### DADOS OBSERVACIONAIS

January 10, 2021

#### TODOS OS DADOS ESTAO EM HORA ZULU

## 0.1 FASE DA LUA

 $\mathbf{2021}\text{-}\mathbf{1}\text{-}\mathbf{6} \ \mathrm{sizigia}$ 

 $\mathbf{2021}\text{-}\mathbf{1}\text{-}\mathbf{13} \ \mathrm{sizigia}$ 

 $\mathbf{2021}\text{-}\mathbf{1}\text{-}\mathbf{20}\ \mathrm{quadratura}$ 

 $\mathbf{2021}\text{-}\mathbf{1}\text{-}\mathbf{28} \ \mathrm{sizigia}$ 

 $\mathbf{2021}\text{-}\mathbf{2}\text{-}\mathbf{4}\ \mathrm{quadratura}$ 

#### 0.2 Rio Grande do Sul

#### $\mathbf{Simcosta}$

mes	dia	hora	min	boia	vvel(nós)	rajada(nós)	vdir	t_ar(°C)	t_ag(°C)	Hs(m)	Hmax(m)	Tp(s)	dirmed
1	10	19	21	RS4	16.5	20.6	66.42	25.4	25.73	1.14	1.65	8.0	95.13
1	10	18	51	RS4	16.1	18.9	70.42	25.3	25.73	1.09	2.05	7.7	101.53
1	10	17	51	RS4	15.6	18.5	71.42	25.2	25.75	1.08	1.71	8.3	104.13
1	10	16	51	RS4	16.7	19.2	64.42	25.1	25.73	1.13	1.81	7.4	97.72
1	10	16	21	RS4	15.2	17.3	65.42	25.1	25.61	1.06	1.97	8.3	101.03
1	10	21	51	RS2	18.7	23.5	65.37	26.0	26.14	0.22	0.34	2.0	245.67
1	10	21	21	RS2	18.3	23.5	65.37	26.4	26.17	0.21	0.37	2.0	240.67
1	10	20	51	RS2	17.1	21.0	66.37	26.7	26.22	0.18	0.35	1.9	233.67
1	10	20	21	RS2	16.5	20.8	71.37	27.0	26.29	0.15	0.29	2.0	217.37
1	10	19	51	RS2	16.9	21.4	69.37	27.0	26.3	0.15	0.28	4.1	207.17
1	10	19	21	RS2	16.5	20.4	75.37	26.8	26.41	0.15	0.27	4.4	205.27
1	10	18	51	RS2	15.2	18.3	81.37	26.6	26.38	0.14	0.22	4.0	205.37
1	10	18	21	RS2	15.0	18.3	82.37	26.8	25.91	0.15	0.24	4.3	200.47
1	10	17	51	RS2	14.4	17.5	81.37	26.7	26.06	0.12	0.18	4.2	193.67
1	10	17	21	RS2	14.4	17.3	82.37	27.3	25.91	0.14	0.24	3.8	198.27
1	10	16	51	RS2	14.6	18.1	77.37	26.9	25.8	0.14	0.25	4.3	195.97
1	10	16	21	RS2	12.6	16.3	72.37	27.2	25.81	0.19	0.41	4.8	200.87

#### 0.3 Santa Catarina

#### Praias WAVECHECK

ano	mes	dia	estado	nome	lat	lon	altura(m)	direcao
2021	1	10	Santa Catarina	Praia do Caldeirao	-27.7266	-48.506	0.75	Sudeste
2021	1	10	Santa Catarina	Campeche	-27.7003	-48.4921	0.5	Sudeste
2021	1	10	Santa Catarina	Rosa Norte	-28.1245	-48.6368	0.5	Sudeste
2021	1	10	Santa Catarina	Rosa Sul	-28.1343	-48.6407	0.25	Sudeste

## 0.4 Parana

## 0.5 Sao Paulo

## Praias WAVECHECK

ano	mes	dia	estado	nome	lat	lon	altura(m)	direcao
2021	1	10	Sao Paulo	Camburi	-23.781	-45.651	0.75	Sudeste
2021	1	10	Sao Paulo	Baleia	-23.777	-45.674	0.5	Sudeste
2021	1	10	Sao Paulo	Juquei	-23.769	-45.751	0.5	Não informado

## 0.6 Rio de Janeiro

### Praias RICO SURF

ano	mes	dia	nome	lat	lon	altura(m)	periodo(s)	tsm(°C)	direcao
2021	1	10	Recreio - Posto 10	-23.0262	-43.4579	0.6	8.0	21.0	Sudeste
2021	1	10	Ipanema - Posto 8	-22.9881	-43.1971	0.3	9.0	21.0	Leste
2021	1	10	Figueira de Arraial do Cabo	-22.9466	-42.1609	0.4	8.0	19.0	Leste Sudeste
2021	1	10	Prainha - Canto Direito	-23.0423	-43.5072	0.6	8.0	21.0	Sudeste
2021	1	10	Copacabana - Posto 6	-22.985	-43.1887	0.1	9.0	21.0	Leste
2021	1	10	Cabo Frio - Praia do Forte	-22.8885	-42.0191	0.5	8.0	19.0	Sudeste
2021	1	10	Saquarema - Praia da Vila	-22.9336	-42.5177	0.7	9.0	21.0	Sudeste
2021	1	10	Macumba - CCB	-23.0316	-43.4761	0.7	8.0	21.0	Sudeste
2021	1	10	Leblon - Canto	-22.9881	-43.2233	0.4	9.0	21.0	Leste
2021	1	10	Cabo Frio - Praia do Peró	-22.8585	-41.9862	0.2	8.0	19.0	Sudeste
2021	1	10	Recreio - Canto	-23.0299	-43.4673	0.4	8.0	21.0	Sudeste
2021	1	10	Arpoador	-22.9895	-43.1919	0.1	9.0	21.0	Leste
2021	1	10	Prainha	-23.0408	-43.5048	0.7	8.0	21.0	Sudeste
2021	1	10	Copacabana - Posto 5	-22.9806	-43.1888	0.3	9.0	21.0	Leste
2021	1	10	Macumba - Rico Pointao vivo	-23.0315	-43.4761	0.7	8.0	21.0	Sudeste
2021	1	10	Praia do Diabo	-22.9886	-43.1896	0.4	9.0	21.0	Leste
2021	1	10	Macumba - Secreto	-23.0369	-43.4954	0.7	8.0	21.0	Sudeste
2021	1	10	Praia do Leme	-22.9648	-43.1688	0.6	9.0	21.0	Leste

#### Simcosta

mes	dia	hora	min	boia	vvel(nós)	rajada(nós)	vdir	$t_ar(^{\circ}C)$	$t_ag(^{\circ}C)$	Hs(m)	Hmax(m)	Tp(s)	dirmed
1	10	21	51	RJ3	9.5	12.4	99.12	None	25.78	0.98	1.71	4.7	134.12
1	10	21	21	RJ3	12.2	16.1	112.12	None	26.19	0.97	1.7	5.0	131.12
1	10	20	51	RJ3	11.7	14.0	125.12	None	26.7	0.89	1.58	4.8	134.12
1	10	20	21	RJ3	12.1	14.6	120.12	None	27.36	0.97	1.56	4.9	123.12
1	10	19	51	RJ3	10.9	13.4	110.12	None	28.4	0.98	1.4	4.7	124.12
1	10	19	21	RJ3	13.4	15.9	112.12	None	28.28	0.89	1.67	4.7	131.12
1	10	18	51	RJ3	13.4	15.9	107.12	None	27.66	0.91	1.35	10.0	127.12
1	10	18	21	RJ3	13.4	15.7	114.12	None	28.03	0.83	1.51	9.5	128.12
1	10	17	51	RJ3	14.2	16.3	116.12	None	28.27	0.84	1.46	10.0	131.12
1	10	17	21	RJ3	12.2	14.8	123.12	None	28.16	0.7	1.22	10.5	128.12
1	10	16	51	RJ3	11.1	12.6	127.12	None	28.44	0.7	1.35	9.1	135.12
1	10	16	21	RJ3	8.7	11.3	125.12	None	28.44	0.71	1.05	9.5	133.12

## 0.7 Espirito Santo

#### Boias

mes	dia	hora	min	vvel(nos)	vdir	t_ag(°C)	t_ar(°C)	Hs(m)	Tp(s)	dirmed
1	10	20	0	None	None	None	None	None	None	None
1	10	19	0	None	None	None	None	0.81	None	98
1	10	18	0	None	None	None	None	0.78	None	97
1	10	17	0	None	None	None	None	0.78	None	97
1	10	16	0	None	None	None	None	0.76	None	101
1	10	15	0	None	None	None	None	0.79	None	99
1	10	14	0	None	None	None	None	0.77	None	101

#### 0.8 Bahia

#### Simcosta

mes	dia	hora	min	boia	vvel(nós)	rajada(nós)	vdir	t_ar(°C)	t_ag(°C)	Hs(m)	Hmax(m)	Tp(s)	dirmed
1	10	21	51	BA1	12.2	17.9	93.72	27.3	27.87	0.26	0.48	4.0	179.92
1	10	21	21	BA1	13.0	21.6	101.72	27.4	27.98	0.27	0.41	3.7	186.82
1	10	20	51	BA1	13.2	21.4	95.72	27.6	27.69	0.27	0.51	3.3	197.72
1	10	20	21	BA1	11.7	21.4	99.72	28.1	27.43	0.26	0.56	6.7	189.12
1	10	19	51	BA1	15.7	21.2	90.72	28.5	27.52	0.23	0.44	6.3	176.22
1	10	19	21	BA1	15.0	20.8	89.72	28.6	27.0	0.25	0.59	4.2	157.52
1	10	18	51	BA1	13.4	17.9	91.72	29.0	27.14	0.27	0.44	6.9	263.82
1	10	18	21	BA1	9.7	17.1	91.72	29.2	27.17	0.21	0.36	2.1	152.02
1	10	17	51	BA1	8.7	12.4	99.72	29.5	27.23	0.22	0.5	5.0	99.32
1	10	17	21	BA1	8.9	12.4	115.72	29.4	27.35	0.24	0.57	10.5	84.32
1	10	16	51	BA1	8.4	15.2	132.72	29.2	27.11	0.2	0.42	4.8	155.02
1	10	16	21	BA1	8.4	11.7	158.72	28.9	27.39	0.21	0.33	2.7	116.02

## 0.9 Sergipe

## Boias

	mes	dia	hora	minuto	Onda_dirmed	Hs(m)	vvel(nos)	rajada(nos)
Г	1	10	22	10	94	1.19	19.0	20.2

### 0.10 Alagoas

#### 0.11 Pernambuco

#### Boias

mes	dia	hora	minuto	Onda_dirmed	Hs(m)	vvel(nos)	rajada(nos)
1	10	21	10	88	1.05	13.4	15.0
1	10	21	0	85	1.08	13.4	14.4
1	10	20	0	90	1.08	13.8	15.2

#### 0.12 Paraiba

#### 0.13 Rio Grande do Norte

0.14 Ceara

0.15 Piaui

0.16 Maranhao

0.17 Belem

0.18 NDBC e ALTIMETRO

## NDBC em 9/1/2021.

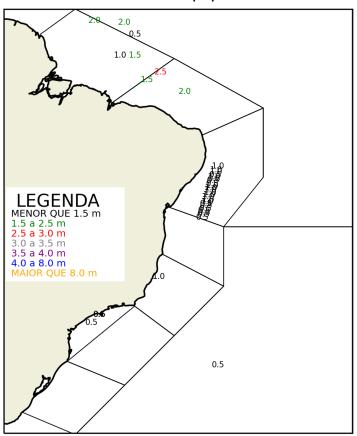


Figure 0.1: Altura de onda em metros

## NDBC em 10/1/2021.

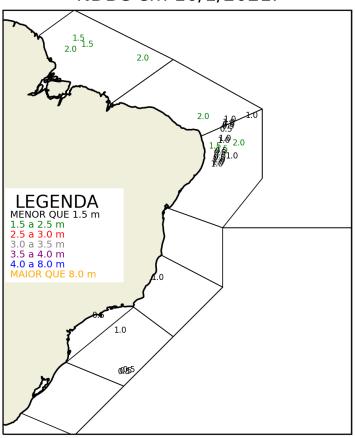


Figure 0.2: Altura de onda em metros

# Ondas Altimetro METAREA V entre 7/1 21:00 e 8/1 21:00.

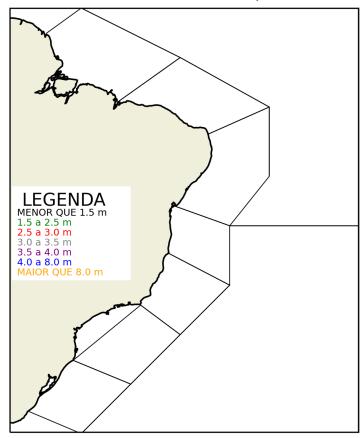


Figure 0.3: Altura de onda em metros

# Ondas Altimetro METAREA V entre 8/1 21:00 e 9/1 21:00.

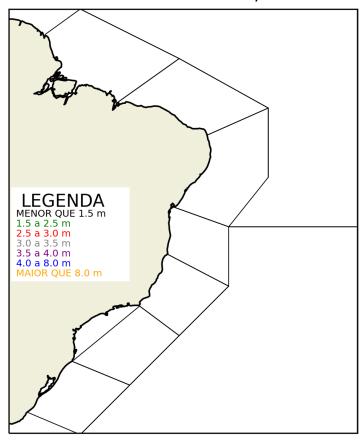


Figure 0.4: Altura de onda em metros

# Ondas Altimetro METAREA V entre 9/1 21:00 e 10/1 21:00.

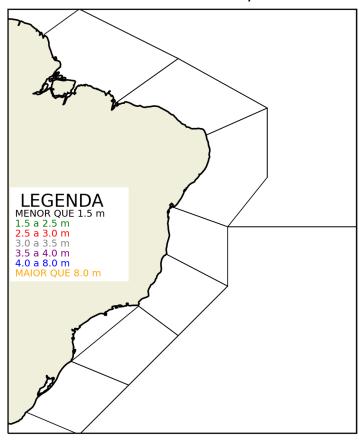


Figure 0.5: Altura de onda em metros

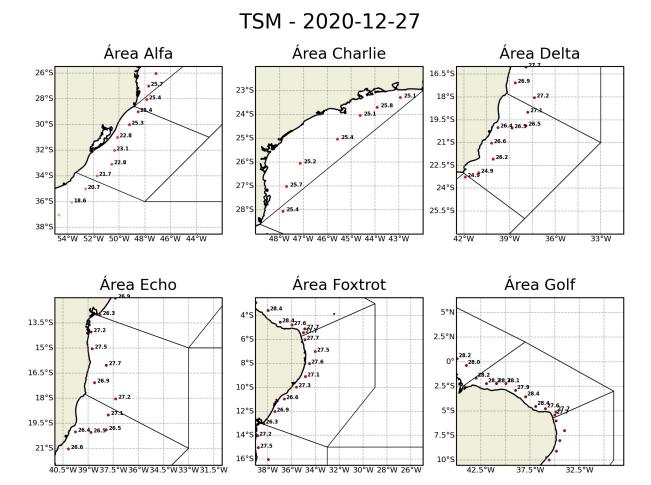


Figure 0.6: Temperatura da Superficie do mar em °C

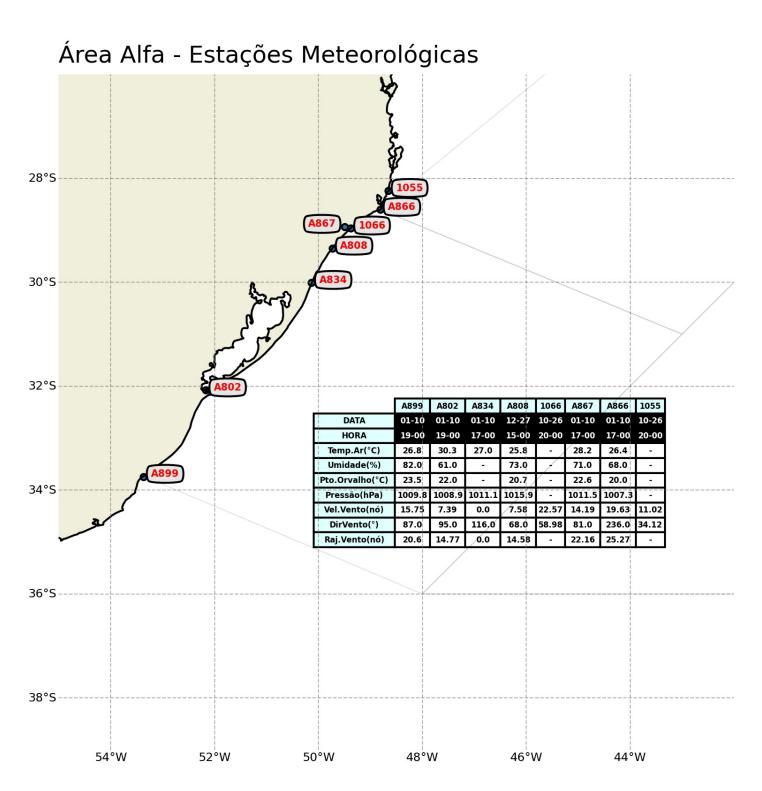


Figure 0.7: Dados das estacoes meteorologicas na area Alfa.

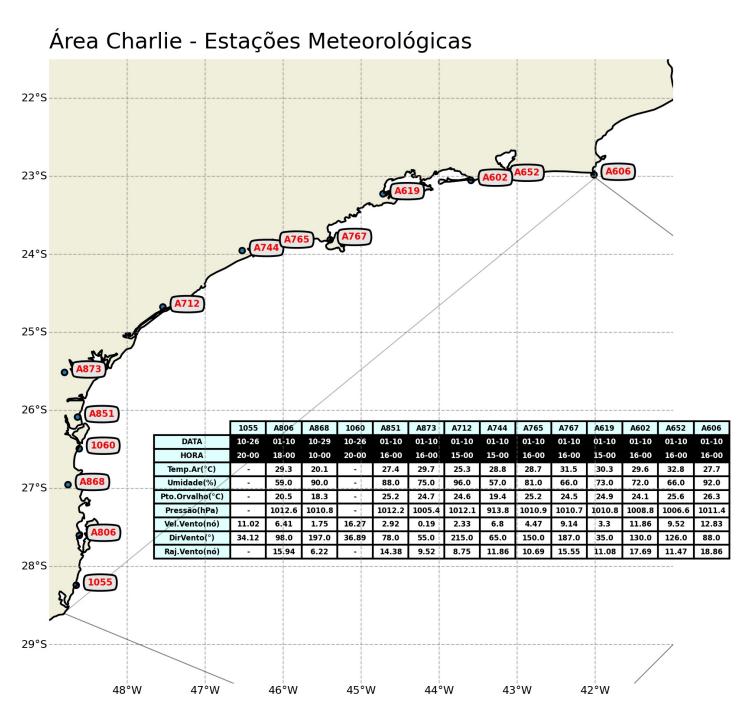


Figure 0.8: Dados das estacoes meteorologicas na area Charlie.

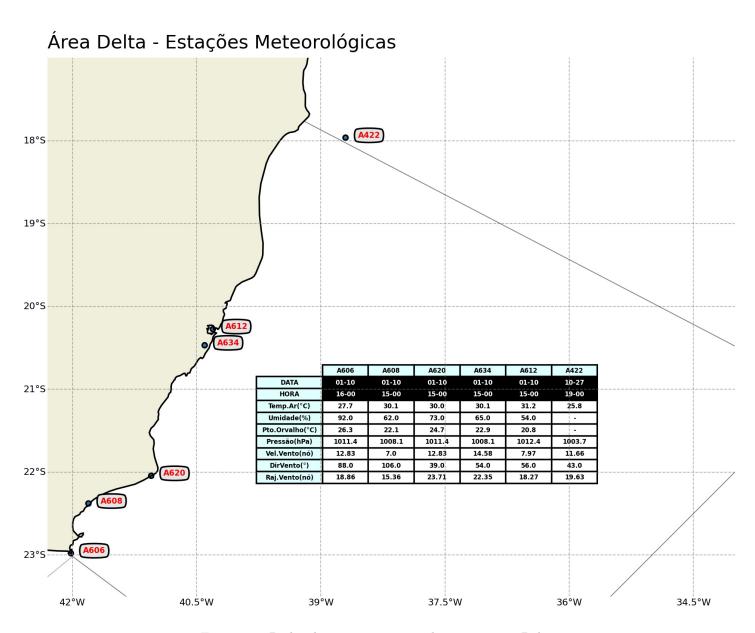


Figure 0.9: Dados das estacoes meteorologicas na area Delta.

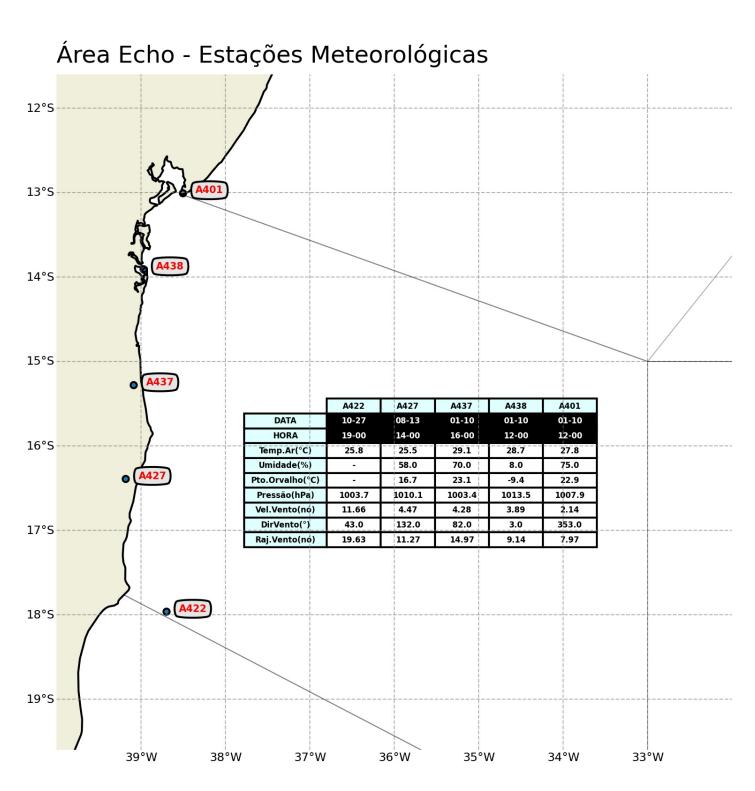


Figure 0.10: Dados das estacoes meteorologicas na area Echo.

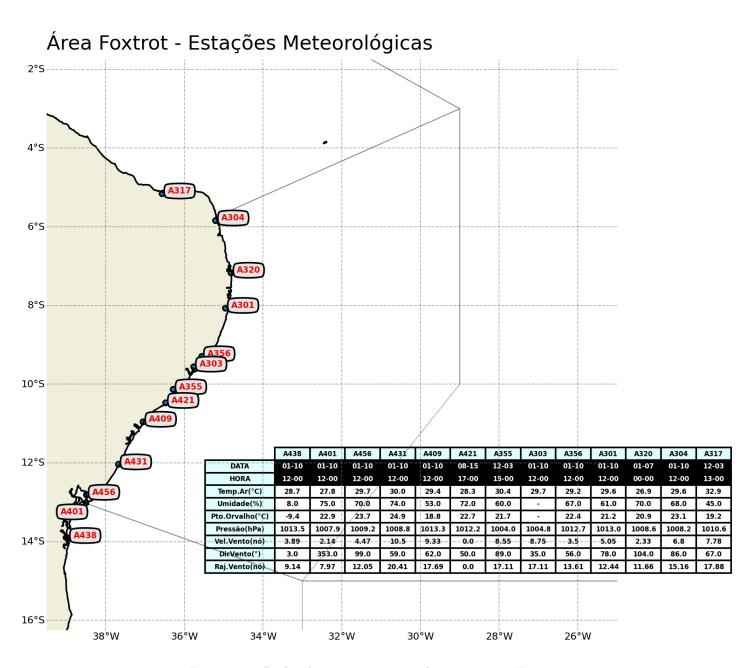


Figure 0.11: Dados das estacoes meteorologicas na area Foxtrot.

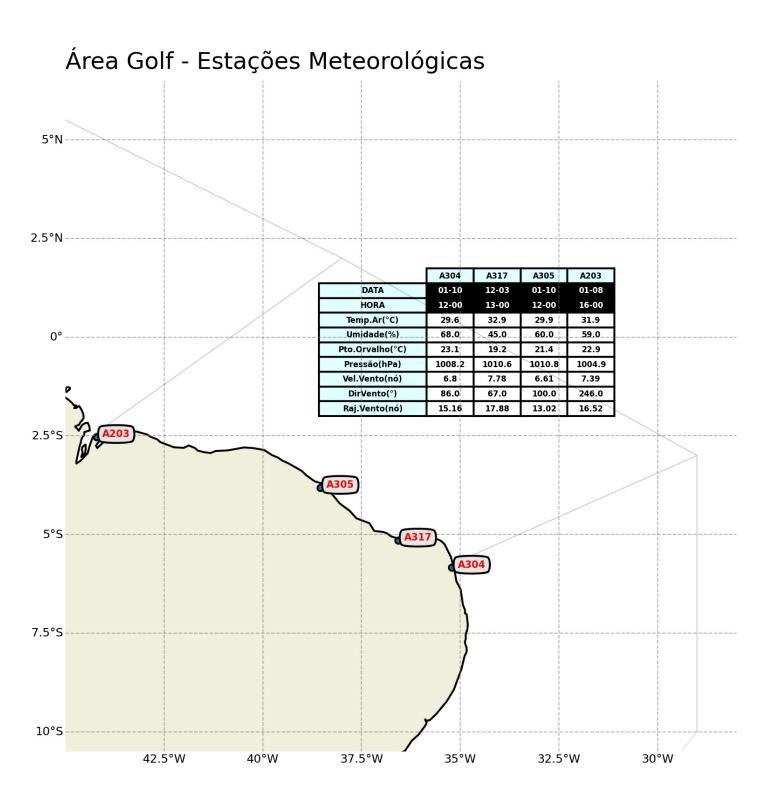


Figure 0.12: Dados das estacoes meteorologicas na area Golf.

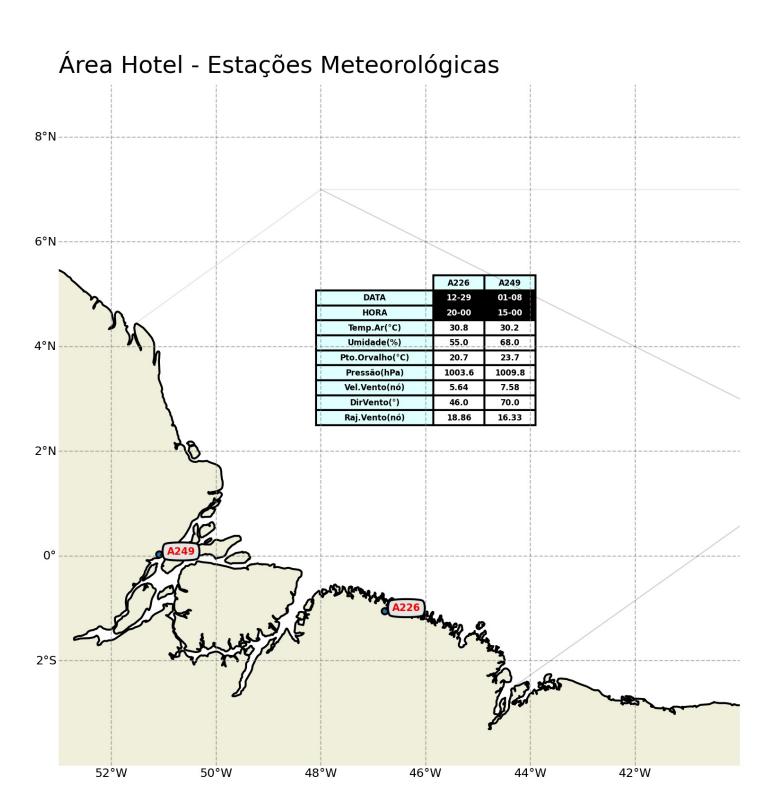


Figure 0.13: Dados das estacoes meteorologicas na area Hotel.