

EROM QA Report For: VPU = 21 Runid = 0001
 ETFRACT1 = 0.3 ETFRACT2 = 0.5
 Gage Sequestration Proportion = 0.2
 See Page 3 for a brief explanation of the values in the tables.

N = Number of Gages
 Qbar = Log10 Mean Flow (cfs)
 SEE = Standard Error of the Estimate in percent;
 2/3 of the Flow Estimates will have errors that are within one SEE

Table 1: Statistics For All Gages:

		Gage		Runoff		Excess ET		RefGage Reg		PlusFlowAR	
Period	N	Qbar	Qbar	SEE	Qbar	SEE	Qbar	SEE	Qbar	SEE	
MA	59	1.6178	1.6768	55.086	1.6768	55.086	1.6693	53.808	1.6693	53.808	
JAN											
FEB											
MAR											
APR											
MAY											
JUN											
JUL											
AUG											
SEP											
OCT											
NOV											
DEC											

Table 2: Statistics For Sequestered Gages:

Period	N	Gage		Seq. Gages	
		Qbar	Qbar	SEE	
MA	12	1.5694	1.6425	57.688	
JAN					
FEB					
MAR					
APR					
MAY					
JUN					
JUL					
AUG					
SEP					
OCT					
NOV					
DEC					

Table 3: Statistics For Reference Gages:

Period	N	Gage	Runoff	Excess ET		RefGage	Reg	PlusFlowAR		
		Qbar	Qbar	SEE	Qbar	SEE	Qbar	SEE	Qbar	SEE
MA	12	1.3787	1.4673	66.045	1.4673	66.045	1.4306	59.223	1.4306	59.223
JAN										
FEB										
MAR										
APR										
MAY										
JUN										
JUL										
AUG										
SEP										
OCT										
NOV										
DEC										

Table 4: Reference Gage Log-Log Regression Statistics:

Period	N	a	b	BCF	R2	SER
MA	12	0.3793	0.6811	1.1254	0.3519	0.2545
JAN						
FEB						
MAR						
APR						
MAY						
JUN						
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						

N = Number of Reference Gages

a , b = regression coefficients; BCF = Bias Correction

R2 = R-Squared of the regression; SER = Standard Error of the Regression

Summary of contents of the QA Report:

Two statistics are used for measuring how well the different flow estimates performed in relation to the gage flows:

1. The log10 mean gage flow as compared to the log10 mean flow estimates at the gages.
2. The Standard Error of the Estimate (SEE) in percent; 2/3 of the flow estimates will be within one SEE.

Six flow values are calculated in EROM:

- A - Cumulative runoff based on the runoff grids
- B - The application of Excess ET to the cumulative runoff
- C - The flow adjustments from the Reference Gage Regression
- D - The application of the PlusFlowAR additions and removals
- E - Gage adjustment, in which the flows at the gage and a distance upstream are adjusted to match the actual gage flow. Statistics for this flow are not presented because all gages are adjusted, therefore the statistics would perfectly match the gage values.
- F - The gage adjustment statistics with a randomly selected proportion of the gages removed (typically 0.2); this process is referred to as Gage Sequestering. The Gage Sequestering provides a method to estimate the accuracy of the flows after the gage adjustment.

There are four tables in the EROM QA Report:

Table 1 reports statistics for all gages for flows A, B, C, and D described above.

Table 2 reports the statistics for only the sequestered gages from the sixth flow estimate

Table 3 reports the statistics for the Reference gages.

Table 4 presents the statistics used in the Reference Gage Regression step;
these values are the log-log regression coefficients
and the associated R2 and Standard Error of the Regression.

The tables report values for Mean Annual (MA) and each month that has been run.

See the NHDPlus User Guide for more information