

THE ARCTIC OCEAN AND THE GEOPOLITICS OF MARITIME TRANSPORTATION

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On August 27, 2019, the Russian Ministry of National Defense officially announced the discovery of five new islands in the Novaya Zemlya archipelago near the homonymous island and within the Nansen glacier in the Arctic Circle.¹ Also, the *Natural Communication* journal, published, in October 2019, an estimate that some 340 million people will be living on land that falls below average coastal land levels by 2050.² Both the “emergence” of new islands in the Arctic Ocean, as well as the planet’s population at risk of flooding are the result of rapid melting of the Arctic Ocean ice. The list has endless scientific records on the pace and effects of melting Arctic Ocean ice.

Indeed, all the scientific observations on the rapid geophysical, geological and geographical changes occurring in all natural elements, which vastly impact on the morphology and terrain of the frozen part of the Arctic Ocean, strongly suggest that this is true.³ Bearing in mind that the area north of the Arctic Circle makes up the 8% of the total area of the globe and the 15% of its ground territory,⁴ it is easily understood that any evolution/transformation in this geographical segment is of a global interest because it alters, inter alia, the constituent of the existing planetary geopolitical context and that of international relations.

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¹ https://function.mil.ru/news_page/country/more.htm?id=12249505@egNews

² Kulp, S.A., Strauss, B.H. New elevation data triple estimates of global vulnerability to sea-level rise and coastal flooding, *Nature Communication*, 10, 4844 (2019), doi:10.1038/s41467-019-12808-z <https://www.nature.com/articles/s41467-019-12808-z>

³ For more analysis, see, Sotiropoulos, Ioannis P., “Climatic Change and Geopolitical Principles. From the Strategy of ‘Containment’ to the Strategy of ‘Containment Antagonism’. The Transformation of the Anglo-Saxon Classic Theories of Geopolitics and the Emerging Successor Geopolitical Approach.”, *Civitas Gentium*, Department of Turkish Studies and Modern Asian Studies, School of Economics and Political Sciences, National and Kapodistrian University of Athens, Athens, September 2016, Vol. 4, no 1, pp. 83-126.

⁴ Borgerson, Scott, “The Coming Arctic Boom. As the Ice Melts, the Region Heats Up”, *Foreign Affairs*, vol. 92, no 4, July/August 2013, pp. 76-89, p. 80.

The process of melting ice in the Arctic Zone, focusing on the Arctic Ocean, is taking place at a rapid pace. In the winter of 2016, a new record was set for a dramatic reduction in sea ice cover in the Arctic Ocean. Specifically, in November 2016, the Arctic sea ice area averaged 9.080,000 km², the lowest winter-November record. The previous low was in November 2006, with 9,880,000 km² of sea ice, while the median for November 1981-2010 was 11,030,000 km².

It is worth to notice that in February 2017, the sea ice extent and cover area, were 14,000,000. km², and 13,000,000 km² respectively, a new record for February.

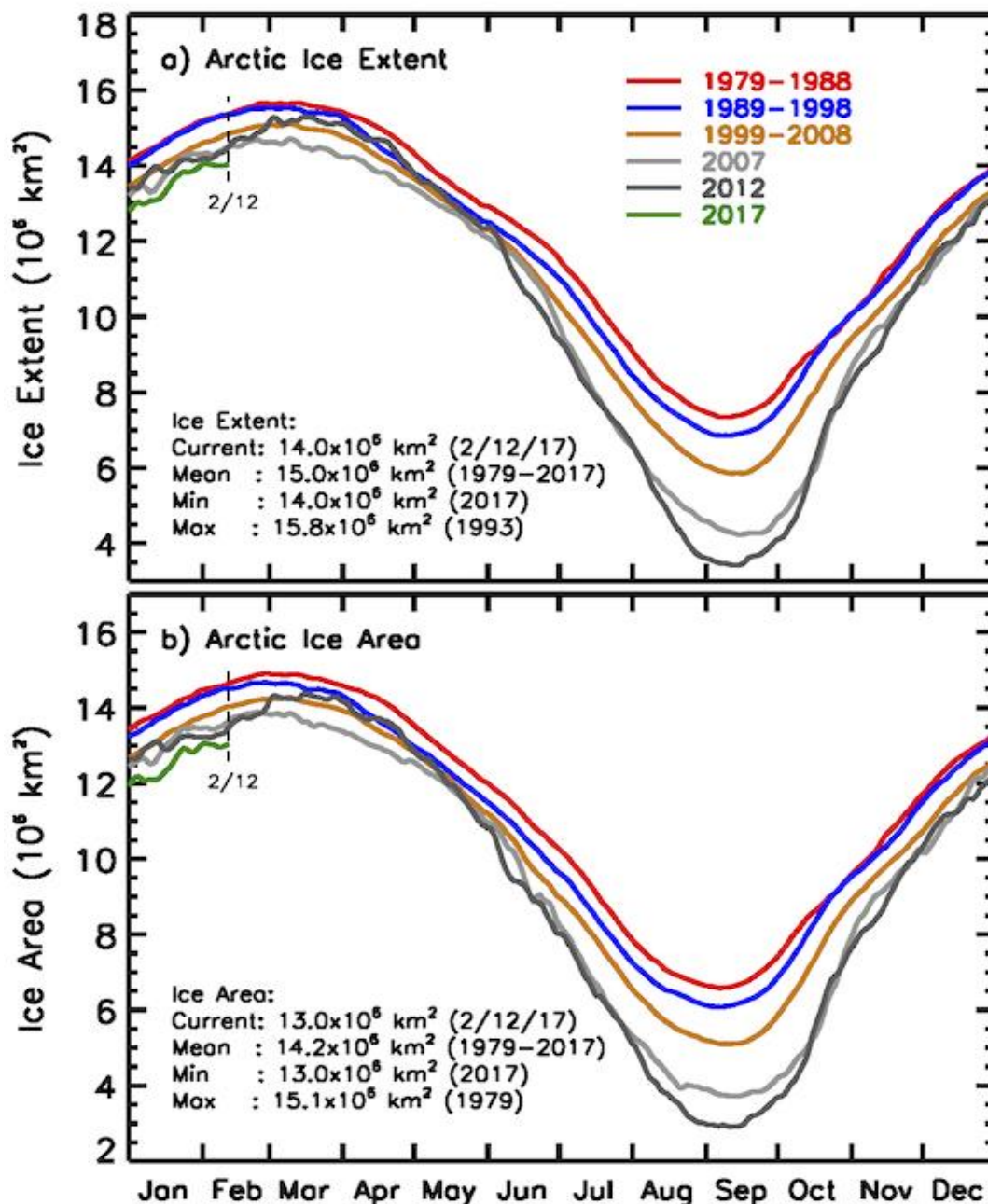


Table no 1: The sea ice extent and cover area in February 2017.

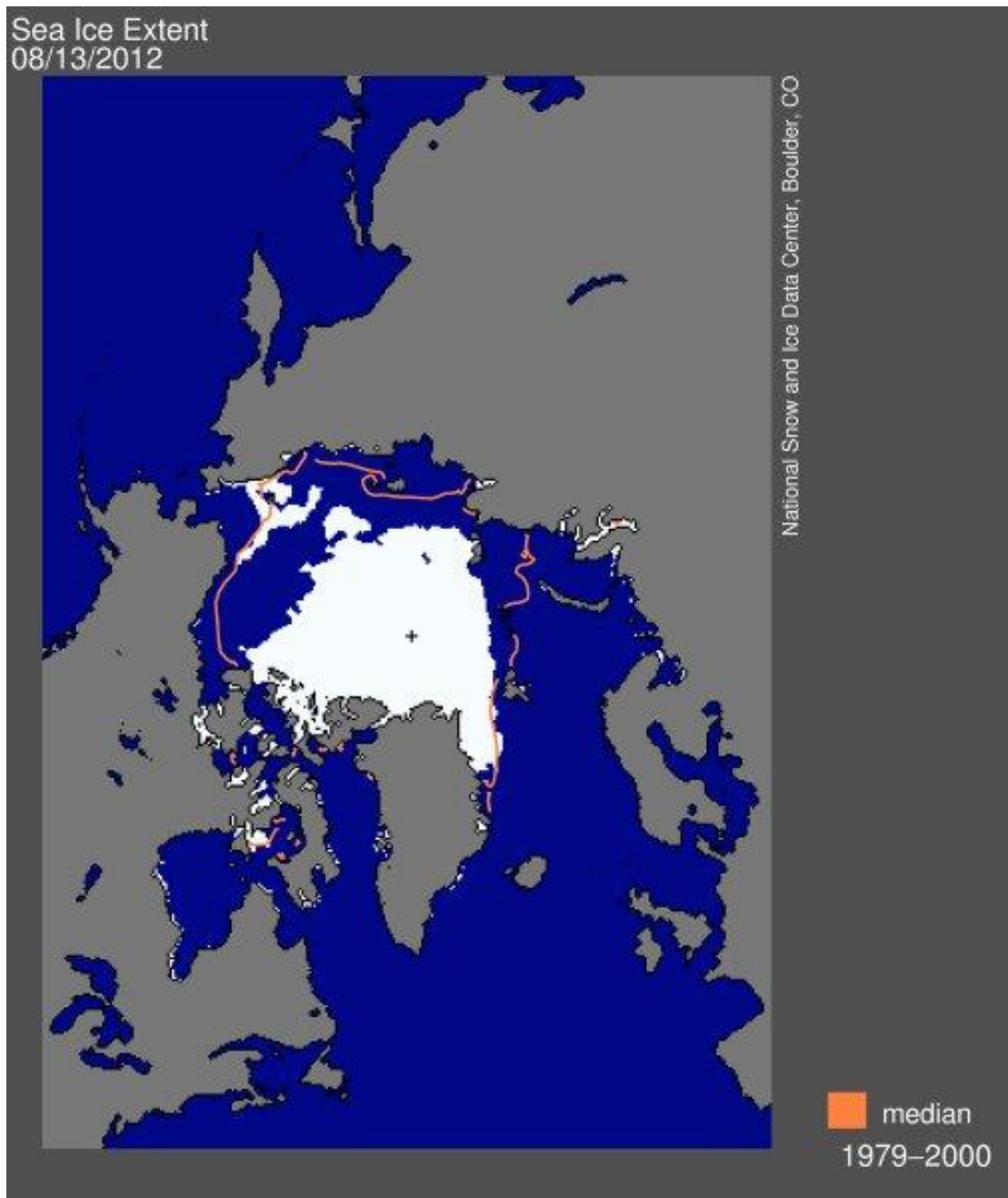


Image no 1: The extend of Arctic ice in August 2012, in comparison with the median of the years 1979-2000.

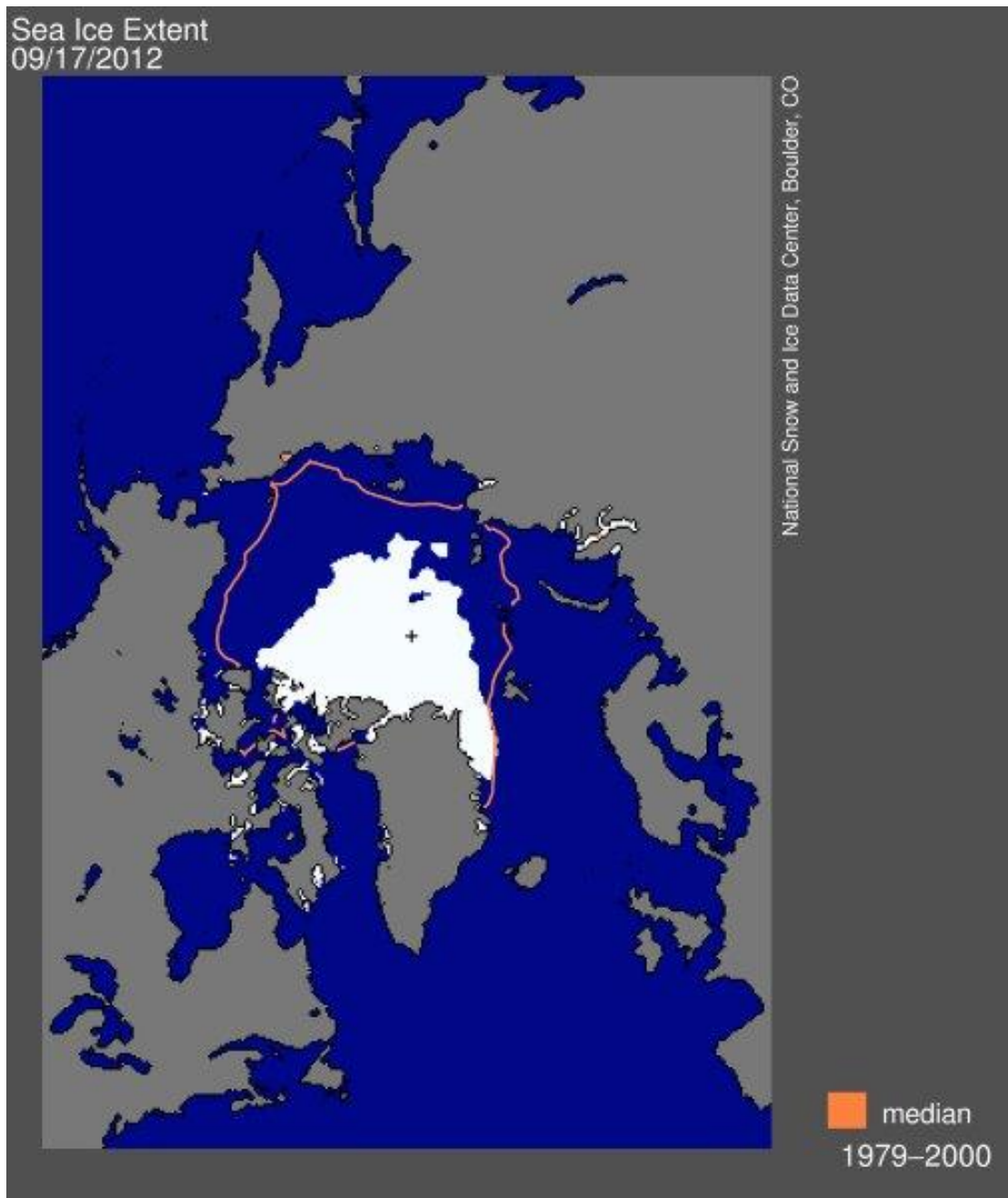


Image no 2: The extend of Arctic ice in September 2012, in comparison with the median of the years 1979-2000.

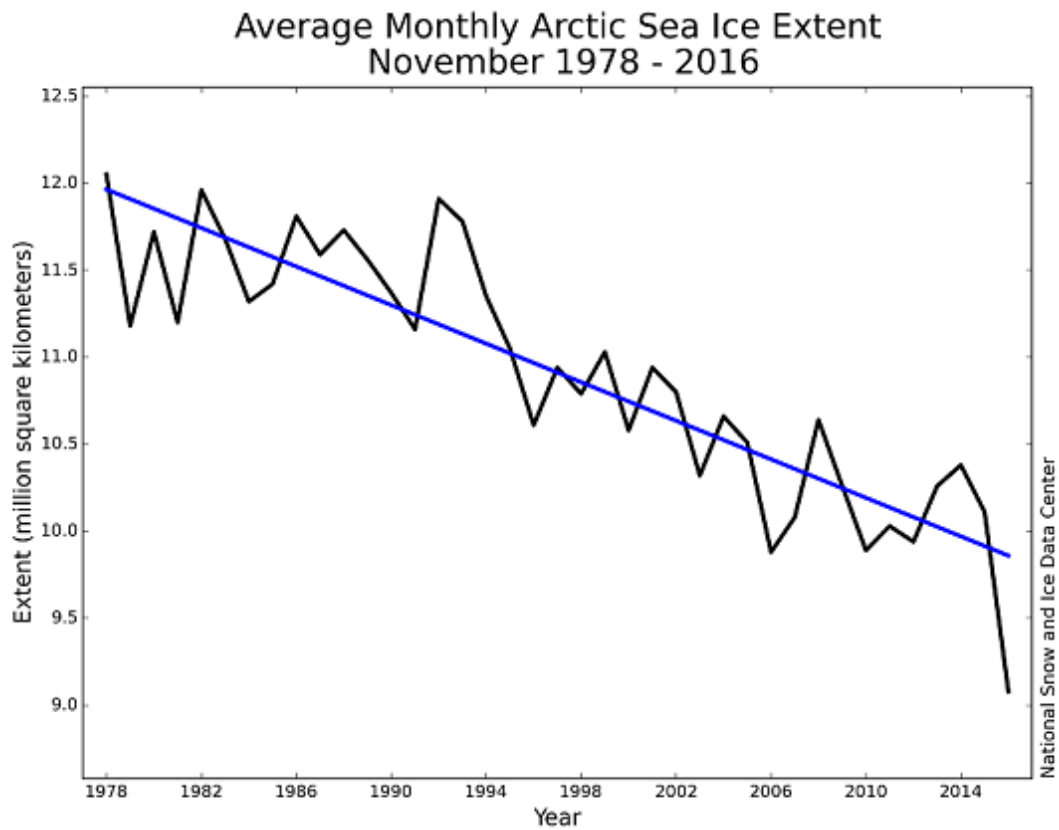


Table no 2: The trend of the average monthly Arctic Seas ice extent for November in the years 1978-2016 is steadily downward in fast.

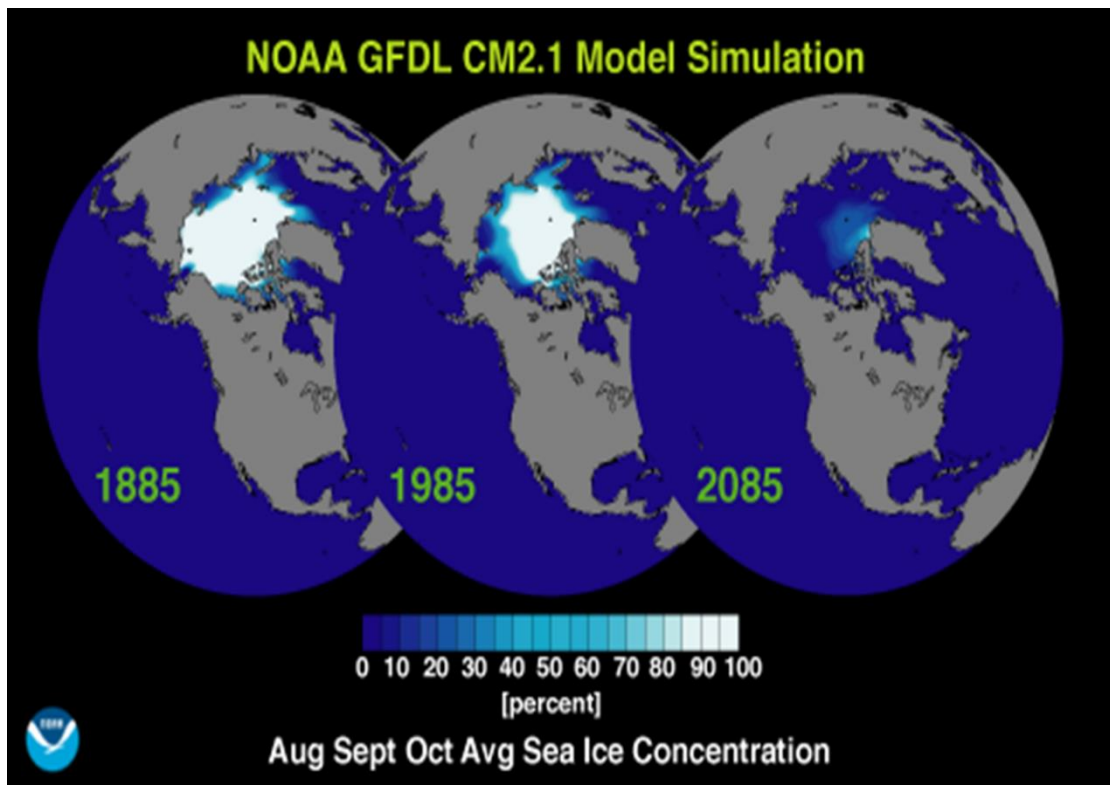


Image no 3: Model simulation for the Arctic Ocean/Zone.

The effects of the melting ice in the Arctic have seismic consequences for all human activity and create a new geopolitical environment for all aspects of power,⁵ being extremely noticeable in the maritime sector. Especially for the geopolitics of maritime transport, the fact that the Arctic Ocean tends to become rapidly navigable, almost year-round, which is prohibitive in recent decades, on the one hand reduces the distance between ports of departure and arrival, on the other hand travel time, launching new transit services, and more. Indeed, new shipping and maritime transport have been planned, with the North/North-East Route already having begun for several hundred maritime routes. Specifically, the new routes open for navigation and maritime transport are the following:

- The North/Northeast Sea Route, which is entirely under Russian control, and ends at the Bering Sea/Bering Straits, where the continents of Asia (Russia) and America (USA) are united.
- The Northwest Passage Route, which controlled by Canada. But the exit is controlled by the US (Alaska), and it also ends at the Bering Sea/Bering Straits.
- The Arctic Bridge Route, which connects Churchill with Murmansk.
- The Trans-Polar Sea Route, which passes through the North Pole and it also ends at the Bering Sea/Bering Straits.

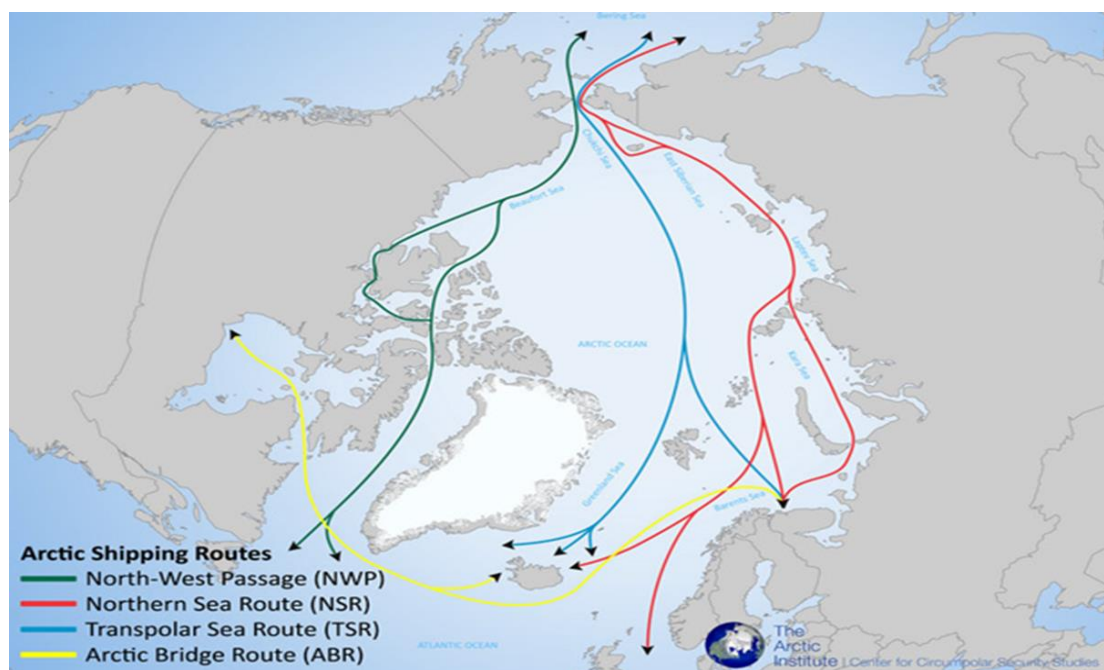


Image no 4: The new routes opened for navigation and maritime transport in the Arctic Ocean. Humpert, M. & Raspotnik, A., The Future of Arctic Shipping Along the Transpolar Sea Route. Arctic Yearbook, 2012, pp. 281-307.

⁵ For a full analysis of all aspects of power and the melting of Arctic ice, see, Sotiropoulos, Ioannis P., "Russia's Emergence from the Ice. Climate Changes and the Principles of the New Geopolitics", Foreign Affairs, Hellenic Edition, issue no 19, October, 2013, pp. 140-163.

The first two, i.e. The North/Northeast Sea Route and the Northwest Passage Route are the most interesting in terms of facilitating the current trips with new cheapest and safest routes. Thus, the journey of a ferry departing Rotterdam and the port of destination San Francisco *via* the Northwest Pass is shortened by 1/3 compared to the traditional route so far. Also of great benefit to the use of the Northwest Passage is that the New York-Tokyo distance through the Panama Canal is 18,200 km, while the Northwest Pass is 14,000 km. crossing northeast of Baffin Island and north of Somerset and Victoria, while the traditional one through the Panamanian canal. In the same vain, a freighter departing from the port of Rotterdam and ending at Yokohama using the new North/Northeast Sea Route, along the northern Russian coastline, shortens its journey by 3,900 nautical miles by reducing it by 20 nautical miles 33 days of navigation, with the consequent beneficial effects, primarily on fuel costs, crew compensation, and on all mechanical and all kinds of ship damage.⁶ Also, sailing through the North/Northeast Sea Road avoids the straits of Gibraltar, the Mediterranean and the Suez Canal, geographically significant congestion points, and in addition, transport is made more secure as their routes do not cross dangerous routes of the Straits of Aden and Malacca.

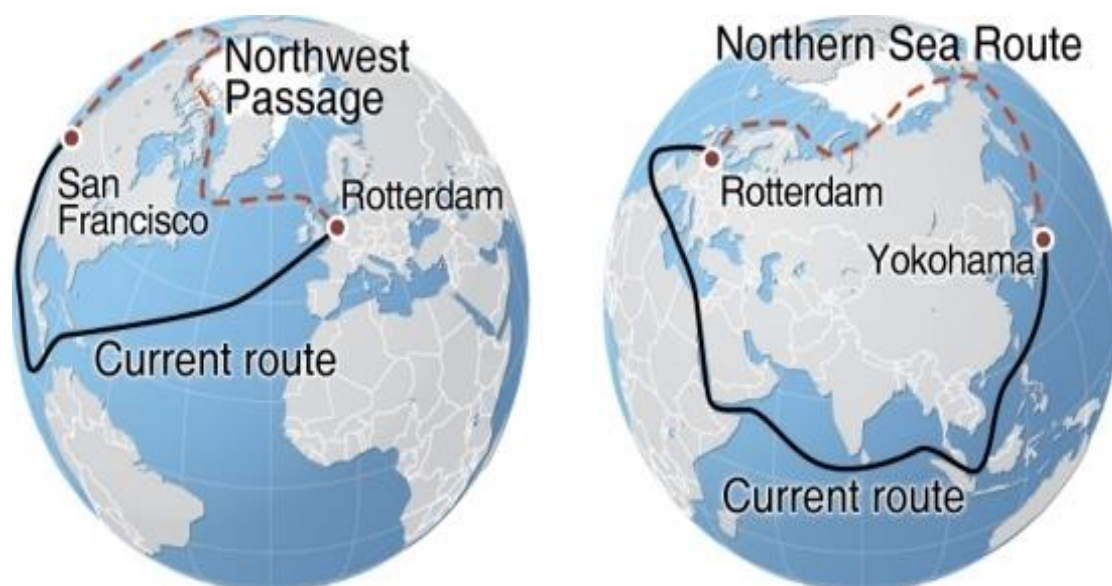


Image no 5: Examples of the supremacy of the New Sea Routes

⁶ Ria Novosti, 17-10-2012.

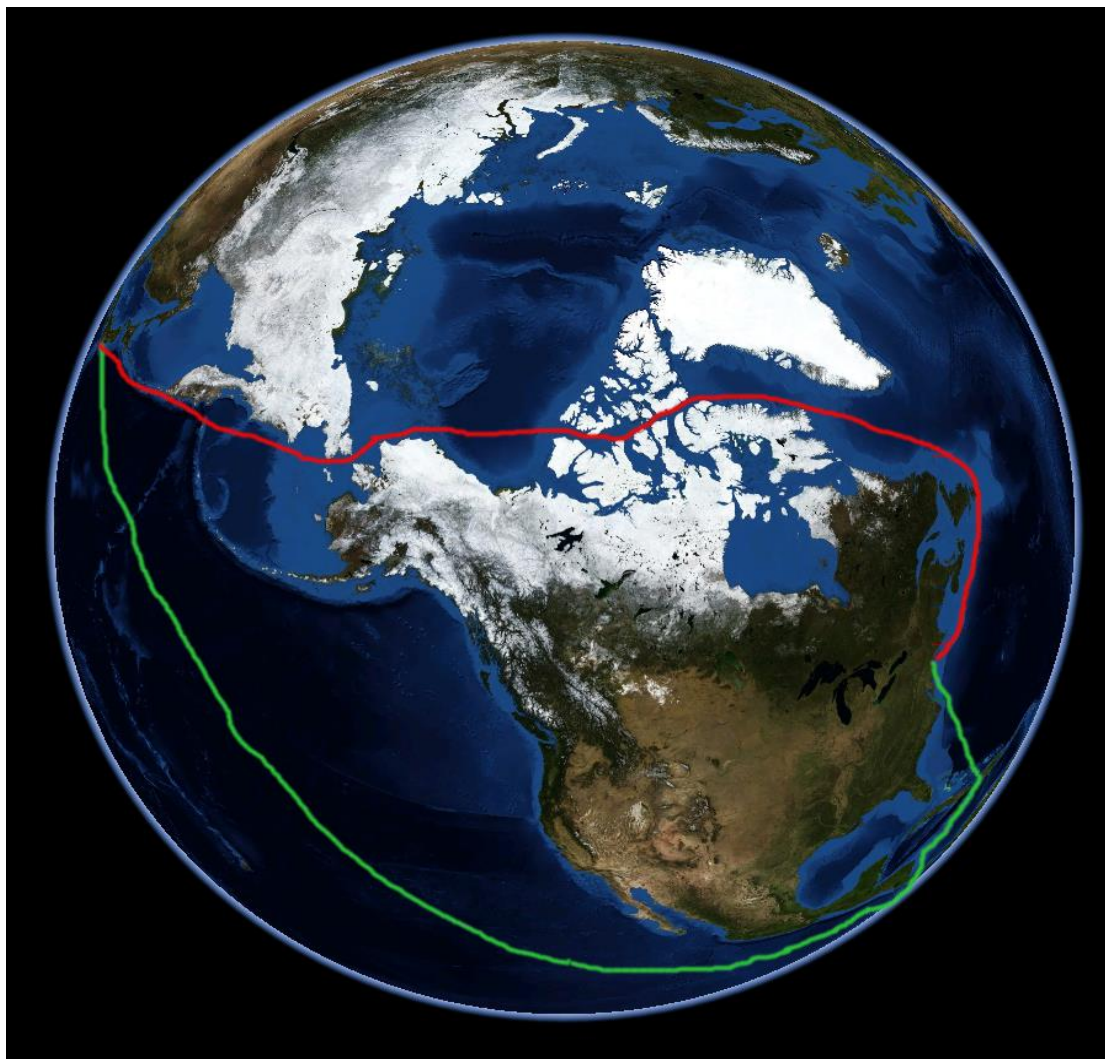


Image no 6: Examples of the supremacy of the New Sea Routes

As the trend of the Active Supra-System in the navigation of trade routes along with the dynamics of the global economy is turning to the East in both import and export countries (Japan, China, Korea, etc.), it seems, by strict economic criteria, that the North/Northeast Sea Route is to take the lion's share, at least at the initial phase.

Although the classic route from West to the East is shorter in some traditional destinations such as India, it is a dangerous voyage as it is vulnerable to pirates in the East African Sea, the Arabian Sea and the Indian Ocean. Consequently, even in those cases, a captain with multiple loads, might prefer the North/Northeast Sea Route over the classic Suez route.

From Rotterdam via: ----- ---- to	Cape of the Good Hope	Straits of Suez	North/Northeast Sea Route	Difference % Suez and North/Northeast Sea Route
Yokohama, Japan	14,448	11,133	7,010	37%
Busan, South Korea	14,084	10,744	7,667	29%
Shanghai, China	13,796	10,557	8,046	24%
Hong Kong, China	13,014	9,701	8,594	11%
Ho Chi Minh City, Vietnam	12,258	8,887	9,428	-6%

Table no 4: Routes and Distances. Farre et al., Commercial Arctic shipping through the Northeast Passage: routes, resources, governance, technology, and infrastructure, 2014.

In conclusion, it is certain that the Arctic Zone, focusing on the Arctic Ocean and its peripheral seas, from a low-interest periphery of the globe, is going to be upgraded qualitatively and quantitatively in all areas of human, private and public, activity in the near future, more likely in the next two decades to come. The center of gravity of the planet, from the Mediterranean Sea, which acts as the main planetary transit route being a geopolitical subsystem of particular political and military importance, will be moved to a much northerner periphery. Very soon, the Globe, referring to the Arctic Ocean, is to speak of a 'Second Mediterranean Sea', in the same manner as it did referring to Constantinople as the second Rome, and to Moscow that succeeded Constantinople as the third Rome.

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