

IX.3.0B-SYSTEM-UDUCNV SUBROUTINE UDUCNV

Description

Subroutine UDUCNV converts data values from one data unit to another.

See Chapter I.4-DATAUNIT [[Hyperlink](#)] for a list of the valid data unit codes.

Calling Sequence

CALL UDUCNV (UNTIN,UNTOUT,ICONV,NVAL,VAL1,VAL2,ISTAT)

Argument List

<u>Argument</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
UNTIN	Input	A4	1	Input units code
UNTOUT	Input	A4	1	Output units code
ICONV	Input	I*4	1	Conversion indicator: 1 = convert data 2 = return conversion factors
NVAL	Input	I*4	1	Number of data values to be converted
VAL1	Output	R*4	NVAL	If ICONV=1 data values to be converted If ICONV=2 conversion factor <u>1</u> /
VAL2	Output	R*4	NVAL	If ICONV=1 converted data values If ICONV=2 second conversion factor for temperature data <u>1</u> /
ISTAT	Output	I*4	1	Status code: 0 = no errors 1 = invalid input units 2 = incompatible input and output units 3 = invalid value of ICONV 4 = error reading data units file 5 = conversion factor is zero for input units 6 = number of values to be converted is less than zero

Notes:

1/ If ICONV is set to 2 the factors needed to convert the data from the input units to the output units are returned. Data values can be converted by using the following equation:

$$\text{NEWVAL}=\text{OLDVAL}*\text{VAL1}+\text{VAL2}$$

VAL2 is zero unless temperature data is being converted.