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AGU100 ADVANCING EARTHAND SPACE SCIENCE

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^{,t}inel-2 for geological applications

Sentinel-2 for mapping iron oxide minerals on a continental scale

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Problem

Iron is the 4th most common mineral in the earth crust and is essential for plant growth. Remote sensing is the only suitable tool for surveying iron repeatedly and worldwide.

Opportunity

Sentinel-2 has multiple bands that allow mapping of iron oxide minerals.

Results

Sentinel-2 mineral maps are not as spatially contiguous as e.g. hyperspectral data from AVIRIS, but there is potential to map important Minerals such as hematite, goethite and jarosite.



Challenge

extent to continental-scale and validate results.



Remote Sens. 2015, 7, 12635-12653; doi:10.3390/rs71012635



Sentinel-2 for Mapping Iron Absorption Feature Parameter

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ator for soil fertility and the usability of an area for cu' ing is the only suitable tool for surveying large areas at a high



Parabola fitting technique to map absorption features goethit1.spc Goethite WS222

