

VENEZUELA

The Republic of Venezuela is situated in the extreme north of South America. It is bordered in the north by the Caribbean Sea, in the east by the Atlantic Ocean and the Republic of Guyana, in the south by the Republic of Brazil and in the west by Colombia. The geographical borders of the country are either determined by natural geographical features (seas, rivers and mountains) or by conventional lines, established by mutual agreement between the countries.

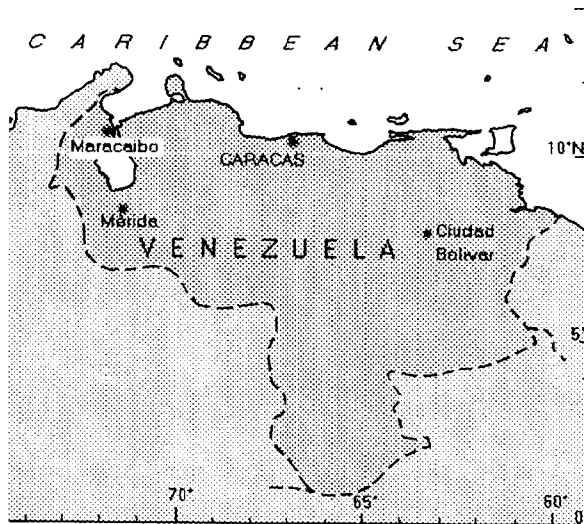


FIG. 1.- Venezuela.

The country stretches from $0^{\circ}38'53''\text{N}$ to $12^{\circ}12'00''\text{N}$ and from $59^{\circ}47'50''\text{W}$ to $73^{\circ}22'38''\text{W}$. It is so located in the north of Ecuador (northern hemisphere). Taking into consideration its insular situation, the most northerly position is the Island of Aves, in the insular territory, at $15^{\circ}40'22''\text{N}$.

The land area is $916,445\text{ km}^2$, with a population of 20,600,000 (in 1994). It is administratively divided into 22 States, a Federal District and the Federal Dependencies, which are a group of islands scattered in the Caribbean Sea. The capital is Caracas, with a population of about million and half.

The topography of the country presents a great variety of features, from plain land to the high mountains with permanent snow in the Andes, and, in the south, the imposing Guyanese massif with its large plateau (Tepuis).

Due to its geographical position and to its proximity to the Equator, temperatures are high during the whole year, except in those regions tempered by the altitude. The four seasons peculiar to temperate zones do not exist. Only two seasons can be distinguished: the rainy season, from May to October, and the dry season, from November to April.

There are four climatic conditions: the rainy tropical of the forest, with high temperatures and rain throughout the year; the rainy tropical of the savannah, with rains from April to October; the tropical of altitude, with its thermic layers, and the semi-arid, mainly located in the northern coastal zone of the country and the Caribbean islands.

The Venezuelan Andes are a part of the South American Andes, and are divided into two branches: one oriented southwest-northeast, bearing the name of "Cordillera de los Andes" and other lying to the north, known as "Sierra de Perijá". The depression of the Lago Maracaibo is located between both mountain chains. This hollow has a great economic importance for the country, due to the oil industry and agricultural activities.

The maximum heights are found in the cordillera de los Andes; amongst them: El Pico Bolívar (5,007 m), Humboldt (4,942 m), La Concha (4,922 m), Bonpland (4,883 m) etc.. In the south of the Orinoco is located the system of Guyana, the oldest group of tablelands and hills in the world, with the maximum height in the Pico Roraima (2,810 m). The impressive Angel Falls, the highest one in the world (979 m), are originated here.

Between the mountain chains of los Andes and La Costa, in the north, and the Escudo de Guyana in the south, the Venezuelan plains lay, crossed by the river Orinoco (2,575 km). This is the main river of Venezuela and one of the longest in the world.

The Hydrographic Service

The Directorate of Hydrography and Navigation is responsible for the achievement of studies and projects in the field of Marine Sciences.

To carry out these activities, it has various units prepared for the acquisition, processing and storage of data.

There is a land-based Oceanographic Data Centre, with the necessary hardware and software to fulfil the requirements resulting from the collection, management and generation of digital format products.

The personnel is formed by an experienced group of Hydrographers, Oceanographers, Meteorologists, Cartographers, Geographers, Biologists, Astronomers and technical staff for field activities.

The professional services include:

- the coordination, carrying out and supervision of hydrographic surveys
- the production of nautical charts and special studies;
- the studies of coastal and oceanic hydrodynamics;
- the processing and analysis of meteorological information;
- the construction and maintenance of maritime signals;
- the study of astronomical phenomena;
- the provision of nautical charts and other publications related to Aids to Navigation;
- the broadcasting of the official time in Venezuela.