

Introduction to Land and Sea Breeze

Take a walk along a dry beach on a hot early afternoon. No sooner than putting your barefoot in the sand, you start hopping and jumping and immediately run towards the sea to soak your scorching feet in the water. Yes, the sun heats both up. However, land and water do not heat up or cool down at the same pace. This differential heating and cooling of land and sea give rise to what are known as breezes, in the coastal areas.

There are two types of breezes:

- Sea Breeze
- Land Breeze

What Is Sea Breeze?

This process takes place for the duration of the day. Both the sea and the land surface are heated up by the sun. The sea heats up slower than the land because it has a much higher heat capacity. Thus, the temperature over the land surface increases, in turn, heating up the surrounding air. Expansion occurs in the less dense warm air and an area over the land having low pressure is developed. At the same time on the top of the sea, a high-pressure area develops. Due to the difference in pressure, the air flows from the high pressure over the sea to the low pressure over the land. This flow of air from the sea to the land is termed as the sea breeze.

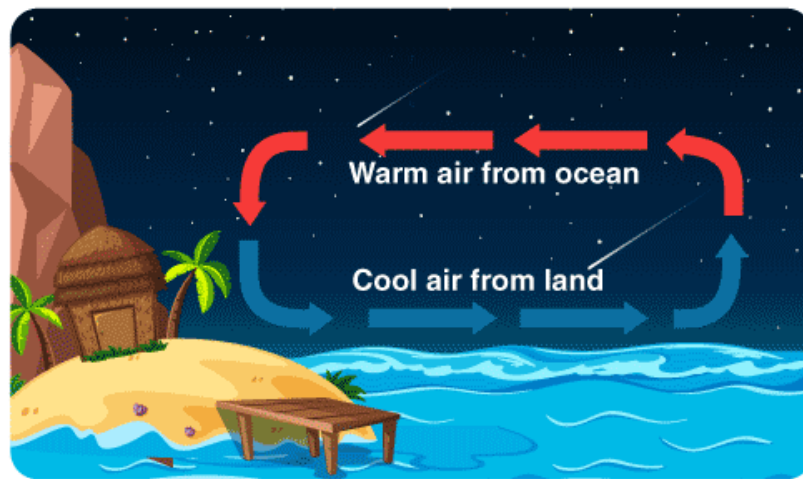


The sea breeze is more prevalent on warm sunny days during the spring and summer. An amazing cooling effect and a noticeable temperature drop are experienced because of it.

What Is Land Breeze?

This process takes place for the duration of the night and the above-mentioned process gets reversed. Both the land and the sea start cooling down when the sunsets. As the heat capacity of the land is different from the sea it cools down quicker. Thus, a low-pressure situation develops

over the sea as the temperature above it is higher when compared to the land. Due to this, the air flows from the land to the sea which is termed the land breeze.



Land Breeze

Land breezes can occur at any time of year but are more prevalent during the fall and winter seasons when water temperatures are still warm, and nights are cool.

Frequently Asked Questions – FAQs

What are the types of Breezes?

Sea Breeze and Land Breeze

When does Sea Breeze take place?

Sea Breeze takes place for the duration of the day.

True or False. Land cools down quicker than the Sea.

True.

When does Land Breeze take place?

Land Breeze takes place for the duration of the night.

What is the direction of airflow in Sea Breeze?

The direction of airflow in Sea Breeze is from the sea to the land.