Some Experience Using SEN2COR

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ESA has developed and launched the Sentinel-2A optical imaging mission that delivers optical data products designed to feed downstream services mainly related to land monitoring, emergency management and security. Many of these applications require accurate correction of satellite images for atmospheric effects to ensure the highest quality of scientific exploitation of Sentinel-2 data. Therefore the atmospheric correction processor Sen2Cor was developed by TPZ V on behalf of ESA. TPZ F and DLR have teamed up in order to provide the calibration and validation of the Level-2A processor Sen2Cor. Level-2A processing is applied to Top-Of-Atmosphere (TOA) Level-1C ortho-image reflectance products. Level-2A main output is the Bottom-Of-Atmosphere (BOA) corrected reflectance product. Additional outputs are an Aerosol Optical Thickness (AOT) map, a Water Vapour (WV) map and a Scene Classification (SC) map with Quality Indicators for cloud and snow probabilities.
The poster will present some processing examples of Sen2Cor applied to Sentinel-2A data together with first performance investigations. Different situations will be covered like processing with and without DEM (Digital Elevation Model). Sen2Cor processing is controlled by several configuration parameters. Some examples will be presented demonstrating the influence of different settings of some parameters.