

#462

MODELING PROGRAMS

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1. INTRODUCTION:

The documentation for this data set was originally on paper, kept in NSSDC's Data Set Catalogs (DSCs). The paper documentation in the Data Set Catalogs have been made into digital images, and then collected into a single PDF file for each Data Set Catalog. The inventory information in these DSCs is current as of July 1, 2004. This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system. The information existing in the DSCs is now not needed for locating the data files, but we did not remove that inventory information.

The offline tape datasets have now been migrated from the original magnetic tape to Archival Information Packages (AIP's).

A prior restoration may have been done on data sets, if a requestor of this data set has questions; they should send an inquiry to the request office to see if additional information exists.

2. ERRATA/CHANGE LOG:

NOTE: Changes are made in a text box, and will show up that way when displayed on screen with a PDF reader.

When printing, special settings may be required to make the text box appear on the printed output.

Version	Date	Person	Page	Description of Change
01				
02				

3 LINKS TO RELEVANT INFORMATION IN THE ONLINE NSSDC
INFORMATION SYSTEM:

<http://nssdc.gsfc.nasa.gov/nmc/>

[NOTE: This link will take you to the main page of the NSSDC Master Catalog. There you will be able to perform searches to find additional information]

4. CATALOG MATERIALS:

- a. Associated Documents To find associated documents you will need to know the document ID number and then click here.
<http://nssdcftp.gsfc.nasa.gov/miscellaneous/documents/>

- b. Core Catalog Materials

MODELING PROGRAMS

This data set catalog consists of one 9-track, 1600 BPI, ASCII magnetic tape created on the MODCOMP IV computer. The tape contains 17 files of various modeling programs as listed below.

D#
D-23642

C#
C-17667

<u>FILE</u>	<u>PROGRAM NAME</u>	<u>NSDF ID</u>
1	Program Model (MODEL)	PT-11A
2	Program Orp (ORP)	PT-12A
3	UNIFLUX	PT-13A
4 - 16	SOFIP DISTRIBUTION	PT-15A
17	SHIELDOSE PACKAGE	PT-16A

DOCUMENTATION

<u>FILE</u>	<u>PROGRAM NAME</u>	<u>DOCUMENT LOCATION</u>
1	PROGRAM MODEL	PT BOOKLET LOCATED IN ROOM 121B
2	PROGRAM ORP	"
3	UNIFLUX	
4 - 16	SOFIP DISTRIBUTION	PT BOOKLET LOCATED IN ROOM 121B
17	SHIELDOSE PACKAGE	"

10558
7901

File 1 - MODEL
PT-11A

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1 C***** MODEL 00000010
2 CC 00000020
3 CC 00000030
4 C*****00000040
5 C PROGRAM MODEL VERSION 4 SEPTEMBER 1983 *00000050
6 C PROGRAM MODEL USES SOME OF 10 BLOCK DATA SUB-PROGRAMS. *00000060
7 C 2 AE4 OUTER ZONE ELECTRON MODELS (L.GT.2.8) AT EPOCHS 1964 *00000070
8 C (SOL MIN) AND 1967 (SOL MAX), 2 INNER ZONE ELECTRON MODELS (L.LE. *00000080
9 C 2.8) AE5 EPOCH 1975 (SOL MIN) AND AE6 FOR 1980 (SOL MAX) AND *00000090
10 C 2 AP8 PROTON MODELS AT EPOCHS 1964 AND 1970. EACH BLOCK DATA *00000100
11 C PROVIDES FLUX TO 1 PARTICLE/SQ.CM.SEC. FOR DOCUMENTATION SEE *00000110
12 C NSSDC 72-10 AND 73-06 FOR AE4, NSSDC 72-10, 72-11 AND 74-03 FOR *00000120
13 C AE5 AND NSSDC 76-06 FOR AP8 AND NSSDC 84-** FOR AE8MAX AND AE8MIN *00000130
14 C FOR EPOCHS 1990 AND 1986. C.-K. CHEN. NATIONAL SPACE *00000140
15 C SCIENCE DATA CENTER, CODE 601 GSFC, GREENBELT MARYLAND 20771.. TEL *00000150
16 C 301-344-8105 OR 8310. *00000160
17 C*****00000170
18 DIMENSION XL(100), EE(10), AM(8), BINT(25) 00000180
19 COMMON/DIF/E(10), FLUX(10), DLUX(50,8), BNUM(50) 00000190
20 DATA B2/3./ 00000200
21 DATA ANAM/2HT0/ 00000210
22 DATA BINT/.005,.0080,.017,.03,.04,.06,0.10,.11,.15,.20,.23,.33,.47 00000220
23 X,.60,.58,.59,.596,.599,.6,.601,.602,.603,.6035,.604,.604/ 00000230
24 CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC 00000240
25 C CARD 1 - C 00000250
26 C NE IS NUMBER OF ENERGIES. MAX NE=9 FOR IPUN=0 AND 5 FOR C 00000260
27 C IPUN=1. IF NE=0 PROGRAM TERMINATES. C 00000270
28 C NL IS NUMBER OF L VALUES. MAX NL=100. C 00000280
29 C MTYPE IS PARTICLE TYPE. 1 FOR SOLAR MAX PROTONS, 2 FOR SOLAR C 00000290
30 C MIN PROTONS, 3 FOR SOLAR MAX AND 4 FOR SOLAR MIN ELECTRONS ( C 00000300
31 C WITH AE-4 MODELS), 00000310
32 C 5 FOR AE7-HIGH AND 6 FOR AE7-LOW OUTER ZONE MODELS. C 00000320
33 C 7 AND 8 FOR AE8MIN AND AE8MAX RESPECTIVELY FOR INNER AND C 00000330
34 C OUTER ZONES C 00000340
35 C IDIFF=0 FOR INTEGRAL SPECTRUM 1 FOR DIFF 2 FOR BOTH. C 00000350
36 C IDEF=0 FOR DEFAULT B RANGE 1 FOR USER INPUT C 00000360
37 C IPUN=0 FOR NO CARD OUTPUT 1 FOR CARD OUTPUT. C 00000370
38 C CARD 2 - ENERGY ARRAY IN ANY ORDER. C 00000380
39 C CARD 3 - L VALUE ARRAY IN ANY ORDER. C 00000390
40 C CARDS 4 TO 4 PLUS NL - C 00000400
41 C B01 IS LOWEST B/B0 VALUE. C 00000410
42 C B02 IS HIGHEST B/B0 VALUE OR B/B0 INCREMENT. C 00000420
43 C NDELB IS NUMBER OF B/B0 INCREMENTS WITH DEFAULT OF 20 IF C 00000430
44 C NDELB=0. IF NDELB=1 B02 IS B/B0 INCREMENT C 00000440
45 CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC 00000450
46 C 00000460
47 C 00000470
48 C 10 WRITE(1,51) 00000480
49 51 FORMAT(' INPUT NE,NL,MTYPE,IDIFF,IDEFF,IPUN') 00000490
50 10 READ(5,900,END=290)NE,NL,MTYPE,IDIFF,IDEFF,IPUN 00000500
51 IF (NE.EQ.0) GO TO 290 00000510
52 IF (NE.GT.9) NE=9 00000520
53 C 00000530
54 C 00000540
55 C WRITE(1,52) 00000550
56 52 FORMAT(' INPUT (E(I),I=1,NE)') 00000560
57 READ(5,910)(E(I),I=1,NE) 00000570
58 C 00000580
```