

KIC 006696580

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})
006696580-01	OBS	2092.01	57.689478	139.928306	1603.0	5.053	27.0	29.0	1.05	6228	5.08	16.22
006696580-02	OBS	2092.02	25.563783	145.205557	1073.8	4.950	27.4	29.2	1.05	6228	4.14	48.01
006696580-03	OBS	2092.03	77.087624	202.730559	970.0	4.019	11.6	12.9	1.05	6228	4.25	11.02

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006696580-01	OBS	PC	0.98	0	0	0	0	NO_COMMENT
006696580-02	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006696580-03	OBS	PC	0.78	0	0	0	0	CENT_FEW_DIFFS

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

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

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

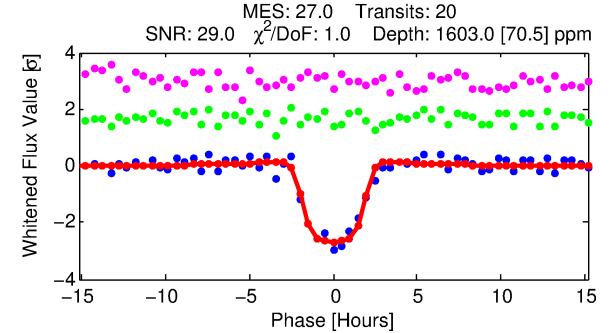
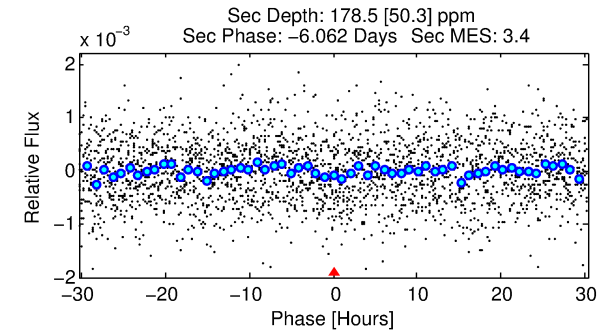
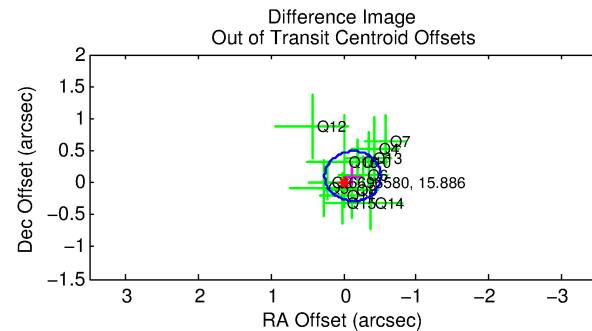
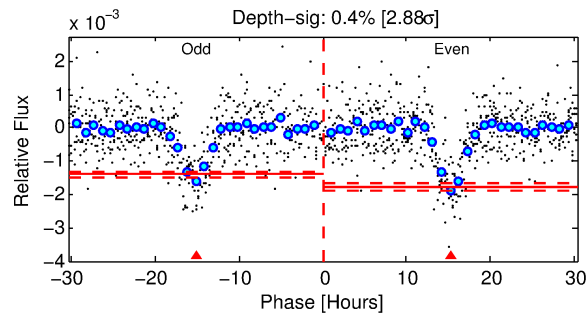
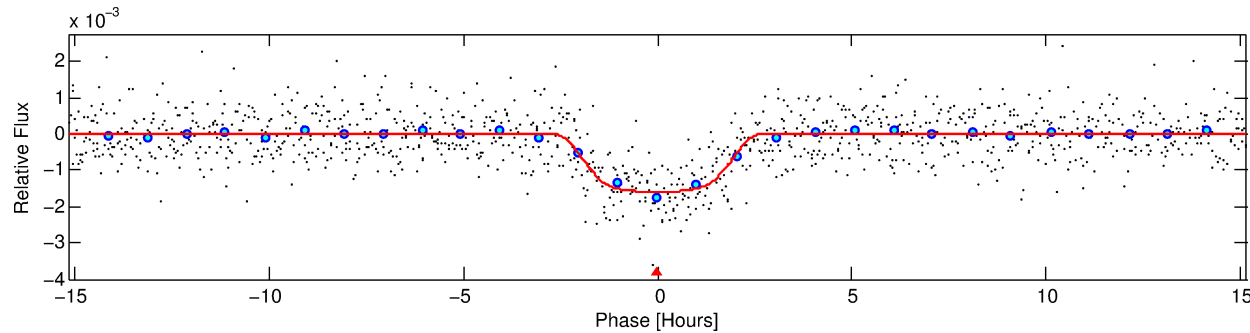
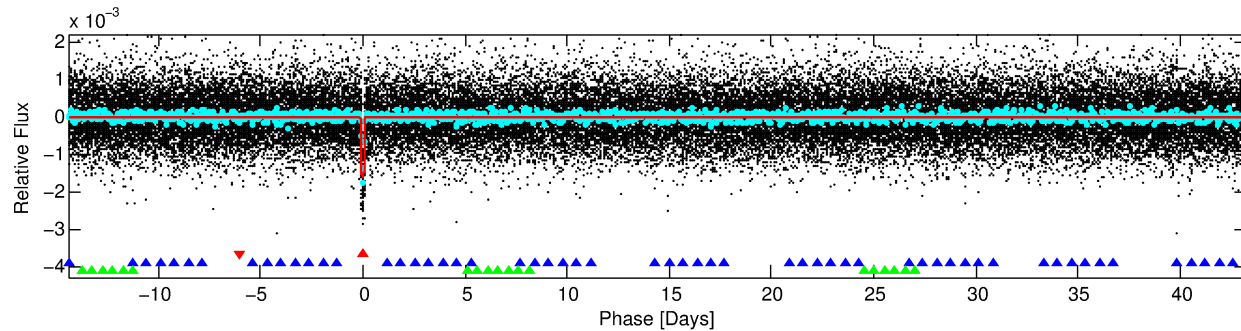
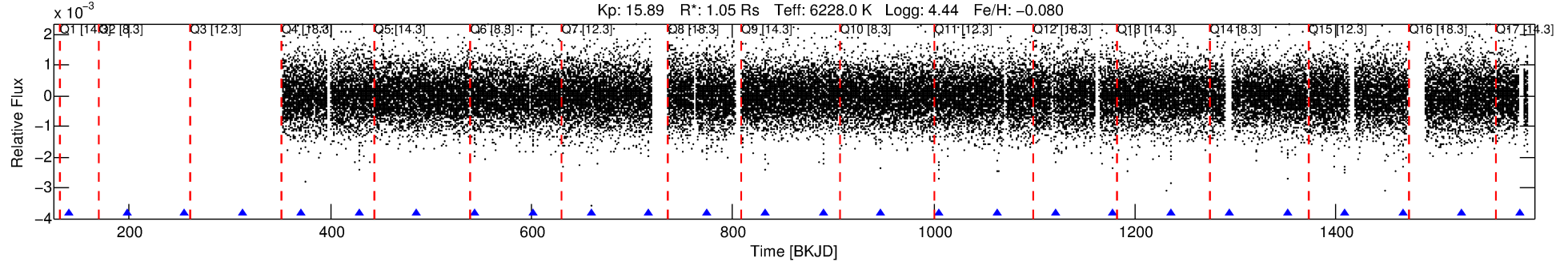
Ephemeris Match Information For 006696580-01

No Significant Match Found

DV One-Page Summary

KIC: 6696580 Candidate: 1 of 3 Period: 57.689 d
KOI: K02092.01 Name: Kepler-359c Corr: 0.987

Kp: 15.89 R*: 1.05 Rs Teff: 6228.0 K Logg: 4.44 Fe/H: -0.080



DV Fit Results:

Period = 57.68948 [0.00037] d
Epoch = 139.9283 [0.0055] BKJD
Rp/R* = 0.0444 [0.0017]
a/R* = 42.14 [5.19]
b = 0.93 [0.02]
Seff = 16.22 [6.43]
Teff = 512 [51] K
Rp = 5.08 [1.53] Re
a = 0.3024 [0.0753] AU
Ag = 348.28 [161.28] [2.15σ]
Teffp = 3418 [288] K [9.95σ]

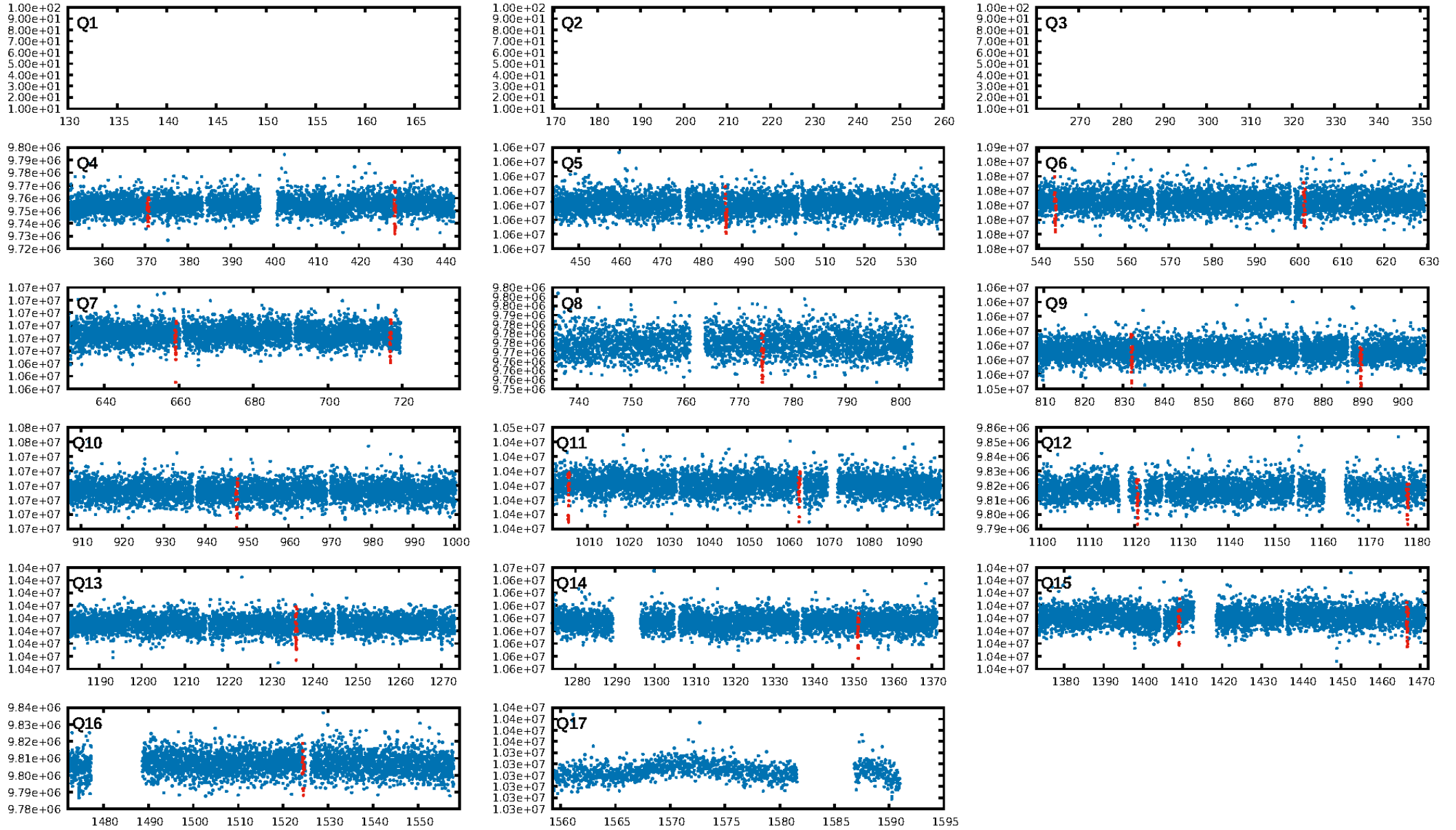
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [109.00σ]
LongPeriod-sig: 100.0% [72.11σ]
ModelChiSquare2-sig: 74.2%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 5.93e-154
RollingBand-fgt: 1.00 [20/20]
GhostDiagnostic-chr: 22.81
Centroid-sig: 57.3%
Centroid-so: 0.445 arcsec [0.97σ]
OotOffset-rm: 0.164 arcsec [1.27σ]
KicOffset-rm: 0.178 arcsec [1.31σ]
OotOffset-st: 3/3/4/3 [13]
KicOffset-st: 3/3/4/3 [13]
DiffImageQuality-fgm: 1.00 [13/13]
DiffImageOverlap-fno: 1.00 [13/13]

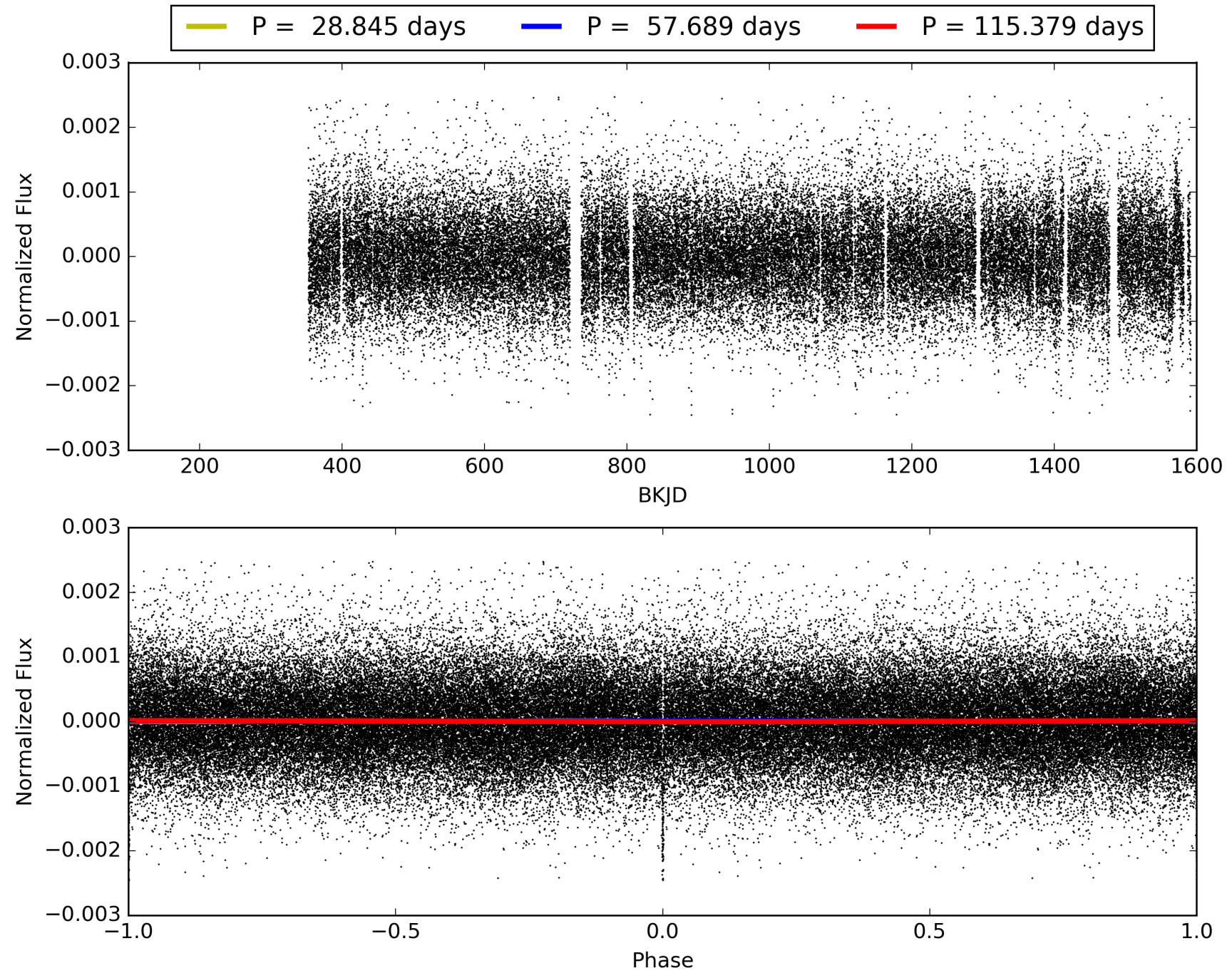
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 006696580-01, PDC Light Curves

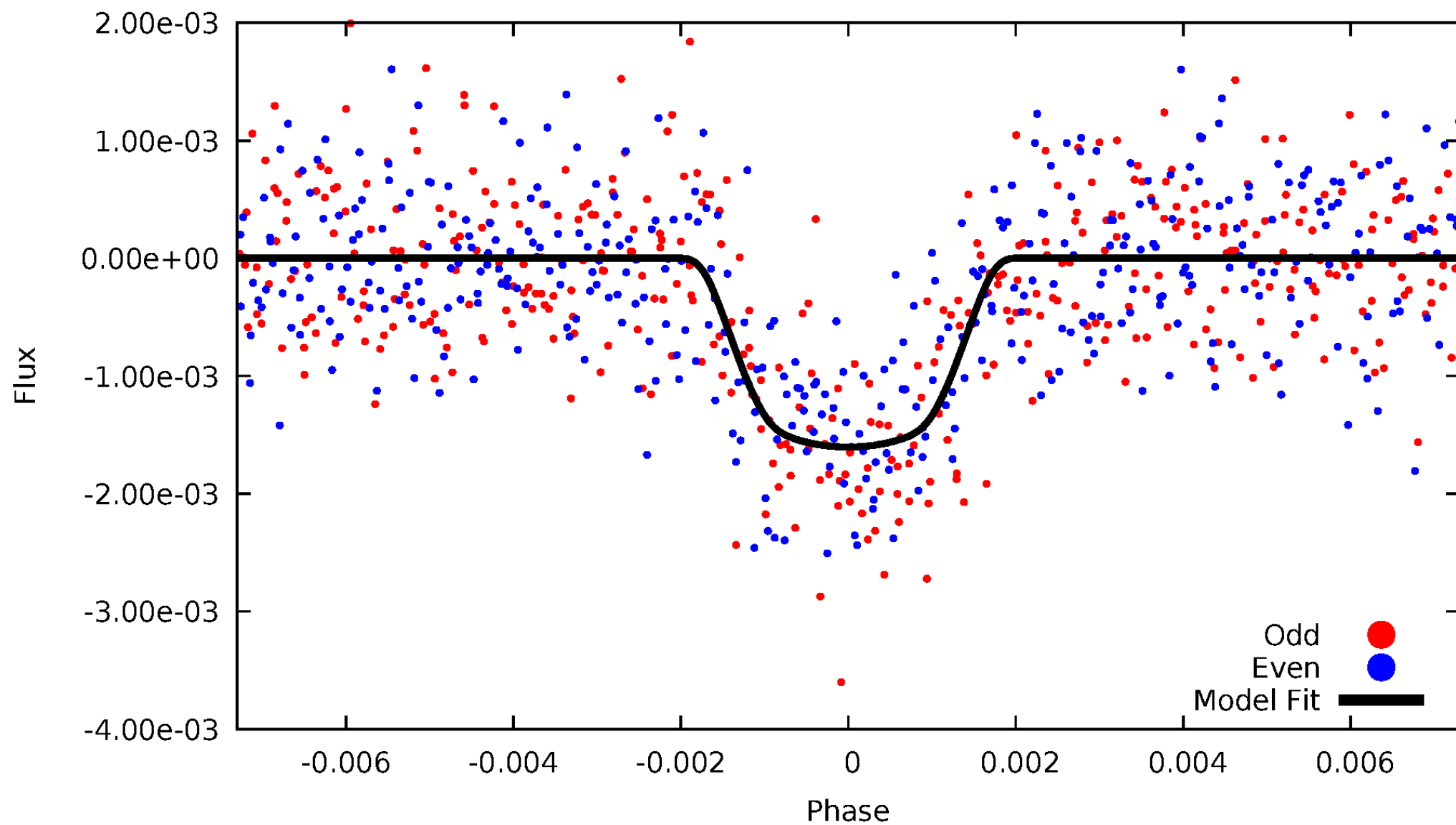


TCE 006696580-01



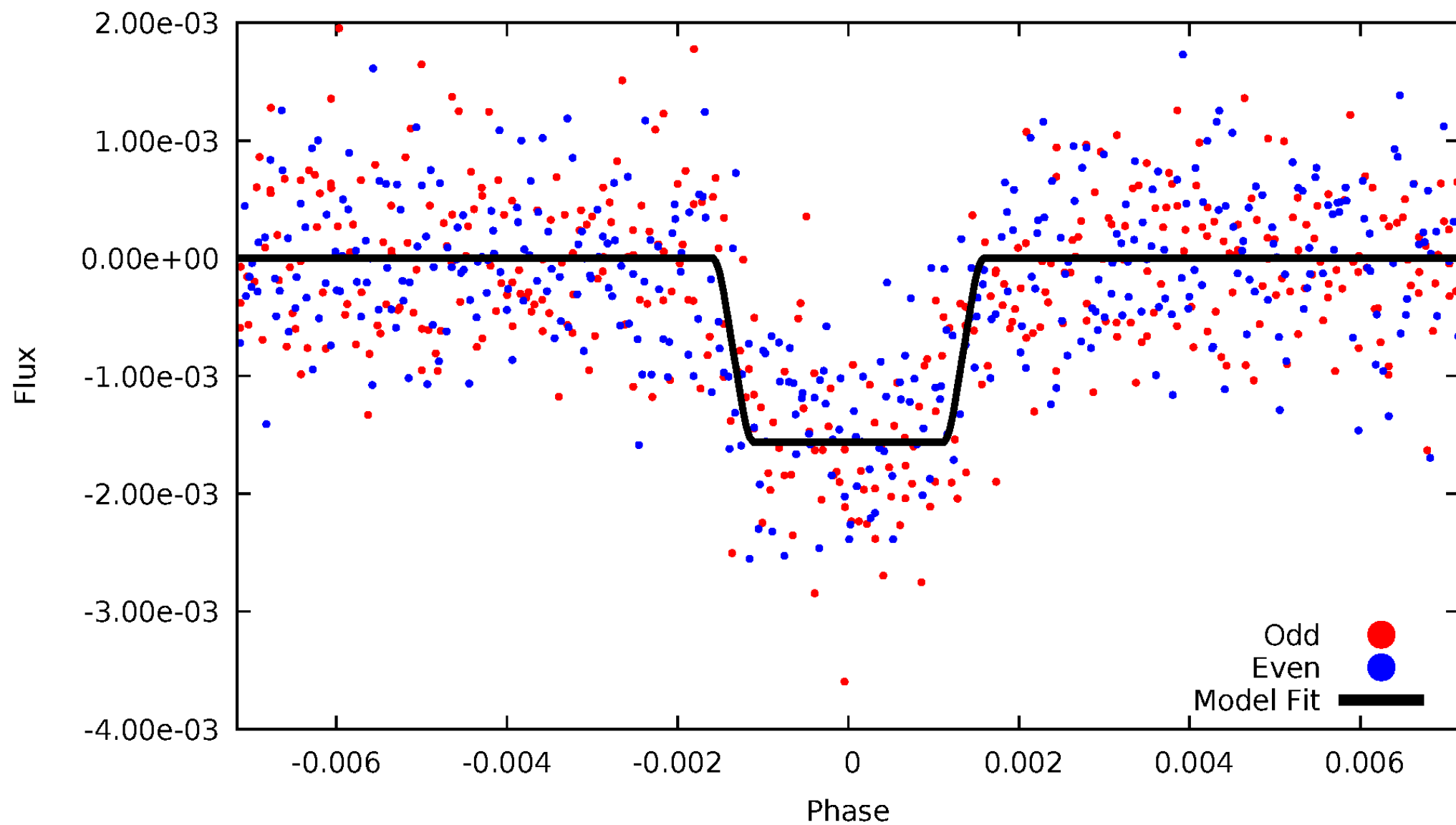
DV Odd/Even

TCE 006696580-01



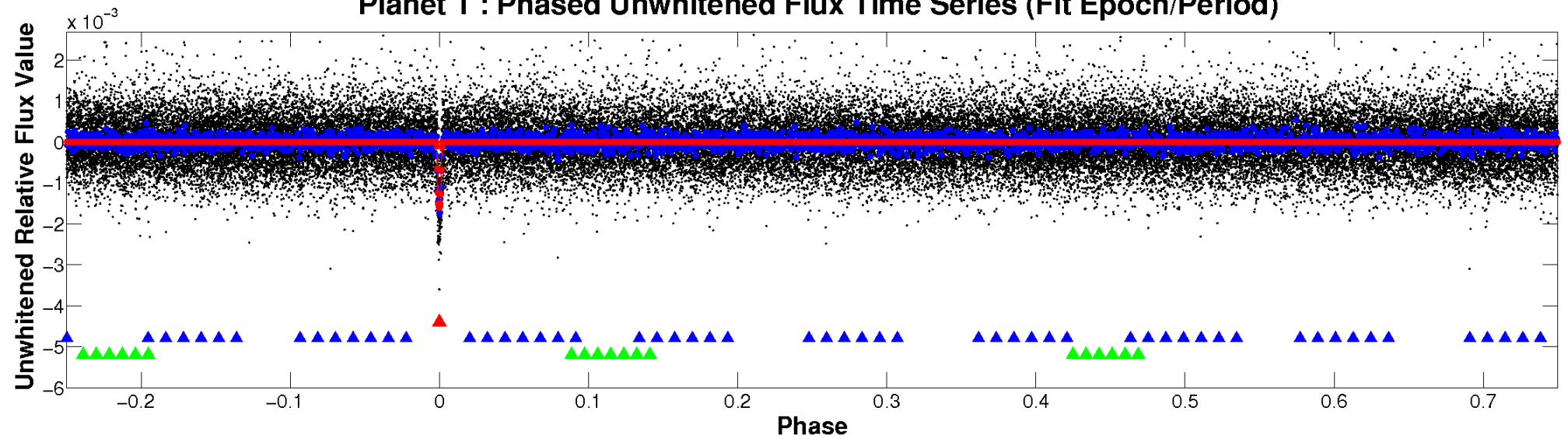
ALT Odd/Even

TCE 006696580-01

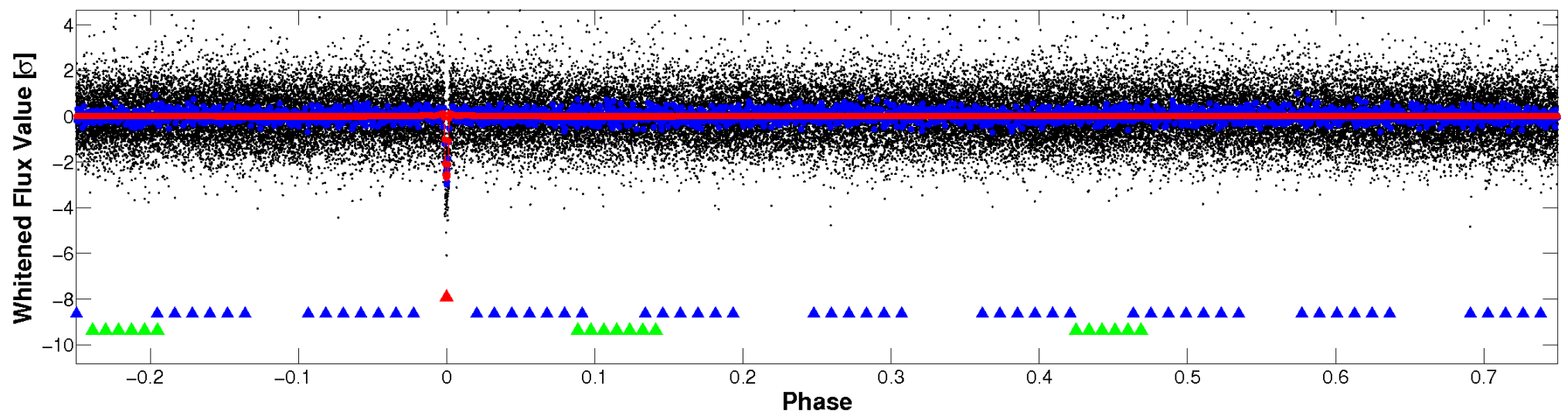


Non-Whitened Vs. Whitened Light Curve

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

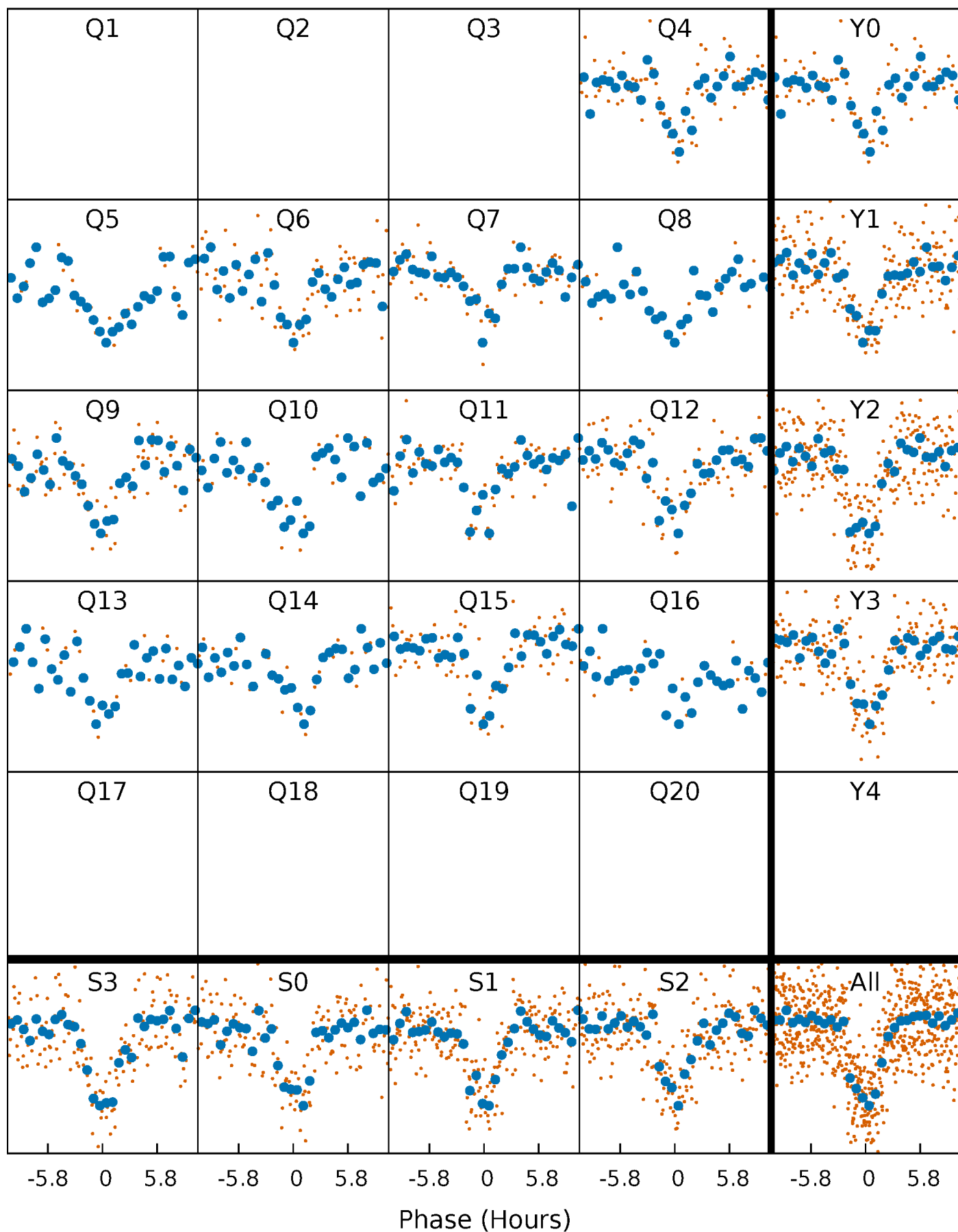


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



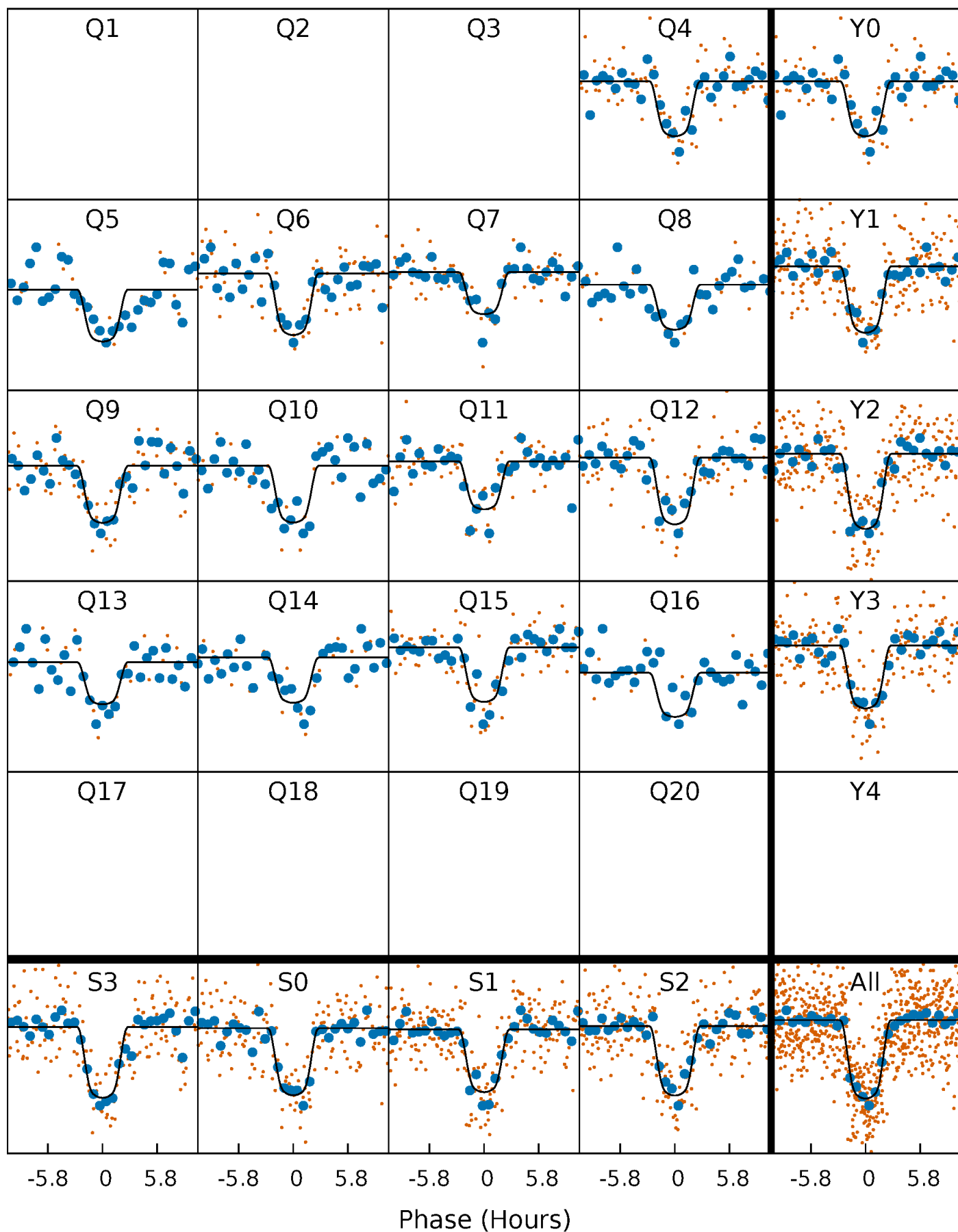
PDC Quarter-Phased Transit Curves

TCE 006696580-01 P= 57.689478 Days $T_0=139.928306$ (BKJD)



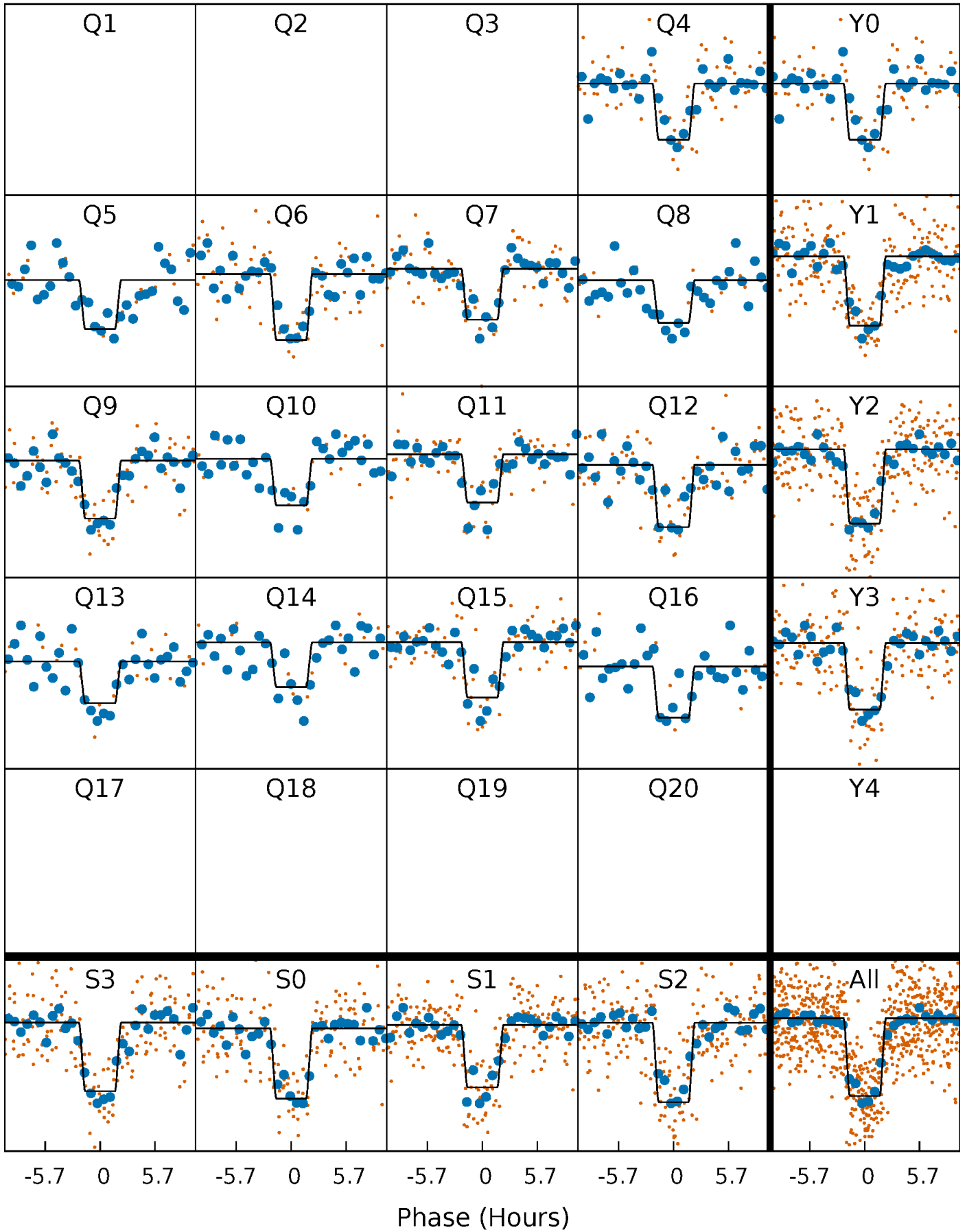
DV Quarter-Phased Transit Curves

TCE 006696580-01 P= 57.689478 Days $T_0=139.928306$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

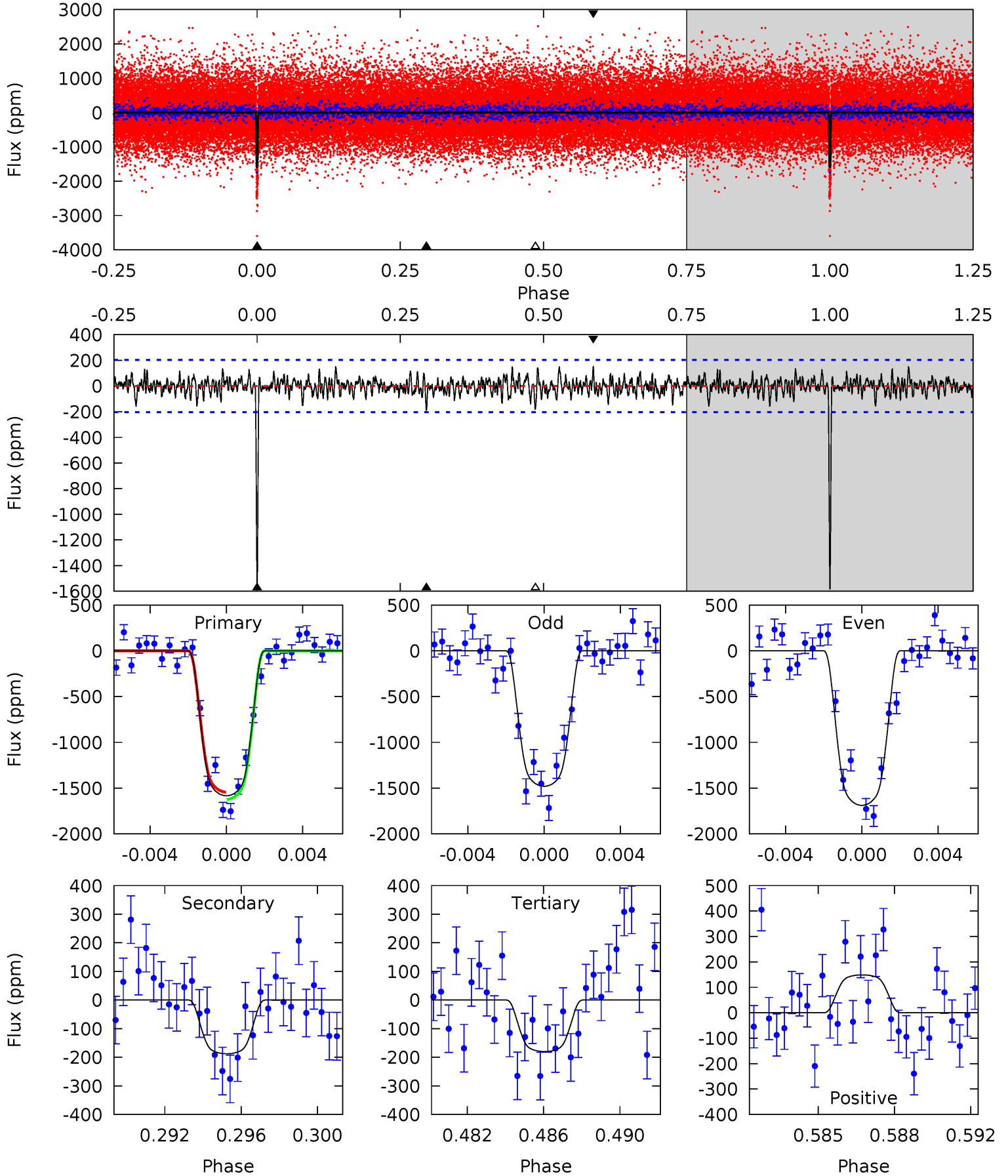
TCE 006696580-01 P= 57.690070 Days $T_0=139.920629$ (BKJD)



DV Model-Shift Uniqueness Test

006696580-01, $P = 57.689478$ Days, $E = 139.928306$ Days

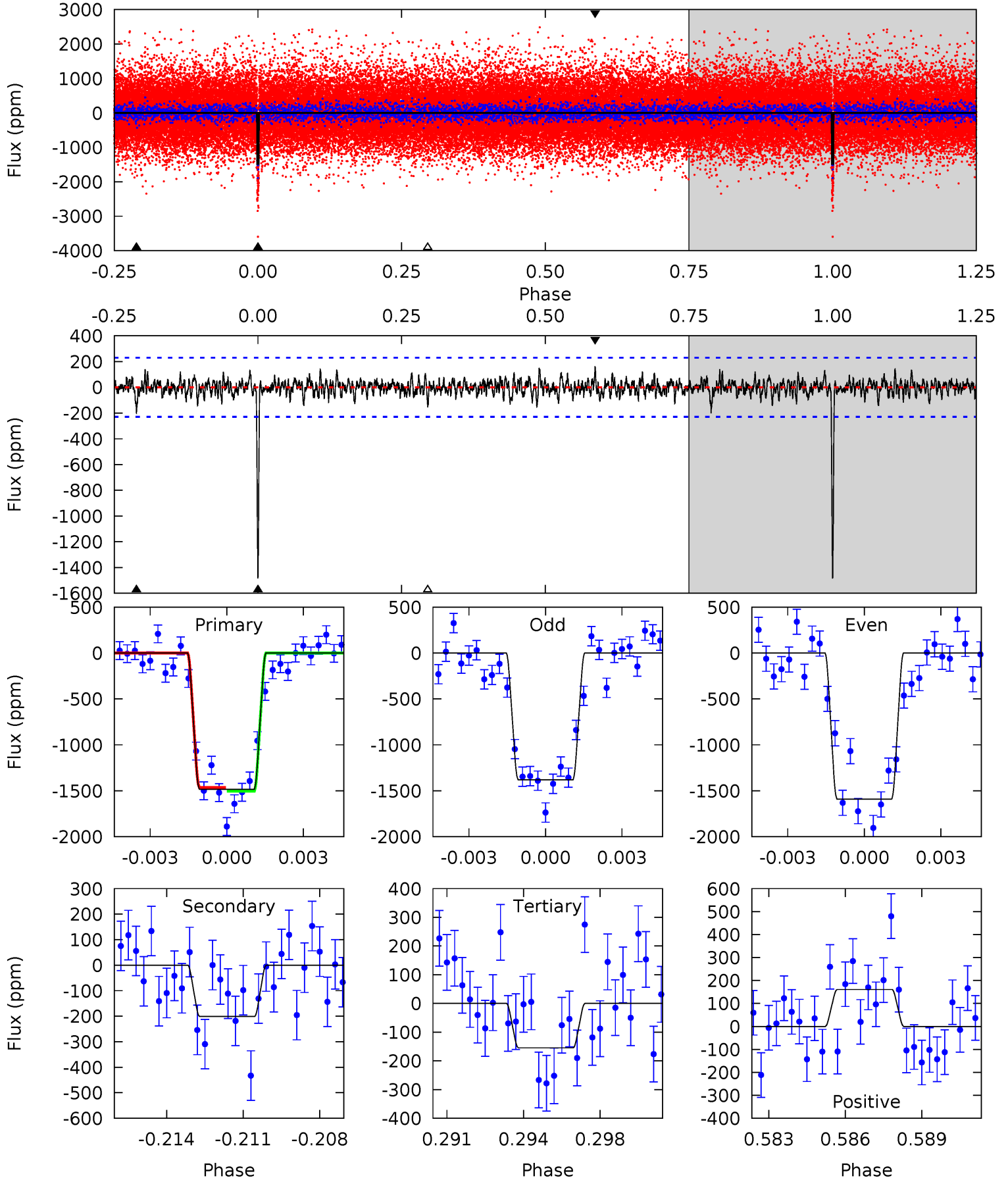
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
40.5	4.80	4.60	3.81	5.20	2.88	1.27	35.9	36.7	0.20	0.99	2.66	1.00	0.09	1.02



Alt Model-Shift Uniqueness Test

006696580-01, $P = 57.690070$ Days, $E = 139.920629$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
33.9	4.60	3.53	3.67	5.25	2.96	1.03	30.4	30.2	1.07	0.93	2.39	1.01	0.10	0.45



Stellar Parameters For KIC 006696580

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6228^{+196}_{-261}	$4.441^{+0.065}_{-0.195}$	$-0.080^{+0.250}_{-0.300}$	$1.049^{+0.313}_{-0.134}$	$1.107^{+0.159}_{-0.145}$	$1.351^{+0.371}_{-0.700}$
	+3%/-4%	+1%/-4%	+312%/-375%	+30%/-13%	+14%/-13%	+27%/-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 006696580-01 / KOI 2092.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-188 ± 39	$5.21^{+0.90}_{-0.49}$	730^{+56}_{-43}	3822^{+180}_{-185}	328^{+106}_{-98}
Alt.	-201 ± 44	$4.64^{+0.75}_{-0.43}$	728^{+50}_{-39}	4021^{+207}_{-215}	441^{+166}_{-131}

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

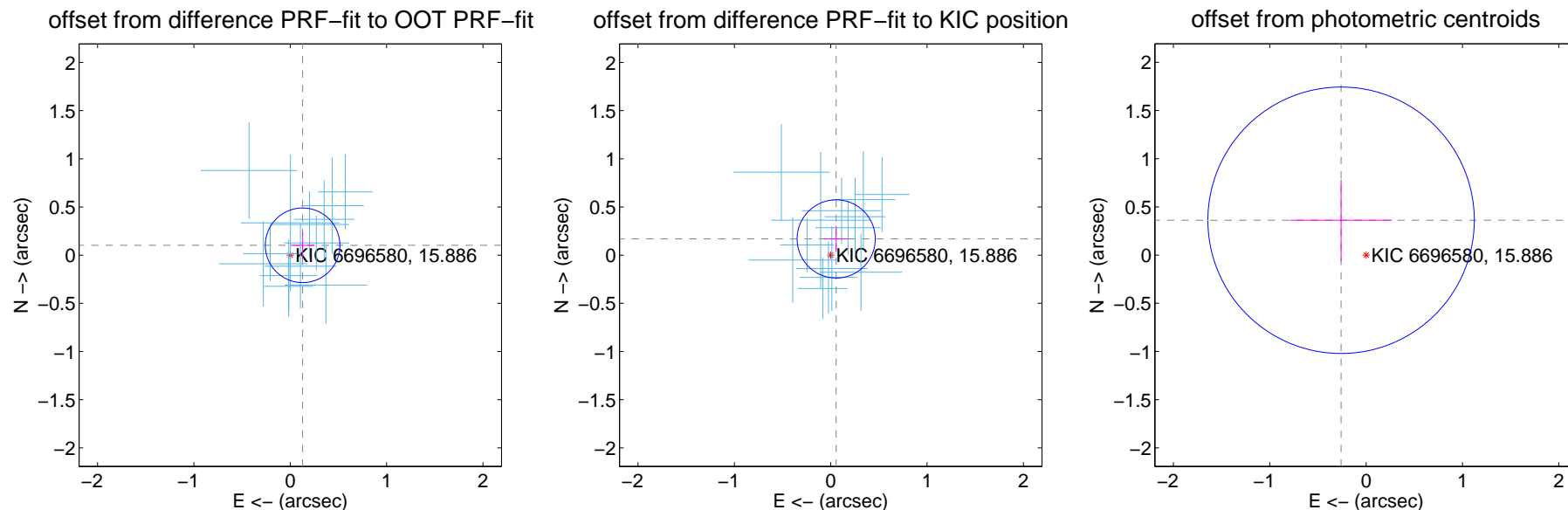
DV Centroid Data

Supplemental centroid analysis for 006696580-01. Kepler magnitude: 15.89. Transit SNR 29.04

There are 13 quarters with good PRF difference image offsets

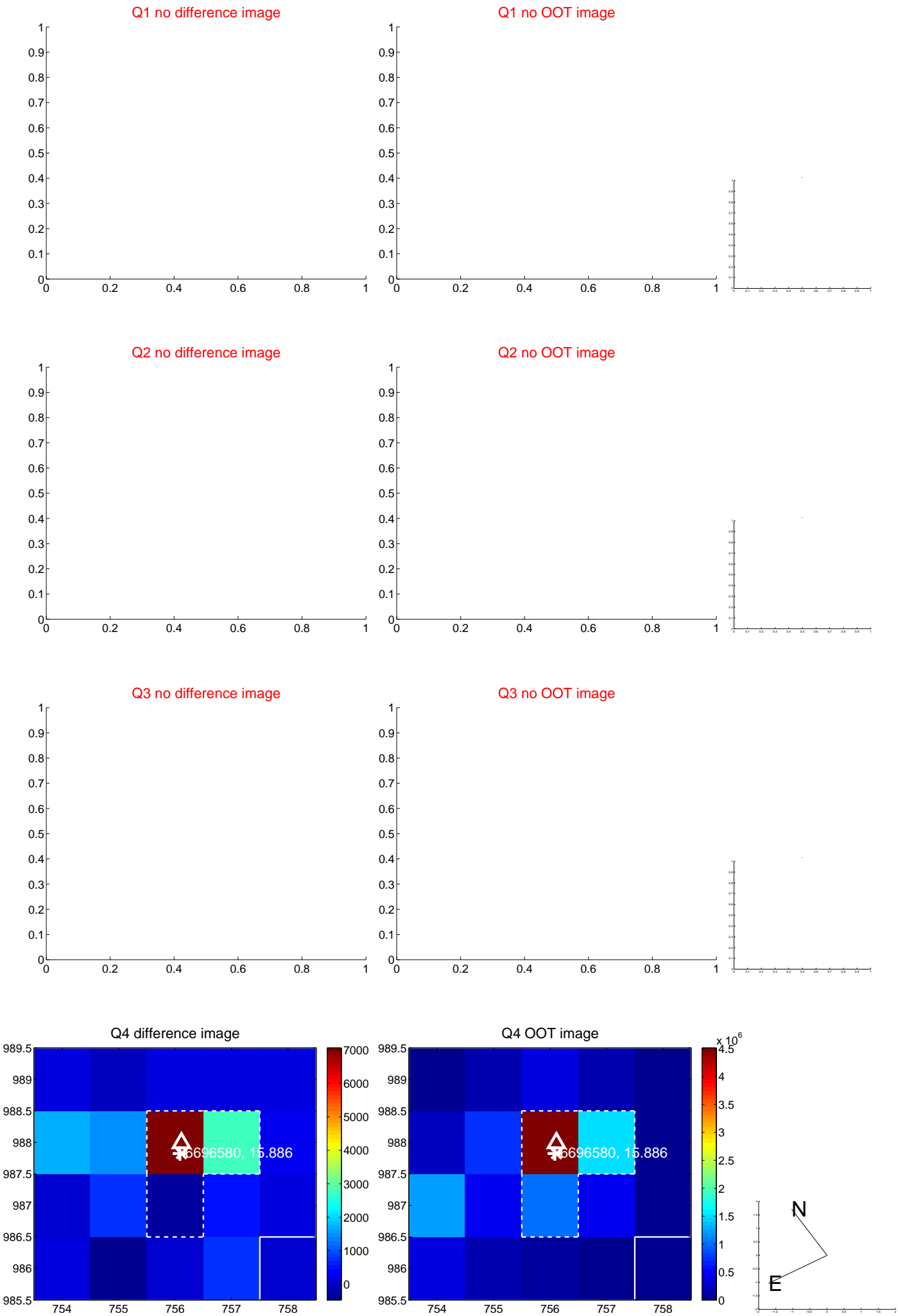
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.164 ± 0.129	1.27	-0.128 ± 0.124	0.102 ± 0.136
PRF-fit source offset from KIC position	0.178 ± 0.135	1.31	-0.057 ± 0.124	0.168 ± 0.136
photometric centroid source offset	0.44 ± 0.46	0.97	0.26 ± 0.53	0.36 ± 0.42

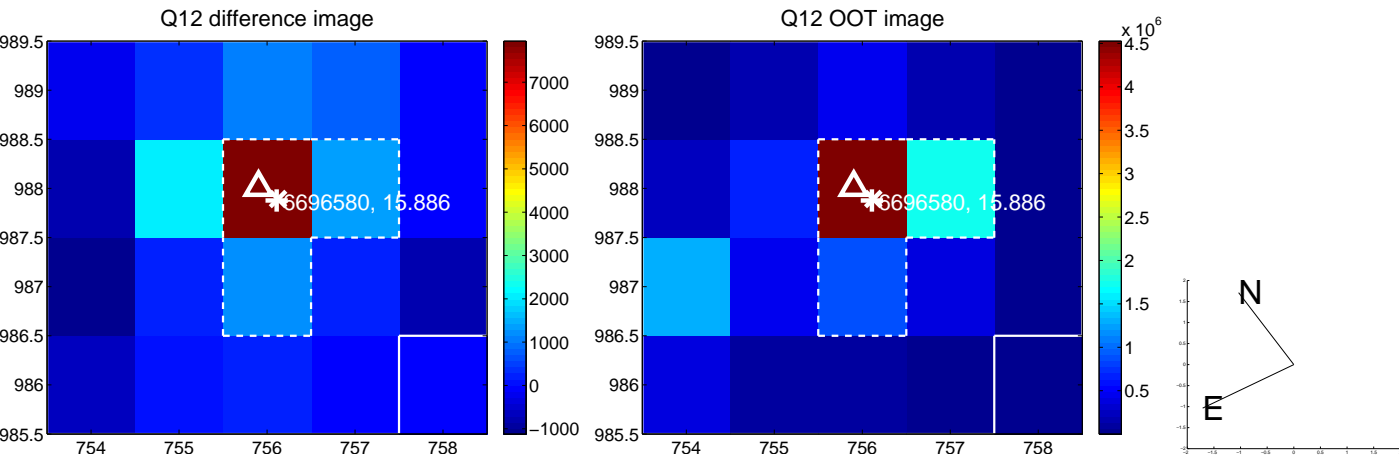
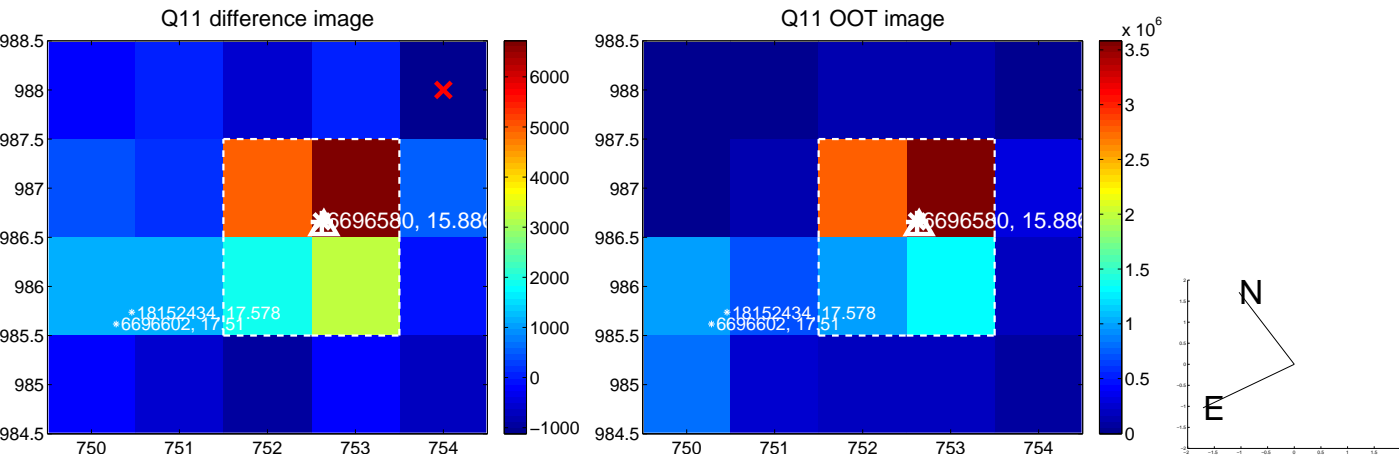
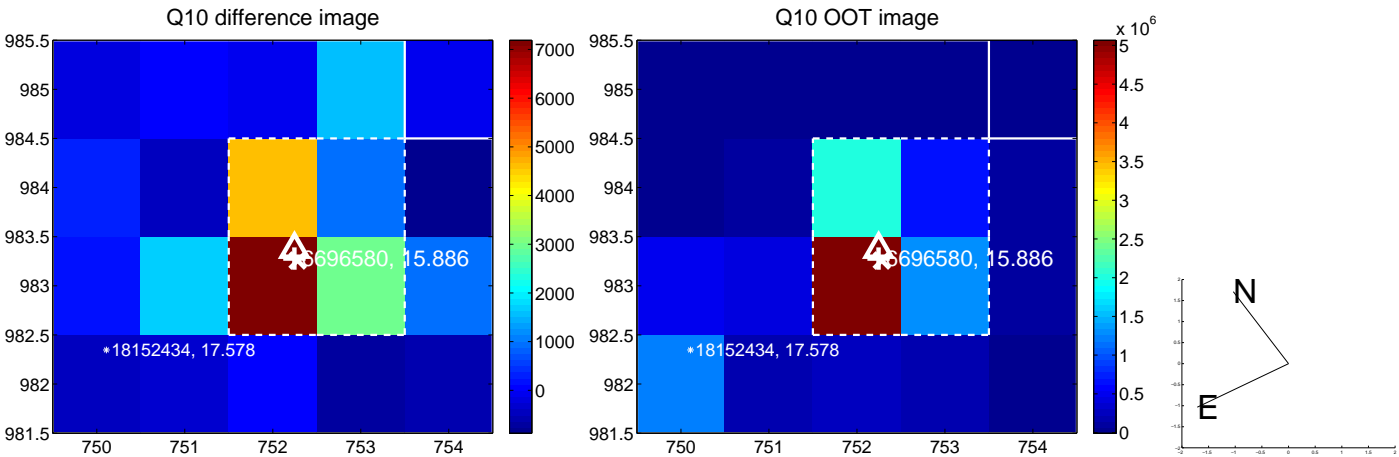
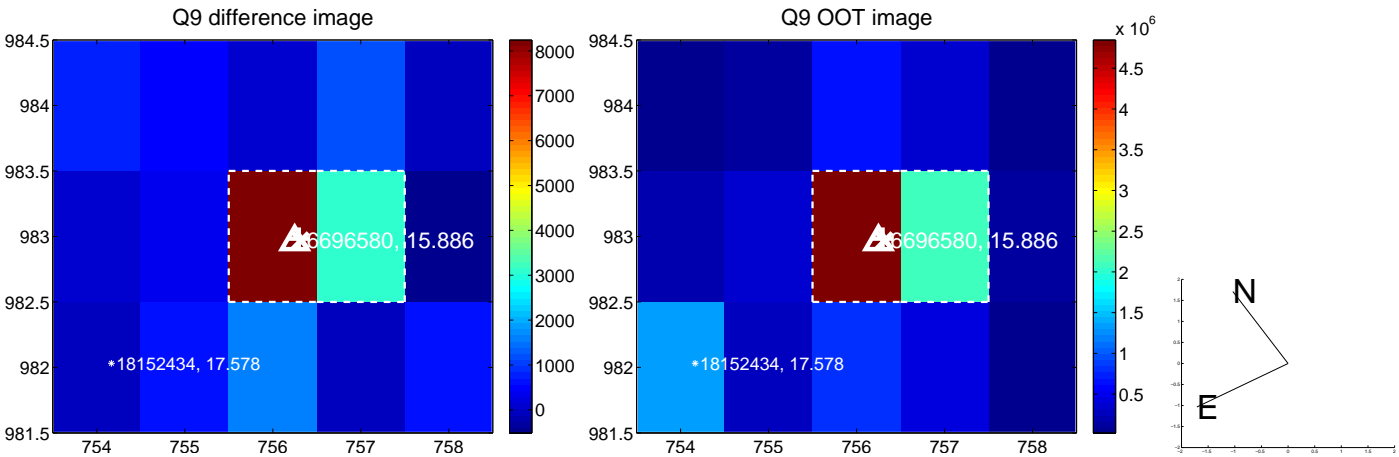


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

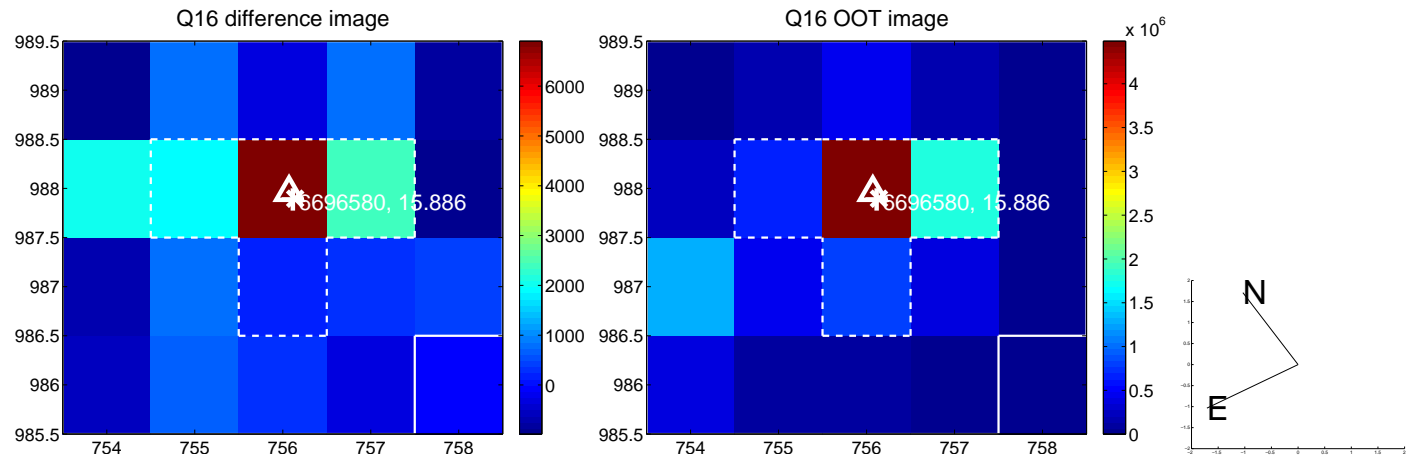
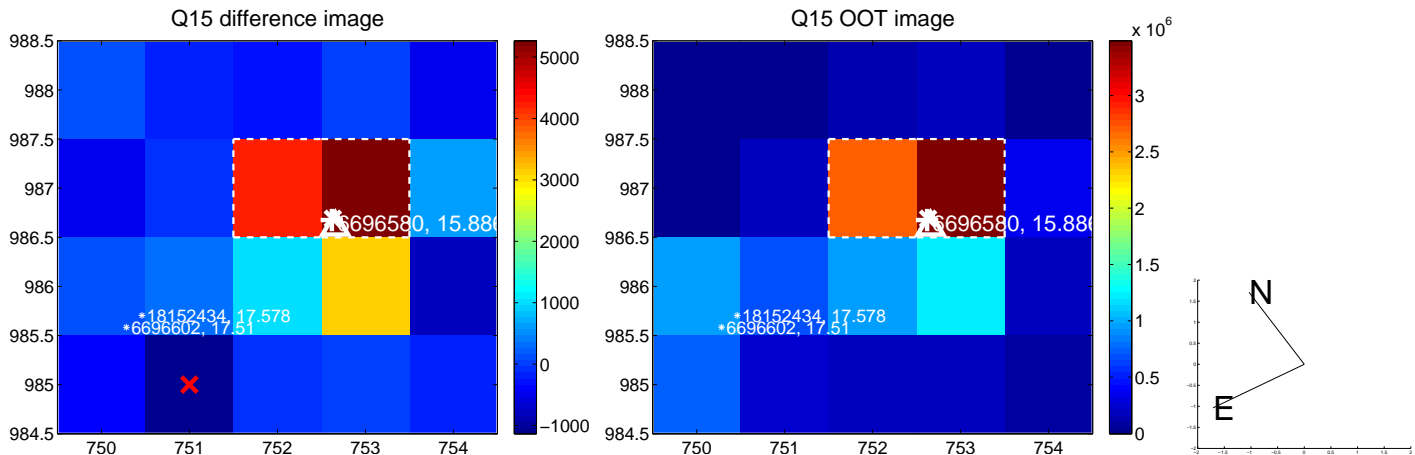
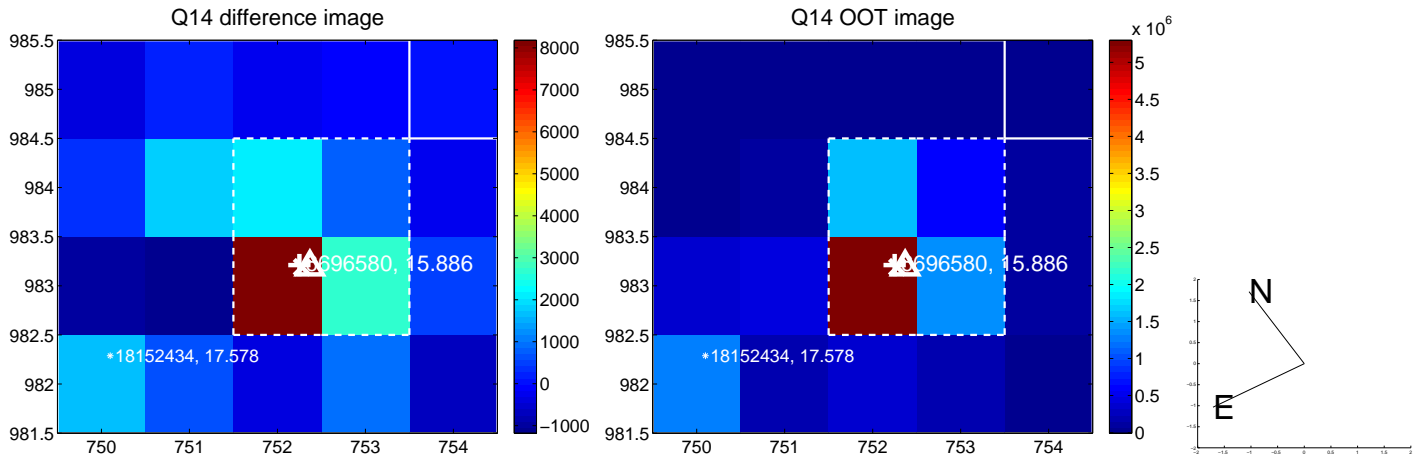
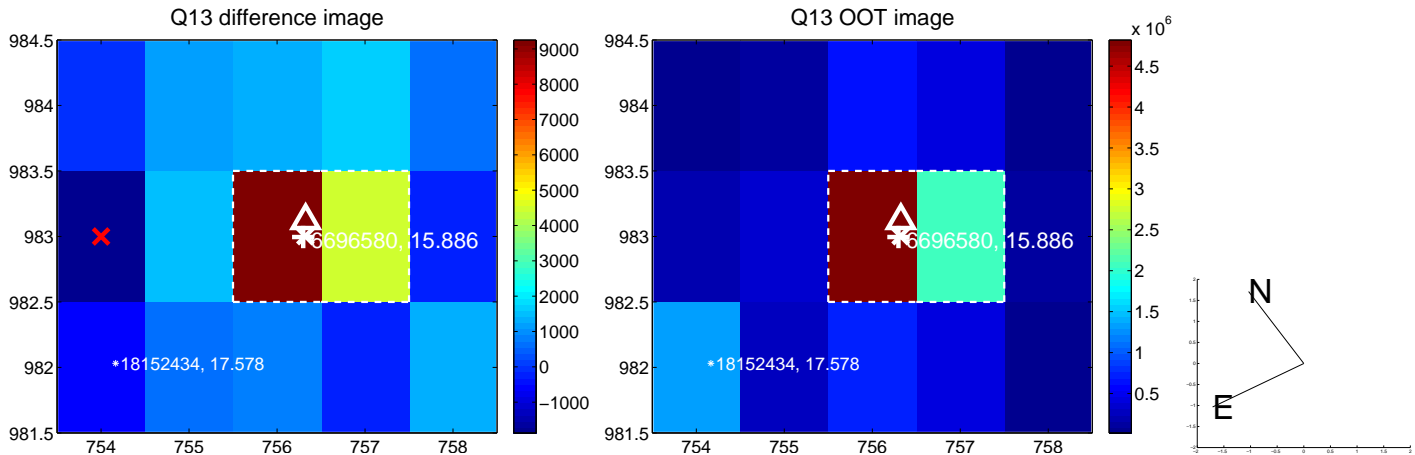
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



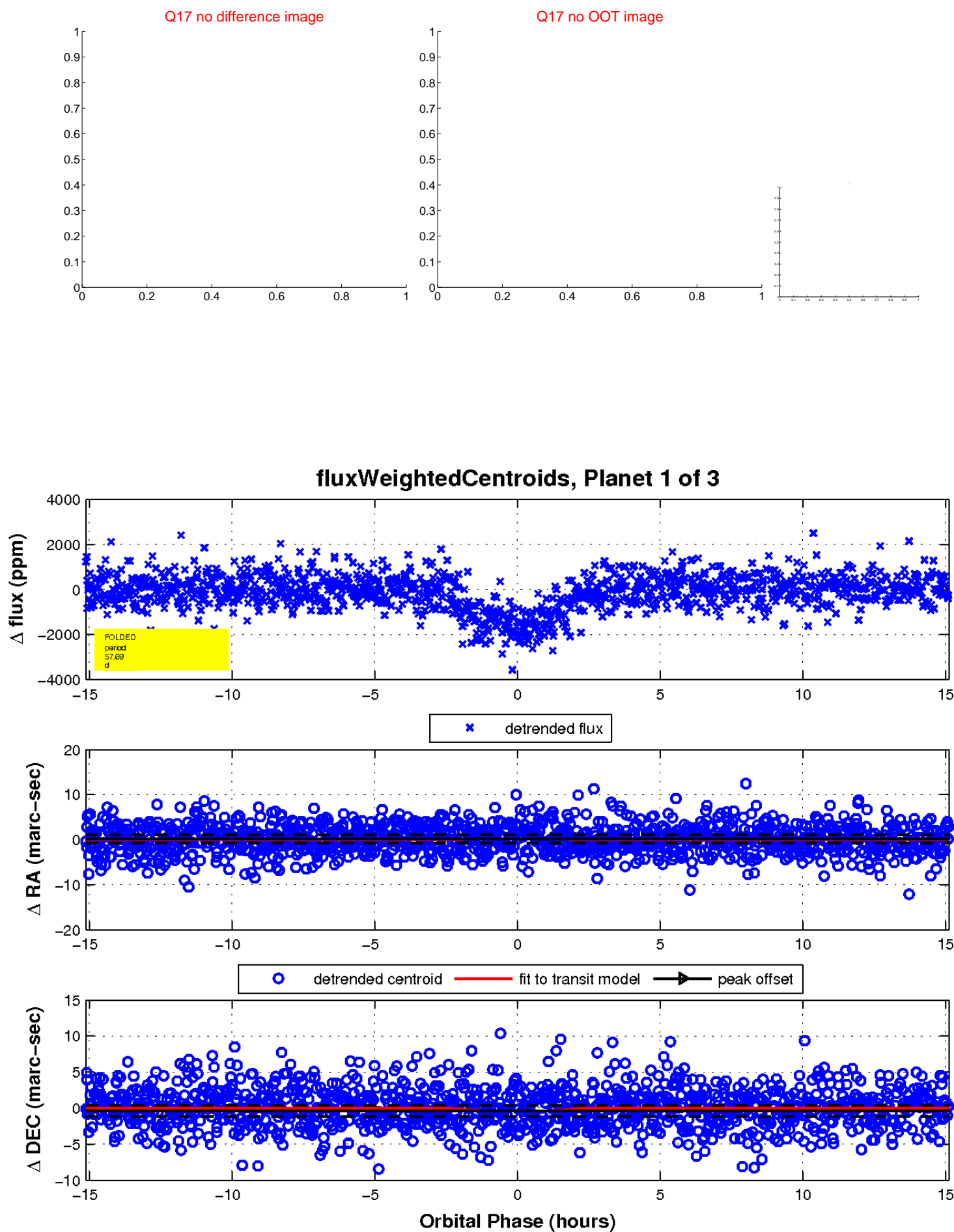
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

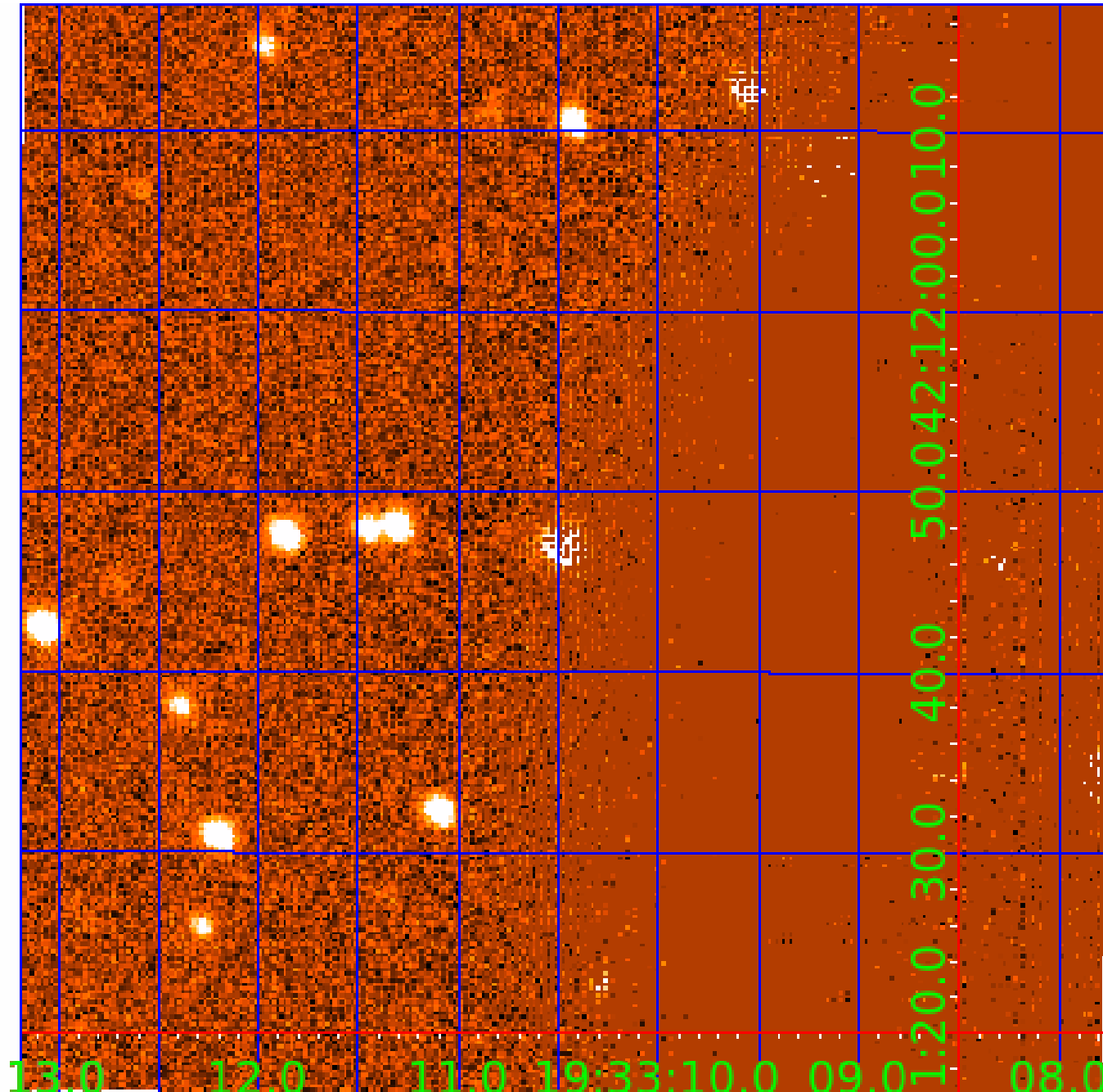


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006696580

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})
006696580-01	OBS	2092.01	57.689478	139.928306	1603.0	5.053	27.0	29.0	1.05	6228	5.08	16.22
006696580-02	OBS	2092.02	25.563783	145.205557	1073.8	4.950	27.4	29.2	1.05	6228	4.14	48.01
006696580-03	OBS	2092.03	77.087624	202.730559	970.0	4.019	11.6	12.9	1.05	6228	4.25	11.02

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006696580-01	OBS	PC	0.98	0	0	0	0	NO_COMMENT
006696580-02	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006696580-03	OBS	PC	0.78	0	0	0	0	CENT_FEW_DIFFS

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

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

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

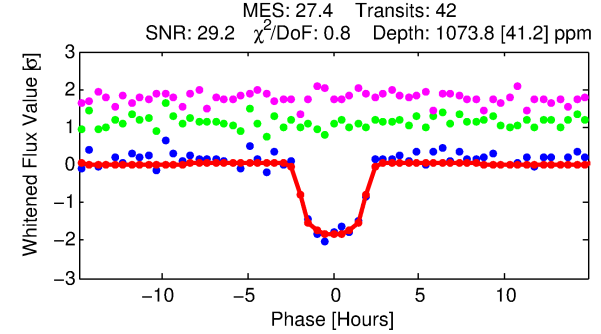
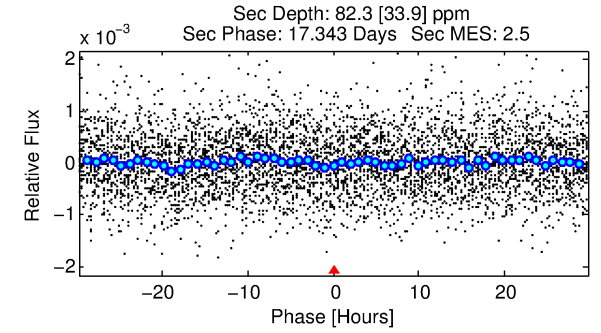
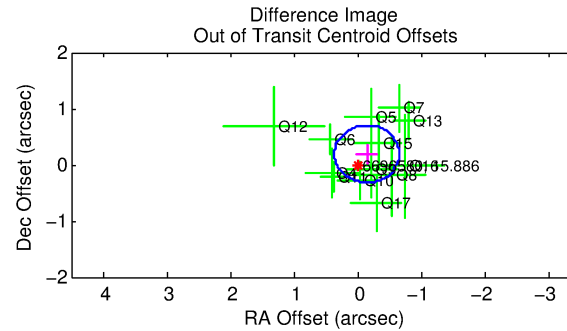
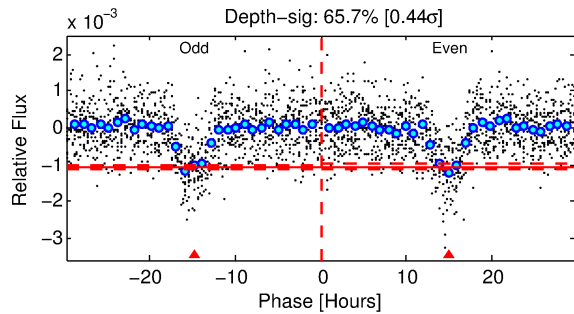
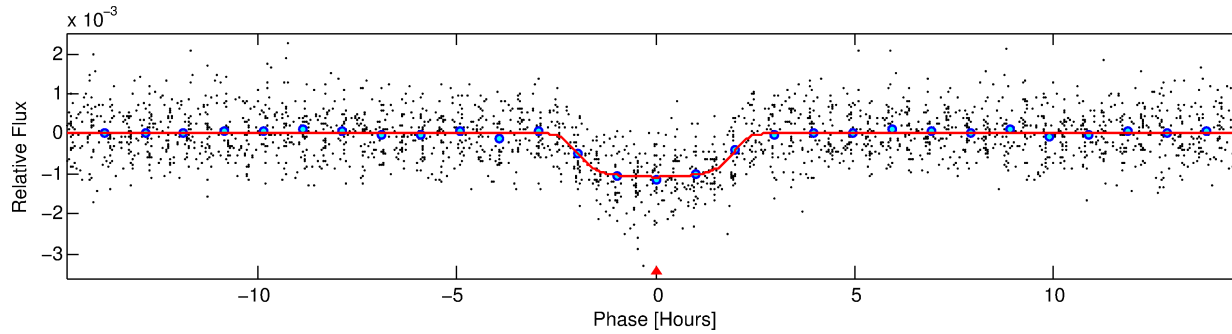
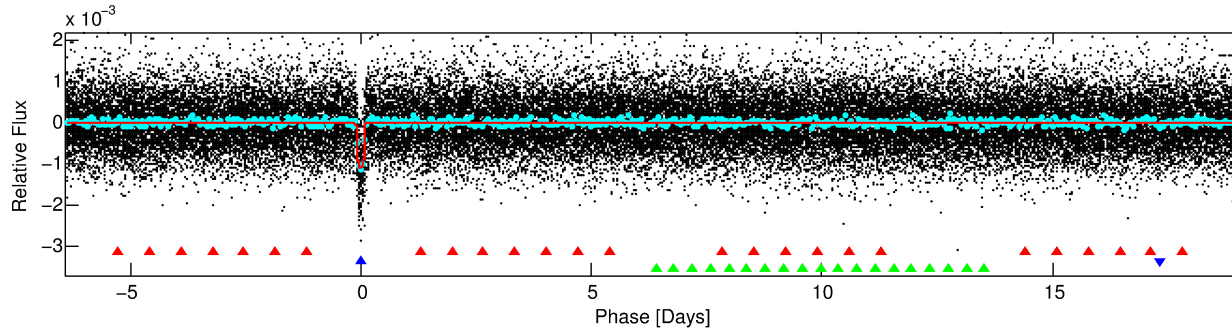
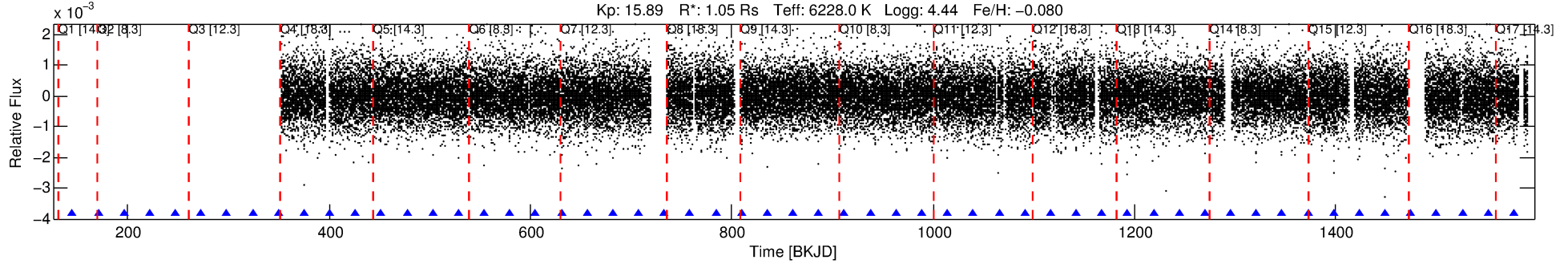
Ephemeris Match Information For 006696580-02

No Significant Match Found

DV One-Page Summary

KIC: 6696580 Candidate: 2 of 3 Period: 25.564 d
KOI: K02092.02 Name: Kepler-359b Corr: 0.951

Kp: 15.89 R*: 1.05 Rs Teff: 6228.0 K Logg: 4.44 Fe/H: -0.080



DV Fit Results:

Period = 25.56378 [0.00015] d
Epoch = 145.2056 [0.0050] BKJD
Rp/R* = 0.0361 [0.0015]
a/R* = 18.61 [2.94]
b = 0.92 [0.03]
Seff = 48.01 [19.04]
Teq = 671 [67] K
Rp = 4.14 [1.25] Re
a = 0.1758 [0.0438] AU
Ag = 81.76 [45.15] [1.79σ]
Teffp = 3121 [352] K [6.83σ]

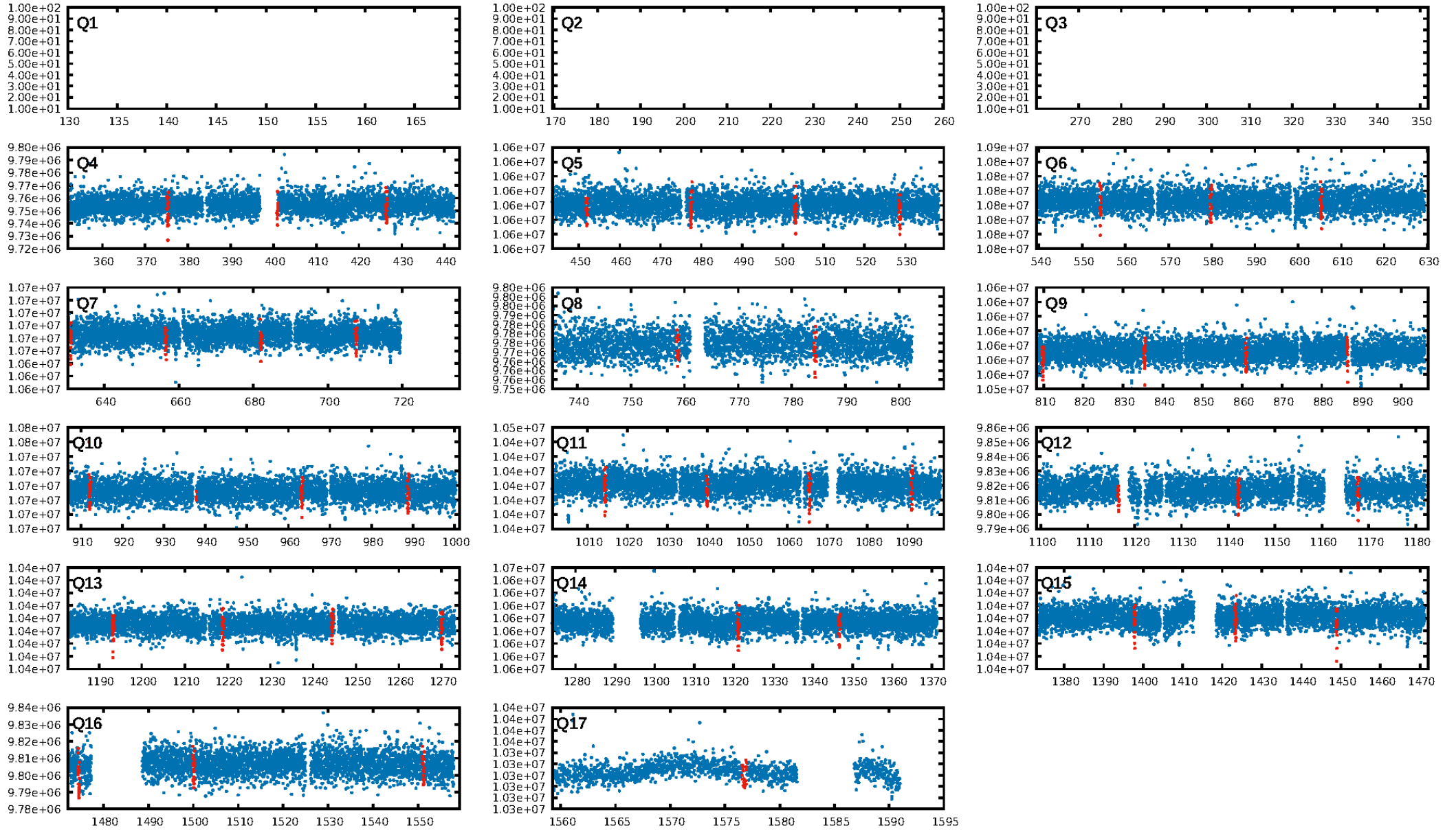
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [109.00σ]
ModelChiSquare2-sig: 100.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 9.63e-160
RollingBand-fgt: 1.00 [41/41]
GhostDiagnostic-chr: 2.303
Centroid-sig: 98.7%
Centroid-so: 0.331 arcsec [0.64σ]
OotOffset-rm: 0.241 arcsec [1.42σ]
KicOffset-rm: 0.261 arcsec [1.55σ]
OotOffset-st: 2/3/4/4 [13]
KicOffset-st: 2/3/4/4 [13]
DiffImageQuality-fgm: 1.00 [13/13]
DiffImageOverlap-fno: 1.00 [14/14]

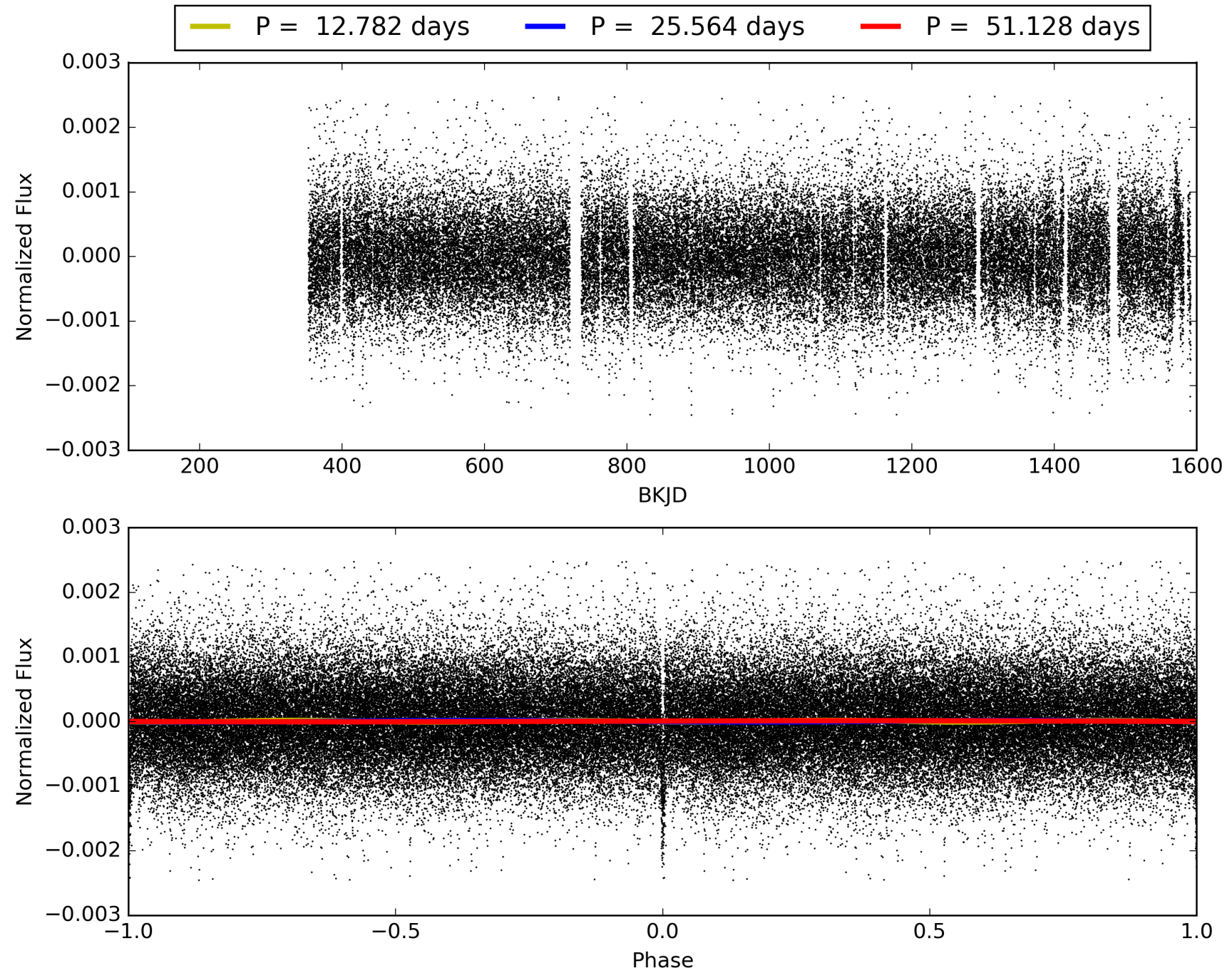
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 21:34:20 Z

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

TCE 006696580-02, PDC Light Curves

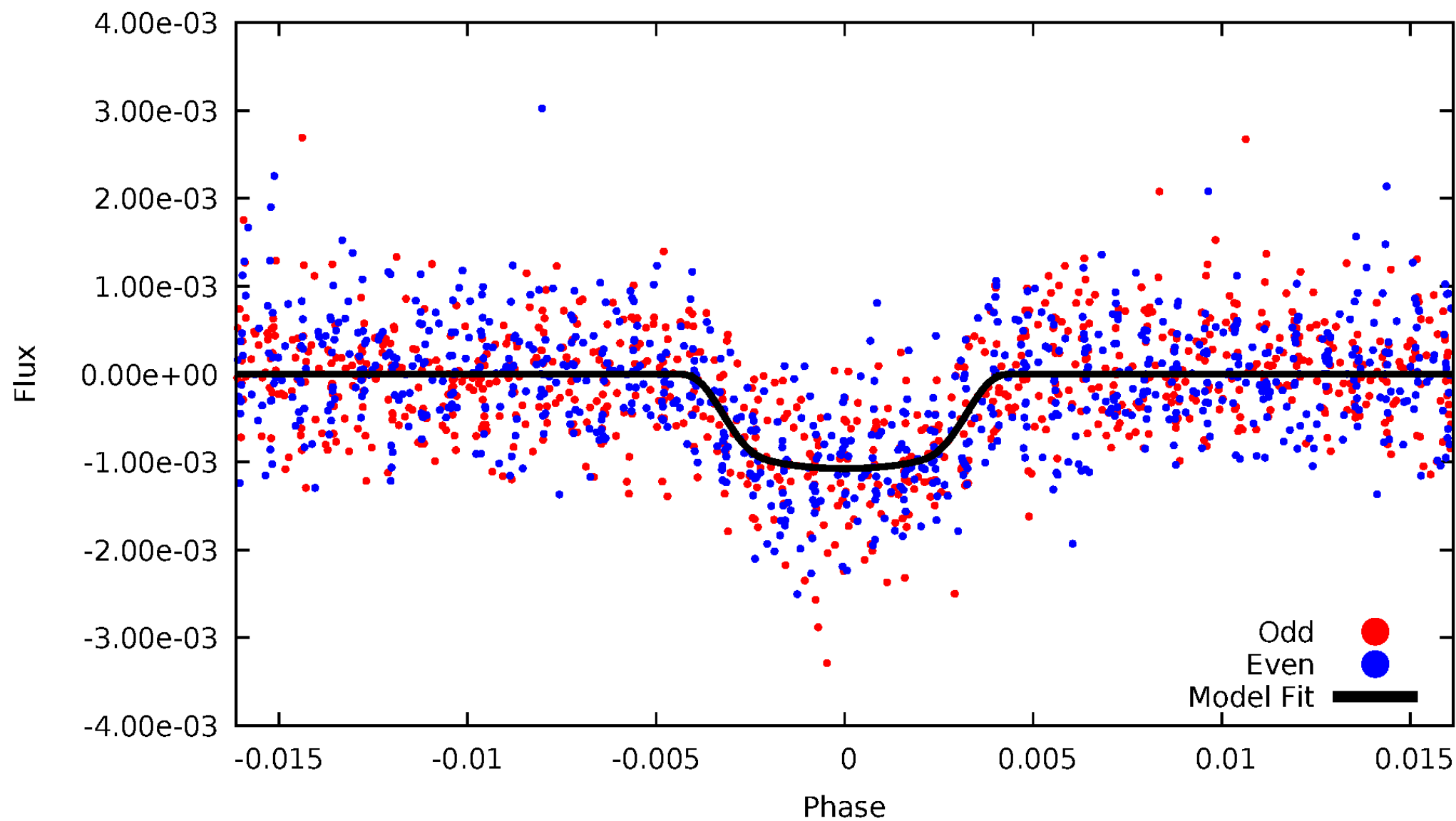


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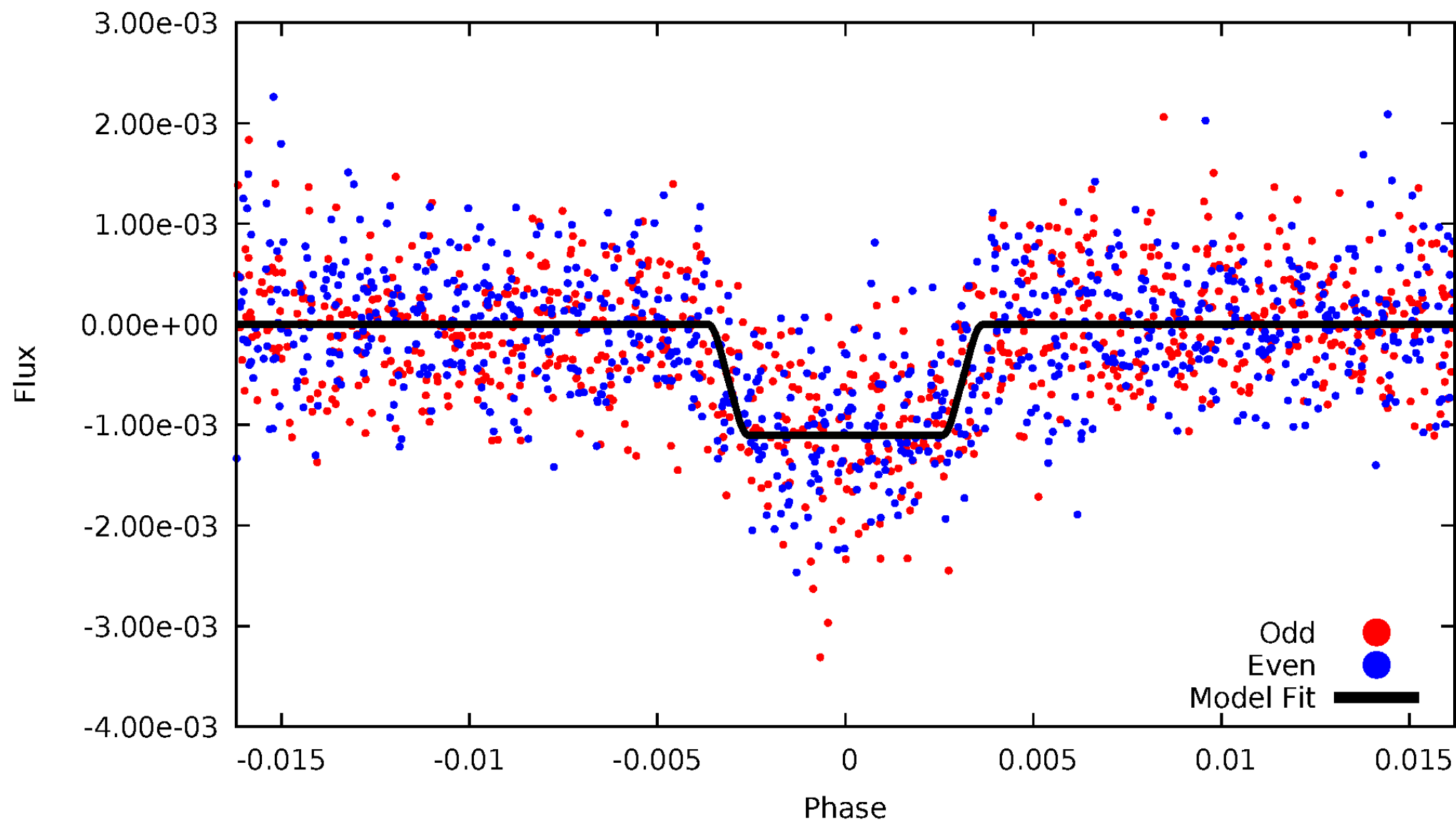
DV Odd/Even

TCE 006696580-02



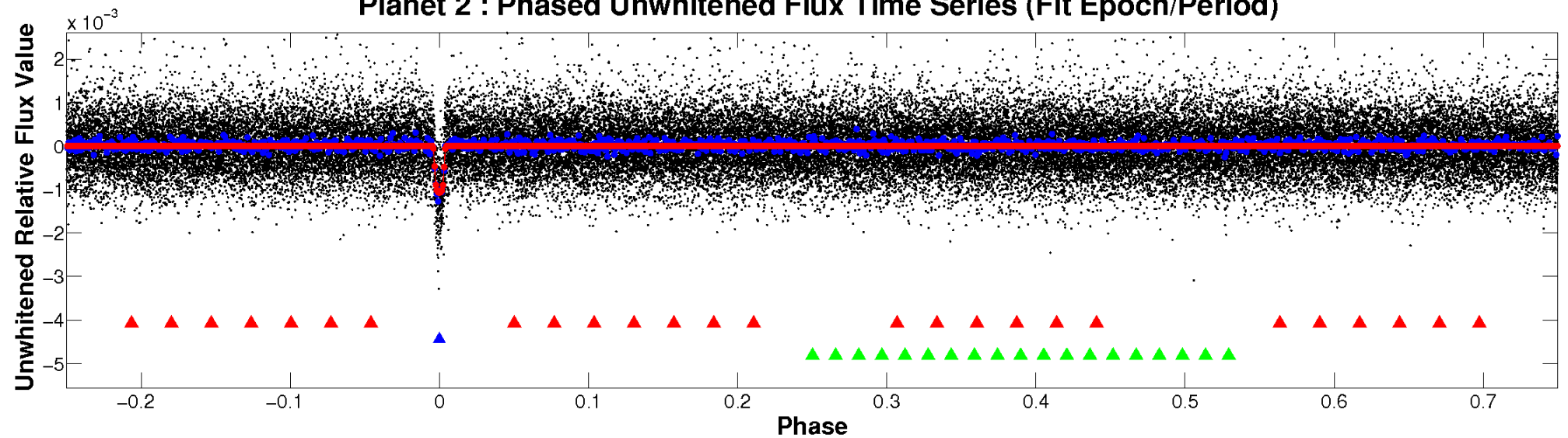
ALT Odd/Even

TCE 006696580-02

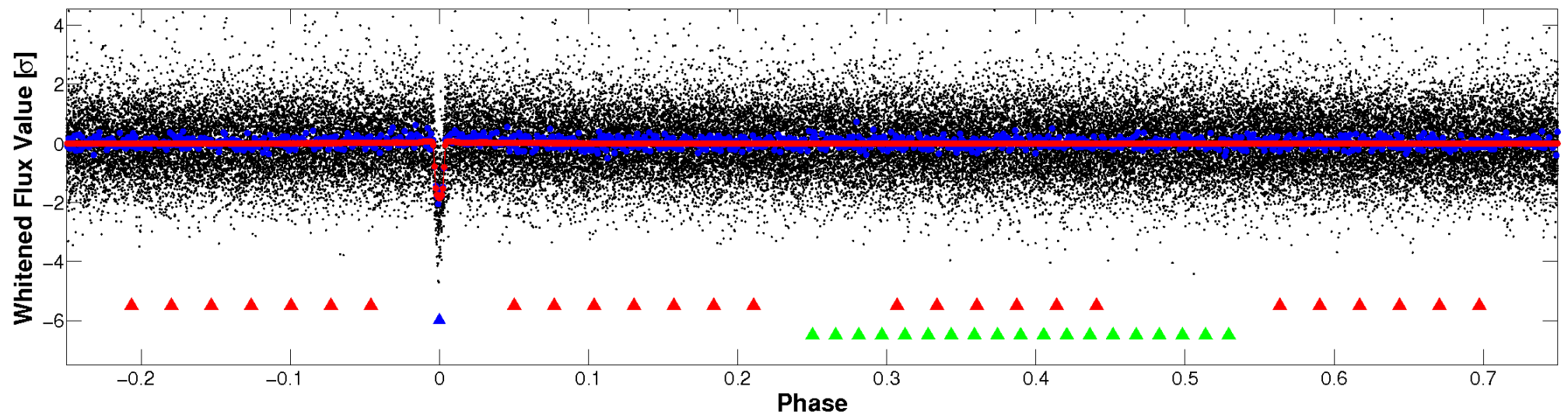


Non-Whitened Vs. Whitened Light Curve

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

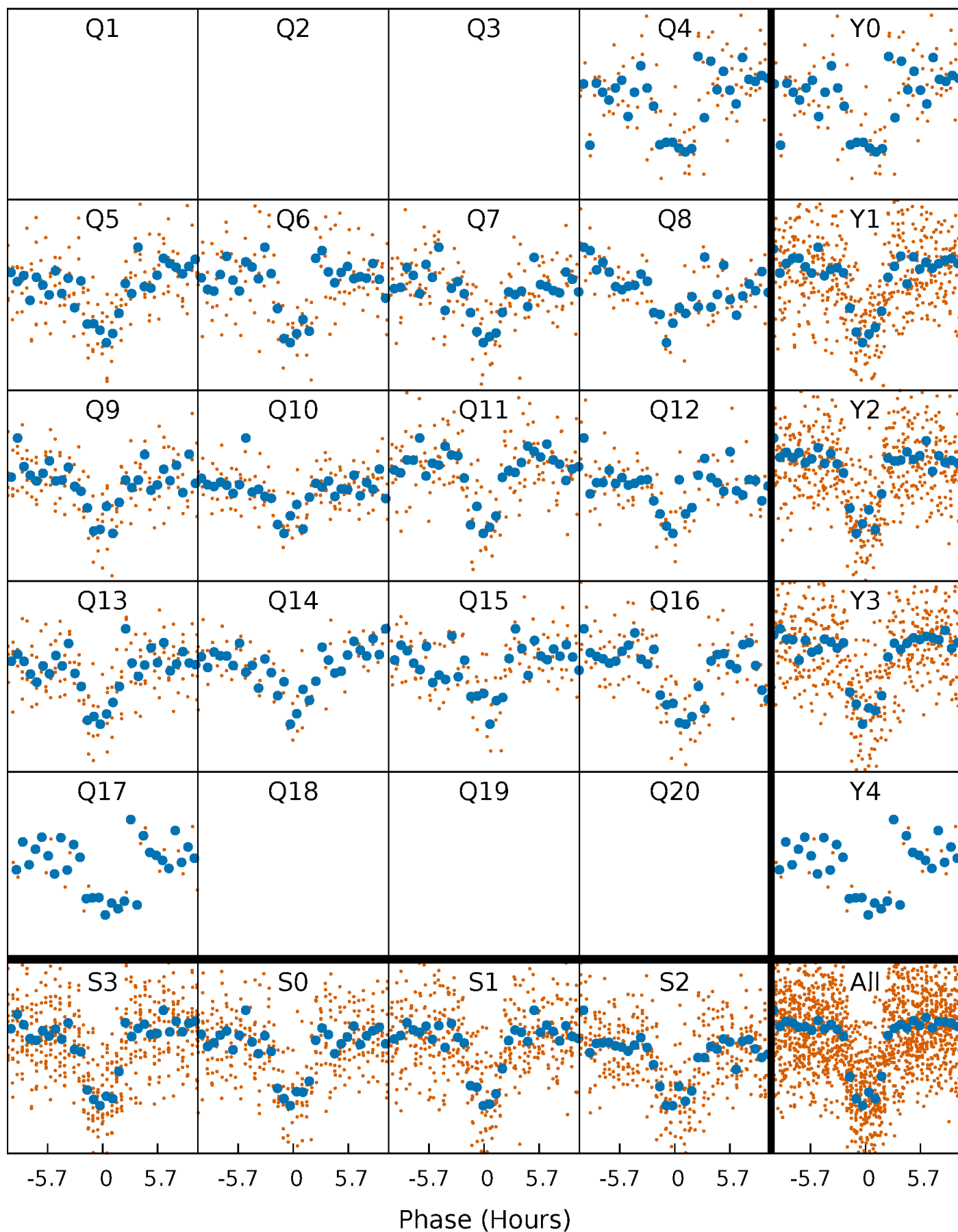


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



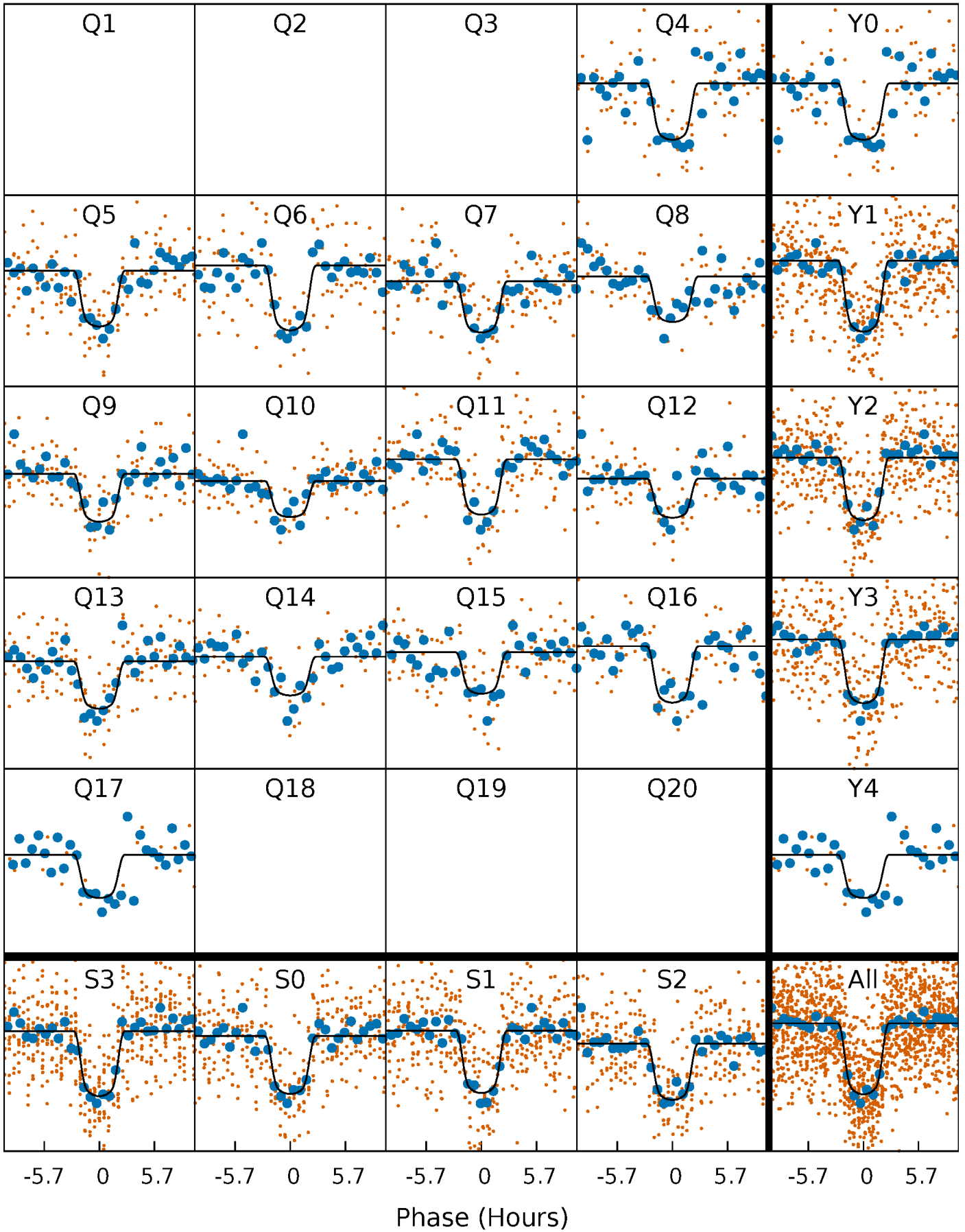
PDC Quarter-Phased Transit Curves

TCE 006696580-02 P= 25.563783 Days $T_0=145.205557$ (BKJD)



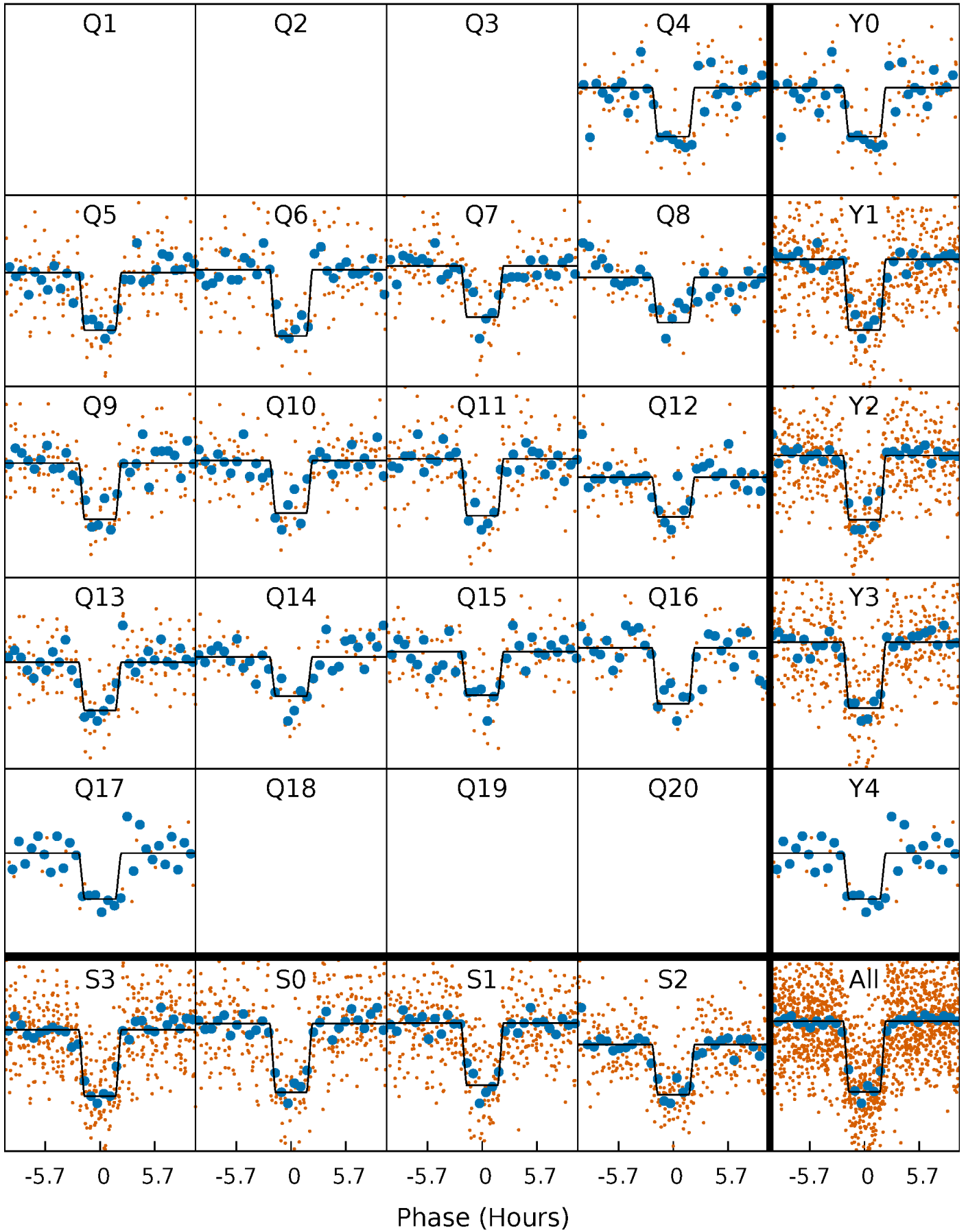
DV Quarter-Phased Transit Curves

TCE 006696580-02 $P = 25.563783$ Days $T_0 = 145.205557$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

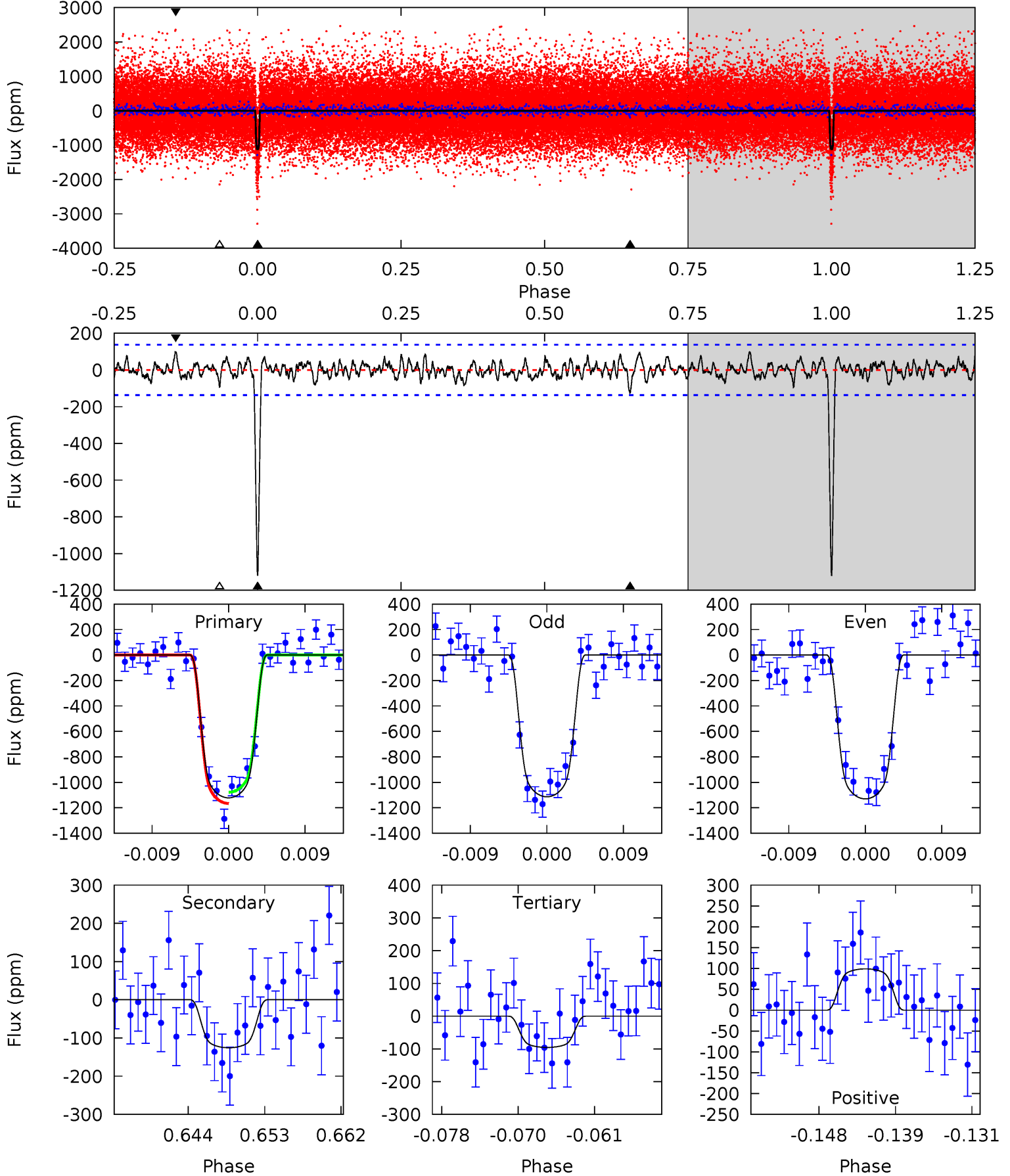
TCE 006696580-02 P= 25.564049 Days $T_0=145.197043$ (BKJD)



DV Model-Shift Uniqueness Test

006696580-02, P = 25.563783 Days, E = 145.205557 Days

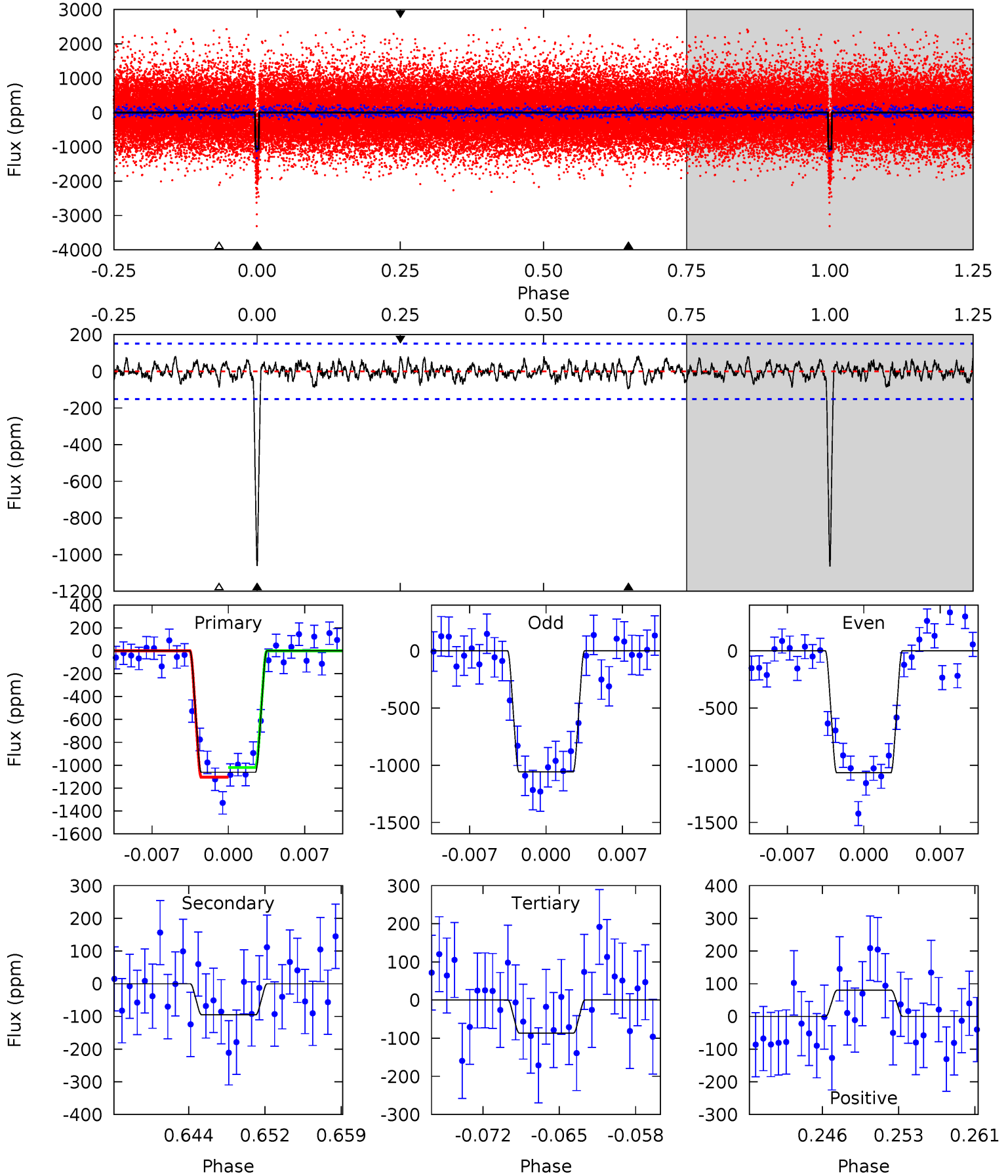
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
41.3	4.62	3.51	3.65	5.05	2.62	1.22	37.8	37.6	1.11	0.98	0.30	0.99	0.08	1.62



Alt Model-Shift Uniqueness Test

006696580-02, P = 25.564049 Days, E = 145.197043 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
35.7	3.19	2.91	2.69	5.09	2.69	1.02	32.8	33.0	0.28	0.50	0.15	1.01	0.07	1.41



Stellar Parameters For KIC 006696580

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6228^{+196}_{-261}	$4.441^{+0.065}_{-0.195}$	$-0.080^{+0.250}_{-0.300}$	$1.049^{+0.313}_{-0.134}$	$1.107^{+0.159}_{-0.145}$	$1.351^{+0.371}_{-0.700}$
	+3%/-4%	+1%/-4%	+312%/-375%	+30%/-13%	+14%/-13%	+27%/-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 006696580-02 / KOI 2092.02

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-126 ± 27	$4.24^{+0.69}_{-0.40}$	952^{+70}_{-49}	3820^{+180}_{-199}	112^{+40}_{-34}
Alt.	-95 ± 30	$3.94^{+0.62}_{-0.40}$	957^{+73}_{-57}	3753^{+220}_{-245}	98^{+43}_{-35}

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

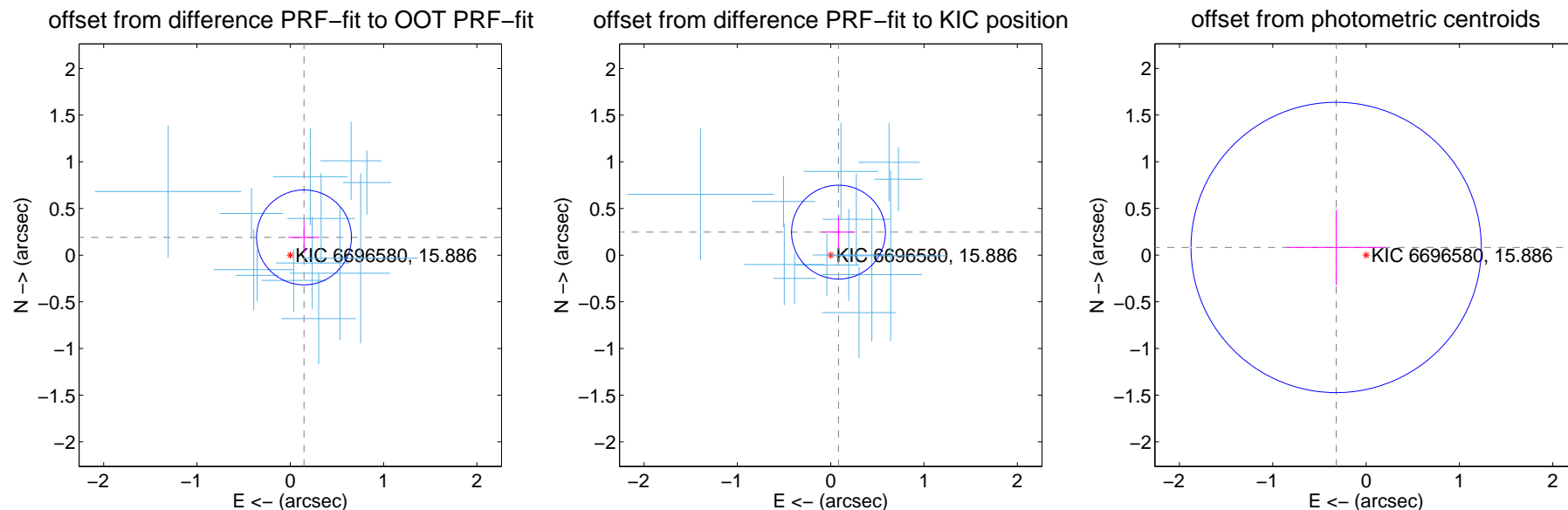
DV Centroid Data

Supplemental centroid analysis for 006696580-02. Kepler magnitude: 15.89. Transit SNR 29.23

There are 13 quarters with good PRF difference image offsets

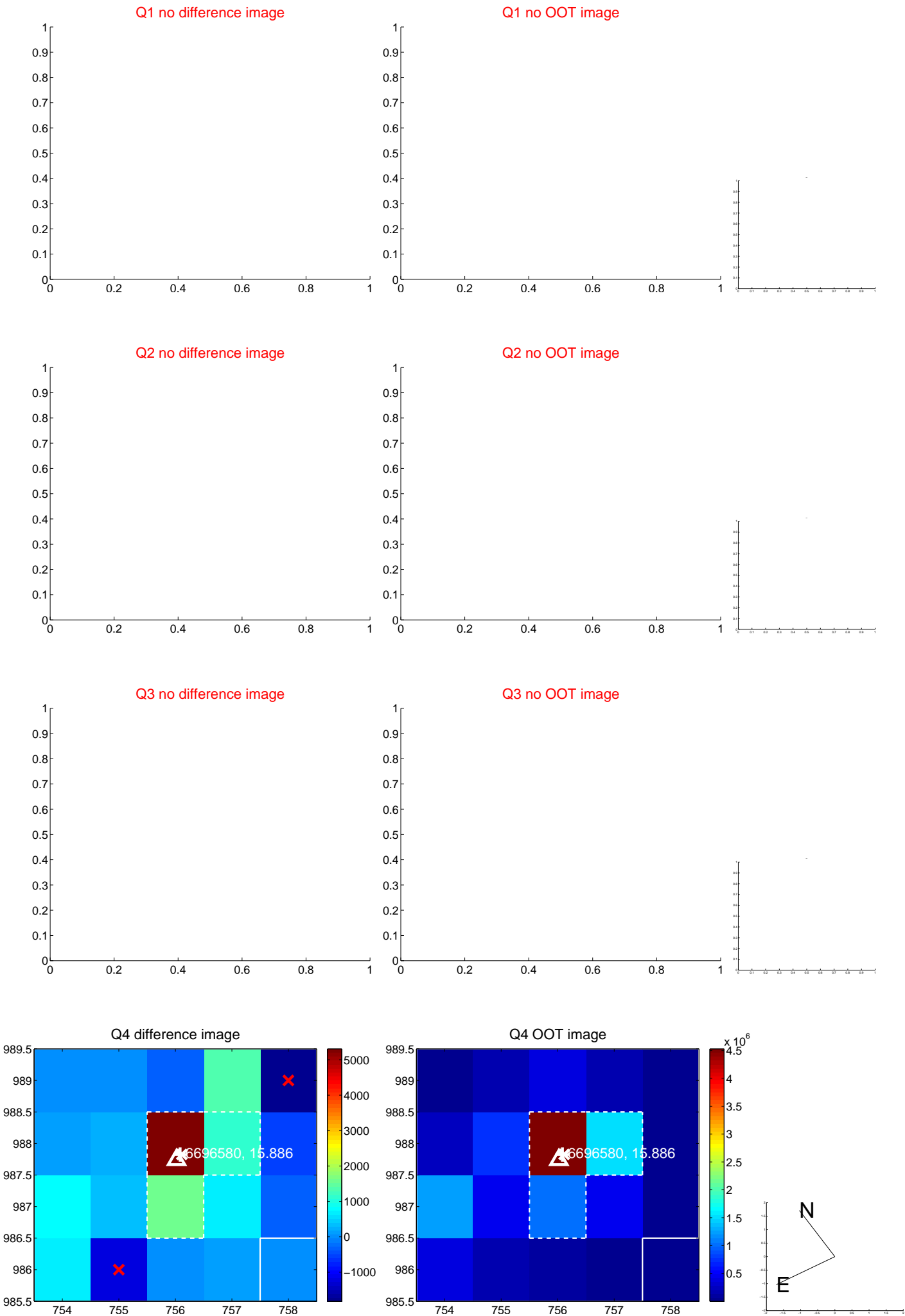
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.241 ± 0.170	1.42	-0.147 ± 0.168	0.190 ± 0.170
PRF-fit source offset from KIC position	0.261 ± 0.168	1.55	-0.083 ± 0.173	0.247 ± 0.167
photometric centroid source offset	0.33 ± 0.52	0.64	0.32 ± 0.53	0.08 ± 0.40

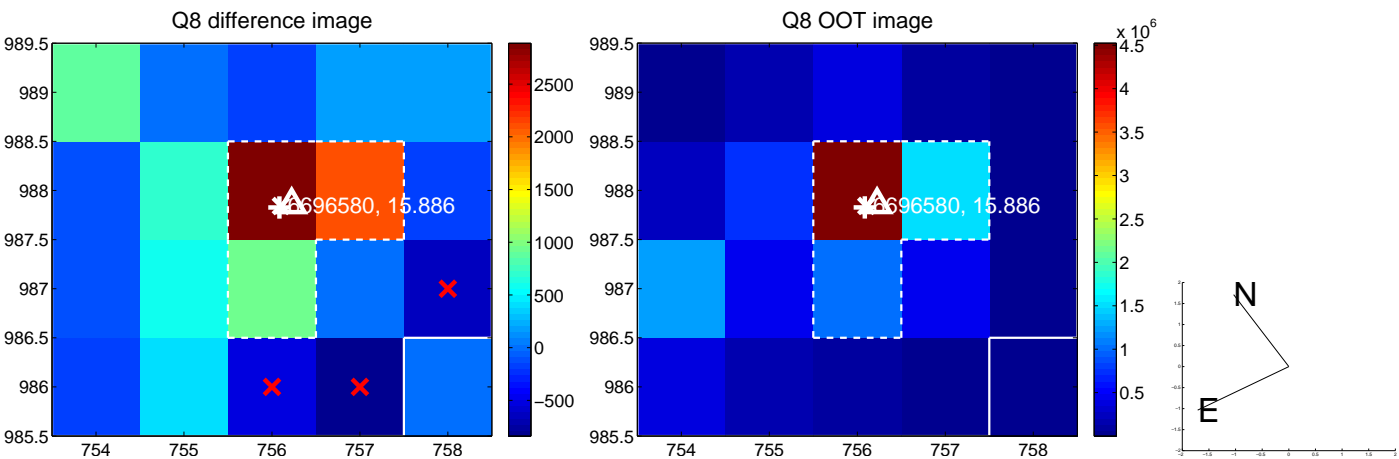
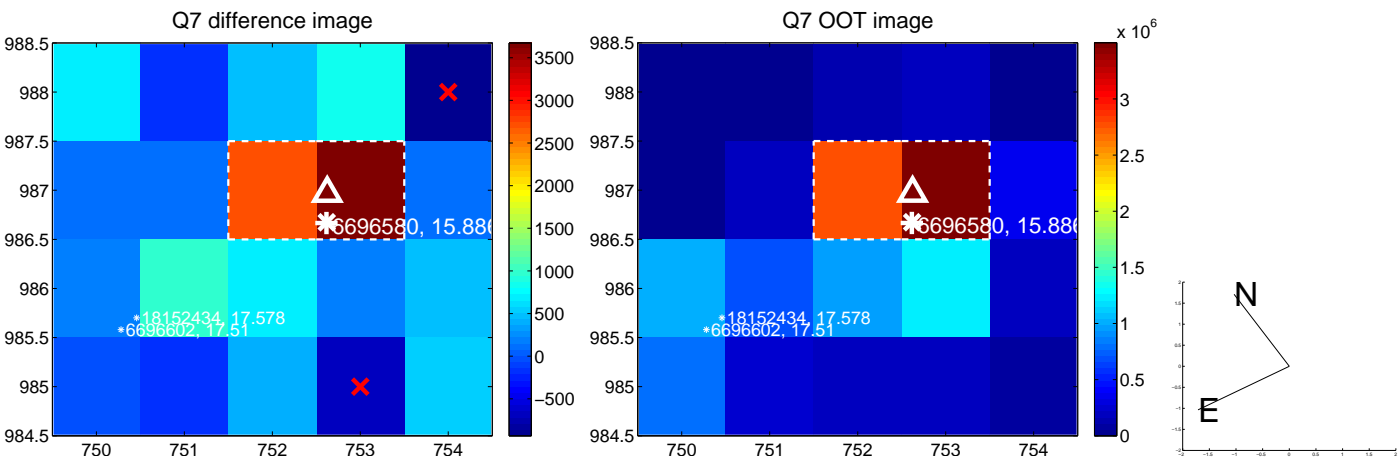
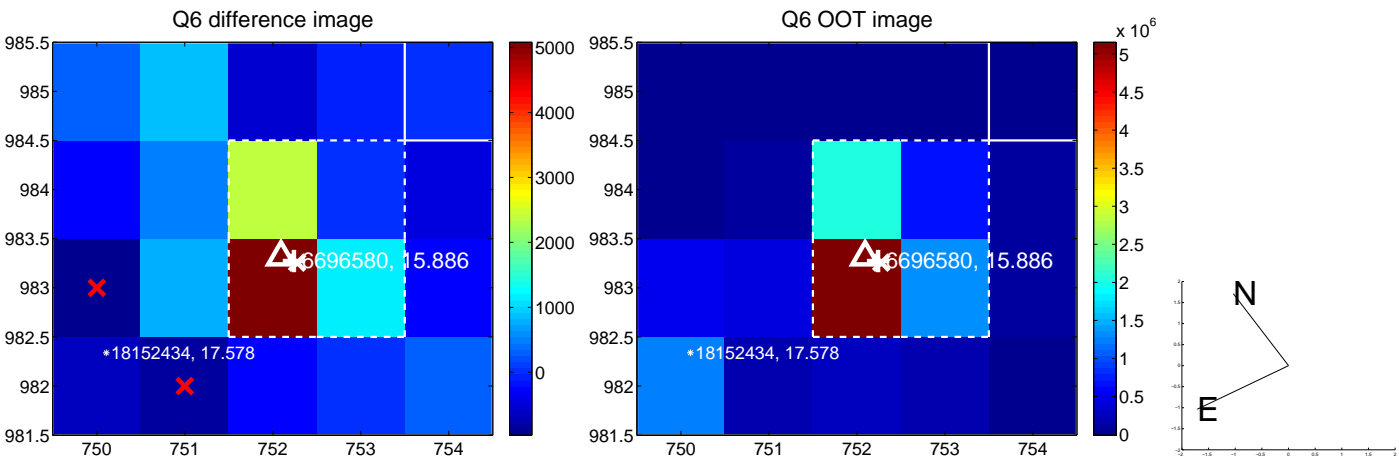
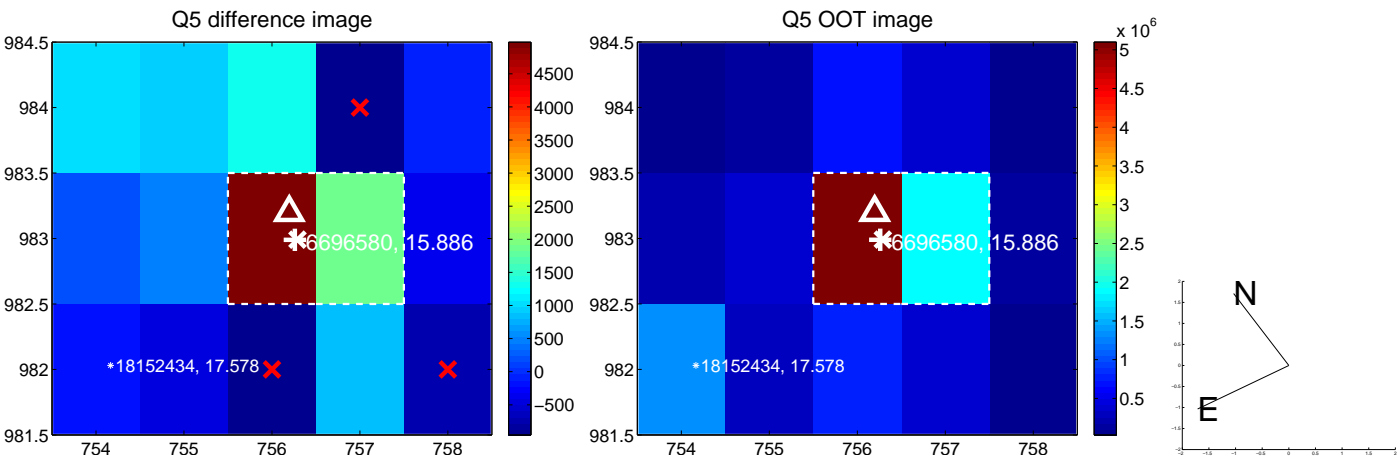


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

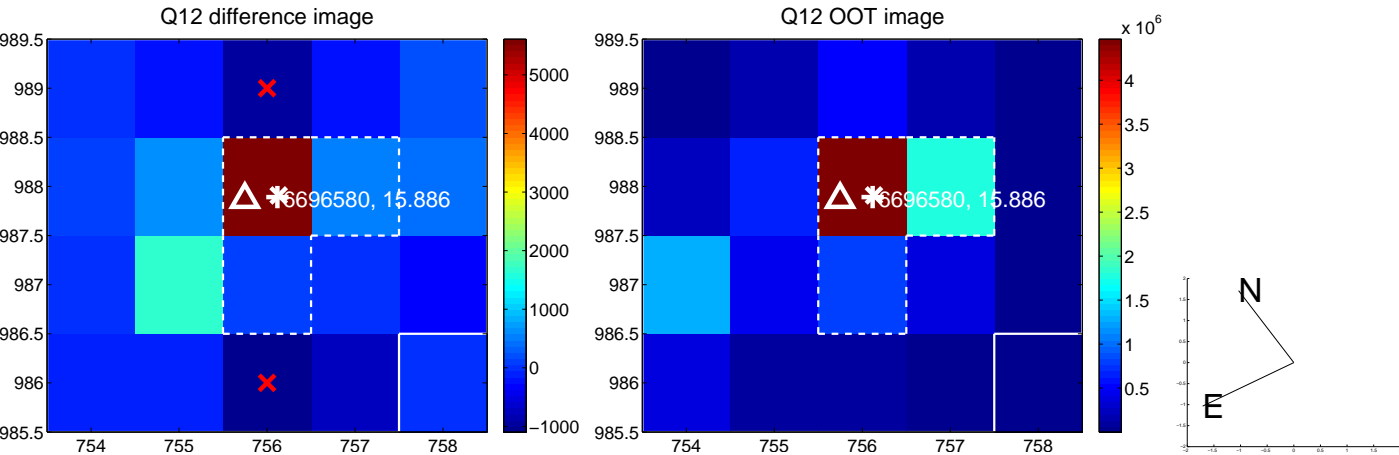
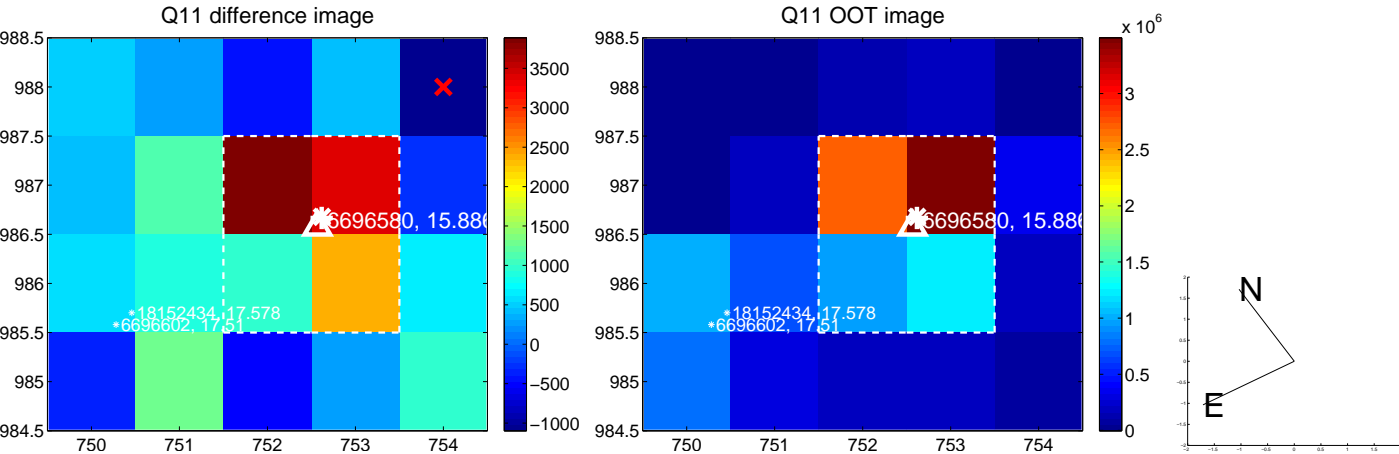
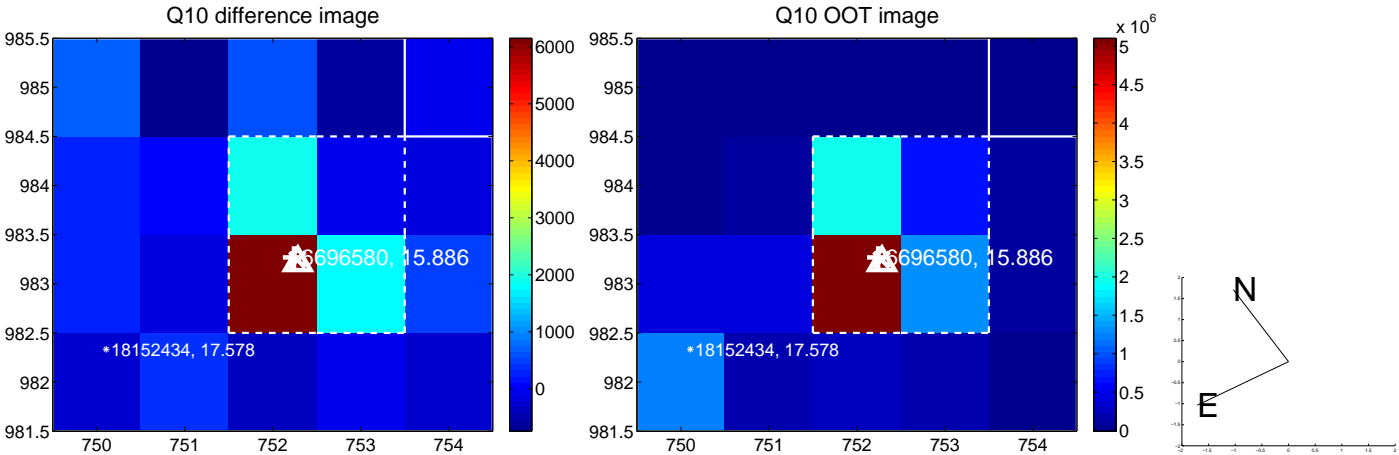
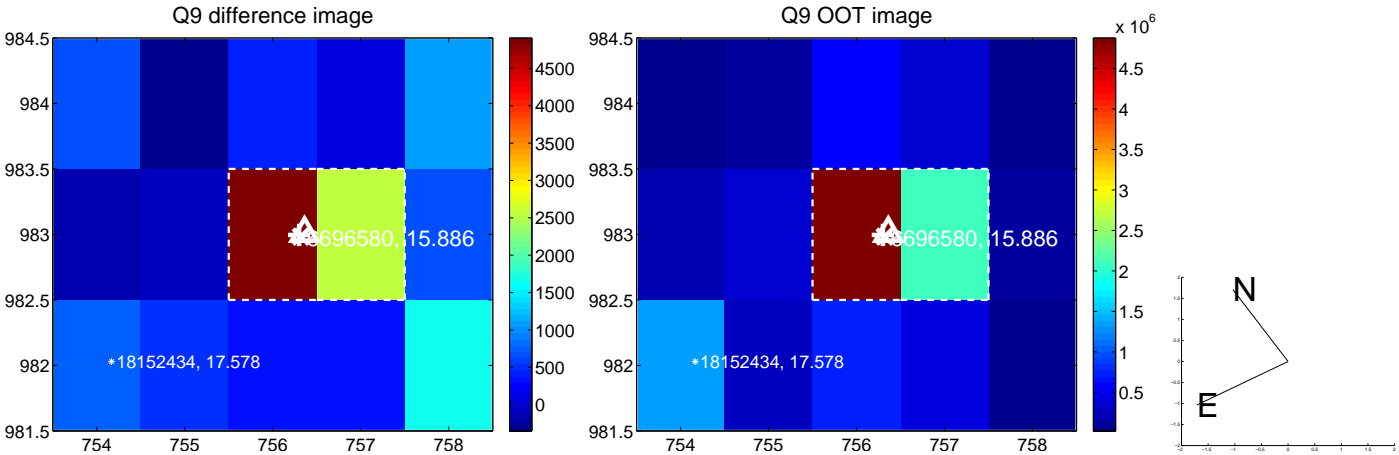
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



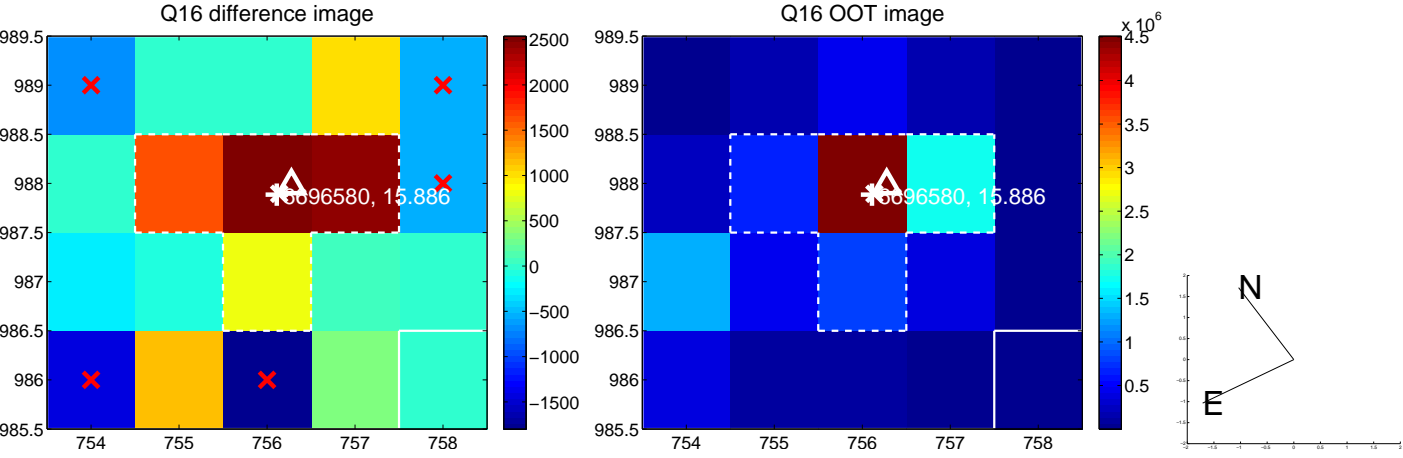
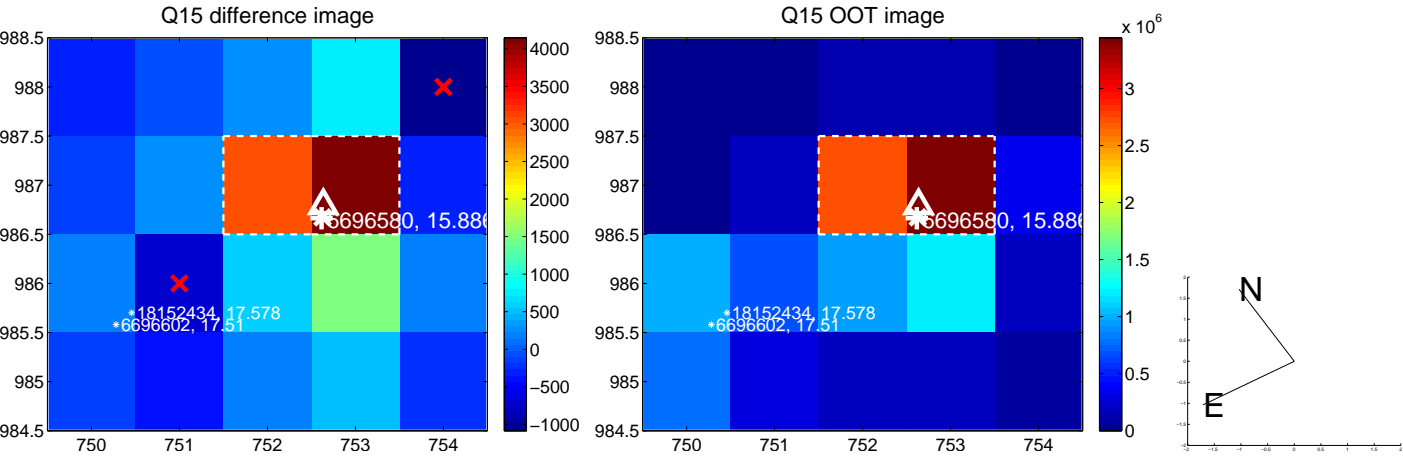
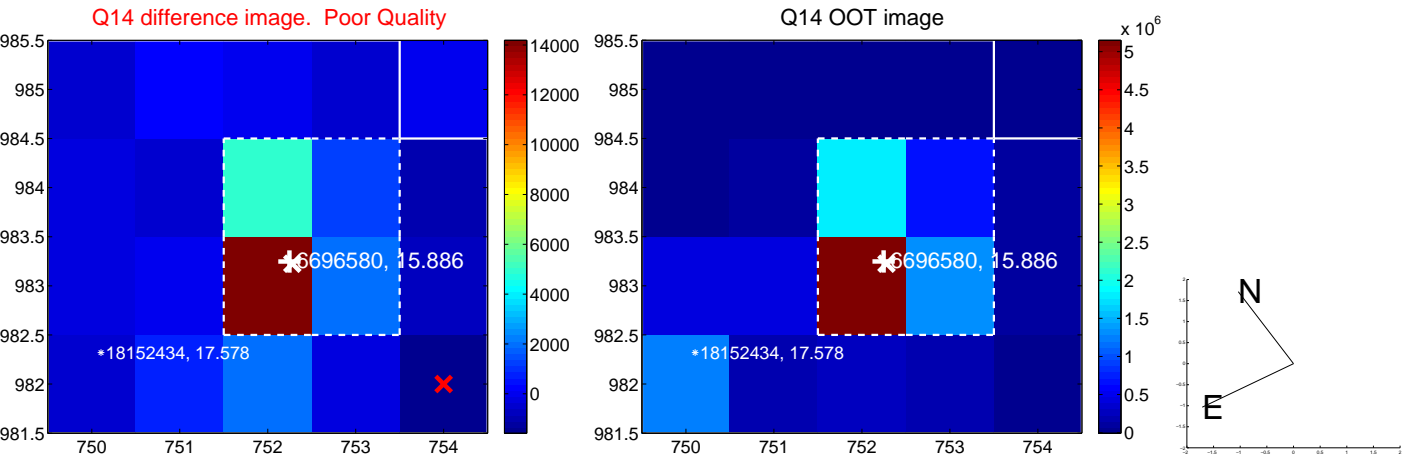
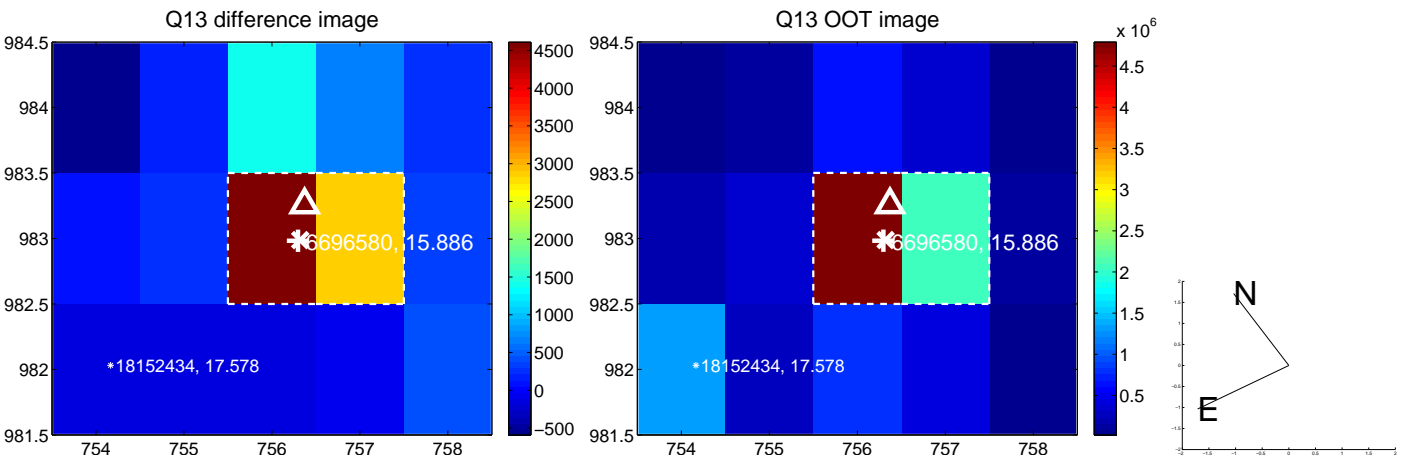
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



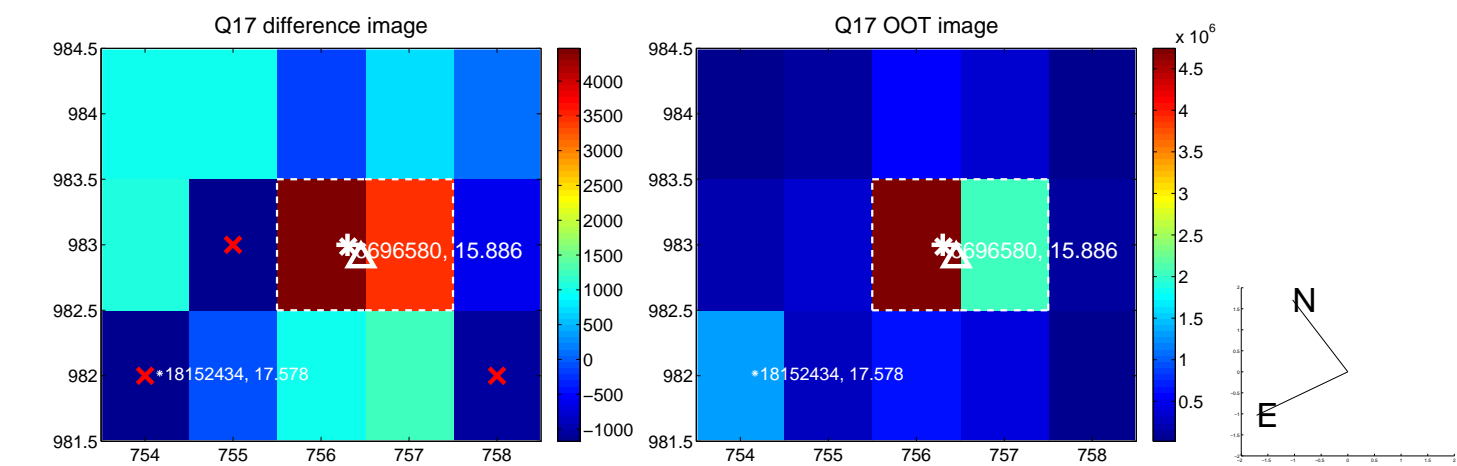
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



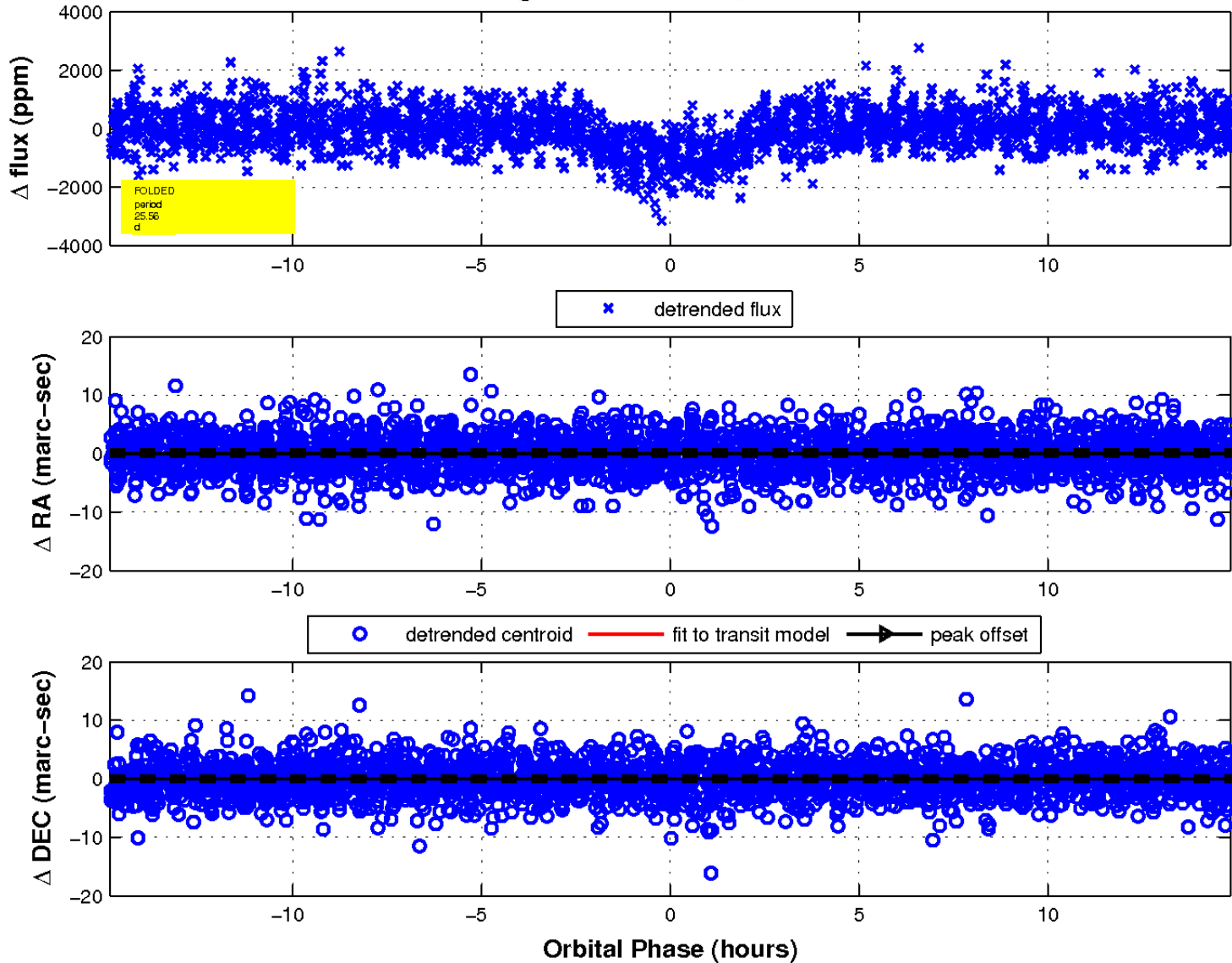
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

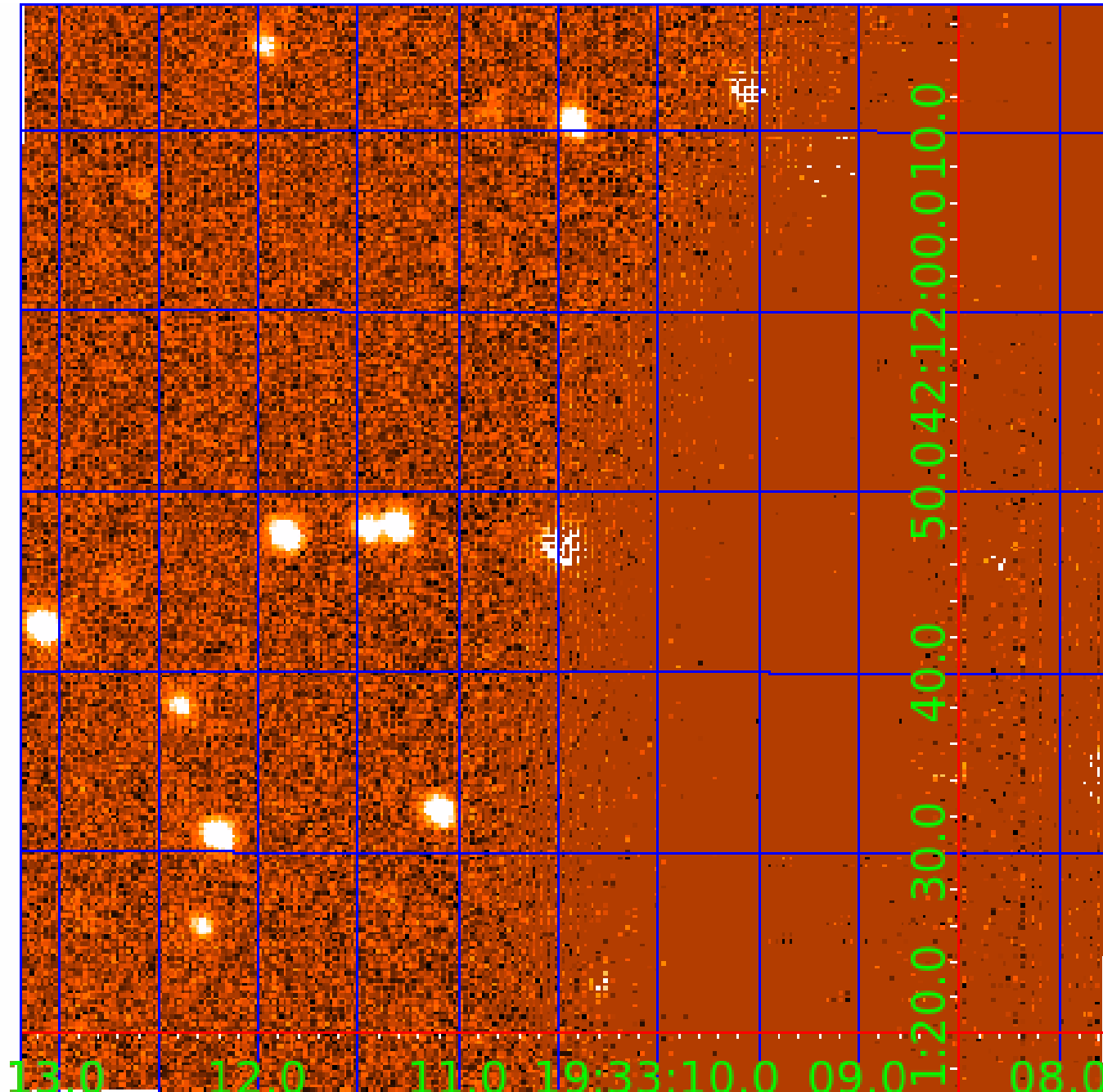


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 006696580

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})
006696580-01	OBS	2092.01	57.689478	139.928306	1603.0	5.053	27.0	29.0	1.05	6228	5.08	16.22
006696580-02	OBS	2092.02	25.563783	145.205557	1073.8	4.950	27.4	29.2	1.05	6228	4.14	48.01
006696580-03	OBS	2092.03	77.087624	202.730559	970.0	4.019	11.6	12.9	1.05	6228	4.25	11.02

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006696580-01	OBS	PC	0.98	0	0	0	0	NO_COMMENT
006696580-02	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006696580-03	OBS	PC	0.78	0	0	0	0	CENT_FEW_DIFFS

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

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

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

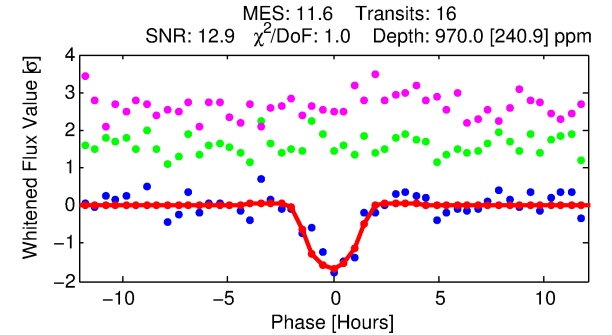
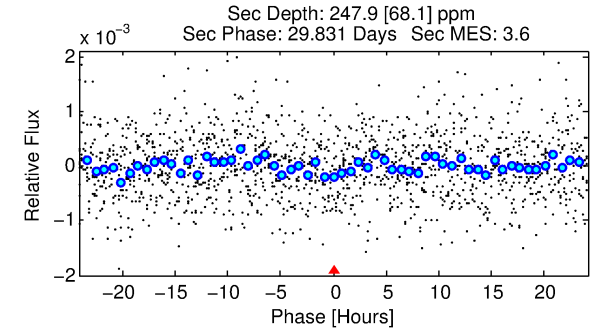
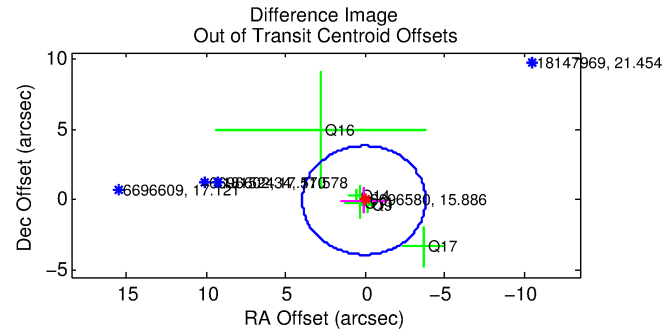
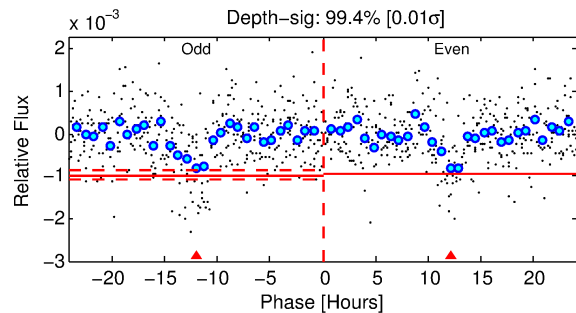
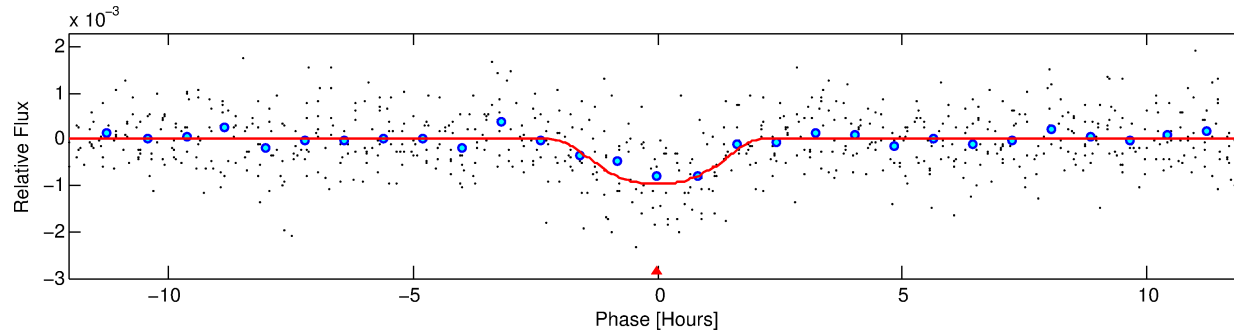
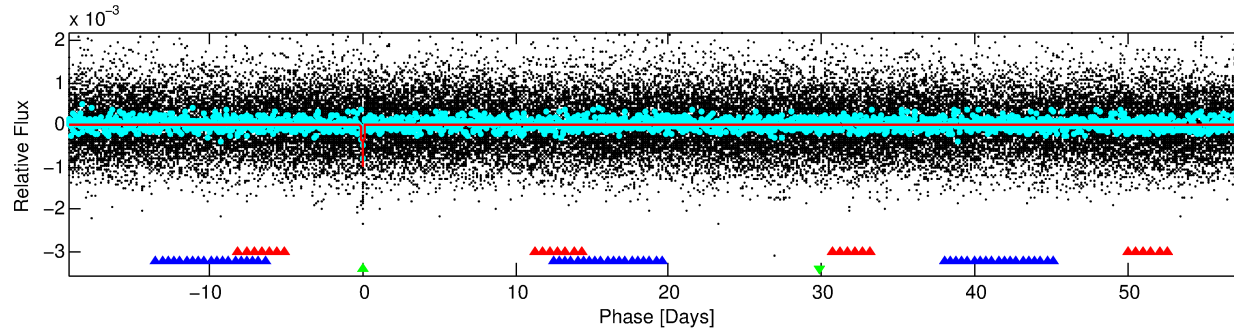
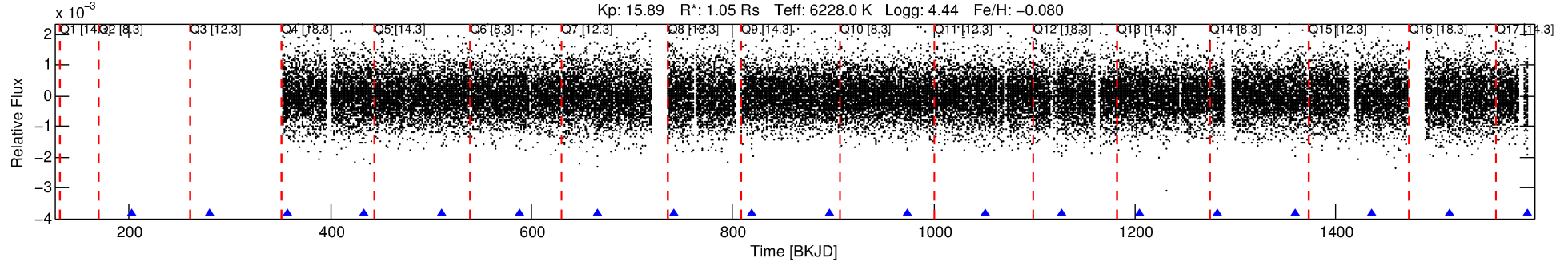
Ephemeris Match Information For 006696580-03

No Significant Match Found

DV One-Page Summary

KIC: 6696580 Candidate: 3 of 3 Period: 77.088 d
KOI: K02092.03 Name: Kepler-359d Corr: 0.929

Kp: 15.89 R*: 1.05 Rs Teff: 6228.0 K Logg: 4.44 Fe/H: -0.080



DV Fit Results:

Period = 77.08762 [0.00086] d
Epoch = 202.7306 [0.0092] BKJD
Rp/R* = 0.0372 [0.0090]
a/R* = 55.74 [13.79]
b = 0.96 [0.03]
Seff = 11.02 [4.37]
Teq = 465 [46] K
Rp = 4.25 [1.63] Re
a = 0.3669 [0.0913] AU
Ag = 1015.02 [671.15] [1.51σ]
Teff = 4054 [588] K [6.09σ]

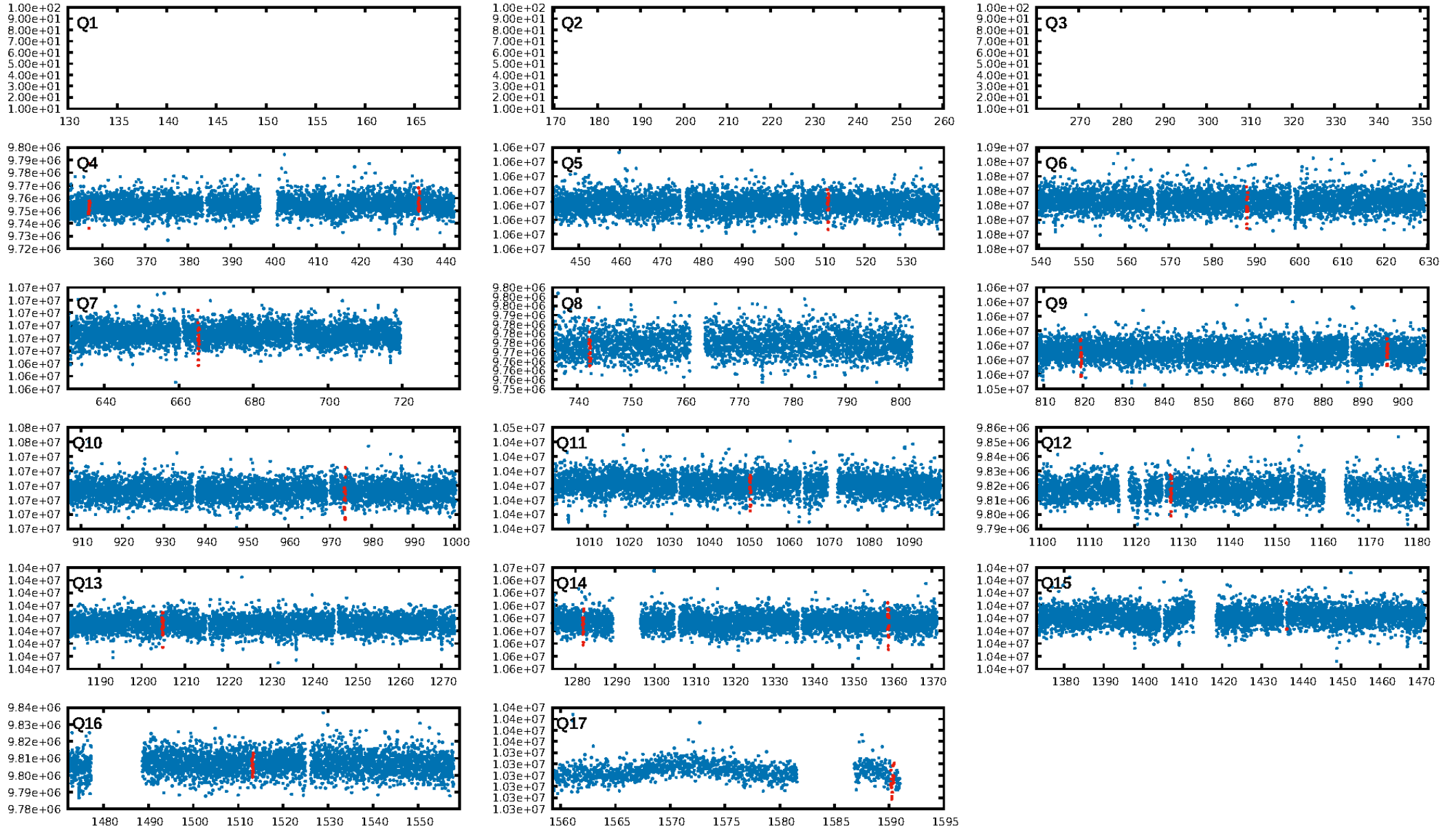
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [72.11σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 25.0%
ModelChiSquareGof-sig: 93.1%
Bootstrap-pfa: 2.22e-30
RollingBand-fgt: 1.00 [15/15]
GhostDiagnostic-chr: 1.156
Centroid-sig: 99.7%
Centroid-so: 0.326 arcsec [0.28σ]
OotOffset-rm: 0.090 arcsec [0.07σ]
OotOffset-st: 1/1/1/2 [5]
KicOffset-rm: 0.154 arcsec [0.12σ]
KicOffset-st: 1/1/1/2 [5]
DiffImageQuality-fgm: 0.40 [2/5]
DiffImageOverlap-fno: 1.00 [12/12]

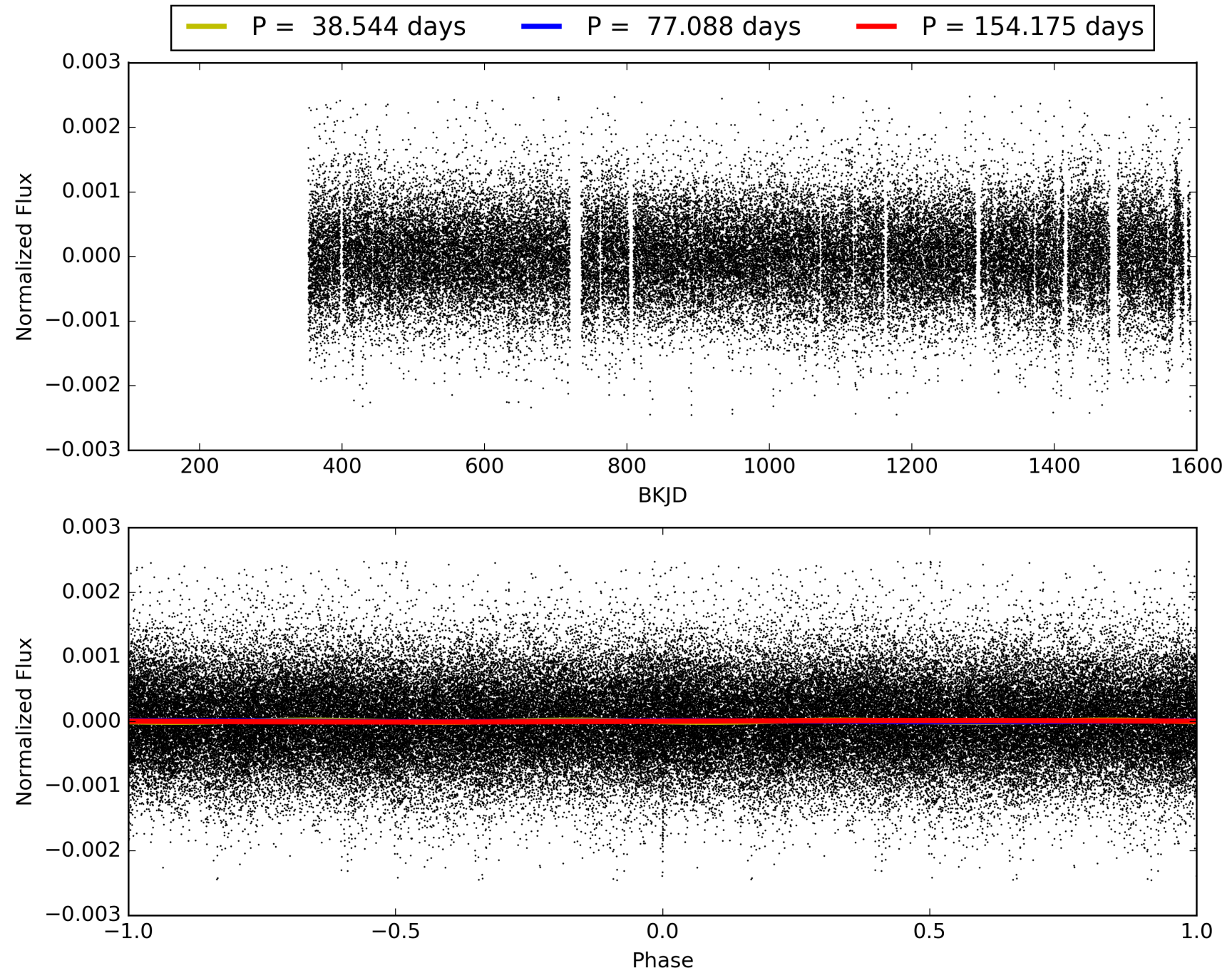
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 21:34:27 Z

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

TCE 006696580-03, PDC Light Curves

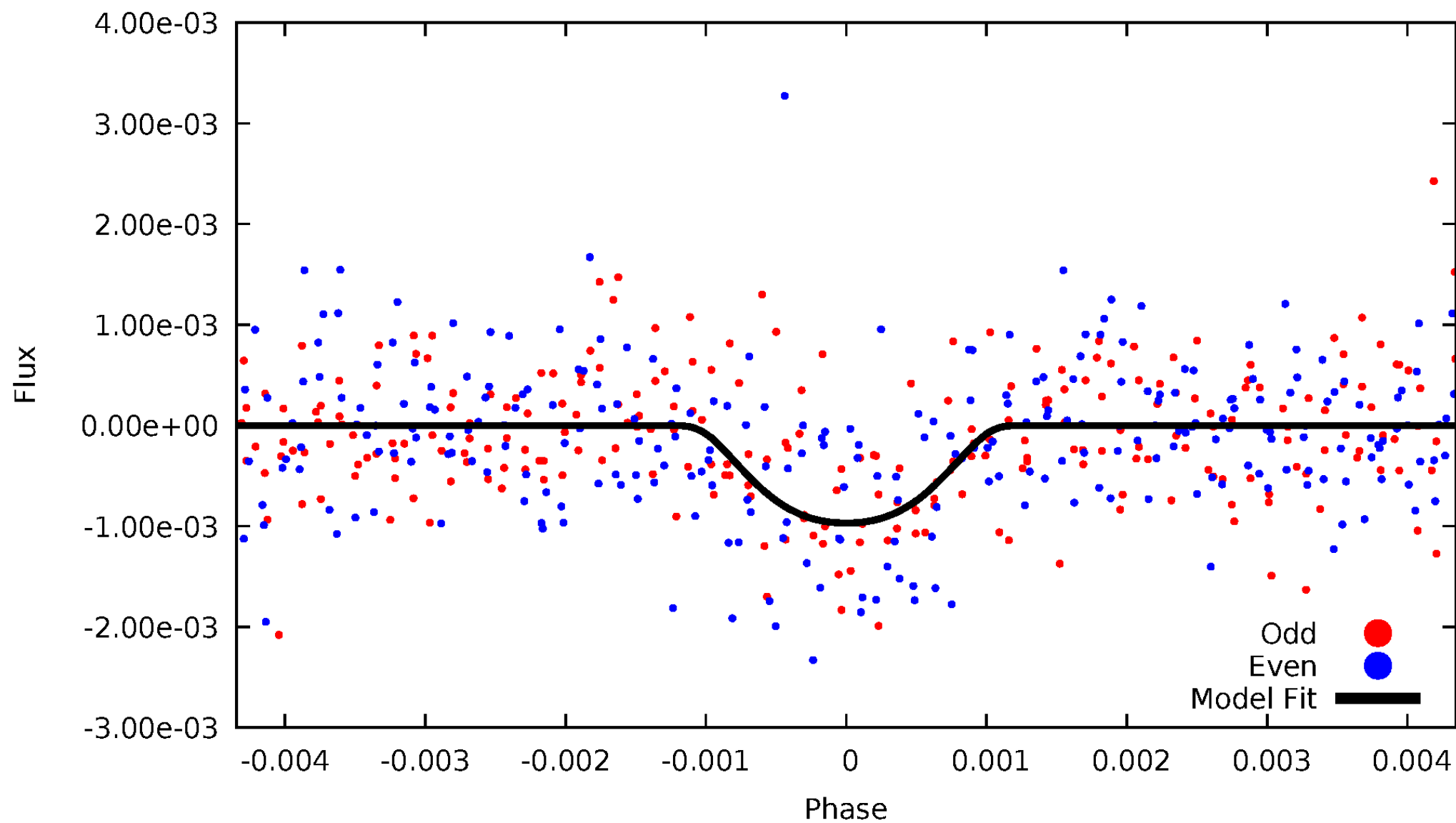


TCE 006696580-03



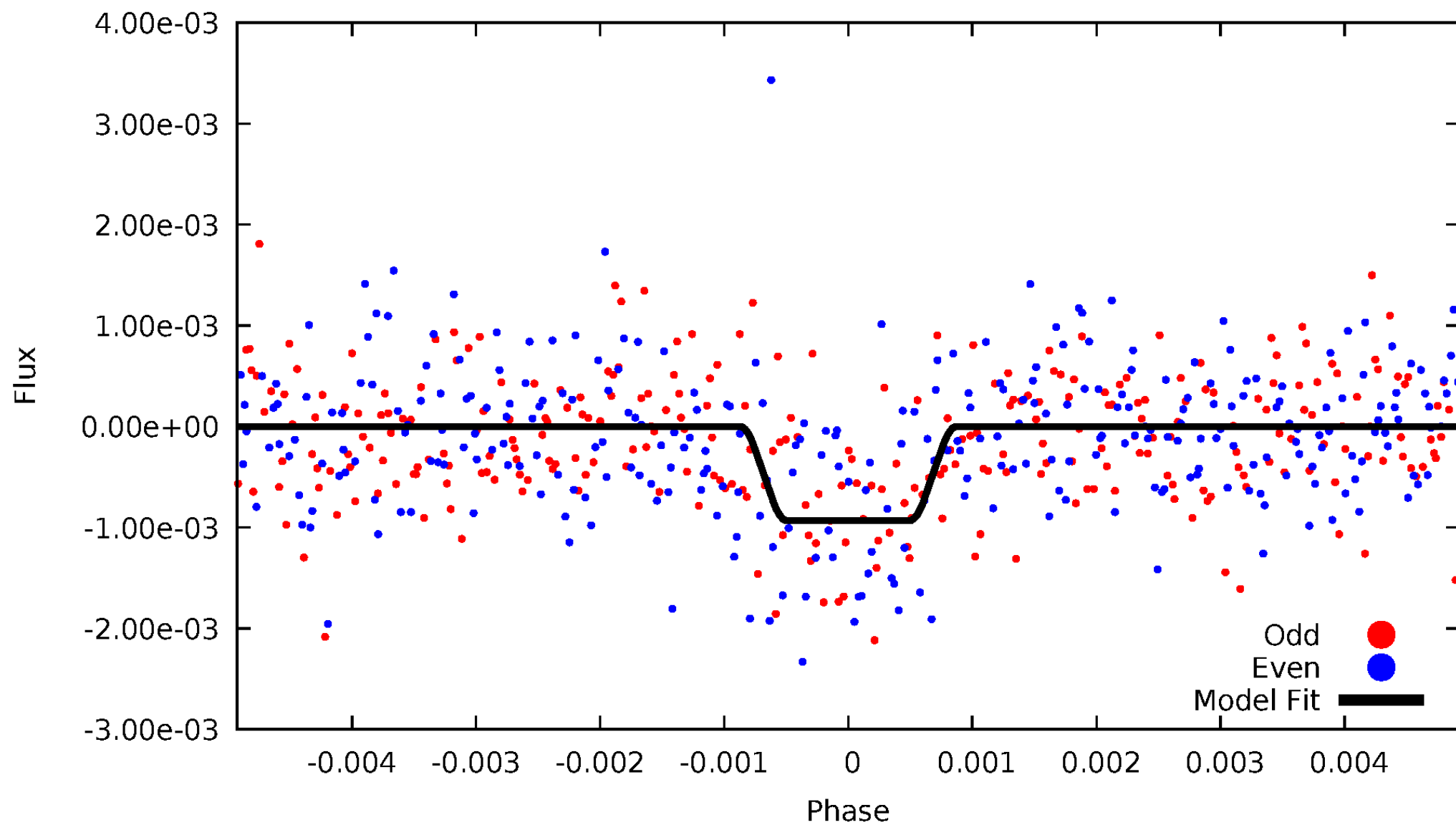
DV Odd/Even

TCE 006696580-03



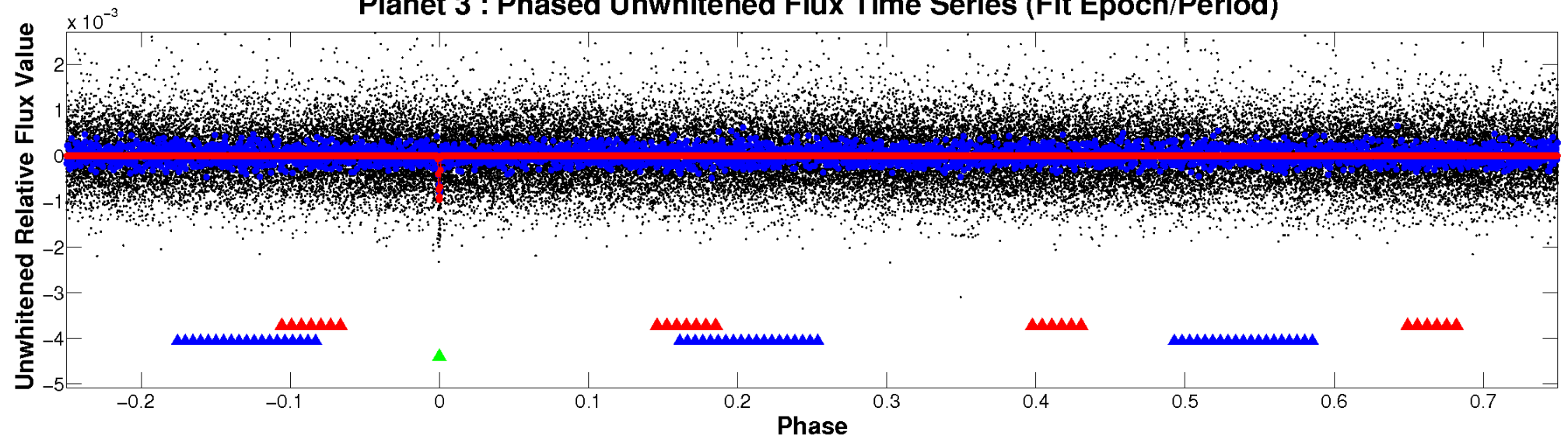
ALT Odd/Even

TCE 006696580-03

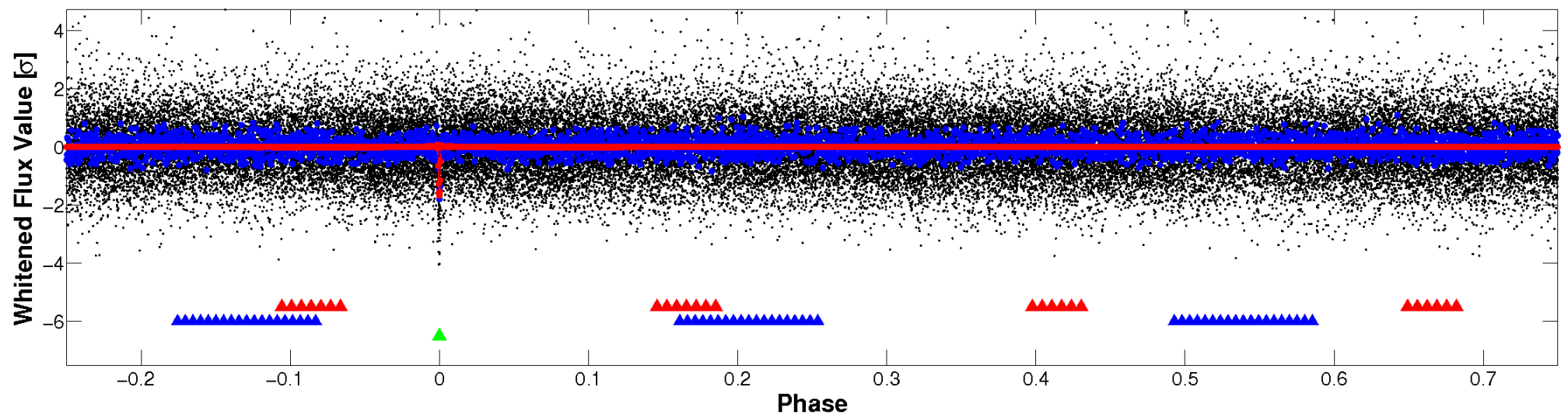


Non-Whitened Vs. Whitened Light Curve

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

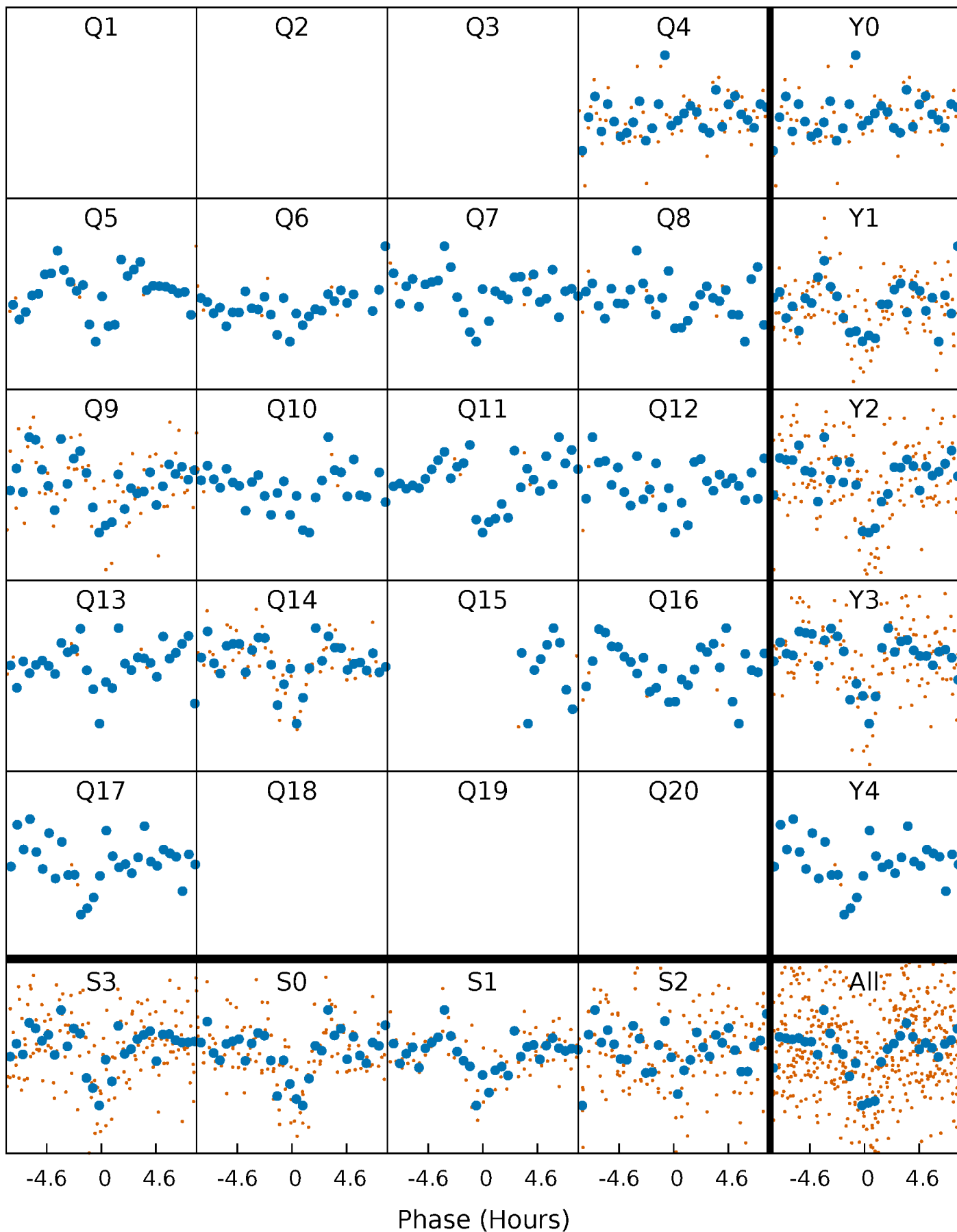


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



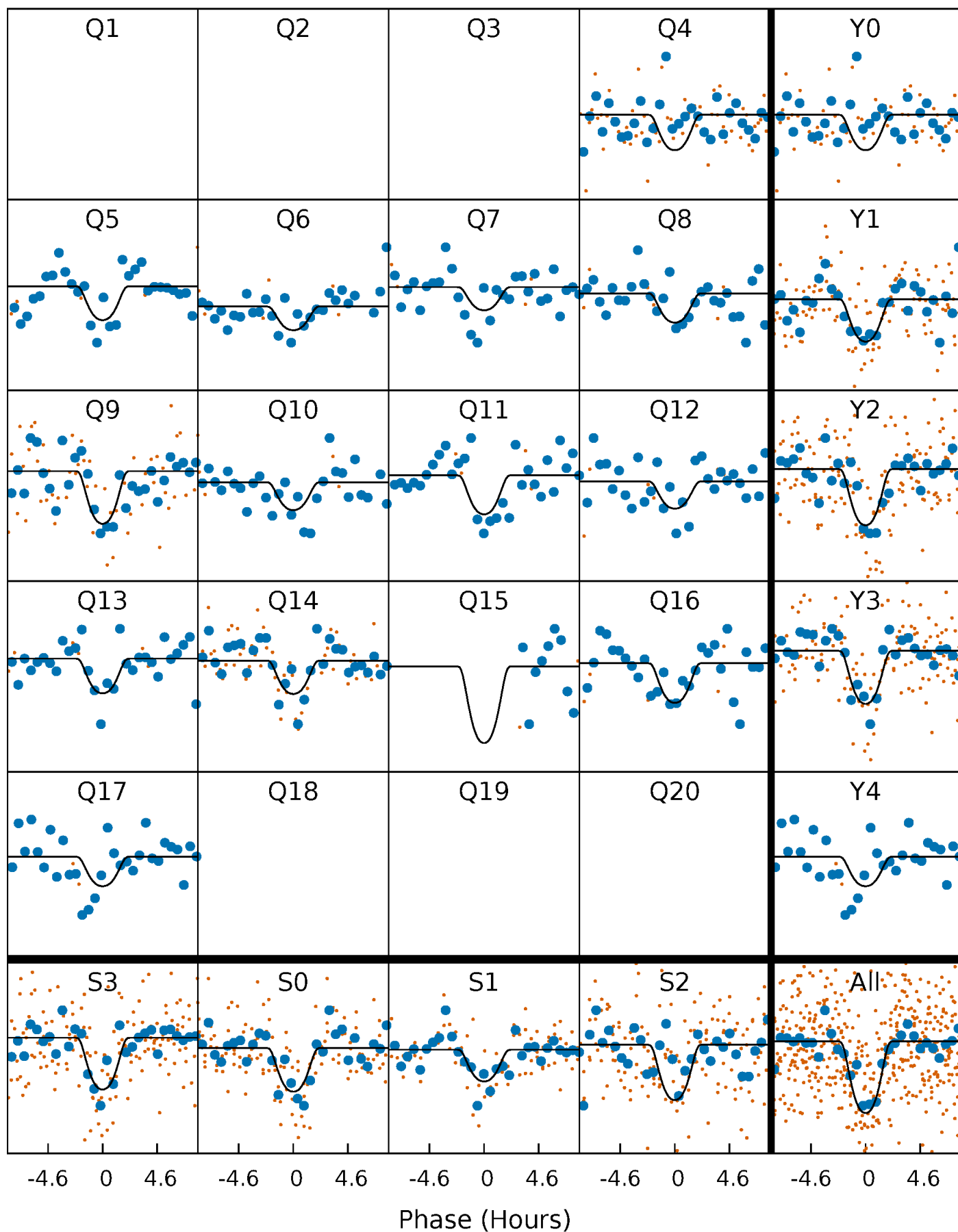
PDC Quarter-Phased Transit Curves

TCE 006696580-03 $P = 77.087624$ Days $T_0 = 202.730559$ (BKJD)



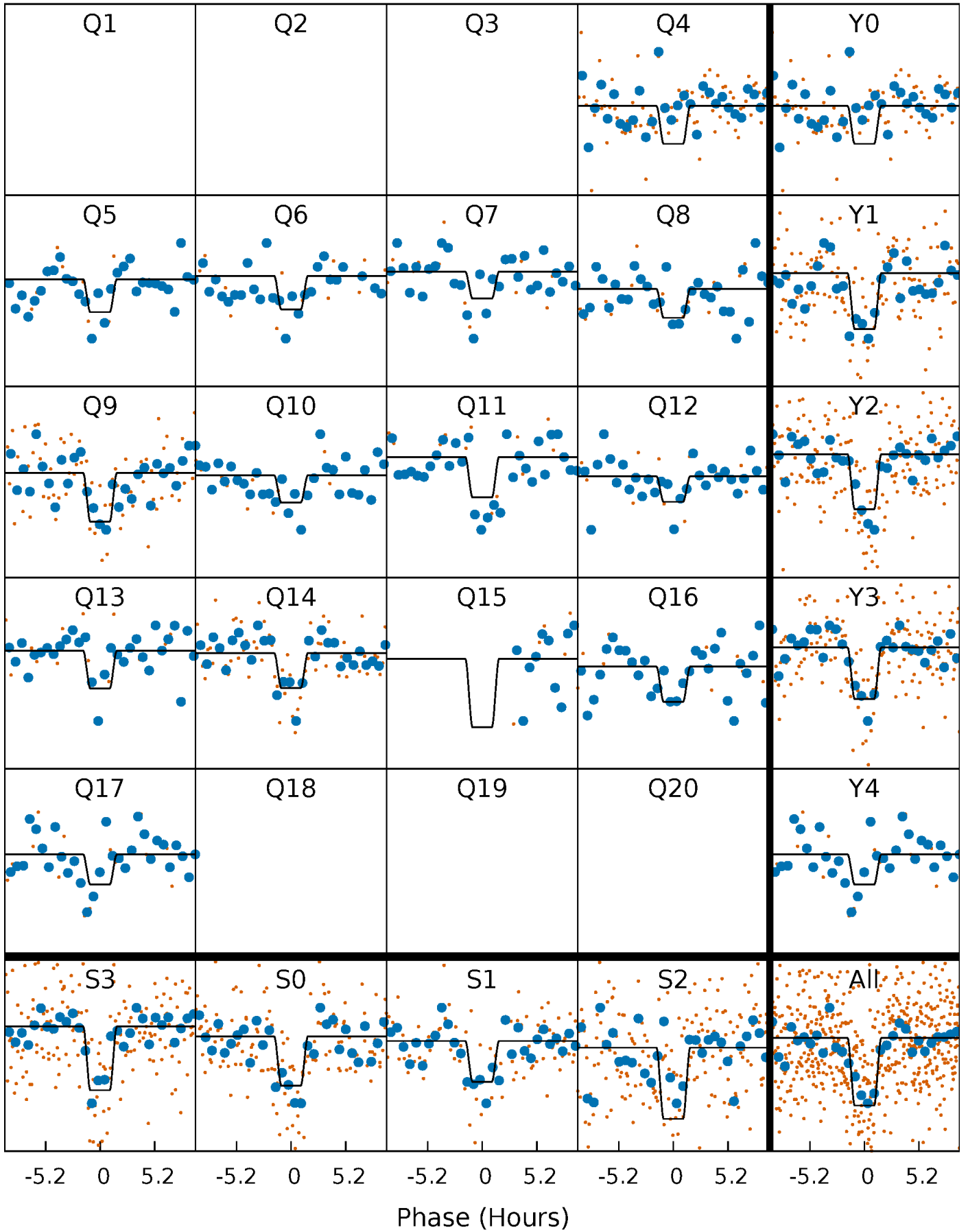
DV Quarter-Phased Transit Curves

TCE 006696580-03 $P = 77.087624$ Days $T_0 = 202.730559$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

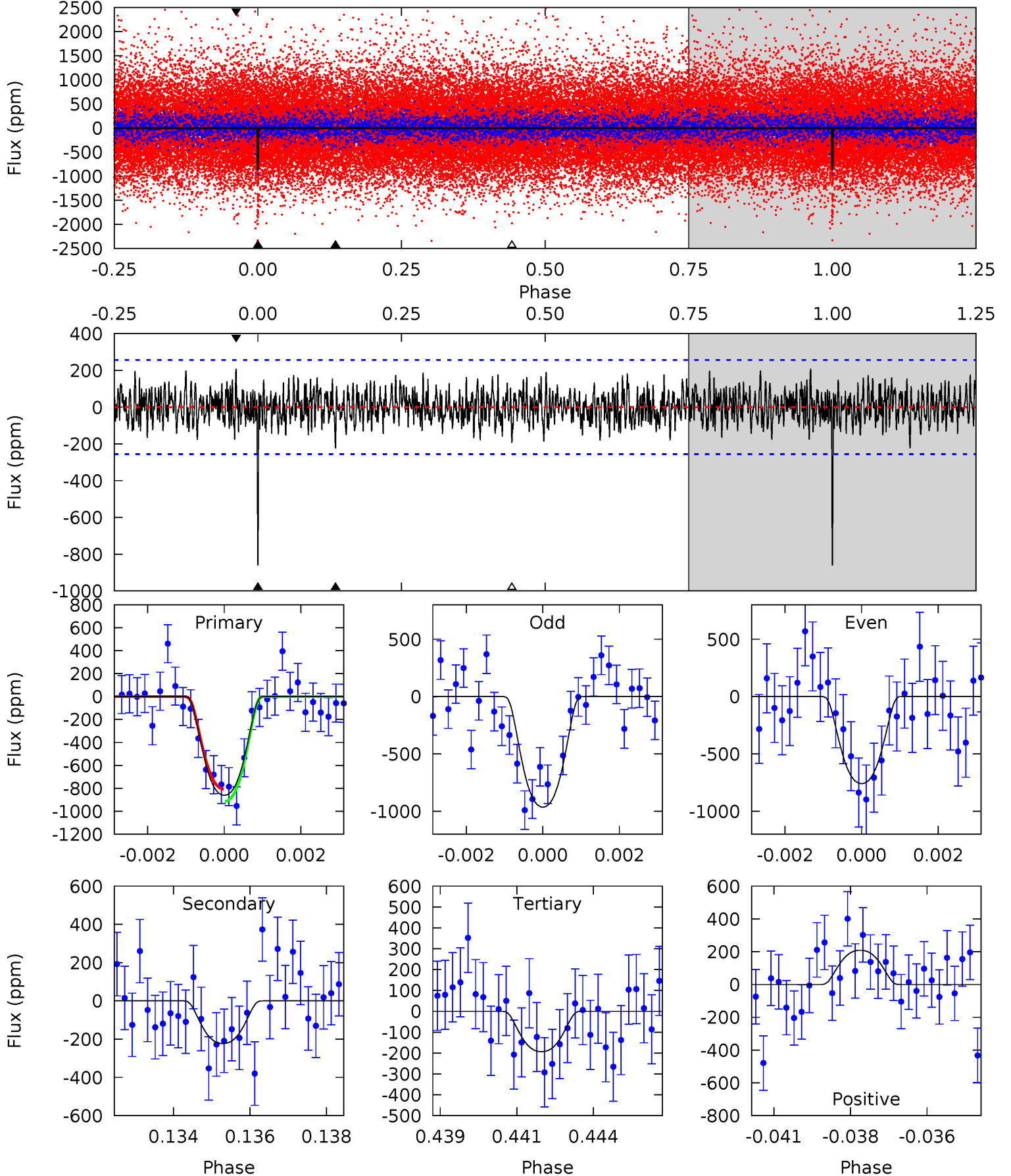
TCE 006696580-03 P= 77.086654 Days $T_0=202.746554$ (BKJD)



DV Model-Shift Uniqueness Test

006696580-03, $P = 77.087624$ Days, $E = 202.730559$ Days

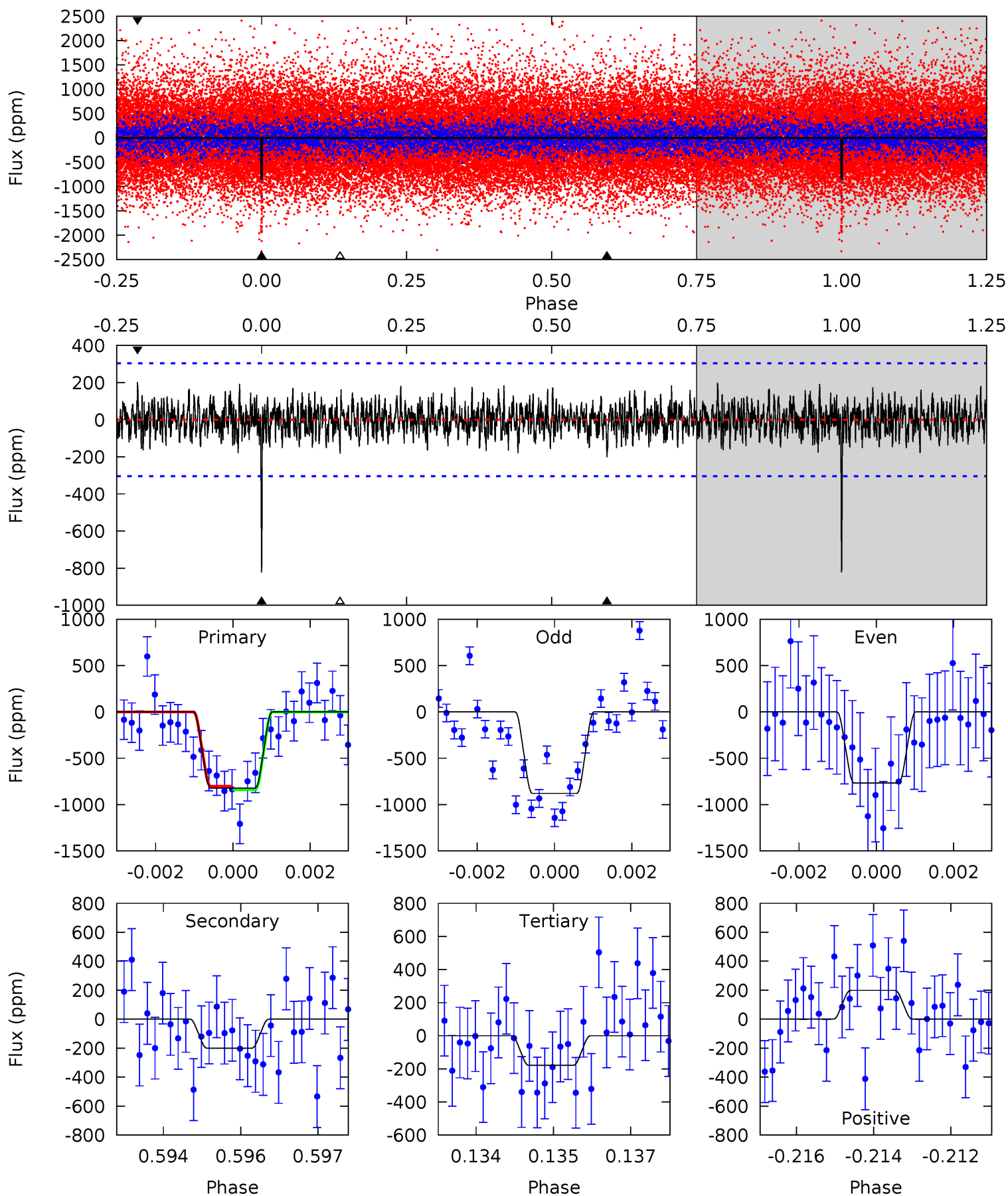
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.8	4.61	4.00	4.31	5.29	3.04	1.44	13.8	13.5	0.61	0.30	2.13	0.92	0.20	1.12



Alt Model-Shift Uniqueness Test

006696580-03, $P = 77.086654$ Days, $E = 202.746554$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.5	3.53	3.15	3.49	5.35	3.14	1.11	11.3	11.0	0.38	0.04	0.98	0.85	0.19	0.33



Stellar Parameters For KIC 006696580

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6228^{+196}_{-261}	$4.441^{+0.065}_{-0.195}$	$-0.080^{+0.250}_{-0.300}$	$1.049^{+0.313}_{-0.134}$	$1.107^{+0.159}_{-0.145}$	$1.351^{+0.371}_{-0.700}$
	+3%/-4%	+1%/-4%	+312%/-375%	+30%/-13%	+14%/-13%	+27%/-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 006696580-03 / KOI 2092.03

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-223±48	$4.38^{+1.32}_{-1.11}$	661^{+46}_{-37}	4196^{+549}_{-372}	819^{+716}_{-354}
Alt.	-201±57	$3.56^{+1.22}_{-1.14}$	660^{+46}_{-37}	4458^{+781}_{-483}	1140^{+1412}_{-570}

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 $A_{obs} \gg 1.0$

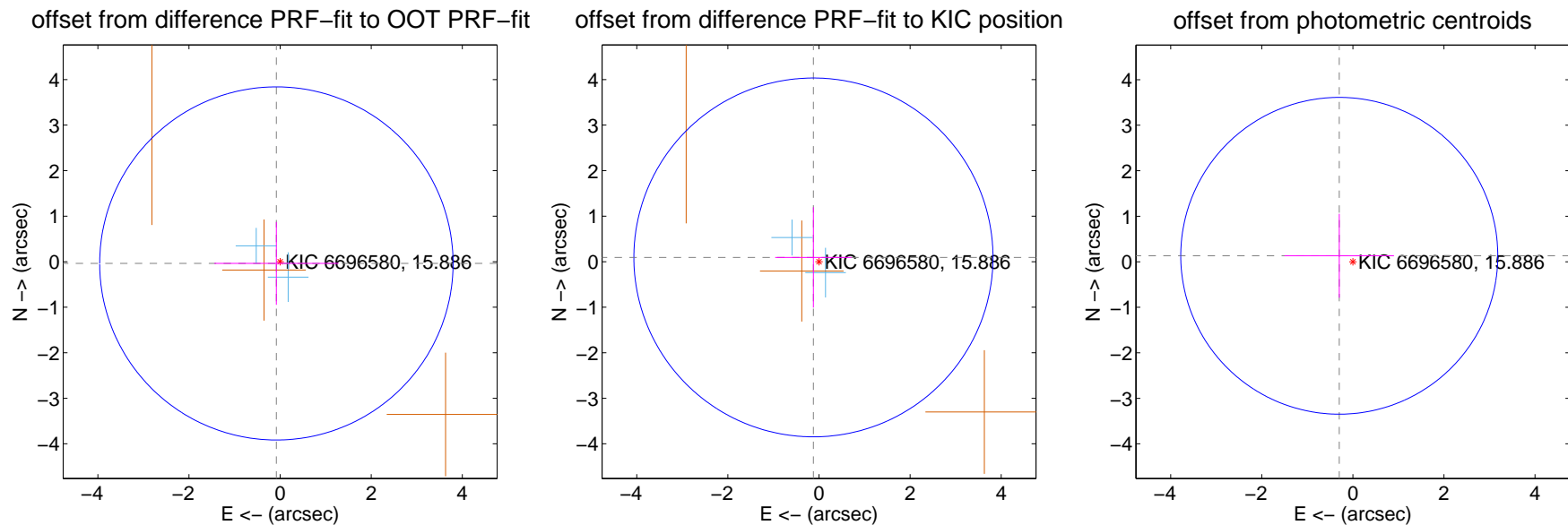
DV Centroid Data

Supplemental centroid analysis for 006696580-03. Kepler magnitude: 15.89. Transit SNR 12.85

There are 2 quarters with good PRF difference image offsets

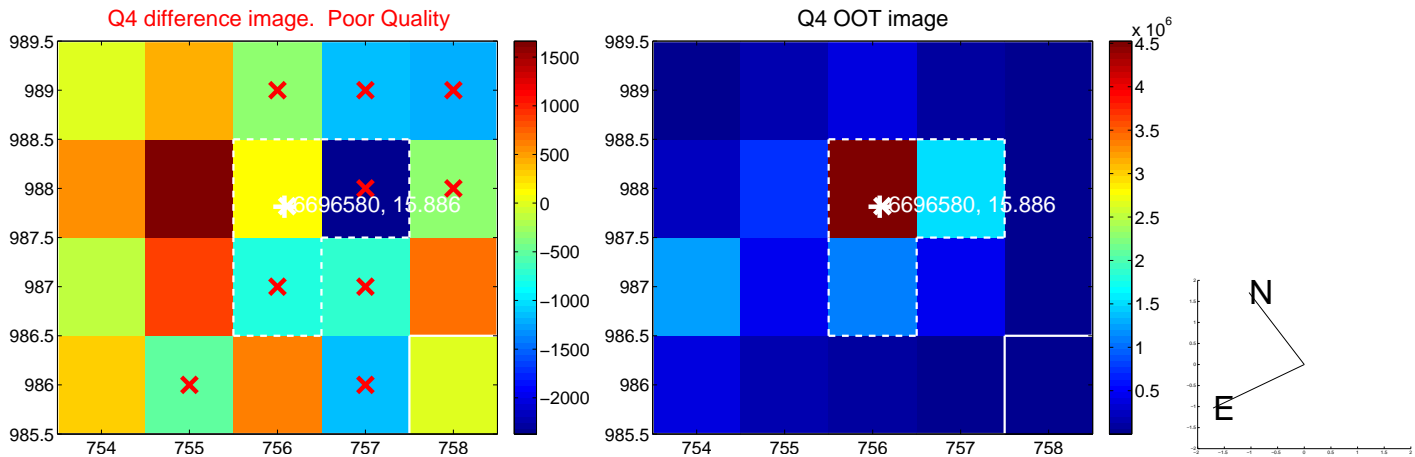
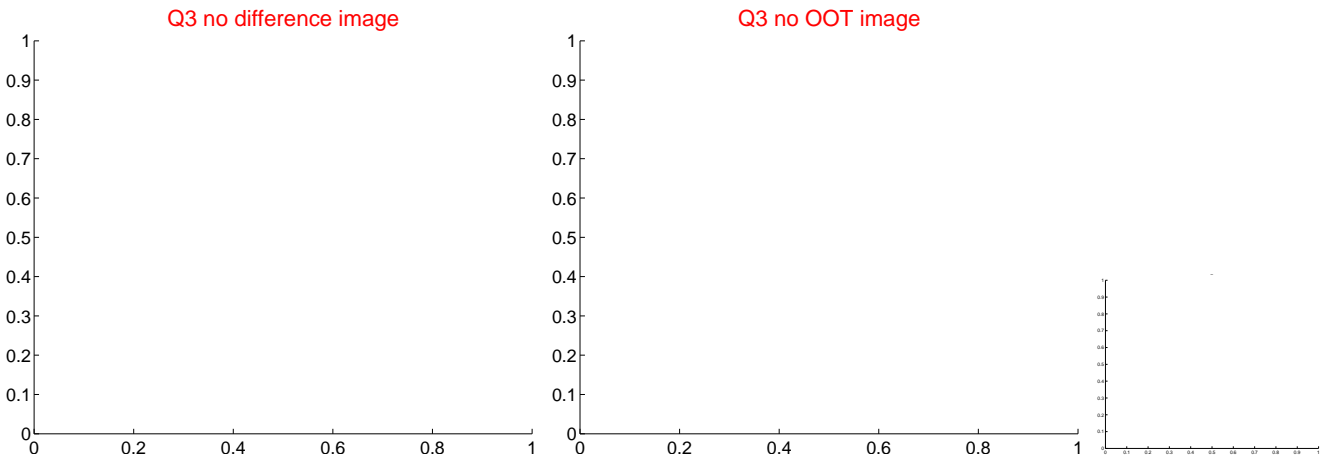
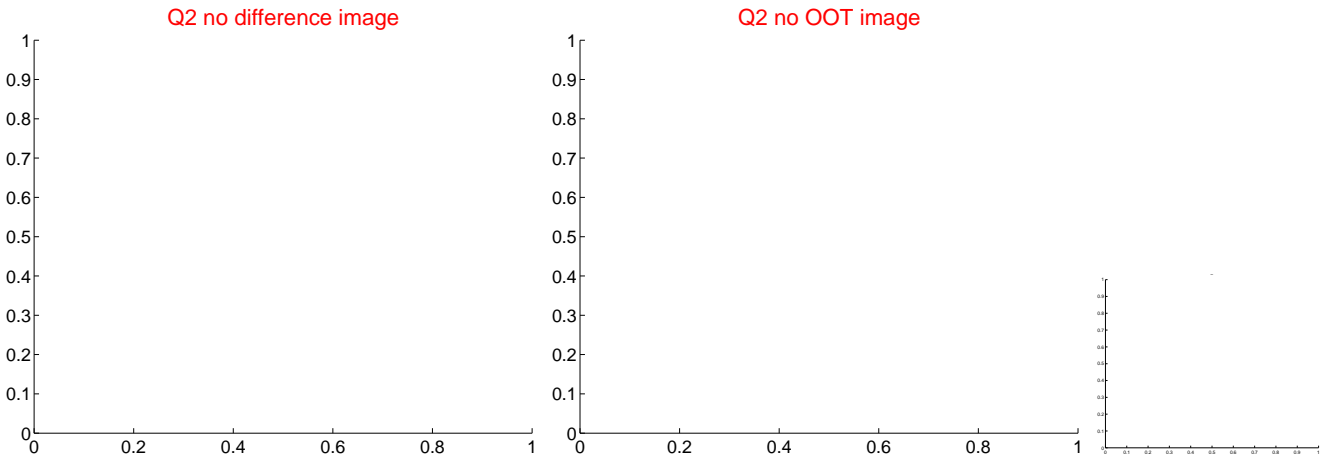
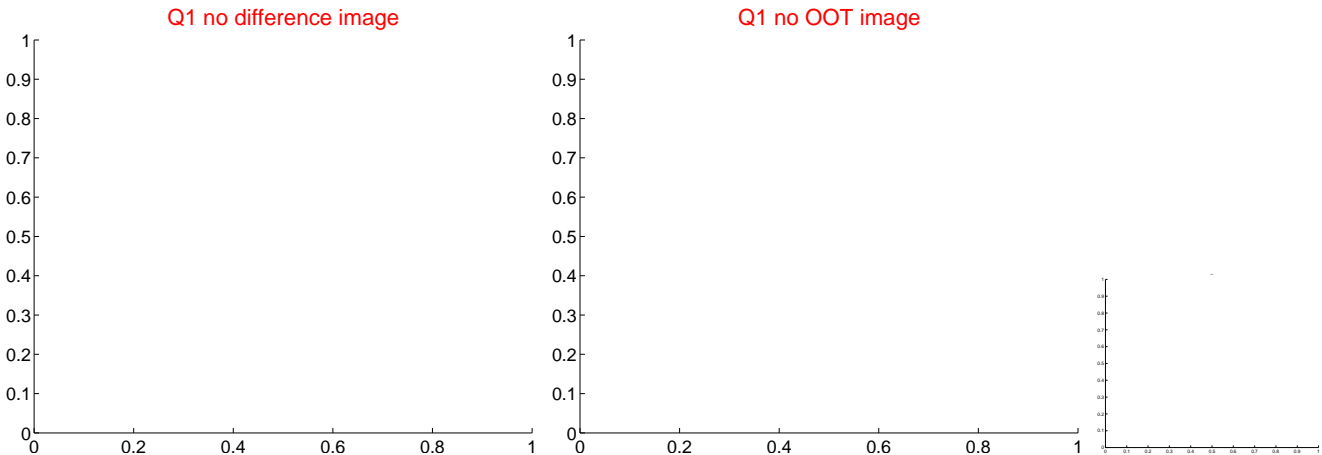
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.090 ± 1.293	0.07	0.082 ± 1.362	-0.038 ± 0.910
PRF-fit source offset from KIC position	0.154 ± 1.314	0.12	0.122 ± 0.839	0.094 ± 1.102
photometric centroid source offset	0.33 ± 1.16	0.28	0.30 ± 1.20	0.13 ± 0.92

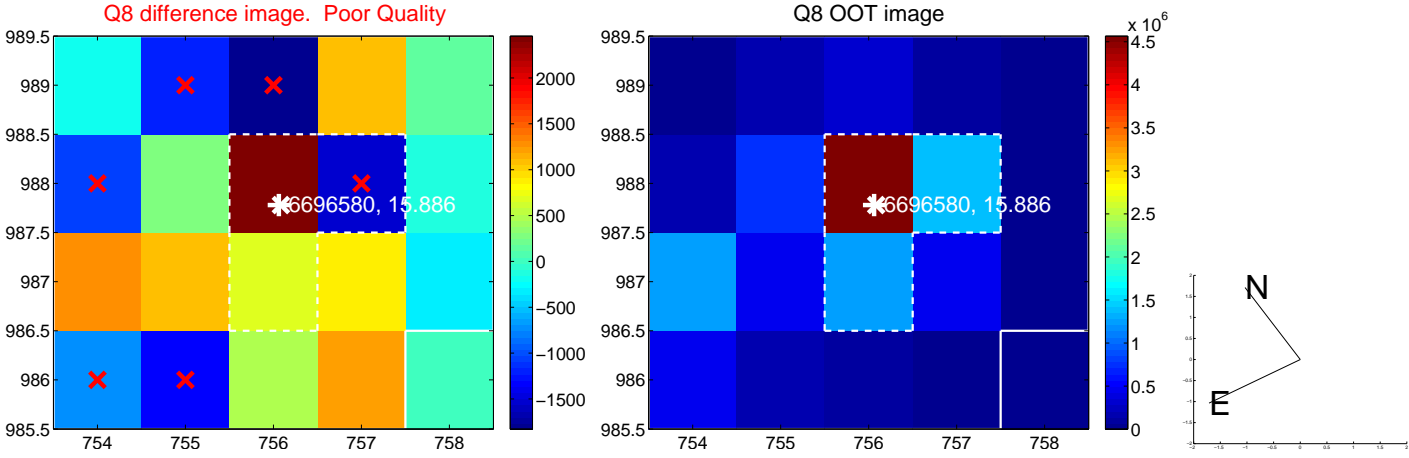
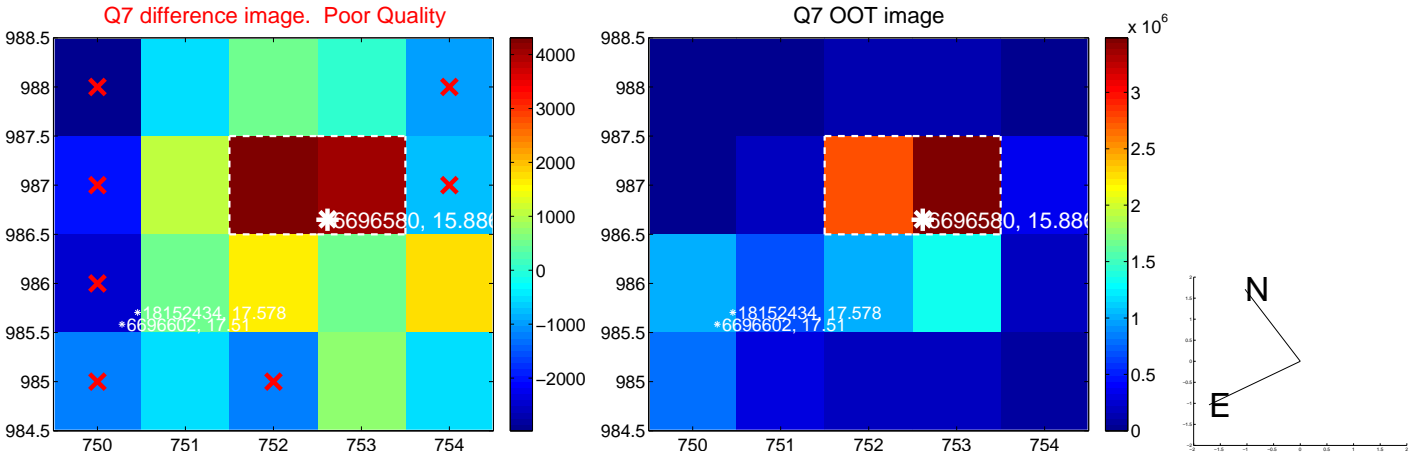
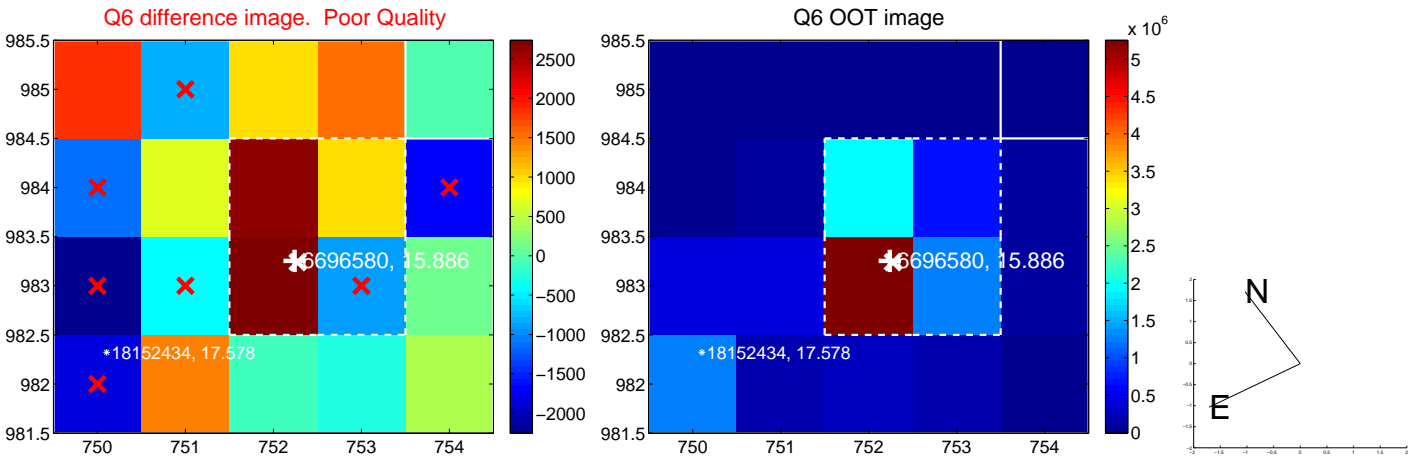
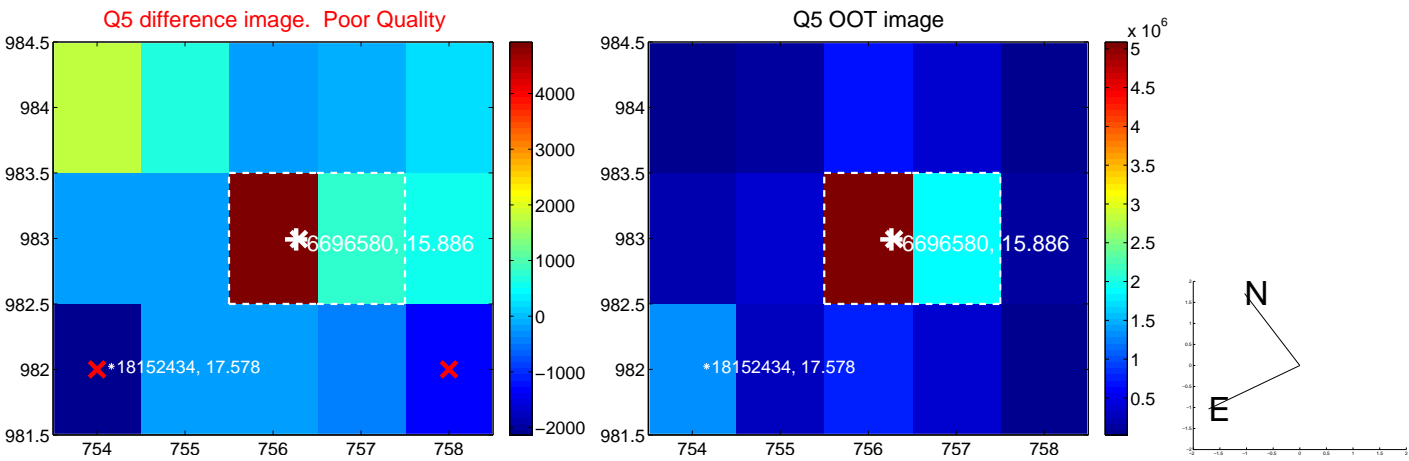


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

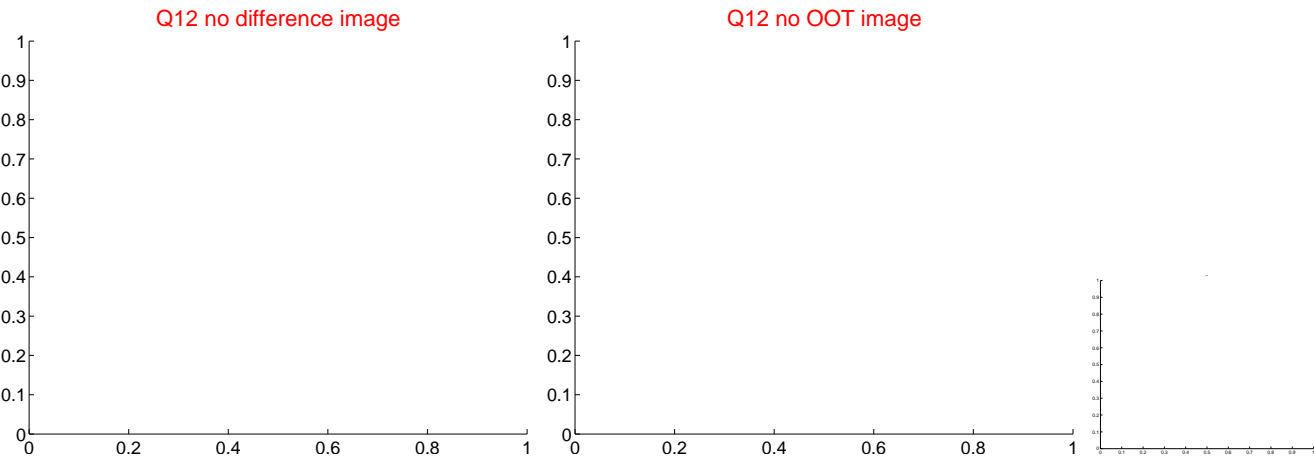
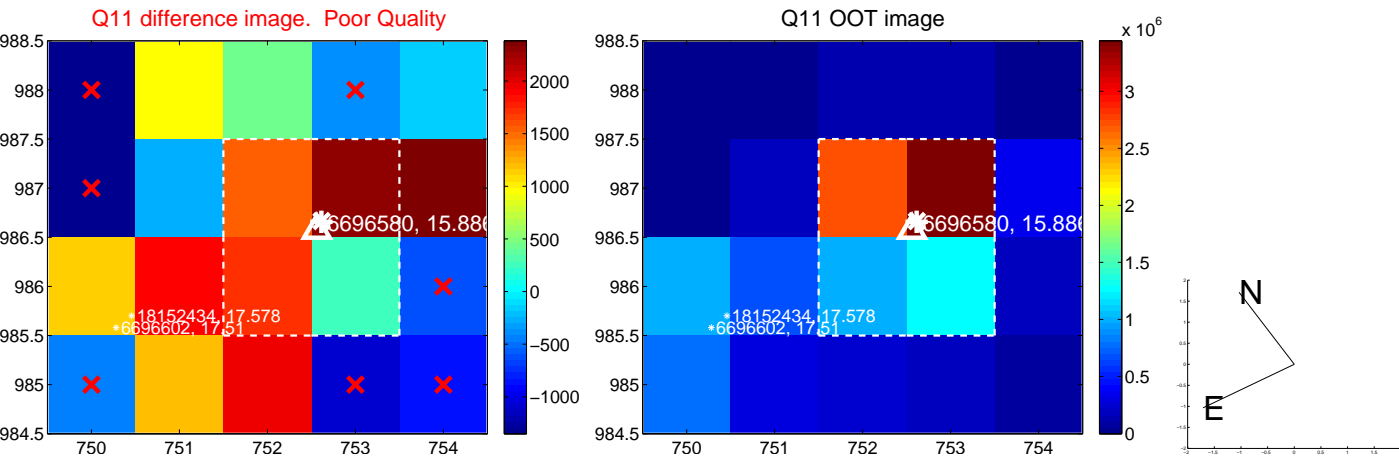
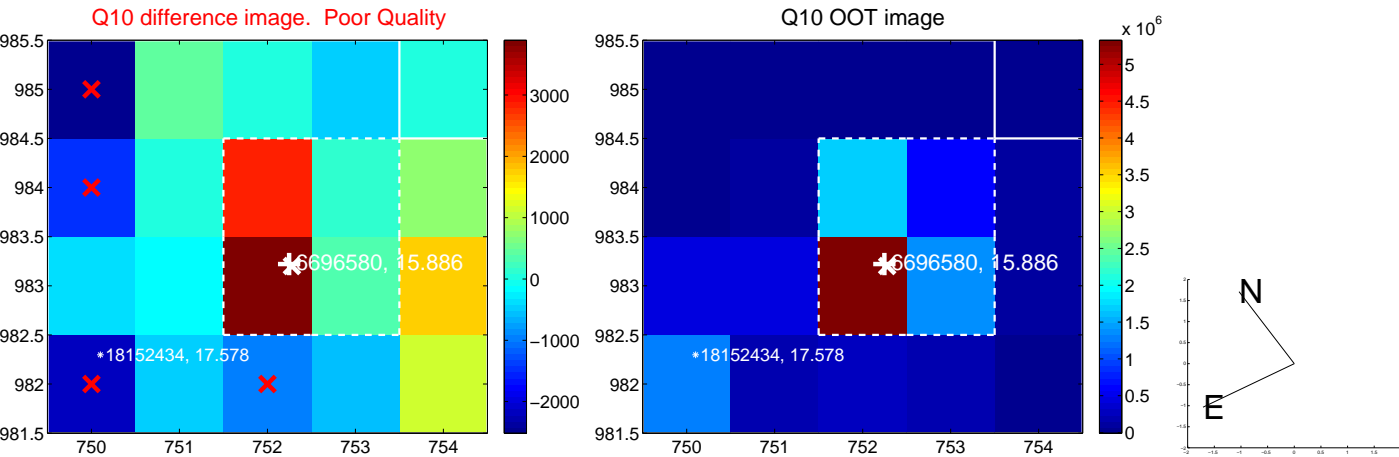
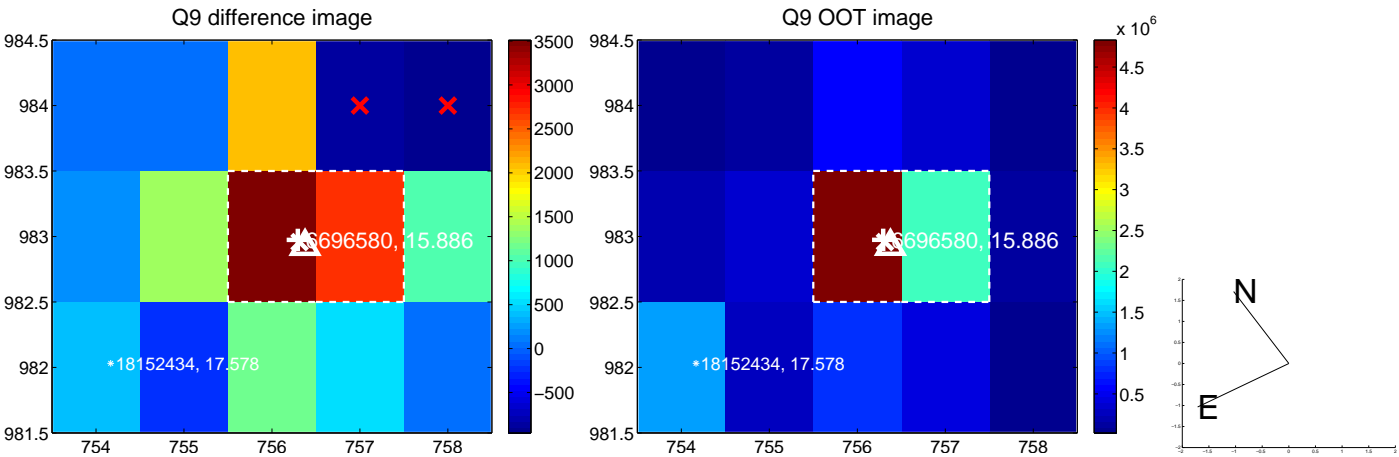
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



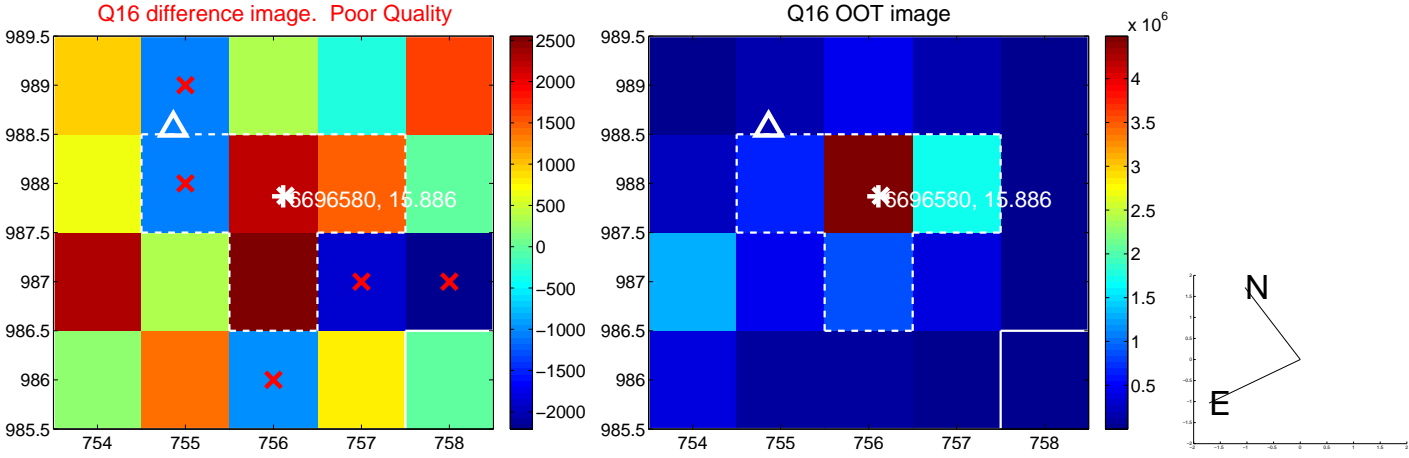
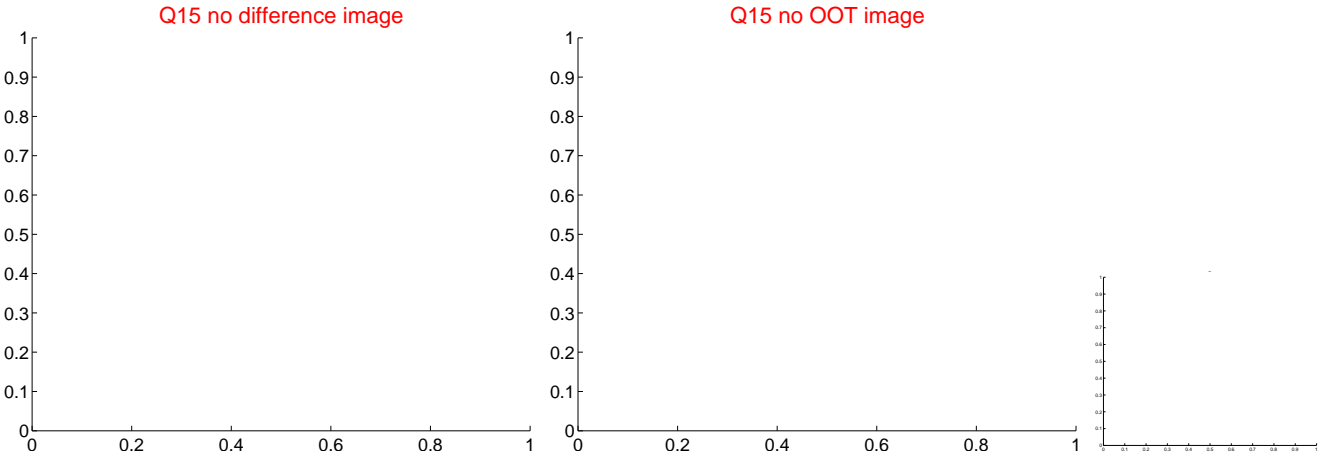
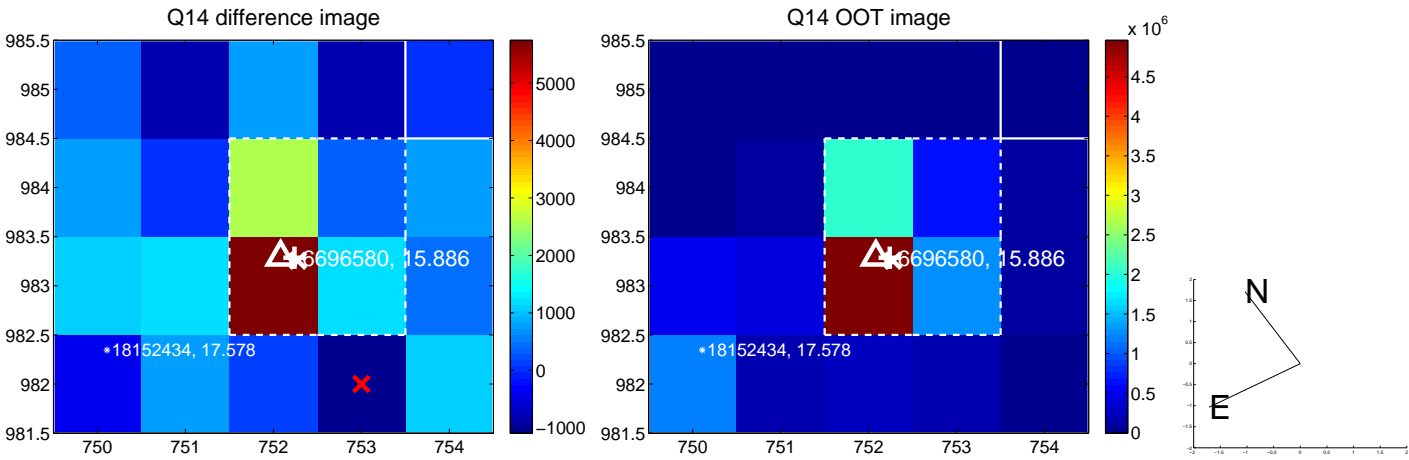
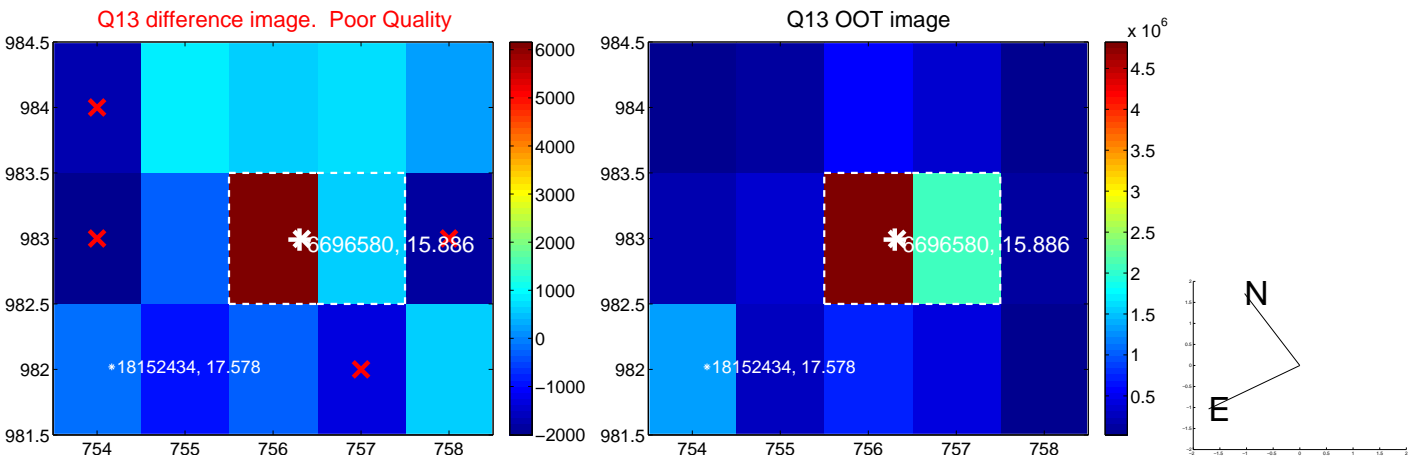
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



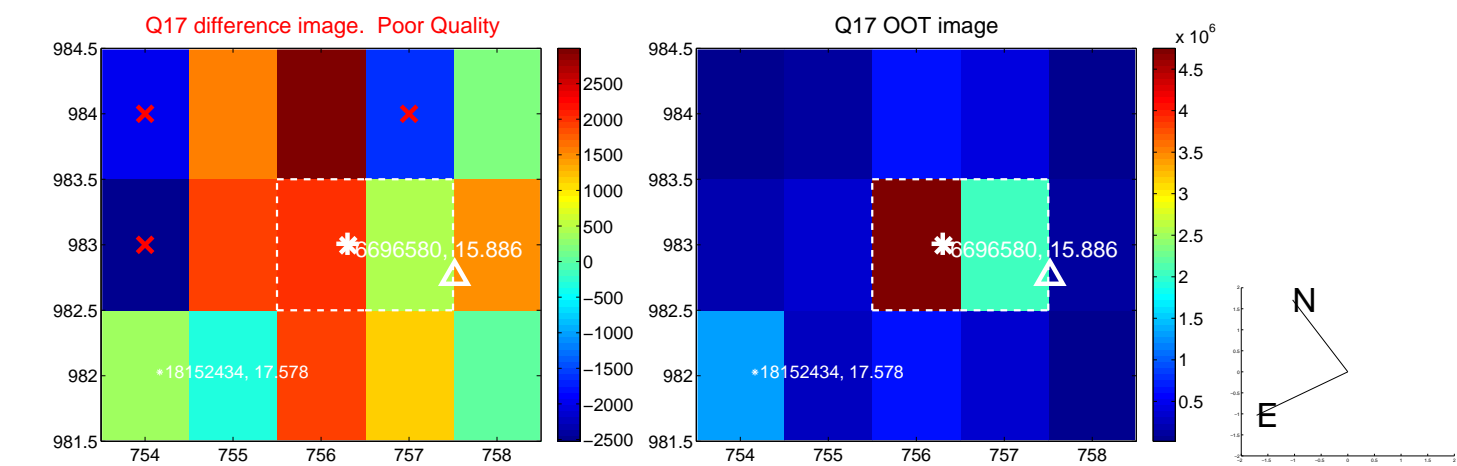
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



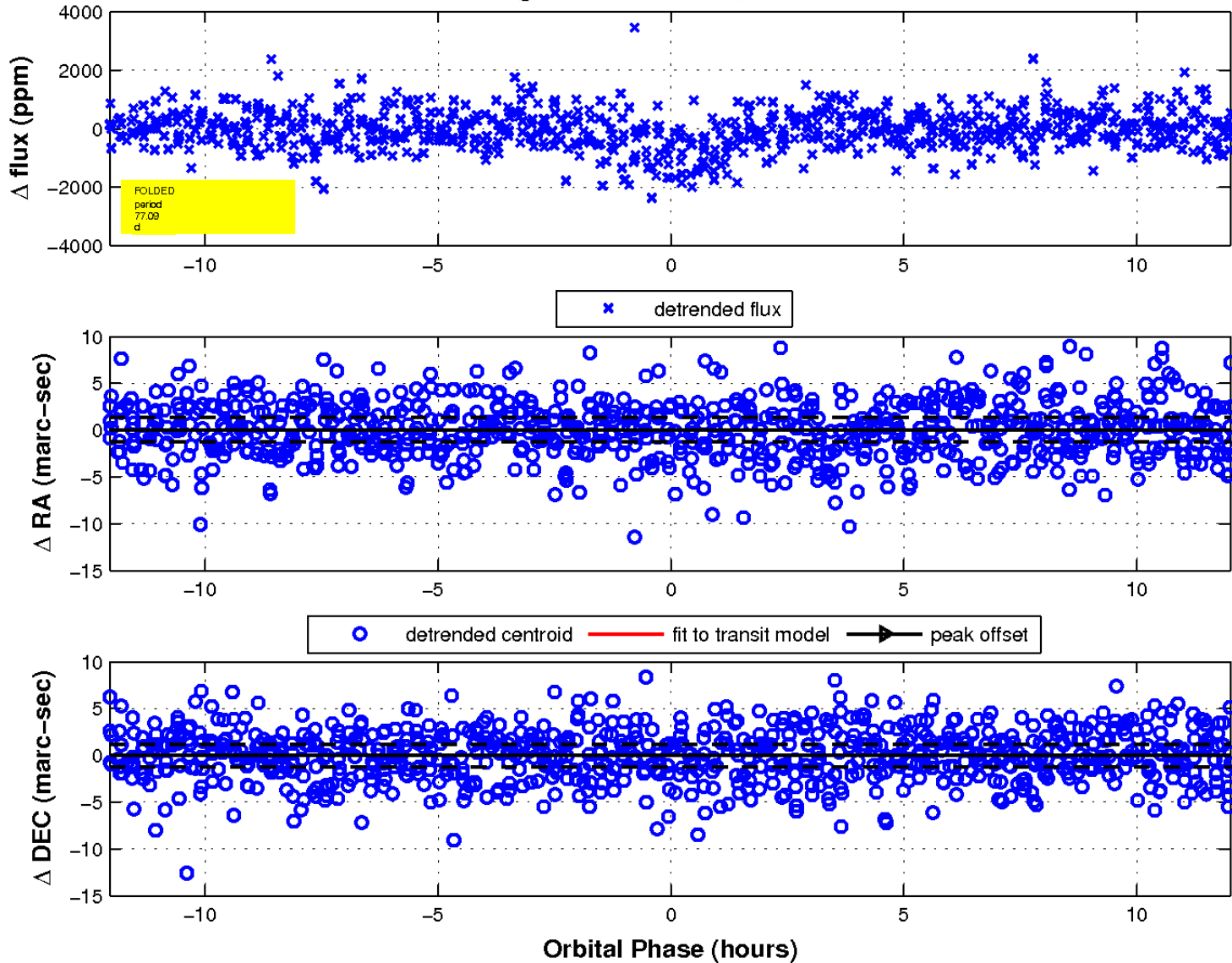
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 3 of 3



UKIRT Image

Declination

