// NOTE: need to upload your data points (in this case “veg\_plots” as a geometry for this script to work)

//use\_example\_ee\_script(sensor = 'MODIS')

// Sample NDVI for IRG - MODIS MOD13Q1

// Example from irg package https://github.com/robitalec/irg

// Alec L. Robitaille

var plots = ee.FeatureCollection(veg\_plots)

print(plots)

// // // // Functions ===================================================================

function rescaleBands (im) {

var viBands = im.select(['NDVI', 'EVI']).multiply(0.0001);

var surfBands = im.select('sur\_refl\_b0.\*').multiply(0.0001);

var viewBands = im.select(['ViewZenith', 'SolarZenith', 'RelativeAzimuth']).multiply(0.01);

return(im.addBands(viBands, null, true)

.addBands(surfBands, null, true)

.addBands(viewBands, null, true));

}

// // Function to grab year from image and add it as a band

function addYear(img) {

return(img.addBands(ee.Image(img.date().get('year')).rename('yr')));

}

// Function to sample an image in each region of supplied geometry

function sampleRegions (im) {

return(im.reduceRegions(features, ee.Reducer.mean(), 250)

.copyProperties(im));

}

// // Feature ====================================================================

var features = plots

// // Images ======================================================================

var modis = ee.ImageCollection('MODIS/006/MOD13Q1');

// // Filter ======================================================================

modis = modis.filterDate('2002-01-01', '2023-01-01')

.filterBounds(features);

// // Process images ==============================================================

// // Add dates

modis = modis.map(addYear)

.map(rescaleBands);

// // Sample images ===============================================================

var sample = modis.map(sampleRegions)

.flatten()

.filter(ee.Filter.neq('NDVI', null));

print(sample.first())

// // Export ======================================================================

Export.table.toDrive({

collection: sample,

description: 'veg\_ploints-ndvi-MODIS-MOD13Q1',

selectors: ['PLOT\_ID', 'NDVI', 'SummaryQA', 'DayOfYear', 'yr']

});

Map.addLayer(modis.first(), null, 'modis');

Map.addLayer(plots, null, 'veg\_points');