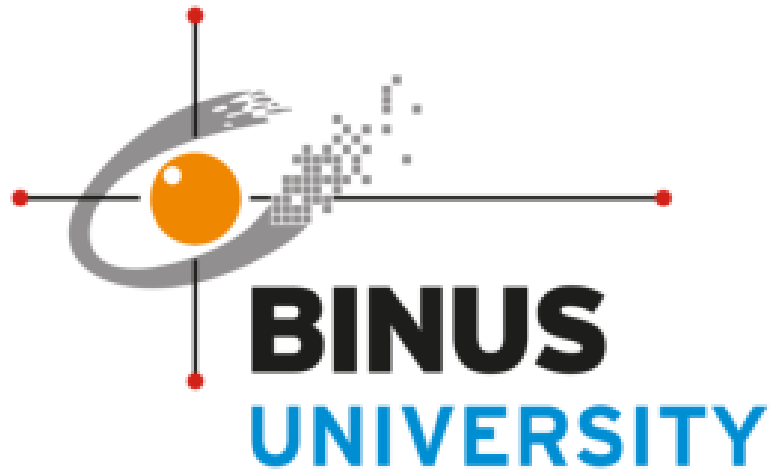


Fundamentals of Data Science Final Project



Lecturer:

**D6211_NUNUNG NURUL QOMARIYAH, S.Kom.,
M.T.I., Ph.D.**

Arranged by :

_Daffa

2702357996_Edbert Tan

COMP6784001_Fundamentals of Data Science

Computer Science Faculty

Binus International University

Project name
Solar Power Plant optimization

Name and Group Members:

1. Daffa
2. Edbert Tan

1. Problem Analysis

As it stands, humanity's constant use of fossil fuel has drained the earth of many resources, with the possibility of humans running out of it completely in the future. The issue is that humans keep using the non-renewable resources instead of the renewable ones. Renewable energy comes in many forms such as wind energy, geothermal energy, hydropower, bioenergy, ocean energy, and the main topic here, solar energy. Solar energy can be harnessed by using solar panels, which absorb the energy from sunlight and create electric charges from them. Like any solution, there is a way to optimize solar energy, in this case by placing them in a solar energy plant within areas with the most sunshine hours. However, there is also an issue with the solar panels where they will break more often when placed in areas with an average temperature higher than 25 degrees Celsius. To solve this, we have to place the solar energy plant in a place with the most sunshine hours while also making sure the average temperature does not exceed 25 by too much.

2. related work

https://www.researchgate.net/publication/324840611_Potential_of_Solar_Energy_in_Indonesia

https://www.researchgate.net/publication/356513998_Study_of_Indonesia's_Solar_Energy_Implementation_Using_Identification_of_Potency_Policies_and_Cost-Benefit_Analysis

<https://journals.itb.ac.id/index.php/joki/article/download/3917/1961>

3. Dataset and Reprocessing

average sunshine hours per area

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	No	place	Link	average	January	February	March	April	May	June	July	August	September	October	November	December		
2																		
3																		
4	3	Gunung Sitoli	https://riaskab	33,25	22,00	63,00	37,00	34,00	36,00	33,00	35,00	26,00	22,00	31,00	26,00	34,00		
5	6	Deli Serdang	https://deliserd	46,88	58,75	48,75	68,75	66,25	66,25	35,00	63,75	55,00	43,75	23,75	22,50	10,00		
6	9	Indragiri, Aceh Besar	https://bandaa	63,75	78,75	71,25	57,50	83,75	72,50	66,75	68,75	71,25	70,00	33,75	51,25	37,50		
7	10	Kualanamu - Deli Serdang	https://sumut.b	56,04	66,25	48,75	73,75	63,75	71,25	56,25	72,50	61,25	55,00	35,00	42,50	26,25		
8	11	Sultan Iskandar Muda - Banda Aceh	https://www.bp	65,69														
9	12	Minimil Belawan - Medan	https://sumut.b	78,02	92,50	90,00	100,00	100,00	96,75	93,75	82,50	68,75	71,25	46,25	55,00	37,50		
10	13	Sultan Syarif Kasim II - Pekanbaru	https://pekanba	52,75	34,00	49,00	44,00	57,00	65,00	68,00	62,00	52,00	62,00	47,00	54,00	39,00		
11	14	Minangkabau - Padang Pariaman	https://sumbar	7,60														
12	15	Gunung Sitoli Nias No. 101, Gunung Sitoli	https://niassala	52,08	45,00	79,00	49,00	43,00	53,00	65,00	59,00	52,00	50,00	33,00	44,00	53,00		
13	17	Dabo Singkep		0,00														
14	19	Lhokseumawe 124 LAM	https://lhokseu	75,73	68,75	66,25	86,25	96,25	92,50	91,25	92,50	78,75	62,50	68,75	55,00	50,00		
15	20	Sibolga, Sumatera Utara	https://sibolga	50,33	54,00	63,00	64,00	55,00	47,00	53,00	70,00	43,00	52,00	31,00	33,00	39,00		
16	23	Tjut Nyak Dien Meulaboh - Nagan Raya	https://www.bn	59,46														
17	29	Kabupaten Indragiri Hulu, Riau 29353	https://inhukab.n/a															
18	31	Bandung	https://bandung	58,92	57,00	52,00	44,00	47,00	49,00	34,00	73,00	90,00	81,00	80,00	51,00	49,00		
19	33	Sultan Mahmud Badaruddin II - Palembang	https://palemba	47,25	48,60	37,40	45,30	51,80	59,60	24,30	48,10	70,50	56,00	48,50	46,10	30,80		
20	35	Kepahyang, Bengkulu	https://kepahia	39,06	32,50	41,25	48,75	50,00	40,00	53,75	65,00	18,75	15,00	28,75	35,00	40,00		
21	38	Semarang	https://jateng.b	67,83	34,00	39,00	68,00	74,00	81,00	75,00	89,00	91,00	84,00	85,00	47,00	47,00		
22	39	Palembang	https://palemba	36,22	24,49	37,65	35,56	40,50	42,50	40,94	45,46	36,67	40,36	35,46	21,11	33,97		
23	41	Bengkulu	https://bengkul	74,38	86,25	78,75	90,00	100,00	86,25	80,00	77,50	77,50	57,50	46,25	56,25	56,25		
24	47	Bandar Lampung	https://lampun	71,04	53,75	37,50	66,25	85,00	81,25	53,75	62,50	87,50	100,00	100,00	61,25	63,75		
25	49	Tegal	https://tegalaiat	81,00	52,00	38,00	80,00	89,00	86,00	90,00	91,00	96,00	99,00	99,00	75,00	78,00		
26	52	Cilacap	https://cilacapi	66,81	44,35	48,61	69,94	80,40	83,10	73,03	88,97	77,03	77,23	60,77	44,27	54,03		
27	53	Pontianak, Kalimantan Barat	https://kalbar.b.n/a															
28	54	Parbo Kerinci	https://kerinci	59,38	31,25	53,75	51,25	63,75	72,50	66,25	52,50	72,50	72,50	72,50	58,75	45,00		
29	55	Belitung	https://belitung	61,37	33,30	56,70	55,60	50,30	58,80	63,50	87,40	87,40	88,80	60,70	64,30	29,60		
30	56	Jatipwangi Kab. Majalengka	https://majalen	57,42	45,00	22,00	54,00	56,00	71,00	61,00	65,00	74,00	86,00	67,00	49,00	39,00		
31	59	Paloh Kab. Sambas	https://kalbar.b.n/a	50,00														
32	60	Bandara Fatmawati Soekarno, Bengkulu	https://bengkul	63,44	65,00	67,50	76,25	96,25	81,25	67,50	66,25	70,00	50,00	37,50	41,25	42,50		
33	61	Kab. Melawi Kalimantan	https://melawi	58,33	71,00	52,00	53,00	62,00	59,00	62,00	51,00	65,00	55,00	59,00	50,00	61,00		
34	63	Sultan Thaha palimera Jambi	https://jambi.bj	59,31														
35	65	Amir, Bangka, Pangkalpinang	https://www.bp	56,00														
36	67	Pelabuhan Laut Pontianak	https://kalbar.b.n/a															
37	72	Kampung Baru - Kupang	https://kupangi	77,58	55,00	51,00	72,00	89,00	92,00	78,00	95,00	93,00	95,00	85,00	63,00	63,00		
38	75	Balikpapan	https://balikap	54,08	36,00	27,00	41,00	41,00	51,00	53,00	56,00	85,00	74,00	79,00	55,00	51,00		
39	78	Wangapau - Sumba Timur	https://ntt.bps	80,30														
40	79	Banjarbaru	https://banjarb	48,26	36,20	36,60	32,50	56,20	59,60	45,70	58,40	57,90	60,60	55,20	44,70	35,50		
41	84	Juanda - Surabaya	https://jatim.bj	66,50	46,00	51,00	55,00	64,00	91,00	75,00	88,00	96,00	88,00	49,00	49,00	46,00		
42	85	Nauru Bai - Denpasar	https://bali.bps	88,96	96,25	57,50	95,00	57,50	100,00	90,00	100,00	100,00	91,25	100,00	100,00	100,00		
43	89	Sultan Ali Muhammad Sulaiman Sepinggan	https://balikap	54,08	36,00	27,00	41,00	41,00	51,00	53,00	56,00	85,00	74,00	79,00	55,00	51,00		
44	90	Syaamsudin Noor - Banjarmasin	https://banjarb	57,43	30,70	41,30	50,90	50,40	63,60	39,40	76,00	76,30	78,60	71,50	56,70	53,80		
45	91	Burungbung	https://banyuw	84,79	83,75	70,00	71,25	46,25	90,00	77,50	93,75	100,00	85,00	100,00	100,00	100,00		
46	92	Bengkong - Bato Ular	https://barucka	65,21	53,00	43,75	51,25	71,25	67,50	66,25	70,00	77,50	66,25	83,75	67,50	67,50		
47	94	Iskander - Kotawaringin Barat	https://kotabika	61,58	50,00	48,00	62,00	52,00	64,00	66,00	72,00	76,00	64,00	62,00	61,00	59,00		
48	95	Juwata - Tarakan	https://tarakan	65,58	65,00	71,00	58,00	67,00	80,00	74,00	74,00	71,00	58,00	53,00	62,00	54,00		
49	99	Sultan Muhammad Salahuddin - Bima	https://bimaikal.n/a															
50	103	Sangkalapora - Bawean, Gresik	https://gresika	82,92	47,50	32,50	68,75	76,25	91,25	100,00	100,00	100,00	100,00	100,00	98,75	80,00		
51	105	Guati Sumasin Alim - Kotabaru	https://kotabar	62,75	47,00	67,00	56,00	53,00	65,00	47,00	43,00	91,00	84,00	69,00	75,00	56,00		
52	106	Sultan Muhammad Kaharuddin - Sumba	https://sumbaw.n/a															
53	107	Tanjung Harapan - Bulungan	https://bulunga	60,31	38,75	45,00	52,50	58,75	63,75	66,25	75,00	71,25	70,00	68,75	67,50	46,25		
54	109	Tilik Piyut - Palangka Raya	https://palangi	60,67	57,00	55,00	55,00	67,00	66,00	63,00	63,00	68,00	64,00	50,00	57,00	63,00		
55	110	Transitus Xaverius Jeda - Marumere Sika	https://sikikal.n/a															
56	116	Malaka	https://matarak	75,83	64,00	46,00	70,00	66,00	88,00	88,00	82,00	91,00	89,00	90,00	61,00	75,00		
57	117	Alor	https://ntt.bps	81,90														
58	120	Winangun - Manado	https://manado	57,83	42,00	48,00	61,00	50,00	71,00	69,00	57,00	68,00	47,00	81,00	57,00	43,00		
59	121	Gowa	https://sulbar.b	49,35	30,70	48,60	54,40	57,00	57,90	55,30	43,40	53,90	49,60	57,30	50,20	33,90		
60	124	Ternate	https://ternate	68,92	61,00	60,00	68,00	71,00	73,00	49,00	67,00	65,00	89,00	86,00	72,00	66,00		
61	128	Seram Bagian Barat	https://sbkabi	63,99	48,30	61,50	65,90	52,80	66,30	45,70	59,50	67,70	89,10	83,10				
62	130	Minimil Ritung	https://bitungib	58,92	53,00	58,00	80,00	82,00	50,00	62,00	46,00	61,00	49,00	61,00	55,00	50,00		
63	132	Munira SIS Al-Jufri - Palu	https://sultang	63,48	26,90	80,20	76,40	75,00	68,30	57,30	69,10	73,00	58,80	60,20	58,70	57,80		
64	134	Sam Ralulang - Manado	https://manado	57,83	42,00	48,00	61,00	50,00	71,00	69,00	57,00	68,00	47,00	81,00	57,00	43,00		
65	137	Sultan Babullah - Ternate	https://ternate	68,92	61,00	60,00	68,00	71,00	73,00	49,00	67,00	65,00	89,00	86,00	72,00	66,00		
66	140	Sukuran Amruddin Amir - Banggai	https://banggai	64,58	81,25	70,00	62,50	51,25	65,00	72,50	56,25	51,25	36,25	52,50	76,25	100,00		
67	143	Geser - Seram Bagian Timur	https://sbkabi.b	54,75	45,00	59,00	66,00	55,00	50,00	39,00	48,00	57,00</						

average area temperature

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
	No	Place	Link	average	January	February	March	April	May	June	July	August	September	October	November	December	
1																	
2																	
3																	
4		3	Gunung Sitoli	https://lnia	26,508	26	26,4	27	26,7	26,9	26,7	26,3	26,3	26,3	26,3	26,4	26,8
5		6	Deli Serdang	https://sun	28,467	27,5	27,9	29	29,2	29,1	28,4	28,5	29,1	28,4	29,2	27,9	27,4
6		8	Indrapuri, Aceh Besar	https://ace	26,425	26,4	26,4	26,6	26,8	26,7	26,1	25,2	25,5	25,9	27,1	27,2	27,2
7		10	Kualanamu - Deli Serdang	https://sun	28,467	27,5	27,9	29	29,2	29,1	28,4	28,5	29,1	28,4	29,2	27,9	27,4
8		11	Sultan Iskandar Muda - Banda Aceh	https://per	26,975	26,1	26,9	26,5	27	27,7	27,6	27,8	27,3	27	27,3	26,2	26,3
9		12	Maritim Belawan - Medan	https://sun	28,1	28	27,8	28,5	28,8	29	28,2	28,7	28,2	28	27,7	27,6	26,7
10		13	Sultan Syarif Kasim II - Pekanbaru	https://pek	27,35	25,9	26,4	26,4	26,2	28	27,7	27,5	27,1	27,6	27,3	27	31,1
11		14	Minangkabau - Padang Pariaman	https://pac	27,183	26,7	27,1	27,5	27,6	27,9	27,7	27,1	26,9	26,7	26,6	27,1	27,3
12		15	Gunung Sitoli Nias No. 101, Gunung Sitoli	https://wsl	26,167	27	26	26	27	27	26	26	26	25	26	26	26
13		17	Dabo Singkep	https://kej	27,183	26,4	27,3	27,3	27,3	27,7	27,8	27,8	26,9	26,9	27,2	26,8	26,8
14		19	Lhokseumawe 124 LAM	https://lho	27,242	26,3	26,5	27,1	27,9	28,2	27,9	28	27,7	27,3	26,8	26,5	26,7
15		20	Sibolga, Sumatera Utara	https://silb	26,333	25,7	26,3	26,8	25,8	27,1	26,7	26,6	26,4	26,3	26,5	25,5	26,3
16		23	Tjur Nyak Dien Meulaboh - Nagan Raya	https://nag	26,861	27,43	27,03	27,17	27,51	27,49	26,64	27,05	26,5	26,54	26,23	26,26	26,48
17		29	Kabupaten Indragiri Hulu, Riau 29353	https://inh	26,992	26,8	26,5	27,6	27,2	28	26,9	27,1	27	26,7	26,7	27,1	26,3
18		31	Bandung	https://bar	23,375	23,3	23,5	24,1	23,3	23,9	22,8	23,1	23,3	23,3	23,2	23,4	23,3
19		33	Sultan Mahmud Badaruddin II - Palembang	https://pai	27,775	27,5	27,2	27,8	28,1	28,2	27,8	27,9	28,3	27,7	27,6	27,7	27,5
20		35	Kepahyang, Bengkulu	https://kej	24,292	24,3	24,6	24,4	24,8	24,7	24,2	24,2	24,3	24,3	23,9	24,1	23,7
21		38	Semarang	https://jate	28,333	27,8	27,4	28	28,5	29	28,5	28,3	28,6	29,2	28,7	28,6	27,4
22		39	Palembang	https://pai	34,592	34	34	35	34,3	34,6	35,2	34,3	34,6	35	35,2	34	34,9
23		41	Bengkulu	https://ber	28,908	27,8	28,5	29	29,2	30,3	29,6	28,9	29,3	28	28,6	28,3	29,4
24		47	Bandar Lampung	https://lam	29,355	27,8	27,9	28,3	28,6	30	29,1	28,9	29,6	30,9	32,2	30,4	29,9
25		49	Tegal	https://teg	28,125	27,4	27	27,6	28,5	28,5	28,2	27,5	27,3	27,9	29,2	29,4	29
26		52	Cilacap	https://cila	27,217	27,70	27,30	27,80	28,00	28,10	27,30	26,00	25,30	25,80	27,20	28,00	28,10
27		53	Pontianak, Kalimantan Barat	https://por	27,517	27,1	27,3	27,9	28,1	28,3	27,2	27,7	27,7	27	27,5	27,1	27,3
28		54	Parbo Kerinci	https://ker	22,333	22,1	22,5	22,2	22,3	23,1	22	22,4	22,3	21,3	22,5	22,7	22,6
29		55	Belitung	https://bel	26,208	26,4	26,4	26,5	26,6	27,1	25,9	26,3	26,4	26,6	25	25	26,3
30		56	Jatiwangi Kab. Majalengka	https://ma	27,975	27,2	27	27	27,9	28,3	27,5	27,2	27,4	28,3	30,1	30	27,8
31		59	Paloh Kab. Sambas	https://san	26,725	25,8	25,6	26,1	27,2	27,5	27,1	27,4	26,6	26,8	27,2	26,7	26,7
32		60	Bandara Fatmawati Soekarno, Bengkulu	https://ber	28,908	27,8	28,5	29	29,2	30,3	29,6	28,9	29,3	28	28,6	28,3	29,4
33		61	Kab. Melawi Kalimantan	https://kalbar.bps.go.id/d/statistics-table/2/MtEyIzI=/rata-rata-suhu.html													
34		63	Sultan Thaha palmera Jambi	https://jam	27,2	27	26,5	26,9	27,2	27,3	27,5	28	28	27	27	27	27
35		65	Amir, Bangka, Pangkalpinang	https://pangkalpinangkota.bps.go.id/d/statistics-table/2/MjE3IzI=/rata-rata-suhu-kota-pangkalpinang.html													
36		67	Pelabuhan Laut Pontianak	https://por	27,517	27,1	27,3	27,9	28,1	28,3	27,2	27,7	27,7	27	27,5	27,1	27,3
37		72	Kampung Baru - Kupang	https://kuq	27,625	27,8	27	27,6	27,7	28,5	27,3	25,8	26,9	28,2	28,8	28,1	27,8
38		75	Balikpapan	https://kal	27,217	26,8	26,8	27,2	27,7	27,8	27,3	27,2	26,9	26,8	27,4	27,3	27,4
39		78	Waingapu - Sumba Timur	https://sun	27,333	28	28	28	28	26	26	25	25	28	29	29	28
40		79	Banjarbaru	https://bar	28,637	28,37	28,53	28,76	29,04	29,33	28,3	28,27	29,38	28,86	29,06	28,2	27,54
41		84	Juanda - Surabaya	https://jati	28,075	27,5	27,7	27,9	28,2	28,6	27,9	27,5	27,3	28,3	29,8	28,2	28
42		85	Ngurah Rai - Denpasar	https://bal	27,533	27,8	27,5	28,1	27,8	27,7	27,1	26,4	26,3	26,6	28	28,6	28,5
43		89	Sultan Aji Muhammad Sulaiman Sepinggan -	https://bal	33,017	33,3	32,9	32,2	34,1	33,4	32,3	31,9	32,3	32,1	33,8	33,9	34
44		90	Syamsudin Noor - Banjarmasin	https://banjarbaru kota.bps.go.id/d/statistics-table/2/MTF0IzI=/suhu-udara.html													
45		91	Banyuwangi	https://bar	27,092	27,2	26,4	27,2	27,4	26,8	25,7	25,8	26,2	27,9	28,5	28,6	28,6
46		92	Beringin - Bantio Utara	https://bar	27,533	26,8	26,7	26,8	27,4	27,9	27,6	27,4	27,9	27,8	28,5	28	27,6
47		94	Iskandar - Kotawaringin Barat	https://kot	28,246	28,25	28,2	28,35	28,4	28,75	28,3	28,25	28,1	28,35	28,15	28,05	27,8
48		95	Juwata - Tarakan	https://kal	28,108	27,2	27,5	27,9	28,1	28,3	28,4	28,2	28,4	28,1	28,7	28,3	28,2
49		99	Sultan Muhammad Salahuddin - Bima	https://birn	27,266	27,2	26,8	27,3	27,8	27,2	26,6	25,8	26	27,2	28,9	28,29	28,1
50		103	Sangkapura - Bawean, Gresik	https://gre	28,283	27,4	27,1	27,3	28,2	28,7	28,7	28,1	28	28,3	29,1	29,4	29,1
51		105	Gusti Syamsir Alam - Kotabaru	https://kot	26,95	26,8	26,5	26,7	27,2	27,1	26,4	26,5	26,3	26,9	27,7	27,7	27,6
52		106	Sultan Muhammad Kaharuddin - Sumbawa	https://cdn.bmkg.go.id/Web/ANALISIS-CUACA-EKSTREM-01-Mei-2021-1.pdf													
53		107	Tanjung Harapan - Bulungan	https://bul	27,7	27	26,9	27,3	27,7	27,9	27,9	27,8	28	27,8	28,2	28,1	27,8
54		109	Tilik Bicut - Palangka Raya	https://pai	27,575	27,5	27,4	27,5	27,7	28,1	27,4	27,5	27,5	27,6	27,4	27,6	27,7
55		110	Fransiskus Xaverius Seda - Maumere Sikka	https://siki	27,788	28,3	28,05	28,55	28,6	27,15	27,5	25,5	25,8	26,9	27,6	29,55	29,95
56		116	Mataram	https://ma	26,683	26,9	26,5	26,6	27,1	26,3	26,1	25,3	25,3	26	27,7	28,3	28,1
57		117	Alor	https://ntt.bps.go.id/d/statistics-table/2/OTU4IzI=/suhu-udara-menurut-kabupaten-kota.html													
58		120	Winangun - Manado	https://ma	27,008	26,2	26,5	26,4	27,8	27,2	27,1	27,1	27,1	26,8	28,3	27	26,6
59		121	Gowa	https://gowakab.bps.go.id/d/													
60		124	Ternate	https://ten	27,167	27	27	27	28	27	27	27	27	27	27	27	28
61		128	Seram Bagian Barat	https://sbkab.bps.go.id/d/statistics-table?subject=519													
62		130	Maritim Bitung	https://bitu	27,633	26,9	27,6	27,9	27,7	27,1	27,1	27,7	27,6	28,3	28,3	28	27,4
63		132	Mutlaka SIS Al-Jufrie - Palu	https://sult	27,183	26,7	26,7	27,1	28	27,6	27,1	26,6	26,7	27	27,3	27,6	27,8
64		134	Sam Batulangi - Manado	https://ma	27,008	26,2	26,5	26,4	27,8	27,2	27,1	27,1	27,1	26,8	28,3	27	26,6
65		137	Sultan Babullah - Ternate	https://ten	27,167	27	27	27	28	27	27	27	27	27	27	27	28
66		140	Syukuran Aminuddin Amir - Banggai	https://bar	23,45	23,8	24,3	24	23,6	23,3	23,8	22,7	22,6	22,1	22,7	25	23,5
67		143	Geser - Seram Bagian Timur	https://sbt	26,975	25,1	27,8	28,3	28,3	26,9	27,2	23,8	25,8	26,5	27,5	28,4	28,1
68		144	Djalaluddin - Gorontalo	https://gor	27,075	26,9	27,3	26,6	27,3	26,6	27,2	27	27	26,7	27,7	27,2	27,4
69		146	Desman Sadik - Halmahera Selatan	https://hal	27	27	27	27	27	27	27	27	26	26	27	28	28
70		148	Maiene	https://ma	28,108	26,9	27,3	27,4	28,1	28,4	27,8	27,8	27,9	28,5	29,3	29,1	28,8
71		149	Naha - Kepulauan Sangihe	https://san	27,667	27	27,1	27,1	28,3	28,1	27,3	27,7	27,6	28,1	28,1	27,7	27,9
72		150	Namlea - Buju	https://bur	28,058	27,5	27,3	27,7	27,8	28	27,5	27	27,9	27,9	29,3	29,9	28,9
73		151	Mathilda Batlayeri - Maluku Tenggara Barat	https://ma	26,7	26,9	24,5	25,9	25,6	27,4	26,3						

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC																																																																																																																																																																																																																																																																																																																																											
1	d) by lowest sunshine hours			Link	average				Link	average	sorted by lowest average temperature														Link	average																																																																																																																																																																																																																																																																																																																																														
2	85	Niquah Rika - Denpasar	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	https://17.59	85	Niquah Rika	

-using google colab to visualise data

-using powerbi to visualise data