

KIC 011391755

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})
011391755-01	OBS	2639.01	25.112318	146.347316	424.1	8.489	11.1	10.9	1.11	6133	2.63	53.84

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011391755-01	OBS	PC	0.65	0	0	0	0	NO_COMMENT

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 011391755-01

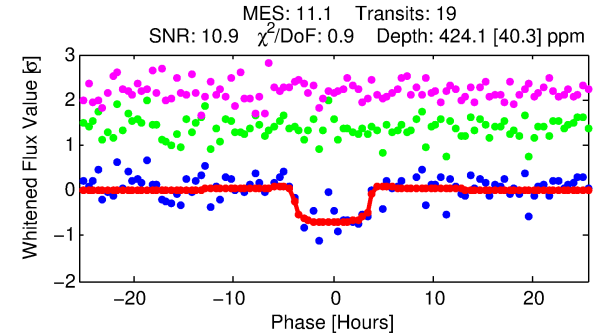
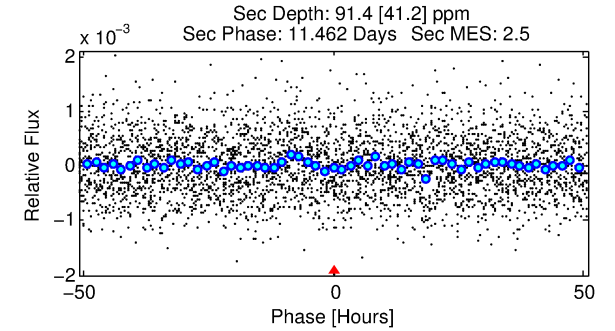
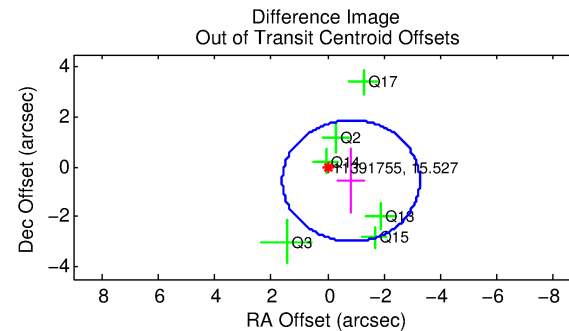
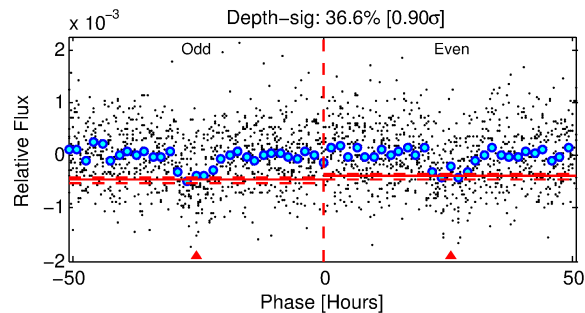
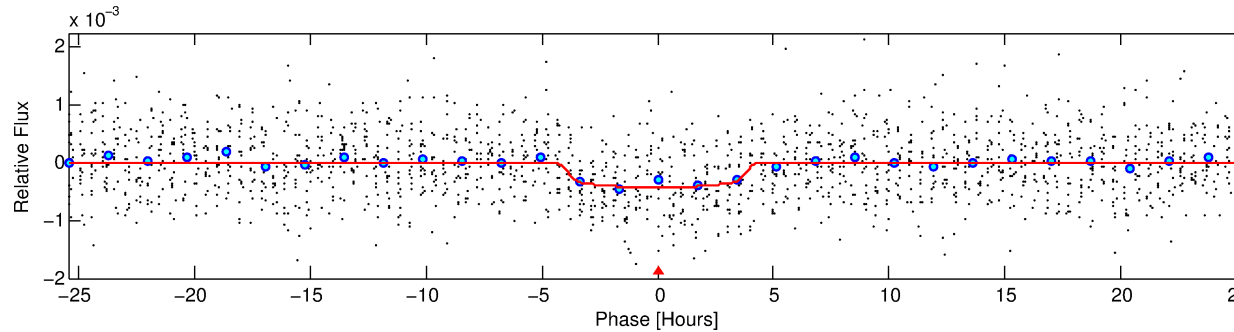
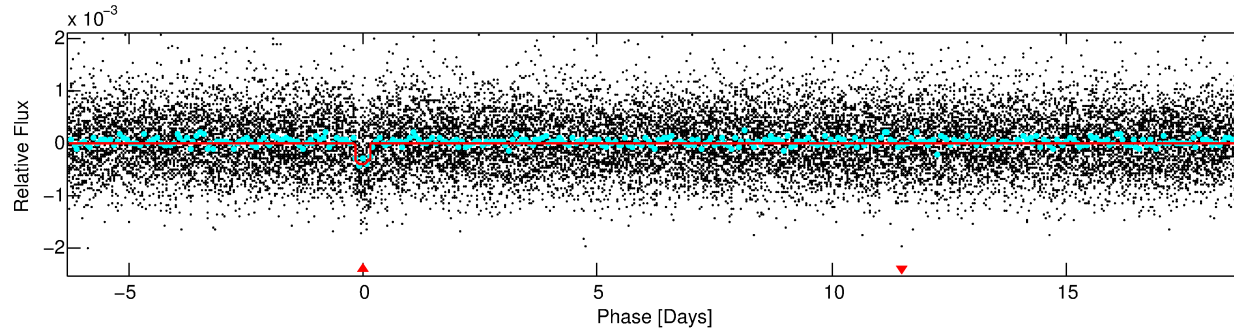
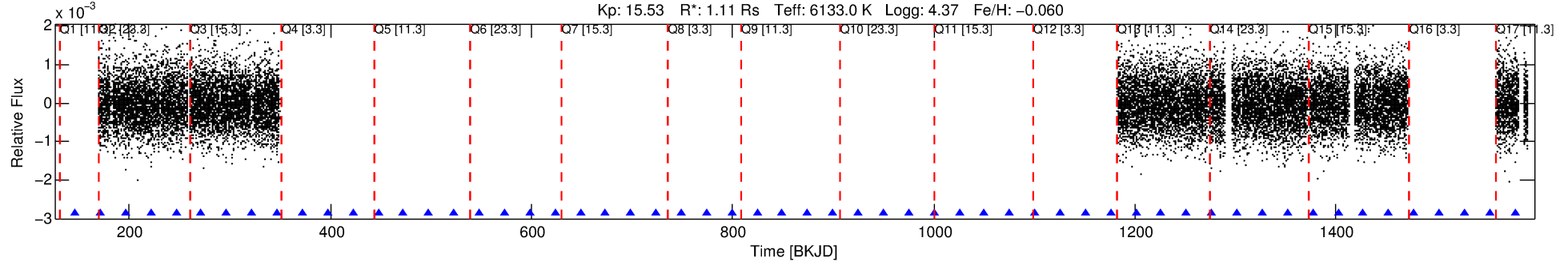
No Significant Match Found

DV One-Page Summary

KIC: 11391755 Candidate: 1 of 1 Period: 25.112 d

KOI: K02639.01 Corr: 0.806

Kp: 15.53 R*: 1.11 Rs Teff: 6133.0 K Logg: 4.37 Fe/H: -0.060



DV Fit Results:

Period = 25.11232 [0.00033] d
Epoch = 146.3473 [0.0122] BKJD
Rp/R* = 0.0217 [0.0039]
a/R* = 12.17 [10.64]
b = 0.87 [0.25]
Seff = 53.84 [22.57]
Teq = 691 [72] K
Rp = 2.63 [0.99] Re
a = 0.1706 [0.0465] AU
Ag = 211.40 [147.39] [1.43σ]
Teff = 4072 [609] K [5.51σ]

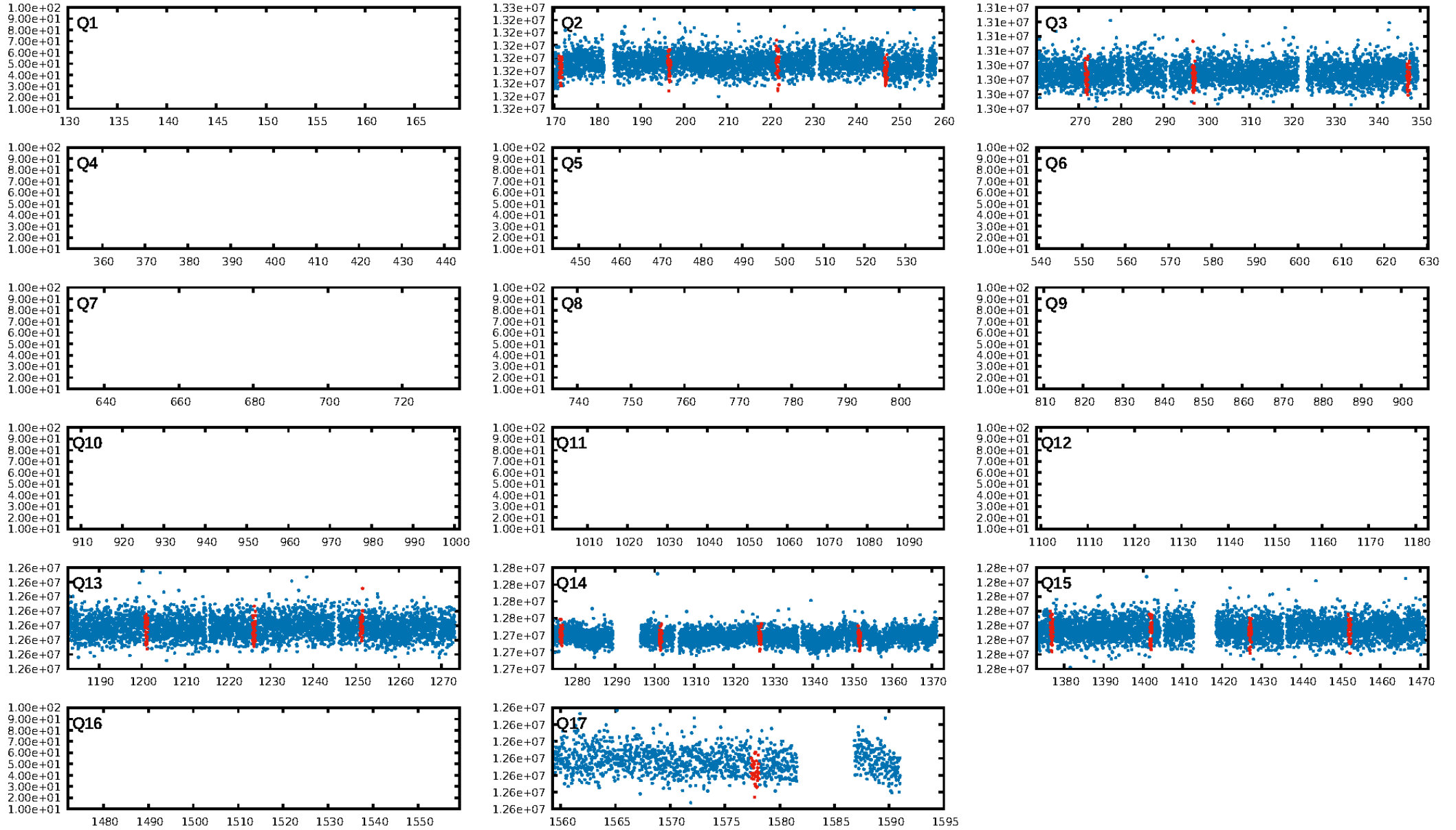
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 93.3%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 9.09e-27
RollingBand-fgt: 1.00 [18/18]
GhostDiagnostic-chr: 1.528
Centroid-sig: 34.2%
Centroid-so: 1.806 arcsec [1.22σ]
OotOffset-rm: 1.007 arcsec [1.24σ]
KicOffset-rm: 0.881 arcsec [1.07σ]
OotOffset-st: 2/2/0/2 [6]
KicOffset-st: 2/2/0/2 [6]
DiffImageQuality-fgm: 0.67 [4/6]
DiffImageOverlap-fno: 1.00 [6/6]

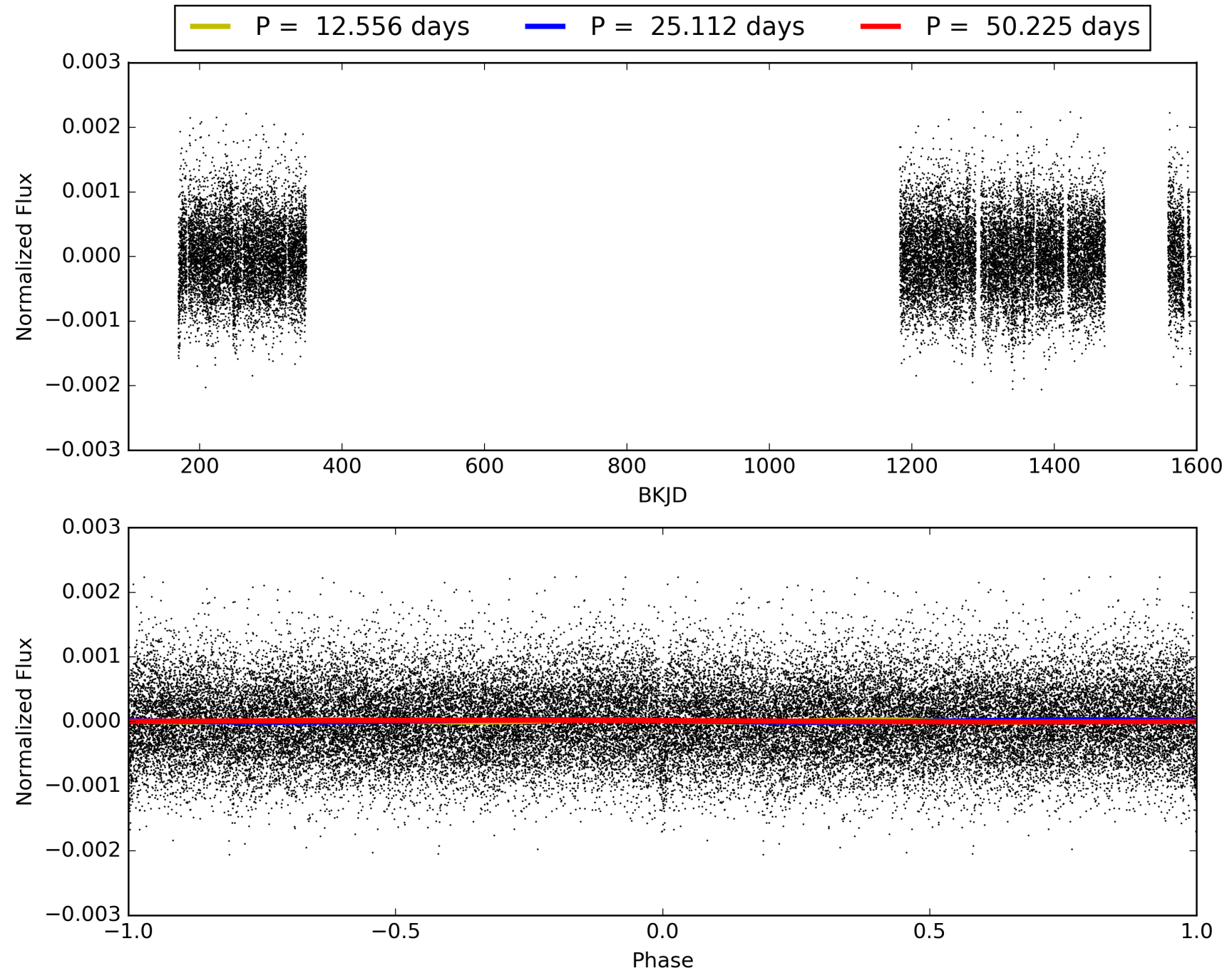
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 19:46:48 Z

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

TCE 011391755-01, PDC Light Curves

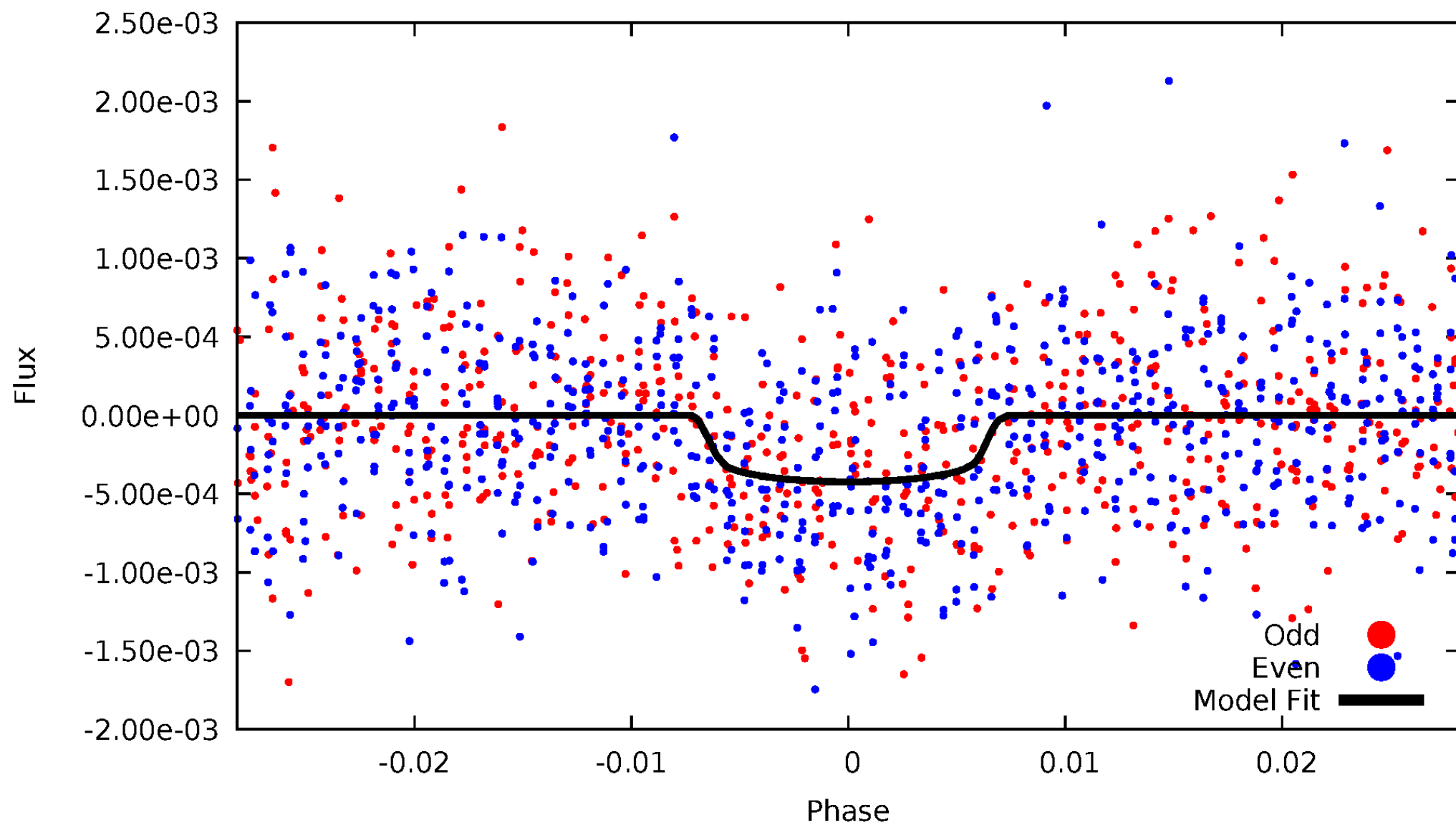


TCE 011391755-01



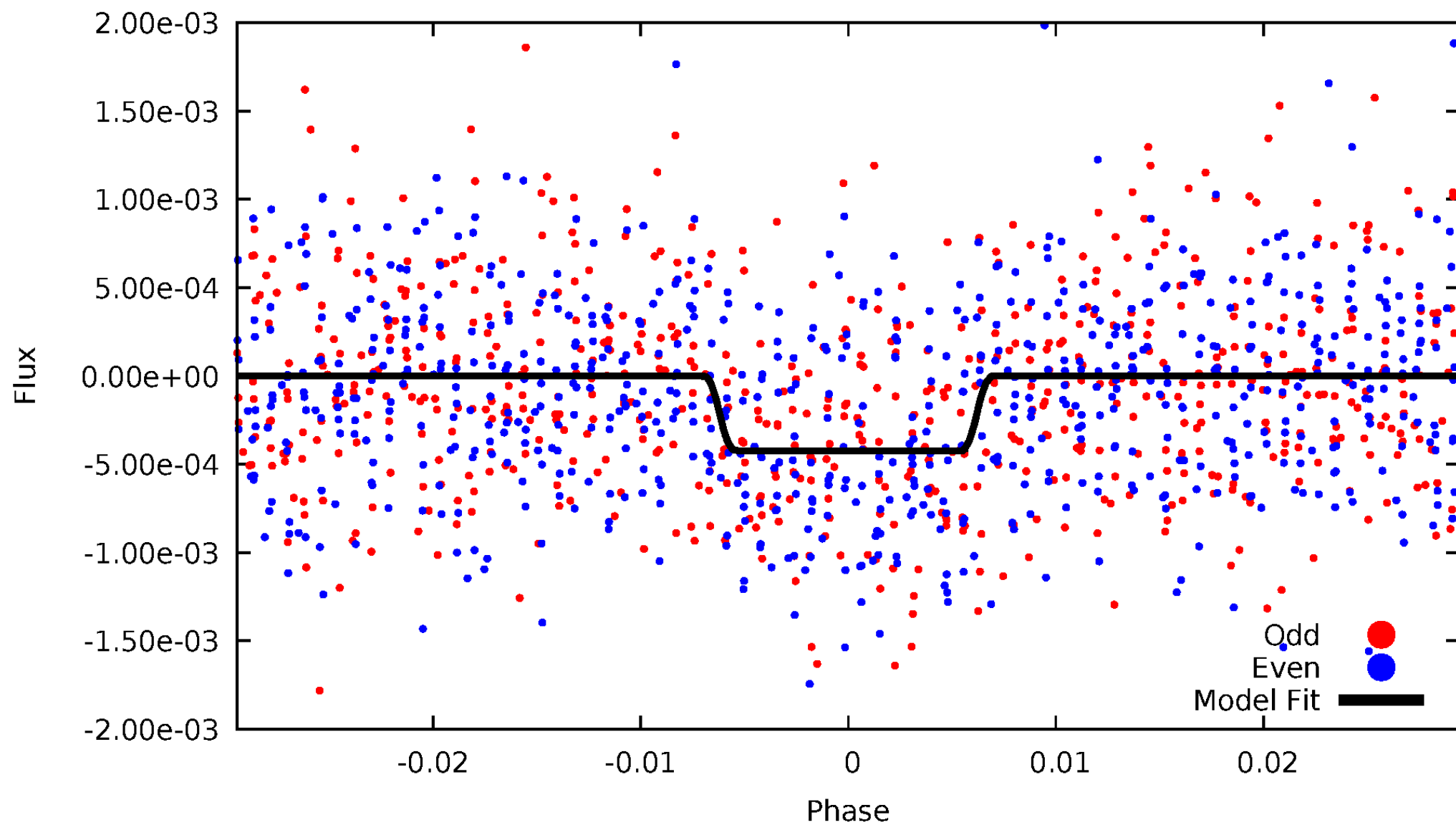
DV Odd/Even

TCE 011391755-01

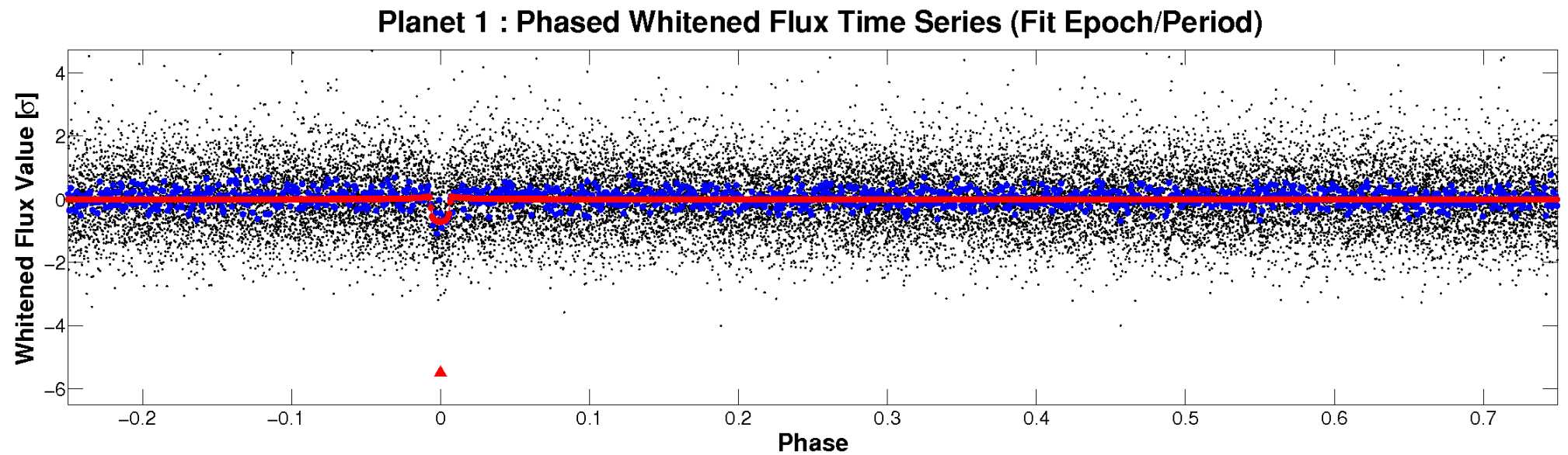
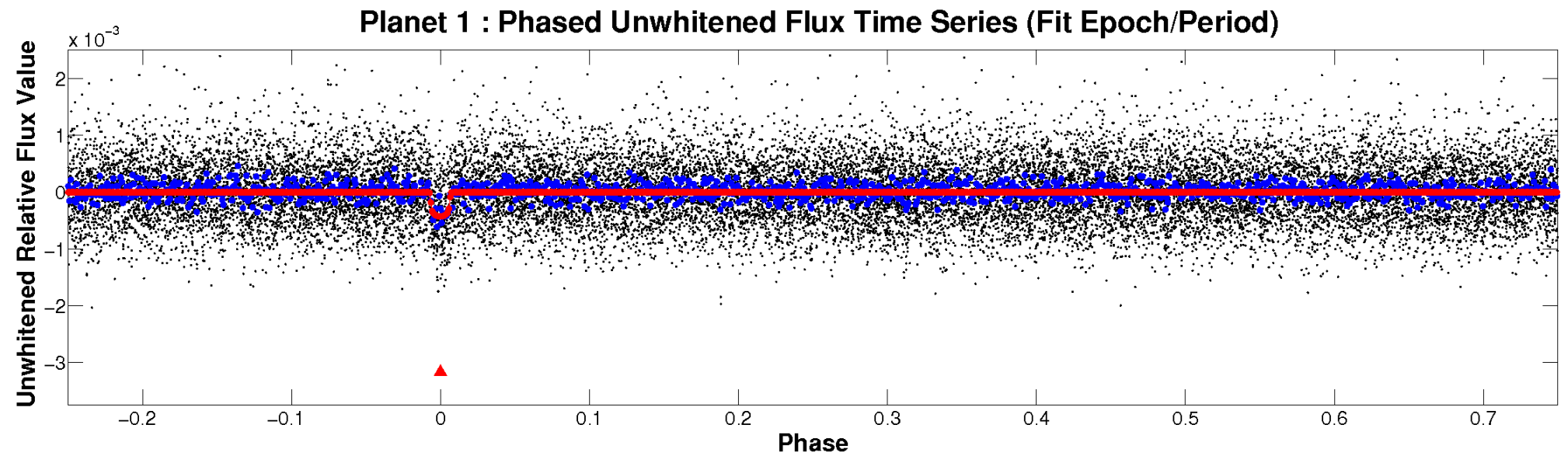


ALT Odd/Even

TCE 011391755-01

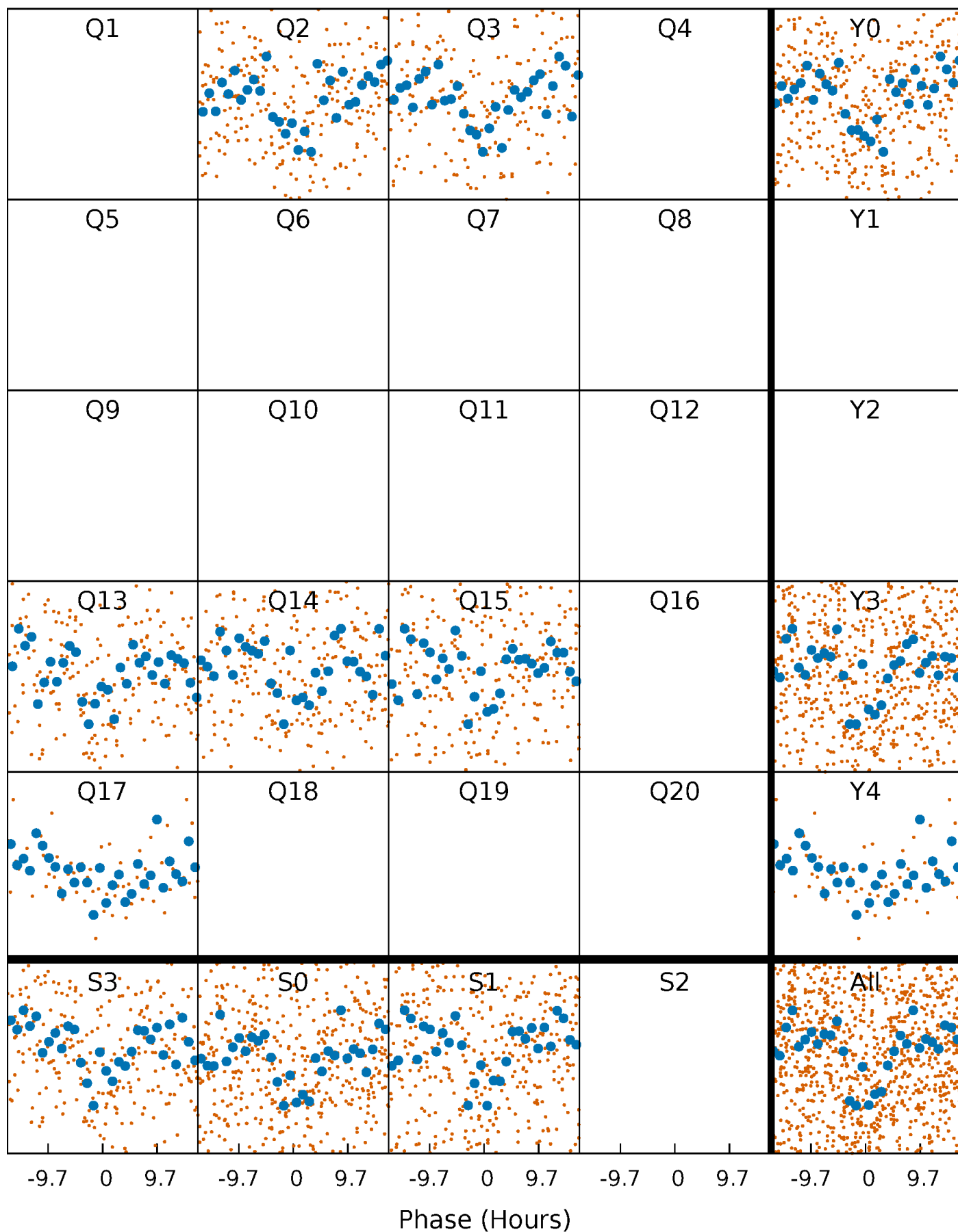


Non-Whitened Vs. Whitened Light Curve



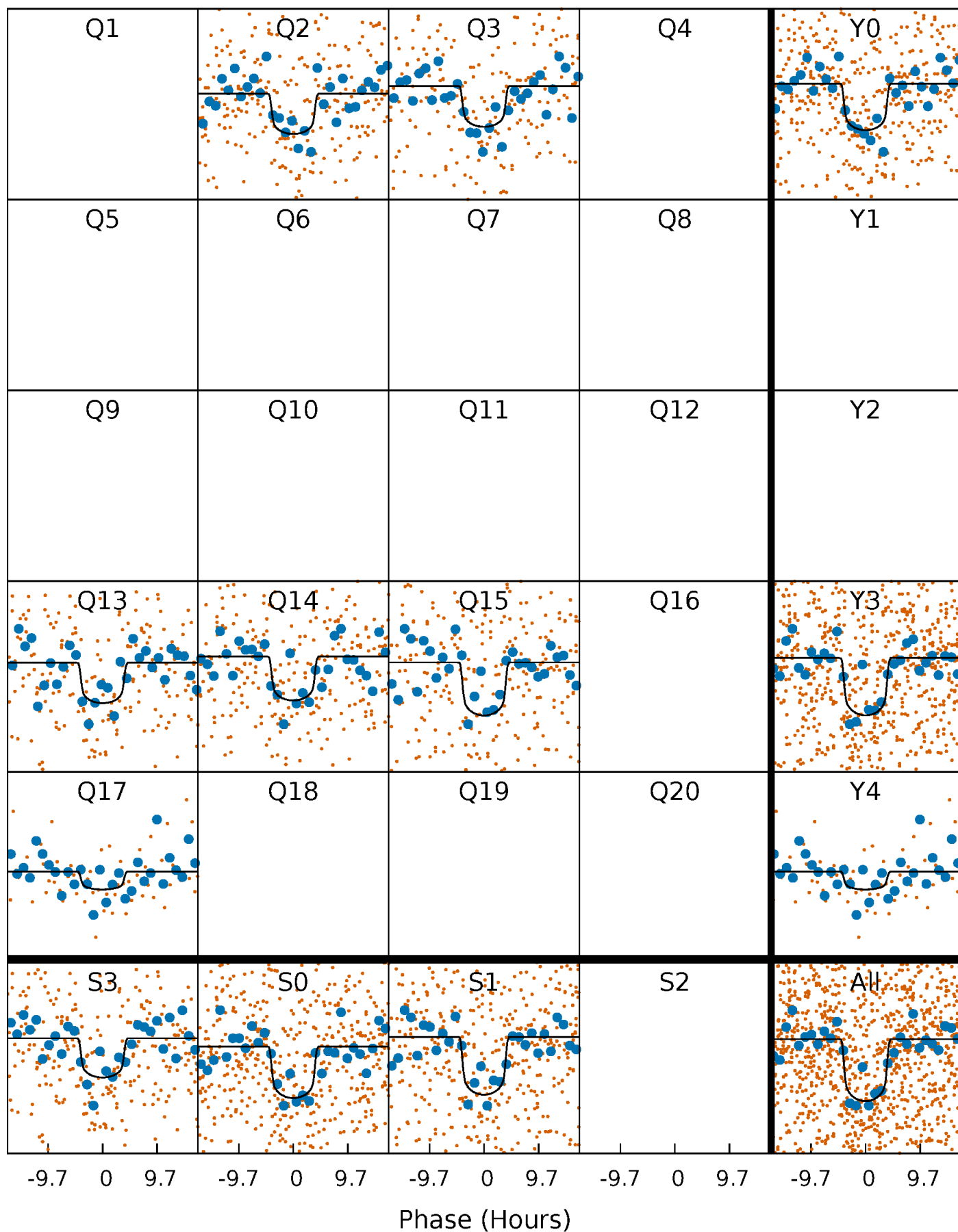
PDC Quarter-Phased Transit Curves

TCE 011391755-01 P= 25.112318 Days $T_0=146.347316$ (BKJD)



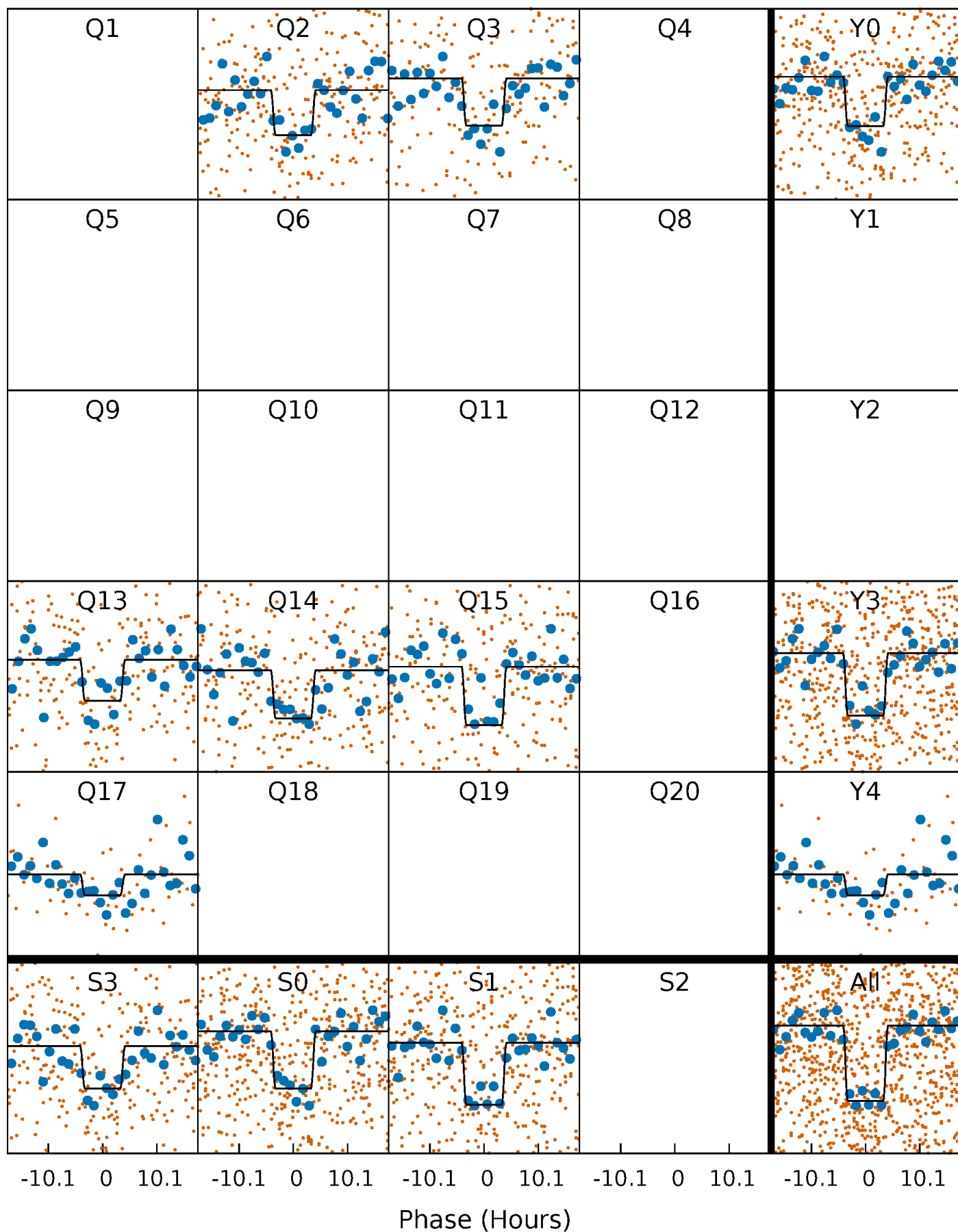
DV Quarter-Phased Transit Curves

TCE 011391755-01 P= 25.112318 Days $T_0=146.347316$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

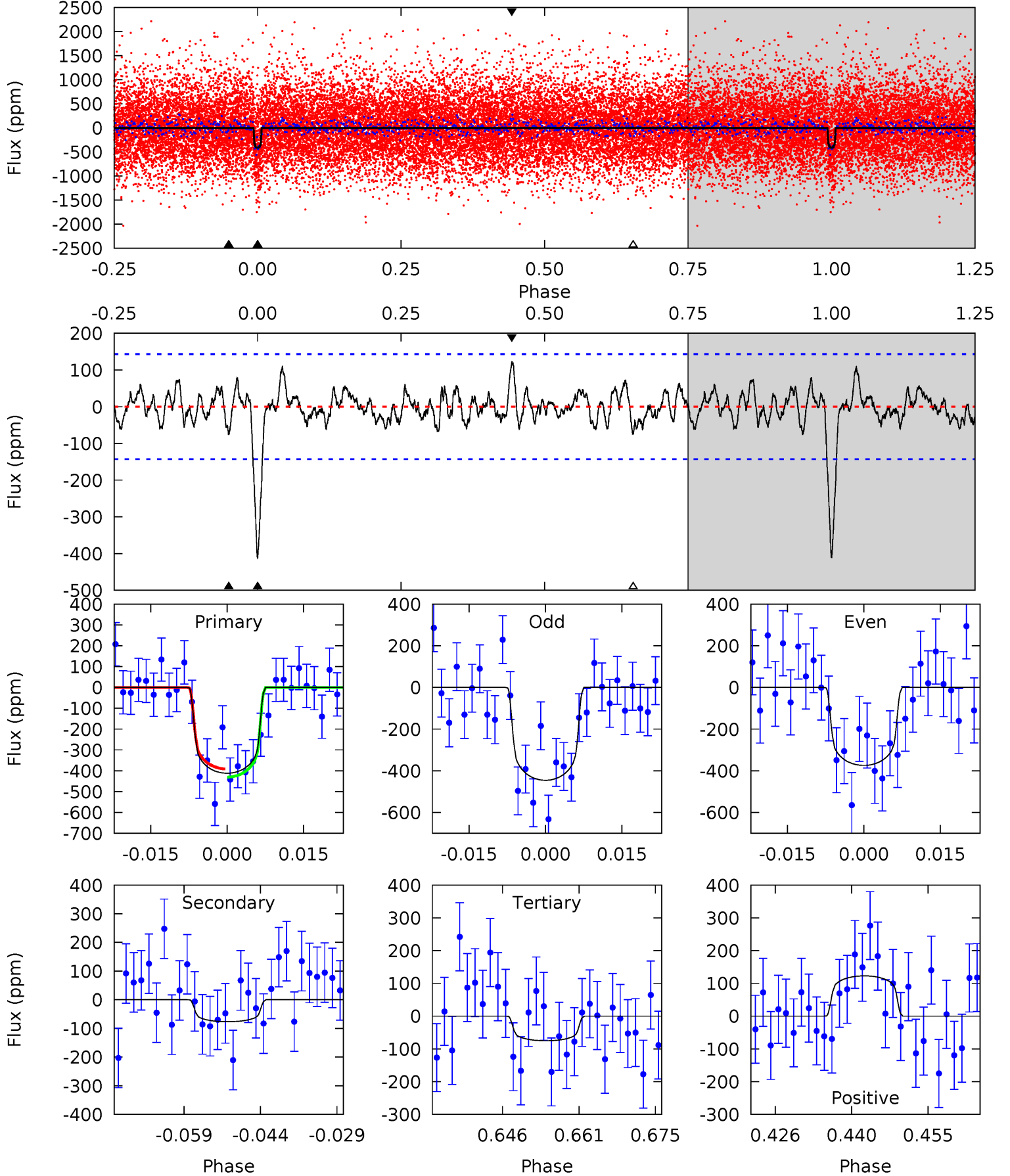
TCE 011391755-01 P= 25.111935 Days $T_0=146.356357$ (BKJD)



DV Model-Shift Uniqueness Test

011391755-01, $P = 25.112318$ Days, $E = 146.347316$ Days

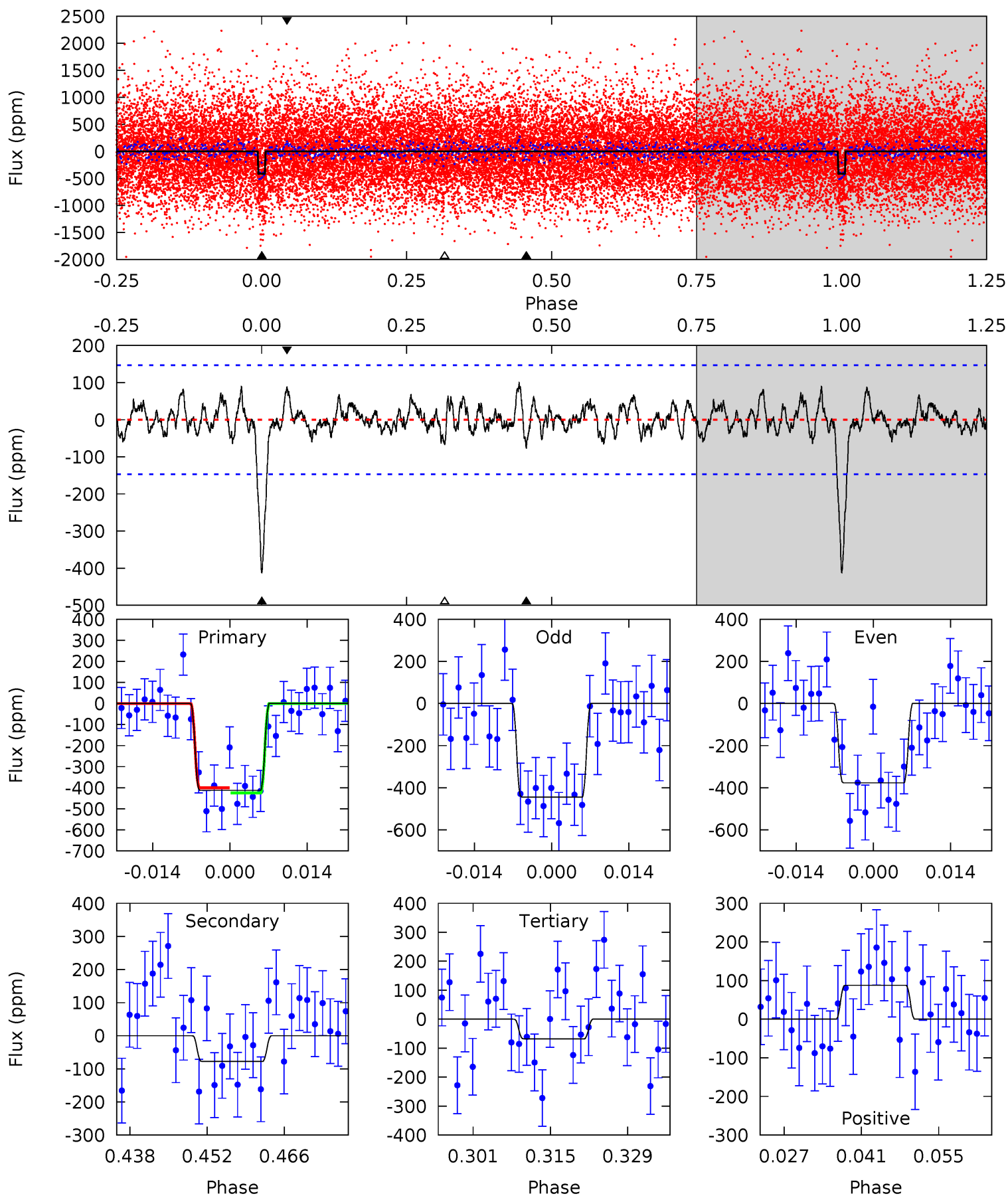
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.3	2.65	2.60	4.26	4.95	2.44	1.15	11.6	10.00	0.05	-1.60	1.24	1.03	0.23	0.68



Alt Model-Shift Uniqueness Test

011391755-01, $P = 25.111935$ Days, $E = 146.356357$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.9	2.62	2.29	2.96	4.97	2.47	0.99	11.7	11.0	0.33	-0.34	1.14	1.09	0.19	0.41



Stellar Parameters For KIC 011391755

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6133^{+171}_{-236}	$4.367^{+0.105}_{-0.210}$	$-0.060^{+0.250}_{-0.300}$	$1.112^{+0.366}_{-0.157}$	$1.049^{+0.166}_{-0.135}$	$1.074^{+0.519}_{-0.557}$
	+3%/-4%	+2%/-5%	+417%/-500%	+33%/-14%	+16%/-13%	+48%/-52%
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 011391755-01 / KOI 2639.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-77 ± 29	$2.73^{+0.63}_{-0.61}$	973^{+74}_{-57}	4138^{+454}_{-410}	160^{+126}_{-74}
Alt.	-78 ± 30	$2.61^{+0.63}_{-0.54}$	978^{+81}_{-57}	4217^{+496}_{-401}	177^{+139}_{-84}

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

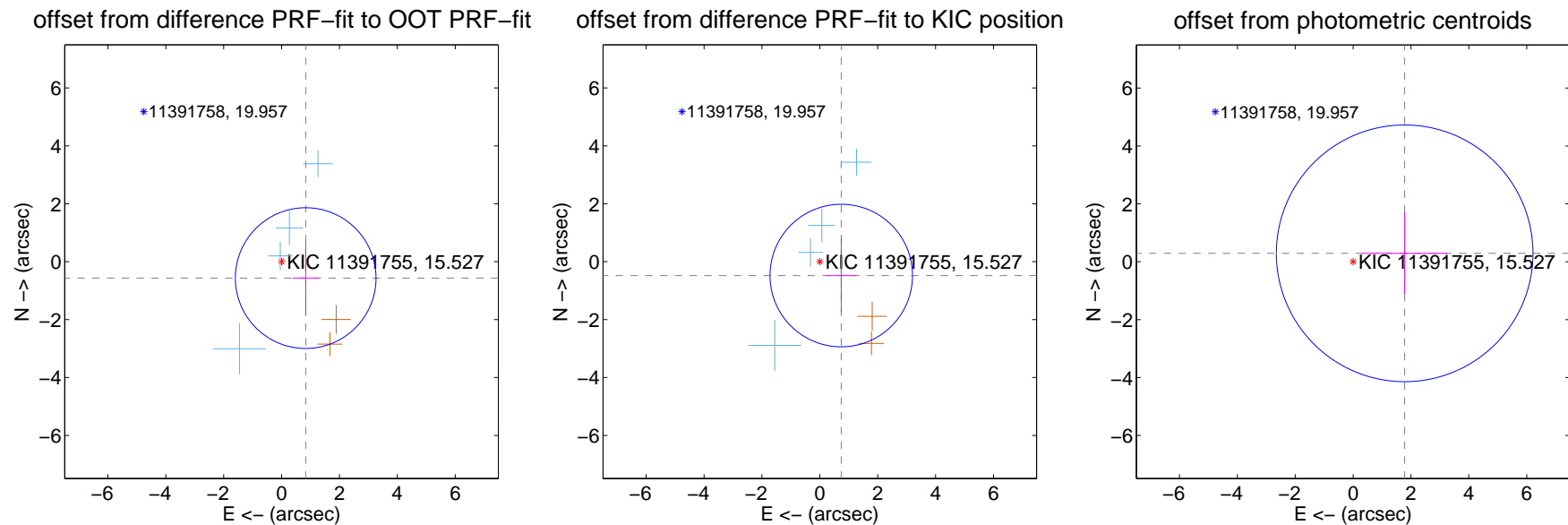
DV Centroid Data

Supplemental centroid analysis for 011391755-01. Kepler magnitude: 15.53. Transit SNR 10.87

There are 4 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.007 ± 0.810	1.24	-0.833 ± 0.453	-0.566 ± 1.277
PRF-fit source offset from KIC position	0.881 ± 0.821	1.07	-0.740 ± 0.509	-0.479 ± 1.289
photometric centroid source offset	1.81 ± 1.48	1.22	-1.78 ± 1.48	0.29 ± 1.42



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.

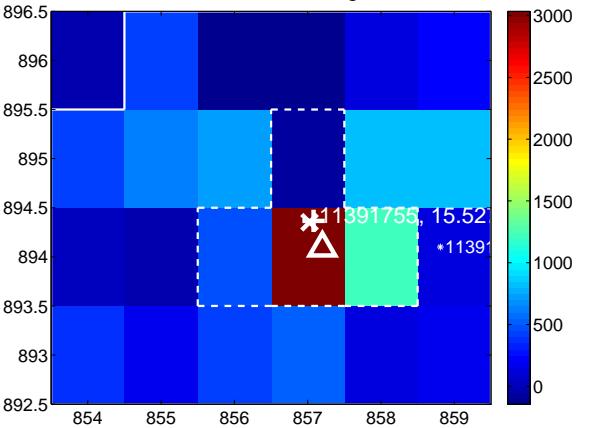
Q1 no difference image



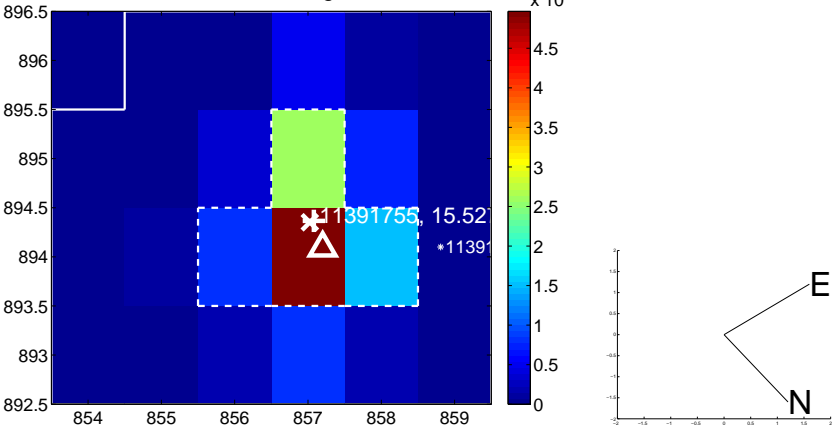
Q1 no OOT image



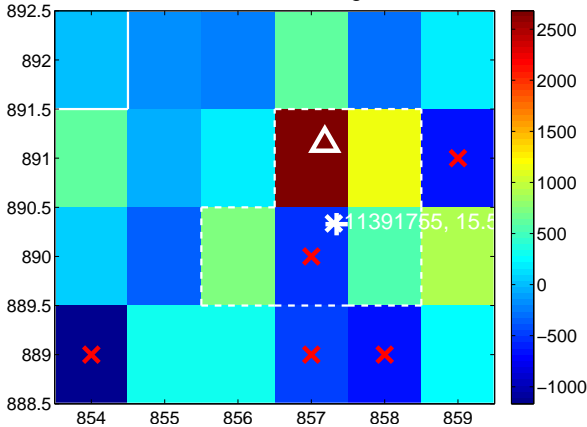
Q2 difference image



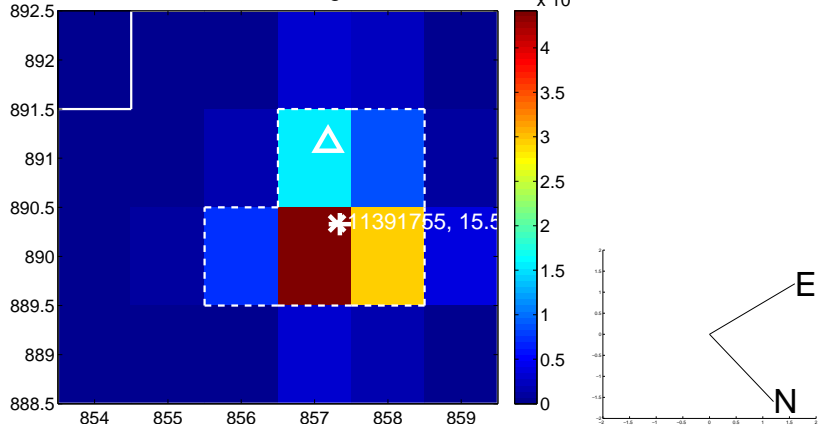
Q2 OOT image



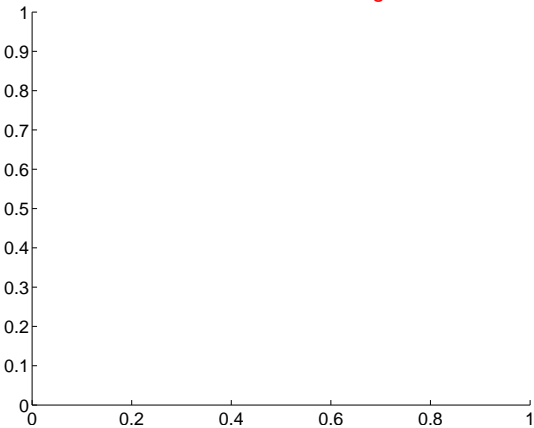
Q3 difference image



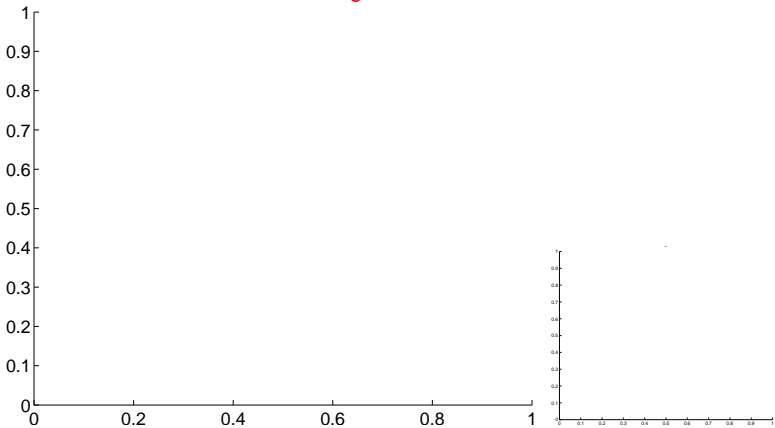
Q3 OOT image



Q4 no difference image



Q4 no OOT image



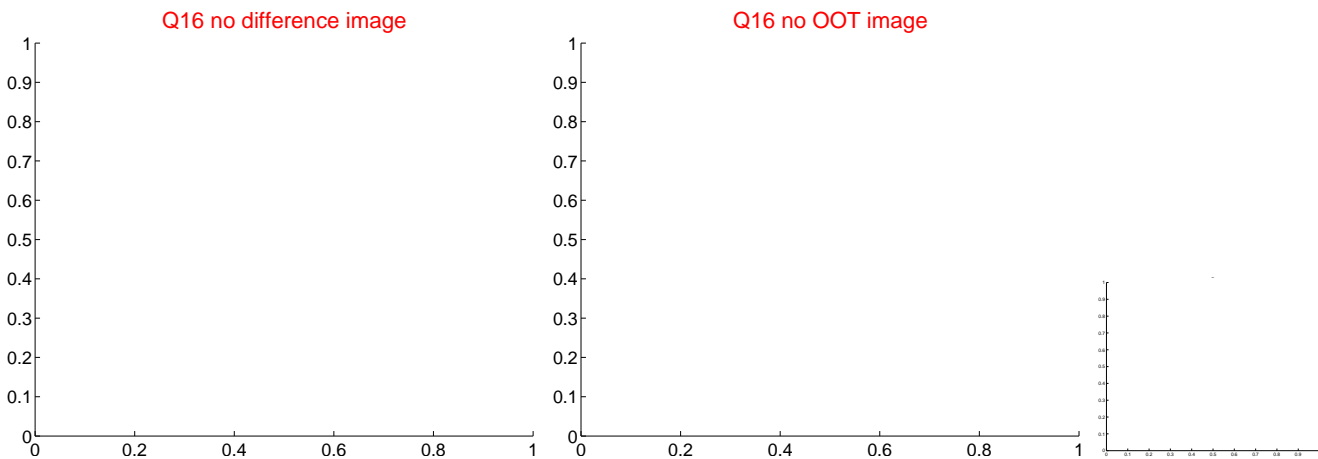
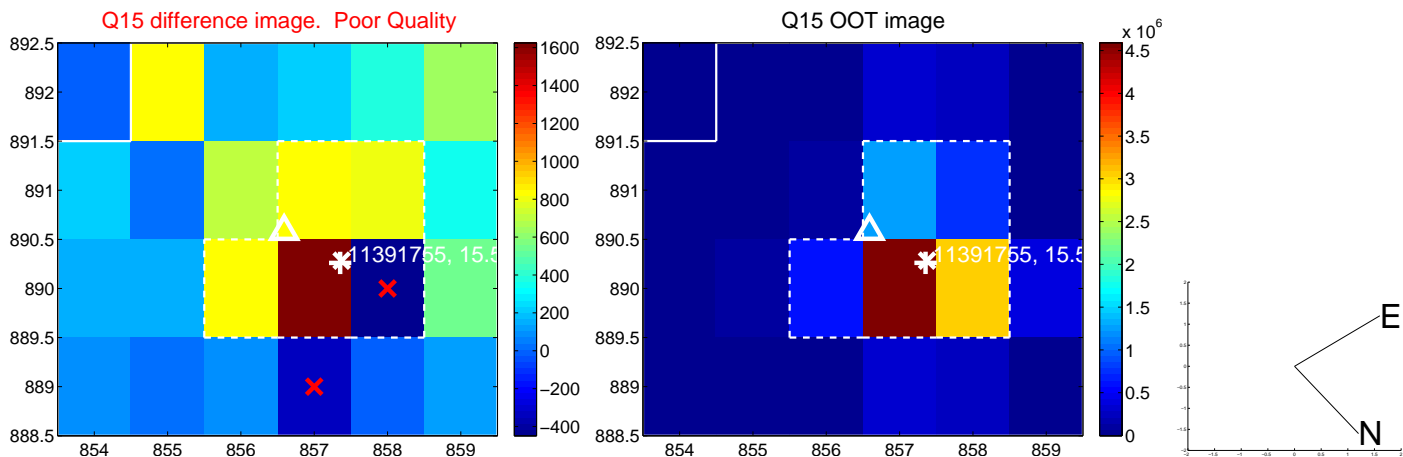
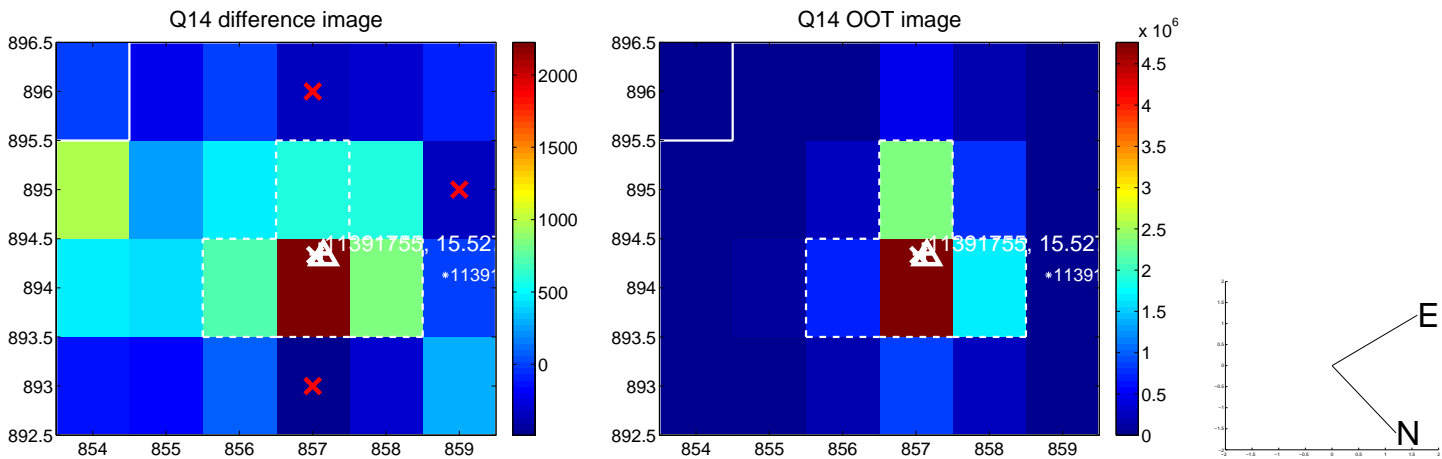
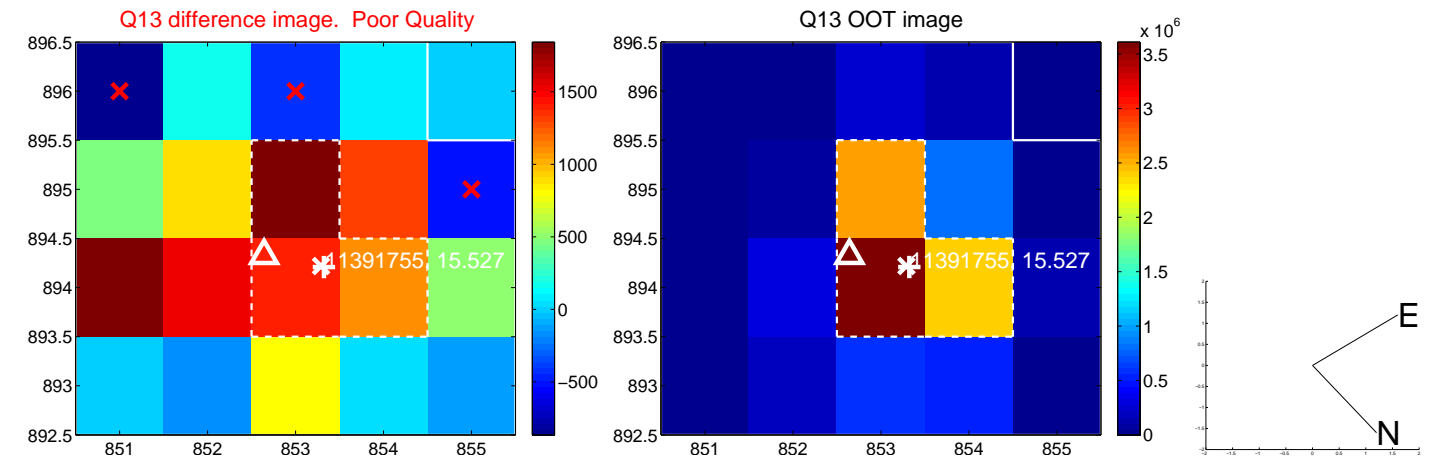
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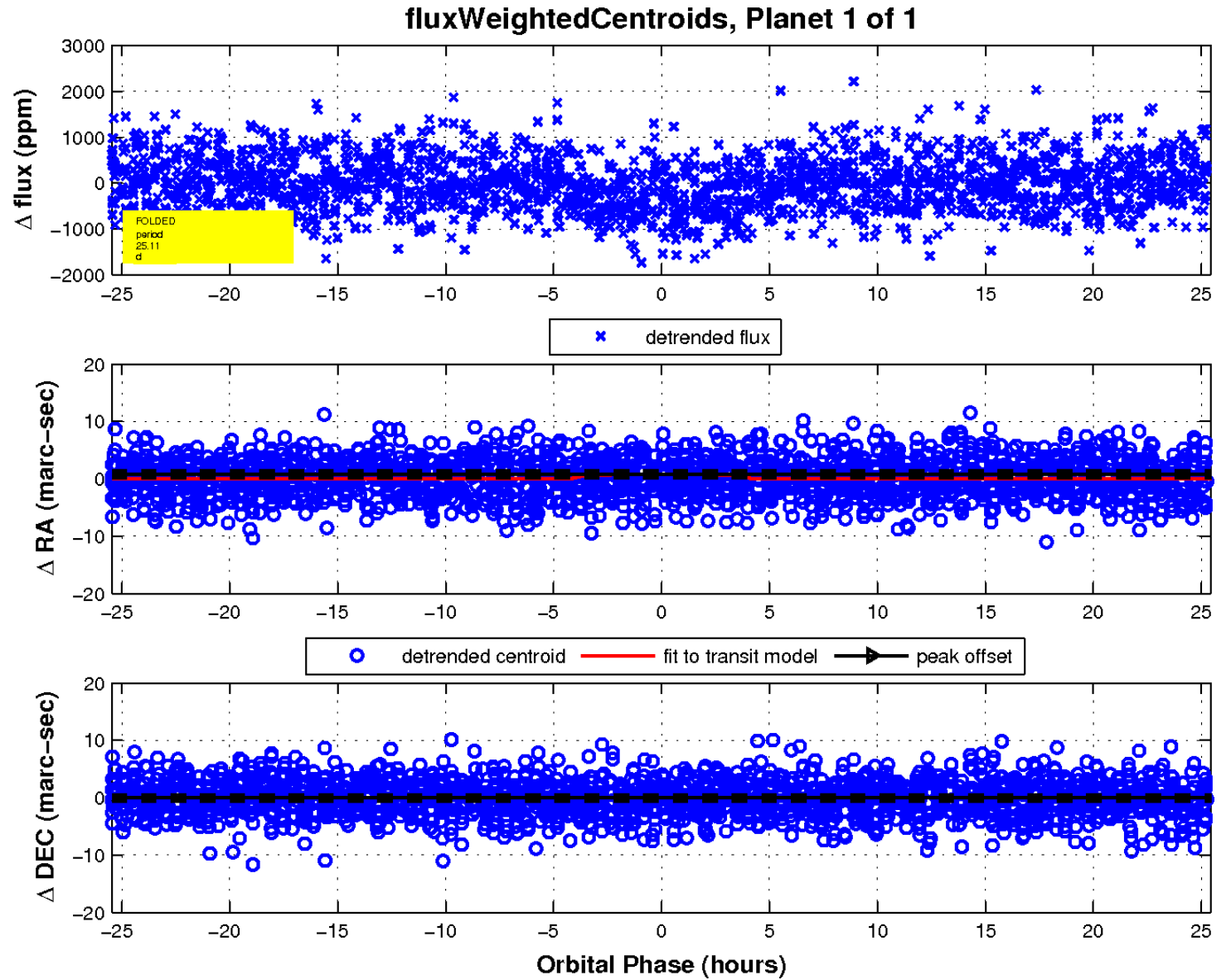
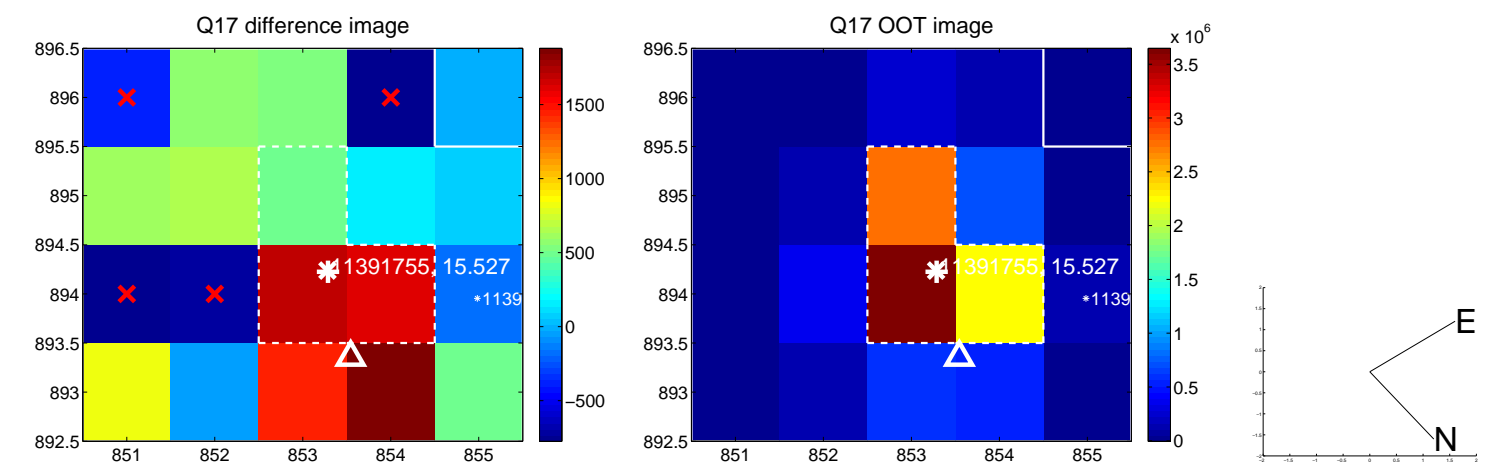
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UKIRT Image

Declination

