

KIC 007597150

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})
007597150-01	OBS	No	1.185112	132.137440	0.2	8.394	7.9	0.1	1.68	7282	0.08	12713.76
007597150-02	OBS	No	47.328333	177.880517	497.2	4.895	10.5	9.0	1.68	7282	4.32	93.14
007597150-03	OBS	No	8.293566	136.451345	43.3	2.639	10.1	2.9	1.68	7282	1.29	949.80
007597150-04	OBS	No	8.291193	136.224441	719.1	2.304	9.5	9.0	1.68	7282	4.69	950.16
007597150-05	OBS	No	63.139376	159.633307	625.6	1.776	9.1	8.6	1.68	7282	4.62	63.42
007597150-06	OBS	No	31.101521	149.334486	381.5	6.475	9.6	6.2	1.68	7282	6.26	163.02
007597150-07	OBS	No	39.081868	137.421010	1020.6	14.434	9.6	9.1	1.68	7282	9.72	120.22
007597150-08	OBS	No	25.156825	145.994068	159.9	3.808	9.2	3.5	1.68	7282	2.35	216.31
007597150-09	OBS	No	35.930360	143.370372	221.5	1.500	7.3	-1.0	1.68	7282	2.55	134.48

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007597150-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV
007597150-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD
007597150-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—NO_FITS—CENT_NOFITS

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

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

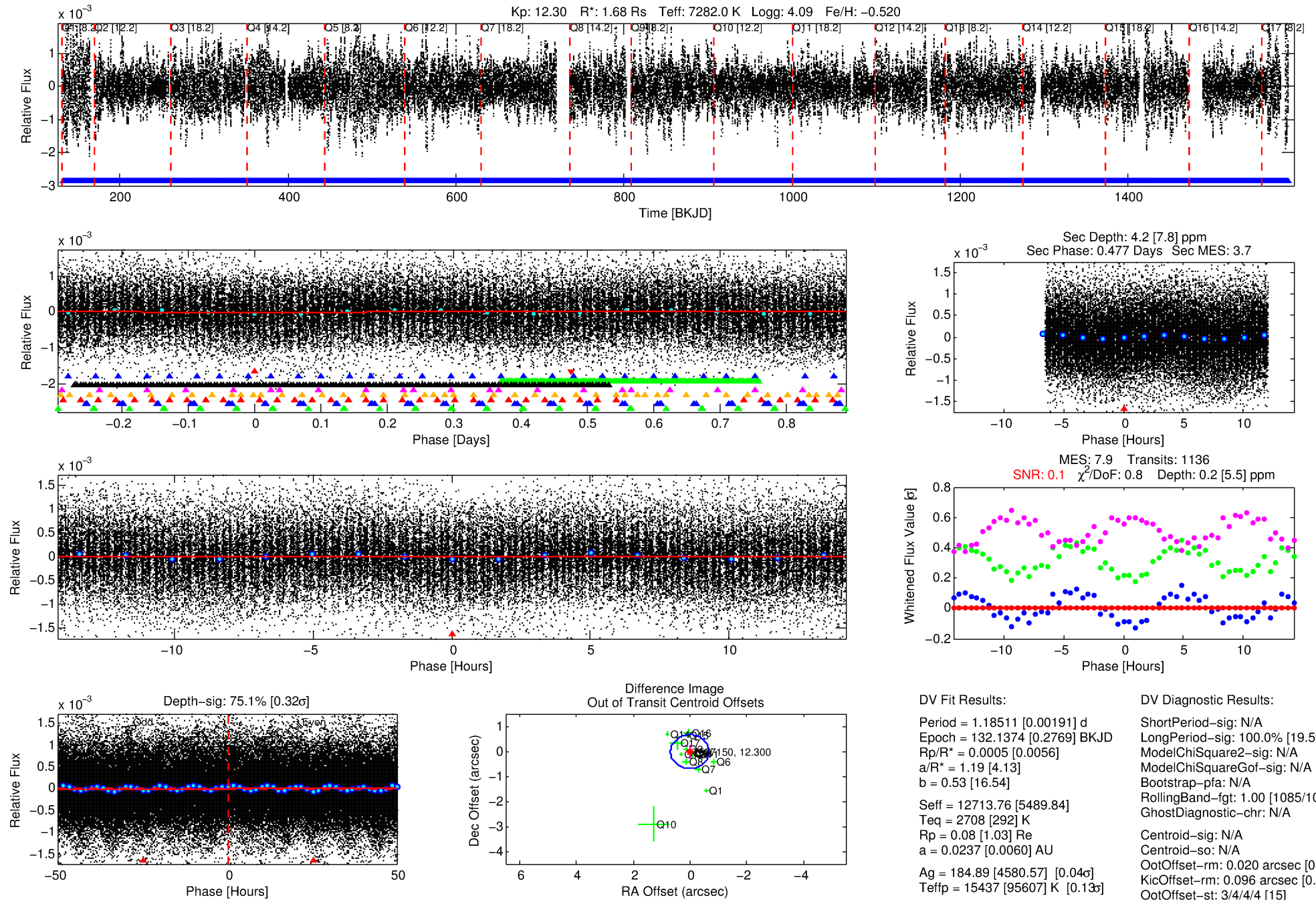
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007597150-01

No Significant Match Found

DV One-Page Summary

KIC: 7597150 Candidate: 1 of 9 Period: 1.185 d



DV Fit Results:

Period = 1.18511 [0.00191] d
Epoch = 132.1374 [0.2769] BKJD
Rp/R* = 0.0005 [0.0056]
a/R* = 1.19 [4.13]
b = 0.53 [16.54]
Seff = 12713.76 [5489.84]
Teff = 2708 [292] K
Rp = 0.08 [1.03] Re
a = 0.0237 [0.0060] AU
Ag = 184.89 [4580.57] [0.04 σ]
Teffp = 15437 [95607] K [0.13 σ]

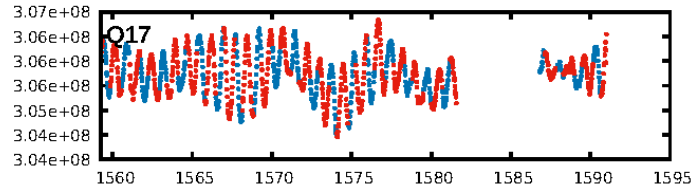
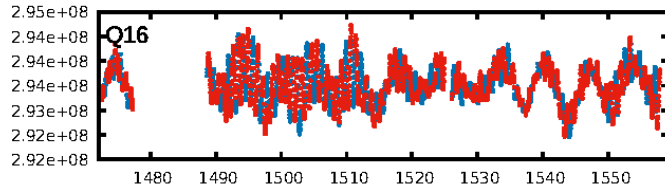
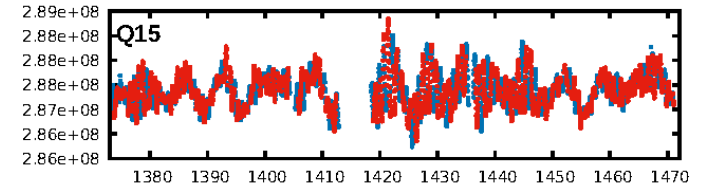
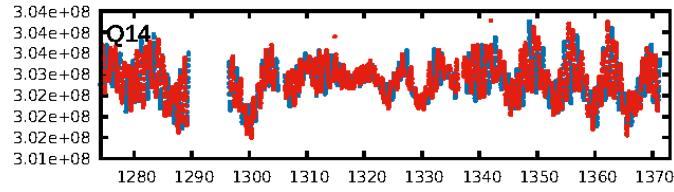
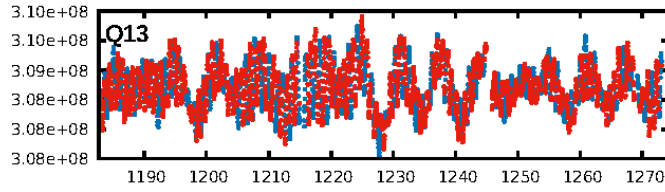
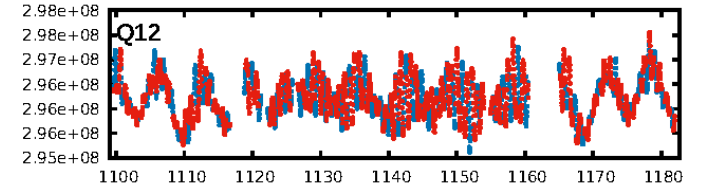
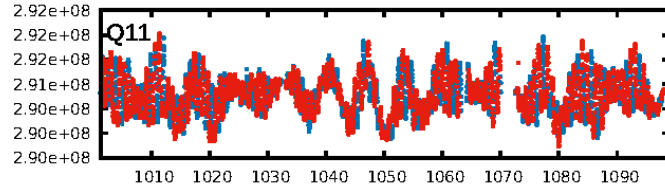
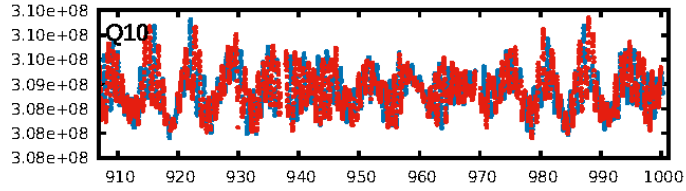
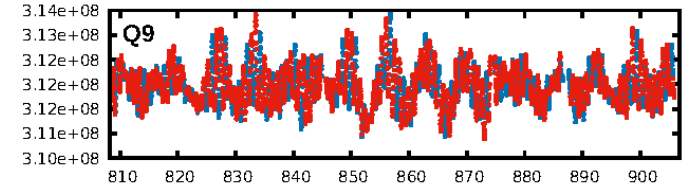
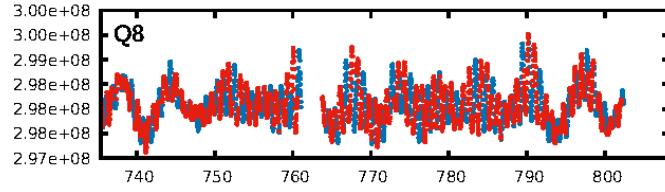
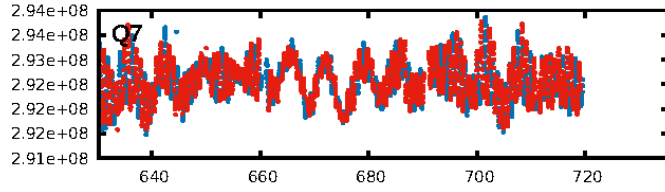
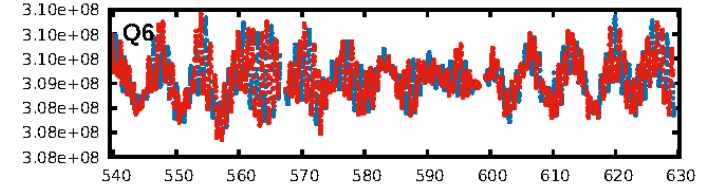
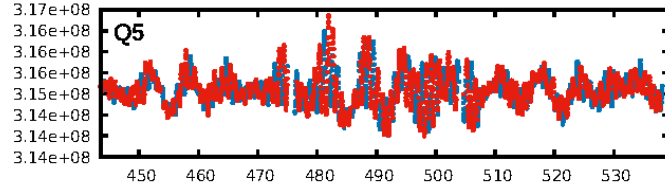
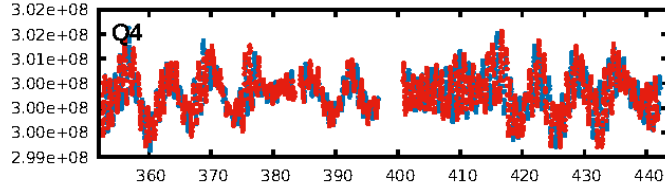
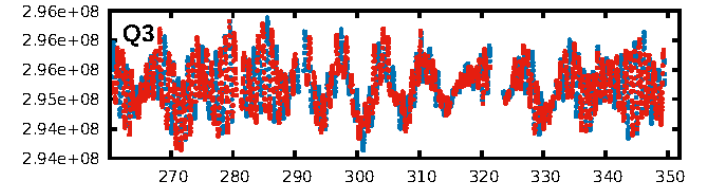
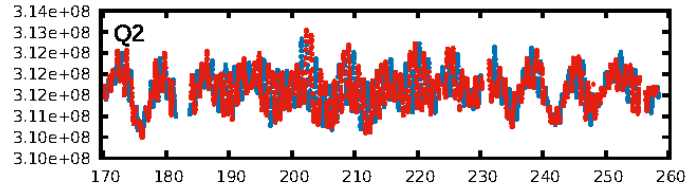
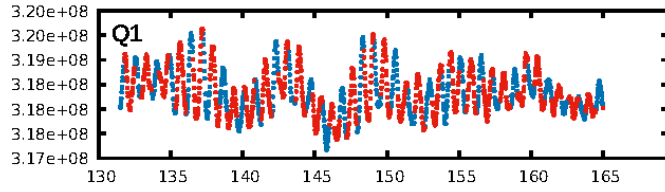
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [19.59 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1085/1085]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.020 arcsec [0.09 σ]
KicOffset-rm: 0.096 arcsec [0.37 σ]
OotOffset-st: 3/4/4/4 [15]
KicOffset-st: 3/4/4/4 [15]
DiffImageQuality-fgm: 0.60 [9/15]
DiffImageOverlap-fno: 1.00 [17/17]

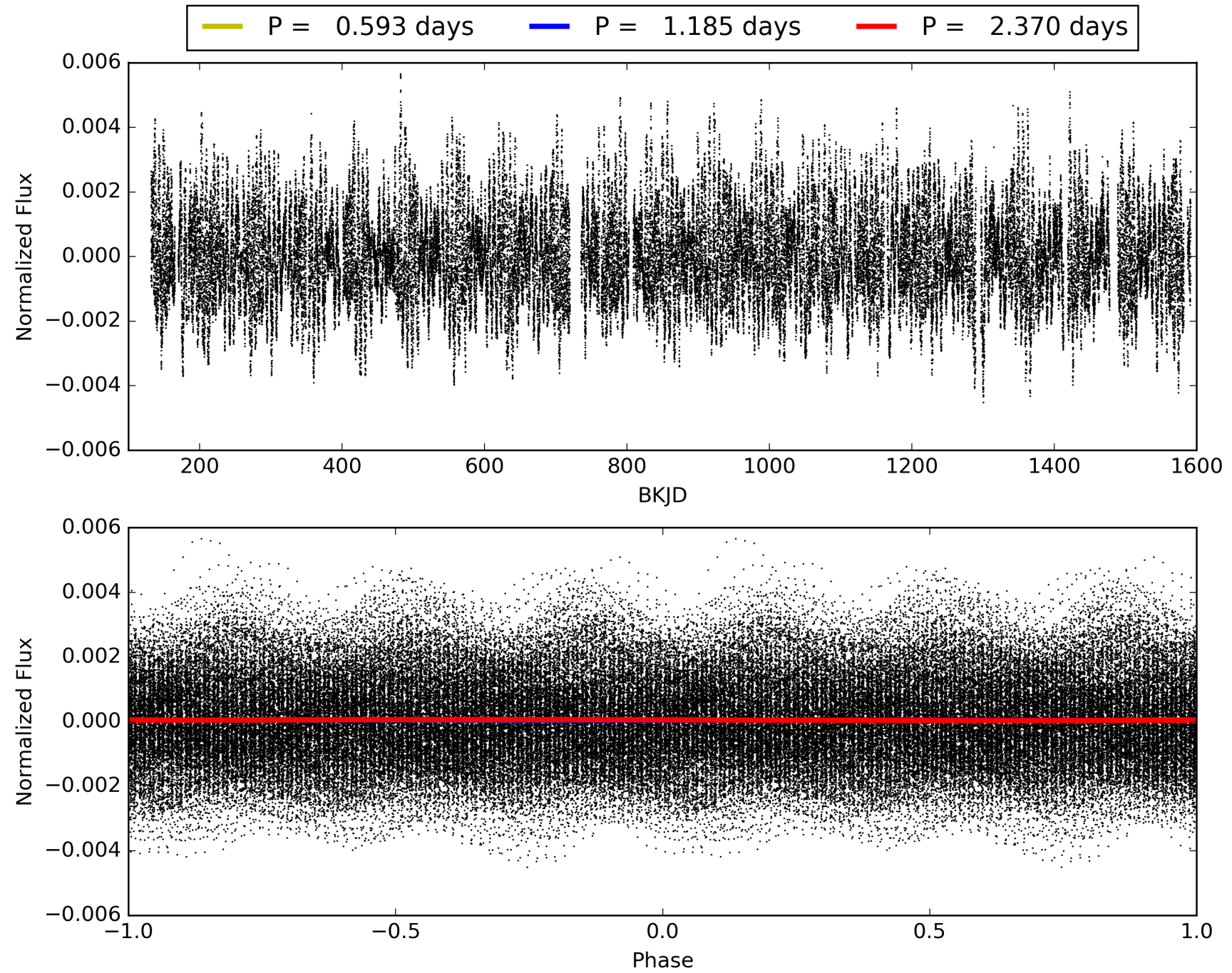
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:30:37 Z

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

TCE 007597150-01, PDC Light Curves

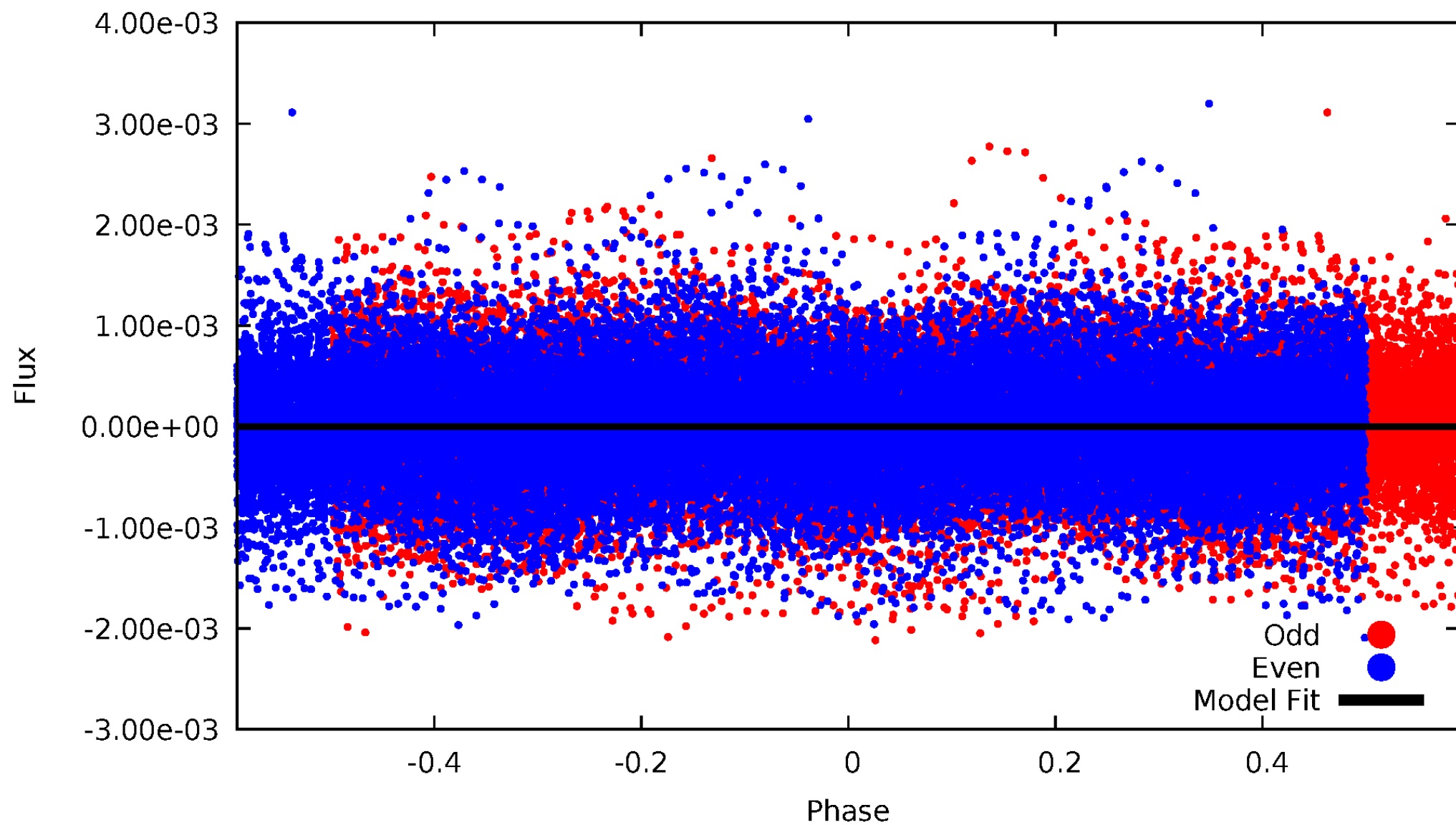


TCE 007597150-01



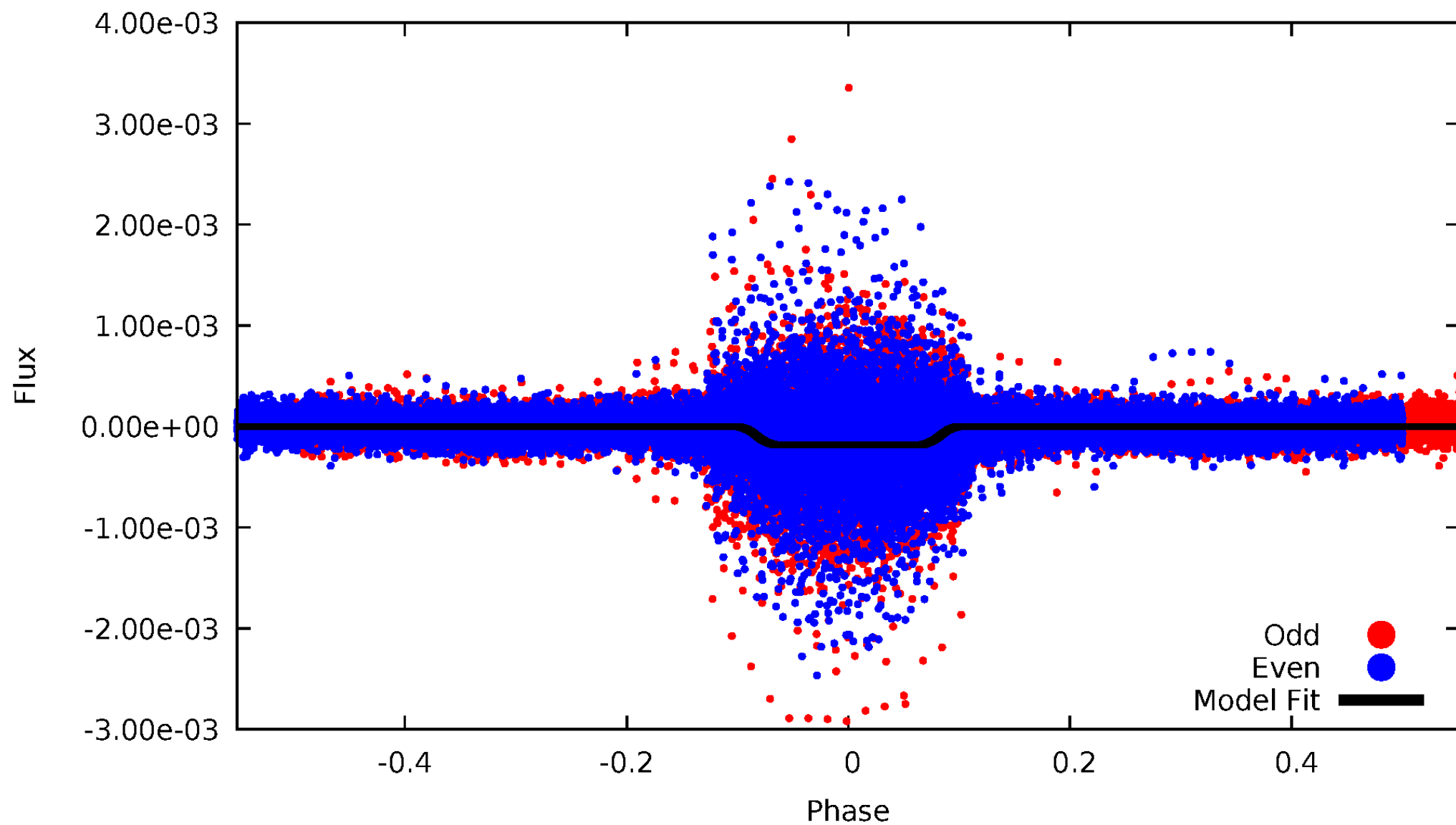
DV Odd/Even

TCE 007597150-01



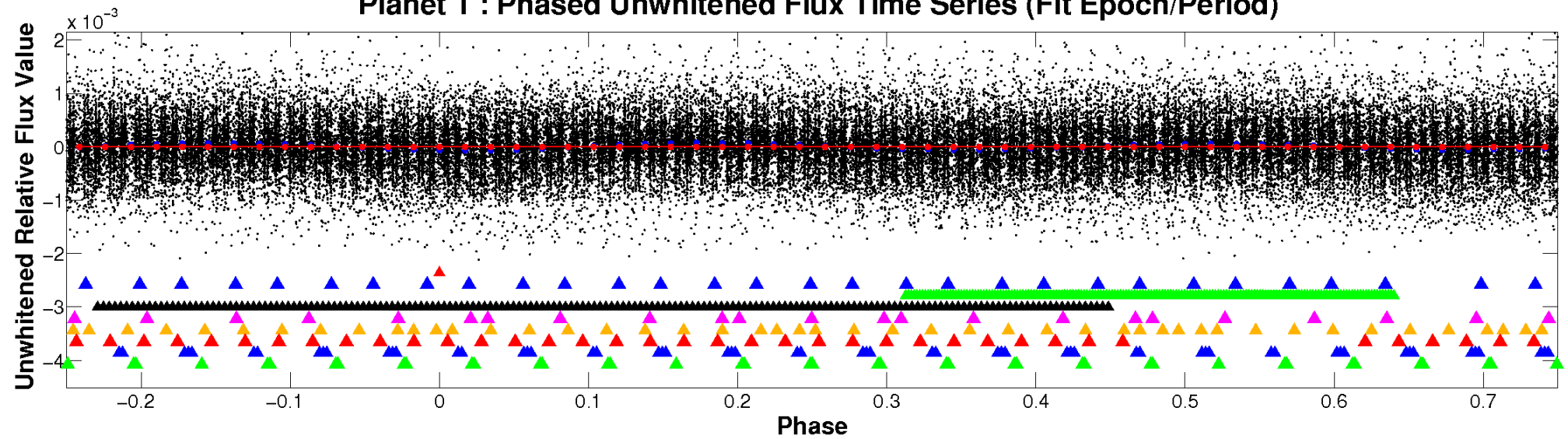
ALT Odd/Even

TCE 007597150-01

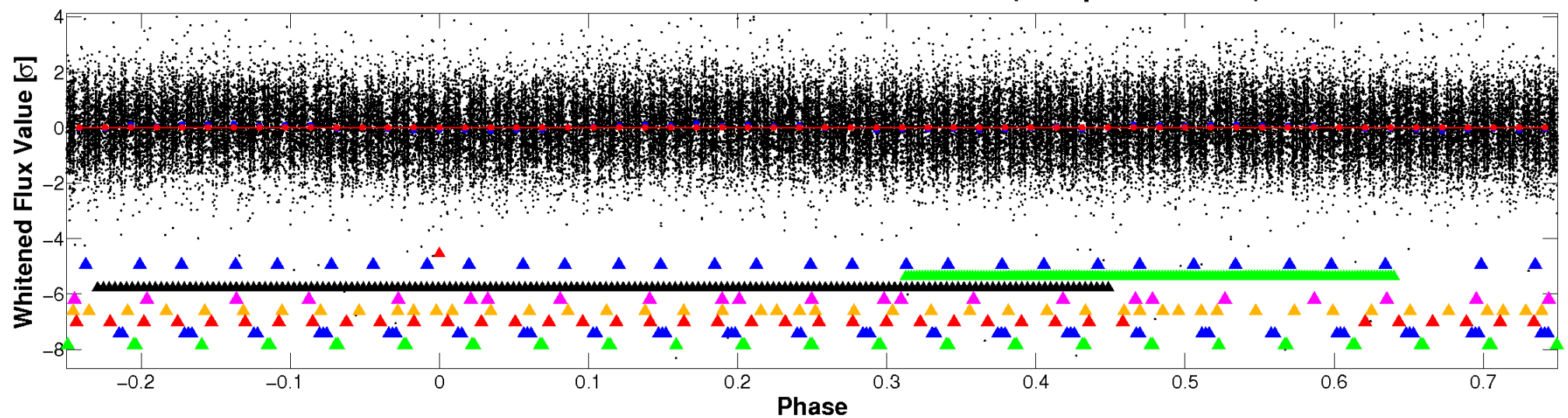


Non-Whitened Vs. Whitened Light Curve

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

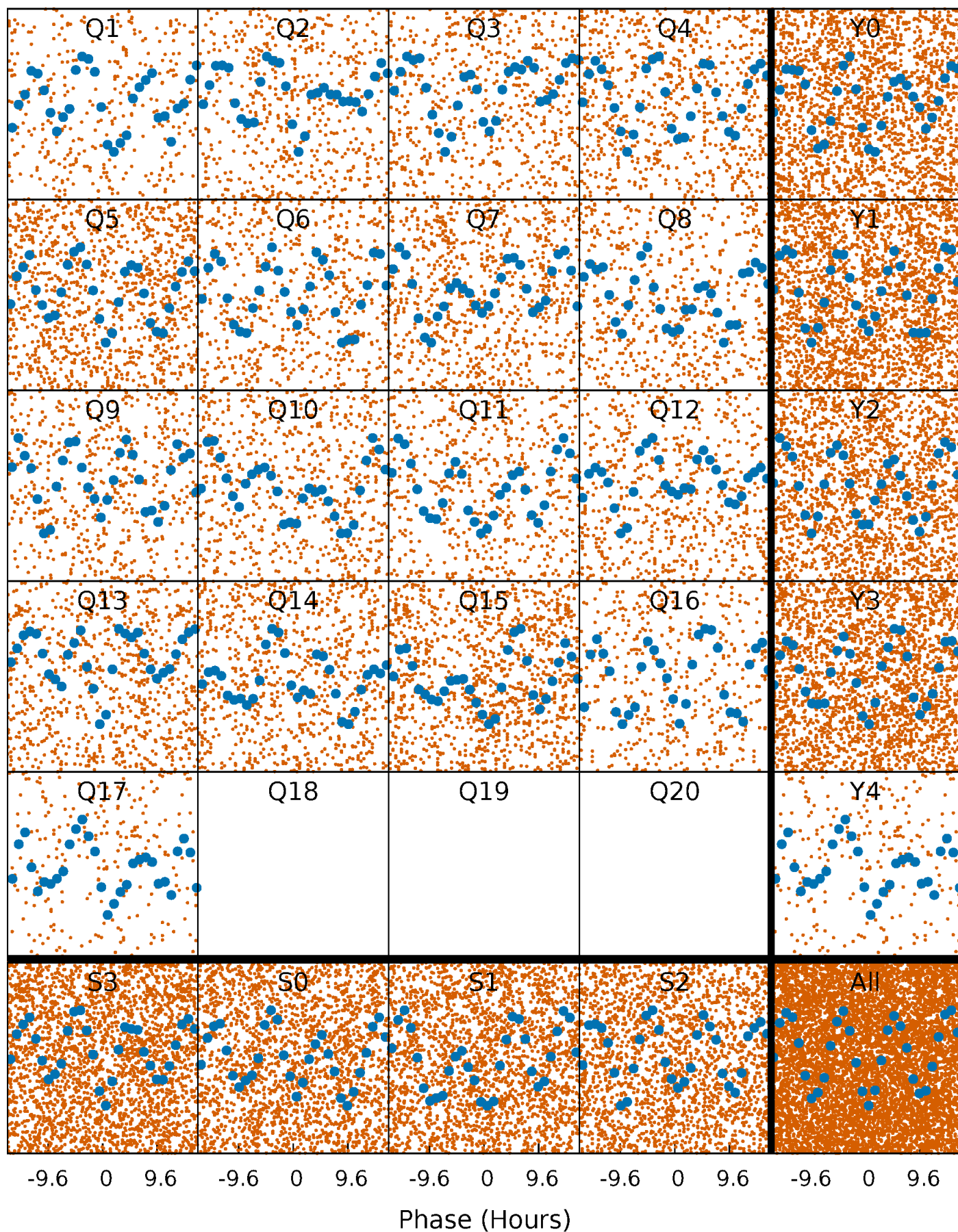


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



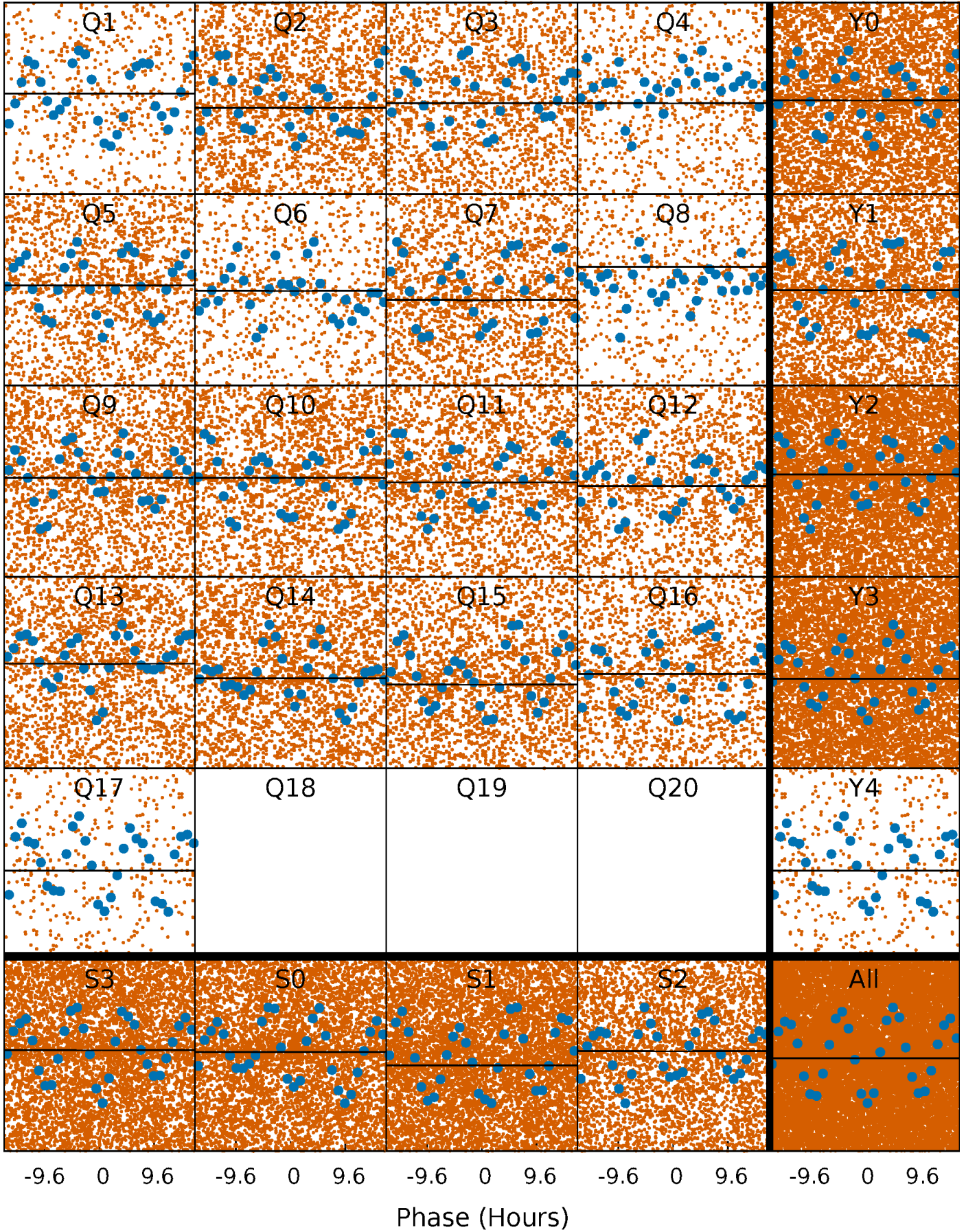
PDC Quarter-Phased Transit Curves

TCE 007597150-01 P= 1.185112 Days $T_0=132.137440$ (BKJD)



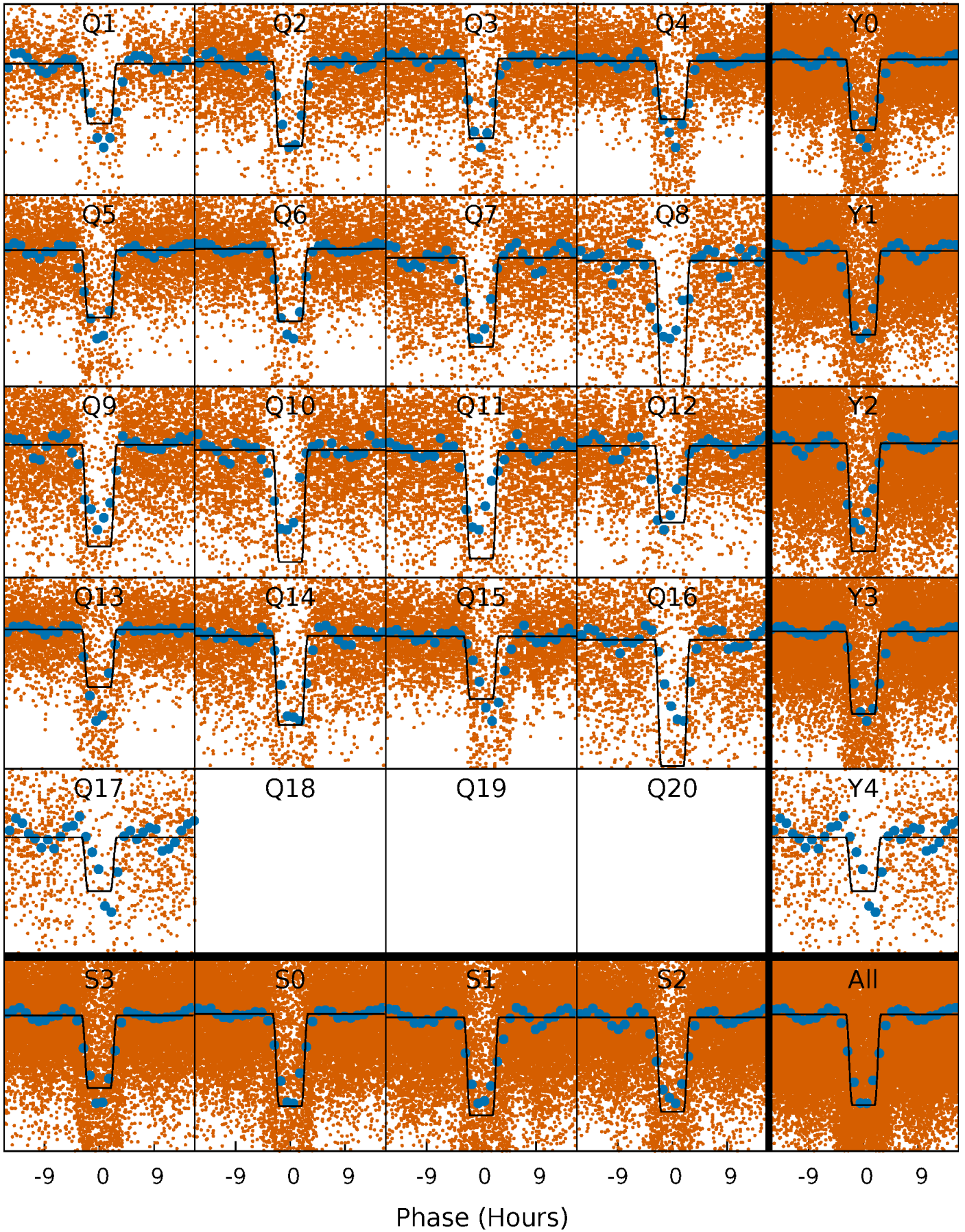
DV Quarter-Phased Transit Curves

TCE 007597150-01 P= 1.185112 Days $T_0=132.137440$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

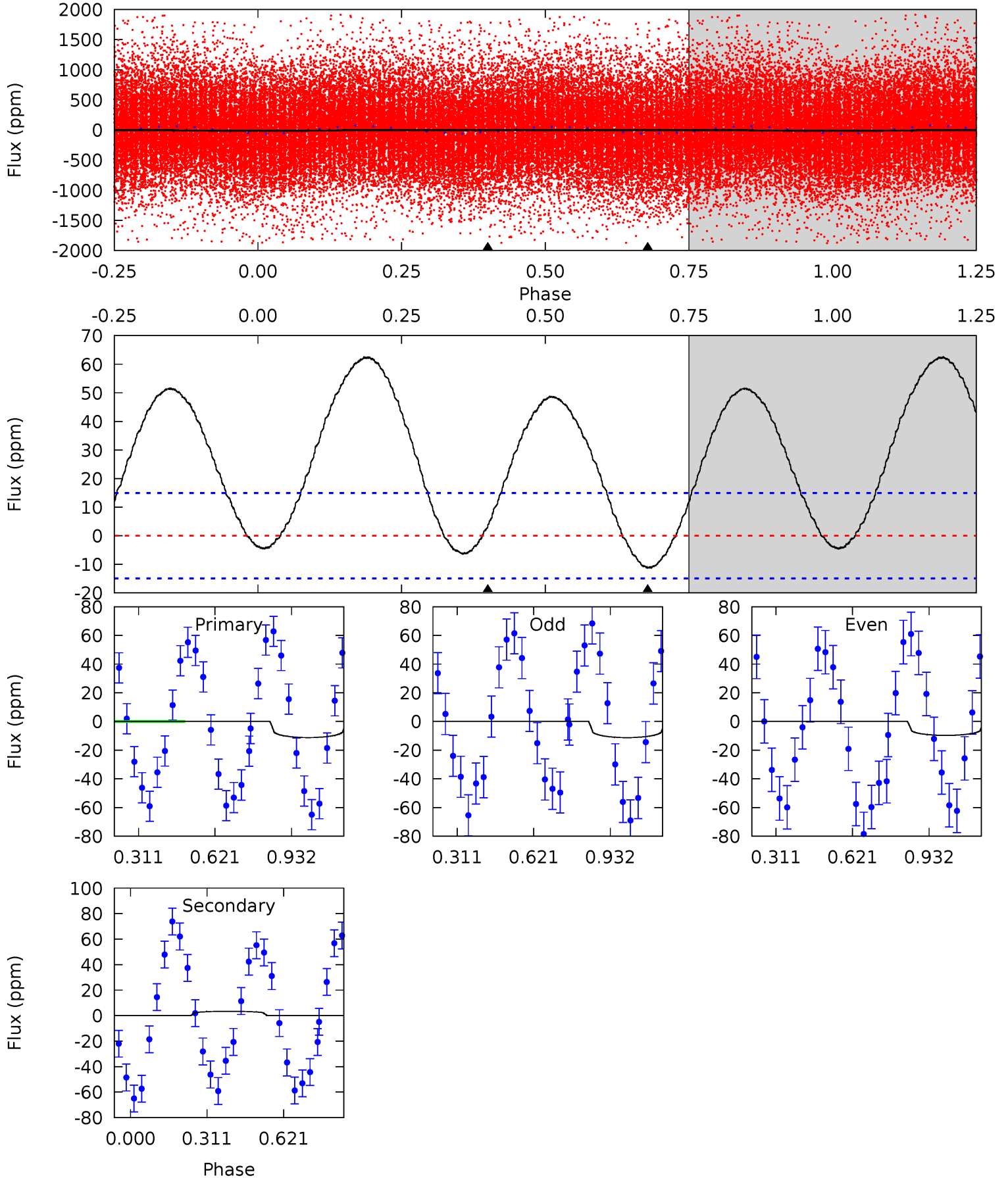
TCE 007597150-01 P= 1.185071 Days $T_0=132.178471$ (BKJD)



DV Model-Shift Uniqueness Test

007597150-01, P = 1.185112 Days, E = 130.952328 Days

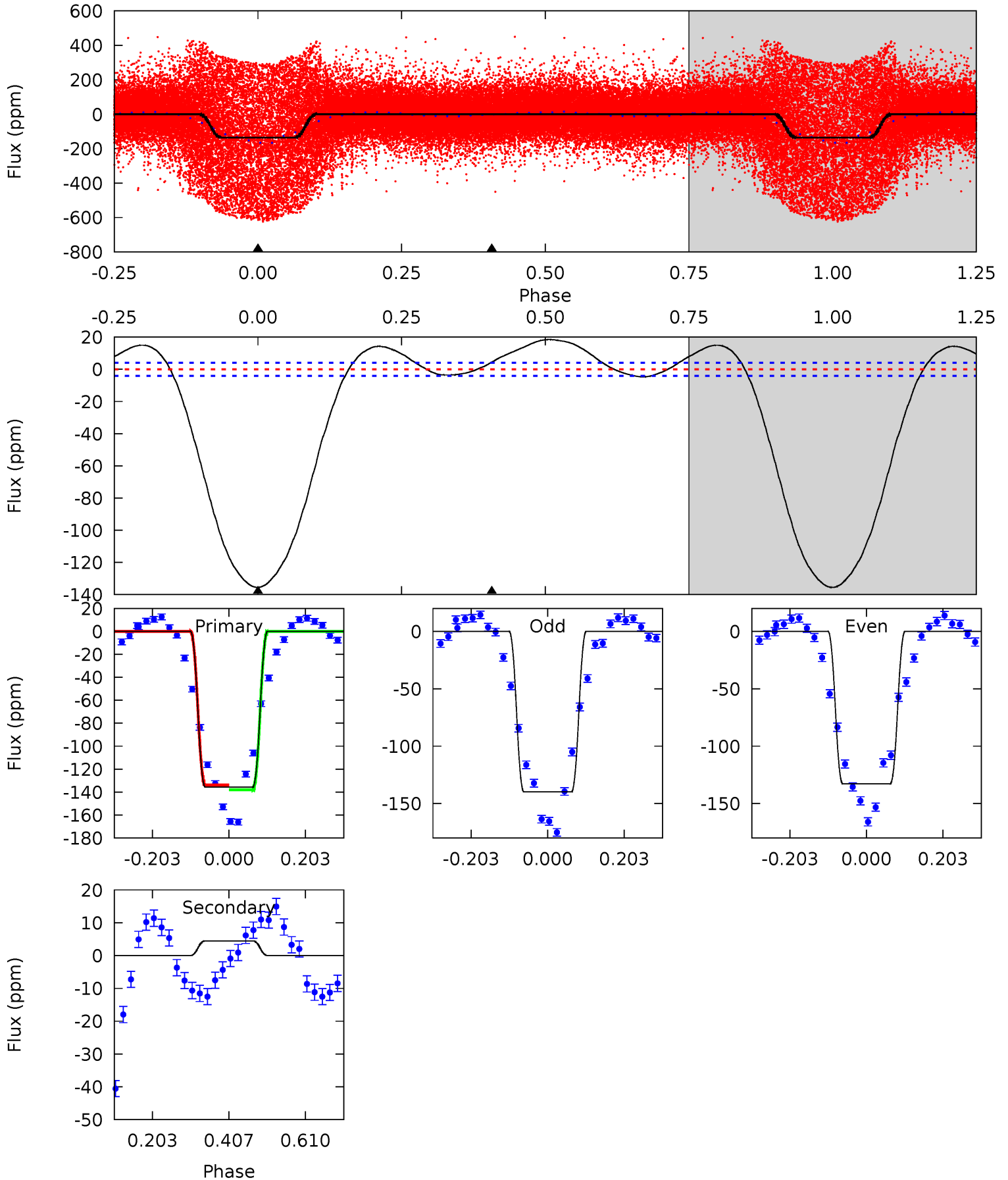
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.25	-0.98	0	0	4.32	1.01	2.46	3.25	3.25	-0.98	-0.98	0.23	-0.98	0.85	3.05



Alt Model-Shift Uniqueness Test

007597150-01, P = 1.185071 Days, E = 130.993400 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
146.7	-4.85	0	0	4.41	1.27	7.02	146.7	146.7	-4.85	-4.85	3.80	1.12	0.12	2.20



Stellar Parameters For KIC 007597150

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7282^{+233}_{-285}	$4.087^{+0.234}_{-0.156}$	$-0.520^{+0.250}_{-0.300}$	$1.683^{+0.458}_{-0.458}$	$1.260^{+0.196}_{-0.161}$	$0.372^{+0.467}_{-0.169}$
	+3%/-4%	+6%/-4%	+48%/-58%	+27%/-27%	+16%/-13%	+125%/-45%
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 007597150-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	3 ± 3	$0.74^{+0.81}_{-0.51}$	3749^{+286}_{-292}	-4758^{+1142}_{-3685}	$-1.347^{+1.295}_{-13.820}$
Alt.	4 ± 1	$2.46^{+1.05}_{-1.09}$	3733^{+304}_{-280}	-3889^{+230}_{-410}	$-0.228^{+0.125}_{-0.447}$

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

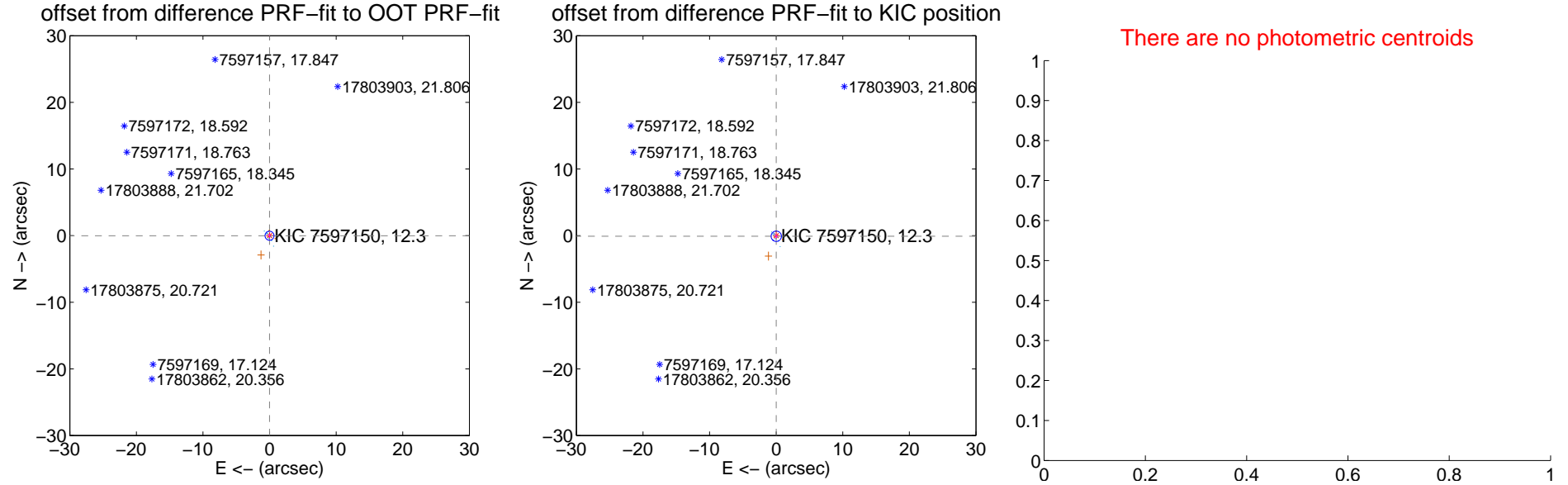
DV Centroid Data

Supplemental centroid analysis for 007597150-01. Kepler magnitude: 12.30. Transit SNR 0.05

There are 9 quarters with good PRF difference image offsets

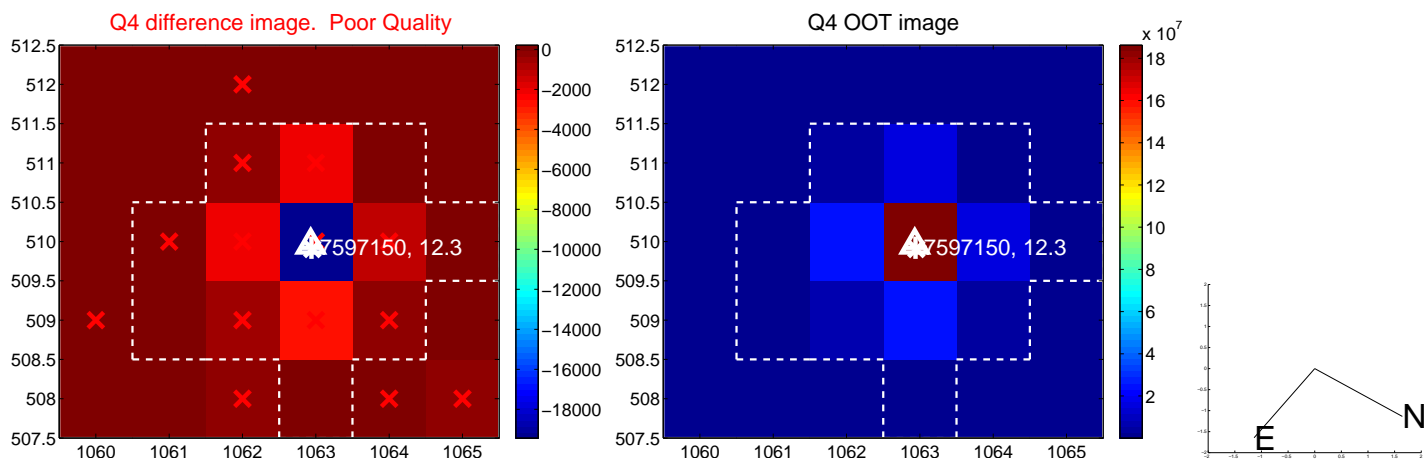
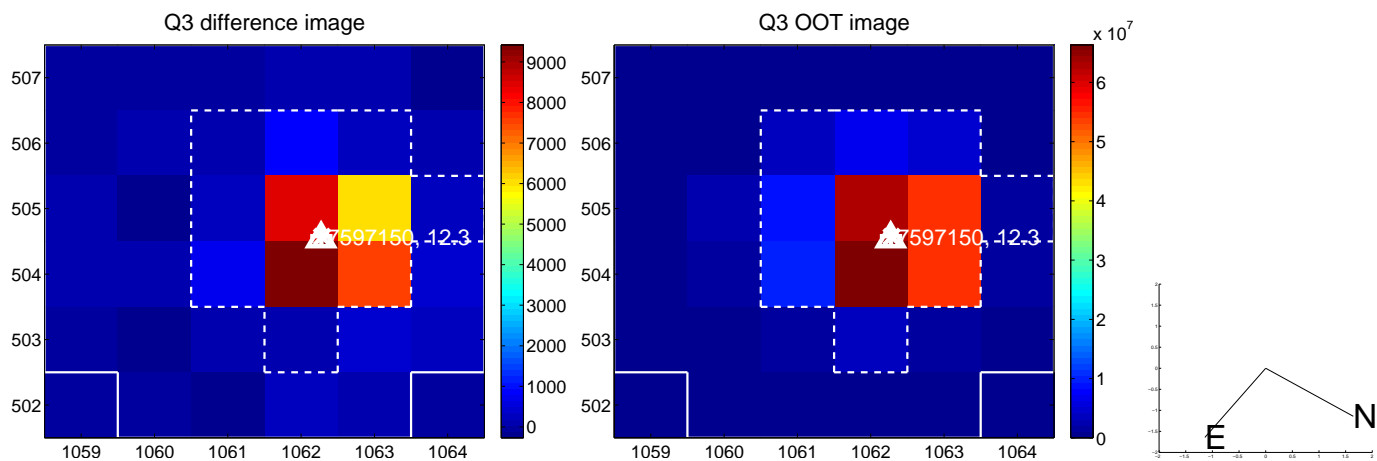
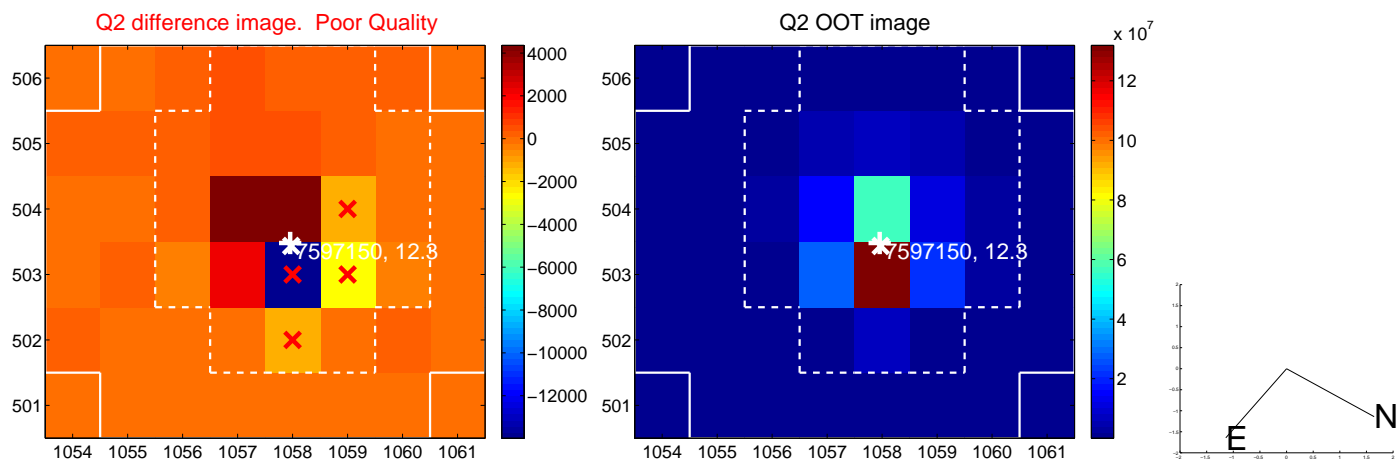
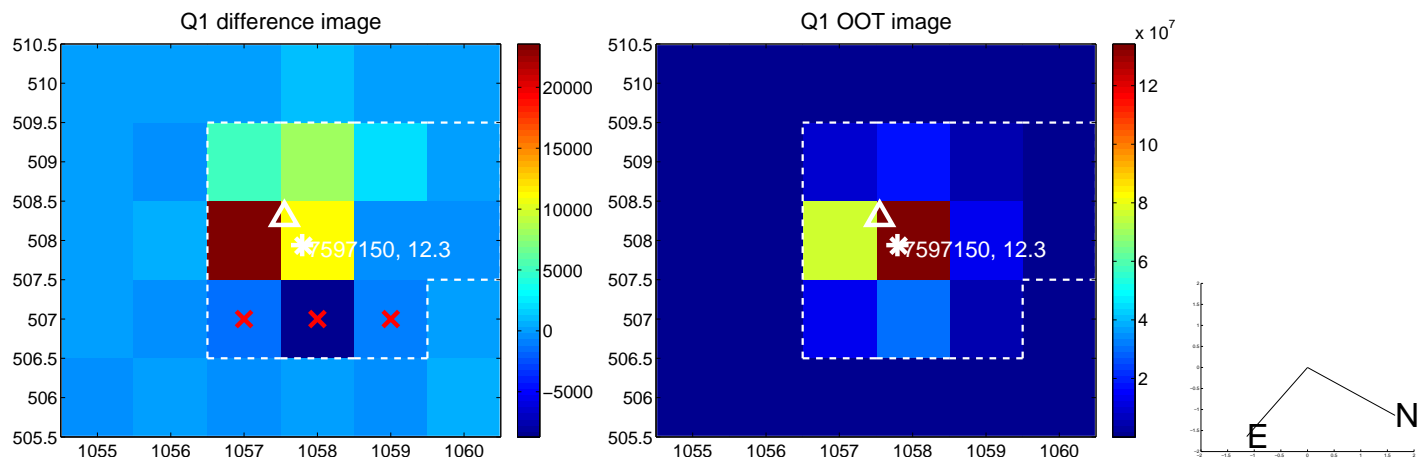
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.020 ± 0.225	0.09	0.008 ± 0.138	-0.018 ± 0.234
PRF-fit source offset from KIC position	0.096 ± 0.259	0.37	-0.011 ± 0.140	-0.095 ± 0.262
photometric centroid source offset	—	—	—	—

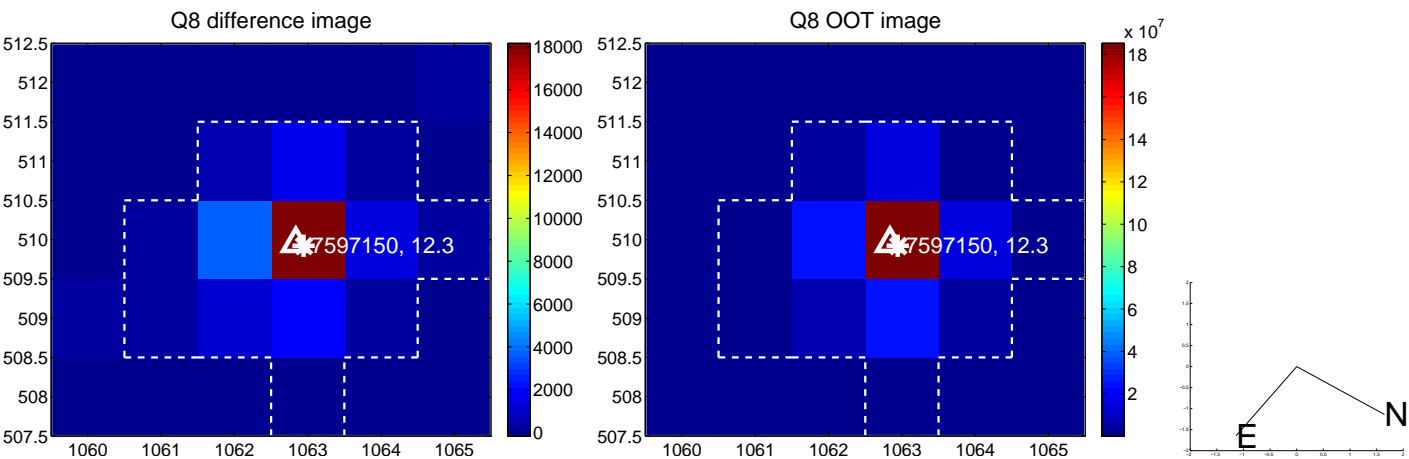
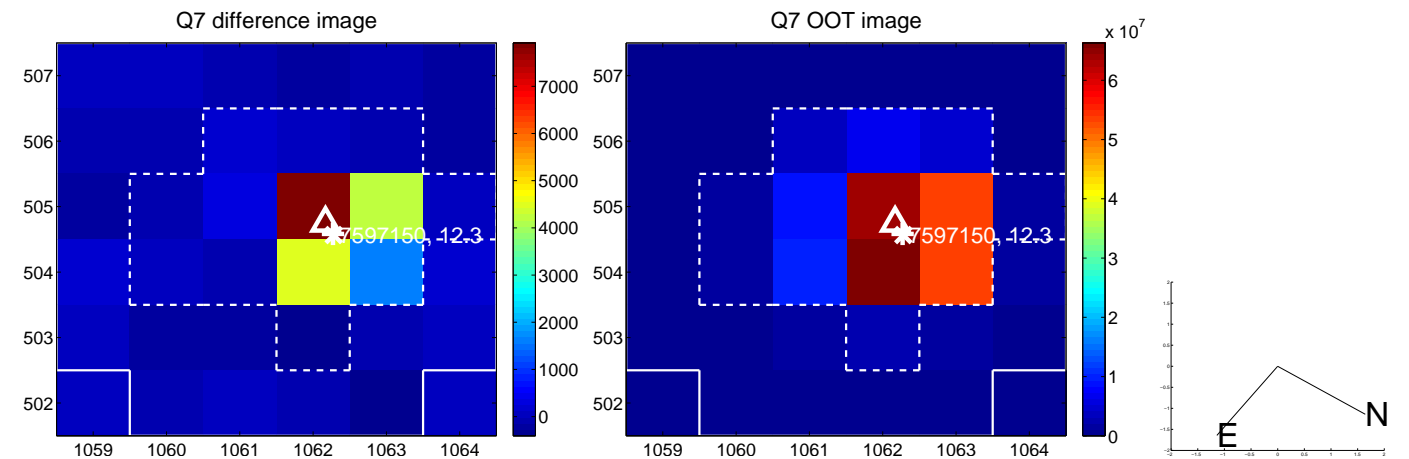
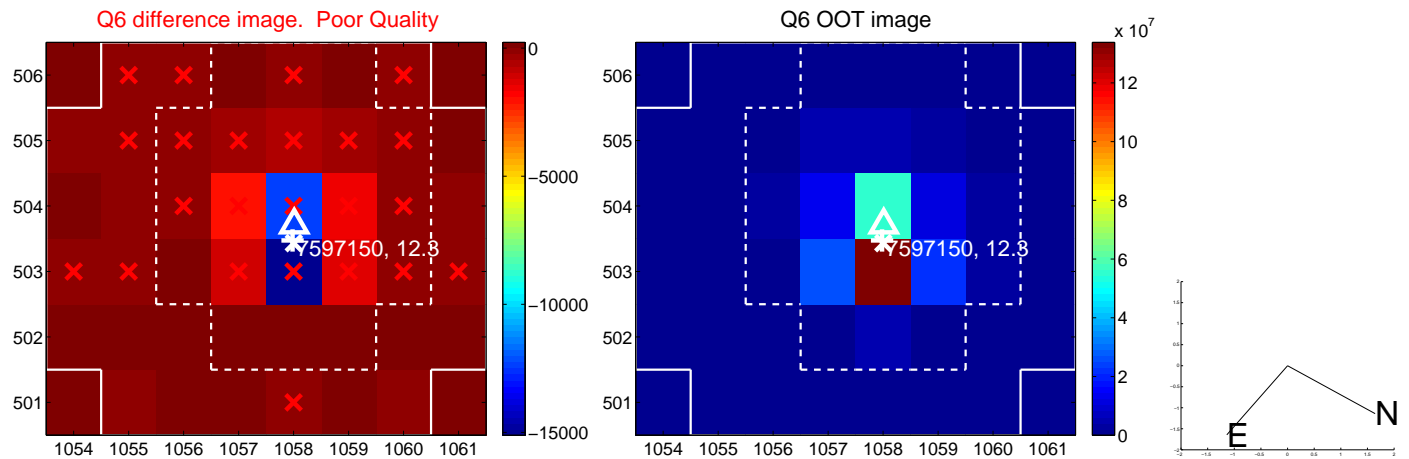
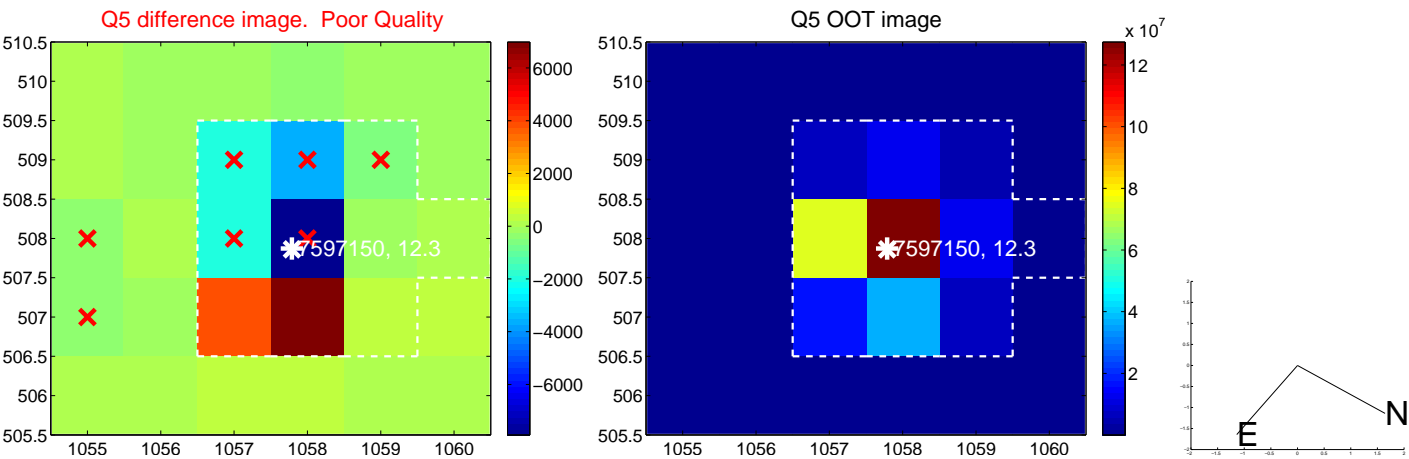


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

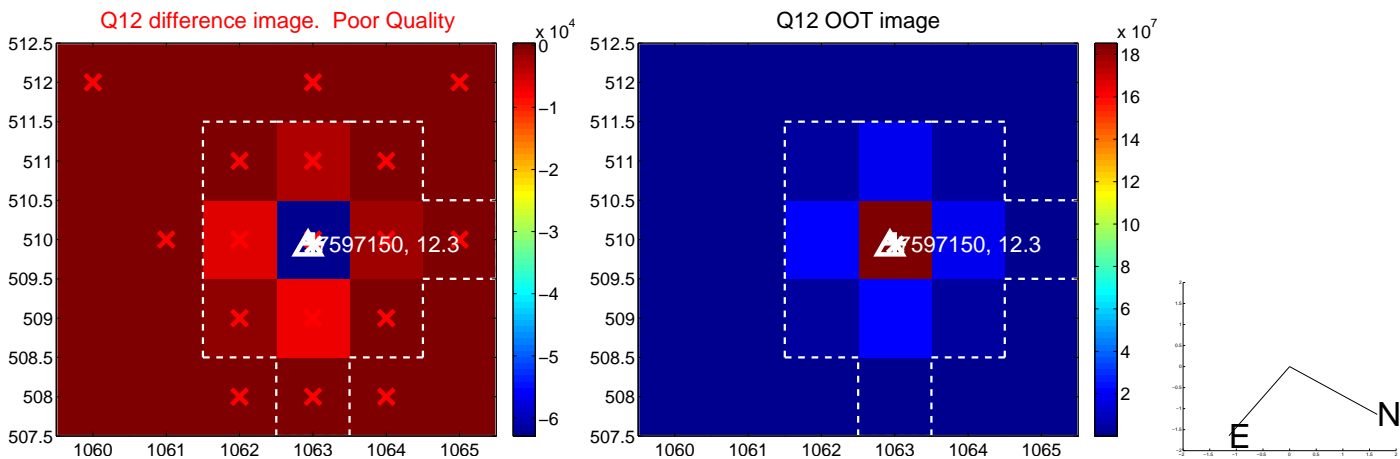
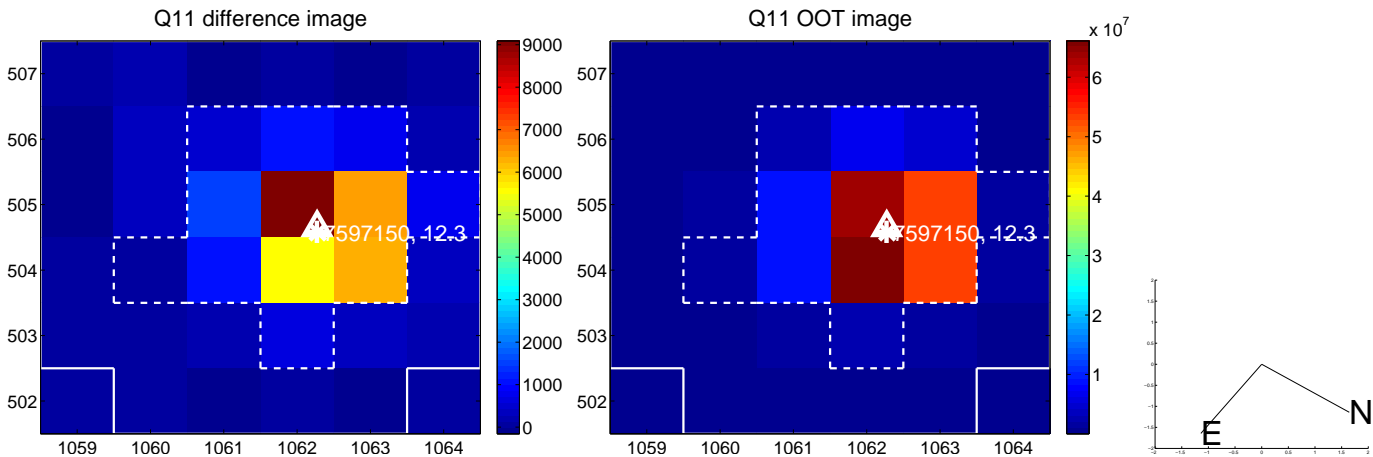
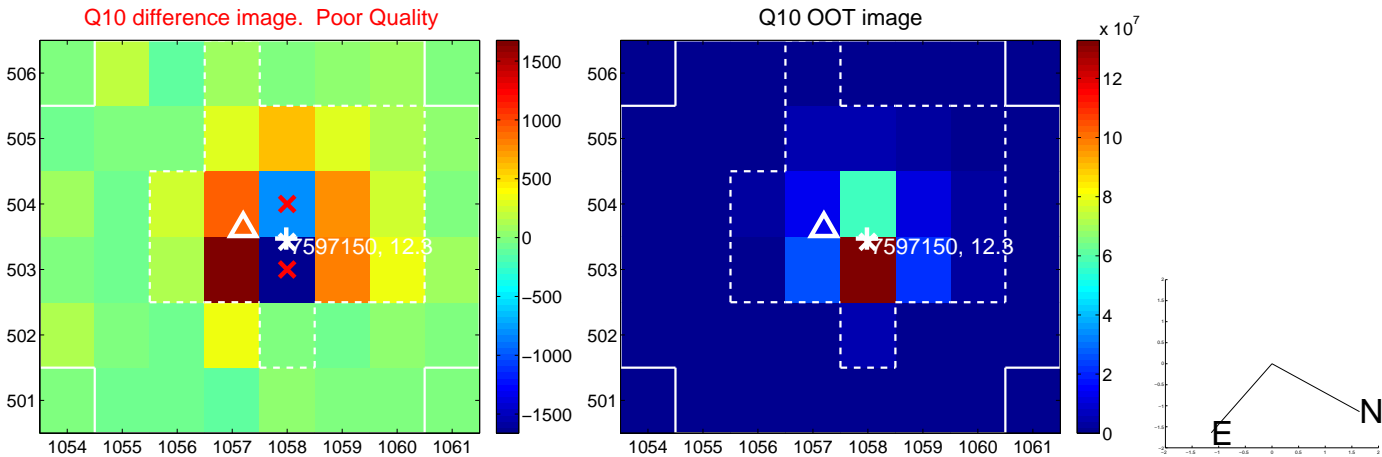
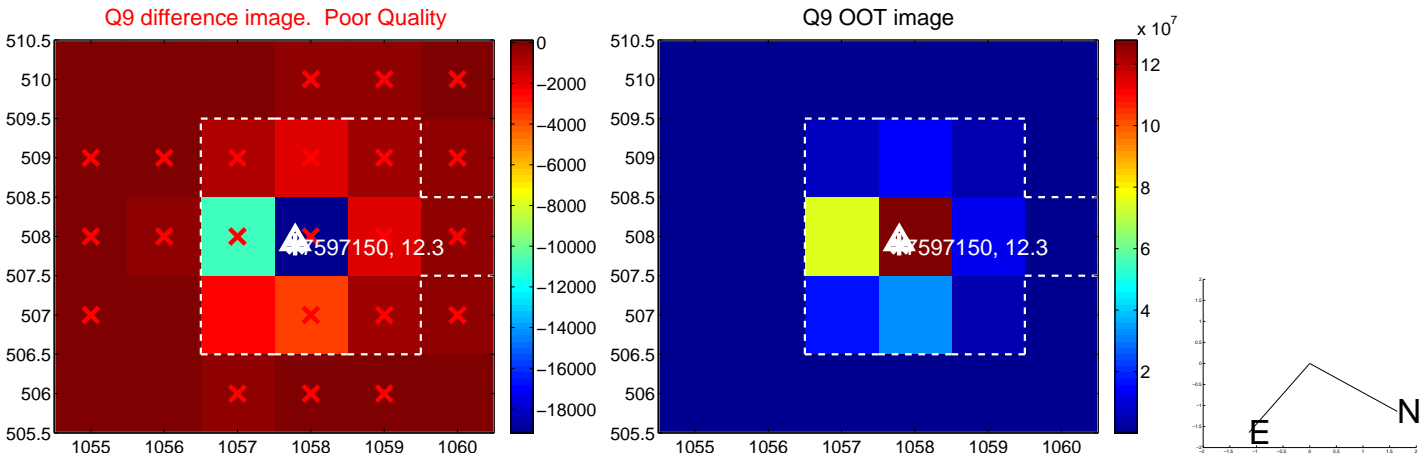
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



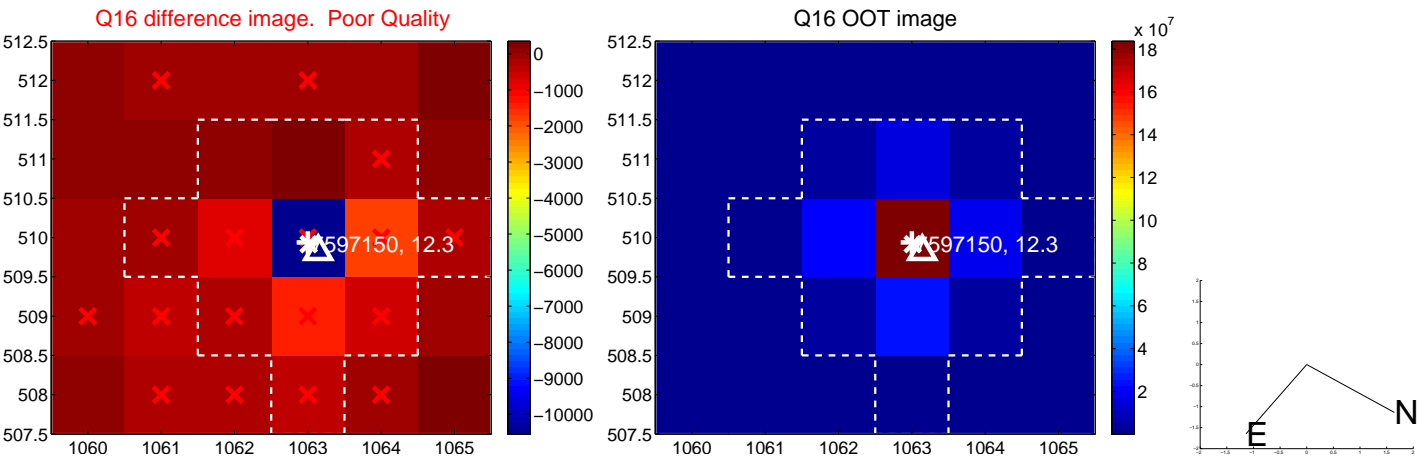
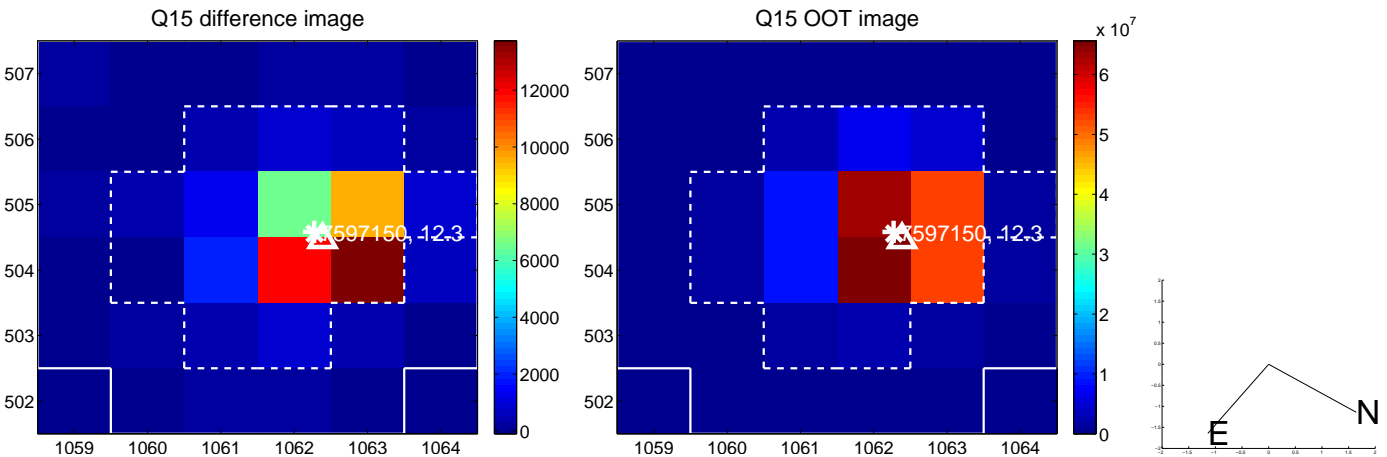
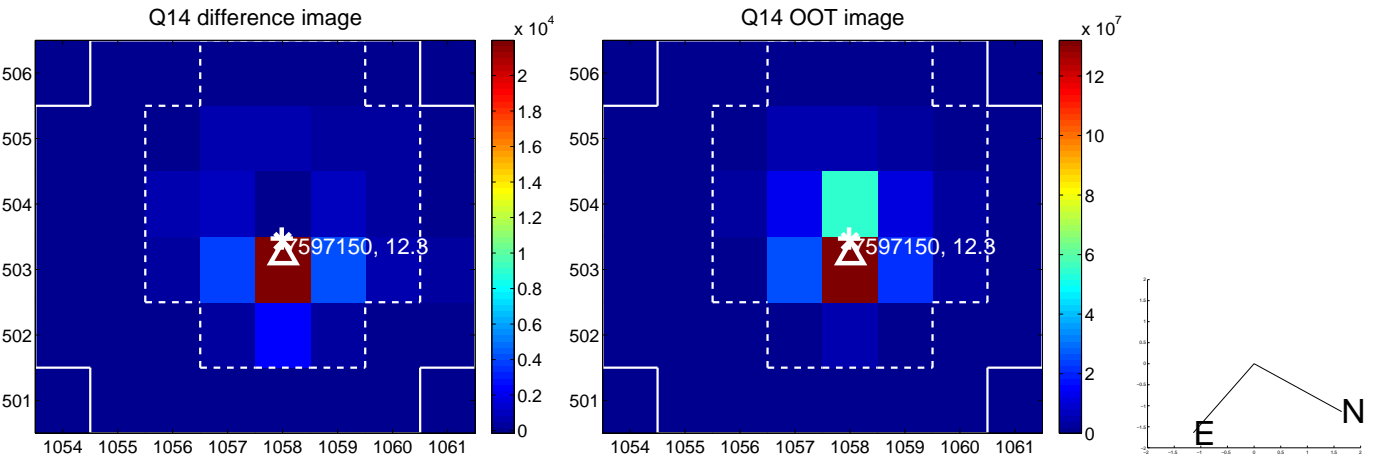
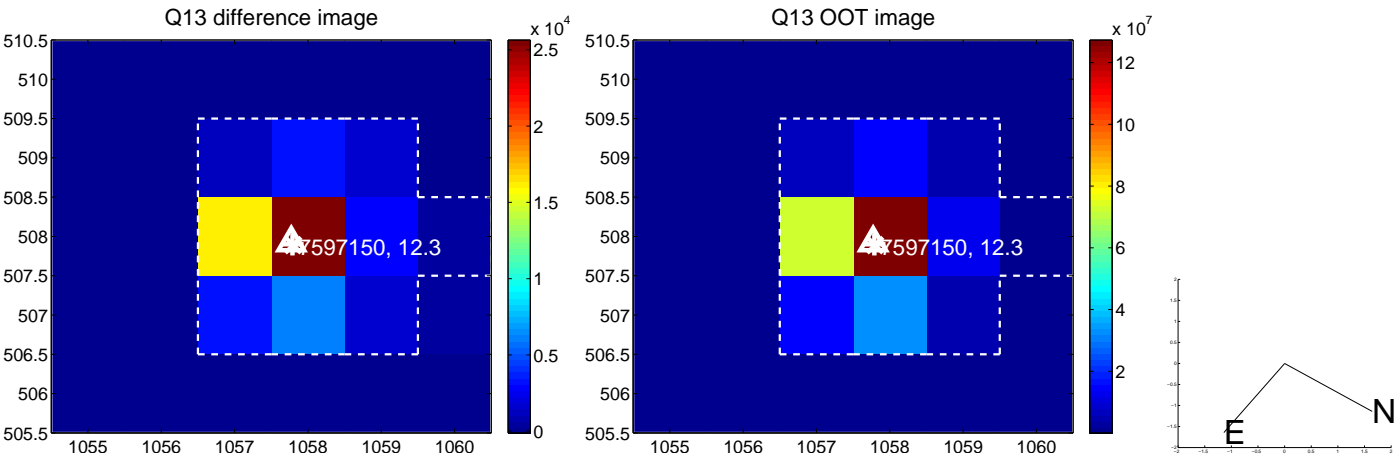
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



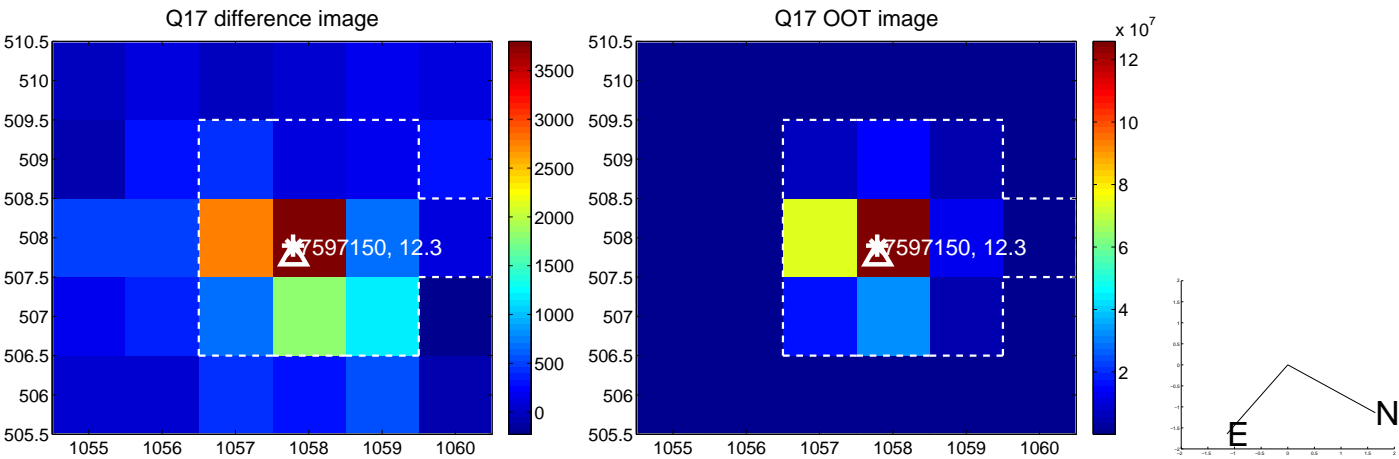
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



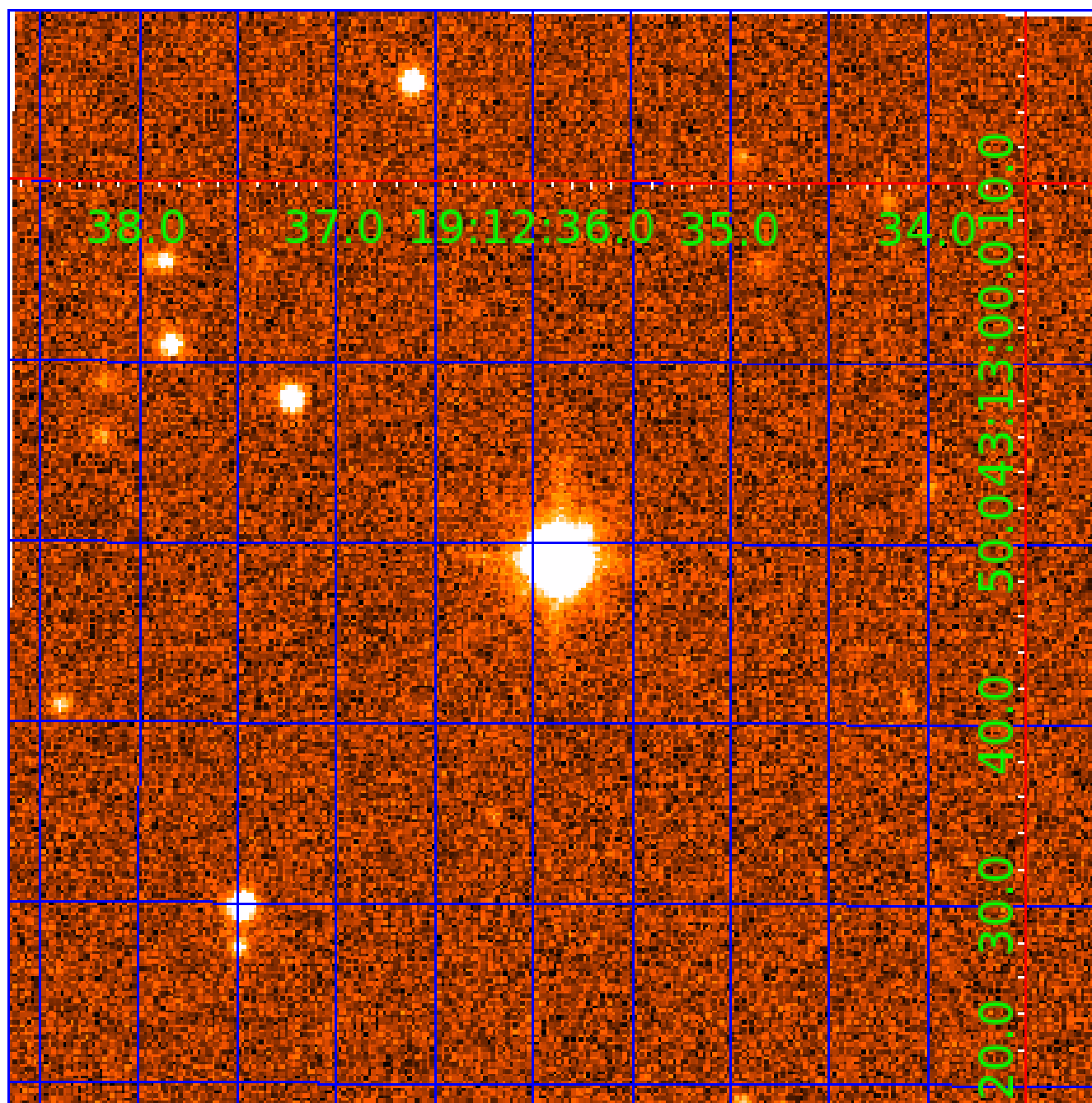
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination



KIC 007597150

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})
007597150-01	OBS	No	1.185112	132.137440	0.2	8.394	7.9	0.1	1.68	7282	0.08	12713.76
007597150-02	OBS	No	47.328333	177.880517	497.2	4.895	10.5	9.0	1.68	7282	4.32	93.14
007597150-03	OBS	No	8.293566	136.451345	43.3	2.639	10.1	2.9	1.68	7282	1.29	949.80
007597150-04	OBS	No	8.291193	136.224441	719.1	2.304	9.5	9.0	1.68	7282	4.69	950.16
007597150-05	OBS	No	63.139376	159.633307	625.6	1.776	9.1	8.6	1.68	7282	4.62	63.42
007597150-06	OBS	No	31.101521	149.334486	381.5	6.475	9.6	6.2	1.68	7282	6.26	163.02
007597150-07	OBS	No	39.081868	137.421010	1020.6	14.434	9.6	9.1	1.68	7282	9.72	120.22
007597150-08	OBS	No	25.156825	145.994068	159.9	3.808	9.2	3.5	1.68	7282	2.35	216.31
007597150-09	OBS	No	35.930360	143.370372	221.5	1.500	7.3	-1.0	1.68	7282	2.55	134.48

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007597150-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV
007597150-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD
007597150-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—NO_FITS—CENT_NOFITS

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

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

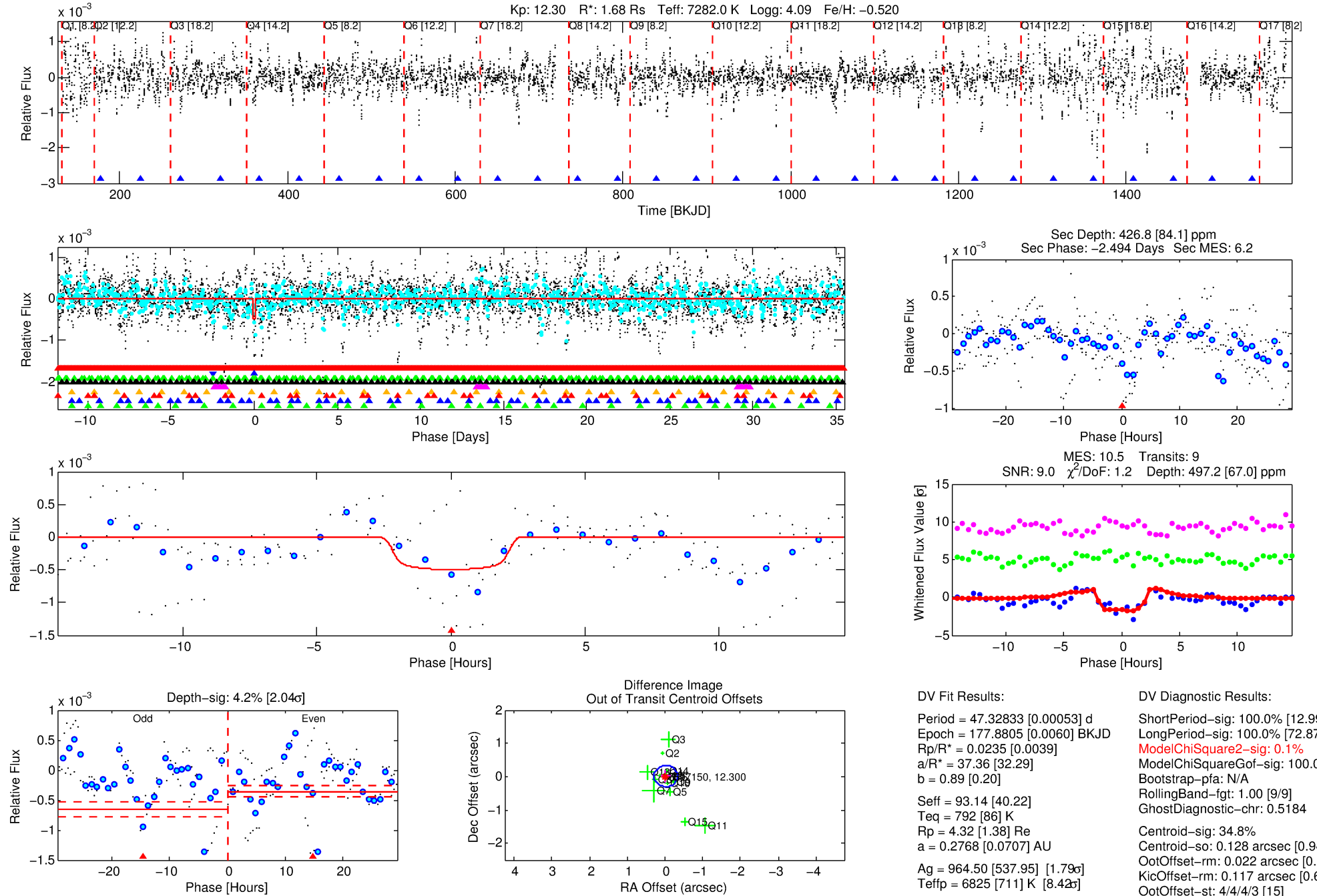
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007597150-02

No Significant Match Found

DV One-Page Summary

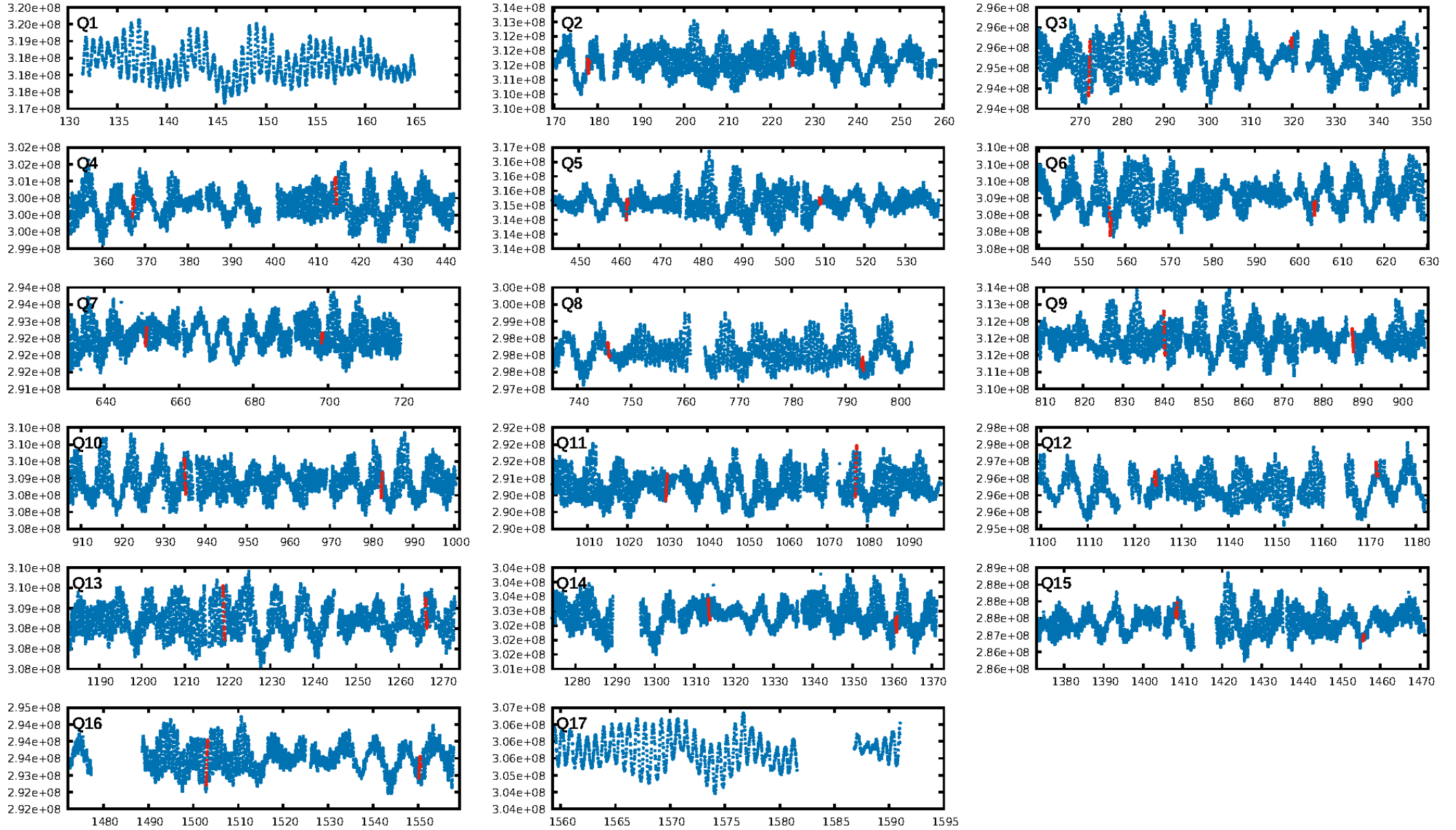
KIC: 7597150 Candidate: 2 of 9 Period: 47.328 d



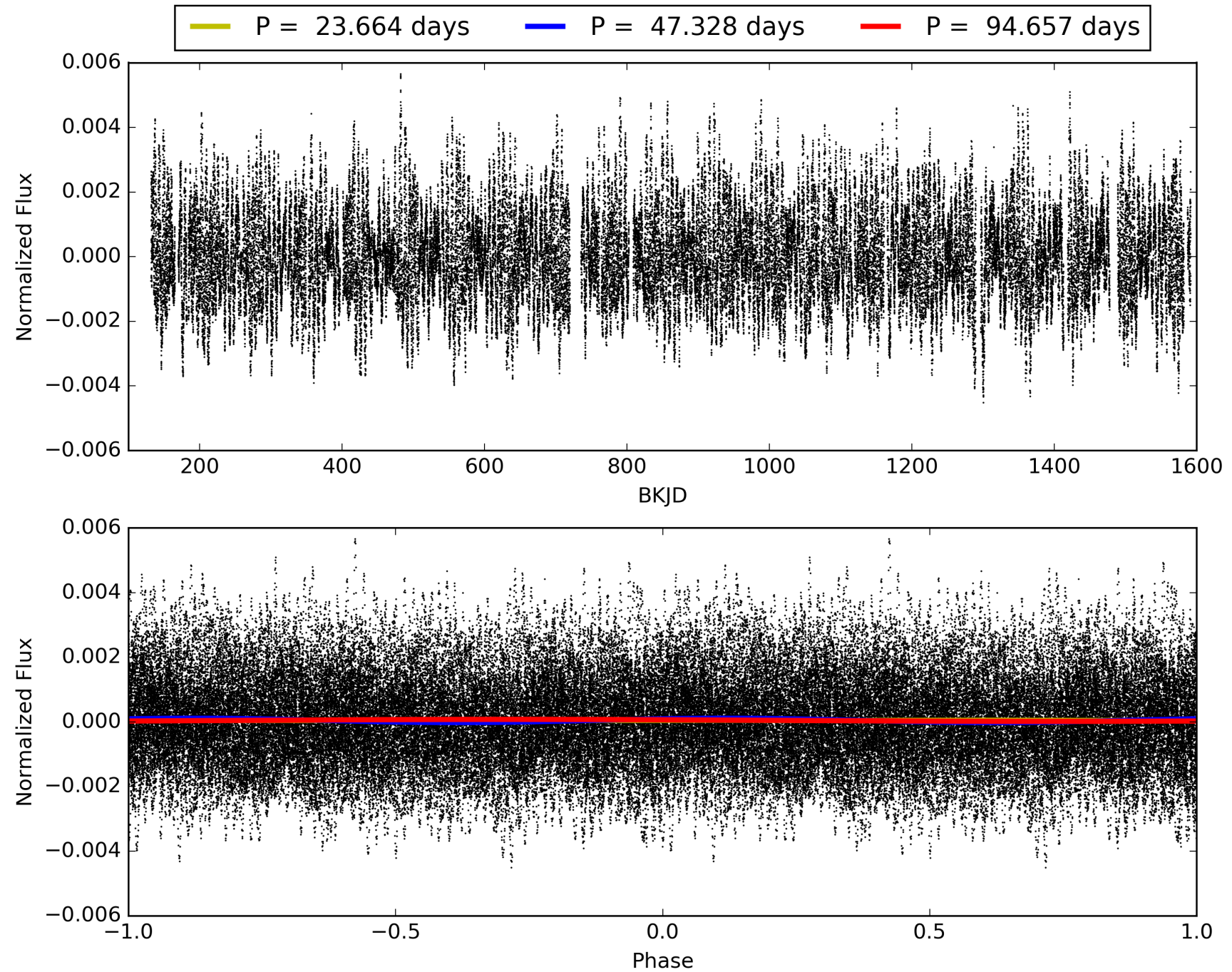
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:30:48 Z

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

TCE 007597150-02, PDC Light Curves

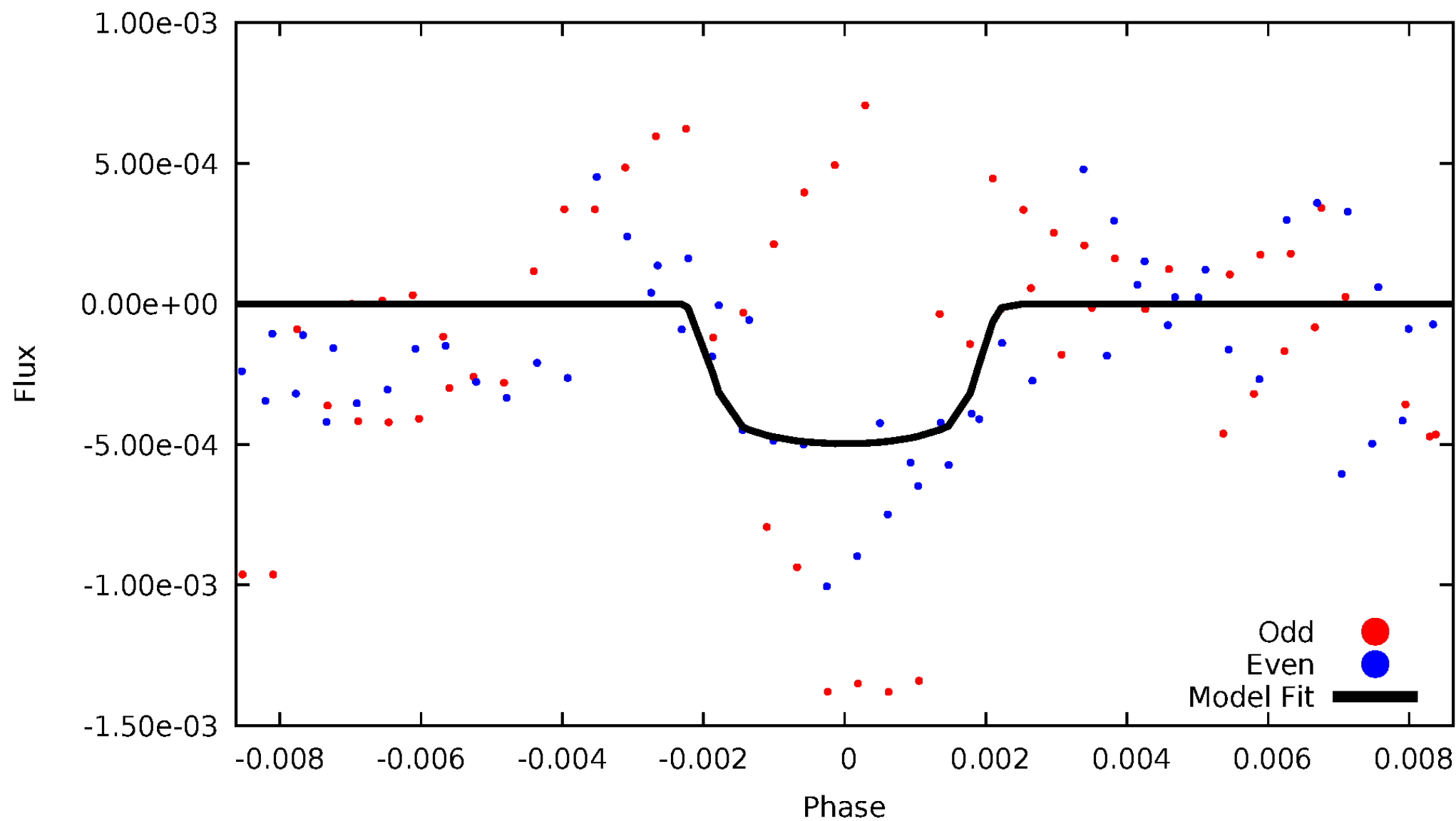


TCE 007597150-02



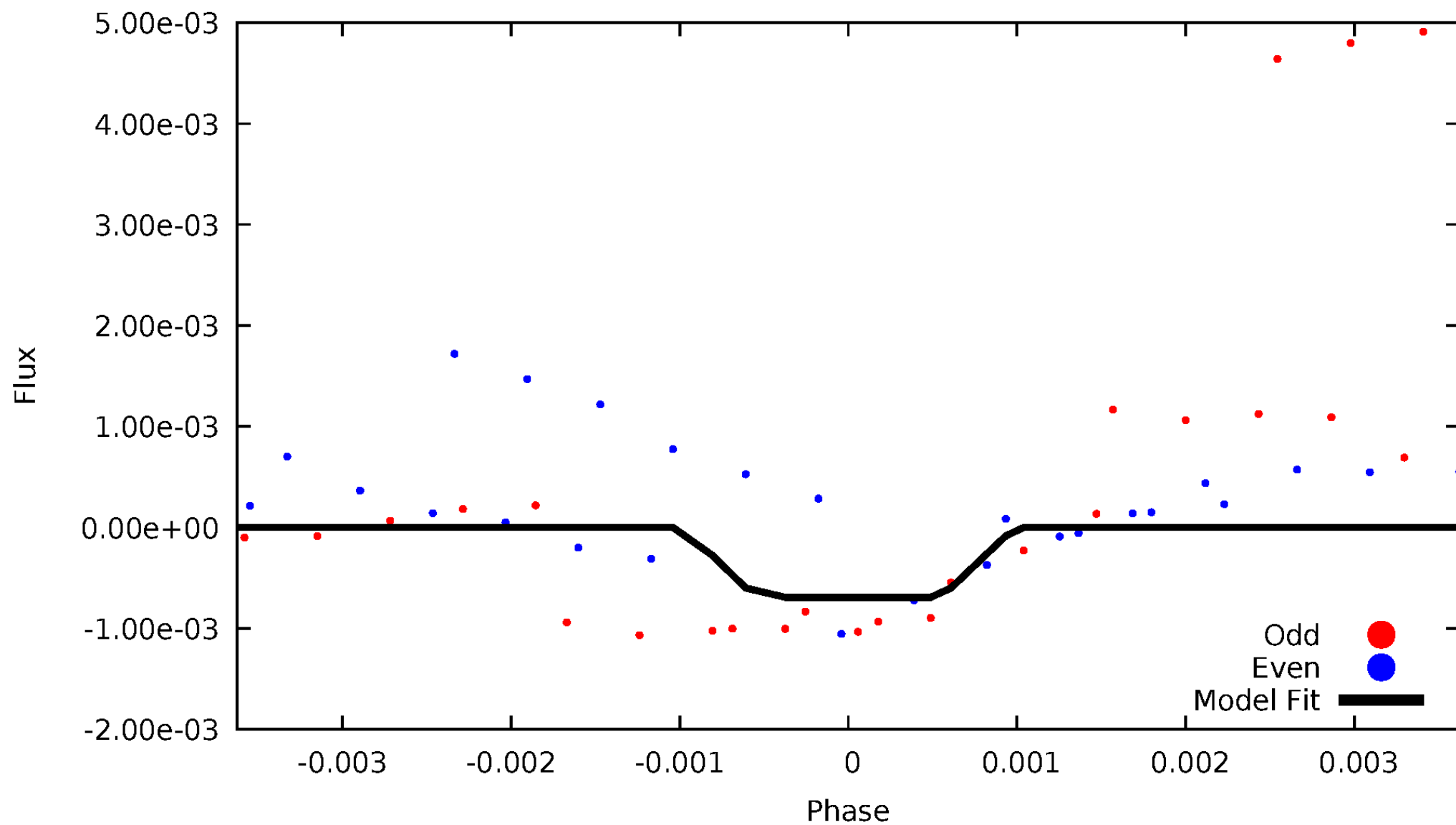
DV Odd/Even

TCE 007597150-02



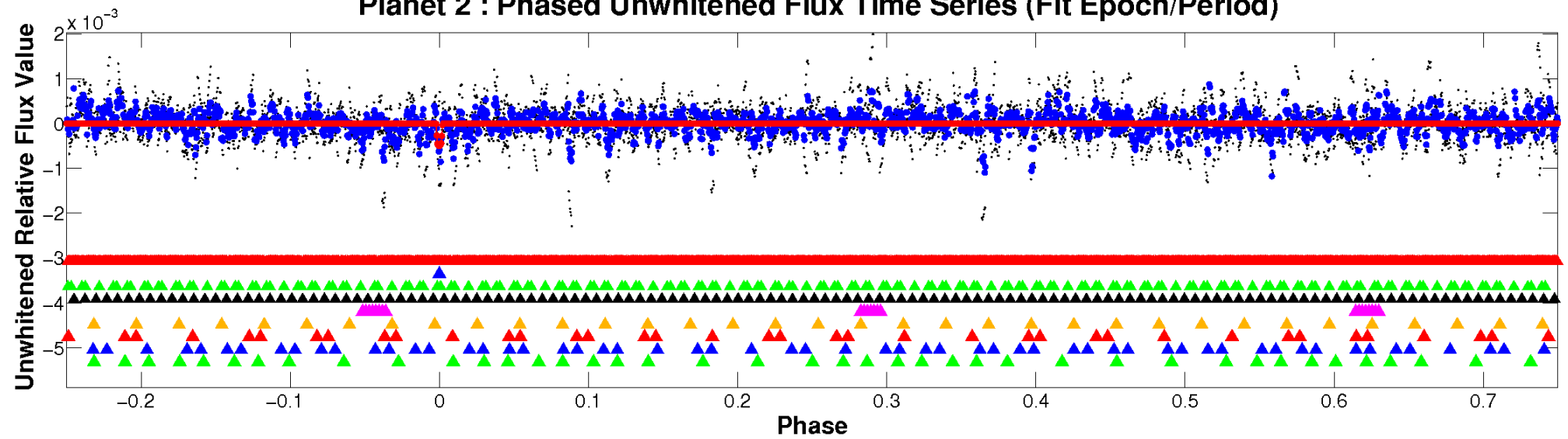
ALT Odd/Even

TCE 007597150-02

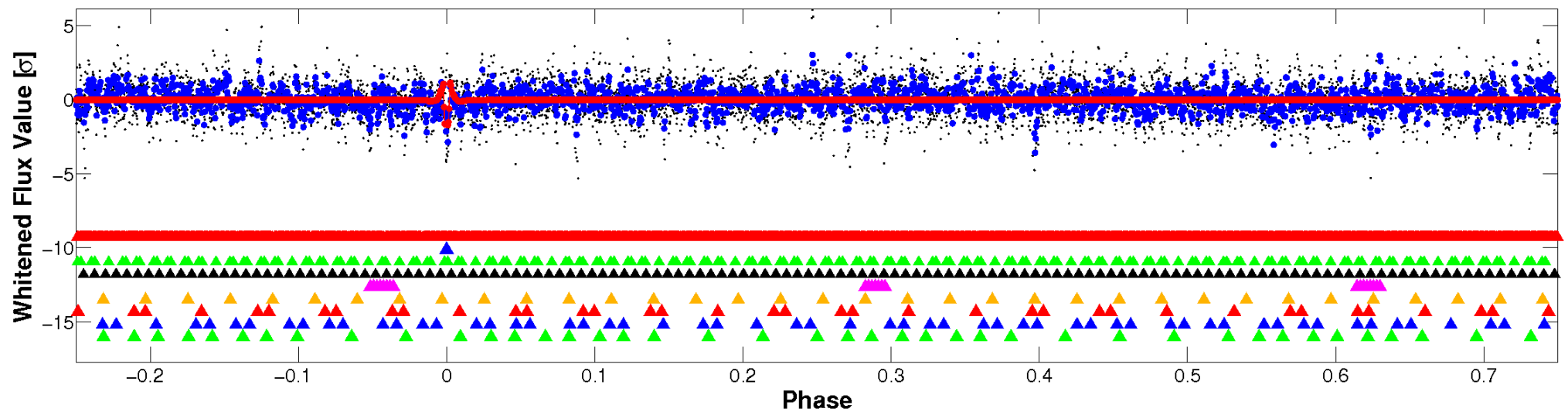


Non-Whitened Vs. Whitened Light Curve

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

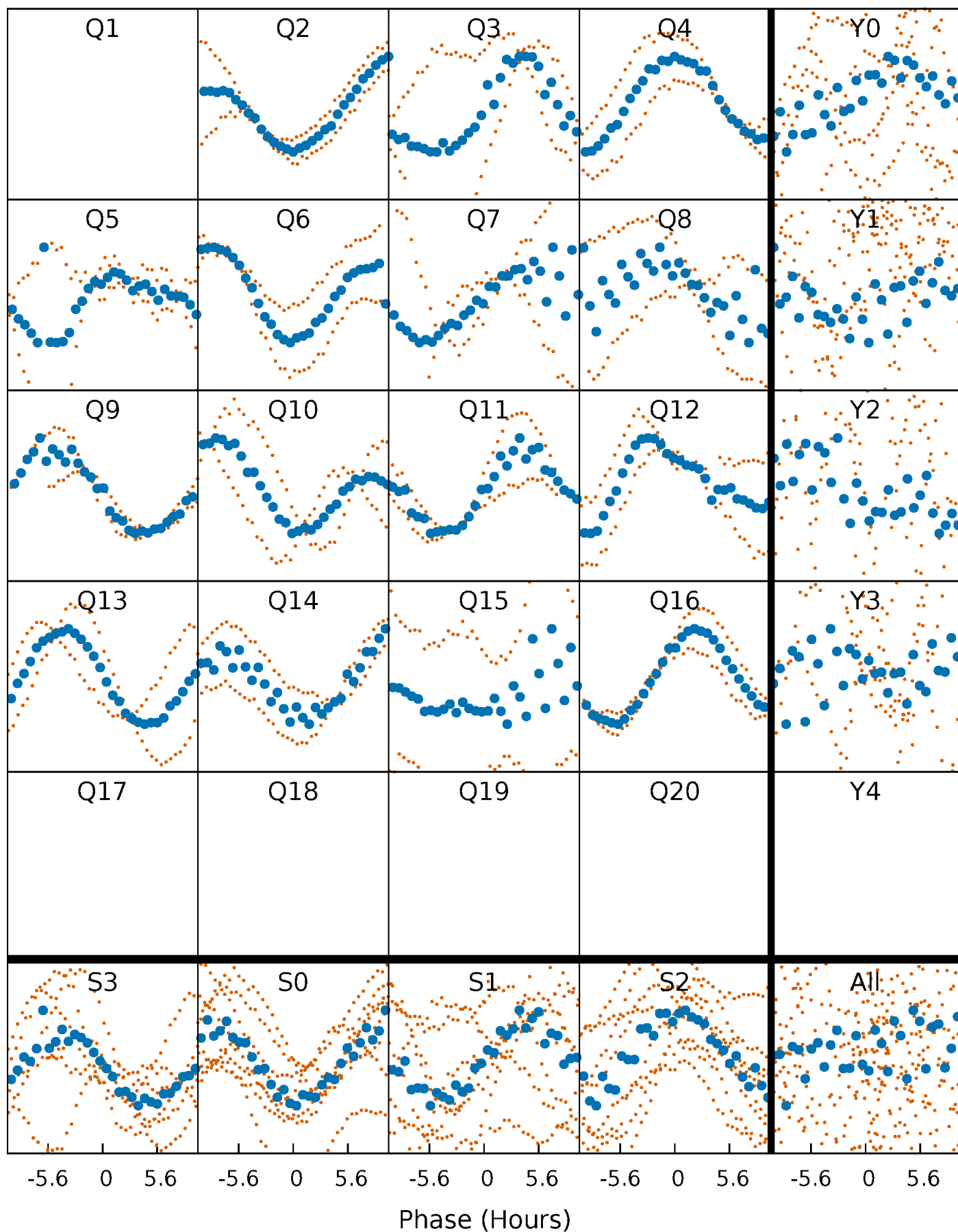


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



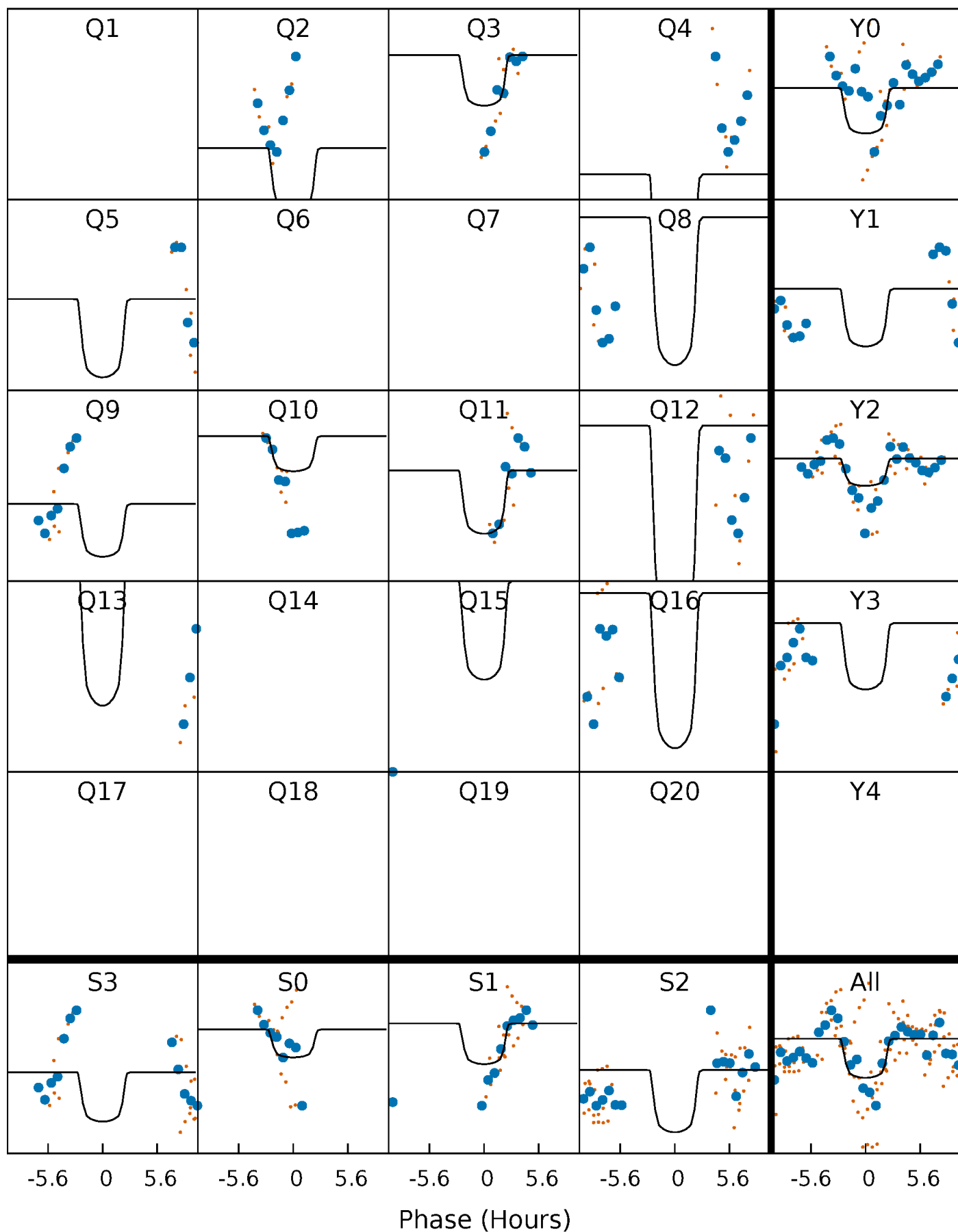
PDC Quarter-Phased Transit Curves

TCE 007597150-02 P= 47.328333 Days $T_0=177.880517$ (BKJD)



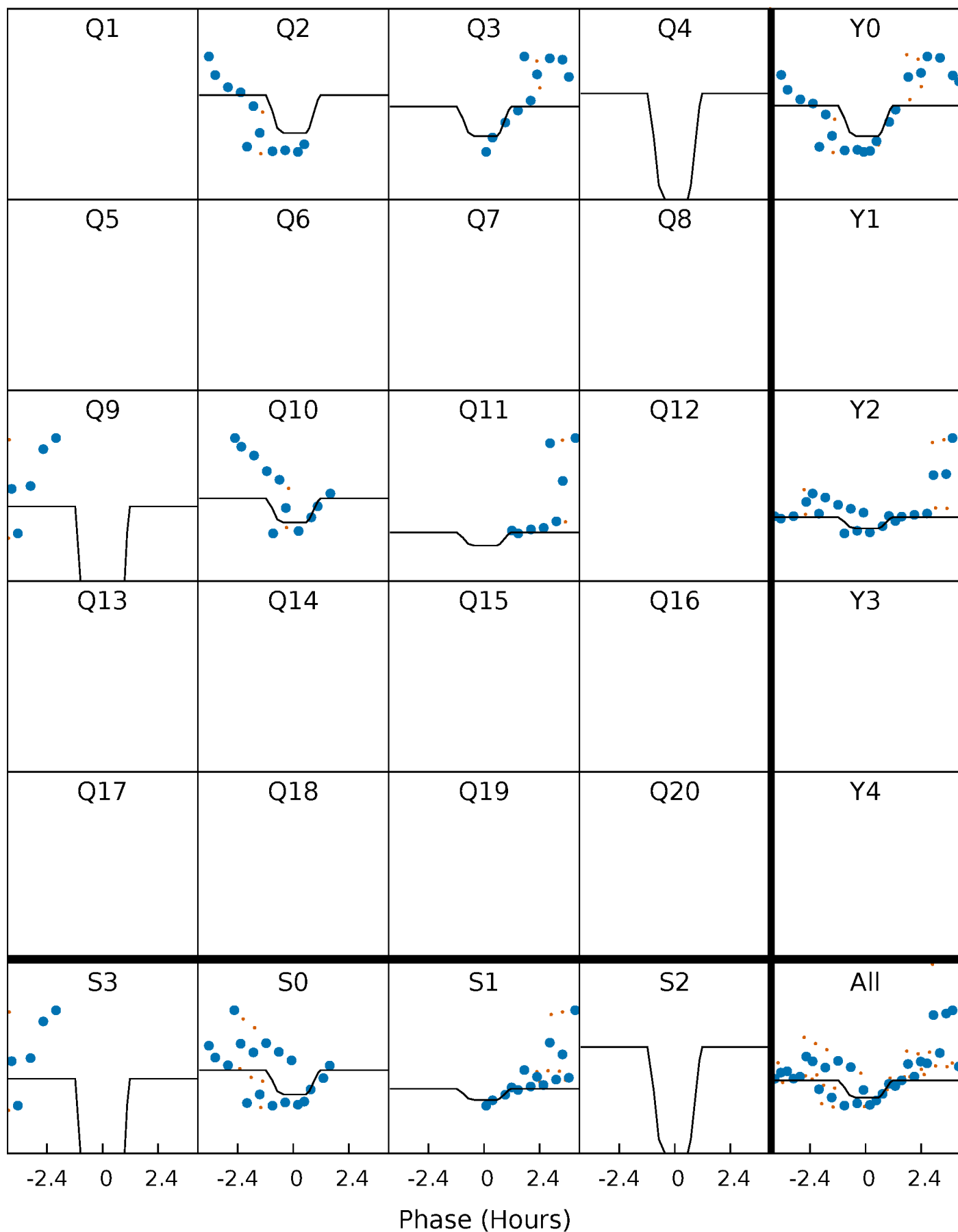
DV Quarter-Phased Transit Curves

TCE 007597150-02 P= 47.328333 Days $T_0=177.880517$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

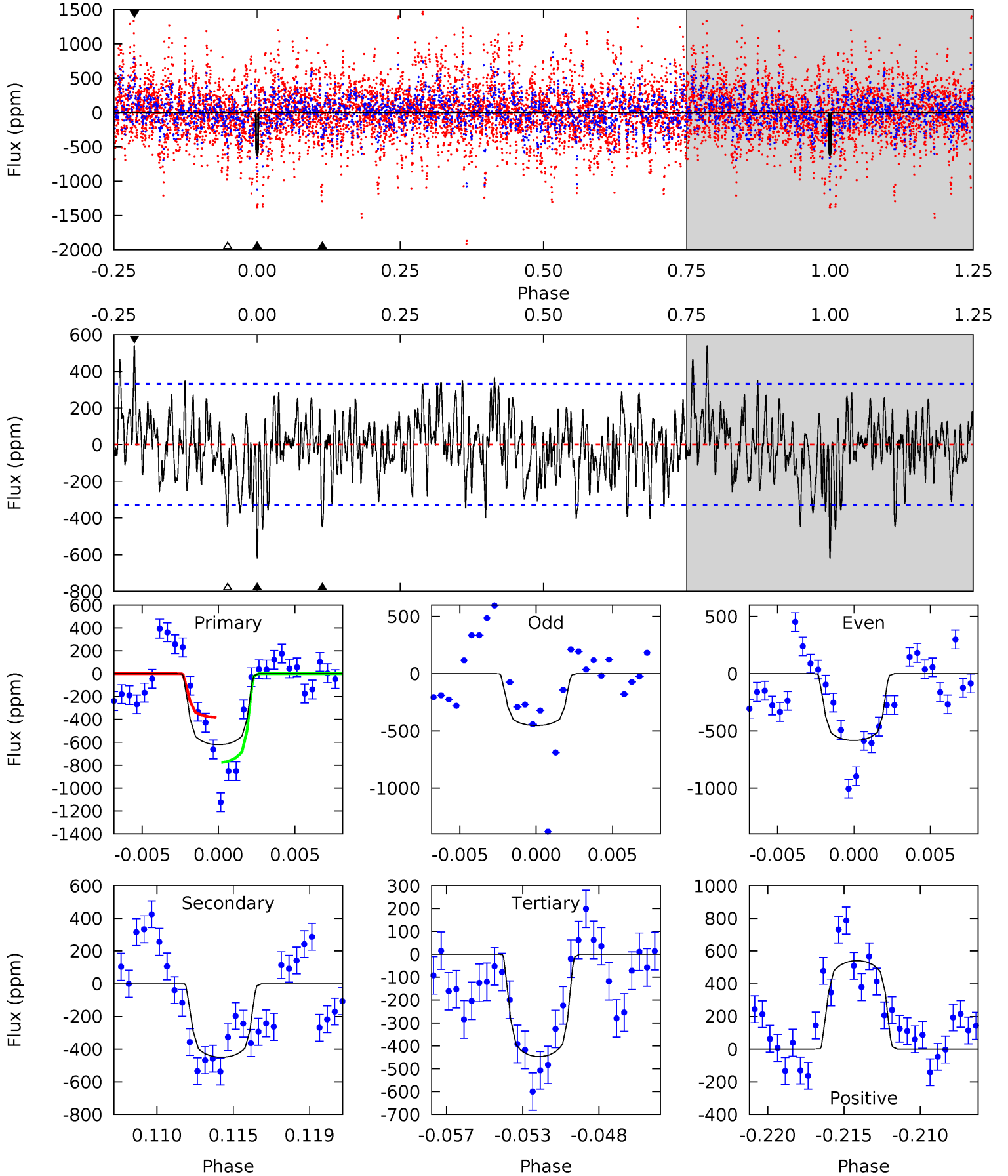
TCE 007597150-02 P= 47.327680 Days $T_0=177.871846$ (BKJD)



DV Model-Shift Uniqueness Test

007597150-02, $P = 47.328333$ Days, $E = 130.552184$ Days

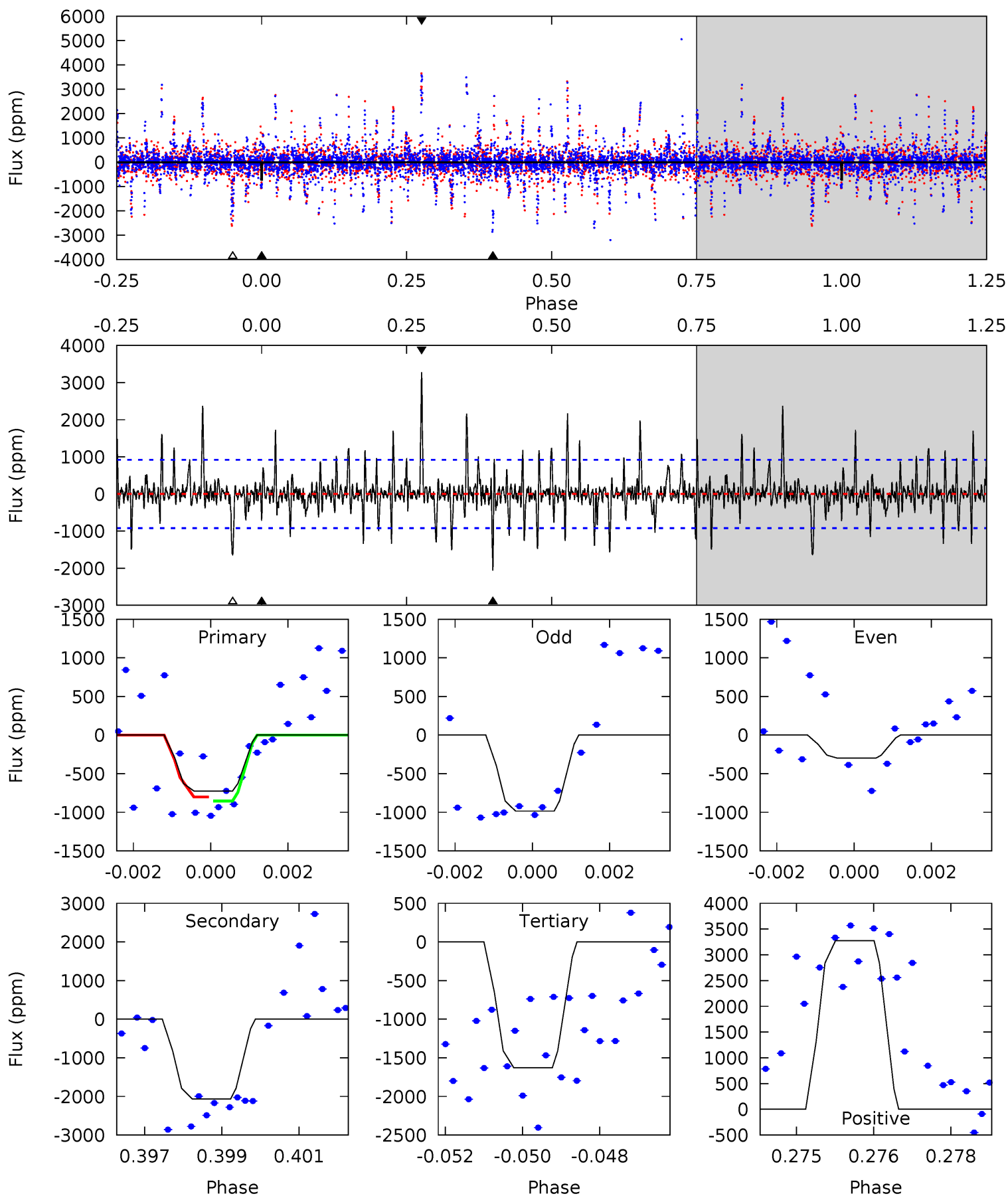
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.70	7.03	6.99	8.45	5.17	2.82	2.34	2.71	1.25	0.05	-1.41	1.01	0.82	0.47	3.16



Alt Model-Shift Uniqueness Test

007597150-02, P = 47.327680 Days, E = 130.544166 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.21	12.0	9.45	19.0	5.35	3.13	2.47	-5.25	-14.8	2.53	-7.04	1.56	0.68	0.61	0.15



Stellar Parameters For KIC 007597150

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7282^{+233}_{-285}	$4.087^{+0.234}_{-0.156}$	$-0.520^{+0.250}_{-0.300}$	$1.683^{+0.458}_{-0.458}$	$1.260^{+0.196}_{-0.161}$	$0.372^{+0.467}_{-0.169}$
	+3%/-4%	+6%/-4%	+48%/-58%	+27%/-27%	+16%/-13%	+125%/-45%
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 007597150-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-450 ± 64	$4.27^{+1.05}_{-0.89}$	1096^{+81}_{-87}	6781^{+800}_{-555}	1042^{+626}_{-369}
Alt.	-2063 ± 172	$4.68^{+1.02}_{-0.95}$	1088^{+86}_{-87}	10340^{+1692}_{-1083}	3918^{+2282}_{-1212}

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 $A_{obs} \gg 1.0$

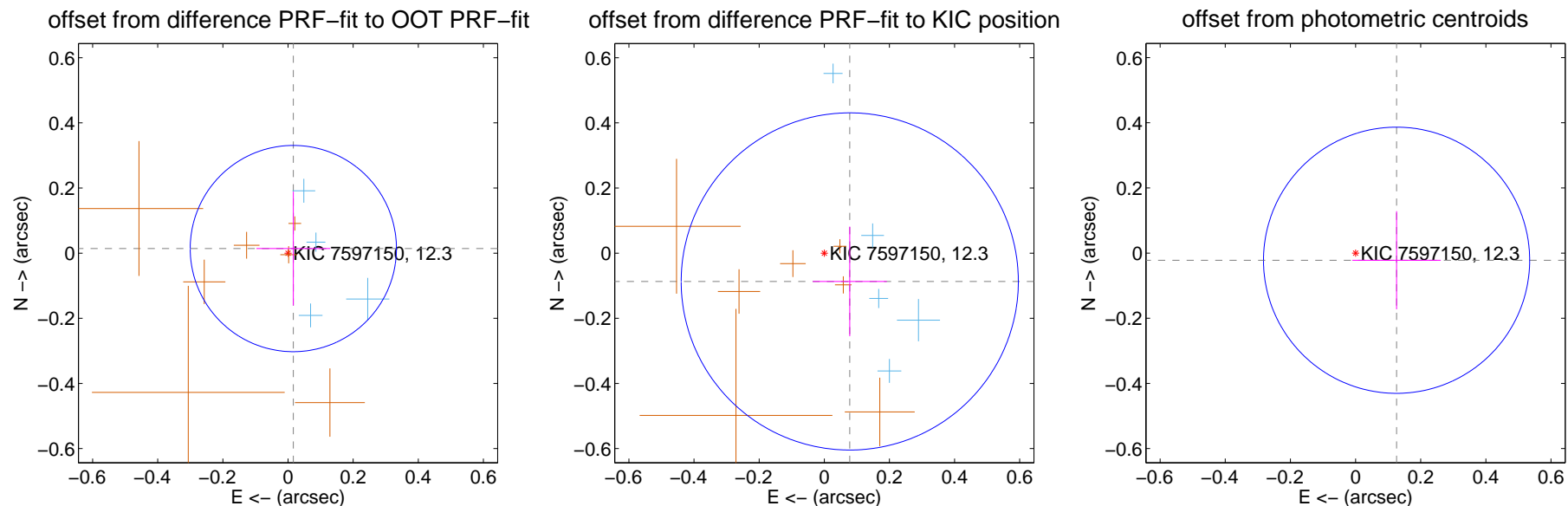
DV Centroid Data

Supplemental centroid analysis for 007597150-02. Kepler magnitude: 12.30. Transit SNR 9.00

There are 6 quarters with good PRF difference image offsets

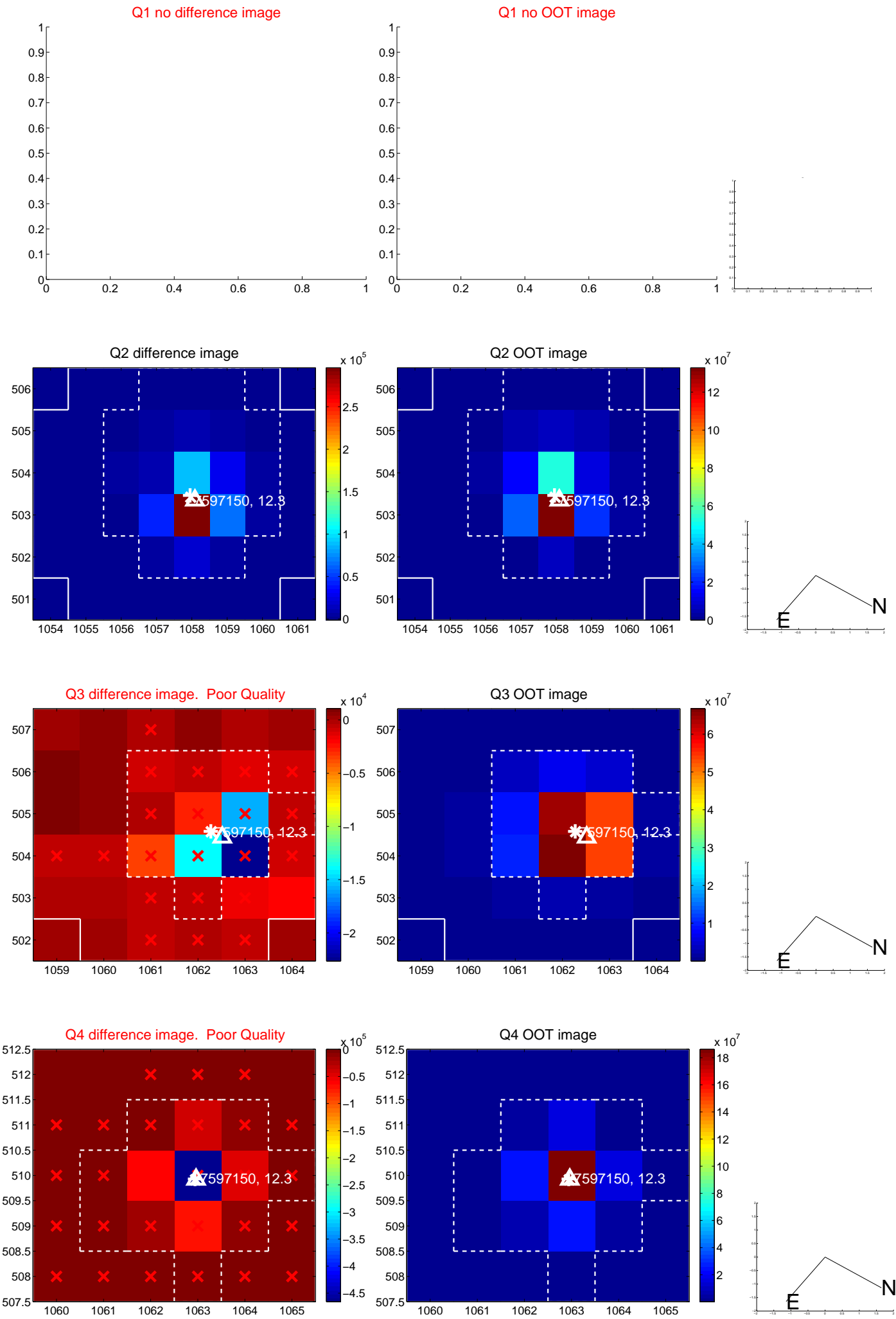
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.022 ± 0.106	0.20	-0.016 ± 0.113	0.014 ± 0.175
PRF-fit source offset from KIC position	0.117 ± 0.173	0.68	-0.078 ± 0.114	-0.087 ± 0.168
photometric centroid source offset	0.13 ± 0.14	0.94	-0.13 ± 0.14	-0.02 ± 0.15

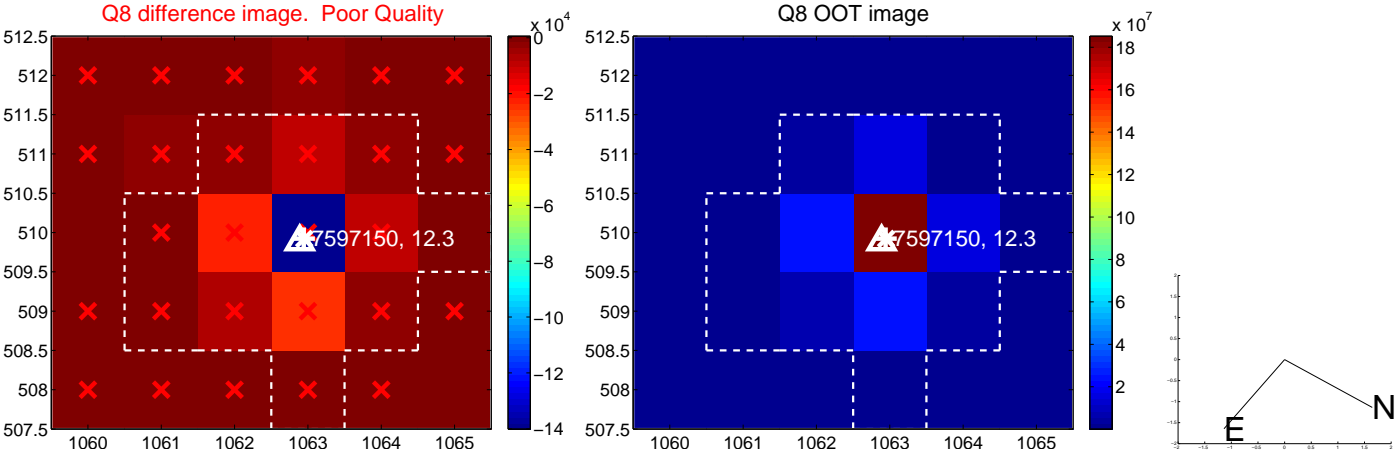
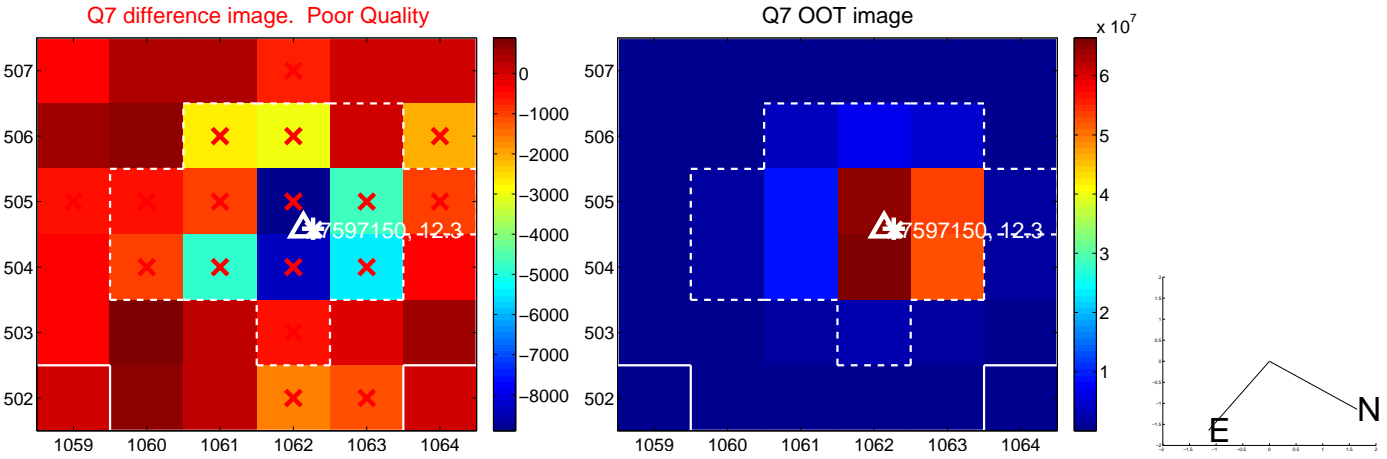
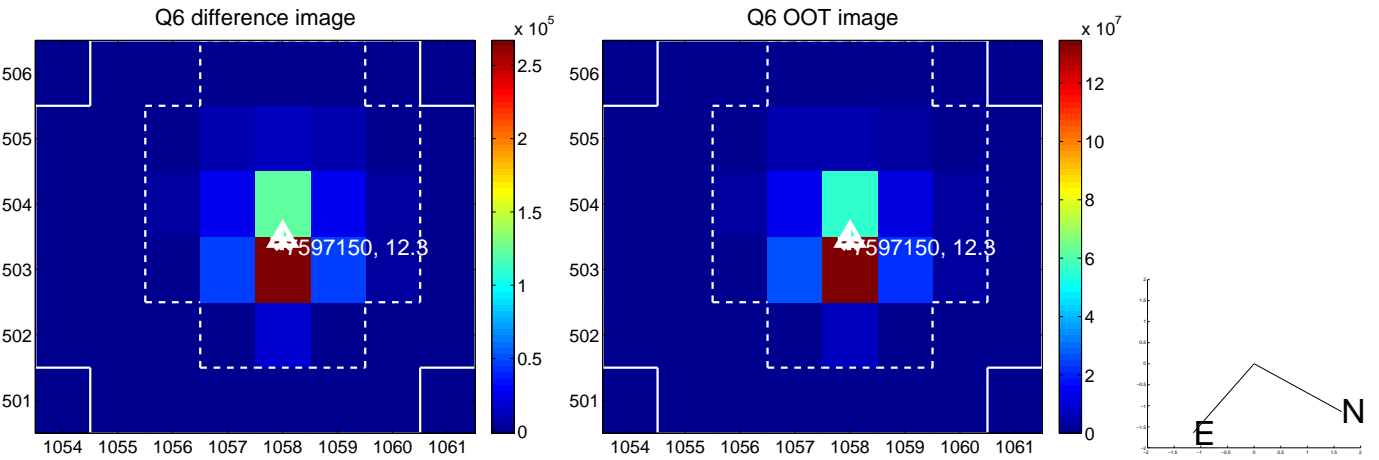
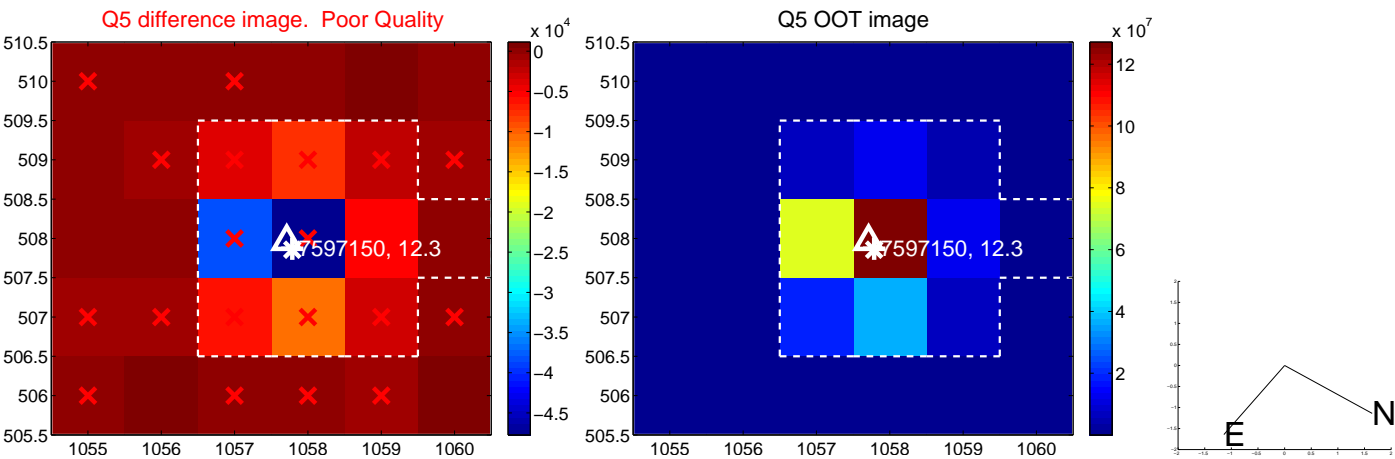


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

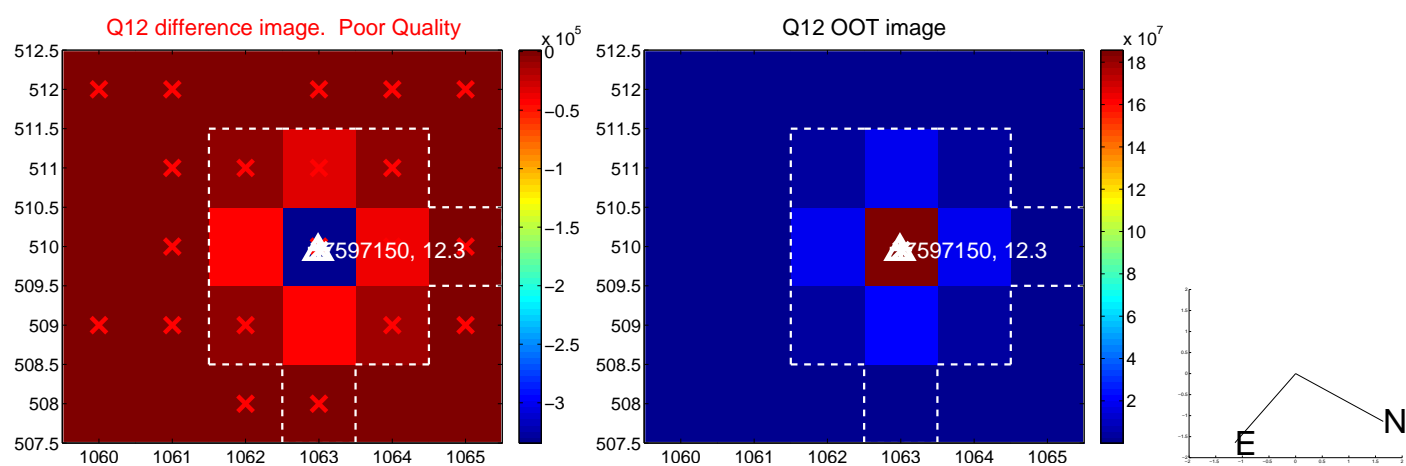
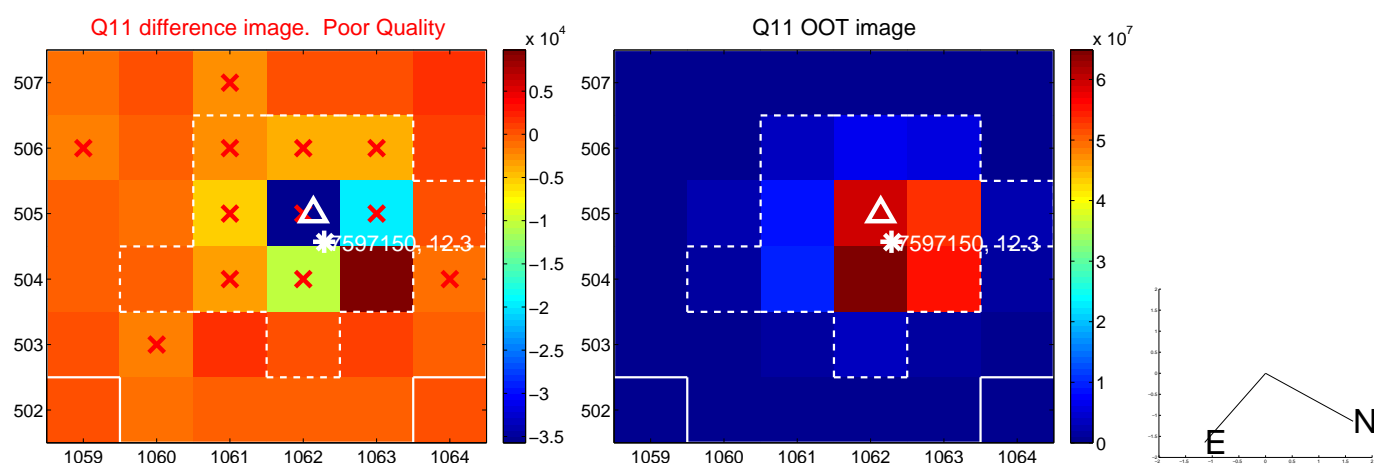
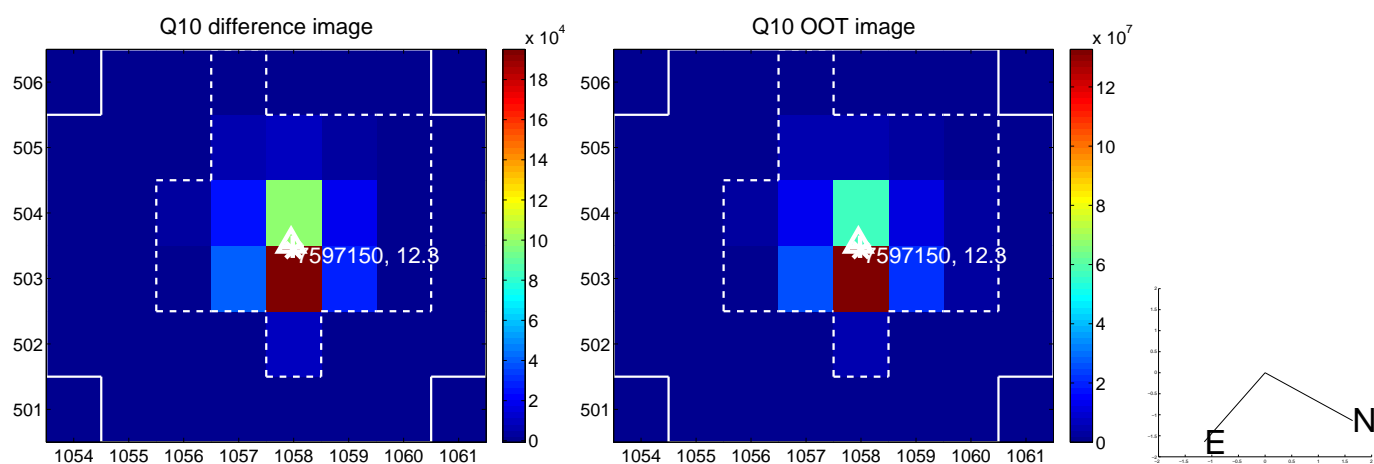
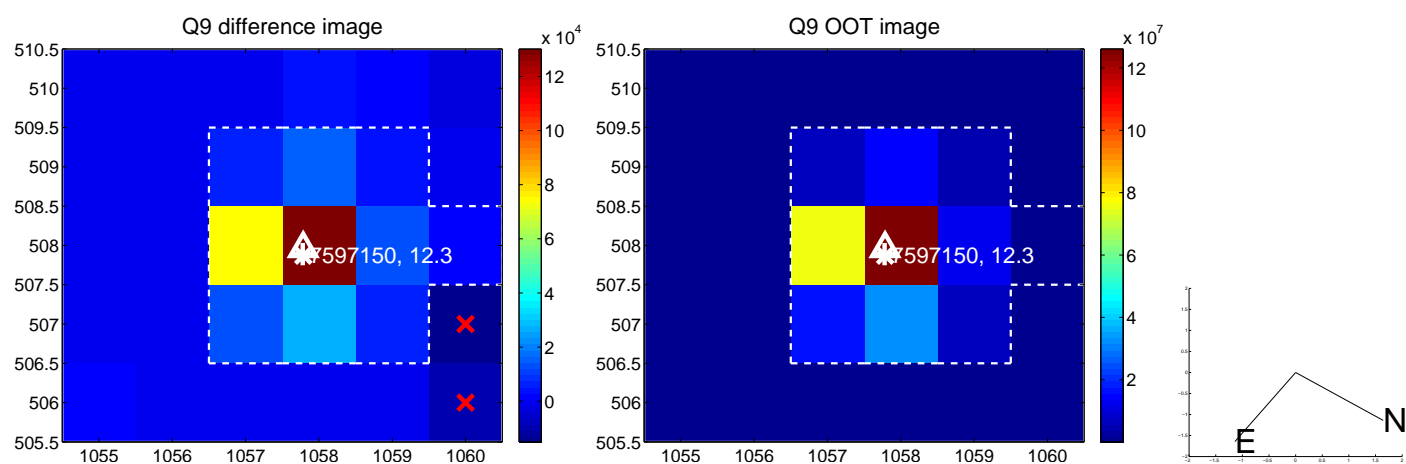
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



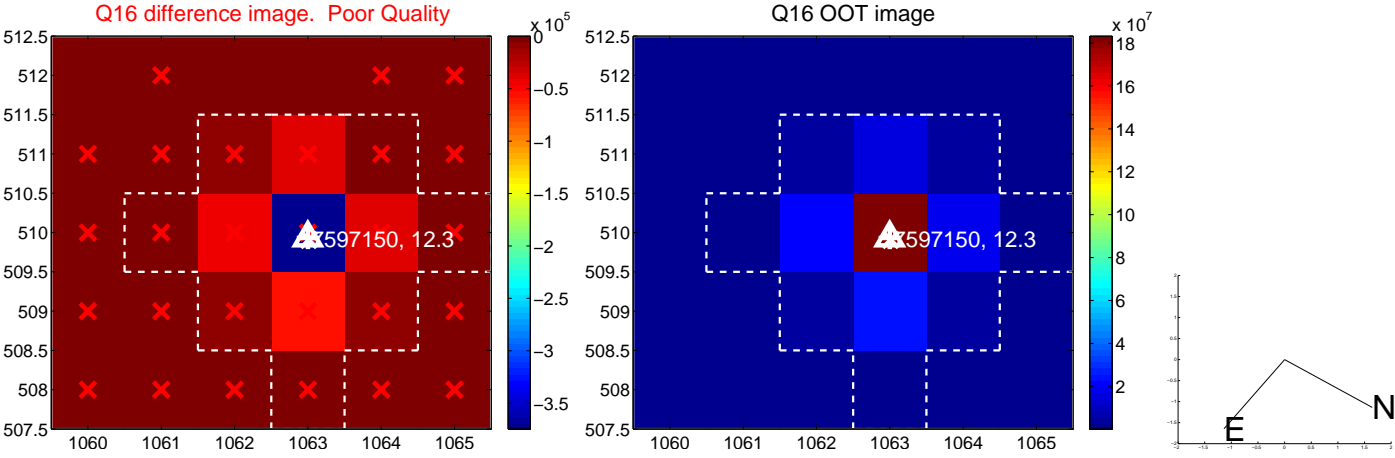
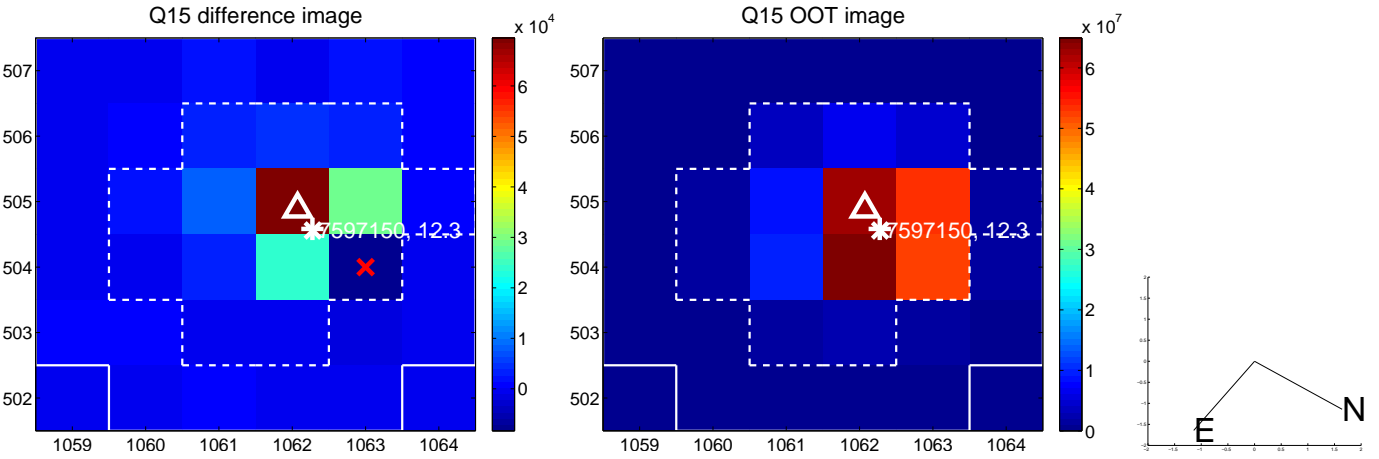
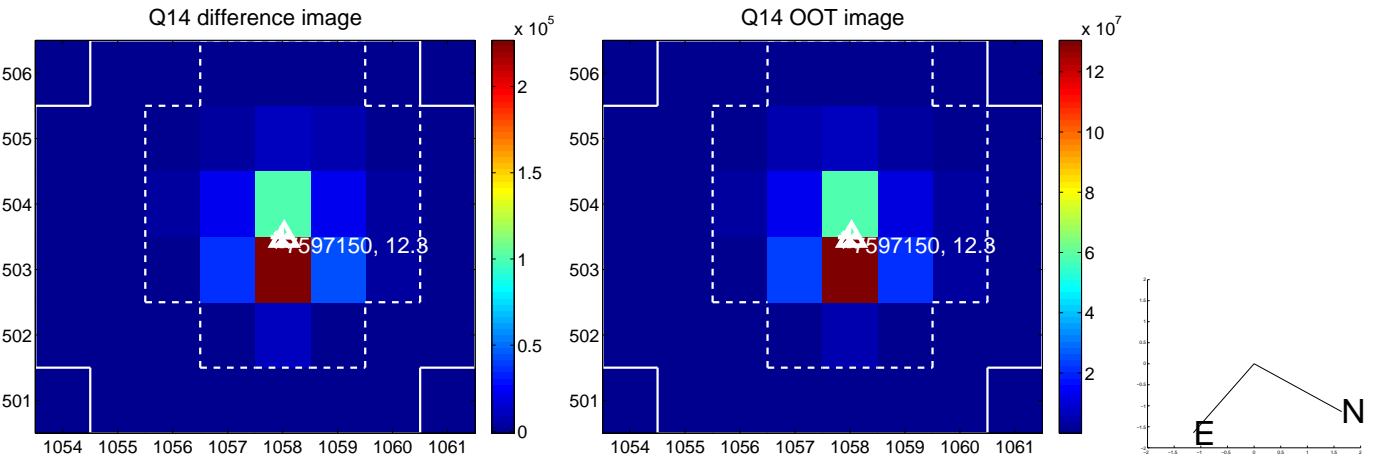
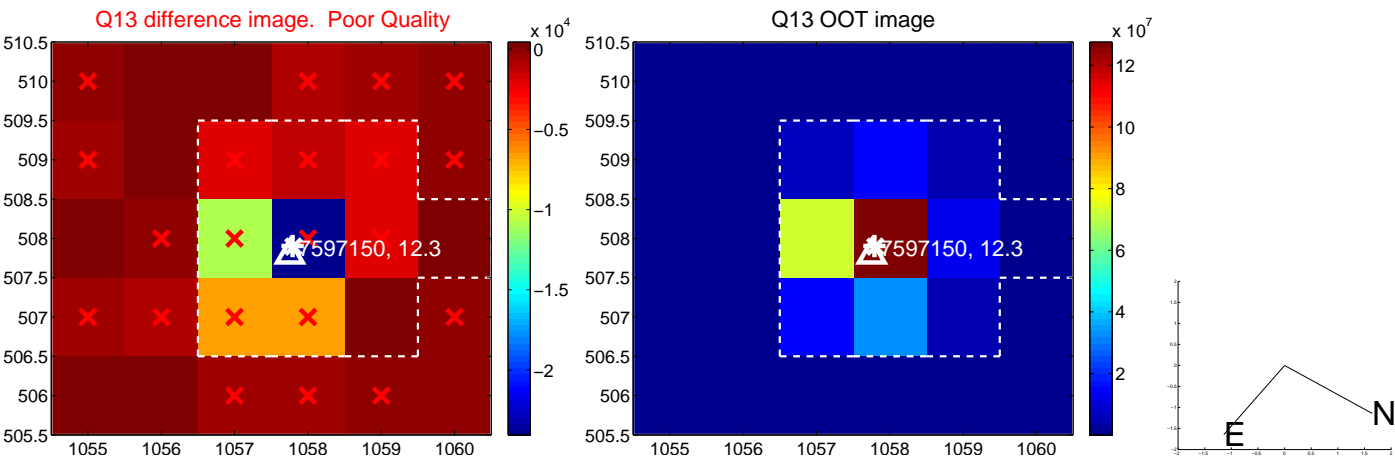
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



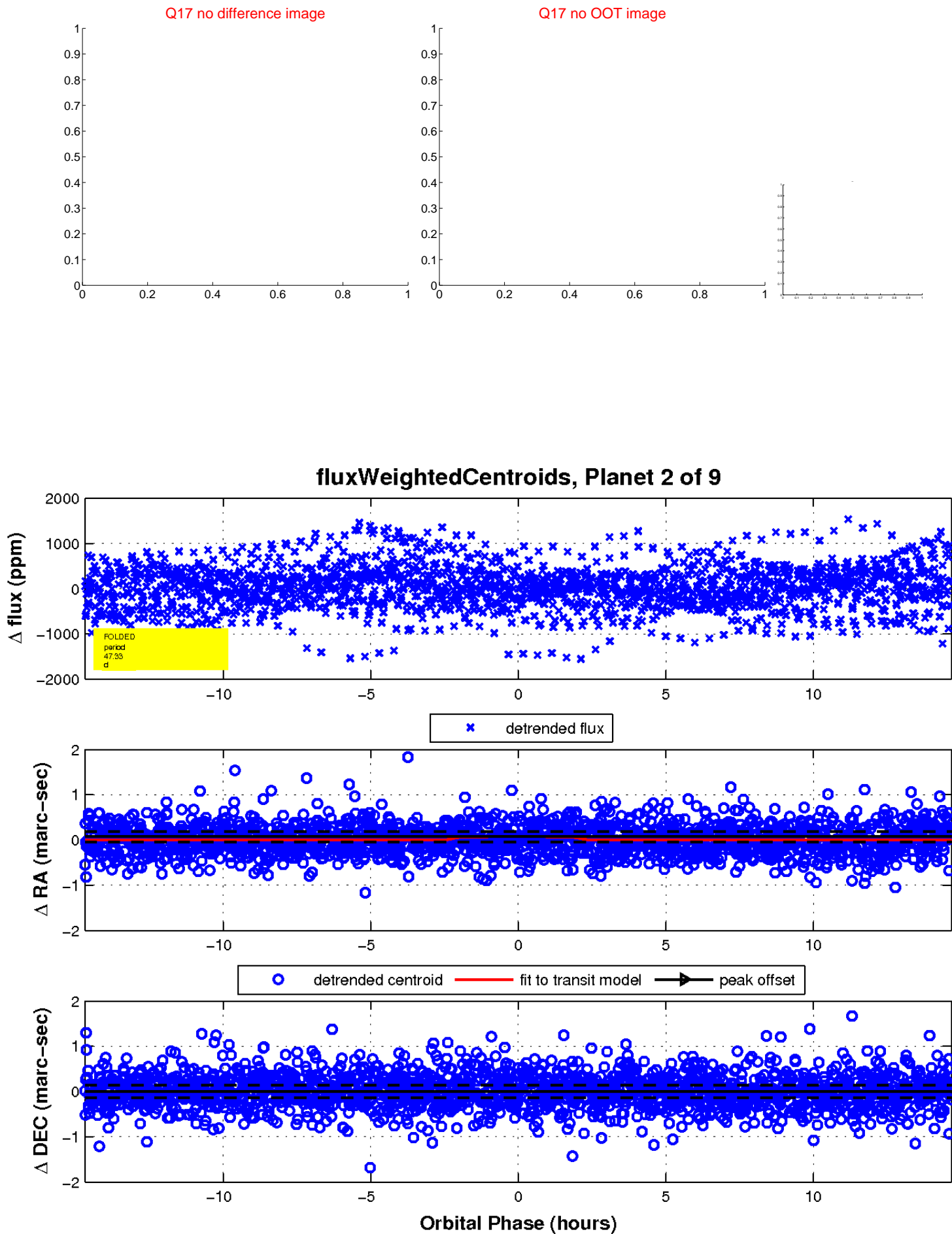
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

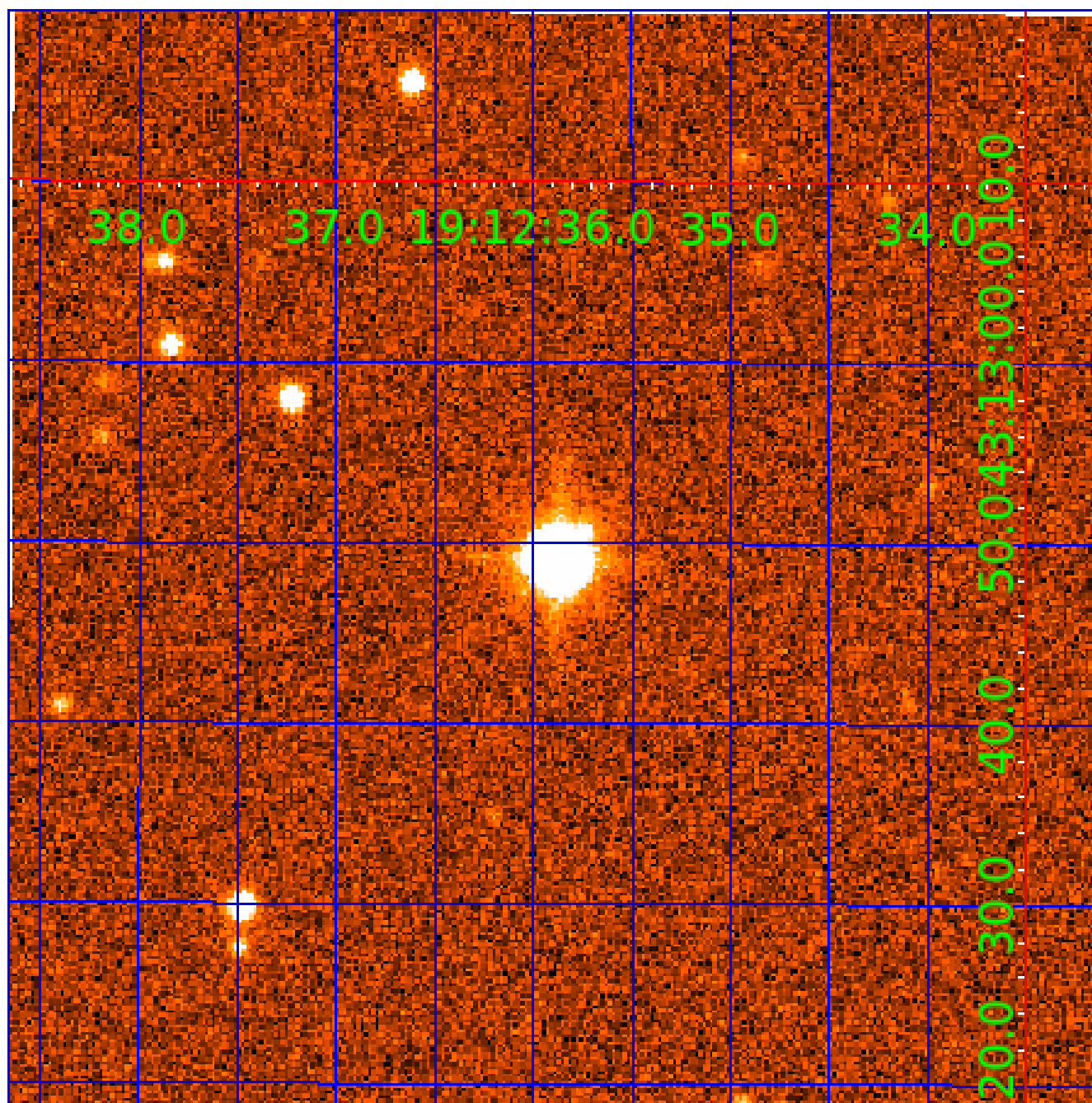


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007597150

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})
007597150-01	OBS	No	1.185112	132.137440	0.2	8.394	7.9	0.1	1.68	7282	0.08	12713.76
007597150-02	OBS	No	47.328333	177.880517	497.2	4.895	10.5	9.0	1.68	7282	4.32	93.14
007597150-03	OBS	No	8.293566	136.451345	43.3	2.639	10.1	2.9	1.68	7282	1.29	949.80
007597150-04	OBS	No	8.291193	136.224441	719.1	2.304	9.5	9.0	1.68	7282	4.69	950.16
007597150-05	OBS	No	63.139376	159.633307	625.6	1.776	9.1	8.6	1.68	7282	4.62	63.42
007597150-06	OBS	No	31.101521	149.334486	381.5	6.475	9.6	6.2	1.68	7282	6.26	163.02
007597150-07	OBS	No	39.081868	137.421010	1020.6	14.434	9.6	9.1	1.68	7282	9.72	120.22
007597150-08	OBS	No	25.156825	145.994068	159.9	3.808	9.2	3.5	1.68	7282	2.35	216.31
007597150-09	OBS	No	35.930360	143.370372	221.5	1.500	7.3	-1.0	1.68	7282	2.55	134.48

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007597150-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV
007597150-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD
007597150-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—NO_FITS—CENT_NOFITS

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

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

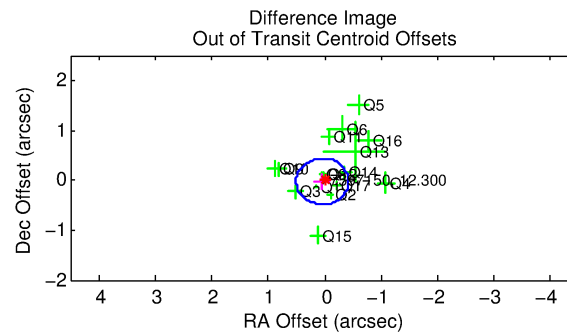
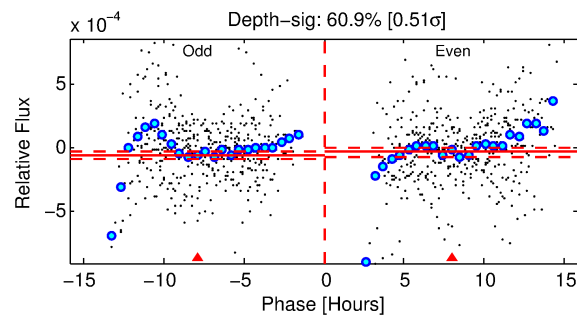
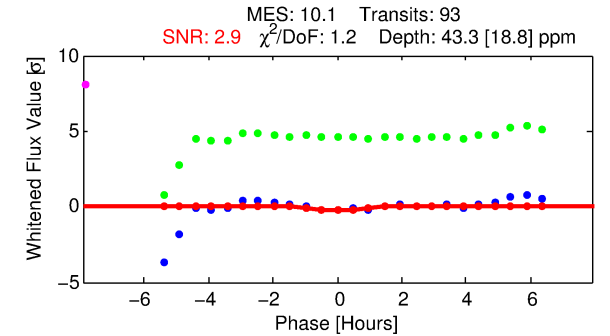
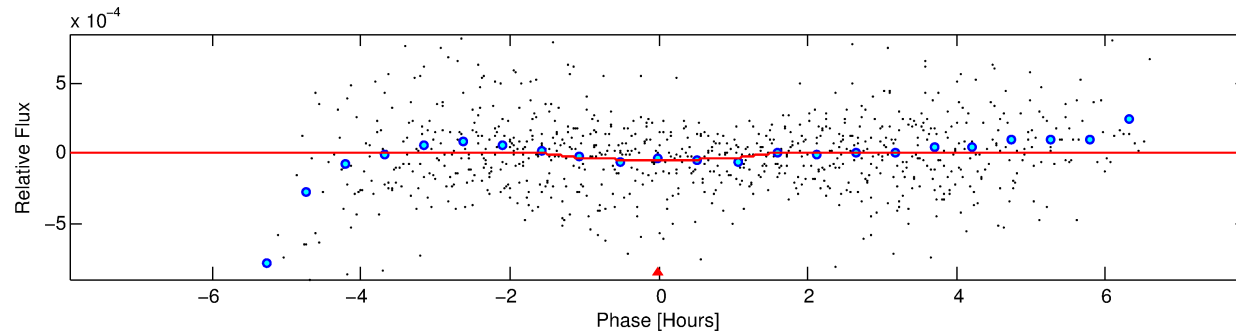
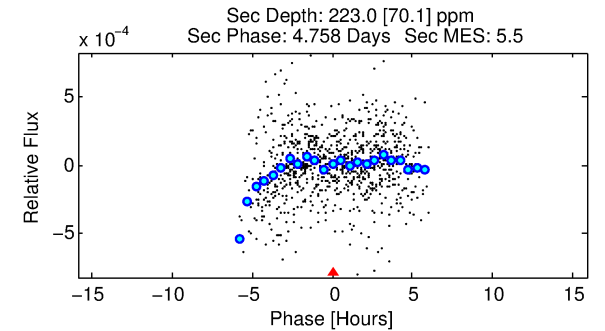
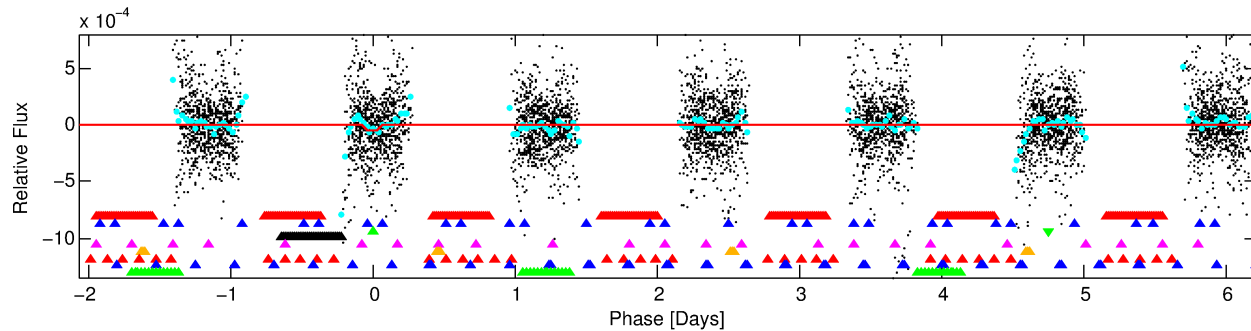
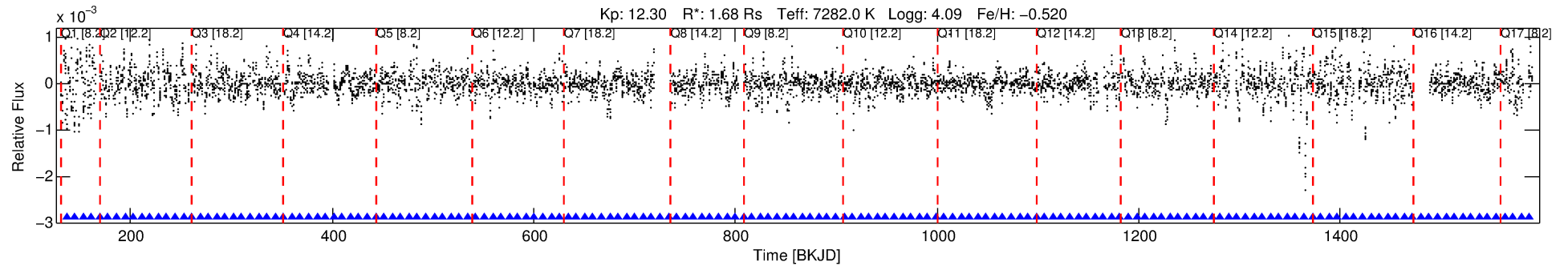
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007597150-03

No Significant Match Found

DV One-Page Summary

KIC: 7597150 Candidate: 3 of 9 Period: 8.294 d



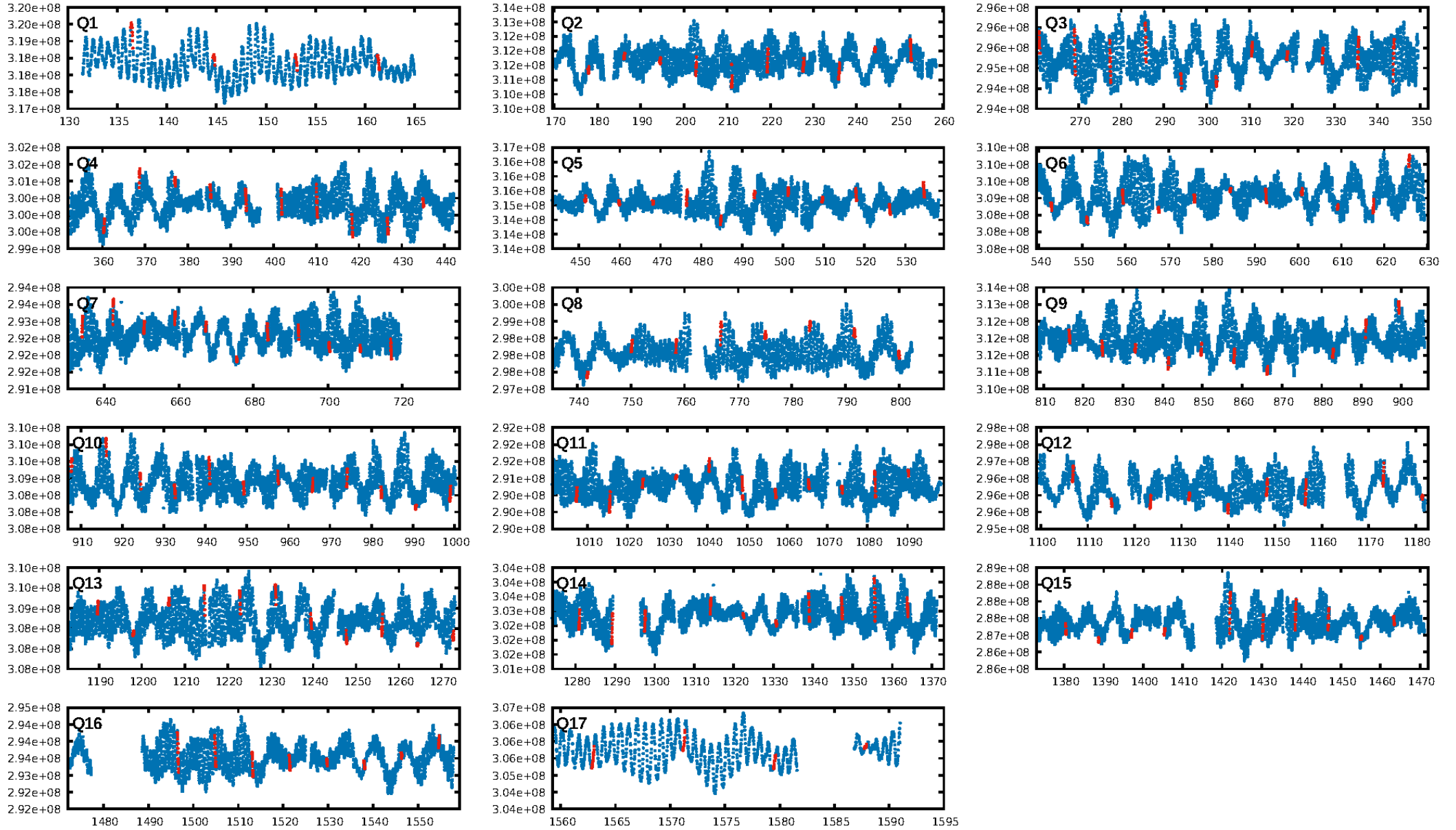
DV Fit Results:

Period = 8.29357 [0.00033] d
Epoch = 136.4513 [0.0256] BKJD
Rp/R* = 0.0070 [0.0102]
a/R* = 10.57 [97.15]
b = 0.91 [1.84]
Seff = 949.80 [410.12]
Teq = 1416 [153] K
Rp = 1.29 [1.91] Re
a = 0.0867 [0.0221] AU
Ag = 553.71 [1638.81] [0.34σ]
Teffp = 10617 [7794] K [1.18σ]

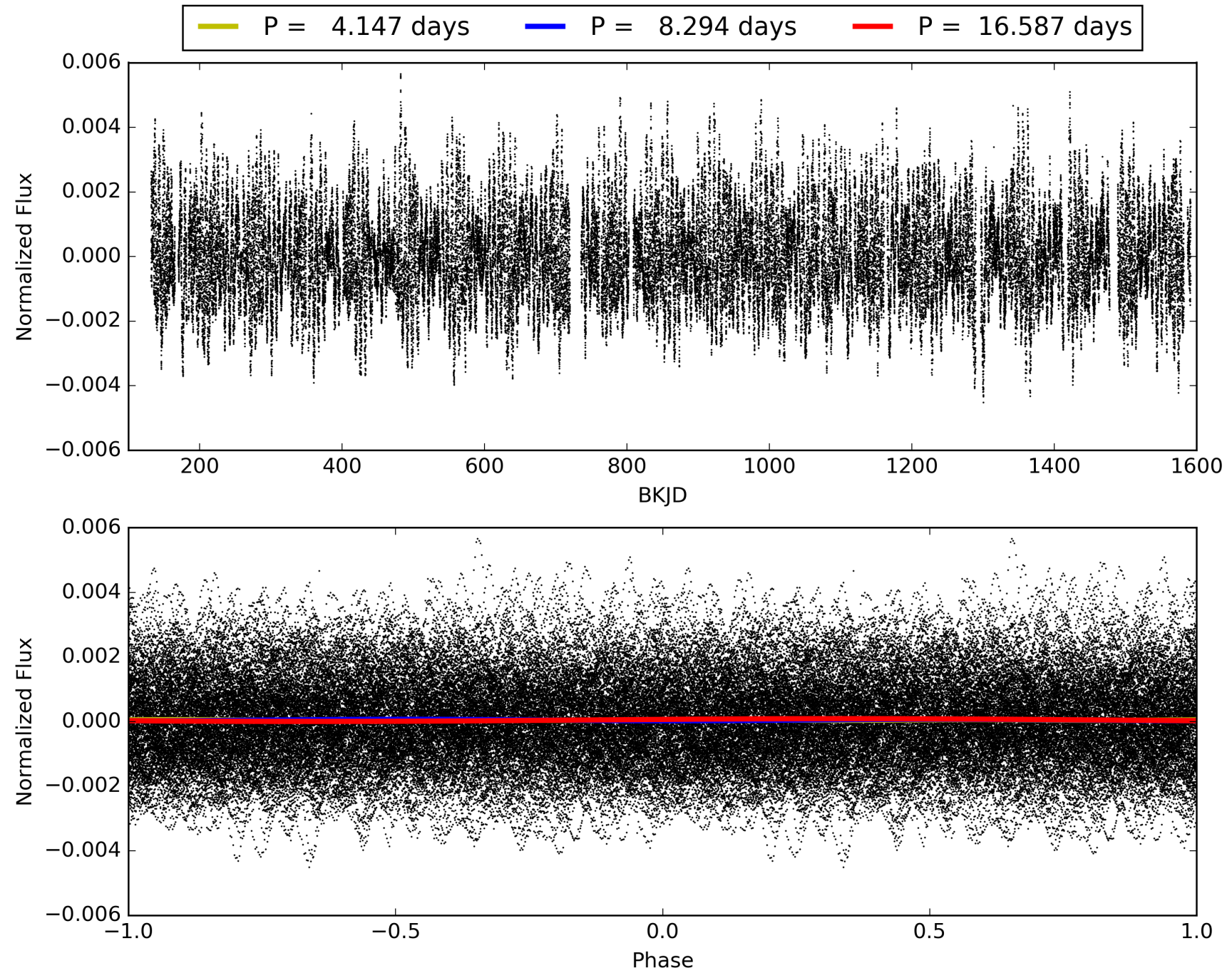
DV Diagnostic Results:

ShortPeriod-sig: 1.3% [0.02σ]
LongPeriod-sig: 100.0% [87.36σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [93/93]
GhostDiagnostic-chr: -0.3777
Centroid-sig: 95.9%
Centroid-so: 0.126 arcsec [0.14σ]
OotOffset-rm: 0.050 arcsec [0.32σ]
KicOffset-rm: 0.103 arcsec [0.60σ]
OotOffset-st: 4/3/4/5 [16]
KicOffset-st: 4/3/4/5 [16]
DiffImageQuality-fgm: 0.38 [6/16]
DiffImageOverlap-fno: 0.47 [8/17]

TCE 007597150-03, PDC Light Curves

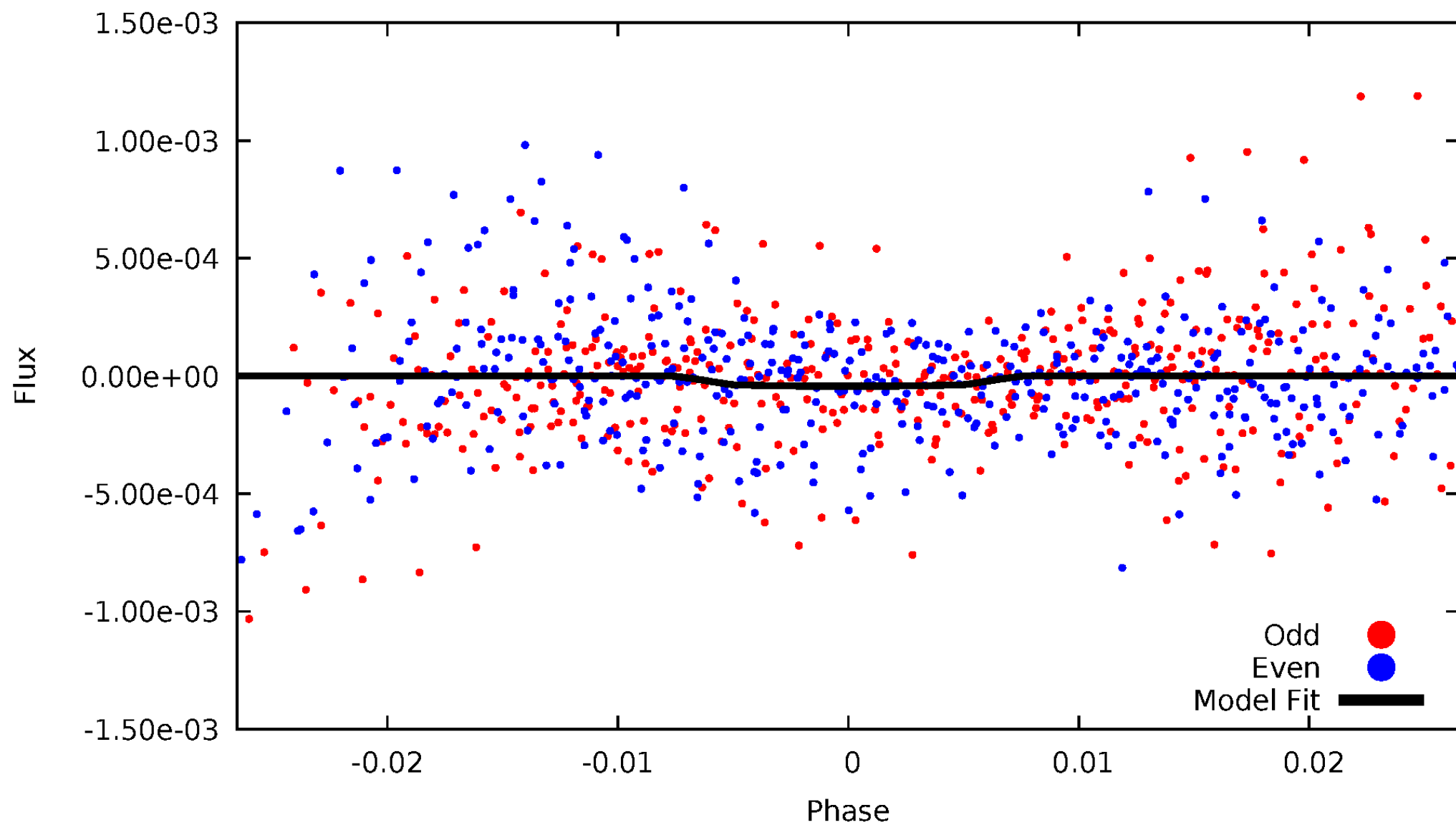


TCE 007597150-03



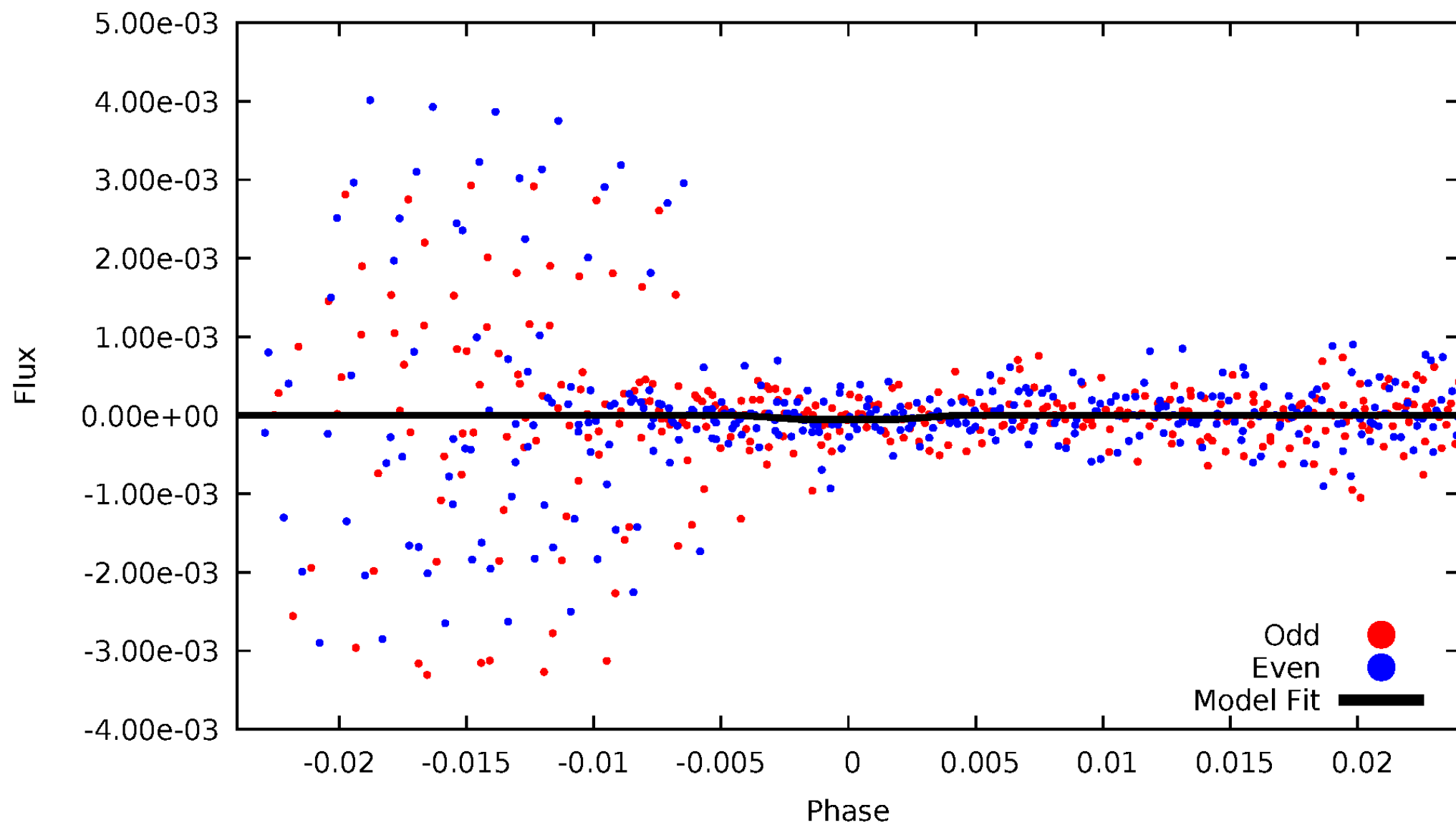
DV Odd/Even

TCE 007597150-03



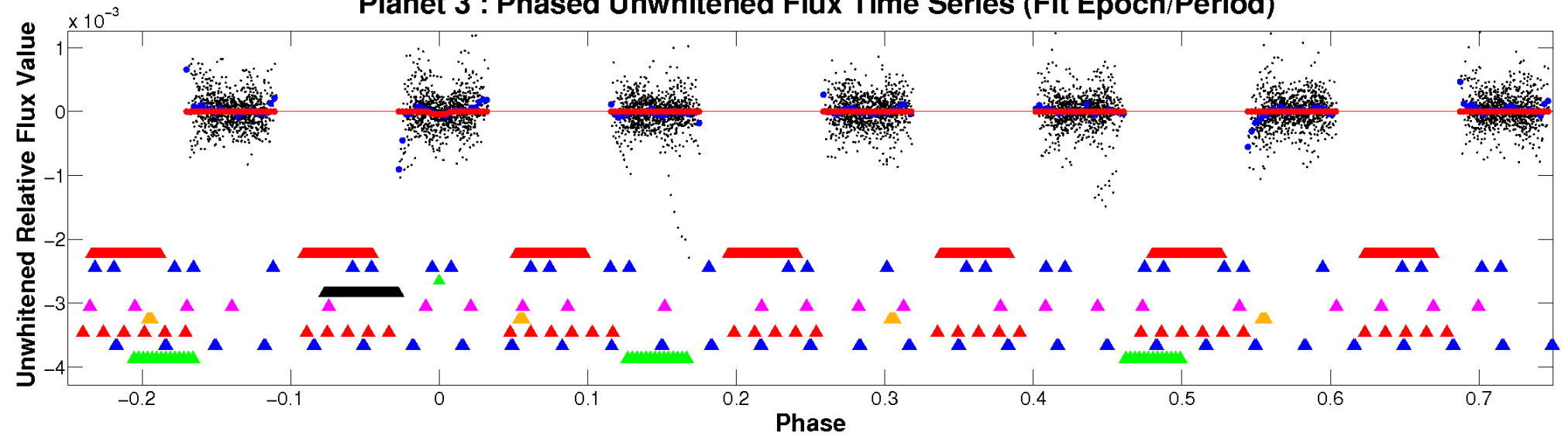
ALT Odd/Even

TCE 007597150-03

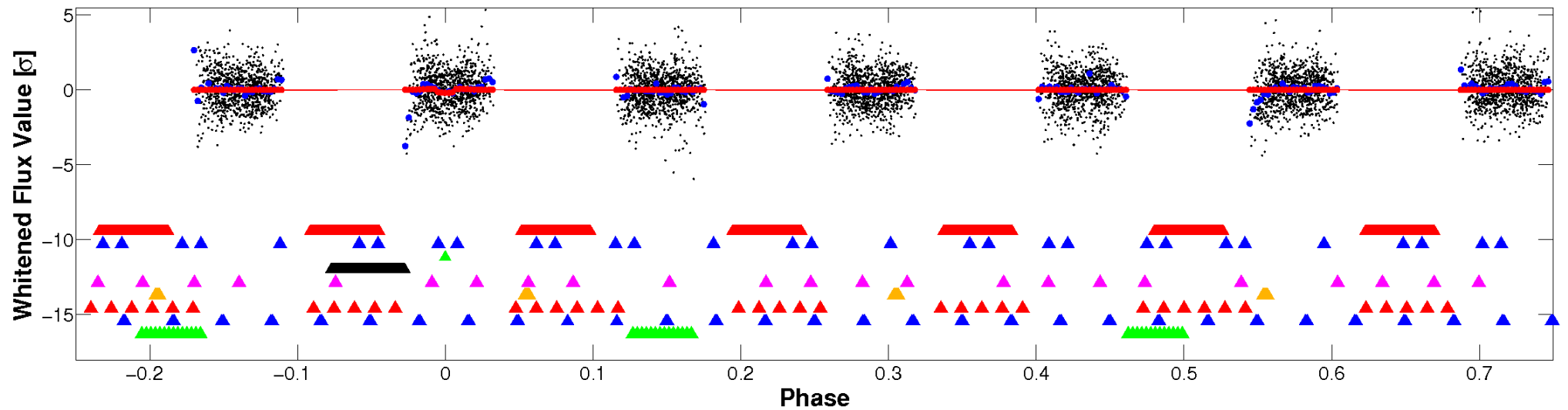


Non-Whitened Vs. Whitened Light Curve

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

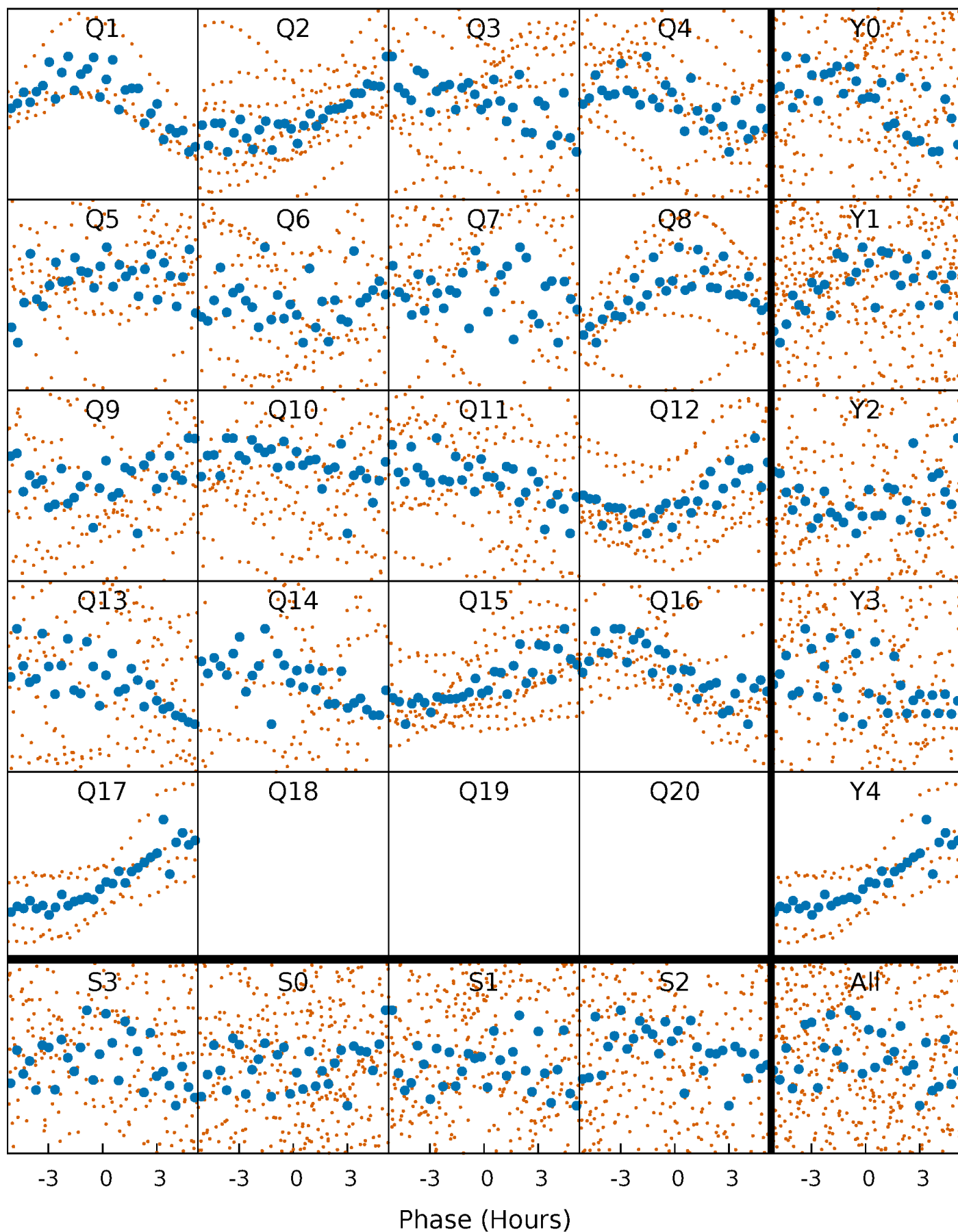


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



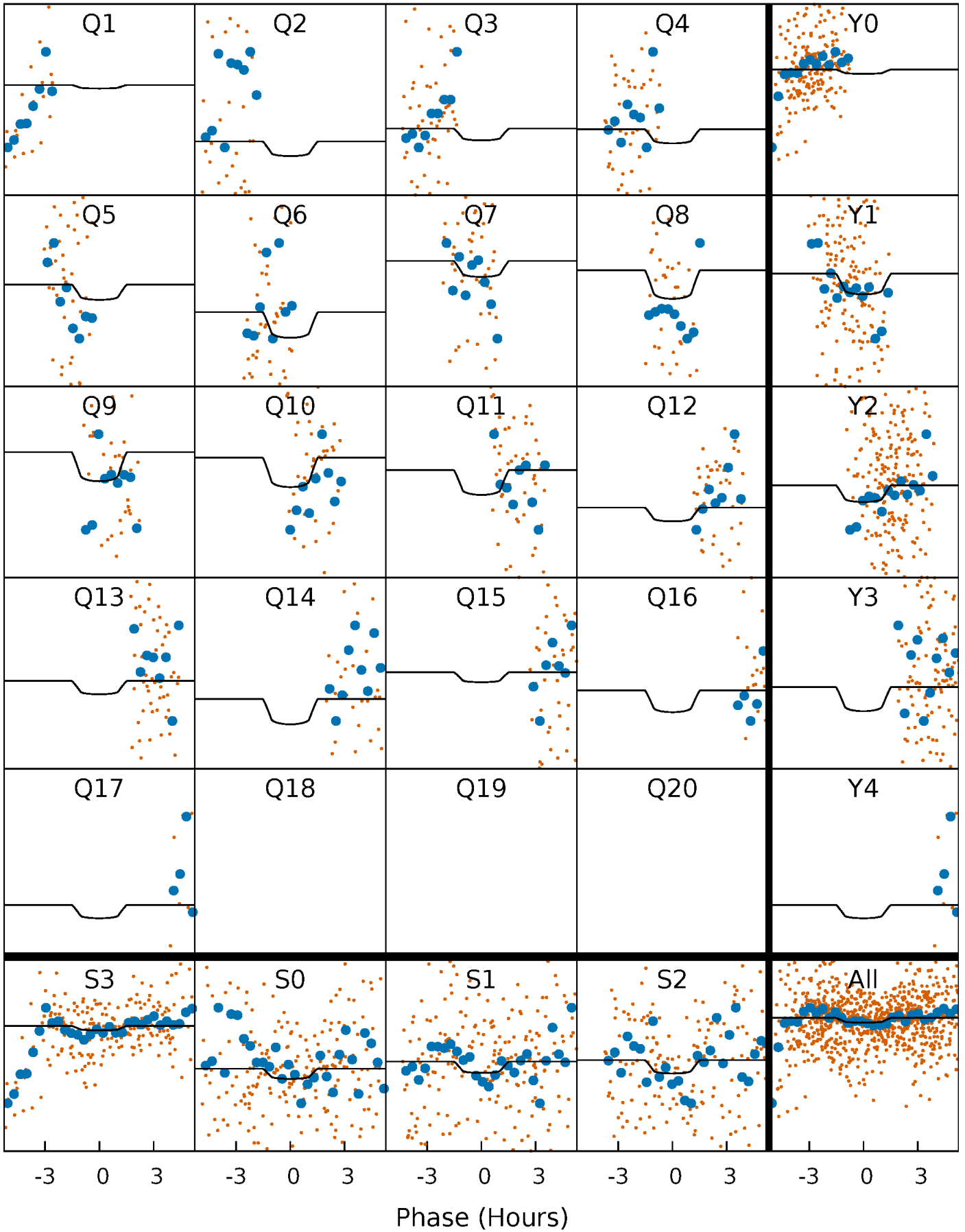
PDC Quarter-Phased Transit Curves

TCE 007597150-03 P= 8.293566 Days $T_0=136.451345$ (BKJD)



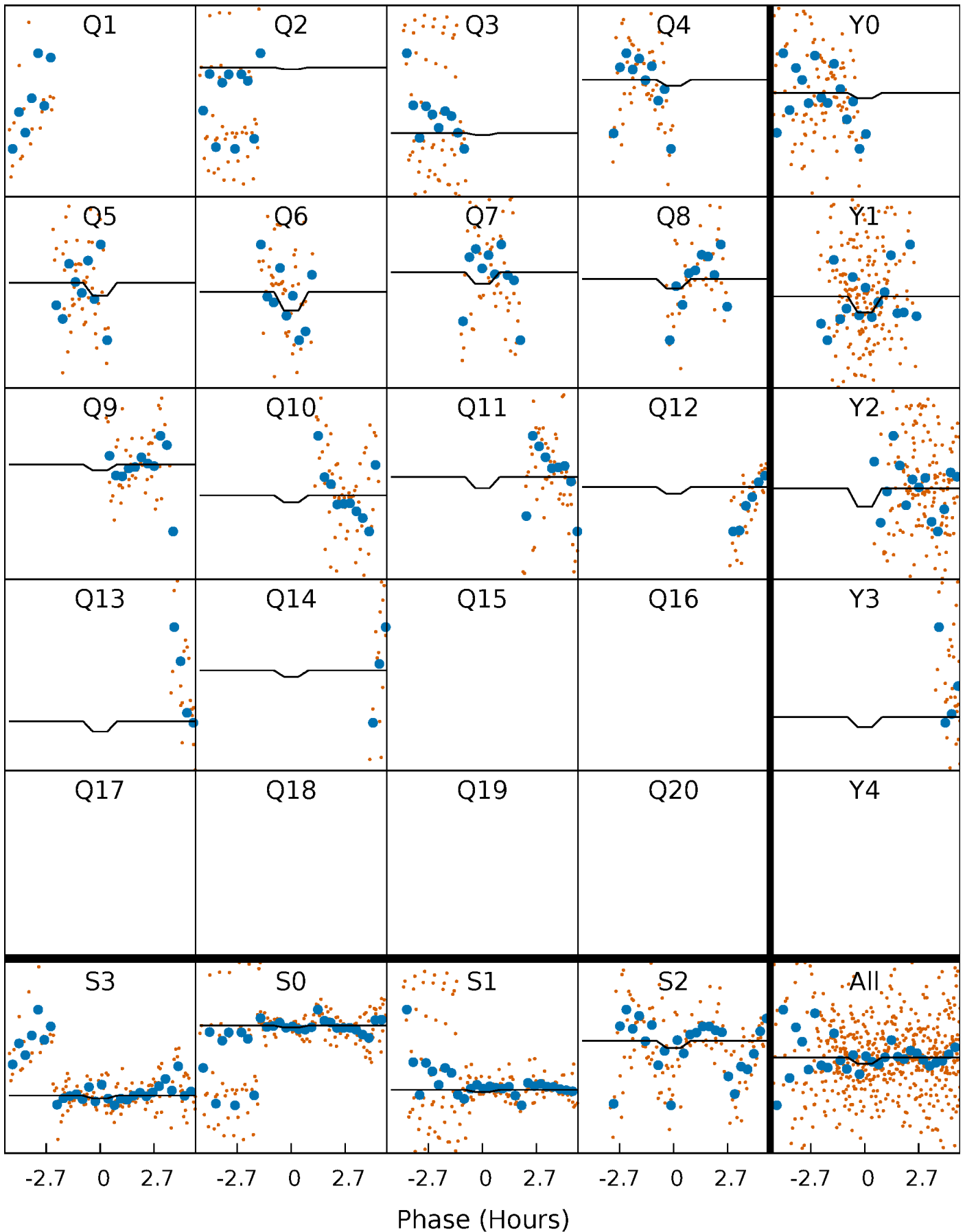
DV Quarter-Phased Transit Curves

TCE 007597150-03 $P = 8.293566$ Days $T_0 = 136.451345$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

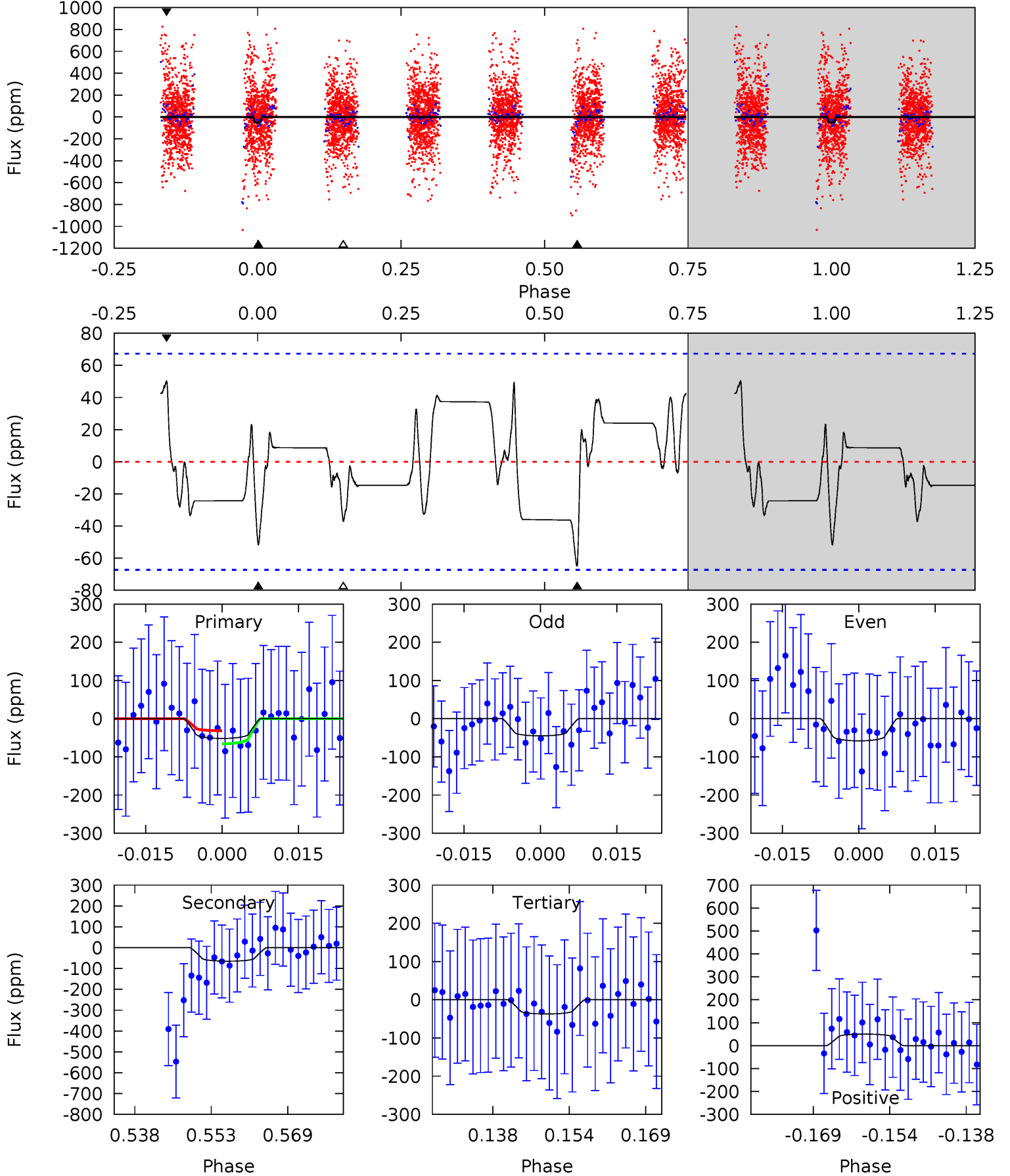
TCE 007597150-03 P= 8.293050 Days $T_0=136.442202$ (BKJD)



DV Model-Shift Uniqueness Test

007597150-03, P = 8.293566 Days, E = 128.157779 Days

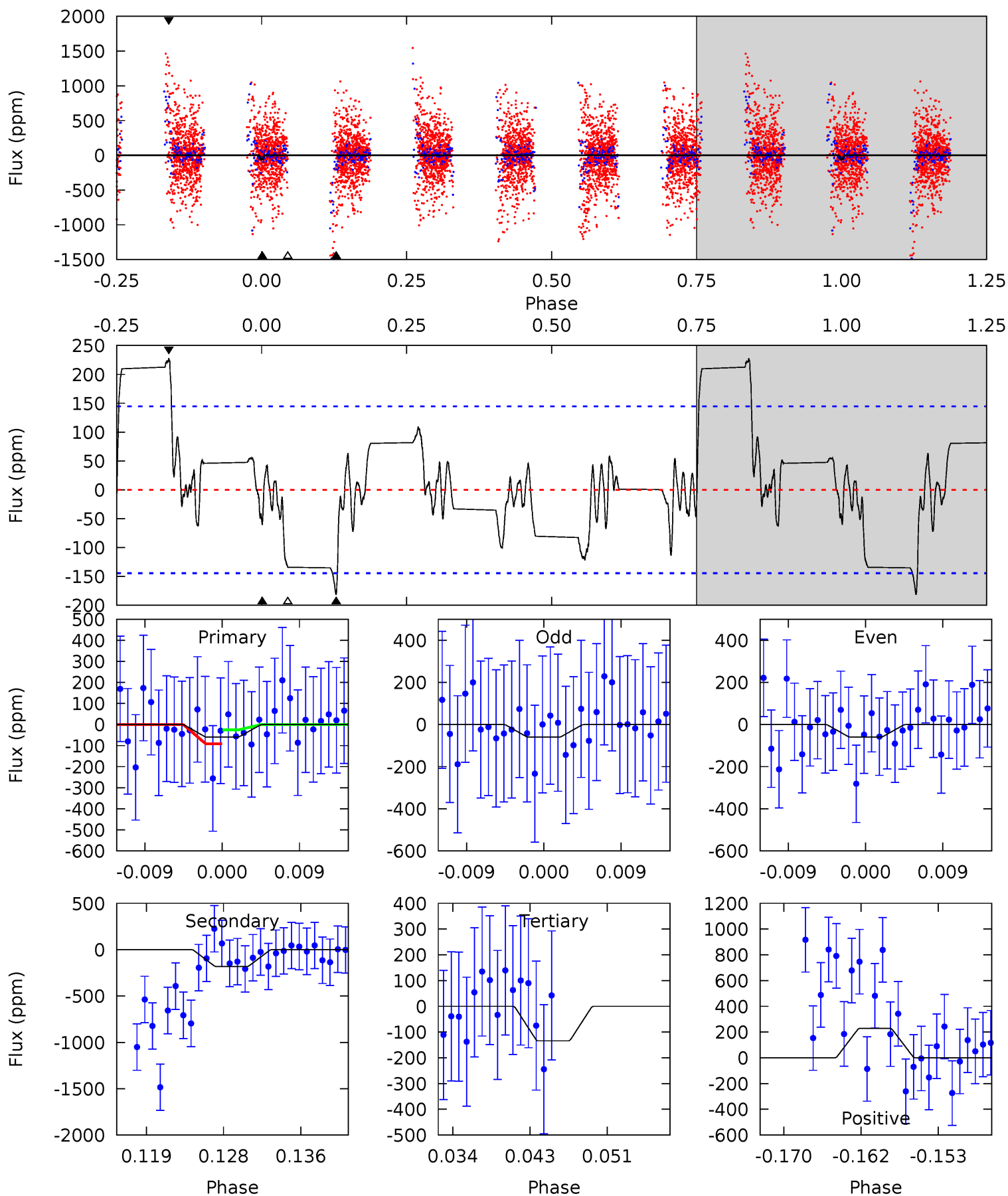
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.79	4.77	2.73	3.69	4.94	2.42	1.52	1.07	0.11	2.04	1.08	0.48	1.82	0.44	1.27



Alt Model-Shift Uniqueness Test

007597150-03, P = 8.293050 Days, E = 128.149152 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.09	6.37	4.69	7.97	5.06	2.63	1.73	-2.61	-5.88	1.67	-1.60	0.01	1.92	0.56	1.19



Stellar Parameters For KIC 007597150

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7282^{+233}_{-285}	$4.087^{+0.234}_{-0.156}$	$-0.520^{+0.250}_{-0.300}$	$1.683^{+0.458}_{-0.458}$	$1.260^{+0.196}_{-0.161}$	$0.372^{+0.467}_{-0.169}$
	+3%/-4%	+6%/-4%	+48%/-58%	+27%/-27%	+16%/-13%	+125%/-45%
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 007597150-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-65 ± 14	$1.83^{+1.84}_{-1.16}$	1950^{+157}_{-159}	6210^{+5948}_{-1571}	76^{+538}_{-57}
Alt.	-182 ± 29	$1.86^{+1.71}_{-1.24}$	1953^{+147}_{-152}	8281^{+13089}_{-2376}	208^{+1625}_{-150}

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

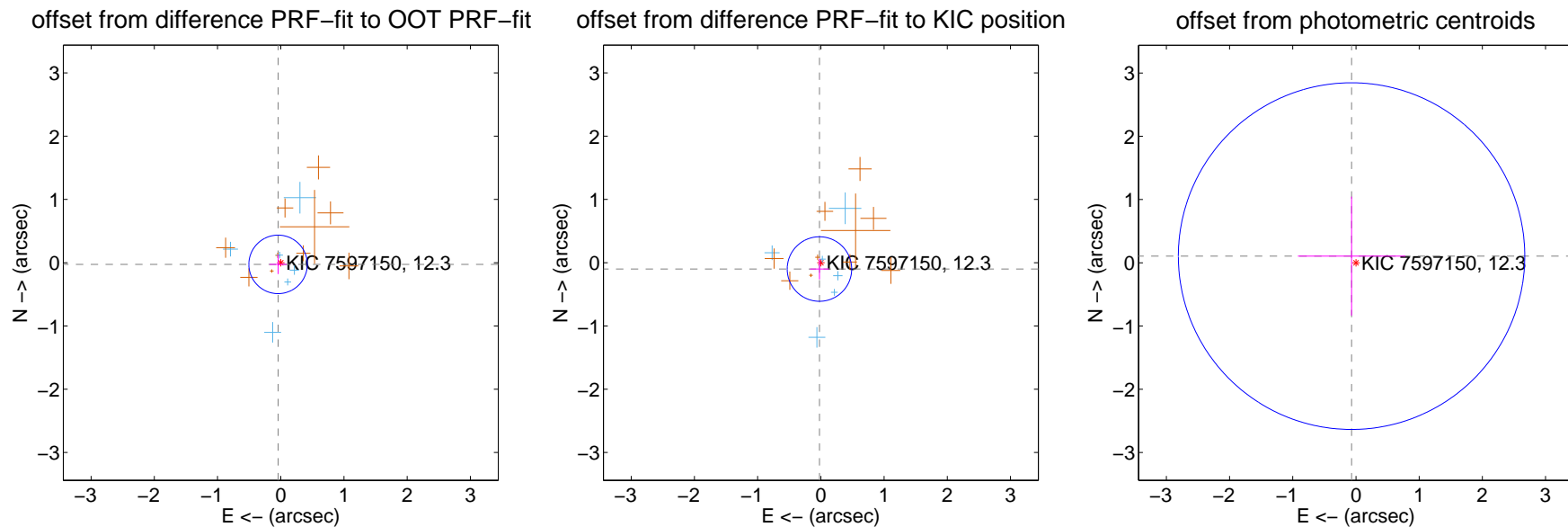
DV Centroid Data

Supplemental centroid analysis for 007597150-03. Kepler magnitude: 12.30. Transit SNR 2.88

There are 6 quarters with good PRF difference image offsets

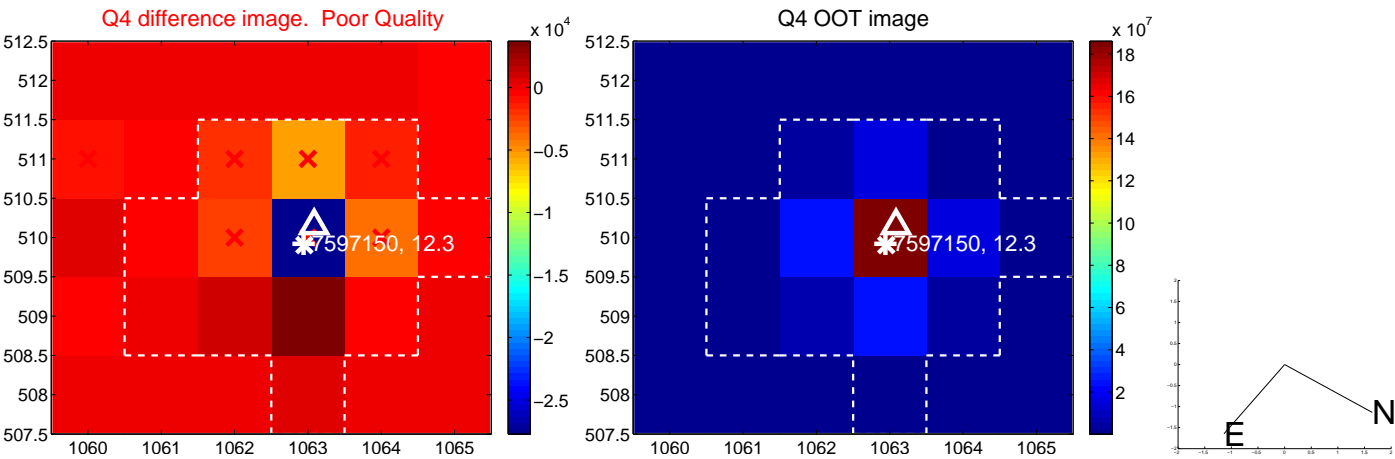
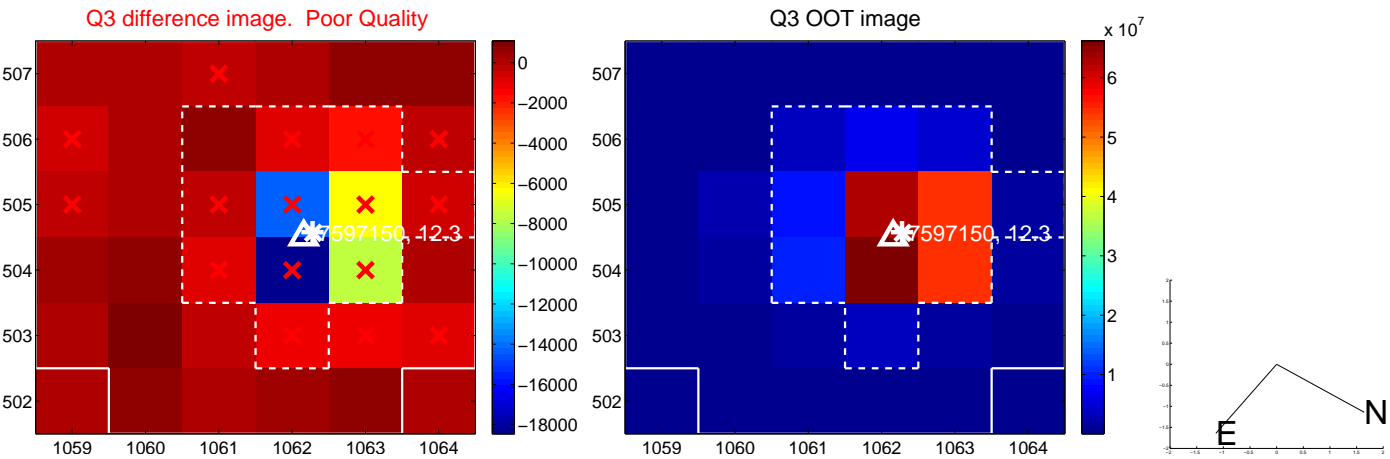
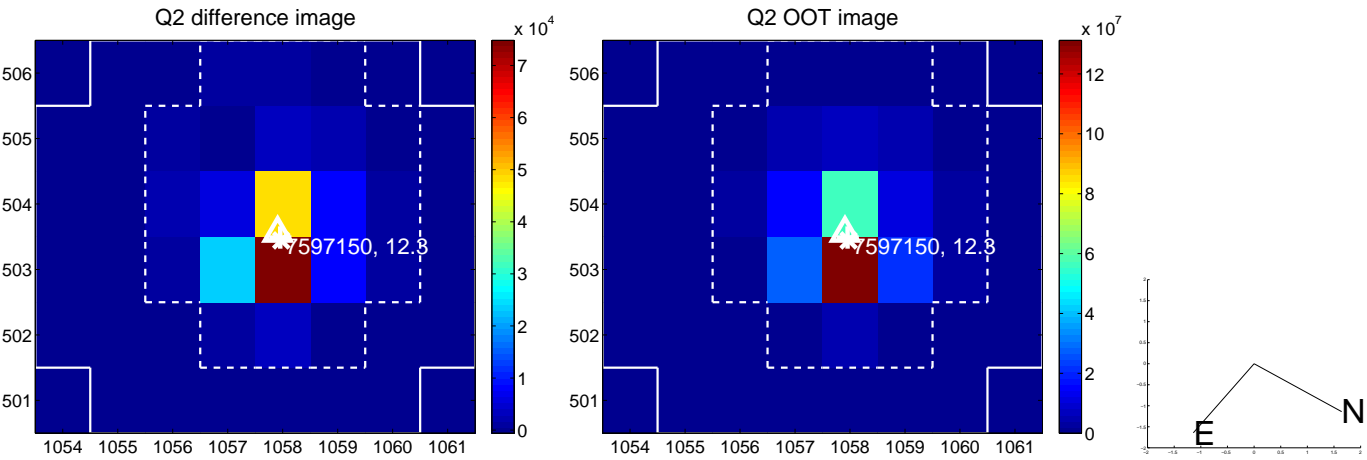
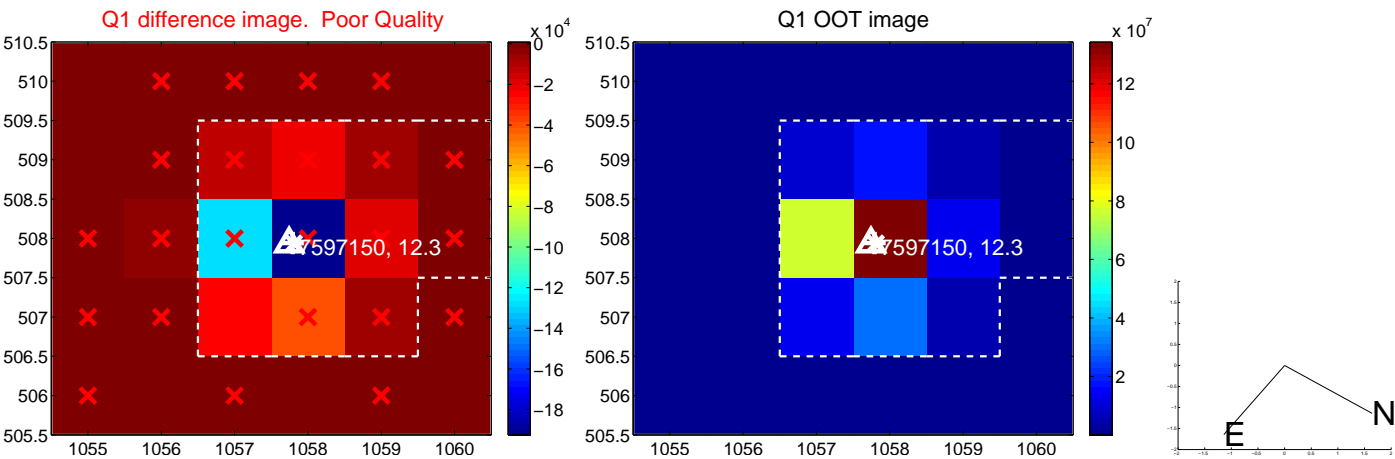
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.050 ± 0.154	0.32	0.042 ± 0.136	-0.027 ± 0.153
PRF-fit source offset from KIC position	0.103 ± 0.170	0.60	0.022 ± 0.150	-0.100 ± 0.164
photometric centroid source offset	0.13 ± 0.91	0.14	0.07 ± 0.85	0.11 ± 0.94

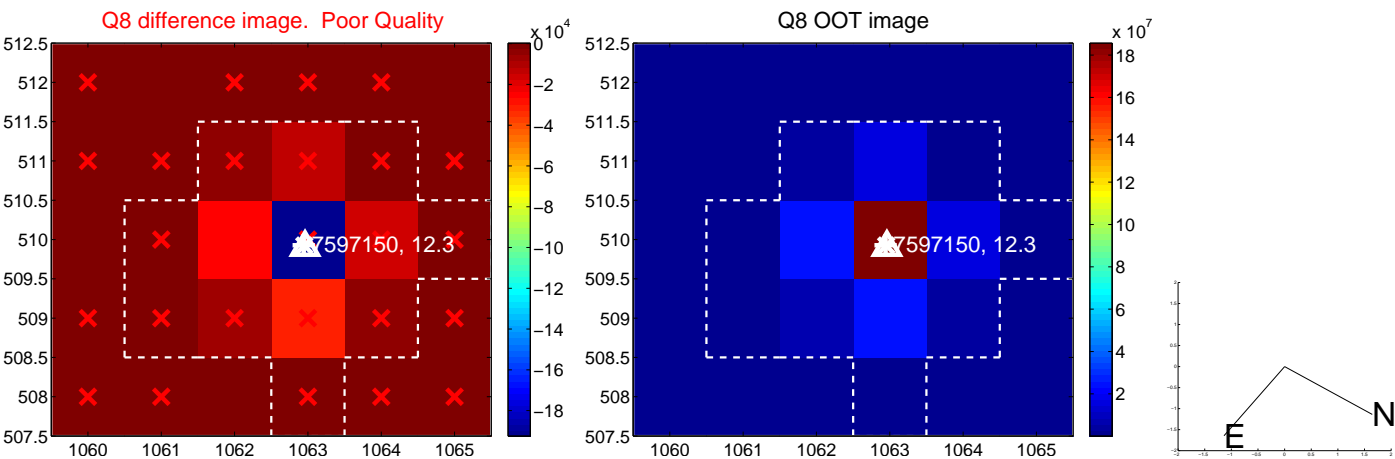
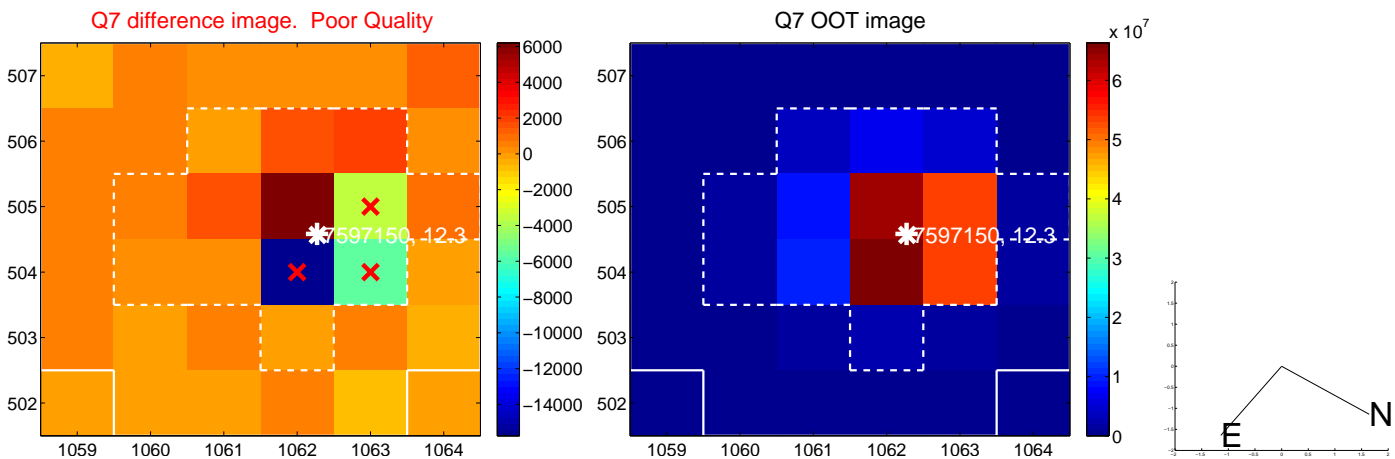
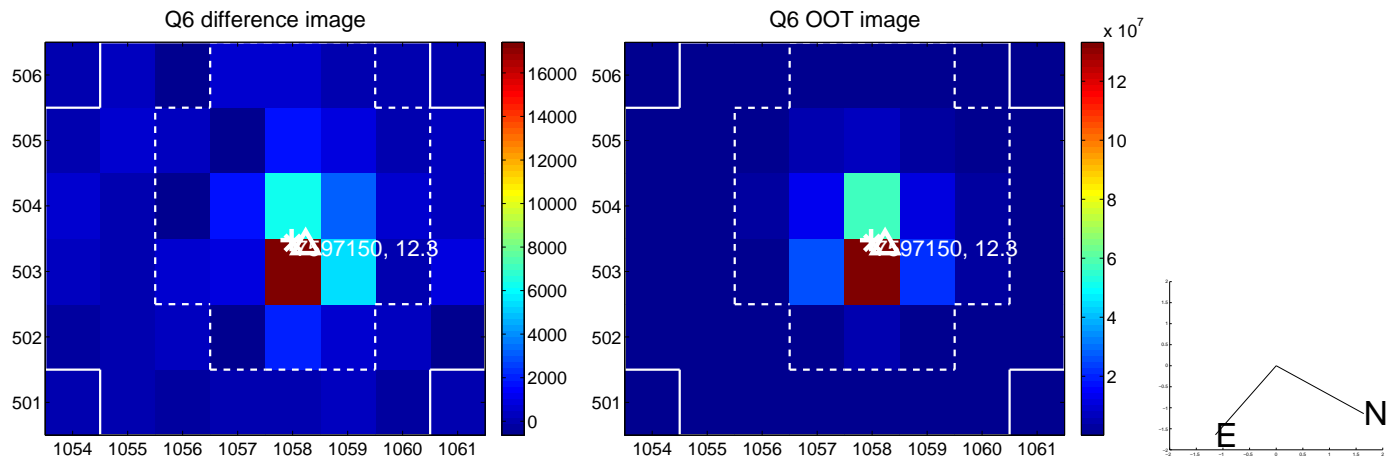
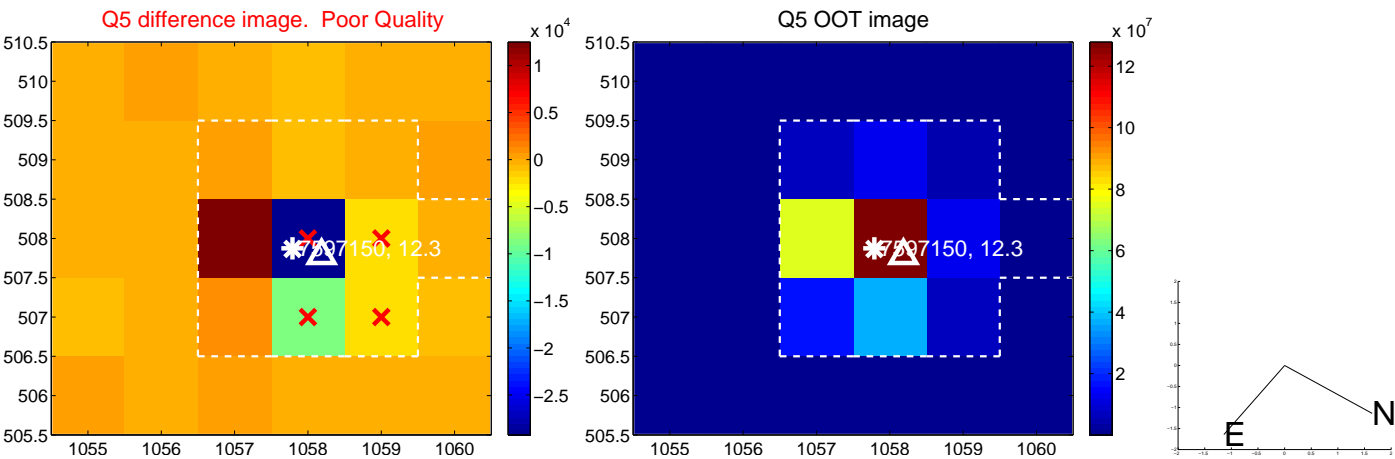


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

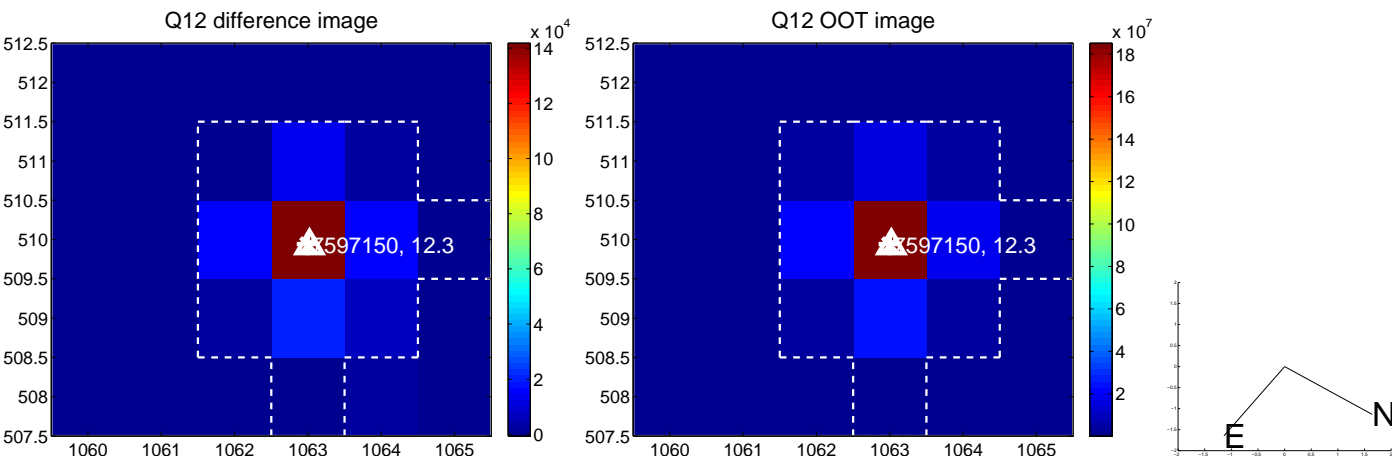
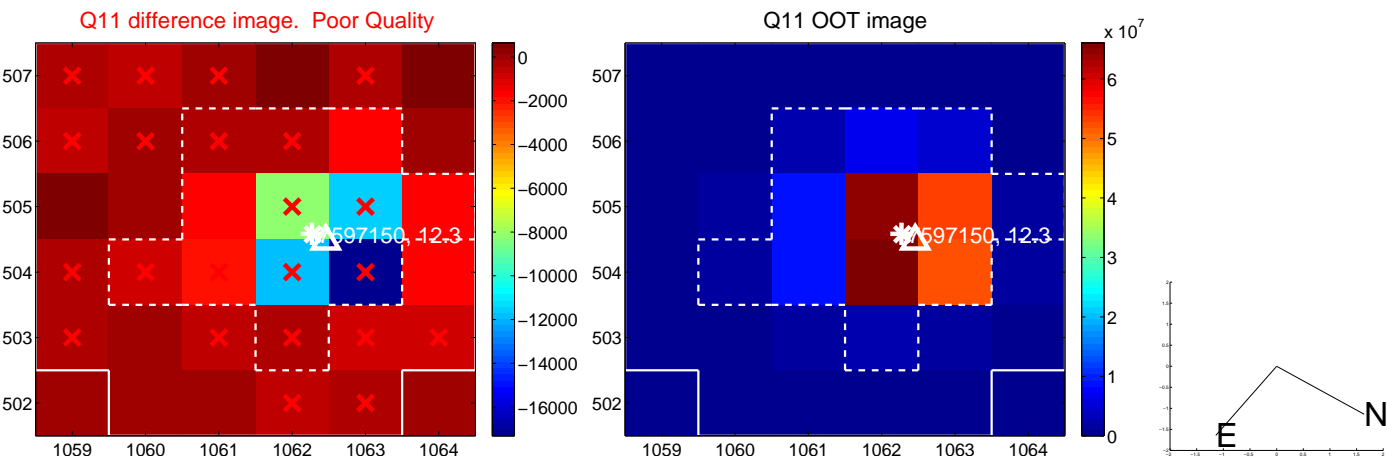
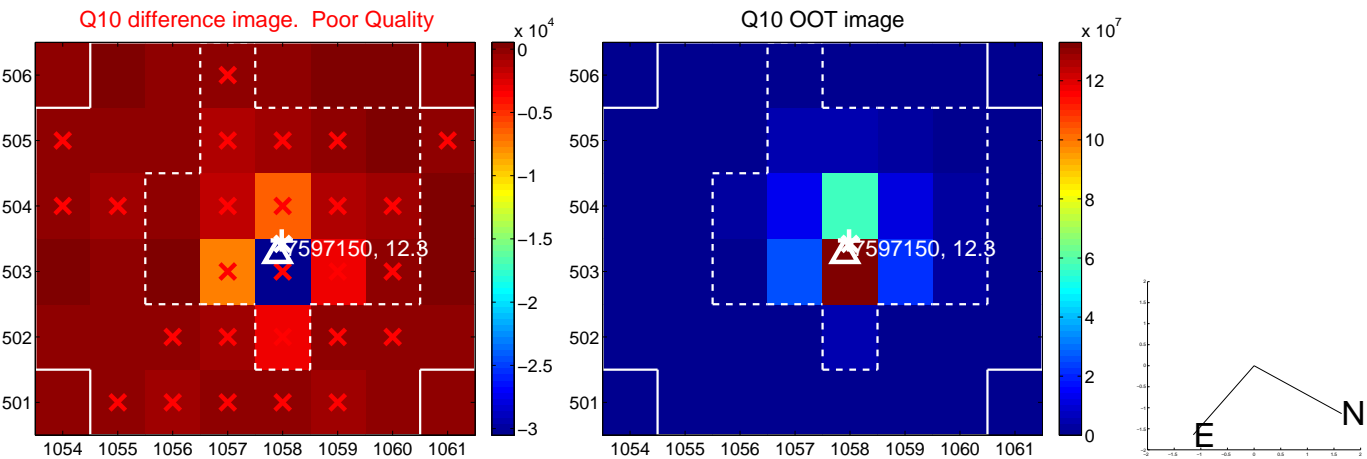
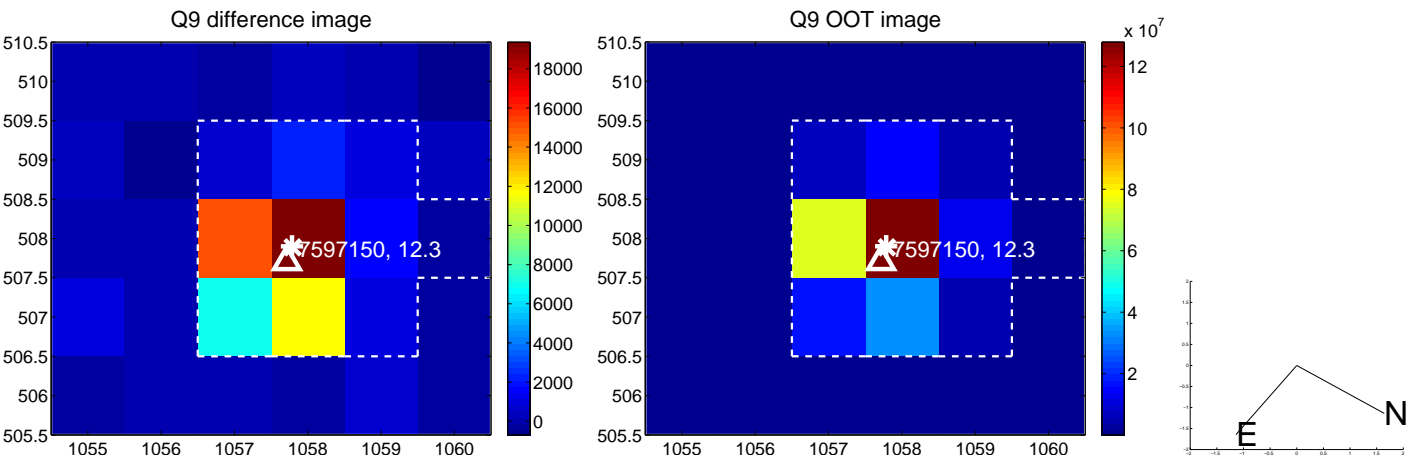
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



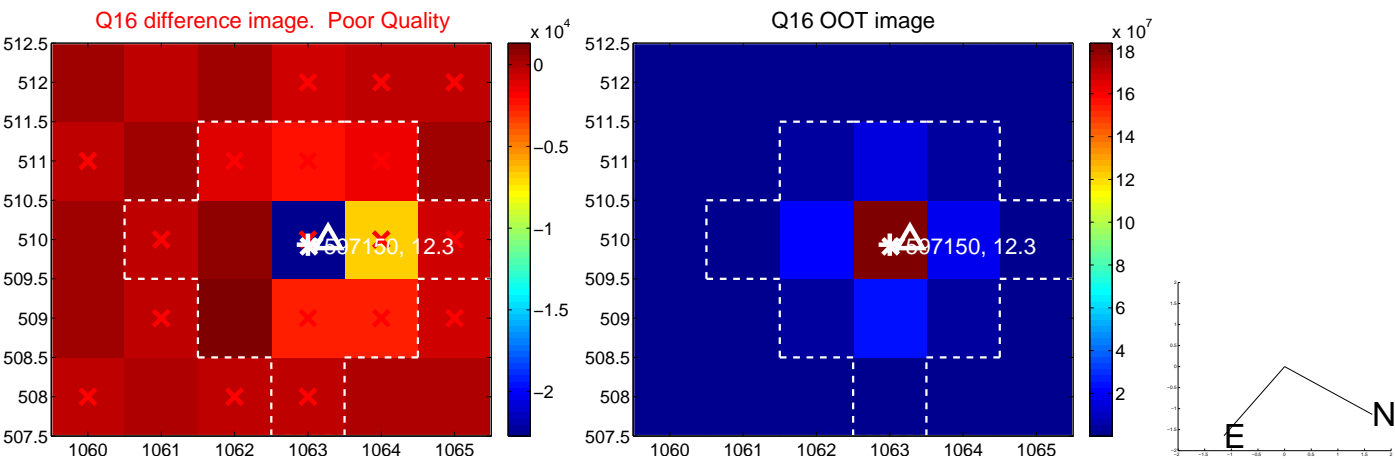
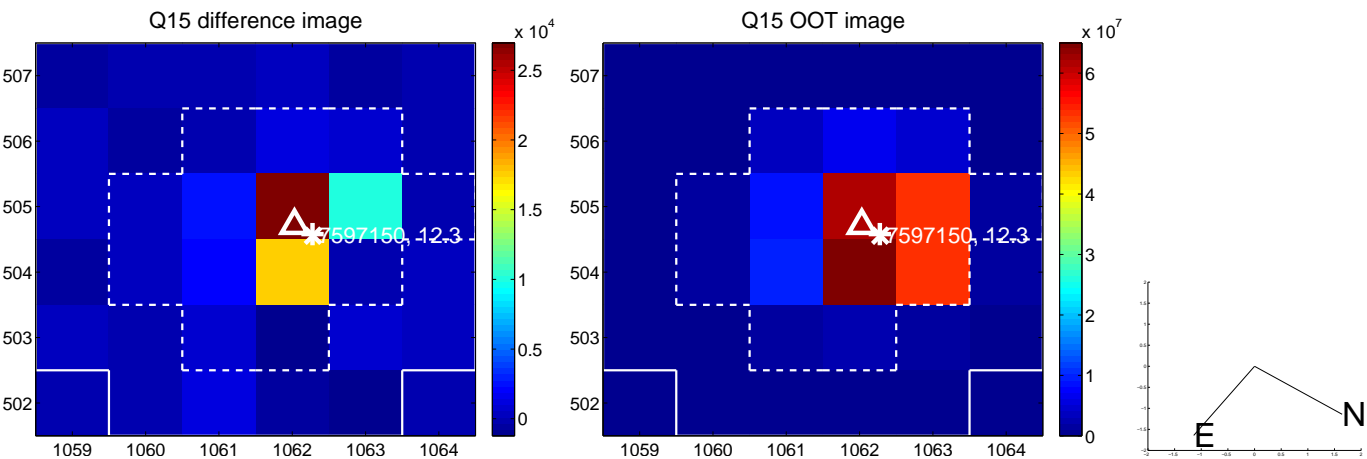
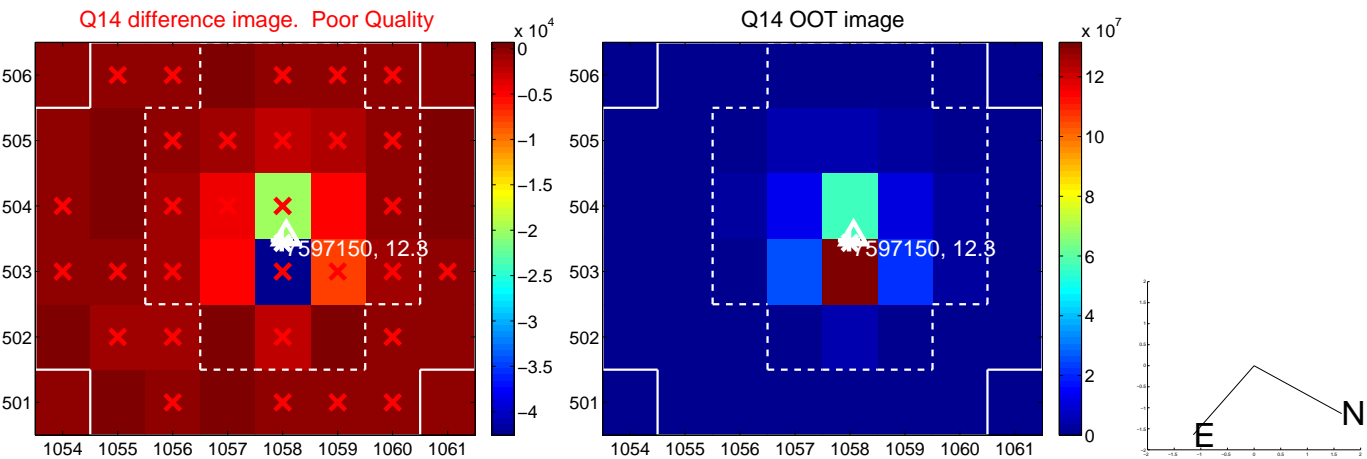
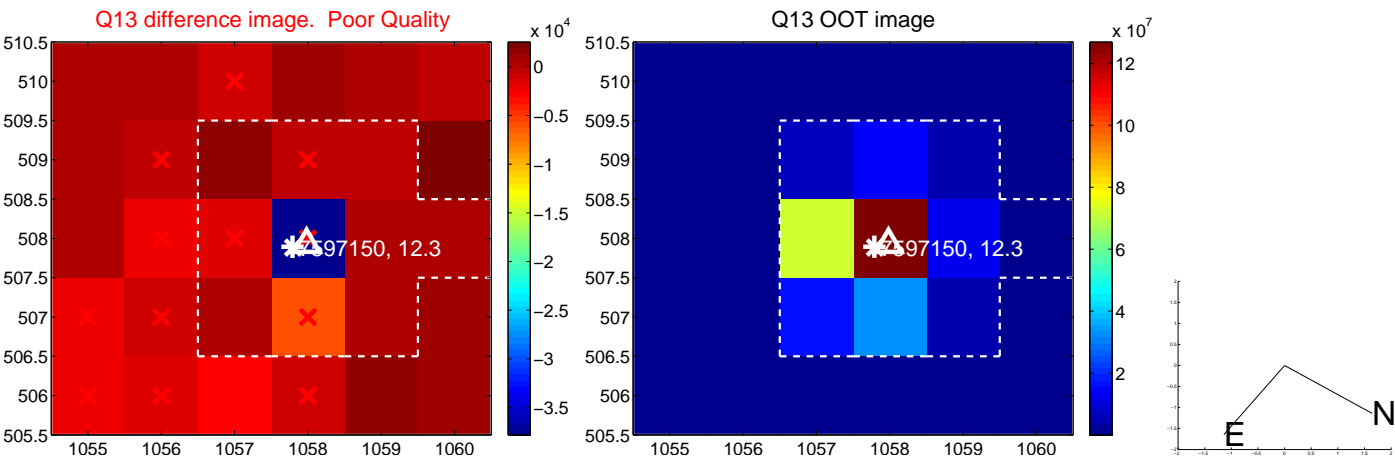
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



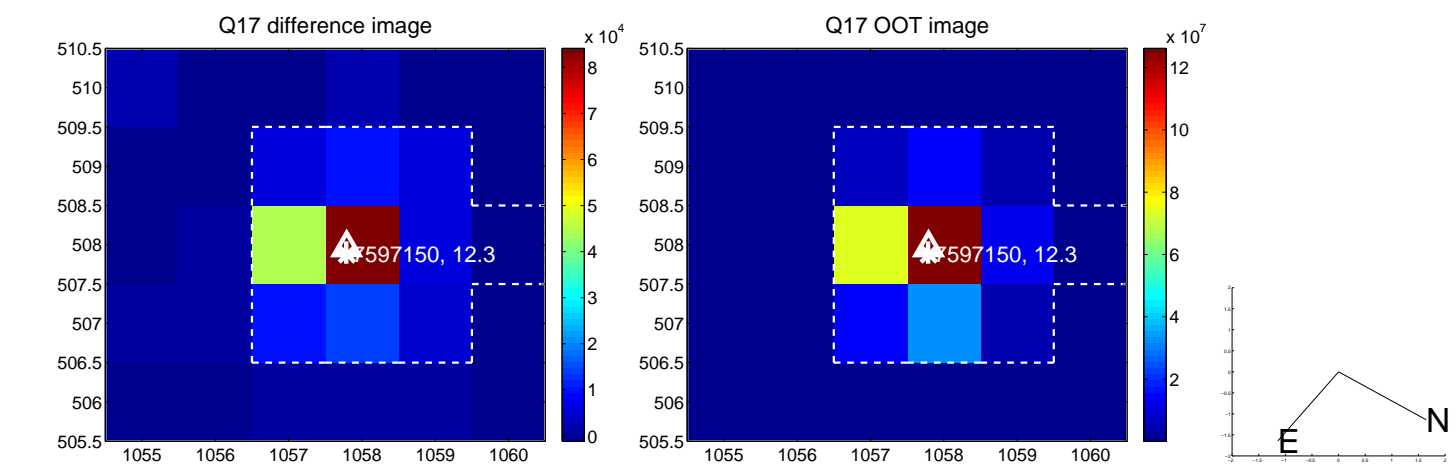
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



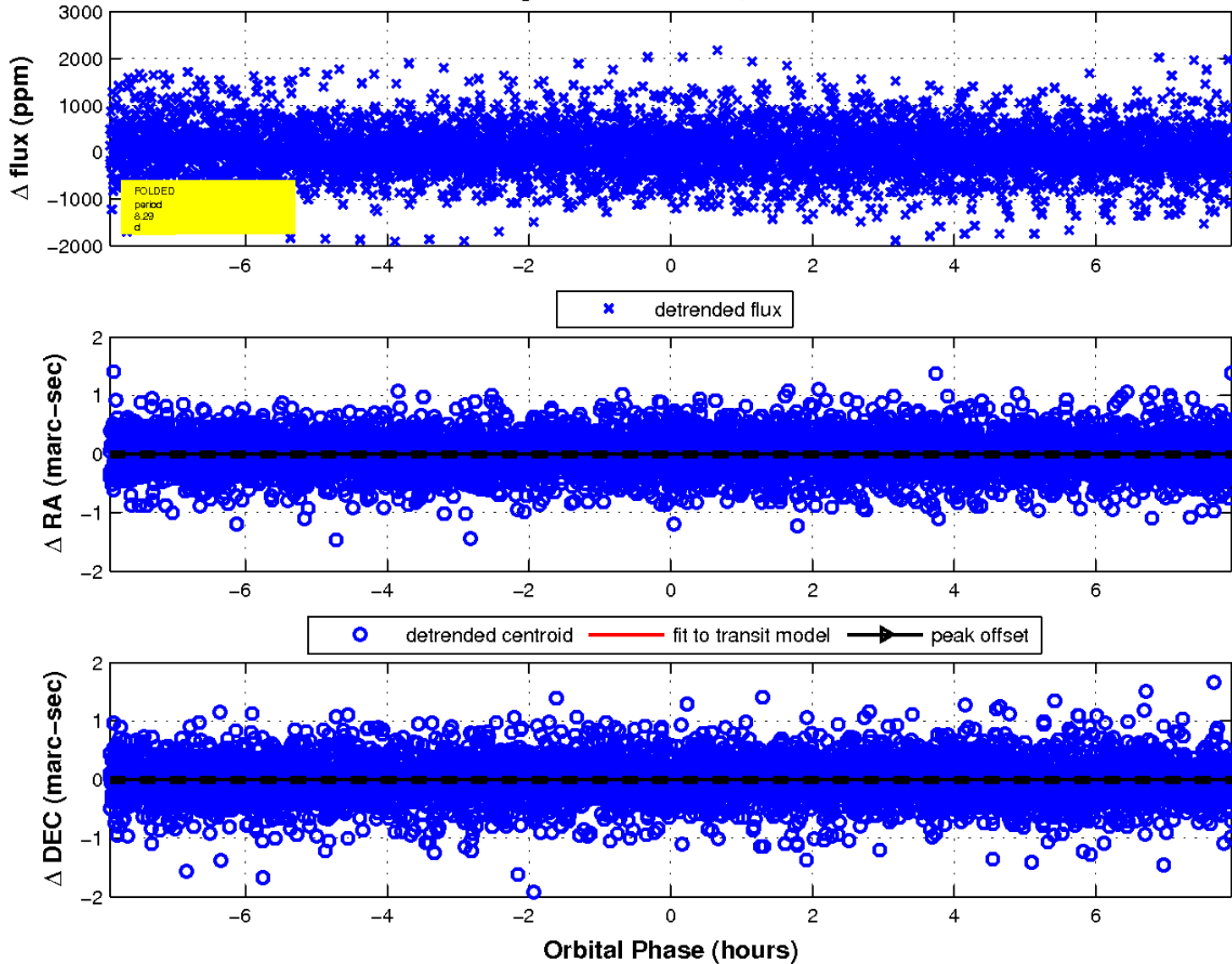
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

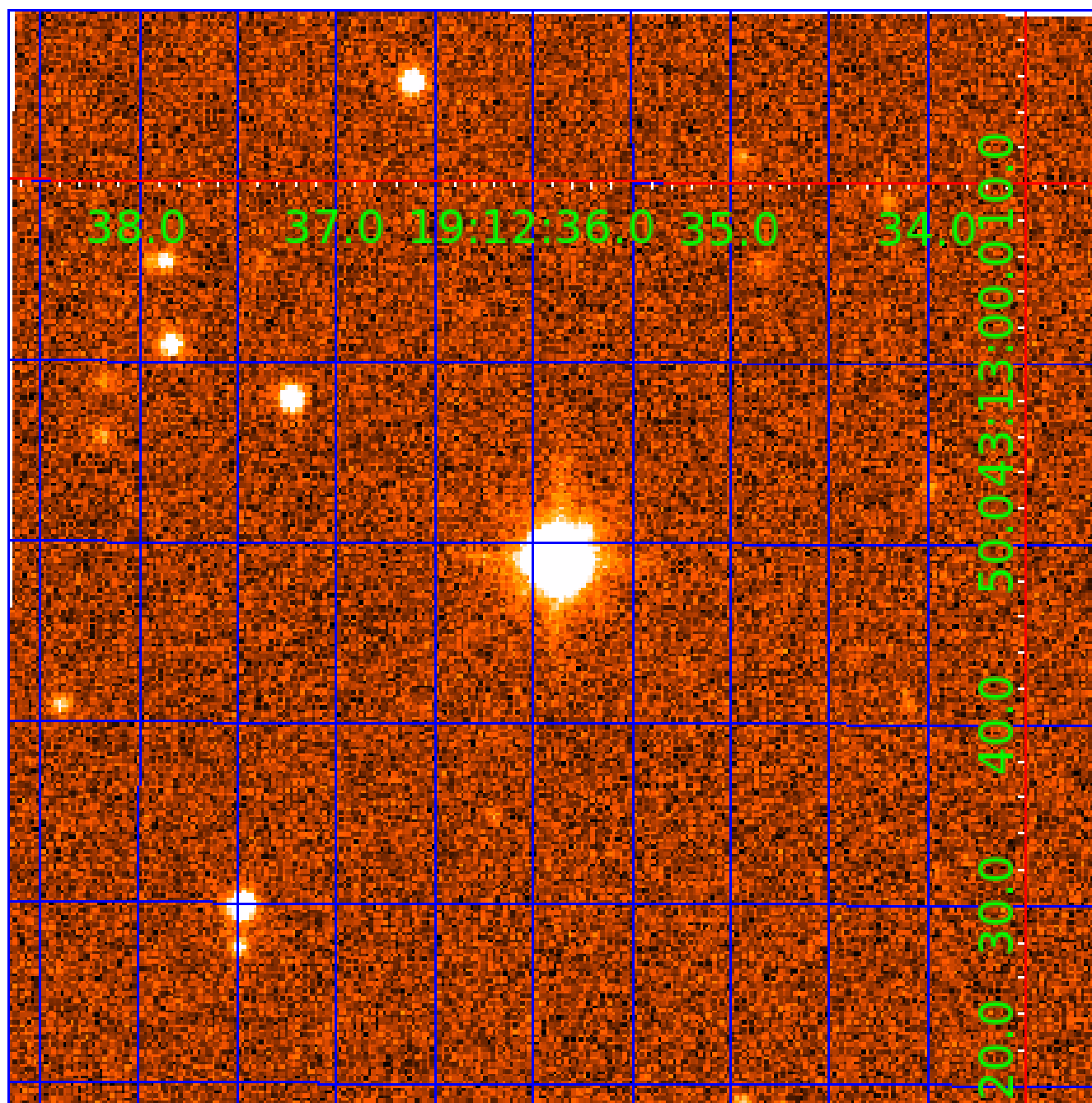


fluxWeightedCentroids, Planet 3 of 9



UKIRT Image

Declination



KIC 007597150

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})
007597150-01	OBS	No	1.185112	132.137440	0.2	8.394	7.9	0.1	1.68	7282	0.08	12713.76
007597150-02	OBS	No	47.328333	177.880517	497.2	4.895	10.5	9.0	1.68	7282	4.32	93.14
007597150-03	OBS	No	8.293566	136.451345	43.3	2.639	10.1	2.9	1.68	7282	1.29	949.80
007597150-04	OBS	No	8.291193	136.224441	719.1	2.304	9.5	9.0	1.68	7282	4.69	950.16
007597150-05	OBS	No	63.139376	159.633307	625.6	1.776	9.1	8.6	1.68	7282	4.62	63.42
007597150-06	OBS	No	31.101521	149.334486	381.5	6.475	9.6	6.2	1.68	7282	6.26	163.02
007597150-07	OBS	No	39.081868	137.421010	1020.6	14.434	9.6	9.1	1.68	7282	9.72	120.22
007597150-08	OBS	No	25.156825	145.994068	159.9	3.808	9.2	3.5	1.68	7282	2.35	216.31
007597150-09	OBS	No	35.930360	143.370372	221.5	1.500	7.3	-1.0	1.68	7282	2.55	134.48

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007597150-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV
007597150-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD
007597150-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—NO_FITS—CENT_NOFITS

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

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

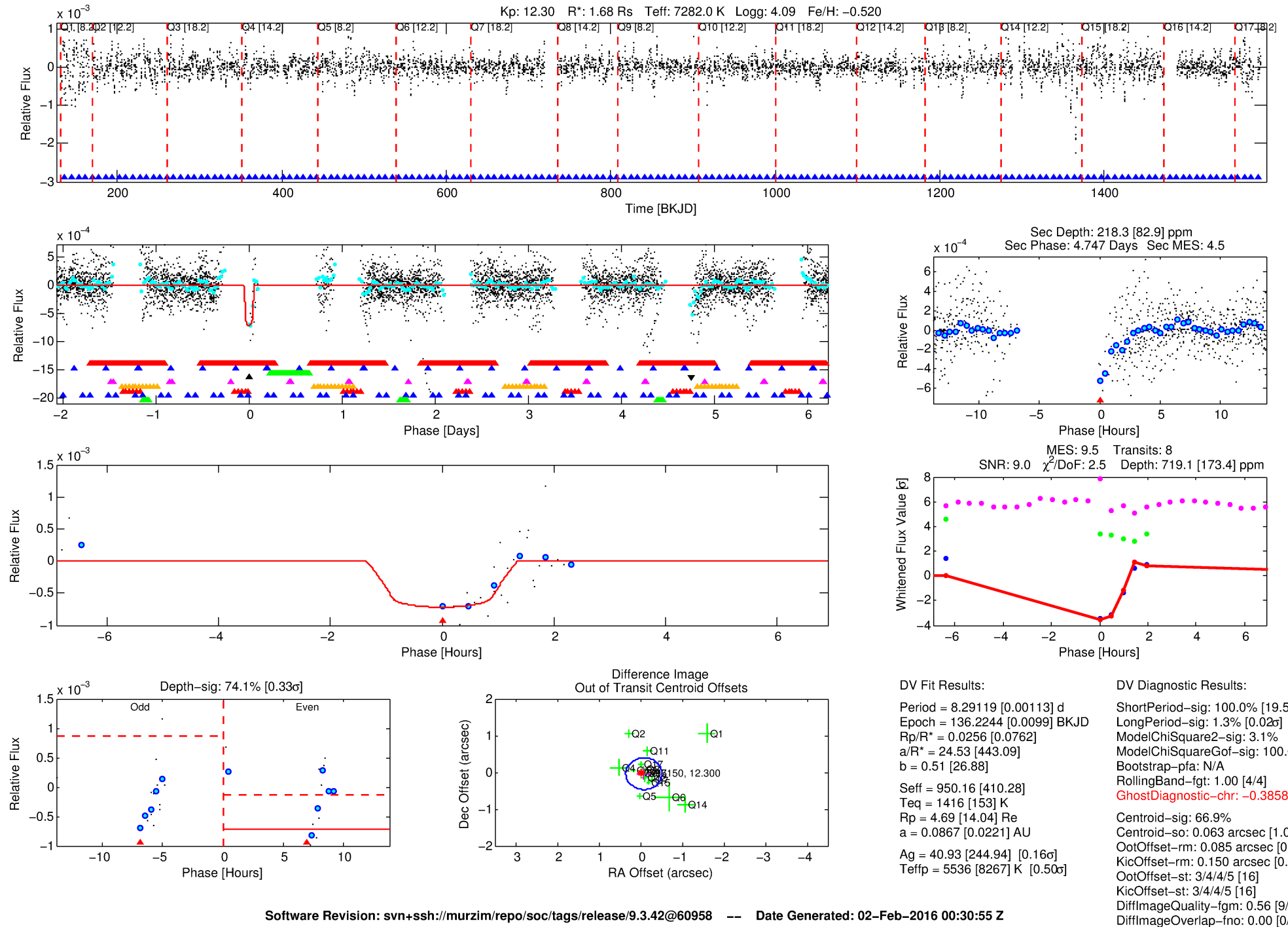
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007597150-04

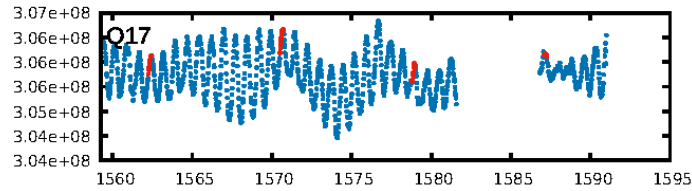
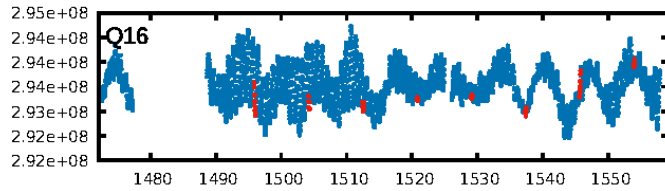
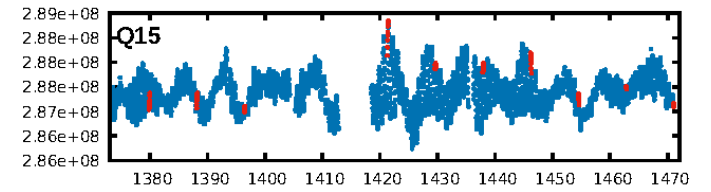
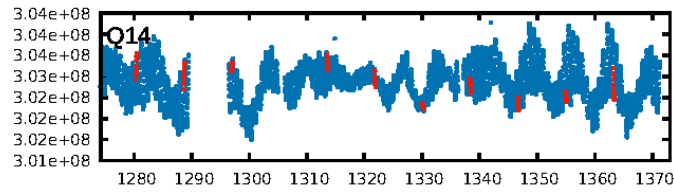
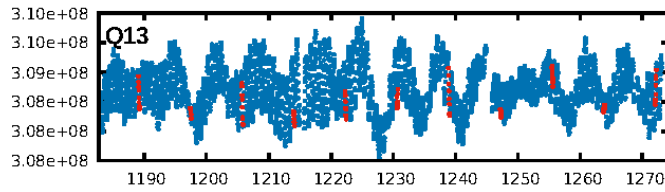
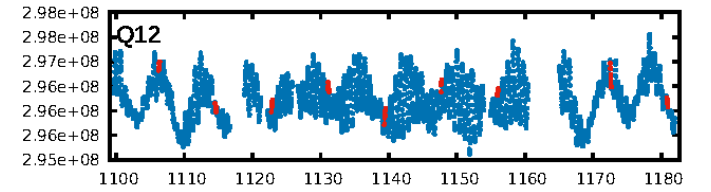
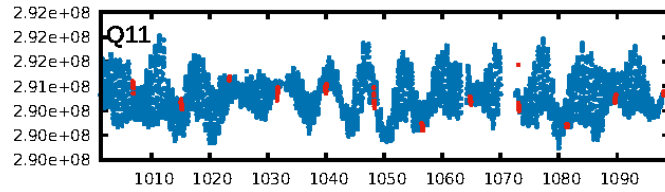
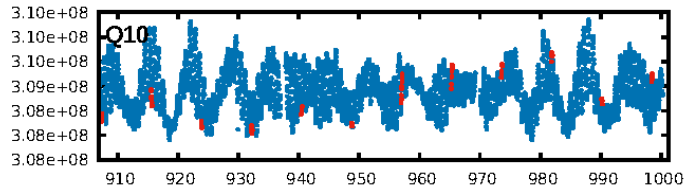
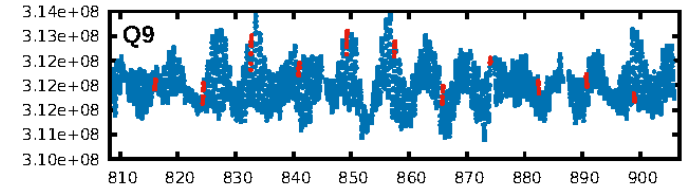
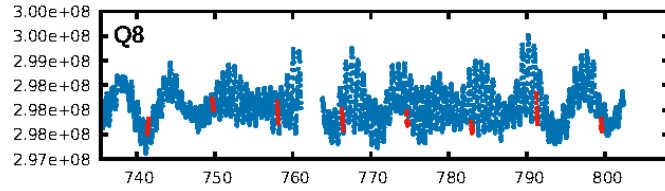
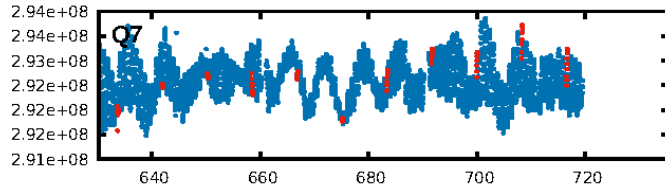
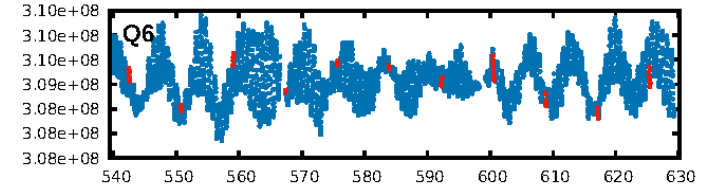
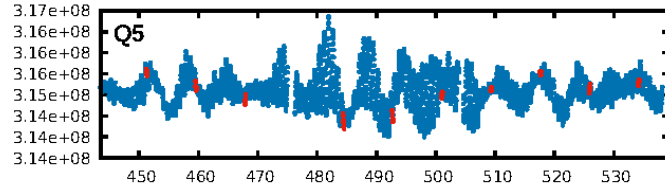
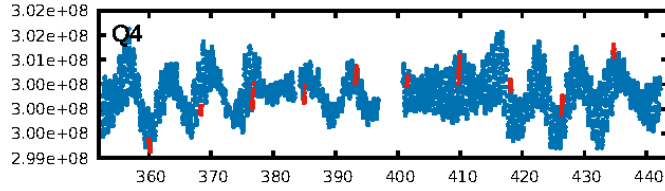
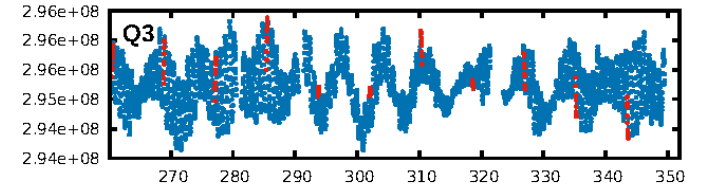
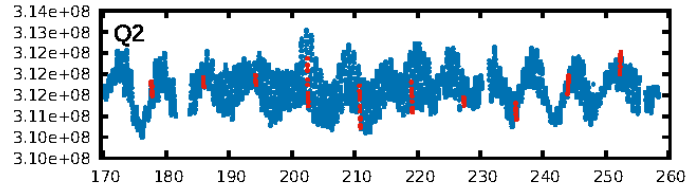
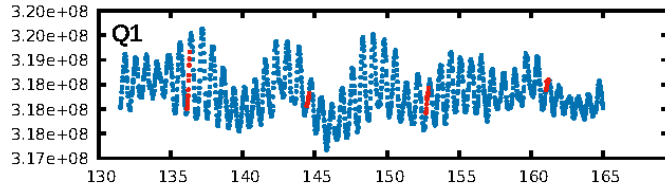
No Significant Match Found

DV One-Page Summary

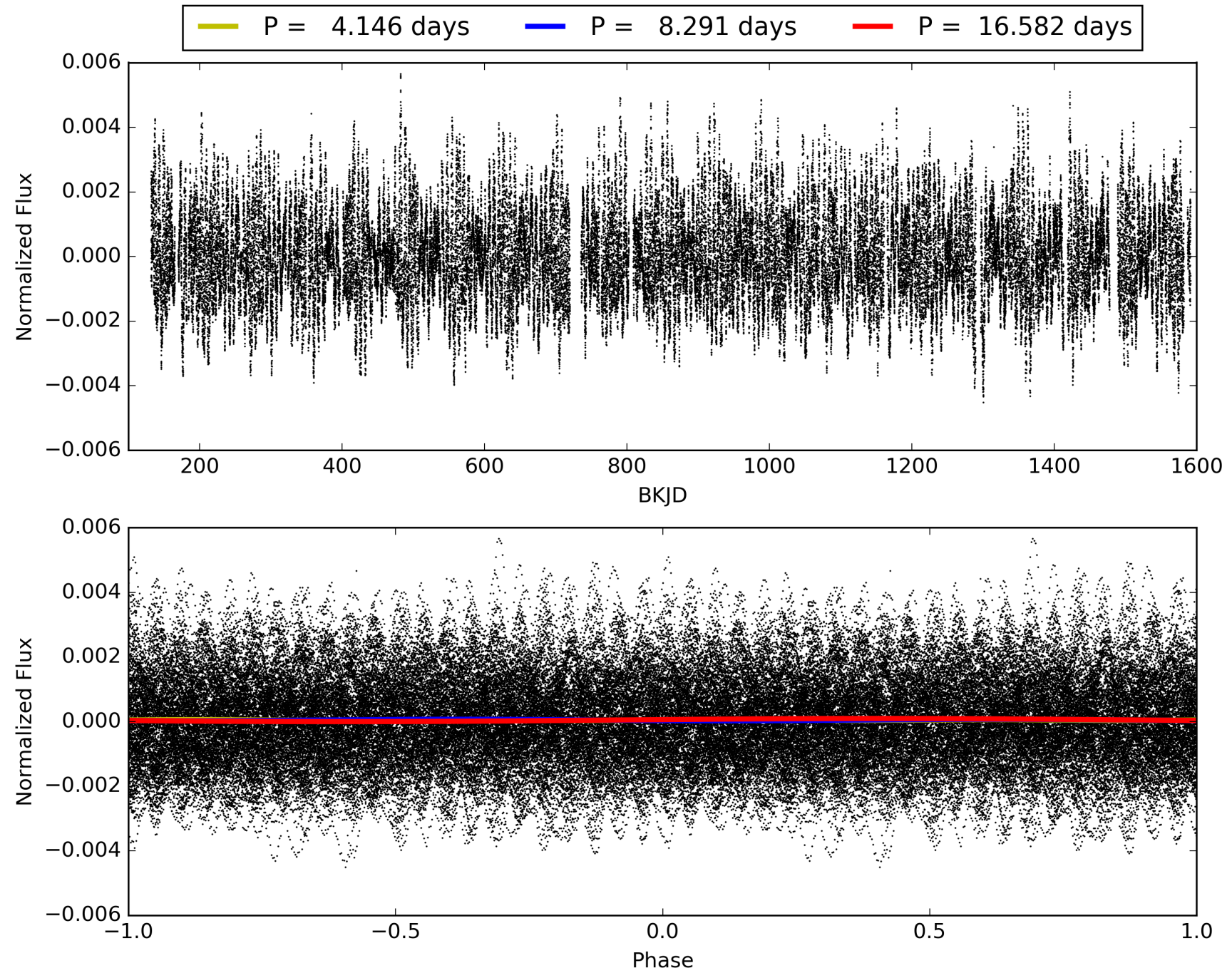
KIC: 7597150 Candidate: 4 of 9 Period: 8.291 d



TCE 007597150-04, PDC Light Curves

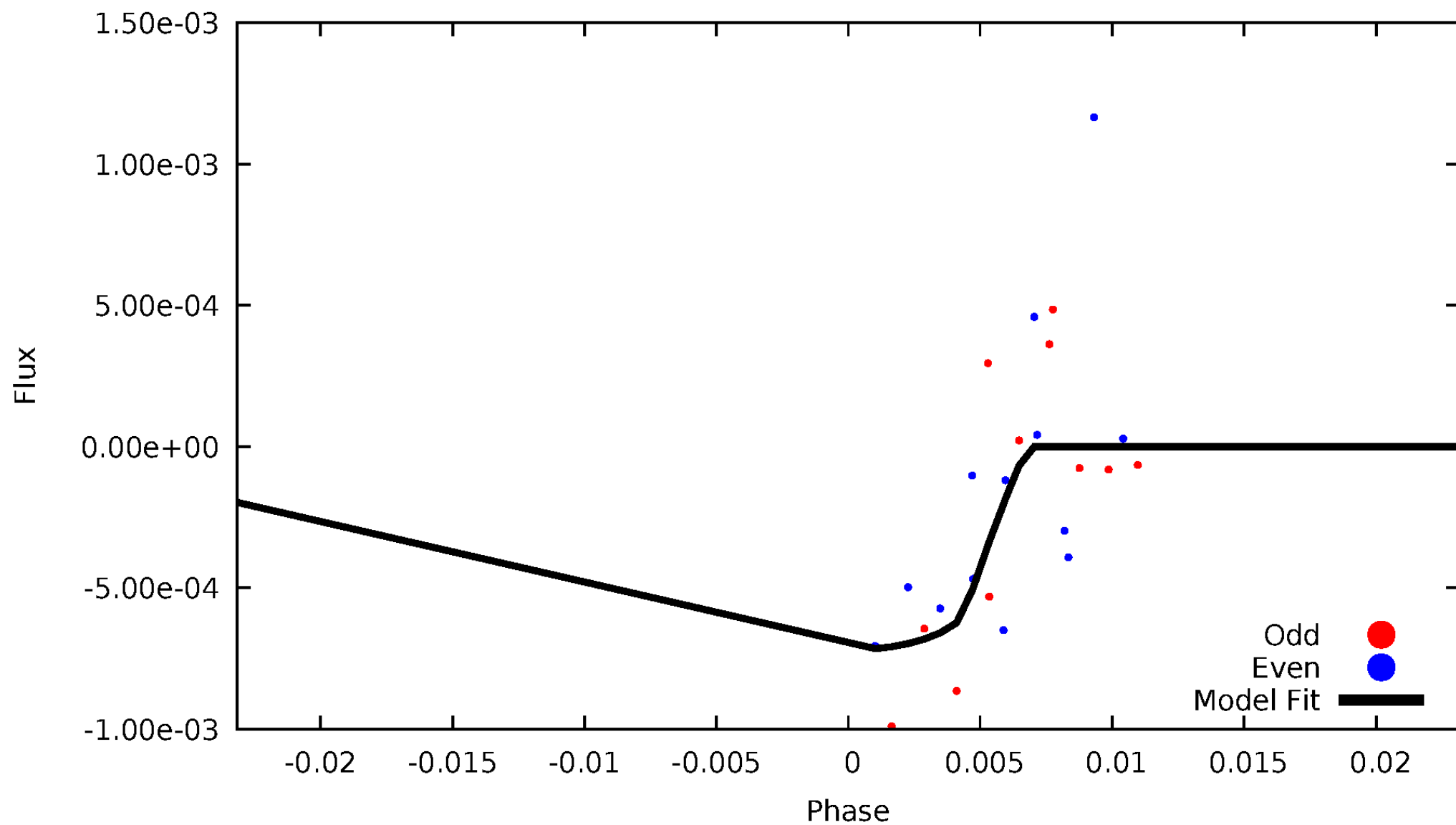


TCE 007597150-04



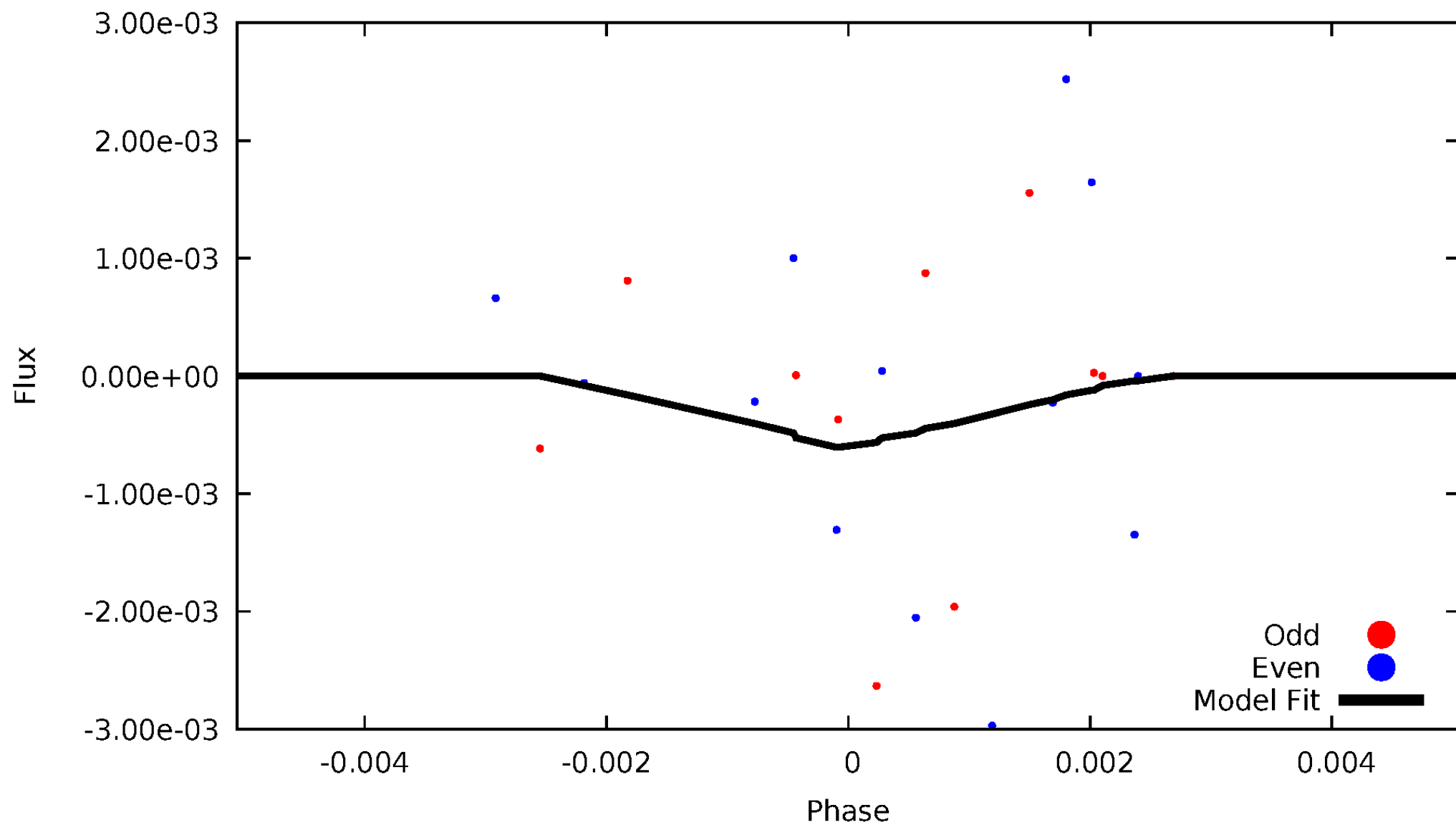
DV Odd/Even

TCE 007597150-04



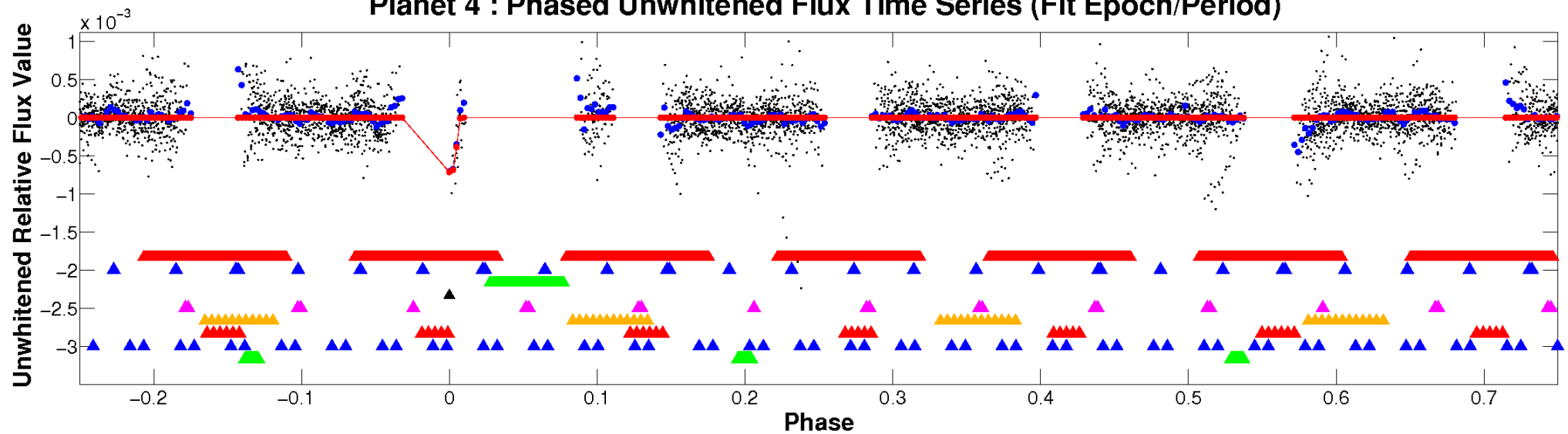
ALT Odd/Even

TCE 007597150-04

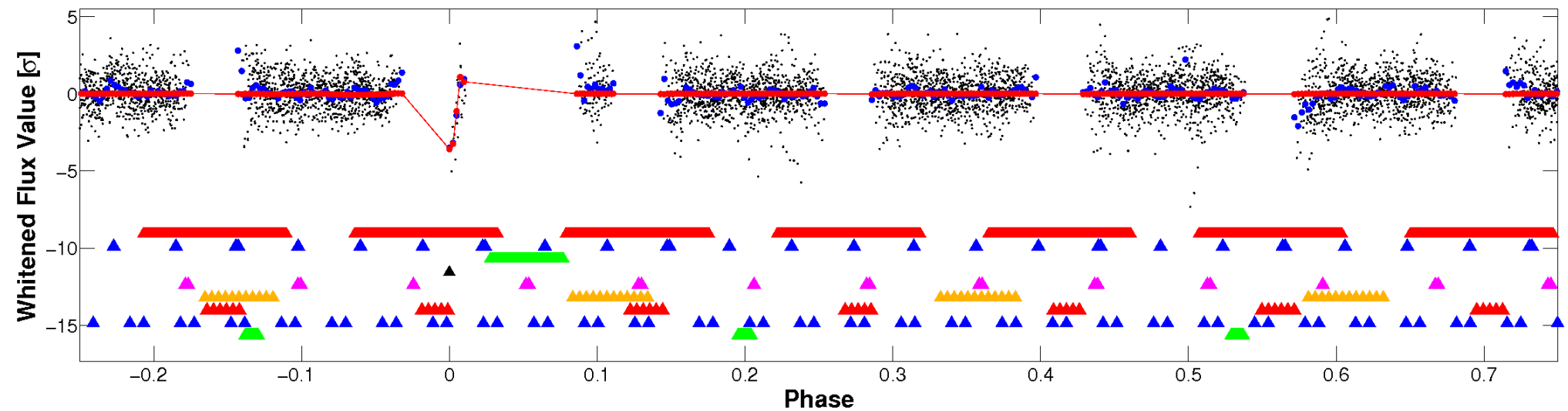


Non-Whitened Vs. Whitened Light Curve

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

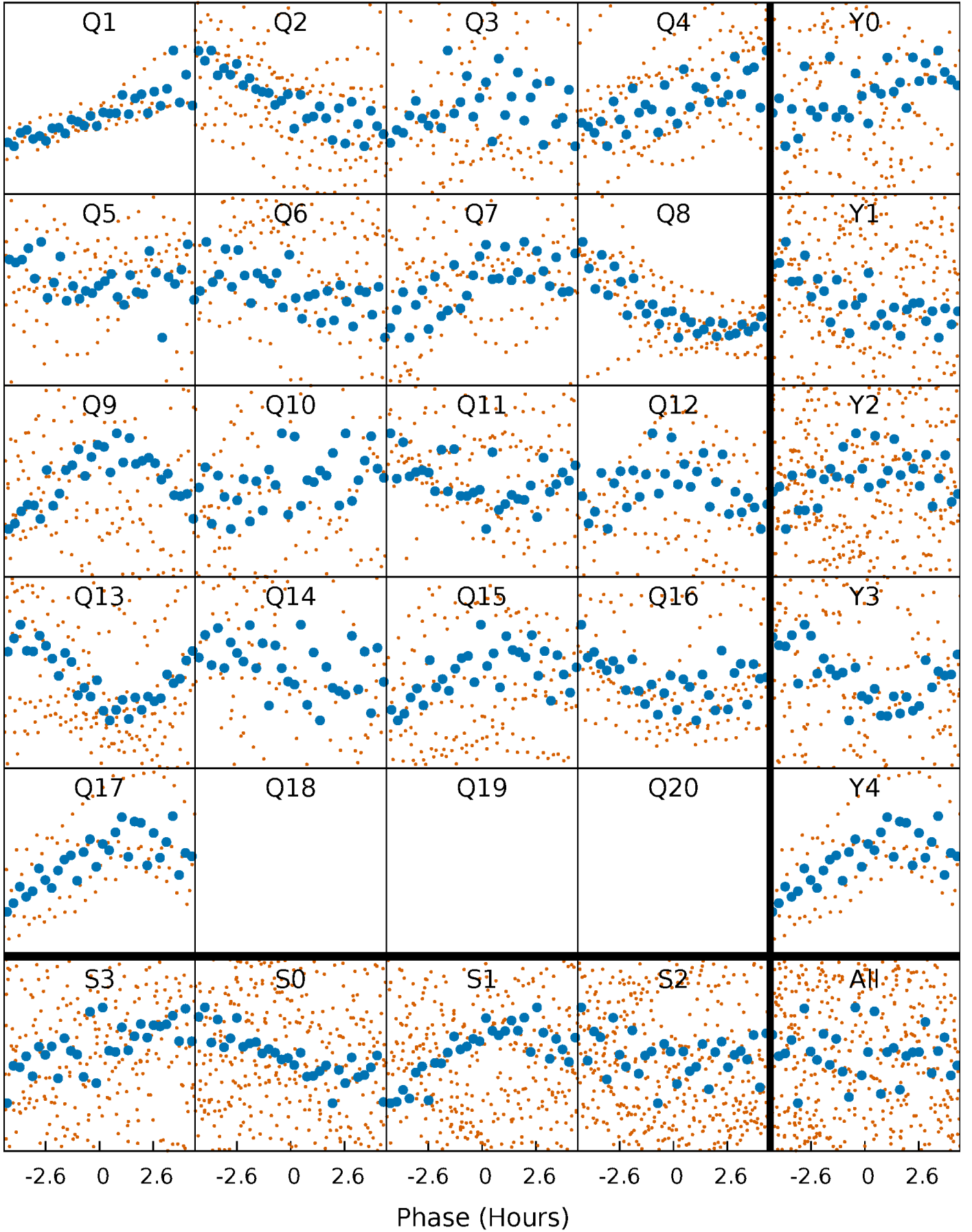


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



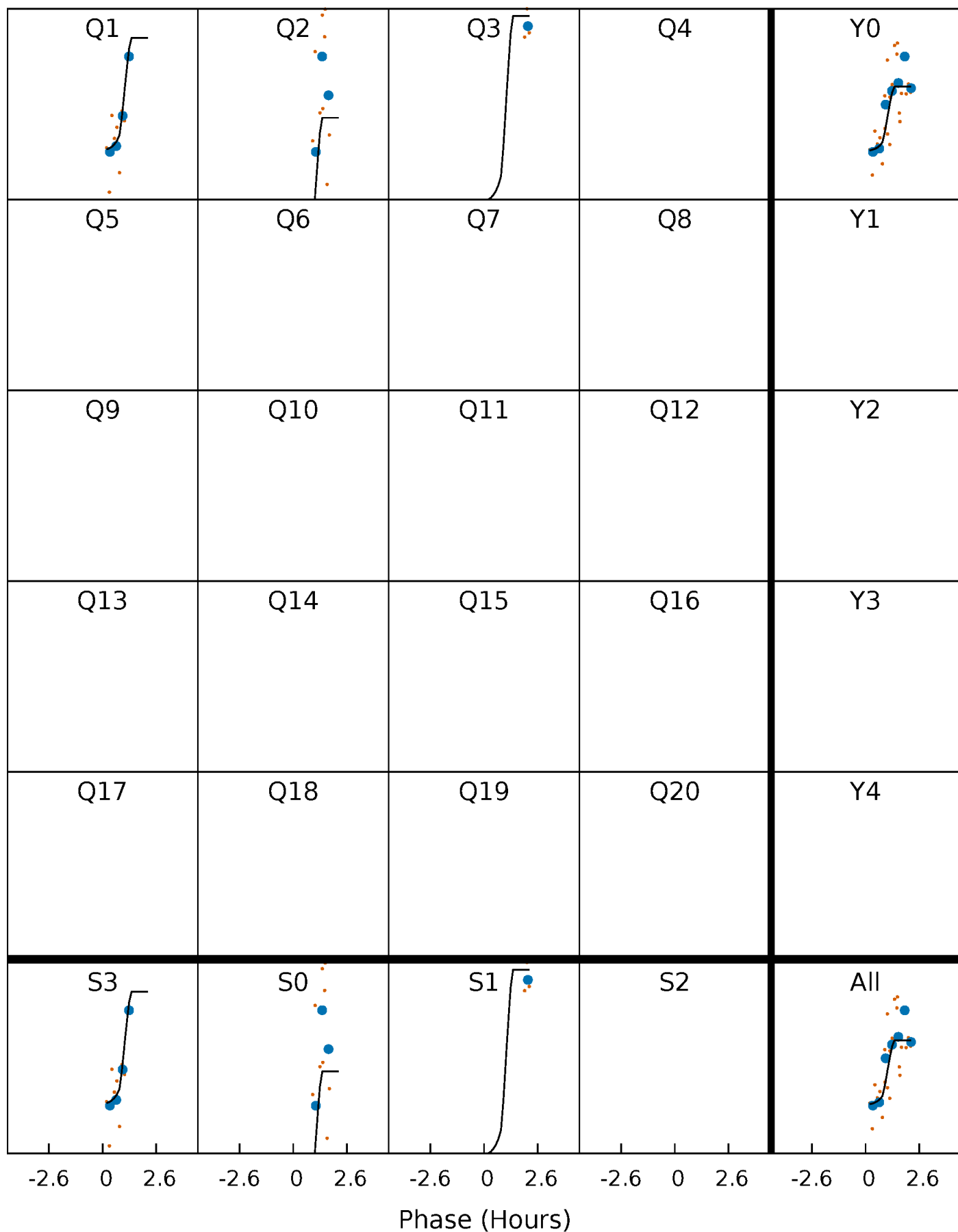
PDC Quarter-Phased Transit Curves

TCE 007597150-04 P= 8.291193 Days $T_0=136.224441$ (BKJD)



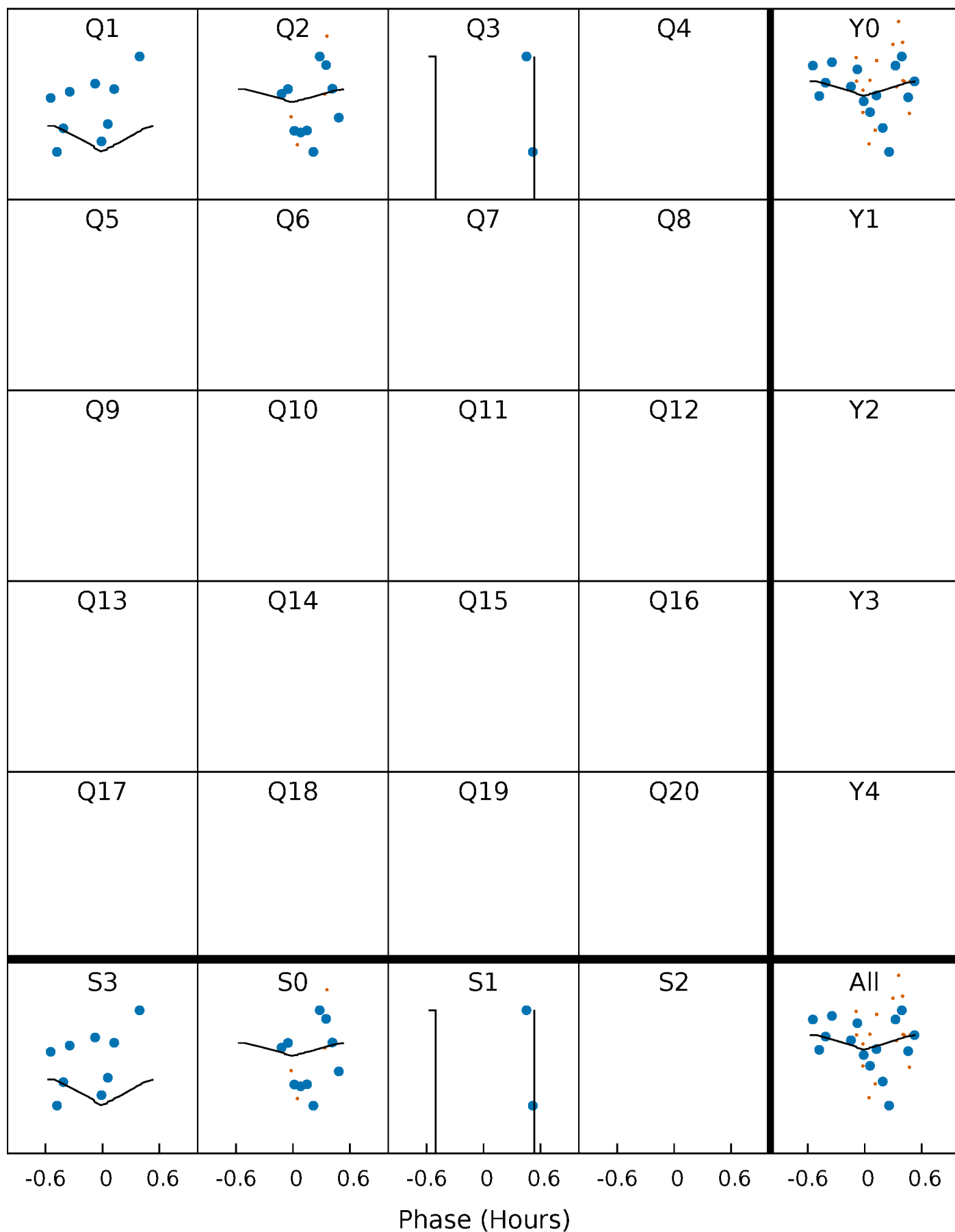
DV Quarter-Phased Transit Curves

TCE 007597150-04 P= 8.291193 Days $T_0=136.224441$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

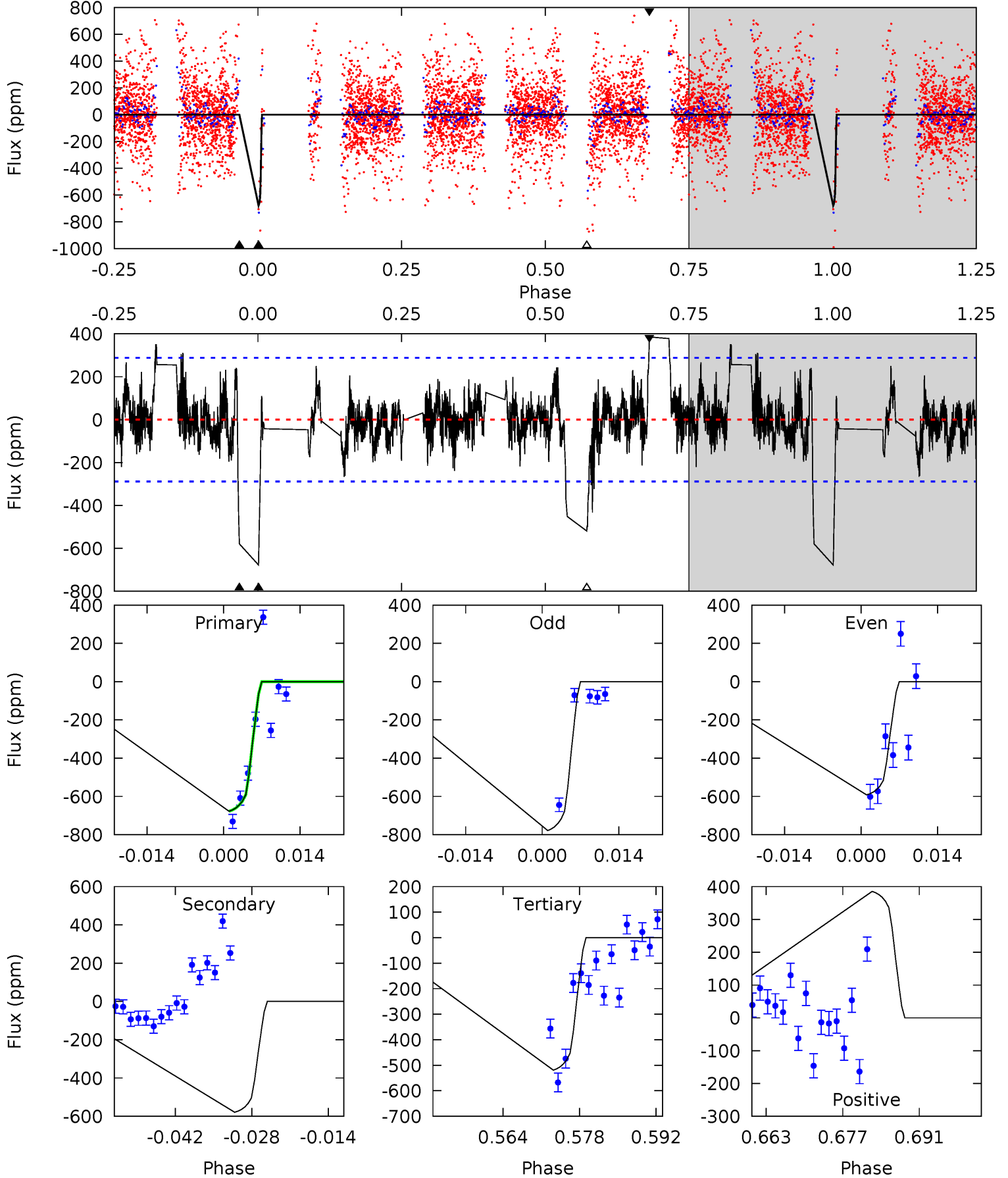
TCE 007597150-04 P= 8.293310 Days $T_0=136.257096$ (BKJD)



DV Model-Shift Uniqueness Test

007597150-04, P = 8.291193 Days, E = 127.933248 Days

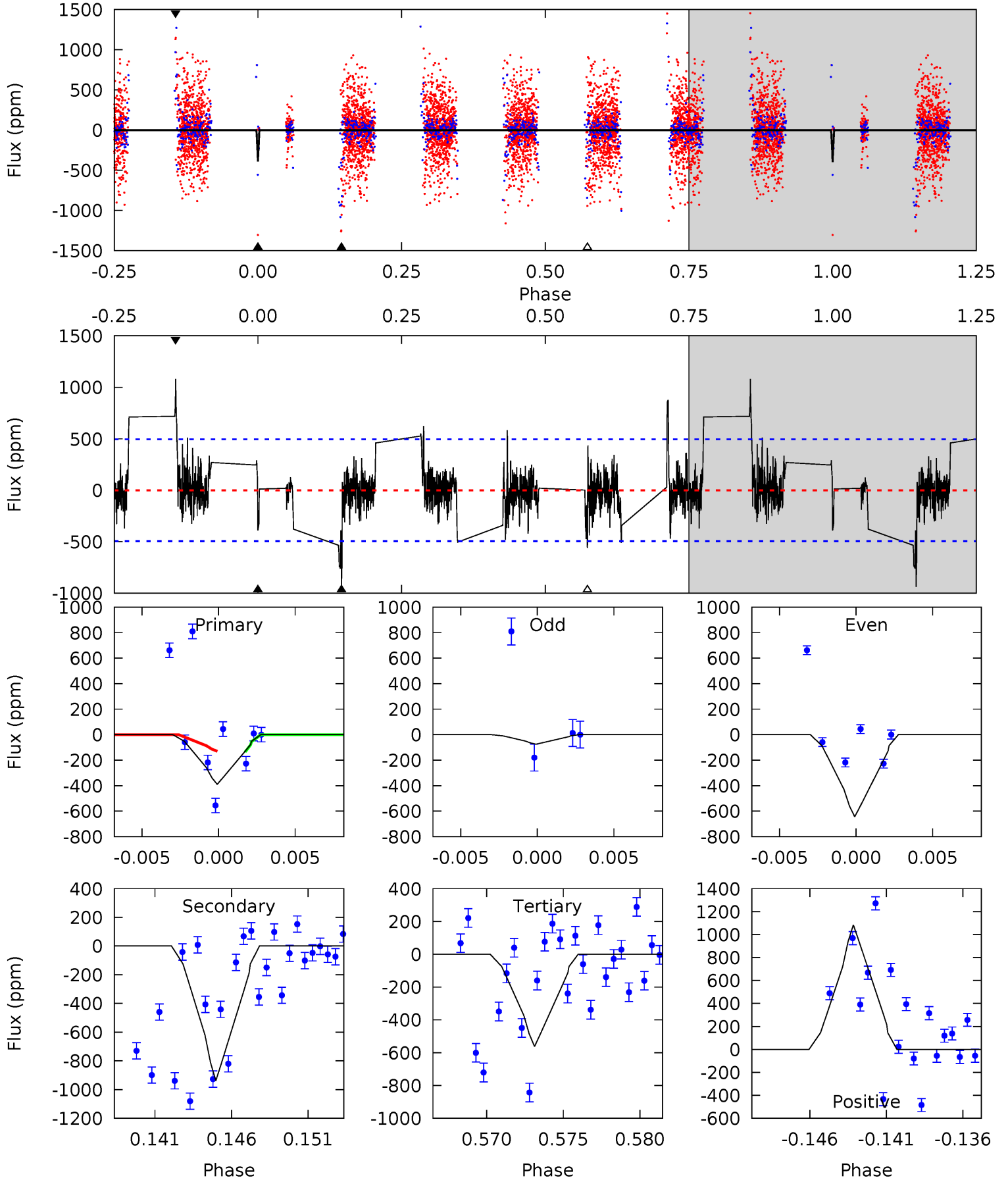
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.7	9.96	8.93	6.63	4.96	2.45	1.48	2.72	5.03	1.03	3.33	1.64	1.05	0.36	0



Alt Model-Shift Uniqueness Test

007597150-04, P = 8.293310 Days, E = 127.963786 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.05	9.75	5.84	11.3	5.16	2.82	1.43	-1.79	-7.21	3.91	-1.51	3.09	8.31	0.54	0.02



Stellar Parameters For KIC 007597150

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7282^{+233}_{-285}	$4.087^{+0.234}_{-0.156}$	$-0.520^{+0.250}_{-0.300}$	$1.683^{+0.458}_{-0.458}$	$1.260^{+0.196}_{-0.161}$	$0.372^{+0.467}_{-0.169}$
	+3%/-4%	+6%/-4%	+48%/-58%	+27%/-27%	+16%/-13%	+125%/-45%
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 007597150-04 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-579 ± 58	$10.86^{+12.86}_{-7.18}$	1961^{+152}_{-148}	4642^{+3279}_{-1121}	20^{+163}_{-16}
Alt.	-936 ± 96	$10.89^{+11.54}_{-7.21}$	1958^{+157}_{-148}	5163^{+4244}_{-1251}	33^{+263}_{-26}

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 $A_{obs} \gg 1.0$

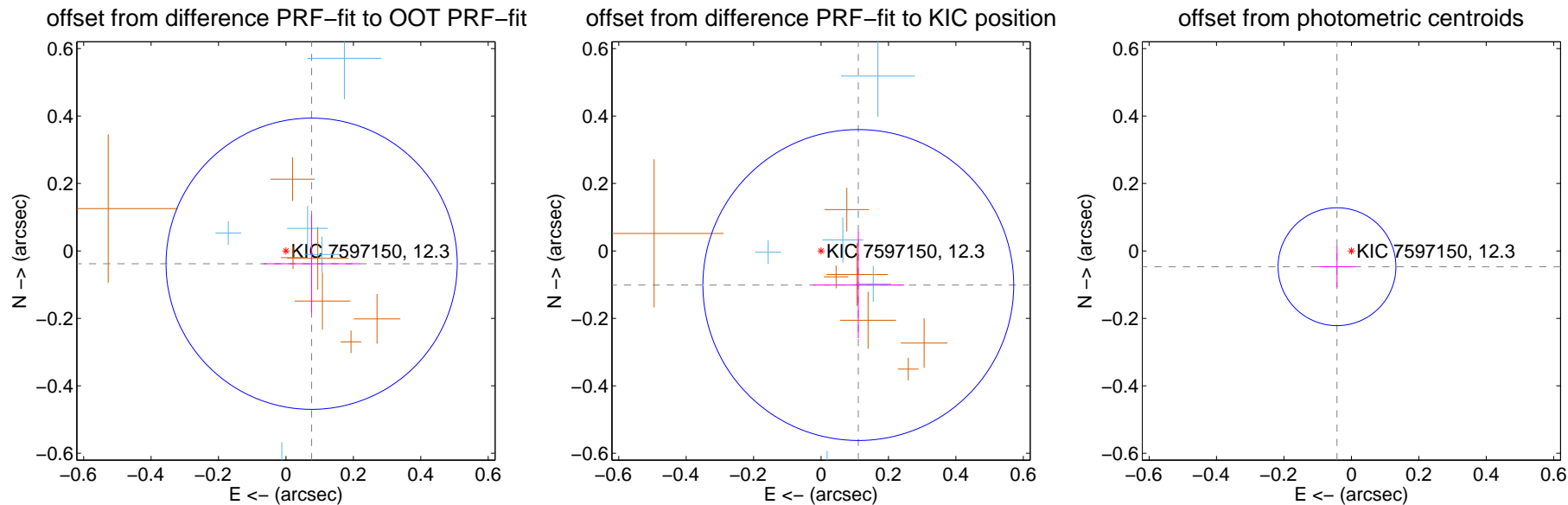
DV Centroid Data

Supplemental centroid analysis for 007597150-04. Kepler magnitude: 12.30. Transit SNR 9.00

There are 9 quarters with good PRF difference image offsets

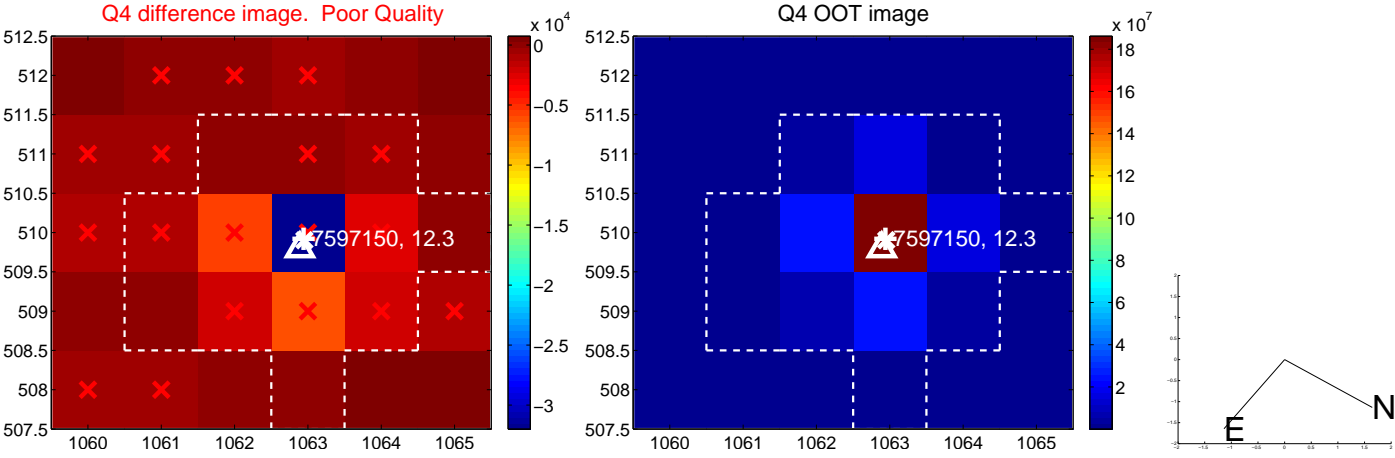
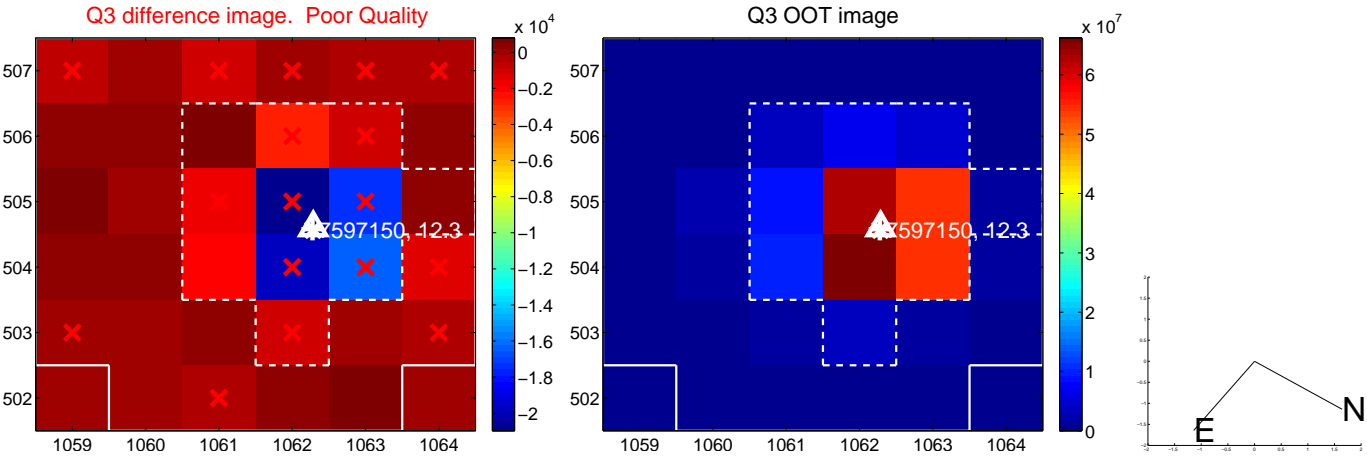
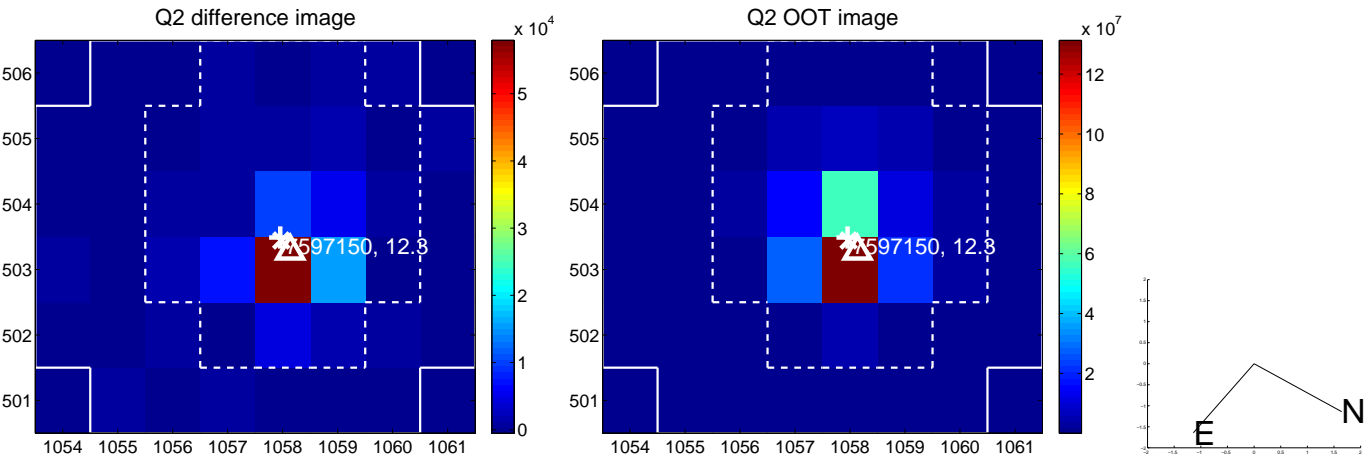
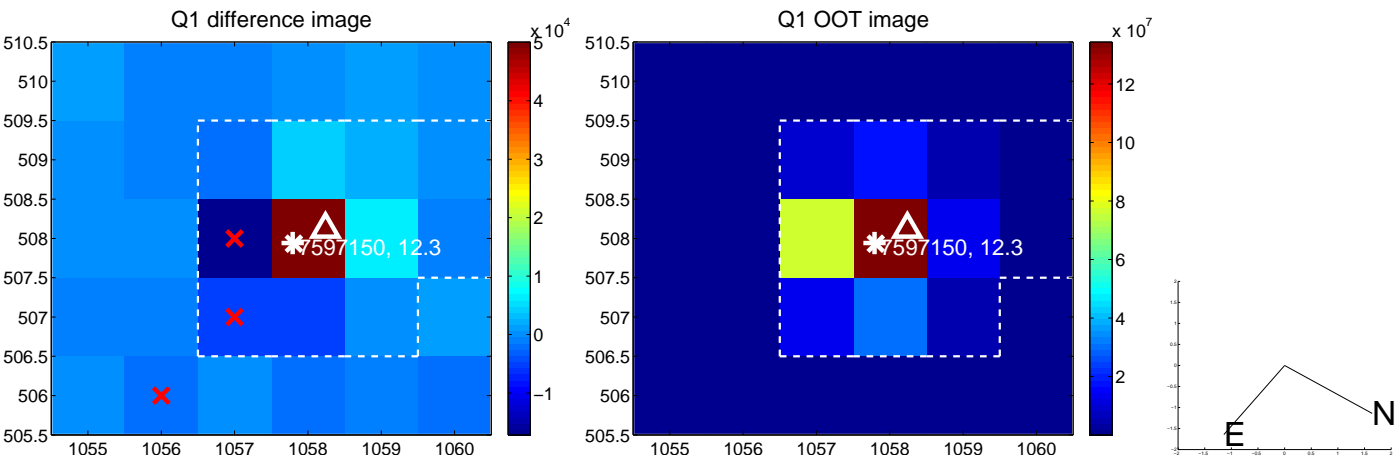
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.085 ± 0.144	0.59	-0.076 ± 0.144	-0.038 ± 0.145
PRF-fit source offset from KIC position	0.150 ± 0.154	0.98	-0.111 ± 0.136	-0.101 ± 0.158
photometric centroid source offset	0.06 ± 0.06	1.09	0.04 ± 0.05	-0.05 ± 0.06

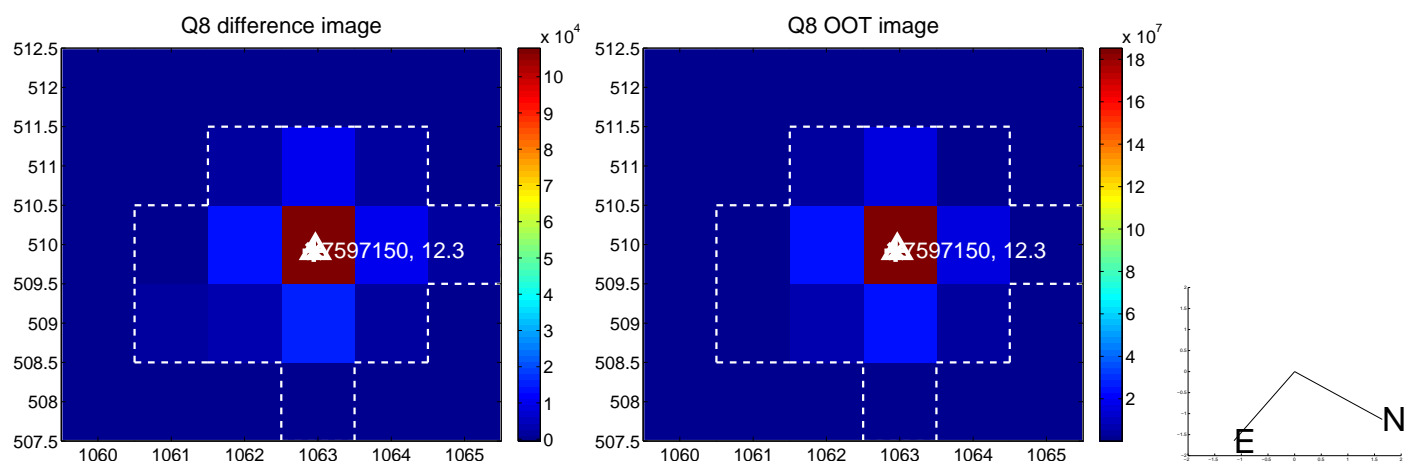
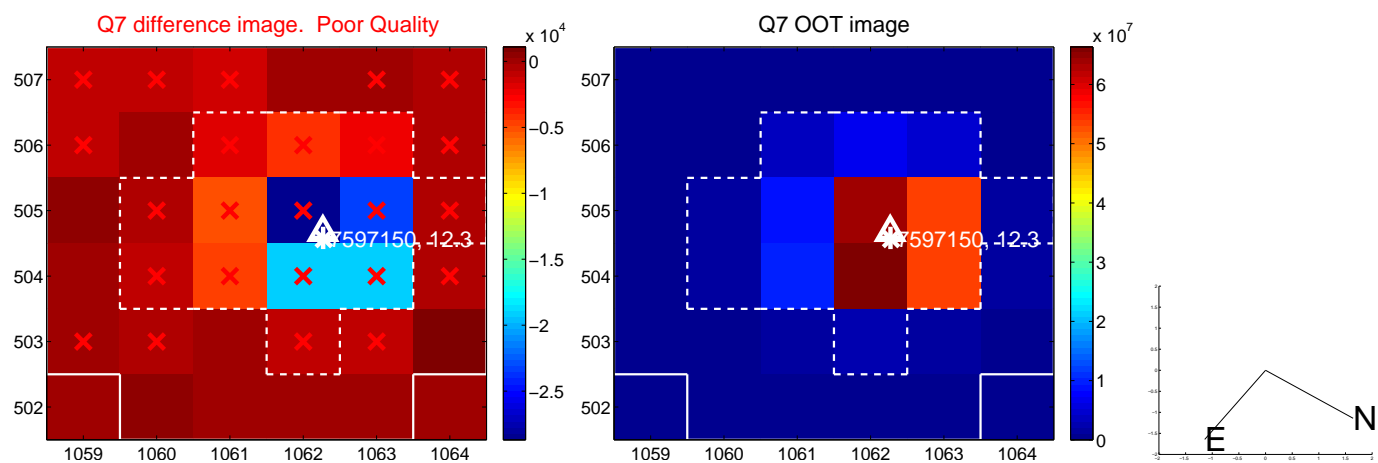
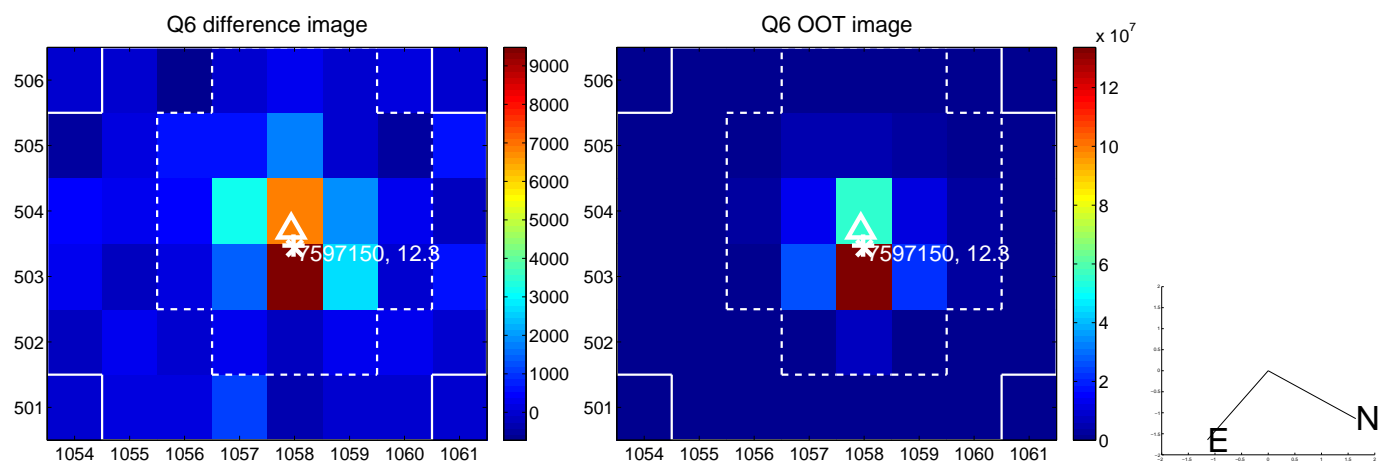
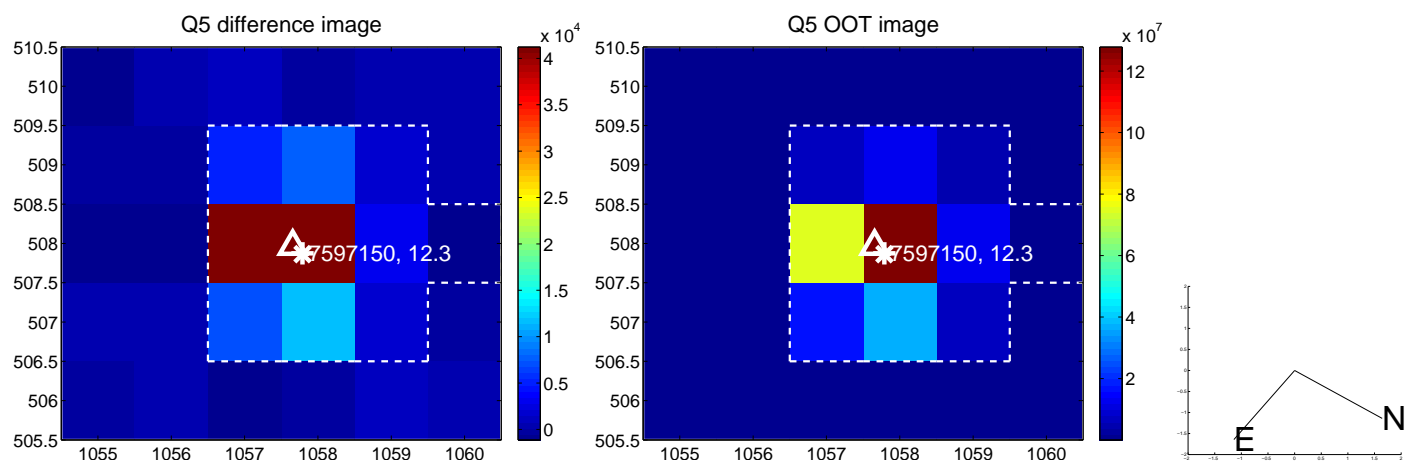


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

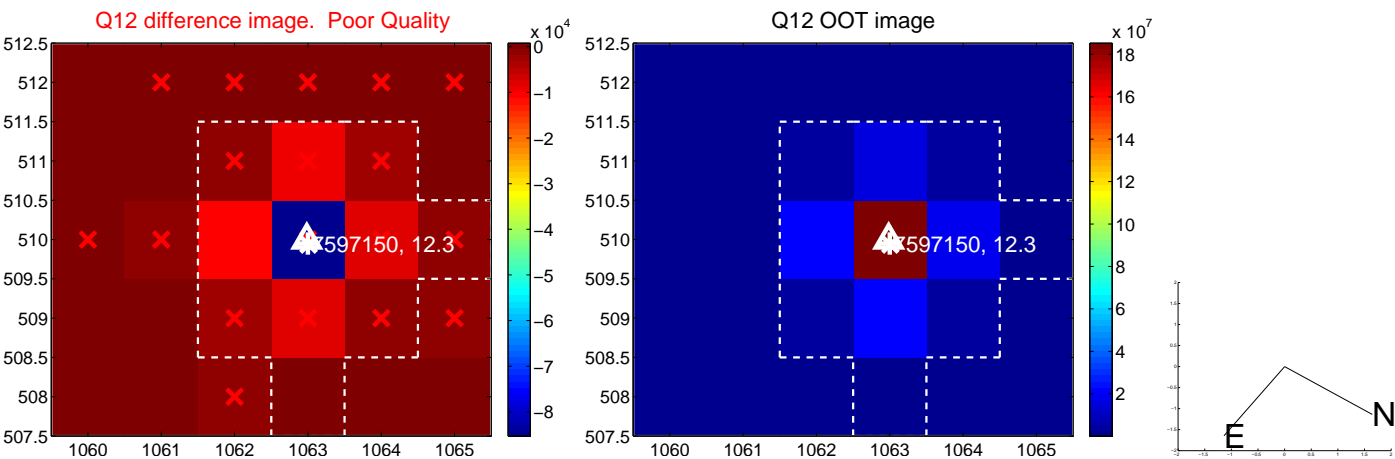
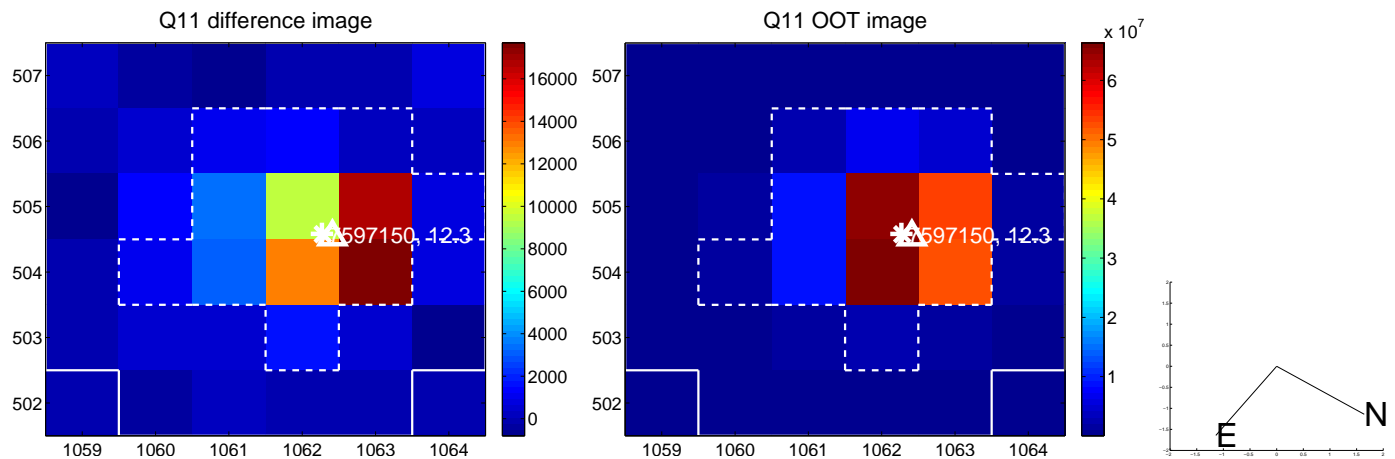
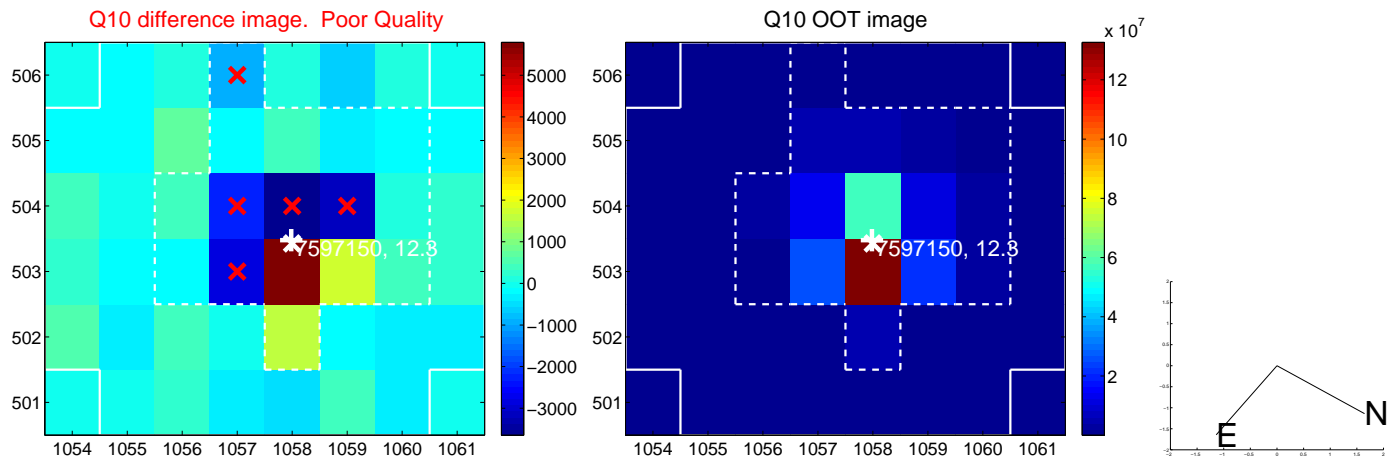
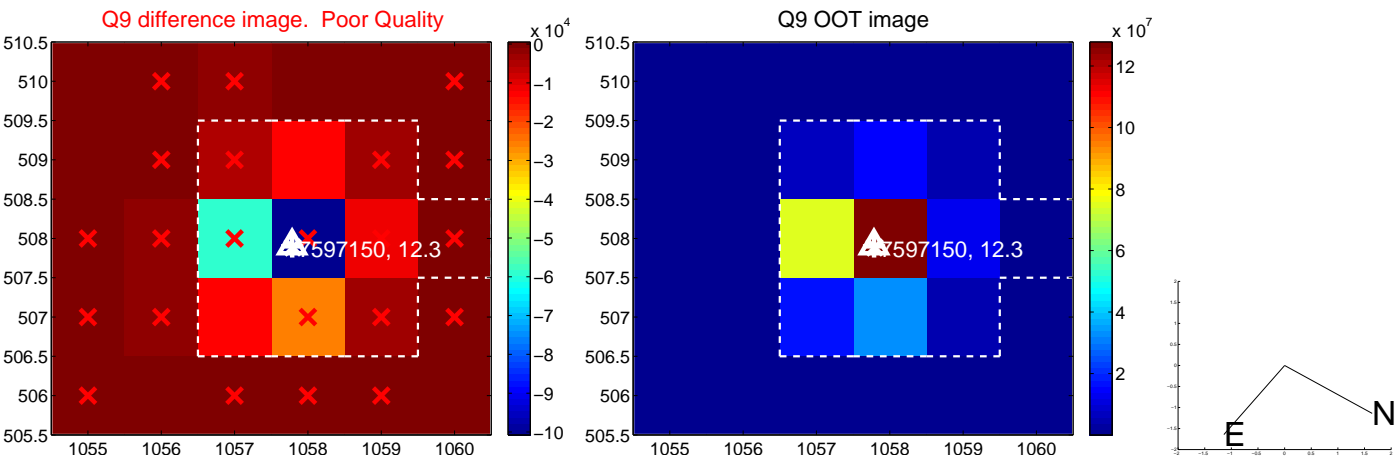
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



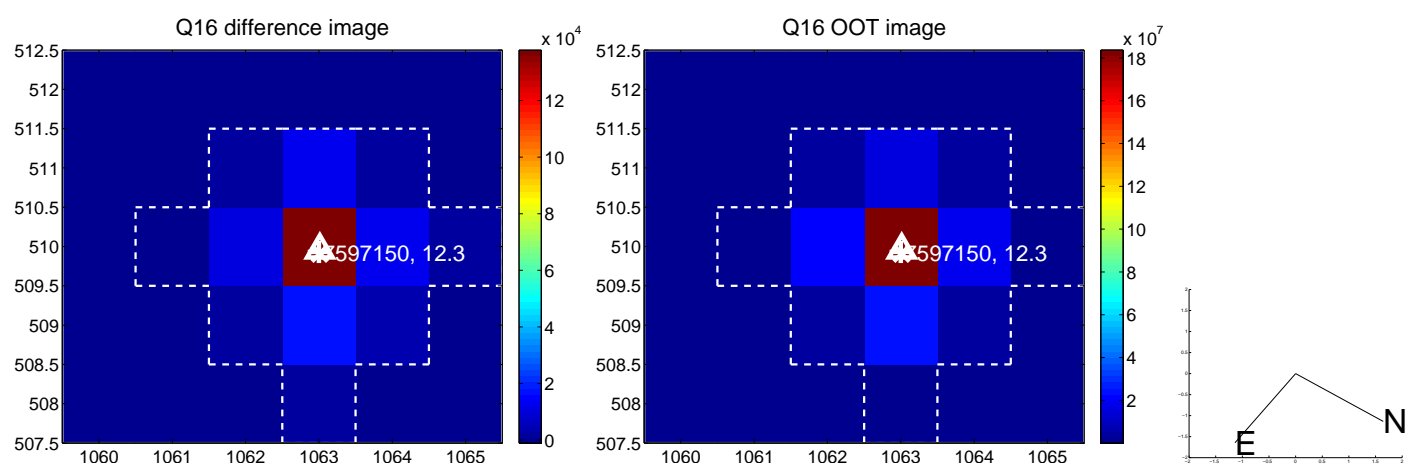
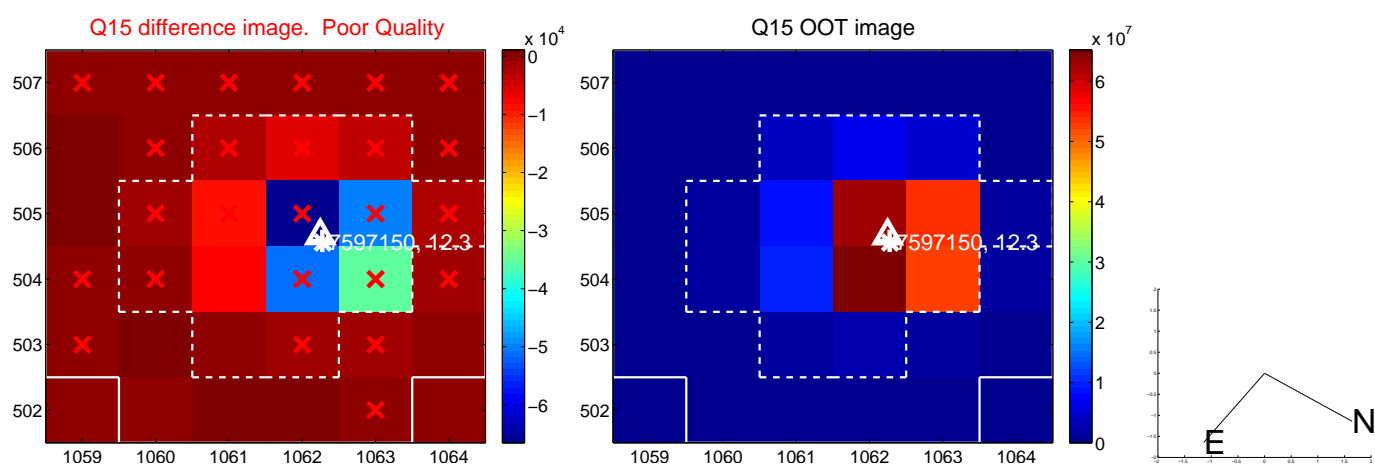
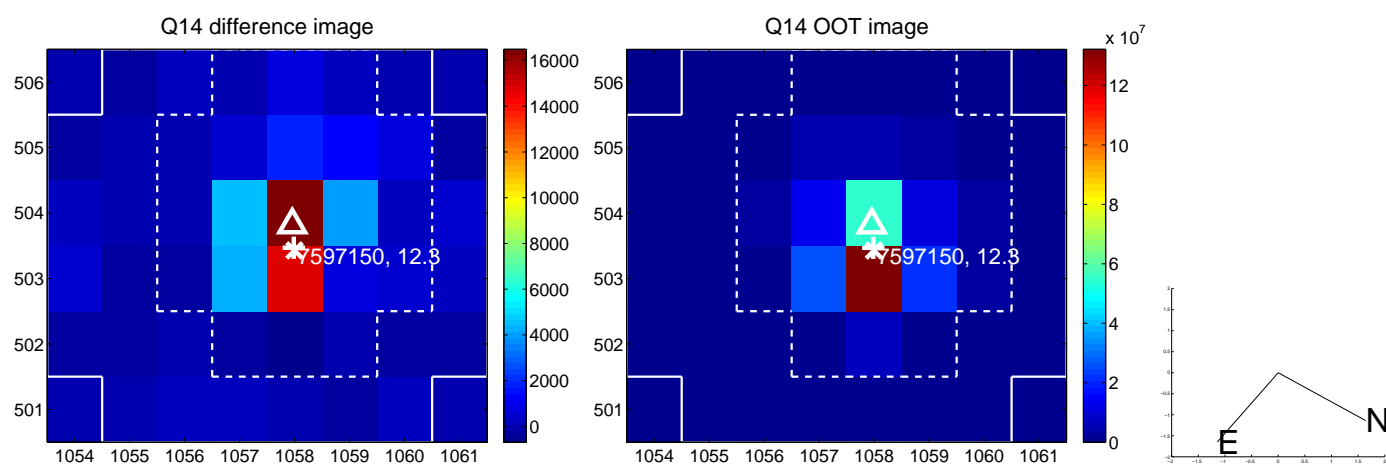
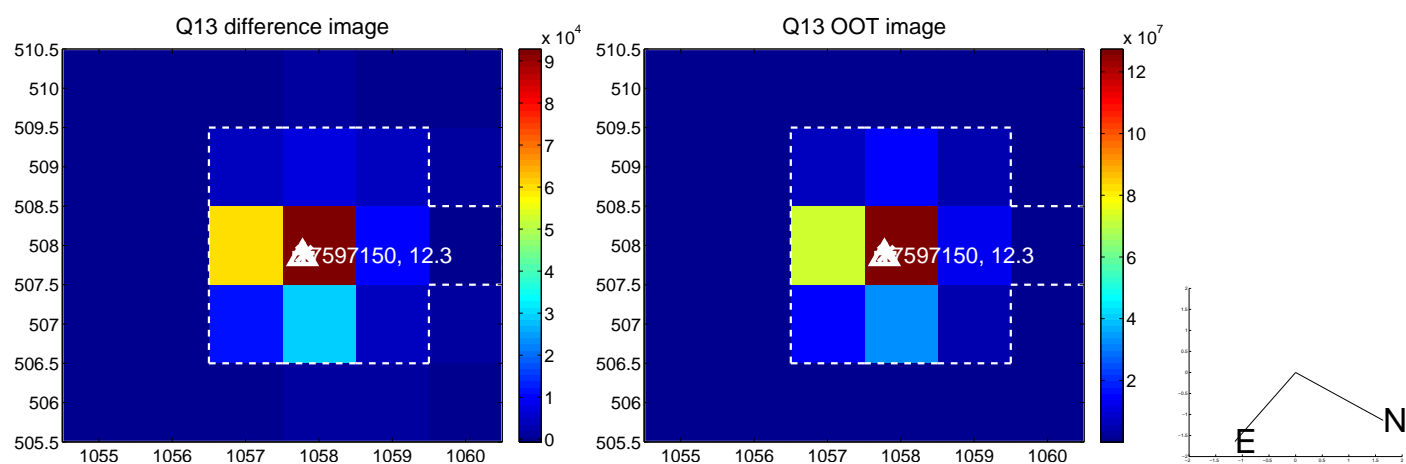
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



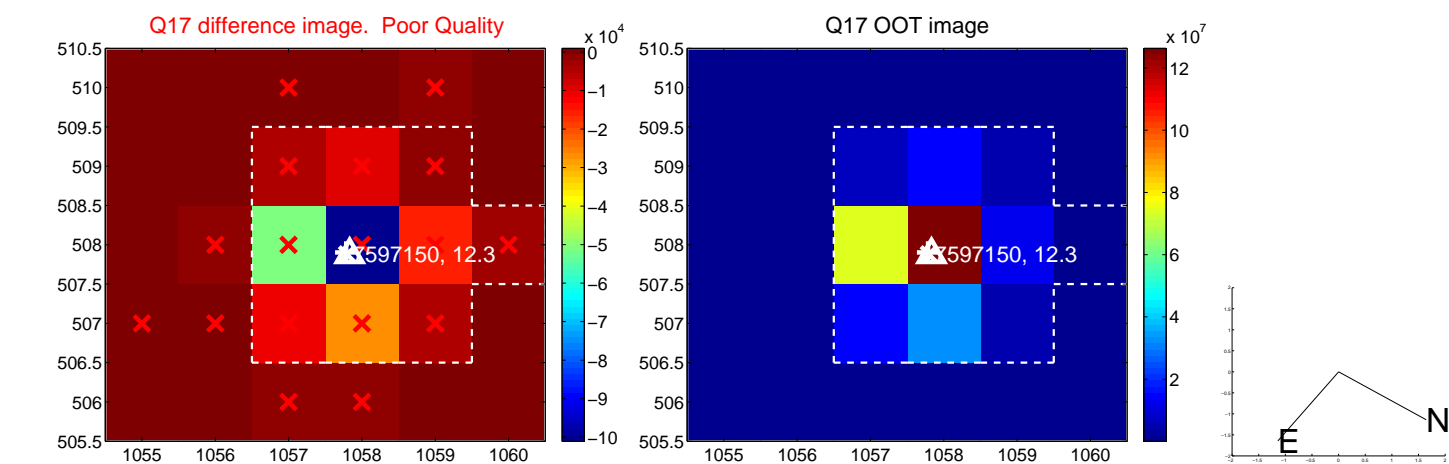
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



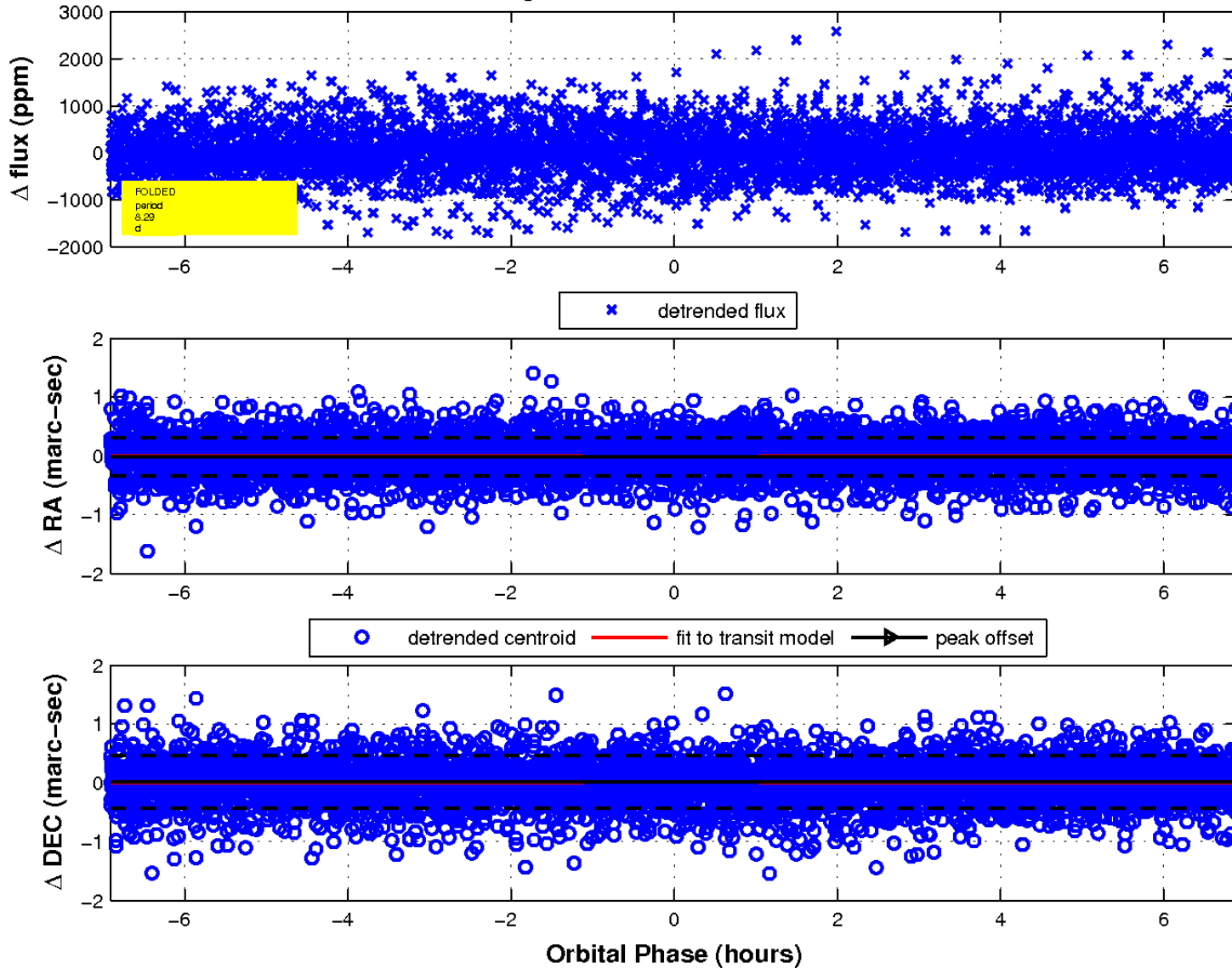
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

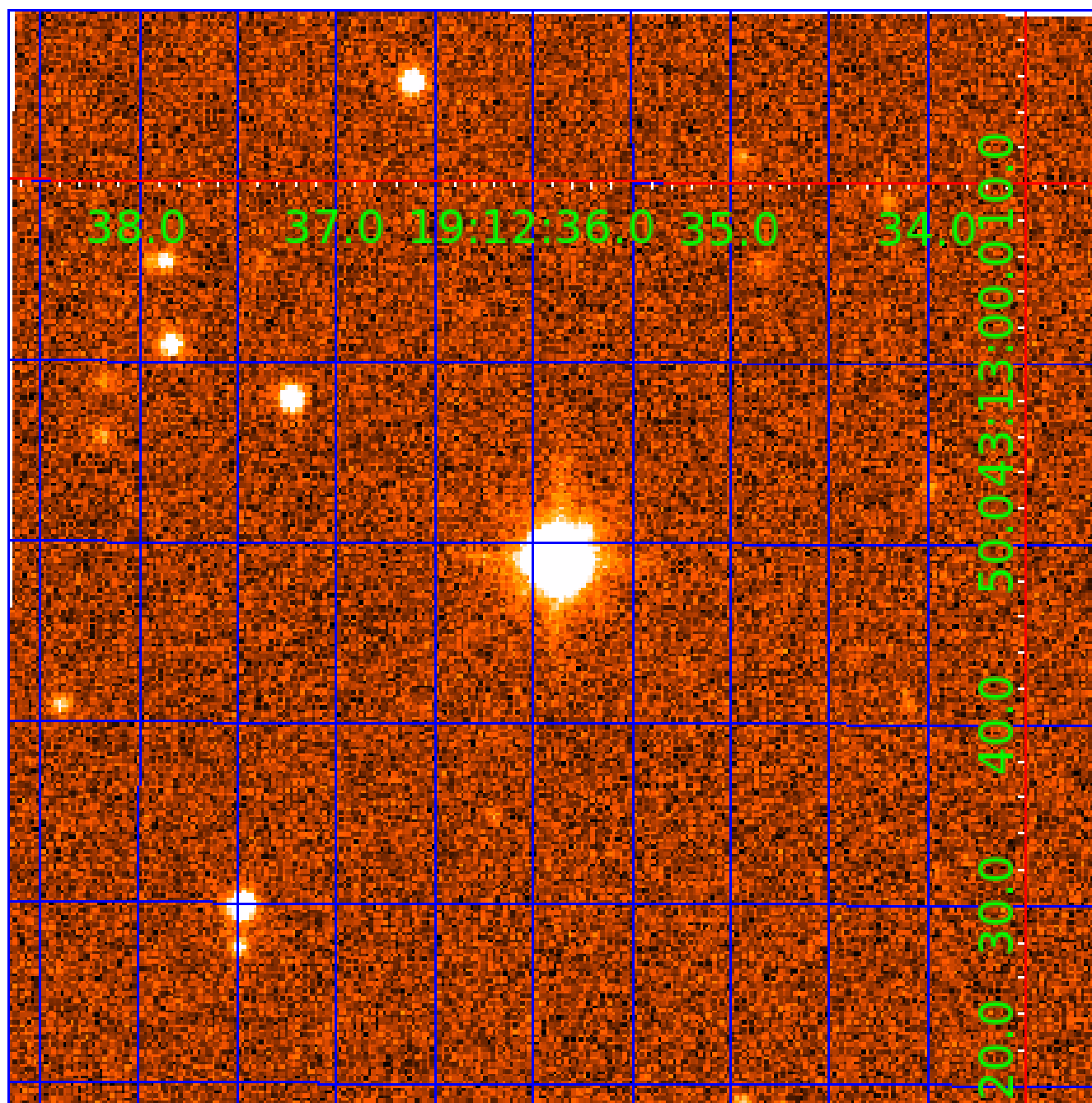


fluxWeightedCentroids, Planet 4 of 9



UKIRT Image

Declination



KIC 007597150

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})
007597150-01	OBS	No	1.185112	132.137440	0.2	8.394	7.9	0.1	1.68	7282	0.08	12713.76
007597150-02	OBS	No	47.328333	177.880517	497.2	4.895	10.5	9.0	1.68	7282	4.32	93.14
007597150-03	OBS	No	8.293566	136.451345	43.3	2.639	10.1	2.9	1.68	7282	1.29	949.80
007597150-04	OBS	No	8.291193	136.224441	719.1	2.304	9.5	9.0	1.68	7282	4.69	950.16
007597150-05	OBS	No	63.139376	159.633307	625.6	1.776	9.1	8.6	1.68	7282	4.62	63.42
007597150-06	OBS	No	31.101521	149.334486	381.5	6.475	9.6	6.2	1.68	7282	6.26	163.02
007597150-07	OBS	No	39.081868	137.421010	1020.6	14.434	9.6	9.1	1.68	7282	9.72	120.22
007597150-08	OBS	No	25.156825	145.994068	159.9	3.808	9.2	3.5	1.68	7282	2.35	216.31
007597150-09	OBS	No	35.930360	143.370372	221.5	1.500	7.3	-1.0	1.68	7282	2.55	134.48

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007597150-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV
007597150-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD
007597150-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—NO_FITS—CENT_NOFITS

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

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

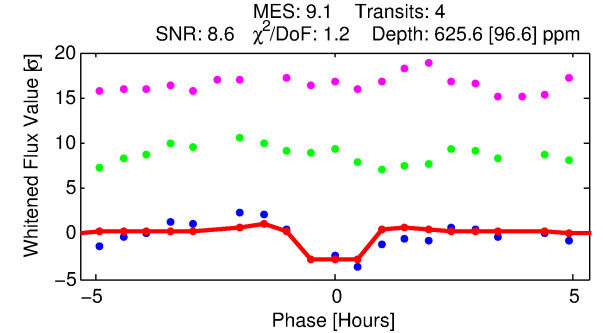
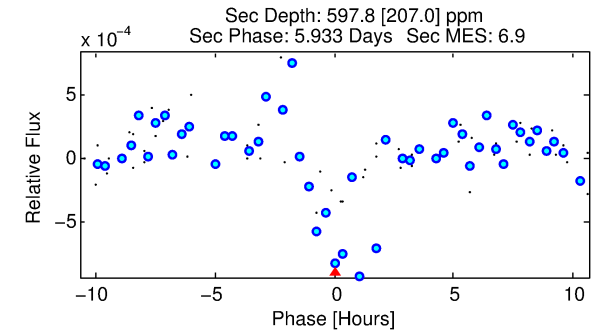
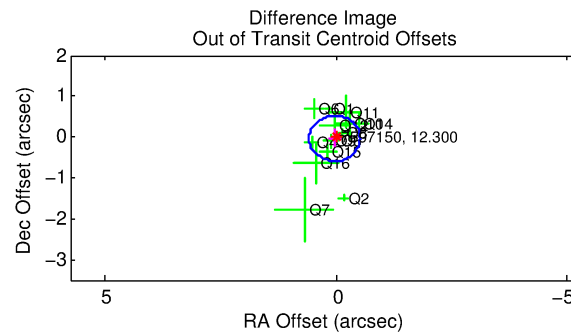
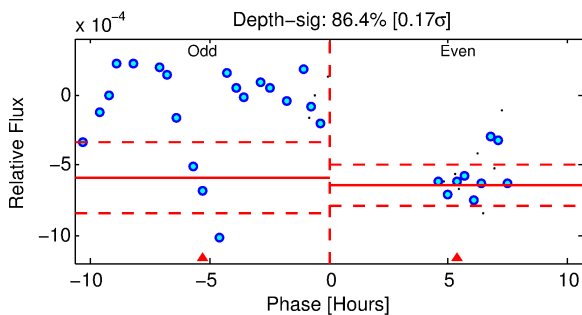
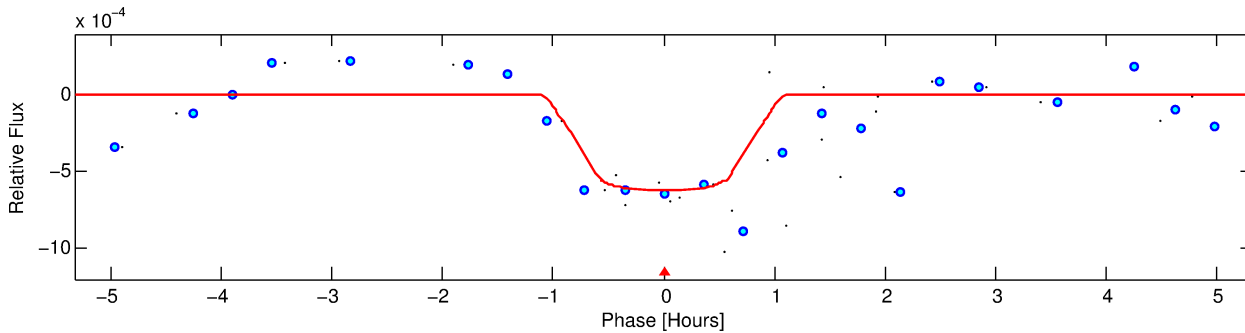
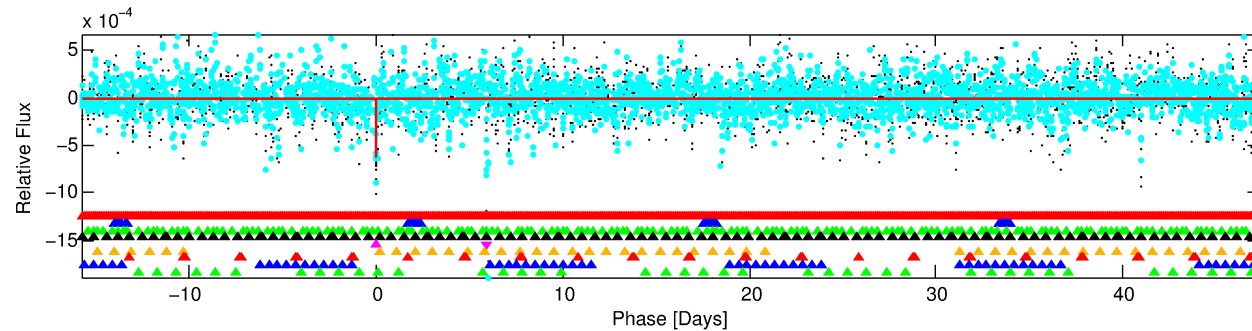
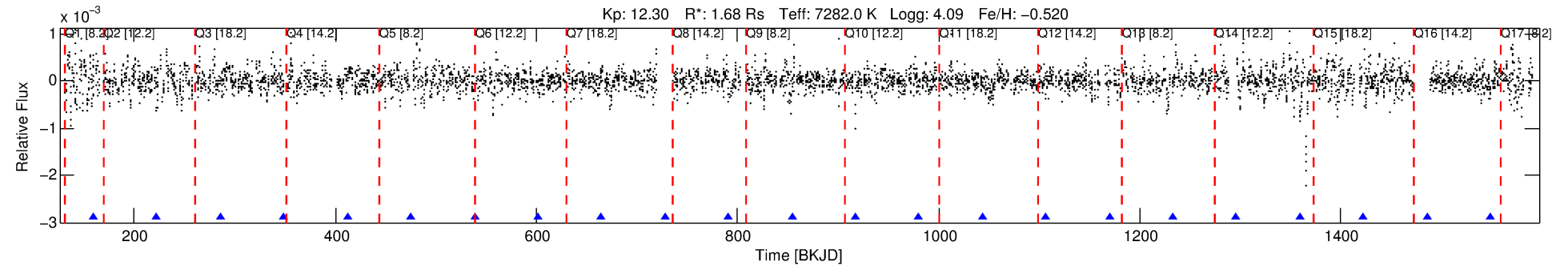
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007597150-05

No Significant Match Found

DV One-Page Summary

KIC: 7597150 Candidate: 5 of 9 Period: 63.139 d



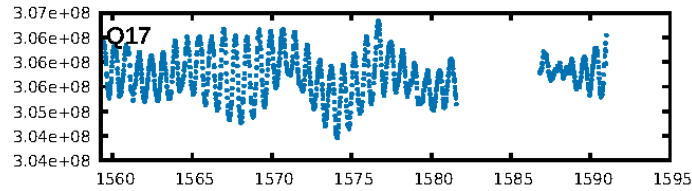
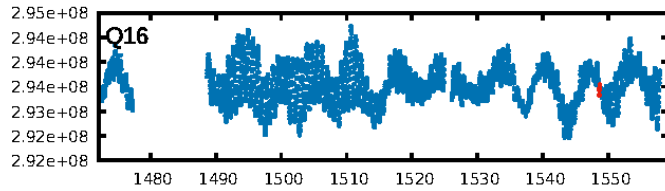
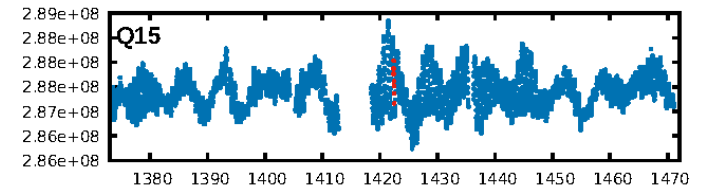
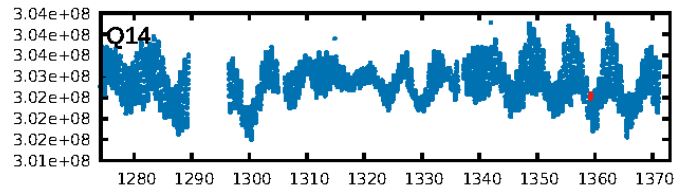
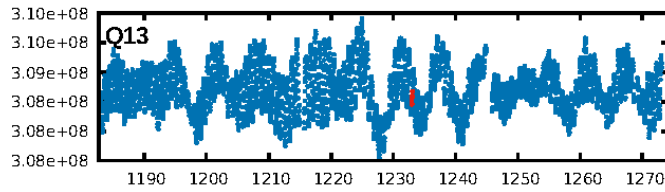
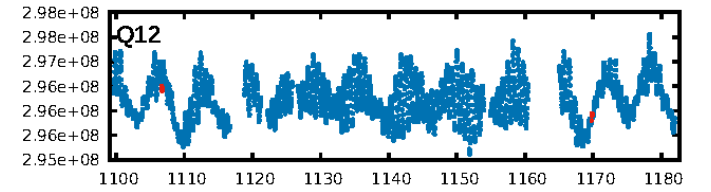
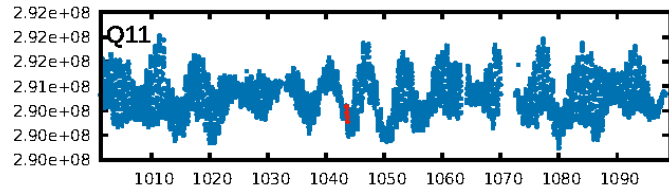
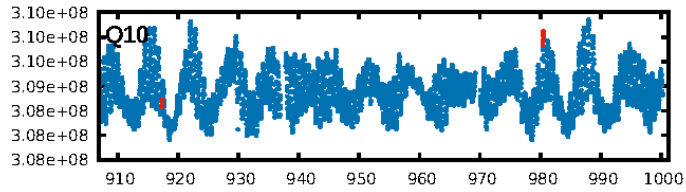
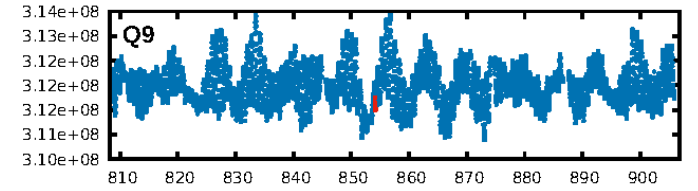
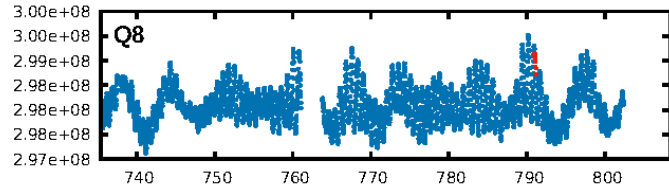
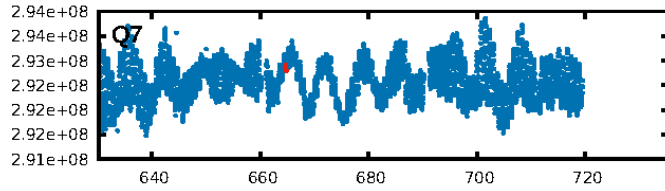
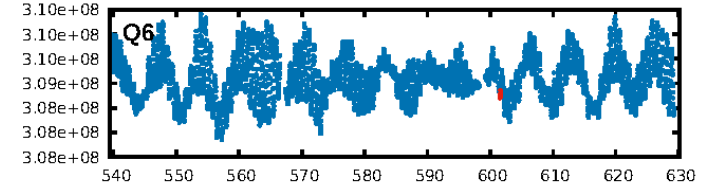
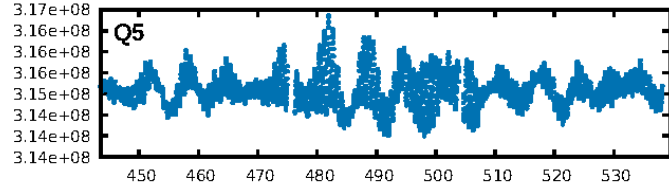
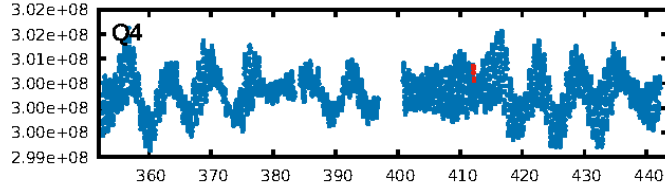
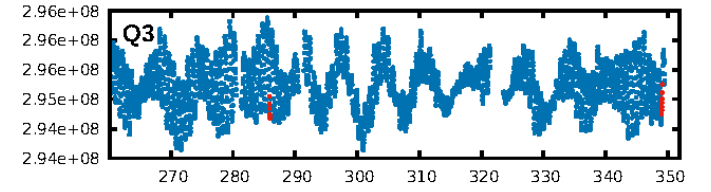
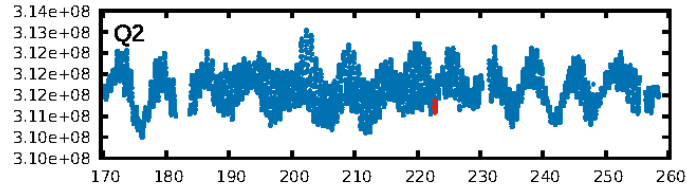
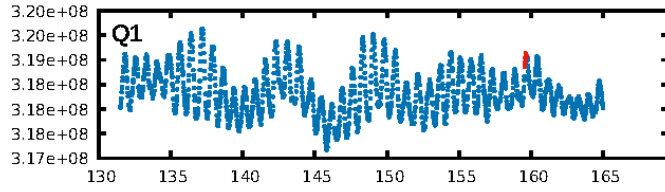
DV Fit Results:

Period = 63.13938 [0.00057] d
Epoch = 159.6333 [0.0068] BKJD
Rp/R* = 0.0251 [0.0582]
a/R* = 181.12 [2600.32]
b = 0.78 [7.33]
Seff = 63.42 [27.38]
Teq = 720 [78] K
Rp = 4.62 [10.75] Re
a = 0.3354 [0.0856] AU
Ag = 1737.33 [8092.79] [0.21 σ]
Teffp = 7183 [8338] K [0.78 σ]

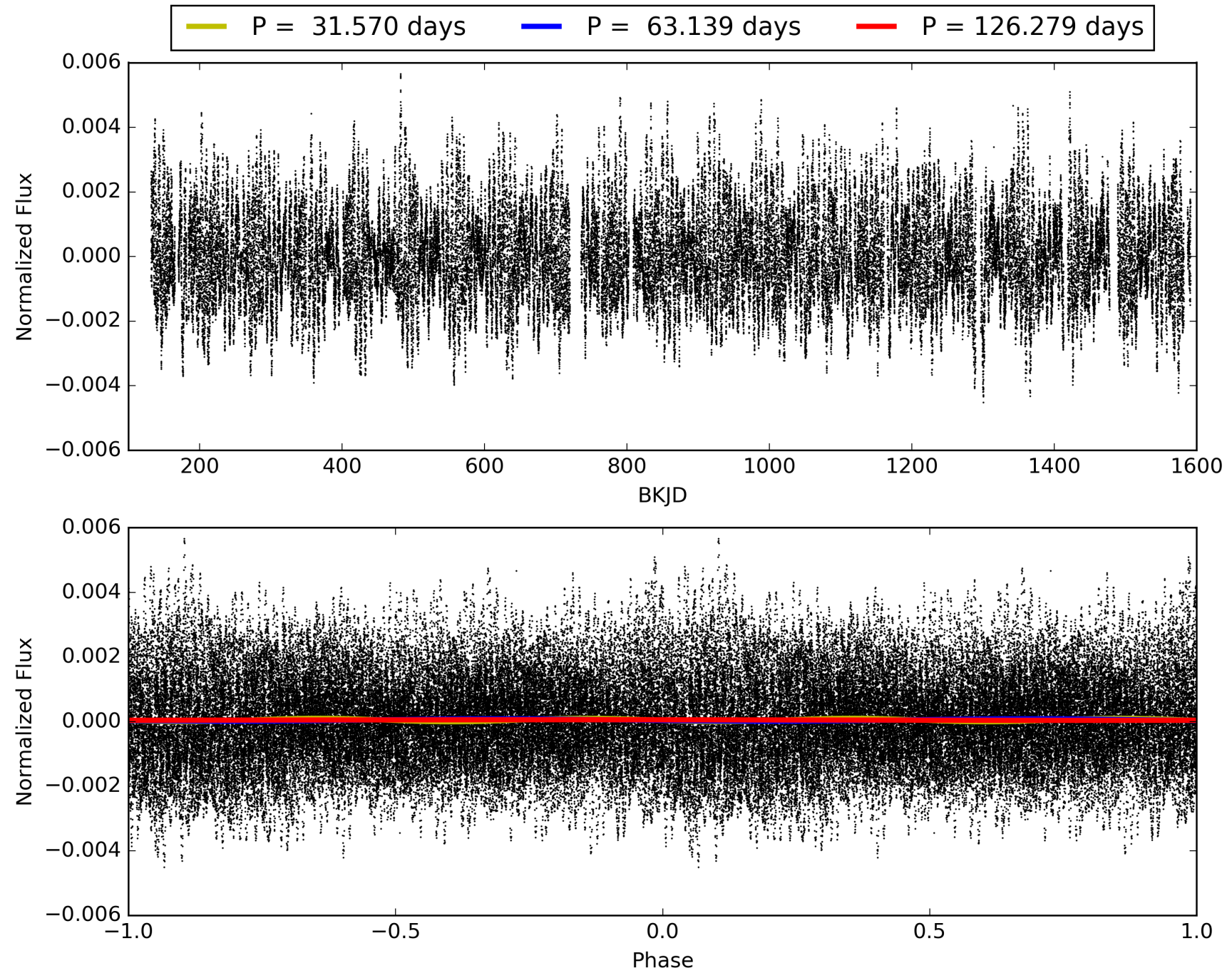
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [72.87 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 87.1%
ModelChiSquareGof-sig: 99.3%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 0.4177
Centroid-sig: 1.9%
Centroid-so: 0.371 arcsec [1.59 σ]
OotOffset-rm: 0.049 arcsec [0.26 σ]
KicOffset-rm: 0.093 arcsec [0.47 σ]
OotOffset-st: 4/4/4/2 [14]
KicOffset-st: 4/4/4/2 [14]
DiffImageQuality-fgm: 0.57 [8/14]
DiffImageOverlap-fno: 0.33 [5/15]

TCE 007597150-05, PDC Light Curves

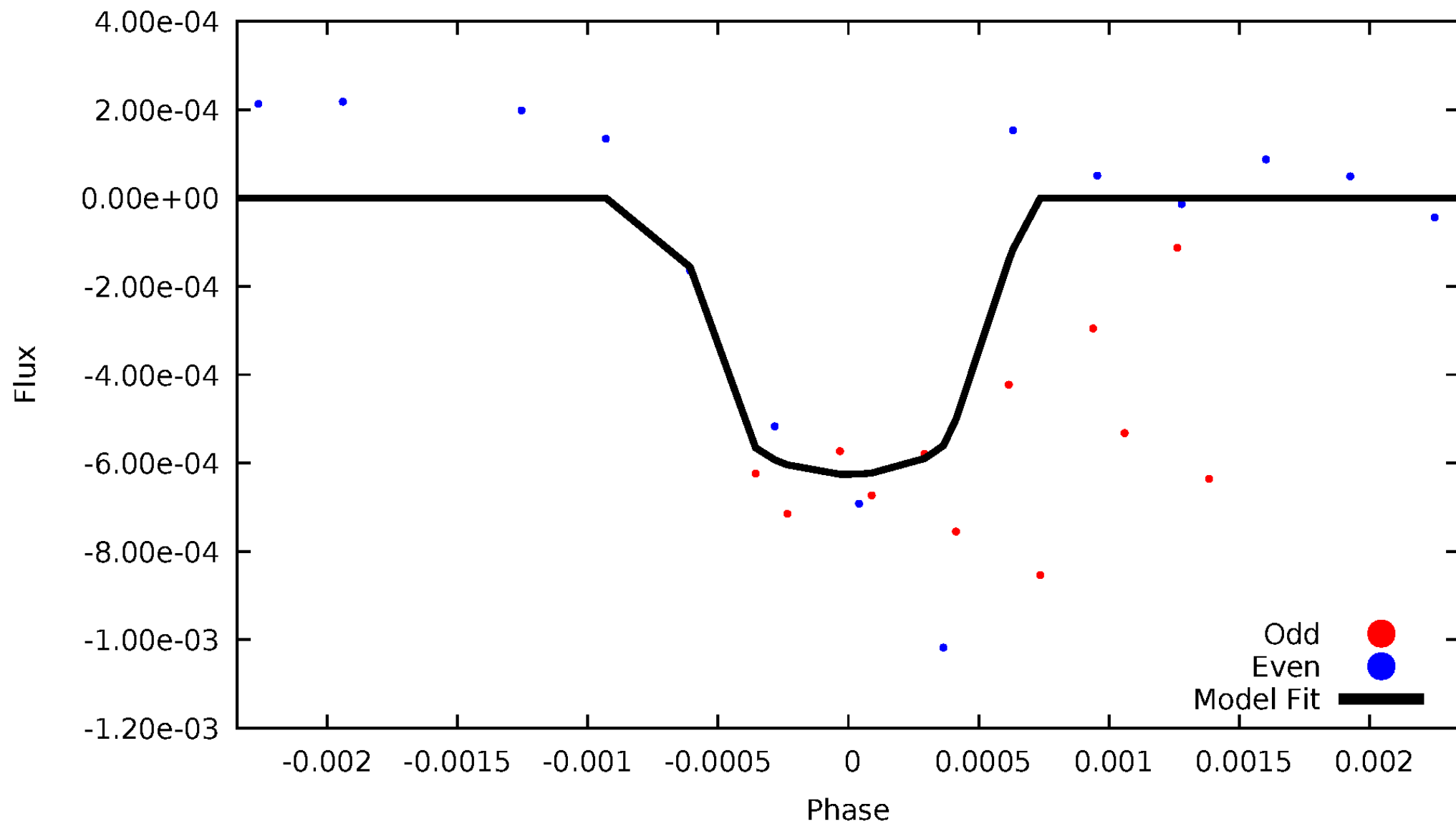


TCE 007597150-05



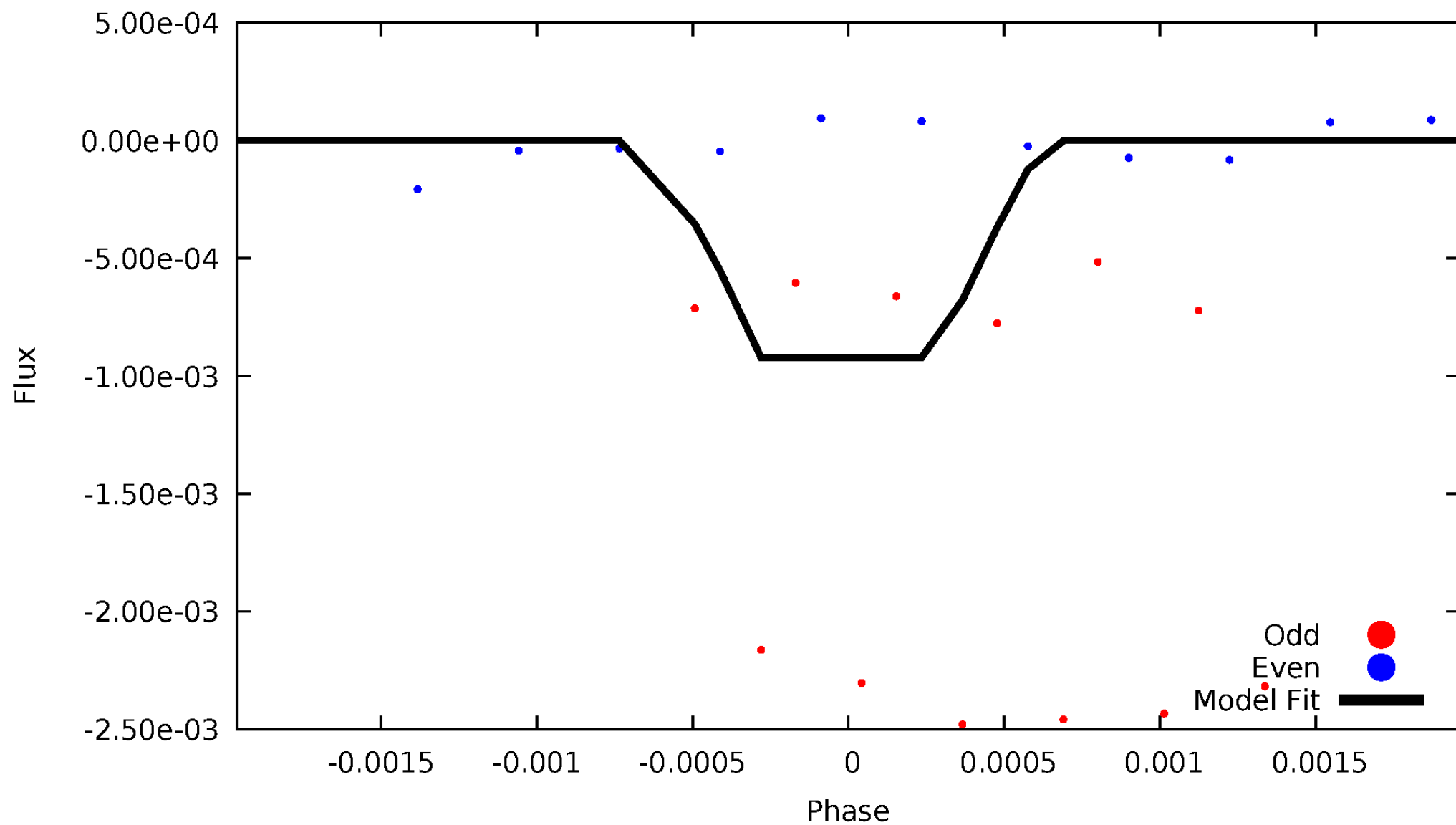
DV Odd/Even

TCE 007597150-05



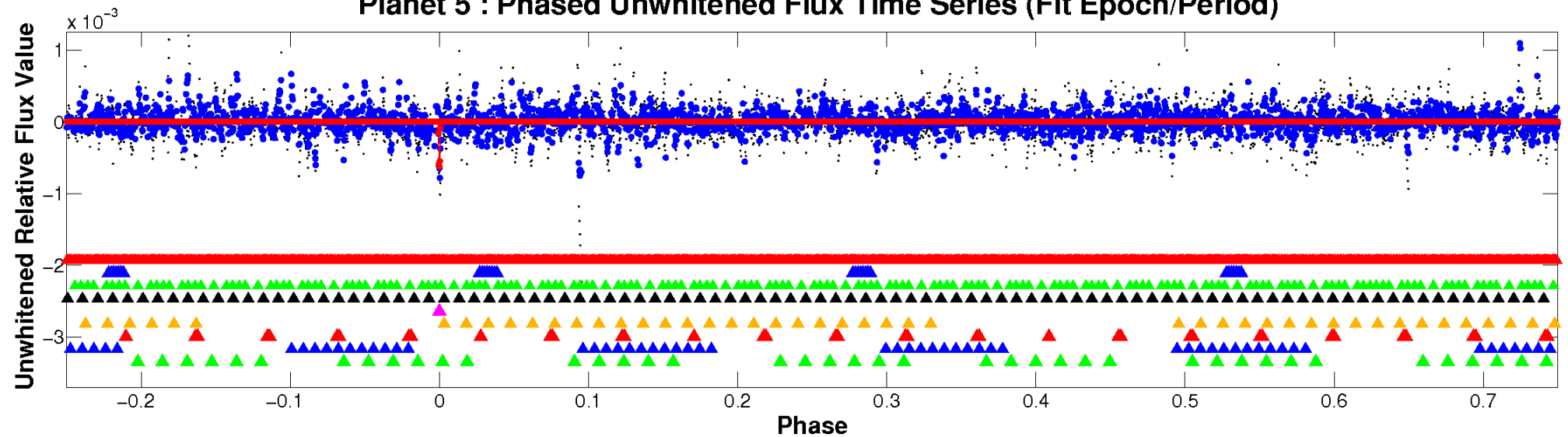
ALT Odd/Even

TCE 007597150-05

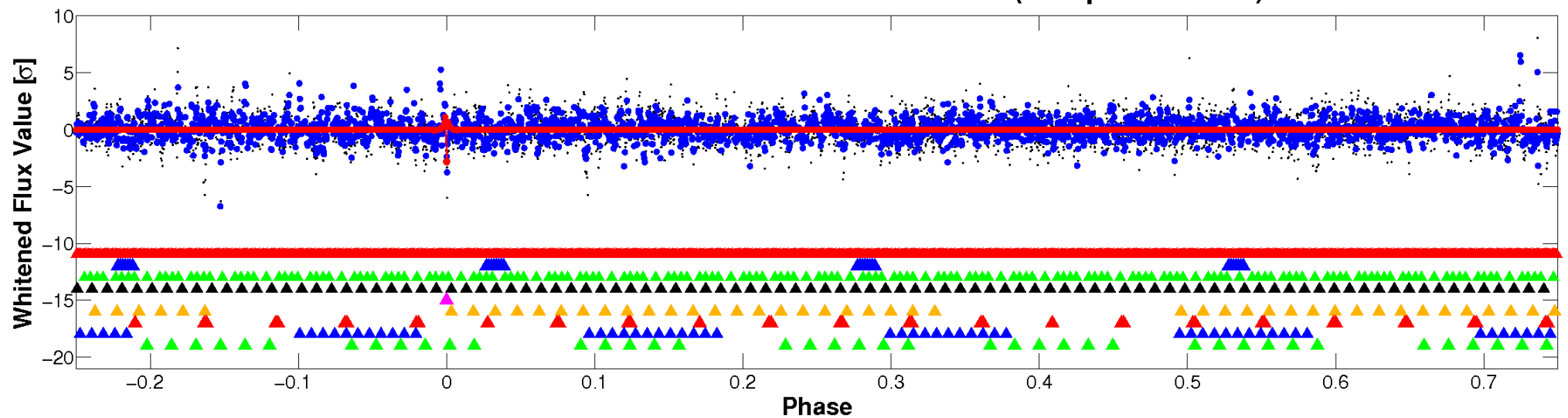


Non-Whitened Vs. Whitened Light Curve

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

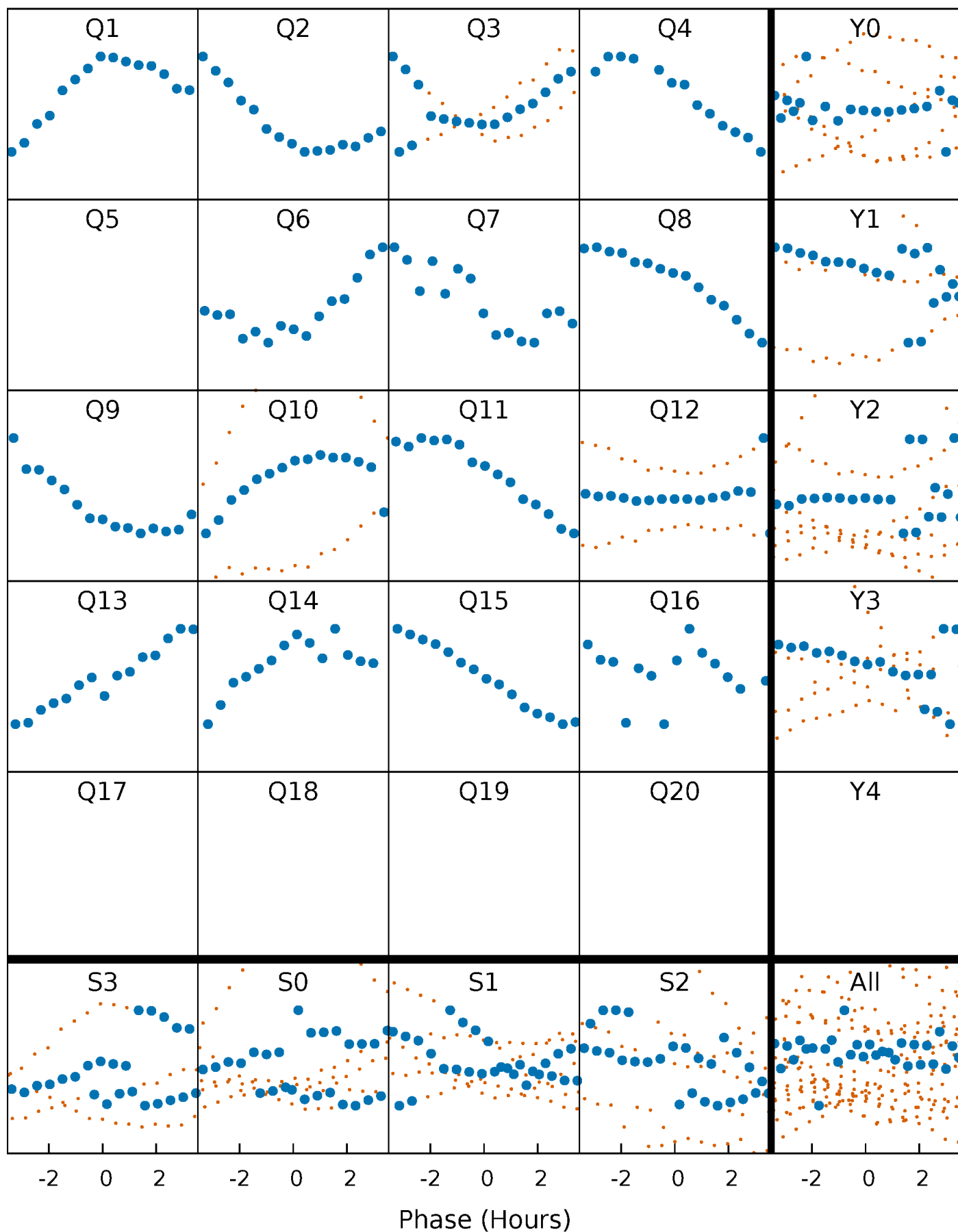


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



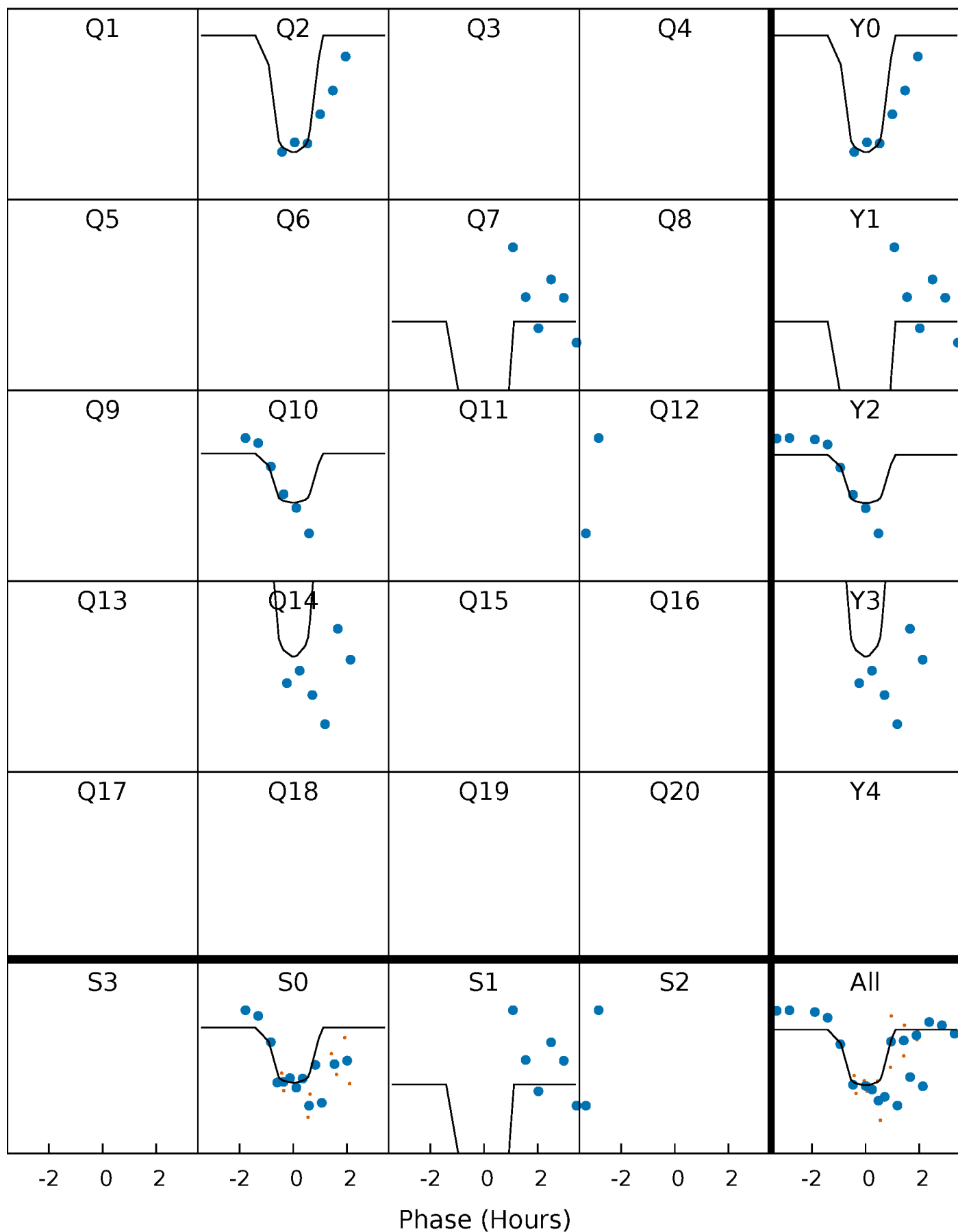
PDC Quarter-Phased Transit Curves

TCE 007597150-05 P= 63.139376 Days $T_0=159.633307$ (BKJD)



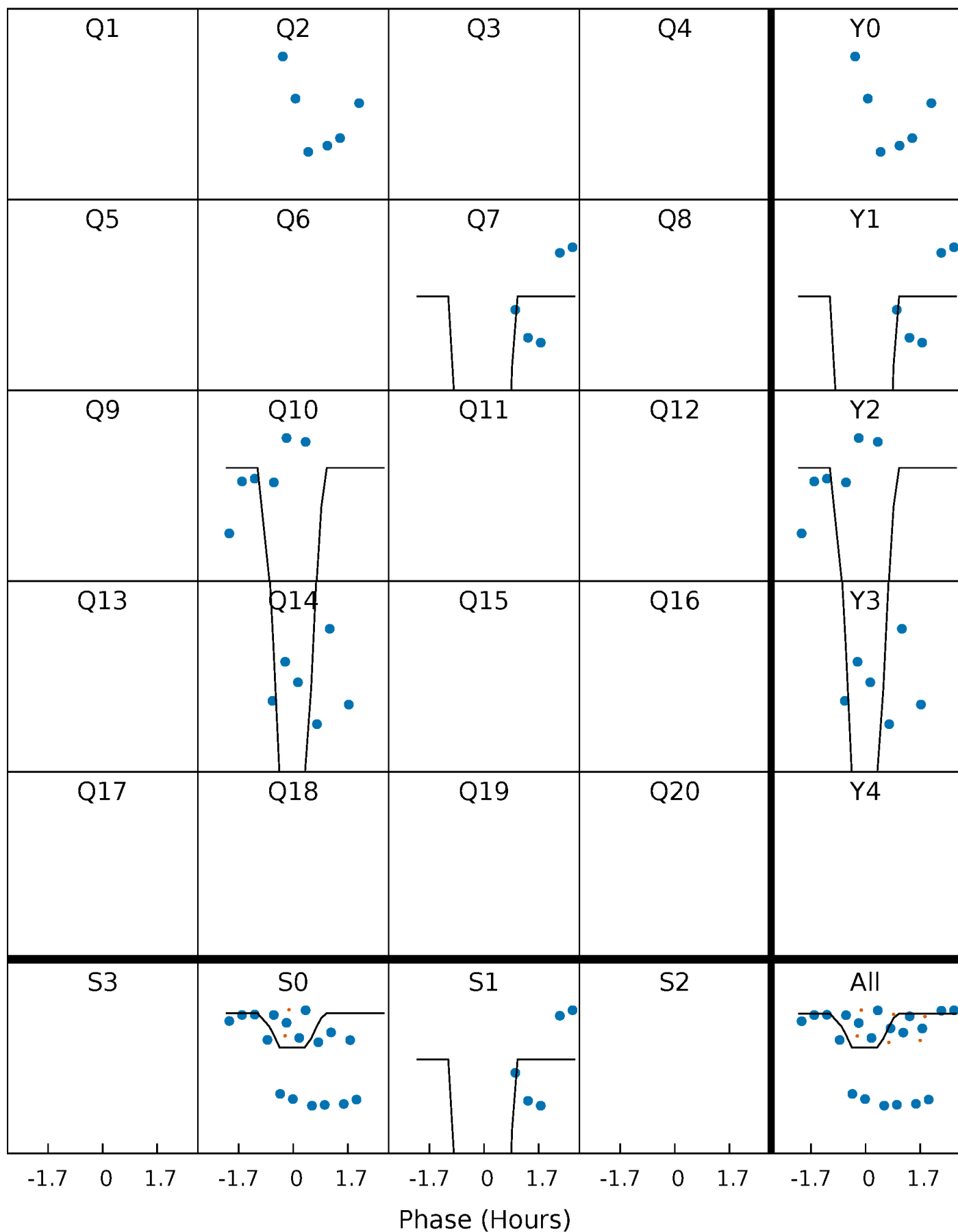
DV Quarter-Phased Transit Curves

TCE 007597150-05 P= 63.139376 Days $T_0=159.633307$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

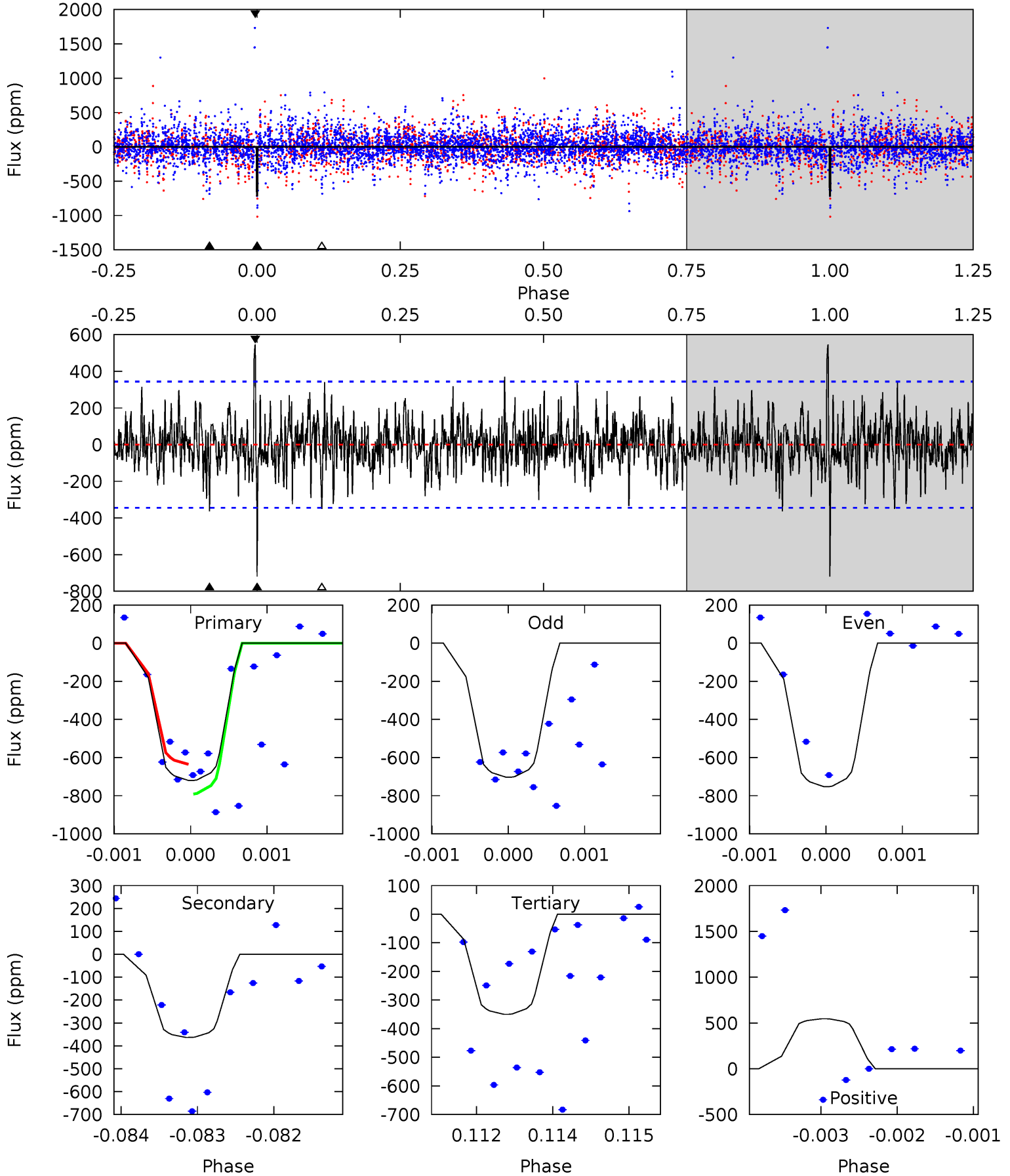
TCE 007597150-05 $P = 63.140547$ Days $T_0 = 159.627387$ (BKJD)



DV Model-Shift Uniqueness Test

007597150-05, P = 63.139376 Days, E = 96.493931 Days

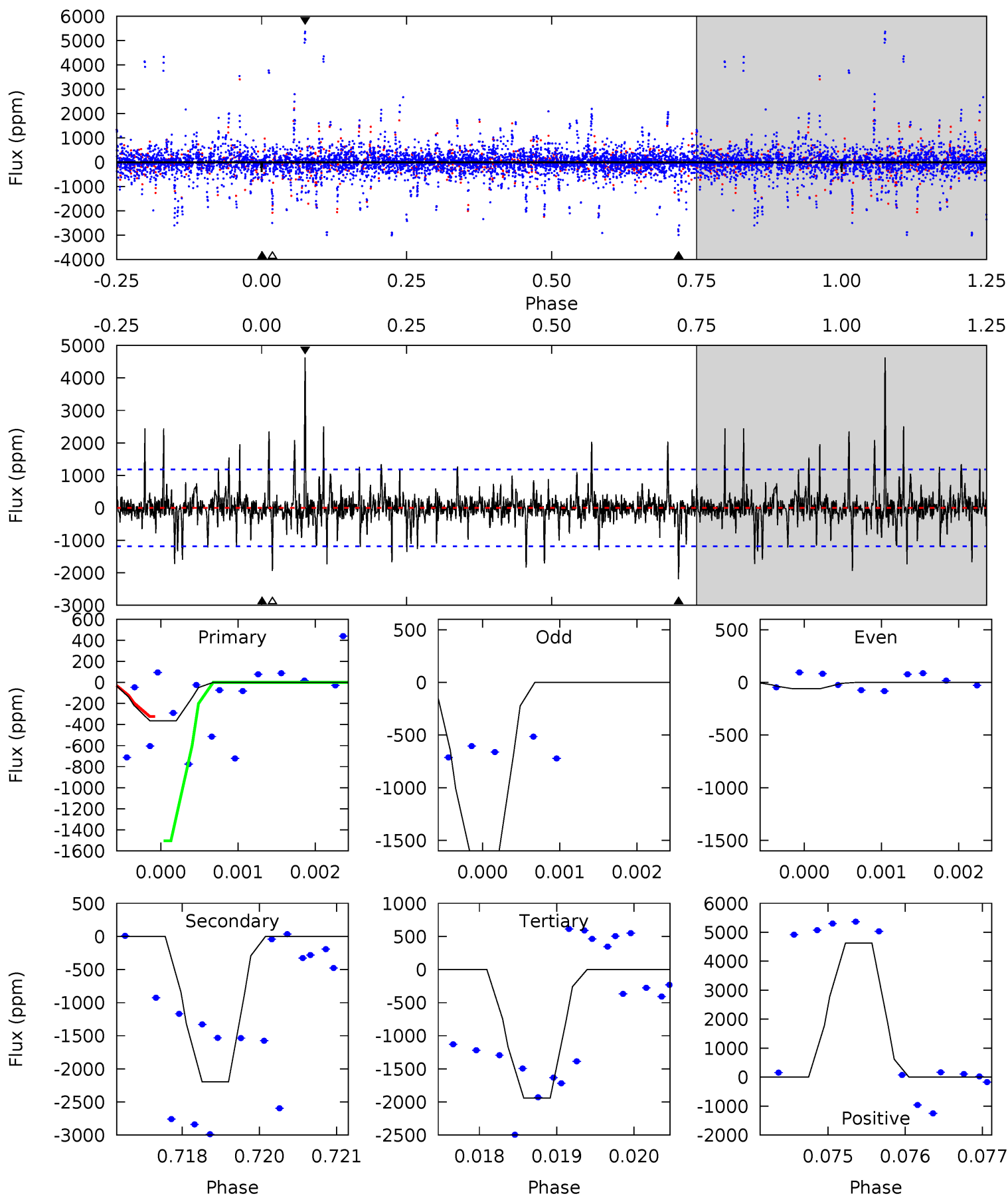
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.4	5.73	5.52	8.61	5.44	3.27	1.65	5.84	2.76	0.21	-2.88	0.37	0.95	0.43	1.13



Alt Model-Shift Uniqueness Test

007597150-05, P = 63.140547 Days, E = 96.486840 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.66	10.0	8.88	21.2	5.42	3.24	1.89	-7.22	-19.5	1.16	-11.1	3.86	1.34	0.68	2.75



Stellar Parameters For KIC 007597150

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7282^{+233}_{-285}	$4.087^{+0.234}_{-0.156}$	$-0.520^{+0.250}_{-0.300}$	$1.683^{+0.458}_{-0.458}$	$1.260^{+0.196}_{-0.161}$	$0.372^{+0.467}_{-0.169}$
	+3%/-4%	+6%/-4%	+48%/-58%	+27%/-27%	+16%/-13%	+125%/-45%
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 007597150-05 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-363 ± 63	$8.71^{+8.38}_{-5.53}$	997^{+75}_{-77}	4594^{+2980}_{-958}	285^{+1775}_{-208}
Alt.	-2195 ± 219	$9.63^{+8.99}_{-6.13}$	992^{+82}_{-72}	6721^{+7086}_{-1765}	1458^{+9839}_{-1059}

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

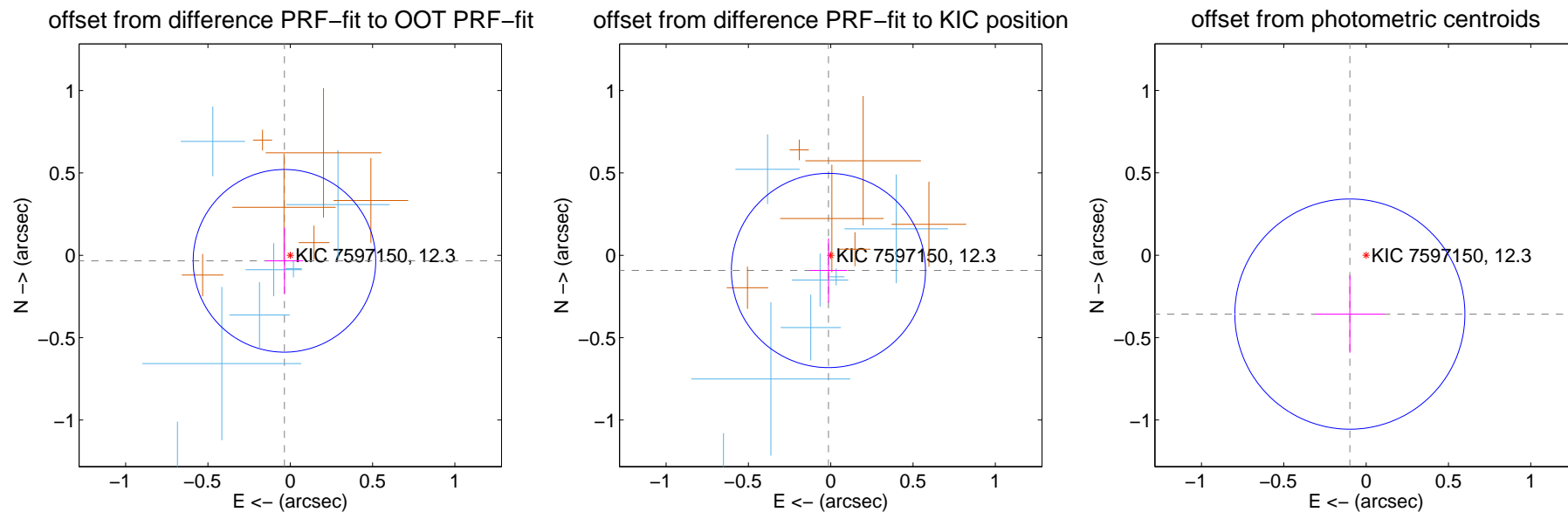
DV Centroid Data

Supplemental centroid analysis for 007597150-05. Kepler magnitude: 12.30. Transit SNR 8.59

There are 8 quarters with good PRF difference image offsets

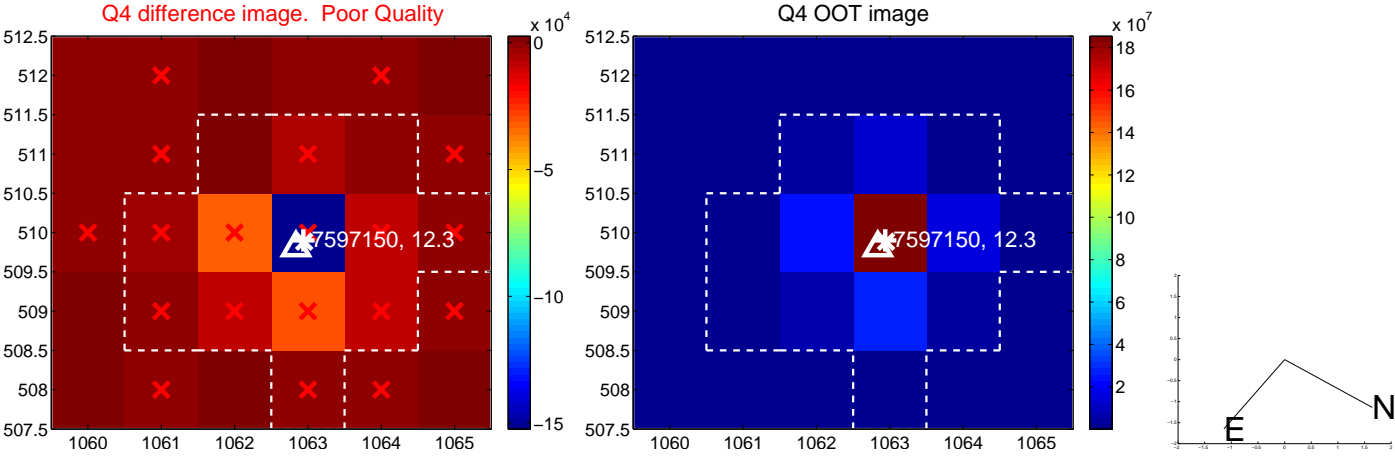
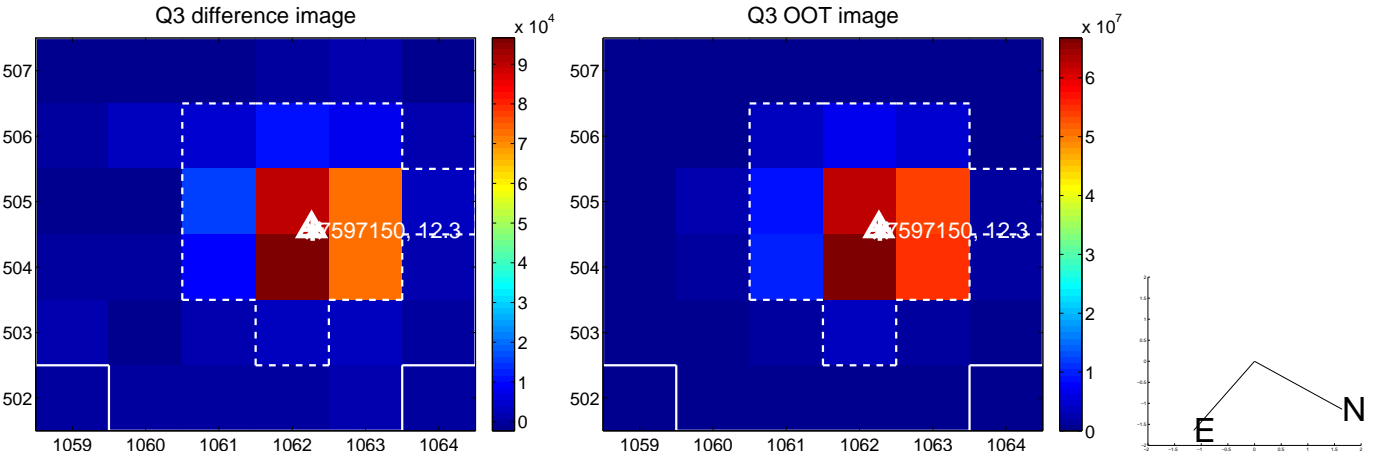
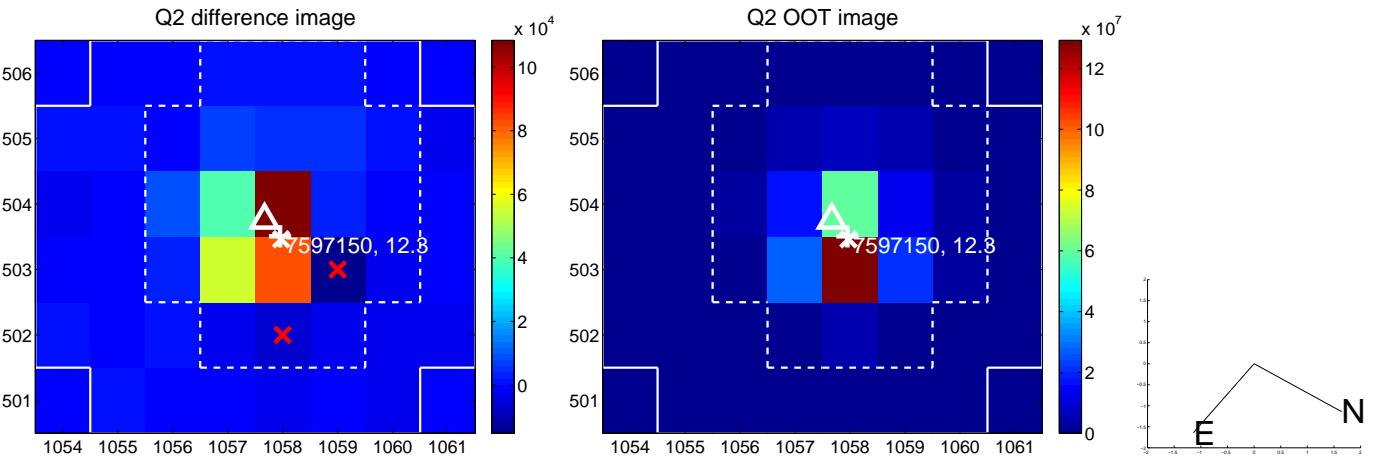
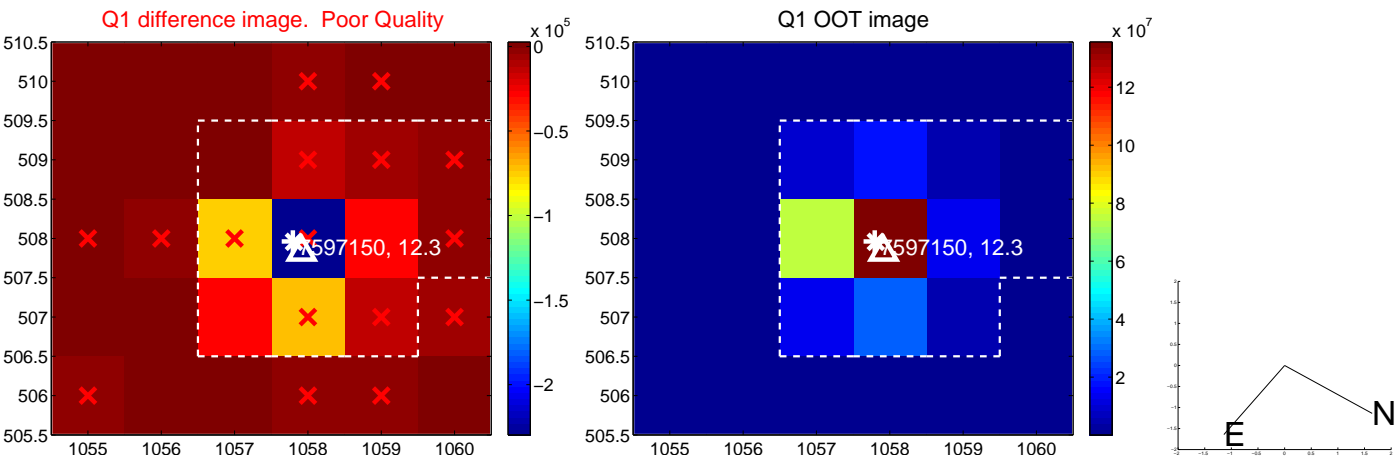
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.049 ± 0.185	0.26	0.035 ± 0.114	-0.034 ± 0.202
PRF-fit source offset from KIC position	0.093 ± 0.197	0.47	0.014 ± 0.114	-0.092 ± 0.195
photometric centroid source offset	0.37 ± 0.23	1.59	0.10 ± 0.21	-0.36 ± 0.23

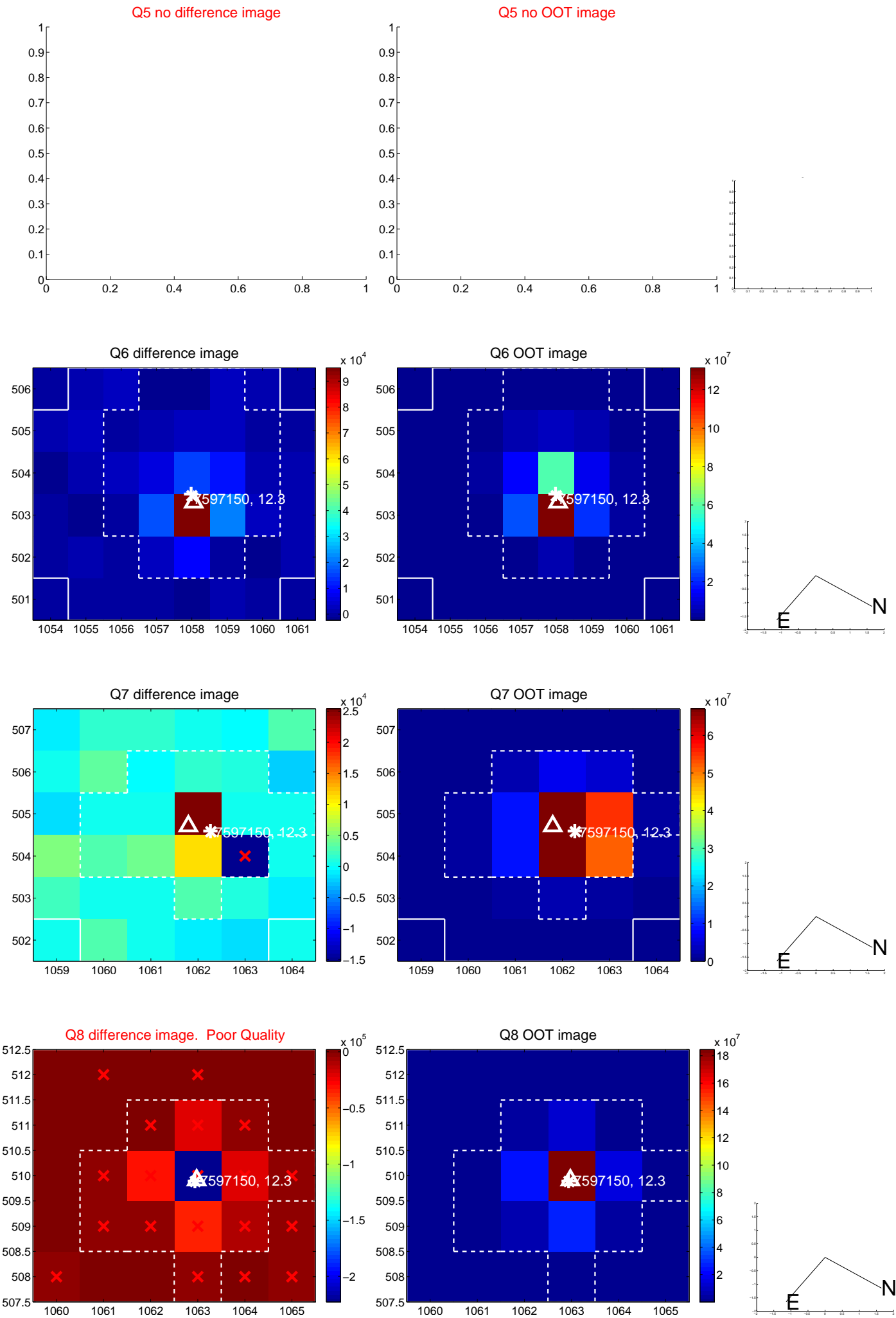


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

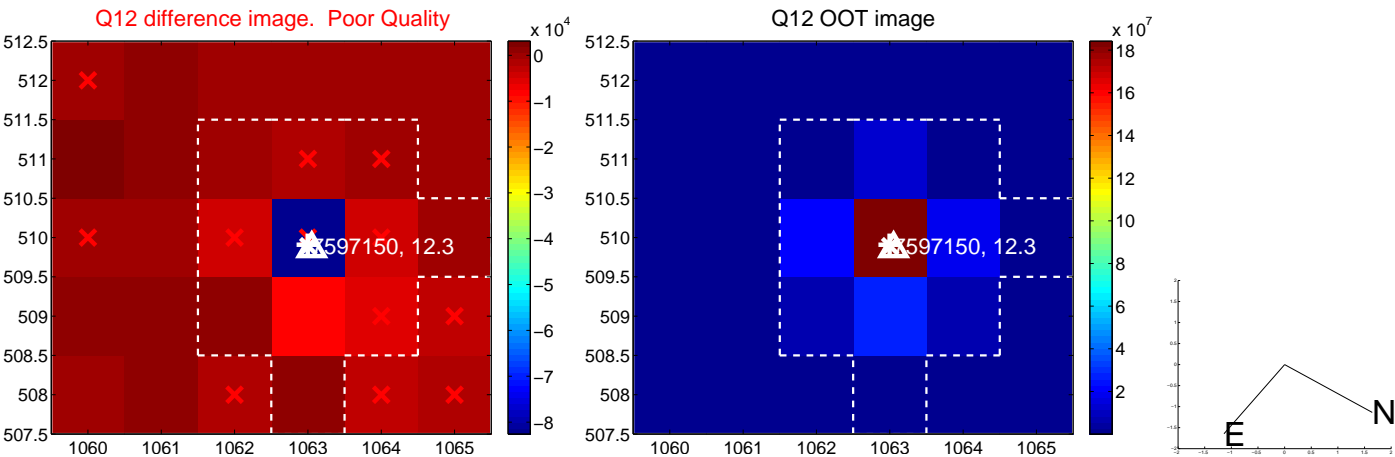
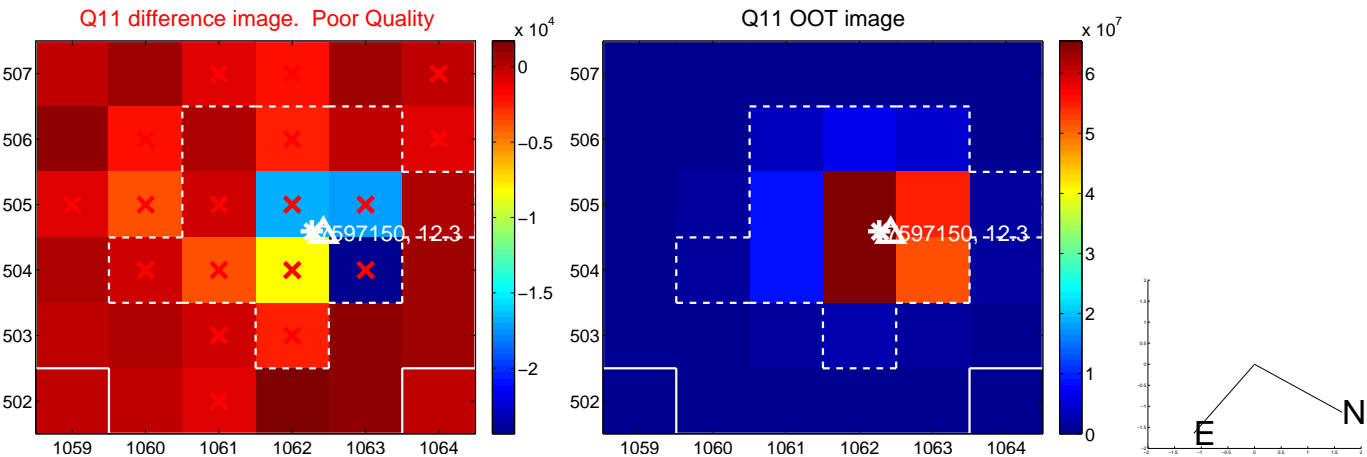
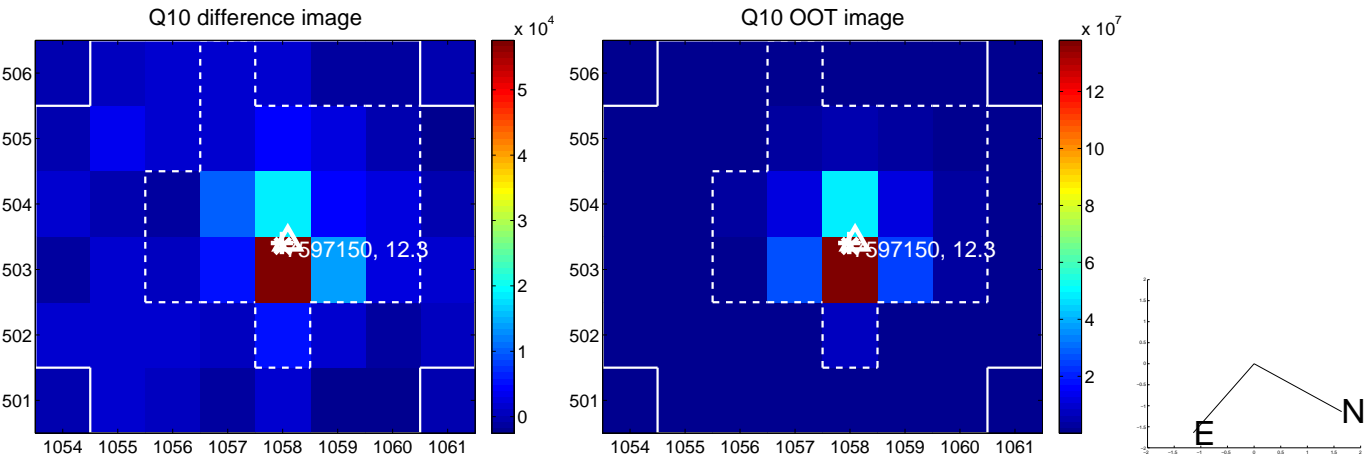
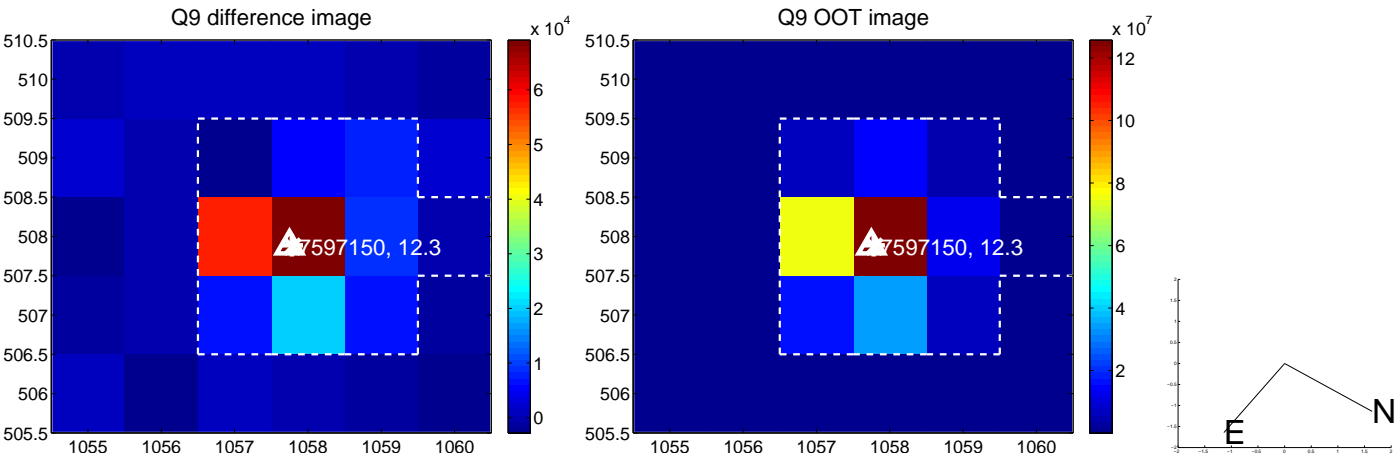
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



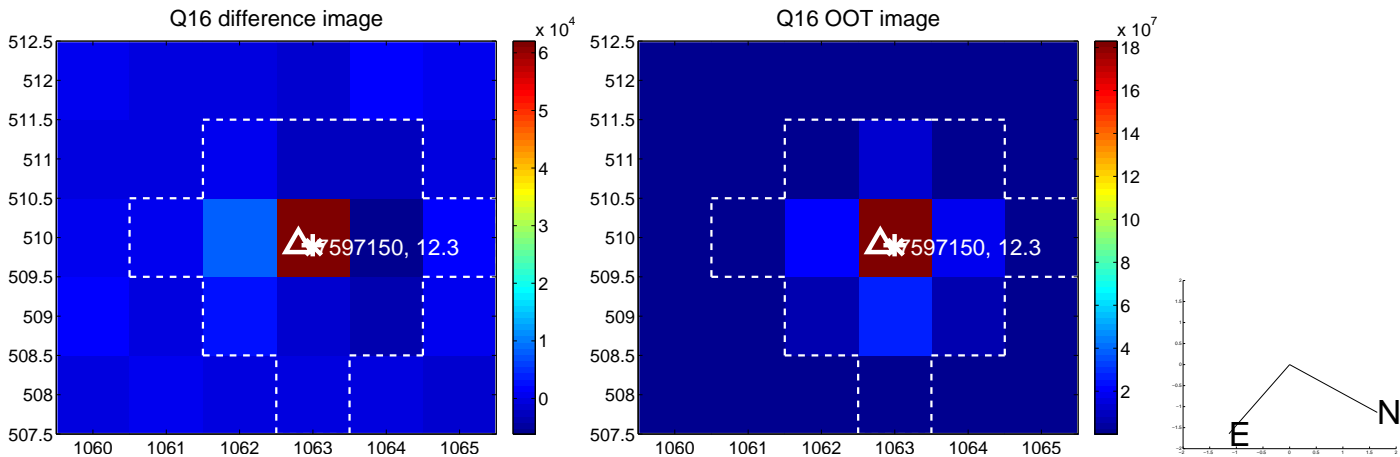
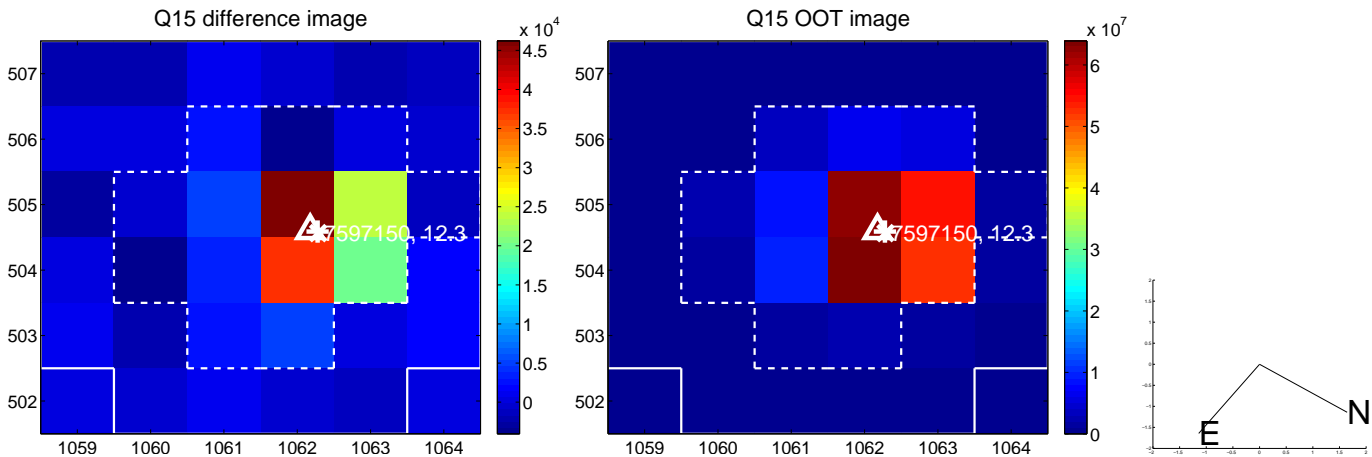
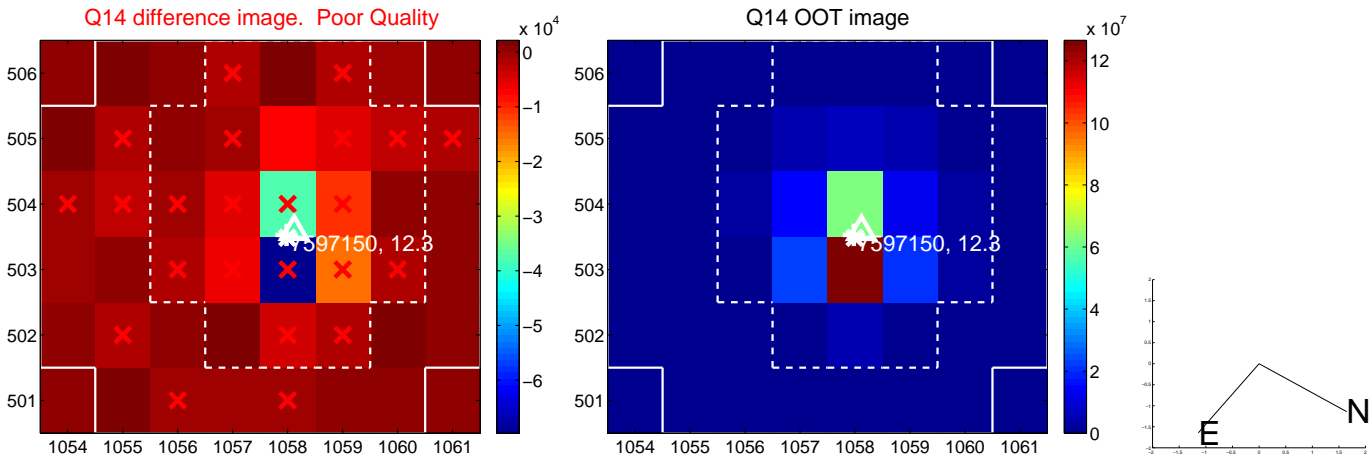
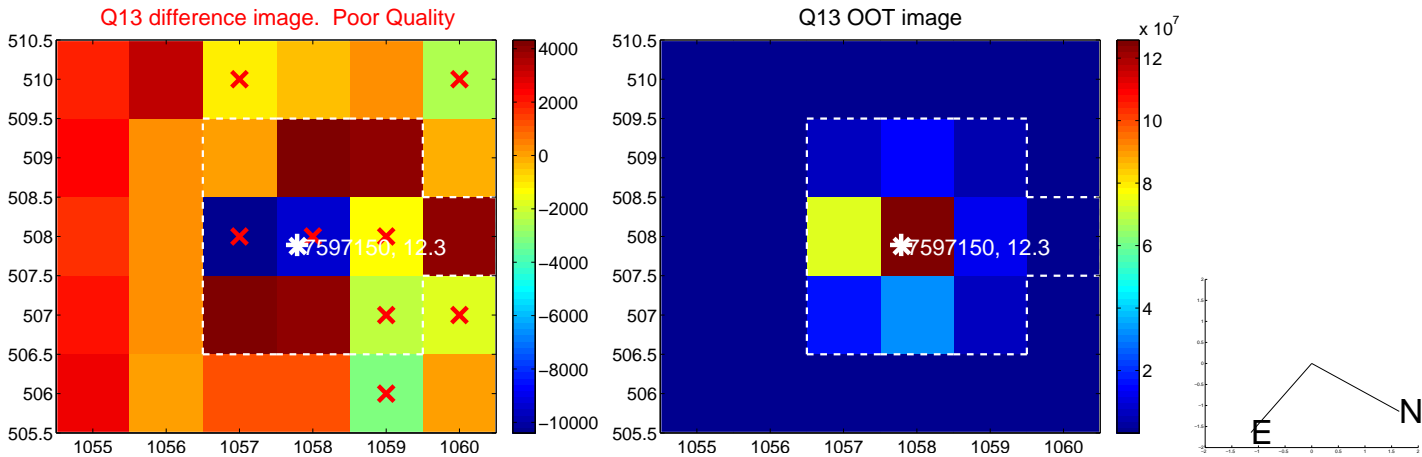
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



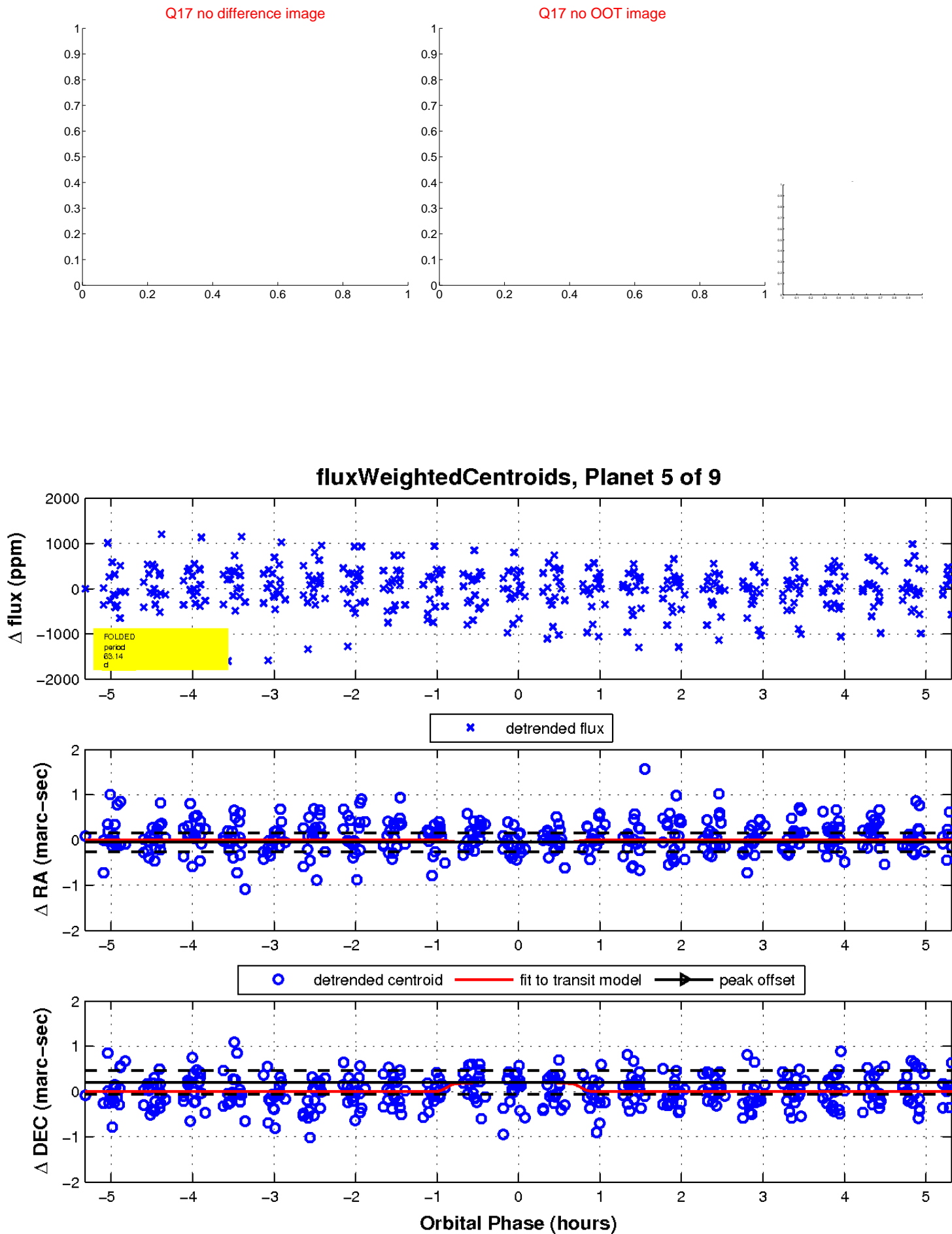
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

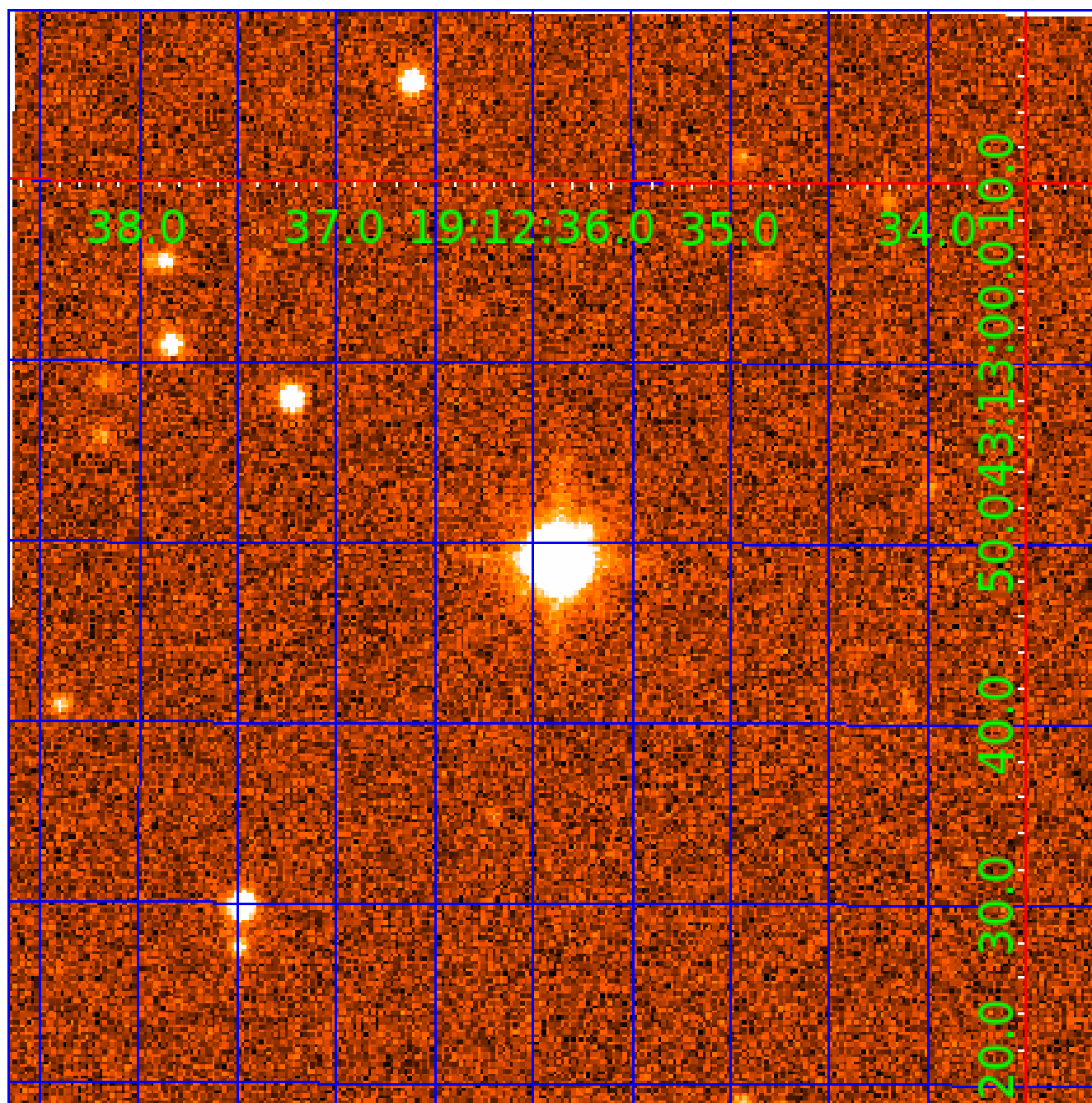


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007597150

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})
007597150-01	OBS	No	1.185112	132.137440	0.2	8.394	7.9	0.1	1.68	7282	0.08	12713.76
007597150-02	OBS	No	47.328333	177.880517	497.2	4.895	10.5	9.0	1.68	7282	4.32	93.14
007597150-03	OBS	No	8.293566	136.451345	43.3	2.639	10.1	2.9	1.68	7282	1.29	949.80
007597150-04	OBS	No	8.291193	136.224441	719.1	2.304	9.5	9.0	1.68	7282	4.69	950.16
007597150-05	OBS	No	63.139376	159.633307	625.6	1.776	9.1	8.6	1.68	7282	4.62	63.42
007597150-06	OBS	No	31.101521	149.334486	381.5	6.475	9.6	6.2	1.68	7282	6.26	163.02
007597150-07	OBS	No	39.081868	137.421010	1020.6	14.434	9.6	9.1	1.68	7282	9.72	120.22
007597150-08	OBS	No	25.156825	145.994068	159.9	3.808	9.2	3.5	1.68	7282	2.35	216.31
007597150-09	OBS	No	35.930360	143.370372	221.5	1.500	7.3	-1.0	1.68	7282	2.55	134.48

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007597150-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV
007597150-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD
007597150-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—NO_FITS—CENT_NOFITS

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

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

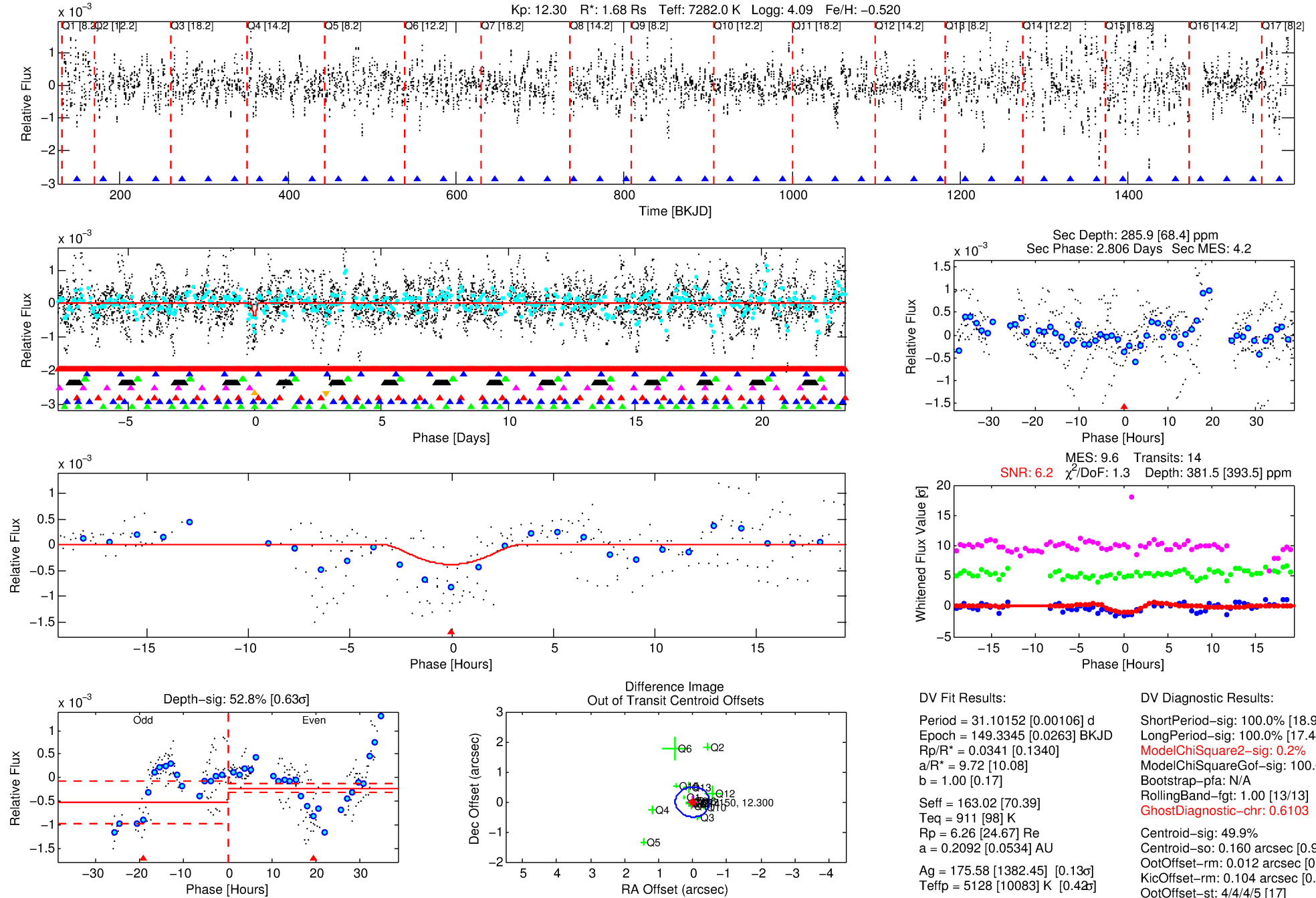
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007597150-06

No Significant Match Found

DV One-Page Summary

KIC: 7597150 Candidate: 6 of 9 Period: 31.102 d



DV Fit Results:

Period = 31.10152 [0.00106] d
Epoch = 149.3345 [0.0263] BKJD
Rp/R* = 0.0341 [0.1340]
a/R* = 9.72 [10.08]
b = 1.00 [0.17]
Seff = 163.02 [70.39]
Teq = 911 [98] K
Rp = 6.26 [24.67] Re
a = 0.2092 [0.0534] AU
Ag = 175.58 [1382.45] [0.13 σ]
Teffp = 5128 [10083] K [0.42 σ]

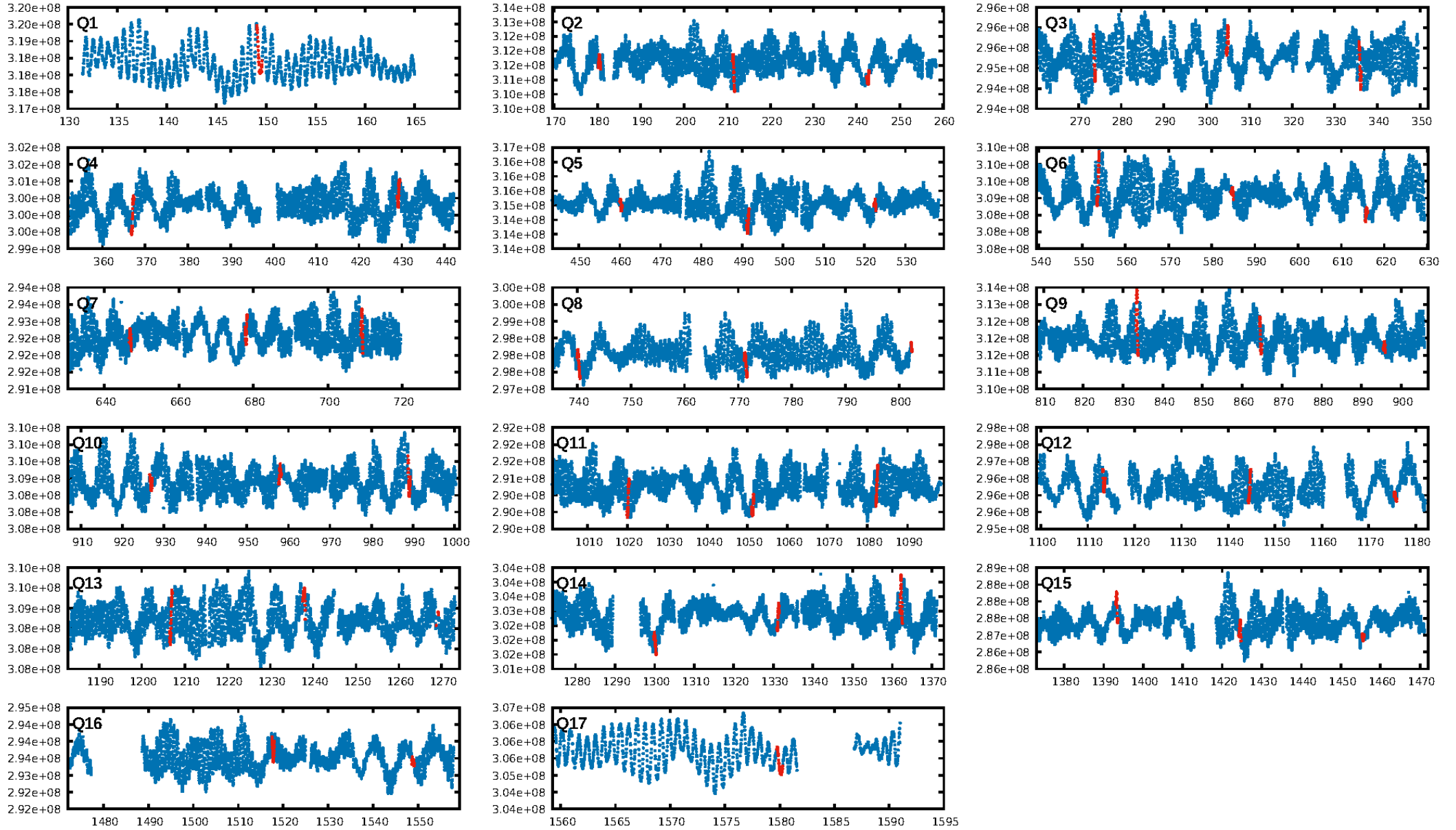
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [18.99 σ]
LongPeriod-sig: 100.0% [17.44 σ]
ModelChiSquare2-sig: 0.2%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [13/13]
GhostDiagnostic-chr: 0.6103
Centroid-sig: 49.9%
Centroid-so: 0.160 arcsec [0.91 σ]
OotOffset-rm: 0.012 arcsec [0.07 σ]
KicOffset-rm: 0.104 arcsec [0.65 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.59 [10/17]
DiffImageOverlap-fno: 0.00 [0/17]

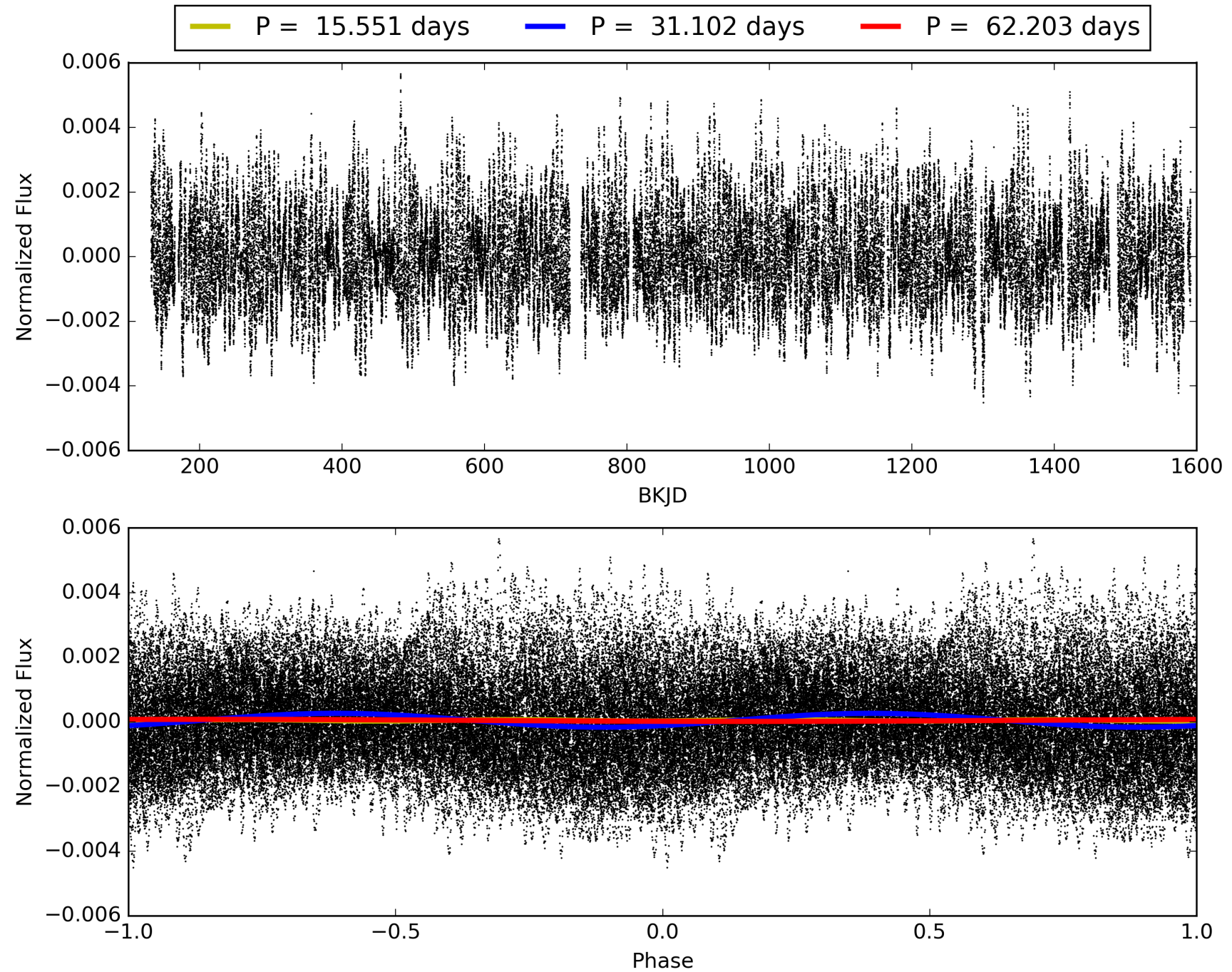
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:31:01 Z

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

TCE 007597150-06, PDC Light Curves

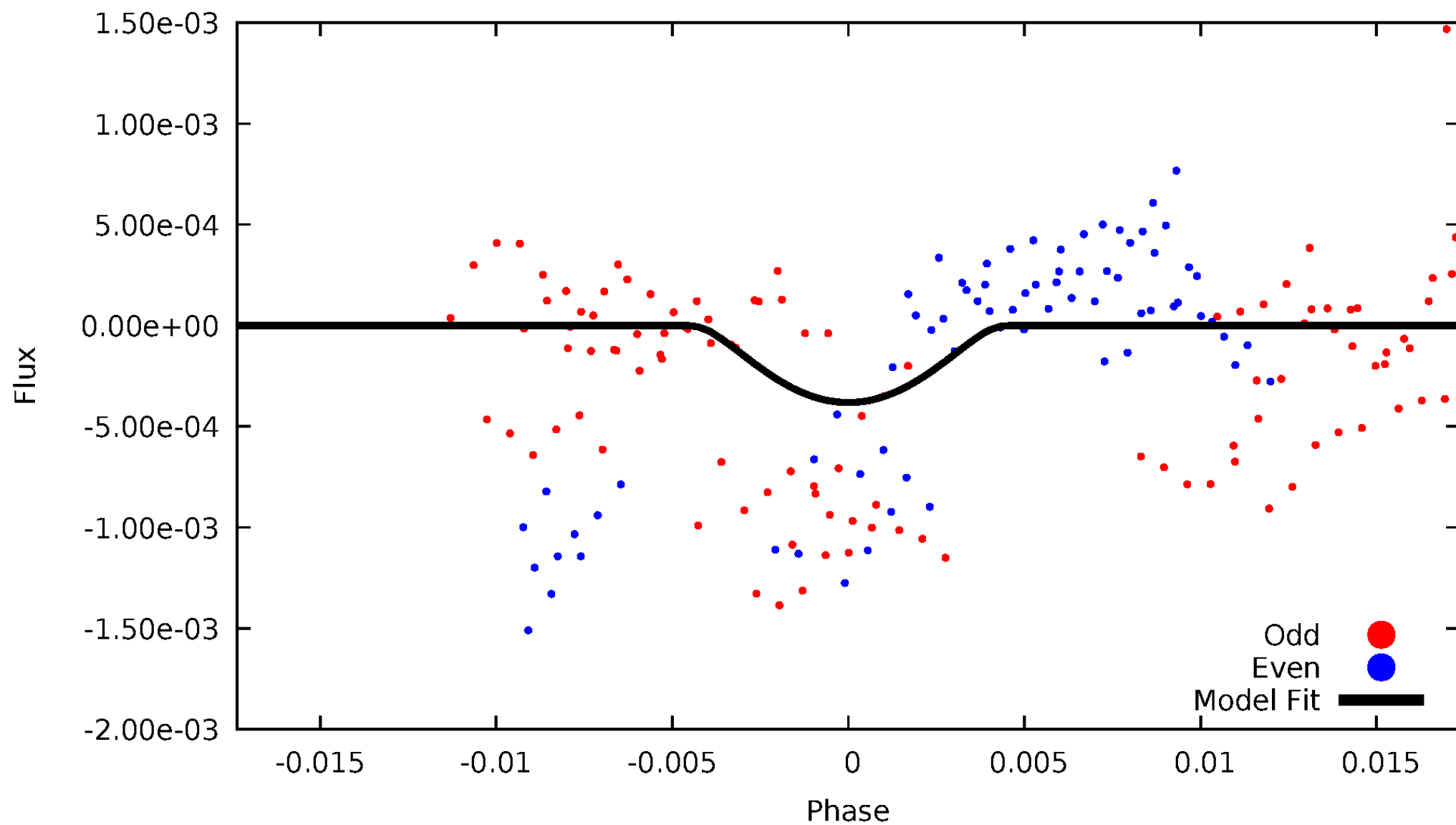


TCE 007597150-06



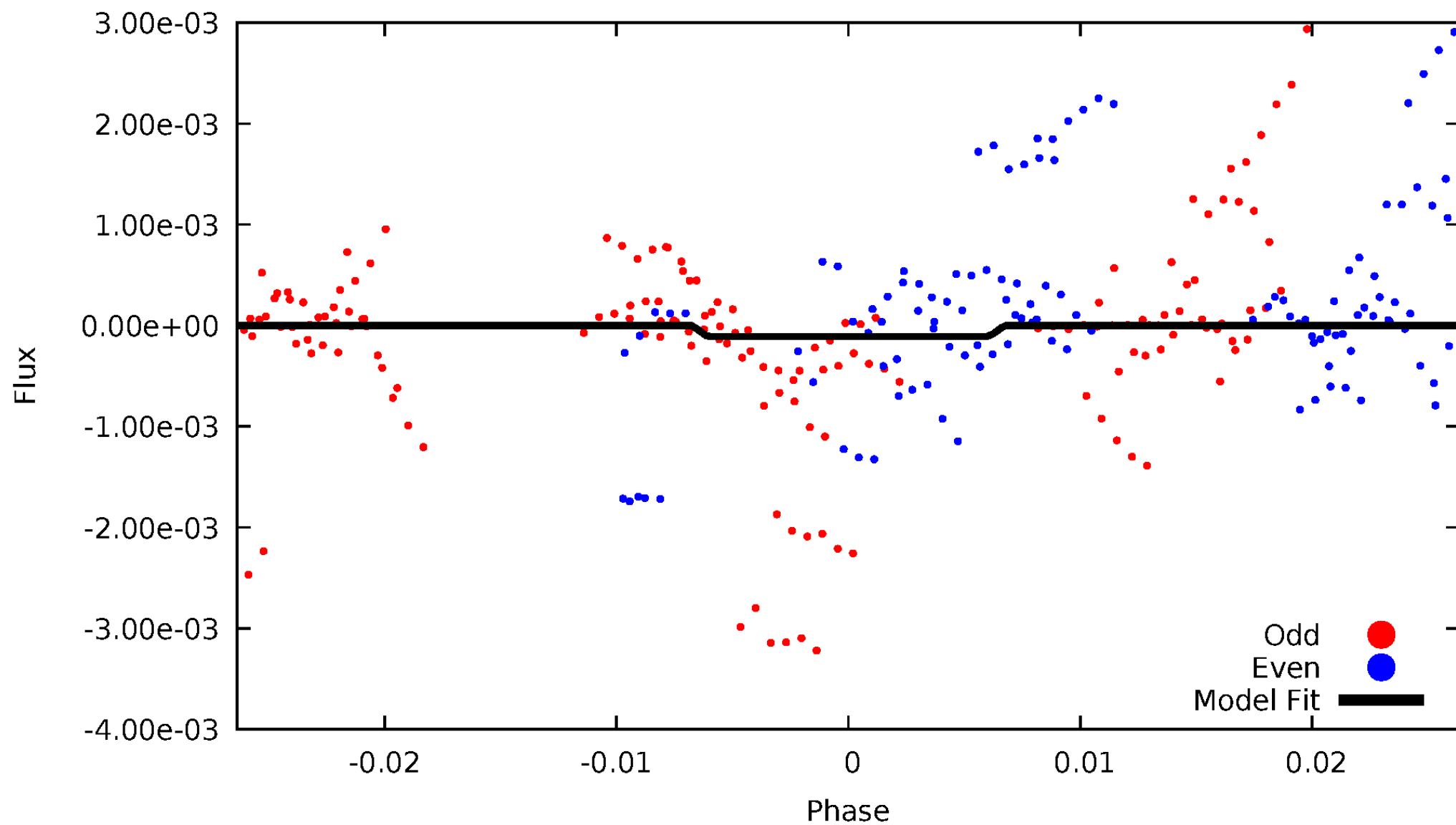
DV Odd/Even

TCE 007597150-06



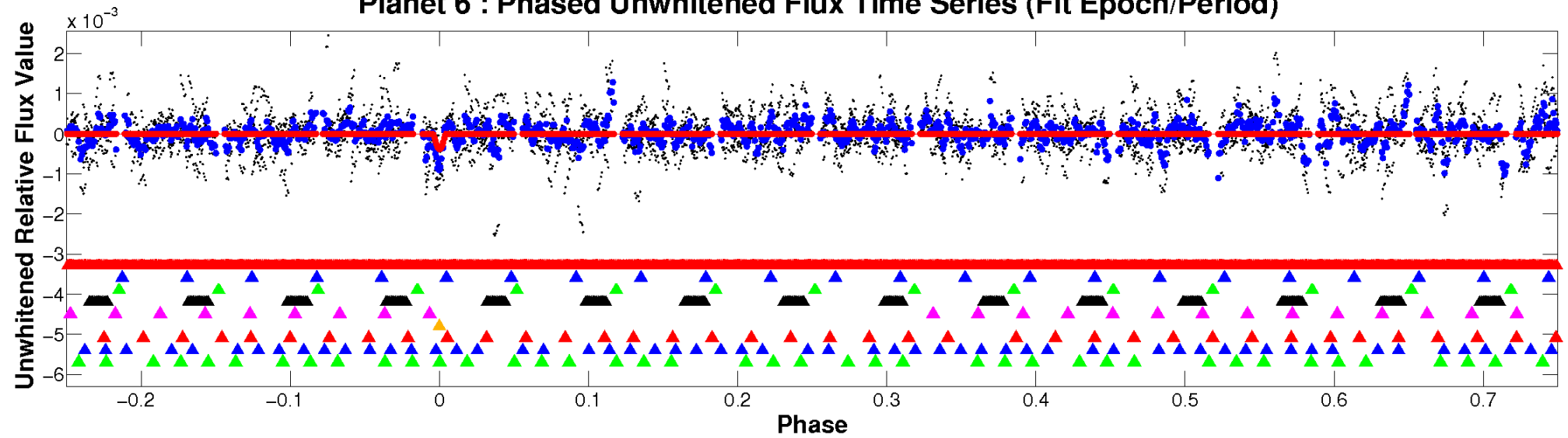
ALT Odd/Even

TCE 007597150-06

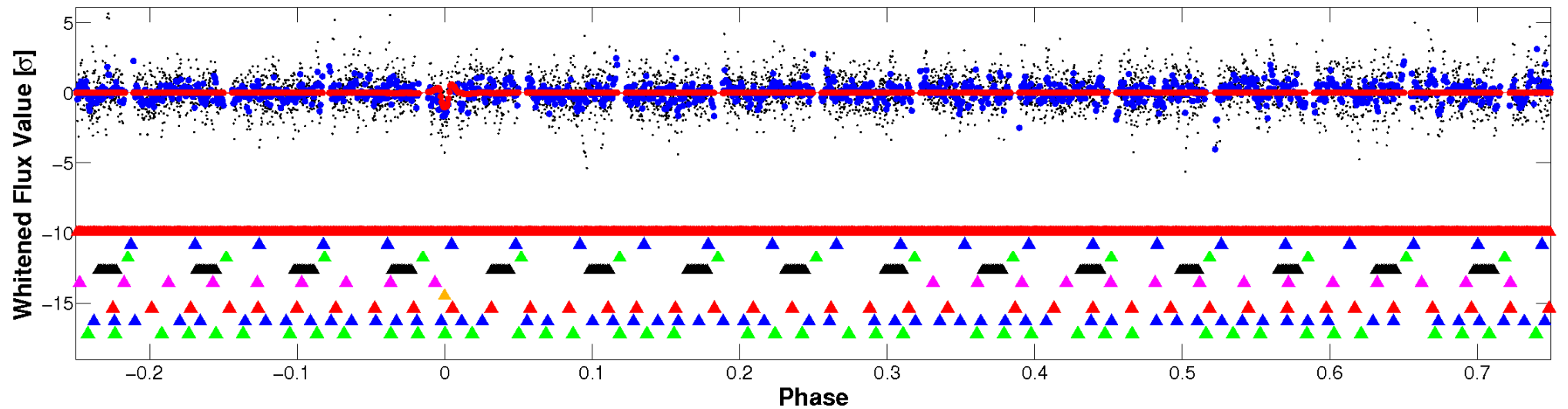


Non-Whitened Vs. Whitened Light Curve

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

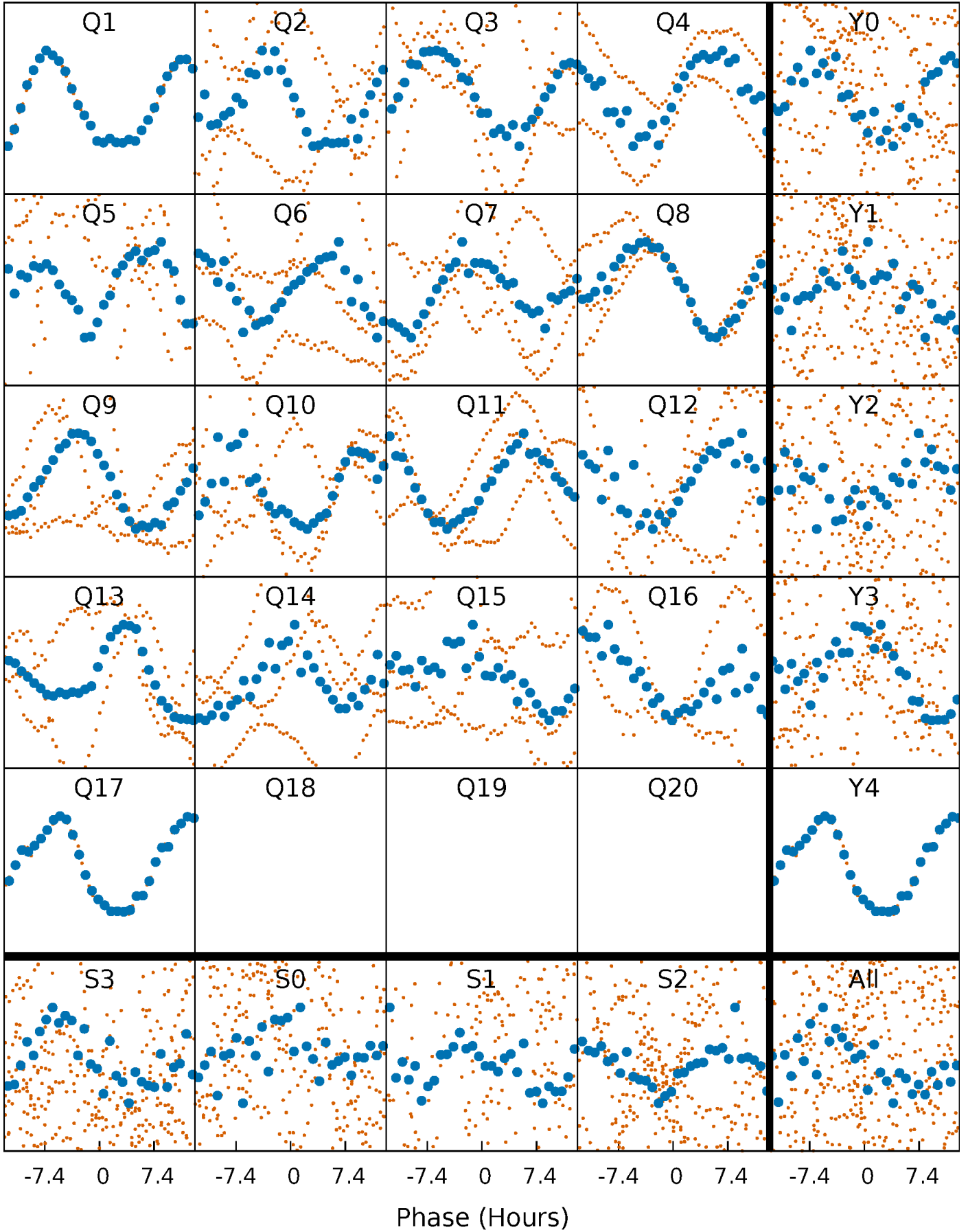


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



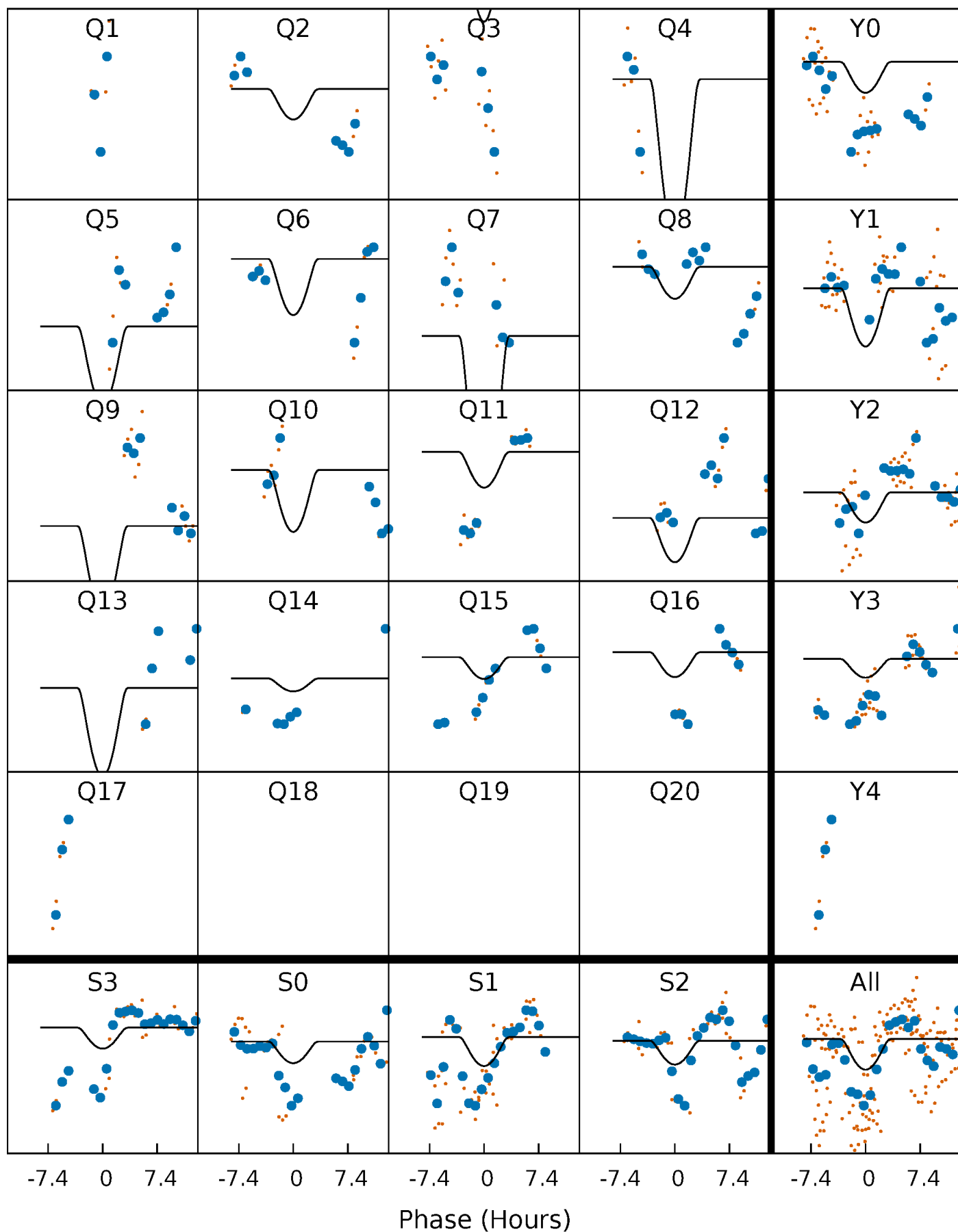
PDC Quarter-Phased Transit Curves

TCE 007597150-06 P= 31.101521 Days $T_0=149.334486$ (BKJD)



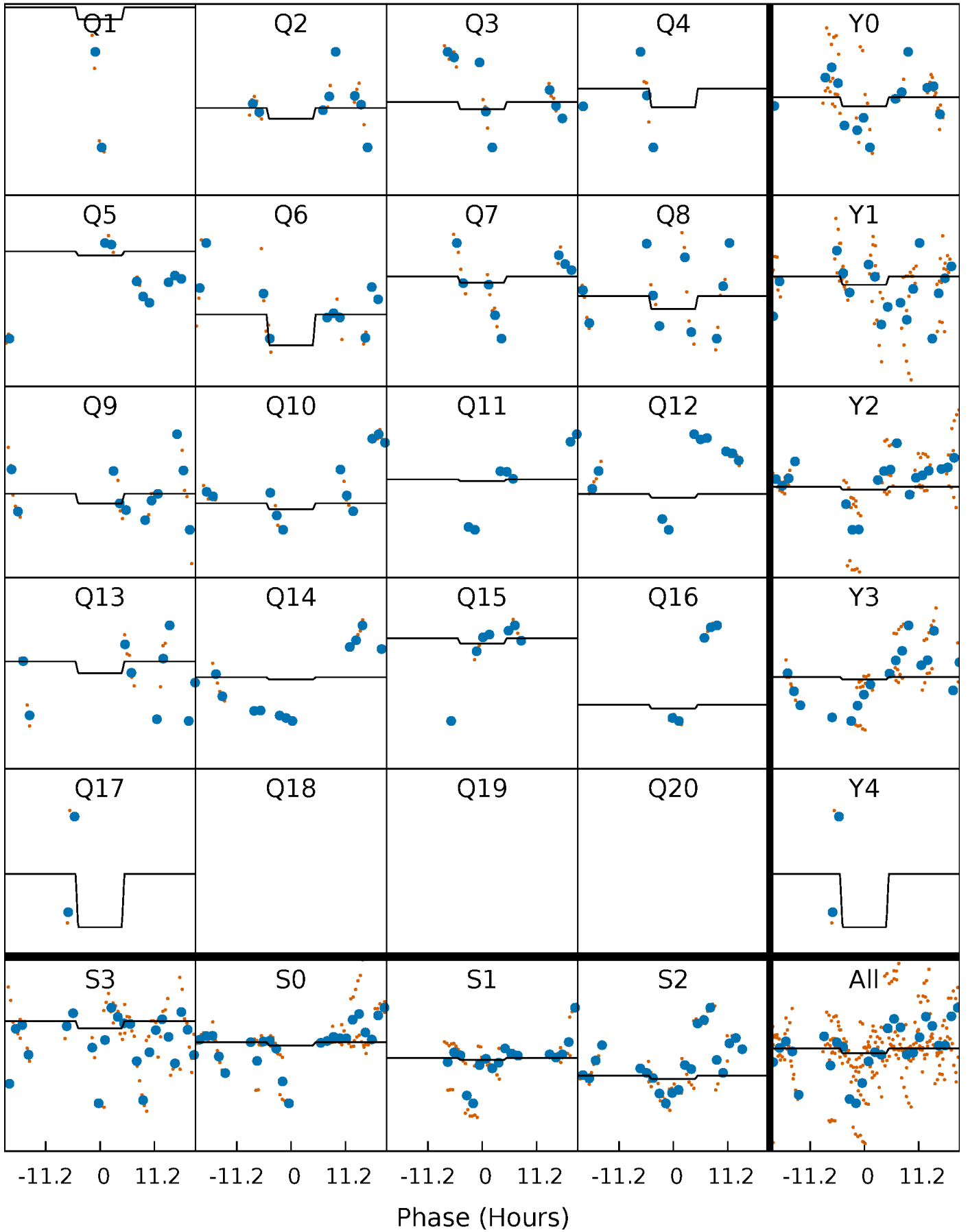
DV Quarter-Phased Transit Curves

TCE 007597150-06 P= 31.101521 Days $T_0=149.334486$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

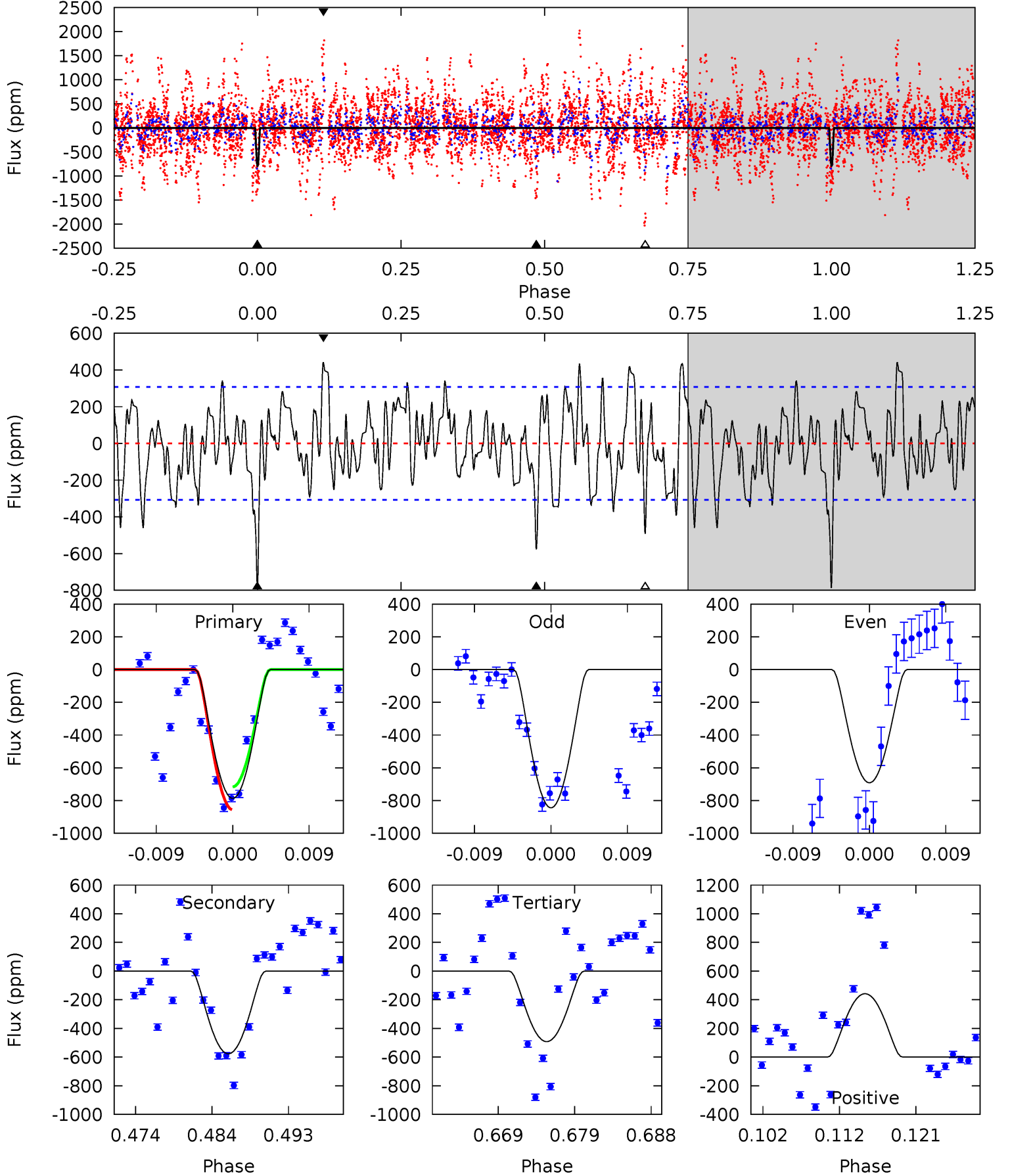
TCE 007597150-06 P= 31.101834 Days $T_0=149.337573$ (BKJD)



DV Model-Shift Uniqueness Test

007597150-06, $P = 31.101521$ Days, $E = 118.232965$ Days

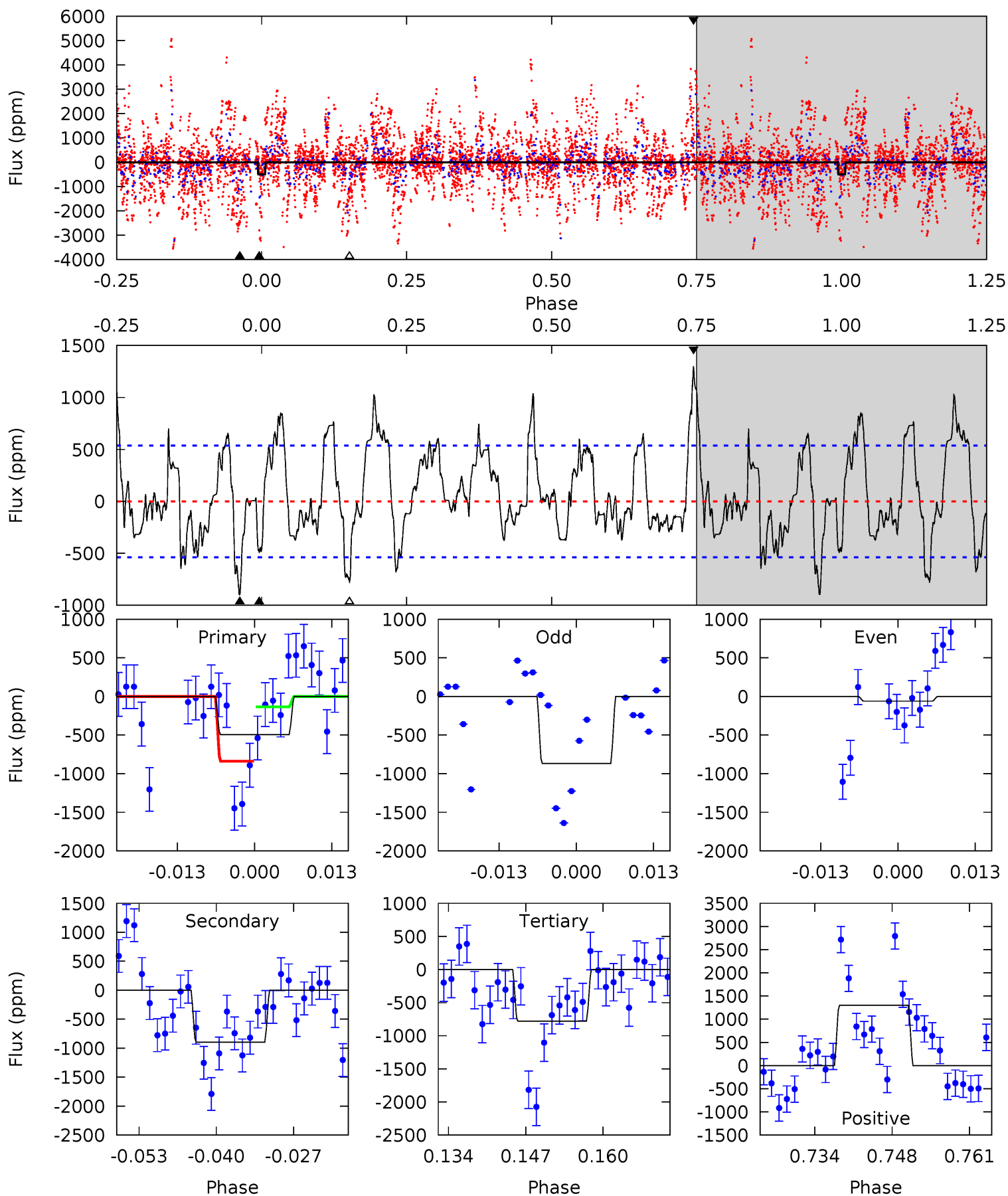
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.9	9.45	8.07	7.25	5.04	2.60	2.77	4.82	5.64	1.39	2.21	1.24	0.30	0.36	1.16



Alt Model-Shift Uniqueness Test

007597150-06, P = 31.101834 Days, E = 118.235739 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.58	8.32	7.23	12.0	4.97	2.47	3.46	-2.65	-7.46	1.09	-3.72	3.62	3.06	0.59	3.31



Stellar Parameters For KIC 007597150

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	7282^{+233}_{-285}	$4.087^{+0.234}_{-0.156}$	$-0.520^{+0.250}_{-0.300}$	$1.683^{+0.458}_{-0.458}$	$1.260^{+0.196}_{-0.161}$	$0.372^{+0.467}_{-0.169}$
	+3%/-4%	+6%/-4%	+48%/-58%	+27%/-27%	+16%/-13%	+125%/-45%
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 007597150-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-577 ± 61	$17.76^{+19.61}_{-12.02}$	1255^{+95}_{-101}	3883^{+2269}_{-821}	44^{+379}_{-35}
Alt.	-899 ± 108	$16.67^{+19.33}_{-11.48}$	1263^{+100}_{-95}	4305^{+3126}_{-965}	80^{+769}_{-63}

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 $A_{obs} \gg 1.0$

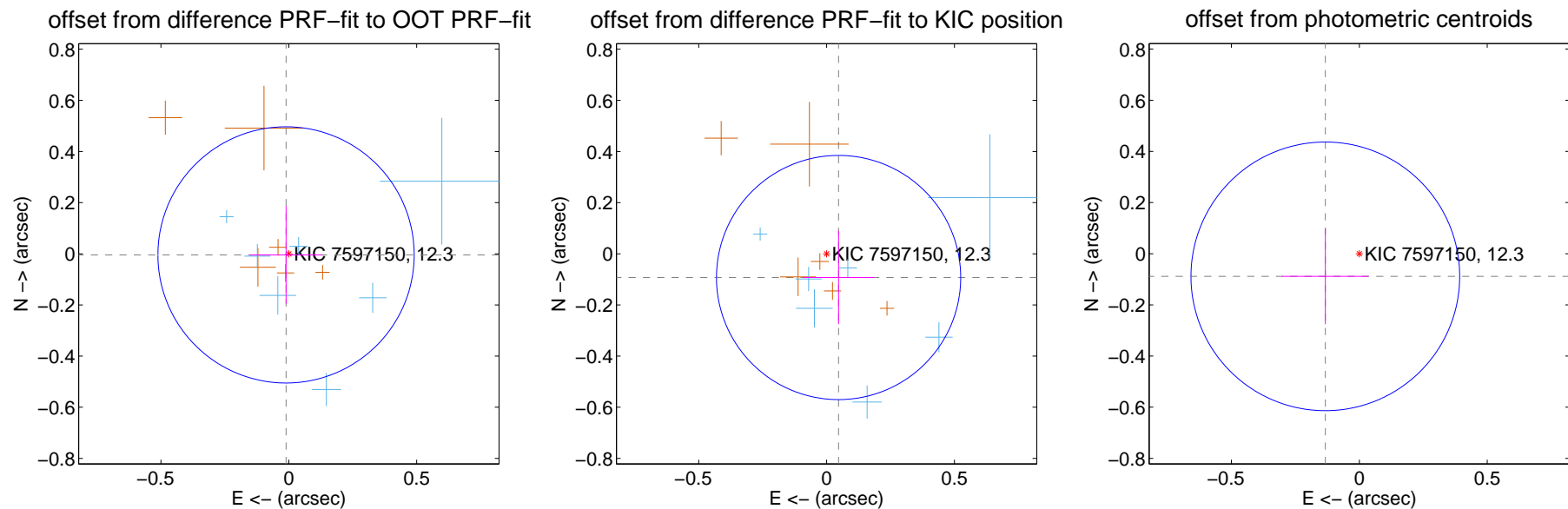
DV Centroid Data

Supplemental centroid analysis for 007597150-06. Kepler magnitude: 12.30. Transit SNR 6.15

There are 10 quarters with good PRF difference image offsets

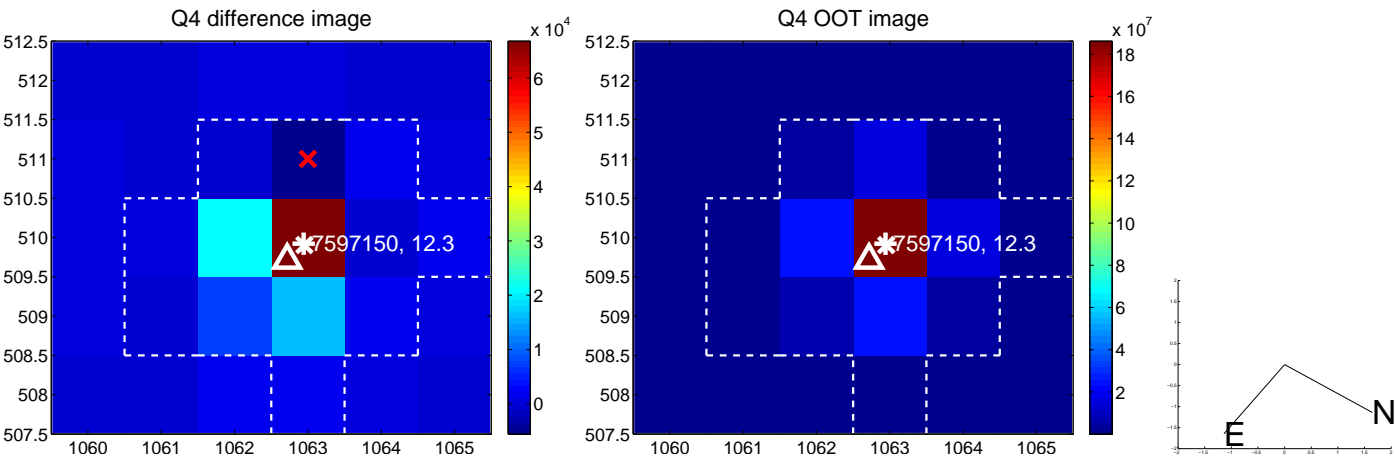
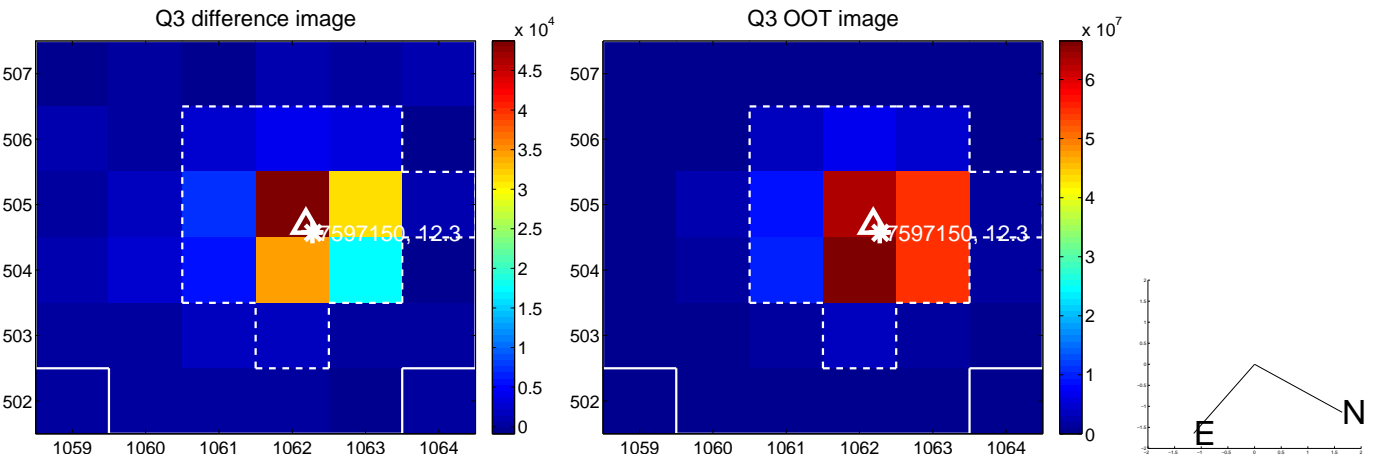
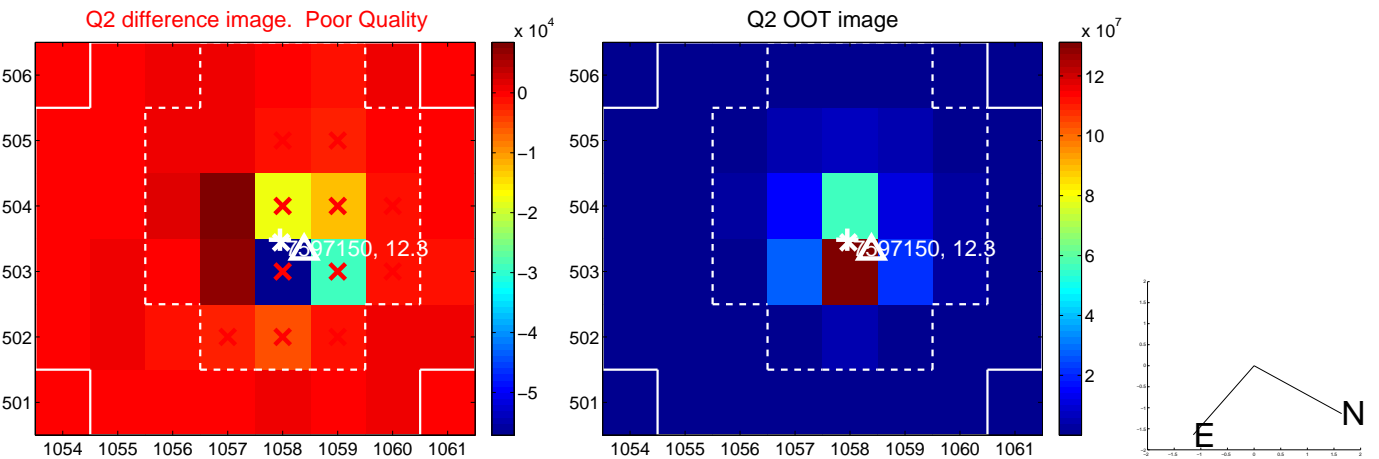
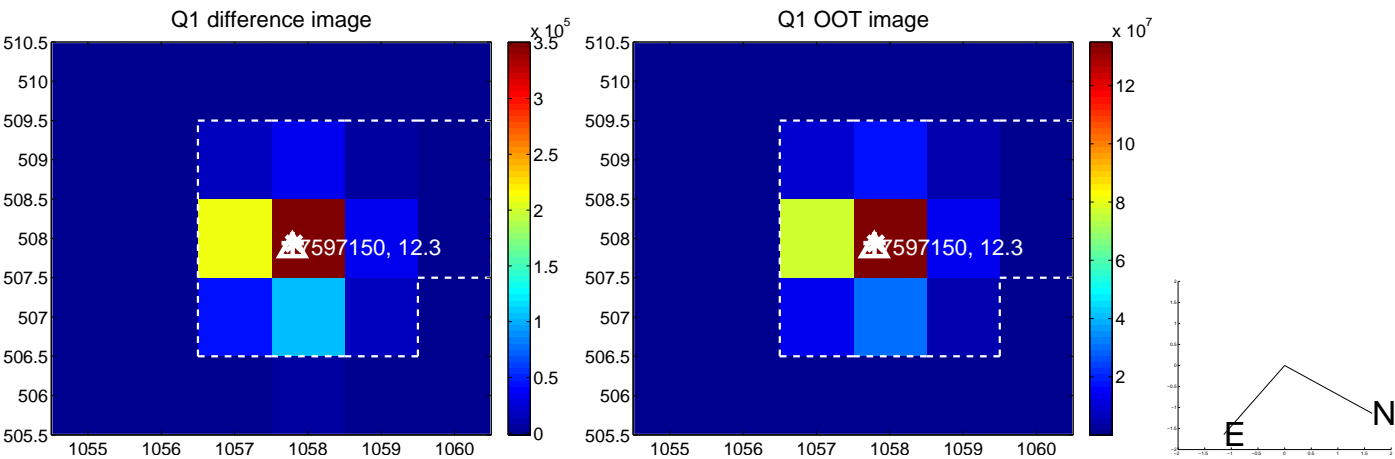
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.012 ± 0.167	0.07	0.011 ± 0.142	-0.004 ± 0.191
PRF-fit source offset from KIC position	0.104 ± 0.159	0.65	-0.047 ± 0.140	-0.093 ± 0.183
photometric centroid source offset	0.16 ± 0.18	0.91	0.13 ± 0.17	-0.09 ± 0.19

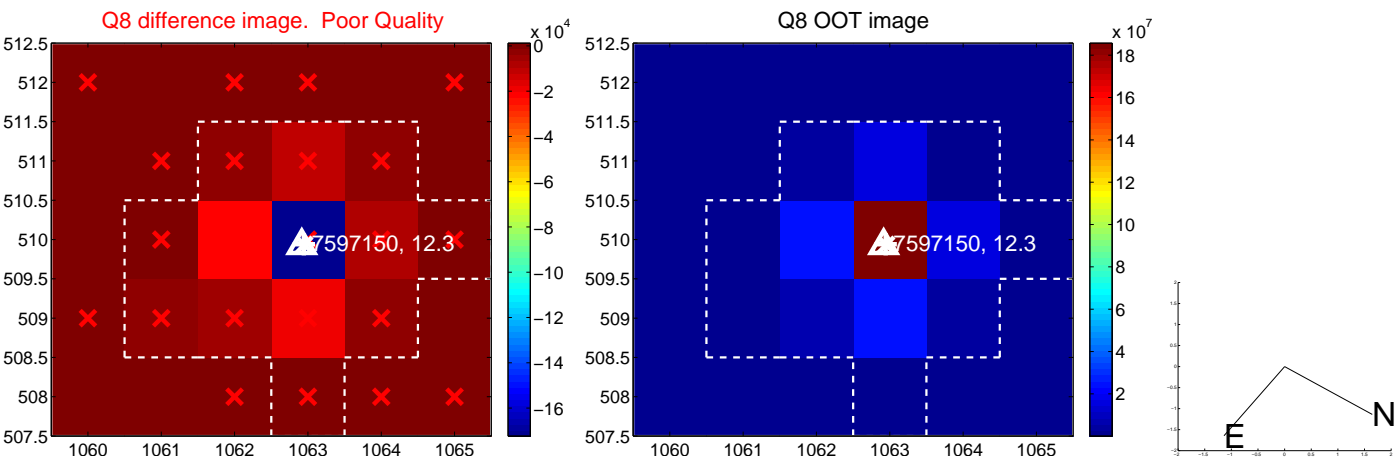
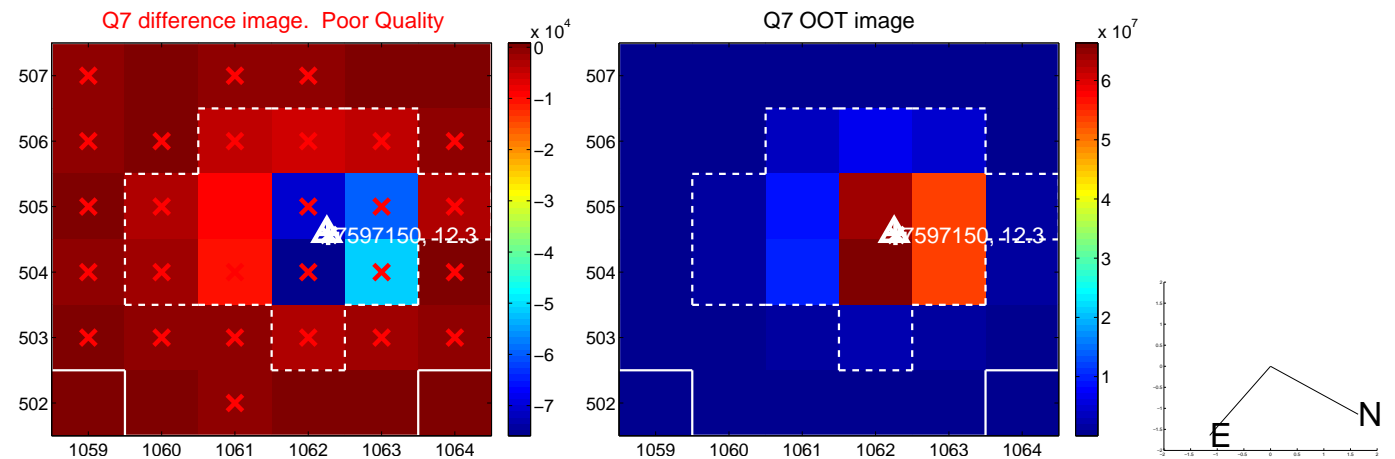
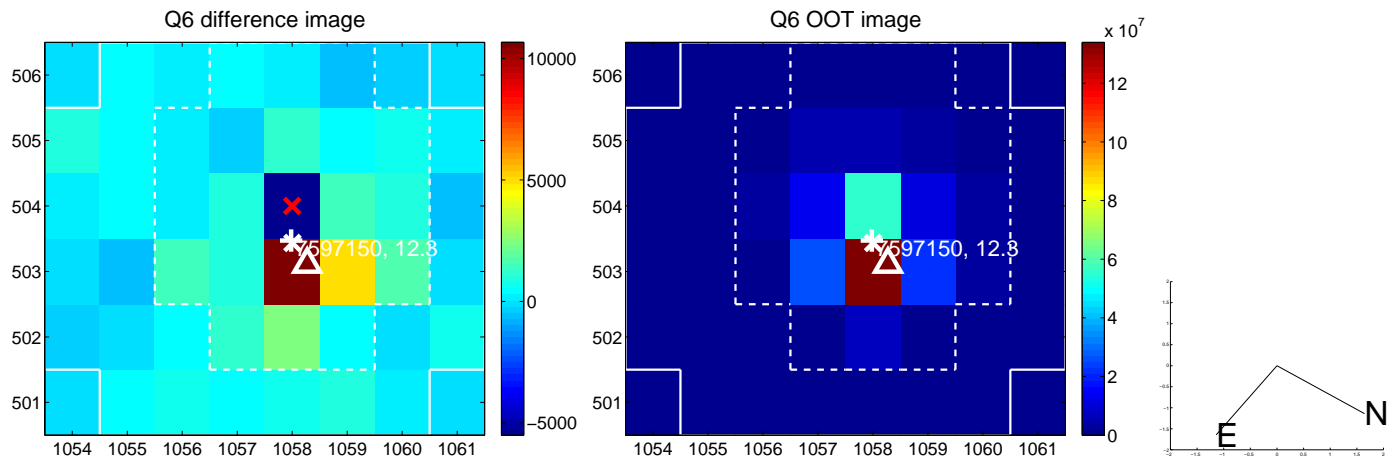
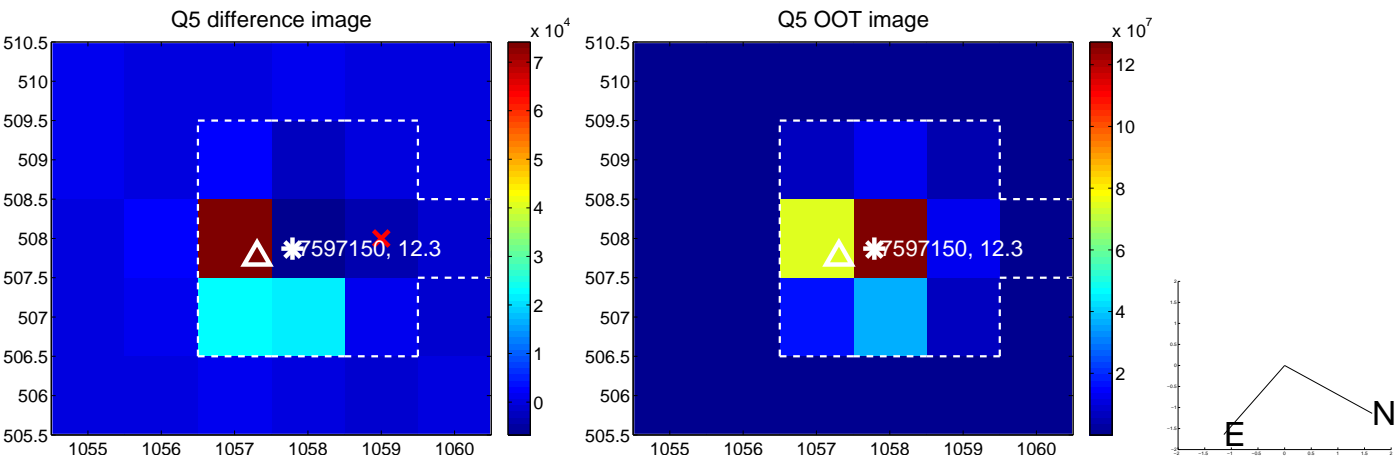


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

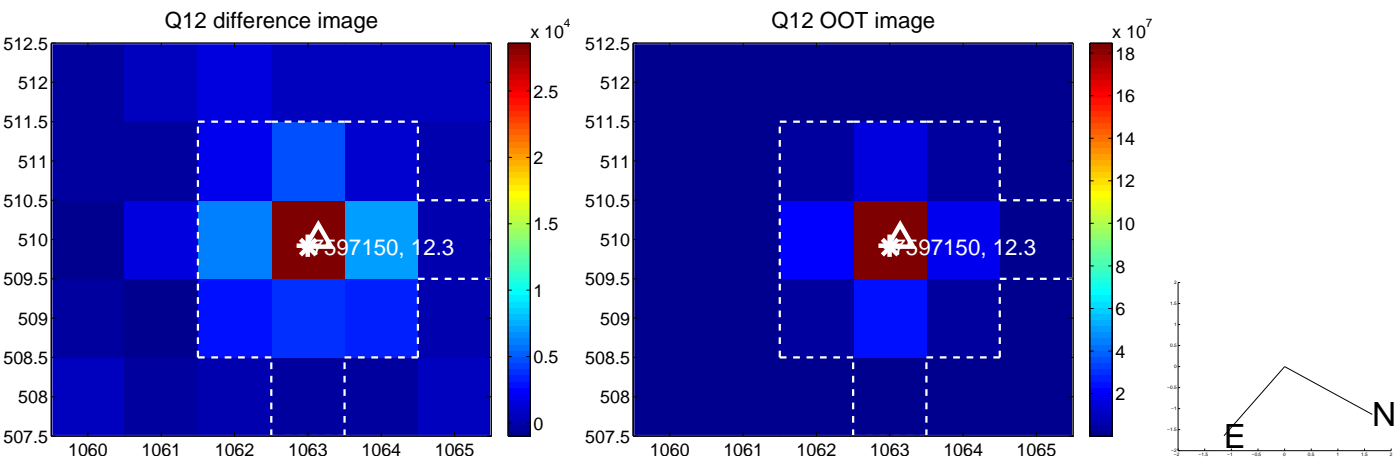
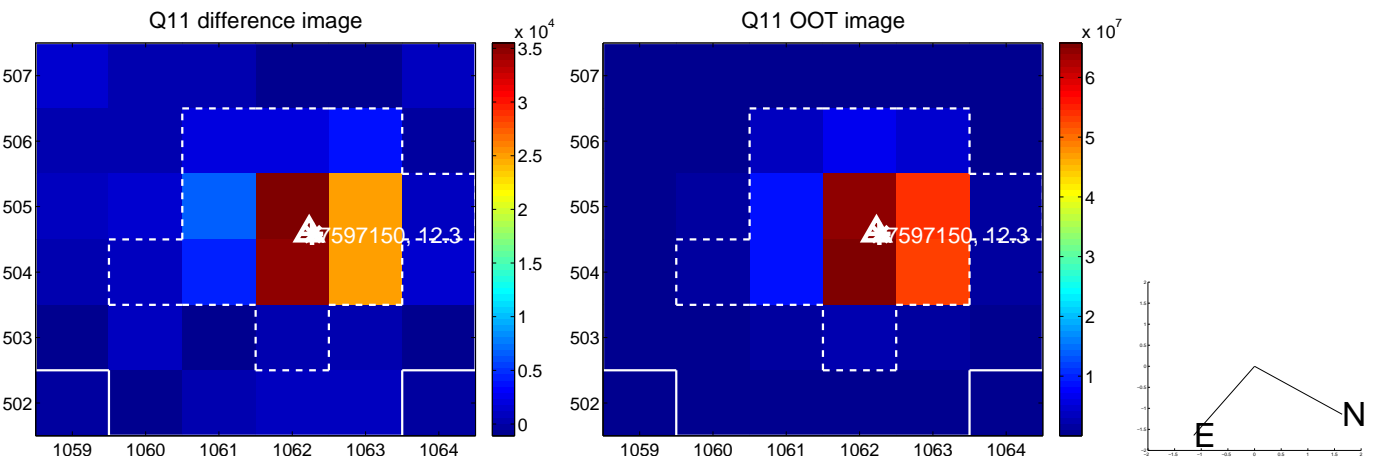
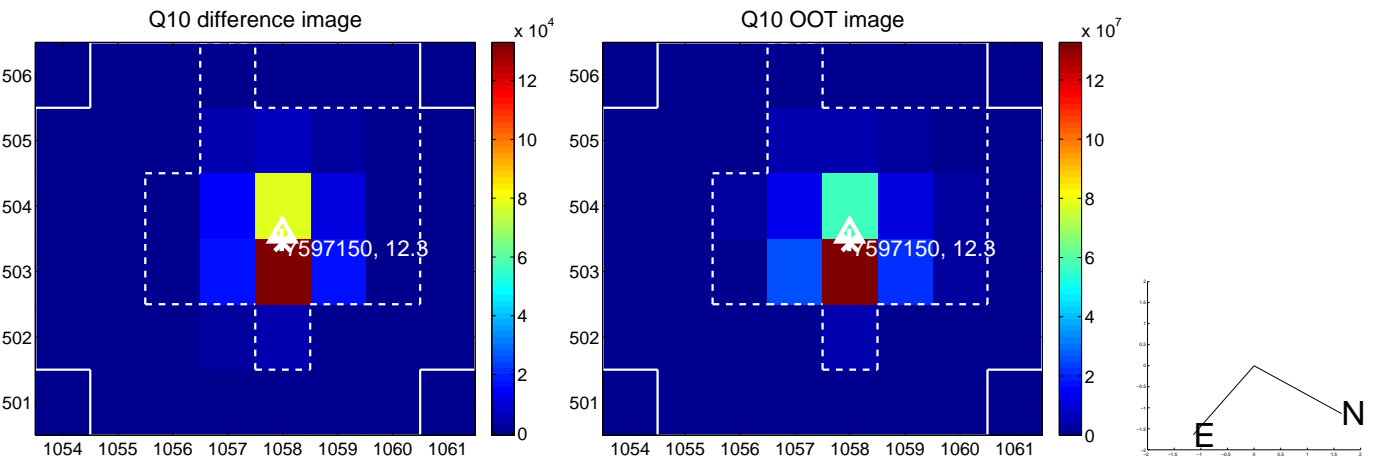
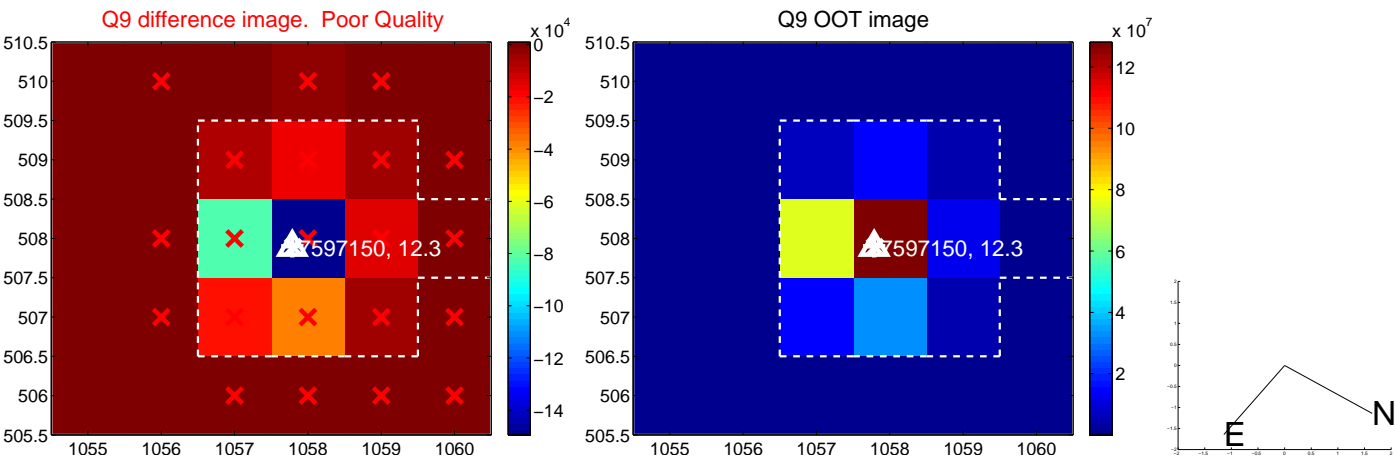
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



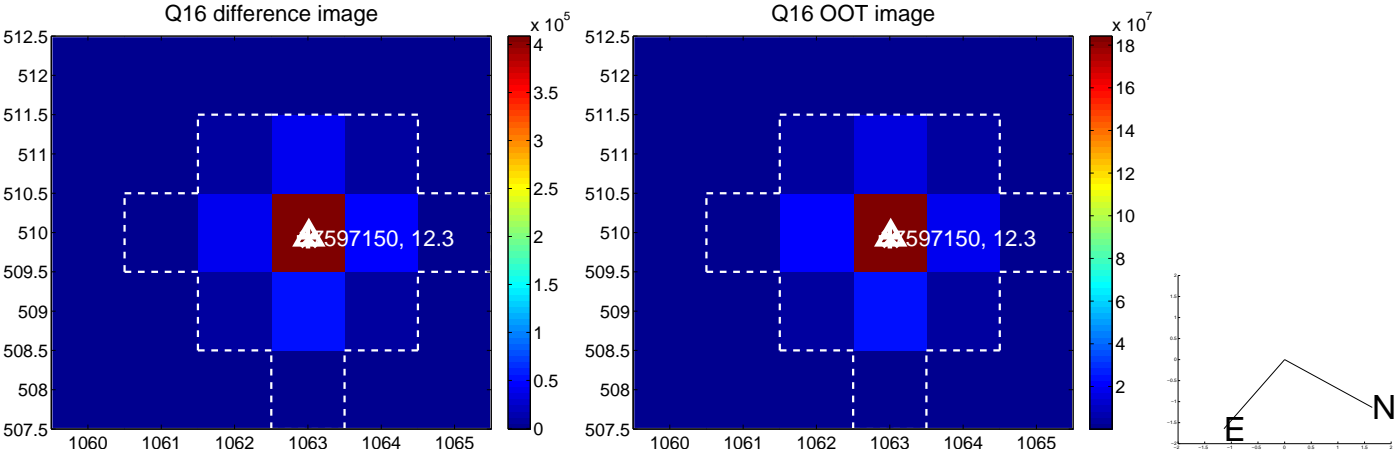
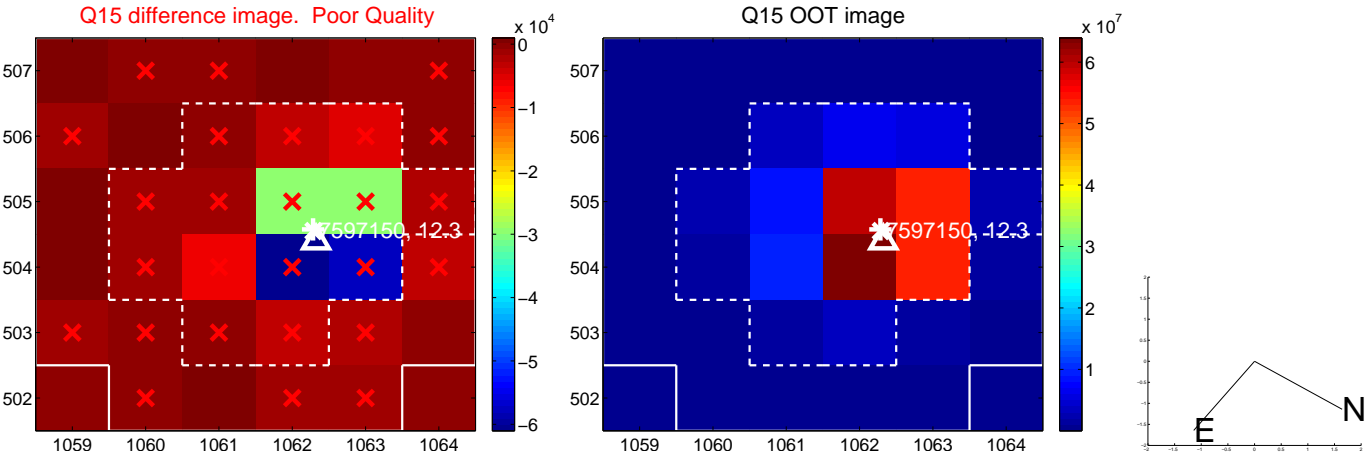
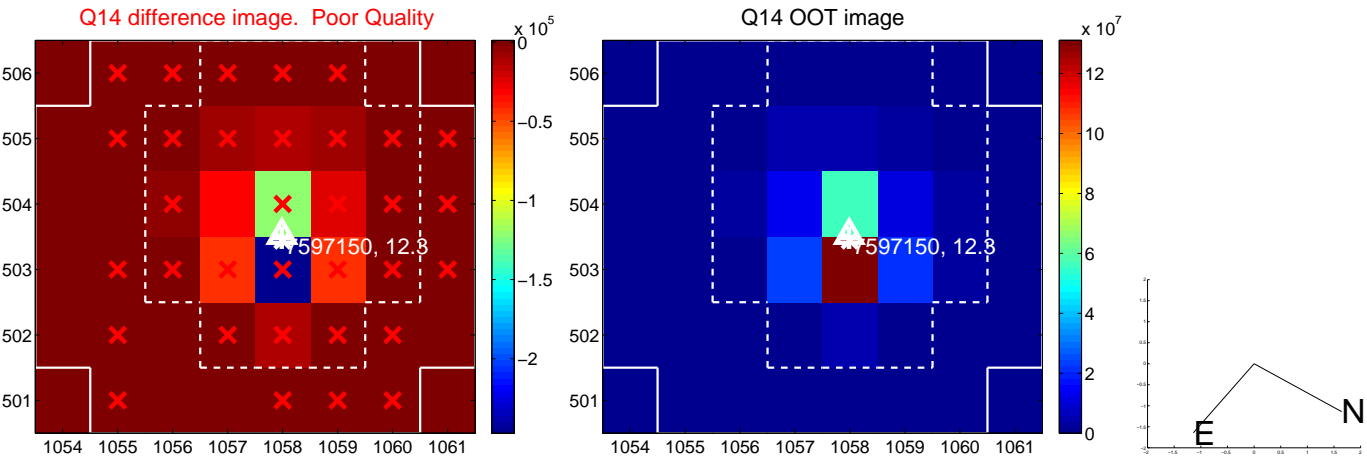
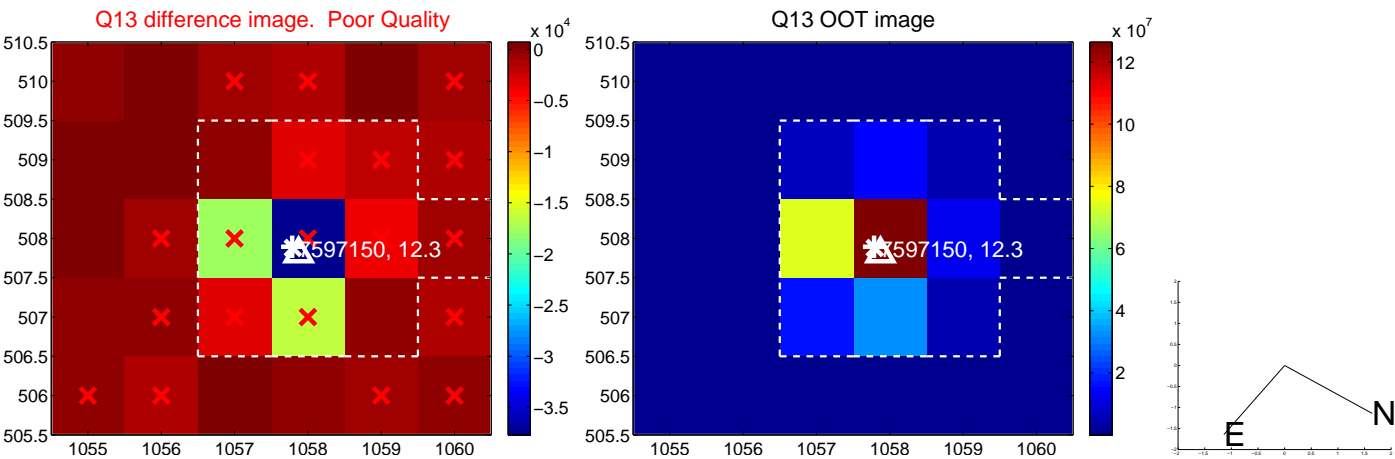
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



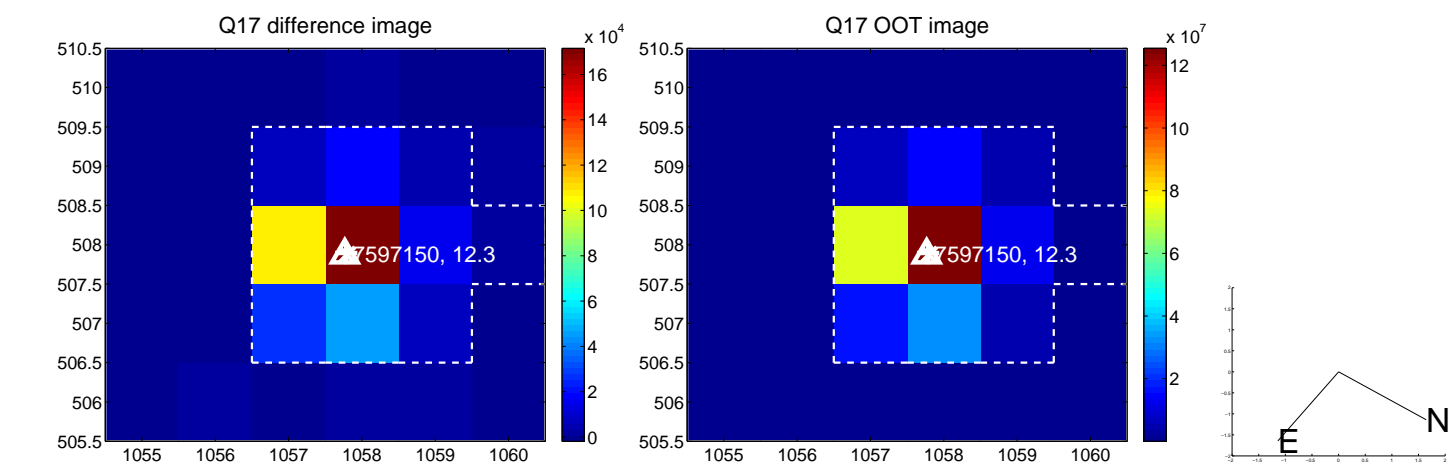
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



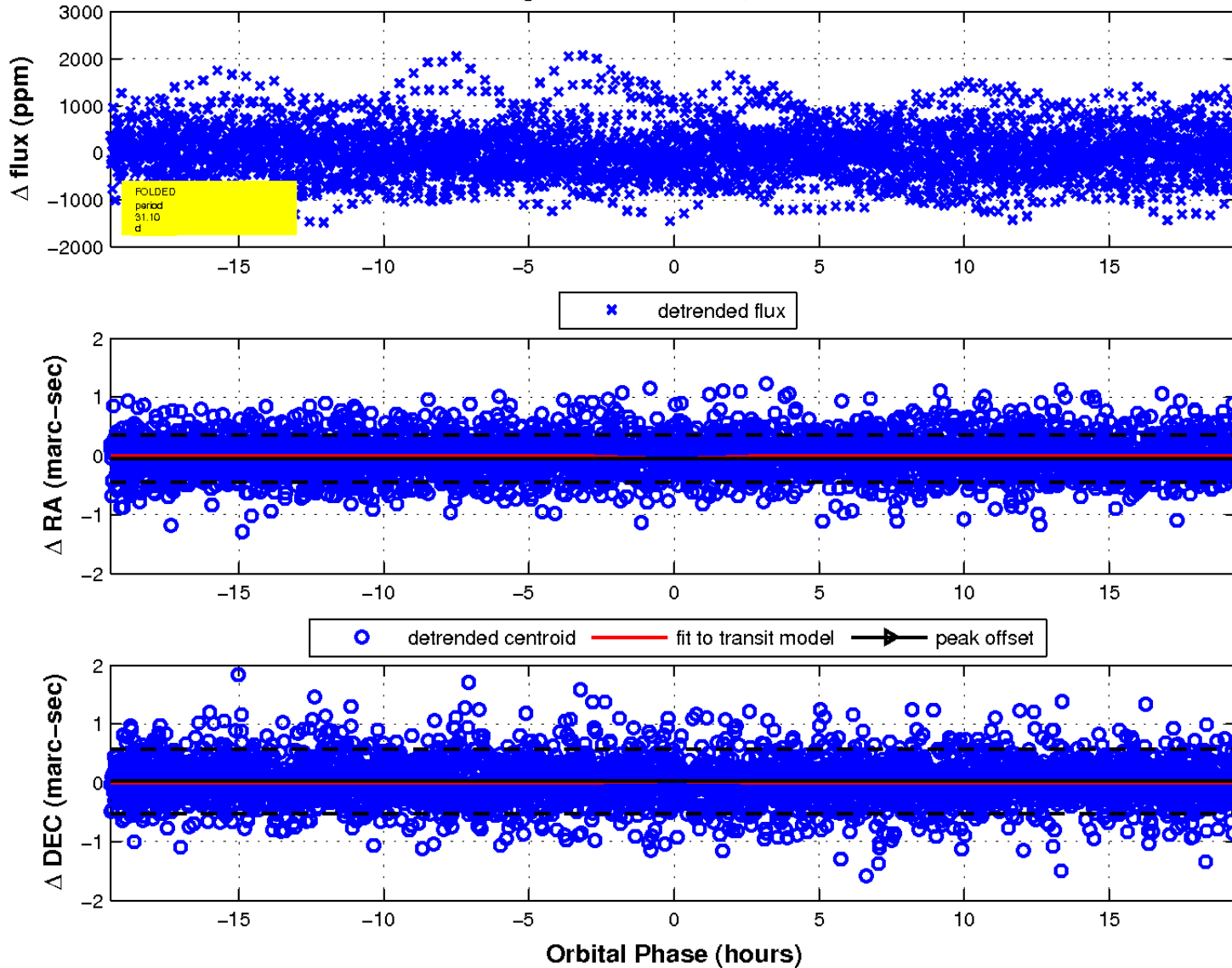
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

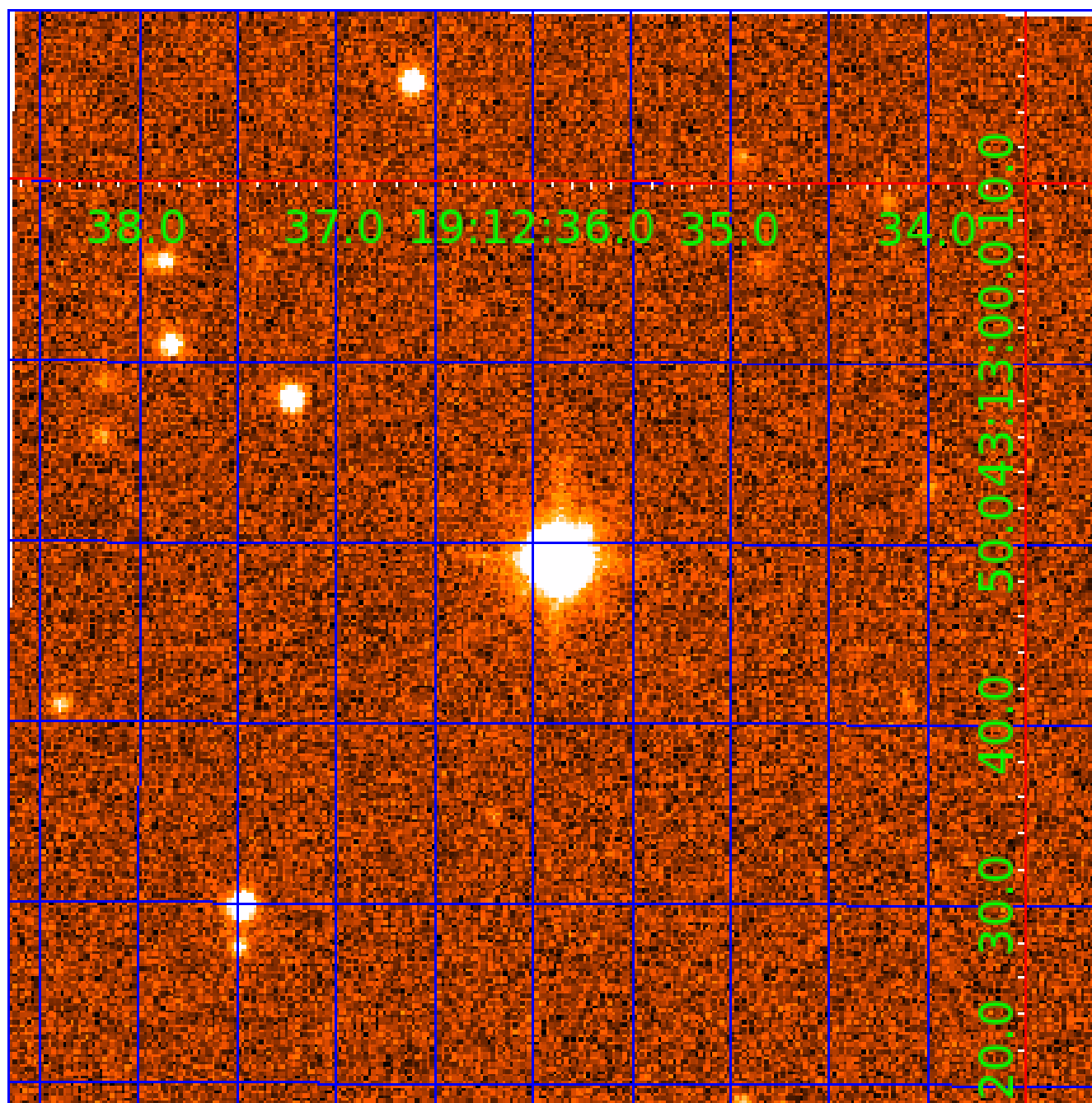


fluxWeightedCentroids, Planet 6 of 9



UKIRT Image

Declination



KIC 007597150

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})
007597150-01	OBS	No	1.185112	132.137440	0.2	8.394	7.9	0.1	1.68	7282	0.08	12713.76
007597150-02	OBS	No	47.328333	177.880517	497.2	4.895	10.5	9.0	1.68	7282	4.32	93.14
007597150-03	OBS	No	8.293566	136.451345	43.3	2.639	10.1	2.9	1.68	7282	1.29	949.80
007597150-04	OBS	No	8.291193	136.224441	719.1	2.304	9.5	9.0	1.68	7282	4.69	950.16
007597150-05	OBS	No	63.139376	159.633307	625.6	1.776	9.1	8.6	1.68	7282	4.62	63.42
007597150-06	OBS	No	31.101521	149.334486	381.5	6.475	9.6	6.2	1.68	7282	6.26	163.02
007597150-07	OBS	No	39.081868	137.421010	1020.6	14.434	9.6	9.1	1.68	7282	9.72	120.22
007597150-08	OBS	No	25.156825	145.994068	159.9	3.808	9.2	3.5	1.68	7282	2.35	216.31
007597150-09	OBS	No	35.930360	143.370372	221.5	1.500	7.3	-1.0	1.68	7282	2.55	134.48

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007597150-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV
007597150-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD
007597150-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—NO_FITS—CENT_NOFITS

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

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

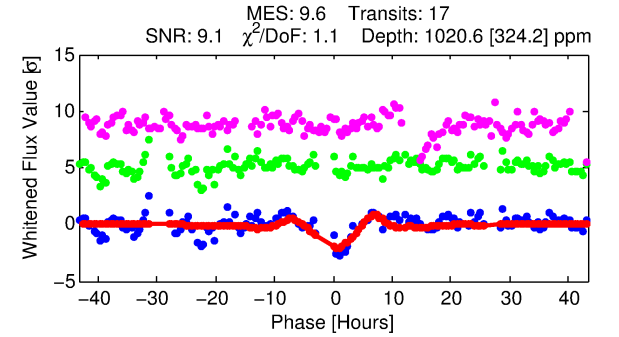
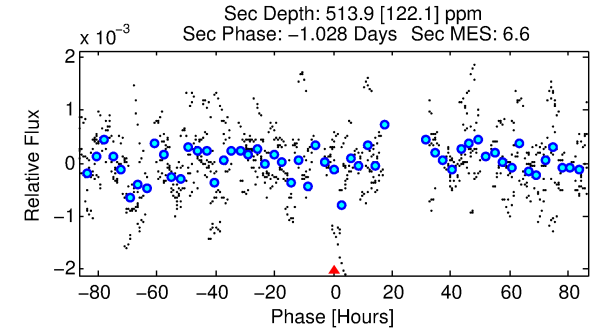
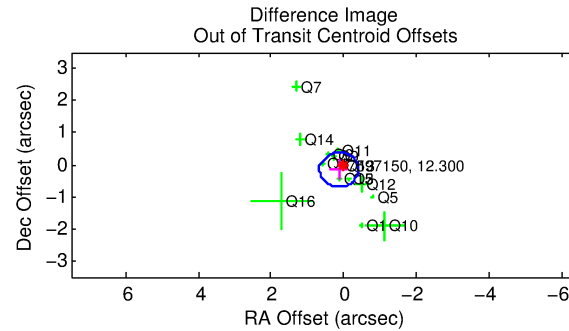
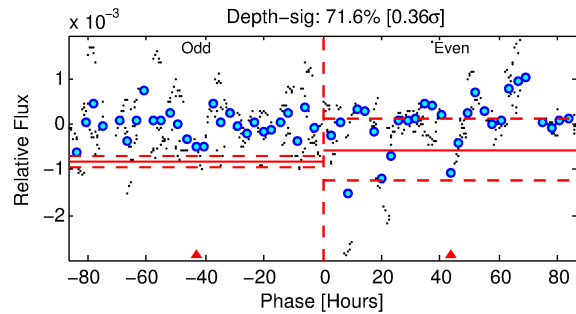
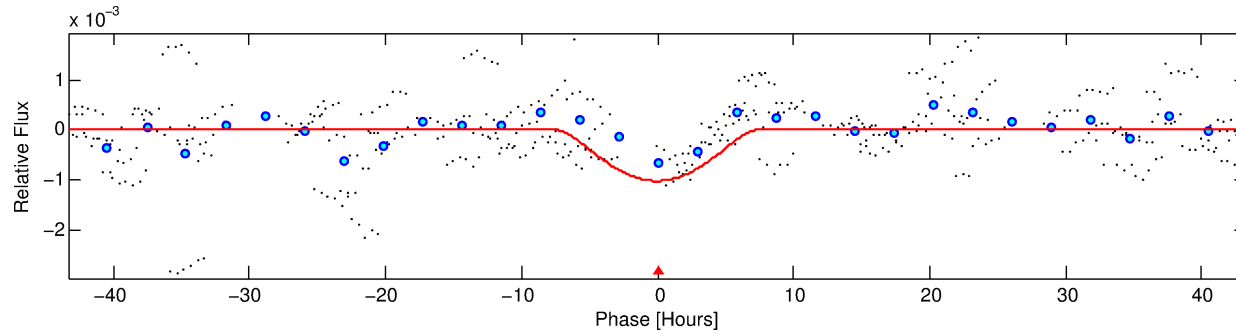
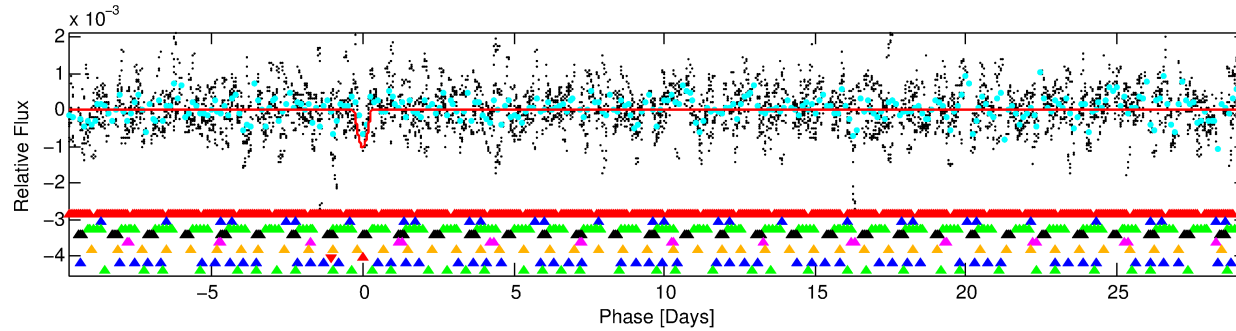
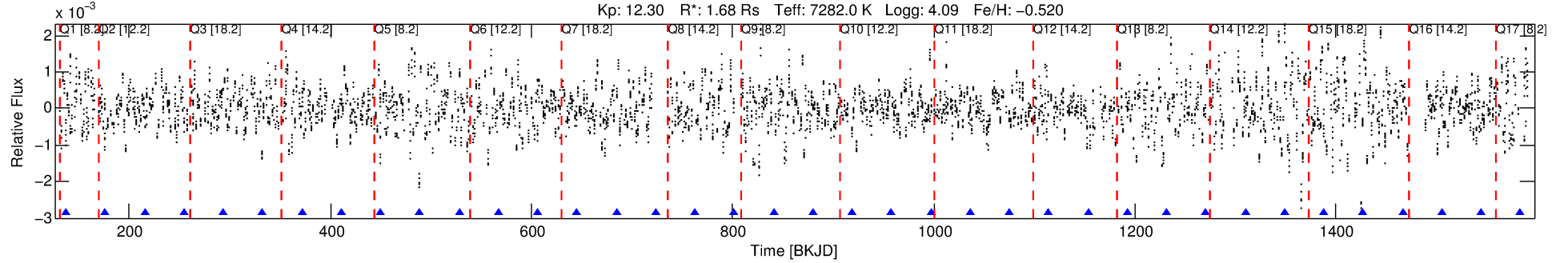
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007597150-07

No Significant Match Found

DV One-Page Summary

KIC: 7597150 Candidate: 7 of 9 Period: 39.082 d



DV Fit Results:

Period = 39.08187 [0.00420] d
Epoch = 137.4210 [0.0830] BKJD
Rp/R* = 0.0530 [0.0937]
a/R* = 7.02 [2.40]
b = 1.00 [0.15]
Seff = 120.22 [51.91]
Teq = 844 [91] K
Rp = 9.72 [17.42] Re
a = 0.2436 [0.0622] AU
Ag = 177.44 [633.73] [0.28 σ]
Teff = 4765 [4231] K [0.93 σ]

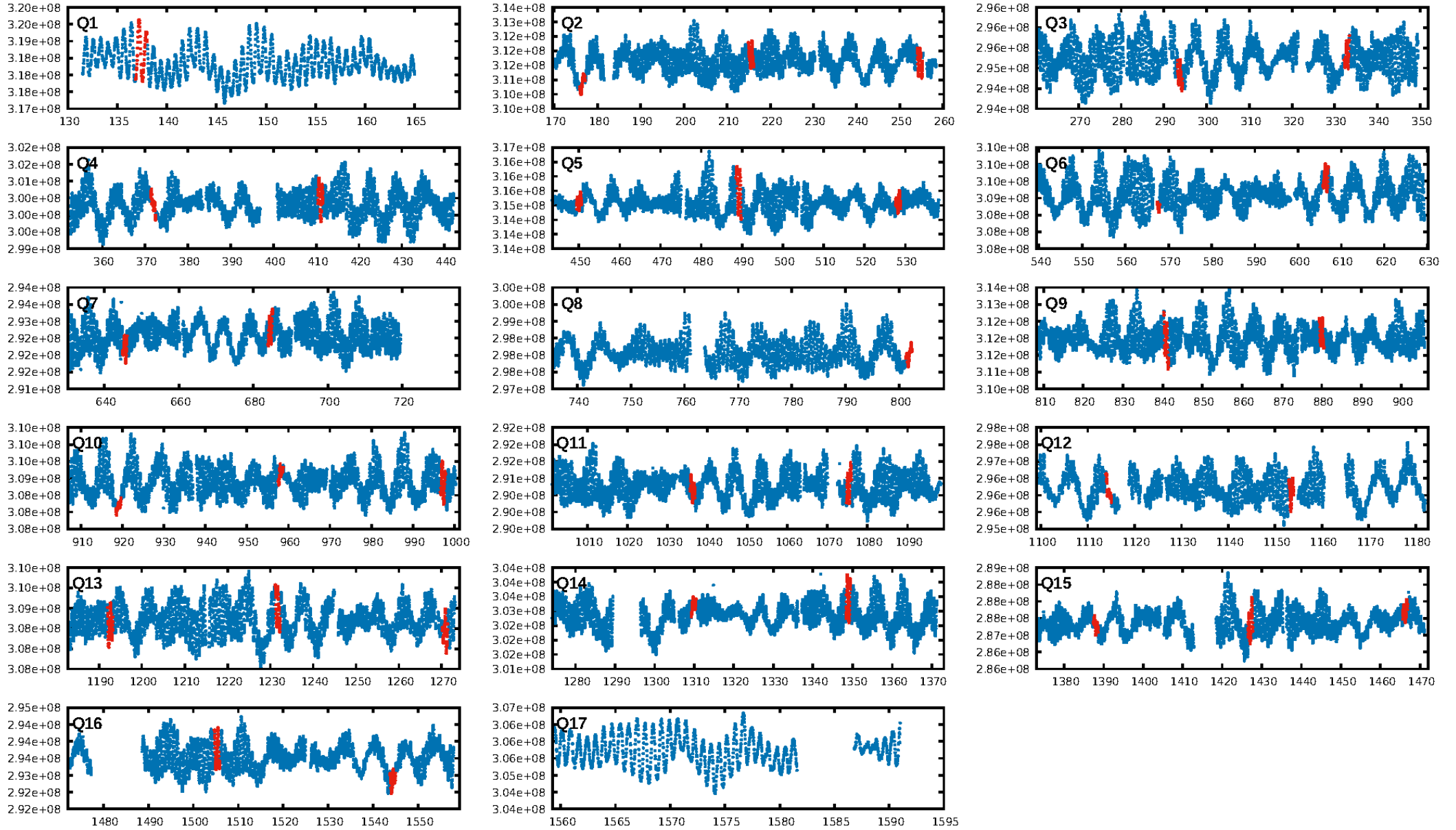
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [5.21 σ]
LongPeriod-sig: 100.0% [12.99 σ]
ModelChiSquare2-sig: 1.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [16/16]
GhostDiagnostic-chr: -1.471
Centroid-sig: 0.1%
Centroid-so: 0.139 arcsec [2.47 σ]
OotOffset-rm: 0.208 arcsec [1.17 σ]
KicOffset-rm: 0.244 arcsec [1.08 σ]
OotOffset-st: 3/4/3/4 [14]
KicOffset-st: 3/4/3/4 [14]
DiffImageQuality-fgm: 0.50 [7/14]
DiffImageOverlap-fno: 0.00 [0/15]

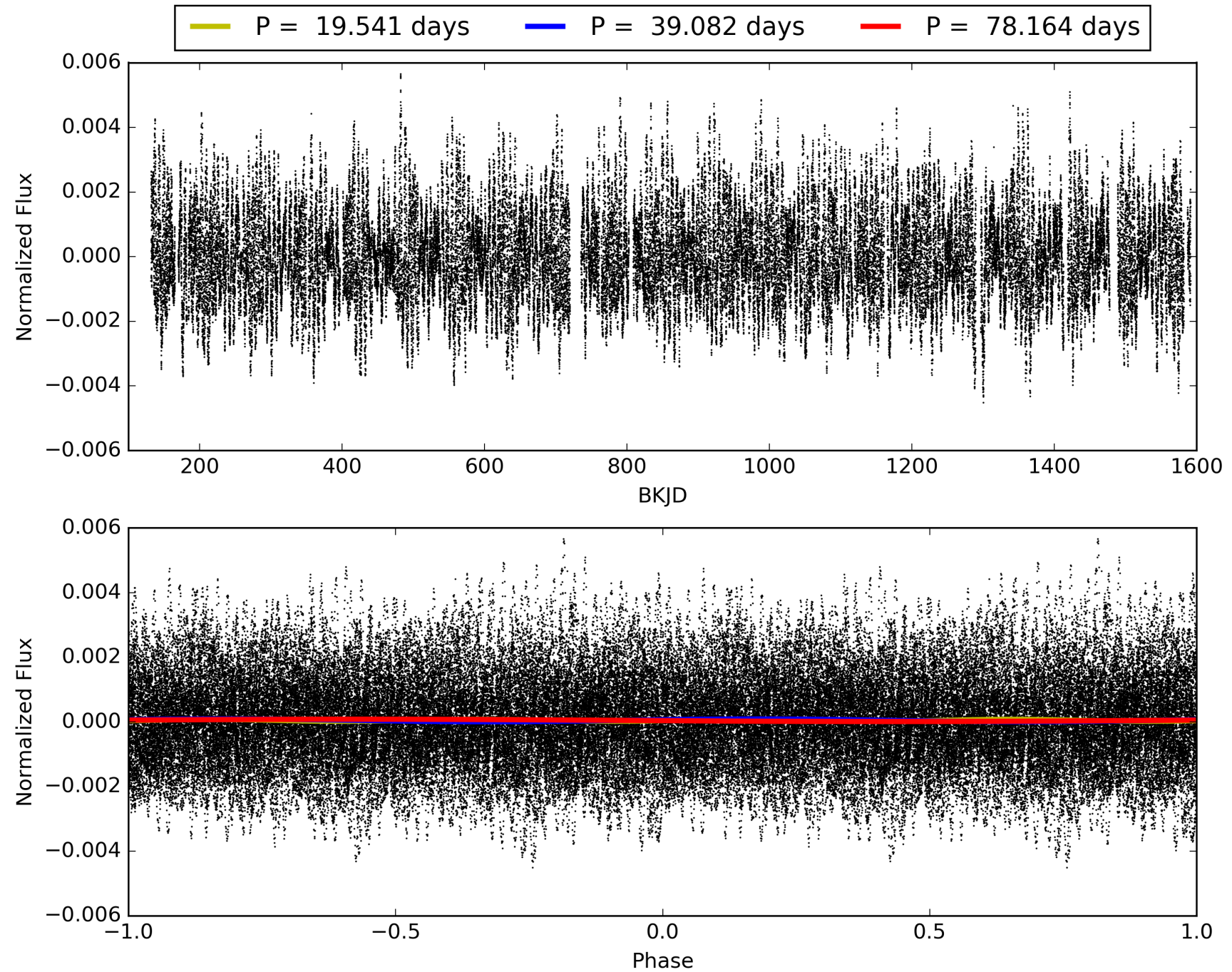
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:31:04 Z

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

TCE 007597150-07, PDC Light Curves

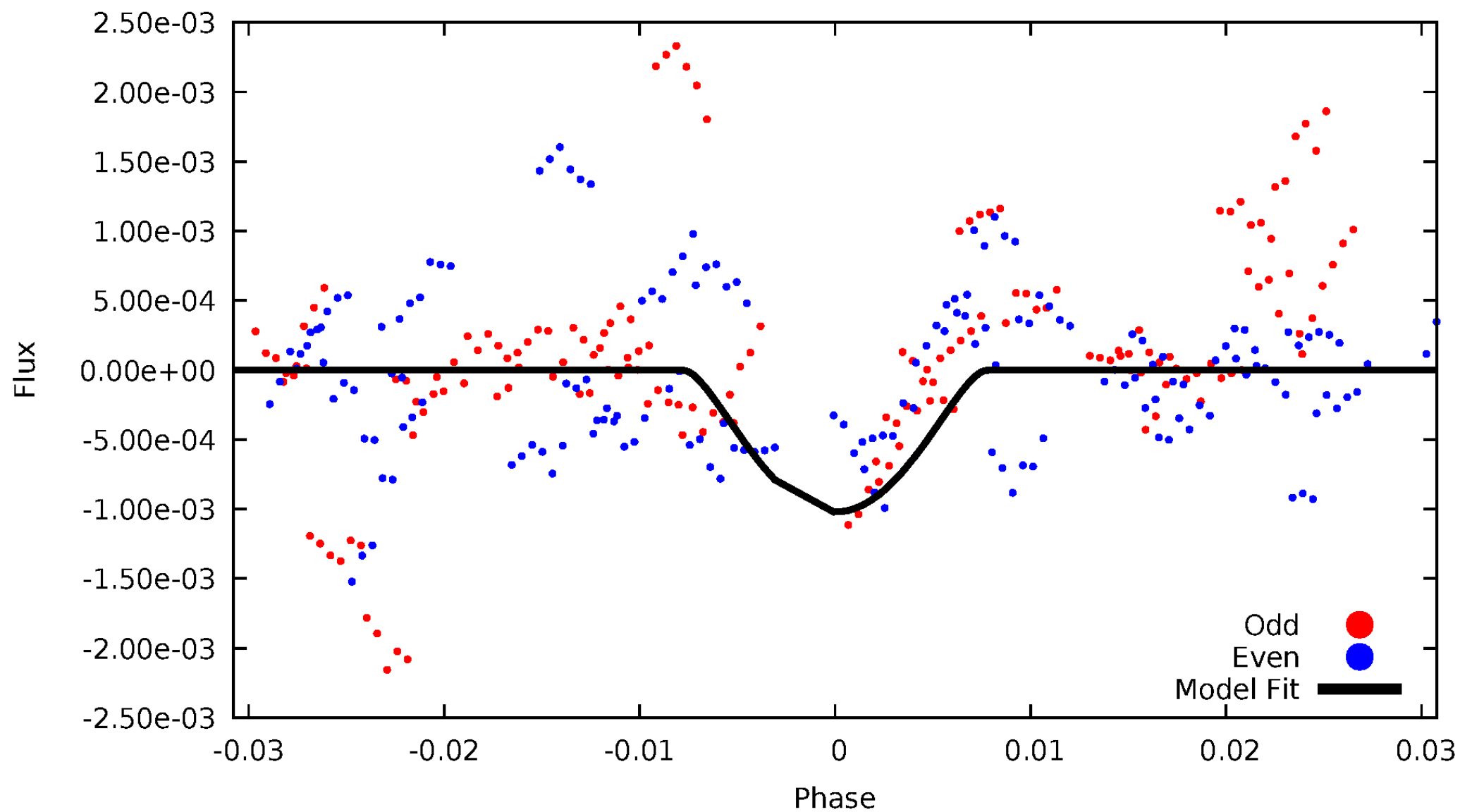


TCE 007597150-07



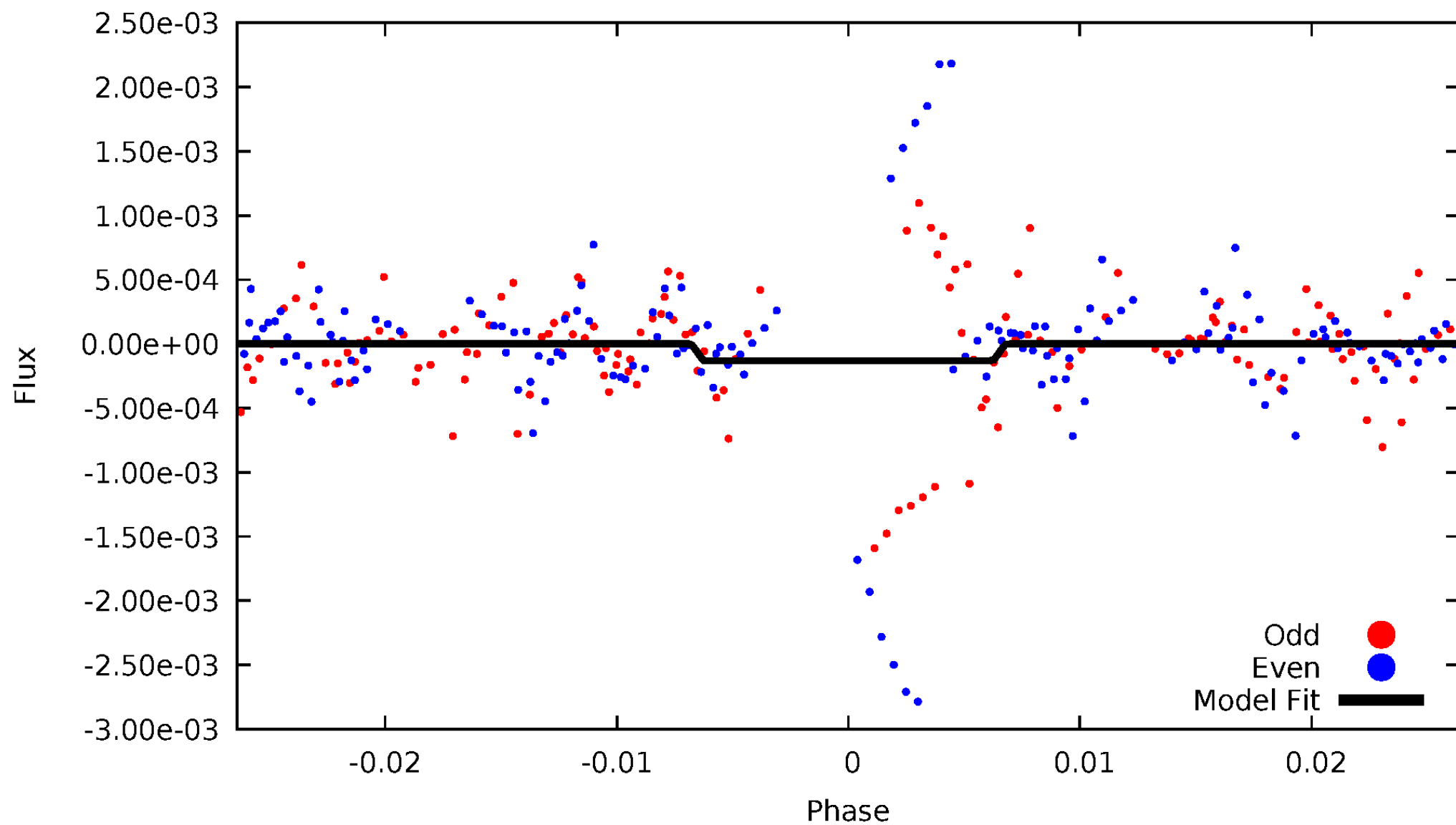
DV Odd/Even

TCE 007597150-07



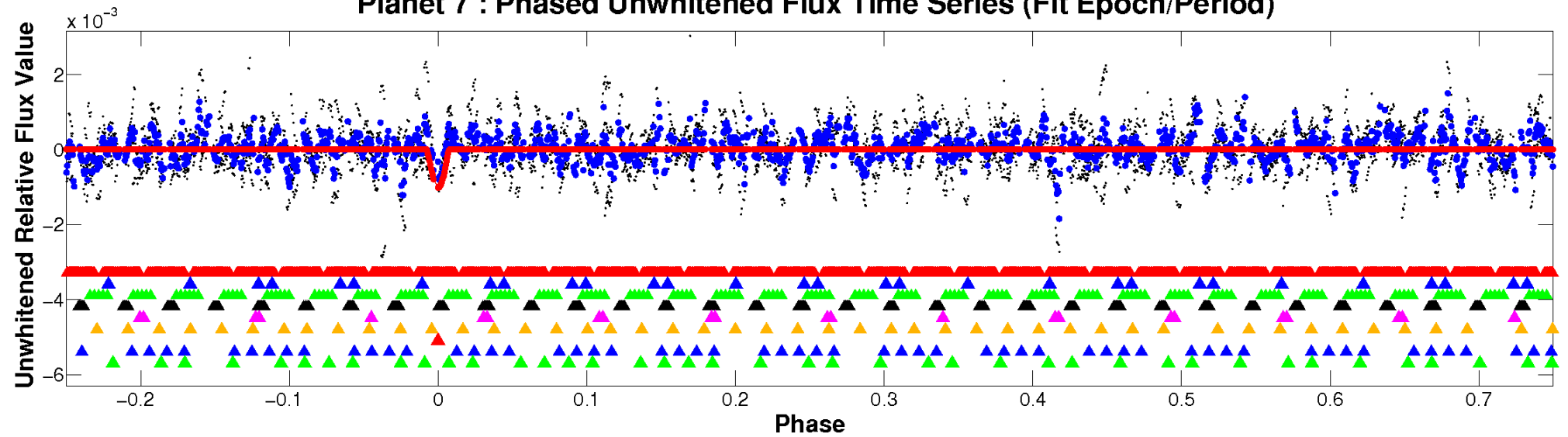
ALT Odd/Even

TCE 007597150-07

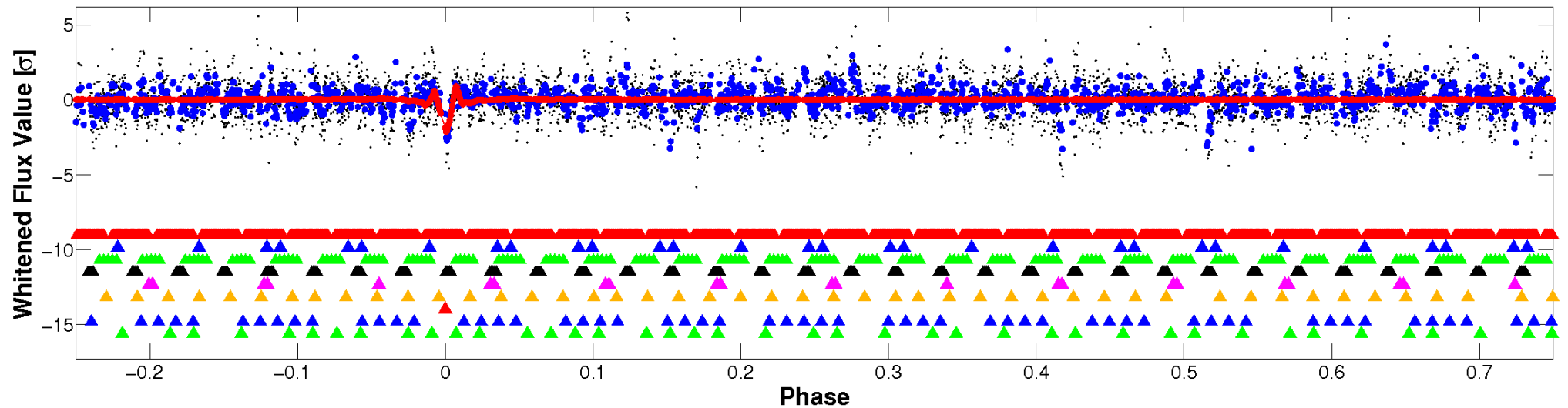


Non-Whitened Vs. Whitened Light Curve

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

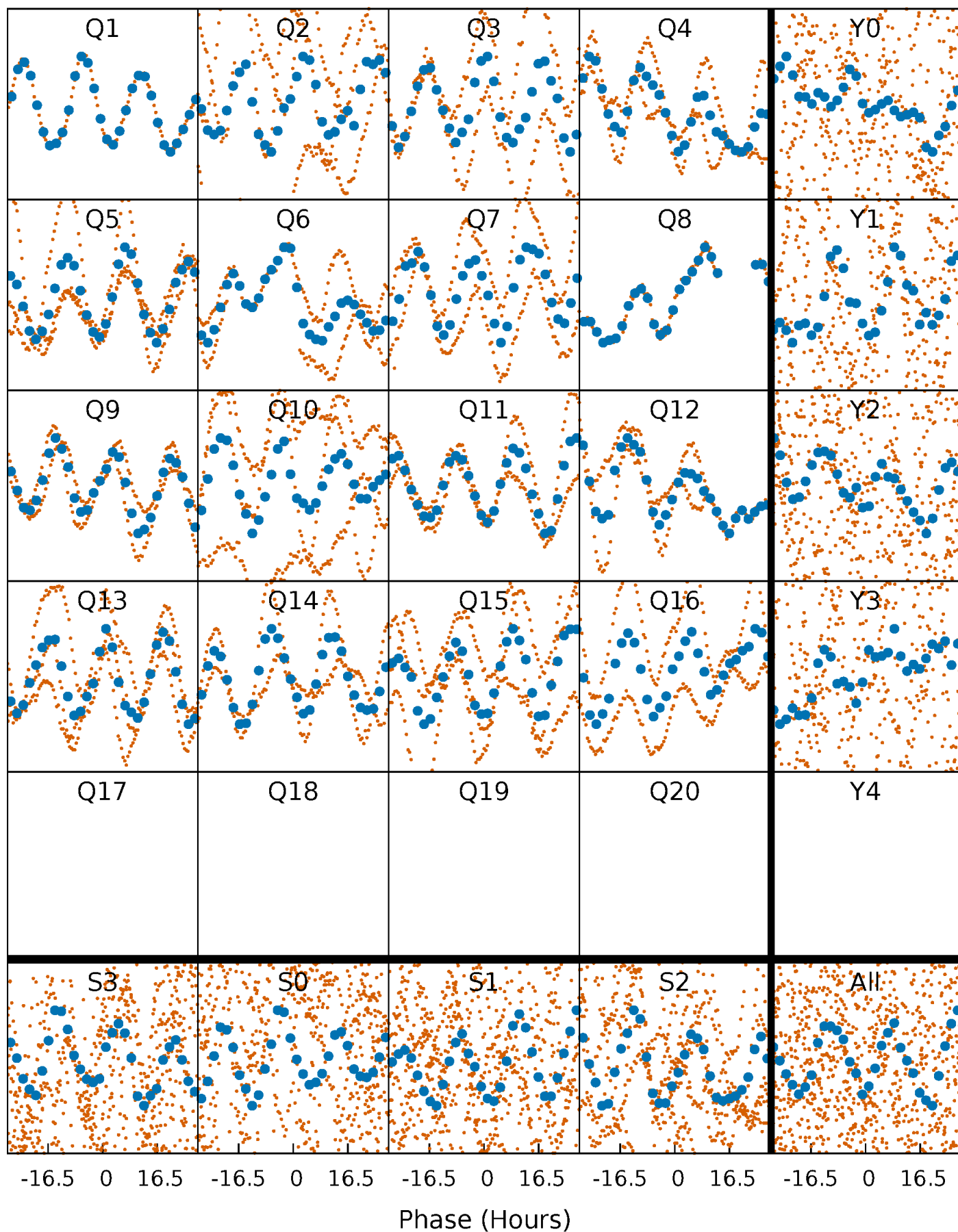


Planet 7 : Phased Whitened Flux Time Series (Fit Epoch/Period)



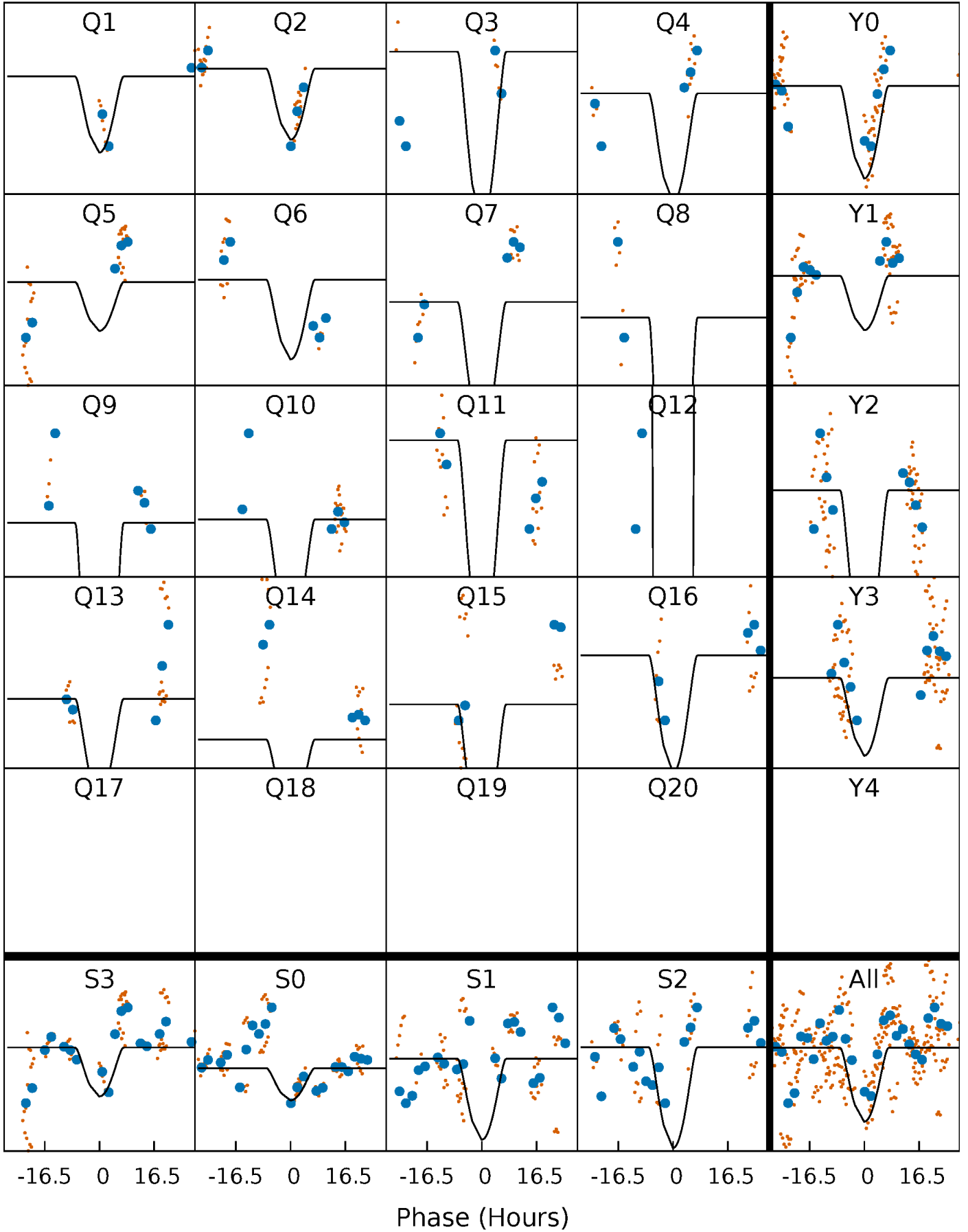
PDC Quarter-Phased Transit Curves

TCE 007597150-07 $P = 39.081868$ Days $T_0 = 137.421010$ (BKJD)



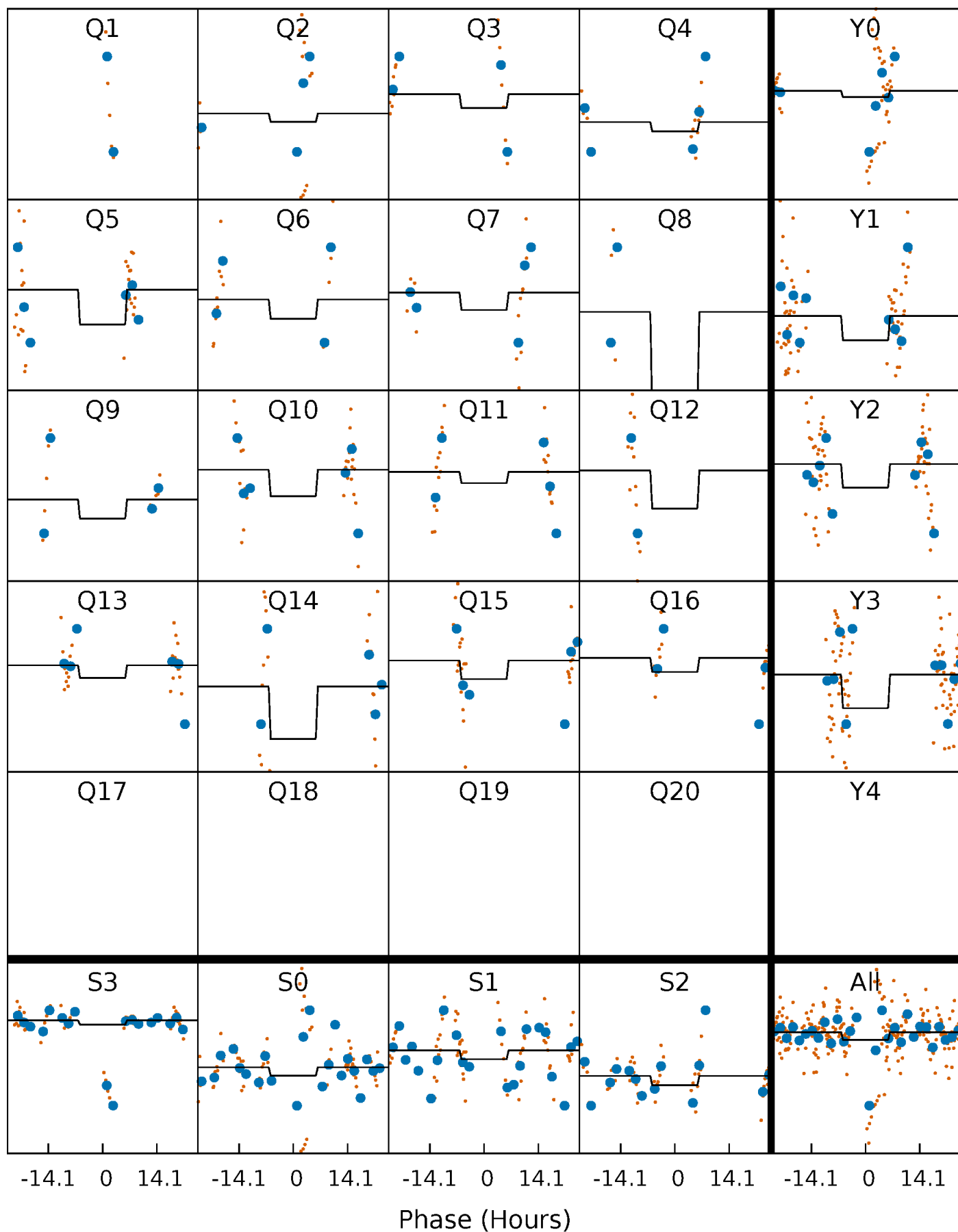
DV Quarter-Phased Transit Curves

TCE 007597150-07 P= 39.081868 Days $T_0=137.421010$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

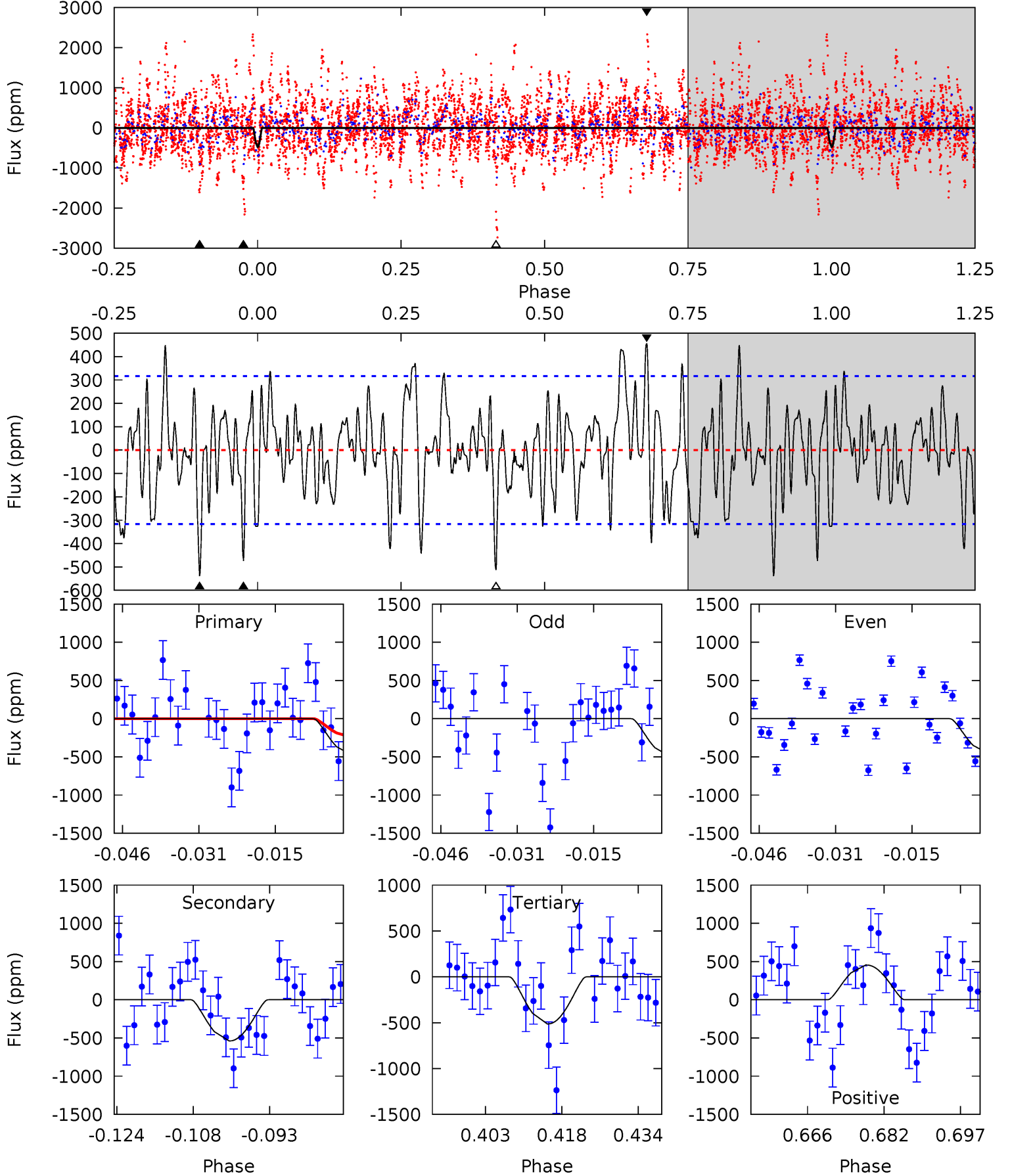
TCE 007597150-07 $P = 39.082398$ Days $T_0 = 137.402770$ (BKJD)



DV Model-Shift Uniqueness Test

007597150-07, P = 39.081868 Days, E = 98.339142 Days

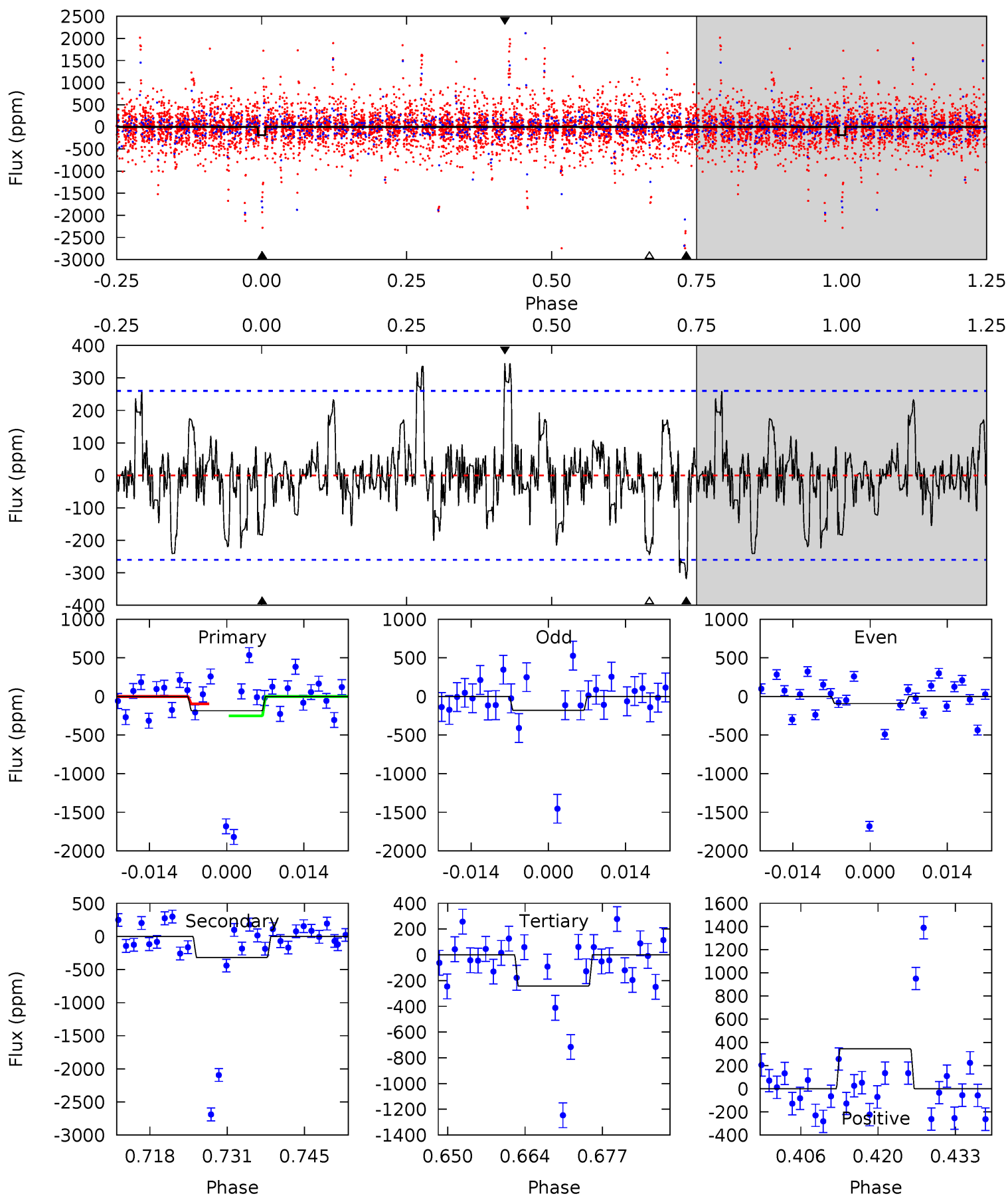
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.40	8.41	8.02	7.11	4.94	2.42	2.67	-0.63	0.29	0.38	1.30	0.29	75.0	0.46	2.24



Alt Model-Shift Uniqueness Test

007597150-07, P = 39.082398 Days, E = 98.320372 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.54	6.06	4.63	6.60	4.97	2.47	1.57	-1.09	-3.05	1.43	-0.54	0.81	5.90	0.52	1.49



Stellar Parameters For KIC 007597150

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7282^{+233}_{-285}	$4.087^{+0.234}_{-0.156}$	$-0.520^{+0.250}_{-0.300}$	$1.683^{+0.458}_{-0.458}$	$1.260^{+0.196}_{-0.161}$	$0.372^{+0.467}_{-0.169}$
	+3%/-4%	+6%/-4%	+48%/-58%	+27%/-27%	+16%/-13%	+125%/-45%
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 007597150-07 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-539 ± 64	$15.22^{+14.40}_{-9.96}$	1171^{+93}_{-96}	4112^{+2262}_{-838}	78^{+573}_{-57}
Alt.	-317 ± 52	$11.72^{+13.79}_{-8.62}$	1171^{+86}_{-95}	4050^{+3355}_{-893}	76^{+1055}_{-60}

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

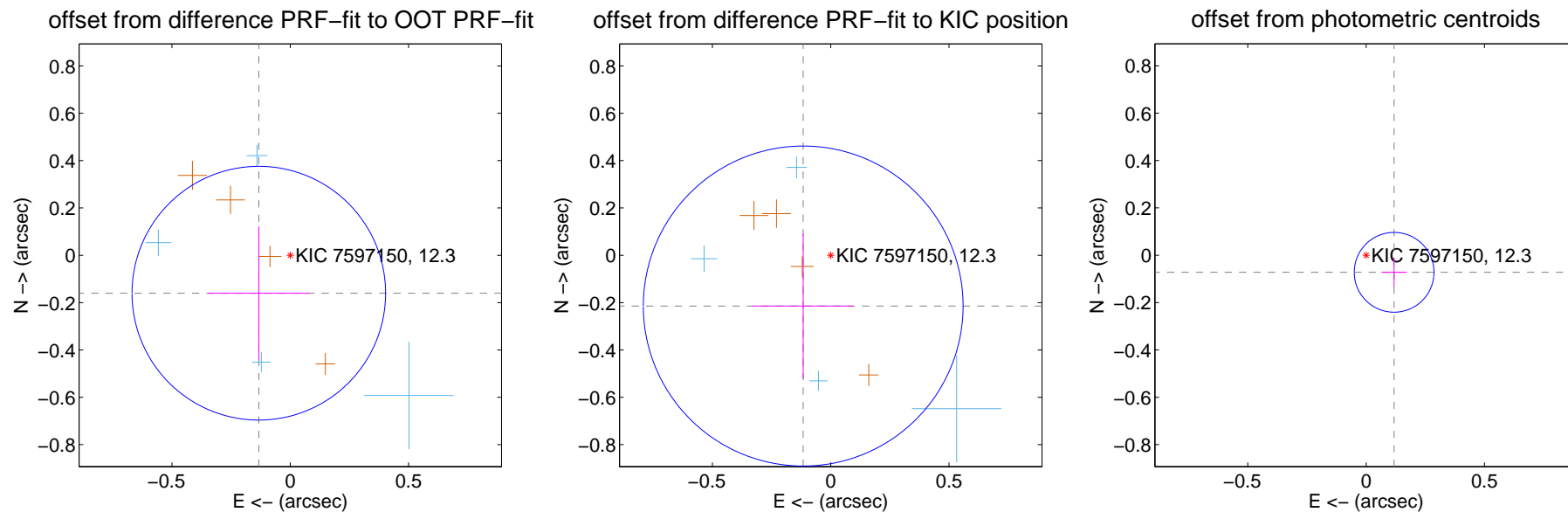
DV Centroid Data

Supplemental centroid analysis for 007597150-07. Kepler magnitude: 12.30. Transit SNR 9.13

There are 7 quarters with good PRF difference image offsets

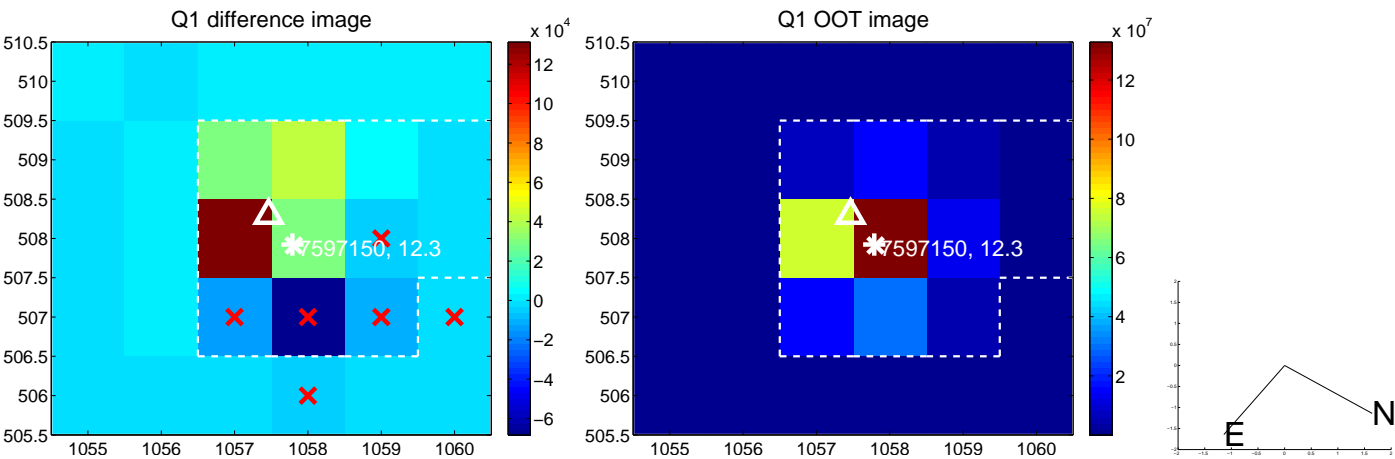
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.208 ± 0.179	1.17	0.133 ± 0.215	-0.160 ± 0.283
PRF-fit source offset from KIC position	0.244 ± 0.225	1.08	0.116 ± 0.213	-0.214 ± 0.306
photometric centroid source offset	0.14 ± 0.06	2.47	-0.12 ± 0.05	-0.07 ± 0.06

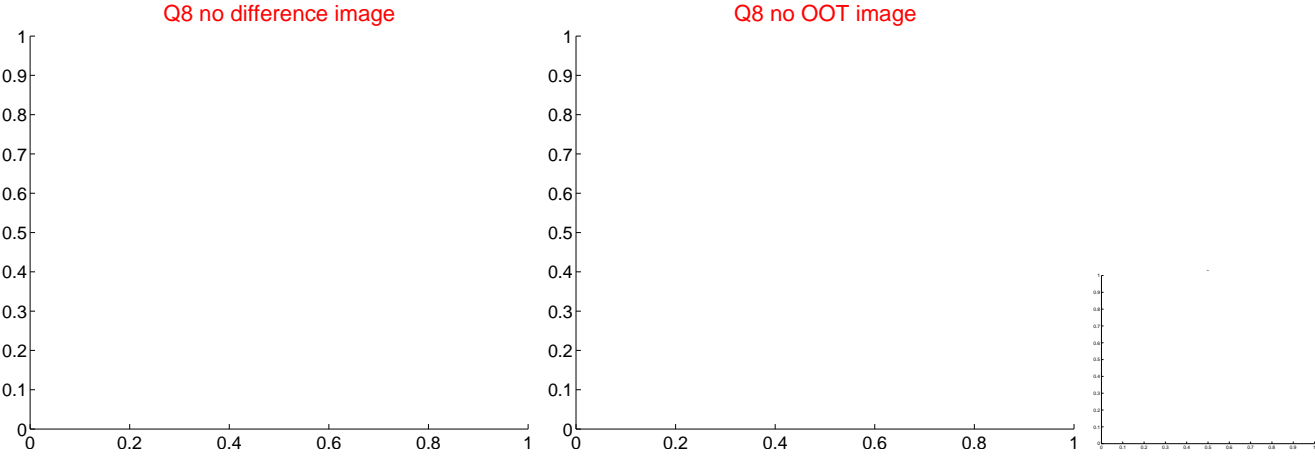
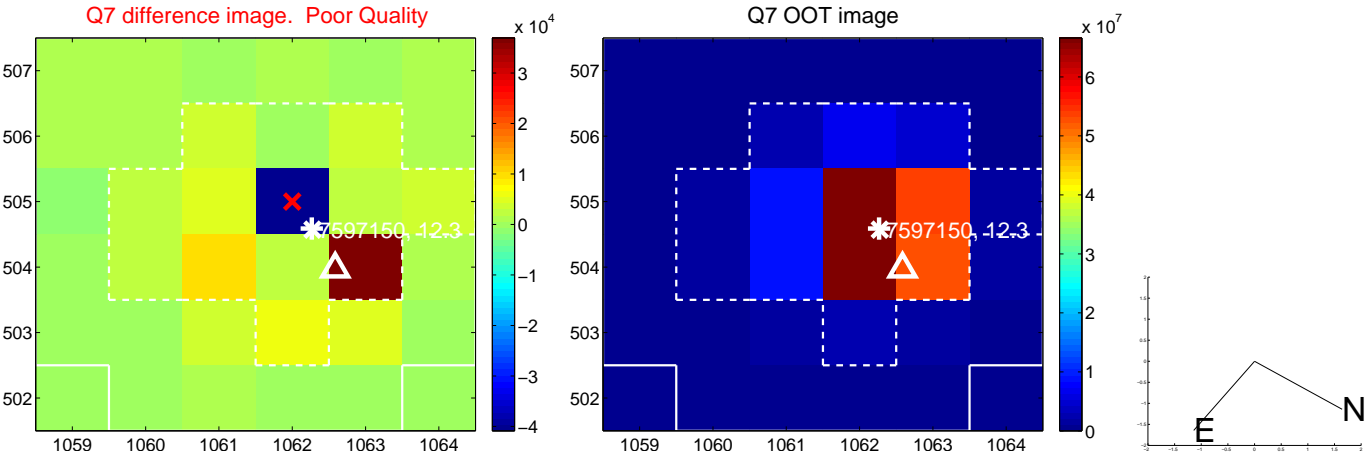
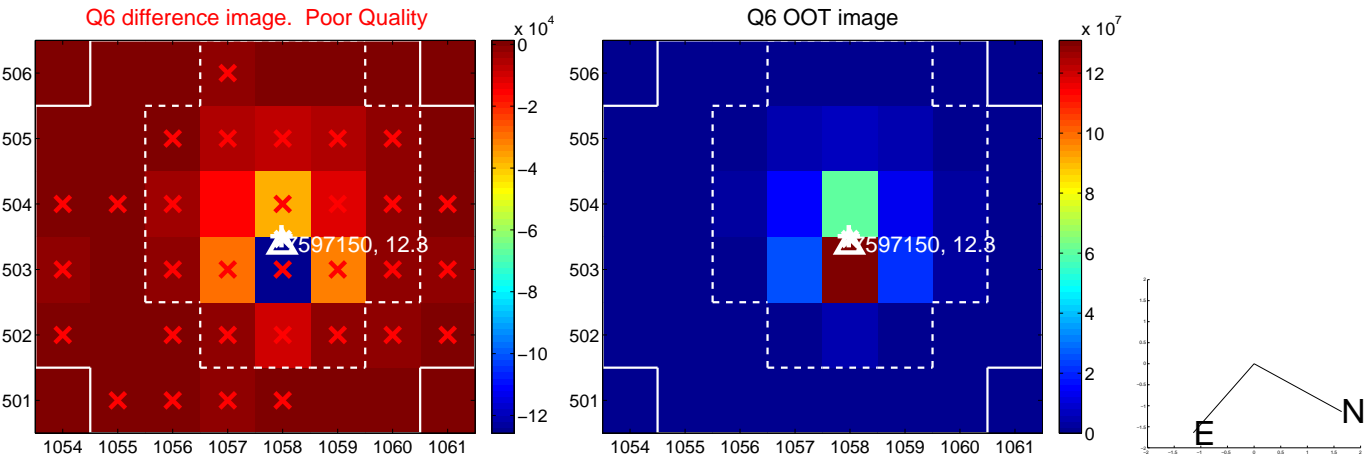
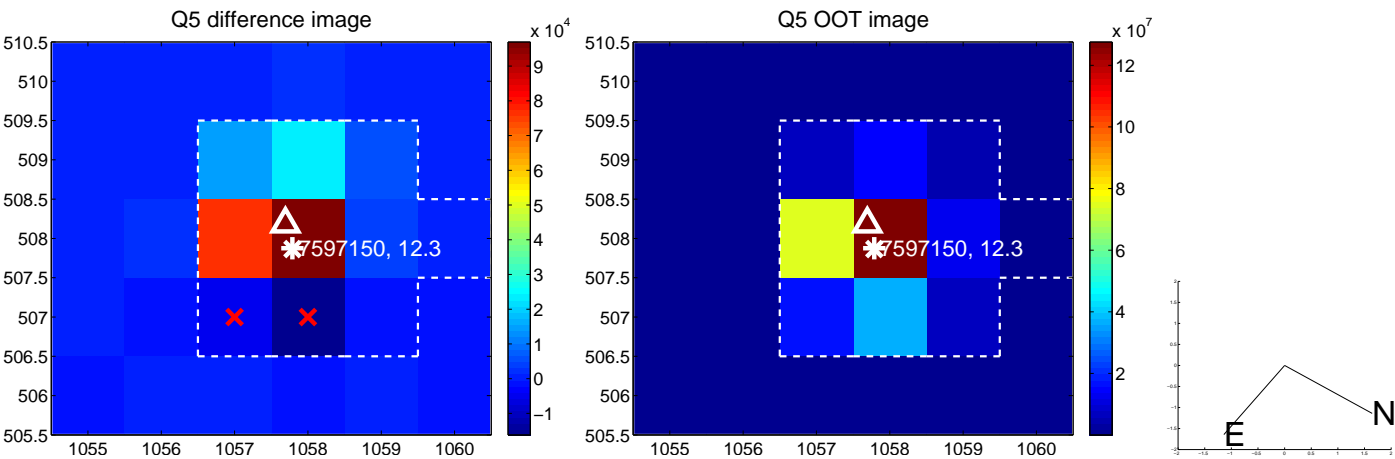


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

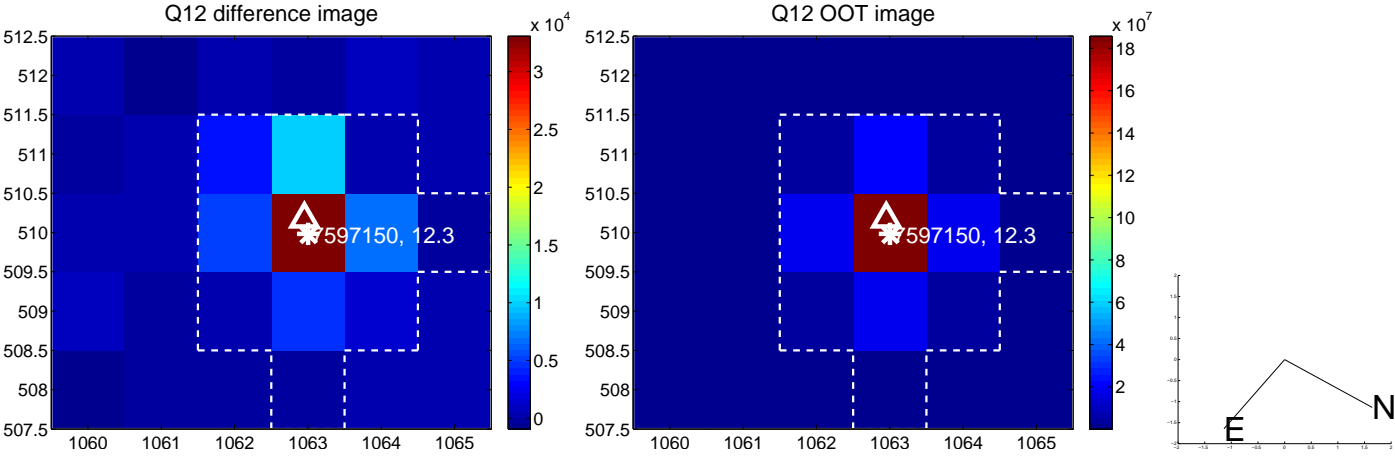
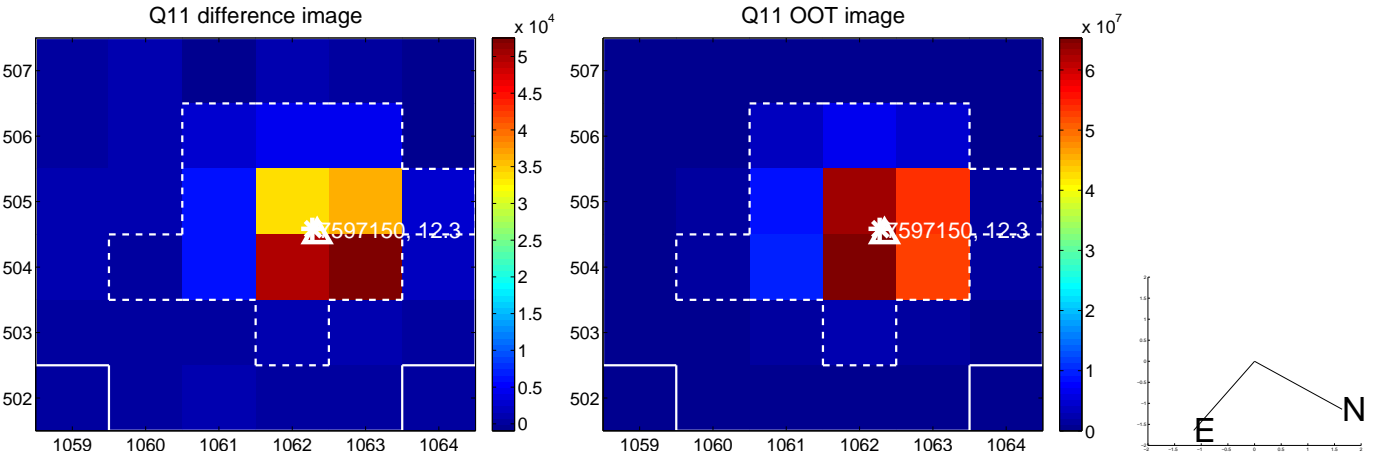
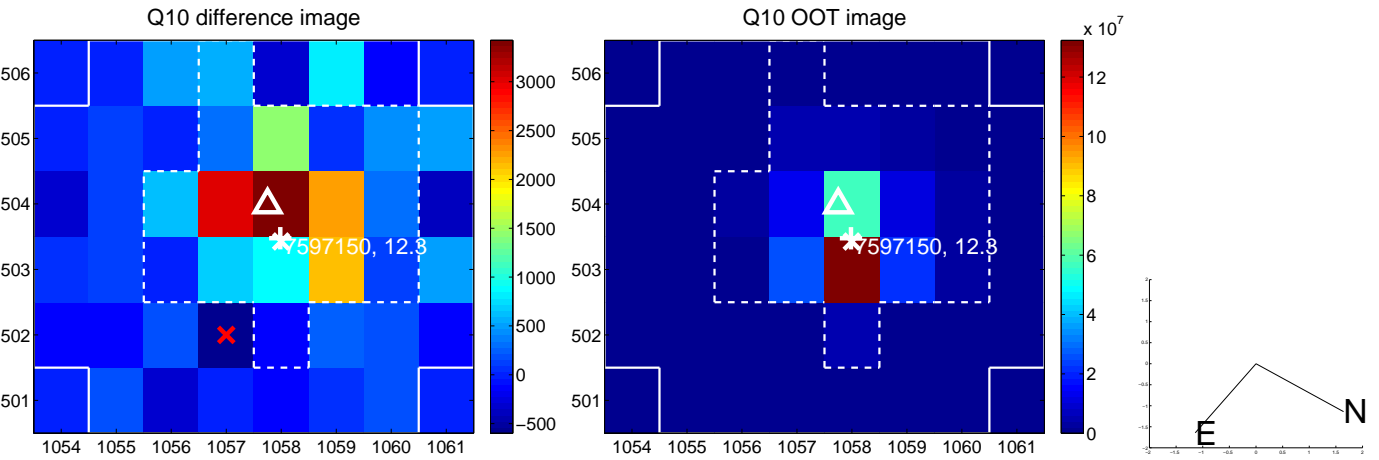
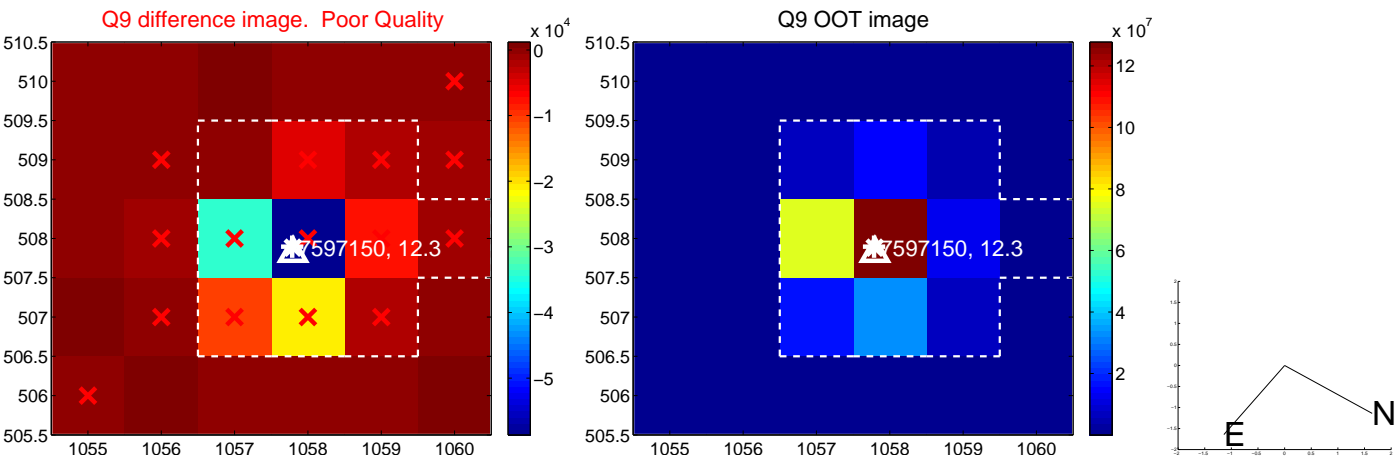
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



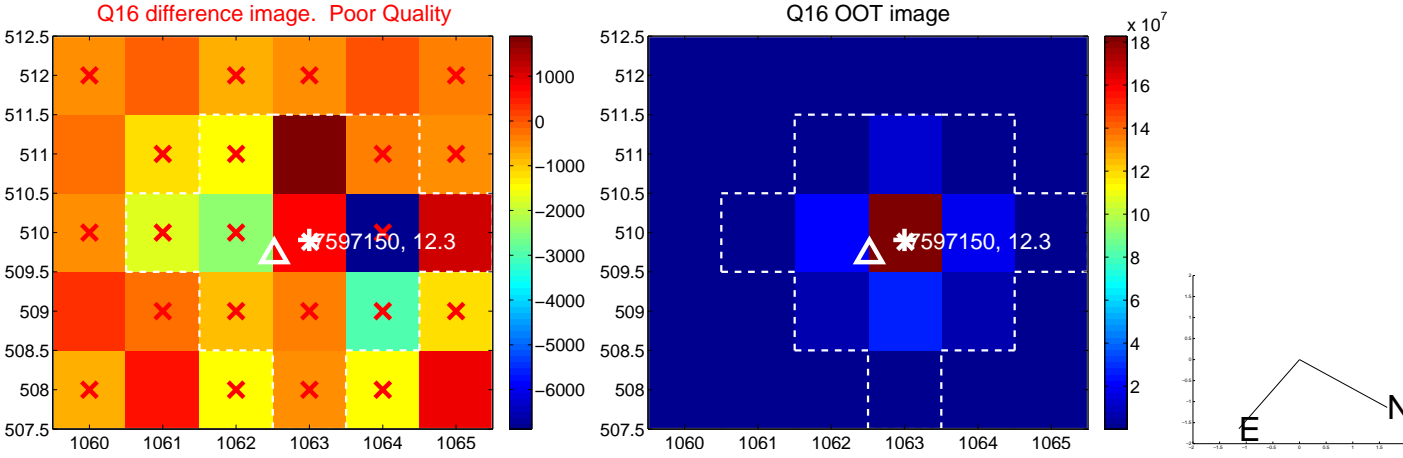
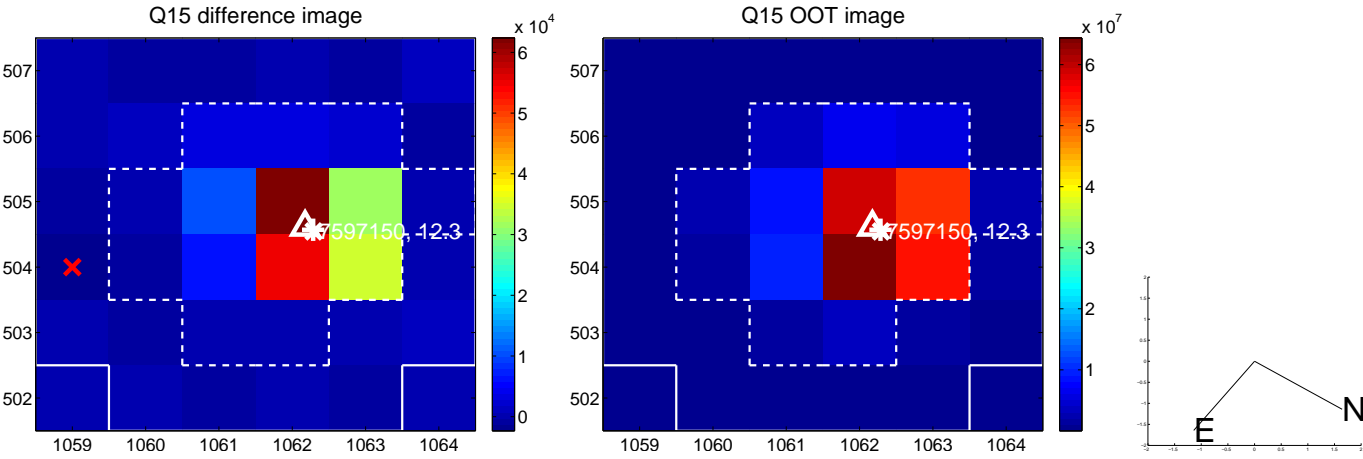
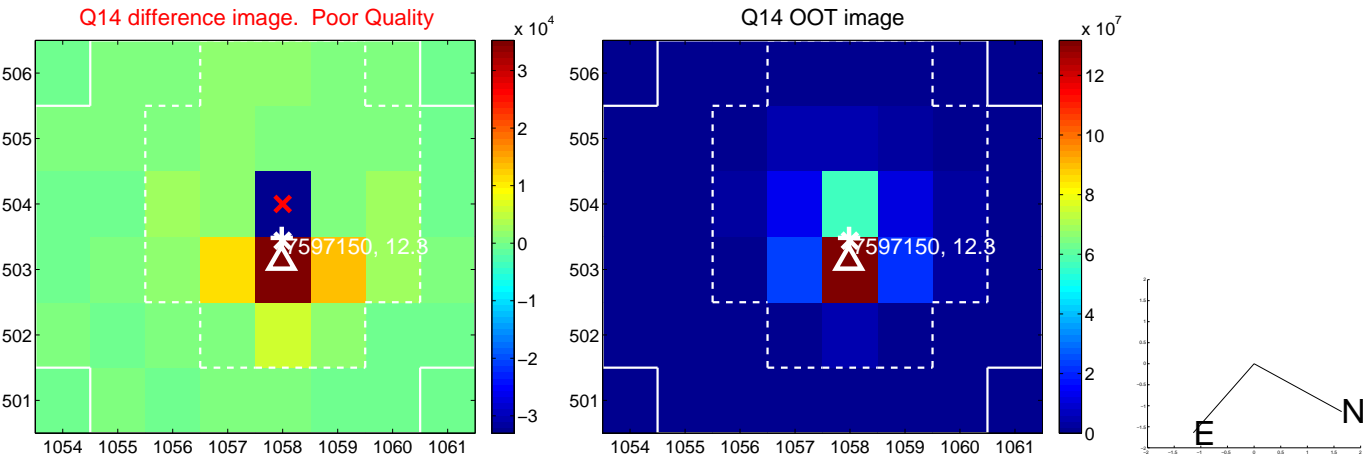
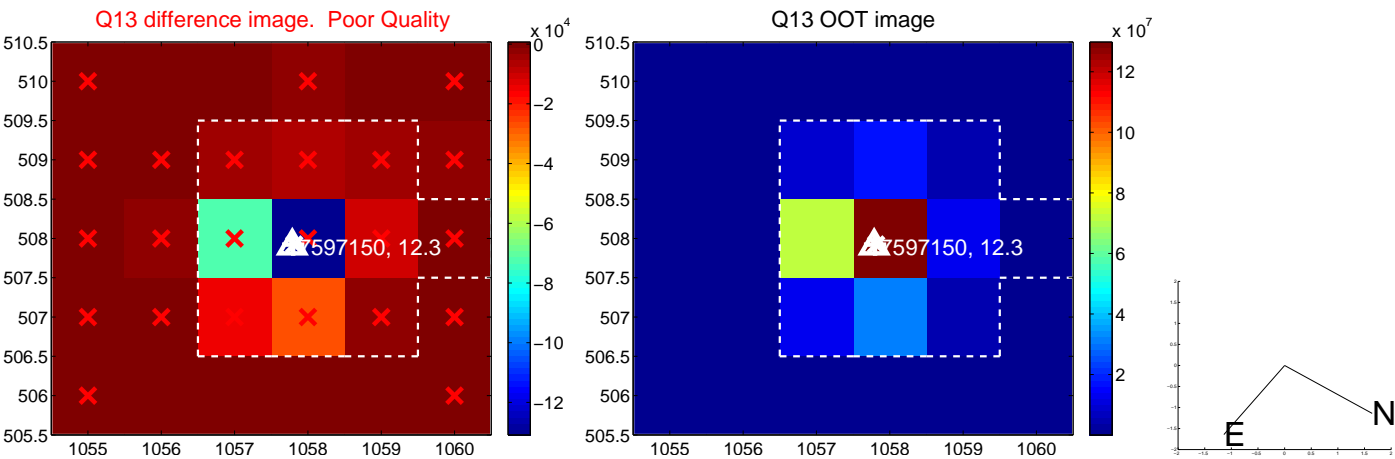
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



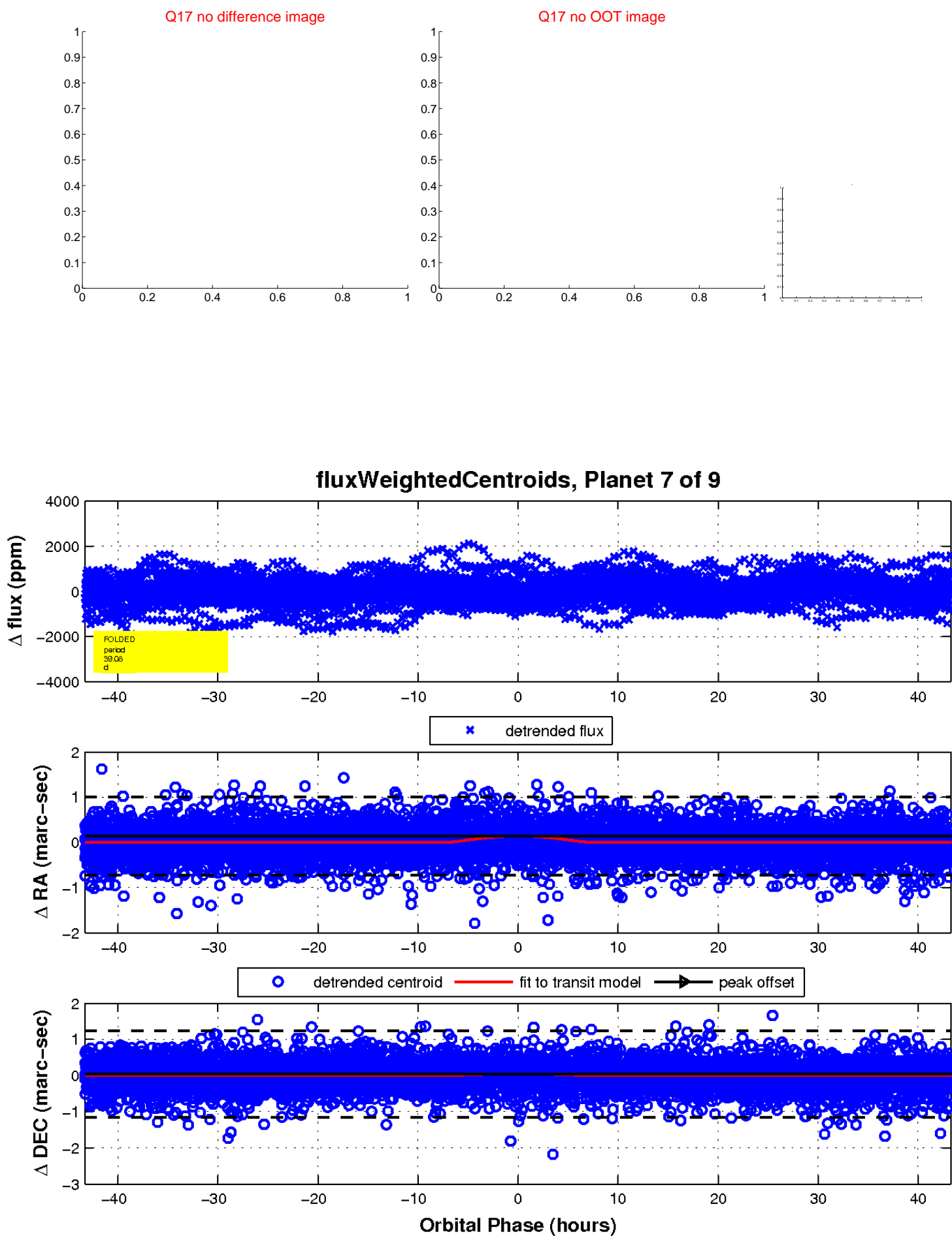
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

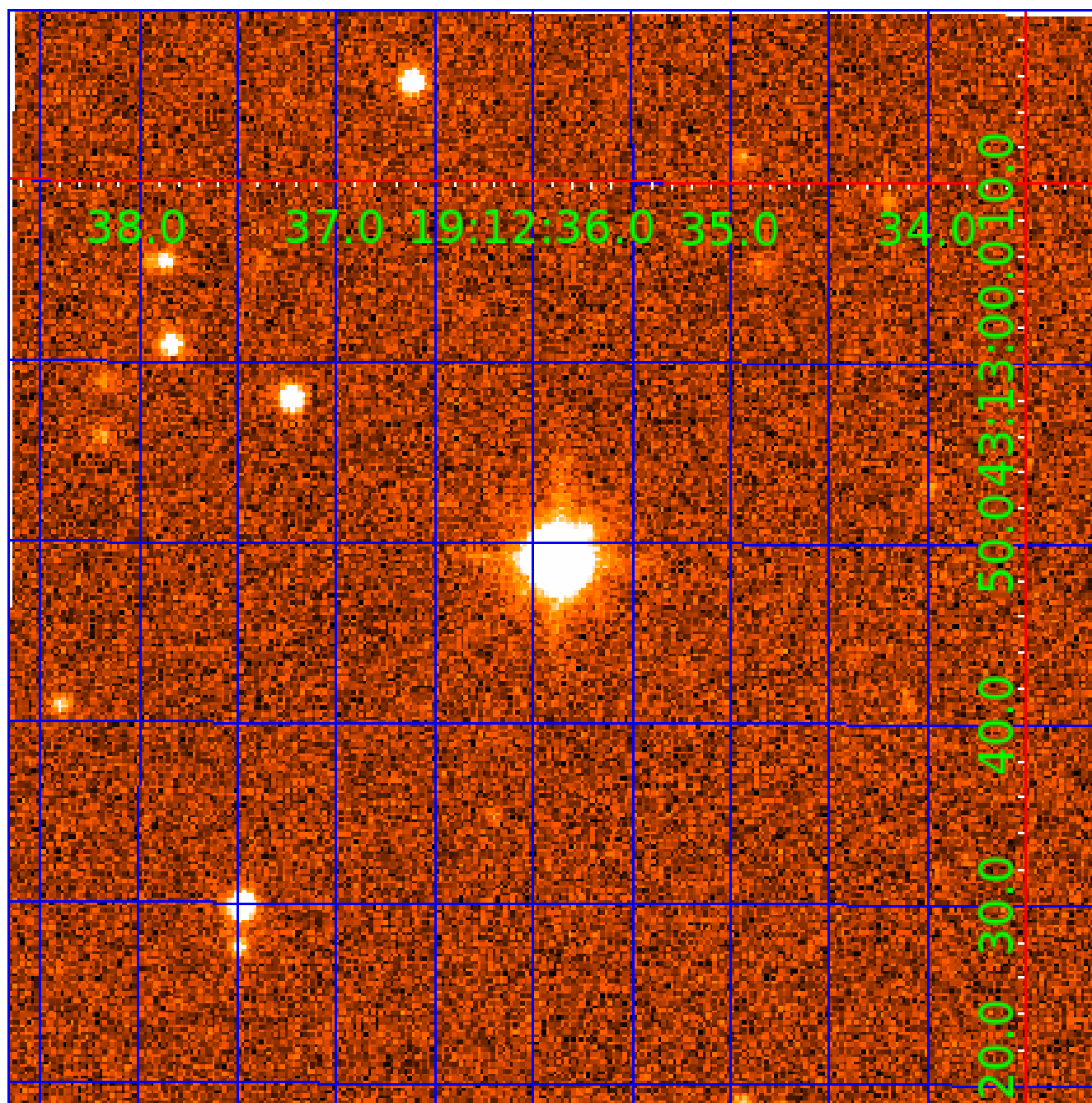


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007597150

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})
007597150-01	OBS	No	1.185112	132.137440	0.2	8.394	7.9	0.1	1.68	7282	0.08	12713.76
007597150-02	OBS	No	47.328333	177.880517	497.2	4.895	10.5	9.0	1.68	7282	4.32	93.14
007597150-03	OBS	No	8.293566	136.451345	43.3	2.639	10.1	2.9	1.68	7282	1.29	949.80
007597150-04	OBS	No	8.291193	136.224441	719.1	2.304	9.5	9.0	1.68	7282	4.69	950.16
007597150-05	OBS	No	63.139376	159.633307	625.6	1.776	9.1	8.6	1.68	7282	4.62	63.42
007597150-06	OBS	No	31.101521	149.334486	381.5	6.475	9.6	6.2	1.68	7282	6.26	163.02
007597150-07	OBS	No	39.081868	137.421010	1020.6	14.434	9.6	9.1	1.68	7282	9.72	120.22
007597150-08	OBS	No	25.156825	145.994068	159.9	3.808	9.2	3.5	1.68	7282	2.35	216.31
007597150-09	OBS	No	35.930360	143.370372	221.5	1.500	7.3	-1.0	1.68	7282	2.55	134.48

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007597150-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV
007597150-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD
007597150-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—NO_FITS—CENT_NOFITS

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

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

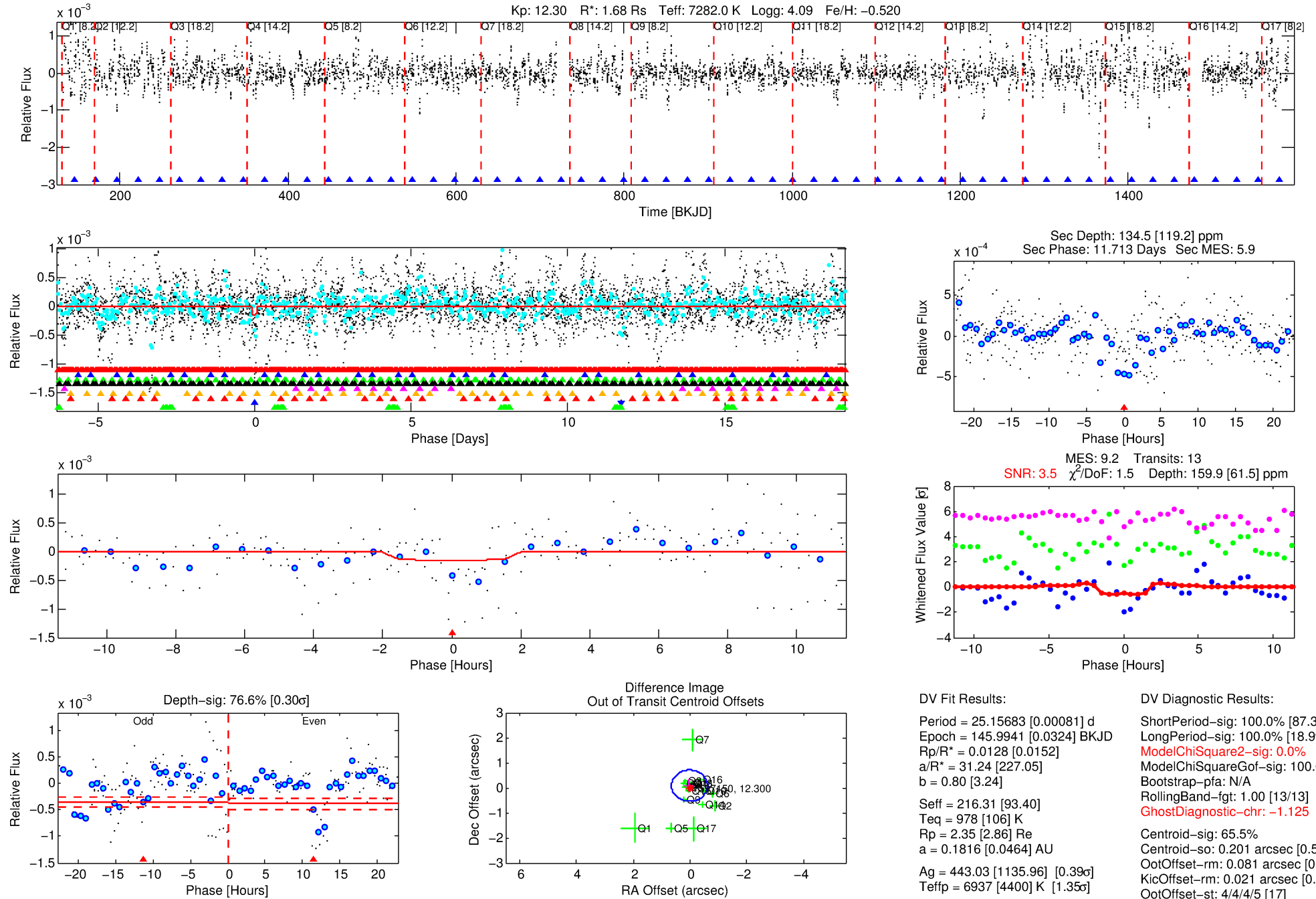
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007597150-08

No Significant Match Found

DV One-Page Summary

KIC: 7597150 Candidate: 8 of 9 Period: 25.157 d



DV Fit Results:

Period = 25.15683 [0.00081] d
Epoch = 145.9941 [0.0324] BKJD
Rp/R* = 0.0128 [0.0152]
a/R* = 31.24 [227.05]
b = 0.80 [3.24]
Seff = 216.31 [93.40]
Teff = 978 [106] K
Rp = 2.35 [2.86] Re
a = 0.1816 [0.0464] AU
Ag = 443.03 [1135.96] [0.39 σ]
Teffp = 6937 [4400] K [1.35 σ]

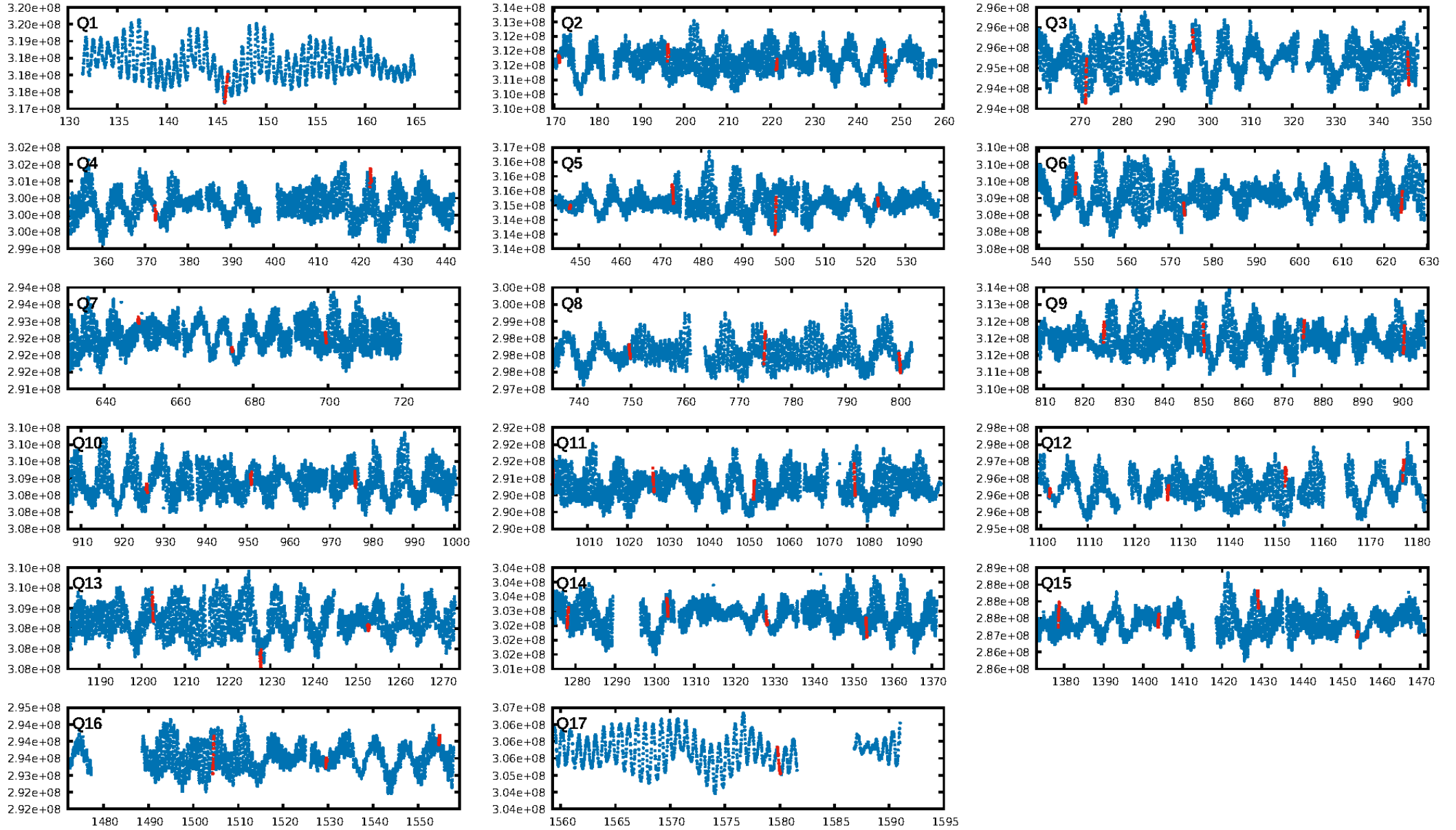
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [87.36 σ]
LongPeriod-sig: 100.0% [18.99 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [13/13]
GhostDiagnostic-chr: -1.125
Centroid-sig: 65.5%
Centroid-so: 0.201 arcsec [0.53 σ]
OotOffset-rm: 0.081 arcsec [0.39 σ]
KicOffset-rm: 0.021 arcsec [0.12 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.53 [9/17]
DiffImageOverlap-fno: 0.24 [4/17]

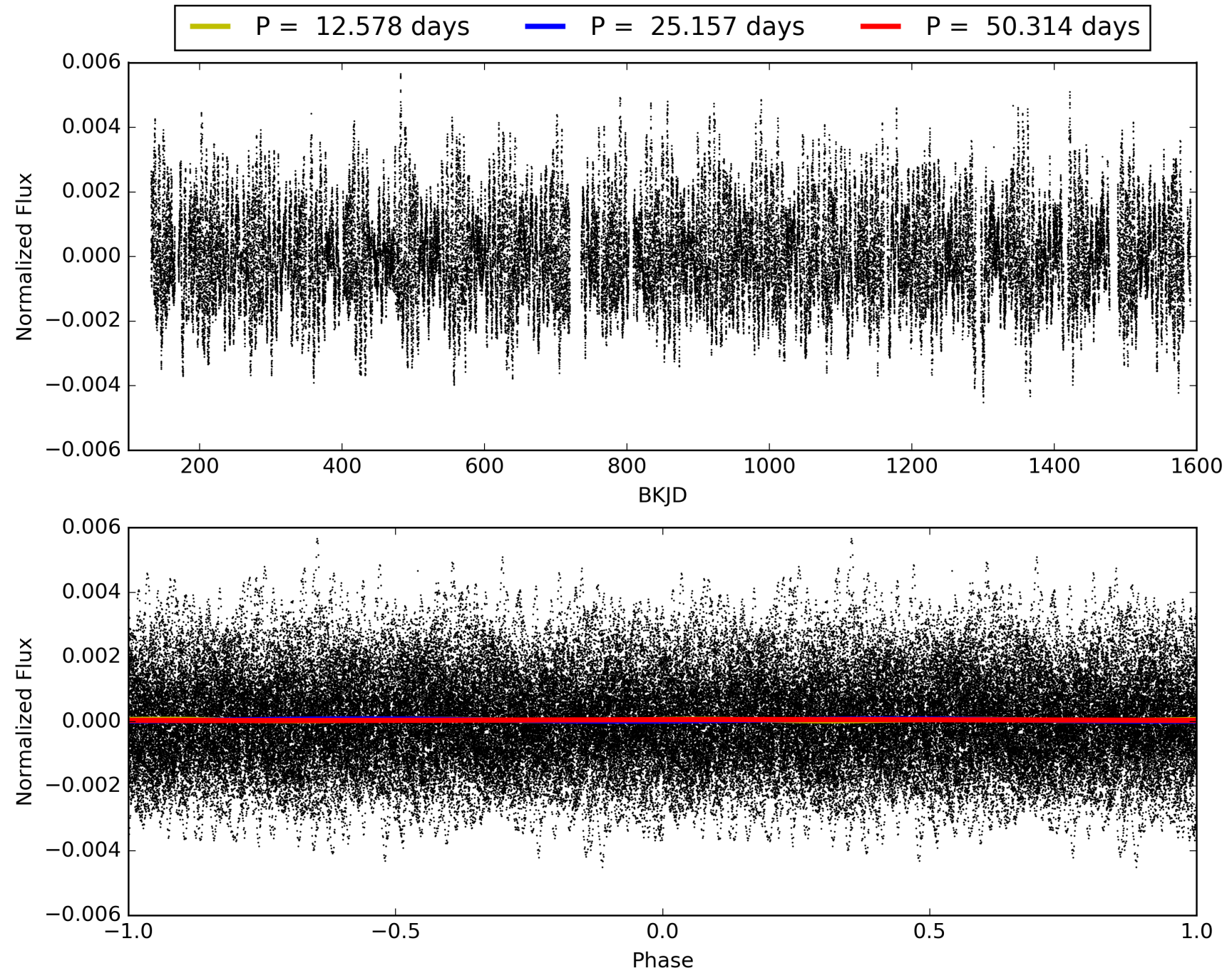
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:31:07 Z

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

TCE 007597150-08, PDC Light Curves

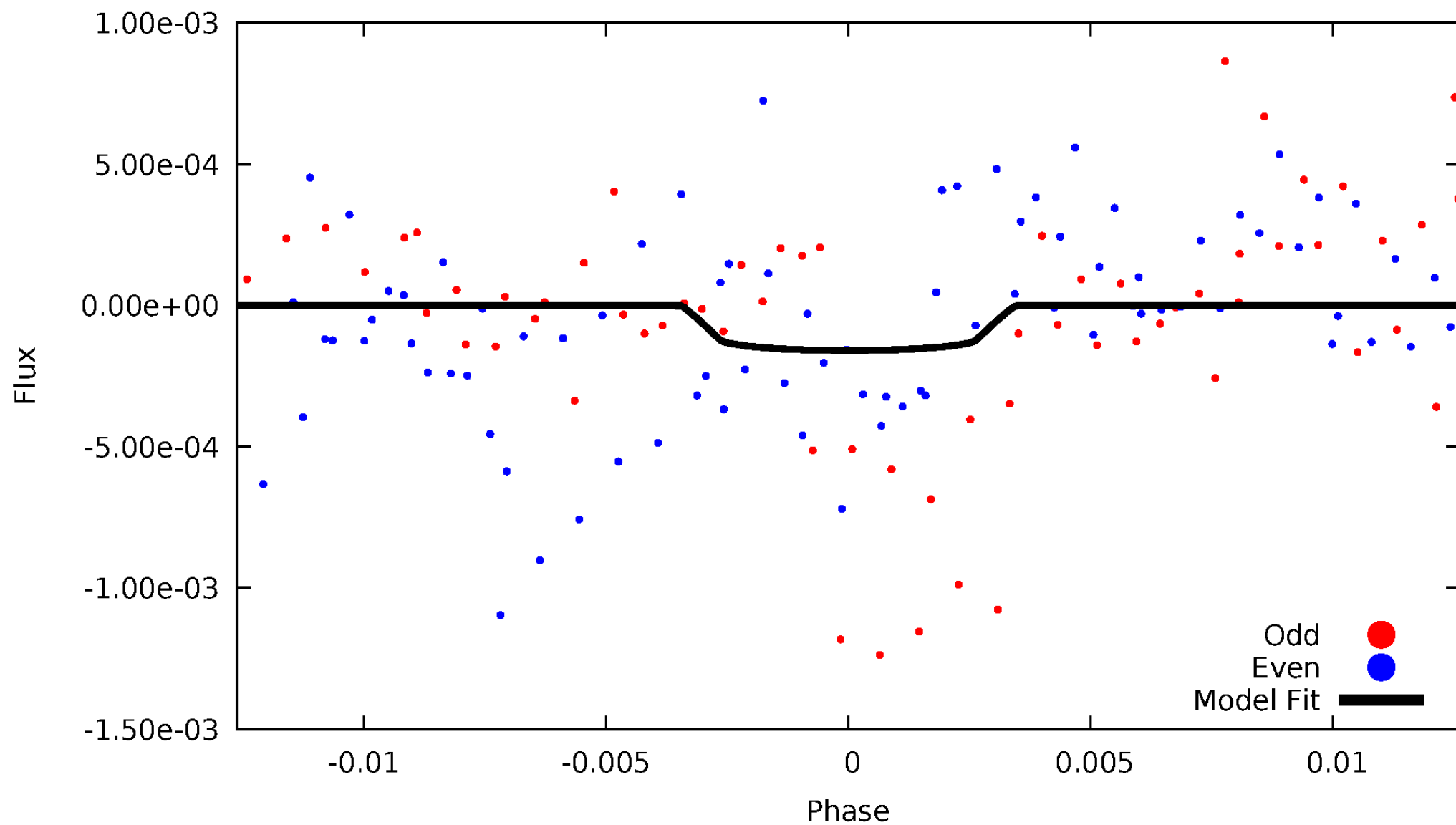


TCE 007597150-08



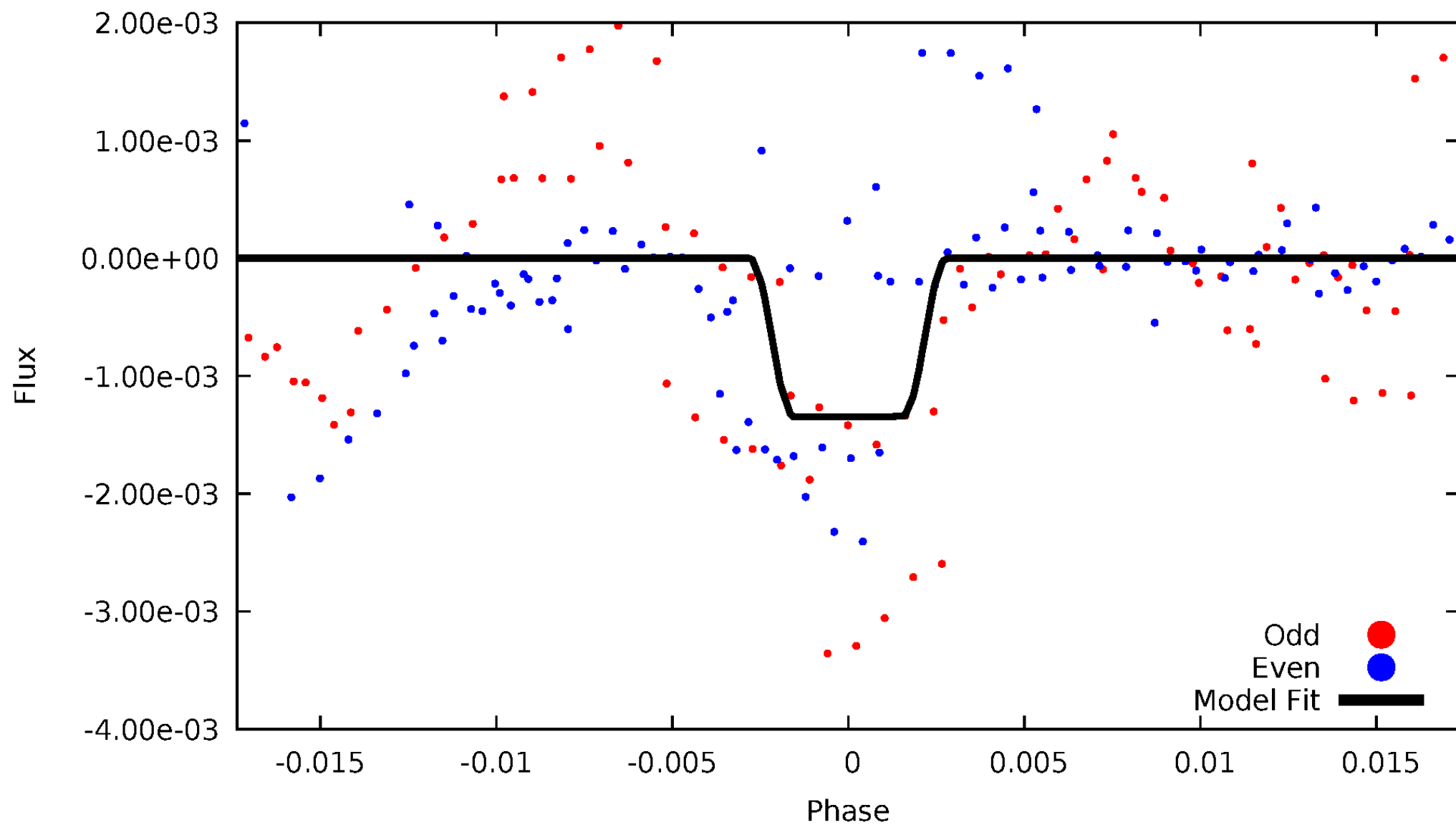
DV Odd/Even

TCE 007597150-08



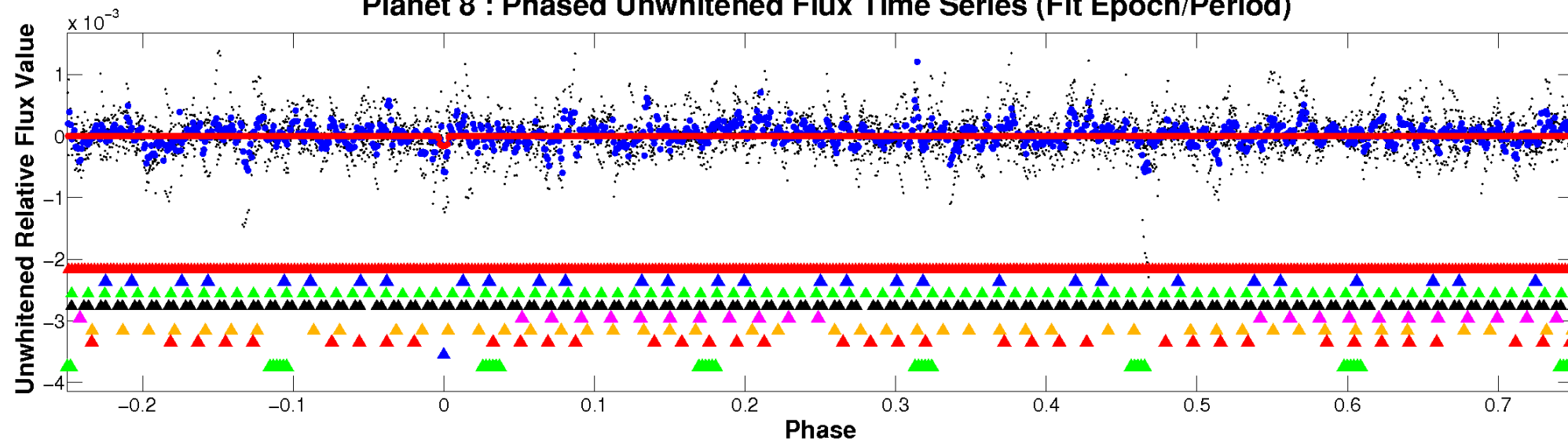
ALT Odd/Even

TCE 007597150-08

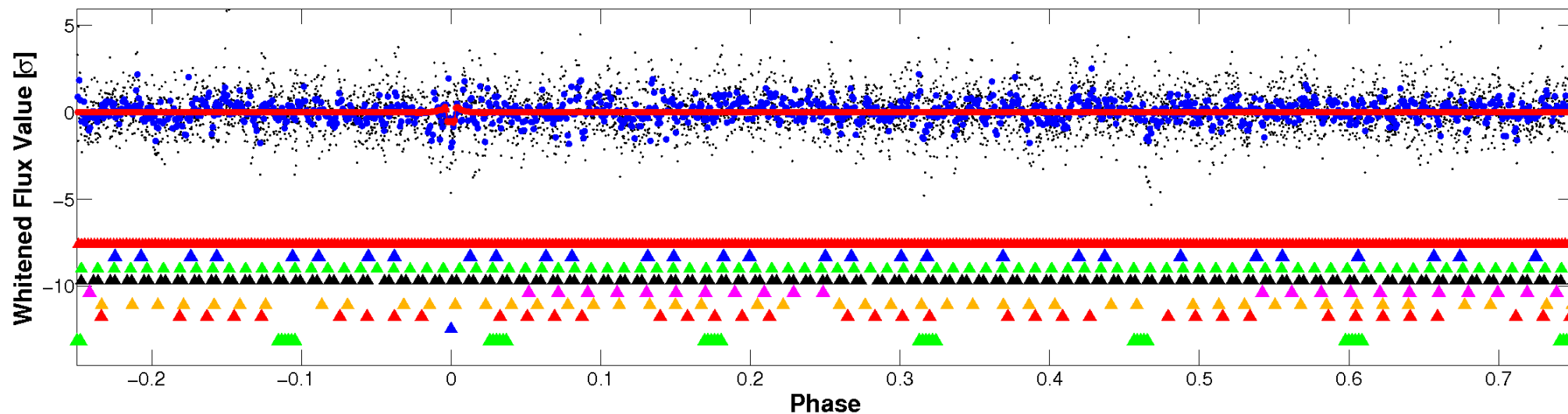


Non-Whitened Vs. Whitened Light Curve

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

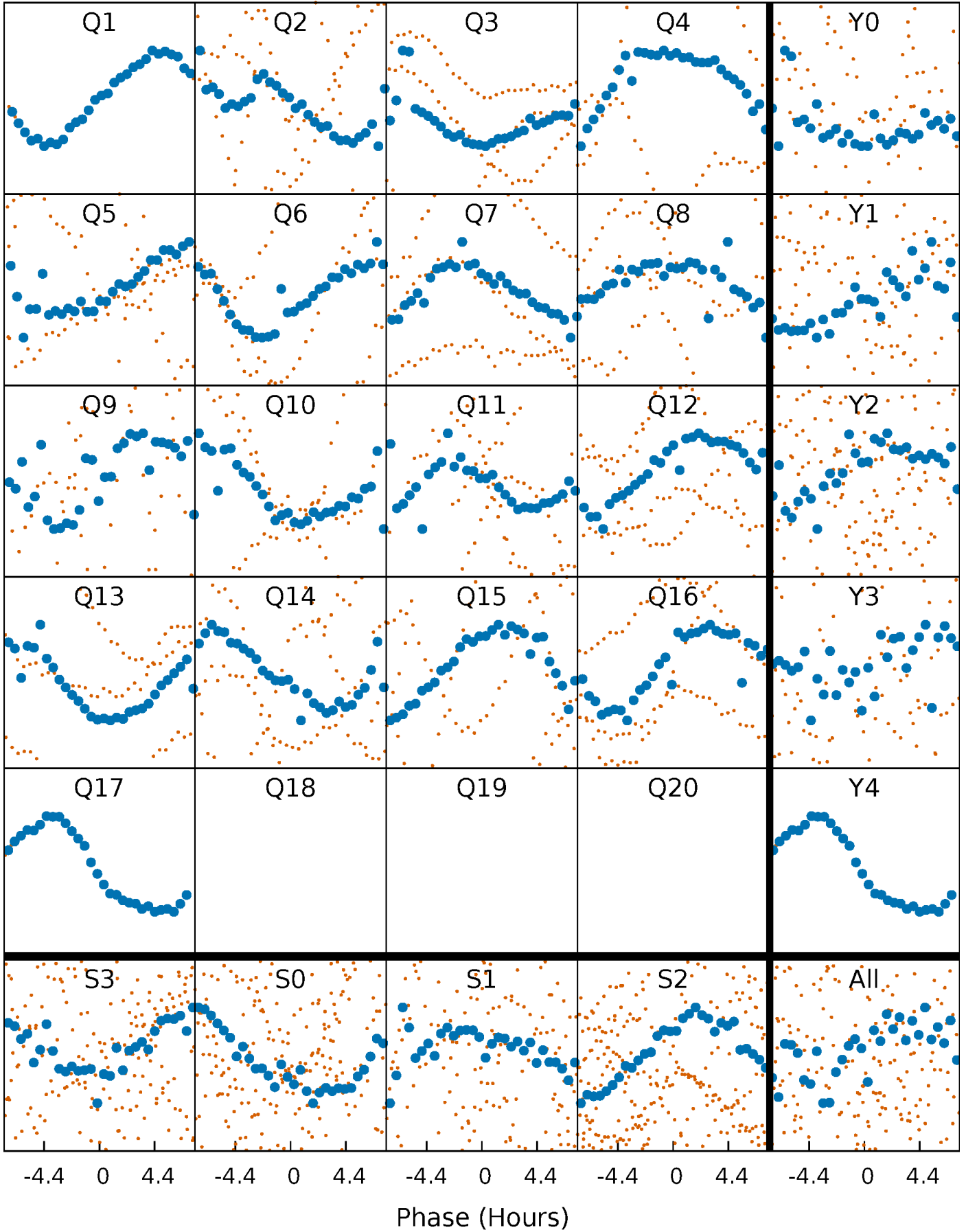


Planet 8 : Phased Whitened Flux Time Series (Fit Epoch/Period)



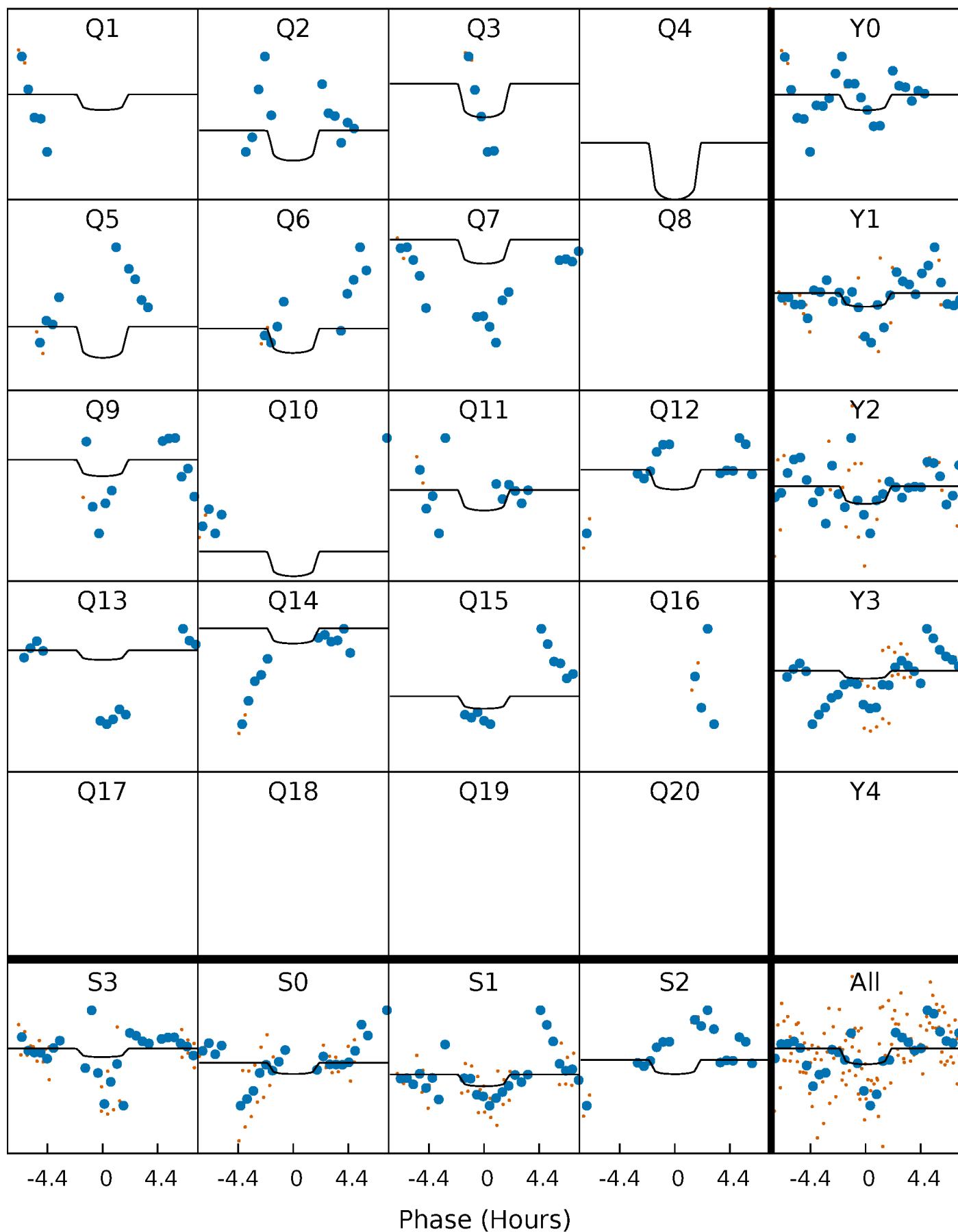
PDC Quarter-Phased Transit Curves

TCE 007597150-08 P= 25.156825 Days $T_0=145.994068$ (BKJD)



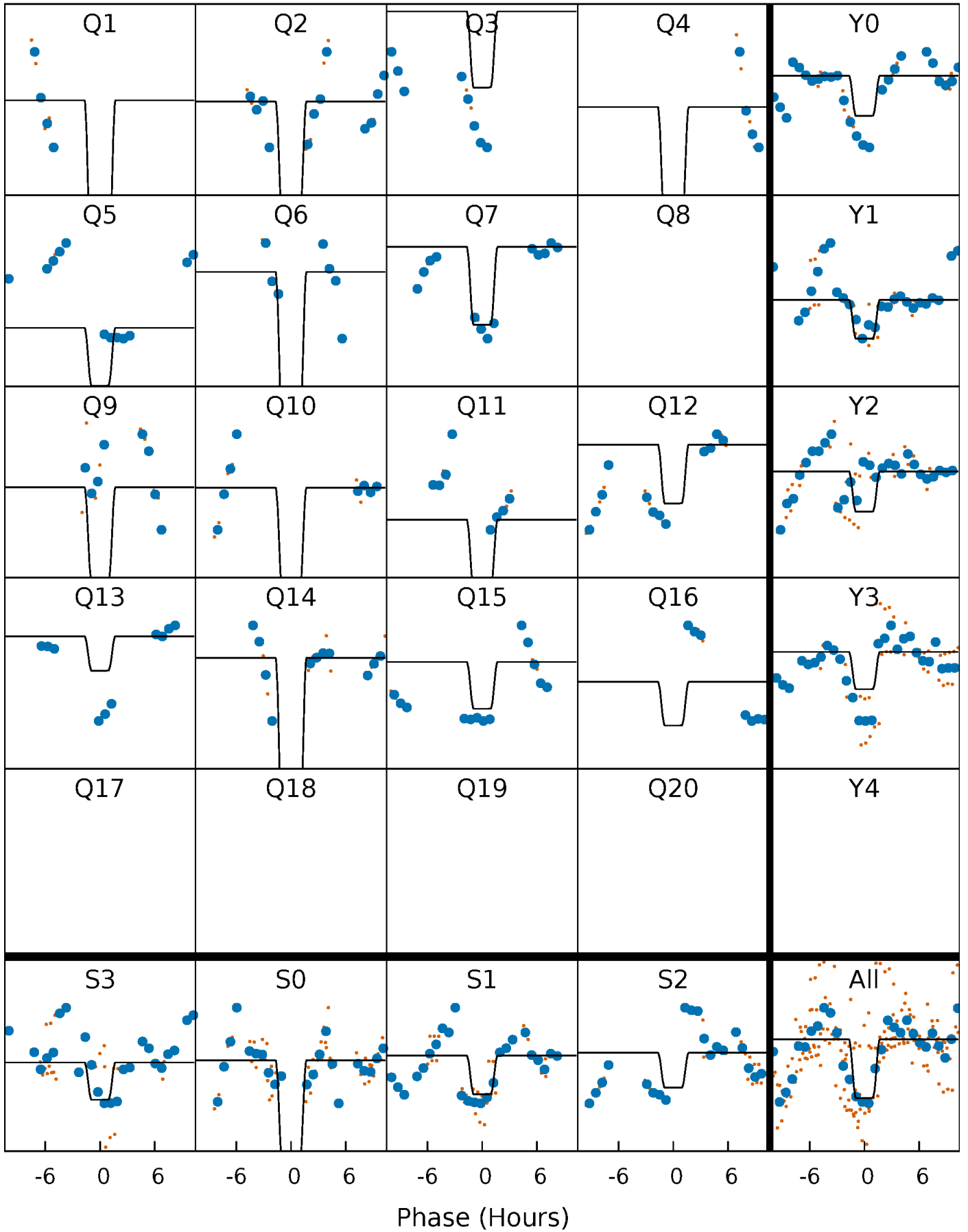
DV Quarter-Phased Transit Curves

TCE 007597150-08 P= 25.156825 Days $T_0=145.994068$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

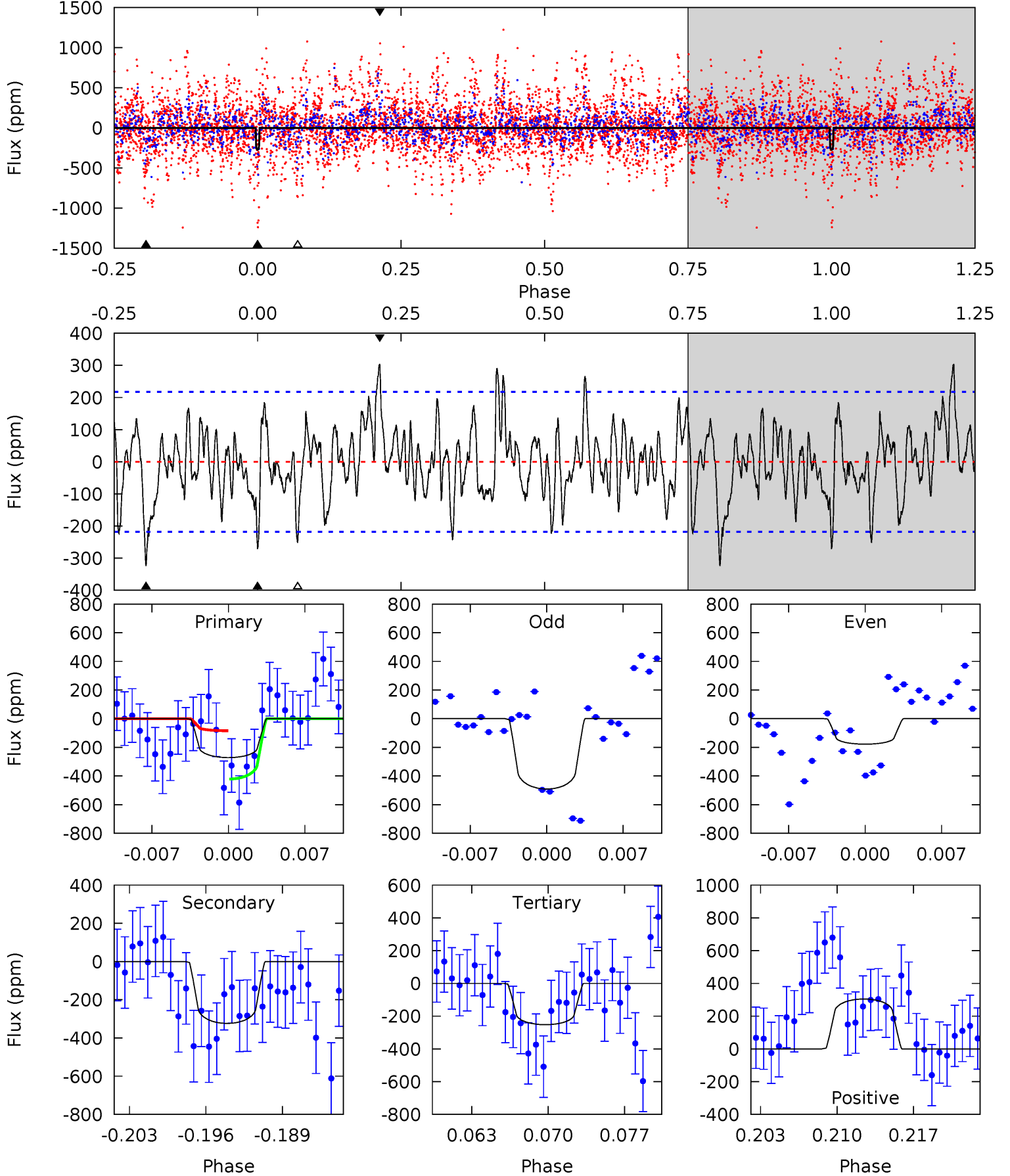
TCE 007597150-08 P= 25.156284 Days $T_0=146.028136$ (BKJD)



DV Model-Shift Uniqueness Test

007597150-08, P = 25.156825 Days, E = 120.837243 Days

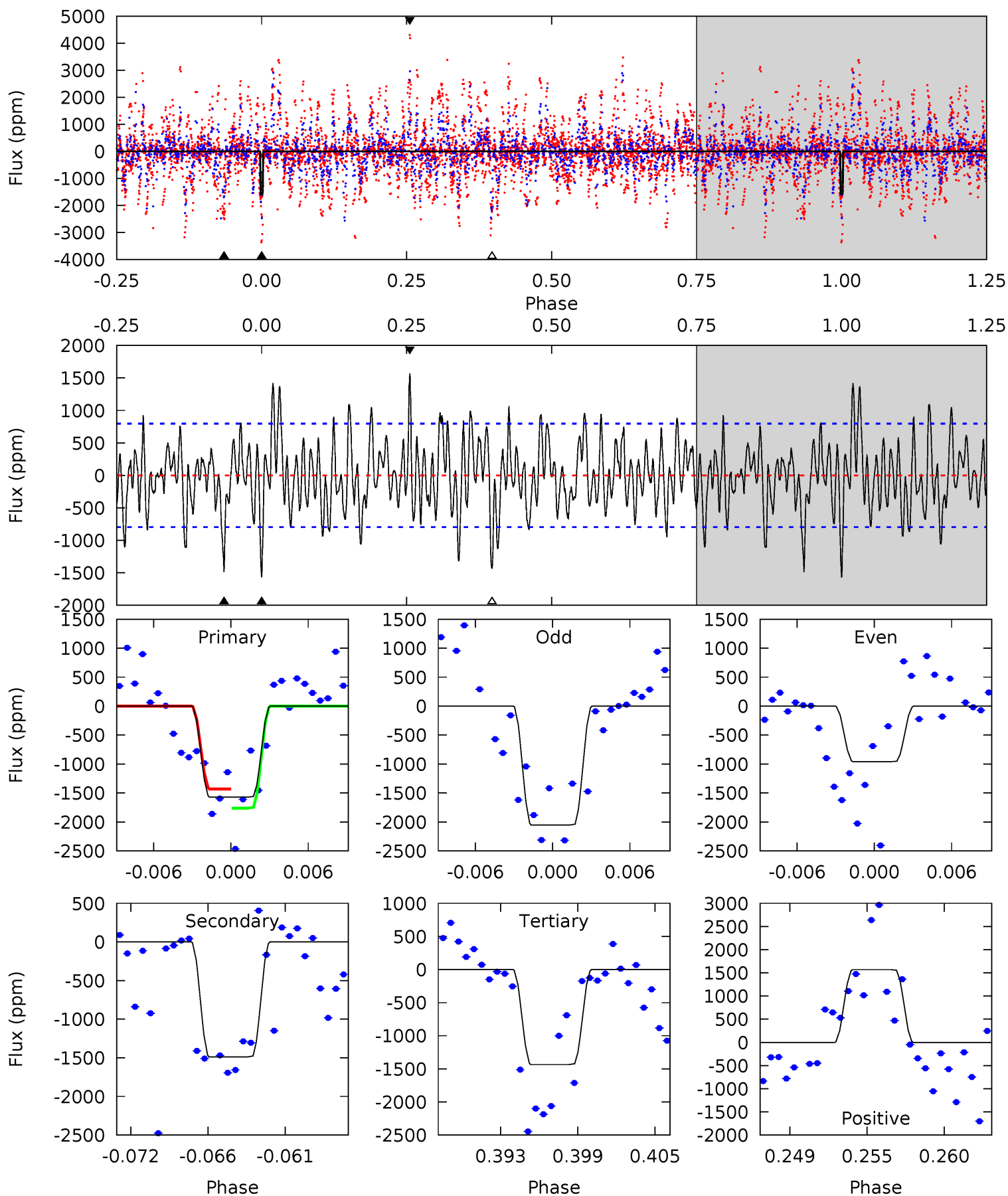
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.35	7.57	5.89	7.12	5.09	2.70	2.21	0.46	-0.77	1.67	0.45	3.58	2.75	0.48	3.90



Alt Model-Shift Uniqueness Test

007597150-08, P = 25.156284 Days, E = 120.871852 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.1	9.61	9.26	10.1	5.14	2.77	2.95	0.89	0.02	0.35	-0.52	3.56	0.88	0.50	1.07



Stellar Parameters For KIC 007597150

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7282^{+233}_{-285}	$4.087^{+0.234}_{-0.156}$	$-0.520^{+0.250}_{-0.300}$	$1.683^{+0.458}_{-0.458}$	$1.260^{+0.196}_{-0.161}$	$0.372^{+0.467}_{-0.169}$
	+3%/-4%	+6%/-4%	+48%/-58%	+27%/-27%	+16%/-13%	+125%/-45%
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 007597150-08 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-324 ± 43	$2.96^{+2.47}_{-1.90}$	1358^{+104}_{-112}	7784^{+9224}_{-2128}	699^{+4387}_{-502}
Alt.	-1489 ± 155	$6.56^{+3.06}_{-2.81}$	1356^{+108}_{-108}	7460^{+2986}_{-1297}	628^{+1280}_{-338}

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 $A_{obs} \gg 1.0$

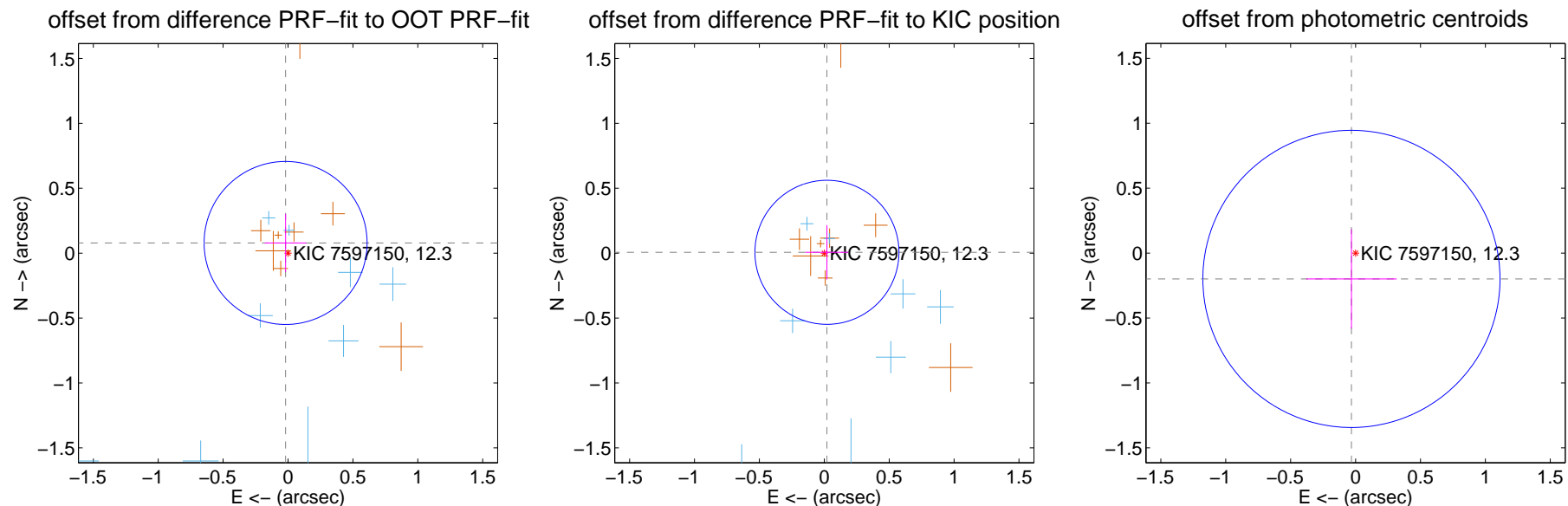
DV Centroid Data

Supplemental centroid analysis for 007597150-08. Kepler magnitude: 12.30. Transit SNR 3.49

There are 9 quarters with good PRF difference image offsets

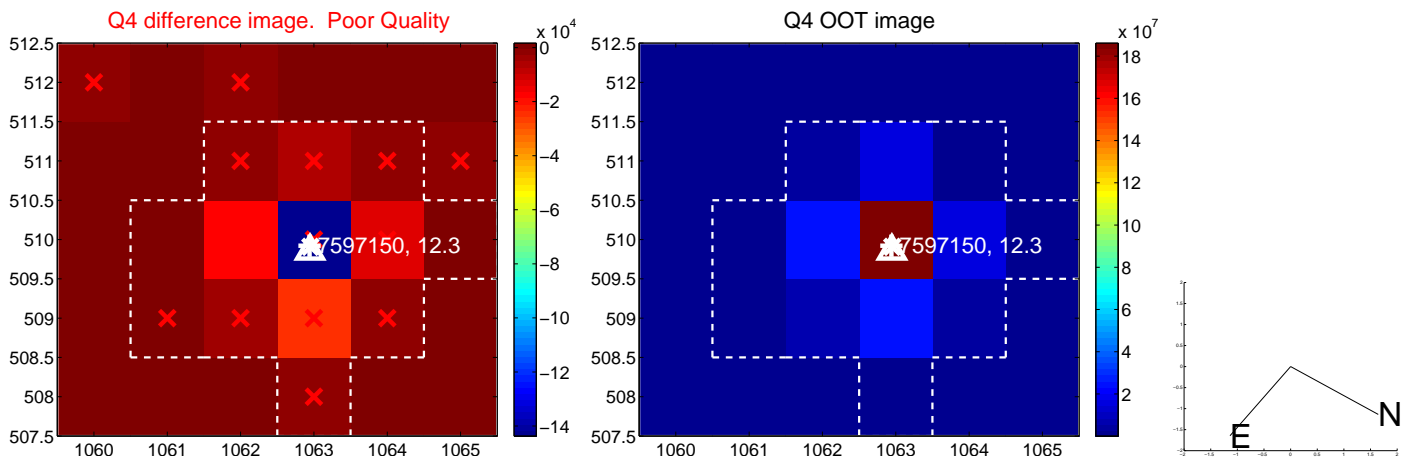
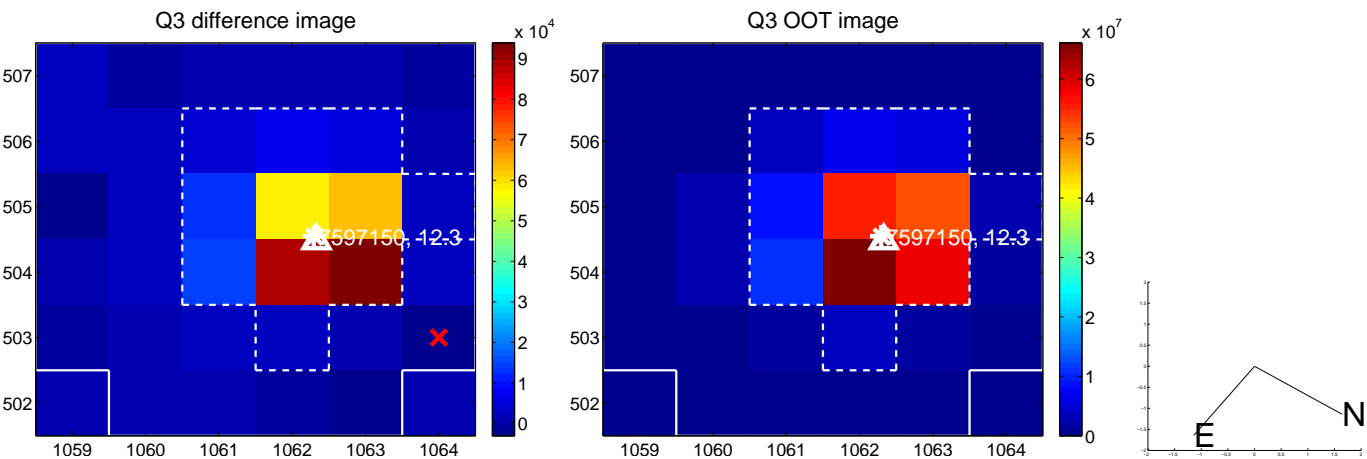
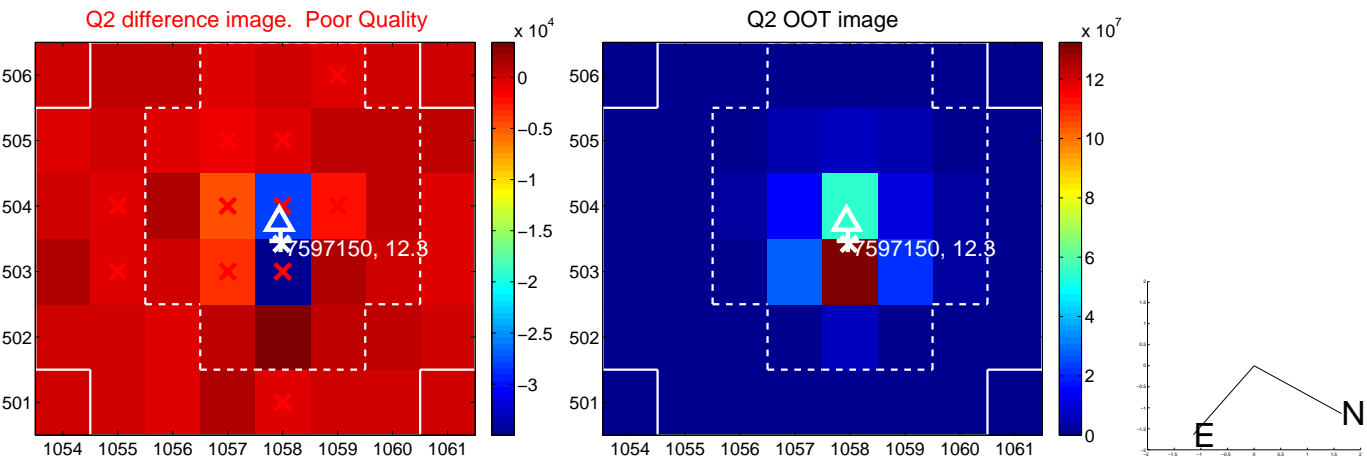
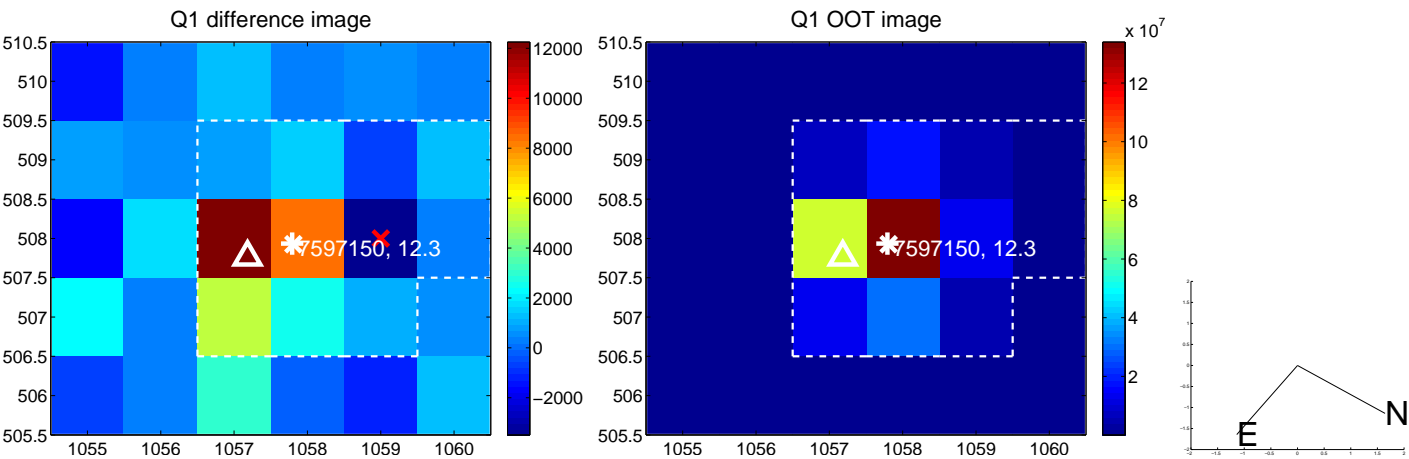
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.081 ± 0.209	0.39	0.019 ± 0.161	0.078 ± 0.224
PRF-fit source offset from KIC position	0.021 ± 0.185	0.12	-0.020 ± 0.166	0.006 ± 0.209
photometric centroid source offset	0.20 ± 0.38	0.53	0.03 ± 0.35	-0.20 ± 0.38

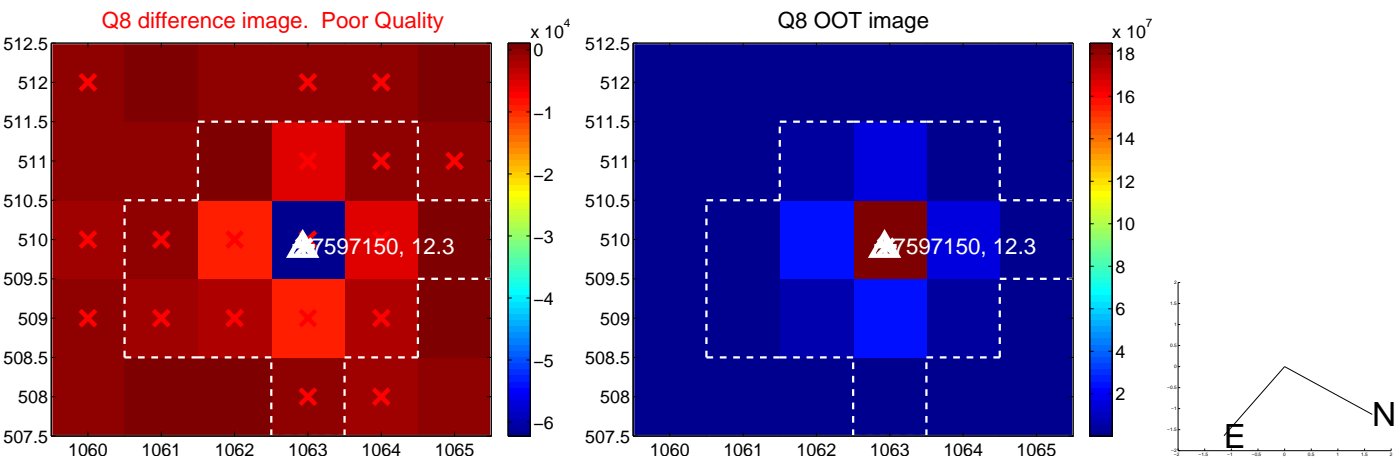
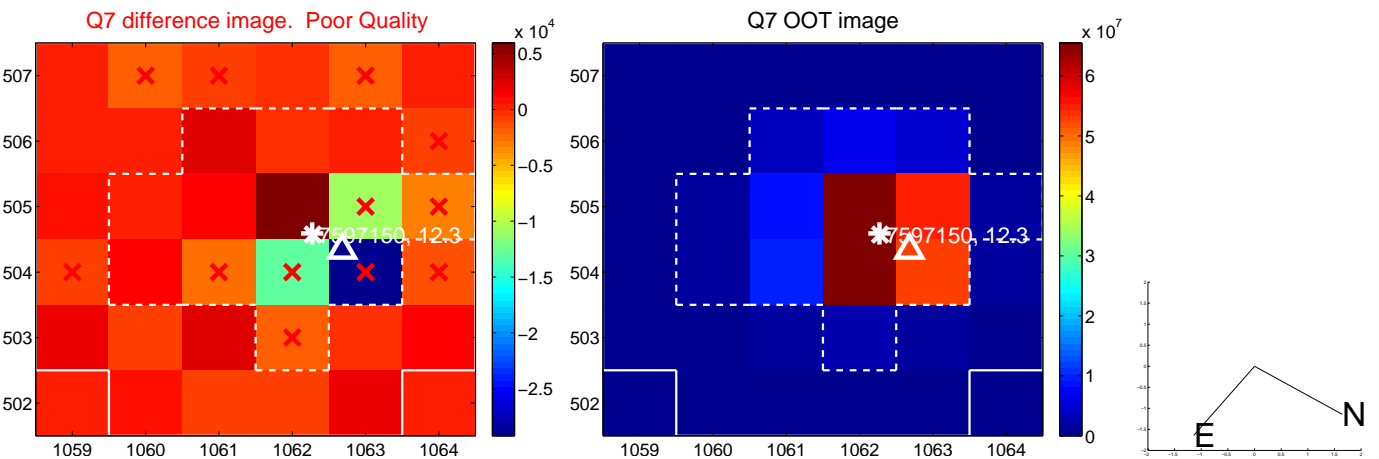
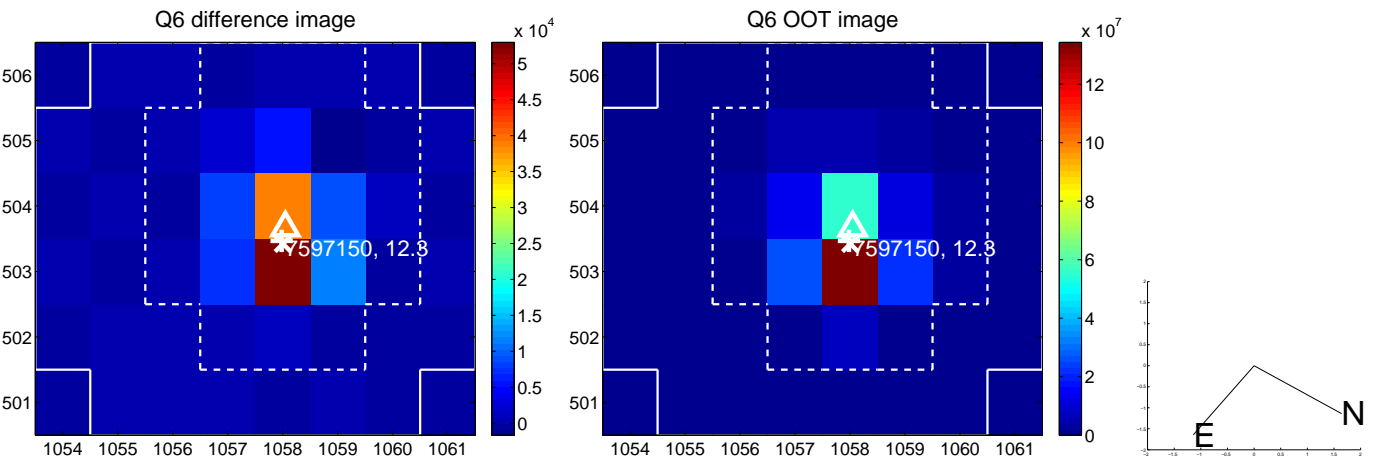
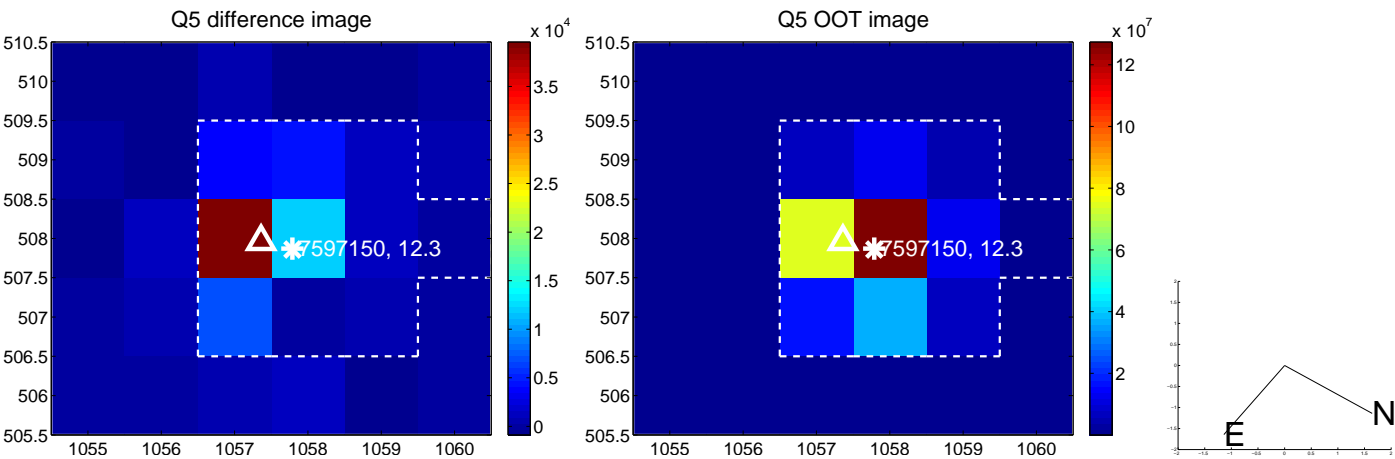


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

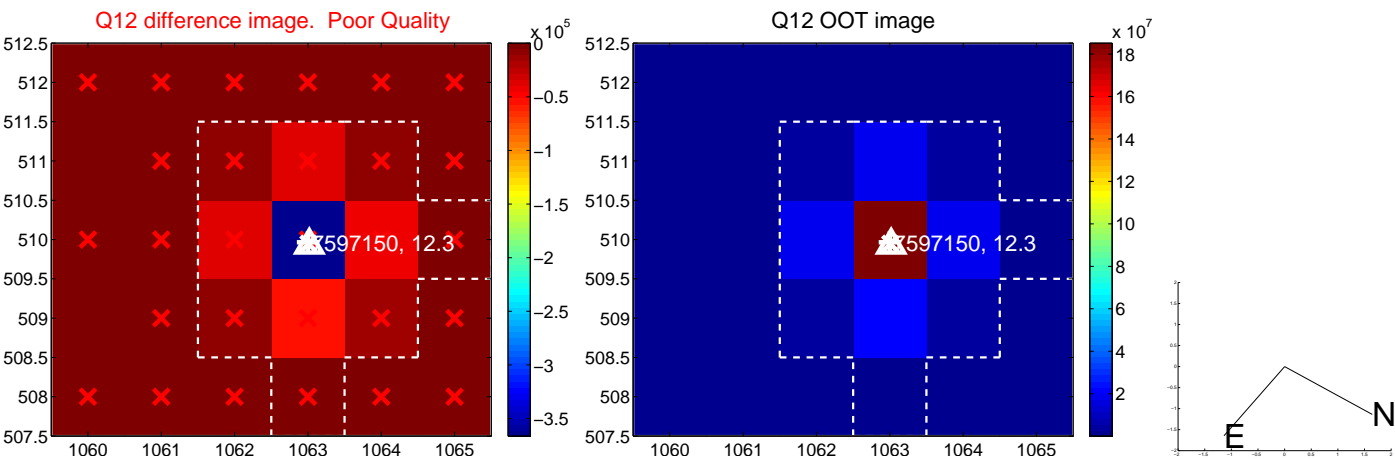
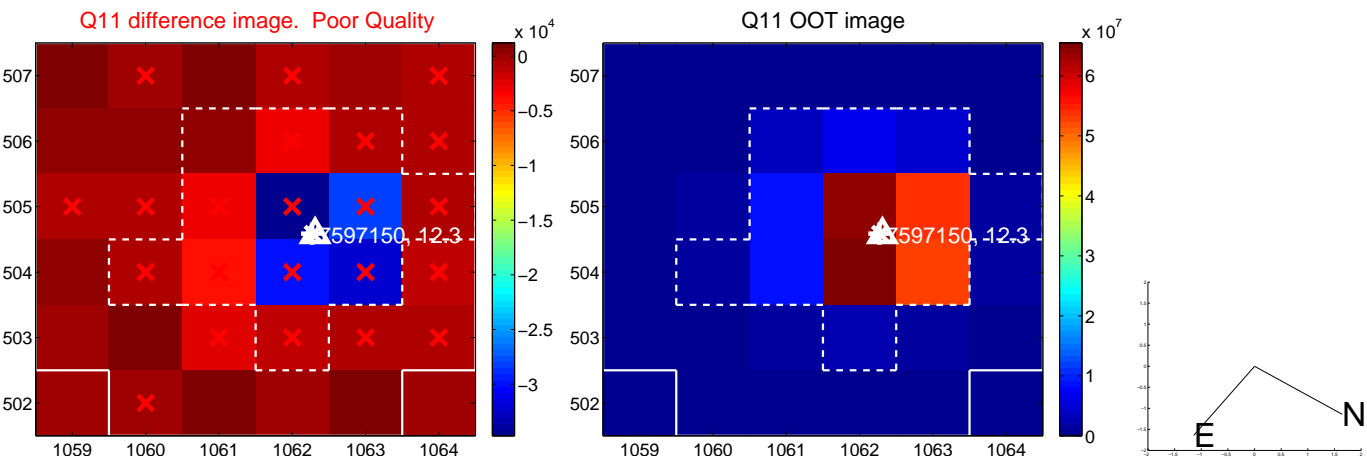
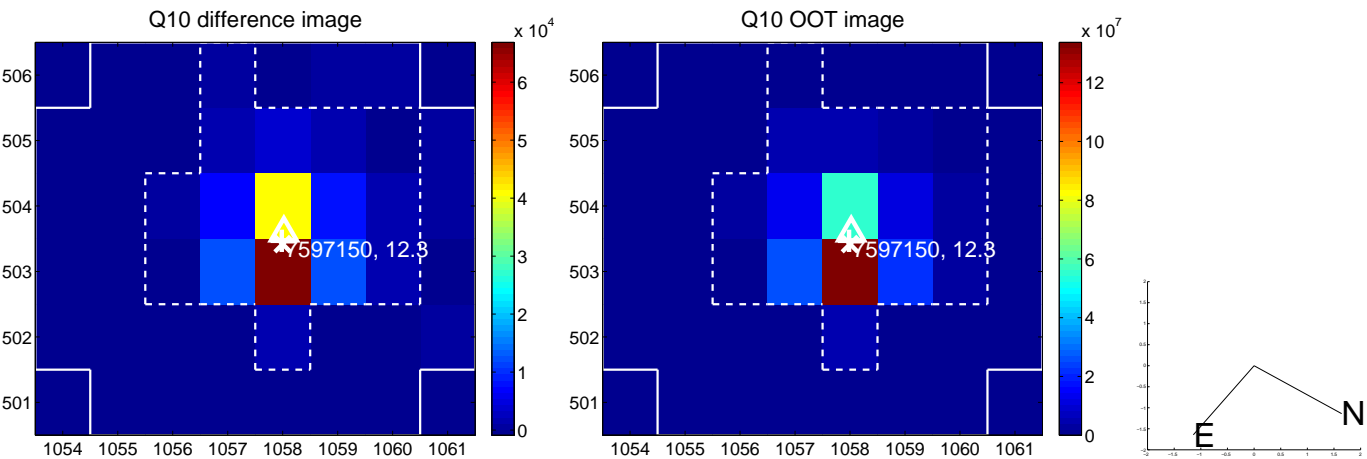
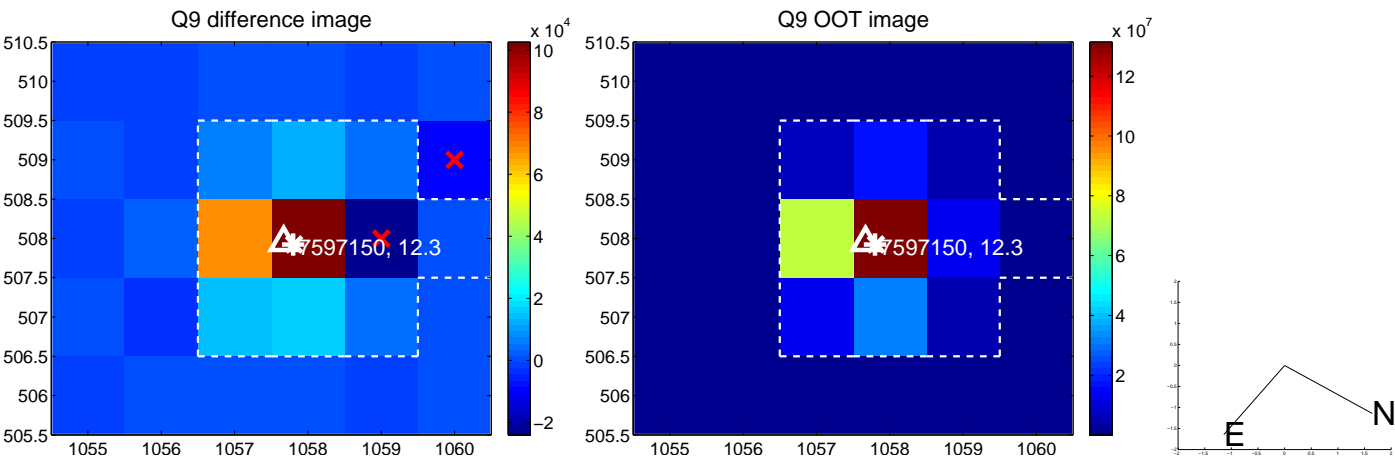
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



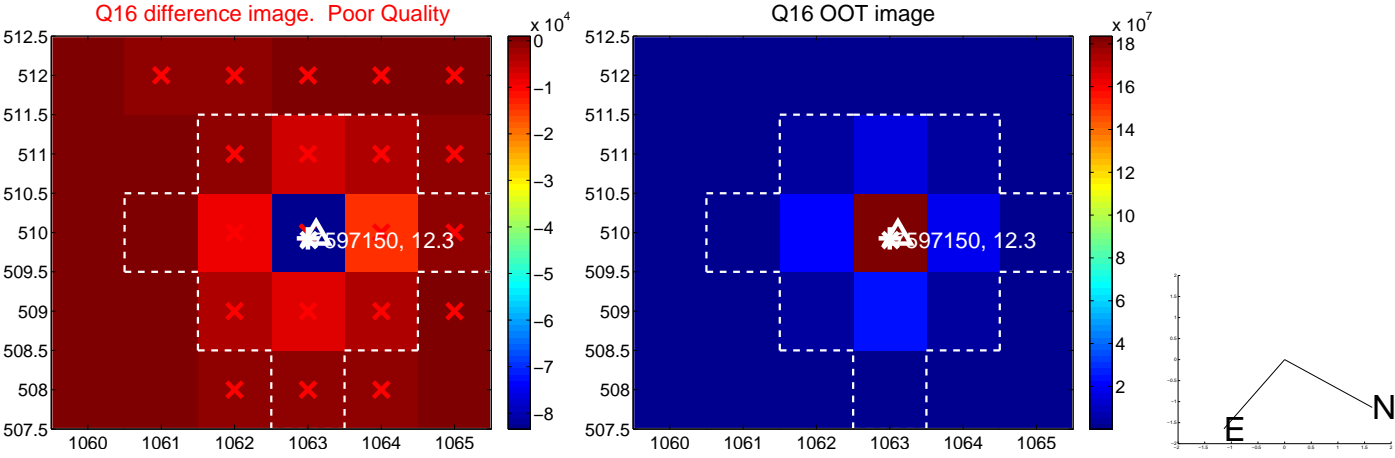
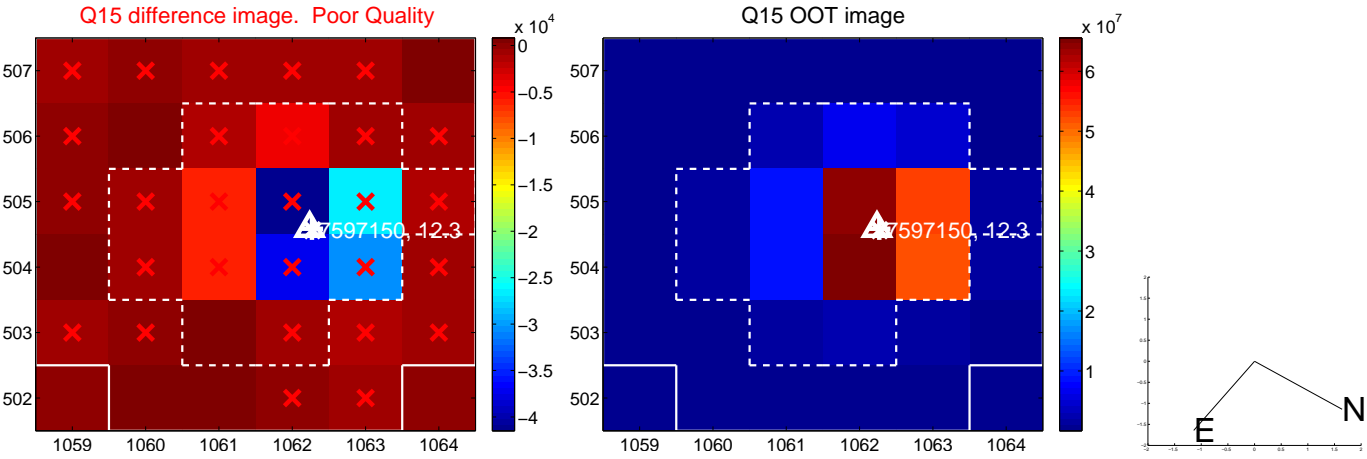
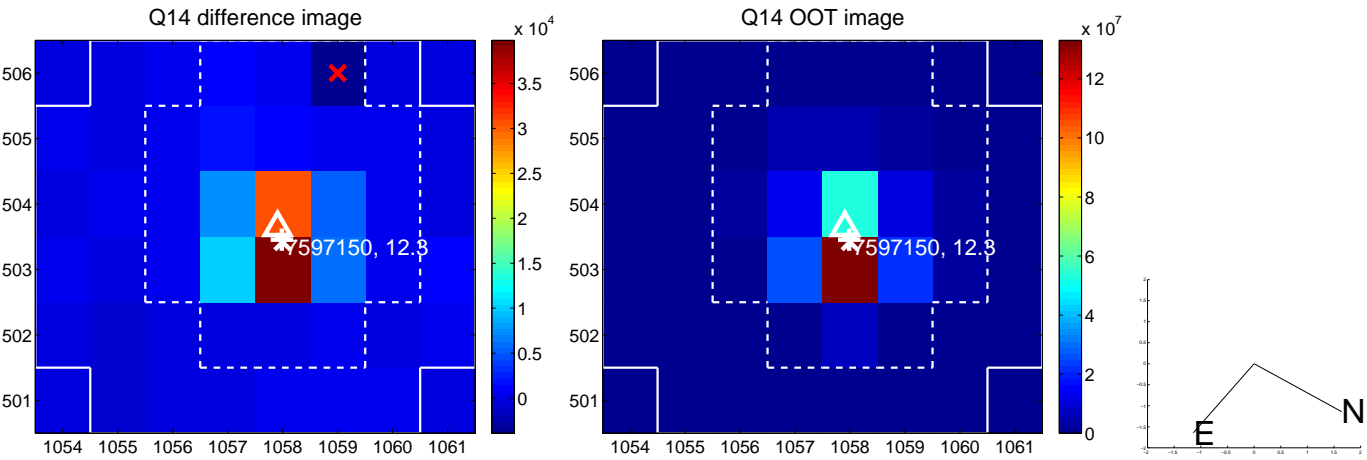
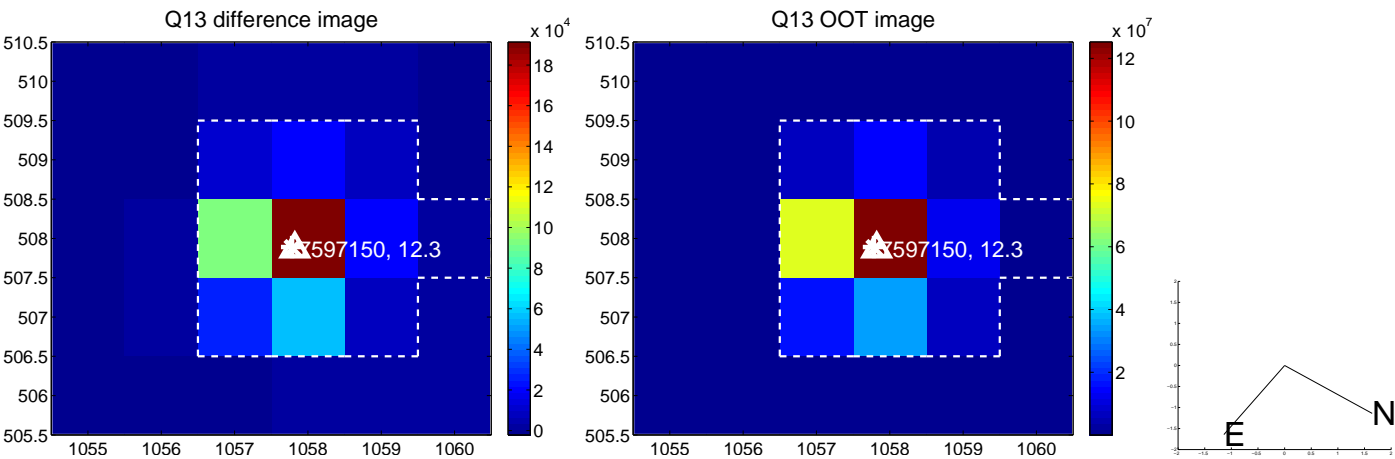
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



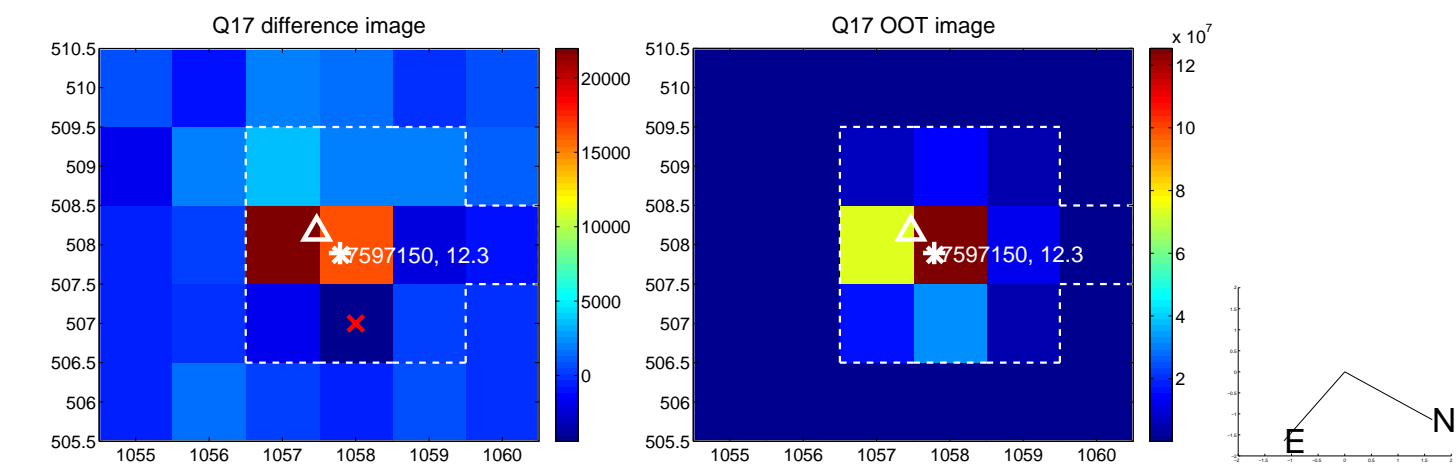
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



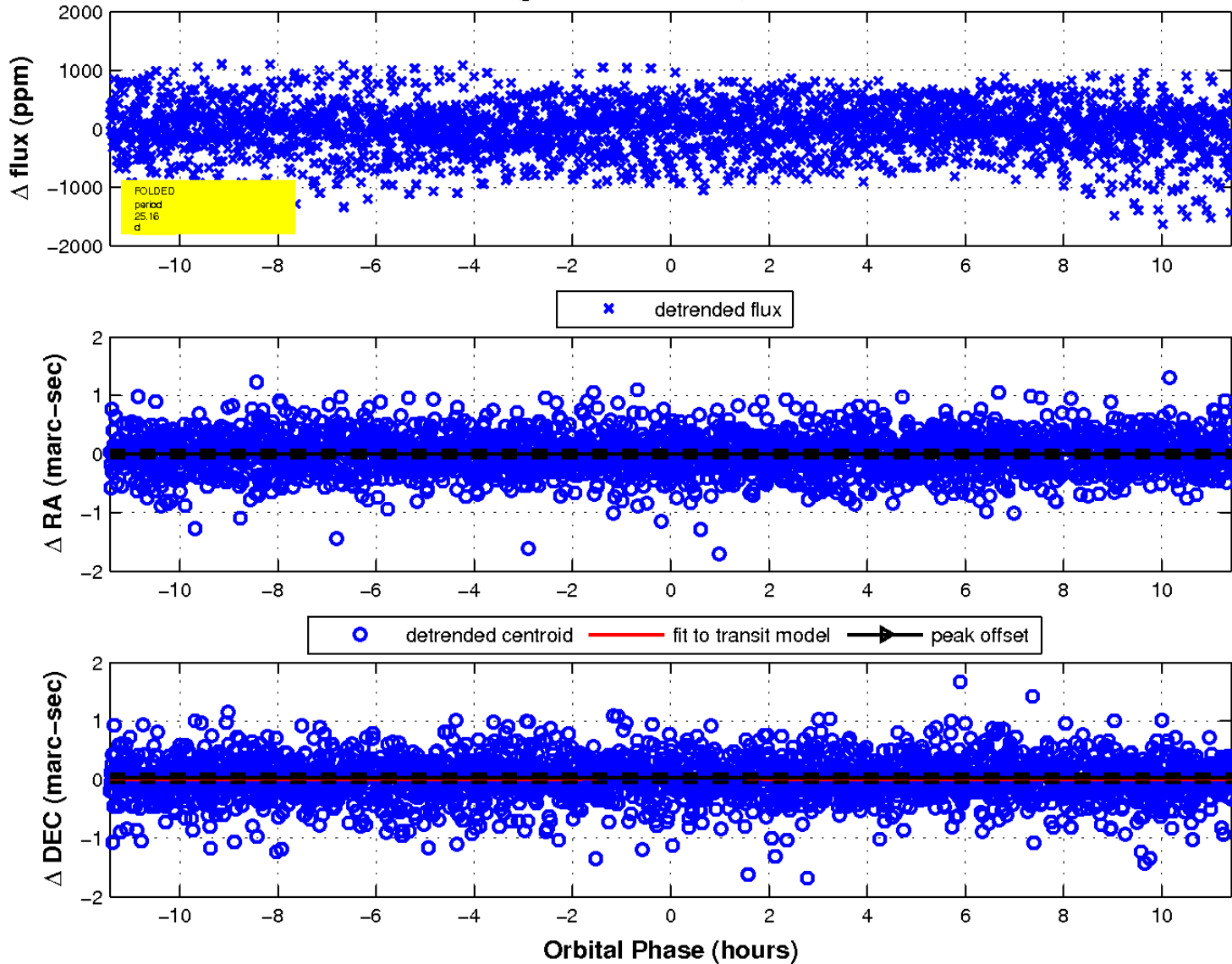
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

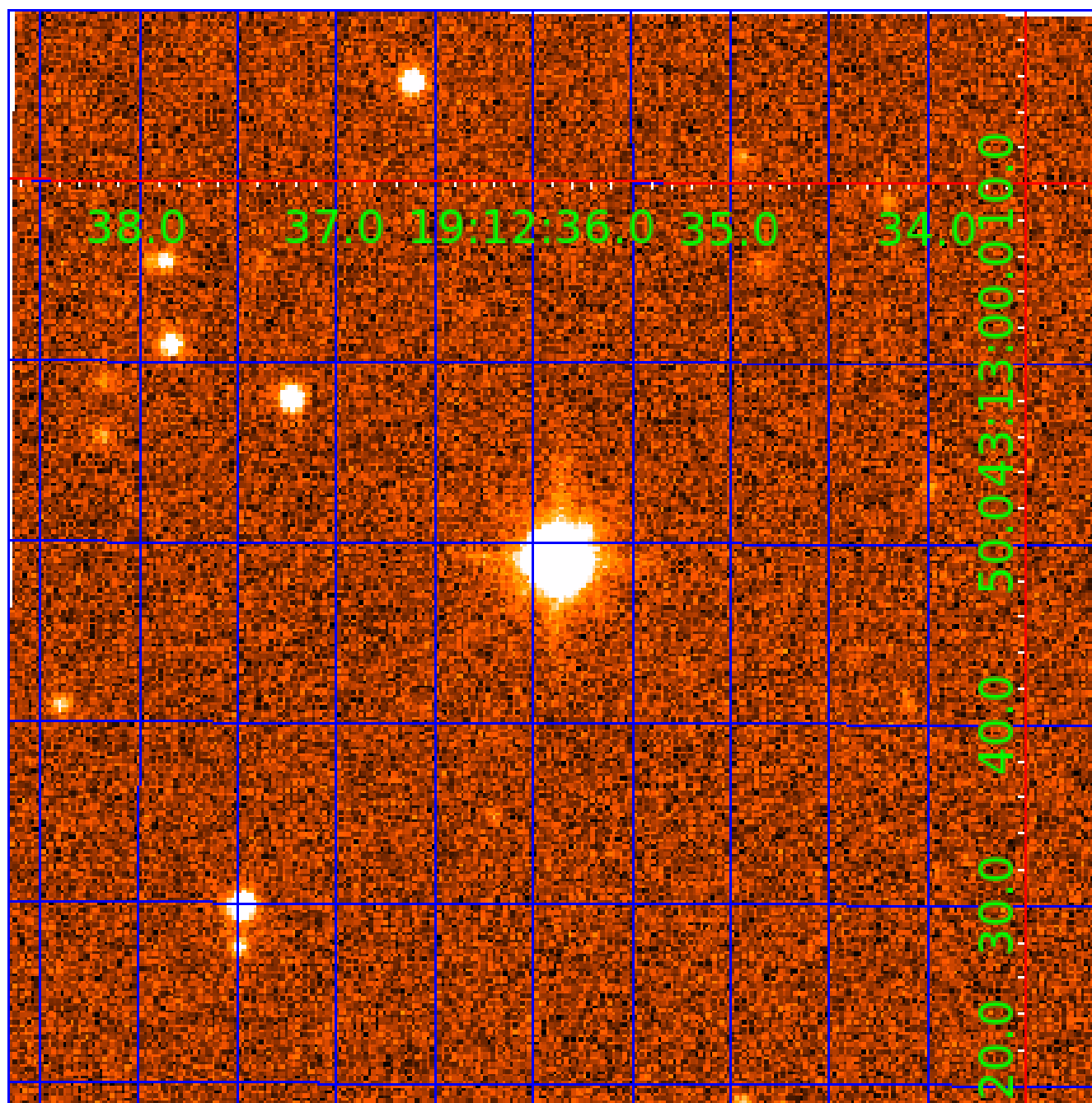


fluxWeightedCentroids, Planet 8 of 9



UKIRT Image

Declination



KIC 007597150

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})
007597150-01	OBS	No	1.185112	132.137440	0.2	8.394	7.9	0.1	1.68	7282	0.08	12713.76
007597150-02	OBS	No	47.328333	177.880517	497.2	4.895	10.5	9.0	1.68	7282	4.32	93.14
007597150-03	OBS	No	8.293566	136.451345	43.3	2.639	10.1	2.9	1.68	7282	1.29	949.80
007597150-04	OBS	No	8.291193	136.224441	719.1	2.304	9.5	9.0	1.68	7282	4.69	950.16
007597150-05	OBS	No	63.139376	159.633307	625.6	1.776	9.1	8.6	1.68	7282	4.62	63.42
007597150-06	OBS	No	31.101521	149.334486	381.5	6.475	9.6	6.2	1.68	7282	6.26	163.02
007597150-07	OBS	No	39.081868	137.421010	1020.6	14.434	9.6	9.1	1.68	7282	9.72	120.22
007597150-08	OBS	No	25.156825	145.994068	159.9	3.808	9.2	3.5	1.68	7282	2.35	216.31
007597150-09	OBS	No	35.930360	143.370372	221.5	1.500	7.3	-1.0	1.68	7282	2.55	134.48

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007597150-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV
007597150-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD
007597150-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
007597150-09	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—NO_FITS—CENT_NOFITS

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

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

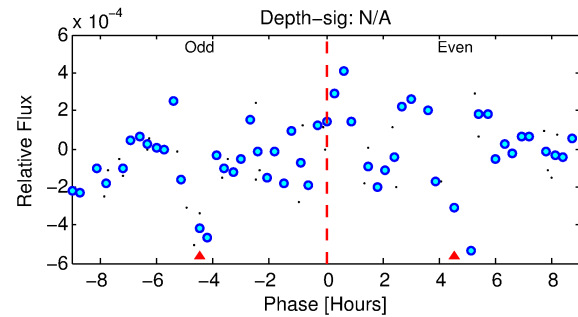
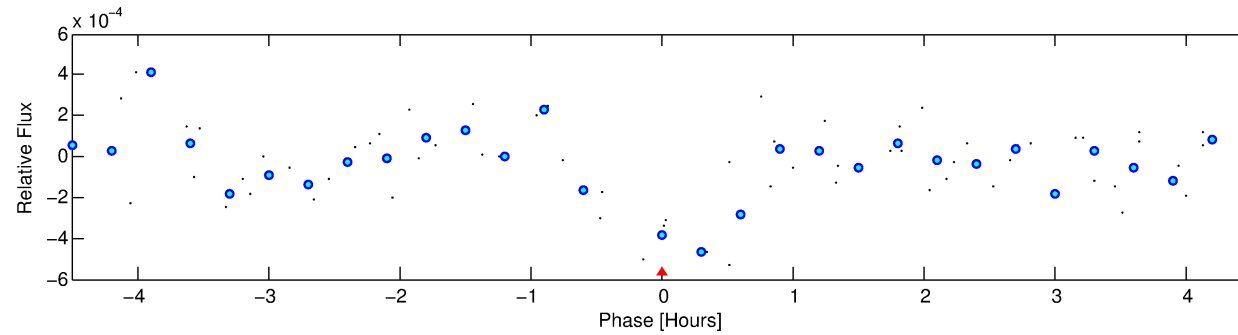
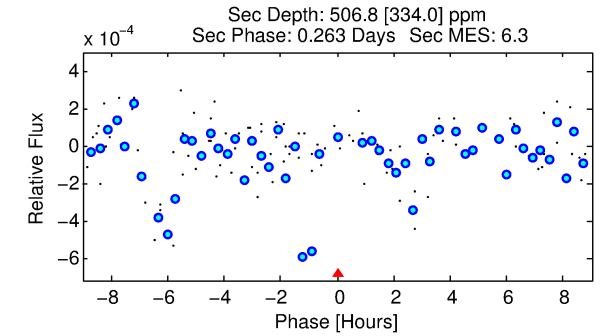
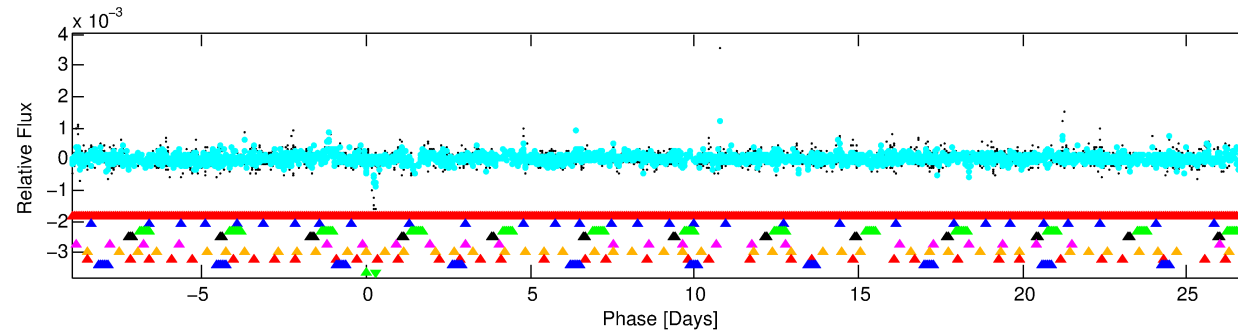
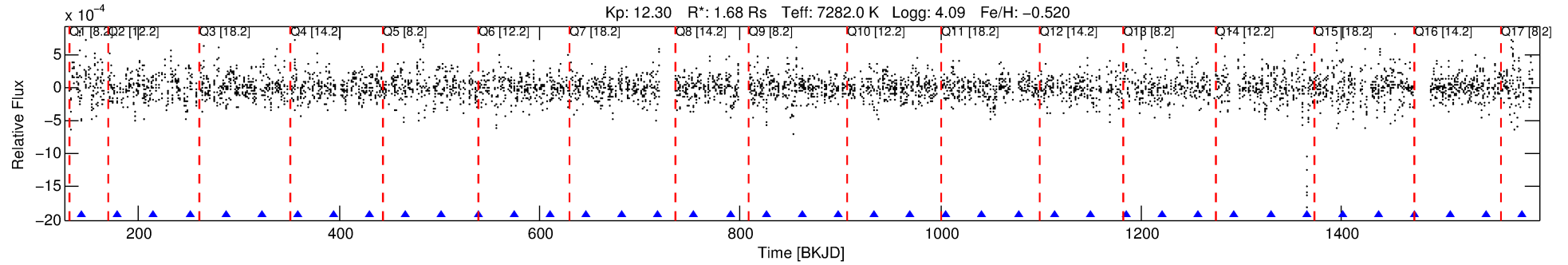
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007597150-09

No Significant Match Found

DV One-Page Summary

KIC: 7597150 Candidate: 9 of 9 Period: 35.930 d



TPS TCE Results:

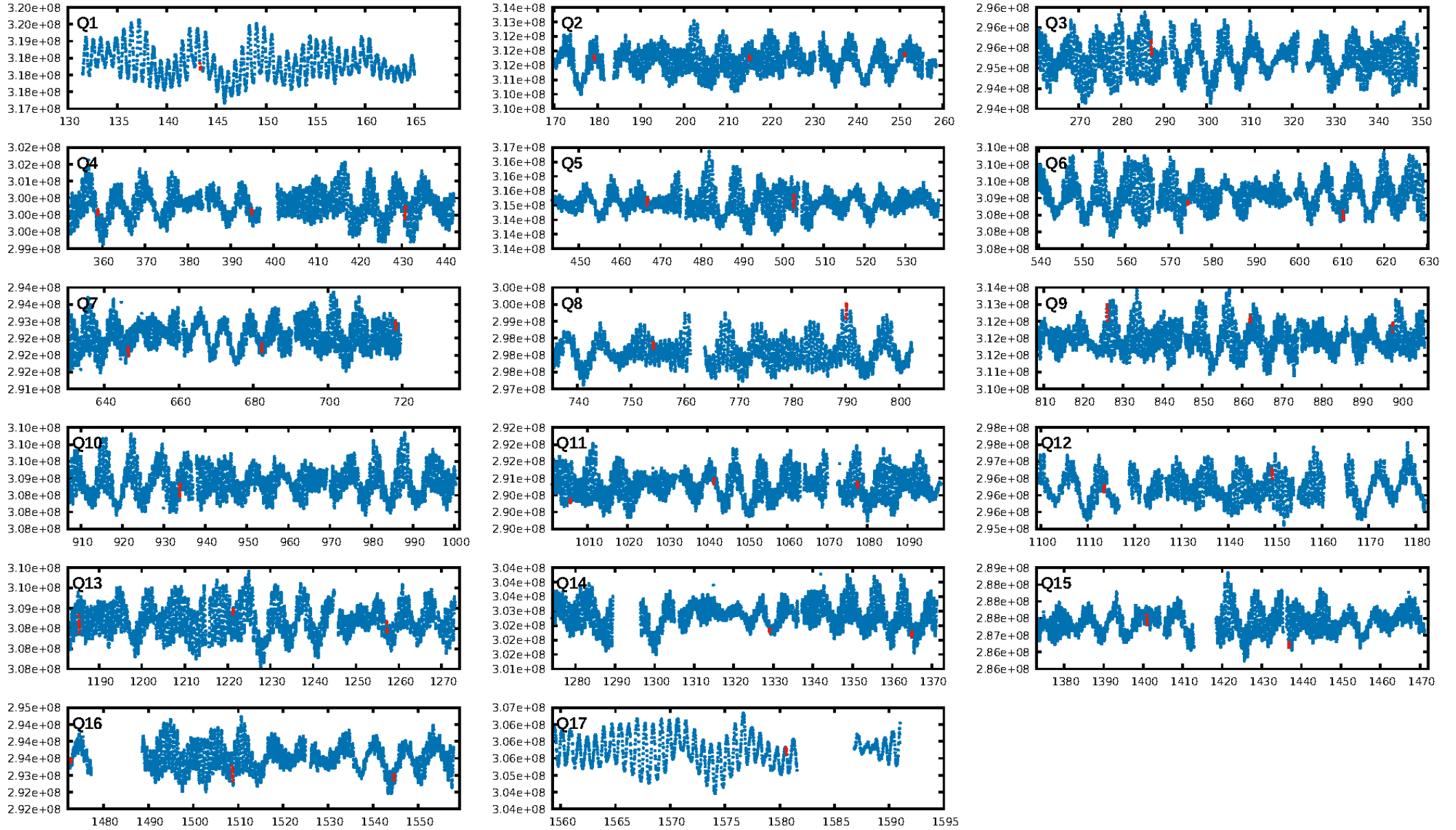
Period = 35.93036 d
Epoch = 143.3704 BKJD

DV fit results are unavailable

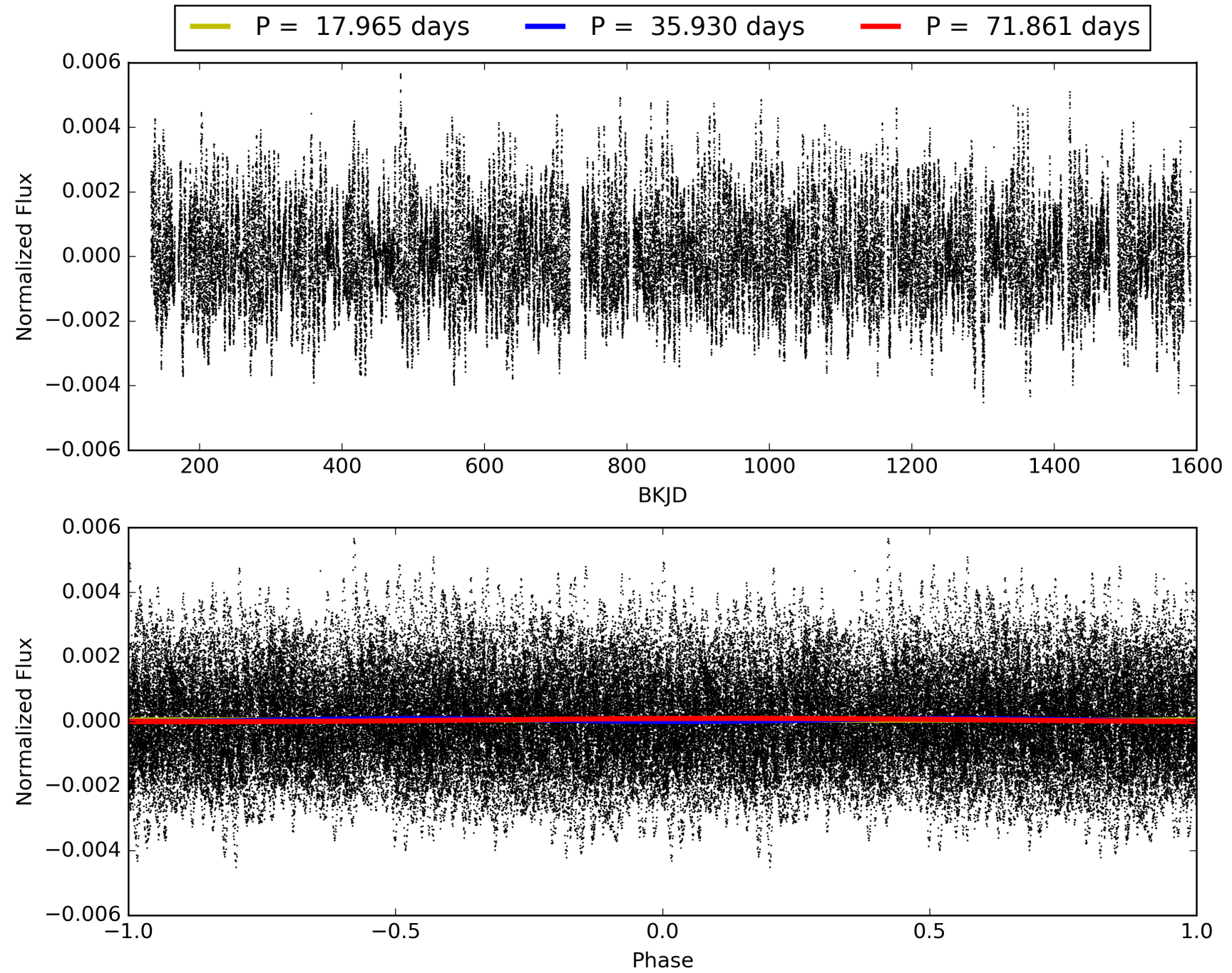
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [17.44σ]
LongPeriod-sig: 100.0% [5.21σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: N/A
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: N/A

TCE 007597150-09, PDC Light Curves

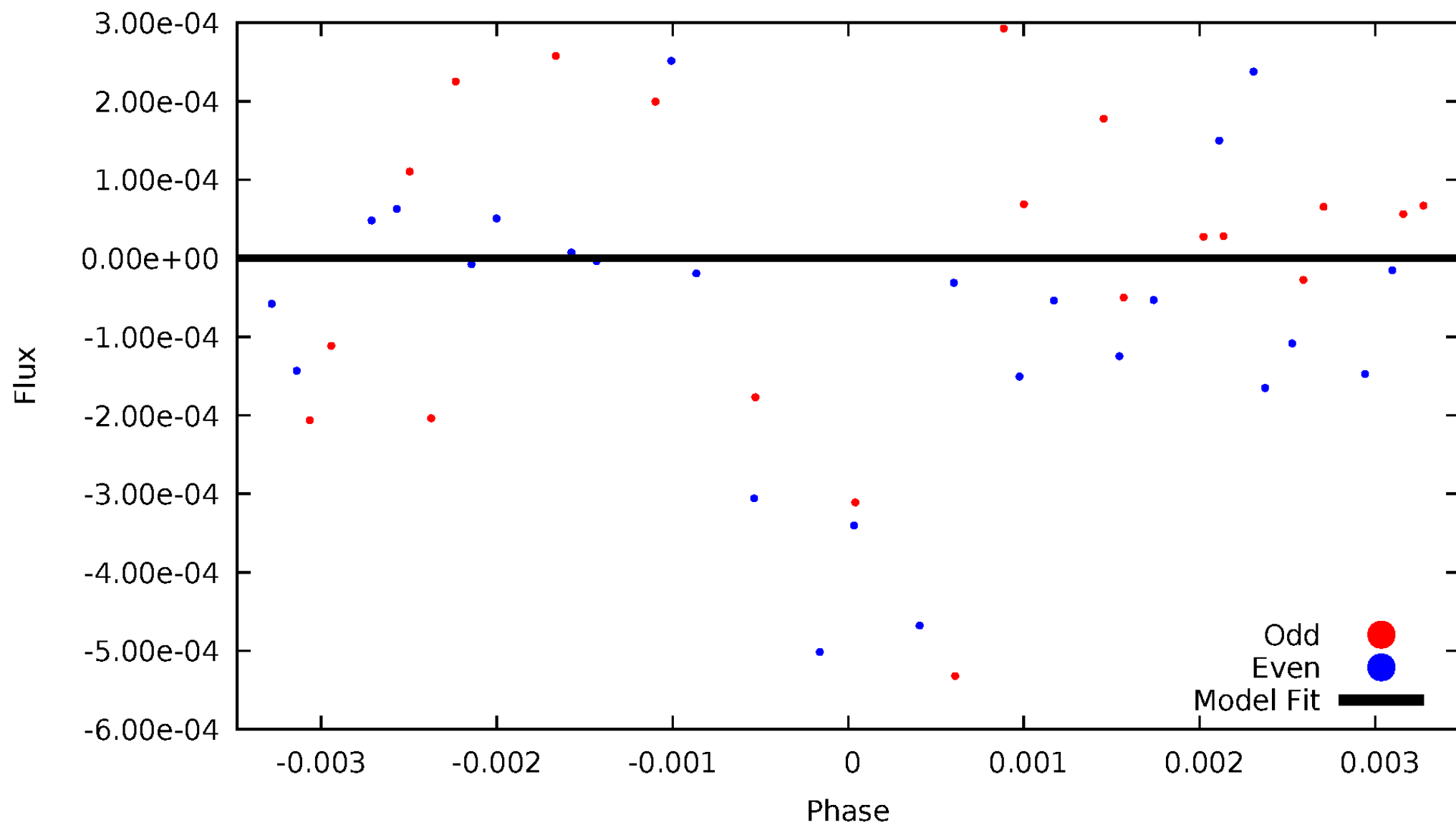


TCE 007597150-09



DV Odd/Even

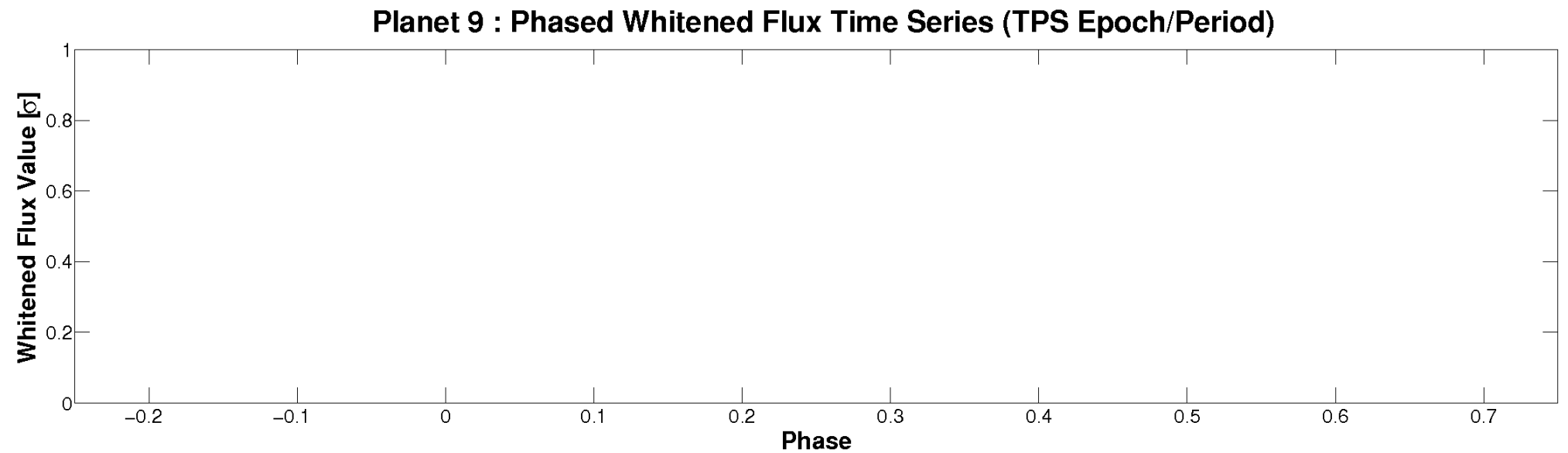
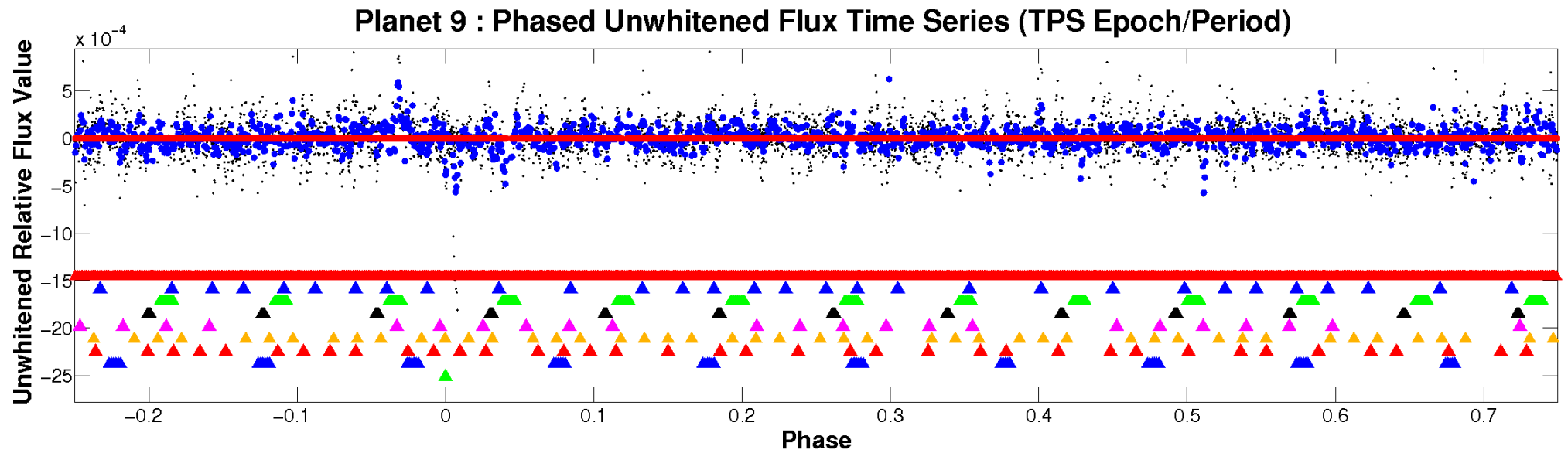
TCE 007597150-09



ALT Odd/Even

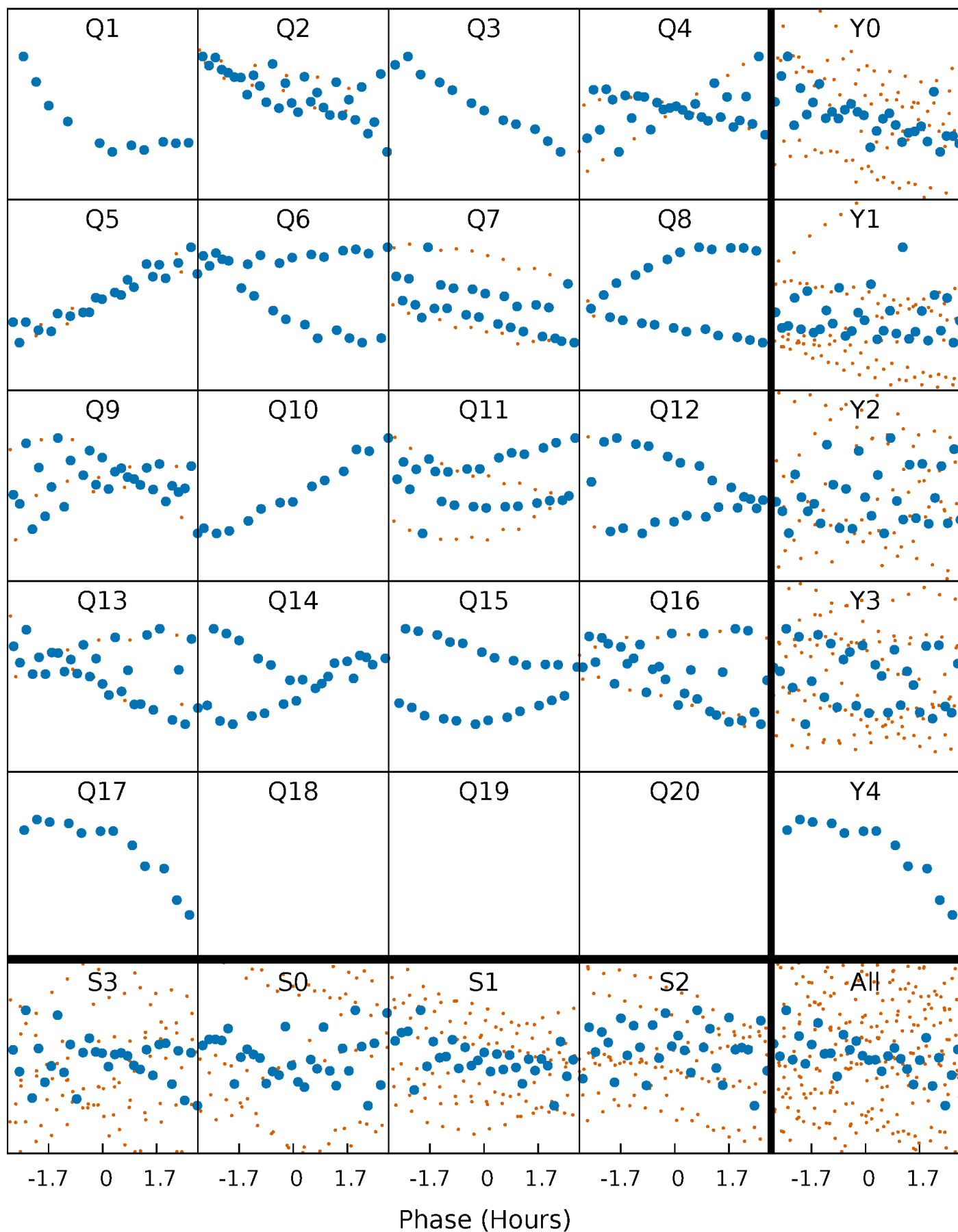
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve



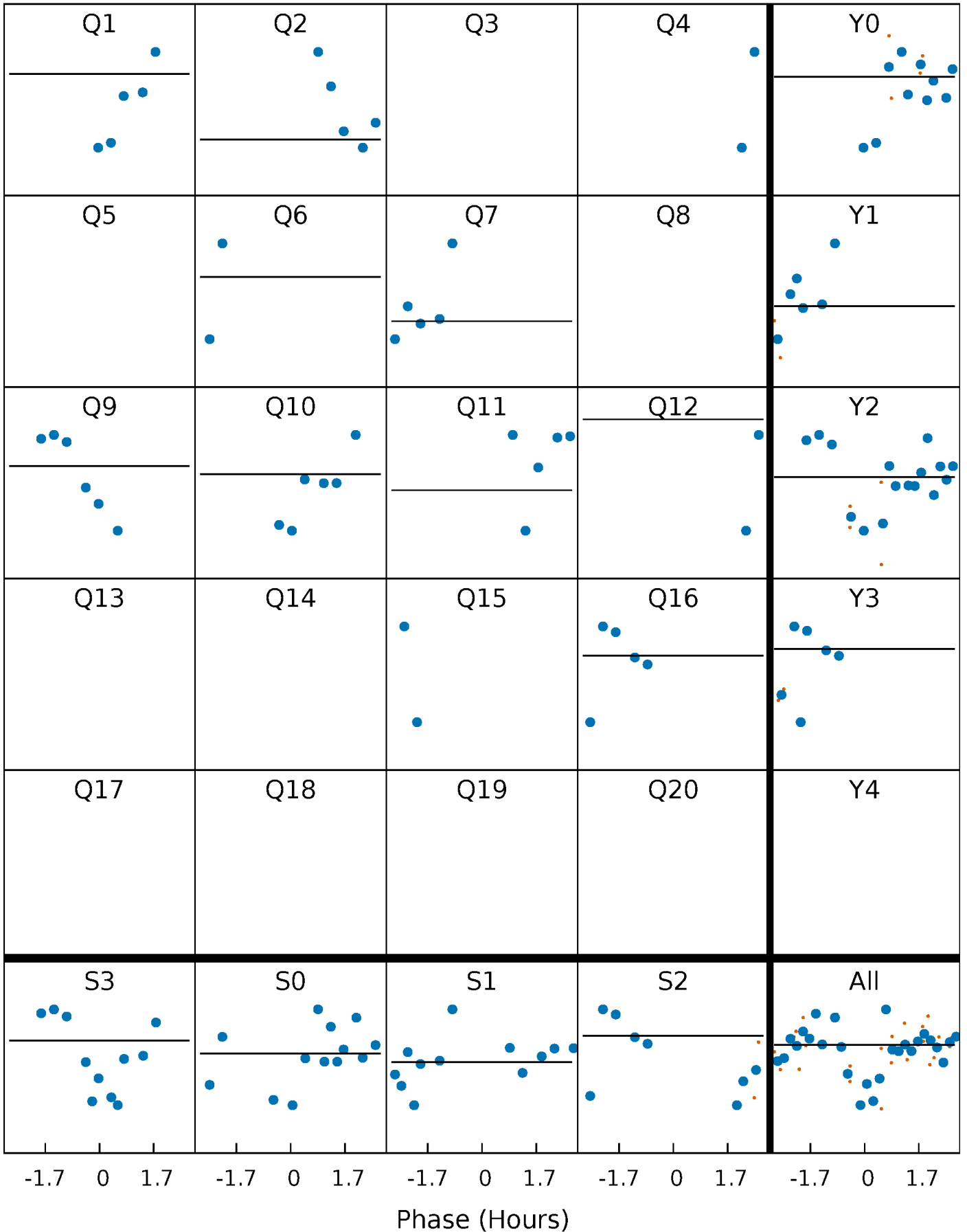
PDC Quarter-Phased Transit Curves

TCE 007597150-09 P= 35.930360 Days $T_0=143.370372$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 007597150-09 P= 35.930360 Days $T_0=143.370372$ (BKJD)

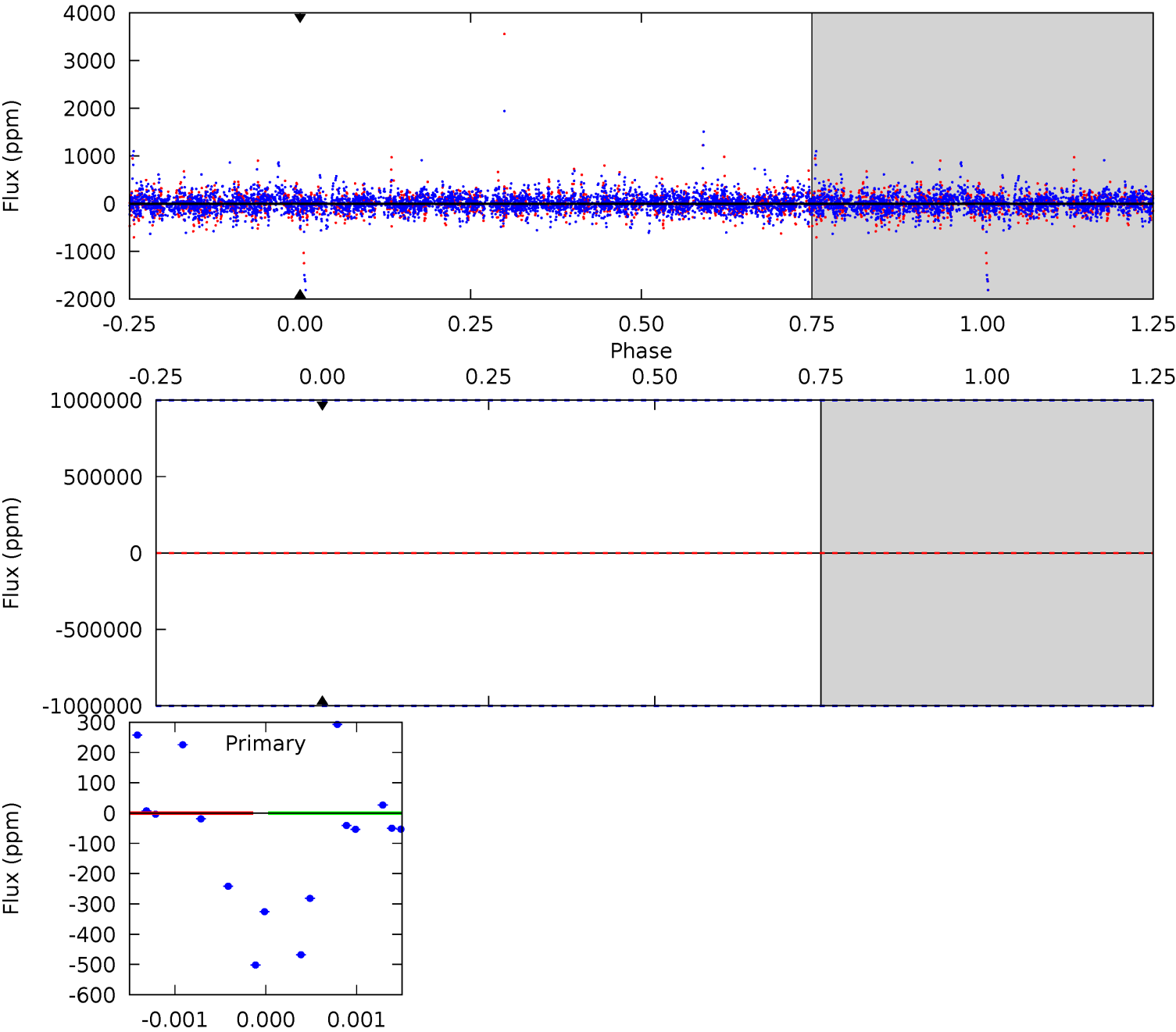


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

007597150-09, P = 35.930360 Days, E = 107.440012 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

This plot does not exist for this TCE.

Stellar Parameters For KIC 007597150

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7282^{+233}_{-285}	$4.087^{+0.234}_{-0.156}$	$-0.520^{+0.250}_{-0.300}$	$1.683^{+0.458}_{-0.458}$	$1.260^{+0.196}_{-0.161}$	$0.372^{+0.467}_{-0.169}$
	+3%/-4%	+6%/-4%	+48%/-58%	+27%/-27%	+16%/-13%	+125%/-45%
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 007597150-09 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$12.00^{+14.86}_{-8.60}$	1205^{+95}_{-95}	-4795^{+47090}_{-44923}	$-127.548^{+35107.800}_{-40182.907}$
Alt.	N/A	N/A	N/A	N/A	N/A

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)

A_{obs} = Observed Albedo (Assuming $T=0$)

If a secondary eclipse is present, the system is likely an EB if $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

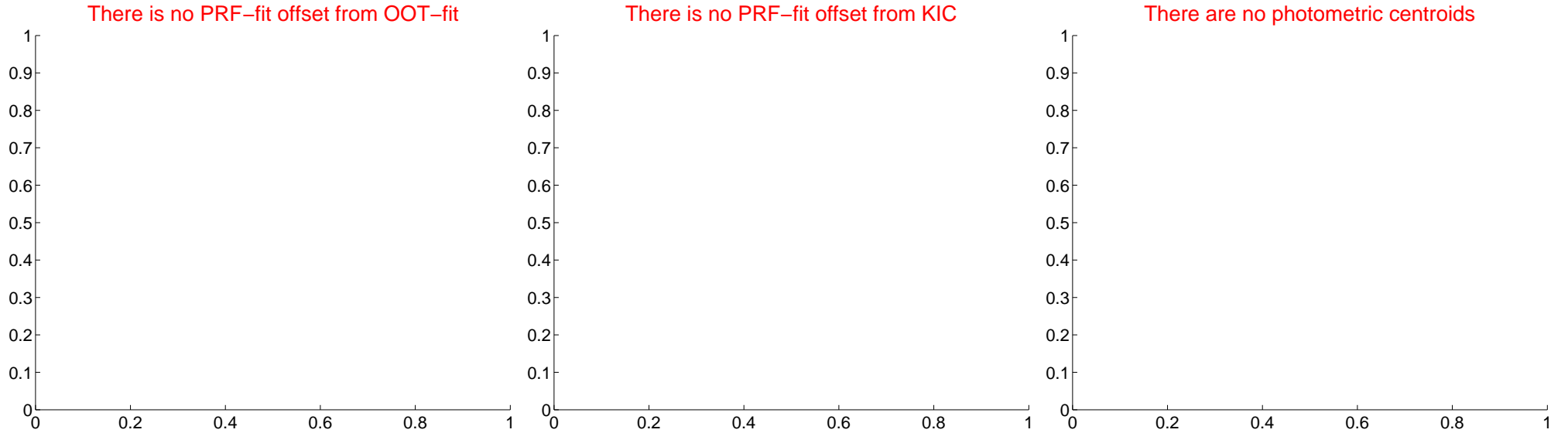
DV Centroid Data

Supplemental centroid analysis for 007597150-09. Kepler magnitude: 12.30. Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
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

