



教育部深空探测联合研究中心
Center of Space Exploration, Ministry of Education of China

The Report on the Process of “Jointly Lunar Map Drawing Project by Chinese and Italian College Students”

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- Under the guidance of the Ministry of Science and Technology and the Ministry of Education of China, Center of Space Exploration (hereinafter referred to as Center) is responsible for the “Joint Lunar Map Drawing Project by Chinese and Italian College Students” with tremendous support from National Remote Sensing Center and National Astronomical Observatories of the Chinese Academy of Sciences.



- Related universities such as Peking University, Tsinghua University, China University of Geosciences (Beijing, and Wuhan), East China Normal University, Nanjing University, and Chongqing University undertake specific research tasks.



- With the guidance of experts both from China and Italy, Chinese and Italian college students use the scientific data obtained from Chang'E-1 lunar probe and make joint efforts to draw digital map of the moon, in a bid to develop the students' ability in analyzing deep space exploration data, arouse the students' interest in exploring the mysteries of the universe, enhance the application of Chinese lunar exploration data in international cooperation, probe to draw a series of maps, including Lunar Element Distribution Map, Geological Structure Map, Microwave Brightness Temperature Map, and Map of Solar Wind Ion, At last, we will compile and publish the valuable research materials offered by the research units engaged in the popular science textbooks, improve the international images of China in lunar exploration, and promote cooperation in space exploration of China and Italy.



1. Organize Chinese research team

- As the Ministry of Science and Technology planned to launch the “Joint Lunar Map Drawing Project by Chinese and Italian College Students”, the Center responded quickly and organized research teams and selected outstanding institutions of higher education. The 7 universities selected are Peking University, Tsinghua University, China University of Geosciences (Wuhan), East China Normal University, Nanjing University, and Chongqing University, including 77 team members of which 44 are students.



2、 Improve the research content gradually, and form the preliminary research plan

- From the end of 2011, the Center has organized meetings with related universities experts on the research contents for many times, and the plan of “Implementation Scheme of Joint Lunar Map Drawing Project by Chinese and Italian College Students” and “Execution Plan for Joint Lunar Map Drawing Project by Chinese and Italian College Students” were further polished. Translation in English of the plan were also produced. In September, 2013, leaders from China’s Ministry of Science & Technology paid a visit to Italy and conveyed the information of the related contents and plan to the Italian side.



3、 Promote project implementation through different channels

- After establishment the research team and determine the research content, the Center report work to the related ministry organizely and systematically and promote the project application and approval. Through variety channels with Italian side such as meeting, video discussion and communicating on the Italy embassy in Beijing then lead to our research team paid a visit to Italy to communicate with them and Look forward to receive anticipated results.



- 1). On November 15 to 16, 2013, the fourth China-Italy Innovation Forum was held in the Beijing Scientific Committee. During which, the National Remote Sensing Center of China signed a Program Cooperation Memo with Italy, and the Center organized a meeting for the members of China's project team and the representatives from Italian Space Agency to exchange their views on the "Joint Lunar Map Drawing Project by Chinese and Italian College Students" and to reach some preliminary agreements on the research contents, cooperation modes, team establishments, etc.



- 2). On June 16, 2014, leaders from China's Ministry of Science & Technology reached a consensus on the China-Italy project research with the Italian side and formed the meeting minutes during their visits in Italy.
- 3). On September 12, 2014, China's project team reported the project progress to the leaders of China's Ministry of Science & Technology and further ensured the research funding channels for the project as well as other safeguard measures.



- 4). On November 24, 2014, we negotiated to hold a video meeting for discussion about the China-Italy project with the Italian side at the conference center of China University of Geosciences (Beijing). This meeting, based on the minutes formed on June 16, 2014, was mainly about the linkage of research contents, the time and plans of the research, mutual visits, etc. , and we decided to carry out project cooperation and exchanges during China's visits in Italy at the end of January, 2015.



- 5). On January 7, 2015, China' project team went to the Embassy of Italy in Beijing and discussed with Professor Yi Nuocheng about the project cooperation and research and the related issues of going to Italy for communication. Professor Yi readily agreed to contact other embassies of Italy in China so as to facilitate the communication for the Chinese part, and he also promised, by negotiating with the Italian side, to provide the documents of the memo as well as the related data required to be given by the Italian side in the declaration. And all of these could be provided in Rome face to face.



4、 Project research time and attribution of achievements

- On the basis of the meeting minutes formed on June 16, 2014, and according to the linkage of the China- Italy cooperation project, the research contents and the expected outcomes of the research, we expect to finish the research in three years (from January, 2015 to December, 2017) and attribute all the research results to both sides.



In 2017 ,Chang'e-5 will launch in China, we will carry back 2 kilogram lunar soil and rock , there will have many opportunity between China and Italy.there are four goal through our cooperation:

- 1.to have a deep start cooperation between china and Italy,do comprehensive research on deep space science and technology.
- 2. Do cooperation on talent training among the involve universities both China and Italy..



- 3. to exchange Chinese culture and Italian culture through the member involve the project.
- 4. To establish a road between ESA and CNSA (China National Space Administration)



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Thank you!