VI.5.4-XSETS-CONFIG   XSETS CONFIGURATION FILE FORMAT

The configuration file consists of two main sections:

    o the product header information
    o the Forecast Group specifications

A Forecast Group specification consists of:

    o a group header line
    o a sets grouping line
    o one or more individual Segment lines

Syntax Rules

The specifications are field oriented and positionally dependent. A
definition or null field must be in place.

General syntax rules:
    o blank lines are ignored
    o comment field is indicated by the # pound sign - any # found in
      a line stops field parsing from that point to the end of the
      line
    o field delimiter is the space, embedded spaces are enclosed in
      pairs of double (") or single (') quotes
    o continuations indicated by '\' as last character on line
    o other files can be included through the use of an '@INCLUDE
      file_name' statement where 'file_name' is the name of the file
      to be read - the file must be in the directory referenced by
      the token xsets_param_dir

Input Data

In the following input description, [] indicates an optional field
and {} indicates the default value.

The following input is used to define parameters for messages:

    <u>Record</u> <u>Field</u>   <u>Variable</u>   <u>Description</u>

    Header Section:

      1   1   1   '1' - indicator of Product
                                         Header information used in
                                         every forecast

              2   num_header_lines   Number of lines in header

    Forecast Group Section:

      2   1 $ '$' - indicator of Forecast
                                         Group information section

Record	Field	Variable	Description
	2	fgroup	Title used in Forecast Group list box and in naming output files. Embedded blanks are replaced with underscores in naming the product file.
	3	afos_dest	AFOS circuit address
	4	dflt_time_step	Default time step for forecasts (can be overridden in individual Segment specification line
	5	auto_flood_check_plus	Highlight routine forecast points plus any points in flood according to field 12 of the Segment specifications. 1 = highlight 0 or null = no highlight
	6	[output_style]	Override default specified by token xsets_output_style: E = expanded C = compressed
	7	[comment]	Optional comment field that will always be entered in the 'COMMENT' section at the bottom of the generated file. A '\n' anywhere in this field will be interpreted as a new-line. This can be used to force a new line into this section. Otherwise, this statement will be word-wrapped at 68 columns.
	8	[comment_location]	{null} = end of product and after the 'COMMENT' line non-null = immediately after preamble
	9	[preamble_override]	Override system default setting 'FORECAST GROUP IS' or global override specified by the token xsets_fgroup_preamble

XSETS Group Section:

Record	Field	Variable	Description
3	1	!	'!' - indicator of a XSETS group section

Record	Field	Variable	Description
	2	xsets_id	Name used in the listing of all Segments in a Forecast Group (identifier displayed in list box)
	3	[description]	Override description stored in the loc table and placed at the head of the product passage: null = use the Informix loc table description
	4	[river_name]	' – River_name' appended to the description unless value is null
	5	[separator_type]	{0} => no separator 1 => : (colon) only 2 => : (colon) followed line of '*'s 3 => : (colon) followed by user specified separator – the next line (record 4) contains the separator

Record 4 is used only when field 5 on record 3 is 3.

Record	Field	Variable	Description
4	1		Separator character

Segment Section:

Record	Field	Variable	Description
5	1	ofs_id	OFS time series identifier
	2	output_type	Output type: R = routine point highlighted when the Forecast Group is selected C[:n] = crest only the optional ':n' where 'n' is an integer is used for crest-crest relationships indicating the number of hours to subtract (':-n') or add (':n') to the time at which the crest is computed to occur, 0<n<time

Record	Field	Variable	Description

<div style="margin-left: auto">

interval
null = not highlighted
upon fgroup
selection
Output for R and null will be
time series format.

</div>

	3	ts_type[:ts_deltat]	OFS time series type to extract (required): :ts_deltat = optional time series time interval (default is 6 hours)
	4	useqpf	'Y' = use of QPF in forecast ('ts' in pedtsep set to FF) null = no QPF ('ts' set to FZ)
	5	idb_id[:idb_out[:num_vals[:deltat-t[:E|:M|:O]]]]	Identifier used to get data from Informix database: [:idb_out] = optional id to use in the product instead of idb_id [:num_vals] = number of values to output - default is 1 [:deltat-t] = time interval of extracted and displayed values - {0} = most recent value [:E|:M|:O] {E} = estimate observed from OFS time series - 'E' is appended to the value M = do not use estimated observed if observations can not be found - 'M' is displayed O = do not extract observations from Informix - use OFS time series values - append 'E' to indicated estimated observation
	6	rating_id	OFS Rating Curve identifier (can be different than ofs_id in field 1) - required only if translation between flows and stages must be made

Record	Field	Variable	Description
	7	pedtsep	SHEF code of data to query Informix and use for forecast values: pe = physical element code of output d = duration ts = type and source e = extremum (not used) P = probability (not used – always Z)
	8	output_interval	Time interval (hours) of output data. Default is OFS time series time interval. Maximum value is 99. Can be other than the OFS time series time interval. If different but less than 24 hours, value must be even multiple of time interval. If equal or greater than 24 hours, it must be an even multiple of 24 hours.
	9	[D:|V:]num_to_fcst	Number of values desired in output time series: {D:}n = n is the number of days to output – actual output is number of days times the number of values per day V:n = n is the number of values to output
	10	afos_id	NNNXXX where NNN is the product category and XXX is 1 to 3 characters.
	11	[crest_chk]	Crest specification used to determine if crest info is added. Crest spec of form XX:nn where XX and nn are: FQ = flood flow CQ = cautionary or warning flow FS = feet below flood stage CS = feet below cautionary or warning stage Q = specific flow ST = specific stage nn = percentage of flow (FQ, CQ) or feet below stage (FS, CS), just

Record	Field	Variable	Description
			flow (FQ) or just feet (ST)
			null = no crest info generated
			Examples are FQ:80, FS:2.3, CQ:90, CS:0.0, ST:10.3 and Q:15000.
	12	[flood_chk]	Flood specification used to determine if point is in flood and will be highlighted when a 'Flood Check' is performed. Format is same as for the crest check specifications listed above.
	13	[comment]	Comment that will appear on same line as the sets grouping description. An example might be 'USE FCST WITH CAUTION...NO OBSERVED DATA'
	14	[x[:y]]	Output precision - override value specified by the tokens xsets_Q_precision or xsets_H_precision depending on type of data specified in field 7:
			null = use default values
			x = decimal precision for forecasts and latest observation if y not given (0, {1} or 2)
			y = decimal precision for latest observation (0, {1} or 2)
	15	[db[:n]]	Database table name {latestobsvalue} and n = 0 no ingest filter check n = {1} ingest filter check
	16	[db_ped]	Database SHEF physical element (ped) of data desired from table specified in field 15 {ped in field 7}

Repeat records 3, 4 and 5 for other Segments.

Repeat records 2, 3, 4 and 5 for other Forecast Groups.

<u>Example</u>

```
1 3
RIVER STAGE FORECAST
NATIONAL WEATHER SERVICE
MIDDLE ATLANTIC RIVER FORECAST CENTER, STATE COLLEGE, PA

#   Forecast Group Definition:
$ " Exp. Rappahannock River" DEF 6 0 "" "" "" ""

!  Remington  Remington "Rappahannock River" 3
----------------------------------------------------------------------
REMV2RAP R SSTG Y RENV2 REMV2RAP HGZZZZZ 24 D:1 WRKMCM FS:3.0 FS:3.0 ""

!  Culpeper Culpeper "Rapidan River" 3
----------------------------------------------------------------------
CULV2RPN R SSTG Y RANV2 RANV2RPN HGZZZZZ 24 D:1 WRKMCM CS:1 CS:1 "" ""

!  Fredericksburg  Fredericksburg "Rappahannock River" 3
----------------------------------------------------------------------
FREV2RAP C SSTG Y FEDV2 FREV2RAP HGZZZZZ 24 D:1 WRKMCM FS:6.0 FS:6.0 \
 "City Dock Staff Gage"  "" ""
```

Alternate input structure using an INCLUDE file:

```
1 3
RIVER STAGE FORECAST
NATIONAL WEATHER SERVICE
MIDDLE ATLANTIC RIVER FORECAST CENTER, STATE COLLEGE, PA

#   Forecast Group Definition:

$ " Exp. Rappahannock River" DEF 6 0 ""
@INCLUDE RAP
```

where filename RAP contains:

```
!  Remington  Remington "Rappahannock River" 3
----------------------------------------------------------------------
REMV2RAP R SSTG Y RENV2 REMV2RAP HGZZZZZ 24 D:1 WRKMCM FS:3.0 FS:3.0 ""

!  Culpeper  Culpeper "Rapidan River" 3
----------------------------------------------------------------------
CULV2RPN R SSTG Y RANV2 RANV2RPN HGZZZZZ 24 D:1 WRKMCM CS:1 CS:1 "" ""

!  Fredericksburg  Fredericksburg "Rappahannock River" 3
----------------------------------------------------------------------
FREV2RAP C SSTG Y FEDV2 FREV2RAP HGZZZZZ 24 D:1 WRKMCM FS:6.0 FS:6.0 \
 "City Dock Staff Gage"  "" ""
```