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| **Implementation of Near-Real-Time monitoring tools in Sepal - methods and examples** |
| **Introduction/Aim:** Near real-time monitoring (NRTM) of forest resources is crucial for protecting existing resources and improving law enforcement efforts. However, easily accessible global NRTM systems often suffer from overestimation of alerts due to a lack of customization for geographic and local conditions. To address this limitation, the FAO forestry department developed easy-to-use, open-source functionalities as part of the SEPAL cloud computing platform.**Methods:** Two main methods are available through the platform. The first one is based on a tailored version of the Continuous Change Detection and Classification (CCDC) approach, as proposed by Zhu and Woodcock (2014), for rapid forest disturbance detection. As CCDC is data agnostic, the algorithm can either utilize a combination of Landsat and Sentinel-2, Sentinel-1 or Planet daily imagery. The implementation of the BayTS algorithm allows users to access and customize the underlying method of the globally available RADD alerts, which is solely based on Sentinel-1 radar data to detect changes in forest. Both methods can be fully customized by a set of parameters. In addition, the alerts can be easily masked by any kind of locally available forest mask. This allows users not only to optimize the algorithms for local conditions, but also to obtain ownership on the generated information, which might be critical for subsequent legal actions.**Results:**The tool has been tested in different countries and climatic zones and results were comparable or better with respect to other algorithms. Specifically alerts generated with the Planet daily imagery were generally both, timelier, as well as more spatially accurate due to the better temporal and spatial resolution. |