Molli R. Jones* (mjones2@immaculata.edu), Deptartment of Math/CS/Physics, P.O. Box 648, Immaculata, PA 19345-0648. Integrating Mathematical Modeling into Science and Mathematics Curricula in Challenged School Districts.

Imagine what can happen when mathematics and science professors work with NASA scientists to help dedicated K-12 teachers understand mathematical modeling and the scientific process. The Partnership in Math and Science aims to improve the math and science abilities of upper-elementary and secondary teachers in challenged greater Philadelphia-area school districts. With their increased knowledge of mathematics and science, teachers gain the confidence necessary to complement the textbook with less-conventional methods in the classroom. During the 2009-2010 school year, the teachers are working with NASA satellite data to answer research questions that were formulated by NASA scientists and education specialists. The teachers will then integrate their knowledge of mathematical modeling, data analysis, NASA missions, and space science to cooperatively create and implement unit plans that actively involve students in the scientific process. The Partnership in Math and Science is a Mathematics and Science Partnerships (MSP) Program supported by the U.S. Department of Education (http://www.ed-msp.net/). (Received September 17, 2009)