## 30th IAA SYMPOSIUM ON SPACE AND SOCIETY (E5) Space Assets and Disaster Management (4)

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## COMBINING SPACE DATA WITH AI TECHNIQUES TO IMPROVE DISASTER RESPONSE TIMES

## 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 using AI techniques in combination with Earth observation (and other) data to create tools that can help with disaster response management and disaster mitigation.

During the research sprint, 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