

**Table 1:** Summary of author interpretations of the geological and geomorphological features selected within *Pokémon Legends: Arceus*, based on in-game visuals or prompts, versus the geological understanding of the features post-literature review.

Features	Geological interpreted of features pre-literature review	Geological understanding of feature post-literature review	In-game features realistic based on comparison to post-literature review?	Topic
<p><b>Obsidian Fieldlands</b> <i>(Location Name)</i></p>	<p>Hisui is based on the volcanic island of Hokkaido. The area is named after the volcanic glass, obsidian, that can be found naturally occurring in this area.</p>	<p>There are 21 naturally occurring sites of obsidian on Hokkaido. However, none are within the Obsidian Fieldlands. Instead, the obsidian found here are palaeolithic tools.</p>	<p>Close. However, the presence of obsidian underwent additional steps to justify the naming of the location by developers.</p>	<p>Physical volcanology, Archaeology</p>
<p><b>Cobalt Coastland</b> <i>(Location Name)</i></p>	<p>Hisui is based on the volcanic island of Hokkaido. Cobalt was concentrated into economic deposits in the east of the island due to hydrothermal systems related to the local volcanism.</p>	<p>Cobalt can be found on Hokkaido; however, it is not a primary mined metal. Instead, a “cobalt” blue pond that formed because of lahar-mitigation dams diverting a volcanic spring is likely the source of the area’s name.</p>	<p>Plausible. However, an alternative solution is more justifiable.</p>	<p>Economic Geology, Physical volcanology, Hazard-mitigation</p>
<p><b>Veilstone Cape</b> <i>(Peninsula &amp; Sea Caves)</i></p>	<p>Island-arc volcanism related to the subduction of the Pacific Plate underneath the Eurasian Plate. Or extreme erosion of softer rock either side of the peninsula. Erosion of the peninsula is evident in the sea cave and arches present.</p>	<p>The peninsula is the result of island-arc volcanism (submarine and aerial) and tectonic uplift due to the subduction of the Pacific Plate underneath the Eurasian Plate. Sea caves and arches present.</p>	<p>Yes. Additional information helped to expand on the pre-literature interpretation.</p>	<p>Physical volcanology, Plate Tectonics, Erosional Processes</p>
<p><b>Firespit Island</b> <i>(Active Volcano)</i></p>	<p>Active volcanic island off the east coast of Hokkaido. During a previous explosive eruption, the volcano experienced a sector-collapse. Post-collapse volcanism continues.</p>	<p>There is no volcanic island off the east coast of Hokkaido that can act as a direct comparison. However, literature on volcanic sector-collapses support most in-game visuals. Volcanic slopes are a maximum</p>	<p>Yes. Although there is no direct comparison of a volcano on Hokkaido, reviews of other volcanoes across the world provided additional information to support sector-collapse visuals. However, old edifice and central active vent</p>	<p>Physical Volcanology</p>

		of 40° (less than in-game slope)	are unrealistically steep.	
<b>Spirit Lakes – Lake Verity &amp; Lake Valor</b> <i>(Crater Lake)</i>	Both lakes formed due to a caldera-forming eruption, creating a depression that was later infilled by water.	Lake Tōya is found at the location of Lake Verity. Lake Kussharo is found at the location of Lake Valor. Both formed due to caldera-forming eruptions.	Yes. Additional information helped to expand on the pre-literature interpretation.	Physical Volcanology
<b>Coronet Highland – Mt Coronet</b> <i>(Mountain)</i>	Tallest mountain on Hisui. Possibly formed due to volcanic or tectonic processes related to the subduction of the Pacific Plate underneath the Eurasian Plate.	Mt Asahi is the tallest mountain on Hokkaido and is located similarly to Mt Coronet. It is a stratovolcano, part of the Taisetsuzan volcano group, a result of the underlying subduction of the Pacific Plate.	Yes. Additional information helped to expand on the pre-literature interpretation.	Physical Volcanology, Plate Tectonics
<b>Alabaster Island – Lake Acuity</b> <i>(Crater Lake)</i>	Like the previous Spirit Lakes, Lake Acuity formed due to a caldera-forming eruption, creating a depression that was later infilled by water. Unknown reasoning for the presence of saltwater.	There are no volcanoes or volcanic deposits noted in the north of Hokkaido. However, the most northern lake is low-lying and close to the sea. During stormy weather, saltwater can flow upstream into the lake.	No. Whilst the video game does hint at the possibility of a non-volcanic origin for the lake, it does not assist in providing further explanations. Therefore, it is easy to assume a caldera-forming eruption origin that is in turn false as the lake is more akin to a natural coastal lagoon.	Coastal Geography