Astronomical Workshops for Elementary School Teachers

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A means for unlocking research and getting it to the public is provided by several add-on grant programs, such as the NASA Astrophysics Data Analysis Program Educational Supplements (one of which supports the efforts described here). Through this type of program, researchers can share both their scientific expertise and their new results with teachers, students, and/or the public. The exploration of the solar system is very exciting to students, and we have found it an excellent vehicle to teach basic physical concepts in a concrete and captivating manner.

One-time lecture/demonstrations by scientists to elementary school classes interest children in science, but can also improve the scientist's image at the expense of the teacher's image and confidence. We are, instead, developing teachers' workshops and lesson plans to accompany several hands-on planetary science units. The workshops serve the dual purpose of introducing the units to teachers, thereby increasing their familiarity and confidence with the subject matter, and clarifying the needs of teachers to the researchers. The lesson plans and units thus developed, designed to be easily and inexpensively reproduced, can be used 'as is,' or the contents can be adapted to suit various curricula, as teacher time and experience permits. An example of the work will be presented.