

# Abstract

## **Solar Power Task: Assessing Extended Student Reasoning with Performance Assessment**

**Track:** Teaching with GIS

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Under an NSF grant, SRI International's Center for Technology and Learning has been designing and piloting performance assessments aimed to measure students' abilities to use complex technology tools to do the sorts of extended reasoning and data analysis that the tools provide unprecedented opportunity for. The Solar Power Task engaged students in using ArcView and the Spatial Analyst to critique, compare, and synthesize data related to the use of solar energy to generate electricity. The paper will describe the task, its piloting in high schools, cognitive analyses of students doing think-alouds as they carry out the task, and scoring rubrics.

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