

Solar Energy...

The Sun is the Earth's main source of electromagnetic radiation. Not all of the solar energy reaching the Earth's atmosphere actually reaches the land and water.

The **albedo** (percentage of light reflected) of a material will determine how much radiation is reflected. Clean snow has a high albedo whereas black soil has a low albedo.

Any material that absorbs energy and becomes warmer is called a **heat sink**. The oceans are good heat sinks whereas soil and rock are poor heat sinks.

The **heat capacity** of a substance will indicate whether a substance is a good heat sink or not. Heat capacity is a measure of how much heat it takes to raise the temperature of an object by one degree. The heat capacity of water is 4186 Joules per kilogram.

How does this affect our weather?

- solar energy that is reflected does not raise temperatures

-heat sinks can increase temps

examples??

OCEANS!

Spring/summer...

Fall/winter...



