MINISTRY OF ENVIRONMENT AND ENERGY
REPUBLIC OF MALDIVES

SOLAR RESOURCE OVERVIEW OF MALDIVES 2017

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MINISTRY OF ENVIRONMENT AND ENERGY
REPUBLIC OF MALDIVES

Green Building
Handhuvaree Hingun
Maafannu, Male', 20392
The Republic of Maldives

WWW.ENVIRONMENT.GOV.MV
ISBN 978-99915-59-46-9

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FOREWORD

H.E. THORIQ IBRAHIM
Minister of Environment and Energy

As a country that is entirely dependent on imported fossil fuels in meeting its current energy demands, it is a priority of the Government of Maldives to reduce this dependency and enhance energy security. As such, the Government is geared to diversify the energy mix by utilizing the locally available renewable energy sources. Currently, the Government is undertaking a project to install renewable energy systems up to 30% of day-time peak demand in all inhabited islands of Maldives. To encourage private sector participation, Government has developed a number of regulatory regimes including Net Metering and Power Purchasing arrangements under Power Purchasing Agreements.

A main barrier in the development of renewable energy in Maldives is the unavailability of reliable and accurate data on renewable energy resources. It is an utmost priority of the Government to establish and support mechanisms for systematic data collection on potential renewable energy resources. It is my belief that availability of such data to the public and private sector will contribute positively to their engagement in developing renewable energy initiatives in the country.

I am pleased to present this solar resource overview of the Maldives, as a first publication in the series to provide accurate data on solar radiation in the Maldives. The report is aimed at reducing the gap in availability of systematic data. By the end of this project, we will be able to incorporate the data into national planning as well as providing free access to the data for the public and private sector via the Global Solar Atlas.

This is an initiative supported by The World Bank, Energy Sector Management Assistant Program (ESMAP) and Asia Sustainable and Alternative Energy Program (ASTAE). I am grateful to the financial support provided by these agencies and their recognition of the importance of this project. The success of this project is also attributed to the technical support from Solargis. I would also like to thank the dedicated staff of Energy Department of the Ministry of Environment and Energy for their hard work and contribution to this project.

Male', November 2017

SOLAR PHOTOVOLTAIC SYSTEMS INSTALLED IN DH. KUDAHUVADHOO

CONTENTS

SOLAR METEO STATION AT HANIMAADHOO AIRPORT

INTRODUCTION

This solar overview of the Maldives is based on the findings of Phase 2 of the project Renewable Energy Resource Mapping for the Republic of Maldives implemented by the World Bank. Phase 2 of the project involves a 2-year measurement campaign to take solar measurements at four locations (Hanimaadhoo, Hulhule, Kahdhoo and Gan) in the Maldives. Ground measurements at these sites were used to site adapt satellite derived solar data for the period 1999 to 2016. This report presents the summarized results of the modelled data for the period 1999 to 2016 by using the ground measurements from the first 12 months of the measuring campaign, from January 2016 to December 2016. It is important to note that these are interim measurements and will be updated once the project is completed.

Solar energy projects require representative and accurate GHI (Global Horizontal Irradiance) and DNI (Direct Normal Irradiance) time series. It is believed that the outputs of this project would support and facilitate future solar energy projects in the Maldives. This renewable energy resource mapping project is funded by the Energy Sector Management Assistance Program (ESMAP) and Asia Sustainable and Alternative Energy Program (ASTAE), both administered by the World Bank. Ministry of Environment and Energy of Maldives is the World Bank's primary counterpart of this project.

METHOD AND OUTPUTS

A three step process is used to develop and deliver the solar resource data sets.

1 . Satellite based solar model and meteorological models. Solar parameters, from 1999 to 2016, are calculated using the Solargis model, which uses a set of inputs characterizing the cloud transmittance, state of the atmosphere and terrain conditions.

2 . Ground measurements. Four measurement stations were installed at Hanimaadhoo, Hulhule, Kahdhoo and Gan airports within the premises of the Maldives Meteorological Service (Figure 1). Solar radiation and meteorological parameters were measured from January 2016 to December 2016. The measurements will continue for an additional year.

3 . Improve accuracy of solar models using ground measurement. Site adaptation of the satellite-based model data was done by correlating the model and ground measurements for the overlapping data of year 2016. Based on the model adaptation, improved and more accurate time series and Typical Meteorological Year (TMY) data were produced. The data represent a period 1999 to 2016.

FIGURE 1 : POSITION OF SOLAR METEOROLOGICAL STATIONS IN MALDIVES

Data on the improved solar model is provided in this report. Detailed technical information on the process is available from World Bank. 2017. *Solar resource mapping in the Maldives: annual solar resources report.* Energy Sector Management Assistance Program (ESMAP). Washington, D.C.: World Bank Group. available at

http://documents.worldbank.org/curated/en/348591497433883065/Solar-resource-mapping-in-the-Maldives-annual-solar-resources-report

The solar outputs of the Phase 2 of the project will be as an hourly time series (1999 to 2016) and a Typical Meteorological Year (TMY). The data is available at Ministry of Environment and Energy and from below link

https://energydata.info/dataset/maldives-solar-radiation-measurement-data

ROLE OF AGENCIES INVOLVED

THE WORLD BANK
Administrator and Implementing Agency of Renewable Energy Resource Mapping project in Maldives.

MINISTRY OF ENVIRONMENT AND ENERGY
The primary country counterpart for the World Bank project.

ENERGY SECTOR MANAGEMENT ASSISTANT PROGRAM (ESMAP)
The financial and technical support by the Energy Sector Management Assistance Program (ESMAP) is gratefully acknowledged. ESMAP—a global knowledge and technical assistance program administered by the World Bank—assists low- and middle-income countries to increase their know-how and institutional capacity to achieve environmentally sustainable energy solutions for poverty reduction and economic growth. ESMAP is funded by Australia, Austria, Denmark, the European Commission, Finland, France, Germany, Iceland, Japan, Lithuania, Luxembourg, the Netherlands, Norway, the Rockefeller Foundation, Sweden, Switzerland, the United Kingdom, and the World Bank.

ESMAP launched a global initiative to support Renewable Energy Resource Assessment & Mapping in 2013 to help countries understand their resource potential. ESMAP is the co-funder of Renewable Energy Resource Mapping project in Maldives. For more information on ESMAP's work in Maldives, please visit https://www.esmap.org/re_mapping_maldives

ASIA SUSTAINABLE AND ALTERNATIVE ENERGY PROGRAM
Co-funder of Renewable Energy Resource Mapping project in Maldives.

MALDIVES METEOROLOGICAL SERVICE
Maldives Meteorological Service (MMS) is the host of solar measuring stations in Maldives. During the measurement campaign, local staff of Maldives Meteorological Service was fully trained for participation on daily inspection and cleaning of instruments.

SOLARGIS S.R.O., SLOVAKIA
Consultant to World Bank to implement the project Renewable Energy Resource Mapping for the Republic of Maldives.

TYPICAL METROLOGICAL YEAR DATA

The Typical Meteorological Year (TMY) contains hourly data derived from the time series covering complete 18 years (1999 to 2016). The data history of 18 years is compressed into one year. TMY data includes all the important parameters such as Global Horizontal Irradiance (GHI), Direct Normal Irradiance (DNI), Diffuse Horizontal Irradiance (DNI), Air Temperature (TEMP) and others.

P50 TMY dataset represents, for each month, the average climate conditions and the most representative cumulative distribution function, therefore extreme situations (e.g. extremely cloudy weather) are not represented in this dataset. The long-term annual summary of GHI and DNI are considered as the most critical parameters to consider.

P90 TMY dataset represents for each month the climate conditions, which after summarization GHI and DNI for the whole year results in the value equal to P90 derived by the analysis of uncertainty of the estimate and of the interannual variability for any single year. Thus TMY for P90 represents generally a conservative estimate, i.e. a year with the long-term value of GHI and DNI.

The TMY datasets were constructed from solar radiation and meteorological parameters.

In the following graphs, the values for Hulhule' meteorological site were shown in order to represent the methodology of TMY data calculation.

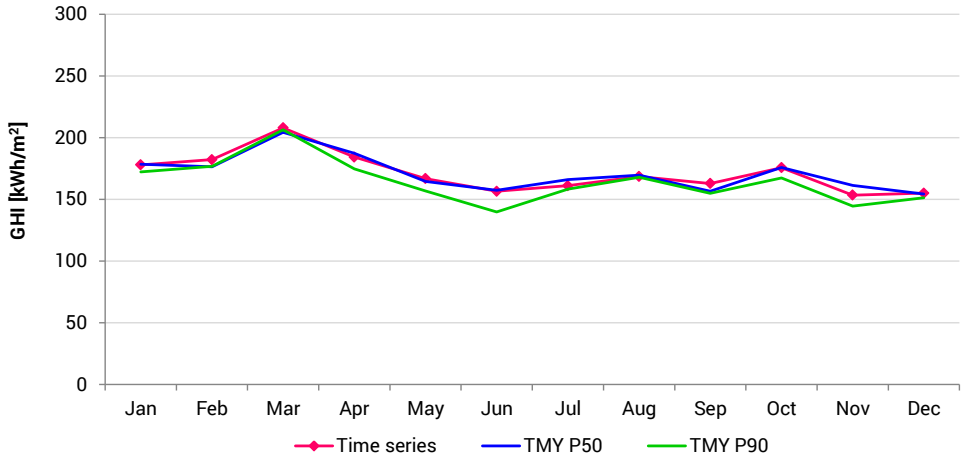


FIGURE 2 : GHI MONTHLY VALUES DERIVED FROM TIME SERIES AND TMY P50 AND P90 AT HULHULE' SITE.

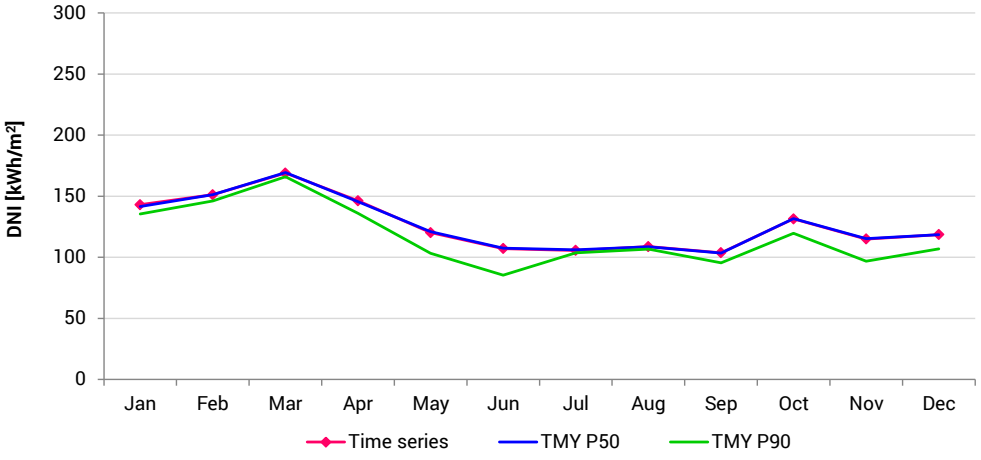


FIGURE 3 : DNI MONTHLY VALUES DERIVED FROM TIME SERIES AND TMY P50 AND P90 AT HULHULE' SITE.

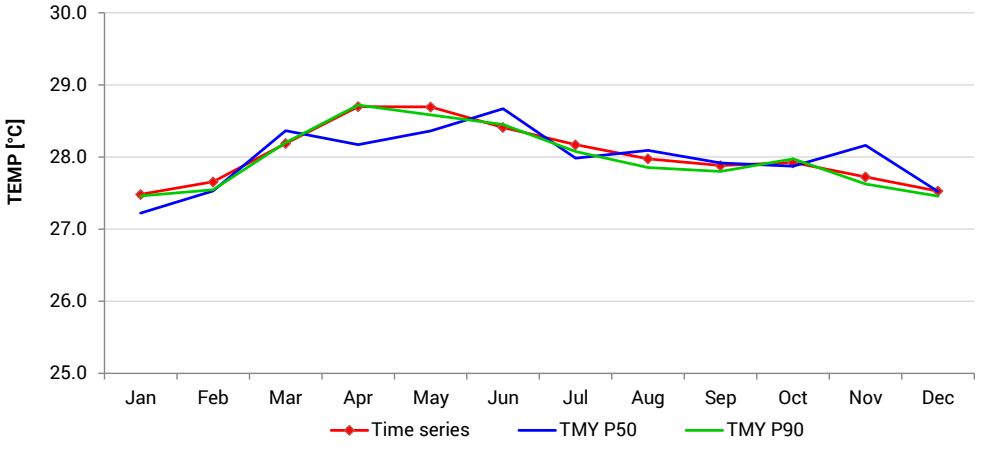


FIGURE 4 : TEMP MONTHLY VALUES DERIVED FROM TIME SERIES AND TMY P50 AND P90 AT HULHULE' SITE

SOLAR MEASUREMENT PARAMETERS

GLOBAL HORIZONTAL IRRADIANCE (GHI)

Global Horizontal Irradiance is the total solar radiation incident on a horizontal surface. It is the sum of Direct Normal Irradiance (DNI), Diffuse Horizontal Irradiance (DHI), and ground-reflected radiation. This value is of particular interest to photovoltaic installations. An application such as HOMER uses Solar GHI to compute flat-panel PV output.

DIRECT NORMAL IRRADIANCE (DNI)

Direct Normal Irradiance is the amount of solar radiation received per unit area by a surface that is always held perpendicular (or normal) to the rays that come in a straight line from the direction of the sun at its current position in the sky. Typically, you can maximize the amount of irradiance annually received by a surface by keeping it normal to incoming radiation. This quantity is of particular interest to concentrating solar thermal installations and installations that track the position of the sun.

DIFFUSE HORIZONTAL IRRADIANCE (DIF)

Diffuse Horizontal Irradiance is the amount of radiation received per unit area by a surface (not subject to any shade or shadow) that does not arrive on a direct path from the sun, but has been scattered by molecules and particles in the atmosphere and comes equally from all directions.

GLOBAL TILTED IRRADIANCE (GTI)

Global Tilted Irradiation/Irradiance (GTI) or total radiation received on a surface with defined tilt and azimuth, fixed or sun-tracking. This is the sum of the scattered radiation, direct and reflected. It is a reference for photovoltaic (PV) applications, and can be occasionally affected by shadow.

SOLAR RESOURCE OVERVIEW OF THE FOUR LOCATIONS

HANIMAADHOO

HULHULE

KAHDHOOO

GAN

HANIMAADHOO

LOCATION DETAILS

HANIMAADHOO, AIRPORT

HAA DHAAL ATOLL, MALDIVES

LATITUDE : 6.746389 °

LONGITUDE : 73.16861 °

ELEVATION : 2 M A.S.L

TABLE 1: GLOBAL HORIZONTAL IRRADIATION (GHI) MONTHLY AND YEARLY SUMS FOR HANIMAADHOO, MALDIVES IN KWH/M²

GHI

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	168.45	164.67	209.69	190.83	137.99	173.66	150.02	157.78	177.27	142.53	172.5	161.95	2007
2000	170.02	175.65	200.62	174.3	169.3	130.24	171.71	154.13	155.41	180.3	154.09	173.75	2010
2001	158.87	166.04	210.4	179.38	160.83	145.35	157.5	172.66	154.81	174.35	165.77	161.7	2008
2002	170.24	165.16	200.48	181.27	169.69	150.28	171.89	162.3	195.64	169.28	135.69	144.14	2016
2003	179.11	175.96	207.66	173.42	174.65	142.74	141.37	185.41	168.66	181.63	117.06	181.82	2029
2004	184.97	186.54	208.95	182.66	159.16	162.66	139.8	178.42	147.03	152.8	137.29	158.18	1998
2005	165.52	182.82	213.49	181.9	180.06	139.02	154.13	186.95	157.72	166.06	159.22	156.86	2044
2006	160.57	182.26	202.56	203.23	154.01	152.34	171.79	176.04	149.42	164.15	129.84	141.93	1988
2007	182.22	183.09	209.05	191.58	168.67	135.34	155.19	165.73	162.69	162.7	171.29	145.12	2033
2008	182.87	151.23	170.72	176.95	175.4	135.45	143.12	173.23	193.24	159.46	161.98	170.35	1994
2009	177.88	182.57	215.43	174.52	167.5	157.47	157.88	165.92	167.65	187.52	144.61	151.28	2050
2010	180.93	165.66	211.27	186.69	143.6	126.27	135.78	156.16	162.55	185.5	146.86	150.11	1951
2011	170.59	175.98	212.97	193.94	168.38	174.37	145.14	146.62	164.84	187.5	133.13	158.99	2032
2012	171.73	170.97	208.96	185.14	191.6	146.9	176.9	155.59	174.8	149.99	161.82	132.41	2027
2013	180.04	180.06	204.8	205.31	141.95	133.09	151.31	163.32	165.66	188.96	164.12	153.23	2032
2014	180.84	179.09	203.09	192.6	172.01	162.55	180.78	154.24	161.24	167.81	148.59	161.67	2065
2015	185.19	171.52	210.65	197.5	152.96	151.82	168.85	180.36	150.95	164.55	136.17	146.63	2017
2016	173.47	174.12	212.55	195.46	142.12	150.04	150.4	171.95	176.98	194.93	148.55	160.1	2051

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE

TABLE 2 : DIRECT NORMAL IRRADIATION (DNI) MONTHLY AND YEARLY SUMS FOR HANIMAADHOO, MALDIVES IN KWH/M²

DNI

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	137.98	132.27	171.76	135.17	79.5	152.57	98.51	98.6	133.55	89.46	164.85	153.63	1548
2000	149.41	156.56	146.94	114.12	122.21	74.2	106.98	91.62	95.45	152.23	117.02	155.79	1483
2001	112.17	124.93	161.22	135.87	102.58	92.23	89.86	106.27	88.4	121.93	135.99	135.53	1407
2002	122.61	128.38	151.14	138.2	117.53	87.51	107.35	91.24	157.36	123.09	90.17	98.11	1413
2003	153.84	152.74	169.26	134.76	120.4	92.63	77.1	120.76	119.6	147.74	77.57	177.96	1544
2004	169.54	156.27	165.12	143.26	89.63	103	75.13	115.84	89.34	118.76	97.1	126.69	1450
2005	129.85	168.77	182.09	150.42	133.43	75.81	88.67	127.15	103.96	123.6	131.39	137.38	1553
2006	135.06	157.78	164.59	162.44	97.55	98.03	108.42	117.01	82.4	128.89	91.49	92.04	1436
2007	151.56	166.97	165.63	151.73	124.04	80.28	92.81	102.26	101.57	108.65	141.76	104.47	1492
2008	154.15	104.54	132.47	130.57	130.18	71.13	75.23	105.14	147.06	124.21	116.33	160.92	1452
2009	149.66	151.16	182.22	125.9	104.81	105.12	98.07	97.39	107.14	148.75	106.14	127.34	1504
2010	148.66	125.56	170.52	145.4	95.11	75.17	63.56	91.4	95.49	146.42	105.74	127.49	1391
2011	129.09	144.5	175.35	146.6	114.29	123.89	79.84	79.5	110.23	163.68	82.16	120.69	1470
2012	139.68	125.18	157.93	127.67	141.12	72.62	121.29	94.2	111.12	113.92	117.69	87.84	1410
2013	155.21	160.01	166.89	172.43	75.13	69.2	80.62	102.09	107.37	154.24	138.86	118.76	1501
2014	154.11	157.47	164.46	148.83	125.33	104.16	115.68	89.88	109.89	129.86	102.48	138.22	1540
2015	169.49	141.1	179.23	170.21	89.63	94.84	114.56	120.65	92.53	125.99	97	116.11	1511
2016	136.98	138.83	174.63	152	85.67	84.3	95.12	118.42	125.1	165.09	100.76	132.49	1509

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE

TABLE 3 : DIFFUSE HORIZONTAL IRRADIATION (DIF) MONTHLY AND YEARLY SUMS FOR HANIMAADHOO, MALDIVES IN KWH/M²

DIF

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	74.94	69.78	78.02	84.77	76.38	64.03	75	81.75	75.13	75.55	58.12	61.57	875
2000	67.93	63.16	86.24	84.04	76.89	74.45	88.19	82.44	81.51	67.32	71.42	68.9	912
2001	80.1	73.74	86.01	75.21	81.92	75.23	87.06	88.64	84.58	80.66	70.82	70.26	954
2002	83.25	70.1	83.88	75.91	81.34	82.77	88.37	89.08	76.7	75.24	72.55	76.46	956
2003	71.91	65.88	78.03	69.08	82.03	72.9	82.13	89.28	76.69	72.67	62.94	63.82	887
2004	69.14	72.35	81.26	73.33	89.26	83.2	80.56	87.75	78.01	66.2	69.58	72.21	923
2005	76.14	61.9	74.88	68.77	80.24	80.58	84.82	88.44	78.4	73.6	67.72	64.65	900
2006	67.34	67.65	76.62	77.08	79.65	77.48	85.92	84.29	83.54	68.91	66.37	78.08	913
2007	76.72	64.74	81.48	75.45	76.22	74.85	82.91	84.98	81.5	79.28	72.17	74.37	925
2008	76.29	74.6	69.81	75.71	77.39	80.61	83.98	89.81	79.17	67.3	77.58	62.8	915
2009	75.08	72.41	76.41	78.18	86	78.32	81.85	88.65	83.07	75.89	70.82	65.74	932
2010	77.53	73.15	79.72	74.28	71.6	70.12	85.63	83.09	88.04	76.05	71.8	65.73	917
2011	80.3	69.73	79.36	80.67	81.61	80.03	81.35	83.38	79.57	67.26	74.24	75.77	933
2012	74.73	78.42	84.97	84.86	85.37	89.72	82.37	81.53	88.18	65.99	77.8	72.07	966
2013	72.13	64.04	76.08	73.25	82.15	79.07	87.1	82.77	82.49	74.88	67.15	73.53	915
2014	74.87	64.84	77.66	76.46	78.25	81.86	89.53	82.42	75.91	71.72	75.29	67.97	917
2015	69.45	69.16	74.93	68.98	81.81	79.05	80.59	86.09	77.21	72.23	67.88	68.43	896
2016	78.18	74.26	78.09	77.83	75.53	85.31	76.03	79.12	80.32	72.53	77.08	70.87	925

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE

TABLE 4 : GLOBAL TILTED IRRADIATION (GTI) MONTHLY AND YEARLY SUMS FOR HANIMAADHOO, MALDIVES IN KWH/M²

GTI

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	180.14	172.62	213.14	187.68	133.18	163.56	143.41	153.6	177.17	146.93	184.17	175.29	2031
2000	182.37	184.38	203.56	171.42	162.62	124.24	164.36	150.51	155.28	187.19	163.31	187.75	2037
2001	169.11	173.43	213.62	176.38	154.75	138.33	150.96	168.34	154.65	180.05	176.14	174.23	2030
2002	181.29	172.42	203.45	178.3	162.77	143.27	164.28	158.56	196.12	174.96	143.02	153.75	2032
2003	192.05	184.62	210.8	170.66	167.76	135.84	135.69	180.81	168.84	188.15	123.24	197.52	2056
2004	199.03	195.56	212.11	179.35	153.17	154.75	134.31	173.91	147.18	157.54	144.91	170	2022
2005	176.77	192.23	216.93	178.27	172.73	132.76	147.7	181.94	158.44	171.52	169.29	169.18	2068
2006	171.73	191.31	205.64	199.69	148.4	144.94	164.4	171.55	149.79	169.13	136.85	151.06	2004
2007	195.24	192.53	212.4	188.14	161.66	129.09	148.55	161.35	163.19	167.32	182.24	155.11	2057
2008	196.03	157.67	172.63	174.05	168.01	129.42	137.37	168.74	193.83	164.41	171.37	184.54	2018
2009	190.58	191.36	218.68	171.21	161.22	149.67	151.19	161.79	168	194.04	153.07	162.83	2074
2010	193.77	173.1	214.5	183.3	138.27	120.35	130.68	152.19	162.6	192.13	155.14	161.57	1978
2011	182	184.38	216.2	190.68	161.77	165.36	139.24	143.17	165.46	193.82	139.93	170.49	2053
2012	183.69	178.41	211.99	182.21	183.75	140.55	169.02	151.56	175.33	154.12	171.36	141	2043
2013	193.06	189.02	207.74	201.51	137.02	127.22	145.28	159.34	166.34	195.57	174.84	164.39	2061
2014	193.9	187.97	206.05	189.22	164.85	154.58	172.86	150.68	161.54	173.25	156.75	174.27	2086
2015	199.25	179.58	214.24	193.68	147.4	144.53	161.17	175.51	151	169.83	143.82	157.39	2037
2016	185.49	182.28	215.77	192.06	136.96	143.19	143.93	167.03	177.6	202	156.74	172.23	2075

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE

TABLE 5 : MONTHLY AND YEARLY MEAN TEMPERATURE FOR HANIMAADHOO, MALDIVES IN °C

TEMP

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	27.09	27.51	28.21	28.75	27.84	27.82	27.7	27.52	27.96	27.39	27.32	27.27	27.7
2000	26.98	26.92	28.05	28.82	28.62	27.74	27.76	27.48	27.85	27.92	27.99	27.56	27.8
2001	27.11	27.3	28.29	28.78	28.98	28.13	27.88	27.86	27.54	27.55	27.69	27.48	27.9
2002	27.51	27.79	28.45	28.98	28.95	28.57	28.27	27.88	28.39	28.15	27.89	27.37	28.2
2003	27.54	27.9	28.5	29.32	29.39	28.47	28.14	28.15	28.02	27.93	27.49	27.39	28.2
2004	27.47	27.64	28.47	29.11	28.88	28.18	27.45	27.89	27.57	27.73	27.73	27.35	28.0
2005	27.38	27.91	28.26	28.79	29.38	28.5	27.96	28.29	27.7	28.07	27.75	27.29	28.1
2006	27	27.33	28.18	28.88	28.89	28.55	28.25	28.16	27.92	28.05	27.99	27.61	28.1
2007	27.22	27.3	28.04	29.05	29.21	28.79	28.24	28.13	27.88	28.07	27.6	27.66	28.1
2008	27.17	27.4	27.57	28.65	28.74	28.48	27.88	27.85	27.81	28.11	28.06	27.34	27.9
2009	26.95	27.34	28.25	29.01	28.98	28.18	28.04	27.75	27.92	28.16	27.93	27.85	28.0
2010	27.55	27.71	28.58	29.3	29.46	28.48	28.05	27.92	27.8	27.83	27.62	26.95	28.1
2011	27.04	26.93	27.73	28.52	28.63	28.59	28.04	27.77	27.79	28	27.84	27.68	27.9
2012	26.93	27.31	27.59	28.65	28.53	28.27	28.15	28.03	27.96	27.87	27.94	27.69	27.9
2013	27.48	27.45	28.24	28.82	28.94	27.89	27.8	27.5	27.49	27.85	27.85	27.52	27.9
2014	27.11	27.34	28.11	28.75	29.31	28.78	28.34	27.64	27.72	27.86	27.54	27.57	28.0
2015	27.27	27.33	28.03	28.9	29.19	28.8	28.24	28.22	28.11	28.3	28.13	28.03	28.2
2016	27.99	28.16	28.71	29.51	29.63	28.55	28.19	27.86	27.56	27.89	27.62	27.55	28.3

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE

HULHULE, AIRPORT
MALE' ATOLL, MALDIVES
LATITUDE: 4.192733 °
LONGITUDE: 73.528 °
ELEVATION: 2 M A.S.L

TABLE 6 : GLOBAL HORIZONTAL IRRADIATION (GHI) MONTHLY AND YEARLY SUMS FOR HULHULE, MALDIVES IN KWH/M²

GHI

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	151.9	176.94	206.63	176.87	160.49	166.1	168.62	168.84	166.85	167.4	177.79	159.56	2048
2000	164.35	191.35	202.3	175.28	170.1	141.55	167.33	169.4	143.34	185.3	153.38	182.02	2046
2001	172.46	178.65	217.01	174.83	168.11	161.81	159.48	180.22	149.36	172.37	169.51	161.42	2065
2002	170.76	170.48	201.83	169.55	168.85	149.3	176.46	172.87	175.59	175.56	136.04	137.33	2005
2003	170.39	180.9	204.19	175	174.59	133.86	149.68	188.02	156.48	201.09	136.34	178.47	2049
2004	188.94	190.18	216.56	185.38	171.51	176.17	144.5	172.22	155.85	171.48	145.08	150.4	2068
2005	181.17	187.71	209.6	193.85	165.18	158.96	158.52	181.03	161.11	169.54	166.79	167.76	2101
2006	173.44	182	198.7	199.99	175.12	152.03	166.77	157.55	151.3	179.03	123.48	115.85	1975
2007	182.44	193.89	217.32	185.54	172.82	147.51	158.66	172.95	156.34	158.73	176.14	151.45	2074
2008	172.12	181.77	180.46	166.98	182.3	160.06	152.25	167.99	199.13	169.1	161.22	161.98	2055
2009	185.42	191.96	223.83	179.65	166.93	164.58	167.56	142.56	175.14	197.65	131.71	150.35	2077
2010	185.48	173.22	215.94	178.02	157.17	139.96	150.7	169.36	151.4	201.58	165.73	151.62	2040
2011	178.23	187.04	220.28	187.07	164.42	175.14	161.22	169.11	164.44	172.26	143.93	160.62	2084
2012	183.47	169.68	213.58	189.32	177.51	161.7	170.88	169.3	164.32	166.62	162.53	136.2	2065
2013	187.86	176.13	192.39	202.99	156.85	144.31	165.87	162.79	173.52	170.46	165.42	157.5	2056
2014	189.81	188	199.95	200.84	161.13	168.71	174.25	163.1	155.14	167.48	144.56	154.15	2067
2015	192.87	177.11	209.33	195.7	172.54	159.04	164.1	166.24	150.1	168.27	152.36	155.67	2063
2016	171.62	182.62	213.52	179.61	138.27	157.26	142.78	160.45	183.01	169.22	150.85	159.08	2008

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE

TABLE 7 : DIRECT NORMAL IRRADIATION (DNI) MONTHLY AND YEARLY SUMS FOR HULHULE, MALDIVES IN KWH/M²

DNI

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	114	146.78	166.77	127.05	116.13	140.15	128.39	114.51	109.97	117.36	153.14	130.8	1565
2000	129.82	166	149.19	119.84	126.3	87.74	113.58	107.77	81.95	153.97	120.13	161.98	1518
2001	136.16	133.99	170.02	136.74	117.48	108.45	101.29	115.98	80.72	120.02	133.61	123.32	1478
2002	129.18	129.64	152.22	129.08	127.45	87.51	124.95	96.32	117.34	131.22	86.66	90.71	1402
2003	136.79	164.06	168.77	129.69	114.9	88.08	94.55	129.37	103.06	179.81	97.46	156.55	1563
2004	161.23	161.46	181.69	155.96	109.66	134.22	85.36	118.88	89.25	135.88	105.13	105.01	1544
2005	144.61	163.34	182.88	166.29	114.01	107.28	104.21	126.31	96.61	116.01	131.72	140.31	1594
2006	139.13	146.98	159.09	160.93	127.9	101.79	104.34	93.98	92.56	144.22	77.65	63.83	1412
2007	141.06	176.23	180.98	154.95	136.91	105.16	109.76	109.82	88.1	103.85	143.35	107.39	1558
2008	135.51	141.95	139.26	117.9	149.03	112.7	84.42	107.24	154.63	113.98	114.86	131.42	1503
2009	151.89	168.86	204.48	135.32	113.97	120.78	118.01	85.55	120.75	156.55	99.66	124.45	1600
2010	150.48	139.78	179.27	144.21	108.68	85.7	89.72	108.16	95.7	161.38	124.89	113.35	1501
2011	141.06	158.03	186.76	145.11	120.56	123.05	95.8	104.87	108.16	136.18	92.37	118.86	1531
2012	151.85	117.32	164.44	142.7	138.99	91.5	119.68	106.29	98.33	112.56	120.31	86.8	1451
2013	157.59	150.76	148.28	175.84	103.7	84.88	105.71	104.39	118.92	119.37	146.68	110.23	1526
2014	161.67	163.24	152.49	171.53	122.12	122.94	123.37	105.9	95.94	120.26	97.2	118.15	1555
2015	168.39	146.04	171.46	179.58	129.46	118.99	112.3	117.76	87.66	119.62	119.35	119.85	1590
2016	124.4	148.01	183.34	139.18	86.26	107.1	85.02	104.76	126.65	123.99	104.51	131.76	1465

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE

TABLE 8 :DIFFUSE HORIZONTAL IRRADIATION (DIF) MONTHLY AND YEARLY SUMS FOR HULHULE, MALDIVES IN KWH/M²

DIF

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	71.99	69.3	79.13	79.78	75.57	65.55	73.12	81.57	83.62	77.88	68.05	70.17	896
2000	73.52	69.78	85.83	81.76	77.3	76.18	80.86	86.55	80.14	72.28	68.78	70.89	924
2001	75.19	77.51	85.83	72.21	79.55	80.19	81.05	90.35	85.6	81.73	74.12	76.46	960
2002	78.94	73.96	83.47	74.1	75.54	82.22	81.78	95.87	86.31	77.82	74.07	74.73	959
2003	74.58	61.8	76.99	76.91	86.67	69.6	79.64	87.56	76.8	68.13	67.81	71.3	898
2004	76.31	70.92	77.93	69.68	87.51	74.93	80.19	81.26	85.11	72.11	69.38	76.62	922
2005	79.25	69.04	71.42	72.44	79.48	78.69	79.37	83.16	85.89	80.24	72.85	71.63	923
2006	75.38	74.67	76.92	76.73	79.7	75.96	87.84	84.04	79.42	74	68.13	71.08	924
2007	82.19	65.37	79.55	69.81	71.84	71.14	77.65	87.71	86.04	79.77	74.73	76.26	922
2008	76.35	76.87	77.16	76.5	71.91	75.65	87.23	84.22	80.53	82.49	78.21	72.65	940
2009	78.73	69.9	71.33	79.1	81.79	74.53	78.74	76.79	81.42	80.71	62.48	65.28	901
2010	79.15	69.91	79.03	69.68	76.15	75.46	81.32	84.86	76.67	80.83	75.65	74.22	923
2011	79.25	71.73	78.45	76.95	74.85	83.49	87.11	87.2	80.26	72.82	76.63	77.55	946
2012	78.06	81.72	86.18	79.26	75	90.72	79.91	86.32	87.06	82.93	75.17	76.73	979
2013	76.58	66.03	79.37	71.31	78.57	79.45	84.98	82.38	81.46	80.97	63.87	80.13	925
2014	76.56	69.34	82.4	70.71	71.73	75.75	80.49	81.17	79.82	77.58	74.68	73.54	914
2015	76.12	70.19	79.42	64.1	75.81	71.85	80.2	75.44	81.59	79.57	69.56	75.23	899
2016	82.91	73.22	75.99	74.33	73.48	77.41	79.05	79.31	83.46	77.88	75.08	70.06	922

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE

TABLE 9 : GLOBAL TILTED IRRADIATION (GTI) MONTHLY AND YEARLY SUMS FOR HULHULE, MALDIVES IN KWH/M²

GTI

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	158.24	182.46	208.53	174.45	155.98	159.53	162.94	165.56	166.66	170.99	185.1	167.34	2058
2000	171.55	197.25	203.86	173.11	165.12	136.83	162.05	166.39	143.14	189.59	159.37	191.52	2060
2001	180.17	183.74	218.94	172.66	163.41	156.19	154.63	176.87	149.19	175.81	176.15	168.98	2077
2002	178.02	175.38	203.37	167.29	163.73	144.44	170.66	170.02	175.42	179.48	140.55	143.09	2011
2003	178	186.62	205.99	172.97	169.75	129.3	145.05	184.56	156.2	205.9	141.18	187.7	2063
2004	197.79	196.07	218.49	182.71	166.73	169.61	140.31	168.89	155.72	175.03	150.38	156.99	2079
2005	189.32	193.61	211.48	191.04	160.58	153.39	153.54	177.52	161.21	172.89	173.46	176.13	2114
2006	181.1	187.44	200.36	197.36	170.14	146.79	161.7	154.65	151.32	182.73	127.35	119.98	1981
2007	190.46	200.17	219.34	183.01	167.66	142.25	153.58	169.66	156.3	161.69	183.22	158.18	2086
2008	179.68	187.24	181.68	165.05	176.65	154.37	147.87	164.79	199.12	172.4	167.1	169.83	2066
2009	193.91	198.03	225.74	177.05	162.35	158.64	162.24	140.05	175.33	202.04	136.78	157.64	2090
2010	193.91	178.28	217.83	175.67	152.89	135.36	146.32	166.15	150.98	206.18	171.99	158.52	2054
2011	186.24	192.76	222.15	184.74	159.72	168.85	156.47	166.05	164.56	175.56	148.73	167.97	2094
2012	191.92	174.31	215.26	186.92	172.35	156.51	165.54	166.2	164.41	169.62	168.74	141.8	2074
2013	196.5	181.46	194.07	200.04	152.42	139.62	160.8	159.71	173.63	173.84	172.43	164.5	2069
2014	198.68	193.97	201.56	198.07	156.24	162.61	168.64	160.19	155.02	170.9	149.49	161.32	2077
2015	202.12	182.28	211.27	192.87	167.47	153.17	158.85	162.96	149.89	171.55	158.41	163	2074
2016	178.78	188.03	215.19	177.27	134.6	151.76	138.55	157.22	183.27	172.56	156.27	166.89	2020

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE

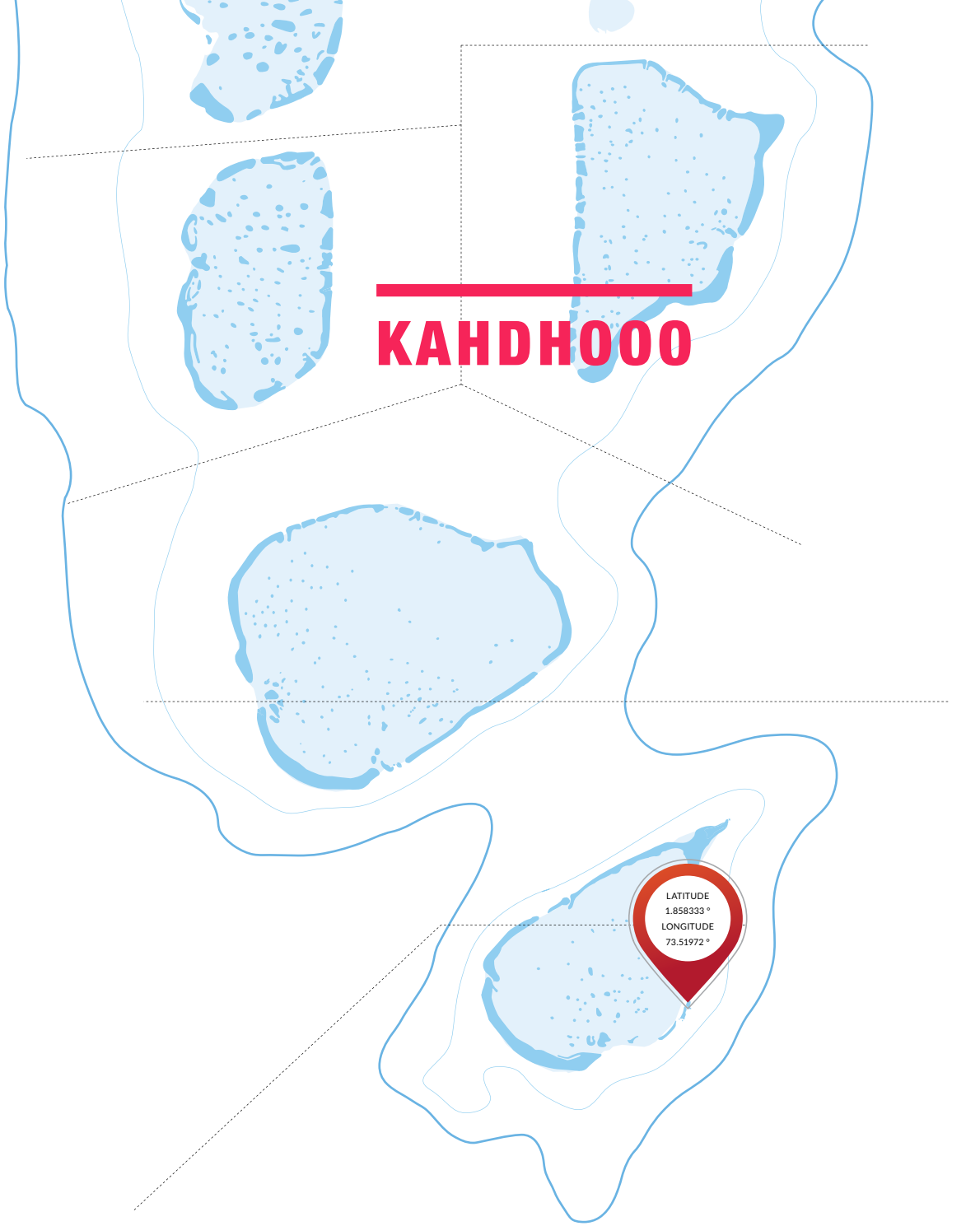
TABLE 10 : MONTHLY AND YEARLY MEAN TEMPERATURE FOR HULHULE, MALDIVES IN °C

TEMP

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	27.17	27.56	28.2	28.41	28	27.82	28.08	27.62	27.98	27.61	27.71	27.25	27.8
2000	27.19	27.22	28.2	28.46	28.39	27.86	27.96	27.56	27.6	27.85	27.73	27.68	27.8
2001	27.46	27.43	28.39	28.72	28.71	28.27	28.08	28.13	27.51	27.54	27.55	27.29	27.9
2002	27.74	27.96	28.13	28.53	28.8	28.66	28.33	27.96	28.01	27.87	27.82	27.3	28.1
2003	27.53	28	28.37	28.93	28.87	28.51	28.53	28.18	27.92	28.16	27.4	27.67	28.2
2004	27.76	27.97	28.48	28.85	28.99	28.33	27.59	27.88	27.58	27.53	27.62	27.4	28.0
2005	27.56	28.12	28.45	28.85	28.87	28.44	28.08	28.38	27.81	28.07	27.7	27.43	28.1
2006	27.22	27.61	28.22	28.68	28.64	28.55	28.31	28.18	27.79	28	27.74	27.57	28.0
2007	27.48	27.44	27.95	28.79	28.8	28.69	28.29	28.28	28.16	27.94	27.7	27.45	28.1
2008	27.14	27.67	27.75	28.24	28.38	28.52	28.04	27.85	28.12	28.36	28.17	27.62	28.0
2009	27.37	27.47	28.1	28.74	28.54	28.28	28.14	27.69	28.02	28.23	27.96	27.78	28.0
2010	27.79	27.89	28.41	29.08	29.2	28.45	28.22	28.09	27.96	28.02	27.82	27.08	28.2
2011	27.21	26.92	27.83	28.18	28.37	28.55	28.04	28.05	28.11	28.08	27.95	27.58	27.9
2012	27.22	27.67	27.8	28.58	28.25	28.45	28.35	28.12	27.99	27.93	27.68	27.52	28.0
2013	27.76	27.53	28.12	28.82	28.58	27.95	27.98	27.68	27.72	27.8	27.47	27.67	27.9
2014	27.41	27.44	28.22	28.6	28.83	28.63	28.47	27.95	27.8	27.97	27.62	27.52	28.0
2015	27.56	27.44	28.05	28.86	28.96	28.77	28.35	28.04	28.14	28.04	28.03	28.16	28.2
2016	28.1	28.46	28.69	29.26	29.34	28.66	28.25	27.91	27.66	27.61	27.39	27.56	28.2

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE



KAHDHOO, AIRPORT, MALDIVES

LATITUDE: 1.858333 °

LONGITUDE: 73.51972 °

ELEVATION: 2 M A.S.L

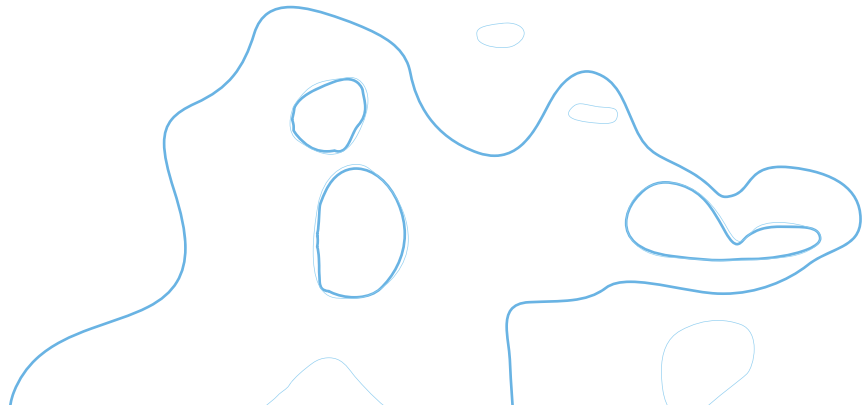


TABLE 11 : GLOBAL HORIZONTAL IRRADIATION (GHI) MONTHLY AND YEARLY SUMS FOR KAHDHOO, MALDIVES IN KWH/M²

GHI

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	156.87	188.22	199.93	174	167.09	168.65	173.61	166.1	166.74	175.29	174.36	154.25	2065
2000	176.41	188.29	209.5	183.66	175.7	145.31	163.59	160.67	153.42	179.5	159.75	169.26	2065
2001	180.82	178.28	218.04	162.62	178.48	168.06	143.22	165.6	165.78	170.89	162.12	166.9	2061
2002	158.24	163	190.6	173.58	175.67	144.84	158.77	169.53	177.92	170.27	157.57	156.69	1997
2003	172.97	185.88	190.86	165.75	166.23	145.92	161.13	179.99	164.24	190.89	155.94	161.88	2042
2004	168.45	193.88	217.3	175.87	174.54	174.97	145.05	173.52	159.25	170.71	137.14	159.18	2050
2005	176.39	174.85	214.87	187.94	161.18	160.63	154.72	168.72	164.83	177	182.24	184.1	2107
2006	170.96	172.36	205.72	182.84	177.41	141.16	160.68	167.05	157.92	172.66	127.63	124.43	1961
2007	174.7	186.64	210.19	181.92	179.31	149.81	153.33	160.71	157.9	166.39	194.96	143.41	2059
2008	180.44	191.91	185.56	175.53	182.22	163.94	156.08	166.02	194.56	170.32	167.33	168.21	2102
2009	188.75	186.08	221.01	176.68	175.15	158	175.83	144.25	180.15	184.34	156.77	157.97	2105
2010	183.77	172.17	211.52	181.88	152.8	153.14	145.39	154.58	159.49	193.91	169.59	179.56	2058
2011	190.35	192.1	215.65	178.69	166.94	168.01	157.94	178.72	170.22	170.12	151.9	152.5	2093
2012	193.99	160.4	206.56	177.62	160.26	167.53	174.41	171.77	168.02	152.7	153.64	160.3	2047
2013	198.82	172.13	196.92	185.98	151.25	153.94	174.32	157.15	191.28	167.64	156.84	139.28	2046
2014	195.24	181.29	187.21	193.32	159.19	171.25	176.97	168.59	153.6	180.38	152.25	166.32	2086
2015	195.33	176.34	212.15	186.99	174.35	172.16	157.57	156.3	155.96	165.34	146.08	174.78	2073
2016	167.08	162.29	208.92	168.85	154.23	163.68	146.21	148.7	183.24	166.45	144.99	170.87	1986

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE

TABLE 12 : DIRECT NORMAL IRRADIATION (DNI) MONTHLY AND YEARLY SUMS FOR KAHDHOO, MALDIVES IN KWH/M²

DNI

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	108.68	170.41	164.63	133.41	129.72	142.79	148.89	126.38	113.55	123.47	142.34	121.37	1626
2000	140.66	158.71	168.43	141.07	149.67	106.46	122.99	98.32	93.37	141.05	124.96	135.4	1581
2001	149.8	136.47	184.55	126.72	152.88	123.76	86.48	107.49	106.89	120.32	126.21	138.26	1560
2002	114.48	125.01	151	145.11	146.44	91.4	108.34	104.78	126.9	123.81	129.39	119.21	1486
2003	134.81	169.06	160.45	137.34	129.84	106.13	110.19	131.74	110.43	152.09	126.36	126.93	1595
2004	140.66	169.85	193.81	151.05	128.5	145.57	94.01	127.33	103.68	133.62	97.88	127.67	1614
2005	135.82	150.59	193.25	164.26	126.14	119.72	105.47	122.42	108.04	127.59	158.12	163.5	1675
2006	140.09	138.57	179.3	145.79	140.01	102.2	108.17	117.06	101.69	134.34	86.09	75.55	1469
2007	142.6	159.68	188.52	159.66	164.46	110.69	116.14	102.15	96.36	114.85	179.51	98.86	1633
2008	153.82	154.28	147.92	137.84	155.71	135.48	102.29	111.4	153.92	116.47	129.06	148.18	1646
2009	154.19	169.26	203.27	136.76	138.13	126.82	141.4	89.87	131.69	141.71	122.99	129.84	1686
2010	152.92	140.23	181.5	158.35	111.64	99.6	97.08	90.96	102.91	157.6	126.16	153.99	1573
2011	157.63	166.8	188.9	139.25	126.6	132.93	94.15	127.33	113	120.68	115.61	111.08	1594
2012	170.1	106.99	162.14	131.41	126.62	115.78	131.5	118.6	113.4	102.25	113.59	118.67	1511
2013	179.3	144.15	164.51	157.19	111.01	102.75	127.91	107.44	145.43	116.61	127.8	91.52	1576
2014	176.57	161.09	140.16	165.18	119.95	141.23	137.25	118.54	95.22	130.67	114.5	138.82	1639
2015	178.6	151.95	191.99	170.71	144.91	142.93	114.25	110.91	100.75	120.36	108.73	152.52	1689
2016	130.96	123.02	187.5	138.96	118.58	123.51	90.77	94.03	133.46	115.03	108.52	150.96	1515

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE

TABLE 13 : DIFFUSE HORIZONTAL IRRADIATION (DIF) MONTHLY AND YEARLY SUMS FOR KAHDHOO, MALDIVES IN KWH/M²

DIF

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	79.54	62.88	74.05	74.3	71.81	66.56	65.73	72.16	79.39	81.57	70.51	71.08	870
2000	77.45	70.25	80.73	77.26	68.41	68.1	73.15	84.7	80.78	74.83	71.06	76.83	904
2001	74.4	75.21	75.71	69.41	67.78	78.48	78.55	83.18	81.72	79.97	70.76	71.44	907
2002	75.33	70.15	75.75	67.6	68.57	76.89	77.66	87.42	81.59	76.72	65.74	72.04	895
2003	77.15	63.65	69.96	65.52	72.38	70.48	81.17	78.38	77.99	77.53	65.79	73.31	873
2004	71	68.77	70.52	66.98	78.11	68.61	74.47	77.55	78.86	72.39	69.41	71.37	868
2005	80.25	65.33	68.59	70.08	70.11	73.32	75.76	74.97	80.49	81.21	68.63	69.56	878
2006	71.43	69.54	69.61	74.44	74.72	65.49	80.29	77.23	78.57	75.82	67.19	70.71	875
2007	73.46	68.52	69.04	66.33	59.62	70.58	68.91	82.14	82.62	79.05	66.76	74.68	862
2008	73.19	76.15	72.94	71.8	69.59	67.95	78.35	81.45	77.91	83.15	72.16	67.39	892
2009	79.42	63.51	69.01	75.41	74.34	65.71	72.6	75.99	79.39	80.31	68.43	69.9	874
2010	76.2	67.74	73.27	67.68	71.18	78.28	75.48	83.05	78.99	77.01	78.36	73.72	901
2011	77.63	68.14	72.13	73.82	74.64	71.27	85.94	81.34	81.89	81.53	69.16	75.61	913
2012	75.82	78.72	80.66	77.67	69.32	80.58	76.5	80.76	80.22	77.38	71.65	77.21	926
2013	72.98	65.82	72.58	71.77	69.97	77.3	79.24	77.17	78.01	80.89	67.84	73.73	887
2014	71.77	62.81	78.13	70.96	69.7	67.36	74.94	77	78.29	82.21	69.97	70.46	874
2015	70.43	65.86	67.6	64	67.63	69.26	72.33	71.63	77.54	76.91	69.45	70.69	843
2016	73.87	72.2	67.96	66.34	67.31	72.79	78.39	76.45	78.48	79.37	67.6	66.98	868

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE

TABLE 14 : GLOBAL TILTED IRRADIATION (GTI) MONTHLY AND YEARLY SUMS FOR KAHDHOO, MALDIVES IN KWH/M²

GTI

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	160.83	192.02	200.92	172.08	163.66	163.99	169.2	163.65	166.46	177.53	178.72	158.93	2068
2000	181.44	191.83	210.42	181.86	171.76	141.61	159.74	158.62	153.11	181.88	163.71	174.55	2071
2001	186.12	181.46	219.14	161.06	174.43	163.72	140.18	163.29	165.63	172.92	166.11	172.18	2066
2002	162.32	165.93	191.31	171.9	171.7	141.42	155.21	167.26	177.58	172.48	161.62	161.34	2000
2003	177.8	189.59	191.74	164.16	162.63	142.23	157.48	177.52	163.84	193.44	159.94	166.8	2047
2004	173.31	197.72	218.23	173.98	170.86	170.2	141.96	170.89	159.02	172.75	140.26	164.09	2053
2005	181.19	178.21	215.92	185.92	157.69	156.47	151.29	166.23	164.63	179.3	187.14	190.25	2114
2006	175.78	175.47	206.72	181.09	173.64	137.65	157.13	164.6	157.79	174.79	130.35	127.5	1963
2007	179.66	190.24	211.33	179.93	175.17	146	149.72	158.46	157.76	168.38	200.36	147.32	2064
2008	185.83	195.52	186.1	173.82	178.11	159.4	152.7	163.63	194.24	172.47	171.42	173.68	2107
2009	194.23	189.65	221.94	174.75	171.42	153.78	171.53	142.35	179.96	186.77	160.71	162.88	2110
2010	189.18	175.29	212.54	179.83	149.69	149.51	142.17	152.61	159.04	196.68	173.64	185.39	2066
2011	195.97	195.88	216.53	176.98	163.48	163.54	154.64	176.16	170.01	172.01	155.41	156.93	2098
2012	199.9	163.04	207.42	175.93	157	163.37	170.38	169.33	167.84	154.32	157.35	164.98	2051
2013	204.95	175.36	197.84	183.97	148.01	150.19	170.27	154.79	191.18	169.74	160.77	143.02	2050
2014	201.24	184.95	187.88	191.28	155.88	166.61	172.74	166.3	153.26	182.6	155.85	171.54	2090
2015	201.37	179.56	213.24	184.91	170.52	167.42	153.96	154.01	155.65	167.21	149.6	180.46	2078
2016	171.68	165.2	209.7	167.07	150.97	159.48	143.1	146.59	183.18	168.45	148.42	176.48	1990

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE

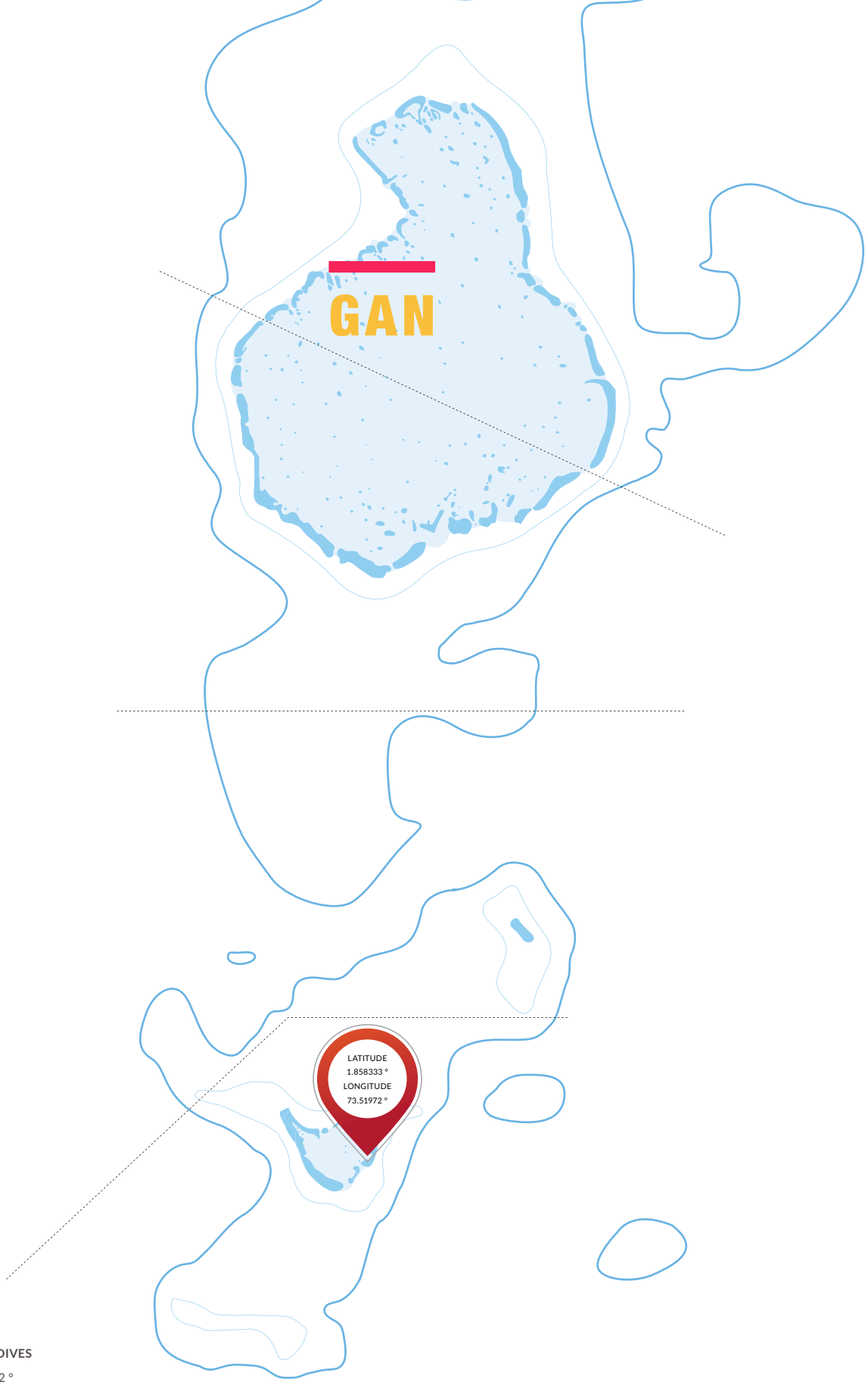
TABLE 15 : MONTHLY AND YEARLY MEAN TEMPERATURE FOR KAHDHOO, , MALDIVES IN °C

TEMP

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	27.15	27.79	28.34	28.15	28.31	27.9	28.23	27.63	27.95	27.88	27.86	27.34	27.9
2000	27.49	27.59	28.22	28.39	28.46	27.97	27.93	27.75	27.64	27.77	27.66	27.99	27.9
2001	27.93	27.67	28.39	28.43	28.64	28.44	28.05	28.25	27.65	27.52	27.64	27.19	28.0
2002	27.79	27.97	28.09	28.48	28.8	28.57	28.21	28.11	27.95	27.77	27.95	27.69	28.1
2003	27.87	28.33	28.38	28.84	28.62	28.57	28.54	28.25	28.14	28.15	27.8	27.53	28.3
2004	27.93	28.47	28.53	28.68	29	28.37	27.74	27.81	27.6	27.6	27.79	27.46	28.1
2005	27.73	28.2	28.59	28.82	28.8	28.38	27.91	27.97	27.93	27.98	27.64	27.5	28.1
2006	27.41	27.77	28.35	28.45	28.55	28.47	28.09	28.07	27.82	27.93	27.66	27.62	28.0
2007	27.61	27.86	28.23	28.68	28.69	28.72	28.32	28.29	28.3	27.91	27.8	27.46	28.2
2008	27.59	28.02	27.75	27.99	28.11	28.37	28.09	27.9	28.34	28.18	28.14	27.81	28.0
2009	27.59	27.61	28.06	28.81	28.63	28.43	28.21	27.86	28.23	28.16	27.72	27.86	28.1
2010	27.95	28.26	28.58	29.17	29.24	28.48	28.08	28.07	28.08	28.22	27.98	27.45	28.3
2011	27.45	27.25	28.04	28.23	28.38	28.37	28.19	28.04	28.14	28.04	28.05	27.64	28.0
2012	27.33	27.77	28.01	28.43	28.23	28.42	28.17	28.12	28.05	27.74	27.86	27.66	28.0
2013	27.97	27.7	28.24	28.86	28.49	28.07	27.97	27.58	27.94	27.74	27.69	27.65	28.0
2014	27.62	27.75	28.17	28.53	28.57	28.61	28.4	27.99	27.8	28.03	27.72	27.86	28.1
2015	27.63	27.66	28.18	28.73	28.96	28.88	28.4	28.1	28.24	28.2	28.18	28.36	28.3
2016	28.25	28.64	28.74	29.13	29.15	28.62	28.18	27.85	27.84	27.7	27.47	27.4	28.2

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE



GAN,
SEENU ATOLL, MALDIVES
LATITUDE: -0.690592 °
LONGITUDE: 73.15014 °
ELEVATION: 2 M A.S.L

GHI

TABLE 16 : GLOBAL HORIZONTAL IRRADIATION (GHI) MONTHLY AND YEARLY SUMS FOR GAN, MALDIVES IN KWH/M²

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	159.23	172.97	187.56	191.58	168.59	167.4	176.99	171.64	172.56	180.1	191.62	173.92	2114
2000	166.44	177.94	203.65	187.48	178.72	134.77	152.34	165.3	142.11	183.35	147.21	167.64	2007
2001	194.94	188	194.4	170.66	174.64	156.27	144.66	158.47	157.06	169.08	180.16	183.72	2072
2002	150.42	174.09	192.18	160.45	177.2	124.44	141.92	166.94	178.91	156.62	154.36	174.83	1952
2003	179.48	189.72	203.47	160.8	171.16	149.2	153.88	175.15	179.33	206.77	181.56	153.62	2104
2004	173.18	186.22	219.91	171.53	161.86	149.23	156.42	164.76	169.05	176.79	165.56	166.28	2061
2005	159.46	171.58	214.55	190.07	172.43	139.7	144.3	158.47	183.54	160.81	198.88	191.88	2086
2006	182.25	163.1	208.46	187.52	184.76	143.64	155.4	177.01	175.16	181.96	139.62	141.76	2041
2007	170.04	187.23	215.06	188.46	172.09	155.53	153.1	173.74	159.71	171.18	169.36	169.43	2085
2008	181.09	183.44	196.43	171.9	161.6	158.91	149.11	161.15	182.1	168.41	182.27	186.72	2083
2009	177.92	193.33	210.2	177.45	176.05	160.37	155.74	155.77	176.65	167.44	162.15	166.55	2080
2010	182.44	174.09	184.89	173.32	158.41	160.27	135.73	141.17	162.64	188.15	161.31	196.95	2019
2011	195.54	191.18	208.36	170.48	166.09	157.39	157.14	174.94	166.24	166.17	159.33	170.44	2083
2012	204.1	169.19	204.63	186.28	158.89	162.97	166.86	181.96	176.11	153.16	172.13	167.93	2104
2013	197.62	162.19	188.37	174.5	164.85	147.57	157.68	154.14	182.68	167.13	163.42	144.66	2005
2014	177	190.34	173.24	184.71	158.59	165.69	163.62	167.99	160.91	176.64	159.31	183.12	2061
2015	196.33	178.53	215.96	166.55	174.93	166.86	155	148.09	159.73	173.2	141.3	194.7	2071
2016	180.32	179.14	209.86	173.34	161.04	160.3	149.59	152.3	169.13	193.69	167.93	181.2	2078

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE

TABLE 17 : DIRECT NORMAL IRRADIATION (DNI) MONTHLY AND YEARLY SUMS FOR GAN, MALDIVES IN KWH/M²

DNI

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	120.95	151.34	152.18	168.86	135.15	141.99	145.98	131.74	125.1	136.13	166.01	155.66	1731
2000	131.01	133.42	163.54	160.42	165.58	94.91	106.7	110.43	86.04	140.65	110.53	138	1541
2001	174.87	157.85	150.8	130.78	158.82	126.42	94.14	105.45	98.17	129.14	152.13	167.68	1646
2002	105.08	142.97	159.31	137.25	157.41	81.35	96.92	114.1	139.35	109.12	131.43	148.66	1523
2003	154.75	175.41	182.84	124.12	149.9	114.75	111.12	135.51	140.62	185.29	159.98	122.97	1757
2004	144.01	159.64	202.95	149.09	115.98	120.14	108.68	121.78	122.26	144.09	123.13	140.19	1652
2005	119.32	143.27	203.66	167.45	154.29	98.78	99.77	112.98	142.04	112.5	188.2	176.83	1719
2006	161.74	138.48	188.47	163	166.29	102.22	102.01	130.25	129.69	140.2	92.68	102.02	1617
2007	128.73	158.48	200.52	168.55	164.28	121.16	110.46	129.14	108.63	113.27	131.57	135.34	1670
2008	159.6	136.6	164.23	147.11	130.4	124.75	100.19	104.41	147.63	122.5	154.07	180.01	1672
2009	144.02	175.23	187.91	144.98	157.45	128.69	113.76	102.84	131.45	122.28	135.09	143.12	1687
2010	160.43	145.66	136.23	147.6	131.16	118.18	93.16	89.57	111.02	136.53	117.95	187.48	1575
2011	173.3	169.36	173.55	132.4	133.78	131.87	104.11	137.01	109.94	120.72	124.01	133.02	1643
2012	186.13	127.91	162.89	164.86	132.88	121.92	131.27	143	130.93	100.6	152.51	127.89	1683
2013	180.22	135.74	153.35	152.69	128.93	100.98	113.22	105.57	136.09	119.41	126.1	106.32	1559
2014	143.37	174.4	133.19	163.34	128.09	136.86	119.27	125.94	113.26	133.28	125.53	168.01	1665
2015	190.54	148.58	205.86	142.61	166.34	146.89	116.06	92.66	108.85	131.38	94.76	187.97	1733
2016	148.13	149.85	197.2	149.48	125.03	129.91	105.38	91.27	119.09	154	131.95	167.8	1669

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE

TABLE 18 : DIFFUSE HORIZONTAL IRRADIATION (DIF) MONTHLY AND YEARLY SUMS FOR GAN, MALDIVES IN KWH/M²

DIF

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	71.52	63.08	72.5	66.34	69.48	66.87	72.15	73.23	76.9	78.3	69.89	65.04	845
2000	73.4	78.59	79.29	68.4	60.13	67.7	74.39	81.9	75.29	80.32	67.8	71.76	879
2001	70.36	70.34	79.2	73.05	60.82	67.3	75.89	78.63	81.25	73.81	68.91	67.18	867
2002	73.93	68.08	72	63.56	64.75	66.49	71.24	79.17	73.77	75.96	61.71	69.45	840
2003	67.29	62.02	66.56	69.17	64.67	67.42	74.03	73.35	71.81	71.46	66.31	68.55	823
2004	71.73	66.89	68.17	65.96	75.74	64.18	76.98	74.5	74.53	72.75	75.77	69.33	857
2005	74.23	66.09	62.4	69.49	63.34	68.86	70.58	74.08	73.09	74.96	62.57	66.7	826
2006	66.28	60.06	66.54	67.39	65.81	69.94	79.69	77.74	74.47	79.09	73	70.51	851
2007	77.25	68.8	66.14	64.32	54.65	69.31	71.96	76.74	75.79	83.02	72.91	72.84	854
2008	67.7	79.31	73.44	65.14	67.59	69.34	75.87	81.89	69.76	77.29	70.62	61.77	860
2009	75.56	64.05	71.86	71.83	62.92	67.91	73.5	77.19	74.55	77.79	66.03	67.31	851
2010	68.54	65.05	79.16	66.76	64.62	74.46	69.16	73	76.06	85.8	74.17	66.51	863
2011	72.7	65.85	75.34	73.44	68.73	63.28	79.82	71.7	80.11	75.61	72.68	75.26	875
2012	70.85	72.81	79.76	67.78	63.41	75.08	71.15	74.51	74.98	77.42	63.13	76.78	868
2013	69.79	61.78	72.8	64.27	69.93	75.21	74.7	75.14	76.44	78.79	73.46	68.12	860
2014	72.98	61.92	71.37	66.19	65.01	67.5	77.94	74	72.05	78.84	69.73	63.76	841
2015	62.14	69.19	63.43	64.46	55.62	63.6	72.36	77.29	75.22	75.25	73.24	64.56	816
2016	73.76	66.03	63.59	65.09	69.8	68.51	73.9	81.37	75.57	80.26	72.83	64.29	855

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE

TABLE 19 : GLOBAL TILTED IRRADIATION (GTI) MONTHLY AND YEARLY SUMS FOR GAN, MALDIVES IN KWH/M2

GTI

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	156.35	170.96	187.42	193.77	171.75	171.4	180.84	173.94	173.27	178.79	188.38	170.08	2117
2000	163.34	176.07	203.57	189.57	182.35	137.54	155.25	167.33	142.5	182.03	144.86	164.1	2009
2001	191.01	185.84	194.27	172.34	178.21	159.89	147.29	160.5	157.47	167.88	177.08	179.61	2071
2002	147.86	172.07	192.15	162.04	180.88	126.84	144.6	169.04	179.63	155.48	151.66	171.13	1953
2003	175.94	187.43	203.33	162.34	174.64	152.51	156.88	177.45	180.05	205.13	178.39	150.44	2105
2004	169.88	184.05	219.86	173.41	164.71	152.6	159.37	166.99	169.6	175.61	162.99	162.7	2062
2005	156.65	169.66	214.33	192.19	176.02	142.6	147.04	160.49	184.15	159.69	195.26	187.57	2086
2006	178.72	161.23	208.28	189.59	188.51	146.66	158.26	179.42	175.7	180.7	137.62	139.04	2044
2007	166.94	185.08	214.85	190.58	175.59	159	156.03	176.05	160.27	170.14	166.67	165.9	2087
2008	177.37	181.49	196.37	173.71	164.62	162.48	151.85	163.12	182.9	167.1	179.11	182.38	2083
2009	174.56	191.09	210.05	179.39	179.64	163.99	158.71	157.62	177.24	166.28	159.27	162.97	2081
2010	178.75	172.13	184.76	175.26	161.54	163.75	138.28	142.82	163.23	186.8	158.87	192.38	2019
2011	191.54	188.92	208.3	172.1	169.16	161.04	160.05	177.32	166.8	165.2	156.81	166.93	2084
2012	199.88	167.39	204.58	188.4	161.85	166.59	170.25	184.48	176.68	152.15	169.05	164.53	2106
2013	193.61	160.4	188.16	176.39	167.98	150.61	160.73	156.05	183.33	166.02	160.81	141.82	2006
2014	173.66	187.99	173.09	186.85	161.52	169.57	166.81	170.25	161.49	175.38	156.72	178.99	2062
2015	192.15	176.53	215.69	168.36	178.6	170.92	158.06	149.84	160.29	172.12	139.16	190.13	2072
2016	176.88	177.14	209.81	175.24	164.03	163.94	152.45	154.04	169.59	192.2	165.16	177.1	2078

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE

TABLE 20 : MONTHLY AND YEARLY MEAN TEMPERATURE FOR GAN, MALDIVES IN °C

TEMP

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999	27.49	28.02	28.38	28.47	28.33	27.99	28.16	27.76	27.67	27.98	27.92	27.69	28.0
2000	27.57	27.88	28.15	28.53	28.8	28.04	27.82	27.86	27.65	27.93	27.69	27.99	28.0
2001	28.08	28.1	28.44	28.61	29.03	28.43	27.84	28.01	27.69	27.86	27.69	27.43	28.1
2002	27.66	28.16	28.29	28.62	28.73	28.25	28.08	27.94	27.85	27.8	27.87	28.01	28.1
2003	28.12	28.5	28.52	28.9	28.63	28.61	28.52	28.12	28.05	28.32	28.14	27.63	28.3
2004	27.86	28.53	28.67	28.63	28.74	28.24	27.75	27.78	27.45	27.52	27.85	27.56	28.0
2005	27.62	28.14	28.75	28.91	28.71	28.25	27.87	27.79	27.97	27.85	27.76	27.62	28.1
2006	27.42	27.74	28.37	28.48	28.62	28.18	27.97	28.03	27.98	27.83	27.34	27.77	28.0
2007	27.91	27.94	28.26	28.65	28.78	28.65	28.17	28.25	28.21	27.79	27.75	27.75	28.2
2008	27.56	28.05	28.04	28.03	27.95	28.24	28.14	28	28.14	28.01	27.8	27.69	28.0
2009	27.72	27.84	28.17	28.68	28.48	28.25	28.1	27.92	28.12	28.24	27.6	27.99	28.1
2010	28.09	28.35	28.56	29.05	29.11	28.43	27.96	27.88	28.05	28.13	27.79	27.36	28.2
2011	27.43	27.53	28.08	28.22	28.17	27.89	27.95	27.96	27.96	27.77	27.93	27.91	27.9
2012	27.57	27.79	28.12	28.53	28.42	28.4	28.01	28.17	28.08	27.84	27.9	27.78	28.1
2013	28	27.7	28.35	28.74	28.67	27.94	27.81	27.6	27.76	27.68	27.95	27.51	28.0
2014	27.59	27.89	27.99	28.57	28.64	28.58	28.1	27.97	27.62	27.98	27.86	28.24	28.1
2015	27.53	27.84	28.16	28.83	29.02	28.85	28.44	27.99	28.22	28.2	28.25	28.47	28.3
2016	28.44	28.76	28.77	29.34	29.35	28.65	28.17	27.66	27.86	27.66	27.73	27.49	28.3

MEANING OF THE BACKGROUND COLOR OF CELLS

BLUE COLOR MEANS THE LOWEST VALUES, RED COLOR MEANS THE HIGHEST VALUES. VALUES BETWEEN THE HIGHEST AND LOWEST ARE REPRESENTED BY COLOR RANGE BETWEEN RED AND BLUE

MONTHLY SUMS OF SOLAR RATIATION AND METEOROLOGICAL PARAMETERS OF THE FOUR LOCATIONS

HANIMADHOO

GHID - AVERAGE DAILY SUM OF GLOBAL HORIZONTAL IRRADIATION [KWH/M²]

GHIM - MONTHLY SUM OF GLOBAL HORIZONTAL IRRADIATION [KWH/M²]

DNID - AVERAGE DAILY SUM OF DIRECT NORMAL IRRADIATION [KWH/M²]

DNIM - MONTHLY SUM OF DIRECT NORMAL IRRADIATION [KWH/M²]

DIFD - AVERAGE DAILY SUM OF DIFFUSE HORIZONTAL IRRADIATION [KWH/M²]

DIFM - MONTHLY SUM OF DIFFUSE HORIZONTAL IRRADIATION [KWH/M²]

GTID - AVERAGE DAILY SUM OF GLOBAL TILTED IRRADIATION [KWH/M²] (FIXED INCLINATION: 9 DEG. AZIMUTH: 180 DEG.)

GTIM - MONTHLY SUM OF GLOBAL TILTED IRRADIATION [KWH/M²] (FIXED INCLINATION: 9 DEG. AZIMUTH: 180 DEG.)

TEMP - AVERAGE DIURNAL (24 HOUR) AIR TEMPERATURE AT 2 M [DEG. C]

WS - AVERAGE WIND SPEED AT 10 M [M/S]

RH - RELATIVE HUMIDITY [%]

AP - ATMOSPHERIC PRESSURE [HPA]

PWAT - PRECIPITABLE WATER [KG/M²]

TABLE 21 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR HANIMAADHOO, MALDIVES

YEAR	MONTH	GHID	GHIM	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
1999	1	5.434	168.5	4.451	138	2.417	74.9	5.811	180.1	27.1	3.9	73.8	1009.9	37.8
1999	2	5.881	164.7	4.724	132.3	2.492	69.8	6.165	172.6	27.5	3.5	74.8	1011	40.1
1999	3	6.764	209.7	5.541	171.8	2.516	78	6.875	213.1	28.2	2.9	75.3	1007.8	38.5
1999	4	6.361	190.8	4.506	135.2	2.826	84.8	6.256	187.7	28.7	6.4	73.8	1009.2	43.6
1999	5	4.451	138	2.565	79.5	2.464	76.4	4.296	133.2	27.8	7.4	76.6	1008.8	54.1
1999	6	5.789	173.7	5.086	152.6	2.134	64	5.452	163.6	27.8	6.8	74.2	1009.9	45.5
1999	7	4.839	150	3.178	98.5	2.419	75	4.626	143.4	27.7	7.9	74.1	1009.3	49.2
1999	8	5.09	157.8	3.181	98.6	2.637	81.7	4.955	153.6	27.5	6.2	74.5	1010.2	48.6
1999	9	5.909	177.3	4.452	133.6	2.504	75.1	5.906	177.2	28	5.4	73.4	1009.6	49.4
1999	10	4.598	142.5	2.885	89.4	2.437	75.5	4.74	146.9	27.4	7.6	77	1008.9	53.2
1999	11	5.75	172.5	5.495	164.8	1.937	58.1	6.139	184.2	27.3	3.2	72.9	1010.2	45.8
1999	12	5.224	161.9	4.956	153.6	1.986	61.6	5.655	175.3	27.3	3.6	71.7	1010.4	41.4
2000	1	5.485	170	4.82	149.4	2.191	67.9	5.883	182.4	27	3.7	73.4	1009.9	37.8
2000	2	6.057	175.7	5.398	156.5	2.178	63.2	6.358	184.4	26.9	3.7	75.4	1009.5	34.9
2000	3	6.472	200.6	4.74	146.9	2.782	86.2	6.566	203.5	28	3.9	74.2	1009.3	39.6
2000	4	5.81	174.3	3.804	114.1	2.801	84	5.714	171.4	28.8	5.3	75.8	1008.7	46.4
2000	5	5.461	169.3	3.942	122.2	2.48	76.9	5.246	162.6	28.6	5.8	74.3	1009.4	51.2
2000	6	4.341	130.2	2.473	74.2	2.482	74.5	4.141	124.2	27.8	8.5	74.6	1009.1	51.1
2000	7	5.539	171.7	3.451	107	2.845	88.2	5.302	164.4	27.8	7.3	74.5	1008.7	46.4
2000	8	4.972	154.1	2.956	91.6	2.659	82.4	4.855	150.5	27.5	7.3	74.7	1009.3	49.8
2000	9	5.18	155.4	3.182	95.5	2.717	81.5	5.176	155.3	27.9	5.4	73.9	1009	50.5
2000	10	5.816	180.3	4.911	152.2	2.172	67.3	6.038	187.2	27.9	5.4	74.2	1010	46.6
2000	11	5.136	154.1	3.9	117	2.381	71.4	5.444	163.3	28	3.3	72.4	1009	46
2000	12	5.605	173.8	5.025	155.8	2.223	68.9	6.056	187.7	27.6	3.4	71	1009.8	37
2001	1	5.125	158.9	3.618	112.2	2.584	80.1	5.455	169.1	27.1	3.7	74.7	1009.4	44.3
2001	2	5.93	166	4.462	124.9	2.634	73.8	6.194	173.4	27.3	3.8	76.9	1010	36.3
2001	3	6.787	210.4	5.201	161.2	2.774	86	6.891	213.6	28.3	3.6	74.6	1009.9	36.4
2001	4	5.979	179.4	4.529	135.9	2.507	75.2	5.88	176.4	28.8	3.5	74.1	1008.9	52.3
2001	5	5.188	160.8	3.309	102.6	2.643	81.9	4.992	154.8	29	6.8	74.8	1008.8	53.8
2001	6	4.845	145.3	3.074	92.2	2.508	75.2	4.611	138.3	28.1	7.4	74.6	1008.9	49
2001	7	5.08	157.5	2.899	89.9	2.808	87	4.87	151	27.9	7.2	74.3	1009.3	50.3
2001	8	5.57	172.7	3.428	106.3	2.859	88.6	5.43	168.3	27.9	6.5	75.7	1010.1	49
2001	9	5.16	154.8	2.947	88.4	2.82	84.6	5.155	154.7	27.5	6.3	75.7	1009.6	52
2001	10	5.624	174.3	3.933	121.9	2.602	80.7	5.808	180	27.5	6.7	77.6	1009.6	54.3
2001	11	5.526	165.8	4.533	136	2.36	70.8	5.871	176.1	27.7	3.6	74.1	1010.2	47
2001	12	5.216	161.7	4.372	135.5	2.267	70.3	5.62	174.2	27.5	3.5	73.2	1011.8	42.6
2002	1	5.491	170.2	3.955	122.6	2.686	83.3	5.848	181.3	27.5	4.1	73.5	1010.6	37.7
2002	2	5.899	165.2	4.584	128.4	2.504	70.1	6.158	172.4	27.8	4.2	73.5	1011.5	40.4
2002	3	6.467	200.5	4.875	151.1	2.706	83.9	6.563	203.5	28.4	3	72.2	1009.8	39.9
2002	4	6.042	181.3	4.607	138.2	2.53	75.9	5.943	178.3	29	2.6	72.5	1008.8	48.5
2002	5	5.474	169.7	3.791	117.5	2.624	81.3	5.251	162.8	29	6.3	74.9	1008.8	55.2
2002	6	5.01	150.3	2.917	87.5	2.759	82.8	4.776	143.3	28.6	7.6	74.4	1008.8	49.8
2002	7	5.545	171.9	3.463	107.4	2.851	88.4	5.299	164.3	28.3	7.2	72.7	1010.7	44.9
2002	8	5.235	162.3	2.943	91.2	2.873	89.1	5.115	158.6	27.9	6.9	75.1	1010.2	47.3

TABLE 21 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR HANIMAADHOO, MALDIVES

YEAR	MONTH	GHID	GHIM	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
2002	9	6.522	195.7	5.245	157.3	2.557	76.7	6.537	196.1	28.4	4.5	71.1	1011	44.3
2002	10	5.461	169.3	3.971	123.1	2.427	75.2	5.644	175	28.1	5.3	75.2	1009.5	53
2002	11	4.523	135.7	3.006	90.2	2.418	72.5	4.767	143	27.9	3.5	74.8	1010.1	54.4
2002	12	4.649	144.1	3.165	98.1	2.466	76.4	4.96	153.8	27.4	3.3	72.9	1011.1	45.2
2003	1	5.778	179.1	4.962	153.8	2.32	71.9	6.195	192	27.5	4.1	73.4	1011.5	41.5
2003	2	6.284	176	5.455	152.7	2.353	65.9	6.593	184.6	27.9	3.5	75.6	1010.5	40.4
2003	3	6.698	207.6	5.46	169.3	2.517	78	6.8	210.8	28.5	3.2	74.1	1009.9	41.4
2003	4	5.781	173.4	4.492	134.8	2.303	69.1	5.689	170.7	29.3	3.1	73	1008.9	50.1
2003	5	5.634	174.7	3.884	120.4	2.646	82	5.412	167.8	29.4	5.7	74.1	1009.1	53.2
2003	6	4.758	142.7	3.088	92.6	2.43	72.9	4.528	135.8	28.5	6.3	75.4	1008.5	55.8
2003	7	4.56	141.4	2.487	77.1	2.65	82.2	4.377	135.7	28.1	5.5	76.6	1009.1	53.5
2003	8	5.981	185.4	3.895	120.7	2.88	89.3	5.833	180.8	28.2	6.4	74.4	1010	47.8
2003	9	5.622	168.7	3.987	119.6	2.556	76.7	5.628	168.8	28	5.9	74.7	1010.5	50.9
2003	10	5.859	181.6	4.766	147.7	2.344	72.7	6.069	188.1	27.9	5.3	75.4	1010.1	46.1
2003	11	3.902	117.1	2.586	77.6	2.098	62.9	4.108	123.2	27.5	3.6	75.9	1009.9	55.7
2003	12	5.865	181.8	5.741	178	2.059	63.8	6.371	197.5	27.4	4.2	73.8	1011	34.4
2004	1	5.967	185	5.469	169.5	2.23	69.1	6.42	199	27.5	4	74.4	1010.5	36.8
2004	2	6.433	186.6	5.388	156.3	2.495	72.4	6.743	195.5	27.6	3.3	74	1010.8	34.4
2004	3	6.74	208.9	5.327	165.1	2.621	81.3	6.843	212.1	28.5	3.5	74.4	1009.9	36.8
2004	4	6.089	182.7	4.776	143.3	2.444	73.3	5.978	179.3	29.1	3.4	73.7	1009.4	49
2004	5	5.134	159.2	2.891	89.6	2.879	89.2	4.941	153.2	28.9	7.9	74.5	1008.3	50.7
2004	6	5.422	162.7	3.433	103	2.774	83.2	5.158	154.7	28.2	7.3	75.1	1010.4	47.6
2004	7	4.51	139.8	2.424	75.1	2.598	80.5	4.333	134.3	27.4	7.5	75.5	1009.2	51.8
2004	8	5.755	178.4	3.737	115.8	2.831	87.8	5.61	173.9	27.9	5.9	74.7	1010.3	49.5
2004	9	4.901	147	2.978	89.3	2.6	78	4.906	147.2	27.6	6	75.8	1009.9	52.6
2004	10	4.929	152.8	3.831	118.8	2.136	66.2	5.082	157.5	27.7	4.6	75.8	1010.6	54.6
2004	11	4.576	137.3	3.236	97.1	2.319	69.6	4.831	144.9	27.7	3.7	75.2	1010.1	53.7
2004	12	5.102	158.2	4.087	126.7	2.33	72.2	5.484	170	27.4	3.8	74.2	1010.3	46.2
2005	1	5.34	165.5	4.189	129.9	2.456	76.1	5.702	176.8	27.4	3.5	74.9	1010.6	43.1
2005	2	6.529	182.8	6.027	168.8	2.211	61.9	6.866	192.2	27.9	4.3	73.7	1011.2	33.2
2005	3	6.887	213.5	5.874	182.1	2.416	74.9	6.998	216.9	28.2	3.6	74.8	1010.9	37.2
2005	4	6.063	181.9	5.014	150.4	2.292	68.8	5.943	178.3	28.8	3.4	73.2	1010	50.2
2005	5	5.808	180	4.304	133.4	2.588	80.2	5.572	172.7	29.4	4.9	73.7	1008.7	49.7
2005	6	4.634	139	2.527	75.8	2.686	80.6	4.425	132.8	28.5	8.1	74.4	1008.4	51.6
2005	7	4.972	154.1	2.86	88.7	2.736	84.8	4.765	147.7	28	7.2	75.6	1009.9	50.6
2005	8	6.03	186.9	4.102	127.2	2.853	88.4	5.869	181.9	28.3	5.6	73.1	1010	47.3
2005	9	5.257	157.7	3.465	104	2.613	78.4	5.281	158.4	27.7	6	75	1010.1	50.2
2005	10	5.357	166.1	3.987	123.6	2.374	73.6	5.532	171.5	28.1	6.2	75.2	1009.9	52.1
2005	11	5.308	159.2	4.38	131.4	2.257	67.7	5.643	169.3	27.7	4.3	74.6	1009.9	52.2
2005	12	5.06	156.9	4.432	137.4	2.085	64.6	5.457	169.2	27.3	4.4	74.9	1009.8	41.8
2006	1	5.18	160.6	4.357	135.1	2.173	67.4	5.54	171.7	27	3.8	75.1	1010.7	40.7
2006	2	6.509	182.3	5.635	157.8	2.416	67.6	6.832	191.3	27.3	3.5	73.9	1010.6	34.5
2006	3	6.534	202.6	5.309	164.6	2.472	76.6	6.634	205.7	28.2	4	75.4	1009.8	41.3
2006	4	6.774	203.2	5.415	162.5	2.569	77.1	6.657	199.7	28.9	4.2	74.3	1009.1	41.8

TABLE 21 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR HANIMAADHOO, MALDIVES

YEAR	MONTH	GHID	GHIM	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
2006	5	4.968	154	3.147	97.6	2.569	79.6	4.787	148.4	28.9	6.3	74.5	1009.1	51.8
2006	6	5.078	152.3	3.268	98	2.583	77.5	4.832	145	28.5	6.6	74	1008.8	50.6
2006	7	5.542	171.8	3.498	108.4	2.772	85.9	5.303	164.4	28.3	6.9	73.9	1009.9	48.3
2006	8	5.679	176	3.775	117	2.719	84.3	5.534	171.6	28.2	5.6	73.3	1009.9	49.9
2006	9	4.981	149.4	2.747	82.4	2.785	83.5	4.993	149.8	27.9	6	75.1	1009.9	53.1
2006	10	5.295	164.1	4.158	128.9	2.223	68.9	5.456	169.1	28.1	3.9	73.7	1010.9	49.9
2006	11	4.328	129.8	3.05	91.5	2.212	66.4	4.562	136.9	28	3.3	74.4	1009.7	56.6
2006	12	4.578	141.9	2.969	92	2.519	78.1	4.873	151.1	27.6	4.4	73.4	1010.4	48.5
2007	1	5.878	182.2	4.889	151.6	2.475	76.7	6.297	195.2	27.2	4.9	73.1	1011.5	36.2
2007	2	6.539	183.1	5.963	167	2.312	64.7	6.876	192.5	27.3	4	72.4	1010.7	31.7
2007	3	6.744	209.1	5.343	165.6	2.628	81.5	6.852	212.4	28	3.1	74	1010.2	37.3
2007	4	6.386	191.6	5.058	151.7	2.515	75.5	6.271	188.1	29	3.1	73.6	1009.3	47.4
2007	5	5.441	168.7	4.001	124	2.459	76.2	5.215	161.7	29.2	5.3	74.2	1008.9	52.5
2007	6	4.511	135.3	2.676	80.3	2.495	74.9	4.303	129.1	28.8	6.7	74.2	1007.2	54.6
2007	7	5.006	155.2	2.994	92.8	2.675	82.9	4.792	148.6	28.3	7	75.2	1008.7	51.2
2007	8	5.346	165.7	3.298	102.2	2.741	85	5.205	161.4	28.1	5.3	74.9	1009	50.4
2007	9	5.423	162.7	3.386	101.6	2.716	81.5	5.44	163.2	27.9	6.4	76.2	1008.8	53.1
2007	10	5.248	162.7	3.505	108.7	2.558	79.3	5.397	167.3	28.1	5.5	74.5	1009	51.9
2007	11	5.709	171.3	4.725	141.8	2.406	72.2	6.074	182.2	27.6	3.2	73.5	1009.9	44.5
2007	12	4.681	145.1	3.37	104.5	2.399	74.4	5.003	155.1	27.7	3.7	73	1009.3	44.5
2008	1	5.899	182.9	4.973	154.2	2.461	76.3	6.324	196	27.2	4.2	73.6	1010	36.4
2008	2	5.215	151.2	3.605	104.5	2.572	74.6	5.437	157.7	27.4	4	75.2	1010.1	41.9
2008	3	5.507	170.7	4.273	132.5	2.252	69.8	5.569	172.6	27.6	3.6	74.1	1008.6	47.6
2008	4	5.898	176.9	4.352	130.6	2.524	75.7	5.801	174	28.6	4.3	73.9	1008.4	48.1
2008	5	5.658	175.4	4.199	130.2	2.496	77.4	5.419	168	28.7	5.7	73.4	1009.3	50.8
2008	6	4.515	135.4	2.371	71.1	2.687	80.6	4.314	129.4	28.5	5.9	73.2	1008.8	52.5
2008	7	4.617	143.1	2.427	75.2	2.709	84	4.431	137.4	27.9	6.7	74.2	1008.6	51.8
2008	8	5.588	173.2	3.392	105.2	2.897	89.8	5.443	168.7	27.9	5.4	75.3	1008.7	50.3
2008	9	6.441	193.2	4.902	147.1	2.639	79.2	6.461	193.8	27.8	4.2	73.5	1009.8	45.8
2008	10	5.144	159.5	4.007	124.2	2.171	67.3	5.303	164.4	28.1	3.7	72.4	1009.3	49.2
2008	11	5.399	162	3.878	116.3	2.586	77.6	5.712	171.4	28.1	3.2	72.1	1009.2	45.9
2008	12	5.495	170.3	5.191	160.9	2.026	62.8	5.953	184.5	27.4	2.7	71.9	1010.3	43.7
2009	1	5.738	177.9	4.828	149.7	2.422	75.1	6.148	190.6	26.9	3.1	69.8	1010.9	34.7
2009	2	6.52	182.6	5.398	151.1	2.586	72.4	6.834	191.4	27.3	3.4	71.7	1010.4	30.3
2009	3	6.949	215.4	5.878	182.2	2.465	76.4	7.054	218.7	28.2	2.8	73.2	1009.7	37
2009	4	5.817	174.5	4.196	125.9	2.606	78.2	5.707	171.2	29	3.8	73.6	1008.7	44.3
2009	5	5.403	167.5	3.381	104.8	2.774	86	5.201	161.2	29	6.2	74.6	1008.2	51.4
2009	6	5.249	157.5	3.504	105.1	2.611	78.3	4.989	149.7	28.2	6.8	74.7	1009.5	52.3
2009	7	5.093	157.9	3.164	98.1	2.64	81.8	4.877	151.2	28	6.4	74.7	1009.5	51
2009	8	5.352	165.9	3.142	97.4	2.859	88.6	5.219	161.8	27.7	6.6	76.1	1009.7	53.1
2009	9	5.589	167.7	3.572	107.2	2.769	83.1	5.6	168	27.9	6.5	76.1	1010.2	51.4
2009	10	6.049	187.5	4.798	148.7	2.448	75.9	6.259	194	28.2	3.4	72.1	1010.2	45.7
2009	11	4.82	144.6	3.537	106.1	2.361	70.8	5.102	153.1	27.9	3.7	72.6	1009.2	48.6
2009	12	4.88	151.3	4.108	127.3	2.121	65.8	5.253	162.8	27.9	2.9	74.2	1010.1	50.7

TABLE 21 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR HANIMAADHOO, MALDIVES

YEAR	MONTH	GHID	GHIM	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
2010	1	5.836	180.9	4.795	148.6	2.501	77.5	6.25	193.8	27.5	3.3	73.4	1011.3	39.8
2010	2	5.916	165.6	4.484	125.6	2.613	73.2	6.182	173.1	27.7	3.1	74.5	1010.9	41
2010	3	6.815	211.3	5.5	170.5	2.572	79.7	6.92	214.5	28.6	3.1	73	1010.6	38.9
2010	4	6.223	186.7	4.846	145.4	2.476	74.3	6.11	183.3	29.3	3.2	74.5	1009.4	53.2
2010	5	4.633	143.6	3.068	95.1	2.31	71.6	4.461	138.3	29.5	5.7	75	1007.8	58.5
2010	6	4.209	126.3	2.506	75.2	2.338	70.1	4.012	120.4	28.5	6.5	75.4	1008.9	54.9
2010	7	4.38	135.8	2.05	63.6	2.762	85.6	4.215	130.7	28	7.1	74.9	1008.7	53.9
2010	8	5.037	156.1	2.949	91.4	2.68	83.1	4.909	152.2	27.9	6.8	75.8	1008.9	52.1
2010	9	5.418	162.5	3.183	95.5	2.935	88	5.42	162.6	27.8	5.7	76.2	1008.7	53.7
2010	10	5.983	185.5	4.723	146.4	2.453	76	6.198	192.1	27.8	6.8	74.6	1008.9	44.3
2010	11	4.895	146.8	3.525	105.8	2.393	71.8	5.171	155.1	27.6	4.8	75.4	1008.8	52.5
2010	12	4.843	150.1	4.113	127.5	2.12	65.7	5.212	161.6	27	3.6	73.4	1008.1	45.8
2011	1	5.503	170.6	4.164	129.1	2.59	80.3	5.871	182	27	4.2	73.9	1009.3	38.2
2011	2	6.285	176	5.161	144.5	2.49	69.7	6.585	184.4	26.9	3.5	73.3	1009.5	35.1
2011	3	6.87	213	5.656	175.3	2.56	79.4	6.974	216.2	27.7	2.9	74.8	1009.4	36.9
2011	4	6.465	194	4.887	146.6	2.689	80.7	6.356	190.7	28.5	3.3	73.2	1009	45.5
2011	5	5.432	168.4	3.686	114.3	2.632	81.6	5.218	161.8	28.6	5	72.5	1009.2	49.9
2011	6	5.812	174.4	4.129	123.9	2.668	80	5.512	165.4	28.6	6.9	73.7	1008.5	47.2
2011	7	4.682	145.1	2.575	79.8	2.624	81.3	4.492	139.3	28	5.9	73.9	1008.6	51.3
2011	8	4.73	146.6	2.565	79.5	2.689	83.4	4.618	143.2	27.8	5.6	75.4	1008.9	52.7
2011	9	5.494	164.8	3.674	110.2	2.653	79.6	5.515	165.5	27.8	5.1	74.4	1009.8	50.1
2011	10	6.048	187.5	5.28	163.7	2.17	67.3	6.253	193.8	28	3.4	71.7	1008.9	45.6
2011	11	4.438	133.1	2.739	82.2	2.474	74.2	4.664	139.9	27.8	4.5	73.2	1008.6	51
2011	12	5.129	159	3.893	120.7	2.444	75.8	5.5	170.5	27.7	3.3	71.3	1009	44.1
2012	1	5.54	171.7	4.506	139.7	2.411	74.7	5.925	183.7	26.9	3.9	70.8	1010.3	36
2012	2	5.896	171	4.317	125.2	2.704	78.4	6.152	178.4	27.3	3.5	72.9	1009.1	40.5
2012	3	6.741	209	5.095	157.9	2.741	85	6.838	212	27.6	3.3	73.8	1009.8	36.6
2012	4	6.171	185.1	4.256	127.7	2.829	84.9	6.073	182.2	28.7	3.9	73.3	1008.8	43.8
2012	5	6.18	191.6	4.552	141.1	2.754	85.4	5.927	183.7	28.5	5.2	73.3	1008.9	40
2012	6	4.897	146.9	2.421	72.6	2.991	89.7	4.685	140.6	28.3	6.6	73.6	1008.7	49.4
2012	7	5.706	176.9	3.913	121.3	2.658	82.4	5.452	169	28.1	6.7	73.5	1008.5	48.7
2012	8	5.019	155.6	3.039	94.2	2.63	81.5	4.889	151.6	28	5.2	73.3	1009.6	50.5
2012	9	5.827	174.8	3.704	111.1	2.939	88.2	5.844	175.3	27.9	4.6	73.8	1010.1	50.2
2012	10	4.838	150	3.675	113.9	2.129	66	4.972	154.1	27.9	3.5	72.8	1009.4	51.5
2012	11	5.394	161.8	3.923	117.7	2.593	77.8	5.712	171.4	27.9	2.4	70.2	1009.7	49.6
2012	12	4.271	132.4	2.834	87.9	2.325	72.1	4.548	141	27.7	4.1	72.2	1009.1	50
2013	1	5.808	180	5.006	155.2	2.326	72.1	6.228	193.1	27.5	3.9	72.4	1011.1	37.4
2013	2	6.431	180.1	5.715	160	2.287	64	6.75	189	27.4	3.2	71.5	1010.5	39.8
2013	3	6.607	204.8	5.384	166.9	2.454	76.1	6.701	207.7	28.2	3.1	73.2	1010	44.4
2013	4	6.844	205.3	5.747	172.4	2.442	73.3	6.717	201.5	28.8	3.5	71.5	1008.8	40.4
2013	5	4.579	141.9	2.423	75.1	2.65	82.2	4.42	137	29	5.9	74.7	1008.2	57.2
2013	6	4.437	133.1	2.307	69.2	2.636	79.1	4.241	127.2	27.9	8.1	74.9	1008.3	52.1
2013	7	4.881	151.3	2.601	80.6	2.81	87.1	4.687	145.3	27.8	6.1	75.4	1008.7	49.2
2013	8	5.268	163.3	3.293	102.1	2.67	82.8	5.14	159.3	27.5	6.3	75.1	1009.5	48.8

TABLE 21 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR HANIMAADHOO, MALDIVES

YEAR	MONTH	GHID	GHIM	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
2013	9	5.522	165.7	3.579	107.4	2.75	82.5	5.545	166.3	27.5	5.9	75.3	1009.7	49.8
2013	10	6.095	188.9	4.975	154.2	2.416	74.9	6.309	195.6	27.8	5	74.3	1010.1	46.6
2013	11	5.471	164.1	4.629	138.9	2.238	67.1	5.828	174.8	27.8	2.9	72.3	1009.4	49.3
2013	12	4.943	153.2	3.831	118.8	2.372	73.5	5.303	164.4	27.5	3.6	71.1	1009.6	43.5
2014	1	5.834	180.9	4.972	154.1	2.415	74.9	6.255	193.9	27.1	3.7	72.1	1011.2	39.2
2014	2	6.396	179.1	5.624	157.5	2.316	64.8	6.714	188	27.3	3.5	71.1	1009.7	35.1
2014	3	6.551	203.1	5.305	164.5	2.505	77.7	6.647	206.1	28.1	3.5	72.2	1010.1	40.4
2014	4	6.42	192.6	4.961	148.8	2.549	76.5	6.308	189.2	28.7	3.4	74.3	1009.7	46.2
2014	5	5.549	172	4.043	125.3	2.524	78.2	5.318	164.9	29.3	4.5	72.7	1008.4	50.4
2014	6	5.418	162.5	3.472	104.2	2.729	81.9	5.153	154.6	28.8	7.8	73.8	1008.2	51.4
2014	7	5.832	180.8	3.732	115.7	2.888	89.5	5.576	172.9	28.3	7.2	74.1	1009.7	48.8
2014	8	4.976	154.3	2.899	89.9	2.658	82.4	4.861	150.7	27.6	6.1	74.5	1009.6	50.5
2014	9	5.375	161.2	3.663	109.9	2.53	75.9	5.385	161.6	27.7	5.4	74.7	1010.1	52.1
2014	10	5.413	167.8	4.189	129.9	2.313	71.7	5.589	173.3	27.9	4	74.6	1010	53.3
2014	11	4.953	148.6	3.416	102.5	2.51	75.3	5.225	156.8	27.5	3.8	72.9	1010	51.8
2014	12	5.215	161.7	4.459	138.2	2.193	68	5.621	174.3	27.6	3.1	72.9	1010.1	50.3
2015	1	5.974	185.2	5.467	169.5	2.24	69.4	6.427	199.2	27.3	3.7	70.5	1011.5	34.9
2015	2	6.126	171.5	5.039	141.1	2.47	69.2	6.413	179.6	27.3	3.2	71.8	1011.1	37.7
2015	3	6.795	210.6	5.782	179.2	2.417	74.9	6.911	214.2	28	2.9	72.2	1011.3	39.7
2015	4	6.583	197.5	5.674	170.2	2.3	69	6.456	193.7	28.9	2.4	68.8	1009.7	47.8
2015	5	4.934	153	2.891	89.6	2.639	81.8	4.755	147.4	29.2	5.2	74.2	1009.1	54.8
2015	6	5.061	151.8	3.161	94.8	2.635	79	4.818	144.5	28.8	6.5	74.4	1008.7	52
2015	7	5.446	168.8	3.696	114.6	2.6	80.6	5.199	161.2	28.2	6.1	72.6	1010.1	49.6
2015	8	5.818	180.4	3.892	120.7	2.777	86.1	5.662	175.5	28.2	5.9	74.5	1010.3	52.2
2015	9	5.032	151	3.084	92.5	2.574	77.2	5.033	151	28.1	5.9	75.9	1010.2	57.1
2015	10	5.308	164.5	4.064	126	2.33	72.2	5.479	169.8	28.3	3.9	74	1010.5	56.3
2015	11	4.539	136.2	3.234	97	2.262	67.9	4.794	143.8	28.1	3.6	74	1009.6	54.8
2015	12	4.73	146.6	3.746	116.1	2.207	68.4	5.077	157.4	28	4	73.5	1010.9	51.4
2016	1	5.596	173.5	4.419	137	2.522	78.2	5.984	185.5	28	4.1	72.7	1011.3	39.8
2016	2	6.004	174.1	4.787	138.8	2.561	74.3	6.286	182.3	28.2	4	71.4	1011.4	39.9
2016	3	6.857	212.6	5.633	174.6	2.519	78.1	6.96	215.8	28.7	2.6	72.5	1010.8	41.4
2016	4	6.515	195.5	5.067	152	2.594	77.8	6.402	192.1	29.5	2.9	71.7	1009.3	45.8
2016	5	4.585	142.1	2.764	85.7	2.437	75.5	4.418	137	29.6	4.9	72.3	1008.8	56.8
2016	6	5.001	150	2.81	84.3	2.843	85.3	4.773	143.2	28.6	7.5	74.4	1009.3	50.1
2016	7	4.852	150.4	3.068	95.1	2.453	76	4.643	143.9	28.2	7.1	73.3	1009.4	52.4
2016	8	5.547	172	3.82	118.4	2.552	79.1	5.388	167	27.9	6.9	75.2	1010.1	51.1
2016	9	5.899	177	4.17	125.1	2.677	80.3	5.92	177.6	27.5	6.2	75.8	1010.7	47.4
2016	10	6.288	194.9	5.326	165.1	2.34	72.5	6.516	202	27.9	5	73.7	1010.3	47.3
2016	11	4.952	148.6	3.359	100.8	2.569	77.1	5.225	156.8	27.6	2.8	72.5	1010.4	49.3
2016	12	5.164	160.1	4.274	132.5	2.286	70.9	5.555	172.2	27.6	3.6	71.4	1010.6	39.1

HULHULE

GHID - AVERAGE DAILY SUM OF GLOBAL HORIZONTAL IRRADIATION [KWH/M²]

GHIM - MONTHLY SUM OF GLOBAL HORIZONTAL IRRADIATION [KWH/M²]

DNID - AVERAGE DAILY SUM OF DIRECT NORMAL IRRADIATION [KWH/M²]

DNIM - MONTHLY SUM OF DIRECT NORMAL IRRADIATION [KWH/M²]

DIFD - AVERAGE DAILY SUM OF DIFFUSE HORIZONTAL IRRADIATION [KWH/M²]

DIFM - MONTHLY SUM OF DIFFUSE HORIZONTAL IRRADIATION [KWH/M²]

GTID - AVERAGE DAILY SUM OF GLOBAL TILTED IRRADIATION [KWH/M²] (FIXED INCLINATION: 9 DEG. AZIMUTH: 180 DEG.)

GTIM - MONTHLY SUM OF GLOBAL TILTED IRRADIATION [KWH/M²] (FIXED INCLINATION: 9 DEG. AZIMUTH: 180 DEG.)

TEMP - AVERAGE DIURNAL (24 HOUR) AIR TEMPERATURE AT 2 M [DEG. C]

WS - AVERAGE WIND SPEED AT 10 M [M/S]

RH - RELATIVE HUMIDITY [%]

AP - ATMOSPHERIC PRESSURE [HPA]

PWAT - PRECIPITABLE WATER [KG/M²]

TABLE 22 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR HULHULE, MALDIVES

YEAR	MONTH	GHID	GHIM	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
1999	1	4.9	151.9	3.677	114	2.323	72	5.105	158.3	27.2	5.3	74.4	1009.8	45.5
1999	2	6.319	176.9	5.242	146.8	2.476	69.3	6.516	182.4	27.5	4.1	74.7	1010.9	41.6
1999	3	6.666	206.6	5.38	166.8	2.553	79.1	6.727	208.5	28.2	3.3	74.2	1007.9	43.3
1999	4	5.896	176.9	4.235	127	2.66	79.8	5.815	174.5	28.4	7	73.4	1009.7	44.5
1999	5	5.177	160.5	3.746	116.1	2.438	75.6	5.032	156	28	6.6	74.9	1009.3	51
1999	6	5.537	166.1	4.672	140.2	2.185	65.5	5.318	159.5	27.8	5.8	73.5	1010.2	44.5
1999	7	5.439	168.6	4.142	128.4	2.359	73.1	5.256	162.9	28.1	6.2	71.4	1009.7	46.8
1999	8	5.446	168.8	3.694	114.5	2.631	81.6	5.341	165.6	27.6	5.2	72.4	1010.6	47.7
1999	9	5.562	166.9	3.666	110	2.787	83.6	5.555	166.7	28	5.6	72.2	1009.9	50.6
1999	10	5.4	167.4	3.786	117.4	2.512	77.9	5.516	171	27.6	8	74.6	1009.5	52
1999	11	5.926	177.8	5.104	153.1	2.268	68	6.17	185.1	27.7	3.9	70.9	1010.3	46.5
1999	12	5.147	159.6	4.22	130.8	2.264	70.2	5.398	167.3	27.2	4.6	73.7	1010.4	48.3
2000	1	5.302	164.4	4.188	129.8	2.372	73.5	5.534	171.6	27.2	5.1	74.3	1009.6	42
2000	2	6.598	191.3	5.724	166	2.406	69.8	6.802	197.3	27.2	4	74.4	1009.4	37.6
2000	3	6.526	202.3	4.812	149.2	2.769	85.8	6.576	203.9	28.2	3.9	72.6	1009.4	42.8
2000	4	5.843	175.3	3.994	119.8	2.725	81.8	5.771	173.1	28.5	5.7	74.8	1009.1	47.5
2000	5	5.487	170.1	4.074	126.3	2.493	77.3	5.326	165.1	28.4	5.8	74.5	1009.8	52.5
2000	6	4.718	141.5	2.925	87.8	2.539	76.2	4.561	136.8	27.9	7.2	73.2	1009.7	50.6
2000	7	5.398	167.3	3.664	113.6	2.609	80.9	5.228	162.1	28	6.6	72.6	1009.1	45.6
2000	8	5.464	169.4	3.476	107.8	2.792	86.6	5.367	166.4	27.6	6.4	73.5	1009.7	47.4
2000	9	4.778	143.3	2.731	81.9	2.671	80.1	4.771	143.1	27.6	5.8	73.1	1009.6	52.2
2000	10	5.978	185.3	4.967	154	2.331	72.3	6.116	189.6	27.8	6.2	74	1010.4	47.8
2000	11	5.113	153.4	4.004	120.1	2.293	68.8	5.312	159.4	27.7	3.9	73.1	1009.2	49.3
2000	12	5.871	182	5.225	162	2.287	70.9	6.178	191.5	27.7	4.3	73.4	1009.7	42.6
2001	1	5.563	172.5	4.392	136.2	2.426	75.2	5.812	180.2	27.5	5.2	74.2	1009.3	44.9
2001	2	6.38	178.6	4.785	134	2.768	77.5	6.562	183.7	27.4	3.9	75.5	1009.9	37.1
2001	3	7	217	5.484	170	2.768	85.8	7.062	218.9	28.4	3.7	72.5	1009.9	36.7
2001	4	5.828	174.8	4.558	136.7	2.407	72.2	5.755	172.7	28.7	4.5	73.6	1009.1	53.7
2001	5	5.423	168.1	3.79	117.5	2.566	79.5	5.271	163.4	28.7	6.2	74.8	1009.2	52.9
2001	6	5.394	161.8	3.615	108.5	2.673	80.2	5.207	156.2	28.3	6.6	72.7	1009.3	46.8
2001	7	5.145	159.5	3.268	101.3	2.615	81.1	4.988	154.6	28.1	6.3	72.3	1009.6	48.2
2001	8	5.813	180.2	3.741	116	2.914	90.3	5.705	176.9	28.1	5.8	73.3	1010.5	47.6
2001	9	4.978	149.3	2.69	80.7	2.853	85.6	4.973	149.2	27.5	6.4	75.4	1010.1	53.4
2001	10	5.56	172.4	3.871	120	2.636	81.7	5.671	175.8	27.5	7.2	76.3	1010.1	52.2
2001	11	5.65	169.5	4.453	133.6	2.471	74.1	5.872	176.2	27.6	4.8	75.4	1010.4	49.7
2001	12	5.207	161.4	3.978	123.3	2.466	76.4	5.451	169	27.3	4.7	76.2	1011.6	48.9
2002	1	5.508	170.7	4.167	129.2	2.547	79	5.743	178	27.7	5.5	73.2	1010.3	43.7
2002	2	6.088	170.5	4.63	129.6	2.641	73.9	6.263	175.4	28	5.5	73.8	1011.3	44.6
2002	3	6.511	201.8	4.91	152.2	2.693	83.5	6.56	203.4	28.1	3.8	74.5	1009.7	44.4
2002	4	5.652	169.6	4.303	129.1	2.47	74.1	5.576	167.3	28.5	3.3	73.2	1009	52.8
2002	5	5.447	168.9	4.111	127.4	2.437	75.5	5.282	163.7	28.8	6.3	74.7	1009.2	51.8
2002	6	4.977	149.3	2.917	87.5	2.741	82.2	4.815	144.5	28.7	7.4	72.9	1009.3	48.8
2002	7	5.692	176.5	4.031	125	2.638	81.8	5.505	170.7	28.3	6.9	71.5	1011.1	45.6
2002	8	5.576	172.9	3.107	96.3	3.093	95.9	5.484	170	28	6.1	73.2	1010.5	46.5

TABLE 22 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR HULHULE, MALDIVES

YEAR	MONTH	GHID	GHIM	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
2002	9	5.853	175.6	3.911	117.3	2.877	86.3	5.848	175.4	28	4.8	72.4	1011.4	47.4
2002	10	5.663	175.6	4.233	131.2	2.51	77.8	5.789	179.5	27.9	6	76	1009.9	55.1
2002	11	4.534	136	2.888	86.6	2.469	74.1	4.685	140.6	27.8	4.4	75.4	1010.4	55
2002	12	4.43	137.3	2.926	90.7	2.411	74.7	4.616	143.1	27.3	4.2	76	1011	50.5
2003	1	5.496	170.4	4.412	136.8	2.406	74.6	5.742	178	27.5	6	74.7	1011.2	43.1
2003	2	6.46	180.9	5.859	164.1	2.208	61.8	6.664	186.6	28	4.6	74.3	1010.3	40.6
2003	3	6.587	204.2	5.444	168.8	2.484	77	6.645	206	28.4	3.6	73.3	1009.9	43.6
2003	4	5.833	175	4.323	129.7	2.563	76.9	5.766	173	28.9	3.5	72.4	1009.2	51.6
2003	5	5.632	174.6	3.706	114.9	2.796	86.7	5.476	169.8	28.9	6	74.8	1009.6	54
2003	6	4.462	133.9	2.936	88.1	2.32	69.6	4.31	129.3	28.5	5.6	74.4	1008.9	54.5
2003	7	4.828	149.7	3.05	94.5	2.569	79.6	4.679	145	28.5	4.2	73	1009.4	50.7
2003	8	6.065	188	4.173	129.4	2.825	87.6	5.954	184.6	28.2	5.8	72.5	1010.4	45.4
2003	9	5.216	156.5	3.436	103.1	2.56	76.8	5.207	156.2	27.9	6	73.9	1010.9	51.3
2003	10	6.487	201.1	5.8	179.8	2.198	68.1	6.642	205.9	28.2	5.5	73.2	1010.5	45.5
2003	11	4.545	136.3	3.249	97.5	2.26	67.8	4.706	141.2	27.4	4	76	1010	57.5
2003	12	5.757	178.5	5.05	156.6	2.3	71.3	6.055	187.7	27.7	5.3	74.6	1010.8	41.8
2004	1	6.095	188.9	5.201	161.2	2.462	76.3	6.381	197.8	27.8	6.1	75.2	1010.2	43.3
2004	2	6.558	190.2	5.568	161.5	2.445	70.9	6.761	196.1	28	4.7	72.8	1010.5	37.5
2004	3	6.986	216.6	5.861	181.7	2.514	77.9	7.048	218.5	28.5	4	72.7	1010.1	38.3
2004	4	6.179	185.4	5.199	156	2.323	69.7	6.09	182.7	28.8	4.1	73.1	1009.7	51.8
2004	5	5.533	171.5	3.538	109.7	2.823	87.5	5.379	166.7	29	7.8	72.9	1008.8	46.5
2004	6	5.872	176.2	4.474	134.2	2.498	74.9	5.653	169.6	28.3	6.3	73.8	1010.9	47
2004	7	4.661	144.5	2.754	85.4	2.587	80.2	4.526	140.3	27.6	6.6	73.7	1009.6	50.3
2004	8	5.556	172.2	3.835	118.9	2.621	81.3	5.448	168.9	27.9	5.2	73.8	1010.6	48.6
2004	9	5.195	155.8	2.975	89.2	2.837	85.1	5.19	155.7	27.6	6	74	1010.4	50.9
2004	10	5.532	171.5	4.383	135.9	2.326	72.1	5.646	175	27.5	4.4	75.1	1010.9	53.4
2004	11	4.836	145.1	3.504	105.1	2.313	69.4	5.013	150.4	27.6	4.5	75.8	1010.1	56.2
2004	12	4.852	150.4	3.387	105	2.472	76.6	5.064	157	27.4	5.6	76.8	1010	51.3
2005	1	5.844	181.2	4.665	144.6	2.557	79.3	6.107	189.3	27.6	4.7	75.2	1010.4	46.2
2005	2	6.704	187.7	5.833	163.3	2.466	69	6.914	193.6	28.1	5.5	74.2	1010.9	37.8
2005	3	6.761	209.6	5.899	182.9	2.304	71.4	6.822	211.5	28.4	4.5	73.2	1010.9	41.1
2005	4	6.461	193.8	5.543	166.3	2.415	72.5	6.368	191	28.8	3.8	72.2	1010.1	47.9
2005	5	5.329	165.2	3.678	114	2.564	79.5	5.18	160.6	28.9	5.8	74.6	1009.2	53.5
2005	6	5.299	159	3.576	107.3	2.623	78.7	5.113	153.4	28.4	7.4	73.8	1009	49.1
2005	7	5.114	158.5	3.362	104.2	2.56	79.4	4.953	153.5	28.1	6.2	73.7	1010.3	47.8
2005	8	5.84	181	4.075	126.3	2.683	83.2	5.727	177.5	28.4	4.7	71.2	1010.3	47
2005	9	5.371	161.1	3.221	96.6	2.863	85.9	5.374	161.2	27.8	5.4	73.6	1010.4	50.3
2005	10	5.469	169.5	3.742	116	2.588	80.2	5.577	172.9	28.1	6.6	74.8	1010.3	52.5
2005	11	5.56	166.8	4.391	131.7	2.428	72.8	5.782	173.5	27.7	5.7	75.5	1010.2	51.7
2005	12	5.412	167.8	4.526	140.3	2.311	71.6	5.682	176.1	27.4	5.3	75.5	1009.8	44.9
2006	1	5.595	173.4	4.488	139.1	2.432	75.4	5.842	181.1	27.2	5.5	75.4	1010.5	43.9
2006	2	6.5	182	5.249	147	2.667	74.7	6.695	187.5	27.6	5.1	75.3	1010.3	40.5
2006	3	6.41	198.7	5.132	159.1	2.481	76.9	6.463	200.4	28.2	4.1	74.7	1009.8	43.6
2006	4	6.666	200	5.364	160.9	2.558	76.7	6.578	197.3	28.7	4.6	73.3	1009.5	44.6

TABLE 22 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR HULHULE, MALDIVES

YEAR	MONTH	GHID	GHIM	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
2006	5	5.649	175.1	4.126	127.9	2.571	79.7	5.488	170.1	28.6	5.9	74.2	1009.6	49.3
2006	6	5.068	152	3.393	101.8	2.532	76	4.893	146.8	28.6	6	73.5	1009.2	49.9
2006	7	5.38	166.8	3.366	104.3	2.834	87.9	5.216	161.7	28.3	5.5	73.2	1010.2	47.6
2006	8	5.083	157.6	3.032	94	2.711	84	4.989	154.7	28.2	4.6	72.4	1010.2	50.2
2006	9	5.043	151.3	3.086	92.6	2.647	79.4	5.044	151.3	27.8	5.6	75	1010.4	51.1
2006	10	5.775	179	4.652	144.2	2.387	74	5.895	182.7	28	3.8	73.4	1011.1	49.1
2006	11	4.116	123.5	2.588	77.6	2.271	68.1	4.245	127.4	27.7	3.7	75	1009.8	58.3
2006	12	3.737	115.8	2.059	63.8	2.293	71.1	3.87	120	27.6	5.9	76.8	1010.2	56.4
2007	1	5.885	182.4	4.55	141.1	2.651	82.2	6.144	190.5	27.5	7	74.8	1011.1	42
2007	2	6.924	193.9	6.294	176.2	2.335	65.4	7.149	200.2	27.4	5.3	73.2	1010.4	33.7
2007	3	7.01	217.3	5.838	181	2.566	79.5	7.076	219.4	28	3.6	73.5	1010.2	37.3
2007	4	6.184	185.5	5.165	155	2.327	69.8	6.1	183	28.8	3.6	72.6	1009.5	49.6
2007	5	5.575	172.8	4.417	136.9	2.318	71.9	5.408	167.6	28.8	5.8	74.2	1009.3	54.8
2007	6	4.917	147.5	3.505	105.2	2.371	71.1	4.742	142.3	28.7	4.5	74.1	1007.6	51.8
2007	7	5.118	158.7	3.54	109.7	2.505	77.7	4.954	153.6	28.3	5.6	73.5	1009.1	50.2
2007	8	5.579	172.9	3.542	109.8	2.83	87.7	5.473	169.7	28.3	4.3	72.4	1009.4	48.3
2007	9	5.211	156.3	2.937	88.1	2.868	86	5.21	156.3	28.2	5.8	73.8	1009.3	50.9
2007	10	5.12	158.7	3.35	103.9	2.573	79.8	5.216	161.7	27.9	6.2	73.7	1009.6	52.2
2007	11	5.871	176.1	4.778	143.3	2.491	74.7	6.107	183.2	27.7	3.6	73.5	1009.9	46.2
2007	12	4.886	151.5	3.464	107.4	2.46	76.3	5.102	158.2	27.5	5	75.2	1009.3	48.5
2008	1	5.552	172.1	4.371	135.5	2.463	76.4	5.796	179.7	27.1	4.9	76.2	1009.9	42.2
2008	2	6.268	181.8	4.895	142	2.65	76.9	6.456	187.2	27.7	4.1	72.8	1010	38.1
2008	3	5.821	180.5	4.492	139.3	2.489	77.2	5.861	181.7	27.8	4.1	74.2	1008.6	48.4
2008	4	5.566	167	3.93	117.9	2.55	76.5	5.502	165.1	28.2	4.9	73.5	1008.8	50.4
2008	5	5.881	182.3	4.808	149	2.32	71.9	5.698	176.6	28.4	5.2	72.9	1009.7	48.2
2008	6	5.335	160.1	3.757	112.7	2.522	75.7	5.146	154.4	28.5	5.1	72.5	1009.2	50
2008	7	4.911	152.2	2.723	84.4	2.814	87.2	4.77	147.9	28	5.5	72.7	1009	49.9
2008	8	5.419	168	3.459	107.2	2.716	84.2	5.316	164.8	27.9	4.6	73.8	1009	49.1
2008	9	6.638	199.1	5.154	154.6	2.684	80.5	6.637	199.1	28.1	4.6	71.9	1010	44
2008	10	5.455	169.1	3.677	114	2.661	82.5	5.561	172.4	28.4	5	72.8	1009.6	51.3
2008	11	5.374	161.2	3.829	114.9	2.607	78.2	5.57	167.1	28.2	4.5	72	1009.3	49
2008	12	5.225	162	4.239	131.4	2.343	72.6	5.479	169.8	27.6	4.4	73	1010.1	47.7
2009	1	5.981	185.4	4.9	151.9	2.539	78.7	6.255	193.9	27.4	6	73.3	1010.6	39.8
2009	2	6.856	192	6.031	168.9	2.496	69.9	7.073	198	27.5	4.7	71	1010.2	32.2
2009	3	7.221	223.9	6.596	204.5	2.301	71.3	7.282	225.7	28.1	3	72.4	1009.7	38.2
2009	4	5.989	179.7	4.511	135.3	2.637	79.1	5.901	177	28.7	4.4	72.9	1008.9	44.3
2009	5	5.385	166.9	3.676	114	2.638	81.8	5.237	162.3	28.5	6.6	75.6	1008.8	51.4
2009	6	5.486	164.6	4.026	120.8	2.485	74.5	5.288	158.6	28.3	6.6	73.9	1010	49.2
2009	7	5.406	167.6	3.807	118	2.54	78.7	5.233	162.2	28.1	4.9	73.9	1009.9	48.3
2009	8	4.599	142.6	2.759	85.5	2.477	76.8	4.518	140.1	27.7	6.2	74.8	1010.2	53.8
2009	9	5.838	175.1	4.025	120.8	2.714	81.4	5.844	175.3	28	6.1	75	1010.7	49.8
2009	10	6.376	197.7	5.05	156.6	2.604	80.7	6.518	202.1	28.2	3.6	72.1	1010.4	46.8
2009	11	4.39	131.7	3.322	99.7	2.083	62.5	4.559	136.8	28	5.2	73.6	1009.4	51.4
2009	12	4.85	150.3	4.015	124.5	2.106	65.3	5.085	157.6	27.8	3	73.5	1010	52.3

TABLE 22 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR HULHULE, MALDIVES

YEAR	MONTH	GHID	GHIM	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
2010	1	5.983	185.5	4.854	150.5	2.553	79.1	6.255	193.9	27.8	5.4	73.8	1011.1	43.9
2010	2	6.187	173.2	4.992	139.8	2.497	69.9	6.367	178.3	27.9	4.6	73.7	1010.7	44.9
2010	3	6.966	215.9	5.783	179.3	2.549	79	7.026	217.8	28.4	3.5	73.1	1010.6	40.7
2010	4	5.934	178	4.807	144.2	2.323	69.7	5.856	175.7	29.1	3.6	74.1	1009.7	55.3
2010	5	5.07	157.2	3.506	108.7	2.457	76.2	4.932	152.9	29.2	5.8	74.4	1008.2	58.1
2010	6	4.665	140	2.857	85.7	2.515	75.5	4.512	135.4	28.5	5.6	74.3	1009.3	51.8
2010	7	4.861	150.7	2.894	89.7	2.623	81.3	4.72	146.3	28.2	5.3	73.7	1009	51.8
2010	8	5.463	169.4	3.489	108.2	2.737	84.8	5.36	166.2	28.1	6.1	74.2	1009.3	49.7
2010	9	5.047	151.4	3.19	95.7	2.555	76.7	5.032	151	28	6	74.5	1009.2	51.8
2010	10	6.503	201.6	5.206	161.4	2.607	80.8	6.651	206.2	28	6.5	73.4	1009.3	42.8
2010	11	5.524	165.7	4.163	124.9	2.522	75.7	5.733	172	27.8	5.6	73.4	1009	49.8
2010	12	4.891	151.6	3.656	113.3	2.394	74.2	5.114	158.5	27.1	4.7	73.8	1008.2	49
2011	1	5.75	178.2	4.55	141.1	2.556	79.2	6.008	186.2	27.2	5.1	73.9	1009.1	42.9
2011	2	6.68	187	5.644	158	2.562	71.7	6.884	192.8	26.9	3.4	74.2	1009.4	35
2011	3	7.106	220.3	6.025	186.8	2.53	78.4	7.166	222.1	27.8	3.6	73	1009.3	37.4
2011	4	6.236	187.1	4.837	145.1	2.565	77	6.158	184.7	28.2	4	73.4	1009.3	45.3
2011	5	5.304	164.4	3.889	120.6	2.415	74.9	5.152	159.7	28.4	5.8	74.3	1009.6	51.9
2011	6	5.838	175.1	4.101	123	2.783	83.5	5.628	168.8	28.6	5.8	73.5	1008.9	46.3
2011	7	5.201	161.2	3.09	95.8	2.81	87.1	5.047	156.5	28	4.6	73.7	1008.9	47.6
2011	8	5.455	169.1	3.383	104.9	2.813	87.2	5.356	166	28	4.5	72.9	1009.2	50.4
2011	9	5.481	164.4	3.605	108.2	2.676	80.3	5.485	164.6	28.1	4.3	72.1	1010.1	50.1
2011	10	5.557	172.3	4.393	136.2	2.349	72.8	5.663	175.6	28.1	3.8	71.2	1009	46.8
2011	11	4.798	143.9	3.079	92.4	2.555	76.7	4.958	148.7	27.9	4.8	73.3	1008.7	52.4
2011	12	5.181	160.6	3.835	118.9	2.502	77.6	5.418	168	27.6	4.1	72.9	1008.9	47.8
2012	1	5.918	183.5	4.898	151.8	2.518	78.1	6.191	191.9	27.2	4.8	70.7	1010	36.9
2012	2	5.851	169.7	4.045	117.3	2.818	81.7	6.011	174.3	27.7	5	72.8	1008.9	44.6
2012	3	6.89	213.6	5.304	164.4	2.78	86.2	6.944	215.3	27.8	3.2	71.2	1009.8	38.1
2012	4	6.311	189.3	4.757	142.7	2.642	79.3	6.231	186.9	28.6	4	72.3	1009.1	46.8
2012	5	5.726	177.5	4.483	139	2.419	75	5.56	172.4	28.2	4.8	73.6	1009.3	44
2012	6	5.39	161.7	3.05	91.5	3.024	90.7	5.217	156.5	28.4	5.4	72.1	1009.1	45.8
2012	7	5.513	170.9	3.861	119.7	2.578	79.9	5.34	165.5	28.4	5.1	71.4	1008.9	46.7
2012	8	5.461	169.3	3.429	106.3	2.784	86.3	5.361	166.2	28.1	4.6	72.7	1009.9	49.1
2012	9	5.477	164.3	3.278	98.3	2.902	87.1	5.48	164.4	28	4	73.1	1010.4	49.8
2012	10	5.375	166.6	3.631	112.6	2.675	82.9	5.472	169.6	27.9	4.6	73.5	1009.6	53.9
2012	11	5.418	162.5	4.01	120.3	2.505	75.2	5.625	168.8	27.7	3.1	73.2	1009.8	53.7
2012	12	4.394	136.2	2.8	86.8	2.475	76.7	4.574	141.8	27.5	4.3	74.2	1008.9	52.3
2013	1	6.06	187.9	5.083	157.6	2.471	76.6	6.339	196.5	27.8	5.5	72.5	1010.8	40.3
2013	2	6.291	176.1	5.384	150.8	2.358	66	6.481	181.5	27.5	4.5	72.7	1010.3	41.3
2013	3	6.206	192.4	4.783	148.3	2.56	79.4	6.26	194.1	28.1	3.5	73.2	1009.9	47.3
2013	4	6.766	203	5.861	175.8	2.377	71.3	6.668	200	28.8	3.4	71	1008.9	43.7
2013	5	5.06	156.9	3.345	103.7	2.535	78.6	4.917	152.4	28.6	6.5	74.3	1008.7	55.6
2013	6	4.81	144.3	2.829	84.9	2.648	79.4	4.654	139.6	27.9	6.1	75	1008.7	49.6
2013	7	5.35	165.8	3.41	105.7	2.742	85	5.187	160.8	28	4.6	73.5	1009	46.8
2013	8	5.251	162.8	3.367	104.4	2.657	82.4	5.152	159.7	27.7	5.6	72.9	1009.8	48.2

TABLE 22 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR HULHULE, MALDIVES

YEAR	MONTH	GHID	GHIM	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
2013	9	5.784	173.5	3.964	118.9	2.716	81.5	5.788	173.6	27.7	5.1	74.1	1010	47.5
2013	10	5.499	170.5	3.851	119.4	2.612	81	5.608	173.8	27.8	5.7	74.1	1010.5	51.2
2013	11	5.514	165.4	4.89	146.7	2.129	63.9	5.748	172.4	27.5	3	72.6	1009.5	50.6
2013	12	5.081	157.5	3.556	110.2	2.585	80.1	5.307	164.5	27.7	5.2	73.1	1009.5	48.7
2014	1	6.123	189.8	5.215	161.7	2.47	76.6	6.409	198.7	27.4	5.7	73.6	1010.9	41
2014	2	6.715	188	5.83	163.2	2.477	69.4	6.927	194	27.4	5.2	72.3	1009.4	36.8
2014	3	6.45	200	4.919	152.5	2.659	82.4	6.502	201.6	28.2	4.7	73.1	1009.9	46
2014	4	6.694	200.8	5.718	171.5	2.357	70.7	6.602	198.1	28.6	3.6	71.9	1009.9	44.6
2014	5	5.198	161.1	3.939	122.1	2.314	71.7	5.04	156.2	28.8	5.4	73.9	1008.8	55.4
2014	6	5.624	168.7	4.098	122.9	2.525	75.8	5.42	162.6	28.6	6.4	74.3	1008.6	49.3
2014	7	5.621	174.3	3.98	123.4	2.596	80.5	5.44	168.6	28.5	5.9	72.2	1010	46.2
2014	8	5.261	163.1	3.416	105.9	2.618	81.2	5.167	160.2	27.9	5	72	1010	48.1
2014	9	5.171	155.1	3.198	95.9	2.661	79.8	5.167	155	27.8	5.3	74.1	1010.4	52.9
2014	10	5.402	167.5	3.88	120.3	2.502	77.6	5.512	170.9	28	4.5	73.3	1010.2	53
2014	11	4.819	144.6	3.24	97.2	2.489	74.7	4.983	149.5	27.6	4.4	74	1010	54.9
2014	12	4.973	154.2	3.811	118.1	2.373	73.6	5.204	161.3	27.5	2.9	73.7	1010.1	53.4
2015	1	6.222	192.9	5.432	168.4	2.456	76.1	6.52	202.1	27.6	5.6	71.5	1011.2	37.9
2015	2	6.325	177.1	5.215	146	2.507	70.2	6.51	182.3	27.4	5.3	72.2	1010.9	38.4
2015	3	6.753	209.3	5.531	171.5	2.562	79.4	6.815	211.3	28	3.4	71.2	1011.1	41.3
2015	4	6.524	195.7	5.986	179.6	2.137	64.1	6.429	192.9	28.9	2.7	69.7	1009.8	47.4
2015	5	5.565	172.5	4.176	129.5	2.446	75.8	5.402	167.5	29	5.6	74	1009.5	53.8
2015	6	5.301	159	3.966	119	2.395	71.9	5.106	153.2	28.8	5.1	73.4	1009.1	48.7
2015	7	5.293	164.1	3.623	112.3	2.587	80.2	5.124	158.8	28.3	4.9	71.5	1010.4	50.5
2015	8	5.362	166.2	3.799	117.8	2.433	75.4	5.257	163	28	5.1	74.3	1010.7	53.5
2015	9	5.003	150.1	2.922	87.7	2.719	81.6	4.996	149.9	28.1	5.5	74.2	1010.6	55.6
2015	10	5.428	168.3	3.858	119.6	2.567	79.6	5.534	171.6	28	3.5	74.7	1010.8	56.7
2015	11	5.079	152.4	3.978	119.3	2.319	69.6	5.28	158.4	28	4	74.6	1009.7	54.5
2015	12	5.021	155.7	3.866	119.8	2.427	75.2	5.258	163	28.2	4.5	73.3	1010.8	51.8
2016	1	5.536	171.6	4.013	124.4	2.675	82.9	5.767	178.8	28.1	6.1	74.5	1011.1	46.6
2016	2	6.298	182.6	5.104	148	2.525	73.2	6.484	188	28.5	5.4	71.9	1011.1	44.9
2016	3	6.888	213.5	5.914	183.3	2.451	76	6.942	215.2	28.7	3.2	72.2	1010.8	42.9
2016	4	5.987	179.6	4.639	139.2	2.478	74.3	5.909	177.3	29.3	2.9	71.7	1009.5	51.2
2016	5	4.461	138.3	2.783	86.3	2.371	73.5	4.342	134.6	29.3	5.5	73.1	1009.2	56.6
2016	6	5.242	157.3	3.57	107.1	2.58	77.4	5.059	151.8	28.7	6.7	73.1	1009.8	48
2016	7	4.606	142.8	2.743	85	2.55	79	4.47	138.6	28.3	5.8	72.6	1009.7	51.9
2016	8	5.176	160.5	3.38	104.8	2.559	79.3	5.072	157.2	27.9	6.4	74.3	1010.5	50.1
2016	9	6.1	183	4.222	126.7	2.781	83.4	6.109	183.3	27.7	5.5	74.3	1011	46.5
2016	10	5.459	169.2	4	124	2.512	77.9	5.566	172.5	27.6	5.9	74.7	1010.6	51
2016	11	5.028	150.8	3.484	104.5	2.502	75.1	5.209	156.3	27.4	3.2	74.8	1010.5	53.8
2016	12	5.132	159.1	4.25	131.8	2.26	70.1	5.383	166.9	27.6	4.4	72.6	1010.6	45.2

KAHDHOOO

GHID - AVERAGE DAILY SUM OF GLOBAL HORIZONTAL IRRADIATION [KWH/M²]

GHIM - MONTHLY SUM OF GLOBAL HORIZONTAL IRRADIATION [KWH/M²]

DNID - AVERAGE DAILY SUM OF DIRECT NORMAL IRRADIATION [KWH/M²]

DNIM - MONTHLY SUM OF DIRECT NORMAL IRRADIATION [KWH/M²]

DIFD - AVERAGE DAILY SUM OF DIFFUSE HORIZONTAL IRRADIATION [KWH/M²]

DIFM - MONTHLY SUM OF DIFFUSE HORIZONTAL IRRADIATION [KWH/M²]

GTID - AVERAGE DAILY SUM OF GLOBAL TILTED IRRADIATION [KWH/M²] (FIXED INCLINATION: 9 DEG. AZIMUTH: 180 DEG.)

GTIM - MONTHLY SUM OF GLOBAL TILTED IRRADIATION [KWH/M²] (FIXED INCLINATION: 9 DEG. AZIMUTH: 180 DEG.)

TEMP - AVERAGE DIURNAL (24 HOUR) AIR TEMPERATURE AT 2 M [DEG. C]

WS - AVERAGE WIND SPEED AT 10 M [M/S]

RH - RELATIVE HUMIDITY [%]

AP - ATMOSPHERIC PRESSURE [HPA]

PWAT - PRECIPITABLE WATER [KG/M²]

TABLE 23 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR KAHDHOO, MALDIVES

YEAR	MONTH	GHID	GHIM	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
1999	1	5.06	156.9	3.506	108.7	2.566	79.5	5.188	160.8	27.1	4.9	75.4	1009.7	49.2
1999	2	6.722	188.2	6.086	170.4	2.246	62.9	6.858	192	27.8	3.9	73	1010.8	43.3
1999	3	6.449	199.9	5.311	164.6	2.389	74.1	6.481	200.9	28.3	3.6	72.7	1007.9	45.4
1999	4	5.8	174	4.447	133.4	2.477	74.3	5.736	172.1	28.2	6.8	73.4	1010.2	46.1
1999	5	5.39	167.1	4.185	129.7	2.317	71.8	5.28	163.7	28.3	6	72.4	1009.5	48.1
1999	6	5.622	168.7	4.759	142.8	2.219	66.6	5.466	164	27.9	4.7	72.8	1010.3	43.7
1999	7	5.6	173.6	4.803	148.9	2.12	65.7	5.458	169.2	28.2	4.8	70.8	1009.8	45.6
1999	8	5.358	166.1	4.077	126.4	2.328	72.2	5.279	163.6	27.6	4.2	70.6	1010.8	45.8
1999	9	5.558	166.7	3.785	113.5	2.646	79.4	5.549	166.5	27.9	5.1	71.6	1010.2	50.9
1999	10	5.655	175.3	3.983	123.5	2.632	81.6	5.727	177.5	27.9	7.7	72.8	1009.8	48.9
1999	11	5.812	174.4	4.745	142.3	2.351	70.5	5.957	178.7	27.9	5	71.5	1010.3	47.2
1999	12	4.976	154.3	3.915	121.4	2.293	71.1	5.126	158.9	27.3	5.2	74.9	1010.3	52.5
2000	1	5.691	176.4	4.538	140.7	2.498	77.4	5.853	181.4	27.5	5.1	73.4	1009.5	44.9
2000	2	6.493	188.3	5.473	158.7	2.423	70.3	6.615	191.8	27.6	4.2	73.4	1009.2	38.7
2000	3	6.758	209.5	5.433	168.4	2.604	80.7	6.788	210.4	28.2	4	71.5	1009.4	40.3
2000	4	6.122	183.7	4.702	141.1	2.576	77.3	6.061	181.8	28.4	6	73.5	1009.4	47.5
2000	5	5.667	175.7	4.828	149.7	2.207	68.4	5.541	171.8	28.5	5.3	72.6	1009.9	51.1
2000	6	4.844	145.3	3.549	106.5	2.27	68.1	4.72	141.6	28	5.8	72.1	1009.9	49
2000	7	5.277	163.6	3.967	123	2.36	73.2	5.153	159.7	27.9	4.7	71.4	1009.2	44.6
2000	8	5.183	160.7	3.171	98.3	2.732	84.7	5.117	158.6	27.7	5.7	72.3	1010	46.6
2000	9	5.114	153.4	3.113	93.4	2.693	80.8	5.104	153.1	27.6	5.7	72.6	1009.9	51.5
2000	10	5.79	179.5	4.55	141.1	2.414	74.8	5.867	181.9	27.8	6.7	73.3	1010.7	48.9
2000	11	5.325	159.8	4.166	125	2.369	71.1	5.457	163.7	27.7	5.2	74.3	1009.3	52.3
2000	12	5.46	169.3	4.368	135.4	2.479	76.8	5.631	174.6	28	4.4	73.3	1009.6	47.3
2001	1	5.833	180.8	4.832	149.8	2.4	74.4	6.004	186.1	27.9	5.1	72.9	1009	43.7
2001	2	6.367	178.3	4.874	136.5	2.686	75.2	6.481	181.5	27.7	3.6	72.7	1009.8	39.1
2001	3	7.033	218	5.954	184.6	2.442	75.7	7.069	219.1	28.4	3.6	71.1	1009.9	41.3
2001	4	5.421	162.6	4.224	126.7	2.314	69.4	5.369	161.1	28.4	4.9	73.1	1009.3	53.7
2001	5	5.758	178.5	4.932	152.9	2.186	67.8	5.627	174.4	28.6	5.4	74	1009.4	51.1
2001	6	5.602	168.1	4.126	123.8	2.616	78.5	5.457	163.7	28.4	5.2	71	1009.4	45.6
2001	7	4.62	143.2	2.789	86.5	2.534	78.6	4.522	140.2	28.1	5	72.2	1009.8	46.9
2001	8	5.342	165.6	3.467	107.5	2.683	83.2	5.267	163.3	28.2	4.9	72.1	1010.7	48.6
2001	9	5.526	165.8	3.563	106.9	2.724	81.7	5.521	165.6	27.6	6.4	73.9	1010.4	52
2001	10	5.513	170.9	3.881	120.3	2.58	80	5.578	172.9	27.5	7.5	75.2	1010.5	52.6
2001	11	5.404	162.1	4.207	126.2	2.359	70.8	5.537	166.1	27.6	6.1	75.1	1010.5	51.6
2001	12	5.384	166.9	4.46	138.3	2.305	71.5	5.554	172.2	27.2	3.9	76.1	1011.6	50.2
2002	1	5.104	158.2	3.693	114.5	2.43	75.3	5.236	162.3	27.8	5.1	73.5	1010.1	48.1
2002	2	5.821	163	4.464	125	2.506	70.2	5.926	165.9	28	5.2	73.9	1011.2	46.8
2002	3	6.148	190.6	4.871	151	2.444	75.8	6.171	191.3	28.1	3.8	73.8	1009.6	47.4
2002	4	5.786	173.6	4.837	145.1	2.254	67.6	5.73	171.9	28.5	3.5	72.5	1009	52.7
2002	5	5.667	175.7	4.724	146.4	2.212	68.6	5.539	171.7	28.8	5.5	73.4	1009.4	48.5
2002	6	4.828	144.8	3.047	91.4	2.563	76.9	4.714	141.4	28.6	6.8	72.7	1009.5	49.9
2002	7	5.122	158.8	3.495	108.3	2.506	77.7	5.007	155.2	28.2	6.3	71.8	1011.3	47.2
2002	8	5.469	169.5	3.38	104.8	2.82	87.4	5.396	167.3	28.1	5	71.7	1010.6	46.1

TABLE 23 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR KAHDHOO, MALDIVES

YEAR	MONTH	GHID	GHIM	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
2002	9	5.931	177.9	4.23	126.9	2.72	81.6	5.919	177.6	28	4.8	72.5	1011.7	48.7
2002	10	5.493	170.3	3.994	123.8	2.475	76.7	5.564	172.5	27.8	5.6	75.1	1010.2	55.3
2002	11	5.252	157.6	4.313	129.4	2.191	65.7	5.387	161.6	27.9	5	74.1	1010.4	52.5
2002	12	5.054	156.7	3.845	119.2	2.324	72	5.205	161.4	27.7	3.8	74.1	1010.9	51.1
2003	1	5.58	173	4.349	134.8	2.489	77.2	5.736	177.8	27.9	5.6	73.7	1011	46.6
2003	2	6.638	185.9	6.038	169.1	2.273	63.6	6.771	189.6	28.3	4.8	72.8	1010.1	41.8
2003	3	6.157	190.9	5.176	160.5	2.257	70	6.185	191.7	28.4	3.7	72.5	1009.9	46.5
2003	4	5.525	165.8	4.578	137.3	2.184	65.5	5.472	164.2	28.8	4.2	72.1	1009.3	53.1
2003	5	5.363	166.3	4.189	129.9	2.335	72.4	5.246	162.6	28.6	5.7	74.3	1009.9	52
2003	6	4.864	145.9	3.538	106.1	2.35	70.5	4.741	142.2	28.6	4.3	73.3	1009.1	52.6
2003	7	5.197	161.1	3.554	110.2	2.618	81.2	5.08	157.5	28.5	3.5	72.6	1009.5	49.3
2003	8	5.806	180	4.25	131.8	2.529	78.4	5.727	177.5	28.3	4.9	71.5	1010.7	46
2003	9	5.475	164.2	3.681	110.4	2.599	78	5.461	163.8	28.1	5.4	71.5	1011.1	51
2003	10	6.158	190.9	4.906	152.1	2.501	77.5	6.24	193.4	28.1	5.6	72.6	1010.8	48.4
2003	11	5.198	155.9	4.212	126.4	2.193	65.8	5.331	159.9	27.8	5.5	74.5	1010	55.2
2003	12	5.222	161.9	4.094	126.9	2.365	73.3	5.381	166.8	27.5	4.6	74.8	1010.7	50
2004	1	5.434	168.5	4.537	140.6	2.29	71	5.59	173.3	27.9	5.7	75.5	1009.9	48.8
2004	2	6.685	193.9	5.857	169.9	2.371	68.8	6.818	197.7	28.5	4.9	71.6	1010.3	40.4
2004	3	7.01	217.3	6.252	193.8	2.275	70.5	7.04	218.2	28.5	4.1	71.6	1010.1	39.5
2004	4	5.862	175.9	5.034	151	2.233	67	5.799	174	28.7	4.3	72.8	1009.8	53.1
2004	5	5.63	174.5	4.145	128.5	2.52	78.1	5.511	170.8	29	7.5	71.8	1009.1	45.9
2004	6	5.833	175	4.852	145.6	2.287	68.6	5.673	170.2	28.4	5.5	72.5	1011.2	47.1
2004	7	4.679	145	3.032	94	2.402	74.5	4.579	141.9	27.7	5.1	72.1	1009.8	48.8
2004	8	5.597	173.5	4.107	127.3	2.502	77.6	5.513	170.9	27.8	4.7	73.6	1010.8	47.3
2004	9	5.308	159.2	3.456	103.7	2.629	78.9	5.301	159	27.6	5.4	73.4	1010.6	49.3
2004	10	5.507	170.7	4.31	133.6	2.335	72.4	5.572	172.7	27.6	4.4	74.7	1011	52.3
2004	11	4.572	137.2	3.263	97.9	2.314	69.4	4.675	140.2	27.8	4.9	75.5	1010	56.4
2004	12	5.135	159.2	4.118	127.7	2.302	71.4	5.293	164.1	27.5	4.4	77.2	1009.9	52.4
2005	1	5.69	176.4	4.381	135.8	2.588	80.2	5.845	181.2	27.7	4.2	75.2	1010.3	49.5
2005	2	6.245	174.9	5.378	150.6	2.333	65.3	6.364	178.2	28.2	5.2	74.1	1010.7	43.1
2005	3	6.931	214.9	6.234	193.3	2.212	68.6	6.965	215.9	28.6	4.2	72.1	1010.8	44.3
2005	4	6.265	188	5.475	164.2	2.336	70.1	6.197	185.9	28.8	3.8	70.9	1010.2	47.9
2005	5	5.199	161.2	4.069	126.1	2.262	70.1	5.087	157.7	28.8	5.6	73.1	1009.4	51.6
2005	6	5.354	160.6	3.991	119.7	2.444	73.3	5.216	156.5	28.4	5.8	73.5	1009.3	49.5
2005	7	4.991	154.7	3.402	105.5	2.444	75.8	4.881	151.3	27.9	5	73.8	1010.6	47.6
2005	8	5.442	168.7	3.949	122.4	2.419	75	5.362	166.2	28	4.1	72.3	1010.5	46.8
2005	9	5.495	164.8	3.602	108.1	2.683	80.5	5.488	164.6	27.9	5	72.4	1010.6	48.9
2005	10	5.71	177	4.116	127.6	2.62	81.2	5.784	179.3	28	6.6	74.2	1010.6	52.2
2005	11	6.074	182.2	5.271	158.1	2.288	68.6	6.238	187.1	27.6	6.5	75.3	1010.4	51.6
2005	12	5.939	184.1	5.274	163.5	2.244	69.6	6.137	190.2	27.5	5.7	75	1009.9	45.4
2006	1	5.515	171	4.519	140.1	2.304	71.4	5.671	175.8	27.4	5.2	74.8	1010.3	46
2006	2	6.156	172.4	4.949	138.6	2.483	69.5	6.267	175.5	27.8	5	74.8	1010.2	44.8
2006	3	6.636	205.7	5.784	179.3	2.246	69.6	6.668	206.7	28.3	4	73	1009.8	44.1
2006	4	6.095	182.8	4.86	145.8	2.481	74.4	6.037	181.1	28.5	4.5	72.5	1009.8	45.8

TABLE 23 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR KAHDHOO, MALDIVES

YEAR	MONTH	GHID	GHIM	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
2006	5	5.723	177.4	4.516	140	2.411	74.7	5.601	173.6	28.5	5.1	73	1009.9	49.2
2006	6	4.705	141.2	3.406	102.2	2.183	65.5	4.588	137.6	28.5	5.2	72.6	1009.4	49.6
2006	7	5.183	160.7	3.489	108.2	2.59	80.3	5.068	157.1	28.1	4	73.4	1010.4	48.1
2006	8	5.388	167	3.776	117.1	2.492	77.3	5.31	164.6	28.1	4.2	73.1	1010.3	48.4
2006	9	5.264	157.9	3.39	101.7	2.619	78.6	5.259	157.8	27.8	5.5	74	1010.6	49.5
2006	10	5.57	172.7	4.333	134.3	2.446	75.8	5.638	174.8	27.9	3.4	72.3	1011.3	51.5
2006	11	4.254	127.6	2.87	86.1	2.24	67.2	4.345	130.3	27.7	3.6	75	1009.8	57.9
2006	12	4.014	124.4	2.437	75.5	2.281	70.7	4.112	127.5	27.6	4.6	76.5	1010	58.1
2007	1	5.635	174.7	4.6	142.6	2.37	73.5	5.796	179.7	27.6	5.8	76	1010.8	48.6
2007	2	6.666	186.6	5.703	159.7	2.447	68.5	6.794	190.2	27.9	5.1	73	1010.1	38.3
2007	3	6.781	210.2	6.081	188.5	2.227	69	6.817	211.3	28.2	3.6	71.1	1010.1	38.7
2007	4	6.064	181.9	5.322	159.7	2.211	66.3	5.998	179.9	28.7	4.1	71.9	1009.7	48.9
2007	5	5.784	179.3	5.305	164.5	1.923	59.6	5.651	175.2	28.7	5	73.7	1009.5	54
2007	6	4.994	149.8	3.69	110.7	2.353	70.6	4.866	146	28.7	3.9	73.9	1007.7	50
2007	7	4.946	153.3	3.746	116.1	2.223	68.9	4.83	149.7	28.3	4.1	71.3	1009.3	49.1
2007	8	5.184	160.7	3.295	102.1	2.649	82.1	5.111	158.4	28.3	4	71.9	1009.5	47.8
2007	9	5.263	157.9	3.212	96.4	2.754	82.6	5.259	157.8	28.3	4.9	72.4	1009.5	49.6
2007	10	5.368	166.4	3.705	114.9	2.55	79	5.431	168.4	27.9	5.9	72.9	1009.8	52.7
2007	11	6.499	195	5.984	179.5	2.226	66.8	6.679	200.4	27.8	4	73.1	1009.9	45.6
2007	12	4.626	143.4	3.189	98.9	2.409	74.7	4.752	147.3	27.5	4.1	75	1009.3	51.2
2008	1	5.821	180.5	4.962	153.8	2.361	73.2	5.994	185.8	27.6	4.1	73.8	1009.7	44.3
2008	2	6.618	191.9	5.32	154.3	2.626	76.2	6.742	195.5	28	4.7	71.3	1009.8	38.2
2008	3	5.986	185.6	4.772	147.9	2.353	72.9	6.003	186.1	27.8	3.9	73.6	1008.8	45.9
2008	4	5.851	175.5	4.595	137.8	2.393	71.8	5.794	173.8	28	5	72.7	1009.1	50.1
2008	5	5.878	182.2	5.023	155.7	2.245	69.6	5.745	178.1	28.1	4.1	73.2	1010	48.5
2008	6	5.464	163.9	4.516	135.5	2.265	68	5.314	159.4	28.4	4.1	72.7	1009.4	48.6
2008	7	5.035	156.1	3.3	102.3	2.528	78.4	4.926	152.7	28.1	4.6	72.4	1009.2	49.1
2008	8	5.356	166	3.594	111.4	2.628	81.5	5.278	163.6	27.9	4.2	72.7	1009.2	48.3
2008	9	6.486	194.6	5.131	153.9	2.597	77.9	6.474	194.2	28.3	4.4	70.7	1010.2	44.6
2008	10	5.494	170.3	3.757	116.5	2.682	83.1	5.563	172.5	28.2	5.8	73.5	1009.8	50
2008	11	5.577	167.3	4.302	129.1	2.405	72.2	5.714	171.4	28.1	5.3	73.4	1009.4	49.3
2008	12	5.426	168.2	4.78	148.2	2.174	67.4	5.602	173.7	27.8	4.6	73	1010.1	50.4
2009	1	6.089	188.8	4.974	154.2	2.562	79.4	6.265	194.2	27.6	5.6	73.3	1010.3	43.5
2009	2	6.645	186.1	6.045	169.3	2.268	63.5	6.773	189.6	27.6	4.9	71.7	1010	36.5
2009	3	7.13	221	6.557	203.3	2.226	69	7.159	221.9	28.1	3.1	71.4	1009.7	40.9
2009	4	5.889	176.7	4.558	136.7	2.514	75.4	5.825	174.8	28.8	4.7	72.2	1009.1	47.1
2009	5	5.65	175.2	4.455	138.1	2.398	74.3	5.53	171.4	28.6	5.7	73.1	1009.1	50
2009	6	5.266	158	4.227	126.8	2.191	65.7	5.126	153.8	28.4	4.9	72.2	1010.2	45.3
2009	7	5.672	175.8	4.561	141.4	2.342	72.6	5.533	171.5	28.2	4.2	73.3	1010	46.9
2009	8	4.653	144.2	2.899	89.9	2.451	76	4.592	142.4	27.9	5.1	73.1	1010.5	52.4
2009	9	6.005	180.2	4.39	131.7	2.646	79.4	5.999	180	28.2	5.2	72.9	1011	49.7
2009	10	5.946	184.3	4.571	141.7	2.591	80.3	6.025	186.8	28.2	3.6	72.7	1010.5	50.5
2009	11	5.226	156.8	4.099	123	2.281	68.4	5.357	160.7	27.7	5.4	73.7	1009.5	49.7
2009	12	5.096	158	4.188	129.8	2.255	69.9	5.254	162.9	27.9	3	74.4	1010	53.9

TABLE 23 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR KAHDHOO, MALDIVES

YEAR	MONTH	GHID	GHIM	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
2010	1	5.928	183.8	4.933	152.9	2.458	76.2	6.102	189.2	28	4.9	74	1010.9	47.2
2010	2	6.149	172.2	5.008	140.2	2.42	67.8	6.26	175.3	28.2	4.5	73.8	1010.4	48.3
2010	3	6.823	211.5	5.855	181.5	2.364	73.3	6.856	212.5	28.6	3.5	72.3	1010.5	45.4
2010	4	6.062	181.9	5.279	158.4	2.256	67.7	5.994	179.8	29.2	3.9	73	1009.8	55.5
2010	5	4.929	152.8	3.602	111.7	2.296	71.2	4.829	149.7	29.2	5.5	73.6	1008.4	56.4
2010	6	5.105	153.2	3.32	99.6	2.61	78.3	4.984	149.5	28.5	4.9	74.2	1009.6	50
2010	7	4.69	145.4	3.132	97.1	2.435	75.5	4.586	142.2	28.1	3.7	73.5	1009.2	51.5
2010	8	4.987	154.6	2.934	91	2.679	83	4.923	152.6	28.1	5.2	73.8	1009.6	50.5
2010	9	5.316	159.5	3.43	102.9	2.633	79	5.301	159	28.1	5.7	72.7	1009.5	50.5
2010	10	6.255	193.9	5.084	157.6	2.484	77	6.345	196.7	28.2	6.4	71.8	1009.5	43.6
2010	11	5.653	169.6	4.206	126.2	2.612	78.4	5.788	173.6	28	6.3	72.6	1009.2	50.1
2010	12	5.792	179.6	4.968	154	2.378	73.7	5.98	185.4	27.5	5.1	73.2	1008.2	46.4
2011	1	6.14	190.3	5.085	157.6	2.504	77.6	6.322	196	27.4	4.8	73.3	1009	42.9
2011	2	6.86	192.1	5.957	166.8	2.433	68.1	6.995	195.9	27.2	3.8	73.1	1009.3	36
2011	3	6.956	215.6	6.094	188.9	2.327	72.1	6.985	216.5	28	3.4	71.1	1009.3	39.9
2011	4	5.956	178.7	4.641	139.2	2.461	73.8	5.899	177	28.2	4.3	71.9	1009.5	46.1
2011	5	5.385	166.9	4.084	126.6	2.408	74.6	5.273	163.5	28.4	5	73	1009.8	51.6
2011	6	5.601	168	4.431	132.9	2.376	71.3	5.451	163.5	28.4	4.8	72.9	1009.1	46.3
2011	7	5.095	157.9	3.037	94.1	2.772	85.9	4.988	154.6	28.2	4.3	73	1009	46.4
2011	8	5.765	178.7	4.107	127.3	2.624	81.3	5.683	176.2	28	3.5	72.4	1009.3	49.7
2011	9	5.674	170.2	3.766	113	2.73	81.9	5.667	170	28.1	4.1	72.3	1010.2	50.2
2011	10	5.488	170.1	3.893	120.7	2.63	81.5	5.549	172	28	4.1	72.1	1009.2	50.3
2011	11	5.063	151.9	3.853	115.6	2.305	69.2	5.18	155.4	28	4	72	1008.7	52.6
2011	12	4.92	152.5	3.583	111.1	2.439	75.6	5.062	156.9	27.6	3.8	72.9	1008.9	50.4
2012	1	6.258	194	5.487	170.1	2.446	75.8	6.448	199.9	27.3	4.4	70.9	1009.7	37
2012	2	5.531	160.4	3.689	107	2.715	78.7	5.622	163	27.8	4.1	72.2	1008.7	47.7
2012	3	6.663	206.6	5.231	162.2	2.602	80.7	6.691	207.4	28	3.4	70	1009.7	40.9
2012	4	5.921	177.6	4.38	131.4	2.589	77.7	5.864	175.9	28.4	4.2	72.7	1009.3	48.4
2012	5	5.17	160.3	4.085	126.6	2.236	69.3	5.064	157	28.2	4.4	73.5	1009.6	49.5
2012	6	5.584	167.5	3.86	115.8	2.686	80.6	5.446	163.4	28.4	4	70.6	1009.3	44
2012	7	5.626	174.4	4.242	131.5	2.468	76.5	5.496	170.4	28.2	3.3	70.7	1009.1	45.9
2012	8	5.541	171.8	3.826	118.6	2.605	80.8	5.462	169.3	28.1	4	72.4	1010.1	47.9
2012	9	5.6	168	3.78	113.4	2.674	80.2	5.595	167.8	28.1	3.8	72.6	1010.6	49.1
2012	10	4.926	152.7	3.298	102.2	2.496	77.4	4.978	154.3	27.7	4.9	74.2	1009.8	56.5
2012	11	5.121	153.6	3.786	113.6	2.388	71.6	5.245	157.3	27.9	3.9	73.8	1009.9	53.9
2012	12	5.171	160.3	3.828	118.7	2.491	77.2	5.322	165	27.7	3.4	73.2	1008.8	51.6
2013	1	6.414	198.8	5.784	179.3	2.354	73	6.611	204.9	28	5.2	72.2	1010.6	41.7
2013	2	6.147	172.1	5.148	144.1	2.351	65.8	6.262	175.3	27.7	3.8	72.8	1010.1	45.1
2013	3	6.352	196.9	5.307	164.5	2.342	72.6	6.382	197.8	28.2	3.3	72.2	1009.9	49.2
2013	4	6.199	186	5.24	157.2	2.393	71.8	6.132	184	28.9	3.6	71.4	1009	46.8
2013	5	4.879	151.2	3.581	111	2.257	70	4.774	148	28.5	6.7	74.1	1009.1	55.1
2013	6	5.131	153.9	3.425	102.8	2.577	77.3	5.007	150.2	28.1	4.8	73.2	1009	47
2013	7	5.623	174.3	4.126	127.9	2.556	79.2	5.492	170.3	28	4	72.8	1009.2	45
2013	8	5.069	157.1	3.466	107.4	2.49	77.2	4.993	154.8	27.6	4.4	73	1010.1	47.4

TABLE 23 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR KAHDHOO, MALDIVES

YEAR	MONTH	GHID	GHIM	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
2013	9	6.376	191.3	4.848	145.4	2.6	78	6.372	191.2	27.9	4.3	72.7	1010.2	46
2013	10	5.408	167.6	3.762	116.6	2.61	80.9	5.476	169.8	27.7	5.6	73.6	1010.8	52.3
2013	11	5.228	156.8	4.26	127.8	2.261	67.8	5.359	160.8	27.7	3.6	73.2	1009.5	53.2
2013	12	4.493	139.3	2.952	91.5	2.378	73.7	4.613	143	27.6	5.3	74.2	1009.5	53.2
2014	1	6.298	195.2	5.696	176.6	2.315	71.8	6.492	201.3	27.6	4.8	73.6	1010.7	44.5
2014	2	6.475	181.3	5.753	161.1	2.244	62.8	6.605	184.9	27.8	5	72.2	1009.2	40
2014	3	6.039	187.2	4.521	140.2	2.52	78.1	6.061	187.9	28.2	4.4	73.3	1009.8	50.5
2014	4	6.444	193.3	5.506	165.2	2.365	71	6.376	191.3	28.5	4.1	72.4	1010	45.8
2014	5	5.135	159.2	3.869	119.9	2.249	69.7	5.028	155.9	28.6	5.6	74.8	1009.2	57.6
2014	6	5.709	171.3	4.708	141.2	2.246	67.4	5.554	166.6	28.6	4.9	73.3	1008.8	48.9
2014	7	5.708	176.9	4.428	137.3	2.417	74.9	5.572	172.7	28.4	4.7	71	1010.3	43.9
2014	8	5.438	168.6	3.824	118.5	2.484	77	5.365	166.3	28	4.2	71.7	1010.1	46.9
2014	9	5.12	153.6	3.174	95.2	2.609	78.3	5.109	153.3	27.8	4.9	73.5	1010.7	52
2014	10	5.819	180.4	4.215	130.7	2.652	82.2	5.89	182.6	28	4.7	72.4	1010.4	51.7
2014	11	5.075	152.2	3.817	114.5	2.332	70	5.195	155.8	27.7	5	73.9	1010.1	54.5
2014	12	5.365	166.3	4.478	138.8	2.273	70.5	5.534	171.6	27.9	4.8	74.1	1010.1	52
2015	1	6.301	195.3	5.761	178.6	2.272	70.4	6.496	201.4	27.6	4.9	72	1011	40.2
2015	2	6.298	176.3	5.427	152	2.352	65.9	6.413	179.6	27.7	4.8	71.2	1010.6	40.1
2015	3	6.844	212.2	6.193	192	2.181	67.6	6.879	213.2	28.2	3.1	69.7	1011.1	43
2015	4	6.233	187	5.69	170.7	2.134	64	6.164	184.9	28.7	3	70.2	1009.9	48.1
2015	5	5.624	174.3	4.674	144.9	2.182	67.6	5.5	170.5	29	5.7	73.2	1009.8	53.8
2015	6	5.739	172.2	4.765	143	2.308	69.2	5.581	167.4	28.9	3.7	71.3	1009.3	47.3
2015	7	5.083	157.6	3.685	114.2	2.333	72.3	4.966	153.9	28.4	3.8	70.9	1010.6	48.9
2015	8	5.042	156.3	3.578	110.9	2.31	71.6	4.968	154	28.1	4.2	72.8	1010.9	53
2015	9	5.198	155.9	3.358	100.7	2.585	77.5	5.188	155.6	28.2	4.5	72.8	1010.9	53.9
2015	10	5.334	165.4	3.883	120.4	2.481	76.9	5.394	167.2	28.2	3.2	73.1	1010.8	55.8
2015	11	4.869	146.1	3.624	108.7	2.315	69.5	4.986	149.6	28.2	4.7	73.7	1009.9	56.4
2015	12	5.638	174.8	4.92	152.5	2.28	70.7	5.822	180.5	28.4	4.6	73.2	1010.8	51.8
2016	1	5.39	167.1	4.224	130.9	2.383	73.9	5.538	171.7	28.2	5.2	74.6	1010.9	50.9
2016	2	5.596	162.3	4.242	123	2.49	72.2	5.697	165.2	28.6	5.1	72.6	1010.8	49
2016	3	6.739	208.9	6.048	187.5	2.192	68	6.765	209.7	28.7	3.2	71.6	1010.7	45.6
2016	4	5.628	168.8	4.632	139	2.211	66.3	5.569	167.1	29.1	3.2	72.7	1009.6	57
2016	5	4.975	154.2	3.825	118.6	2.172	67.3	4.87	151	29.1	5.8	73.7	1009.5	55.9
2016	6	5.456	163.7	4.117	123.5	2.426	72.8	5.316	159.5	28.6	5.3	72.5	1010.1	46.3
2016	7	4.716	146.2	2.928	90.8	2.529	78.4	4.616	143.1	28.2	4.7	72	1009.8	50.2
2016	8	4.797	148.7	3.033	94	2.466	76.4	4.729	146.6	27.9	5.5	73.8	1010.8	50.4
2016	9	6.108	183.2	4.449	133.5	2.616	78.5	6.106	183.2	27.8	4.7	72.2	1011.2	46.9
2016	10	5.369	166.4	3.711	115	2.56	79.4	5.434	168.5	27.7	5.9	73.2	1010.9	51.6
2016	11	4.833	145	3.617	108.5	2.253	67.6	4.948	148.4	27.5	5.1	75.3	1010.6	55
2016	12	5.512	170.9	4.87	151	2.161	67	5.693	176.5	27.4	4.9	74.1	1010.6	48.2

GAN

GHID - AVERAGE DAILY SUM OF GLOBAL HORIZONTAL IRRADIATION [KWH/M²]

GHIM - MONTHLY SUM OF GLOBAL HORIZONTAL IRRADIATION [KWH/M²]

DNID - AVERAGE DAILY SUM OF DIRECT NORMAL IRRADIATION [KWH/M²]

DNIM - MONTHLY SUM OF DIRECT NORMAL IRRADIATION [KWH/M²]

DIFD - AVERAGE DAILY SUM OF DIFFUSE HORIZONTAL IRRADIATION [KWH/M²]

DIFM - MONTHLY SUM OF DIFFUSE HORIZONTAL IRRADIATION [KWH/M²]

GTID - AVERAGE DAILY SUM OF GLOBAL TILTED IRRADIATION [KWH/M²] (FIXED INCLINATION: 9 DEG. AZIMUTH: 180 DEG.)

GTIM - MONTHLY SUM OF GLOBAL TILTED IRRADIATION [KWH/M²] (FIXED INCLINATION: 9 DEG. AZIMUTH: 180 DEG.)

TEMP - AVERAGE DIURNAL (24 HOUR) AIR TEMPERATURE AT 2 M [DEG. C]

WS - AVERAGE WIND SPEED AT 10 M [M/S]

RH - RELATIVE HUMIDITY [%]

AP - ATMOSPHERIC PRESSURE [HPA]

PWAT - PRECIPITABLE WATER [KG/M²]

TABLE 24 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR GAN, MALDIVES

YEAR	MONTH	GHID	GHIM	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
1999	1	5.136	159.2	3.902	121	2.307	71.5	5.043	156.3	27.5	5.4	74.8	1009.6	51.3
1999	2	6.178	173	5.404	151.3	2.253	63.1	6.106	171	28	3.8	71.7	1010.8	47.4
1999	3	6.05	187.6	4.909	152.2	2.339	72.5	6.046	187.4	28.4	4.2	72.1	1008	46.3
1999	4	6.386	191.6	5.629	168.9	2.211	66.3	6.459	193.8	28.5	6.3	70.8	1010.4	45.3
1999	5	5.438	168.6	4.36	135.2	2.241	69.5	5.54	171.7	28.3	5.1	72.3	1009.6	46.7
1999	6	5.58	167.4	4.733	142	2.229	66.9	5.713	171.4	28	4.3	71.2	1010.4	42.8
1999	7	5.709	177	4.709	146	2.327	72.1	5.833	180.8	28.2	4.2	70.8	1009.9	45.3
1999	8	5.536	171.6	4.25	131.8	2.362	73.2	5.611	173.9	27.8	3.7	71.6	1010.9	46.6
1999	9	5.752	172.6	4.17	125.1	2.563	76.9	5.776	173.3	27.7	4.3	72.2	1010.3	50.7
1999	10	5.809	180.1	4.391	136.1	2.526	78.3	5.767	178.8	28	6.8	72	1009.8	47.9
1999	11	6.387	191.6	5.534	166	2.329	69.9	6.28	188.4	27.9	6.1	71.9	1010.3	48.1
1999	12	5.61	173.9	5.021	155.7	2.098	65	5.486	170.1	27.7	5.5	74.3	1010.2	49.9
2000	1	5.369	166.4	4.226	131	2.368	73.4	5.269	163.3	27.6	4.9	74	1009.3	48.2
2000	2	6.136	177.9	4.6	133.4	2.71	78.6	6.071	176.1	27.9	5	72.5	1009.1	43.8
2000	3	6.569	203.6	5.275	163.5	2.558	79.3	6.567	203.6	28.1	4.6	71.5	1009.4	41
2000	4	6.25	187.5	5.347	160.4	2.28	68.4	6.319	189.6	28.5	6.1	71.8	1009.5	47.2
2000	5	5.765	178.7	5.341	165.6	1.94	60.1	5.882	182.3	28.8	4.3	70.6	1010	46.8
2000	6	4.493	134.8	3.164	94.9	2.257	67.7	4.585	137.6	28	4.3	72.1	1009.9	48.3
2000	7	4.914	152.3	3.442	106.7	2.399	74.4	5.008	155.2	27.8	3.5	70.8	1009.3	43.8
2000	8	5.332	165.3	3.562	110.4	2.642	81.9	5.398	167.3	27.9	5.2	71.5	1010.1	46.6
2000	9	4.737	142.1	2.868	86	2.509	75.3	4.75	142.5	27.7	5.4	73.6	1010.1	51.2
2000	10	5.915	183.4	4.537	140.6	2.591	80.3	5.872	182	27.9	6.1	72.6	1010.7	49.9
2000	11	4.907	147.2	3.684	110.5	2.26	67.8	4.829	144.9	27.7	6.7	74.7	1009.3	52.7
2000	12	5.408	167.6	4.452	138	2.315	71.8	5.294	164.1	28	5.2	73.7	1009.6	49.6
2001	1	6.289	195	5.641	174.9	2.27	70.4	6.161	191	28.1	5	72.5	1008.8	42.3
2001	2	6.714	188	5.637	157.8	2.512	70.3	6.637	185.8	28.1	3.9	71.4	1009.7	44.4
2001	3	6.271	194.4	4.865	150.8	2.555	79.2	6.267	194.3	28.4	3.8	70.9	1010	47.8
2001	4	5.689	170.7	4.359	130.8	2.435	73	5.745	172.3	28.6	5.5	72.6	1009.4	52.9
2001	5	5.633	174.6	5.123	158.8	1.962	60.8	5.749	178.2	29	5.1	71.5	1009.4	48.5
2001	6	5.209	156.3	4.214	126.4	2.243	67.3	5.33	159.9	28.4	4.3	70.7	1009.6	44.9
2001	7	4.667	144.7	3.036	94.1	2.448	75.9	4.752	147.3	27.8	3.7	72.5	1009.9	46.8
2001	8	5.112	158.5	3.402	105.5	2.536	78.6	5.177	160.5	28	4.2	72.9	1010.9	49
2001	9	5.235	157.1	3.272	98.2	2.708	81.2	5.249	157.5	27.7	4.9	72.7	1010.7	49.4
2001	10	5.454	169.1	4.166	129.1	2.381	73.8	5.416	167.9	27.9	6.1	72.7	1010.6	50.6
2001	11	6.005	180.2	5.071	152.1	2.297	68.9	5.903	177.1	27.7	7	74.7	1010.5	52.2
2001	12	5.926	183.7	5.409	167.7	2.167	67.2	5.793	179.6	27.4	3.7	75	1011.5	51.7
2002	1	4.852	150.4	3.39	105.1	2.385	73.9	4.77	147.9	27.7	4.9	74.5	1010.1	52.2
2002	2	6.217	174.1	5.106	143	2.431	68.1	6.145	172.1	28.2	4.5	73	1011	48
2002	3	6.199	192.2	5.139	159.3	2.323	72	6.198	192.1	28.3	3.7	73.3	1009.6	51.2
2002	4	5.349	160.5	4.575	137.2	2.119	63.6	5.401	162	28.6	3.8	71.7	1009	52
2002	5	5.716	177.2	5.078	157.4	2.089	64.8	5.835	180.9	28.7	4.8	72.4	1009.6	46.6
2002	6	4.148	124.4	2.712	81.4	2.216	66.5	4.228	126.8	28.2	4.9	73.8	1009.7	53
2002	7	4.578	141.9	3.127	96.9	2.298	71.2	4.664	144.6	28.1	4.8	72.5	1011.5	49.3
2002	8	5.385	166.9	3.68	114.1	2.554	79.2	5.453	169	27.9	4.3	72.7	1010.8	47.4

TABLE 24 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR GAN, MALDIVES

YEAR	MONTH	GHID	GHIM	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
2002	8	5.385	166.9	3.68	114.1	2.554	79.2	5.453	169	27.9	4.3	72.7	1010.8	47.4
2002	9	5.964	178.9	4.645	139.3	2.459	73.8	5.988	179.6	27.9	4.1	72.6	1011.8	49.2
2002	10	5.052	156.6	3.52	109.1	2.45	76	5.015	155.5	27.8	4.4	73.8	1010.3	55.1
2002	11	5.145	154.3	4.381	131.4	2.057	61.7	5.055	151.7	27.9	4.4	73.1	1010.5	50
2002	12	5.64	174.8	4.795	148.6	2.24	69.4	5.52	171.1	28	4.1	72.9	1010.8	52
2003	1	5.79	179.5	4.992	154.8	2.171	67.3	5.675	175.9	28.1	4.9	73.4	1010.9	49.7
2003	2	6.776	189.7	6.265	175.4	2.215	62	6.694	187.4	28.5	4.5	72.4	1010.1	42.7
2003	3	6.564	203.5	5.898	182.8	2.147	66.6	6.559	203.3	28.5	4.1	72.6	1009.8	47.5
2003	4	5.36	160.8	4.137	124.1	2.306	69.2	5.411	162.3	28.9	4.9	72.2	1009.4	55
2003	5	5.521	171.2	4.835	149.9	2.086	64.7	5.634	174.7	28.6	5.4	73	1010.1	49.7
2003	6	4.973	149.2	3.825	114.8	2.247	67.4	5.083	152.5	28.6	4	72.7	1009.2	50.8
2003	7	4.964	153.9	3.585	111.1	2.388	74	5.061	156.9	28.5	3.7	72.9	1009.7	50
2003	8	5.65	175.2	4.371	135.5	2.366	73.3	5.724	177.4	28.1	3.9	71.1	1010.8	46.3
2003	9	5.978	179.3	4.687	140.6	2.394	71.8	6.002	180.1	28.1	4.5	71.4	1011.3	49.6
2003	10	6.67	206.8	5.977	185.3	2.305	71.5	6.617	205.1	28.3	5.4	70.8	1011	46.3
2003	11	6.052	181.6	5.333	160	2.21	66.3	5.946	178.4	28.1	5.9	73	1010	51.6
2003	12	4.956	153.6	3.967	123	2.211	68.5	4.853	150.4	27.6	4.8	75.9	1010.6	54.8
2004	1	5.587	173.2	4.645	144	2.314	71.7	5.48	169.9	27.9	4.6	76.2	1009.8	53.7
2004	2	6.421	186.2	5.505	159.6	2.306	66.9	6.347	184.1	28.5	4.6	71.5	1010.1	45.6
2004	3	7.094	219.9	6.547	203	2.199	68.2	7.092	219.9	28.7	4.3	70.3	1010	39.2
2004	4	5.718	171.5	4.969	149.1	2.199	66	5.78	173.4	28.6	4.4	72.7	1009.9	52.6
2004	5	5.221	161.9	3.741	116	2.443	75.7	5.313	164.7	28.7	6.8	72	1009.4	47.4
2004	6	4.974	149.2	4.005	120.2	2.14	64.2	5.087	152.6	28.2	4.2	71.8	1011.3	48.4
2004	7	5.046	156.4	3.506	108.7	2.483	77	5.141	159.4	27.8	4.4	72.3	1009.9	47.3
2004	8	5.315	164.8	3.928	121.8	2.403	74.5	5.387	167	27.8	4.7	73.8	1011	46.9
2004	9	5.635	169.1	4.075	122.2	2.484	74.5	5.653	169.6	27.4	4.3	73.7	1010.8	49.1
2004	10	5.703	176.8	4.648	144.1	2.347	72.8	5.665	175.6	27.5	4	74.6	1011.1	50.6
2004	11	5.519	165.6	4.104	123.1	2.526	75.8	5.433	163	27.9	5.3	75.3	1010	55.5
2004	12	5.364	166.3	4.522	140.2	2.236	69.3	5.249	162.7	27.6	3.8	76.1	1009.9	53.7
2005	1	5.144	159.5	3.849	119.3	2.395	74.2	5.054	156.7	27.6	3.9	75.2	1010.3	53.2
2005	2	6.128	171.6	5.117	143.3	2.36	66.1	6.059	169.7	28.1	4.3	74.2	1010.6	48
2005	3	6.921	214.6	6.57	203.7	2.013	62.4	6.914	214.3	28.7	3.9	71.3	1010.8	46
2005	4	6.336	190.1	5.582	167.5	2.316	69.5	6.407	192.2	28.9	4.1	70.6	1010.2	48.6
2005	5	5.562	172.4	4.977	154.3	2.043	63.3	5.678	176	28.7	4.8	72.1	1009.6	49.8
2005	6	4.657	139.7	3.293	98.8	2.295	68.9	4.754	142.6	28.3	4.4	73.4	1009.5	51.3
2005	7	4.655	144.3	3.218	99.8	2.276	70.6	4.743	147	27.9	4.2	73.4	1010.8	47.9
2005	8	5.112	158.5	3.644	113	2.389	74.1	5.177	160.5	27.8	4.3	73.6	1010.7	49.7
2005	9	6.118	183.5	4.735	142.1	2.436	73.1	6.138	184.1	28	4.2	71.9	1010.8	45.6
2005	10	5.187	160.8	3.629	112.5	2.418	75	5.151	159.7	27.9	6.2	73.7	1010.8	53.3
2005	11	6.63	198.9	6.273	188.2	2.086	62.6	6.509	195.3	27.7	6	74	1010.4	49.8
2005	12	6.19	191.9	5.704	176.8	2.151	66.7	6.05	187.6	27.6	5.9	74.9	1009.9	47.8
2006	1	5.879	182.2	5.218	161.8	2.138	66.3	5.765	178.7	27.4	4.9	74.5	1010.2	47.2
2006	2	5.825	163.1	4.946	138.5	2.145	60.1	5.758	161.2	27.7	4.4	74.4	1010.1	48.7
2006	3	6.725	208.5	6.08	188.5	2.147	66.6	6.719	208.3	28.4	4.4	72.2	1009.8	47.1

TABLE 24 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR GAN, MALDIVES

YEAR	MONTH	GHID	GHIM	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
2006	4	6.251	187.5	5.433	163	2.246	67.4	6.32	189.6	28.5	4.5	71.3	1009.9	48.6
2006	5	5.96	184.8	5.364	166.3	2.123	65.8	6.081	188.5	28.6	4.4	71.5	1010	47.9
2006	6	4.788	143.6	3.407	102.2	2.331	69.9	4.889	146.7	28.2	3.5	72.7	1009.6	50.3
2006	7	5.013	155.4	3.291	102	2.571	79.7	5.105	158.3	28	4.5	74.5	1010.5	50.3
2006	8	5.71	177	4.201	130.2	2.508	77.7	5.787	179.4	28	4.4	73.2	1010.4	47
2006	9	5.839	175.2	4.323	129.7	2.482	74.5	5.856	175.7	28	5	73.1	1010.8	47.6
2006	10	5.87	182	4.522	140.2	2.551	79.1	5.829	180.7	27.8	3.3	73.4	1011.4	51.8
2006	11	4.654	139.6	3.09	92.7	2.433	73	4.587	137.6	27.3	3.4	75.5	1009.9	57.8
2006	12	4.573	141.8	3.291	102	2.275	70.5	4.485	139	27.8	3.7	75	1010	57.2
2007	1	5.485	170	4.152	128.7	2.491	77.2	5.385	166.9	27.9	4.4	74.8	1010.7	53.6
2007	2	6.687	187.2	5.66	158.5	2.457	68.8	6.61	185.1	27.9	4.6	73.7	1009.9	43.4
2007	3	6.937	215	6.469	200.5	2.133	66.1	6.93	214.8	28.3	3.6	72.2	1010	42.4
2007	4	6.282	188.5	5.619	168.6	2.144	64.3	6.353	190.6	28.6	4.6	70.8	1009.8	48.3
2007	5	5.551	172.1	5.3	164.3	1.763	54.7	5.664	175.6	28.8	4.5	73	1009.6	53
2007	6	5.184	155.5	4.039	121.2	2.31	69.3	5.3	159	28.6	4.4	74	1007.9	50
2007	7	4.939	153.1	3.563	110.5	2.321	72	5.033	156	28.2	4.1	73.4	1009.4	50.3
2007	8	5.605	173.8	4.166	129.1	2.475	76.7	5.679	176	28.3	4.1	72.5	1009.7	49.1
2007	9	5.324	159.7	3.621	108.6	2.526	75.8	5.342	160.3	28.2	4.4	73	1009.7	50.3
2007	10	5.522	171.2	3.654	113.3	2.678	83	5.488	170.1	27.8	4.9	73.1	1010	52.8
2007	11	5.645	169.3	4.386	131.6	2.43	72.9	5.556	166.7	27.8	4.9	73.9	1009.9	49.9
2007	12	5.465	169.4	4.366	135.3	2.35	72.9	5.352	165.9	27.8	4.9	74.3	1009.2	50.5
2008	1	5.842	181.1	5.149	159.6	2.184	67.7	5.721	177.4	27.6	3.5	73.5	1009.7	46.1
2008	2	6.325	183.4	4.71	136.6	2.735	79.3	6.258	181.5	28	5.2	71.5	1009.7	42.6
2008	3	6.337	196.4	5.297	164.2	2.369	73.4	6.335	196.4	28	4.3	72	1008.9	44.5
2008	4	5.73	171.9	4.903	147.1	2.171	65.1	5.79	173.7	28	4.9	72.3	1009.2	48.9
2008	5	5.213	161.6	4.207	130.4	2.181	67.6	5.31	164.6	27.9	3.8	73	1010.1	49.4
2008	6	5.297	158.9	4.158	124.7	2.311	69.3	5.416	162.5	28.2	4.2	73.5	1009.6	49.1
2008	7	4.81	149.1	3.232	100.2	2.447	75.9	4.899	151.9	28.1	4	72.7	1009.3	48.9
2008	8	5.198	161.1	3.368	104.4	2.641	81.9	5.262	163.1	28	4.3	72.5	1009.4	48
2008	9	6.07	182.1	4.921	147.6	2.326	69.8	6.096	182.9	28.1	4.1	71.6	1010.3	46.3
2008	10	5.433	168.4	3.951	122.5	2.493	77.3	5.39	167.1	28	6	73	1010	50.2
2008	11	6.076	182.3	5.136	154.1	2.354	70.6	5.971	179.1	27.8	6.1	75.3	1009.6	50.6
2008	12	6.023	186.7	5.807	180	1.992	61.8	5.883	182.4	27.7	4.5	74.3	1010	50.1
2009	1	5.739	177.9	4.646	144	2.437	75.5	5.631	174.6	27.7	4.6	74	1010.2	48.9
2009	2	6.904	193.3	6.258	175.2	2.287	64	6.825	191.1	27.8	4.1	71.6	1009.8	40.3
2009	3	6.781	210.2	6.062	187.9	2.318	71.9	6.776	210.1	28.2	3.6	72.1	1009.7	43.8
2009	4	5.915	177.5	4.833	145	2.394	71.8	5.98	179.4	28.7	5.5	73.2	1009.2	51.4
2009	5	5.679	176	5.079	157.4	2.03	62.9	5.795	179.6	28.5	4.7	72.3	1009.3	48.3
2009	6	5.345	160.3	4.29	128.7	2.264	67.9	5.466	164	28.3	4.5	72.9	1010.3	44.4
2009	7	5.024	155.7	3.67	113.8	2.371	73.5	5.119	158.7	28.1	4.6	73.9	1010.2	47.4
2009	8	5.025	155.8	3.318	102.9	2.49	77.2	5.084	157.6	27.9	4.2	73	1010.6	51.1
2009	9	5.889	176.7	4.382	131.5	2.485	74.5	5.908	177.2	28.1	4.3	73.2	1011.2	51.7
2009	10	5.402	167.5	3.944	122.3	2.509	77.8	5.364	166.3	28.2	3.5	72	1010.6	52.1
2009	11	5.405	162.2	4.503	135.1	2.201	66	5.309	159.3	27.6	5.6	74.9	1009.5	49.8

TABLE 24 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR GAN, MALDIVES

YEAR	MONTH	GHIM	GHID	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
2009	12	5.373	166.6	4.617	143.1	2.172	67.3	5.257	163	28	3.4	74.3	1010	54
2010	1	5.885	182.4	5.175	160.4	2.211	68.5	5.766	178.7	28.1	4.2	73.6	1010.9	49.4
2010	2	6.218	174.1	5.202	145.7	2.323	65	6.148	172.1	28.4	3.5	73.5	1010.3	51
2010	3	5.964	184.9	4.395	136.2	2.553	79.1	5.96	184.8	28.6	3.3	73.4	1010.5	51.9
2010	4	5.777	173.3	4.92	147.6	2.225	66.8	5.842	175.3	29	3.8	73.6	1009.9	56.1
2010	5	5.11	158.4	4.231	131.2	2.085	64.6	5.211	161.5	29.1	5.3	73.1	1008.6	53.3
2010	6	5.343	160.3	3.94	118.2	2.482	74.5	5.458	163.7	28.4	4.3	74.4	1009.7	48
2010	7	4.378	135.7	3.005	93.2	2.231	69.2	4.46	138.3	28	3.9	74.4	1009.4	53
2010	8	4.554	141.2	2.89	89.6	2.355	73	4.607	142.8	27.9	3.7	73.9	1009.8	51.7
2010	9	5.421	162.6	3.701	111	2.535	76	5.441	163.2	28	4.9	72.8	1009.6	49.1
2010	10	6.069	188.1	4.404	136.5	2.768	85.8	6.026	186.8	28.1	6.2	72.1	1009.7	47.4
2010	11	5.377	161.3	3.932	118	2.472	74.2	5.296	158.9	27.8	6.4	73.1	1009.4	50.4
2010	12	6.353	196.9	6.048	187.5	2.146	66.5	6.205	192.4	27.4	5.6	73.7	1008.2	44.6
2011	1	6.308	195.5	5.59	173.3	2.345	72.7	6.179	191.5	27.4	4.7	73.7	1008.9	43.7
2011	2	6.828	191.2	6.048	169.3	2.352	65.9	6.747	188.9	27.5	3.8	72.8	1009.1	38.8
2011	3	6.721	208.4	5.598	173.5	2.431	75.4	6.719	208.3	28.1	3.5	71.5	1009.3	43.8
2011	4	5.682	170.5	4.414	132.4	2.448	73.4	5.736	172.1	28.2	3.6	72	1009.6	49.6
2011	5	5.357	166.1	4.315	133.8	2.218	68.8	5.457	169.2	28.2	3.9	72.8	1010	50.1
2011	6	5.246	157.4	4.396	131.9	2.11	63.3	5.368	161	27.9	3.6	72.1	1009.4	47.3
2011	7	5.069	157.1	3.358	104.1	2.575	79.8	5.163	160.1	28	4.4	73.9	1009.2	46.9
2011	8	5.643	174.9	4.42	137	2.313	71.7	5.72	177.3	28	4	74.1	1009.5	49.2
2011	9	5.541	166.2	3.665	110	2.671	80.1	5.56	166.8	28	4.2	73.8	1010.4	51.4
2011	10	5.36	166.2	3.894	120.7	2.439	75.6	5.329	165.2	27.8	3.3	72.7	1009.3	53.4
2011	11	5.311	159.3	4.134	124	2.422	72.7	5.227	156.8	27.9	4	72.7	1008.8	54.2
2011	12	5.498	170.4	4.291	133	2.428	75.3	5.385	166.9	27.9	5.5	74.1	1008.8	51.3
2012	1	6.584	204.1	6.004	186.1	2.286	70.9	6.448	199.9	27.6	4.2	71	1009.5	39.8
2012	2	5.834	169.2	4.411	127.9	2.511	72.8	5.772	167.4	27.8	3.5	72	1008.6	48.7
2012	3	6.601	204.6	5.255	162.9	2.573	79.8	6.6	204.6	28.1	4.1	71.1	1009.7	42.5
2012	4	6.209	186.3	5.496	164.9	2.259	67.8	6.28	188.4	28.5	4.2	70.6	1009.4	45.9
2012	5	5.125	158.9	4.287	132.9	2.045	63.4	5.221	161.9	28.4	3.4	71.6	1009.7	52.7
2012	6	5.433	163	4.064	121.9	2.503	75.1	5.553	166.6	28.4	3.1	69.9	1009.5	45
2012	7	5.383	166.9	4.234	131.3	2.295	71.1	5.492	170.3	28	2.7	70.9	1009.2	48.6
2012	8	5.87	182	4.613	143	2.403	74.5	5.951	184.5	28.2	4	72.3	1010.2	48
2012	9	5.87	176.1	4.364	130.9	2.499	75	5.889	176.7	28.1	4	72.4	1010.7	48.8
2012	10	4.941	153.2	3.245	100.6	2.498	77.4	4.908	152.1	27.8	4.4	72.8	1009.8	55.2
2012	11	5.738	172.1	5.084	152.5	2.105	63.1	5.635	169.1	27.9	4.5	73.8	1009.9	51.3
2012	12	5.417	167.9	4.125	127.9	2.477	76.8	5.307	164.5	27.8	4.6	73.2	1008.8	52
2013	1	6.374	197.6	5.814	180.2	2.251	69.8	6.245	193.6	28	4.9	73.7	1010.5	45.5
2013	2	5.793	162.2	4.848	135.7	2.207	61.8	5.728	160.4	27.7	3.2	72.9	1010.1	48.8
2013	3	6.076	188.4	4.947	153.4	2.348	72.8	6.07	188.2	28.3	3.5	71.2	1009.8	48.8
2013	4	5.817	174.5	5.09	152.7	2.142	64.3	5.88	176.4	28.7	4	72.1	1009	50.2
2013	5	5.318	164.9	4.159	128.9	2.256	69.9	5.418	168	28.7	6.5	72.2	1009.3	51.4
2013	6	4.919	147.6	3.366	101	2.507	75.2	5.02	150.6	27.9	4.3	72.8	1009.2	45.4
2013	7	5.086	157.7	3.653	113.2	2.409	74.7	5.185	160.7	27.8	4.4	72.5	1009.4	45.1

TABLE 24 : MONTHLY SUMS OF SOLAR RADIATION AND METEOROLOGICAL PARAMETERS FOR GAN, MALDIVES

YEAR	MONTH	GHID	GHIM	DNID	DNIM	DIFD	DIFM	GTID	GTIM	TEMP	WS	RH	AP	PWAT
2013	8	4.972	154.1	3.406	105.6	2.424	75.1	5.034	156.1	27.6	4.1	73.4	1010.2	48.2
2013	9	6.09	182.7	4.537	136.1	2.548	76.4	6.111	183.3	27.8	3.6	73.1	1010.4	47.7
2013	10	5.391	167.1	3.852	119.4	2.542	78.8	5.355	166	27.7	4.2	72.5	1011	52
2013	11	5.447	163.4	4.203	126.1	2.449	73.5	5.36	160.8	28	4.1	72.8	1009.4	53.8
2013	12	4.666	144.6	3.43	106.3	2.197	68.1	4.575	141.8	27.5	5.8	75.2	1009.5	55.3
2014	1	5.71	177	4.625	143.4	2.354	73	5.602	173.7	27.6	3.5	73.9	1010.7	50.7
2014	2	6.798	190.3	6.229	174.4	2.212	61.9	6.714	188	27.9	4.4	72.4	1009	41.5
2014	3	5.588	173.2	4.296	133.2	2.303	71.4	5.584	173.1	28	3.4	73.5	1009.8	54
2014	4	6.157	184.7	5.445	163.3	2.207	66.2	6.228	186.8	28.6	4.8	72.1	1010.1	48
2014	5	5.116	158.6	4.132	128.1	2.097	65	5.21	161.5	28.6	5.1	73.3	1009.3	56.3
2014	6	5.523	165.7	4.562	136.9	2.25	67.5	5.652	169.6	28.6	3.7	72.4	1008.9	49
2014	7	5.278	163.6	3.847	119.3	2.514	77.9	5.381	166.8	28.1	4.1	71.6	1010.4	44.2
2014	8	5.419	168	4.062	125.9	2.387	74	5.492	170.3	28	4.4	72.3	1010.2	47.4
2014	9	5.364	160.9	3.775	113.2	2.401	72	5.383	161.5	27.6	4.3	72.8	1010.9	51.7
2014	10	5.698	176.6	4.299	133.3	2.543	78.8	5.658	175.4	28	3.9	71.9	1010.5	52.2
2014	11	5.31	159.3	4.184	125.5	2.324	69.7	5.224	156.7	27.9	5.3	73.5	1010.1	53.8
2014	12	5.907	183.1	5.42	168	2.057	63.8	5.774	179	28.2	6.3	73.5	1009.9	50.1
2015	1	6.333	196.3	6.146	190.5	2.004	62.1	6.198	192.1	27.5	4.4	73.2	1010.9	42.6
2015	2	6.376	178.5	5.307	148.6	2.471	69.2	6.305	176.5	27.8	4	71.2	1010.5	43.6
2015	3	6.966	215.9	6.641	205.9	2.046	63.4	6.958	215.7	28.2	2.5	69.8	1011	43.8
2015	4	5.552	166.6	4.753	142.6	2.149	64.5	5.612	168.4	28.8	3.4	69.8	1009.9	49.3
2015	5	5.643	174.9	5.366	166.3	1.794	55.6	5.761	178.6	29	4.8	71.4	1010	52.5
2015	6	5.562	166.9	4.896	146.9	2.12	63.6	5.697	170.9	28.8	3.2	71.4	1009.4	48
2015	7	5	155	3.744	116.1	2.334	72.4	5.099	158.1	28.4	3.8	70.9	1010.7	"47.3"
2015	8	4.777	148.1	2.989	92.7	2.493	77.3	4.833	149.8	28	3.6	73.2	1011.1	52.4
2015	9	5.325	159.8	3.629	108.9	2.507	75.2	5.344	160.3	28.2	3.6	72.4	1011	51.8
2015	10	5.587	173.2	4.238	131.4	2.428	75.3	5.552	172.1	28.2	2.7	71.9	1010.8	54.7
2015	11	4.71	141.3	3.159	94.8	2.441	73.2	4.639	139.2	28.2	4.7	73.1	1009.9	56.6
2015	12	6.281	194.7	6.064	188	2.082	64.5	6.133	190.1	28.5	4.5	73.1	1010.7	50.9
2016	1	5.817	180.3	4.778	148.1	2.379	73.7	5.705	176.9	28.4	4.2	74	1010.7	52.5
2016	2	6.177	179.1	5.167	149.8	2.276	66	6.108	177.1	28.8	4.1	71.8	1010.6	50.8
2016	3	6.77	209.9	6.362	197.2	2.051	63.6	6.768	209.8	28.8	3	72.6	1010.7	48.1
2016	4	5.778	173.3	4.983	149.5	2.169	65.1	5.841	175.2	29.3	4	71.8	1009.6	56.2
2016	5	5.195	161	4.034	125.1	2.252	69.8	5.291	164	29.3	6	72.3	1009.6	54.2
2016	6	5.343	160.3	4.33	129.9	2.284	68.5	5.465	164	28.7	3.6	70.3	1010.3	46
2016	7	4.826	149.6	3.4	105.4	2.384	73.9	4.918	152.5	28.2	3.7	71.8	1009.9	48
2016	8	4.913	152.3	2.944	91.3	2.625	81.4	4.969	154	27.7	4	74.3	1010.9	49.7
2016	9	5.637	169.1	3.969	119.1	2.519	75.6	5.653	169.6	27.8	4.2	72.2	1011.3	48.5
2016	10	6.248	193.7	4.968	154	2.589	80.3	6.2	192.2	27.7	4.2	72.5	1011	48.0
2016	11	5.598	167.9	4.398	131.9	2.428	72.8	5.505	165.2	27.7	5.8	74.8	1010.6	53.5
2016	12	5.845	181.2	5.413	167.8	2.074	64.3	5.713	177.1	27.5	5.4	73.8	1010.6	47.6

YEARLY SUMMARIES OF SOLAR AND METEOROLOGICAL PARAMETERS

STATISTICS OF SITE-ADAPTED YEARLY VALUES REPRESENTING 18 YEARS (1999 TO 2016).

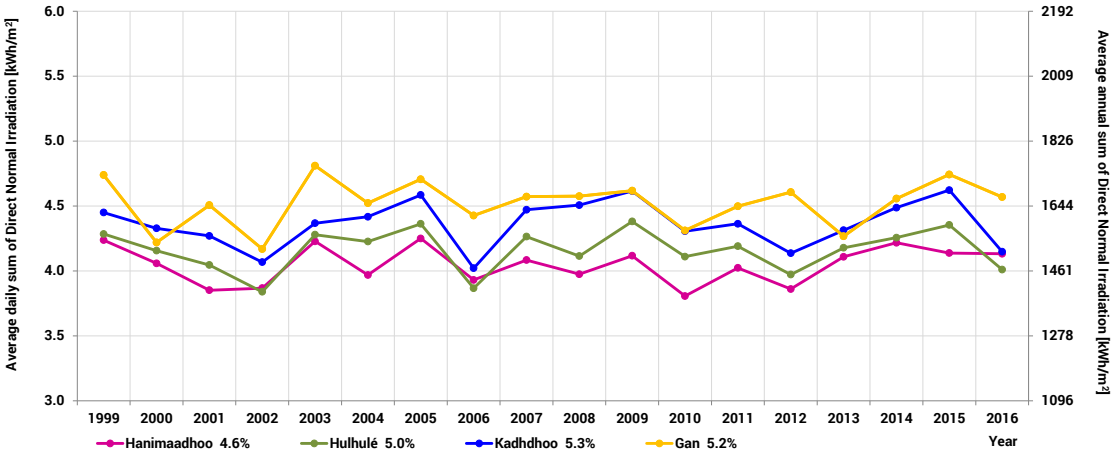


FIGURE 5 : INTERANNUAL VARIABILITY OF SITE-ADAPTED YEARLY DNI (KWH/M²). ANNUAL AVERAGE (AVG, SOLID LINE) AND STANDARD DEVIATION (VALUE BEHIND THE NAMES OF SITES). FIGURE: SOLARGIS

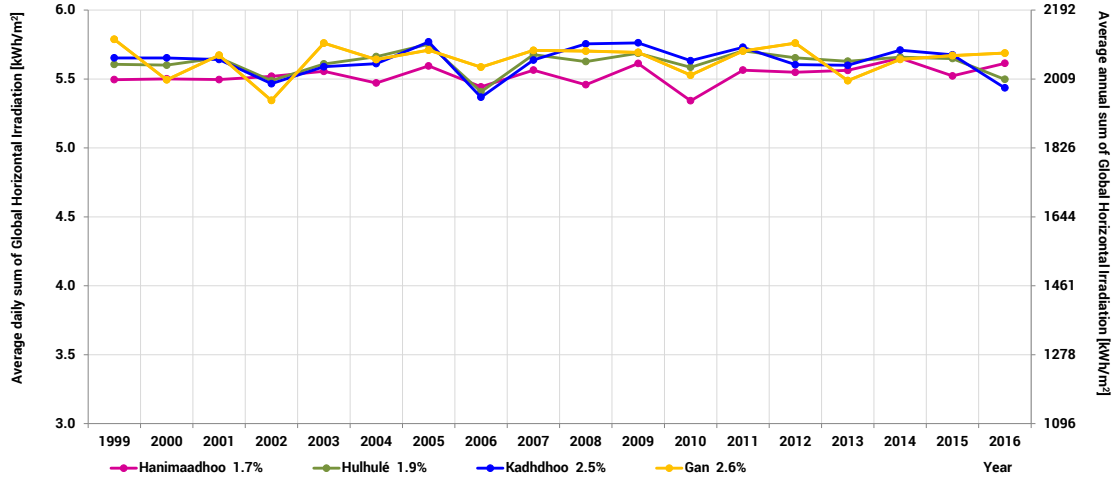


FIGURE 6 :INTERANNUAL VARIABILITY OF SITE-ADAPTED YEARLY GHI (KWH/M²). ANNUAL AVERAGE (AVG, SOLID LINE) AND STANDARD DEVIATION (VALUE BEHIND THE NAMES OF SITES). FIGURE: SOLARGIS

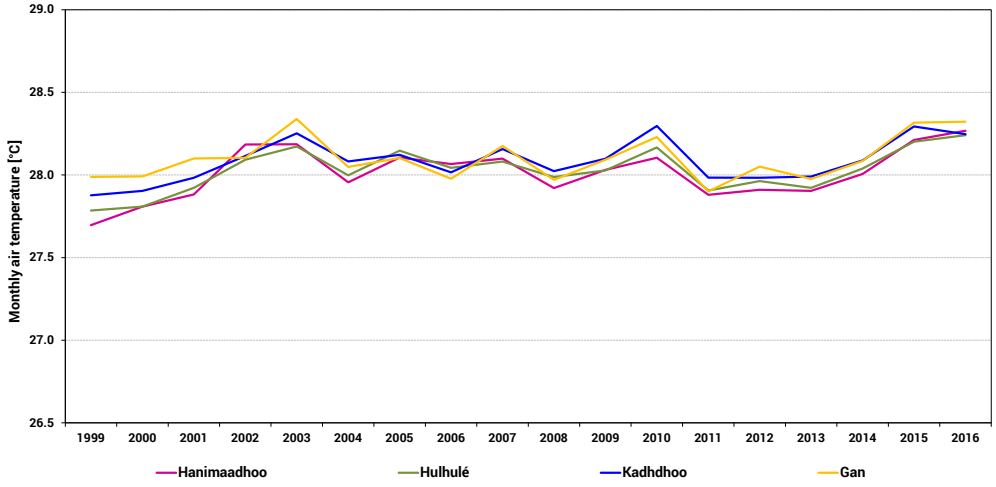


FIGURE 7 : INTERANNUAL VARIABILITY OF YEARLY TEMP (°C). ANNUAL AVERAGE (AVG, SOLID LINE).

COMPARISON OF MONTHLY SUMMARIES AND METEOROLOGICAL PARAMETERS

THE GRAPHS COMPARE (SITE-ADAPTED) MONTHLY MODEL TIME SERIES COMPARED TO LONG TERM AVERAGES.

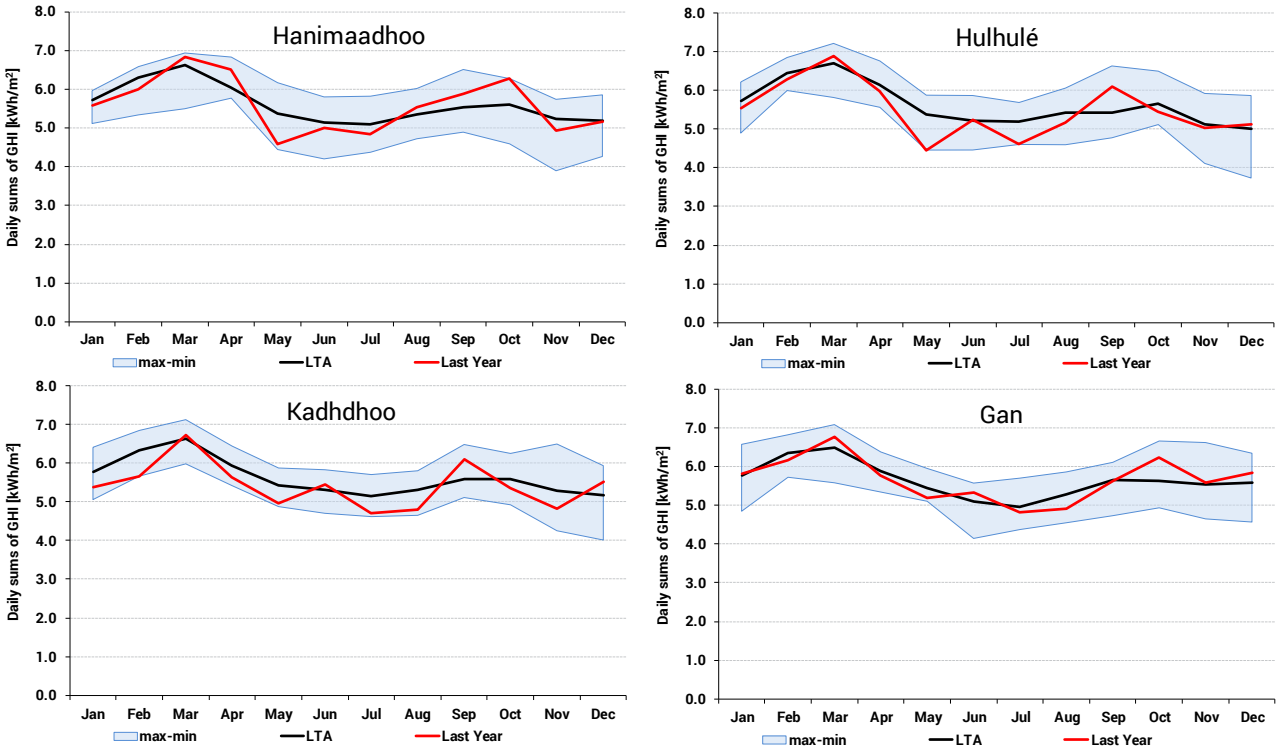


FIGURE 8 : GHI MONTHLY AVERAGES (KWH/M²). MONTHLY AVERAGE SHOWN AS SOLID LINE; MIN/MAX MONTHLY VALUES AS BOUNDARY LINES; LAST 12 MONTHS IN RED

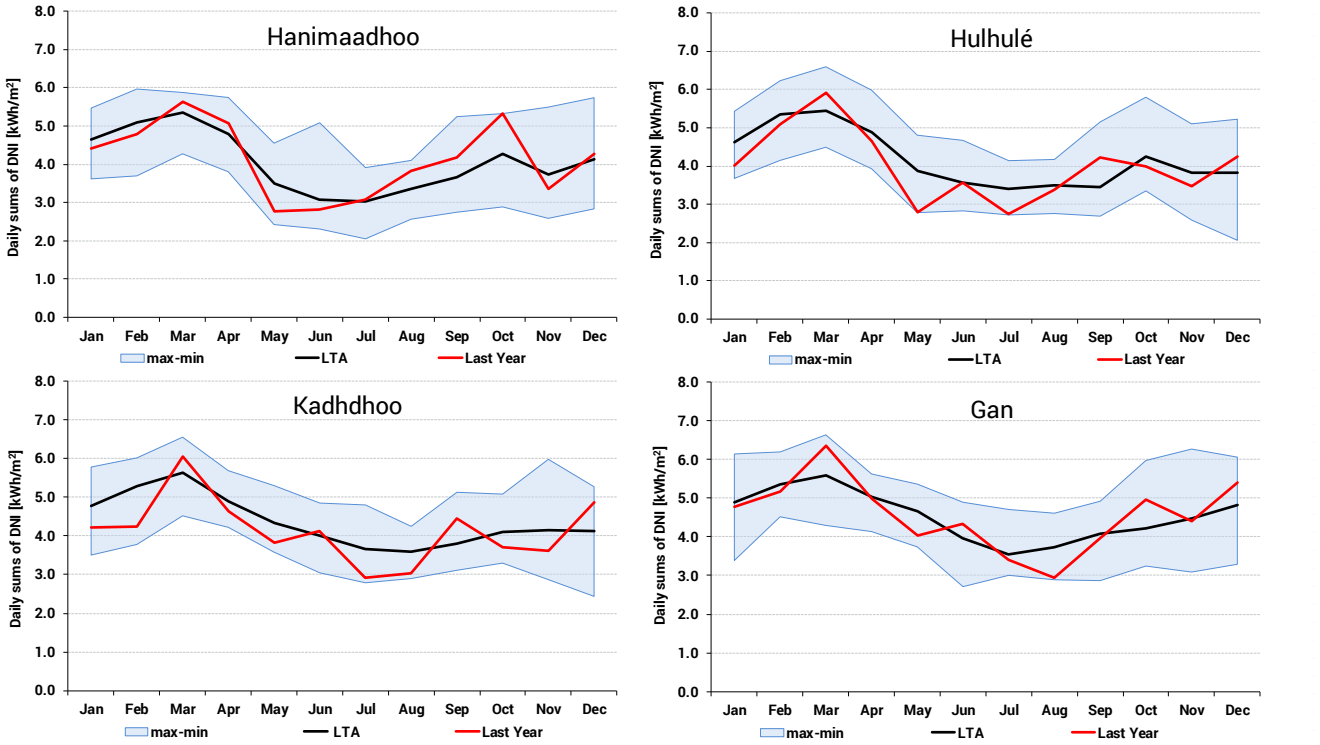


FIGURE 9 : DNI MONTHLY AVERAGES (KWH/M²). MONTHLY AVERAGE SHOWN AS SOLID LINE; MIN/MAX MONTHLY VALUES AS BOUNDARY LINES; LAST 12 MONTHS IN RED

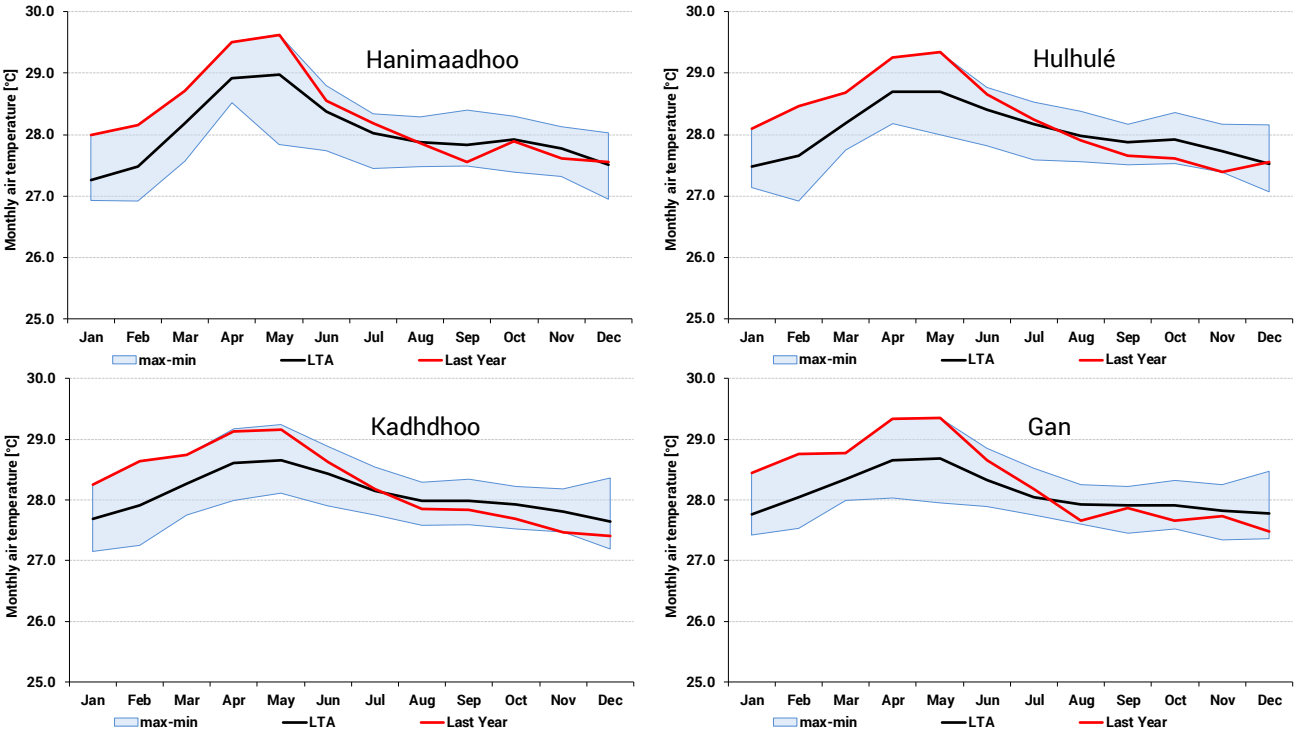


FIGURE 10 : TEMP MONTHLY AVERAGES (° C). MONTHLY AVERAGE SOWN AS SOLID LINE; MIN/MAX MONTHLY VALUES AS BOUNDARY LINES; LAST 12 MONTHS SHOWN IN RED.

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http://documents.worldbank.org/curated/en/348591497433883065/Solar-resource-mapping-in-the-Maldives-annual-solar-resources-report

For preliminary solar resource data for other sites in the Maldives please refer to the Global Solar Atlas:

http://globalsolaratlas.info.

REFERENCES

1 . World Bank. 2017. Solar resource mapping in the Maldives: annual solar resources report. Energy Sector Management Assistance Program (ESMAP). Washington, D.C.: World Bank Group.
2 . Solargis. 2017. Solar Resource Overview Hulhule
3 . Solargis. 2017. Solar Resource Overview Gan
4 . Solargis. 2017. Solar Resource Overview Hanimaadhoo
5 . Solargis. 2017. Solar Resource Overview Kahdhoo
6 . Solar measurements Maldives, WB, ESMAP

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2017

ISBN 978-99915-59-46-9

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REPUBLIC OF MALDIVES

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