Results for different n values:

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n	L0	L	p	x	theta	phi	a	H
5	27.5233	27.524	3.20646	13.2584	0.800085	0.457821	27.9297	124.541
2	25.4565	25.458	1.10775	12.6646	0.364947	0.173614	72.5797	294.733
1	25.114	25.117	0.537568	12.5431	0.186044	0.085558	146.425	587.781
0.5	25.0235	25.0294	0.266656	12.5109	0.0934738	0.0426083	293.537	1174.94
0.2	24.99	25.0047	0.106413	12.5018	0.0374436	0.0170224	734.392	2936.27
0.1	24.9719	25.0012	0.0531813	12.5004	0.0187286	0.00850855	1469.14	5869.9