

# KIC 007282265

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
007282265-01	OBS	No	1.121122	132.423693	1072.8	3.500	73.8	-1.0	2.74	11012	9.27	109079.91

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007282265-01	OBS	FP	0.00	1	0	0	0	<del>SWEET_NTL</del> — <del>LPP_DV</del> — <del>CENT_NOFITS</del>

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

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

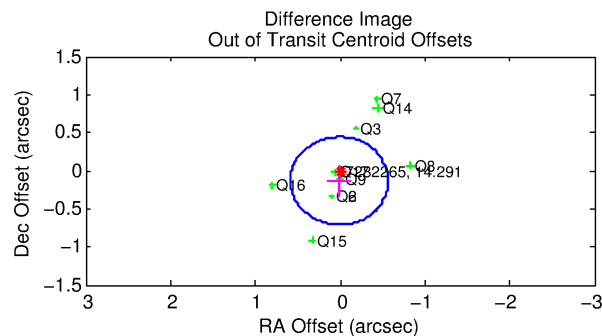
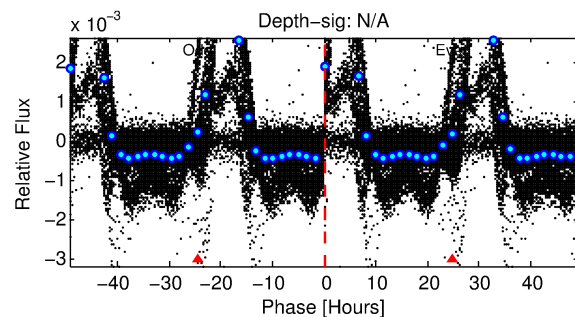
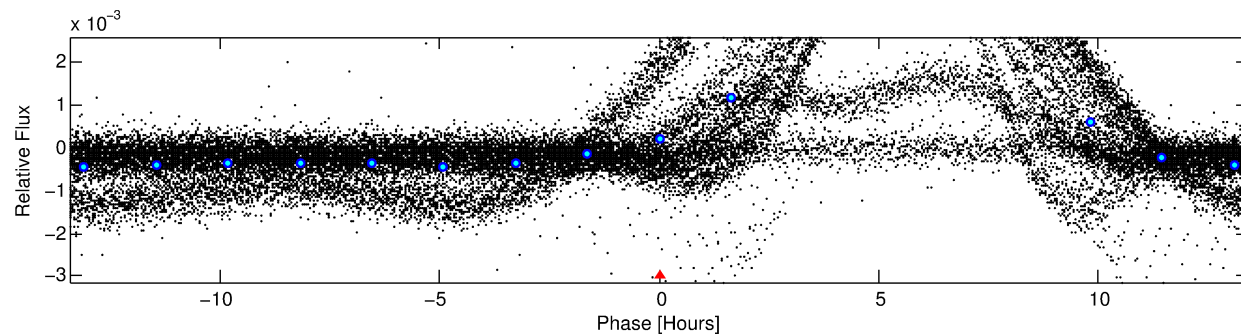
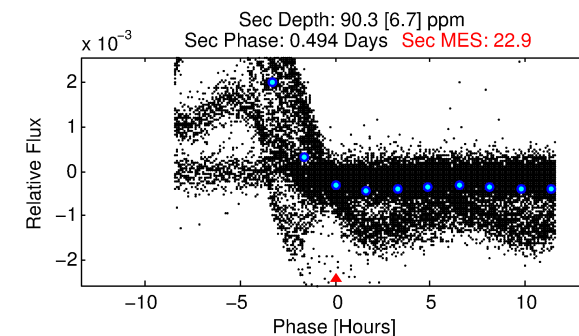
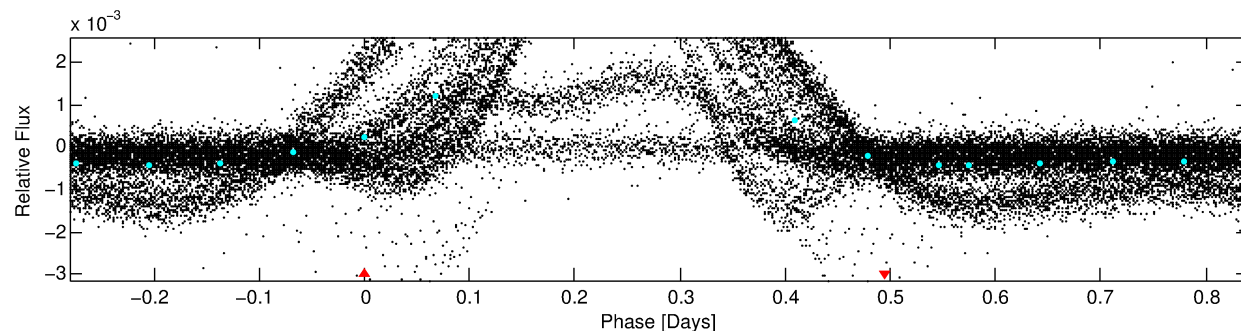
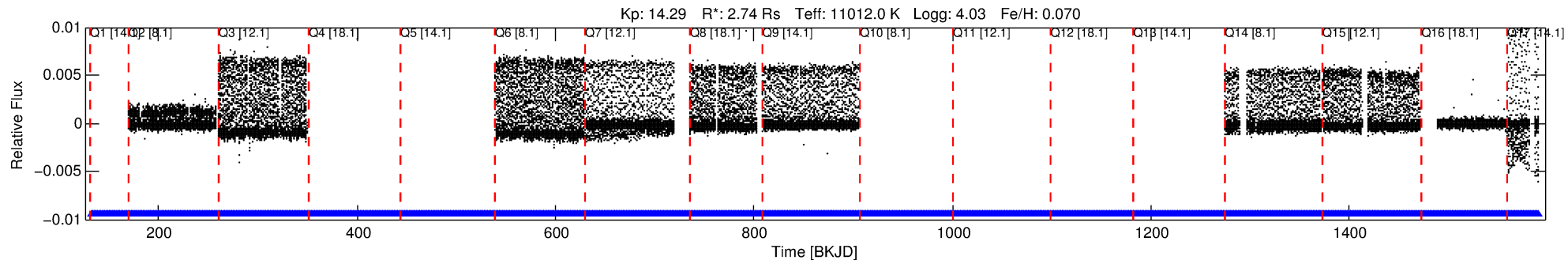
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

## Ephemeris Match Information For 007282265-01

No Significant Match Found

# DV One-Page Summary

KIC: 7282265 Candidate: 1 of 1 Period: 1.121 d



## TPS TCE Results:

Period = 1.12112 d  
Epoch = 132.4237 BKJD

**DV fit results are unavailable**

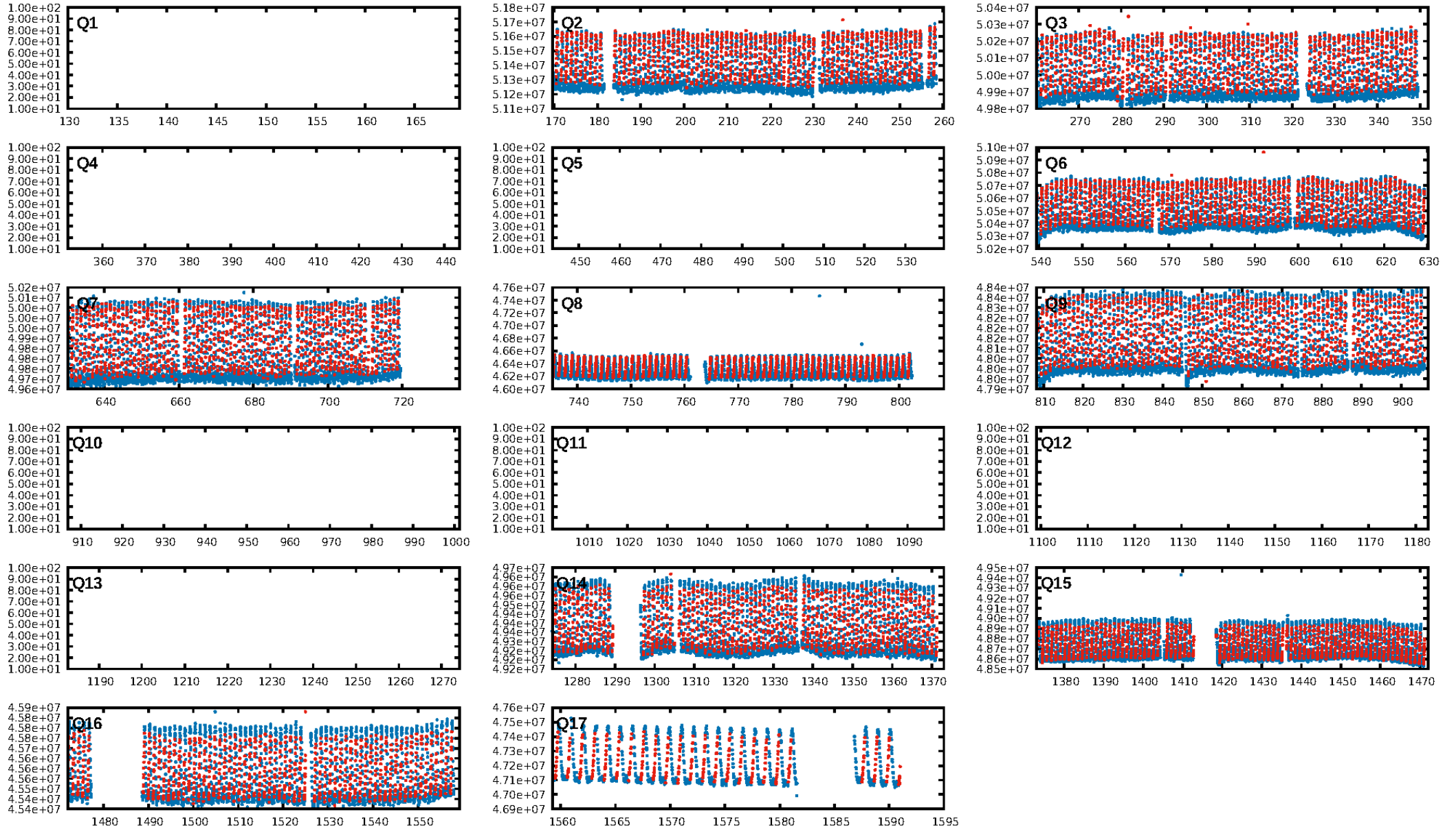
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: N/A  
RollingBand-fgt: 1.00 [678/678]  
**GhostDiagnostic-chr: -2.123**  
Centroid-sig: 18.1%  
Centroid-so: 0.211 arcsec [2.89σ]  
OotOffset-rm: 0.134 arcsec [0.69σ]  
KicOffset-rm: 0.216 arcsec [1.50σ]  
OotOffset-st: 3/3/2/2 [10]  
KicOffset-st: 3/3/2/2 [10]  
DiffImageQuality-fgm: 0.40 [4/10]  
DiffImageOverlap-fno: 1.00 [10/10]

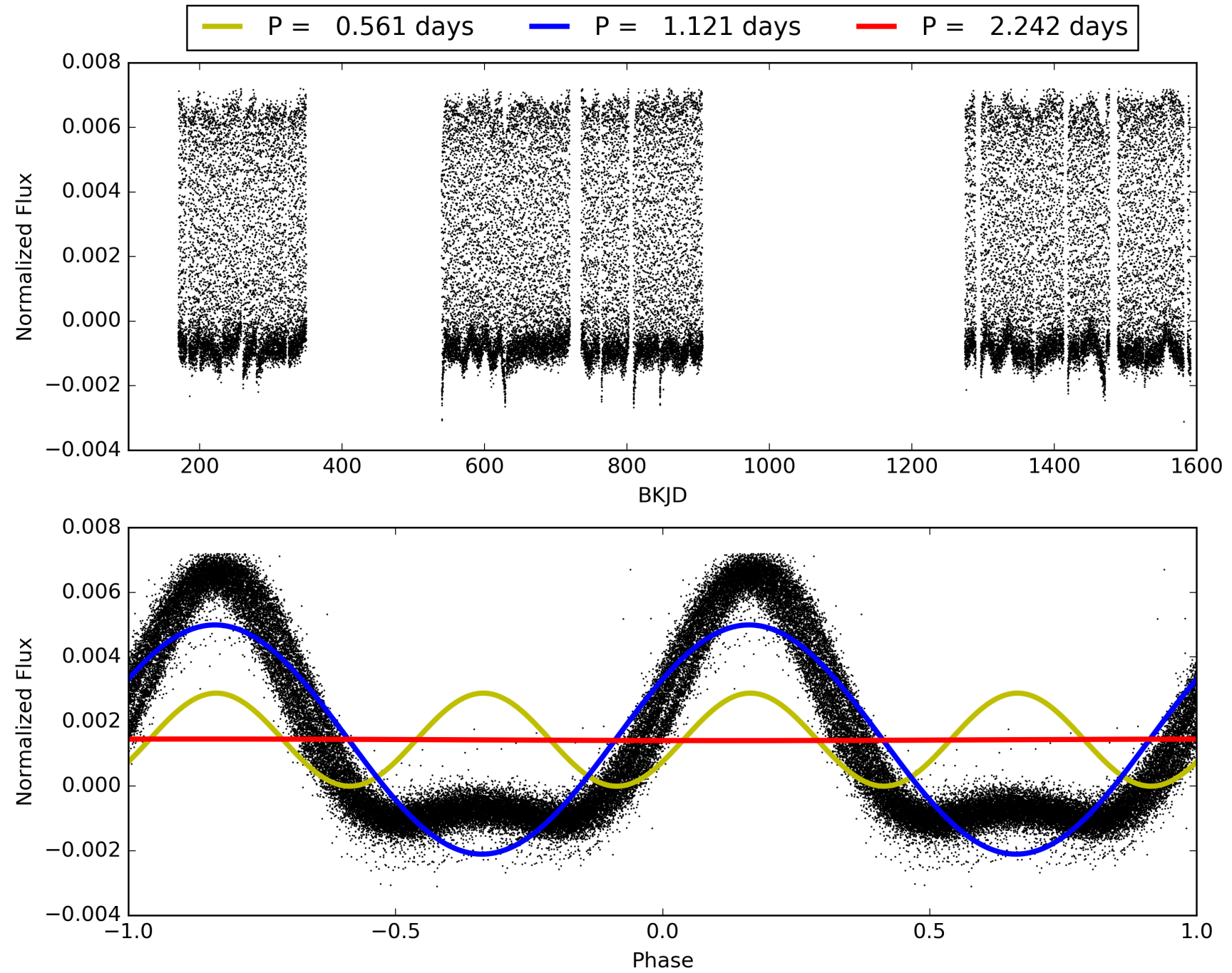
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 14:04:05 Z

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

# TCE 007282265-01, PDC Light Curves

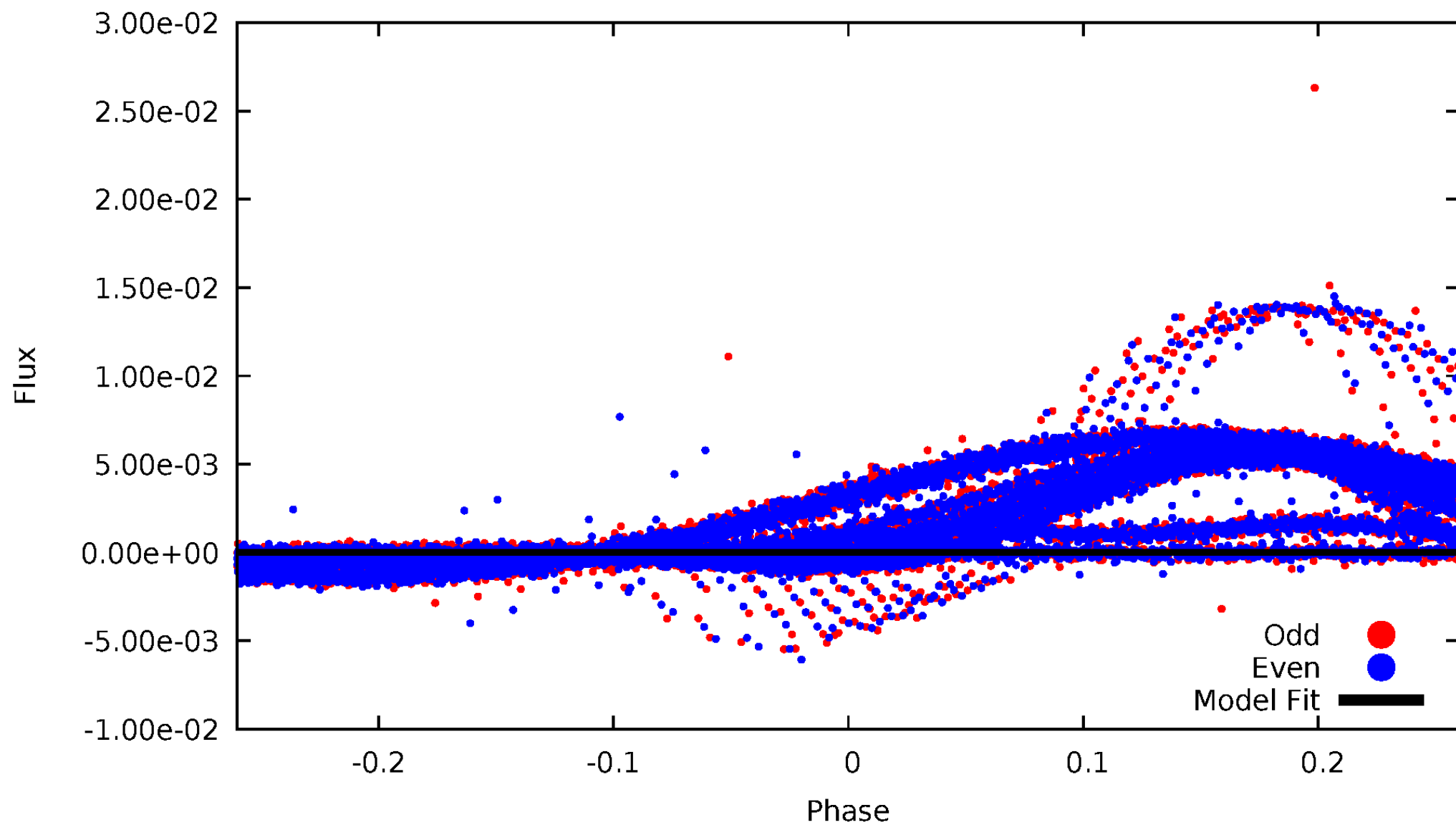


TCE 007282265-01



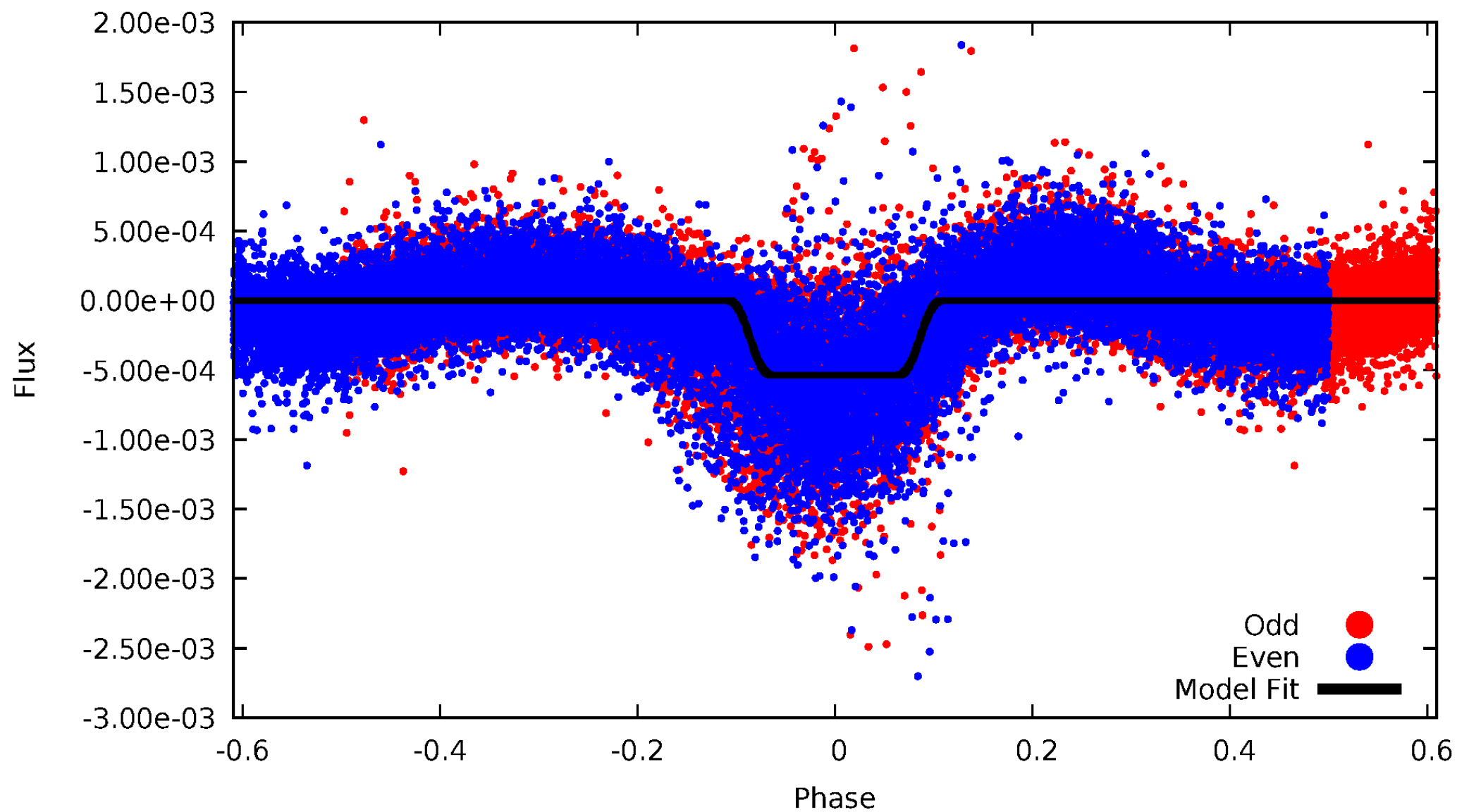
# DV Odd/Even

TCE 007282265-01



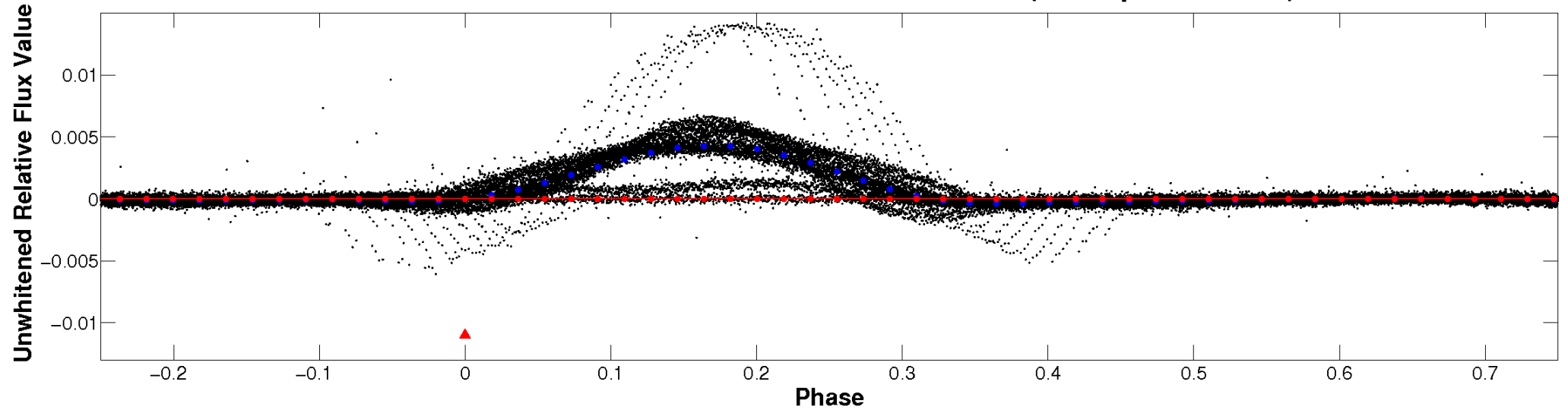
# ALT Odd/Even

TCE 007282265-01



# Non-Whitened Vs. Whitened Light Curve

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



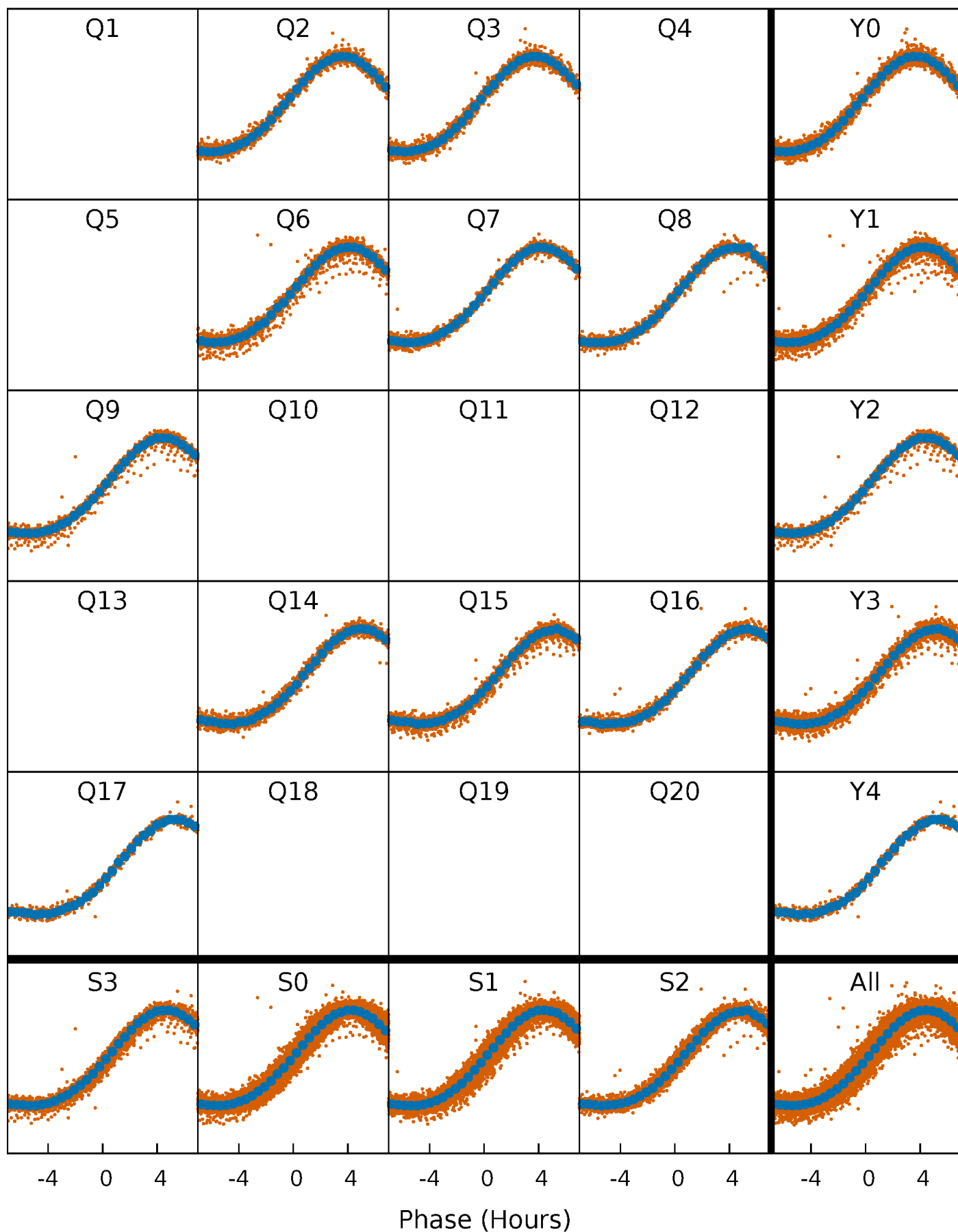
**Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)**





# PDC Quarter-Phased Transit Curves

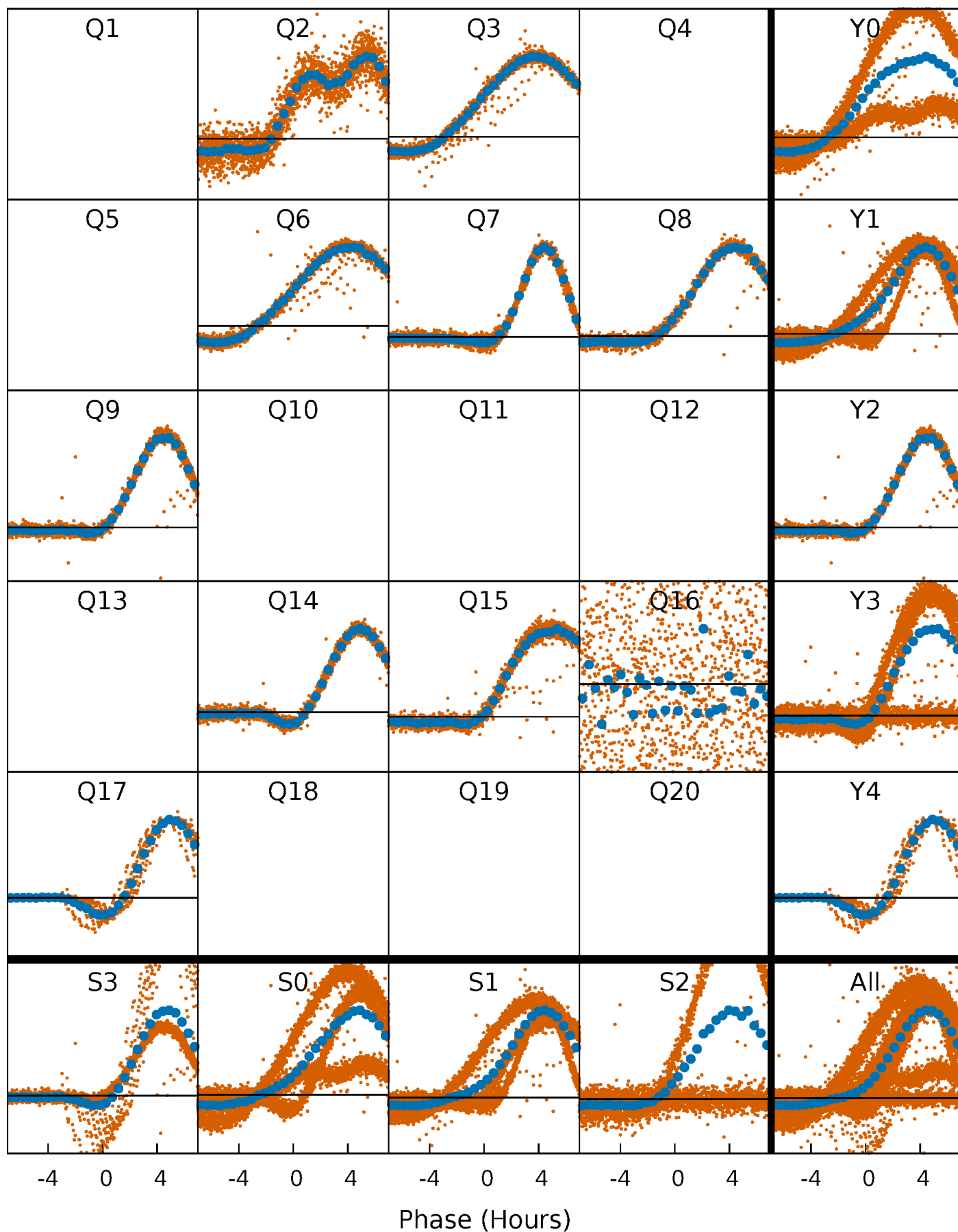
TCE 007282265-01 P= 1.121122 Days  $T_0=132.423693$  (BKJD)





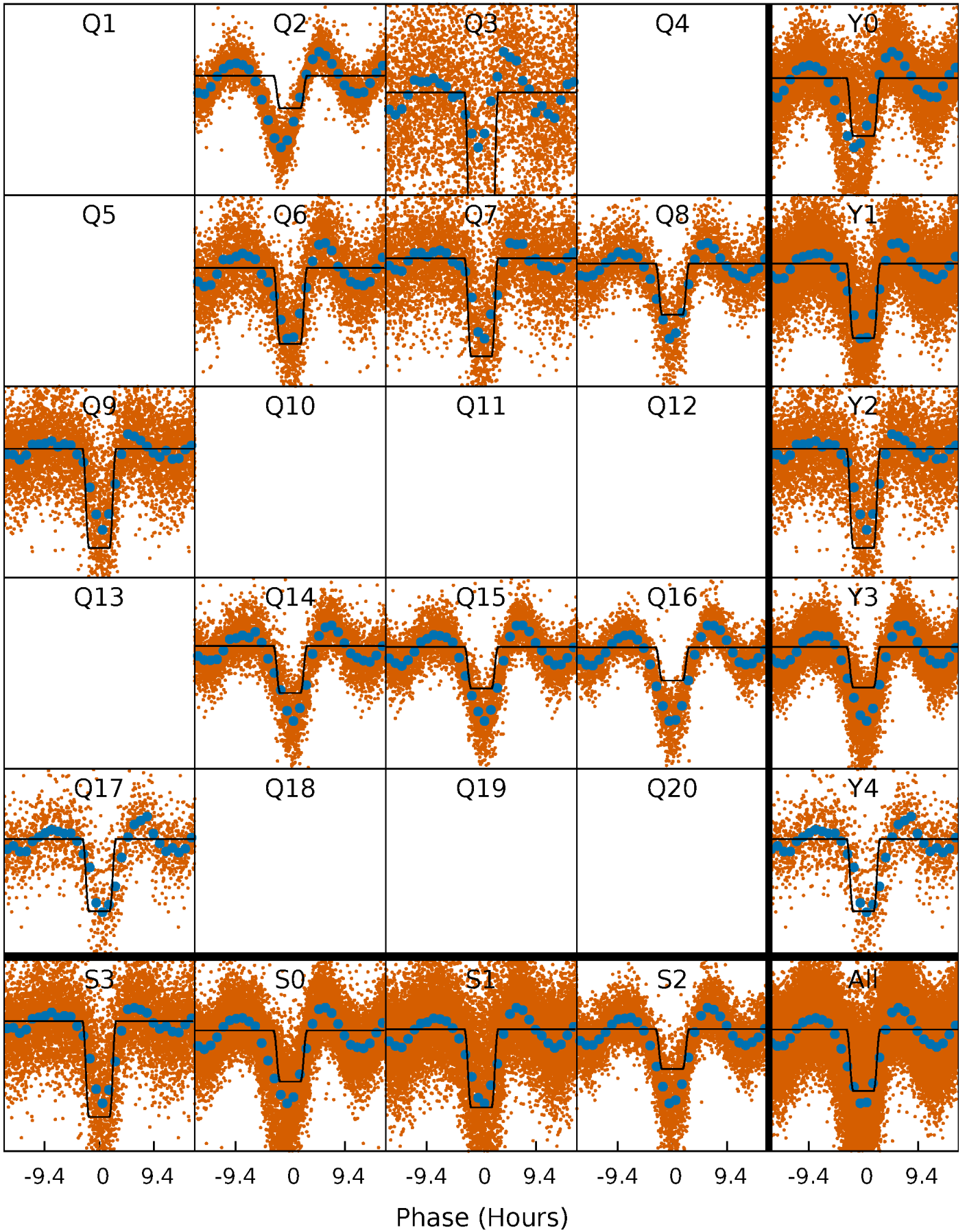
# DV Quarter-Phased Transit Curves

TCE 007282265-01 P= 1.121122 Days  $T_0=132.423693$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

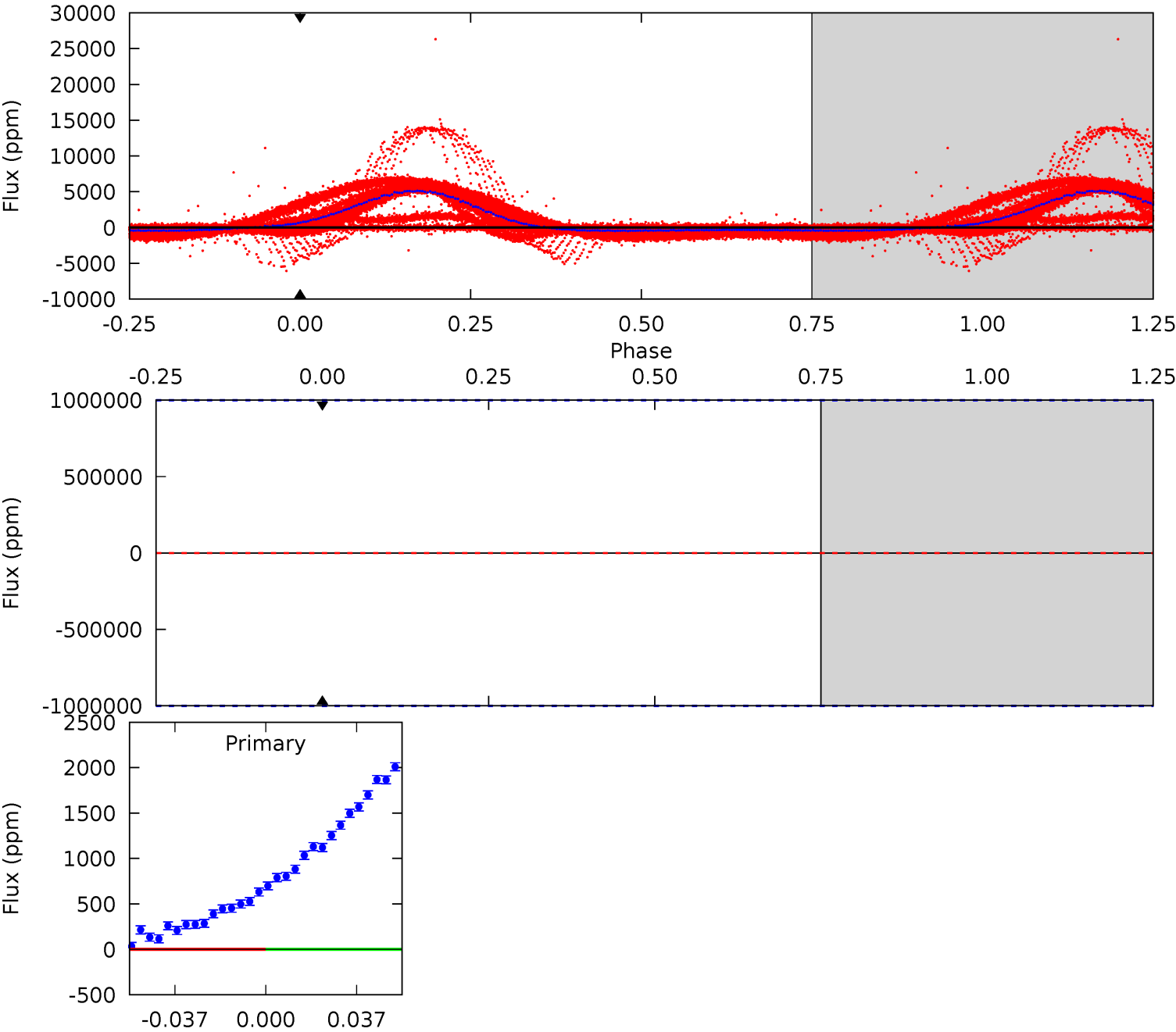
TCE 007282265-01 P= 1.121122 Days  $T_0=132.380304$  (BKJD)



DV Model-Shift Uniqueness Test

007282265-01, P = 1.121122 Days, E = 132.423693 Days

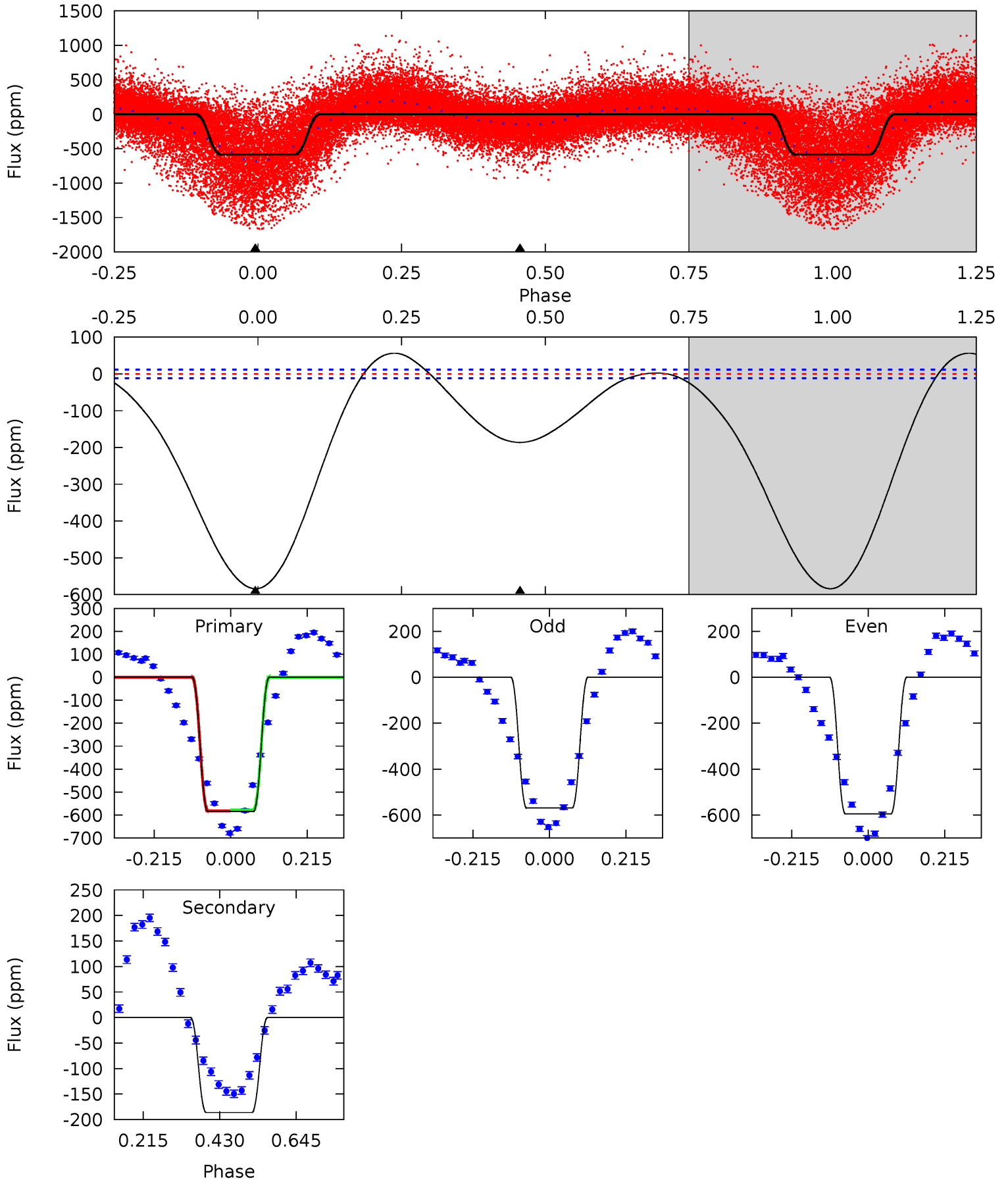
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



# Alt Model-Shift Uniqueness Test

007282265-01, P = 1.121122 Days, E = 132.380304 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
220.8	70.4	0	0	4.40	1.24	12.4	220.8	220.8	70.4	70.4	4.89	1.01	0.09	0.74



### Stellar Parameters For KIC 007282265

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$11012^{+304}_{-479}$	$4.025^{+0.258}_{-0.172}$	$0.070^{+0.150}_{-0.650}$	$2.744^{+0.665}_{-0.997}$	$2.909^{+0.241}_{-0.723}$	$0.198^{+0.341}_{-0.098}$
	+3%/-4%	+6%/-4%	+214%/-929%	+24%/-36%	+8%/-25%	+172%/-49%
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 007282265-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	$A_{\text{obs}}$
DV	$0 \pm 1000000$	$21.95^{+25.09}_{-14.89}$	$6405^{+532}_{-548}$	$-6980^{+98765}_{-76885}$	$-1.359^{+182.958}_{-172.302}$
Alt.	$-186 \pm 3$	$21.39^{+22.90}_{-15.05}$	$6452^{+480}_{-639}$	$-3846^{+11154}_{-880}$	$0.197^{+1.890}_{-0.150}$

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

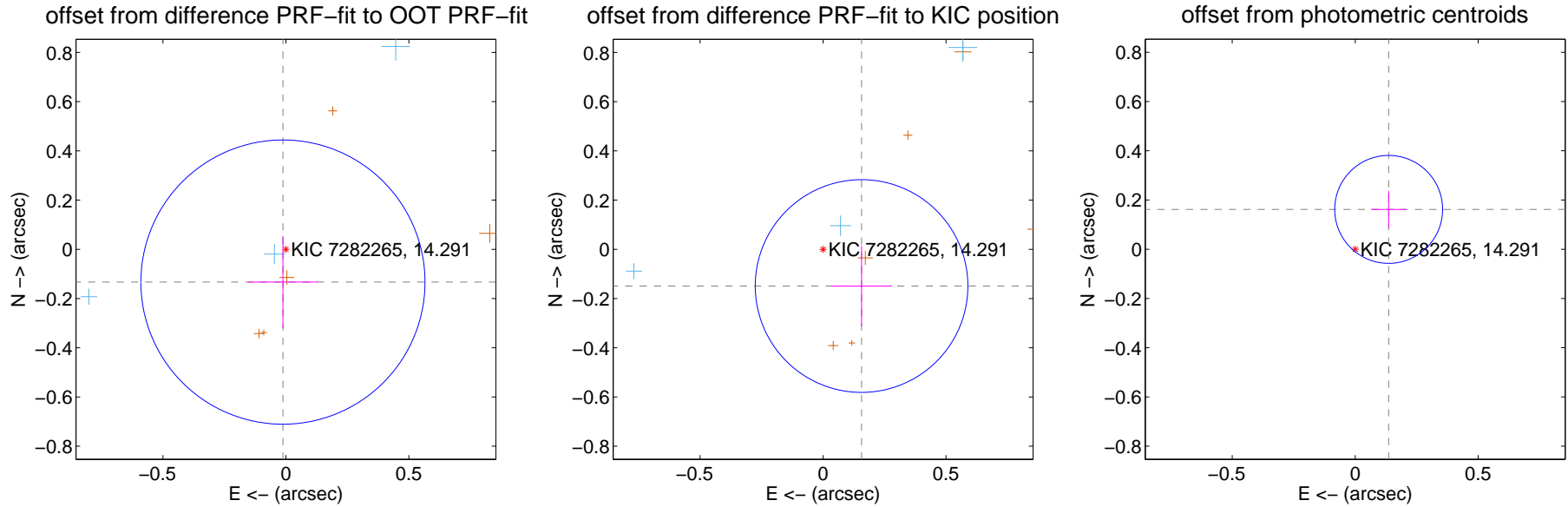
## DV Centroid Data

Supplemental centroid analysis for 007282265-01. Kepler magnitude: 14.29. Transit SNR -1.00

There are 4 quarters with good PRF difference image offsets

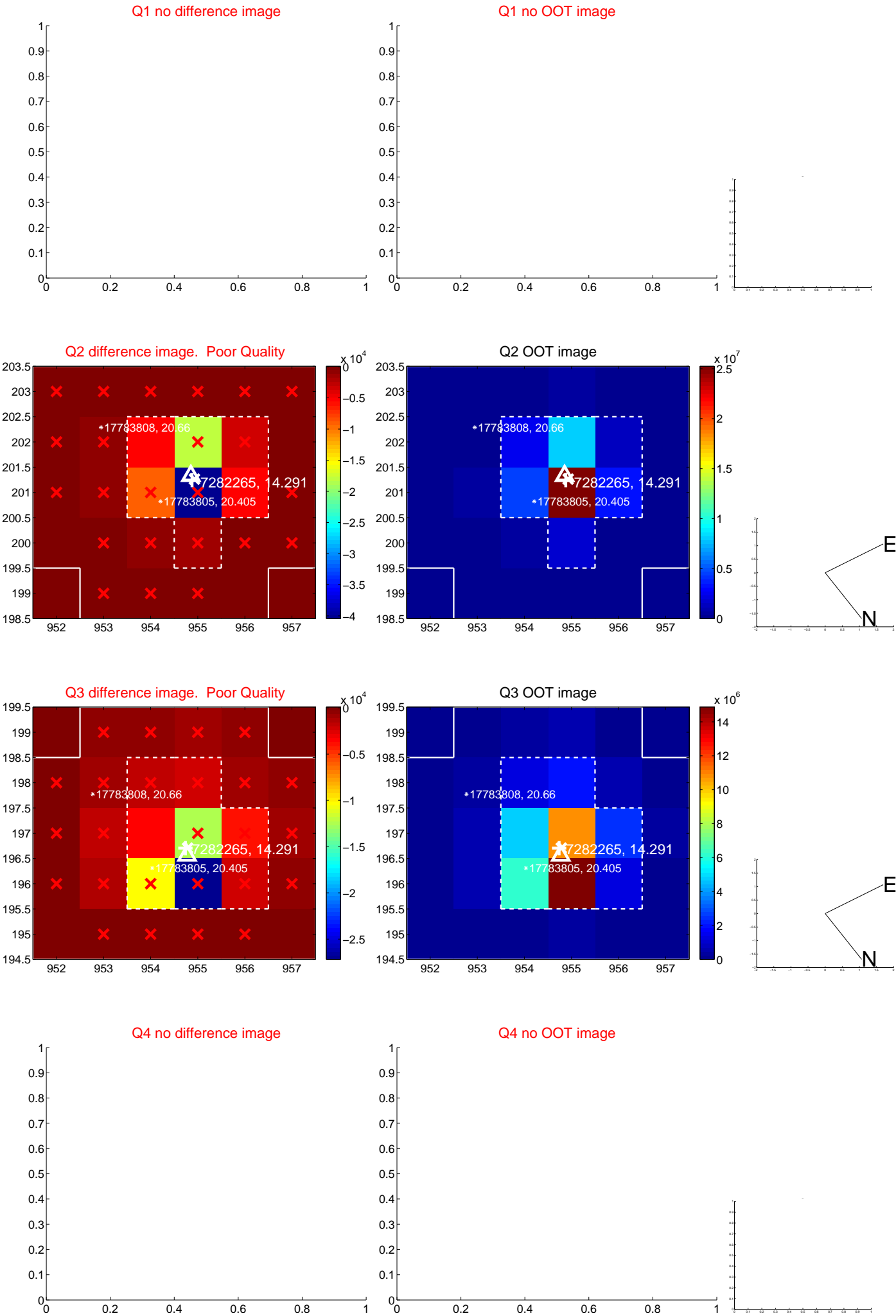
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.134 \pm 0.192$	0.69	$0.012 \pm 0.142$	$-0.133 \pm 0.187$
PRF-fit source offset from KIC position	$0.216 \pm 0.144$	1.50	$-0.157 \pm 0.124$	$-0.149 \pm 0.163$
photometric centroid source offset	$0.21 \pm 0.07$	2.89	$-0.14 \pm 0.07$	$0.16 \pm 0.07$



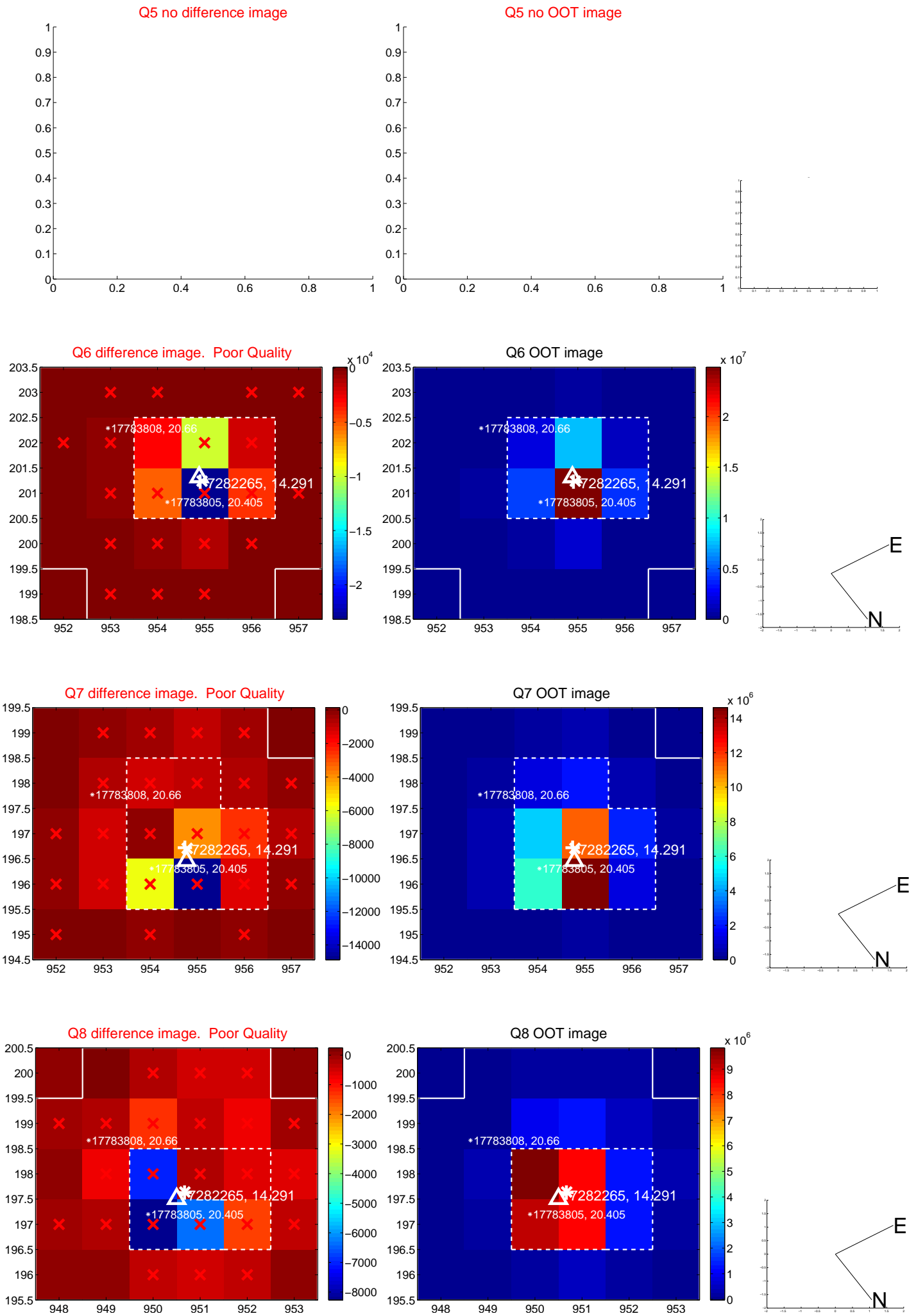
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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

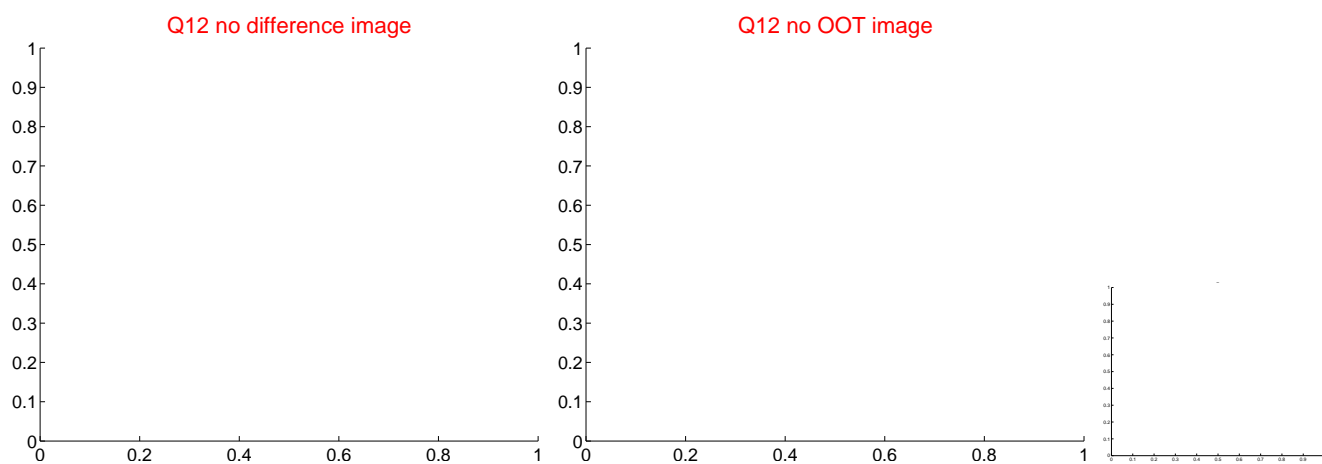
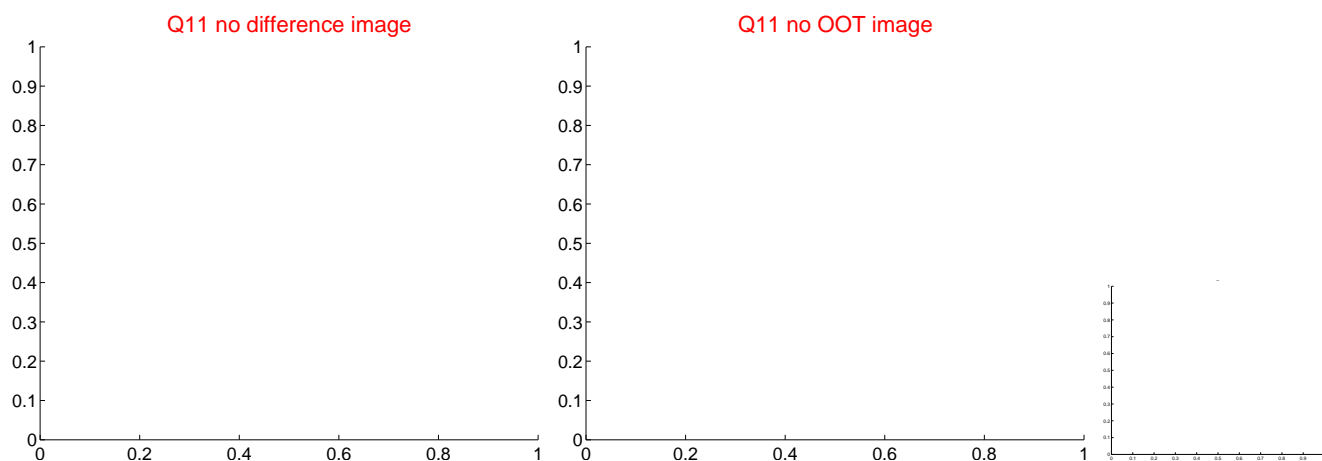
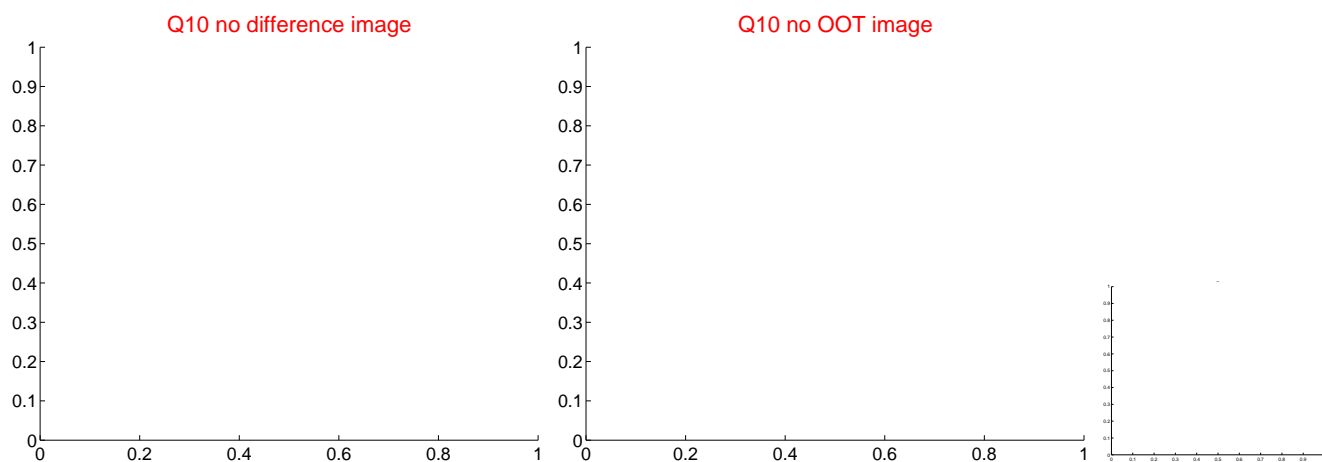
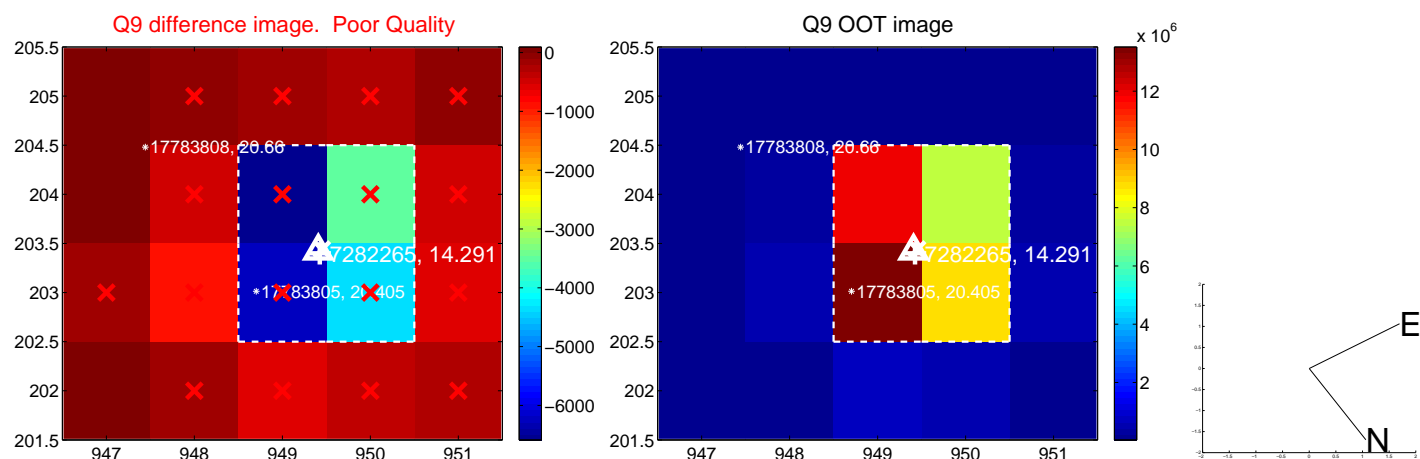




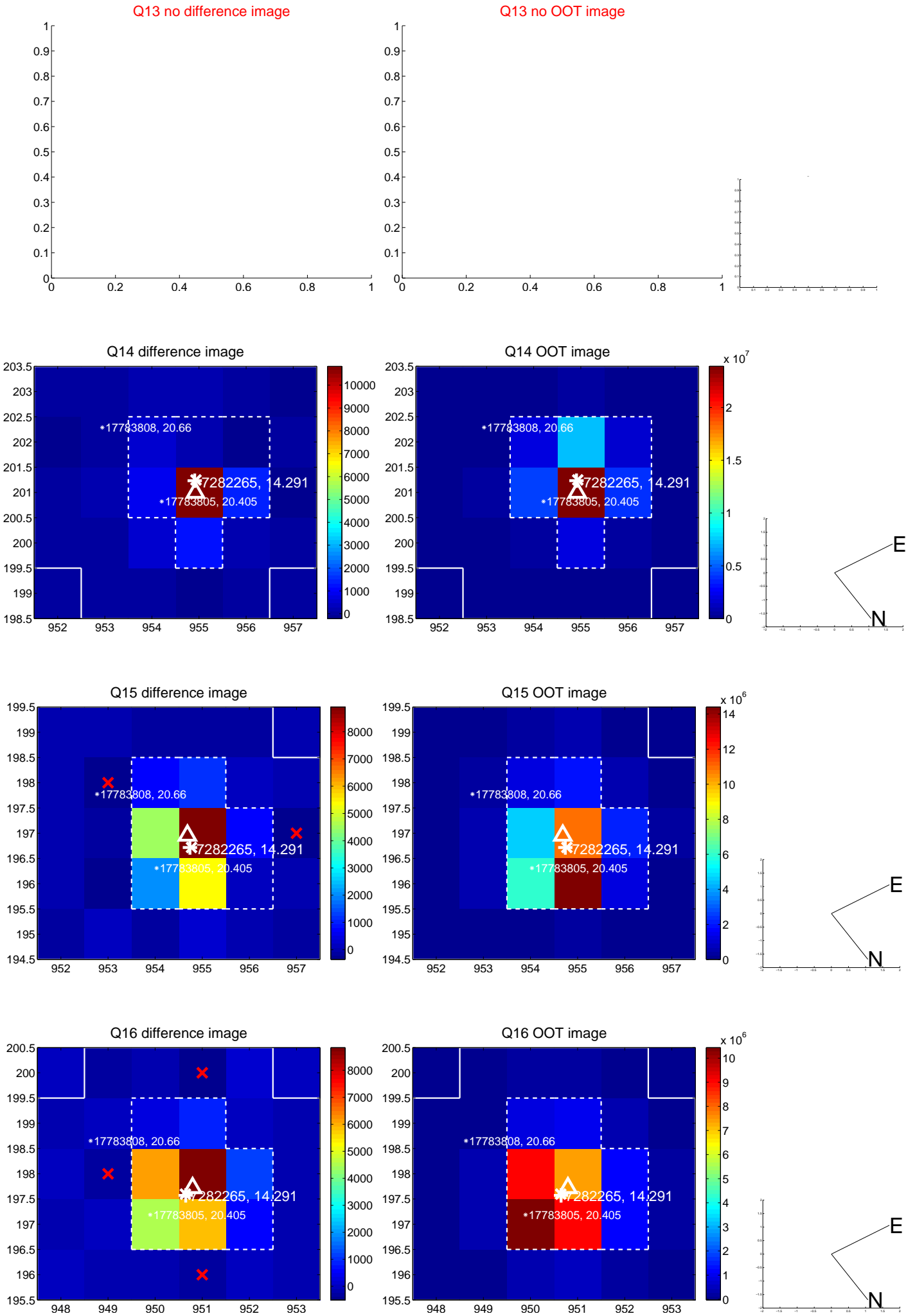
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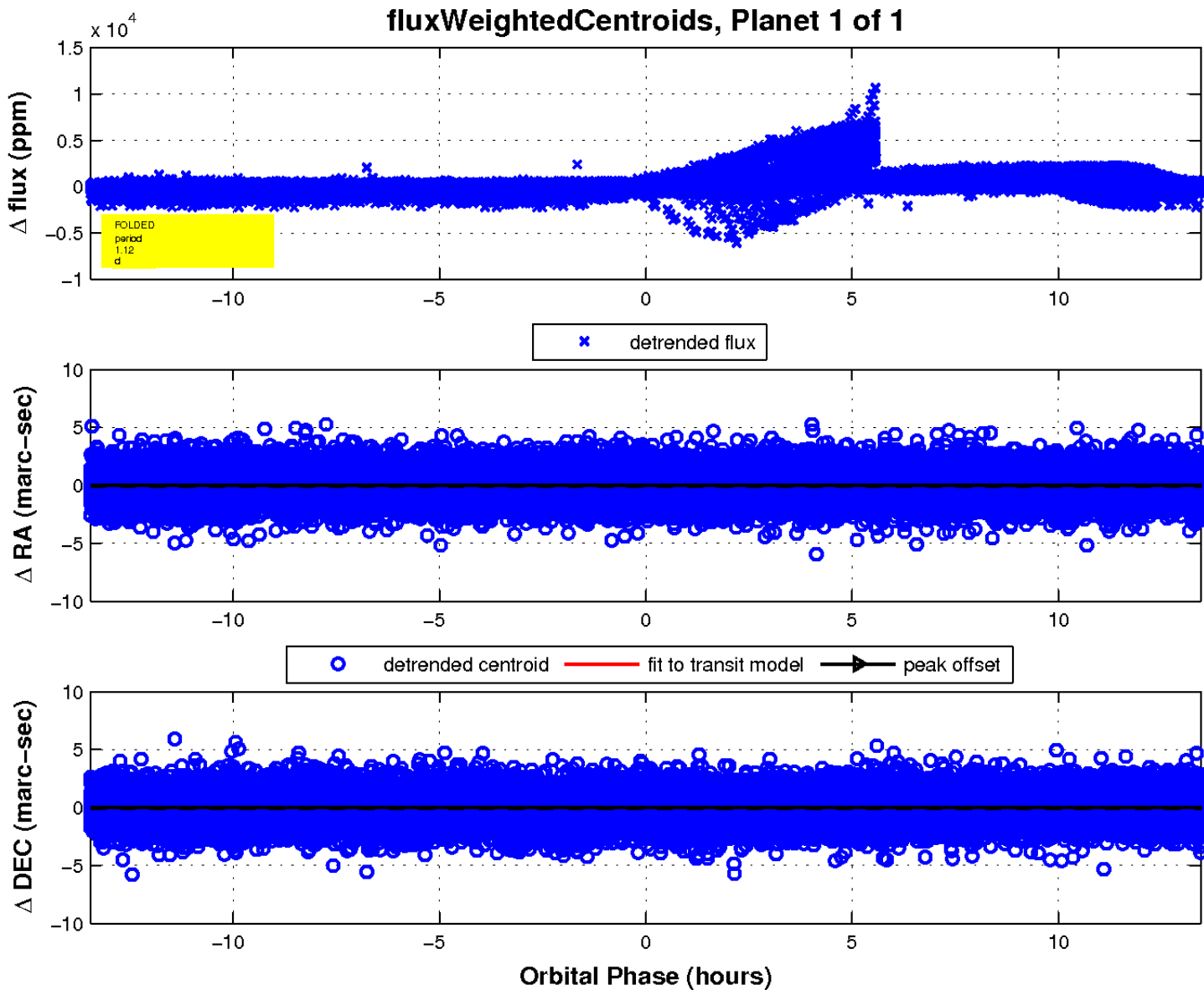
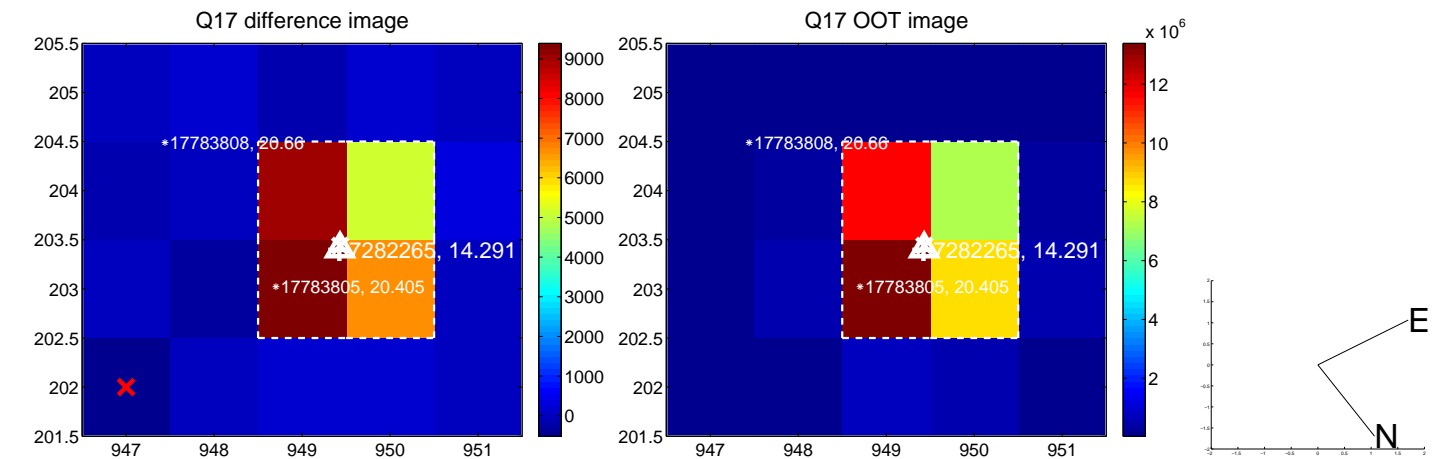
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UKIRT Image

