

REMOTE SENSING DAY III

PREPARED BY

NAME SURNAME : ONAT BİNGÖL

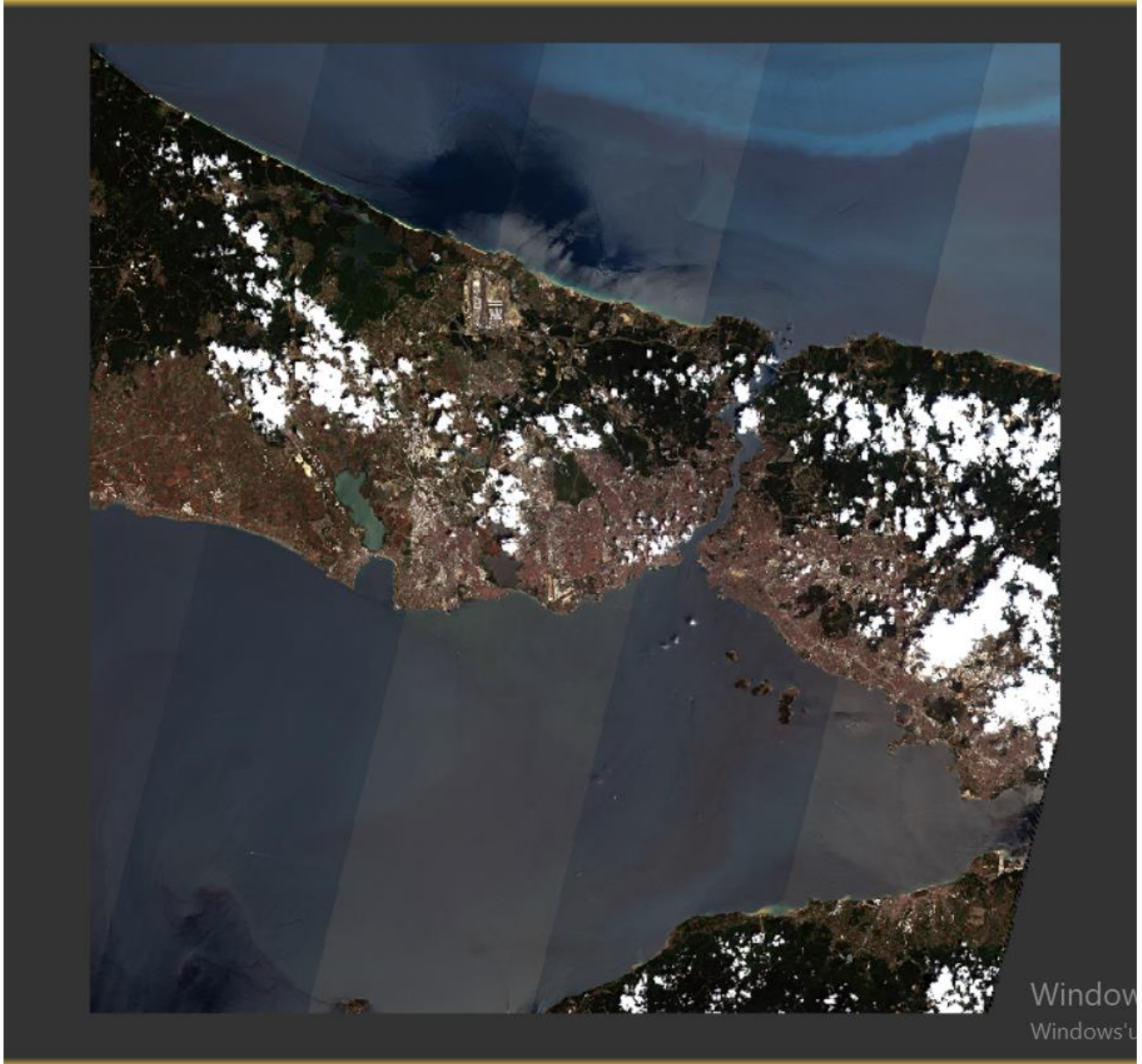
STUDENT NUMBER : 010180617

DUE DATE : 22/06/2023

COURSE NAME : GEOMATICS PROJECT III

LECTURER : DOÇ.DR. FİLİZ BEKTAŞ BALÇIK

Sentinel 2 Data Download and upload to Snap Software



First, the image with Sentinel 2 data given for our group was requested and downloaded from the "<https://sentinel.esa.int/web/sentinel/home>" site. This data was then opened on the ESA SNAP application.

Subsetting the Image

After this step, image subset operation was performed in line with the coordinates specified for the study. Thus, both the workload and the data crowd were reduced by disabling the data except for the area we will use. After this step, resampling was carried out to make the image we subset useful for us.



UL: 41.133 N, 28.982 E

BR: 41.088 N, 29.085 E

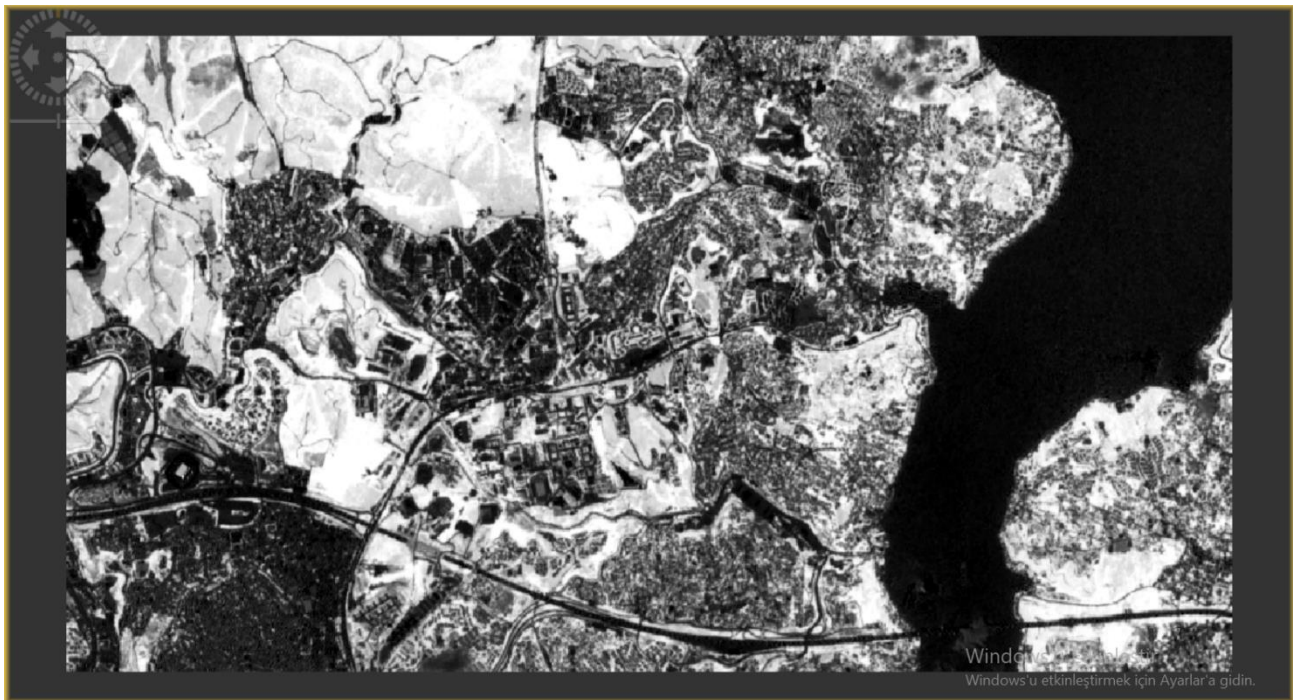


New Image Creating

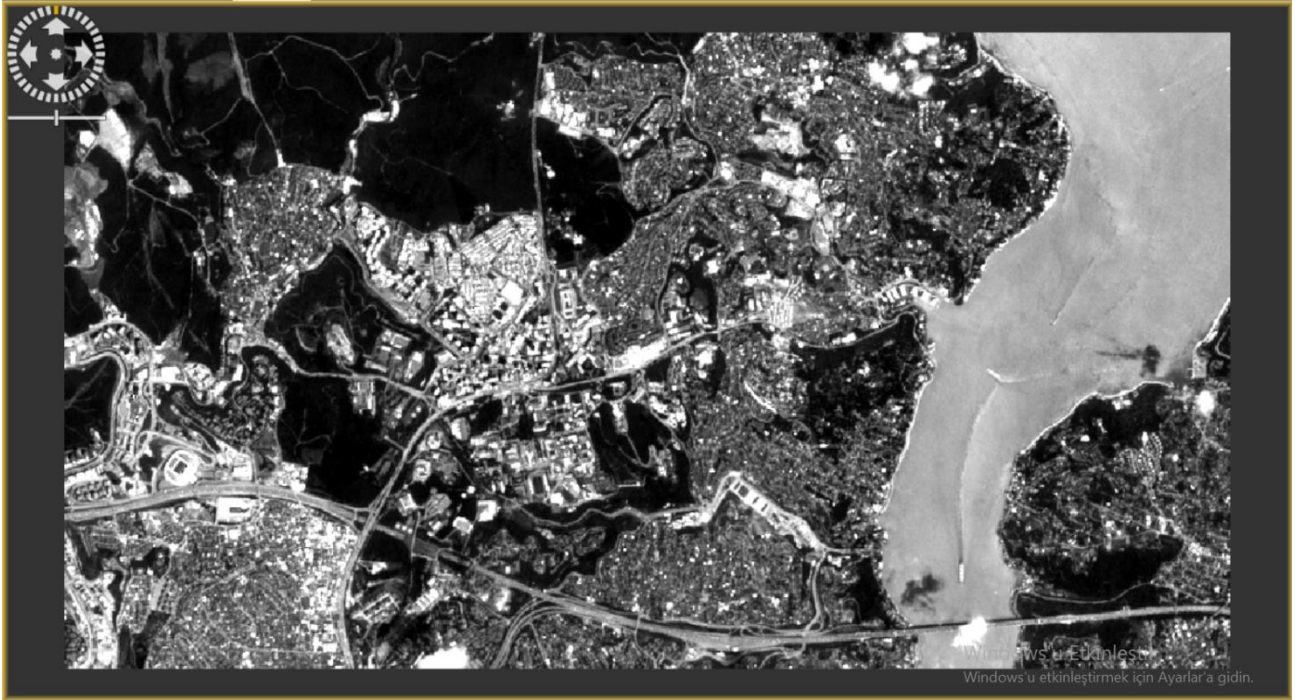
After resampling, the desired images were created according to the order of the students in the student group. These desired images are NDVI / B2 / SAVI. This generated image was output in GEOTIFF format and transferred to ARCGIS PRO for use in the next steps.

Group #	3D MODEL
	Image to be used in the Model
Student # 1	Color image RGB: NDVI/B2/SAVI

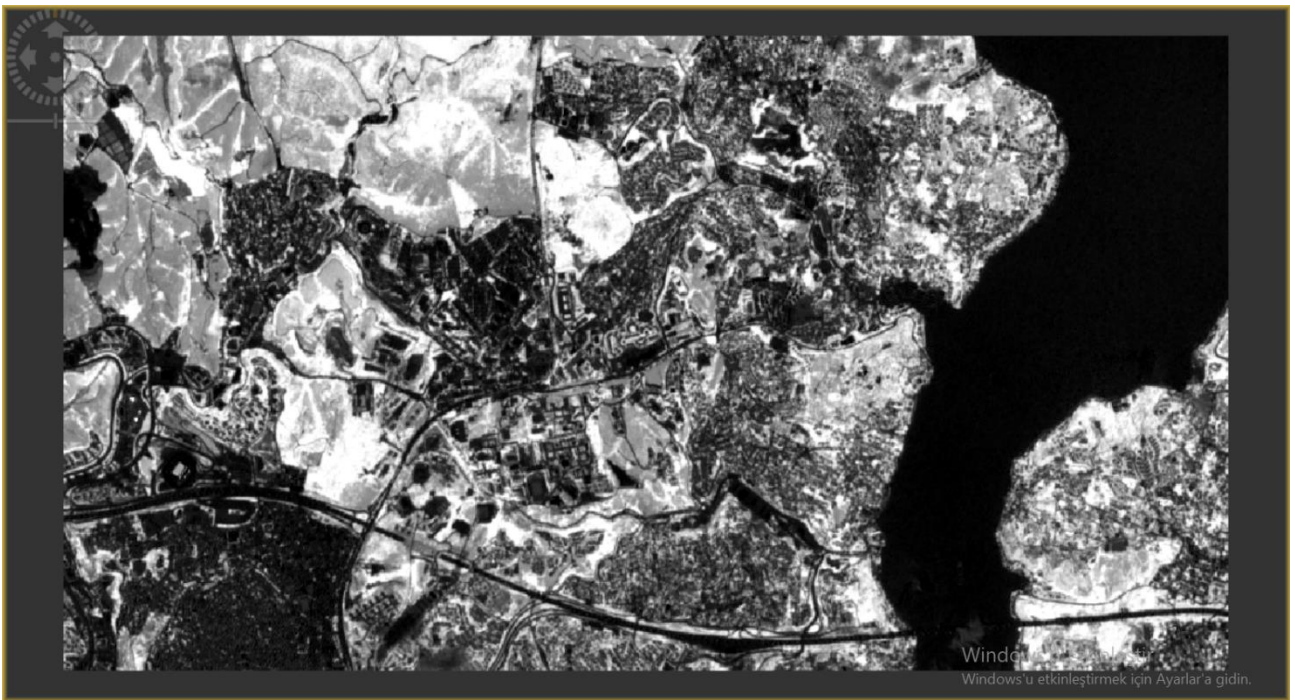
New Image Specifications



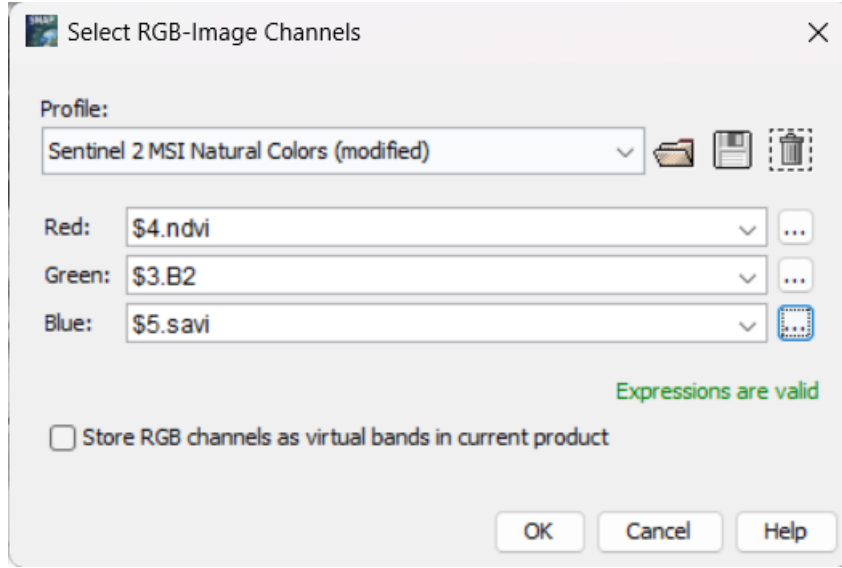
NDVI Image



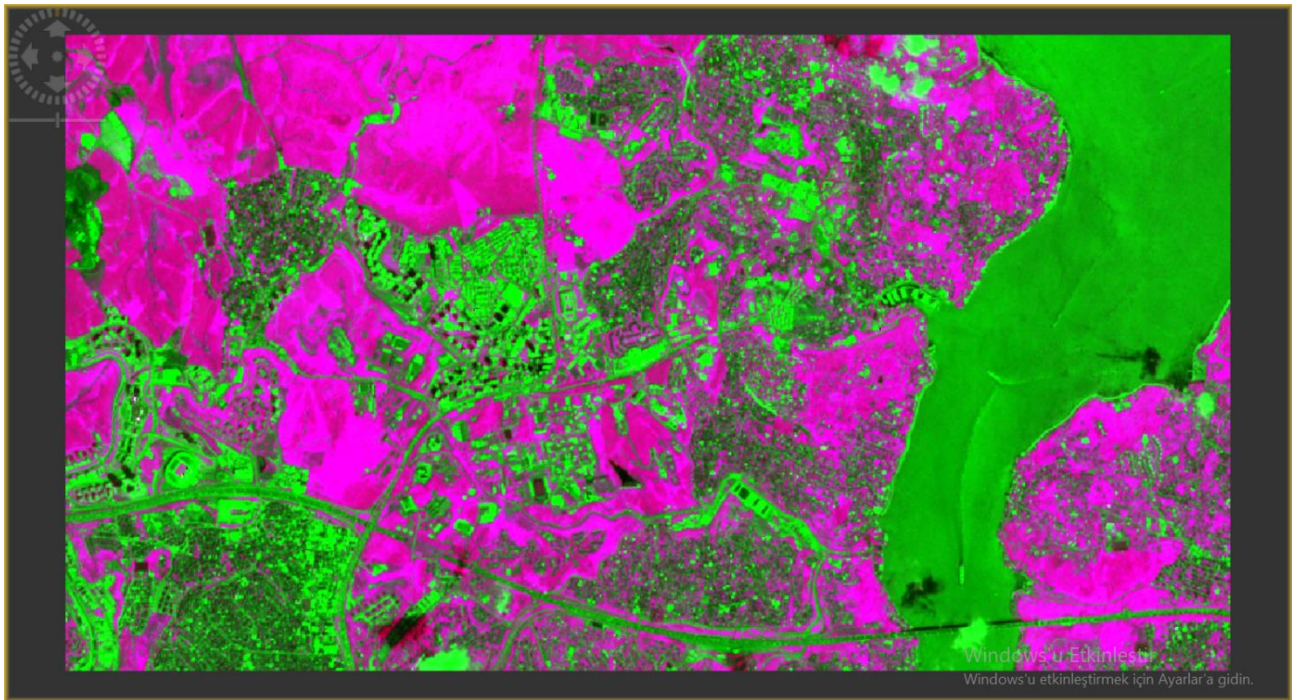
B2 Band Image



SAVI Image



New Image Creation



New Image

ArcGIS Pro and Flight Planning

The DEM data loaded in the image and class files that we output as GeoTIFF were transferred to ArcGIS Pro application. These two imported data were reprojected onto the same coordinate system (WGS 1984). DEM data clip is received in the new image sizes we created via ESA Snap. Then, the newly created image was created in 3D form using the height information in the DEM data. It is shown in the image below. Finally, the flight simulation was applied to the data we created and it was output as a video.

