

KIC 011669125

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})
011669125-01	OBS	1535.01	70.698114	188.569263	365.9	7.111	31.9	32.5	0.87	5811	1.97	7.13

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011669125-01	OBS	PC	0.96	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.

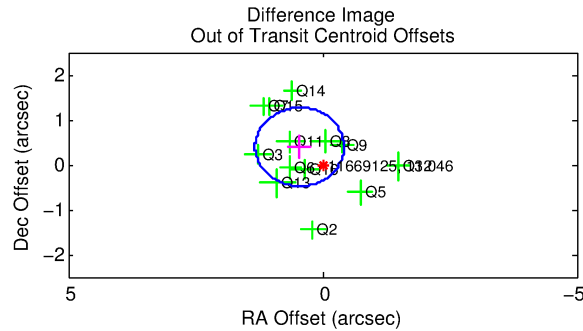
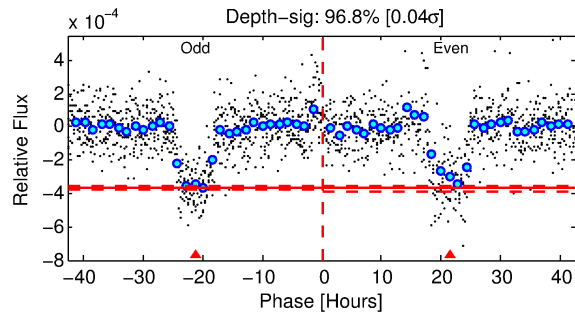
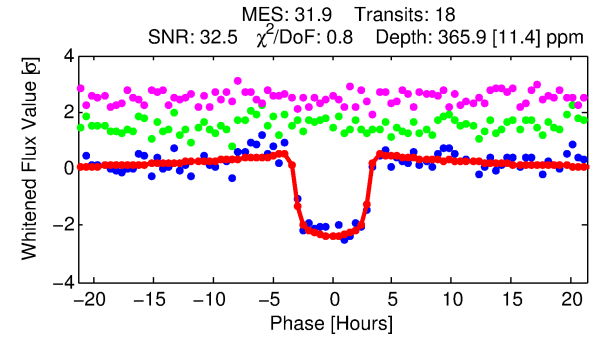
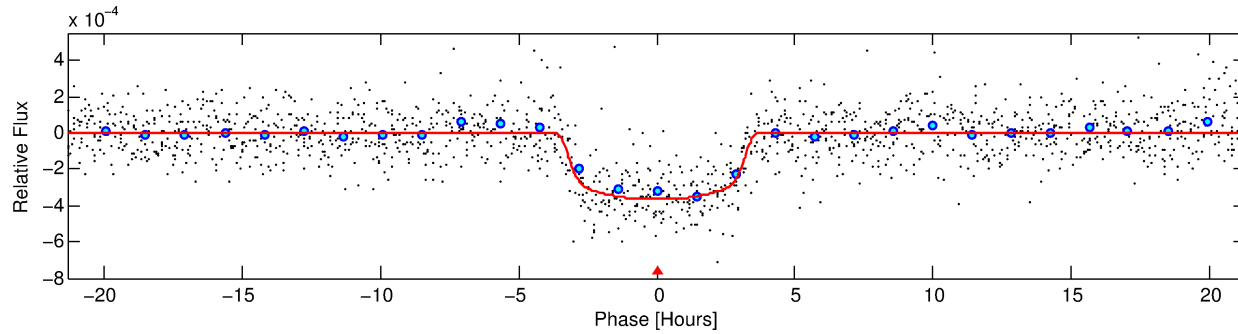
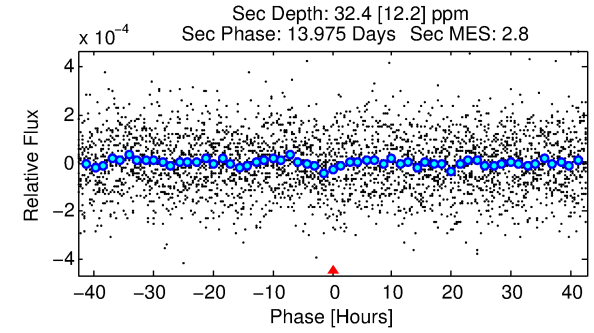
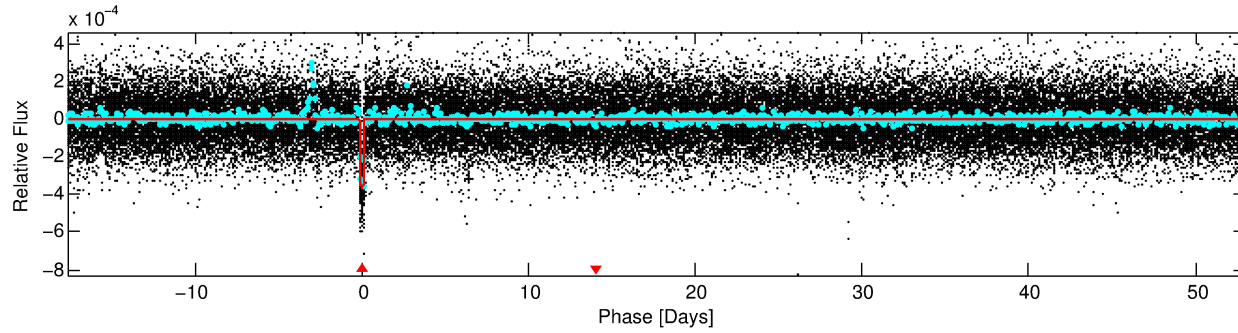
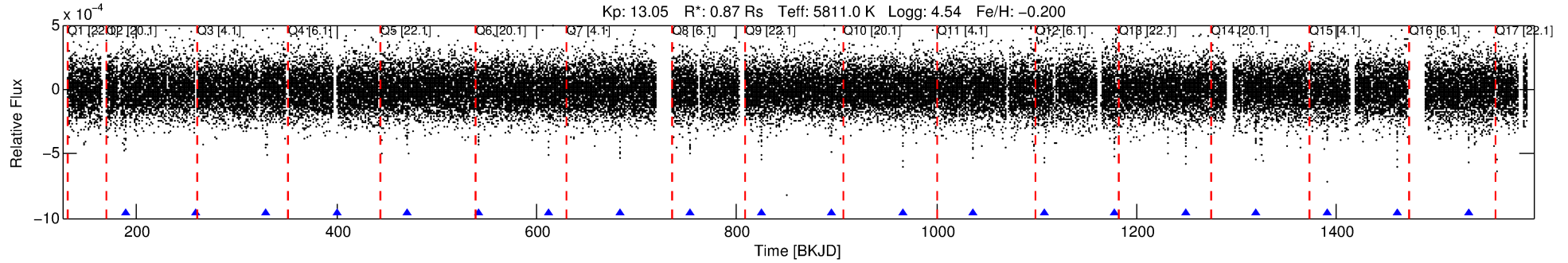
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011669125-01

No Significant Match Found

DV One-Page Summary

KIC: 11669125 Candidate: 1 of 1 Period: 70.698 d
KOI: K01535.01 Corr: 0.966



DV Fit Results:

Period = 70.69811 [0.00035] d
Epoch = 188.5693 [0.0040] BKJD
Rp/R* = 0.0208 [0.0010]
a/R* = 36.28 [7.86]
b = 0.90 [0.05]
Seff = 7.13 [1.51]
Teq = 417 [22] K
Rp = 1.97 [0.28] Re
a = 0.3278 [0.0412] AU
Ag = 495.65 [216.06] [2.29σ]
Teffp = 3040 [302] K [8.66σ]

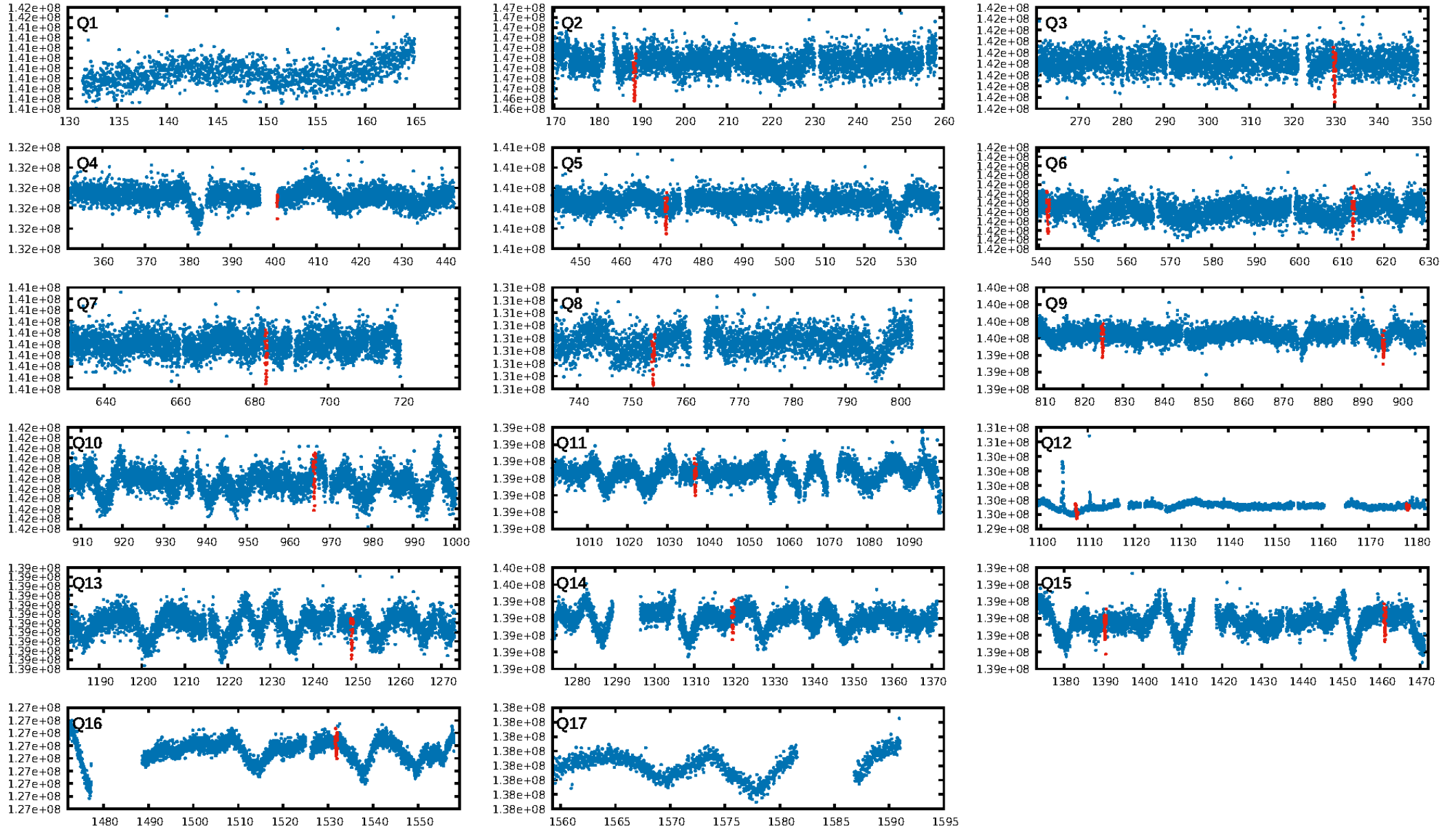
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 88.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.72e-191
RollingBand-fgt: 1.00 [18/18]
GhostDiagnostic-chr: 3.669
Centroid-sig: 2.3%
Centroid-so: 0.175 arcsec [0.55σ]
OotOffset-rm: 0.602 arcsec [2.07σ]
KicOffset-rm: 0.841 arcsec [3.36σ]
OotOffset-st: 3/4/3/3 [13]
KicOffset-st: 3/4/3/3 [13]
DiffImageQuality-fgm: 1.00 [13/13]
DiffImageOverlap-fno: 1.00 [13/13]

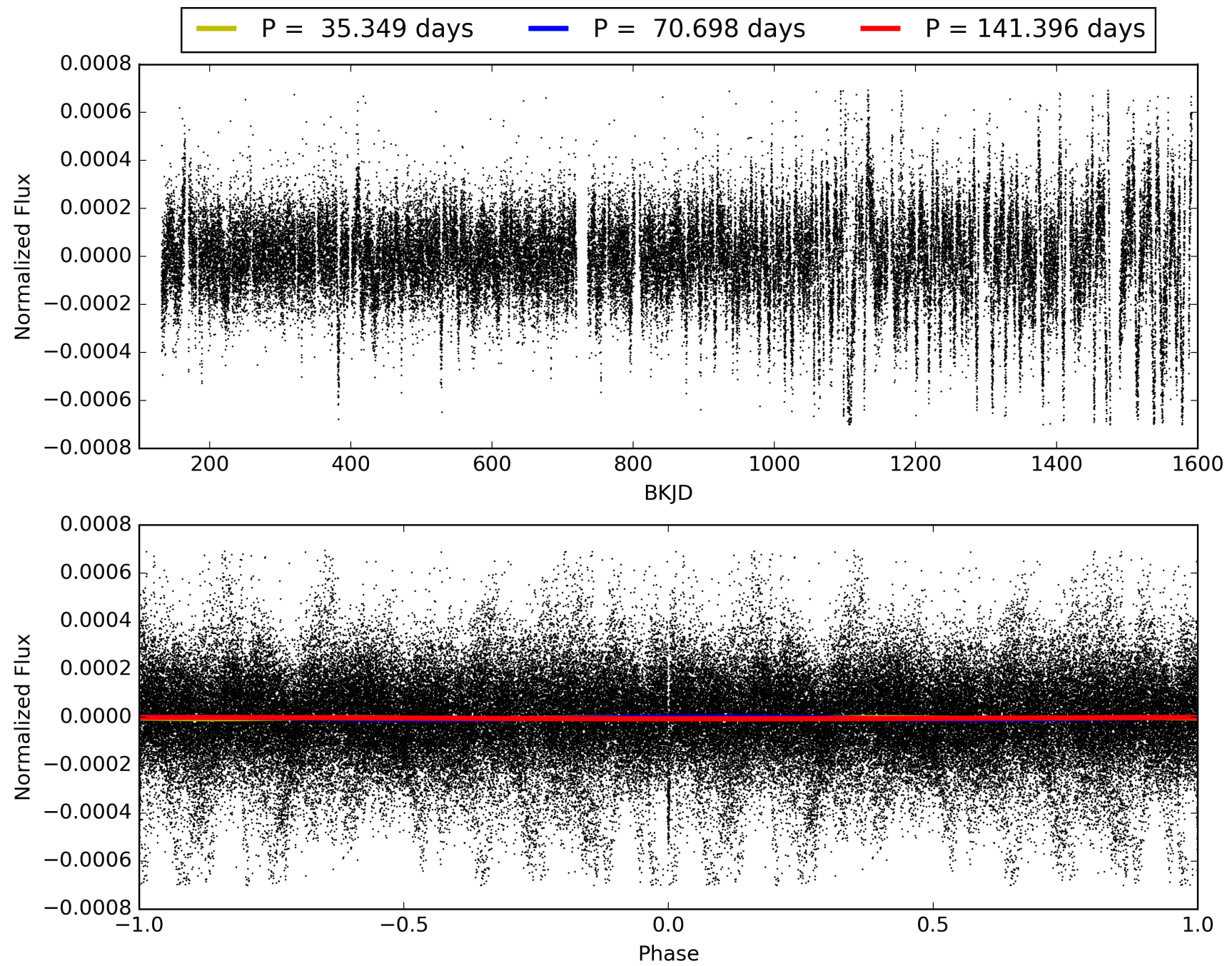
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:36:35 Z

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

TCE 011669125-01, PDC Light Curves

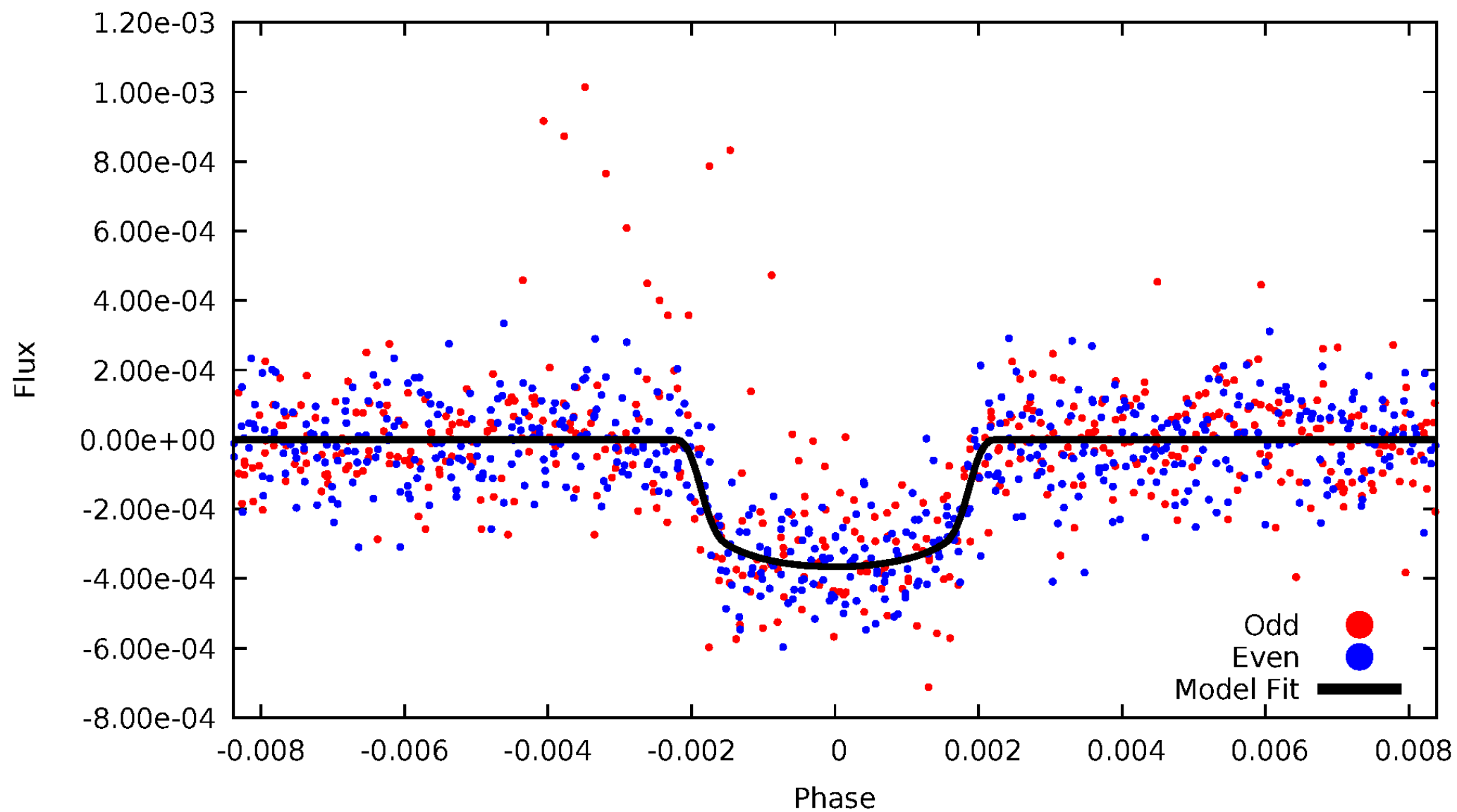


TCE 011669125-01



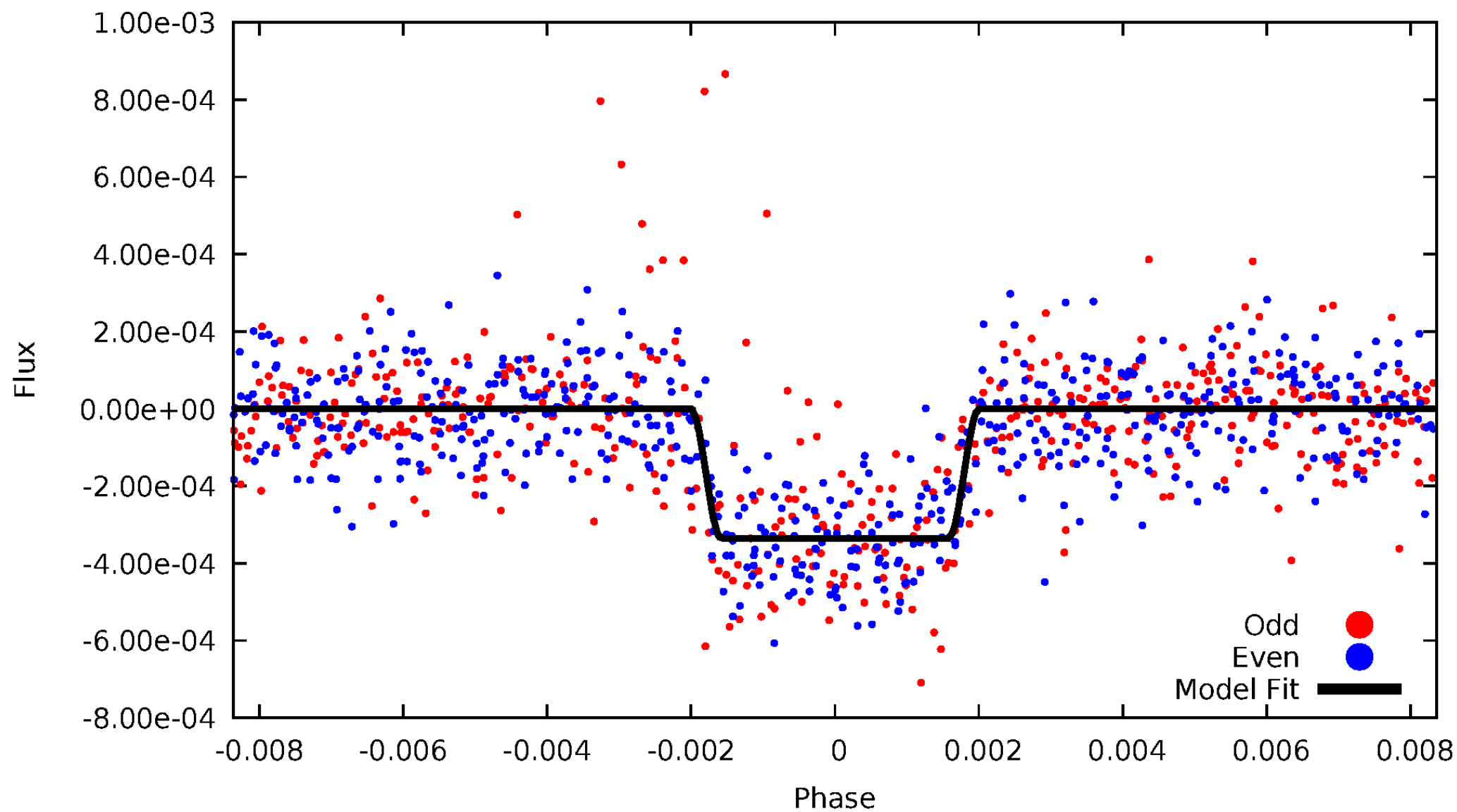
DV Odd/Even

TCE 011669125-01

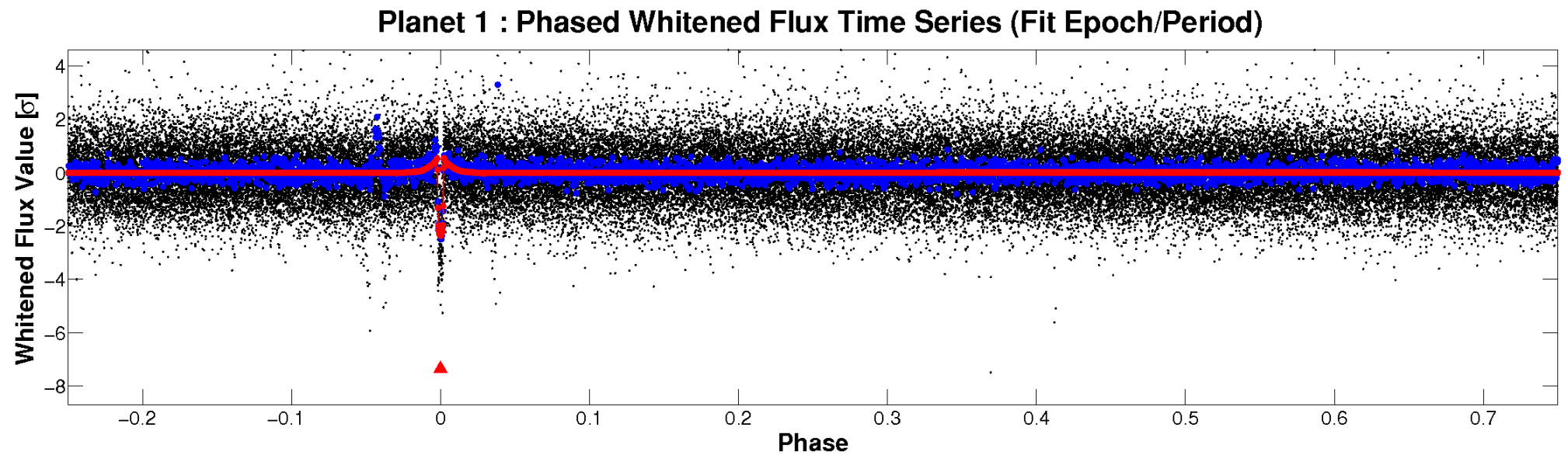
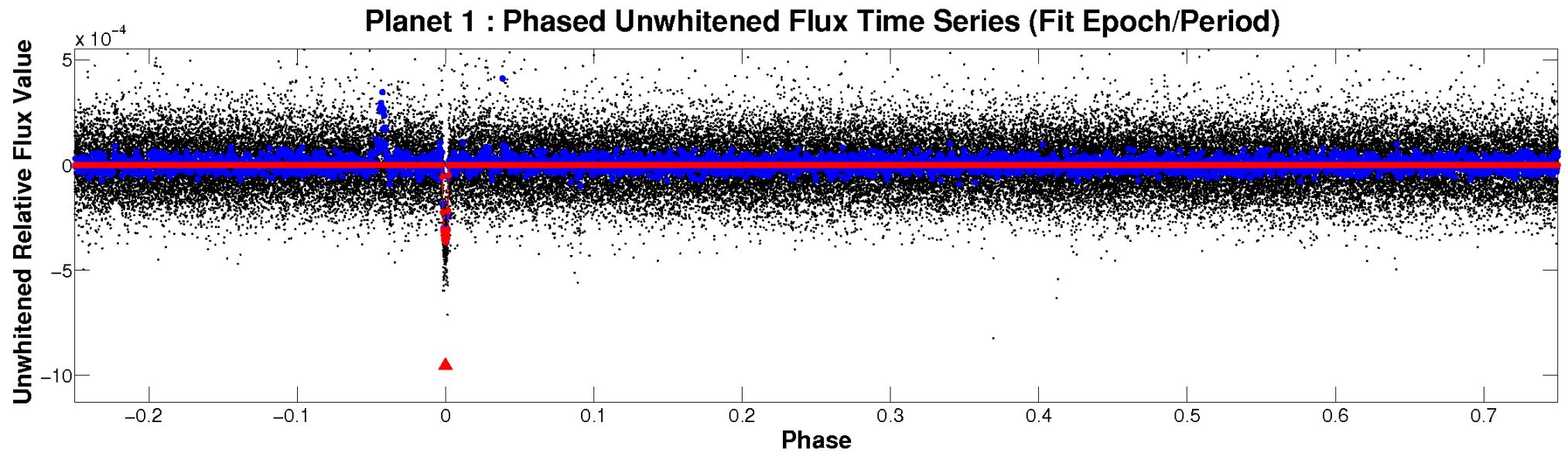


ALT Odd/Even

TCE 011669125-01

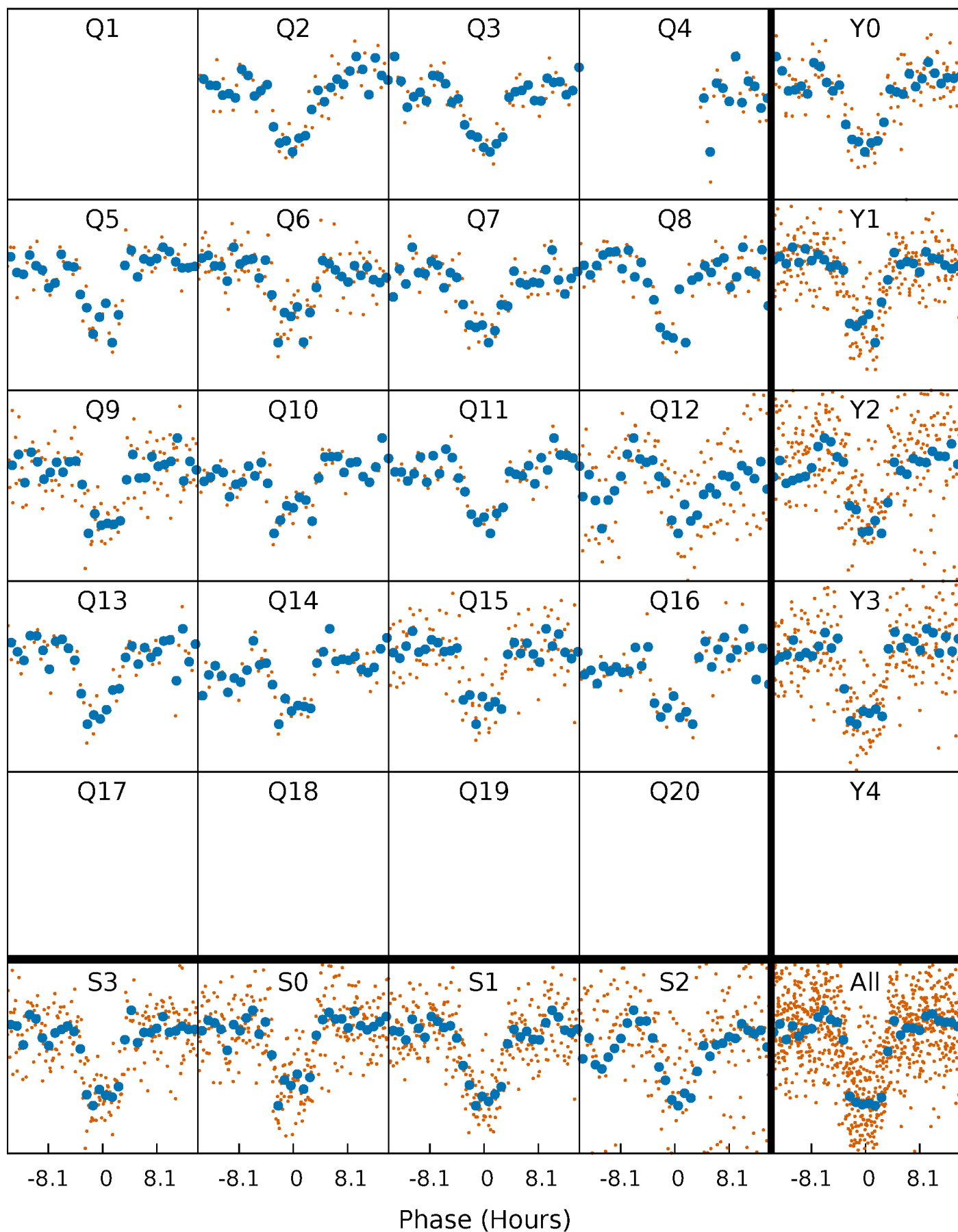


Non-Whitened Vs. Whitened Light Curve



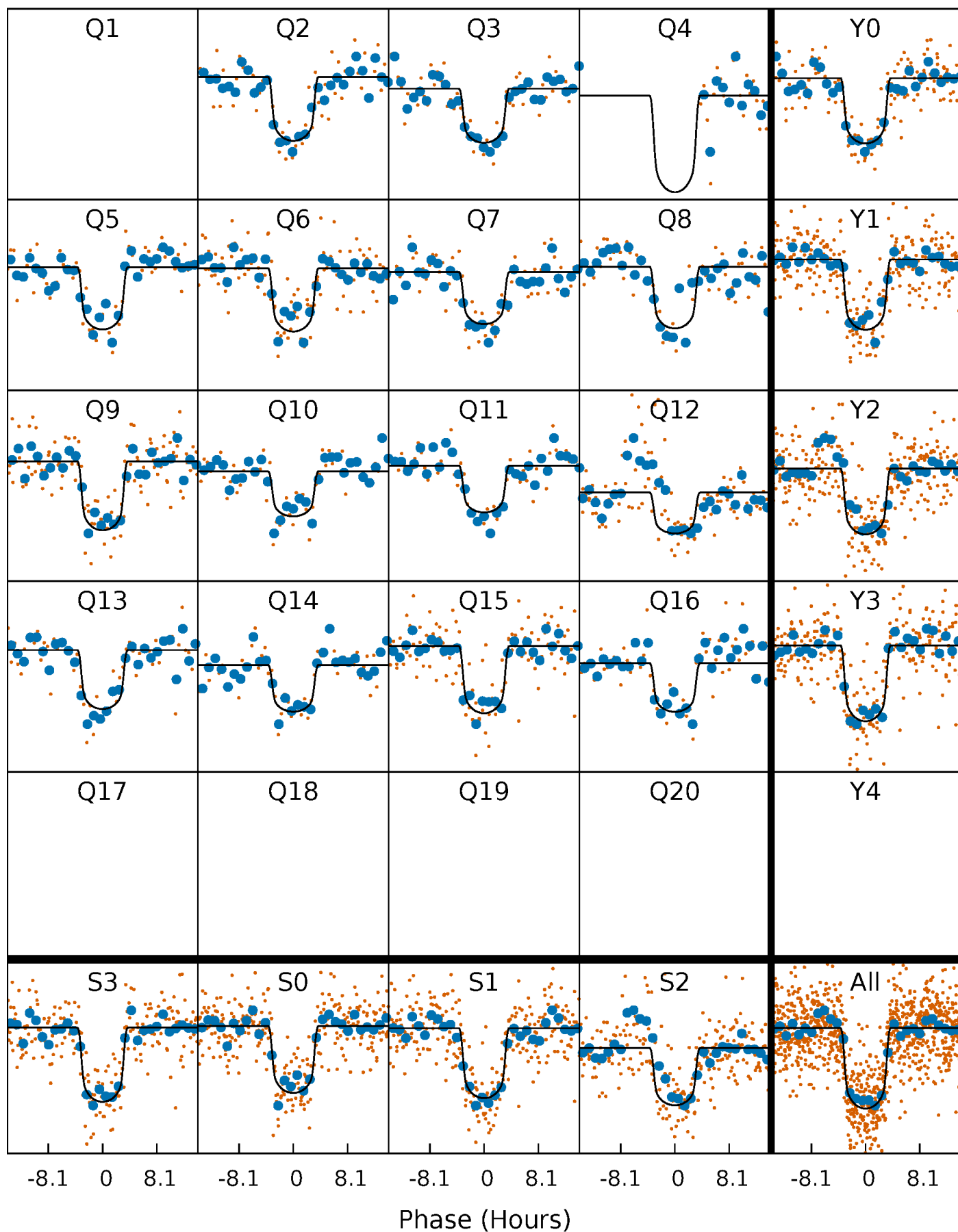
PDC Quarter-Phased Transit Curves

TCE 011669125-01 P= 70.698114 Days $T_0=188.569263$ (BKJD)



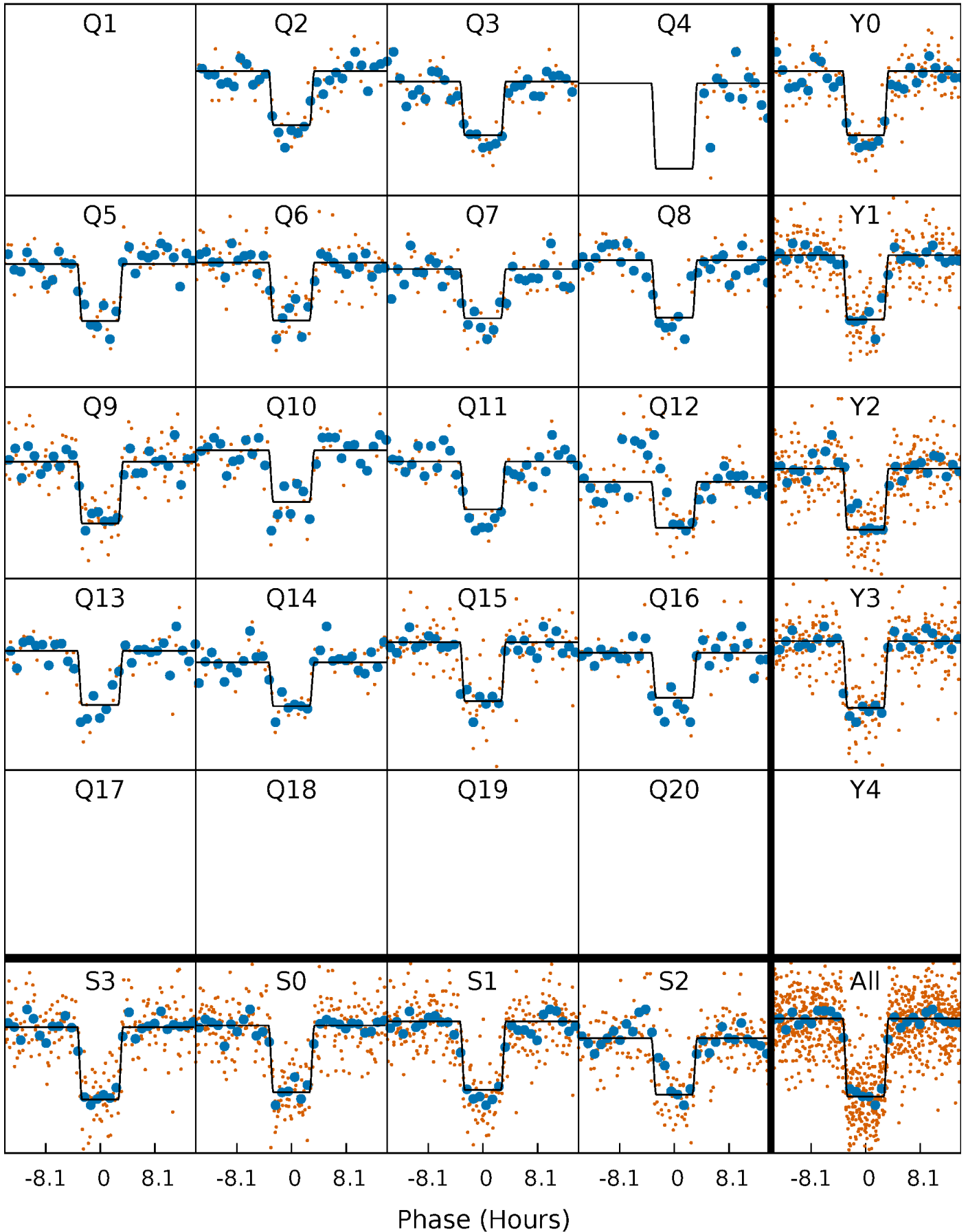
DV Quarter-Phased Transit Curves

TCE 011669125-01 P= 70.698114 Days $T_0=188.569263$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

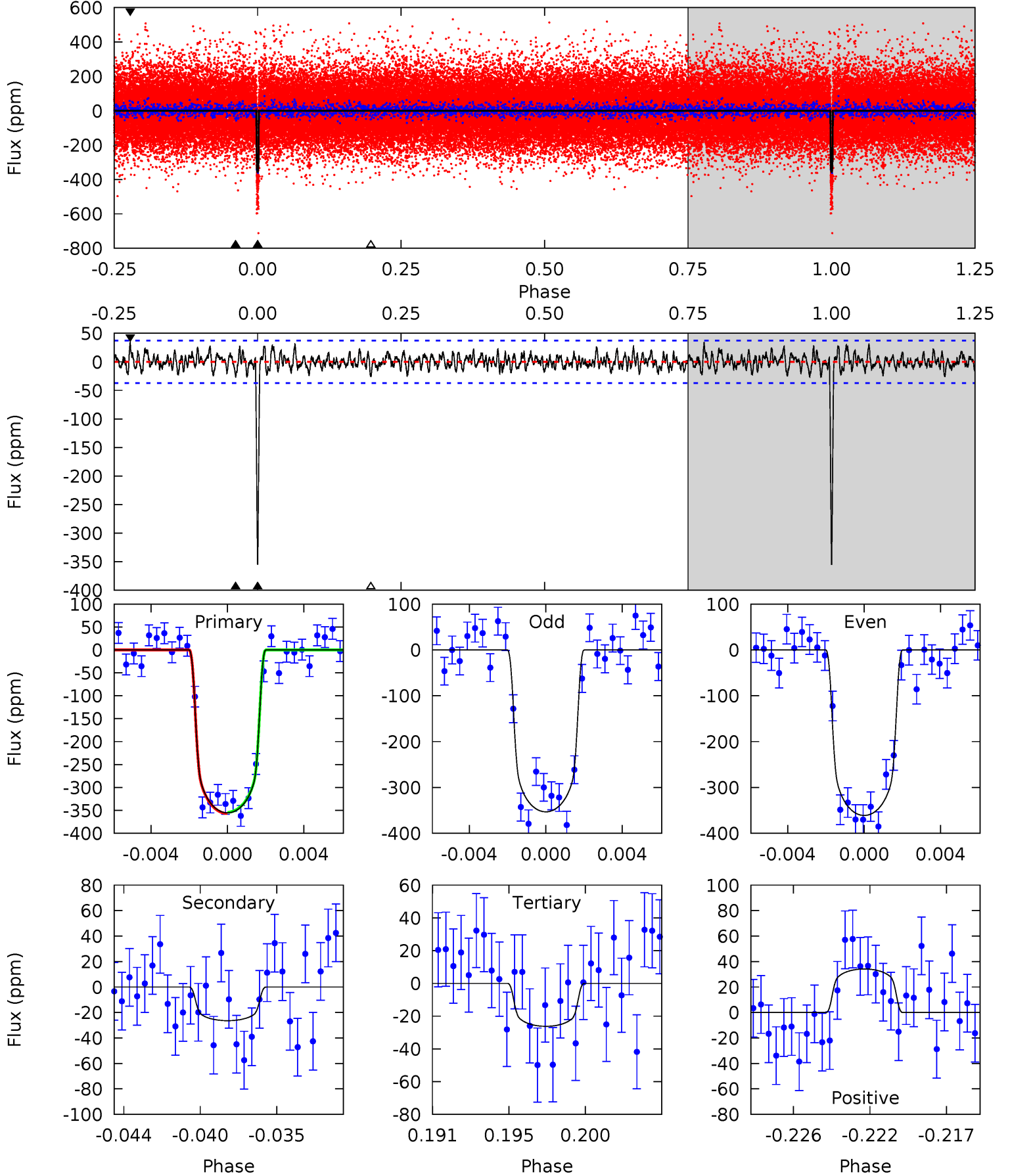
TCE 011669125-01 P= 70.698885 Days $T_0=188.563784$ (BKJD)



DV Model-Shift Uniqueness Test

011669125-01, $P = 70.698114$ Days, $E = 117.871149$ Days

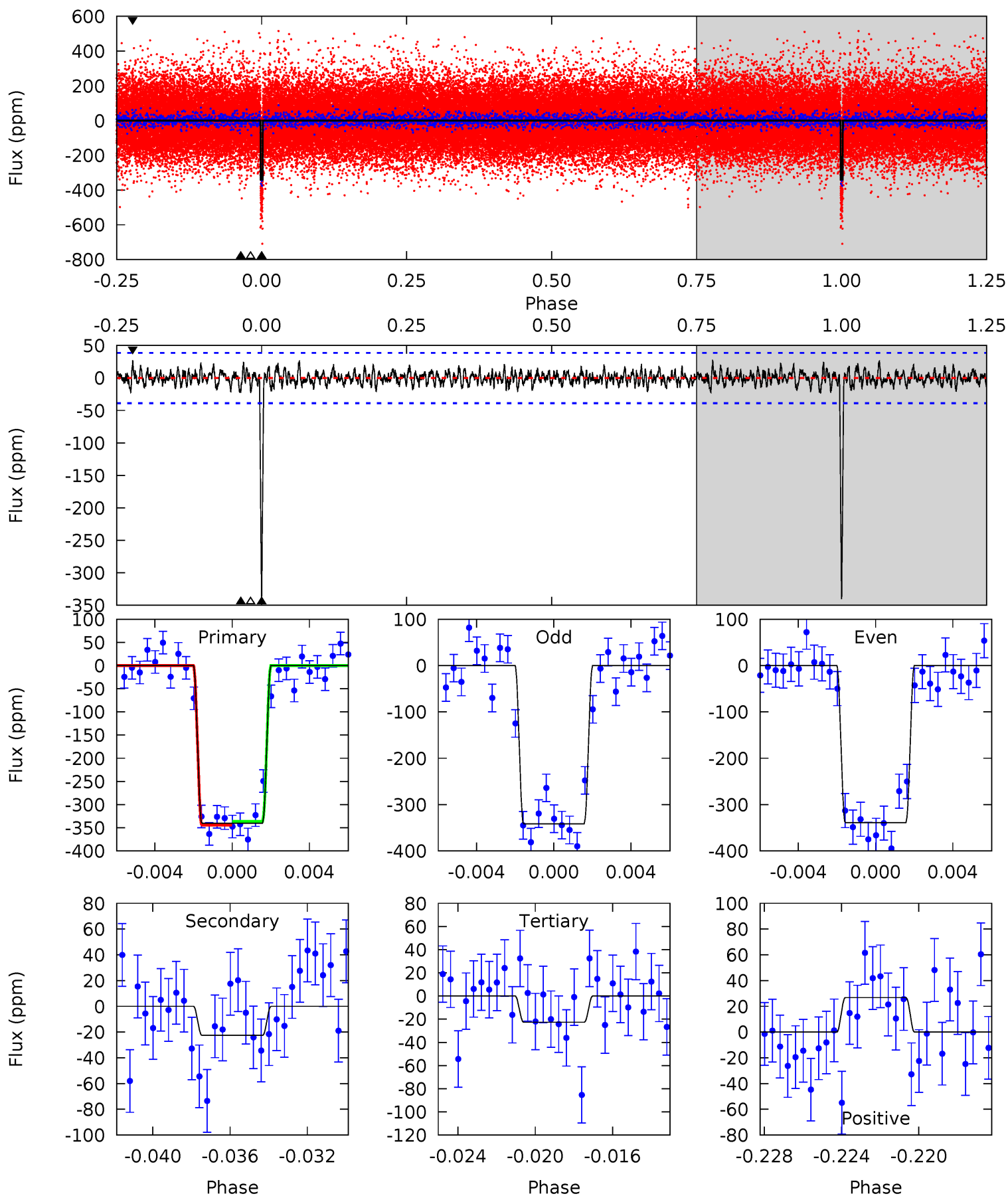
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
49.5	3.68	3.65	4.76	5.18	2.85	1.37	45.8	44.7	0.03	-1.08	0.55	0.95	0.09	0.19



Alt Model-Shift Uniqueness Test

011669125-01, $P = 70.698885$ Days, $E = 117.864899$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
45.7	3.03	3.03	3.60	5.20	2.88	1.06	42.6	42.1	0.00	-0.57	0.16	0.95	0.07	0.58



Stellar Parameters For KIC 011669125

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5811^{+104}_{-116}	$4.536^{+0.030}_{-0.113}$	$-0.200^{+0.150}_{-0.150}$	$0.866^{+0.118}_{-0.050}$	$0.940^{+0.045}_{-0.077}$	$2.039^{+0.274}_{-0.641}$
	+2%/-2%	+1%/-2%	+75%/-75%	+14%/-6%	+5%/-8%	+13%/-31%
Source	SPE59	SPE59	SPE59	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011669125-01 / KOI 1535.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-26 ± 7	$2.00^{+0.16}_{-0.13}$	589^{+22}_{-17}	3401^{+141}_{-173}	378^{+118}_{-107}
Alt.	-23 ± 7	$1.76^{+0.15}_{-0.12}$	590^{+22}_{-16}	3445^{+202}_{-202}	408^{+173}_{-136}

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

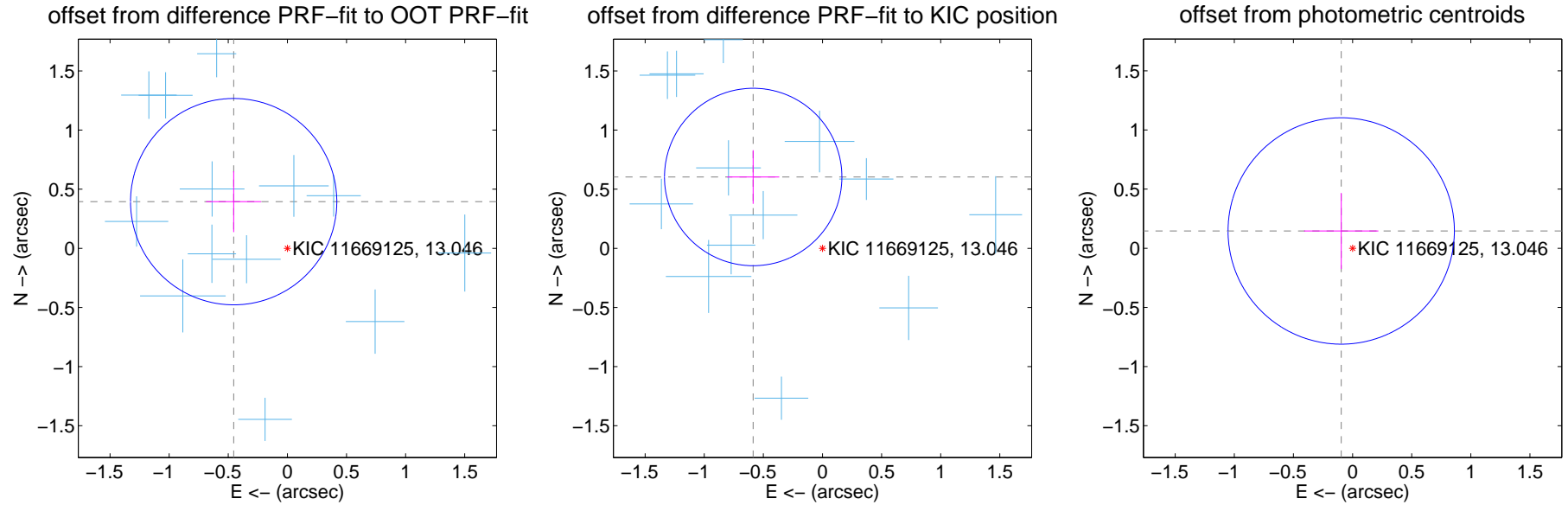
DV Centroid Data

Supplemental centroid analysis for 011669125-01. Kepler magnitude: 13.05. Transit SNR 32.48

There are 13 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.40 arcsec

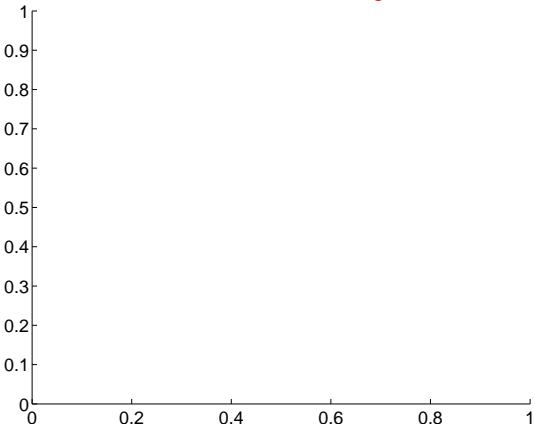
	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.602 ± 0.291	2.07	0.454 ± 0.233	0.395 ± 0.258
PRF-fit source offset from KIC position	0.841 ± 0.250	3.36	0.586 ± 0.221	0.603 ± 0.227
photometric centroid source offset	0.17 ± 0.32	0.55	0.10 ± 0.31	0.15 ± 0.32



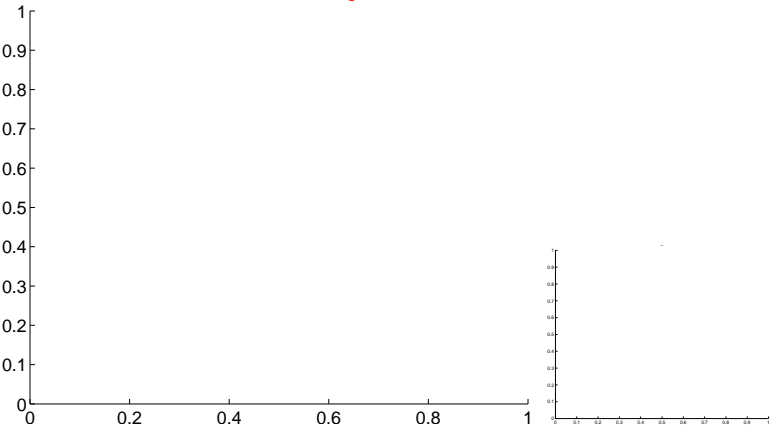
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

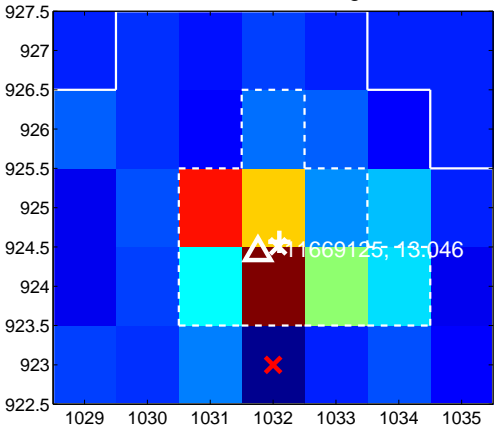
Q1 no difference image



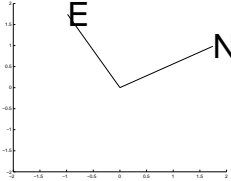
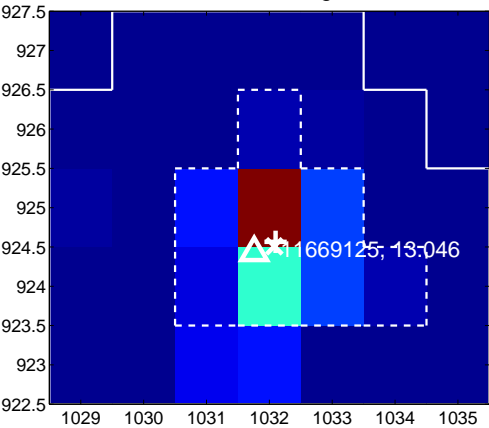
Q1 no OOT image



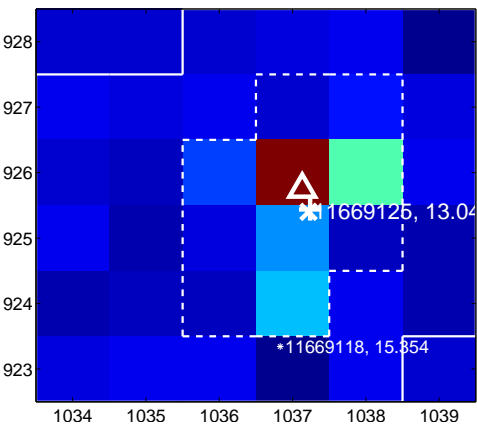
Q2 difference image



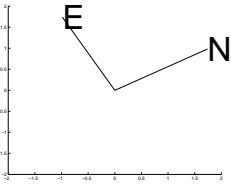
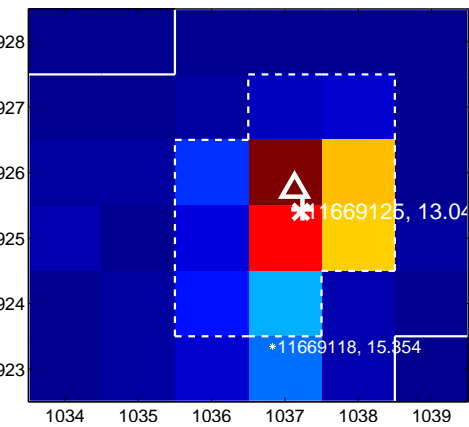
Q2 OOT image



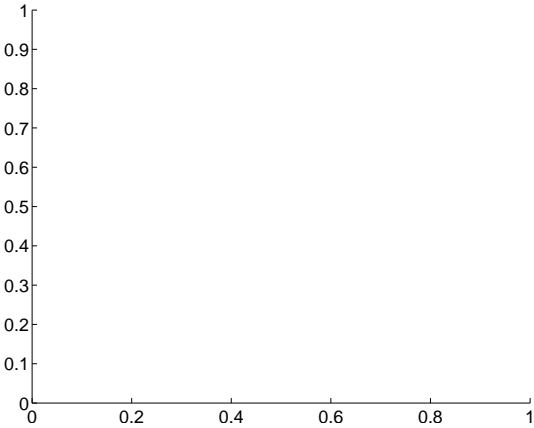
Q3 difference image



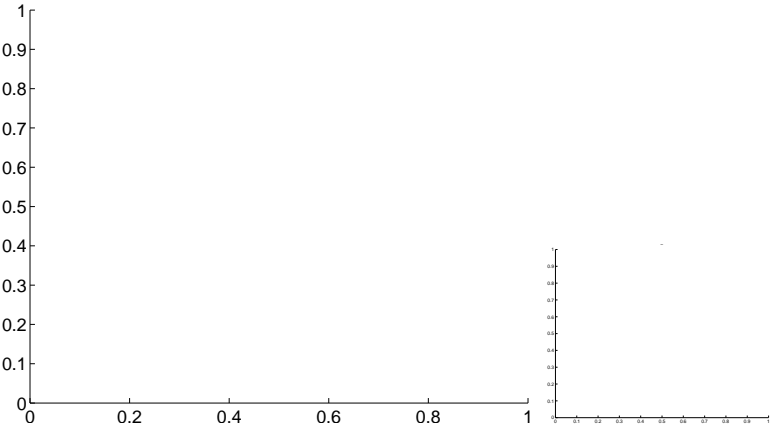
Q3 OOT image



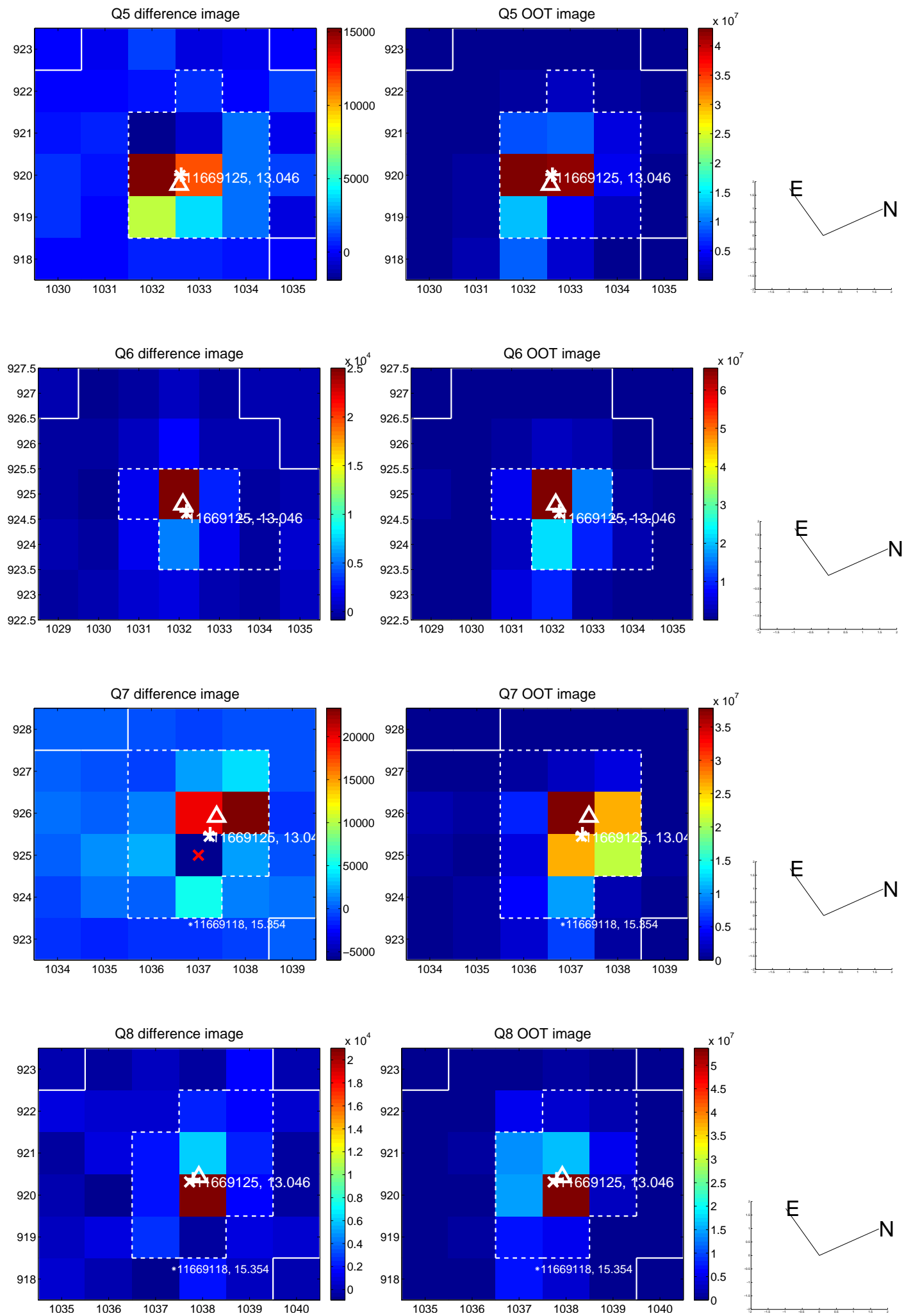
Q4 no difference image



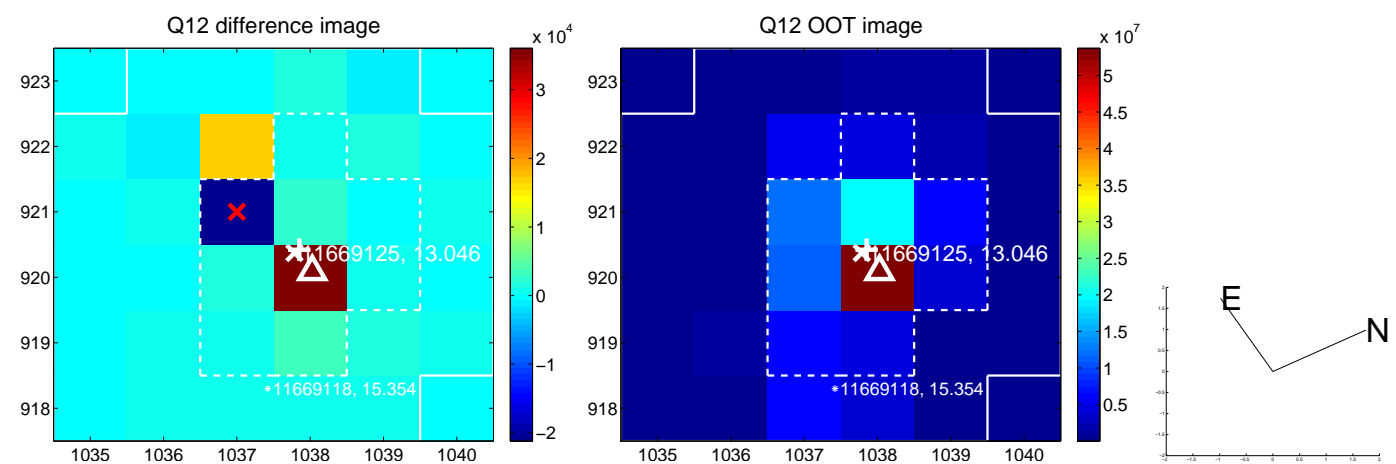
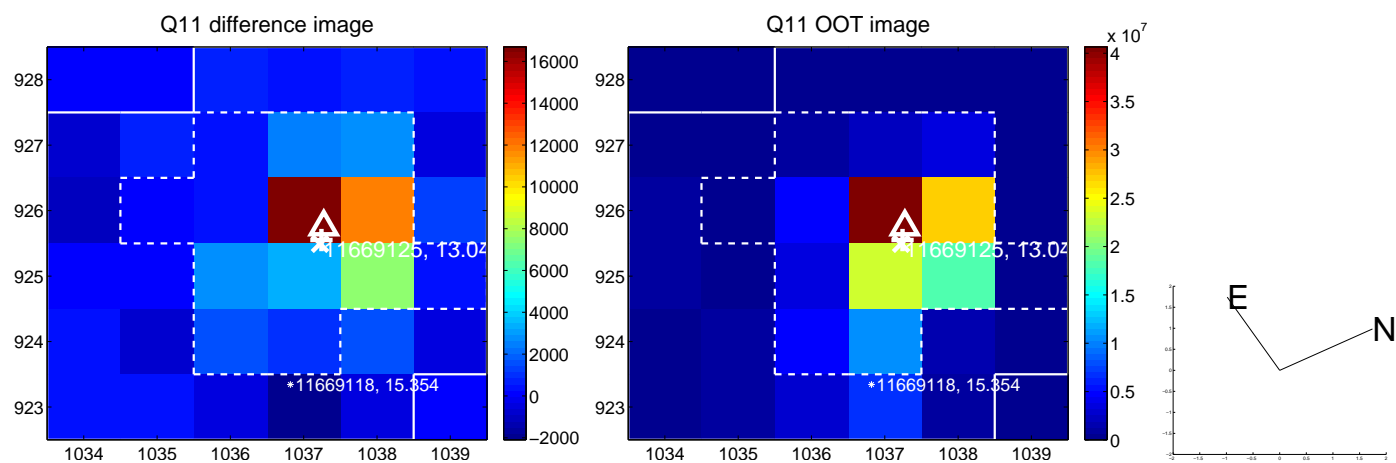
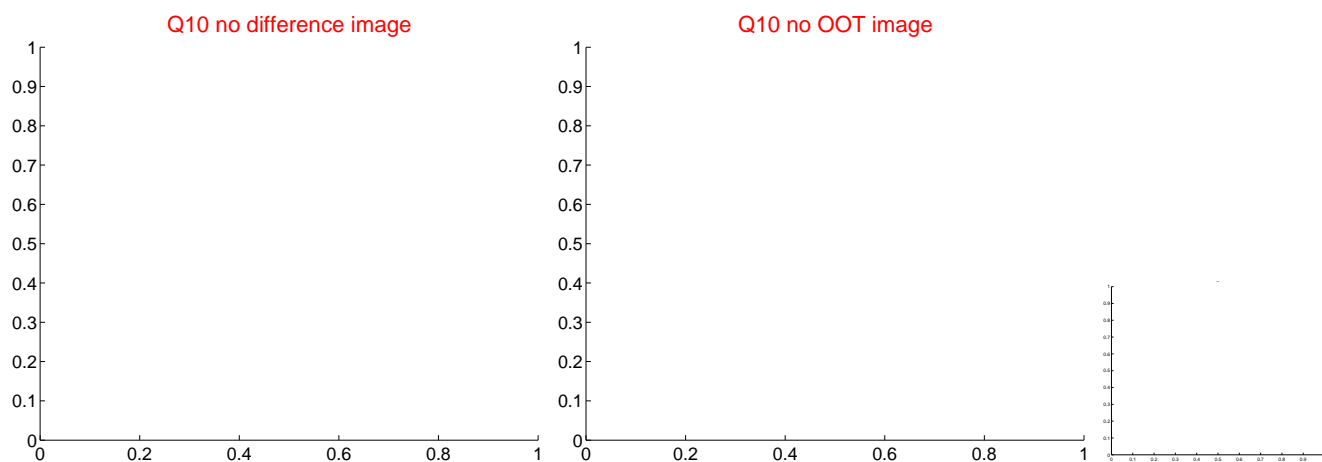
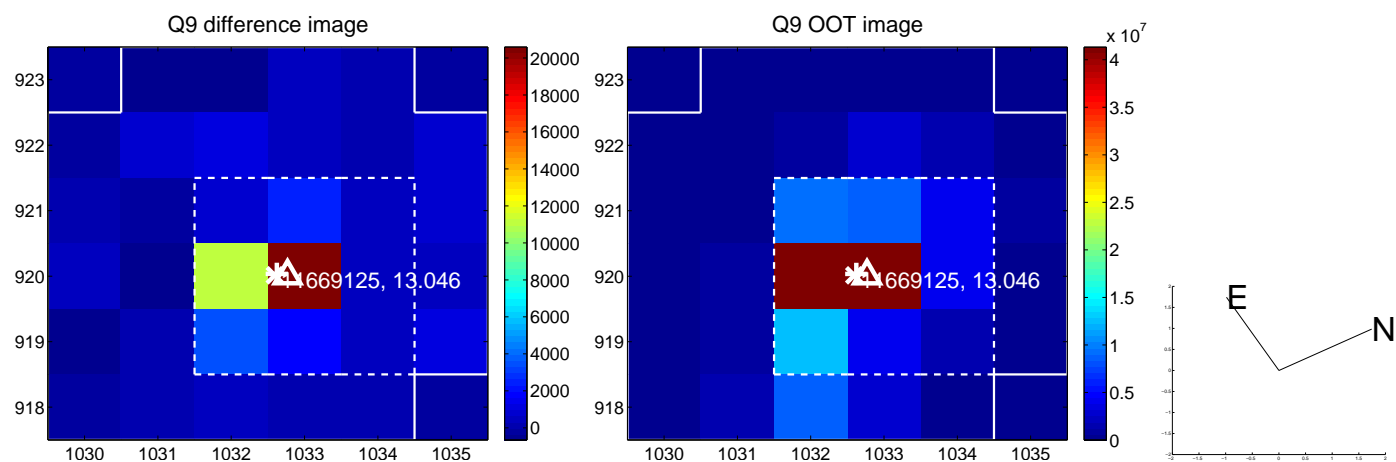
Q4 no OOT image



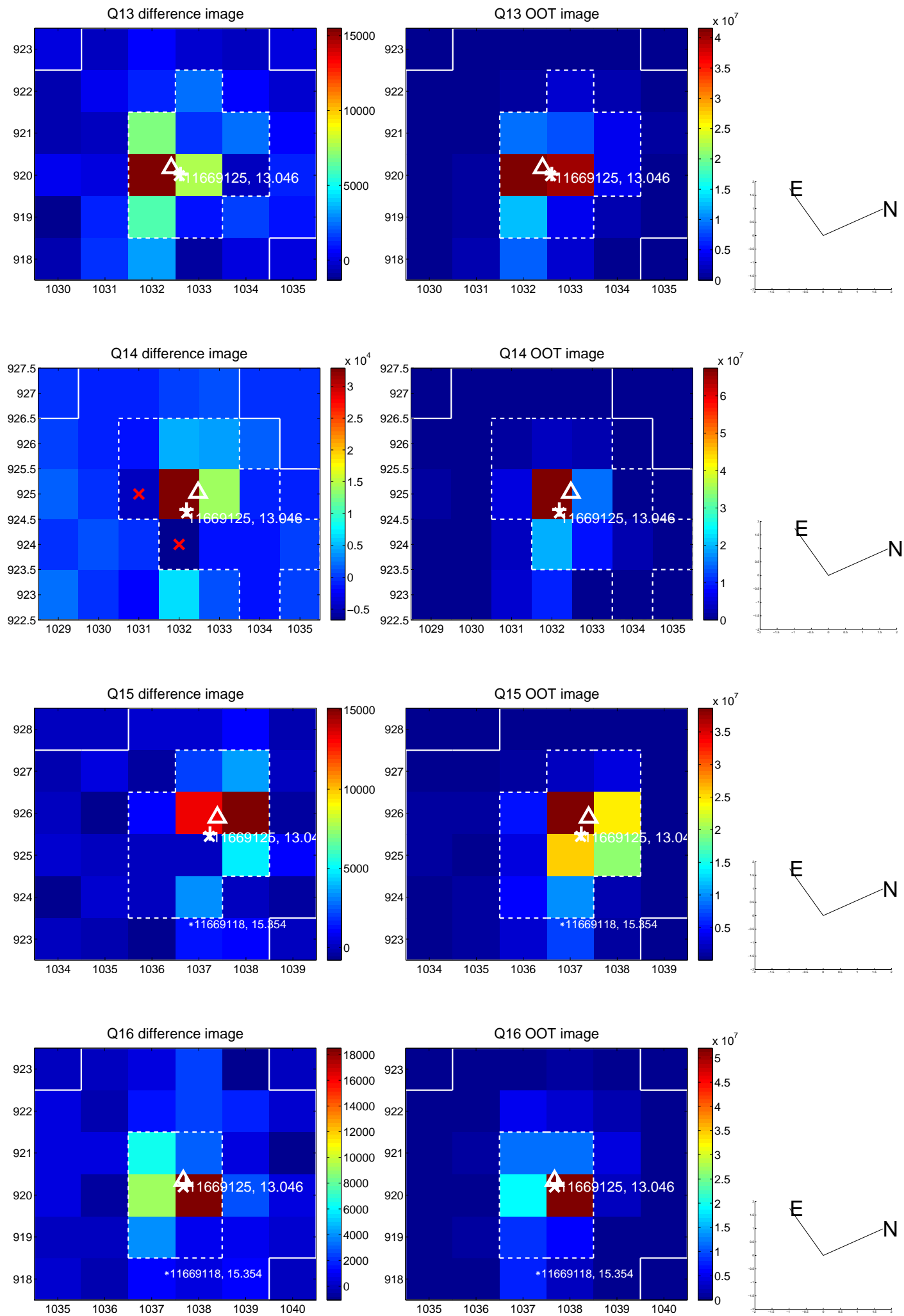
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



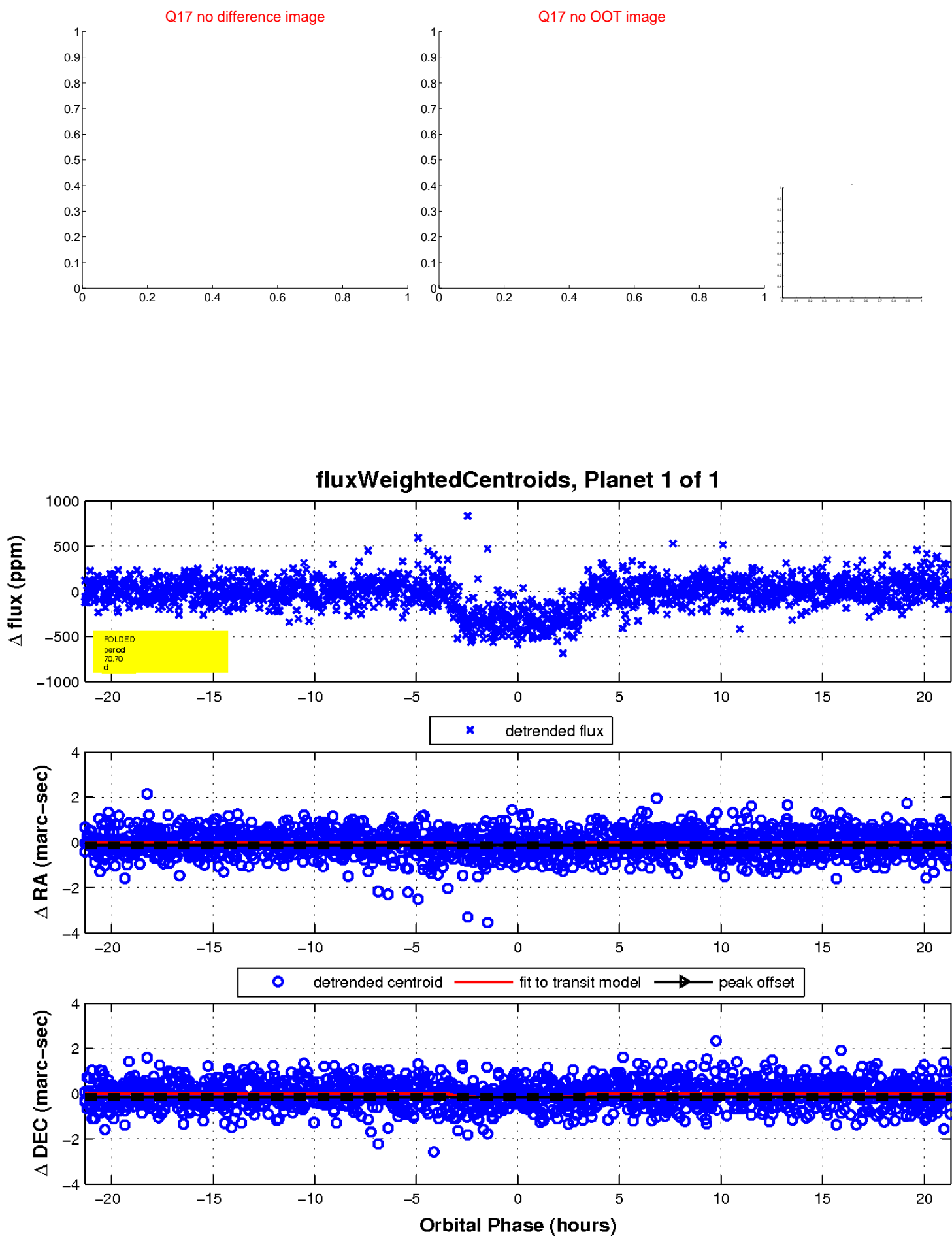
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



UKIRT Image

Declination

