# Solar Radiation Prediciton

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## Introduction

These datasets are meteorological data from the HI-SEAS weather station from four months (September - December 2016) between Mission IV and Mission V.

The dataset have following features:

- UNIXTime
  Observation time by the number of seconds that have elapsed since 00:00:00 UTC on 1 January 1970.
- Date and Time
  Provide the the Local date and time when record was taken place.
- Temperature
  Temperature of atmosphere in Fahrenheit.
- Pressure
  Atmospheric Pressure in Hg.
- Humidity
  Humidity of atmosphere in Percentage.
- Wind Direction
  Measured in Degrees.
- Speed
  Speed of the Wind.
- Time of Sunrise and Sunset
- Radiation
  Units in $Watt/m^2$

## Problem Statement

Our main goal is to develop a Machine Learning Model from which Solar Radiation will be predicted. The following steps is going to be followed.

**Data Preprocessing**

**Data Visualizing**

**Correlation**

**Feature Scaling**

**Training Model**

**Fine tuning of Model**