

LANDSAT COLLAGE

Landsat: Science in Art

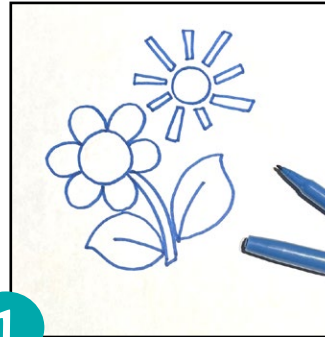
The Landsat series of satellites has been collecting visually stunning and scientifically valuable images of Earth since 1972. While Landsat data have played a critical role in the study of our land resources, images from these data have provided some of the most beautiful and unique views of our planet.

From folded red mountain ridges, yellow dunes dotted with brilliant pools of blue water, and swirling clouds of blue-green phytoplankton, these images reveal a hidden world of color, textures, patterns, and movement.

Materials:

- scissors
- paste or glue stick
- pencil and marker
- scrap paper
- frame (page 2)
- print-outs of Landsat images
- color printer

Instructions to make your own collage:



1

Draw a picture on a sheet of scrap paper and trace over with a dark marker.



2

Select the colors you like and trace the shapes from your drawing on the back.



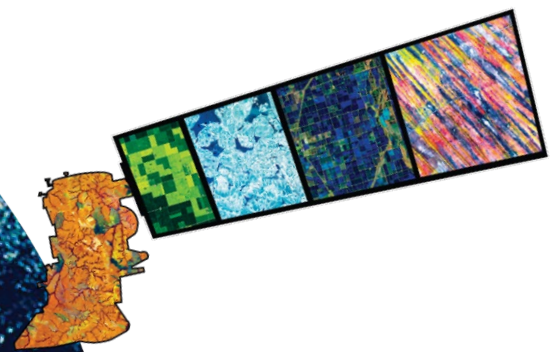
3

Cut out the shapes.



4

Paste your masterpiece in to the frame.

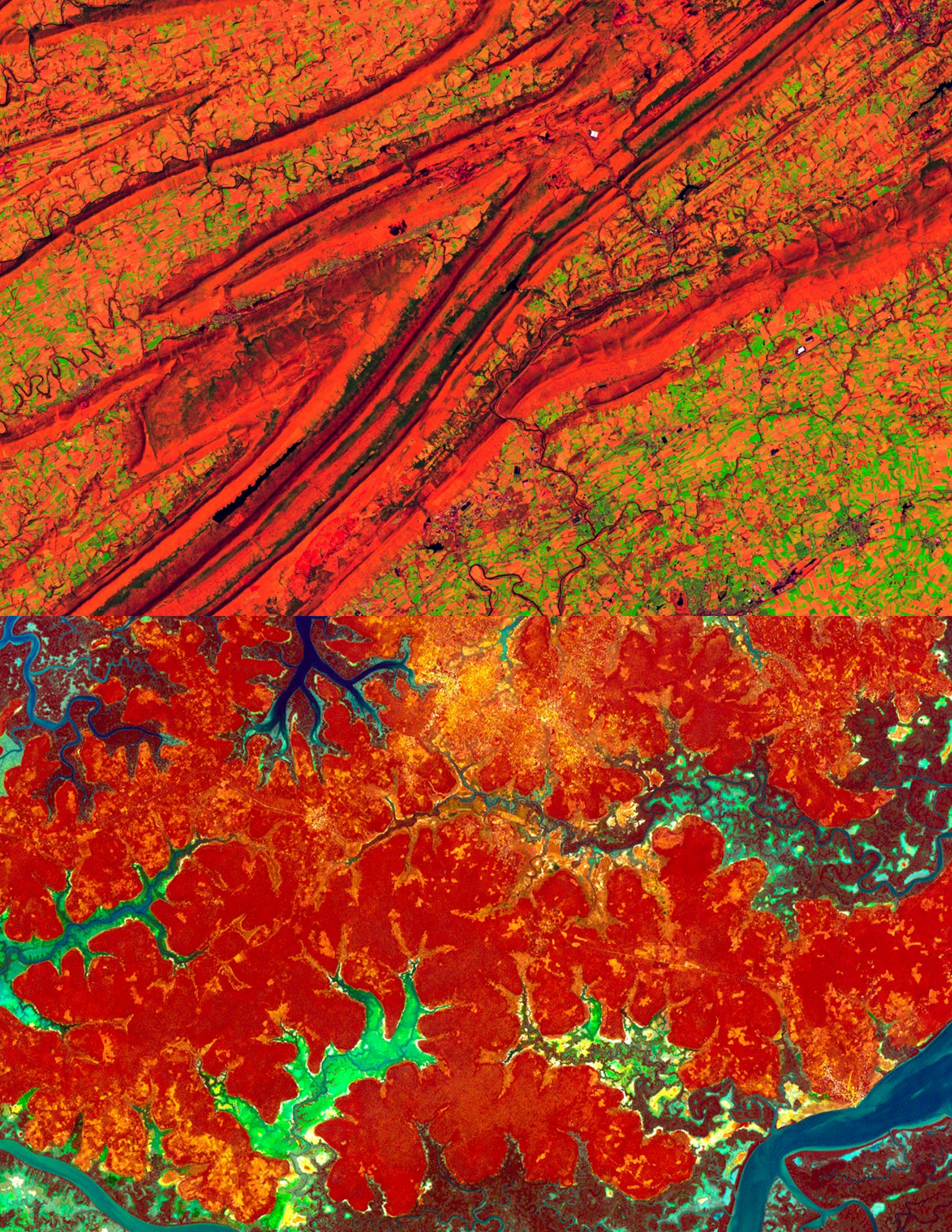






Shifting-Shapes.tif
Acquired September 23, 2017
Farmland in northeastern China
Landsat 8 OLI, Earth as Art Collection 5
False-color composite
Extensive farmland in northeastern China shows a predictable pattern of vertical shapes

Gaara_oli_2017239_lrg.tif
Acquired August 27, 2017
Ga'ara Depression, Iraq
Landsat 8 OLI
False-color composite (shortwave infrared, near infrared, green)
This formation is made up of alternating layers of sandstone and soft claystone that formed roughly 300 million years ago.



NA-River-and-Ridge.tif
Acquired April 24, 2014
Appalachian Mountain Ridge, Pennsylvania
Landsat 8 OLI, Earth as Art Collection 4
False-color composite
The Appalachian Mountain Ridge appears as orange folds,
lying next to the state capital, Harrisburg.

Guinea_bissau.tif
Acquired December 1, 2000
Guinea-Bissau, West Africa
Landsat 7 ETM+, Earth as Art Collection 1
False-color composite
Complex patterns can be seen in the shallow waters along
its coastline, where silt carried by the Geba and other rivers
washes out into the Atlantic Ocean.



SA-Capillaries.tif

Acquired January 28, 2014

Meta River, boundary between Colombia and Venezuela,
South America

Landsat 8 OLI, Earth as Art Collection 4

False-color composite

The Meta River resembles an artery among capillaries within the human body. Those capillary-like features actually depict dense tree cover along the numerous streams that flow among rich tropical grassland.

Namibia_oli_2020130_lrg.tif

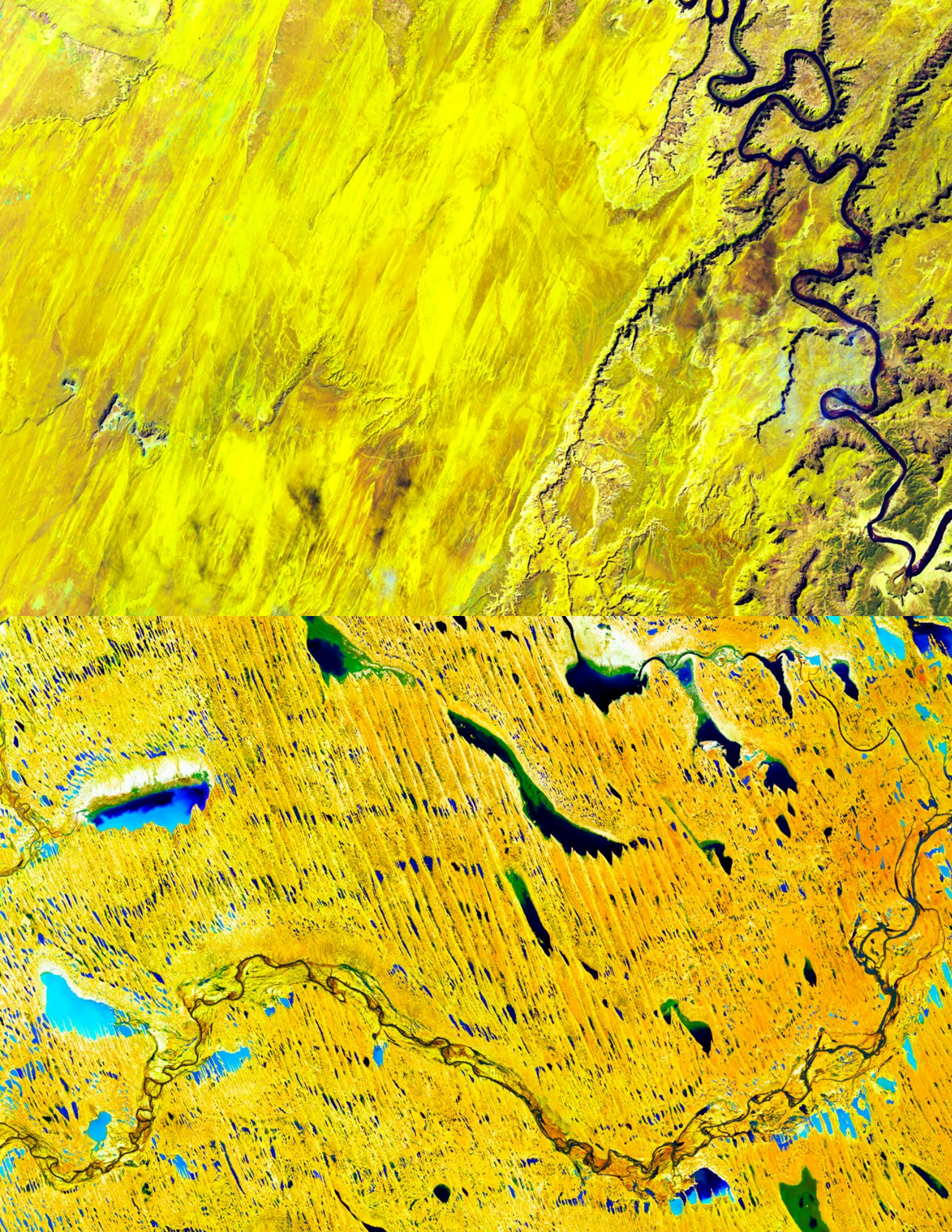
Mariental, Namibia

Acquired May 9, 2020

Landsat 8 OLI

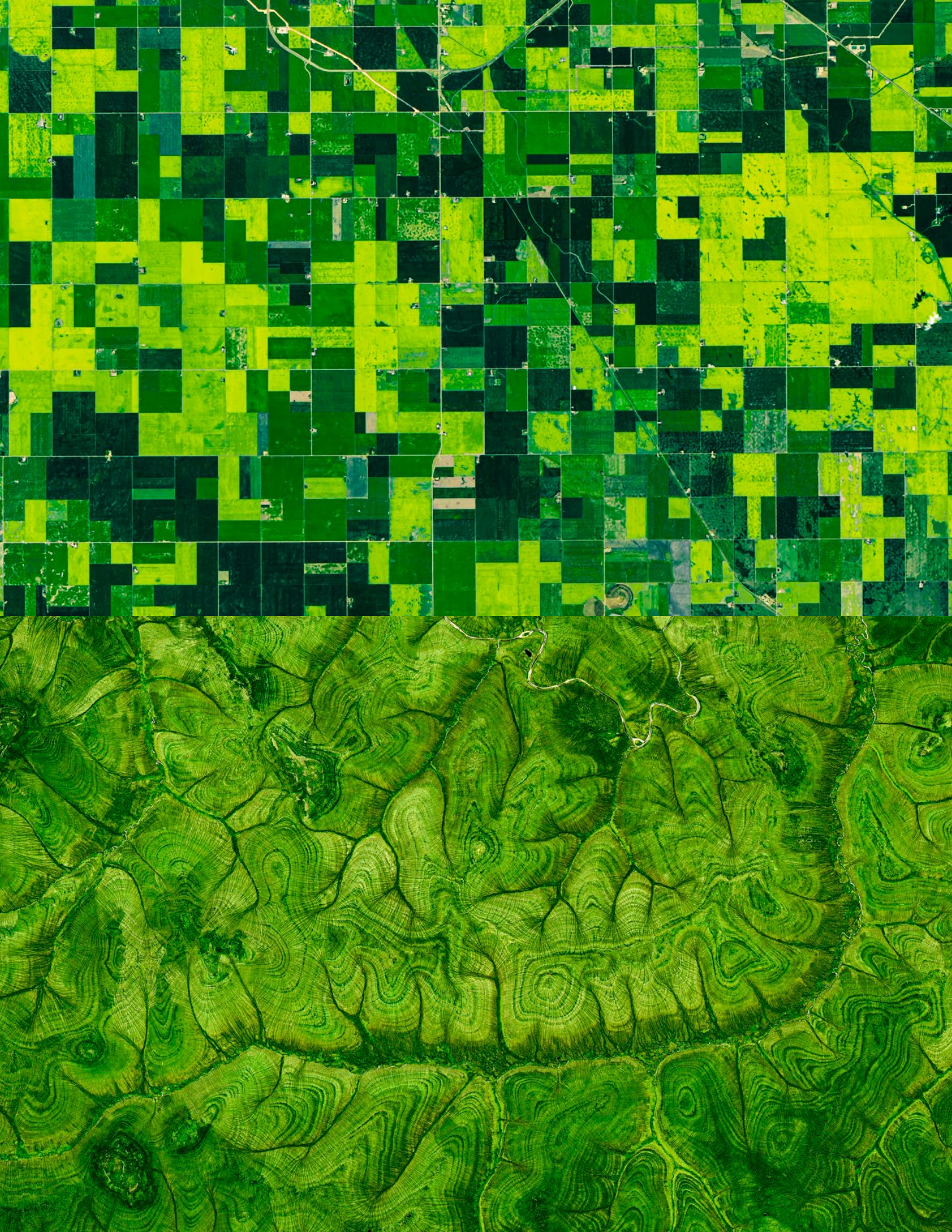
Natural-color composite

Namibia contains an array of extreme landscapes: mighty sand dunes, gravel plains, rolling hills, and diamond-rich coastal deserts.



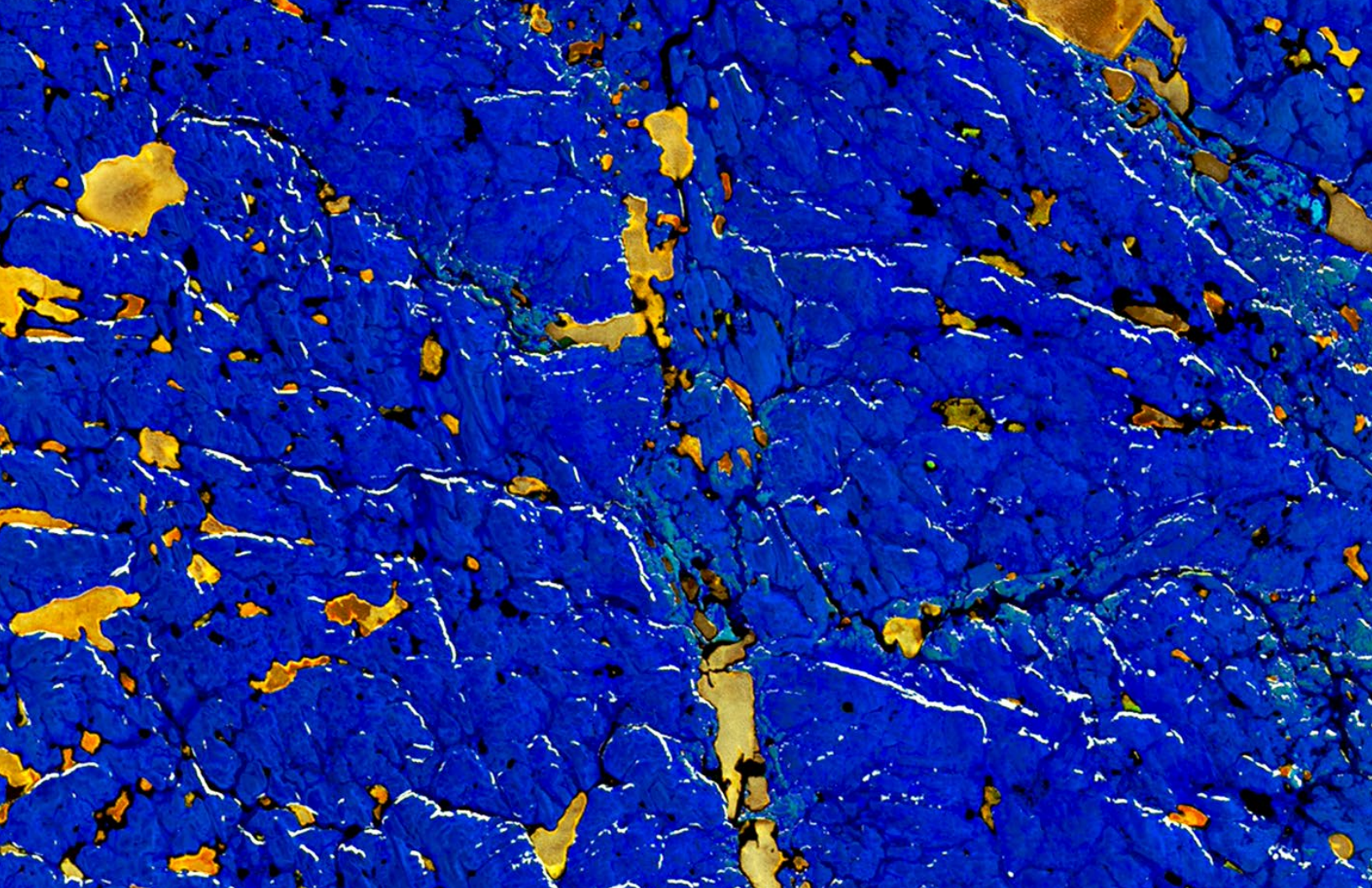
NA-Canyonlands.tif
Acquired March 29, 2015
Canyonlands National Park, Utah
Landsat 8 OLI, Earth as Art Collection 4
False-color composite
The Green River and the Colorado River meet within Canyonlands National Park while overlooking arches, canyons, and rock formations.

Parellel-Dunes.tif
Acquired January 5, 2016
Simpson Desert Regional Reserve, South Australia
Landsat 8 OLI, Earth as Art Collection 5
False-color composite
Shallow lakes, dry most of the time, are surrounded by sand dunes.



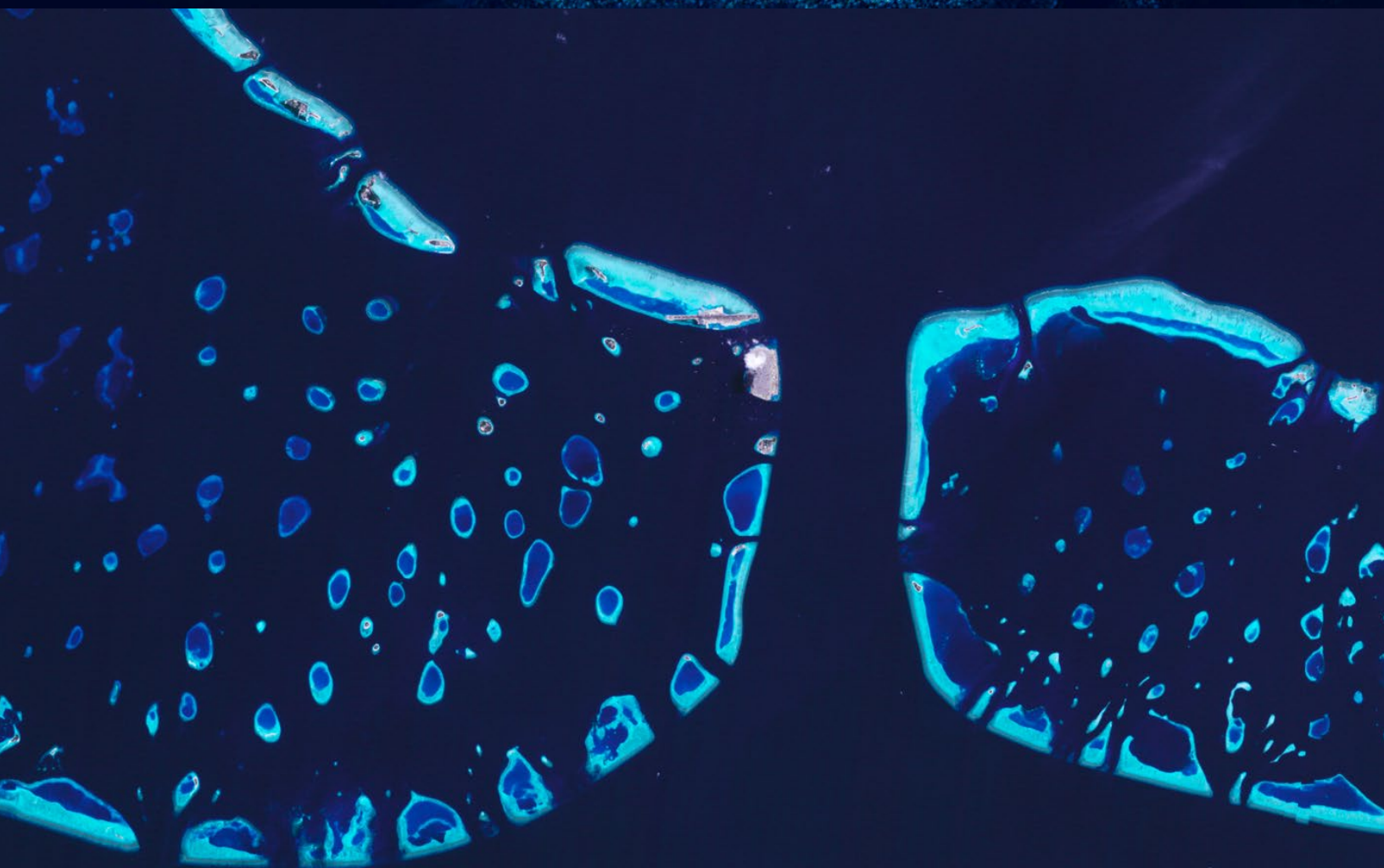
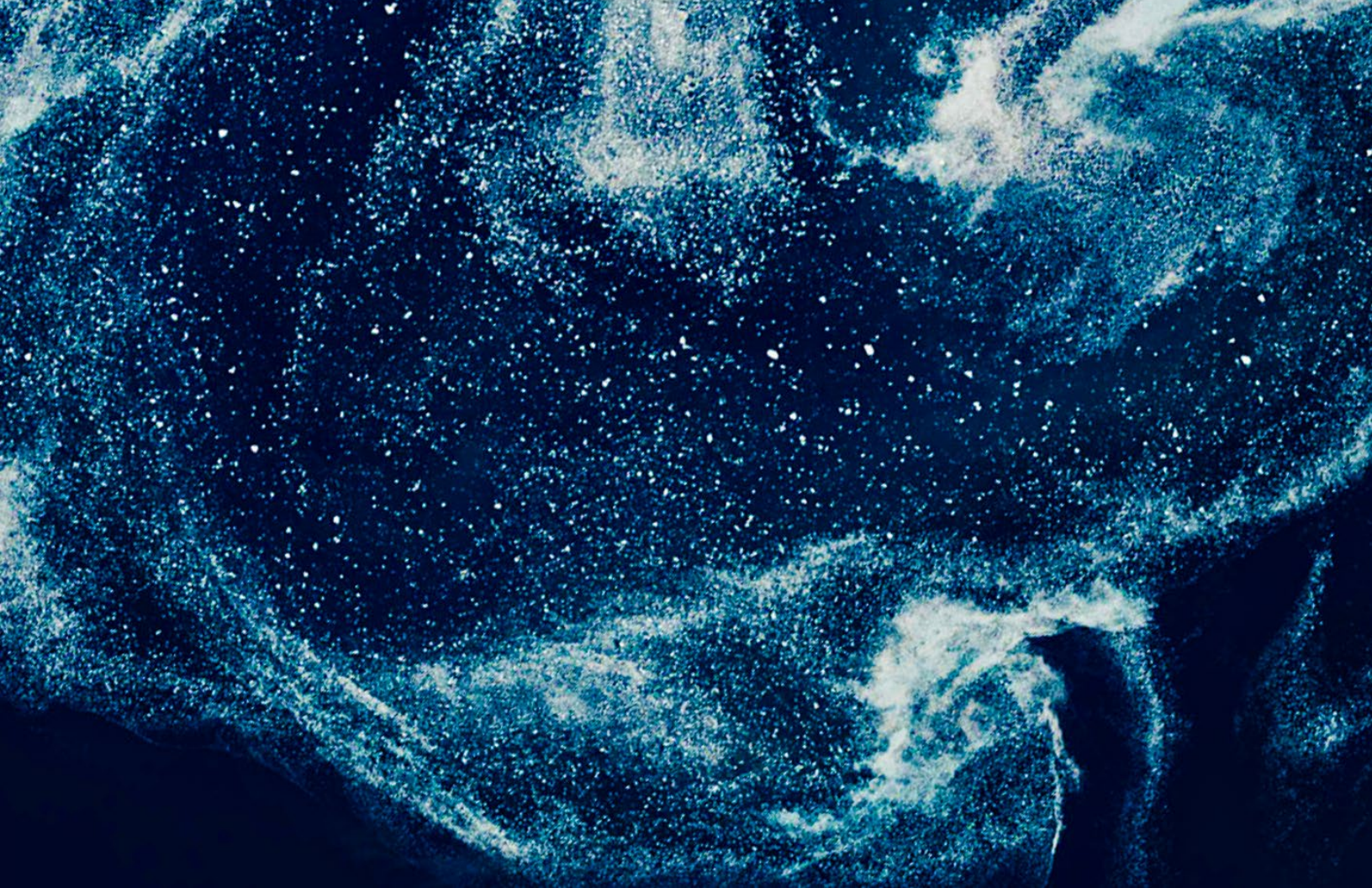
Canadacanola_oli_2019204_lrg.tif
Acquired July 23, 2019
Canola fields near Regina, Saskatchewan
Landsat 8 OLI
Natural-color composite
When they bloom, canola fields turn yellow.

Russia_oli_2019203_lrg.tif
Acquired July 22, 2019
Central Siberian Plateau, Russia
Landsat 8 OLI
Natural-color composite
In this image, stripe patterns twist and turn around the hills
of the northern Central Siberian Plateau.



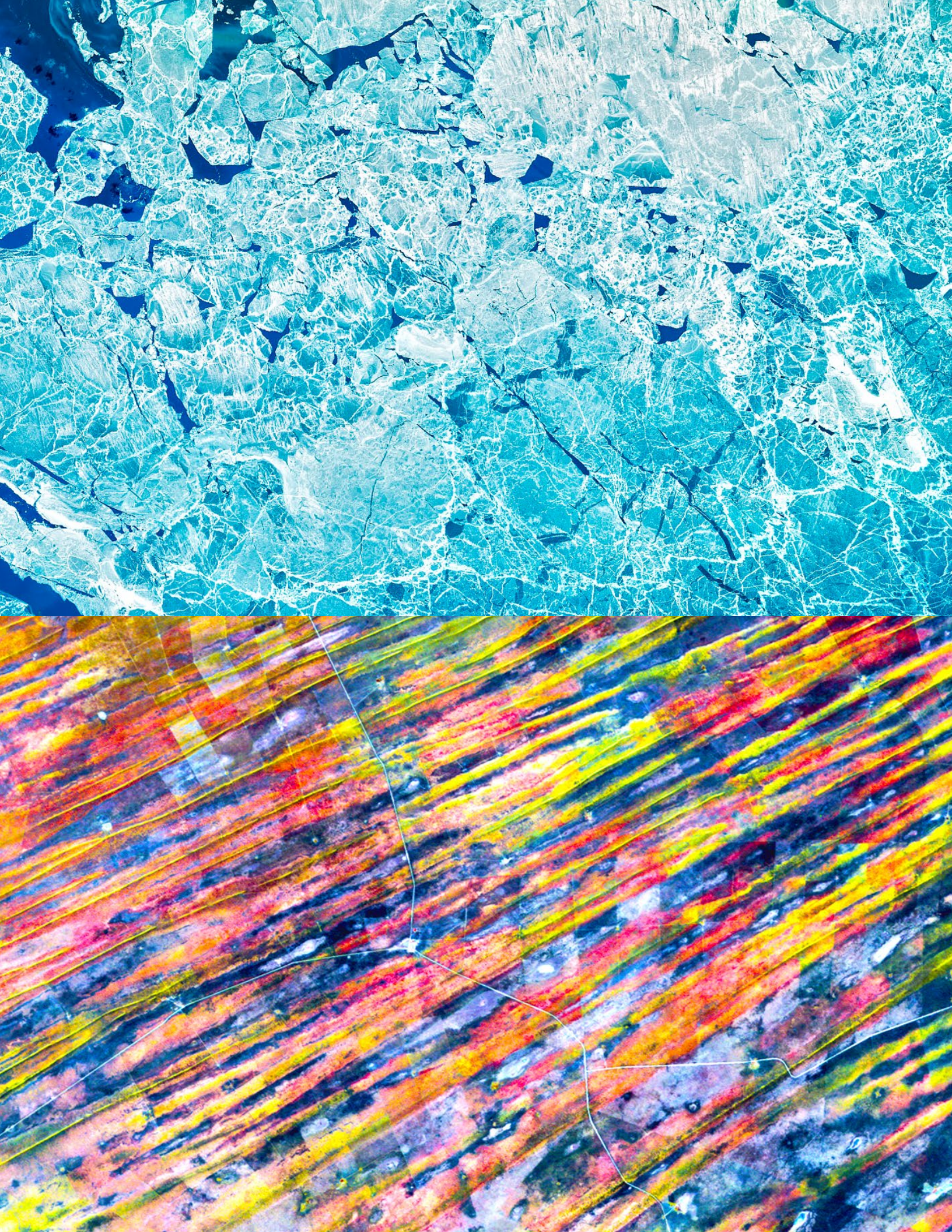
Chukchi_oli_2018169_lrg.tif
Acquired June 18, 2018
Chukchi Sea, Arctic Ocean
Landsat 8 OLI
Natural-color composite
Phytoplankton blooms form patterns of blue and green seawater.

Copper-and-blue.tif
Acquired June 1, 2014
Whitefish Lake, Canada
Landsat 8 OLI, Earth as Art Collection 6
False-color composite
The blue in this image is land covered with shrubs and the copper color is a result of the presence of lake ice.



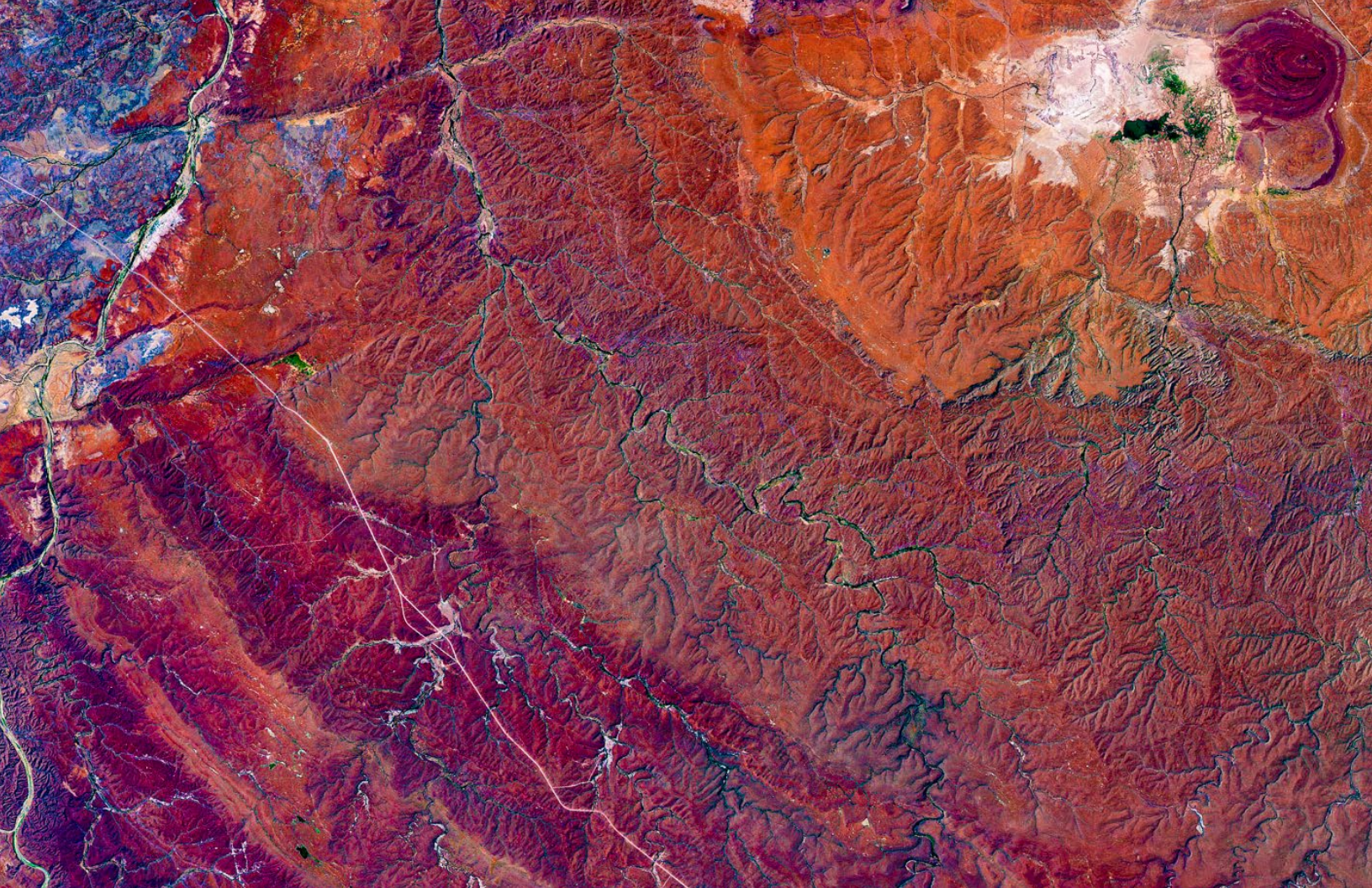
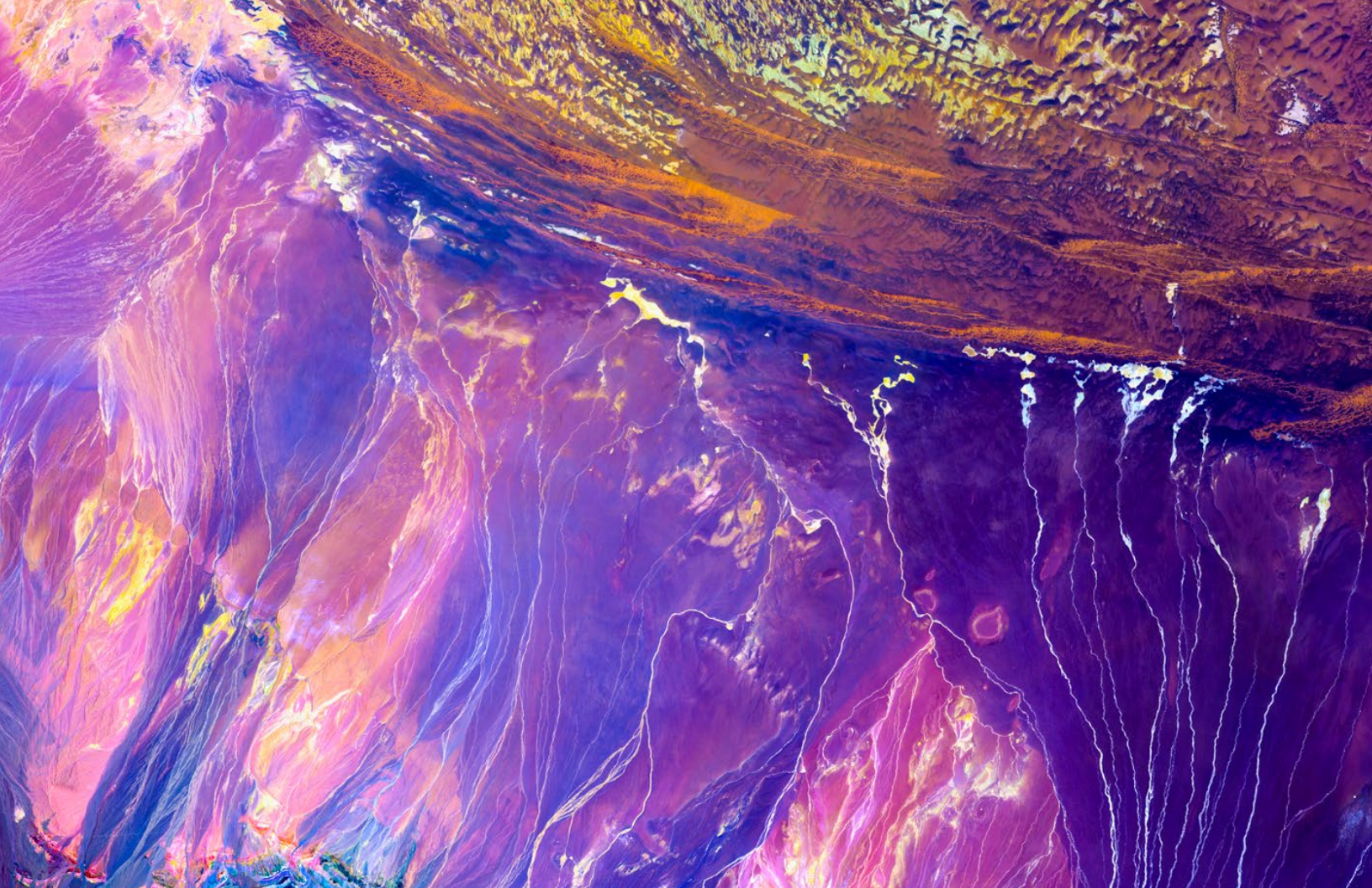
Greenlandseaice_oli_2020185_lrg.tif
Acquired July 3, 2020
Denmark Strait, Greenland
Landsat 8 OLI
Natural-color composite
Sea ice travel from the Arctic Ocean to Greenland, melting as
it gets carried by the East Greenland Current.

Maldives_tm5_199734_lrg.tif
Acquired February 3, 1997
Maldives, Indian Ocean
Landsat 5 TM
Natural-color composite
The Maldives has the lowest terrain of any country in the
world, making it vulnerable to sea level rise.



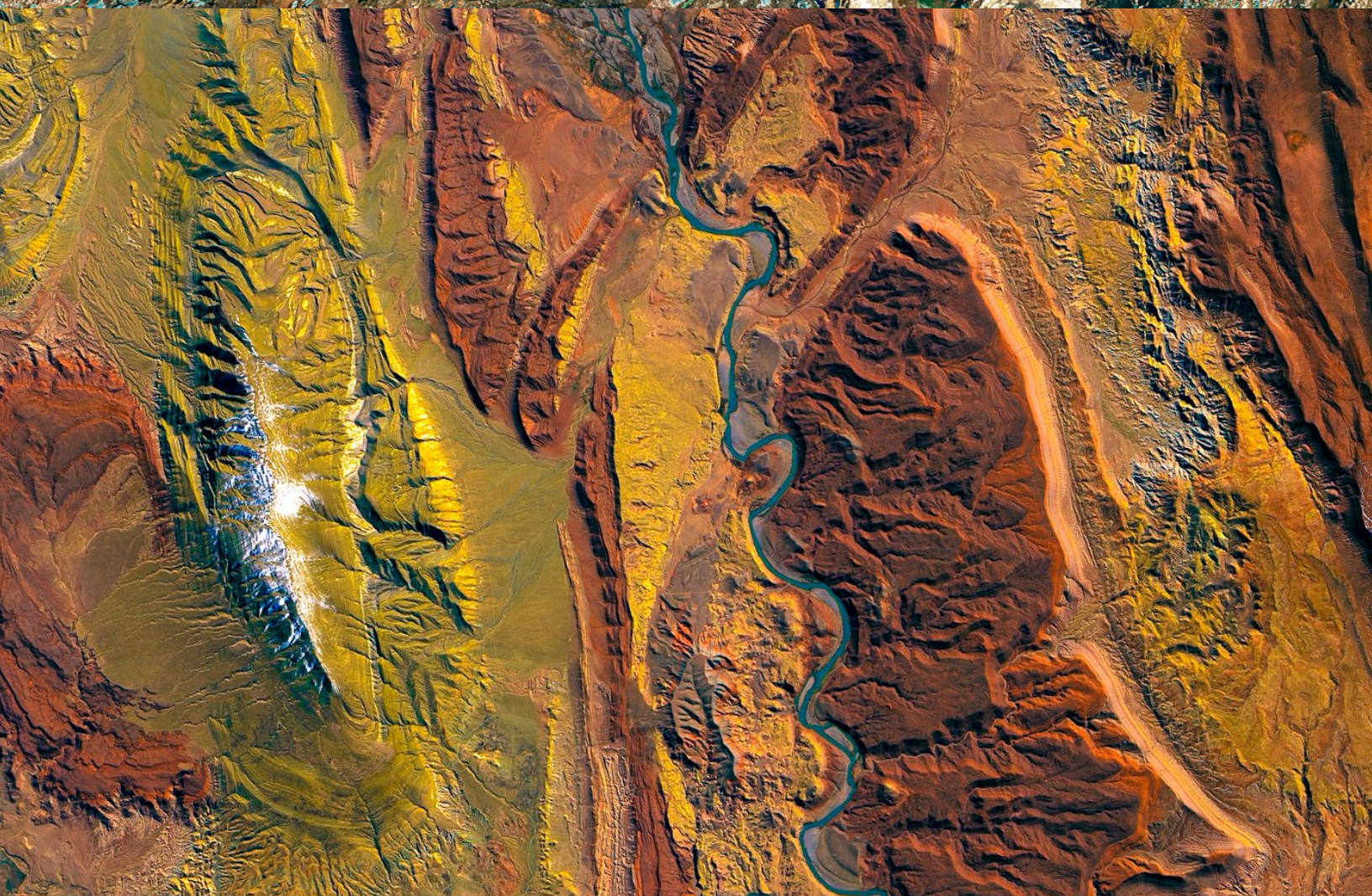
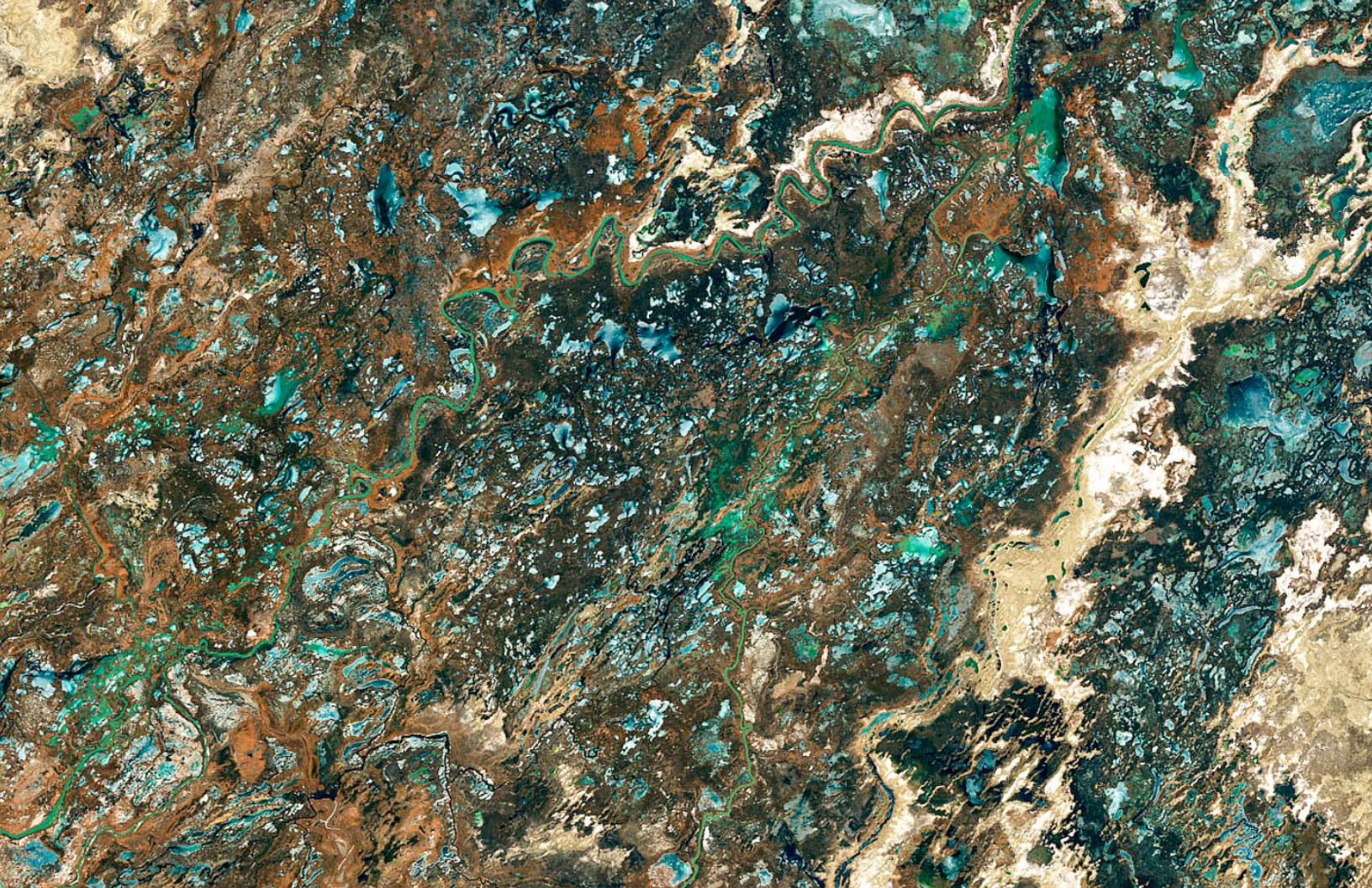
Balkhash_oli_2020067_lrg.tif
Acquired March 7, 2020
Lake Balkhash, Kazakhstan
Landsat 8 OLI
Natural-color composite
Ice breaking up on Lake Balkhash reveals swirls of sediment
and the shallow, sandy bed of the western part of the lake.

Optimist.tif
Acquired August 1, 2000
Kalahari Desert, Namibia
Landsat 7 ETM+, Earth as Art Collection 1
False-color composite
Sand dunes encroach onto once-fertile land.



AS-Wind-Power.tif
Acquired June 12, 2014
Dasht-e Lut Desert, Iran
Landsat 8 OLI, Earth as Art Collection 4
False-color composite
The linear features in this image are formed by wind erosion.

Namibia_oli_2020130_lrg.tif
Mariental, Namibia
Acquired May 9, 2020
Landsat 8 OLI
Natural-color composite
Namibia contains an array of extreme landscapes: mighty sand dunes, gravel plains, rolling hills, and diamond-rich coastal deserts.



Balkhash_oli_2020067_lrg.tif
Acquired March 7, 2020
Lake Balkhash, Kazakhstan
Landsat 8 OLI
Natural-color composite
Ice breaking up on Lake Balkhash reveals swirls of sediment
and the shallow, sandy bed of the western part of the lake.

Candeleros_oli_2018246_lrg.tif
Acquired September 3, 2018
Neuquén Basin, Argentina
Landsat 8 OLI
Natural-color composite
Paleontologists search for dinosaur fossils in this basin.



Lakecarnegie_oli_2020086_lrg.tif
Acquired March 26, 2020
Lake Carnegie, Australia
Landsat 8 OLI
Natural-color composite
One of Australia's largest lakes, Lake Carnegie, is partially filled in this image.

Lakecarnegie_oli_2020086_lrg.tif
Acquired March 26, 2020
Lake Carnegie, Australia
Landsat 8 OLI
Natural-color composite
One of Australia's largest lakes, Lake Carnegie, is partially filled in this image.