ABSTRACT

TITLE: Reanalyses and Essential Climate Variables

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Reanalyses are a potentially powerful climate data collection driven by observations but also subjected to model bias. Additionally, reanalyses can produce and use essential climate variables in a consistent method. For example, snow cover and soil moisture (among other variables) will eventually be assimilated into the reanalyses, but also provide crucial validation data. Sea surface temperature can be prescribed or assimilated in a coupled reanalysis. The strength of reanalysis lies in the ancillary data that is produced from the modeling components but not routinely observed thereby providing more complete Earth system information. The weakness in this concept is that the model derived data can be affected by model bias and may also change relative to the available observing system. Here, we will review the status of existing reanalyses and the ECVs being considered for the workshop.

Purpose of Michael Bosilovich's contribution to the workshop: Michael Bosilovich will represent US reanalysis community in this international discussion of Essential Climate Variables (ECVs) and the relative nature of reanalyses to ECVs.