

<http://minneanalytics.org/minnemudac/data/>

Undergrad Challenge

In this challenge, you will build a predictive model that will return 3 key insights to the farmer:

1. Predicted commodity closing (EOD) price 5 consecutive trading days in September & October (10 total days). Dates will not be disclosed prior to November 9.
 - a. Target variable Contract dates (March, May, July)
 - b. Total measurements will be 30 (10 days x 3 contract dates)
2. Is today's price a peak / sell recommendation (binary)
3. Predicted commodity EOD price for December 6th
 - a. Most accurate prediction will be announced at FASTCon (Dec 9th)

Model development will occur against July & August timeframes

Predictive accuracy will be measured against September and October actuals

Undergraduate Challenge: Analytic Thought Starters

- What is the price difference by contract date?
- Is there seasonality in the target variable for a given contract date?
- Is canola price predictive of soybean price?
- Is there an effect of the delayed 2019 seeding on soybean prices (see time lag in datasets on Oil Crops Outlook tab: oil crops chart gallery figure 1)?

Undergraduate: Evaluation

Accuracy will be measured against each deliverable distinctly:

1. Predicted commodity closing (EOD) price 5 consecutive trading days in September & October (dates will not be disclosed prior to November 9 - 10 total days)
 - a. You will provide a file with predicted EOD price for September 3-October 31 it will include:
 - i. Predicted price for each of the distinct contract dates (March, May, July)
 - b. Total measurements will be 30 (10 days x 3 contract dates)
2. Is today's price a peak / sell recommendation (binary)
 - a. You will provide a file with SELL or HOLD as your recommendation for September 3-October 31 it will include:
 - i. A recommendation of SELL or HOLD for each of the distinct contract dates (March, May, July)
 - b. Total measurements will be 30 (10 days x 3 contract dates)
 - i. SELL recommendation w/in \$0.16 of the max price = 10 pts
 - ii. HOLD recommendation w/in \$0.16 of the min price = 10 pts
 - iii. HOLD recommendation w/in \$0.16 of the max price = -5 pts
 - iv. SELL recommendation w/in \$0.32 of the min price = -5 pts
3. Predicted commodity EOD price on December 6th for each of the three contract dates
 - a. Most accurate prediction will be announced at FASTCon (Dec 9th)