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## P1: How High Does the Lower Atmosphere Go?

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## ***How High Does the Lower Atmosphere Go?***

College of Sciences and Health Professions

**Student Researchers:** Vladimir Sworski and Justin Flaherty

**Faculty Advisors:** Shawn Ryan and Thijs Heus

### **Abstract**

The Atmospheric Boundary Layer (ABL), consisting of the bottom few kilometers of the troposphere, is a region with strong mixing of moisture and winds. This region's activity has a large impact on weather and climate models. In this study, we use a high resolution computer model: Large Eddy Simulation (LES). Statistics produced require a strong understanding of the height of the ABL. The purpose of this study was to create a method for determining this height accurately and consistently, as previous models demonstrated significant error.