Discussion:

The river section transitions from a mild slope (0.00094) to a steep slope (0.00188), and back to a mild slope (0.00094). Because the same amount of water (200 cumec) has to pass through the entire river, changes in the riverbed's steepness force the water to adjust its speed and depth to keep up.

- Upstream (9,900 m): The water starts out deep (1.65 meters) and moves relatively slowly at 1.21 m/s.
- The Steep Middle (6,600 m): Here, the riverbed slope doubles. As a result, the water velocity increases to 2.36 m/s, and depth decreases to 0.85 meters.
- Downstream (3,300 m to 0 m): As the slope flattens back to mild, the water slows down to around 1.47 m/s and depth of about 1.36 meters.

The produced data, as well as longitudinal profile indicates that critical flow occurs at River Station (RS) 70 point. This is where the steep middle section begins. At this location, the actual water level (97.75 m) drops down almost perfectly to match the critical water level (97.64 m).

Summary:

Station	Slope	Depth (m)	Velocity (m/s)	Flow State
9,900 m (RS 100)	Mild (0.00094)	1.65	1.21	Subcritical
6,600 m (RS 70)	Steep (0.00188)	0.85	2.36	Subcritical (near critical)
3,300 m (RS 40)	Mild (0.00094)	1.36	1.47	Subcritical
0 m (RS 10)	Mild (0.00094)	1.35	1.48	Subcritical