Located on the northern coast of South America, Venezuela is known for its diverse natural attractions as well as its wide variety of appetising cuisines. Referred to as the Lighthouse of Maracaibo, Catatumbo lightning or the “everlasting tempest”; South America’s largest water body, Lake Maracaibo, is not only a prime attraction for nature lovers but a major tourist spot as well. ‘Lago de Maracaibo’ as it is known in Spanish, is one of the oldest lakes on Earth, around 20-36 million years old. The region surrounding the lake, Maracaibo Basin, contains large reserves of crude oil and is one of the biggest oil exporters in the world.

The Catatumbo lightning occurs only over the mouth of the Catatumbo river where it merges with Lake Maracaibo. Catatumbo lightning is a weather phenomenon unique to Lake Maracaibo, which produces more lightning than any other place on the planet. And hence, it is also rightfully known as the ‘Lightning Capital of the world’.

The persevering flashes are so bright that they can be seen for up to 400 kilometres, and were therefore utilised for quite a long time by Caribbean navigators in colonial times, giving it the nickname ‘Lighthouse of Catatumbo.’

According to NASA, this Venezuelan water body is the site of the highest number of lightning per square kilometre in the world, receiving an average rate of around 233 flashes per kilometre square in a year. Lake Maracaibo receives approximately 300 nightly thunderstorms in a year and has now taken the top spot as the location of maximum lightning activity, which was earlier Africa’s Congo Basin. The Lightning Imaging Sensor (LIS) detects the distribution and variability of total lightning that occurs in the tropical regions around the world. This advanced sensor can identify short lightning strikes even in broad daylight, and that’s what makes it so powerful.

The lightning produces a zigzag of electrical energy which is so strong that it can light 100 million bulbs. Just ten minutes of Catatumbo Lightning could be sufficient to illuminate all of South America. In 2013, the place was officially named as the place of highest concentration of lightning in the world by the Guinness World Records.

But this nocturnal, aesthetically pleasing spectacle in Venezuela has a dangerous side as well. The fury of sky-tearing lightning claims 2400 lives annually around the world, many of which occur in Lake Maracaibo.

The region is thought to be the world’s biggest producer of ozone, making it a significant player in replenishing of the depleting ozone layer. However, most scientists believe that the ozone produced reaches only the tropospheric atmosphere and never reaches the ozonosphere. Whatever the facts may be, this spectacular electro-visual theatre of mother-nature will continue to amaze and scare people around the world.

Nature’s Grandest Lightning Show on Earth
Lake Maracaibo

The Catatumbo River in a small region of northwestern Venezuela meets Lake Maracaibo; you’ll find one of the nature’s most terrific wonders — the Catatumbo lightning.