Trustworthiness Evaluation

Each of the top 10 participants will provide a dedicated section in their final submission, covering the following aspects. Please describe your approach, tools used, and any insights or challenges encountered for each.

1. Data & Model Bias (max 100 words) (WG Data):

Describe any potential biases you identified in the dataset (e.g., subjective, regional, environmental, or temporal biases). Detail any techniques or tools you used (e.g., <u>AI Fairness</u> 360) to assess or mitigate these biases. Discuss any biases that were difficult to address and consider how they might impact your model's performance across different contexts.

2. Model Transparency (max 100 words) (WG Modelling):

Explain your use of interpretability tools like LIME or SHAP. Share insights on which features (e.g., SAR or optical bands) were most influential in detecting landslides. Include figures and discuss any unexpected findings or patterns you observed in the interpretability results.

3. Approach Reusability (max 100 words) (WG Modelling):

Comment on how adaptable or reusable your model architecture and methods are for other natural disaster contexts or landslide events. Note any design choices you made to enhance flexibility and discuss any limitations to reusability you identified.

4. Sustainability and Efficiency (max 100 words) (Sustainable AI):

Using tools such as CodeCarbon, ML CO2 Impact, or Experiment Impact Tracker, estimate the environmental impact of your model (e.g., carbon emissions from training). Describe any optimisations you implemented to improve efficiency and discuss the trade-offs you considered between model complexity and sustainability.

Trustworthiness Evaluation: Simplified Guide

In your final submission, include a short section (just a few sentences per item!) covering these key points. No need for long paragraphs—focus on the essentials and your unique insights.

1. Bias in Data & Model

- o Did you notice any biases in the data (e.g., location, time, or type of data)?
- o What tools or methods (if any) did you use to check or fix these biases?
- o Were there biases you couldn't fully address? If so, how might they affect your model's performance?

2. Model Transparency

- o Did you use tools like LIME or SHAP? What did you learn about the most important features in your model?
- o Share one interesting or unexpected result you noticed.

3. Adaptability to Other Uses

- o How easy would it be to apply your model to other disasters or landslides?
- o Mention one choice you made to make your approach flexible—or one challenge to doing so.

4. Efficiency & Sustainability

- o Did you track the environmental impact of your model (e.g., CO2 emissions)?
- o What steps did you take to make your model faster or more efficient?
- o Did you balance complexity with sustainability? If so, how?

Key Tips

- **Keep it brief:** Bullet points or short sentences are fine.
- **Focus on what matters:** Share what you actually did—no need for theoretical explanations.
- **Relax:** It's okay if you didn't address everything perfectly. Just be honest about your approach!

5.