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Module 3 - Explore Ideas for Your Project

Exploring the intersection of remote sensing technology and mining in mineral-rich regions like the Republic of Congo and Colombia or in new zones of interest like the sea, where big mining companies like Glencore operate, is a relevant field for research and intervention. Remote sensing proves invaluable in monitoring such activities, given the challenging conditions, conflicts, and environmental harm often associated with mining. This interdisciplinary approach is crucial due to the social exploitation, adverse working conditions, and environmental degradation prevalent in these regions, maximized by increased demand for minerals from tech giants. Moreover, these areas have a history of oppression. Remote sensing's utility lies not only in its ability to detect mineral deposits by analyzing the unique spectral signatures of minerals but also in providing critical insights into water contamination and tailing leakage, which pose significant environmental and health risks. By utilizing data beyond the visible spectrum, such as infrared and short-wave radiation, we could identify structural features, soil properties, rock composition, vegetation characteristics, and detect environmental harms, enhancing environmental monitoring and management efforts.

Additionally, I considered exploring topics such as Palestine or Beni in the Democratic Republic of Congo, where violence, war, and displacements are occurring. However, I discovered that the GEE platform does not permit users to access data from these regions specifically.