

Coral Reefs and Remote Sensing – A Fifth Grade Science Unit

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Satellite data have wide-ranging applications throughout scientific study that can be applied to the elementary school classroom. A unit has been prepared to investigate the application of satellites in the study of coral reef health. Lessons on the parameters measured by satellites are presented; i.e., sea surface temperature, sea surface height, sea surface roughness, and ocean color. The techniques of data collection are explained using grade five appropriate examples. Further parameters derived from these data are also included; e.g., surface currents. Once students have a basic understanding of remote sensing they are then introduced to the fundamentals of coral reefs. Worldwide locations of reefs are identified, the biology and physiology of corals are introduced, and the importance of reefs is conveyed. The methods by which satellite information is used to monitor coral health links the remote sensing with the biological aspects of the unit. The conclusion focuses on conservation of coral reefs and how individuals, specifically students, can contribute to their continued well-being.

Remote sensing can be a challenging topic to try to relate to elementary age students, but when connected to such a fascinating, contemporary topic as the coral reef ecosystem, its challenges are substantially depreciated. This presentation will illustrate the benefits of teaching this topic and the potential challenges facing educators.

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