**Images Downloading**

Requirements:

* Gbdx-config file
* Python version 3.6+
* Gbdxtools library
* Rasterio library
* Matplotlib library

Steps:

1. Create a configuration file for using gbdxtools library in root folder
2. Order image – OrderImage.py
3. Polygon coordinates(should be backwards for RDA.py) - <http://apps.headwallphotonics.com/>
4. Download - Rda.py
5. Tile tiff - Batch file
6. Save in [\\10.199.11.162\Images](file:///\\10.199.11.162\Images)

**Configuration for gbdxtools**

Order image

**Download image**

**Generate polygon coordinates of AOI**

**Save in media**

**Tile tiff**

1. Gbdx config file:

Save in root – C:\Users\**username\.gbdx-config**

**Content of the file:**

[gbdx]

auth\_url = https://geobigdata.io/auth/v1/oauth/token/

client\_id = B9tFshItGFxqRGL3a;zZd4GZsQ7FTX!lZbk9FE6C

client\_secret = \_DNm\_zKbK!3Qx\_ugKmWeOh;g8ZGBZLy2v!N?hG8nJzNPa1O\_ec7Gua?k3cqr2sjWTPRg27Qe7q5PK5y889ID.qLrNbB8N96g.Y4Qj@yWG6411o16-WmIZzvWXkC7F.rN

user\_name = lahavy@video-inform.com

user\_password = 5642296Yeffet7

[gbdx\_token]

json = {"access\_token": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCIsImtpZCI6Ik1Ea3hPREE1UTBFeFJUTXpOek01UlVSRE5qWTRRelpHT1ROR1FUWTBNMFJHTnpjMFEwTTFSZyJ9..atpf1hz9sfR5a4yS5oxQZYPN2Y4chnrZ10LX8Z86nlVe\_Dr1SE14wN3\_uuECj1mMTUni7NMmE6ckcthLRLnGqmMaT9ah56B9UpYMfuMhMi5zUtqy\_BH5a-gCloz4We-X5msrDuWEw6c43S-rTgtTHVISc0KG4pfhdja0ZhsNLTTM-iiZmVV03ONtFrPE95Dpv8wPbzboGElXzAbO9kvV1Xi5gwfwGMyLy44tYL4RzXqdRTwq29F7bh5sWSL6wM\_wz3g0IBsvW\_jpqoBMziqQOhDPz8LP6IiWO0grhBe9FeHW8TJsDv5tdXj6Fve9zdTkvqd9v5V6dexEl1K8cq1MlQ", "expires\_in": 604800, "token\_type": "Bearer", "scope": ["openid", "email", "offline\_access"], "expires\_at": 1596120590.6098807, "refresh\_token": "EUosjCxT0iamdz2QIb3CU0UBXJhMxDyb\_zaz1Q\_gSJZpB"}

2.Order Image:

**You must order image before you try to download it.**

Run “Order Image.py”

**Content of the file:**

from gbdxtools import Interface

gbdx = Interface()

order\_id = gbdx.ordering.order("10400100143FC900")

print(order\_id)

3.Generating polygon coordinates:

Go to <http://apps.headwallphotonics.com/> then generate a polygon of the area to be downloaded.

Then copy coordinates to RDA.py

4.Downloading process:

Requirements:

* Catalog id/ids
* Polygon coordinates – 4 points, 5th is the same as the first(Closing the polygon)

Run “RDA.py”

**Content of file:**

from gbdxtools.catalog import Catalog

from gbdxtools.images.catalog\_image import CatalogImage

**#Enter catalog id of image**

imageId = "104001001BA7C400"

**#Enter polygon coordinates of AOI**

crop = "POLYGON ((2.273792652835591 48.87926313360808,2.2741359755894974 48.859841811415095,2.3157119750976562 48.85534106071708,2.3096698806187943 48.87553753410312,2.273792652835591 48.87926313360808))"

print(Catalog().get\_strip\_metadata(imageId))

c = CatalogImage(imageId, product="ortho", pansharpen=True, acomp=True)

aoi = c.aoi(wkt=crop)

image = aoi.geotiff(path="tiling.tif")

aoi.plot()