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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

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Terminology for Chinese meteorological satellites

中国气象卫星名词术语

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard was proposed by the China Meteorological Administration. This standard is under the jurisdiction of the National Satellite Meteorology and Space Weather Standardization Technical Committee (SAC/TC347). Drafting organization of this standard. National Satellite Meteorological Center. The main drafters of this standard. Xian Di, Li Xue, Liu Liwei, Xu Zhe, Qi Yonggang, Jia Xu.

Since 1988, my country's meteorological satellites have covered two major series of geostationary and polar orbit, and technically completed the transition from the first generation to the second generation. It has realized serialized development and operational operation, and promoted it through a wide range of applications in weather forecasting, disaster prevention and mitigation, and climate change. This has triggered the rapid development of satellite meteorology. Fengyun Meteorological Satellite is included in the international business network by the World Meteorological Organization, and more and more countries are developing Begin to receive and use Fengyun satellite products. With the opening and sharing of satellite data, Fengyun series of meteorological satellites have been used in agriculture, forestry, animal husbandry, 98 domestic industries, such as fisheries, have been applied. Since there is currently no specific terminology standard for meteorological satellites in China, the There are phenomena such as inaccuracy, confusion or lack of explanation in the use of related terms. This standard is aimed at users of meteorological satellite data. Expansion of terms related to China's meteorological satellites. Terminology of China Meteorological Satellite

1 Scope

China's national terminology for its meteorological satellites. It covers the general terms, the satellite names, the observing instruments and the satellite systems. China operates one of the three major civil meteorological satellite programmes in the world - the Fengyun series, in both polar and geostationary orbits - and its data feeds the global forecasting system

through the World Meteorological Organization's exchange arrangements. That is precisely why the terminology needs standardising in English as well as Chinese: the products are used by foreign forecasting centres, the instruments are compared with their American and European equivalents, and the calibration and intercomparison work that makes satellite data usable across programmes depends on everyone meaning the same thing by a radiance, a channel, a scan mode and a product level. A vocabulary standard is the least glamorous and most necessary part of participating in that system.

This standard specifies the general terminology of China's meteorological satellites, the terminology of meteorological satellite names, the terms of meteorological satellite observation instruments, and the number of meteorological satellites. According to the term. This standard applies to satellite engineering construction, product research and development, scientific research, application services, communication transmission and teaching.

2 General

2.1 Meteorological satellite An artificial earth satellite that observes the earth's atmosphere and the earth's surface from space, such as meteorology and space weather.

2.2 Geosynchronous orbit The orbit period is equal to the rotation period of the earth, and the motion direction is the same as the orbit of the earth rotation.

2.3 Geostationary orbit The orbital plane coincides with the earth's equatorial plane, the orbital period is equal to the earth's rotation period, and the orbital eccentricity is equal to 0. (2.2).

2.4 Polar orbit The satellite passes through orbits over the north and south poles of the earth each time it revolves around the earth.

2.5 Sun synchronous orbit The orbit where the satellite's orbital plane's eastward angular velocity is equal to the average angular velocity of the sun on the ecliptic.

2.6 Polar orbiting meteorological satellite Meteorological satellite (2.1) operating along polar orbit (2.4).

2.7 Geostationary meteorological satellite Meteorological satellite (2.1) operating along geosynchronous orbit (2.2).

2.8 Payload payload An instrument or equipment installed on a satellite platform to perform a specific task.

2.9 Data processing center The information system responsible for the collection, processing, storage, distribution, application and service of meteorological satellite (2.1) data.