Diagram, schematic

Description automatically generated

Index Confidence Interval ranges averaged across all six inputs for each of the output targets.

Chart

Description automatically generated

The following 3 panels show 3 regions (northern, mid and southern) for 3 sowing dates (DOY = 100, 150 ,201). They highlight the variations in sensitivity to different inputs based on latitude and Time of sowing. They also highlight the variations between the Random Forest and the ANN emulators.

Emerald Sobol S1 and St (100000 samples)

Calendar

Description automatically generated

Gunnedah Sobol S1 and St (100000 samples)

Chart, scatter chart

Description automatically generated

Horsham Sobol S1 and St (100000 samples)

Chart, scatter chart

Description automatically generated

Sobol analysis for 21 inputs across 3 locations. One sowing time used. Analysis done with sample size of 100000. This equates to (p+2)\*n = (21+2)\*100000=2.3 million simulations by 6 outputs by 3 locations = 41.4 million model runs for each of 2 models. **TOTAL of 82.8 million simulations!!!**

Calendar

Description automatically generated