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AMENDMENT 1
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Reference atmospheres for aerospace use AMENDMENT 1

Atmosphères de référence pour l'application aérospatiale
AMENDEMENT 1



Reference number
ISO 5878 : 1982/Amd.1 : 1990 (E)

Foreword

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Amendment 1 to ISO 5878 : 1982 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Sub-Committee SC 6, *Standard atmosphere*.

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Reference atmospheres for aerospace use

AMENDMENT 1

Page 2, table 2

Replace the unit kPa by hPa.

Page 3, 3.1, second paragraph

Replace the first phrase by the following:

Features typical of the thermal structure of the tropical atmosphere are shown in figure 1 and in table 16.

Page 6

Replace the note by the following:

NOTE — A one- or two-digit number preceded by a plus or minus sign following each entry of pressure and density indicates the power of ten by which that entry should be multiplied.

Page 7, table 4

- For $h = 50\,000$ m, replace $\rho = 1,047\,952 \times 10^{-3} \text{ kg}\cdot\text{m}^{-3}$ by $\rho = 1,047\,852 \times 10^{-3} \text{ kg}\cdot\text{m}^{-3}$.
- For $h = 56\,000$ m, replace $T = 255,521$ K by $T = 255,525$ K.
- For $h = 58\,000$ m, replace $\rho = 4,032\,813 \times 10^{-4} \text{ kg}\cdot\text{m}^{-3}$ by $\rho = 4,082\,813 \times 10^{-4} \text{ kg}\cdot\text{m}^{-3}$.
- For $h = 62\,000$ m, replace $p = 1,080\,647 \times 10^{-1}$ hPa by $p = 1,680\,647 \times 10^{-1}$ hPa.
- For $h = 64\,000$ m, replace $\rho = 1,879\,963 \times 10^{-4} \text{ kg}\cdot\text{m}^{-3}$ by $\rho = 1,875\,963 \times 10^{-4} \text{ kg}\cdot\text{m}^{-3}$.
- For $h = 70\,000$ m, replace $p = 5,261\,760 \times 10^{-2}$ hPa by $p = 5,264\,760 \times 10^{-2}$ hPa.
- For $h = 80\,000$ m, replace $\rho = 1,877\,773 \times 10^{-5} \text{ kg}\cdot\text{m}^{-3}$ by $\rho = 1,877\,743 \times 10^{-5} \text{ kg}\cdot\text{m}^{-3}$.

Page 13, table 10

For $h = 56\,000$ m, replace $\rho = 5,051\,153 \times 10^{-4} \text{ kg}\cdot\text{m}^{-3}$ by $\rho = 5,041\,153 \times 10^{-4} \text{ kg}\cdot\text{m}^{-3}$.

Page 16, table 13

For $h = 32\,000$ m, replace $H = 32\,918$ m by $H = 31\,918$ m.

Page 20, table 16, 60° N, June-July, 4th line

Replace $H = 23,500$ km by $H = 23,000$ km.

Page 21, table 17

- 3rd line, 4th column, replace 40/38 (245) by 40/38 (245)*.
- Add the following note:

* Numerator: number of launchings in December-January; denominator: number of launchings in June-July; in brackets: total number of launchings.

Page 21, table 18

- 6th line, 2nd column, replace 30° 57' S by 31° 09' S.
- 6th line, 3rd column, replace 136° 31' E by 136° 48' E.
- 7th line, 3rd column, replace 160° 29' W by 106° 29' W.

Page 24, table 21

- 6th line, 9th column, replace 224 by 226.
- 17th line, 6th column, replace 274 by 276.

Page 25, table 21

29th line, 9th column, replace 220 by 225.

Page 26, table 21

- 22nd line, 3rd column, replace 238 by 234.
- 22nd line, 9th column, replace 235 by 234.

Page 27, table 21

- 13th line, 4th column, replace 210 by 310.
- 22nd line, 3rd column, replace 242 by 240.
- 22nd line, 4th column, replace 252 by 262.
- 22nd line, 8th column, replace 244 by 241.

Page 28, table 22

- 6th line, 10th column, replace $1,841\,01 \times 10^{-2}$ by $1,841\,0 \times 10^{-2}$.
- 10th line, 10th column, replace $1,026\,9 \times 10^{-4}$ by $1,026\,9 \times 10^{-3}$.

Pages 34 to 37

Replace the term "geometrical" by "geometric".

Page 34, figure 1, 60° N

Modify the December-January curve between the 35 km and 80 km altitudes so that it shows a constant temperature of 251,35 K for the layer between 49,3 km and 51,3 km.

Page 36, figure 3, 60° N Winter

Modify the "warm" curve between the 35 km and 80 km altitudes so that it shows a constant temperature of 267,15 K for the layer between 42,2 km and 48,3 km.