

Space Weather Services in CMA

Dan DU^{1#+}, Guanglin YANG¹

¹National Center for Space Weather, China Meteorological Administration, China

[#]Corresponding author: dud@cma.gov.cn ⁺Presenter

Space weather services are the start point and final goal of the space weather operation. Now National Center for Space Weather (NCSW) provides three categories services, namely governmental services, public services and professional services. 1) Before or when some significant disastrous space weather events or some important society activities occur, governmental services will be provided to decision-maker in time. The services products include special bulletin about space weather forecasting and warning, and suggestions to mitigate risks. For example, the special bulletin on the increasing space weather activities in five years, which was issued on 2007 March, accepted comments from Prime Minister Wen. 2) Public services generally refer to public education and training, such as exchanging forecasting techniques and expertise, exchanging knowledge on user requirements, and providing public education and outreach material. We have provided variety of public services via paper or media. For example, we have broadcasted space weather forecasting on CCTV for several times so that the public can acquire space weather information immediately. 3) Professional services refer to services for four types of users based on their special requirement of space weather, which include aerospace system (spacecraft, astronaut, payloads etc.), wireless communication linkage system (communication, navigation, orientation etc.), ground technology system (electric power grid, pipeline, aviation etc.), and life system. In the past, we have provided all sorts of services, such as services for FY-2/3 series satellite launching and in orbit, Chang'e 1, Shenzhou 7/8, Tiangong 1, and "Wenchuan" earthquake et al. Especially during Shenzhou 7 mission, we successfully forecasted the time window for the space walk. In future, we will develop prompt, regular, and specialized space weather services.