

TEXAS A&M AGRILIFE

# Raw data preparation prior to uploading in the Wheat CAP UAS Hub

→ Jose Landivar, Amir M.H. Ibrahim, Jackie C. Rudd, Jinha Jung, Juan A. Landivar, Mahendra Bhandari, Russ Garetson, Shannon A. Baker







# Main points

- Organizing RAW Images
- Including GCP Survey
- Excel sheets with field layout and plot identifiers



# Organizing RAW Images

Step 1: Create main folder  
Naming:  
YYYYMMDD\_location (two letters)  
crop name\_experimental condition or sublocation

Example for Amarillo datasets:  
**20220112\_ar\_wheat\_irr**

Step 2: Create sub folder  
Name of subfolders depend on platform used

Example for Mavic 2 Pro  
and Slant Range 3p (respectively):  
**m2p, s3p**

Step 3: Copy images  
From Drone's memory card to the  
respective folder

Annotations for the file explorer screenshot:

- 20220112\_ar\_wheat\_irr (Main folder)
- 20220112\_ar\_wheat\_irr.csv (GCP File)
- m2p (Folders including RGB images)
- 100MEDIA, 101MEDIA, 102MEDIA (Folders including RGB images)
- s3p (Folders including Multispectral images)
- 20220112T172032, 20220112T172033, 20220112T172034 (Folders including Multispectral images)

- \* Do not modify pictures/folder name
- \* Upload ZIPPED file (.zip format)



# Including GCP Survey

- File containing GCP information should also follow folder naming structure

Example for Amarillo datasets:  
[20220112\\_ar\\_wheat\\_irr](#)

- File should include the following information:

NAME	LATITUDE	LONGITUDE	ALTITUDE
GCP1	35.17872035N	102.09810792W	1143.522
GCP2	35.17872214N	102.09773328W	1143.358
GCP3	35.17872366N	102.09718904W	1143.123
GCP4	35.17943823N	102.09719079W	1143.257
GCP5	35.17943656N	102.09773576W	1143.502
GCP6	35.17943584N	102.09810864W	1143.622
GCP7	35.18020125N	102.09811116W	1143.669
GCP8	35.18020347N	102.09773605W	1143.586
GCP9	35.18020609N	102.09719266W	1143.351
GCP10	35.17866967N	102.09823584W	1143.552





# Excel sheets with field layout and plot identifier

The field layout and plot identifiers should be included on the first RAW Data Upload.

- Field Layout

- Plot Identifiers

Note: Red circled information (similar) is required in the field layout excel sheet

Year	EXPT	TEST_N	PLOT_ID	PLOT	BLOC	ENTRY	NAME	Is_private
2021	BI	DEMO	202112039001	1	1	1	Tascosa	No
2021	BI	DEMO	202112039002	2	1	2	Sturdy	No
2021	BI	DEMO	202112039003	3	1	3	Caprock	No
2021	BI	DEMO	202112039004	4	1	4	TAM W-101	No
2021	BI	DEMO	202112039005	5	1	5	TAM 105	No

**Thank you!**