Plan Overview

A Data Management Plan created using DMPonline

Title: AshTraj

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Affiliation: University of Manchester

Funder: Natural Environment Research Council (NERC)

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Project abstract:

Application of the PlumeTraj analysis toolkit to the modelling of volcanic ash plumes using Geostationary satellites. Data plan developed for the NERC Exploring the Frontiers of Science, June 2022 call.

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Start date: 01-01-2023

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AshTraj

Manchester Data Management Outline

1. Will this project be reviewed by any of the following bodies (please select all that apply)?

- Funder

2. Is The University of Manchester collaborating with other institutions on this project?

- Yes - Part of a collaboration and owning or handling data

Project partners within the project are another researcher within the University of Manchester (Dr. Chris Johnson, Dept. of Maths) and Dr. Claire Witham at the UK Met Office.

3. What data will you use in this project (please select all that apply)?

- Acquire new data
- Re-use existing data (please list below)

Satellite data, looking at volcanic plumes, from ESA and EUMETSAT will be used. Meteorological data from NOAA and the UK Met Office will be used.

Analysed data, output from the project, combines the satellite data with trajectory models which use the meteorological data.

4. Where will the data be stored and backed-up during the project lifetime?

- Other storage system (please list below)

Local hard drives in the interim will be used. Long term storage is expected at the NERC CEDA storage facility.

5. If you will be using Research Data Storage, how much storage will you require?

- 1 - 8 TB

6. Are you going to be receiving data from, or sharing data with an external third party?

- Yes

Receiving data from ESA, EUMETSAT, NOAA, UK Met Office.
Data will be shared with the UK Met Office and the British Geological Survey, as well as any local civil defence, monitoring, or scientific groups requiring it for disaster response or long term monitoring of target volcanoes.

7. How long do you intend to keep your data for after the end of your project (in years)?

- 5 - 10 years

Guidance for questions 8 to 13

Highly restricted information defined in the Information security classification, ownership and secure information handling SOP is information that requires enhanced security as unauthorised disclosure could cause significant harm to individuals or to the University and its ambitions in respect of its purpose, vision and values. This could be: information that is subject to export controls; valuable intellectual property; security sensitive material or research in key industrial fields at particular risk of being targeted by foreign states. See more examples of highly restricted information .

Personal information, also known as personal data, relates to identifiable living individuals. Personal data is classed as special category personal data if it includes any of the following types of information about an identifiable living individual: racial or ethnic origin; political opinions; religious or similar philosophical beliefs; trade union membership; genetic data; biometric data; health data; sexual life; sexual orientation.

Please note that in line with data protection law (the UK General Data Protection Regulation and Data Protection Act 2018), personal information should only be stored in an identifiable form for as long as is necessary for the project; it should be pseudonymised (partially de-identified) and/or anonymised (completely de—identified) as soon as practically possible. You must obtain the appropriate ethical approval in order to use identifiable personal data.

8. What type of information will you be processing (please select all that apply)?

- No confidential or personal data

9. How do you plan to store, protect and ensure confidentiality of any highly restricted data or personal data (please select all that apply)?

- Not applicable

10. If you are storing personal information (including contact details) will you need to keep it beyond the end of the project?

- Not applicable

11. Will the participants' information (personal and/or sensitive) be shared with or accessed by anyone outside of the University of Manchester?

- Not applicable

12. If you will be sharing personal information outside of the University of Manchester will the individual or organisation you are sharing with be outside the EEA?

- Not applicable

13. Are you planning to use the personal information for future purposes such as research?

- No

14. Will this project use innovative technologies to collect or process data?

- No

15. Who will act as the data custodian for this study, and so be responsible for the information involved?

Catherine Hayer

16. Please provide the date on which this plan was last reviewed (dd/mm/yyyy).

2022-06-08

Outline DMP

Project Title

AshTraj

Principal Investigator(s) / Grant Holder

Mike Burton

Will the grant produce data?

- Yes

Nominated Data Centre(s)

- Other e.g. Archaeology Data Service

NERC's CEDA (Centre for Environmental Data Archival) Archive

Briefly list the datasets that the project will produce. If the total is likely to be larger than 1TB please indicate.

Volcanic ash emission time series for volcanoes in Iceland, Europe, Africa, the Caribbean.
Verification output model data for various test and true eruptions.