You need to test the code for two cases, one for high altitude around 15760 m to ground for JAXA wing body case. Another one near the ground (1000m) to the ground. For both cases check the relevant flight information from the thesis paper I shared.

Test Case 1 (check the Thesis)

Page 61 has the jaxa wing body case. The input of the code will be this near field signature (Figure 4.4).

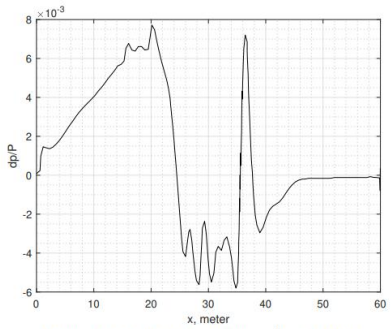


Figure 4.4 : Near-field signature, $r/L = 1$, JWB

Then the output of the code/ or the propagated code should match their outputs Fig 4.5 (page 62) which is at 0 deg azimuth

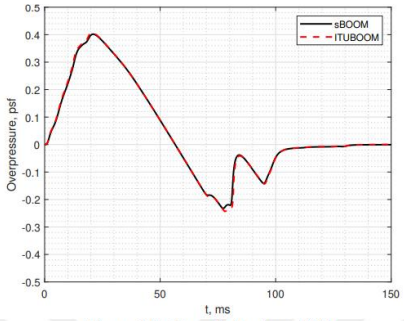


Figure 4.5 : Ground signatures, JWB

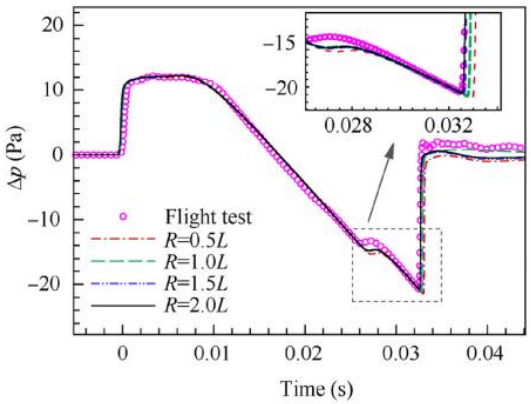
Then results should also match for other azimuth angle given in the table 4.2 (page 62)

Table 4.2 : JWB perceived loudness from ITUBOOM and sBOOM

Azimuth Angle	ITUBOOM	sBOOM
0 Degree	81.30063	80.66667
20 Degree	81.33086	78.06131
40 Degree	82.34975	80.14446

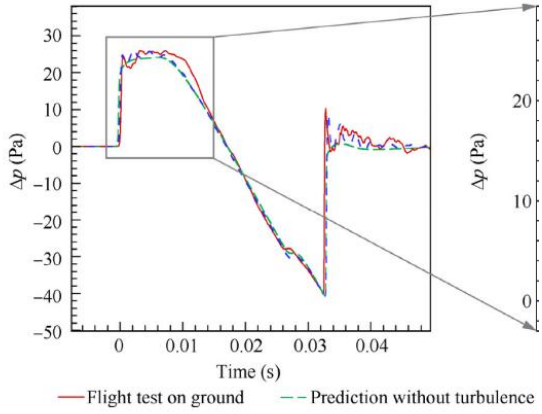
Test Case 2 (check "*Far-field sonic boom prediction considering atmospheric turbulence effects: An improved approach*")

JAXA DSEND, take any of the curves as input from Fig 8b for your code (check this altiude, may be 1000m).



is (b) Far-field predictions at top of atmospheric boundary layer

And then the code should give outputs similar to the green curve in the figure 10 (left)



parison of measured and predicted waveforms on ground (Fl

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