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## Better Climate Services: guidelines, standards and best practices for data processing

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Timely delivery and effective use of climate information is fundamental for a green recovery and a resilient, climate neutral Europe, in response to climate change and variability. Climate services address this through the provision of climate information for use in decision-making to manage risks and create opportunities. In order to develop future equitable and quality-assured climate services to all sectors of society, it is important to work on developing standardisation procedures for climate services, as well as supporting an equitable European climate services community and also enhancing the uptake of quality-assured climate services to support adaptation and mitigation to climate change and variability.

An important component of the climate service reliability and use depends on the data, specifically on the traceable quality of its input and output datasets. The output datasets need to be FAIR, also for machines, meaning the output datasets provide full provenance information about e.g. the input datasets, the processing software, the quality and accuracy, all supported by interoperable metadata, including information on uncertainty. To support those needs and objectives for climate services, we will present preliminary guidelines of good practices for vocabularies, formats, metadata and technical standards, including FAIR principles for data and software/processing. As well, preliminary best practices in provenance of processing methodologies to guarantee traceability and reproducibility of climate data and ways to communicate it in a user-friendly manner will also be shown along with climate uncertainty, risk assessment and communication. Eventually all guidelines and good practices will be shared via the Climateurope2 platform, set up under the project to support the climate services community.

Everyone interested can also join our network to actively participate in developing best practices for climate services <https://climateurope2.eu/>

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