Technical Note 997-103_TN006_090130

OmniPro-Accept

Module: File import/export

OmniPro-Accept ASCII Format

Description

This document describes the ASCII file format for files generated with the OmniPro-Accept software.
Following typographic conventions are used in the syntax column of tables below:

- `·` Space character (ASCII character # 32)
- `[tab]` ASCII character # 9
- *`NbrOfCurves`* Name of variable length character string

Each line will start with a character coding the type of information in that line:

- ':' Information on number of measurements dumped; separators between individual measurements.
- '#' Comments line. This sign could also appear anywhere inside another line and marks the rest of the line as comments.
- '%' Label information line. The sign is immediately followed by a three letter code (for type of information) and then, depending on this code, the information in question. (The coding is specific for each kind of information.)
- '!' Operator comments.
- '=' A measurement point.

Every line of the output is terminated with `[CR][LF]`.
The output is divided into blocks. First is the header block: (Space character is denoted by an `'·'` character)

Line	Syntax	Comment
i	`:MSR·[tab]`*`NbrOfCurves`*`[tab]·#·No.·of·measurement·in·file`	*`NbrOfCurves`* determines the number of curves in the file and thus how many data blocks there will be in the dump.
ii	`:SYS·BDS·0·#·Beam·Data·Scanner·System`	-

Then there is one block of curve data for each curve.

Line	Syntax	Comment
1	`#`	
2	`#·RFA300·ASCII·Measurement·Dump·(·BDS·format·)`	
3	`#`	
4	`#·Measurement·number·[tab]`*`Nbr`*	*`Nbr`* = order number of the curve
5	`#`	
6	`%VNR·1.0`	Indicates the format version of ASCII dumps.

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7	%MOD·[tab]*Mode*	*Mode* = identifies how the curve was measured. Possible values are: 'FLM·' (Film) 'RAT·' (Ratio (RelativeDose)) 'ABS·' (AbsoluteDose) 'INT·' (Integrated) 'UDF·' (Undefined/Isodose) ''
8	%TYP·[tab]*Type*	*Type* = identifies type of curve. Possible values are: 'SCN·' (Scan) 'ISO·' (Isodose) 'UDF·' (Undefined)
9	%SCN·[tab]*ScanType*	*ScanType* = identifies type of scan. Possible values are: 'DPT·' (DepthDose) 'PRO·' (Profile) 'MTX·' (Matrix) 'DIA·' (Diagonal) 'UDF·' (Undefined/Isodose)
10	%FLD·[tab]*DetectorType*	Possible values of *DetectorType* are: 'ION·' (IonChamber) 'SEM·' (Semiconductor) 'UDF·' (Undefined)
11	%DAT·[tab]*DateOfCreation*	*DateOfCreation* = 'MM-DD-YYYY'
12	%TIM·[tab]*TimeOfCreation*	*TimeOfCreation* = 'HH:MM:SS'
13	%FSZ·[tab]*FieldWidth*[tab]*FieldHeigh t*	*FieldWidth* and *FieldHeight* in mm
14	%BMT·[tab]*RadType*[tab]*Energy*	Possible values of *RadType* are: 'COB·' (Cobalt) 'PHO·' (Photons) 'ELE·' (Electrons) 'UDF·' (Undefined) *Energy* is a right-justified, seven-character string with energy value in MV or MeV always with one decimal. Example: '···26.5'
15	%SSD·[tab]*SSD*	*SSD* in mm
16	%BUP·[tab]*BuildUp*	*BuildUp* in 0.1 mm
17	%BRD·[tab]*BeamReferenceDist*	*BeamReferenceDist* in mm
18	%FSH·[tab]*Shape*	*Shape* = the field shape. Possible values are: '-1' (Undefined) '0' (Circular) '1' (Rectangular) '2' (Irregular)
19	%ASC·[tab]*AccessoryNbr*	*Accessory number*
20	%WEG·[tab]*WedgeNbr*	*Wedge number (angle)*
21	%GPO·[tab]*GantryAngle*	*GantryAngle* in degrees
22	%CPO·[tab]*CollimatorAngle*	*CollimatorAngle* in degrees

23	%MEA·[tab]*MeasurementType*	Possible values of *MeasurementType* are: '-1' (Undefined) '0' (Absolute dose) '1' (Open depth) '2' (Open profile) '4' (Wedge) '5' (Wedge depth) '6' (Wedge profile)
24	%PRD·[tab]*ProfileDepth*	*ProfileDepth* in 0.1 mm
25	%PTS·[tab]*NbrOfPoints*	*NbrOfPoints* = number of curve data points
26	%STS·[tab]*StartX*[tab]*StartY*[tab]*StartZ*·#·Start·Scan·values·in·mm·(·X·,·Y·,·Z·)	*StartX*, *StartY* and *StartZ* are right-justified, seven-character strings with start values for each axis in origin-relative coordinates, in mm and always with one decimal. Example: '··-100.0'.
27	%EDS·[tab]*EndX*[tab]*EndY*[tab]*EndZ*·#·End·Scan·values·in·mm·(·X·,·Y·,·Z·)	*EndX*, *EndY* and *EndZ* are right-justified, seven-character strings with end values for each axis in origin-relative coordinates, in mm and always with one decimal. Example: '··100.0'.
28	!·*CommentsLine1*	Operator comments, sixty characters long.
29	!·*CommentsLine2*	Operator comments, sixty characters long.
30	#	
31	#[tab]··X·····Y·····Z·····Dose	
32	#	
33 : :	=·[tab]*XPos*[tab]*YPos*[tab]*ZPos*[tab]*Dose*	*XPos*, *YPos* and *ZPos* are right-justified, seven-character strings with origin-relative coordinates of the data point, in mm and always with one decimal. Example: '···10.0'. *Dose* is also a right-justified, seven-character string but with the normalized dose value of the data point, in percent and always with one decimal. This field is repeated for every curve data point.
-	:EOM··#·End·of·Measurement	-

The last block indicates the end of file.

Line	Syntax	Comment
-	:EOF·#·End·of·File	Indicates the end of file.

Example

This is an example of a depth dose measurement, made with an ion chamber, in a 100x100 mm 6 MV photon field. SSD is 1000 mm. The ASCII output was made using version 4.3 of the RFA-300 software.

```
:MSR·[tab]1[tab]·#·No.·of·measurement·in·file
:SYS·BDS·0·#·Beam·Data·Scanner·system
#
#·RFA300·ASCII Measurement·Dump·(·BDS·format·)
#
#·Measurement·number·[tab]1
#
%VNR·1.0
%MOD·[tab]RAT
%TYP·[tab]SCN
%SCN·[tab]DPT
%FLD·[tab]ION
```

```
%DAT·[tab]02-03-1988
%TIM·[tab]14:15:25
%FSZ·[tab]100[tab]100
%BMT·[tab]PHO·[tab]····6.0
%SSD·[tab]1000
%BUP·[tab]13
%BRD·[tab]0
%FSH·[tab]1
%ASC·[tab]0
%WEG·[tab]0
%GPO·[tab]0
%CPO·[tab]0
%MEA·[tab]1
%PRD·[tab]0
%PTS·[tab]25
%STS·[tab]····0.0[tab]····0.0[tab]····0.0[tab]·#·Start·Scan·values·in·mm·(·X·,·Y·,·Z·)
%EDS·[tab]····0.0[tab]····0.0[tab]··300.0[tab]·#·End·Scan·values·in·mm·(·X·,·Y·,·Z·)
!·PDD·data·from·Med.·Phys.·7,·720·(1980)·····················
!·····························································
#
#[tab]··X·····Y·····Z·····Dose
#
=·[tab]····0.0[tab]····0.0[tab]···10.0[tab]···99.7
=·[tab]····0.0[tab]····0.0[tab]···20.0[tab]··100.0
= [tab]····0.0[tab]····0.0[tab]···30.0[tab]···96.1
= [tab]····0.0[tab]····0.0[tab]···40.0[tab]···91.8
= [tab]····0.0[tab]····0.0[tab]···50.0[tab]···88.1
= [tab]····0.0[tab]····0.0[tab]···60.0[tab]···83.9
= [tab]····0.0[tab]····0.0[tab]···70.0[tab]···79.8
= [tab]····0.0[tab]····0.0[tab]···80.0[tab]···75.7
= [tab]····0.0[tab]····0.0[tab]···90.0[tab]···71.7
= [tab]····0.0[tab]····0.0[tab]··100.0[tab]···67.8
= [tab]····0.0[tab]····0.0[tab]··110.0[tab]···64.4
= [tab]····0.0[tab]····0.0[tab]··120.0[tab]···60.5
= [tab]····0.0[tab]····0.0[tab]··130.0[tab]···57.5
= [tab]····0.0[tab]····0.0[tab]··140.0[tab]···54.2
= [tab]····0.0[tab]····0.0[tab]··150.0[tab]···51.0
= [tab]····0.0[tab]····0.0[tab]··160.0[tab]···48.1
= [tab]····0.0[tab]····0.0[tab]··170.0[tab]···45.2
= [tab]····0.0[tab]····0.0[tab]··180.0[tab]···42.5
= [tab]····0.0[tab]····0.0[tab]··190.0[tab]···40.5
= [tab]····0.0[tab]····0.0[tab]··200.0[tab]···38.3
= [tab]····0.0[tab]····0.0[tab]··220.0[tab]···34.2
= [tab]····0.0[tab]····0.0[tab]··240.0[tab]···30.5
= [tab]····0.0[tab]····0.0[tab]··260.0[tab]···26.8
= [tab]····0.0[tab]····0.0[tab]··280.0[tab]···24.1
= [tab]····0.0[tab]····0.0[tab]··300.0[tab]···21.4
:EOM··#·End·of·Measurement
:EOF·#·End·of·File
```

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