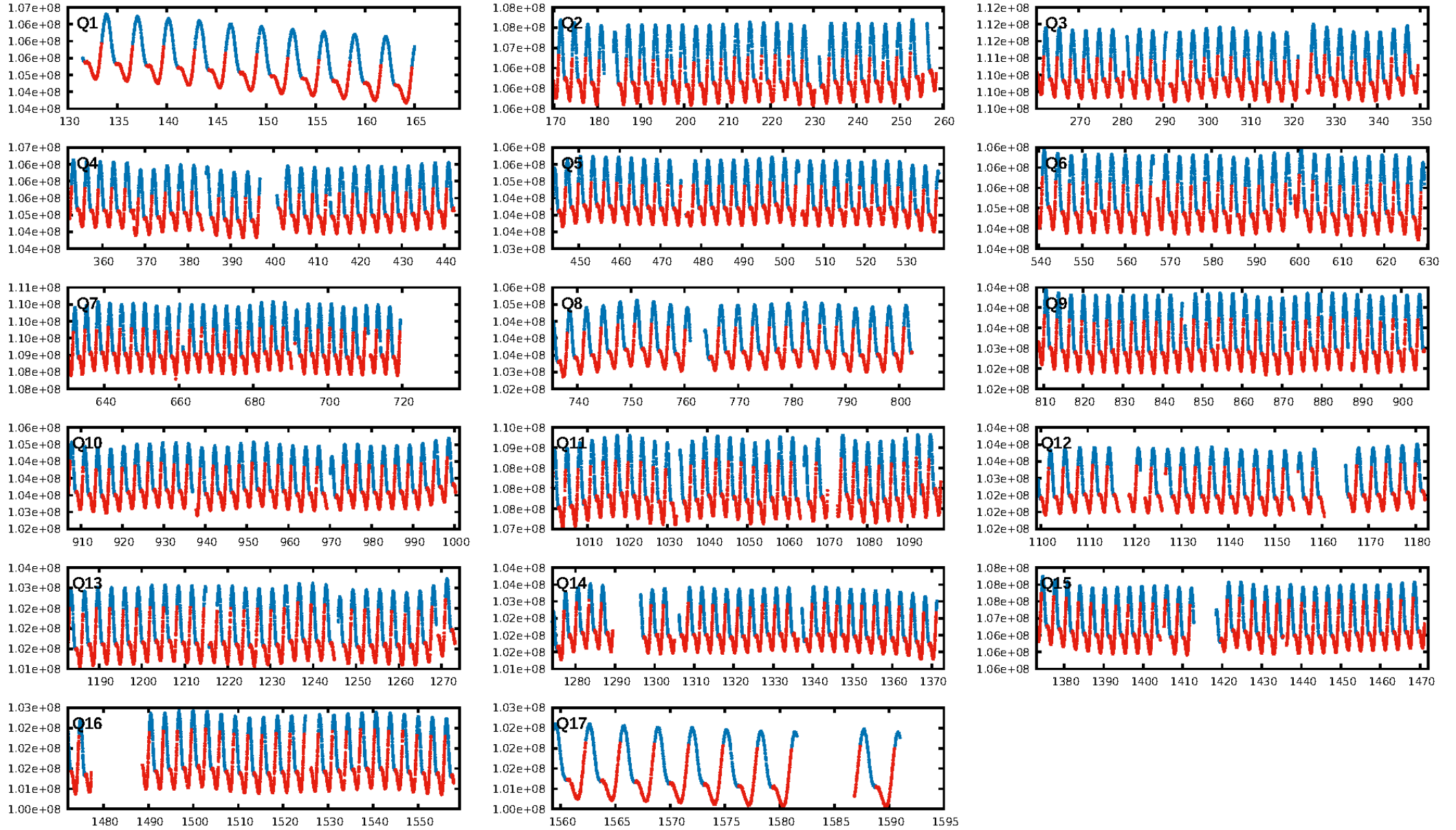
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [410/410]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.037 arcsec [0.55σ]
KicOffset-rm: 0.298 arcsec [4.15σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

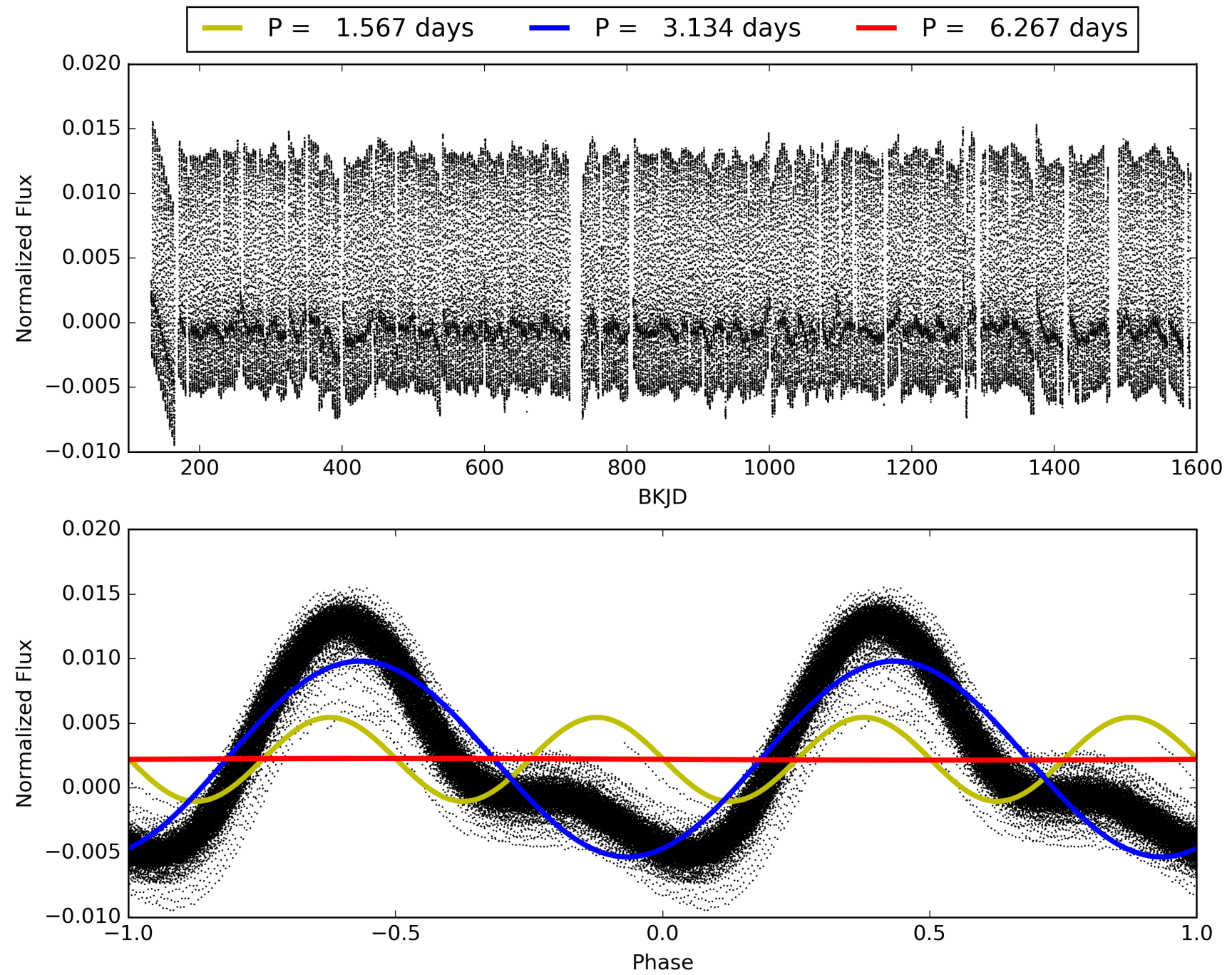
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 06:43:32 Z

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

TCE 008569986-03, PDC Light Curves

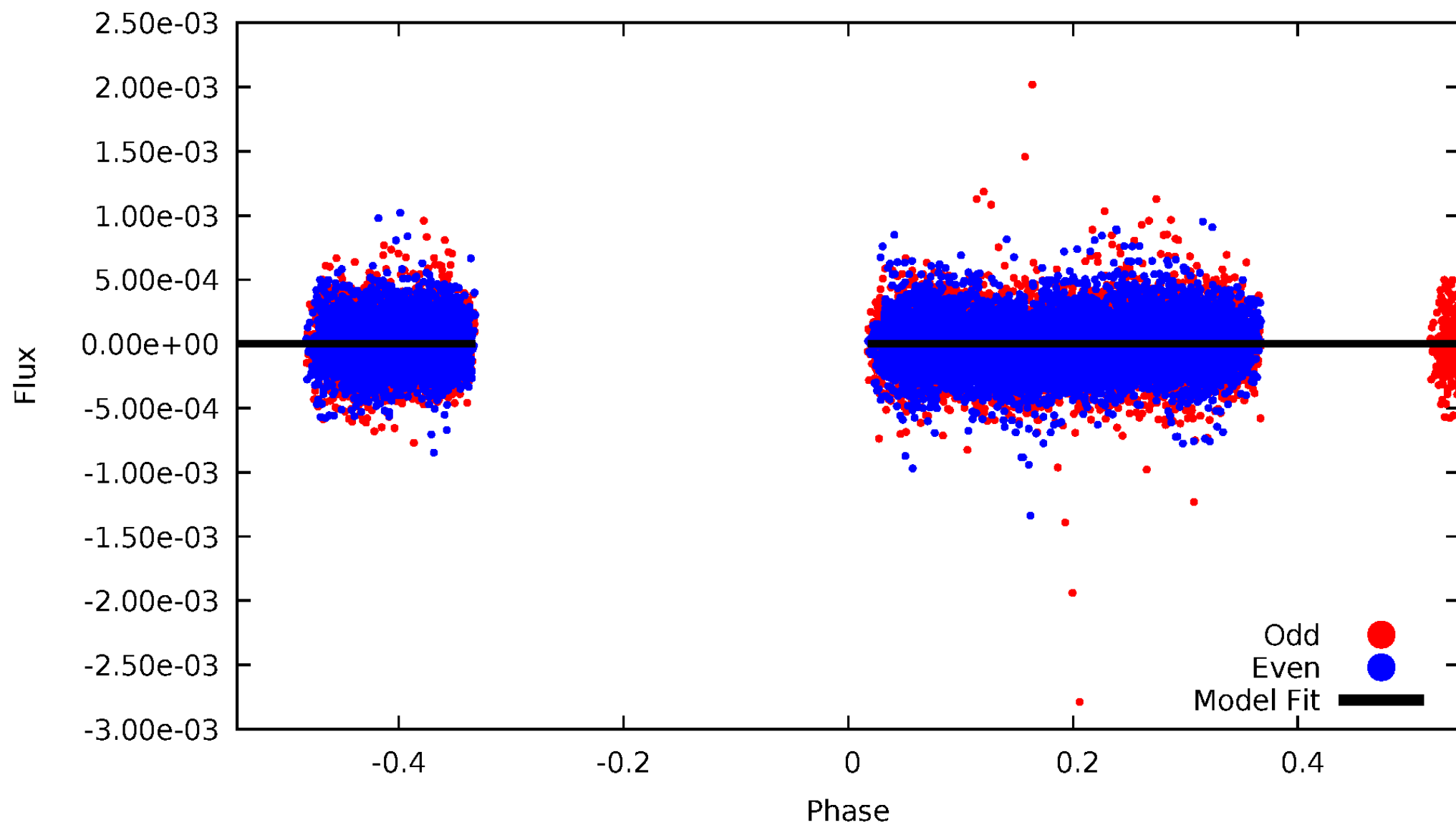


TCE 008569986-03



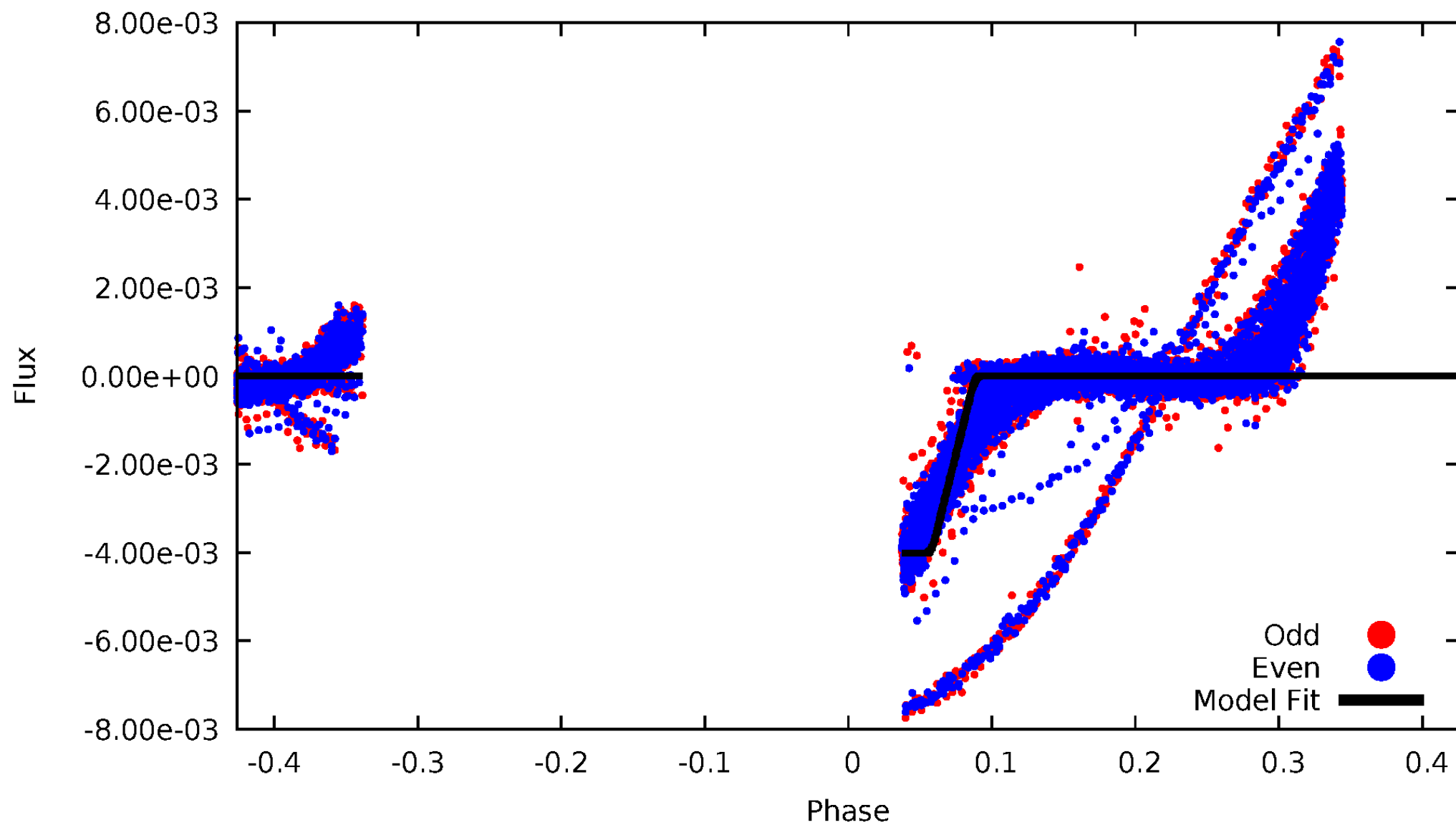
DV Odd/Even

TCE 008569986-03



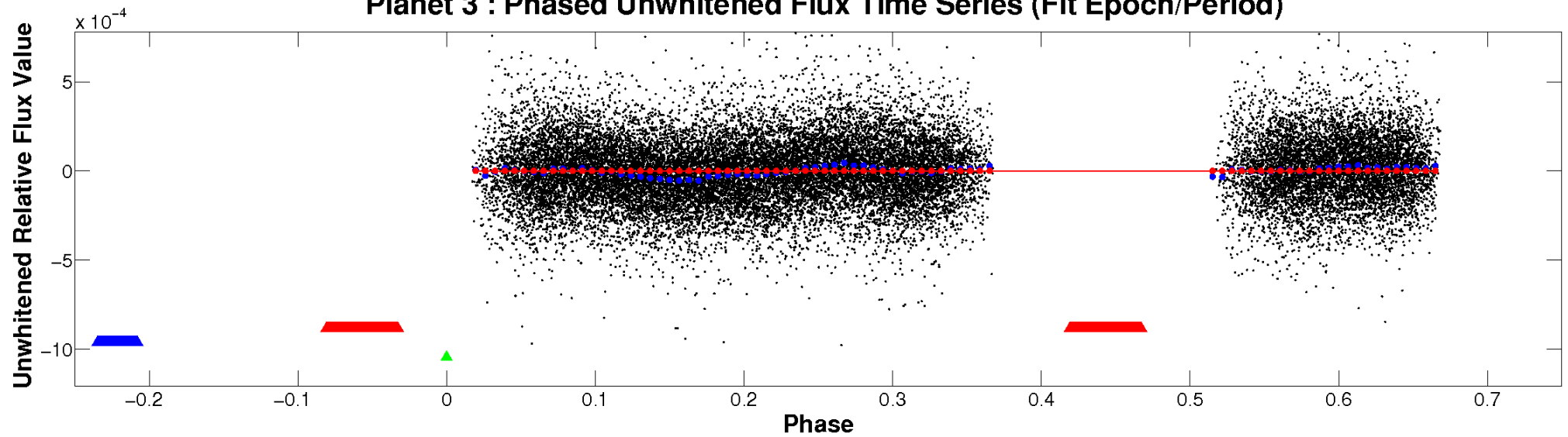
ALT Odd/Even

TCE 008569986-03

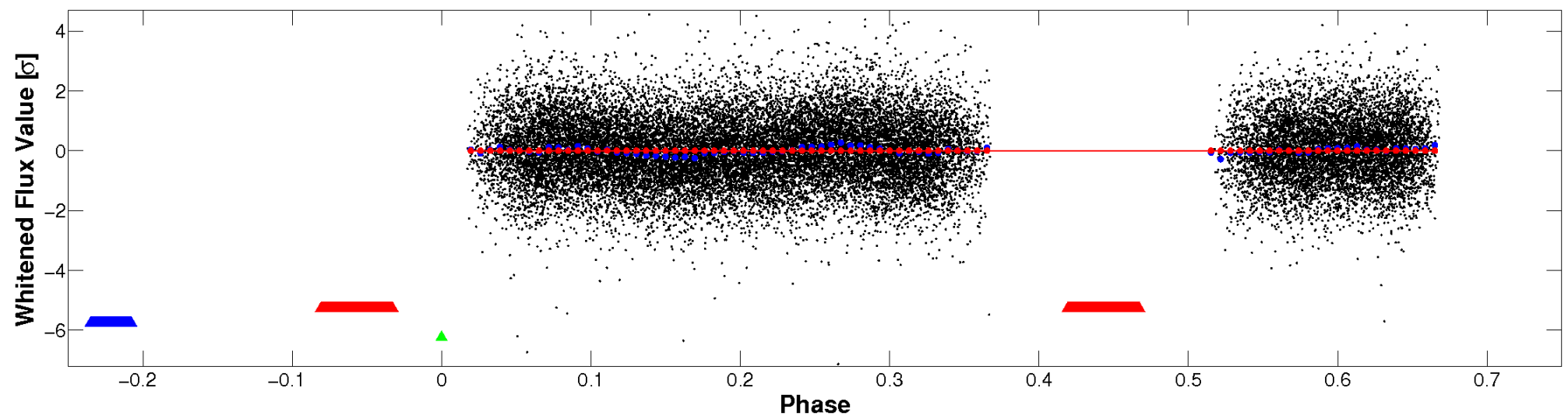


Non-Whitened Vs. Whitened Light Curve

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

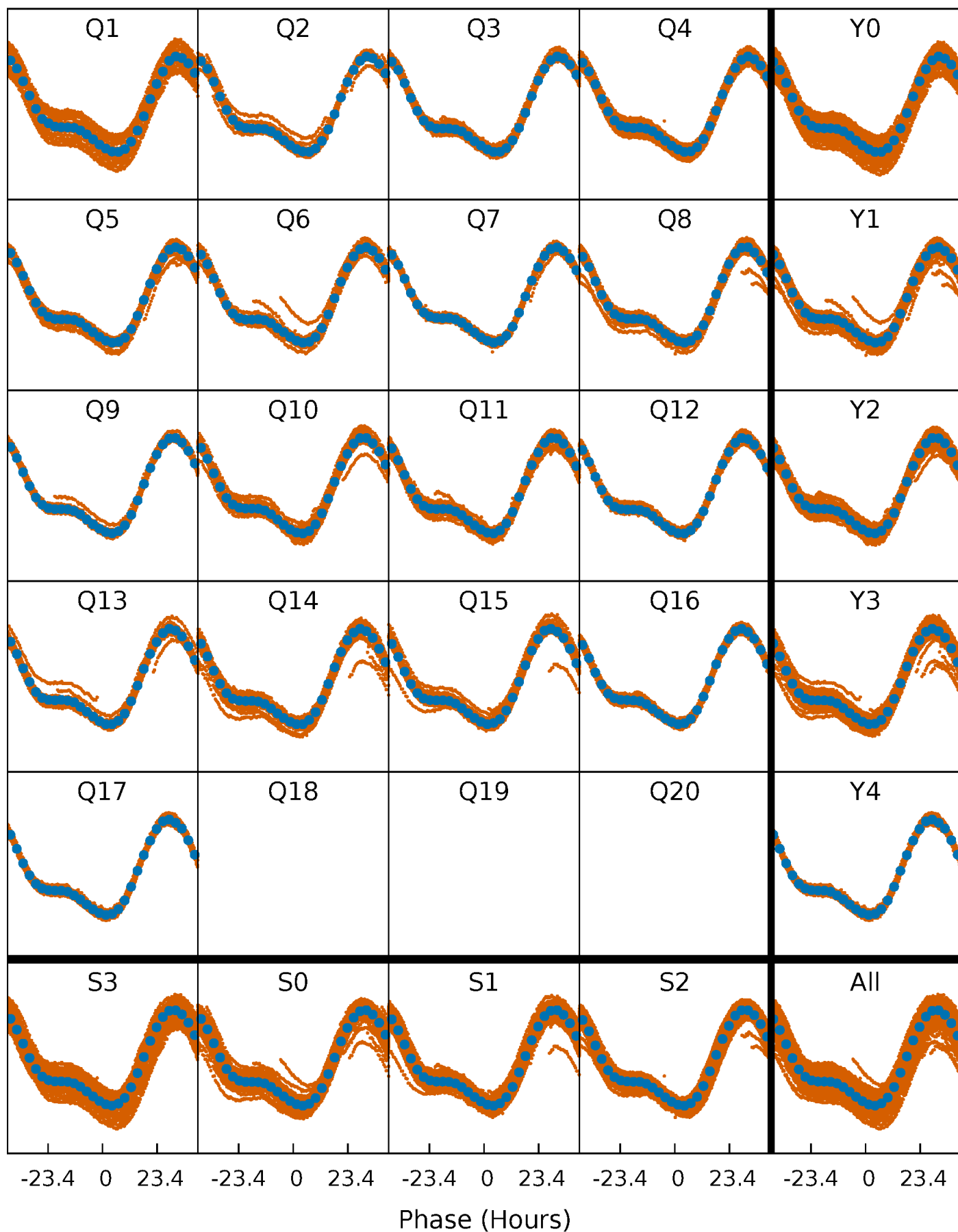


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



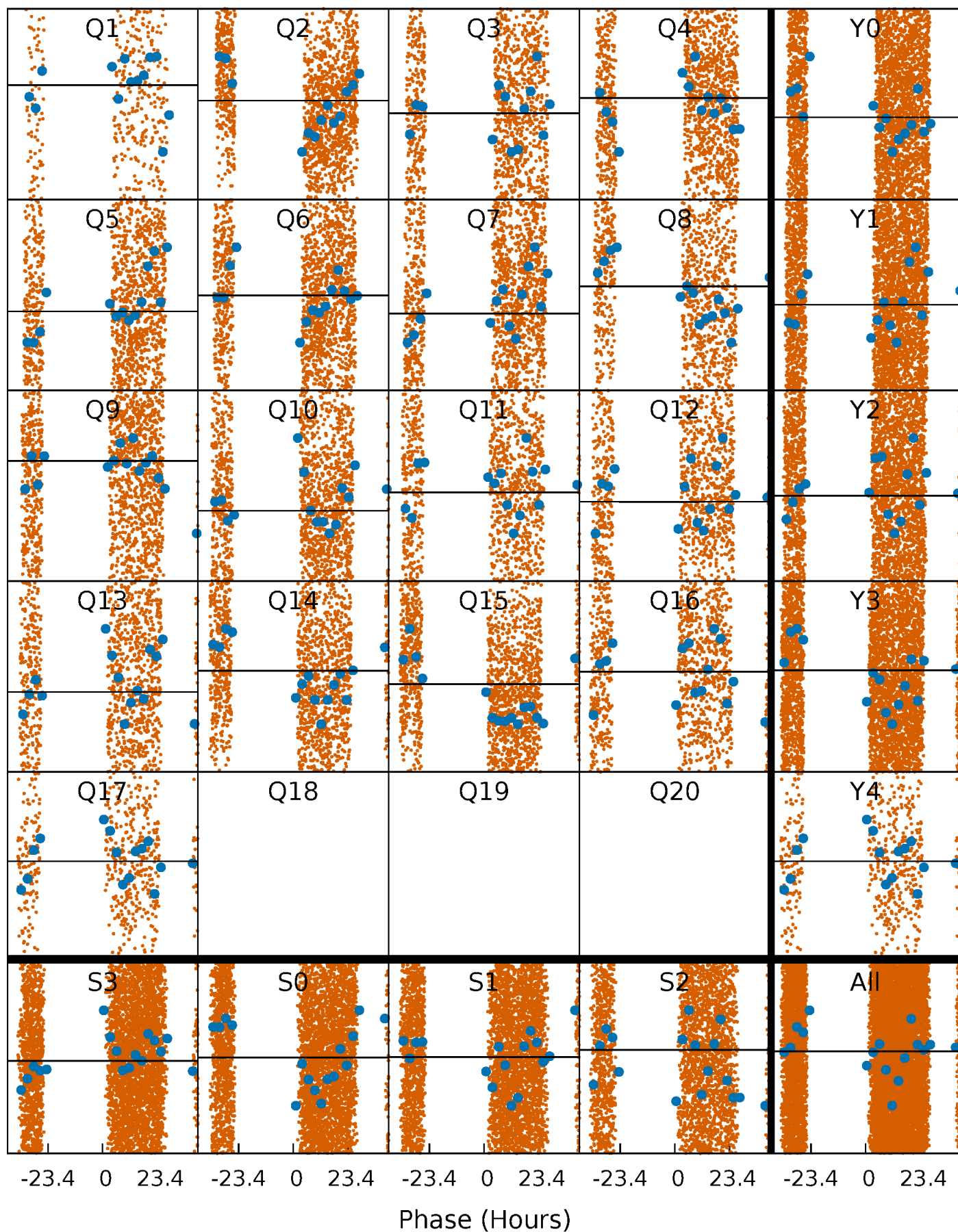
PDC Quarter-Phased Transit Curves

TCE 008569986-03 P= 3.133531 Days $T_0=132.547089$ (BKJD)



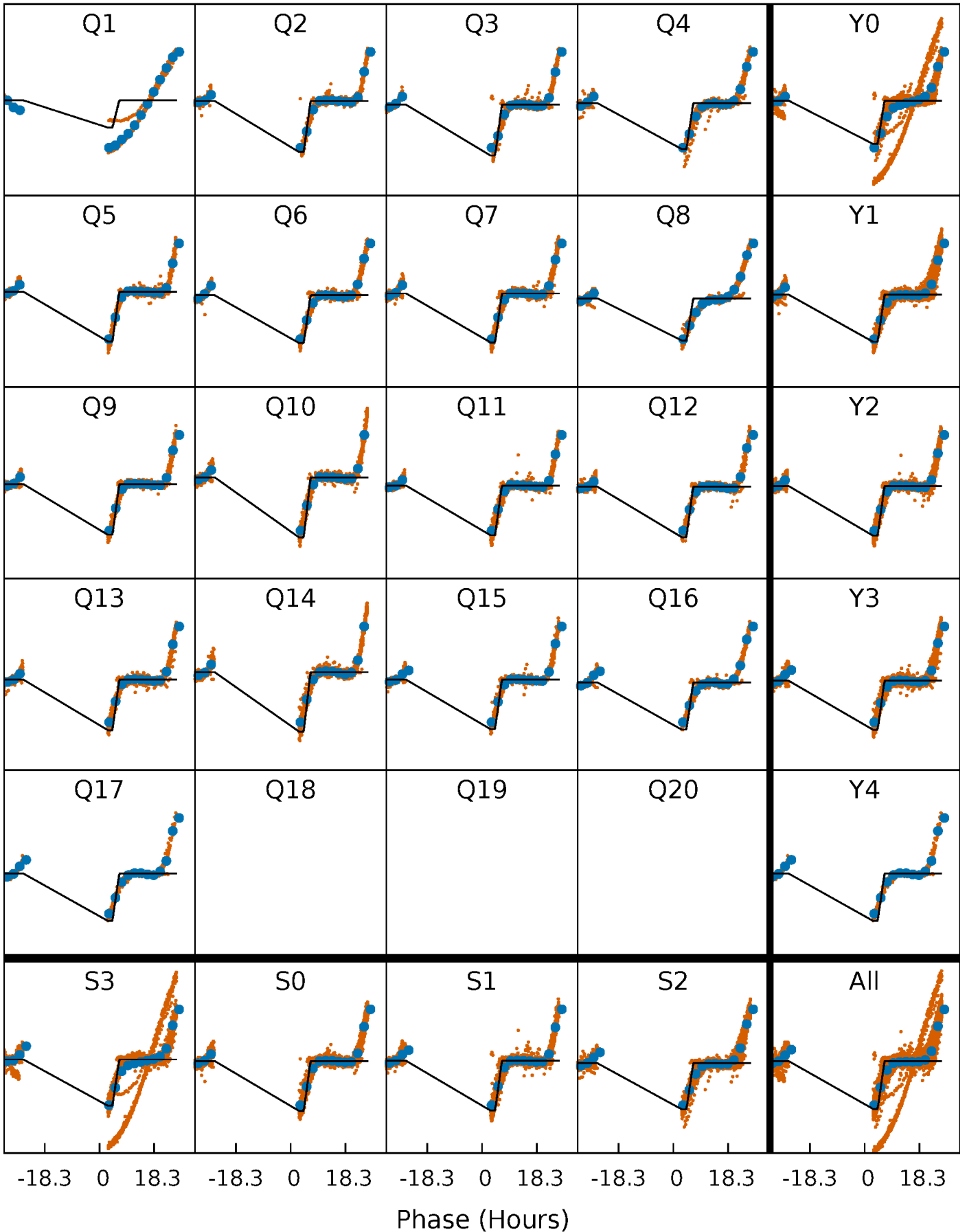
DV Quarter-Phased Transit Curves

TCE 008569986-03 P= 3.133531 Days $T_0=132.547089$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

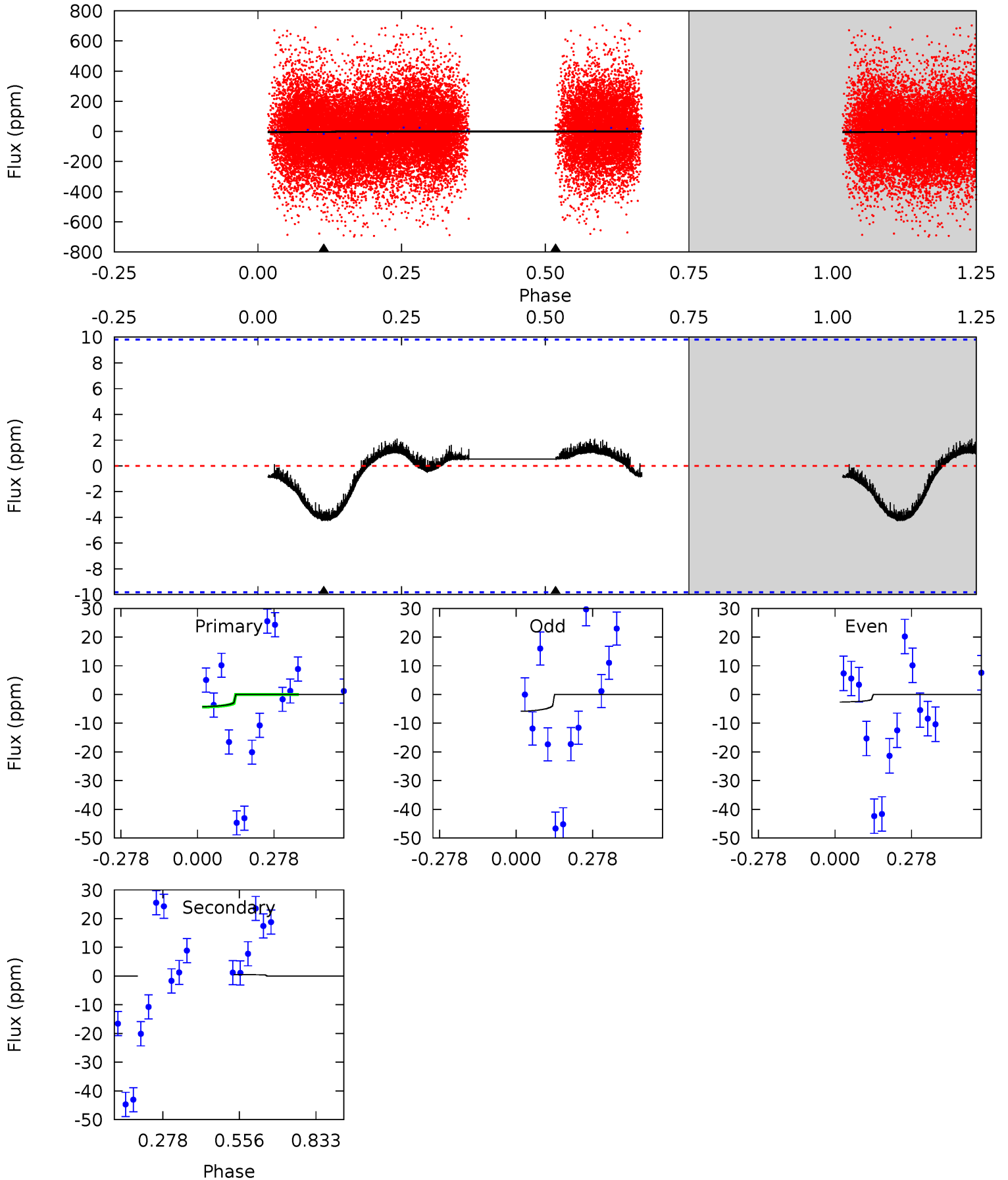
TCE 008569986-03 $P = 3.133224$ Days $T_0 = 132.626372$ (BKJD)



DV Model-Shift Uniqueness Test

008569986-03, P = 3.133531 Days, E = 132.547089 Days

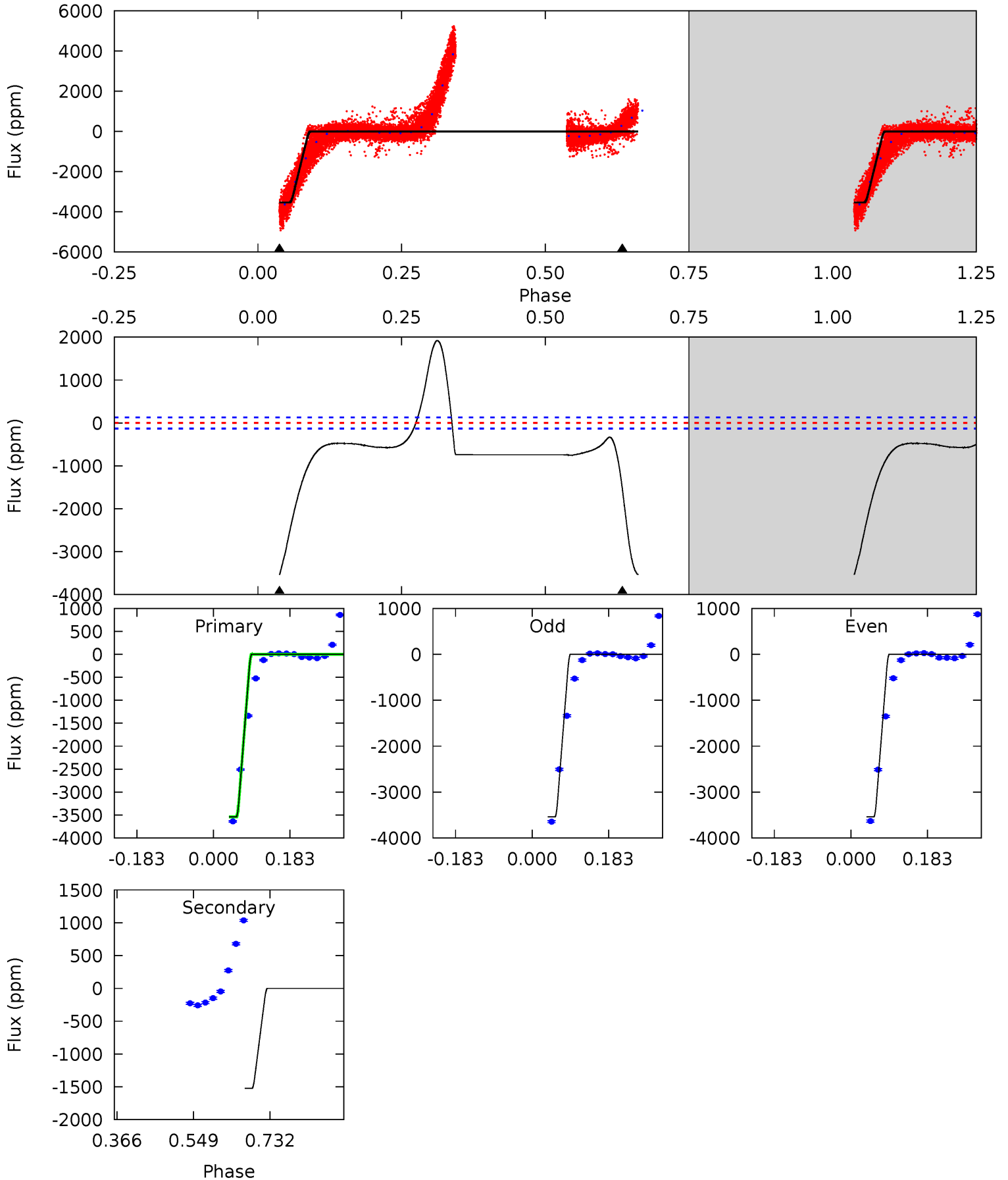
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.88	-0.23	0	0	4.35	1.09	0.15	1.88	1.88	-0.23	-0.23	0.72	1.16	0.33	0



Alt Model-Shift Uniqueness Test

008569986-03, P = 3.133224 Days, E = 132.626372 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
122.5	52.7	0	0	4.44	1.33	31.1	122.5	122.5	52.7	52.7	0.02	0.98	0.35	0



Stellar Parameters For KIC 008569986

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	ρ_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	9176^{+255}_{-438}	$3.929^{+0.270}_{-0.180}$	$0.070^{+0.150}_{-0.700}$	$2.786^{+0.904}_{-1.104}$	$2.402^{+0.377}_{-0.753}$	$0.157^{+0.302}_{-0.081}$
	+3%/-5%	+7%/-5%	+214%/-1000%	+32%/-40%	+16%/-31%	+193%/-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 008569986-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	1 ± 2	$5.73^{+6.24}_{-4.08}$	3949^{+357}_{-392}	-3583^{+632}_{-443}	$-0.011^{+0.193}_{-0.275}$
Alt.	-1524 ± 29	$18.88^{+9.57}_{-8.76}$	3960^{+356}_{-399}	6662^{+2811}_{-1245}	$7.263^{+17.930}_{-3.983}$

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

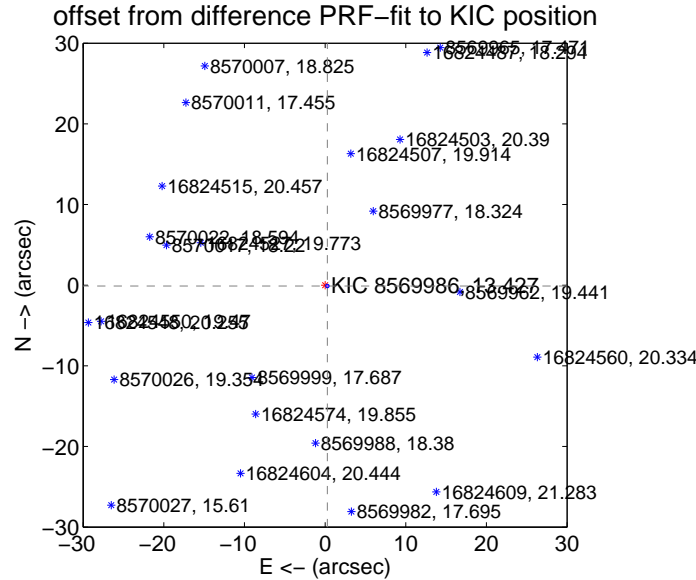
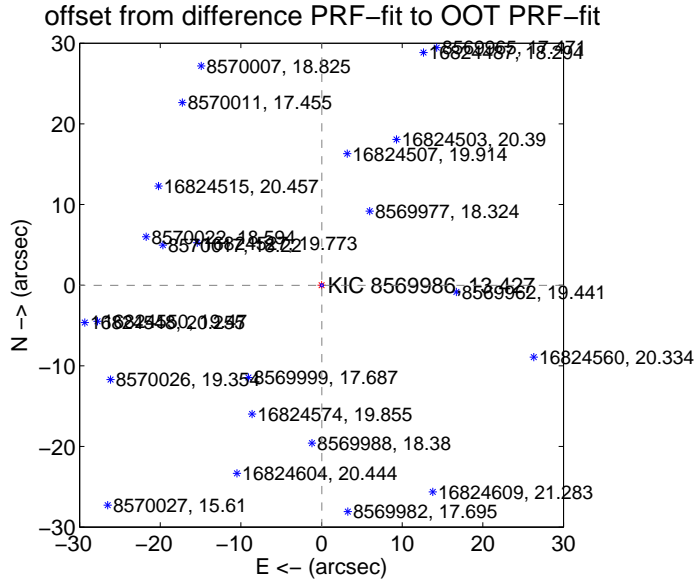
DV Centroid Data

Supplemental centroid analysis for 008569986-03. Kepler magnitude: 13.43. Transit SNR 0.00

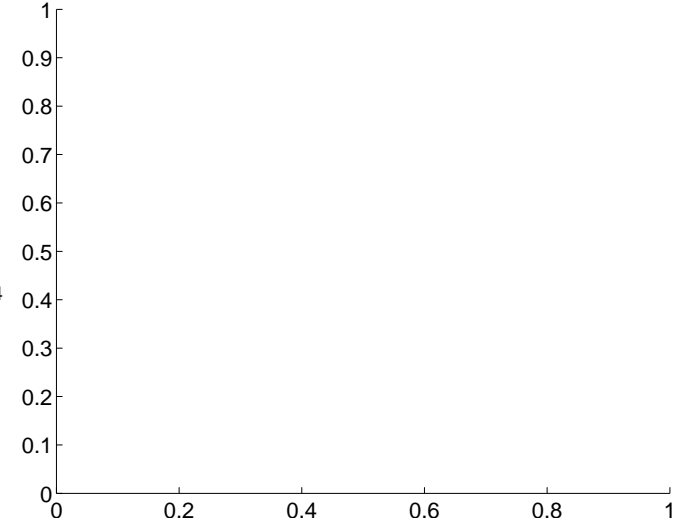
There are 17 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.037 ± 0.067	0.55	-0.033 ± 0.068	-0.018 ± 0.067
PRF-fit source offset from KIC position	0.298 ± 0.072	4.15	-0.278 ± 0.072	-0.107 ± 0.071
photometric centroid source offset	—	—	—	—

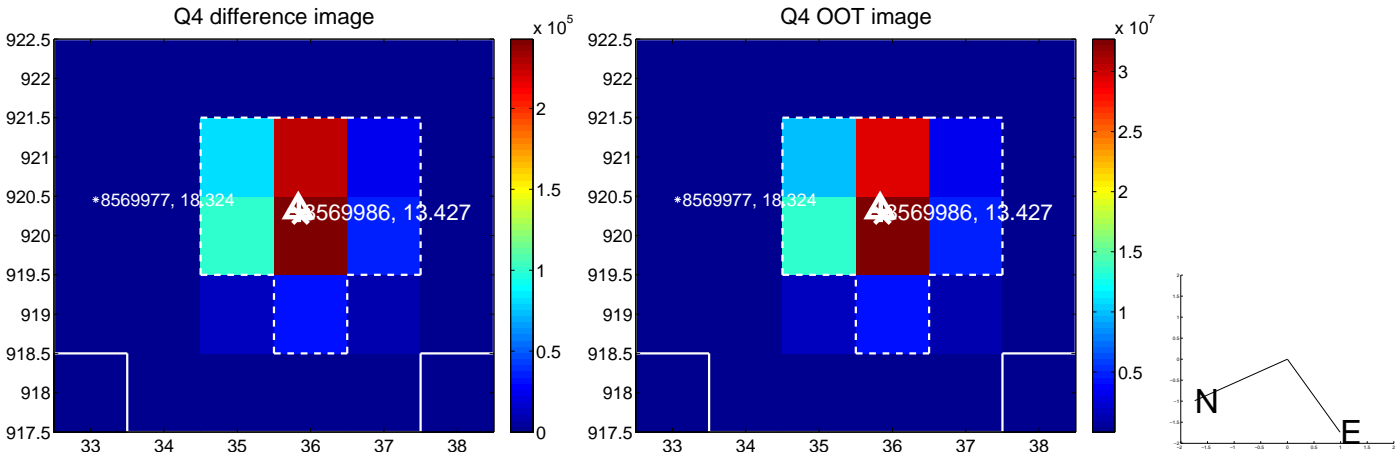
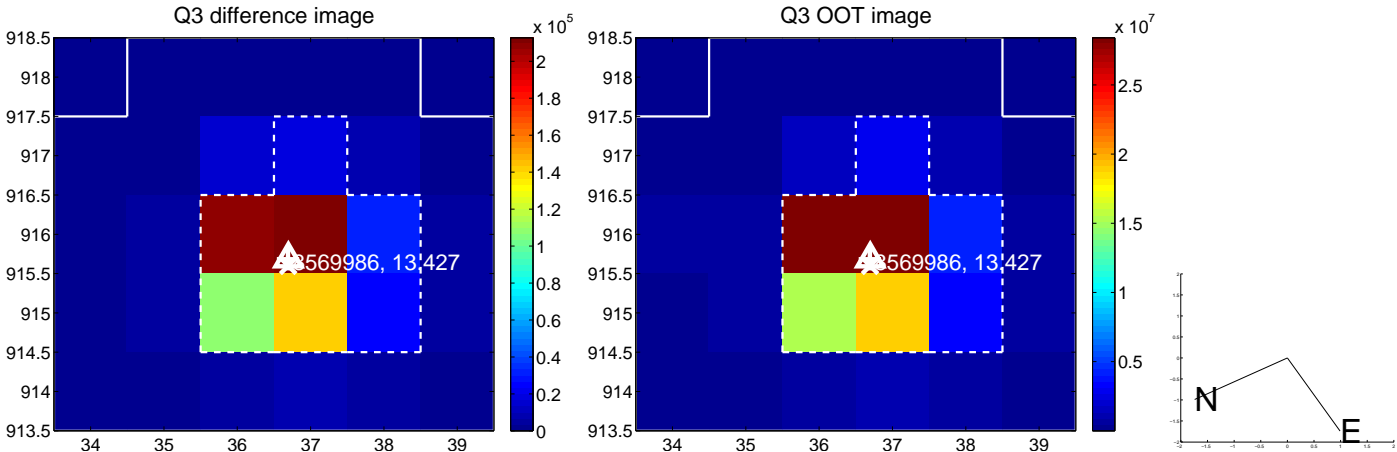
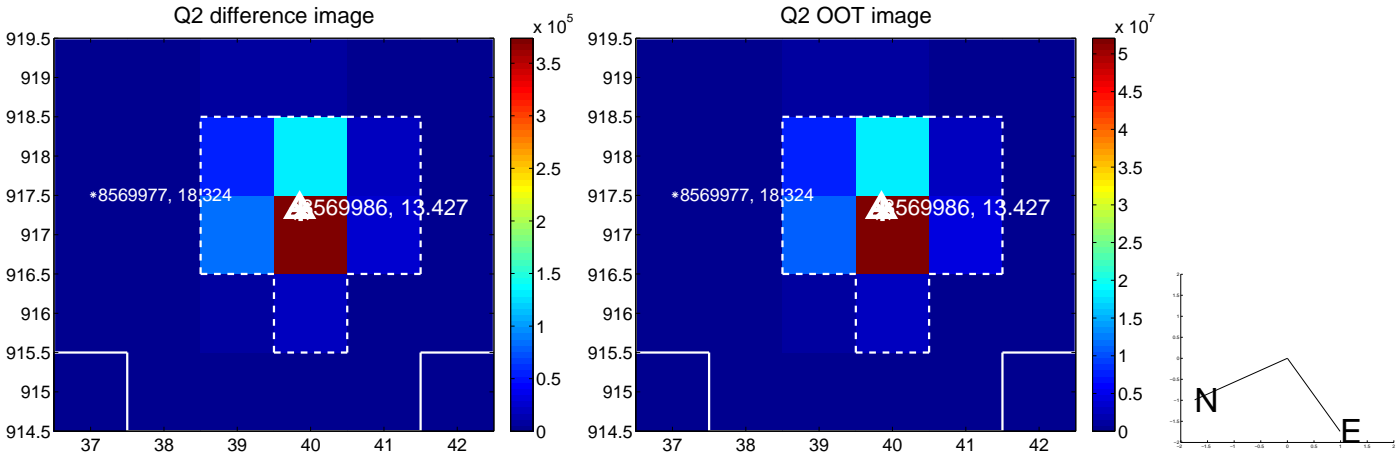
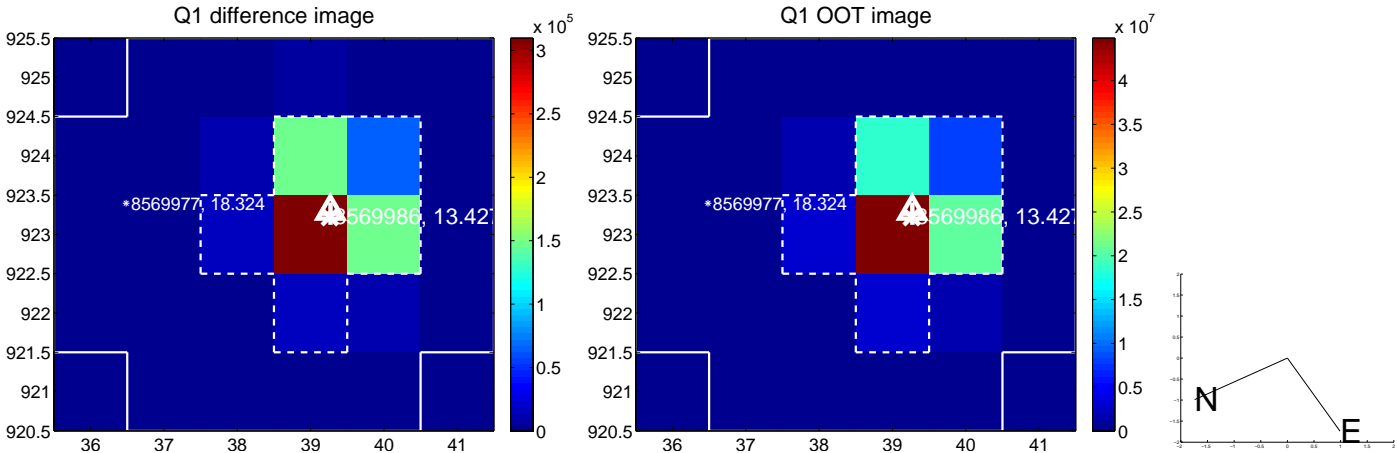


There are no photometric centroids

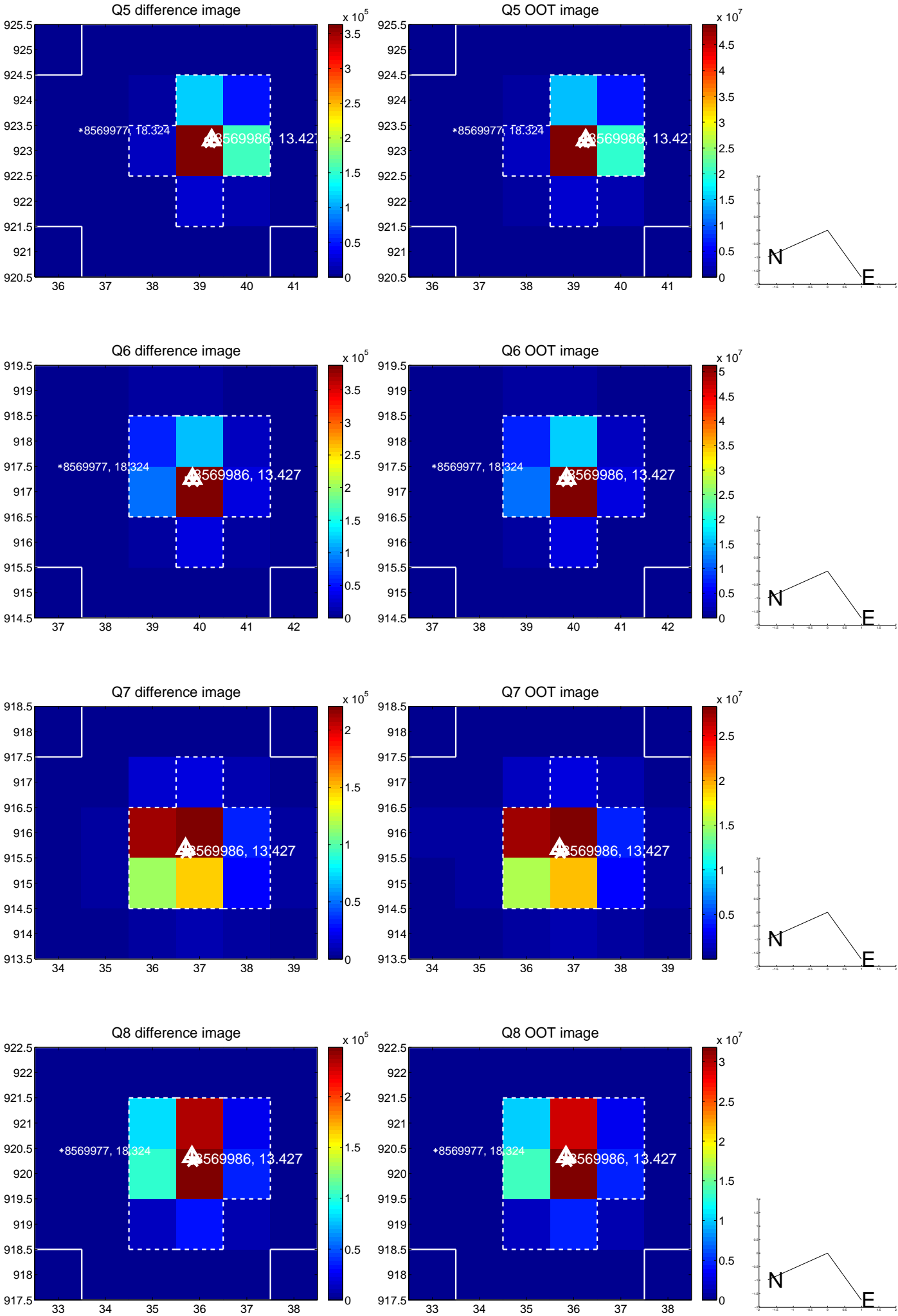


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

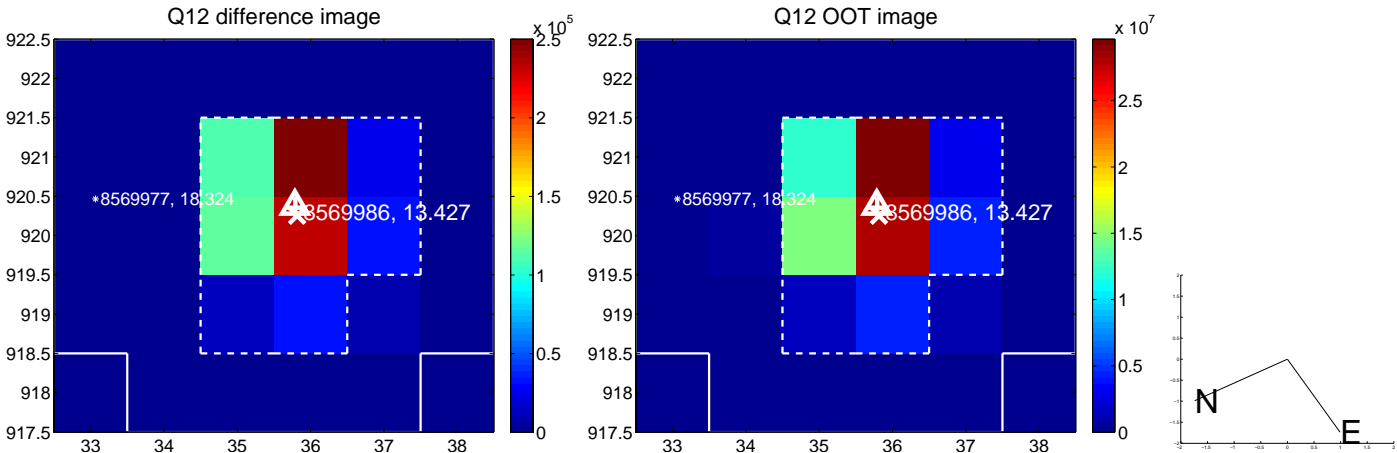
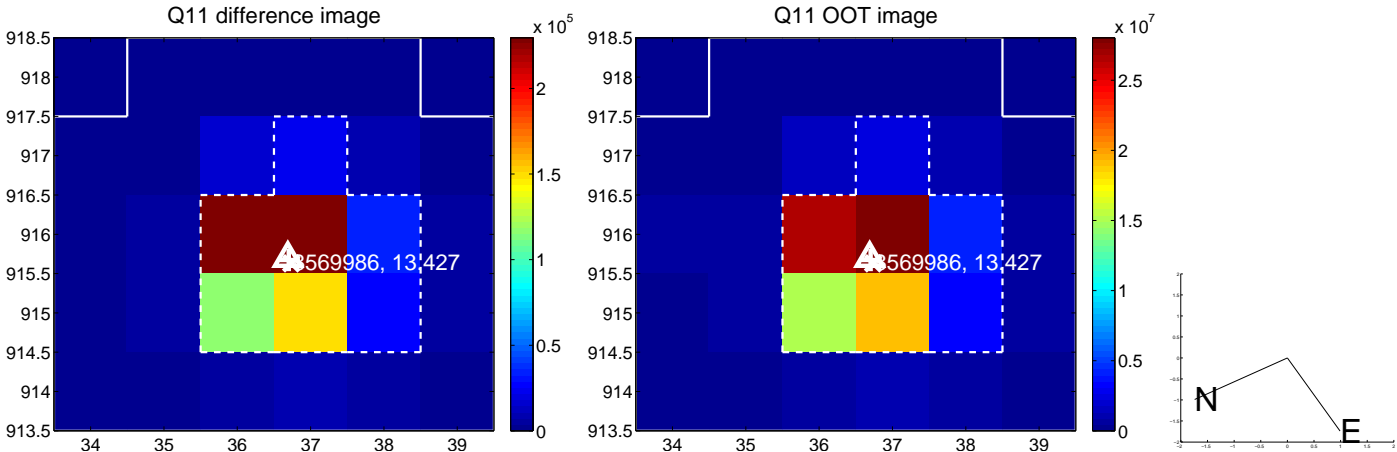
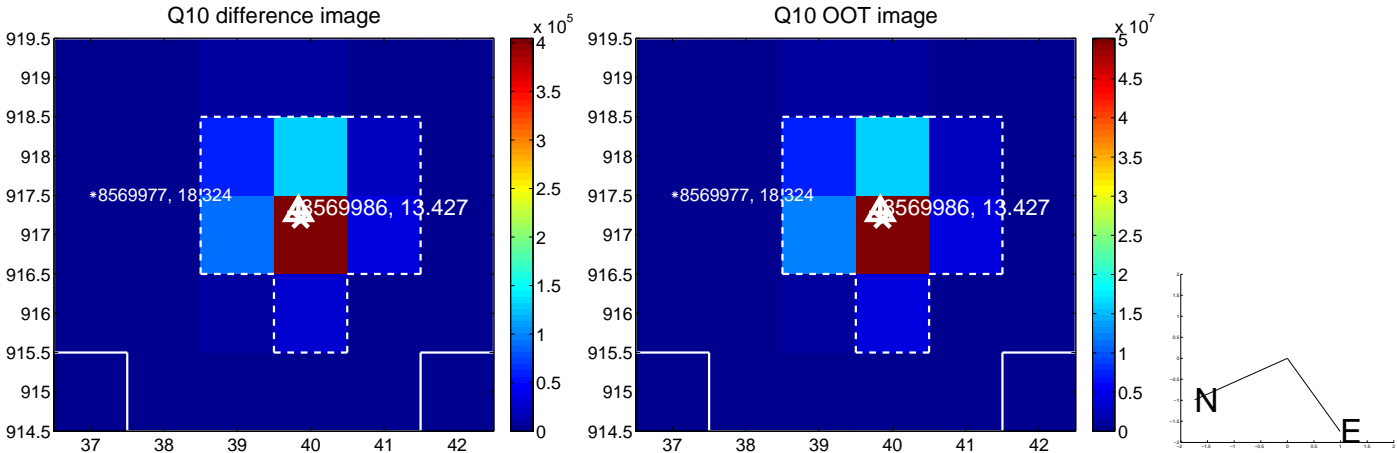
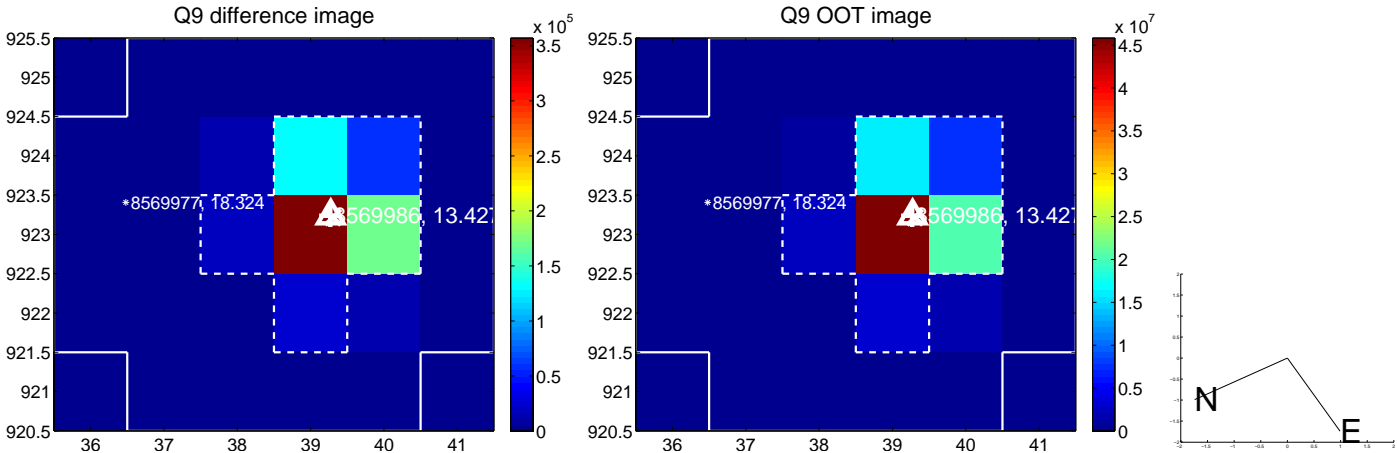
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



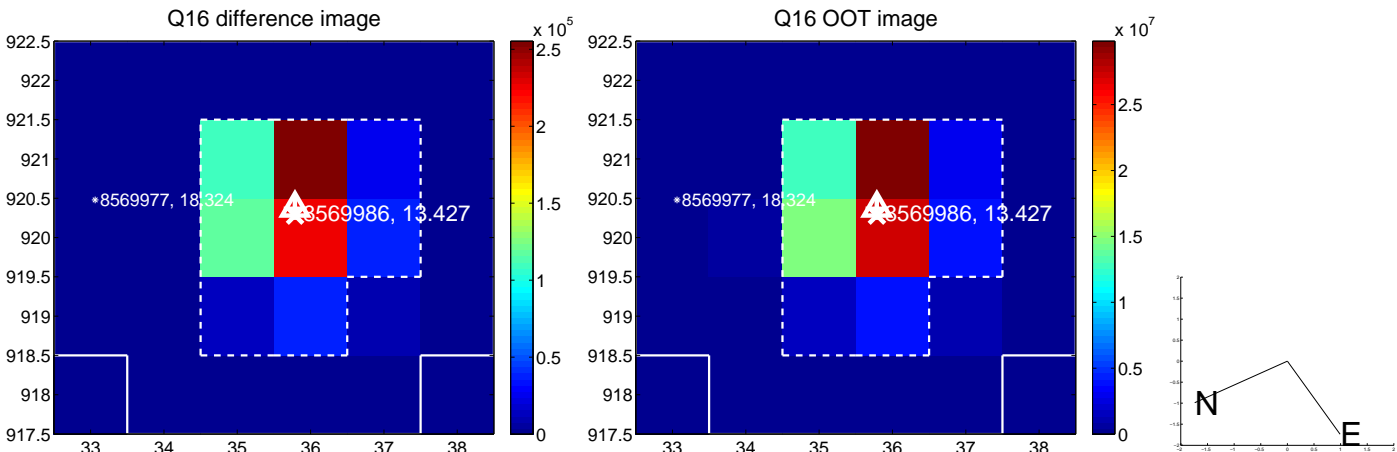
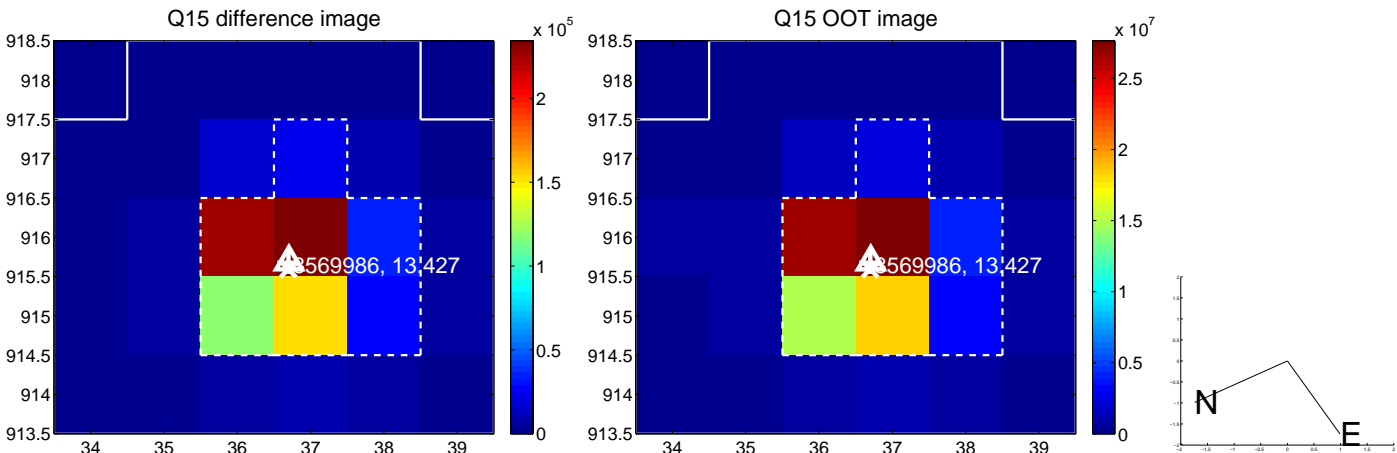
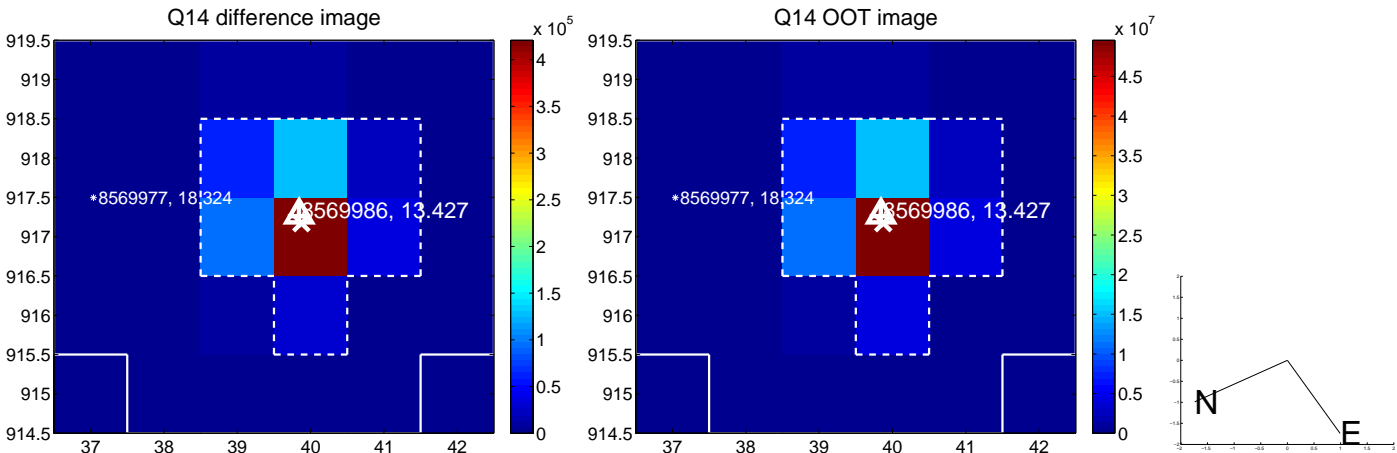
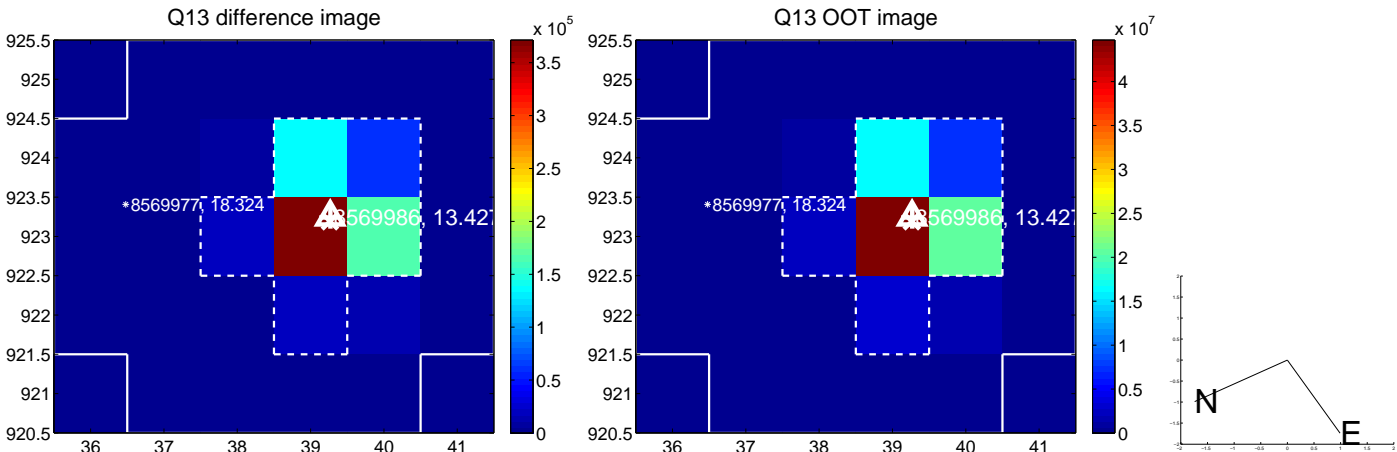
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



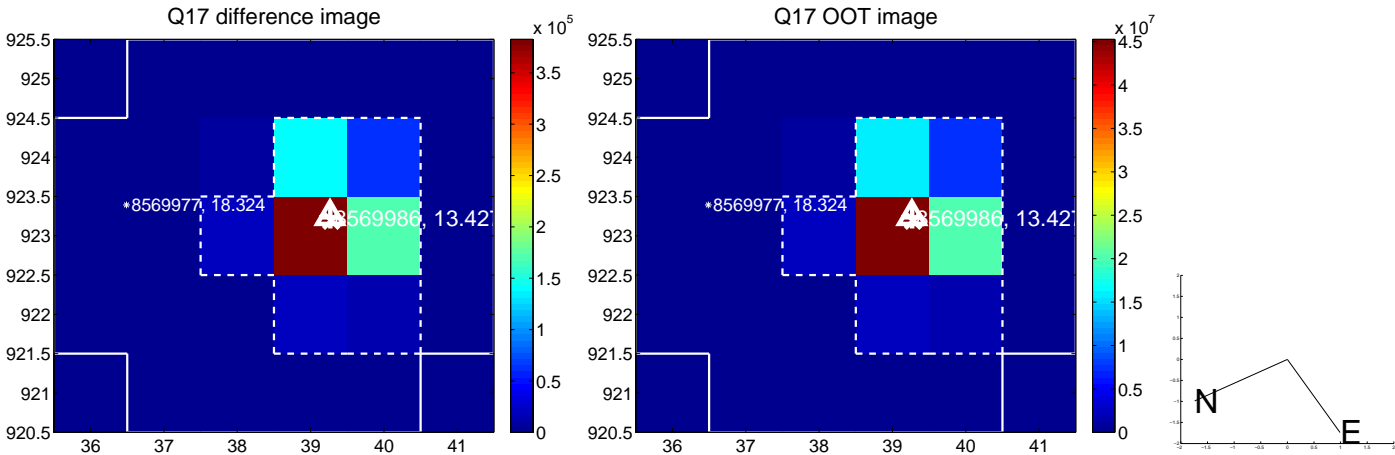
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



folded centroid time series figure for this object.

UKIRT Image

Declination

