

KIC 005956776

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})
005956776-01	OBS	3821.01	0.569113	132.023494	119295.7	1.500	1253.3	-1.0	1.71	7174	60.31	30071.68

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005956776-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_NOFITS

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

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

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

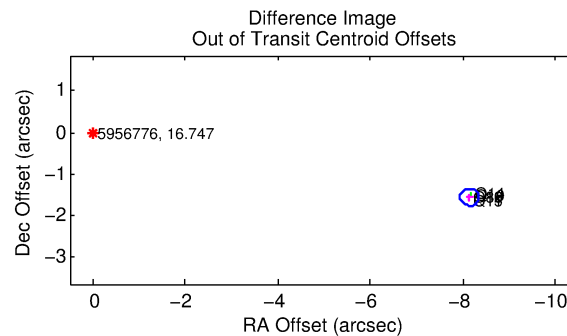
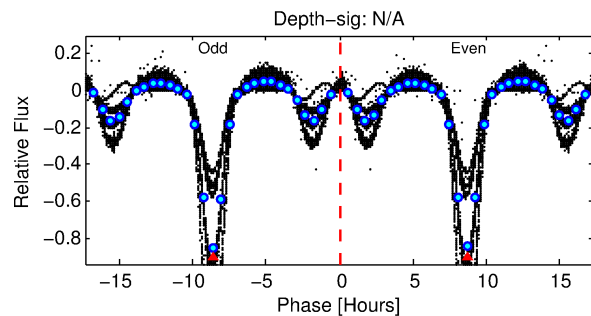
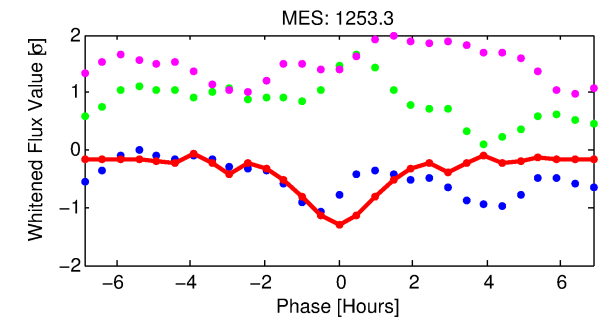
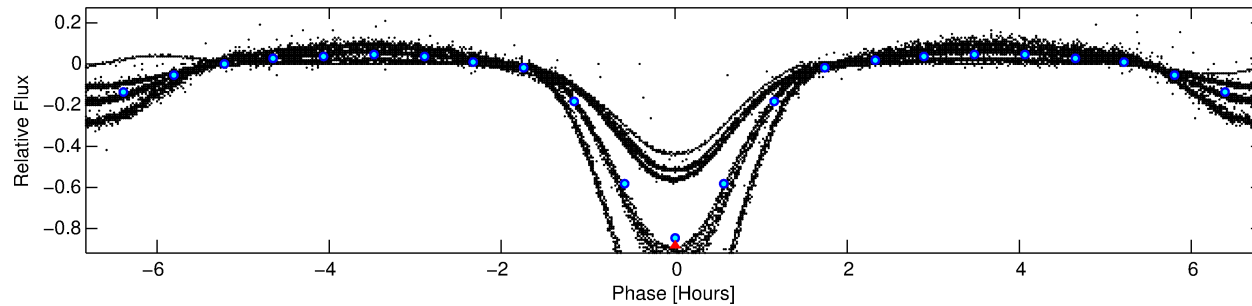
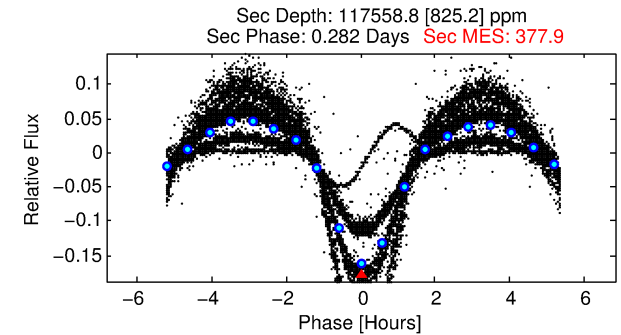
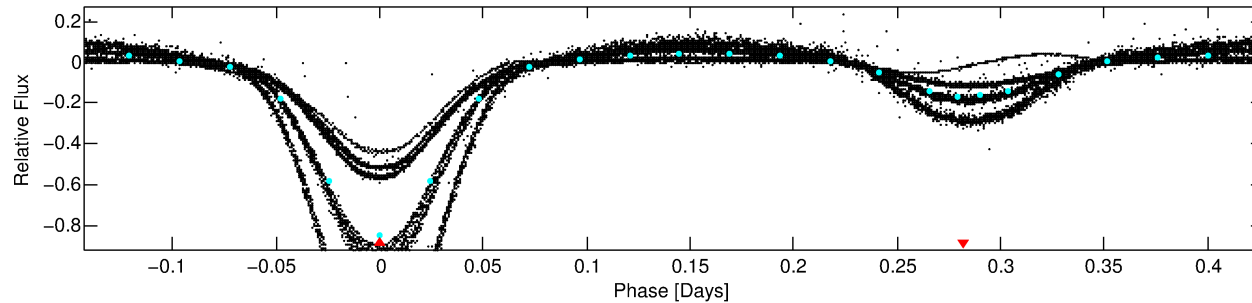
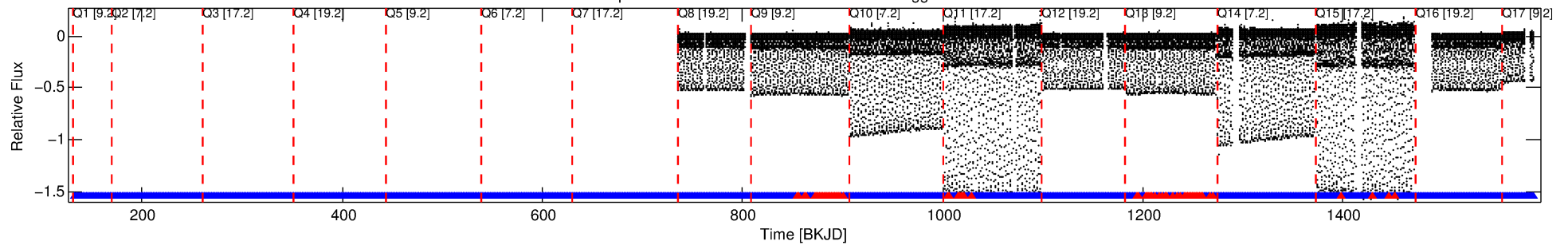
Ephemeris Match Information For 005956776-01

No Significant Match Found

DV One-Page Summary

KIC: 5956776 Candidate: 1 of 1 Period: 0.569 d
KOI: K03821 Corr: No Ephemeris Match

Kp: 16.75 R*: 1.71 Rs Teff: 7174.0 K Logg: 4.13 Fe/H: -0.200



TPS TCE Results:

Period = 0.56911 d
Epoch = 132.0235 BKJD

DV fit results are unavailable

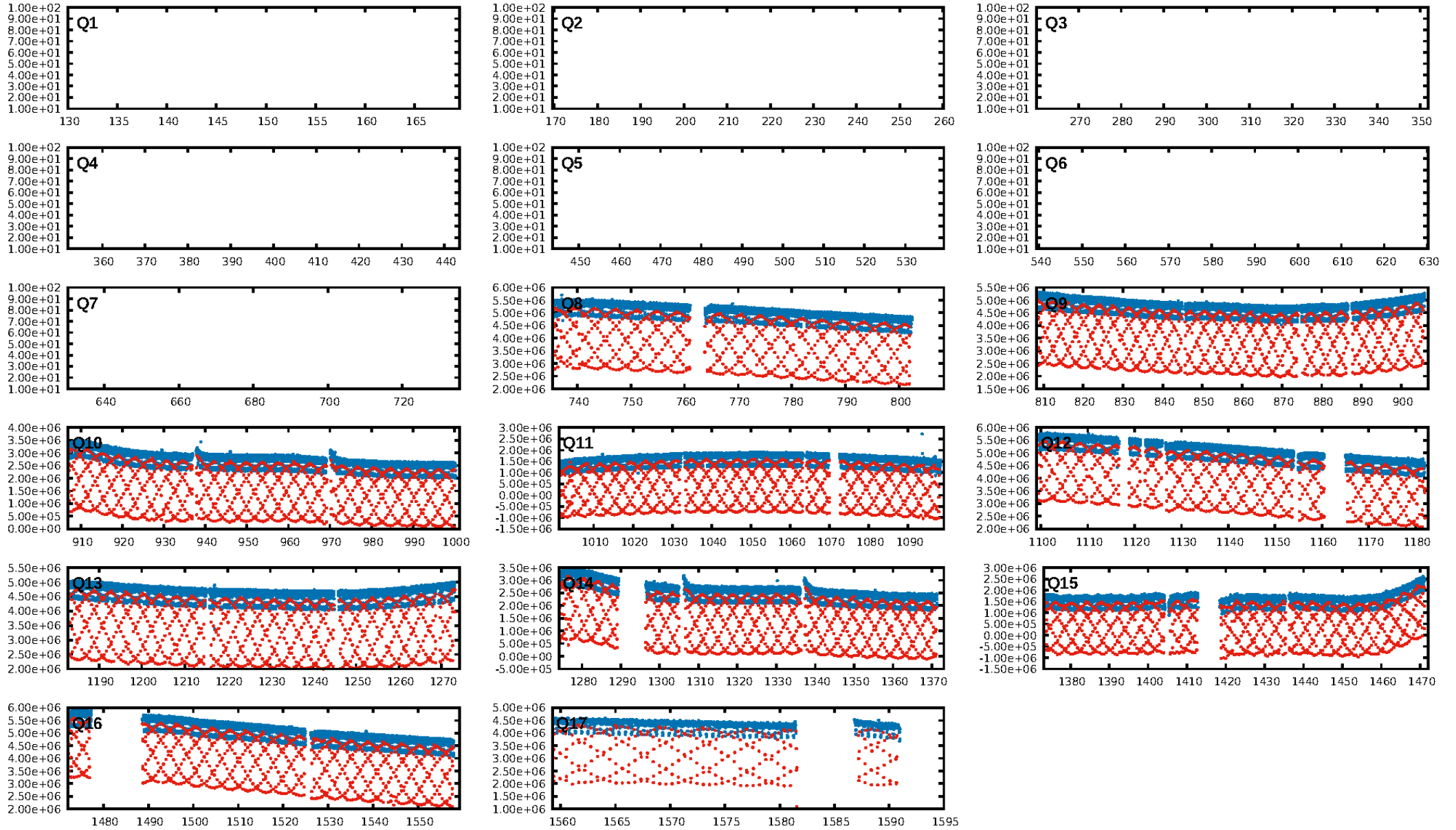
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.91 [1213/1328]
GhostDiagnostic-chr: 1.754
Centroid-sig: 0.0%
Centroid-so: 4.418 arcsec [8198.73σ]
OotOffset-rm: 8.293 arcsec [123.37σ]
KicOffset-rm: 0.182 arcsec [2.67σ]
OotOffset-st: 2/2/3/0 [7]
KicOffset-st: 2/2/3/3 [10]
DiffImageQuality-fgm: 1.00 [10/10]
DiffImageOverlap-fno: 1.00 [10/10]

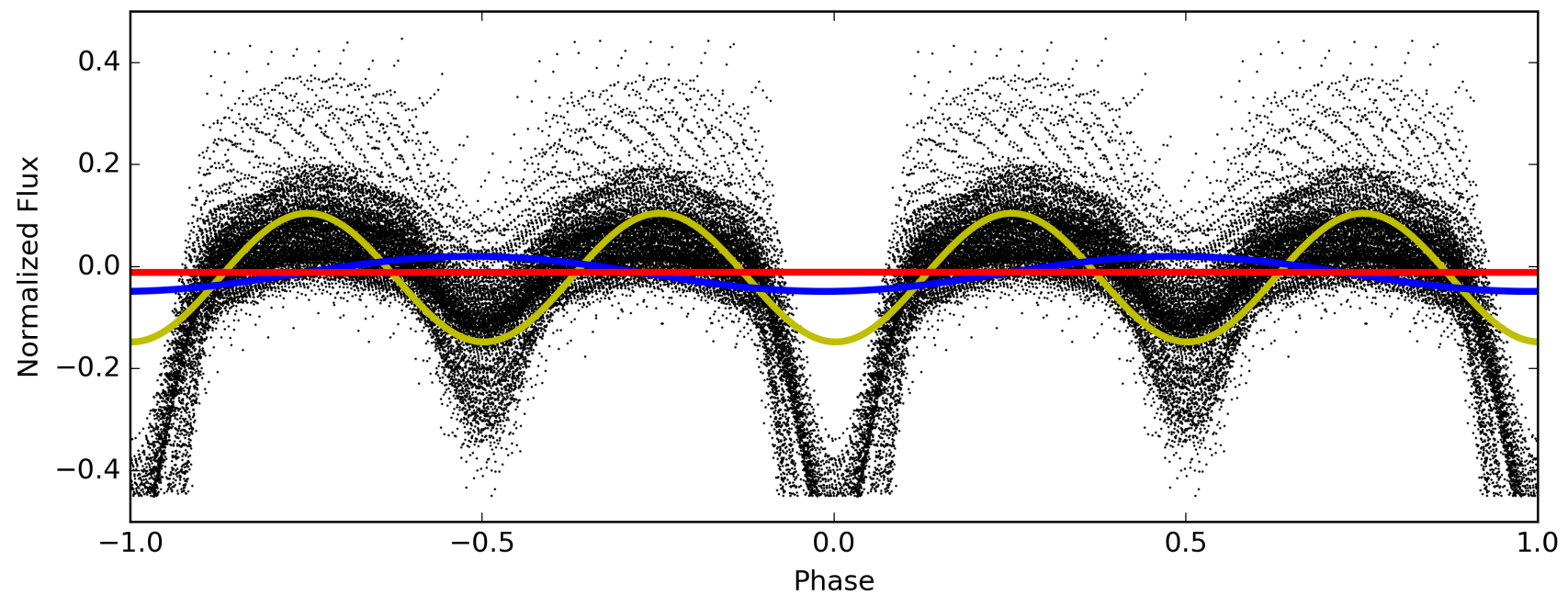
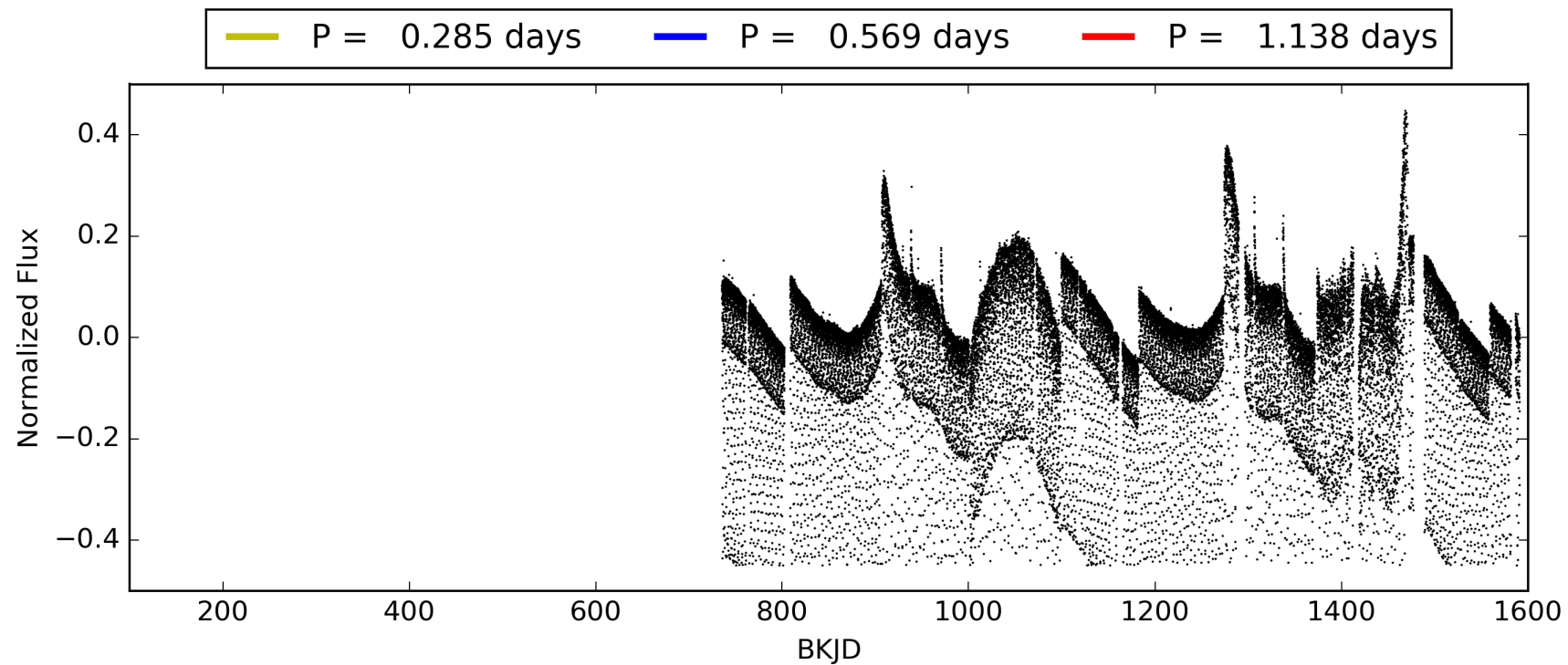
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 02:23:17 Z

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

TCE 005956776-01, PDC Light Curves

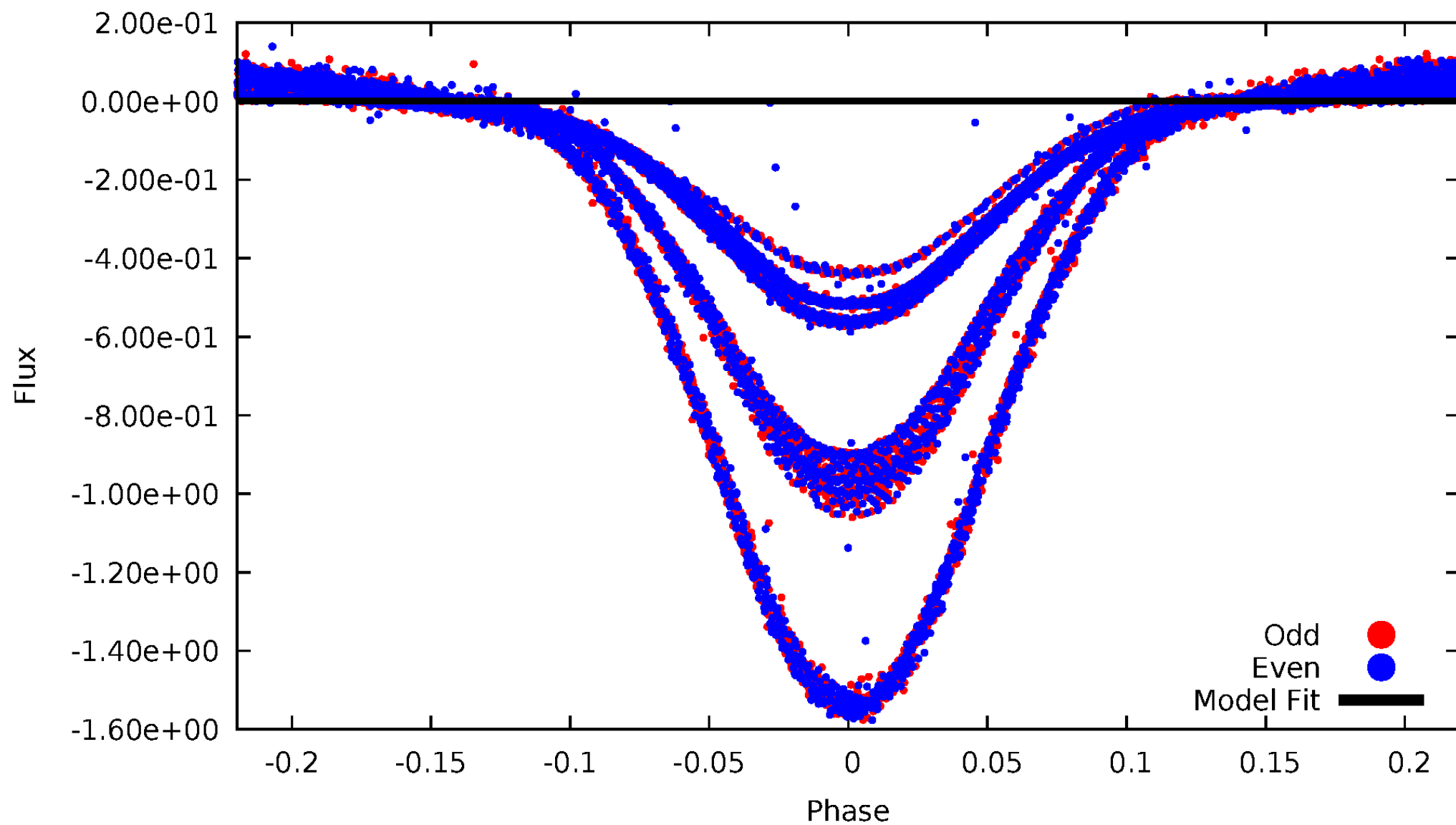


TCE 005956776-01



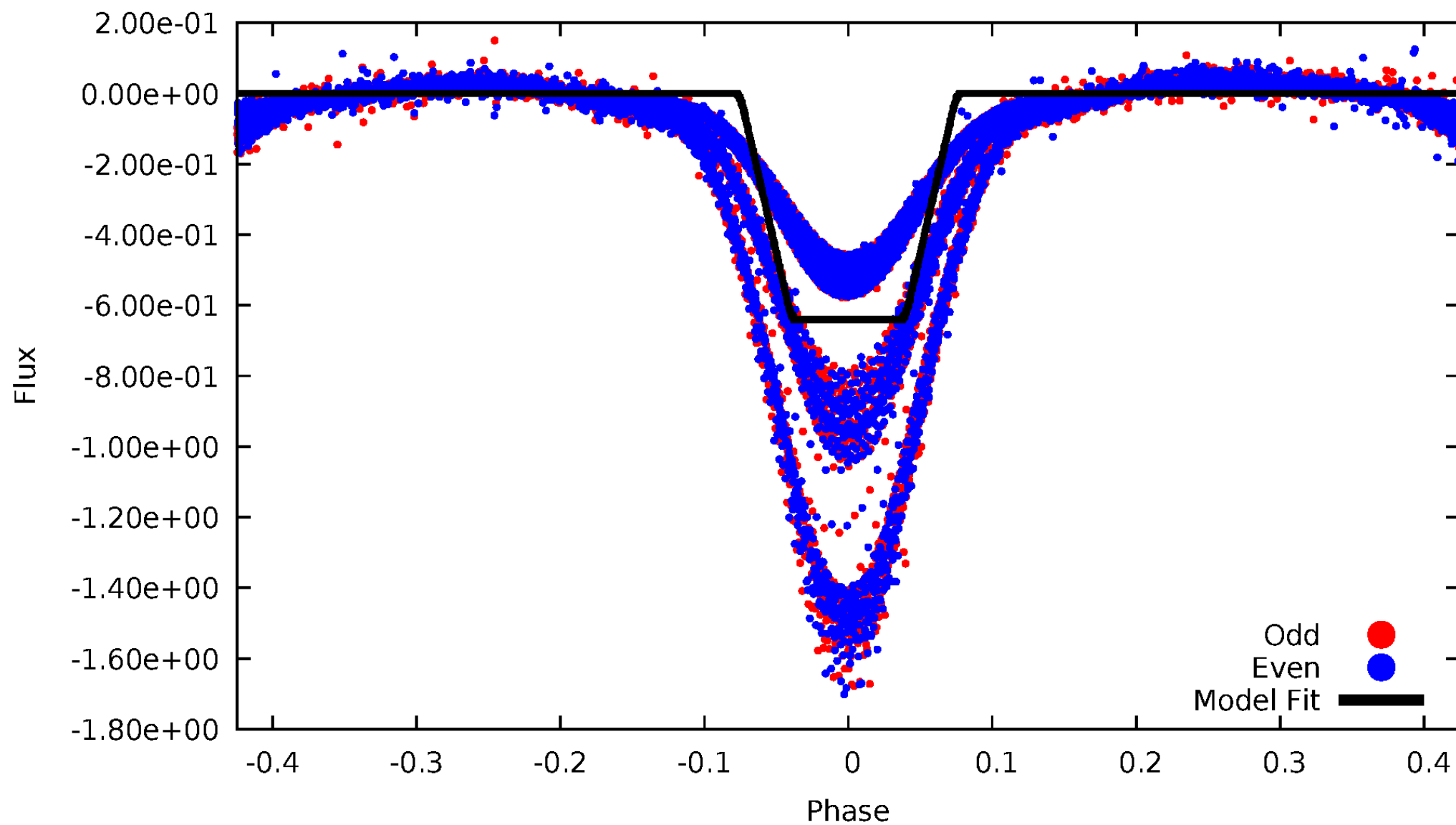
DV Odd/Even

TCE 005956776-01



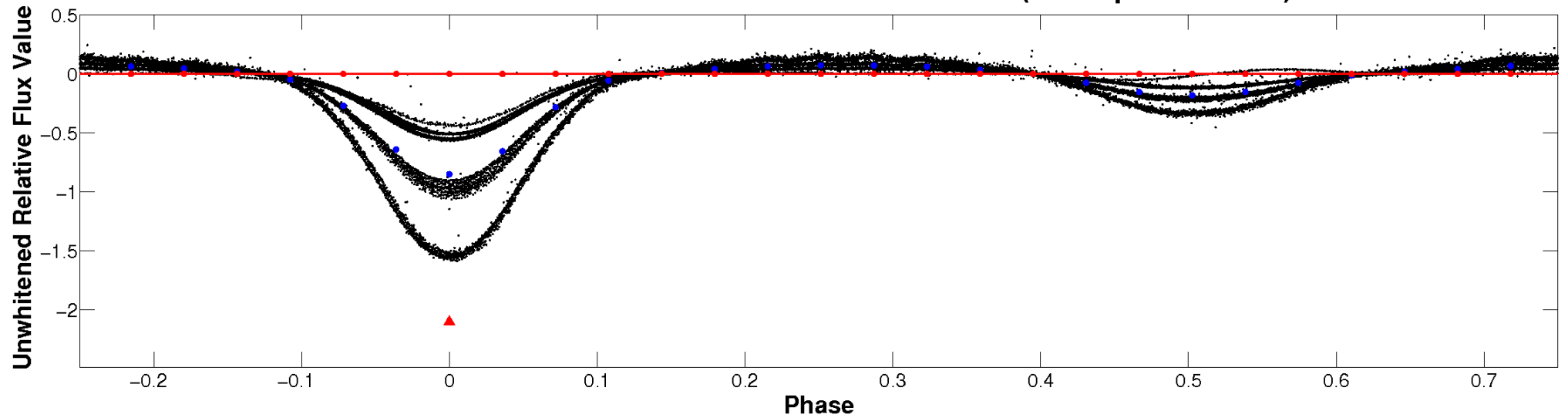
ALT Odd/Even

TCE 005956776-01



Non-Whitened Vs. Whitened Light Curve

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

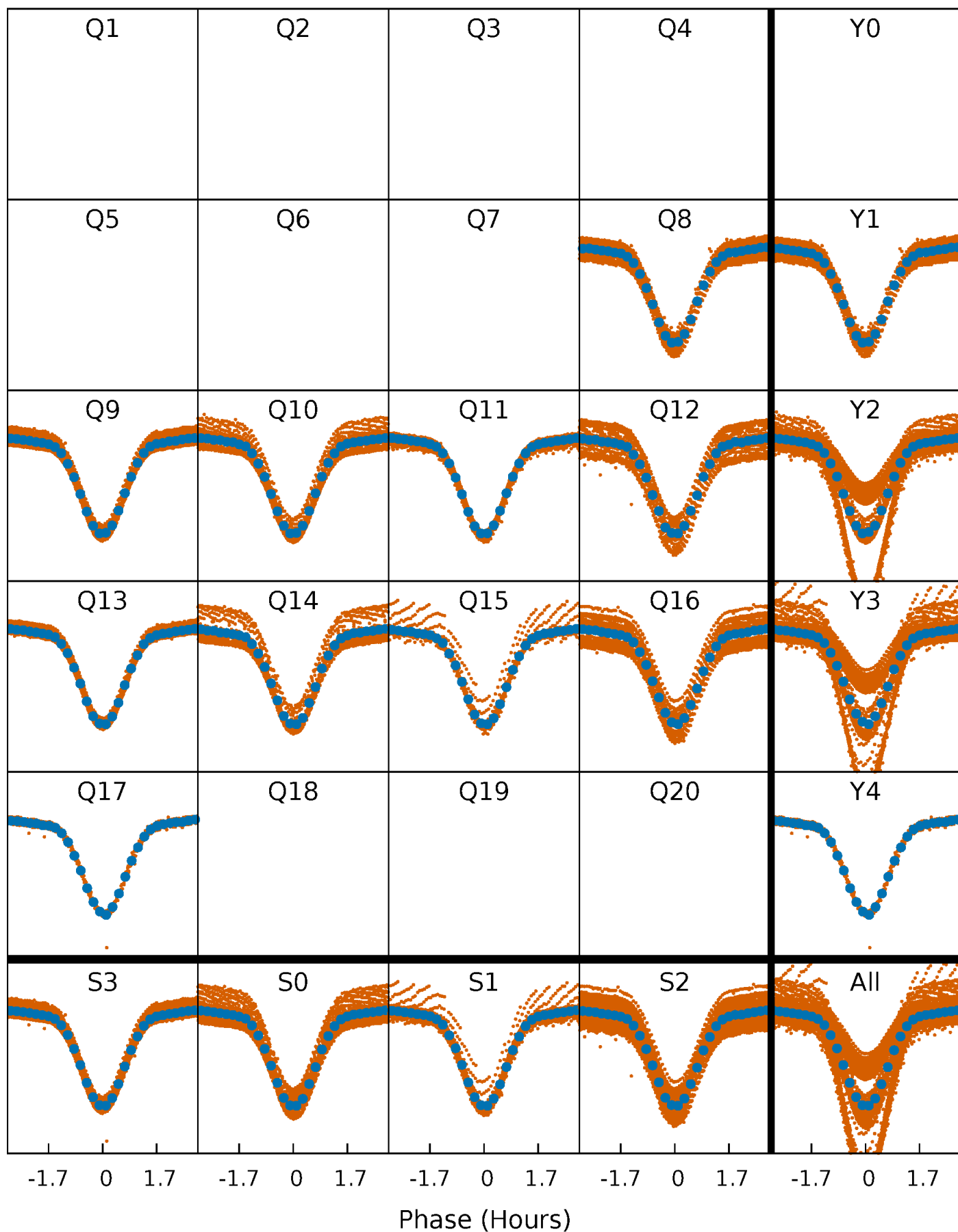


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



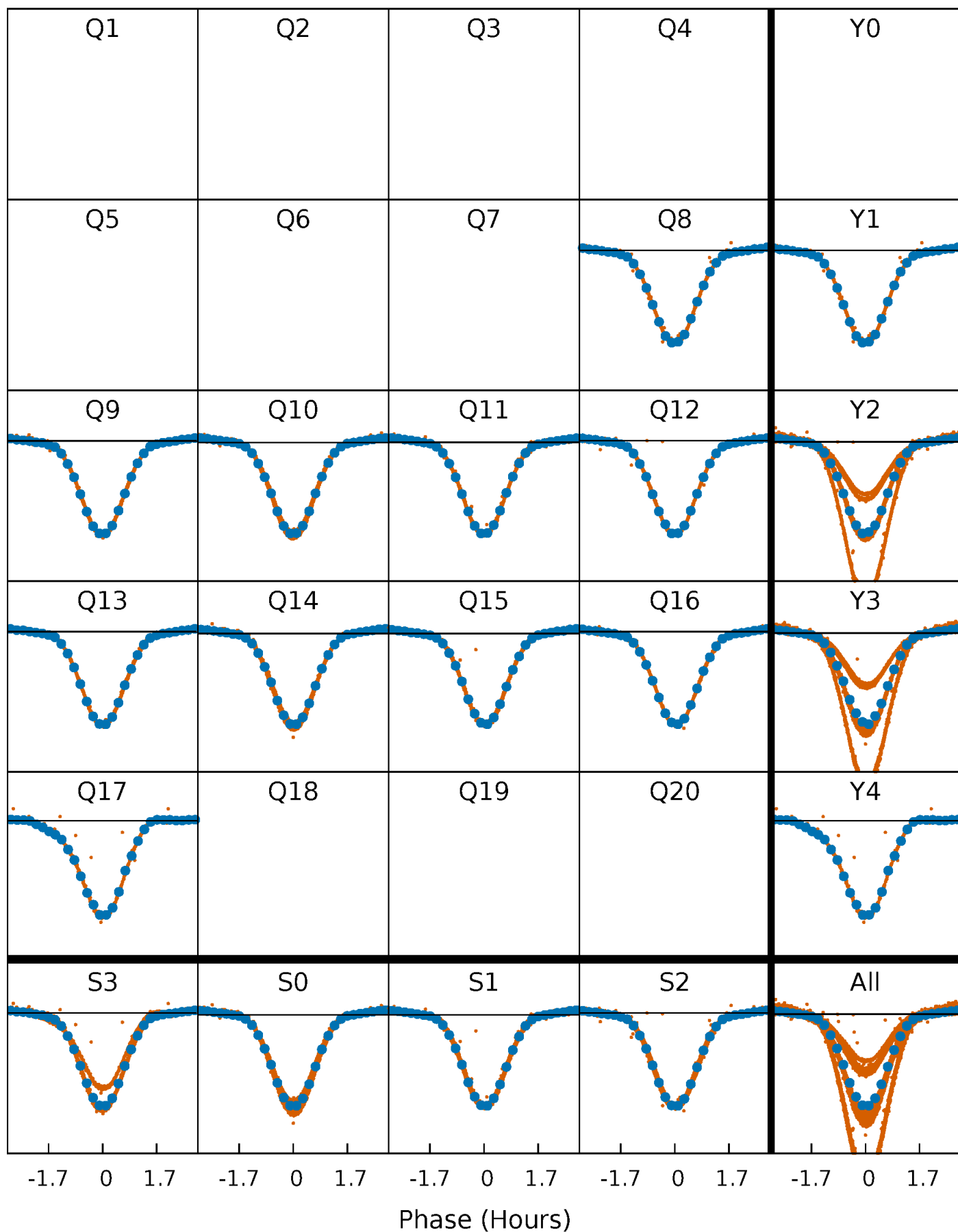
PDC Quarter-Phased Transit Curves

TCE 005956776-01 P= 0.569113 Days $T_0=132.023494$ (BKJD)



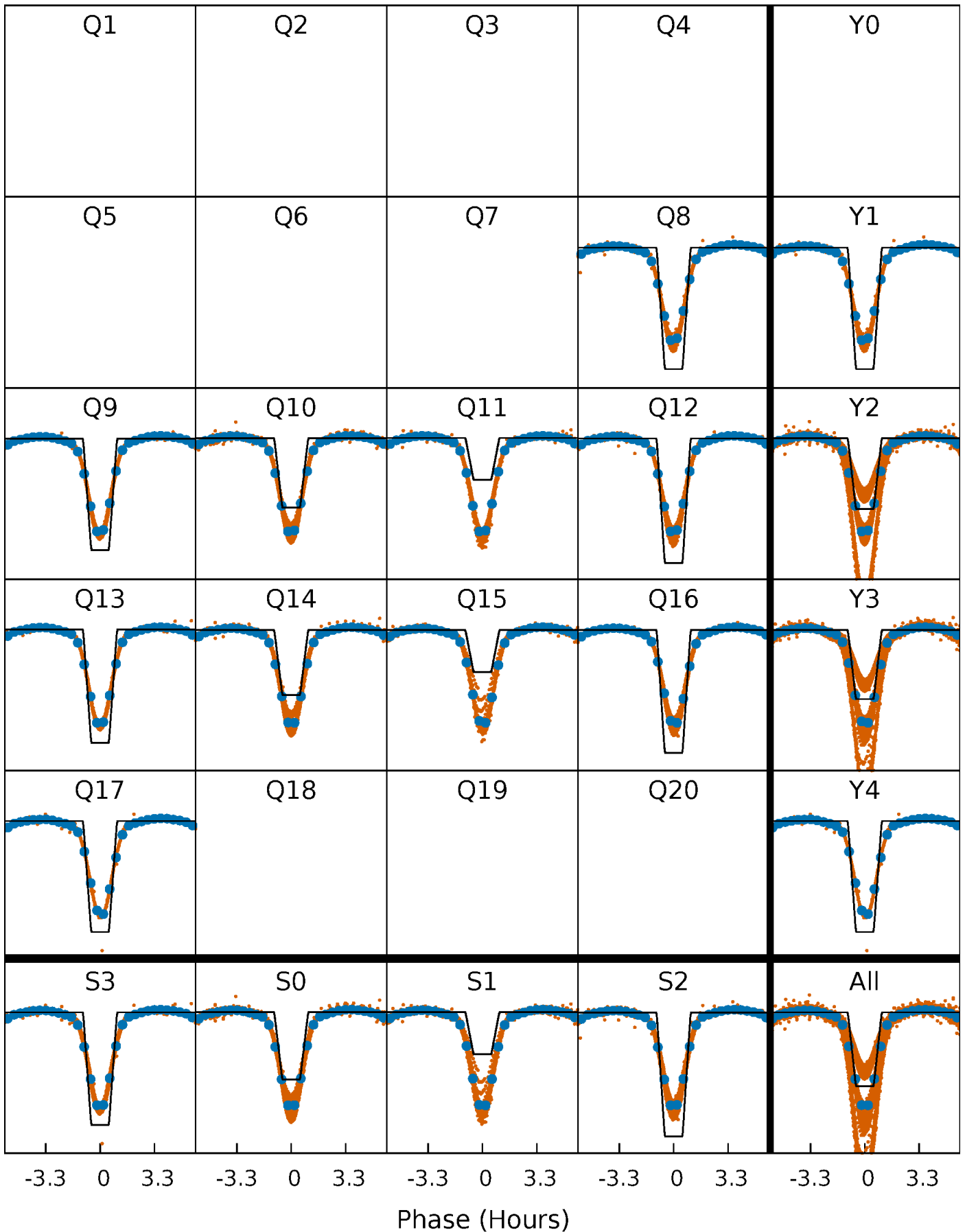
DV Quarter-Phased Transit Curves

TCE 005956776-01 P= 0.569113 Days $T_0=132.023494$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

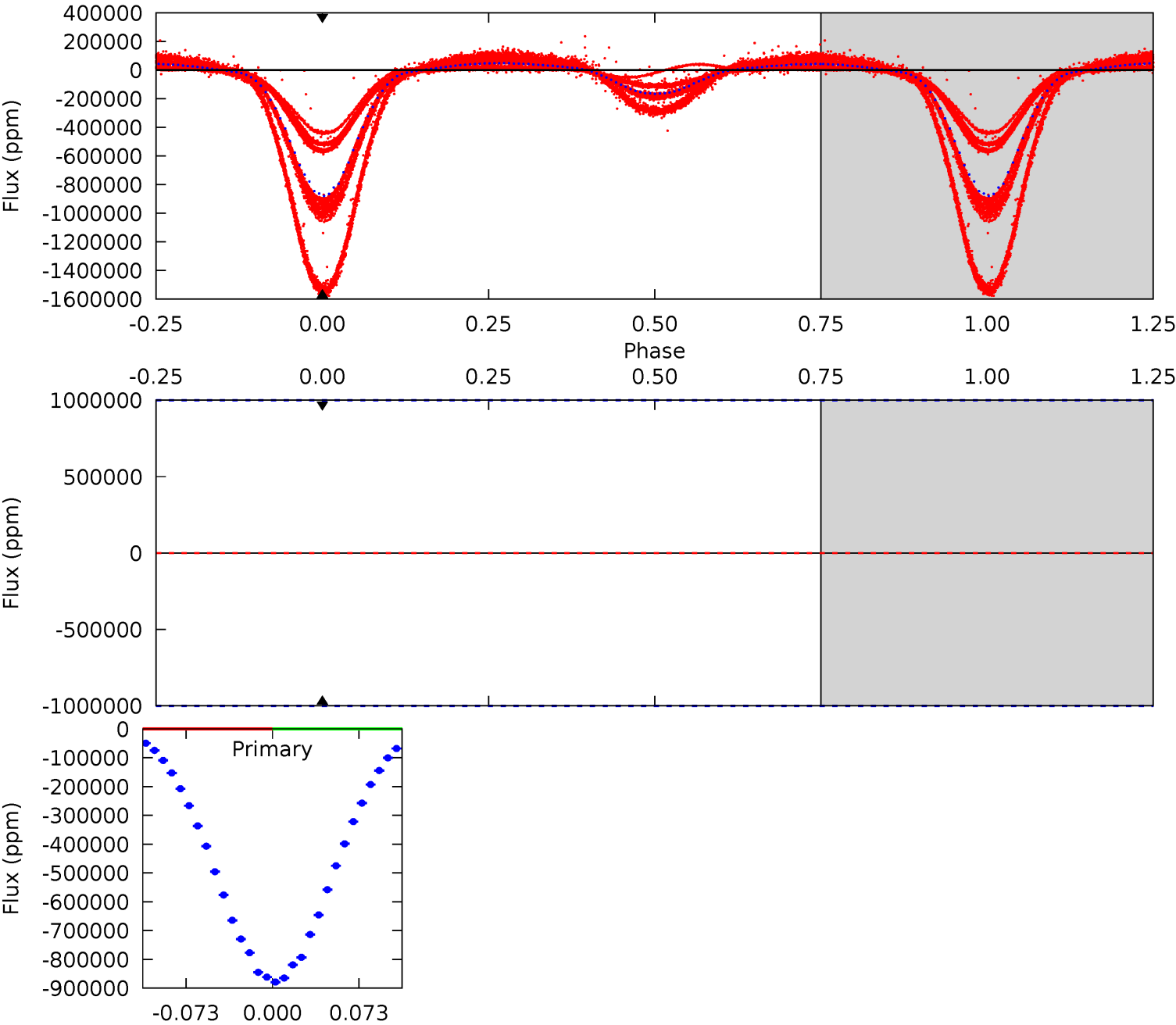
TCE 005956776-01 P= 0.569113 Days $T_0=132.023952$ (BKJD)



DV Model-Shift Uniqueness Test

005956776-01, P = 0.569113 Days, E = 132.023494 Days

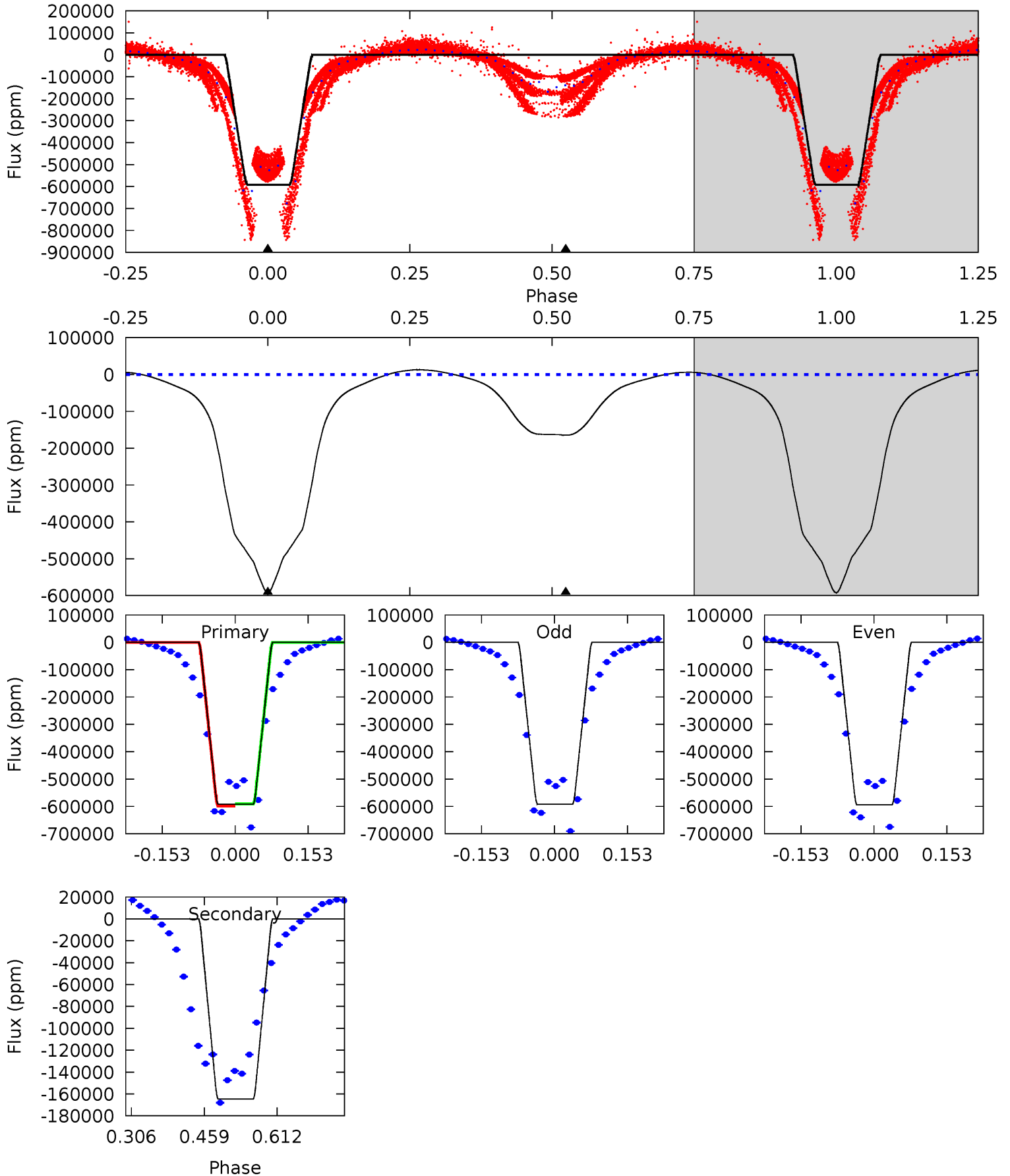
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005956776-01, P = 0.569113 Days, E = 132.023952 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1686	468.8	0	0	4.47	1.43	36.1	1686	1686	468.8	468.8	3.75	1.46	0.02	11.6



Stellar Parameters For KIC 005956776

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7174^{+225}_{-325}	$4.130^{+0.170}_{-0.187}$	$-0.200^{+0.250}_{-0.350}$	$1.705^{+0.520}_{-0.378}$	$1.430^{+0.209}_{-0.255}$	$0.406^{+0.334}_{-0.197}$
	+3%/-5%	+4%/-5%	+125%/-175%	+30%/-22%	+15%/-18%	+82%/-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 005956776-01 / KOI 3821.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$61.75^{+21.42}_{-21.41}$	4686^{+387}_{-339}	-3957^{+11476}_{-3102}	$0.067^{+4.507}_{-3.172}$
Alt.	-164663 ± 351	$150.51^{+31.80}_{-27.32}$	4720^{+385}_{-360}	4954^{+424}_{-430}	$1.092^{+0.475}_{-0.347}$

T_{max} = Theoretical Maximum Planetary Temperature
 T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)
 A_{obs} = Observed Albedo (Assuming $T=0$)

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

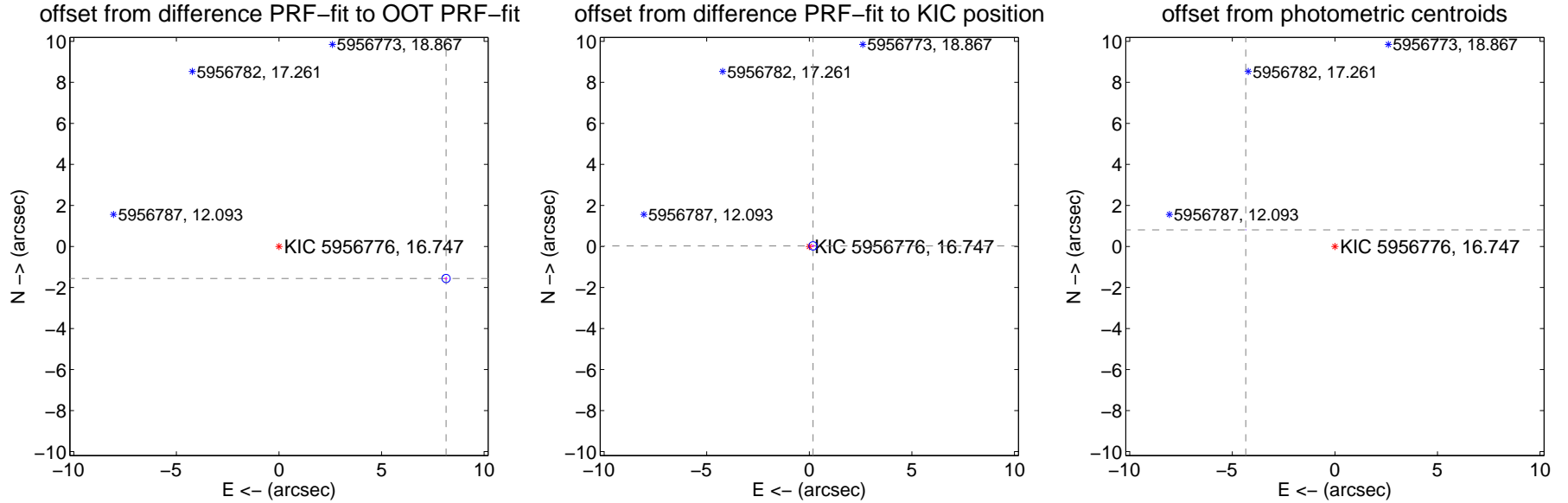
DV Centroid Data

Supplemental centroid analysis for 005956776-01. Kepler magnitude: 16.75. Transit SNR -1.00

There are 10 quarters with good PRF difference image offsets

The OOT PRF centroid is offset from the target star catalog position by about 8.12 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.293 ± 0.067	123.37	-8.144 ± 0.067	-1.562 ± 0.069
PRF-fit source offset from KIC position	0.182 ± 0.068	2.67	-0.179 ± 0.068	0.028 ± 0.068
photometric centroid source offset	4.42 ± 0.00	8198.73	4.34 ± 0.00	0.81 ± 0.00

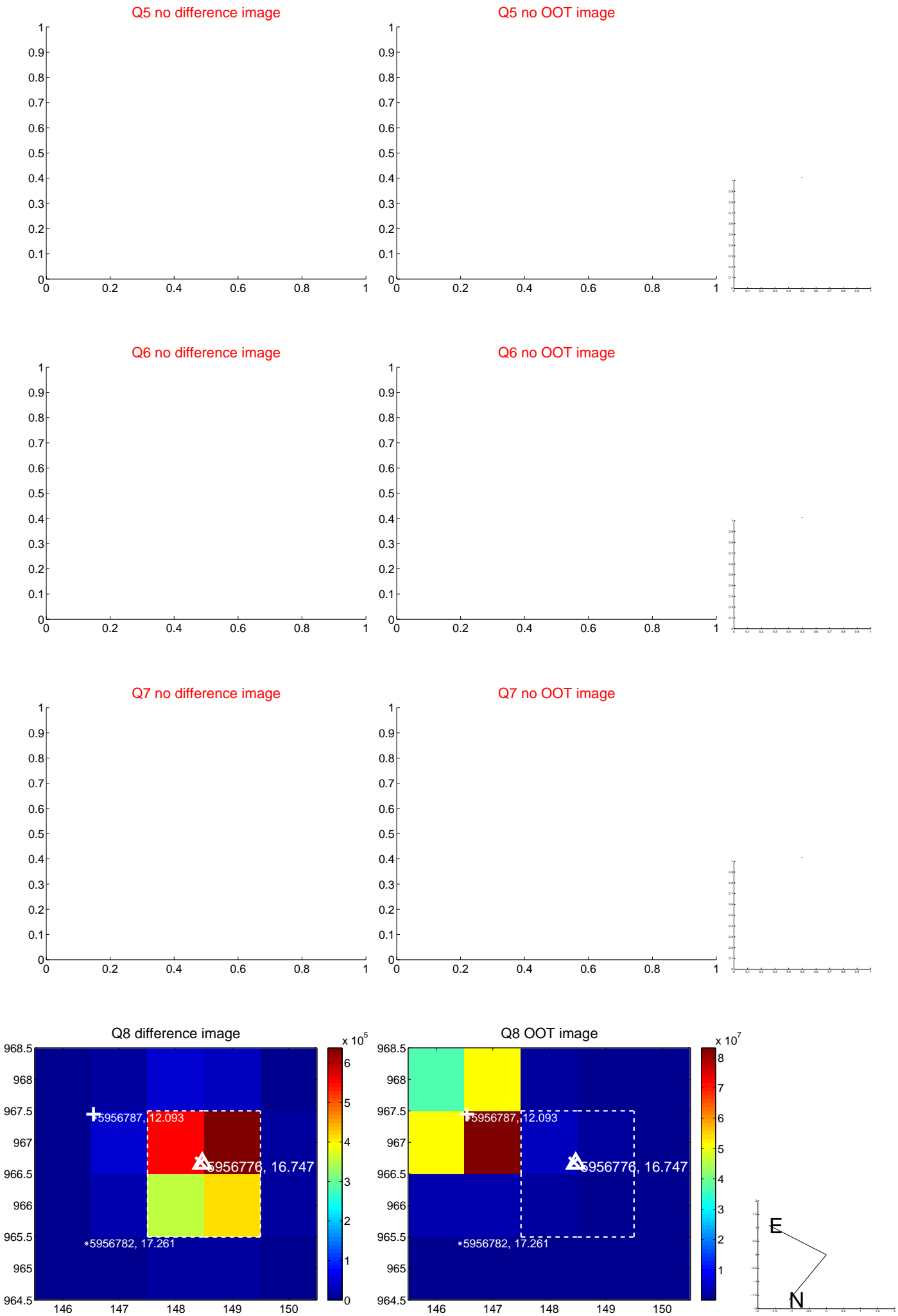


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

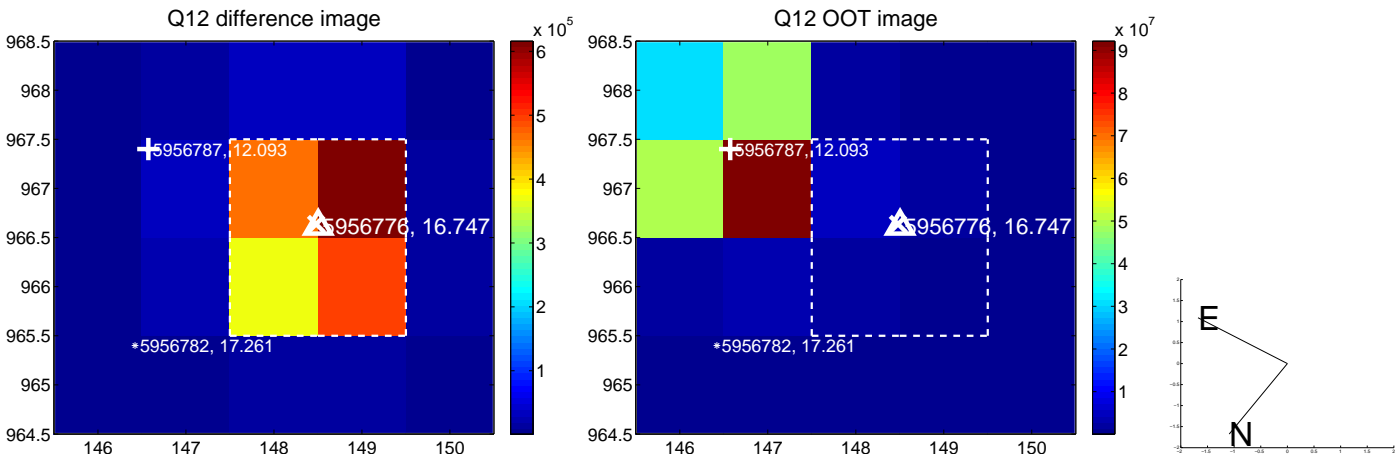
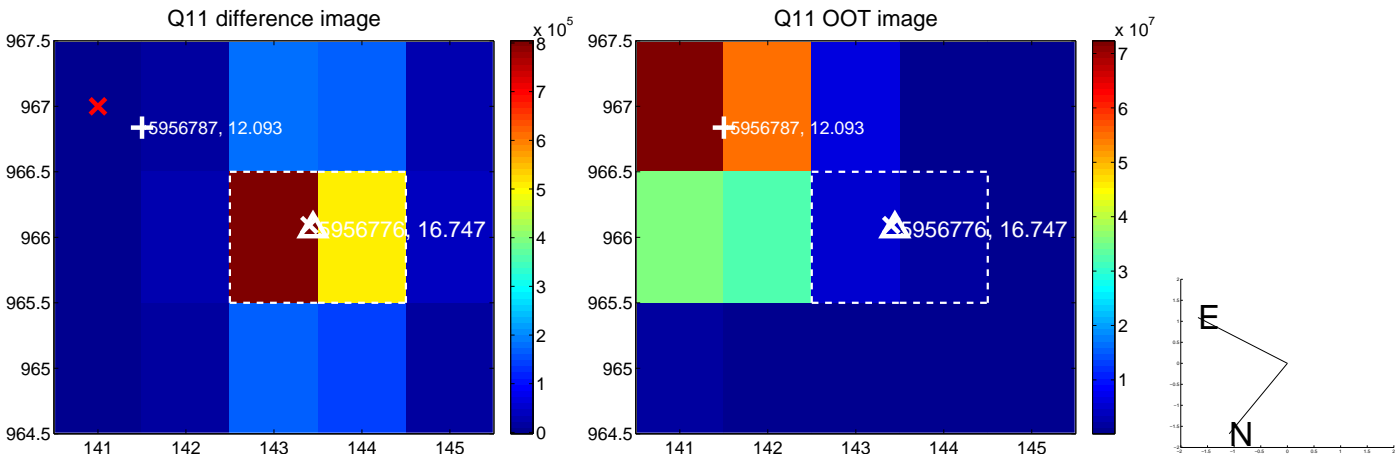
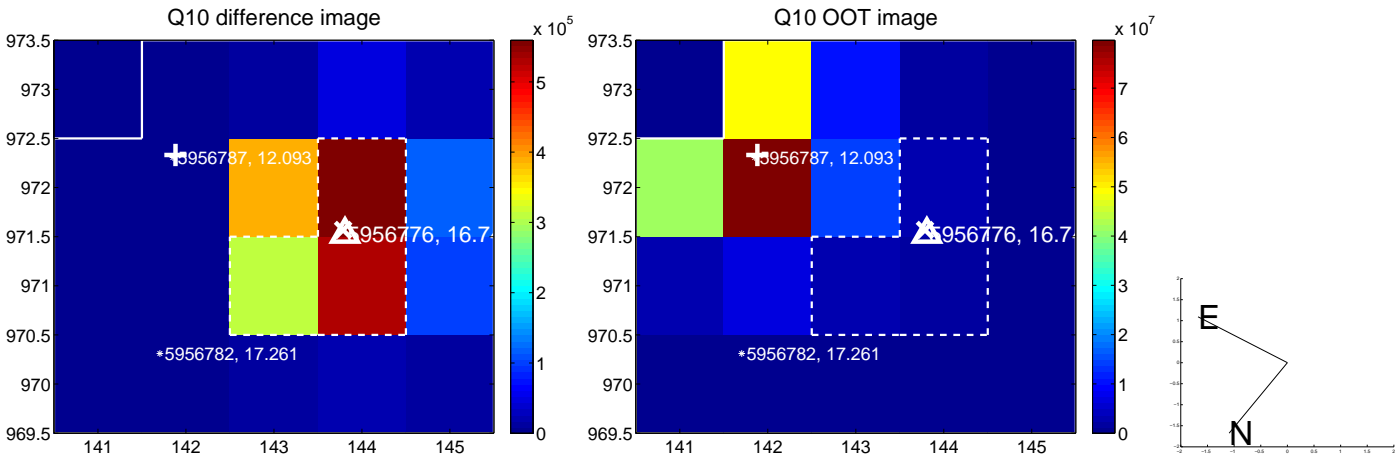
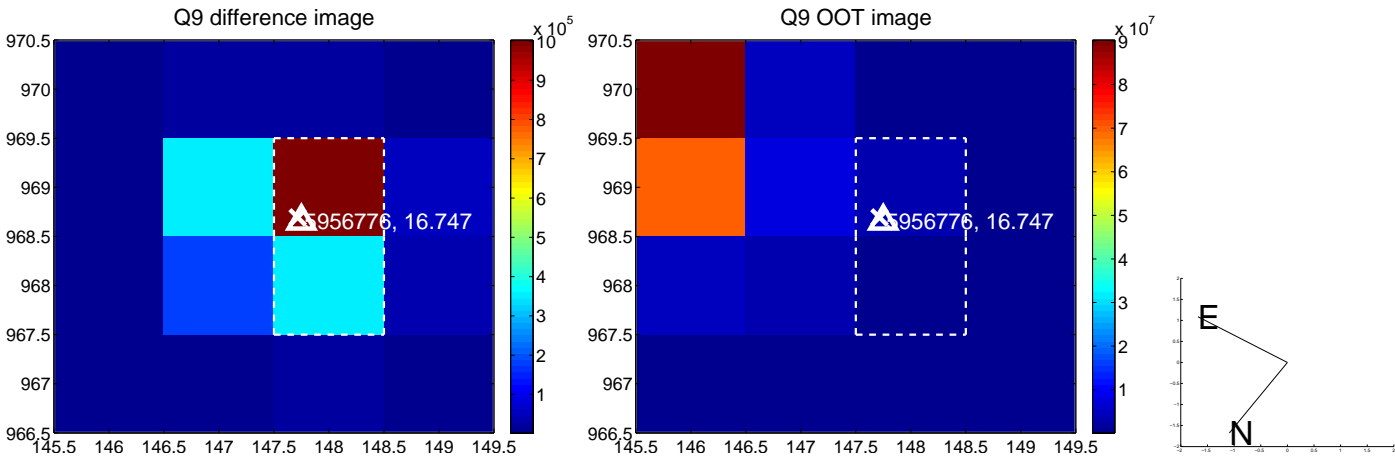
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



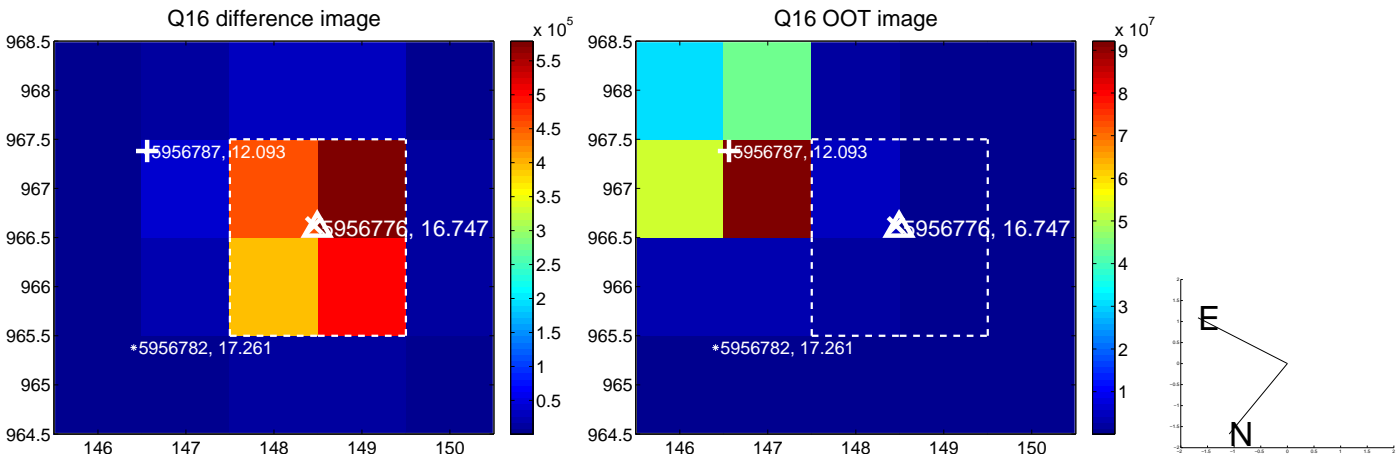
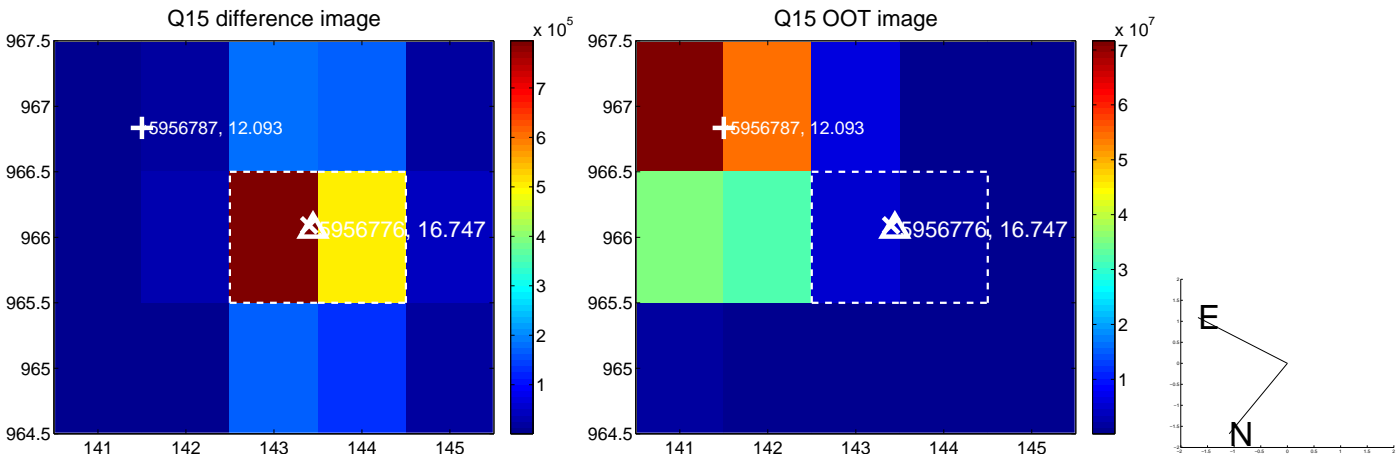
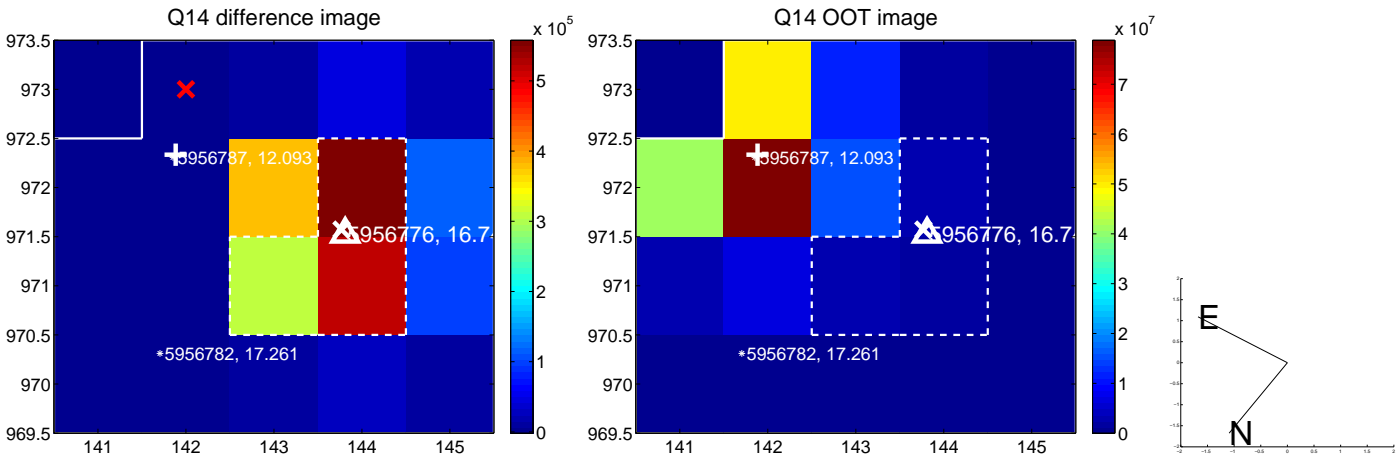
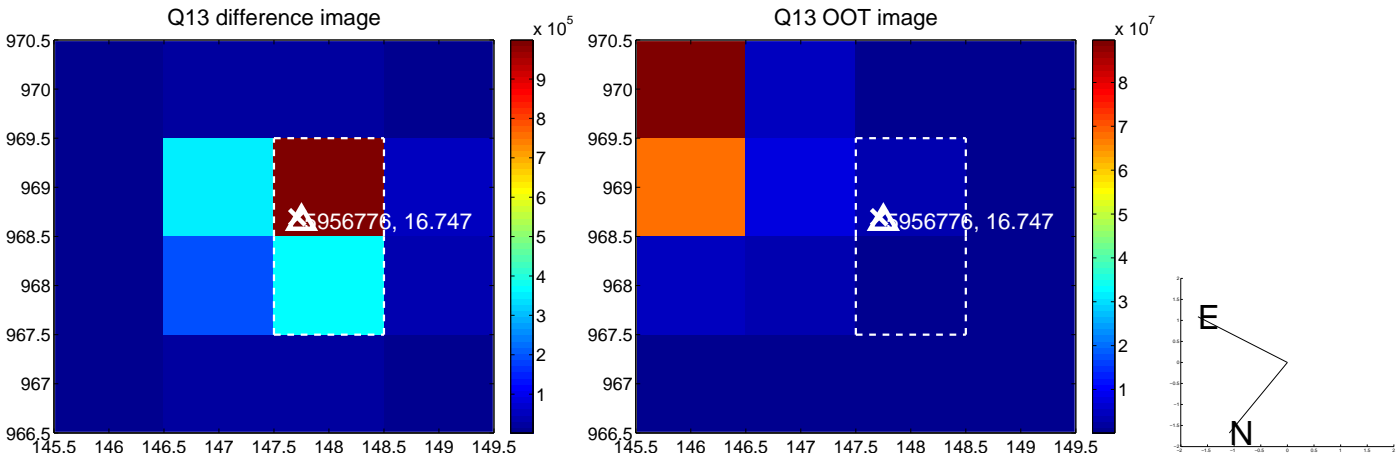
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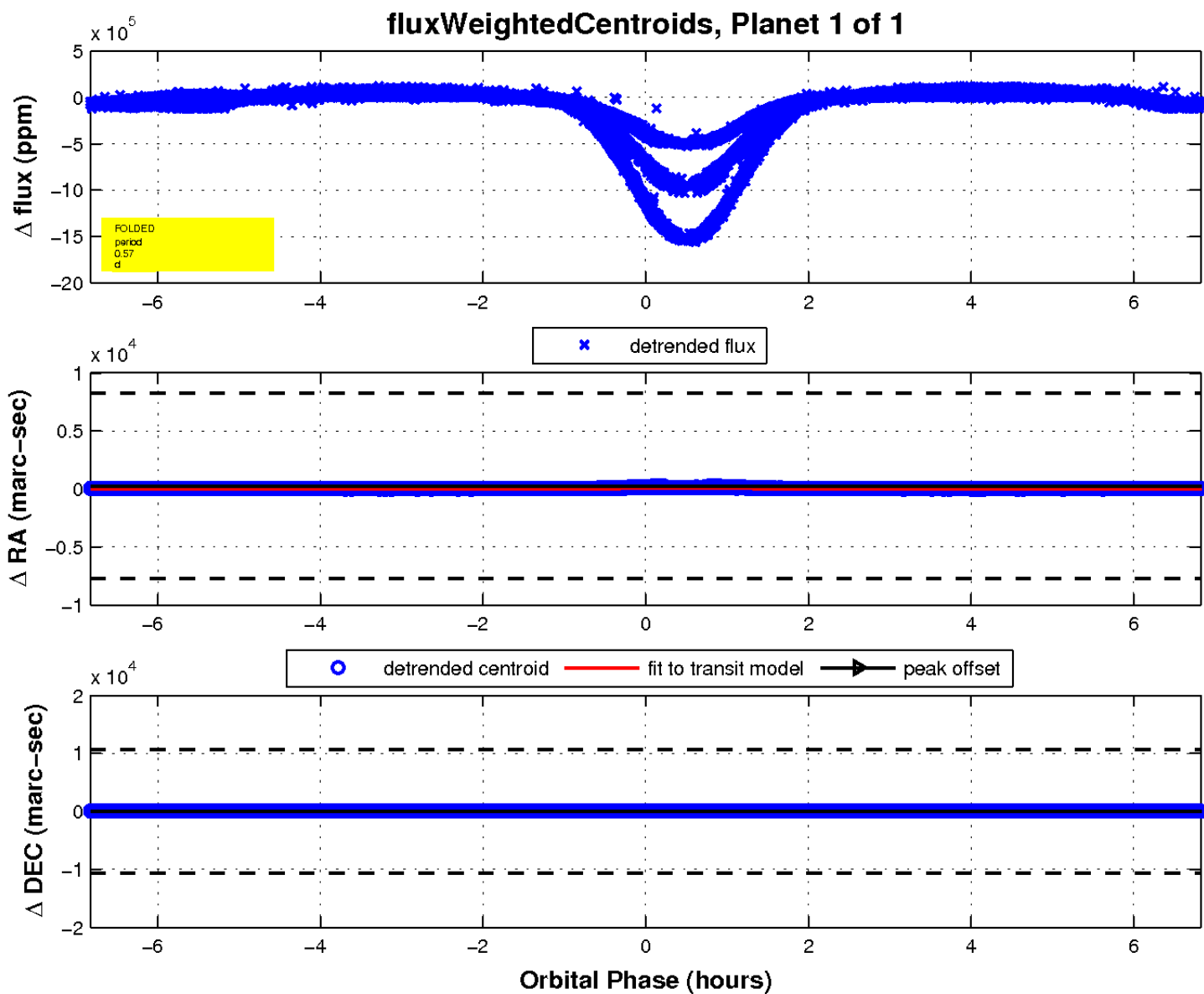
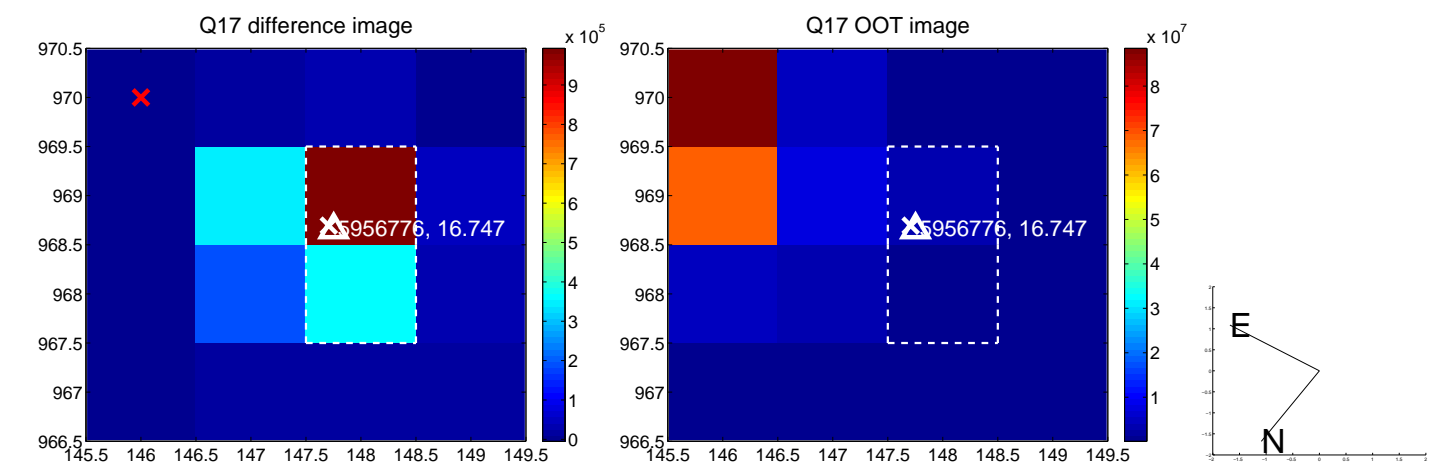
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UKIRT Image

Declination

