

# THE GEO KNOWLEDGE HUB: TRANSFORMATIVE SOLUTIONS THROUGH OPEN SCIENCE

## LEVERAGING TECHNOLOGY FOR IMPACT

The GEO Knoweldge Hub is a technology enabler, combining big Earth observations data with cloud computing technologies to provide transformative solutions through open science

- Over 400 million free and open Earth observations resources
- Research papers, methodologies and reports
- Software algorithms and cloud computing processing
- In situ and satellite data and images
- Results for verification

# SUPPORTING ACTION ON GLOBAL POLICY FRAMEWORKS

The GEO Knowledge Hub empowers decision makers with end-to-end

solutions to bring codified knowledge, data and tools together for improved reporting on global conventions, targets and agreements

## **CO-CREATING WITH COMMUNITIES**

Trusted, reliable knowledge for actions on climate change mitigation and adaptation produced together with regional and national stakeholders

#### **HOW IT WORKS:**

knowledge resources mediation	➡ ingestion ➡ discoverable, accessible, reusable knowledge
(a) Journal paper	PANGAEA. Dus Adduber for Earth & Environmental Science (b) In-situ data
Big earth observation time series analysis for monitoring Brazilian agriculture Michele Cristina Araujo Picell <sup>11</sup> , Giberto Camara <sup>1</sup> , Ieda Sanche <sup>4</sup> , Rolf Simée <sup>4</sup> , Alcandre Couthno <sup>1</sup> , Jalio Equerdo <sup>1</sup> , Jalio Antune <sup>4</sup> , Rodrigo Anzolin Begott <sup>11</sup> , Damies Arve <sup>4</sup> , Canatio Almeida <sup>1</sup> <sup>10</sup> enter blane the area of 2006. In the area from the transmission of the tran	Camara, Gilberto, Picoli, Michelle; Simoes, Rolf; Maciel, Adeline; Carvalho, Alexandre X Y; Coutinba, Alexandre; Esquerado, Julic; Antunes, Joao; Begotti, Kodrigo; Arvor, Damien (2017); Lind cover change maps for Mato Grosso State in Brazil: 2001-2016, links to files. PANGAEA. Interst/doi.org/10.1594/PANGAEA.881231, Supplement to: Picoli, Michelle; Cämara, Gilberto; Sanches, leda; Simoes, Rolf; Carvalho, Alexandre X Y; Maciel, Adeline; Coutinho, Alexandre; Esquerdo, Julio; Antunes, Joao; Begotti, Rodrigo; Arvor, Damien; Almeida, Claudi (2018); Big earth observation time series analysis for monitoring Brazilian agriculture. ISPKS Journal of Photogrammetry and Remote Sensing. 145, 328-339, Interst/doi.org/10.1016/j.isprighrs.2018.08.007 Areaser 13 > Include mode
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	(e) Results

Knowledge Resources	Sources
Publications	Scientific Journals and Reports provided by GEO Work Programme activities, with associated DOI (unique object identifier)
Software code, models and tools	Open source software code provided by GEO Work Programme activities, preferably available in Github, with associated DOI. Backup copies stored in the Knowledge Hub.
Remote sensing data	Link provided by the GEOSS Platform (or similar indexing schema) to files in a cloud repository
In situ data	Link provided by the GEOSS Platform (or similar indexing schema) to files in a recommended data repository, with associated DOI
Ancillary data	Link provided by the GEOSS Platform (or similar indexing schema) to files in a recommended data repository, with associated DOI
Output data and products	Link provided by the GEOSS Platform (or similar indexing schema) to files in a recommended data repository, with associated DOI
Videos	Directly stored in the Knowledge Hub
Other relevant documents (e.g., training materials)	Directly stored in the Knowledge Hub

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