

## **THE ARCTIC-SEA IS NOT AN OCEAN BUT A BUFFER-SEA**

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**M**any maps, many atlases and many text-books are indicative of the fact that the Arctic-Sea is an Ocean. Of course this is a mistake. The Arctic Sea is not an Ocean but Buffer-Sea.

When we measure the Basins of the World-Sea we must measure with a general measurement in the global sense.

The Basins of the World-Sea are there because the existing Land outlines them in the immense water-area of World-Sea. Then, if we wish to measure the Basins of World-Sea, we need, first, a measurement to measure the Land in a general global way.

All Land-bodies on the Earth are isolated, each of the completely surrounded by the World-Sea.

But on the contrary, the Basins of the World-Sea. are allconnected with each other to form one large, single water-area.

Any piece of Land completely surrounded by the World Sea, and larger than 5.000.000 square kilometers is a Continent.

Whereas a piece of Land completely surrounded by the World-Sea, but smaller than 5.000.000 square kilometers is an Island.

Five million square kilometers of Land is about one hundredth of the total area of the Earth and about one thirtieth of the total area of the Land on the Globe. In this way we have Six Continents and Numerous Islands. The Six Continents are Eurasia, Africa, America, Columbia, Antarctica and Australia.

The Numerous Islands range with Greenland as the largest, and Islets with areas less than one square kilometer the smallest.

Eurasia and Africa are isolated from each other by an open stretch of Sea, the Suez-Channel, man-made. Eurasia has an area of more than 49.000.000 square kilometers and Africa, 000 square kilometers.

America, with an area of more than 20.000.000 square kilometers is isolated from Columbia by the Panama-Canal, though has a few locks is also man-made. Columbia has an area of approximately 17.500.000 square kilometers.

Antarctica, the fifth Continent, has an area of about 15.000 square kilometers and is a huge land-mass, covered with ice and completely surrounded by the World-Sea.

Australia, the sixth and the smallest Continent, has an area of about 7.600.000 square kilometers and is completely isolated by the World-Sea.

The Islands start with Greenland as the largest (area about 2.000.000 square kilometers) to the smallest with an area of less than one square kilometer.

It is evident that these Six Continents and Numerous Islands divide the World-Sea in Basins, more or less closed but all connected with each other. The Islands play only a secondary important part in the shaping of these same Basins. When we measure these Basins in order to classify them, it is only right, if we define them by the Continents, which, as has already been said, are the main shapers of the Basins of the World-Sea.

In this manner, we shall distinguish between Oceans, Buffer-Seas and Marginal-Seas.

Oceans are these Basins of the World-sea which are bordered by five or four Continents.

Buffer-Seas are these Basins of the World-Sea which are bordered by two Continents.

Marginal-Seas are these Basins of the World-Sea which are bordered by one single Continent.

Islands, also help form the border of the Three Oceans, of four of the Six Buffer-Seas and of ten of the Eleven Marginal-Seas but are only of secondary importance in comparison with the part the Continents play in the shaping of the Basins of the World-Sea.

The Pacific-Ocean, with, an area of about 165.000.000 square kilometers, is bordered by the five Continents, Antártica, Columbia, America, Eurasia and Australia.

The Atlantic -Ocean, with an area of about 82.000.000 square kilometers, is bordered by the five Continents, Antártica, Africa, Eurasia, America and Columbia

The Indian-Ocean, with an area of about 73.000.000 square kilometers, is bordered by the four Continents, Antártica, Australia, Eurasia and Africa.

The Arctic-Sea, with an area of about 14.000.000 square kilometers, is bordered by only two Continents, Eurasia and America and must not be considered an Ocean but a Buffer- Sea.

Its scientific name is the Great-Eurasian-American-Buffer- Sea in distinguishing it from the Little-Eurasian-American - Buffer-Sea, which has an area of approximately 2.200.00 square kilometers and with the present name of Bering-Sea. The latter is the fifth largest of the Six Buffer-Seas. The Arctic- Sea is the largest of the Buffer-Seas and we have shown the main reason why the Arctic-Sea is not an Ocean but a Buffer- Sea.

There are two more reasons why we cannot consider the Arctic-Sea to be an Ocean but have to understand her as a Buffer-Sea.

The Pacific-Ocean has an area of 165,000.000 square kilometers, the Atlantic-Ocean, 82.000.000 square kilometers and the Indian-Ocean, 73.000.000 square kilometers.

The Buffer-Seas range with areas from 14.000.000 square kilometers to 700.000 square kilometers

and the Marginal- Seas range with areas from 1.500.000 square kilometer to 110.000 square kilometers. Thus, the Arctic-Sea, with an area of 14.000.000 square kilometers, cannot be classified as an Ocean. It is the top in the list of the Buffer-Seas, the second being the Eurasian-Australian-Buffer-Sea which has an area of 9.000.000 square kilometers and last in the list is the Red- Sea, which has an area of 700.000 square kilometers.

The Marginal-Seas begin with the Okhotsk-Marginal-Sea as the largest with an area of 1.500.000 square kilometers. The second and the third have almost the same areas. They are the Chinese-Marginal-Sea and the Hudson-Marginal-Sea and have each approximately an area of 1.200.000 square kilometers. The smallest is the Tasman-Marginal-Sea with an area of 110.000 square kilometers.

These relative figures make it still more convincing that our division of the Basins of the World-Sea into Oceans, Buffer. Seas and Marginal-Seas is a right one. Then, last but not least, the following explanation gives us to understand, that Arctic- Sea is not an Ocean but a Buffer-Sea.

First of all, the depth of a Sea or an Ocean is just as well a geographical feature as the height of a hill or a mountain, and the mean-depth of a Sea-Basin is surely as well a geographical feature as the mean-height of a Continent or of an Island.

The mean-depth of the Pacific-Ocean is 4.100 meters, the Atlantic-Ocean 3.860 meters and the Indian-Ocean 3.930 meters. In short the mean-depth of each of these Oceans is 4.000 meters, roughly.

Now, the mean-depth of the Arctic-Sea or the Great-Eurasian-American-Buffer-Sea is only 1.170 meters, which is less than one third of the above figure given for the Oceans.

This works out in this way. Whereas the volume of the Pacific-Ocean is 677.000.000 cubic kilometers and the volume of the Atlantic-Ocean is 317.000.00 cubic kilometers and the Indian-Ocean, 287.000.000 cubic kilometers, the volume of the Arctic-Sea is only 16.400.000 cubic kilometers.

Whereas the area of the Arctic-Sea is less than one fifth of the Indian-Ocean, which is the smallest, the volume of the Arctic-Sea is even less than one seventeenth of the Indian- Ocean.

For this very reason it can be said that the Basin of the Arctic-Sea is only a miniature in comparison with the giant Basins of the Oceans.

Thus, the three reasons given above, by definition, by area and by volume, prove that the Arctic-Sea cannot be considered an Ocean but a Buffer-Sea.

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