



2022

270

81

I<sup>2</sup>

6

<sup>3</sup>

75

II

2022

I

II

2022

1 2022

AAA	37	2.00~5.48	2.84	79.02	--	107.61	31	92.48	--	95.04
AA <sup>+</sup>	33	2.40~6.90	3.33	125.14	46.13	83.82	33	125.69	33.21	83.77
AA	11	2.80~7.00	3.70	165.02	39.88	70.98	11	163.09	37.40	70.64

1

Wind

4

95%

2 2022

	0.003	--		0.029	--
	0.001	0.015		0.003	0.025

1  
 2 I II  
 3 2022 4 21  
 4 Mann-Whitney U

95%

P  
5

5%

2022

1

31

I

1

30

II

2022

I

II

2022

3 2022

AAA	15	2.23~5.95	3.46	136.68	--	89.13	14	150.88	--	76.90
AA+	12	2.80~6.45	4.38	226.13	89.45	70.56	12	226.90	76.02	70.54
AA	4	3.50~6.39	4.95	293.48	67.35	50.37	4	296.34	69.44	49.89

Wind

AAA AA+

95%

AAA AA+

I

II

4 2022

	0.088	--	0.157
			--

I

II

2022

3

5 2022

3	AAA	66	2.40~5.50	3.33	97.52	--	65.12	60	102.20	--	54.25
	AA+	30	3.13~4.60	3.71	136.04	38.51	29.31	30	136.32	34.12	29.79
	AA	8	3.50~5.80	4.17	182.05	46.01	43.05	8	183.26	46.94	42.10
5	AAA	21	3.13~4.60	3.72	117.97	--	40.19	21	117.69	--	39.47

Wind

3

AAA    AA+    AA

95%                    3    AAA    AA+    AAA    AA                    I

II   AA+    AA                    II

6 2022

3

	0.000	--		0.000	--
	0.002	0.068		0.002	0.049

2022

3

29

3

I

5

11

I

30

3

10

5

5

II

2022

3

I

2022

87BI

AA+	2	3.14~3.22	3.18	75.12	15.87	9.90	2	78.78	17.75	14.00
AA	1	3.60~3.60	3.60	118.38	43.26	--	1	126.79	48.01	--

Wind

2022

5

11

I

9

II

2022

I

II

I

II

2022

5

10 2022

5

AAA	1	3.28~3.28	3.28	80.55	--	--	1		--	--
AA+	4	3.73~4.80	4.02	147.17	66.62	38.73	4	147.93	62.88	40.21
AA	4	4.60~4.75	4.64	212.39	65.22	8.63	4	210.27	62.34	7.87
A+	2	5.10~5.10	5.10	256.86	--	2.31	--	--	--	--

Wind

2022

13

1

4

1

3

9

3

11 2022



0.5.10.1



“ ” “ ” “ ” “ ” “ ” “ ”

270

1  
3 5  
3 5  
5 7

3  
5

1

“ 5+3” 5

2

I

II

3

---

1

2

3

II

30