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Willow project greenlighted, a National Reserve in Alaska will be drilled for oil, USA

Sentinel-3 OLCI FR acquired on 13 July 2016 at 20:57:38 UTC

Sentinel-1 CSAR IW acquired on 28 August 2018 for 16:43:09 to 16:44:03 UTC

Sentinel-2 MSI acquired on 19 September 2018 at 22:05:31 UTC

Sentinel-3 SLSTR RBT acquired on 30 September 2018 at 21:24:00 UTC

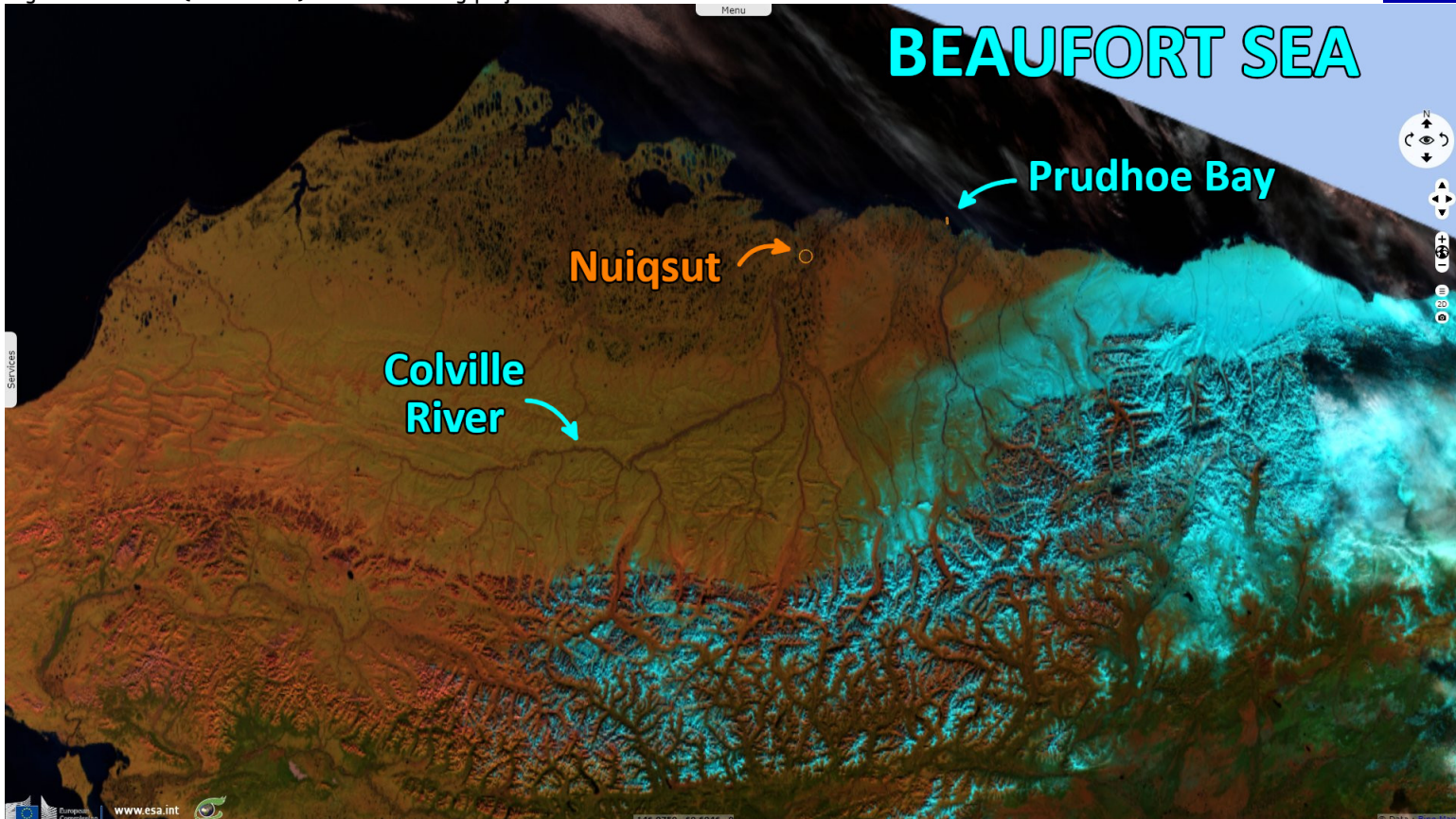
Sentinel-3 OLCI FR acquired on 05 October 2018 at 20:54:05 UTC

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Keyword(s): Land, polar, natural resources, oil and gas, climate change, global warming, natural reserve, biodiversity, Alaska, USA, United States

Fig. 1 - S3 SLSTR (30.09.2018) - Willow drilling project in north-west Alaska has been validated.

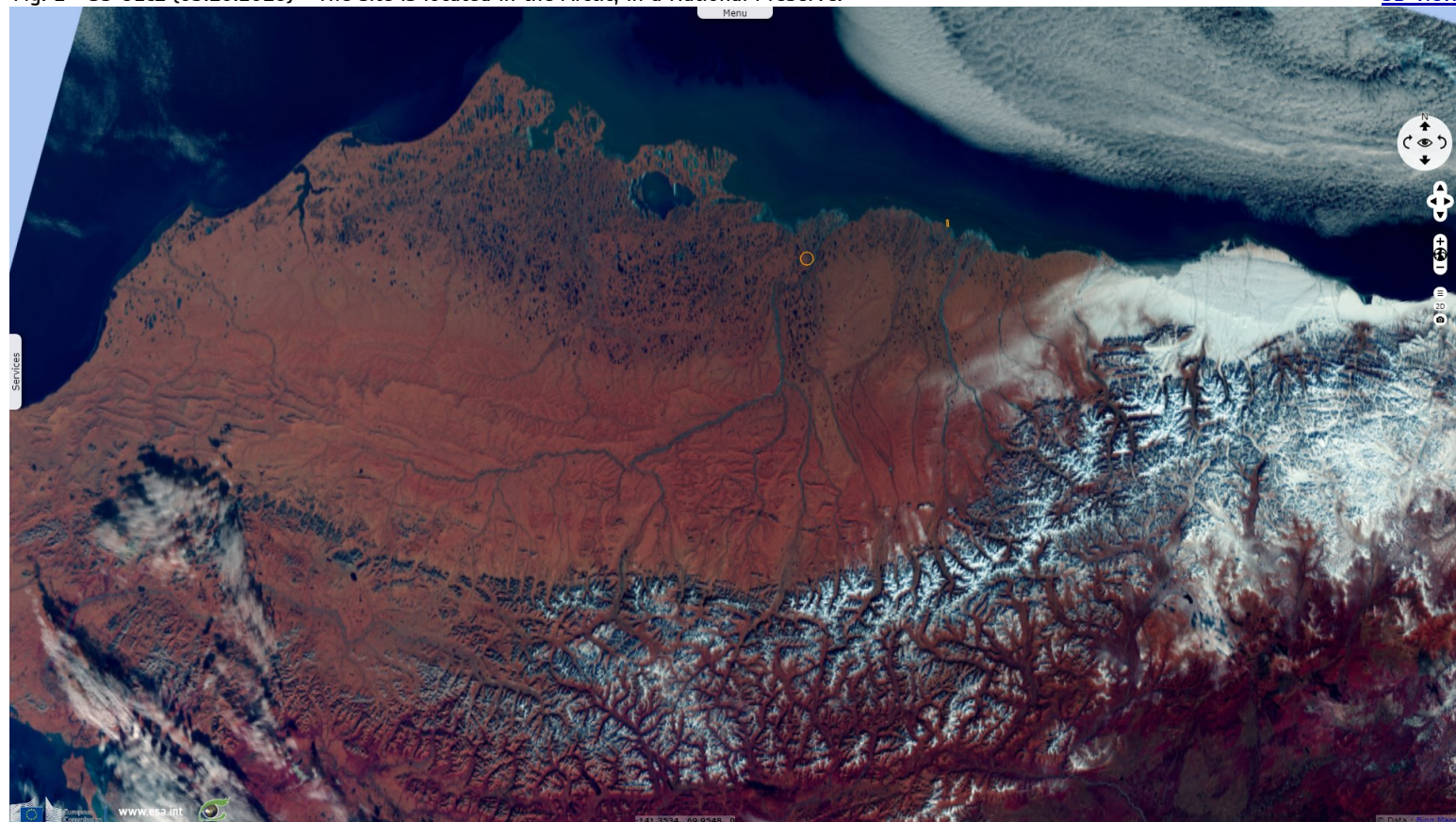
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"Willow is on Alaska's remote North Slope, 966 kilometers north of Anchorage. It is in something called the National Petroleum Reserve-Alaska, which was originally set aside a century ago as an emergency oil supply for the U.S. Navy. The area has been overseen by the U.S. Interior Department since the 1970s, and there has been debate over where development should occur.", wrote [Becky Bohrer](#) for Associated Press. "The Biden administration last year limited oil and gas leasing to just over half of the federal lands in the nearly 23-million-acre reserve."

Fig. 2 - S3 OLCI (05.10.2018) - The site is located in the Arctic, in a National Preserve.

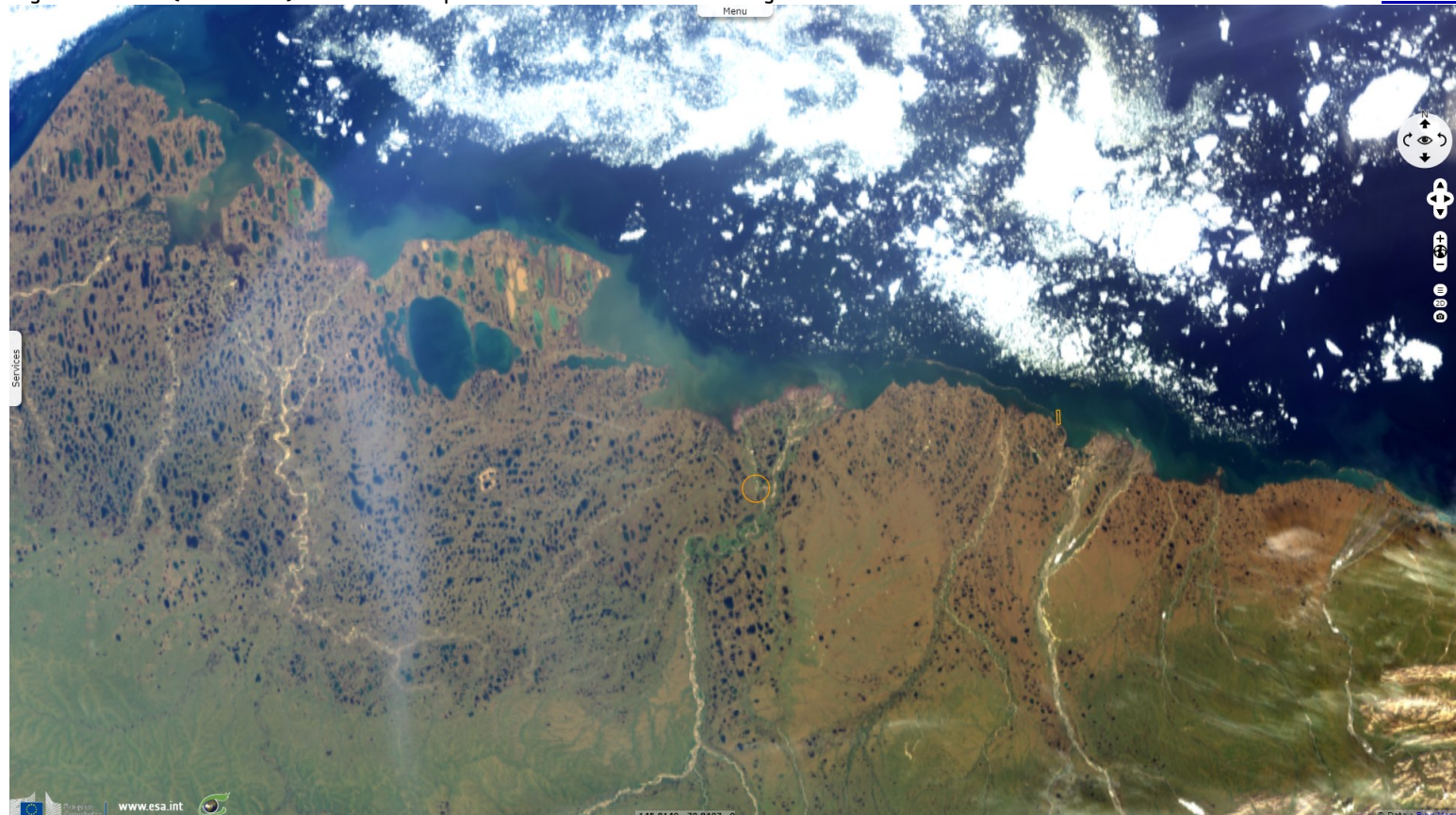
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Maxine Joselow [adds](#) for the Washington Post: "Opponents hoped Biden would reject energy giant ConocoPhillips's multibillion-dollar drilling project, on Alaska's North Slope. But facing the prospect of having such a decision overturned in court, the administration plans to let the oil company build just three pads in the National Petroleum Reserve-Alaska (NPR-A), the nation's largest expanse of public land, these three individuals said. The decision shrinks the project from the five pads that ConocoPhillips originally proposed but allows what company officials have described as a site large enough for them to move forward and start construction within days."

Fig. 3 - S3 OLCI (13.07.2016) - The western part of the reserve has been safeguarded and removed from the lease.

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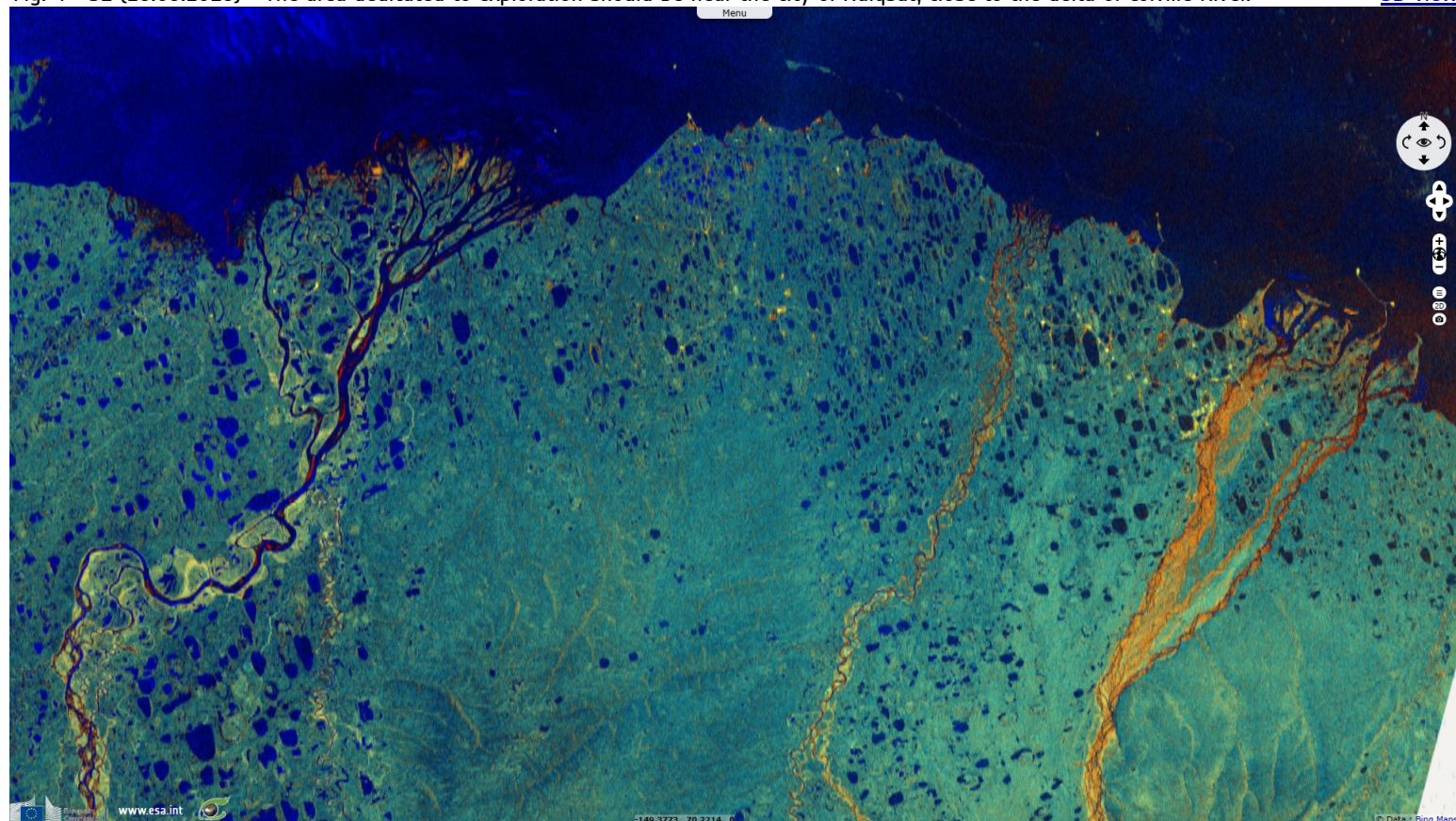


This decision has caused disappointment, [reports](#) Becky Bohrer: "Environmental groups see the approval of the Willow project as a betrayal of President Joe Biden's 2020 campaign promises to end new oil and gas drilling on federal lands. They say it is out of step with Biden's goals to cut carbon emissions and move to clean energy. Using the oil Willow would produce over 30 years would emit roughly as much greenhouse gases as the combined emissions from 1.7 million passenger cars over the same time period."

"The approval of the project near the city of Nuiqsut would allow the construction of hundreds of miles of roads and pipelines, airstrips, a gravel mine and a processing facility", [states](#) the Washington Post article. Yet, "the move to bar drilling in the Arctic Ocean comes despite little industry interest in the area. Several major oil companies have exited the region in recent years, citing economic headwinds."

Fig. 4 - S1 (28.08.2018) - The area dedicated to exploration should be near the city of Nuiqsut, close to the delta of Colville River.

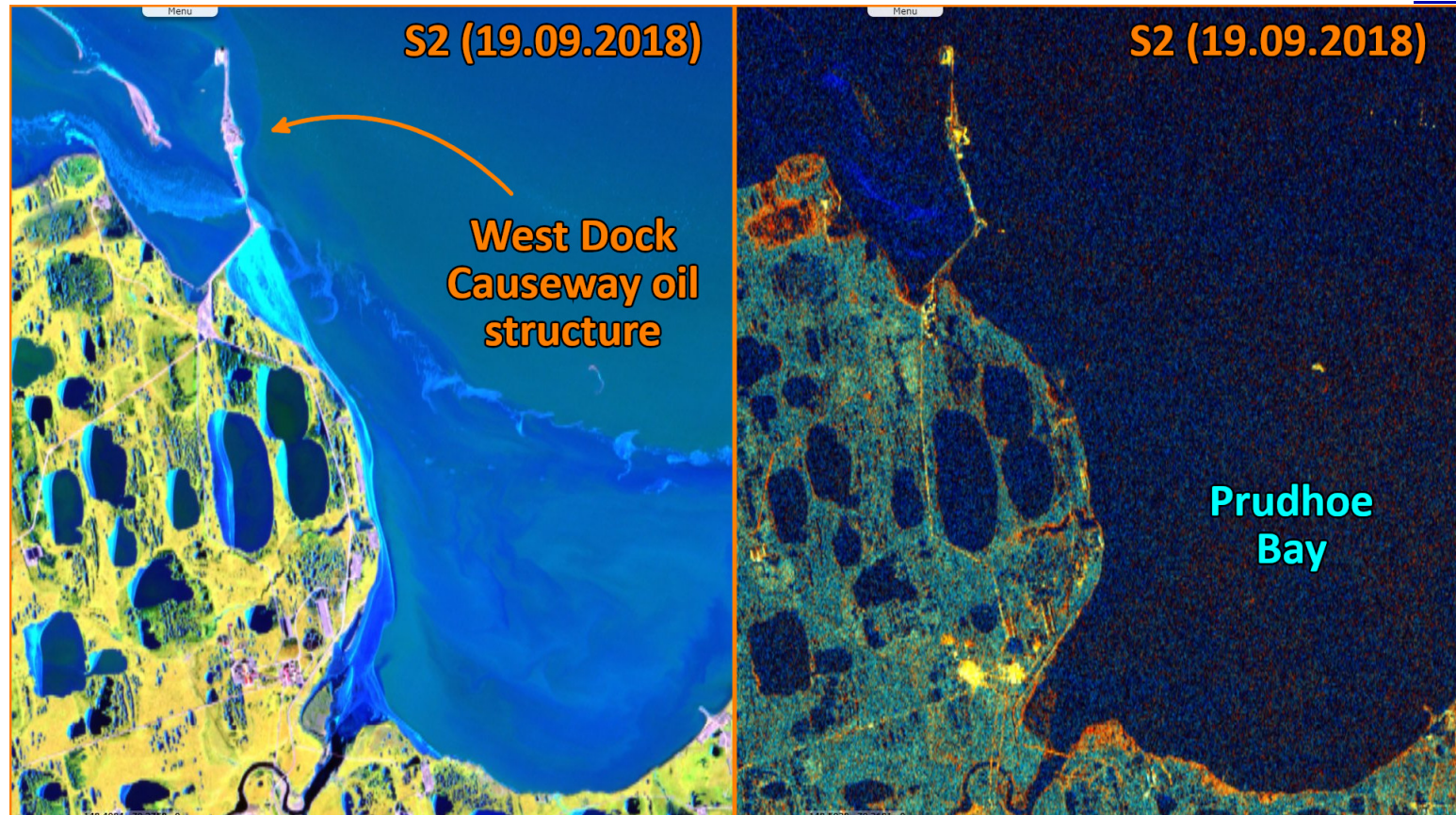
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This decision is to put in context with a decision to withdraw a part of the National Reserve from the lease: "*Biden would use his authority under the Outer Continental Shelf Lands Act to withdraw roughly 2.8 million acres of the Beaufort Sea in the Arctic Ocean from future oil and gas leasing, the statement said. The withdrawal would build on President Barack Obama's decision to put a temporary end to exploration in the Chukchi and Beaufort seas off the Alaskan coast.*"

Fig. 5 - S2 (19.09.2018) / S1 (28.08.2018) - Prudhoe Bay has been producing oil for several decades, creating dedicated infrastructures.

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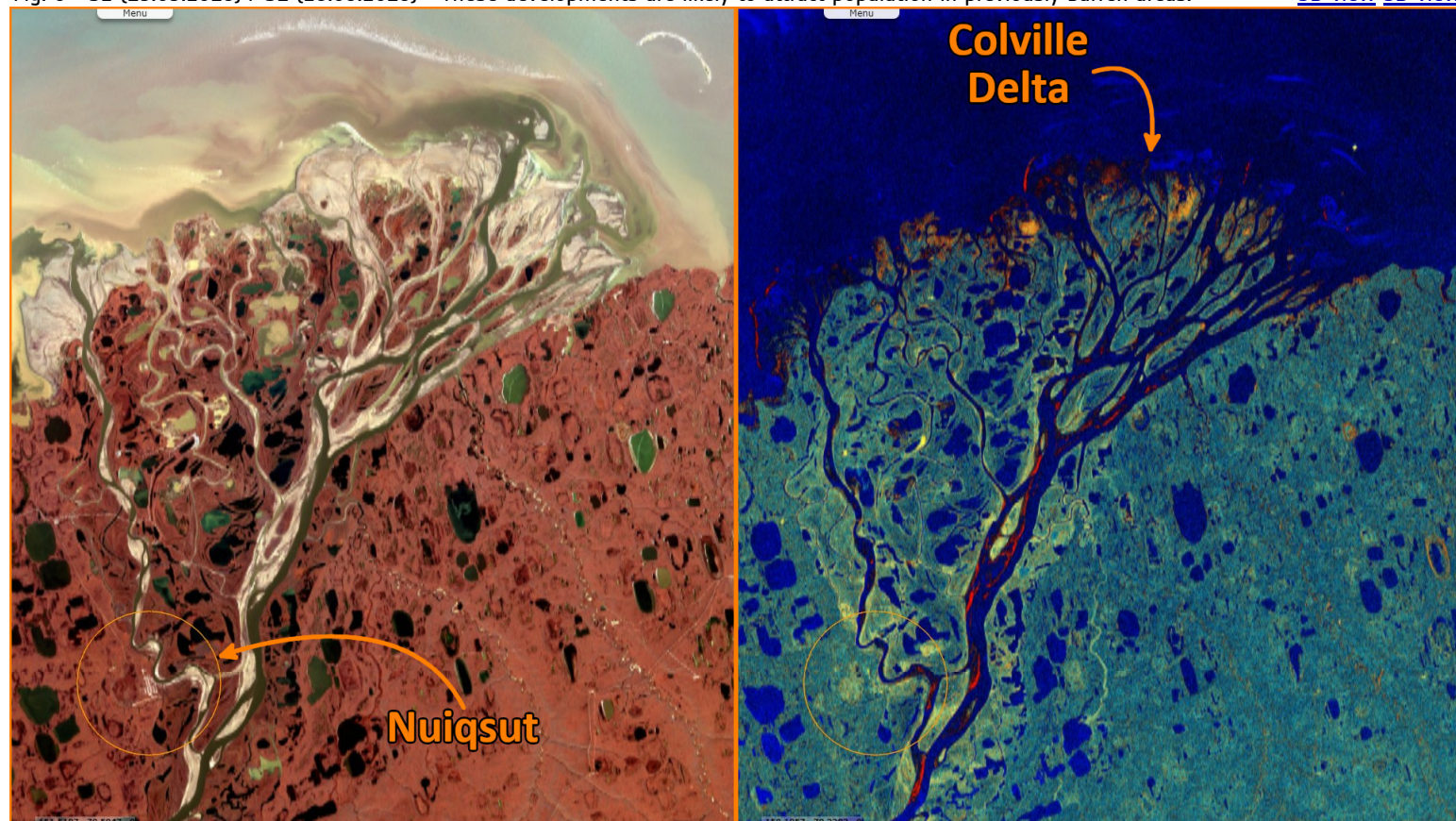


Becky Bohrer [reminds](#) the historic and possible future importance of the oil industry for Alaska: "*Alaska's economic fortunes are tied to the boom-and-bust cycles of oil. The flow of oil through the trans-Alaska pipeline is a fraction of what it was at its height in the late 1980s. Willow also is currently the largest proposed oil project on federal lands.*"

Maxine Joselow [complements](#): "*Biden's effort to close off the spigot to future drilling in the region, even as he prepares to approve an operation that could produce between 576 million and 614 million barrels of oil over the next 30 years, highlights the challenge the president faces in delivering on his much-touted climate goals.*"

Fig. 6 - S2 (19.09.2018) / S1 (28.08.2018) - These developments are likely to attract population in previously barren areas.

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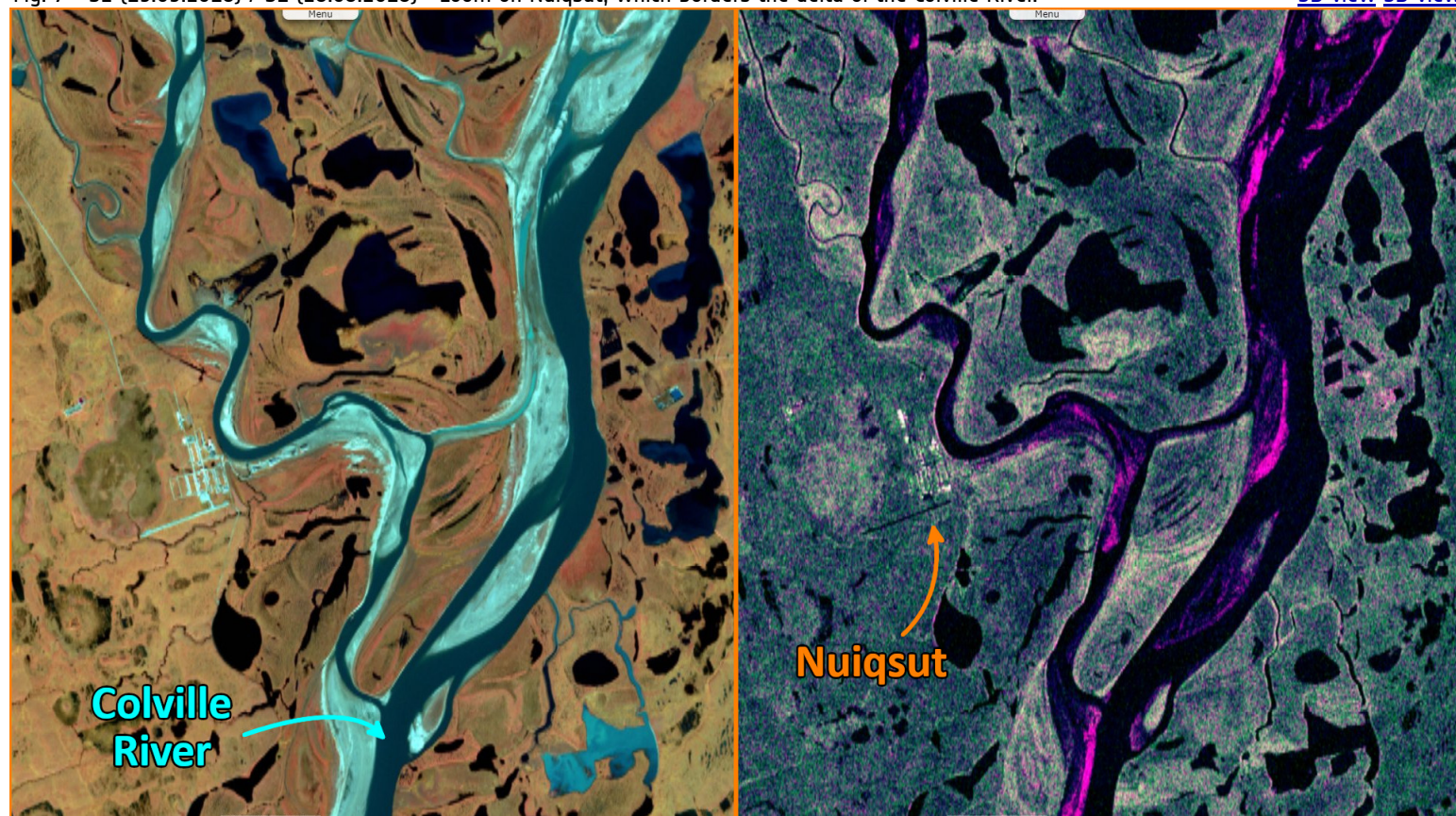


"The U.N. Intergovernmental Panel on Climate Change, which includes hundreds of top climate and energy experts, has said that the world must zero out greenhouse gas emissions by the middle of the century to have a hope of meeting its climate goals. Any newly built fossil fuel infrastructure will have to be decommissioned before the end of its useful lifetime, the panel said, or risk pushing the planet past the threshold of catastrophic warming.

The region around Nuiqsut is one of the fastest-warming places on Earth. Its average temperature has risen 4 degrees Celsius above preindustrial levels — more than three times the global average, according to a Washington Post analysis of temperature data. The area is also home to Teshekpuk Lake, a 22-mile-wide reservoir that lies nearly 70 miles west of Nuiqsut. The lake is home to thousands of migrating caribou and roughly 600 000 shorebirds and more than 78 000 molting geese, along with polar bears and other species."

Fig. 7 - S2 (19.09.2018) / S1 (28.08.2018) - Zoom on Nuiqsut, which borders the delta of the Colville River.













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"The Biden administration's approval earlier this week of the largest new oil project in years on Alaska's petroleum-rich North Slope was immediately met by lawsuits seeking to stop the Willow project." "Lawsuits filed by environmental groups and an Alaska Native organization seek to overturn Monday's approval of three drill sites and up to 199 total wells for the ConocoPhillips Alaska project. The lawsuits allege the U.S. government failed to adequately consider alternatives to greenlighting development."

"Many Alaska Natives say they support the Willow project because it will bring jobs and money to their communities. But some are opposed, concerned about effects on health, the climate and caribou.", [concludes](#) the APNews article

*The views expressed herein can in no way be taken to reflect the official opinion of the European Space Agency or the European Union.
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