

# LEWS Data Working Group



**Co-Chairs:** Dalia Kirschbaum (NASA), Ben Mirus (US Geological Survey)

**Goal:** To promote open data and sharing of information that can be used for landslide model development, parameterization, or evaluation.

## **Overview of Today's Kickoff Meeting:**

- Overview of working group focus
- Review of main objectives and products
- Open discussion
- Logistics: participation and timeline for future activities

# Motivation and Objectives

1. Conduct review of LEWS data needs and opportunities
2. Identify and assemble possible benchmark datasets
3. Develop a centralized portal/repository for inventory metadata
4. Provide forum to discuss applications and knowledge gaps

# Data Needs and Opportunities

## Inventories

- Event based – typically most used for LEWS
- Multi-temporal inventories – rare, but potentially quite valuable
- Static maps (no timing) – useful for susceptibility that informs LEWS

## Data for model development and testing

- Rainfall products
- Hydrologic products
- Land-cover and land-use change

## Open questions related to LEWS model input

- Spatial extent (e.g., coverage of LEWS, satellite vs. in-situ data)
- Temporal resolution (e.g., daily vs. hourly, satellite return periods)
- System requirements and usage (i.e., infrastructure needs, priorities of stakeholders)

*Produce white Paper highlighting when and how different data may be used for LEWS.*

# Benchmark Datasets

## Facilitate objective comparison of different LEWS modeling approaches

- Consider range of geographic and hydroclimatic settings
- Identify representative of datasets used globally for LEWS development
- Provide template or guidelines for future LEWS data

## Data standards and criteria for consideration

- Metadata needs
- Spatial or temporal resolution requirements
- Data accessibility

*Identify criteria for benchmarks and some possible initial datasets*

# Centralized Data Repository



## What...

- should it look like?
- are the potential benefits to the community for more open data sharing?
- are the incentives for open sharing of data?
- do we want to ultimately accomplish with an open repository?

# Discussion and input from you!

Put your feedback [here](#)



1. What are the main data limitations for LEWS development and improvement?
  - Open and accessible landslide inventories with timing information
2. What knowledge gaps can be addressed more effectively together?
  - Identify relations between temporal resolution and LEWS performance?
  - How well does satellite products compare to in-situ measurements for LEWS performance?
3. What data or infrastructure would be beneficial for the LEWS community?
  - Benchmark datasets for testing alternative LEWS models and approaches
  - Centralized portal / repository with metadata for open access
  - Promote discussion and shared objectives of CEOS and other parallel organizations

# Logistics – Timeline and Plans

## Future meetings

- Monthly – Associates and active members
- Quarterly – Observers and inactive members
- Disseminate white paper in 2022
- Establish centralized data repository in 2023

## Products

- Identify possible benchmark datasets in 2021
- Plan LEWS model benchmark study for 2022
- Disseminate white paper in 2022
- Establish centralized data repository in 2023

# Logistics – Participation and Expectations

## Associates and active participants

- Identify one (or more) objectives for active involvement (sign up today!)  
[https://docs.google.com/spreadsheets/d/1IO6-ixBc1gA7Mcq32WYloQ4doeVjySNLKa\\_3f2XUO\\_k/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1IO6-ixBc1gA7Mcq32WYloQ4doeVjySNLKa_3f2XUO_k/edit?usp=sharing)
- Participate meaningfully in monthly meetings and/or email discussions
- Concrete contributions to developing products

## Observers and less active members

- Regular updates on WG progress
- Provide broad feedback to WG meetings or email chairs
- Consider ways you can support WG activities and objectives