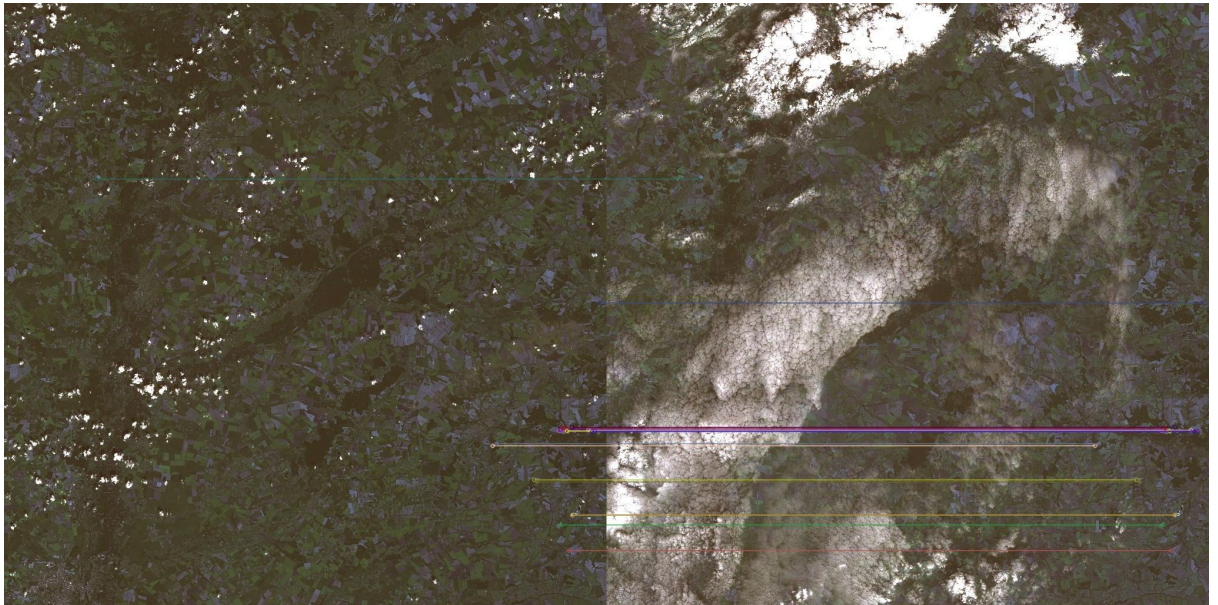


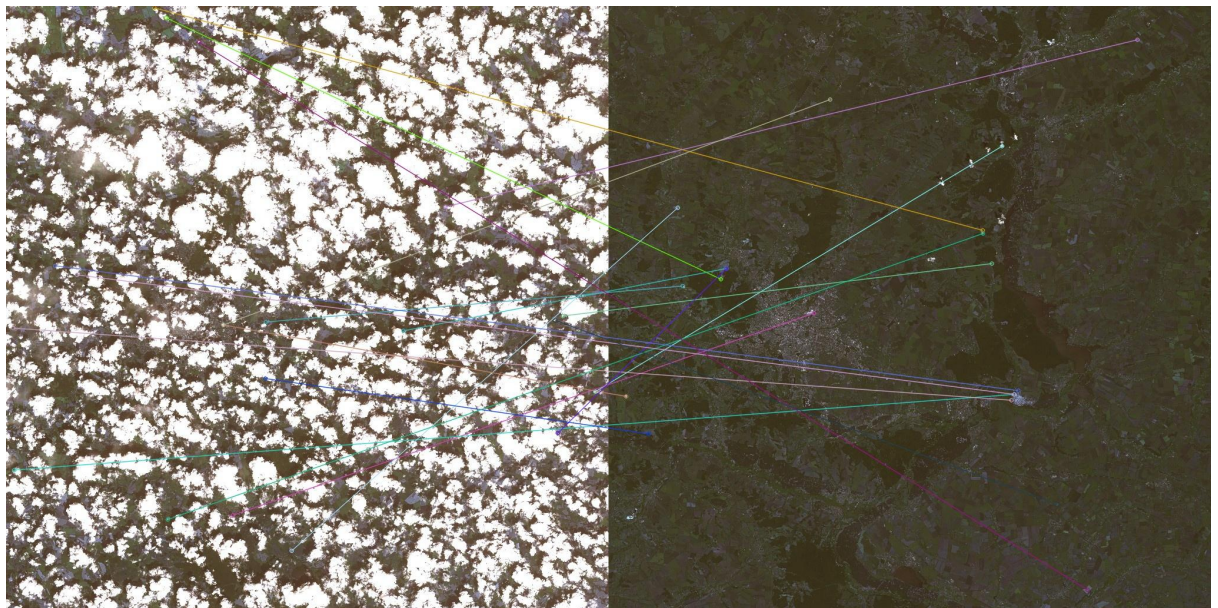
Improvements

- At the moment inference works only with basic datasets, which are stored locally. This dataset is 35GB, which is quite a lot, so one of the improvements can be to process 1 image after it downloads and then instantly delete it. This approach assumes that the only info needed from the original dataset is image in RGB format.
- The result image is 2048x1024, when the original is 10980x10980. So we can:
 - find keypoints on smaller image
 - find matching images
 - combine and make a result with scaled keypoints on the original image, so the result image will be 21960x10980
- For this, I will include some examples:



At this result, we can see that the right part is much more cloudy than the left, but this algorithm still provides good accuracy.

However, we also can see this:



It is quite obvious that this result is a mistake of the algorithm. So another point of improvement can be using deep neural networks or maybe even classic ML algorithms to classify, if the image is good enough to process it. So in the first example our classifier should output “1”, and in the second - “0”.