

TIC 198153540 STATISTICAL VALIDATION REPORT

This document is created by the SHERLOCK statistical validation report generator (<https://github.com/franpoz/SHERLOCK>) and focuses on the target star TIC 198153540.

RA (deg)	Dec (deg)	V (mag)	J (mag)	H (mag)	K (mag)
14:04:22.59	46:31:09.84	11.36	9.8	9.36	9.24

Table 1: The proposed target parameters.

T0 (d)	Period (d)	Duration (h)	Depth (ppt)
1741.586	8.0217	1.7	0.867

Table 2: The candidate parameters.

TIC 198153540 Folded Curve with P=8.02d and T0=1741.59. SNR=35.44

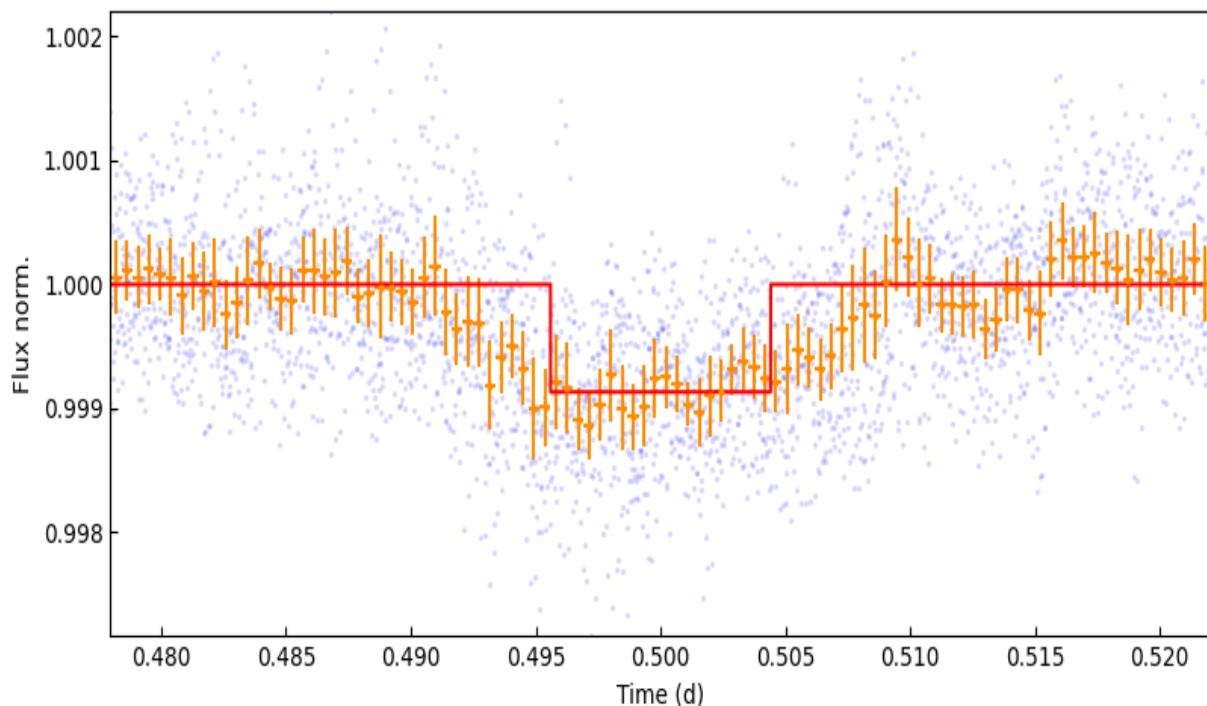


Figure 1: Folded curve of the found candidate.

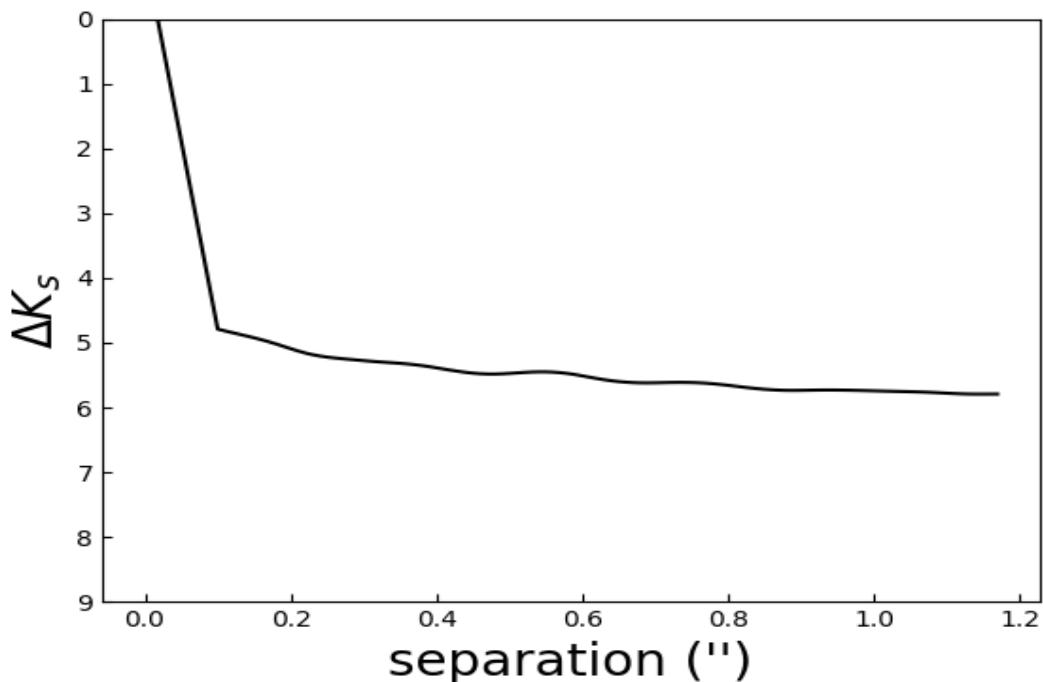


Figure 2: Contrast curve for target.

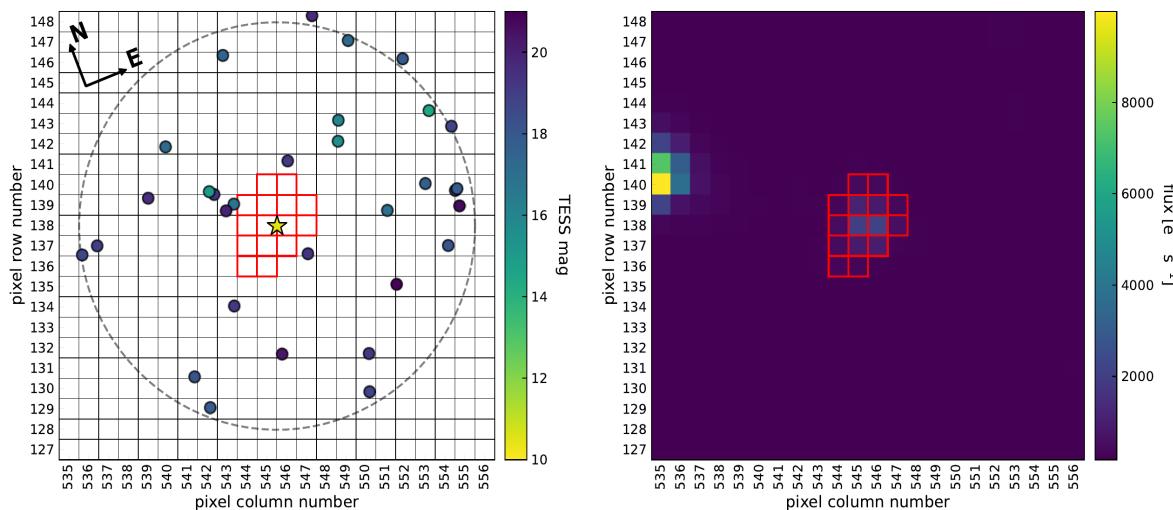


Figure 3: Nearby stars for target and its aperture

ID	scenario	M_s	R_s	P_orb	inc	b	ecc	w	R_p	M_EB	R_EB	prob
198153540	TP	0.87	0.78	8.02	88.47	0.42	0.49	179.89	2.56	0.0	0.0	0.872548
198153540	EB	0.87	0.78	8.02	85.56	1.91	0.03	244.85	0.0	0.79	0.78	0.0
198153540	EBx2P	0.87	0.78	16.04	88.06	0.83	0.68	184.13	0.0	0.86	0.78	0.0
198153540	PTP	0.87	0.78	8.02	88.69	0.38	0.37	169.42	2.61	0.0	0.0	0.05201
198153540	PEB	0.87	0.78	8.02	86.71	1.29	0.11	154.59	0.0	0.38	0.39	0.0
198153540	PEBx2P	0.87	0.78	16.04	88.26	0.55	0.73	175.81	0.0	0.85	0.78	6e-06
198153540	STP	0.67	0.69	8.02	88.63	0.33	0.45	156.42	4.78	0.0	0.0	0.000463
198153540	SEB	0.18	0.21	8.02	89.57	0.13	0.82	188.37	0.0	0.05	0.1	0.000183
198153540	SEBx2P	0.31	0.33	16.04	89.09	0.48	0.79	192.83	0.0	0.3	0.32	3.7e-05
198153540	DTP	0.87	0.78	8.02	88.28	0.27	0.64	153.24	2.59	0.0	0.0	0.068597



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198153540	DEB	0.87	0.78	8.02	85.89	1.78	0.03	159.75	0.0	0.66	0.65	0.0
198153540	DEBx2P	0.87	0.78	16.04	88.06	0.73	0.62	166.21	0.0	0.85	0.78	0.0
198153540	BTP	1.14	1.23	8.02	87.51	0.57	0.05	126.09	15.33	0.0	0.0	3.4e-05
198153540	BEB	0.93	0.89	8.02	89.68	0.08	0.16	94.7	0.0	0.21	0.24	0.004
198153540	BEBx2P	0.86	0.9	16.04	87.56	1.32	0.23	217.48	0.0	0.83	0.84	0.002121
198153080	NTP	0.34	0.36	8.02	89.67	0.17	0.53	195.42	19.79	0.0	0.0	0.0
198153080	NEB	0.34	0.36	8.02	89.95	0.02	0.72	174.29	0.0	0.29	0.31	0.0
198153080	NEBx2P	0.34	0.36	16.04	89.98	0.01	0.64	174.34	0.0	0.34	0.35	1e-06

Table 3: Scenarios attributes and probabilities.

Scenario	FPP	NFPP	FPP2	FPP3+
0	0.006628	1e-06	0.000267	0.000133
1	0.006966	1e-06	0.000281	0.00014
2	0.006865	1e-06	0.000276	0.000138
3	0.006994	1e-06	0.000282	0.000141
4	0.006768	1e-06	0.000272	0.000136
MEAN	0.006844	1e-06	0.000276	0.000138

Table 4: Validation results.

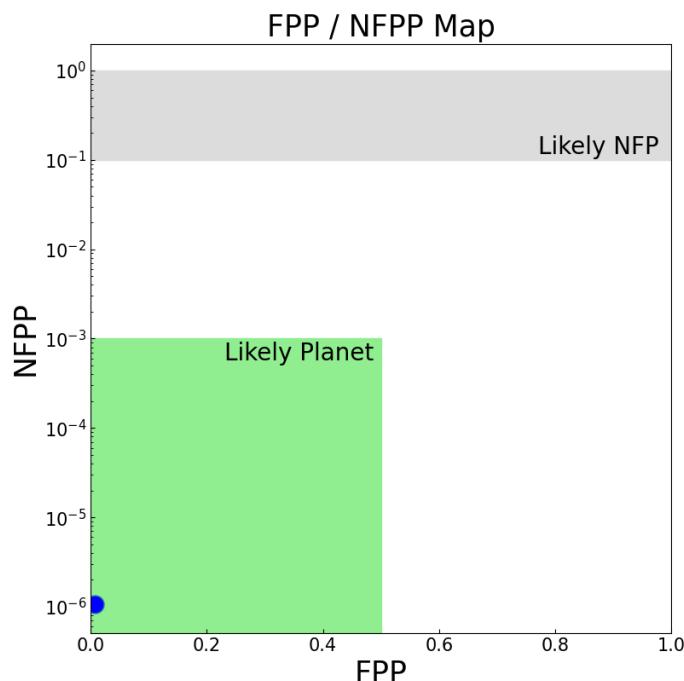


Figure 4: Validation map for the mean scenario.

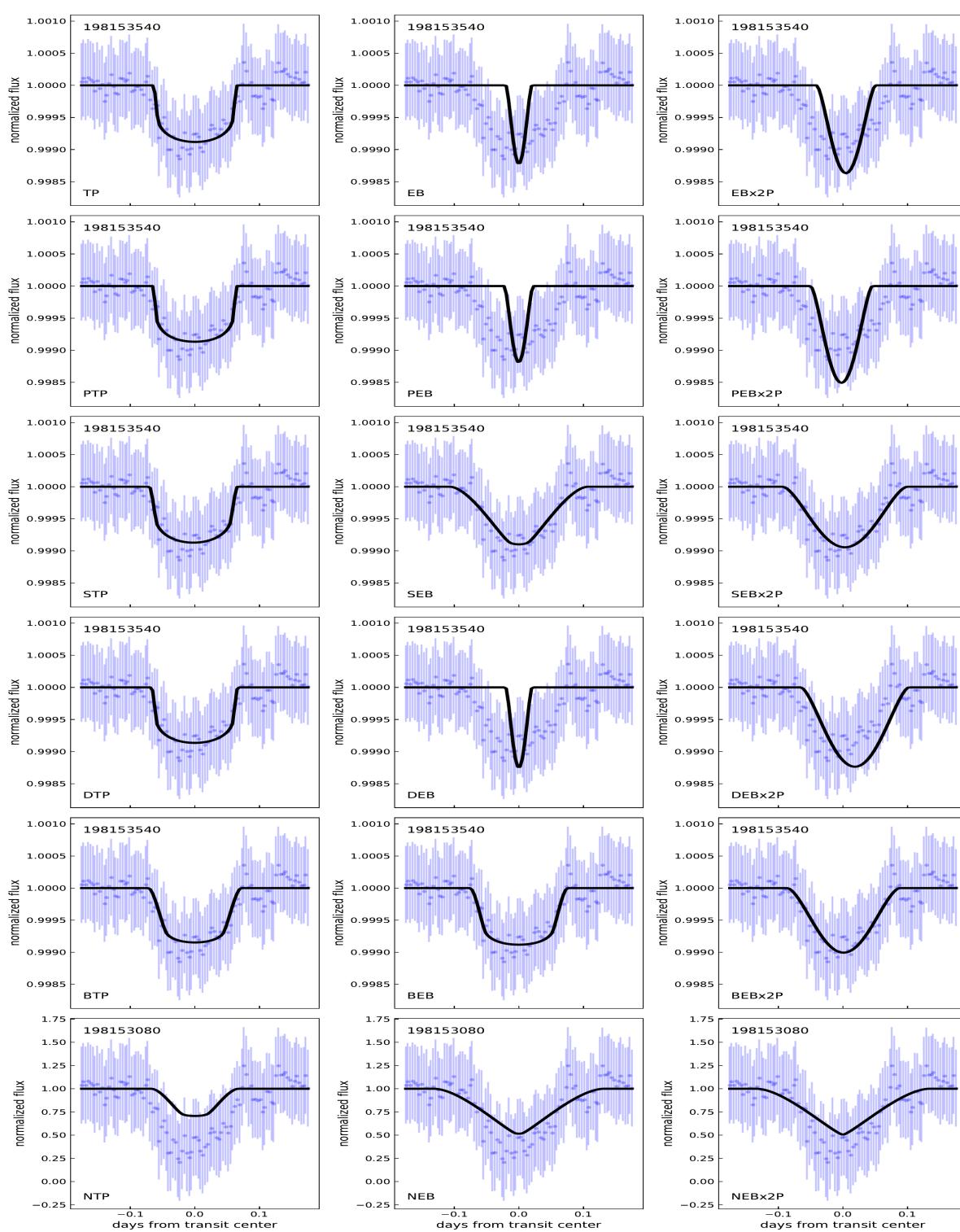


Figure 5: Best fits for scenario no. .0



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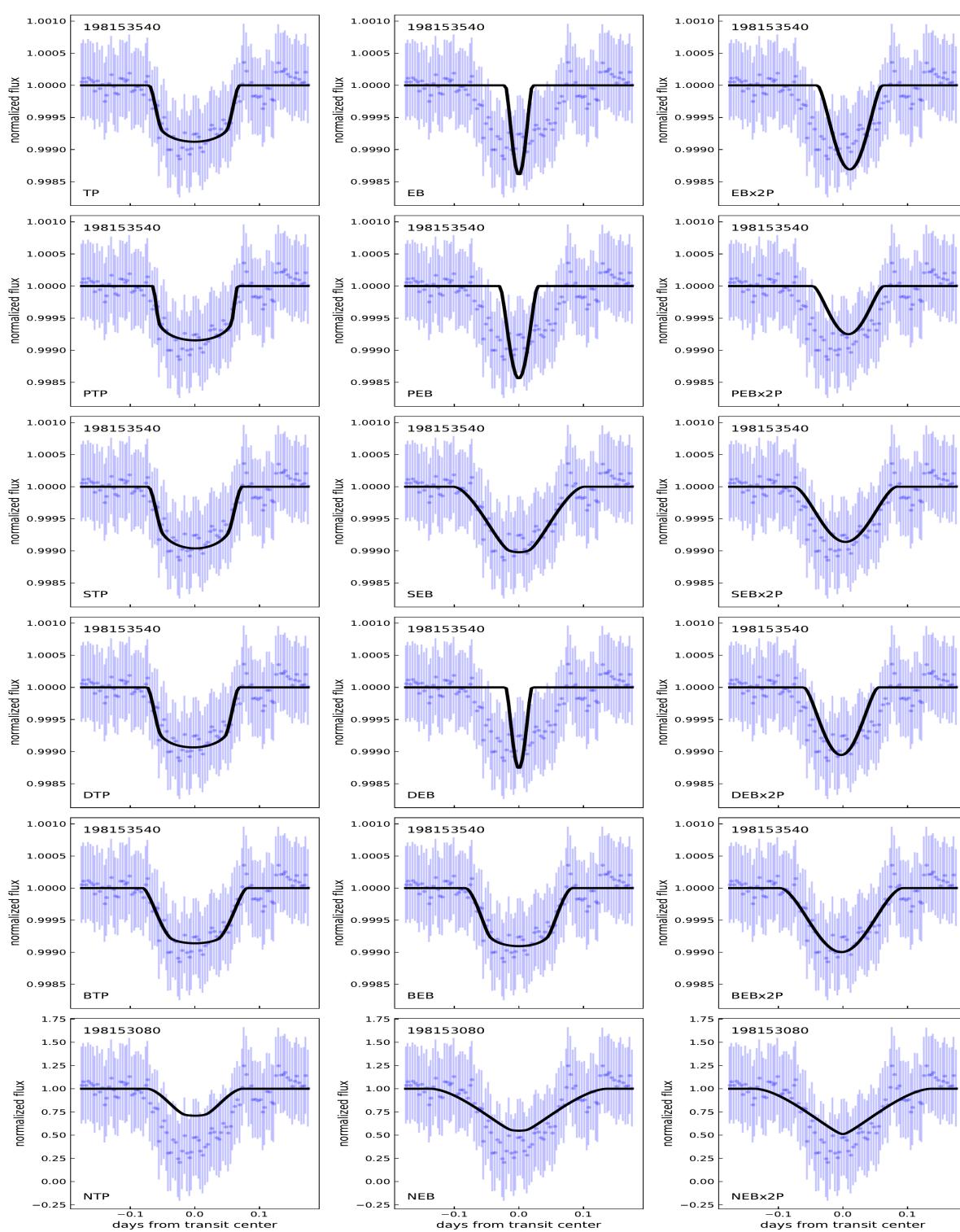


Figure 6: Best fits for scenario no. .1

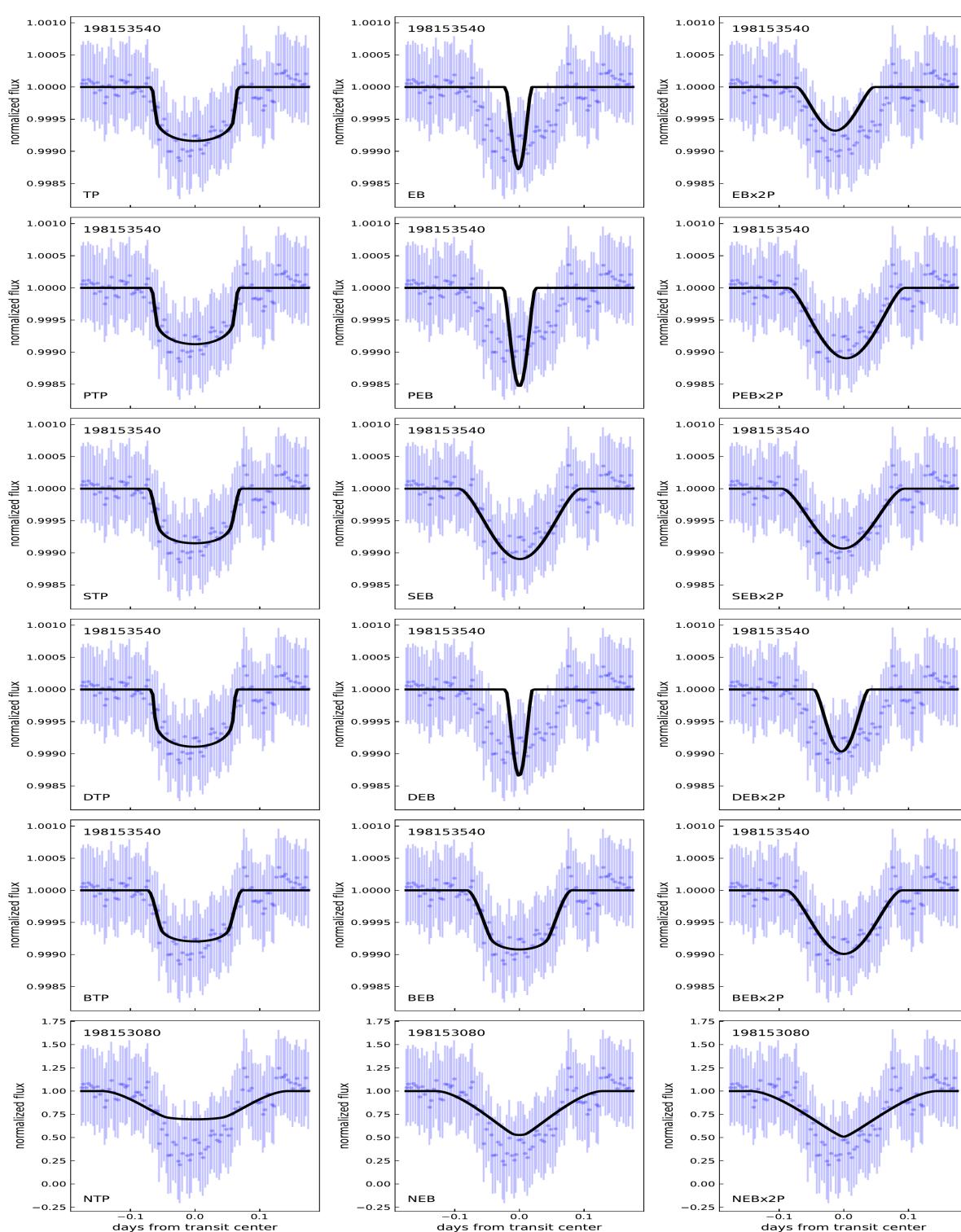


Figure 7: Best fits for scenario no. .2

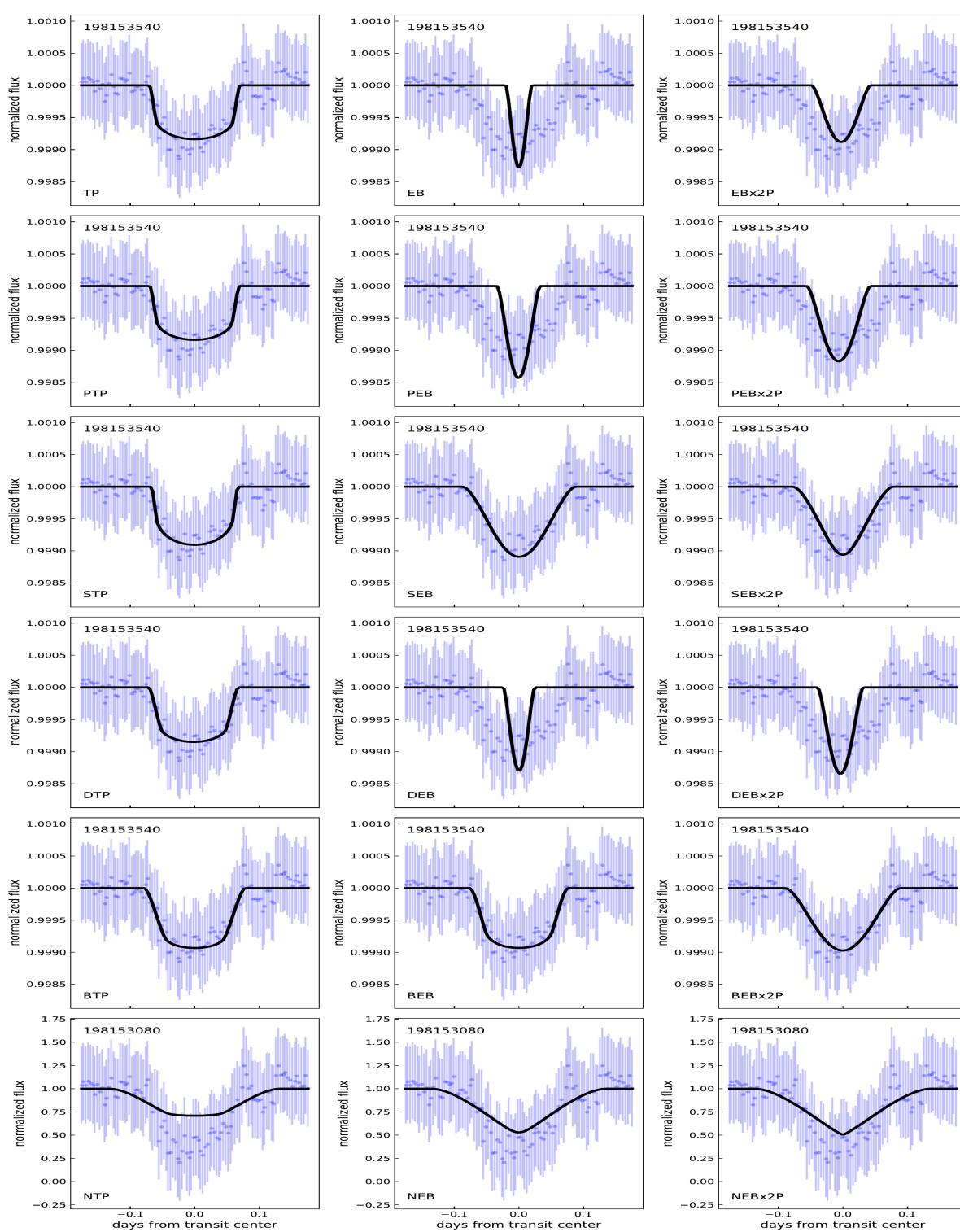


Figure 8: Best fits for scenario no. .3

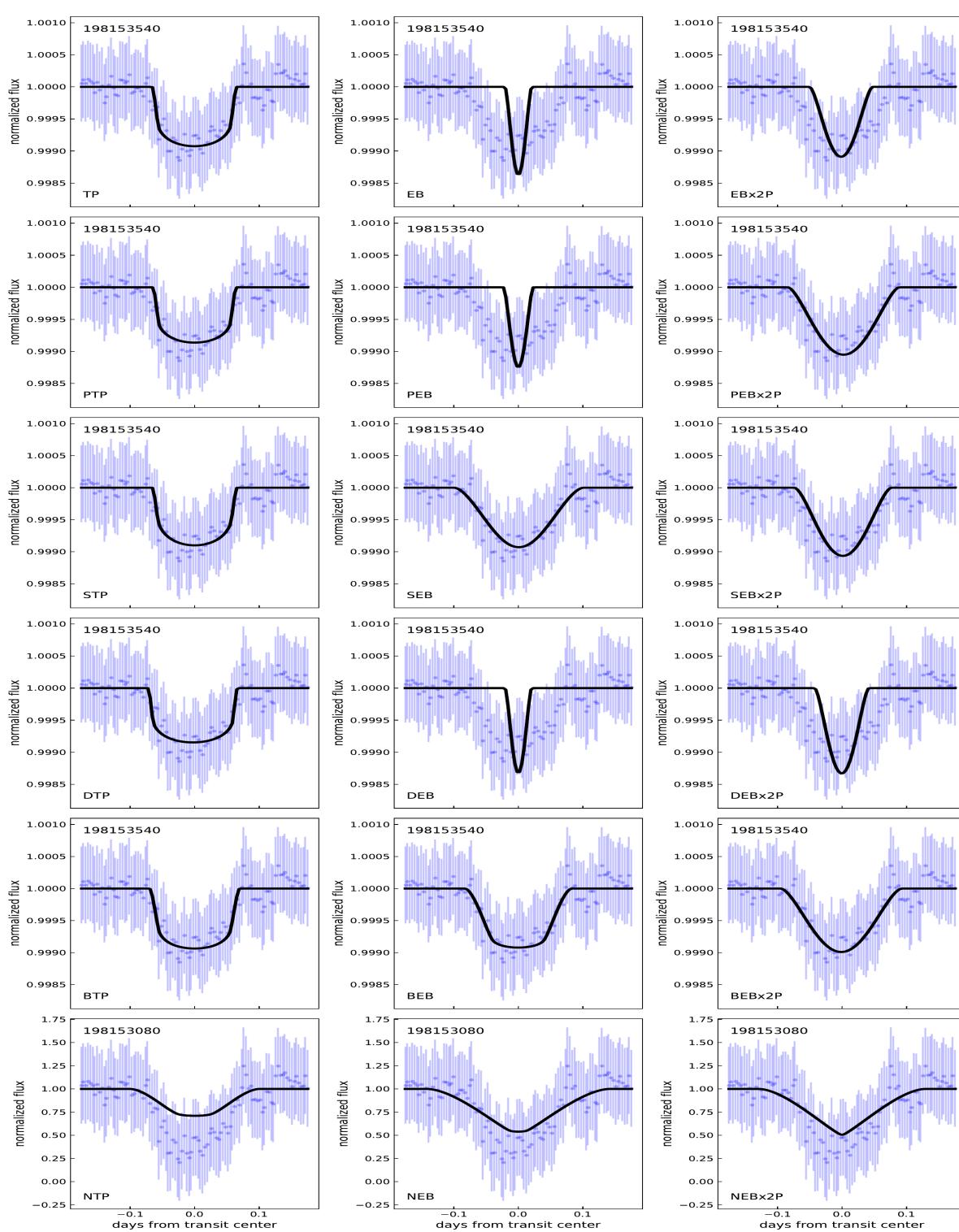


Figure 9: Best fits for scenario no. .4