

How Valuable are your Data?

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ABSTRACT

Fields of science which deal with Change rely critically upon Data across the time domain - their status and management, as well as their interpretation. The quality and extent of Data curation is therefore a significant factor in the advancement of knowledge today in those disciplines. The future is limited by the scope, accessibility and versatility of past and recent Data and by what tools are supported.

The handling of scientific Data has, somewhat unfortunately, progressed with different ideals. The front end (an observing tool, such as a telescope or a satellite) is clearly important because its performance and technology add to existing knowledge by offering different frequencies, improved resolution, etc. The front end is also the most visible, and is almost always the most expensive element. The instruments which acquire and deliver the Data are costly, though not on the same scale, while the curation of the Data (the actual purpose of the whole instrument) tends to be left to individual initiative, and has traditionally received little institutional support.

Data can and should be much better managed throughout today's science. In Astronomy the picture is grim: estimates put the support for Data Management at less than 1% of the total cost of a telescope plus instrumentation. For future advances, that fraction MUST increase very significantly.

How does Data Management fare in other fields? These facts are basic to this meeting, since they alone can indicate where we all really come from. It is pointless trying to sell an idea or a package for Data Management to a scientist in a different field if the basic premises regarding the status of the actual Data are very different. The purpose of this poster is to gather that basic information. It will include a space for writing in details:

- (a) the field of science or sub-discipline,
- (b) the general status of Data Management (e.g. *high, medium, low*) with guestimates of actual ratios if possible),
- (c) any foreseen expansion in Data Management tools or support.