Key Points of Geoscience Research and Its Future Development Trend

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Abstract: In recent years, with the development of economy and the progress of society, the people’s thinking consciousness level has been continuously improved, thus effectively promoting the development and deepening of earth science research work. Researchers say that as one of the important basic disciplines, the number of disciplines involved in earth science is relatively complex, and among them, the contents studied by a large number of disciplines are closely related to human survival. Therefore, it is of great significance and value for the improvement and optimization of the earth’s ecological environment to effectively promote the rational implementation and deepening of the earth’s scientific research. In this study, by sorting out and analyzing a large number of data of geoscience research work at home and abroad, the researchers made an in-depth analysis and exploration of the key points of geoscience research work at home and abroad and the future development trend of geoscience research work, aiming at pointing out the direction for the development of geoscience research work in China, thus laying a good foundation and guarantee for improving and optimizing the comprehensive quality of geoscience research work.

Keywords: Earth Science; Research Status; Key Points of Scientific Research; Development Trend; Practical Significance

As one of the important scientific fields, geoscience research involves a wide range of fields, including geology, geophysics, energy science, atmospheric science, environmental science and marine science. Generally speaking, the development of relevant research work is of great significance for human beings to further realize their full understanding and clear understanding of the natural environment, and is conducive to promoting the harmonious coexistence between man and nature, thus helping human beings to rationally realize the scientific transformation of nature in the process of development, which is of great significance and value for the progress of human society. In recent years, with the continuous improvement of the quality of life, more and more people pay great attention to earth science research work, thus reasonably promoting the orderly development of the earth science research work. Faced with this trend, researchers say that through the effective development and progress of earth science research, human beings can better achieve harmonious coexistence with nature, which has positive significance and value for the implementation of the concept of sustainable development.

1. The value of earth science research work

The researchers pointed out that as one of the important basic disciplines, the development and implementation of earth science research work is conducive to helping human beings better realize effective understanding and full understanding of earth knowledge, and has a good driving value for improving and optimizing...
the level of earth research work\(^1\). On this issue, after a lot of analysis, the researchers put forward that through the effective exploration and optimization of earth science, human beings can fully understand and recognize the related contents such as the development of the earth and the change of the natural environment, which will play a good role in promoting the transformation of the natural environment during the development of human society. At the same time, a large number of studies show that through the orderly development of earth science research, researchers can improve and optimize the shortcomings in the current social development process in time, which is of great significance to the development and prosperity of human society.

2. Current earth science research work points

2.1 The problem of orogenic belts

As one of the hot issues in current geoscience research, the orogenic belt is the focus of a large number of regional scientific researchers. Generally speaking, orogenic belts mainly include orogenic types, orogenic processes, orogenic forms, and orogenic mechanisms. In the research process of this discipline, researchers have effectively analyzed and explored the movement of ancient continental plates. At the same time, some researchers have systematically analyzed magma flow and melting, thus further realizing the orderly development and implementation of related research work. Based on this, human beings have realized a further understanding of the orogenic movement in the back arc area and the active continental margin, which has a positive effect on improving the comprehensive level of research work.

2.2 Global tectonic belt problem

On the research of global tectonic belt, relevant researchers mainly analyzed and explored Tethys tectonic domain, evolution of Pacific island arc and plate movement of Qinghai-Tibet Plateau. A large number of practices show that through the analysis of related plates and tectonic domains, researchers can analyze and explore the development of the natural environment of the earth more clearly, which is of good significance for human beings to better understand nature\(^2\). At the same time, by analyzing the global tectonic belt, researchers can further realize clear control and effective observation of the evolution of the natural environment, which lays a foundation for improving the research level.

2.3 Energy issues

As one of the important issues in the development of human society, the energy problem has an important impact on the development of human society. At present, due to the restriction of energy, a large number of countries have encountered corresponding bottlenecks in the development of social productive forces. Based on this, the military energy problems in various countries all over the world show high concern. Therefore, for our country, from the perspective of development, effectively promoting the research on energy has become an important part in the field of geoscience research in our country. Generally speaking, through the rational development of energy research, researchers can further realize the systematic analysis of mineral resources reserves, metallogenic mechanism, ore application and mining work, which can promote the rational solution of energy problems.

2.4 Geological disasters

In recent years, geological disasters such as volcanoes, earthquakes and tsunamis have greatly affected the development of human society. Based on this, a large number of earth science researchers have made the research work of related natural disasters the key content of their research. On this issue, a large number of studies have shown that through the reasonable control of earth science research work, human beings can systematically analyze the natural environment, which is of positive significance for the promotion and improvement of the level of geological disaster research work\(^3\). Based on this, in daily life, researchers can better improve and optimize the ability of geological disaster prediction, which has a good promotion value for controlling the influence of geological disasters and ensuring the safety of people’s lives and property.

2.5 Environmental protection issues

On the issue of environmental protection, through the development of earth science research, researchers can effectively realize a reasonable analysis of environmental problems. Generally speaking, environmental protection is a brand-new field differentiated during the
study of geological disasters. In the research process, through reasonable analysis of relevant contents, researchers can further realize effective analysis of natural environmental problems, which is of good recommendation significance for the orderly implementation of environmental protection work and is conducive to the harmonious coexistence between man and nature. In view of this problem, the researchers said that carrying out environmental protection research is conducive to reforming the objective world and realizing the establishment and improvement of relevant development mechanisms, which is of great significance and value for maintaining the balance of ecosystems in the natural environment.

3. The future development trend of earth science research work

3.1 Strengthening the global consideration of earth science knowledge

From the development point of view, in the future earth science research process, the related research work should be further developed systematically, so as to promote the cross-integration of various research fields, so as to lay a good foundation for the development of interdisciplinary research work, thus achieving the comprehensive and overall improvement of research work and providing power for the in-depth development of research work. For this problem, the researchers said that through the intervention of global vision, the researchers can better realize the systematic analysis of related contents, which is of positive significance for improving the comprehensive quality of China’s geoscience research.

3.2 Reasonable promotion and optimization of research technology level

Relevant research shows that in the process of earth science research, at present, the main problem in China lies in the relatively weak technical level, which leads to the difficulty of realizing reasonable implementation and deepening of earth science and training research, and is not conducive to the effective guarantee of scientific and accurate research results. Therefore, in the future research process, researchers should further intensify their scientific research work, so as to effectively realize the exploration of earth science research technology, thereby effectively improving the technical level, reasonably and effectively meeting the actual needs of earth science research work, and providing guarantee for the accuracy of related research results.

3.3 Enhancing the pertinence of earth science research work

In the process of earth science research, in order to effectively realize the reasonable deepening of research work in various fields, researchers should establish and improve the research direction in combination with practical problems while carrying out research work, so as to ensure that the research work has strong pertinence. In view of this problem, a large number of studies show that strengthening the pertinence of research work will help researchers to further establish research objectives and optimize research directions, which will have a good driving value for the further development of research work.

4. Conclusion

From the perspective of development, at this stage, with the promotion of social and economic development, earth science research has become the key issue of research all over the world. To solve this problem, in daily work, in order to effectively improve and optimize the level of geoscience research work, researchers should conduct in-depth analysis and exploration based on the current social research hotspots, so as to effectively consider the development of geoscience research work, so as to lay a solid foundation and guarantee for the follow-up research work.

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