function onOpen() {

SpreadsheetApp.getUi().createMenu("Run Script").addItem("Update Climate", "pullData").addItem('Update Record',"RecordFunction").addToUi();

//addSeparator().addSubMenu(SpreadsheetApp.getUi().createMenu('Update Records').addItem('Update Record new',"RecordFunction")).addToUi();

}

function pullData() {

var sheet = SpreadsheetApp.getActiveSheet();

var sid = ["META2","PAHN","PAJN","PAKT","PAKW","APGA2","PASI","AGYthr","PAYA"];

var row = 4;

var date = sheet.getSheetName();

//var month = date.substr(5,6);

var url = "http://data.rcc-acis.org/StnData"

//var elems = "mly\_mean\_maxt"

//[{"name":"pcpn","interval":"mly","duration":"mly","reduce":{"reduce":"sum","add":"mcnt"}}

if (date.length < 6){

var interval = "yly";

var maxMissingValues = 36;

}

else {

var interval = "mly";

var maxMissingValues = 3;

}

var after\_name\_string = "%2C%22interval%22%3A%22"+interval+"%22%2C%22reduce%22%3A%7B%22reduce%22%3A"

// , "interval": "mly" , "reduce": { "reduce" :

var after\_reduce\_string = "%2C%22add%22%3A%22mcnt%22%7D%2C%22maxmissing%22%3A"+maxMissingValues+"%7D"

// ,"add": "mcnt"},"maxmissing": 3 }

var normal\_temp\_string = "%22%2C%22interval%22%3A%22"+interval+"%22%2C%22normal%22%3A1%2C%22reduce%22%3A%22mean%22%7D"

// ","interval": "mly" , "normal" : 1 , "reduce": "mean"}

sid.forEach(function(obj) {

// %7B { %7D } %22 "" %3A : %2C , %5B [, %5D ]

var intro\_string = "%7B%22sid%22%3A%22"+obj+"%22%2C%22date%22%3A%22"+date+"%22%2C%22elems%22%3A%5B%7B"

// { " sid " : " PAYA " , " date " : " 2021-09 " , "elems" : [{

var pcpn\_sum\_string = intro\_string+"%22name%22%3A%22pcpn%22"+after\_name\_string+"%22sum%22"+after\_reduce\_string+"%2C"

var max\_mean\_t\_string = pcpn\_sum\_string+"%7B%22name%22%3A%22maxt%22"+after\_name\_string+"%22mean%22"+after\_reduce\_string+"%2C"

var min\_mean\_t\_string = max\_mean\_t\_string+"%7B%22name%22%3A%22mint%22"+after\_name\_string+"%22mean%22"+after\_reduce\_string+"%2C"

var avg\_mean\_t\_string = min\_mean\_t\_string+"%7B%22name%22%3A%22avgt%22"+after\_name\_string+"%22mean%22"+after\_reduce\_string+"%2C"

var snow\_sum\_string = avg\_mean\_t\_string+"%7B%22name%22%3A%22snow%22"+after\_name\_string+"%22sum%22"+after\_reduce\_string+"%2C"

// NORMALS

var normal\_pcpn = snow\_sum\_string+"%7B%22name%22%3A%22pcpn%22%2C%22interval%22%3A%22"+interval+"%22%2C%22normal%22%3A1%7D%2C"

var normal\_mean\_maxt = normal\_pcpn+"%7B%22name%22%3A%22maxt"+normal\_temp\_string+"%2C"

var normal\_mean\_mint = normal\_mean\_maxt+"%7B%22name%22%3A%22mint"+normal\_temp\_string+"%2C"

var normal\_mean\_avgt = normal\_mean\_mint+"%7B%22name%22%3A%22avgt"+normal\_temp\_string+"%2C"

var normal\_snow = normal\_mean\_avgt+"%7B%22name%22%3A%22snow%22%2C%22interval%22%3A%22"+interval+"%22%2C%22normal%22%3A1%7D%5D%7D"

var params\_string = normal\_snow

var res = UrlFetchApp.fetch(url+"?params="+params\_string);

var content = res.getContentText();

var json = JSON.parse(content);

Logger.log(json);

var data\_value = json["data"]

sheet.getRange(row,2).setValue(data\_value[0][1]) //precip

sheet.getRange(row,3).setValue(data\_value[0][1][1]) //missing count precip

sheet.getRange(row,8).setValue(data\_value[0][2]) //mean maxt

sheet.getRange(row,9).setValue(data\_value[0][2][1]) //missing count maxt

sheet.getRange(row,13).setValue(data\_value[0][3]) //mean mint

sheet.getRange(row,14).setValue(data\_value[0][3][1]) //missing count mint

sheet.getRange(row,18).setValue(data\_value[0][4]) //mean t

sheet.getRange(row,19).setValue(data\_value[0][4][1]) //missing count avg t

sheet.getRange(row,24).setValue(data\_value[0][5]) //snow

sheet.getRange(row,25).setValue(data\_value[0][5][1]) //missing count snow t

sheet.getRange(row,4).setValue(data\_value[0][6]) //normal precip

sheet.getRange(row,10).setValue(data\_value[0][7]) //normal mean max t

sheet.getRange(row,15).setValue(data\_value[0][8]) //normal mean min t

sheet.getRange(row,20).setValue(data\_value[0][9]) //normal mean avg t

sheet.getRange(row,26).setValue(data\_value[0][10]) //normal snow

row += 2;

});

}

function RecordFunction(){

var sheet = SpreadsheetApp.getActiveSheet();

var sid = ["META2","PAHN","PAJN","PAKT","PAKW","PAPG","PASI","AGYthr","PAYA"];

//var sid = ["PAGY"];

var row = 4;

var row\_new = 1;

var date = sheet.getSheetName();

var year = date.substr(0,4);

var url = "http://data.rcc-acis.org/StnData"

if (date.length < 6){

var interval = "yly";

var maxMissingValues = 36;

var after\_reduce\_string = "%7D%2C%22maxmissing%22%3A"+maxMissingValues+"%7D";

}

else {

var interval = "mly";

var month = date.substr(5,6);

var maxMissingValues = 3;

var after\_reduce\_string = "%7D%2C%22maxmissing%22%3A"+maxMissingValues+"%2C%22groupby%22%3A%5B%22year%22%2C%22"+month+"%22%2C%22"+month+"%22%5D%7D";

}

sid.forEach(function(obj) {

// Work with META2 to start

var intro\_string = "%7B%22sid%22%3A%22"+obj+"%22%2C%22date%22%3A%22por%22%2C%22elems%22%3A%5B%7B"

var after\_name\_string = "%2C%22interval%22%3A%22"+interval+"%22%2C%22reduce%22%3A%7B%22reduce%22%3A"

//var after\_reduce\_string = "%7D%2C%22maxmissing%22%3A"+maxMissingValues+"%2C%22groupby%22%3A%5B%22year%22%2C%22"+month+"%22%2C%22"+month+"%22%5D%7D"

var pcpn\_sum\_string = intro\_string+"%22name%22%3A%22pcpn%22"+after\_name\_string+"%22sum%22"+after\_reduce\_string+"%2C"

//%7D%5D%7D" +%2C

var max\_mean\_t\_string = pcpn\_sum\_string+"%7B%22name%22%3A%22maxt%22"+after\_name\_string+"%22mean%22"+after\_reduce\_string+"%2C"

var min\_mean\_t\_string = max\_mean\_t\_string+"%7B%22name%22%3A%22mint%22"+after\_name\_string+"%22mean%22"+after\_reduce\_string+"%2C"

var avg\_mean\_t\_string = min\_mean\_t\_string+"%7B%22name%22%3A%22avgt%22"+after\_name\_string+"%22mean%22"+after\_reduce\_string+"%2C"

var snow\_sum\_string = avg\_mean\_t\_string+"%7B%22name%22%3A%22snow%22"+after\_name\_string+"%22sum%22"+after\_reduce\_string+"%5D%7D"

var params\_string = snow\_sum\_string

var row\_new = 1;

var value = 0;

var res = UrlFetchApp.fetch(url+"?params="+params\_string);

var content = res.getContentText();

var json = JSON.parse(content);

Logger.log(json);

var data\_value = json["data"]

var secondSheet = SpreadsheetApp.getActiveSpreadsheet();

var secondSheet2 = secondSheet.getSheetByName('KeepBlank');

data\_value.forEach(function(val\_year)

{

if ( (data\_value[value][1]) != "M") {

secondSheet2.getRange(row\_new,1).setValue(data\_value[value][0]) //year

secondSheet2.getRange(row\_new,2).setValue(data\_value[value][1]) //current value

}

if ((data\_value[value][2]) != "M") {

secondSheet2.getRange(row\_new,1).setValue(data\_value[value][0]) //year

secondSheet2.getRange(row\_new,3).setValue(data\_value[value][2]) //maxt

}

if ((data\_value[value][3]) != "M") {

secondSheet2.getRange(row\_new,1).setValue(data\_value[value][0]) //year

secondSheet2.getRange(row\_new,4).setValue(data\_value[value][3]) //mint

}

if ((data\_value[value][4]) != "M") {

secondSheet2.getRange(row\_new,1).setValue(data\_value[value][0]) //year

secondSheet2.getRange(row\_new,5).setValue(data\_value[value][4]) //avgt

}

if ((data\_value[value][5]) != "M") {

secondSheet2.getRange(row\_new,1).setValue(data\_value[value][0]) //year

secondSheet2.getRange(row\_new,6).setValue(data\_value[value][5]) //snow

}

row\_new += 1;

value += 1;

last\_year\_of\_data = val\_year;

});

var colmn = 2;

var jj = 0;

var colum\_val = [6,12,17,22,28];

var column\_val\_data = [2,8,13,18,24]

while (colmn < 7) {

secondSheet2.getRange("A1:F250").sort({column: colmn, ascending: false});

if (sheet.getRange(row,column\_val\_data[jj]).getValue() == "M") {

sheet.getRange(row,colum\_val[jj]).setValue("M"); //current value

}

else {

var tosearch = year;

var tf = secondSheet.createTextFinder(tosearch);

var all = tf.findAll();

for (var i = 0; i < all.length; i++) {

rank = all[i].getA1Notation();

sheet.getRange(row,colum\_val[jj]).setValue(rank.substr(1)); //current value

//var tempvalue = secondSheet2.getLastRow();

//sheet.getRange(row,colum\_val[jj]).setValue(tempvalue); //total values?

}

};

jj += 1;

colmn += 1;

};

secondSheet2.clear();

row += 2;

});

}

//https://developers.google.com/apps-script/guides/html/best-practices#code.gs

//https://stackoverflow.com/questions/18646554/importing-external-javascript-to-google-apps-script

//https://en.wikipedia.org/wiki/Percent-encoding

//https://stackoverflow.com/questions/27577922/how-to-pass-a-json-array-as-a-parameter-in-url

//http://jsfiddle.net/gf9d65L1/