

Third Sonic Boom Prediction Workshop Cases: Analysis Using The NASA PCBoom

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This paper presents simulation results and analyses using the test cases provided for the Third Sonic Boom Prediction Workshop of the American Institute of Aeronautics and Astronautics. The simulations focus on propagation to the ground of sonic booms generated by supersonic aircraft accounting for atmospheric effects. The simulation results use the NASA PCBoom propagation code that features the latest updates on the ray tube area and kinematic ray tracing algorithms to better predict waveforms and sonic boom carpet edges, respectively.