

KIC 003429626

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})
003429626-01	OBS	No	543.689279	464.764712	772.5	3.460	30.5	21.8	0.97	5825	3.00	0.63
003429626-02	OBS	No	533.246362	470.967413	713.0	5.716	22.4	16.1	0.97	5825	3.30	0.65
003429626-06	OBS	No	512.410561	495.614041	624.6	10.231	15.9	15.0	0.97	5825	2.46	0.68

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003429626-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003429626-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003429626-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

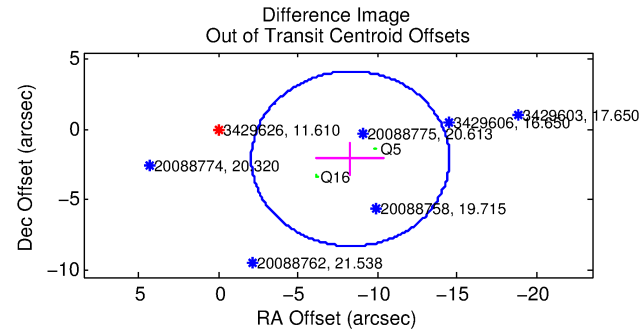
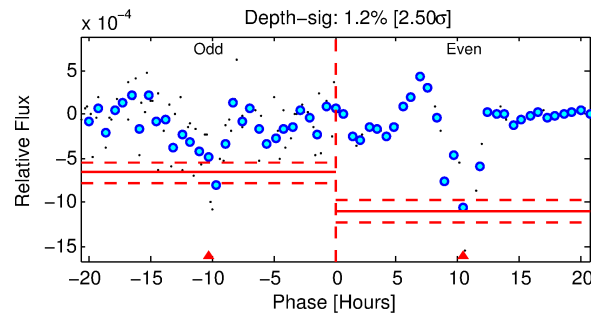
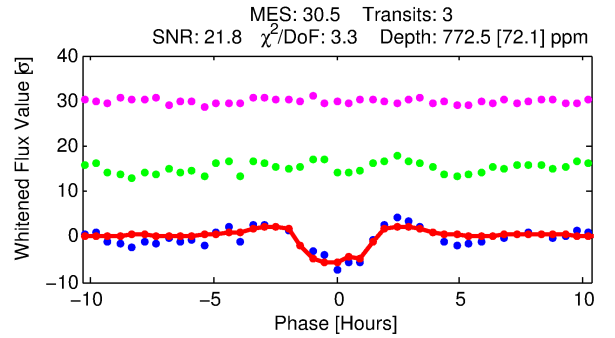
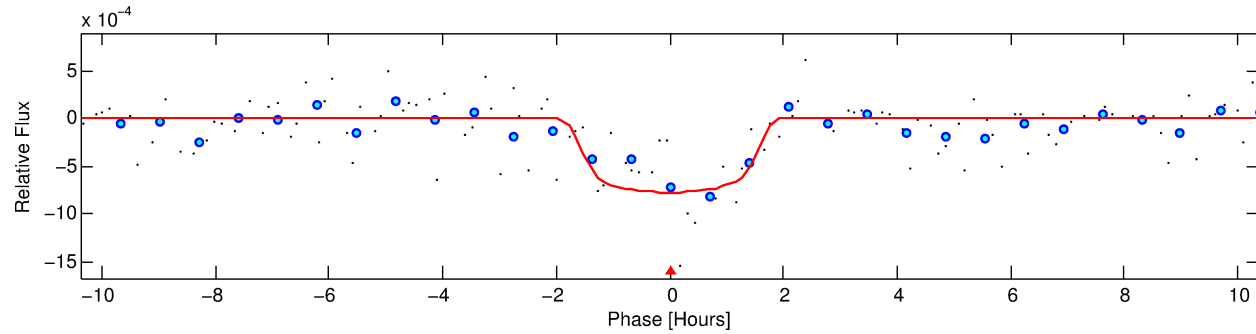
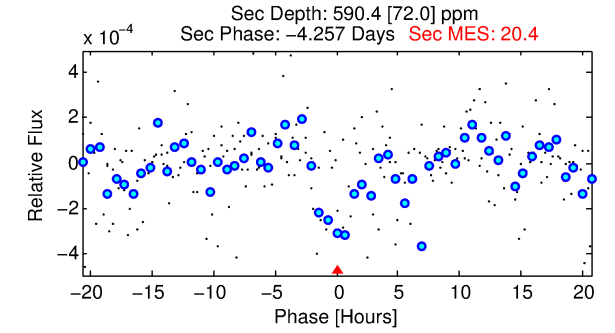
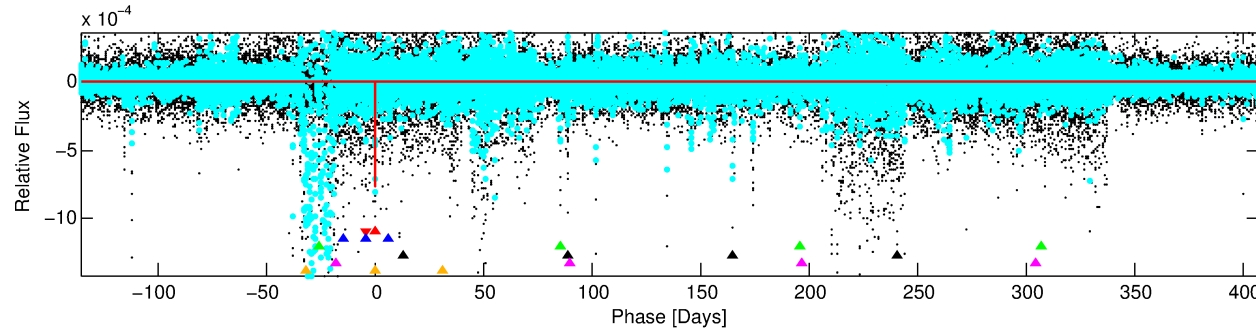
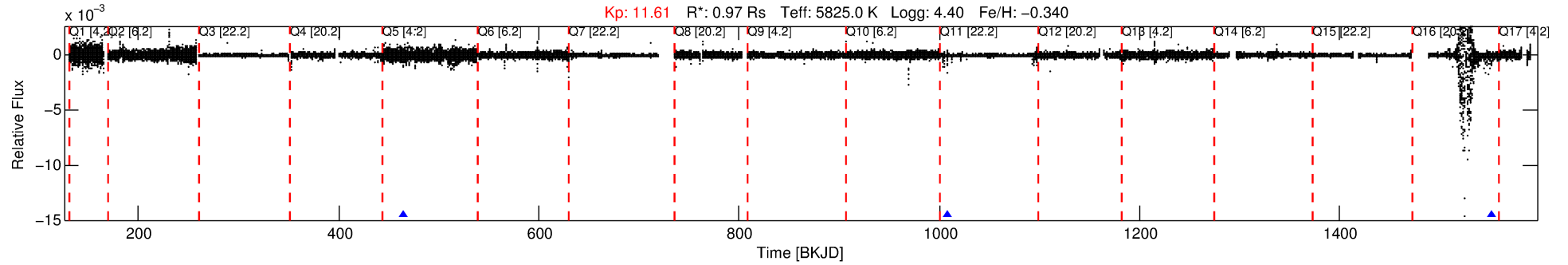
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003429626-01

No Significant Match Found

DV One-Page Summary

KIC: 3429626 Candidate: 1 of 6 Period: 543.689 d



DV Fit Results:

Period = 543.68928 [0.00569] d
Epoch = 464.7647 [0.0076] BKJD
Rp/R* = 0.0284 [0.0158]
a/R* = 754.72 [1954.33]
b = 0.81 [1.10]
Seff = 0.63 [0.23]
Teq = 227 [21] K
Rp = 3.00 [1.88] Re
a = 1.2403 [0.2946] AU
Ag = 55426.80 [64598.38] [0.86σ]
Teffp = 5386 [1512] K [3.41σ]

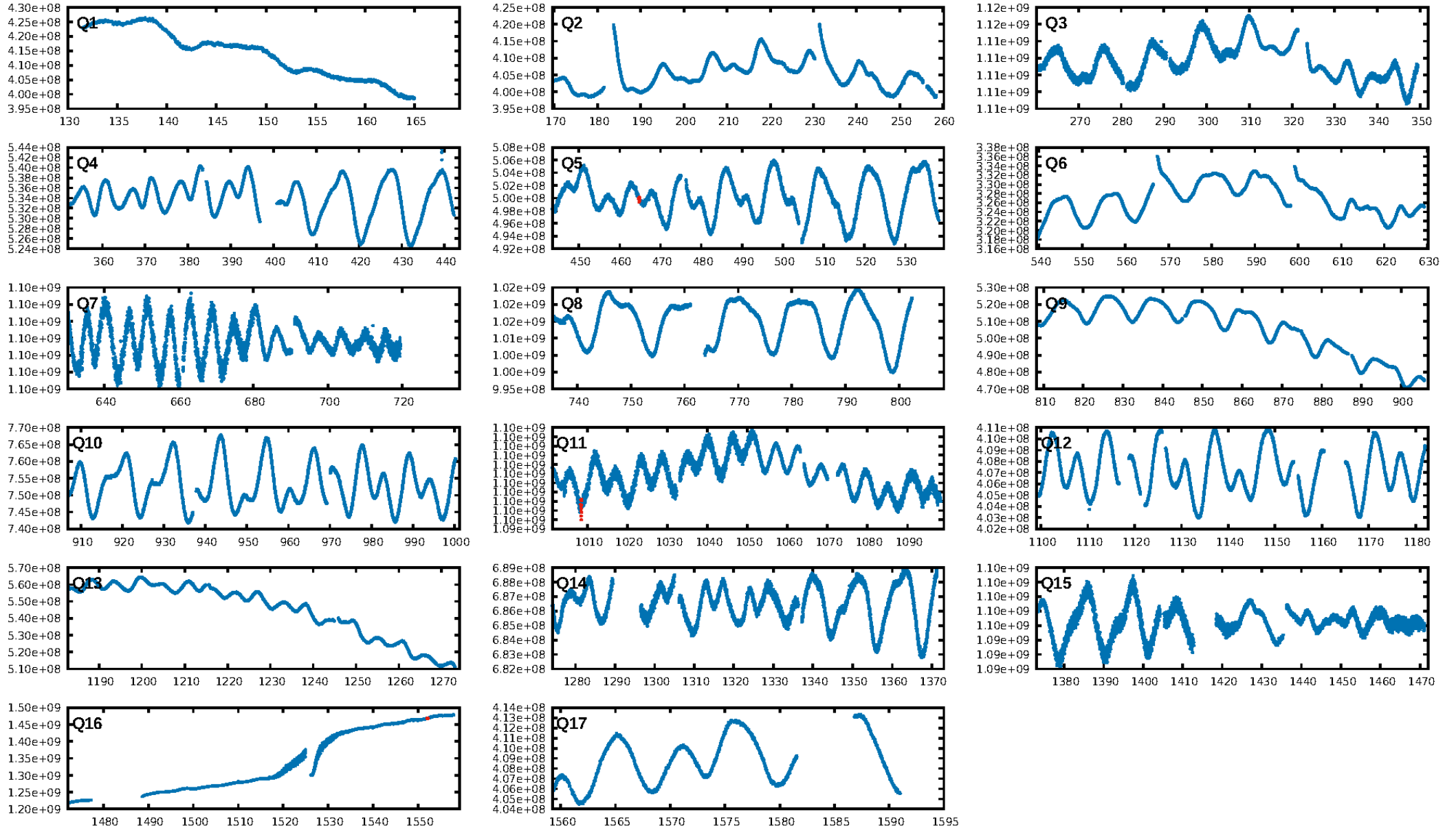
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [37.51σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 13.5%
ModelChiSquareGof-sig: 2.6%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -0.54
Centroid-sig: 1.6%
Centroid-so: 4.293 arcsec [4.10σ]
OotOffset-rm: 8.550 arcsec [4.12σ]
OotOffset-st: 0/0/1/1 [2]
KicOffset-rm: 6.305 arcsec [13.56σ]
KicOffset-st: 0/0/1/1 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [2/2]

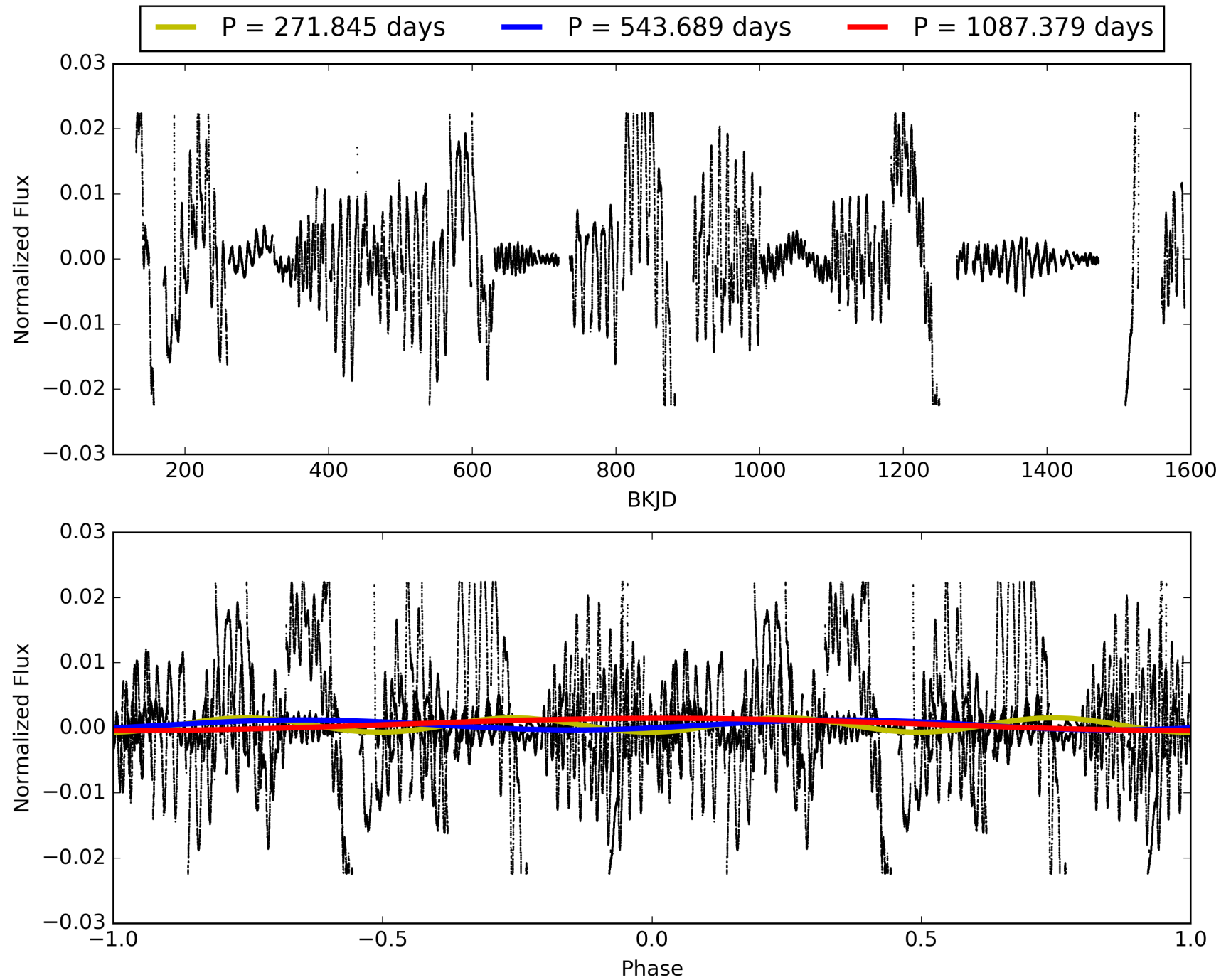
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:58:06 Z

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

TCE 003429626-01, PDC Light Curves

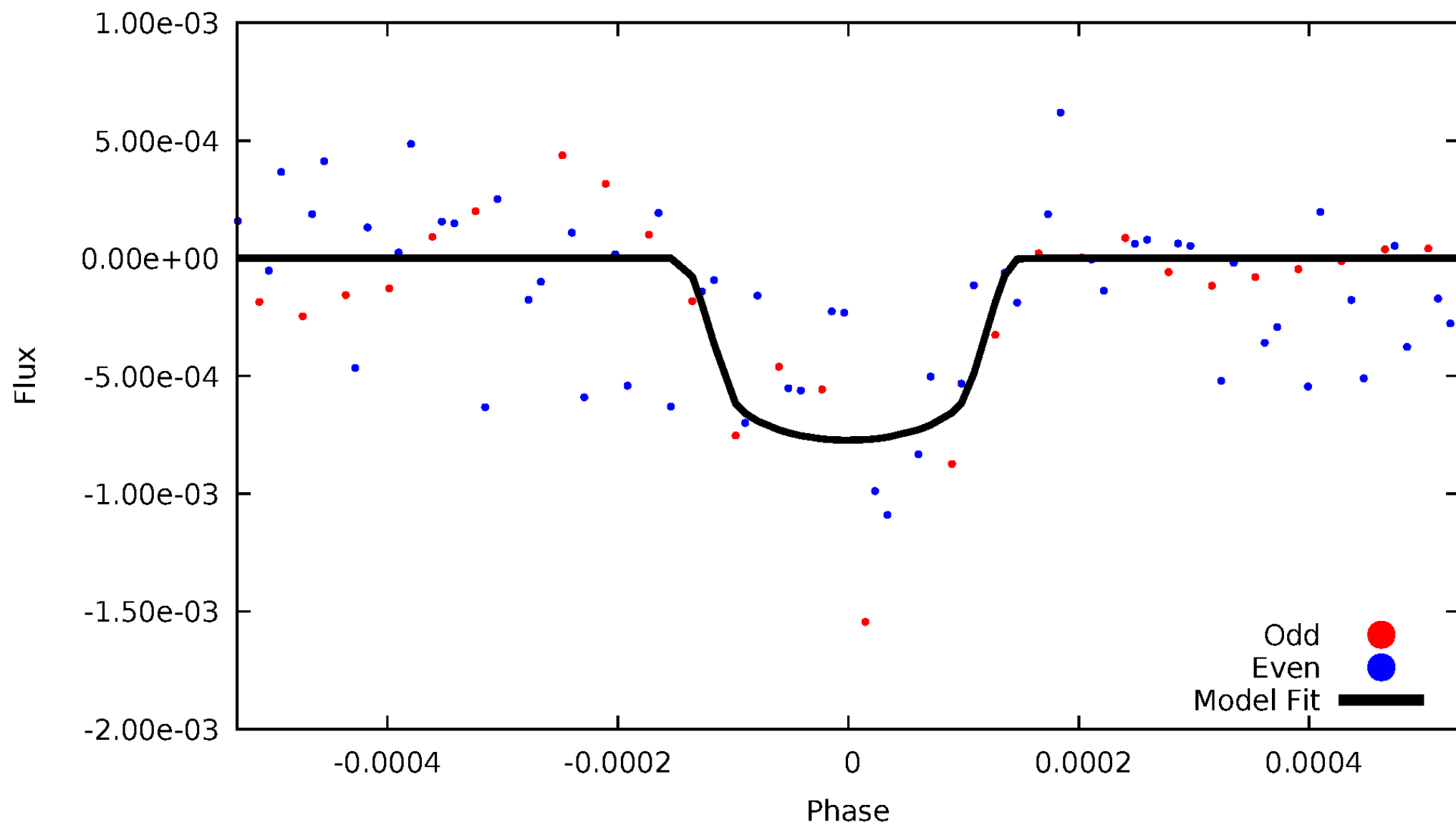


TCE 003429626-01



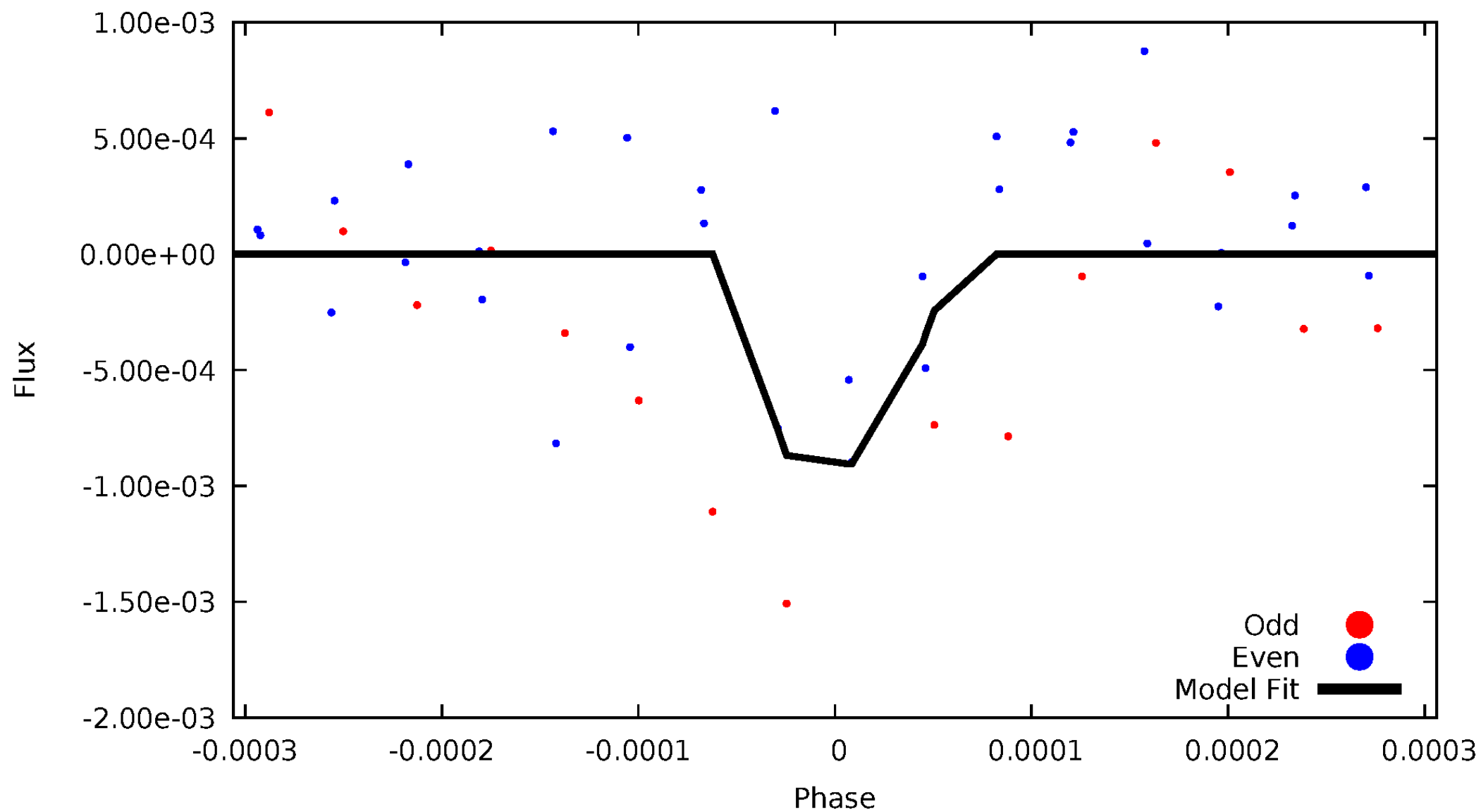
DV Odd/Even

TCE 003429626-01

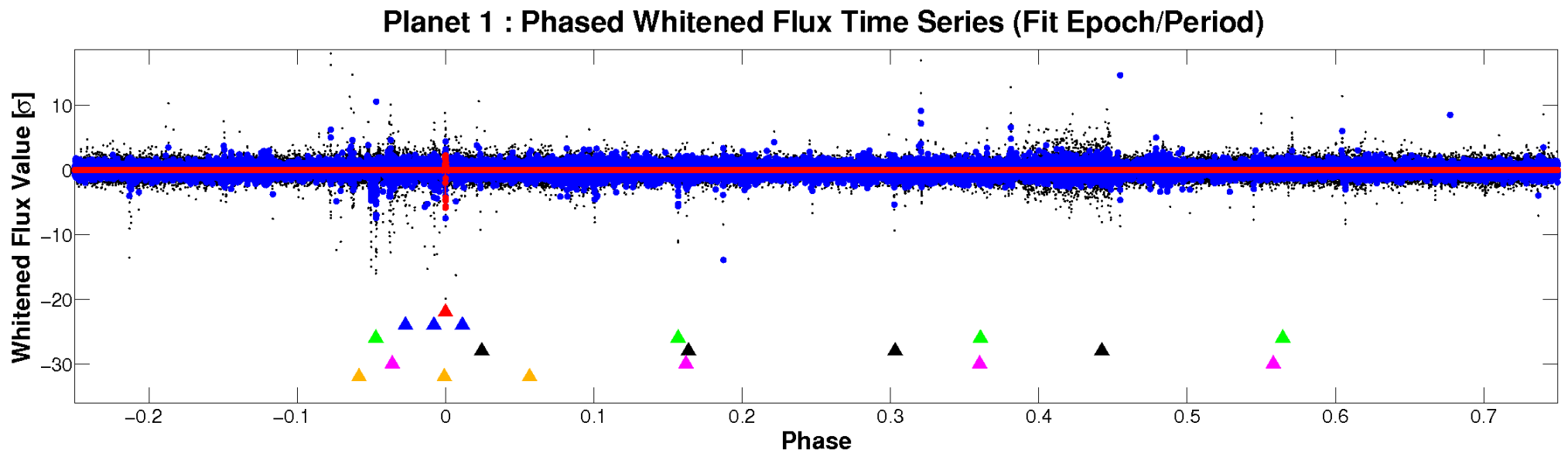
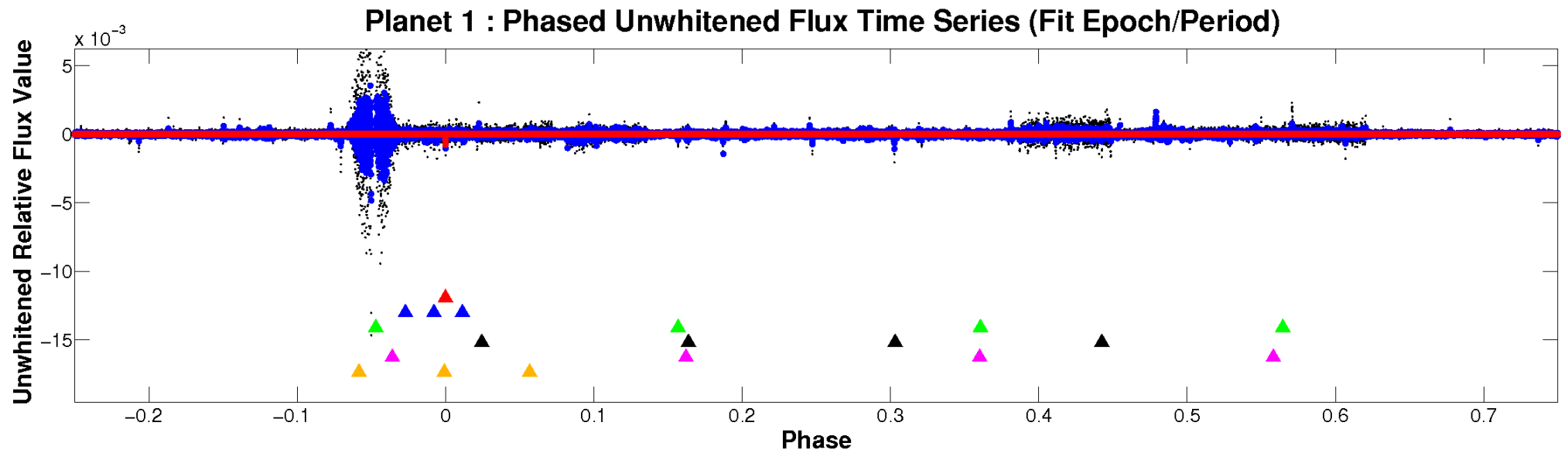


ALT Odd/Even

TCE 003429626-01

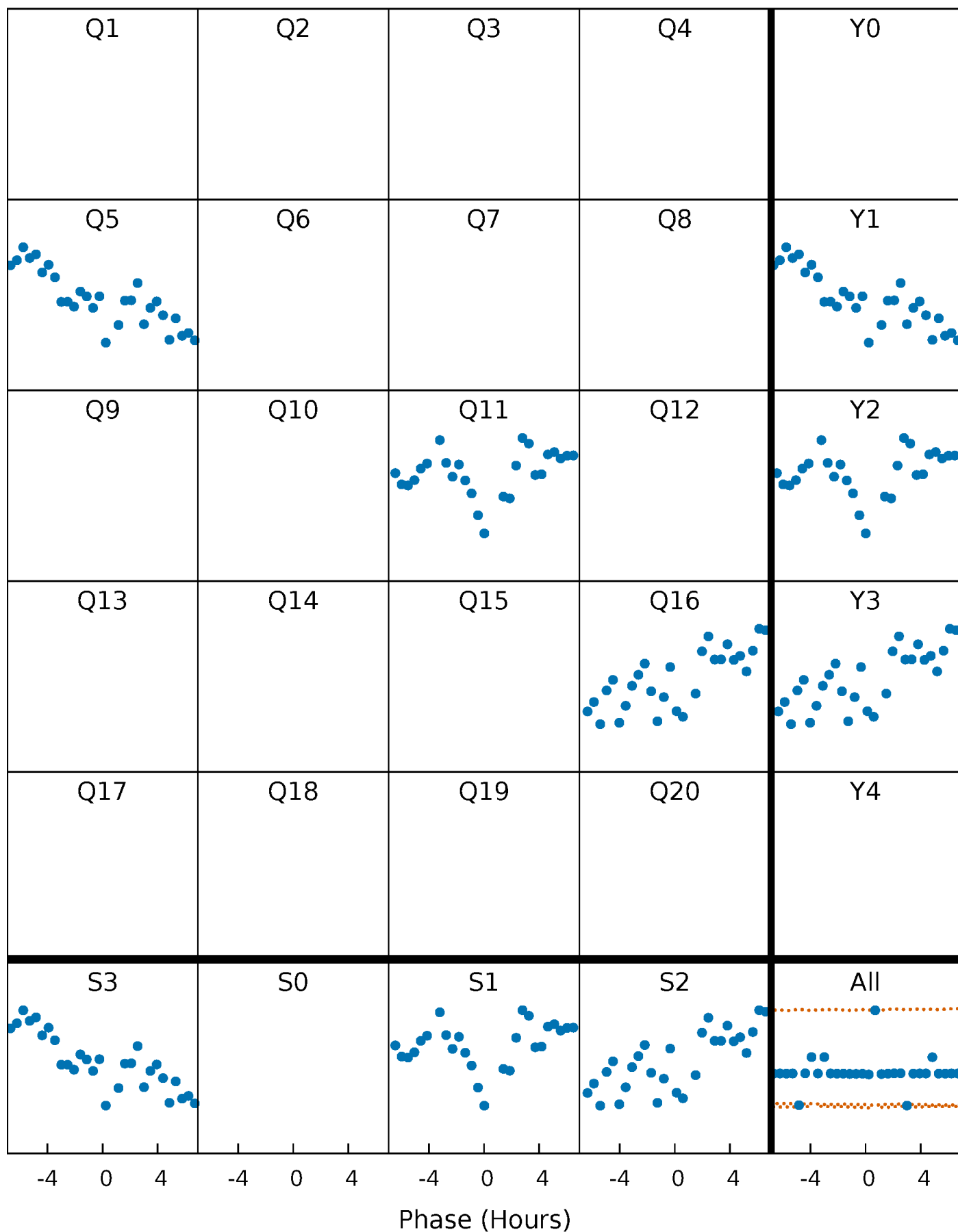


Non-Whitened Vs. Whitened Light Curve



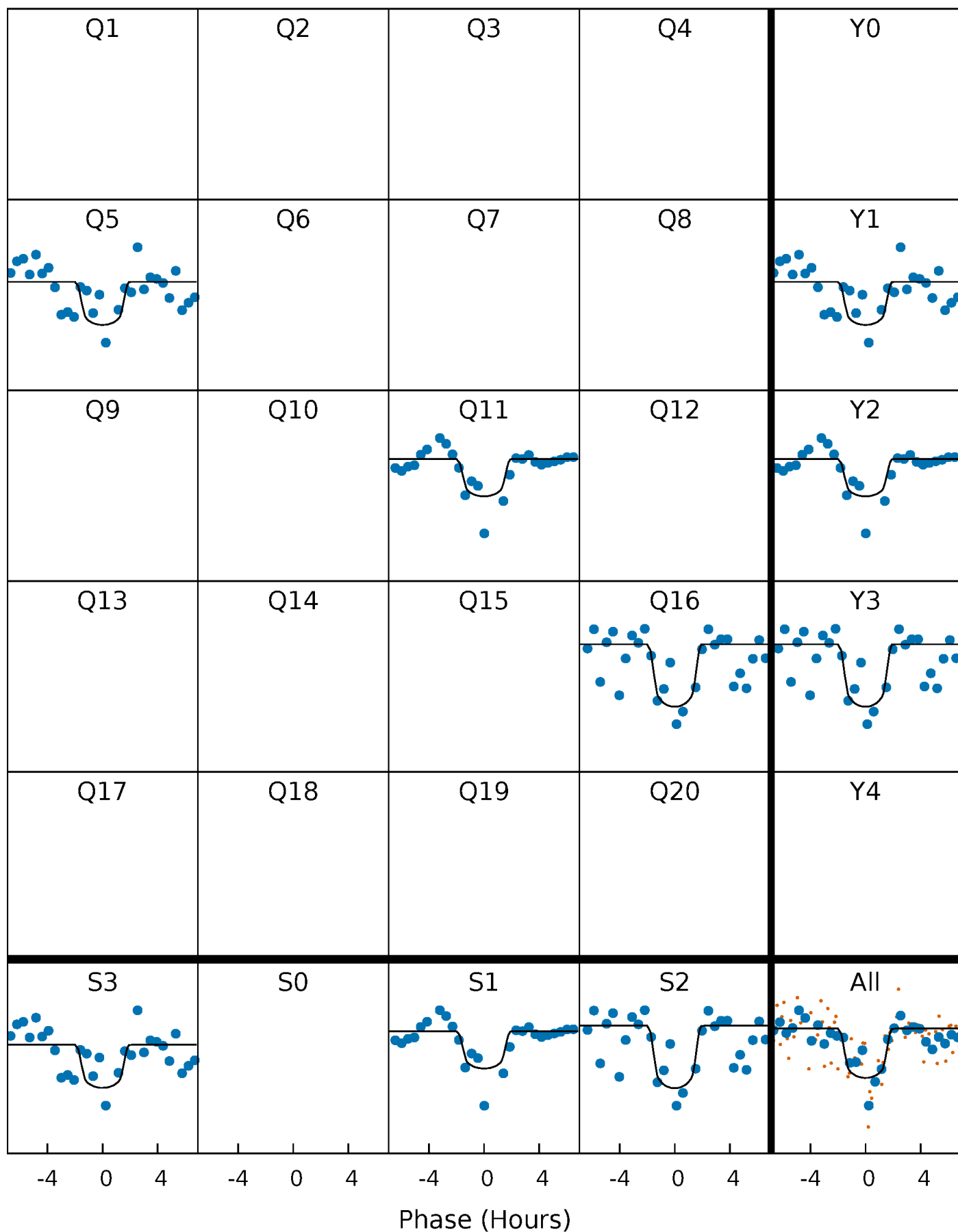
PDC Quarter-Phased Transit Curves

TCE 003429626-01 P=543.689279 Days $T_0=464.764712$ (BKJD)



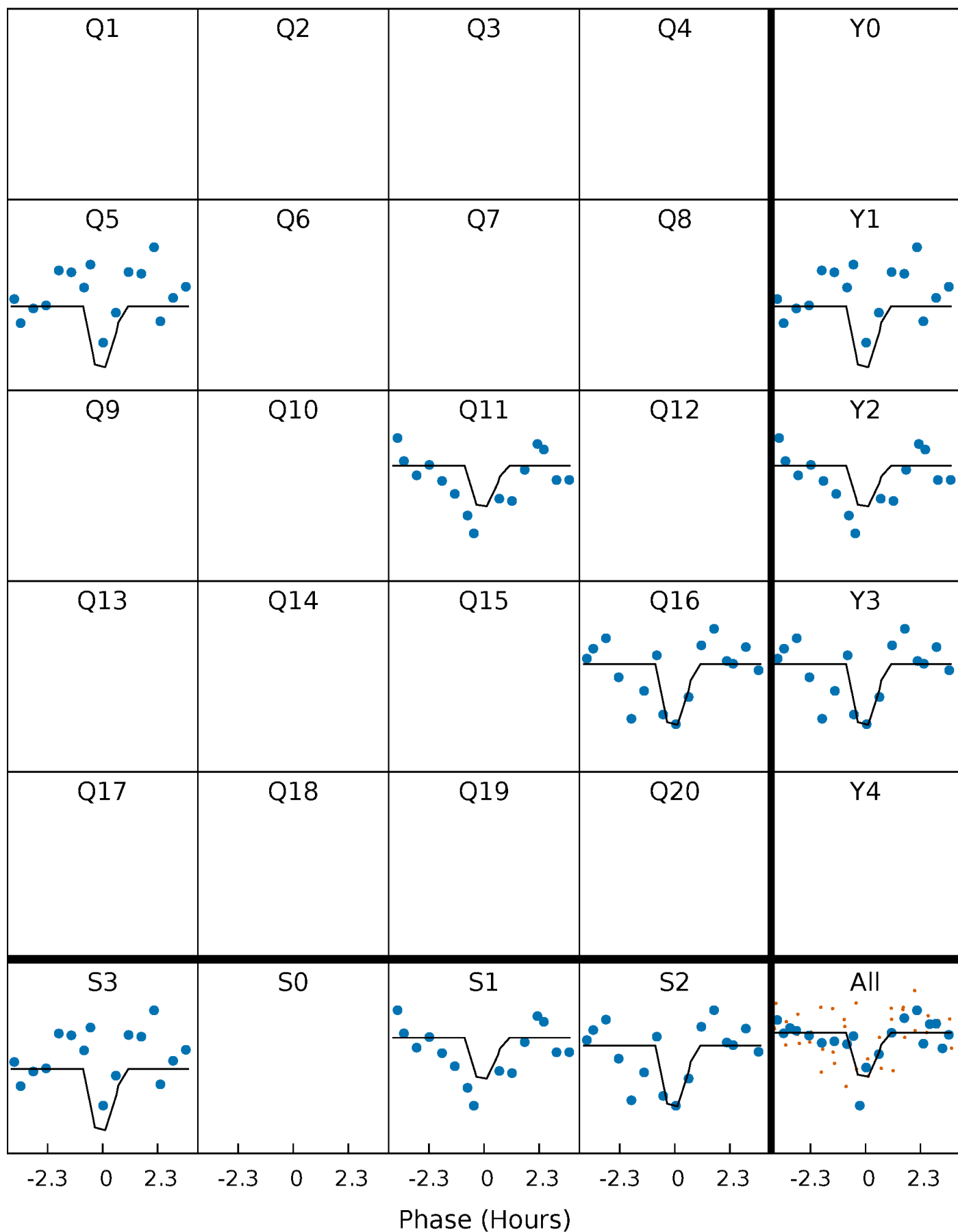
DV Quarter-Phased Transit Curves

TCE 003429626-01 P=543.689279 Days $T_0=464.764712$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

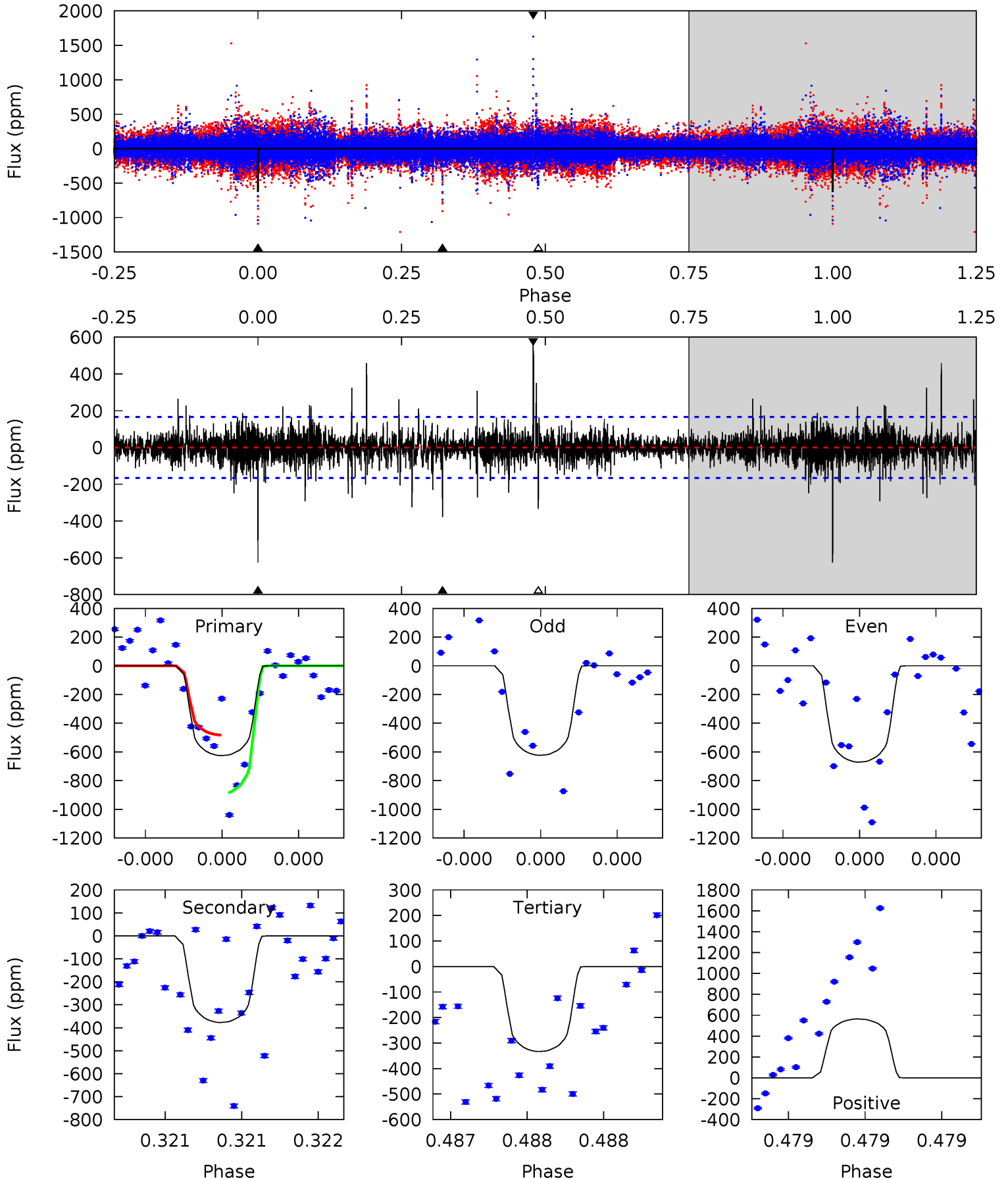
TCE 003429626-01 P=543.696165 Days $T_0=464.779305$ (BKJD)



DV Model-Shift Uniqueness Test

003429626-01, P = 543.689279 Days, E = 464.764712 Days

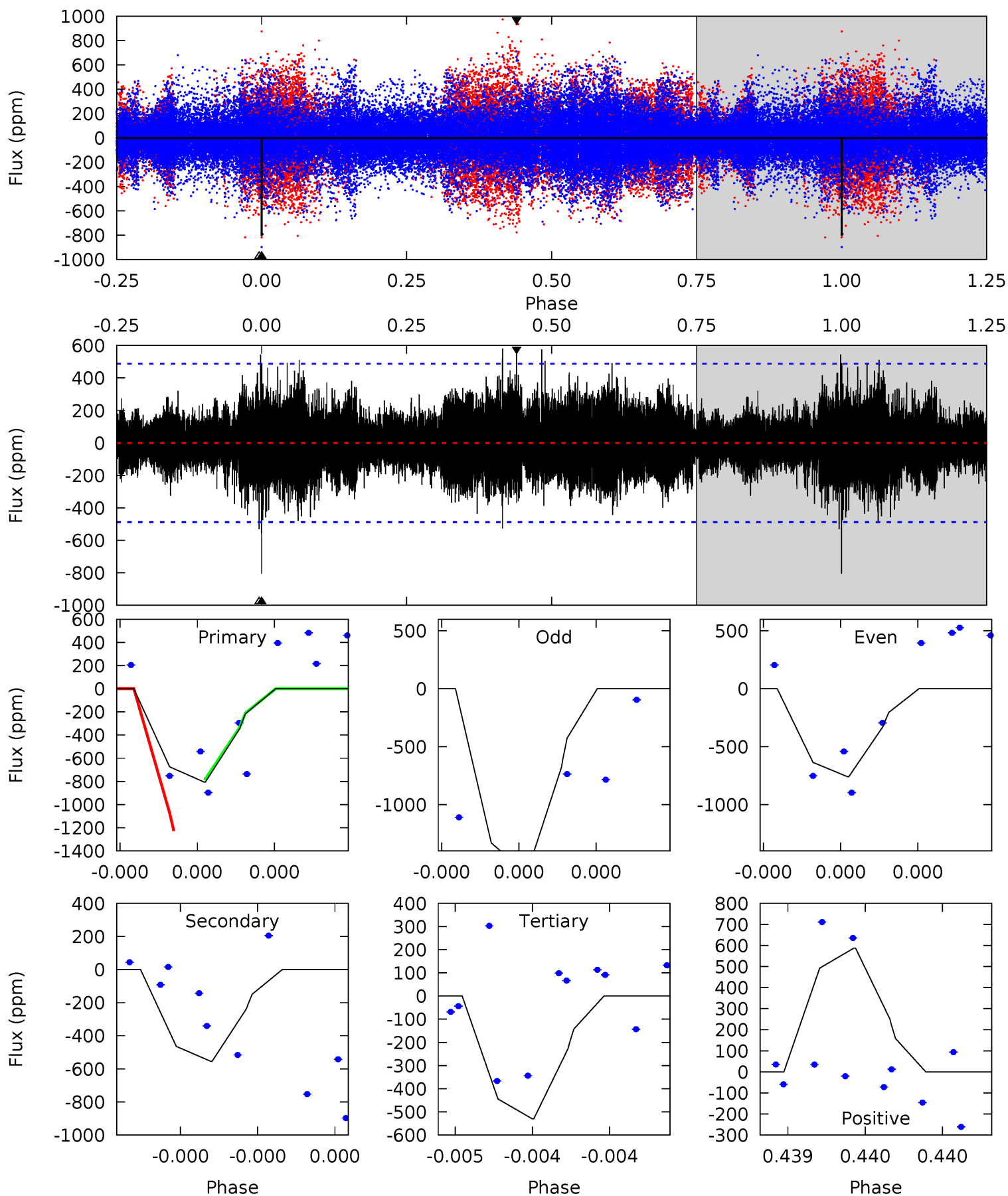
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.4	12.9	11.4	19.3	5.68	3.64	1.59	10.0	2.11	1.50	-6.40	0.61	1.02	0.47	6.56



Alt Model-Shift Uniqueness Test

003429626-01, P = 543.696165 Days, E = 464.779305 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.70	6.69	6.39	7.08	5.88	3.94	1.30	3.31	2.62	0.29	-0.40	4.02	0.95	0.42	2.85



Stellar Parameters For KIC 003429626

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5825^{+175}_{-193}	$4.401^{+0.132}_{-0.182}$	$-0.340^{+0.300}_{-0.300}$	$0.968^{+0.279}_{-0.172}$	$0.860^{+0.119}_{-0.079}$	$1.335^{+0.786}_{-0.670}$
	+3%/-3%	+3%/-4%	+88%/-88%	+29%/-18%	+14%/-9%	+59%/-50%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 003429626-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-377 ± 29	$3.17^{+1.77}_{-1.62}$	319^{+22}_{-19}	4825^{+1810}_{-722}	31162^{+97655}_{-17897}
Alt.	-555 ± 83	$3.24^{+1.69}_{-1.74}$	320^{+23}_{-19}	5209^{+2416}_{-799}	$45668^{+170605}_{-27309}$

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

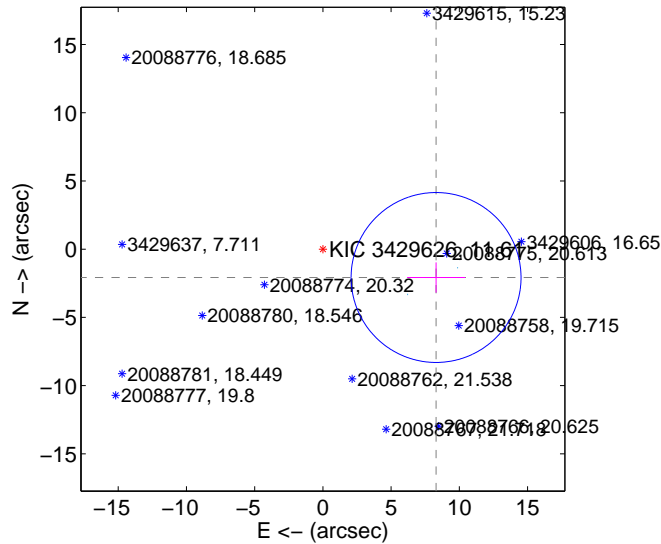
Supplemental centroid analysis for 003429626-01. **Kepler magnitude: 11.61.** Transit SNR 21.76

There are 2 quarters with good PRF difference image offsets

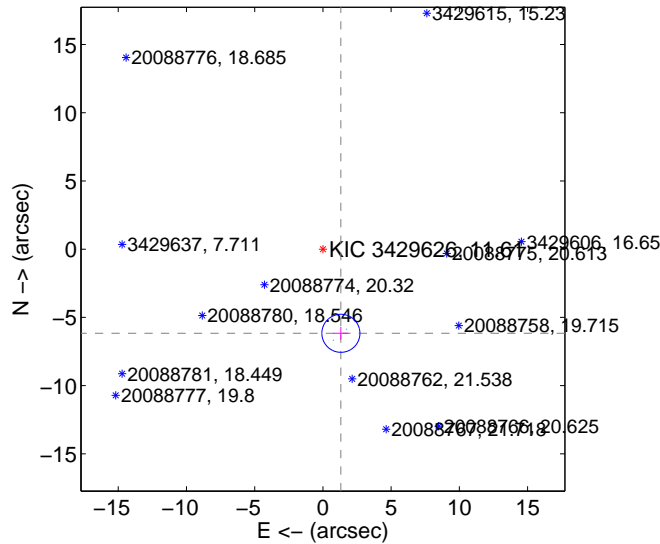
The OOT PRF centroid is offset from the target star catalog position by about 6.39 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.550 ± 2.075	4.12	-8.294 ± 2.121	-2.077 ± 1.104
PRF-fit source offset from KIC position	6.305 ± 0.465	13.56	-1.317 ± 0.560	-6.165 ± 0.460
photometric centroid source offset	4.29 ± 1.05	4.10	0.27 ± 1.01	-4.28 ± 1.05

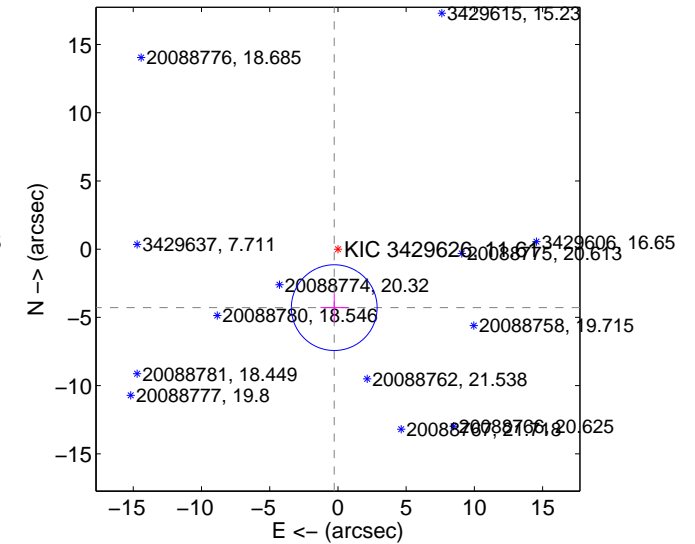
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids

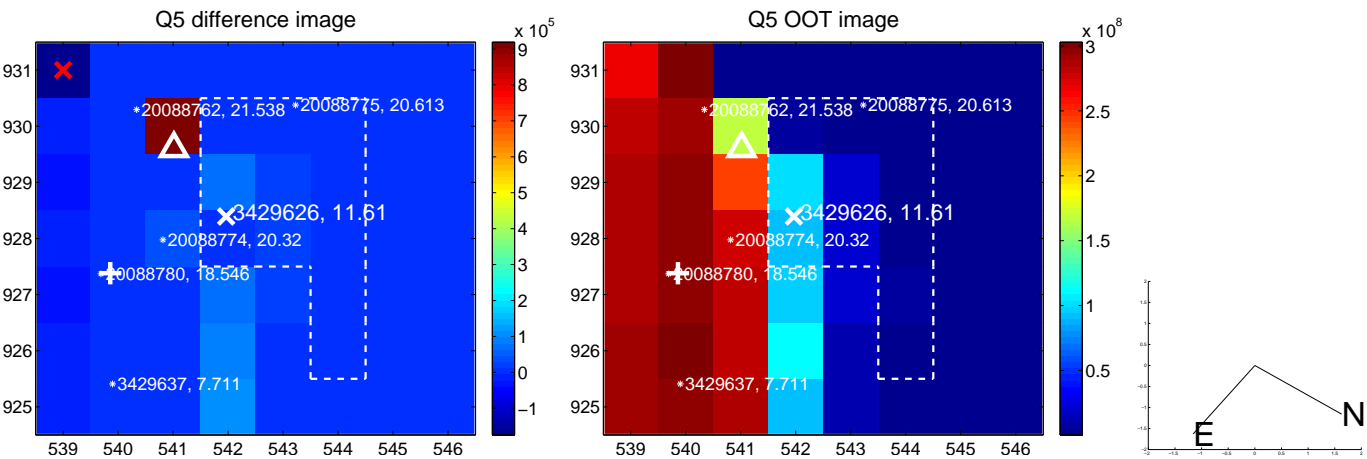


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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



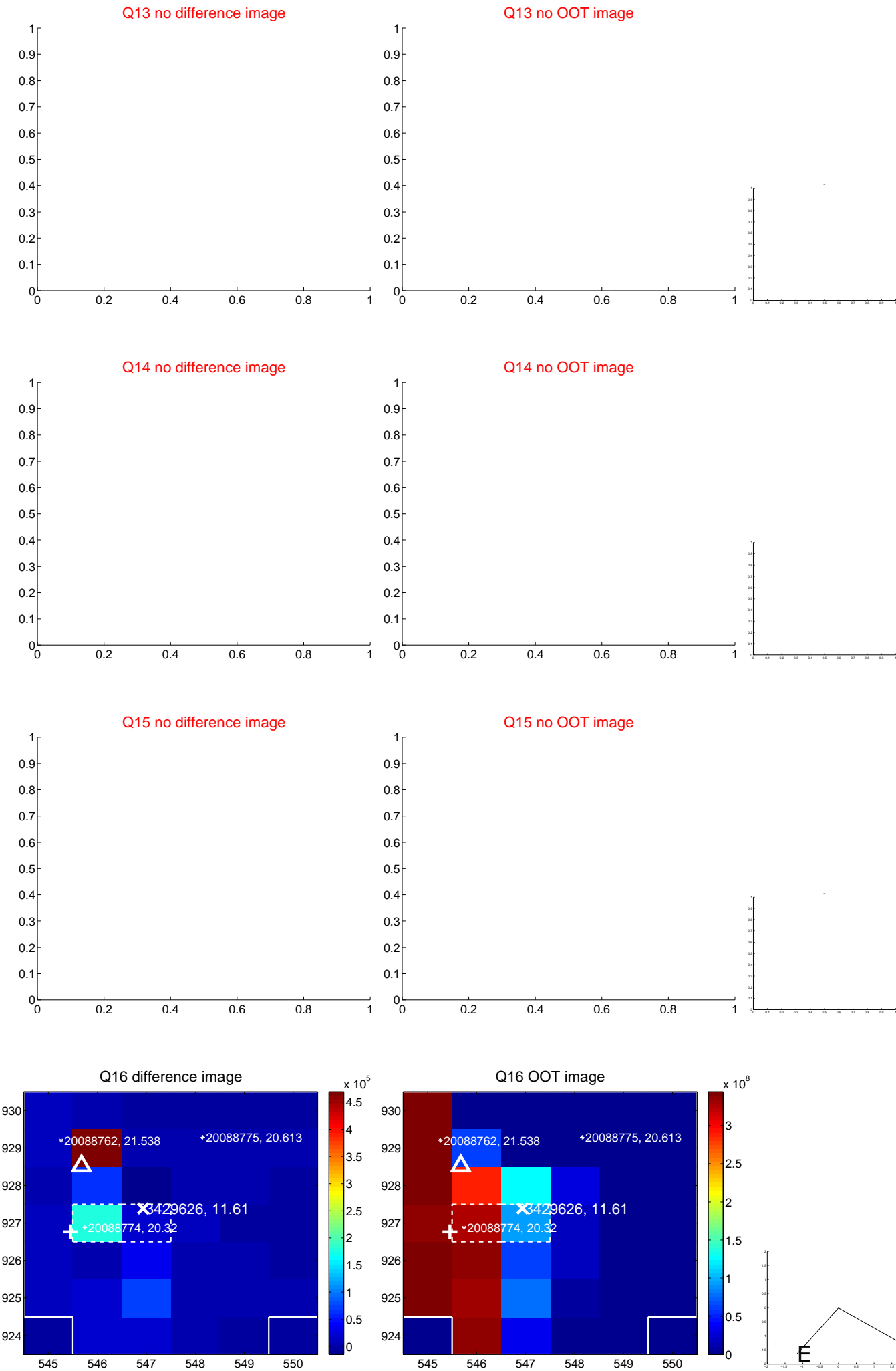
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



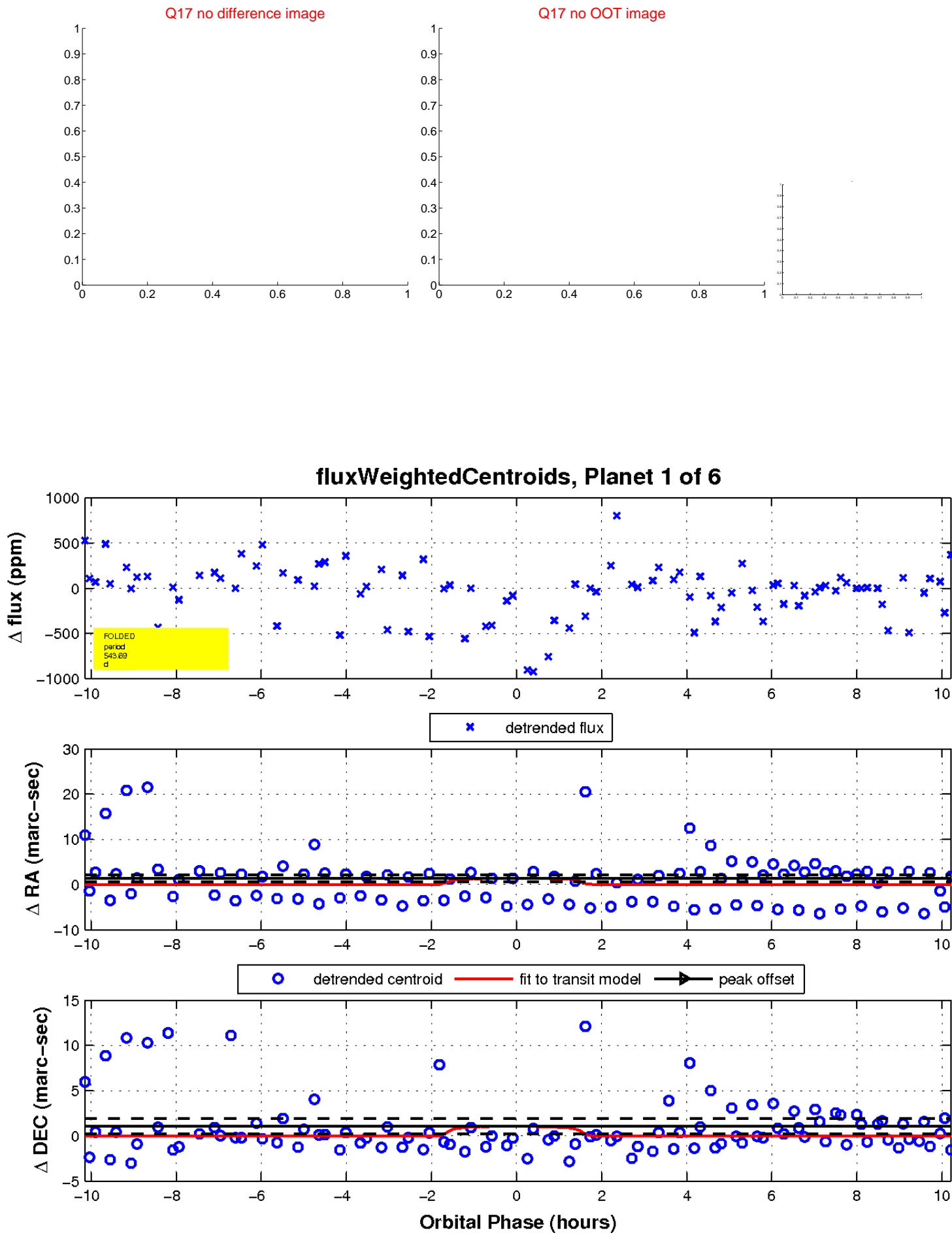
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



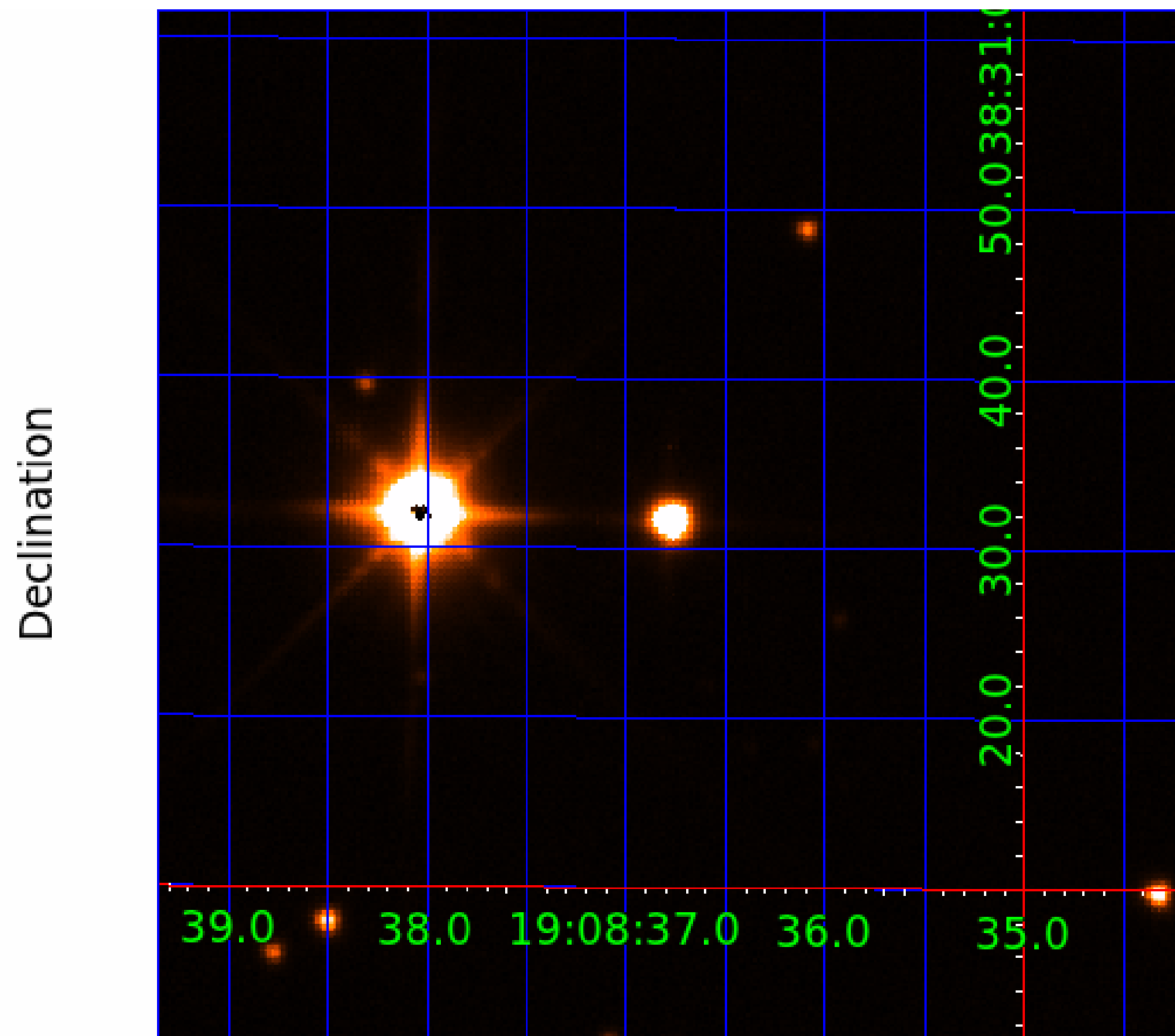
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



UKIRT Image



KIC 003429626

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})
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003429626-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003429626-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003429626-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

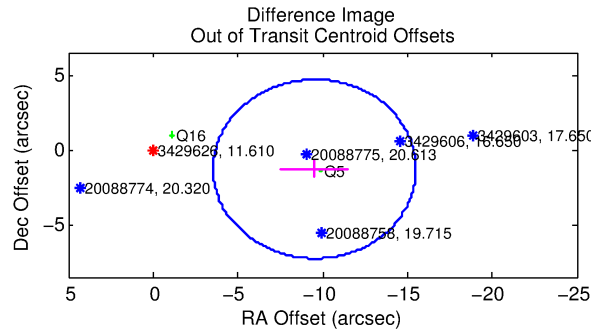
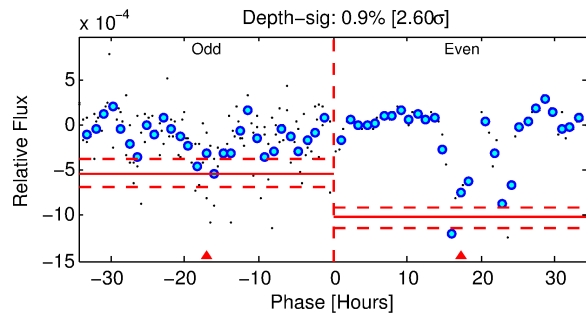
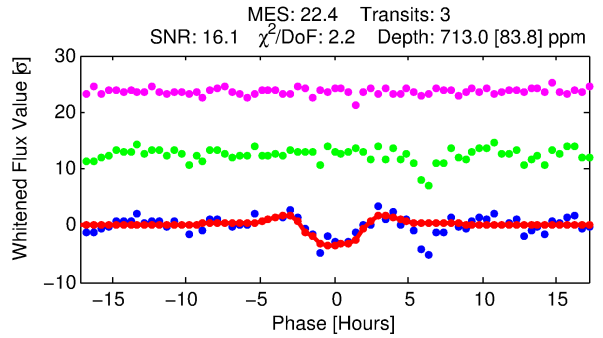
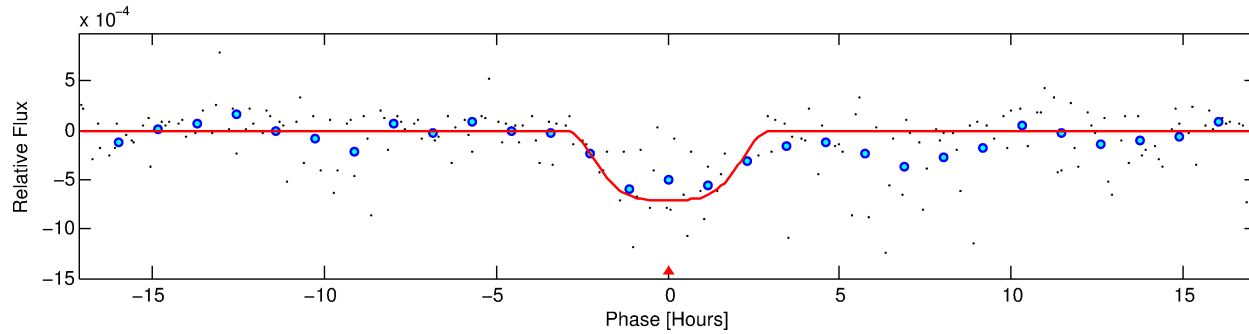
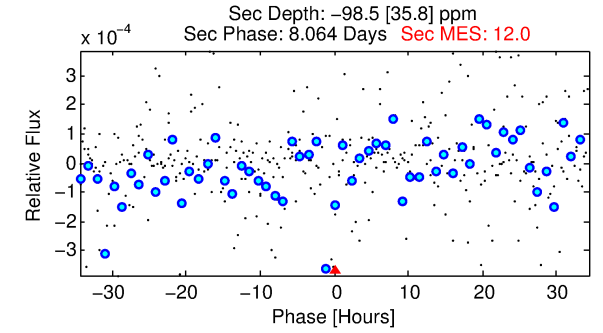
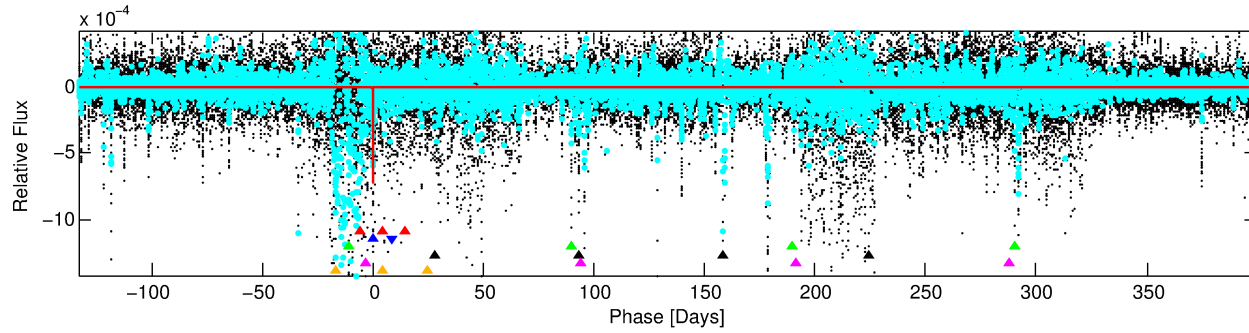
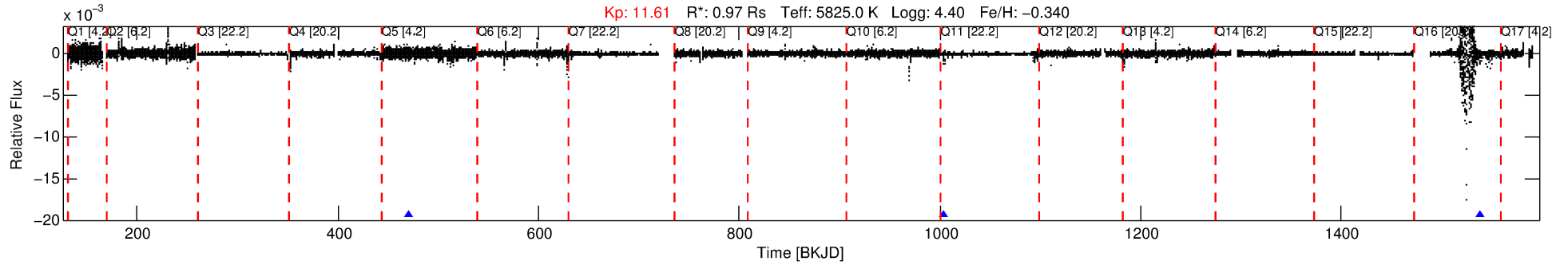
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003429626-02

No Significant Match Found

DV One-Page Summary

KIC: 3429626 Candidate: 2 of 6 Period: 533.246 d



DV Fit Results:

Period = 533.24636 [0.00971] d
Epoch = 470.9674 [0.0134] BKJD
Rp/R* = 0.0312 [0.0027]
a/R* = 275.90 [65.91]
b = 0.96 [0.02]
Seff = 0.64 [0.23]
Teq = 228 [21] K
Rp = 3.30 [0.99] Re
a = 1.2243 [0.2909] AU
Ag = N/A
Teffp = N/A

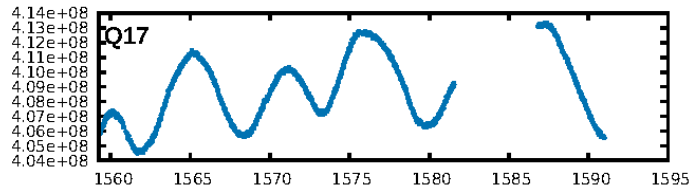
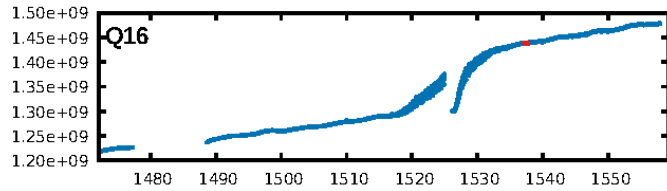
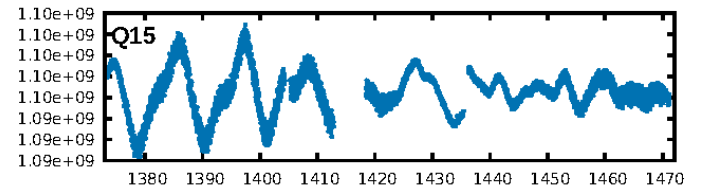
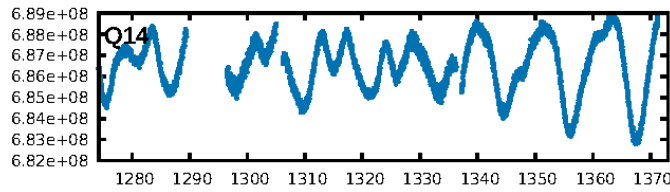
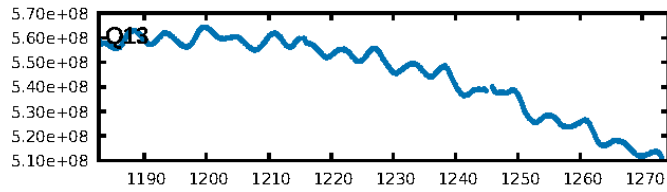
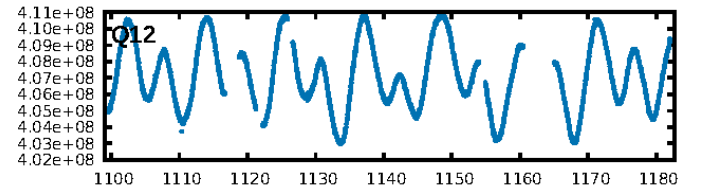
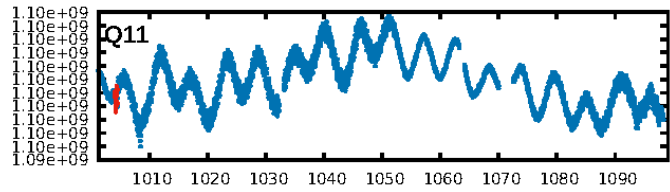
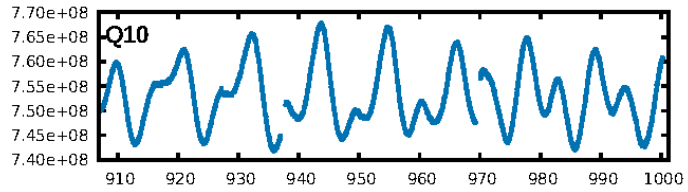
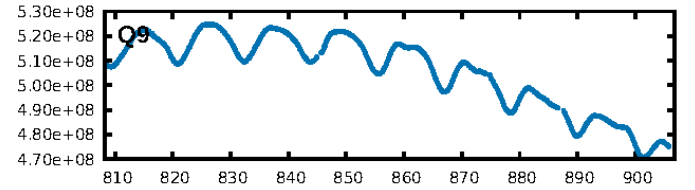
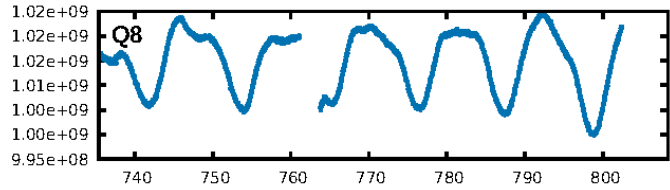
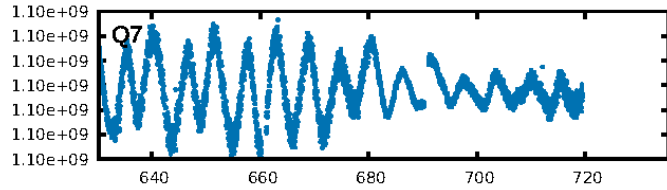
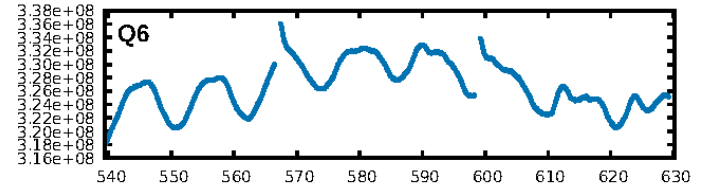
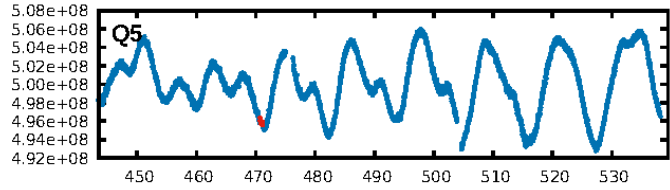
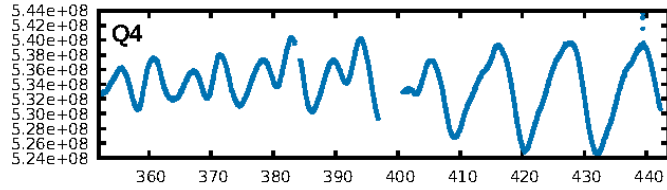
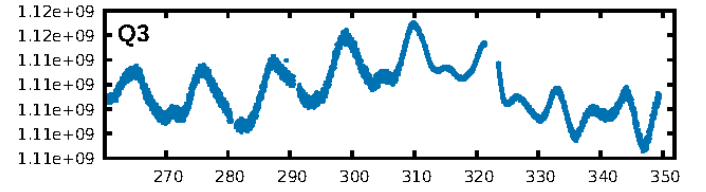
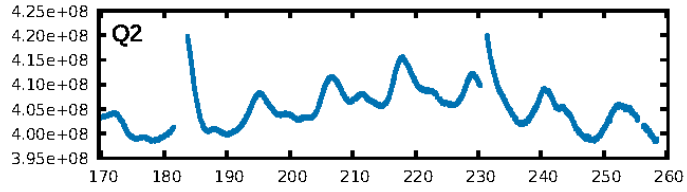
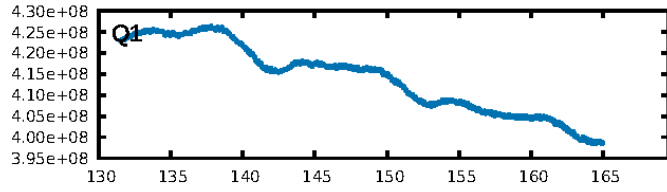
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [42.67σ]
LongPeriod-sig: 100.0% [37.51σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 27.4%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -4.369
Centroid-sig: 0.0%
Centroid-so: 6.598 arcsec [5.65σ]
OotOffset-rm: 9.612 arcsec [4.83σ]
KicOffset-rm: 6.001 arcsec [3.84σ]
OotOffset-st: 0/0/1/1 [2]
KicOffset-st: 0/0/1/1 [2]
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DiffImageOverlap-fno: 1.00 [2/2]

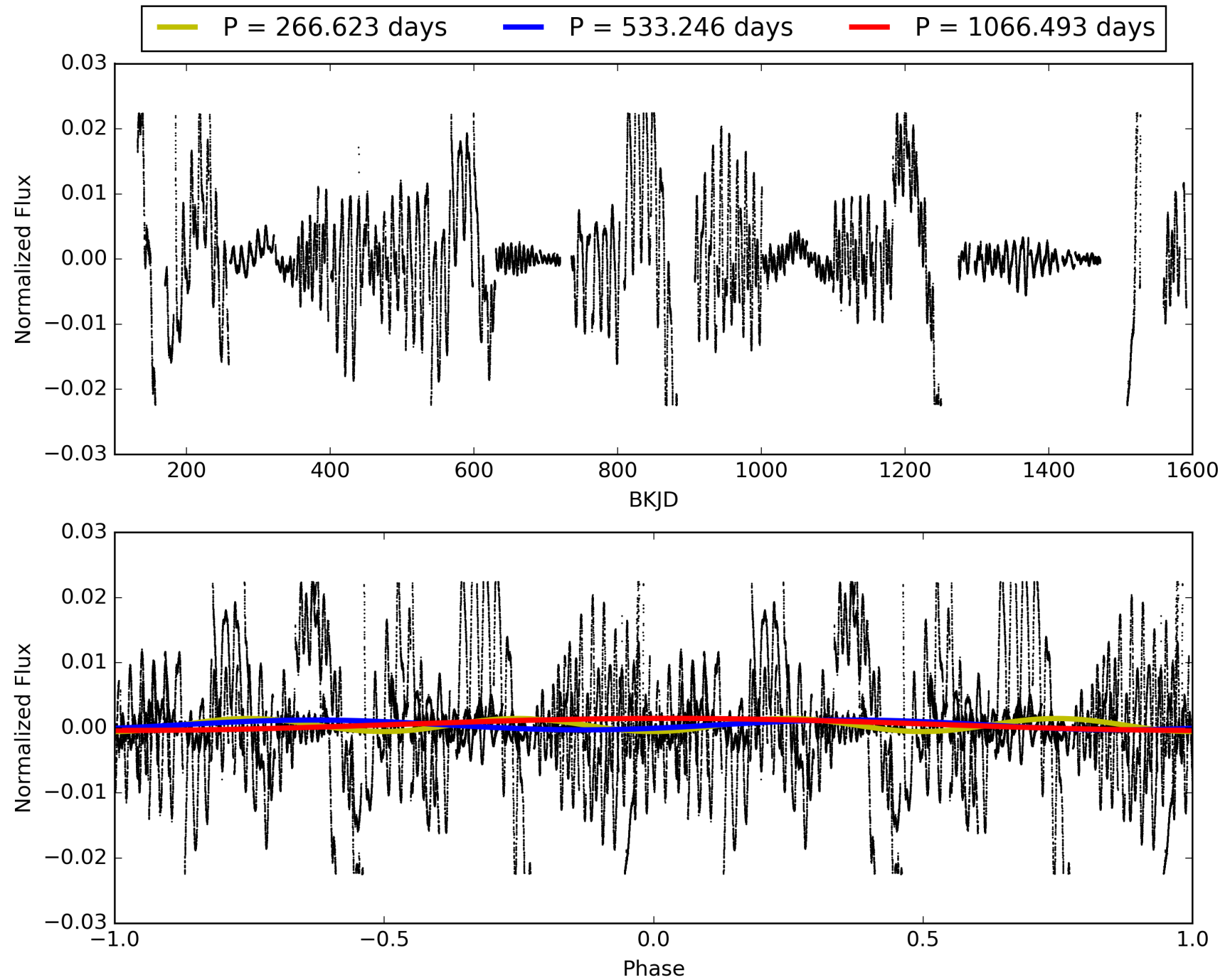
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 003429626-02, PDC Light Curves

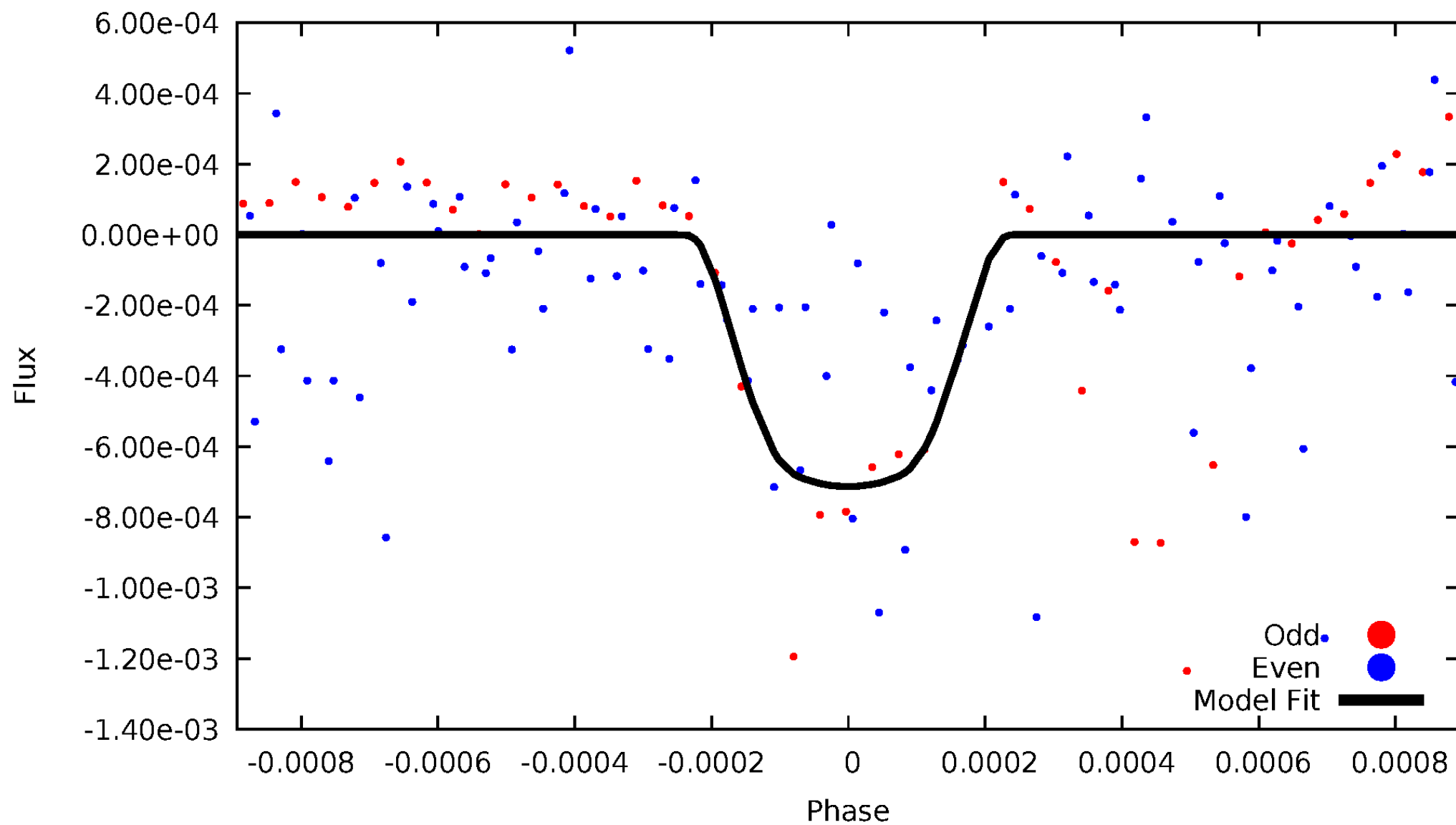


TCE 003429626-02



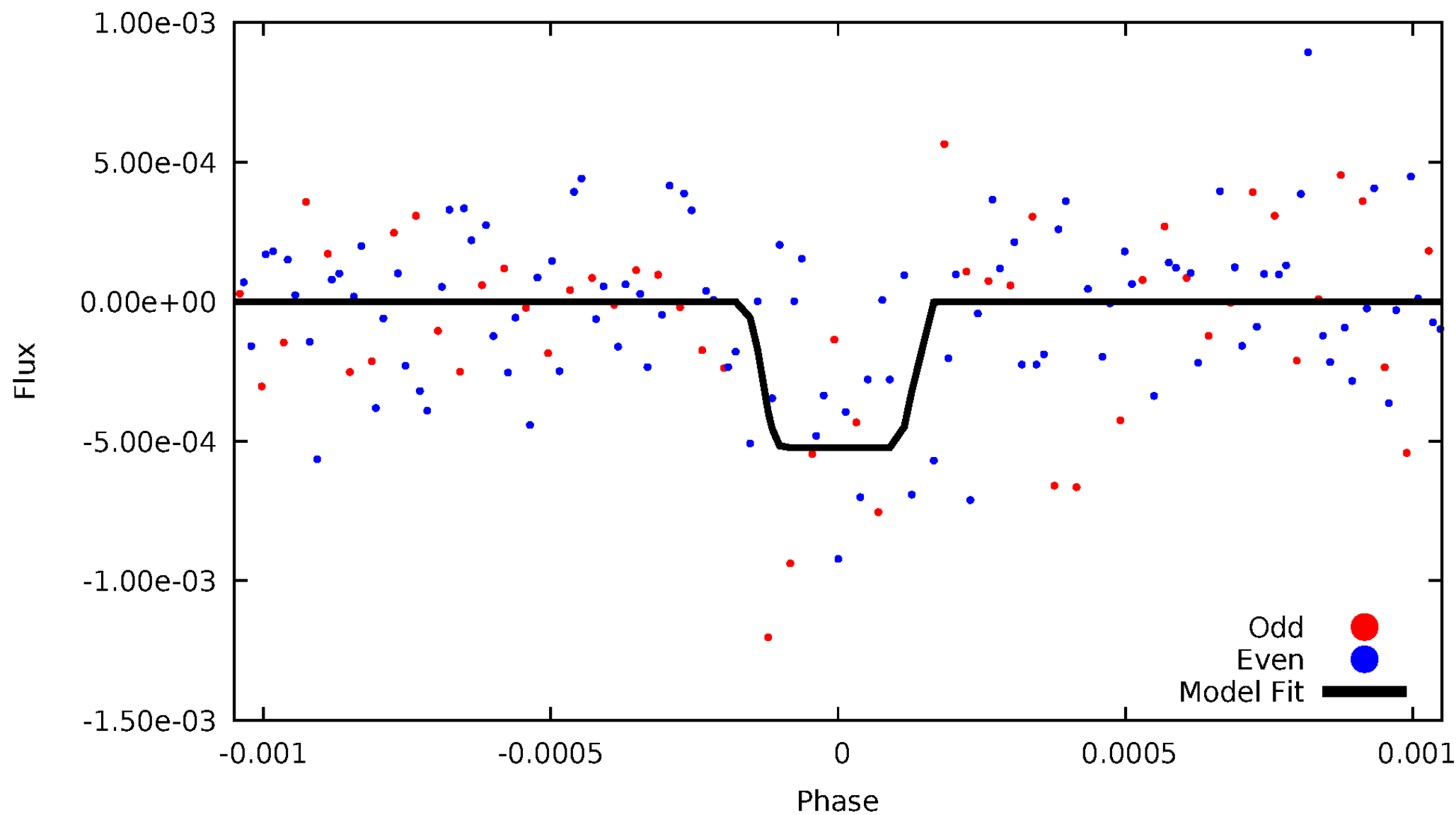
DV Odd/Even

TCE 003429626-02



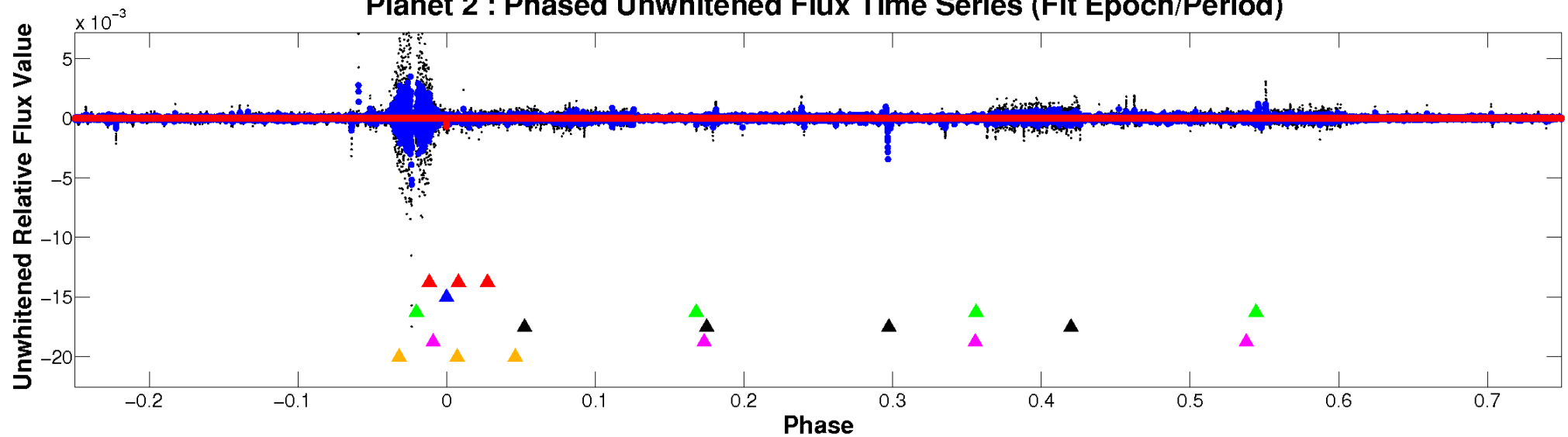
ALT Odd/Even

TCE 003429626-02

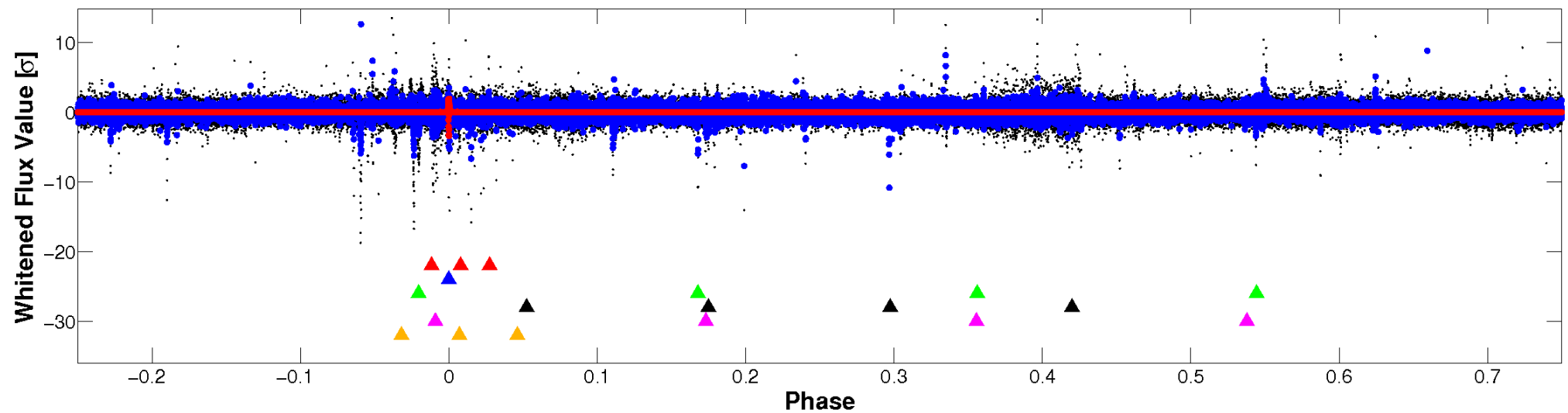


Non-Whitened Vs. Whitened Light Curve

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

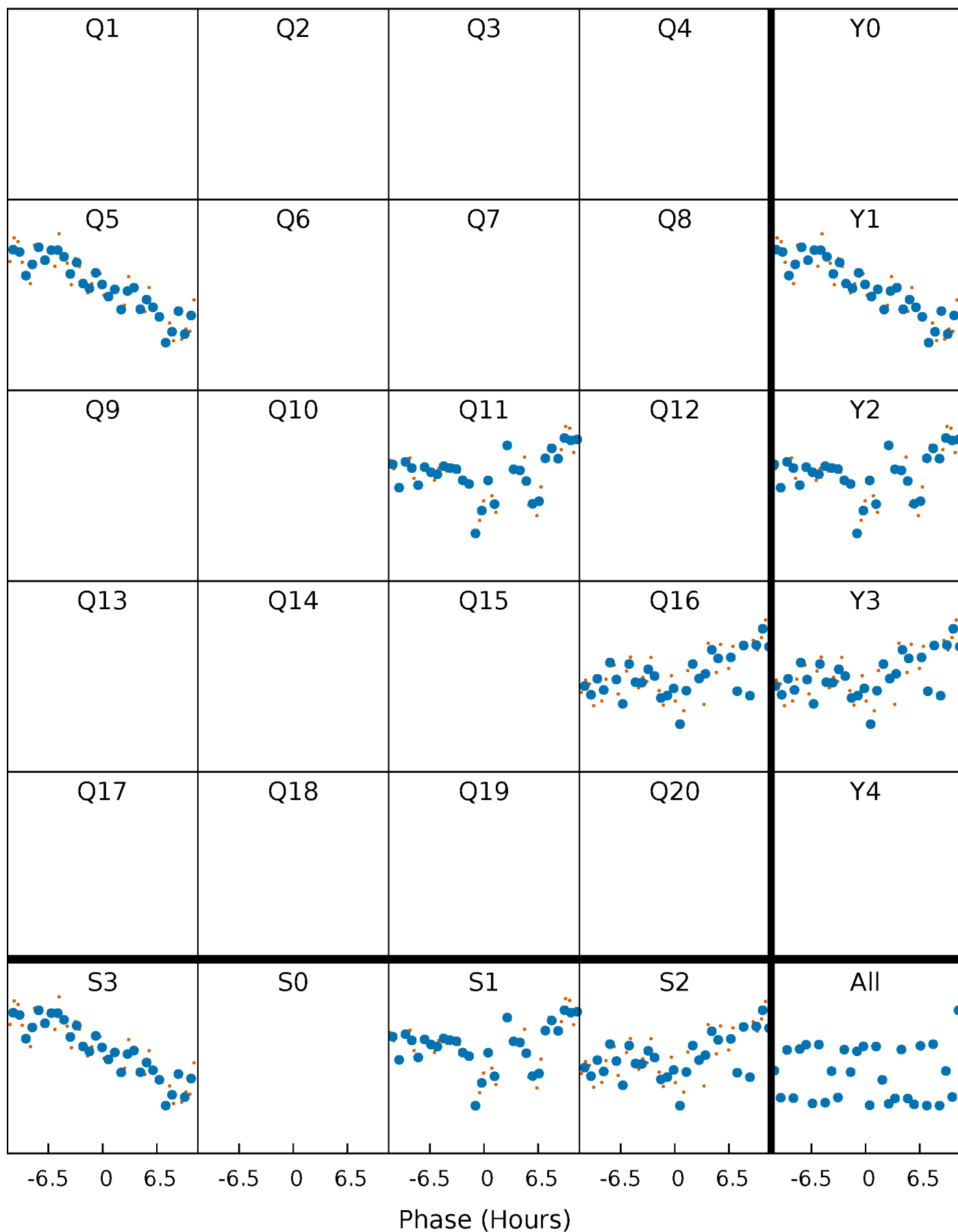


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



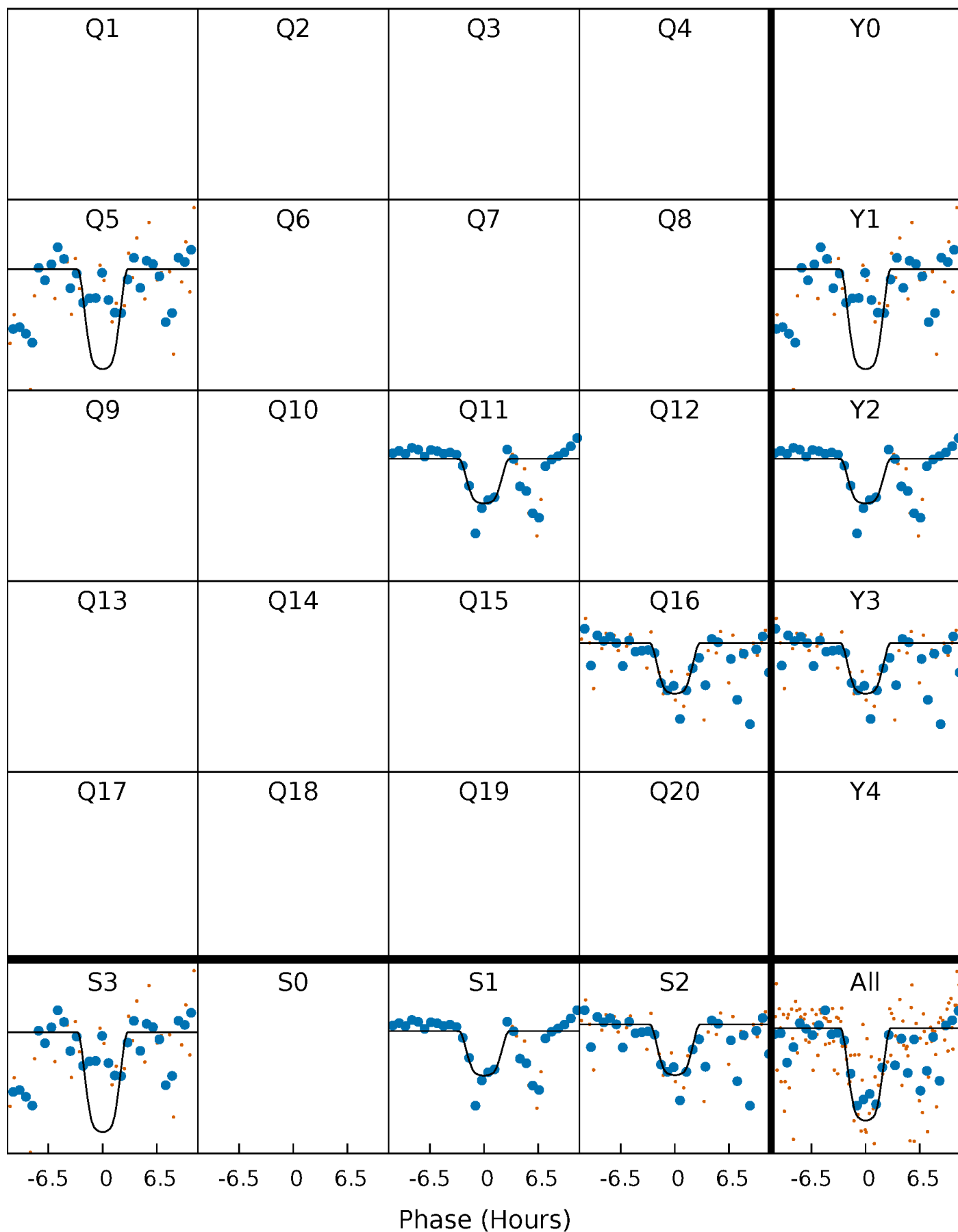
PDC Quarter-Phased Transit Curves

TCE 003429626-02 $P=533.246362$ Days $T_0=470.967413$ (BKJD)



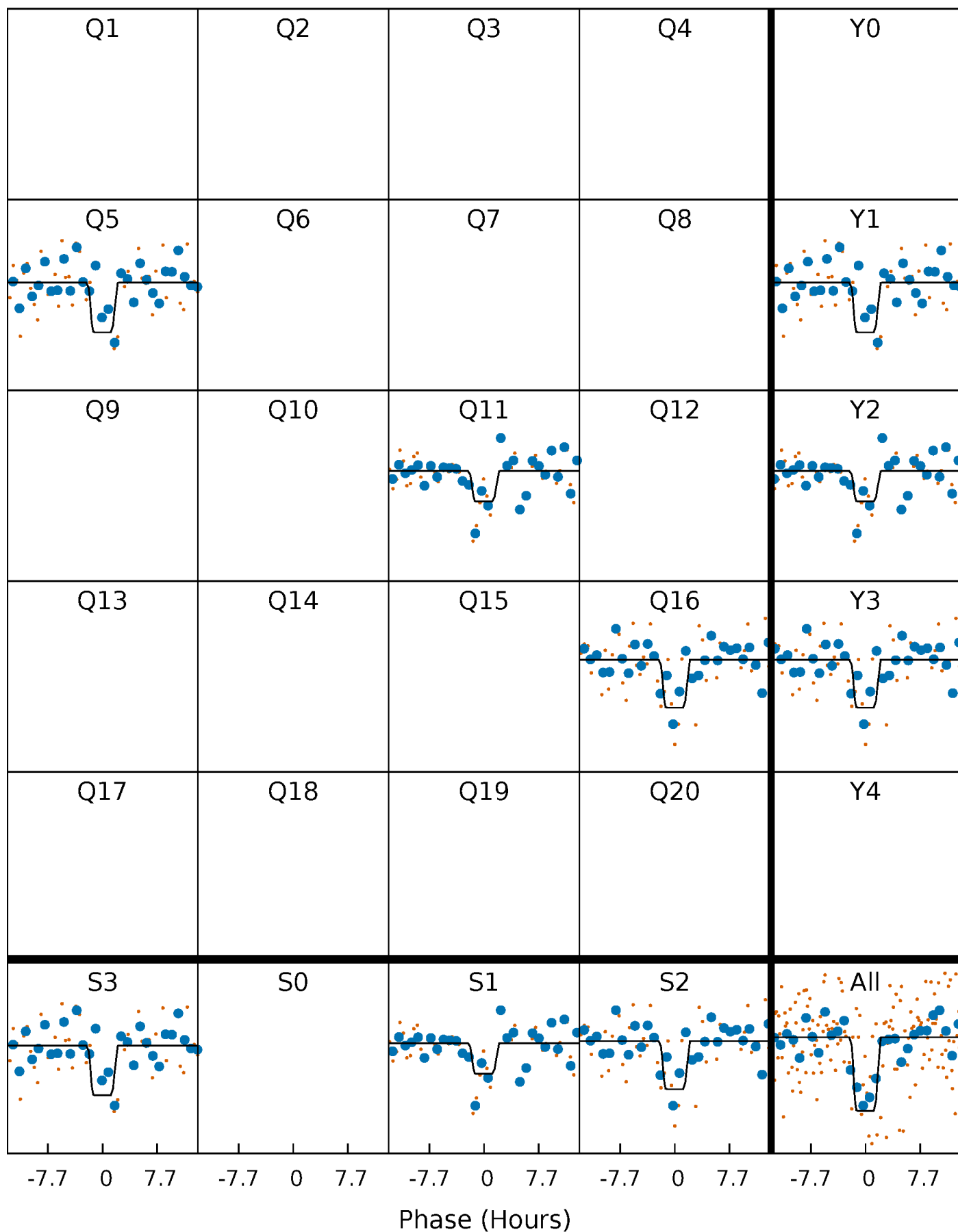
DV Quarter-Phased Transit Curves

TCE 003429626-02 $P=533.246362$ Days $T_0=470.967413$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

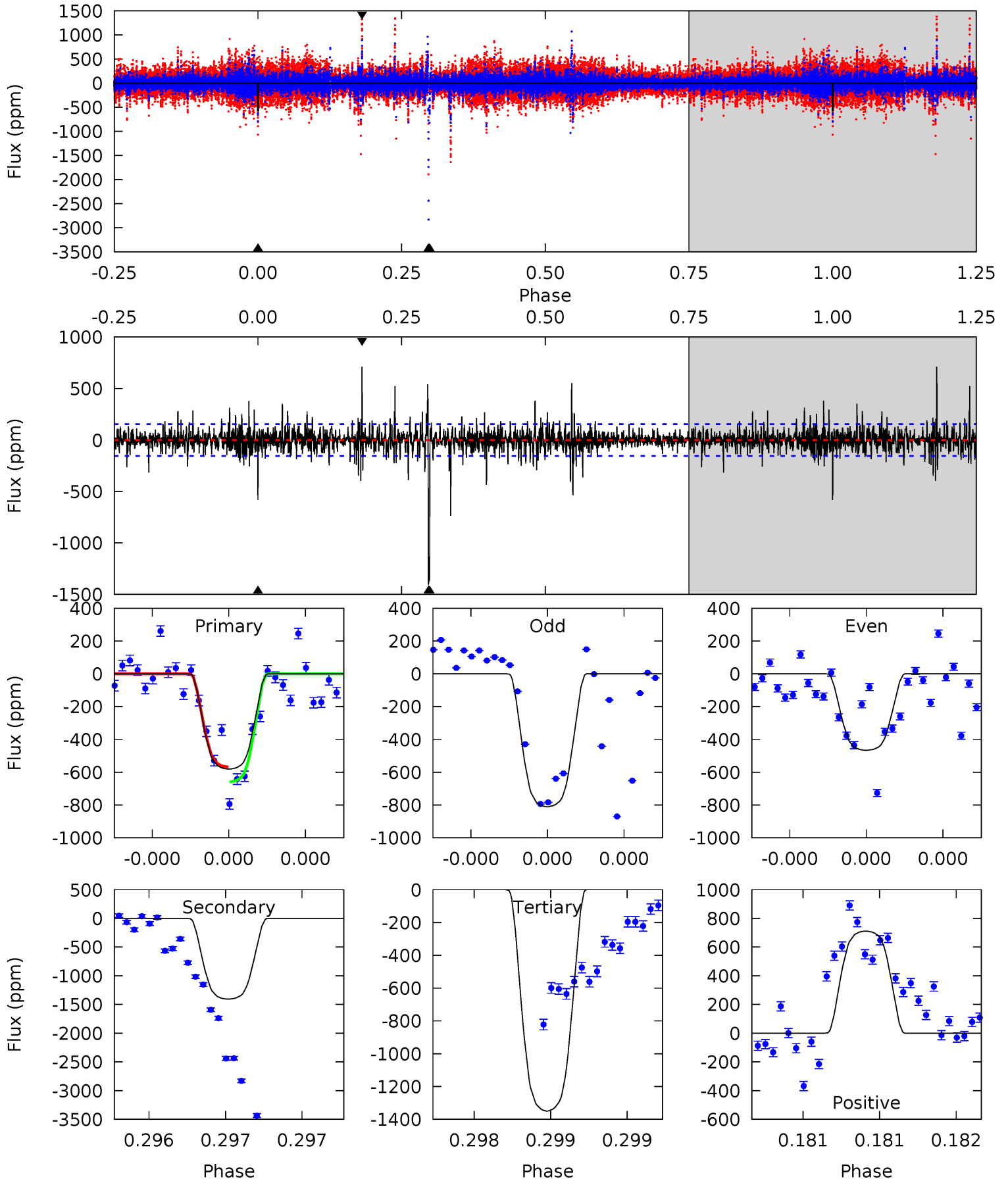
TCE 003429626-02 $P=533.247804$ Days $T_0=470.988141$ (BKJD)



DV Model-Shift Uniqueness Test

003429626-02, P = 533.246362 Days, E = 470.967413 Days

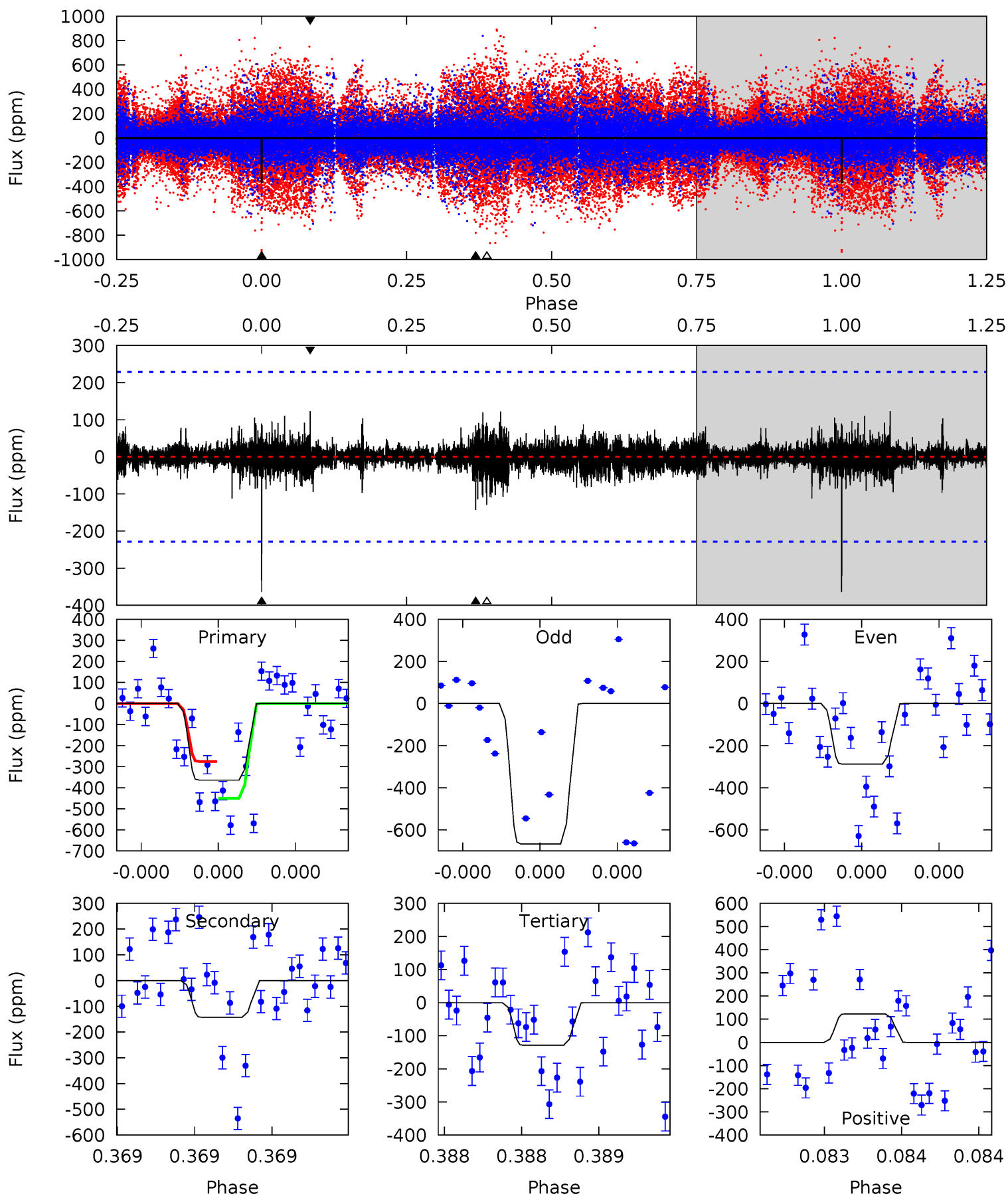
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.0	50.9	48.8	25.7	5.58	3.50	2.65	-27.8	-4.73	2.05	25.1	4.94	0.79	0.34	1.62



Alt Model-Shift Uniqueness Test

003429626-02, P = 533.247804 Days, E = 470.988141 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.98	3.53	3.18	3.03	5.64	3.58	0.50	5.80	5.95	0.35	0.50	4.16	1.14	0.25	2.14



Stellar Parameters For KIC 003429626

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5825^{+175}_{-193}	$4.401^{+0.132}_{-0.182}$	$-0.340^{+0.300}_{-0.300}$	$0.968^{+0.279}_{-0.172}$	$0.860^{+0.119}_{-0.079}$	$1.335^{+0.786}_{-0.670}$
	+3%/-3%	+3%/-4%	+88%/-88%	+29%/-18%	+14%/-9%	+59%/-50%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 003429626-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1407 ± 28	$3.33^{+0.58}_{-0.44}$	321^{+23}_{-18}	6387^{+351}_{-351}	105134^{+30636}_{-28403}
Alt.	-143 ± 41	$2.49^{+0.48}_{-0.40}$	323^{+21}_{-19}	4394^{+352}_{-344}	18687^{+9487}_{-7232}

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 $A_{obs} \gg 1.0$

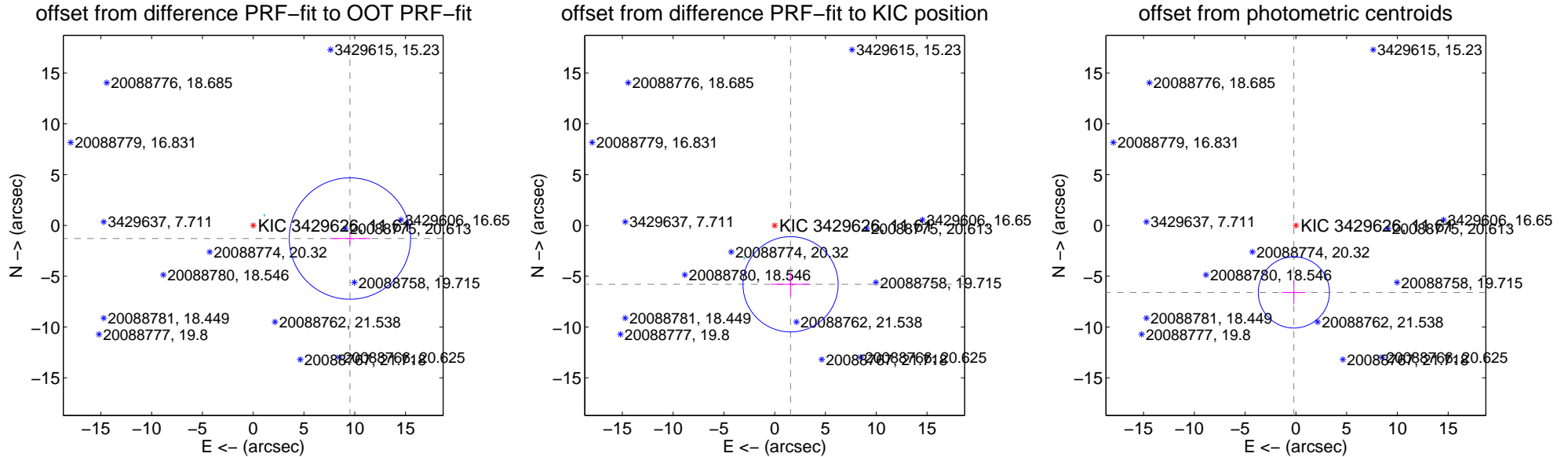
DV Centroid Data

Supplemental centroid analysis for 003429626-02. **Kepler magnitude: 11.61.** Transit SNR 16.06

There are 1 quarters with good PRF difference image offsets

The OOT PRF centroid is offset from the target star catalog position by about 5.89 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	9.612 ± 1.992	4.83	-9.525 ± 2.009	-1.290 ± 0.563
PRF-fit source offset from KIC position	6.001 ± 1.562	3.84	-1.563 ± 1.941	-5.794 ± 1.096
photometric centroid source offset	6.60 ± 1.17	5.65	0.20 ± 1.16	-6.60 ± 1.17

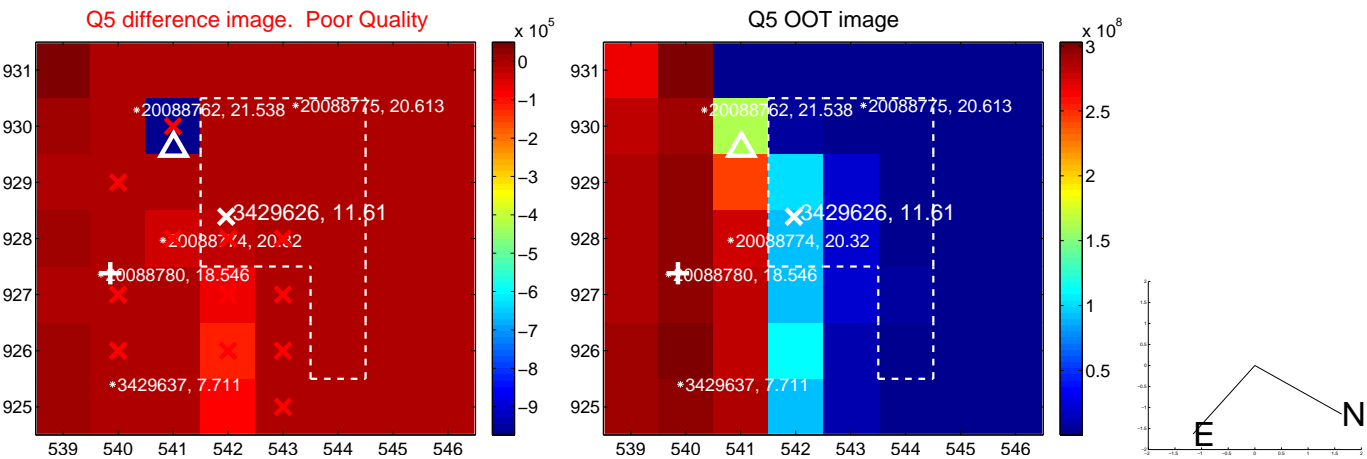


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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



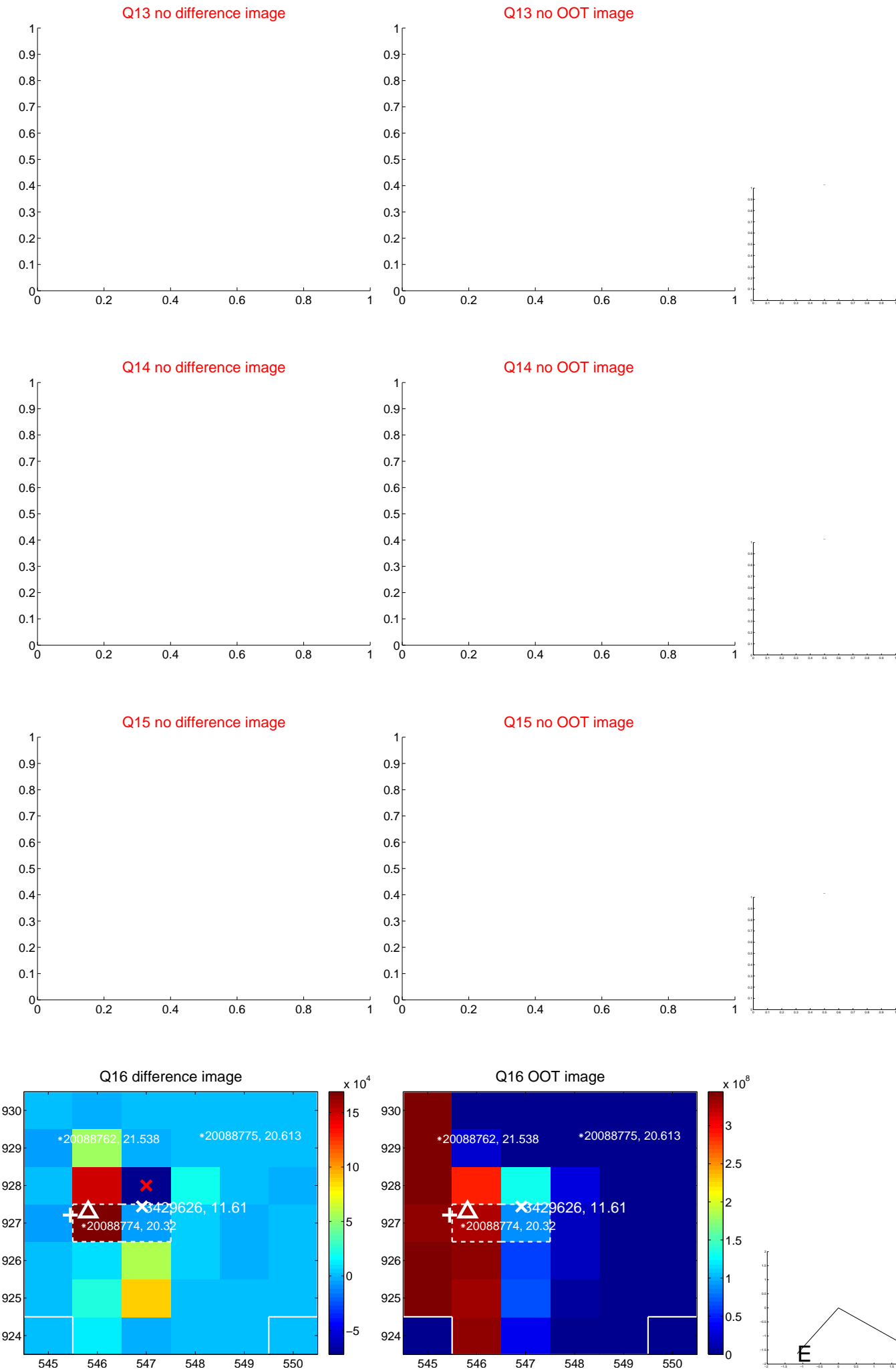
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



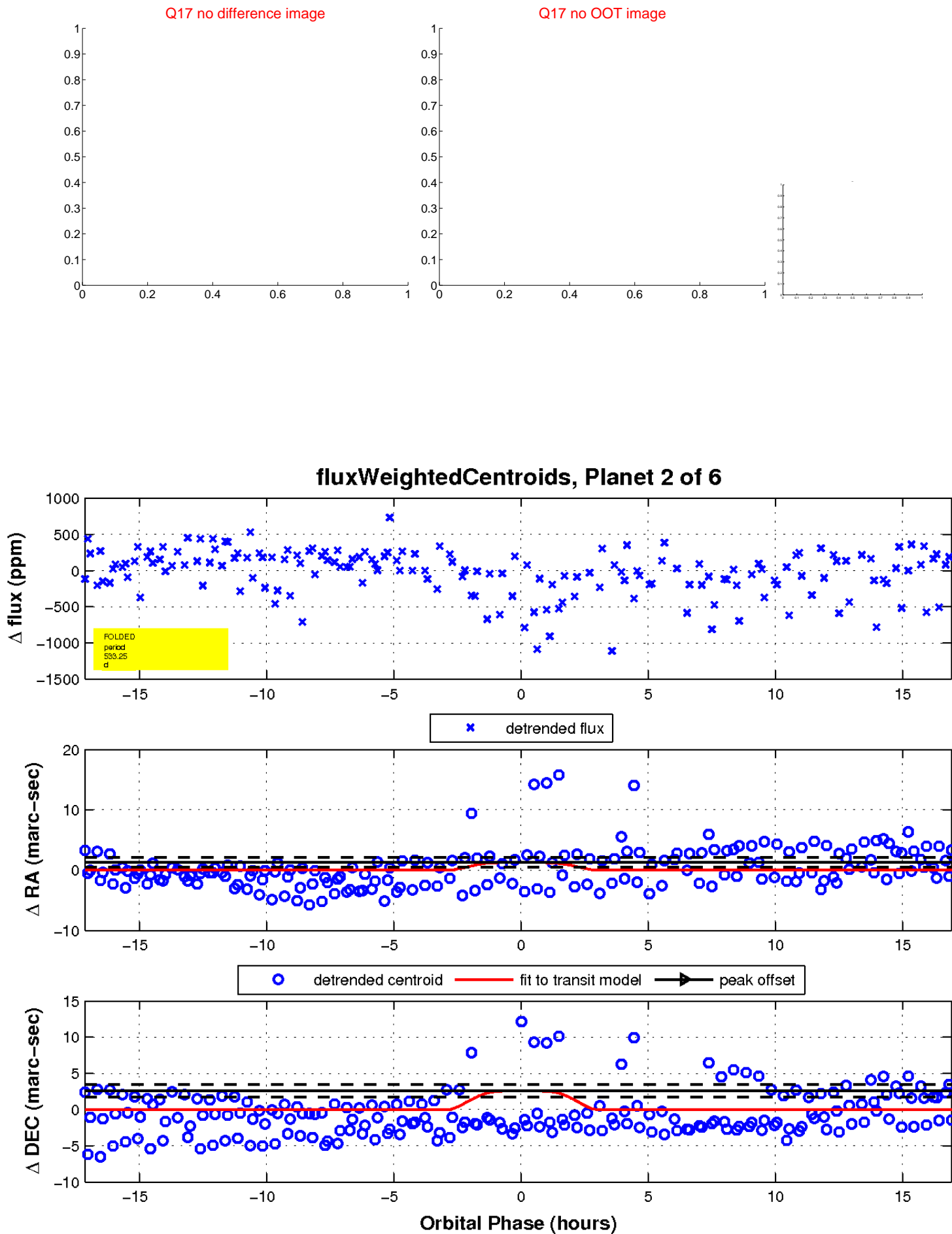
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



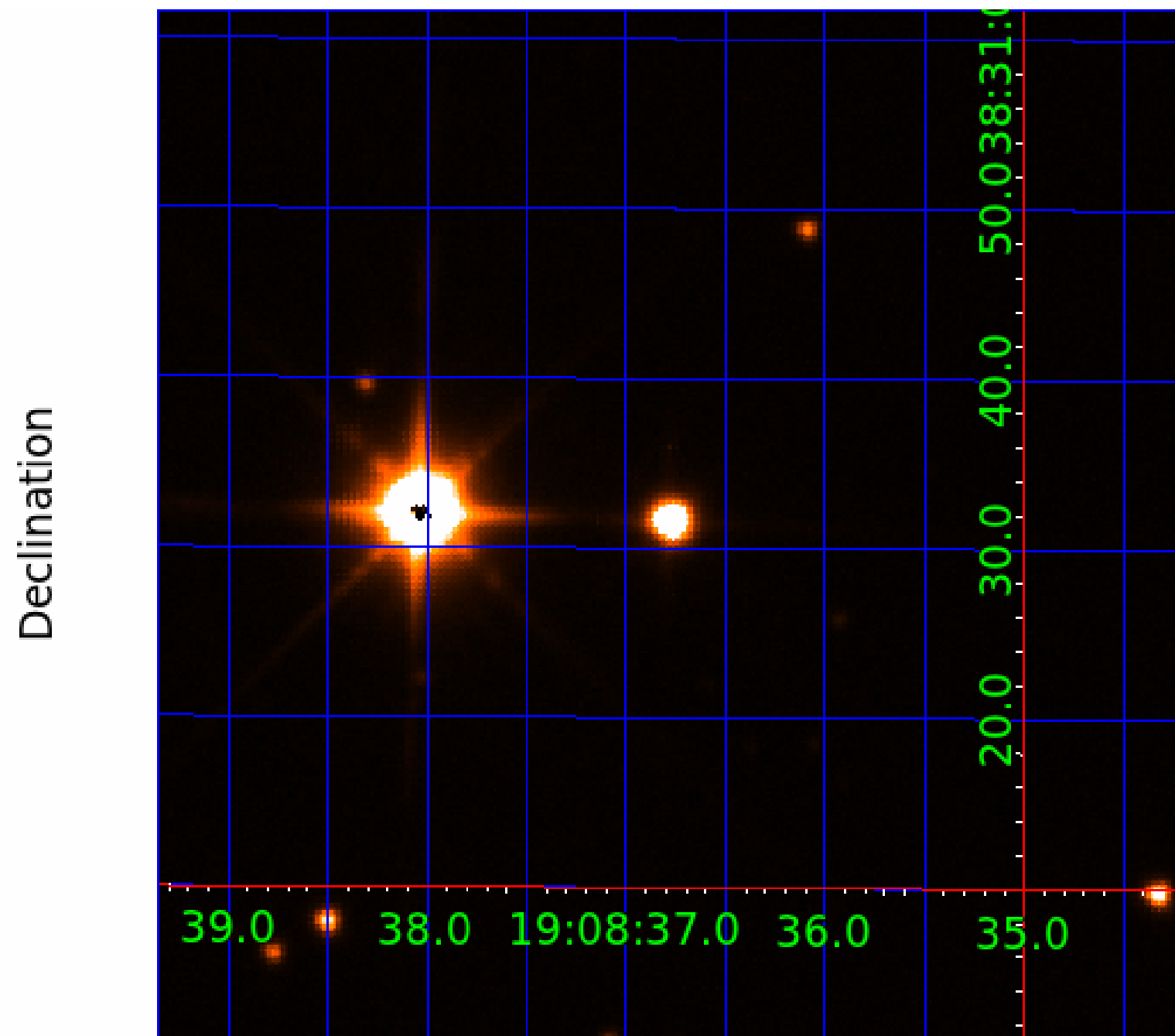
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 003429626

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})
003429626-01	OBS	No	543.689279	464.764712	772.5	3.460	30.5	21.8	0.97	5825	3.00	0.63
003429626-02	OBS	No	533.246362	470.967413	713.0	5.716	22.4	16.1	0.97	5825	3.30	0.65
003429626-06	OBS	No	512.410561	495.614041	624.6	10.231	15.9	15.0	0.97	5825	2.46	0.68

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003429626-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003429626-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003429626-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

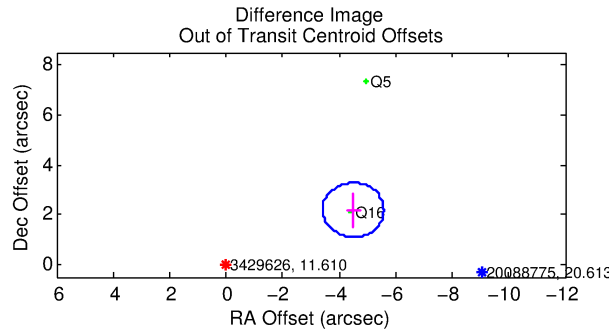
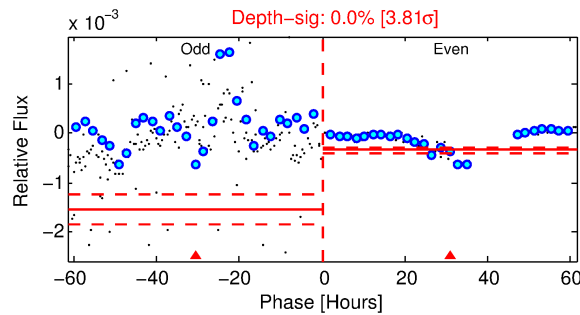
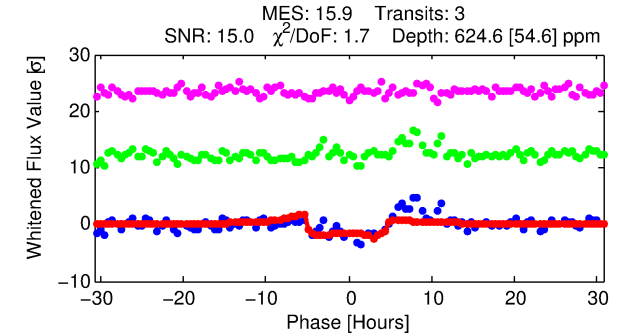
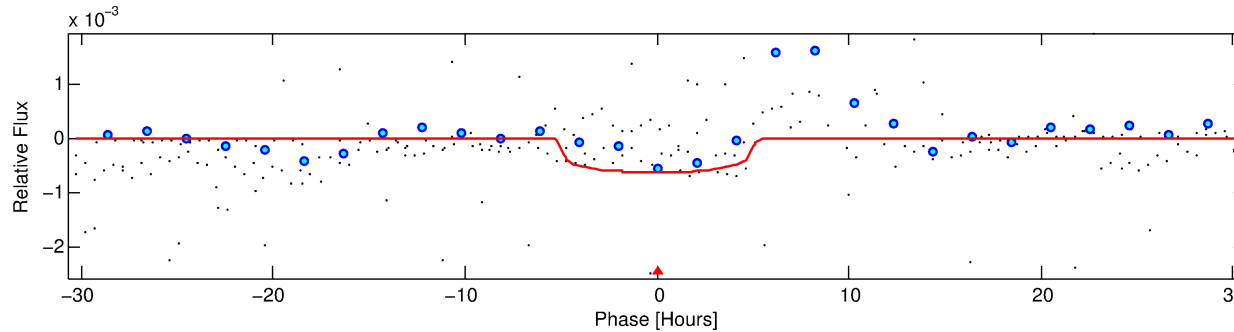
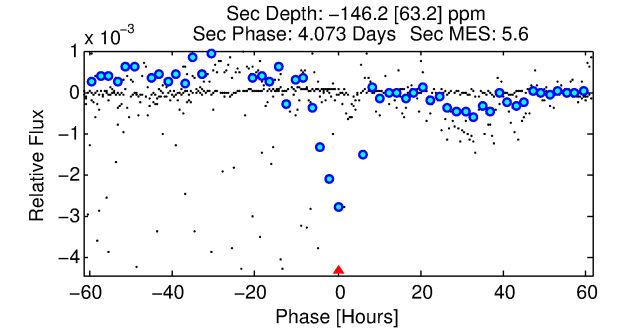
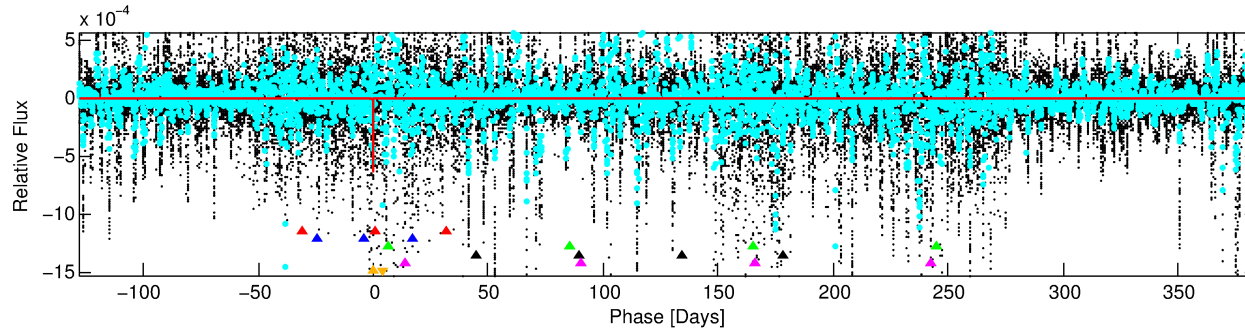
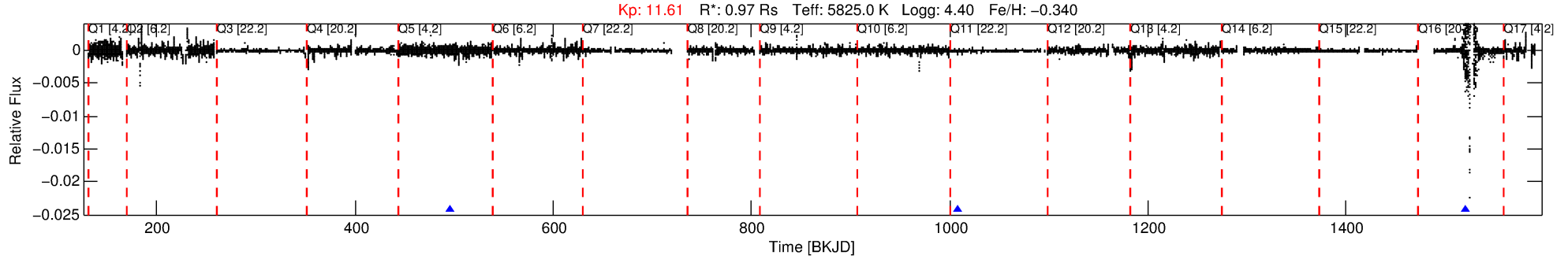
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003429626-06

No Significant Match Found

DV One-Page Summary

KIC: 3429626 Candidate: 6 of 6 Period: 512.411 d



DV Fit Results:

Period = 512.41056 [0.01120] d
Epoch = 495.6140 [0.0109] BKJD
Rp/R* = 0.0233 [0.0083]
a/R* = 355.52 [583.98]
b = 0.43 [3.14]
Seff = 0.68 [0.25]
Teq = 232 [21] K
Rp = 2.46 [1.13] Re
a = 1.1922 [0.2832] AU
Ag = N/A
Teffp = N/A

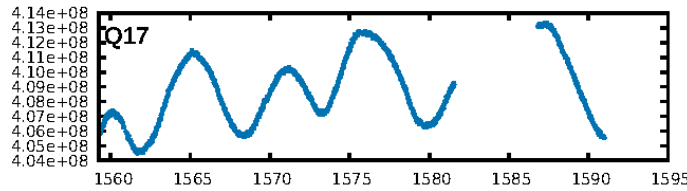
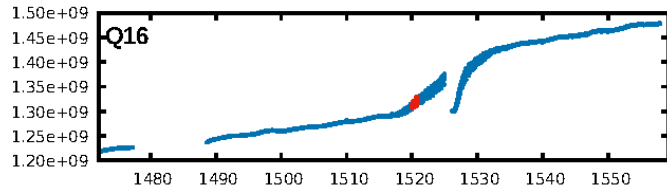
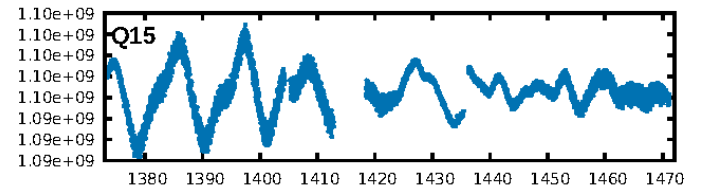
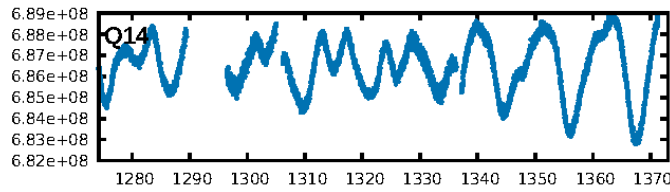
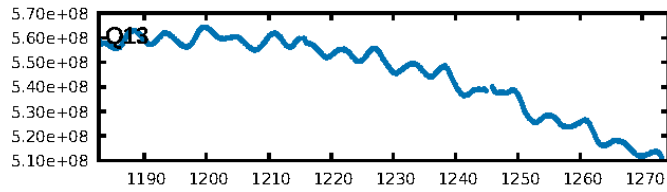
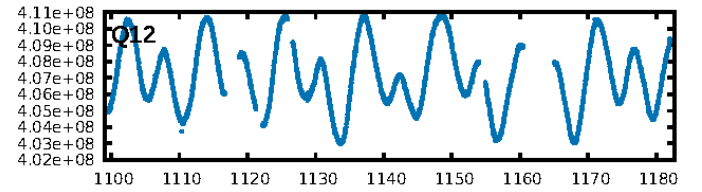
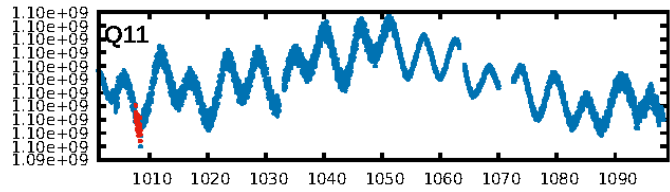
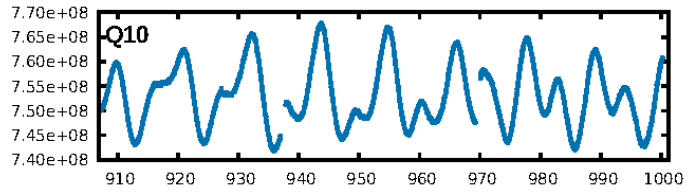
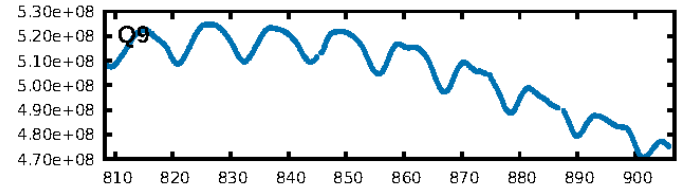
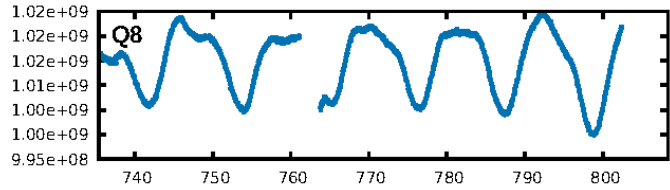
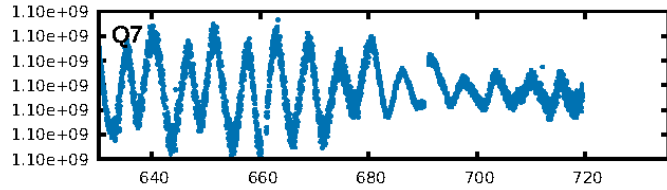
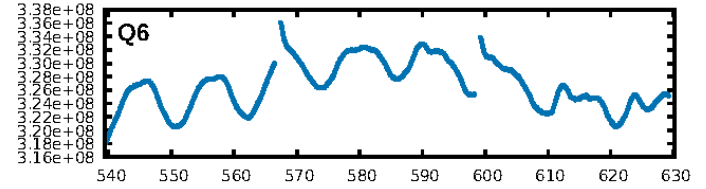
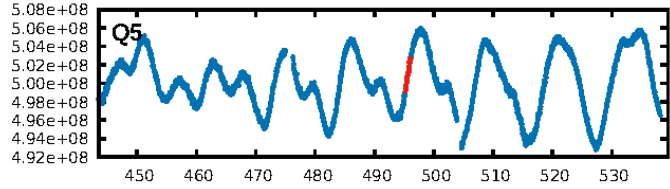
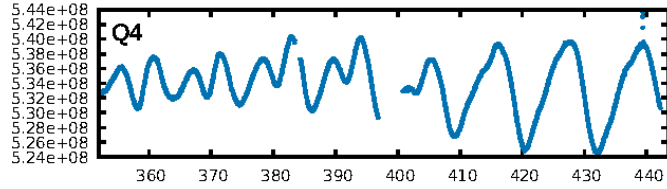
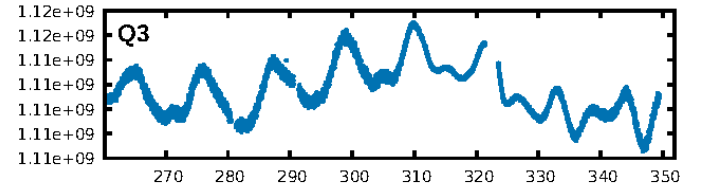
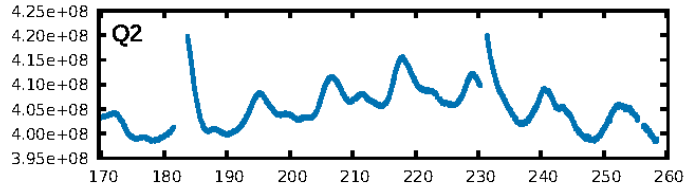
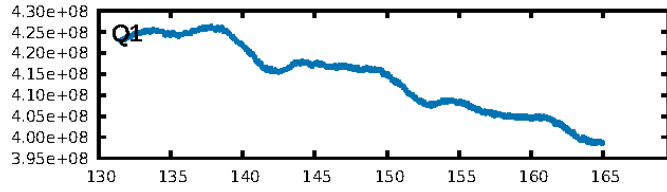
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [68.78σ]
LongPeriod-sig: 100.0% [42.67σ]
ModelChiSquare2-sig: 0.2%
ModelChiSquareGof-sig: 4.9%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.225
Centroid-sig: 56.8%
Centroid-so: 3.043 arcsec [2.25σ]
OotOffset-rm: 4.998 arcsec [13.81σ]
KicOffset-rm: 1.906 arcsec [1.16σ]
OotOffset-st: 0/0/1/1 [2]
KicOffset-st: 0/0/1/1 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [2/2]

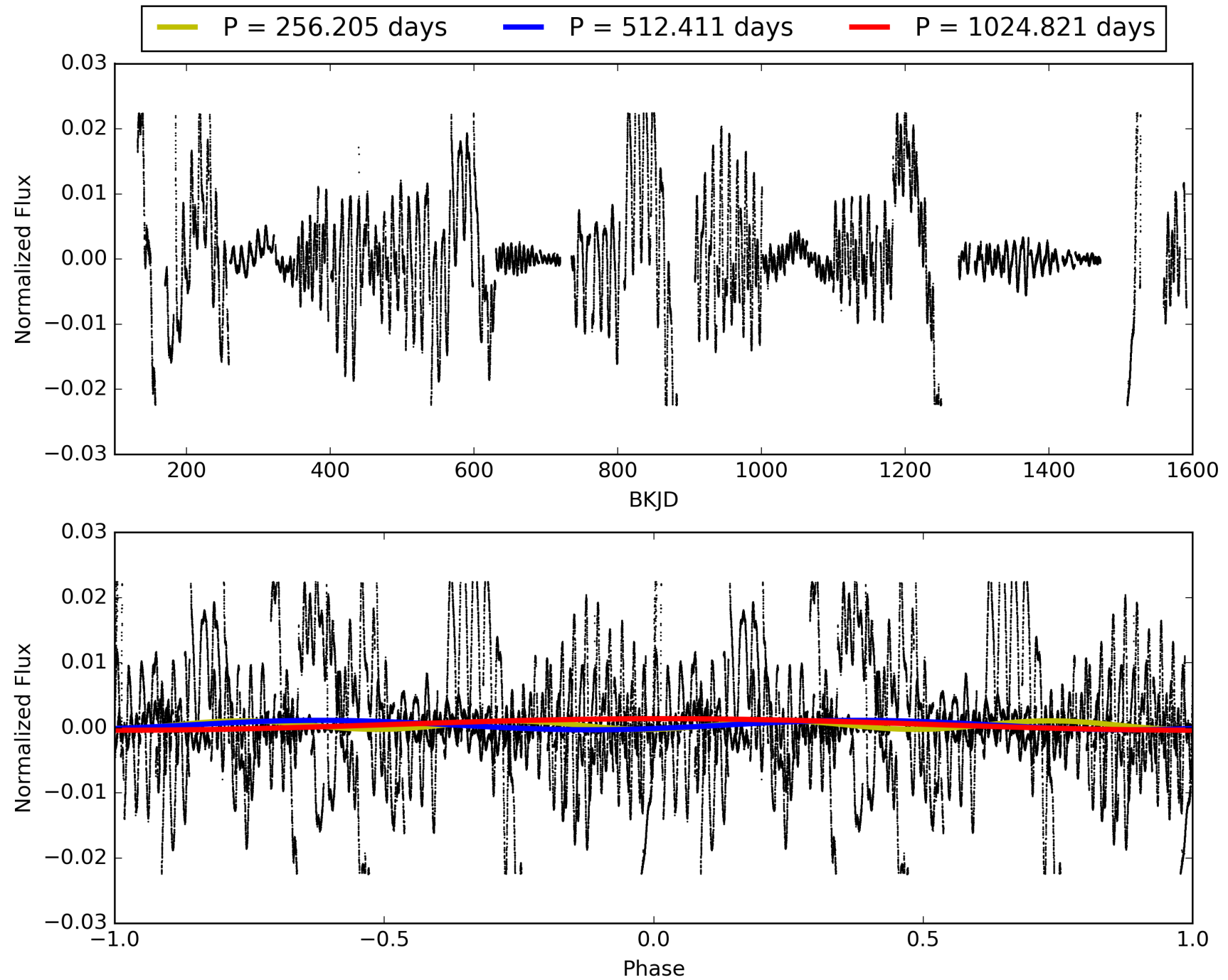
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:58:55 Z

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

TCE 003429626-06, PDC Light Curves

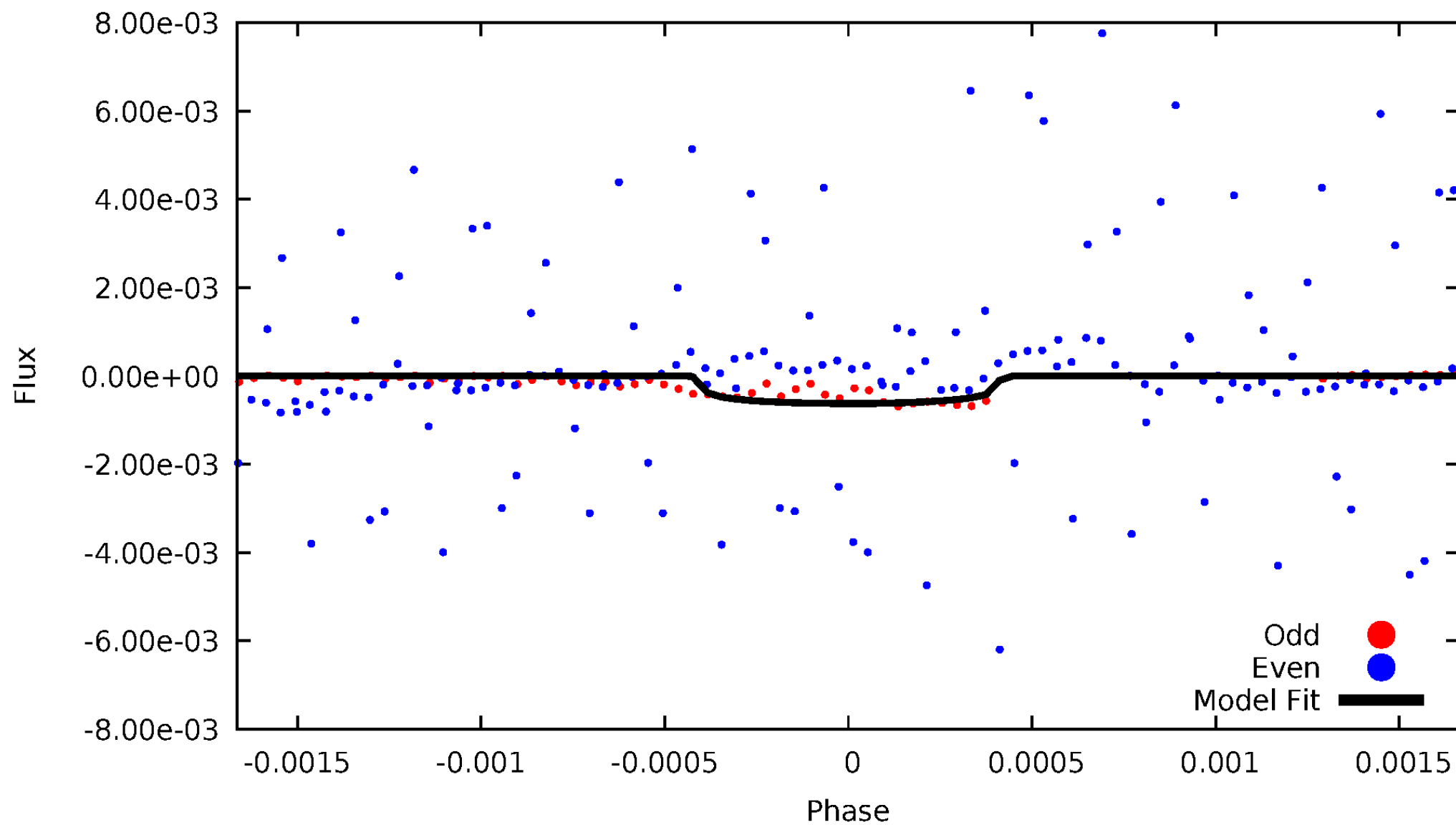


TCE 003429626-06



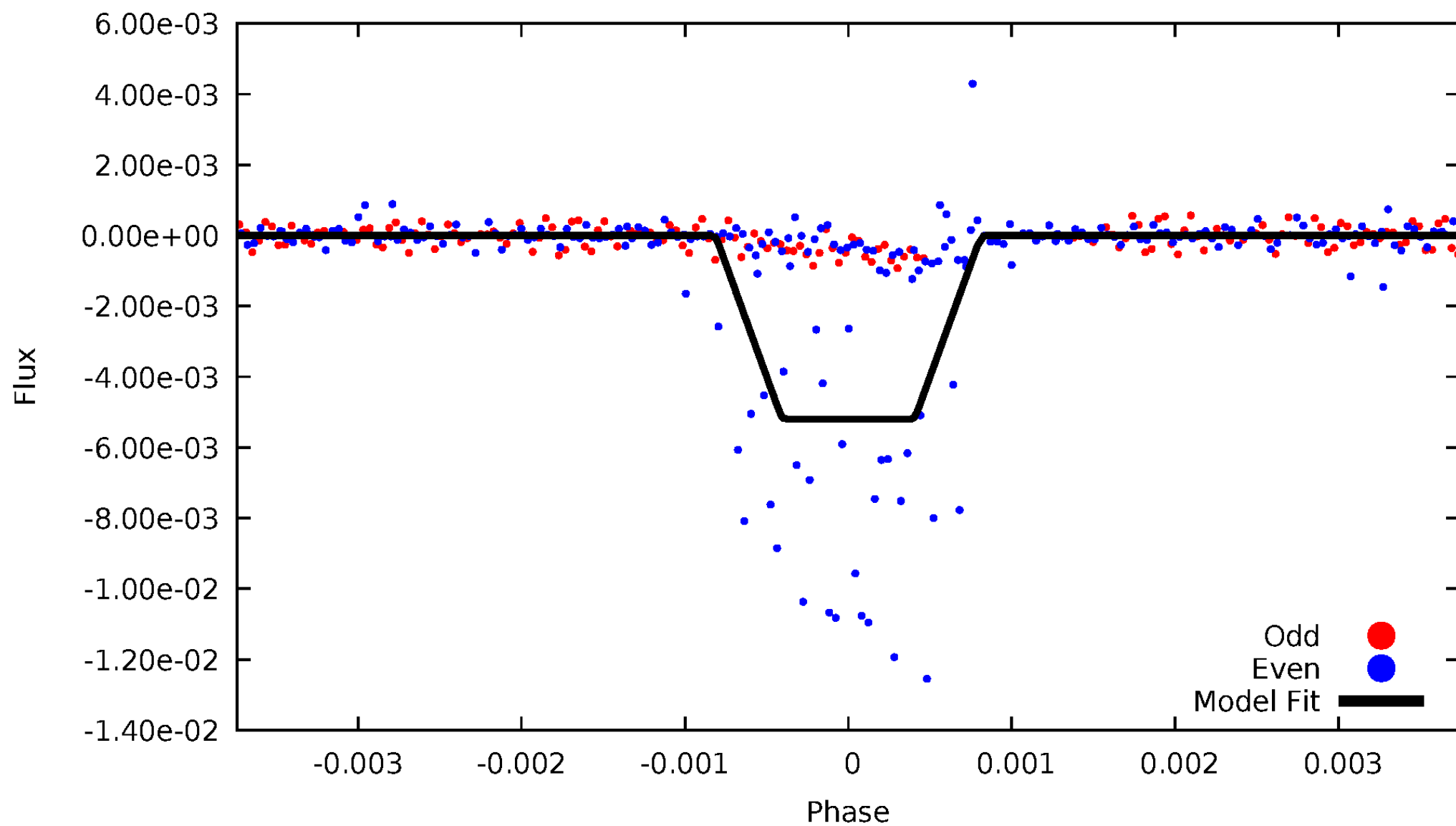
DV Odd/Even

TCE 003429626-06



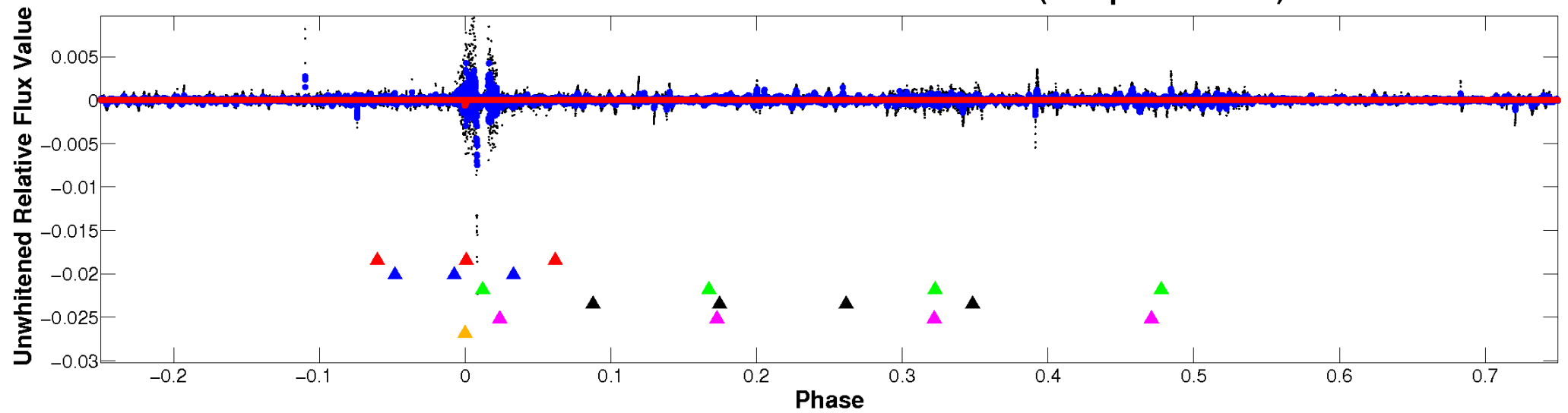
ALT Odd/Even

TCE 003429626-06

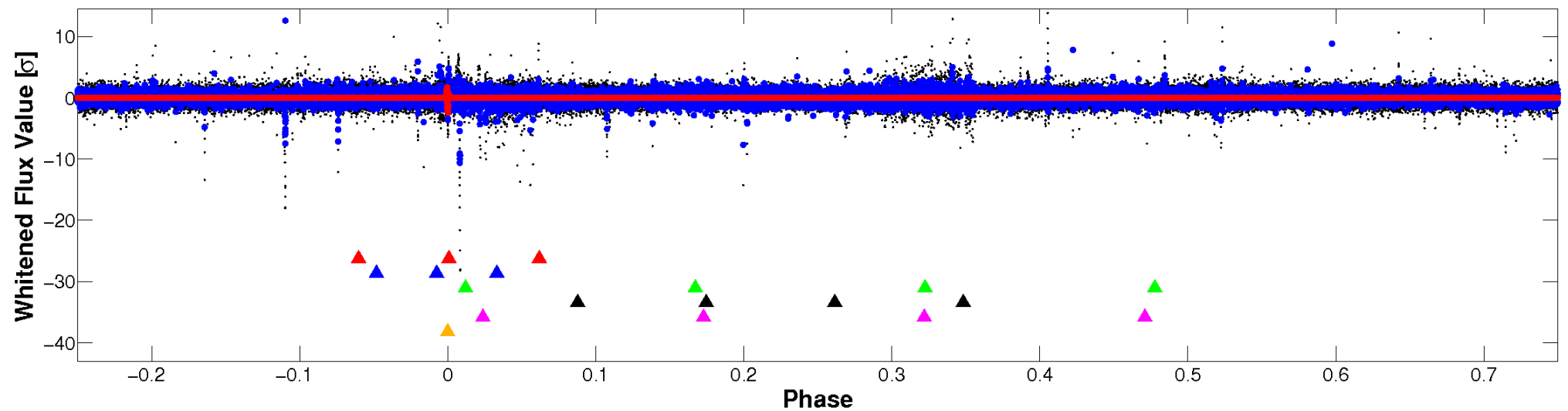


Non-Whitened Vs. Whitened Light Curve

Planet 6 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

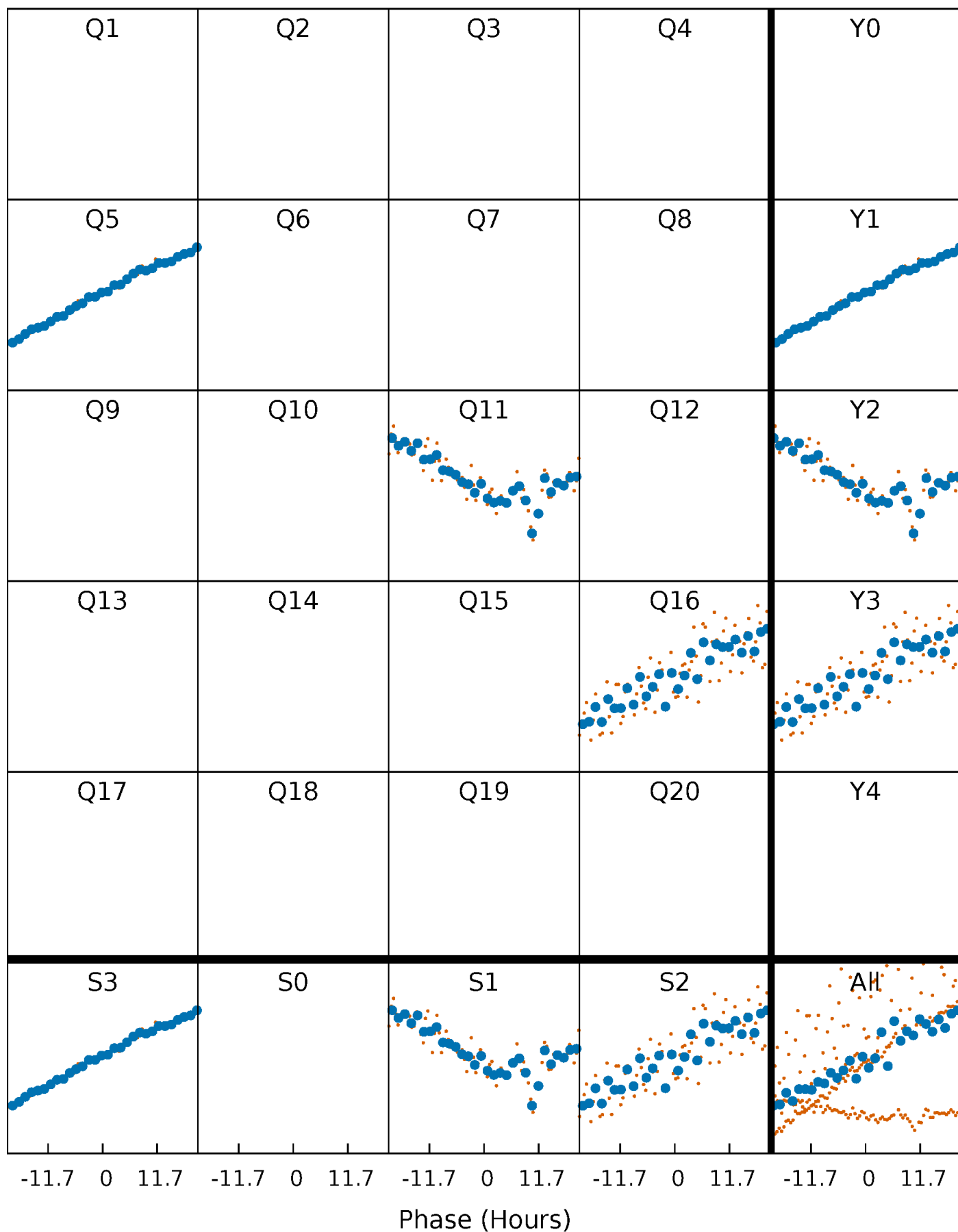


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



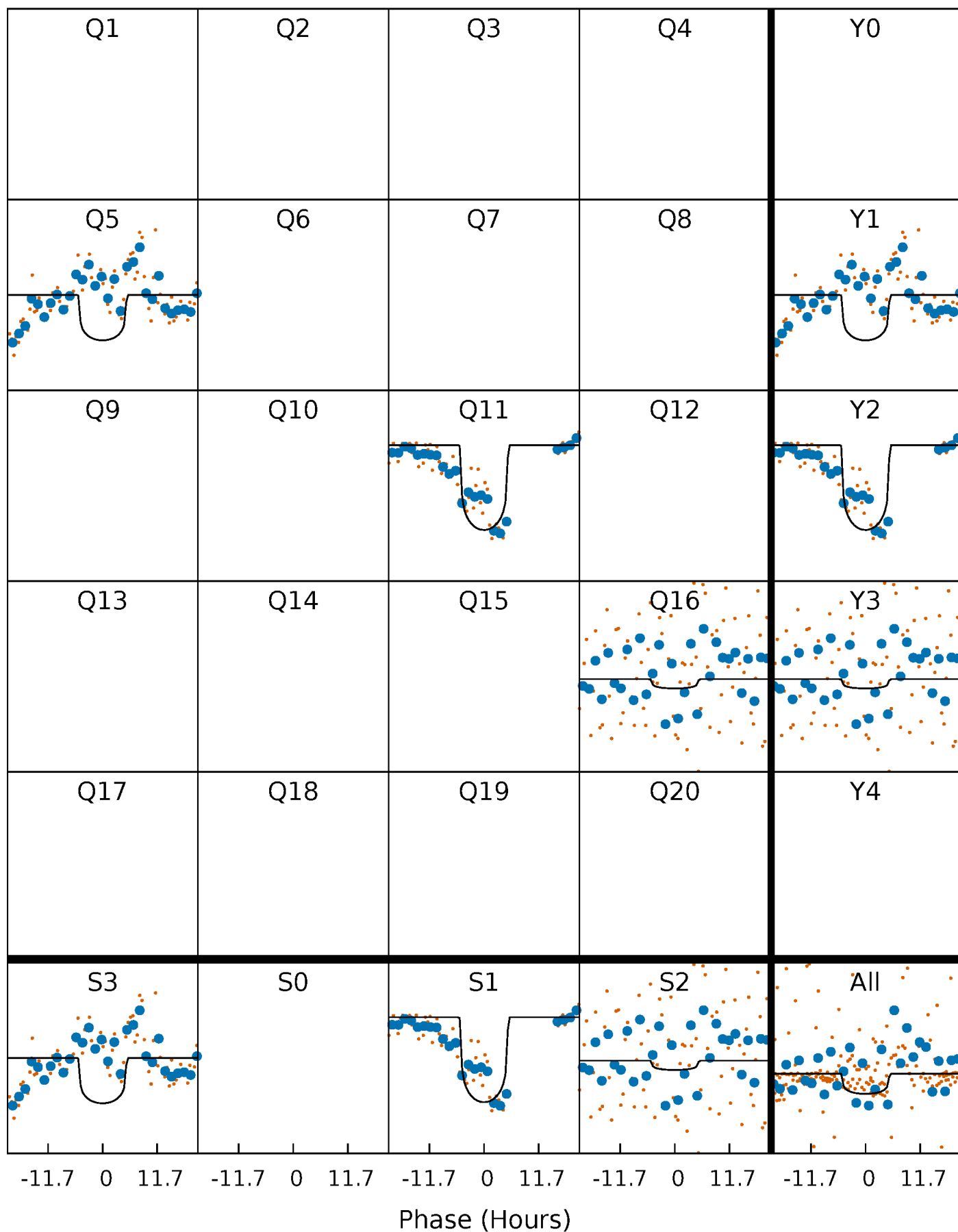
PDC Quarter-Phased Transit Curves

TCE 003429626-06 $P=512.410561$ Days $T_0=495.614041$ (BKJD)



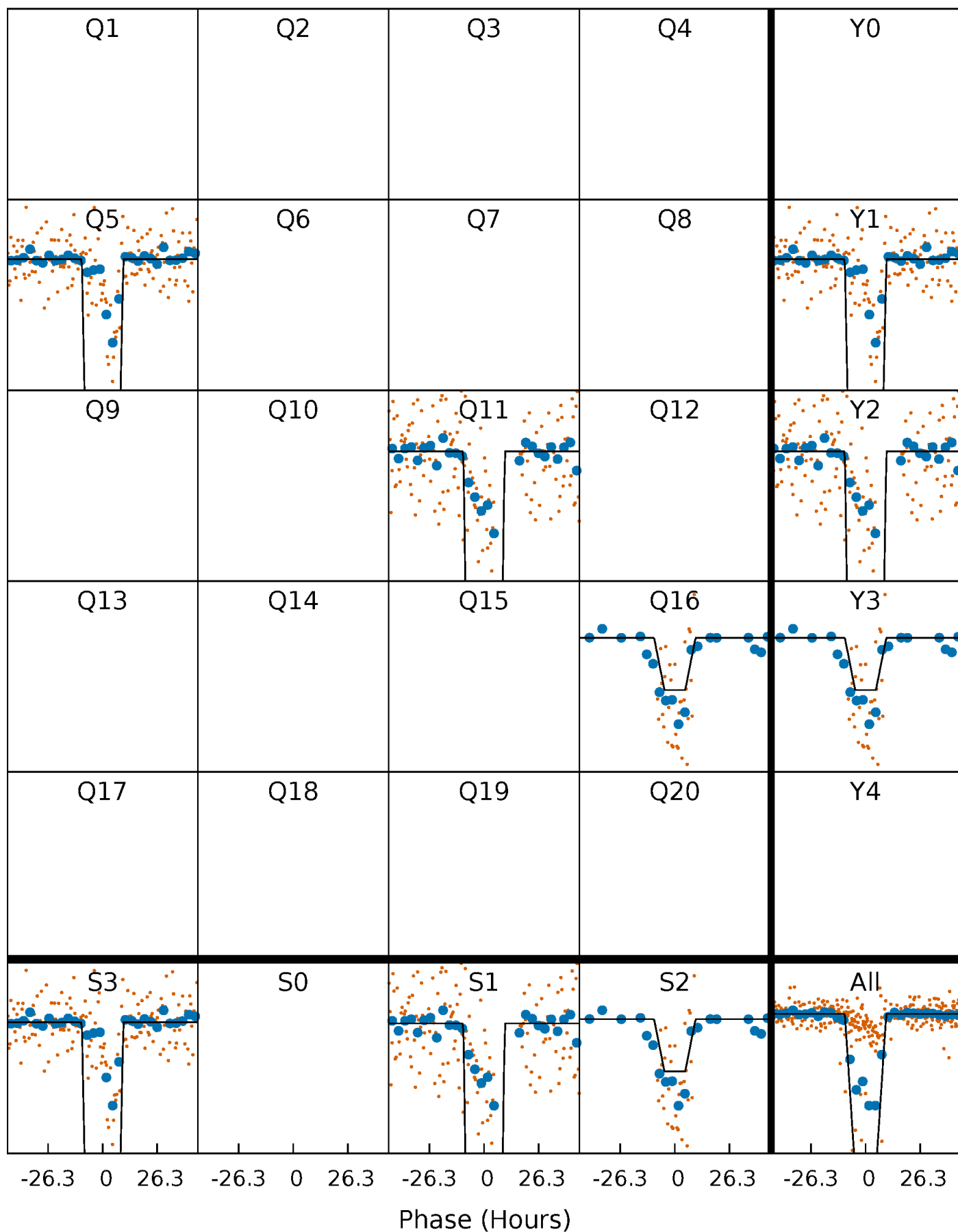
DV Quarter-Phased Transit Curves

TCE 003429626-06 $P=512.410561$ Days $T_0=495.614041$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

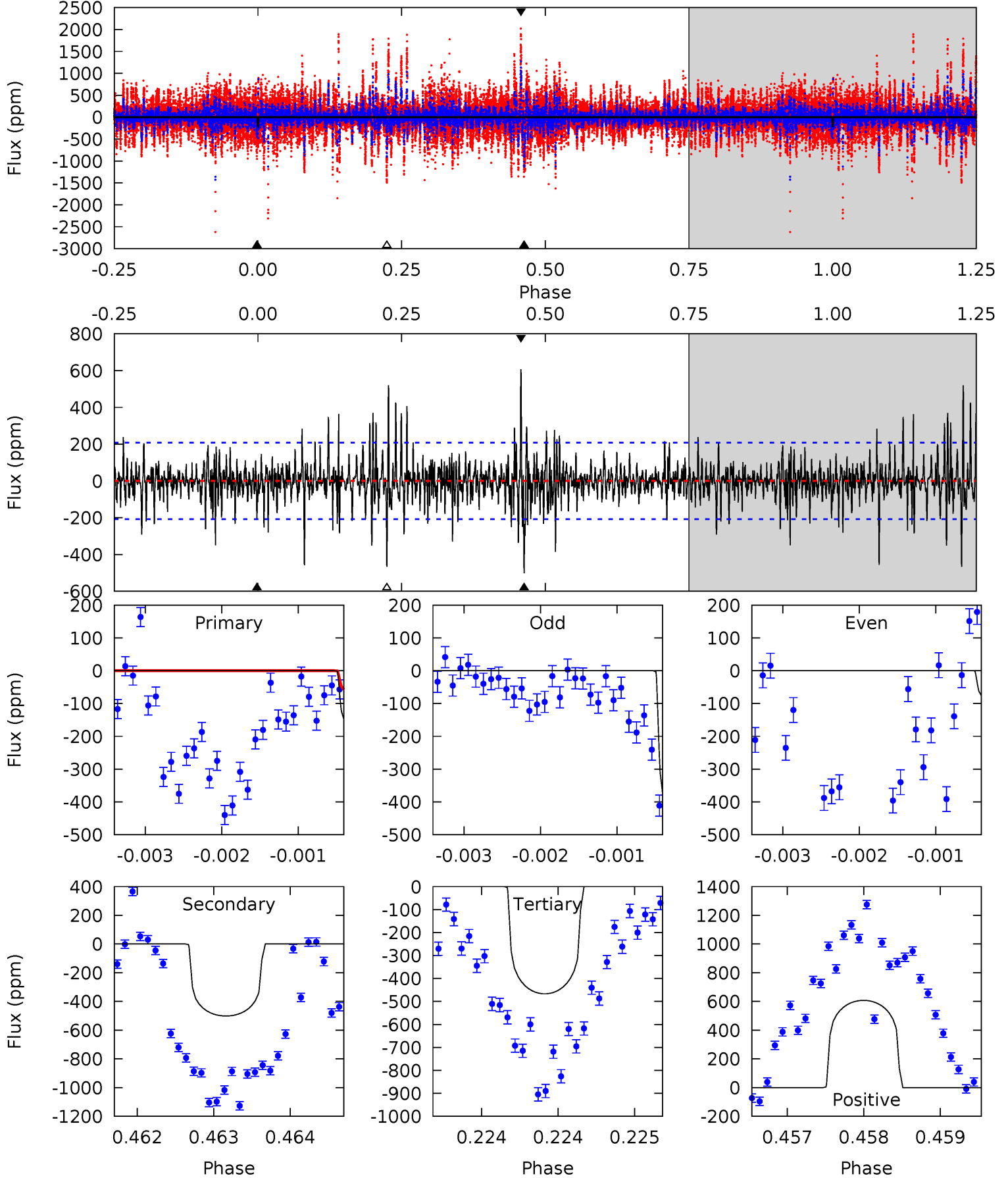
TCE 003429626-06 $P=512.419195$ Days $T_0=495.561349$ (BKJD)



DV Model-Shift Uniqueness Test

003429626-06, P = 512.410561 Days, E = 495.614041 Days

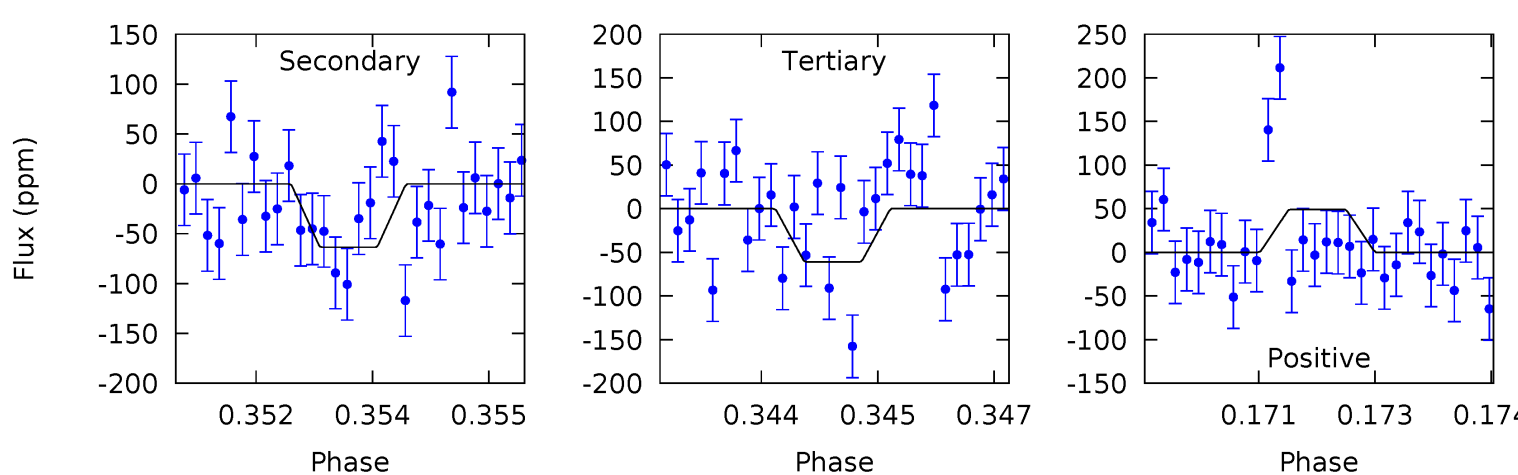
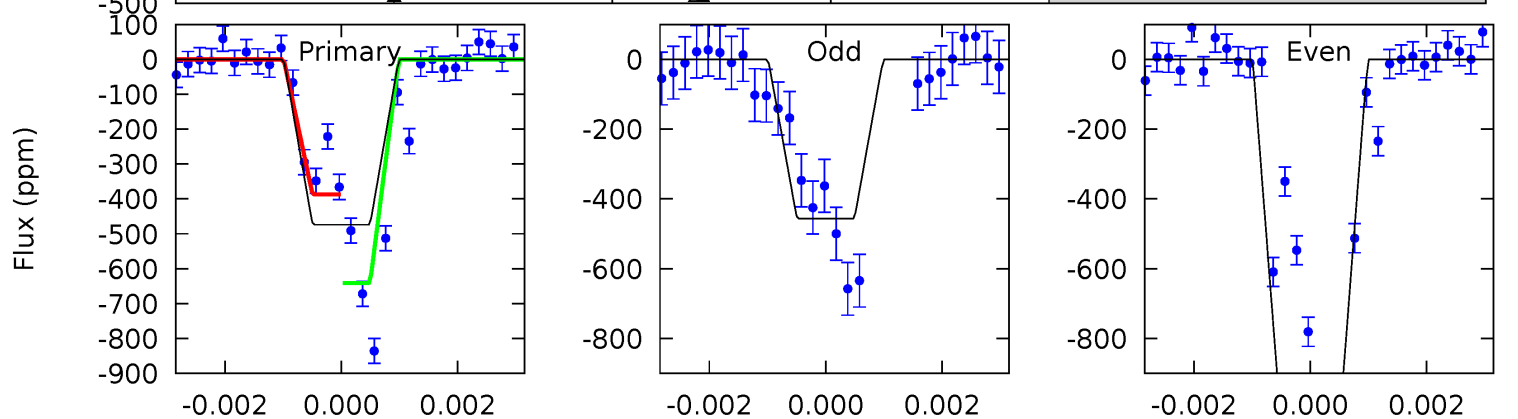
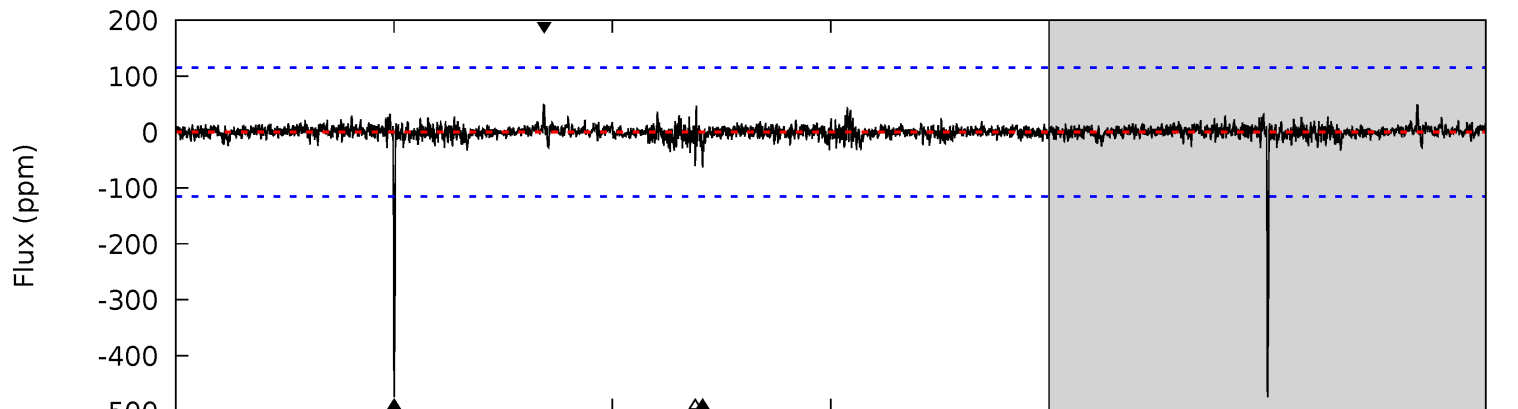
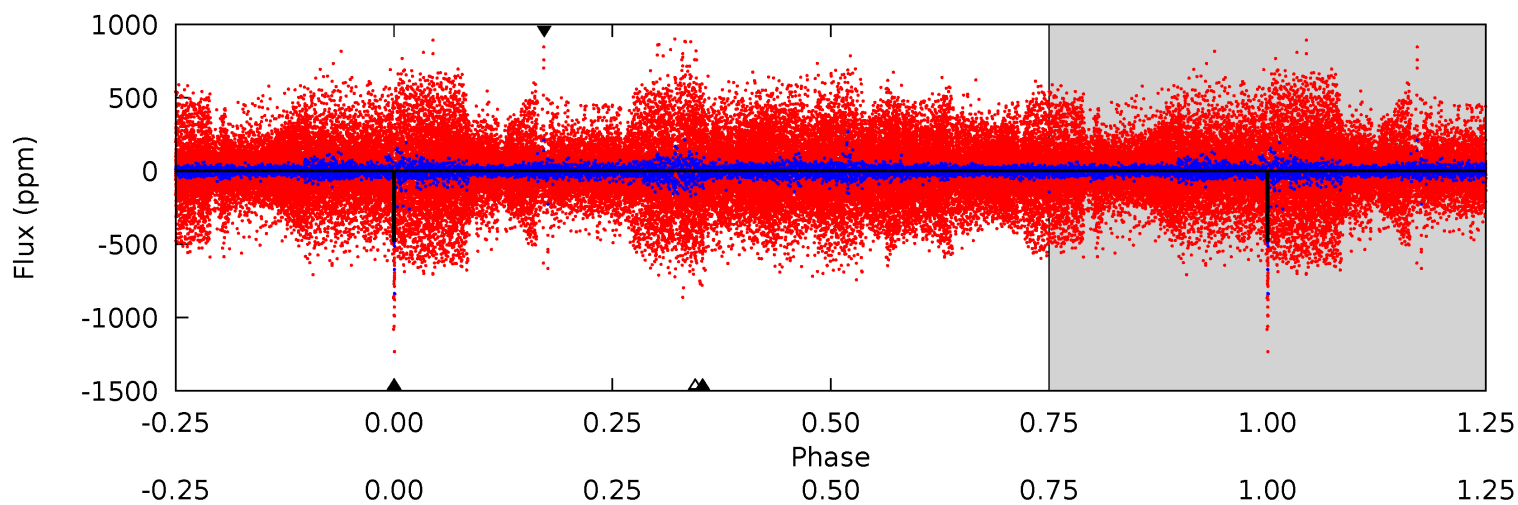
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.33	13.2	12.3	16.0	5.48	3.33	2.18	-6.95	-10.7	0.91	-2.80	4.36	0.81	0.55	3.06



Alt Model-Shift Uniqueness Test

003429626-06, P = 512.419195 Days, E = 495.561349 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.1	2.96	2.83	2.29	5.36	3.15	0.37	19.2	19.8	0.13	0.67	14.0	5.84	0.09	5.62



Stellar Parameters For KIC 003429626

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5825^{+175}_{-193}	$4.401^{+0.132}_{-0.182}$	$-0.340^{+0.300}_{-0.300}$	$0.968^{+0.279}_{-0.172}$	$0.860^{+0.119}_{-0.079}$	$1.335^{+0.786}_{-0.670}$
	+3%/-3%	+3%/-4%	+88%/-88%	+29%/-18%	+14%/-9%	+59%/-50%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 003429626-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-501 ± 38	$2.55^{+0.98}_{-0.93}$	326^{+25}_{-20}	5688^{+1493}_{-780}	59891^{+88574}_{-29130}
Alt.	-64 ± 21	$7.74^{+1.38}_{-1.19}$	325^{+23}_{-19}	2711^{+157}_{-173}	812^{+498}_{-349}

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

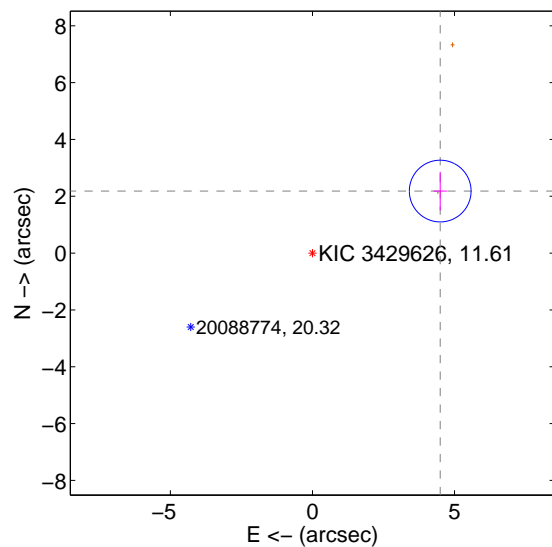
Supplemental centroid analysis for 003429626-06. **Kepler magnitude: 11.61.** Transit SNR 15.00

There are 0 quarters with good PRF difference image offsets

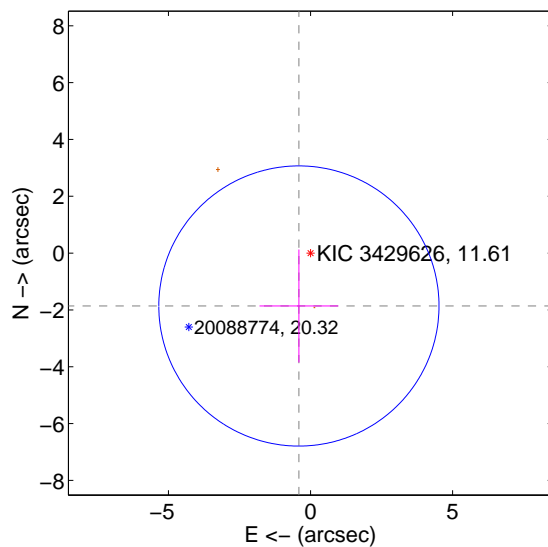
The OOT PRF centroid is offset from the target star catalog position by about 5.88 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.998 ± 0.362	13.81	-4.496 ± 0.233	2.183 ± 0.676
PRF-fit source offset from KIC position	1.906 ± 1.643	1.16	0.409 ± 1.388	-1.862 ± 1.987
photometric centroid source offset	3.04 ± 1.35	2.25	2.25 ± 1.37	-2.05 ± 1.33

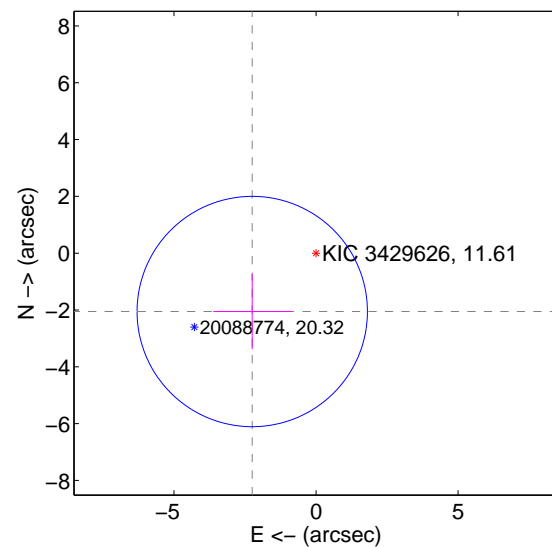
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids

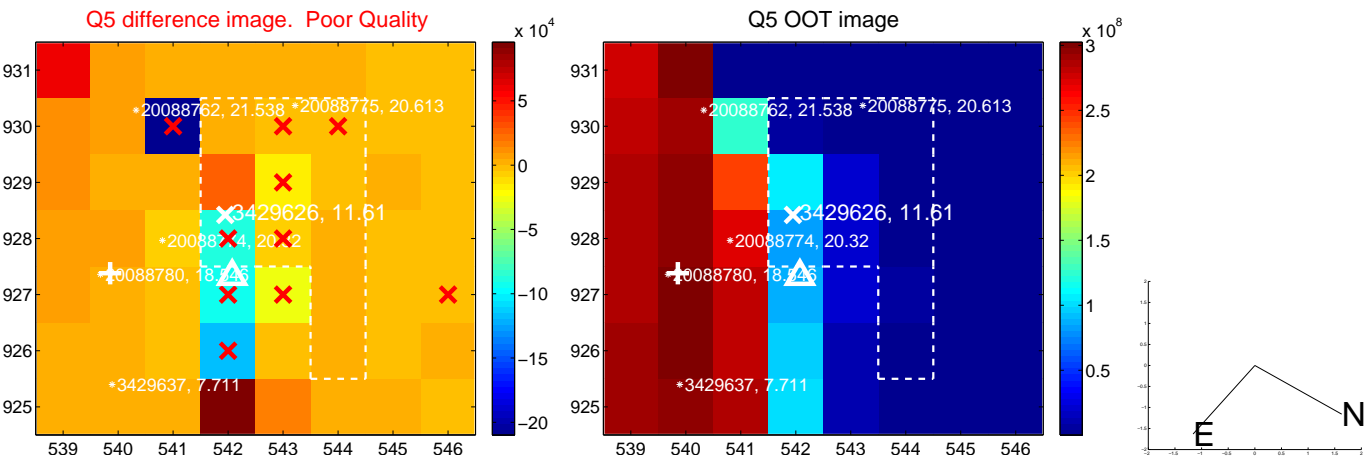


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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



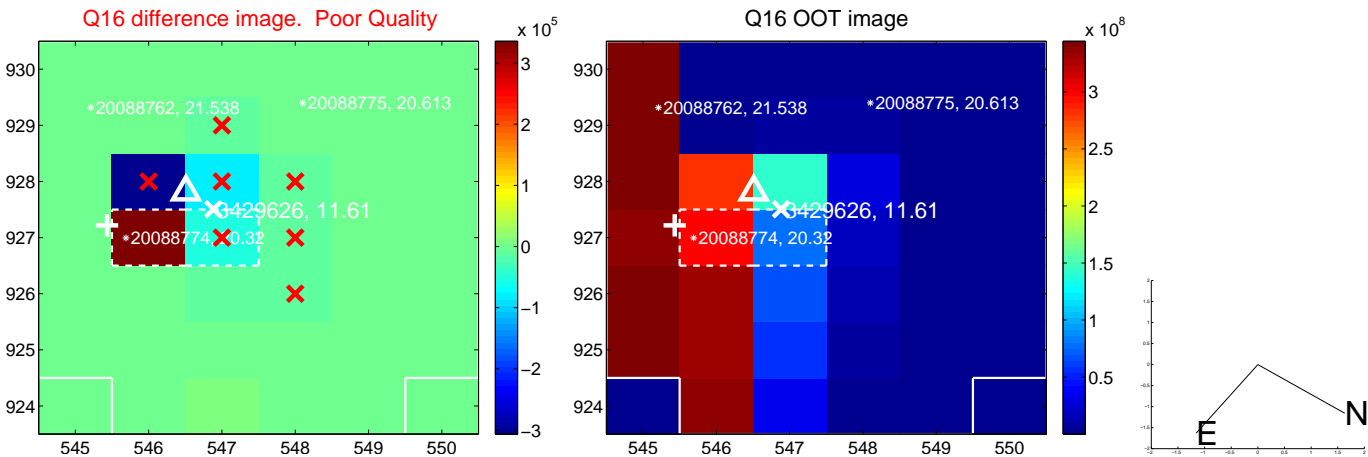
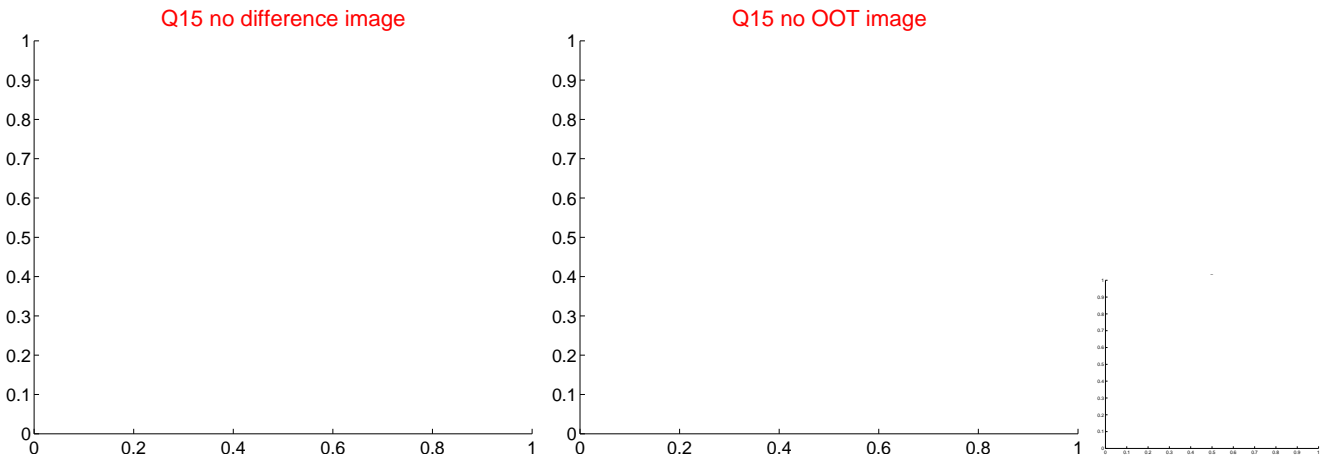
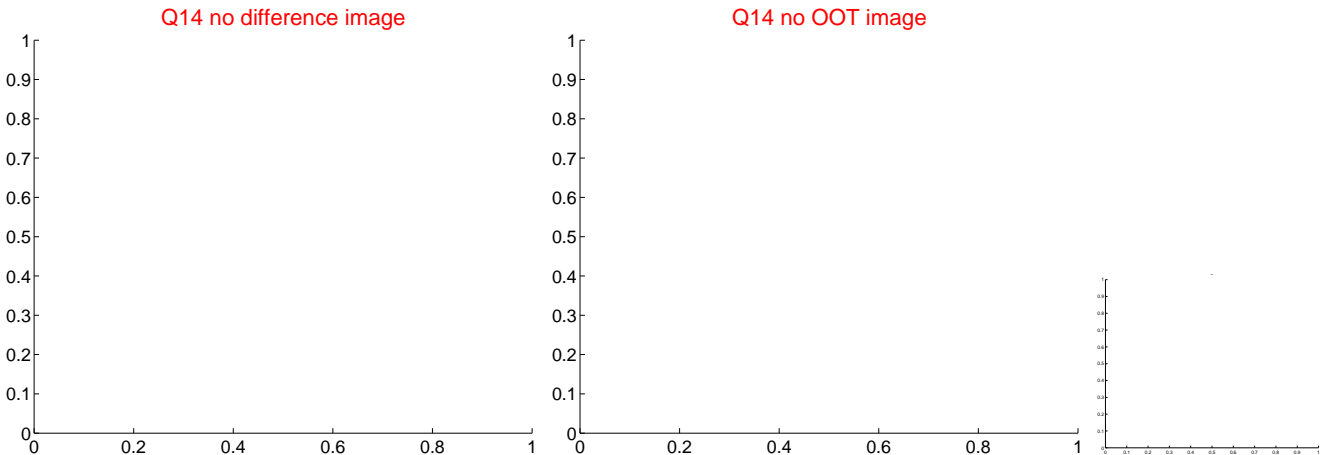
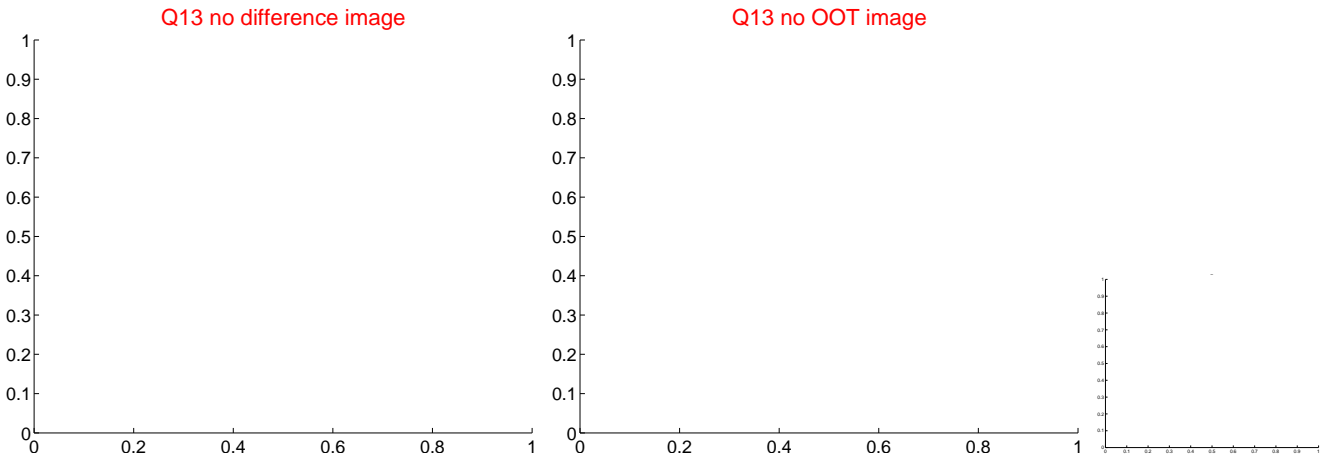
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



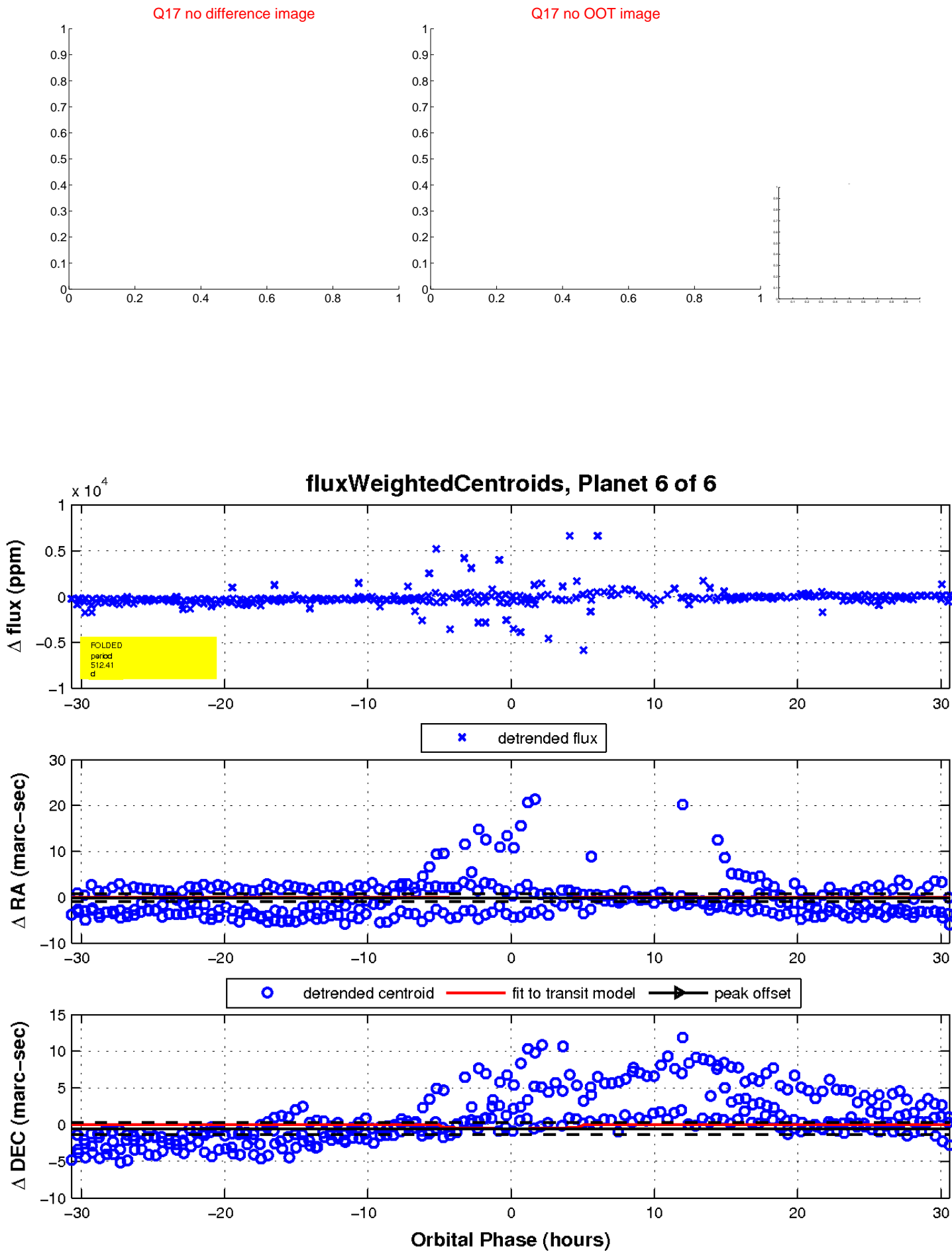
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

