

G2F Comp Meeting

Submission

Submission Template

The file **1_Submission_Template_2024.csv** only exists for the **testing** set. This file contains the environments and hybrids for which participants will submit yield predictions. Submissions must be made using the EvalAI website (<https://eval.ai/web/challenges/challenge-page/2376/overview>) between December 15, 2024 and January 15, 2025. Participants should add their predictions to the template under the Yield_Mg_ha header and keep the other columns as they are in the template. **Submissions that do not contain all of the locations, hybrids, and headers as listed in the template, and submissions with any missing values will be REJECTED by the EvalAI evaluation script.** The columns in the submission template are as follows:

Table 1. Description of the columns in the submission template file

Name	Description
Env	Environment (combination of location of evaluation and year) that will match fields in environmental data sets
Hybrid	Hybrid name that will match genotype file
Yield_Mg_ha	Grain yield in Mg per ha at 15.5% grain moisture. (Values to be predicted by participants)

Timeline

Finish Cleaning data by Dec 22nd

Aim to start making Submission before Jan

Jan 15th is the deadline (Only can make 5 submissions)

Dataset

- Trait most phenotype info
- Metadata with location info
- Soil
- Weather
- Genotype
- Environmental Covariate Data

Overall Workflow

Choose data

Run APSIM

Clean and select data

Run / Testing different Models

Make Prediction and submit

Strategies

- Assign tasks according to what people are good at
- Tasks (Cleaning, Running envirotyping tool, Subsetting data, Design algorithms)
- Run Envirotyping tool
- Make at smaller subset of the data so the team can test models (Kaggle site)
- Discuss about potential meeting frequency

Graham: Data Cleaning, Reformatting

Catherine and Sam: Running Envirotyping tool

Iris: Set up Google Drive (

Goal

RMSE is below 3

Communication

Slack Channel

https://join.slack.com/t/uiucdigitalfarmhand/shared_invite/zt-2vtvudc36-NKZIFwVOCLT2pJxJtezccg

Google drive / Github page to upload code

Important Links

Updated dataset (Last updated on 12/4)

<https://drive.google.com/drive/folders/1IQ3zoxBuuSP9KBYbH5dxicEjovyDtpsu>

Data Description

<https://docs.google.com/document/d/1rOcVMPwSusHs9GcFBJ-frAWBI2xzJQXE/edit>

EvalAI

<https://eval.ai/web/challenges/challenge-page/2376/overview>

Competition Website

<https://www.maizegxeprediction.org/>

Kaggle Comp

<https://www.kaggle.com/competitions/genomes-to-field-corn-hybrid-prediction/data>

TO-DO

Next Meeting Dec 20th

Check previous G2F Paper on Website

Iris: Make Google Drive and Github