

VI.5.4-XSETS-EXAMPLES XSETS EXAMPLES

Example 1 - Flood Forecast

Apps_Defaults Tokens

```
xsets_add_remarks      : YES    # Add remarks after each group
xsets_afos_node        : PIT     # 3-character AFOS node identifier
xsets_brackets         : YES     # Put brackets around numbers
xsets_expanded_dates   : YES     # Dates (MMDD) inserted before daily
                           # values
xsets_print_crests     : COMMENT  # Print crest comment
xsets_print_fs         : YES     # Print flood stage as comment
xsets_print_fs_cross   : COMMENT  # Time level passes flood stage
xsets_print_ls         : COMMENT  # Print latest stage, don't
                           # encode
xsets_print_ws         : YES     # Print warning stage
xsets_output_style     : E       # Expanded output style
xsets_ws_label         : 'CAUTION' # String used to describe
                           # warning stage
```

Input (config file)

```
1 3
RIVER STAGE FORECAST
NATIONAL WEATHER SERVICE
MIDDLE ATLANTIC RIVER FORECAST CENTER, STATE COLLEGE, PA
$ "Exp. Rappahannock River" DEF 6 0 "@INC ReservoirStatement"
! "Remington" "Remington" "Rappahannock River" 3
-----
REMV2RAP "R" SSTG Y RENV2 REMV2RAP HGZZZZ 24 D:1 RVFPOT FS:3.0 FS:3.0
! "Culpeper" "Culpeper" "Rapidan River" 3
-----
CULV2RPN "R" SSTG Y CLPV2 CULV2RPN HGZZZZ 24 D:1 RVFPOT CS:1. CS:1.

File: ReservoirStatement
THESE FORECASTS ASSUME A CONTINUATION OF PRESENT RESERVOIR RELEASES.
```

Output

```
ZCZC PITRVFPOT DEF
FGUS51 KRHA ddhmm
RVFPOT
RIVER STAGE FORECAST
NATIONAL WEATHER SERVICE
MIDDLE ATLANTIC RIVER FORECAST CENTER, STATE COLLEGE, PA
944 AM EDT THU SEP 30 1999
:
:   River Forecast for Exp. Rappahannock River
:
:
:-----
:Remington - Rappahannock River
:FLOOD STAGE 15.0
:
:LATEST STAGE [13.9] FT AT [0800] EDT ON [0930]
.A : CREST : RENV2 [0930] E DC9909300944/DH[20]/HGIFFX [16.0]
.A : REACH FS : RENV2 [0930] E DC9909300944/DH[12]/HGIFF 15.0
.E RENV2 [1001] E DC9909300944/DH[08]/HGIFF/DID1
:Fcst at 8AM on [1001]
.E1      /[      10.0]
```

```

:Remarks [ABOVE FS MIDDAY...CREST 15.5 - 16.5 FT AFTN
:-----
:Culpeper - Rapidan River
:FLOOD STAGE 14.0    CAUTION STAGE 13.0
:
:LATEST STAGE [11.8] FT AT [0815] EDT ON [0930]
.A : CREST : CLPV2 [0930] E DC9909300944/DH[18]/HGIFFX [16.5]
.A : REACH FS : CLPV2 [0930] E DC9909300944/DH[11]/HGIFFX 14.0
.E CLPV2 [1001] E DC9909300944/DH[08]/HGIFFX/DID1
:Fcst at 8AM on [1001]
.E1      /[      9.5]
:Remarks [ABOVE CS SOON...ABOVE FS BY MIDDAY
:Remarks [CREST 16 - 17 FT LATE AFTERNOON
:*****
COMMENT

```

REMINGTON AND CULPEPER ARE EXPECTED TO RISE ABOVE THERE RESPECTIVE FLOOD STAGES BY MIDDAY AND CREST 1-3 FEET ABOVE FLOOD STAGE.

THESE FORECASTS ASSUME A CONTINUATION OF PRESENT RESERVOIR RELEASES. TWENTY-FOUR HOUR QPF ENDING AT 8 AM FRIDAY MORNING IS ZERO.

TWENTY-FOUR HOUR OBSERVED RAINFALL ENDING AT 7 AM THIS MORNING GENERALLY RANGED BETWEEN TWO AND FOUR INCHES WITH SOME SCATTERED HEAVIER AMOUNTS TO NEAR FIVE INCHES SEEN IN THE HEADWATERS.

RUNOFF FROM THIS PRECIPITATION HAS CAUSED SHARP RISES EARLY THIS MORNING ON THE RAPPAHANNOCK AND RAPIDAN RIVERS. ADDITIONAL RISES OF ONE TO FIVE FEET ARE EXPECTED DURING THE NEXT 12 TO 24 HOURS.

[MARFC]

Example 2 - Combination stage and flow forecast

Apps_Defaults Tokens

Same as Example 1.

Input (config file)

```

1 3
RIVER STAGE FORECAST
NATIONAL WEATHER SERVICE
MIDDLE ATLANTIC RIVER FORECAST CENTER, STATE COLLEGE, PA
$ " LOWER SUSQUEHANNA" DEF 6 0
! Renovo "Renovo" "West Branch Susquehanna River" 3
-----
ROVPlWBS "R" SSTG Y ROVPl ROVPlWBS HGZZZZ 24 D:1 RVFSUQ FS:4.0 FS:4.0
! Harrisburg "Harrisburg" "Susquehanna River" 3
-----
HRBPlSUQ "R" SSTG Y HARP1 HRBPlSUQ HGZZZZ 24 D:2 RVFSUQ CS:1.0 CS:1.0
HRBPlSUQ "R" SQME:24 Y HARP1 HRBPlSUQ QRDZZZ 24 D:3 RVFSUQ " " "

```

Output

```

ZCZC PITRVFSUQ DEF
FGUS51 KRHA ddhmm
RVFSUQ
RIVER STAGE FORECAST
NATIONAL WEATHER SERVICE
MIDDLE ATLANTIC RIVER FORECAST CENTER, STATE COLLEGE, PA
858 AM EDT WED SEP 29 1999
:
:   River Forecast for LOWER SUSQUEHANNA
:

```

```

:
:-----
:Renovo - West Branch Susquehanna River
:FLOOD STAGE 16.0
:
:LATEST STAGE [-0.3] FT AT [0700] EDT ON [0929]
.E ROVP1 [0930] E DC9909290858/DH[08]/HGIFFF/DID1
:Fcst at 8AM on [0930]
.E1      /[\      -0.2]
:Remarks [
:-----
:Harrisburg - Susquehanna River
:FLOOD STAGE 17.0      CAUTION STAGE 11.0
:
:LATEST STAGE [3.9] FT AT [0633] EDT ON [0929]
.E HARP1 [0930] E DC9909290858/DH[08]/HGIFFF/DID1
:Fcst at 8AM on [0930]      [1001]
.E1      /[\      3.9]/[\      4.3]
:Remarks [
.E HARP1 [0930] E DC9909290858/DH[08]/QRDFFF/DID1
:Fcst at 8AM on [0930]      [1001]      [1002]
.E1      /[\      13.3]/[\      15.7]/[\      19.9]
:Remarks [
:*****
COMMENT

```

THESE FORECASTS ASSUME A CONTINUATION OF PRESENT RESERVOIR RELEASES.

QPF FOR THE NEXT 24 HOURS IS AROUND AN INCH AND A HALF. RISES OF A FEW FEET CAN BE EXPECTED ACROSS THE BASIN OVER THE NEXT 24 HOURS.

[MARFC]

Example 3a - Daily routine forecast with nothing going on

Apps_Defaults Tokens

```

xsets_add_remarks      : NO      # Add remarks after each group
xsets_afos_node        : MKC      # 3-character AFOS node identifier
xsets_brackets         : NO      # Put brackets around numbers
xsets_expanded_dates   : YES      # Dates (MMDD) inserted before
                               # daily values
xsets_print_crests     : NO      # Print crest remark
xsets_print_fs         : YES      # Print flood stage as comment
xsets_print_fs_cross   : COMMENT   # Time level passes flood stage
xsets_print_ls         : COMMENT   # Print latest stage, don't
                               # encode
xsets_print_ws         : YES      # Print warning stage
xsets_output_style     : E        # Expanded output style
xsets_ws_label         : 'WARNING' #String used to describe
warning
                               # stage

```

Input (config file)

```

1 3
RIVER FORECAST
NATIONAL WEATHER SERVICE
MISSOURI BASIN RFC - PLEASANT HILL, MO
#
$ "MISSOURI MAINSTEM" DEF 6 0
! SSCN1 "SOUTH SIOUX CITY NE" "MISSOURI RIVER" 1

```

```
SSCN1FTS "R" QINE Y SSCN1 SSCN1 HGZZZZZ 6 3 RVFMOM "CS:0.0" "FS:0.0"
! SCLM7 "ST CHARLES MO" "MISSOURI RIVER" 1
SCLM7FTS "R" QINE Y SCLM7 SCLM7 HGZZZZZ 6 3 RVFMOM "CS:0.0" "FS:0.0"
```

Output

```
ZCZC MKCRVFMOM DEF
FGUS53 KKRK ddhmm
RVFMOM
RIVER FORECAST
NATIONAL WEATHER SERVICE
MISSOURI BASIN RFC - PLEASANT HILL, MO
1509Z Thu Sep 23 1999
:
:   River Forecast for MISSOURI MAINSTEM
:
:
:
: SOUTH SIOUX CITY NE - MISSOURI RIVER
:FLOOD STAGE 30.0   WARNING STAGE 28.0
:
:LATEST STAGE 18.7 FT AT 1100Z ON 0923
.E SSCN1 0923 Z DC9909231509/DH18/HGIFF/DIH6
:QPF FCST      12Z      18Z      0Z      6Z
.E1 :0923:      /      18.7/      18.7/      18.7
.E2 :0924:/      18.7/      18.7/      18.7/      18.7
.E3 :0925:/      18.7/      18.7/      18.7/      18.7
.E4 :0926:/      18.7
:
: ST CHARLES MO - MISSOURI RIVER
:FLOOD STAGE 25.0   WARNING STAGE 23.0
:
:LATEST STAGE 13.1 FT AT 1400Z ON 0923
.E SCLM7 0923 Z DC9909231509/DH18/HGIFF/DIH6
:QPF FCST      12Z      18Z      0Z      6Z
.E1 :0923:      /      13.1/      13.1/      13.1
.E2 :0924:/      13.1/      13.1/      13.1/      13.1
.E3 :0925:/      13.1/      13.1/      13.0/      13.0
.E4 :0926:/      13.0
:*****
COMMENT
```

ajm

Example 3b - Daily routine forecast with nothing going on

Apps_Defaults Tokens

Same as Example 3a except:

```
  xsets_expanded_dates : NO      # No dates (MMDD) inserted before
                               # daily values
```

Input (config file)

Same as Example 3a.

Output

```
ZCZC MKCRVFMOM DEF
FGUS53 KKRK ddhmm
RVFMOM
RIVER FORECAST
```

```

NATIONAL WEATHER SERVICE
MISSOURI BASIN RFC - PLEASANT HILL, MO
1516Z Thu Sep 23 1999
:
:   River Forecast for MISSOURI MAINSTEM
:
:
:
:SOUTH SIOUX CITY NE - MISSOURI RIVER
:FLOOD STAGE 30.0   WARNING STAGE 28.0
:
:LATEST STAGE 18.7 FT AT 1100Z ON 0923
.E SSCN1 0923 Z DC9909231516/DH18/HGIFF/DIH6
:QPF FCST      12Z      18Z      0Z      6Z
.E1           /      18.7/      18.7/      18.7
.E2          /      18.7/      18.7/      18.7
.E3          /      18.7/      18.7/      18.7
.E4          /      18.7
:
:ST CHARLES MO - MISSOURI RIVER
:FLOOD STAGE 25.0   WARNING STAGE 23.0
:
:LATEST STAGE 13.1 FT AT 1400Z ON 0923
.E SCLM7 0923 Z DC9909231516/DH18/HGIFF/DIH6
:QPF FCST      12Z      18Z      0Z      6Z
.E1           /      13.1/      13.1/      13.1
.E2          /      13.1/      13.1/      13.1
.E3          /      13.1/      13.1/      13.0
.E4          /      13.0
:*****
COMMENT

```

ajm

Example 3c - Daily routine forecast with nothing going on

Apps_Defaults Tokens

Same as Example 3a except:

```

xsets_output_style      : C      # Compact output style

```

Input (config file)

Same as Example 1.

Output

```

ZCZC MKCRVFMOM DEF
FGUS53 KCRF ddhmm
RVFMOM
RIVER FORECAST
NATIONAL WEATHER SERVICE
MISSOURI BASIN RFC - PLEASANT HILL, MO
1517Z Thu Sep 23 1999
:
:   River Forecast for MISSOURI MAINSTEM
:
:
:
:SOUTH SIOUX CITY NE - MISSOURI RIVER
:FLOOD STAGE 30.0   WARNING STAGE 28.0
:

```

```

:LATEST STAGE 18.7 FT AT 1100Z ON 0923
.E SSCN1 0923 Z DC9909231517/DH18/HGIFF/DIH6/18.7/18.7/18.7/18.7/18.7
.E1 /18.7/18.7/18.7/18.7/18.7/18.7/18.7
:
:
:ST CHARLES MO - MISSOURI RIVER
:FLOOD STAGE 25.0      WARNING STAGE 23.0
:
:LATEST STAGE 13.1 FT AT 1400Z ON 0923
.E SCLM7 0923 Z DC9909231517/DH18/HGIFF/DIH6/13.1/13.1/13.1/13.1/13.1
.E1 /13.1/13.1/13.1/13.1/13.0/13.0/13.0
:*****
COMMENT

```

ajm

Example 4a - Long range forecast

Apps_Defaults Tokens

```

xsets_output_style : C          # Compact output style

```

Input (config file)

Output time interval is 120 hours.
Number of values to forecast is 5.

```

1 3
RIVER FORECAST
NATIONAL WEATHER SERVICE
MISSOURI BASIN RFC - PLEASANT HILL, MO
#
$ UPRMOLONG DEF 6
! MLRM8 "" "" 1
MLRM8FTS "" QINE Y MLRM8 MLRM8 HGZZZZZ 120 V:5 RVFUMO "" "" ""
! SIDM8 "" "" 1
SIDM8FTS "" QINE Y SIDM8 SIDM8 HGZZZZZ 120 V:5 RVFUMO "" "" ""

```

Output

```

ZCZC MKCRVFUMO DEF
FGUS53 KKRK ddhmm
RVFUMO
RIVER FORECAST
NATIONAL WEATHER SERVICE
MISSOURI BASIN RFC - PLEASANT HILL, MO
1420Z Wed Sep 29 1999
:
:   River Forecast for UPRMOLONG
:
:
:
:MELROSE MT 7S
:FLOOD STAGE 6.0      WARNING STAGE 5.0
:
:LATEST STAGE 1.3 FT AT 1115Z ON 0929
.E MLRM8 0930 Z DC9909291420/DH12/HGIFF/DID5/1.3/1.2/1.2/1.2/1.2
:
:SIDNEY MT 2S
:FLOOD STAGE 19.0     WARNING STAGE 17.0
:
:LATEST STAGE 5.8 FT AT 1400Z ON 0929
.E SIDM8 0930 Z DC9909291420/DH12/HGIFF/DID5/6.0/5.8/5.6/5.4/5.3
:*****

```

COMMENT

dmb

Example 4b - Long range forecast

Apps_Defaults Tokens

xsets_output_style : E # Expanded output style

Input (config file)

Same as previous example.

Output

```
ZCZC MKCRVFUMO DEF
FGUS53 KKRK 151402
RVFUMO
RIVER FORECAST
NATIONAL WEATHER SERVICE
MISSOURI BASIN RFC - PLEASANT HILL, MO
1400Z Wed Sep 15 1999
:
:   River Forecast for UPRMOLONG
:
:
:
:MELROSE MT 7S
:FLOOD STAGE 6.0   WARNING STAGE 5.0
:
:LATEST STAGE 1.2 FT AT 1115Z ON 0915
.E MLRM8 0916 Z DC9909151400/DH12/HGIFF/DID5
:Fcst at 12Z on 0916   0921   0926   1001
.E1      /   1.2/   1.2/   1.2/   1.1
:
:      12Z on 1006
.E2      /   1.1
:
:
:SIDNEY MT 2S
:FLOOD STAGE 19.0   WARNING STAGE 17.0
:
:LATEST STAGE 6.2 FT AT 1400Z ON 0915
.E SIDM8 0916 Z DC9909151400/DH12/HGIFF/DID5
:Fcst at 12Z on 0916   0921   0926   1001
.E1      /   6.2/   5.7/   5.3/   5.0
:
:      12Z on 1006
.E2      /   4.9
:*****
COMMENT
```

Example 5 - Reservoir inflow

Input (config file)

```
1 3
RIVER FORECAST
NATIONAL WEATHER SERVICE
MISSOURI BASIN RFC - PLEASANT HILL, MO
#
! CLIK1 "CLINTON DAM INFLOWS" "WAKARUSA RIVER" 1
CLIK1FTS "" SQIN Y CLIK1 CLIK1 QIZZZZZ 6 3 RVFKSR "" "" ""
```

Output

ZCZC MKCRVFKSR DEF
FGUS53 KKRF ddhmm
RVFKSR
RIVER FORECAST
NATIONAL WEATHER SERVICE
MISSOURI BASIN RFC - PLEASANT HILL, MO
1533Z Thu Sep 23 1999
:
: River Forecast for KANSAS
:
:
:
:CLINTON DAM INFLOWS - WAKARUSA RIVER
:
:
:LATEST DISCHARGE 0.0 KCFS AT 1300Z ON 0923
.E CLIK1 0923 Z DC9909231533/DH18/QIIF/DIH6/0.0/0.0/0.0/0.0/0.0/0.0
.E1 /0.0/0.0/0.0/0.0/0.0/0.0/0.0
:*****
COMMENT

ajm