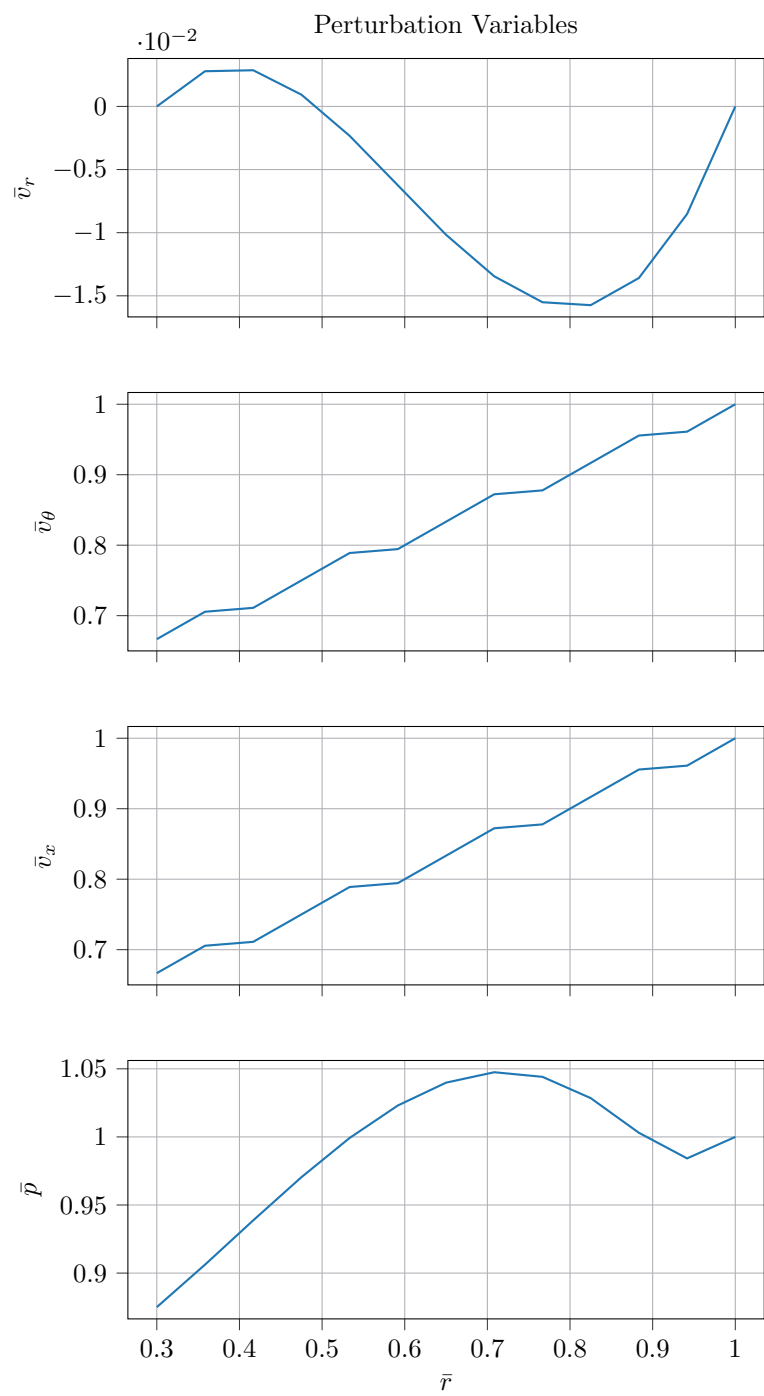


Figure 1: Mach distribution for method of manufactured solution case



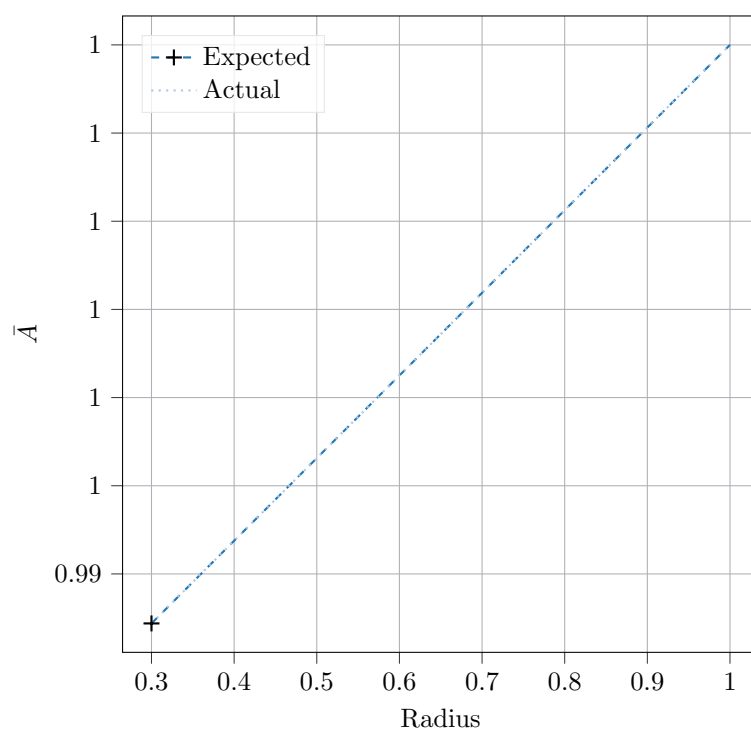


Figure 2: Speed of Sound from Integrating the Tangential Mach Number

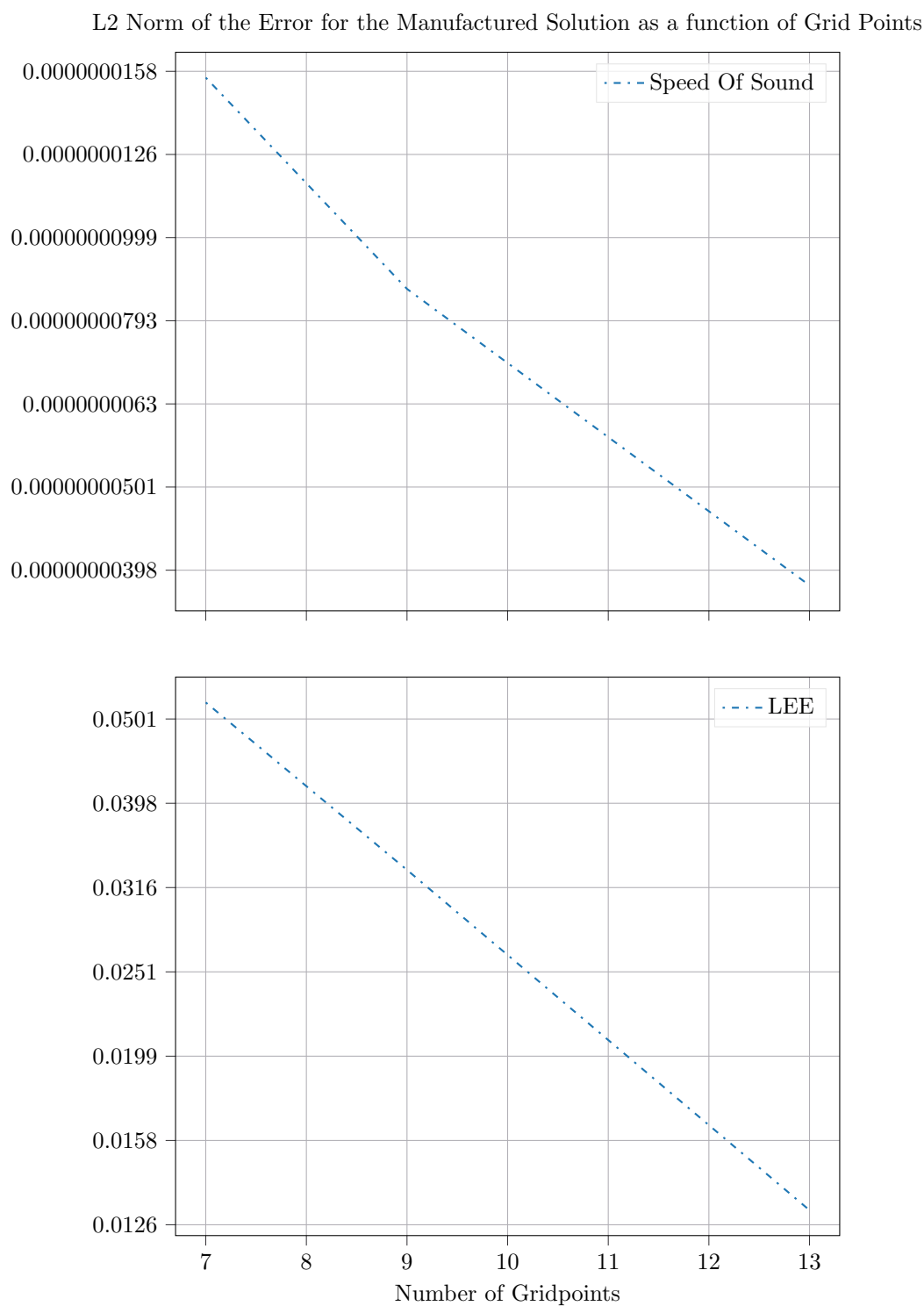


Figure 3: Speed of Sound Expected vs Actual

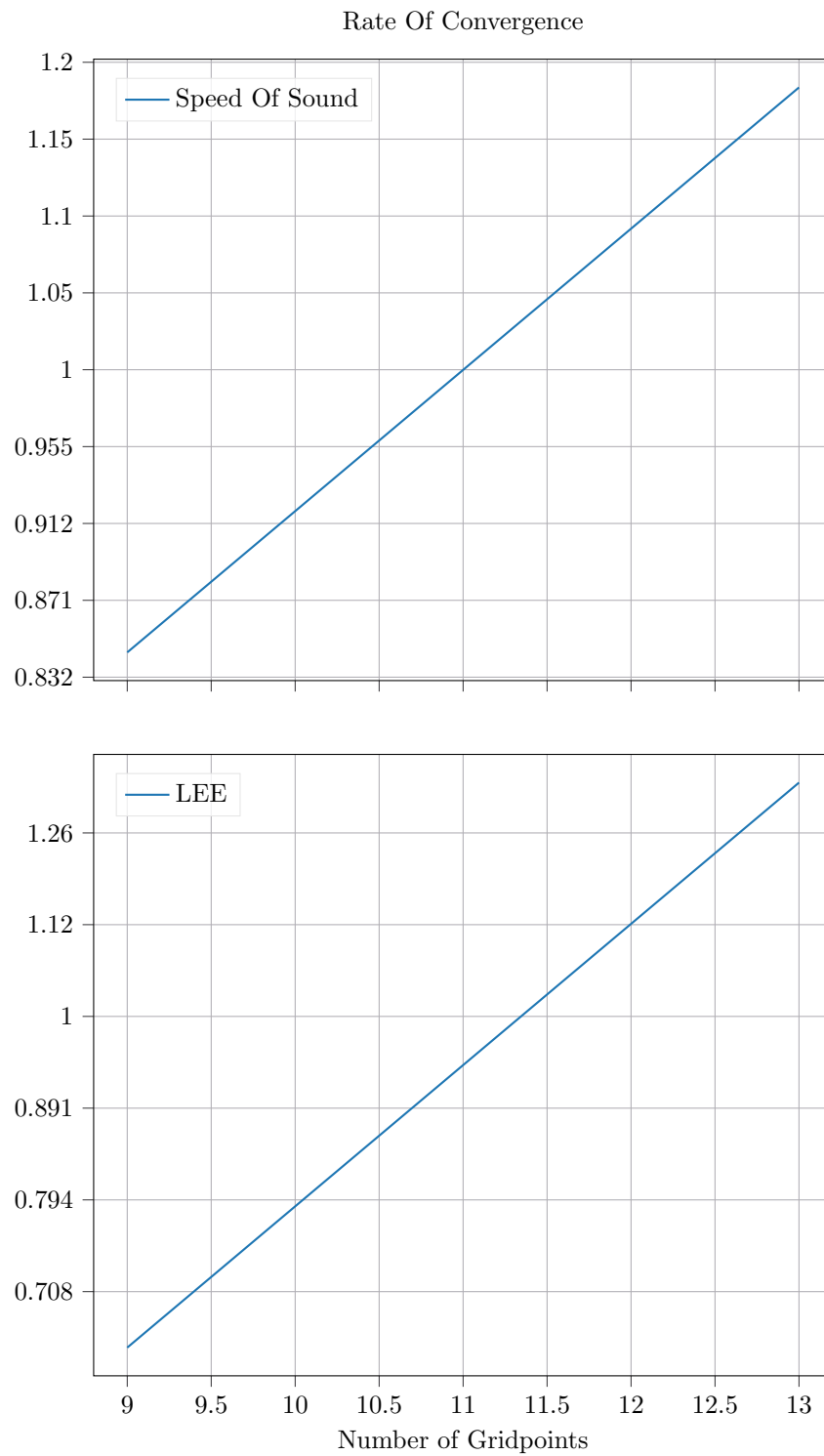


Figure 4: Rate of Convergence for the Speed of Sound Integration

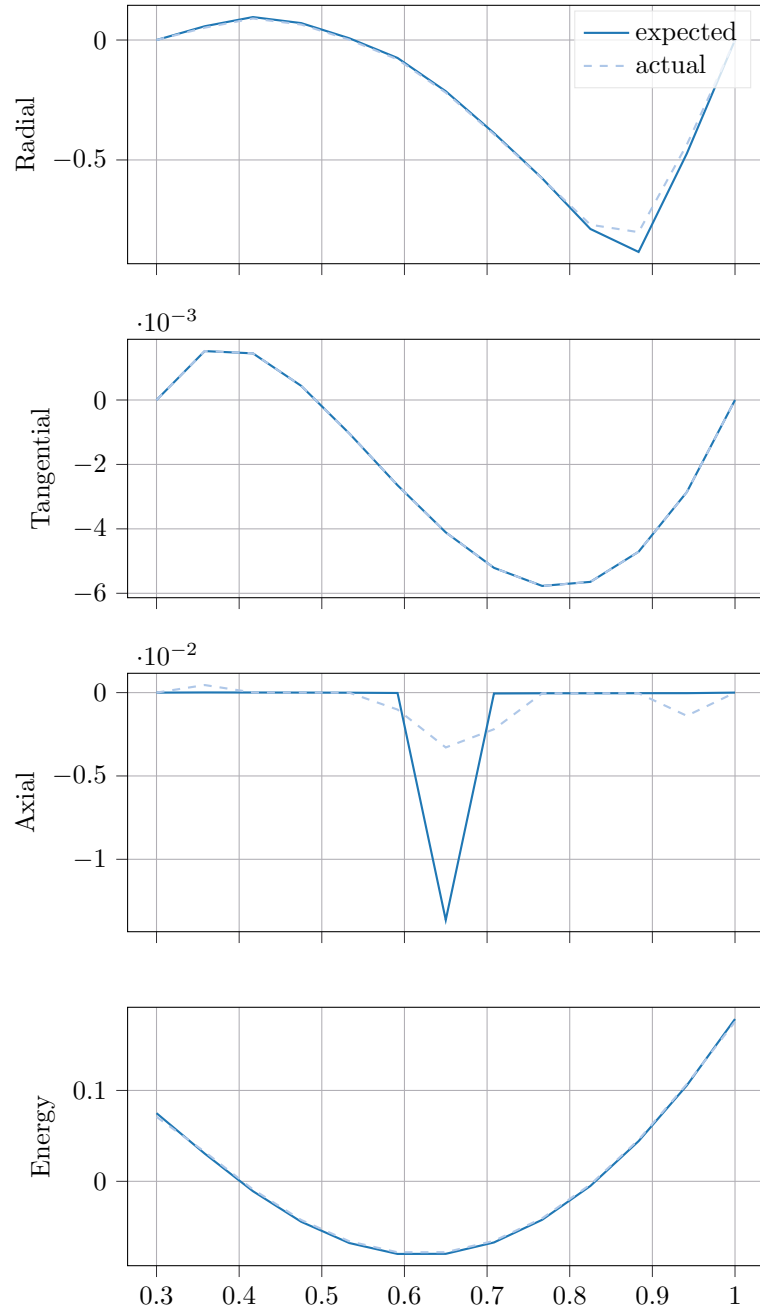
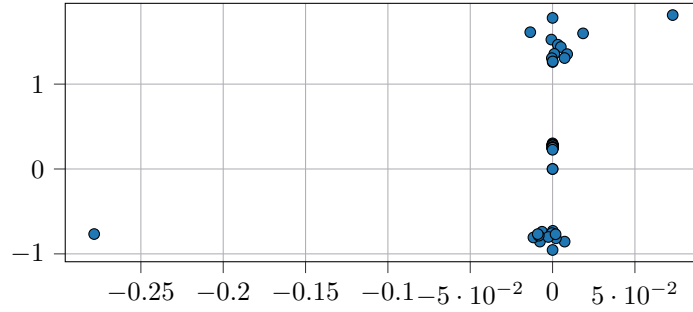


Figure 5: Source Term Error



1 Results

#	j	Re{gam}	Im{gam}	Re{gam/ak}	Im{gam/ak}	nz
1	-37.264125	-8.350929e+00	-1.242138	-2.783643e-01	-0.766566	1.717882e-01
2	-31.435655	-2.602296e-06	-1.047855	-8.674322e-08	-0.954330	7.900108e-08
3	-41.173750	4.215406e-03	-1.372458	1.405135e-04	-0.728620	-7.459674e-05
4	-40.575773	-1.919799e-01	-1.352526	-6.399330e-03	-0.739341	3.498112e-03
5	-35.065153	-2.304424e-01	-1.168838	-7.681412e-03	-0.855513	5.622291e-03
6	-35.055587	2.194349e-01	-1.168520	7.314497e-03	-0.855750	-5.356677e-03
7	-39.706555	-1.350185e-02	-1.323552	-4.500618e-04	-0.755543	2.569154e-04
8	-36.729887	6.130196e-02	-1.224330	2.043399e-03	-0.816771	-1.363186e-03
9	-37.188259	-3.490463e-01	-1.239609	-1.163488e-02	-0.806635	7.571019e-03
10	-37.453471	-7.717350e-02	-1.248449	-2.572450e-03	-0.800990	1.650454e-03
11	-38.174476	-2.517297e-01	-1.272483	-8.390989e-03	-0.785831	5.181918e-03
12	-39.101664	-2.697962e-01	-1.303389	-8.993208e-03	-0.767194	5.293538e-03
13	-39.021616	5.478842e-02	-1.300721	1.826281e-03	-0.768803	-1.079441e-03
14	16.248841	2.188027e+00	0.541628	7.293425e-02	1.813404	-2.441883e-01
15	16.852570	-9.384534e-05	0.561752	-3.128178e-06	1.780144	9.912923e-06
16	18.609036	-4.064223e-01	0.620301	-1.354741e-02	1.611351	3.519200e-02
17	18.759855	5.554359e-01	0.625328	1.851453e-02	1.597759	-4.730594e-02
18	19.677224	-2.199466e-02	0.655907	-7.331554e-04	1.524603	1.704160e-03
19	20.489146	9.543505e-02	0.682972	3.181168e-03	1.464158	-6.819806e-03
20	20.867619	1.503344e-01	0.695587	5.011147e-03	1.437559	-1.035646e-02
21	22.163870	2.657936e-01	0.738796	8.859787e-03	1.353360	-1.622976e-02
22	22.123941	3.135184e-02	0.737465	1.045061e-03	1.355994	-1.921580e-03
23	22.952809	2.187020e-01	0.765094	7.290068e-03	1.306911	-1.245268e-02
24	22.980985	-1.337883e-02	0.766033	-4.459611e-04	1.305427	7.599797e-04
25	23.797847	1.178538e-03	0.793262	3.928461e-05	1.260618	-6.242947e-05
26	23.673735	3.430374e-03	0.789125	1.143458e-04	1.267227	-1.836239e-04
27	99.278429	0.000000e+00	3.309281	0.000000e+00	0.302180	0.000000e+00
28	111.880614	0.000000e+00	3.729354	0.000000e+00	0.268143	0.000000e+00
29	104.544293	0.000000e+00	3.484810	0.000000e+00	0.286960	0.000000e+00
30	104.535058	1.014222e-07	3.484502	3.380741e-09	0.286985	-2.784393e-10
31	104.500140	-2.704455e-03	3.483338	-9.014850e-05	0.287081	7.429631e-06
32	104.500139	2.704938e-03	3.483338	9.016461e-05	0.287081	-7.430959e-06
33	104.491323	4.172681e-06	3.483044	1.390894e-07	0.287105	-1.146505e-08
34	107.196287	-9.270933e-06	3.573210	-3.090311e-07	0.279860	2.420389e-08
35	107.372831	1.819993e-07	3.579094	6.066644e-09	0.279400	-4.735897e-10
36	107.455372	0.000000e+00	3.581846	0.000000e+00	0.279186	0.000000e+00
37	107.643800	0.000000e+00	3.588127	0.000000e+00	0.278697	0.000000e+00
38	107.537029	0.000000e+00	3.584568	0.000000e+00	0.278974	0.000000e+00
39	115.395085	0.000000e+00	3.846503	0.000000e+00	0.259976	0.000000e+00
40	124.357058	0.000000e+00	4.145235	0.000000e+00	0.241241	0.000000e+00
41	124.502356	0.000000e+00	4.150079	0.000000e+00	0.240959	0.000000e+00
42	124.968387	0.000000e+00	4.165613	0.000000e+00	0.240061	0.000000e+00
43	124.623227	0.000000e+00	4.154108	0.000000e+00	0.240726	0.000000e+00
44	124.756497	0.000000e+00	4.158550	0.000000e+00	0.240468	0.000000e+00
45	120.374220	0.000000e+00	4.012474	0.000000e+00	0.249223	0.000000e+00

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