Holocene Volcanic Activity in all Caribbean Plate Margins: Forecast and Risk Assessment

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CARIBBEAN VOLCANIC ACTIVITY & FORECAST REPORT

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The Caribbean area primarily consists of the countries of Mexico, Guatemala, Honduras, Nicaragua, Costa Rica, Panama, Columbia and Venezuela and the island nations represented in the Lesser Antilles. Some countries such as Cuba, Dominican Republic, Puerto Rico, Jamaica and Venezuela, do not have any active volcanoes within.

The following table presents the current eruption status and forecast for all volcanoes within the Caribbean Plate boundaries. It will be upgraded from time to time as appropriate and as necessary.

All forecasts on the following table have been compiled, using presently loaded data, from the SWVRC software programme, ***ERUPTION Pro 10.5***, the only known long-range and reasonably accurate forecasting programme of it kind in the world. Accuracy, relative to Caribbean area volcanoes only, is as follows: Of **9** Volcanoes originally forecasted, **8** have confirmed eruptions so far, for an accuracy of **88.89%** to date for the year **2005**.

KEY:

Volcano =	**Name of volcano**
Country =	**Country of volcano location**
Next Forecasted Year =	**Year volcano is next forecasted to erupt**
Yr. Of =>50% =	**Year volcano is forecasted to erupt with =>50% probability**
Yr. Of =>95% =	**Year volcano is forecasted to erupt with =>95% probability**
Current Status =	**Current status of the volcano at this time**

ACTIVE VOLCANO STATUS OF THE CARIBBEAN

AS OF: 17 June 2005

Volcano	Country	Next Forecast Year	Yr. Of =>50%	Yr. Of =>95%	Current Status
Ceboruco	Mexico	1874	2052	2660	In Repose
Colima	Mexico	2070	2005	2431	Erupted
El Chichon	Mexico	1998	2193	2859	In Repose
Jocotitlan	Mexico	1272	4647	15866	In Repose
Michoacan-Guanajuato	Mexico	1951	2753	5444	In Repose
Pico De Orizaba	Mexico	1712	1728	1865	Overdue
Pinacate	Mexico	1947	1960	2049	In Repose
Popocatepetl	Mexico	2005	2144	2609	Erupted
San Martin	Mexico	1944	2196	3075	In Repose
Socorro	Mexico	1997	2014	2087	In Repose
Tacana	Mexico	1990	2011	2098	In Repose
Tres Virgenes	Mexico	1861	1946	2244	In Repose
Acatenango	Guatemala	1977	2249	3173	In Repose
Almolonga	Guatemala	1821	2096	3021	In Repose
Atitlan	Guatemala	1873	1882	1970	Overdue
Fuego	Guatemala	2053	2005	2022	Erupted
Pacaya	Guatemala	2035	2029	2005	Erupted
Santa Maria	Guatemala	2010	2005	2042	Erupted
Tajumulco	Guatemala	1870	1926	2138	In Repose
Cerro Negro	Nicaragua	2014	2003	2018	In Repose
Concepcion	Nicaragua	2004	1990	2009	In Repose
Cosiguina	Nicaragua	1868	1909	2075	In Repose
Las Pilas	Nicaragua	1957	2064	2430	In Repose
Masaya	Nicaragua	2030	2165	2704	In Repose
Momotombo	Nicaragua	2013	2151	2676	In Repose
San Cristobal	Nicaragua	2019	2005	2082	Forecasted ‘05

ACTIVE VOLCANO STATUS OF THE CARIBBEAN

AS OF: 17 June 2005

Volcano	Country	Next Forecast Year	Yr. Of =>50%	Yr. Of =>95%	Current Status
Telica	Nicaragua	2027	2009	2042	In Repose
Arenal	Costa Rica	2020	2215	2005	Erupted
Barva	Costa Rica	1869	4658	13932	In Repose
Irazu	Costa Rica	2015	2001	2025	In Repose
Miravalles	Costa Rica	1948	4391	12513	In Repose
Poás	Costa Rica	2040	2112	2501	In Repose
Rincón de la Vieja	Costa Rica	2021	2086	2388	In Repose
Turrialba	Costa Rica	1875	2505	4630	In Repose
Baru	Panama	1552	2036	3654	In Repose
Azufral	Columbia	-916	-219	2140	In Repose
Cerro Bravo	Columbia	1728	2264	4073	In Repose
Cumbal	Columbia	1930	1970	2117	In Repose
Dona Juana	Columbia	1899	3475	8719	In Repose
Galeras	Columbia	2034	2005	2446	Erupted
Purace	Columbia	2001	2037	2236	In Repose
Nevado Del Ruiz	Columbia	2015	2267	3173	In Repose
Nevado Del Tolima	Columbia	1949	2890	6039	In Repose
Kick-‘em -Jenny	West Indies	2008	2004	2017	In Repose
La Soufriere	West Indies	1997	2245	3140	In Repose
Liamuiga	West Indies	1849	2342	4002	In Repose
Mt. Pelée	West Indies	1981	2049	2450	In Repose
Soufriere	West Indies	2000	2117	2576	In Repose
Soufriere Hills	West Indies	2005	2029	2116	Erupted
The Quill	West Indies	403	2247	8382	In Repose

SWVRC's eruption forecasting programme, ***ERUPTION Pro 10.5***, the only known long-range reasonably accurate forecasting programme of it kind in the world, is currently forecasting 495 volcanoes throughout the world. You can learn more about all current eruptions (global) plus much, much more at the SWVRC website located at the URL of: http://www.swvrc.org .

The interpretation of the Year volcano is next forecasted to erupt, Year volcano is forecasted to erupt with =>50% probability and Year volcano is forecasted to erupt with =>95% probability is as follows: Let us use, for example, volcano **Nevado Del Ruiz** in Columbia. It currently forecasted (with current data loaded) to erupt again in 2015. If it does **not** erupt and if the year reaches 2267, then **Ruiz** would now go to an =>50% probability of an eruption. If **Ruiz** does **not** erupt when the year reaches 3173, then **Ruiz** would go to an =>95% probability of an eruption. Of course if **Ruiz** does erupt then new forecast year calculations would be rendered by ***ERUPTION Pro 10.5***.

In some cases, one will find that the year that a particular volcano is next forecasted to erupt is greater than say the year a volcano is forecasted to erupt with =>50%. For example, **San Cristobal** in Nicaragua is currently forecasted to erupt in 2019 but forecasted at =>50% probability in the year 2005. This seeming anomaly is due to the current data that is loaded into the computer. As the data changes, sometimes on a daily basis, the forecasted years will sometimes change on a daily basis as well. As new data is received and loaded into the ***ERUPTION Pro 10.5*** database, so are the forecast years calculations revised.

NOTE: This document report will be updated from time-to-time as necessary to reflect the latest outputs from the ***ERUPTION Pro 10.5*** database.