

# KIC 005479538

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
005479538-01	OBS	No	0.611871	131.585056	12.6	1.417	9.9	8.6	1.91	9700	0.73	85102.47
005479538-02	OBS	No	0.611871	131.783852	12.5	1.283	8.3	8.2	1.91	9700	0.73	85102.39
005479538-03	OBS	No	0.611864	131.989527	0.8	2.189	9.2	0.5	1.91	9700	0.18	85103.78

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005479538-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005479538-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_SATURATED
005479538-03	OBS	FP	0.00	1	0	0	0	LPP_DV—SAME_NTL_PERIOD—CENT_SATURATED

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

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

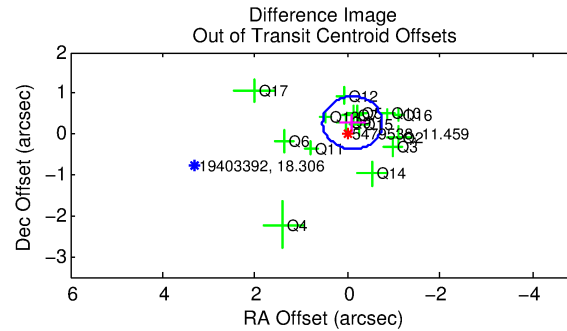
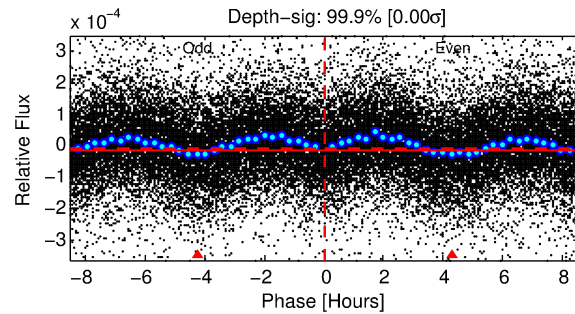
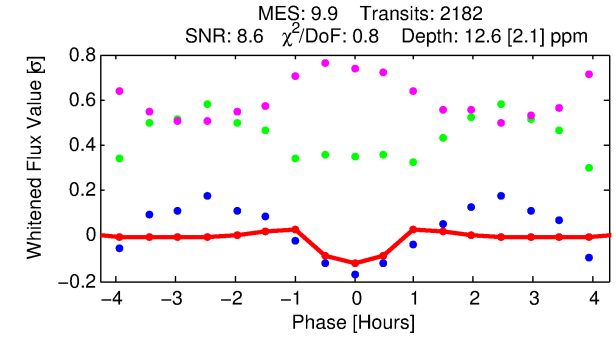
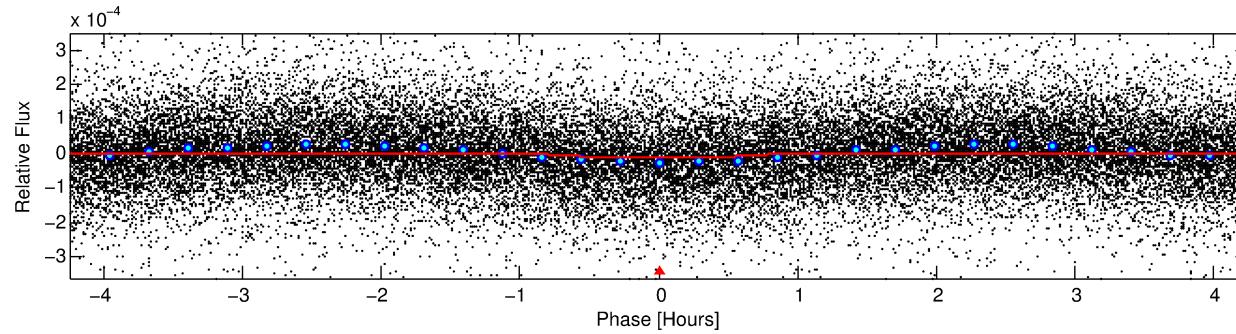
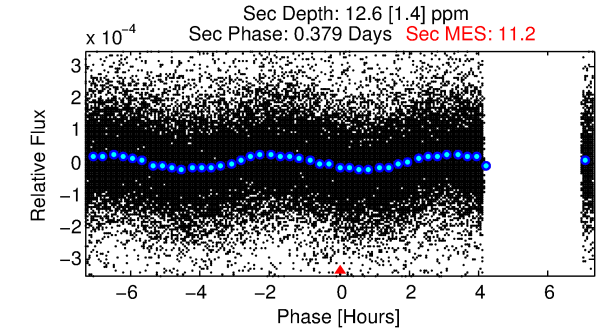
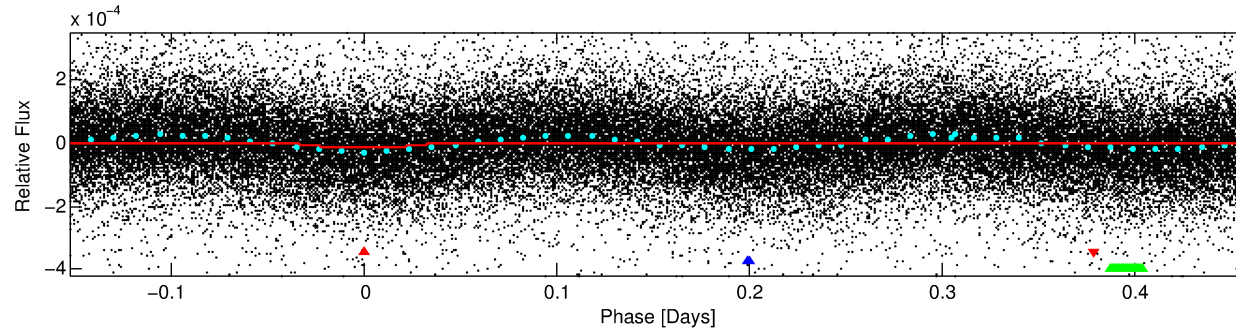
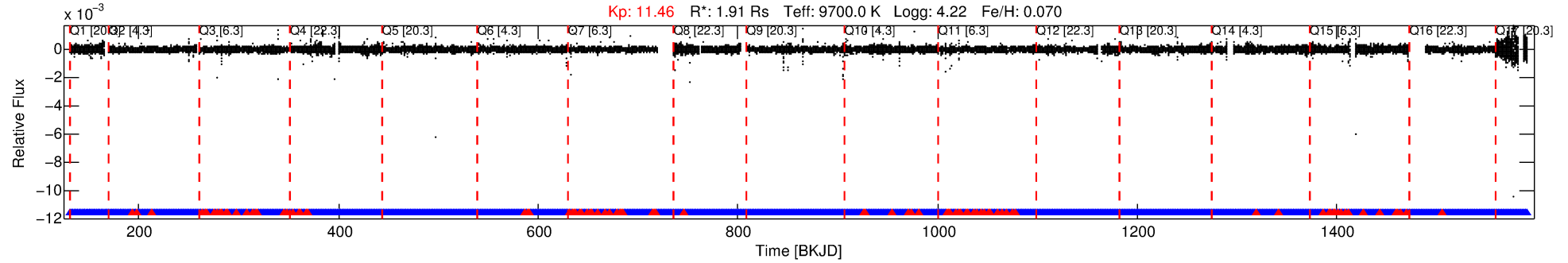
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

Ephemeris Match Information For 005479538-01

No Significant Match Found

# DV One-Page Summary

KIC: 5479538 Candidate: 1 of 3 Period: 0.612 d



## DV Fit Results:

Period = 0.61187 [0.00001] d  
Epoch = 131.5851 [0.0019] BKJD  
Rp/R\* = 0.0035 [0.0004]  
a/R\* = 2.51 [1.15]  
b = 0.70 [0.40]  
Seff = 85102.47 [48149.89]  
Teq = 4355 [616] K  
Rp = 0.73 [0.37] Re  
a = 0.0184 [0.0073] AU  
Ag = 4.42 [2.65] [1.29σ]  
Teffp = 9762 [717] K [5.72σ]

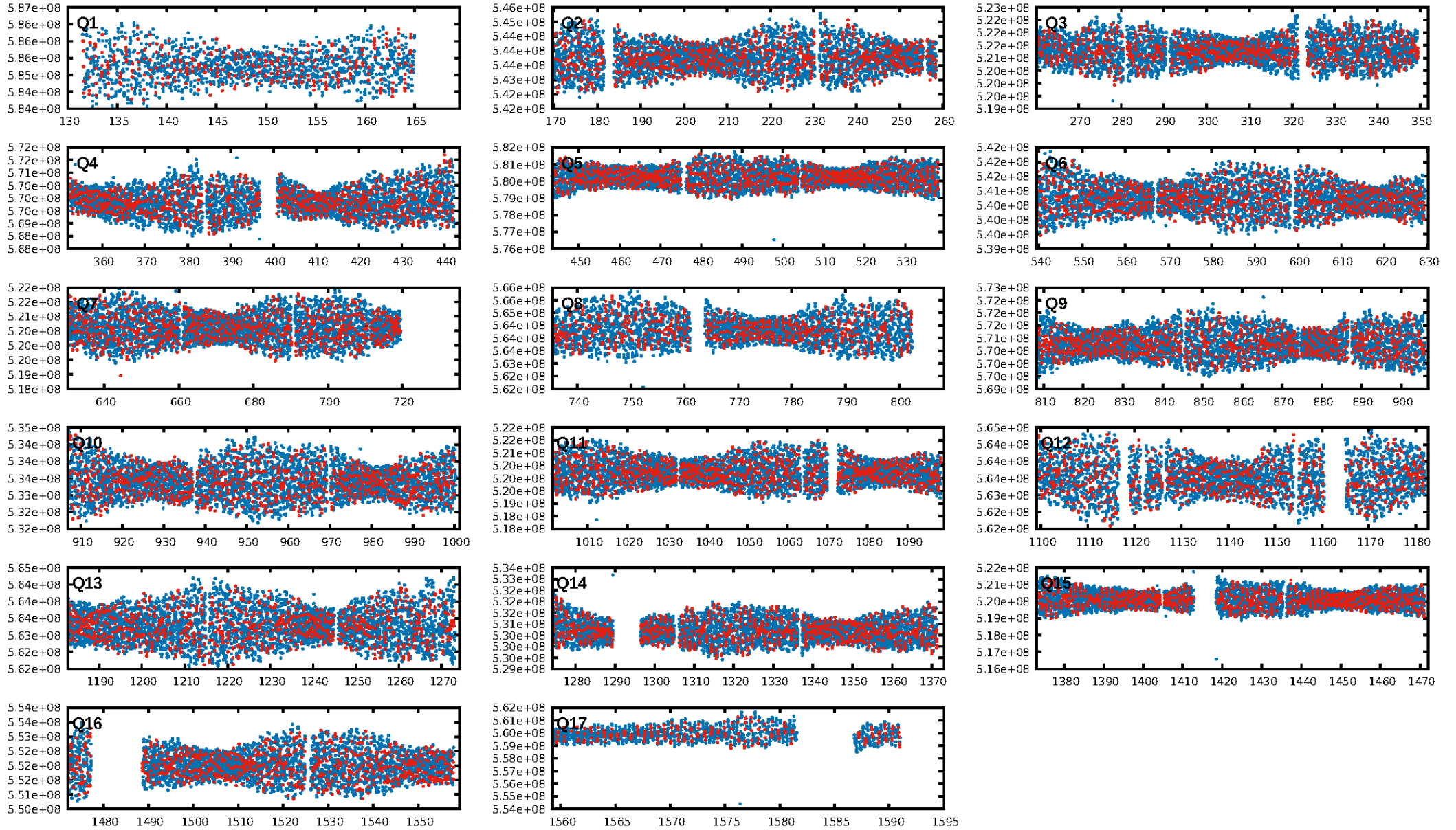
## DV Diagnostic Results:

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: 0.95 [1990/2085]  
GhostDiagnostic-chr: 0.756  
Centroid-sig: 32.7%  
Centroid-so: 1.219 arcsec [1.10σ]  
OotOffset-rm: 0.294 arcsec [1.37σ]  
OotOffset-st: 4/4/3/4 [15]  
KicOffset-rm: 0.467 arcsec [1.86σ]  
KicOffset-st: 4/4/3/4 [15]  
DiffImageQuality-fgm: 0.87 [13/15]  
DiffImageOverlap-fno: 0.00 [0/17]

Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 08:50:14 Z

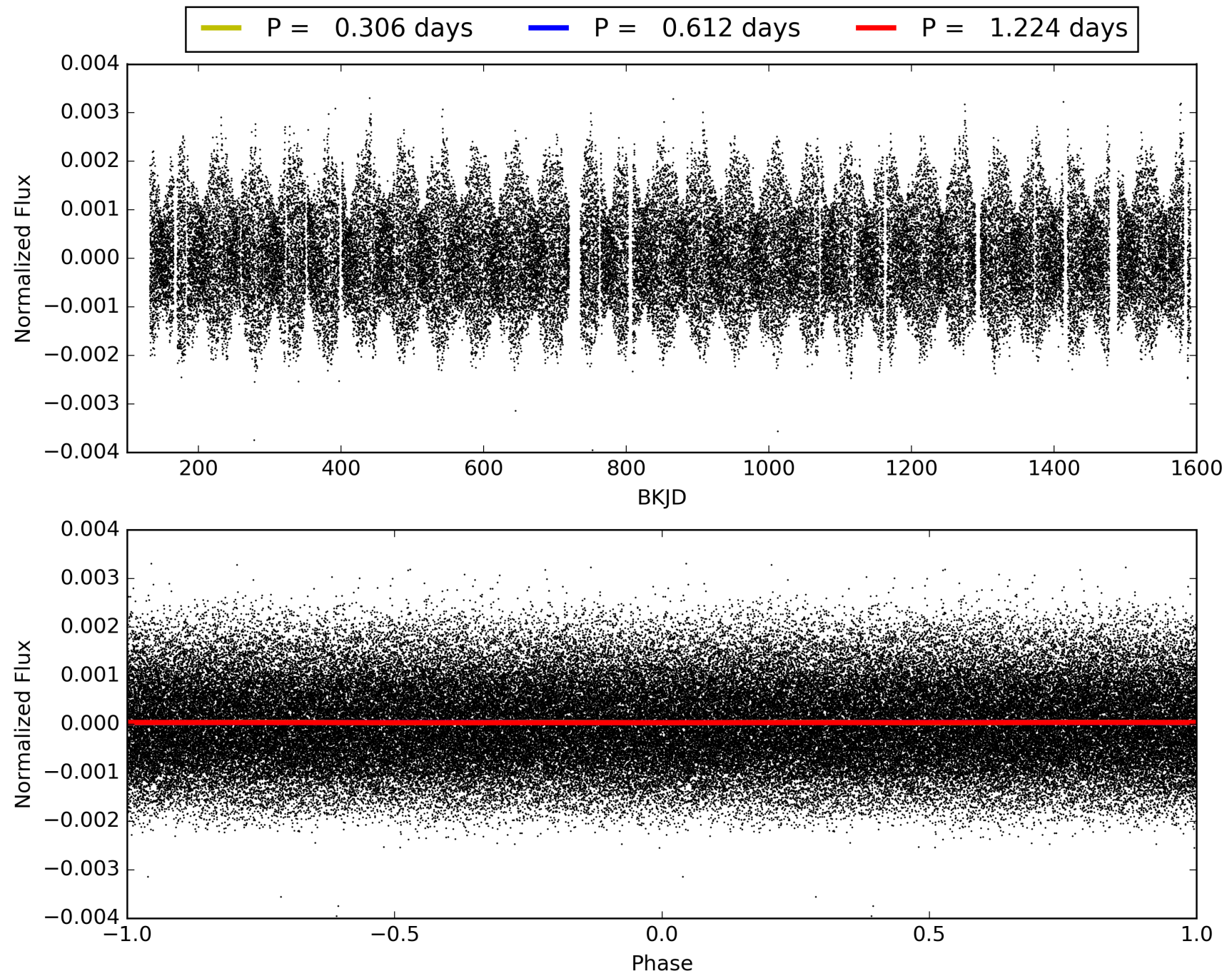
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

# TCE 005479538-01, PDC Light Curves





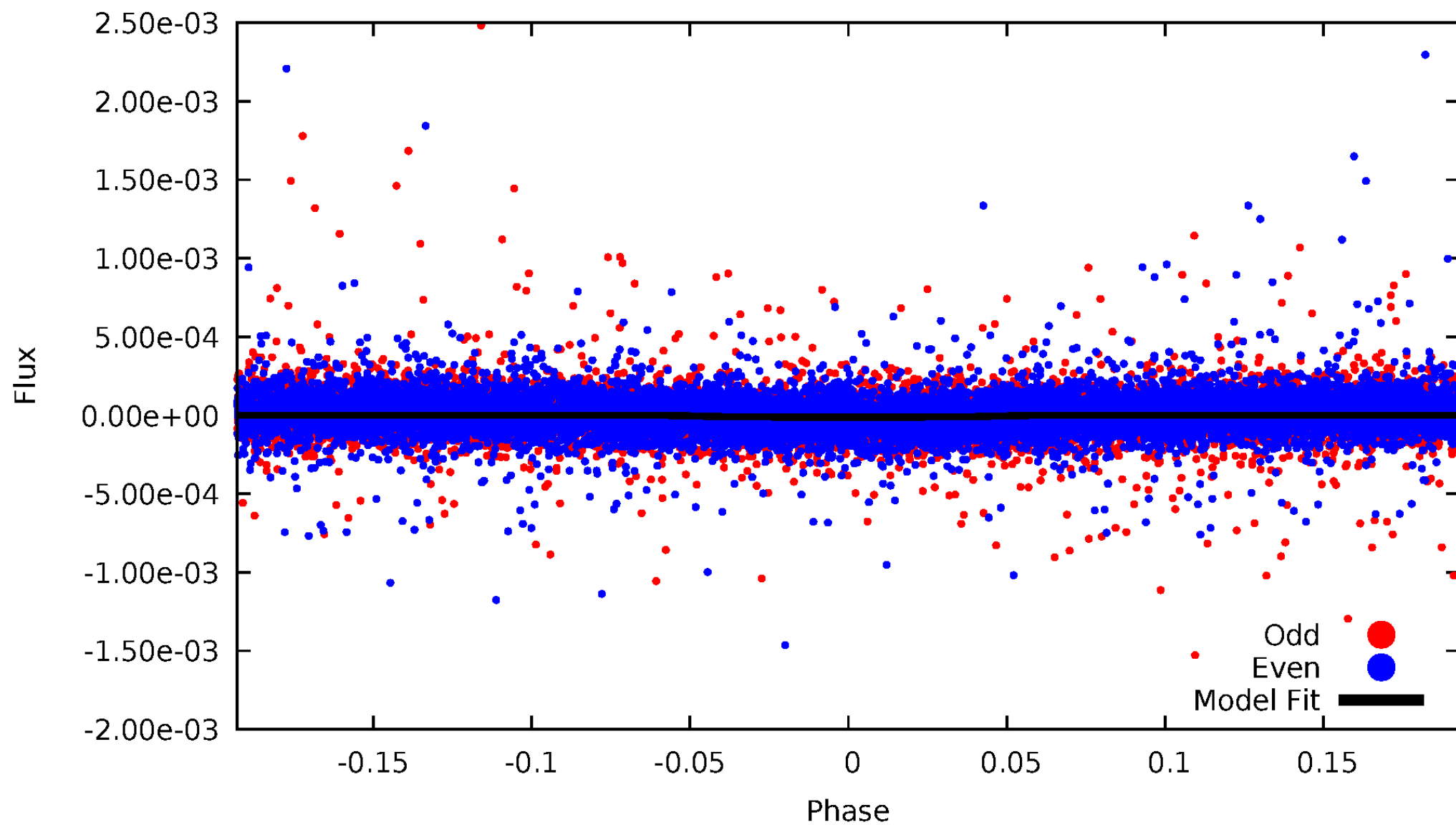
TCE 005479538-01





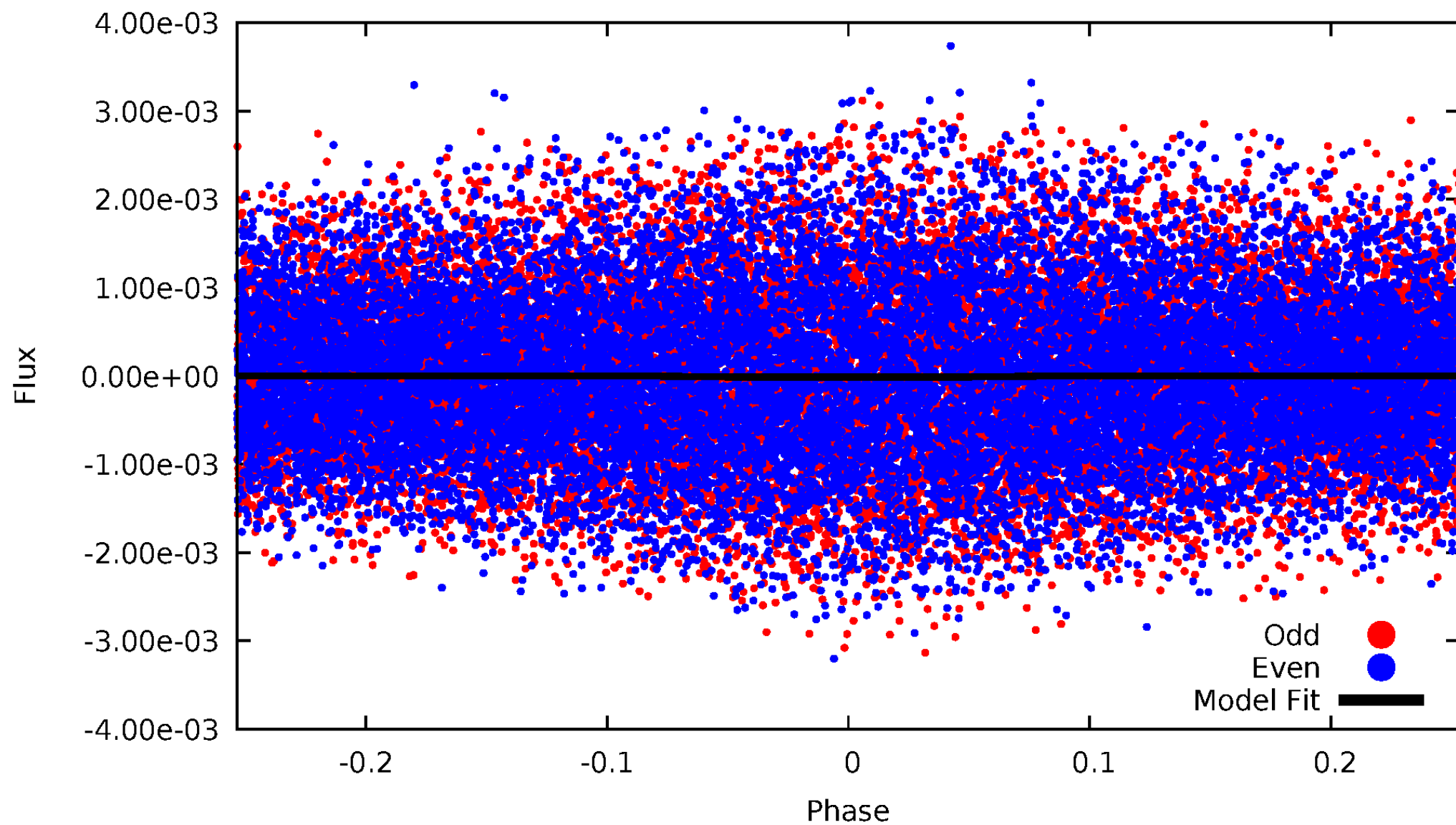
# DV Odd/Even

TCE 005479538-01



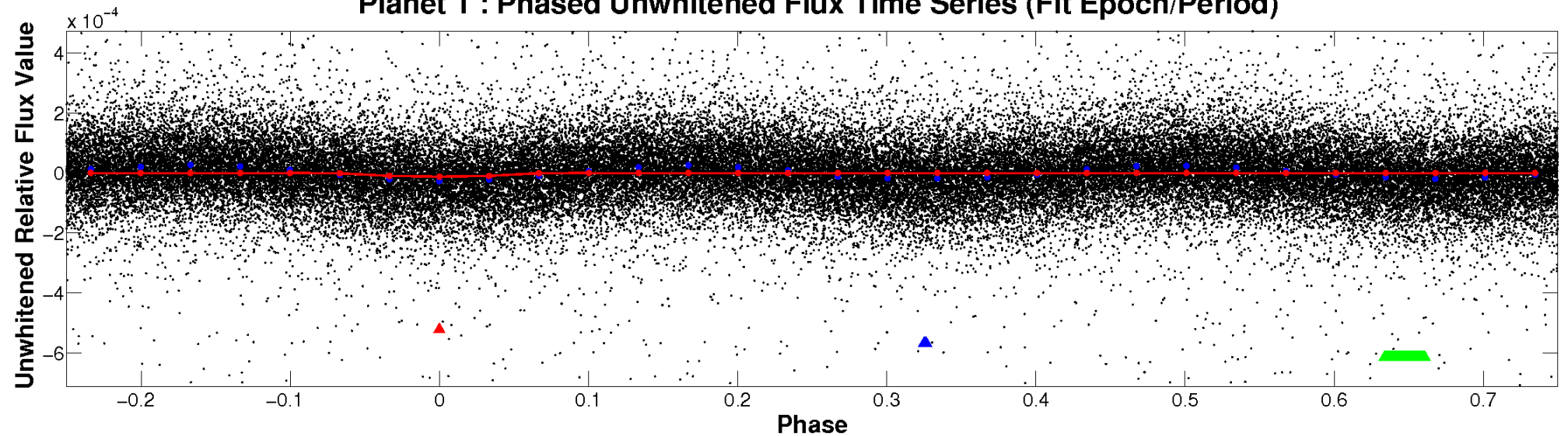
# ALT Odd/Even

TCE 005479538-01

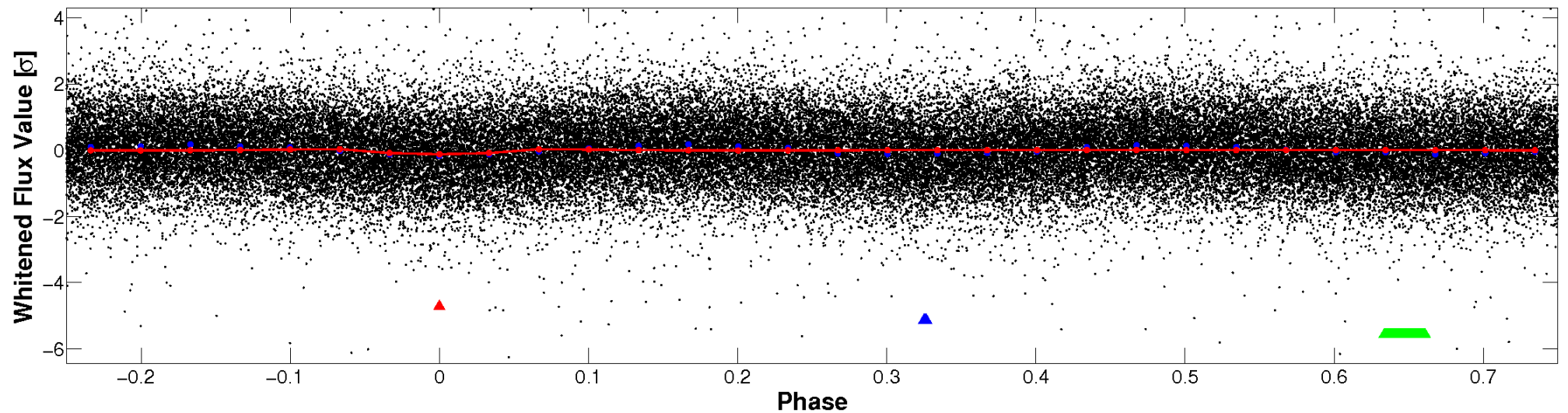


# Non-Whitened Vs. Whitened Light Curve

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



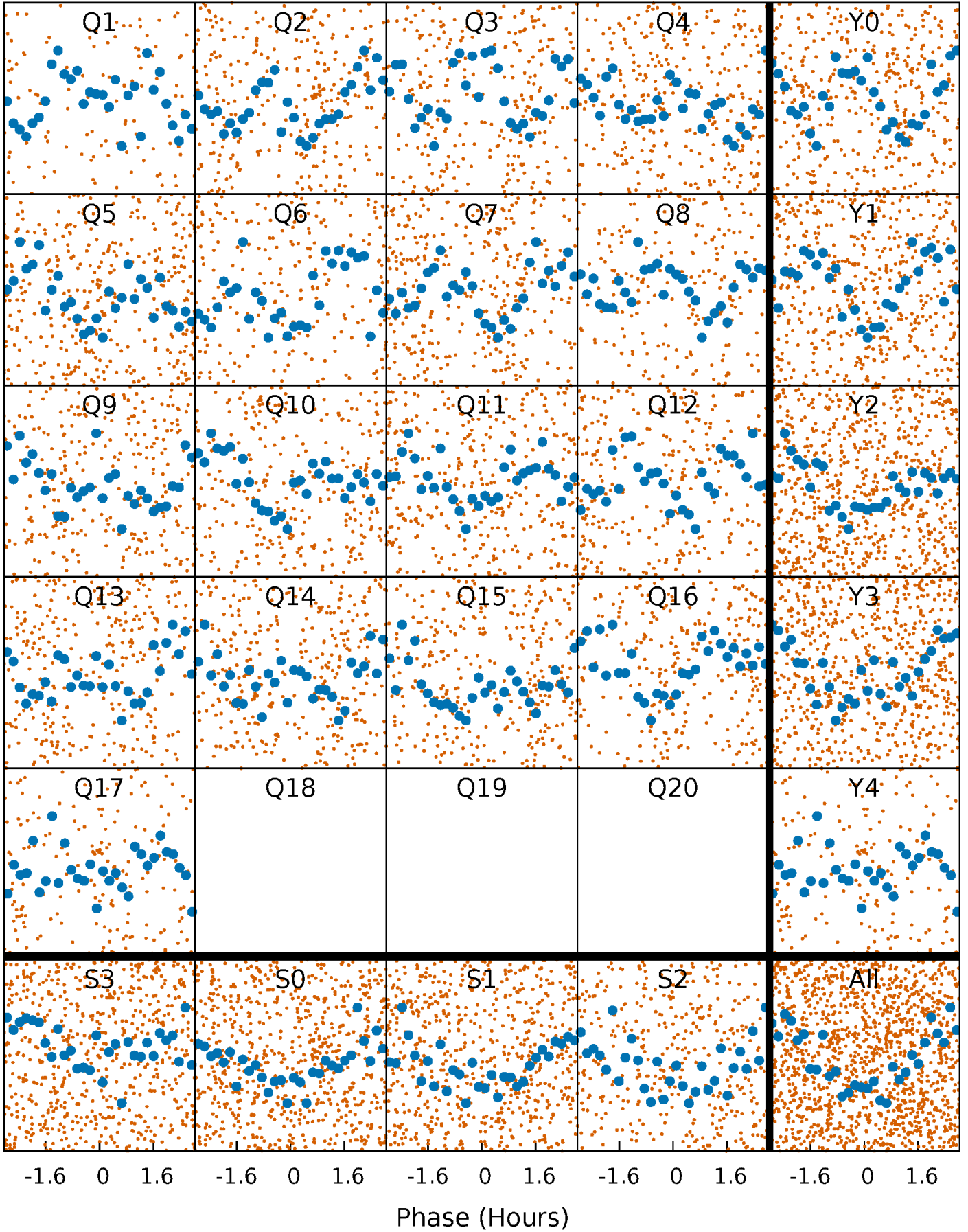
**Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)**





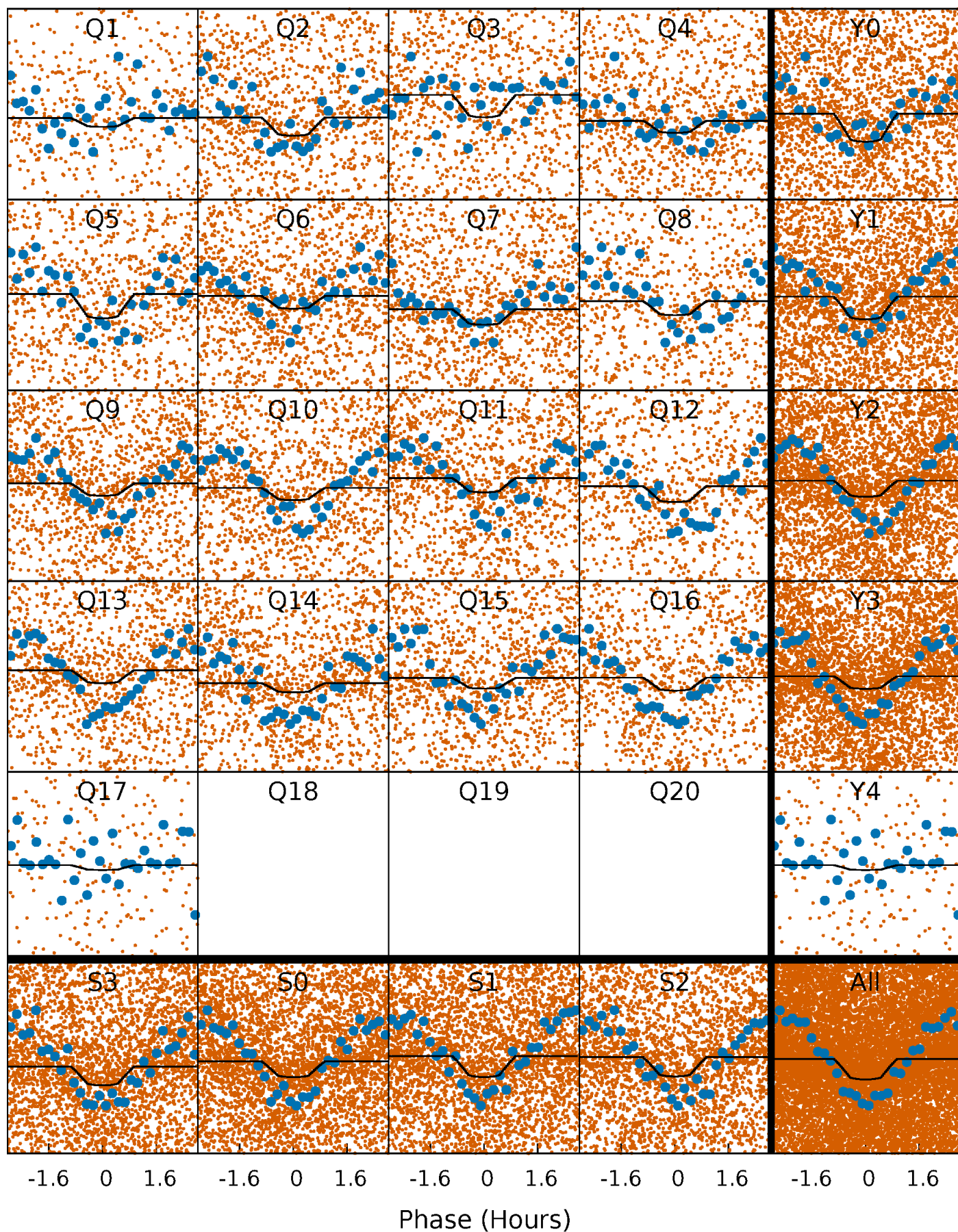
# PDC Quarter-Phased Transit Curves

TCE 005479538-01 P= 0.611871 Days  $T_0=131.585056$  (BKJD)



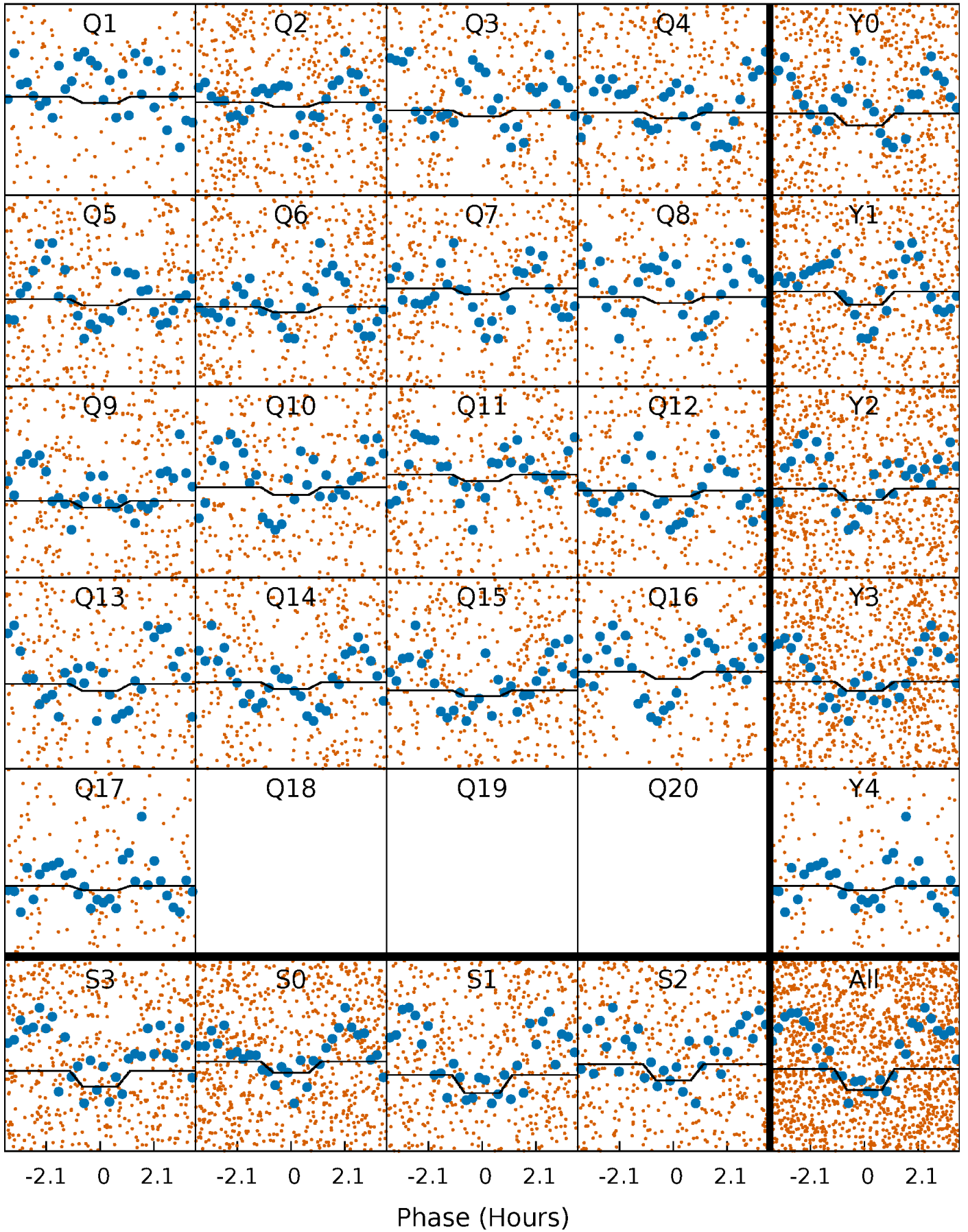
# DV Quarter-Phased Transit Curves

TCE 005479538-01 P= 0.611871 Days  $T_0=131.585056$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

TCE 005479538-01 P= 0.611873 Days  $T_0=131.585134$  (BKJD)

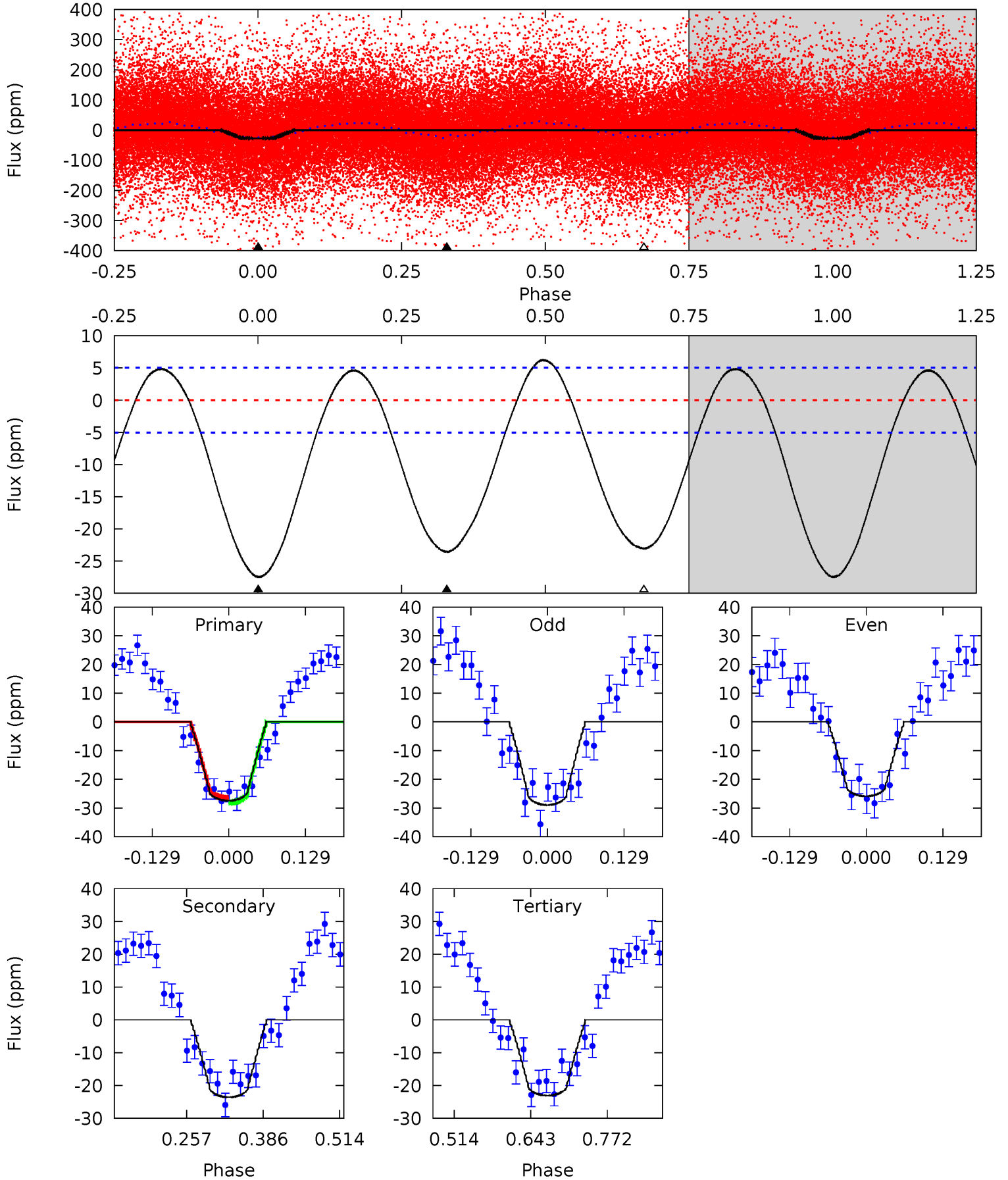




# DV Model-Shift Uniqueness Test

005479538-01, P = 0.611871 Days, E = 130.973185 Days

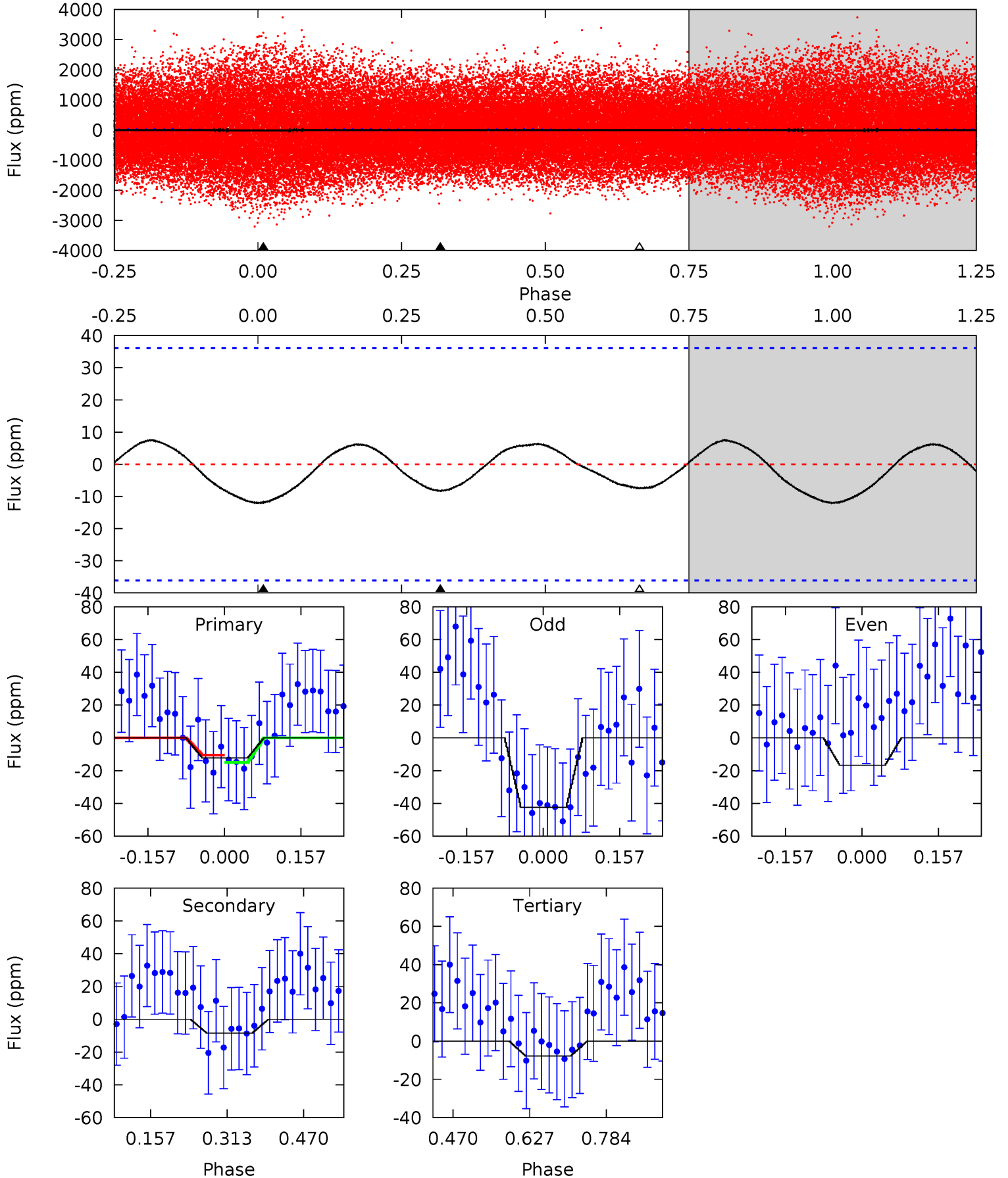
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.6	21.1	20.7	0	4.51	1.52	9.29	3.94	24.6	0.46	21.1	1.38	1.02	0.18	0.69



# Alt Model-Shift Uniqueness Test

005479538-01, P = 0.611873 Days, E = 130.973261 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
1.52	1.05	0.96	0	4.47	1.42	0.64	0.57	1.52	0.09	1.05	1.51	0.66	0.39	0.28



### Stellar Parameters For KIC 005479538

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$9700^{+272}_{-375}$	$4.225^{+0.140}_{-0.280}$	$0.070^{+0.150}_{-0.600}$	$1.911^{+0.957}_{-0.410}$	$2.238^{+0.445}_{-0.495}$	$0.452^{+0.337}_{-0.292}$
	+3%/-4%	+3%/-7%	+214%/-857%	+50%/-21%	+20%/-22%	+75%/-65%
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 005479538-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	$A_{obs}$
DV	$-24 \pm 1$	$0.74^{+0.20}_{-0.14}$	$6146^{+687}_{-449}$	$12266^{+1525}_{-1167}$	$7.807^{+3.343}_{-2.705}$
Alt.	$-8 \pm 8$	$0.75^{+0.20}_{-0.14}$	$6180^{+680}_{-454}$	$8297^{+2393}_{-11521}$	$2.660^{+3.276}_{-2.392}$

$T_{max}$  = 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  $A_{obs} \gg 1.0$



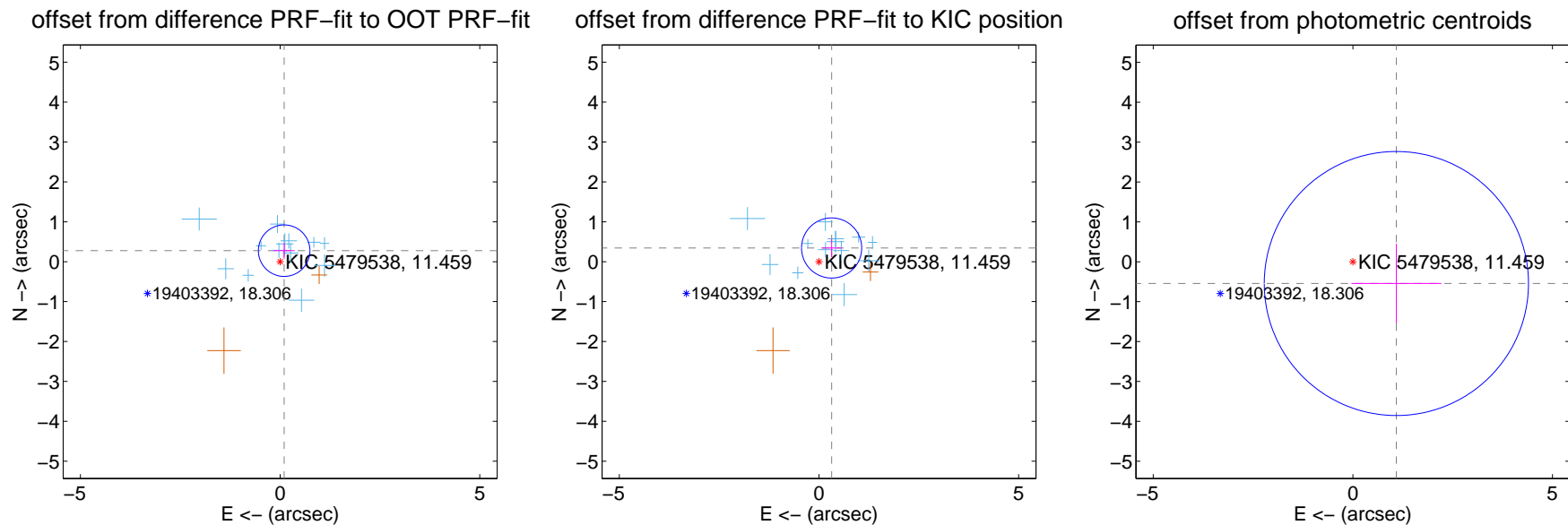
## DV Centroid Data

Supplemental centroid analysis for 005479538-01. **Kepler magnitude: 11.46.** Transit SNR 8.63

There are 13 quarters with good PRF difference image offsets

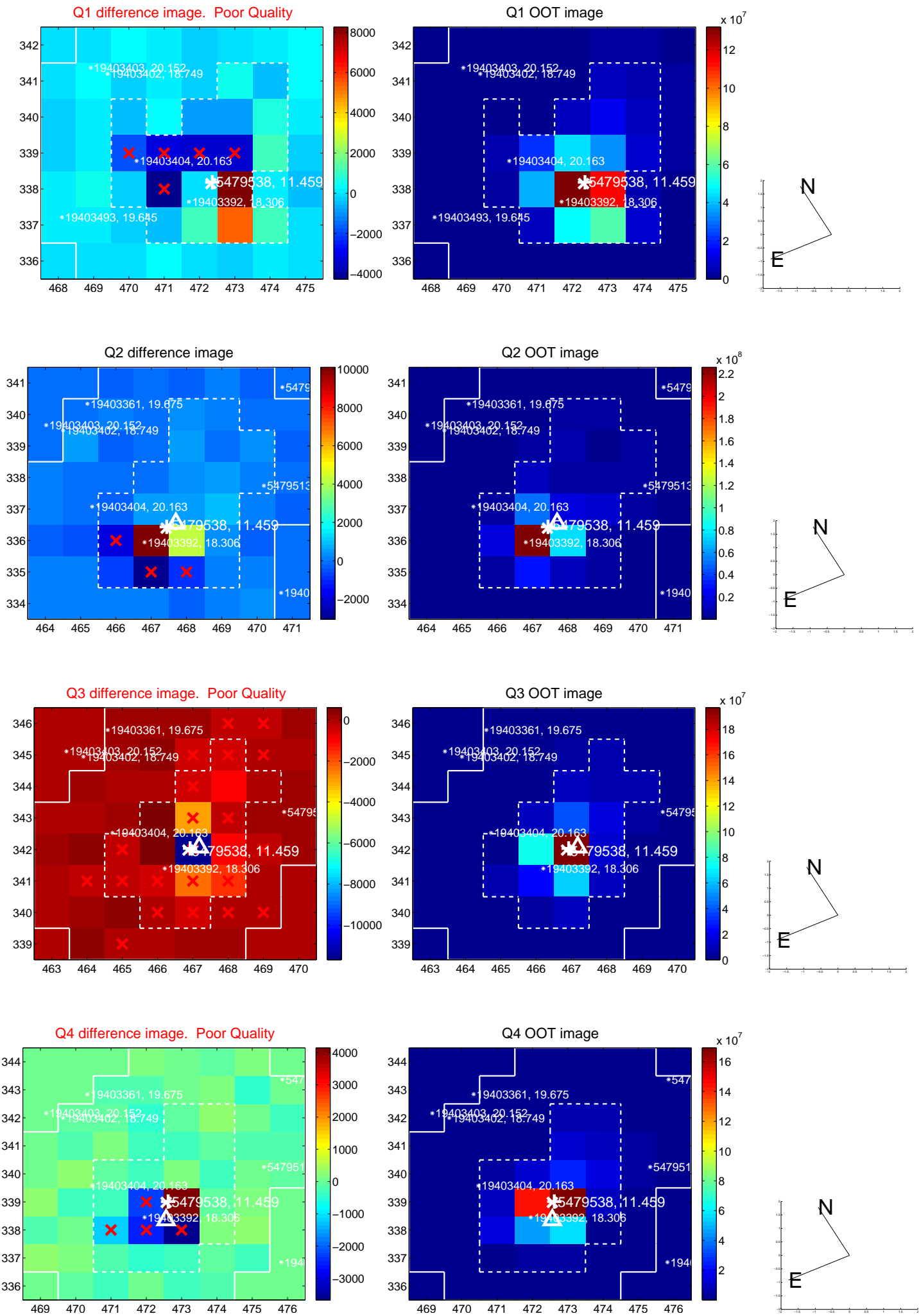
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.294 \pm 0.215$	1.37	$-0.101 \pm 0.264$	$0.276 \pm 0.202$
PRF-fit source offset from KIC position	$0.467 \pm 0.251$	1.86	$-0.316 \pm 0.246$	$0.343 \pm 0.227$
photometric centroid source offset	$1.22 \pm 1.10$	1.10	$-1.09 \pm 1.13$	$-0.55 \pm 1.00$

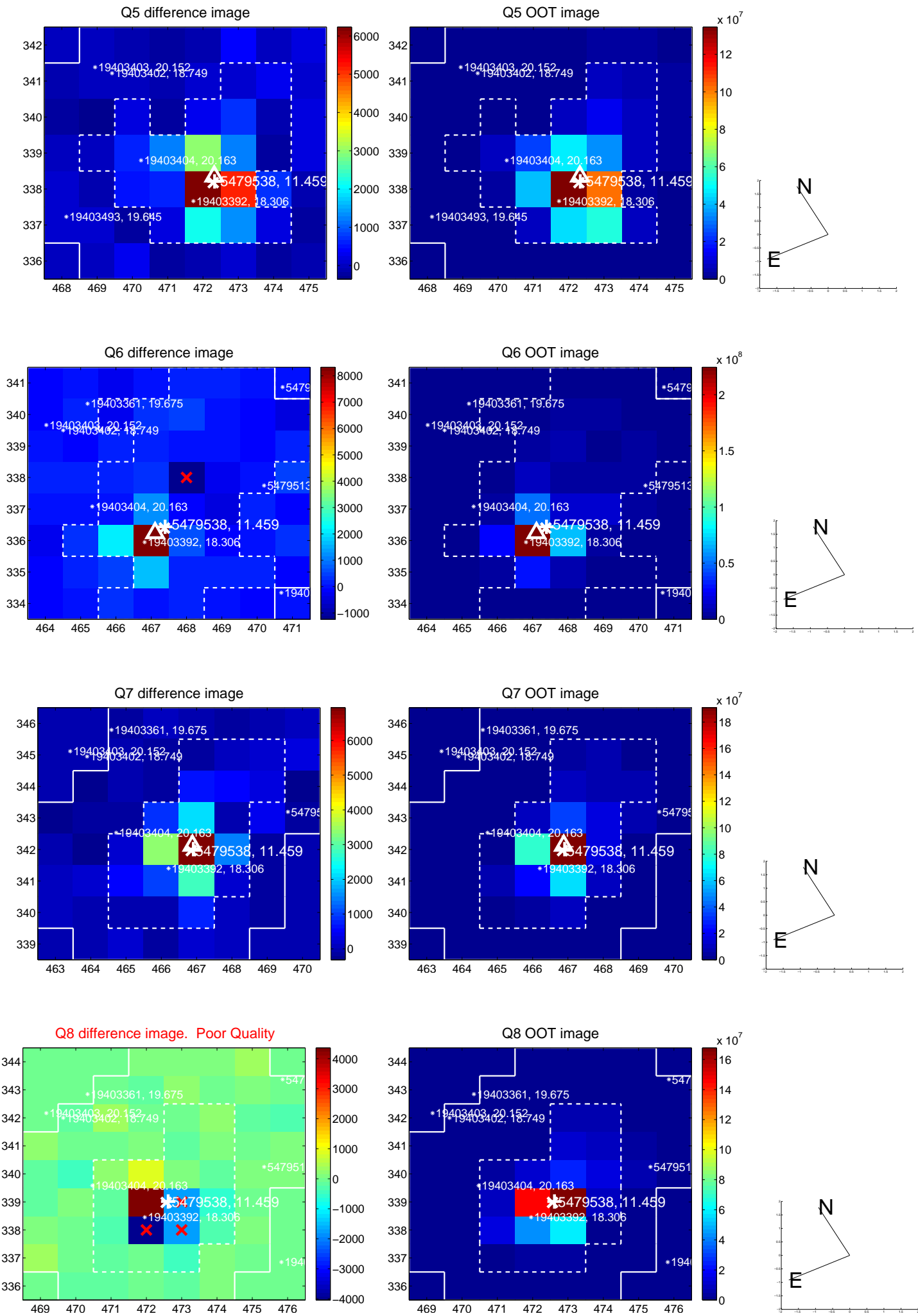


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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

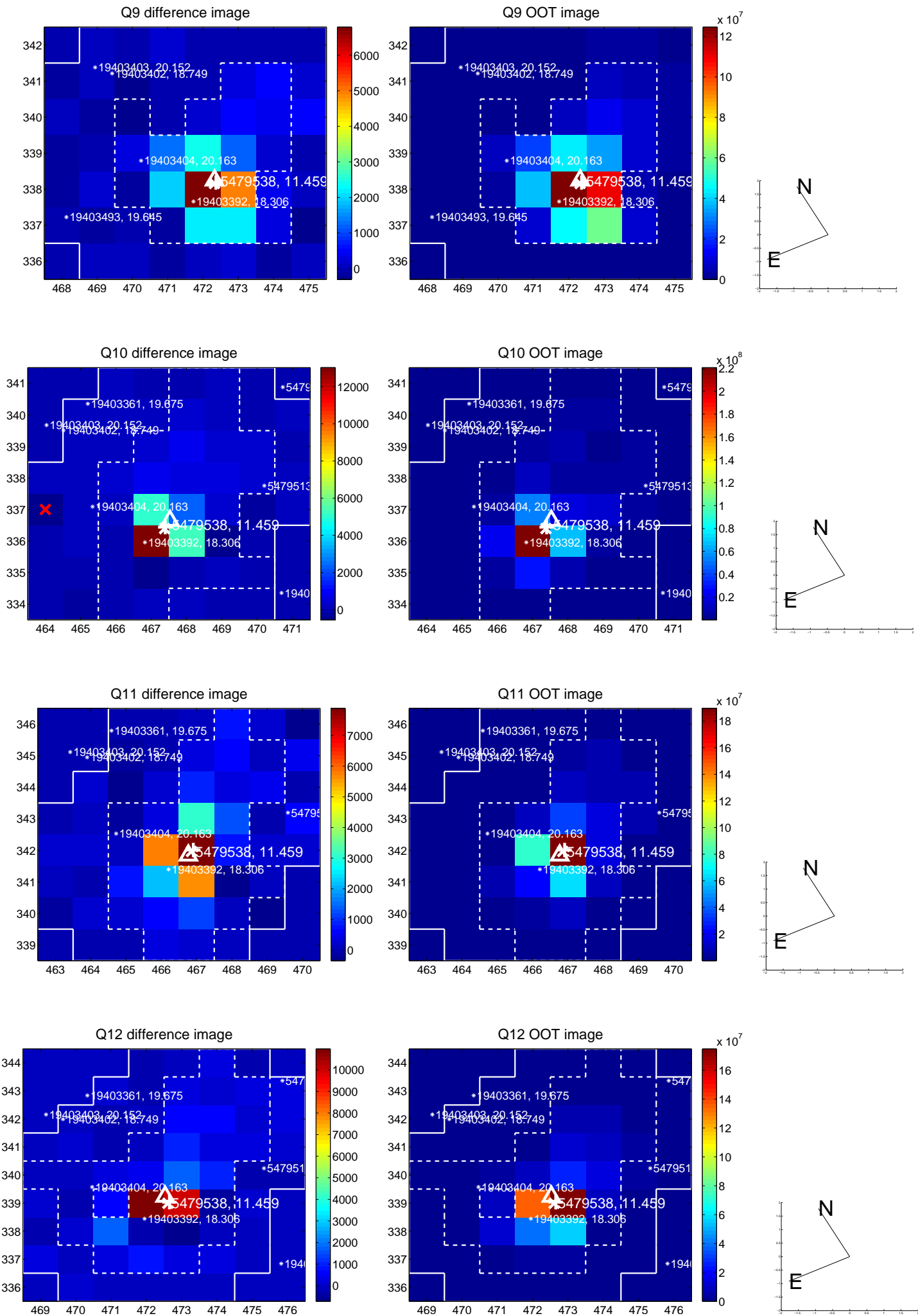


white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.

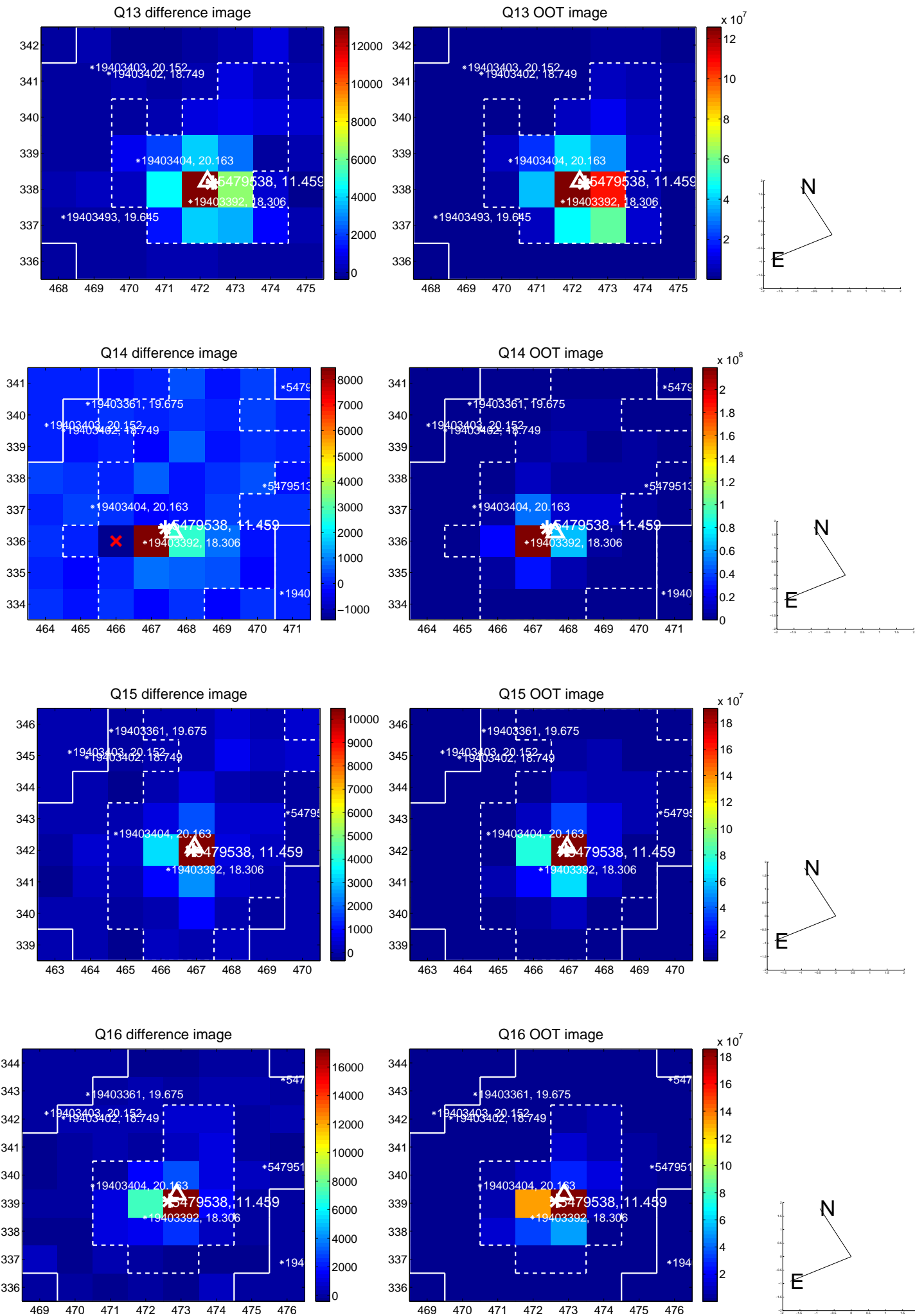




white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



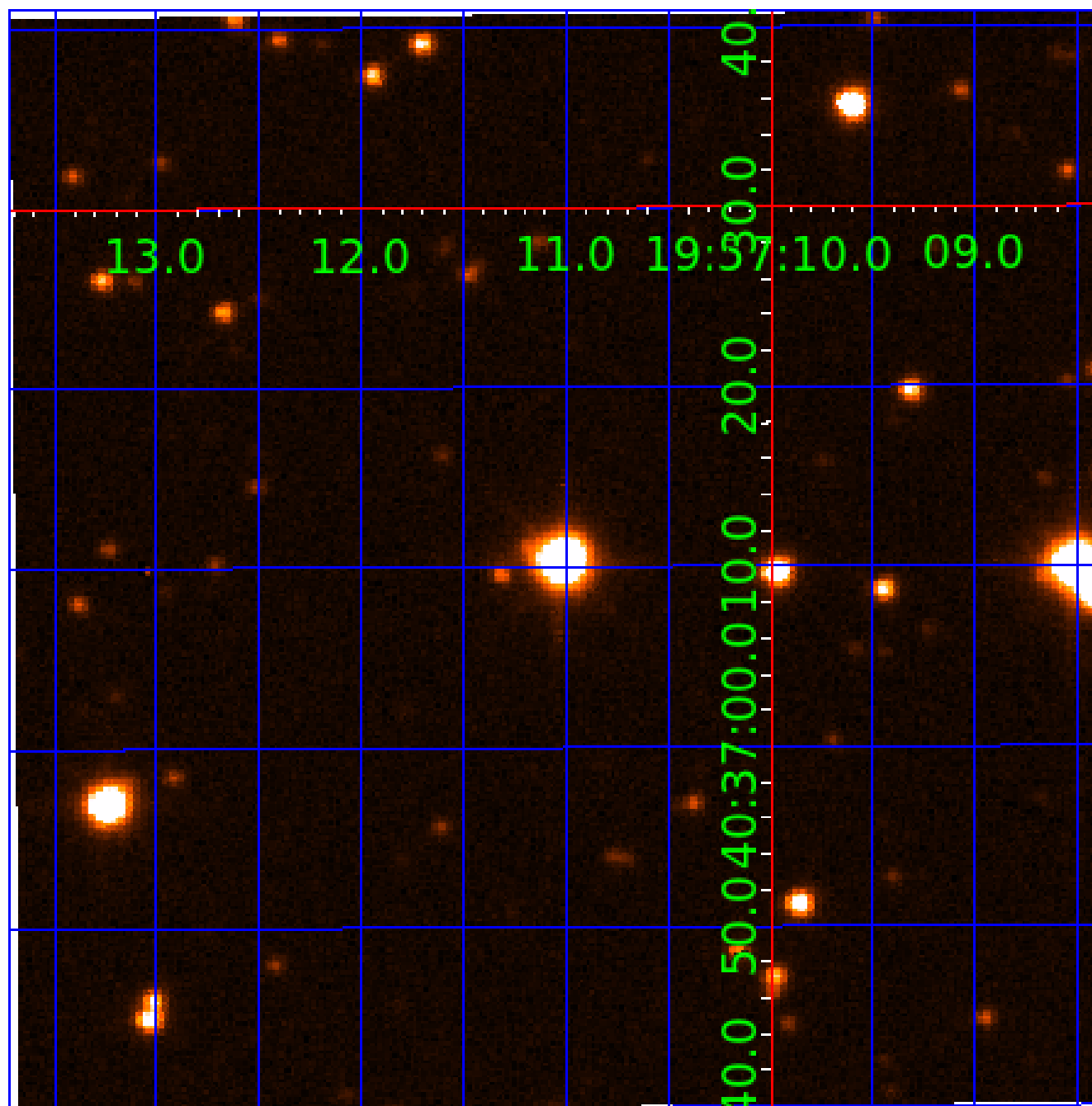
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.





UKIRT Image

Declination



# KIC 005479538

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
005479538-01	OBS	No	0.611871	131.585056	12.6	1.417	9.9	8.6	1.91	9700	0.73	85102.47
005479538-02	OBS	No	0.611871	131.783852	12.5	1.283	8.3	8.2	1.91	9700	0.73	85102.39
005479538-03	OBS	No	0.611864	131.989527	0.8	2.189	9.2	0.5	1.91	9700	0.18	85103.78

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005479538-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005479538-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_SATURATED
005479538-03	OBS	FP	0.00	1	0	0	0	LPP_DV—SAME_NTL_PERIOD—CENT_SATURATED

**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.

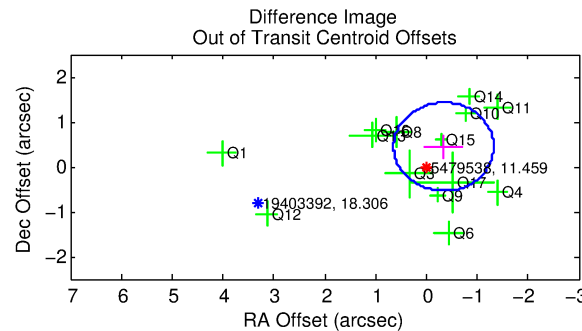
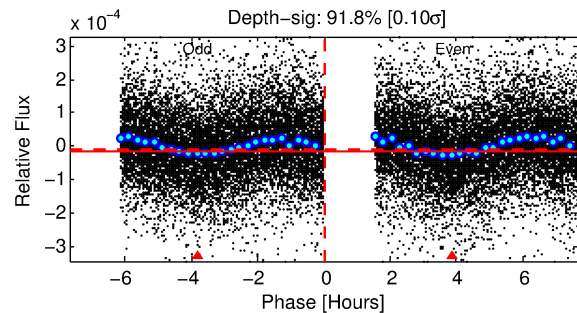
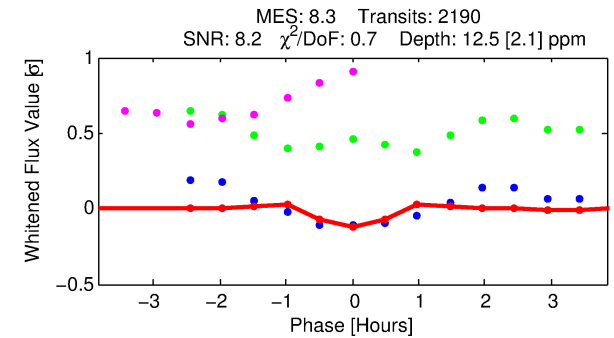
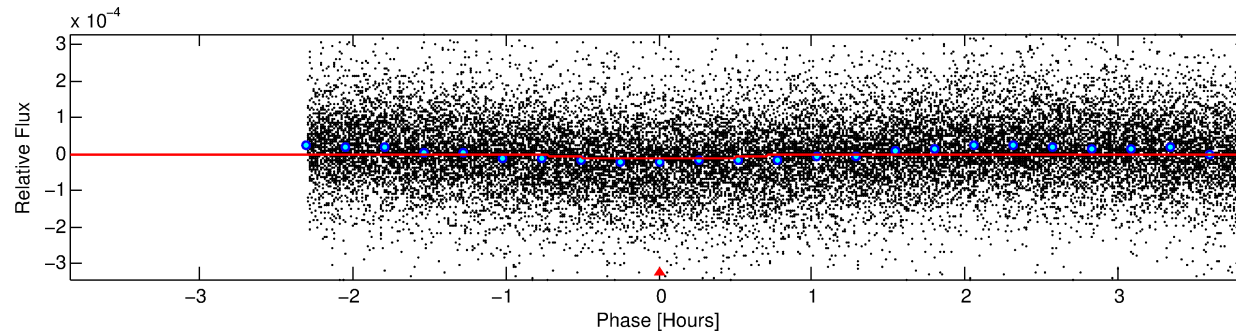
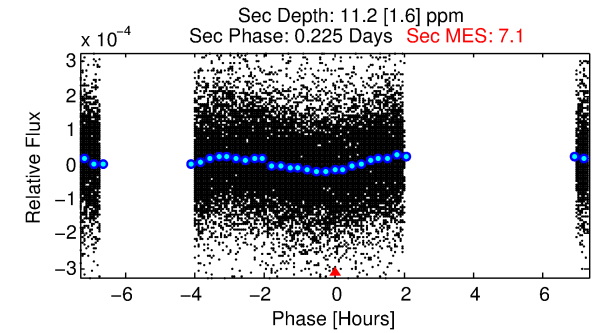
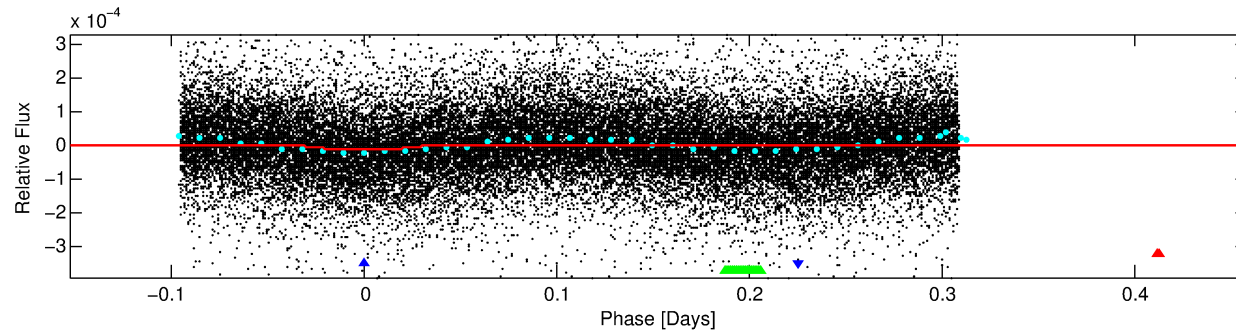
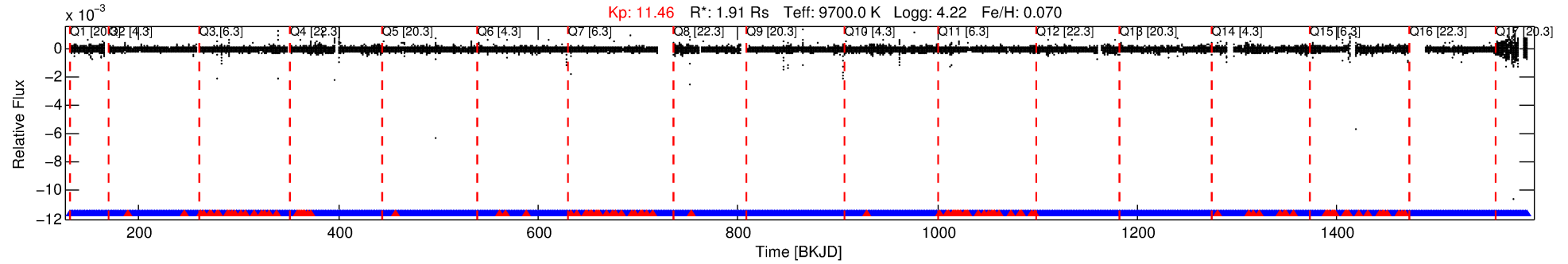
## Ephemeris Match Information For 005479538-02

No Significant Match Found



# DV One-Page Summary

KIC: 5479538 Candidate: 2 of 3 Period: 0.612 d



## DV Fit Results:

Period = 0.61187 [0.00001] d  
Epoch = 131.7839 [0.0019] BKJD  
Rp/R\* = 0.0035 [0.0004]  
a/R\* = 2.75 [1.42]  
b = 0.70 [0.44]  
Seff = 85102.39 [48149.85]  
Teq = 4355 [616] K  
Rp = 0.73 [0.37] Re  
a = 0.0184 [0.0073] AU  
Ag = 3.95 [2.40] [1.23σ]  
Teffp = 9490 [743] K [5.32σ]

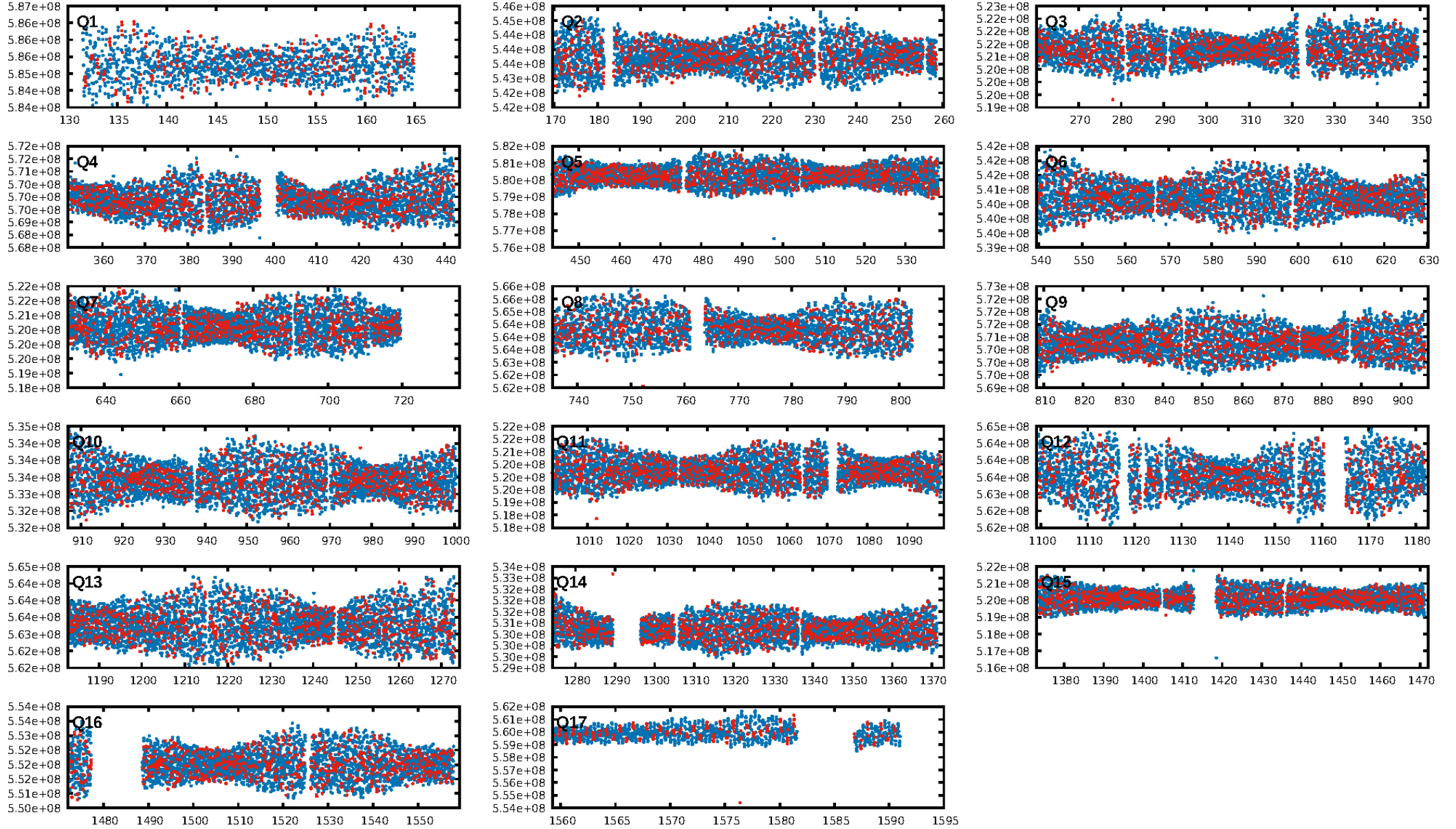
## DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: N/A  
RollingBand-fgt: 0.95 [1980/2091]  
GhostDiagnostic-chr: 0.5097  
Centroid-sig: 20.8%  
Centroid-so: 1.038 arcsec [0.89σ]  
OotOffset-rm: 0.558 arcsec [1.70σ]  
KicOffset-rm: 0.799 arcsec [2.09σ]  
OotOffset-st: 3/3/4/4 [14]  
KicOffset-st: 3/3/4/4 [14]  
DiffImageQuality-fgm: 0.64 [9/14]  
DiffImageOverlap-fno: 0.00 [0/17]

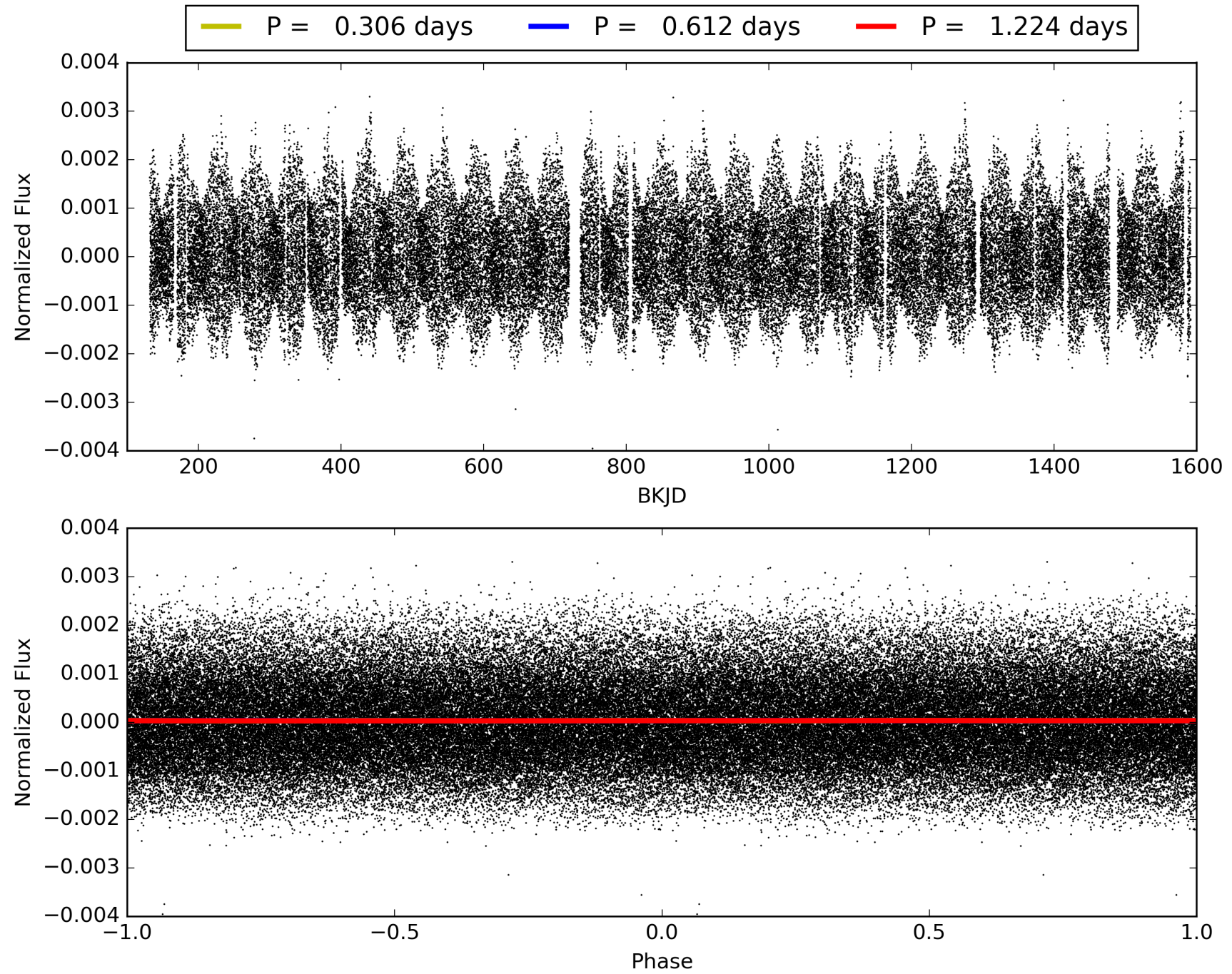
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 08:50:24 Z

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

# TCE 005479538-02, PDC Light Curves

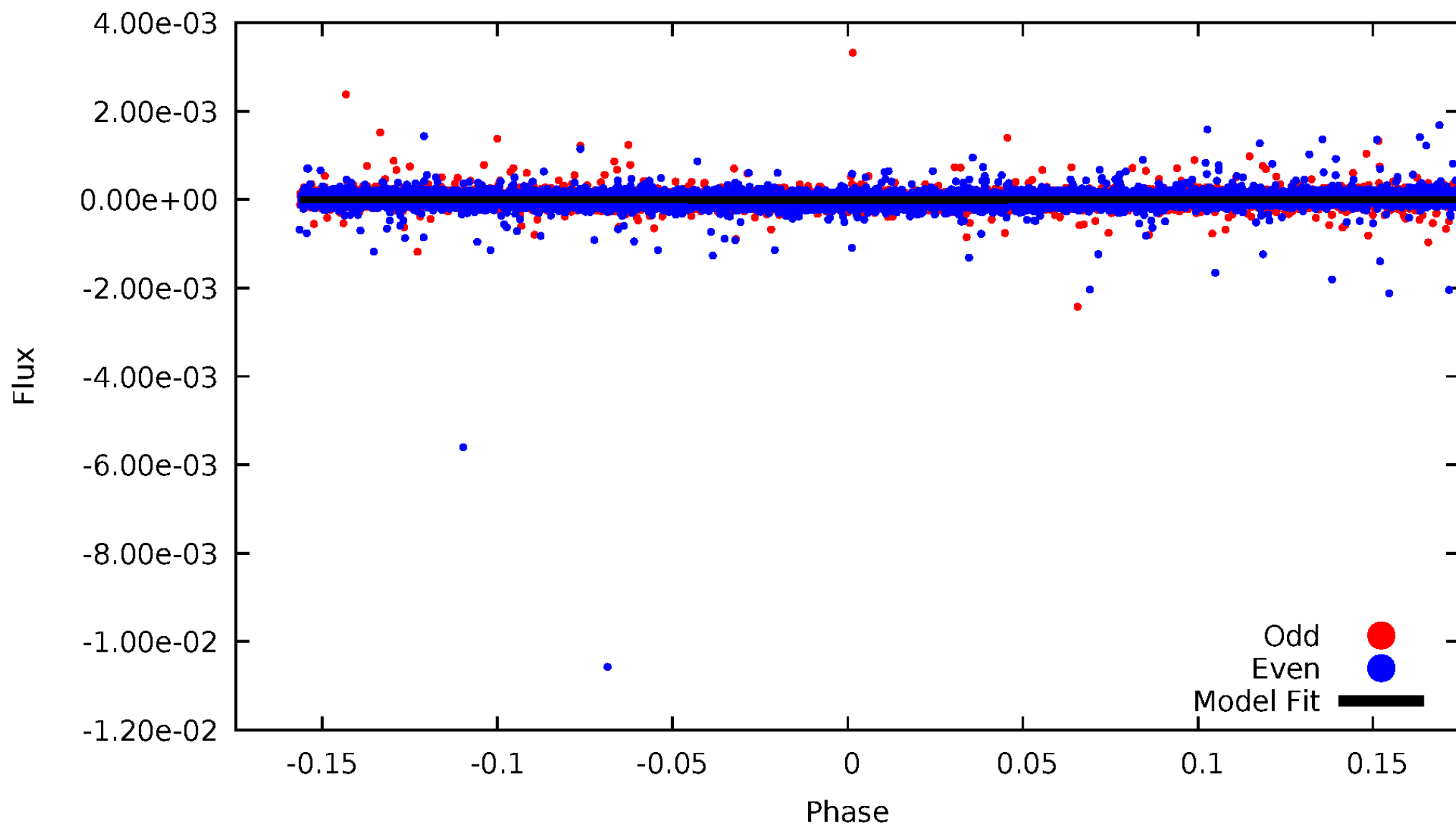


TCE 005479538-02



# DV Odd/Even

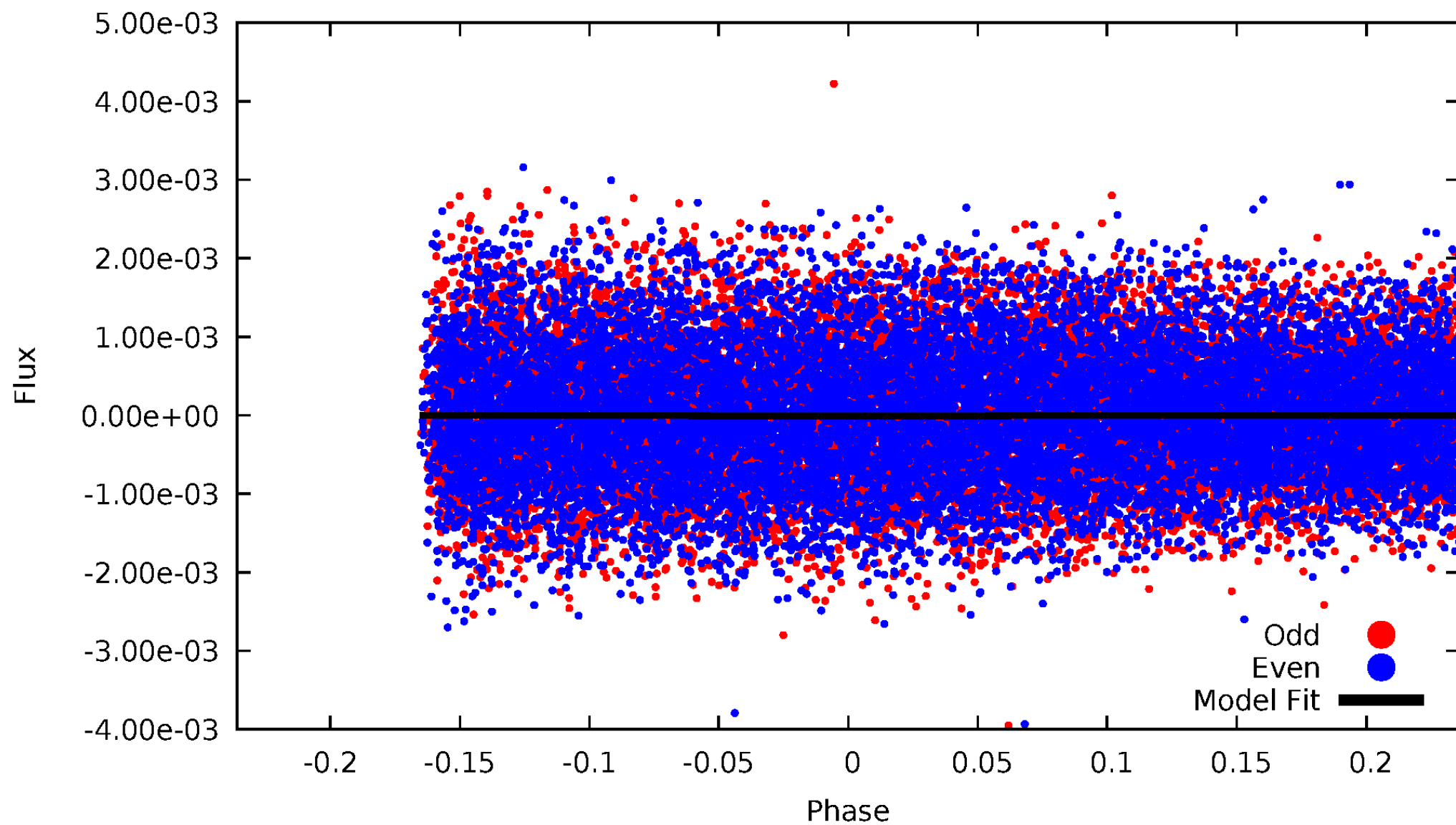
TCE 005479538-02





# ALT Odd/Even

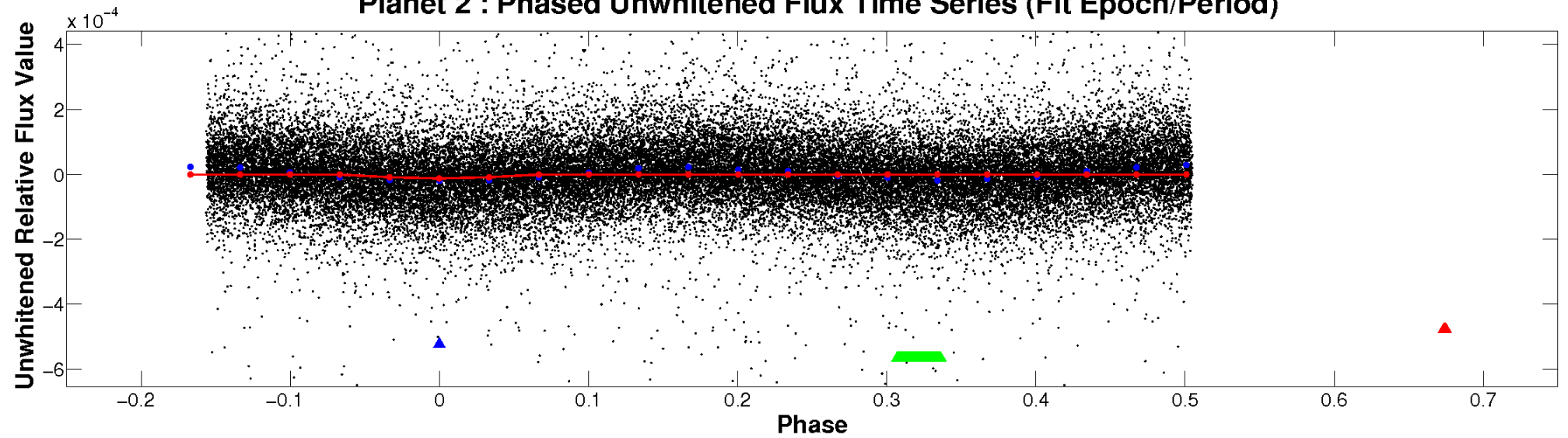
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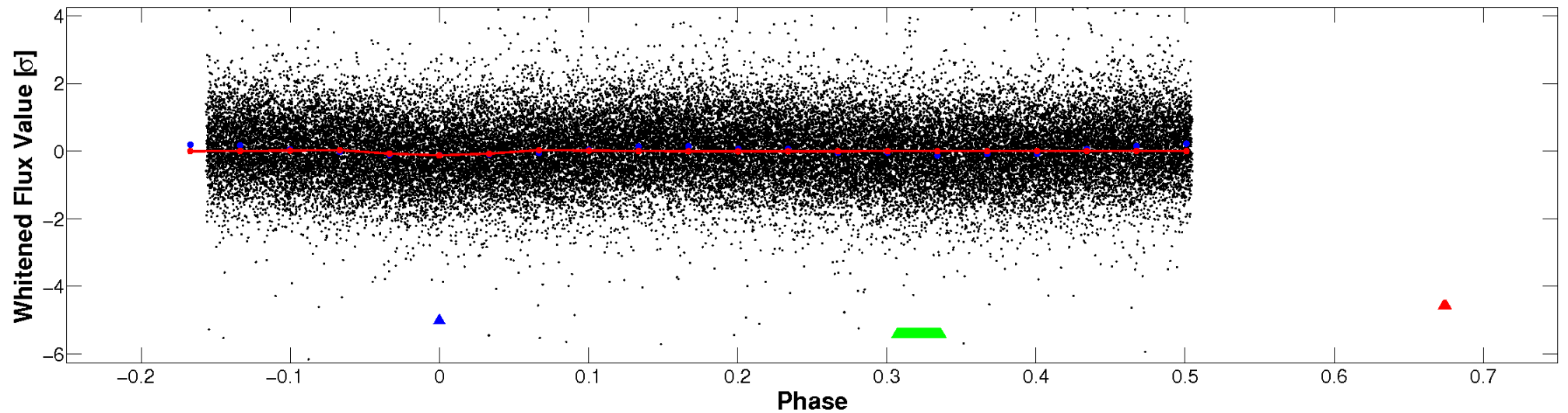


# Non-Whitened Vs. Whitened Light Curve

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

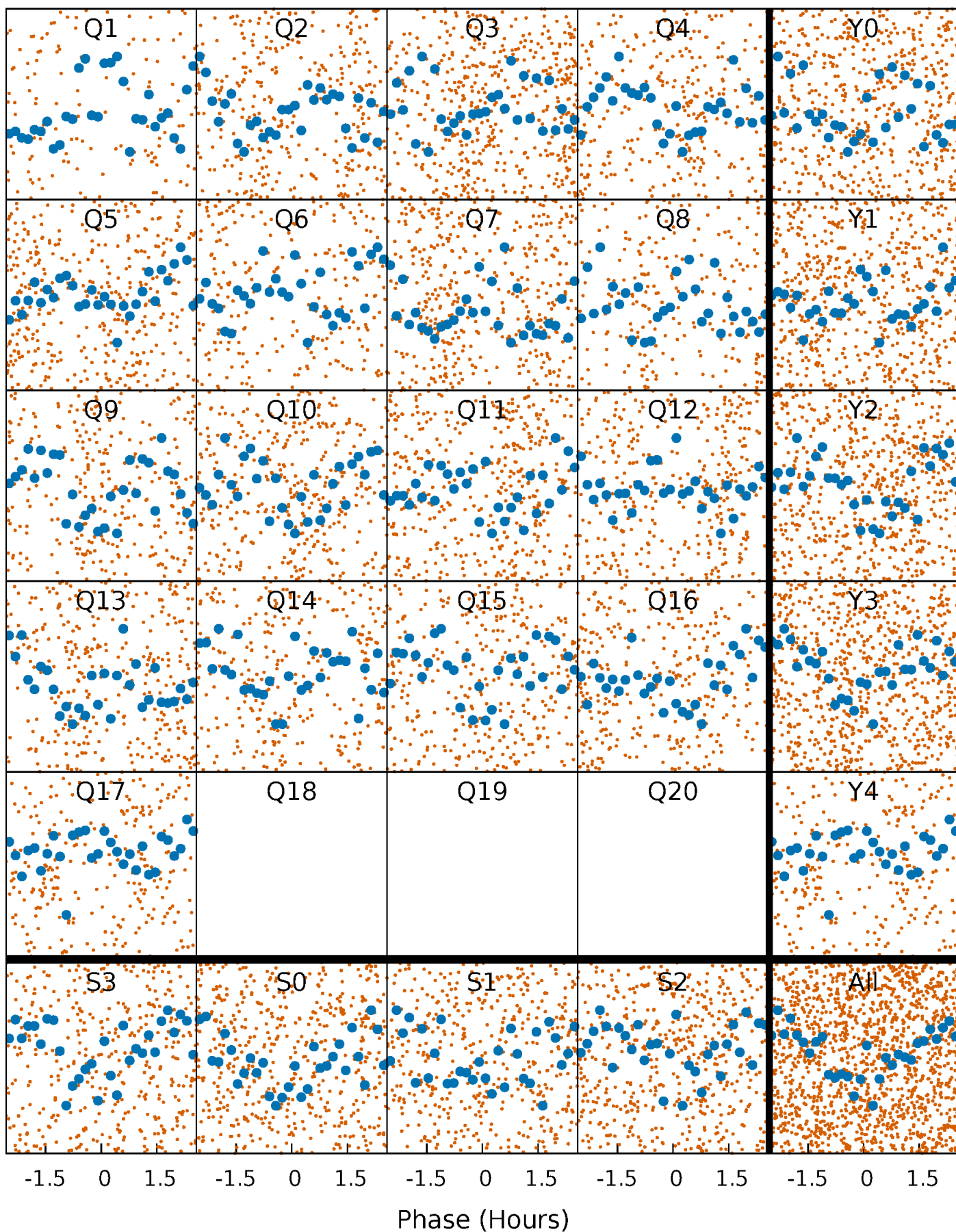


**Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)**



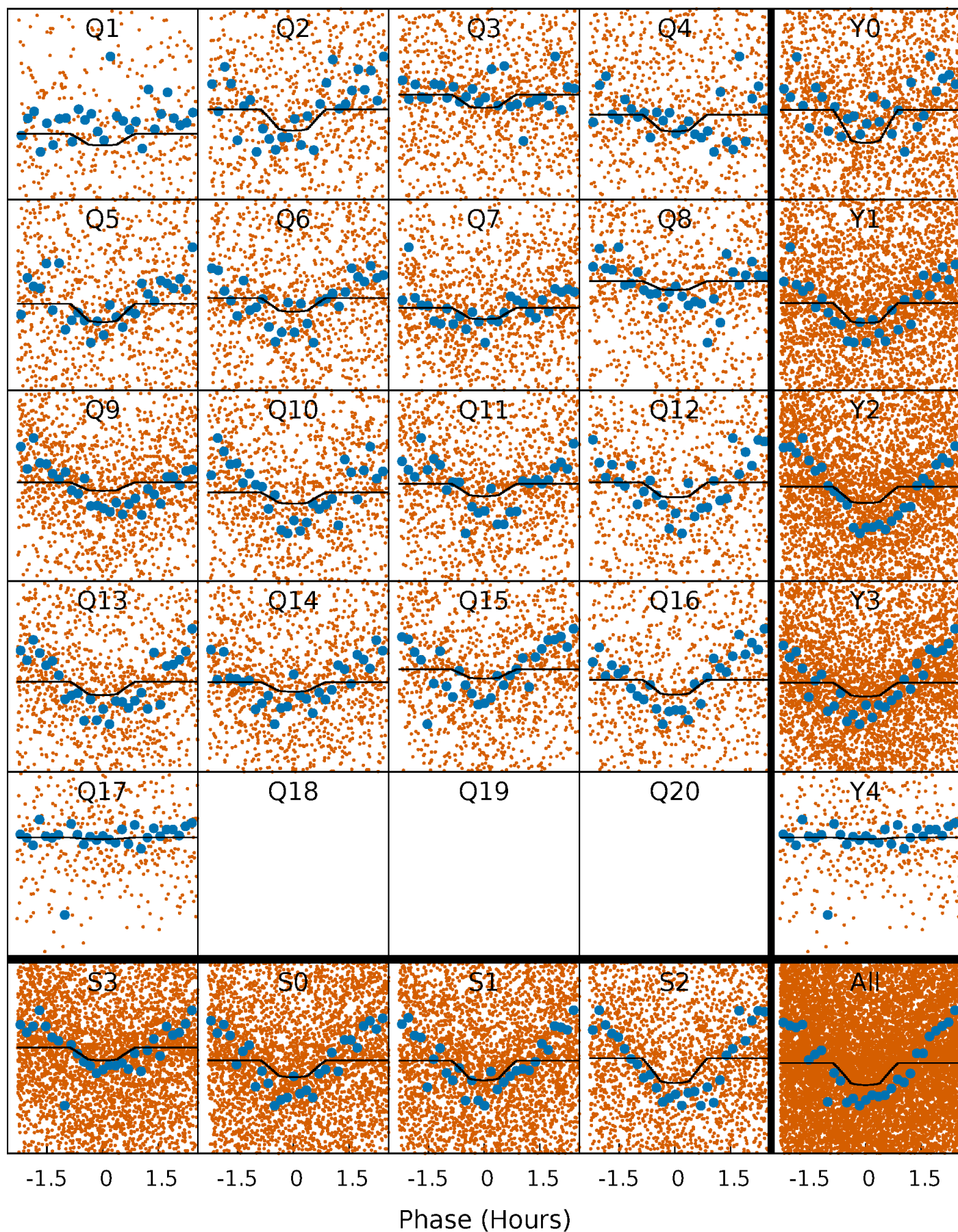
# PDC Quarter-Phased Transit Curves

TCE 005479538-02   P= 0.611871 Days    $T_0=131.783852$  (BKJD)



# DV Quarter-Phased Transit Curves

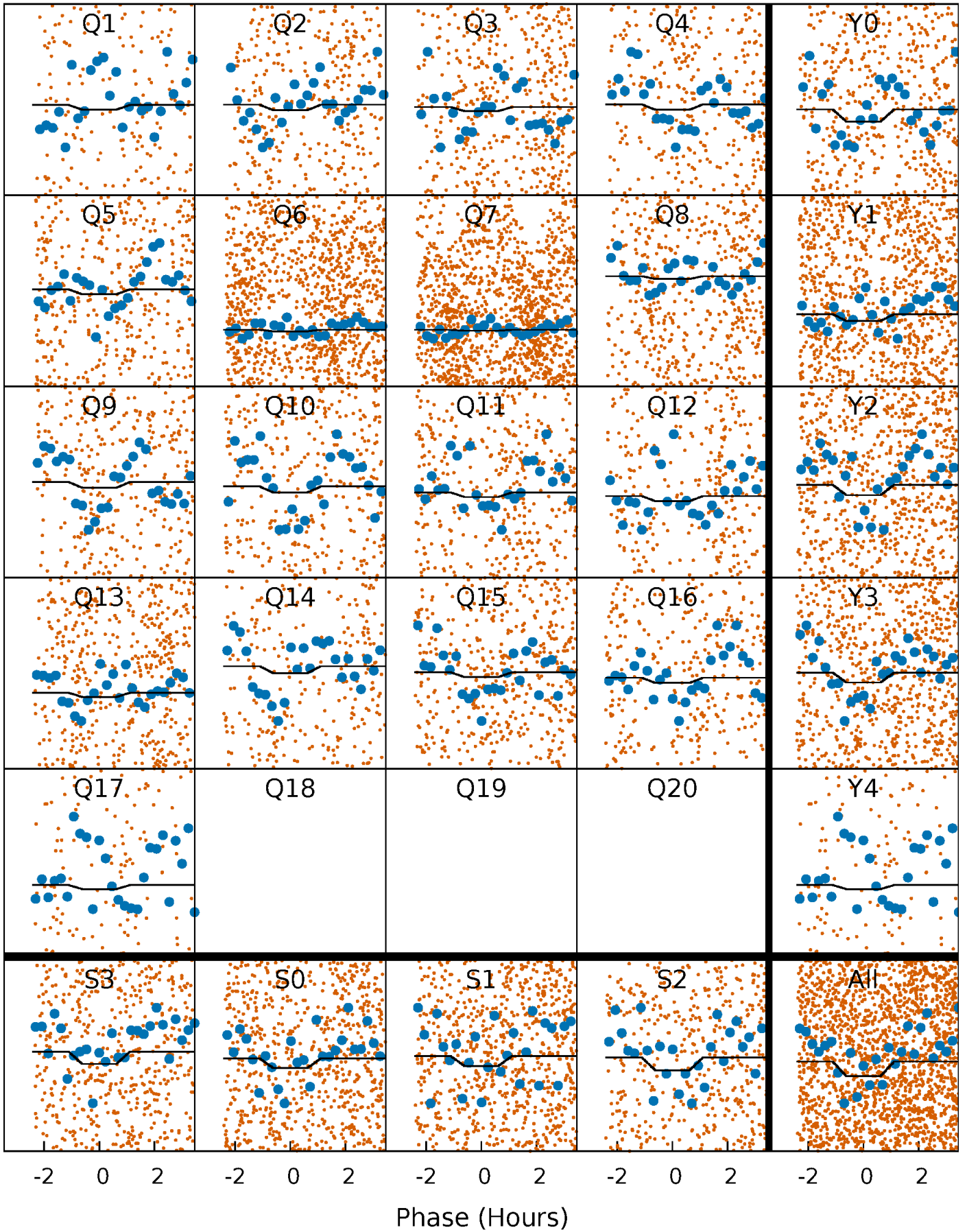
TCE 005479538-02   P= 0.611871 Days    $T_0=131.783852$  (BKJD)





# Alt. Detrend Quarter-Phased Transit Curves

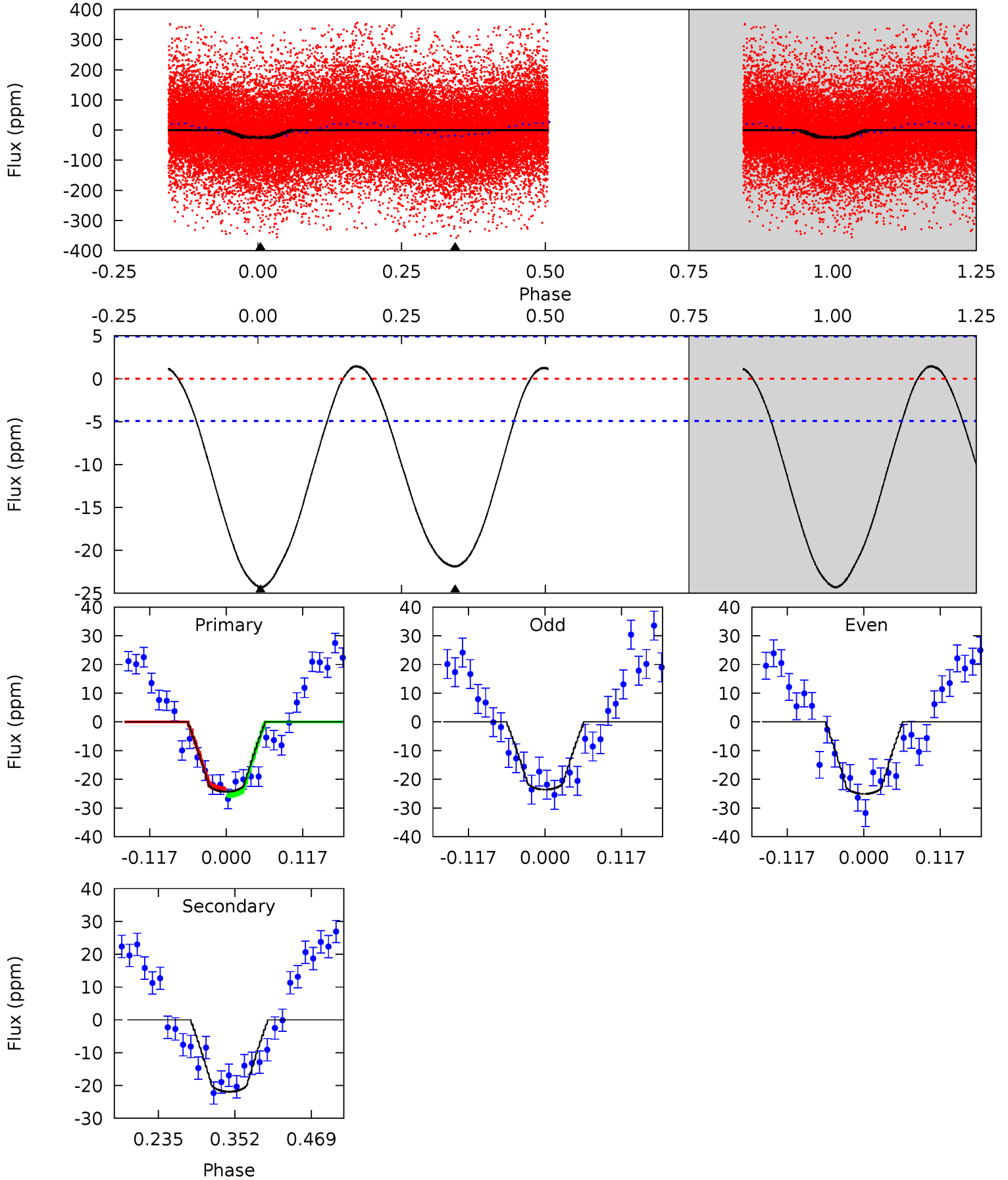
TCE 005479538-02   P= 0.611873 Days    $T_0=131.783902$  (BKJD)



# DV Model-Shift Uniqueness Test

005479538-02, P = 0.611871 Days, E = 131.171981 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
22.4	20.2	0	0	4.53	1.57	1.55	22.4	22.4	20.2	20.2	0.71	1.05	0.06	0.92

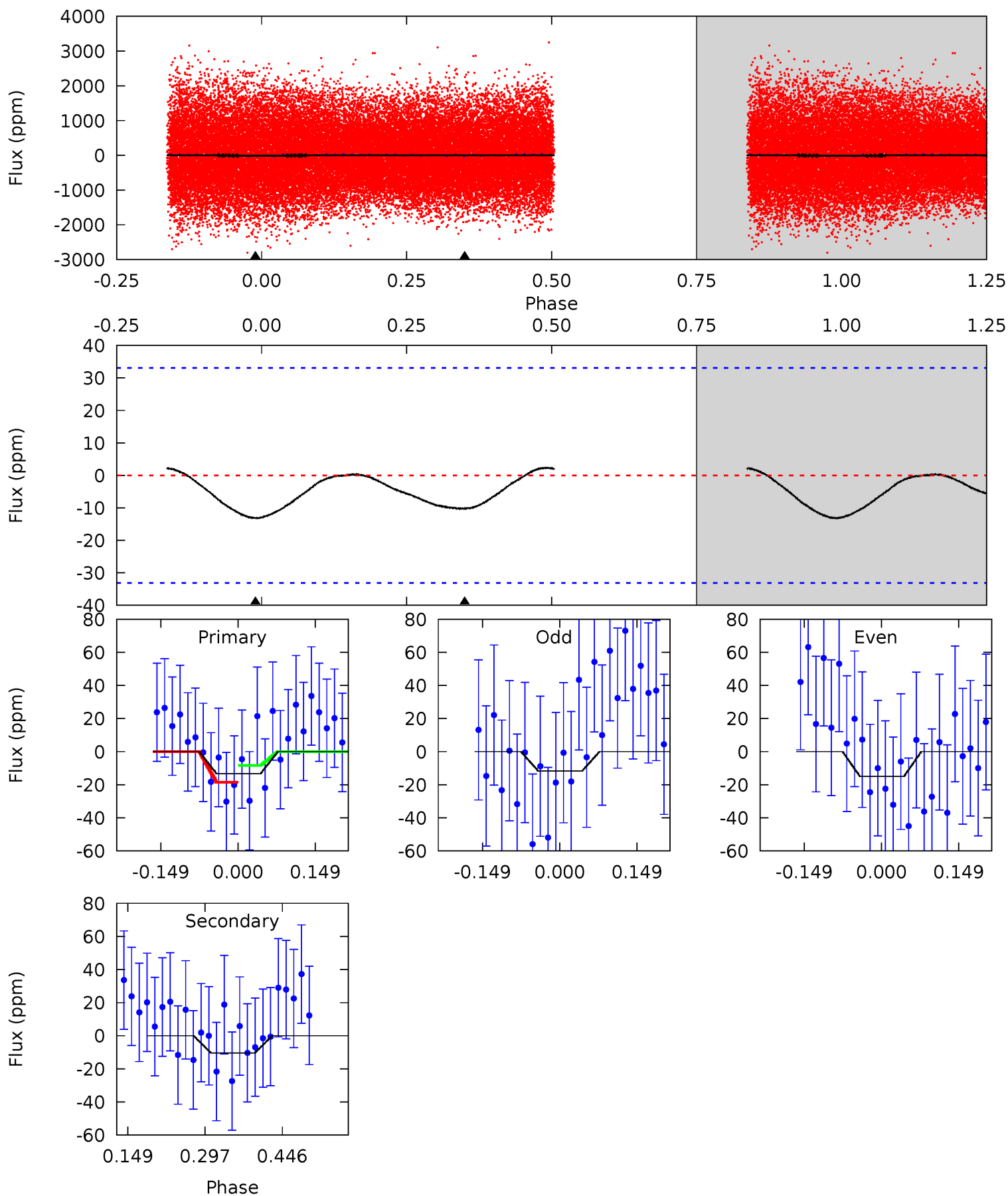




# Alt Model-Shift Uniqueness Test

005479538-02, P = 0.611873 Days, E = 131.172029 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
1.81	1.41	0	0	4.48	1.44	0.10	1.81	1.81	1.41	1.41	0.20	0.65	0.16	0.61



### Stellar Parameters For KIC 005479538

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$9700^{+272}_{-375}$	$4.225^{+0.140}_{-0.280}$	$0.070^{+0.150}_{-0.600}$	$1.911^{+0.957}_{-0.410}$	$2.238^{+0.445}_{-0.495}$	$0.452^{+0.337}_{-0.292}$
	+3%/-4%	+3%/-7%	+214%/-857%	+50%/-21%	+20%/-22%	+75%/-65%
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 005479538-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	$A_{\text{obs}}$
DV	$-22 \pm 1$	$0.74^{+0.20}_{-0.13}$	$6162^{+691}_{-459}$	$11835^{+1565}_{-1133}$	$7.175^{+3.354}_{-2.599}$
Alt.	$-10 \pm 7$	$0.75^{+0.19}_{-0.14}$	$6164^{+675}_{-422}$	$8716^{+2252}_{-3092}$	$3.095^{+3.070}_{-2.256}$

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

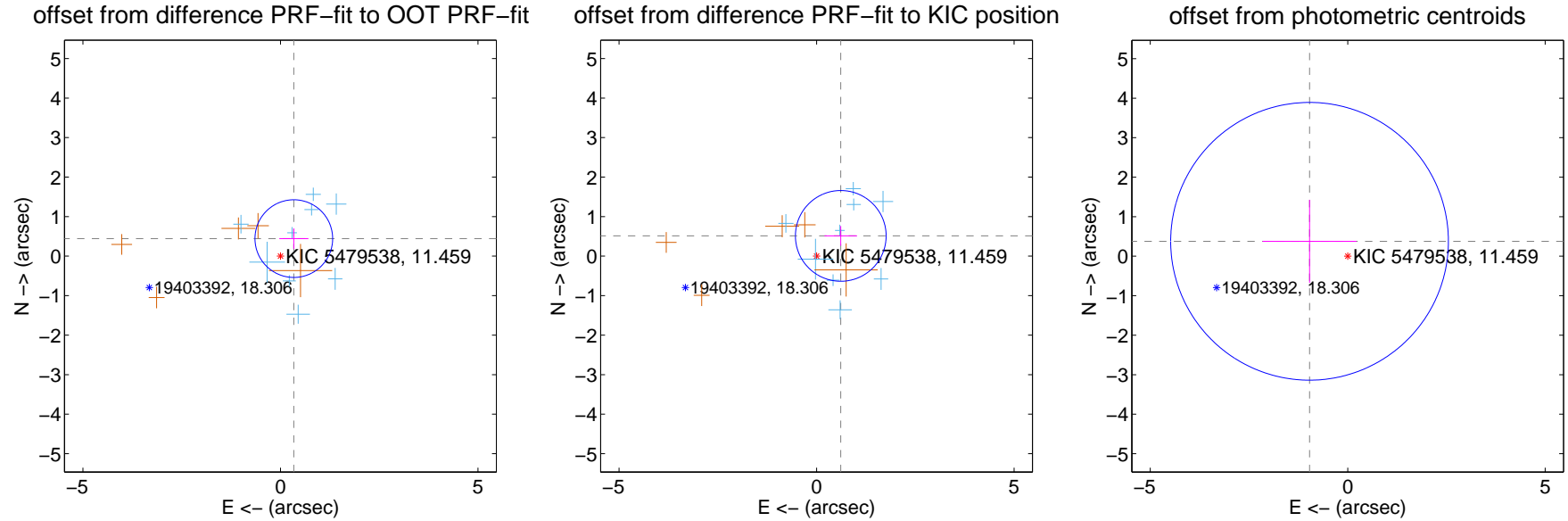
## DV Centroid Data

Supplemental centroid analysis for 005479538-02. **Kepler magnitude: 11.46.** Transit SNR 8.24

There are 9 quarters with good PRF difference image offsets

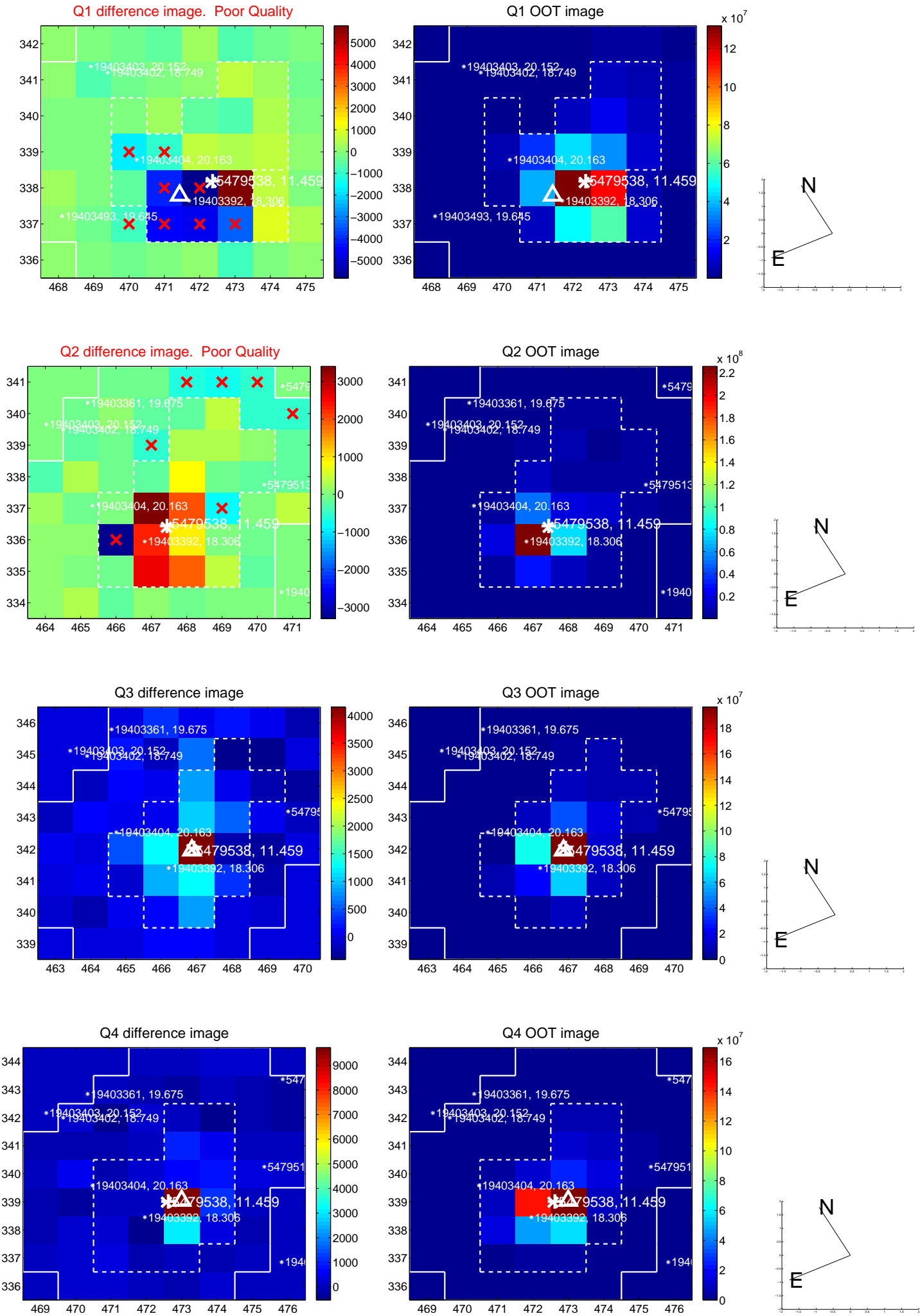
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.558 \pm 0.328$	1.70	$-0.338 \pm 0.369$	$0.444 \pm 0.259$
PRF-fit source offset from KIC position	$0.799 \pm 0.383$	2.09	$-0.613 \pm 0.413$	$0.512 \pm 0.251$
photometric centroid source offset	$1.04 \pm 1.17$	0.89	$0.97 \pm 1.19$	$0.38 \pm 1.05$

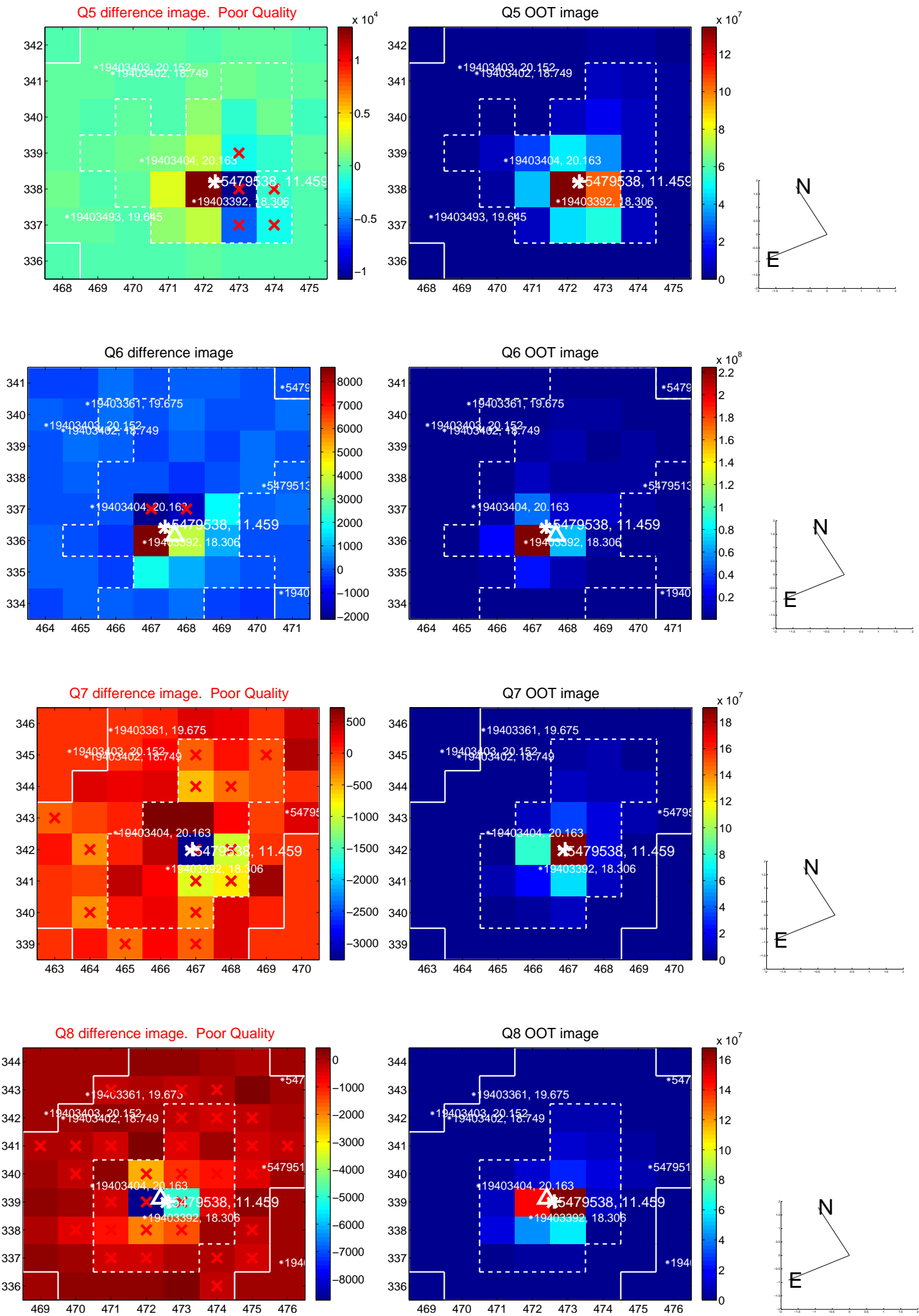


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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

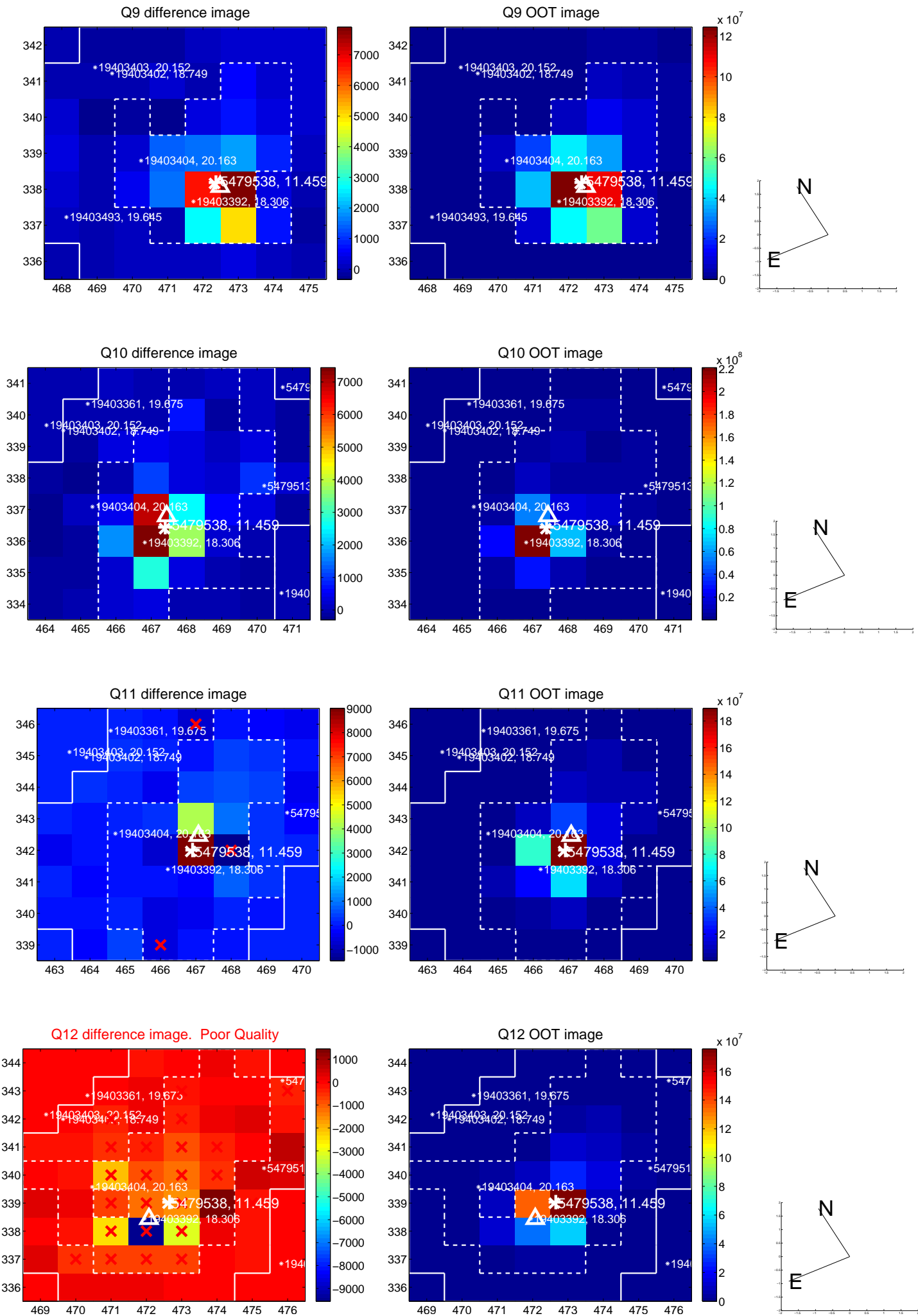


white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.

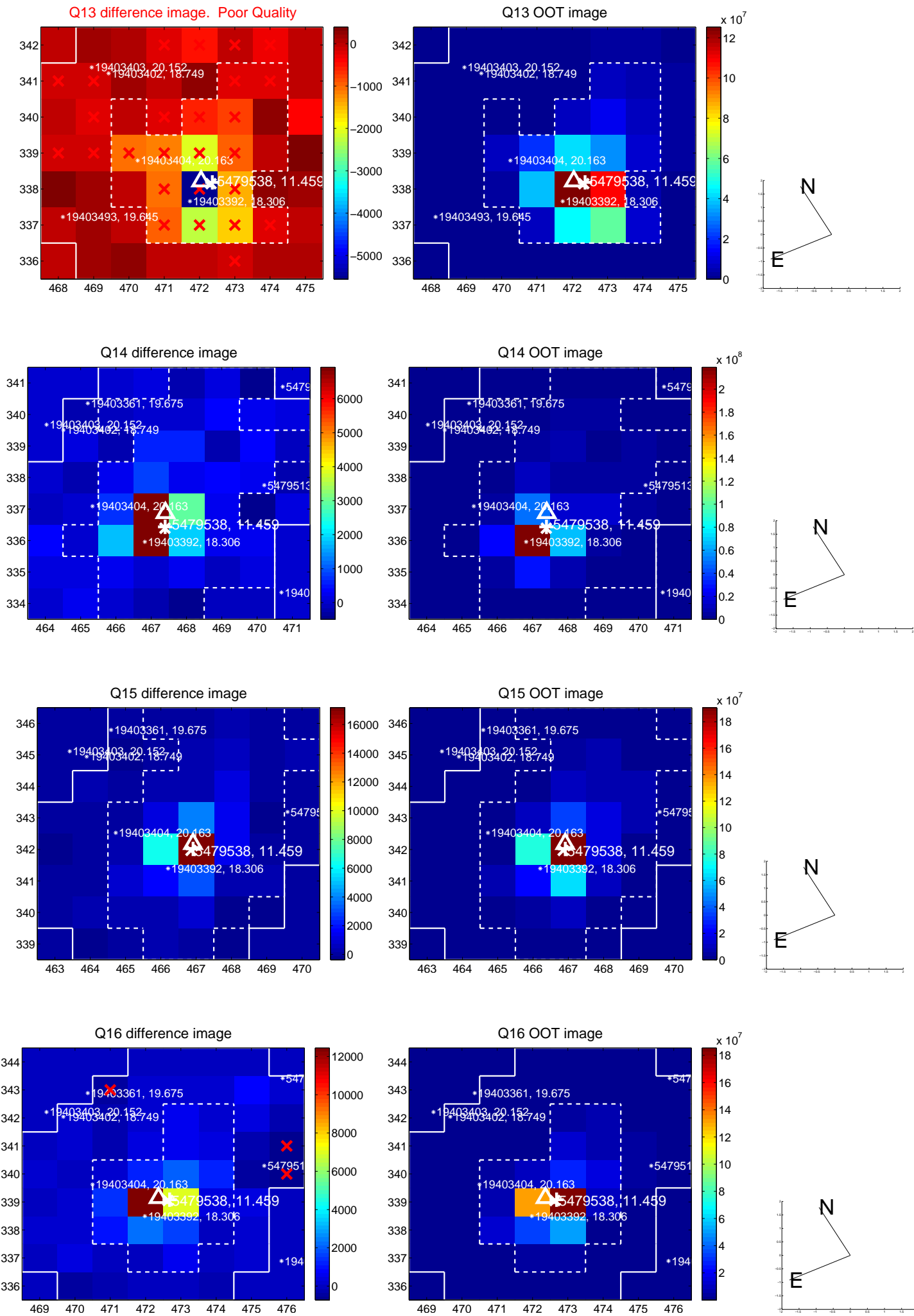




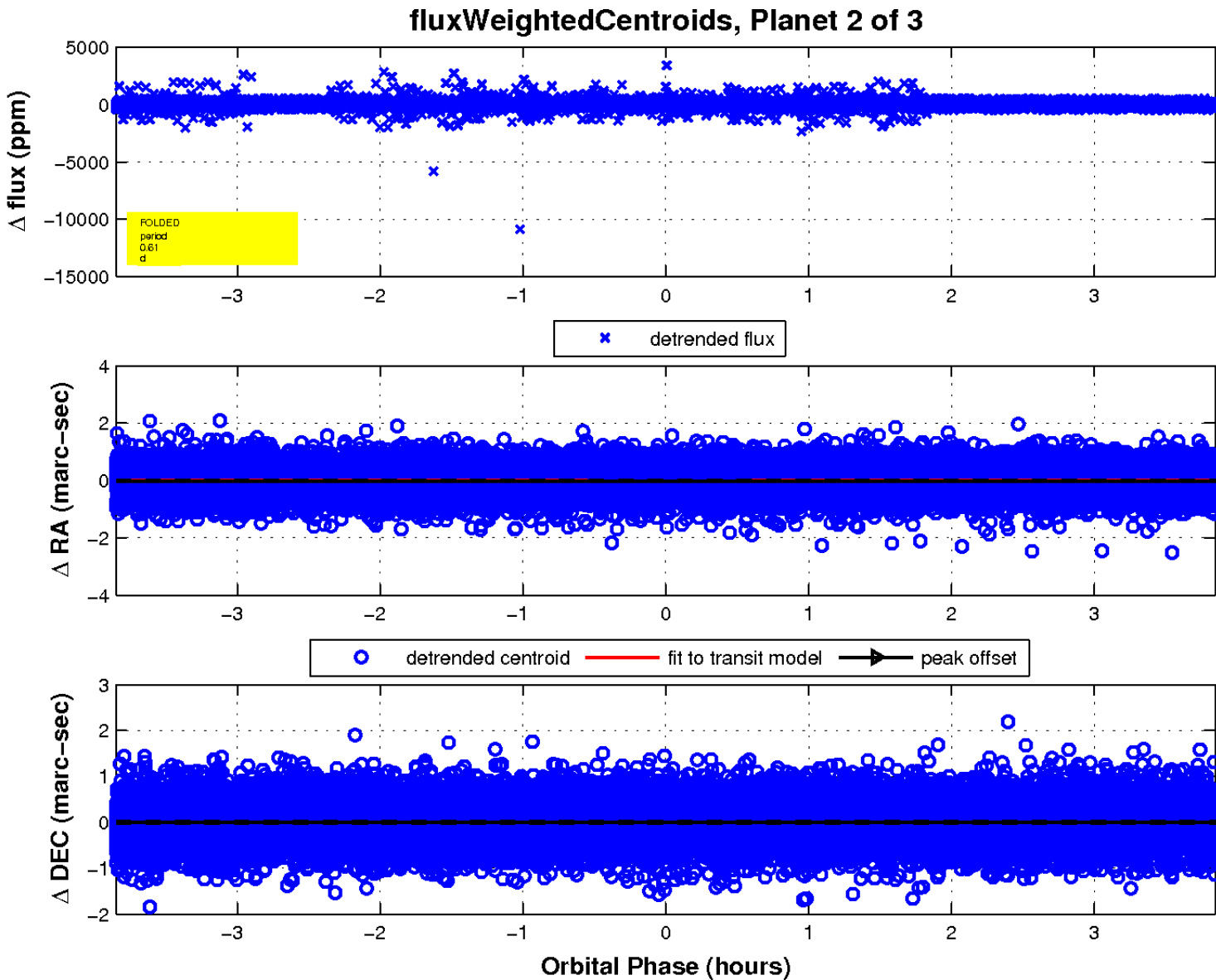
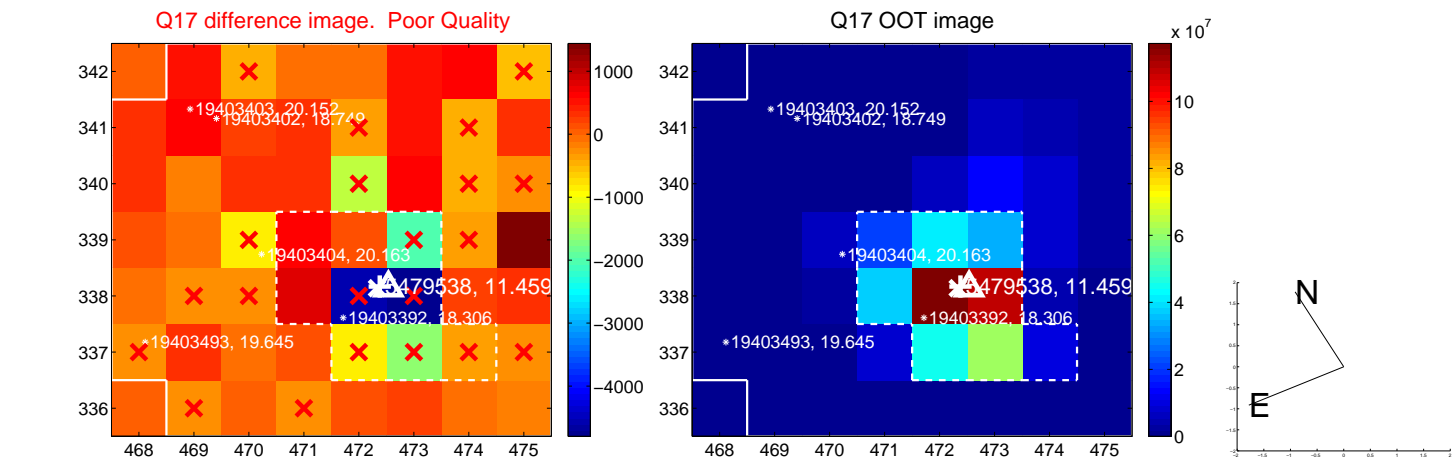
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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

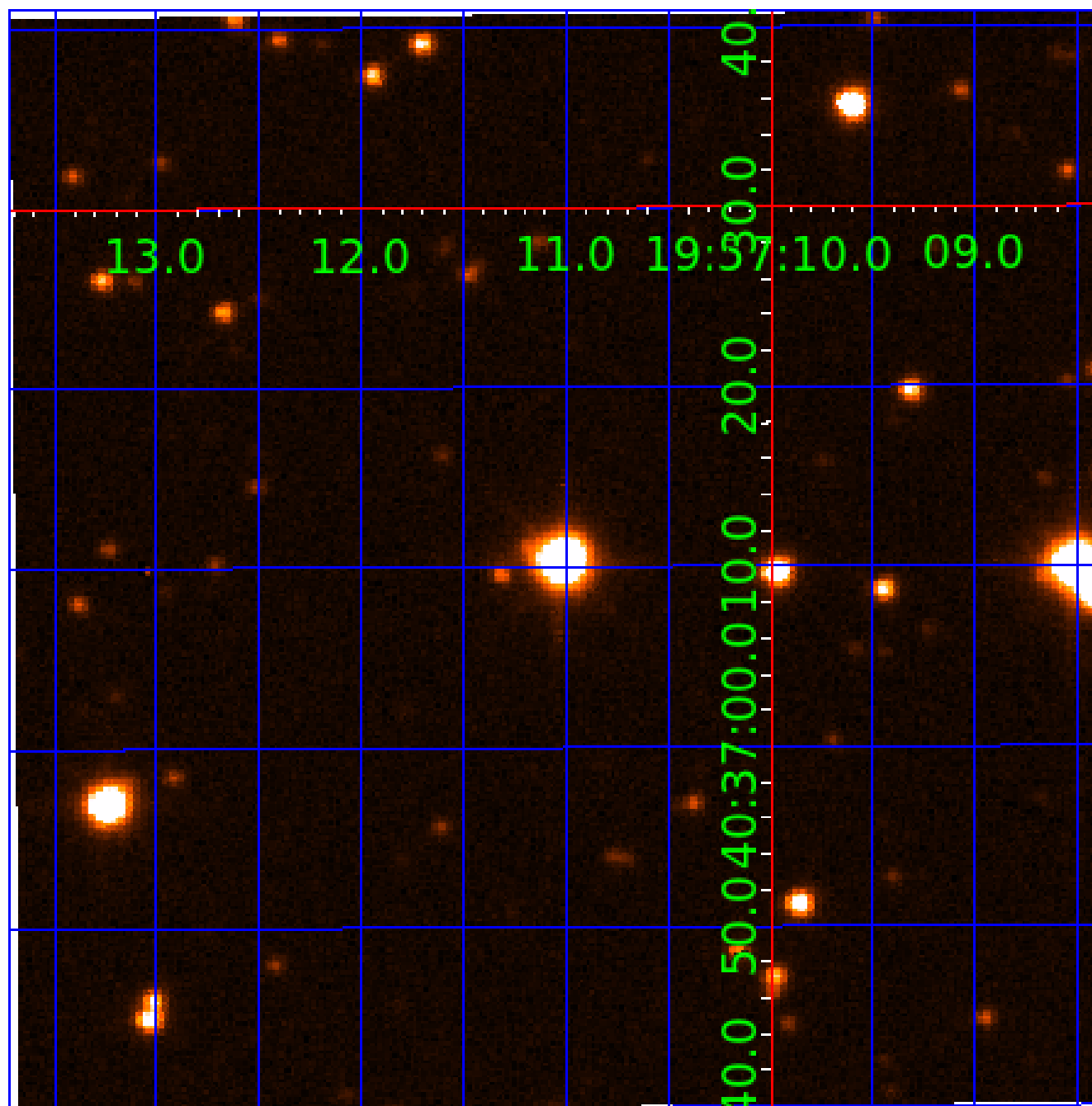


white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



UKIRT Image

Declination



# KIC 005479538

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
005479538-01	OBS	No	0.611871	131.585056	12.6	1.417	9.9	8.6	1.91	9700	0.73	85102.47
005479538-02	OBS	No	0.611871	131.783852	12.5	1.283	8.3	8.2	1.91	9700	0.73	85102.39
005479538-03	OBS	No	0.611864	131.989527	0.8	2.189	9.2	0.5	1.91	9700	0.18	85103.78

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005479538-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005479538-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_SATURATED
005479538-03	OBS	FP	0.00	1	0	0	0	LPP_DV—SAME_NTL_PERIOD—CENT_SATURATED

**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.

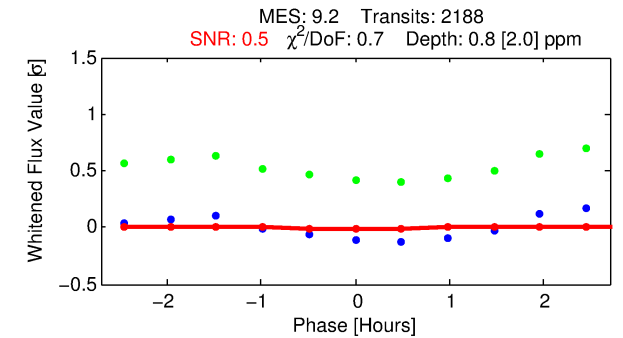
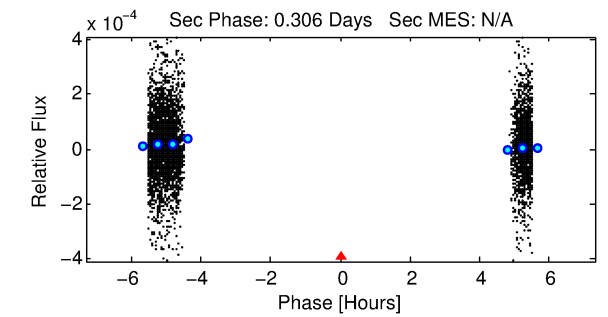
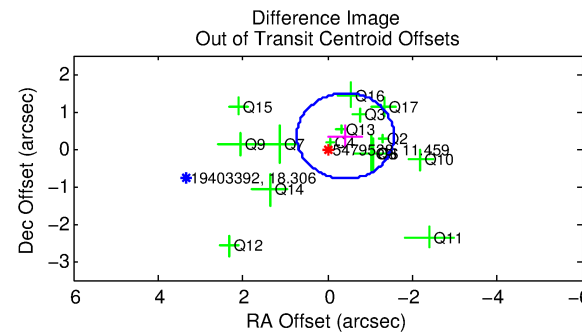
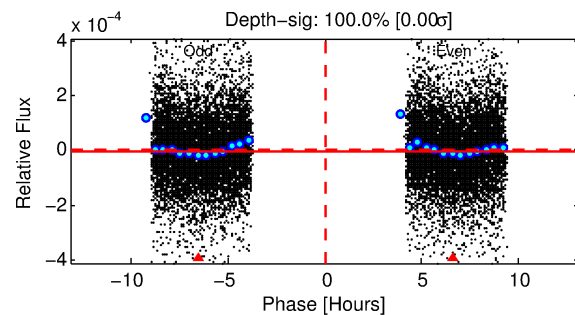
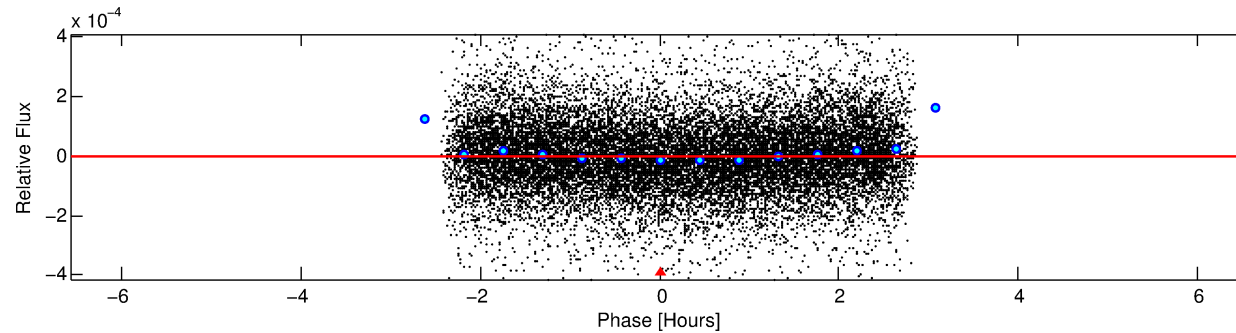
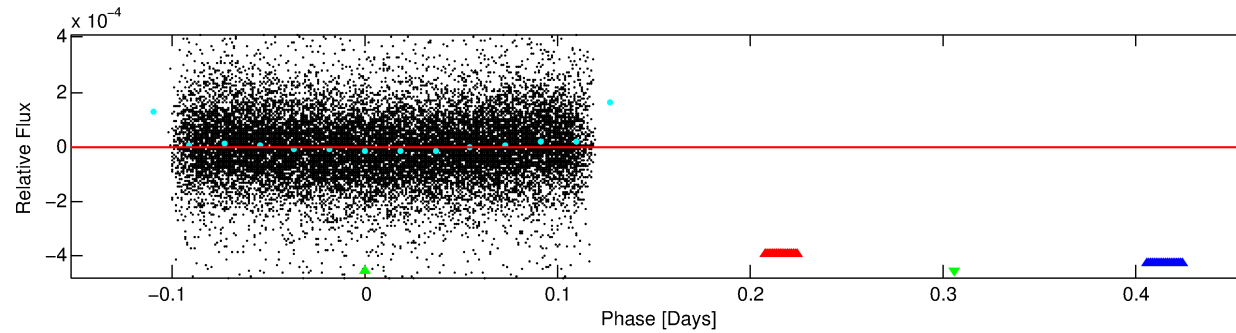
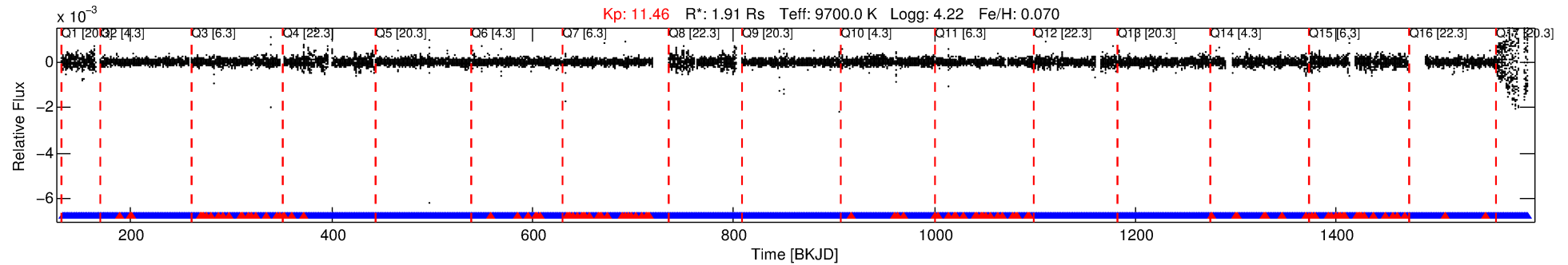
## Ephemeris Match Information For 005479538-03

No Significant Match Found



# DV One-Page Summary

KIC: 5479538 Candidate: 3 of 3 Period: 0.612 d



## DV Fit Results:

Period = 0.61186 [0.00024] d  
Epoch = 131.9895 [0.0361] BKJD  
Rp/R\* = 0.0008 [0.0012]  
a/R\* = 1.99 [3.34]  
b = 0.50 [3.40]  
Seff = 85103.78 [48150.65]  
Teq = 4355 [616] K  
Rp = 0.18 [0.26] Re  
a = 0.0184 [0.0073] AU

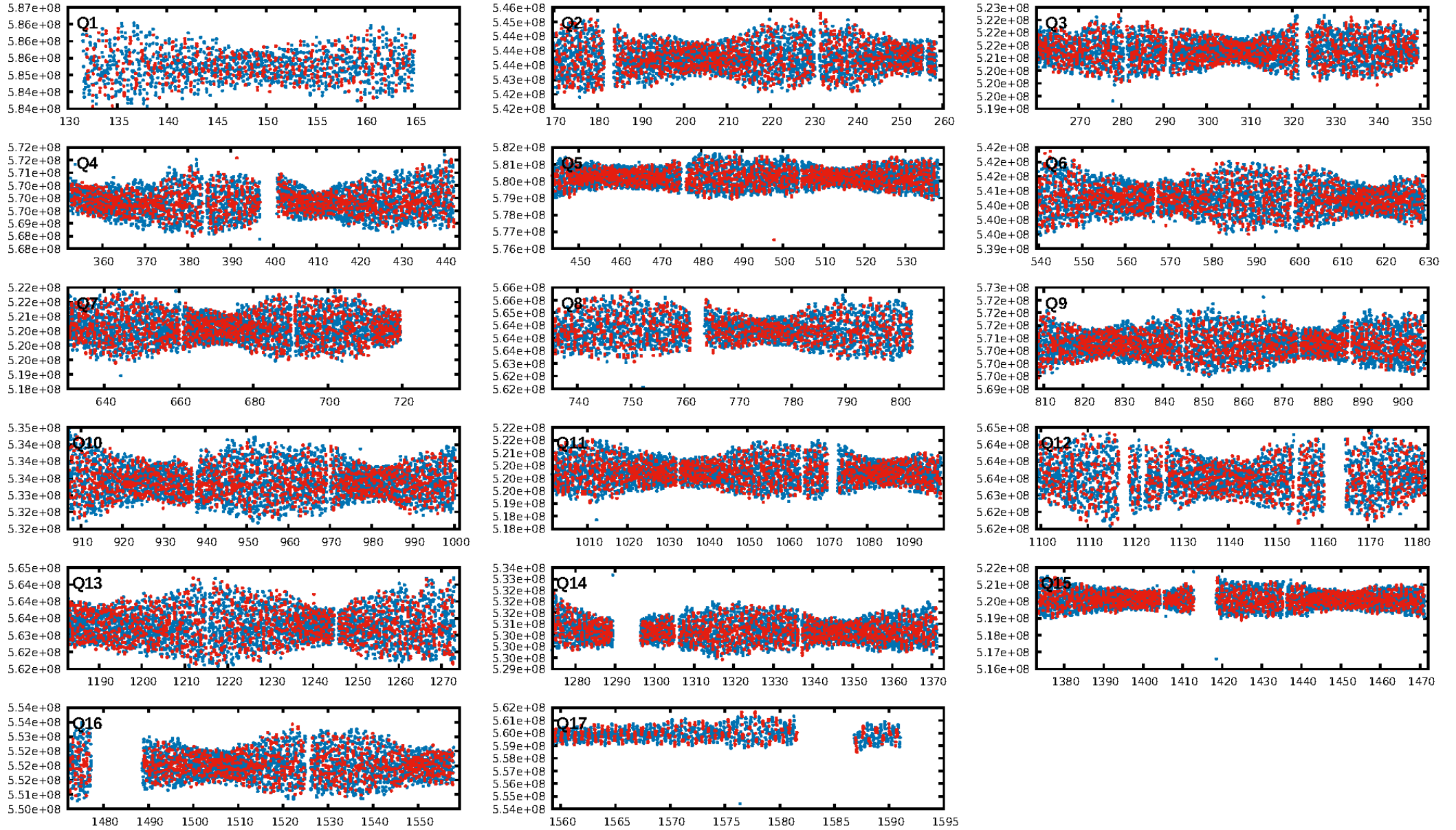
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: 0.0% [0.00 $\sigma$ ]  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: N/A  
RollingBand-fgt: 0.94 [1973/2089]  
GhostDiagnostic-chr: N/A  
Centroid-sig: N/A  
Centroid-so: N/A  
OotOffset-rm: 0.544 arcsec [1.42 $\sigma$ ]  
KicOffset-rm: 0.771 arcsec [2.05 $\sigma$ ]  
OotOffset-st: 4/4/4/3 [15]  
KicOffset-st: 4/4/4/3 [15]  
DiffImageQuality-fgm: 0.67 [10/15]  
DiffImageOverlap-fno: 0.00 [0/17]

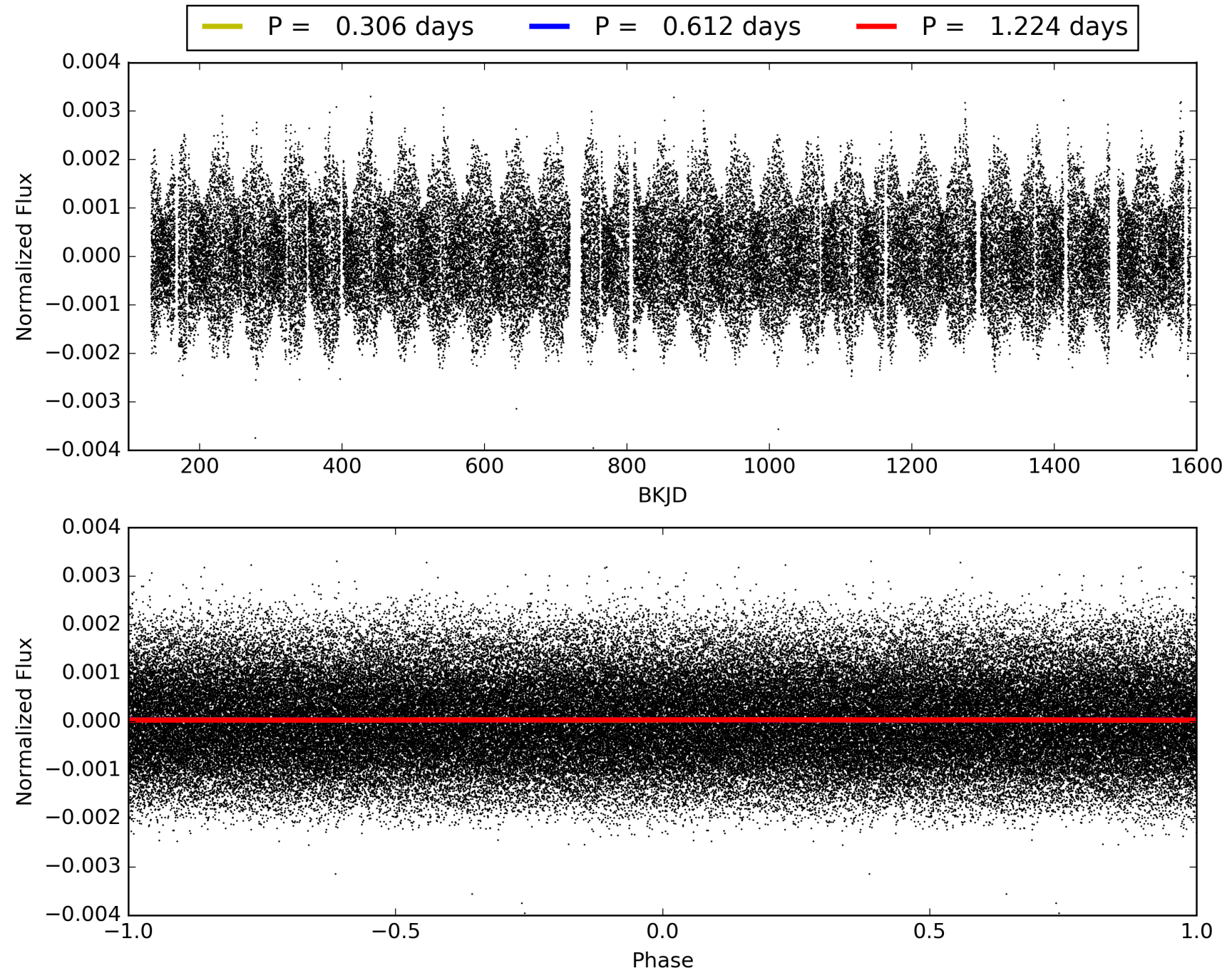
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 08:50:33 Z

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

# TCE 005479538-03, PDC Light Curves

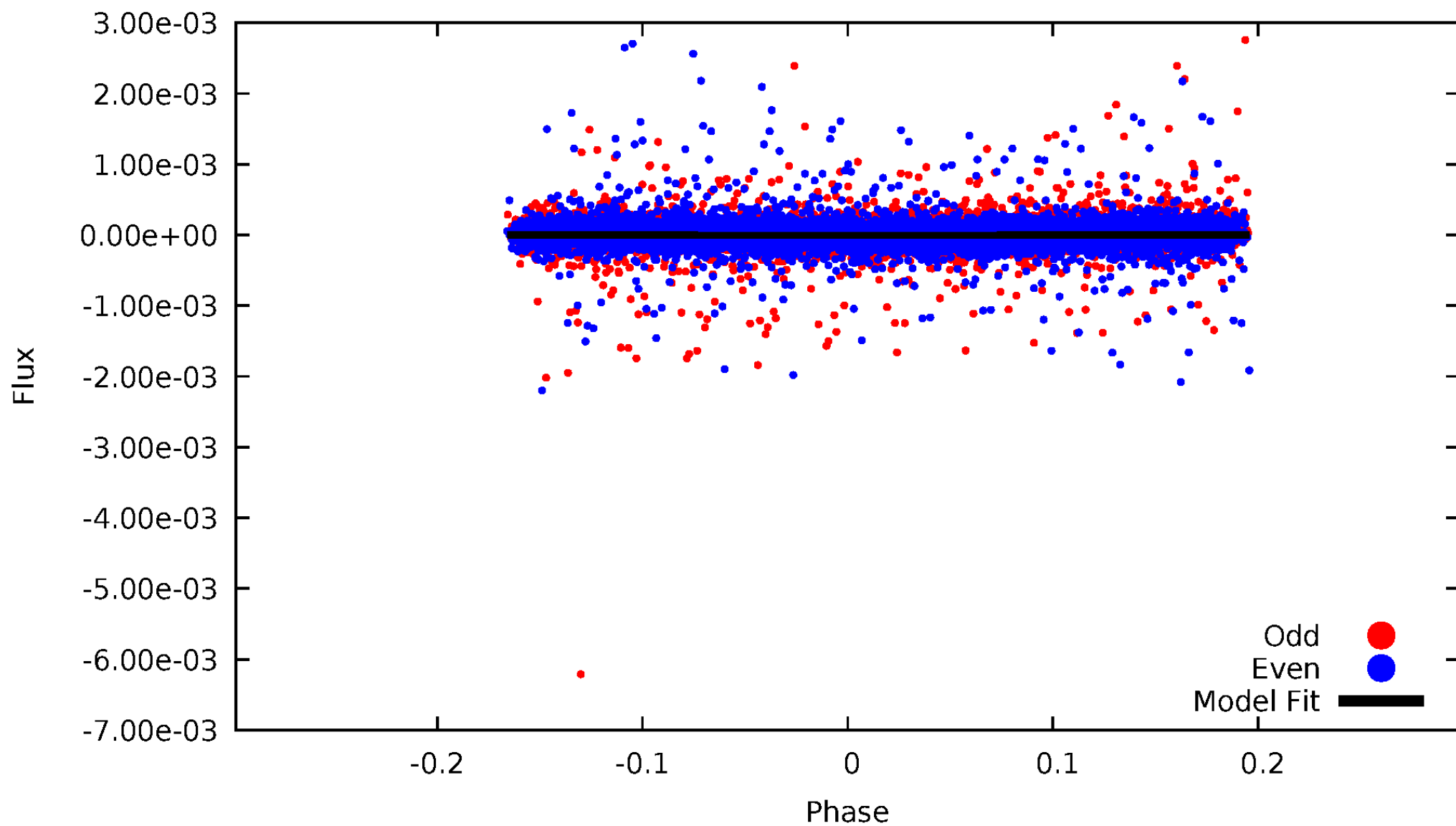


TCE 005479538-03



# DV Odd/Even

TCE 005479538-03



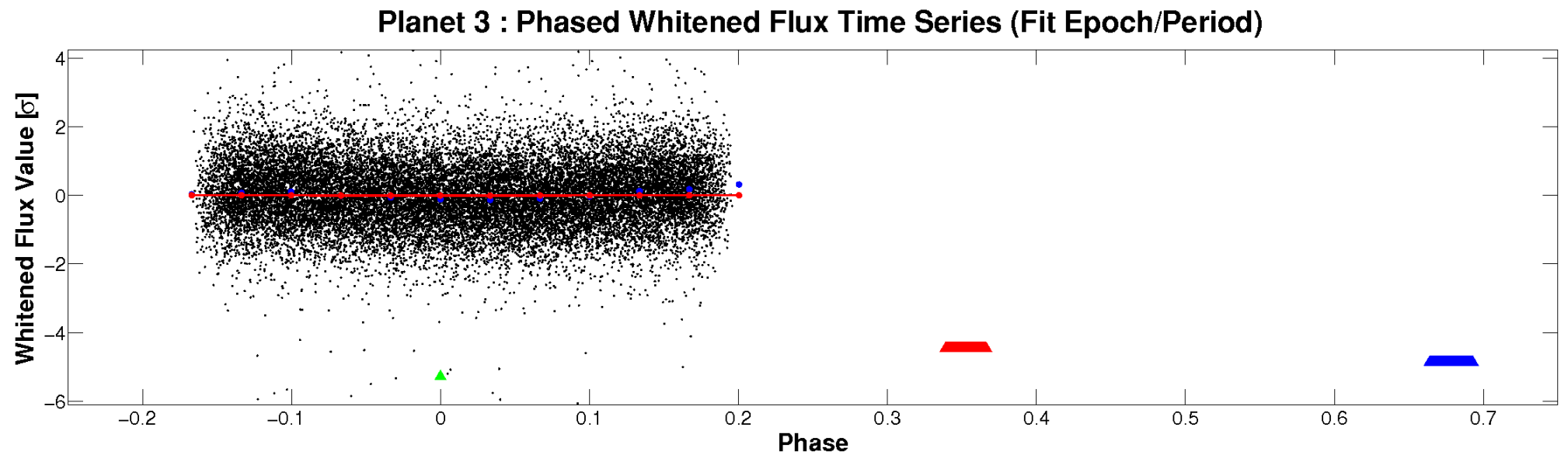
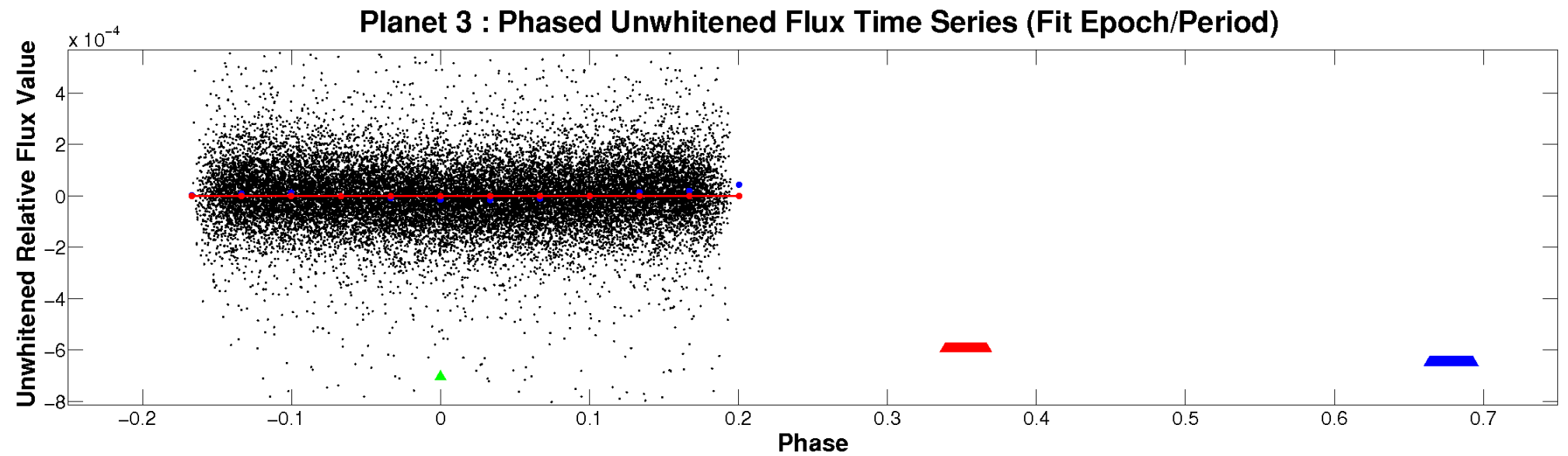


ALT Odd/Even

This plot does not exist for this TCE.

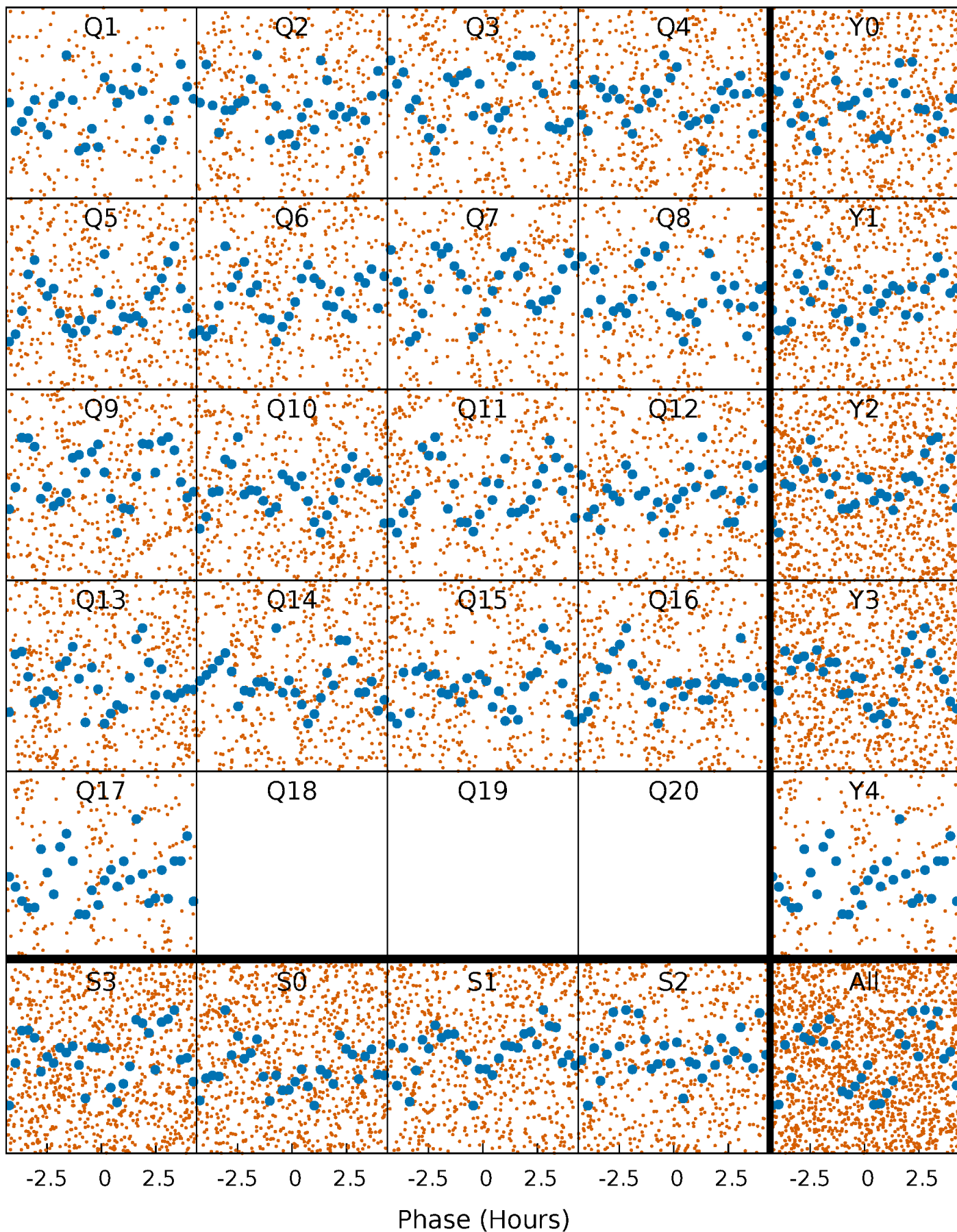


# Non-Whitened Vs. Whitened Light Curve



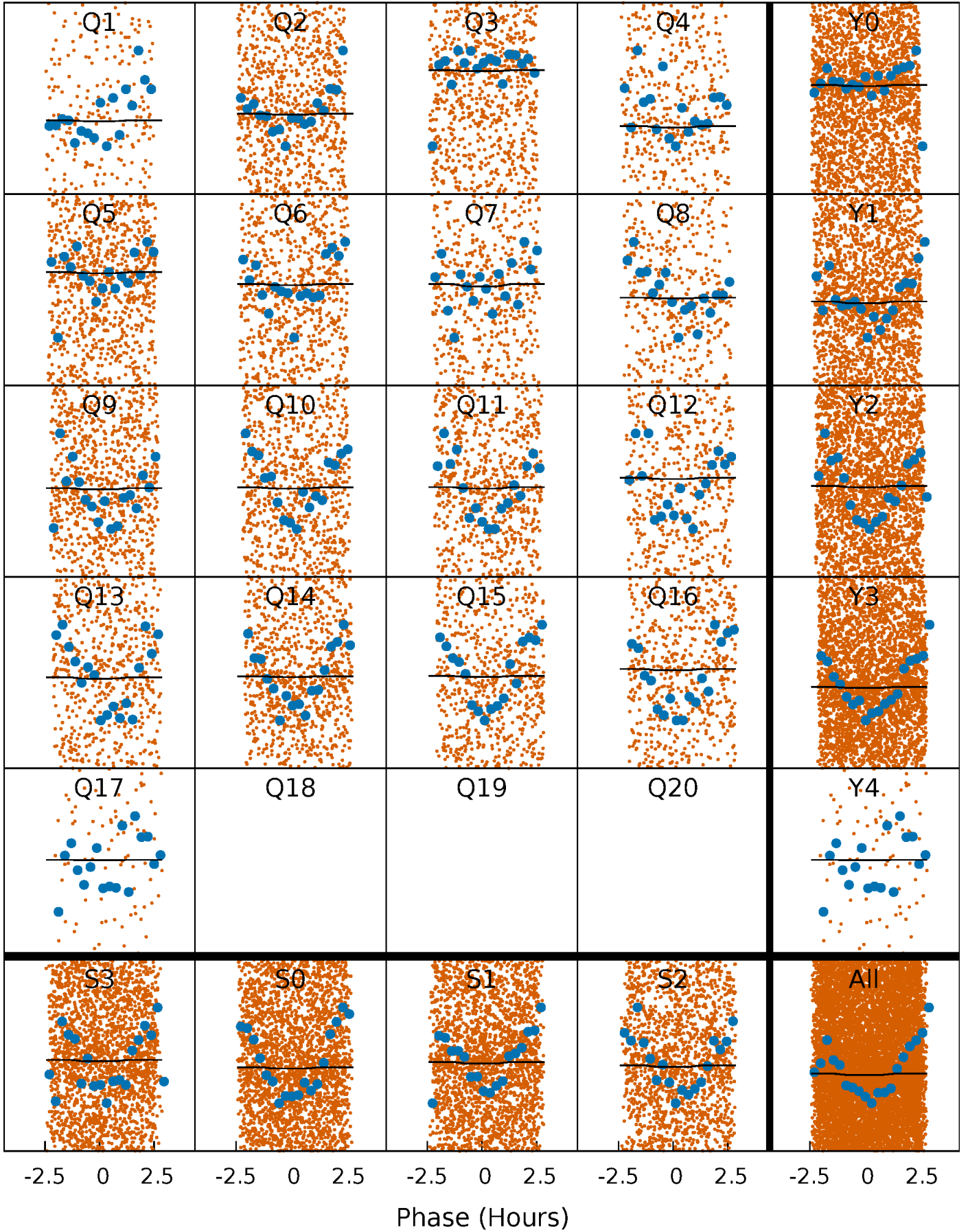
# PDC Quarter-Phased Transit Curves

TCE 005479538-03 P= 0.611864 Days  $T_0=131.989527$  (BKJD)



# DV Quarter-Phased Transit Curves

TCE 005479538-03     $P = 0.611864$  Days     $T_0 = 131.989527$  (BKJD)

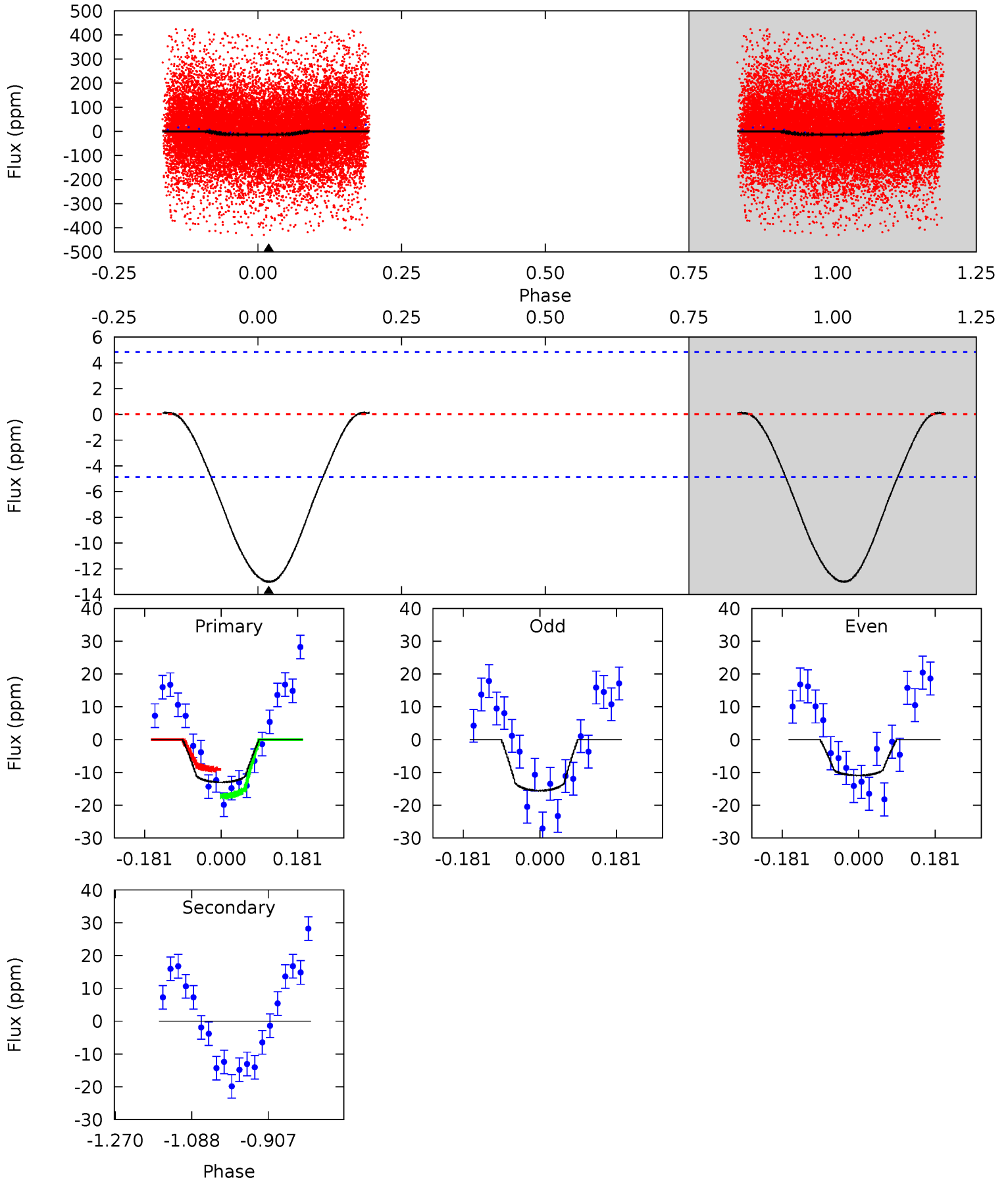


This plot does not exist for this TCE.

# DV Model-Shift Uniqueness Test

005479538-03, P = 0.611864 Days, E = 131.377663 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
11.9	0	0	0	4.44	1.34	0.15	11.9	11.9	0	0	2.12	0.96	0.01	3.87





## Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

### Stellar Parameters For KIC 005479538

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$9700^{+272}_{-375}$	$4.225^{+0.140}_{-0.280}$	$0.070^{+0.150}_{-0.600}$	$1.911^{+0.957}_{-0.410}$	$2.238^{+0.445}_{-0.495}$	$0.452^{+0.337}_{-0.292}$
	+3%/-4%	+3%/-7%	+214%/-857%	+50%/-21%	+20%/-22%	+75%/-65%
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 005479538-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	$A_{obs}$
DV	$0 \pm 1$	$0.26^{+0.23}_{-0.17}$	$6167^{+639}_{-438}$	$-5153^{+15008}_{-5765}$	$-0.082^{+4.351}_{-4.947}$
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  $A_{obs} \gg 1.0$

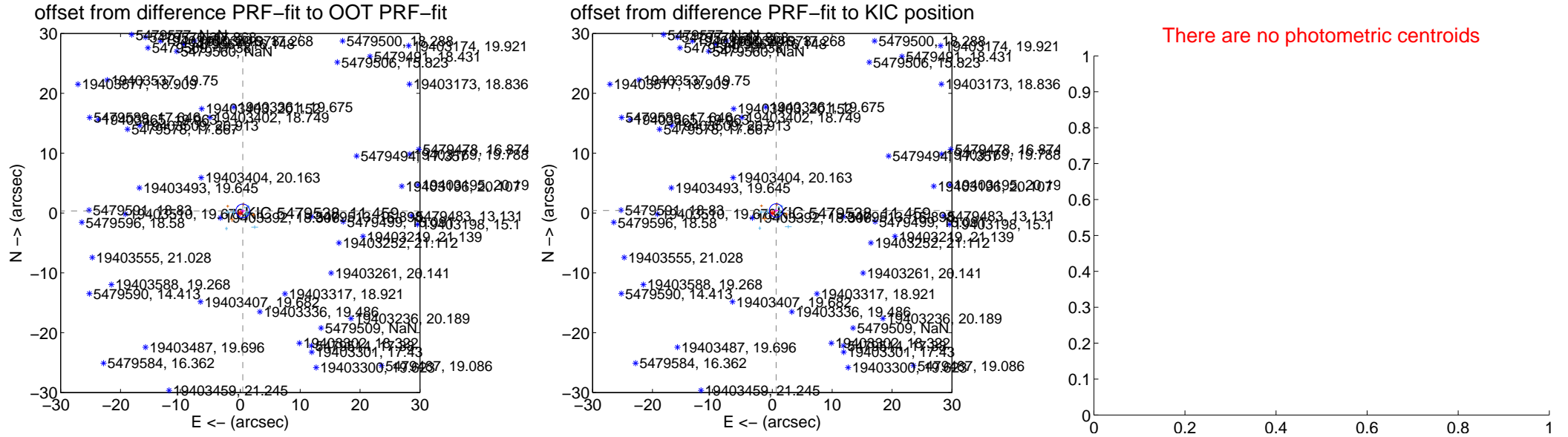
## DV Centroid Data

Supplemental centroid analysis for 005479538-03. **Kepler magnitude: 11.46.** Transit SNR 0.54

There are 10 quarters with good PRF difference image offsets

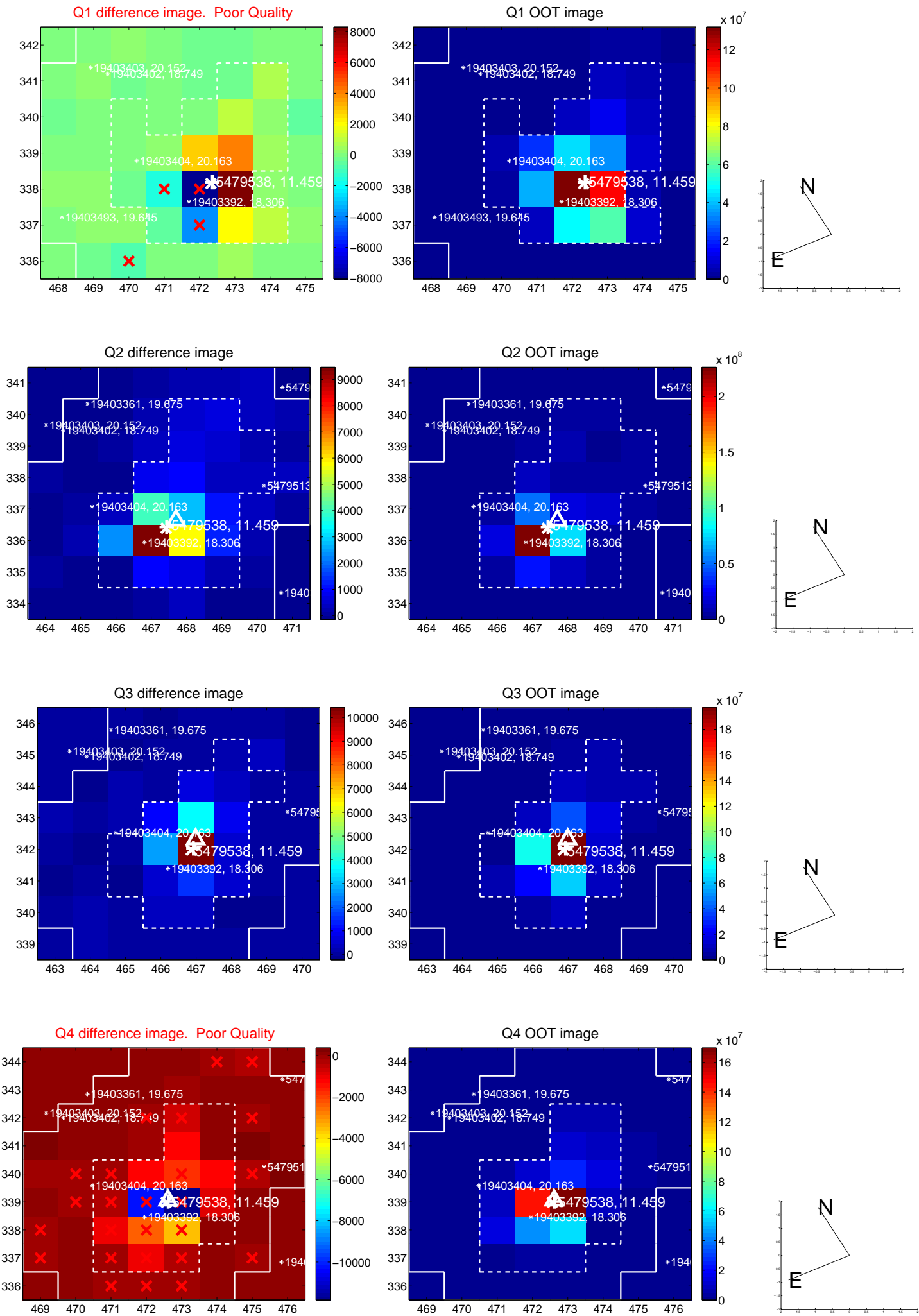
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.544 \pm 0.382$	1.42	$-0.419 \pm 0.409$	$0.347 \pm 0.289$
PRF-fit source offset from KIC position	$0.771 \pm 0.377$	2.05	$-0.648 \pm 0.393$	$0.417 \pm 0.300$
photometric centroid source offset	—	—	—	—

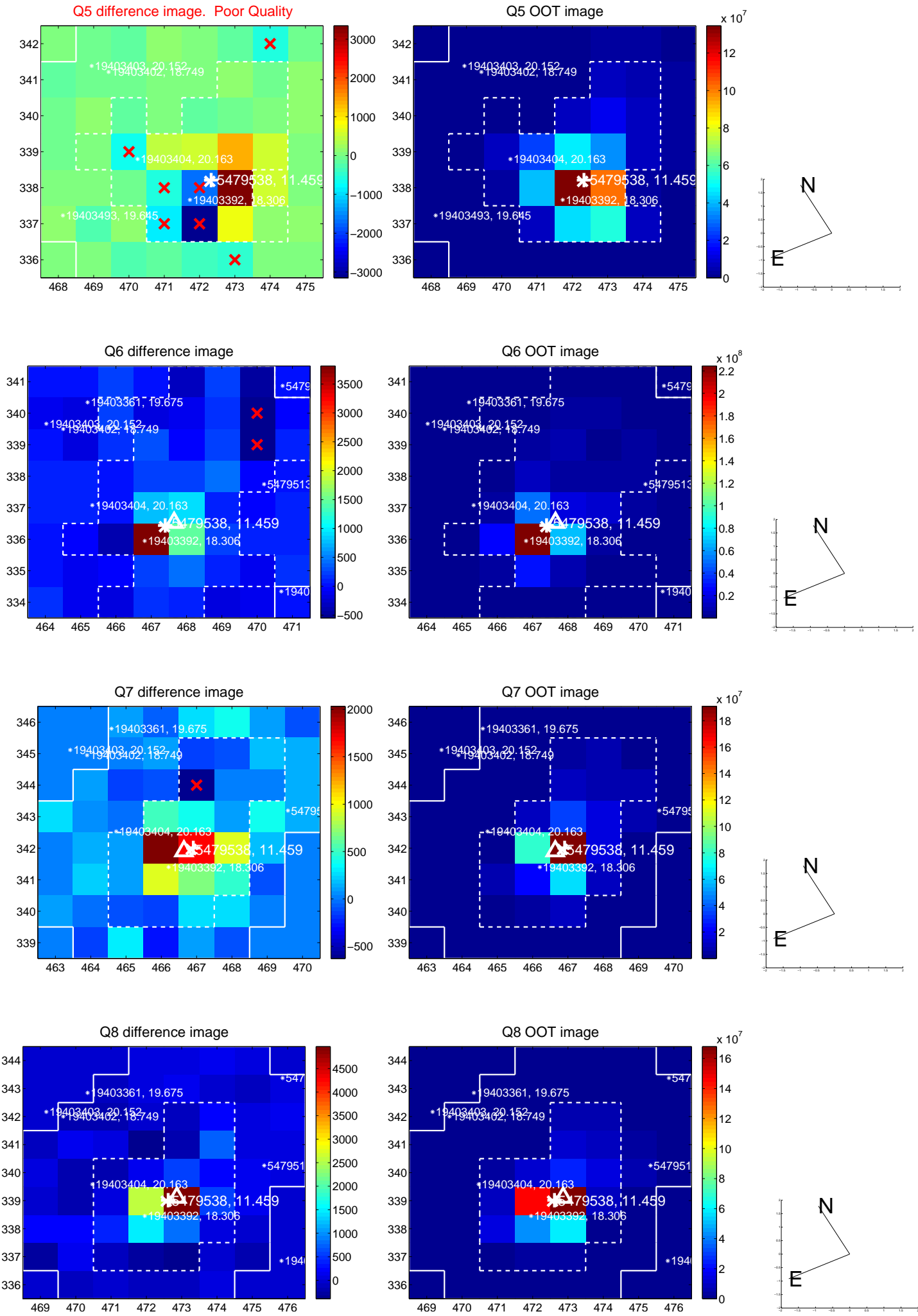


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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

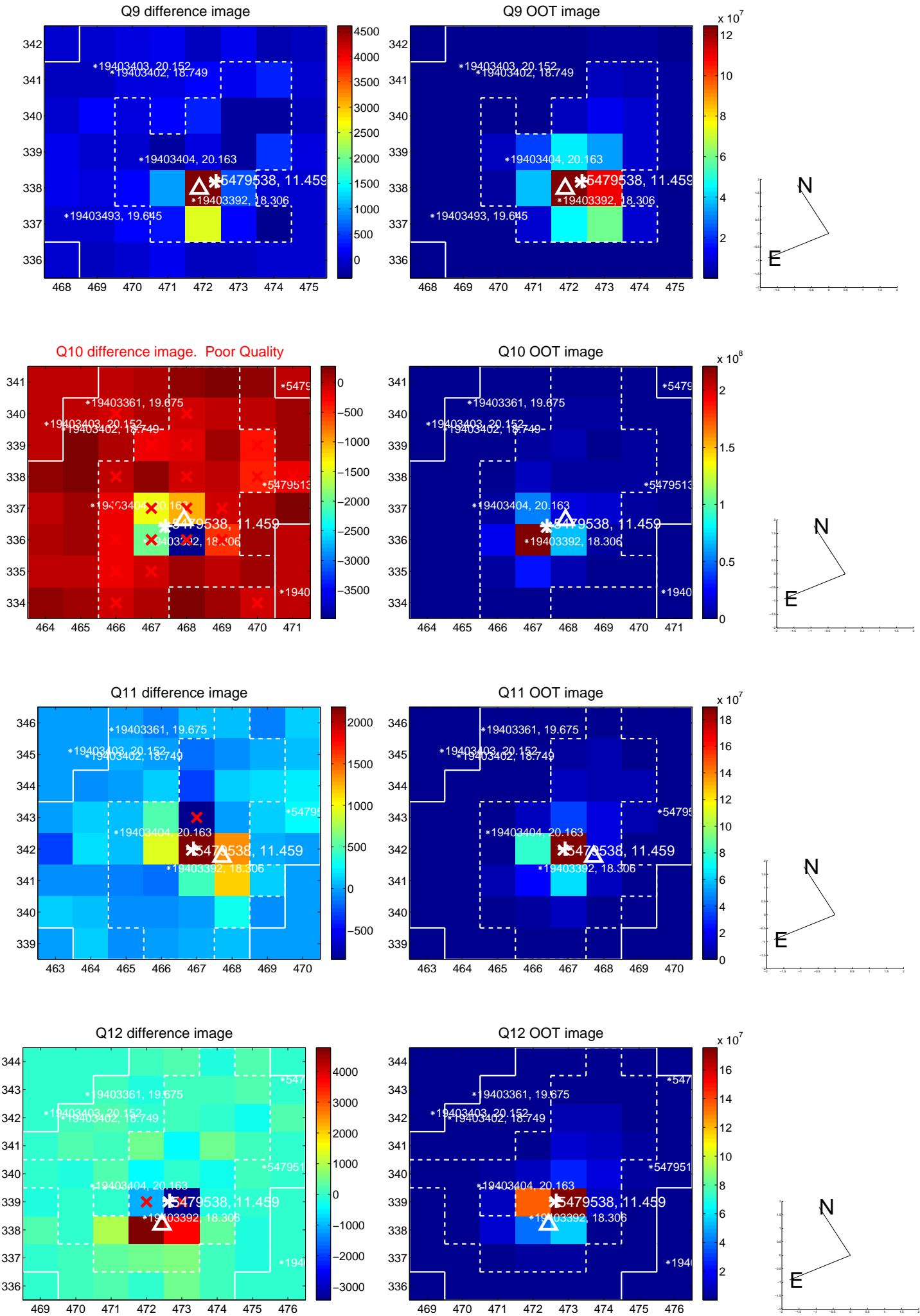
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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

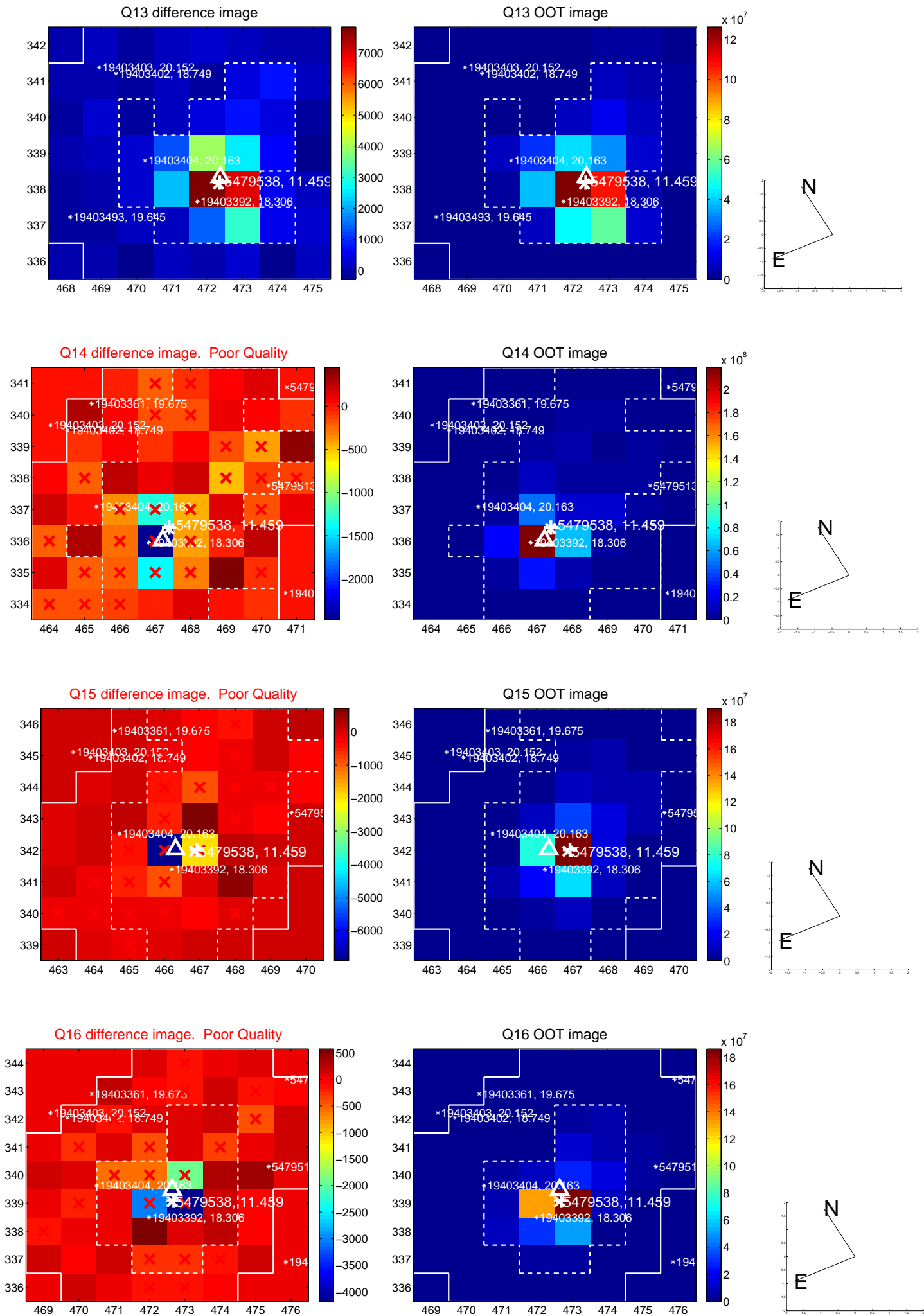


white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.

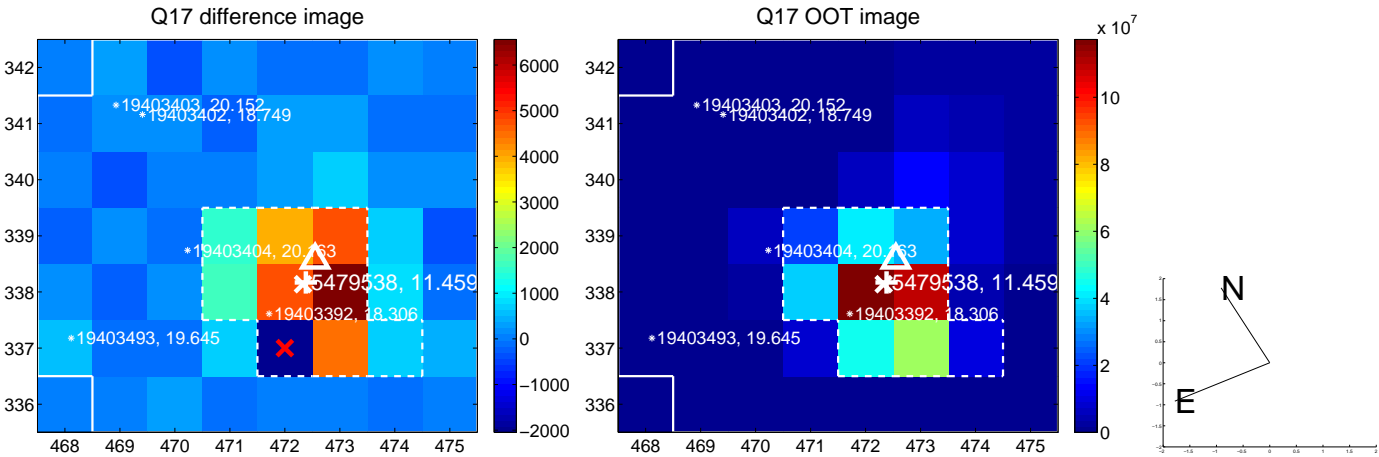




white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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

