Beppu’s Hot Springs

Beppu’s hot springs have the largest water output in Japan, with more than 80,000 liters per minute gushing from over 2,000 springs. The city also has the nation’s highest average temperature for hot springs, between 90°C and 100°C at the source.

These hot springs were created by geothermal activity deep within the earth, dating back millions of years. Several tectonic plates intersect near Kyushu, and when one slides beneath another (subduction), the movement creates heat and pressure that allows magma to come closer to the surface. This in turn heats stores of water deep below ground. The hot water then flows out through cracks in the earth’s surface along fault lines, resulting in hot springs.

The stores of groundwater that feed the hot springs are replenished regularly by rainwater because of an alluvial fan topography that facilitates the earth’s absorption of rain. Once absorbed, the water is heated geothermally; it also reacts chemically with the adjacent rock, resulting in a wide array of spring water types. Local baths offer seven of the ten hot spring water types recognized in Japan.