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**Technical specifications of electromagnetic environmental
protection for radio telescopes**

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Foreword

This document is in accordance with the provisions of GB/T 1:1-2020 "Guidelines for Standardization Work Part 1: Structure and Drafting Rules for Standardization Documents" drafting:

Please note that some contents of this document may refer to patents: The issuing agency of this document assumes no responsibility for identifying patents:

This document is proposed and managed by the National Radio Interference Standardization Technical Committee (SAC/TC79):

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Technical specification for radio telescope electromagnetic environment protection

1 Scope

This document specifies the requirements for the protection of the electromagnetic environment of radio telescopes and describes the measurement of the electromagnetic environment of radio astronomy ground observation stations:

This document is applicable to the electromagnetic environment measurement during the site selection, construction, operation and maintenance of radio astronomy ground observation stations:

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text: Among them, dated references

For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to this document:

GB/T 6113:101 Radio Disturbance and Immunity Measuring Equipment and Measurement Methods Specification Part 1-1: Radio Disturbance and Immunity Measuring equipment Measuring equipment

3 Terms and definitions, abbreviations

3:1 Terms and Definitions

The following terms and definitions apply to this document:

A generic term used for radio waves:

Include a specific frequency band in the frequency allocation table, stipulating that the frequency band can be used for one or more terrestrial or space wireless networks under specified conditions:

used by the telecommunications service or the radio astronomy service:

radio astronomy radioastronomy

Astronomy based on the reception of radio waves originating in the universe:

Harmful interference harmful interference

Endanger the normal operation of radio navigation or other safety services, or seriously impair, hinder or repeatedly interrupt unmanned

Interference with radio communications services:

The state in which two or more radio services use the radio spectrum in the same frequency range:

power densitypower density

Transmitted power per unit area in a cross-section perpendicular to the direction of propagation of electromagnetic waves: