

Shift Procedure

1. Compute required measurement shifts on measurement summary form (old form 9-207).
2. On the rating curve worksheet, draw a shift curve(s) based on the measurements. Alternatively, you can wait to do this until after you have done step #5, below.
3. Plot the measurement-defined shift adjustments and the gage-height differences between the rating and shift curve(s) at several gage heights on a rectangular grid (form 9-213e).
4. Draw a V-diagram considering all of the plotted points.
5. For ADAPS, approximate the V-diagram with two intersecting straight lines and list the three coordinate sets (GH and corresponding shift adjustment).
6. Re-plot the shift curve by using the V-diagram and, if the shift curve is poorly shaped (not hydraulically reasonable), modify the V-diagram as necessary to correct it. **This is especially important if you skipped step #2, above.**
7. Determine from the V-diagram the shift adjustment applicable to each discharge measurement and recomputed its percent difference on the 9-207 form as necessary.
8. Prorating with time from one V-diagram to another requires the use of many tools such as hydrographer's field notes, gage observer notes, hydrograph comparisons, hydrologic events, and the hydrographer's knowledge of the channel and control. Hydrographers with limited experience should consult with more experienced personnel when applying shifts that vary with both stage and time.