



Solar Energy Nowcast Demonstrator

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The EU project DNICast developed improved nowcasts of direct normal irradiance to improve the operation of concentrated solar power plants. Several nowcasts based on all-sky cameras, satellites, and numerical weather predictions are used. Combination algorithms are evaluated. All nowcasts have different temporal and spatial resolutions, some provide uncertainties and others not. And some nowcasts provide probabilistic information. Their update frequency ranges from minutes to hours. It is a challenge to visualize this variety of nowcasts and its ancillary information e.g. on uncertainty in a manner that the power plant operator as a non-meteorologist can understand the information content.

Within this project a demonstrator of the various forecast capabilities has been developed. The demonstrator shows the results of the project with advanced visualizations concepts with special respect to solar irradiance forecasts for the solar energy sector.

This paper presents the development of the demonstrator and the concepts behind the visualization of the nowcasts results.