
Space data and information transfer systems — Attitude data messages

*Systèmes de transfert des informations et données spatiales —
Messages de données d'attitude*



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Foreword

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 13541 was prepared by the Consultative Committee for Space Data Systems (CCSDS) (as CCSDS 504.0-B-1, May 2008) and was adopted (without modifications except those stated in Clause 2 of this International Standard) by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 13, *Space data and information transfer systems*.

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Space data and information transfer systems — Attitude data messages

1 Scope

This International Standard specifies two standard message formats for use in transferring spacecraft attitude information between space agencies: the attitude parameter message (APM) and the attitude ephemeris message (AEM). Such exchanges are used for:

- preflight planning for tracking or attitude estimation support;
- scheduling attitude and data processing support;
- carrying out attitude operations;
- performing attitude comparisons;
- carrying out attitude propagations and/or sensor predictions;
- testing to initialize sub-system simulators (communications, power, etc.).

This International Standard includes sets of requirements and criteria that the message formats have been designed to meet. For exchanges where these requirements do not capture the needs of the participating agencies, another mechanism may be selected.

The scope and field of application are furthermore detailed in subclause 1.2 of the enclosed CCSDS publication.

2 Requirements

Requirements are the technical recommendations made in the following publication (reproduced on the following pages), which is adopted as an International Standard:

CCSDS 504.0-B-1, May 2008, *Attitude data messages*

For the purposes of international standardization, the modifications outlined below shall apply to the specific clauses and paragraphs of publication CCSDS 504.0-B-1.

Pages i to v

This part is information which is relevant to the CCSDS publication only.

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Add the following information to the reference indicated:

[4] Document CCSDS 301.0-B-3, January 2002, is equivalent to ISO 11104:2003.

[7] Document CCSDS 502.0-B-1, September 2004, is equivalent to ISO 22644:2006.