Vlastnoručně sestavený skript, který byl využit k získaní průměrných ročních NDVI hodnot pro bakalářskou práci

```
// modis NDVI RADIATION

var modisNDVI =
ee.ImageCollection('MODIS/061/MOD13Q1').filterBounds(Fukushima_Daiichi_Radiation)

        .select('NDVI')

        .map(function(img){

                var rescaled_NDVI = img.select('NDVI')

                            .multiply(0.0001)

                            .rename('NDVI_rescaled');

                return img.addBands(rescaled_NDVI);});


//make a list of years and filter the modisNDVI

var years = ee.List.sequence(2000, 2022, 1).map(function(year){

  var start = ee.Number(year);

  var end = start.add(ee.Number(1));

  var ndviMeanYear = modisNDVI.select('NDVI_rescaled')

                .filter(ee.Filter.calendarRange(start, end, 'year')).mean();

  return ndviMeanYear.set('year', start)

});



//get the ndvi mean for each PA and set the year

var ndviMeanAnnual = ee.ImageCollection(years).map(function(img){

  var reduceRegions = img.reduceRegions({collection: Fukushima_Daiichi_Radiation,

                reducer: ee.Reducer.mean(),

                scale: 250,

                tileScale: 4})

  return reduceRegions.map(function(feat){
```

```
    return feat.set('year', img.get('year'))

  })


}).flatten()

print(ndviMeanAnnual.limit(100))




// modis NDVI CONTROL_2 AREA

var modisNDVICONTROL_2 =
ee.ImageCollection('MODIS/061/MOD13Q1').filterBounds(CONTROL_2_without_radiation)

        .select('NDVICONTROL_2')

        .map(function(img){

                var rescaled_NDVICONTROL_2 = img.select('NDVICONTROL_2')

                        .multiply(0.0001)

                        .rename('NDVICONTROL_2_rescaled');

                return img.addBands(rescaled_NDVICONTROL_2);});


//make a list of years and filter the modisNDVI

var yearsCONTROL_2 = ee.List.sequence(2000, 2022, 1).map(function(year){

  var startCONTROL_2 = ee.Number(year);

  var endCONTROL_2 = startCONTROL_2.add(ee.Number(1));

  var ndviMeanYearCONTROL_2 = modisNDVI.select('NDVICONTROL_2_rescaled')

                .filter(ee.Filter.calendarRange(startCONTROL_2, endCONTROL_2,
'year')).mean();

  return ndviMeanYearCONTROL_2.set('year', startCONTROL_2)

});
```

```
//get the ndvi mean for each PA and set the year

var ndviMeanAnnualCONTROL_2 = ee.ImageCollection(years).map(function(img){

  var reduceRegionsCONTROL_2 = img.reduceRegions({collection:
CONTROL_2_without_radiation,

                reducer: ee.Reducer.mean(),

                scale: 250,

                tileScale: 4})

  return reduceRegionsCONTROL_2.map(function(feat){

    return feat.set('year', img.get('year'))

  })


}).flatten()

print(ndviMeanAnnualCONTROL_2.limit(100))


//print('NDVI Annual Mean', ndviMeanAnnual.get('mean'));

//Area Comparison

var polygonAreaRadiation = Fukushima_Daiichi_Radiation.area({'maxError': 1});

var polygonAreaCONTROL_2 = CONTROL_2_without_radiation.area({'maxError': 1});

print('polygonAreaRadiation.area(...) =', polygonAreaRadiation);

print('polygonAreaCONTROL_2.area(...) =', polygonAreaCONTROL_2);



// Export data to a CSV

Export.table.toDrive({

  collection: ndviMeanAnnual,

  description: 'ndviMeanAnnual_Export_S2_Fuku',

  fileFormat: 'CSV'})
```

```
// Export data to a CSV

Export.table.toDrive({

  collection: ndviMeanAnnualCONTROL_2,

  description: 'ndviMeanAnnual_Control_2_Export_S2_Fuku',

  fileFormat: 'CSV'})
```