

Template for comments and secretariat observations

Date: 22 June 2007

Document: CD22009

1	2	(3)	4	5	(6)	(7)
MB ¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment ²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
JP	1 4	the magnetic field in the region	Te	The model describes the magnetic field in the region "from 1 Re to 6.6". It means that the model includes the 'ionosphere'. (1Re=the surface of the earth)	It shall be mentioned following two items into the draft; ·The ionospheric current is one of important elements to constitute the magnetospheric magnetic field structure. ·The model description region should be re-defined. (See the next comment.)	CLOSED: Accepted and partially implemented. The statement that ionospheric currents are not the subject of the proposed Standard has been incorporated in Sec. 1 and 4.
JP	2.3	Magnetospheric sources of magnetic field	te	Magnetospheric sources of magnetic field are currents flowing 'inside' the Earth's magnetosphere include 'ionospheric currents'. (In general, magnetic field data which were measured by LEO satellites show effects caused not only by magnetospheric currents but also ionospheric currents.) The ionospheric currents contribute to the magnetic field variation at LEO (altitude; at least 600km). The regular part of the magnetic field model is valid at higher altitudes than 3000km or so if it does not include the effects from the ionospheric currents. Sq (Geomagnetic solar quiet daily variation field) variation could be appreciable at altitudes around 1000km. Please see following references. 1. Sugiura, M. and M.P. Hagan, Geomagnetic Sq variation at satellite altitudes: Is Sq correction important in Magsat data analysis?, Geophys. Res. Lett., 6, 397, 1979. 2. Maeda, H., T. Iyemori, T. Araki,	Taking into account of the numerical estimation or the observational facts at LEO, '1.5 Re' is a safety value as a lower limit of the model which does not include the effect from ionospheric currents.	CLOSED: Accepted and partially implemented. Ionospheric currents are described in the list of magnetospheric currents. A short comment about ionospheric current effect at altitudes above 1.5Re was introduced. The statement that ionospheric currents are not the subject of the proposed Standard has been incorporated in Sec. 2.3.

1 MB = Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)

2 Type of comment: ge = general te = technical ed = editorial

NOTE Columns 1, 2, 4, 5 are compulsory.

Template for comments and secretariat observations

1	2	(3)	4	5	(6)	(7)
MB ¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment ²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
				<p>and T. Kamei, New evidence of a meridional current system in the equatorial ionosphere, Geophys. Res. Lett., 9, 337-340, 1982.</p> <p>3. Yamashita, S. and T. Iyemori, Seasonal and local-time dependences of the inter-hemispheric field-aligned currents deduced from the Øersted satellite and the ground geomagnetic observations, J. Geophys. Res., VOL. 107, NO. A11, 1372, doi:10.1029/2002JA009414, 2002.</p>		
JP	2.3	Field-aligned currents, produced by currents flowing along the auroral magnetic field lines, closed by currents on the magnetopause and on the ionospheric surface.	ge	The terms 'on the ionospheric surface' mean 'on the interface (the altitude is 500km or above) between the ionosphere and the magnetosphere.'	'on the ionospheric surface' should be changed to 'in the ionosphere'	CLOSED: Accepted and implemented.

1 MB = Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)

2 Type of comment: ge = general te = technical ed = editorial

NOTE Columns 1, 2, 4, 5 are compulsory.