

Shawn Lani

When does the geyser erupt?



Spend a few minutes watching this geyser.

Notice how a geyser goes through a cycle: water heats up, the geyser erupts, and then the water drains back into the tank.

The water in the glass tank is heated from below. Although it gets so hot that normally it would boil, the weight of the water in the tube above stops any steam bubbles forming. Eventually, the water gets so hot that it boils even under pressure. As soon as some water has been forced out of the top of the tube, there is less pressure on the water in the tank, and boiling can happen easily, forcing much more water up and out of the tube. The water then drains back into the tank and the cycle starts again.

Natural geysers work in the same way. The heat comes from very hot rocks under the ground (Fig. 1).



Fig. 1: Natural geyser.