## INTERNATIONAL STANDARD

ISO 13526

First edition 2010-09-15 **AMENDMENT 1** 2015-07-01

### Space data and information transfer systems — Tracking data message

#### **AMENDMENT 1**

Systèmes de transfert des informations et données spatiales — Message de données de suivi

# iTeh STANDARD PREVIEW (standards.iteh.ai)

ISO 13526:2010/Amd 1:2015 https://standards.iteh.ai/catalog/standards/sist/9a0b364b-cc92-4373-a647-7fe97d9b3e7c/iso-13526-2010-amd-1-2015



### iTeh STANDARD PREVIEW (standards.iteh.ai)

ISO 13526:2010/Amd 1:2015 https://standards.iteh.ai/catalog/standards/sist/9a0b364b-cc92-4373-a647-7fe97d9b3e7c/iso-13526-2010-amd-1-2015



#### COPYRIGHT PROTECTED DOCUMENT

#### 

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Ch. de Blandonnet 8 • CP 401 CH-1214 Vernier, Geneva, Switzerland Tel. +41 22 749 01 11 Fax +41 22 749 09 47 copyright@iso.org www.iso.org



### Recommended Standard CCSDS 503.0-B-1 AMENDMENT 1

Issue Date: September 2010

### **Tracking Data Message**

#### AMENDMENT 1

The Management Council of the Consultative Committee for Space Data Systems (CCSDS) has authorized the publication of amendment 1 to CCSDS 503.0-B-1, issued November 2007.

Page 3-27

Subsection 3.5.2.6 RANGE,

insert new sentence following "If ambiguous range is provided . . . the RANGE observable must be performed":

"For two-way and three-way data, the ICD should specify whether the observable is based upon the round trip light time, or half the round trip light time (due to the signal's having traveled to the spacecraft and back to the receiver)."

ISO 13526:2010/Amd 1:2015

Page 3-31

https://standards.iteh.ai/catalog/standards/sist/9a0b364b-cc92-4373-a647-

7fe97d9b3e7c/iso-13526-2010-amd-1-2015

Subsection 3.5.5.1 CLOCK BIAS.

replace third and fourth sentences ("For example, the CLOCK\_BIAS keyword . . . consistent with the TDM convention for differenced data") with the following:

"For example, the CLOCK\_BIAS keyword may be used to show the difference between UTC and a station clock by setting PARTICIPANT\_1 to the name of the station clock and PARTICIPANT\_2 to 'UTC'. The observable should be calculated as clock#2 minus clock#1 (i.e., UTC – ST, where ST is the station time), consistent with the TDM convention for differenced data."

Reference Number: CCSDS 503.0-B-1 Cor. 1

NOTE - Current versions of CCSDS documents are maintained at the CCSDS Web site: http://www.ccsds.org/

Correspondence regarding CCSDS documents should be addressed to

CCSDS Secretariat Space Communications and Navigation Office, 7L70 Space Operations Mission Directorate NASA Headquarters Washington, DC 20546-0001, USA

#### **AMENDMENT 1 TO CCSDS 503.0-B-1 (Continued)**

#### Page 3-31

Subsection 3.5.5.1 CLOCK\_BIAS (continued),

- after the fifth sentence ("This parameter may . . . including Delta-DOR."), insert the following:

"If used for Delta-DOR, only a single CLOCK\_BIAS should be provided per daily VLBI session, with a time-tag strictly before the first data point (e.g., one minute prior), and with the understanding that the clock will continue to drift throughout the session. An exception could be made for the (rare) case where a station clock is reset in the middle of a VLBI session, in which case a second CLOCK\_BIAS measurement may be provided."

#### Page B-3

Add new row at end of table:

33. Whether the RANGE observable for 2W and/or 3W range is based on the round trip light time, or half the round trip light time.

3.5.2.6

#### Page D-11

### iTeh STANDARD PREVIEW

Figure D-11, at the bottom of the figure, replace

"CLOCK\_BIAS = 2004-136T15:42:00.0000-4.59e-7 CLOCK\_BIAS = 2004-136T16:02:00.0000 https://standards.iteh.ai/catalog/standards/sist/9a0b364b-cc92-4373-a647-4.59e-7" with "CLOCK\_BIAS = 2004-136T15:41:00:0000-24.59e-7"

#### Page D-15

#### Figure D-15,

replace

"PARTICIPANT\_1 = UTC-NIST PARTICIPANT\_2 = DSS-10" with "PARTICIPANT\_1 = DSS-10

PARTICIPANT 2 = UTC-NIST"

Distribution Control Number: TC 10-22 Reference Number: CCSDS 503.0-B-1 Cor. 1 Page 2 of 3

#### **AMENDMENT 1 TO CCSDS 503.0-B-1 (Continued)**

Page D-15

Figure D-15 (continued),

- replace

"PARTICIPANT\_1 = UTC-NIST PARTICIPANT\_2 = DSS-40" with "PARTICIPANT\_1 = DSS-40

PARTICIPANT\_2 = UTC-NIST"

- replace

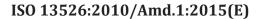
"PARTICIPANT\_1 = UTC-NIST PARTICIPANT\_2 = DSS-60" with "PARTICIPANT\_1 = DSS-60

PARTICIPANT\_2 = UTC-NIST"

### iTeh STANDARD PREVIEW (standards.iteh.ai)

ISO 13526:2010/Amd 1:2015 https://standards.iteh.ai/catalog/standards/sist/9a0b364b-cc92-4373-a647-7fe97d9b3e7c/iso-13526-2010-amd-1-2015

Distribution Control Number: TC 10-22 Reference Number: CCSDS 503.0-B-1 Cor. 1 Page 3 of 3



## iTeh STANDARD PREVIEW (standards.iteh.ai)

ISO 13526:2010/Amd 1:2015 https://standards.iteh.ai/catalog/standards/sist/9a0b364b-cc92-4373-a647-7fe97d9b3e7c/iso-13526-2010-amd-1-2015