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| Manual for meteorological data for solar power calcuation tool |
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| Edition 1  December 2017 |



Revisions to this IALA Document are to be noted in the table prior to the issue of a revised document.

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| Date | Page / Section Revised | Requirement for Revision |
| December 2017 |  | First issue |
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# INTRODUCTION

The following the description shows how to extract relevant data from a public NASA website.

Another website to derive data from is <http://re.jrc.ec.europa.eu/pvgis/apps4/pvest.php>.

# Short manual for meteorology and Solar Energy

| Description | Action |
| --- | --- |
| <http://eosweb.larc.nasa.gov/sse/> | Click on the link at the left side to access the NASA's website. |
|  | **Step 1:**  Click on the link shown on the left side. |
|  | **Step 2:**  Click on the link shown on the left side. |
|  | **Step 3:**  Enter the geographical position where your AtoN is located.  To derive coordinates from a map you can use <http://www.latlong.net/>  (see short description at the end of the table).  Then press the button “Submit”.  In this example, it is used a location in Svalbard. |
|  | **Step 4:**  Select the headlines.  Click on the link "Parameters" for more information and definition |
|  | **Step 5:**  Add more choices to suit your location  Select all parameters and press “Submit” button at the bottom |
|  | **Step 6:**  Use parameters in "Monthly Average…”  and subtract the percentage difference according to "Minimum" column below.  This must be done manually.  The result is passed into the IALA excel sheet. |
|  | **Step 7:**  Data from step 6 is to copied in this section at table ‘radiation & duration of night’ of the Excel sheet. |
|  | **Step 8:**  Use the value of NASA table for the monthly average hours of daylight, convert it into duration of night (= 24 – daylight hours) and copy them  into the IALA excel sheet.  Example for the month of June are shown here. |

# Get Latitude and Longitude of a site from a web based map

| Description | Action |
| --- | --- |
| <http://www.latlong.net/> | Click on the link at the left side to access a free program online, to find a certrain location |
|  | Click the map and the position with respect. Latitude and longitude of the location you have selected is displayed. |

