

Day 7: Laboratories

A tachyon beam enters the manifold at the location marked S; tachyon beams always move **downward**. Tachyon beams pass freely through empty space (.). However, if a tachyon beam encounters a splitter (^), the beam is stopped; instead, a new tachyon beam continues from the immediate left and from the immediate right of the splitter.

How many times will the beam be split?

Answer: 1605

Part Two

With a quantum tachyon manifold, only a **single tachyon particle** is sent through the manifold. A tachyon particle takes **both** the left and right path of each splitter encountered.

Since this is impossible, the manual recommends the many-worlds interpretation of quantum tachyon splitting: each time a particle reaches a splitter, it's actually **time itself** which splits. In one timeline, the particle went left, and in the other timeline, the particle went right.

To fix the manifold, what you really need to know is the **number of timelines** active after a single particle completes all of its possible journeys through the manifold.

In total, how many different timelines would a single tachyon particle end up on?

Answer: 29893386035180