Table S1. ΔR and ΔZ at T_{FIRST} obtained using *RTLoc* and *MParLoc* for all tested configurations (ΔTimes only; ΔTimes + ΔAmp + BAZ; ΔTimes + ΔAmp; and ΔTimes + BAZ) for the selected events. The number of available observables (P-picks, BAZ estimates, and P_v values) is also reported.

T_{LAST}													
ID	***RTLoc***		***MPArLoc* ΔTimes**		***MPArLoc* ΔTimes + ΔAmp + BAZ**		***MParLoc* ΔTimes + ΔAmp**		***MParLoc* ΔTimes + BAZ**		**Available observables**		
	ΔR (km)	**ΔZ (km)**	**ΔR (km)**	**ΔZ (km)**	**ΔR (km)**	**ΔZ (km)**	**ΔR (km)**	**ΔZ (km)**	**ΔR (km)**	**ΔZ (km)**	**P-Picks**	**BAZ**	**P_v**
MS	6	16	3	12	10	12	14	8	10	12	5	4	0
EV1	9	8	6	-4	6	-4	6	-4	6	-4	5	4	0
EV2	3	11	4	21	4	-11	4	-11	3	9	5	2	0
EV3	6	0	8	0	14	0	14	0	8	0	5	4	0
EV4	10	41	11	36	11	24	11	24	15	32	5	3	0
EV5	11	31	7	34	11	22	11	22	3	22	5	3	0
EV6	13	-1	21	5	2	29	2	29	38	-3	5	3	0
EV7	39	-18	83	-19	63	-19	91	-19	95	-19	5	4	0
EV8	10	38	14	38	6	38	6	38	98	-34	5	3	0
EV9	1	10	3	13	2	9	4	9	4	9	5	4	0
FOR	6	1	2	0	2	0	2	0	2	0	6	3	0
AS1	32	15	31	0	26	0	26	0	31	0	5	3	0
AS2	9	32	2	0	2	0	13	20	4	0	5	3	0
AS3	32	32	18	20	11	20	11	12	7	0	5	3	0
AS4	4	22	4	0	3	0	3	0	3	0	5	5	0
AS5	15	18	3	0	17	12	7	0	7	0	5	3	0
AS6	8	21	20	28	35	28	35	28	20	28	5	4	0
AS7	8	9	6	0	18	20	18	20	6	0	5	3	0
AS8	9	22	13	20	5	0	5	0	5	0	5	4	0
AS9	7	3	4	0	15	20	15	20	4	0	5	3	0
AS10	10	3	6	4	8	8	8	8	7	-4	5	3	0
AS11	7	25	3	20	10	16	10	16	5	0	5	4	0
AS12	10	0	7	20	16	20	16	20	7	0	5	4	0
AS13	37	17	15	30	21	26	21	26	15	30	5	3	0
AS14	11	-11	6	13	12	13	12	13	11	-11	5	2	0
AS15	17	32	6	0	17	20	17	20	11	0	5	3	0
AS16	7	9	10	-10	19	18	19	18	10	-10	5	2	0
AS17	14	37	10	24	15	0	15	0	15	0	5	4	0
AS18	8	-1	7	-1	7	-1	7	-1	7	-1	5	3	0
AS19	26	-11	0	13	9	9	9	9	9	-11	5	3	0

Table S2. ΔR and ΔZ at T_{LAST} obtained using *RTLoc* and *MParLoc* for all tested configurations (ΔTimes only; ΔTimes + ΔAmp + BAZ; ΔTimes + ΔAmp; and ΔTimes + BAZ) for the selected events. The number of available observables (P-picks, BAZ estimates, and P_v values) is also reported.

T_{FIRST}													
ID	***RTLoc***		***MPArLoc* ΔTimes**		***MPArLoc* ΔTimes + ΔAmp + BAZ**		***MParLoc* ΔTimes + ΔAmp**		***MParLoc* ΔTimes + BAZ**		**Available observables**		
	ΔR (km)	**ΔZ (km)**	**ΔR (km)**	**ΔZ (km)**	**ΔR (km)**	**ΔZ (km)**	**ΔR (km)**	**ΔZ (km)**	**ΔR (km)**	**ΔZ (km)**	**P-Picks**	**BAZ**	**P_v**
MS	6	56	6	28	6	24	6	28	3	12	26	22	26
EV1	23	46	2	-4	14	20	2	-4	2	-4	17	16	15
EV2	6	27	8	13	8	13	8	13	8	13	21	14	20
EV3	19	-10	10	0	22	0	5	0	5	0	19	16	18
EV4	26	68	10	48	15	68	6	32	10	48	18	11	17
EV5	7	15	4	26	13	30	7	30	4	26	25	17	24
EV6	31	2	98	69	82	21	82	21	98	69	19	17	18
EV7	34	-6	92	-19	92	-19	92	-19	92	-19	18	17	17
EV8	45	-6	64	6	10	-18	39	14	64	6	19	13	16
EV9	35	4	27	-3	12	5	12	5	27	-3	12	10	9
FOR	6	23	6	20	6	20	6	20	6	20	23	19	22
AS1	32	15	31	0	26	0	31	0	31	0	5	3	0
AS2	11	33	11	36	11	36	11	36	11	36	12	9	11
AS3	30	26	14	20	14	24	14	24	14	24	13	8	12
AS4	7	56	6	24	9	28	6	24	6	24	21	15	20
AS5	57	14	24	20	3	12	24	20	24	20	19	14	18
AS6	12	21	11	20	27	28	11	20	11	20	9	6	8
AS7	76	61	14	32	10	28	10	28	14	32	19	14	18
AS8	13	34	9	24	9	20	9	24	9	24	19	16	18
AS9	9	37	7	40	11	28	7	28	7	40	18	15	15
AS10	12	48	5	20	10	16	5	20	8	4	16	11	15
AS11	21	61	3	28	7	24	3	24	3	28	16	13	15
AS12	27	61	7	28	1	24	7	28	7	28	14	13	13
AS13	9	8	11	54	7	26	11	54	11	54	11	10	10
AS14	12	53	6	33	6	21	6	33	6	33	13	6	12
AS15	16	69	5	28	5	40	5	28	5	28	19	16	18
AS16	25	60	2	18	4	38	2	18	2	18	8	3	7
AS17	13	69	8	24	2	28	8	24	8	24	19	15	18
AS18	15	68	5	27	6	55	5	27	5	27	20	14	19
AS19	26	59	4	13	6	53	4	13	4	13	21	17	20