ISO 22009:2023-01 (E)

Space environment (natural and artificial) - Model of the Earth's magnetospheric magnetic field

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Terms and definitions 1

4 General concepts and assumptions 2
4.1 Magnetic field induction in the Earth's magnetosphere 2
4.2 Magnetospheric magnetic field standardization: process-based approach 2

5 Model requirements 3
5.1 General 3
5.2 The magnetospheric magnetic field sources 3
5.3 Parameterization 3
5.4 Magnetospheric dynamics 3
5.5 Model testing and comparison with measurements 3

6 List of criteria 3

Annex A (normative) Paraboloid model of the magnetospheric magnetic field: calculation of induction of the magnetic field of the magnetospheric currents 5

Annex B (informative) Submodels 11

Annex C (informative) Coordinate systems and dataset for model testing 14

Bibliography 16