



EXPLANATION

Coaxial graphical correlation

Dependent variable-Discharge at Sacramento

- Independent variables-1. Stage at Sacramento
2. Fall in reach from Sacramento to Freeport
3. Algebraic average of change in stage in 15 minutes, observed at Sacramento and Freeport

Example

- Given- 1. Stage at Sacramento=2.57 feet
2. Fall in reach=1.14 feet
3. Average rate of change in stage= +0.03 feet in 15 minutes
Required discharge at Sacramento= 11,500 cubic feet per second

Discharge measurement series

- | | |
|-------------------------|---------------------------------|
| A -August 27-28, 1957 | G -April 23-24, 1959 |
| B -October 28-29, 1957 | H -September 30-October 1, 1959 |
| C -December 10-11, 1957 | J -October 20-21, 1959 |
| D -July 16-17, 1958 | K -January 14-15, 1960 |
| E -October 21-22, 1958 | L -June 9-10, 1960 |
| F -December 8-9, 1958 | M -October 6-7, 1960 |

NOTE: A total of 302 discharge measurements were used to define the rating curves. Only those graphical estimates of discharge that differ from the measured discharge by more than $\pm 15\%$ are designated by series letter on the comparison graph above