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%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%% Before left_join %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Drain cells
drain1 = readtable('C:\Users\nyamaa.mendsaikhan\CPTS575_project\Data\drain.csv','ReadVariableNames');
drain1 = table2array(drain1);
drain0 = drain1(:,1:3);
drain2 = drain1(:,4);
drain2 = repmat(drain2,1,90);
drain = [drain0 drain2];
drain_table = array2table(drain);
writetable(drain_table, 'C:\Users\nyamaa.mendsaikhan\CPTS575_project\Data\drain_matlab.csv');

% River cells
river1 = readtable('C:\Users\nyamaa.mendsaikhan\CPTS575_project\Data\river.csv','ReadVariableNames');
river1 = table2array(river1);
river0 = river1(:,1:3);
river2 = river1(:,4);
river2 = repmat(river2,1,90);
river = [river0 river2];
river_table = array2table(river);
writetable(river_table, 'C:\Users\nyamaa.mendsaikhan\CPTS575_project\Data\river_matlab.csv');

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%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%% After left_join %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Drain matlab (rbinded with lay, row, col)
drain_matlab = readtable('C:\Users\nyamaa.mendsaikhan\CPTS575_project\Data\drain_matlab_all.csv','ReadVariableNames');
drain_matlab = drain_matlab(:,2:94);
drain_matlab = table2array(drain_matlab);
project_drain = drain_matlab(:,71:90);
project_drain = array2table(project_drain);
% writetable(project_drain, 'C:\Users\nyamaa.mendsaikhan\CPTS575_project\Data\final\project_drain.csv');

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% river matlab (rbinded with lay, row, col)
river_matlab = readtable('C:\Users\nyamaa.mendsaikhan\CPTS575_project\Data\river_matlab_all.csv','ReadVariableNames');
river_matlab = river_matlab(:,2:94);
river_matlab = table2array(river_matlab);
project_river = river_matlab(:,71:90);
project_river = array2table(project_river);
% writetable(project_river, 'C:\Users\nyamaa.mendsaikhan\CPTS575_project\Data\final\project_river.csv');

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