Climate Change Information Dashboards for Water Resource Managers

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It is in the context of its application that one needs to determine if climate information is of high quality and ultimately useful. Therefore, it is important that the intersection between data providers and data consumers is structured in form of an iterative and collaborative exchange where science and application viewpoints can be brought together. A traditional "loading dock"-style hand-off of data fails to optimally inform decisions. It is now broadly recognized that a collaborative, open exchange is better suited to generate credible and salient products and knowledge that can be more confidently used in decisions. But in order for this exchange to be successful in practice, it needs to be sufficiently efficient to actually facilitate an exploratory process that is inherently iterative to determine the most informative products. It also requires a transparent approach that is easily understood and communicated.

We will present prototypes of Climate Information Dashboards that collect on a single page to integrate a suite of key climate information for resource managers. The content of dashboards is based on standardized products that can be assembled to meet specific needs. They were co-designed with the water resource managers and are tailored to selected management and decision topics. The visualizations are tuned to quickly provide the basic information, yet below individual diagnostics are more detailed analyses that can be consulted. These dashboards offer a flexible way to connect decision-makers to climate model output. Conversely, such dashboards can also be applied to inform model development by providing insight into a suite of key characteristics of model performance that have been identified as critical by a sector.