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HOT, COLD, AND ANNUAL REFERENCE ATMOSPHERES FOR EDWARDS AIR FORCE BASE, CALIFORNIA (1975 VERSION)

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16. ABSTRACT

Three reference atmospheres pertaining to summer (hot), winter (cold), and mean annual conditions for Edwards Air Force Base, California, are presented from surface to 90 km altitude (700 km for the annual model). Computed values of pressure, kinetic temperature, virtual temperature, and density and relative differences [percentage departure from the Edwards reference atmosphere, 1975 (ERA-75)] of the atmospheric parameters versus altitude are tabulated in 250 m increments. Hydrostatic and gas law equations were used in conjunction with radiosonde and rocketsonde thermodynamic data in determining the vertical structure of these three atmospheric models. The thermodynamic parameters have all been subjected to a fifth degree least-squares curve-fit procedure, and the resulting coefficients were incorporated into Univac 1108 computer subroutines so that any quantity may be recomputed at any desired altitude using these subroutines. This document supersedes NASA TM X-64941 and should be used in place of it.

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DEFINITION OF SYMBOLS AND ABBREVIATIONS

Symbol	Definition
C_s	speed of sound (m s^{-1})
D	atmospheric density (kg m^{-3})
DR	density ratio (percent)
D_0	density at sea level (1.236178 kg m^{-3})
e	vapor pressure (mb)
e_s	saturation vapor pressure (mb)
g	acceleration of gravity (m s^{-2})
g_0	acceleration of gravity at sea level (9.80665 m s^{-2})
H	geopotential altitude (geopotential m)
L_k	kinetic temperature gradient dT/dZ (K m^{-1})
L_m	molecular temperature gradient dT_m/dZ (K m^{-1})
M	molecular weight of air (unitless)
M_0	mean molecular weight of air from 0 to 90 km altitude (28.9644)
P	atmospheric pressure (N cm^{-2})
P_0	sea level pressure (10.1899040 N cm^{-2})
p	atmospheric pressure (mb)
PR	pressure ratio (percent)
PD	pressure difference (N cm^{-2})

DEFINITION OF SYMBOLS AND ABBREVIATIONS Continued

Symbol	Definition
R*	universal gas constant (8.31432×10^3 m^2 s^{-2} K^{-1})
RD(D)	relative deviation of density (percent) from ERA-74
RD(P)	relative deviation of pressure (percent) from ERA-74
RD(T*)	relative deviation of virtual temperature (percent) from ERA-74
RH	relative humidity (percent)
r'	6342891 } function of latitude to convert geopotential altitude to geometric altitude (m)
r*	6348976 }
S	Sutherland's constant (110.4 K)
T	kinetic temperature (K)
T_m	molecular temperature (K)
T*	virtual temperature (K)
t	kinetic temperature (°C)
Z	geometric altitude (m)
ω	mixing ratio (g kg^{-1})
β	constant used in Sutherland's viscosity equation (1.458×10^{-6} kg/s m $K^{1/2}$)
μ	coefficient of viscosity (N s m^{-2})
μ_0	coefficient of viscosity at sea level (1.778415×10^{-5} N s m^{-2})
η	kinematic viscosity (m^2 s^{-1})
γ	ratio of specific heat (1.40 unitless)

DEFINITION OF SYMBOLS AND ABBREVIATIONS Concluded

Abbreviation	Meaning
ECA-75	Edwards Cold Atmosphere, 1975
EHA-75	Edwards Hot Atmosphere, 1975
ERA-75	Edwards Reference Atmosphere, 1975
KCA-71	Kennedy Cold Atmosphere, 1971
KHA-71	Kennedy Hot Atmosphere, 1971
PRA-63	Patrick Reference Atmosphere, 1963
VCA-73	Vandenberg Cold Atmosphere, 1973
VHA-73	Vandenberg Hot Atmosphere, 1973
VRA-71	Vandenberg Reference Atmosphere, 1971

TECHNICAL MEMORANDUM X-64970

HOT, COLD, AND ANNUAL REFERENCE ATMOSPHERES FOR EDWARDS AIR FORCE BASE, CALIFORNIA (1975 VERSION)

INTRODUCTION

This report presents the mean and extreme reference atmospheric models from surface to 90 km altitude[1] that should be used in design studies (launch and re-entry analyses) of aerospace vehicles applicable to the Edwards Air Force Base (AFB), California, region, including the NASA Flight Research Center. The mean model (ERA-75) is an atmosphere giving pressure, temperature, and density on an annual basis. The two extreme atmospheres represent the typical extreme thermodynamic conditions that can exist over Edwards AFB and are designated the Edwards hot atmosphere (EHA-75) (summer type) and Edwards cold atmosphere (ECA-75) (winter type).

The development of the Edwards hot and cold atmospheres is similar to the construction of both the Kennedy Space Center [1] and Vandenberg Air Force Base [2] hot and cold atmospheric models. After the three Edwards atmospheres were generated, each was curve-fitted using a fifth degree polynomial and they were made available as Univac 1108 computer subroutines.

BACKGROUND

As a prelude to the construction of the 1975 Edwards atmospheres, the following was accomplished. An annual Patrick reference atmosphere (PRA-63) [3], and extreme winter (KCA-71) and summer (KHA-71) atmospheres [1], were developed for the Cape Canaveral, Florida, area. The annual Vandenberg AFB, California, reference atmosphere (VRA-71) [4] with extreme winter (VCA-73) and summer (VHA-73) type models [2] was then constructed in response to a need for an atmospheric model at that location. Because of Space Shuttle studies involving the Edwards AFB Test Center, a need for similar atmospheres at this site was realized, resulting in the publication of an extreme winter (ECA-74) and summer (EHA-74) together with an annual Edwards atmosphere (ERA-74) [5]. After the publication of Reference 5, it was discovered that the Edwards AFB (Part I) IRIG Range Reference Atmos-

1. The Edwards (annual) reference atmosphere does extend to 700 km altitude.

phere document [6], which was the document used in modeling the lower levels of the Edwards annual 1974 atmosphere, contained erroneous atmospheres. Therefore, a new 1975 annual atmosphere for Edwards AFB was constructed and is given in this document. The Edwards Hot and Cold atmospheres 1974 as presented in Reference 5 are correct but have been renamed (1975) and are reprinted in this document. Therefore, this document supersedes NASA TM X-64941 [5] and should be used in place of it.

GEOGRAPHY

Edwards Air Force Base is located in the south central part of California on the Mojave Desert at latitude 34° 55' N., longitude 117° 54' W. at an elevation of 706 m (2316 ft) above mean sea level. It is situated approximately 225 km (140 mi) east of Vandenberg AFB, with the Sierra, Nevada, and Coast Range Mountains separating the two sites. Although the distance between these two air bases is small, this geographical obstacle allows Vandenberg a coastal climatology and Edwards an arid, desert surrounding.

Edwards is located on the western end of the Mojave Desert with nearby mountains encompassing it from the northwest, westward through the southeast. Within these quadrants, the mountains are 19 to 64 km (12 to 40 mi) away. In the southern part of the range the mountains have an altitude in excess of 3050 m (10 000 ft).

Edwards AFB occupies 1218 km^2 (301 000 acres) and contains many dry lakes consisting of sun-hardened wind-smoothed clay and silt. Seven natural runways crisscross the 17.7 km (11 mi) length of Rogers Dry Lake providing the Flight Research Center with the ability to handle landings of todays biggest and speediest aircraft, and those envisioned for the future. A 4572 by 91 m (15 000 by 300 ft) concrete runway merging with Rogers Dry Lake can give 19.3 km (12 mi) of available runway. Figure 1 shows the vast, flat, desert lands (with dry lake beds) that surround the NASA Flight Research Center headquarters building. Part of the runway area can be seen between the buildings and distant mountain chain of Figure 1.

SURFACE CLIMATOLOGY

The climate at Edwards is typical of desert regions (see References 7 and 8). During July and August, one can expect a mean of 27 days in which the temperature equals or exceeds 100°F. The highest temperature ever recorded is 113° F, while the lowest is 4° F. The mean annual precipitation is small, being slightly less than 4 in. Most of this, approximately 3.2 in., falls during

the winter months of November through March. The total amount of snowfall is also small, usually totaling approximately 1 in. with most of this occurring during January.

Frontal passages are relatively infrequent in the Edwards AFB area. Edwards is protected by mountain ranges that tend to break up fronts, particularly the Pacific cold fronts or cold type occlusions. Frontal passages generally occur from October through April, with the most intense and greatest number occurring during December through February. Two general types of synoptic conditions have an effect on the weather at Edwards: (1) the Great Basin High pressure cell along with the Thermal Low and (2) the Pacific High pressure cell. The positioning of these three centers either allows or prohibits strong Pacific Ocean frontal passages over the Mojave Desert. The high pressure cells tend to be the governing factor during the winter months, while the thermal low dominates the southwestern United States during the summer months providing good flying weather and no frontal passages. For a more detailed description of the Edwards AFB climatology, please refer to References 1 and 9.

CLIMATOLOGY ALOFT

The climatology of temperature versus altitude for Edwards is similar to that at Vandenberg with the exception of surface and near-surface temperatures for the two sites. The mean summer surface temperature at Edwards is more than 13 K warmer than that at Vandenberg. Also the winter surface mean temperature value at Edwards is approximately 2 K warmer. However, conditions reverse aloft (>5 km during summer and >1 km during winter) with temperatures at Edwards being slightly cooler than at Vandenberg. In comparing the annual mean temperature profiles for both sites, Edwards is more than 7 K warmer at the surface and remains warmer through 3 km. However, above this level annual temperatures at Edwards are cooler, by about 1 K, up through 25 km altitude.

Mean temperatures by month versus altitude for Edwards AFB are shown in Figure 2 as being either cooler or warmer than the annual mean. This relative temperature structure is almost identical to that of Vandenberg [2] with only two minor differences noted. First, the Edwards surface temperatures[2] indicate a 6 month summer season starting between April and May, while Vandenberg has only a 5 month summer starting between May and June. However, this difference is not noticed at levels above the surface. Secondly, warm temperatures[2] for winter begin at 13 km for Edwards and at 14 km for Vandenberg.

2. Relative to the annual mean temperature.

CONSTRUCTION OF EDWARDS ANNUAL ATMOSPHERE

Model Generation

The annual Edwards reference atmosphere, 1975 (ERA-75), established by this report used the Uniform Summary of Rawinsonde Observations for Edwards AFB (P.O.R. 1953-1967) and the Vandenberg reference atmosphere [4] as input in construction. Mean temperatures (for annual conditions) were obtained from the Edwards Rawinsonde Summary for the surface, 900 mb, 850 mb, and the other pressure levels aloft. It was then determined that the annual temperature conditions above 3250 m at Edwards were approximately identical to the Vandenberg 1971 model [4], thereby allowing use of the VRA-71 temperatures directly above this level in the modeling process. The mean surface atmospheric pressure was taken from the Revised Uniform Summary of Surface Weather Observations for Edwards AFB (P.O.R. 1962-1972)[3]. Pressures aloft to 90 km were computed using the hypsometric pressure relationship. Densities were then computed versus altitude using the equation of state. However, using this iterative procedure to compute pressures and densities aloft gave somewhat different values from the VRA-71 [4]. Therefore, this iterative procedure was used only to 3250 m — the altitude where pressure, temperature, and density values approximate the VRA-71 values. Thermodynamic values used above this level are VRA-71 values directly, thereby giving identical atmospheric conditions above 3 km in both the Vandenberg and Edwards annual models. Since the station separation between these two sites is approximately 225 km (140 mi), the thermodynamic conditions aloft should be nearly identical.

Curve-Fitting Technique

The values of pressure, density, temperature, and virtual temperature were subjected to a least-squares curve-fit procedure versus geometric altitude from surface to 81 750 m, the altitude at which the fitted temperature profile intersects the U. S. Standard Atmosphere, 1962. The coefficients generated by this method define a fifth degree polynomial as a function of altitude for each thermodynamic quantity subjected to a curve fit. Using the appropriate polynomial, values of pressure, virtual temperature, kinetic temperature, and density can be computed at any desired altitude. For purposes of this report, tabulated values (Table 1) are given only at discrete altitudes.

3. The Uniform Summary of Rawinsonde Observations and the Uniform Summary of Surface Weather Observations for Edwards AFB can be obtained from NOAA, National Climatic Center, Asheville, NC.

Both kinetic temperature and virtual temperature result from simple curve fits of the quantity versus altitude [see equations (15) and (16) that follow]. Since pressure and density vary logarithmically with height, a slightly different procedure was used in deriving coefficients for these parameters. Instead of curve-fitting linear functions of pressure and density, the quantities

$$\ell n \frac{P}{P_1}$$

and

$$\ell n \frac{D}{D_1}$$

were curve-fitted as a function of geometric altitude. (Here, P_1 and D_1 are, respectively, 10 N/cm^2 and 1.2172 kg/m^3.) Therefore, the expressions defining these quantities are exponential functions of the polynomial [see equations (5) and (10) that follow].

In performing the curve fits, each curve is broken into six legs and coefficients are derived for each leg. Therefore, these derived coefficients, as listed in Table 2, are not the same from equation to equation or from leg to leg. In keeping with the procedures of Reference 3, no coefficients are given for virtual temperature or density above the fourth leg (28 250 m). Density is computed above this level via the equation of state.

This annual reference atmosphere is extended to 700 km altitude by integration of basic data from the U.S. Standard Atmosphere, 1962. This extension begins at 81 750 m and assumes an isothermal profile to 90 000 m. In the region from 90 000 to 700 000 m, linear segments of molecular temperature versus altitude are defined by the gradients given in the U.S. Standard Atmosphere, 1962 [9]. Since the Edwards atmospheric profiles are identical to the Vandenberg reference atmosphere, 1971 [4] from 3250 to 700 000 m, the reader should consult this reference if there are further questions concerning procedures followed or equations used within this altitude region.

EXTREME ATMOSPHERIC PARAMETER RELATIONSHIPS

Since the objective of this study is to produce a typical extreme density profile, the question to be answered here is: what actually constitutes a typical extreme atmospheric density profile? The envelopes of extreme density for Cape Kennedy [1], as shown in Figure 3, imply that a typical individual extreme

density profile may be represented by a similarly shaped profile, that is, deviations of density, either all negative or all positive, from sea level to 90 km altitude. However, it is unrealistic for either all low- or all high-density values to occur simultaneously at all altitudes in the atmosphere. Examinations of many individual density profiles show that when large positive deviations (with respect to the mean) of density occur at the surface, correspondingly large negative deviations will occur near 15 km altitude and above. Such a situation occurs during the winter season (cold atmosphere). The reverse is also true — density profiles with large negative deviations at lower levels will have correspondingly large positive deviations at higher levels. This situation occurs in the summer season (hot atmosphere) (Fig. 3).

An idealized vertical temperature profile (associated with an extreme density profile), along with a sea-level pressure value, was used to derive the required pressure versus altitude profile by use of the hypsometric equation. Density was then determined by the ideal gas law. Now, with temperature being the parameter actually used in the modeling program, what is an extreme temperature profile and how are these profiles related to extreme density profiles?

To help answer these questions the National Climatic Center of the National Oceanic and Atmospheric Administration and the U. S. Air Force Environmental Technical Applications Center conducted interlevel and intralevel correlation studies [11,12] on Cape Kennedy, Florida and Vandenberg AFB/ Point Arguello, California radiosonde thermodynamic data. The Cape Kennedy interlevel temperature correlation, as a function of altitude, showed a negative correlation between the lower (2 to 10 km) and higher (14 to 19 km) levels. Monthly maximum negative correlations between 4 km and above ranged from -0.345 (at 16 km in July) to -0.735 (at 18 km in May). The interlevel density correlation study for both Vandenberg and Cape Kennedy showed a high negative correlation between the lower (1 to 3 km) and higher (14 to 18 km) levels. For Vandenberg, on a monthly basis, the interlevel correlations between 2 km and above showed a peak negative density correlation occurring at 16 and 17 km from May through November (maximum of -0.837 in June at 17 km) and occurring slightly lower at 14 and 15 km from December through April (maximum of -0.798 in April at 15 km). Figure 4 gives the seasonal and annual interlevel density correlations between 2 km and other levels. It shows density being positively correlated directly below 8 km and negatively correlated above 8 km altitude. The isopycnic (constant density) level is indicated by the zero interlevel correlation near 8 km. Note that a negative correlation exists up to 35 km altitude. Cape Kennedy data showed very similar results. These studies indicated that temperature and density profiles do exhibit negative correlation characteristics of being either of low value near the surface while high near the tropopause, or high near the ground and low aloft.

Cape Kennedy intralevel correlations between temperature and density ranged from -0.929 (September) to -0.980 (December) at the surface. The correlation at the tropopause level ranged from -0.860 (September) to -0.938 (January). These high negative correlations indicate a low temperature — high density, and high temperature — low density relationship both near the earth's surface and at the tropopause level (15 to 18 km).

CONSTRUCTION OF EXTREME MODELS

Model Generation

With the previous correlation relationships in mind, the following procedure was used in the construction of the two Edwards extreme reference atmospheres.

Edwards AFB constant pressure-level radiosonde data (P.O.R. 1/61-5/68) was used in the construction of the hot and cold temperature profiles.[4] The radiosonde data were visually scanned and extreme temperature profiles were selected as explained in the following.

For the cold "winter type" atmosphere the surface, 900, 850, 800, 750, and 700 mb levels were searched for low (cold) temperatures. Also, the 125, 100, 80, and 70 mb levels were searched for high (hot) temperatures. This searching resulted in the selection of 18 cold temperature profiles (9 cold day and 9 cold night profiles). In most cases profiles with cold temperatures near ground level did exhibit very warm temperatures aloft (near tropopause). This is in keeping with similar results obtained with Vandenberg and Cape Kennedy radiosonde temperature data. Most of the 18 cold temperature profiles were very cold[5] from ground level through 9 km altitude. From 9 through 14 km, temperatures were more normal with increasing altitude, although they were warming up. Very warm temperatures then prevailed from 14 through 24 km, with temperatures cooling off slowly above this level to the stratopause.

In a similar manner 18 hot temperature profiles were selected (9 day and 9 night profiles) to be used in establishing the hot "summer type" temperature profile. High (hot) temperatures were searched for in the pressure-level

4. Data used above radiosonde levels was taken from Point Mugu, California rocketsonde data [2].

5. All temperatures mentioned here are either cold or hot relative to the annual average.

data close to the ground, and low (cold) temperatures near the tropopause level were also found. The 18 hot temperature profiles selected were all hot (see footnote 5) from surface to 10 km altitude. Temperatures cooled with altitude between 10 and 16 km, and cold temperatures existed between 15 and 17 km altitude. Above this level temperatures warmed with altitude up to the stratopause.

To arrive at one hot and one cold temperature profile, the 36 extreme profiles were plotted versus altitude and two idealized temperature profiles were then determined, based on these extremals and the correlative properties of their vertical structure.

A further example of the "correlative vertical structure properties" is shown in Figure 5. Given here are two actual, observed, extreme temperature profiles that occurred on a summer (7-28-66) and winter (12-14-65) day over Edwards AFB. Also given in Figure 5 are the Edwards mean summer and winter profiles [8] along with the extreme temperature envelopes. It can be seen in this figure that the two extreme "day" profiles follow a similar but more extreme vertical structure than do their respective seasonal profiles; i.e., the cold "day" profile is colder than its seasonal counterpart in the low altitude levels (surface to 9 km). It then became much warmer in the stratosphere (10 to 24 km), and colder again above these levels. The hot "day" profile has a similar but opposite vertical temperature structure when compared to the summer mean profile.

The two extreme temperature profiles selected for use in the Edwards hot and cold atmospheres were modeled not only with this extreme vertical structure in mind, but the earth's surface, tropopause, and stratopause altitude levels were the three key levels used, as breakpoints, in modeling the final vertical temperature profile. First, linear temperature legs were used between the three key altitude levels. Then the temperature profiles were further adjusted with additional linear segments so that the resulting density profiles would be realistic. These two Edwards extreme temperature profiles are shown in Figure 6 and temperature/altitude breakpoints are given in Table 3. A very hot (110° F) surface temperature was used for the final summer model, and a cold (32° F) surface value was used for the winter atmosphere. From 47 to 90 km altitude, for the summer model, temperature values used were taken directly from the Vandenberg hot atmosphere, 1973 [2]. Similarly, from 32 to 90 km altitude, Vandenberg cold atmosphere, 1973 [2] temperatures were used in the cold generating program.

Surface pressure values used, were selected as follows. The range of surface pressure for Edwards AFB varies from 9.20 to 9.56 N/cm^2 (920 to 956 mb) with a mean annual pressure of 934 mb (see Reference 1, Section 7). Values ± 0.05 N/cm^2 (± 5 mb) of this mean pressure value were selected to be used in the extreme models, i.e., 9.29 N/cm^2 (929 mb) for the hot atmosphere and 9.39 N/cm^2 (939 mb) for the cold atmosphere. These surface pressure values selected are very similar to the Edwards June average of 9.31 N/cm^2 (931 mb) and the December mean of 9.38 N/cm^2 (938 mb).

Since virtual temperature (T^*) was used as input in the hypsometric pressure equation, the extreme Edwards surface kinetic temperatures (T) were adjusted to approximate T^*. This was accomplished through the following procedure. Eighteen of the hot summer temperature radiosonde profiles for Edwards were obtained and values of temperature, relative humidity, and pressure were used to compute saturation vapor pressure (e_s) and then T^*. Eighteen of the cold winter profiles were also analyzed separately. The mean difference between T^* and T for the two cases is shown in Table 4 with only slight adjustment. This adjusted mean difference ($\Delta T = \overline{T^*} - \overline{T}$) versus altitude was used as a guideline for adding an increment of temperature to the kinetic value on the hot and cold profiles to arrive at virtual temperature versus altitude profiles. The surface hot ΔT used was 1.6 K, with a smaller difference extending up to 7.6 km altitude. The surface cold ΔT had only a small difference, generally about 0.5 K, with a smaller change existing up to 5 km altitude.

Curve Fitting Technique

The values of pressure, density, temperature, and virtual temperature for the Edwards hot and cold profiles were also curve-fitted with fifth degree polynomials from the surface to 90 000 m. This least-squares curve-fitting procedure used on these two extreme atmospheres is identical to that done on the annual model, with the exception that pressure and density were linearly curve-fitted, not logarithmically. That is, the quantities P and D were curve-fitted as a function of geometric altitude. The reason pressure and density were not logarithmically curve-fitted, as was the annual model, is that all the previously constructed hot and cold atmospheres for Kennedy and Vandenberg used a linear fit. Use of a linear fit for pressure and density below 90 km altitude is adequate for the extreme models. However, since all annual models extend to 700 km altitude, a linear fit does not work as well above 90 km and were not used in the annual cases. The hot profile was broken into 11 legs, while the cold model consisted of 9 legs as given in Table 3. Tables 5 and 6 give tabular values at 250 m intervals of the hot and cold Edwards atmospheres, respectively.

SUBROUTINE INFORMATION

The hot (EHA-75) and cold (ECA-75) Edwards computer subroutines were developed using the existing Univac 1108 PRA-63 subroutine [3] as a guide. This procedure was also followed in the construction of the ERA-75 subroutine. The PRA-63 subroutine was revised to fit these new hot and cold Edwards atmospheres, but the methods and functions of these new models were maintained similar to the PRA-63 subroutine. This similarity of all subroutines provides easy utility for the user of computerized atmospheres. Reference 12 gives programmer information pertaining to the similar PRA-63 subroutine. The hot and cold subroutines are in Fortran IV with approximately 600 storage locations. The variable PR has to be dimensioned at least 15 times in the calling program. The same 15 parameters that can be obtained from the PRA-63 are available in the hot, cold, and annual Edwards atmospheres. These 15 parameters are listed below.

PR Call No.	Parameter	Code	Units
PR (1)	= Geometric Altitude	Z	m
PR (2)	= Pressure	PRES	$N\ cm^{-2}$
PR (3)	= Kinetic Temperature	TEMPK	K
PR (4)	= Virtual Temperature	TEMPV	K
PR (5)	= Molecular Temperature	TEMPM	K
PR (6)	= Density	DENS	$kg\ m^{-3}$
PR (7)	= Viscosity	VISCOS	$Ns\ m^{-2}$
PR (8)	= Kinematic Viscosity	VISK	$m^2\ s^{-1}$
PR (9)	= Speed of Sound	SPDSO	ms^{-1}
PR (10)	= Molecular Weight	MWT	unitless
PR (11)	= Sea Level Pressure	PSL	$N\ cm^{-2}$
PR (12)	= Pressure Ratio	PRAT	unitless
PR (13)	= Density Ratio	DR	unitless
PR (14)	= Viscosity Ratio	VR	unitless
PR (15)	= Pressure Difference	DELP	$N\ cm^{-2}$

EQUATIONS USED

Equations Used in Generating Profiles

As was stated earlier, the hydrostatic and ideal gas equations were used as the two governing atmospheric equations in generating the three models. The

input requirement uses a surface pressure value and a virtual temperature profile. Pressure versus altitude was computed using the following iterative equation:

$$P_i = P_{i-1} \exp\left[\frac{-g_0 M_0 (H_i - H_{i-1})}{R^* \frac{(T_i^* + T_{i-1}^*)}{2}}\right] , \quad (1)$$

where P_{i-1} is the base pressure for the first computation and P_i is the pressure level to be computed, above level i-1. This iterative procedure involved an incrementing of 50 m throughout the computation.

Density was computed using the ideal gas law as given in equation (2):

$$D = \frac{10^2 M_0 P}{R^* T^*} . \quad (2)$$

The equation used in converting geometric altitude (Z) to geopotential altitude (H) was

$$H = \frac{Zr'}{Z + r^*} . \quad (3)$$

The equation used to compute virtual temperature (T*) in the ΔT computations is taken from Reference 13:

$$T^* = T (1 + 0.61 w) , \quad (4)$$

where

$$w = \frac{0.622e}{p-e} ,$$

$$e = \frac{RH * e_s}{100} \quad ,$$

and

$$e_s = \text{anti}\,\ell n\left[1.80910 + \frac{17.26945t}{237.3 + t}\right] \quad ,$$

where e_s is written from

$$e_s = 6.11 \times 10\left(\frac{7.5t}{237.3 + t}\right) \quad .$$

See the Definition of Symbols and Abbreviations in the front of this report for the definition of all parameters and constants used in these generation equations.

Equations Used in Computer Subroutines

The following explains the final computation of thermodynamic quantities for the annual Edwards reference atmosphere as listed in Table 1. Analytical equations are presented when applicable. Derived values of the coefficients ($A_0 \ldots A_5$) are given in Table 2. Equations similar to these were used in the hot and cold Edwards atmospheric subroutines.

1. Pressure

   a. Altitude Region: 706 to 81 750 m

$$P = P_1 \exp(A_0 + A_1Z + A_2Z^2 + A_3Z^3 + A_4Z^4 + A_5Z^5) \quad , \qquad (5)$$

where

$$P_1 = 10.0 \text{ N cm}^{-2} \quad .$$

b. Altitude Region: 81 750 to 90 000 m

(1) Analytical Equation

$$P = P_b \exp\left[\frac{-g_0 M_0 r' r^* (Z - Z_b)}{R^* T_b (r^* + Z)(r^* + Z_b)}\right] . \quad (6)$$

(2) Computational Equation

$$P = P_b \exp\left[\frac{-1.376598941 \times 10^{12} (Z - Z_b)}{T_b (6348794 + Z)(6348794 + Z_b)}\right] , \quad (7)$$

where

P_b = pressure at base

T_b = kinetic temperature at base

Z_b = geometric altitude at base.

c. Altitude Region: 90 000 to 700 000 m

(1) Analytical Equation for $L_m \neq 0$

$$\ell n\, P = \ell n\, P_b + \left[\frac{g_0 M_0 r' r^*}{L_m R^* (r^* + Z)(r^* + Z_b)}\right] \ell n \left[\frac{T_{mb}}{T_{mb} + L_m (Z - Z_b)}\right] . \quad (8)$$

(2) Computational Equation for $L_m \neq 0$

$$\ell n\, P = \ell n\, P_b + \left[\frac{1.376598941 \times 10^{12}}{L_m (6348794 + Z)\ (6348794 + Z_b)} \right] \ell n \left[\frac{T_{mb}}{T_{mb} + L_m (Z - Z_b)} \right], \tag{9}$$

where T_{mb} equals molecular temperature at base. If L_m equals zero, the analytical equation is the same as equation (6) and the computational equation is the same as equation (7). In this altitude region, however, molecular temperature (T_{mb}) is used instead of kinetic temperature (T_b).

2. Density

a. Altitude Region: 706 to 28 250 m

$$D = D_1 \exp(A_0 + A_1 Z + A_2 Z^2 + A_3 Z^3 + A_4 Z^4 + A_5 Z^5) \quad , \tag{10}$$

where

$$D_1 = 1.2172 \text{ kg m}^{-3} \quad .$$

b. Altitude Region: 28 250 to 700 000 m

(1) Analytical Equation

$$D = \frac{10^4 M_0 P}{R^* T_n} \quad . \tag{11}$$

(2) Computational Equation

$$D = (0.3483676 \times 10^2) \frac{P}{T_n} \quad , \tag{12}$$

where

T_n = T from 28 250 to 90 000 m altitude

$T_n = T_m$ from 90 000 to 700 000 m altitude.

3. Density Ratio

Altitude Region: 706 to 700 000 m

$$DR = D/D_0 \quad , \tag{13}$$

where

$D_0 = 1.1361175$.

4. Pressure Ratio

Altitude Region: 706 to 700 000 m

$$PR = P/P_0 \tag{14}$$

where

$P_0 = 9.4953873$.

5. Virtual Temperature

Altitude Region: 706 to 9950 m

$$T^* = A_0 + A_1Z + A_2Z^2 + A_3Z^3 + A_4Z^4 + A_5Z^5 \quad . \tag{15}$$

Virtual temperature is the same as kinetic temperature above 9950 m altitude.

6. Kinetic Temperature

a. Altitude Region: 706 to 81 750 m

$$T = A_0 + A_1 Z + A_2 Z^2 + A_3 Z^3 + A_4 Z^4 + A_5 Z^5 \quad . \tag{16}$$

b. Altitude Region: 81 750 to 90 000 m

$$T = T_b + L_k (Z - Z_b) \quad , \tag{17}$$

where

T_b = kinetic temperature at base .

c. Altitude Region: 90 000 to 700 000 m

$$T = \frac{M T_m}{M_0} \quad . \tag{18}$$

7. Molecular Temperature

a. Altitude Region: 706 to 90 000 m

The molecular temperature is equal to the kinetic temperature in this altitude region, since the molecular weight is considered to be of the constant value M_0.

b. Altitude Region: 90 000 to 700 000 m

$$T_m = T_{mb} + L_m (Z - Z_b) \quad , \tag{19}$$

where

T_{mb} = molecular temperature at base

Z_b = geometric height at base.

8. Coefficient of Viscosity

Altitude Region: 706 to 700 000 m

(1) Analytical Equation

$$\mu = \frac{\beta (T_n)^{3/2}}{T_n + S} \quad . \tag{20}$$

(2) Computational Equation

$$\mu = \frac{1.458 \cdot 10^{-6} (T_n)^{3/2}}{T_n + 110.4} \quad , \tag{21}$$

where

T_n = T from 706 to 90 000 m altitude

T_n = T_m from 90 000 to 700 000 altitude.

9. Kinematic Viscosity

a. Altitude Region: 706 to 90 000 m

$$\eta = \mu/D \quad . \tag{22}$$

b. Altitude Region: 90 000 to 700 000 m

Kinematic viscosity is not computed above 90 000 m altitude.

10. Viscosity Ratio

Altitude Region: 706 to 700 000 m

$$\mu R = \mu/\mu_0 \quad , \tag{23}$$

where

$$\mu_0 = 1.8004408 \times 10^{-5} \quad . \tag{23}$$

11. Speed of Sound

Altitude Region: 706 to 700 000 m

(1) Analytical Equation

$$C_S = \left[\frac{\gamma R^* T_n}{M_0}\right]^{1/2} \quad . \tag{24}$$

(2) Computational Equation

$$C_S = 20.046707 \, (T_n)^{1/2} \quad , \tag{25}$$

where

$T_n = T^*$ from 706 to 9950 m altitude

$T_n = T$ from 10 000 to 90 000 m altitude

$T_n = T_m$ from 90 000 to 700 000 m altitude.

12. Pressure Difference

Altitude Region: 706 to 700 000 m

$$PD = P_0 - P \quad . \tag{26}$$

13. Molecular Weight

a. Altitude Region: 706 to 90 000 m

Molecular weight is taken to be of constant value (28.9644) below 90 000 m altitude.

b. Altitude Region: 90 000 to 700 000 m

$$M = M_b + \Delta M\,(Z - Z_b) \quad , \tag{27}$$

where

M_b = molecular weight at base

ΔM = molecular weight gradient

Z_b = geometric altitude at base.

The equations used in the Edwards hot and cold subroutines are identical to those given above, with the exception of the pressure and density formulas, and different base value constants were used.

DATA COMPARISONS

The wide range of values assumed by the extreme thermodynamic parameters makes it necessary to compute relative comparisons. Such a computation more satisfactorily depicts departures in the higher altitudes where

pressure and density values are small. The relative differences between temperature, pressure, and density values from the atmospheres defined by this report and the annual ERA-75 are computed as follows:

$$RD(T^*) = \frac{T_R - T_S}{T_S} \times 100 \quad , \tag{28}$$

$$RD\,(P) = \frac{P_R - P_S}{P_S} \times 100 \quad , \tag{29}$$

and

$$RD\,(D) = \frac{D_R - D_S}{D_S} \times 100 \quad , \tag{30}$$

where the subscript R denotes parameters from the EHA-75 or ECA-75, and the subscript S denotes parameters from the ERA-75.

The two finalized extreme density profiles for Edwards AFB are given in Figure 7. They are shown as relative (percent) deviations from the ERA-75 density values. The two density profiles follow very similar patterns, as did the previously constructed Kennedy and Vandenberg extreme density departures. This comparison is given in the next section. Levels of minimum density variation are noted at approximately 8, 30, and 90 km altitude. Levels of maximum variability occur near the surface, 15 and 74 km. The Edwards hot density profile goes from -9.2 percent at ground level to a peak of 12.2 percent at 16 km, decreasing slightly and then increasing to another peak of 26.4 percent at 74.5 km altitude. The Vandenberg cold density profile is 6.6 percent at the surface and increases to 7.2 percent at 1.25 km. The values then fall to a negative peak of -10.4 percent by 15 km. A slight increase with altitude is followed by another negative peak of -31.1 percent at 72 km altitude. Hot and cold pressure and temperature deviations are given in Figure 8 as percentages from the ERA-75 model. Tables 5 and 6 give the numerical results for all the atmospheric thermodynamic parameters at 250 m intervals.

HOT AND COLD COMPARISON BY LOCATION

A comparison between the three sets of extreme atmospheres (Kennedy Space Center, Vandenberg, and Edwards) is presented as a percentage difference from the U.S. Standard Atmosphere, 1962(US62) [10] in Figures 9 and 10. Figure 9 gives the vertical temperature profiles of the six extremals as a percent of US62 temperatures. No great differences exist between the three hot or the three cold profiles. Generally, differences are within 5 percent (relative to US62) at most levels below 80 km altitude.

The cold atmospheres have the following properties. At surface level, the greatest difference in temperature is approximately 2 percent between the Vandenberg and Edwards models. At higher altitudes the greatest difference is between the Kennedy and Vandenberg profiles, with a 4.5 percent difference at 9 km, 4.8 percent at 20 km, 4.5 percent at 80 km, and 11.25 percent at 90 km altitude. Above 32 km the Vandenberg and Edwards temperature profiles are identical.

The hot temperature profiles vary by 4.5 percent at the surface between Kennedy and Edwards (3.5 percent between Edwards and Vandenberg). A 4.5 percent difference is also noted between Vandenberg and Kennedy at 15 km and between Vandenberg and Kennedy at 32 km. The largest difference is approximately 5.75 percent between 80 to 90 km altitude for Kennedy and Vandenberg. Above 47 km the Vandenberg and Edwards temperature profiles are identical.

Given in Figure 10 are the density comparisons between the three sets of profiles, relative to the US62 density values. Again the profiles are very similar to one another, as shown in the figure. Cold profile comparisons indicate extreme percentage differences as follows. A 2 percent difference exists between Edwards and Vandenberg at the surface. Vandenberg/Kennedy differences became quite large at certain altitudes. Some of these extreme differences are 21 percent at 90 km, 8 percent at 80 km, and 7.5 percent at 16 km. Kennedy/Edwards differences are as much as 5 percent at 49 km and 4.5 percent at 32 km.

Hot density profiles vary up to 3.75 percent at the surface (Edwards/Kennedy). Vandenberg/Kennedy differences aloft increase to 4 percent at 15 km, 14 percent at 80 km, and 25 percent at 90 km. Edwards/Vandenberg differences range up to 6.75 percent as shown at 30 km altitude. One will notice that there are differences between the Edwards and Vandenberg pressure and density profiles at the altitude levels of equal temperature values. This is

because, even though temperatures are identical, pressures and densities may be somewhat different because they are computed by an iterative scheme based on the computed pressure of the previous level.

CONCLUSIONS

The atmospheres defined by this report provide a consistent set of thermodynamic parameters representative of mean and extreme conditions over Edwards AFB to 90 km altitude. The results presented here are the most current and complete tabulations of thermodynamic profiles for the Edwards area. These reference atmospheres are subject to future revisions as more frequent and accurate measurements are obtained. It is recommended that these atmospheres be used in space vehicle design, performance, heating, and trajectory studies applicable to Edwards Air Force Base, California.

The ERA-75, EHA-75, and ECA-75 have been programmed under those designations as computer subroutines and are available, upon request, from the MSFC Aerospace Environment Division of the Space Sciences Laboratory. The two subroutines will operate similarly to those previously issued to qualified requesters (i.e., the VRA-71 subroutine of Reference 4).

The nine atmospheric subroutines currently on file in the MSFC Aerospace Environment Division are listed below (with appropriate calling code):

Subroutine Title	Subroutine Call Code
1. Patrick Reference Atmosphere, 1963	PRA63
2. Vandenberg Reference Atmosphere, 1971	VRA71
3. Kennedy Hot Atmosphere, 1971	KHA71
4. Kennedy Cold Atmosphere, 1971	KCA71
5. Vandenberg Hot Atmosphere, 1973	VHA73
6. Vandenberg Cold Atmosphere, 1973	VCA73
7. Edwards Reference Atmosphere, 1975	ERA75
8. Edwards Hot Atmosphere, 1975	EHA75
9. Edwards Cold Atmosphere, 1975	ECA75

Although this report presents pressure, temperature, and density values, other associated parameters may be of interest to users (i.e., the coefficient of viscosity, kinematic viscosity, speed of sound, etc.). These parameters can easily be obtained through the use of their respective equations as given in this report. However, the three Edwards computerized subroutines will give all the parameters listed here.

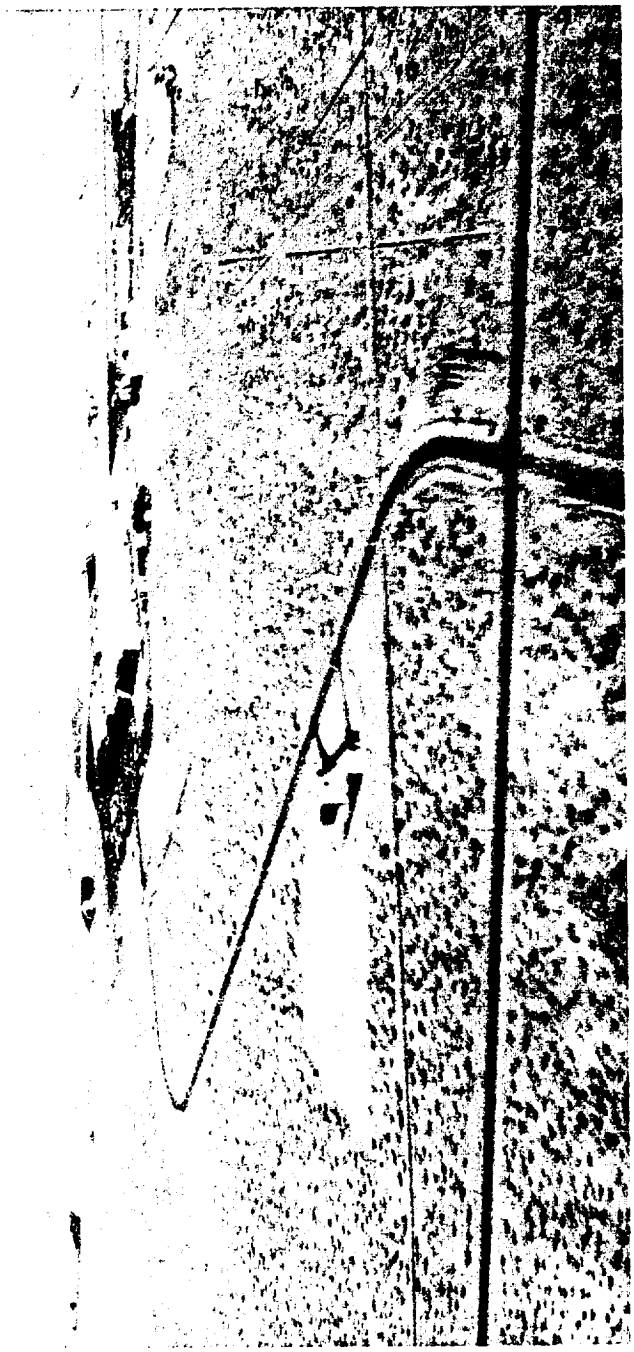

Figure 1. NASA Flight Research Center, Edwards, California.

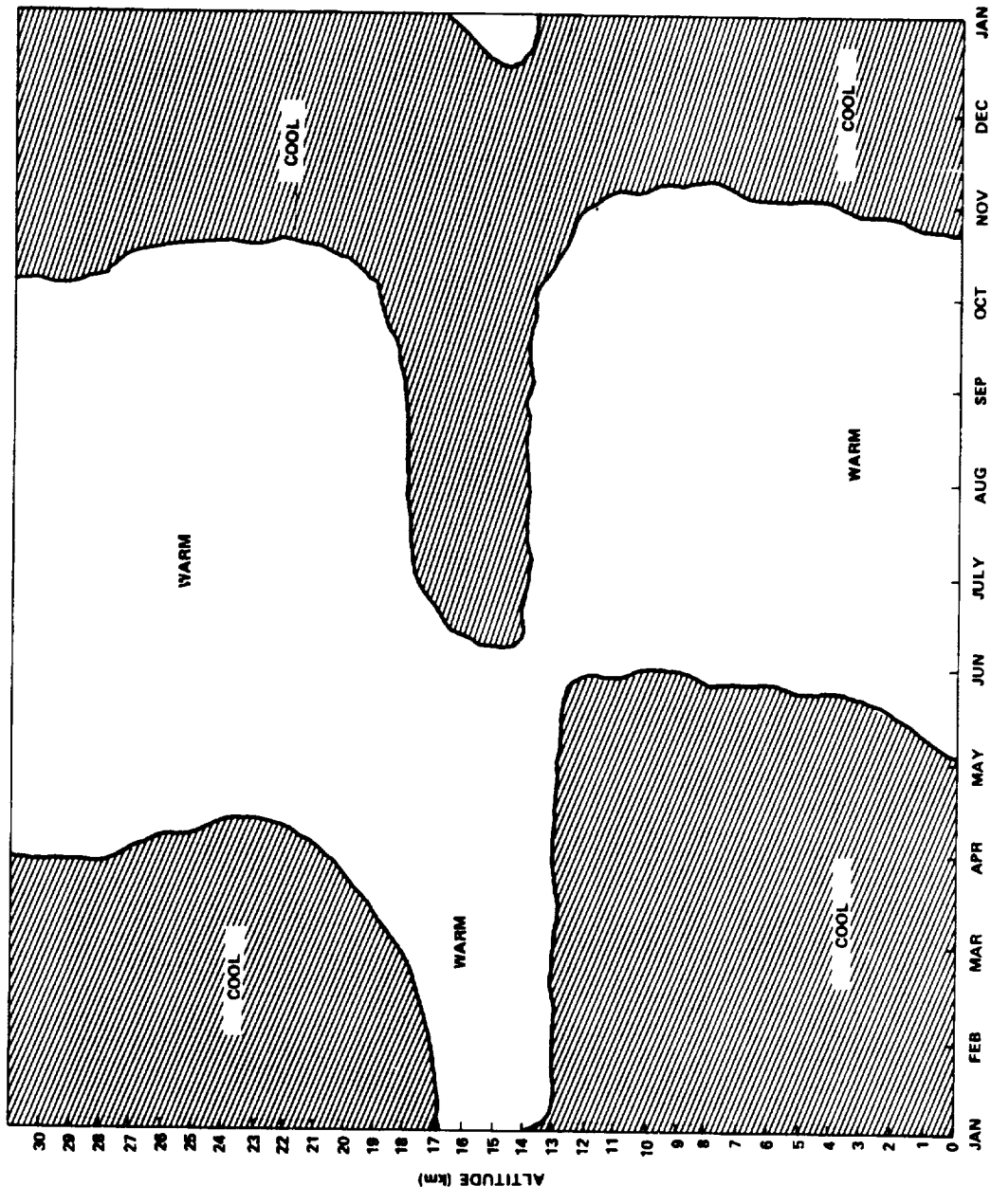

Figure 2. Edwards AFB monthly mean temperature versus altitude structure (areas designated as cool and warm are either cooler or warmer, respectively, than the annual mean temperature.)

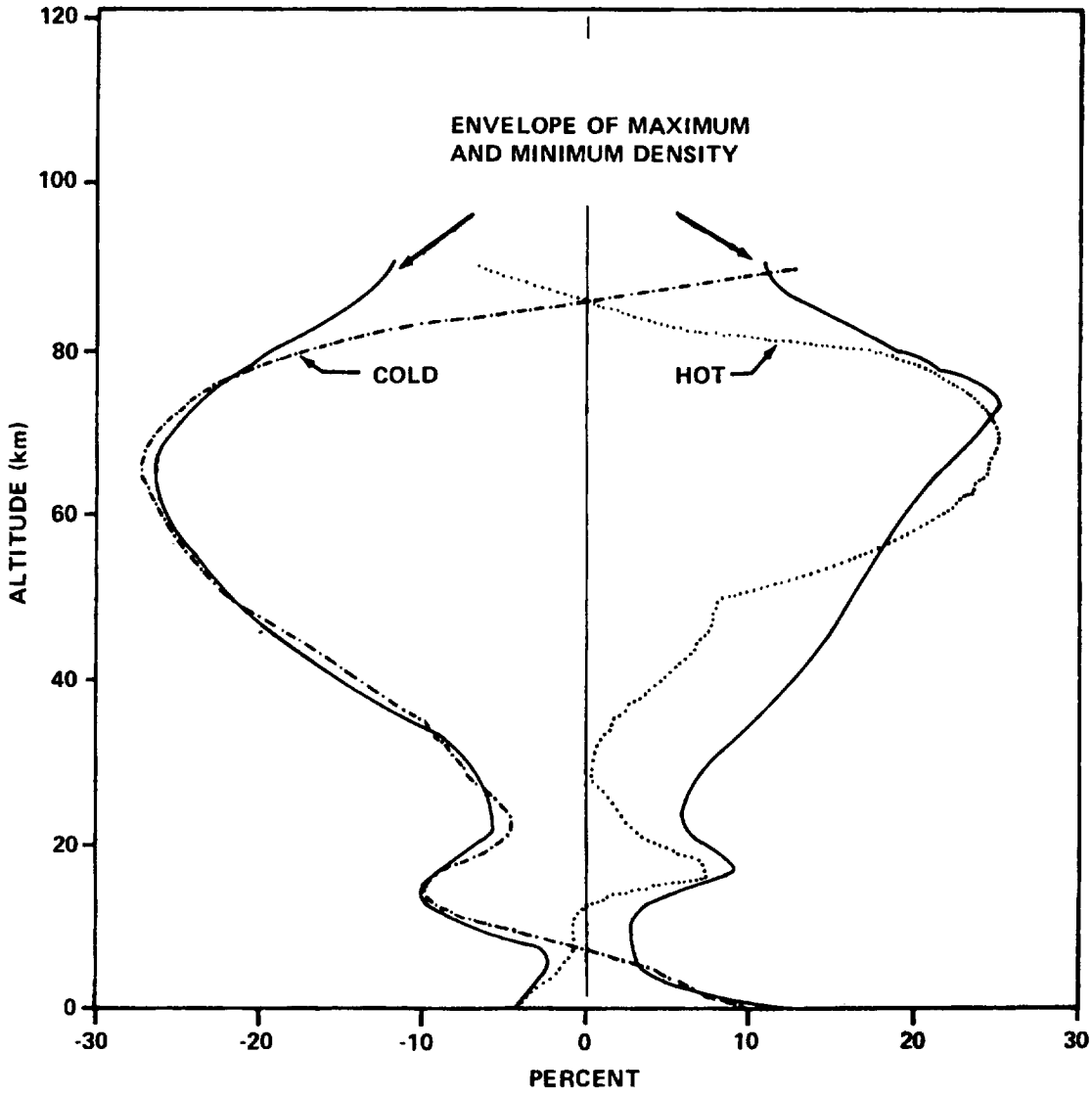

Figure 3. Relative deviations (percent) of extreme Kennedy Space Center, Florida density profiles with respect to PRA-63.

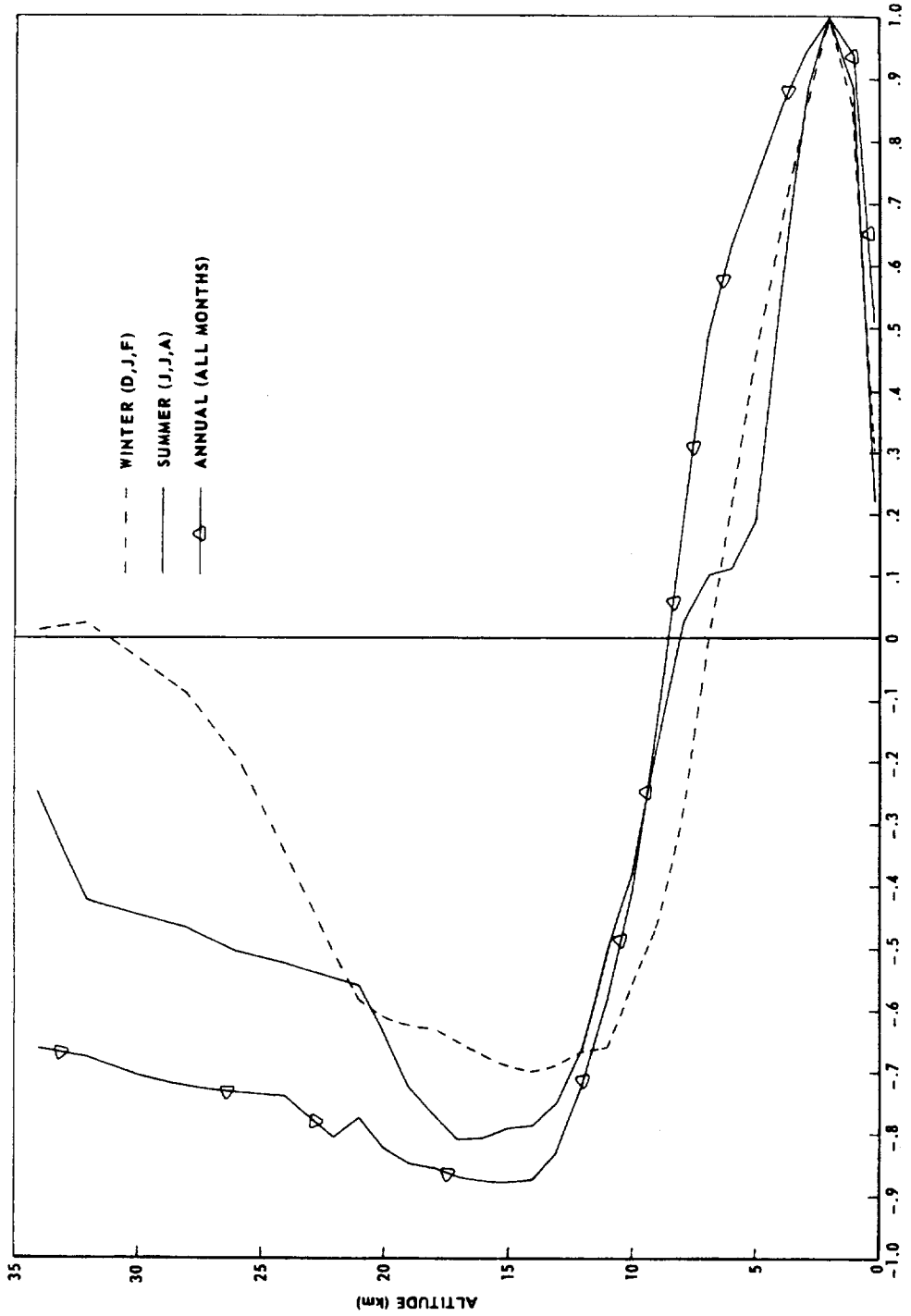

Figure 4. Point Arguello, California, density correlation coefficient profiles, by season, between 2 km and all other altitude levels.

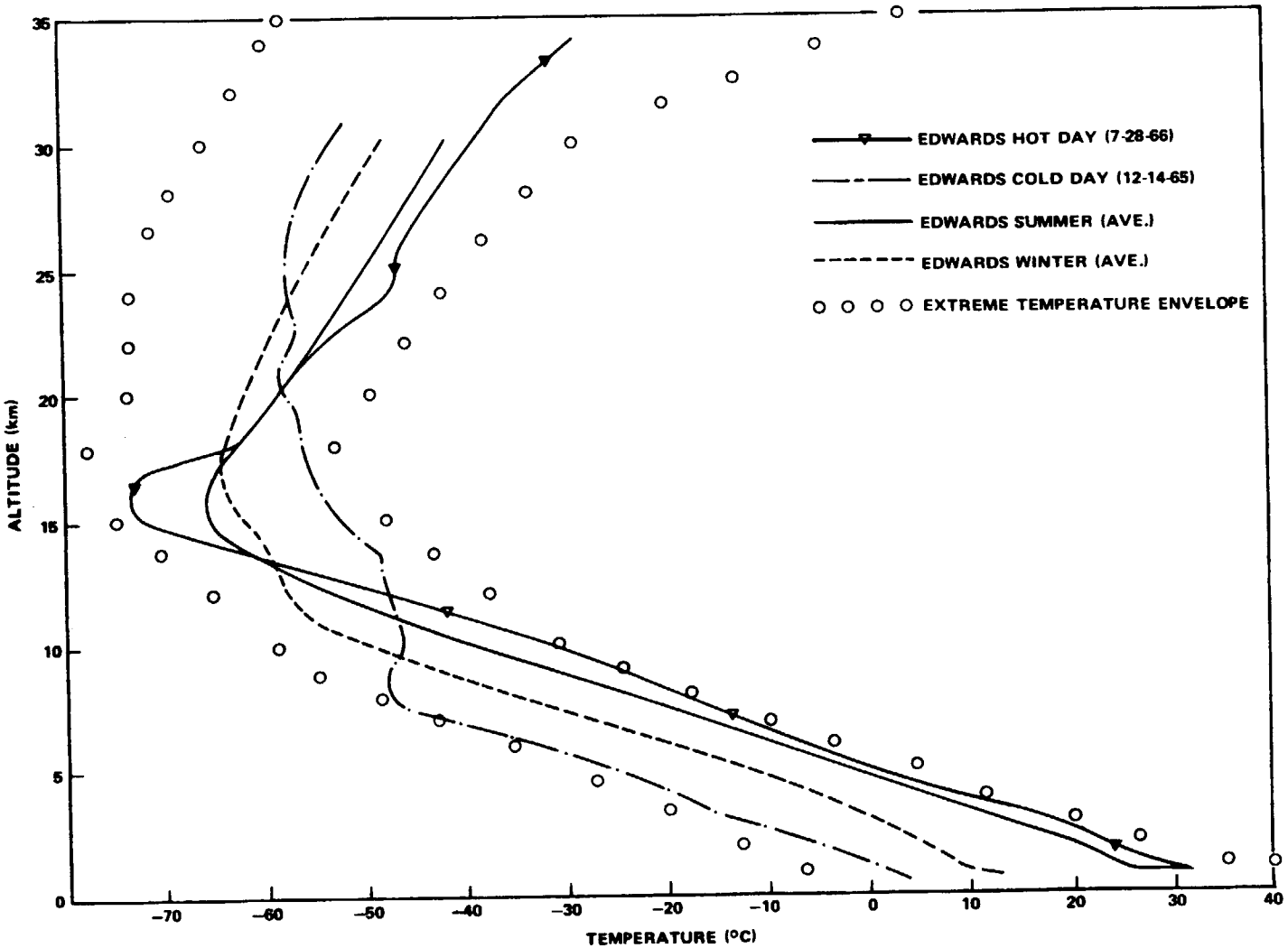

Figure 5. Seasonal mean and typical extreme temperature profiles representing summer (hot) and winter (cold) conditions over Edwards AFB.

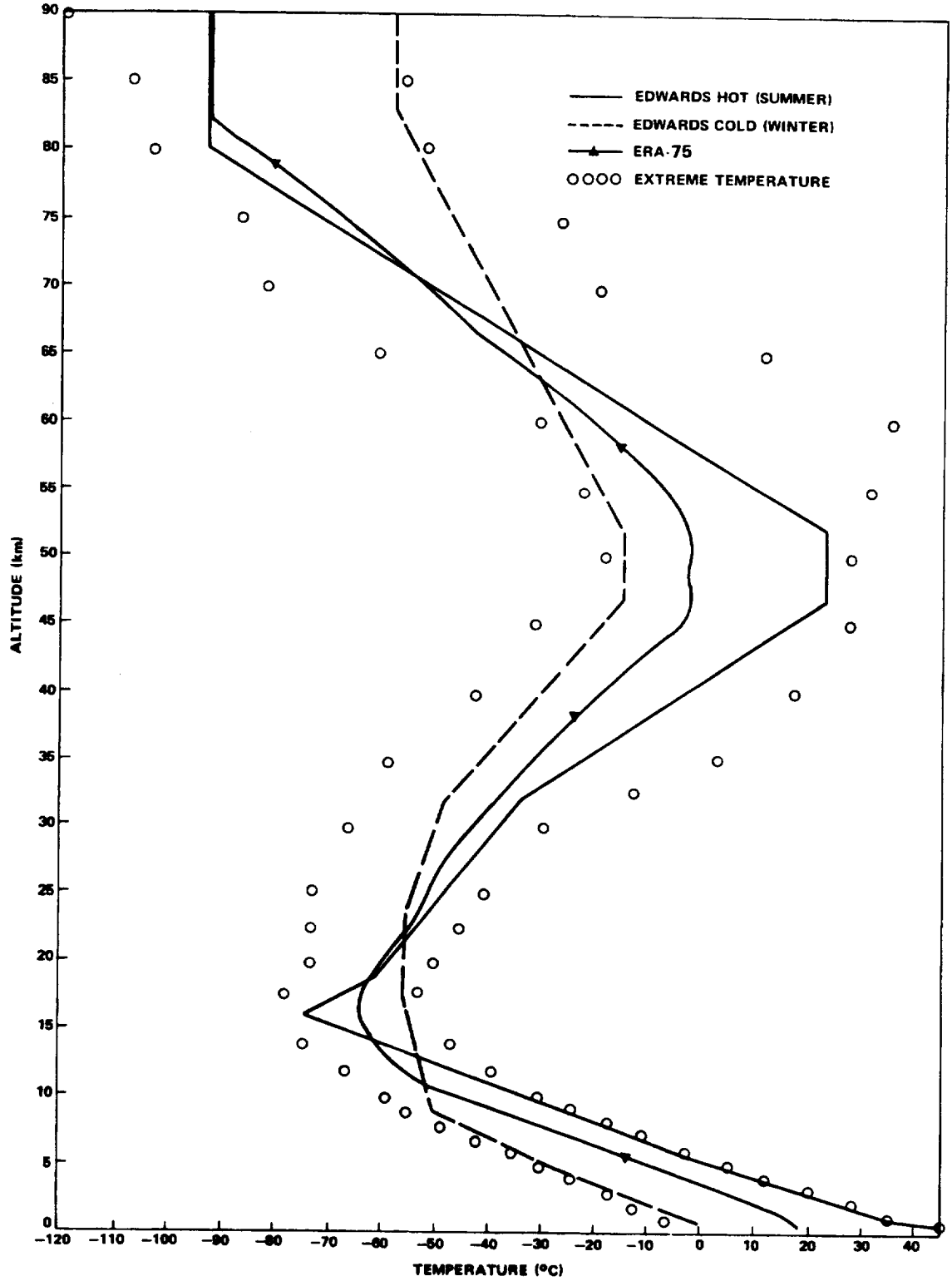

Figure 6. Temperature profiles of the hot, cold and ERA-75 for Edwards AFB.

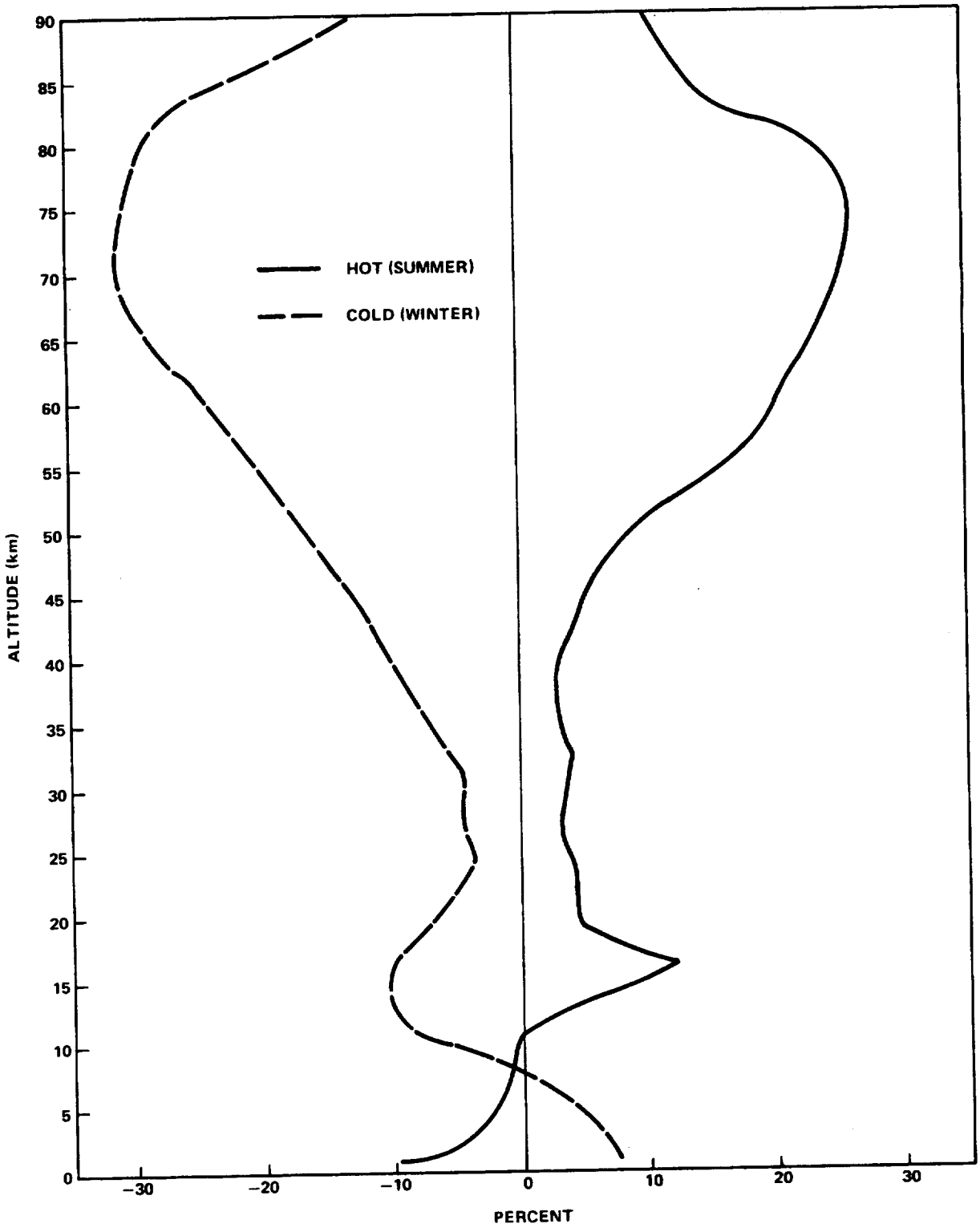

Figure 7. Hot and cold density deviation profiles (as percent of ERA-75) applicable to Edwards AFB.

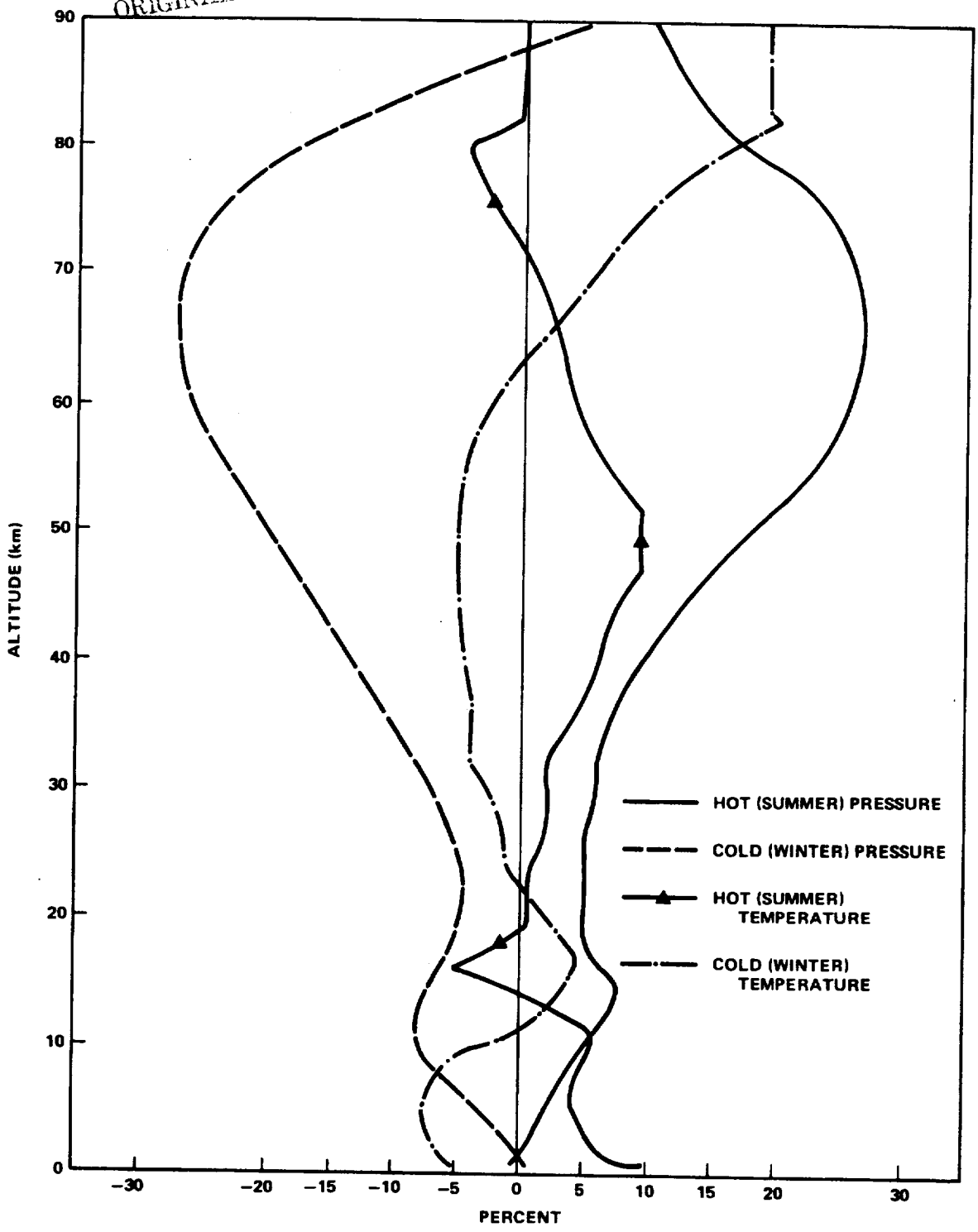

Figure 8. Relative deviations (percent) of Edwards hot and cold temperature and pressure profiles with respect to ERA-75.

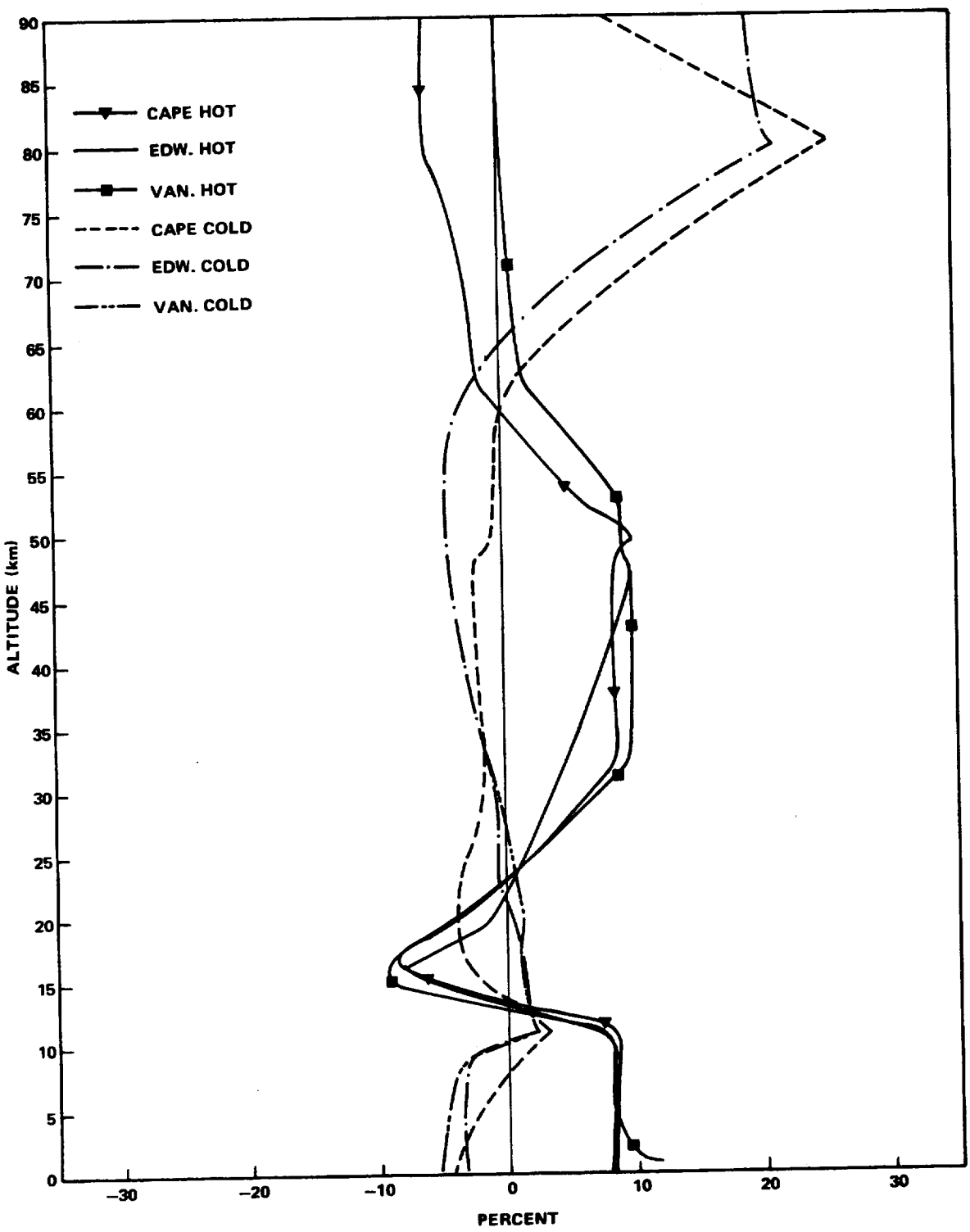

Figure 9. Relative (percent) differences of hot and cold temperatures from the US62 for Kennedy Space Center, Vandenberg AFB, and Edwards AFB.

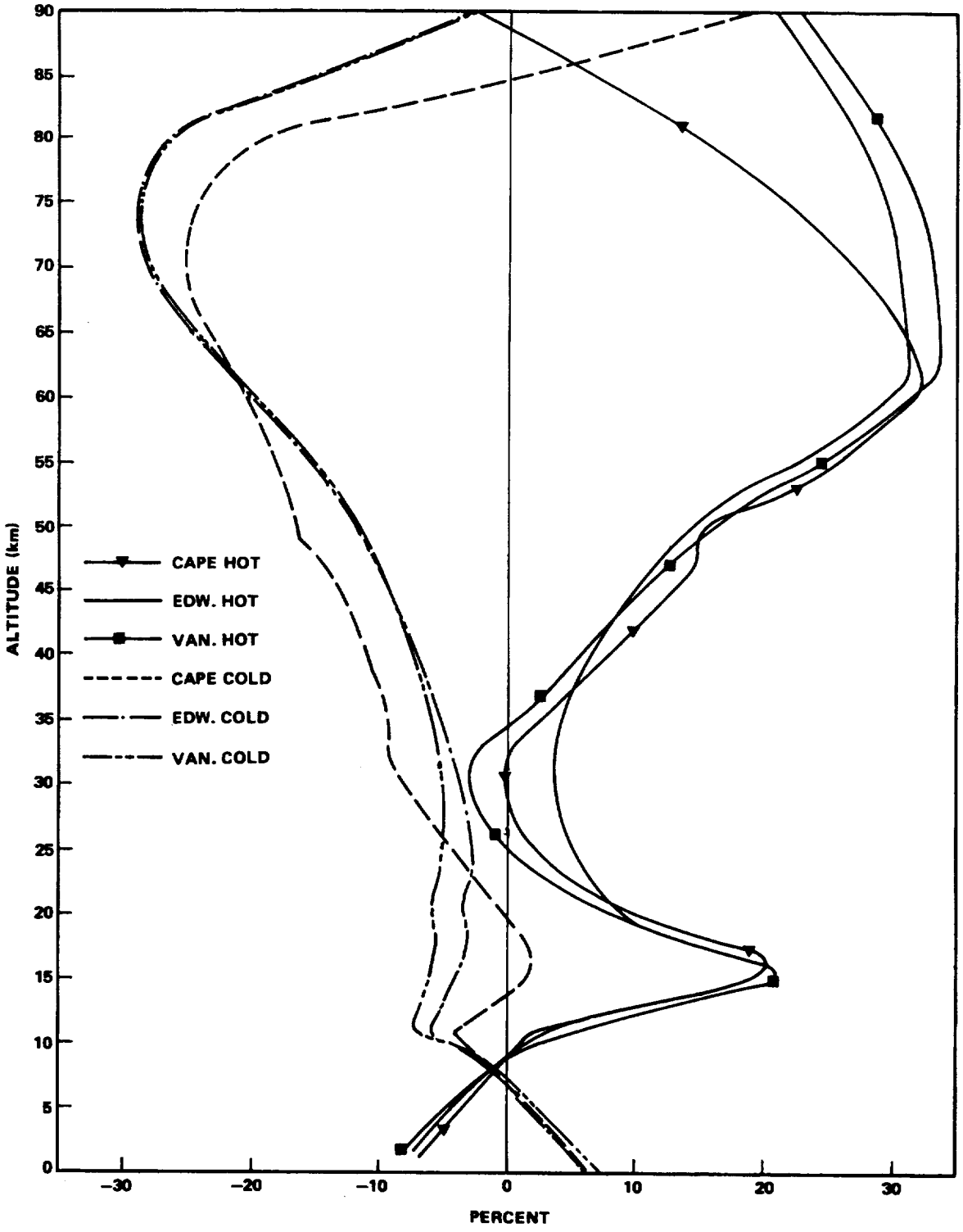

Figure 10. Relative (percent) differences of hot and cold densities from the US62, for Kennedy Space Center, Vandenberg AFB, and Edwards AFB.

NOTES ON TABULAR VALUES IN TABLES 1, 2, 5, AND 6

The two-digit numbers that are preceded by the plus or minus sign indicate the power of 10 by which the respective principal value must be multiplied. For example, a tabular value indicated as:

2.8588177 + 02 is 285.88177

and

1.5663607 - 05 is 0.000015663607

TABLE 1. EDWARDS AFB REFERENCE ATMOSPHERE 1974 (ERA-75) VERSUS GEOMETRIC ALTITUDE (ANNUAL)

GEOMETRIC ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	KINEMATIC VISCOSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
meters	degrees K	degrees K	newtons cm^{-2}	kg m^{-3}	m^2 sec^{-1}	newton-sec m^{-2}	m sec^{-1}
726.	2.9026638+02	2.8927295+02	9.3407949+00	1.1210501+00	1.6009931-05	1.7947936-05	3.4154145+02
750.	2.9033188+02	2.8939035+02	9.2712400+00	1.1148514+00	1.6104322-05	1.7953589-05	3.4157999+02
1000.	2.9008086+02	2.8935619+02	9.0176369+00	1.0829572+00	1.6576780-05	1.7951944-05	3.4143229+02
1250.	2.8910784+02	2.8851649+02	8.7545789+00	1.0549050+00	1.6979237-05	1.7911481-05	3.4085917+02
1500.	2.8775831+02	2.8726205+02	8.4993083+00	1.0289489+00	1.7348730-05	1.7850926-05	3.4006269+02
1750.	2.8624936+02	2.8583268+02	8.2503776+00	1.0090773+00	1.7709570-05	1.7781773-05	3.3916991+02
2000.	2.8469736+02	2.8435157+02	8.0072182+00	9.7979598-01	1.8075130-05	1.7709940-05	3.3824919+02
2250.	2.8314573+02	2.8285965+02	7.7697682+00	9.5595149-01	1.8450102-05	1.7637403-05	3.3732619+02
2500.	2.8159264+02	2.8135[illegible]+02	7.5381560+00	9.3257174-01	1.8833743-05	1.7563817-05	3.3639978+02
2750.	2.8001870+02	2.7980219+02	7.3124316+00	9.0973094-01	1.9223458-05	1.7488175-05	3.3545832+02
3000.	2.7841472+02	2.7821671+02	7.0923446+00	8.8743099-01	1.9618973-05	1.7410485-05	3.3449617+02
3250.	2.7696706+02	2.7676821+02	6.8894233+00	8.6652073-01	2.0010280-05	1.7339323-05	3.3362540+02
3500.	2.7546408+02	2.7527428+02	6.6797081+00	8.4471642-01	2.0439693-05	1.7265744-05	3.3271895+02
3750.	2.7392165+02	2.7374033+02	6.4753456+00	8.2347506-01	2.0874945-05	1.7189996-05	3.3178614+02
4000.	2.7234559+02	2.7217236+02	6.2761829+00	8.0276189-01	2.1316859-05	1.7112362-05	3.3082996+02
4250.	2.7073838+02	2.7057486+02	6.0820661+00	7.8254802-01	2.1766137-05	1.7033248-05	3.2985264+02
4500.	2.6916441+02	2.6895100+02	5.8929619+00	7.6280938-01	2.2223374-05	1.6952198-05	3.2885576+02
4750.	2.6744510+02	2.6732281+02	5.7084365+00	7.4352594-01	2.2689357-05	1.6869903-05	3.2784033+02
5000.	2.6576157+02	2.6563136+02	5.5286658+00	7.2468088-01	2.3163579-05	1.6786203-05	3.2680685+02
5250.	2.6405433+02	2.6393697+02	5.3534321+00	7.0625996-01	2.3647245-05	1.6701102-05	3.2575546+02
5500.	2.6232337+02	2.6221941+02	5.1826251+00	6.8825086-01	2.4140292-05	1.6614577-05	3.2468599+02
5750.	2.6056842+02	2.6047802+02	5.0161405+00	6.7064270-01	2.4642921-05	1.6526562-05	3.2359808+02
6000.	2.5878904+02	2.5871198+02	4.8538800+00	6.5342553-01	2.5155218-05	1.6437062-05	3.2249129+02
6250.	2.5698482+02	2.5692048+02	4.6957514+00	6.3650990-01	2.5677380-05	1.6345961-05	3.2136515+02
6500.	2.5515553+02	2.5510286+02	4.5416673+00	6.2012655-01	2.6209540-05	1.6253232-05	3.2021933+02
6750.	2.5330127+02	2.5325866+02	4.3915456+00	6.0402606-01	2.6751879-05	1.6158845-05	3.1905367+02
7000.	2.5142269+02	2.5138876+02	4.2453086+00	5.8827869-01	2.7304776-05	1.6062801-05	3.1786835+02
7250.	2.4952106+02	2.4949308+02	4.1028832+00	5.7287399-01	2.7868495-05	1.5965136-05	3.1666397+02
7500.	2.4759854+02	2.4757555+02	3.9641996+00	5.5780281-01	2.8443735-05	1.5865939-05	3.1544169+02
7750.	2.4565825+02	2.4563751+02	3.8291924+00	5.4304708-01	2.9031288-05	1.5765356-05	3.1420329+02
8000.	2.4370449+02	2.4368403+02	3.6977986+00	5.2859970-01	2.9632266-05	1.5663607-05	3.1295134+02
8250.	2.4174286+02	2.4172105+02	3.5695584+00	5.1444454-01	3.0246140-05	1.5560991-05	3.1168929+02
8500.	2.3978051+02	2.3975626+02	3.4456147+00	5.0056633-01	3.0880827-05	1.5457902-05	3.1042164+02
8750.	2.3782618+02	2.3779918+02	3.3247124+00	4.8694867-01	3.1532769-05	1.5354843-05	3.0915401+02
9000.	2.3589345+02	2.3586146+02	3.2071907+00	4.7357411-01	3.2207045-05	1.5252423-05	3.0789330+02
9250.	2.3398591+02	2.3395699+02	3.0930220+00	4.6042411-01	3.2907477-05	1.5151396-05	3.0664783+02

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
700.	1.0000000+00	1.0000000+00	9.9999999-01	2.8964400+01	0.0000000
750.	9.9469478-01	9.9447061-01	1.0003150+00	2.8964400+01	4.9554944-02
1000.	9.6540358-01	9.6632037-01	1.0002233+00	2.8964400+01	3.2315803-01
1250.	9.3724132-01	9.4099715-01	9.9796885-01	2.8964400+01	5.8621597-01
1500.	9.0991274-01	9.1784385-01	9.9459495-01	2.8964400+01	8.4196657-01
1750.	8.8326292-01	8.9565762-01	9.9074192-01	2.8964400+01	1.0954171+00
2000.	8.5723092-01	8.7399839-01	9.8673967-01	2.8964400+01	1.3335767+00
2250.	8.3181017-01	8.5272060-01	9.8269811-01	2.8964400+01	1.5710767+00
2500.	8.0701941-01	8.3187338-01	9.7859813-01	2.8964400+01	1.8026389+00
2750.	7.8284096-01	8.1149891-01	9.7438361-01	2.8964400+01	2.0283633+00
3000.	7.5928698-01	7.9160609-01	9.7005498-01	2.8964400+01	2.2404510+00
3250.	7.3756284-01	7.7295451-01	9.6609008-01	2.8964400+01	2.4513717+00
3500.	7.1511130-01	7.5350461-01	9.6199051-01	2.8964400+01	2.6610869+00
3750.	6.9323283-01	7.3455687-01	9.5777010-01	2.8964400+01	2.8654492+00
4000.	6.7191079-01	7.1608029-01	9.5344456-01	2.8964400+01	3.0646141+00
4250.	6.5112939-01	6.9834910-01	9.4902543-01	2.8964400+01	3.2587289+00
4500.	6.3087370-01	6.8044183-01	9.4452376-01	2.8964400+01	3.4479331+00
4750.	6.1112963-01	6.6324201-01	9.3993554-01	2.8964400+01	3.6323584+00
5000.	5.9188386-01	6.4643041-01	9.3527204-01	2.8964400+01	3.8121291+00
5250.	5.7312362-01	6.2999856-01	9.3053053-01	2.8964400+01	3.9873627+00
5500.	5.5483769-01	6.1393408-01	9.2570963-01	2.8964400+01	4.1581699+00
5750.	5.3701431-01	5.9822723-01	9.2080683-01	2.8964400+01	4.3246545+00
6000.	5.1964314-01	5.8286916-01	9.1581906-01	2.8964400+01	4.4869150+00
6250.	5.0271432-01	5.6785142-01	9.1074321-01	2.8964400+01	4.6450435+00
6500.	4.8621650-01	5.5316578-01	9.0557665-01	2.8964400+01	4.7991276+00
6750.	4.7014660-01	5.3883382-01	9.0031774-01	2.8964400+01	4.9492494+00
7000.	4.5449115-01	5.2475602-01	8.9496645-01	2.8964400+01	5.0954863+00
7250.	4.3924347-01	5.1101551-01	8.8952491-01	2.8964400+01	5.2379117+00
7500.	4.2439640-01	4.9756992-01	8.8399796-01	2.8964400+01	5.3765953+00
7750.	4.0994288-01	4.8442928-01	8.7839363-01	2.8964400+01	5.5116025+00
8000.	3.9587622-01	4.7152192-01	8.7272470-01	2.8964400+01	5.6429964+00
8250.	3.8219020-01	4.5889523-01	8.6700726-01	2.8964400+01	5.7708366+00
8500.	3.6887810-01	4.4651557-01	8.6126351-01	2.8964400+01	5.8951803+00
8750.	3.5593463-01	4.3436834-01	8.5552122-01	2.8964400+01	6.0160825+00
9000.	3.4333373-01	4.2243795-01	8.4981488-01	2.8964400+01	6.1335963+00
9250.	3.3113049-01	4.1070788-01	8.4418600-01	2.8964400+01	6.2477729+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	KINEMATIC VISCOSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
meters	degrees K	degrees K	newtons cm^{-2}	kg m^{-3}	m^2 sec^{-1}	newton-sec m^{-2}	m sec^{-1}
9500.	2.3212722+02	2.3212722+02	2.9021325+00	4.4747924-01	3.3638763-05	1.5052648-05	3.0542747+02
9750.	2.3033142+02	2.3031566+02	2.6744810+00	4.3471910-01	3.4406635-05	1.4957222-05	3.0424374+02
10000.	2.2850072+02	2.2850072+02	2.7706815+00	4.2292641-01	3.5177524-05	1.4859917-05	3.0303224+02
10250.	2.2657094+02	2.2657094+02	2.6680694+00	4.1027175-01	3.5966632-05	1.4756093-05	3.0174992+02
10500.	2.2484695+02	2.2484695+02	2.5667450+00	3.9803200-01	3.6838961-05	1.4663012-05	3.0059970+02
10750.	2.2330947+02	2.2330947+02	2.4726369+00	3.8576578-01	3.7794273-05	1.4579737-05	2.9957021+02
11000.	2.2193979+02	2.2193979+02	2.3796741+00	3.7353754-01	3.8832351-05	1.4505341-05	2.9865008+02
11250.	2.2071979+02	2.2071979+02	2.2697856+00	3.6139731-01	3.9952998-05	1.4438906-05	2.9782811+02
11500.	2.1963208+02	2.1963208+02	2.2029009+00	3.4939109-01	4.1156004-05	1.4379541-05	2.9709336+02
11750.	2.1866009+02	2.1866009+02	2.1189499+00	3.3755875-01	4.2441156-05	1.4326384-05	2.9643523+02
12000.	2.1778813+02	2.1778813+02	2.0378622+00	3.2593435-01	4.3808243-05	1.4278611-05	2.9584359+02
12250.	2.1700147+02	2.1700147+02	1.9593681+00	3.1454643-01	4.5257340-05	1.4235441-05	2.9530880+02
12500.	2.1628650+02	2.1628650+02	1.8839979+00	3.0341834-01	4.6787367-05	1.4196146-05	2.9482191+02
12750.	2.1563072+02	2.1563072+02	1.8110822+00	2.9256849-01	4.8399111-05	1.4160055-05	2.9437462+02
13000.	2.1502290+02	2.1502290+02	1.7407523+00	2.8201088-01	5.0092260-05	1.4126562-05	2.9395944+02
13250.	2.1445314+02	2.1445314+02	1.6729394+00	2.7175530-01	5.1866990-05	1.4095129-05	2.9356972+02
13500.	2.1391292+02	2.1391292+02	1.6075752+00	2.6180781-01	5.3723735-05	1.4065293-05	2.9319973+02
13750.	2.1339533+02	2.1339533+02	1.5445922+00	2.5217112-01	5.5663302-05	1.4036677-05	2.9284460+02
14000.	2.1289493+02	2.1289493+02	1.4839231+00	2.4284485-01	5.7666966-05	1.4008983-05	2.9250124+02
14250.	2.1240807+02	2.1240807+02	1.4255013+00	2.3382597-01	5.9796659-05	1.3982012-05	2.9216660+02
14500.	2.1193280+02	2.1193280+02	1.3692610+00	2.2510912-01	6.1995074-05	1.3955657-05	2.9183955+02
14750.	2.1146905+02	2.1146905+02	1.3151367+00	2.1668689-01	6.4285924-05	1.3929917-05	2.9152007+02
15000.	2.1101876+02	2.1101876+02	1.2630643+00	2.0855008-01	6.6674156-05	1.3904901-05	2.9120953+02
15250.	2.1058578+02	2.1058578+02	1.2127798+00	2.0066808-01	6.9166167-05	1.3880825-05	2.9091062+02
15500.	2.1017622+02	2.1017622+02	1.1644230+00	1.9306901-01	7.1770177-05	1.3858033-05	2.9062759+02
15750.	2.0979829+02	2.0979829+02	1.1185252+00	1.8574007-01	7.4496472-05	1.3836983-05	2.9036617+02
16000.	2.0946258+02	2.0946258+02	1.0743324+00	1.7862758-01	7.7358000-05	1.3818273-05	2.9013377+02
16250.	2.0918206+02	2.0918206+02	1.0312625+00	1.7173747-01	8.0373511-05	1.3802628-05	2.8993942+02
16500.	2.0897209+02	2.0897209+02	9.9021667-01	1.6505515-01	8.3553360-05	1.3790912-05	2.8979387+02
16750.	2.0885070+02	2.0885070+02	9.5277749-01	1.5856594-01	8.6729996-05	1.3784137-05	2.8970969+02
17000.	2.0883655+02	2.0883655+02	9.1290847-01	1.5225517-01	9.0528671-05	1.3783458-05	2.8970126+02
17250.	2.0895901+02	2.0895901+02	8.7655924-01	1.4610826-01	9.4383317-05	1.3790182-05	2.8978481+02
17500.	2.0923025+02	2.0923025+02	8.4166058-01	1.4011111-01	9.8534390-05	1.3805762-05	2.8997836+02
17750.	2.0970546+02	2.0970546+02	8.0817544-01	1.3424996-01	1.0303028-04	1.3831811-05	2.9030193+02
18000.	2.1039268+02	2.1039268+02	7.7604645-01	1.2851184-01	1.0792843-04	1.3873081-05	2.9077721+02
18250.	2.1172300+02	2.1172300+02	7.4516521-01	1.2321339-01	1.1271910-04	1.3888592-05	2.9100594+02

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
9500.	3.1925896-01	3.9916078-01	8.3868497-01	2.8964400+01	6.3566625+00
9750.	3.0773497-01	3.8777348-01	8.3336722-01	2.8964400+01	6.4663140+00
10000.	2.9662157-01	3.7681314-01	8.2794574-01	2.8964400+01	6.5701135+00
10250.	2.8563622-01	3.6597093-01	8.2216101-01	2.8964400+01	6.6727256+00
10500.	2.7500283-01	3.5585103-01	8.1697463-01	2.8964400+01	6.7720499+00
10750.	2.6471379-01	3.4611110-01	8.1233504-01	2.8964400+01	6.8681580+00
11000.	2.5476141-01	3.3626326-01	8.0818991-01	2.8964400+01	6.9611208+00
11250.	2.4513817-01	3.2637341-01	8.0448838-01	2.8964400+01	7.0510094+00
11500.	2.3583656-01	3.1666411-01	8.0116877-01	2.8964400+01	7.1378940+00
11750.	2.2684897-01	3.0713943-01	7.9821923-01	2.8964400+01	7.2218451+00
12000.	2.1816796-01	2.9774821-01	7.9555728-01	2.8964400+01	7.3029329+00
12250.	2.0977861-01	2.8850195-01	7.9315195-01	2.8964400+01	7.3812269+00
12500.	2.0169567-01	2.7965547-01	7.9096257-01	2.8964400+01	7.4567971+00
12750.	1.9388952-01	2.6977718-01	7.8895173-01	2.8964400+01	7.5297127+00
13000.	1.8636019-01	2.6155957-01	7.8708562-01	2.8964400+01	7.6000427+00
13250.	1.7910832-01	2.4291137-01	7.8533428-01	2.8964400+01	7.6678556+00
13500.	1.7213262-01	2.3338021-01	7.8367192-01	2.8964400+01	7.7332197+00
13750.	1.6539982-01	2.2499188-01	7.8207751-01	2.8964400+01	7.7962028+00
14000.	1.5888476-01	2.1662265-01	7.8053447-01	2.8964400+01	7.8568710+00
14250.	1.5261528-01	2.0857763-01	7.7903174-01	2.8964400+01	7.9152937+00
14500.	1.4658934-01	2.0090222-01	7.7756333-01	2.8964400+01	7.9715340+00
14750.	1.4079495-01	1.9328921-01	7.7612917-01	2.8964400+01	8.0256582+00
15000.	1.3522041-01	1.8603161-01	7.7473538-01	2.8964400+01	8.0777307+00
15250.	1.2985831-01	1.7901793-01	7.7339395-01	2.8964400+01	8.1278151+00
15500.	1.2470253-01	1.7223941-01	7.7212452-01	2.8964400+01	8.1759741+00
15750.	1.1974626-01	1.6558412-01	7.7095124-01	2.8964400+01	8.2222698+00
16000.	1.1498298-01	1.5933752-01	7.6990873-01	2.8964400+01	8.2667625+00
16250.	1.1040629-01	1.5319339-01	7.6892477-01	2.8964400+01	8.3095125+00
16500.	1.0600988-01	1.4723262-01	7.6803850-01	2.8964400+01	8.3505783+00
16750.	1.0178764-01	1.4144411-01	7.6803678-01	2.8964400+01	8.3900175+00
17000.	9.7733408-02	1.3581478-01	7.6796899-01	2.8964400+01	8.4278865+00
17250.	9.3841522-02	1.3033161-01	7.6834363-01	2.8964400+01	8.4642408+00
17500.	9.0135915-02	1.2498252-01	7.6921176-01	2.8964400+01	8.4991341+00
17750.	8.6521056-02	1.1975375-01	7.7066353-01	2.8964400+01	8.5326195+00
18000.	8.3081413-02	1.1463523-01	7.7279535-01	2.8964400+01	8.5647485+00
18250.	7.9775353-02	1.0993841-01	7.7582168-01	2.8964400+01	8.5956298+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	KINEMATIC VISCOSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
meters	degrees K	degrees K	newtons cm^{-2}	kg m^{-3}	m^2 sec^{-1}	newton-sec m^{-2}	m sec^{-1}
18500.	2.1099521+02	2.1099521+02	7.1625661-01	1.1824420-01	1.1758372-04	1.3903592-05	2.9119329+02
18750.	2.1131205+02	2.1131205+02	6.8839170-01	1.1344795-01	1.2273999-04	1.3921197-05	2.9141183+02
19000.	2.1166882+02	2.1166882+02	6.6155133-01	1.0882416-01	1.2810581-04	1.3941008-05	2.9165773+02
19250.	2.1206218+02	2.1206218+02	6.3571371-01	1.0437159-01	1.3377896-04	1.3962723-05	2.9192724+02
19500.	2.1248103+02	2.1248103+02	6.1085615-01	1.0008831-01	1.3973715-04	1.3986055-05	2.9221677+02
19750.	2.1292641+02	2.1292641+02	5.8695436-01	9.5971841-02	1.4598788-04	1.4010726-05	2.9252287+02
20000.	2.1339162+02	2.1339162+02	5.6398383-01	9.2019116-02	1.5253866-04	1.4036472-05	2.9284225+02
20250.	2.1387214+02	2.1387214+02	5.4191571-01	8.8226679-02	1.5939668-04	1.4063040-05	2.9317178+02
20500.	2.1436370+02	2.1436370+02	5.2072620-01	8.4590651-02	1.6656914-04	1.4090192-05	2.9350850+02
20750.	2.1486231+02	2.1486231+02	5.0038653-01	8.1106670-02	1.7406301-04	1.4117706-05	2.9384964+02
21000.	2.1536418+02	2.1536418+02	4.8086911-01	7.7770908-02	1.8188514-04	1.4145373-05	2.9419263+02
21250.	2.1586584+02	2.1586584+02	4.6214602-01	7.4578129-02	1.9004231-04	1.4173000-05	2.9453507+02
21500.	2.1636406+02	2.1636406+02	4.4418927-01	7.1523728-02	1.9854126-04	1.4200411-05	2.9487477+02
21750.	2.1685597+02	2.1685597+02	4.2697124-01	6.8602822-02	2.0738867-04	1.4227448-05	2.9520978+02
22000.	2.1733892+02	2.1733892+02	4.1045343-01	6.5810409-02	2.1659138-04	1.4253967-05	2.9553832+02
22250.	2.1781069+02	2.1781069+02	3.9463991-01	6.3141479-02	2.2615638-04	1.4279848-05	2.9585891+02
22500.	2.1826928+02	2.1826928+02	3.7947157-01	6.0591002-02	2.3609387-04	1.4304983-05	2.9617020+02
22750.	2.1871304+02	2.1871304+02	3.6493144-01	5.8153976-02	2.4640246-04	1.4329283-05	2.9647112+02
23000.	2.1914086+02	2.1914086+02	3.5099534-01	5.5825416-02	2.5709956-04	1.4352693-05	2.9676094+02
23250.	2.1955175+02	2.1955175+02	3.3763691-01	5.3600409-02	2.6819108-04	1.4375152-05	2.9703902+02
23500.	2.1994521+02	2.1994521+02	3.2482963-01	5.1474152-02	2.7968686-04	1.4396644-05	2.9730506+02
23750.	2.2032124+02	2.2032124+02	3.1255132-01	4.9441865-02	2.9159841-04	1.4417169-05	2.9755910+02
24000.	2.2068038+02	2.2068038+02	3.0077469-01	4.7498948-02	3.0393812-04	1.4436741-05	2.9780132+02
24250.	2.2102236+02	2.2102236+02	2.8947946-01	4.5640858-02	3.1672055-04	1.4455397-05	2.9803218+02
24500.	2.2134934+02	2.2134934+02	2.7864212-01	4.3863223-02	3.2996225-04	1.4473208-05	2.9825256+02
24750.	2.2166262+02	2.2166262+02	2.6824272-01	4.2161760-02	3.4368256-04	1.4490261-05	2.9846354+02
25000.	2.2196423+02	2.2196423+02	2.5825416-01	4.0532336-02	3.5790363-04	1.4506670-05	2.9866653+02
25250.	2.2225667+02	2.2225667+02	2.4866233-01	3.8970971-02	3.7265097-04	1.4522570-05	2.9886320+02
25500.	2.2254294+02	2.2254294+02	2.3944905-01	3.7473797-02	3.8795445-04	1.4538126-05	2.9905561+02
25750.	2.2282657+02	2.2282657+02	2.3058320-01	3.6037118-02	4.0384834-04	1.4553530-05	2.9924613+02
26000.	2.2311148+02	2.2311148+02	2.2205890-01	3.4657364-02	4.2037229-04	1.4568995-05	2.9943738+02
26250.	2.2340222+02	2.2340222+02	2.1385474-01	3.3331123-02	4.3757205-04	1.4584768-05	2.9963242+02
26500.	2.2370383+02	2.2370383+02	2.0595366-01	3.2055122-02	4.5550939-04	1.4601121-05	2.9983461+02
26750.	2.2402190+02	2.2402190+02	1.9833962-01	3.0826228-02	4.7421811-04	1.4618355-05	3.0004769+02
27000.	2.2436256+02	2.2436256+02	1.9099714-01	2.9641456-02	4.9379501-04	1.4636803-05	3.0027575+02
27250.	2.2473230+02	2.2473230+02	1.8391140-01	2.8497972-02	5.1431102-04	1.4656821-05	3.0052319+02

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
18500.	7.6680477-02	1.0597028-01	7.7466246-01	2.8964400+01	8.6245384+00
18750.	7.3697344-02	1.0119793-01	7.7564334-01	2.8964400+01	8.6524032+00
19000.	7.0823879-02	9.7073413-02	7.7674711-01	2.8964400+01	8.6792437+00
19250.	6.8057774-02	9.3131026-02	7.7795702-01	2.8964400+01	8.7050812+00
19500.	6.5396591-02	8.9293555-02	7.7925704-01	2.8964400+01	8.7299389+00
19750.	6.2837730-02	8.5638077-02	7.8063161-01	2.8964400+01	8.7538406+00
20000.	6.0378483-02	8.2042959-02	7.8206606-01	2.8964400+01	8.7768120+00
20250.	5.8016037-02	7.8703231-02	7.8354636-01	2.8964400+01	8.7988790+00
20500.	5.5747525-02	7.5456019-02	7.8505919-01	2.8964400+01	8.8200687+00
20750.	5.3572015-02	7.2349015-02	7.8659218-01	2.8964400+01	8.8404084+00
21000.	5.1480534-02	6.9373267-02	7.8813369-01	2.8964400+01	8.8599259+00
21250.	4.9476091-02	6.6525241-02	7.8967299-01	2.8964400+01	8.8786490+00
21500.	4.7553691-02	6.3803052-02	7.9120224-01	2.8964400+01	8.8966057+00
21750.	4.5712354-02	6.1195143-02	7.9270665-01	2.8964400+01	8.9138240+00
22000.	4.3943094-02	5.8704253-02	7.9418421-01	2.8964400+01	8.9303316+00
22250.	4.2246975-02	5.6323312-02	7.9562621-01	2.8964400+01	8.9461560+00
22500.	4.0625603-02	5.4048433-02	7.9702660-01	2.8964400+01	8.9613245+00
22750.	3.9068563-02	5.1874555-02	7.9838254-01	2.8964400+01	8.9758636+00
23000.	3.7576603-02	4.9797431-02	7.9968470-01	2.8964400+01	8.9897996+00
23250.	3.6146433-02	4.7612679-02	8.0093620-01	2.8964400+01	9.0031586+00
23500.	3.4775373-02	4.5916214-02	8.0213368-01	2.8964400+01	9.0159653+00
23750.	3.3460783-02	4.4123171-02	8.0327727-01	2.8964400+01	9.0282446+00
24000.	3.2203117-02	4.2376349-02	8.0436774-01	2.8964400+01	9.0400203+00
24250.	3.0993866-02	4.0712594-02	8.0542723-01	2.8964400+01	9.0513155+00
24500.	2.9833665-02	3.9126757-02	8.0639958-01	2.8964400+01	9.0621529+00
24750.	2.8717119-02	3.7639166-02	8.0734974-01	2.8964400+01	9.0725542+00
25000.	2.7647965-02	3.6135686-02	8.0826398-01	2.8964400+01	9.0825409+00
25250.	2.6621078-02	3.4752917-02	8.0914989-01	2.8964400+01	9.0921329+00
25500.	2.5634290-02	3.3427406-02	8.1001662-01	2.8964400+01	9.1013503+00
25750.	2.4685586-02	3.2145658-02	8.1087469-01	2.8964400+01	9.1102120+00
26000.	2.3773019-02	3.0915069-02	8.1173654-01	2.8964400+01	9.1187360+00
26250.	2.2894724-02	2.9732055-02	8.1261534-01	2.8964400+01	9.1269403+00
26500.	2.2046839-02	2.8593835-02	8.1352645-01	2.8964400+01	9.1348413+00
26750.	2.1233698-02	2.7497036-02	8.1448671-01	2.8964400+01	9.1424553+00
27000.	2.0447633-02	2.6440795-02	8.1551455-01	2.8964400+01	9.1497978+00
27250.	1.9689052-02	2.5420784-02	8.1662991-01	2.8964400+01	9.1568836+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	KINEMATIC VISCOSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
m	K	K	N cm^{-2}	kg m^{-3}	m^{2}s^{-1}	N·s m^{-2}	m s^{-1}
27500.	2.2513896+02	2.2513896+02	1.7706838-01	2.7393095-02	5.3585766-04	1.4678800-05	3.0079484+02
27750.	2.2568981+02	2.2568981+02	1.7049480-01	2.6324278-02	5.5853985-04	1.4703159-05	3.0109587+02
28000.	2.2609358+02	2.2609358+02	1.6405777-01	2.5289117-02	5.8247786-04	1.4730351-05	3.0143187+02
28250.	2.2627900+02	2.2627900+02	1.5804113-01	2.4331204-02	6.0582093-04	1.4740353-05	3.0155545+02
28500.	2.2491562+02	2.2491562+02	1.5220885-01	2.3379836-02	6.3194050-04	1.4774666-05	3.0197935+02
28750.	2.2753574+02	2.2753574+02	1.4675423-01	2.2468741-02	6.5905110-04	1.4808049-05	3.0239170+02
29000.	2.2814065+02	2.2814065+02	1.4142899-01	2.1596011-02	6.8719054-04	1.4840574-05	3.0279339+02
29250.	2.2873169+02	2.2873169+02	1.3630517-01	2.0759829-02	7.1639886-04	1.4872317-05	3.0318535+02
29500.	2.2931017+02	2.2931017+02	1.3137509-01	1.9958480-02	7.4671776-04	1.4903351-05	3.0356850+02
29750.	2.2987726+02	2.2987726+02	1.2663138-01	1.9190358-02	7.7818982-04	1.4933741-05	3.0394364+02
30000.	2.3043426+02	2.3043426+02	1.2206691-01	1.8453921-02	8.1086040-04	1.4963557-05	3.0431165+02
30250.	2.3098234+02	2.3098234+02	1.1767484-01	1.7747722-02	8.4477689-04	1.4992865-05	3.0467333+02
30500.	2.3152265+02	2.3152265+02	1.1344859-01	1.7070386-02	8.7998755-04	1.5021727-05	3.0502947+02
30750.	2.3205635+02	2.3205635+02	1.0938177-01	1.6420609-02	9.1654380-04	1.5050207-05	3.0538084+02
31000.	2.3258450+02	2.3258450+02	1.0546830-01	1.5797158-02	9.5449846-04	1.5078363-05	3.0572815+02
31250.	2.3310822+02	2.3310822+02	1.0170230-01	1.5198858-02	9.9390716-04	1.5106253-05	3.0607217+02
31500.	2.3362848+02	2.3362848+02	9.8078093-02	1.4624599-02	1.0348272-03	1.5133933-05	3.0641354+02
31750.	2.3414630+02	2.3414630+02	9.4590244-02	1.4073328-02	1.0773184-03	1.5161455-05	3.0675292+02
32000.	2.3466267+02	2.3466267+02	9.1233502-02	1.3544035-02	1.1214437-03	1.5188873-05	3.0709098+02
32250.	2.3517847+02	2.3517847+02	8.8002827-02	1.3035774-02	1.1672676-03	1.5216234-05	3.0742830+02
32500.	2.3569462+02	2.3569462+02	8.4893359-02	1.2547633-02	1.2148576-03	1.5243587-05	3.0776546+02
32750.	2.3621191+02	2.3621191+02	8.1900433-02	1.2078764-02	1.2642838-03	1.5270974-05	3.0810302+02
33000.	2.3673119+02	2.3673119+02	7.9019569-02	1.1628319-02	1.3156191-03	1.5298438-05	3.0844149+02
33250.	2.3725320+02	2.3725320+02	7.6244430-02	1.1196544-02	1.3689393-03	1.5326021-05	3.0878137+02
33500.	2.3777868+02	2.3777868+02	7.3576879-02	1.0779688-02	1.4243231-03	1.5353759-05	3.0912313+02
33750.	2.3830832+02	2.3830832+02	7.1006897-02	1.0380041-02	1.4818523-03	1.5381689-05	3.0946722+02
34000.	2.3884268+02	2.3884268+02	6.8532667-02	9.9959356-03	1.5416105-03	1.5409839-05	3.0981399+02
34250.	2.3938245+02	2.3938245+02	6.6150483-02	9.6267225-03	1.6036844-03	1.5438244-05	3.1016387+02
34500.	2.3992809+02	2.3992809+02	6.3856785-02	9.2717947-03	1.6681707-03	1.5466933-05	3.1051715+02
34750.	2.4048017+02	2.4048017+02	6.1648170-02	8.9305596-03	1.7351576-03	1.5495928-05	3.1087421+02
35000.	2.4103908+02	2.4103908+02	5.9521349-02	8.6024678-03	1.8047490-03	1.5525252-05	3.1123525+02
35250.	2.4160527+02	2.4160527+02	5.7473165-02	8.2869834-03	1.8770312-03	1.5554926-05	3.1160058+02
35500.	2.4217903+02	2.4217903+02	5.5500577-02	7.9835990-03	1.9521228-03	1.5584965-05	3.1197035+02
35750.	2.4276074+02	2.4276074+02	5.3600677-02	7.6918282-03	2.0301270-03	1.5615388-05	3.1234480+02
36000.	2.4335058+02	2.4335058+02	5.1770654-02	7.4112084-03	2.1111540-03	1.5646202-05	3.1272402+02
36250.	2.4394878+02	2.4394878+02	5.0007814-02	7.1412949-03	2.1953188-03	1.5677419-05	3.1310816+02

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
27500.	1.895e-02	2.443E-02	8.178E-01	2.896E+01	9.163E+00
27750.	1.824e-02	2.343E-02	8.192E-01	2.896E+01	9.170E+00
28000.	1.756E-02	2.255E-02	8.207E-01	2.896E+01	9.176E+00
28250.	1.691E-02	2.173E-02	8.212E-01	2.896E+01	9.182E+00
28500.	1.630E-02	2.095E-02	8.231E-01	2.896E+01	9.188E+00
28750.	1.571E-02	2.024E-02	8.250E-01	2.896E+01	9.194E+00
29000.	1.514E-02	1.958E-02	8.268E-01	2.896E+01	9.199E+00
29250.	1.459E-02	1.895E-02	8.286E-01	2.896E+01	9.204E+00
29500.	1.408E-02	1.837E-02	8.303E-01	2.896E+01	9.209E+00
29750.	1.358E-02	1.781E-02	8.320E-01	2.896E+01	9.214E+00
30000.	1.310E-02	1.729E-02	8.337E-01	2.896E+01	9.219E+00
30250.	1.264E-02	1.681E-02	8.353E-01	2.896E+01	9.223E+00
30500.	1.219E-02	1.632E-02	8.369E-01	2.896E+01	9.227E+00
30750.	1.177E-02	1.587E-02	8.385E-01	2.896E+01	9.231E+00
31000.	1.136E-02	1.544E-02	8.401E-01	2.896E+01	9.235E+00
31250.	1.097E-02	1.503E-02	8.416E-01	2.896E+01	9.239E+00
31500.	1.059E-02	1.464E-02	8.431E-01	2.896E+01	9.243E+00
31750.	1.022E-02	1.425E-02	8.446E-01	2.896E+01	9.246E+00
32000.	9.867E-03	1.388E-02	8.462E-01	2.896E+01	9.250E+00
32250.	9.521E-03	1.352E-02	8.477E-01	2.896E+01	9.253E+00
32500.	9.188E-03	1.319E-02	8.493E-01	2.896E+01	9.256E+00
32750.	8.868E-03	1.287E-02	8.508E-01	2.896E+01	9.259E+00
33000.	8.559E-03	1.257E-02	8.523E-01	2.896E+01	9.262E+00
33250.	8.262E-03	1.228E-02	8.537E-01	2.896E+01	9.265E+00
33500.	7.976E-03	1.200E-02	8.551E-01	2.896E+01	9.267E+00
33750.	7.701E-03	1.173E-02	8.565E-01	2.896E+01	9.270E+00
34000.	7.436E-03	1.147E-02	8.579E-01	2.896E+01	9.272E+00
34250.	7.181E-03	1.122E-02	8.593E-01	2.896E+01	9.275E+00
34500.	6.936E-03	1.098E-02	8.607E-01	2.896E+01	9.277E+00
34750.	6.699E-03	1.075E-02	8.621E-01	2.896E+01	9.279E+00
35000.	6.472E-03	1.052E-02	8.635E-01	2.896E+01	9.281E+00
35250.	6.253E-03	1.030E-02	8.648E-01	2.896E+01	9.283E+00
35500.	6.041E-03	1.009E-02	8.662E-01	2.896E+01	9.285E+00
35750.	5.838E-03	9.881E-03	8.675E-01	2.896E+01	9.287E+00
36000.	5.642E-03	9.680E-03	8.689E-01	2.896E+01	9.288E+00
36250.	5.453E-03	9.485E-03	8.702E-01	2.896E+01	9.290E+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	KINEMATIC VISCOSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
m	K	K	N cm^{-2}	kg m^{-3}	m^2 s^{-1}	N-s m^{-2}	m s^{-1}
36500.	2.4956551+02	2.4956551+02	4.8309561-02	6.8816628-03	2.2827397-03	1.5709045-05	3.1349728+02
36750.	2.4517081+02	2.4517081+02	4.6673421-02	6.6319099-03	2.3745367-03	1.5791081-05	3.1389141+02
37000.	2.4579478+02	2.4579478+02	4.5096980-02	6.3916438-03	2.4678365-03	1.5773532-05	3.1429059+02
37250.	2.4642734+02	2.4642734+02	4.3577957-02	6.1604967-03	2.5657657-03	1.5806391-05	3.1469475+02
37500.	2.4706844+02	2.4706844+02	4.2114125-02	5.9381109-03	2.6674571-03	1.5839655-05	3.1510383+02
37750.	2.4771795+02	2.4771795+02	4.0703376-02	5.7241961-03	2.7730451-03	1.5873315-05	3.1551775+02
38000.	2.4837562+02	2.4837562+02	3.9343655-02	5.5182770-03	2.8826674-03	1.5907357-05	3.1593631+02
38250.	2.4904134+02	2.4904134+02	3.8033008-02	5.3201882-03	2.9964681-03	1.5941774-05	3.1635942+02
38500.	2.4971464+02	2.4971464+02	3.6769549-02	5.1295829-03	3.1145886-03	1.5976541-05	3.1678678+02
38750.	2.5039520+02	2.5039520+02	3.5551969-02	4.9461730-03	3.2371772-03	1.6011638-05	3.1721817+02
39000.	2.5108266+02	2.5108266+02	3.4377026-02	4.7696810-03	3.3643858-03	1.6047047-05	3.1765333+02
39250.	2.5177692+02	2.5177692+02	3.3244545-02	4.5998438-03	3.4963657-03	1.6082736-05	3.1809188+02
39500.	2.5247596+02	2.5247596+02	3.2152425-02	4.4364078-03	3.6332720-03	1.6118674-05	3.1853347+02
39750.	2.5318066+02	2.5318066+02	3.1099123-02	4.2791288-03	3.7752628-03	1.6154836-05	3.1897770+02
40000.	2.5388979+02	2.5388979+02	3.0083150-02	4.1277733-03	3.9224962-03	1.6191175-05	3.1942409+02
40250.	2.5460265+02	2.5460265+02	2.9103085-02	3.9821156-03	4.0751351-03	1.6227659-05	3.1987221+02
40500.	2.5531831+02	2.5531831+02	2.8157561-02	3.8419422-03	4.2333378-03	1.6264239-05	3.2032146+02
40750.	2.5603600+02	2.5603600+02	2.7245262-02	3.7070438-03	4.3972707-03	1.6300875-05	3.2077135+02
41000.	2.5675447+02	2.5675447+02	2.6364920-02	3.5772217-03	4.5670959-03	1.6337515-05	3.2122122+02
41250.	2.5747322+02	2.5747322+02	2.5515322-02	3.4522858-03	4.7429734-03	1.6374100-05	3.2167039+02
41500.	2.5819072+02	2.5819072+02	2.4695310-02	3.3320508-03	4.9250704-03	1.6410585-05	3.2211827+02
41750.	2.5890582+02	2.5890582+02	2.3903764-02	3.2163407-03	5.1135499-03	1.6446901-05	3.2256405+02
42000.	2.5961737+02	2.5961737+02	2.3139577-02	3.1049844-03	5.3085585-03	1.6482991-05	3.2300700+02
42250.	2.6032399+02	2.6032399+02	2.2401761-02	2.9978198-03	5.5102662-03	1.6518786-05	3.2344627+02
42500.	2.6102428+02	2.6102428+02	2.1689277-02	2.8949891-03	5.7188231-03	1.6554215-05	3.2388102+02
42750.	2.6171676+02	2.6171676+02	2.1001202-02	2.7963413-03	5.9343778-03	1.6589205-05	3.2431035+02
43000.	2.6239986+02	2.6239986+02	2.0336609-02	2.6999312-03	6.1570753-03	1.6623680-05	3.2473332+02
43250.	2.6307195+02	2.6307195+02	1.9694417-02	2.6080190-03	6.3870540-03	1.6657560-05	3.2514892+02
43500.	2.6373138+02	2.6373138+02	1.9074375-02	2.5195690-03	6.6244502-03	1.6690760-05	3.2555619+02
43750.	2.6437621+02	2.6437621+02	1.8475071-02	2.4343536-03	6.8693802-03	1.6723187-05	3.2595394+02
44000.	2.6500971+02	2.6500971+02	1.7895922-02	2.3525465-03	7.1219673-03	1.6754759-05	3.2634116+02
44250.	2.6561485+02	2.6561485+02	1.7336182-02	2.2737298-03	7.3823087-03	1.6785375-05	3.2671662+02
44500.	2.6620956+02	2.6620956+02	1.6795129-02	2.1978876-03	7.6504980-03	1.6814934-05	3.2707910+02
44750.	2.6677182+02	2.6677182+02	1.6272054-02	2.1249082-03	7.9266201-03	1.6843340-05	3.2742741+02
45000.	2.6731929+02	2.6731929+02	1.5766305-02	2.0546863-03	8.2107314-03	1.6870477-05	3.2776019+02
45250.	2.6782983+02	2.6782983+02	1.5277242-02	1.9871184-03	8.5028871-03	1.6896244-05	3.2807605+02

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
36500.	5.171887-03	6.1385863-03	8.7525634-01	2.8964400+01	9.2924855+00
36750.	4.996729[illegible]-03	5.9158319-03	8.7724132-01	2.8964400+01	9.2941215+00
37000.	4.827959[illegible]-03	5.7414791-03	8.7884935-01	2.8964400+01	9.2956986+00
37250.	4.665337[illegible]-03	5.4952911-03	8.8268217-01	2.8964400+01	9.2972172+00
37500.	4.508e232-03	5.2969179-03	8.8253351-01	2.8964400+01	9.2986809+00
37750.	4.3579923-03	5.1065373-03	8.8440896-01	2.8964400+01	9.3000916+00
38000.	4.212[illegible]-03	4.9229176-03	8.8630567-01	2.8964400+01	9.3014513+00
38250.	4.071[illegible]-03	4.7457184-03	8.8822327-01	2.8964400+01	9.3027620+00
38500.	3.9364476-03	4.5756946-03	8.9016039-01	2.8964400+01	9.3040254+00
38750.	3.8068432-03	4.4120891-03	8.9211586-01	2.8964400+01	9.3052435+00
39000.	3.680[illegible]-03	4.2546546-03	8.9408872-01	2.8964400+01	9.3064179+00
39250.	3.5593[illegible]-03	4.1031563-03	8.9607719-01	2.8964400+01	9.3075504+00
39500.	3.4421508-03	3.9573679-03	8.9807966-01	2.8964400+01	9.3086425+00
3975[illegible].	3.3293872-03	3.8172718-03	9.0009435-01	2.8964400+01	9.3096958+00
40000.	3.2206199-03	3.6829596-03	9.0211946-01	2.8964400+01	9.3107119+00
40250.	3.1156968-03	3.5521299-03	9.0415183-01	2.8964400+01	9.3116919+00
40500.	3.0144716-03	3.4270923-03	9.0618996-01	2.8964400+01	9.3126374+00
40750.	2.9168034-03	3.3067602-03	9.0823126-01	2.8964400+01	9.3135498+00
41000.	2.8225563-03	3.1909561-03	9.1027261-01	2.8964400+01	9.3144301+00
41250.	2.7316017-03	3.0795[illegible]-03	9.1231134-01	2.8964400+01	9.3152796+00
41500.	2.6438125-03	2.9722[illegible]-03	9.1434386-01	2.8964400+01	9.3160996+00
41750.	2.559[illegible]-03	2.8690428-03	9.1636728-01	2.8964400+01	9.3168912+00
42000.	2.4772599-03	2.7697166-03	9.1837811-01	2.8964400+01	9.3176554+00
42250.	2.3982703-03	2.6741176-03	9.2037243-01	2.8964400+01	9.3183932+00
42500.	2.3219947-03	2.5821228-03	9.2234644-01	2.8964400+01	9.3191057+00
42750.	2.2483314-03	2.4935918-03	9.2429598-01	2.8964400+01	9.3197938+00
43000.	2.1771818-03	2.4083948-03	9.2621681-01	2.8964400+01	9.3204584+00
43250.	2.1084519-03	2.3264372-03	9.2810439-01	2.8964400+01	9.3211004+00
43500.	2.042[illegible]-03	2.2475079-03	9.2995427-01	2.8964400+01	9.3217206+00
43750.	1.9778906-03	2.1715832-03	9.3176103-01	2.8964400+01	9.3223199+00
44000.	1.9156865-03	2.0985[illegible]-03	9.3352012-01	2.8964400+01	9.3228991+00
44250.	1.8559643-03	2.0282143-03	9.3522593-01	2.8964400+01	9.3234588+00
44500.	1.7985951-03	1.9605614-03	9.3687288-01	2.8964400+01	9.3239999+00
44750.	1.7422416-03	1.8954623-03	9.3845554-01	2.8964400+01	9.3245230+00
45000.	1.6878476-03	1.8328228-03	9.3996764-01	2.8964400+01	9.3250287+00
45250.	1.6356398-03	1.7725539-03	9.4140317-01	2.8964400+01	9.3255178+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	KINEMATIC VISCOSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
m	K	K	N cm^{-2}	kg m^{-3}	m^2 s^{-1}	N s m^{-2}	m s^{-1}
45500.	2.6831589+02	2.6831589+02	1.4804243-02	1.9221071-03	8.6031073-03	1.6920515-05	3.2837361+02
45750.	2.6877010+02	2.6877010+02	1.4946717-02	1.8575569-03	9.1114084-03	1.6943178-05	3.2865193+02
46000.	2.6918990+02	2.6918990+02	1.5090100-02	1.7993759-03	9.6277728-03	1.6964107-05	3.2890799+02
46250.	2.6957262+02	2.6957262+02	1.5235842-02	1.7414776-03	9.7521639-03	1.6983175-05	3.2914172+02
46500.	2.6991556+02	2.6991556+02	1.5061920-02	1.6857774-03	1.0084516-02	1.7000250-05	3.2935102+02
46750.	2.7021588+02	2.7021588+02	1.5260328-02	1.6321943-03	1.0924736-02	1.7015195-05	3.2953420+02
47000.	2.7047061+02	2.7047061+02	1.5272081-02	1.5806507-03	1.0772693-02	1.7027864-05	3.2968948+02
47250.	2.7067679+02	2.7067679+02	1.5496217-02	1.5310719-03	1.1128226-02	1.7038115-05	3.2981512+02
47500.	2.7083127+02	2.7083127+02	1.5532281-02	1.4833859-03	1.1491138-02	1.7045793-05	3.2990922+02
47750.	2.7093109+02	2.7093109+02	1.5779850-02	1.4375232-03	1.1861202-02	1.7050753-05	3.2997001+02
48000.	2.7097250+02	2.7097250+02	1.6038509-02	1.3934199-03	1.2238103-02	1.7052811-05	3.2999523+02
48250.	2.7095242+02	2.7095242+02	1.6307849-02	1.3510100-03	1.2621530-02	1.7051813-05	3.2998301+02
48500.	2.7086734+02	2.7086734+02	1.6187503-02	1.3102339-03	1.3011101-02	1.7047586-05	3.2993119+02
48750.	2.7071362+02	2.7071362+02	9.8770976-03	1.2710335-03	1.1906371-02	1.7039996-05	3.2983786+02
49000.	2.7048761+02	2.7048761+02	9.5762799-03	1.2333525-03	1.1568898-02	1.7028710-05	3.2969989+02
49250.	2.7063017+02	2.7063017+02	9.2694900-03	1.1932119-03	1.1277267-02	1.7035798-05	3.2978672+02
49500.	2.7084969+02	2.7084969+02	8.9898768-03	1.1562809-03	1.1742712-02	1.7046708-05	3.2992044+02
49750.	2.7102480+02	2.7102480+02	8.7184679-03	1.1206472-03	1.2219250-02	1.7055409-05	3.3002707+02
50000.	2.7115662+02	2.7115662+02	8.4550115-03	1.0862549-03	1.2707150-02	1.7061957-05	3.3010733+02
50250.	2.7124635+02	2.7124635+02	8.1992726-03	1.0530505-03	1.3206693-02	1.7066413-05	3.3016194+02
50500.	2.7129508+02	2.7129508+02	7.9510153-03	1.0209828-03	1.3718092-02	1.7068833-05	3.3019159+02
50750.	2.7130383+02	2.7130383+02	7.7100180-03	9.9000440-04	1.4241609-02	1.7069268-05	3.3019692+02
51000.	2.7127369+02	2.7127369+02	7.4760636-03	9.6007037-04	1.4777625-02	1.7067771-05	3.3017857+02
51250.	2.7120576+02	2.7120576+02	7.2489410-03	9.3113661-04	1.5326417-02	1.7064398-05	3.3013729+02
51500.	2.7110114+02	2.7110114+02	7.0285973-03	9.0316230-04	1.5888301-02	1.7059201-05	3.3007355+02
51750.	2.7096078+02	2.7096078+02	6.8143876-03	8.7610901-04	1.6463592-02	1.7052229-05	3.2998809+02
52000.	2.7078585+02	2.7078585+02	6.6063708-03	8.4993929-04	2.0052652-02	1.7043536-05	3.2988156+02
52250.	2.7057727+02	2.7057727+02	6.4044138-03	8.2461827-04	2.0655821-02	1.7033168-05	3.2975448+02
52500.	2.7033617+02	2.7033617+02	6.2085363-03	8.0011204-04	2.1273493-02	1.7021178-05	3.2960754+02
52750.	2.7006396+02	2.7006396+02	6.0187683-03	7.7638931-04	2.1906034-02	1.7007611-05	3.2944129+02
53000.	2.6976022+02	2.6976022+02	5.8349118-03	7.5341949-04	2.2553840-02	1.6992517-05	3.2925623+02
53250.	2.6942744+02	2.6942744+02	5.6568949-03	7.3117352-04	2.3217394-02	1.6976944-05	3.2905309+02
53500.	2.6906612+02	2.6906612+02	5.4806709-03	7.0962904-04	2.3897073-02	1.6957938-05	3.2883237+02
53750.	2.6867717+02	2.6867717+02	5.3119200-03	6.8874508-04	2.4593340-02	1.6938542-05	3.2859461+02
54000.	2.6826166+02	2.6826166+02	5.1478915-03	6.6851096-04	2.5306703-02	1.6917808-05	3.2834042+02
54250.	2.6782047+02	2.6782047+02	4.9886464-03	6.4889841-04	2.6037628-02	1.6896776-05	3.2807031+02

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
45500.	1.584901E-03	1.719955E-03	9.427554E-01	2.896440E+01	9.325990E+00
45750.	1.533928E-03	1.665970E-03	9.440181E-01	2.896440E+01	9.320448E+00
46000.	1.488335E-03	1.608586E-03	9.451843E-01	2.896440E+01	9.326890E+00
46250.	1.442668E-03	1.553434E-03	9.462467E-01	2.896440E+01	9.327319E+00
46500.	1.398820E-03	1.503749E-03	9.471984E-01	2.896440E+01	9.327733E+00
46750.	1.356368E-03	1.455912E-03	9.480337E-01	2.896440E+01	9.328134E+00
47000.	1.313615E-03	1.407733E-03	9.487366E-01	2.896440E+01	9.328522E+00
47250.	1.273576E-03	1.365740E-03	9.493277E-01	2.896440E+01	9.328898E+00
47500.	1.234619E-03	1.323211E-03	9.497355E-01	2.896440E+01	9.329262E+00
47750.	1.196884E-03	1.282306E-03	9.500119E-01	2.896440E+01	9.329615E+00
48000.	1.160349E-03	1.242957E-03	9.501265E-01	2.896440E+01	9.329956E+00
48250.	1.124941E-03	1.205129E-03	9.500729E-01	2.896440E+01	9.330287E+00
48500.	1.090946E-03	1.168759E-03	9.498354E-01	2.896440E+01	9.330607E+00
48750.	1.057415E-03	1.133788E-03	9.494397E-01	2.896440E+01	9.330917E+00
49000.	1.025210E-03	1.100176E-03	9.488783E-01	2.896440E+01	9.331217E+00
49250.	9.923662E-04	1.067693E-03	9.481784E-01	2.896440E+01	9.331509E+00
49500.	9.624316E-04	1.036426E-03	9.473664E-01	2.896440E+01	9.331791E+00
49750.	9.333753E-04	9.994157E-04	9.464133E-01	2.896440E+01	9.332065E+00
50000.	9.051704E-04	9.687617E-04	9.453619E-01	2.896440E+01	9.332330E+00
50250.	8.777917E-04	9.393289E-04	9.442088E-01	2.896440E+01	9.332587E+00
50500.	8.512139E-04	9.107374E-04	9.431929E-01	2.896440E+01	9.332840E+00
50750.	8.254134E-04	8.831948E-04	9.421936E-01	2.896440E+01	9.333086E+00
51000.	8.003669E-04	8.566273E-04	9.412966E-01	2.896440E+01	9.333324E+00
51250.	7.760518E-04	8.305921E-04	9.405772E-01	2.896440E+01	9.333556E+00
51500.	7.524463E-04	8.052965E-04	9.398263E-01	2.896440E+01	9.333782E+00
51750.	7.295277E-04	7.807795E-04	9.390913E-01	2.896440E+01	9.333998E+00
52000.	7.072814E-04	7.569646E-04	9.384697E-01	2.896440E+01	9.334208E+00
52250.	6.856881E-04	7.338557E-04	9.378321E-01	2.896440E+01	9.334412E+00
52500.	6.647117E-04	7.113716E-04	9.483643E-01	2.896440E+01	9.334586E+00
52750.	6.443529E-04	6.895543E-04	9.476281E-01	2.896440E+01	9.334776E+00
53000.	6.245872E-04	6.683648E-04	9.467647E-01	2.896440E+01	9.334961E+00
53250.	6.053976E-04	6.478221E-04	9.458437E-01	2.896440E+01	9.335140E+00
53500.	5.867677E-04	6.278939E-04	9.448405E-01	2.896440E+01	9.335314E+00
53750.	5.686796E-04	6.085493E-04	9.437549E-01	2.896440E+01	9.335483E+00
54000.	5.511192E-04	5.898268E-04	9.426946E-01	2.896440E+01	9.335647E+00
54250.	5.340785E-04	5.716488E-04	9.417778E-01	2.896440E+01	9.335806E+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	KINEMATIC VISCOSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
m	K	K	N cm^{-2}	kg m^{-3}	m^2 s^{-1}	N s m^{-2}	m s^{-1}
54500.	2.6735455+02	2.6735455+02	4.8340461-03	6.2988455-04	2.6786639-02	1.6872490-05	3.2778483+02
54750.	2.6686487+02	2.6686487+02	4.6839549-03	6.1194734-04	2.7554289-02	1.6847996-05	3.2748450+02
55000.	2.6635233+02	2.6635233+02	4.5382458-03	5.9356636-04	2.8341122-02	1.6822337-05	3.2716987+02
55260.	2.6581781+02	2.6581781+02	4.3967917-03	5.7622165-04	2.9147728-02	1.6795552-05	3.2684142+02
55500.	2.6526231+02	2.6526231+02	4.2594714-03	5.5939412-04	2.9974733-02	1.6767689-05	3.2649973+02
55750.	2.6468660+02	2.6468660+02	4.1261654-03	5.4306576-04	3.0822757-02	1.6738789-05	3.2614523+02
56000.	2.6409158+02	2.6409158+02	3.9967607-03	5.2721934-04	3.1692461-02	1.6708879-05	3.2577843+02
56280.	2.6347816+02	2.6347816+02	3.8711454-03	5.1183809-04	3.2584551-02	1.6678015-05	3.2539987+02
56500.	2.6284720+02	2.6284720+02	3.7492116-03	4.9690613-04	3.3499754-02	1.6646234-05	3.2501001+02
56750.	2.6219954+02	2.6219954+02	3.6308558-03	4.8240837-04	3.4438819-02	1.6613575-05	3.2460934+02
57000.	2.6153592+02	2.6153592+02	3.5159756-03	4.6833031-04	3.5402517-02	1.6580072-05	3.2419829+02
57260.	2.6085715+02	2.6085715+02	3.4044730-03	4.5465807-04	3.6391663-02	1.6545763-05	3.2377732+02
57500.	2.6016418+02	2.6016418+02	3.2962517-03	4.4137792-04	3.7407159-02	1.6510694-05	3.2334698+02
57750.	2.5945753+02	2.5945753+02	3.1912198-03	4.2847766-04	3.8449818-02	1.6474888-05	3.2290755+02
58000.	2.5873822+02	2.5873822+02	3.0892862-03	4.1594443-04	3.9520649-02	1.6438394-05	3.2245963+02
58250.	2.5800690+02	2.5800690+02	2.9903654-03	4.0376692-04	4.0620549-02	1.6401242-05	3.2200359+02
58500.	2.5726427+02	2.5726427+02	2.8943716-03	3.9193365-04	4.1750602-02	1.6363466-05	3.2153984+02
58750.	2.5651123+02	2.5651123+02	2.8012216-03	3.8043358-04	4.2911851-02	1.6325109-05	3.2106890+02
59000.	2.5574828+02	2.5574828+02	2.7108367-03	3.6925672-04	4.4105342-02	1.6286194-05	3.2059106+02
59260.	2.5497627+02	2.5497627+02	2.6231383-03	3.5839272-04	4.5332289-02	1.6246762-05	3.2010683+02
59500.	2.5419568+02	2.5419568+02	2.5380510-03	3.4783232-04	4.6593820-02	1.6206837-05	3.1961646+02
59750.	2.5340742+02	2.5340742+02	2.4555021-03	3.3756603-04	4.7891256-02	1.6166461-05	3.1912051+02
60000.	2.5261192+02	2.5261192+02	2.3754195-03	3.2758516-04	4.9225845-02	1.6125656-05	3.1861922+02
60250.	2.5181012+02	2.5181012+02	2.2977344-03	3.1788088-04	5.0599043-02	1.6084468-05	3.1811317+02
60500.	2.5100237+02	2.5100237+02	2.2223798-03	3.0844534-04	5.2012177-02	1.6042914-05	3.1760254+02
60750.	2.5018933+02	2.5018933+02	2.1492900-03	2.9927055-04	5.3466756-02	1.6001026-05	3.1708774+02
61000.	2.4937169+02	2.4937169+02	2.0784015-03	2.9034881-04	5.4964365-02	1.5958838-05	3.1656918+02
61250.	2.4854984+02	2.4854984+02	2.0096524-03	2.8167300-04	5.6506546-02	1.5916369-05	3.1604709+02
61500.	2.4772443+02	2.4772443+02	1.9429829-03	2.7323599-04	5.8095022-02	1.5873651-05	3.1552187+02
61750.	2.4689601+02	2.4689601+02	1.8783345-03	2.6503097-04	5.9731557-02	1.5830713-05	3.1499386+02
62000.	2.4606511+02	2.4606511+02	1.8156804-03	2.5705139-04	6.1417989-02	1.5787579-05	3.1446338+02
62250.	2.4523228+02	2.4523228+02	1.7548756-03	2.4929090-04	6.3156255-02	1.5744280-05	3.1393076+02
62500.	2.4439787+02	2.4439787+02	1.6959563-03	2.4174360-04	6.4948280-02	1.5700831-05	3.1339622+02
62750.	2.4356239+02	2.4356239+02	1.6388403-03	2.3440353-04	6.6796173-02	1.5657259-05	3.1286009+02
63000.	2.4272632+02	2.4272632+02	1.5834767-03	2.2726500-04	6.8702127-02	1.5613589-05	3.1232265+02
63250.	2.4189005+02	2.4189005+02	1.5298159-03	2.2032254-04	7.0668394-02	1.5569840-05	3.1178416+02

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
54500.	5.175197?-04	5.6187211-04	9.4007970-01	2.8964400+01	9.3359610+00
54750.	5.0145142-04	5.4542373-04	9.3871499-01	2.8964400+01	9.3361111+00
55000.	4.8565221-04	5.2947353-04	9.3728536-01	2.8964400+01	9.3362567+00
55250.	4.7_?8651-04	5.1402169-04	9.3579295-01	2.8964400+01	9.3363982+00
55500.	4.5602737-04	4.9899118-04	9.3424654-01	2.8964400+01	9.3365355+00
55750.	4.4173611-04	4.8442595-04	9.3263502-01	2.8964400+01	9.3366688+00
56000.	4.2788229-04	4.7029962-04	9.3096379-01	2.8964400+01	9.3367982+00
56250.	4.1443425-04	4.5657222-04	9.2924417-01	2.8964400+01	9.3369238+00
56500.	4.0136036-04	4.4325260-04	9.2747343-01	2.8964400+01	9.3370458+00
56750.	3.8872951-04	4.3031832-04	9.2565377-01	2.8964400+01	9.3371642+00
57000.	3.7641076-04	4.1776937-04	9.2378719-01	2.8964400+01	9.3372790+00
57250.	3.6447368-04	4.0556445-04	9.2187555-01	2.8964400+01	9.3373905+00
57500.	3.5288772-04	3.9371628-04	9.1992162-01	2.8964400+01	9.3374988+00
57750.	3.4164328-04	3.8221296-04	9.1792662-01	2.8964400+01	9.3376038+00
58000.	3.3073654-04	3.7103168-04	9.1589328-01	2.8964400+01	9.3377057+00
58250.	3.2014036-04	3.6016848-04	9.1382329-01	2.8964400+01	9.3378046+00
58500.	3.0986359-04	3.4961296-04	9.1171855-01	2.8964400+01	9.3379006+00
58750.	2.9989114-04	3.3935466-04	9.0958142-01	2.8964400+01	9.3379937+00
59000.	2.9021470-04	3.2938466-04	9.0741319-01	2.8964400+01	9.3380841+00
59250.	2.8082623-04	3.1969375-04	9.0521625-01	2.8964400+01	9.3381718+00
59500.	2.7171661-04	3.1027366-04	9.0299167-01	2.8964400+01	9.3382570+00
59750.	2.6287935-04	3.0111591-04	9.0074238-01	2.8964400+01	9.3383394+00
60000.	2.5430592-04	2.9221277-04	8.9846856-01	2.8964400+01	9.3384196+00
60250.	2.4599417-04	2.8355635-04	8.9617371-01	2.8964400+01	9.3384973+00
60500.	2.3792191-04	2.7513966-04	8.9385843-01	2.8964400+01	9.3385726+00
60750.	2.3009712-04	2.6695555-04	8.9152455-01	2.8964400+01	9.3386457+00
61000.	2.2250799-04	2.5899717-04	8.8917398-01	2.8964400+01	9.3387166+00
61250.	2.1514760-04	2.5125817-04	8.8680774-01	2.8964400+01	9.3387853+00
61500.	2.0801044-04	2.4373218-04	8.8442765-01	2.8964400+01	9.3388520+00
61750.	2.0109937-04	2.3641313-04	8.8203527-01	2.8964400+01	9.3389167+00
62000.	1.9437858-04	2.2929518-04	8.7963203-01	2.8964400+01	9.3389794+00
62250.	1.8787219-04	2.2237267-04	8.7721952-01	2.8964400+01	9.3390402+00
62500.	1.8156445-04	2.1564031-04	8.7479870-01	2.8964400+01	9.3390990+00
62750.	1.7544977-04	2.0909283-04	8.7237102-01	2.8964400+01	9.3391562+00
63000.	1.6952269-04	2.0272516-04	8.6993784-01	2.8964400+01	9.3392116+00
63250.	1.6377791-04	1.9653228-04	8.6750031-01	2.8964400+01	9.3392651+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	KINEMATIC VISCOSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
m	K	K	N cm^{-2}	kg m^{-3}	m^2 s^{-1}	N-s m^{-2}	m^2 s^{-1}
63500.	2.4105411+02	2.4105411+02	1.4778108-03	2.1357089-04	7.2697361-02	1.5526040-05	3.1124496+02
63750.	2.4021875+02	2.4021875+02	1.4279140-03	2.0700498-04	7.4791498-02	1.5482202-05	3.1070518+02
64000.	2.3938440+02	2.3938440+02	1.3785800-03	2.0061984-04	7.6953251-02	1.5438349-05	3.1016513+02
64250.	2.3856142+02	2.3856142+02	1.3312645-03	1.9441066-04	7.9185465-02	1.5394499-05	3.0962503+02
64500.	2.3772018+02	2.3772018+02	1.2859246-03	1.8837284-04	8.1490899-02	1.5350672-05	3.0908511+02
64750.	2.3689090+02	2.3689090+02	1.2410184-03	1.8250199-04	8.3872400-02	1.5306880-05	3.0854552+02
65000.	2.3606390+02	2.3606390+02	1.1980055-03	1.7679378-04	8.6333018-02	1.5263141-05	3.0800647+02
65250.	2.3523950+02	2.3523950+02	1.1563457-03	1.7124392-04	8.8875970-02	1.5219470-05	3.0746818+02
65500.	2.3441794+02	2.3441794+02	1.1160005-03	1.6584841-04	9.1504538-02	1.5175882-05	3.0693080+02
65750.	2.3359949+02	2.3359949+02	1.0769327-03	1.6060329-04	9.4222174-02	1.5132391-05	3.0639452+02
66000.	2.3278436+02	2.3278436+02	1.0391056-03	1.5550474-04	9.7032473-02	1.5089010-05	3.0585949+02
66250.	2.3197269+02	2.3197269+02	1.0024833-03	1.5054904-04	9.9939194-02	1.5045745-05	3.0532578+02
66500.	2.3116461+02	2.3116461+02	9.6703142-04	1.4573269-04	1.0294605-01	1.5002605-05	3.0479352+02
66750.	2.3036050+02	2.3036050+02	9.3271615-04	1.4105199-04	1.0605792-01	1.4959611-05	3.0426294+02
67000.	2.2956021+02	2.2956021+02	8.9950478-04	1.3650376-04	1.0927724-01	1.4916765-05	3.0373397+02
67250.	2.2876404+02	2.2876404+02	8.6736533-04	1.3208456-04	1.1261009-01	1.4874054-05	3.0320679+02
67500.	2.2797205+02	2.2797205+02	8.3626666-04	1.2779120-04	1.1606051-01	1.4831512-05	3.0268148+02
67750.	2.2718420+02	2.2718420+02	8.0617863-04	1.2362062-04	1.1963319-01	1.4789129-05	3.0215802+02
68000.	2.2640073+02	2.2640073+02	7.7707160-04	1.1956965-04	1.2333327-01	1.4746916-05	3.0163655+02
68250.	2.2562149+02	2.2562149+02	7.4891699-04	1.1563549-04	1.2716576-01	1.4704869-05	3.0111700+02
68500.	2.2484653+02	2.2484653+02	7.2168681-04	1.1181507-04	1.3113607-01	1.4662989-05	3.0059943+02
68750.	2.2407571+02	2.2407571+02	6.9535410-04	1.0810580-04	1.3524964-01	1.4621271-05	3.0008373+02
69000.	2.2330920+02	2.2330920+02	6.6989220-04	1.0450475-04	1.3951253-01	1.4579723-05	2.9957003+02
69250.	2.2254678+02	2.2254678+02	6.4527534-04	1.0100933-04	1.4393061-01	1.4538335-05	2.9905820+02
69500.	2.2178860+02	2.2178860+02	6.2147861-04	9.7616832-05	1.4851042-01	1.4497117-05	2.9854834+02
69750.	2.2103421+02	2.2103421+02	5.9847750-04	9.4329841-05	1.5325807-01	1.4456043-05	2.9804017+02
70000.	2.2028366+02	2.2028366+02	5.7624817-04	9.1130767-05	1.5818059-01	1.4415118-05	2.9753372+02
70250.	2.1953665+02	2.1953665+02	5.5476779-04	8.8032281-05	1.6328472-01	1.4374327-05	2.9702880+02
70500.	2.1879318+02	2.1879318+02	5.3401358-04	8.5026883-05	1.6857808-01	1.4333669-05	2.9652543+02
70750.	2.1805283+02	2.1805283+02	5.1396379-04	8.2112365-05	1.7406784-01	1.4293122-05	2.9602331+02
71000.	2.1731552+02	2.1731552+02	4.9459703-04	7.9286366-05	1.7976209-01	1.4252683-05	2.9552241+02
71250.	2.1658112+02	2.1658112+02	4.7589263-04	7.6546642-05	1.8566908-01	1.4212345-05	2.9502264+02
71500.	2.1584888+02	2.1584888+02	4.5783041-04	7.3891179-05	1.9179696-01	1.4172067-05	2.9452350+02
71750.	2.1511890+02	2.1511890+02	4.4039062-04	7.1317688-05	1.9815357-01	1.4131855-05	2.9402505+02
72000.	2.1439084+02	2.1439084+02	4.2355436-04	6.8824123-05	2.0474928-01	1.4091690-05	2.9352707+02
72250.	2.1366394+02	2.1366394+02	4.0730285-04	6.6408546-06	2.1159222-01	1.4051532-05	2.9302905+02

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
63500.	1.5821139-04	1.9050967-04	8.6505992-01	2.8964400+01	9.3393172+00
63750.	1.5281509-04	1.8465274-04	8.6261743-01	2.8964400+01	9.3393675+00
64000.	1.4758761-04	1.7895767-04	8.6017485-01	2.8964400+01	9.3394164+00
64250.	1.4252154-04	1.7341835-04	8.5773289-01	2.8964400+01	9.3394637+00
64500.	1.3761965-04	1.6803249-04	8.5528980-01	2.8964400+01	9.3395096+00
64750.	1.3286504-04	1.6279557-04	8.5284985-01	2.8964400+01	9.3395540+00
65000.	1.2826220-04	1.5770373-04	8.5041203-01	2.8964400+01	9.3395970+00
65250.	1.2379521-04	1.5275314-04	8.4797885-01	2.8964400+01	9.3396386+00
65500.	1.1947597-04	1.4794023-04	8.4555025-01	2.8964400+01	9.3396790+00
65750.	1.1529348-04	1.4326197-04	8.4312709-01	2.8964400+01	9.3397181+00
66000.	1.1124381-04	1.3871346-04	8.4071602-01	2.8964400+01	9.3397559+00
66250.	1.0732313-04	1.3429269-04	8.3829944-01	2.8964400+01	9.3397925+00
66500.	1.0352774-04	1.2999659-04	8.3589584-01	2.8964400+01	9.3398279+00
66750.	9.9854644-05	1.2582131-04	8.3350036-01	2.8964400+01	9.3398622+00
67000.	9.6296826-05	1.2176419-04	8.3111255-01	2.8964400+01	9.3398956+00
67250.	9.2857764-05	1.1782217-04	8.2873340-01	2.8964400+01	9.3399277+00
67500.	8.9528426-05	1.1399241-04	8.2636311-01	2.8964400+01	9.3399587+00
67750.	8.6307283-05	1.1027216-04	8.2400167-01	2.8964400+01	9.3399888+00
68000.	8.3191103-05	1.0665862-04	8.2164972-01	2.8964400+01	9.3400179+00
68250.	8.0177[illegible]-05	1.0314922-04	8.1930697-01	2.8964400+01	9.3400460+00
68500.	7.7261819-05	9.9741365-05	8.1697355-01	2.8964400+01	9.3400733+00
68750.	7.4442711-05	9.6432618-05	8.1464913-01	2.8964400+01	9.3400996+00
69000.	7.1716036-05	9.3220414-05	8.1233423-01	2.8964400+01	9.3401251+00
69250.	6.9081415-05	9.0102424-05	8.1002825-01	2.8964400+01	9.3401498+00
69500.	6.6533823-05	8.7076243-05	8.0773170-01	2.8964400+01	9.3401735+00
69750.	6.4071366-05	8.4139719-05	8.0544326-01	2.8964400+01	9.3401965+00
70000.	6.1691556-05	8.1290938-05	8.0316301-01	2.8964400+01	9.3402188+00
70250.	5.9391925-05	7.8526625-05	8.0089224-01	2.8964400+01	9.3402402+00
70500.	5.7170035-05	7.5845747-05	7.9862492-01	2.8964400+01	9.3402610+00
70750.	5.5023566-05	7.3245947-05	7.9636577-01	2.8964400+01	9.3402810+00
71000.	5.2950287-05	7.0725887-05	7.9411265-01	2.8964400+01	9.3403004+00
71250.	5.0947769-05	6.8281196-05	7.9186513-01	2.8964400+01	9.3403190+00
71500.	4.9014073-05	6.5912467-05	7.8962297-01	2.8964400+01	9.3403372+00
71750.	4.7147417-05	6.3616662-05	7.8738549-01	2.8964400+01	9.3403546+00
72000.	4.5344573-05	6.1392549-05	7.8514265-01	2.8964400+01	9.3403714+00
72250.	4.3604731-05	5.9237e.3-05	7.8290515-01	2.8964400+01	9.3403877+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	KINEMATIC VISCOSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
m	K	K	$N\,cm^{-2}$	$kg\,m^{-3}$	$m^2\,s^{-1}$	$N\cdot s\,m^{-2}$	$m^2\,s^{-1}$
72500.	2.1293826+02	2.1293826+02	3.9161809-04	6.4068829-05	2.1869265-01	1.4011382-05	2.9253101+02
72750.	2.1221310+02	2.1221310+02	3.7648248-04	6.1803108-05	2.2605988-01	1.3971203-05	2.9203248+02
73000.	2.1148819+02	2.1148819+02	3.6187895-04	5.9609427-05	2.3370430-01	1.3930980-05	2.9153326+02
73250.	2.1076309+02	2.1076309+02	3.4779071-04	5.7485878-05	2.4163651-01	1.3890687-05	2.9103307+02
73500.	2.1003696+02	2.1003696+02	3.3420166-04	5.5430735-05	2.4986640-01	1.3850278-05	2.9053129+02
73750.	2.0930991+02	2.0930991+02	3.2109598-04	5.3442018-05	2.5840639-01	1.3809759-05	2.9002801+02
74000.	2.0858051+02	2.0858051+02	3.0845853-04	5.1518217-05	2.6726563-01	1.3769049-05	2.8952223+02
74250.	2.0784900+02	2.0784900+02	2.9627420-04	4.9657363-05	2.7645772-01	1.3728162-05	2.8901410+02
74500.	2.0711438+02	2.0711438+02	2.8452869-04	4.7857892-05	2.8599335-01	1.3687039-05	2.8850290+02
74750.	2.0637622+02	2.0637622+02	2.7320778-04	4.6118074-05	2.9588522-01	1.3645656-05	2.8798832+02
75000.	2.0563354+02	2.0563354+02	2.6229794-04	4.4436379-05	3.0614461-01	1.3603958-05	2.8746967+02
75250.	2.0488605+02	2.0488605+02	2.5178569-04	4.2811102-05	3.1678523-01	1.3561925-05	2.8694670+02
75500.	2.0413251+02	2.0413251+02	2.4165825-04	4.1240812-05	3.2781817-01	1.3519488-05	2.8641855+02
75750.	2.0337286+02	2.0337286+02	2.3190299-04	3.9723828-05	3.3925835-01	1.3476641-05	2.8588512+02
76000.	2.0260577+02	2.0260577+02	2.2250776-04	3.8258777-05	3.5111696-01	1.3433306-05	2.8534594+02
76250.	2.0183075+02	2.0183075+02	2.1346064-04	3.6844123-05	3.6340812-01	1.3389453-05	2.8479917+02
76500.	2.0104657+02	2.0104657+02	2.0475015-04	3.5478506-05	3.7614357-01	1.3345012-05	2.8424536+02
76750.	2.0026287+02	2.0026287+02	1.9636610-04	3.4160427-05	3.8933816-01	1.3299958-05	2.8368373+02
77000.	1.9944855+02	1.9944855+02	1.8829458-04	3.2888548-05	4.0300428-01	1.3254226-05	2.8311349+02
77250.	1.9863269+02	1.9863269+02	1.8052811-04	3.1661527-05	4.1715487-01	1.3207761-05	2.8253380+02
77500.	1.9780426+02	1.9780426+02	1.7305542-04	3.0478041-05	4.3180236-01	1.3160498-05	2.8194401+02
77750.	1.9696228+02	1.9696228+02	1.6586657-04	2.9336855-05	4.4695932-01	1.3112381-05	2.8134330+02
78000.	1.9610583+02	1.9610583+02	1.5895186-04	2.8236629-05	4.6263842-01	1.3063349-05	2.8073096+02
78250.	1.9523389+02	1.9523389+02	1.5230199-04	2.7176163-05	4.7885131-01	1.3013341-05	2.8010616+02
78500.	1.9434546+02	1.9434546+02	1.4590782-04	2.6154228-05	4.9560988-01	1.2962294-05	2.7946811+02
78750.	1.9343916+02	1.9343916+02	1.3976058-04	2.5169702-05	5.1292312-01	1.2910122-05	2.7881571+02
79000.	1.9251422+02	1.9251422+02	1.3385165-04	2.4221368-05	5.3080305-01	1.2856776-05	2.7814833+02
79250.	1.9156915+02	1.9156915+02	1.2817279-04	2.3308161-05	5.4925663-01	1.2802162-05	2.7746476+02
79500.	1.9060278+02	1.9060278+02	1.2271593-04	2.2428976-05	5.6829183-01	1.2746204-05	2.7676405+02
79750.	1.8961407+02	1.8961407+02	1.1747330-04	2.1582728-05	5.8791617-01	1.2688835-05	2.7604529+02
80000.	1.8860150+02	1.8860150+02	1.1243729-04	2.0768398-05	6.0813343-01	1.2629957-05	2.7530724+02
80250.	1.8756433+02	1.8756433+02	1.0760055-04	1.9984901-05	6.2895071-01	1.2569518-05	2.7454920+02
80500.	1.8650031+02	1.8650031+02	1.0295604-04	1.9231362-05	6.5036398-01	1.2507376-05	2.7376935+02
80750.	1.8540869+02	1.8540869+02	9.8496865-05	1.8506746-05	6.7237514-01	1.2443476-05	2.7296697+02
81000.	1.8428839+02	1.8428839+02	9.4216307-05	1.7810079-05	6.9498529-01	1.2377743-05	2.7214104+02
81250.	1.8313770+02	1.8313770+02	9.0107961-05	1.7140487-05	7.1818625-01	1.2310063-05	2.7129008+02

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
72500.	1.192566J-05	5.715c727-05	7.8c66817-01	2.89644c0+01	9.3404033+00
72750.	4.03C5166-05	5.5129657-05	7.7842952-01	2.8964490+01	9.3404165+00
73000.	3.8741774-05	5.3172048-05	7.7618839-01	2.8964480+01	9.3404331+00
73250.	3.7233524-05	5.1278598-05	7.7394343-01	2.8964461+01	9.3404472+00
73500.	3.5776717-05	4.9445368-05	7.7169197-01	2.8964450+01	9.3404608+00
73750.	3.4375057-05	4.7671371-05	7.6943419-01	2.8964430+01	9.3404739+00
74000.	3.3022726-05	4.5956321-05	7.6718016-01	2.8964410+01	9.3404865+00
74250.	3.1718J17-05	4.4295J4J-05	7.6492884-01	2.8964400+01	9.3404987+00
74500.	3.0462865-05	4.2691234-05	7.6267082-01	2.8964380+01	9.3405105+00
74750.	2.9254677-05	4.1138201-05	7.6041111-01	2.8964360+01	9.3405218+00
75000.	2.8093971-05	3.9636174-05	7.5814962-01	2.8964340+01	9.3405327+00
75250.	2.6979466-05	3.8183493-05	7.5588589-01	2.8964320+01	9.3405432+00
75500.	2.5911272-05	3.6779001-05	7.5362142-01	2.8964300+01	9.3405533+00
75750.	2.4887269-05	3.5423482-05	7.5135412-01	2.8964280+01	9.3405631+00
76000.	2.3906873-05	3.4117025-05	7.4908564-01	2.8964260+01	9.3405725+00
76250.	2.2969513-05	3.2859723-05	7.4681634-01	2.8964240+01	9.3405815+00
76500.	2.2074992-05	3.1647584-05	7.4454221-01	2.8964220+01	9.3405902+00
76750.	2.1222311-05	3.0471011-05	7.4227994-01	2.8964200+01	9.3405986+00
77000.	2.0410834-05	2.9337269-05	7.3999190-01	2.8964180+01	9.3406067+00
77250.	1.9636447-05	2.8242741-05	7.3769J2L-01	2.8964160+01	9.3406144+00
77500.	1.8896841-05	2.7187c04-05	7.3539972-01	2.8964140+01	9.3406219+00
77750.	1.8191222-05	2.6169c84-05	7.3307879-01	2.8964120+01	9.3406291+00
78000.	1.7516952-05	2.5187668-05	7.2784689-01	2.8964100+01	9.3406360+00
78250.	1.6873636-05	2.4241712-05	7.2560265-01	2.8964080+01	9.3406427+00
78500.	1.5622492-05	2.3330115-05	7.2221642-01	2.8964060+01	9.3406491+00
78750.	1.4962366-05	2.2451077-05	7.1932957-01	2.8964040+01	9.3406552+00
79000.	1.4329774-05	2.1605704-05	7.1633731-01	2.8964020+01	9.3406612+00
79250.	1.3721029-05	2.0791304-05	7.1329437-01	2.8964000+01	9.3406668+00
79500.	1.3137034-05	2.0007113-05	7.1017059-01	2.8963980+01	9.3406723+00
79750.	1.2576037-05	1.9252242-05	7.0698618-01	2.8963960+01	9.3406775+00
80000.	1.2037236-05	1.8525643-05	7.0369969-01	2.8963940+01	9.3406826+00
80250.	1.1519421-05	1.7826747-05	7.0033222-01	2.8963920+01	9.3406874+00
80500.	1.1022193-05	1.7154775-05	6.9686987-01	2.8963900+01	9.3406920+00
80750.	1.0544435-05	1.6509142-05	6.9331962-01	2.8963880+01	9.3406965+00
81000.	1.0086541-05	1.5888962-05	6.8964715-01	2.8963860+01	9.3407007+00
81250.	9.6467122-06	1.5293671-05	6.8587622-01	2.8963840+01	9.3407049+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	KINEMATIC VISCOSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
m	K	K	$N\,cm^{-2}$	$kg\ m^{-3}$	$m^2\,s^{-1}$	$N\text{-}s\,m^{-2}$	$m\,s^{-1}$
81500.	1.8195465+02	1.8195465+02	8.6165552-05	1.6497125-05	7.4196597-01	1.2240305-05	2.7041242+02
81750.	1.8065000+02	1.8065000+02	8.2382921-05	1.5886820-05	7.6561405-01	1.2163173-05	2.6944122+02
82000.	1.8065000+02	1.8065000+02	7.8673815-05	1.5171552-05	8.0170920-01	1.2163173-05	2.6944122+02
82250.	1.8065000+02	1.8065000+02	7.5131972-05	1.4488538-05	8.3950306-01	1.2163173-05	2.6944122+02
82500.	1.8065000+02	1.8065000+02	7.1749837-05	1.3836323-05	8.7907547-01	1.2163173-05	2.6944122+02
82750.	1.8065000+02	1.8065000+02	6.8520199-05	1.3213516-05	9.2050990-01	1.2163173-05	2.6944122+02
83000.	1.8065000+02	1.8065000+02	6.5436167-05	1.2618768-05	9.6389390-01	1.2163173-05	2.6944122+02
83250.	1.8064000+02	1.8065000+02	6.2491170-05	1.2050871-05	1.0093189+00	1.2163173-05	2.6944122+02
83500.	1.8065000+02	1.8065000+02	5.9678927-05	1.1508555-05	1.0568810+00	1.2163173-05	2.6944122+02
83750.	1.8065000+02	1.8065000+02	5.6993445-05	1.0990683-05	1.1066803+00	1.2163173-05	2.6944122+02
84000.	1.8065000+02	1.8065000+02	5.4429003-05	1.0496153-05	1.1588219+00	1.2163173-05	2.6944122+02
84250.	1.8064000+02	1.8065000+02	5.1980134-05	1.0023911-05	1.2134159+00	1.2163173-05	2.6944122+02
84500.	1.8065000+02	1.8065000+02	4.9641622-05	9.5729491-06	1.2705774+00	1.2163173-05	2.6944122+02
84750.	1.8065000+02	1.8065000+02	4.7408486-05	9.1423085-06	1.3304268+00	1.2163173-05	2.6944122+02
85000.	1.8065000+02	1.8065000+02	4.5275970-05	8.7310716-06	1.3930905+00	1.2163173-05	2.6944122+02
85250.	1.8064000+02	1.8065000+02	4.3239633-05	8.3383627-06	1.4587003+00	1.2163173-05	2.6944122+02
85500.	1.8065000+02	1.8065000+02	4.1294839-05	7.9633458-06	1.5273947+00	1.2163173-05	2.6944122+02
85750.	1.8065000+02	1.8065000+02	3.9437748-05	7.6052221-06	1.5993185+00	1.2163173-05	2.6944122+02
86000.	1.8065000+02	1.8065000+02	3.7664308-05	7.2632298-06	1.6746231+00	1.2163173-05	2.6944122+02
86250.	1.8064000+02	1.8065000+02	3.5970746-05	6.9366412-06	1.7534671+00	1.2163173-05	2.6944122+02
86500.	1.8065000+02	1.8065000+02	3.4353456-05	6.6247612-06	1.8360167+00	1.2163173-05	2.6944122+02
86750.	1.8065000+02	1.8065000+02	3.2809000-05	6.3269263-06	1.9224457+00	1.2163173-05	2.6944122+02
87000.	1.8065000+02	1.8065000+02	3.1334090-05	6.0425029-06	2.0129361+00	1.2163173-05	2.6944122+02
87250.	1.8064000+02	1.8065000+02	2.9925591-05	5.7708869-06	2.1076784+00	1.2163173-05	2.6944122+02
87500.	1.8065000+02	1.8065000+02	2.8580507-05	5.5114989-06	2.2068720+00	1.2163173-05	2.6944122+02
87750.	1.8065000+02	1.8065000+02	2.7295980-05	5.2637891-06	2.3107257+00	1.2163173-05	2.6944122+02
88000.	1.8065000+02	1.8065000+02	2.6069278-05	5.0272304-06	2.4194579+00	1.2163173-05	2.6944122+02
88250.	1.8064000+02	1.8065000+02	2.4897793-05	4.8013198-06	2.5332977+00	1.2163173-05	2.6944122+02
88500.	1.8065000+02	1.8065000+02	2.3779037-05	4.5855776-06	2.6524842+00	1.2163173-05	2.6944122+02
88750.	1.8065000+02	1.8065000+02	2.2710432-05	4.3795451-06	2.7772684+00	1.2163173-05	2.6944122+02
89000.	1.8065000+02	1.8065000+02	2.1690308-05	4.1827847-06	2.9079126+00	1.2163173-05	2.6944122+02
89250.	1.8064000+02	1.8065000+02	2.0715899-05	3.9948785-06	3.0446914+00	1.2163173-05	2.6944122+02
89500.	1.8065000+02	1.8065000+02	1.9785334-05	3.8154273-06	3.1878926+00	1.2163173-05	2.6944122+02
89750.	1.8065000+02	1.8065000+02	1.8896638-05	3.6440501-06	3.3378170+00	1.2163173-05	2.6944122+02

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
81500.	9.2246467-06	1.4715778-05	6.8198959-01	2.8964400+01	9.3407089+00
81750.	8.8196936-06	1.4171374-05	6.7769200-01	2.8964400+01	9.3407125+00
82000.	8.4226637-06	1.3633339-05	6.7769200-01	2.8964400+01	9.3407161+00
82250.	8.0434237-06	1.3129078-05	6.7769200-01	2.8964400+01	9.3407198+00
82500.	7.6813416-06	1.2342288-05	6.7769200-01	2.8964400+01	9.3407233+00
82750.	7.3356653-06	1.1786731-05	6.7769200-01	2.8964400+01	9.3407265+00
83000.	7.0054173-06	1.1256221-05	6.7769200-01	2.8964400+01	9.3407296+00
83250.	6.6901342-06	1.0749628-05	6.7769200-01	2.8964400+01	9.3407325+00
83500.	6.3895827-06	1.0265073-05	6.7769200-01	2.8964400+01	9.3407353+00
83750.	6.1031628-06	9.8039181-06	6.7769200-01	2.8964400+01	9.3407379+00
84000.	5.8302004-06	9.3627872-06	6.7769200-01	2.8964400+01	9.3407404+00
84250.	5.5548512-06	8.9415366-06	6.7769200-01	2.8964400+01	9.3407429+00
84500.	5.3144965-06	8.5392696-06	6.7769200-01	2.8964400+01	9.3407453+00
84750.	5.0754230-06	8.1551292-06	6.7769200-01	2.8964400+01	9.3407476+00
85000.	4.8471217-06	7.7882974-06	6.7769200-01	2.8964400+01	9.3407497+00
85250.	4.6291063-06	7.4379928-06	6.7769200-01	2.8964400+01	9.3407518+00
85500.	4.4209127-06	7.1034760-06	6.7769200-01	2.8964400+01	9.3407537+00
85750.	4.2220976-06	6.7840162-06	6.7769200-01	2.8964400+01	9.3407556+00
86000.	4.0322360-06	6.4789519-06	6.7769200-01	2.8964400+01	9.3407574+00
86250.	3.8509298-06	6.1876282-06	6.7769200-01	2.8964400+01	9.3407590+00
86500.	3.6777872-06	5.9094247-06	6.7769200-01	2.8964400+01	9.3407606+00
86750.	3.5124419-06	5.6437498-06	6.7769200-01	2.8964400+01	9.3407621+00
87000.	3.3546421-06	5.3900382-06	6.7769200-01	2.8964400+01	9.3407637+00
87250.	3.2037521-06	5.1477506-06	6.7769200-01	2.8964400+01	9.3407650+00
87500.	3.0597511-06	4.9163716-06	6.7769200-01	2.8964400+01	9.3407664+00
87750.	2.9222331-06	4.6954093-06	6.7769200-01	2.8964400+01	9.3407677+00
88000.	2.7909057-06	4.4843448-06	6.7769200-01	2.8964400+01	9.3407689+00
88250.	2.6654897-06	4.2828771-06	6.7769200-01	2.8964400+01	9.3407701+00
88500.	2.5457188-06	4.0909366-06	6.7769200-01	2.8964400+01	9.3407712+00
88750.	2.4313382-06	3.9080453-06	6.7769200-01	2.8964400+01	9.3407723+00
89000.	2.3221062-06	3.7341139-06	6.7769200-01	2.8964400+01	9.3407733+00
89250.	2.2177876-06	3.5685147-06	6.7769200-01	2.8964400+01	9.3407743+00
89500.	2.1181639-06	3.4103965-06	6.7769200-01	2.8964400+01	9.3407753+00
89750.	2.0230225-06	3.2595644-06	6.7769200-01	2.8964400+01	9.3407761+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	MOLECULAR TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
m	K	K	N cm^{-2}	kg m^{-3}	N·s m^{-2}	m^2 s^{-1}
90000.	1.8065000+02	1.8065000+02	1.8049200-05	3.4806292-06	1.2163173-05	2.6944122+02
91000.	1.8365000+02	1.8359699+02	1.6041800-05	2.8532947-06	1.2340215-05	2.7166927+02
92000.	1.8665000+02	1.8654122+02	1.2573282-05	2.3467045-06	1.2516127-05	2.7387920+02
93000.	1.8965000+02	1.8948521+02	1.0540546-05	1.9361901-06	1.2690922-05	2.7607143+02
94000.	1.9265000+02	1.9242545+02	8.8619225-06	1.6024046-06	1.2864614-05	2.7824640+02
95000.	1.9565000+02	1.9536499+02	7.4701982-06	1.3301176-06	1.3037218-05	2.8040450+02
96000.	1.9865000+02	1.9830269+02	6.3141230-06	1.1072921-06	1.3208747-05	2.8254611+02
97000.	2.0165000+02	2.0123869+02	5.3507148-06	9.2436170-07	1.3379216-05	2.8467162+02
98000.	2.0465000+02	2.0417293+02	4.5454466-06	7.7378743-07	1.3548638-05	2.8678136+02
99000.	2.0765000+02	2.0710543+02	3.8710884-06	6.4993541-07	1.3717028-05	2.8887571+02
100000.	2.1065000+02	2.1003618+02	3.3040799-06	5.4642031-07	1.3884397-05	2.9095497+02
101000.	2.1365000+02	2.1296536+02	2.8288700-06	4.6498430-07	1.4161117-05	2.9438778+02
102000.	2.2065000+02	2.1951950+02	2.4307590-06	3.8377415-07	1.4435101-05	2.9778102+02
103000.	2.2565000+02	2.2429458+02	2.0958842-06	3.2357107-07	1.4706408-05	3.0113603+02
104000.	2.3065000+02	2.2905841+02	1.8131082-06	2.7384703-07	1.4975097-05	3.0445407+02
105000.	2.3565000+02	2.3366160+02	1.5739398-06	2.3260574-07	1.5241223-05	3.0773633+02
106000.	2.4065000+02	2.3835354+02	1.3695853-06	1.9826268-07	1.5504842-05	3.1098396+02
107000.	2.4565000+02	2.4303443+02	1.1964029-06	1.6955390-07	1.5766004-05	3.1419801+02
108000.	2.5065000+02	2.4770428+02	1.0466290-06	1.4596643-07	1.6024767-05	3.1737953+02
109000.	2.5565000+02	2.5236307+02	9.1864954-07	1.2618471-07	1.6281177-05	3.2052946+02
110000.	2.6065000+02	2.5701081+02	8.0843999-07	1.0805074-07	1.6535285-05	3.2364874+02
111000.	2.7065000+02	2.6641333+02	7.1400613-07	9.1903288-08	1.7036783-05	3.2979880+02
112000.	2.8065000+02	2.7578201+02	6.3347397-07	7.8632390-08	1.7529632-05	3.3583626+02
113000.	2.9065000+02	2.8511685+02	5.6440663-07	6.7498712-08	1.8014180-05	3.4176707+02
114000.	3.0065000+02	2.9441786+02	5.0485583-07	5.8498391-08	1.8490756-05	3.4759671+02
115000.	3.1065000+02	3.0368504+02	4.5325523-07	5.0828725-08	1.8959675-05	3.5333018+02
116000.	3.2065000+02	3.1291837+02	4.0833563-07	4.4363283-08	1.9421230-05	3.5897208+02
117000.	3.3065000+02	3.2211788+02	3.6906139-07	3.8883723-08	1.9875702-05	3.6452668+02
118000.	3.4065000+02	3.3128355+02	3.3458269-07	3.4216202-08	2.0323356-05	3.6999789+02
119000.	3.5065000+02	3.4041538+02	3.0419729-07	3.0221725-08	2.0764442-05	3.7538937+02
120000.	3.6065000+02	3.4951339+02	2.7732500-07	2.6788033-08	2.1199197-05	3.8070451+02
121000.	3.8065000+02	3.6839207+02	2.5376953-07	2.3224769-08	2.2050607-05	3.9111815+02
122000.	4.0065000+02	3.8721782+02	2.3327920-07	2.0283767-08	2.2879253-05	4.0126163+02
123000.	4.2065000+02	4.0599063+02	2.1533093-07	1.7832912-08	2.3686639-05	4.1115493+02
124000.	4.4065000+02	4.2471051+02	1.9950839-07	1.5772667-08	2.4474125-05	4.2081571+02
125000.	4.6065000+02	4.4337746+02	1.8548089-07	1.4027039-08	2.5242944-05	4.3025962+02
126000.	4.8065000+02	4.6199147+02	1.7297906-07	1.2537251-08	2.5994216-05	4.3950064+02
127000.	5.0065000+02	4.8055255+02	1.6178335-07	1.1257361-08	2.6728963-05	4.4855135+02
128000.	5.2065000+02	4.9906069+02	1.5171293-07	1.0151132-08	2.7448117-05	4.5742299+02
129000.	5.4065000+02	5.1751590+02	1.4261771-07	9.1895662-09	2.8152534-05	4.6612582+02

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
90000.	1.93229[illegible]-06	3.1[illegible]-06	6.77692[illegible]-01	2.8964[illegible]+01	9.3[illegible]+00
91000.	1.61[illegible]-06	2.5451[illegible]-06	6.8755622-01	2.8955960+01	9.3407799+00
92000.	1.3460[illegible]-06	2.0[illegible]	6.9735749-01	2.8947526+01	9.3407824+00
93000.	1.12[illegible]-06	1.7[illegible]	7.0[illegible]	2.8939[illegible]+01	9.3407844+00
94000.	9.4[illegible]	1.4[illegible]	7.1[illegible]	2.8930[illegible]+01	9.3[illegible]
95000.	7.9[illegible]	1.1[illegible]	7.2[illegible]	2.8922[illegible]+01	9.3407875+00
96000.	6.7[illegible]	9.8[illegible]	7.3594797-01	2.8913760+01	9.3407887+00
97000.	5.7[illegible]	8.2[illegible]	7.4544595-01	2.8905326+01	9.3[illegible]
98000.	4.8[illegible]	6.9[illegible]	7.5486560-01	2.8896880+01	9.3407904+00
99000.	4.1[illegible]	5.7[illegible]	7.6426770-01	2.8888442+01	9.3[illegible]
100000.	3.5[illegible]	4.8[illegible]	7.7359299-01	2.8880000+01	9.3407917+00
101000.	3.[illegible]	4.[illegible]	7.8[illegible]	2.8871[illegible]+01	9.3407922+00
102000.	2.6[illegible]	3.[illegible]	8.[illegible]	2.8861[illegible]+01	9.3407925+00
103000.	2.2[illegible]	2.[illegible]	8.1939274-01	2.8852[illegible]+01	9.3407924+00
104000.	1.9[illegible]	2.4427724-07	8.3436321-01	2.8752000+01	9.3407931+00
105000.	1.6[illegible]	2.0748516-07	8.4919688-01	2.8720000+01	9.3407934+00
106000.	1.4[illegible]	1.7685444-07	8.6387882-01	2.8688000+01	9.3407936+00
107000.	1.2[illegible]	1.5129502-07	8.7843931-01	2.8656000+01	9.3407937+00
108000.	1.1[illegible]	1.2975[illegible]	8.9284737-01	2.8624000+01	9.3407940+00
109000.	9.8[illegible]	1.1166736-07	9.0713368-01	2.8592000+01	9.3407941+00
110000.	8.6[illegible]	9.6383522-08	9.2129172-01	2.8560000+01	9.3407942+00
111000.	7.6[illegible]	8.[illegible]	9.[illegible]	2.8511000+01	9.3407943+00
112000.	6.7[illegible]	7.0141727-08	9.7669348-01	2.8496000+01	9.3407943+00
113000.	6.[illegible]	6.[illegible]	1.0[illegible]	2.8413000+01	9.3407944+00
114000.	5.[illegible]	5.[illegible]	1.0[illegible]	2.8384000+01	9.3407944+00
115000.	4.8[illegible]	4.[illegible]	1.[illegible]	2.8315000+01	9.3407946+00
116000.	4.3[illegible]	3.[illegible]	1.0[illegible]	2.8266000+01	9.3407946+00
117000.	3.9[illegible]	3.[illegible]	1.[illegible]	2.8217000+01	9.3407946+00
118000.	3.[illegible]	3.[illegible]	1.1[illegible]	2.8168000+01	9.3407947+00
119000.	3.2[illegible]	2.[illegible]	1.1[illegible]	2.8119000+01	9.3407947+00
120000.	2.9[illegible]	2.3[illegible]	1.1811496+00	2.8070000+01	9.3407947+00
121000.	2.7[illegible]	2.[illegible]	1.2[illegible]	2.8031670+01	9.3407947+00
122000.	2.4[illegible]	1.[illegible]	1.2747[illegible]	2.7992[illegible]+01	9.3407948+00
123000.	2.3[illegible]	1.[illegible]	1.3197417+00	2.7955010+01	9.3407948+00
124000.	2.1[illegible]	1.4669647-08	1.3636178+00	2.7916660+01	9.3407948+00
125000.	1.9[illegible]	1.[illegible]	1.4064539+00	2.7878350+01	9.3407948+00
126000.	1.8[illegible]	1.1183489-08	1.4483123+00	2.7840020+01	9.3407948+00
127000.	1.7[illegible]	1.0041818-08	1.4892510+00	2.7801690+01	9.3407948+00
128000.	1.6[illegible]	9.[illegible]	1.5293189+00	2.7763360+01	9.3407948+00
129000.	1.5[illegible]	8.1972041-09	1.5685666+00	2.7725030+01	9.3407948+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	MOLECULAR TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
m	K	K	N cm^{-2}	kg m^{-3}	N-s m^{-2}	m s^{-1}
130000.	5.6065000+02	5.3591817+02	1.3437210-07	8.3493992-09	2.8842997-05	4.7466911+02
131000.	5.8065000+02	5.5426752+02	1.2687067-07	7.6117506-09	2.9520227-05	4.8306133+02
132000.	6.0065000+02	5.7256393+02	1.2002376-07	6.9611904-09	3.0184890-05	4.9131022+02
133000.	6.2065000+02	5.9080740+02	1.1375528-07	6.3850245-09	3.0837601-05	4.9942288+02
134000.	6.4065000+02	6.0899794+02	1.0800000-07	5.8727388-09	3.1478926-05	5.0740585+02
135000.	6.6065000+02	6.2713554+02	1.0270173-07	5.4155688-09	3.2109396-05	5.1526515+02
136000.	6.8065000+02	6.4522042+02	9.7811937-08	5.0041720-09	3.2729499-05	5.2300437+02
137000.	7.0065000+02	6.6326196+02	9.3288464-08	4.6383613-09	3.3339692-05	5.3063466+02
138000.	7.2065000+02	6.8123077+02	8.9094525-08	4.3068959-09	3.3940400-05	5.3815484+02
139000.	7.4065000+02	6.9915664+02	8.5197938-08	4.0073160-09	3.4532020-05	5.4557137+02
140000.	7.6065000+02	7.1702957+02	8.1570390-08	3.7358155-09	3.5114925-05	5.5288841+02
141000.	7.8065000+02	7.3484957+02	7.8186963-08	3.4891186-09	3.5689461-05	5.6010988+02
142000.	8.0065000+02	7.5261665+02	7.5025559-08	3.2644069-09	3.6255957-05	5.6723943+02
143000.	8.2065000+02	7.7033078+02	7.2066884-08	3.0597412-09	3.6814718-05	5.7428046+02
144000.	8.4065000+02	7.8799198+02	6.9292605-08	2.8715040-09	3.7366034-05	5.8123621+02
145000.	8.6065000+02	8.0560025+02	6.6688048-08	2.6997499-09	3.7910175-05	5.8810970+02
146000.	8.8065000+02	8.2315558+02	6.4238968-08	2.5411656-09	3.8447399-05	5.9490377+02
147000.	9.0065000+02	8.4066797+02	6.1932846-08	2.3956362-09	3.8977947-05	6.0162112+02
148000.	9.2065000+02	8.5812744+02	5.9758445-08	2.2612182-09	3.9502050-05	6.0826431+02
149000.	9.4065000+02	8.7553397+02	5.7705619-08	2.1371145-09	4.0019922-05	6.1483571+02
150000.	9.6065000+02	8.9288926+02	5.5766306-08	2.0222947-09	4.0531769-05	6.2133762+02
151000.	9.7865000+02	9.0590972+02	5.3920340-08	1.9252907-09	4.0911818-05	6.2616974+02
152000.	9.9065000+02	9.1894824+02	5.2162807-08	1.8343342-09	4.1288666-05	6.3096486+02
153000.	1.0056500+03	9.3195784+02	5.0488206-08	1.7489639-09	4.1662388-05	6.3572382+02
154000.	1.0206500+03	9.4494451+02	4.8891466-08	1.6687603-09	4.2033058-05	6.4044741+02
155000.	1.0356500+03	9.5790224+02	4.7367906-08	1.5933417-09	4.2400743-05	6.4513641+02
156000.	1.0506500+03	9.7083305+02	4.5913187-08	1.5223592-09	4.2765514-05	6.4979159+02
157000.	1.0656500+03	9.8373692+02	4.4523255-08	1.4554928-09	4.3127434-05	6.5441364+02
158000.	1.0806500+03	9.9661388+02	4.3194386-08	1.3924513-09	4.3486566-05	6.5900329+02
159000.	1.0956500+03	1.0094639+03	4.1923098-08	1.3329666-09	4.3842970-05	6.6356118+02
160000.	1.1106500+03	1.0222870+03	4.0705497-08	1.2767727-09	4.4196706-05	6.6808799+02
161000.	1.1206500+03	1.0350854+03	3.9537190-08	1.2290614-09	4.4431075-05	6.7108889+02
162000.	1.1306500+03	1.0386659+03	3.8412689-08	1.1835437-09	4.4644294-05	6.7407643+02
163000.	1.1406500+03	1.0468265+03	3.7329978-08	1.1401004-09	4.4896393-05	6.7705080+02
164000.	1.1506500+03	1.0549731+03	3.6287170-08	1.0986203-09	4.5127375-05	6.8001215+02
165000.	1.1606500+03	1.0630997+03	3.5282442-08	1.0589979-09	4.5357258-05	6.8296066+02
166000.	1.1706500+03	1.0712084+03	3.4314105-08	1.0211365-09	4.5586059-05	6.8589650+02
167000.	1.1806500+03	1.0792991+03	3.3380526-08	9.8493996-10	4.5813789-05	6.8881982+02
168000.	1.1906500+03	1.0873719+03	3.2480190-08	9.5032508-10	4.6040465-05	6.9173079+02
169000.	1.2006500+03	1.0954267+03	3.1611643-08	9.1720918-10	4.6266101-05	6.9462957+02

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
130000.	1.443665E-04	7.447E376-09	1.6[illegible]E+00	2.7[illegible]E+01	9.349[illegible]E+00
131000.	1.3[illegible]E-04	6.7[illegible]E-09	1.6[illegible]E+00	2.7[illegible]E+01	9.349[illegible]E+00
132000.	1.2[illegible]E-04	6.2[illegible]E-09	1.6[illegible]E+00	2.7[illegible]E+01	9.349[illegible]E+00
133000.	1.2[illegible]E-04	5.8[illegible]E-09	1.7[illegible]E+00	2.7[illegible]E+01	9.349[illegible]E+00
134000.	1.1[illegible]E-04	5.4[illegible]E-09	1.7[illegible]E+00	2.7[illegible]E+01	9.349[illegible]E+00
135000.	1.0[illegible]E-04	4.9[illegible]E-09	1.7[illegible]E+00	2.7[illegible]E+01	9.349[illegible]E+00
136000.	1.0[illegible]E-04	4.6[illegible]E-09	1.8[illegible]E+00	2.7[illegible]E+01	9.349[illegible]E+00
137000.	9.6[illegible]E-05	4.1[illegible]E-09	1.8[illegible]E+00	2.7[illegible]E+01	9.349[illegible]E+00
138000.	9.2[illegible]E-05	3.8[illegible]E-09	1.8[illegible]E+00	2.7[illegible]E+01	9.349[illegible]E+00
139000.	8.8[illegible]E-05	3.5[illegible]E-09	1.9[illegible]E+00	2.7[illegible]E+01	9.349[illegible]E+00
140000.	8.4[illegible]E-05	3.2[illegible]E-09	1.9[illegible]E+00	2.7[illegible]E+01	9.349[illegible]E+00
141000.	8.0[illegible]E-05	3.0[illegible]E-09	1.9[illegible]E+00	2.7[illegible]E+01	9.349[illegible]E+00
142000.	7.7[illegible]E-05	2.7[illegible]E-09	2.0[illegible]E+00	2.7[illegible]E+01	9.349[illegible]E+00
143000.	7.4[illegible]E-05	2.5[illegible]E-09	2.0[illegible]E+00	2.7[illegible]E+01	9.349[illegible]E+00
144000.	7.1[illegible]E-05	2.3[illegible]E-09	2.0[illegible]E+00	2.7[illegible]E+01	9.349[illegible]E+00
145000.	6.8[illegible]E-05	2.1[illegible]E-09	2.1[illegible]E+00	2.7[illegible]E+01	9.349[illegible]E+00
146000.	6.5[illegible]E-05	2.0[illegible]E-09	2.1[illegible]E+00	2.7[illegible]E+01	9.349[illegible]E+00
147000.	6.3[illegible]E-05	1.8[illegible]E-09	2.1[illegible]E+00	2.7[illegible]E+01	9.349[illegible]E+00
148000.	6.0[illegible]E-05	1.7[illegible]E-09	2.2[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
149000.	5.8[illegible]E-05	1.6[illegible]E-09	2.2[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
150000.	5.5[illegible]E-05	1.5[illegible]E-09	2.2[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
151000.	5.3[illegible]E-05	1.4[illegible]E-09	2.2[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
152000.	5.1[illegible]E-05	1.3[illegible]E-09	2.3[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
153000.	4.9[illegible]E-05	1.2[illegible]E-09	2.3[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
154000.	4.7[illegible]E-05	1.2[illegible]E-09	2.3[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
155000.	4.5[illegible]E-05	1.1[illegible]E-09	2.3[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
156000.	4.3[illegible]E-05	1.0[illegible]E-09	2.4[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
157000.	4.2[illegible]E-05	1.0[illegible]E-09	2.4[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
158000.	4.0[illegible]E-05	9.4[illegible]E-10	2.4[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
159000.	3.9[illegible]E-05	9.0[illegible]E-10	2.4[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
160000.	3.7[illegible]E-05	8.6[illegible]E-10	2.4[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
161000.	3.6[illegible]E-05	8.2[illegible]E-10	2.5[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
162000.	3.5[illegible]E-05	7.8[illegible]E-10	2.5[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
163000.	3.3[illegible]E-05	7.5[illegible]E-10	2.5[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
164000.	3.2[illegible]E-05	7.2[illegible]E-10	2.5[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
165000.	3.1[illegible]E-05	6.9[illegible]E-10	2.5[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
166000.	3.0[illegible]E-05	6.6[illegible]E-10	2.6[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
167000.	2.9[illegible]E-05	6.3[illegible]E-10	2.6[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
168000.	2.8[illegible]E-05	6.0[illegible]E-10	2.6[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00
169000.	2.7[illegible]E-05	5.8[illegible]E-10	2.6[illegible]E+00	2.6[illegible]E+01	9.349[illegible]E+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	MOLECULAR TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
m	K	K	N cm^{-2}	kg m^{-3}	N·s m^{-2}	m^2 s^{-1}
170000.	1.2106500+03	1.1034636+03	3.0773599-08	8.8551810-10	4.6490709-05	6.9751629+02
171000.	1.2176500+03	1.1086877+03	2.9963516-08	8.5725111-10	4.6447331-05	6.9952991+02
172000.	1.2246500+03	1.1138986+03	2.9179945-08	8.3004723-10	4.6403460-05	7.0153776+02
173000.	1.2316500+03	1.1190961+03	2.8420925-08	8.0386111-10	4.6359102-05	7.0353986+02
174000.	1.2386500+03	1.1242804+03	2.7685505-08	7.7864876-10	4.6314260-05	7.0553629+02
175000.	1.2456500+03	1.1294514+03	2.6973787-08	7.5436869-10	4.6268939-05	7.0752708+02
176000.	1.2526500+03	1.1346091+03	2.6284921-08	7.3098157-10	4.6223144-05	7.0951228+02
177000.	1.2596500+03	1.1397535+03	2.5618562-08	7.0844921-10	4.6176877-05	7.1149196+02
178000.	1.2666500+03	1.1448846+03	2.4974942-08	6.8673629-10	4.6130144-05	7.1346613+02
179000.	1.2736500+03	1.1500025+03	2.4352296-08	6.6580820-10	4.6082948-05	7.1543486+02
180000.	1.2806500+03	1.1551070+03	2.3749392-08	6.4563255-10	4.6035295-05	7.1739819+02
181000.	1.2876500+03	1.1601982+03	2.3165053-08	6.2617842-10	4.5987185-05	7.1935616+02
182000.	1.2946500+03	1.1652762+03	2.2598597-08	6.0741590-10	4.5938626-05	7.2130882+02
183000.	1.3016500+03	1.1703408+03	2.2049290-08	5.8931679-10	4.5889619-05	7.2325620+02
184000.	1.3086500+03	1.1753922+03	2.1517826-08	5.7185438-10	4.5840170-05	7.2519835+02
185000.	1.3156500+03	1.1804303+03	2.0960309-08	5.5500268-10	4.5790280-05	7.2713531+02
186000.	1.3226500+03	1.1854550+03	2.0459282-08	5.3873732-10	4.5739956-05	7.2906713+02
187000.	1.3296500+03	1.1904665+03	1.9963203-08	5.2303484-10	4.5689199-05	7.3099384+02
188000.	1.3366500+03	1.1954647+03	1.9486552-08	5.0787293-10	4.5638015-05	7.3291549+02
189000.	1.3436500+03	1.2004496+03	1.9023827-08	4.9323001-10	4.5586404-05	7.3483212+02
190000.	1.3506500+03	1.2054212+03	1.8574202-08	4.7907675-10	4.5534373-05	7.3674375+02
191000.	1.3576500+03	1.2103796+03	1.8137534-08	4.6608863-10	4.5481924-05	7.3864038+02
192000.	1.3646500+03	1.2153248+03	1.7712809-08	4.5350153-10	4.5429060-05	7.4053204+02
193000.	1.3716600+03	1.2202567+03	1.7299654-08	4.4130184-10	4.5375780-05	7.4241875+02
194000.	1.3796500+03	1.2251757+03	1.6897719-08	4.2947637-10	4.5322085-05	7.4430051+02
195000.	1.3856500+03	1.2300818+03	1.6506658-08	4.1801220-10	5.0059494-05	7.4617735+02
196000.	1.3926500+03	1.2349729+03	1.6126127-08	4.0689676-10	5.0163831-05	7.4805092+02
197000.	1.3996500+03	1.2398511+03	1.5755815-08	3.9611845-10	5.0268014-05	7.4992849+02
198000.	1.4066500+03	1.2447161+03	1.5395401-08	3.8566561-10	5.0371991-05	7.5180136+02
199000.	1.4136500+03	1.2495681+03	1.5044591-08	3.7552739-10	5.0475744-05	7.5366956+02
200000.	1.4206500+03	1.2544072+03	1.4703093-08	3.6569315-10	5.0579335-05	7.5553312+02
201000.	1.4276500+03	1.2592337+03	1.4370620-08	3.5615256-10	5.0682705-05	7.5739204+02
202000.	1.4346500+03	1.2640472+03	1.4046909-08	3.4689596-10	5.0785874-05	7.5924636+02
203000.	1.4416500+03	1.2688479+03	1.3731694-08	3.3791384-10	5.0888845-05	7.6109611+02
204000.	1.4486500+03	1.2736361+03	1.3424721-08	3.2919703-10	5.0991617-05	7.6294130+02
205000.	1.4556500+03	1.2784119+03	1.3125742-08	3.2073675-10	5.1094193-05	7.6478197+02
206000.	1.4626500+03	1.2831753+03	1.2834527-08	3.1252462-10	5.1196572-05	7.6661813+02
207000.	1.4696500+03	1.2879262+03	1.2550845-08	3.0455248-10	5.1298758-05	7.6844979+02
208000.	1.4766500+03	1.2926652+03	1.2274971-08	2.9681241-10	5.1400749-05	7.7027699+02
209000.	1.4836500+03	1.2973923+03	1.2006194-08	2.8929669-10	5.1502547-05	7.7209973+02

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
170000.	3.2945375E-09	7.0799055E-10	2.5903395E+00	2.6400000E+01	9.3467949E+00
171000.	3.2078122E-09	7.0468581E-10	2.5997306E+00	2.6372500E+01	9.3467949E+00
172000.	3.1238717E-09	7.0141439E-10	2.6097735E+00	2.6345000E+01	9.3467949E+00
173000.	3.0426131E-09	6.9817568E-10	2.6164268E+00	2.6317500E+01	9.3467949E+00
174000.	2.9639345E-09	6.9497038E-10	2.6259517E+00	2.6290000E+01	9.3467949E+00
175000.	2.8877745E-09	6.9179255E-10	2.6336699E+00	2.6262500E+01	9.3467949E+00
176000.	2.8139303E-09	6.8865076E-10	2.6422617E+00	2.6235000E+01	9.3467949E+00
177000.	2.7424342E-09	6.8554142E-10	2.6508272E+00	2.6207500E+01	9.3467949E+00
178000.	2.6731092E-09	6.8246503E-10	2.6597366E+00	2.6180000E+01	9.3467949E+00
179000.	2.6059197E-09	6.7941483E-10	2.6687085E+00	2.6152500E+01	9.3467949E+00
180000.	2.5409392E-09	6.7641766E-10	2.6780687E+00	2.6125000E+01	9.3467949E+00
181000.	2.4779461E-09	6.7345041E-10	2.6868316E+00	2.6097500E+01	9.3467949E+00
182000.	2.4169676E-09	6.7051276E-10	2.6932693E+00	2.6070000E+01	9.3467949E+00
183000.	2.3579357E-09	6.6760282E-10	2.7016822E+00	2.6042500E+01	9.3467949E+00
184000.	2.2997857E-09	6.6470599E-10	2.7103074E+00	2.6015000E+01	9.3467949E+00
185000.	2.2434536E-09	6.6183793E-10	2.7184342E+00	2.5987500E+01	9.3467949E+00
186000.	2.1887726E-09	6.5899489E-10	2.7267736E+00	2.5960000E+01	9.3467949E+00
187000.	2.1372606E-09	6.5618797E-10	2.7350888E+00	2.5932500E+01	9.3467949E+00
188000.	2.0861771E-09	6.5339321E-10	2.7433803E+00	2.5905000E+01	9.3467949E+00
189000.	2.0366397E-09	6.5062142E-10	2.7516481E+00	2.5877500E+01	9.3467949E+00
190000.	1.9885033E-09	6.4787642E-10	2.7598929E+00	2.5850000E+01	9.3467949E+00
191000.	1.9417549E-09	6.4516760E-10	2.7657072E+00	2.5822500E+01	9.3467949E+00
192000.	1.8962849E-09	6.4246329E-10	2.7716297E+00	2.5795000E+01	9.3467949E+00
193000.	1.8521553E-09	6.3978944E-10	2.7774907E+00	2.5767500E+01	9.3467949E+00
194000.	1.8093237E-09	6.3713165E-10	2.7833200E+00	2.5740000E+01	9.3467949E+00
195000.	1.7677577E-09	6.3449757E-10	2.7891477E+00	2.5712500E+01	9.3467949E+00
196000.	1.7274191E-09	6.3189637E-10	2.7949636E+00	2.5677500E+01	9.3467949E+00
197000.	1.6882774E-09	6.2931509E-10	2.8007676E+00	2.5648750E+01	9.3467949E+00
198000.	1.6498187E-09	6.2675175E-10	2.8065616E+00	2.5620000E+01	9.3467949E+00
199000.	1.6126326E-09	6.2422024E-10	2.8123457E+00	2.5591250E+01	9.3467949E+00
200000.	1.5764729E-09	6.2170589E-10	2.8181143E+00	2.5562500E+01	9.3467949E+00
201000.	1.5414479E-09	6.1921764E-10	2.8238730E+00	2.5533750E+01	9.3467949E+00
202000.	1.5070267E-09	6.1675549E-10	2.8296220E+00	2.5505000E+01	9.3467949E+00
203000.	1.4736776E-09	6.1431942E-10	2.8353592E+00	2.5476250E+01	9.3467949E+00
204000.	1.4412139E-09	6.1190865E-10	2.8410863E+00	2.5447500E+01	9.3467949E+00
205000.	1.4095261E-09	6.0951385E-10	2.8468025E+00	2.5418750E+01	9.3467949E+00
206000.	1.3786295E-09	6.0714410E-10	2.8525047E+00	2.5390000E+01	9.3467949E+00
207000.	1.3486594E-09	6.0479962E-10	2.8581962E+00	2.5361250E+01	9.3467949E+00
208000.	1.3194713E-09	6.0248038E-10	2.8638768E+00	2.5332500E+01	9.3467949E+00
209000.	1.2910432E-09	6.0018564E-10	2.8695520E+00	2.5303750E+01	9.3467949E+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	MOLECULAR TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
m	degrees K	degrees K	newtons cm^{-2}	kg m^{-3}	newton-sec m^{-2}	$m^2 s^{-1}$
210000.	1.4506500+03	1.2658705+03	1.1742803-08	2.8199857-10	5.1604155-05	7.6353047+02
211000.	1.4556500+03	1.2687887+03	1.1487101-08	2.7491044-10	5.1705571-05	7.6484518+02
212000.	1.4606500+03	1.2716970+03	1.1237897-08	2.6802581-10	5.1806798-05	7.6615769+02
213000.	1.4656500+03	1.2745964+03	1.0994995-08	2.6133797-10	5.1907837-05	7.6746785+02
214000.	1.4706500+03	1.2774839+03	1.0758220-08	2.5484074-10	5.2008688-05	7.6877583+02
215000.	1.4756500+03	1.2803624+03	1.0527393-08	2.4852795-10	5.2109353-05	7.7008157+02
216000.	1.4806500+03	1.2832310+03	1.0302346-08	2.4239379-10	5.2209833-05	7.7138512+02
217000.	1.4856500+03	1.2860897+03	1.0082916-08	2.3643261-10	5.2310128-05	7.7268646+02
218000.	1.4906500+03	1.2889385+03	9.8689373-09	2.3063885-10	5.2410240-05	7.7398563+02
219000.	1.4956500+03	1.2917773+03	9.6602626-09	2.2500735-10	5.2510169-05	7.7528261+02
220000.	1.5006500+03	1.2946062+03	9.4567372-09	2.1953292-10	5.2609917-05	7.7657742+02
221000.	1.5056500+03	1.2974252+03	9.2582194-09	2.1421072-10	5.2709484-05	7.7787009+02
222000.	1.5106500+03	1.3002342+03	9.0645670-09	2.0903594-10	5.2808871-05	7.7916059+02
223000.	1.5156500+03	1.3030334+03	8.8756443-09	2.0400402-10	5.2908081-05	7.8044897+02
224000.	1.5206500+03	1.3058226+03	8.6913244-09	1.9911063-10	5.3007112-05	7.8173523+02
225000.	1.5256500+03	1.3086018+03	8.5114734-09	1.9435136-10	5.3105966-05	7.8301938+02
226000.	1.5306500+03	1.3113712+03	8.3359701-09	1.8972219-10	5.3204645-05	7.8430142+02
227000.	1.5356500+03	1.3141306+03	8.1646950-09	1.8521897-10	5.3303148-05	7.8558137+02
228000.	1.5406500+03	1.3168801+03	7.9975339-09	1.8083807-10	5.3401478-05	7.8685923+02
229000.	1.5456500+03	1.3196197+03	7.8343722-09	1.7657569-10	5.3499634-05	7.8813503+02
230000.	1.5506500+03	1.3223493+03	7.6751999-09	1.7243033-10	5.3597617-05	7.8940877+02
231000.	1.5556500+03	1.3250693+03	7.5195949-09	1.6839987-10	5.3695801-05	7.9068027+02
232000.	1.5606500+03	1.3277793+03	7.3675768-09	1.6446975-10	5.3794036-05	7.9194247+02
233000.	1.5656500+03	1.3304794+03	7.2190563-09	1.6063719-10	5.3892081-05	7.9320237+02
234000.	1.5706500+03	1.3331697+03	7.0739410-09	1.5689945-10	5.3990019-05	7.9447098+02
235000.	1.5756500+03	1.3358501+03	6.9321937-09	1.5325381-10	5.4087848-05	7.9573728+02
236000.	1.5806500+03	1.3385207+03	6.7938023-09	1.4969770-10	5.4185570-05	7.9700130+02
237000.	1.5856500+03	1.3411814+03	6.6587715-09	1.4623878-10	5.4283184-05	7.9826404+02
238000.	1.5906500+03	1.3438323+03	6.5270330-09	1.4286449-10	5.4380692-05	7.9952549+02
239000.	1.5956500+03	1.3464734+03	6.3984880-09	1.3957239-10	5.4478094-05	7.9851968+02
240000.	1.5906500+03	1.3491047+03	6.2730608-09	1.3732034-10	5.4375389-05	7.9952559+02
241000.	1.5956500+03	1.3517262+03	6.1494784-09	1.3427610-10	5.4452581-05	8.0053024+02
242000.	1.5986500+03	1.3543380+03	6.0256494-09	1.3130759-10	5.4529666-05	8.0153363+02
243000.	1.6026500+03	1.3569402+03	5.9075629-09	1.2841269-10	5.4606647-05	8.0253577+02
244000.	1.6066500+03	1.3595327+03	5.7920932-09	1.2558912-10	5.4683524-05	8.0353665+02
245000.	1.6106500+03	1.3621154+03	5.6791947-09	1.2283534-10	5.4760297-05	8.0453629+02
246000.	1.6146500+03	1.3646885+03	5.5688008-09	1.2014924-10	5.4836967-05	8.0553470+02
247000.	1.6186500+03	1.3672519+03	5.4608521-09	1.1752905-10	5.4913534-05	8.0653186+02
248000.	1.6226500+03	1.3698057+03	5.3552672-09	1.1497295-10	5.4989998-05	8.0752779+02
249000.	1.6266500+03	1.3723502+03	5.2520459-09	1.1247918-10	5.5066361-05	8.0852251+02

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
210000.	1.257152E-09	2.515906E-10	2.675213E+00	2.527500E+01	9.340794E+00
211000.	1.229777E-09	2.459225E-10	2.648684E+00	2.524625E+01	9.340794E+00
212000.	1.203196E-09	2.404845E-10	2.622945E+00	2.521750E+01	9.340794E+00
213000.	1.177294E-09	2.351697E-10	2.597913E+00	2.518875E+01	9.340794E+00
214000.	1.152057E-09	2.299732E-10	2.573531E+00	2.516000E+01	9.340794E+00
215000.	1.127474E-09	2.249169E-10	2.549733E+00	2.513125E+01	9.340794E+00
216000.	1.103529E-09	2.199723E-10	2.526496E+00	2.510250E+01	9.340794E+00
217000.	1.079944E-09	2.151522E-10	2.503746E+00	2.507375E+01	9.340794E+00
218000.	1.056541E-09	2.104573E-10	2.481473E+00	2.504500E+01	9.340794E+00
219000.	1.033421E-09	2.058711E-10	2.459694E+00	2.501625E+01	9.340794E+00
220000.	1.012412E-09	1.995827E-10	2.431251E+00	2.496750E+01	9.340794E+00
221000.	9.911594E-10	1.971089E-10	2.419679E+00	2.495875E+01	9.340794E+00
222000.	9.704277E-10	1.886444E-10	2.394236E+00	2.493000E+01	9.340794E+00
223000.	9.502222E-10	1.819756E-10	2.367004E+00	2.490125E+01	9.340794E+00
224000.	9.305496E-10	1.776102E-10	2.353382E+00	2.487250E+01	9.340794E+00
225000.	9.112151E-10	1.733654E-10	2.338899E+00	2.484375E+01	9.340794E+00
226000.	8.924262E-10	1.692369E-10	2.324387E+00	2.481500E+01	9.340794E+00
227000.	8.740699E-10	1.652191E-10	2.309867E+00	2.478625E+01	9.340794E+00
228000.	8.561941E-10	1.613131E-10	2.295348E+00	2.475750E+01	9.340794E+00
229000.	8.387264E-10	1.575214E-10	2.280838E+00	2.472875E+01	9.340794E+00
230000.	8.216859E-10	1.538414E-10	2.266344E+00	2.470000E+01	9.340794E+00
231000.	8.050270E-10	1.502537E-10	2.251937E+00	2.467063E+01	9.340794E+00
232000.	7.887526E-10	1.466884E-10	2.237762E+00	2.464172E+01	9.340794E+00
233000.	7.728524E-10	1.432732E-10	2.223934E+00	2.461258E+01	9.340794E+00
234000.	7.573166E-10	1.399438E-10	2.210391E+00	2.458344E+01	9.340794E+00
235000.	7.421362E-10	1.367151E-10	2.197258E+00	2.455430E+01	9.340794E+00
236000.	7.273026E-10	1.335674E-10	2.184255E+00	2.452516E+01	9.340794E+00
237000.	7.128065E-10	1.305063E-10	2.171668E+00	2.449602E+01	9.340794E+00
238000.	6.986370E-10	1.275133E-10	2.159467E+00	2.446688E+01	9.340794E+00
239000.	6.847853E-10	1.246277E-10	2.147753E+00	2.443774E+01	9.340794E+00
240000.	6.712455E-10	1.218249E-10	2.136618E+00	2.440860E+01	9.340794E+00
241000.	6.580127E-10	1.191777E-10	2.126033E+00	2.437946E+01	9.340794E+00
242000.	6.450817E-10	1.166172E-10	2.116082E+00	2.435032E+01	9.340794E+00
243000.	6.324475E-10	1.141466E-10	2.106425E+00	2.432118E+01	9.340794E+00
244000.	6.201060E-10	1.117202E-10	2.097067E+00	2.429204E+01	9.340794E+00
245000.	6.080527E-10	1.093718E-10	2.088126E+00	2.426290E+01	9.340794E+00
246000.	5.962818E-10	1.070717E-10	2.079556E+00	2.423376E+01	9.340794E+00
247000.	5.847862E-10	1.048385E-10	2.071356E+00	2.420462E+01	9.340794E+00
248000.	5.735622E-10	1.026826E-10	2.063626E+00	2.417548E+01	9.340794E+00
249000.	5.626069E-10	1.005877E-10	2.056116E+00	2.414634E+01	9.340794E+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	MOLECULAR TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
m	K	K	N cm^{-2}	kg m^{-3}	N-s m^{-2}	m s^{-1}
250000.	1.6306500+03	1.3577603+03	5.1510736-09	1.1004613-10	5.5142621-05	8.0951599+02
251000.	1.6346500+03	1.3594463+03	5.0523125-09	1.0747210-10	5.5218780-05	8.1050826+02
252000.	1.6386500+03	1.3611293+03	4.9557095-09	1.0535554-10	5.5294839-05	8.1149931+02
253000.	1.6426500+03	1.3627993+03	4.8612109-09	1.0309490-10	5.5370797-05	8.1248915+02
254000.	1.6466500+03	1.3644562+03	4.7687647-09	1.0088870-10	5.5446654-05	8.1347779+02
255000.	1.6506500+03	1.3661100+03	4.6783259-09	9.8735476-11	5.5522412-05	8.1446523+02
256000.	1.6546500+03	1.3677558+03	4.5898410-09	9.6633843-11	5.5598070-05	8.1545148+02
257000.	1.6586500+03	1.3693936+03	4.5032638-09	9.4582412-11	5.5673630-05	8.1643653+02
258000.	1.6626500+03	1.3710233+03	4.4185492-09	9.2579880-11	5.5749091-05	8.1742039+02
259000.	1.6666500+03	1.3726449+03	4.3356506-09	9.0624918-11	5.5824454-05	8.1840308+02
260000.	1.6706500+03	1.3742585+03	4.2545264-09	8.8716316-11	5.5899718-05	8.1938459+02
261000.	1.6746500+03	1.3758640+03	4.1751341-09	8.6852861-11	5.5974886-05	8.2036492+02
262000.	1.6786500+03	1.3774616+03	4.0974309-09	8.5033349-11	5.6049955-05	8.2134409+02
263000.	1.6826500+03	1.3790510+03	4.0213771-09	8.3256617-11	5.6124929-05	8.2232207+02
264000.	1.6866500+03	1.3806324+03	3.9469339-09	8.1521590-11	5.6199805-05	8.2329891+02
265000.	1.6906500+03	1.3822058+03	3.8740628-09	7.9827165-11	5.6274586-05	8.2427458+02
266000.	1.6946500+03	1.3837711+03	3.8027275-09	7.8172310-11	5.6349271-05	8.2524910+02
267000.	1.6986500+03	1.3853284+03	3.7328909-09	7.6555984-11	5.6423861-05	8.2622247+02
268000.	1.7026500+03	1.3868776+03	3.6645176-09	7.4977195-11	5.6498357-05	8.2719470+02
269000.	1.7066500+03	1.3884187+03	3.5975742-09	7.3434992-11	5.6572756-05	8.2816579+02
270000.	1.7106500+03	1.3899519+03	3.5320264-09	7.1928422-11	5.6647062-05	8.2913573+02
271000.	1.7146500+03	1.3914769+03	3.4678424-09	7.0456590-11	5.6721274-05	8.3010455+02
272000.	1.7186500+03	1.3929940+03	3.4049895-09	6.9018590-11	5.6795393-05	8.3107224+02
273000.	1.7226500+03	1.3945029+03	3.3434384-09	6.7613595-11	5.6869418-05	8.3203880+02
274000.	1.7266500+03	1.3960038+03	3.2831564-09	6.6240716-11	5.6943350-05	8.3300423+02
275000.	1.7306500+03	1.3974967+03	3.2241167-09	6.4899188-11	5.7017190-05	8.3396856+02
276000.	1.7346500+03	1.3989815+03	3.1662888-09	6.3588183-11	5.7090937-05	8.3493176+02
277000.	1.7386500+03	1.4004583+03	3.1094465-09	6.2306966-11	5.7164592-05	8.3589386+02
278000.	1.7426500+03	1.4019270+03	3.0541608-09	6.1054754-11	5.7238154-05	8.3685485+02
279000.	1.7466500+03	1.4033877+03	2.9998068-09	5.9830847-11	5.7311629-05	8.3781474+02
280000.	1.7506500+03	1.4048404+03	2.9465578-09	5.8634523-11	5.7385011-05	8.3877353+02
281000.	1.7546500+03	1.4062849+03	2.8943893-09	5.7465104-11	5.7458303-05	8.3973123+02
282000.	1.7586500+03	1.4077215+03	2.8432759-09	5.6321906-11	5.7531503-05	8.4068784+02
283000.	1.7626500+03	1.4091500+03	2.7931943-09	5.5204269-11	5.7604615-05	8.4164335+02
284000.	1.7666500+03	1.4105704+03	2.7441205-09	5.4111606-11	5.7677636-05	8.4259778+02
285000.	1.7706500+03	1.4119828+03	2.6960330-09	5.3043262-11	5.7750568-05	8.4355113+02
286000.	1.7746500+03	1.4133871+03	2.6489087-09	5.1998646-11	5.7823412-05	8.4450342+02
287000.	1.7786500+03	1.4147834+03	2.6027260-09	5.0977169-11	5.7896167-05	8.4545462+02
288000.	1.7826500+03	1.4161717+03	2.5574638-09	4.9978263-11	5.7968833-05	8.4640475+02
289000.	1.7866500+03	1.4175519+03	2.5131019-09	4.9001384-11	5.8041411-05	8.4735382+02

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
250000.	5.514596e-12	9.616343e-11	3.072365e+00	2.411722e+01	9.346794e+00
251000.	5.428667e-12	9.502457e-11	3.076603e+00	2.408826e+01	9.346794e+00
252000.	5.343947e-12	9.389779e-11	3.080847e+00	2.405892e+01	9.346794e+00
253000.	5.260427e-12	9.278962e-11	3.085078e+00	2.402978e+01	9.346794e+00
254000.	5.178091e-12	8.979994e-11	3.089305e+00	2.400064e+01	9.346794e+00
255000.	5.096924e-12	8.862074e-11	3.093526e+00	2.397150e+01	9.346794e+00
256000.	4.016910e-12	8.745197e-11	3.097747e+00	2.394236e+01	9.346794e+00
257000.	4.837944e-12	8.629364e-11	3.101951e+00	2.391322e+01	9.346794e+00
258000.	4.760137e-12	8.514561e-11	3.106156e+00	2.388408e+01	9.346794e+00
259000.	4.683462e-12	8.400811e-11	3.110356e+00	2.385494e+01	9.346794e+00
260000.	4.607898e-12	7.913677e-11	3.114548e+00	2.382580e+01	9.346794e+00
261000.	4.533427e-12	7.797457e-11	3.118736e+00	2.379666e+01	9.346794e+00
262000.	4.460032e-12	7.682497e-11	3.122919e+00	2.376752e+01	9.346794e+00
263000.	4.387717e-12	7.568660e-11	3.127095e+00	2.373838e+01	9.346794e+00
264000.	4.316479e-12	7.456033e-11	3.131266e+00	2.370924e+01	9.346794e+00
265000.	4.246296e-12	7.344359e-11	3.135436e+00	2.368010e+01	9.346794e+00
266000.	4.177164e-12	6.997313e-11	3.139596e+00	2.365096e+01	9.346794e+00
267000.	4.109063e-12	6.888529e-11	3.143752e+00	2.362182e+01	9.346794e+00
268000.	4.042013e-12	6.780911e-11	3.147902e+00	2.359268e+01	9.346794e+00
269000.	3.976013e-12	6.674359e-11	3.152048e+00	2.356354e+01	9.346794e+00
270000.	3.911012e-12	6.569161e-11	3.156188e+00	2.353440e+01	9.346794e+00
271000.	3.847057e-12	6.464873e-11	3.160323e+00	2.350526e+01	9.346794e+00
272000.	3.784020e-12	6.361560e-11	3.164452e+00	2.347612e+01	9.346794e+00
273000.	3.722030e-12	6.259312e-11	3.168577e+00	2.344698e+01	9.346794e+00
274000.	3.661028e-12	5.958108e-11	3.172696e+00	2.341784e+01	9.346794e+00
275000.	3.601013e-12	5.859144e-11	3.176811e+00	2.338870e+01	9.346794e+00
276000.	3.542023e-12	5.761101e-11	3.180919e+00	2.335956e+01	9.346794e+00
277000.	3.484011e-12	5.664791e-11	3.185023e+00	2.333042e+01	9.346794e+00
278000.	3.426972e-12	5.569211e-11	3.189119e+00	2.330128e+01	9.346794e+00
279000.	3.371911e-12	5.474359e-11	3.193216e+00	2.327214e+01	9.346794e+00
280000.	3.315866e-12	5.380213e-11	3.197306e+00	2.324300e+01	9.346794e+00
281000.	3.260841e-12	5.286841e-11	3.201387e+00	2.321386e+01	9.346794e+00
282000.	3.206835e-12	5.194311e-11	3.205466e+00	2.318472e+01	9.346794e+00
283000.	2.994317e-12	4.902433e-11	3.209539e+00	2.315558e+01	9.346794e+00
284000.	2.943778e-12	4.812666e-11	3.213608e+00	2.312644e+01	9.346794e+00
285000.	2.666279e-12	4.723159e-11	3.217671e+00	2.309730e+01	9.346794e+00
286000.	2.835699e-12	4.634830e-11	3.221730e+00	2.306816e+01	9.346794e+00
287000.	2.786047e-12	4.547269e-11	3.225784e+00	2.303902e+01	9.346794e+00
288000.	2.737957e-12	4.458106e-11	3.229828e+00	2.300988e+01	9.346794e+00
289000.	2.690456e-12	4.371265e-11	3.233866e+00	2.298074e+01	9.346794e+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	MOLECULAR TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
m	K	K	N cm^{-2}	kg m^{-3}	N-s m^{-2}	m s^{-1}
290000.	1.7906500+03	1.4189240+03	2.4696202-09	4.8095997-11	5.8113902-05	8.4830183+02
291000.	1.7946500+03	1.4202881+03	2.4269984-09	4.7211560-11	5.8186306-05	8.4924878+02
292000.	1.7986500+03	1.4216441+03	2.3852192-09	4.6357597-11	5.8258623-05	8.5019468+02
293000.	1.8026500+03	1.4229922+03	2.3442620-09	4.5533676-11	5.8330852-05	8.5113953+02
294000.	1.8066500+03	1.4243321+03	2.3041091-09	4.4739023-11	5.8402995-05	8.5208332+02
295000.	1.8106500+03	1.4256640+03	2.2647439-09	4.3573490-11	5.8475052-05	8.5302607+02
296000.	1.8146500+03	1.4269879+03	2.2261478-09	4.2736493-11	5.8547022-05	8.5396778+02
297000.	1.8186600+03	1.4283037+03	2.1883045-09	4.1917596-11	5.8618908-05	8.5490846+02
298000.	1.8226500+03	1.4296115+03	2.1511977-09	4.1116379-11	5.8690709-05	8.5584811+02
299000.	1.8266600+03	1.4309111+03	2.1148110-09	4.0332392-11	5.8762424-05	8.5678671+02
300000.	1.8306500+03	1.4321902+03	2.0790502-09	3.9563746-11	5.8834054-05	8.5772430+02
302000.	1.8372500+03	1.4339030+03	2.0096524-09	3.8105743-11	5.8952040-05	8.5926907+02
304000.	1.8438500+03	1.4355909+03	1.9428967-09	3.6707152-11	5.9069838-05	8.6081107+02
306000.	1.8504600+03	1.4372541+03	1.8785268-09	3.5365337-11	5.9187389-05	8.6235033+02
308000.	1.8570500+03	1.4388926+03	1.8165910-09	3.4077782-11	5.9304714-05	8.6388683+02
310000.	1.8636600+03	1.4405062+03	1.7569419-09	3.2842091-11	5.9421813-05	8.6542060+02
312000.	1.8702500+03	1.4420950+03	1.6994860-09	3.1655979-11	5.9538690-05	8.6695166+02
314000.	1.8768500+03	1.4436590+03	1.6441348-09	3.0517269-11	5.9655345-05	8.6848003+02
316000.	1.8834500+03	1.4451982+03	1.5908032-09	2.9423893-11	5.9771779-05	8.7000571+02
318000.	1.8900600+03	1.4467127+03	1.5394094-09	2.8373871-11	5.9887992-05	8.7152871+02
320000.	1.8966500+03	1.4482023+03	1.4898766-09	2.7365340-11	6.0003988-05	8.7304906+02
322000.	1.9032500+03	1.4496672+03	1.4421301-09	2.6396501-11	6.0119767-05	8.7456677+02
324000.	1.9098500+03	1.4511073+03	1.3960788-09	2.5466643-11	6.0235330-05	8.7608185+02
326000.	1.9164600+03	1.4525226+03	1.3517150-09	2.4571145-11	6.0350677-05	8.7759431+02
328000.	1.9230500+03	1.4539130+03	1.3089132-09	2.3711445-11	6.0465811-05	8.7910417+02
330000.	1.9296500+03	1.4552787+03	1.2676311-09	2.2885063-11	6.0580733-05	8.8061144+02
332000.	1.9362500+03	1.4566196+03	1.2278100-09	2.2090599-11	6.0695443-05	8.8211613+02
334000.	1.9428500+03	1.4579357+03	1.1893921-09	2.1326693-11	6.0809944-05	8.8361827+02
336000.	1.9494500+03	1.4592270+03	1.1523229-09	2.0592063-11	6.0924233-05	8.8511785+02
338000.	1.9560500+03	1.4604934+03	1.1165502-09	1.9886479-11	6.1038315-05	8.8661491+02
340000.	1.9626500+03	1.4617353+03	1.0820239-09	1.9205772-11	6.1152192-05	8.8810944+02
342000.	1.9692500+03	1.4629523+03	1.0486965-09	1.8551829-11	6.1265862-05	8.8960144+02
344000.	1.9758500+03	1.4641444+03	1.0165215-09	1.7922572-11	6.1379327-05	8.9109091+02
346000.	1.9824500+03	1.4653117+03	9.8545500-10	1.7316986-11	6.1492588-05	8.9257789+02
348000.	1.9890500+03	1.4664543+03	9.5545483-10	1.6734094-11	6.1605648-05	8.9406255+02
350000.	1.9956600+03	1.4675721+03	9.2648069-10	1.6172967-11	6.1718506-05	8.9554465+02
352000.	2.0022500+03	1.4686651+03	8.9849361-10	1.5632716-11	6.1831163-05	8.9702429+02
354000.	2.0088500+03	1.4697333+03	8.7145655-10	1.5112489-11	6.1943621-05	8.9850150+02
356000.	2.0154500+03	1.4707767+03	8.4533385-10	1.4611473-11	6.2055880-05	8.9997628+02
358000.	2.0220500+03	1.4717953+03	8.2009138-10	1.4128892-11	6.2167942-05	9.0144866+02

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
290000.	2.643927E-12	4.2856128-11	3.2379156+00	2.295160E+01	9.34E7949+00
291000.	2.598827E-12	4.2E2449[-11	3.2419497+00	2.2922460+01	9.34E7949+00
292000.	2.553855E-12	4.1E29217-11	3.2459796+00	2.289332E+01	9.34E7949+00
293000.	2.509[E28-12	4.[411731-11	3.2500033+00	2.2864186+01	9.34E7949+00
294000.	2.466716E-12	3.9631E12-11	3.2540229+00	2.2835040+01	9.34E7949+00
295000.	2.424573.-12	3.8868459-11	3.2580377+00	2.2805900+01	9.34E7949+00
296000.	2.383253[-12	3.8121E4E-11	3.2620476+00	2.2776760+01	9.34E7949+00
297000.	2.342753[-12	3.7391367-11	3.2661529+00	2.2747620+01	9.34E7949+00
298000.	2.303[E36-12	3.6676669-11	3.2700534+00	2.2718480+01	9.34E7949+00
299000.	2.264[E69-12	3.5977332-11	3.2742491+00	2.2689340+01	9.34E7949+00
300000.	2.226771E-12	3.5291663-11	3.2782[1+00	2.2660000+01	9.34E7949+00
302000.	2.151[78E-12	3.[991115-11	3.2861[5E+00	2.260560E+01	9.34E7949+00
304000.	2.[7995E0E-12	3.2743542-11	3.2911772+00	2.255120E+01	9.34E7949+00
306000.	2.[11[995E-12	3.1546E16-11	3.2977268+00	2.2496E0E+01	9.34E7949+00
308000.	1.9447927-12	3.[398[9[-11	3.3042637+00	2.244240E+01	9.34E7949+00
310000.	1.8[E934[E-12	2.9295628-11	3.31[7881+00	2.2388[0E+01	9.34E7949+00
312000.	1.8194233E-12	2.8237787-11	3.3173[01+00	2.233360E+01	9.34E7949+00
314000.	1.76[1656E-12	2.7222234-11	3.3237998+00	2.2279200+01	9.34E7949+00
316000.	1.7638[9[E-12	2.6246724-11	3.3302871+00	2.222480E+01	9.34E7949+00
318000.	1.648[496E-12	2.5311[3E3-11	3.3367621+00	2.217040E+01	9.34E7949+00
320000.	1.5956212E-12	2.4416452-11	3.3432250+00	2.2116000+01	9.34E7949+00
322000.	1.5439[61E-12	2.3560227-11	3.3496758+00	2.2061600+01	9.34E7949+00
324000.	1.4936252E-12	2.2715883-11	3.3561146+00	2.200720E+01	9.34E7949+00
326000.	1.4471E92E-12	2.1917972-11	3.3625414+00	2.1952800+01	9.34E7949+00
328000.	1.4012E6E-12	2.1151[32-11	3.3689563+00	2.1898400+01	9.34E7949+00
330000.	1.3571913E-12	2.[413952-11	3.3753593+00	2.1844000+01	9.34E7949+00
332000.	1.3144598E-12	1.5705273-11	3.3817506+00	2.1789600+01	9.34E7949+00
334000.	1.2733[07E-12	1.5023654-11	3.3881302+00	2.1735200+01	9.34E7949+00
336000.	1.2336455E-12	1.4368548-11	3.3944980+00	2.168080E+01	9.34E7949+00
338000.	1.1953481E-12	1.4738261-11	3.4008543+00	2.1626400+01	9.34E7949+00
340000.	1.1583853E-12	1.4131947-11	3.4071991+00	2.1572000+01	9.34E7949+00
342000.	1.1227[59E-12	1.3548617-11	3.4135325+00	2.151760E+01	9.34E7949+00
344000.	1.0886208E-12	1.2987[67-11	3.4198544+00	2.1463200+01	9.34E7949+00
346000.	1.0558[12E-12	1.2447111-11	3.4261649+00	2.140880E+01	9.34E7949+00
348000.	1.0242683E-12	1.1927162-11	3.4324642+00	2.1354400+01	9.34E7949+00
350000.	9.9386482-11	1.1426023-11	3.4387523+00	2.130000E+01	9.34E7949+00
352000.	9.6419272-11	1.1944728-11	3.4450292+00	2.1245600+01	9.34E7949+00
354000.	9.3256759-11	1.1480654-11	3.4512950+00	2.119120E+01	9.34E7949+00
356000.	9.0399133-11	1.1033737-11	3.4575497+00	2.113680E+01	9.34E7949+00
358000.	8.7756743-11	1.0603266-11	3.4637934+00	2.1082400+01	9.34E7949+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	MOLECULAR TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
m	K	K	N cm^{-2}	kg m^{-3}	N·s m^{-2}	m s^{-1}
360000.	2.0286500+03	1.4727891+03	7.9569618-10	1.3664002-11	6.2279808-05	9.0291863+02
362000.	2.0352500+03	1.4737581+03	7.7211724-10	1.3214098-11	6.2391479-05	9.0438621+02
364000.	2.0418500+03	1.4747024+03	7.4932401-10	1.2784495-11	6.2502956-05	9.0585143+02
366000.	2.0484500+03	1.4756218+03	7.2728756-10	1.2368543-11	6.2614238-05	9.0731425+02
368000.	2.0550500+03	1.4765164+03	7.0598013-10	1.1967621-11	6.2725329-05	9.0877474+02
370000.	2.0616600+03	1.4773863+03	6.8537521-10	1.1581137-11	6.2836228-05	9.1023289+02
372000.	2.0682500+03	1.4782314+03	6.6544709-10	1.1208519-11	6.2946935-05	9.1168869+02
374000.	2.0748500+03	1.4790516+03	6.4617101-10	1.0849220-11	6.3057455-05	9.1314217+02
376000.	2.0814500+03	1.4798471+03	6.2752351-10	1.0502720-11	6.3167787-05	9.1459335+02
378000.	2.0880500+03	1.4806178+03	6.0948201-10	1.0168520-11	6.3277930-05	9.1604224+02
380000.	2.0946500+03	1.4813637+03	5.9202455-10	9.8461900-12	6.3387887-05	9.1748883+02
382000.	2.1012500+03	1.4820848+03	5.7513035-10	9.5351233-12	6.3497657-05	9.1893314+02
384000.	2.1078500+03	1.4827811+03	5.5877925-10	9.2350303-12	6.3607244-05	9.2037519+02
386000.	2.1144600+03	1.4834527+03	5.4295179-10	8.9454378-12	6.3716646-05	9.2181499+02
388000.	2.1210500+03	1.4840994+03	5.2762962-10	8.6659468-12	6.3825865-05	9.2325253+02
390000.	2.1276500+03	1.4847213+03	5.1279474-10	8.3961681-12	6.3934904-05	9.2468784+02
392000.	2.1342500+03	1.4853185+03	4.9843007-10	8.1357333-12	6.4043758-05	9.2612092+02
394000.	2.1408500+03	1.4858908+03	4.8451897-10	7.8842847-12	6.4152435-05	9.2755180+02
396000.	2.1474500+03	1.4864384+03	4.7105576-10	7.6414855-12	6.4260931-05	9.2898046+02
398000.	2.1540500+03	1.4869612+03	4.5799503-10	7.4070068-12	6.4369250-05	9.3040694+02
400000.	2.1606500+03	1.4874591+03	4.4537001-10	7.1808243-12	6.4477391-05	9.3183123+02
402000.	2.1658500+03	1.4880479+03	4.3310086-10	6.9662399-12	6.4562467-05	9.3295187+02
404000.	2.1710500+03	1.4886223+03	4.2120474-10	6.7586691-12	6.4647435-05	9.3407114+02
406000.	2.1762500+03	1.4891824+03	4.0966948-10	6.5578667-12	6.4732293-05	9.3518911+02
408000.	2.1814500+03	1.4897281+03	3.9848298-10	6.3635912-12	6.4817043-05	9.3630573+02
410000.	2.1866500+03	1.4902596+03	3.8763392-10	6.1756156-12	6.4901687-05	9.3742103+02
412000.	2.1918500+03	1.4907764+03	3.7711117-10	5.9937183-12	6.4986220-05	9.3853498+02
414000.	2.1970500+03	1.4912791+03	3.6690399-10	5.8176856-12	6.5070647-05	9.3964763+02
416000.	2.2022500+03	1.4917673+03	3.5700210-10	5.6473137-12	6.5154967-05	9.4075896+02
418000.	2.2074500+03	1.4922412+03	3.4739544-10	5.4824035-12	6.5239181-05	9.4186897+02
420000.	2.2126500+03	1.4927007+03	3.3807444-10	5.3227660-12	6.5323289-05	9.4297768+02
422000.	2.2178500+03	1.4931459+03	3.2902998-10	5.1682208-12	6.5407290-05	9.4408509+02
424000.	2.2230500+03	1.4935767+03	3.2025298-10	5.0185899-12	6.5491187-05	9.4519119+02
426000.	2.2282500+03	1.4939931+03	3.1173486-10	4.8737047-12	6.5574978-05	9.4629601+02
428000.	2.2334500+03	1.4943952+03	3.0346718-10	4.7334005-12	6.5658665-05	9.4739954+02
430000.	2.2386500+03	1.4947830+03	2.9544209-10	4.5975230-12	6.5742249-05	9.4850179+02
432000.	2.2438500+03	1.4951563+03	2.8765169-10	4.4659185-12	6.5825728-05	9.4960275+02
434000.	2.2490500+03	1.4955153+03	2.8008852-10	4.3384436-12	6.5909103-05	9.5070244+02
436000.	2.2542500+03	1.4958599+03	2.7274532-10	4.2149555-12	6.5992375-05	9.5180084+02
438000.	2.2594500+03	1.4961902+03	2.6561517-10	4.0953209-12	6.6075546-05	9.5289800+02

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
360000.	6.5189x0_-11	1.21866574-11	3.4700262+00	2.1024000+01	9.3407949+00
362000.	6.2066_7e3-11	1.17e9_34-11	3.4762481+00	2.0973600+01	9.3407949+00
364000.	6.0x2x5e42-11	1.1[9[435-11	3.4824593+00	2.0919200+01	9.3407949+00
366000.	7.7661742-11	1.1_32778-11	3.4886596+00	2.0864800+01	9.3407949+00
368000.	7.5586[354-11	1.0[675367-11	3.4948492+00	2.0810400+01	9.3407949+00
370000.	7.3374379-11	1.[_33[615-11	3.5011.281+00	2.0756000+01	9.3407949+00
372000.	7.1246[943-11	9.9982317-12	3.5[71963+00	2.0701600+01	9.3407949+00
374000.	6.9177[[3-11	9.e777249-12	3.5133541+00	2.0647200+01	9.3407949+00
376000.	6.7186[95-11	9.e6864[3-12	3.5195814+00	2.0592800+01	9.3407949+00
378000.	6.5249479-11	9.[725313-12	3.5256383+00	2.0538400+01	9.3407949+00
380000.	6.3e0[532-11	8.7829616-12	3.5317647+00	2.0484000+01	9.3407949+00
382000.	6.1571[84-11	8.[[552e2-12	3.53788[7+00	2.0429600+01	9.3407949+00
384000.	5.9021361-11	8.e27837[-12	3.5439866+00	2.0375200+01	9.3407949+00
386000.	5.8126936-11	7.9795165-12	3.5501821+00	2.0320800+01	9.3407949+00
388000.	5.6486[6e-11	7.7312[46-12	3.5561674+00	2.0266400+01	9.3407949+00
390000.	5.4896[[9-11	7.e[95565-12	3.5622427+00	2.0212000+01	9.3407949+00
392000.	5.3361563-11	7.2572433-12	3.5683077+00	2.0157600+01	9.3407949+00
394000.	5.1871277-11	7.[329458-12	3.5743628+00	2.0103200+01	9.3407949+00
396000.	5.[426e72-11	6.e163639-12	3.5804[79+00	2.0048800+01	9.3407949+00
398000.	4.9_31697-11	6.e[72_9[-12	3.5864436+00	1.9994400+01	9.3407949+00
400000.	4.7e8[397-11	6.9[54445-12	3.5924683+00	1.9940000+01	9.3407949+00
402000.	4.6306575-11	6.2143[_8-12	3.5972684+00	1.9900000+01	9.3407949+00
404000.	4.5[9333[-11	6.e288734-12	3.6019426+00	1.9860000+01	9.3407949+00
406000.	4.3864[75-11	5.d997534-12	3.6066[[6+00	1.9820000+01	9.3407949+00
408000.	4.2e8[95[-11	5.e764557-12	3.6113926+00	1.9780000+01	9.3407949+00
410000.	4.1499_29-11	5.5e87775-12	3.6161367+00	1.9740000+01	9.3407949+00
412000.	4.[372442-11	5.d465213-12	3.6208186+00	1.9700000+01	9.3407949+00
414000.	3.9279739-11	5.1894965-12	3.6255226+00	1.9660000+01	9.3407949+00
416000.	3.8217e7[-11	5.0375212-12	3.6302266+00	1.9620000+01	9.3407949+00
418000.	3.7191[_7-11	4.8[[4179-12	3.6349127+00	1.9580000+01	9.3407949+00
420000.	3.6193327-11	4.7480180-12	3.6395990+00	1.9540000+01	9.3407949+00
422000.	3.5225[51-11	4.4[31e_3-12	3.6442792+00	1.9500000+01	9.3407949+00
424000.	3.4285918-11	4.4766465-12	3.6489537+00	1.9460000+01	9.3407949+00
426000.	3.3373983-11	4.3474459-12	3.6536222+00	1.9420000+01	9.3407949+00
428000.	3.2488368-11	4.2222917-12	3.6582850+00	1.9380000+01	9.3407949+00
430000.	3.1629223-11	4.1010861-12	3.6629420+00	1.9340000+01	9.3407949+00
432000.	3.0795199-11	3.9836921-12	3.6675932+00	1.9300000+01	9.3407949+00
434000.	2.9986512-11	3.8699819-12	3.6722386+00	1.9260000+01	9.3407949+00
436000.	2.9199[0e-11	3.7598274-12	3.6768782+00	1.9220000+01	9.3407949+00
438000.	2.8436[39-11	3.65311_9-12	3.6815122+00	1.9180000+01	9.3407949+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	MOLECULAR TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
m	K	K	N cm^{-2}	kg m^{-3}	N-s m^{-2}	m^2 s^{-1}
440000.	2.2646500+03	1.4965061+03	2.5869126-10	3.9794075-12	6.6158619-05	9.5399390+02
442000.	2.2698600+03	1.4968076+03	2.5519673-10	3.8670918-12	6.6241580-05	9.5508853+02
444000.	2.2750500+03	1.4970948+03	2.5143699-10	3.7582516-12	6.6324445-05	9.5618192+02
446000.	2.2802600+03	1.4973676+03	2.4809321-10	3.6527717-12	6.6407207-05	9.5727405+02
448000.	2.2854500+03	1.4976261+03	2.4329140-10	3.5505373-12	6.6489869-05	9.5836494+02
450000.	2.2906600+03	1.4978702+03	2.2699599-10	3.4514913-12	6.6572431-05	9.5945458+02
452000.	2.2958500+03	1.4980999+03	2.2112992-10	3.3553803-12	6.6654892-05	9.6054298+02
454000.	2.3010600+03	1.4983153+03	2.1547934-10	3.2622508-12	6.6737256-05	9.6163017+02
456000.	2.3062500+03	1.4985163+03	2.0998883-10	3.1719590-12	6.6819517-05	9.6271611+02
458000.	2.3114600+03	1.4987029+03	2.0465324-10	3.0844085-12	6.6901681-05	9.6380085+02
460000.	2.3166500+03	1.4988752+03	1.9946788-10	2.9995098-12	6.6983746-05	9.6488435+02
462000.	2.3218600+03	1.4990331+03	1.9442817-10	2.9171770-12	6.7065712-05	9.6596664+02
464000.	2.3270500+03	1.4991767+03	1.8952953-10	2.8373239-12	6.7147581-05	9.6704774+02
466000.	2.3322600+03	1.4993059+03	1.8476770-10	2.7598706-12	6.7229352-05	9.6812760+02
468000.	2.3374500+03	1.4994207+03	1.8013853-10	2.6847388-12	6.7311025-05	9.6920628+02
470000.	2.3426600+03	1.4995212+03	1.7563794-10	2.6118527-12	6.7392602-05	9.7028374+02
472000.	2.3478500+03	1.4996073+03	1.7126204-10	2.5411396-12	6.7474083-05	9.7136002+02
474000.	2.3530600+03	1.4996790+03	1.6700703-10	2.4726287-12	6.7555467-05	9.7243510+02
476000.	2.3582500+03	1.4997364+03	1.6286930-10	2.4059531-12	6.7636754-05	9.7350900+02
478000.	2.3634600+03	1.4997794+03	1.5884530-10	2.3413466-12	6.7717947-05	9.7458172+02
480000.	2.3686500+03	1.4998081+03	1.5493162-10	2.2786463-12	6.7799044-05	9.7565326+02
482000.	2.3738600+03	1.4998224+03	1.5112992-10	2.2179008-12	6.7880046-05	9.7672362+02
484000.	2.3790500+03	1.4998223+03	1.4742202-10	2.1587211-12	6.7960953-05	9.7779281+02
486000.	2.3842600+03	1.4998079+03	1.4381985-10	2.1013810-12	6.8041764-05	9.7886082+02
488000.	2.3894500+03	1.4997791+03	1.4031534-10	2.0457142-12	6.8122486-05	9.7992768+02
490000.	2.3946500+03	1.4997359+03	1.3690966-10	1.9916687-12	6.8203111-05	9.8099338+02
492000.	2.3998500+03	1.4996784+03	1.3358800-10	1.9391934-12	6.8283643-05	9.8205791+02
494000.	2.4050500+03	1.4996065+03	1.3035960-10	1.8882377-12	6.8364083-05	9.8312130+02
496000.	2.4102500+03	1.4995203+03	1.2721787-10	1.8387546-12	6.8444429-05	9.8418354+02
498000.	2.4154500+03	1.4994197+03	1.2416023-10	1.7906974-12	6.8524683-05	9.8524464+02
500000.	2.4206500+03	1.4993047+03	1.2119000-10	1.7441046-12	6.8604845-05	9.8630458+02
502000.	2.4260500+03	1.4991754+03	1.1828759-10	1.6989757-12	6.8684909-05	9.8737301+02
504000.	2.4314600+03	1.4990289+03	1.1546412-10	1.6550459-12	6.8764879-05	9.8844026+02
506000.	2.4368500+03	1.4988633+03	1.1271165-10	1.6123808-12	6.8844757-05	9.8950642+02
508000.	2.4422500+03	1.4986825+03	1.1002987-10	1.5709469-12	6.8924547-05	9.9057140+02
510000.	2.4476500+03	1.4984766+03	1.0741709-10	1.5307110-12	6.9004275-05	9.9163489+02
512000.	2.4530500+03	1.4982554+03	1.0487133-10	1.4916417-12	6.9083944-05	9.9269719+02
514000.	2.4584600+03	1.4980191+03	1.0239080-10	1.4537092-12	6.9163575-05	9.9375843+02
516000.	2.4638600+03	1.4977677+03	9.9973650-11	1.4168825-12	6.9243167-05	9.9481848+02
518000.	2.4692500+03	1.4975011+03	9.7618166-11	1.3811333-12	6.9322720-05	9.9587706+02

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
440000.	2.7694730-11	3.5497142-12	3.6861405+00	1.9140000+01	9.3407949+00
442000.	2.6971913-11	3.4495203-12	3.6907031+00	1.9100000+01	9.3407949+00
444000.	2.6275755-11	3.3524366-12	3.6953601+00	1.9060000+01	9.3407949+00
446000.	2.5596066-11	3.2583183-12	3.6999913+00	1.9020000+01	9.3407949+00
448000.	2.4937300-11	3.1671530-12	3.7045970+00	1.8980000+01	9.3407949+00
450000.	2.4296157-11	3.0787574-12	3.7091970+00	1.8940000+01	9.3407949+00
452000.	2.3673565-11	2.9930692-12	3.7137915+00	1.8900000+01	9.3407949+00
454000.	2.3066030-11	2.9099955-12	3.7183805+00	1.8860000+01	9.3407949+00
456000.	2.2480031-11	2.8294334-12	3.7229639+00	1.8820000+01	9.3407949+00
458000.	2.1909617-11	2.7513565-12	3.7275418+00	1.8780000+01	9.3407949+00
460000.	2.1354400-11	2.6756251-12	3.7321142+00	1.8740000+01	9.3407949+00
462000.	2.0814947-11	2.6021625-12	3.7366810+00	1.8700000+01	9.3407949+00
464000.	2.0290514-11	2.5309519-12	3.7412425+00	1.8660000+01	9.3407949+00
466000.	1.9780720-11	2.4618619-12	3.7457985+00	1.8620000+01	9.3407949+00
468000.	1.9285139-11	2.3948128-12	3.7503491+00	1.8580000+01	9.3407949+00
470000.	1.8803316-11	2.3298269-12	3.7548943+00	1.8540000+01	9.3407949+00
472000.	1.8334846-11	2.2667493-12	3.7594341+00	1.8500000+01	9.3407949+00
474000.	1.7879315-11	2.2055470-12	3.7639686+00	1.8460000+01	9.3407949+00
476000.	1.7436343-11	2.1461601-12	3.7684976+00	1.8420000+01	9.3407949+00
478000.	1.7005544-11	2.0805299-12	3.7730214+00	1.8380000+01	9.3407949+00
480000.	1.6586550-11	2.0325999-12	3.7775399+00	1.8340000+01	9.3407949+00
482000.	1.6177021-11	1.9783155-12	3.7820531+00	1.8300000+01	9.3407949+00
484000.	1.5782599-11	1.9256291-12	3.7865609+00	1.8260000+01	9.3407949+00
486000.	1.5395961-11	1.8744756-12	3.7910636+00	1.8220000+01	9.3407949+00
488000.	1.5021777-11	1.8248176-12	3.7955610+00	1.8180000+01	9.3407949+00
490000.	1.4656745-11	1.7766099-12	3.8000532+00	1.8140000+01	9.3407949+00
492000.	1.4301567-11	1.7298008-12	3.8045402+00	1.8100000+01	9.3407949+00
494000.	1.3955943-11	1.6843473-12	3.8090220+00	1.8060000+01	9.3407949+00
496000.	1.3619597-11	1.6402073-12	3.8134986+00	1.8020000+01	9.3407949+00
498000.	1.3292255-11	1.5973393-12	3.8179701+00	1.7980000+01	9.3407949+00
500000.	1.2974270-11	1.5557776-12	3.8224365+00	1.7940000+01	9.3407949+00
502000.	1.2663760-11	1.5154136-12	3.8253840+00	1.7918000+01	9.3407949+00
504000.	1.2361271-11	1.4741174-12	3.8282694+00	1.7896000+01	9.3407949+00
506000.	1.2066591-11	1.4438642-12	3.8311826+00	1.7874000+01	9.3407949+00
508000.	1.1779497-11	1.4146174-12	3.8343936+00	1.7852000+01	9.3407949+00
510000.	1.1477780-11	1.3693509-12	3.8372225+00	1.7830000+01	9.3407949+00
512000.	1.1227230-11	1.3350355-12	3.8399692+00	1.7808000+01	9.3407949+00
514000.	1.0761080-11	1.3019449-12	3.8428137+00	1.7786000+01	9.3407949+00
516000.	1.0722930-11	1.2691615-12	3.8457161+00	1.7764000+01	9.3407949+00
518000.	1.0453734-11	1.2375301-12	3.8486164+00	1.7742000+01	9.3407949+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	MOLECULAR TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
m	K	K	N cm^{-2}	kg m^{-3}	N·s m^{-2}	m s^{-1}
520000.	2.4546500+03	1.5017173+03	9.5322033-11	1.3528331-12	6.9126736-05	9.9320715+02
522000.	2.4586500+03	1.5019323+03	9.3086454-11	1.3172553-12	6.9178711-05	9.9389478+02
524000.	2.4626500+03	1.5021482+03	9.0905027-11	1.2865736-12	6.9230699-05	9.9458192+02
526000.	2.4666500+03	1.5023629+03	8.8779845-11	1.2547628-12	6.9282550-05	9.9526859+02
528000.	2.4682500+03	1.5025905+03	8.6708354-11	1.2237975-12	6.9334411-05	9.9595479+02
530000.	2.4746500+03	1.5027329+03	8.4689118-11	1.1936538-12	6.9386236-05	9.9664051+02
532000.	2.4750500+03	1.5029201+03	8.2720709-11	1.1643084-12	6.9438021-05	9.9732577+02
534000.	2.4786500+03	1.5031022+03	8.0801808-11	1.1357393-12	6.9489770-05	9.9801055+02
536000.	2.4818500+03	1.5032791+03	7.8931034-11	1.1079241-12	6.9541479-05	9.9869486+02
538000.	2.4862500+03	1.5034508+03	7.7107120-11	1.0808419-12	6.9593152-05	9.9937871+02
540000.	2.4886500+03	1.5036174+03	7.5328784-11	1.0544716-12	6.9644787-05	1.0000621+03
542000.	2.4926500+03	1.5037788+03	7.3594795-11	1.0287932-12	6.9696384-05	1.0007450+03
544000.	2.4966500+03	1.5039350+03	7.1904012-11	1.0037880-12	6.9747945-05	1.0014274+03
546000.	2.4986500+03	1.5040861+03	7.0256256-11	9.7943675-13	6.9799466-05	1.0021094+03
548000.	2.5022500+03	1.5042320+03	6.8649900-11	9.5572106-13	6.9850952-05	1.0027909+03
550000.	2.5066500+03	1.5043727+03	6.7079379-11	9.3262367-13	6.9902399-05	1.0034720+03
552000.	2.5090500+03	1.5045083+03	6.5550097-11	9.1012665-13	6.9953810-05	1.0041526+03
554000.	2.5126500+03	1.5046387+03	6.4060567-11	8.8821386-13	7.0005184-05	1.0048327+03
556000.	2.5158500+03	1.5047640+03	6.2603765-11	8.6686899-13	7.0056521-05	1.0055124+03
558000.	2.5192500+03	1.5048840+03	6.1184730-11	8.4607632-13	7.0107821-05	1.0061916+03
560000.	2.5226500+03	1.5049990+03	5.9800541-11	8.2582091-13	7.0159083-05	1.0068703+03
562000.	2.5260500+03	1.5051087+03	5.8450218-11	8.0608705-13	7.0210310-05	1.0075486+03
564000.	2.5294500+03	1.5052133+03	5.7132932-11	7.8686126-13	7.0261500-05	1.0082265+03
566000.	2.5328600+03	1.5053127+03	5.5847810-11	7.6812948-13	7.0312652-05	1.0089039+03
568000.	2.5362500+03	1.5054070+03	5.4593977-11	7.4987769-13	7.0363769-05	1.0095808+03
570000.	2.5396500+03	1.5054961+03	5.3370636-11	7.3209300-13	7.0414848-05	1.0102573+03
572000.	2.5430500+03	1.5055800+03	5.2176982-11	7.1476259-13	7.0465892-05	1.0109333+03
574000.	2.5464500+03	1.5056588+03	5.1012261-11	6.9787412-13	7.0516900-05	1.0116089+03
576000.	2.5498500+03	1.5057323+03	4.9875696-11	6.8141564-13	7.0567871-05	1.0122840+03
578000.	2.5532500+03	1.5058008+03	4.8766580-11	6.6537536-13	7.0618806-05	1.0129587+03
580000.	2.5566500+03	1.5058641+03	4.7684185-11	6.4974186-13	7.0669704-05	1.0136329+03
582000.	2.5600500+03	1.5059222+03	4.6627816-11	6.3450403-13	7.0720567-05	1.0143067+03
584000.	2.5634500+03	1.5059751+03	4.5596817-11	6.1965139-13	7.0771394-05	1.0149800+03
586000.	2.5668500+03	1.5060229+03	4.4590527-11	6.0517346-13	7.0822185-05	1.0156529+03
588000.	2.5702500+03	1.5060656+03	4.3608318-11	5.9106021-13	7.0872940-05	1.0163253+03
590000.	2.5736500+03	1.5061029+03	4.2649554-11	5.7730160-13	7.0923660-05	1.0169973+03
592000.	2.5770500+03	1.5061352+03	4.1713649-11	5.6388831-13	7.0974344-05	1.0176688+03
594000.	2.5804500+03	1.5061623+03	4.0800003-11	5.5081067-13	7.1024992-05	1.0183399+03
596000.	2.5838500+03	1.5061842+03	3.9908072-11	5.3806062-13	7.1075604-05	1.0190106+03
598000.	2.5872500+03	1.5062010+03	3.9037277-11	5.2562847-13	7.1126184-05	1.0196808+03

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
520000.	1.32_49e1-11	1.2e67552-12	3.8515145+00	1.772e000+01	9.3497949+00
522000.	9.9eb47a5-12	1.1783_32-12	3.85441_4+00	1.7498000+01	9.349_7949+00
524000.	9.732_987-12	1.1476e2e4-12	3.8573342+00	1.767e000+01	9.3497949+00
526000.	9.5345270-12	1.1192745-12	3.8631757+00	1.7659_00+01	9.349_7949+00
528000.	9.2027590-12	1.0918324-12	3.8633d65+00	1.7632500+01	9.3497949+00
530000.	9.2eaa3a7-12	1.0647a1_-12	3.8659727+00	1.761e000+01	9.349_7949+00
532000.	8.9b54531-12	1.0384a073-12	3.8688d363+00	1.7584000+01	9.3497949+00
534000.	8.6b3423_-12	1.013_131-12	3.8711741e+00	1.7566000+01	9.349_7949+00
536000.	8.4991429-12	9.8d2_1394-13	3.8746226+00	1.7544000+01	9.349_7949+00
538000.	8.2346777-12	9.5e41334_-13	3.8775117+00	1.7522000+01	9.349_7949+00
540000.	8.0344936-12	9.2_e1_e_-13	3.8806376+00	1.7503000+01	9.3497949+00
542000.	7.8704a7e-12	9.1773474-13	3.8832535+00	1.7478000+01	9.349_7949+00
544000.	7.6774471-12	8.9517a7d-13	3.8861262+00	1.7456000+01	9.3497949+00
546000.	7.4523357-12	8.7306794-13	3.8889_9d+00	1.7434000+01	9.3497949+00
548000.	7.3492332-12	8.52923_5-13	3.8911e05+00	1.7412000+01	9.349_7949+00
550000.	7.1313352-12	8.3171791-13	3.8947317+00	1.7390000+01	9.349_7949+00
552000.	7.e17e144-12	8.1135143-13	3.8975a64+00	1.7368000+01	9.3497949+00
554000.	6.8579352-12	7.9139523-13	3.9003a5e6+00	1.7346000+01	9.3497949+00
556000.	6.7391de1-12	7.7182b1e-13	3.9033141+00	1.7324000+01	9.3497949+00
558000.	6.5922721-12	7.5271706-13	3.9061773+00	1.7302000+01	9.3497949+00
560000.	6.4324_d26-12	7.3e64742-13	3.9139535+00	1.7280000+01	9.3497949+00
562000.	6.2a7b227-12	7.1934e1_-13	3.9118d77+00	1.7258000+01	9.3497949+00
564000.	6.11e4957-12	7.e1d7eeb-13	3.9147398+00	1.7236000+01	9.3497949+00
566000.	5.97d714_-12	6.0b18746-13	3.9175899+00	1.7214000+01	9.3497949+00
568000.	5.844e021-12	6.8d73e49-13	3.9204379+00	1.7192000+01	9.3497949+00
570000.	5.7137149-12	6.6314218-13	3.9232889+00	1.7170000+01	9.3497949+00
572000.	5.5867252-12	6.37583_9-13	3.9261279+00	1.7148000+01	9.3497949+00
574000.	5.4a12323-12	6.22e1d22-13	3.9289e99+00	1.7126000+01	9.3497949+00
576000.	5.3395536-12	6.0783a71-13	3.9318e98+00	1.7104000+01	9.3497949+00
578000.	5.22_e16e-12	5.9352e05-13	3.9346477+00	1.7082000+01	9.3497949+00
580000.	5.1249307-12	5.795932_-13	3.9374d36+00	1.7060000+01	9.3497949+00
582000.	4.9711d47-12	5.6e59_278-13	3.9403176+00	1.7038000+01	9.3497949+00
584000.	4.8d14757-12	5.4e7417_-13	3.9431495+00	1.7016000+01	9.3497949+00
586000.	4.77374_1-12	5.3f02731-13	3.9459794+00	1.6994000+01	9.349_7949+00
588000.	4.6545879-12	5.2723799-13	3.9488073+00	1.6972000+01	9.3497949+00
590000.	4.5_9a1d7-12	5.1d769_3-13	3.9516332+00	1.6950000+01	9.3497949+00
592000.	4.4e67493-12	5.0_3_2_9-13	3.9544572+00	1.6928000+01	9.3497949+00
594000.	4.3b7f3e7-12	4.9133479-13	3.9572791+00	1.6906000+01	9.3497949+00
596000.	4.2724971-12	4.7f76125-13	3.9600991+00	1.6884000+01	9.3497949+00
598000.	4.1772243-12	4.6d71b2-13	3.9629172+00	1.6862000+01	9.349_7949+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	MOLECULAR TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
m	K	K	N cm^{-2}	kg m^{-3}	N·s m^{-2}	m s^{-1}
600000.	2.5906500+03	1.5062126+03	3.8185502-11	5.1348470-13	7.1176726-05	1.0203506+03
602000.	2.5928500+03	1.5062922+03	3.7354832-11	5.0188839-13	7.1209411-05	1.0207837+03
604000.	2.5950500+03	1.5063697+03	3.6543365-11	4.9056951-13	7.1242082-05	1.0212147+03
606000.	2.5972500+03	1.5064451+03	3.5750650-11	4.7952135-13	7.1274738-05	1.0216435+03
608000.	2.5994500+03	1.5065186+03	3.4976224-11	4.6873697-13	7.1307378-05	1.0220701+03
610000.	2.6016500+03	1.5065900+03	3.4219634-11	4.5820966-13	7.1340003-05	1.0224945+03
612000.	2.6038500+03	1.5066593+03	3.3480948-11	4.4793299-13	7.1372615-05	1.0229168+03
614000.	2.6060500+03	1.5067267+03	3.2758237-11	4.3790059-13	7.1405213-05	1.0233388+03
616000.	2.6082500+03	1.5067920+03	3.2052621-11	4.2810676-13	7.1437795-05	1.0238107+03
618000.	2.6104600+03	1.5068552+03	3.1363153-11	4.1854494-13	7.1470362-05	1.0242424+03
620000.	2.6126500+03	1.5069164+03	3.0689468-11	4.0920967-13	7.1502915-05	1.0246739+03
622000.	2.6148500+03	1.5069756+03	3.0031177-11	4.0009519-13	7.1535454-05	1.0251052+03
624000.	2.6170500+03	1.5070328+03	2.9387904-11	3.9119594-13	7.1567979-05	1.0255363+03
626000.	2.6192600+03	1.5070879+03	2.8759307-11	3.8250685-13	7.1600487-05	1.0259673+03
628000.	2.6214500+03	1.5071410+03	2.8145008-11	3.7402235-13	7.1632982-05	1.0263981+03
630000.	2.6236500+03	1.5071920+03	2.7544671-11	3.6573747-13	7.1665463-05	1.0268287+03
632000.	2.6258500+03	1.5072410+03	2.6957963-11	3.5764726-13	7.1697928-05	1.0272591+03
634000.	2.6280500+03	1.5072880+03	2.6384550-11	3.4974686-13	7.1730380-05	1.0276894+03
636000.	2.6302500+03	1.5073329+03	2.5824128-11	3.4203173-13	7.1762817-05	1.0281194+03
638000.	2.6324600+03	1.5073758+03	2.5276369-11	3.3449707-13	7.1795241-05	1.0285493+03
640000.	2.6346500+03	1.5074167+03	2.4740984-11	3.2713861-13	7.1827649-05	1.0289790+03
642000.	2.6368500+03	1.5074556+03	2.4217661-11	3.1995177-13	7.1860043-05	1.0294085+03
644000.	2.6390500+03	1.5074923+03	2.3706130-11	3.1293260-13	7.1892423-05	1.0298379+03
646000.	2.6412500+03	1.5075270+03	2.3206101-11	3.0607682-13	7.1924787-05	1.0302670+03
648000.	2.6434500+03	1.5075598+03	2.2717302-11	2.9938043-13	7.1957139-05	1.0306960+03
650000.	2.6456500+03	1.5075904+03	2.2239467-11	2.9283955-13	7.1989475-05	1.0311248+03
652000.	2.6478500+03	1.5076191+03	2.1772325-11	2.8645024-13	7.2021798-05	1.0315535+03
654000.	2.6500500+03	1.5076457+03	2.1315642-11	2.8020902-13	7.2054107-05	1.0319819+03
656000.	2.6522500+03	1.5076703+03	2.0869155-11	2.7411208-13	7.2086399-05	1.0324102+03
658000.	2.6544600+03	1.5076928+03	2.0432629-11	2.6815594-13	7.2118679-05	1.0328383+03
660000.	2.6566500+03	1.5077133+03	2.0005835-11	2.6233733-13	7.2150945-05	1.0332662+03
662000.	2.6588500+03	1.5077318+03	1.9588535-11	2.5665272-13	7.2183196-05	1.0336939+03
664000.	2.6610500+03	1.5077483+03	1.9180502-11	2.5109883-13	7.2215433-05	1.0341215+03
666000.	2.6632500+03	1.5077626+03	1.8781523-11	2.4567255-13	7.2247656-05	1.0345489+03
668000.	2.6654500+03	1.5077750+03	1.8391388-11	2.4037080-13	7.2279864-05	1.0349761+03
670000.	2.6676500+03	1.5077853+03	1.8009893-11	2.3519064-13	7.2312059-05	1.0354031+03
672000.	2.6698500+03	1.5077936+03	1.7636824-11	2.3012897-13	7.2344240-05	1.0358300+03
674000.	2.6720500+03	1.5077999+03	1.7271984-11	2.2518293-13	7.2376407-05	1.0362567+03
676000.	2.6742500+03	1.5078041+03	1.6915199-11	2.2034991-13	7.2408558-05	1.0366832+03
678000.	2.6764500+03	1.5078063+03	1.6566261-11	2.1562699-13	7.2440697-05	1.0371095+03

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
600000.	4.208.35e-12	4.e5e237.3-13	3.9657332+00	1.6894222+01	9.34e7949+00
602000.	3.9791.e3-12	4.47579436-13	3.9675543+00	1.68266e0+01	9.34e7949+00
604000.	3.7122320e-12	4.3759525e-13	3.96937e6+00	1.6813200+01	9.34e7949+00
606000.	3.027367.-12	4.27745e.1-13	3.9711941+00	1.6799800+01	9.34e7949+00
608000.	3.7444571-12	4.1812312-13	3.9730127+00	1.67864e0+01	9.34e7949+00
610000.	3.6e3443.3-12	4.e873234-13	3.97483.5+00	1.6773e00+01	9.34e7949+00
612000.	3.5343253-12	3.99560334-13	3.9766475+00	1.6759600+01	9.34e7949+00
614000.	3.517..74-12	3.9.e1343-13	3.9784638+00	1.6746200+01	9.34e7949+00
616000.	3.431140e.-12	3.e1e4.13-13	3.9802791+00	1.6732800+01	9.34e7949+00
618000.	3.3376536-12	3.e73b.79-13	3.9820937+00	1.6719400+01	9.34e7949+00
620000.	3.28553.e-12	3.e522353-13	3.9839074+00	1.67060e0+01	9.34e7949+00
622000.	3.215.56e-12	3.e5e9323-13	3.98572.4+00	1.6692600+01	9.34e7949+00
624000.	3.146146e7-12	3.9445471-13	3.9875326+00	1.6679200+01	9.34e7949+00
626000.	3.e78e72e-12	3.e12e4.e-13	3.9893468+00	1.6665800+01	9.34e7949+00
628000.	3.0131277-12	3.e336357.-13	3.9911593+00	1.6652400+01	9.34e7949+00
630000.	2.9486573-12	3.e2e243.3-13	3.9929e41+00	1.6639000+01	9.34e7949+00
632000.	2.88e2457-12	3.e1722e79-13	3.9947729+00	1.6625600+01	9.34e7949+00
634000.	2.82.e379-12	3.e1.9e147-13	3.9965812+00	1.6612200+01	9.34e7949+00
636000.	2.7e4e03e-12	3.e.e.7941-13	3.9983883+00	1.6598800+01	9.34e7949+00
638000.	2.7.e.1y1-12	2.9e37e34-13	4.e.21948+00	1.6585400+01	9.34e7949+00
640000.	2.61e7.24-12	2.9181443-13	4.e3203.6+00	1.6572000+01	9.34e7949+00
642000.	2.5726760-12	2.e5.2e3e3-13	4.e3e4e5e4+00	1.6558600+01	9.34e7949+00
644000.	2.5637.13e-12	2.e7.e4236-13	4.e4e6e.95+00	1.6545200+01	9.34e7949+00
646000.	2.4e4.e0.e-12	2.e.3_26e4e-13	4.e.374127+00	1.6531800+01	9.34e7949+00
648000.	2.4342.23-12	2.e0.3e57-13	4.e.392152+00	1.6518400+01	9.34e7949+00
650000.	2.3e.e9e0-12	2.e12.4e7-13	4.e.e.169+00	1.6505000+01	9.34e7949+00
652000.	2.33.3e57-12	2.e5e.e57-13	4.e.12e.7e+00	1.6491600+01	9.34e7949+00
654000.	2.2e.e.e44-12	2.e4e5227-13	4.e.14e.e.+00	1.6478200+01	9.34e7949+00
656000.	2.2e.e.e4e-12	2.e4e1367-13	4.e.164172+00	1.6464800+01	9.34e7949+00
658000.	2.1e74e.3-12	2.e3e2.e9-13	4.e.182157+00	1.6451400+01	9.34e7949+00
660000.	2.1.177.1-12	2.e3e1.35-13	4.e2e2135+00	1.6438000+01	9.34e7949+00
662000.	2.e77.e51-12	2.e2e3e36-13	4.e2181.4+00	1.6424600+01	9.34e7949+00
664000.	2.e.e.1121-12	2.e23e637-13	4.e.236.65+00	1.6411200+01	9.34e7949+00
666000.	2.1.3e9e0-12	2.e1e1e.2-13	4.e2254.19+00	1.6397800+01	9.34e7949+00
668000.	1.9ee9317-12	2.e1e415e-13	4.e2271e6+00	1.6384400+01	9.34e7949+00
670000.	1.928.e99-12	2.e.e7e4e-13	4.e.2e99.3+00	1.6371000+01	9.34e7949+00
672000.	1.e4ee1523-12	2.e.527e2-13	4.e.3e7e32+00	1.6357600+01	9.34e7949+00
674000.	1.e3.7.e17-12	2.e.3e7e5-13	4.e.32e755+00	1.6344200+01	9.34e7949+00
676000.	1.e1.e.e51-12	1.e9e5e7.-13	4.e3343e8+00	1.6330800+01	9.34e7949+00
678000.	1.e7.53e0-12	1.e234e75-13	4.e3e1e75+00	1.6317400+01	9.34e7949+00

TABLE 1. (Continued)

GEOMETRIC ALTITUDE	MOLECULAR TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	COEFFICIENT OF VISCOSITY	SPEED OF SOUND
m	K	K	N cm^{-2}	kg m^{-3}	N·s m^{-2}	m s^{-1}
680000.	2.6786500+03	1.5078065+03	1.4225000-11	2.1101167-13	7.2472822-05	1.0375357+03
682000.	2.6808500+03	1.5078096+03	1.5091223-11	2.0650120-13	7.2504933-05	1.0379617+03
684000.	2.6830500+03	1.5078007+03	1.5564766-11	2.0209319-13	7.2537029-05	1.0383875+03
686000.	2.6852500+03	1.5077947+03	1.5245465-11	1.9778517-13	7.2569112-05	1.0388131+03
688000.	2.6874500+03	1.5077867+03	1.4933139-11	1.9357465-13	7.2601180-05	1.0392385+03
690000.	2.6896500+03	1.5077767+03	1.4627644-11	1.8945949-13	7.2633234-05	1.0396638+03
692000.	2.6918500+03	1.5077646+03	1.4328801-11	1.8543716-13	7.2665275-05	1.0400889+03
694000.	2.6940500+03	1.5077505+03	1.4036472-11	1.8150562-13	7.2697302-05	1.0405139+03
696000.	2.6962500+03	1.5077344+03	1.3750504-11	1.7766268-13	7.2729315-05	1.0409386+03
698000.	2.6984500+03	1.5077162+03	1.3470747-11	1.7390620-13	7.2761313-05	1.0413632+03
700000.	2.7006500+03	1.5076960+03	1.3197200-11	1.7021014-13	7.2793298-05	1.0417876+03

TABLE 1. (Concluded)

GEOMETRIC ALTITUDE	PRESSURE RATIO	DENSITY RATIO	VISCOSITY RATIO	MOLECULAR WEIGHT	PRESSURE DIFFERENCE
meters	unitless	unitless	unitless	unitless	newtons cm^{-2}
6[illegible]000.	1.73[illegible]-12	1.[illegible]-13	9.[illegible]+00	1.[illegible]+01	9.3407949+00
6820[illegible].	1.7[illegible]-12	1.[illegible]-13	9.[illegible]+00	1.6290630+01	9.3407949+00
6840[illegible].	1.[illegible]-12	1.[illegible]-13	9.[illegible]+00	1.6277200+01	9.3407949+00
6860[illegible].	1.6321379-12	1.7642648-13	9.[illegible]+00	1.6263800+01	9.3407949+00
6880[illegible].	1.5987[illegible]-12	1.7726[illegible]-13	9.[illegible]+00	1.6250400+01	9.3407949+00
6900[illegible].	1.[illegible]-12	1.[illegible]-13	9.[illegible]+00	1.6237000+01	9.3407949+00
6920[illegible].	1.[illegible]-12	1.[illegible]-13	9.[illegible]+00	1.6223600+01	9.3407949+00
6940[illegible].	1.[illegible]-12	1.[illegible]-13	9.[illegible]+00	1.6210200+01	9.3407949+00
6960[illegible].	1.[illegible]-12	1.[illegible]-13	9.[illegible]+00	1.6196800+01	9.3407949+00
6980[illegible].	1.[illegible]-12	1.[illegible]-13	9.[illegible]+00	1.6183400+01	9.3407949+00
7[illegible]000.	1.[illegible]-12	1.[illegible]-13	9.[illegible]+00	1.6170000+01	9.3407949+00

TABLE 2. DERIVED COEFFICIENTS FOR EMPIRICAL ERA-75 POLYNOMIALS

Leg I			706 ≤ Z < 3250				
Parameters	A_0	A_1	A_2	A_3	A_4	A_5	Equation
Pressure	.2311470177-01	-.1420873904-03	.2589202778-07	-.1310924676-10	.3066517493-14	-.2793754152-18	(5)
Density	.4148561601-01	-.2440071092-03	.1329190371-06	-.5890755107-10	.1273292033-13	-.1080559441-17	(10)
Temperature	.2777646519+03	.3514880842-01	-.3631487720-04	.1590831063-07	-.3444042553-11	.2933439281-15	(16)
Virtual Temp.	.2807898420+03	.2979311809-01	-.3136136691-04	.1347075532-07	-.2848013685-11	.2365289857-15	(15)

Leg II			3250 ≤ Z < 9950 meters				
Parameters	A_0	A_1	A_2	A_3	A_4	A_5	Equation
Pressure	1.8812367×10^{-2}	$-1.1845111 \times 10^{-4}$	$-3.5545155 \times 10^{-10}$	$6.5016675 \times 10^{-14}$	$-5.2355006 \times 10^{-18}$	$3.4885003 \times 10^{-22}$	(5)
Density	1.5470847×10^{-2}	$-1.2568957 \times 10^{-4}$	8.8865136×10^{-9}	$-1.5579407 \times 10^{-12}$	$1.2916496 \times 10^{-16}$	$-4.3994795 \times 10^{-21}$	(10)
Temperature	2.8588177×10^{2}	3.1763281×10^{-3}	$-3.1118251 \times 10^{-6}$	$5.2518793 \times 10^{-10}$	$-4.6448685 \times 10^{-14}$	$1.6145641 \times 10^{-18}$	(16)
Virtual Temp.	2.8715277×10^{2}	2.1517327×10^{-3}	$-2.7196694 \times 10^{-6}$	$4.5126345 \times 10^{-10}$	$-3.9876511 \times 10^{-14}$	$1.3941650 \times 10^{-18}$	(15)

Leg III			9950 ≤ Z < 18040 meters				
Parameters	A_0	A_1	A_2	A_3	A_4	A_5	Equation
Pressure	7.5926341×10^{-2}	$-1.3107406 \times 10^{-4}$	1.4637277×10^{-9}	$-3.1016812 \times 10^{-13}$	$1.3256585 \times 10^{-17}$	$-1.7447999 \times 10^{-22}$	(5)
Density	-1.8048718×10^{0}	3.1917064×10^{-4}	$-2.3142097 \times 10^{-8}$	$-1.1163903 \times 10^{-12}$	$1.2861068 \times 10^{-16}$	$-3.0063455 \times 10^{-21}$	(10)
Temperature	6.6695824×10^{2}	$-8.6067580 \times 10^{-2}$	3.0132231×10^{-6}	$3.8218058 \times 10^{-10}$	$-3.3634352 \times 10^{-14}$	$7.5058913 \times 10^{-19}$	(16)
Virtual Temp.	6.6695824×10^{2}	$-8.6067580 \times 10^{-2}$	3.0132231×10^{-6}	$3.8218058 \times 10^{-10}$	$-3.3634352 \times 10^{-14}$	$7.5058913 \times 10^{-19}$	(15)

Leg IV			18 040 ≤ Z < 28 250 m				
Parameters	A_0	A_1	A_2	A_3	A_4	A_5	Equation
Pressure	-1.5119643+00	6.4840176-05	-2.6797416-09	-6.7408841-13	3.2442591-17	-4.3323941-22	(5)
Density	-2.6647834+00	2.6811921-04	-8.3362456-09	-9.9651556-13	5.1729970-17	-7.0315170-22	(10)
Temperature	6.6447200+02	-5.5557022-02	5.6912588-07	1.7131166-10	-7.9541590-15	1.0455683-19	(16)
Virtual Temp.	6.6447200+02	-5.5557022-02	5.6912588-07	1.7121166-10	-7.9541590-15	1.0455683-19	(15)

Leg V			28 250 ≤ Z < 49 065 m				
Parameters	A_0	A_1	A_2	A_3	A_4	A_5	Equation
Pressure	-5.0774336-02	-1.3229173-04	-3.3047358-10	-2.8081769-14	1.1235247-18	-9.9039449-24	(5)
Temperature	-3.1441590+02	4.4022912-02	-8.4909942-07	-1.8977607-11	8.5503680-16	-7.8943270-21	(16)

Leg VI			49 065 ≤ Z < 81 750 m				
Parameters	A_0	A_1	A_2	A_3	A_4	A_5	Equation
Pressure	4.9682465-01	-2.0600983-04	1.1167046-09	1.3301416-14	-3.5535259-19	1.5827238-24	(5)
Temperature	-2.0223418+03	1.0809620-01	-1.1246815-06	-1.5919380-11	3.5857350-16	-1.7624631-21	(16)

TABLE 3. TEMPERATURE-ALTITUDE BREAKPOINTS USED FOR THE EDWARDS AFB HOT AND COLD ATMOSPHERE MODELS

Edwards Hot (Summer)		
Altitude (km)	Virtual Temperature (K)	Kinetic Temperature (K)
0.706	318.05	316.45
1.2	308.05	307.15
5.4	273.47	273.15
7.6	257.65	257.65
9.8	242.65	242.65
16.0	198.65	198.65
19.0	212.15	212.15
32.0	239.15	239.15
47.0	296.2	296.2
52.0	296.2	296.2
80.0	180.2	180.2
90.0	180.2	180.2
Edwards Cold (Winter)		
0.706	273.65	273.15
5.0	245.15	245.15
9.0	223.15	223.15
18.0	217.15	217.15
24.0	218.15	218.15
32.0	225.2	225.2
47.0	258.2	258.2
52.0	258.2	258.2
83.0	215.2	215.2
90.0	215.2	215.2

TABLE 4. VIRTUAL TEMPERATURE-TEMPERATURE RELATIONSHIP (MEAN DIFFERENCE, ΔT) THAT EXISTS VERSUS ALTITUDE FOR HOT AND COLD DAYS AT EDWARDS AFB, CALIFORNIA

Altitude (km)	Edwards Hot (Summer) $(\bar{T}^* - \bar{T}) = \Delta T$ (K)	Edwards Cold (Winter) $(\bar{T}^* - \bar{T}) = \Delta T$ (K)
Surface	1.60	0.50
1	1.14	0.47
1.2	0.90	0.45
2	0.79	0.35
3	0.65	0.24
4	0.51	0.12
5	0.37	0
6	0.24	0
7	0.09	0
7.6	0	0

TABLE 5. EDWARDS AFB, CALIFORNIA HOT (SUMMER) ATMOSPHERE, 1975

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T*) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T* (K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T*)%	RD(P)%	RD(D)%
706.	705.2	3.180500E+02	3.164500E+02	9.290000E+00	1.017555E+00	9.57	-.54	-9.23
750.	749.2	3.171593E+02	3.156216E+02	9.241866E+00	1.015125E+00	9.24	-.55	-8.96
1000.	998.9	3.120959E+02	3.109151E+02	8.992710E+00	1.003775E+00	7.59	-.28	-7.31
1250.	1248.6	3.076364E+02	3.067452E+02	8.748042E+00	9.906224E-01	6.41	-.07	-6.09
1500.	1498.2	3.035600E+02	3.027214E+02	8.507721E+00	9.698982E-01	6.19	.10	-5.74
1750.	1747.8	3.000352E+02	2.992697E+02	8.272446E+00	9.494718E-01	6.03	.27	-5.44
2000.	1997.5	2.971463E+02	2.964067E+02	8.042143E+00	9.293410E-01	5.89	.44	-5.15
2250.	2247.0	2.944605E+02	2.937665E+02	7.816739E+00	9.095035E-01	5.74	.60	-4.86
2500.	2496.6	2.917346E+02	2.910626E+02	7.596162E+00	8.699569E-01	5.59	.77	-4.57
2750.	2746.2	2.895268E+02	2.888602E+02	7.380034E+00	8.706990E-01	5.45	.93	-4.29
3000.	2995.7	2.873200E+02	2.866785E+02	7.169210E+00	8.517275E-01	5.32	1.08	-4.02
3250.	3245.2	2.851117E+02	2.845476E+02	6.962692E+00	8.330401E-01	5.13	1.06	-3.86
3500.	3494.7	2.831133E+02	2.825305E+02	6.760722E+00	8.146345E-01	4.96	1.21	-3.56
3750.	3744.2	2.812655E+02	2.806714E+02	6.563230E+00	7.965083E-01	4.79	1.36	-3.27
4000.	3993.7	2.794996E+02	2.788333E+02	6.370148E+00	7.786594E-01	4.65	1.50	-3.00
4250.	4243.1	2.778293E+02	2.782459E+02	6.181907E+00	7.610854E-01	4.51	1.63	-2.74
4500.	4492.5	2.780880E+02	2.804357E+02	5.996942E+00	7.437840E-01	4.38	1.77	-2.49
4750.	4741.9	2.787821E+02	2.784119E+02	5.816485E+00	7.267530E-01	4.25	1.90	-2.26
5000.	4991.3	2.767633E+02	2.763881E+02	5.640571E+00	7.099902E-01	4.14	2.02	-2.03
5250.	5240.6	2.747050E+02	2.743642E+02	5.468534E+00	6.934931E-01	4.03	2.15	-1.81
5500.	5490.0	2.727509E+02	2.724454E+02	5.300521E+00	6.770024E-01	3.98	2.27	-1.63
5750.	5739.3	2.709531E+02	2.706849E+02	5.136563E+00	6.609165E-01	3.99	2.40	-1.52
6000.	5988.6	2.691559E+02	2.689227E+02	4.976675E+00	6.441306E-01	4.01	2.53	-1.42
6250.	6237.9	2.673577E+02	2.671613E+02	4.820723E+00	6.281412E-01	4.04	2.66	-1.33
6500.	6487.1	2.655800E+02	2.654000E+02	4.668655E+00	6.124948E-01	4.08	2.80	-1.24
6750.	6736.4	2.637622E+02	2.636364E+02	4.520399E+00	5.970379E-01	4.13	2.93	-1.16
7000.	6985.6	2.619045E+02	2.618727E+02	4.375885E+00	5.819172E-01	4.19	3.08	-1.08
7250.	7234.8	2.600166E+02	2.601159E+02	4.235044E+00	5.670794E-01	4.27	3.22	-1.01
7500.	7484.0	2.583069E+02	2.583545E+02	4.097807E+00	5.525209E-01	4.35	3.37	-.95
7750.	7733.1	2.566272E+02	2.566272E+02	3.964113E+00	5.381223E-01	4.47	3.52	-.91
8000.	7982.3	2.549227E+02	2.549227E+02	3.833929E+00	5.239300E-01	4.60	3.68	-.88
8250.	8231.4	2.532161E+02	2.532161E+02	3.707191E+00	5.100208E-01	4.75	3.84	-.86
8500.	8480.5	2.515133E+02	2.515133E+02	3.583828E+00	4.963950E-01	4.89	4.01	-.83
8750.	8729.6	2.498609E+02	2.498609E+02	3.463773E+00	4.830355E-01	5.04	4.18	-.80
9000.	8978.6	2.481045E+02	2.481045E+02	3.346959E+00	4.699520E-01	5.18	4.36	-.78
9250.	9227.7	2.464000E+02	2.464000E+02	3.233203E+00	4.571364E-01	5.31	4.54	-.71

TABLE 5. (Continued)

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T*) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T* (K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T*)%	RD(P)%	RD(D)%
9500.	9476.7	2.949695E+02	2.949695E+02	3.122790E+00	4.445849E-01	5.41	4.72	-.65
9750.	9725.7	2.929909E+02	2.929909E+02	3.015305E+00	4.322939E-01	5.50	4.90	-.56
10000.	9974.7	2.912306E+02	2.912306E+02	2.910793E+00	4.203554E-01	5.57	5.06	-.49
10250.	10223.7	2.894564E+02	2.894564E+02	2.809172E+00	4.068583E-01	5.69	5.29	-.39
10500.	10472.6	2.876822E+02	2.876822E+02	2.710382E+00	3.972570E-01	5.71	5.51	-.19
10750.	10721.5	2.859080E+02	2.859080E+02	2.614365E+00	3.866657E-01	5.64	5.73	.08
11000.	10970.5	2.841338E+02	2.841338E+02	2.521063E+00	3.751088E-01	5.49	5.94	.42
11250.	11219.3	2.823596E+02	2.823596E+02	2.430419E+00	3.644306E-01	5.27	6.14	.83
11500.	11468.2	2.805854E+02	2.805854E+02	2.342376E+00	3.536852E-01	4.99	6.33	1.29
11750.	11717.1	2.788112E+02	2.788112E+02	2.256879E+00	3.436123E-01	4.69	6.51	1.79
12000.	11965.9	2.770371E+02	2.770371E+02	2.173874E+00	3.335611E-01	4.25	6.67	2.34
12250.	12214.7	2.752629E+02	2.752629E+02	2.093306E+00	3.237285E-01	3.81	6.82	2.92
12500.	12463.5	2.734887E+02	2.734887E+02	2.015123E+00	3.141114E-01	3.33	6.96	3.52
12750.	12712.3	2.717145E+02	2.717145E+02	1.939270E+00	3.047068E-01	2.82	7.08	4.15
13000.	12961.0	2.699403E+02	2.699403E+02	1.865698E+00	2.955115E-01	2.29	7.18	4.79
13250.	13209.7	2.681661E+02	2.681661E+02	1.794355E+00	2.865226E-01	1.73	7.26	5.43
13500.	13458.4	2.663919E+02	2.663919E+02	1.725191E+00	2.777371E-01	1.16	7.32	6.08
13750.	13707.1	2.646177E+02	2.646177E+02	1.658156E+00	2.691520E-01	.57	7.35	6.73
14000.	13955.8	2.628435E+02	2.628435E+02	1.593201E+00	2.607642E-01	-.02	7.36	7.38
14250.	14204.5	2.610693E+02	2.610693E+02	1.530277E+00	2.525709E-01	-.63	7.35	8.02
14500.	14453.1	2.592951E+02	2.592951E+02	1.469342E+00	2.445692E-01	-1.24	7.31	8.69
14750.	14701.7	2.575209E+02	2.575209E+02	1.410344E+00	2.367564E-01	-1.87	7.24	9.36
15000.	14950.3	2.557467E+02	2.557467E+02	1.353239E+00	2.291285E-01	-2.50	7.14	9.87
15250.	15198.9	2.539725E+02	2.539725E+02	1.297980E+00	2.216839E-01	-3.14	7.01	10.46
15500.	15447.4	2.521983E+02	2.521983E+02	1.244525E+00	2.144193E-01	-3.80	6.84	11.05
15750.	15696.0	2.504241E+02	2.504241E+02	1.192830E+00	2.073319E-01	-4.47	6.64	11.62
16000.	15944.5	1.986500E+02	1.986500E+02	1.142850E+00	2.004187E-01	-5.16	6.41	12.20
16250.	16193.0	1.997750E+02	1.997750E+02	1.094891E+00	1.909266E-01	-4.50	6.17	11.17
16500.	16441.5	2.009000E+02	2.009000E+02	1.049193E+00	1.819336E-01	-3.86	5.96	10.23
16750.	16689.9	2.020250E+02	2.020250E+02	1.005643E+00	1.734107E-01	-3.27	5.77	9.36
17000.	16938.4	2.031500E+02	2.031500E+02	9.644128E-01	1.653313E-01	-2.72	5.61	8.59
17250.	17186.8	2.042750E+02	2.042750E+02	9.245419E-01	1.576696E-01	-2.24	5.47	7.91
17500.	17435.2	2.054000E+02	2.054000E+02	8.866787E-01	1.504026E-01	-1.83	5.36	7.35
17750.	17683.5	2.065250E+02	2.065250E+02	8.507644E-01	1.435070E-01	-1.52	5.27	6.90
18000.	17931.9	2.076500E+02	2.076500E+02	8.163921E-01	1.369630E-01	-1.30	5.20	6.58
18250.	18180.2	2.087750E+02	2.087750E+02	7.835813E-01	1.307501E-01	-.92	5.16	6.12

TABLE 5. (Continued)

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T°) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T° (K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T°)%	RD(P)%	RD(D)%
18500.	18428.4	2.099000E+02	2.099000E+02	7.522549E-01	1.248501E-01	-.52	5.03	5.59
18750.	18676.9	2.110250E+02	2.110250E+02	7.223369E-01	1.192459E-01	-.14	4.93	5.11
19000.	18925.2	2.121500E+02	2.121500E+02	6.937627E-01	1.139211E-01	.23	4.87	4.68
19250.	19173.4	2.120692E+02	2.126692E+02	6.664335E-01	1.091673E-01	.29	4.83	4.59
19500.	19421.7	2.131884E+02	2.131884E+02	6.402471E-01	1.046231E-01	.33	4.81	4.52
19750.	19669.9	2.137076E+02	2.137076E+02	6.151409E-01	1.002766E-01	.37	4.80	4.48
20000.	19918.1	2.142268E+02	2.142268E+02	5.911069E-01	9.611918E-02	.39	4.80	4.45
20250.	20166.3	2.147461E+02	2.147461E+02	5.679919E-01	9.219255E-02	.41	4.81	4.43
20500.	20414.4	2.152653E+02	2.152653E+02	5.458633E-01	8.833895E-02	.42	4.82	4.43
20750.	20662.6	2.157846E+02	2.157846E+02	5.246456E-01	8.470046E-02	.43	4.85	4.43
21000.	20910.7	2.163038E+02	2.163038E+02	5.043007E-01	8.121994E-02	.44	4.87	4.44
21250.	21158.8	2.168230E+02	2.168230E+02	4.847914E-01	7.789051E-02	.44	4.90	4.44
21500.	21406.9	2.173423E+02	2.173423E+02	4.660813E-01	7.470515E-02	.45	4.93	4.45
21750.	21655.0	2.178615E+02	2.178615E+02	4.481360E-01	7.165734E-02	.46	4.96	4.46
22000.	21903.0	2.183807E+02	2.183807E+02	4.309243E-01	6.874114E-02	.48	4.99	4.46
22250.	22151.0	2.189000E+02	2.189000E+02	4.144137E-01	6.595047E-02	.50	5.02	4.46
22500.	22399.1	2.194192E+02	2.194192E+02	3.985746E-01	6.327965E-02	.53	5.04	4.45
22750.	22647.0	2.199384E+02	2.199384E+02	3.833781E-01	6.072343E-02	.56	5.06	4.43
23000.	22895.0	2.204577E+02	2.204577E+02	3.687951E-01	5.827623E-02	.60	5.08	4.40
23250.	23143.0	2.209769E+02	2.209769E+02	3.547801E-01	5.593331E-02	.65	5.09	4.36
23500.	23390.9	2.214961E+02	2.214961E+02	3.413699E-01	5.369015E-02	.71	5.09	4.31
23750.	23638.8	2.220153E+02	2.220153E+02	3.284777E-01	5.154185E-02	.77	5.10	4.25
24000.	23886.7	2.225346E+02	2.225346E+02	3.161008E-01	4.948457E-02	.84	5.09	4.18
24250.	24134.6	2.230538E+02	2.230538E+02	3.042179E-01	4.751361E-02	.92	5.09	4.10
24500.	24382.4	2.235730E+02	2.235730E+02	2.928073E-01	4.562568E-02	1.00	5.08	4.01
24750.	24630.3	2.240923E+02	2.240923E+02	2.818499E-01	4.381658E-02	1.10	5.07	3.92
25000.	24878.1	2.246115E+02	2.246115E+02	2.713246E-01	4.208316E-02	1.19	5.05	3.82
25250.	25125.9	2.251307E+02	2.251307E+02	2.612144E-01	4.042169E-02	1.29	5.04	3.71
25500.	25373.6	2.256500E+02	2.256500E+02	2.515028E-01	3.882923E-02	1.40	5.03	3.60
25750.	25621.4	2.261692E+02	2.261692E+02	2.421799E-01	3.730262E-02	1.50	5.02	3.50
26000.	25869.1	2.266884E+02	2.266884E+02	2.332056E-01	3.583936E-02	1.60	5.01	3.40
26250.	26116.9	2.272076E+02	2.272076E+02	2.245896E-01	3.443616E-02	1.70	5.01	3.31
26500.	26364.6	2.277269E+02	2.277269E+02	2.163101E-01	3.309079E-02	1.80	5.02	3.22
26750.	26612.2	2.282461E+02	2.282461E+02	2.083513E-01	3.180062E-02	1.89	5.05	3.16
27000.	26859.9	2.287653E+02	2.287653E+02	2.007029E-01	3.056348E-02	1.96	5.08	3.11
27250.	27107.5	2.292846E+02	2.292846E+02	1.933506E-01	2.937677E-02	2.03	5.14	3.09

TABLE 5. (Continued)

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T*) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T* (K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T*)%	RD(P)%	RD(D)%
27500.	27355.2	2.298E+02	2.298E+02	1.0828E-01	2.823E-02	2.07	5.21	3.10
27750.	27602.8	2.303E+02	2.303E+02	1.7948E-01	2.719E-02	2.10	5.31	3.14
28000.	27850.3	2.308E+02	2.308E+02	1.7295E-01	2.681E-02	2.10	5.44	3.22
28250.	28097.9	2.313E+02	2.313E+02	1.6666E-01	2.596E-02	2.25	5.48	3.16
28500.	28345.4	2.318E+02	2.318E+02	1.6064E-01	2.413E-02	2.19	5.50	3.24
28750.	28593.0	2.324E+02	2.324E+02	1.5484E-01	2.322E-02	2.14	5.53	3.32
29000.	28840.5	2.329E+02	2.329E+02	1.4926E-01	2.232E-02	2.09	5.55	3.39
29250.	29088.0	2.334E+02	2.334E+02	1.4386E-01	2.147E-02	2.06	5.58	3.45
29500.	29335.4	2.339E+02	2.339E+02	1.3873E-01	2.065E-02	2.03	5.61	3.51
29750.	29582.9	2.344E+02	2.344E+02	1.3377E-01	1.987E-02	2.00	5.64	3.57
30000.	29830.3	2.349E+02	2.349E+02	1.2900E-01	1.912E-02	1.98	5.68	3.63
30250.	30077.7	2.355E+02	2.355E+02	1.2440E-01	1.840E-02	1.96	5.71	3.68
30500.	30325.1	2.360E+02	2.360E+02	1.1999E-01	1.771E-02	1.95	5.75	3.73
30750.	30572.5	2.365E+02	2.365E+02	1.1573E-01	1.704E-02	1.94	5.79	3.78
31000.	30819.8	2.370E+02	2.370E+02	1.1163E-01	1.640E-02	1.93	5.83	3.83
31250.	31067.1	2.375E+02	2.375E+02	1.0769E-01	1.579E-02	1.92	5.87	3.87
31500.	31314.4	2.381E+02	2.381E+02	1.0389E-01	1.520E-02	1.92	5.91	3.91
31750.	31561.7	2.386E+02	2.386E+02	1.0022E-01	1.463E-02	1.92	5.95	3.96
32000.	31809.0	2.391E+02	2.391E+02	9.6693E-02	1.408E-02	1.91	5.99	4.00
32250.	32056.3	2.401E+02	2.401E+02	9.3313E-02	1.353E-02	2.09	6.03	3.86
32500.	32303.5	2.411E+02	2.411E+02	9.0062E-02	1.301E-02	2.27	6.08	3.73
32750.	32550.7	2.422E+02	2.422E+02	8.6935E-02	1.251E-02	2.45	6.14	3.60
33000.	32797.9	2.432E+02	2.432E+02	8.3927E-02	1.203E-02	2.63	6.20	3.48
33250.	33045.1	2.439E+02	2.439E+02	8.1033E-02	1.157E-02	2.80	6.27	3.37
33500.	33292.2	2.446E+02	2.446E+02	7.8249E-02	1.113E-02	2.98	6.34	3.27
33750.	33539.4	2.453E+02	2.453E+02	7.5570E-02	1.071E-02	3.15	6.42	3.18
34000.	33786.5	2.460E+02	2.460E+02	7.2992E-02	1.030E-02	3.31	6.51	3.09
34250.	34033.6	2.467E+02	2.467E+02	7.0512E-02	9.916E-03	3.48	6.59	3.01
34500.	34280.7	2.486E+02	2.486E+02	6.8125E-02	9.549E-03	3.64	6.69	2.94
34750.	34527.7	2.496E+02	2.496E+02	6.5828E-02	9.187E-03	3.80	6.79	2.88
35000.	34774.8	2.506E+02	2.506E+02	6.3616E-02	8.844E-03	3.95	6.89	2.83
35250.	35021.8	2.515E+02	2.515E+02	6.1487E-02	8.516E-03	4.10	6.99	2.78
35500.	35268.8	2.524E+02	2.524E+02	5.9437E-02	8.201E-03	4.25	7.10	2.74
35750.	35515.8	2.534E+02	2.534E+02	5.7464E-02	7.899E-03	4.39	7.22	2.71
36000.	35762.7	2.543E+02	2.543E+02	5.5563E-02	7.609E-03	4.53	7.34	2.69
36250.	36009.7	2.553E+02	2.553E+02	5.3732E-02	7.331E-03	4.66	7.46	2.67

TABLE 5. (Continued)

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T°) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T° (K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T°)%	RD(P)%	RD(D)%
36500.	36256.6	2.562650E+02	2.562650E+02	5.196815E-02	7.064197E-03	4.79	7.58	2.67
36750.	36503.5	2.572158E+02	2.572158E+02	5.026855E-02	6.807783E-03	4.91	7.71	2.67
37000.	36750.4	2.581666E+02	2.581666E+02	4.863059E-02	6.561765E-03	5.03	7.84	2.67
37250.	36997.2	2.591175E+02	2.591175E+02	4.705195E-02	6.325744E-03	5.15	7.98	2.69
37500.	37244.1	2.600683E+02	2.600683E+02	4.553018E-02	6.098934E-03	5.26	8.11	2.71
37750.	37490.9	2.610191E+02	2.610191E+02	4.406305E-02	5.880870E-03	5.37	8.25	2.74
38000.	37737.7	2.619700E+02	2.619700E+02	4.264814E-02	5.671569E-03	5.47	8.39	2.77
38250.	37984.5	2.629208E+02	2.629208E+02	4.128337E-02	5.470295E-03	5.57	8.54	2.81
38500.	38231.3	2.638716E+02	2.638716E+02	3.996683E-02	5.276798E-03	5.67	8.69	2.86
38750.	38478.0	2.648225E+02	2.648225E+02	3.869714E-02	5.090881E-03	5.76	8.84	2.91
39000.	38724.7	2.657733E+02	2.657733E+02	3.747150E-02	4.911987E-03	5.85	8.99	2.97
39250.	38971.5	2.667241E+02	2.667241E+02	3.628917E-02	4.740135E-03	5.94	9.14	3.03
39500.	39218.1	2.676750E+02	2.676750E+02	3.514709E-02	4.574745E-03	6.02	9.30	3.10
39750.	39464.8	2.686258E+02	2.686258E+02	3.404598E-02	4.415519E-03	6.10	9.46	3.17
40000.	39711.5	2.695766E+02	2.695766E+02	3.298110E-02	4.262504E-03	6.18	9.62	3.24
40250.	39958.1	2.705275E+02	2.705275E+02	3.195449E-02	4.115135E-03	6.25	9.79	3.32
40500.	40204.7	2.714783E+02	2.714783E+02	3.096244E-02	3.973396E-03	6.33	9.95	3.41
40750.	40451.3	2.724291E+02	2.724291E+02	3.000346E-02	3.837013E-03	6.40	10.12	3.49
41000.	40697.9	2.733800E+02	2.733800E+02	2.907844E-02	3.705574E-03	6.48	10.29	3.58
41250.	40944.4	2.743308E+02	2.743308E+02	2.818538E-02	3.579162E-03	6.55	10.47	3.68
41500.	41191.0	2.752816E+02	2.752816E+02	2.732106E-02	3.457504E-03	6.62	10.64	3.77
41750.	41437.5	2.762325E+02	2.762325E+02	2.648822E-02	3.340271E-03	6.69	10.82	3.87
42000.	41684.0	2.771833E+02	2.771833E+02	2.568419E-02	3.227554E-03	6.77	11.00	3.96
42250.	41930.5	2.781341E+02	2.781341E+02	2.490529E-02	3.118850E-03	6.84	11.18	4.06
42500.	42176.9	2.790850E+02	2.790850E+02	2.415062E-02	3.014198E-03	6.92	11.37	4.16
42750.	42423.4	2.800358E+02	2.800358E+02	2.342353E-02	2.913385E-03	7.00	11.55	4.26
43000.	42669.8	2.809866E+02	2.809866E+02	2.272010E-02	2.816012E-03	7.08	11.75	4.35
43250.	42916.2	2.819375E+02	2.819375E+02	2.204139E-02	2.723037E-03	7.17	11.94	4.45
43500.	43162.6	2.828883E+02	2.828883E+02	2.138511E-02	2.633687E-03	7.26	12.14	4.54
43750.	43408.9	2.838391E+02	2.838391E+02	2.075061E-02	2.546417E-03	7.36	12.34	4.63
44000.	43655.3	2.847900E+02	2.847900E+02	2.013725E-02	2.462974E-03	7.47	12.54	4.72
44250.	43901.6	2.857408E+02	2.857408E+02	1.954422E-02	2.382568E-03	7.58	12.75	4.81
44500.	44147.9	2.866917E+02	2.866917E+02	1.897063E-02	2.305206E-03	7.70	12.96	4.89
44750.	44394.2	2.876425E+02	2.876425E+02	1.841659E-02	2.230499E-03	7.82	13.17	4.96
45000.	44640.5	2.885933E+02	2.885933E+02	1.788194E-02	2.158386E-03	7.94	13.39	5.03
45250.	44886.7	2.895441E+02	2.895441E+02	1.736038E-02	2.089187E-03	8.11	13.61	5.09

TABLE 5. (Continued)

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T°) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T° (K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T°)%	RD(P)%	RD(D)%
45500.	45132.9	2.970495E+02	2.970495E+02	1.6857634E-02	2.022432E-03	8.27	13.84	5.15
45750.	45379.2	2.971445E+02	2.971445E+02	1.6871841E-02	1.957321E-03	8.44	14.07	5.20
46000.	45625.3	2.972370E+02	2.972370E+02	1.6899858E-02	1.8949432E-03	8.62	14.31	5.24
46250.	45871.5	2.973375E+02	2.973375E+02	1.6943192E-02	1.8345491E-03	8.82	14.55	5.27
46500.	46117.7	2.974298E+02	2.974298E+02	1.6996016E-02	1.7757263E-03	9.03	14.80	5.29
46750.	46363.8	2.975247E+02	2.975247E+02	1.7060329E-02	1.7189484E-03	9.24	15.06	5.30
47000.	46609.9	2.976200E+02	2.976200E+02	1.7135764E-02	1.6644456E-03	9.51	15.32	5.30
47250.	46856.0	2.977200E+02	2.977200E+02	1.7219735E-02	1.6121374E-03	9.43	15.58	5.62
47500.	47102.1	2.978200E+02	2.978200E+02	1.7336666E-02	1.5711789E-03	9.37	15.84	5.92
47750.	47348.1	2.979200E+02	2.979200E+02	1.7479247E-02	1.5265226E-03	9.33	16.10	6.19
48000.	47594.2	2.980200E+02	2.980200E+02	1.7641035E-02	1.4831364E-03	9.31	16.35	6.44
48250.	47840.2	2.981200E+02	2.981200E+02	1.7825187E-02	1.4410728E-03	9.32	16.60	6.66
48500.	48086.2	2.982200E+02	2.982200E+02	1.8030636E-02	1.4000142E-03	9.35	16.85	6.85
48750.	48332.2	2.983200E+02	2.983200E+02	1.8256331E-02	1.3602229E-03	9.41	17.09	7.02
49000.	48578.1	2.984200E+02	2.984200E+02	1.8502396E-02	1.3215716E-03	9.51	17.34	7.15
49250.	48824.1	2.985200E+02	2.985200E+02	1.8771710E-02	1.2840037E-03	9.65	17.78	7.61
49500.	49070.0	2.986200E+02	2.986200E+02	1.9066093E-02	1.2475135E-03	9.34	17.99	7.89
49750.	49315.9	2.987200E+02	2.987200E+02	1.9385443E-02	1.2120500E-03	9.29	18.20	8.14
50000.	49561.8	2.988200E+02	2.988200E+02	1.9731529E-02	1.1776111E-03	9.24	18.42	8.41
50250.	49807.6	2.989200E+02	2.989200E+02	2.0107333E-02	1.1441404E-03	9.20	18.64	8.65
50500.	50053.5	2.990200E+02	2.990200E+02	2.0513487E-02	1.1116166E-03	9.18	18.87	8.88
50750.	50299.3	2.991200E+02	2.991200E+02	2.0952322E-02	1.0800166E-03	9.18	19.10	9.09
51000.	50545.1	2.992200E+02	2.992200E+02	2.1426040E-02	1.0493240E-03	9.19	19.34	9.30
51250.	50790.9	2.993200E+02	2.993200E+02	2.1936681E-02	1.0194674E-03	9.22	19.58	9.49
51500.	51036.7	2.994200E+02	2.994200E+02	2.2487035E-02	9.9051667E-04	9.26	19.83	9.67
51750.	51282.4	2.995200E+02	2.995200E+02	2.3078089E-02	9.6236895E-04	9.31	20.08	9.85
52000.	51528.1	2.996200E+02	2.996200E+02	2.3711949E-02	9.3500946E-04	9.39	20.33	10.01
52250.	51773.8	2.997200E+02	2.997200E+02	2.4390111E-02	9.1156954E-04	9.09	20.59	10.55
52500.	52019.5	2.998200E+02	2.998200E+02	2.5029045E-02	8.8864952E-04	8.80	20.84	11.07
52750.	52265.2	2.999200E+02	2.999200E+02	2.5879446E-02	8.6622935E-04	8.53	21.08	11.57
53000.	52510.9	3.000200E+02	3.000200E+02	2.6783657E-02	8.4429536E-04	8.27	21.32	12.06
53250.	52756.5	3.001200E+02	3.001200E+02	2.6742958E-02	8.2284033E-04	8.01	21.55	12.54
53500.	53002.1	3.002200E+02	3.002200E+02	2.6749596E-02	8.0185813E-04	7.77	21.78	13.00
53750.	53247.7	3.003200E+02	3.003200E+02	2.6805000E-02	7.8133806E-04	7.55	22.00	13.44
54000.	53493.3	3.004200E+02	3.004200E+02	2.6871429E-02	7.6126056E-04	7.33	22.22	13.87
54250.	53738.8	3.005200E+02	3.005200E+02	2.6950611E-02	7.4161712E-04	7.12	22.42	14.29

TABLE 5. (Continued)

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T°) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T° (K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T°)%	RD(P)%	RD(D)%
54500.	53984.4	2.858428E+02	2.858428E+02	5.928136E-03	7.224E-04	6.92	22.63	14.70
54750.	54229.9	2.848E+02	2.848E+02	5.753E-03	7.037E-04	6.72	22.82	15.09
55000.	54475.4	2.837714E+02	2.837714E+02	5.583E-03	6.853E-04	6.54	23.02	15.46
55250.	54720.9	2.827357E+02	2.827357E+02	5.417144E-03	6.674E-04	6.36	23.20	15.83
55500.	54966.3	2.817E+02	2.817E+02	5.255E-03	6.499E-04	6.20	23.38	16.18
55750.	55211.8	2.806E+02	2.806E+02	5.098E-03	6.328E-04	6.04	23.56	16.52
56000.	55457.2	2.796E+02	2.796E+02	4.945E-03	6.161E-04	5.88	23.73	16.85
56250.	55702.6	2.785E+02	2.785E+02	4.796E-03	5.997E-04	5.74	23.89	17.17
56500.	55948.0	2.775E+02	2.775E+02	4.651E-03	5.837E-04	5.60	24.05	17.48
56750.	56193.3	2.765E+02	2.765E+02	4.509E-03	5.681E-04	5.46	24.21	17.78
57000.	56438.7	2.754E+02	2.754E+02	4.372E-03	5.529E-04	5.33	24.36	18.06
57250.	56684.0	2.744E+02	2.744E+02	4.238E-03	5.380E-04	5.21	24.50	18.34
57500.	56929.3	2.734E+02	2.734E+02	4.108E-03	5.234E-04	5.09	24.64	18.60
57750.	57174.6	2.723E+02	2.723E+02	3.981E-03	5.092E-04	4.98	24.78	18.86
58000.	57419.9	2.713E+02	2.713E+02	3.858E-03	4.954E-04	4.87	24.91	19.11
58250.	57665.1	2.703E+02	2.703E+02	3.738E-03	4.818E-04	4.77	25.04	19.35
58500.	57910.3	2.692E+02	2.692E+02	3.622E-03	4.686E-04	4.67	25.16	19.58
58750.	58155.6	2.682E+02	2.682E+02	3.508E-03	4.557E-04	4.57	25.27	19.80
59000.	58400.7	2.672E+02	2.672E+02	3.398E-03	4.431E-04	4.48	25.39	20.01
59250.	58645.9	2.661E+02	2.661E+02	3.291E-03	4.308E-04	4.39	25.49	20.22
59500.	58891.1	2.651E+02	2.651E+02	3.187E-03	4.188E-04	4.30	25.60	20.42
59750.	59136.2	2.640E+02	2.640E+02	3.086E-03	4.071E-04	4.22	25.70	20.61
60000.	59381.3	2.630E+02	2.630E+02	2.987E-03	3.957E-04	4.13	25.79	20.80
60250.	59626.4	2.620E+02	2.620E+02	2.892E-03	3.845E-04	4.04	25.88	20.98
60500.	59871.5	2.610E+02	2.610E+02	2.799E-03	3.736E-04	3.98	25.97	21.15
60750.	60116.6	2.599E+02	2.599E+02	2.708E-03	3.630E-04	3.90	26.05	21.32
61000.	60361.6	2.589E+02	2.589E+02	2.621E-03	3.527E-04	3.83	26.13	21.48
61250.	60606.6	2.578E+02	2.578E+02	2.536E-03	3.426E-04	3.75	26.20	21.64
61500.	60851.6	2.568E+02	2.568E+02	2.453E-03	3.327E-04	3.68	26.27	21.79
61750.	61096.6	2.558E+02	2.558E+02	2.372E-03	3.231E-04	3.61	26.34	21.94
62000.	61341.6	2.547E+02	2.547E+02	2.294E-03	3.138E-04	3.54	26.40	22.08
62250.	61586.5	2.537E+02	2.537E+02	2.219E-03	3.046E-04	3.47	26.46	22.22
62500.	61831.4	2.527E+02	2.527E+02	2.145E-03	2.957E-04	3.40	26.51	22.35
62750.	62076.3	2.516E+02	2.516E+02	2.074E-03	2.871E-04	3.33	26.56	22.48
63000.	62321.2	2.506E+02	2.506E+02	2.004E-03	2.786E-04	3.26	26.60	22.61
63250.	62566.1	2.495E+02	2.495E+02	1.937E-03	2.704E-04	3.19	26.65	22.74

TABLE 5. (Continued)

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T°) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T° (K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T°)%	RD(P)%	RD(D)%
63500.	62810.9	2.4855714+02	2.4855714+02	1.8722188-03	2.6239681-04	3.11	26.68	22.86
63750.	63055.8	2.4752143+02	2.4752143+02	1.8068901-03	2.5457883-04	3.04	26.72	22.98
64000.	63300.6	2.4648571+02	2.4648571+02	1.7479222-03	2.4696028-04	2.97	26.75	23.09
64250.	63545.4	2.4545000+02	2.4545000+02	1.6876486-03	2.3953938-04	2.89	26.77	23.21
64500.	63790.1	2.4441429+02	2.4441429+02	1.6300201-03	2.3231113-04	2.82	26.79	23.32
64750.	64034.9	2.4337857+02	2.4337857+02	1.5739679-03	2.2527150-04	2.74	26.81	23.43
65000.	64279.6	2.4234286+02	2.4234286+02	1.5195846-03	2.1841669-04	2.66	26.82	23.54
65250.	64524.3	2.4130714+02	2.4130714+02	1.4668393-03	2.1174324-04	2.58	26.83	23.64
65500.	64769.0	2.4027143+02	2.4027143+02	1.4157653-03	2.0524633-04	2.50	26.84	23.75
65750.	65013.7	2.3923571+02	2.3923571+02	1.3662338-03	1.9891942-04	2.41	26.84	23.85
66000.	65258.4	2.3820000+02	2.3820000+02	1.3182455-03	1.9276726-04	2.33	26.84	23.95
66250.	65503.0	2.3716429+02	2.3716429+02	1.2717366-03	1.8677425-04	2.24	26.83	24.05
66500.	65747.6	2.3612857+02	2.3612857+02	1.2266445-03	1.8094337-04	2.15	26.82	24.15
66750.	65992.2	2.3509286+02	2.3509286+02	1.1829853-03	1.7527282-04	2.05	26.81	24.25
67000.	66236.8	2.3405714+02	2.3405714+02	1.1406493-03	1.6975212-04	1.96	26.79	24.35
67250.	66481.4	2.3302143+02	2.3302143+02	1.0997271-03	1.6438425-04	1.86	26.76	24.45
67500.	66725.9	2.3198571+02	2.3198571+02	1.0600686-03	1.5916085-04	1.76	26.73	24.54
67750.	66970.4	2.3095000+02	2.3095000+02	1.0216188-03	1.5408099-04	1.66	26.70	24.64
68000.	67214.9	2.2991429+02	2.2991429+02	9.8444938-04	1.4914501-04	1.55	26.66	24.73
68250.	67459.4	2.2887857+02	2.2887857+02	9.4838619-04	1.4434123-04	1.44	26.62	24.82
68500.	67703.9	2.2784286+02	2.2784286+02	9.1369145-04	1.3967717-04	1.33	26.58	24.91
68750.	67948.3	2.2680714+02	2.2680714+02	8.7991953-04	1.3514173-04	1.22	26.53	25.00
69000.	68192.8	2.2577143+02	2.2577143+02	8.4723949-04	1.3072944-04	1.10	26.47	25.09
69250.	68437.2	2.2473571+02	2.2473571+02	8.1572770-04	1.2644482-04	.98	26.41	25.18
69500.	68681.6	2.2370000+02	2.2370000+02	7.8523636-04	1.2228060-04	.86	26.35	25.27
69750.	68925.9	2.2266429+02	2.2266429+02	7.5566530-04	1.1823380-04	.74	26.28	25.35
70000.	69170.3	2.2162857+02	2.2162857+02	7.2710143-04	1.1430716-04	.61	26.20	25.43
70250.	69414.6	2.2059286+02	2.2059286+02	6.9953679-04	1.1048746-04	.48	26.12	25.52
70500.	69658.9	2.1955714+02	2.1955714+02	6.7285776-04	1.0678482-04	.35	26.03	25.60
70750.	69903.2	2.1852143+02	2.1852143+02	6.4710855-04	1.0318792-04	.21	25.94	25.67
71000.	70147.5	2.1748571+02	2.1748571+02	6.2217712-04	9.9694729-05	.08	25.85	25.75
71250.	70391.8	2.1645000+02	2.1645000+02	5.9810506-04	9.6302986-05	-.06	25.74	25.82
71500.	70636.0	2.1541429+02	2.1541429+02	5.7492494-04	9.3011998-05	-.20	25.64	25.89
71750.	70880.2	2.1437857+02	2.1437857+02	5.5247307-04	8.9819193-05	-.34	25.52	25.96
72000.	71124.4	2.1334286+02	2.1334286+02	5.3091288-04	8.6722613-05	-.49	25.40	26.02
72250.	71368.6	2.1230714+02	2.1230714+02	5.0993919-04	8.3714729-05	-.64	25.28	26.08

TABLE 5. (Continued)

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T°) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T° (K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T°)%	RD(P)%	RD(D)%
72500.	71812.8	2.112714D+02	2.112714D+02	4.0981666-04	8.0800772-05	-.78	25.14	26.13
72750.	71856.9	2.102357D+02	2.102357D+02	4.7033310-04	7.7975511-05	-.93	25.00	26.18
73000.	72101.0	2.092000D+02	2.092000D+02	4.5154095-04	7.5232028-05	-1.08	24.86	26.22
73250.	72345.1	2.081642D+02	2.081642D+02	4.3345213-04	7.2578192-05	-1.23	24.71	26.26
73500.	72589.2	2.071285D+02	2.071285D+02	4.1596651-04	6.9996833-05	-1.38	24.55	26.30
73750.	72833.3	2.060928D+02	2.060928D+02	3.9916992-04	6.7504406-05	-1.54	24.38	26.32
74000.	73077.3	2.050571D+02	2.050571D+02	3.8289547-04	6.5098278-05	-1.69	24.21	26.34
74250.	73321.4	2.040214D+02	2.040214D+02	3.6727428-04	6.2779372-05	-1.84	24.03	26.36
74500.	73565.4	2.029857D+02	2.029857D+02	3.5221576-04	6.0469389-05	-1.99	23.84	26.36
74750.	73809.4	2.019500D+02	2.019500D+02	3.3767700-04	5.8268547-05	-2.14	23.64	26.35
75000.	74053.3	2.009143D+02	2.009143D+02	3.2369137-04	5.6139469-05	-2.29	23.44	26.34
75250.	74297.3	1.998786D+02	1.998786D+02	3.1024933-04	5.4080963-05	-2.44	23.23	26.32
75500.	74541.2	1.988429D+02	1.988429D+02	2.9724598-04	5.2081346-05	-2.59	23.01	26.28
75750.	74785.1	1.978071D+02	1.978071D+02	2.8478145-04	5.0150156-05	-2.74	22.78	26.24
76000.	75029.0	1.967714D+02	1.967714D+02	2.7279600-04	4.8282385-05	-2.88	22.54	26.18
76250.	75272.9	1.957357D+02	1.957357D+02	2.6121616-04	4.6473980-05	-3.02	22.30	26.11
76500.	75516.8	1.947000D+02	1.947000D+02	2.5007725-04	4.4722080-05	-3.16	22.04	26.02
76750.	75760.6	1.936643D+02	1.936643D+02	2.3937800-04	4.3028116-05	-3.29	21.78	25.92
77000.	76004.4	1.926285D+02	1.926285D+02	2.2906303-04	4.1390419-05	-3.42	21.50	25.81
77250.	76248.2	1.915928D+02	1.915928D+02	2.1910389-04	3.9809465-05	-3.54	21.22	25.67
77500.	76492.0	1.905571D+02	1.905571D+02	2.0958900-04	3.8272381-05	-3.66	20.93	25.53
77750.	76735.8	1.895214D+02	1.895214D+02	2.0034313-04	3.6791801-05	-3.78	20.62	25.36
78000.	76979.5	1.884857D+02	1.884857D+02	1.9156933-04	3.5361767-05	-3.89	20.31	25.17
78250.	77223.2	1.874500D+02	1.874500D+02	1.8306255-04	3.3976316-05	-3.99	19.98	24.97
78500.	77466.9	1.864143D+02	1.864143D+02	1.7484188-04	3.2641649-05	-4.08	19.65	24.74
78750.	77710.6	1.853786D+02	1.853786D+02	1.6699791-04	3.1347752-05	-4.17	19.30	24.49
79000.	77954.3	1.843429D+02	1.843429D+02	1.5939712-04	3.0099630-05	-4.24	18.95	24.22
79250.	78198.0	1.833071D+02	1.833071D+02	1.5205383-04	2.8889179-05	-4.31	18.58	23.92
79500.	78441.6	1.822714D+02	1.822714D+02	1.4499167-04	2.7724981-05	-4.37	18.20	23.60
79750.	78685.2	1.812357D+02	1.812357D+02	1.3819218-04	2.6591778-05	-4.42	17.80	23.25
80000.	78928.8	1.802000D+02	1.802000D+02	1.3204098-04	2.5506019-05	-4.45	17.40	22.87
80250.	79172.4	1.802000D+02	1.802000D+02	1.2591839-04	2.4340630-05	-3.93	17.00	21.78
80500.	79415.9	1.802000D+02	1.802000D+02	1.2002945-04	2.3208616-05	-3.38	16.61	20.69
80750.	79659.5	1.802000D+02	1.802000D+02	1.1440277-04	2.2121429-05	-2.81	16.25	19.61
81000.	79903.0	1.802000D+02	1.802000D+02	1.0919571-04	2.1103859-05	-2.22	15.91	18.54
81250.	80146.5	1.802000D+02	1.802000D+02	1.0423660-04	2.0149648-05	-1.60	15.58	17.47

TABLE 5. (Concluded)

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T*) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T* (K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T*)%	RD(P)%	RD(D)%
81500.	80389.9	1.8020000+02	1.8020000+02	9.9349021-05	1.9204140-05	-.96	15.27	16.90
81750.	80633.4	1.8020000+02	1.8020000+02	9.4680706-05	1.8306639-05	-.25	14.99	15.27
82000.	80876.8	1.8020000+02	1.8020000+02	9.0289115-05	1.7478943-05	-.25	14.83	15.12
82250.	81120.3	1.8020000+02	1.8020000+02	8.6135864-05	1.6681644-05	-.25	14.68	14.97
82500.	81363.7	1.8020000+02	1.8020000+02	8.2125664-05	1.5881538-05	-.25	14.53	14.81
82750.	81607.1	1.8020000+02	1.8020000+02	7.8363419-05	1.5167236-05	-.25	14.37	14.66
83000.	81850.4	1.8020000+02	1.8020000+02	7.4744225-05	1.4469610-05	-.25	14.22	14.51
83250.	82093.8	1.8020000+02	1.8020000+02	7.1334638-05	1.3784409-05	-.25	14.07	14.35
83500.	82337.1	1.8020000+02	1.8020000+02	6.8025589-05	1.3150891-05	-.25	13.91	14.20
83750.	82580.4	1.8020000+02	1.8020000+02	6.4859390-05	1.2552261-05	-.25	13.76	14.04
84000.	82823.7	1.8020000+02	1.8020000+02	6.1969757-05	1.1974335-05	-.25	13.60	13.89
84250.	83067.0	1.8020000+02	1.8020000+02	5.9032440-05	1.1392593-05	-.25	13.45	13.73
84500.	83310.2	1.8020000+02	1.8020000+02	5.6362152-05	1.0883331-05	-.25	13.30	13.58
84750.	83553.5	1.8020000+02	1.8020000+02	5.3710937-05	1.0396957-05	-.25	13.14	13.42
85000.	83796.7	1.8020000+02	1.8020000+02	5.1279068-05	9.9201202-06	-.25	12.99	13.27
85250.	84039.9	1.8020000+02	1.8020000+02	4.8847198-05	9.4299317-06	-.25	12.83	13.11
85500.	84283.0	1.8020000+02	1.8020000+02	4.6577453-05	9.0198516-06	-.25	12.67	12.96
85750.	84526.2	1.8020000+02	1.8020000+02	4.4469633-05	8.5945129-06	-.25	12.52	12.80
86000.	84769.3	1.8020000+02	1.8020000+02	4.2343139-05	8.2016991-06	-.25	12.36	12.64
86250.	85012.5	1.8020000+02	1.8020000+02	4.0426254-05	7.8105926-06	-.25	12.21	12.49
86500.	85255.6	1.8020000+02	1.8020000+02	3.8480759-05	7.4577331-06	-.25	12.05	12.33
86750.	85498.6	1.8020000+02	1.8020000+02	3.6697388-05	7.1010589-06	-.25	11.90	12.17
87000.	85741.7	1.8020000+02	1.8020000+02	3.5005678-05	6.7825317-06	-.25	11.74	12.02
87250.	85984.7	1.8020000+02	1.8020000+02	3.3473968-05	6.4659118-06	-.25	11.58	11.86
87500.	86227.8	1.8020000+02	1.8020000+02	3.1900406-05	6.1798096-06	-.25	11.42	11.70
87750.	86470.8	1.8020000+02	1.8020000+02	3.0288696-05	5.8574677-06	-.25	11.27	11.55
88000.	86713.8	1.8020000+02	1.8020000+02	2.9077530-05	5.6247711-06	-.25	11.11	11.39
88250.	86956.7	1.8020000+02	1.8020000+02	2.7685165-05	5.3576497-06	-.25	10.95	11.23
88500.	87199.7	1.8020000+02	1.8020000+02	2.6350021-05	5.1040649-06	-.25	10.80	11.07
88750.	87442.6	1.8020000+02	1.8020000+02	2.5205612-05	4.8770904-06	-.25	10.64	10.91
89000.	87685.5	1.8020000+02	1.8020000+02	2.4003982-05	4.6634674-06	-.25	10.48	10.76
89250.	87928.4	1.8020000+02	1.8020000+02	2.2860036-05	4.4174194-06	-.25	10.32	10.60
89500.	88171.3	1.8020000+02	1.8020000+02	2.1839142-05	4.2343140-06	-.25	10.16	10.44
89750.	88414.1	1.8020000+02	1.8020000+02	2.0732880-05	4.0264130-06	-.25	10.01	10.28
90000.	88657.0	1.8020000+02	1.8020000+02	1.9807816-05	3.8452140-06	******	9.64	10.11

TABLE 6. EDWARDS AFB, CALIFORNIA COLD (WINTER) ATMOSPHERE, 1975

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T°) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T° (K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T°)%	RD(P)%	RD(D)%
700.	705.2	2.7365000+02	2.7315000+02	9.3900000+00	1.1953854+00	-5.72	.53	6.63
750.	749.2	2.7335797+02	2.7286309+02	9.3370727+00	1.1899167+00	-5.85	.43	6.67
1000.	998.9	2.7169868+02	2.7123291+02	9.0436318+00	1.1595598+00	-6.34	.49	7.07
1250.	1248.6	2.7003938+02	2.6960273+02	8.7609967+00	1.1302265+00	-6.60	.10	7.16
1500.	1498.2	2.6838009+02	2.6797254+02	8.4879111+00	1.1017031+00	-6.73	-.12	7.09
1750.	1747.8	2.6672080+02	2.6634236+02	8.2215875+00	1.0738359+00	-6.82	-.34	6.96
2000.	1997.5	2.6506151+02	2.6471218+02	7.9626412+00	1.0465218+00	-6.90	-.56	6.81
2250.	2247.0	2.6340221+02	2.6308200+02	7.7100220+00	1.0197005+00	-6.97	-.78	6.66
2500.	2496.6	2.6174292+02	2.6145182+02	7.4634498+00	9.9338674-01	-7.05	-1.00	6.51
2750.	2746.2	2.6008363+02	2.5982164+02	7.2228457+00	9.6745674-01	-7.12	-1.23	6.34
3000.	2995.7	2.5842434+02	2.5819145+02	6.9882666+00	9.4204977-01	-7.18	-1.47	6.15
3250.	3245.2	2.5676505+02	2.5656127+02	6.7598376+00	9.1714973-01	-7.29	-1.87	5.85
3500.	3494.7	2.5510575+02	2.5493109+02	6.5376855+00	8.9278151-01	-7.39	-2.11	5.70
3750.	3744.2	2.5344646+02	2.5330091+02	6.3218725+00	8.6896157-01	-7.47	-2.36	5.51
4000.	3993.7	2.5178717+02	2.5167073+02	6.1123285+00	8.4568942-01	-7.55	-2.61	5.35
4250.	4243.1	2.5012788+02	2.5004055+02	5.9087850+00	8.2293915-01	-7.61	-2.87	5.15
4500.	4492.5	2.4846859+02	2.4841036+02	5.7107079+00	8.0065089-01	-7.67	-3.12	4.93
4750.	4741.9	2.4680930+02	2.4678018+02	5.5172312+00	7.7872229-01	-7.72	-3.38	4.70
5000.	4991.3	2.4515001+02	2.4515000+02	5.3279900+00	7.5700013-01	-7.76	-3.65	4.46
5250.	5240.6	2.4377500+02	2.4377500+02	5.1441911+00	7.3513269-01	-7.68	-3.91	4.09
5500.	5490.0	2.4240000+02	2.4240000+02	4.9665900+00	7.1377857-01	-7.59	-4.17	3.71
5750.	5739.3	2.4102500+02	2.4102500+02	4.7941624+00	6.9292854-01	-7.50	-4.43	3.32
6000.	5988.6	2.3965000+02	2.3965000+02	4.6267853+00	6.7257345-01	-7.40	-4.68	2.93
6250.	6237.9	2.3827500+02	2.3827500+02	4.4643393+00	6.5270434-01	-7.28	-4.93	2.53
6500.	6487.1	2.3690000+02	2.3690000+02	4.3067054+00	6.3331228-01	-7.15	-5.17	2.13
6750.	6736.4	2.3552500+02	2.3552500+02	4.1537685+00	6.1438850-01	-7.02	-5.41	1.72
7000.	6985.6	2.3415000+02	2.3415000+02	4.0054143+00	5.9592430-01	-6.87	-5.65	1.30
7250.	7234.8	2.3277500+02	2.3277500+02	3.8615317+00	5.7791115-01	-6.71	-5.88	.88
7500.	7484.0	2.3140000+02	2.3140000+02	3.7220108+00	5.6034059-01	-6.54	-6.11	.46
7750.	7733.1	2.3002500+02	2.3002500+02	3.5867443+00	5.4320429-01	-6.36	-6.33	.03
8000.	7982.3	2.2865000+02	2.2865000+02	3.4556265+00	5.2649399-01	-6.18	-6.55	-.40
8250.	8231.4	2.2727500+02	2.2727500+02	3.3285544+00	5.1020157-01	-5.98	-6.76	-.82
8500.	8480.5	2.2590000+02	2.2590000+02	3.2054260+00	4.9431903-01	-5.79	-6.97	-1.25
8750.	8729.6	2.2452500+02	2.2452500+02	3.0861421+00	4.7883844-01	-5.59	-7.18	-1.67
9000.	8978.6	2.2315000+02	2.2315000+02	2.9706049+00	4.6375200-01	-5.40	-7.38	-2.07
9250.	9227.7	2.2298333+02	2.2298333+02	2.8590224+00	4.4666597-01	-4.70	-7.57	-2.99

TABLE 6. (Continued)

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T°) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T° (K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T°)%	RD(P)%	RD(D)%
9500.	9476.7	2.2281667+02	2.2281667+02	2.7515494+00	4.3019694-01	-4.01	-7.73	-3.86
9750.	9725.7	2.2265000+02	2.2265000+02	2.6480373+00	4.1432303-01	-3.33	-7.88	-4.69
10000.	9974.7	2.2248333+02	2.2248333+02	2.5483443+00	3.9902337-01	-2.63	-8.02	-5.54
10250.	10223.7	2.2231667+02	2.2231667+02	2.4523332+00	3.8427772-01	-1.88	-8.09	-6.34
10500.	10472.6	2.2215000+02	2.2215000+02	2.3598713+00	3.7006659-01	-1.20	-8.13	-7.03
10750.	10721.5	2.2198333+02	2.2198333+02	2.2708307+00	3.5637093-01	-.59	-8.16	-7.62
11000.	10970.5	2.2181667+02	2.2181667+02	2.1850870+00	3.4317250-01	-.06	-8.18	-8.13
11250.	11219.3	2.2165000+02	2.2165000+02	2.1025212+00	3.3045363-01	.42	-8.18	-8.56
11500.	11468.2	2.2148333+02	2.2148333+02	2.0230170+00	3.1819725-01	.84	-8.17	-8.93
11750.	11717.1	2.2131667+02	2.2131667+02	1.9464638+00	3.0638681-01	1.21	-8.14	-9.23
12000.	11965.9	2.2115000+02	2.2115000+02	1.8727532+00	2.9500646-01	1.54	-8.10	-9.49
12250.	12214.7	2.2098333+02	2.2098333+02	1.8017823+00	2.8404071-01	1.83	-8.05	-9.70
12500.	12463.5	2.2081667+02	2.2081667+02	1.7334504+00	2.7347480-01	2.09	-7.99	-9.87
12750.	12712.3	2.2065000+02	2.2065000+02	1.6676615+00	2.6329441-01	2.33	-7.92	-10.01
13000.	12961.1	2.2048333+02	2.2048333+02	1.6043217+00	2.5348568-01	2.54	-7.84	-10.12
13250.	13209.7	2.2031667+02	2.2031667+02	1.5433427+00	2.4403527-01	2.73	-7.75	-10.20
13500.	13458.4	2.2015000+02	2.2015000+02	1.4846371+00	2.3493041-01	2.92	-7.65	-10.27
13750.	13707.1	2.1998333+02	2.1998333+02	1.4281221+00	2.2615862-01	3.09	-7.54	-10.32
14000.	13955.8	2.1981667+02	2.1981667+02	1.3737173+00	2.1770802-01	3.25	-7.43	-10.35
14250.	14204.5	2.1965000+02	2.1965000+02	1.3213456+00	2.0956704-01	3.41	-7.31	-10.37
14500.	14453.1	2.1948333+02	2.1948333+02	1.2709328+00	2.0172459-01	3.56	-7.18	-10.39
14750.	14701.7	2.1931667+02	2.1931667+02	1.2224072+00	1.9416998-01	3.71	-7.05	-10.39
15000.	14950.3	2.1915000+02	2.1915000+02	1.1756991+00	1.8689287-01	3.85	-6.92	-10.38
15250.	15198.9	2.1898333+02	2.1898333+02	1.1307426+00	1.7988327-01	3.99	-6.78	-10.37
15500.	15447.4	2.1881667+02	2.1881667+02	1.0874731+00	1.7313158-01	4.11	-6.64	-10.34
15750.	15696.0	2.1865000+02	2.1865000+02	1.0458295+00	1.6662857-01	4.22	-6.50	-10.29
16000.	15944.5	2.1848333+02	2.1848333+02	1.0057510+00	1.6036523-01	4.31	-6.36	-10.22
16250.	16193.0	2.1831667+02	2.1831667+02	9.6718019-01	1.5433295-01	4.37	-6.22	-10.13
16500.	16441.5	2.1815000+02	2.1815000+02	9.3006250-01	1.4852335-01	4.39	-6.07	-10.02
16750.	16689.9	2.1798333+02	2.1798333+02	8.9434261-01	1.4292827-01	4.37	-5.94	-9.86
17000.	16938.4	2.1781667+02	2.1781667+02	8.5996912-01	1.3754010-01	4.30	-5.80	-9.67
17250.	17186.8	2.1765000+02	2.1765000+02	8.2689173-01	1.3235096-01	4.16	-5.67	-9.42
17500.	17435.2	2.1748333+02	2.1748333+02	7.9506107-01	1.2735379-01	3.94	-5.54	-9.11
17750.	17683.5	2.1731667+02	2.1731667+02	7.6442968-01	1.2254114-01	3.63	-5.41	-8.72
18000.	17931.9	2.1715000+02	2.1715000+02	7.3495366-01	1.1790656-01	3.21	-5.30	-8.25
18250.	18180.2	2.1719167+02	2.1719167+02	7.0661131-01	1.1333784-01	3.07	-5.17	-8.02

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T*) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T* (K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T*)%	RD(P)%	RD(D)%
18500.	18428.6	2.1723333+02	2.1723333+02	6.7936670-01	1.0894700-01	2.96	-5.15	-7.86
18750.	18676.9	2.1727500+02	2.1727500+02	6.5317693-01	1.0472703-01	2.82	-5.12	-7.69
19000.	18925.2	2.1731667+02	2.1731667+02	6.2800190-01	1.0067124-01	2.67	-5.07	-7.49
19250.	19173.4	2.1735833+02	2.1735833+02	6.0380147-01	9.6773273-02	2.50	-5.02	-7.28
19500.	19421.7	2.1740000+02	2.1740000+02	5.8053879-01	9.3027000-02	2.32	-4.96	-7.06
19750.	19669.9	2.1744167+02	2.1744167+02	5.5817579-01	8.9426414-02	2.12	-4.90	-6.82
20000.	19918.1	2.1748333+02	2.1748333+02	5.3667663-01	8.5965850-02	1.92	-4.84	-6.58
20250.	20166.3	2.1752500+02	2.1752500+02	5.1601316-01	8.2639785-02	1.71	-4.78	-6.33
20500.	20414.4	2.1756667+02	2.1756667+02	4.9614725-01	7.9443085-02	1.49	-4.72	-6.09
20750.	20662.6	2.1760833+02	2.1760833+02	4.7704992-01	7.6370533-02	1.28	-4.66	-5.84
21000.	20910.7	2.1765000+02	2.1765000+02	4.5869091-01	7.3417381-02	1.06	-4.61	-5.60
21250.	21158.8	2.1769167+02	2.1769167+02	4.4104200-01	7.0578983-02	.85	-4.57	-5.36
21500.	21406.9	2.1773333+02	2.1773333+02	4.2407448-01	6.7850856-02	.63	-4.53	-5.14
21750.	21655.0	2.1777500+02	2.1777500+02	4.0776398-01	6.5228565-02	.42	-4.50	-4.92
22000.	21903.0	2.1781667+02	2.1781667+02	3.9208290-01	6.2708206-02	.22	-4.48	-4.71
22250.	22151.0	2.1785833+02	2.1785833+02	3.7700792-01	6.0285523-02	.02	-4.47	-4.52
22500.	22399.1	2.1790000+02	2.1790000+02	3.6251453-01	5.7956970-02	-.17	-4.47	-4.35
22750.	22647.0	2.1794167+02	2.1794167+02	3.4858231-01	5.5718933-02	-.35	-4.48	-4.19
23000.	22895.0	2.1798333+02	2.1798333+02	3.3518764-01	5.3567505-02	-.53	-4.50	-4.04
23250.	23143.0	2.1802500+02	2.1802500+02	3.2230938-01	5.1499675-02	-.70	-4.54	-3.92
23500.	23390.9	2.1806667+02	2.1806667+02	3.0992973-01	4.9512157-02	-.85	-4.59	-3.81
23750.	23638.8	2.1810833+02	2.1810833+02	2.9802589-01	4.7601303-02	-1.00	-4.65	-3.72
24000.	23886.7	2.1815000+02	2.1815000+02	2.8658279-01	4.5764786-02	-1.15	-4.72	-3.65
24250.	24134.6	2.1837031+02	2.1837031+02	2.7558494-01	4.3964222-02	-1.20	-4.80	-3.67
24500.	24382.4	2.1859062+02	2.1859062+02	2.6502033-01	4.2236294-02	-1.25	-4.89	-3.71
24750.	24630.3	2.1881094+02	2.1881094+02	2.5488967-01	4.0577709-02	-1.29	-4.99	-3.76
25000.	24878.1	2.1903125+02	2.1903125+02	2.4511787-01	3.8985798-02	-1.32	-5.09	-3.82
25250.	25125.9	2.1925156+02	2.1925156+02	2.3574793-01	3.7457882-02	-1.35	-5.19	-3.88
25500.	25373.6	2.1947187+02	2.1947187+02	2.2674574-01	3.5991306-02	-1.38	-5.30	-3.96
25750.	25621.4	2.1969219+02	2.1969219+02	2.1809511-01	3.4583458-02	-1.41	-5.42	-4.03
26000.	25869.1	2.1991250+02	2.1991250+02	2.0978271-01	3.3232181-02	-1.43	-5.53	-4.11
26250.	26116.9	2.2013281+02	2.2013281+02	2.0179583-01	3.1934906-02	-1.46	-5.64	-4.19
26500.	26364.6	2.2035312+02	2.2035312+02	1.9412054-01	3.0689434-02	-1.50	-5.75	-4.26
26750.	26612.2	2.2057344+02	2.2057344+02	1.8674423-01	2.9493763-02	-1.54	-5.85	-4.32
27000.	26859.9	2.2079375+02	2.2079375+02	1.7965517-01	2.8345894-02	-1.59	-5.94	-4.37
27250.	27107.5	2.2101406+02	2.2101406+02	1.7284168-01	2.7243626-02	-1.65	-6.02	-4.40

TABLE 6. (Continued)

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T°) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T° (K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T°)%	RD(P)%	RD(D)%
27500.	27355.2	2.2123437+02	2.2123437+02	1.6629372-01	2.6185471-02	-1.73	-6.09	-4.41
27750.	27602.8	2.2145469+02	2.2145469+02	1.5999880-01	2.5169281-02	-1.83	-6.13	-4.39
28000.	27850.3	2.2167500+02	2.2167500+02	1.5394886-01	2.4193466-02	-1.95	-6.16	-4.33
28250.	28097.9	2.2189531+02	2.2189531+02	1.4813324-01	2.3256256-02	-1.94	-6.27	-4.42
28500.	28345.4	2.2211562+02	2.2211562+02	1.4254295-01	2.2356434-02	-2.12	-6.40	-4.38
28750.	28593.0	2.2233594+02	2.2233594+02	1.3716793-01	2.1492195-02	-2.29	-6.53	-4.35
29000.	28840.5	2.2255625+02	2.2255625+02	1.3200119-01	2.0662117-02	-2.45	-6.67	-4.32
29250.	29088.0	2.2277656+02	2.2277656+02	1.2703419-01	1.9864921-02	-2.60	-6.80	-4.31
29500.	29335.4	2.2299687+02	2.2299687+02	1.2225803-01	1.9099197-02	-2.75	-6.94	-4.31
29750.	29582.9	2.2321719+02	2.2321719+02	1.1766998-01	1.8363632-02	-2.90	-7.08	-4.31
30000.	29830.3	2.2343750+02	2.2343750+02	1.1325157-01	1.7657204-02	-3.04	-7.22	-4.32
30250.	30077.7	2.2365781+02	2.2365781+02	1.0900616-01	1.6978645-02	-3.17	-7.37	-4.33
30500.	30325.1	2.2387812+02	2.2387812+02	1.0492344-01	1.6326668-02	-3.30	-7.51	-4.36
30750.	30572.5	2.2409844+02	2.2409844+02	1.0099853-01	1.5700500-02	-3.43	-7.66	-4.39
31000.	30819.8	2.2431875+02	2.2431875+02	9.7223701-02	1.5098938-02	-3.55	-7.82	-4.42
31250.	31067.1	2.2453906+02	2.2453906+02	9.3593254-02	1.4520874-02	-3.68	-7.97	-4.46
31500.	31314.4	2.2475937+02	2.2475937+02	9.0102997-02	1.3965607-02	-3.80	-8.13	-4.51
31750.	31561.7	2.2497969+02	2.2497969+02	8.6744575-02	1.3431854-02	-3.91	-8.30	-4.56
32000.	31809.0	2.2520000+02	2.2520000+02	8.3514365-02	1.2918991-02	-4.03	-8.46	-4.62
32250.	32056.3	2.2575000+02	2.2575000+02	8.0411043-02	1.2408785-02	-4.01	-8.63	-4.81
32500.	32303.5	2.2630000+02	2.2630000+02	7.7432365-02	1.1920195-02	-3.99	-8.79	-5.01
32750.	32550.7	2.2685000+02	2.2685000+02	7.4569435-02	1.1451635-02	-3.96	-8.96	-5.20
33000.	32797.9	2.2740000+02	2.2740000+02	7.1818008-02	1.1002544-02	-3.94	-9.12	-5.39
33250.	33045.1	2.2795000+02	2.2795000+02	6.9173422-02	1.0571724-02	-3.92	-9.28	-5.58
33500.	33292.2	2.2850000+02	2.2850000+02	6.6631718-02	1.0158775-02	-3.90	-9.45	-5.77
33750.	33539.4	2.2905000+02	2.2905000+02	6.4188652-02	9.7627544-03	-3.89	-9.61	-5.95
34000.	33786.5	2.2960000+02	2.2960000+02	6.1841039-02	9.3830738-03	-3.87	-9.77	-6.13
34250.	34033.6	2.3015000+02	2.3015000+02	5.9583873-02	9.0189285-03	-3.86	-9.93	-6.31
34500.	34280.7	2.3070000+02	2.3070000+02	5.7414322-02	8.6697520-03	-3.85	-10.09	-6.49
34750.	34527.7	2.3125000+02	2.3125000+02	5.5329036-02	8.3349723-03	-3.84	-10.25	-6.66
35000.	34774.8	2.3180000+02	2.3180000+02	5.3324127-02	8.0138092-03	-3.83	-10.41	-6.84
35250.	35021.8	2.3235000+02	2.3235000+02	5.1396675-02	7.7057572-03	-3.83	-10.57	-7.00
35500.	35268.8	2.3290000+02	2.3290000+02	4.9542961-02	7.4103279-03	-3.83	-10.73	-7.17
35750.	35515.8	2.3345000+02	2.3345000+02	4.7761192-02	7.1269684-03	-3.84	-10.89	-7.33
36000.	35762.7	2.3400000+02	2.3400000+02	4.6047458-02	6.8551330-03	-3.84	-11.05	-7.49
36250.	36009.7	2.3455000+02	2.3455000+02	4.4398746-02	6.5942248-03	-3.85	-11.21	-7.65

TABLE 6. (Continued)

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T°) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T° (K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T°)%	RD(P)%	RD(D)%
36500.	36256.6	2.3510000+02	2.3510000+02	4.2813472-02	6.3438548-03	-3.87	-11.37	-7.80
36750.	36503.5	2.3565000+02	2.3565000+02	4.1288185-02	6.1035996-03	-3.88	-11.53	-7.96
37000.	36750.4	2.3620000+02	2.3620000+02	3.9820938-02	5.8730812-03	-3.90	-11.69	-8.11
37250.	36997.2	2.3675000+02	2.3675000+02	3.8409385-02	5.6516533-03	-3.93	-11.86	-8.26
37500.	37244.1	2.3730000+02	2.3730000+02	3.7050743-02	5.4392128-03	-3.95	-12.02	-8.40
37750.	37490.9	2.3785000+02	2.3785000+02	3.5743465-02	5.2352219-03	-3.98	-12.19	-8.54
38000.	37737.7	2.3840000+02	2.3840000+02	3.4485111-02	5.0392494-03	-4.02	-12.35	-8.69
38250.	37984.5	2.3895000+02	2.3895000+02	3.3273544-02	4.8510437-03	-4.05	-12.52	-8.83
38500.	38231.3	2.3950000+02	2.3950000+02	3.2107143-02	4.6703567-03	-4.09	-12.69	-8.96
38750.	38478.0	2.4005000+02	2.4005000+02	3.0984611-02	4.4967041-03	-4.13	-12.86	-9.10
39000.	38724.7	2.4060000+02	2.4060000+02	2.9902954-02	4.3298111-03	-4.17	-13.03	-9.24
39250.	38971.5	2.4115000+02	2.4115000+02	2.8861427-02	4.1695061-03	-4.22	-13.20	-9.37
39500.	39218.1	2.4170000+02	2.4170000+02	2.7858925-02	4.0155258-03	-4.27	-13.37	-9.50
39750.	39464.8	2.4225000+02	2.4225000+02	2.6892242-02	3.8674278-03	-4.32	-13.54	-9.64
40000.	39711.5	2.4280000+02	2.4280000+02	2.5961265-02	3.7250938-03	-4.37	-13.71	-9.77
40250.	39958.1	2.4335000+02	2.4335000+02	2.5064545-02	3.5882034-03	-4.42	-13.89	-9.90
40500.	40204.7	2.4390000+02	2.4390000+02	2.4200706-02	3.4567490-03	-4.47	-14.06	-10.04
40750.	40451.3	2.4445000+02	2.4445000+02	2.3368378-02	3.3302765-03	-4.53	-14.24	-10.17
41000.	40697.9	2.4500000+02	2.4500000+02	2.2566185-02	3.2086792-03	-4.58	-14.41	-10.30
41250.	40944.4	2.4555000+02	2.4555000+02	2.1792946-02	3.0917358-03	-4.63	-14.59	-10.44
41500.	41191.0	2.4610000+02	2.4610000+02	2.1048088-02	2.9793625-03	-4.68	-14.77	-10.58
41750.	41437.5	2.4665000+02	2.4665000+02	2.0330496-02	2.8713226-03	-4.73	-14.94	-10.72
42000.	41684.0	2.4720000+02	2.4720000+02	1.9638176-02	2.7674908-03	-4.78	-15.12	-10.86
42250.	41930.5	2.4775000+02	2.4775000+02	1.8971138-02	2.6674499-03	-4.83	-15.30	-11.00
42500.	42176.9	2.4830000+02	2.4830000+02	1.8329239-02	2.5713425-03	-4.87	-15.48	-11.15
42750.	42423.4	2.4885000+02	2.4885000+02	1.7709199-02	2.4788294-03	-4.92	-15.66	-11.30
43000.	42669.8	2.4940000+02	2.4940000+02	1.7112656-02	2.3899994-03	-4.95	-15.84	-11.45
43250.	42916.2	2.4995000+02	2.4995000+02	1.6537208-02	2.3044281-03	-4.99	-16.02	-11.61
43500.	43162.6	2.5050000+02	2.5050000+02	1.5982132-02	2.2220350-03	-5.02	-16.19	-11.77
43750.	43408.9	2.5105000+02	2.5105000+02	1.5446663-02	2.1433182-03	-5.04	-16.37	-11.93
44000.	43655.3	2.5160000+02	2.5160000+02	1.4932060-02	2.0672607-03	-5.06	-16.55	-12.11
44250.	43901.6	2.5215000+02	2.5215000+02	1.4434700-02	1.9941101-03	-5.07	-16.73	-12.28
44500.	44147.9	2.5270000+02	2.5270000+02	1.3955002-02	1.9238434-03	-5.07	-16.91	-12.47
44750.	44394.2	2.5325000+02	2.5325000+02	1.3493423-02	1.8561783-03	-5.07	-17.08	-12.66
45000.	44640.5	2.5380000+02	2.5380000+02	1.3047066-02	1.7909775-03	-5.06	-17.26	-12.85
45250.	44886.7	2.5435000+02	2.5435000+02	1.2616653-02	1.7281799-03	-5.03	-17.43	-13.06

TABLE 6. (Continued)

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T°) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T° (°K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T°)%	RD(P)%	RD(D)%
45500.	45132.9	2.5490000+02	2.5490000+02	1.2202682-02	1.6679306-03	-5.00	-17.60	-13.27
45750.	45379.2	2.5545000+02	2.5545000+02	1.1801453-02	1.6096649-03	-4.96	-17.78	-13.49
46000.	45625.3	2.5600000+02	2.5600000+02	1.1413879-02	1.5535202-03	-4.90	-17.94	-13.72
46250.	45871.5	2.5655000+02	2.5655000+02	1.1039886-02	1.4993286-03	-4.83	-18.11	-13.96
46500.	46117.7	2.5710000+02	2.5710000+02	1.0677414-02	1.4469757-03	-4.75	-18.28	-14.20
46750.	46363.9	2.5765000+02	2.5765000+02	1.0327072-02	1.3964233-03	-4.65	-18.44	-14.46
47000.	46609.9	2.5820000+02	2.5820000+02	9.9894762-03	1.3477931-03	-4.54	-18.60	-14.73
47250.	46856.0	2.5820000+02	2.5820000+02	9.6644614-03	1.3039379-03	-4.61	-18.76	-14.83
47500.	47102.1	2.5820000+02	2.5820000+02	9.3500899-03	1.2615075-03	-4.66	-18.92	-14.96
47750.	47348.1	2.5820000+02	2.5820000+02	9.0458822-03	1.2204695-03	-4.70	-19.09	-15.10
48000.	47594.2	2.5820000+02	2.5820000+02	8.7515234-03	1.1807566-03	-4.71	-19.26	-15.26
48250.	47840.2	2.5820000+02	2.5820000+02	8.4667420-03	1.1423364-03	-4.71	-19.43	-15.45
48500.	48086.2	2.5820000+02	2.5820000+02	8.1911731-03	1.1051526-03	-4.68	-19.60	-15.65
48750.	48332.2	2.5820000+02	2.5820000+02	7.9247117-03	1.0692024-03	-4.62	-19.77	-15.88
49000.	48578.1	2.5820000+02	2.5820000+02	7.6668501-03	1.0344262-03	-4.54	-19.94	-16.13
49250.	48824.1	2.5820000+02	2.5820000+02	7.4174213-03	1.0007734-03	-4.59	-19.98	-16.13
49500.	49070.0	2.5820000+02	2.5820000+02	7.1760916-03	9.6820450-04	-4.67	-20.18	-16.27
49750.	49315.9	2.5820000+02	2.5820000+02	6.9426632-03	9.3670225-04	-4.73	-20.37	-16.41
50000.	49561.8	2.5820000+02	2.5820000+02	6.7167425-03	9.0621996-04	-4.78	-20.56	-16.57
50250.	49807.6	2.5820000+02	2.5820000+02	6.4981794-03	8.7673139-04	-4.81	-20.75	-16.74
50500.	50053.5	2.5820000+02	2.5820000+02	6.2867117-03	8.4820604-04	-4.83	-20.93	-16.92
50750.	50299.3	2.5820000+02	2.5820000+02	6.0821724-03	8.2061959-04	-4.83	-21.11	-17.11
51000.	50545.1	2.5820000+02	2.5820000+02	5.8843326-03	7.9390049-04	-4.82	-21.29	-17.31
51250.	50790.9	2.5820000+02	2.5820000+02	5.6927776-03	7.6808452-04	-4.80	-21.47	-17.51
51500.	51036.7	2.5820000+02	2.5820000+02	5.5075550-03	7.4308538-04	-4.76	-21.64	-17.72
51750.	51282.4	2.5820000+02	2.5820000+02	5.3284359-03	7.1891594-04	-4.71	-21.81	-17.94
52000.	51528.1	2.5820000+02	2.5820000+02	5.1550770-03	6.9551897-04	-4.65	-21.97	-18.17
52250.	51773.8	2.5785323+02	2.5785323+02	4.9857211-03	6.7361736-04	-4.70	-22.13	-18.29
52500.	52019.5	2.5750645+02	2.5750645+02	4.8241901-03	6.5264332-04	-4.75	-22.30	-18.43
52750.	52265.2	2.5715968+02	2.5715968+02	4.6675360-03	6.3228905-04	-4.78	-22.46	-18.57
53000.	52510.9	2.5681290+02	2.5681290+02	4.5156181-03	6.1251270-04	-4.80	-22.62	-18.72
53250.	52756.5	2.5646613+02	2.5646613+02	4.3683457-03	5.9332239-04	-4.81	-22.78	-18.88
53500.	53002.1	2.5611936+02	2.5611936+02	4.2255378-03	5.7469523-04	-4.81	-22.94	-19.04
53750.	53247.7	2.5577258+02	2.5577258+02	4.0871942-03	5.5661833-04	-4.80	-23.10	-19.22
54000.	53493.3	2.5542581+02	2.5542581+02	3.9530086-03	5.3908073-04	-4.78	-23.25	-19.40
54250.	53738.8	2.5507904+02	2.5507904+02	3.8230204-03	5.2205920-04	-4.76	-23.41	-19.59

TABLE 6. (Continued)

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T°) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T° (K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T°)%	RD(P)%	RD(D)%
54500.	53984.9	2.5473226+02	2.5473226+02	3.6970615-03	5.0554406-04	-4.72	-23.57	-19.78
54750.	54229.9	2.5438549+02	2.5438549+02	3.5750544-03	4.8952699-04	-4.68	-23.72	-19.94
55000.	54475.9	2.5403871+02	2.5403871+02	3.4568083-03	4.7398329-04	-4.62	-23.87	-20.14
55250.	54720.9	2.5369194+02	2.5369194+02	3.3422947-03	4.5891213-04	-4.56	-24.02	-20.39
55500.	54966.3	2.5334517+02	2.5334517+02	3.2313871-03	4.4429529-04	-4.49	-24.17	-20.60
55750.	55211.8	2.5299839+02	2.5299839+02	3.1239927-03	4.3012237-04	-4.42	-24.32	-20.82
56000.	55457.2	2.5265162+02	2.5265162+02	3.0199671-03	4.1638044-04	-4.33	-24.46	-21.04
56250.	55702.6	2.5230484+02	2.5230484+02	2.9192734-03	4.0305960-04	-4.24	-24.61	-21.27
56500.	55948.0	2.5195807+02	2.5195807+02	2.8217721-03	3.9014018-04	-4.14	-24.75	-21.49
56750.	56193.3	2.5161129+02	2.5161129+02	2.7273846-03	3.7761783-04	-4.04	-24.88	-21.72
57000.	56438.7	2.5126452+02	2.5126452+02	2.6360655-03	3.6548161-04	-3.93	-25.02	-21.96
57250.	56684.0	2.5091774+02	2.5091774+02	2.5476372-03	3.5371733-04	-3.81	-25.16	-22.19
57500.	56929.3	2.5057097+02	2.5057097+02	2.4620843-03	3.4231734-04	-3.69	-25.29	-22.43
57750.	57174.6	2.5022420+02	2.5022420+02	2.3792863-03	3.3127189-04	-3.56	-25.42	-22.66
58000.	57419.9	2.4987742+02	2.4987742+02	2.2991598-03	3.2056808-04	-3.42	-25.54	-22.90
58250.	57665.1	2.4953065+02	2.4953065+02	2.2216272-03	3.1019402-04	-3.29	-25.66	-23.14
58500.	57910.3	2.4918387+02	2.4918387+02	2.1466517-03	3.0014396-04	-3.14	-25.79	-23.38
58750.	58155.6	2.4883710+02	2.4883710+02	2.0740938-03	2.9041600-04	-2.99	-25.90	-23.62
59000.	58400.7	2.4849033+02	2.4849033+02	2.0039630-03	2.8098631-04	-2.84	-26.02	-23.86
59250.	58645.9	2.4814355+02	2.4814355+02	1.9360652-03	2.7185273-04	-2.68	-26.13	-24.10
59500.	58891.1	2.4779678+02	2.4779678+02	1.8704152-03	2.6300263-04	-2.52	-26.24	-24.33
59750.	59136.2	2.4745000+02	2.4745000+02	1.8069577-03	2.5443697-04	-2.35	-26.34	-24.57
60000.	59381.3	2.4710323+02	2.4710323+02	1.7455506-03	2.4613547-04	-2.18	-26.44	-24.80
60250.	59626.4	2.4675645+02	2.4675645+02	1.6861868-03	2.3810005-04	-2.01	-26.54	-25.04
60500.	59871.5	2.4640968+02	2.4640968+02	1.6287708-03	2.3031926-04	-1.83	-26.64	-25.27
60750.	60116.6	2.4606290+02	2.4606290+02	1.5732527-03	2.2278380-04	-1.65	-26.73	-25.50
61000.	60361.6	2.4571613+02	2.4571613+02	1.5196228-03	2.1548581-04	-1.47	-26.82	-25.73
61250.	60606.6	2.4536936+02	2.4536936+02	1.4677143-03	2.0841765-04	-1.28	-26.90	-25.95
61500.	60851.6	2.4502258+02	2.4502258+02	1.4175034-03	2.0157909-04	-1.09	-26.98	-26.18
61750.	61096.6	2.4467581+02	2.4467581+02	1.3690165-03	1.9495368-04	-.90	-27.06	-26.39
62000.	61341.6	2.4432904+02	2.4432904+02	1.3221478-03	1.8854141-04	-.71	-27.13	-26.61
62250.	61586.5	2.4398226+02	2.4398226+02	1.2768030-03	1.8233061-04	-.51	-27.20	-26.82
62500.	61831.4	2.4363549+02	2.4363549+02	1.2329888-03	1.7631936-04	-.31	-27.26	-27.03
62750.	62076.3	2.4328871+02	2.4328871+02	1.1906600-03	1.7049932-04	-.11	-27.32	-27.24
63000.	62321.2	2.4294194+02	2.4294194+02	1.1497116-03	1.6486597-04	.09	-27.38	-27.44
63250.	62566.1	2.4259517+02	2.4259517+02	1.1100936-03	1.5940976-04	.29	-27.43	-27.64

TABLE 6. (Continued)

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T°) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T° (K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T°)%	RD(P)%	RD(D)%
63500.	62810.9	2.4224839+02	2.4224839+02	1.0718512-03	1.5412927-04	.50	-27.47	-27.83
63750.	63055.8	2.4190162+02	2.4190162+02	1.0348797-03	1.4902115-04	.70	-27.52	-28.02
64000.	63300.6	2.4155484+02	2.4155484+02	9.9906682-04	1.4407182-04	.91	-27.55	-28.21
64250.	63545.4	2.4120807+02	2.4120807+02	9.6450328-04	1.3927817-04	1.11	-27.59	-28.38
64500.	63790.1	2.4086129+02	2.4086129+02	9.3106031-04	1.3464737-04	1.32	-27.62	-28.56
64750.	64034.9	2.4051452+02	2.4051452+02	8.9882612-04	1.3015676-04	1.53	-27.64	-28.73
65000.	64279.6	2.4016774+02	2.4016774+02	8.6760521-04	1.2580705-04	1.74	-27.66	-28.89
65250.	64524.3	2.3982097+02	2.3982097+02	8.3736658-04	1.2159967-04	1.95	-27.67	-29.05
65500.	64769.0	2.3947420+02	2.3947420+02	8.0824136-04	1.1753130-04	2.16	-27.68	-29.21
65750.	65013.7	2.3912742+02	2.3912742+02	7.8000307-04	1.1359262-04	2.37	-27.69	-29.36
66000.	65258.4	2.3878065+02	2.3878065+02	7.5278520-04	1.0977697-04	2.58	-27.68	-29.50
66250.	65503.0	2.3843387+02	2.3843387+02	7.2692564-04	1.0608149-04	2.79	-27.68	-29.64
66500.	65747.6	2.3808710+02	2.3808710+02	7.0085287-04	1.0249901-04	2.99	-27.67	-29.77
66750.	65992.2	2.3774033+02	2.3774033+02	6.7630767-04	9.9047184-05	3.20	-27.65	-29.90
67000.	66236.8	2.3739355+02	2.3739355+02	6.5249681-04	9.5687866-05	3.41	-27.63	-30.02
67250.	66481.4	2.3704678+02	2.3704678+02	6.2944412-04	9.2450618-05	3.62	-27.60	-30.13
67500.	66725.9	2.3670000+02	2.3670000+02	6.0719490-04	8.9308739-05	3.83	-27.57	-30.24
67750.	66970.4	2.3635323+02	2.3635323+02	5.8568954-04	8.6269855-05	4.04	-27.53	-30.34
68000.	67214.9	2.3600645+02	2.3600645+02	5.6492328-04	8.3339691-05	4.24	-27.48	-30.44
68250.	67459.4	2.3565968+02	2.3565968+02	5.4476261-04	8.0484867-05	4.45	-27.43	-30.53
68500.	67703.9	2.3531291+02	2.3531291+02	5.2541732-04	7.7739239-05	4.65	-27.38	-30.61
68750.	67948.3	2.3496613+02	2.3496613+02	5.0657656-04	7.5064182-05	4.86	-27.32	-30.69
69000.	68192.8	2.3461936+02	2.3461936+02	4.8845291-04	7.2479725-05	5.06	-27.25	-30.76
69250.	68437.2	2.3427258+02	2.3427258+02	4.7089100-04	6.9980621-05	5.27	-27.18	-30.82
69500.	68681.6	2.3392581+02	2.3392581+02	4.5400143-04	6.7573547-05	5.47	-27.10	-30.88
69750.	68925.9	2.3357904+02	2.3357904+02	4.3755531-04	6.5227985-05	5.68	-27.01	-30.93
70000.	69170.3	2.3323226+02	2.3323226+02	4.2179339-04	6.2973022-05	5.88	-26.92	-30.98
70250.	69414.6	2.3288549+02	2.3288549+02	4.0636062-04	6.0769558-05	6.08	-26.82	-31.02
70500.	69658.9	2.3253871+02	2.3253871+02	3.9167881-04	5.8644322-05	6.28	-26.72	-31.05
70750.	69903.2	2.3219194+02	2.3219194+02	3.7741184-04	5.6611061-05	6.48	-26.61	-31.07
71000.	70147.5	2.3184517+02	2.3184517+02	3.6359310-04	5.4621220-05	6.69	-26.49	-31.10
71250.	70391.8	2.3149839+02	2.3149839+02	3.5029411-04	5.2720547-05	6.89	-26.36	-31.11
71500.	70636.0	2.3115162+02	2.3115162+02	3.3735275-04	5.0862789-05	7.09	-26.23	-31.12
71750.	70880.2	2.3080484+02	2.3080484+02	3.2499790-04	4.9075603-05	7.29	-26.10	-31.12
72000.	71124.4	2.3045807+02	2.3045807+02	3.1304793-04	4.7340393-05	7.49	-25.95	-31.11
72250.	71368.6	2.3011129+02	2.3011129+02	3.0145168-04	4.5662403-05	7.70	-25.80	-31.10

TABLE 6. (Continued)

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T*) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T* (K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T*)%	RD(P)%	RD(D)%
72500.	71612.8	2.2976452+02	2.2976452+02	2.9036522-04	4.4051647-05	7.90	-25.64	-31.09
72750.	71856.9	2.2941774+02	2.2941774+02	2.7958393-04	4.2493820-05	8.11	-25.48	-31.07
73000.	72101.0	2.2907097+02	2.2907097+02	2.6913643-04	4.0983200-05	8.31	-25.31	-31.04
73250.	72345.1	2.2872420+02	2.2872420+02	2.5923252-04	3.9528847-05	8.52	-25.13	-31.01
73500.	72589.2	2.2837742+02	2.2837742+02	2.4958134-04	3.8120746-05	8.73	-24.94	-30.97
73750.	72833.3	2.2803065+02	2.2803065+02	2.4028301-04	3.6758423-05	8.94	-24.75	-30.92
74000.	73077.3	2.2768387+02	2.2768387+02	2.3127556-04	3.5448551-05	9.16	-24.55	-30.88
74250.	73321.4	2.2733710+02	2.2733710+02	2.2264957-04	3.4175396-05	9.38	-24.34	-30.82
74500.	73565.4	2.2699033+02	2.2699033+02	2.1439075-04	3.2966614-05	9.60	-24.12	-30.76
74750.	73809.4	2.2664355+02	2.2664355+02	2.0644665-04	3.1786918-05	9.82	-23.90	-30.70
75000.	74053.3	2.2629678+02	2.2629678+02	1.9875049-04	3.0649185-05	10.05	-23.67	-30.64
75250.	74297.3	2.2595000+02	2.2595000+02	1.9132137-04	2.9570579-05	10.28	-23.43	-30.56
75500.	74541.2	2.2560323+02	2.2560323+02	1.8425941-04	2.8505325-05	10.52	-23.18	-30.49
75750.	74785.1	2.2525645+02	2.2525645+02	1.7738342-04	2.7494430-05	10.76	-22.92	-30.41
76000.	75029.0	2.2490968+02	2.2490968+02	1.7086029-04	2.6510239-05	11.01	-22.66	-30.33
76250.	75272.9	2.2456291+02	2.2456291+02	1.6457081-04	2.5572777-05	11.26	-22.39	-30.24
76500.	75516.8	2.2421613+02	2.2421613+02	1.5850067-04	2.4662018-05	11.52	-22.11	-30.16
76750.	75760.6	2.2386936+02	2.2386936+02	1.5271664-04	2.3796081-05	11.79	-21.82	-30.07
77000.	76004.4	2.2352258+02	2.2352258+02	1.4707565-04	2.2944450-05	12.07	-21.52	-29.98
77250.	76248.2	2.2317581+02	2.2317581+02	1.4173031-04	2.2139549-05	12.36	-21.22	-29.88
77500.	76492.0	2.2282904+02	2.2282904+02	1.3659477-04	2.1361351-05	12.65	-20.90	-29.79
77750.	76735.8	2.2248226+02	2.2248226+02	1.3159752-04	2.0604134-05	12.96	-20.58	-29.69
78000.	76979.5	2.2213549+02	2.2213549+02	1.2694359-04	1.9889831-05	13.27	-20.25	-29.60
78250.	77223.2	2.2178871+02	2.2178871+02	1.2231827-04	1.9189835-05	13.60	-19.91	-29.50
78500.	77466.9	2.2144194+02	2.2144194+02	1.1790276-04	1.8527985-05	13.94	-19.56	-29.40
78750.	77710.6	2.2109517+02	2.2109517+02	1.1370659-04	1.7871857-05	14.30	-19.20	-29.31
79000.	77954.3	2.2074839+02	2.2074839+02	1.0971069-04	1.7252922-05	14.67	-18.83	-29.22
79250.	78198.0	2.2040162+02	2.2040162+02	1.0582924-04	1.6651154-05	15.05	-18.46	-29.12
79500.	78441.6	2.2005484+02	2.2005484+02	1.0191917-04	1.6059875-05	15.45	-18.07	-29.04
79750.	78685.2	2.1970807+02	2.1970807+02	9.8276138-05	1.5499115-05	15.87	-17.68	-28.95
80000.	78928.8	2.1936129+02	2.1936129+02	9.4690323-05	1.4957428-05	16.31	-17.27	-28.87
80250.	79172.4	2.1901452+02	2.1901452+02	9.1319316-05	1.4425278-05	16.77	-16.86	-28.79
80500.	79415.9	2.1866774+02	2.1866774+02	8.7804794-05	1.3903618-05	17.25	-16.43	-28.72
80750.	79659.5	2.1832097+02	2.1832097+02	8.4505081-05	1.3403892-05	17.75	-16.00	-28.66
81000.	79903.0	2.1797420+02	2.1797420+02	8.1262589-05	1.2902260-05	18.28	-15.55	-28.60
81250.	80146.5	2.1762742+02	2.1762742+02	7.8191757-05	1.2429237-05	18.83	-15.10	-28.55

TABLE 6. (Concluded)

GEO-METRIC ALTITUDE	GEO-POTENTIAL ALTITUDE	VIRTUAL TEMPERATURE	KINETIC TEMPERATURE	PRESSURE	DENSITY	REL. DEV. (T*) WITH RESPECT TO ERA-75	REL. DEV. (P) WITH RESPECT TO ERA-75	REL. DEV. (D) WITH RESPECT TO ERA-75
Z(m)	H(m)	T* (K)	T (K)	P (N/cm^2)	D(kg/m^3)	RD(T*)%	RD(P)%	RD(D)%
81500.	80389.9	2.1728065+02	2.1728065+02	7.5025558-05	1.1948586-05	19.41	-14.63	-28.51
81750.	80633.4	2.1693387+02	2.1693387+02	7.1754455-05	1.1873656-05	20.09	-14.16	-28.51
82000.	80876.8	2.1658710+02	2.1658710+02	6.8721771-05	1.1002541-05	19.49	-13.58	-27.92
82250.	81120.3	2.1624033+02	2.1624033+02	6.5450468-05	1.0547638-05	19.70	-13.01	-27.33
82500.	81363.7	2.1589355+02	2.1589355+02	6.2284469-05	1.0078430-05	19.51	-12.44	-26.73
82750.	81607.1	2.1554678+02	2.1554678+02	5.9223175-05	9.6282959-06	19.32	-11.87	-26.14
83000.	81850.4	2.1520000+02	2.1520000+02	5.6037340-05	9.3953013-06	19.13	-11.31	-25.55
83250.	82093.8	2.1520000+02	2.1520000+02	5.3779814-05	9.0295672-06	19.13	-10.74	-25.07
83500.	82337.1	2.1520000+02	2.1520000+02	5.1610504-05	8.6788535-06	19.13	-10.17	-24.59
83750.	82580.4	2.1520000+02	2.1520000+02	5.1523149-05	8.3407759-06	19.13	-9.60	-24.11
84000.	82823.7	2.1520000+02	2.1520000+02	4.9518347-05	8.0164671-06	19.13	-9.02	-23.63
84250.	83067.0	2.1520000+02	2.1520000+02	4.7593415-05	7.7043176-06	19.13	-8.44	-23.14
84500.	83310.2	2.1520000+02	2.1520000+02	4.5739114-05	7.4042082-06	19.13	-7.86	-22.65
84750.	83553.5	2.1520000+02	2.1520000+02	4.3957531-05	7.1161389-06	19.13	-7.27	-22.16
85000.	83796.7	2.1520000+02	2.1520000+02	4.2247176-05	6.8397966-06	19.13	-6.68	-21.67
85250.	84039.9	2.1520000+02	2.1520000+02	4.0605366-05	6.5732598-06	19.13	-6.09	-21.17
85500.	84283.0	2.1520000+02	2.1520000+02	3.9024353-05	6.3171983-06	19.13	-5.49	-20.67
85750.	84526.2	2.1520000+02	2.1520000+02	3.7504733-05	6.0716271-06	19.13	-4.89	-20.16
86000.	84769.3	2.1520000+02	2.1520000+02	3.6045611-05	5.8352351-06	19.13	-4.29	-19.66
86250.	85012.5	2.1520000+02	2.1520000+02	3.4644007-05	5.6080818-06	19.13	-3.68	-19.15
86500.	85255.6	2.1520000+02	2.1520000+02	3.3296346-05	5.3902268-06	19.13	-3.07	-18.64
86750.	85498.6	2.1520000+02	2.1520000+02	3.2000542-05	5.1804185-06	19.13	-2.46	-18.12
87000.	85741.7	2.1520000+02	2.1520000+02	3.0755102-05	4.9785376-06	19.13	-1.84	-17.60
87250.	85984.7	2.1520000+02	2.1520000+02	2.9560626-05	4.7851205-06	19.13	-1.22	-17.08
87500.	86227.8	2.1520000+02	2.1520000+02	2.8409958-05	4.5992136-06	19.13	-.60	-16.56
87750.	86470.8	2.1520000+02	2.1520000+02	2.7306080-05	4.4202208-06	19.13	.03	-16.03
88000.	86713.8	2.1520000+02	2.1520000+02	2.6241243-05	4.2478442-06	19.13	.66	-15.50
88250.	86956.7	2.1520000+02	2.1520000+02	2.5220215-05	4.0826201-06	19.13	1.30	-14.97
88500.	87199.7	2.1520000+02	2.1520000+02	2.4238825-05	3.9237738-06	19.13	1.94	-14.43
88750.	87442.6	2.1520000+02	2.1520000+02	2.3293495-05	3.7709474-06	19.13	2.58	-13.89
89000.	87685.5	2.1520000+02	2.1520000+02	2.2386909-05	3.6240816-06	19.13	3.22	-13.35
89250.	87928.4	2.1520000+02	2.1520000+02	2.1516085-05	3.4833550-06	19.13	3.87	-12.80
89500.	88171.3	2.1520000+02	2.1520000+02	2.0677447-05	3.3475757-06	19.13	4.53	-12.25
89750.	88414.1	2.1520000+02	2.1520000+02	1.9875169-05	3.2175183-06	19.13	5.19	-11.70
90000.	88657.0	2.1520000+02	2.1520000+02	1.9102097-05	3.0927062-06	******	5.84	-11.15

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APPROVAL

HOT, COLD, AND ANNUAL REFERENCE ATMOSPHERES FOR EDWARDS AIR FORCE BASE, CALIFORNIA (1975 VERSION)

By D. L. Johnson

The information in this report has been reviewed for security classification. Review of any information concerning Department of Defense or Atomic Energy Commission programs has been made by the MSFC Security Classification Officer. This report, in its entirety, has been determined to be unclassified.

This document has also been reviewed and approved for technical accuracy.

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