

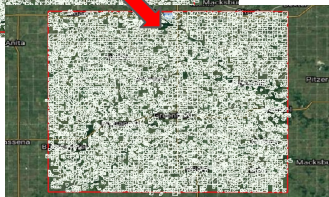
Conceptual Workflow: CLU Data Pre-Processing

This is the conceptual workflow for pre-processing the CLU & CDLS data that will be used in the model.

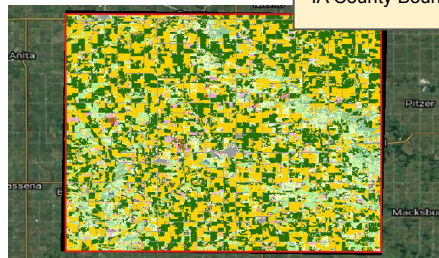
Adair County, IA



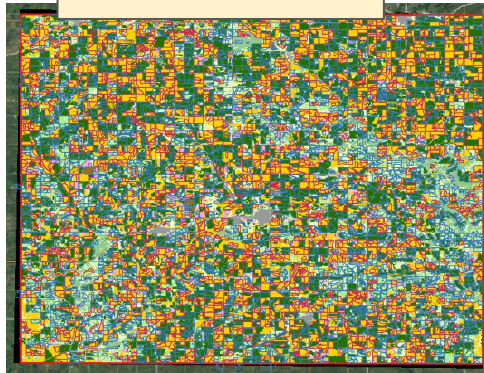
Clip CLU data to Adair, IA County Boundary



Clip 2017 CDLS to Adair, IA County Boundary



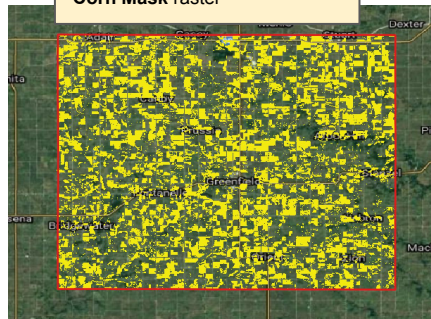
Zonal Statistics: summarize majority, & mean crop types from CDLS raster via CLU polygons



Export **Majority Corn** CLU polygons



Reclassify 2017 CDLS in Adair, IA County to generate a **Corn Mask** raster

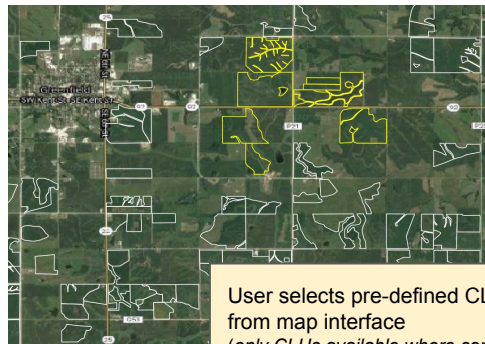


Outputs for Adair County, IA:

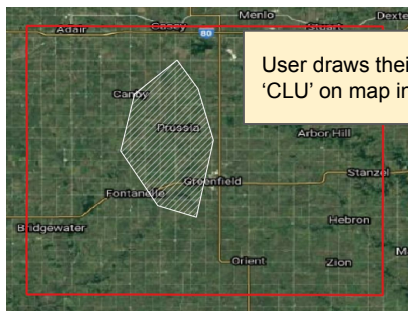
- CLU polygons where corn was the majority crop in 2017
- Corn mask raster

Conceptual Workflow: Define “Area of Interest” (AOI) as Input to Model

This is the conceptual workflow for how an area is defined for input to the analytical model.

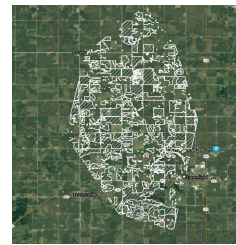
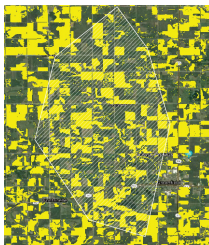


User selects pre-defined CLUs from map interface
(only CLUs available where corn was majority crop in 2017)



User draws their own custom 'CLU' on map interface

Custom 'CLU' is clipped to 2017 Corn Mask



Check for Data Availability @ AOI:

- [Sentinel-2](#)
< 20% (?) Cloud Cover
- [MODIS Terra Vegetation Indices 16-Day Global 250m](#) (only 500m is available in AWS)
- [NAIP](#)

(continued on next slide)