

# MICA TEST PROGRAM

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**PROGRAM:** MicaTestWin.exe

INTRODUCTION: The Mica Test program compares Mica's content at the end of each period (January through June) resulting from a HYSSR regulation with Mica's Operational Rule Curve (ORC). Whenever Mica's end of period content is less than the VRC for that year and period and the System Rule Curve Value equals 2.0, that end of period content along with the year and period are written to a record with "18" as the record code. For the period following the one just written where Mica's storage content was less than the ORC and the System Rule Curve Value equals 2.0,, the program writes out Mica's regulated flow to record code "19" These records are then used as input into the VRC program when the "Arrow local method" will be used in the computation of Mica's and Arrow's VRCs. See Glossary for a definition of Arrow local method.

USER INTERFACE. I have created a windows interface for the programs. The program has three Main Menu items and one check box. The three Main Menu items are, "Input Files", "Output Files", and "Run". The "Input Files" menu item brings up two other Menu Items "Study Characteristics" and "Tabout". The "Output Files" menu item brings up two other menu items "Program Output" , and "Trace File". All of these four menu items "Study Characteristics", "Tabout", "Program Output" , and "Trace File" bring up file dialog boxes where the appropriate file names are selected / entered. After the file names are selected the names will show up on the form. The other Menu Item "Run" runs the program. The "Run" menu item is disabled until the Study Characteristics, Tabout, and Program Output file names have been entered /selected. After the program is run the Form label will change from "Mica Test" to "Mica Test – Done". The trace file name defaults to "C:\MicaTestTrace.txt" this can be changed by using the "Trace File" menu item. Checking or Unchecking the "Write To Trace File" check box determines if a trace file will be produced.

INPUT The program requires two input files: the Study Characteristics file and the TABOUT file. The Study Characteristics file needs to be the same as the one that was used in the HYSSR regulation that created the TABOUT file.

OUTPUT. The program requires user to select the name of the file where the resulting output containing record codes 18 and 19 should be written. These records will be in standard HYSSR format. A description of the format and a sample of the output file follow. With some studies every year and period may have values written to record codes 18 and 19. However, other studies may have many periods where no value is written to record codes 18 and 19. This is not an indication of a study being incorrect. It simply indicates that not every period in the historical record will use the Arrow local method.

The output from the MICATEST program must be included in the input file to the VRC program when the Arrow local method is required.

OUTPUT FORMAT:

COLS 1-2	Record code <b>18 or 19</b>
COLS 19-20	Year ( <b>29</b> means 1929)
COLS 21-23	Period identifier
COLS 24-32	Data value in KAF or CFS
COLS 33-35	Period identifier
COLS 36-44	Data value in KAF or CFS
COLS 45-47	Period identifier
COLS 48-56	Data value in KAF or CFS
COLS 57-59	Period identifier
COLS 60-68	Data value in KAF or CFS
COLS 69-71	Period identifier
COLS 72-80	Data value in KAF or CFS

SAMPLE OUTPUT DATA:

99 output from MicaTestWin run on 08/16/2005 at 1000

18	29JUN	4181.0	
19	29JUL	16900.3	
18	30APR	608.7	
19	30MAY	11634.1	
18	35AP1	2365.6APR	2454.7
19	35APR	3000.0MAY	3571.5
18	36AP1	727.1APR	1141.7
19	36APR	3000.0MAY	3142.6

18	39AP1	2137.5APR	2457.1JUN	6496.7
19	39APR	3000.0MAY	16461.6JUL	48566.3

99 end output from MicaTestWin