**I-GUIDE TOOL FOR MANAGEMENT OF ETHICAL GEOSPATIAL AI AND DATA SCIENCE (I-GUIDE MEG-AID)**

The I-GUIDE Tool for Management of Ethical Geospatial AI and Data Science (I-GUIDE MEG-AID) is a practical project management tool designed to help research teams navigate ethical, legal, and reproducibility-related decisions across the full span of a geospatial project. It aligns with the I-GUIDE lifecycle stages, from defining the research problem through to sharing results.

MEG-AID does not list every activity undertaken in a project. Rather, it focuses on actions that raise ethical, legal, or reproducibility concerns. MEG-AID is most useful when integrated into project planning from the beginning. Many actions are difficult to reverse once work is underway. Revisit MEG-AID regularly. The tool is designed to be updated throughout the project.

**Understanding the Columns**

* **Action**: A concrete step you should take that has potential ethical, legal, or reproducibility consequences;
* **Output(s):** What tangible output(s) should arise from that action;
* **Tips** **for completing**: Practical guidance to help you generate the output(s);
* **Ethical Issues Raised**: A checklist of ethical issues (e.g., fairness, privacy) that the action may implicate;
* **Person Responsible**: Who on the team is accountable for carrying out or overseeing this action;
* **Status:** Tracking progress on taking the action – input “Pending”, “In Progress” or “Completed” as appropriate.

### **MEG-AID Attribution and License**

The MEG-AID (Managing Ethics and Governance Across the I-GUIDE Lifecycle) tool was developed specifically for the I-GUIDE platform to support responsible, reproducible, and ethical research throughout the data and model lifecycle.

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1. **DEFINING THE RESEARCH PROBLEM**

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| --- | --- | --- | --- | --- | --- |
| **Action** | **Output(s)** | **Tips for completing** | **Person Responsible** | **Issue(s)** | **Status** |
| **Optional:** Engage with stakeholders to refine or co-produce research goals | Document setting out key stakeholder objectives and concerns | Use methods like a focus group, workshop, survey, participatory mapping |  | Consent  Fairness  Privacy  Well-being |  |
| Create I-GUIDE Output Management Plan | Complete Section 1 (“Basic Information”) of your Output Management Plan | You don’t need to complete every field of Section 1 just yet. Only complete the fields for which you currently have information |  | Policy Compliance  Reproducibility |  |
| Identify objectives for research impact | Complete the following sections of your Output Management Plan:   * Field titled “Intended Research Outputs and Impact” in Section 1 (“Basic Information”), * Section 4 (“Publications and Conferences”) * Section 5 (“Plan Maintenance and Updates”) | Ensure planned Outreach Activities are appropriate to the audiences you intend to reach |  | Fairness  Well-being |  |
| Identify likely data and model needs | Complete the following sections of your Output Management Plan:   * Section 2 (“Datasets”) * Section 3 (“Models”) | You don’t need to complete every field of Sections 2 and 3 just yet. Only complete the fields for which you currently have information |  | Consent  Privacy  Reproducibility |  |

1. **DATASET ACQUISITION AND CREATION**

**2a. Acquiring Secondary Datasets**

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| **Action (for each dataset)** | **Output(s)** | **Tips for completing** | **Person Responsible** | **Issue(s)** | **Status** |
| Create Data Card for each secondary dataset | Complete the following sections of each Data Card:   * Section 1 (“Basic Information”); * Section 2 (“Dataset Overview”); * Section 3 (“Dataset Characteristics”) * Section 4 (“Provenance”) | You don’t need to complete every field of Sections 1, 2, 3, and 4 just yet. Only complete the fields for which you currently have information  Consider contacting the dataset producer directly to fill in any information gaps |  | Data quality  Policy compliance  Reproducibility |  |
| Determine whether the dataset contains sensitive attributes | Complete the following fields in Section 5 (“Sensitive Data”) of each Data Card:   * “Human Subject Identifiability”; * “Other Sensitivity Factors”; * “Demographic Variables Represented in Dataset”; * “Informed Consent Processes” | If you do not have information about any of these fields, consider contacting the dataset producer directly to fill in any information gaps |  | Consent  Policy compliance  Privacy |  |
| Document known issues with demographic and geographic representativeness of dataset | Update field “More About Methods” in Section 4 (“Provenance”), and complete field “Representativeness of Dataset” in Section 5 (“Sensitive Data) of each Data Card | Check methods used to collect dataset  Consider contacting the dataset producer directly to fill in any information gaps |  | Fairness  Policy compliance  Reproducibility  Understanding limits |  |

**2b. Collecting or Generating Primary Datasets About Non-Human Subjects**

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| **Action** | **Output(s)** | **Tips for completing** | **Person Responsible** | **Issue(s)** | **Status** |
| Create Data Card for each primary dataset about physical phenomena | Complete Section 1 (“Basic Information”) of each Data Card | You don’t need to complete the “Link to Dataset” field at this stage |  | Policy compliance  Reproducibility |  |
| Assess potential sensitivity of dataset | Complete Section 5 (“Sensitive Data”) of each Data Card | Consider whether the dataset could be used to compromise integrity of archaeological sites, to exploit natural resources, or to jeopardize national security |  | Policy compliance  Preventing misuse  Surveillance |  |
| Update Data Card for each dataset | Complete the following sections of each Data Card:   * Section 2 (“Dataset Overview”); * Section 3 (“Dataset Characteristics”); * Section 4 (“Provenance”) | You don’t need to complete every field of Sections 2, 3, and 4 just yet. Only complete the fields for which you currently have information |  | Data quality  Policy compliance  Reproducibility |  |

**2c. Collecting or Generating Primary Datasets About Human Subjects**

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| **Action** | **Output(s)** | **Tips for completing** | **Person Responsible** | **Issue(s)** | **Status** |
| Create Data Card for each primary dataset containing human subjects’ data | Complete Section 1 (“Basic Information”) of each Data Card | You don’t need to complete the “Link to Dataset” field at this stage |  | Policy compliance  Reproducibility |  |
| Design an informed consent process that is as straightforward and clear as possible | Consent materials, including:   * Recruitment message for prospective participants (e.g., email, video); * Method of giving information about your study to prospective participants (e.g., written sheet, video, visualization); * Method of recording informed consent when it is given (e.g., written consent form with signature, oral consent on an audio recording)   Complete field “Informed Consent Processes” in Section 5 (“Sensitive Data”) of each Data Card | Use **standardized templates for consent materials available through your university’s or institution’s Institutional Review Board**  Consult the I-GUIDE Primer on Informed Consent |  | Consent  Policy compliance  Privacy  Surveillance |  |
| Address demographic and geographic fairness in selection of subjects | Strategy for recruiting participants from hard-to-reach populations  Tailor recruitment and consent materials to hard-to-reach populations  Update fields “More About Methods” and “Informed Consent Processes” in Section 4 (“Provenance”), and complete field “Dataset Representativeness” in Section 5 (“Sensitive Data”) of each Data Card | Consult the I-GUIDE Primer on Fair Representation |  | Fairness  Policy compliance |  |
| Design survey/interview instruments with clear language | Survey form or interview protocol  Complete fields “Methods of Collection” and “More About Methods” in Section 4 (“Provenance”) of each Data Card | Use online survey tool such as Google Forms or Qualtrics’ free Online Survey Maker tool |  | Consent  Data quality  Fairness  Reproducibility |  |
| If you are collecting data from subjects who may struggle to understand consent materials or survey/interview instruments, implement strategies to enhance their comprehension | Simplified or translated materials and instruments  Update field “Informed Consent Processes” in Section 5 (“Sensitive Data”) of each Data Card | Think about whether any of your potential subjects may be non-native speakers, children, or have cognitive impairments  Check out the guide for working with people with cognitive impairment from UC San Francisco’s Human Research Protection Program: <https://irb.ucsf.edu/enrolling-individuals-cognitive-impairments-and-assessing-decisional-capacity> |  | Consent  Data quality  Fairness  Policy compliance |  |
| **Secure Institutional Review Board (IRB) approval** | IRB approval notification  Complete field “Information About Ethical Oversight” in Section 5 (“Sensitive Data”) of each Data Card | Apply for IRB approval as soon as possible, as the approval process can take weeks or even months |  | Consent  Fairness  Policy compliance  Privacy  Well-being |  |
| **Obtain and securely store informed consent for personal data collection** | Update field “Informed Consent Processes” in Section 5 (“Sensitive Data”) of each Data Card | Use a password-protected, IRB-compliant server, e.g., Box |  | Consent  Policy compliance  Privacy |  |
| Update Data Card for each dataset | Complete the following sections of each Data Card:   * Section 2 (“Dataset Overview”); * Section 3 (“Dataset Characteristics”); * Section 4 (“Provenance”) | You don’t need to complete every field of Sections 2, 3, and 4 just yet. Only complete the fields for which you currently have information |  | Data quality  Policy compliance  Reproducibility |  |

**2d. Collecting Primary Datasets from Web Scraping or other Digital Activities**

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| **Action** | **Output(s)** | **Tips for completing** | **Person Responsible** | **Issue(s)** | **Status** |
| Create Data Card for each primary dataset containing human subjects’ data | Complete Section 1 (“Basic Information”) of each Data Card | You don’t need to complete the “Link to Dataset” field at this stage |  | Policy compliance  Reproducibility |  |
| Verify that scraping complies with platform policies | Complete field “Collection Policies” in Section 4 (“Provenance”) of each Data Card | Consult a website’s “Data Use Policy” or “Privacy Policy” |  | Consent  Policy compliance  Privacy |  |
| Consider **Institutional Review Board (IRB) approval, and secure approval if considered necessary** | IRB approval notification  Complete field “Information About Ethical Oversight” in Section 5 (“Sensitive Data”) of each Data Card | Consult the Univerisity of Illinois at Urbana Champaign IRB’s guidance here: https://oprs.research.illinois.edu/research-topics/does-my-study-need-irb-approval |  | Consent  Fairness  Policy compliance  Privacy  Well-being |  |
| Document known issues with demographic and geographic representativeness of dataset | Update field “More About Methods” in Section 4 (“Provenance”), and complete field “Representativeness of Dataset” in Section 5 (“Sensitive Data) of each Data Card | Consult statistics about the demographic profiles of a website’s users |  | Fairness  Policy compliance |  |
| Update Data Card for each dataset | Complete the following sections of each Data Card:   * Section 2 (“Dataset Overview”); * Section 3 (“Dataset Characteristics”); * Section 4 (“Provenance”) | You don’t need to complete every field of Sections 1, 2, 3, and 4 just yet. Only complete the fields for which you currently have information |  | Data quality  Policy compliance  Reproducibility |  |

1. **PROCESSING AND CLEANING DATA**

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| **Action** | **Output(s)** | **Tips for completing** | **Person Responsible** | **Issue(s)** | **Status** |
| Record data processing steps | Complete Section 6 (“Transformations”) of each Data Card | Keep a running log or simple spreadsheet of all data cleaning, formatting, and transformation steps as you work |  | Policy compliance  Reproducibility |  |
| Test variables to see if any correlate with demographic groups | Complete field “Correlation with Demographic Variables” in Section 5 (“Sensitive Data”) of each Data Card | Use simple statistical tests or visualizations (e.g., cross-tabulations, scatterplots, chi-square tests) to identify correlations |  | Fairness  Policy compliance |  |
| If geographic or demographic bias detected, take relevant action | Update fields “More About Methods” in Section 4 (“Provenance”) and “Data Representativeness” in Section 5 (“Sensitive Data”) of each Data Card | Measures to address dataset bias can include:   * Collecting additional data; * Applying data debiasing techniques.   If you do not take these measures, ensure bias is recorded in Data Card |  | Data quality  Fairness |  |
| Anonymize or de-identify personally identifiable or sensitive data | Complete field “Measures Taken to Handle Sensitive Data” in Section 5 (“Sensitive Data”) of each Data Card | Use differential privacy techniques for extra security |  | Consent  Policy compliance  Privacy |  |

1. **STORING DATA**

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| --- | --- | --- | --- | --- | --- |
| **Action** | **Output(s)** | **Tips for completing** | **Person Responsible** | **Issue(s)** | **Status** |
| Selecting and using a storage system | Complete fields “Link to Dataset” in Section 1 (“Basic Information”), “Storage Location” in Section 2 (“Dataset Overview”) of each Data Card  Complete Section 6 (“Data Inventory”) of your Output Management Plan | Ensure storage locations align with funding agency policy, or institutional policies.  Also consider:   * Non-sensitive data -> own computer; laboratory server; * Sensitive data -> secure institutional cloud storage with controlled access;   If highly sensitive data, consider whether dataset should be encrypted |  | Policy compliance  Privacy |  |
| Store and backup I-GUIDE Data Cards | Single folder containing all Data Cards | Use a consistent file naming convention for all Data Cards, and include Data Card ID |  | Reproducibility |  |

1. **MODEL ACQUISITION AND CREATION**

**5a. Acquiring Existing Model**

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| **Action** | **Output(s)** | **Tips for completing** | **Person Responsible** | **Issue(s)** | **Status** |
| Create Model Card for each acquired model | Complete the following sections of each Model Card:   * Section 1 (“Basic Information”); * Section 2 (“Model Overview”) | You don’t need to complete every field of Sections 1 and 2 just yet. Only complete the fields for which you currently have information  Contact the model producer to fill information gaps |  | Policy compliance  Reproducibility |  |
| Record model **metadata, provenance, and documentation** | Complete the following sections of each Model Card:   * All fields in Section 3 (“Model Inputs and Training Data”) apart from “Testing or Validation Data Used”); * Section 4 (“Model Structures”); * Section 7 (“Model Deployment and Usage”) | You don’t need to complete every field of Sections 3, 4, and 7 just yet. Only complete the fields for which you currently have information  Contact the model producer to fill information gaps |  | Explainability  Reproducibility |  |
| Assess the demographic and geographic representativeness of datasets used to train the model | Complete the field “Training Dataset Representativeness” in Section (“Model Inputs and Training Data”) of each Model Card | Contact the model producer to fill information gaps |  | Fairness  Model performance |  |
| Assess the model’s transparency, explainability, and interpretability  Consider implementing additional measures if current transparency, explainability, and interpretability of model is inadequate | Complete Section 8 (“Transparency, Explainability, and Interpretability”) of each Model Card | Ask whether someone outside your team understands how the model works, why it made a particular prediction, and what influenced its outputs  Use visual aids, simplified descriptions, or post hoc explanation tools (e.g., SHAP, LIME) if needed to improve clarity |  | Explainability  Interpretability  Preventing misuse  Reproducibility |  |
| Adapt and customize the model for your project | Complete Section 6 (“Model Adaptation and Customization”) of each Model Card | Keep a running log of any changes as you go |  | Fairness  Model performance |  |
| Validate the model using testing datasets | Complete Section 5 (“Model Performance and Evaluation”) of each Model Card | Use representative testing datasets and report multiple metrics (e.g., accuracy, F1 score, error margins) to assess how well your model performs across different groups and scenarios |  | Model performance |  |
| Update Data Card of any datasets used in training or validating the model | Complete Sections 8 (“Annotation Tasks”) and 9 (“Applications and Benchmarks”) of each relevant Data Card | Note which parts of the dataset were used, and for what tasks |  | Explainability  Policy compliance  Reproducibility |  |
| Assess ethical issues that could arise from use of this model | Complete Section 9 (“Other Ethical Considerations”) of each Model Card | Discuss ethical risks with your team or stakeholders  Consult prior research or case studies involving similar models to help anticipate and document potential concerns |  | Consent  Fairness  Preventing misuse  Privacy  Surveillance  Well-being |  |

**5b. Building and Training a Custom Model**

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| **Action** | **Output(s)** | **Tips for completing** | **Person Responsible** | **Issue(s)** | **Status** |
| Create Model Card for each model you or your team build | Complete the following sections of each Model Card:   * Section 1 (“Basic Information”); * Section 2 (“Model Overview”) | You don’t need to complete every field of Sections 1 and 2 just yet. Only complete the fields for which you currently have information |  | Policy compliance  Reproducibility |  |
| Record model **metadata, provenance, and documentation** | Complete the following sections of each Model Card:   * All fields in Section 3 (“Model Inputs and Training Data”) apart from “Testing or Validation Data Used”); * Section 4 (“Model Structures”); * Section 7 (“Model Deployment and Usage”) | You don’t need to complete every field of Sections 3, 4, and 7 just yet. Only complete the fields for which you currently have information |  | Explainability  Reproducibility |  |
| Assess the demographic and geographic representativeness of datasets used to train the model | Complete the field “Training Dataset Representativeness” in Section (“Model Inputs and Training Data”) of each Model Card | You should be able to transfer this information from the relevant Data Cards |  | Fairness  Model performance |  |
| Assess the model’s transparency, explainability, and interpretability  Consider implementing additional measures if current transparency, explainability, and interpretability of model is inadequate | Complete Section 8 (“Transparency, Explainability, and Interpretability”) of each Model Card | Ask whether someone outside your team understand how the model works, why it made a particular prediction, and what influenced its outputs  Use visual aids, simplified descriptions, or post hoc explanation tools (e.g., SHAP, LIME) if needed to improve clarity |  | Explainability  Interpretability  Preventing misuse  Reproducibility |  |
| Validate the model | Complete Section 5 (“Model Performance and Evaluation”) of each Model Card | Use representative testing datasets and report multiple metrics (e.g., accuracy, F1 score, error margins) to assess how well your model performs across different groups and scenarios |  | Model performance |  |
| Update Data Card of any datasets used in training or validating the model | Complete Sections 8 (“Annotation Tasks”) and 9 (“Applications and Benchmarks”) of each relevant Data Card | Note which parts of the dataset were used, and for what tasks |  | Explainability  Policy compliance  Reproducibility |  |
| Assess ethical issues that could arise from use of this model | Complete Section 9 (“Other Ethical Considerations”) of each Model Card | Discuss ethical risks with your team or stakeholders  Consult prior research or case studies involving similar models to help anticipate and document potential concerns |  | Consent  Fairness  Preventing misuse  Privacy  Surveillance  Well-being |  |

1. **INTEGRATING MULTIPLE MODELS INTO A SINGLE MODEL**

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| --- | --- | --- | --- | --- | --- |
| **Action** | **Output(s)** | **Tips for completing** | **Person Responsible** | **Issue(s)** | **Status** |
| Create Model Card for each model you or your team create by integrating two or more other models | Complete the following sections of each Model Card:   * Section 1 (“Basic Information”); * Section 2 (“Model Overview”) | You don’t need to complete every field of Sections 1 and 2 just yet. Only complete the fields for which you currently have information |  | Reproducibility |  |
| Record **metadata, provenance, and documentation** | Complete the following sections of each Model Card:   * Section 3 (“Model Inputs and Training Data”); * Section 4 (“Model Structures”); * Section 6 (“Model Adaptation and Customization”) * Section 7 (“Model Deployment and Usage”) | You don’t need to complete every field of Sections 3, 4, and 7 just yet. Only complete the fields for which you currently have information |  | Explainability  Reproducibility |  |
| Assess the demographic and geographic representativeness of datasets used to train the model | Complete the field “Training Dataset Representativeness” in Section (“Model Inputs and Training Data”) of each Model Card | You should be able to transfer this information from the relevant Data Cards |  | Explainability  Fairness  Interpretability  Reproducibility |  |
| Assess the model’s transparency, explainability, and interpretability  Consider implementing additional measures if current transparency, explainability, and interpretability of model is inadequate | Complete Section 8 (“Transparency, Explainability, and Interpretability”) of each Model Card | Ask whether someone outside your team understand how the model works, why it made a particular prediction, and what influenced its outputs  Use visual aids, simplified descriptions, or post hoc explanation tools (e.g., SHAP, LIME) if needed to improve clarity |  | Explainability  Interpretability  Reproducibility |  |
| Validate the model | Complete Section 5 (“Model Performance and Evaluation”) of each Model Card | Use representative testing datasets and report multiple metrics (e.g., accuracy, F1 score, error margins) to assess how well your model performs across different groups and scenarios |  | Model performance |  |
| Assess ethical issues that could arise from use of this model | Complete Section 9 (“Other Ethical Considerations”) of each Model Card | Discuss ethical risks with your team or stakeholders  Consult prior research or case studies involving similar models to help anticipate and document potential concerns |  | Consent  Fairness  Preventing misuse  Privacy  Surveillance  Well-being |  |

1. **GENERATING AND INTERPRETING MODEL OUTPUTS**

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| --- | --- | --- | --- | --- | --- |
| **Action** | **Output(s)** | **Tips for completing** | **Person Responsible** | **Issue(s)** | **Status** |
| Update Research Product Management Plan | Update all fields | Some fields may still be blank, pending further actions taken in later stages |  | Explainability  Interpretability  Policy compliance  Preventing misuse  Reproducibility |  |
| Update Data Cards | Update all fields | Some fields may still be blank, pending further actions taken in later stages |  | Explainability  Policy compliance  Reproducibility |  |
| Update Model Cards | Update all fields | Some fields may still be blank, pending further actions taken in later stages |  | Explainability  Policy compliance  Reproducibility |  |

1. **DISSEMINATING, ARCHIVING, OR DESTROYING, RESEARCH OUTPUTS**

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| --- | --- | --- | --- | --- | --- |
| **Action** | **Output(s)** | **Tips for completing** | **Person** | **Issue(s)** | **Status** |
| Clearly state limitations and assumptions of datasets and models in all presentations, reports, and papers  Explain clearly how these limitations apply to interpretation of model outputs | Relevant sections in dissemination materials | Avoid oversimplification or overconfidence in predictions  If possible, provide scenario-based interpretations (e.g., “If X changes, then Y is likely to happen”) |  | Communicating limits Explainability  Interpretability  Preventing misuse |  |
| Communicate with affected stakeholders in a way that helps their understanding | Dissemination materials appropriate to each stakeholder group | Possible approaches:   * Provide plain language summaries for non-experts; * Provide translations if working with non-native speakers; * Generate clear visualizations; * Hold meetings with stakeholder groups; * Co-produce dissemination materials with affected groups. |  | Communicating limits  Consent  Fairness  Explainability  Interpretability  Well-being |  |
| Determine which data, models, and research outputs should be shared, archived, or destroyed based on:   * Relevance: Is the dataset/model still useful? * Sensitivity: Does it contain private, proprietary, or regulated data? * Compliance: Are there Policy, ethical, or institutional policies governing retention or deletion? | Update Research Product Management Plan, particularly Sections 2e (“Long-Term Management of Datasets”) and 3e (“Long-Term Management of Models”) | Consult the Digital Curation Centre’s guidance for appraisal and selection of datasets for long-term curation: https://www.dcc.ac.uk/guidance/briefing-papers/introduction-curation/appraisal-and-selection |  | Consent  Policy compliance  Preventing misuse Privacy  Reproducibility |  |
| Securely destroy data and models when necessary, and record what was deleted | Update Sections 6 (“Dataset Inventory”) and 7 (“Model Inventory”), writing “DELETED ON *[DATE]*) where relevant in the “Retention Period” columns  For each deleted Model, delete all but Sections 1 (“Basic Information”) and 2 (“Model Overview”) of its Model Card, and retain  For each deleted Dataset, delete all but Sections 1 (“Basic Information”) and 2 (“Dataset Overview”) of its Model Card, and retain | **Digital data:** Use encryption-based wiping or secure deletion tools.  **Cloud-based data:** Ensure complete deletion, including backups.  **Physical media:** Shred, degauss, or destroy securely.  Machine learning models:Remove training data, logs, and stored artifacts that could recreate sensitive datasets |  | Consent  Policy compliance  Preventing misuse Privacy |  |
| Archive data and models **in trusted open-access repositories, with their respective Data and Model Cards** | Update fields “Terms of Use or Data Sharing Agreement”, “Storage Location”, and “Access Control Policies in Section 2 (“Dataset Overview”) of each Data Card  Update fields “User Licensing”, “Storage Location”, and “Access Control Policies in Section 2 (“Model Overview”) of each Model Card | **Consider public research repositories** (e.g., Dryad, Zenodo, Figshare), d**omain-specific archives** (e.g., ICPSR for social science data, NASA Earthdata for earth sciences data), or institutional repositories (check whether your university library operates a data repository) |  | Consent  Policy compliance  Reproducibility |  |
| Ensure persistent identifiers are assigned (DOI) to datasets and models | Update field “Persistent Identifier” in Section 1 (“Basic Information”) of each Data and Model Card  Update Sections 6 (“Dataset Inventory”) and 7 (“Model Inventory”) of the Research Product Management Plan with persistent identifiers | Thia step is likely to be facilitated by a repository |  | Reproducibility |  |
| Evaluate datasets’ compliance with the FAIR (Findable, Accessible, Interoperable, Reproducible) Principles | Take pragmatic steps to improve compliance with FAIR principles | Consult the easy-to-use F-UJI tool for automated evaluation of dataset compliance: https://www.f-uji.net/ |  | Policy compliance  Reproducibility |  |
| Complete, revise, and finalize documentation | Ensure all fields are complete and up to date in the Research Product Management Plan, each Data Card, and each Model Card | Set aside time at project close-out to check consistent terminology and links across all documents |  | Explainability  Preventing misuse  Reproducibility |  |