

'THE ATLAS AND THE GLOBE OF RUSSIAN GEOGRAPHICAL EXPLORATIONS AND DISCOVERIES OF THE EARTH': CONCEPTS AND CONTENTS

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The Atlas of Russian Geographical Explorations and Discoveries of the Earth is being developed as an integrated illustrated cartographical work devoted to the history of geographical discoveries made by Russian explorers during the whole period of Russian nationhood. This atlas reflects the history of geographical exploration of Russia' territory on different stages of its existence, and the contribution of Russian explorers and discoverers to the global process of accumulation of knowledge about all. It gives the detailed picture of expedition activities of the Russian Academy of Sciences, the Russian Geographical Society, and other Russian institutions and authorities engaged in exploration of Russia and the whole world. The thematic contents of the atlas are given in a chronological order.

It is being developed in the form of three separate issues with the following chronological frames:

- 1) up to 1845 - the year of the establishment of the Russian Geographical Society;
- 2) 1845-1917;
- 3) from 1917 up to the present.

The Atlas presents the process of the main Russian explorations and discoveries connected with removing of 'white spots' from the world maps in the historically consequent, geographically accurate, and cartographically clear way; describes their characteristics and specific historical context of the time they took place, their significance, as well as the role in this process of discoverers and explorers themselves. The route maps themselves as well as encyclopedically short but informative text notes to them accompanied by various illustrations the pictures of explorers and discoverers, photos of objects (artifacts) connected with them, gravures, pictures, drawings, and photos devoted to these events, old maps, fragments of manuscripts recording some or other explorations and discoveries, etc. contribute to the most full and comprehensive presentation of the process of explorations and discoveries. All this allows to describe the journeys of Russian discoveries more excitingly, to characterize their achievements and various motives: an interest in new lands, financial well-being, military eagerness, civil duty, political necessity, scientific interests, and simply curiosity.

Special emphasis is made on the Russian priority of some or others discoveries having the world or national importance, and the priority of geographical discovery is attributed to a person who was the first to "find out the given object and give the first substantial information about it, which allow to mark this object on the map of the Earth".

A lot of documents and materials from the Archive of the Russian Geographical Society, the Russian State Archive of Ancient Acts, the Archive of the Russian Academy of Sciences, the Military History Archive, the Central Naval Archive, as well as from the collections of the State Historical Museum, of manuscripts and maps departments of the Library of the Russian Academy of Sciences, the Russian National Library, and the Russian State Library are used during the compilation of the atlas maps, writing the texts, and the selection of illustrations.

The globe of Russian geographical explorations and discoveries is being developed only in the electronic environment in the form of a virtual interactive product a virtual globe. It is based on a mathematical model of a sphere with a 10° grid and the parameters of the Krasovskiy ellipsoid. The model of the sphere and the system of its management has been developed with the help of the language ActionScript 3. The routes of travelers and expeditions are presented on the globe by means of animation images; their frames combined in a virtual globe with the help of the program Flash.

The atlas is planned to be issued in full to the 170th anniversary of the Russian Geographical Society.

As for the coverage of events, contents, the depth of scientific consideration, and the form of presentation, the 'Atlas of Russian Geographical Explorations and Discoveries of the Earth' unlikely has any analogue in the world. It will certainly be popular not only among the specialists in the spheres of geography and history, but also by wide public. It will be especially important for purposes of education.