

IAF EARTH OBSERVATION SYMPOSIUM (B1)  
Earth Observation Applications, Societal Challenges and Economic Benefits (5)

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USE TO AI TO ANALYSE EARTH OBSERVATION DATA TO DELIVER MORE TIMELY  
INFORMATION TO DECISION-MAKERS

**Abstract**

This is a placeholder abstract that will be updated following the Frontier Development Lab research sprint which takes place in June-August 2019. The Frontier Development Lab (FDL) is an AI and space research accelerator that runs in partnership with NASA in the US, and with ESA in Europe. At least one of the interdisciplinary teams of PhD and post-doctoral researchers will be focussing on how AI techniques can be used to analyse vast quantities of Earth observation data, while fusing it in real-time with additional data sources, to help deliver more timely information to humanitarian agencies, governments and communities in case of natural disasters.

During the research sprint, small teams work intensely over a period of eight weeks, supported by world-class mentors and industry partners as well as the space agencies - with remarkable results. In 2018, one of the FDL Europe teams worked on improving disaster response to flooding events, and this year's teams are likely to concentrate on wildfires, landslides, or earthquakes.

The paper will detail the challenge area that they worked on, the data-sets used, techniques used, and results gained from their prototypes. This will all be communicated within the context of using AI and Space for the benefit of humanity, and will share key learnings, challenges and solutions developed/encountered during the development process.

For more information please feel free to contact [Kate@frontierdevelopmentlab.org](mailto:Kate@frontierdevelopmentlab.org)