PROCESSING AND ANALIZYING THE RESULTS

| File name | Order | Date | Project | Objective |
|---|---|---|---|---|
| 5b_value_and_maps_policy_feb14.R | 37 | 3/23/2020 | n_policy | Make plots for the paper |
| 4_economics_field_policy_feb11.R | 36 | 3/27/2020 | n_policy | Obtain the economic and enviromental indicators for each field, using the |
| 3d_regional_models_policy.R | 35 | 3/27/2020 | n_policy | Calibrate the different models (minimum, RF) for the different policies (N fee, tax, n_red) at different levels (fees, ratios, % goal) |

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|---|---|---|---|---|
| 5c_figure_one_cell_maps.R | 34 | 2/3/2020 | n_management | Make plots for the paper |
| 5b_value_and_maps_jan14.R | 33 | 2/7/2020 | n_management | Make plots for the paper |
| 5a_ update_corn_count_jan13.R | 32 | 1/13/2020 | n_management | Update the grid with the area of corn |
| 4_economics_field_and_local_RF_jan24.R | 31 | 1/24/2020 | n_management | Obtain the economic and enviromental indicators for each field, using the |
| 3c_regional_xboost_jan8.R | 30 | 1/10/2020 | n_management | Create a XBoost models usign RS data |
| 3b_regional_reg and RF_jan3.R | 29 | 1/24/2020 | n_management | Create a RF models usign RS data |
| 3a_regional_stations and MRTN.R | 28 | 1/25/2020 | n_management | Select the RS and calculate MRTN rate |
| 2b_add_sensors.R | 27 | 1/7/2020 | both | Add N_minus and N_rich information |
| 2_post_processing_nov29.R | 26 | 12/19/2019 | both | Clean restuls. Remove outliers |
| 1_daily_to_yearly_remake.R | 25 | 12/19/2019 | both | Transforms APSIM output from daily data to yearly. The previous one skipped files and had to run two times until gets everything. |
| 1_daily_to_yearly_nov26.R | 24 | 12/18/2019 | both | Transforms APSIM output from daily data to yearly |
| parameters.R | 23 | 2/11/2020 | both | Setting parameters used during the work, like prices and fees |

RUNNING THE SIMULATIONS

| File name | Order | Date | Project | Objective |
|---|---|---|---|---|
| yc_output_explore.R | 22 | 11/24/2019 | both | Validation of the sequential simulation vs the year by year |
| server_merge_results.R | 21 | 11/30/2019 | both | Cluster manager 5: merge APSIM output |
| update_ic_nov18.R | 20 | 11/26/2019 | both | Cluster manager 4: update the initial conditions from SP to NRP |
| server_run_files_nov20.R | 19 | 12/18/2019 | both | Cluster manager 3: run the simulations |
| server2_create_yc_files.R | 18 | 11/20/2019 | both | Cluster manager 2: creates the files for the NRP |
| server1_create_stab_files.R | 17 | 12/18/2019 | both | Cluster manager 1: creates the files for the SP |
| server_apsim_call.R | 16 | 12/18/2019 | both | Cluster manager: calls all the other files in the right order, for each cell |
| walltime_updater.R | 15 | 12/19/2019 | both | Creates a file with the cell id and the time needed to run in the Cluster |
| apsim_create_files_nov18.R | 14 | 12/18/2019 | | Create files for APSIM locally |
| apsim_run_files_apr4.R | 13 | 11/19/2019 | | Run APSIM locally |

INITIAL SET UP OF FILES FOR RUNNING THE SIMULATIONS

| File name | Order | Date | Project | Objective |
|---|---|---|---|---|
| clean_fields_step2.R | 12 | 11/29/2019 | both | Clean fields again, remove soils polygon whose horizons were not found |
| soils_manager_Nov29.R | 11 | 11/29/2019 | both | Download horizons for each soil |
| clean_fields_step1.R | 10 | 11/29/2019 | both | Clean fields. Leave only three soils |
| fields_selector_parallel_focal_v2.R | 9 | 11/9/2019 | both | Code to select fields on each cell in parallel |
| fields_selector_manager.R | 8 | 2/2/2020 | both | Code to spit the the grid file in tiles and call the fields selector in parallel |
| functions_vr.R | 7 | 6/29/2019 | both | Functions used for creating fields. Called by other codes |
| daily_to_yearly_validation.R | 6 | 6/2/2019 | both | Validation of the sequential simulation vs the year by year |
| make_met_files.R | 5 | 5/21/2019 | both | Make the .met files that apsim needs |
| z_creator_nov20.R | 4 | 1/25/2020 | both | Randomize the weather |
| z_downloader.R | 3 | 5/19/2019 | both | Code to download the weather of the centroid of each cell |
| grid_10_update.R | 2 | 12/2/2019 | both | Update the grid with the area of corn |
| grid_10_creation.R | 1 | 5/19/2019 | both | Code to create a grid of 10x10 km over Illinois |