

# KIC 005794197

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
005794197-01	OBS	No	1.476719	132.528067	50.5	4.676	11.3	12.2	1.36	7196	1.12	6083.15
005794197-02	OBS	No	1.476736	132.856926	49.8	2.621	11.7	12.1	1.36	7196	1.10	6083.05
005794197-03	OBS	No	1.476793	132.304661	98.9	10.772	11.8	14.6	1.36	7196	1.56	6082.74
005794197-04	OBS	No	10.902672	133.407382	166.8	1.032	24.9	6.6	1.36	7196	1.96	423.14
005794197-06	OBS	No	33.252374	143.369530	500.6	3.000	18.7	-1.0	1.36	7196	3.08	95.67

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005794197-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005794197-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—SWEET_NTL—LPP_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
005794197-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_DV—SAME_NTL_PERIOD
005794197-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
005794197-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

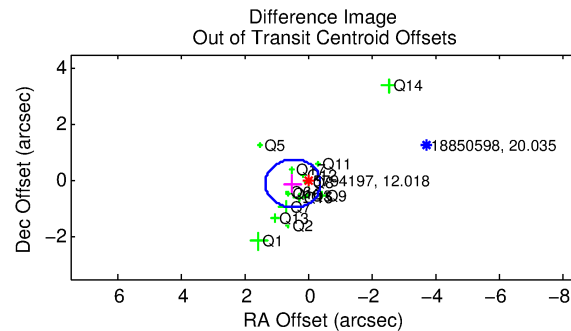
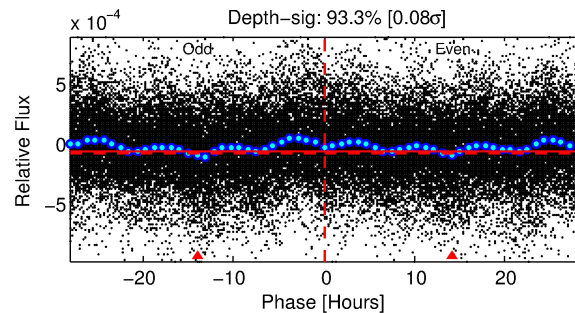
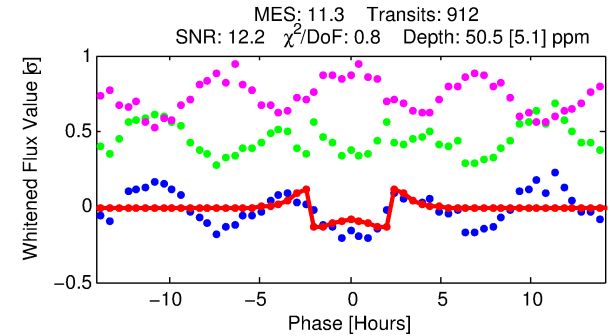
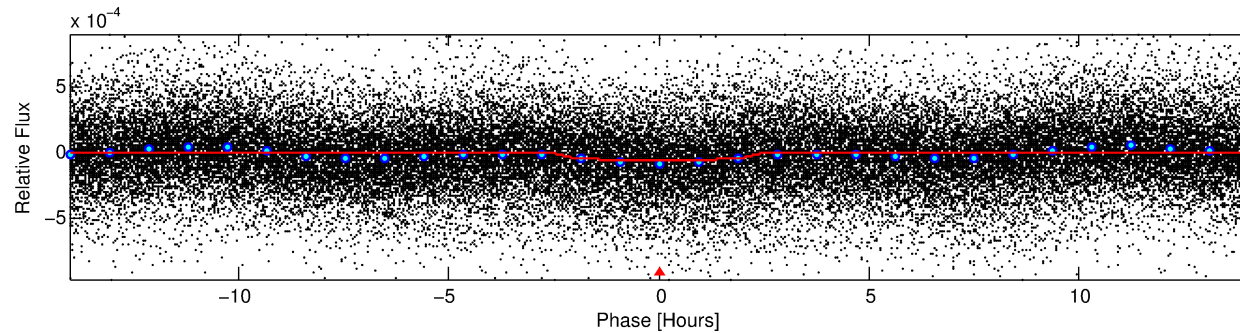
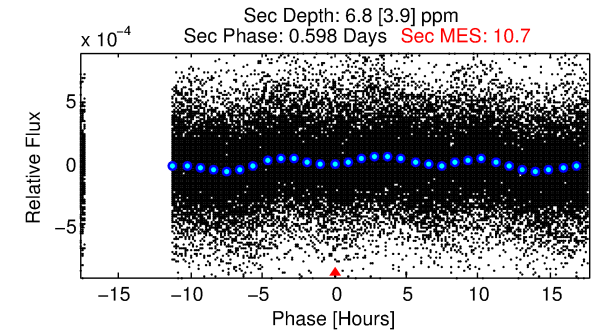
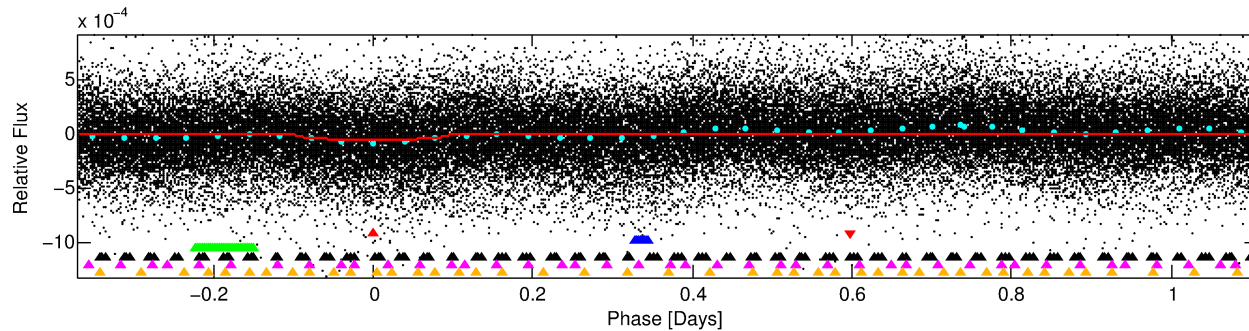
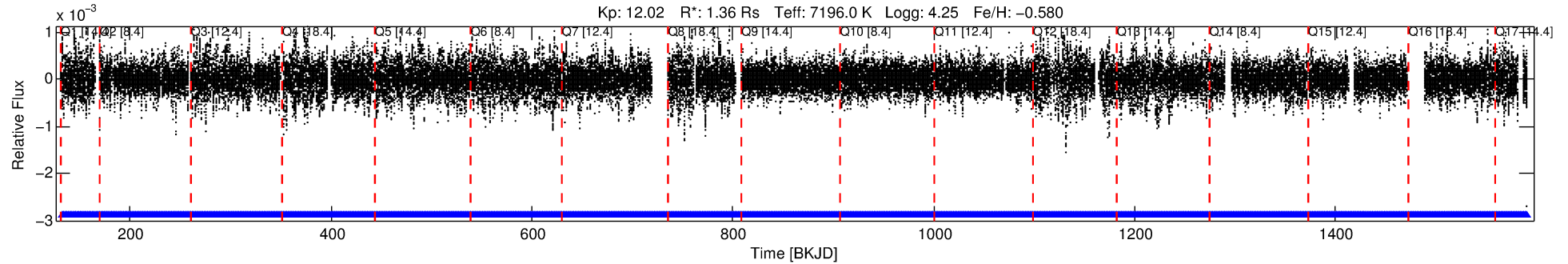
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

## Ephemeris Match Information For 005794197-01

No Significant Match Found

# DV One-Page Summary

KIC: 5794197 Candidate: 1 of 6 Period: 1.477 d



## DV Fit Results:

Period = 1.47672 [0.00001] d  
Epoch = 132.5281 [0.0015] BKJD  
Rp/R\* = 0.0076 [0.0009]  
a/R\* = 1.43 [0.49]  
b = 0.90 [0.14]  
Seff = 6083.14 [2167.06]  
Teff = 2252 [201] K  
Rp = 1.12 [0.34] Re  
a = 0.0270 [0.0062] AU  
Ag = 2.16 [1.53] [0.76σ]  
Teffp = 4220 [677] K [2.79σ]

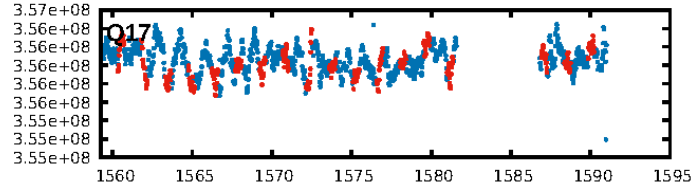
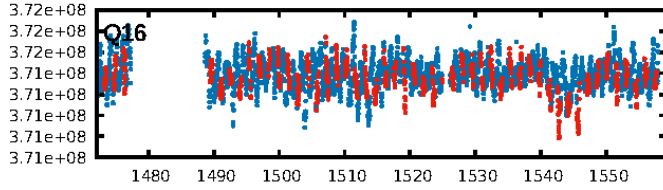
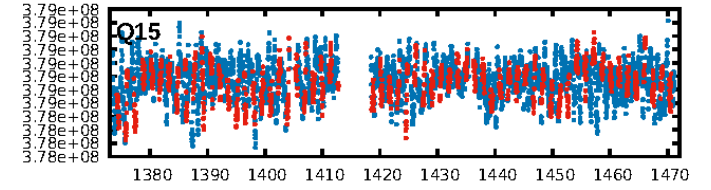
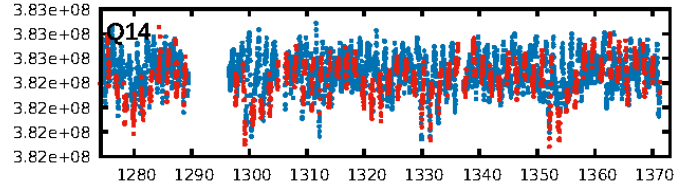
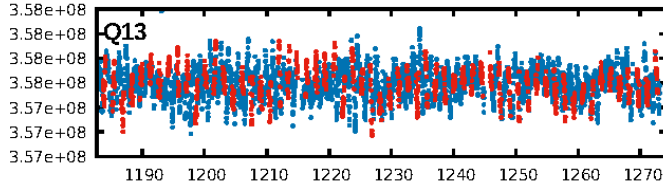
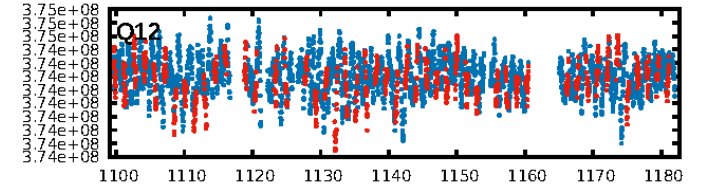
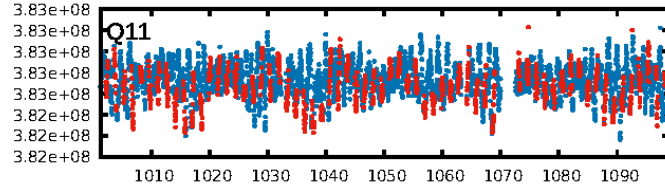
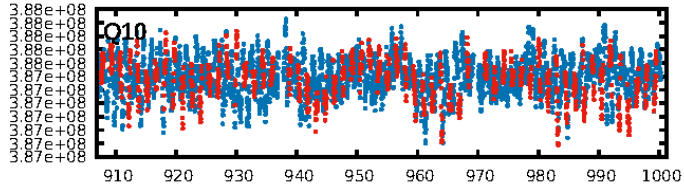
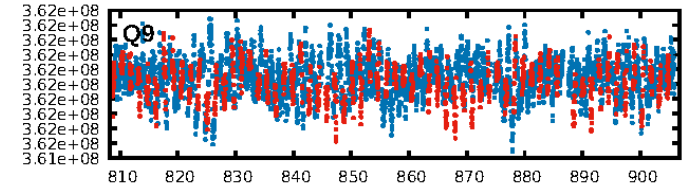
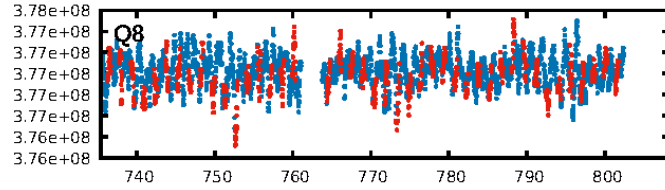
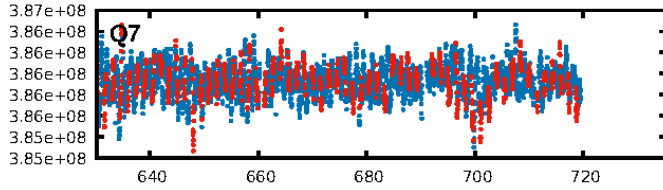
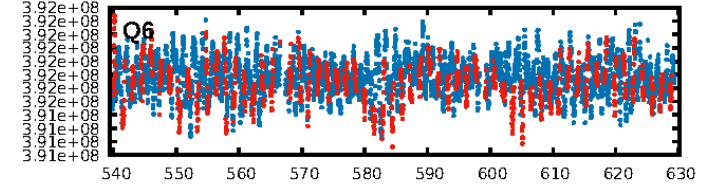
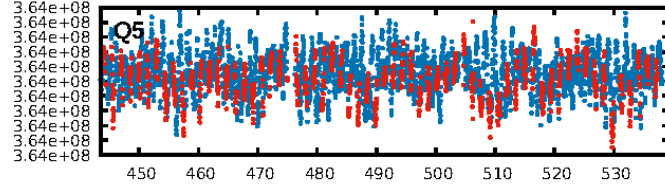
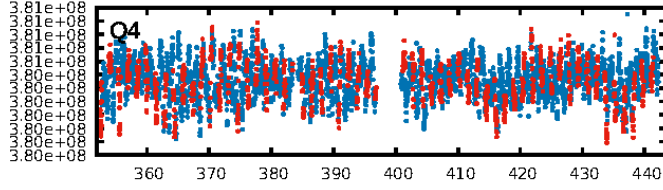
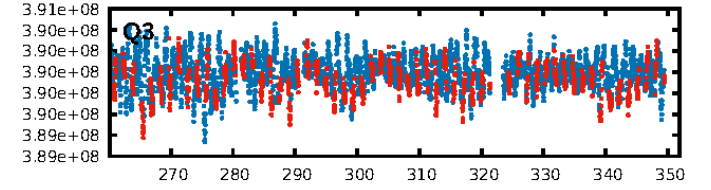
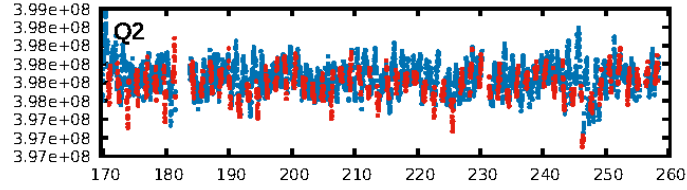
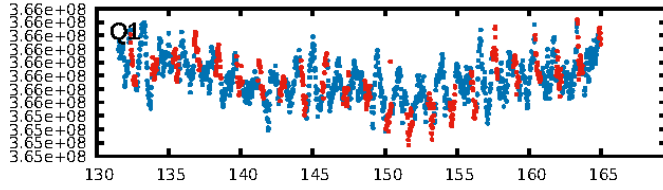
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
**LongPeriod-sig: 0.0% [0.00σ]**  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: N/A  
RollingBand-fgt: 1.00 [871/871]  
GhostDiagnostic-chr: 1.056  
Centroid-sig: N/A  
Centroid-so: N/A  
OotOffset-rm: 0.510 arcsec [1.77σ]  
KicOffset-rm: 0.528 arcsec [2.43σ]  
OotOffset-st: 3/4/3/5 [15]  
KicOffset-st: 3/4/3/5 [15]  
DiffImageQuality-fgm: 0.93 [14/15]  
DiffImageOverlap-fno: 0.00 [0/17]

Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 10:23:29 Z

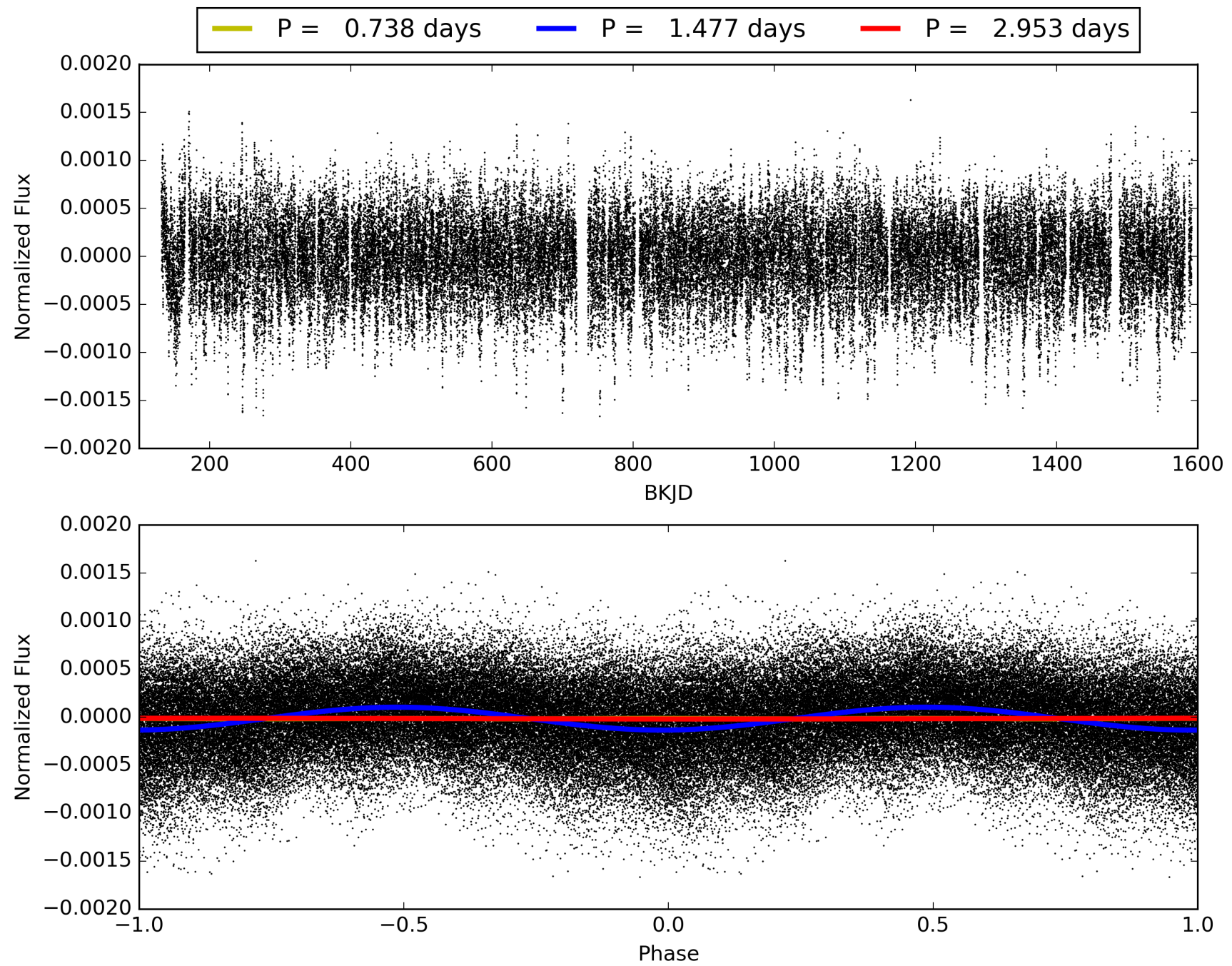
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

# TCE 005794197-01, PDC Light Curves





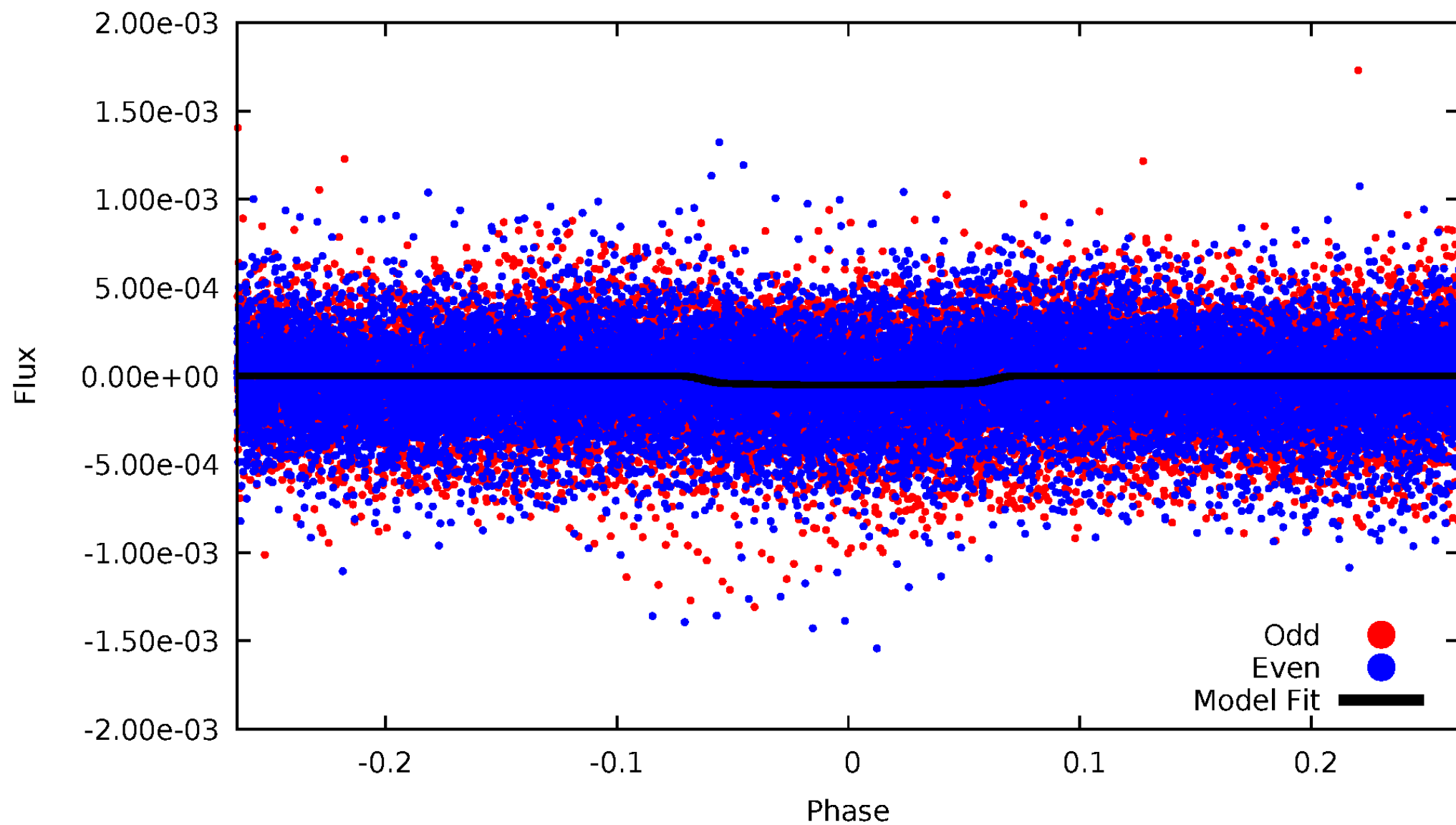
TCE 005794197-01





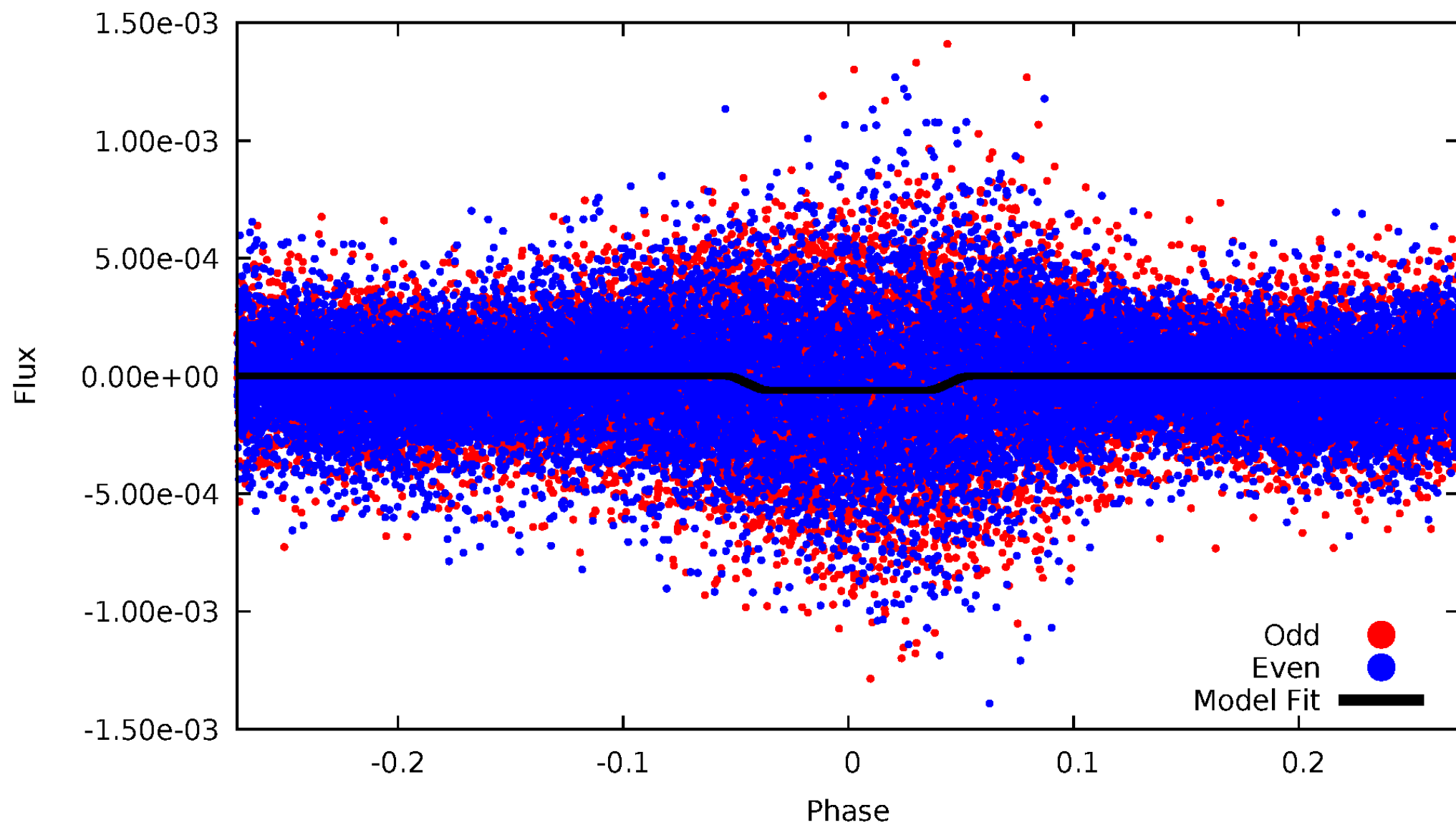
# DV Odd/Even

TCE 005794197-01

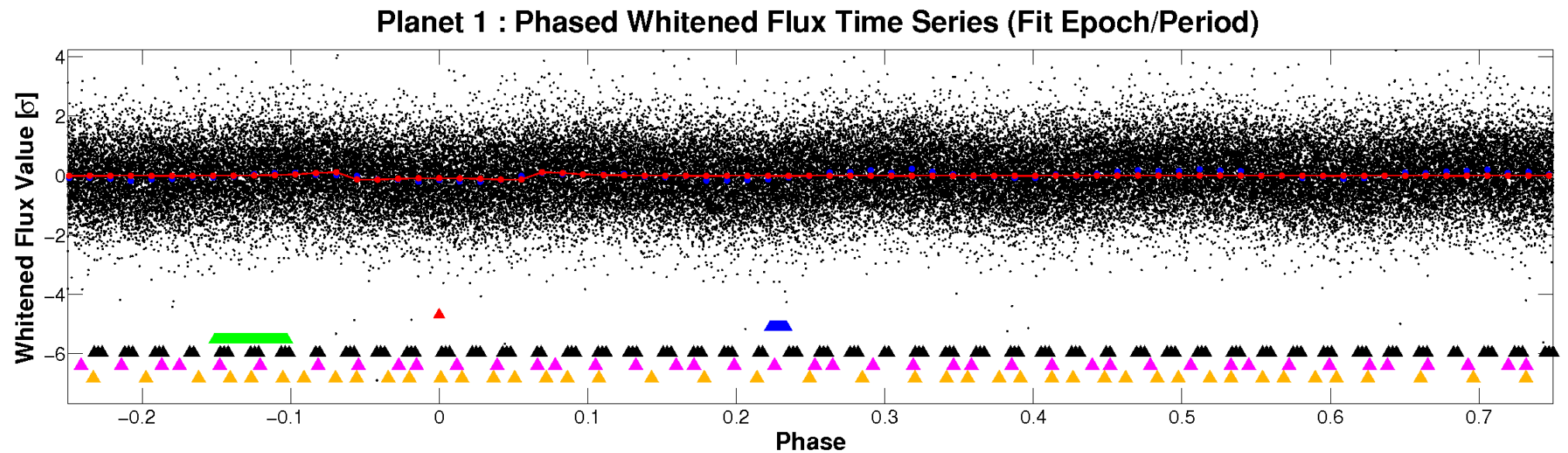
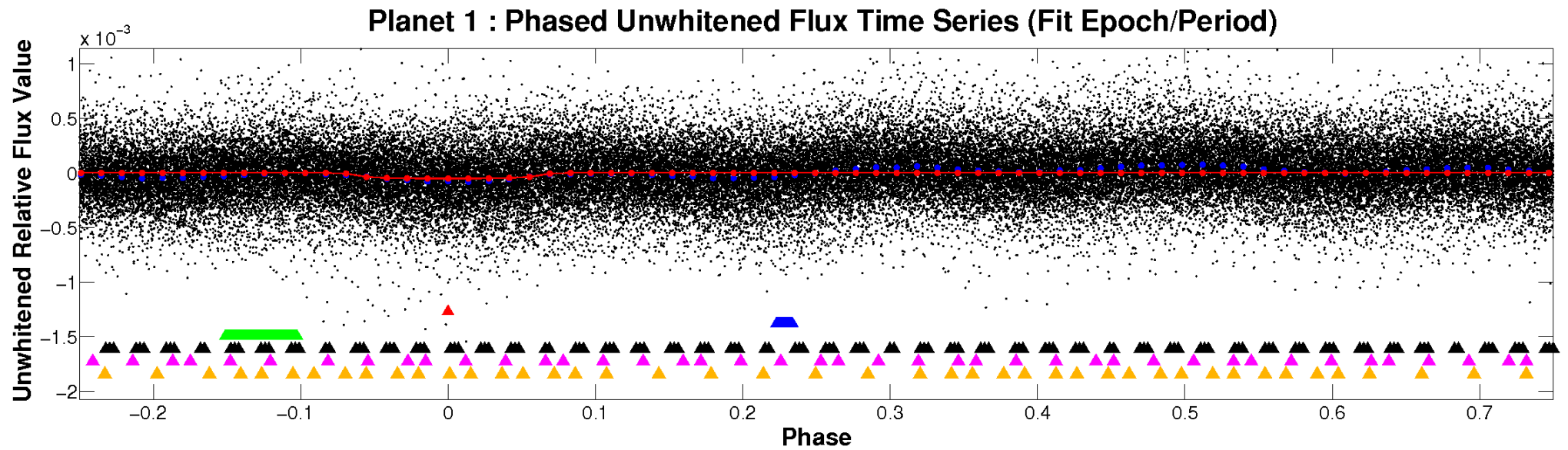


# ALT Odd/Even

TCE 005794197-01



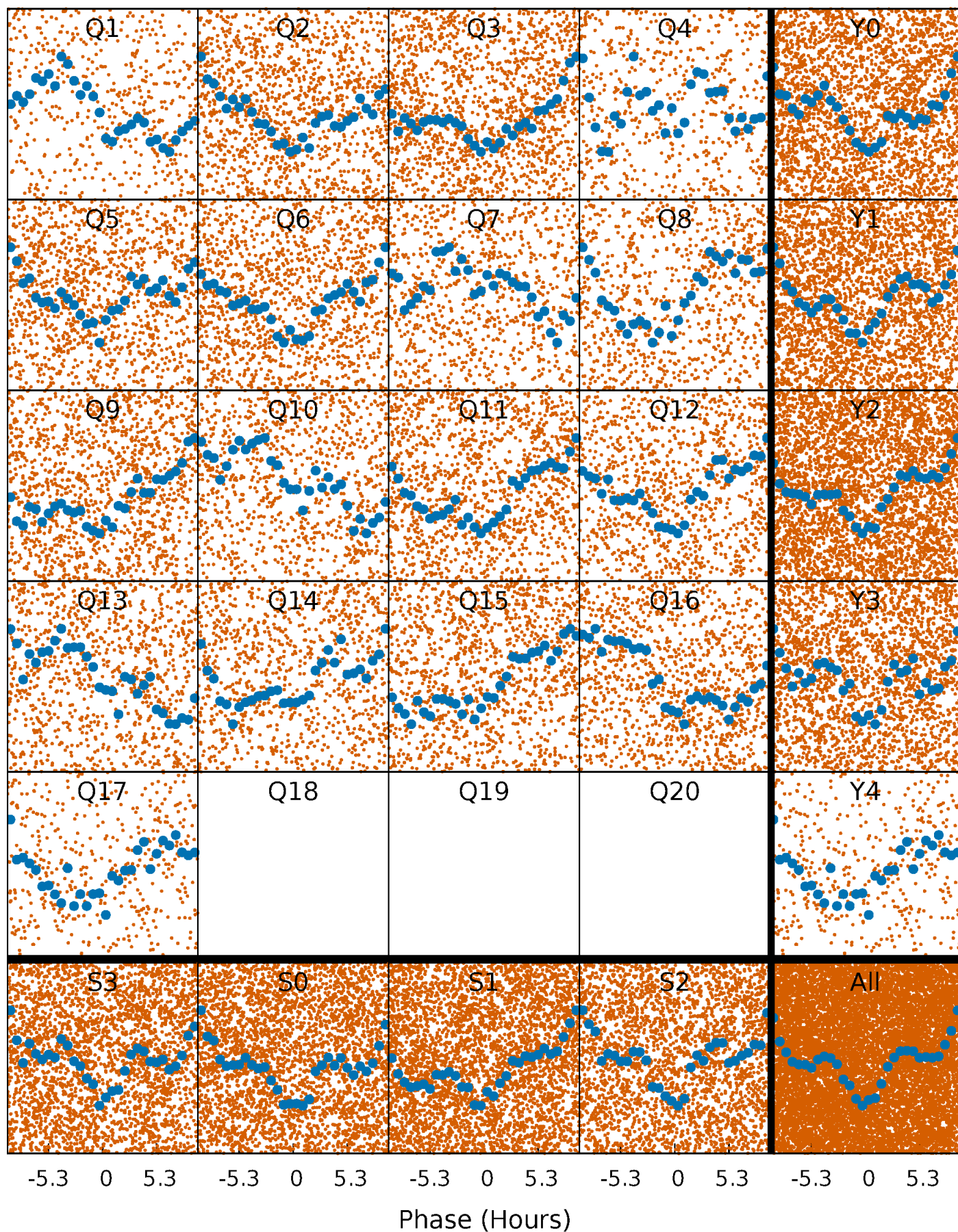
# Non-Whitened Vs. Whitened Light Curve





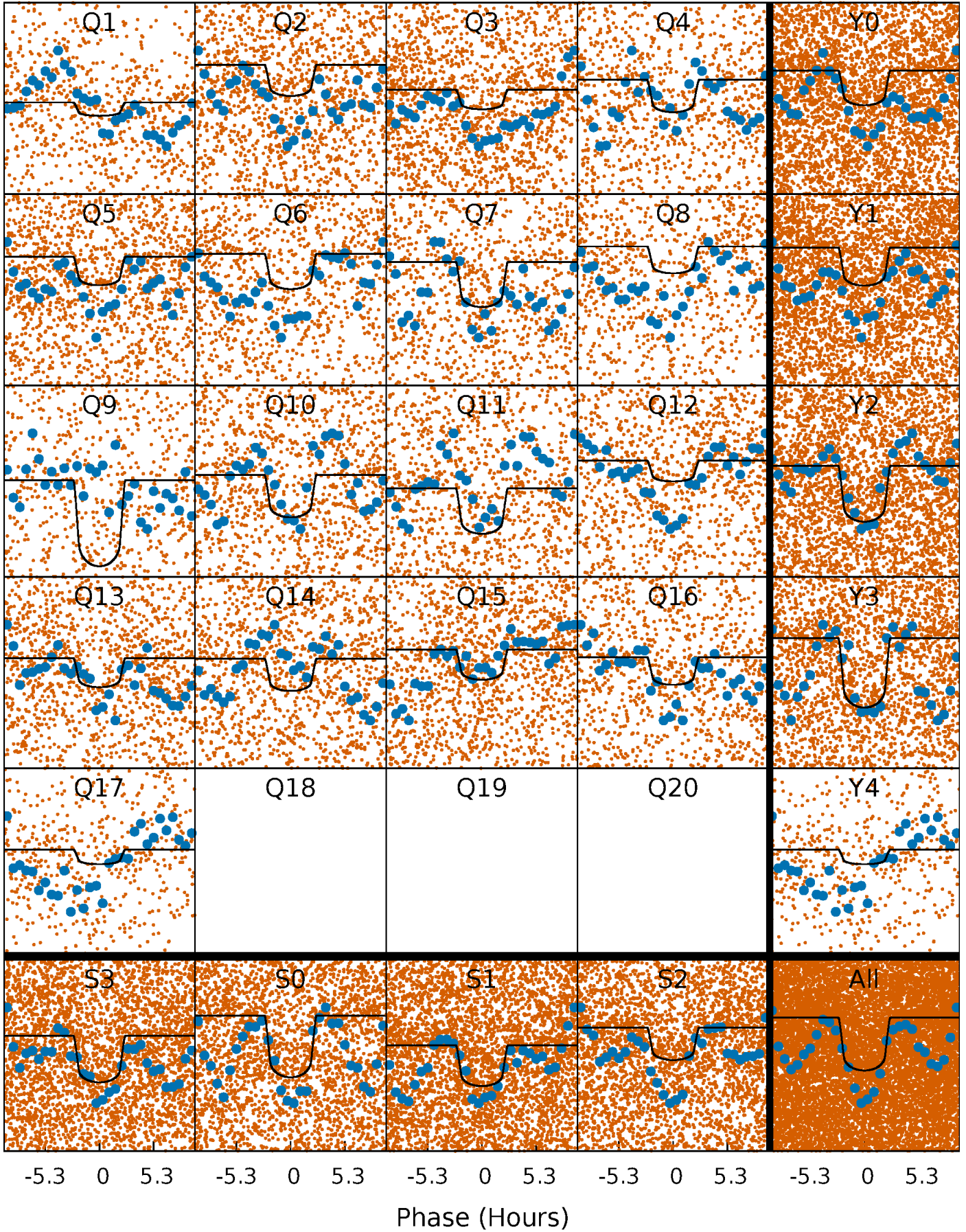
# PDC Quarter-Phased Transit Curves

TCE 005794197-01   P= 1.476719 Days    $T_0=132.528067$  (BKJD)



# DV Quarter-Phased Transit Curves

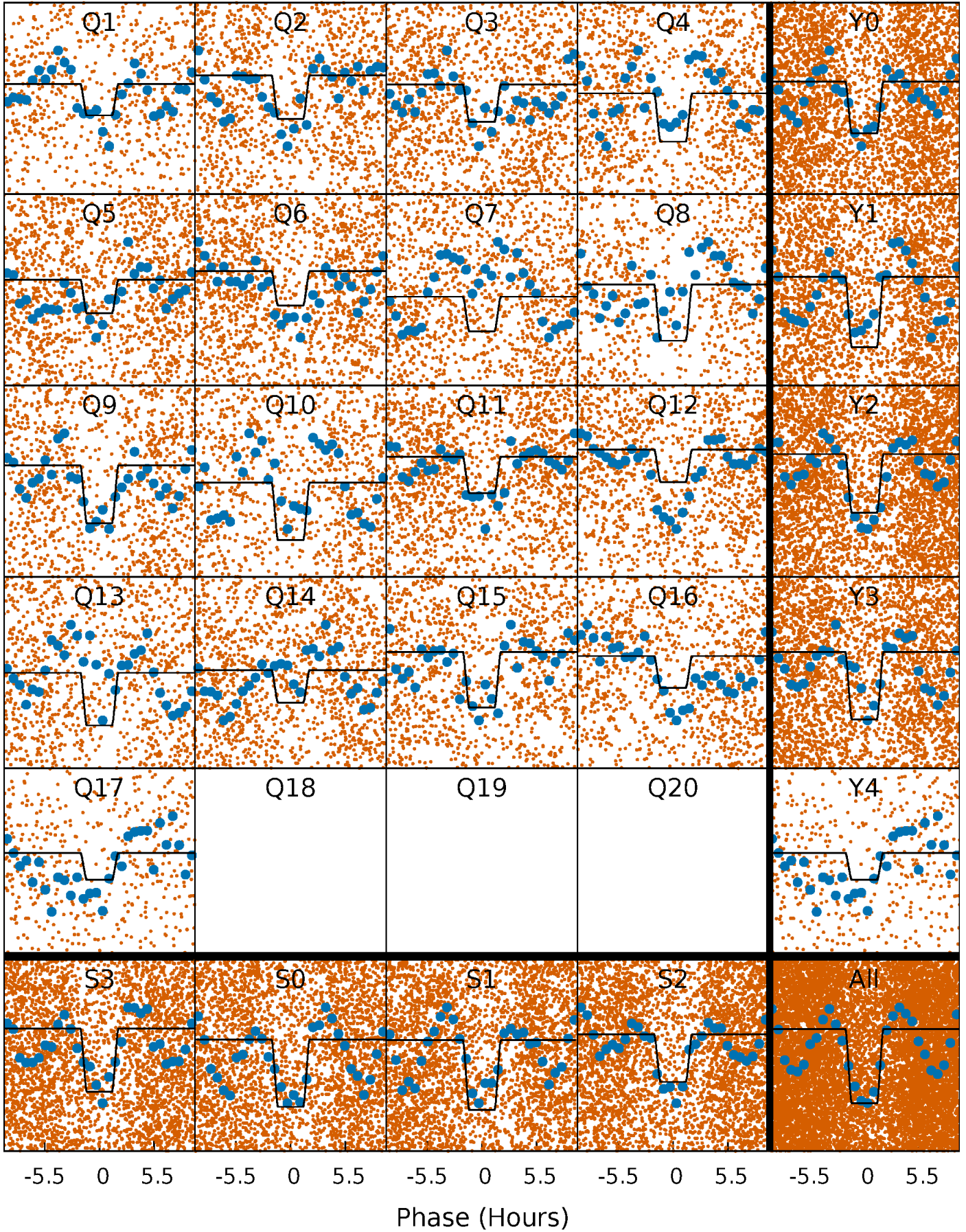
TCE 005794197-01 P= 1.476719 Days  $T_0=132.528067$  (BKJD)





# Alt. Detrend Quarter-Phased Transit Curves

TCE 005794197-01 P= 1.476711 Days  $T_0=132.528238$  (BKJD)

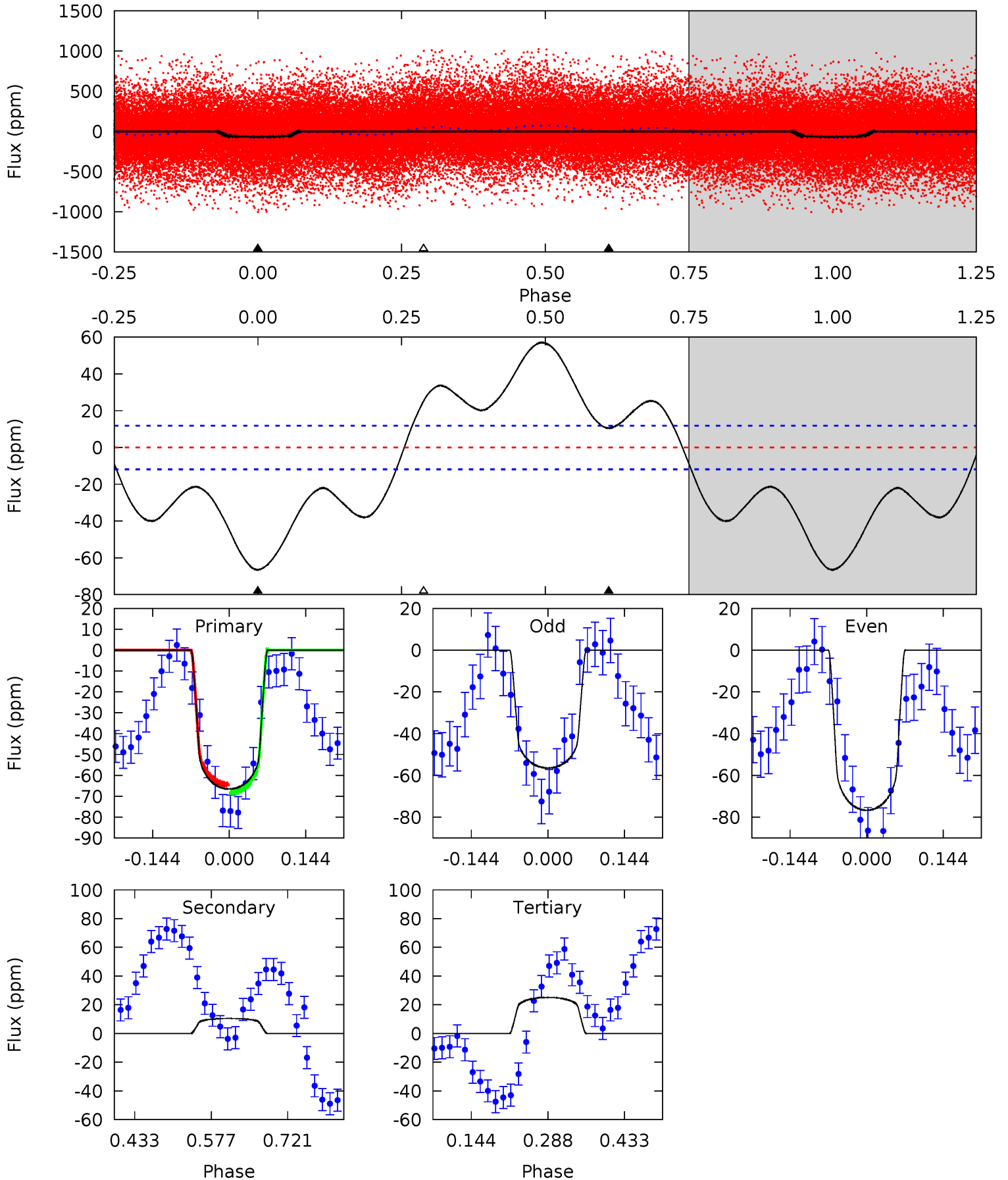




# DV Model-Shift Uniqueness Test

005794197-01, P = 1.476719 Days, E = 131.051348 Days

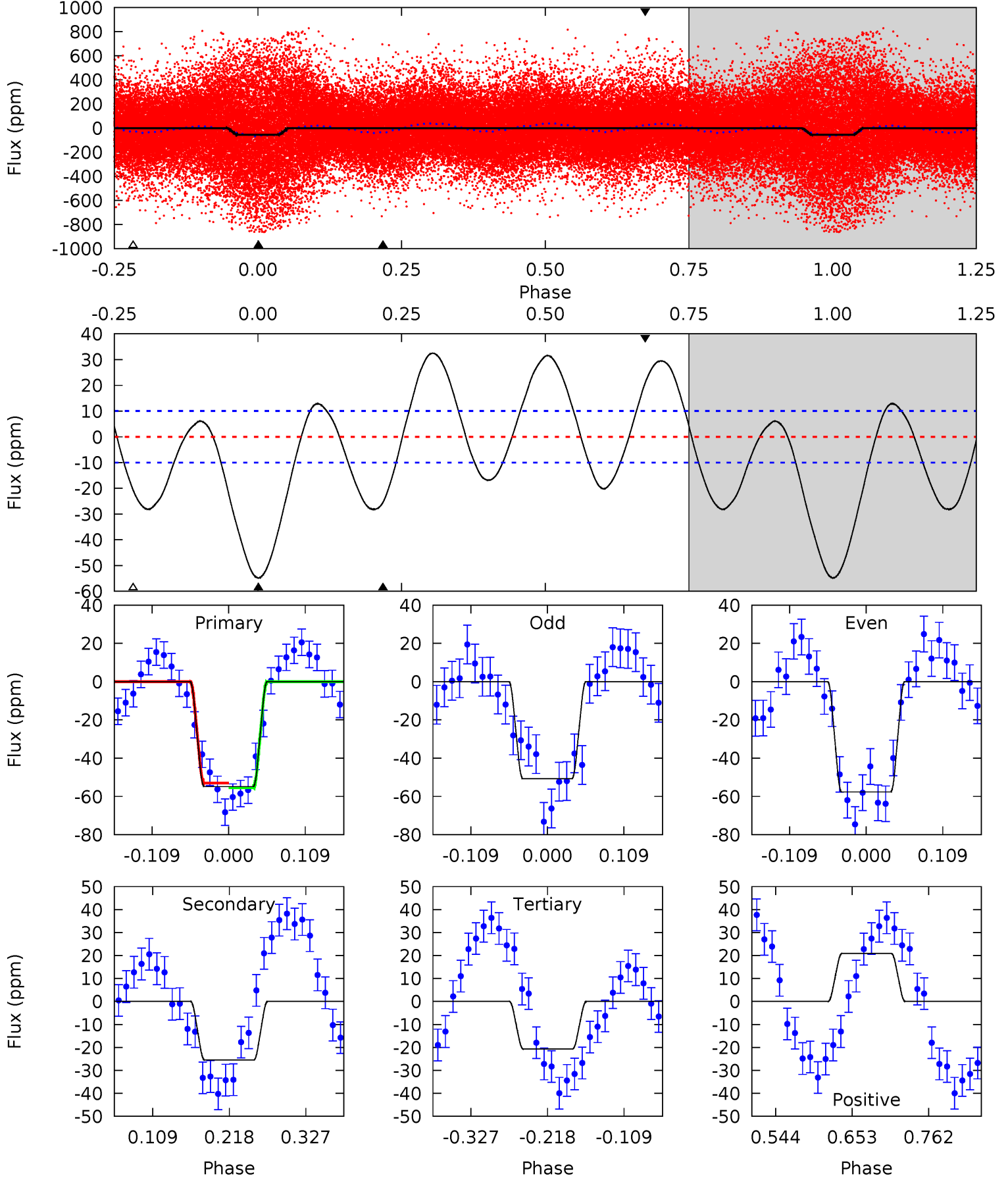
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.1	-3.96	-9.51	0	4.49	1.46	11.4	34.7	25.1	5.55	-3.96	3.84	1.07	0.46	0.75



# Alt Model-Shift Uniqueness Test

005794197-01, P = 1.476711 Days, E = 131.051527 Days

Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.9	11.6	9.39	9.49	4.55	1.60	8.19	15.5	15.4	2.17	2.07	1.58	0.97	0.37	0.56



### Stellar Parameters For KIC 005794197

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$7196^{+193}_{-236}$	$4.252^{+0.120}_{-0.180}$	$-0.580^{+0.250}_{-0.300}$	$1.358^{+0.372}_{-0.248}$	$1.203^{+0.173}_{-0.142}$	$0.676^{+0.428}_{-0.322}$
	+3%/-3%	+3%/-4%	+43%/-52%	+27%/-18%	+14%/-12%	+63%/-48%
Source	PHO1	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 005794197-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	$A_{\text{obs}}$
DV	$10 \pm 3$	$1.14^{+0.21}_{-0.17}$	$3163^{+219}_{-186}$	$-4877^{+341}_{-362}$	$-3.198^{+1.229}_{-1.679}$
Alt.	$-25 \pm 2$	$1.17^{+0.23}_{-0.18}$	$3157^{+227}_{-171}$	$5699^{+417}_{-381}$	$7.492^{+3.086}_{-2.192}$

$T_{\text{max}}$  = Theoretical Maximum Planetary Temperature

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

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



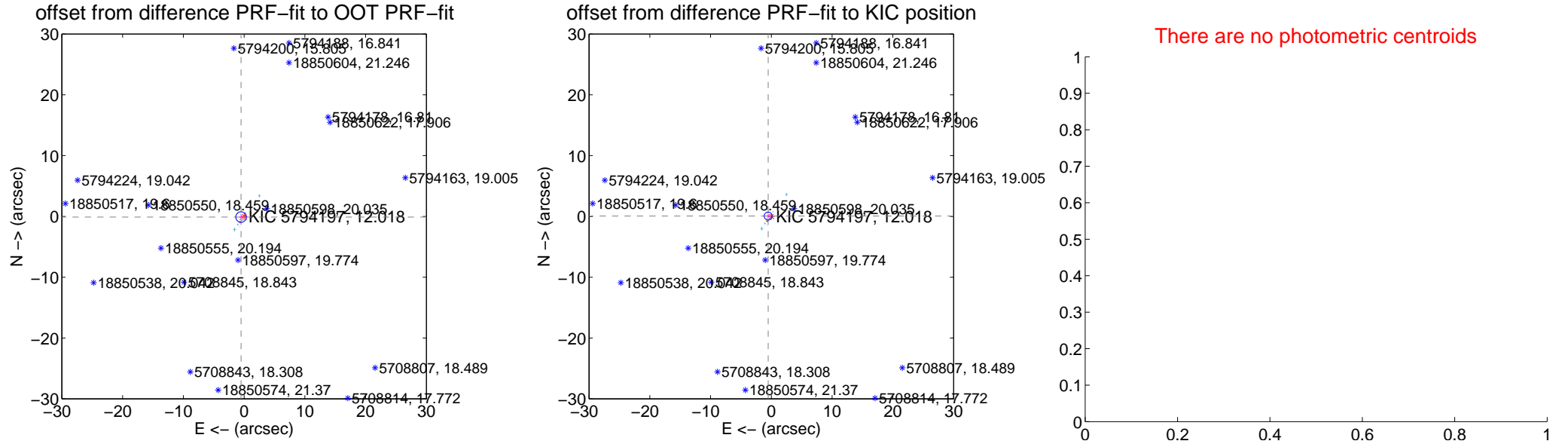
## DV Centroid Data

Supplemental centroid analysis for 005794197-01. Kepler magnitude: 12.02. Transit SNR 12.24

There are 14 quarters with good PRF difference image offsets

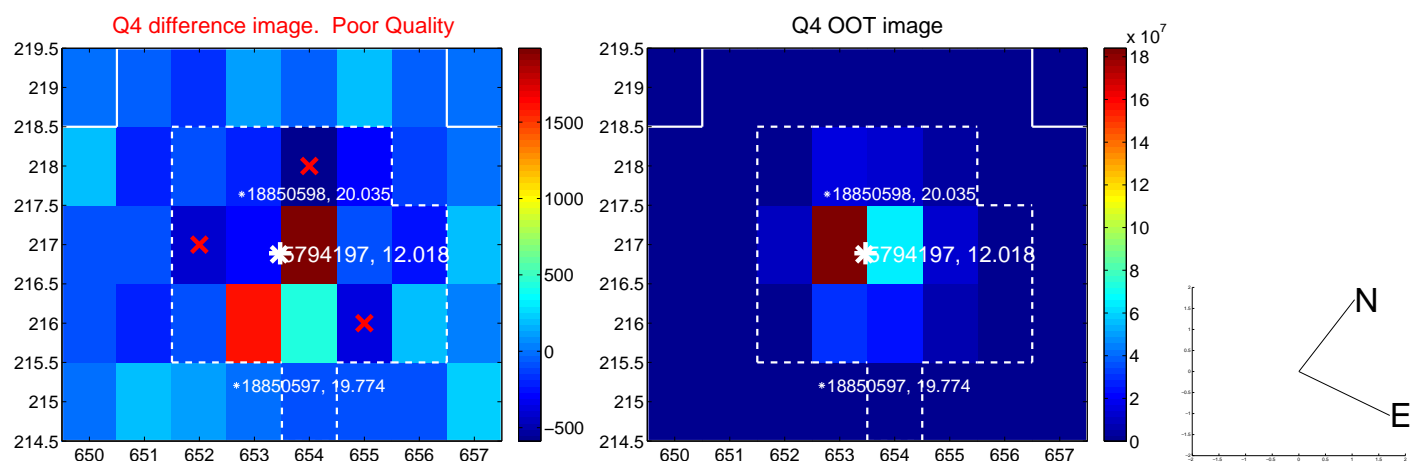
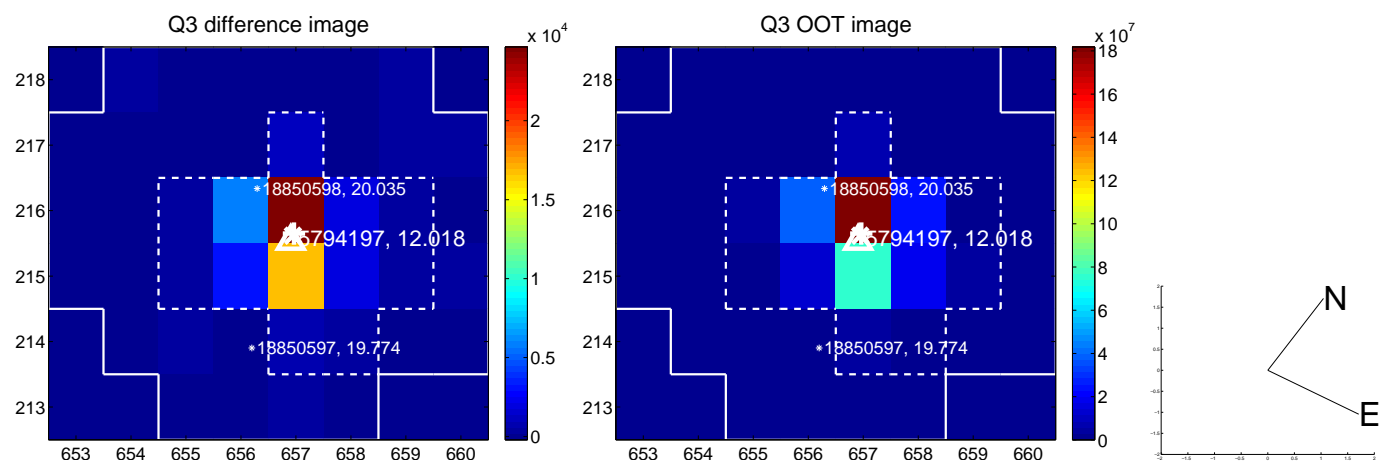
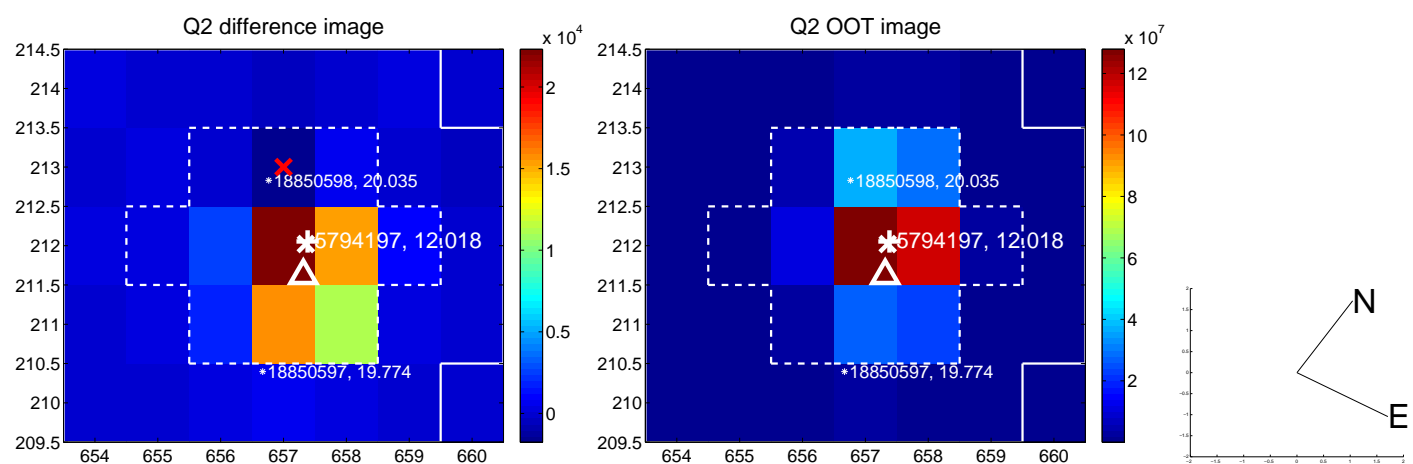
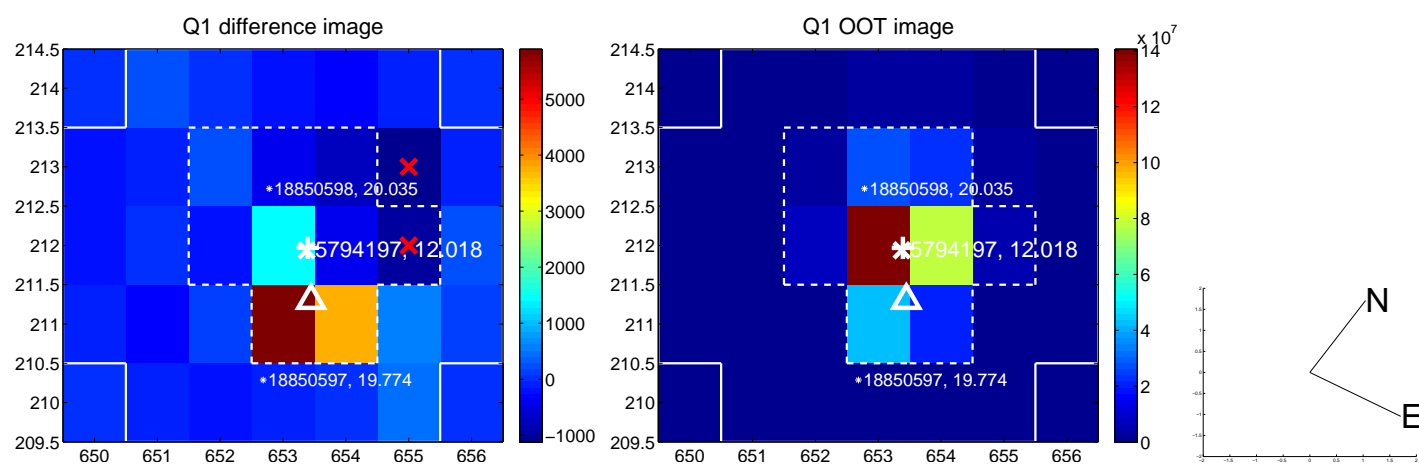
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.510 \pm 0.289$	1.77	$0.500 \pm 0.247$	$-0.100 \pm 0.331$
PRF-fit source offset from KIC position	$0.528 \pm 0.217$	2.43	$0.524 \pm 0.244$	$0.061 \pm 0.338$
photometric centroid source offset	—	—	—	—

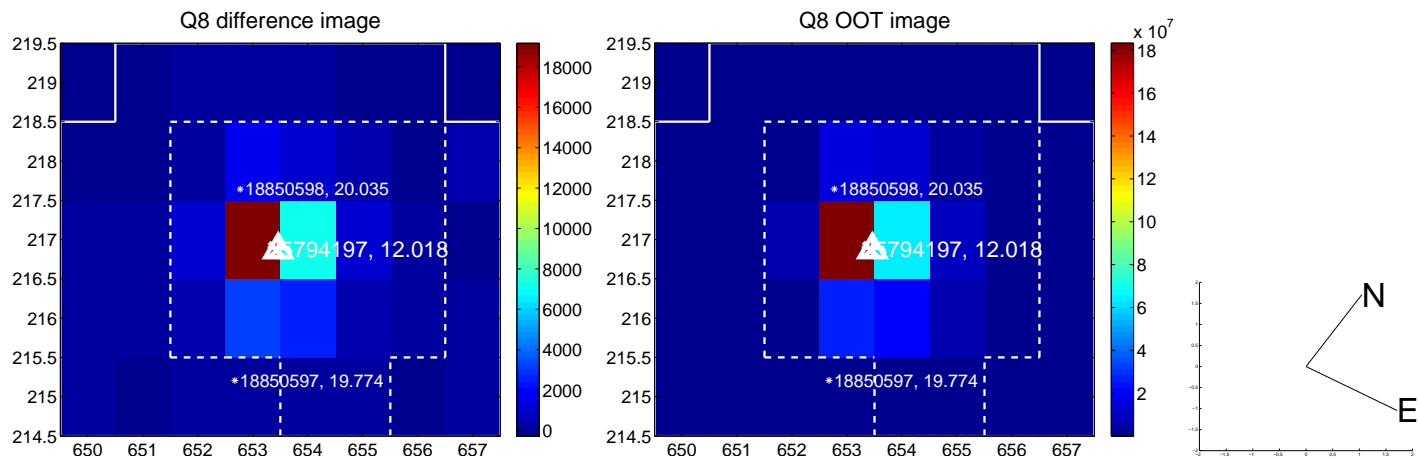
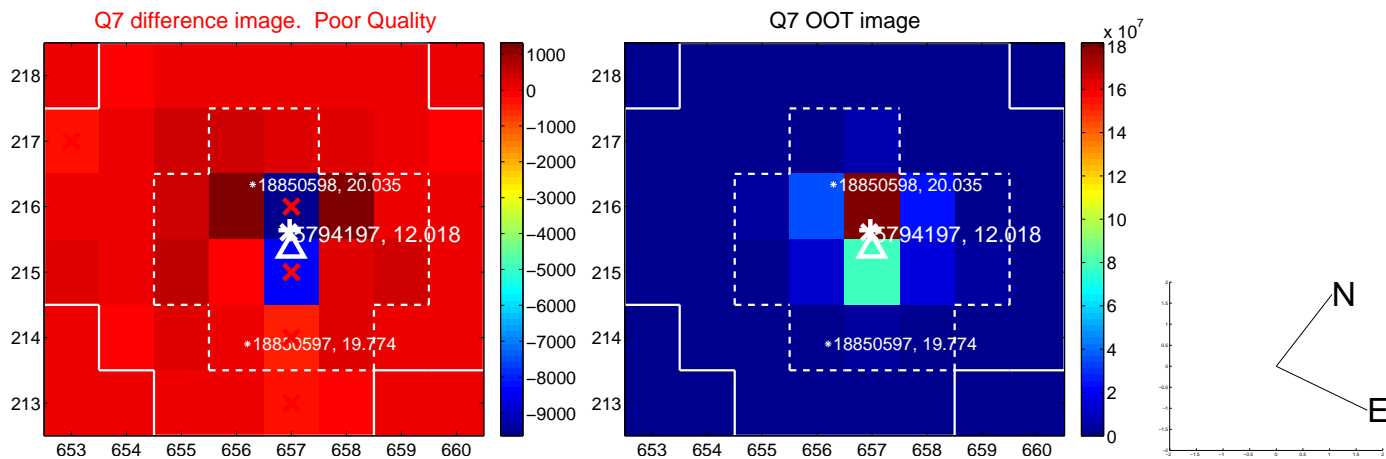
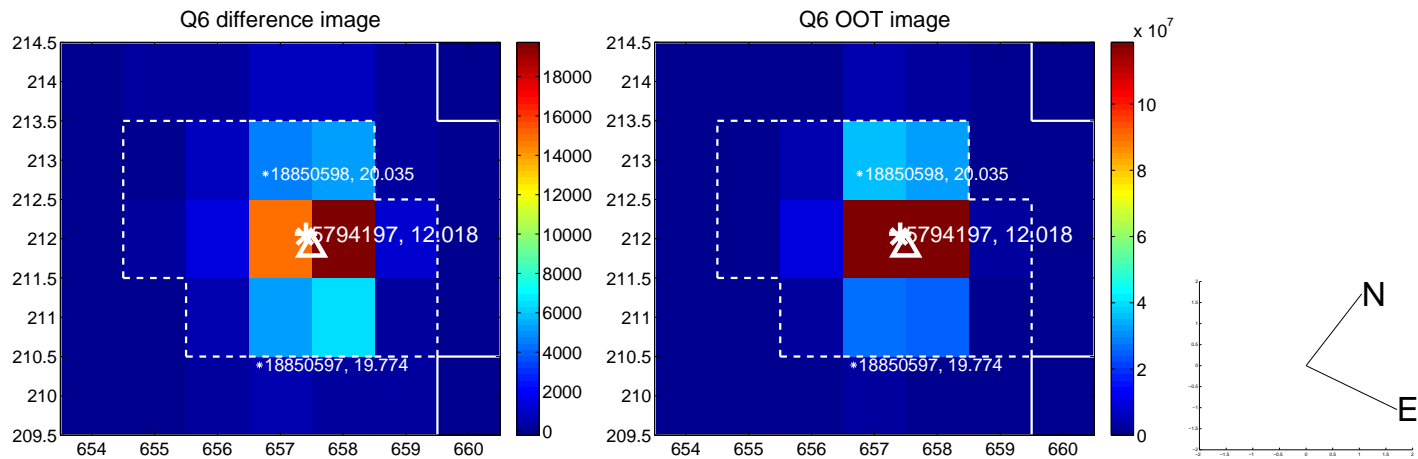
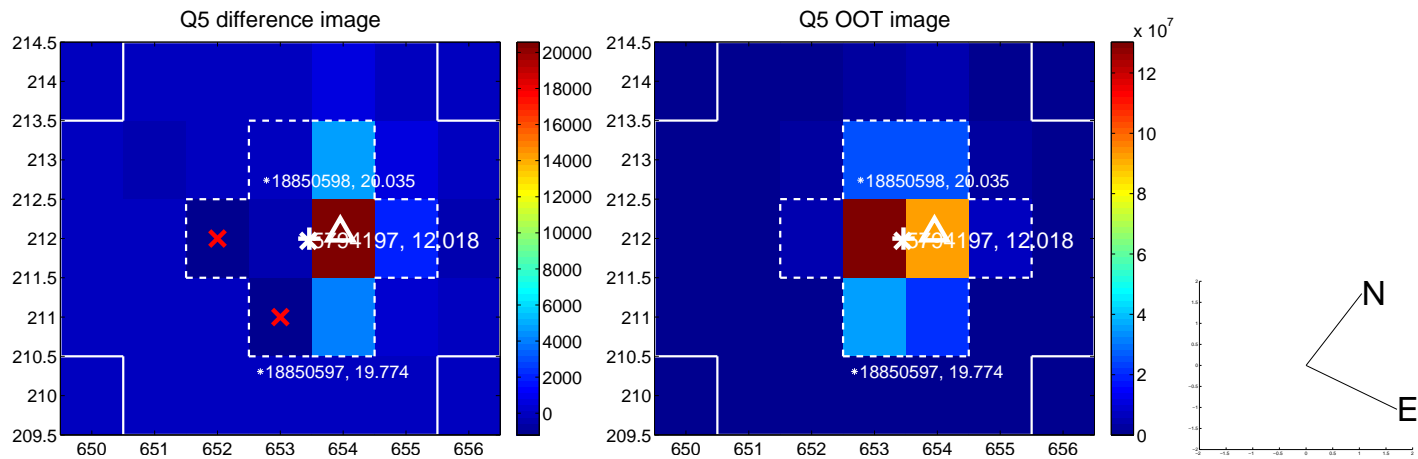


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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

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



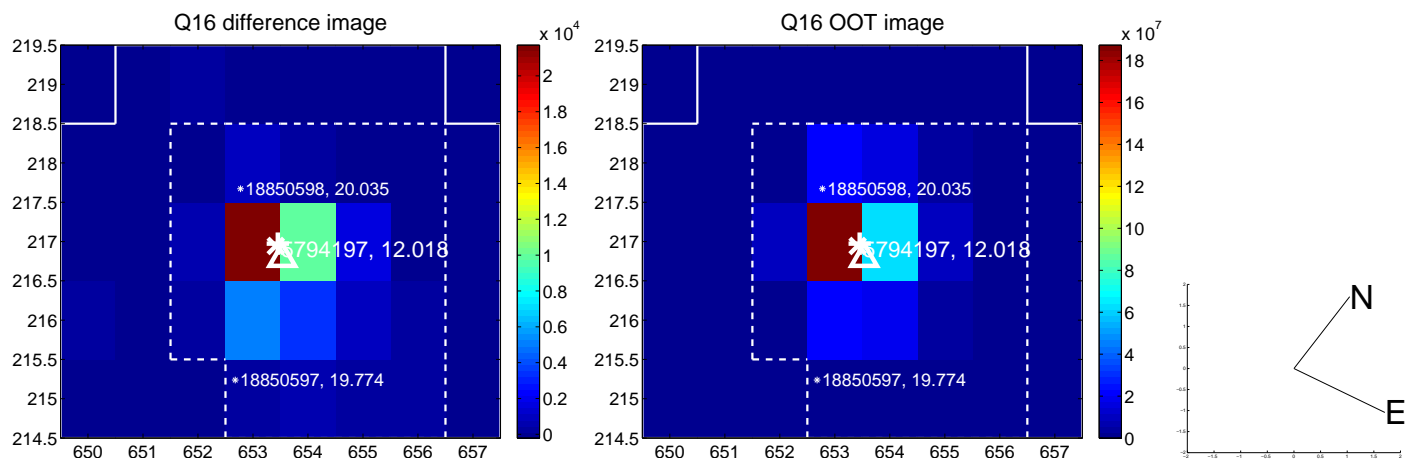
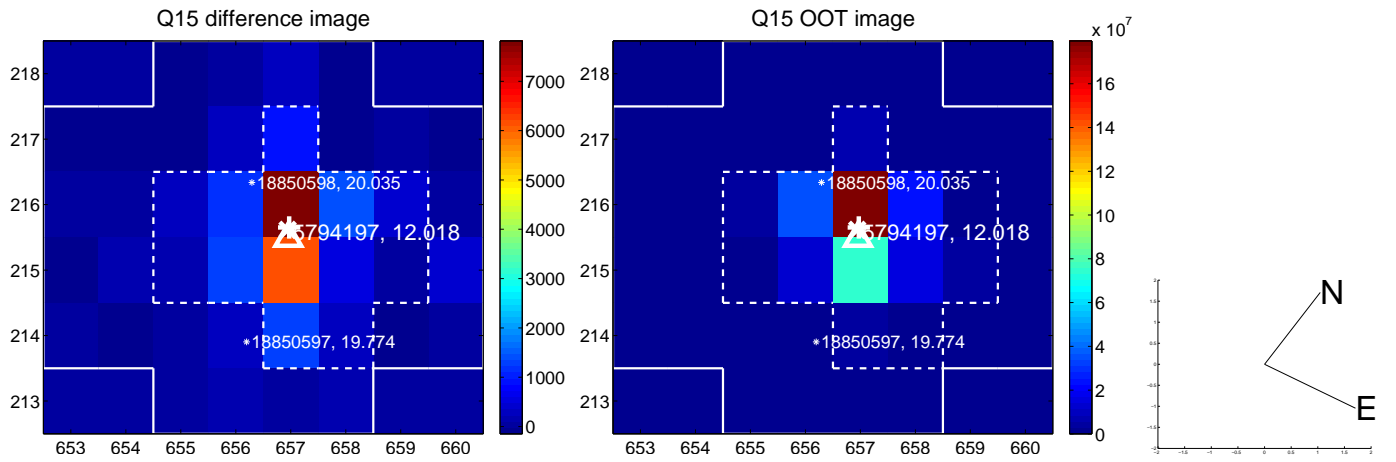
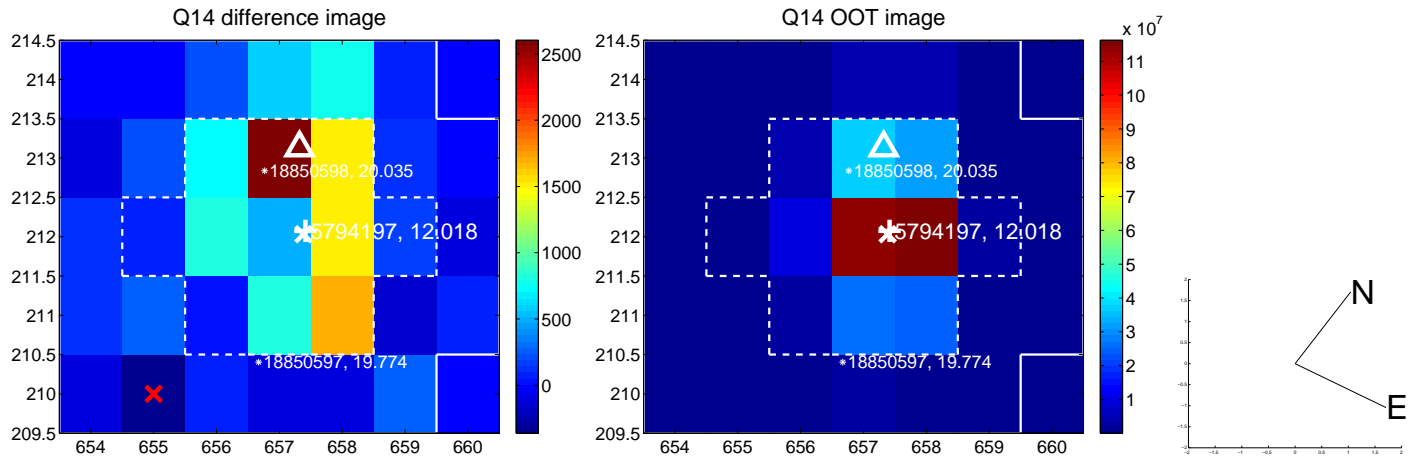
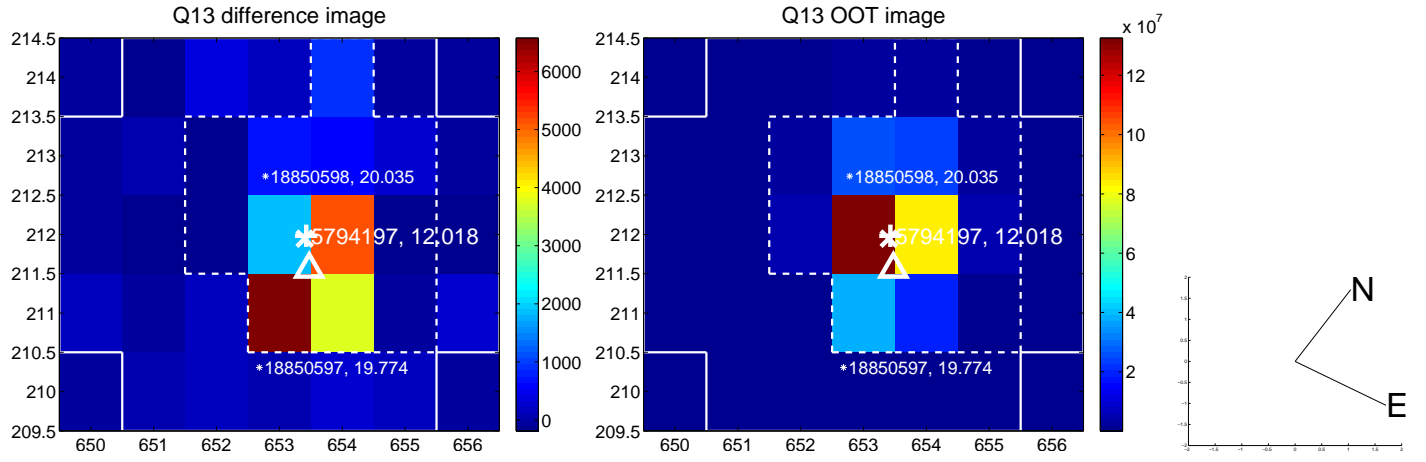
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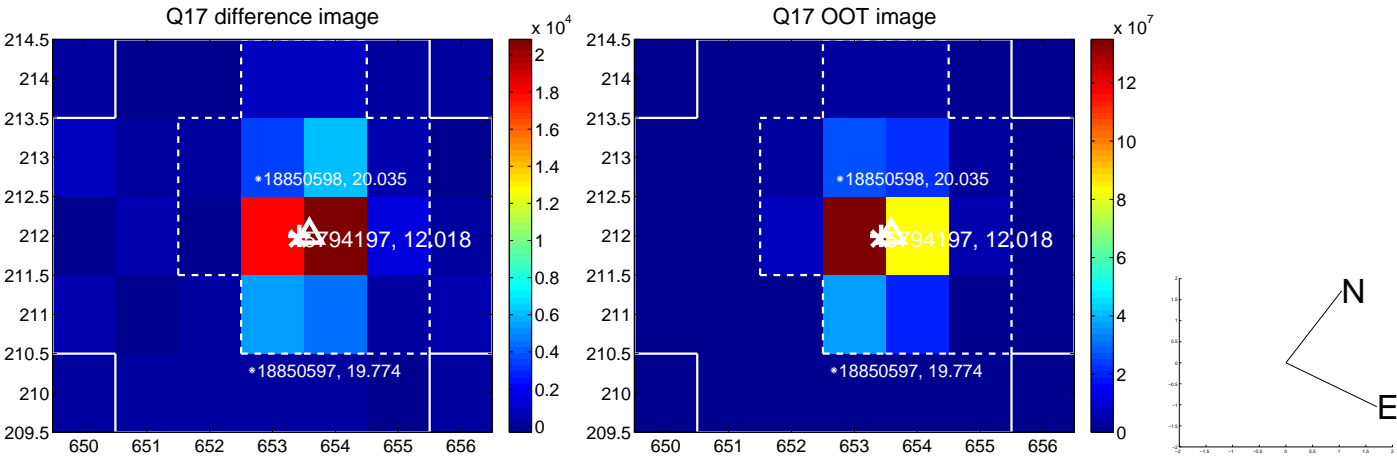




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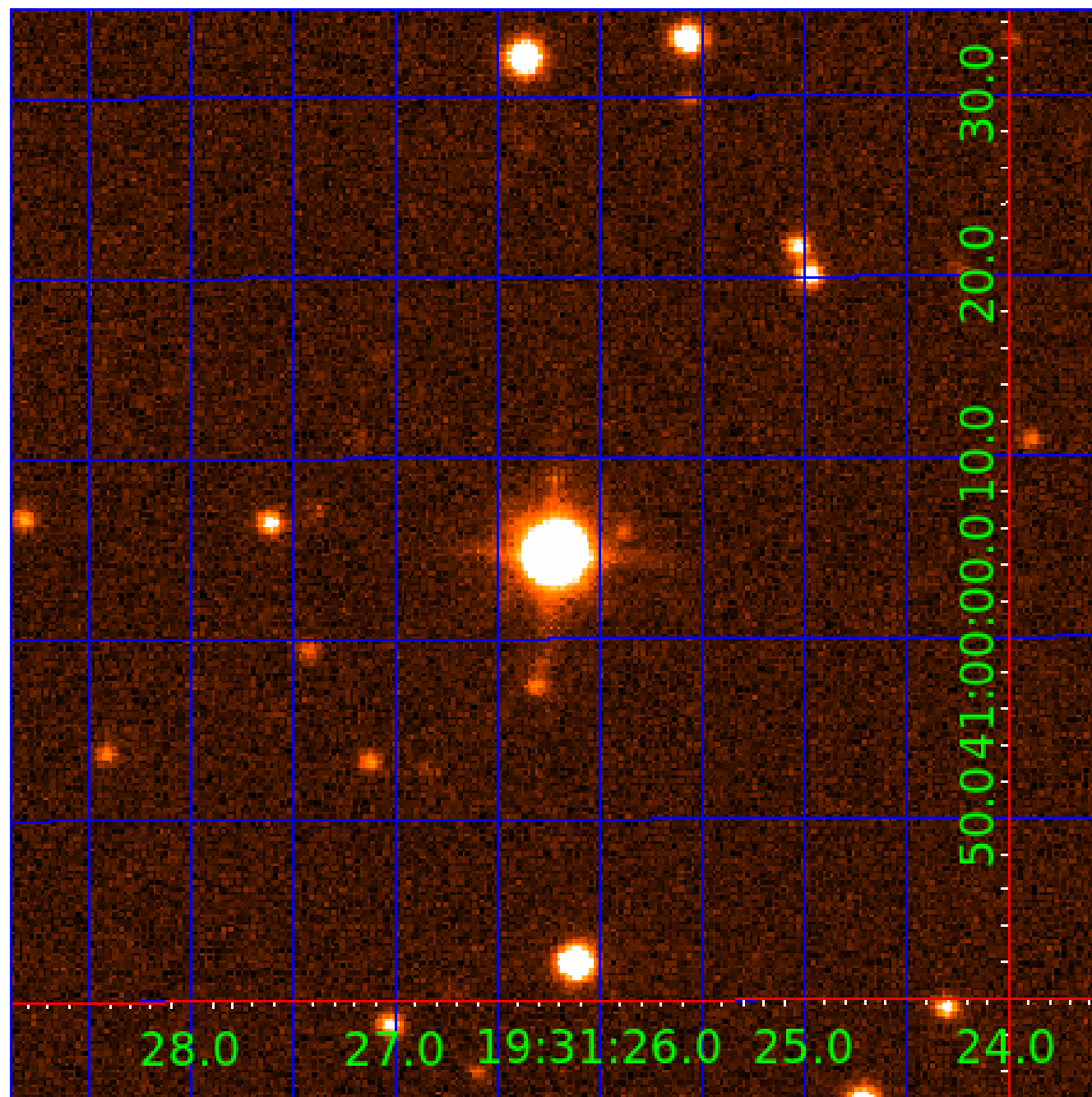
white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination



# KIC 005794197

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
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005794197-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_DV—SAME_NTL_PERIOD
005794197-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
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N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

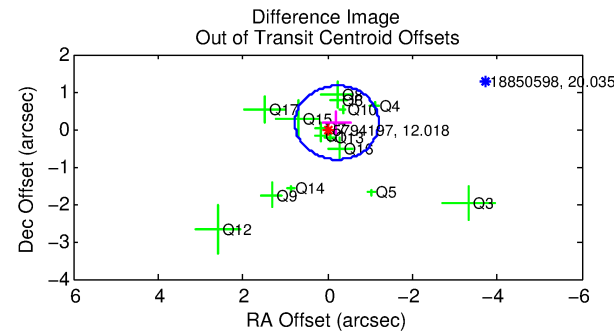
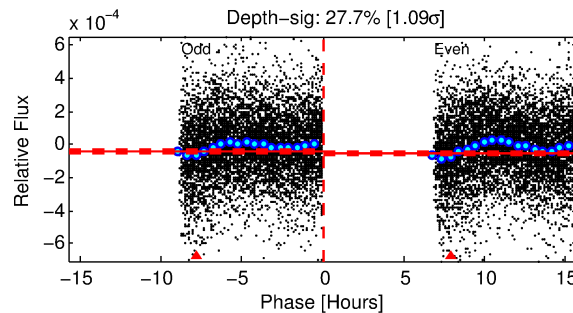
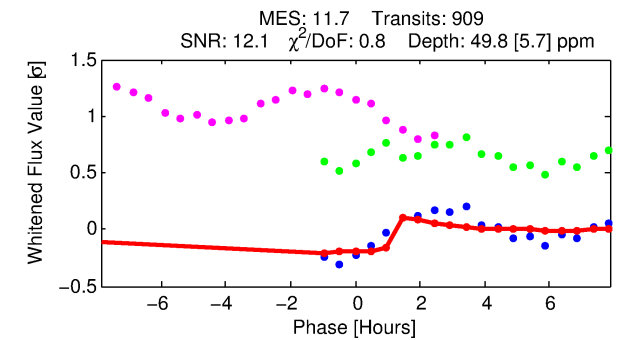
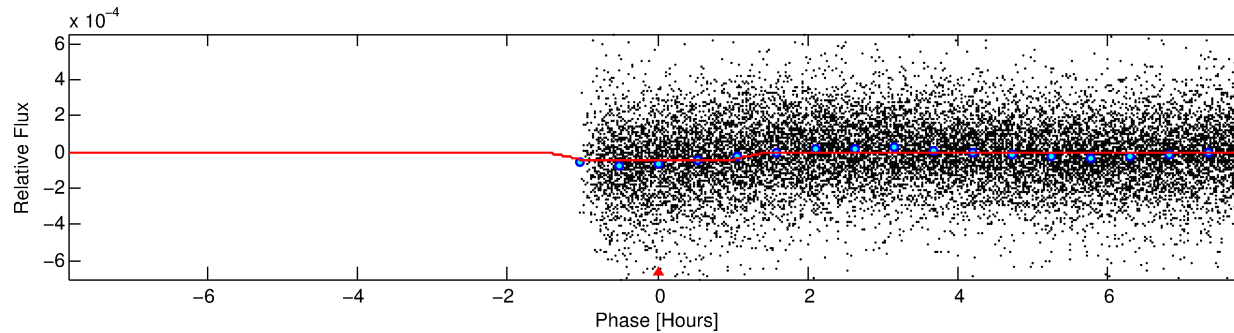
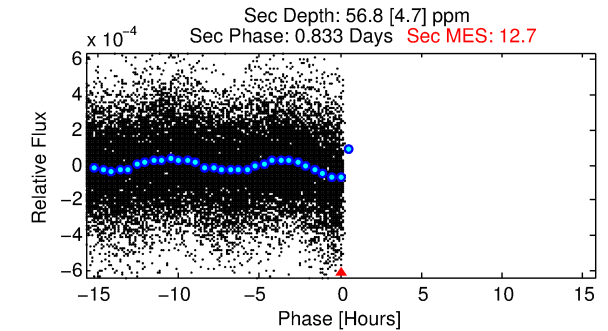
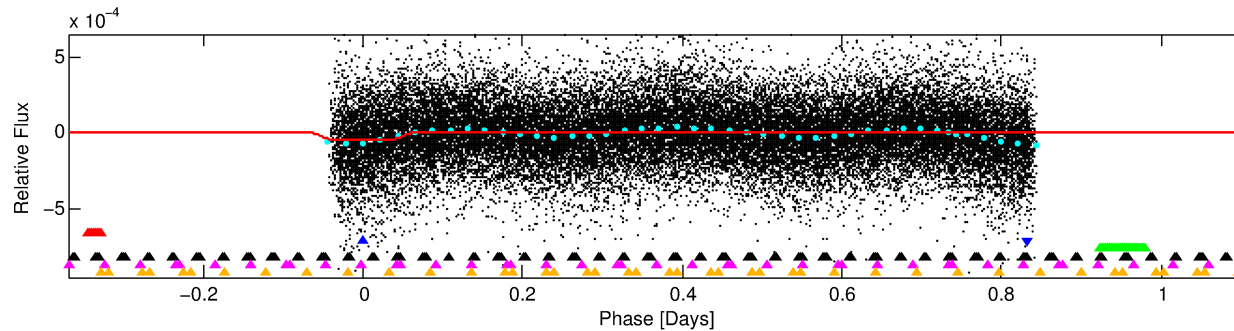
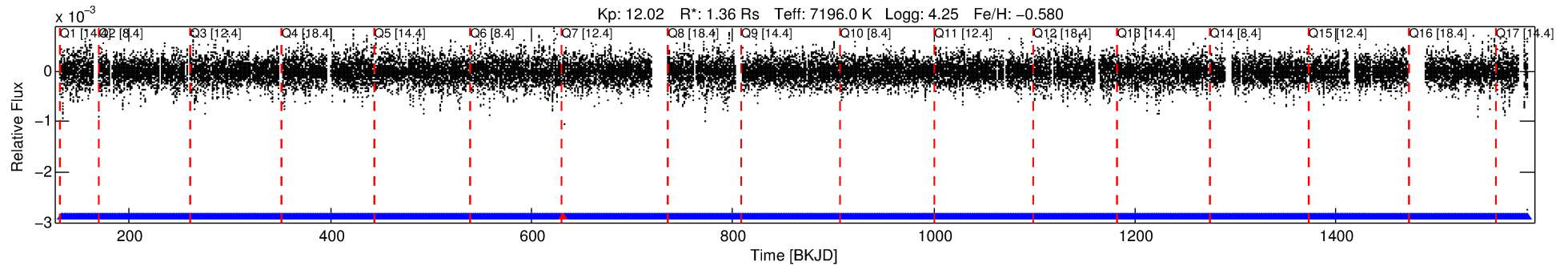
## Ephemeris Match Information For 005794197-02

No Significant Match Found



# DV One-Page Summary

KIC: 5794197 Candidate: 2 of 6 Period: 1.477 d



## DV Fit Results:

Period = 1.47674 [0.00001] d  
Epoch = 132.8569 [0.0047] BKJD  
Rp/R\* = 0.0074 [0.0015]  
a/R\* = 2.26 [2.26]  
b = 0.89 [0.30]  
Seff = 6083.05 [2167.03]  
Teq = 2252 [201] K  
Rp = 1.10 [0.38] Re  
a = 0.0270 [0.0062] AU  
Ag = 18.74 [10.04] [1.77σ]  
Teffp = 7245 [799] K [6.06σ]

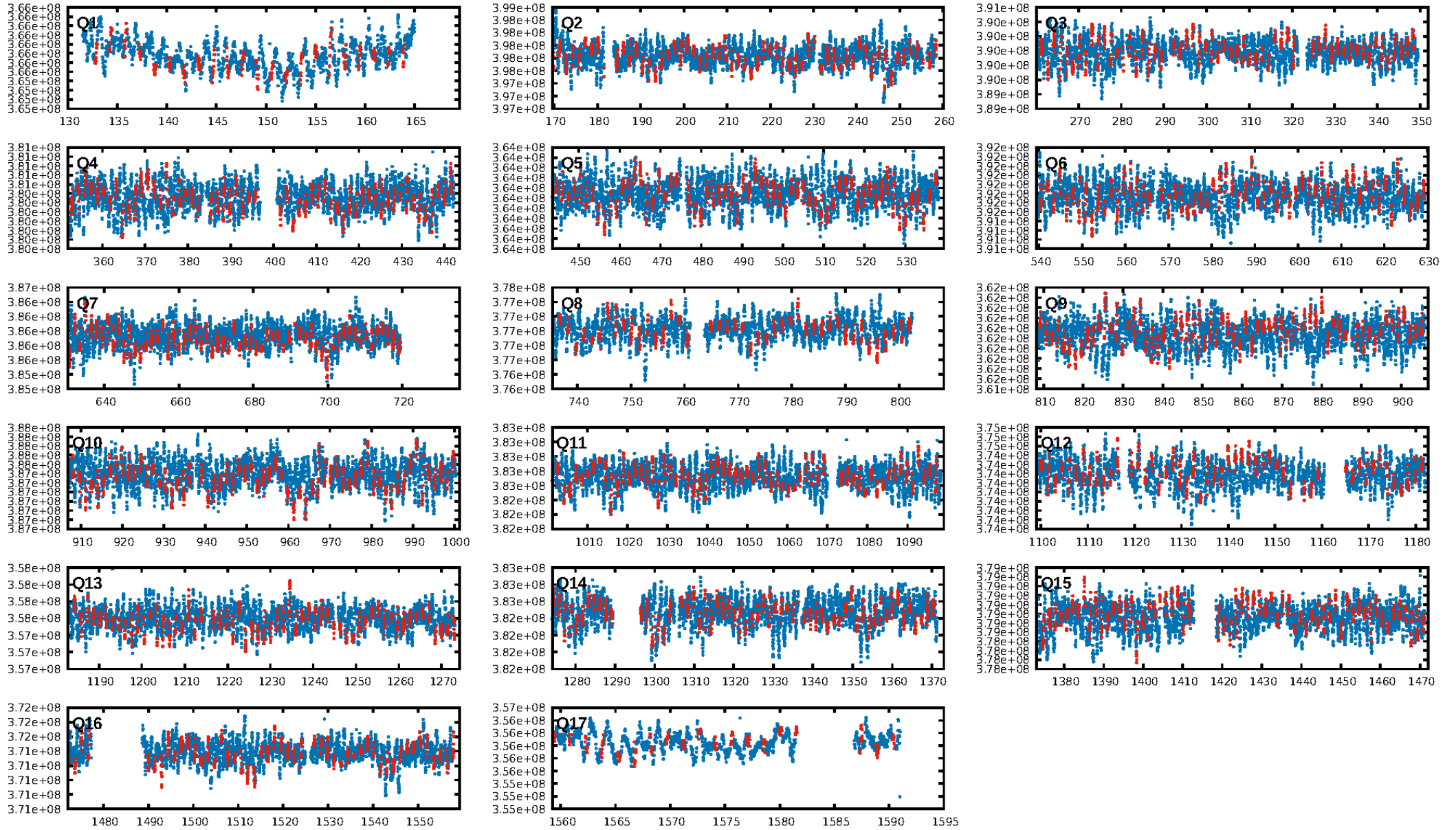
## DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]  
LongPeriod-sig: 0.0% [0.00σ]  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: N/A  
RollingBand-fgt: 1.00 [867/868]  
GhostDiagnostic-chr: 1.876  
Centroid-sig: N/A  
Centroid-so: N/A  
OotOffset-rm: 0.281 arcsec [0.86σ]  
KicOffset-rm: 0.396 arcsec [1.25σ]  
OotOffset-st: 3/3/4/5 [15]  
KicOffset-st: 3/3/4/5 [15]  
DiffImageQuality-fgm: 0.80 [12/15]  
DiffImageOverlap-fno: 0.00 [0/17]

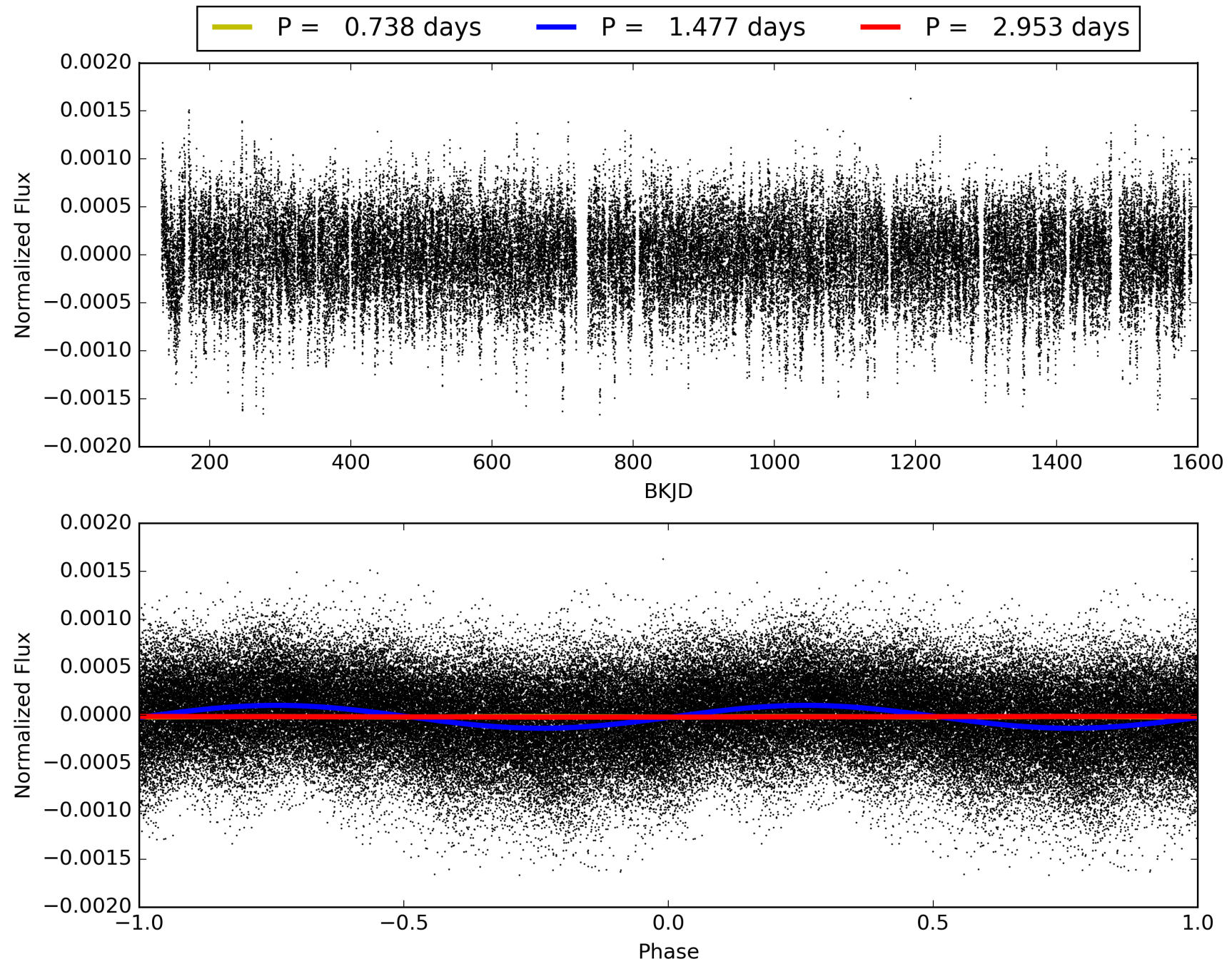
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 10:23:40 Z

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

# TCE 005794197-02, PDC Light Curves

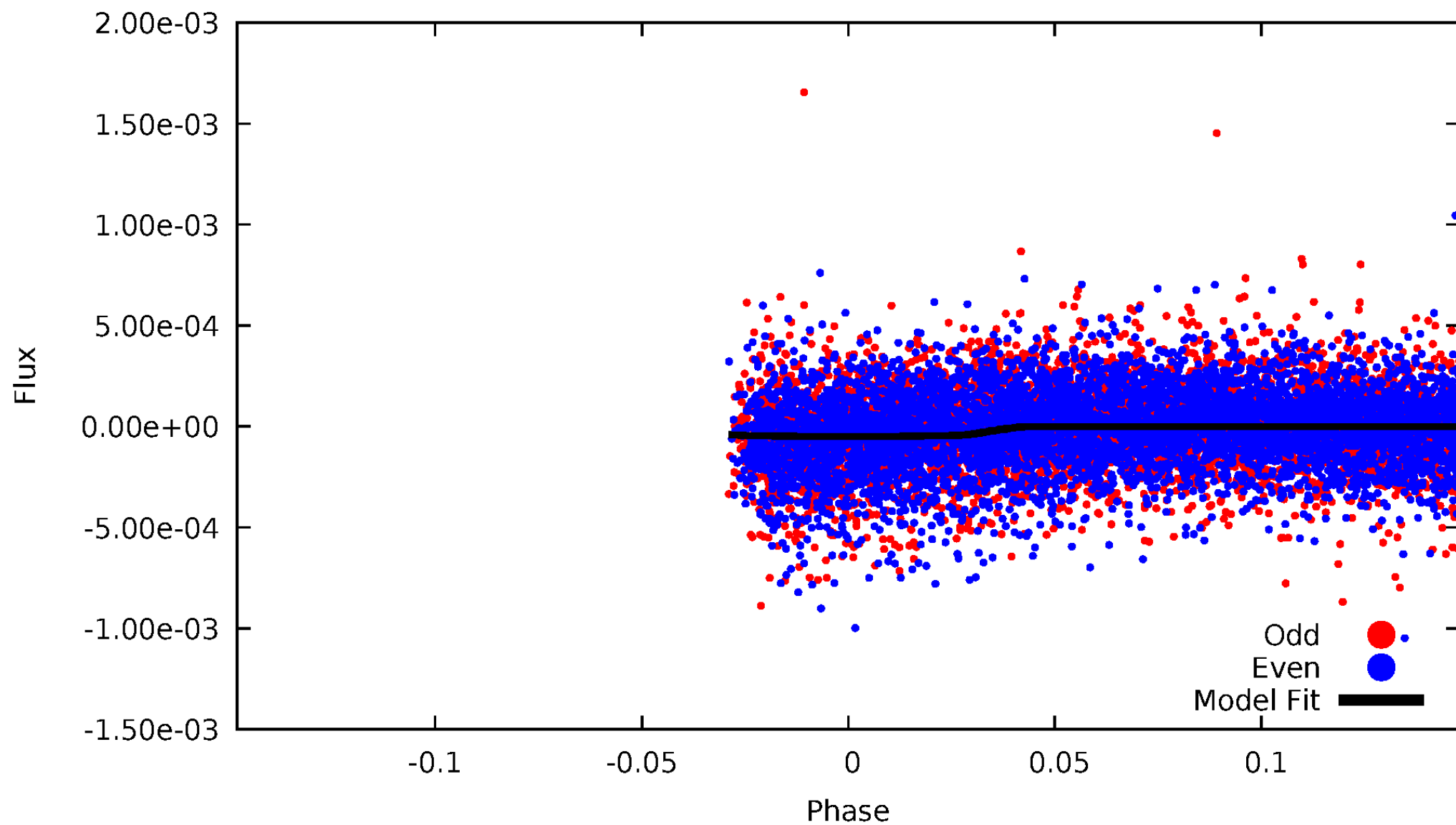


TCE 005794197-02



# DV Odd/Even

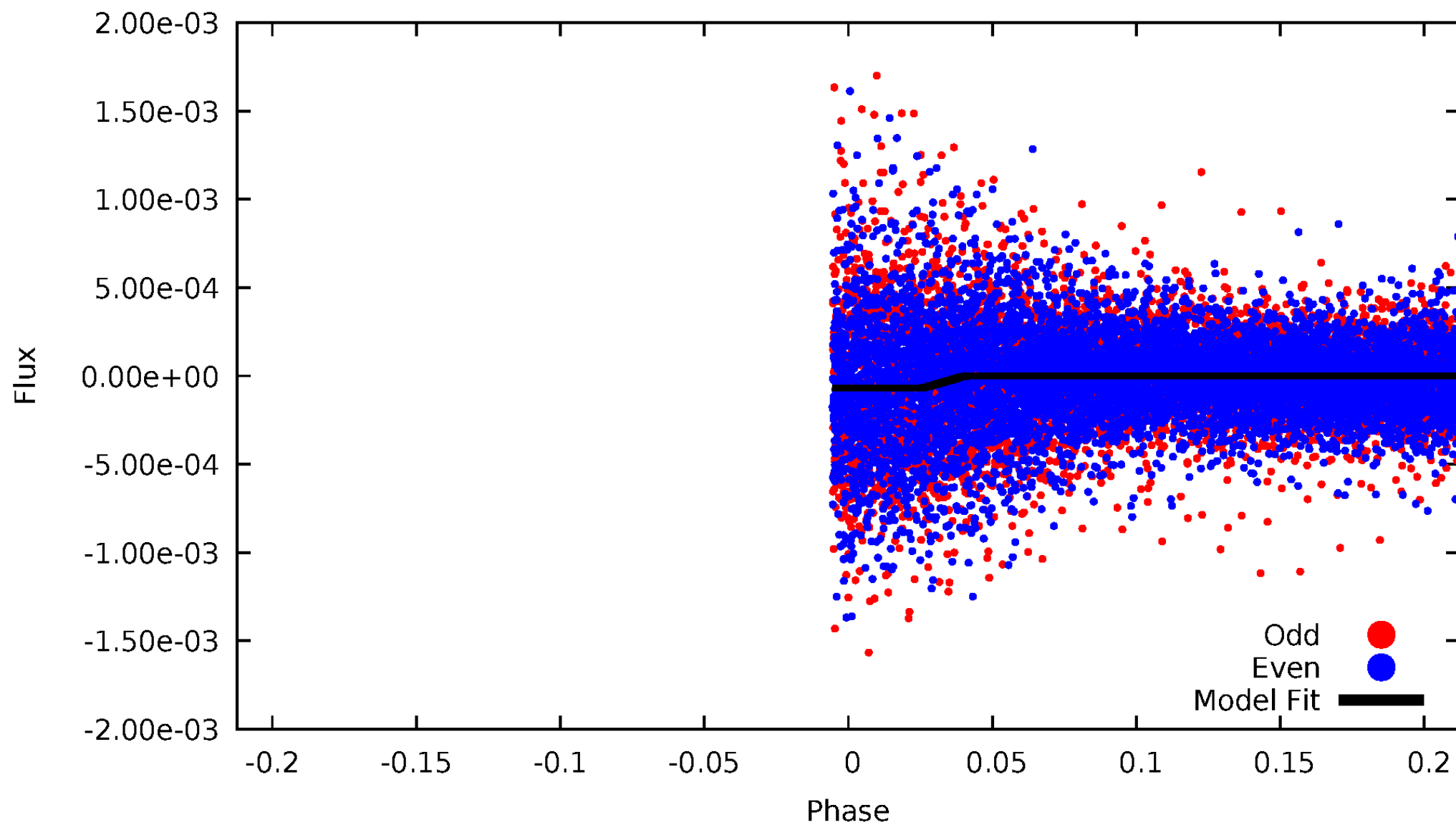
TCE 005794197-02





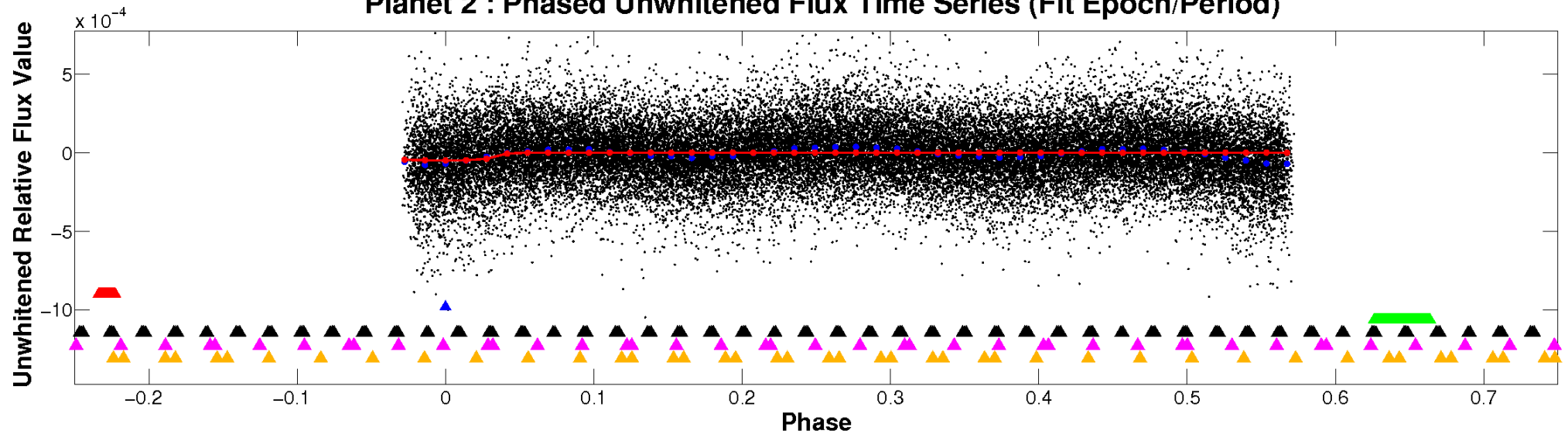
# ALT Odd/Even

TCE 005794197-02

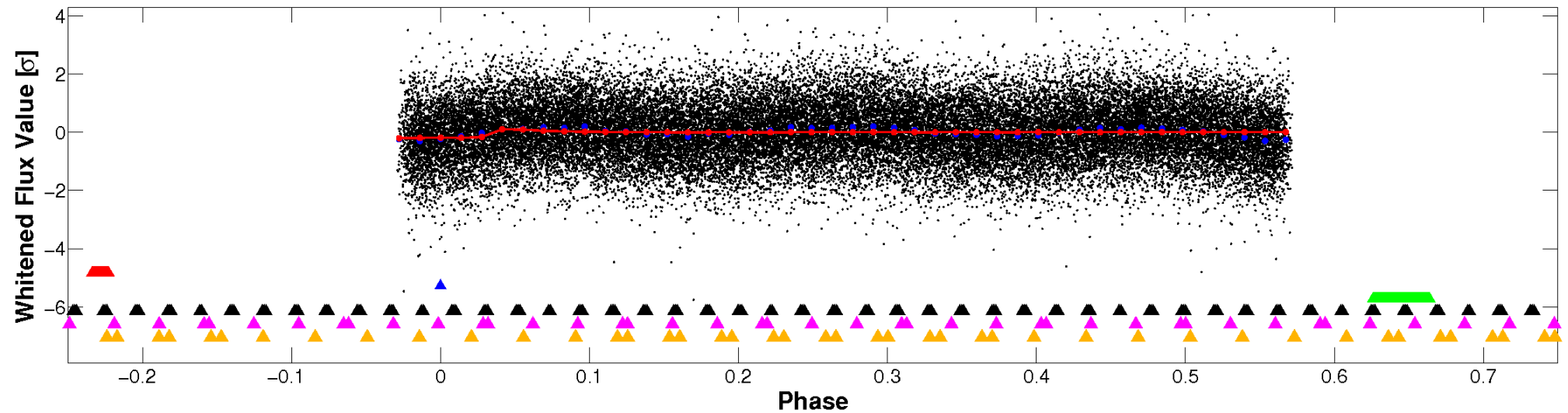


# Non-Whitened Vs. Whitened Light Curve

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

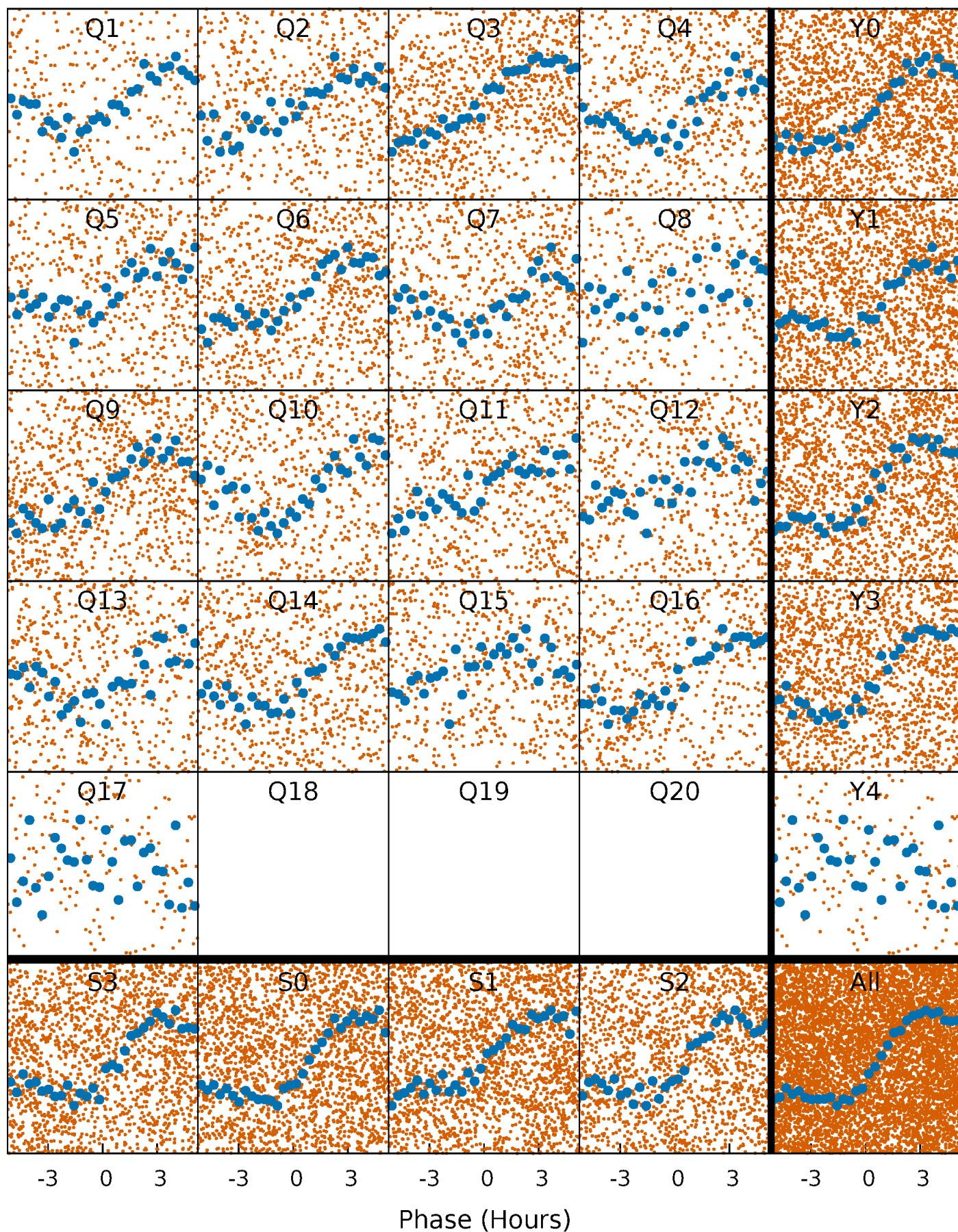


## Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



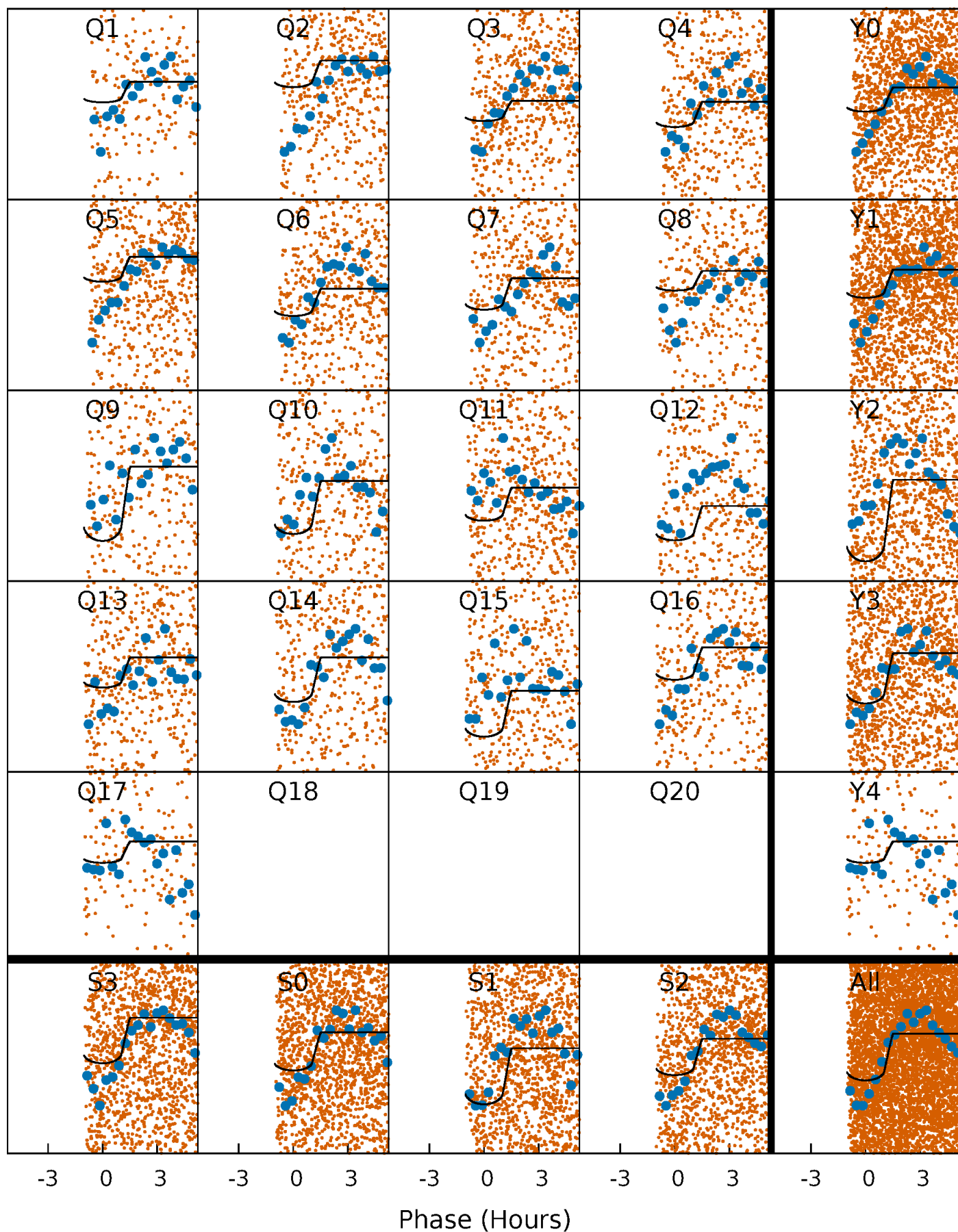
# PDC Quarter-Phased Transit Curves

TCE 005794197-02   P= 1.476736 Days    $T_0=132.856926$  (BKJD)



# DV Quarter-Phased Transit Curves

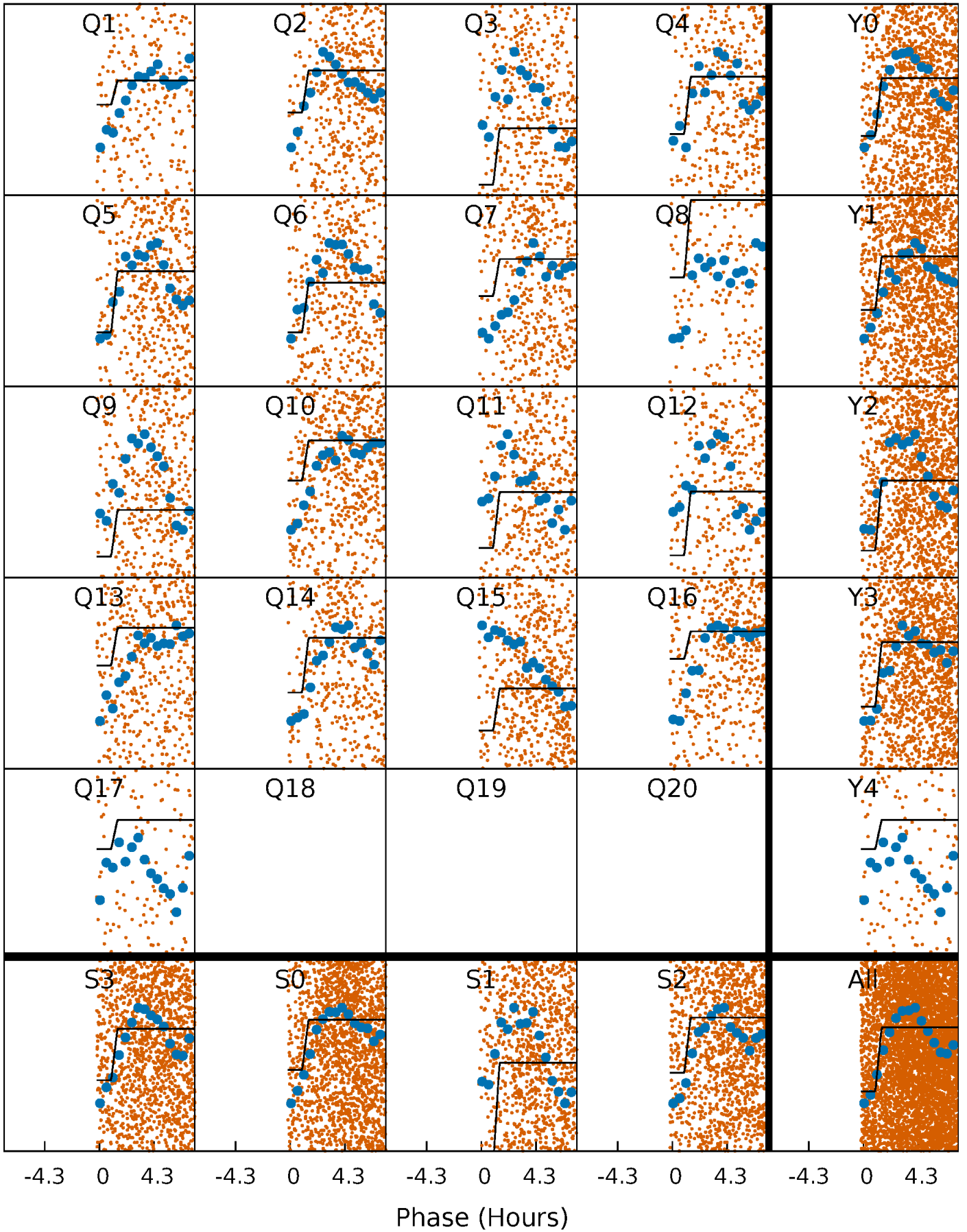
TCE 005794197-02     $P = 1.476736$  Days     $T_0 = 132.856926$  (BKJD)





# Alt. Detrend Quarter-Phased Transit Curves

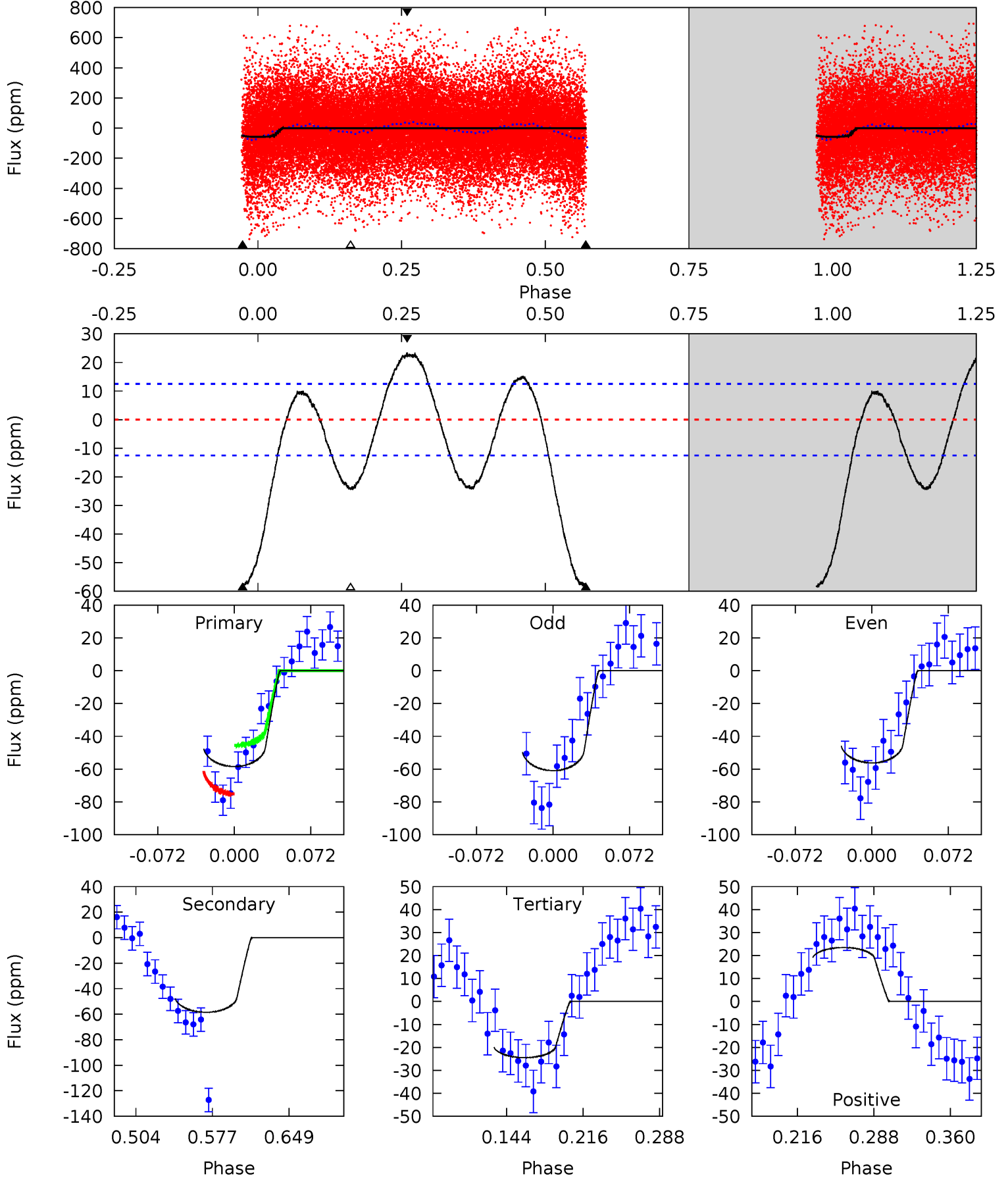
TCE 005794197-02   P= 1.476720 Days    $T_0=132.838215$  (BKJD)



# DV Model-Shift Uniqueness Test

005794197-02, P = 1.476736 Days, E = 131.380190 Days

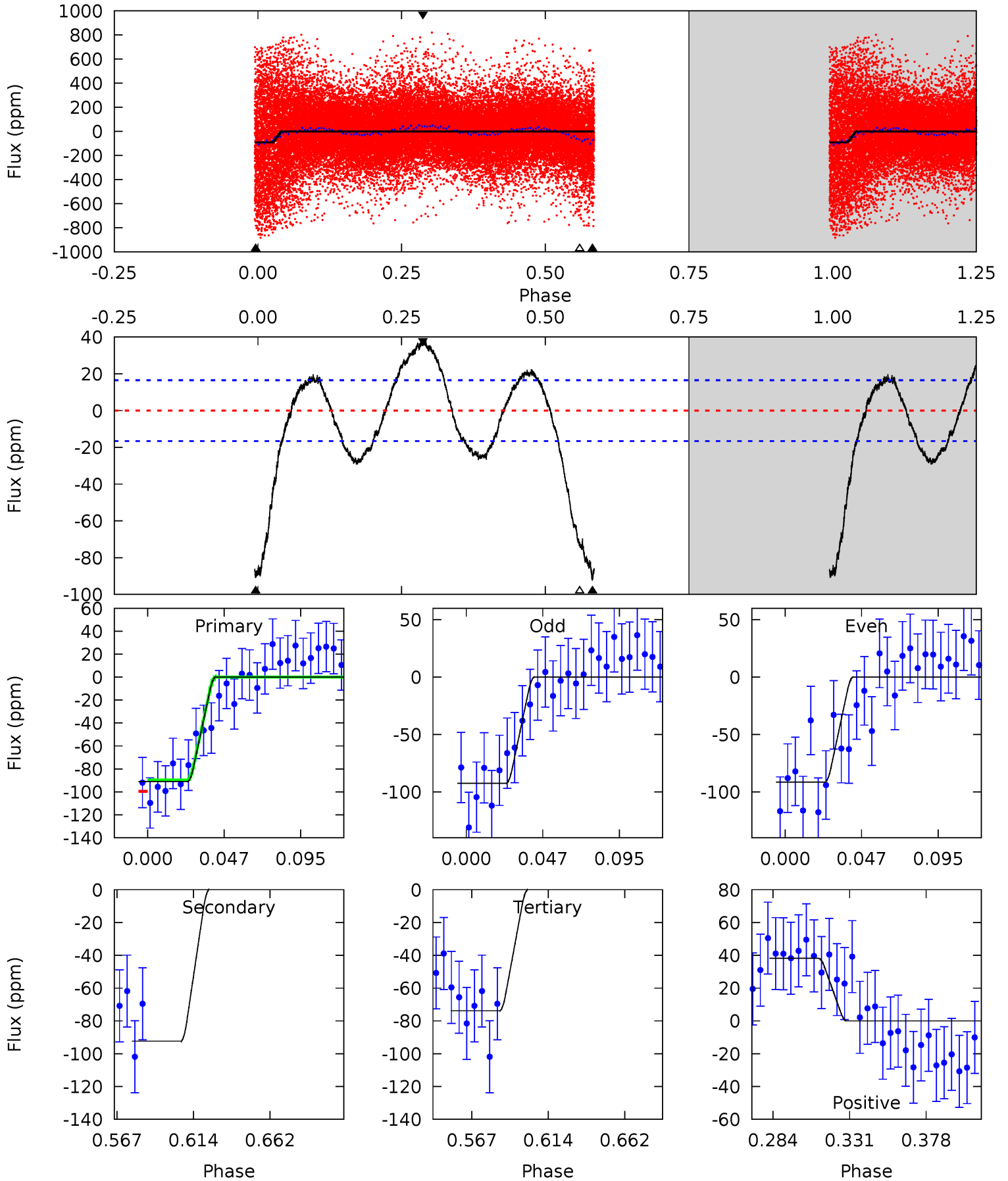
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.6	21.7	9.06	8.69	4.63	1.80	5.45	12.6	12.9	12.6	13.0	0.88	1.13	0.29	4.63



# Alt Model-Shift Uniqueness Test

005794197-02, P = 1.476720 Days, E = 131.361495 Days

Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
26.0	26.4	21.1	10.9	4.72	1.98	7.29	4.89	15.1	5.28	15.5	0.15	0.91	0.29	0.86



### Stellar Parameters For KIC 005794197

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	$7196^{+193}_{-236}$	$4.252^{+0.120}_{-0.180}$	$-0.580^{+0.250}_{-0.300}$	$1.358^{+0.372}_{-0.248}$	$1.203^{+0.173}_{-0.142}$	$0.676^{+0.428}_{-0.322}$
	+3%/-3%	+3%/-4%	+43%/-52%	+27%/-18%	+14%/-12%	+63%/-48%
Source	PHO1	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 005794197-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	$A_{\text{obs}}$
DV	$-58 \pm 3$	$1.13^{+0.30}_{-0.26}$	$3164^{+222}_{-178}$	$7275^{+1069}_{-788}$	$18^{+13}_{-7}$
Alt.	$-92 \pm 4$	$1.24^{+0.29}_{-0.25}$	$3174^{+216}_{-186}$	$7896^{+1164}_{-842}$	$24^{+13}_{-8}$

$T_{\text{max}}$  = Theoretical Maximum Planetary Temperature

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

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

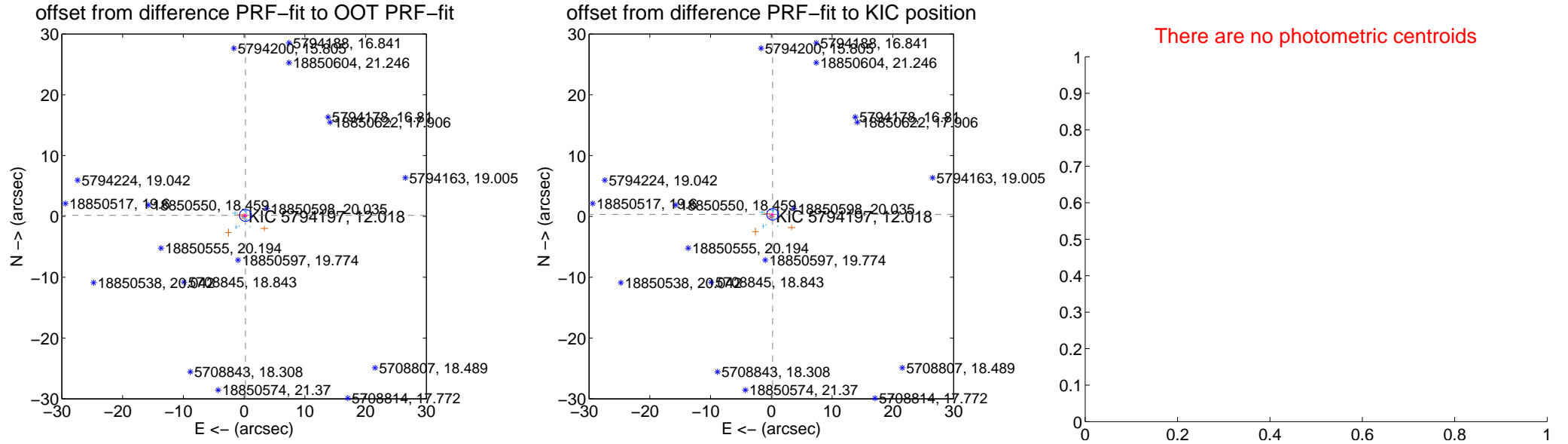
## DV Centroid Data

Supplemental centroid analysis for 005794197-02. Kepler magnitude: 12.02. Transit SNR 12.05

There are 12 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

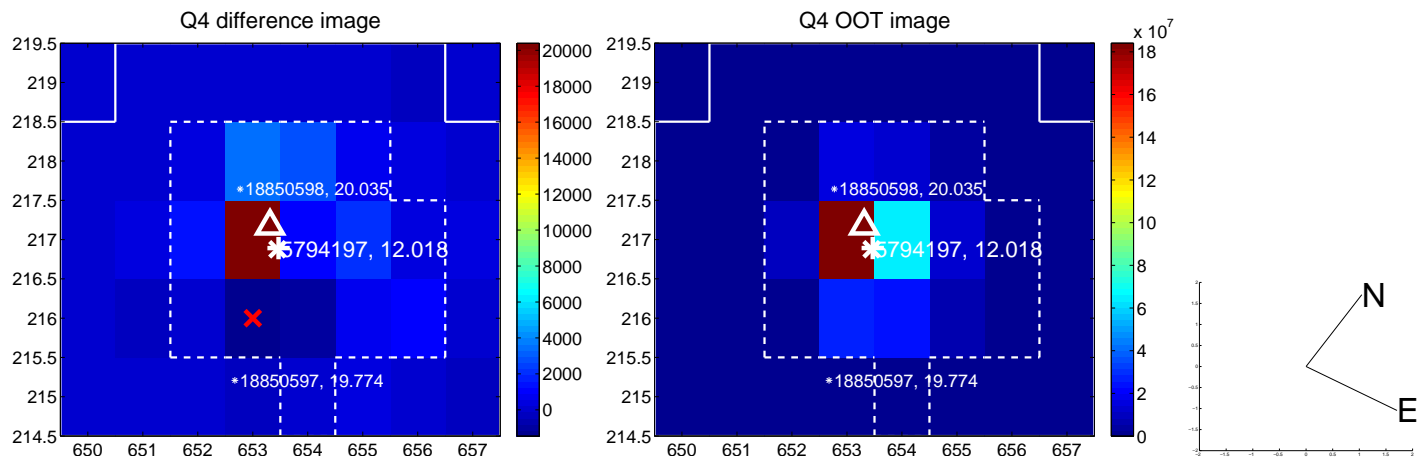
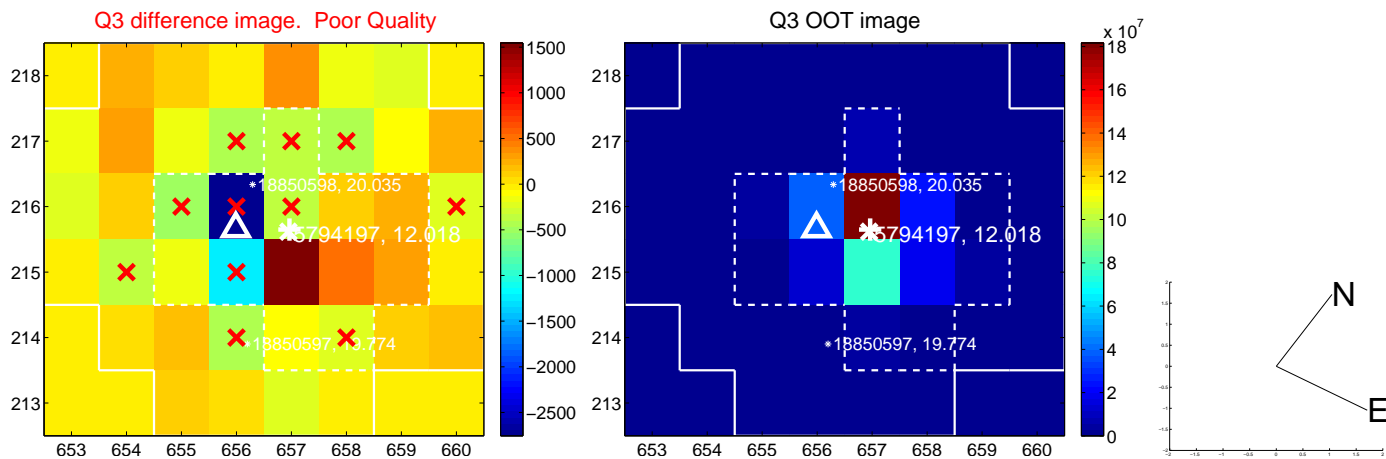
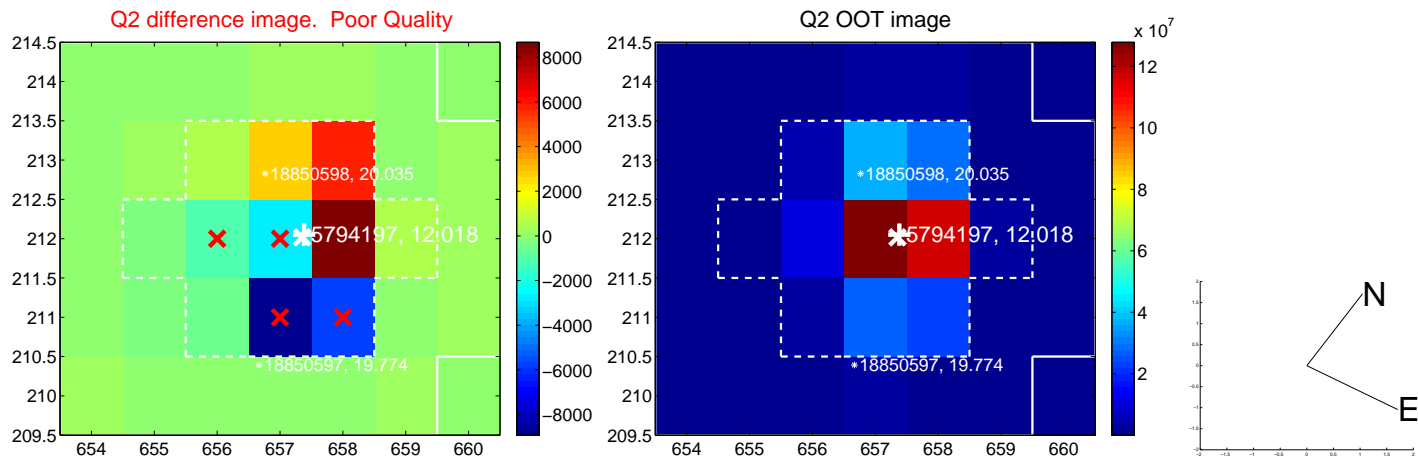
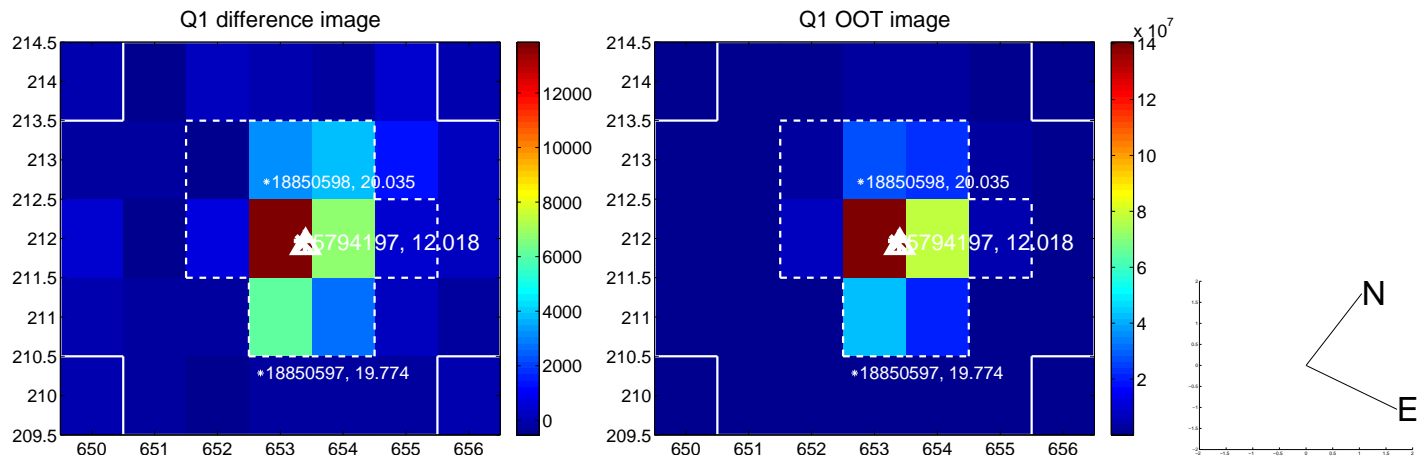
	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.281 \pm 0.329$	0.86	$-0.218 \pm 0.333$	$0.177 \pm 0.296$
PRF-fit source offset from KIC position	$0.396 \pm 0.318$	1.25	$-0.208 \pm 0.353$	$0.337 \pm 0.293$
photometric centroid source offset	—	—	—	—



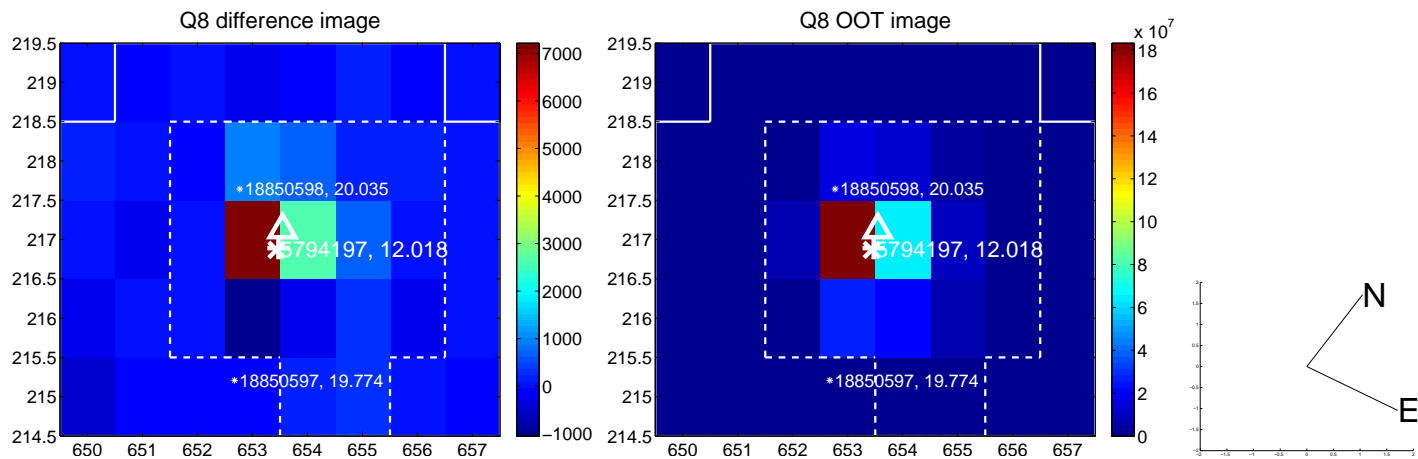
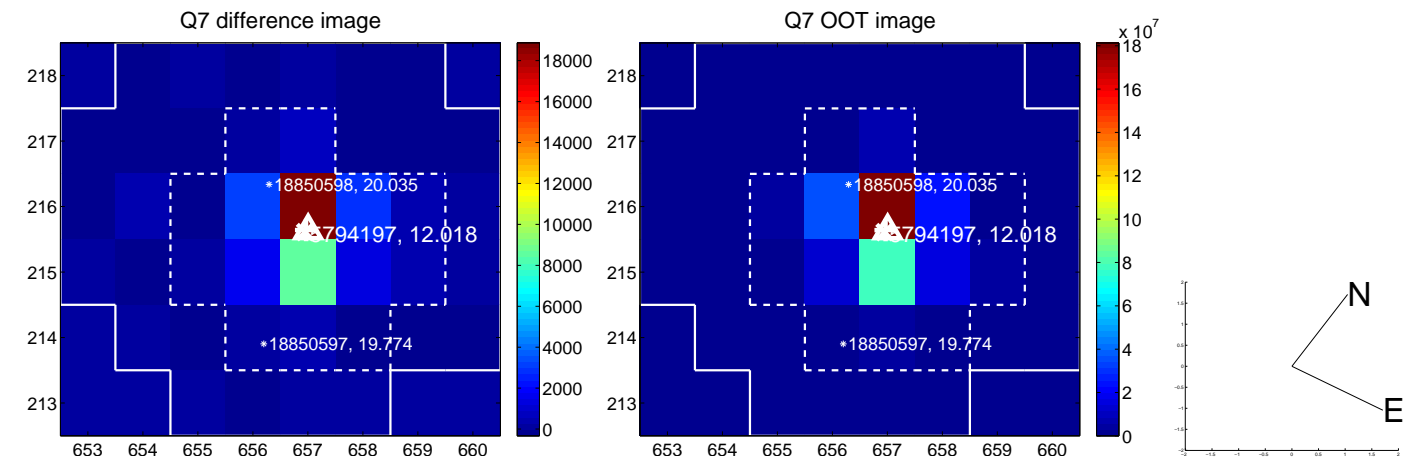
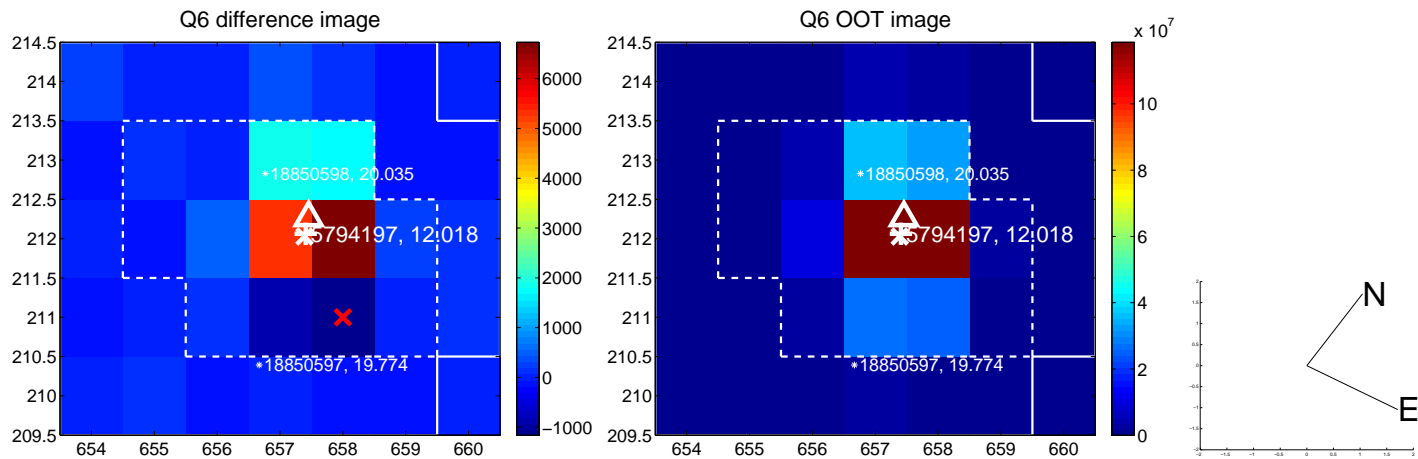
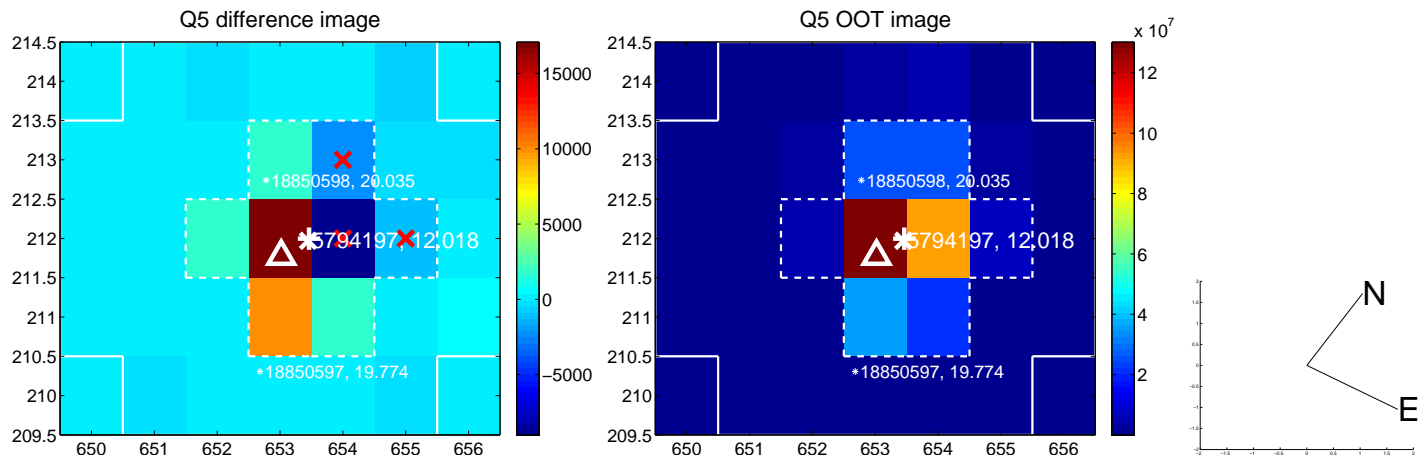
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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



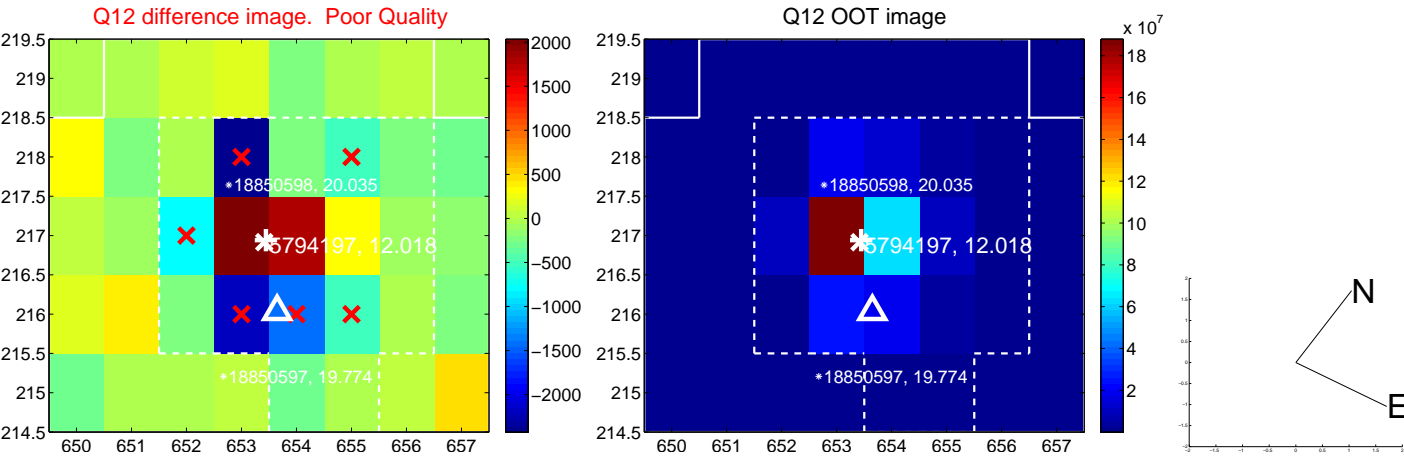
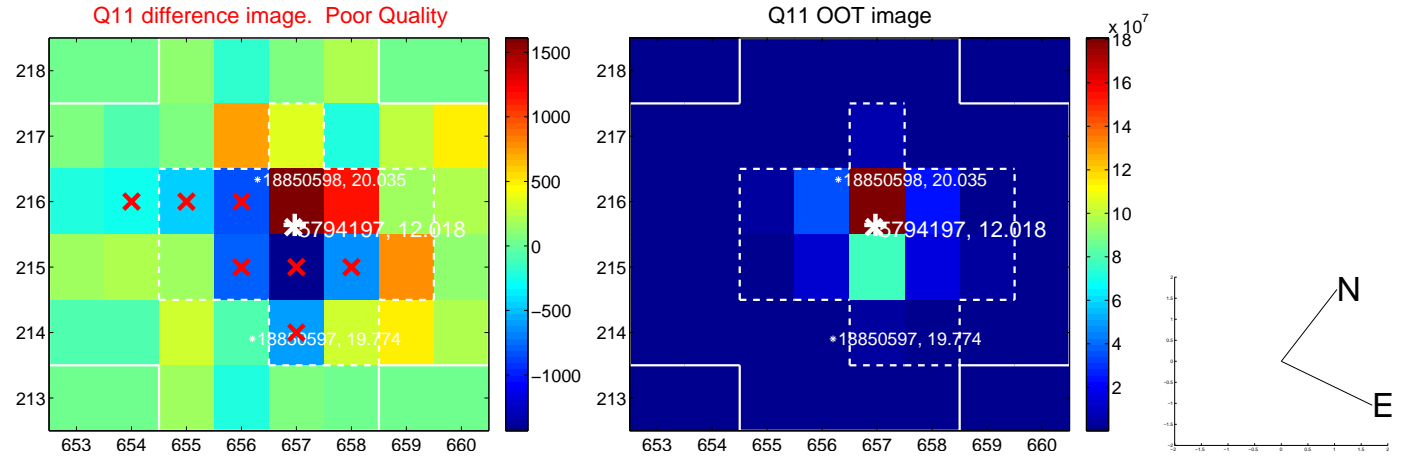
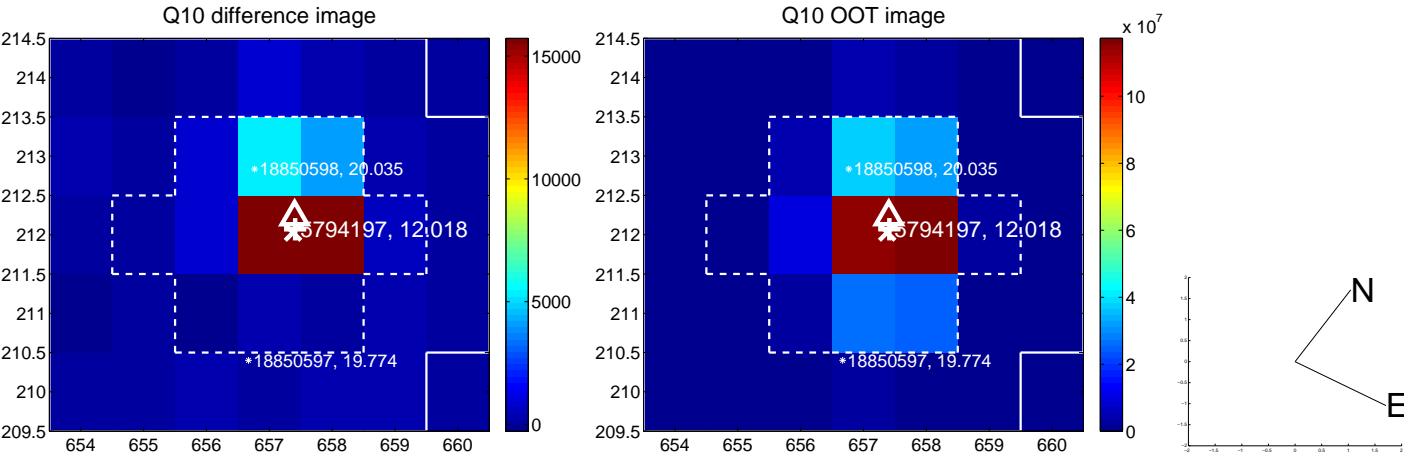
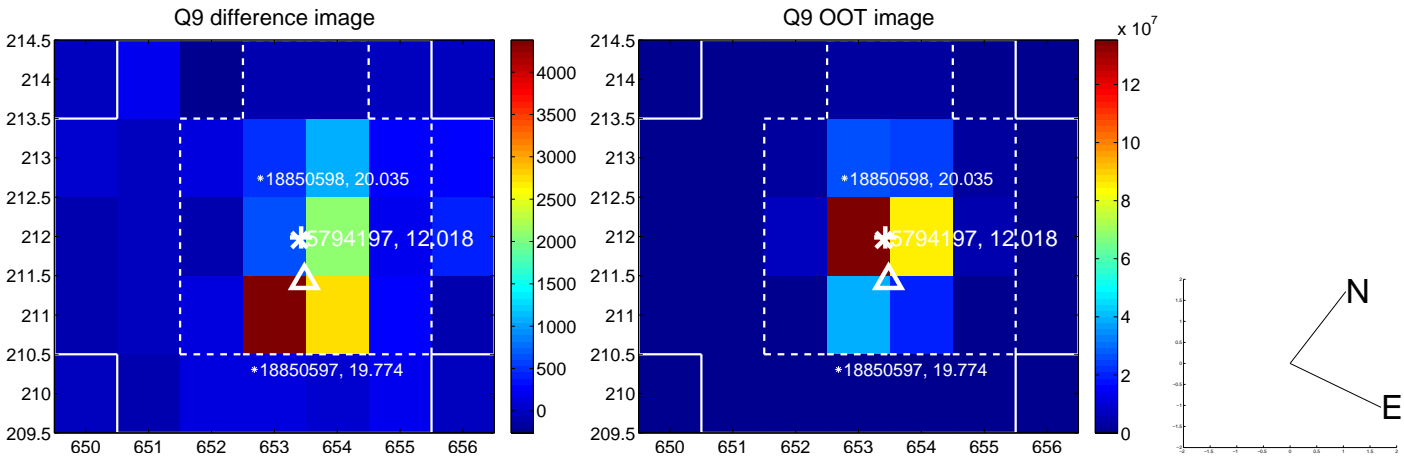
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



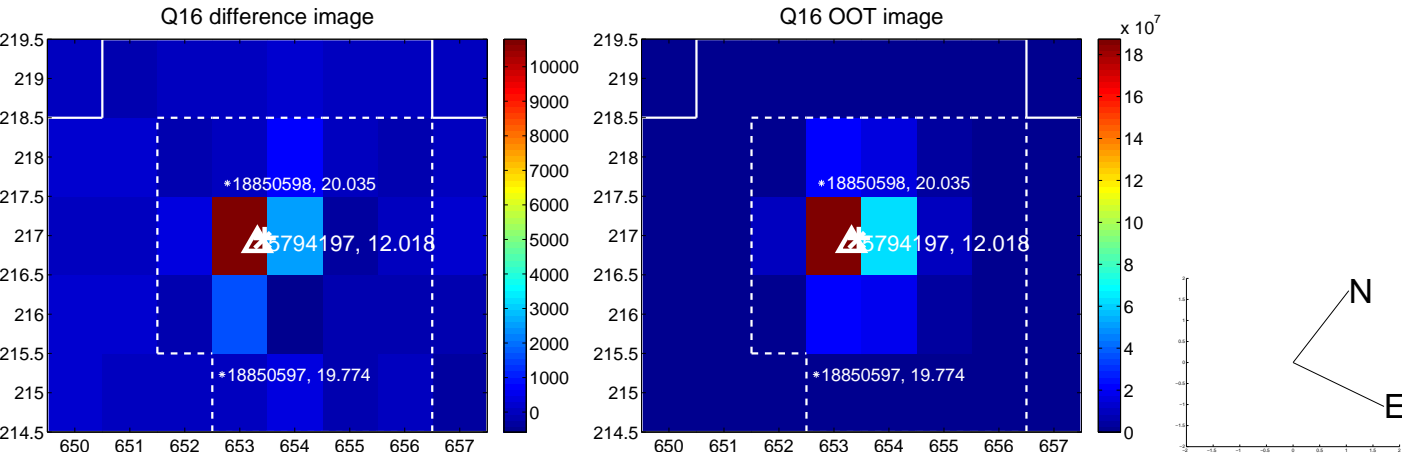
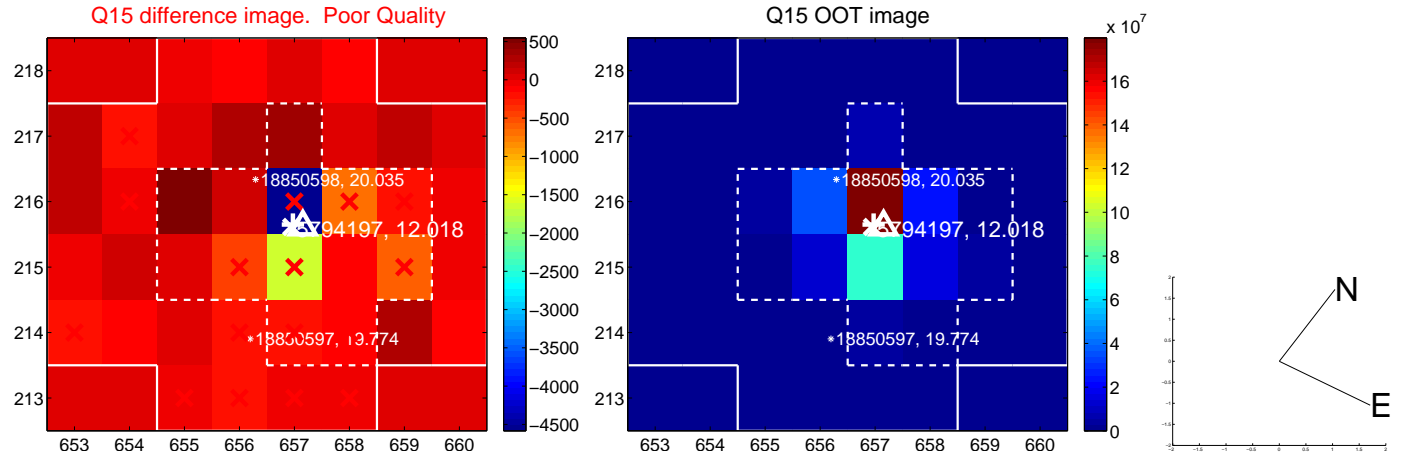
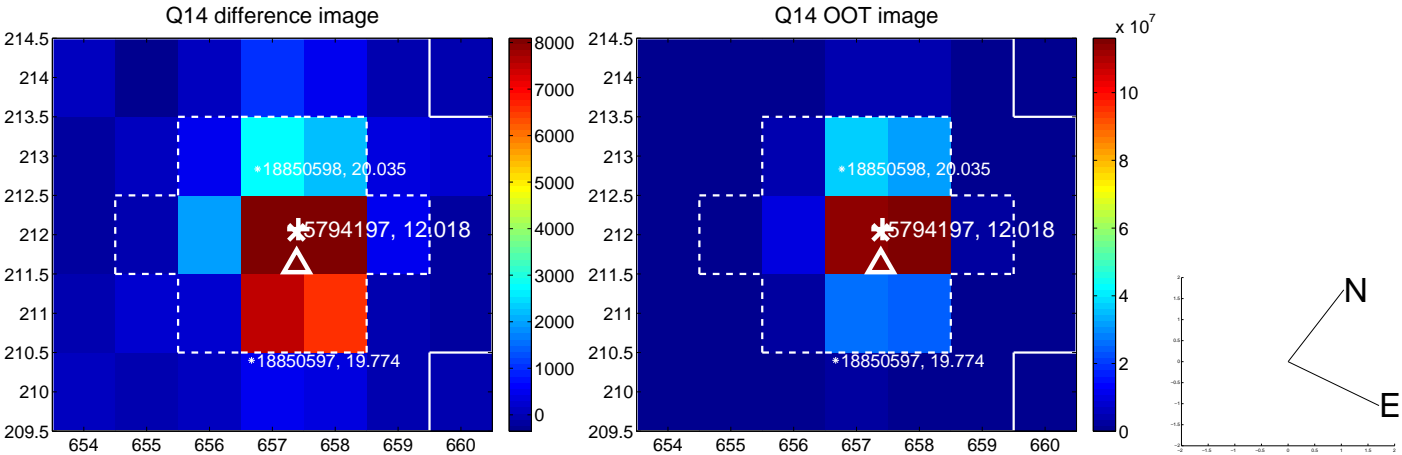
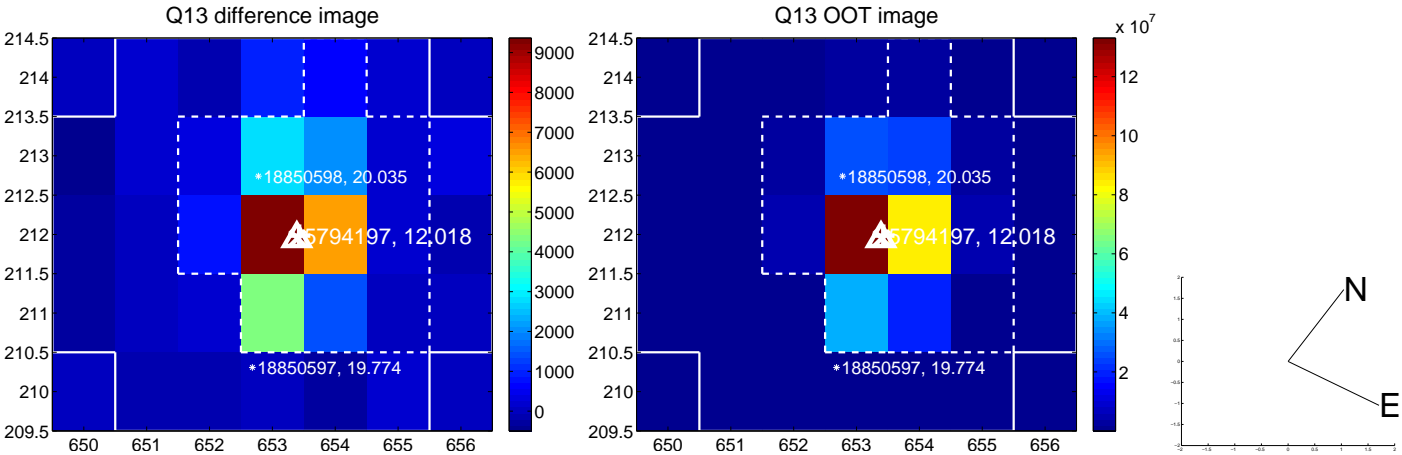
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



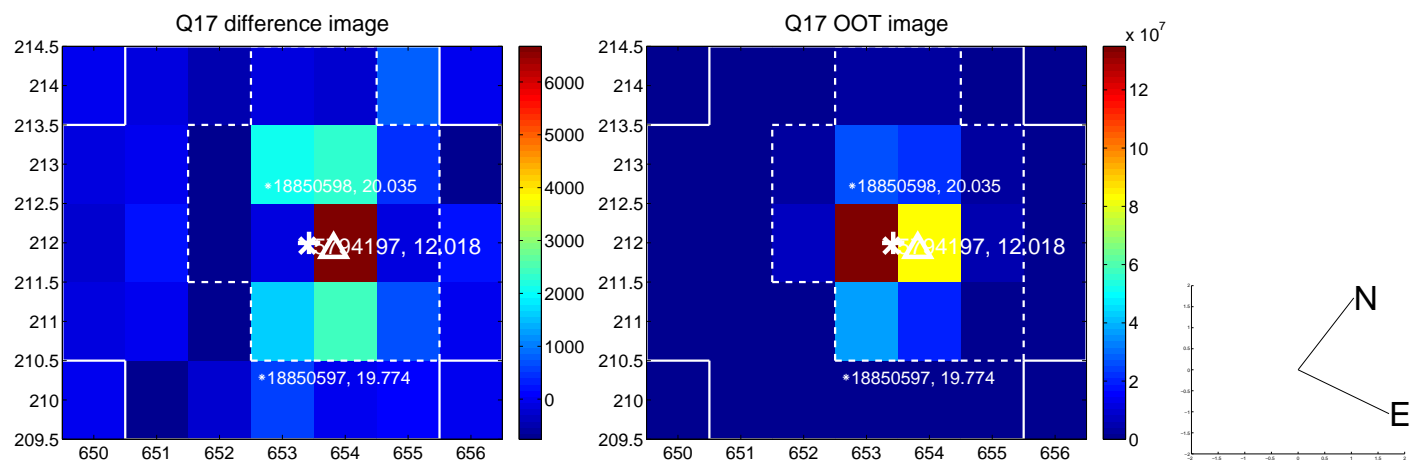
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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



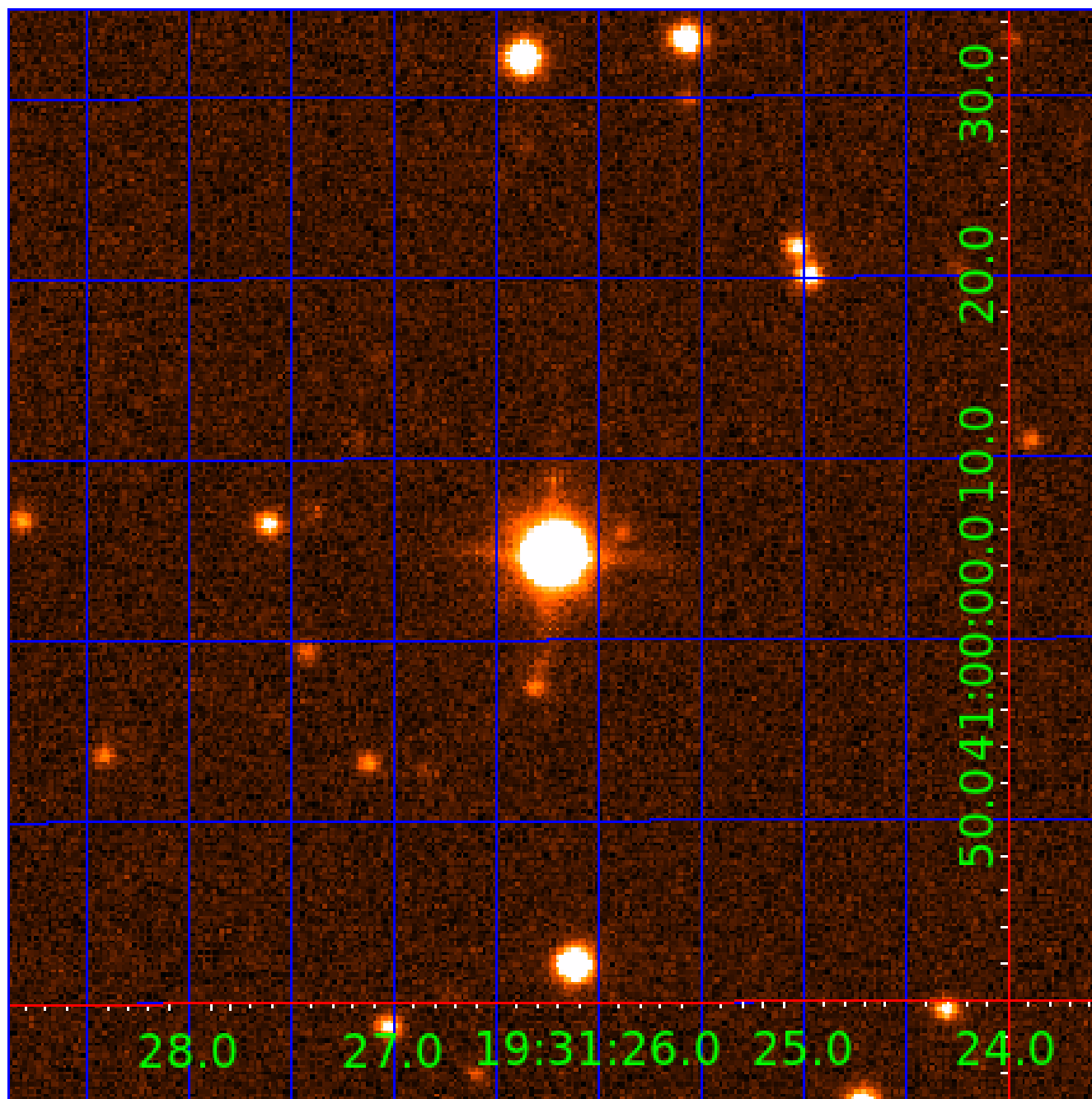
folded centroid time series figure for this object.





UKIRT Image

Declination



# KIC 005794197

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
005794197-01	OBS	No	1.476719	132.528067	50.5	4.676	11.3	12.2	1.36	7196	1.12	6083.15
005794197-02	OBS	No	1.476736	132.856926	49.8	2.621	11.7	12.1	1.36	7196	1.10	6083.05
005794197-03	OBS	No	1.476793	132.304661	98.9	10.772	11.8	14.6	1.36	7196	1.56	6082.74
005794197-04	OBS	No	10.902672	133.407382	166.8	1.032	24.9	6.6	1.36	7196	1.96	423.14
005794197-06	OBS	No	33.252374	143.369530	500.6	3.000	18.7	-1.0	1.36	7196	3.08	95.67

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005794197-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005794197-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—SWEET_NTL—LPP_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
005794197-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_DV—SAME_NTL_PERIOD
005794197-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
005794197-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

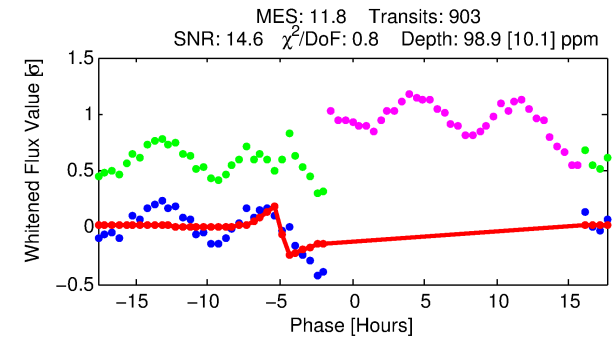
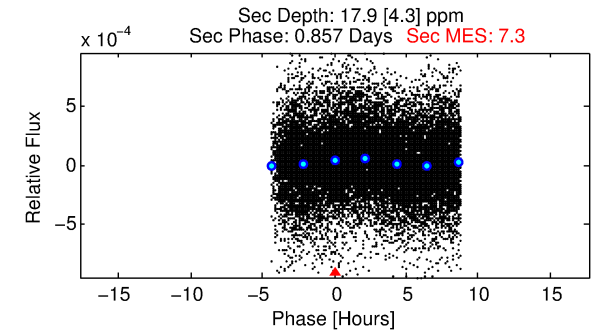
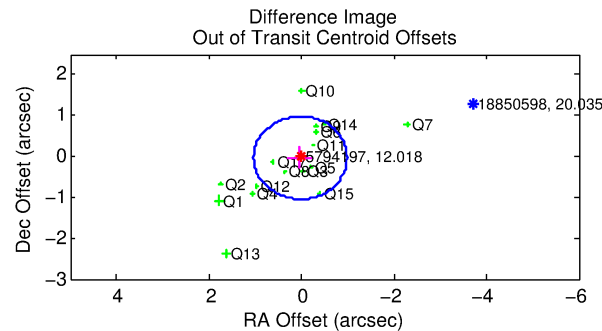
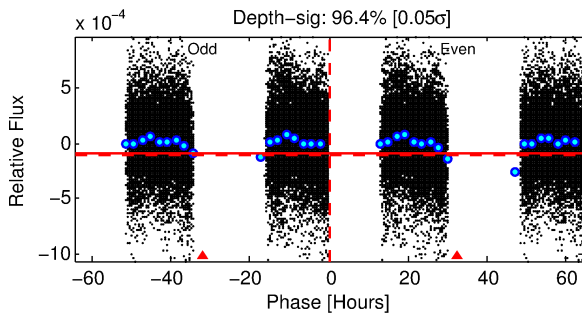
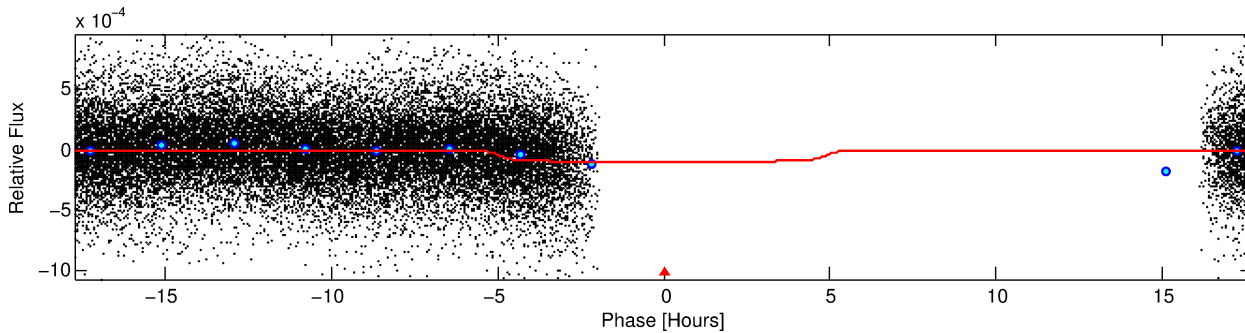
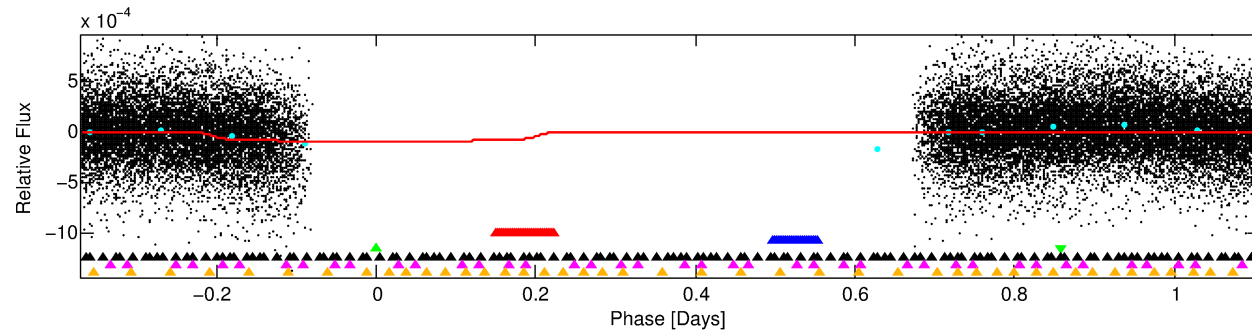
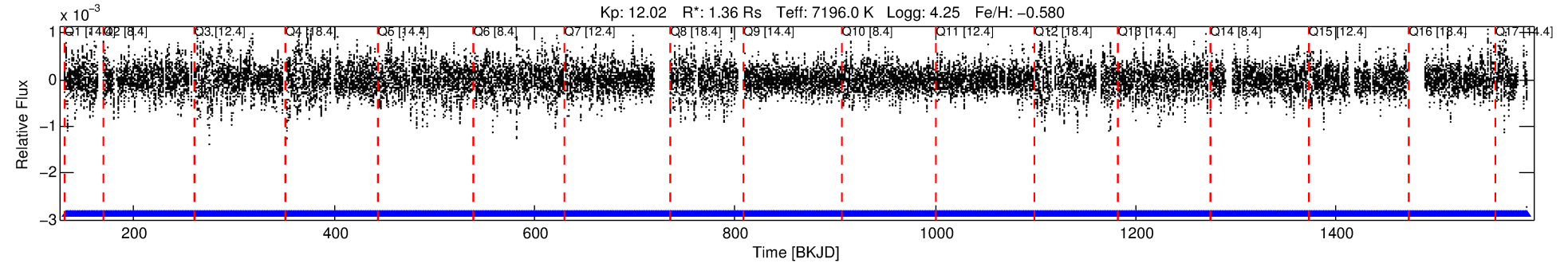
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

Ephemeris Match Information For 005794197-03

No Significant Match Found

# DV One-Page Summary

KIC: 5794197 Candidate: 3 of 6 Period: 1.477 d



## DV Fit Results:

Period = 1.47679 [0.00001] d  
Epoch = 132.3047 [0.0303] BKJD  
Rp/R\* = 0.0106 [0.0008]  
a/R\* = 1.06 [0.03]  
b = 0.90 [0.10]  
Seff = 6082.74 [2166.92]  
Teq = 2252 [201] K  
Rp = 1.57 [0.44] Re  
a = 0.0270 [0.0062] AU  
Ag = 2.92 [1.27] [1.51 $\sigma$ ]  
Teffp = 4551 [353] K [5.66 $\sigma$ ]

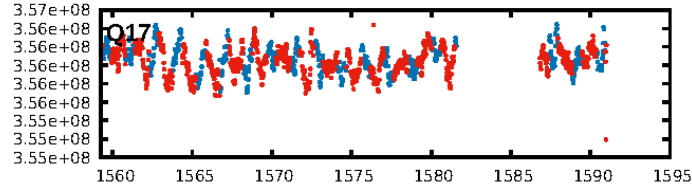
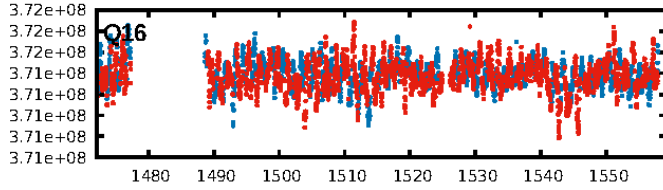
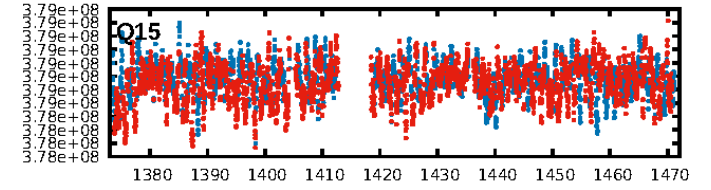
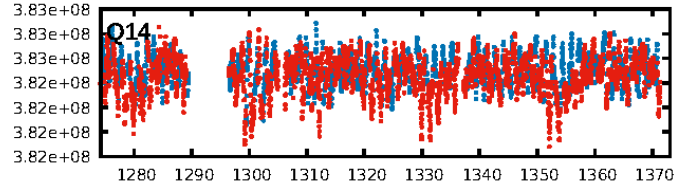
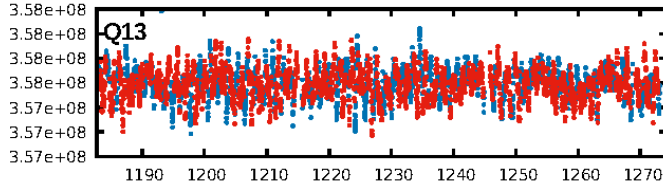
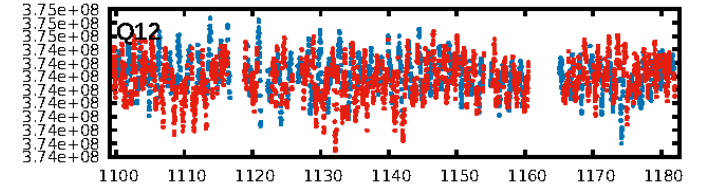
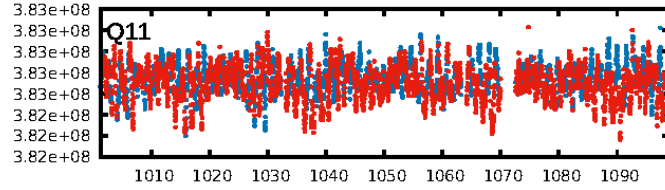
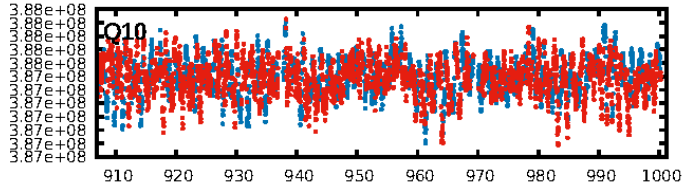
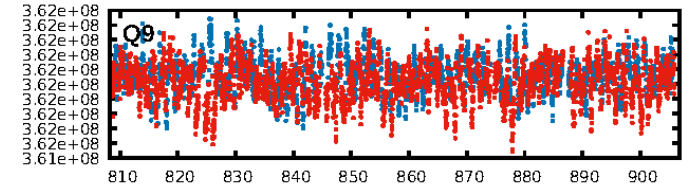
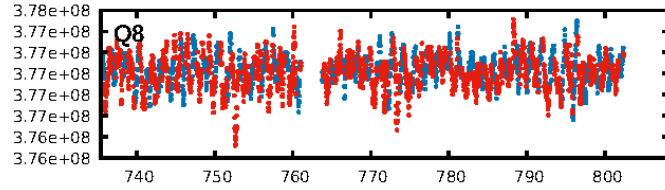
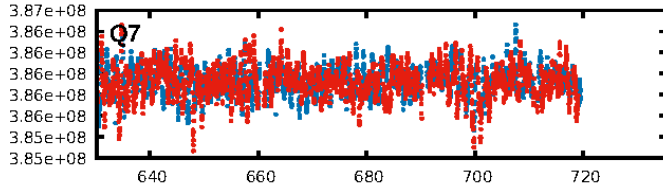
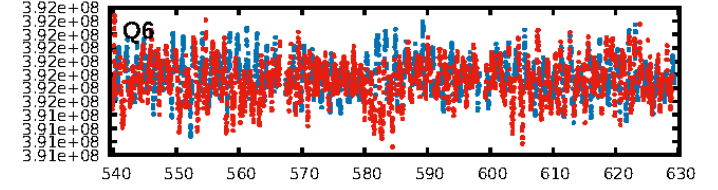
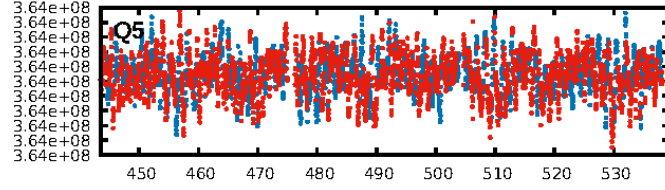
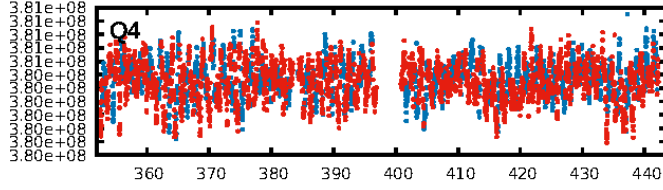
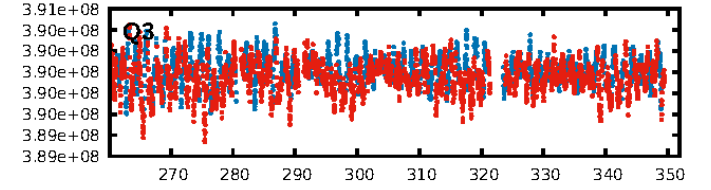
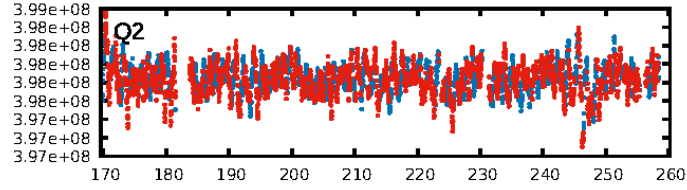
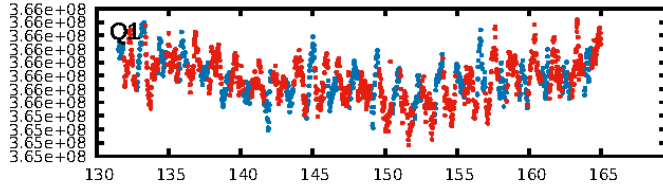
## DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00 $\sigma$ ]  
LongPeriod-sig: 100.0% [20.90 $\sigma$ ]  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: N/A  
RollingBand-fgt: 1.00 [863/863]  
GhostDiagnostic-chr: 2.5  
Centroid-sig: N/A  
Centroid-so: N/A  
OotOffset-rm: 0.042 arcsec [0.12 $\sigma$ ]  
KicOffset-rm: 0.133 arcsec [0.67 $\sigma$ ]  
OotOffset-st: 4/4/3/5 [16]  
KicOffset-st: 4/4/3/5 [16]  
DiffImageQuality-fgm: 0.88 [14/16]  
DiffImageOverlap-fno: 0.00 [0/17]

Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 10:23:50 Z

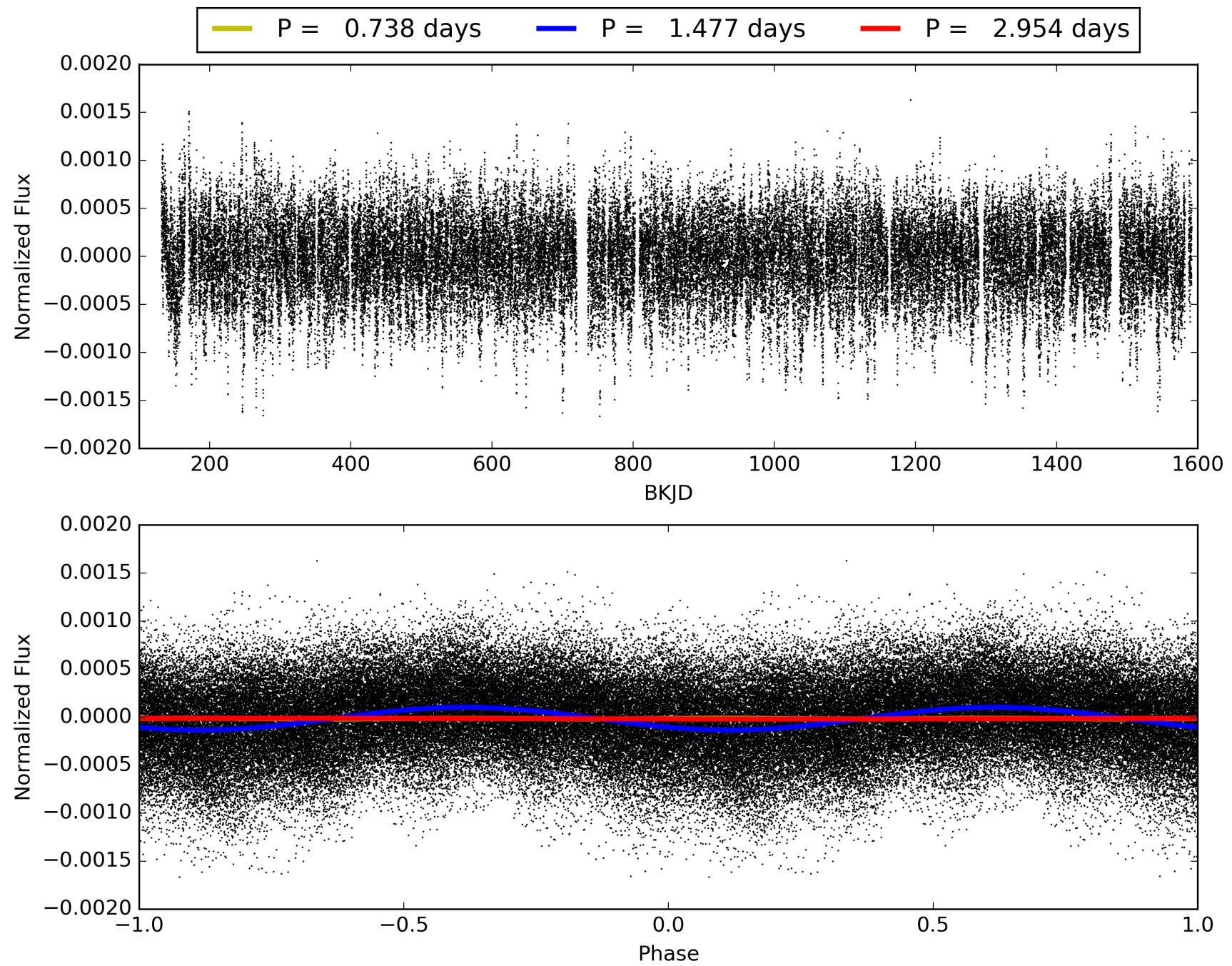
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

# TCE 005794197-03, PDC Light Curves





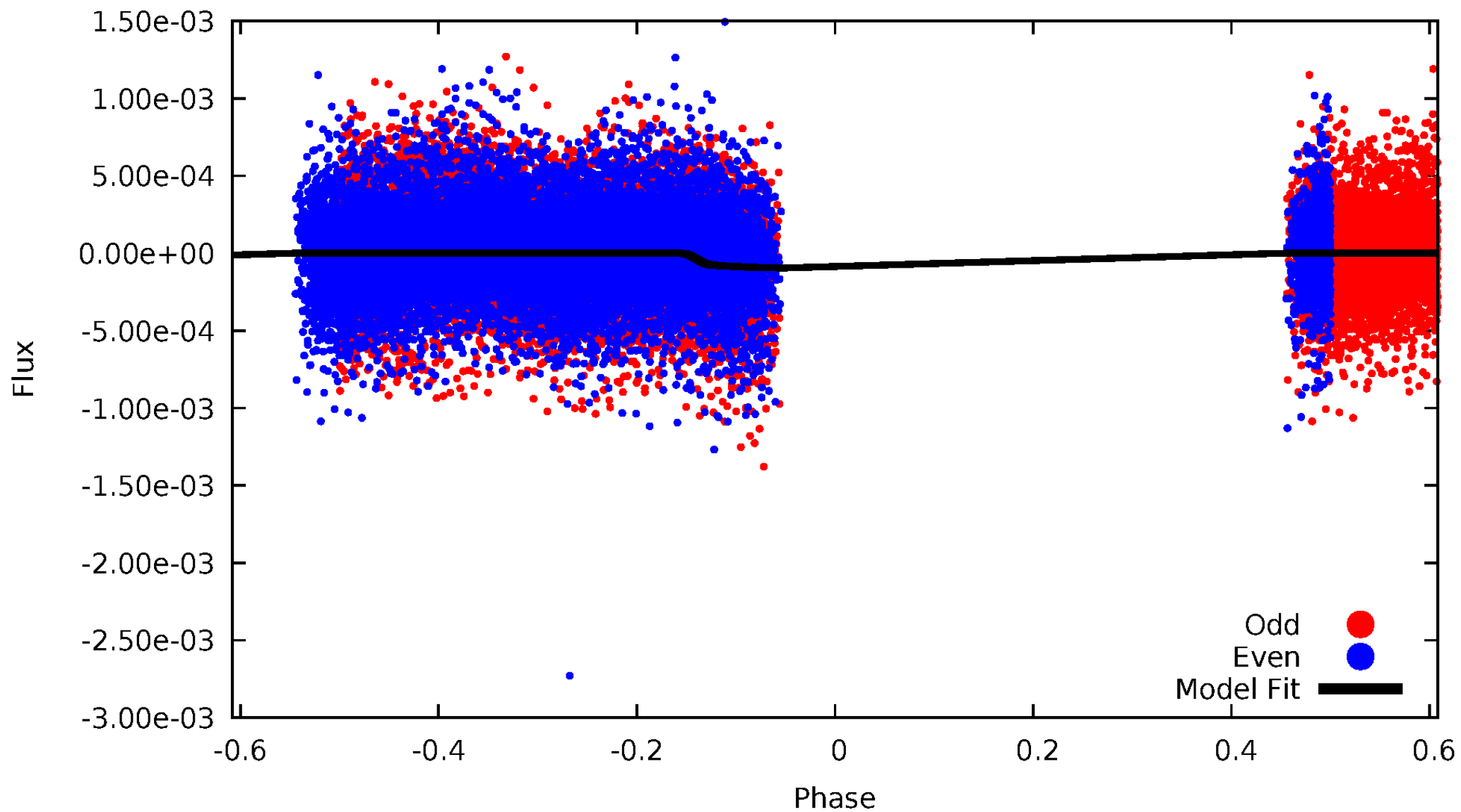
TCE 005794197-03





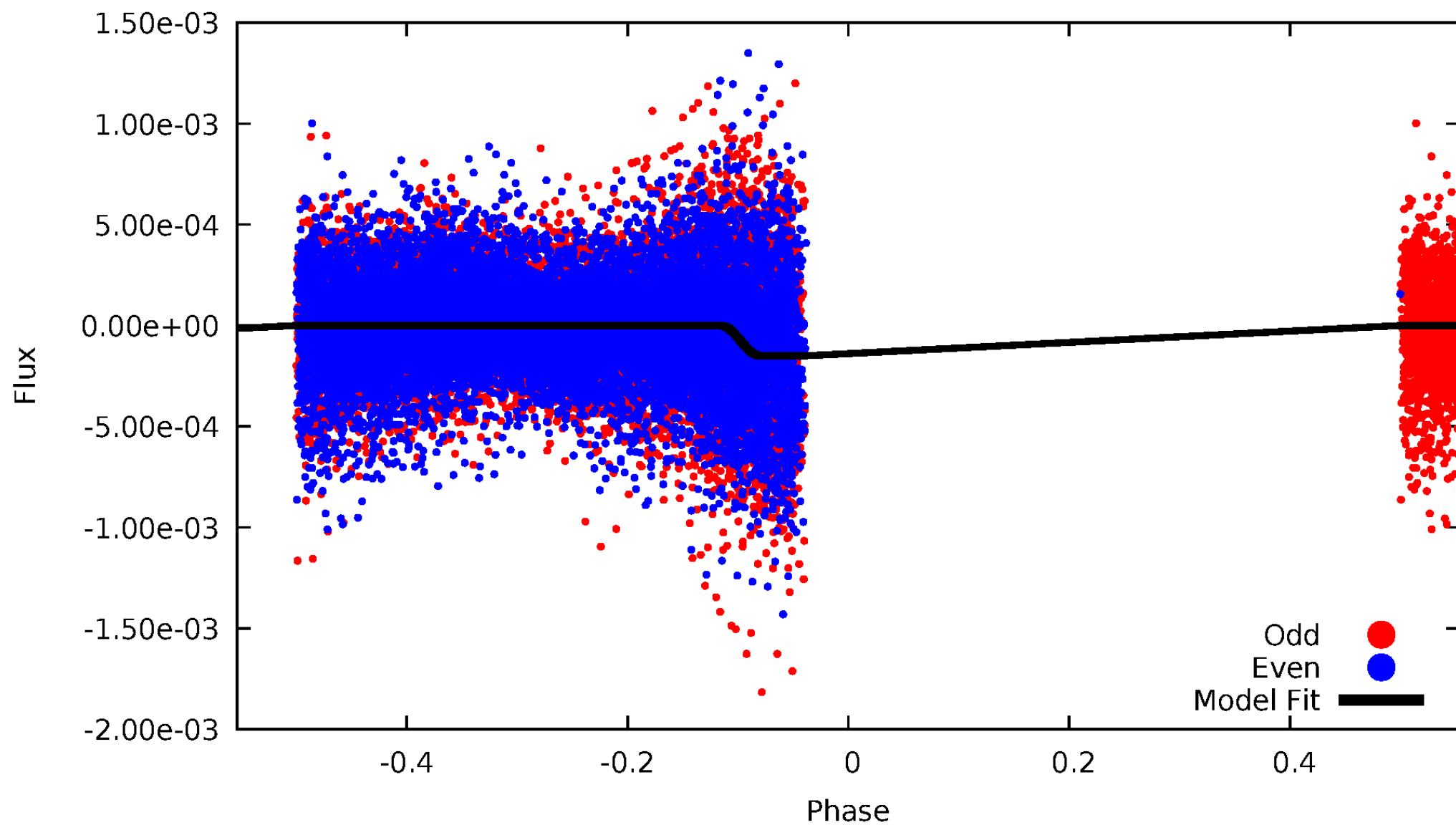
# DV Odd/Even

TCE 005794197-03

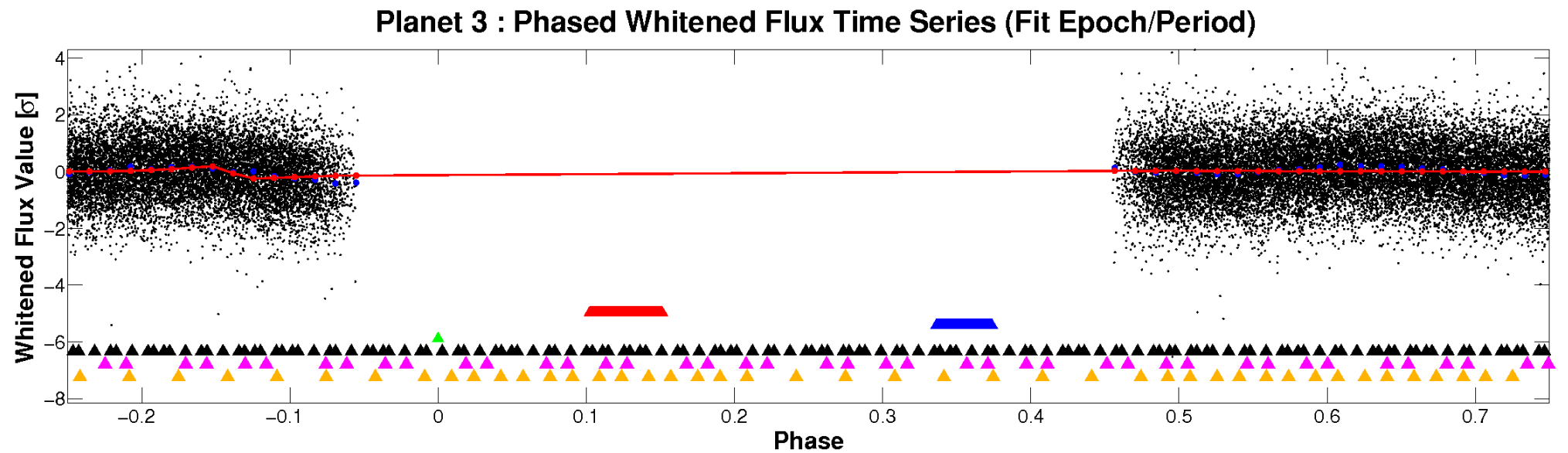
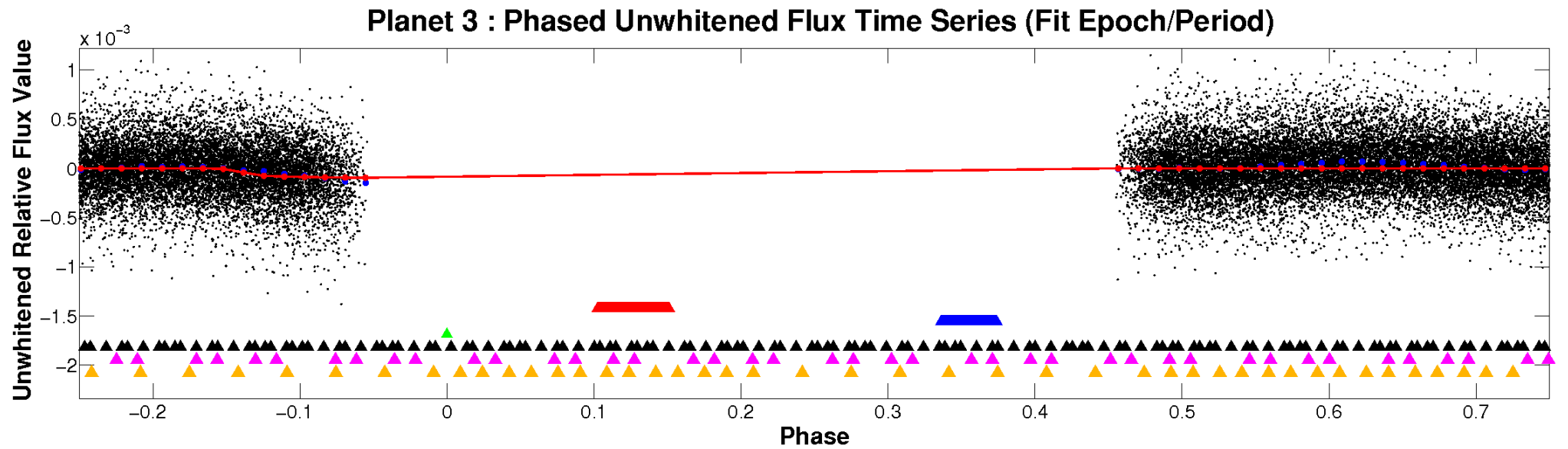


# ALT Odd/Even

TCE 005794197-03

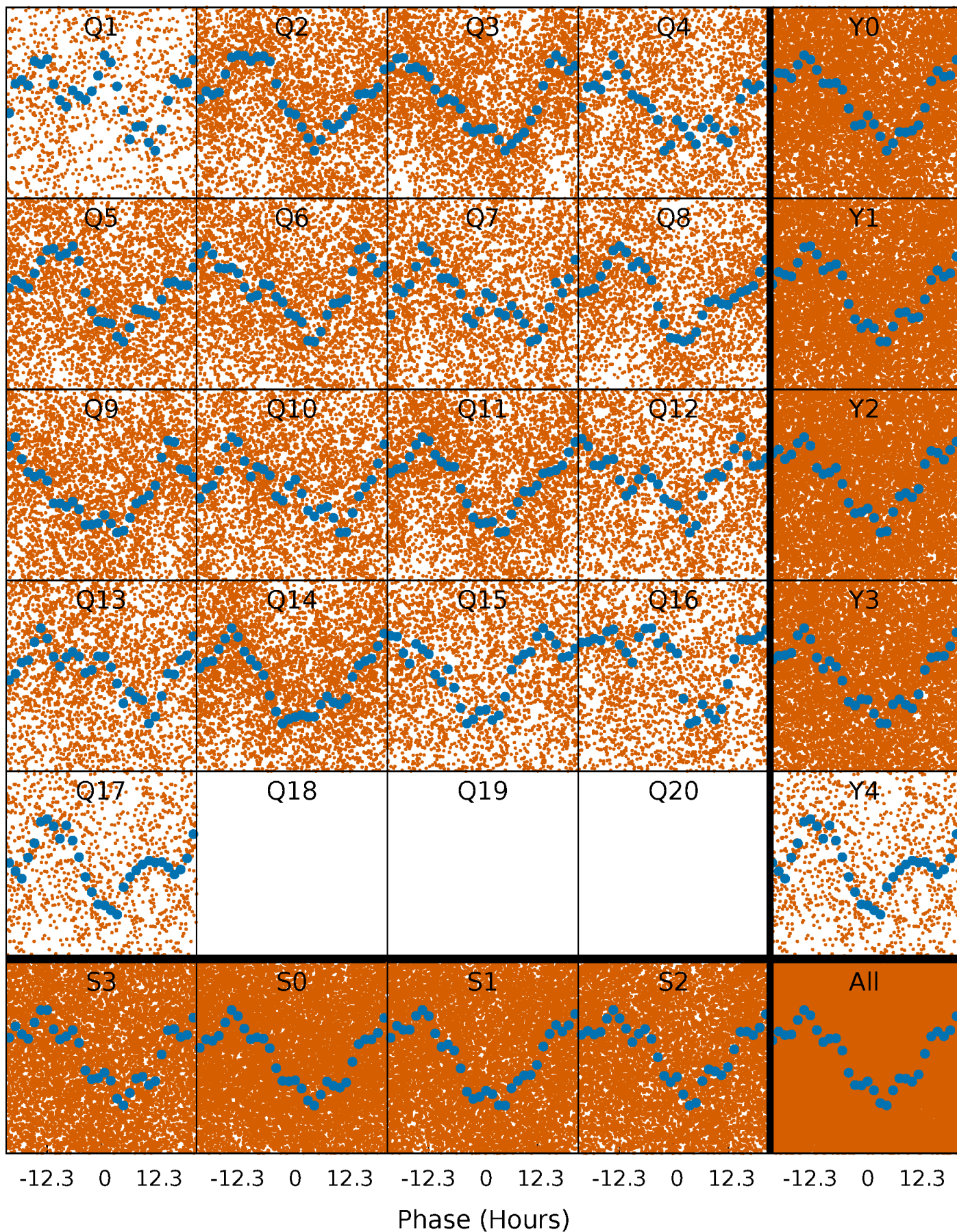


# Non-Whitened Vs. Whitened Light Curve



# PDC Quarter-Phased Transit Curves

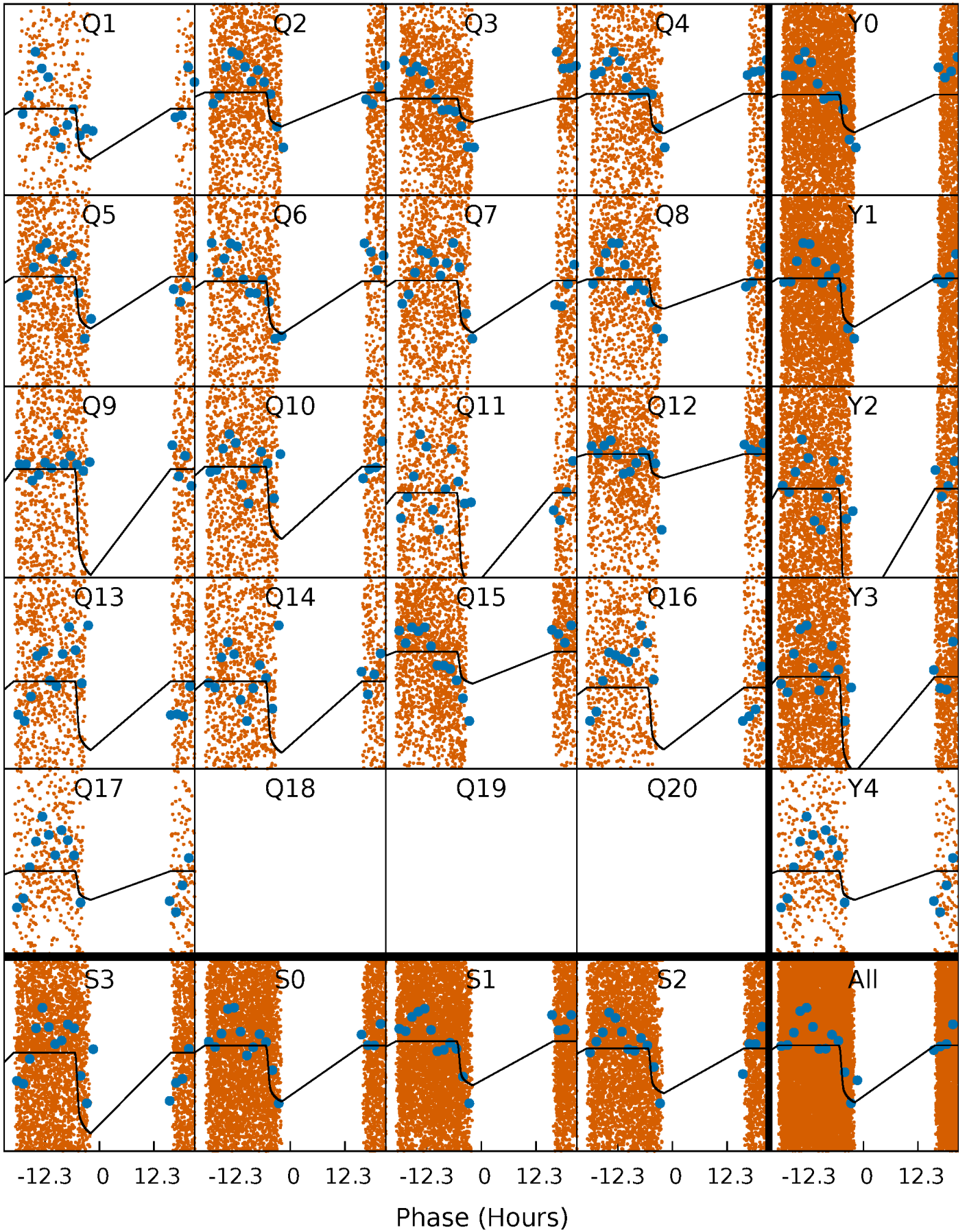
TCE 005794197-03   P= 1.476793 Days    $T_0=132.304661$  (BKJD)





# DV Quarter-Phased Transit Curves

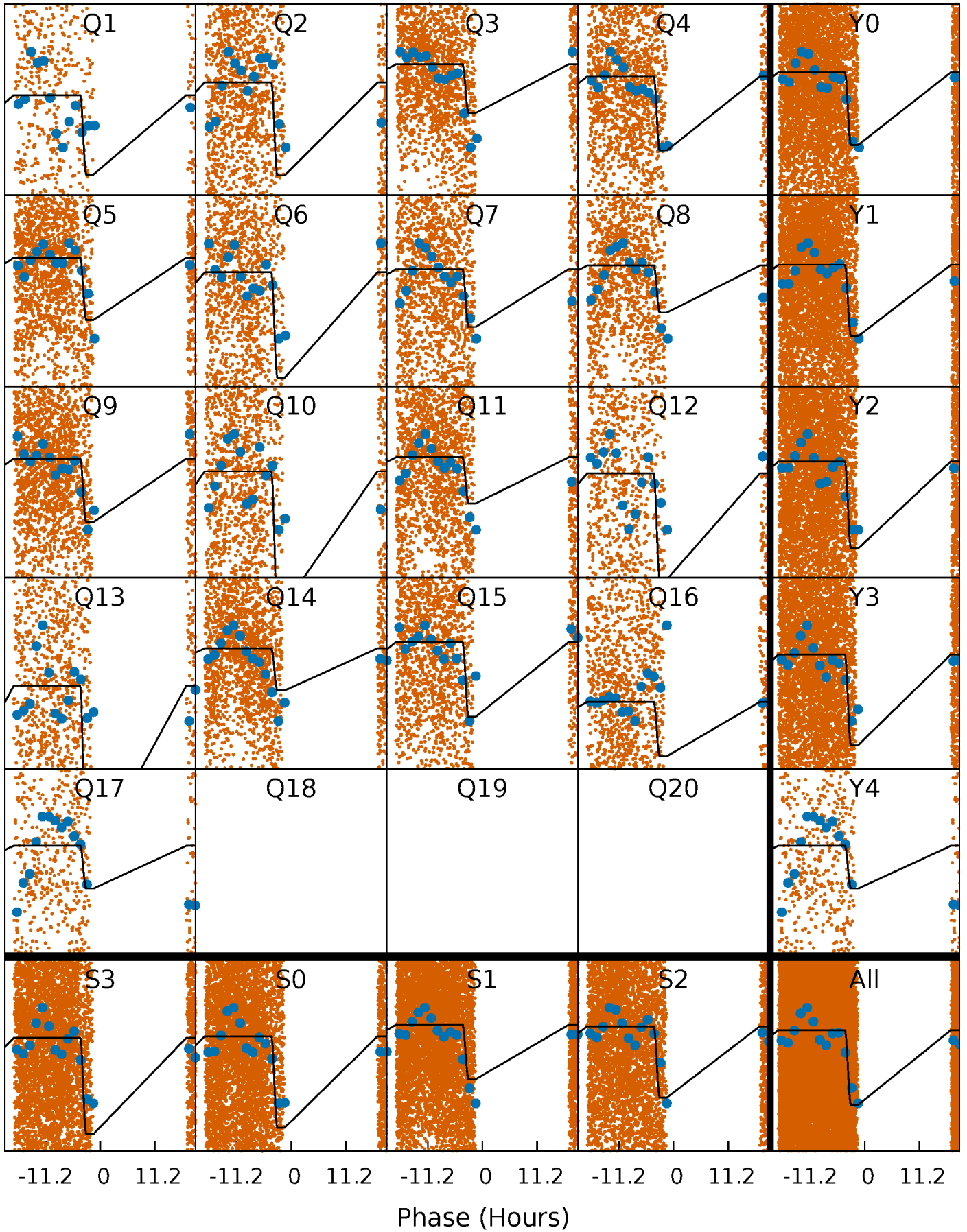
TCE 005794197-03 P= 1.476793 Days  $T_0=132.304661$  (BKJD)





# Alt. Detrend Quarter-Phased Transit Curves

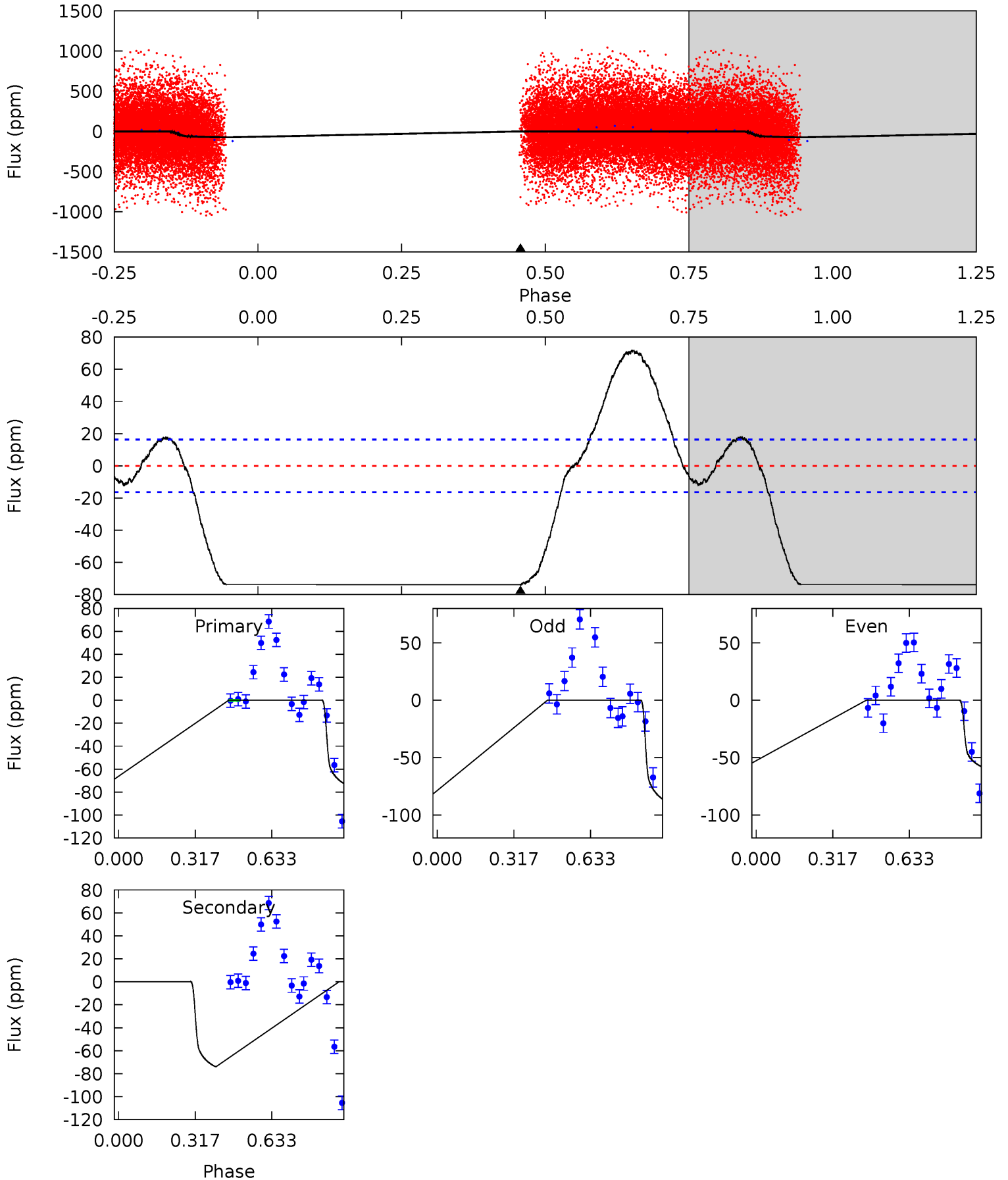
TCE 005794197-03 P= 1.476749 Days  $T_0=132.281315$  (BKJD)



# DV Model-Shift Uniqueness Test

005794197-03, P = 1.476793 Days, E = 130.827868 Days

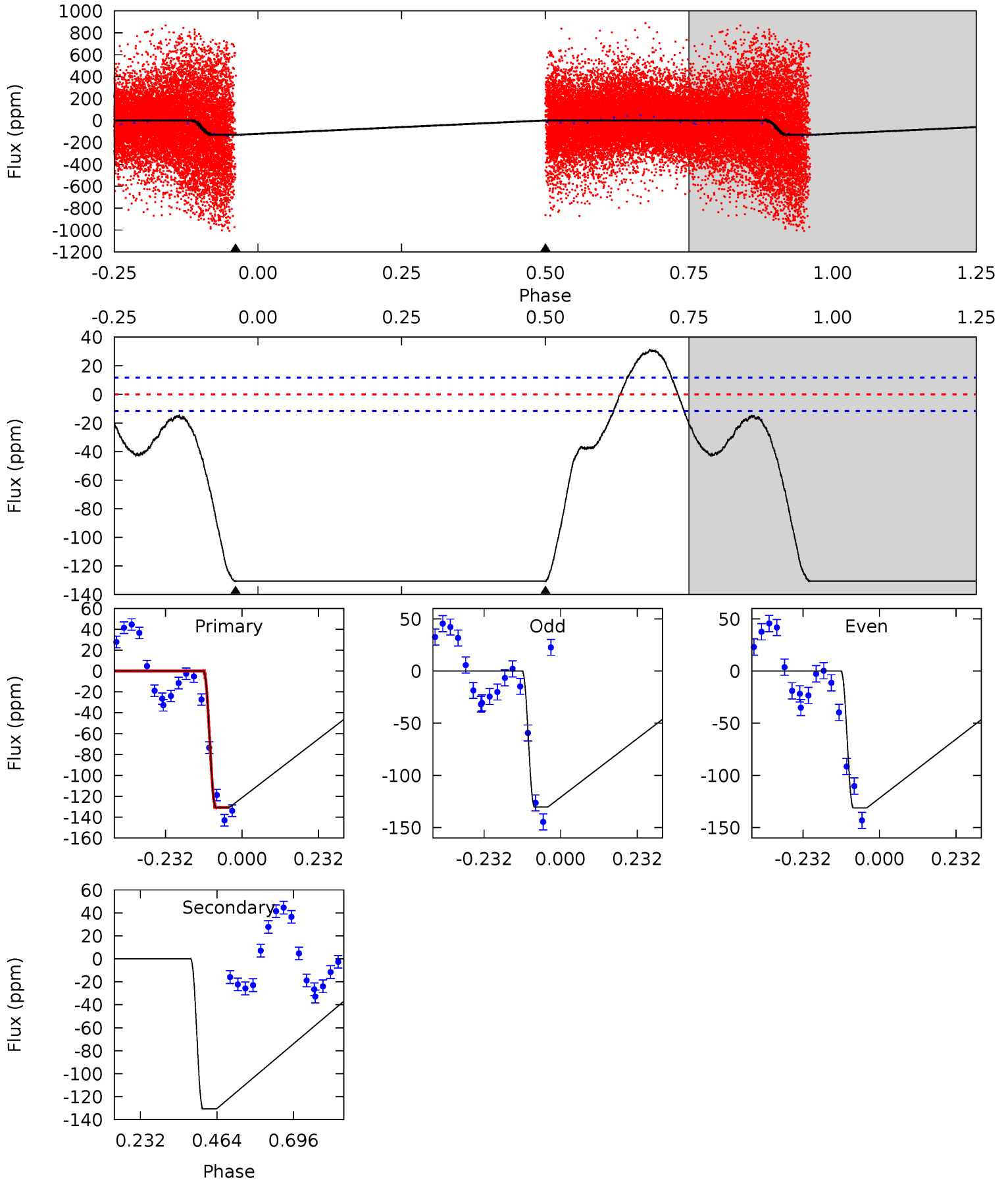
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.6	19.6	0	0	4.32	1.00	6.12	19.6	19.6	19.6	19.6	3.85	0	0.49	0



# Alt Model-Shift Uniqueness Test

005794197-03, P = 1.476749 Days, E = 130.804566 Days

Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
49.1	49.1	0	0	4.39	1.20	5.19	49.1	49.1	49.1	49.1	0.17	0	0.19	0



### Stellar Parameters For KIC 005794197

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$7196^{+193}_{-236}$	$4.252^{+0.120}_{-0.180}$	$-0.580^{+0.250}_{-0.300}$	$1.358^{+0.372}_{-0.248}$	$1.203^{+0.173}_{-0.142}$	$0.676^{+0.428}_{-0.322}$
	+3%/-3%	+3%/-4%	+43%/-52%	+27%/-18%	+14%/-12%	+63%/-48%
Source	PHO1	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 005794197-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	$A_{\text{obs}}$
DV	$-74 \pm 4$	$1.59^{+0.25}_{-0.20}$	$3151^{+237}_{-182}$	$6373^{+336}_{-319}$	$12^{+3}_{-3}$
Alt.	$-131 \pm 3$	$1.83^{+0.31}_{-0.20}$	$3156^{+237}_{-195}$	$6868^{+316}_{-322}$	$16^{+4}_{-4}$

$T_{\text{max}}$  = Theoretical Maximum Planetary Temperature

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

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

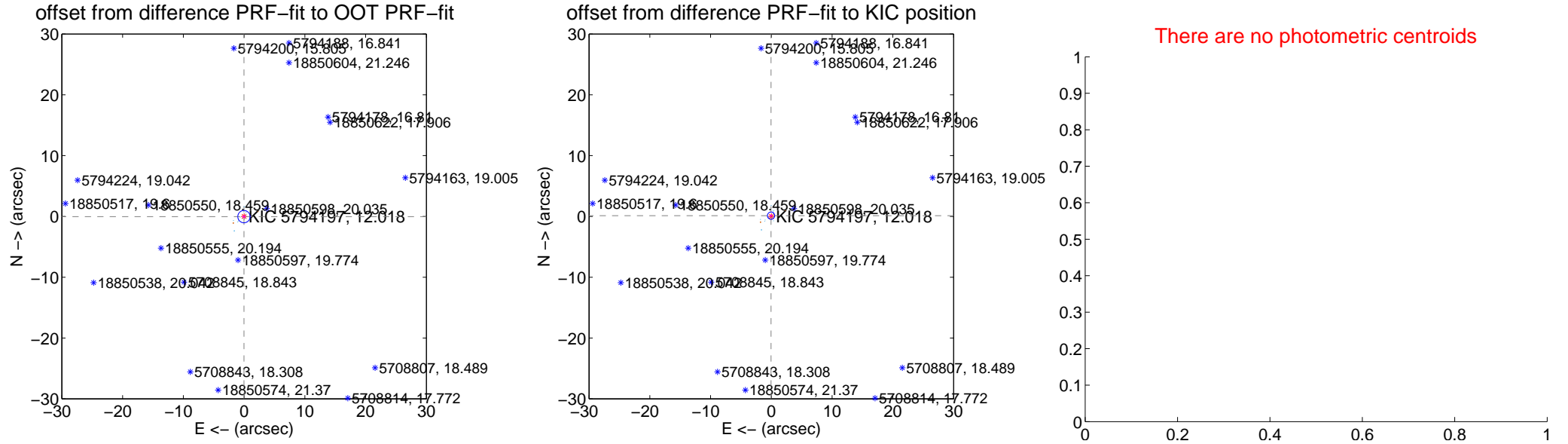
## DV Centroid Data

Supplemental centroid analysis for 005794197-03. Kepler magnitude: 12.02. Transit SNR 14.56

There are 14 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.042 \pm 0.338$	0.12	$0.026 \pm 0.278$	$-0.033 \pm 0.251$
PRF-fit source offset from KIC position	$0.133 \pm 0.199$	0.67	$0.045 \pm 0.213$	$0.125 \pm 0.197$
photometric centroid source offset	—	—	—	—

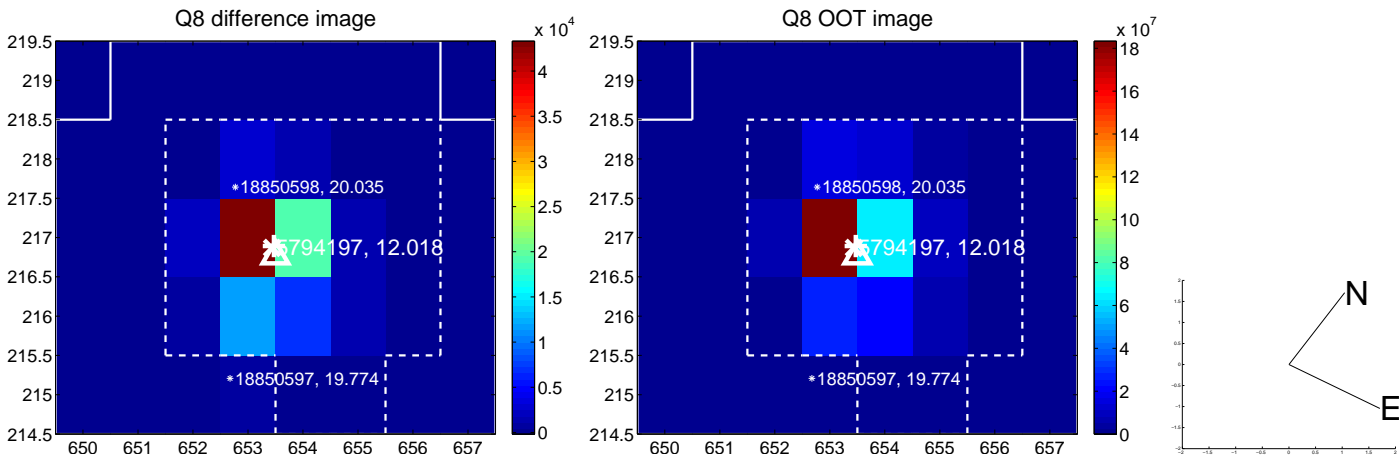
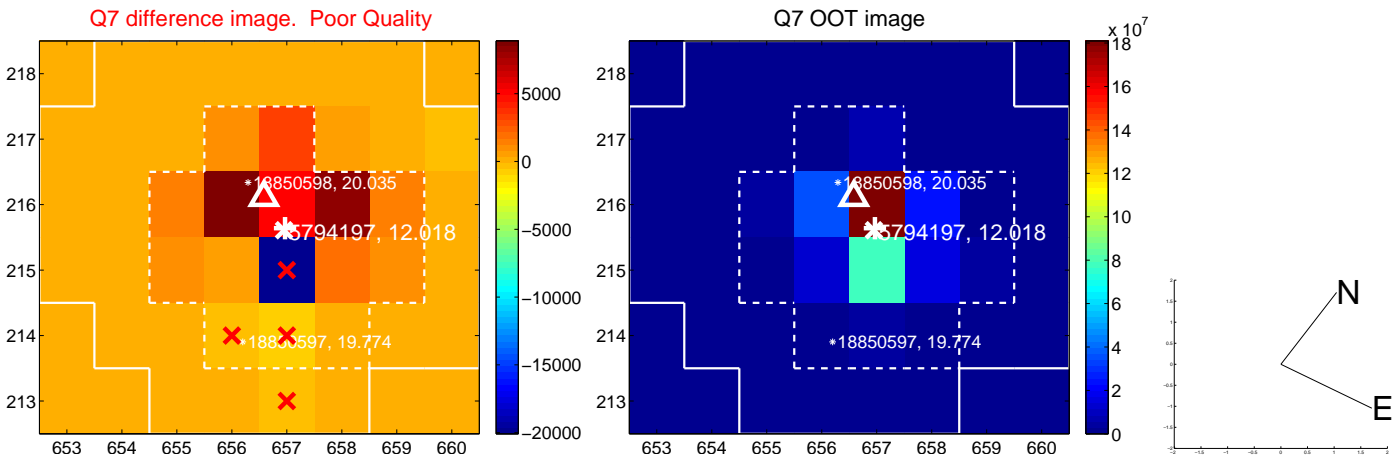
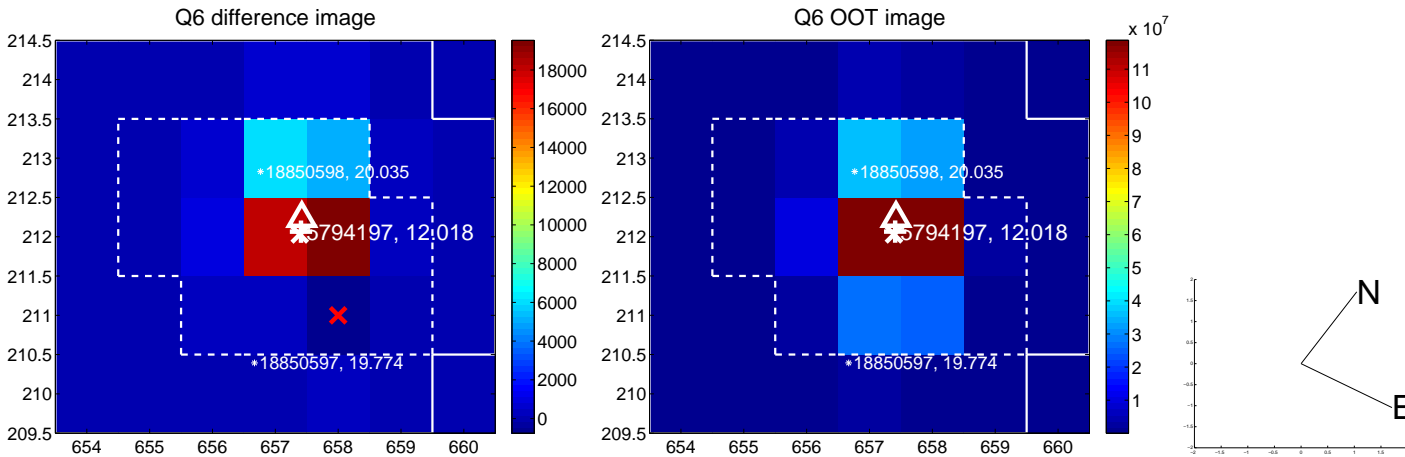
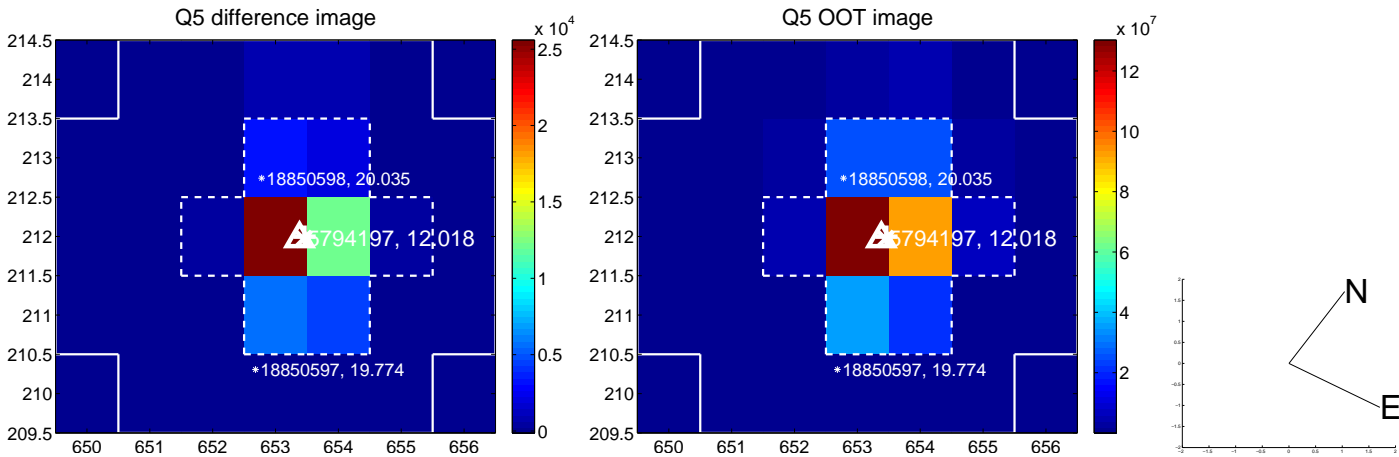


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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

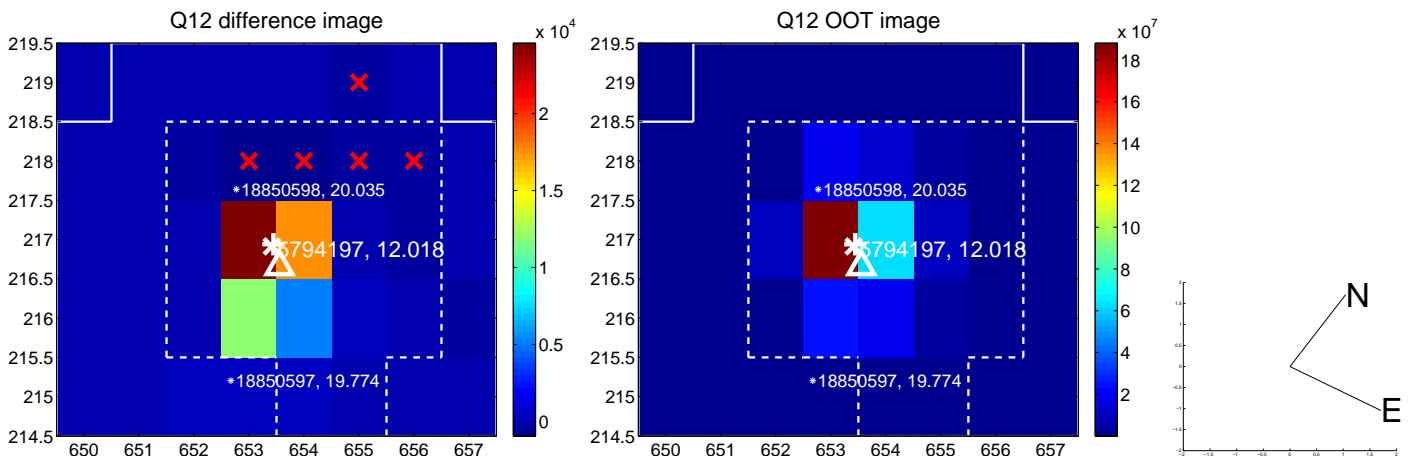
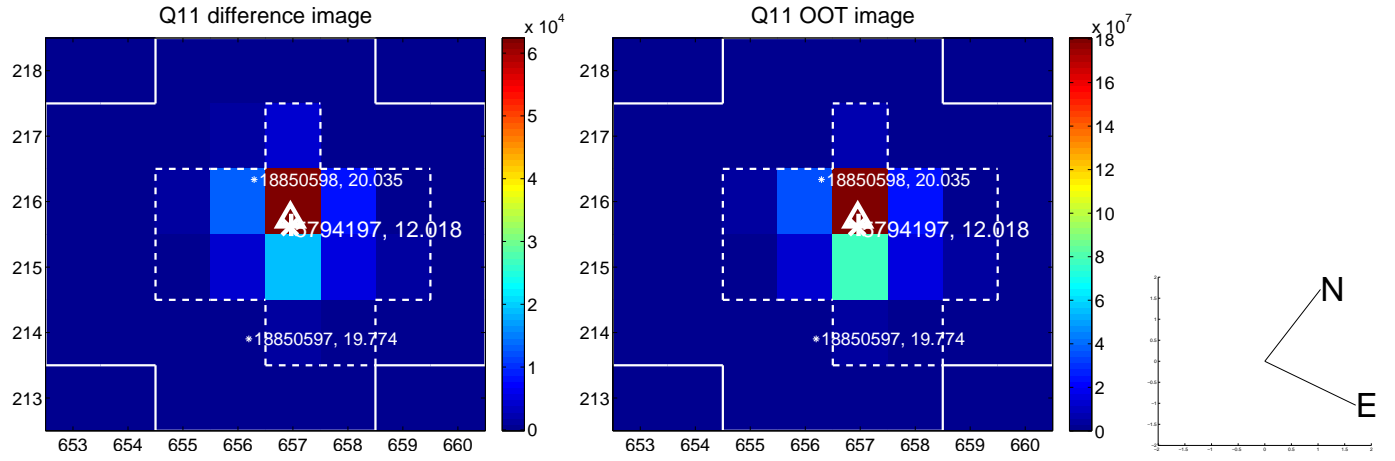
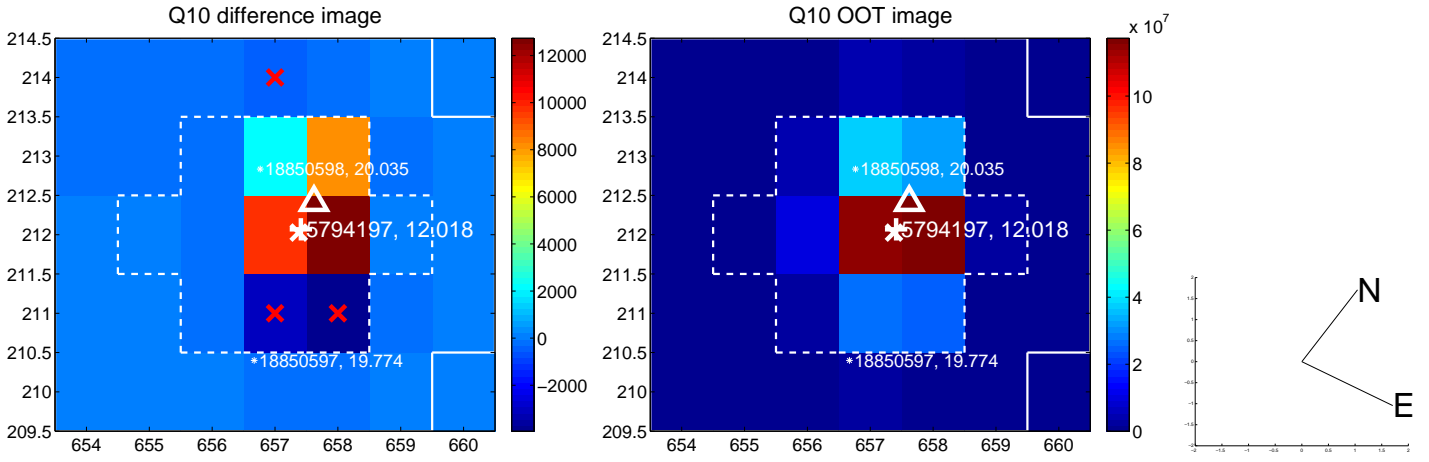
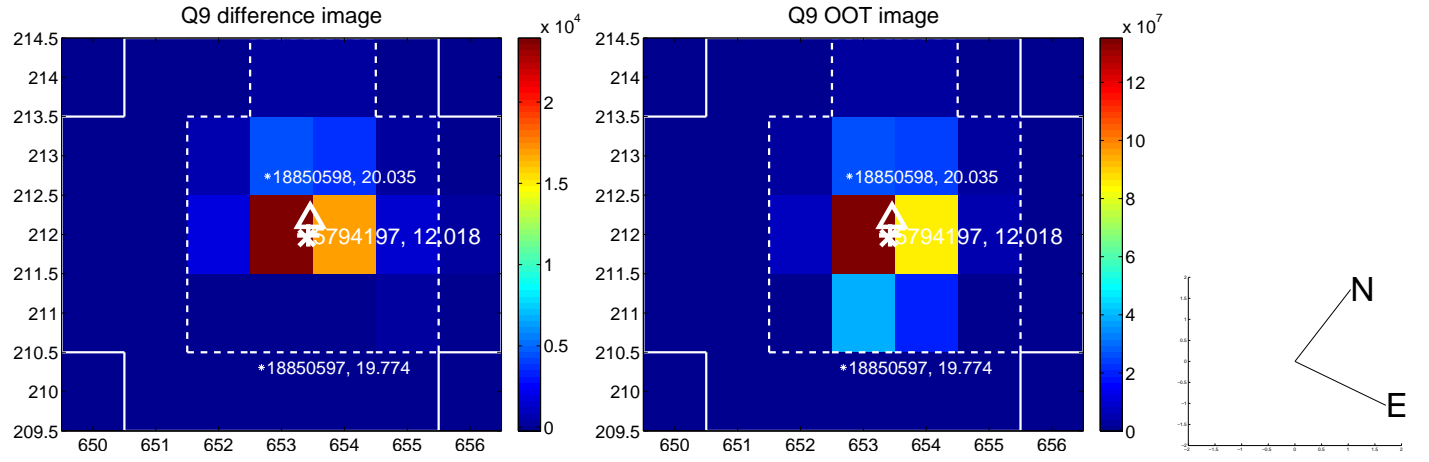




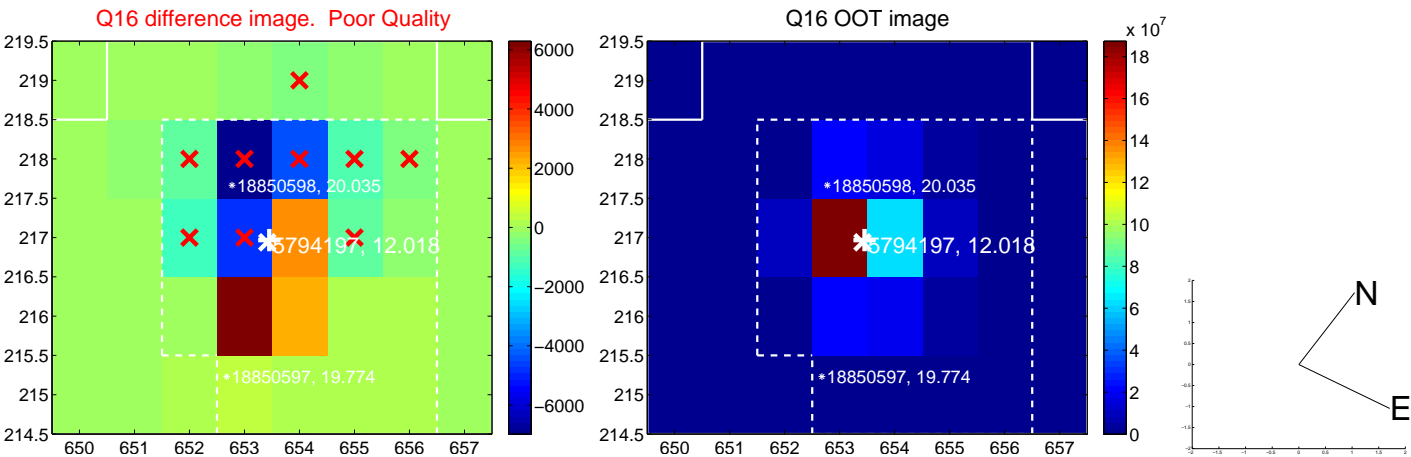
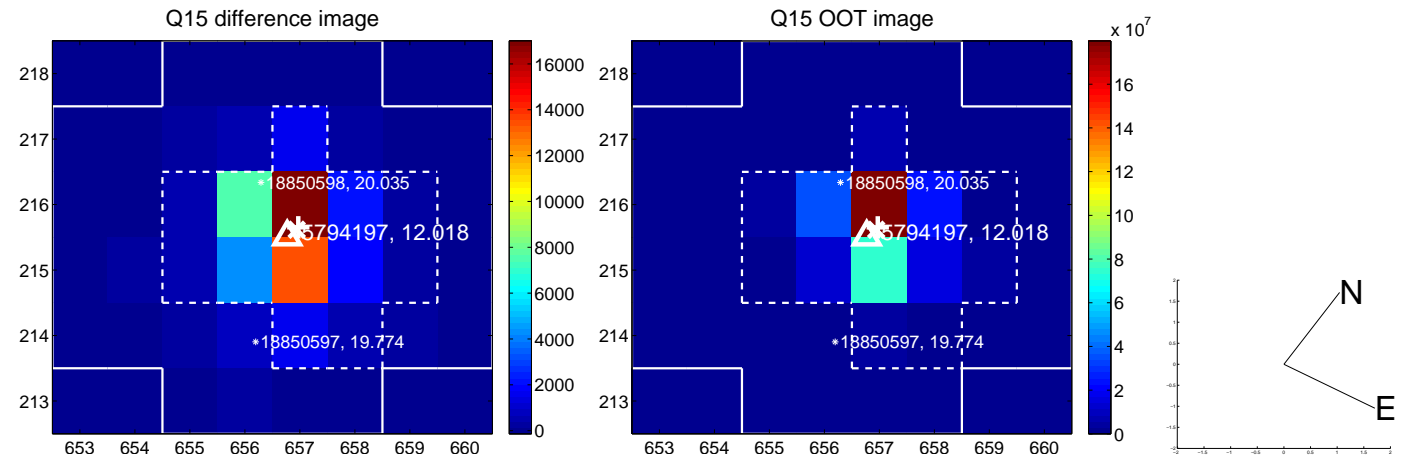
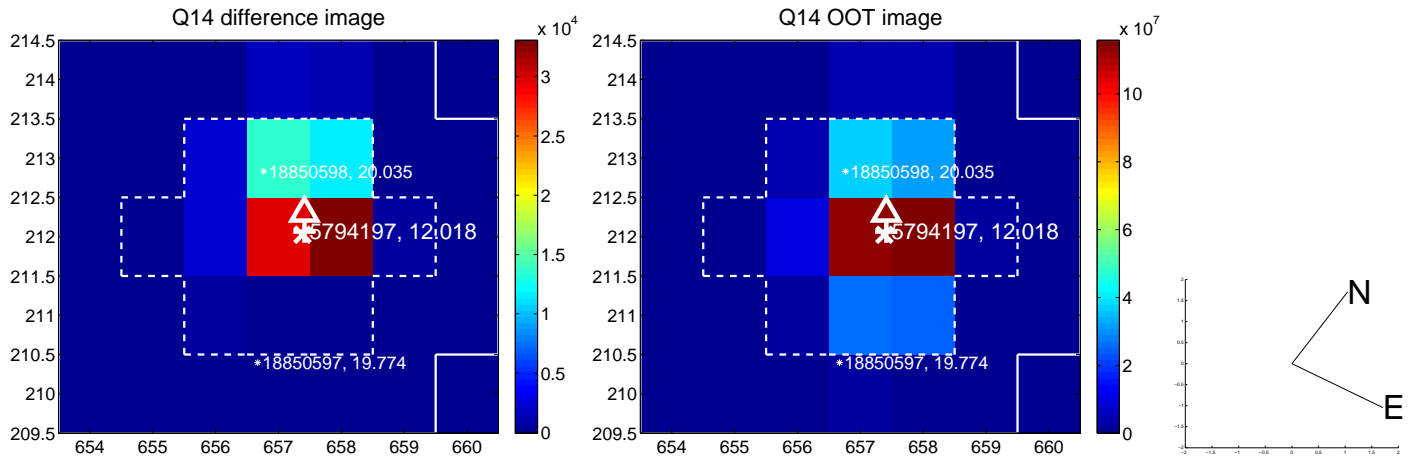
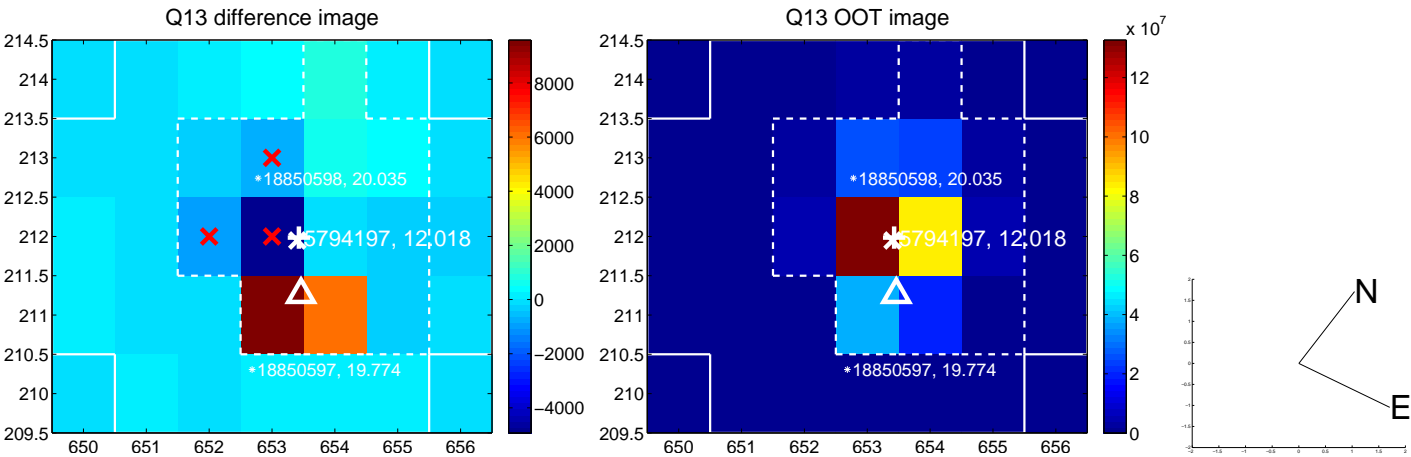
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



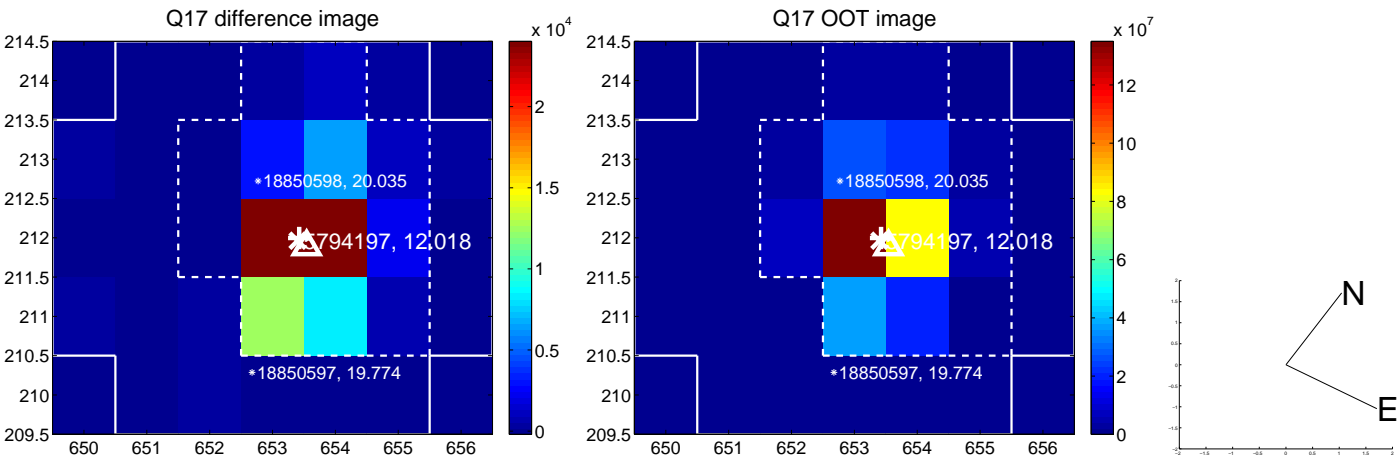
white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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.

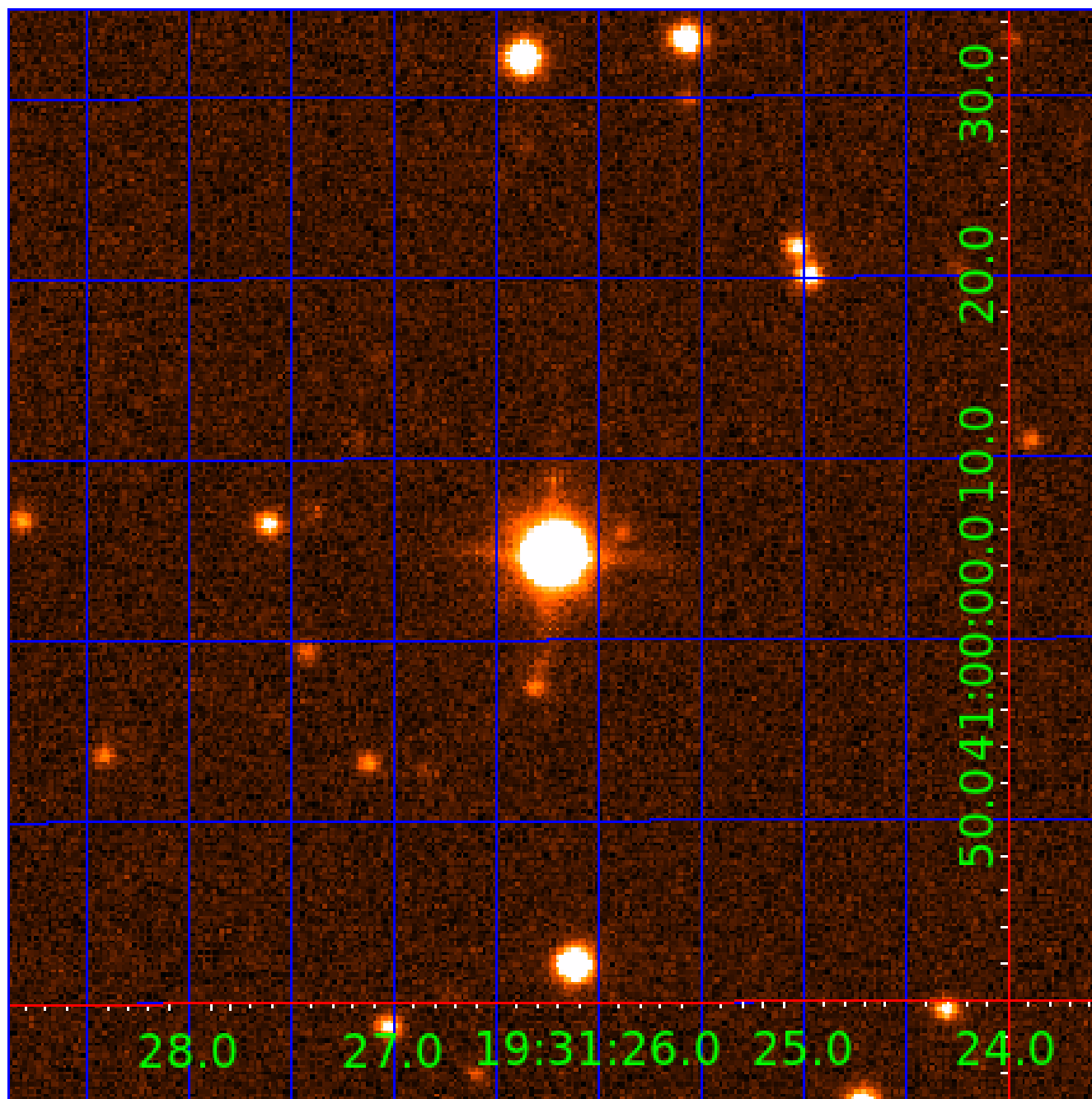


folded centroid time series figure for this object.



UKIRT Image

Declination



# KIC 005794197

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
005794197-01	OBS	No	1.476719	132.528067	50.5	4.676	11.3	12.2	1.36	7196	1.12	6083.15
005794197-02	OBS	No	1.476736	132.856926	49.8	2.621	11.7	12.1	1.36	7196	1.10	6083.05
005794197-03	OBS	No	1.476793	132.304661	98.9	10.772	11.8	14.6	1.36	7196	1.56	6082.74
005794197-04	OBS	No	10.902672	133.407382	166.8	1.032	24.9	6.6	1.36	7196	1.96	423.14
005794197-06	OBS	No	33.252374	143.369530	500.6	3.000	18.7	-1.0	1.36	7196	3.08	95.67

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005794197-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005794197-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—SWEET_NTL—LPP_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
005794197-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_DV—SAME_NTL_PERIOD
005794197-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
005794197-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

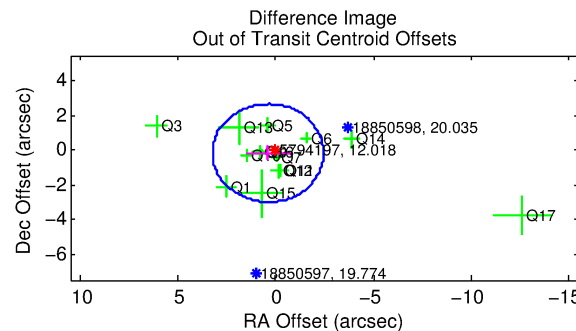
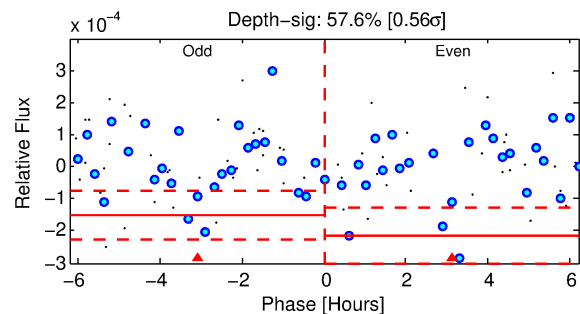
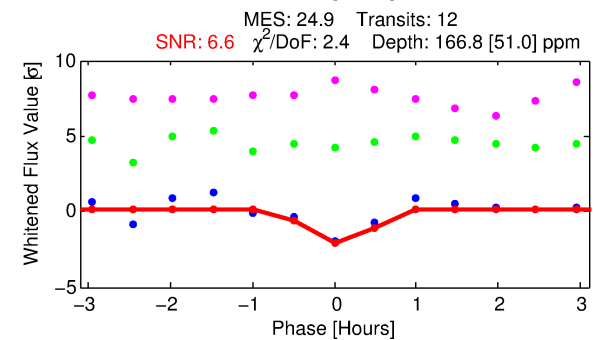
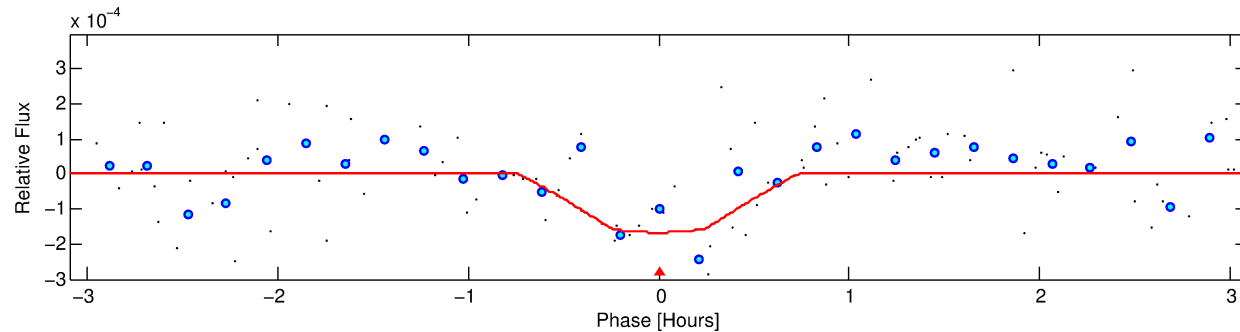
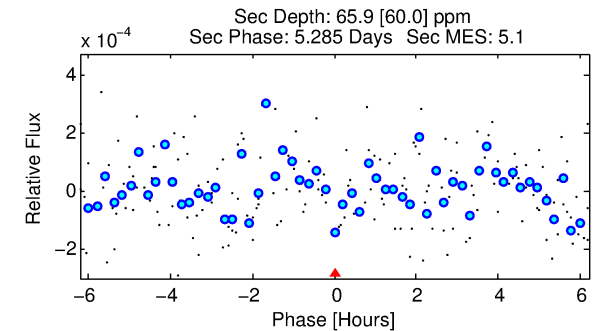
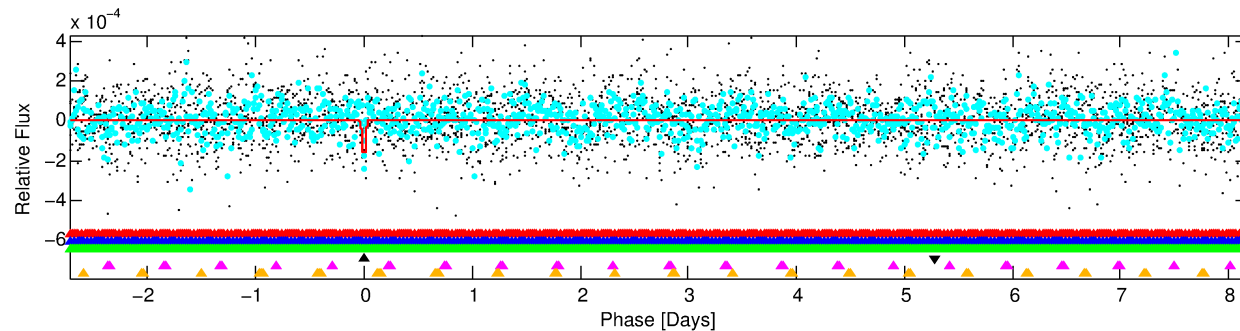
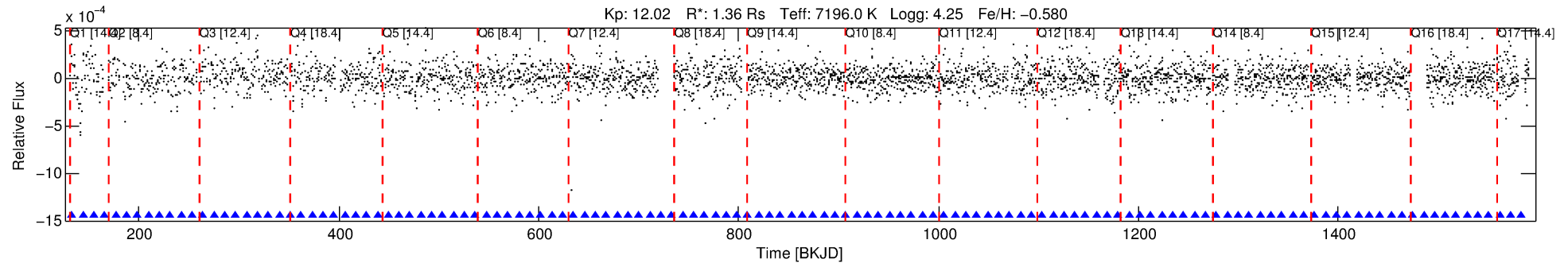
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

Ephemeris Match Information For 005794197-04

No Significant Match Found

# DV One-Page Summary

KIC: 5794197 Candidate: 4 of 6 Period: 10.903 d



## DV Fit Results:

Period = 10.90267 [0.00009] d  
Epoch = 133.4074 [0.0072] BKJD  
Rp/R\* = 0.0132 [0.0110]  
a/R\* = 48.94 [240.33]  
b = 0.81 [2.11]  
Seff = 423.14 [150.74]  
Teq = 1157 [103] K  
Rp = 1.95 [1.71] Re  
a = 0.1023 [0.0234] AU  
Ag = 99.35 [191.28] [0.51σ]  
Teffp = 5645 [2683] K [1.67σ]

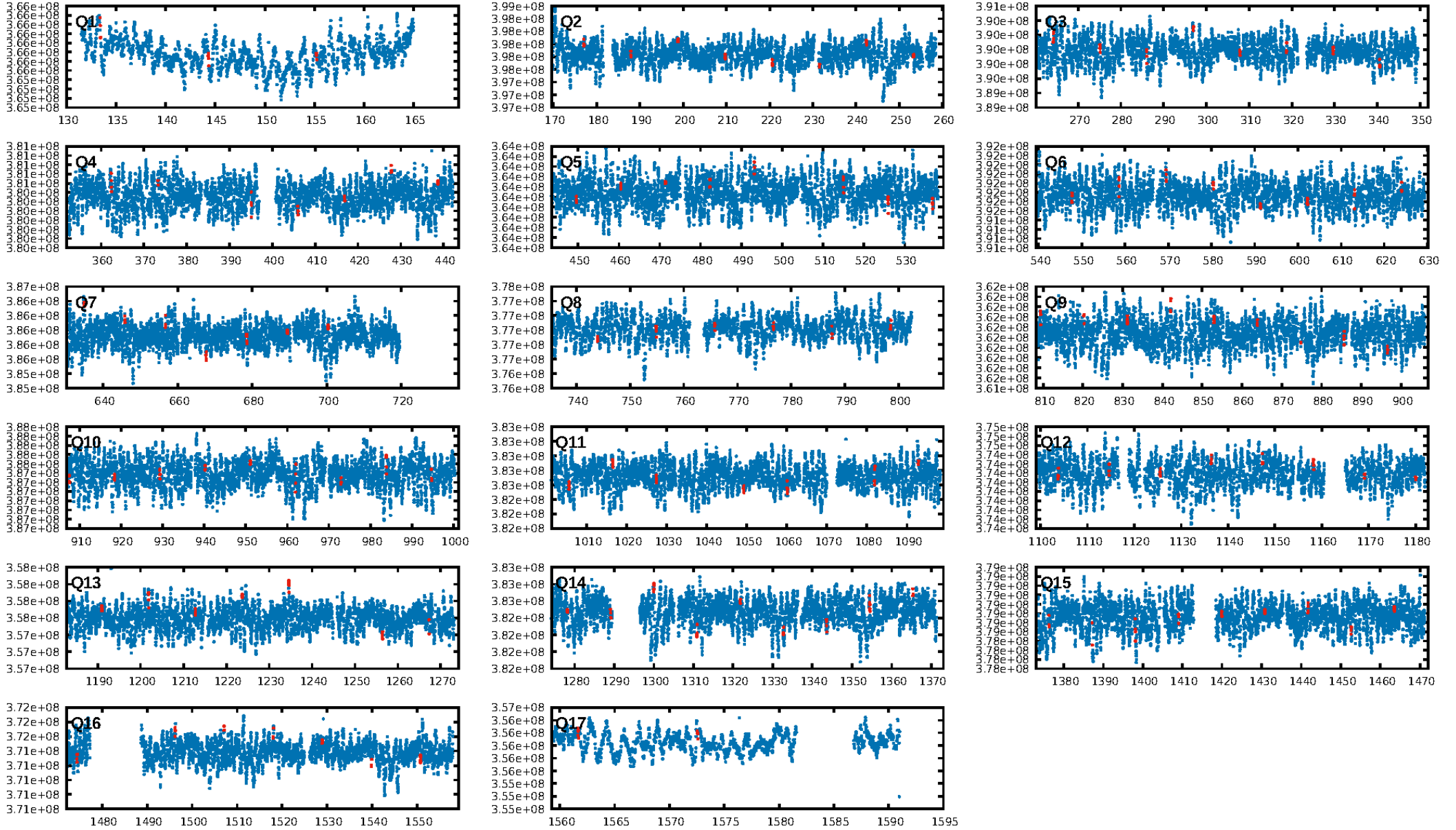
## DV Diagnostic Results:

ShortPeriod-sig: 100.0% [20.90σ]  
LongPeriod-sig: 100.0% [169.07σ]  
ModelChiSquare2-sig: 0.4%  
ModelChiSquareGof-sig: 61.8%  
Bootstrap-pfa: N/A  
RollingBand-fgt: 1.00 [11/11]  
GhostDiagnostic-chr: 0.152  
Centroid-sig: N/A  
Centroid-so: N/A  
OotOffset-rm: 0.426 arcsec [0.45σ]  
OotOffset-st: 3/4/2/5 [14]  
KicOffset-rm: 0.406 arcsec [0.37σ]  
KicOffset-st: 3/4/2/5 [14]  
DiffImageQuality-fgm: 0.21 [3/14]  
DiffImageOverlap-fno: 0.71 [12/17]

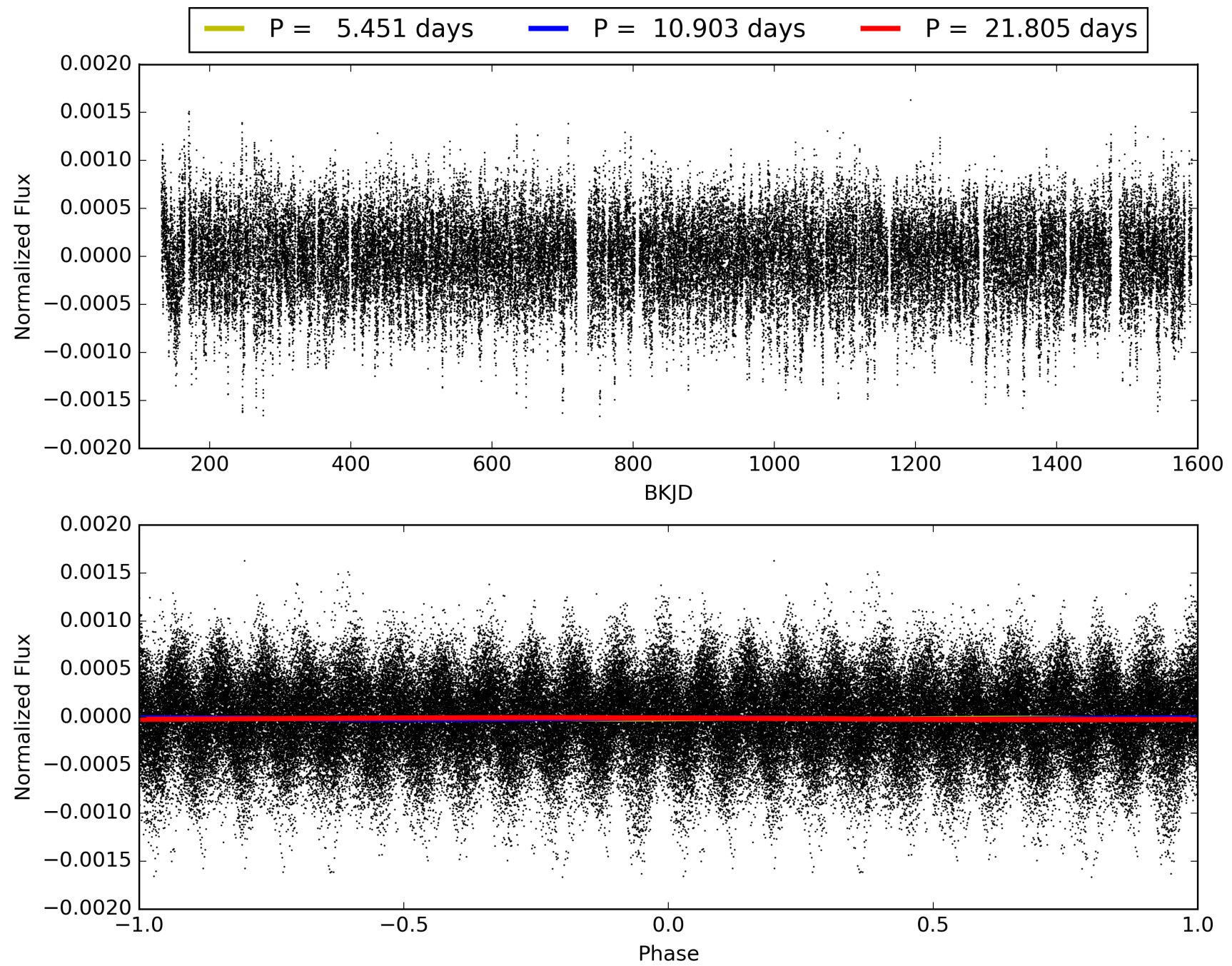
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 10:23:57 Z

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

# TCE 005794197-04, PDC Light Curves



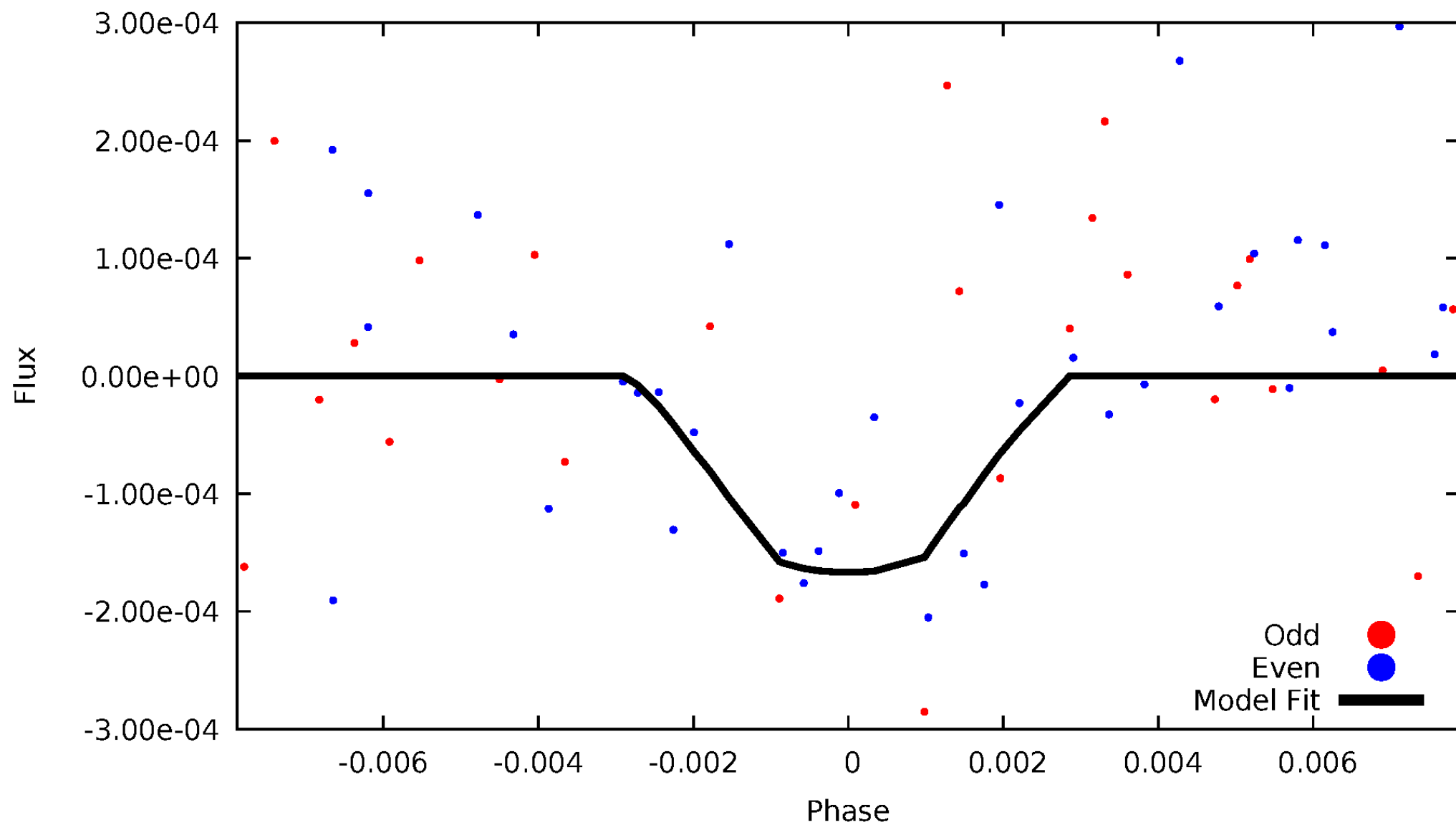
TCE 005794197-04





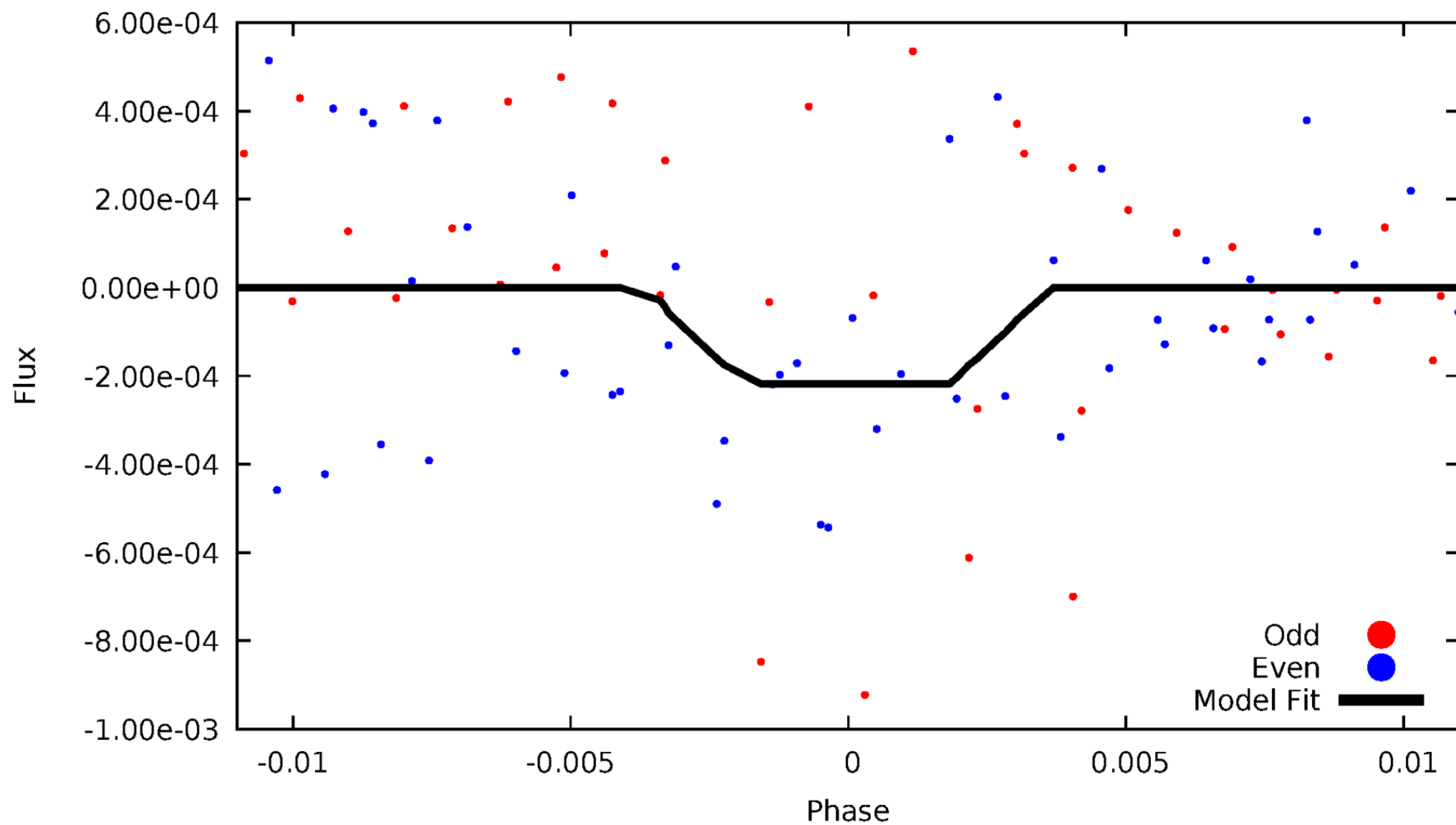
# DV Odd/Even

TCE 005794197-04



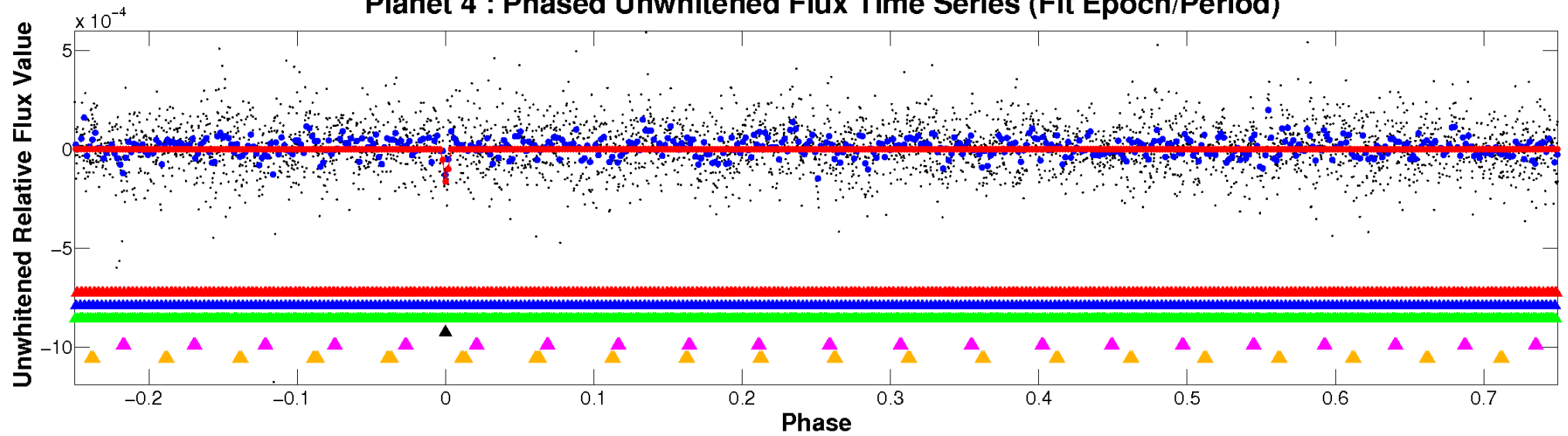
# ALT Odd/Even

TCE 005794197-04

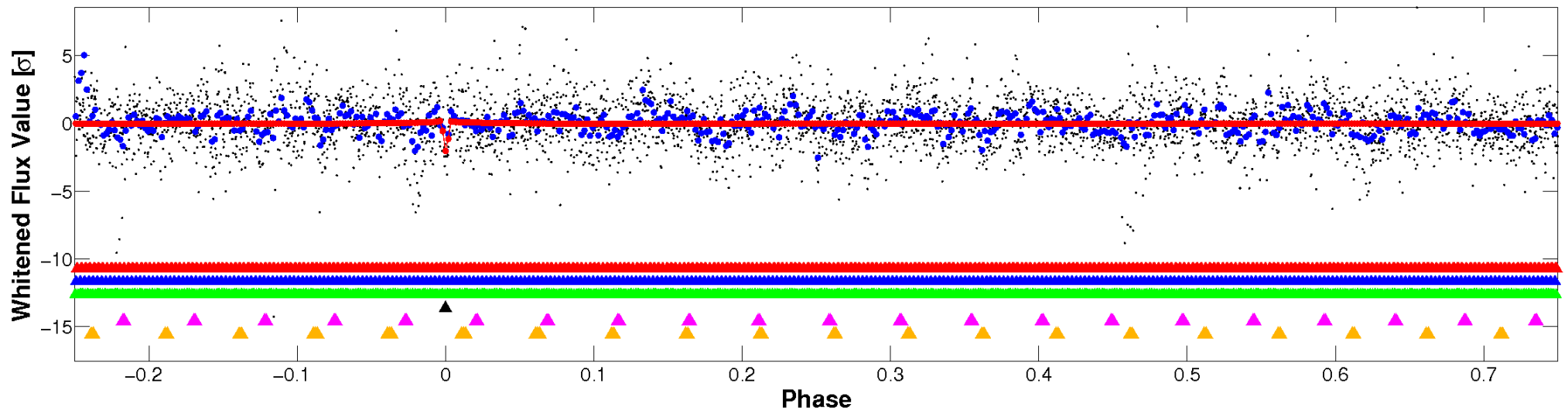


# Non-Whitened Vs. Whitened Light Curve

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

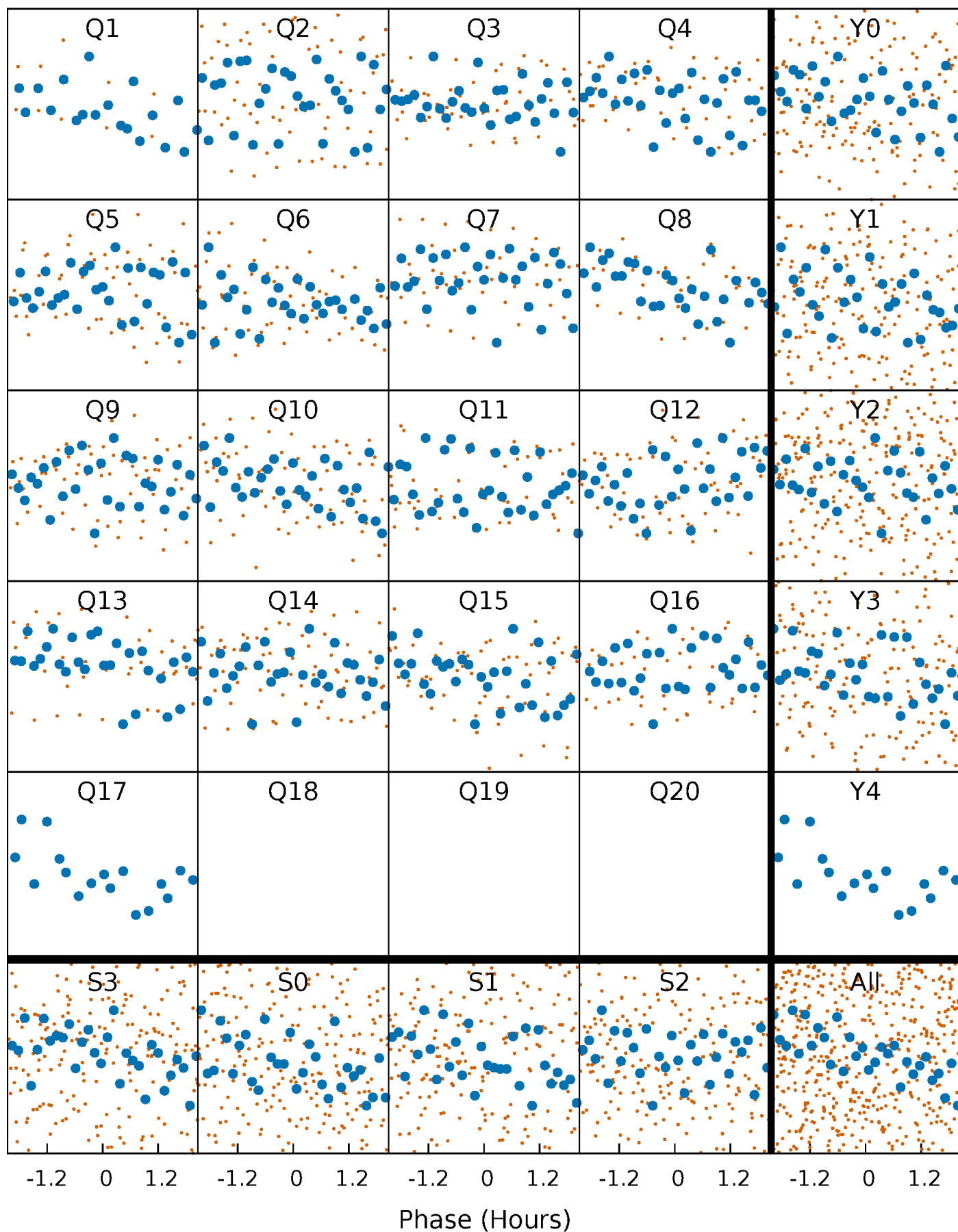


## Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



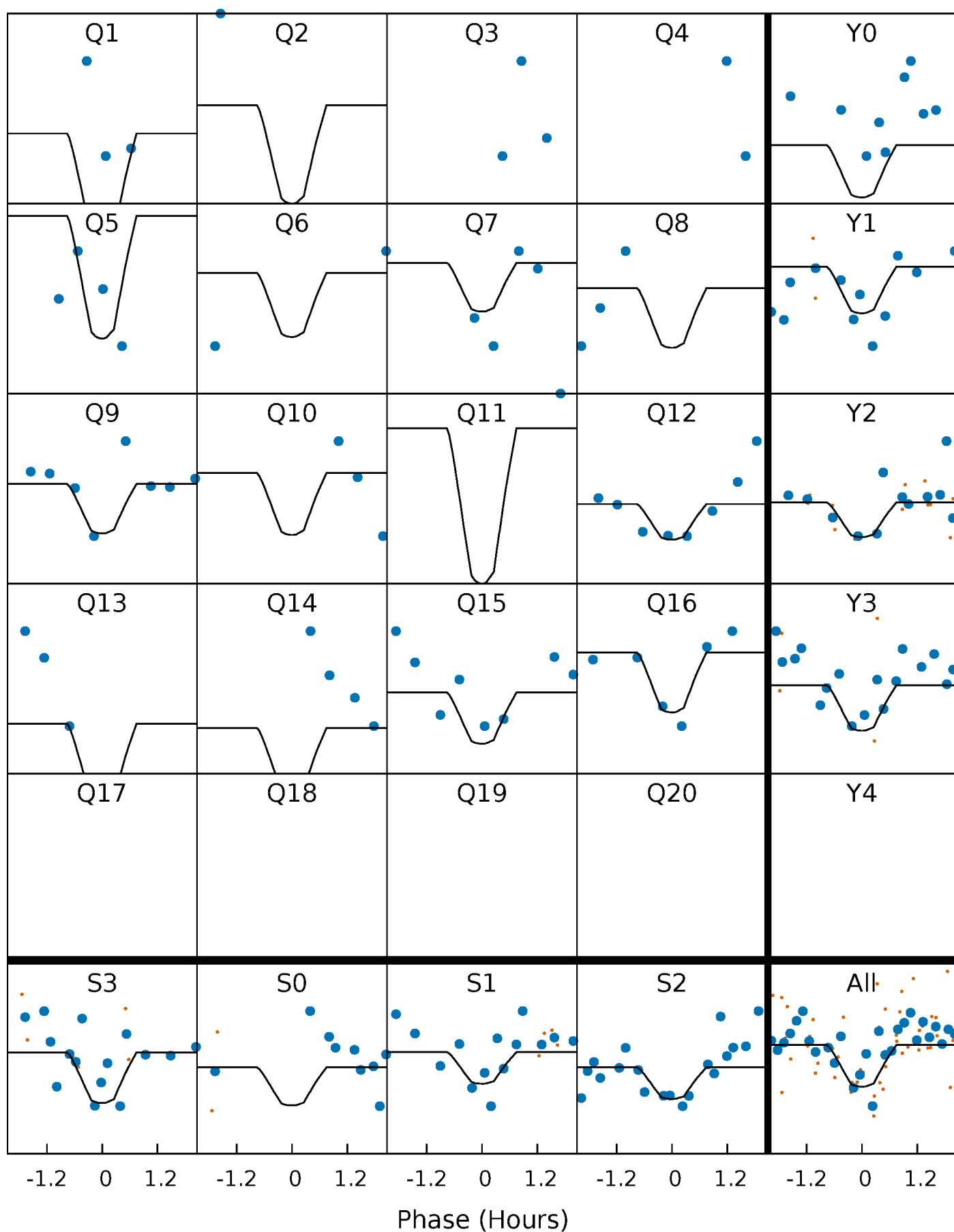
# PDC Quarter-Phased Transit Curves

TCE 005794197-04   P= 10.902672 Days    $T_0=133.407382$  (BKJD)



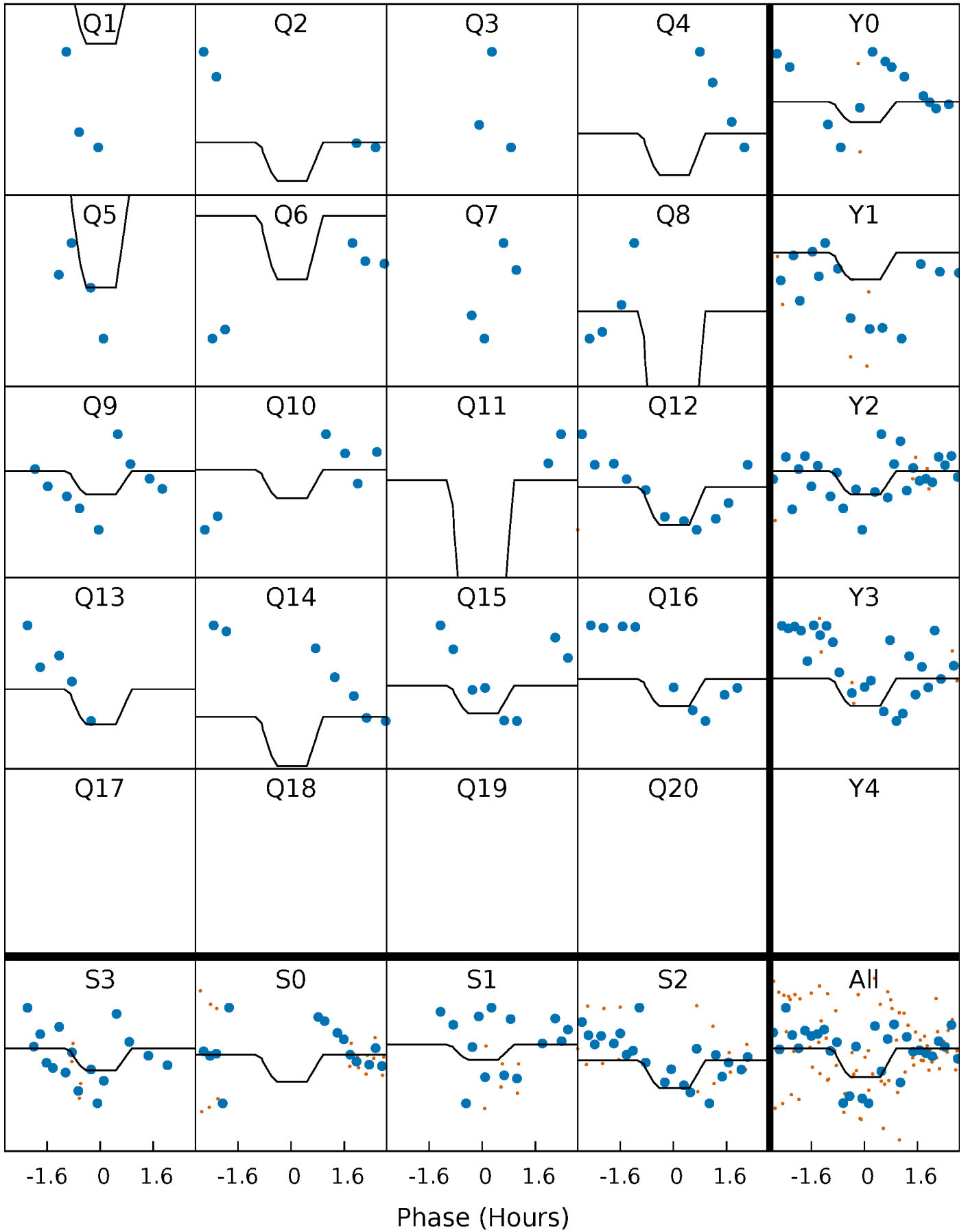
# DV Quarter-Phased Transit Curves

TCE 005794197-04 P= 10.902672 Days  $T_0=133.407382$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

TCE 005794197-04 P= 10.902204 Days  $T_0=133.437816$  (BKJD)

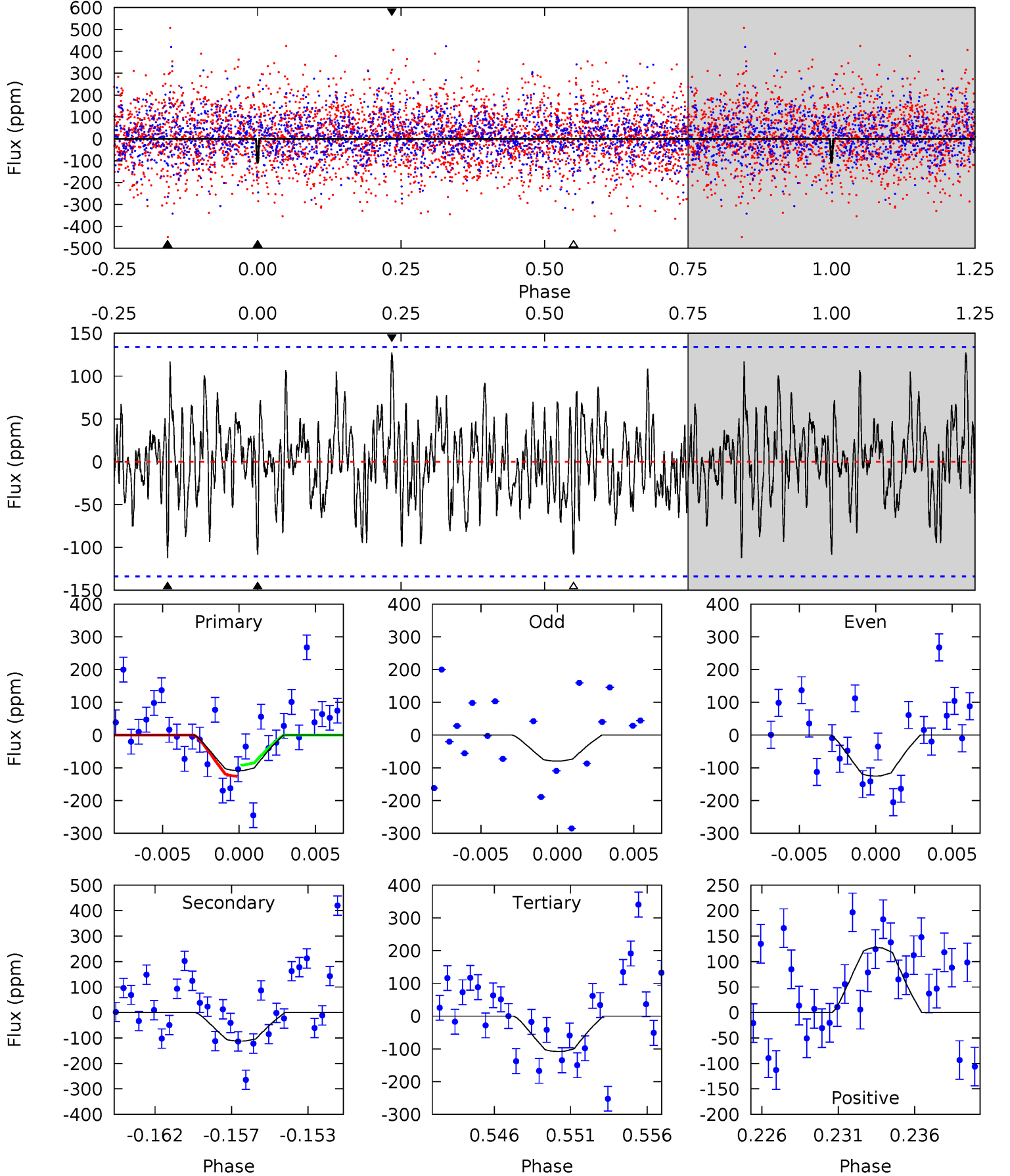




# DV Model-Shift Uniqueness Test

005794197-04,  $P = 10.902672$  Days,  $E = 122.504710$  Days

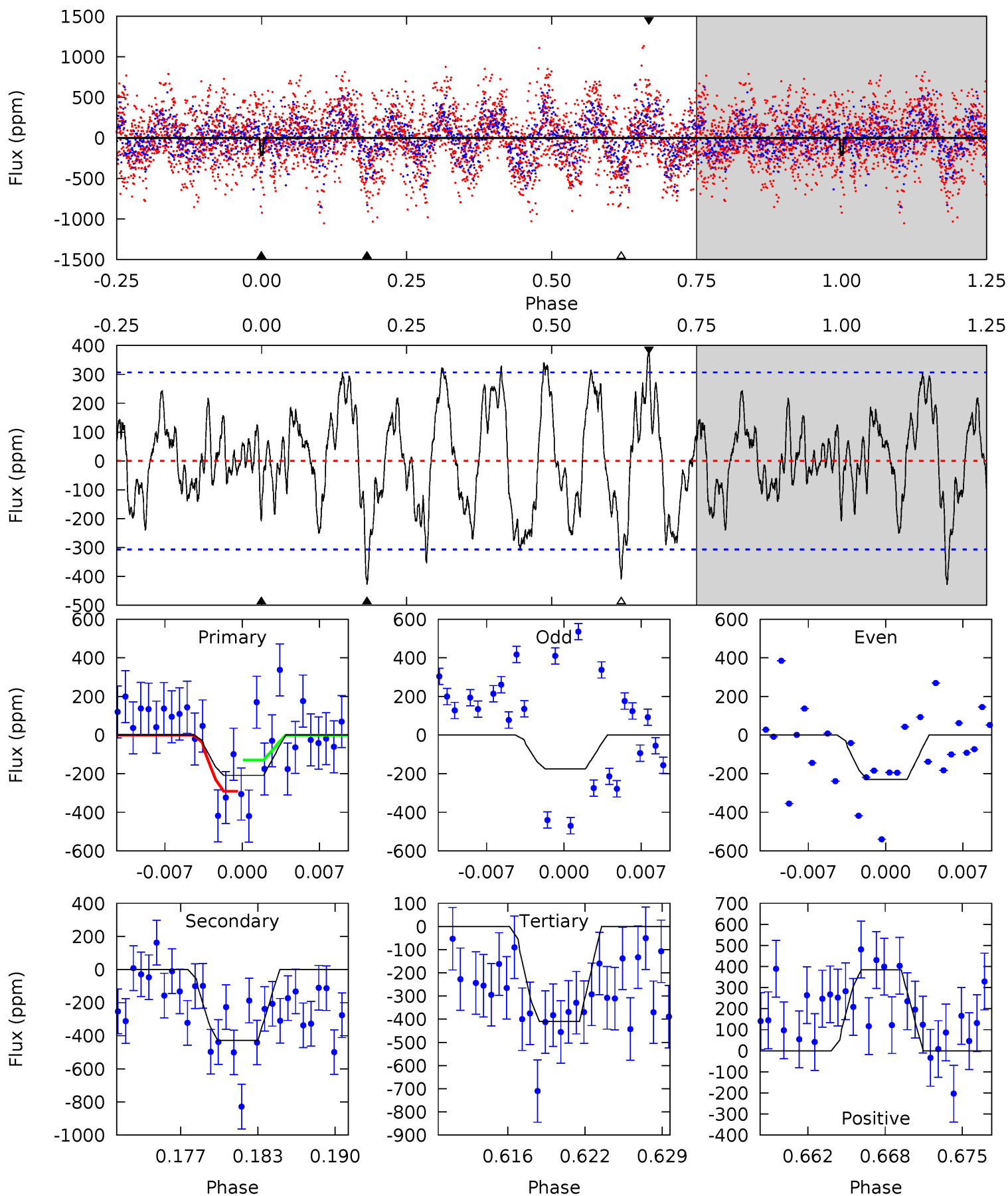
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.19	4.33	4.17	4.91	5.16	2.81	1.49	0.02	-0.72	0.17	-0.58	0.86	0.83	0.53	0.66



# Alt Model-Shift Uniqueness Test

005794197-04, P = 10.902204 Days, E = 122.535612 Days

Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.47	7.14	6.83	6.40	5.11	2.72	2.72	-3.36	-2.93	0.31	0.74	0.44	1.19	0.47	1.36



### Stellar Parameters For KIC 005794197

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$7196^{+193}_{-236}$	$4.252^{+0.120}_{-0.180}$	$-0.580^{+0.250}_{-0.300}$	$1.358^{+0.372}_{-0.248}$	$1.203^{+0.173}_{-0.142}$	$0.676^{+0.428}_{-0.322}$
	+3%/-3%	+3%/-4%	+43%/-52%	+27%/-18%	+14%/-12%	+63%/-48%
Source	PHO1	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 005794197-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	$A_{\text{obs}}$
DV	$-112 \pm 26$	$2.30^{+1.53}_{-1.48}$	$1625^{+120}_{-91}$	$5998^{+5297}_{-1237}$	$129^{+817}_{-86}$
Alt.	$-429 \pm 60$	$2.32^{+1.68}_{-1.37}$	$1632^{+110}_{-91}$	$8684^{+9464}_{-2414}$	$472^{+2157}_{-321}$

$T_{\text{max}}$  = Theoretical Maximum Planetary Temperature

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

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

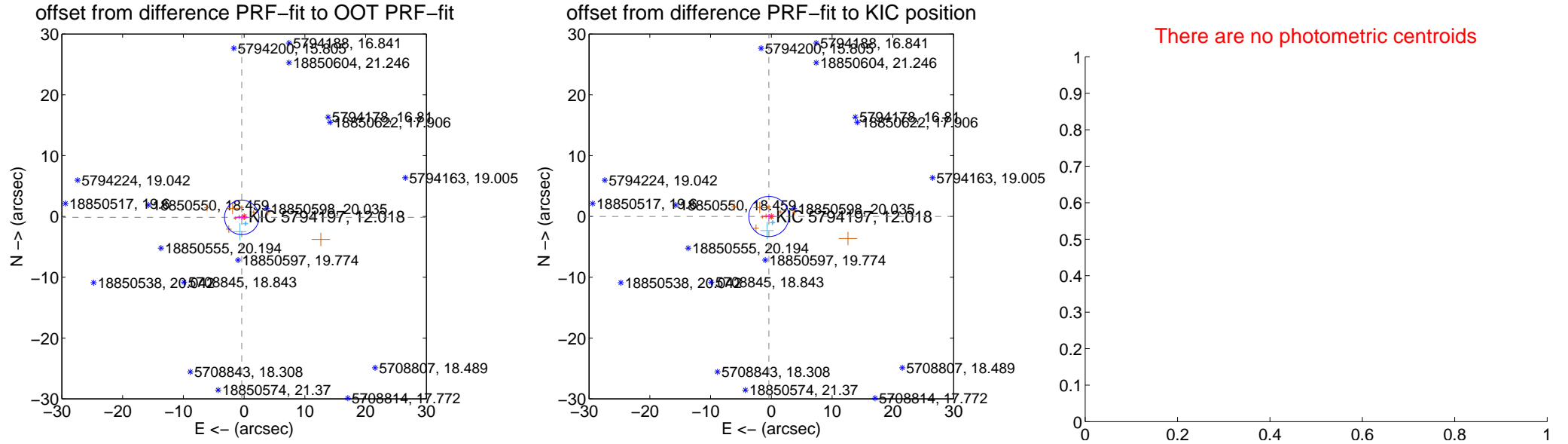
## DV Centroid Data

Supplemental centroid analysis for 005794197-04. Kepler magnitude: 12.02. Transit SNR 6.56

There are 3 quarters with good PRF difference image offsets

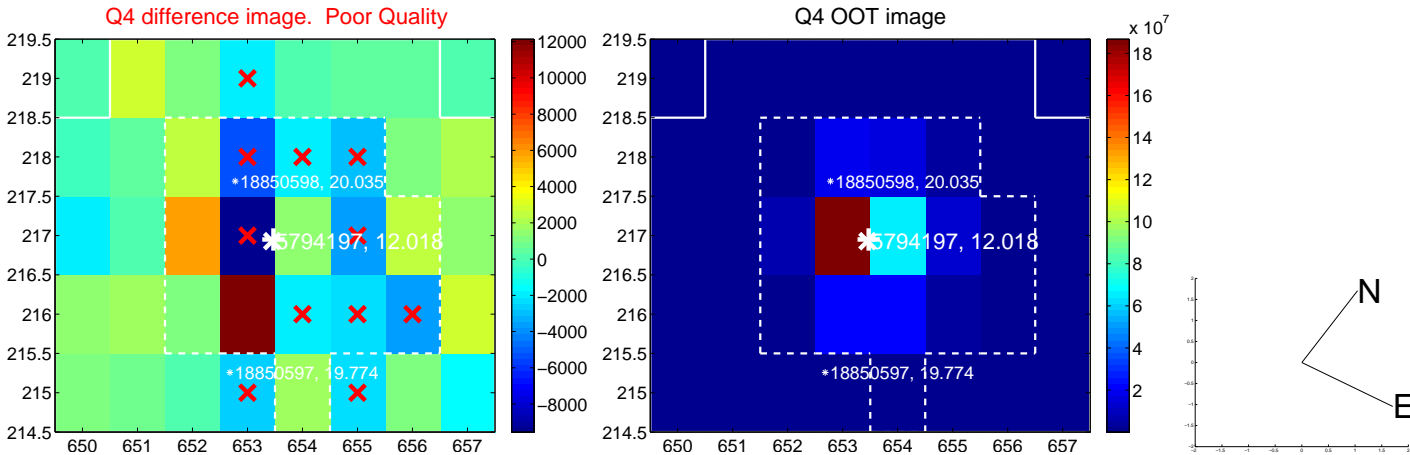
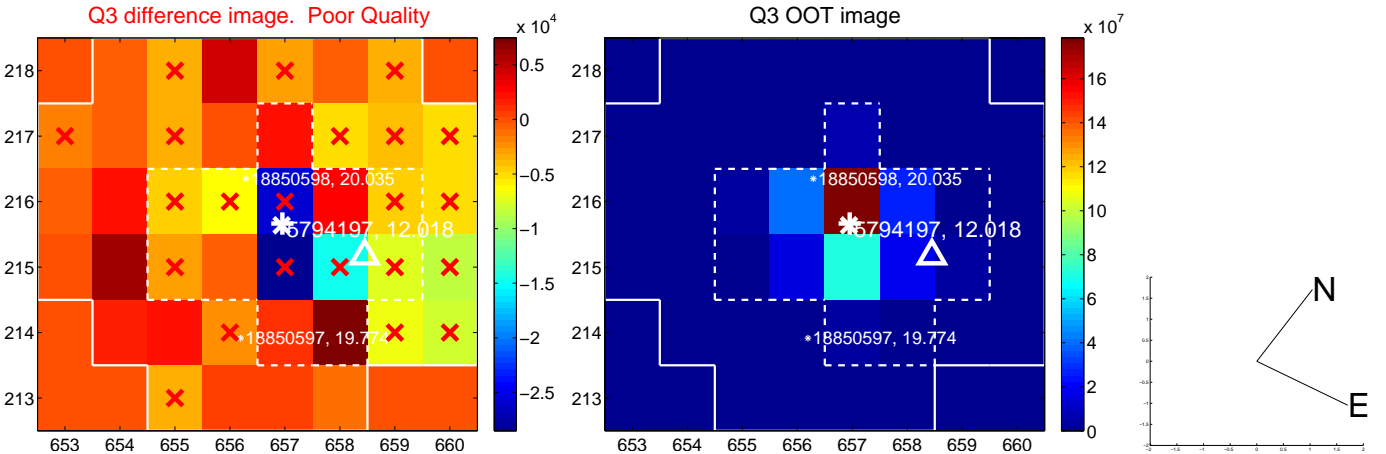
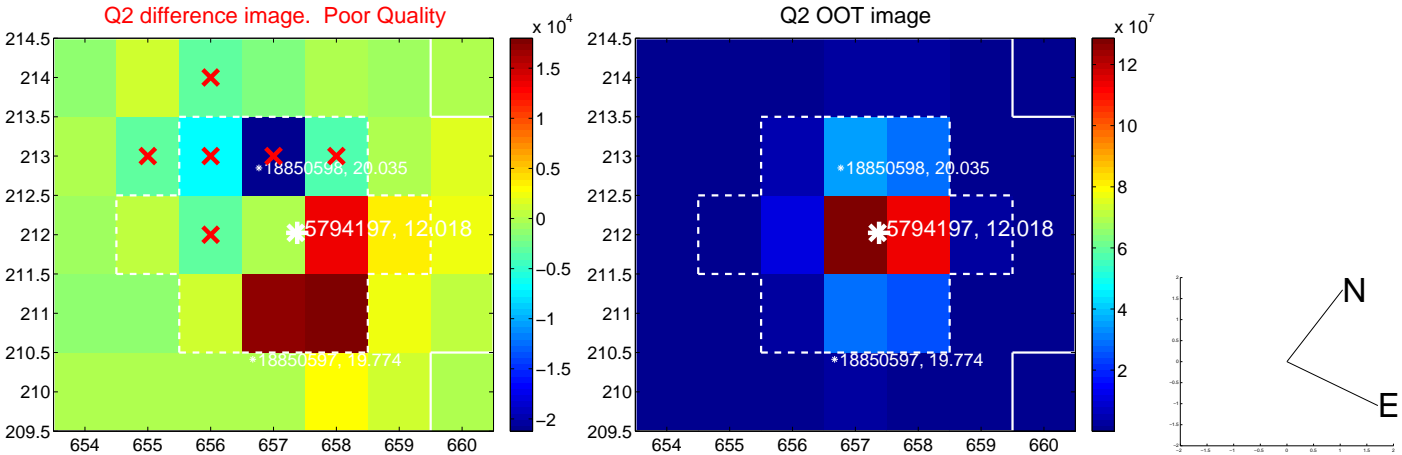
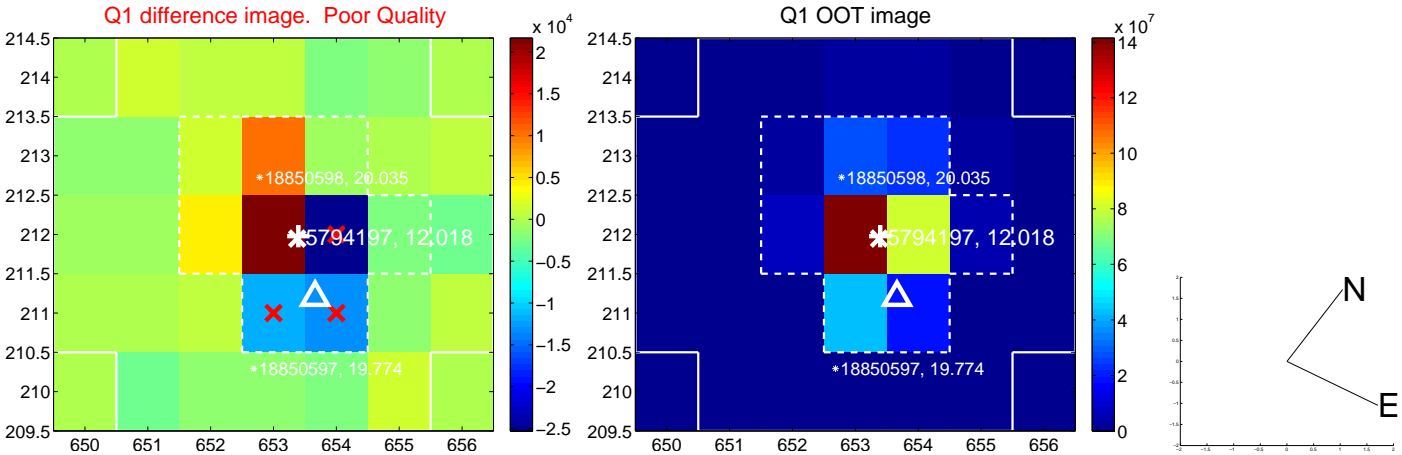
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.426 \pm 0.946$	0.45	$0.397 \pm 1.091$	$-0.154 \pm 0.395$
PRF-fit source offset from KIC position	$0.406 \pm 1.100$	0.37	$0.406 \pm 1.105$	$-0.008 \pm 0.406$
photometric centroid source offset	—	—	—	—

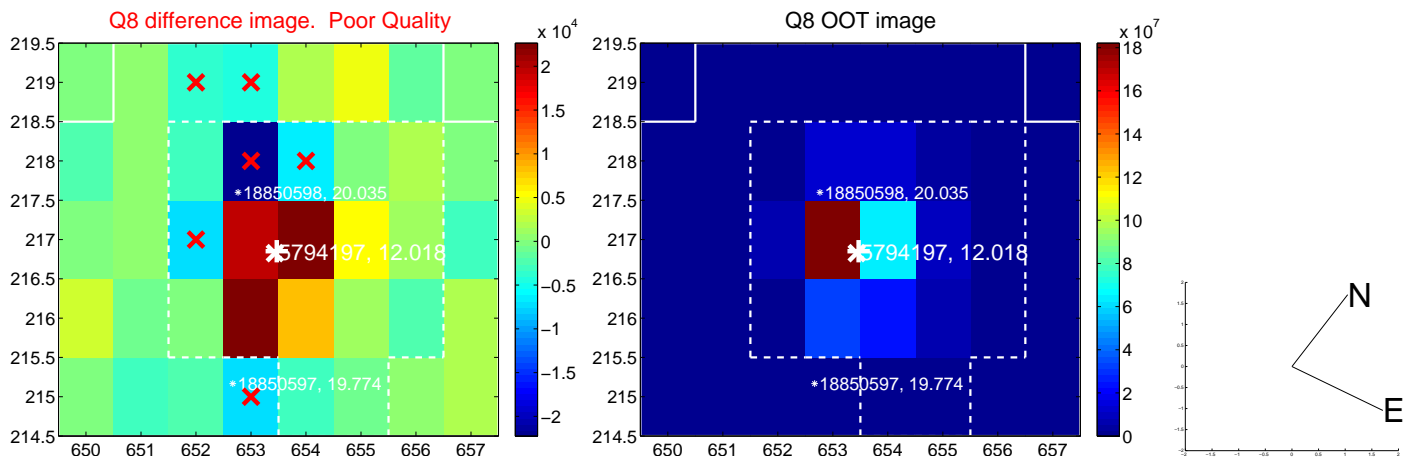
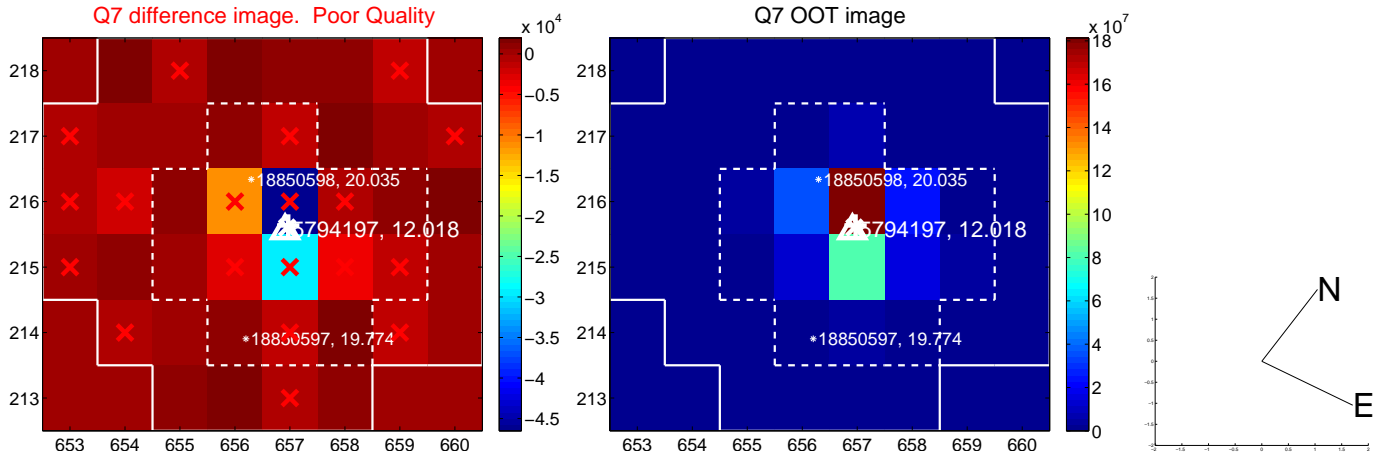
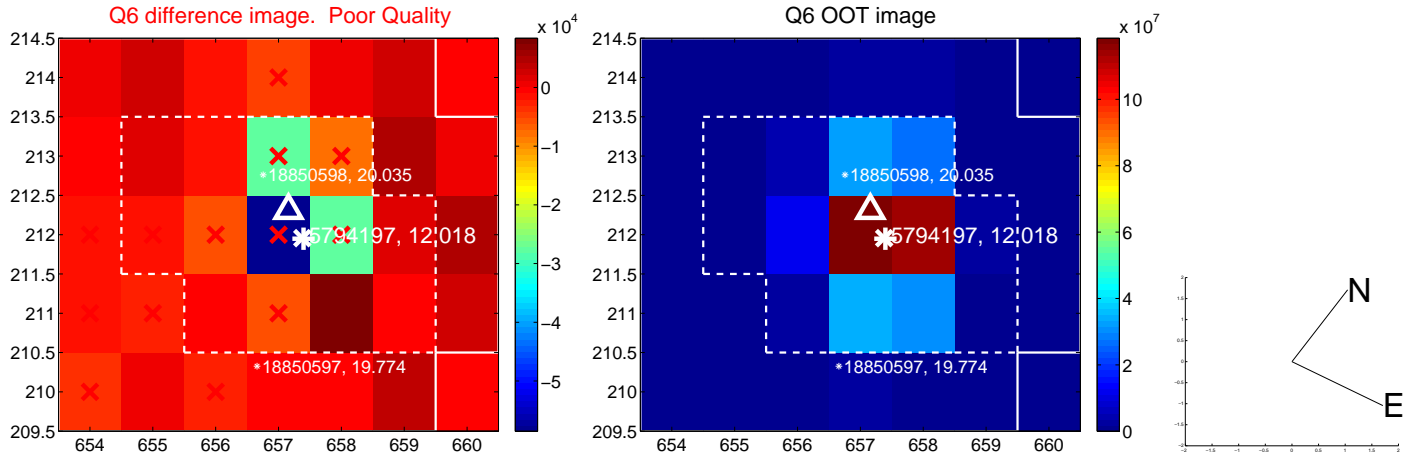
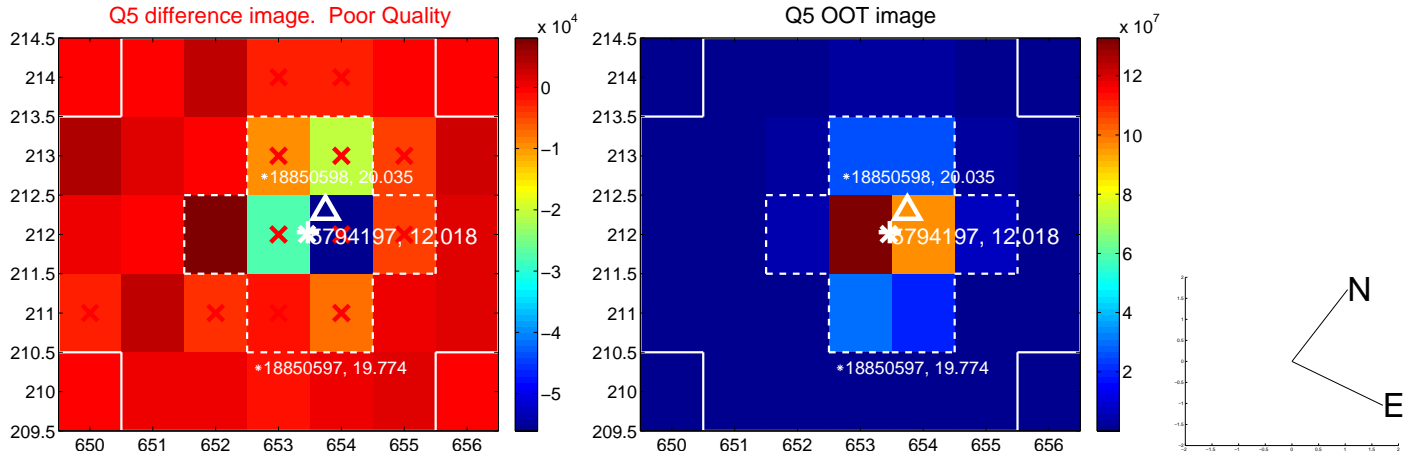


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: three-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

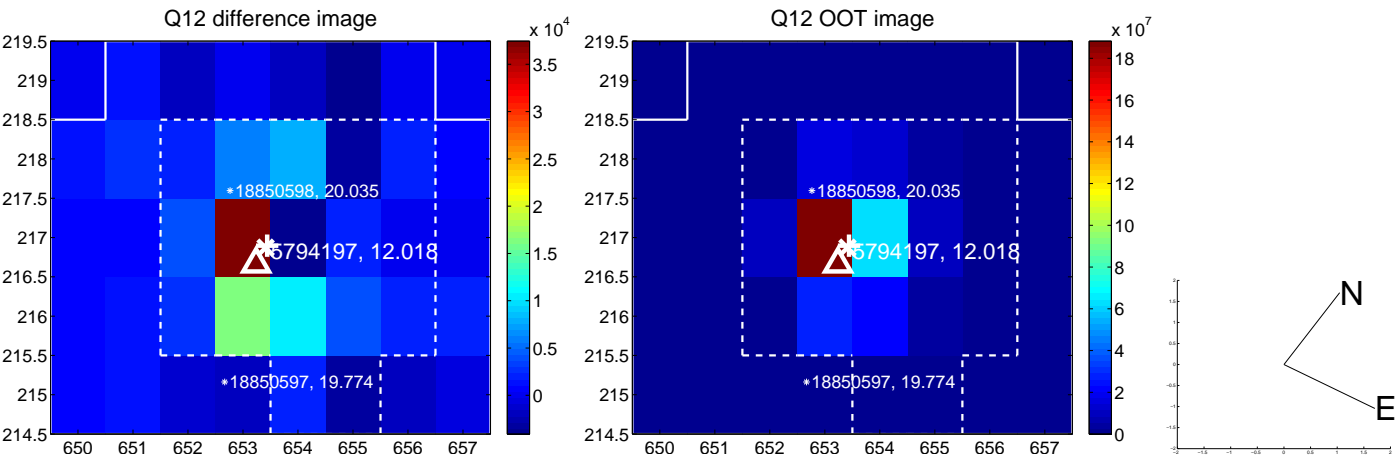
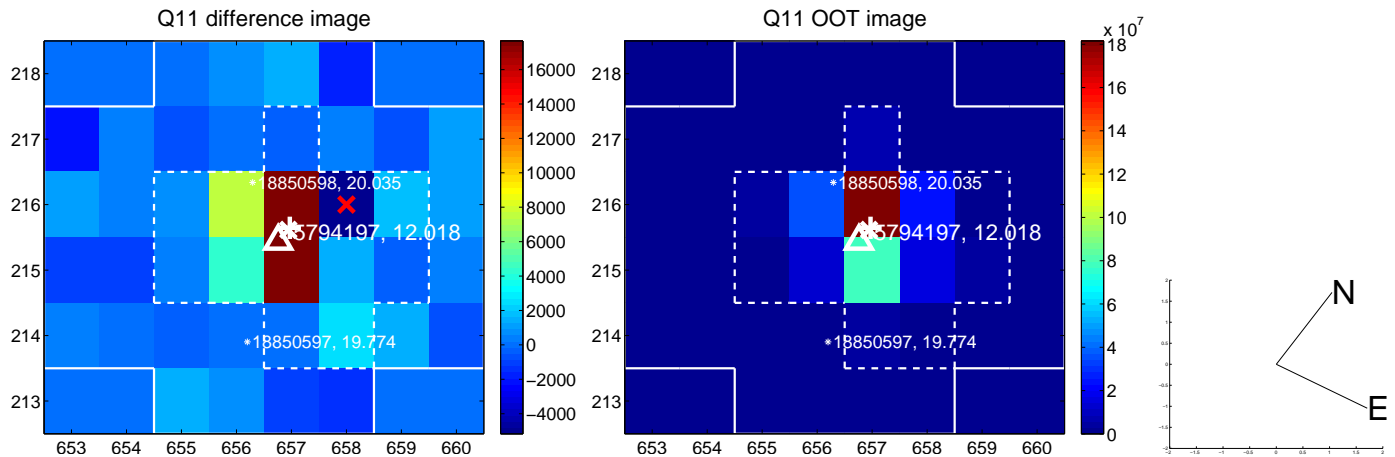
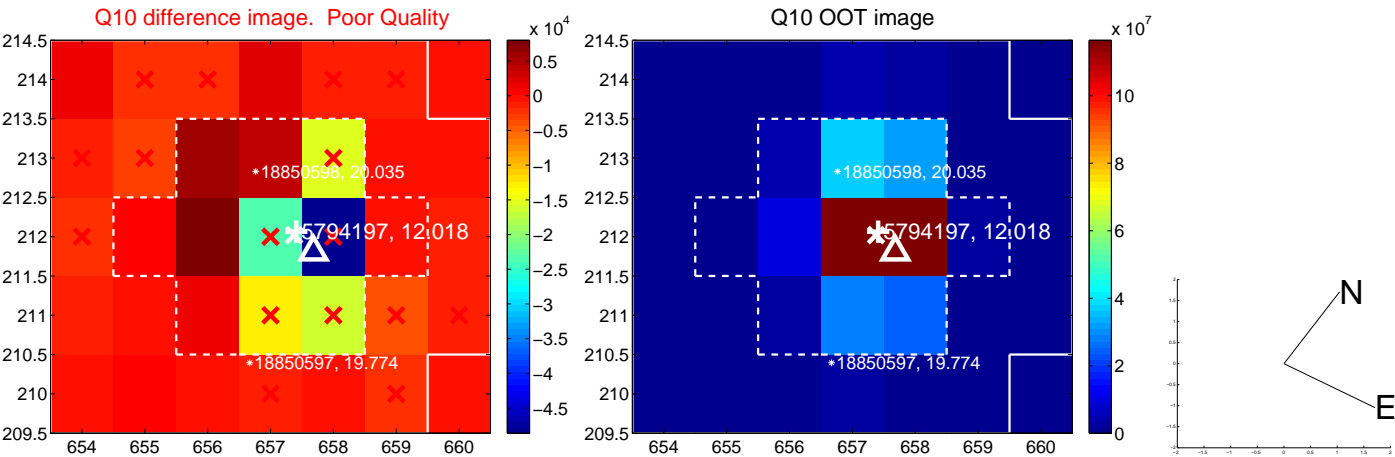
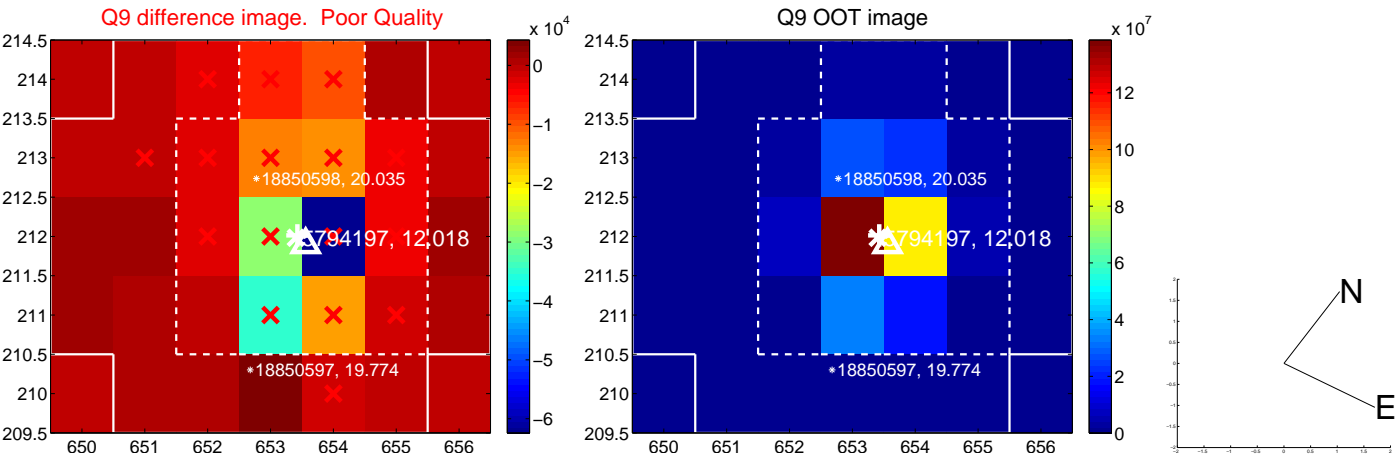


white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.

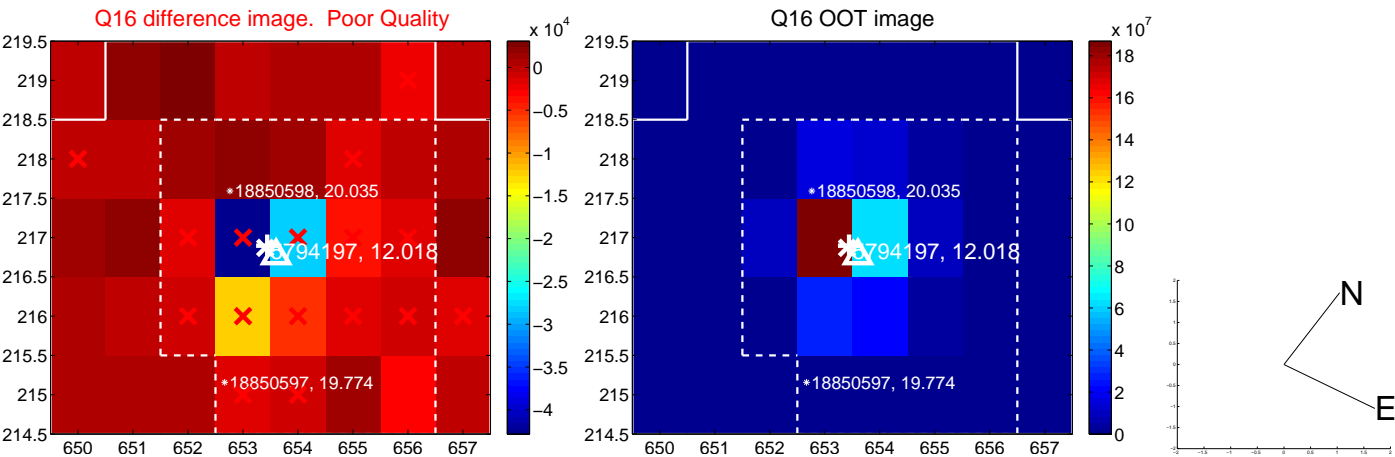
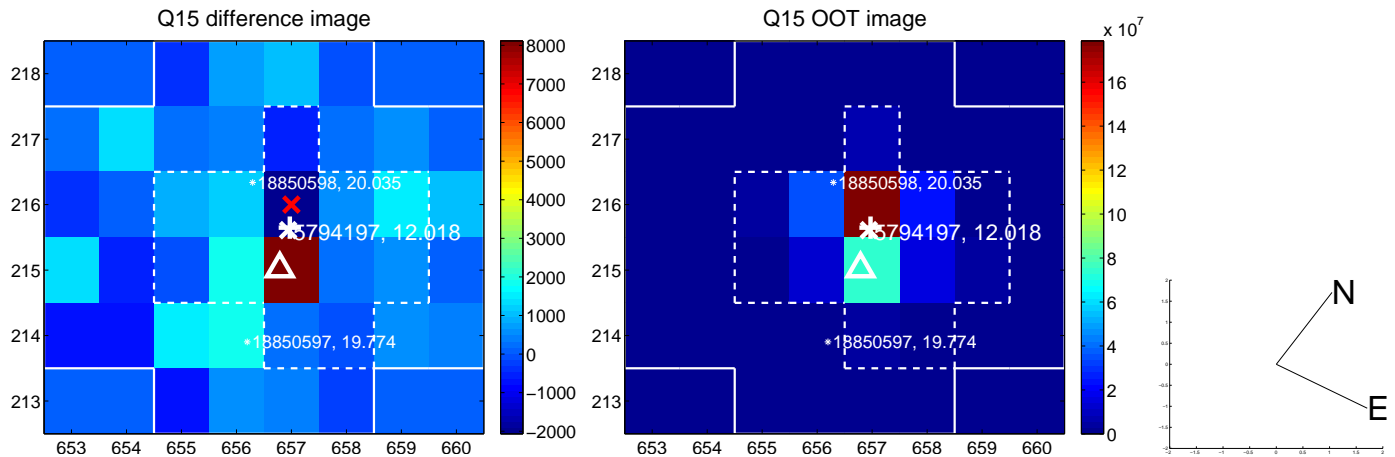
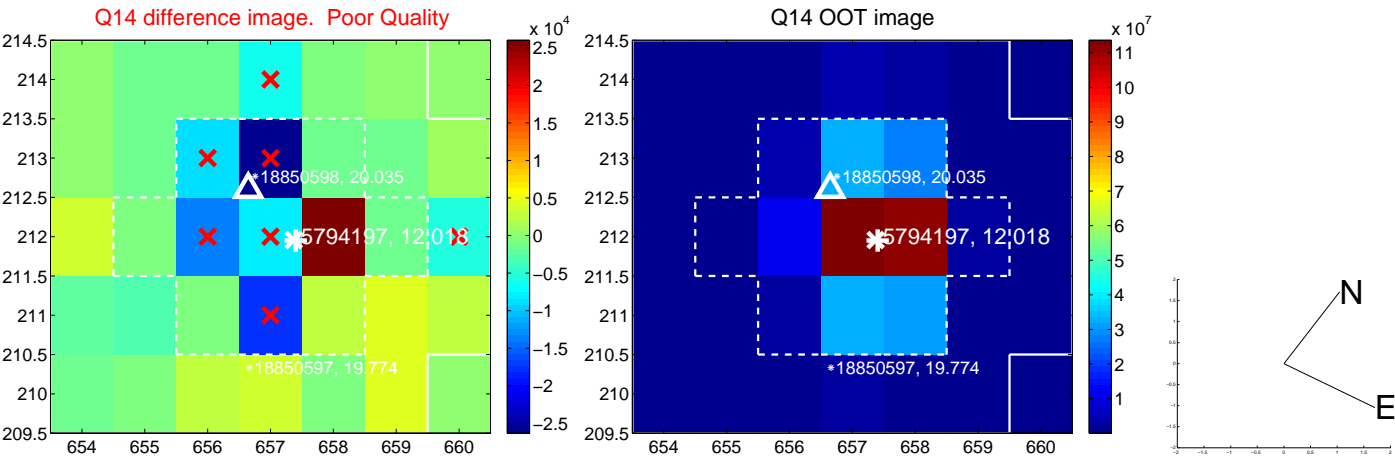
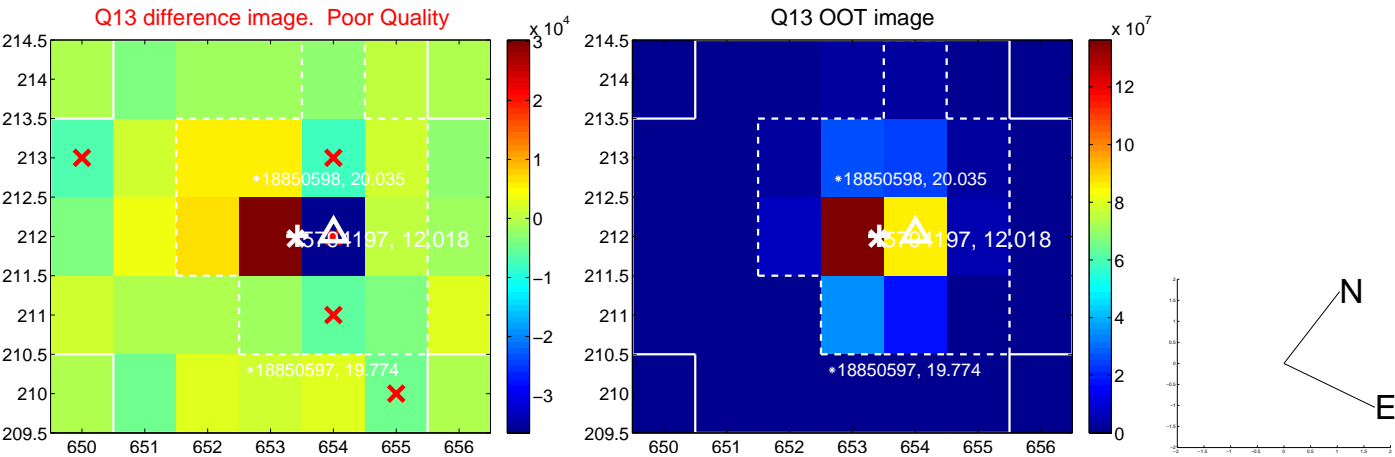




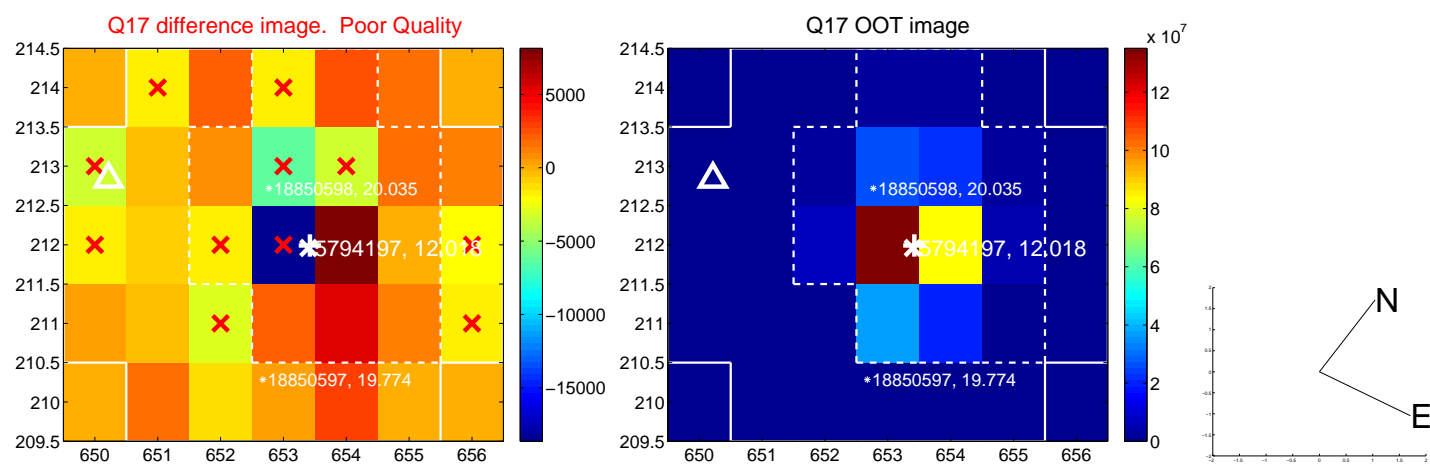
white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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



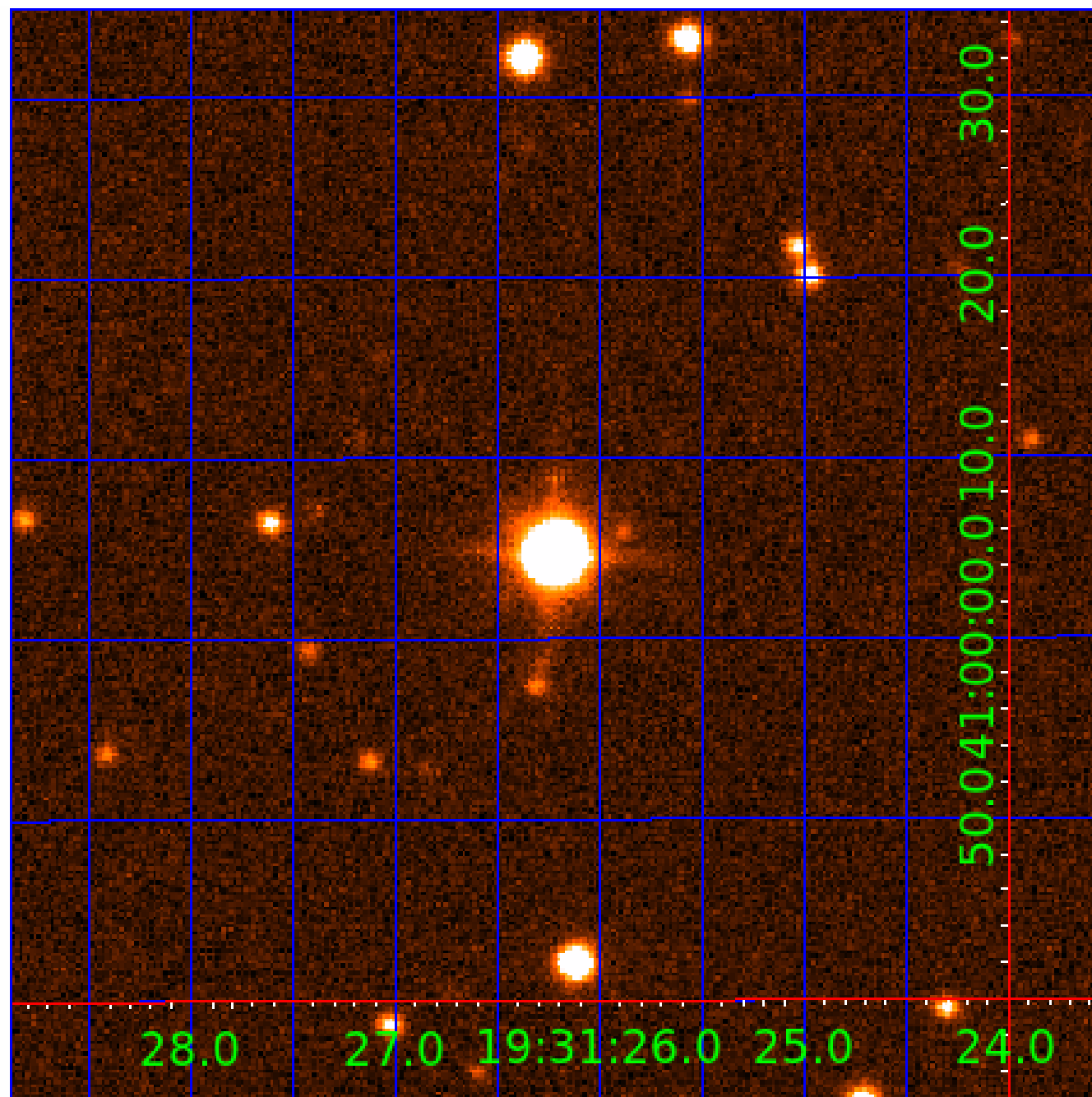
white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination



# KIC 005794197

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
005794197-01	OBS	No	1.476719	132.528067	50.5	4.676	11.3	12.2	1.36	7196	1.12	6083.15
005794197-02	OBS	No	1.476736	132.856926	49.8	2.621	11.7	12.1	1.36	7196	1.10	6083.05
005794197-03	OBS	No	1.476793	132.304661	98.9	10.772	11.8	14.6	1.36	7196	1.56	6082.74
005794197-04	OBS	No	10.902672	133.407382	166.8	1.032	24.9	6.6	1.36	7196	1.96	423.14
005794197-06	OBS	No	33.252374	143.369530	500.6	3.000	18.7	-1.0	1.36	7196	3.08	95.67

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005794197-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005794197-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—SWEET_NTL—LPP_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
005794197-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_DV—SAME_NTL_PERIOD
005794197-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—HALO_GHOST
005794197-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

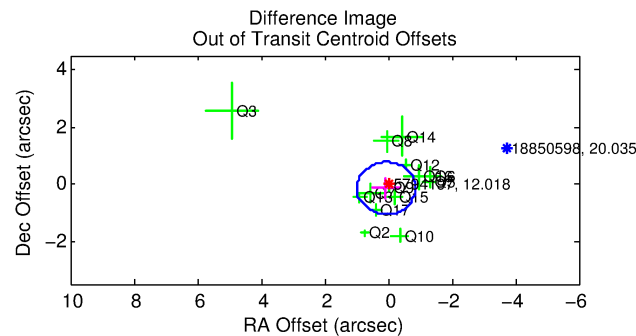
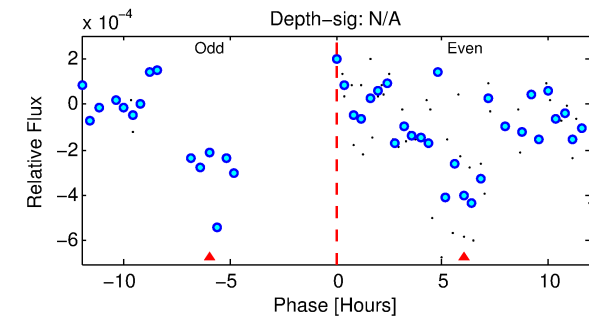
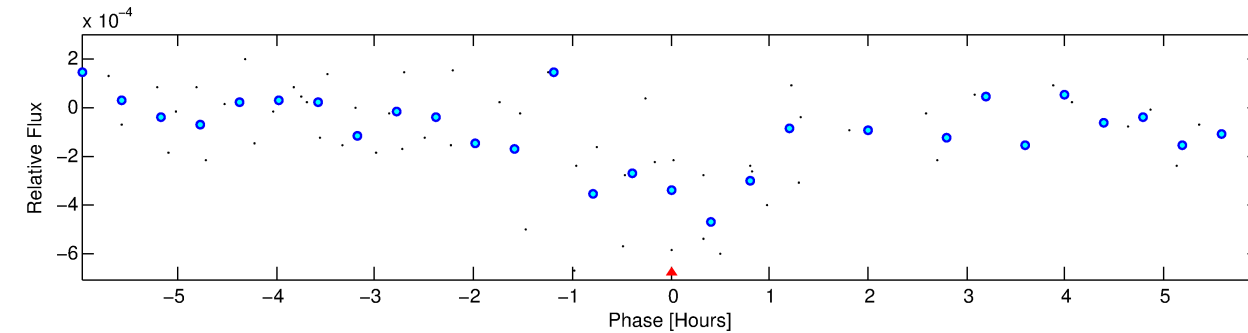
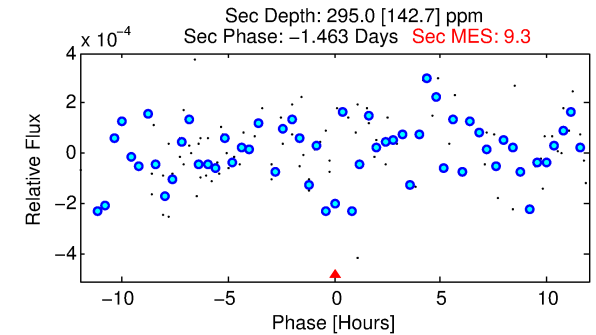
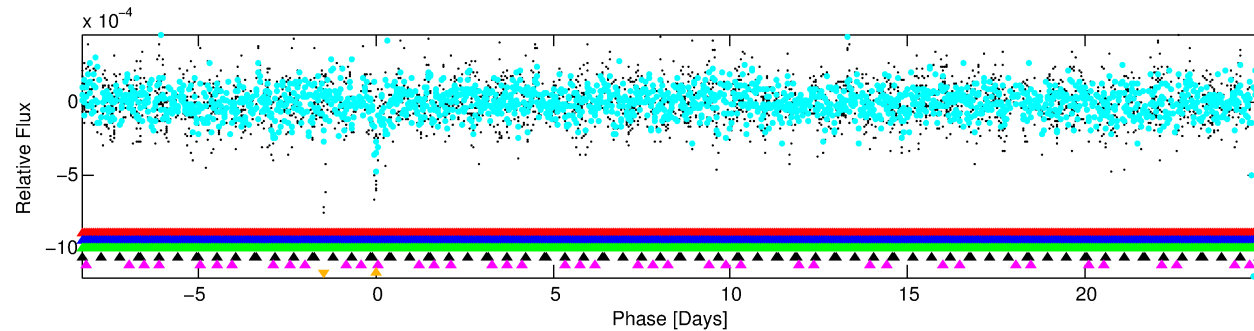
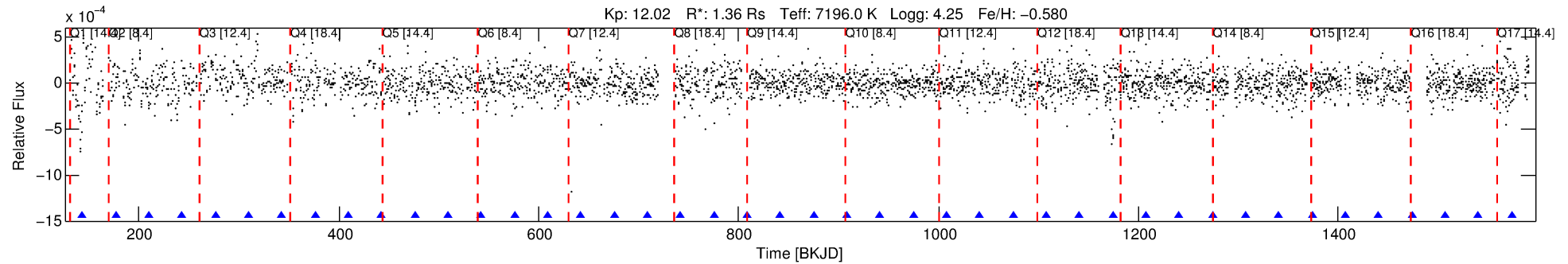
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

Ephemeris Match Information For 005794197-06

No Significant Match Found

# DV One-Page Summary

KIC: 5794197 Candidate: 6 of 6 Period: 33.252 d



## TPS TCE Results:

Period = 33.25237 d  
Epoch = 143.3695 BKJD

DV fit results are unavailable

## DV Diagnostic Results:

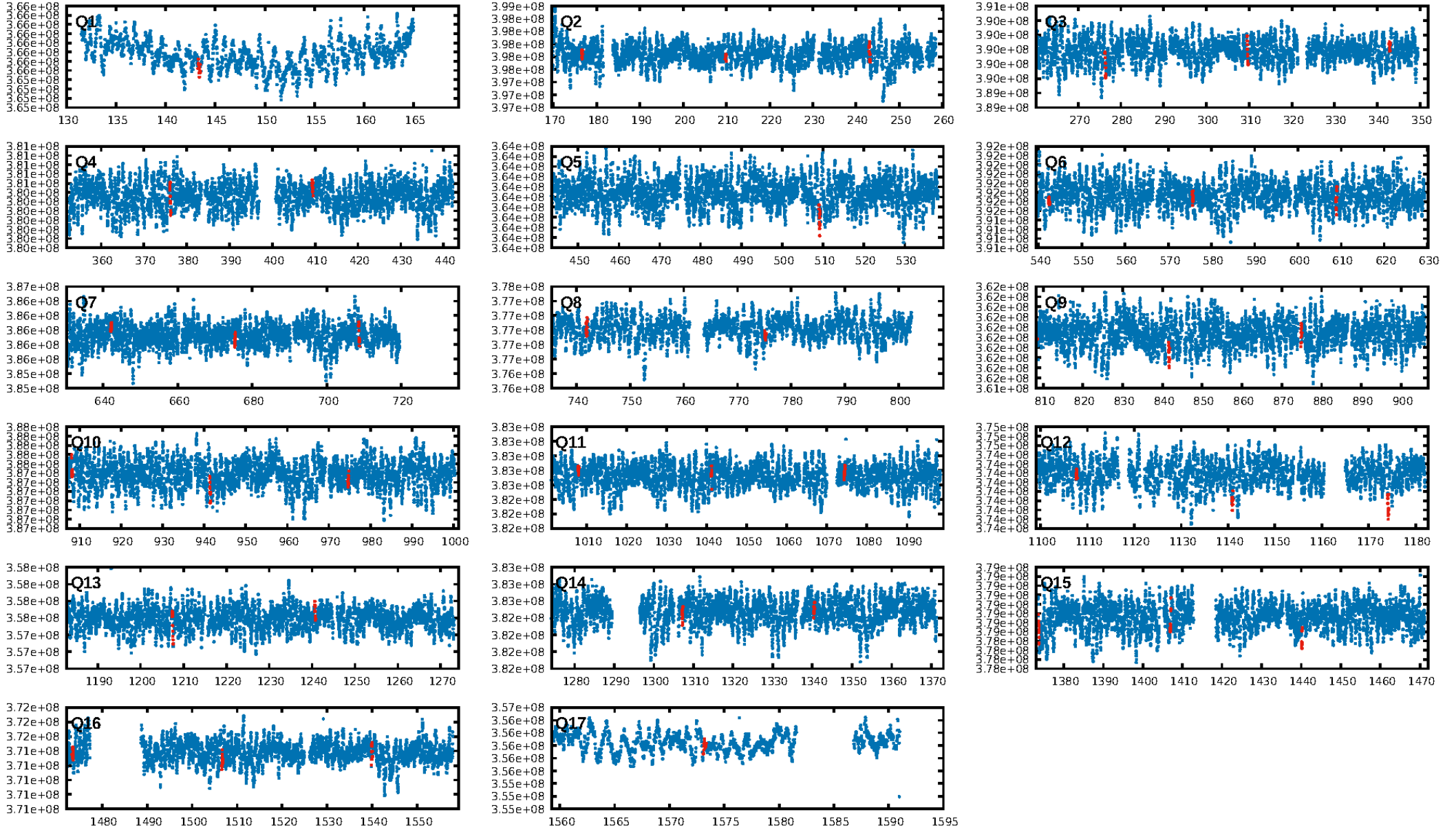
ShortPeriod-sig: 100.0% [169.07σ]  
LongPeriod-sig: 100.0% [6.80σ]  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: N/A  
RollingBand-fgt: 1.00 [5/5]  
GhostDiagnostic-chr: -0.9013  
Centroid-sig: N/A  
Centroid-so: N/A  
OotOffset-rm: 0.162 arcsec [0.53σ]  
KicOffset-rm: 0.080 arcsec [0.21σ]  
OotOffset-st: 4/3/3/4 [14]  
KicOffset-st: 4/3/3/4 [14]  
DiffImageQuality-fgm: 0.57 [8/14]  
DiffImageOverlap-fno: 0.24 [4/17]

Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 10:24:03 Z

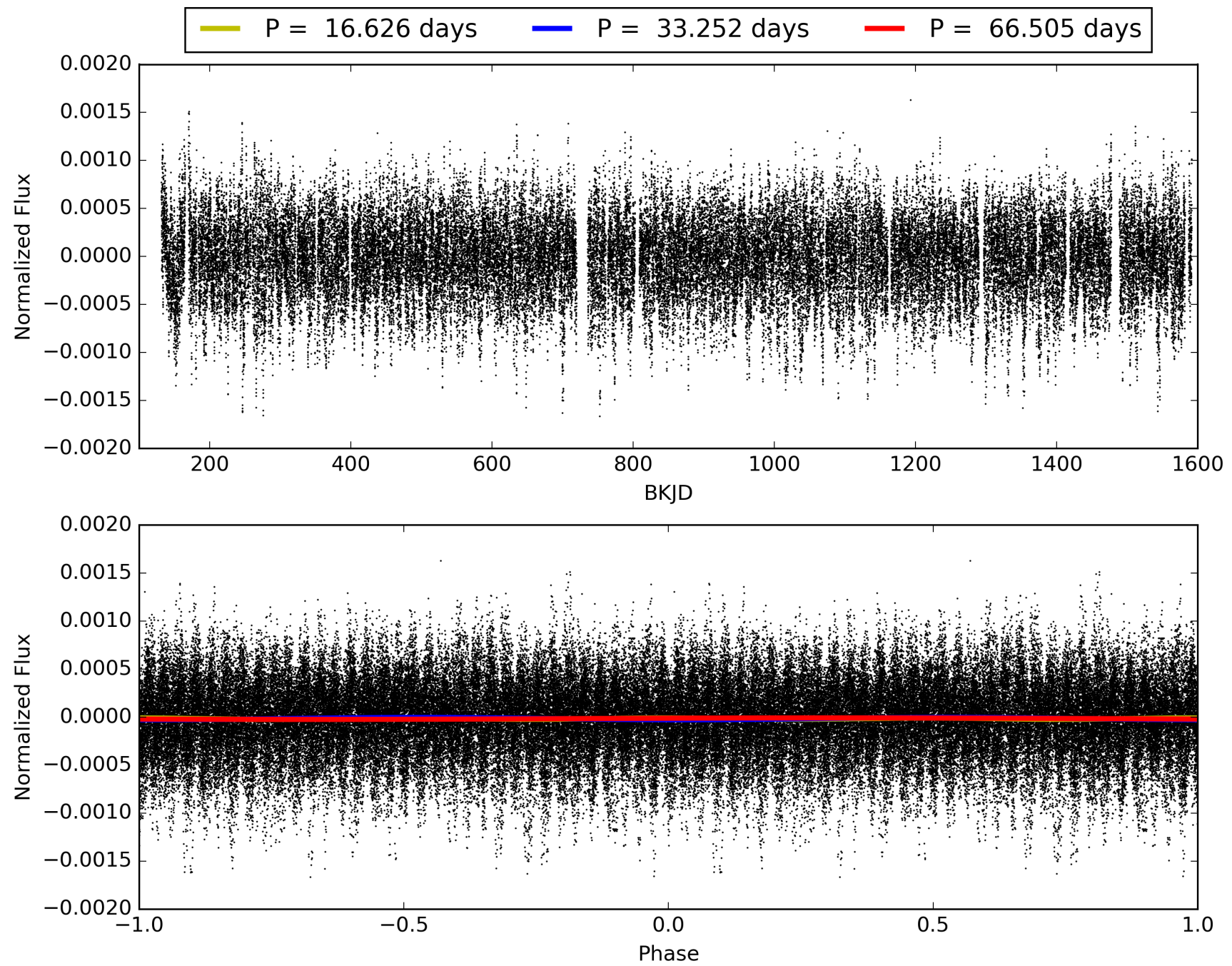
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center



# TCE 005794197-06, PDC Light Curves

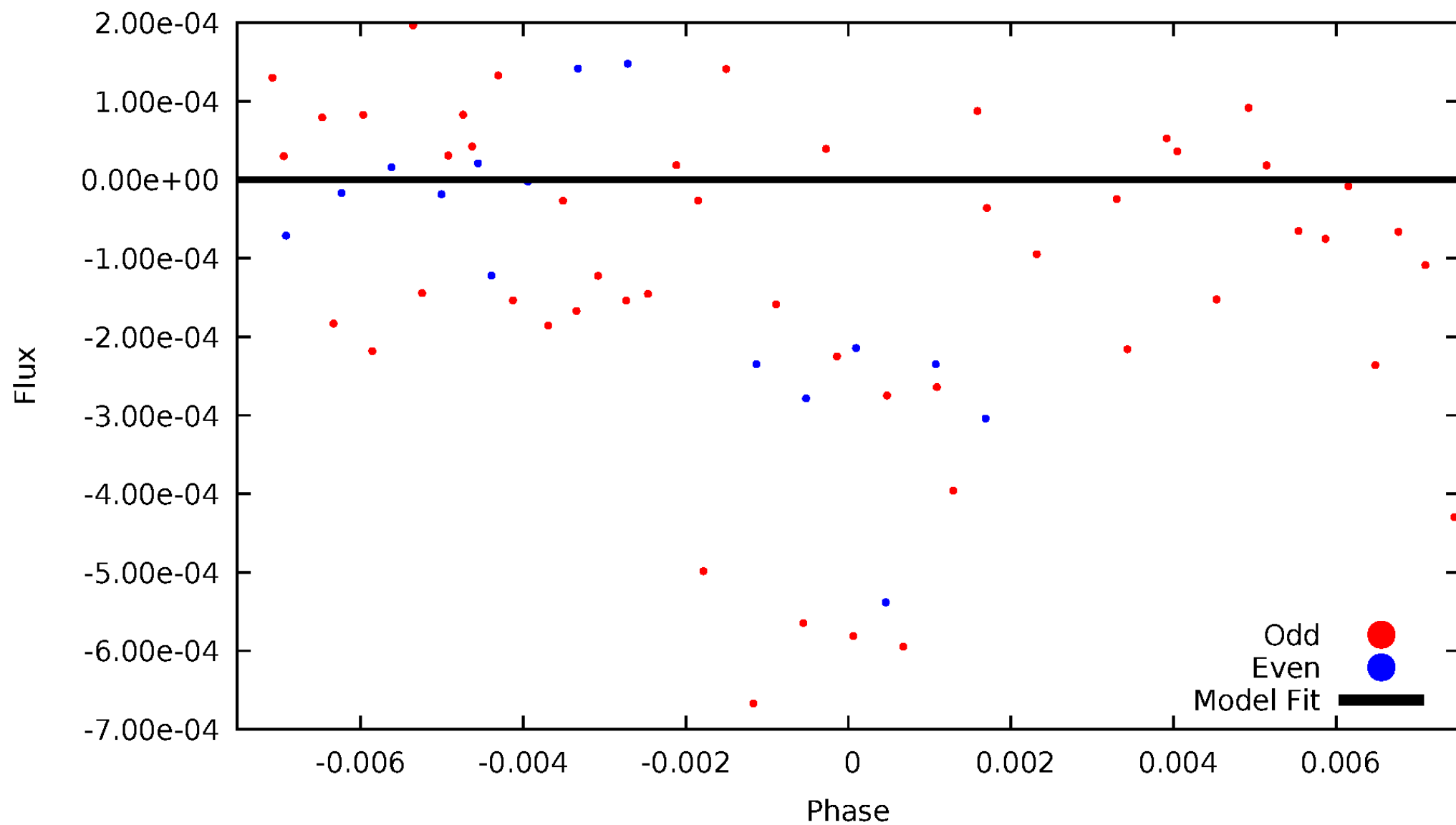


TCE 005794197-06



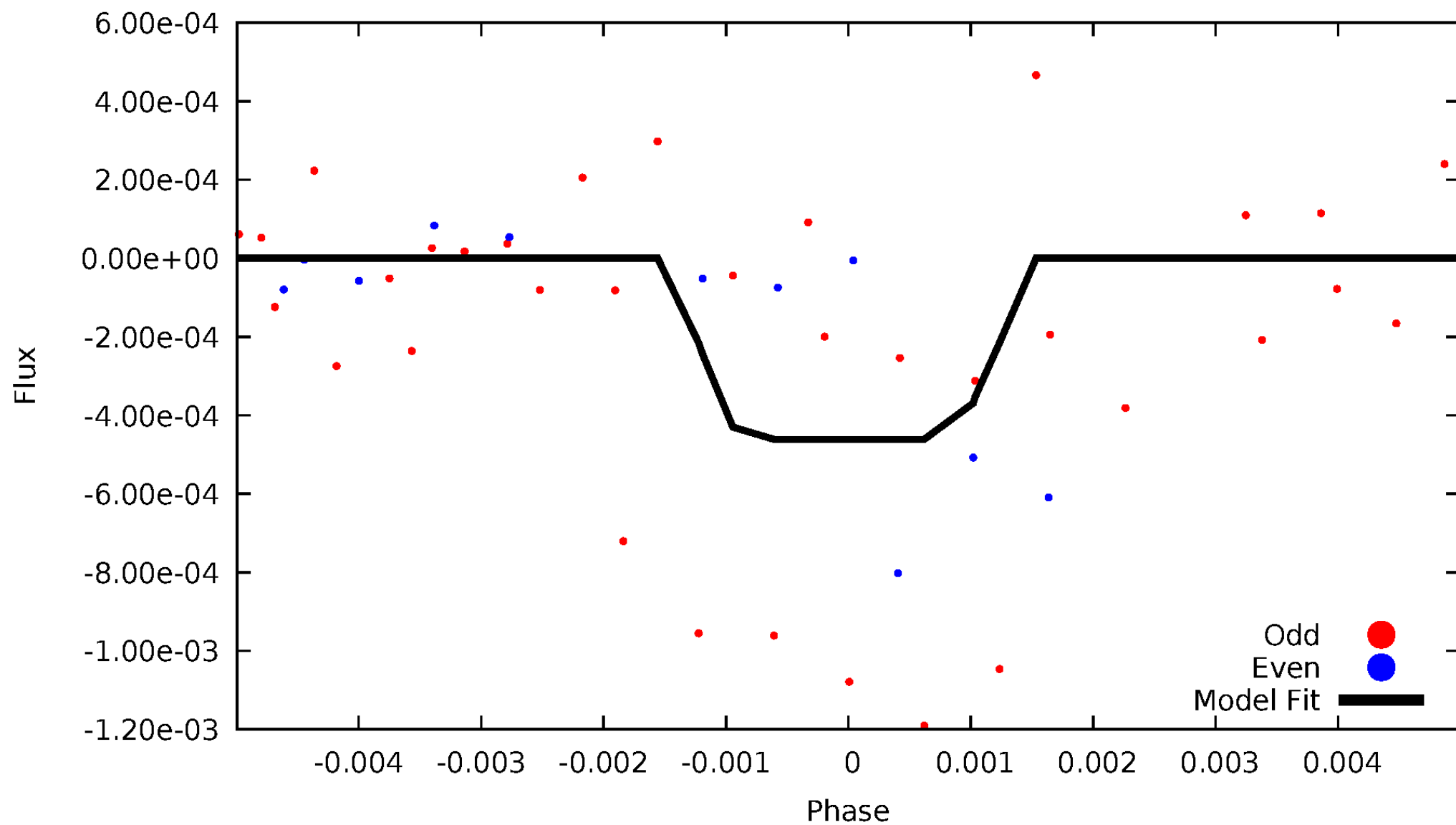
# DV Odd/Even

TCE 005794197-06



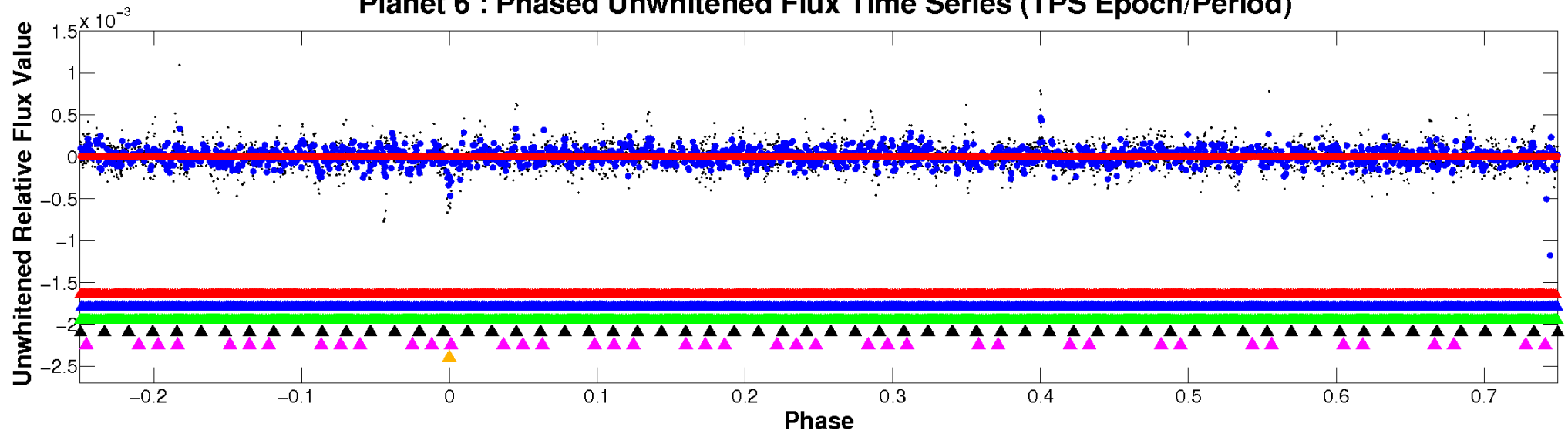
# ALT Odd/Even

TCE 005794197-06

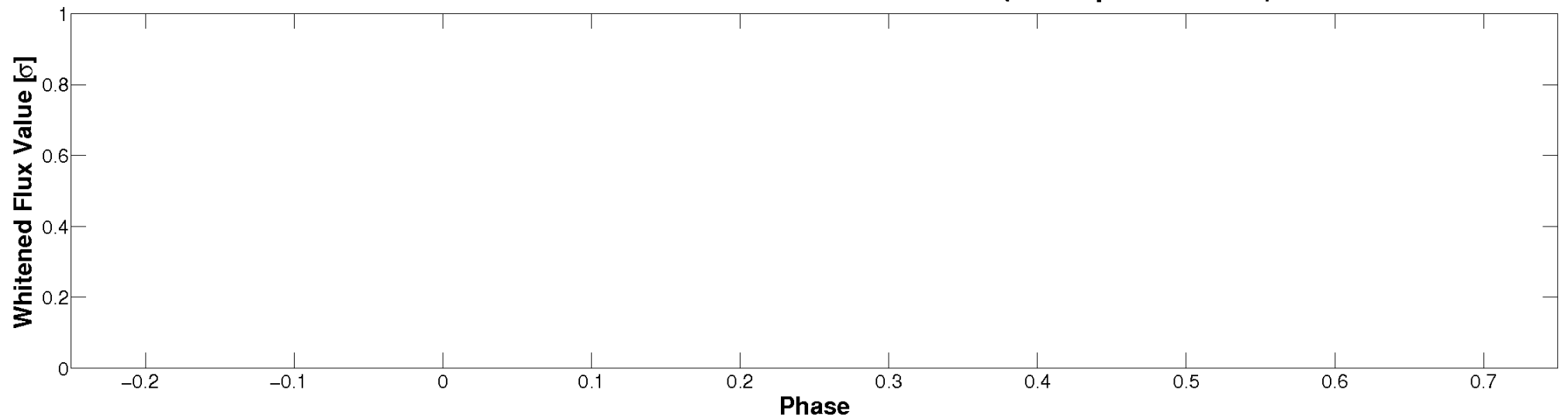


# Non-Whitened Vs. Whitened Light Curve

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

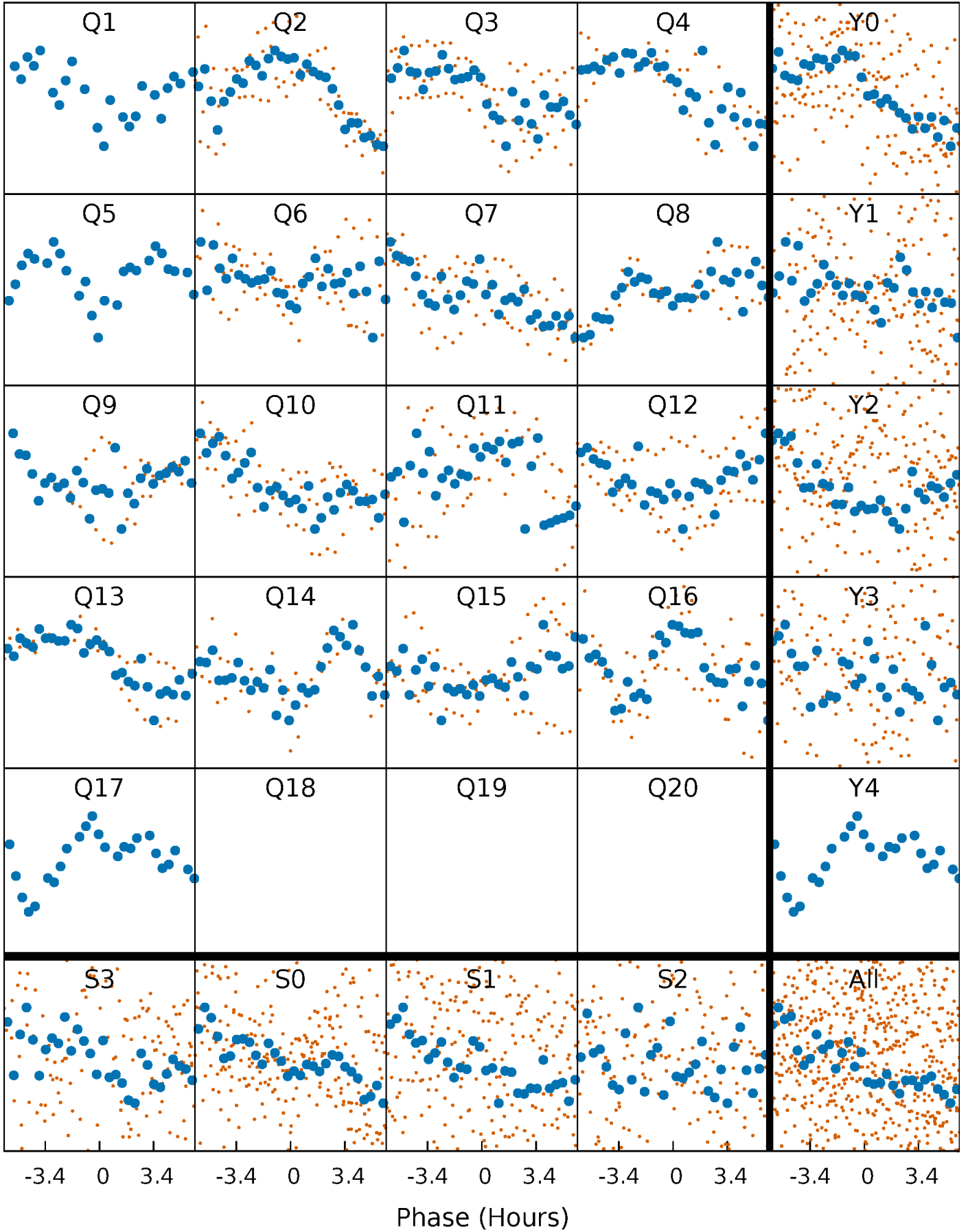


Planet 6 : Phased Whitened Flux Time Series (TPS Epoch/Period)



# PDC Quarter-Phased Transit Curves

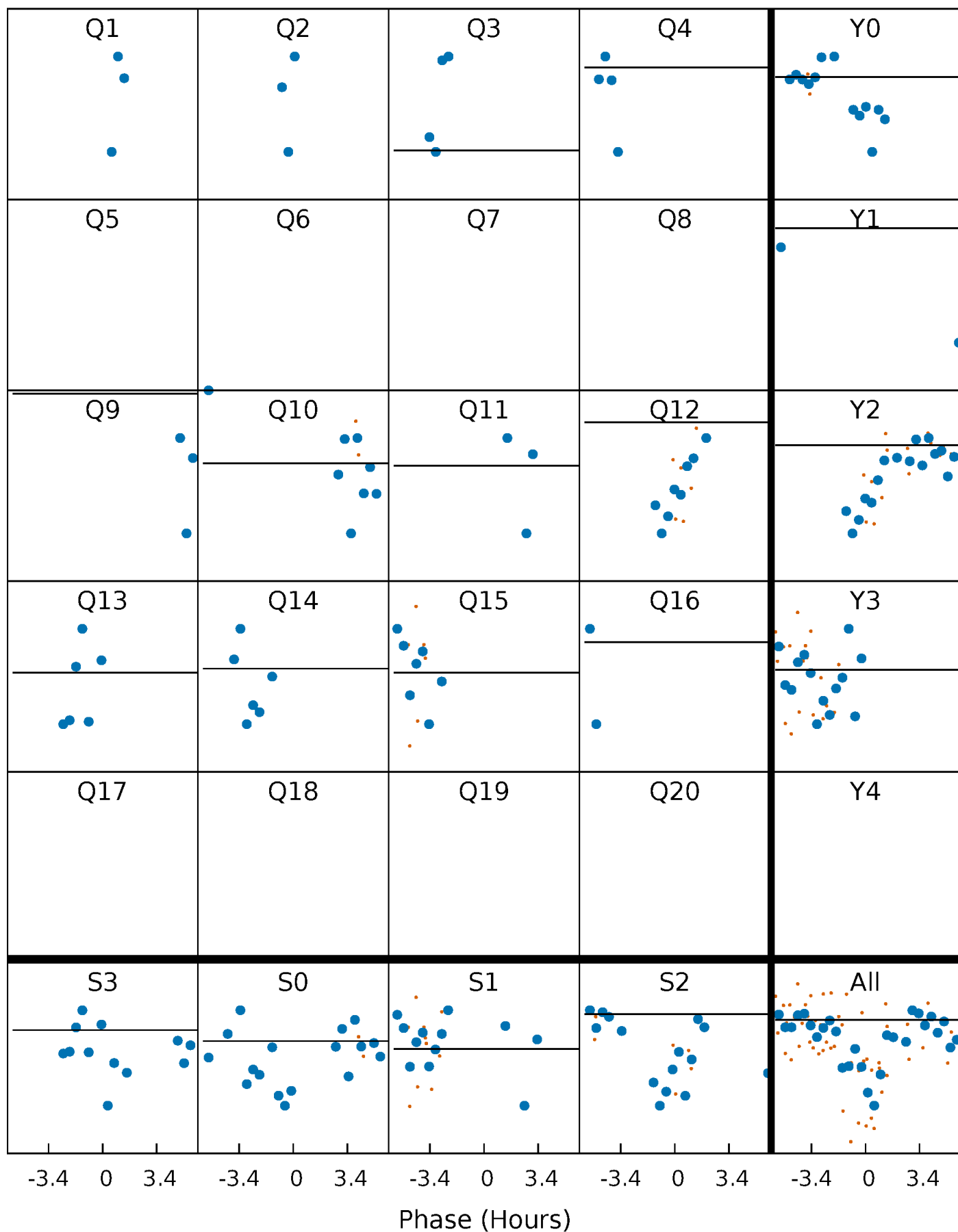
TCE 005794197-06   P= 33.252374 Days    $T_0=143.369530$  (BKJD)





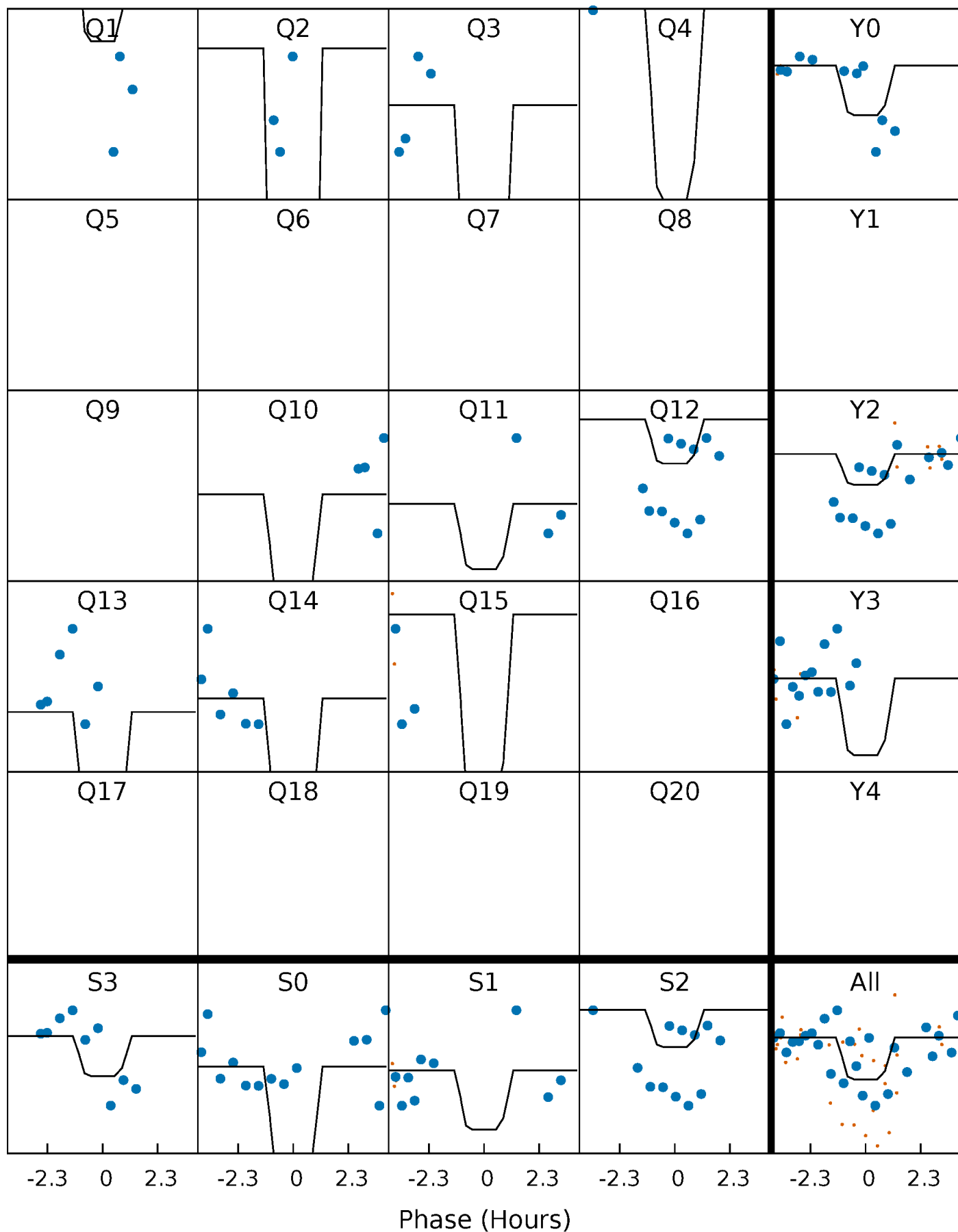
# DV Quarter-Phased Transit Curves

TCE 005794197-06 P= 33.252374 Days  $T_0=143.369530$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

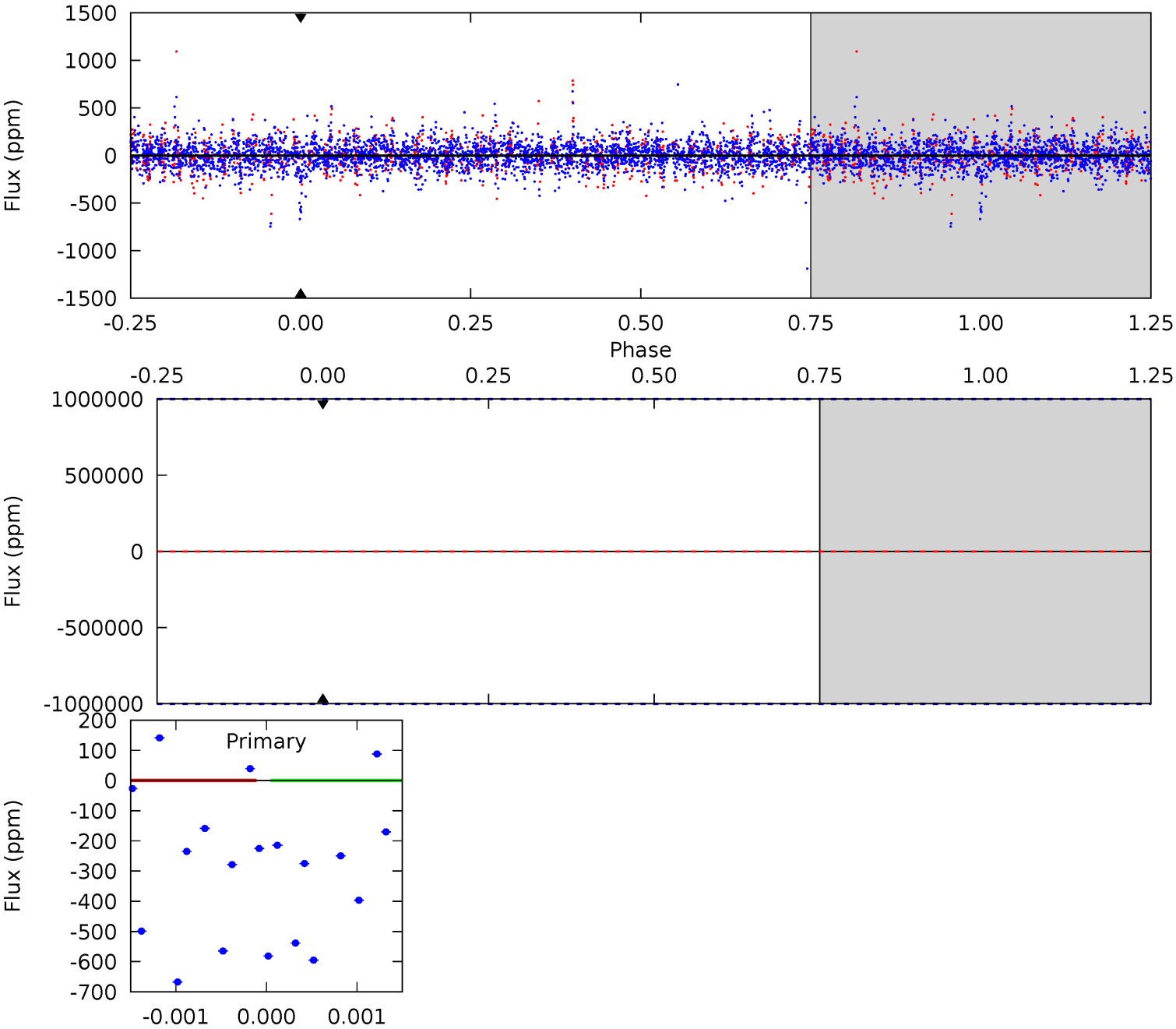
TCE 005794197-06 P= 33.252374 Days  $T_0=143.371353$  (BKJD)



# DV Model-Shift Uniqueness Test

005794197-06, P = 33.252374 Days, E = 110.117156 Days

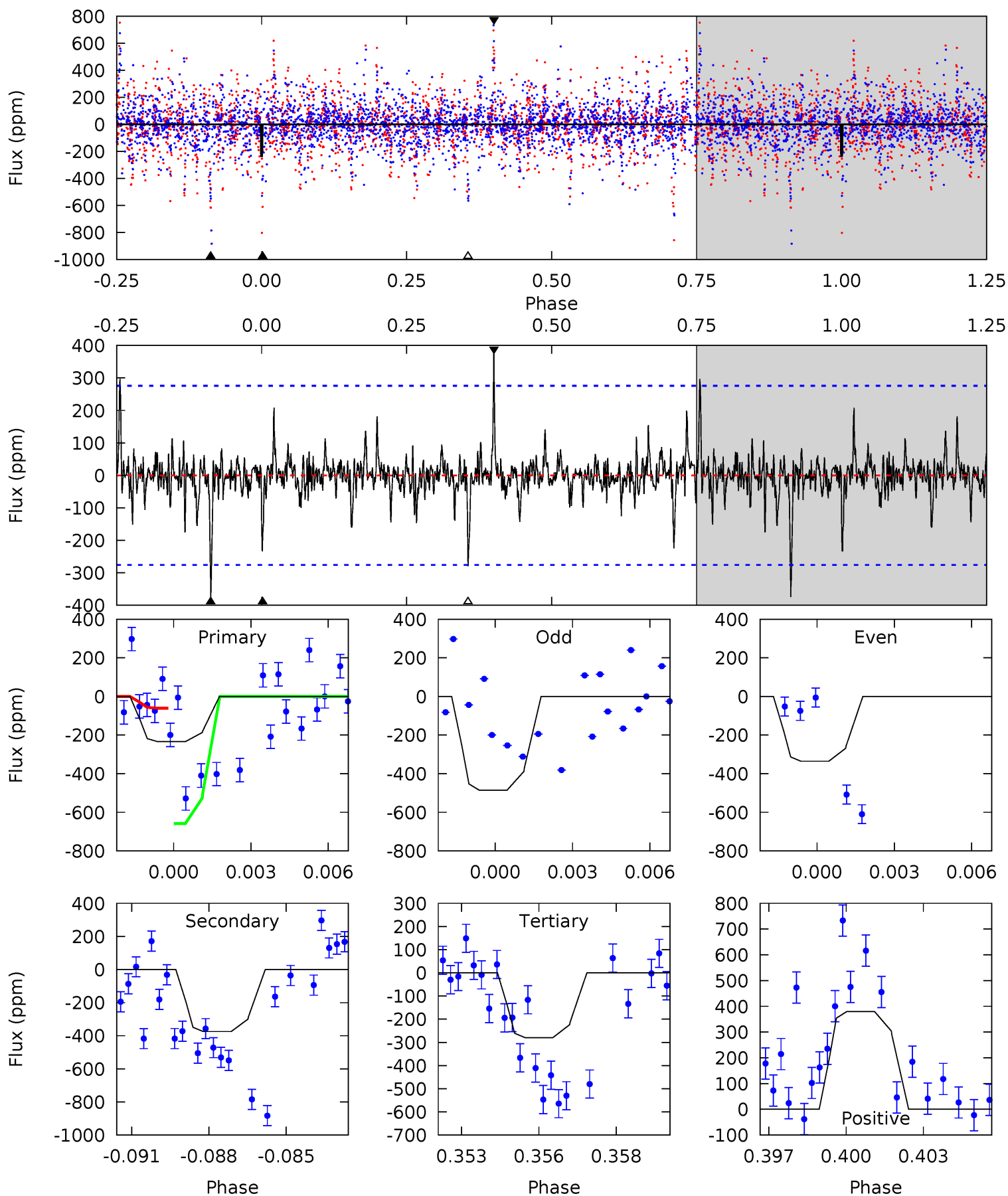
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



# Alt Model-Shift Uniqueness Test

005794197-06, P = 33.252374 Days, E = 110.118979 Days

Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.47	7.15	5.34	7.25	5.27	2.99	1.01	-0.87	-2.79	1.81	-0.10	1.52	1.67	0.50	5.69



### Stellar Parameters For KIC 005794197

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$7196^{+193}_{-236}$	$4.252^{+0.120}_{-0.180}$	$-0.580^{+0.250}_{-0.300}$	$1.358^{+0.372}_{-0.248}$	$1.203^{+0.173}_{-0.142}$	$0.676^{+0.428}_{-0.322}$
	+3%/-3%	+3%/-4%	+43%/-52%	+27%/-18%	+14%/-12%	+63%/-48%
Source	PHO1	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 005794197-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	$A_{\text{obs}}$
DV	$0 \pm 1000000$	$11.79^{+12.03}_{-8.25}$	$1121^{+84}_{-66}$	$-5001^{+40646}_{-27641}$	$-332.085^{+35605.976}_{-31273.222}$
Alt.	$-374 \pm 52$	$11.10^{+11.61}_{-7.41}$	$1119^{+77}_{-64}$	$3966^{+2232}_{-810}$	$77^{+613}_{-59}$

$T_{\text{max}}$  = Theoretical Maximum Planetary Temperature

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

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

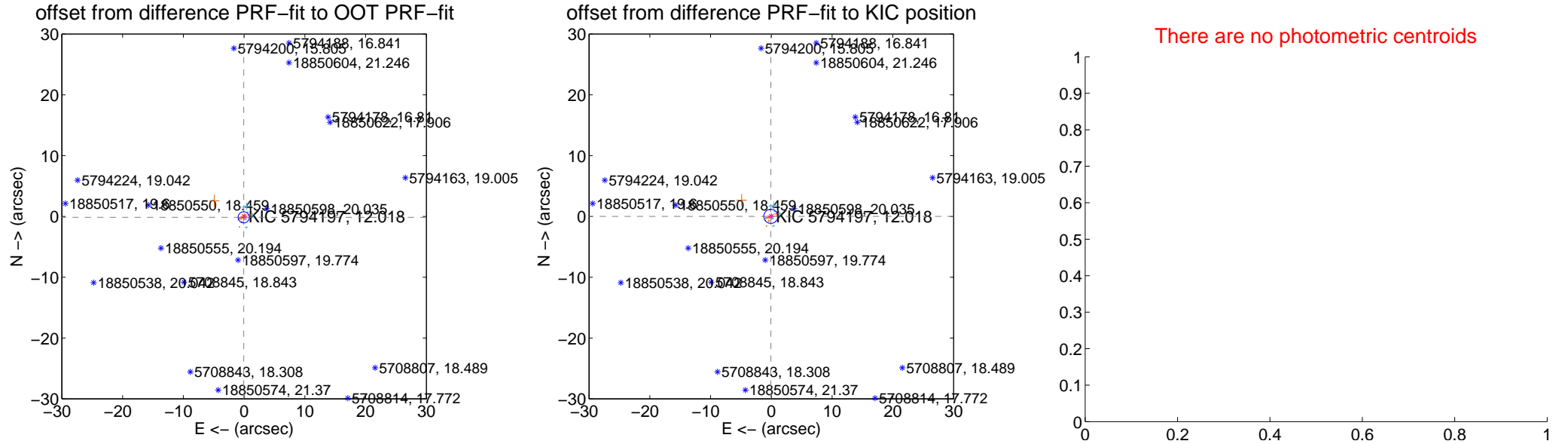
## DV Centroid Data

Supplemental centroid analysis for 005794197-06. Kepler magnitude: 12.02. Transit SNR -1.00

There are 8 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

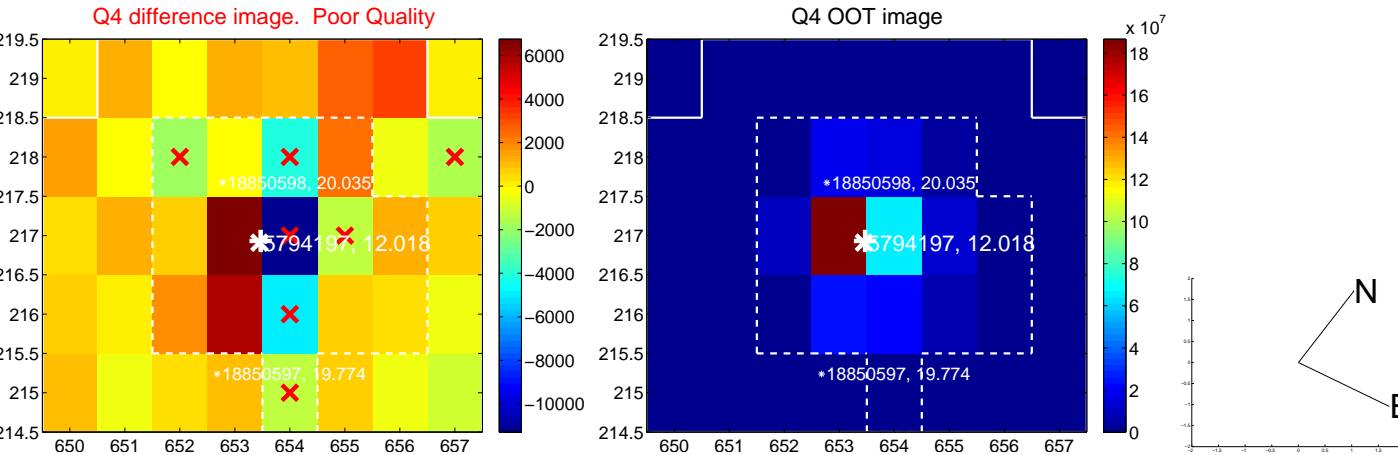
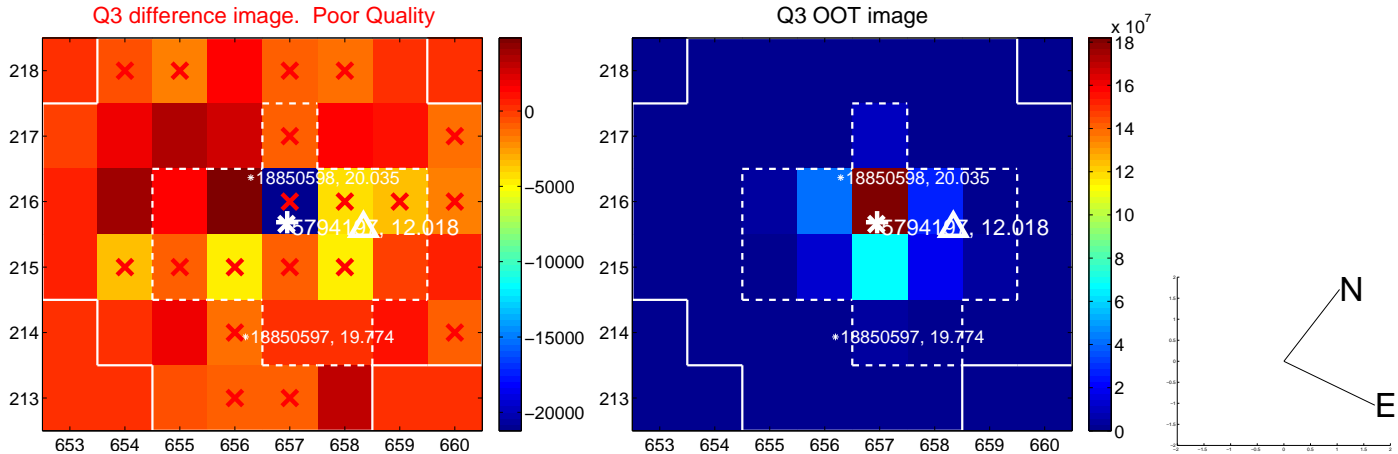
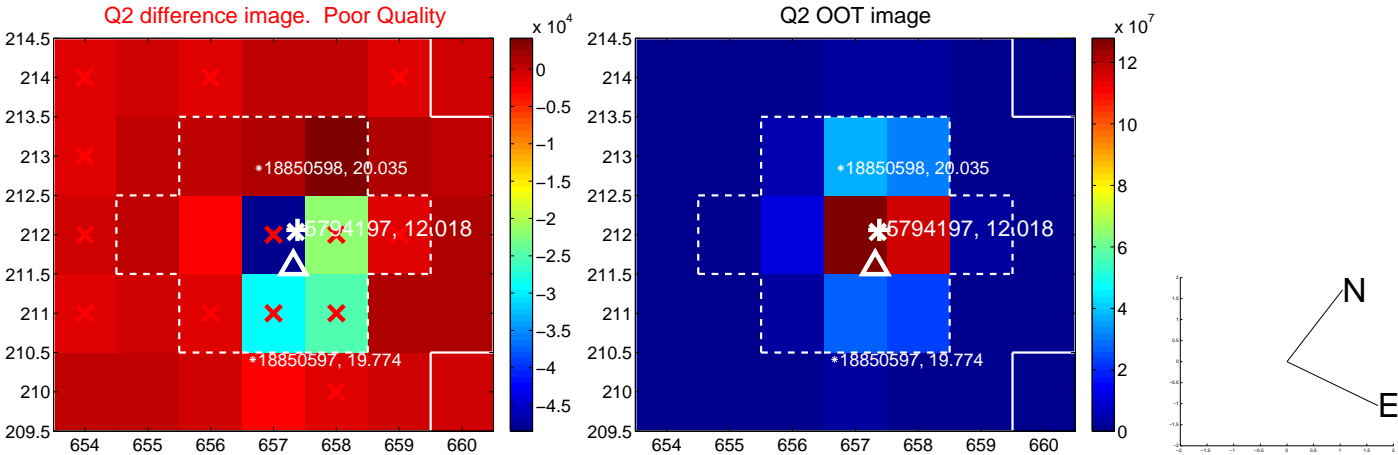
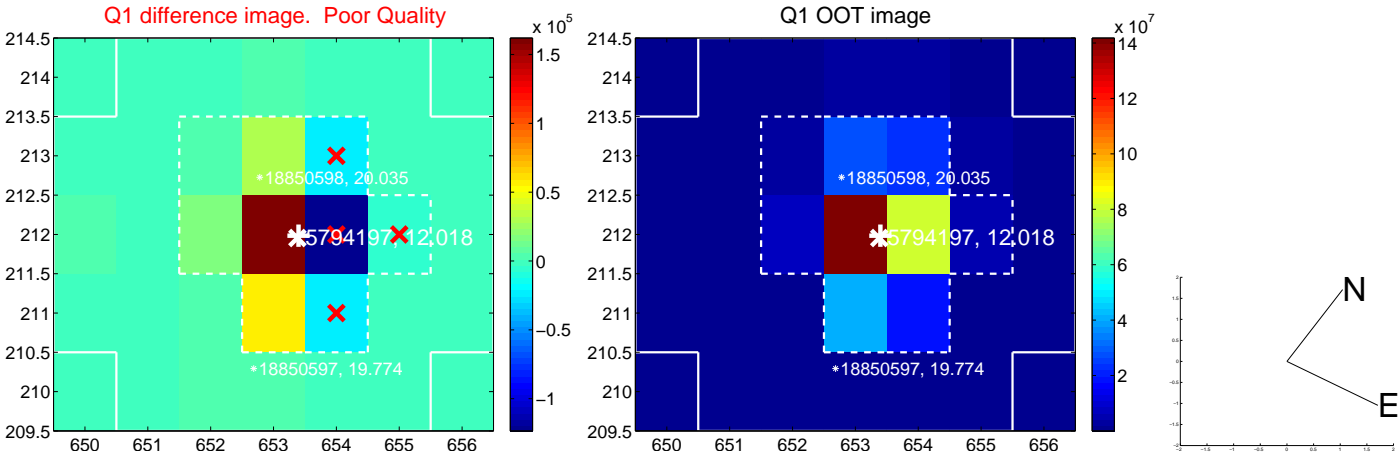
	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.162 \pm 0.306$	0.53	$0.064 \pm 0.430$	$-0.149 \pm 0.335$
PRF-fit source offset from KIC position	$0.080 \pm 0.387$	0.21	$0.080 \pm 0.379$	$0.012 \pm 0.308$
photometric centroid source offset	—	—	—	—



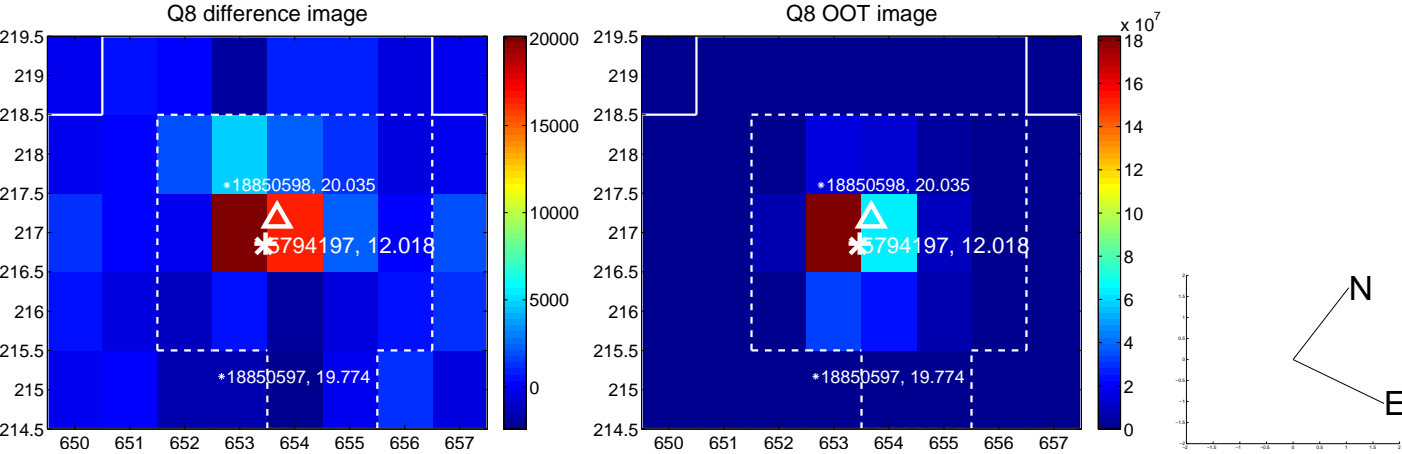
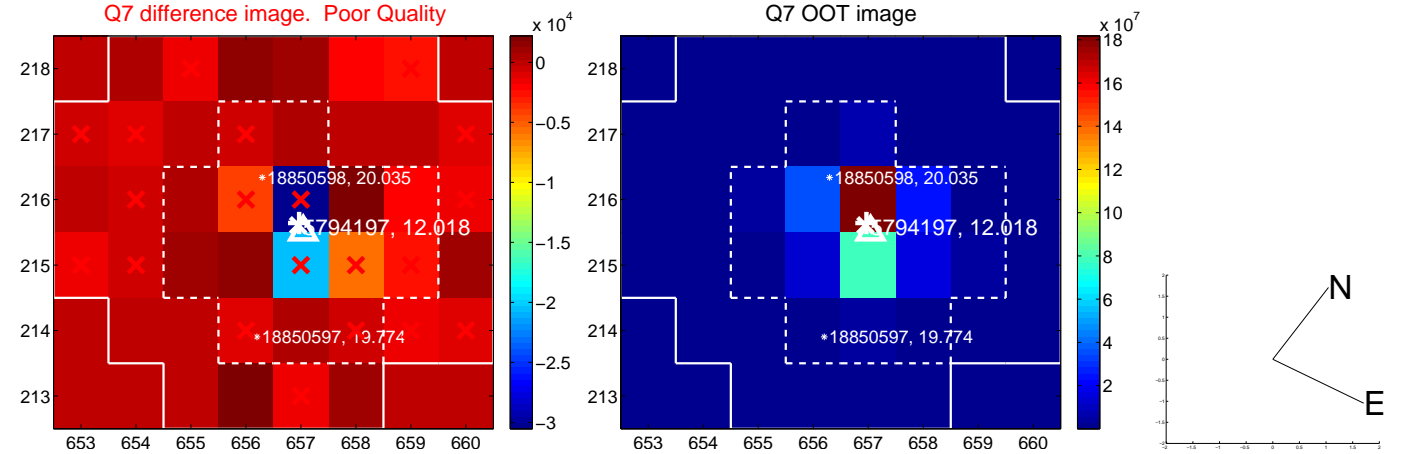
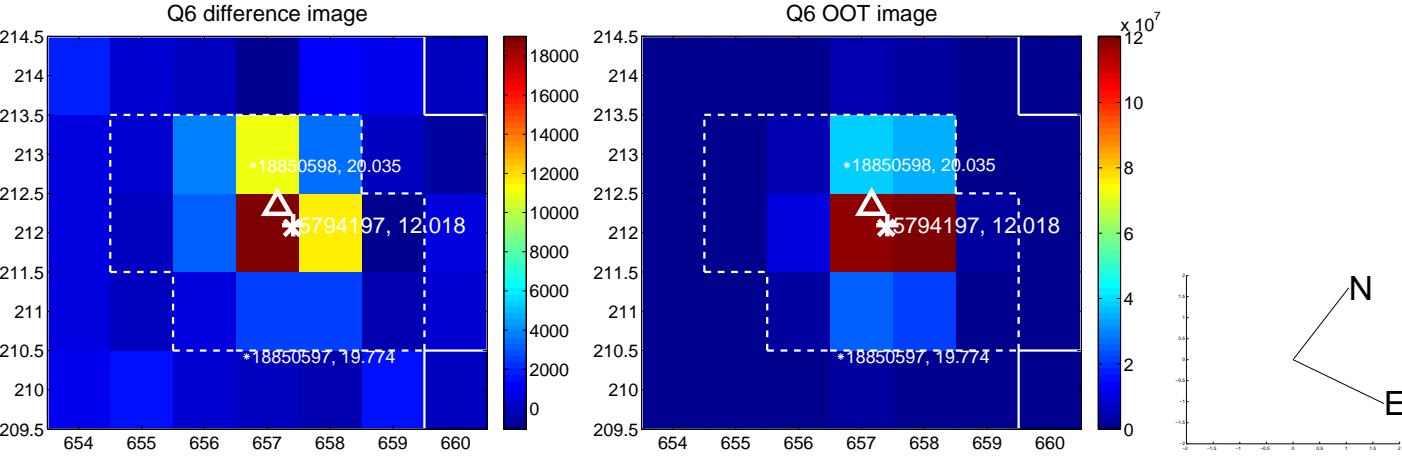
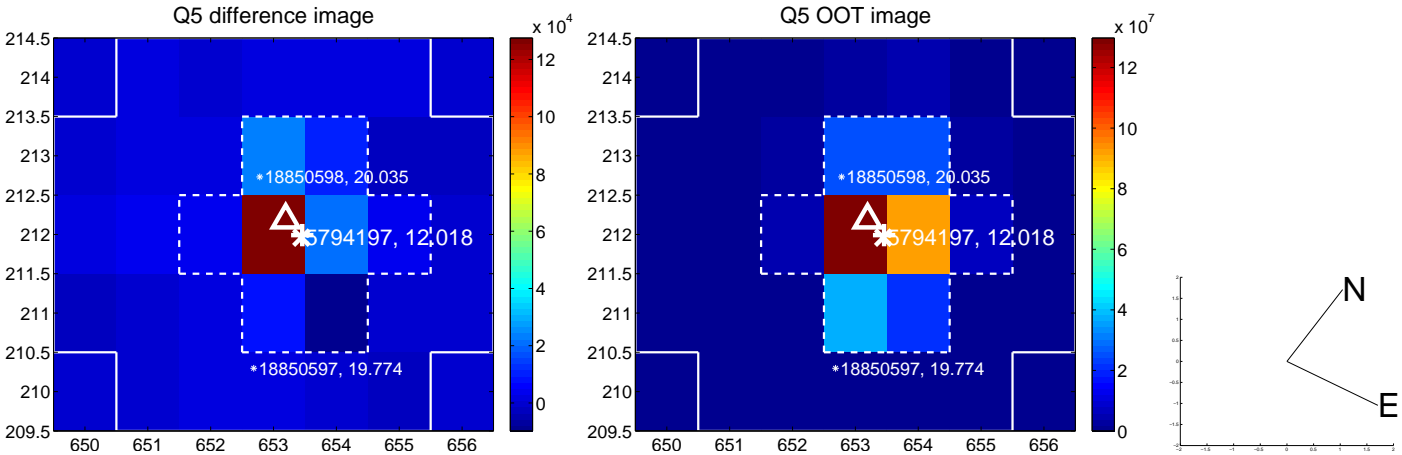
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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



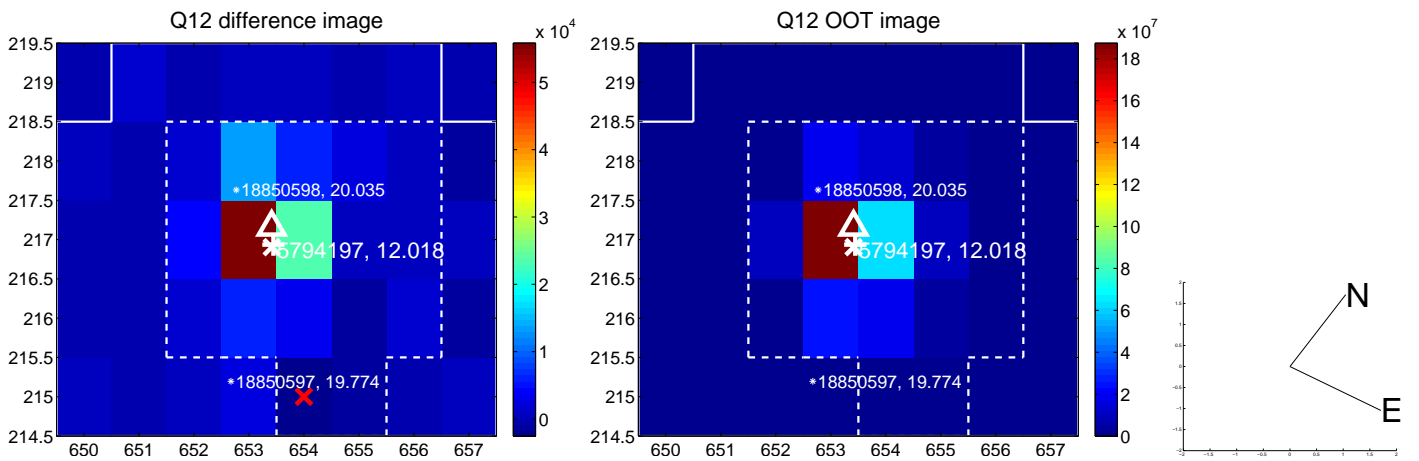
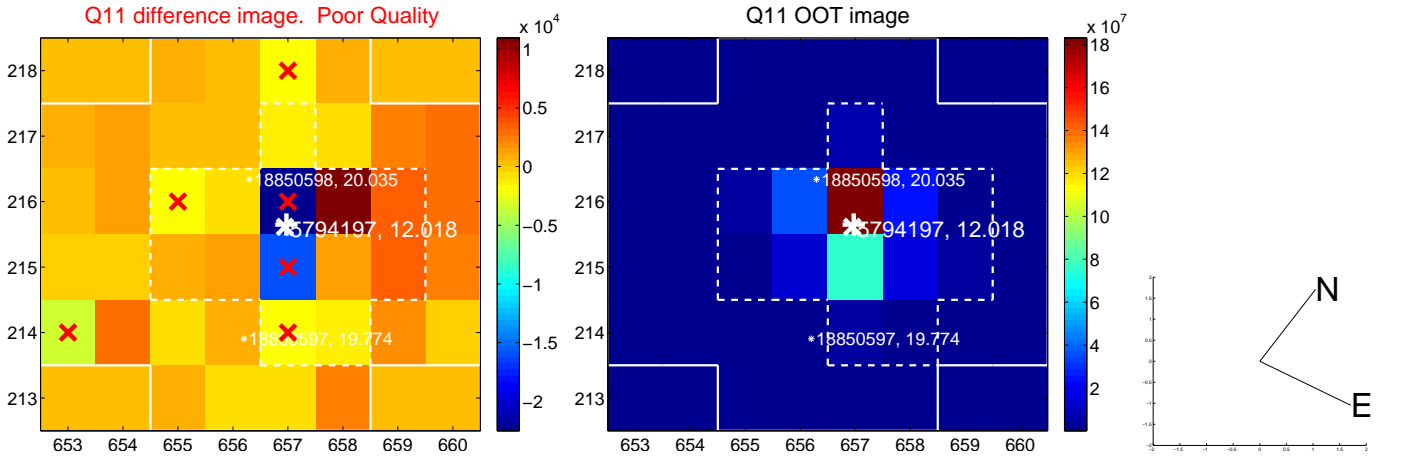
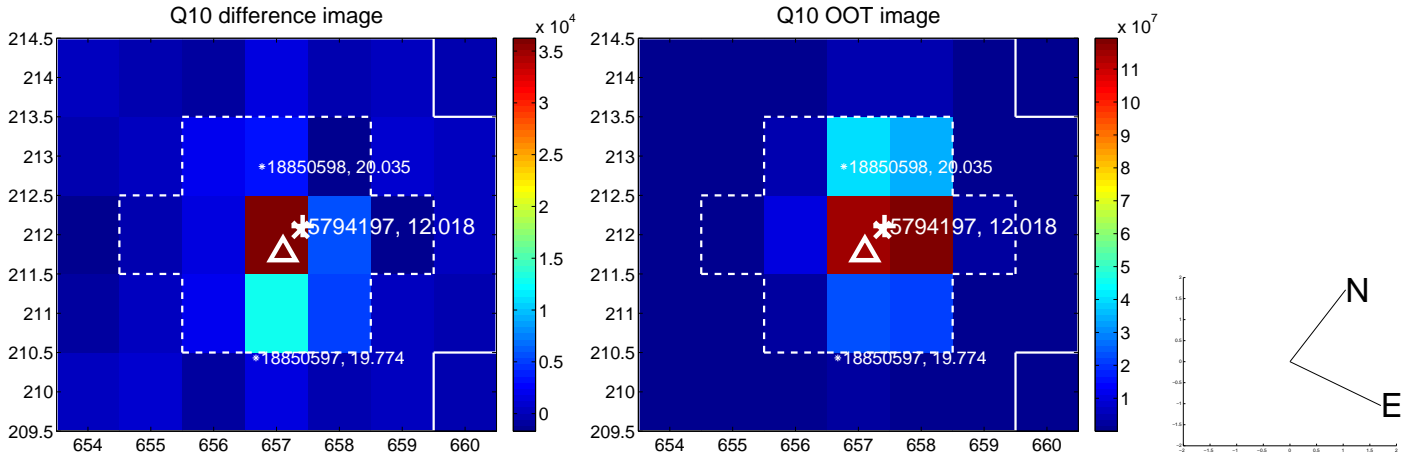
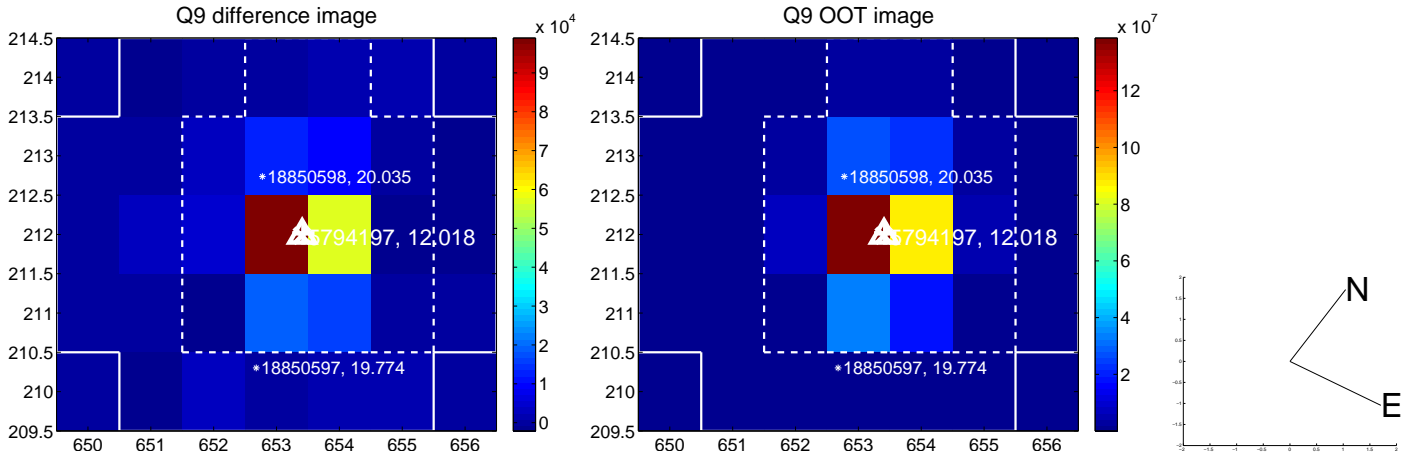
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



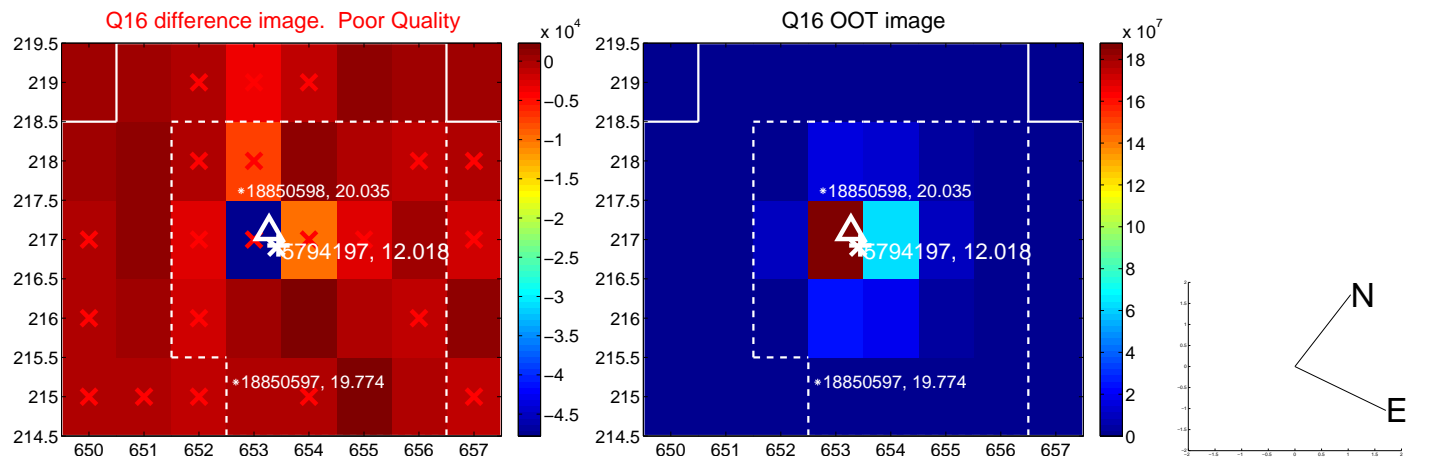
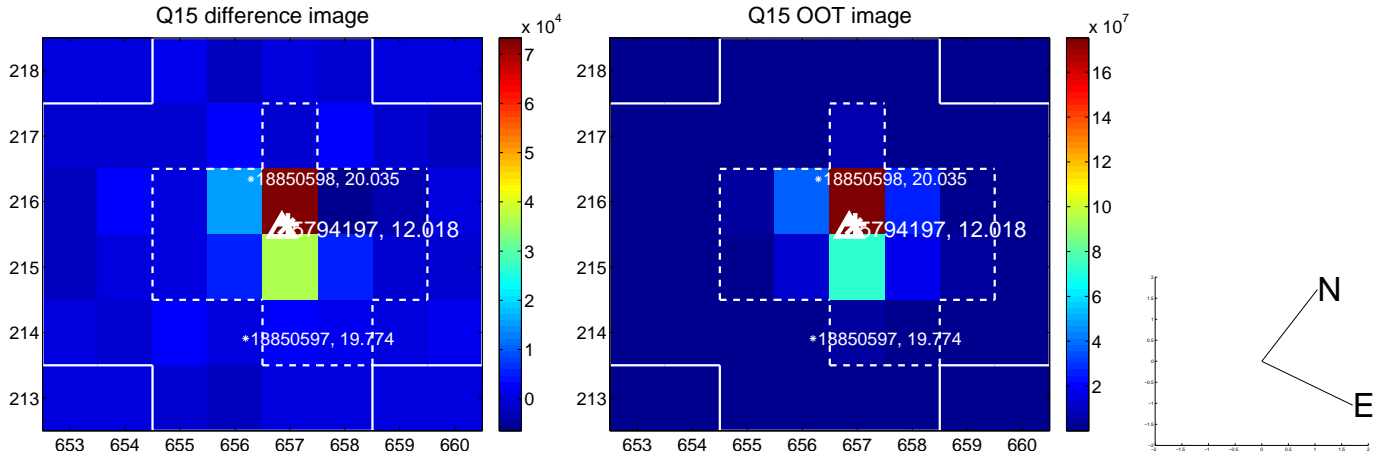
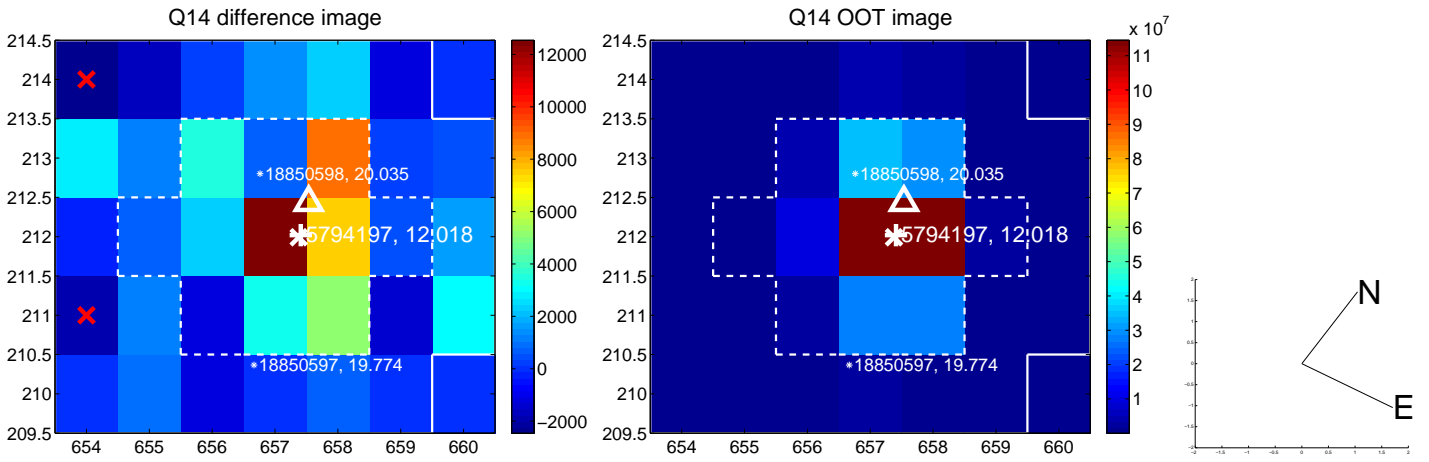
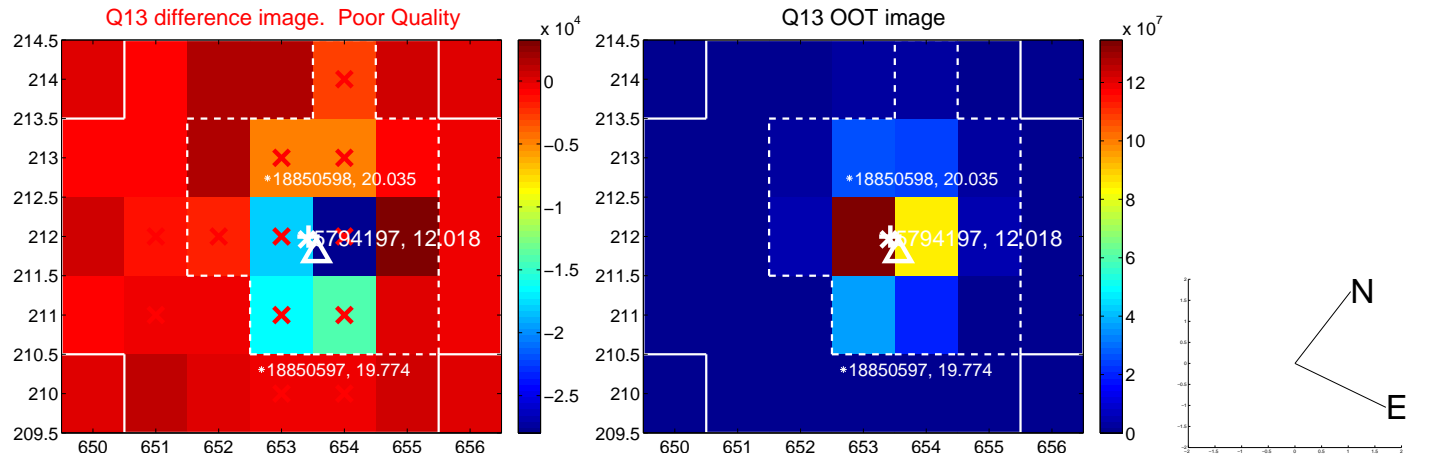
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



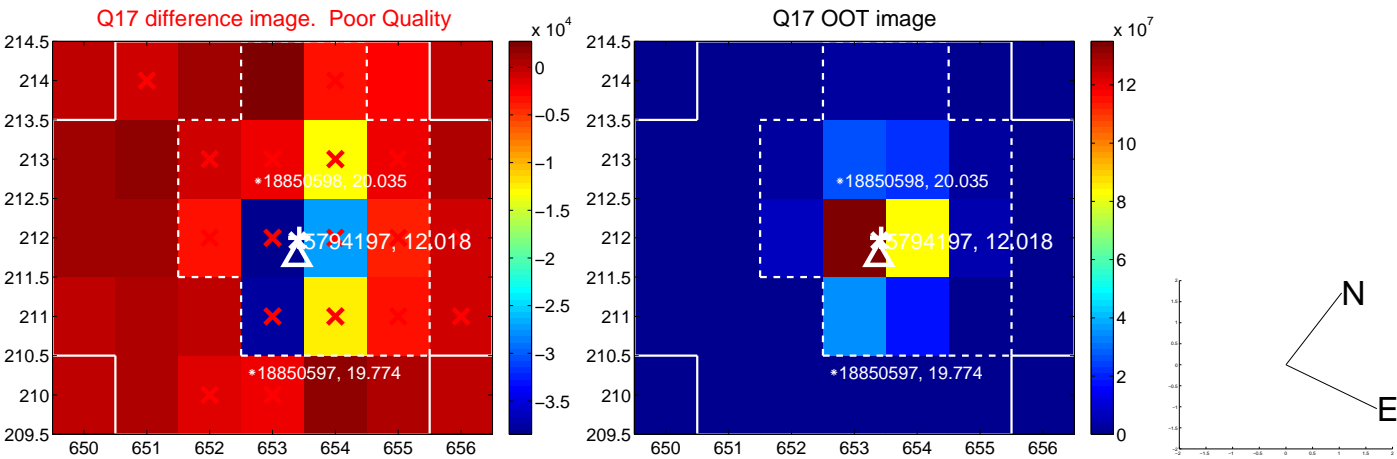
white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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

