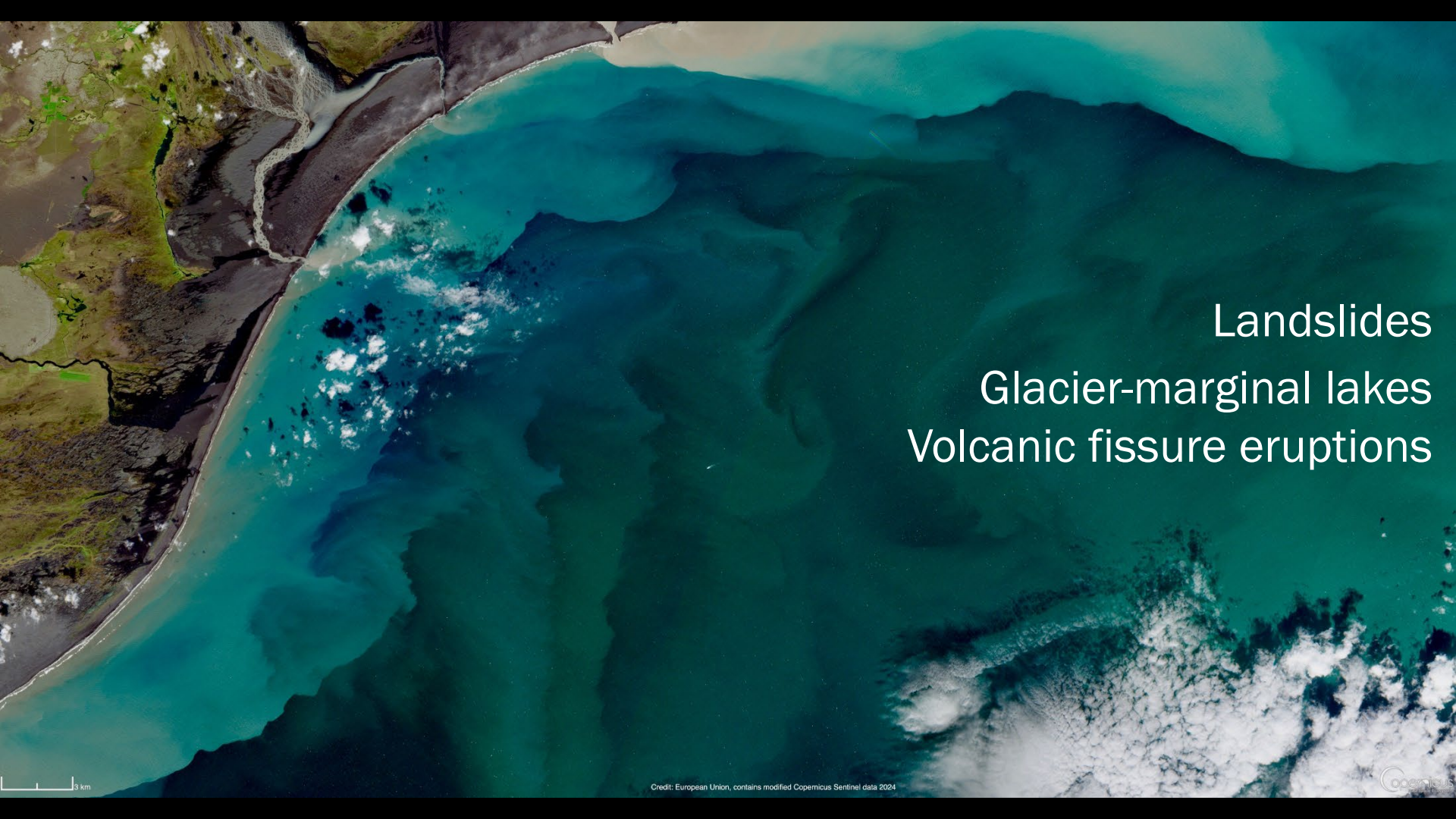


Visual spectrum and natural hazards

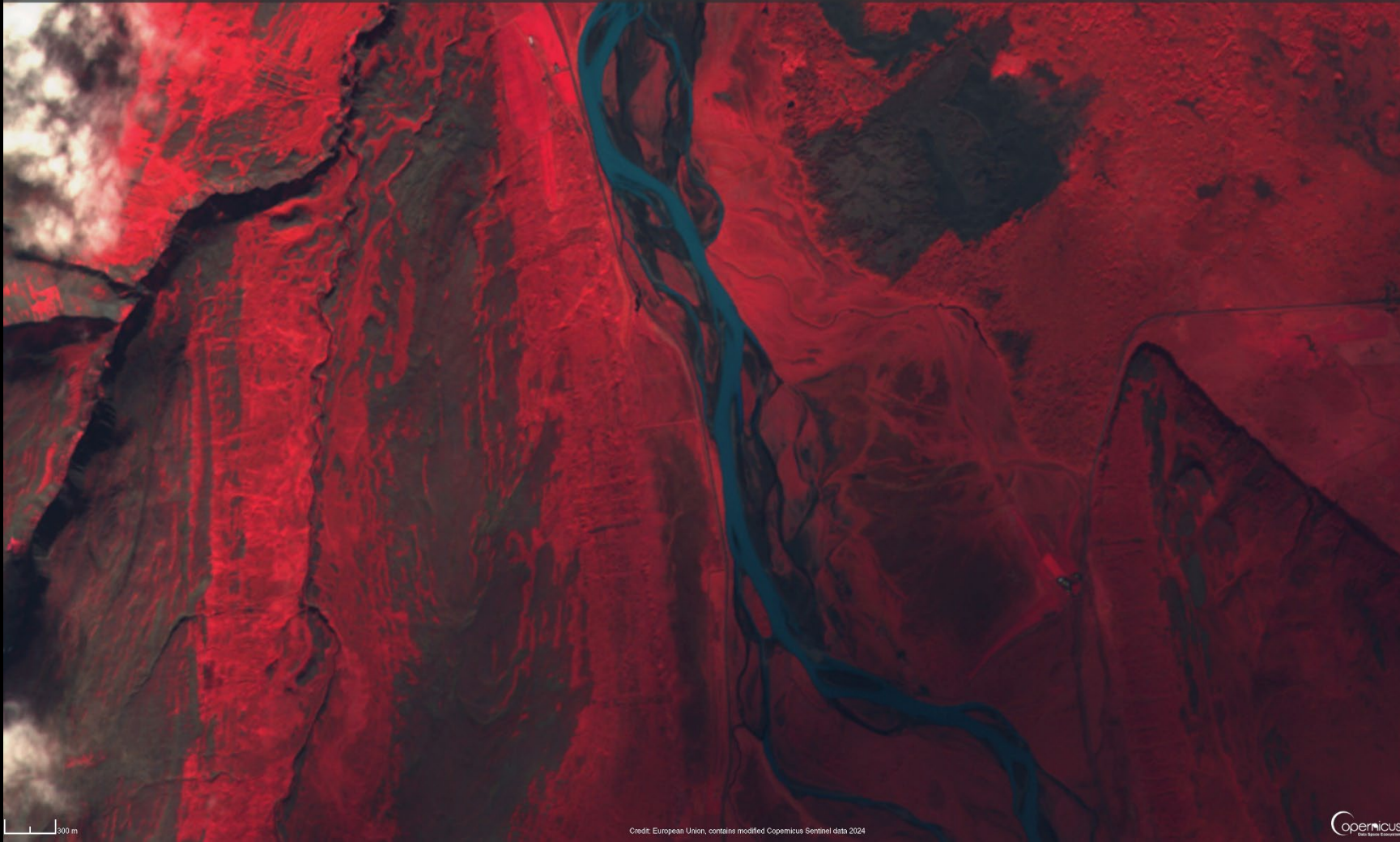
The Copernicus Land Workshop Iceland 2024

Ragnar Heiðar Prastarson | GIS Coordinator | Icelandic Met Office

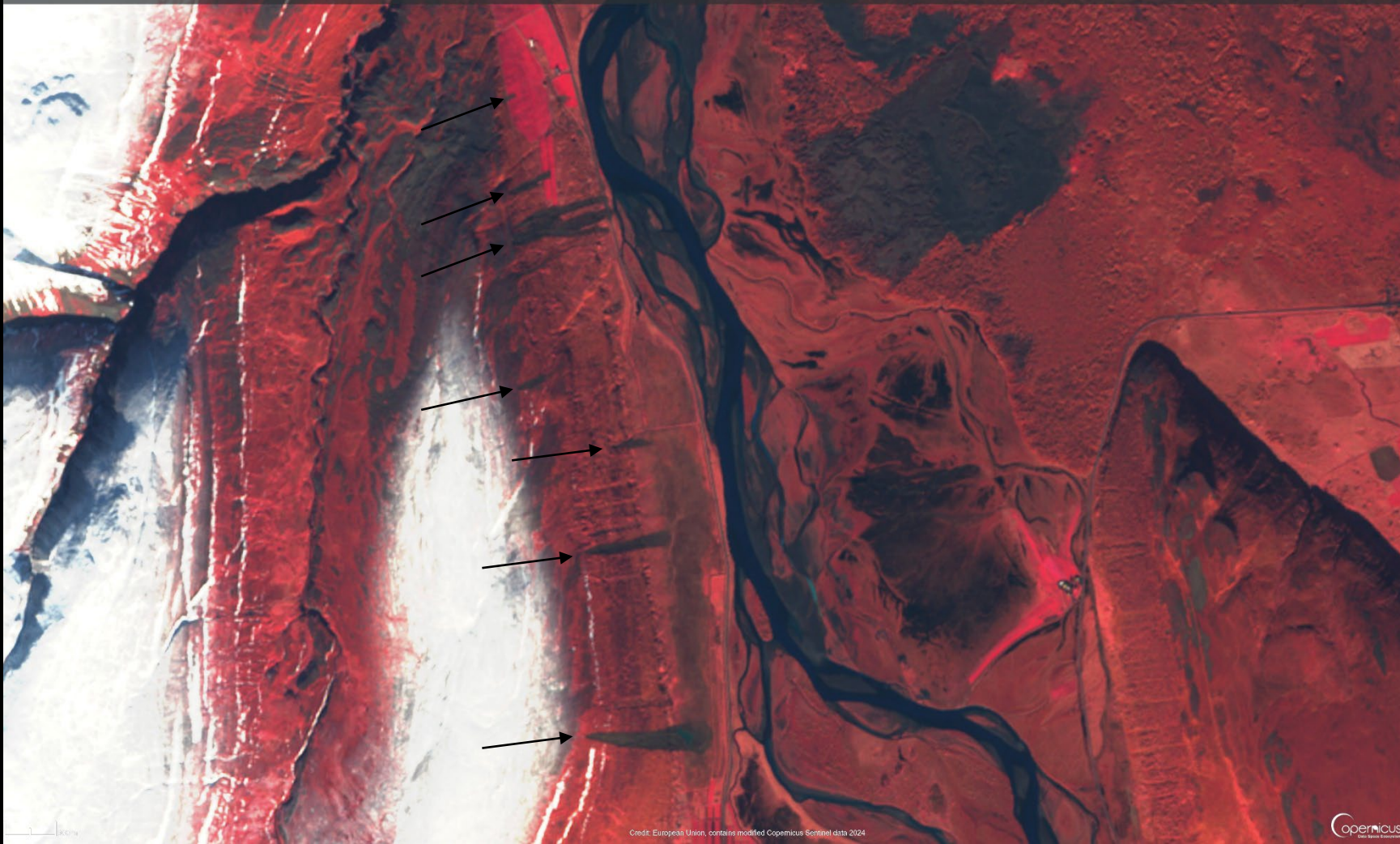


Landslides
Glacier-marginal lakes
Volcanic fissure eruptions





300 m



0 2 km



Staðarfjall

Makki

Seljadalur

Seljadalssá

Skóla

Syðri-Leikskálá

Geirbjarnarstaðir

Háls 2

Torfunes

Ófeigsstaðir

Rangá

Engihlið

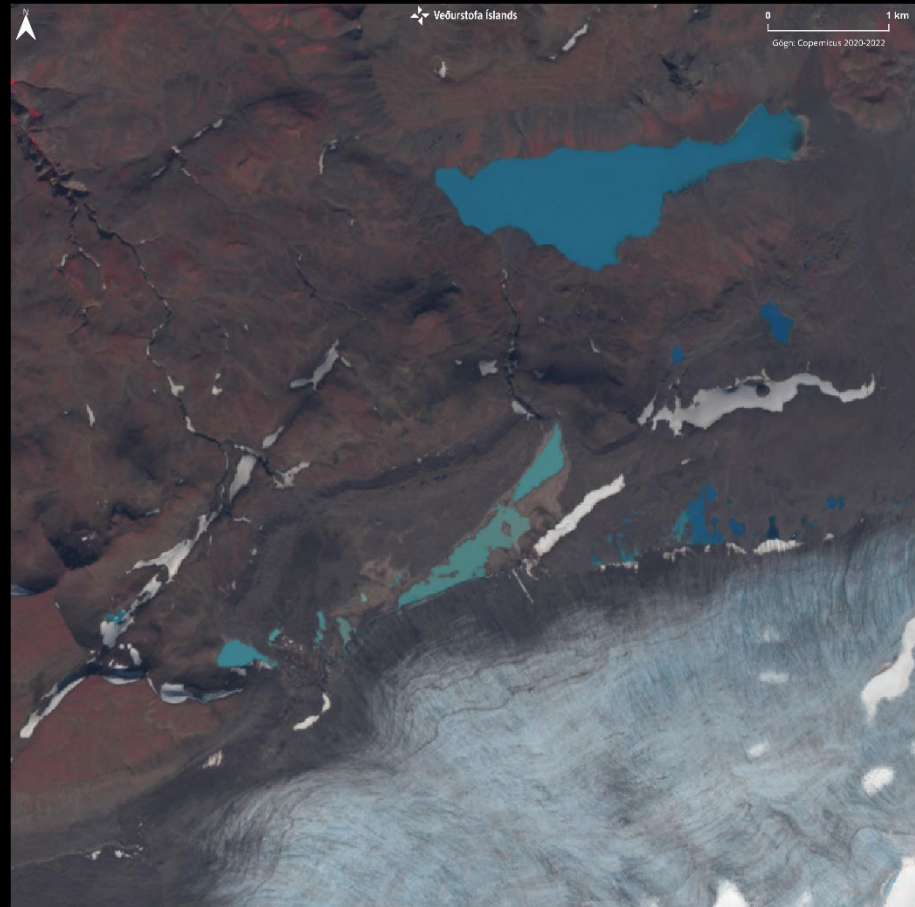
Þóroddsstaður



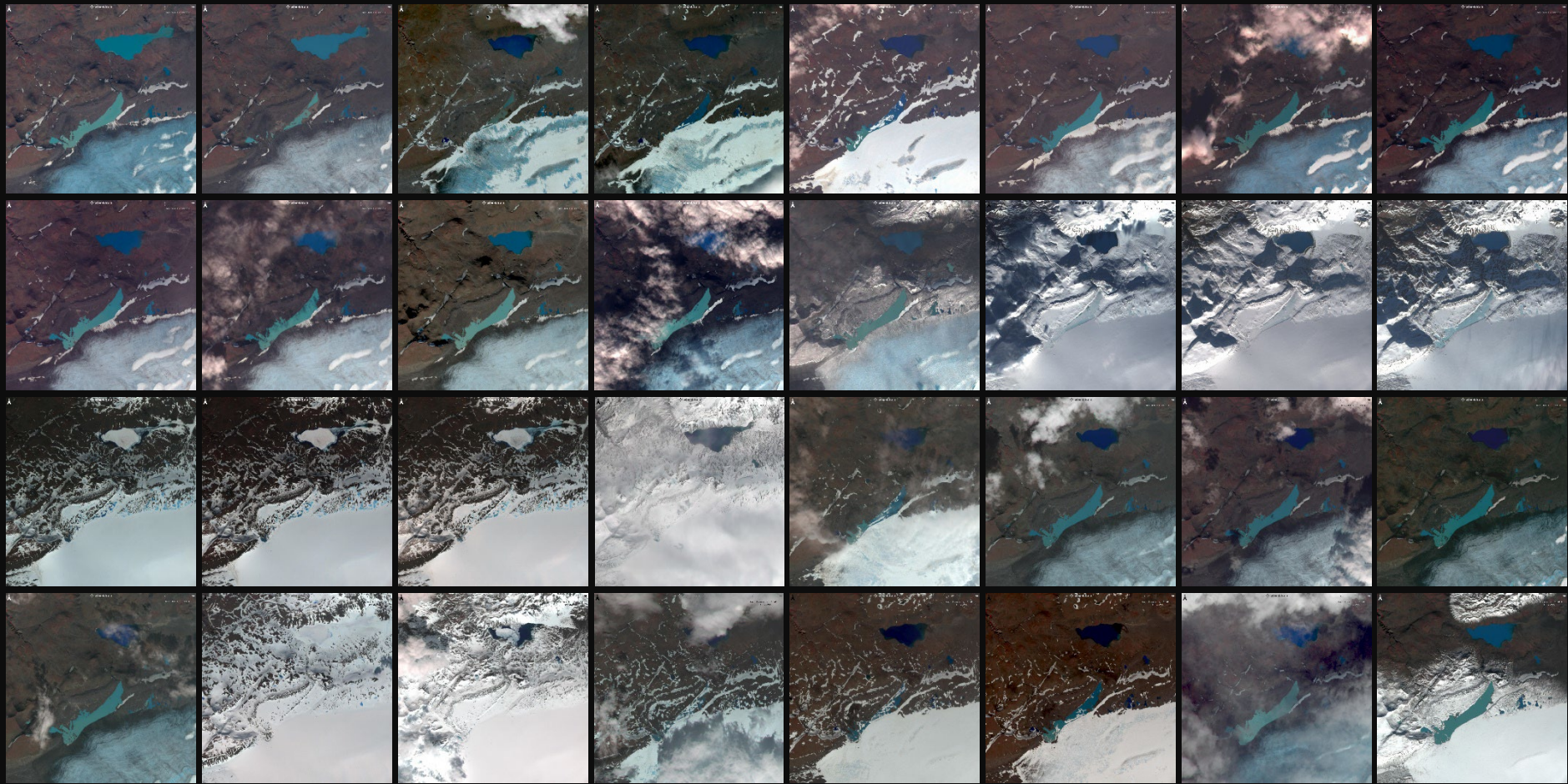




14-08-2020



20-08-2020



```

import os
import arcpy
from datetime import datetime

start_timestamp = datetime.now()
arcpy.env.compression = "LZ77"
arcpy.env.outputCoordinateSystem = arcpy.SpatialReference(3057)
# path to folder that includes .SAFE folders
workspace = r"E:\SCRATCH\snap\S2"

RasterList = []

# look for folders and image bands and append to list of acquisitions
for dirpath, dirnames, filenames in arcpy.da.Walk(workspace, datatype="RasterDataset"):
    for filename in filenames:
        if filename[-7:] == "B08.jp2":
            if dirpath[-8:] == "IMG_DATA":
                item = os.path.join(dirpath, filename)
                RasterList.append(item)

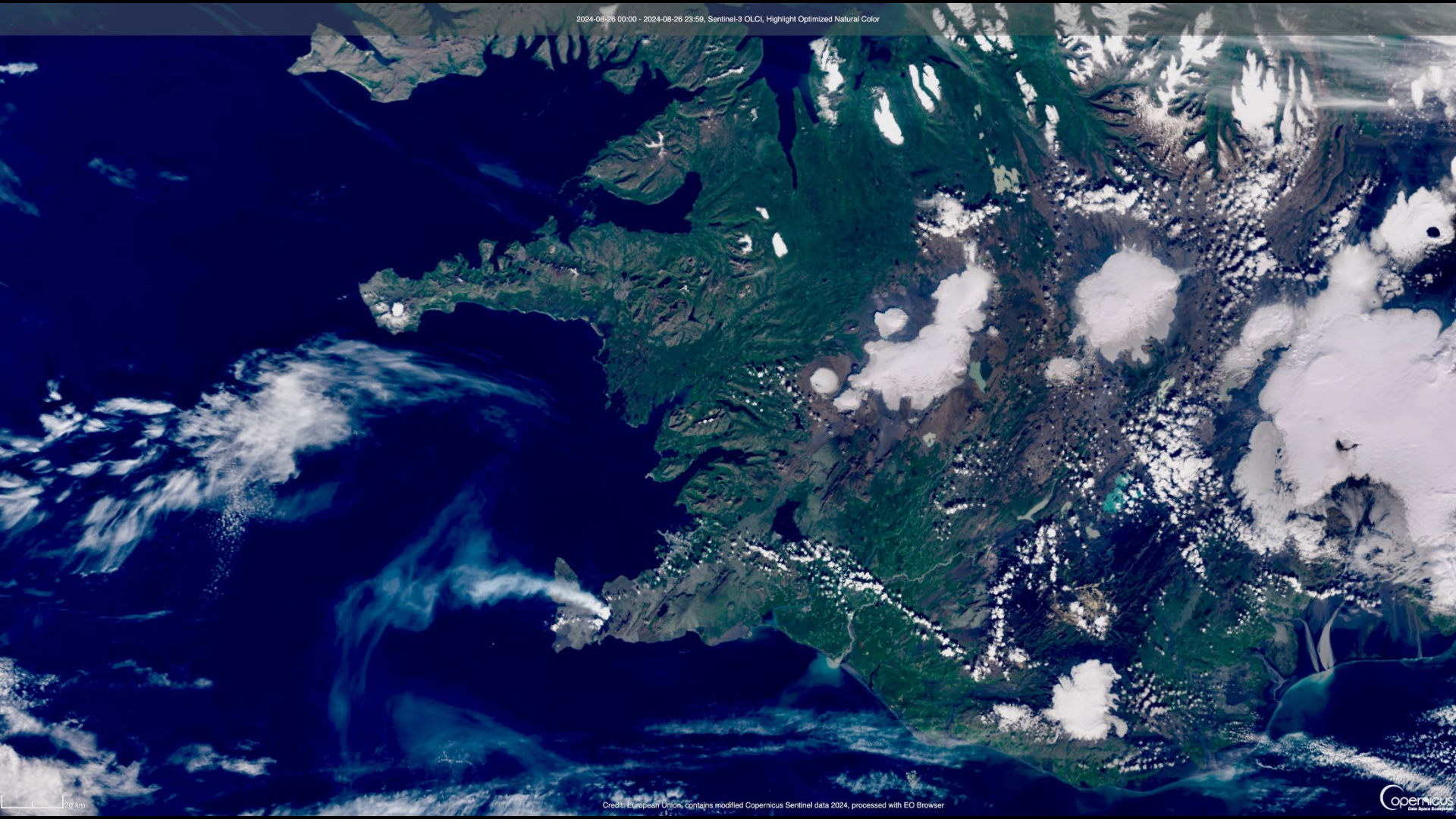
print "Images found: " + str(len(RasterList))

# for each item in the list
for raster in RasterList:
    band8 = raster
    band4 = raster[:-7] + "B04.jp2"
    band3 = raster[:-7] + "B03.jp2"
    BandCombination = band8 + ";" + band4 + ";" + band3
    OutputRasterName = raster[:-7] + "NIR_B843.tif"
    arcpy.CompositeBands_management(BandCombination, OutputRasterName)
    print "Done with " + OutputRasterName

print "done in: " + str(datetime.now() - start_timestamp)

```





Sundhnúksgígar
3.4 km² | 2½ days



Hagafell
0.7 km² | 2 days



Sundhnúksgígar II
4.0 km² | 1 day



Sundhnúksgígar III
6.2 km² | 53 days

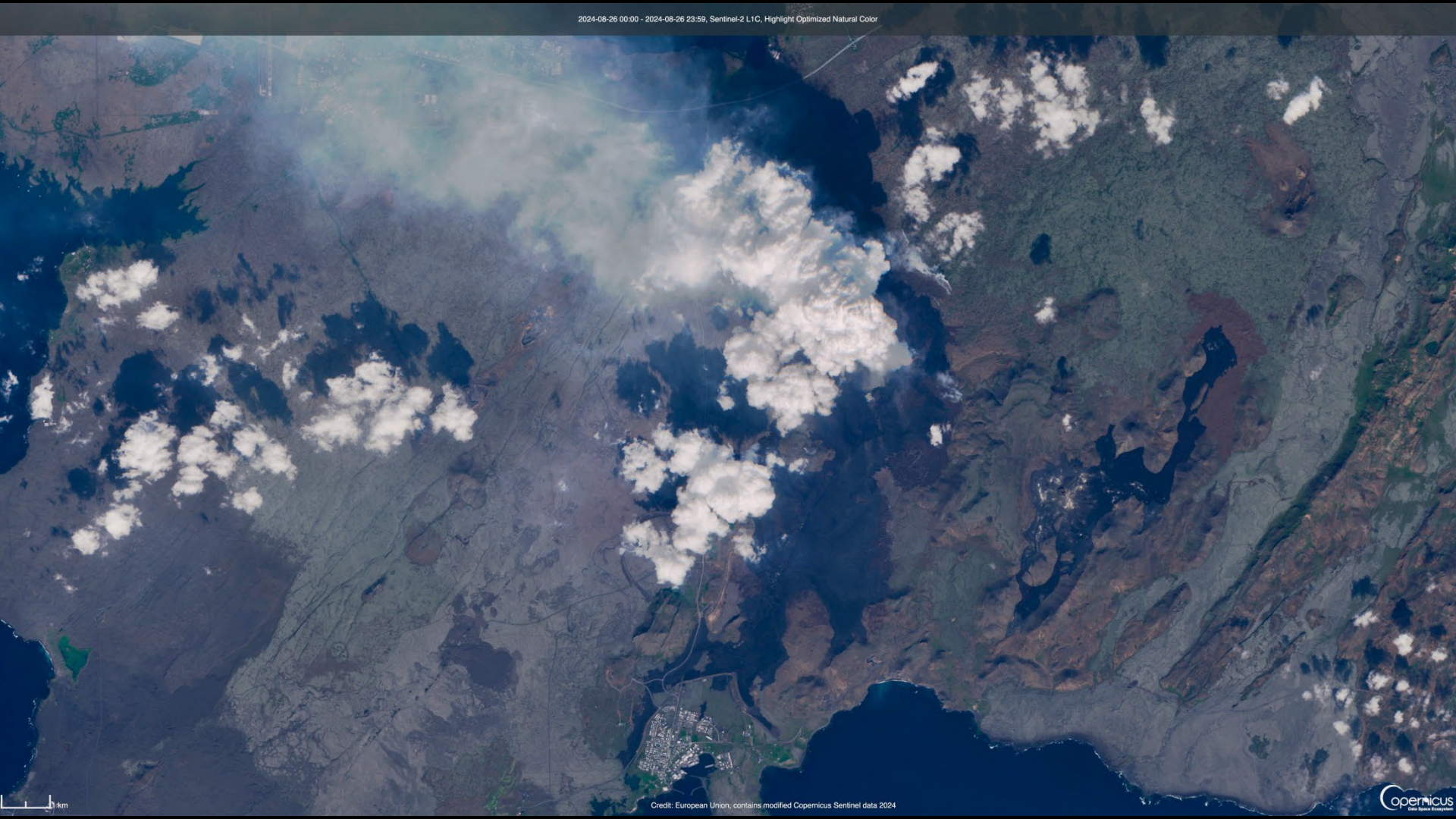


Sundhnúksgígar IV
8.7 km² | 24 days

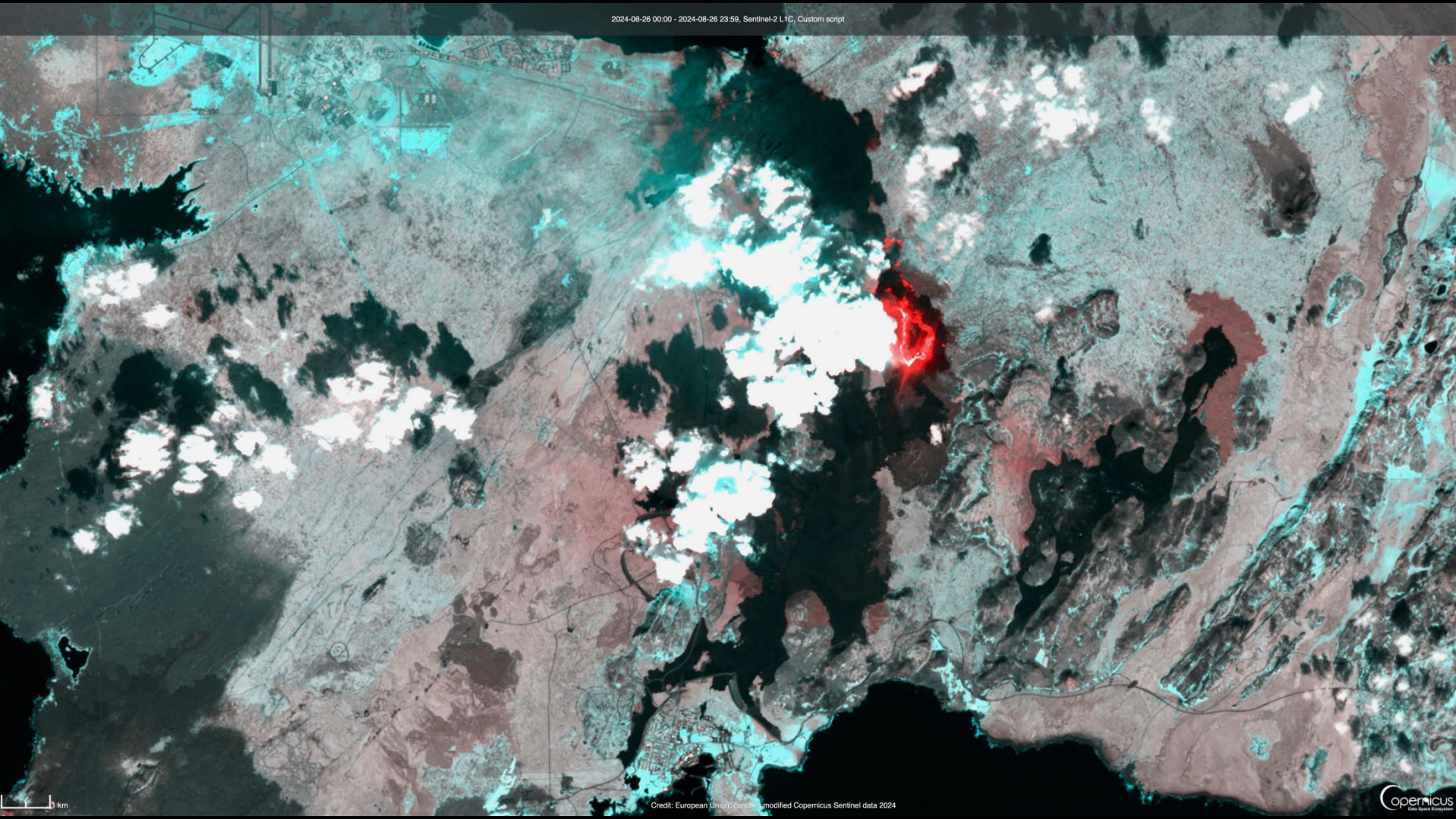


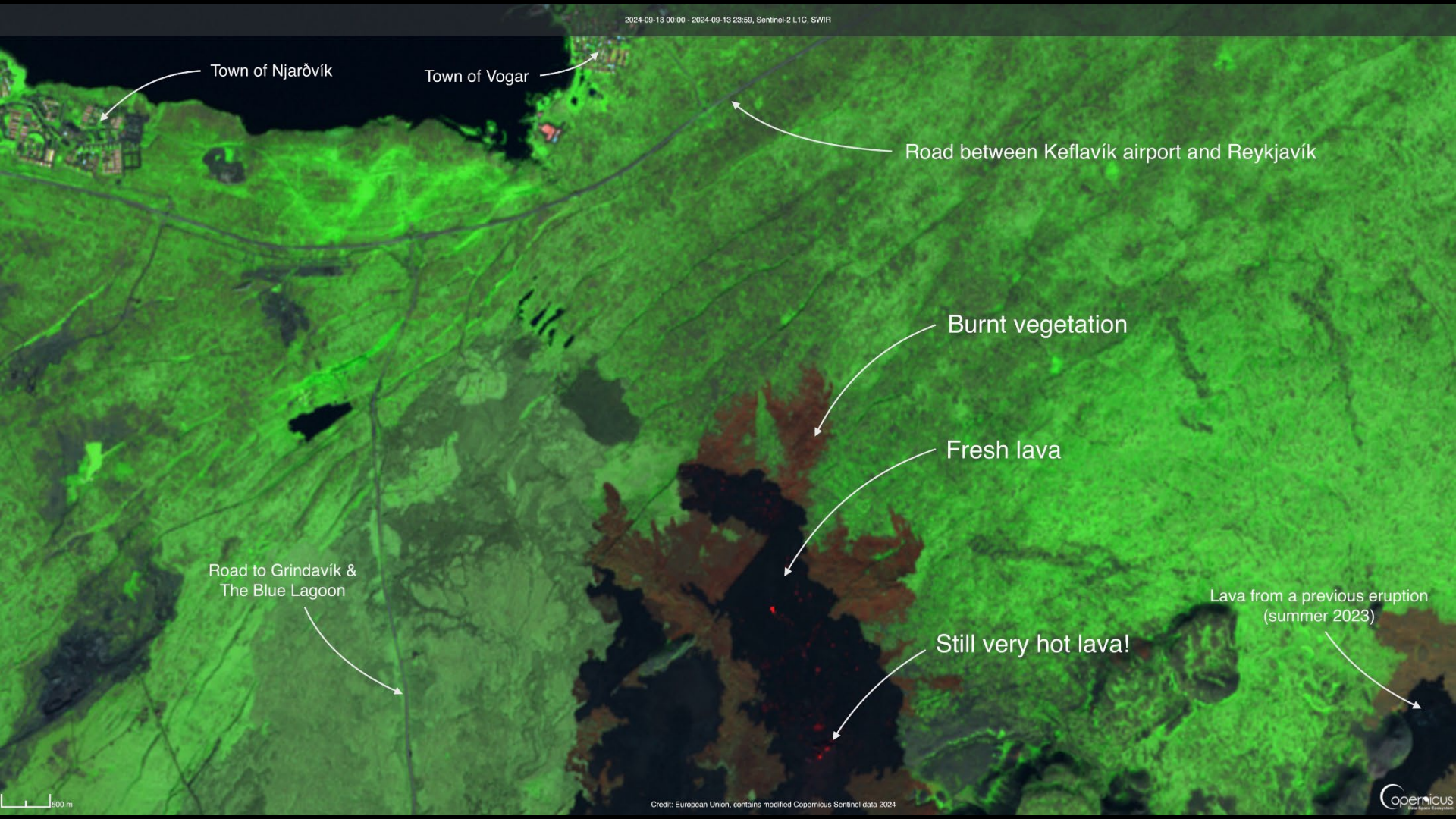
Sundhnúksgígar V
15.8 km² | 13 days





1 km





Town of Njarðvík

Town of Vogar

Road between Keflavík airport and Reykjavík

Burnt vegetation

Fresh lava

Road to Grindavík &
The Blue Lagoon

Still very hot lava!

Lava from a previous eruption
(summer 2023)

500 m

- Questions?
- More beautiful images from the internet:

