

KIC 006950556

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})
006950556-01	OBS	No	289.584479	147.585394	442.8	3.500	12.3	-1.0	4.66	11119	10.12	176.65
006950556-02	OBS	No	0.755882	132.132789	3.4	5.897	11.3	2.7	4.66	11119	0.93	491516.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006950556-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
006950556-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV

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

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

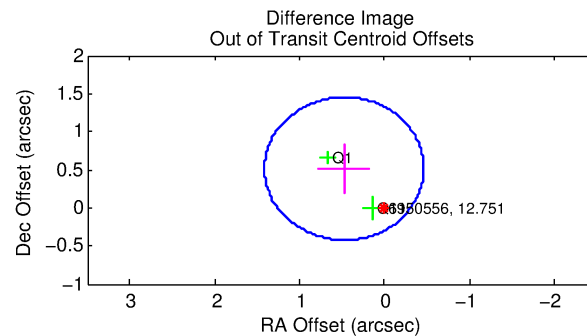
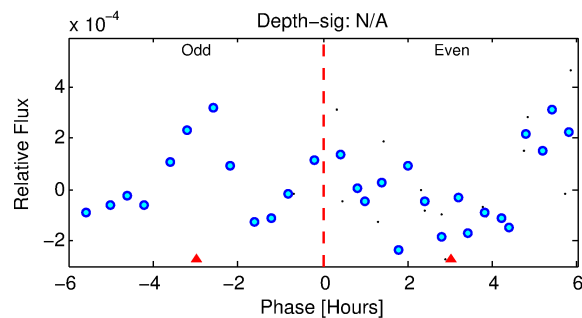
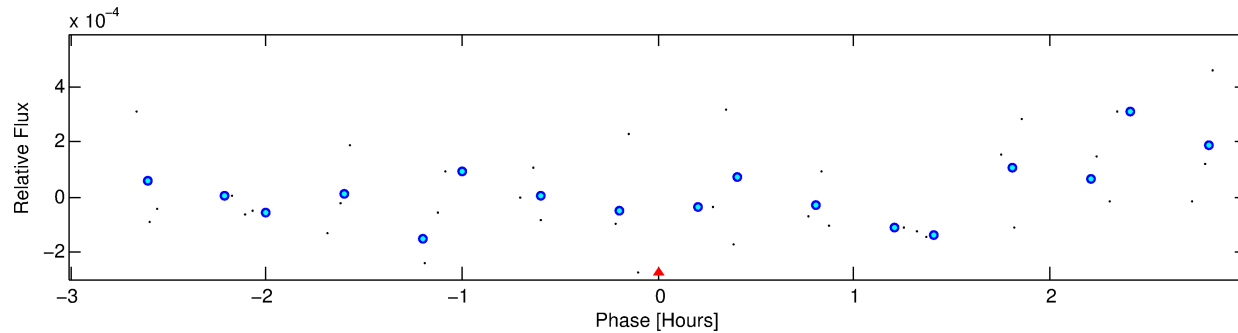
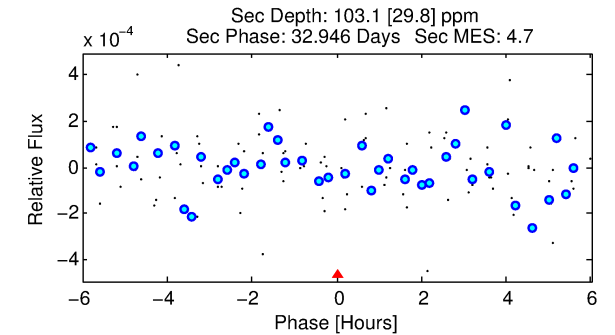
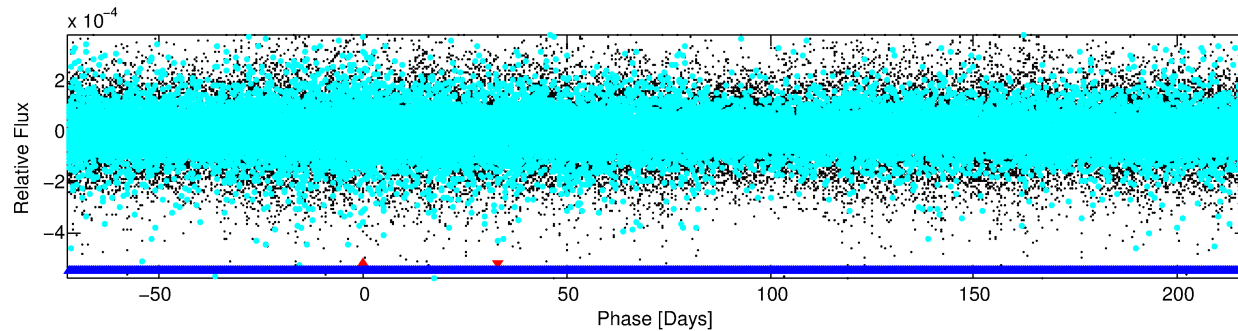
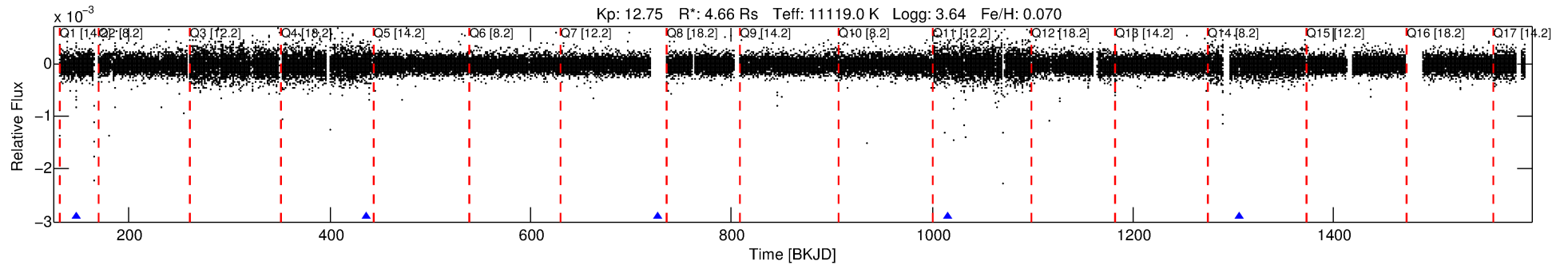
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006950556-01

No Significant Match Found

DV One-Page Summary

KIC: 6950556 Candidate: 1 of 2 Period: 289.584 d



TPS TCE Results:

Period = 289.58448 d
Epoch = 147.5854 BKJD

DV fit results are unavailable

DV Diagnostic Results:

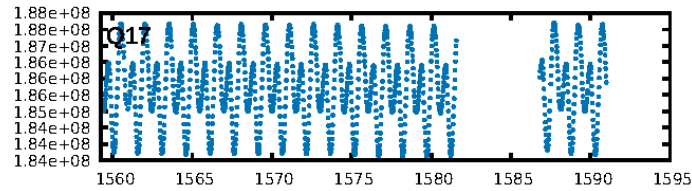
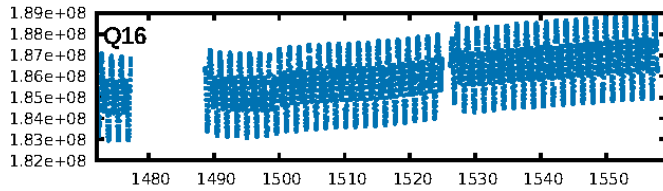
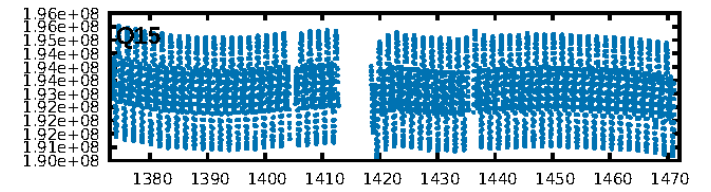
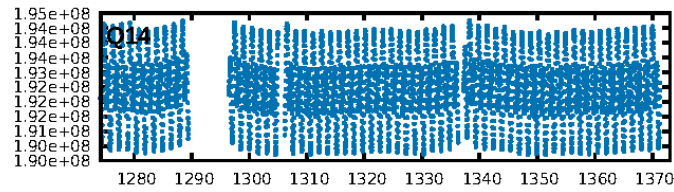
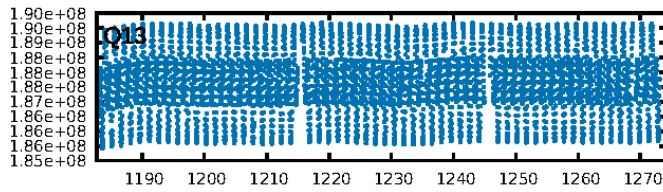
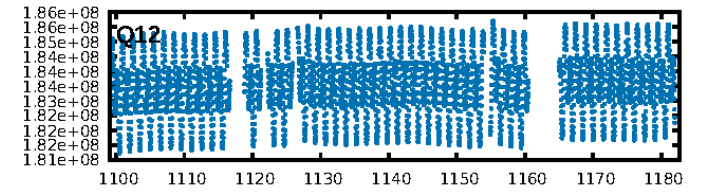
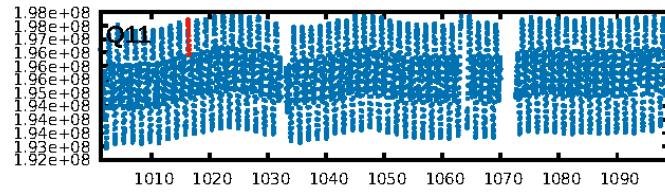
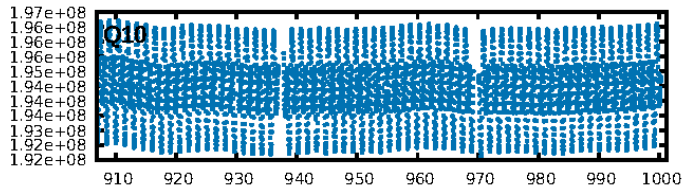
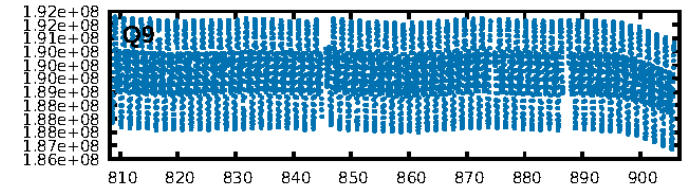
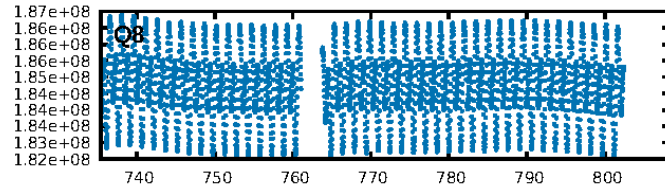
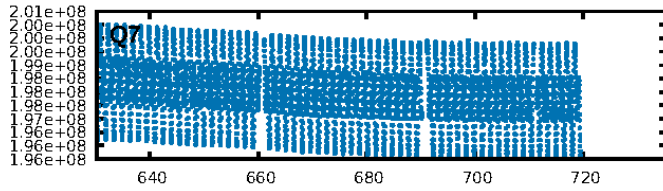
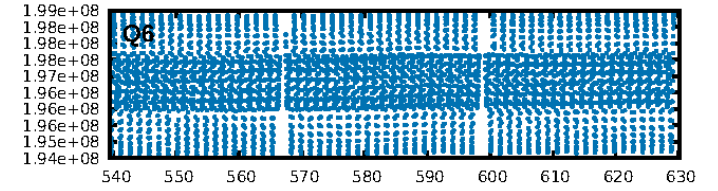
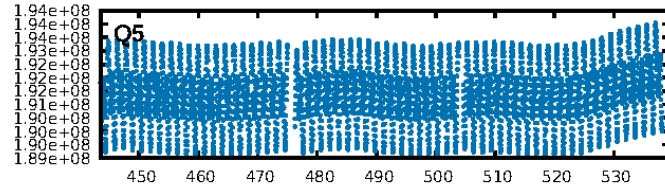
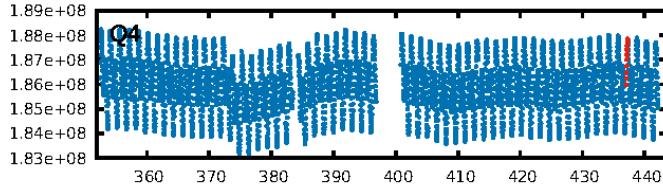
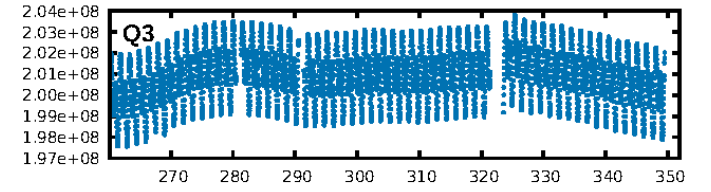
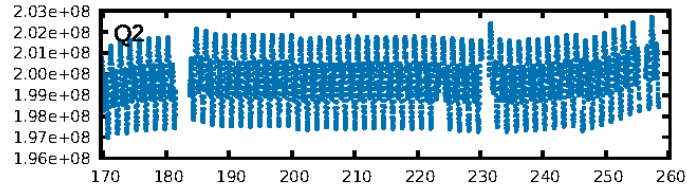
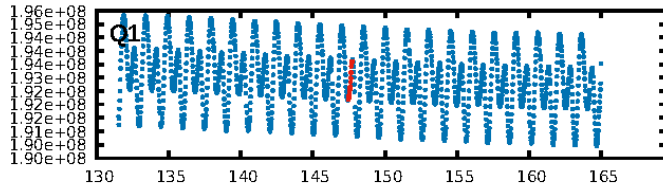
ShortPeriod-sig: 100.0% [1010.83σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: 2.861

Centroid-sig: N/A
Centroid-so: 3.452 arcsec [0.51σ]
OotOffset-rm: 0.700 arcsec [2.24σ]
KicOffset-rm: 0.770 arcsec [2.48σ]
OotOffset-st: 0/1/0/1 [2]
KicOffset-st: 0/1/0/1 [2]
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DiffImageOverlap-fno: 0.50 [1/2]

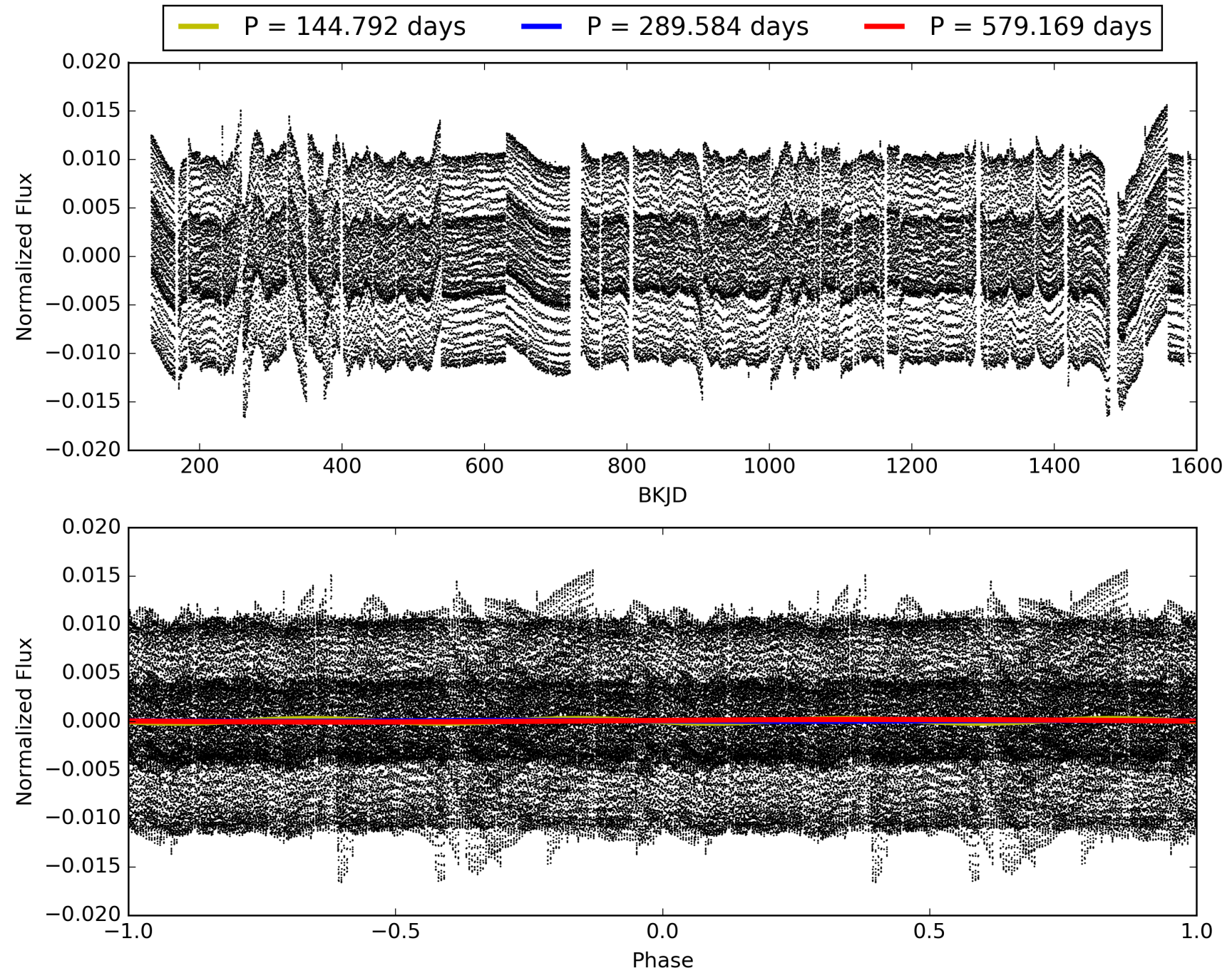
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 11:51:00 Z

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

TCE 006950556-01, PDC Light Curves

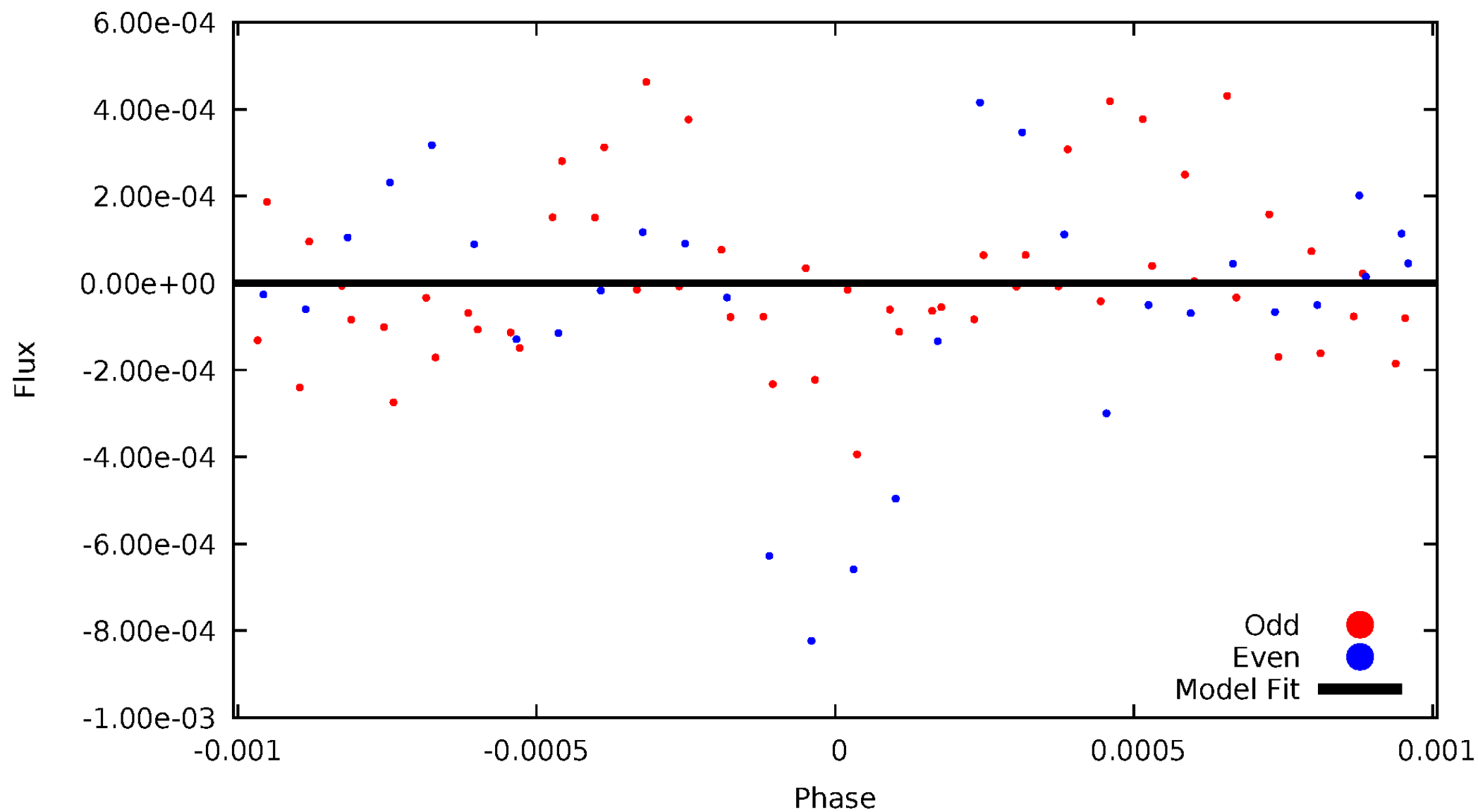


TCE 006950556-01



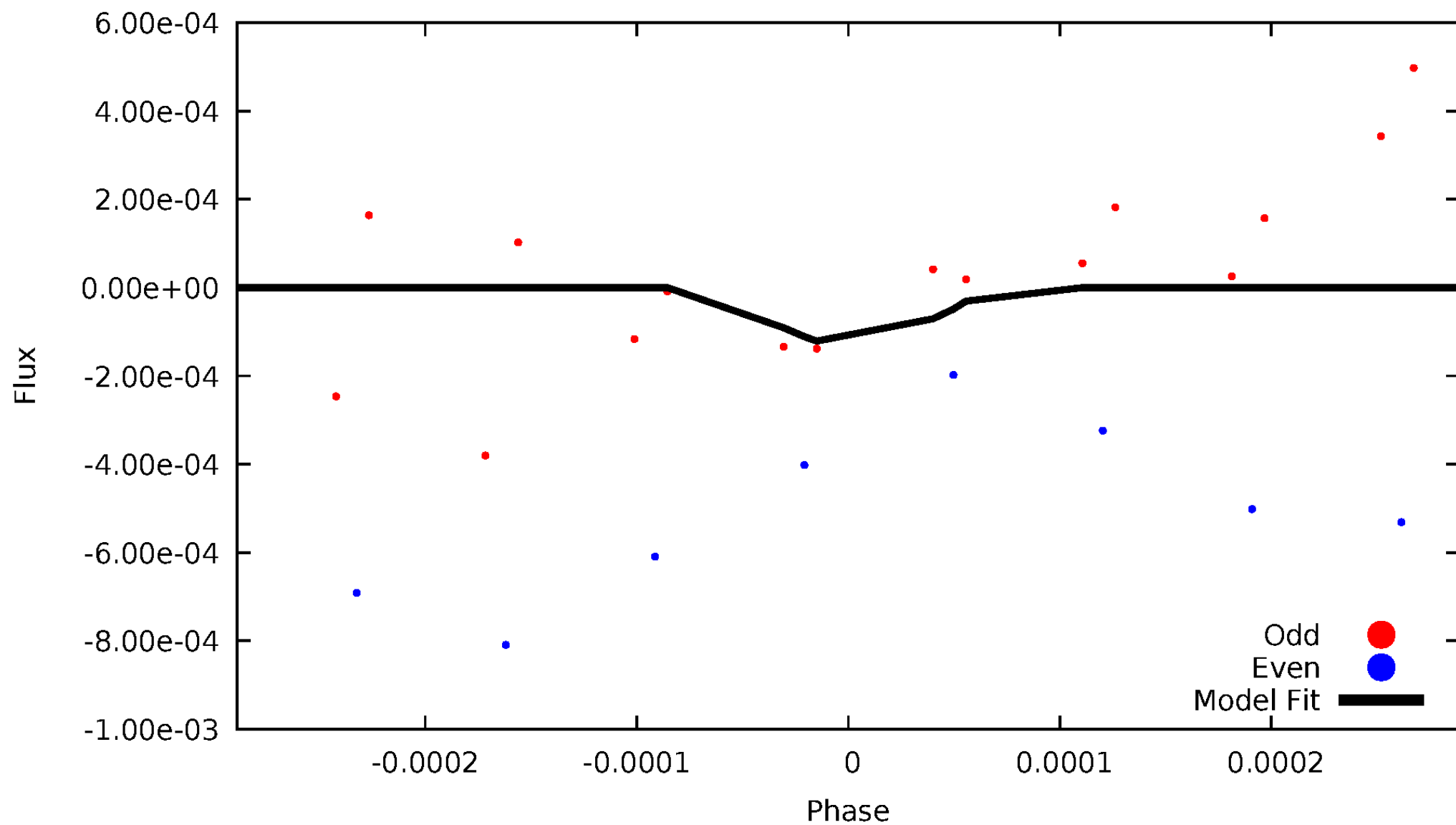
DV Odd/Even

TCE 006950556-01

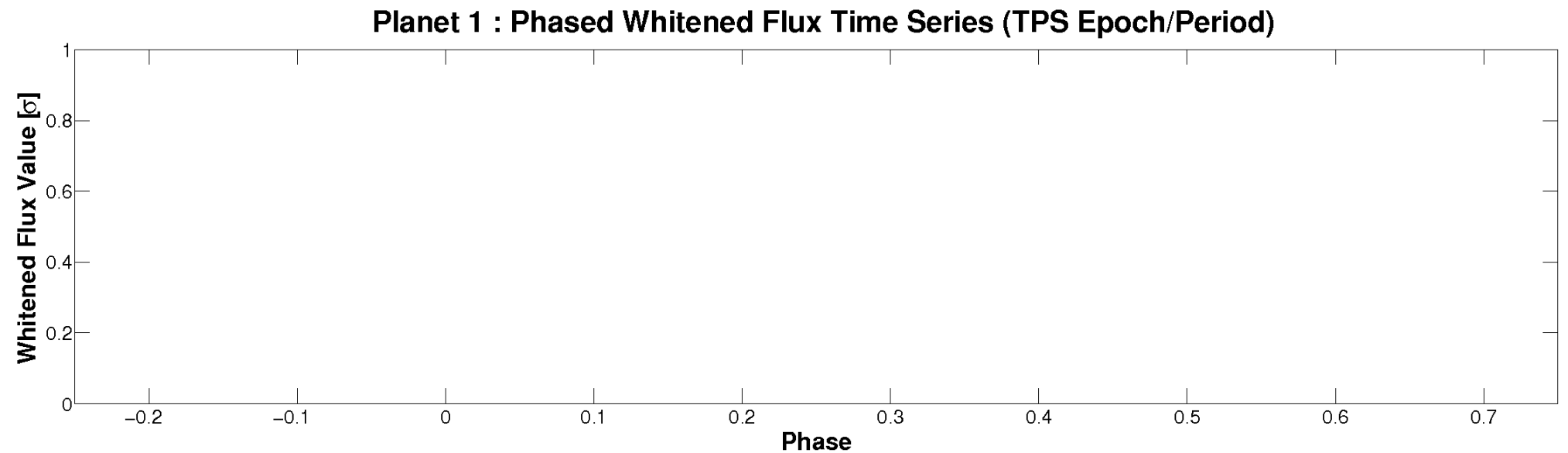
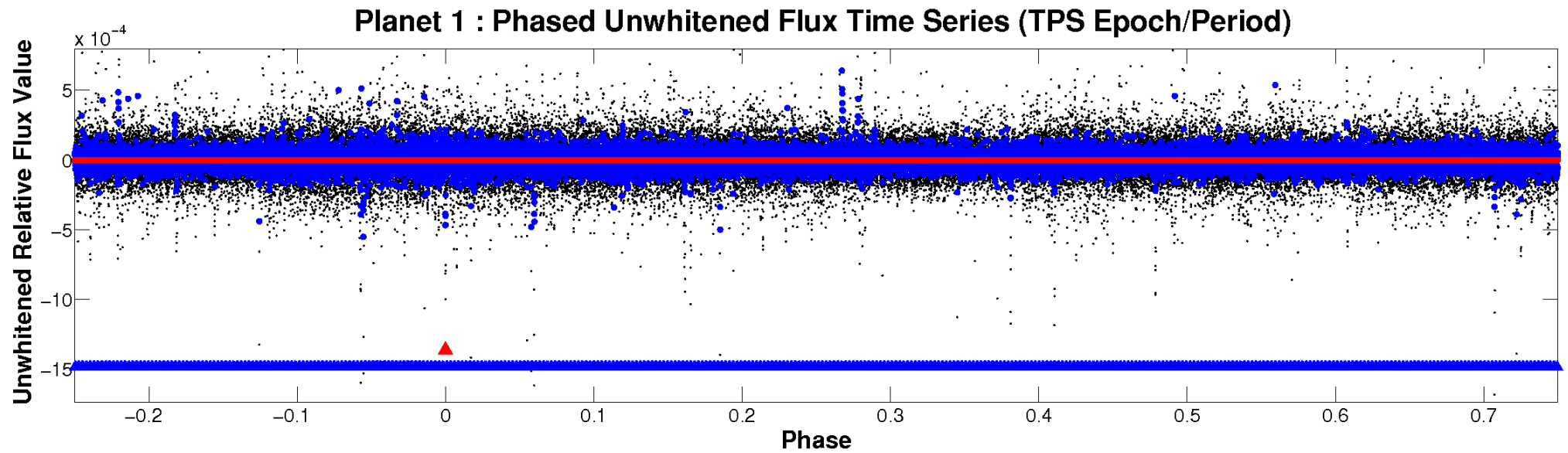


ALT Odd/Even

TCE 006950556-01

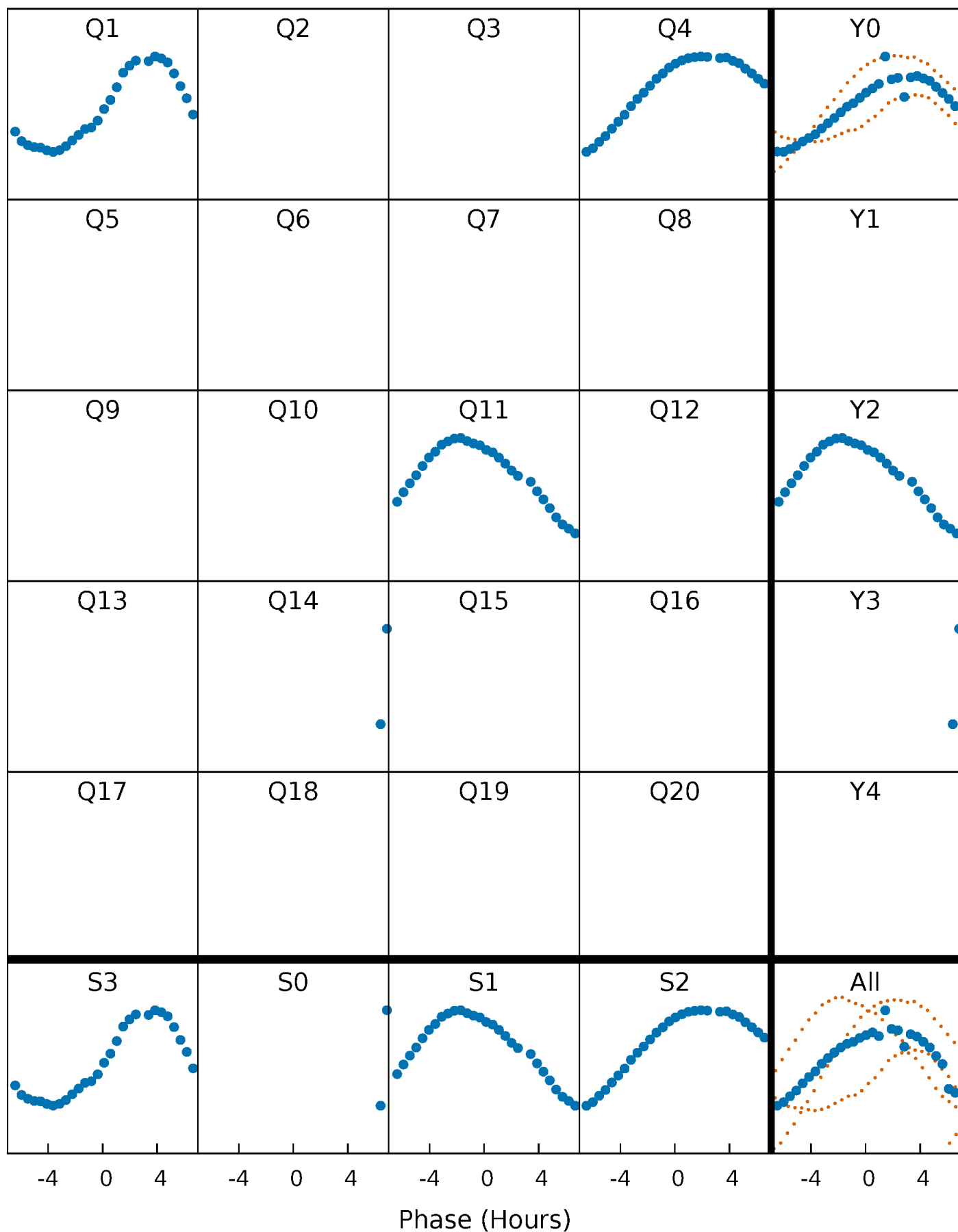


Non-Whitened Vs. Whitened Light Curve



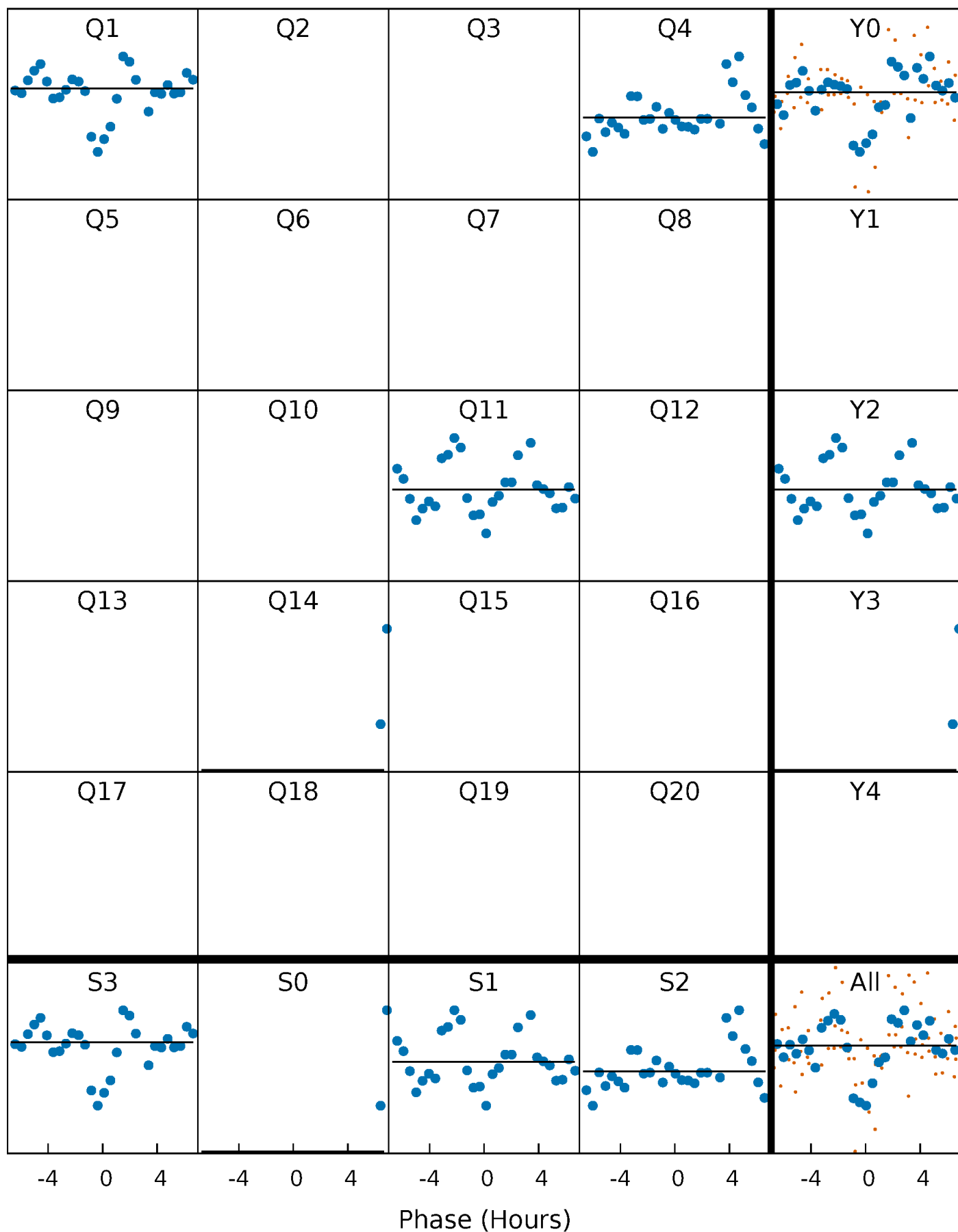
PDC Quarter-Phased Transit Curves

TCE 006950556-01 P=289.584479 Days $T_0=147.585394$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 006950556-01 P=289.584479 Days $T_0=147.585394$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

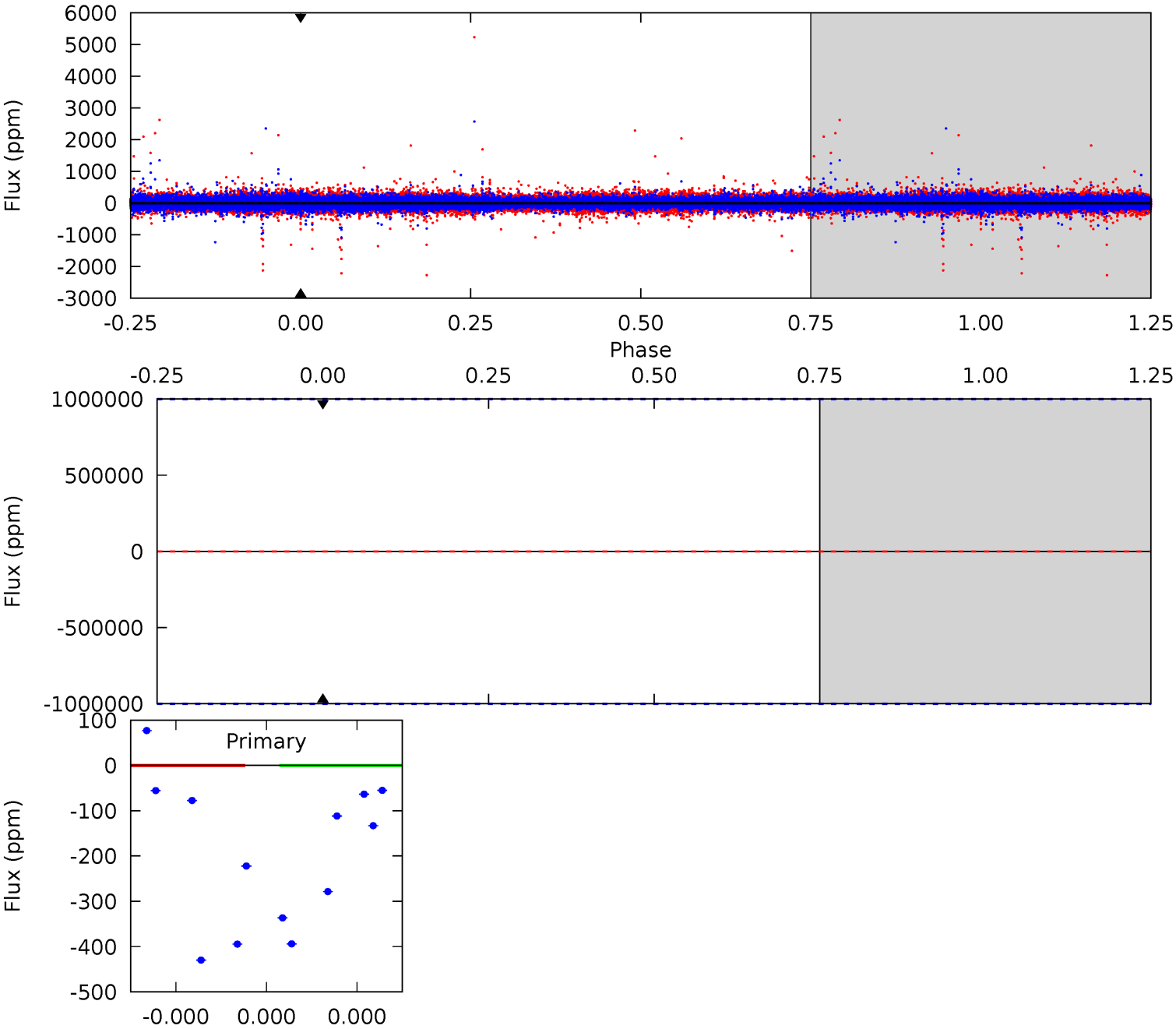
TCE 006950556-01 P=289.584479 Days $T_0=147.375505$ (BKJD)



DV Model-Shift Uniqueness Test

006950556-01, P = 289.584479 Days, E = 147.585394 Days

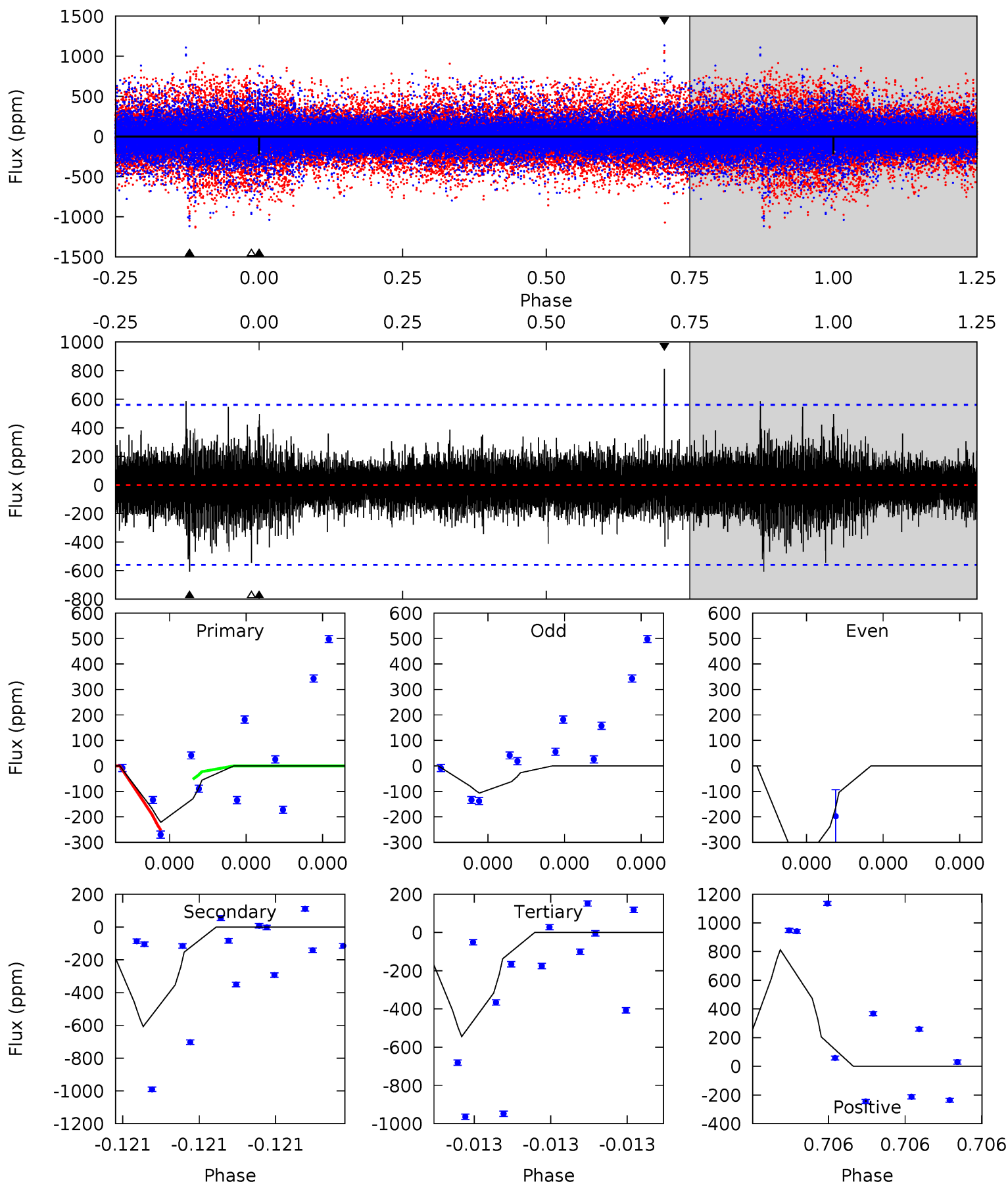
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

006950556-01, P = 289.584479 Days, E = 147.375505 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.29	6.29	5.64	8.42	5.80	3.82	1.04	-3.35	-6.13	0.65	-2.13	1.22	1.75	0.57	0.85



Stellar Parameters For KIC 006950556

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	11119^{+398}_{-531}	$3.642^{+0.425}_{-0.075}$	$0.070^{+0.150}_{-0.550}$	$4.661^{+0.382}_{-2.294}$	$3.473^{+0.069}_{-1.015}$	$0.048^{+0.210}_{-0.008}$
	+4%/-5%	+12%/-2%	+214%/-786%	+8%/-49%	+2%/-29%	+434%/-17%
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 006950556-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$33.58^{+34.72}_{-23.37}$	1269^{+76}_{-149}	$8187^{+102427}_{-96964}$	$1521^{+153103}_{-137194}$
Alt.	-607 ± 97	$35.16^{+34.61}_{-24.78}$	1270^{+84}_{-149}	5472^{+5763}_{-1219}	422^{+4041}_{-305}

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 $A_{obs} \gg 1.0$

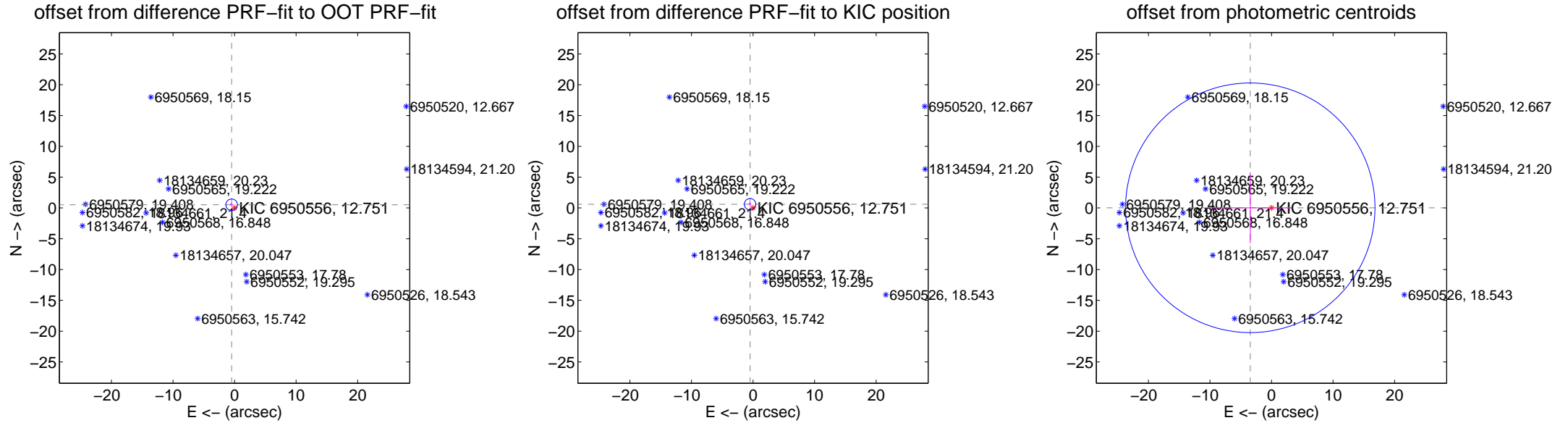
DV Centroid Data

Supplemental centroid analysis for 006950556-01. Kepler magnitude: 12.75. Transit SNR -1.00

There are 1 quarters with good PRF difference image offsets

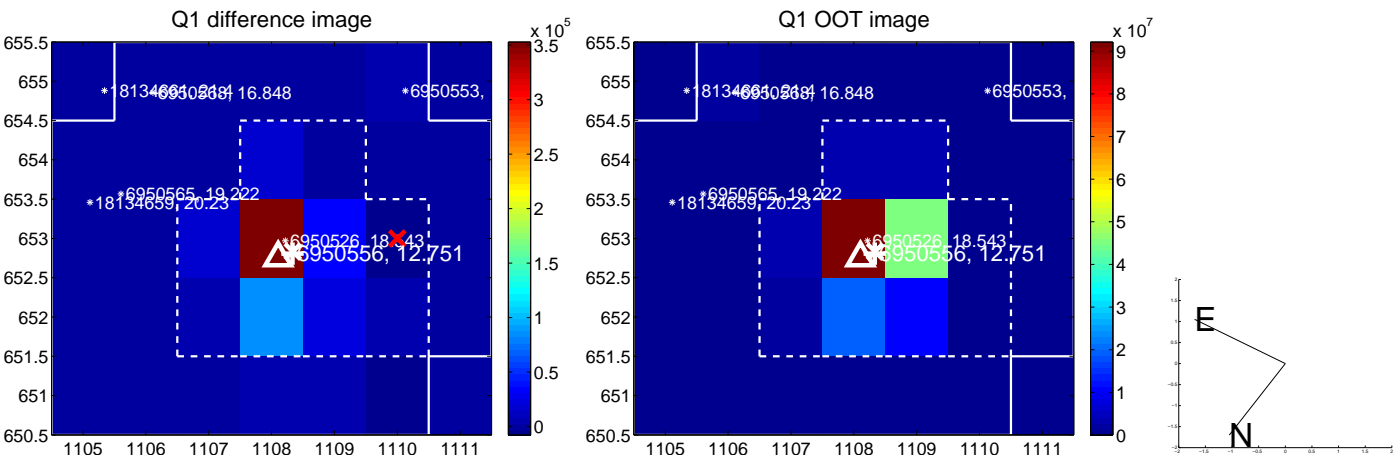
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.700 ± 0.313	2.24	0.474 ± 0.300	0.515 ± 0.323
PRF-fit source offset from KIC position	0.770 ± 0.310	2.48	0.485 ± 0.223	0.598 ± 0.356
photometric centroid source offset	3.45 ± 6.75	0.51	3.45 ± 6.75	0.03 ± 5.74



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.

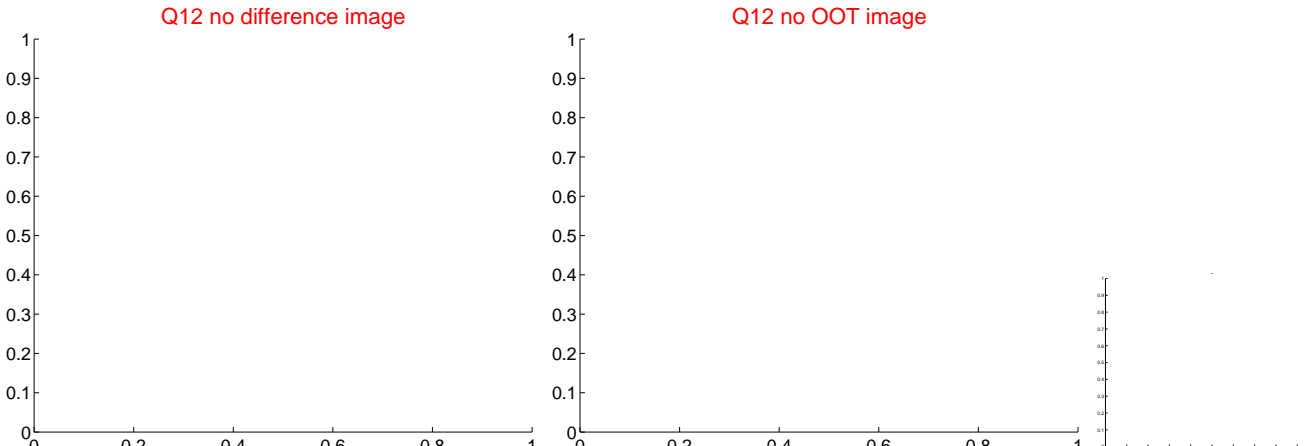
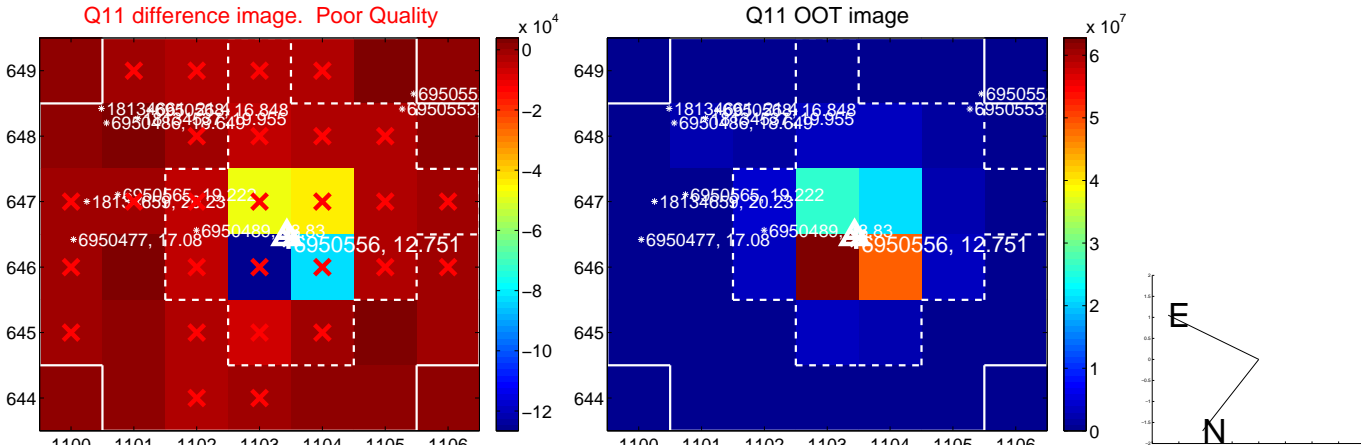
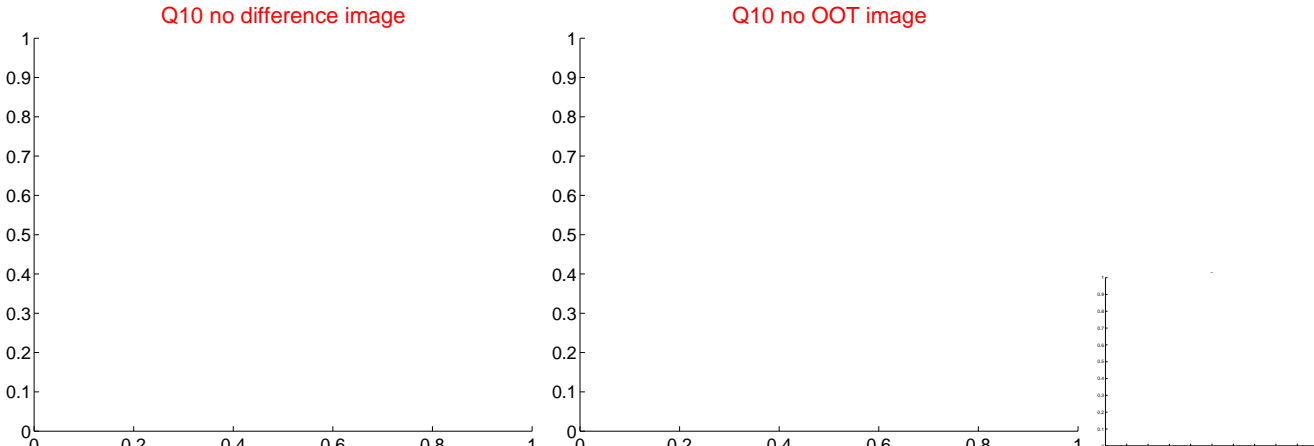
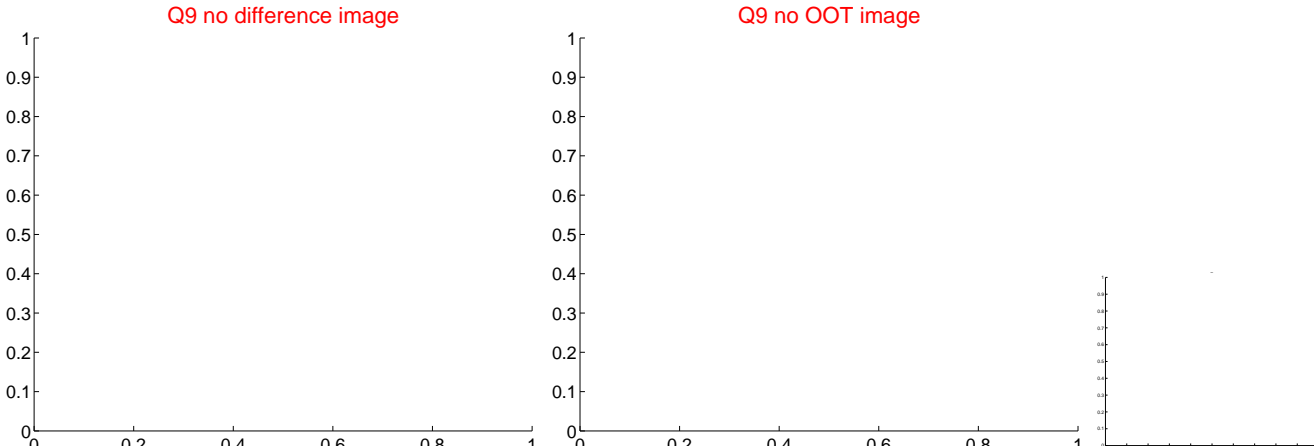
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



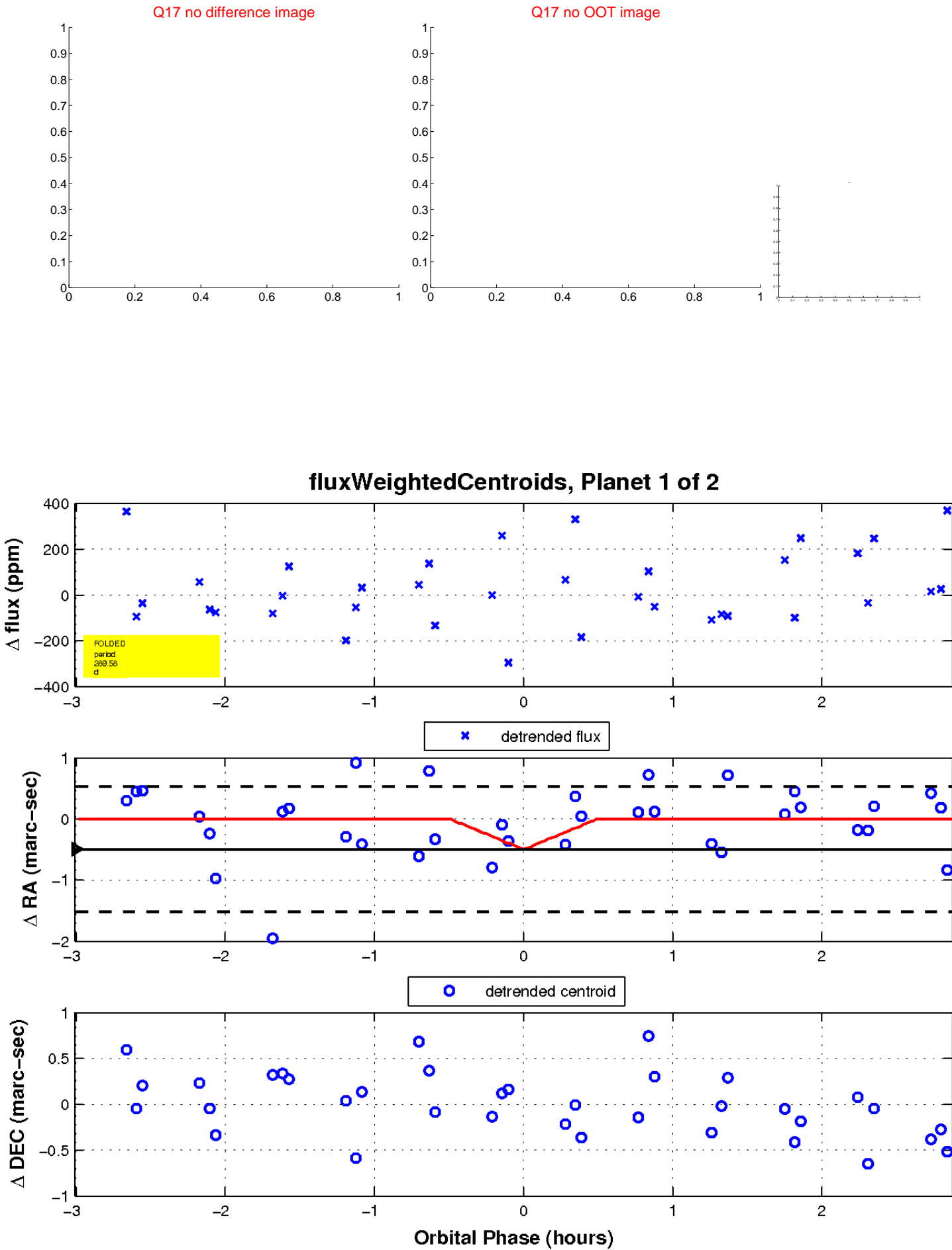
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

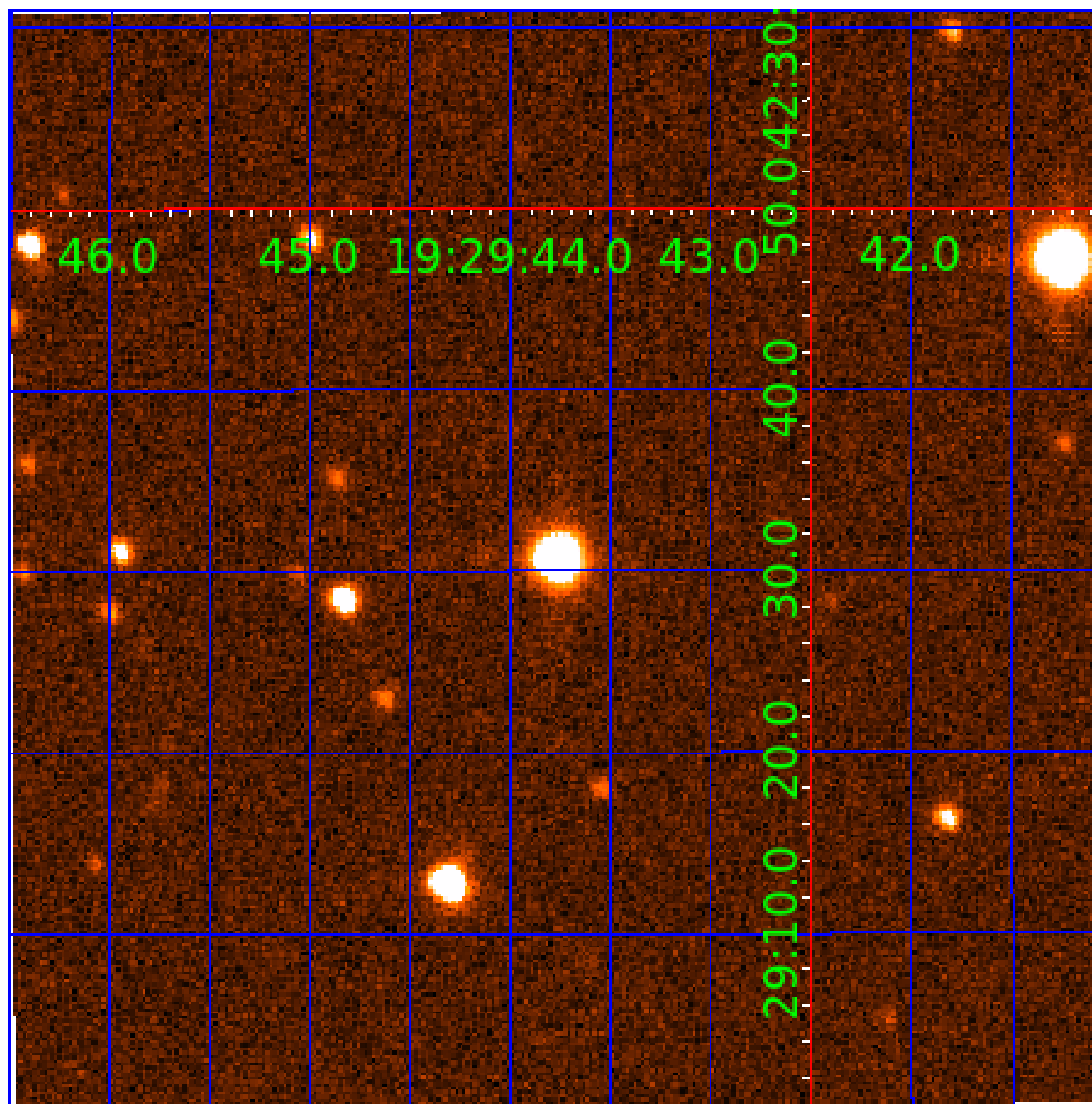


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006950556

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})
006950556-01	OBS	No	289.584479	147.585394	442.8	3.500	12.3	-1.0	4.66	11119	10.12	176.65
006950556-02	OBS	No	0.755882	132.132789	3.4	5.897	11.3	2.7	4.66	11119	0.93	491516.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006950556-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
006950556-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV

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

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

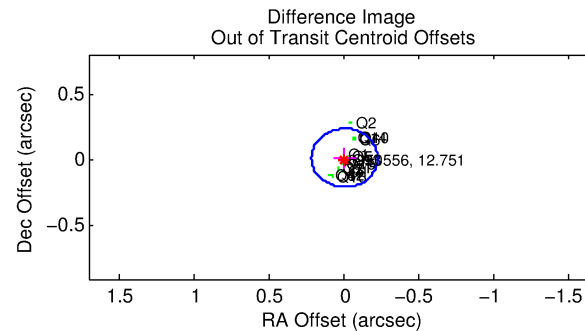
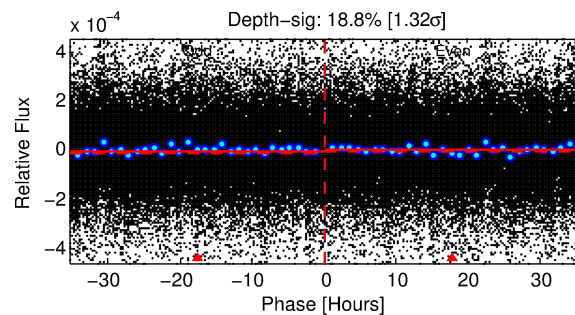
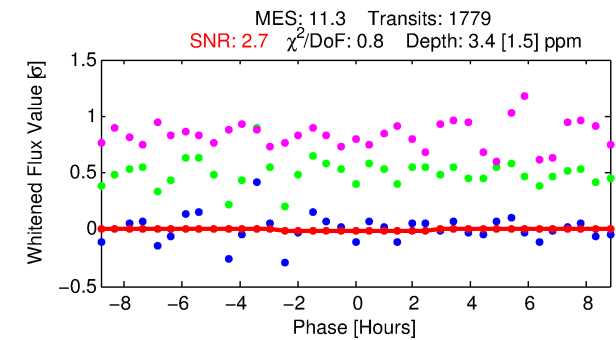
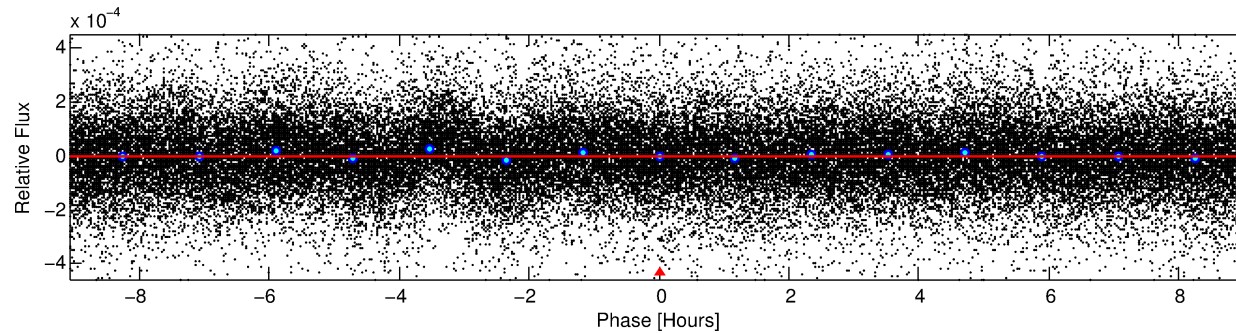
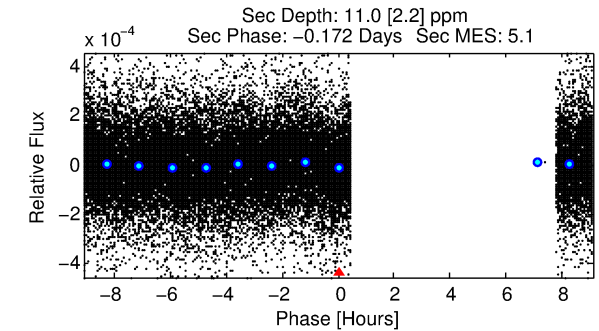
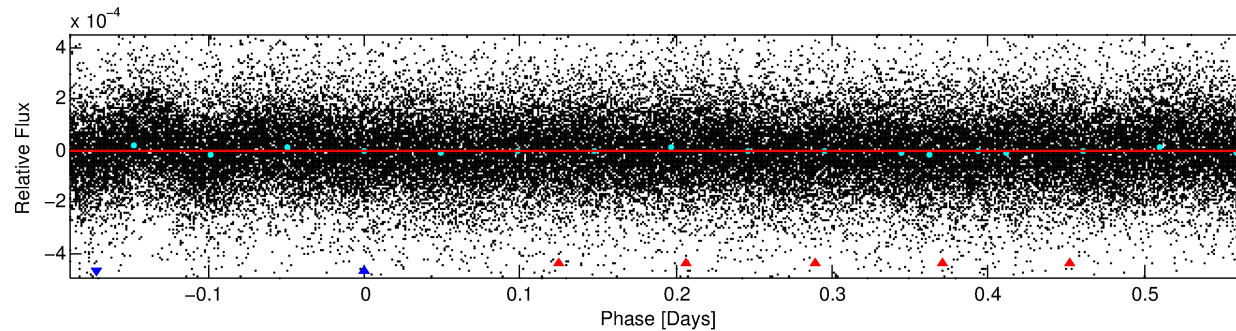
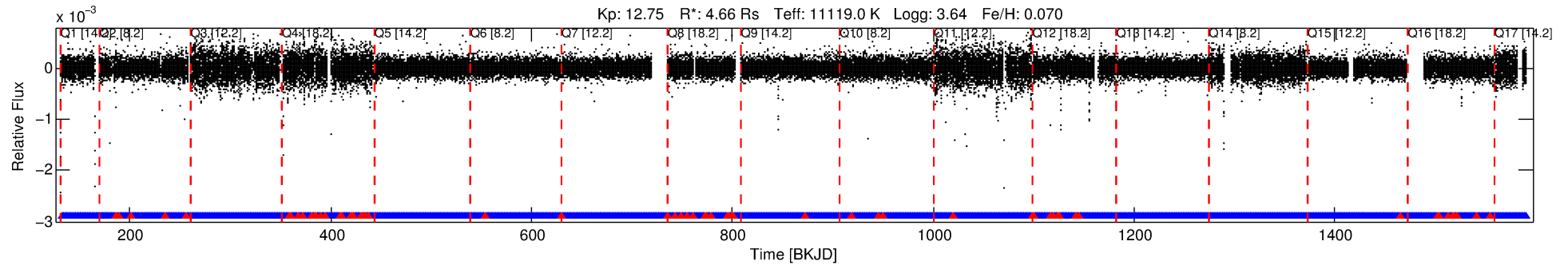
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006950556-02

No Significant Match Found

DV One-Page Summary

KIC: 6950556 Candidate: 2 of 2 Period: 0.756 d



DV Fit Results:

Period = 0.75588 [0.00004] d
Epoch = 132.1328 [0.0139] BKJD
Rp/R* = 0.0018 [0.0011]
a/R* = 1.09 [0.86]
b = 0.70 [3.53]
Seff = 491516.56 [371012.92]
Teq = 6752 [1274] K
Rp = 0.93 [0.73] Re
a = 0.0246 [0.0114] AU
Ag = 4.29 [6.19] [0.53σ]
Teff = 15020 [4737] K [1.69σ]

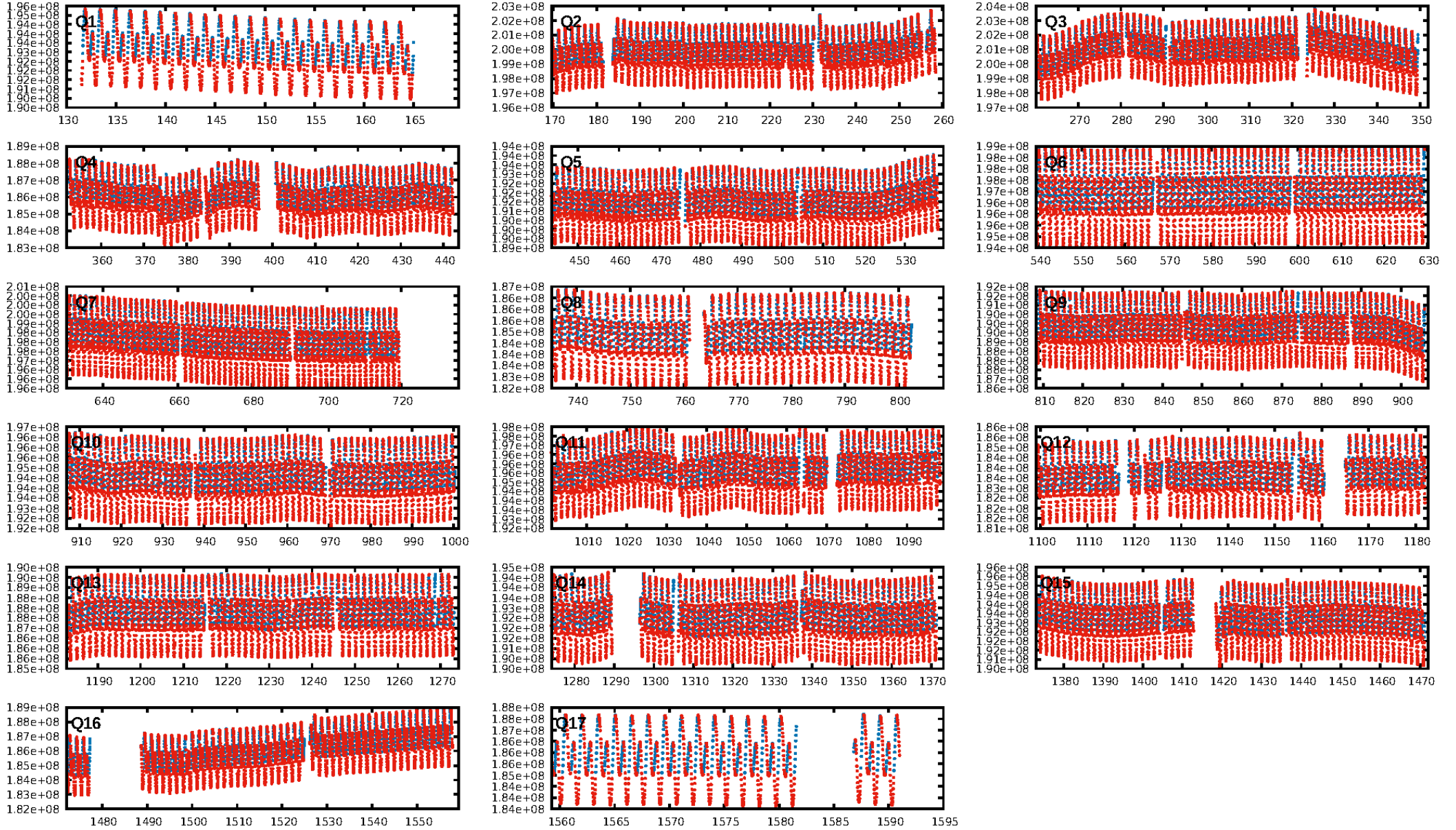
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [1010.83σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.96 [1638/1699]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.018 arcsec [0.25σ]
KicOffset-rm: 0.125 arcsec [1.63σ]
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]

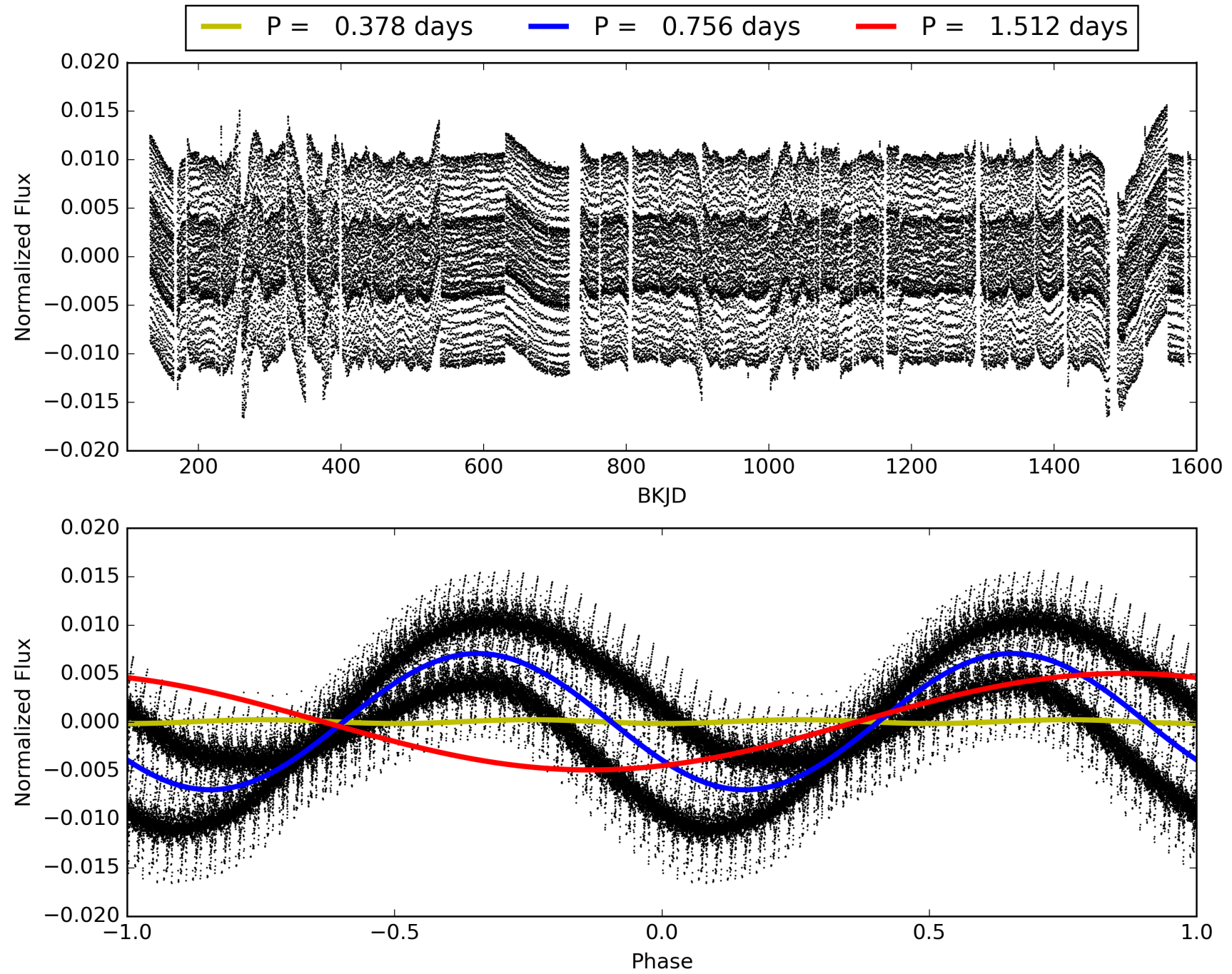
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 11:51:13 Z

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

TCE 006950556-02, PDC Light Curves

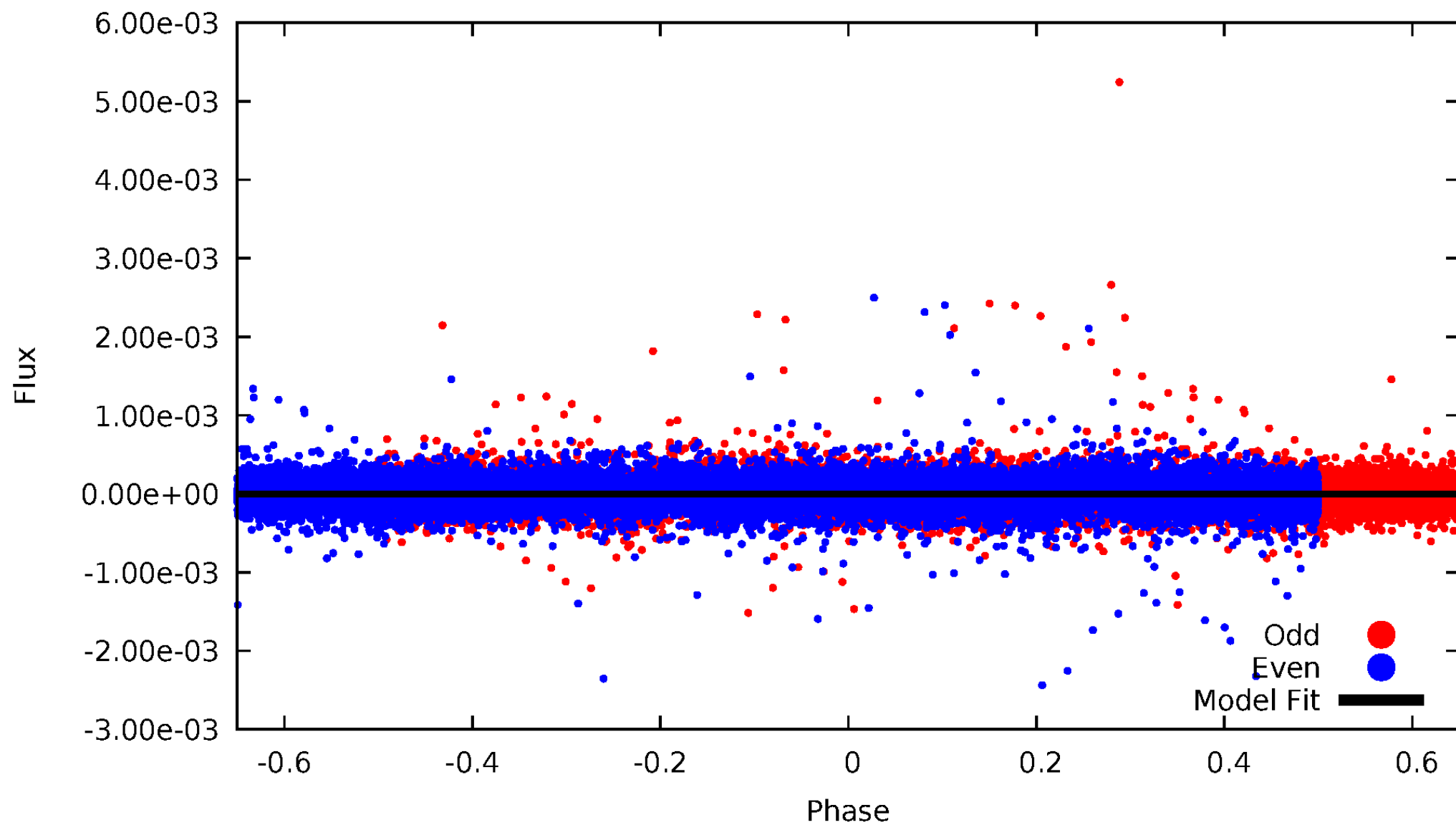


TCE 006950556-02



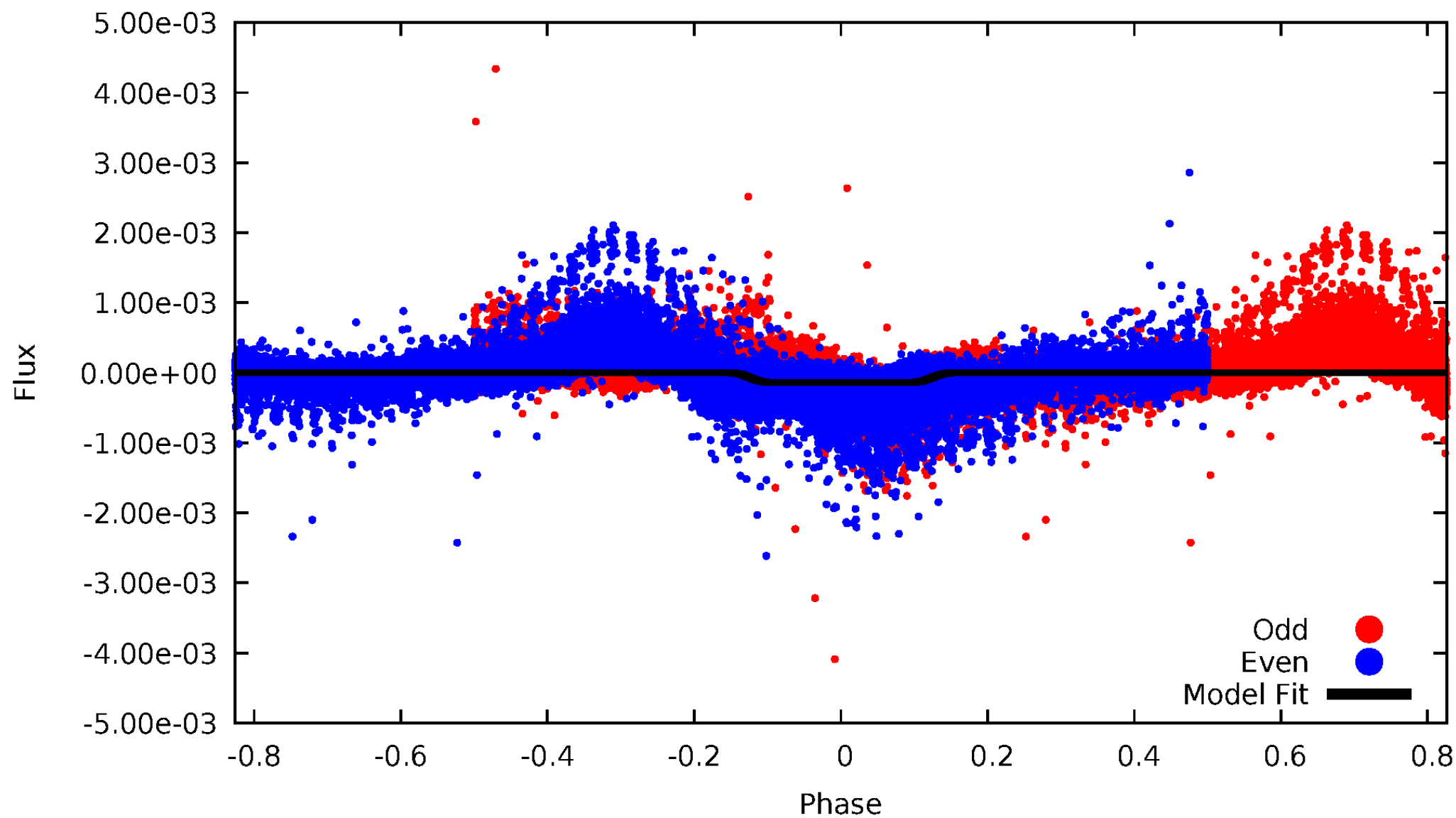
DV Odd/Even

TCE 006950556-02



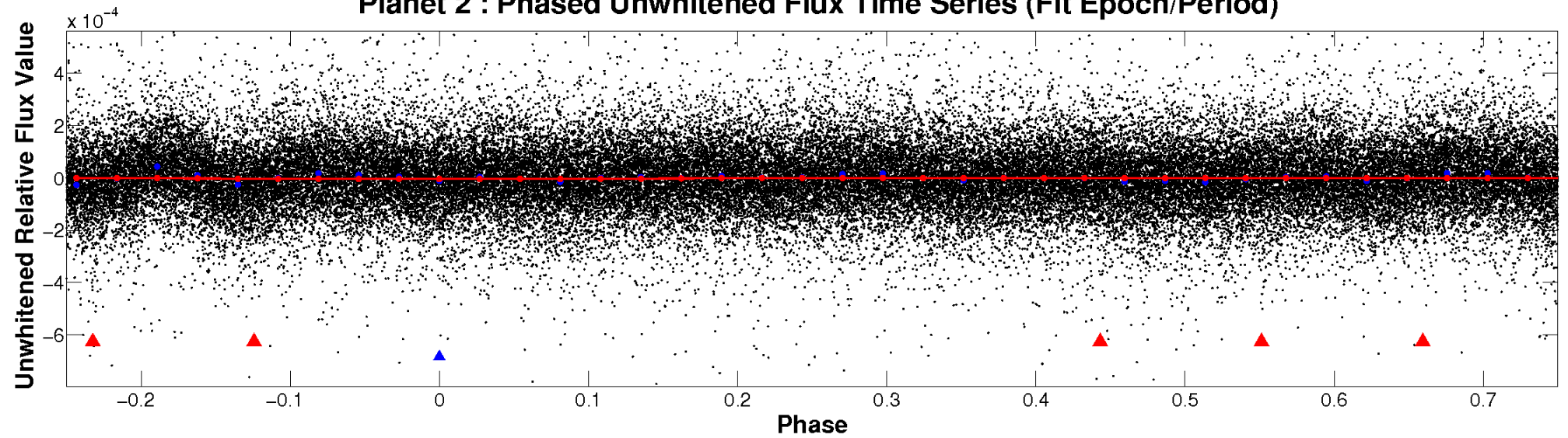
ALT Odd/Even

TCE 006950556-02

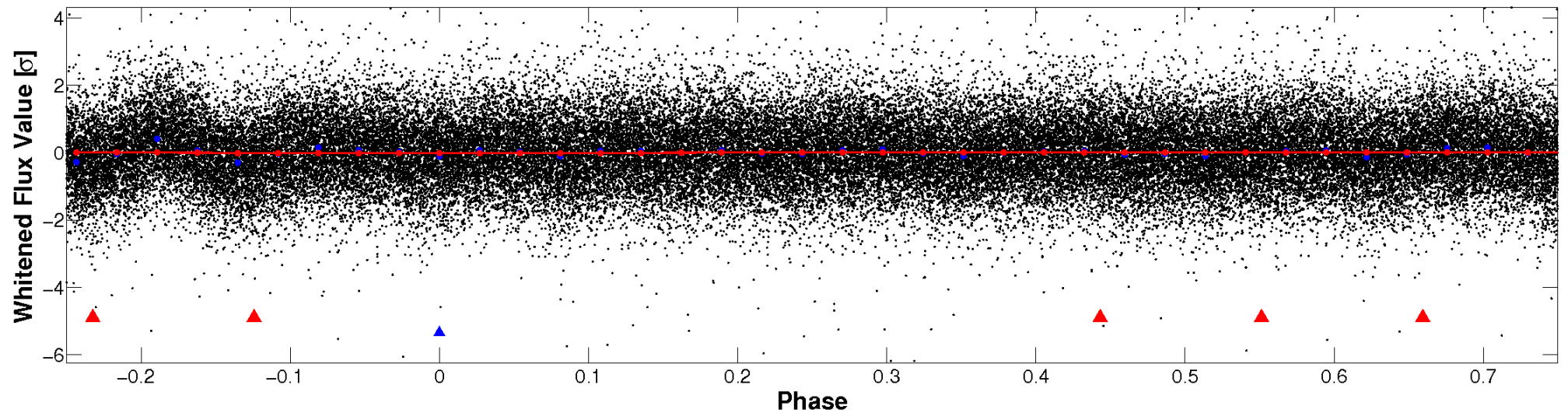


Non-Whitened Vs. Whitened Light Curve

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

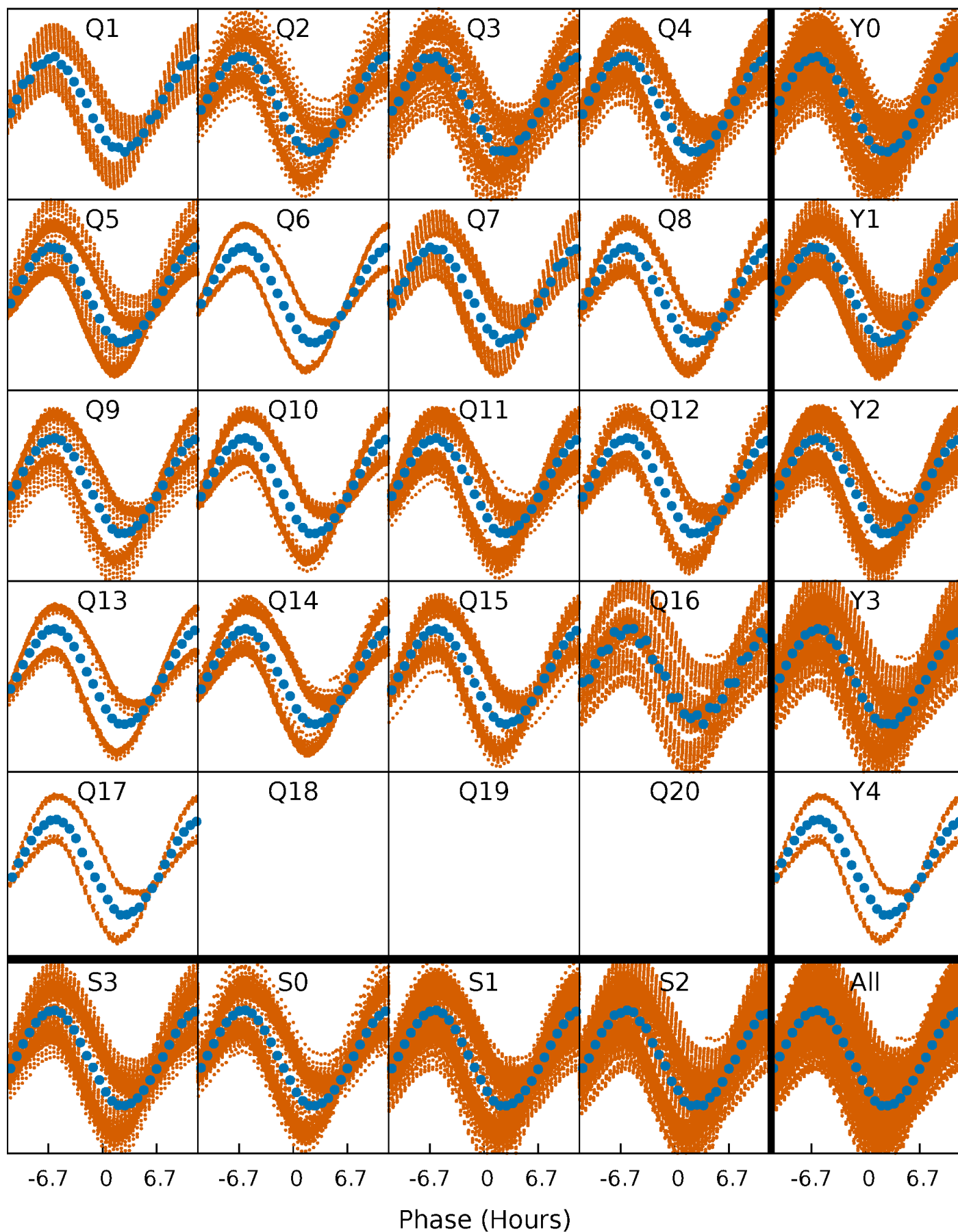


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



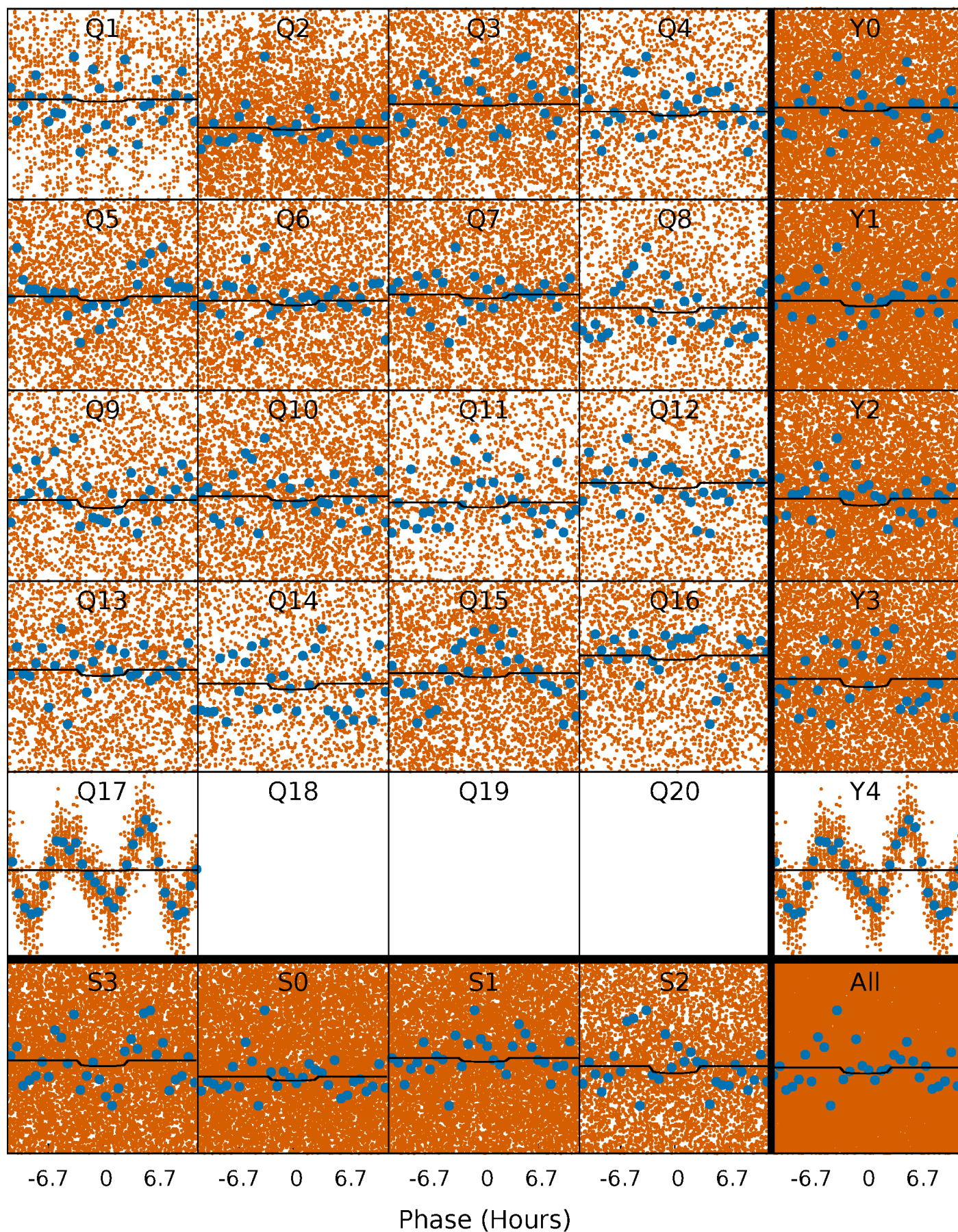
PDC Quarter-Phased Transit Curves

TCE 006950556-02 P= 0.755882 Days $T_0=132.132789$ (BKJD)



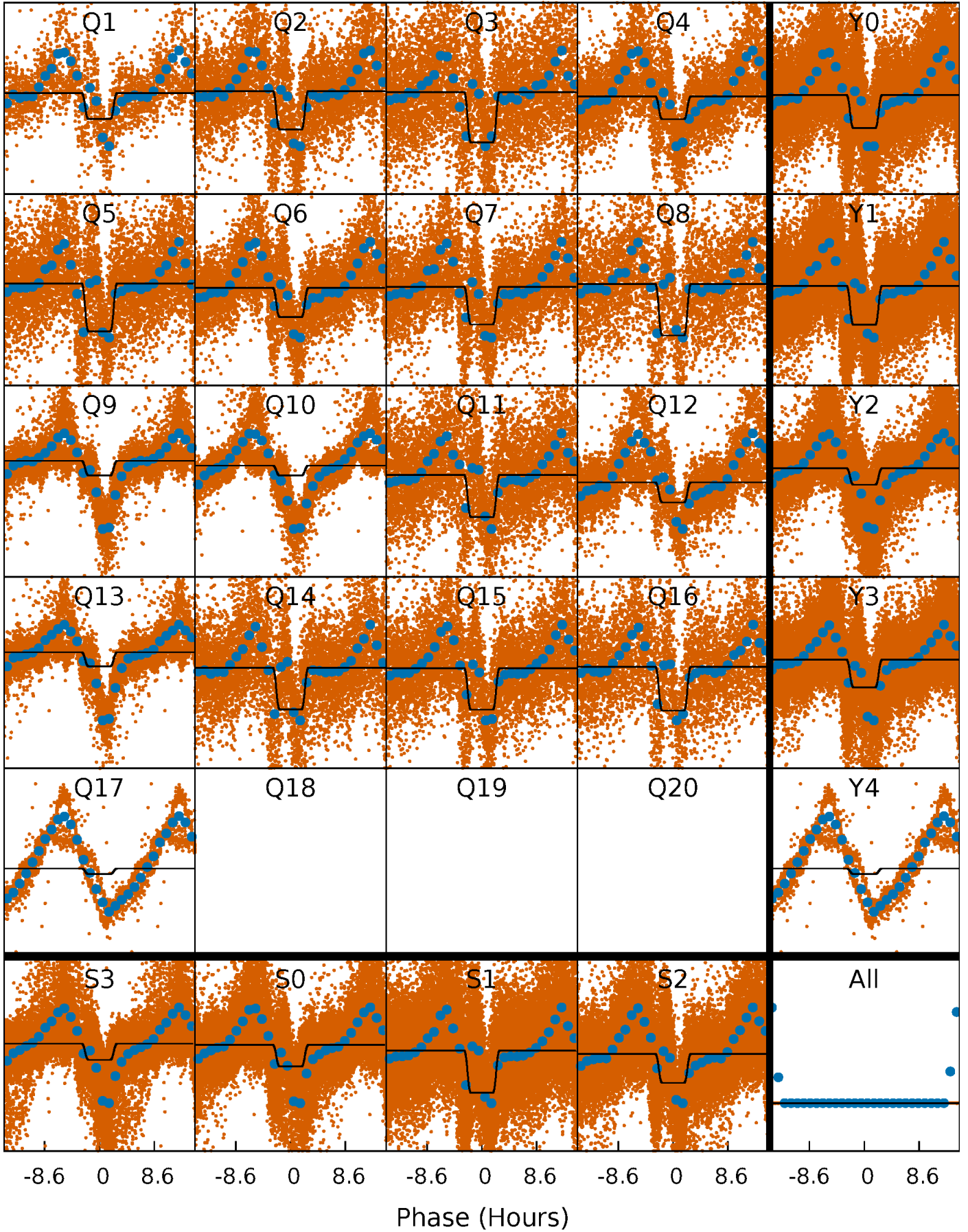
DV Quarter-Phased Transit Curves

TCE 006950556-02 P= 0.755882 Days $T_0=132.132789$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

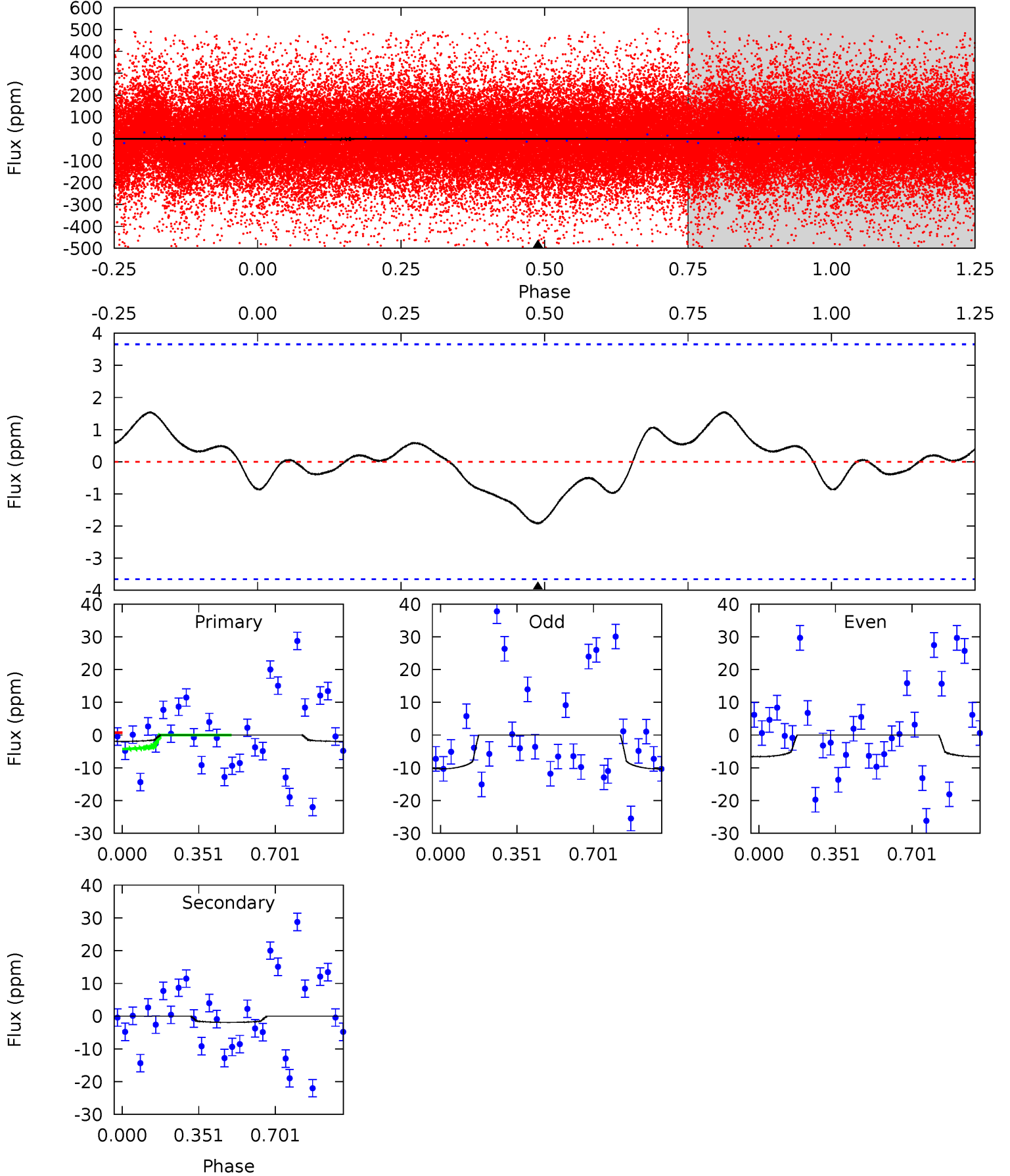
TCE 006950556-02 P= 0.755889 Days $T_0=132.141934$ (BKJD)



DV Model-Shift Uniqueness Test

006950556-02, P = 0.755882 Days, E = 131.376907 Days

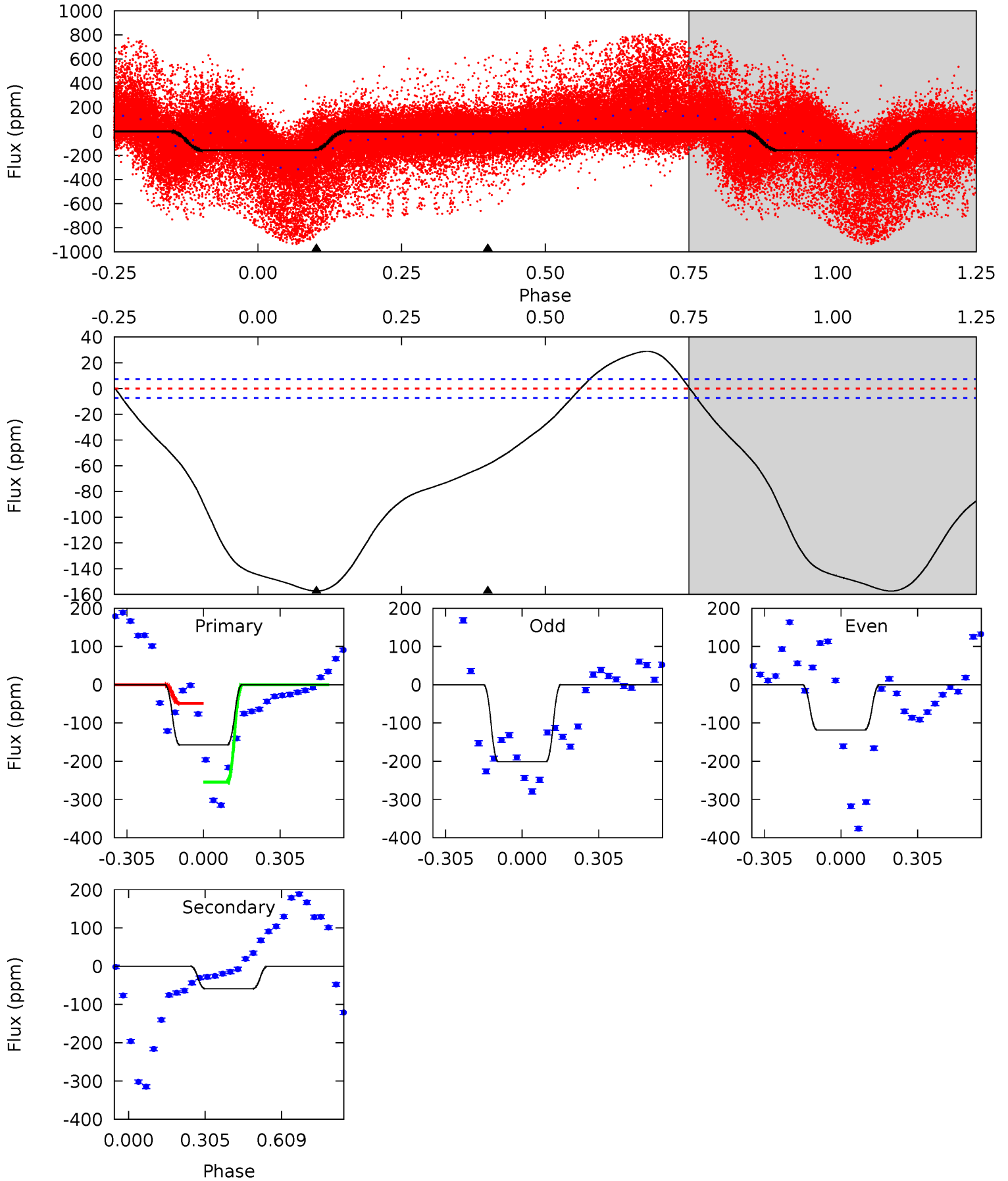
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.25	2.25	0	0	4.29	0.93	0.55	2.25	2.25	2.25	2.25	2.19	2.27	0.45	2.09



Alt Model-Shift Uniqueness Test

006950556-02, P = 0.755889 Days, E = 131.386045 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
93.7	35.1	0	0	4.33	1.03	9.91	93.7	93.7	35.1	35.1	19.2	1.76	0.16	0



Stellar Parameters For KIC 006950556

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	11119^{+398}_{-531}	$3.642^{+0.425}_{-0.075}$	$0.070^{+0.150}_{-0.550}$	$4.661^{+0.382}_{-2.294}$	$3.473^{+0.069}_{-1.015}$	$0.048^{+0.210}_{-0.008}$
	+4%/-5%	+12%/-2%	+214%/-786%	+8%/-49%	+2%/-29%	+434%/-17%
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 006950556-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-2 ± 1	$0.83^{+0.58}_{-0.45}$	9052^{+713}_{-1092}	7422^{+7864}_{-12042}	$0.786^{+3.322}_{-0.549}$
Alt.	-59 ± 2	$5.63^{+0.90}_{-1.38}$	9186^{+643}_{-1070}	6753^{+829}_{-883}	$0.601^{+0.379}_{-0.145}$

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 $A_{obs} \gg 1.0$

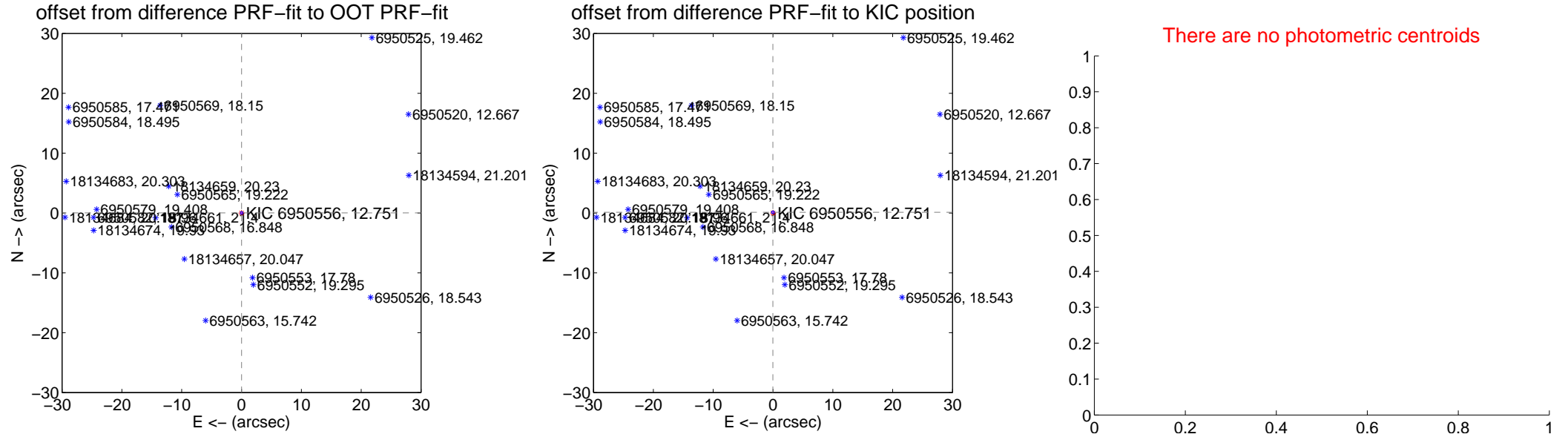
DV Centroid Data

Supplemental centroid analysis for 006950556-02. Kepler magnitude: 12.75. Transit SNR 2.68

There are 17 quarters with good PRF difference image offsets

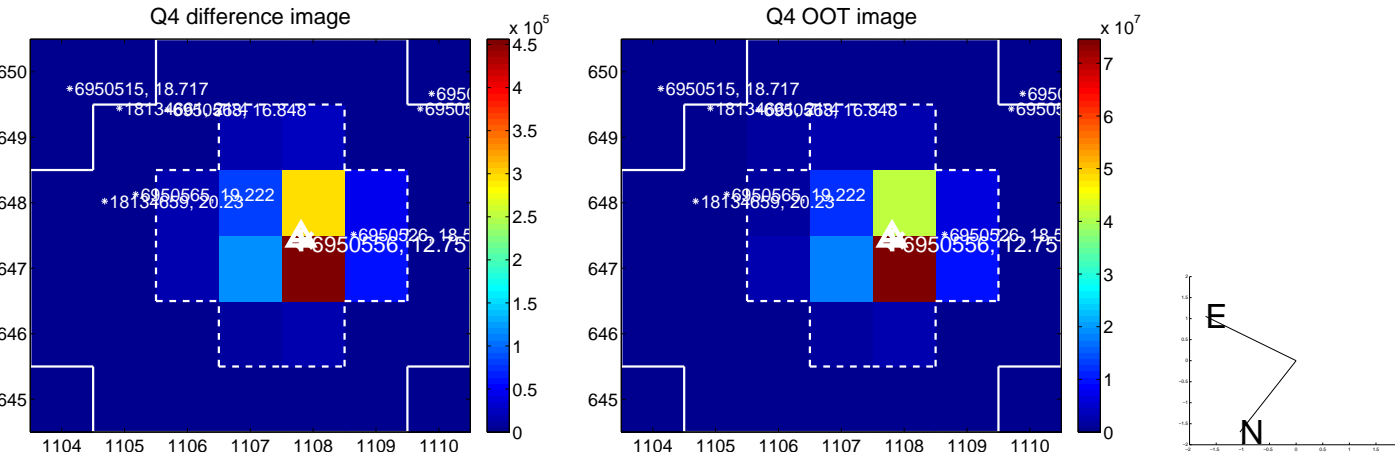
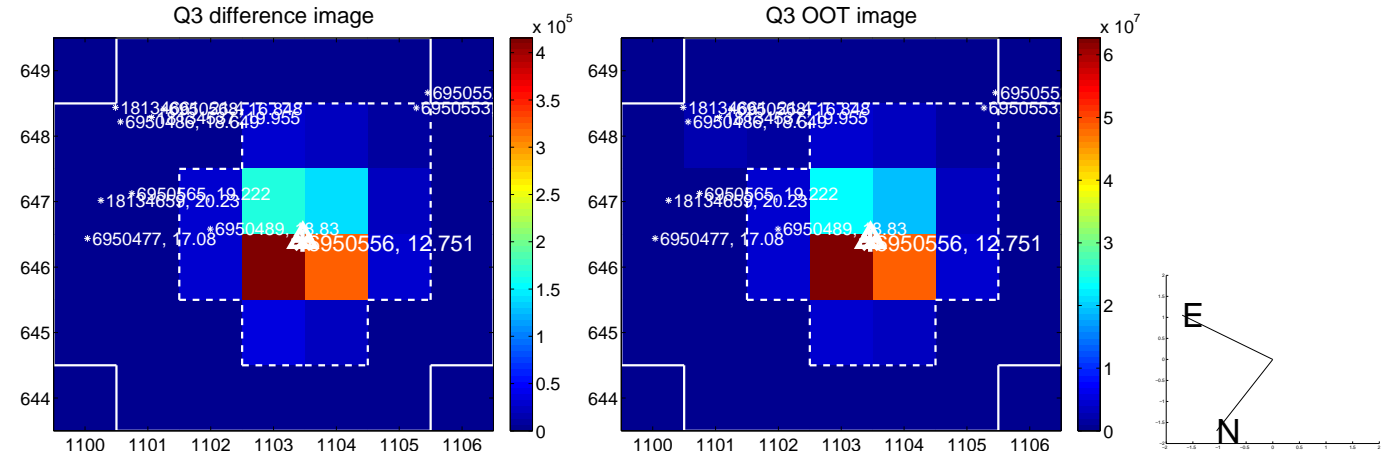
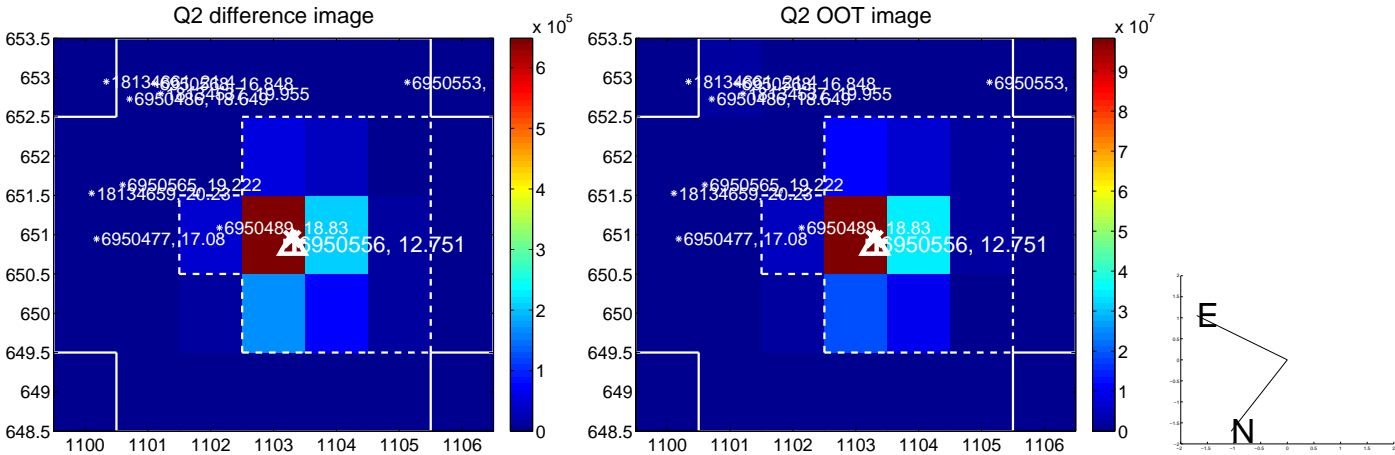
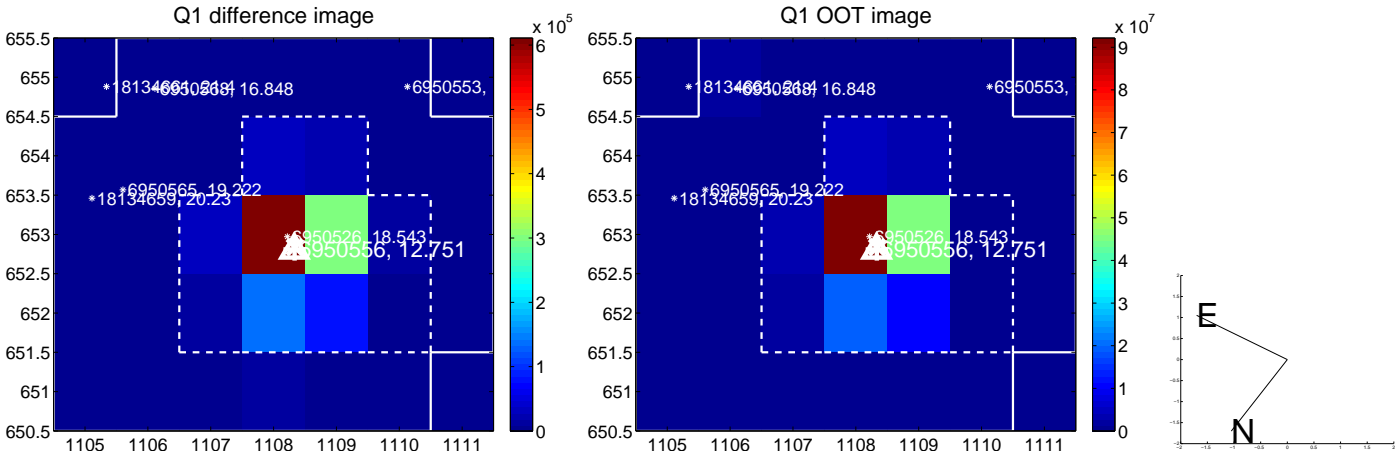
The direct PRF centroid is offset from the target star catalog position by about 0.20 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.018 ± 0.074	0.25	-0.009 ± 0.068	0.016 ± 0.073
PRF-fit source offset from KIC position	0.125 ± 0.077	1.63	0.016 ± 0.077	0.124 ± 0.077
photometric centroid source offset	—	—	—	—

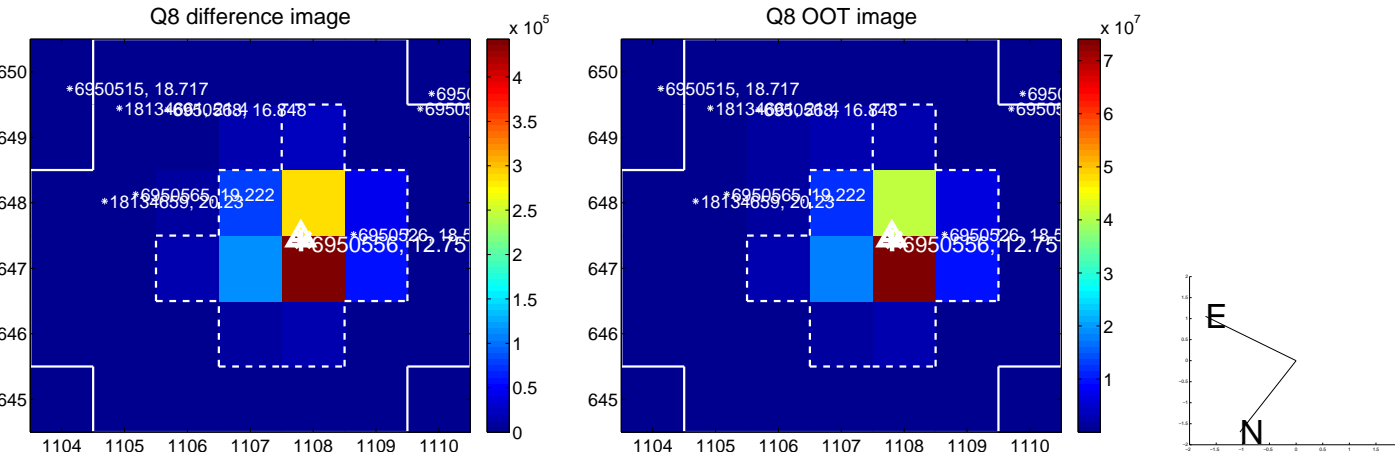
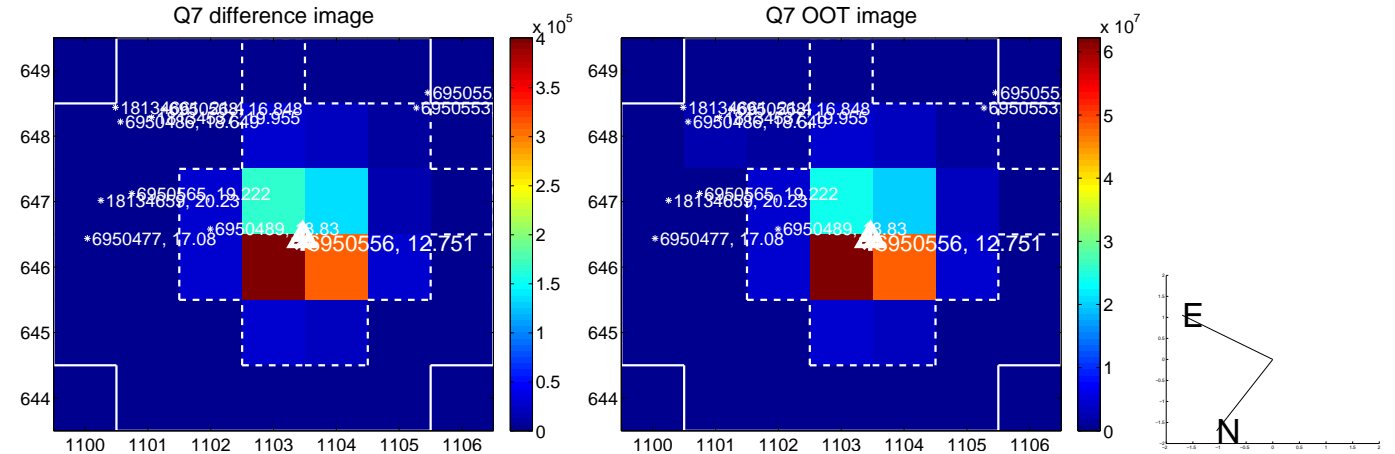
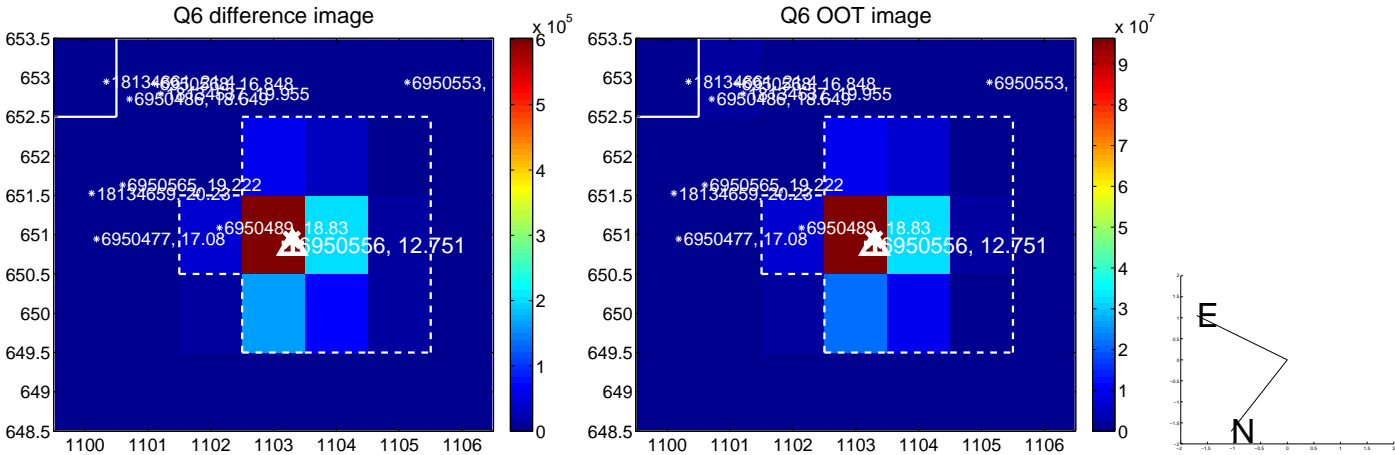
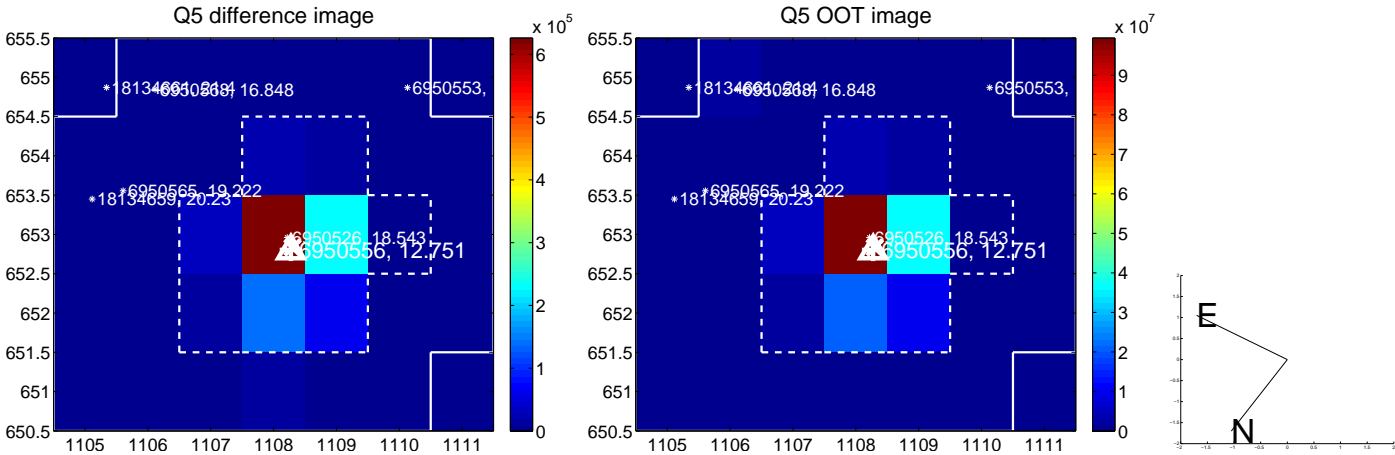


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

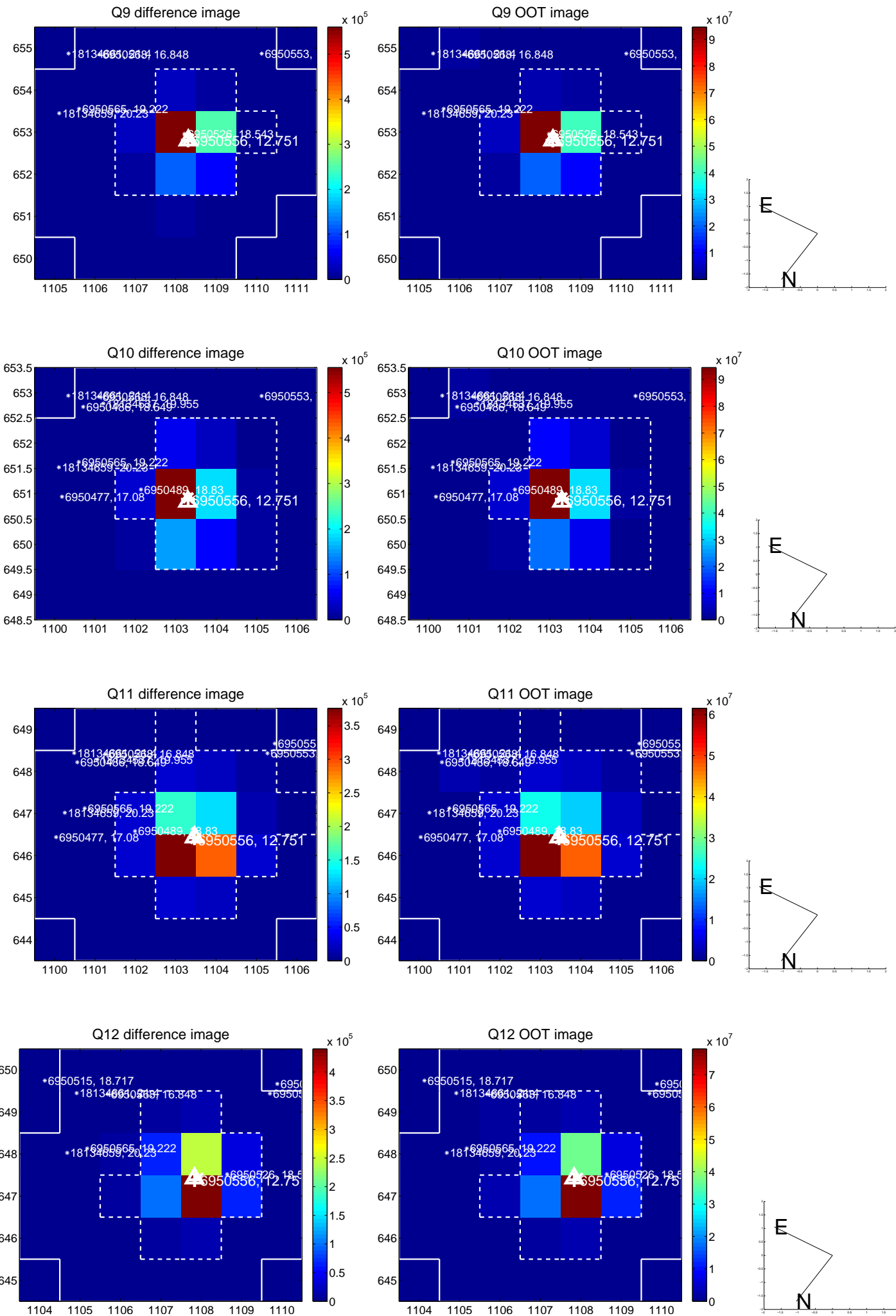
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



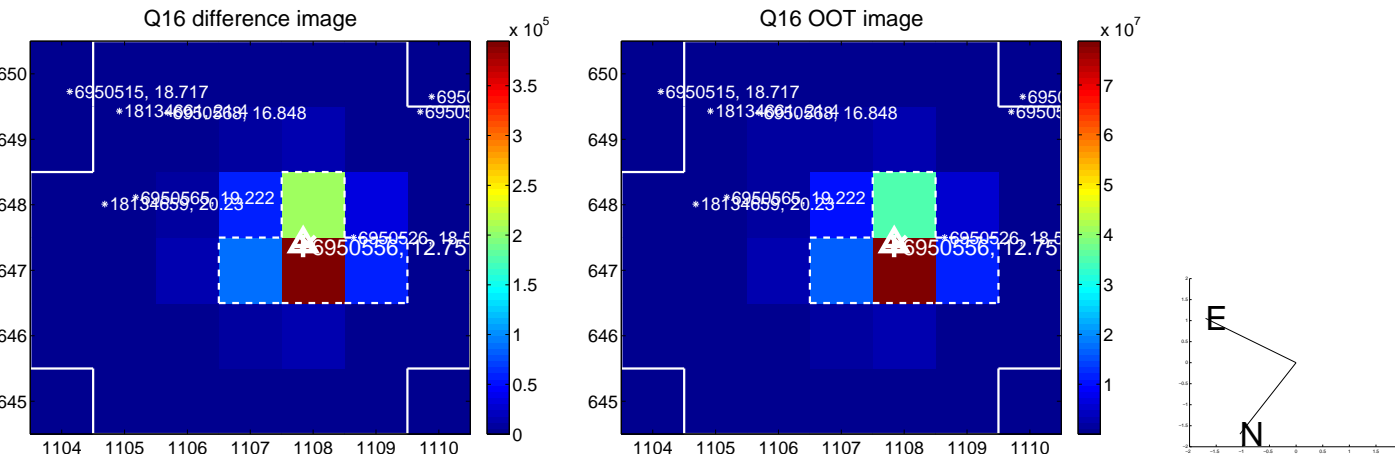
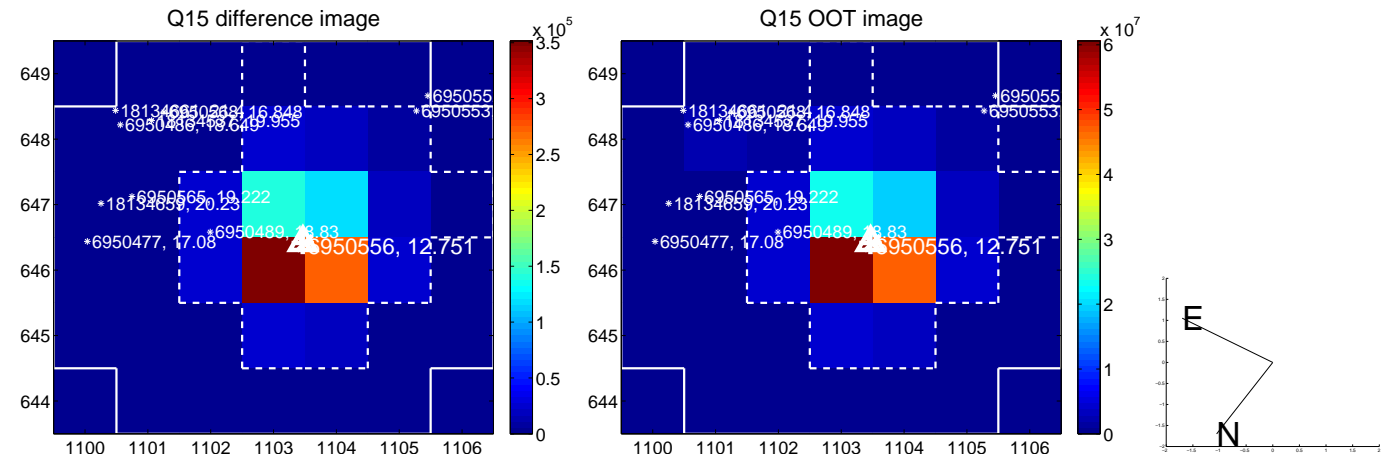
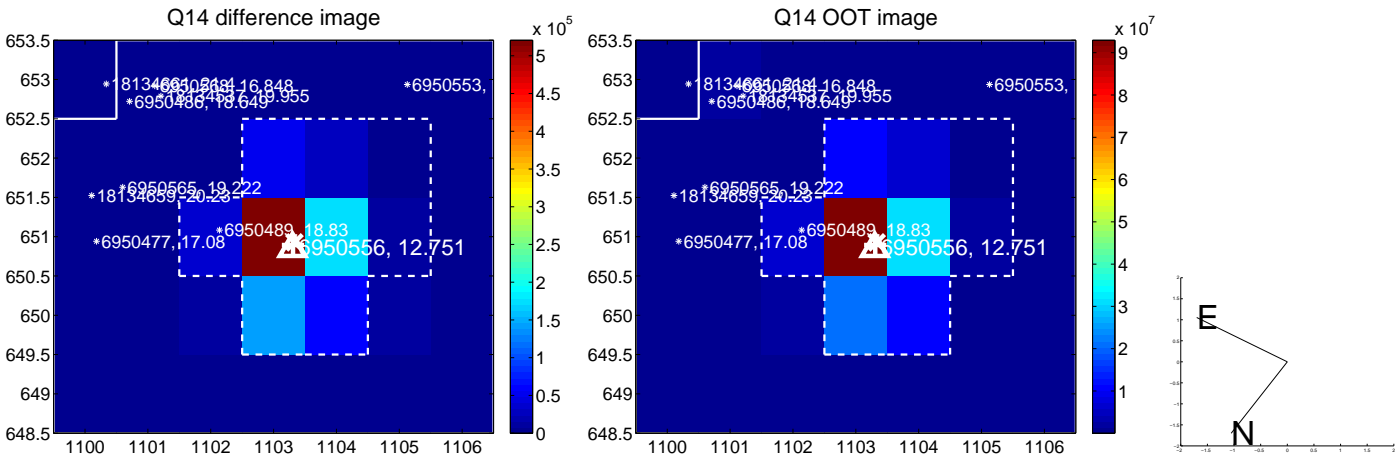
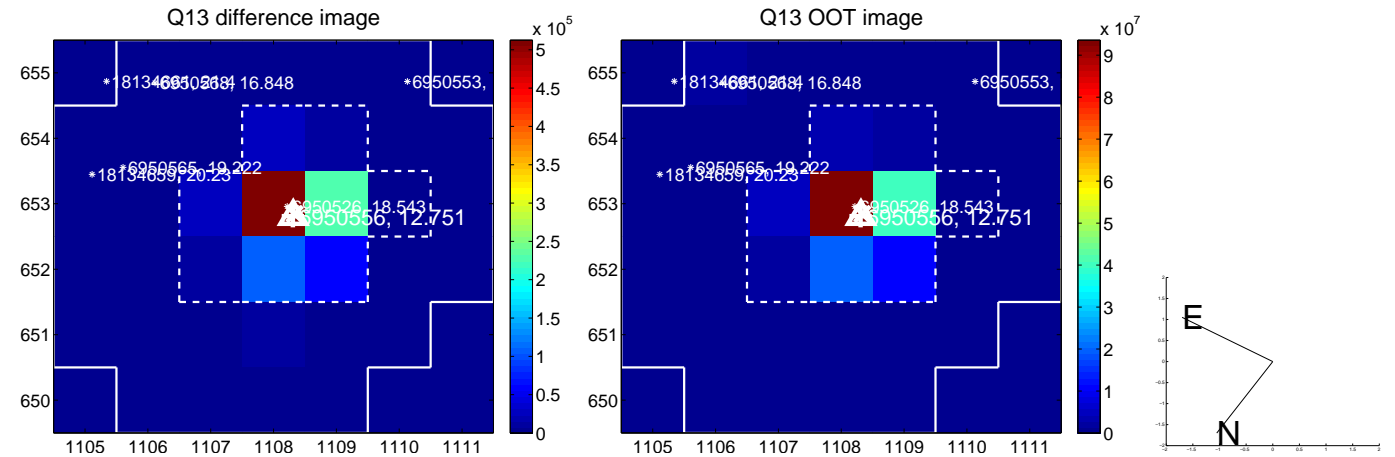
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



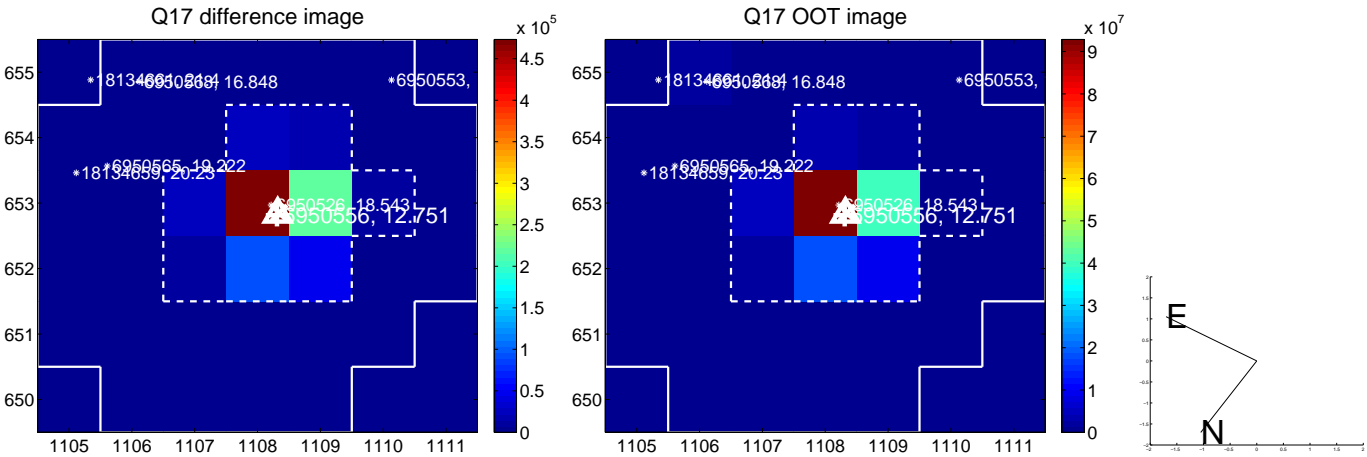
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

