INSTITUTO HIDROGRÁFICO

DIVISÃO DE OCEANOGRAFIA

PJ OC 52EO06
RELATÓRIO TÉCNICO PRELIMINAR
REL. TP-OC-06/2007

TRATAMENTO DE DADOS DE AGITAÇÃO MARÍTIMA AÇORES/S. MIGUEL - OUT A DEZ 2006

MAR/2007

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EXEMPLAR Nº 1

FOLHA DE DIFUSÃO

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TÍTULO DO RELATÓRIO

Tratamento de dados de agitação marítima
Açores/S. Miguel, Outubro a Dezembro de 2006

AUTOR(ES)
INSTITUTO HIDROGRÁFICO

TIPO DE RELATÓRIO	PERÍODO	DATA DO RELATÓRIO	Nº DE PÁGINAS
Técnico Preliminar	Out a Dez 2006	12 de Março de 2007	116

NOTAS (continuar no verso se necessário)

RESUMO (continuar no verso se necessário)

Neste relatório apresenta-se o processamento dos dados de agitação marítima adquiridos pela estação ondógrafo direccional instalada ao largo de Ponta Delgada na ilha de S Miguel, relativos ao período de Outubro a Dezembro de 2006.

Os dados, constituídos por séries temporais de deslocamentos verticais (elevações) e horizontais segundo os eixos N-S e E-W, são calculados pelo microprocessador instalado na bóia, a partir das medições das três componentes da aceleração do movimento da superfície livre e das três componentes do campo magnético terrestre.

Os dados foram processados com vista à estimação da distribuição de energia, direcção média e dispersão, por bandas de frequência, bem como à estimação dos parâmetros característicos da agitação, no que respeita a alturas, períodos e direcções.

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DIVISÃO DE OCEANOGRAFIA

PJ OC 52EO06
RELATÓRIO TÉCNICO PRELIMINAR
REL. TP-OC-06/2007

TRATAMENTO DE DADOS DE AGITAÇÃO MARÍTIMA AÇORES/S. MIGUEL - OUTUBRO A DEZEMBRO 2006

1. INTRODUÇÃO

Neste relatório apresenta-se o processamento dos dados de agitação marítima adquiridos pela estação ondógrafo direccional instalada ao largo de Ponta Delgada na ilha de S. Miguel, relativos ao período de Outubro a Dezembro de 2006. A estação, composta pela bóia DIRECTIONAL WAVERIDER MKIII, receptor WAREC e computador PCPENTIUM, está situada na posição LATITUDE = 37° 43′ 53″ N, LONGITUDE= 25° 43′ 28″ W, Sonda Reduzida = 90 metros.

Os dados constituídos por séries temporais de deslocamentos verticais (elevações) e horizontais segundo os eixos N-S e E-W, são calculados pelo microprocessador instalado na bóia, a partir das medições das três componentes da aceleração do movimento da superfície livre e das três componentes do campo magnético terrestre.

Em condições normais a aquisição dos dados é efectuada de três em três horas, durante períodos de 30 minutos. Em condições de temporal, ou seja, quando a altura significativa excede 5 metros, os períodos de aquisição de 30 minutos são apenas espaçados de pequenos intervalos necessários ao processamento dos dados. Os dados são adquiridos a uma taxa de digitalização de 1.28 amostras por segundo e agrupados em blocos de 200 segundos. O limite mínimo de duração para que um conjunto de dados (registo) seja tratado é de 10 minutos. Os grupos data-hora estão referidos à hora local e correspondem ao início dos registos.

Os dados foram processados com vista à estimação da distribuição de energia, direcção média e dispersão, por bandas de frequência, bem como à estimação dos parâmetros característicos da agitação, no que respeita a alturas, períodos e direcções. Na base deste processamento estão:

- a estimação dos espectros cruzados entre as três séries temporais;
- a estimação dos cinco primeiros coeficientes da expansão em série de Fourier da função de distribuição direccional de energia.

As séries temporais de elevações foram também processadas pelo método directo.

2. RESULTADOS

São apresentados, para cada mês, os resultados do processamento efectuado, organizados de acordo com os seguintes ANEXOS:

ANEXO A - Listagem dos parâmetros HS, H10, H100, HMAX, HMED, THS, TH10, TH100, THMAX, TZ, TC e TMAX calculados pelo método directo;

ANEXO B - Gráficos temporais de HS, HMAX, TZ, TMAX, THS e THMAX;

ANEXO C - Tabelas de ocorrências conjuntas HMAX - THMAX, H100 - TH100, H10 - TH10, HS - THS, HS - TZ e HMAX - TMAX.

ANEXO D - Listagem dos parâmetros espectrais HM0, T02, TP, SMAX, e direccionais THTP1, SPRTP1, THHF1, THLF1 e N;

ANEXO E - Gráficos temporais de HM0, T02 e TP, THTP1, SPRTP1, THHF1, THLF1;

ANEXO F - Tabelas de ocorrências conjuntas HM0-T02 , HM0-TP, HM0-THTP1 e TP-THTP1;

ANEXO G - Evolução temporal da distribuição de energia e da direcção média por banda de frequência;

ANEXO H - Gráficos de distribuição de energia, direcção média e dispersão, para os registos em que HM0 ≥ 4.0 metros.

Adjunto da Divisão de Oceanografia
Responsável pela Secção de Agitação Marítima

Mariana Simões Costa
2007.09.16

Mariana Simões Costa
Assessora principal

Visto
O C / OC

16/9/07

José Alberto de Mesquita Onofre
CTEN EH

ANEXO A

Listagem dos parâmetros HS, H10, H100, HMAX, HMED, THS, TH10, TH100, THMAX, TZ, TC e TMAX, calculados pelo método directo

Código de símbolos:

NA		-	Número de alturas de onda de zero ascendente;
HS	(m)	-	Altura significativa (média do terço mais elevado das alturas de onda de zero ascendente);
H10	(m)	-	Média do décimo mais elevado das alturas de onda de zero ascendente;
H100	(m)	-	Média do centésimo mais elevado das alturas de onda de zero ascendente;
HMAX	(m)	-	Altura máxima de zero ascendente ocorrida no registo;
HMED	(m)	-	Altura média de zero ascendente;
THS	(s)	-	Média dos períodos correspondentes às ondas que foram utilizadas no cálculo de HS;
TH10	(s)	-	Média dos períodos correspondentes às ondas que foram utilizadas no cálculo de H10;
TH100	(s)	-	Média dos períodos correspondentes às ondas que foram utilizadas no cálculo de H100;
THMAX	(s)	-	Período correspondente a HMAX;
TZ	(s)	-	Média dos períodos de zero ascendente;
TC	(s)	-	Média dos períodos de crista;
TMAX	(s)	-	Período máximo ocorrido no registo.

DIA	HORA	NA	HS (m)	H10 (m)	H100 (m)	HMAX (m)	HMED (m)	THS (s)	TH10 (s)	TH100 (s)	THMAX (s)	TZ (s)	TC (s)	TMAX (s)
01	00-00	310	1.08	1.35	1.76	1.83	0.65	8.3	9.2	8.6	8.6	5.8	3.4	18.0
01	03-00	340	0.91	1.16	1.48	1.62	0.56	7.5	8.2	8.9	8.6	5.3	3.0	14.1
01	06-00	377	0.88	1.15	1.45	1.64	0.55	7.0	8.1	9.2	9.4	4.8	2.8	12.5
01	09-00	307	0.88	1.08	1.36	1.43	0.57	7.8	8.4	8.9	9.4	5.8	3.6	14.8
01	12-00	324	1.02	1.26	1.58	1.61	0.63	7.9	8.5	10.7	12.5	5.5	3.3	13.3
01	18-00	345	0.80	1.00	1.34	1.52	0.52	7.0	8.1	7.8	6.2	5.2	3.4	12.5
01	21-00	389	0.82	1.00	1.22	1.33	0.52	6.3	7.0	6.4	7.0	4.6	3.2	14.1
02	00-00	342	0.92	1.17	1.42	1.45	0.60	7.1	8.0	7.0	7.8	5.2	3.4	12.5
02	03-00	337	1.11	1.40	1.71	1.86	0.70	7.0	7.3	7.0	7.0	5.3	3.7	11.7
02	06-00	303	1.06	1.35	1.87	2.11	0.67	7.6	7.8	8.6	8.6	5.9	4.1	14.1
02	09-00	303	1.01	1.19	1.40	1.48	0.67	7.3	7.4	7.6	10.2	5.9	4.1	11.7
02	12-00	340	1.01	1.25	1.60	1.71	0.64	7.0	7.4	7.0	6.2	5.3	3.4	13.3
02	15-00	355	0.89	1.10	1.42	1.54	0.56	6.7	7.4	7.8	9.4	5.0	3.3	12.5
02	18-00	340	0.79	0.97	1.24	1.36	0.52	7.1	7.7	6.8	5.5	5.3	3.3	14.1
02	21-00	338	0.85	1.06	1.38	1.40	0.55	7.0	7.1	7.6	7.0	5.3	3.8	18.8
03	00-00	315	0.81	1.00	1.34	1.46	0.51	7.7	8.8	10.4	9.4	5.7	3.7	17.2
03	03-00	324	0.94	1.20	1.65	1.83	0.59	7.4	7.7	8.1	7.8	5.5	3.9	16.4
03	06-00	333	0.88	1.09	1.48	1.68	0.55	6.8	7.0	7.0	7.0	5.4	3.9	13.3
03	09-00	309	0.78	0.93	1.17	1.20	0.52	7.4	7.8	6.8	7.0	5.8	3.9	14.8
03	15-00	386	1.08	1.38	1.77	1.96	0.70	5.8	5.6	5.1	4.7	4.6	3.5	11.7
03	18-00	378	1.09	1.36	1.76	1.84	0.72	5.9	6.3	6.1	7.8	4.8	3.5	12.5
03	21-00	360	1.03	1.28	1.50	1.58	0.66	6.2	6.7	7.2	9.4	5.0	3.6	14.1
04	00-00	380	1.07	1.30	1.69	1.91	0.69	5.6	5.8	5.5	5.5	4.7	3.5	11.7
04	03-00	390	1.08	1.35	1.74	1.94	0.69	5.8	6.5	5.7	5.5	4.6	3.5	10.9
04	06-00	340	0.98	1.17	1.44	1.51	0.63	6.9	7.1	8.3	6.2	5.3	3.4	13.3
04	09-00	352	0.92	1.14	1.35	1.39	0.61	6.3	6.7	6.1	6.2	5.1	3.6	14.8
04	12-00	341	0.87	1.07	1.40	1.57	0.57	6.7	7.2	7.3	7.0	5.2	3.6	14.1
04	15-00	331	0.94	1.20	1.59	1.60	0.59	7.3	7.0	6.5	5.5	5.4	3.7	14.8
04	18-00	301	1.13	1.36	1.71	1.77	0.72	7.2	7.3	6.5	6.2	5.9	4.0	14.8
04	21-00	323	1.08	1.35	1.67	1.82	0.70	6.9	7.0	6.2	6.2	5.6	3.8	14.1
05	00-00	358	1.14	1.37	1.66	1.77	0.74	6.6	7.2	6.8	5.5	5.0	3.4	14.1
05	03-00	340	1.21	1.49	1.80	1.97	0.76	7.0	7.1	7.0	6.2	5.3	3.7	12.5
05	06-00	322	1.23	1.50	1.93	1.94	0.79	7.3	7.8	9.6	10.2	5.6	3.8	16.4
05	09-00	316	1.34	1.66	1.96	2.15	0.86	7.0	7.2	7.3	7.0	5.7	4.1	15.6
05	12-00	332	1.25	1.59	2.14	2.21	0.80	6.6	6.9	6.5	6.2	5.4	3.7	13.3
05	15-00	365	1.12	1.40	1.77	1.93	0.73	6.1	6.7	8.8	6.2	4.9	3.6	14.1
05	18-00	337	1.19	1.44	1.89	2.22	0.77	6.8	7.3	7.0	6.2	5.3	3.7	15.6
05	21-00	336	1.12	1.38	1.62	1.66	0.73	6.5	6.7	5.7	5.5	5.3	3.9	14.1
06	00-00	332	1.15	1.47	1.98	2.27	0.74	7.2	7.3	7.6	7.8	5.4	3.8	13.3
06	03-00	333	1.38	1.72	2.03	2.15	0.89	7.2	8.0	7.6	9.4	5.4	3.7	13.3
06	06-00	317	1.35	1.67	2.31	2.60	0.85	7.4	7.7	7.3	8.6	5.6	3.8	13.3
06	09-00	276	1.34	1.61	1.97	2.14	0.86	8.1	8.6	8.9	9.4	6.5	4.5	14.8
06	12-00	289	1.35	1.64	2.06	2.26	0.89	7.2	7.2	6.5	6.2	6.2	4.4	14.1
06	18-00	293	1.18	1.43	1.88	2.16	0.77	7.9	8.5	8.6	8.6	6.1	3.9	13.3
06	21-00	278	1.14	1.45	1.82	2.03	0.74	7.5	7.5	7.8	7.8	6.4	4.6	13.3

DIA	HORA	NA	HS (m)	H10 (m)	H100 (m)	HMAX (m)	HMED (m)	THS (s)	TH10 (s)	TH100 (s)	THMAX (s)	TZ (s)	TC (s)	TMAX (s)
07	00-00	290	1.16	1.46	1.91	2.28	0.75	7.2	7.2	7.6	6.2	6.2	4.7	10.9
07	03-00	298	1.17	1.42	1.68	1.76	0.72	7.9	8.1	6.8	6.2	6.0	4.3	14.1
07	06-00	270	1.15	1.41	1.91	2.23	0.75	8.2	8.4	7.8	7.0	6.7	4.3	15.6
07	09-00	249	0.97	1.22	1.58	1.73	0.61	8.6	9.1	8.6	7.8	7.2	5.2	16.4
07	12-00	267	1.05	1.29	1.58	1.61	0.68	8.0	7.9	7.3	6.2	6.7	4.9	13.3
07	15-00	284	0.97	1.21	1.52	1.57	0.61	8.7	8.8	9.4	7.8	6.3	3.9	14.8
07	18-00	282	1.00	1.21	1.45	1.54	0.61	9.4	10.1	9.9	9.4	6.3	3.5	14.1
07	21-00	252	0.95	1.18	1.64	1.84	0.56	10.0	10.2	10.4	10.9	7.1	4.1	13.3
08	00-00	277	0.91	1.16	1.53	1.61	0.54	8.9	9.1	9.4	7.0	6.5	4.2	13.3
08	03-00	294	0.92	1.16	1.44	1.49	0.58	8.4	9.1	9.1	9.4	6.1	4.1	14.1
08	06-00	314	0.96	1.22	1.52	1.65	0.59	8.2	8.9	7.8	7.0	5.7	3.8	13.3
08	09-00	278	0.74	0.92	1.15	1.26	0.46	9.1	9.6	9.6	7.8	6.4	3.7	13.3
08	12-00	316	0.78	0.96	1.19	1.28	0.50	7.7	8.7	7.8	7.8	5.7	3.7	13.3
08	15-00	324	0.85	1.05	1.19	1.24	0.56	7.1	7.3	7.3	9.4	5.5	4.0	12.5
08	18-00	333	0.85	1.08	1.35	1.37	0.54	7.3	7.9	9.1	8.6	5.4	3.5	11.7
08	21-00	256	0.66	0.80	0.97	1.03	0.42	9.0	8.9	8.3	7.8	7.0	4.7	14.8
09	00-00	256	0.82	0.98	1.12	1.14	0.52	9.0	8.9	9.6	9.4	7.0	4.4	14.1
09	03-00	252	0.84	1.05	1.29	1.36	0.53	8.7	8.4	8.3	9.4	7.1	4.9	14.1
09	06-00	270	0.92	1.16	1.58	1.67	0.60	8.4	8.5	9.1	7.8	6.6	4.2	12.5
09	09-00	257	0.94	1.17	1.48	1.59	0.58	8.8	9.1	8.9	9.4	7.0	4.6	13.3
09	12-00	233	0.93	1.19	1.90	1.95	0.57	9.1	9.0	8.6	8.6	7.7	5.5	14.8
09	15-00	231	0.98	1.26	1.65	1.68	0.64	9.2	9.1	9.0	8.6	7.7	5.2	14.1
09	18-00	246	0.90	1.12	1.35	1.43	0.59	9.4	9.5	9.0	8.6	7.3	4.4	14.1
09	21-00	229	0.93	1.20	1.57	1.71	0.56	9.7	9.6	8.6	9.4	7.8	4.6	14.8
10	00-00	254	0.77	0.99	1.37	1.65	0.47	9.0	8.9	8.6	7.8	7.0	4.0	13.3
10	03-00	287	0.91	1.13	1.41	1.48	0.57	8.3	8.4	8.1	7.8	6.2	4.1	12.5
10	06-00	367	1.05	1.27	1.51	1.56	0.68	6.3	6.7	6.2	7.0	4.9	3.5	11.7
10	09-00	410	0.99	1.23	1.45	1.51	0.64	6.0	7.0	8.6	10.2	4.4	3.2	10.2
10	12-00	392	1.07	1.33	1.77	2.03	0.67	6.1	5.8	6.2	5.5	4.6	3.4	11.7
10	15-00	357	1.06	1.31	1.64	1.73	0.68	6.2	6.6	7.2	8.6	5.0	3.7	11.7
10	18-00	314	1.13	1.40	1.70	1.77	0.72	7.1	7.9	7.3	7.0	5.7	4.3	14.8
10	21-00	234	1.54	1.85	2.29	2.30	0.96	10.2	10.2	10.2	10.9	7.7	4.8	14.8
11	00-00	257	1.14	1.43	1.86	1.96	0.73	8.5	8.1	8.3	8.6	6.9	5.0	14.8
11	03-00	248	1.33	1.65	2.07	2.10	0.84	9.0	8.9	9.4	9.4	7.2	5.1	15.6
11	06-00	274	1.28	1.59	1.92	2.04	0.82	8.6	8.9	8.3	7.8	6.5	4.3	14.8
11	12-00	222	1.13	1.46	1.73	1.78	0.69	9.5	9.5	9.4	10.2	8.0	6.0	14.1
11	15-00	231	1.09	1.34	1.99	2.26	0.71	9.4	9.4	9.8	10.2	7.7	5.4	13.3
11	18-00	263	1.06	1.34	1.62	1.63	0.65	8.9	9.2	8.6	7.8	6.8	4.6	13.3
12	00-00	249	0.84	1.04	1.41	1.45	0.54	8.6	8.8	8.2	7.0	7.2	5.3	14.1
12	03-00	266	0.86	1.07	1.28	1.34	0.53	8.7	9.0	8.9	8.6	6.7	4.2	13.3
12	06-00	324	0.84	1.08	1.50	1.69	0.53	8.1	9.0	9.9	10.2	5.5	3.3	12.5
12	09-00	333	0.94	1.22	1.65	1.74	0.58	8.2	9.5	10.7	10.9	5.4	3.2	12.5
12	12-00	376	0.94	1.19	1.56	1.64	0.60	6.1	7.1	7.8	8.6	4.8	3.5	12.5
12	15-00	366	1.24	1.58	2.15	2.34	0.81	5.8	5.6	6.2	5.5	4.9	3.8	12.5
12	18-00	374	1.61	2.04	2.59	2.89	1.02	5.7	5.6	5.5	5.5	4.8	3.9	10.2

DIA	HORA	NA	HS (m)	H10 (m)	H100 (m)	HMAX (m)	HMED (m)	THS (s)	TH10 (s)	TH100 (s)	THMAX (s)	TZ (s)	TC (s)	TMAX (s)
12	21-00	348	2.14	2.71	3.48	3.77	1.34	6.4	6.4	6.5	7.0	5.2	4.2	10.9
13	00-00	298	2.26	2.75	3.40	3.47	1.48	7.1	6.7	6.8	7.0	6.0	4.6	11.7
13	03-00	286	1.93	2.53	3.08	3.21	1.24	7.2	7.1	7.3	7.0	6.3	4.7	12.5
13	06-00	282	1.71	2.14	2.72	2.92	1.10	7.6	7.6	8.1	8.6	6.3	4.4	12.5
13	09-00	324	1.27	1.61	2.04	2.15	0.79	6.9	7.0	7.3	7.8	5.5	4.0	14.8
13	12-00	294	1.06	1.33	1.66	1.79	0.66	7.4	7.7	7.3	7.8	6.1	4.2	13.3
13	15-00	294	1.12	1.40	1.87	1.96	0.72	7.0	7.0	7.0	7.0	6.1	4.3	12.5
13	18-00	298	1.39	1.76	2.32	2.55	0.88	7.0	7.1	6.0	7.0	6.0	4.5	14.1
13	21-00	307	1.09	1.34	1.76	1.89	0.70	7.6	8.1	7.8	6.2	5.9	4.0	12.5
14	00-00	273	1.05	1.33	1.68	1.79	0.64	9.1	9.7	10.9	10.2	6.6	4.2	17.2
14	03-00	248	1.09	1.31	1.52	1.53	0.71	9.1	9.6	9.8	10.2	7.2	4.9	16.4
14	06-00	247	1.14	1.39	1.90	2.10	0.72	9.8	10.1	10.9	10.9	7.3	4.4	16.4
14	09-00	245	1.26	1.56	1.99	1.99	0.79	10.0	11.3	10.9	12.5	7.3	4.3	16.4
14	12-00	293	1.34	1.75	2.21	2.32	0.82	8.8	9.9	10.7	8.6	6.1	3.6	15.6
14	15-00	281	1.22	1.51	1.92	2.20	0.76	9.2	10.3	9.4	11.7	6.4	3.4	16.4
14	18-00	335	1.20	1.53	2.24	2.48	0.77	7.5	8.9	7.6	10.9	5.4	3.4	13.3
14	21-00	315	1.26	1.57	2.01	2.34	0.82	7.8	8.8	8.9	7.8	5.7	3.8	14.8
15	00-00	322	1.40	1.72	2.04	2.17	0.92	7.4	8.4	11.2	15.6	5.6	3.7	15.6
15	03-00	314	1.56	1.89	2.41	2.51	1.00	7.7	8.1	9.1	8.6	5.7	3.8	14.8
15	06-00	317	1.86	2.30	3.15	3.32	1.17	7.0	7.1	6.0	4.7	5.7	4.2	12.5
15	09-00	286	2.13	2.65	3.66	3.90	1.41	7.6	7.8	7.6	7.0	6.2	4.3	15.6
15	12-00	309	1.91	2.40	2.99	3.34	1.24	7.5	8.0	7.0	6.2	5.8	4.1	12.5
15	15-00	312	1.89	2.32	3.09	3.31	1.22	7.6	7.9	7.3	7.0	5.7	3.9	13.3
15	18-00	299	2.08	2.58	3.57	3.71	1.32	7.4	7.9	7.8	8.6	6.0	4.2	14.1
15	21-00	290	1.91	2.40	3.10	3.30	1.20	7.6	7.5	7.6	7.8	6.2	4.5	12.5
16	00-00	284	1.79	2.22	2.76	2.82	1.15	8.0	8.2	8.1	7.0	6.3	4.4	13.3
16	03-00	296	1.89	2.43	2.91	3.03	1.18	7.8	7.9	9.1	10.2	6.1	4.3	13.3
16	06-00	292	1.96	2.45	3.14	3.18	1.25	7.6	7.6	7.6	9.4	6.1	4.5	12.5
16	09-00	313	1.84	2.30	3.00	3.33	1.19	7.0	6.9	6.5	6.2	5.7	4.4	10.9
16	12-00	309	2.30	2.87	3.80	4.40	1.46	7.0	7.1	7.0	7.0	5.8	4.4	11.7
16	15-00	301	2.58	3.22	3.98	4.30	1.63	7.1	7.1	7.3	6.2	6.0	4.5	10.2
16	18-00	284	2.83	3.53	4.45	4.68	1.84	7.5	7.5	7.6	7.0	6.3	4.9	13.3
16	21-00	283	2.54	3.13	3.74	3.93	1.61	7.9	7.4	7.6	7.8	6.3	4.5	12.5
17	00-00	297	2.15	2.65	3.60	4.10	1.37	7.5	7.3	7.8	7.8	6.0	4.4	11.7
17	03-00	298	2.24	2.79	3.67	3.70	1.43	7.3	7.4	7.0	6.2	6.0	4.3	11.7
17	06-00	312	1.78	2.22	2.78	2.86	1.16	7.3	7.1	7.6	7.8	5.7	4.0	11.7
17	09-00	290	1.77	2.17	2.48	2.65	1.15	7.4	7.2	6.5	5.5	6.2	4.7	11.7
17	12-00	309	1.63	2.02	2.39	2.56	1.08	6.8	6.8	6.8	7.8	5.8	4.2	13.3
17	15-00	284	1.80	2.22	2.76	2.91	1.16	7.7	7.2	6.8	8.6	6.3	4.7	14.8
17	21-00	324	1.15	1.44	1.87	2.00	0.77	6.6	6.7	5.7	4.7	5.5	4.0	14.1
18	00-00	342	1.07	1.32	1.70	1.79	0.69	6.4	6.3	5.7	6.2	5.2	3.8	14.8
18	03-00	367	0.96	1.23	1.53	1.67	0.61	6.2	6.5	6.2	5.5	4.9	3.7	12.5
18	06-00	399	0.95	1.17	1.45	1.50	0.59	5.8	6.1	7.2	8.6	4.5	3.6	10.2
18	09-00	370	0.85	1.06	1.32	1.42	0.54	6.4	7.2	8.0	6.2	4.9	3.5	14.1
18	12-00	396	0.78	0.93	1.15	1.26	0.51	5.7	5.8	5.3	3.9	4.5	3.2	12.5

DIA	HORA	NA	HS (m)	H10 (m)	H100 (m)	HMAX (m)	HMED (m)	THS (s)	TH10 (s)	TH100 (s)	THMAX (s)	TZ (s)	TC (s)	TMAX (s)
18	15-00	391	0.86	1.07	1.28	1.35	0.55	5.7	6.0	5.9	5.5	4.6	3.3	11.7
18	18-00	410	0.98	1.25	1.52	1.61	0.63	5.4	5.3	4.9	4.7	4.4	3.3	13.3
18	21-00	420	1.13	1.39	1.73	2.03	0.74	4.9	4.9	4.5	4.7	4.3	3.4	11.7
19	00-00	401	1.45	1.87	2.38	2.63	0.92	5.1	5.3	5.3	4.7	4.5	3.6	9.4
19	03-00	333	2.16	2.57	3.07	3.16	1.38	6.0	5.8	5.2	4.7	5.4	4.2	9.4
19	06-00	311	2.67	3.49	5.09	5.56	1.68	6.8	6.8	7.6	7.8	5.8	4.6	9.4
19	09-00	295	2.39	2.97	4.03	4.42	1.49	7.2	7.3	7.6	7.8	6.1	4.5	10.9
19	15-00	305	1.97	2.42	2.94	2.98	1.25	7.4	7.2	7.8	7.8	5.9	4.2	10.2
19	18-00	278	2.04	2.58	3.17	3.27	1.30	7.7	7.4	7.0	7.0	6.4	4.4	10.9
19	21-00	293	1.59	2.01	2.51	2.74	1.01	7.3	7.4	7.3	7.0	6.1	4.3	10.9
20	00-00	295	1.73	2.11	2.44	2.50	1.11	7.2	7.2	7.0	5.5	6.1	4.5	10.2
20	03-00	295	1.84	2.36	3.29	3.73	1.18	7.2	7.3	7.3	7.8	6.1	4.4	10.9
20	06-00	305	1.84	2.42	3.02	3.10	1.18	7.3	7.6	6.5	7.0	5.9	4.3	12.5
20	09-00	274	2.33	2.87	3.71	3.91	1.56	8.1	8.4	8.6	7.0	6.5	4.8	12.5
20	12-00	303	2.09	2.57	3.20	3.64	1.34	7.5	7.7	7.8	7.0	5.9	4.5	12.5
20	15-00	307	2.09	2.57	3.32	3.57	1.33	7.5	7.1	6.2	5.5	5.8	4.4	10.9
20	18-00	316	1.94	2.36	3.05	3.34	1.22	7.3	7.7	7.3	7.8	5.7	4.2	13.3
21	00-00	309	1.69	2.15	3.12	3.75	1.09	6.9	7.4	6.5	6.2	5.8	4.2	13.3
21	03-00	317	1.68	2.11	2.62	2.73	1.07	7.4	8.3	9.1	8.6	5.6	4.0	14.8
21	06-00	302	1.76	2.18	2.83	3.20	1.11	8.1	9.1	10.2	9.4	5.9	4.0	14.1
21	09-00	329	2.02	2.48	3.17	3.24	1.28	6.5	6.2	6.2	7.0	5.5	4.0	10.9
21	12-00	328	2.14	2.68	3.45	3.61	1.37	6.6	6.6	6.5	7.0	5.4	4.3	10.2
21	15-00	331	2.33	2.93	3.96	4.13	1.44	6.7	6.9	6.5	5.5	5.4	4.3	12.5
21	18-00	294	2.39	2.93	3.43	3.54	1.49	7.2	7.1	7.3	7.8	6.1	4.2	12.5
21	21-00	281	2.13	2.59	3.22	3.28	1.33	7.8	7.9	8.3	8.6	6.4	4.3	10.9
22	00-00	280	2.21	2.86	3.88	4.27	1.40	7.7	7.7	7.8	7.0	6.4	4.7	11.7
22	03-00	280	2.25	2.84	3.93	4.39	1.36	8.0	8.0	8.3	7.8	6.4	4.8	12.5
22	06-00	278	2.12	2.63	3.38	3.81	1.32	8.0	8.0	7.3	7.0	6.4	4.6	13.3
22	09-00	292	2.01	2.49	3.24	3.44	1.23	7.9	7.7	8.1	8.6	6.2	4.0	12.5
22	12-00	307	2.03	2.47	2.99	3.06	1.30	7.3	7.4	7.3	7.0	5.8	4.3	10.9
22	15-00	303	2.09	2.60	3.21	3.29	1.32	7.4	7.3	7.0	7.0	5.9	4.4	11.7
22	18-00	305	1.94	2.41	2.98	3.04	1.22	7.6	7.4	7.3	5.5	5.9	4.3	11.7
22	21-00	273	1.84	2.36	3.02	3.22	1.16	8.3	8.6	8.1	7.8	6.5	4.6	12.5
23	00-00	270	1.64	2.04	2.42	2.62	1.05	7.8	8.0	7.3	7.8	6.6	4.8	12.5
23	03-00	290	1.63	2.09	2.64	2.71	1.01	7.5	7.6	7.3	7.8	6.2	5.0	11.7
23	06-00	285	1.59	1.94	2.47	2.58	1.02	7.5	7.2	6.8	6.2	6.3	4.6	11.7
23	09-00	293	1.61	1.99	2.56	2.61	1.01	7.7	7.8	7.8	7.0	6.1	4.4	11.7
23	12-00	313	1.41	1.77	2.28	2.62	0.90	7.2	7.3	7.8	8.6	5.7	4.0	11.7
23	15-00	326	1.62	1.94	2.45	2.58	1.06	6.9	7.1	6.5	7.0	5.5	4.0	10.9
23	18-00	339	1.80	2.18	2.71	2.80	1.14	6.3	6.1	6.5	6.2	5.3	4.1	10.9
23	21-00	347	1.90	2.35	2.99	3.10	1.21	6.3	6.4	6.5	6.2	5.2	4.0	9.4
24	00-00	301	2.19	2.71	3.54	3.80	1.40	6.9	7.1	6.8	7.0	6.0	4.4	10.2
24	03-00	316	2.08	2.63	3.43	3.48	1.33	6.9	7.0	7.0	7.0	5.7	4.2	11.7
24	06-00	322	2.47	3.16	4.26	4.64	1.53	7.0	7.1	7.0	7.0	5.6	4.3	10.2
24	09-00	294	2.82	3.49	4.81	5.14	1.77	7.5	7.6	7.8	7.8	6.1	4.6	11.7

DIA	HORA	NA	HS (m)	H10 (m)	H100 (m)	HMAX (m)	HMED (m)	THS (s)	TH10 (s)	TH100 (s)	THMAX (s)	TZ (s)	TC (s)	TMAX (s)
24	12-00	287	2.86	3.55	4.72	4.86	1.81	7.8	7.7	8.3	7.8	6.3	4.5	11.7
24	15-00	301	2.78	3.45	4.32	4.55	1.70	7.6	7.8	8.1	7.8	6.0	4.3	12.5
24	18-00	270	3.15	3.90	4.75	4.82	1.97	8.5	8.8	8.1	8.6	6.6	4.7	11.7
24	21-00	215	4.12	5.41	8.09	8.11	2.52	10.2	9.9	10.2	10.2	8.3	5.4	15.6
25	00-00	218	3.94	4.64	5.53	5.63	2.51	10.1	10.8	10.9	10.9	8.2	5.0	15.6
25	06-00	226	3.27	4.25	5.47	5.73	2.03	10.5	11.1	10.5	10.9	7.9	5.2	14.8
25	09-00	211	3.63	4.53	5.97	6.50	2.33	10.5	10.5	9.8	10.2	8.5	6.0	14.8
25	12-00	231	3.39	4.24	5.24	5.44	2.09	10.1	9.9	9.0	8.6	7.7	5.0	15.6
25	15-00	250	2.85	3.71	4.62	4.89	1.72	9.4	9.4	9.6	8.6	7.2	5.2	14.8
25	18-00	229	2.92	3.66	4.36	4.39	1.86	9.7	9.7	9.0	9.4	7.8	5.4	15.6
25	21-00	218	2.78	3.64	4.75	5.07	1.74	10.1	10.1	10.5	10.2	8.2	5.9	16.4
26	00-00	251	2.15	2.66	3.38	3.48	1.35	8.6	8.8	8.9	9.4	7.1	4.8	13.3
26	03-00	244	1.90	2.45	3.32	3.32	1.20	8.7	8.6	7.8	7.8	7.3	5.0	14.1
26	06-00	260	1.72	2.15	2.70	2.87	1.05	9.1	9.1	9.4	10.2	6.9	4.8	13.3
26	09-00	267	1.51	1.89	2.55	2.93	0.95	8.9	9.3	9.4	10.2	6.7	4.6	14.8
26	12-00	265	1.44	1.83	2.44	2.63	0.89	8.7	8.9	8.9	7.0	6.8	4.1	13.3
26	15-00	320	1.15	1.47	1.84	1.95	0.72	7.5	7.9	7.0	7.0	5.6	3.8	10.9
26	18-00	321	1.15	1.42	1.87	1.96	0.75	7.1	7.2	8.1	9.4	5.6	3.8	12.5
26	21-00	331	1.18	1.48	1.83	1.95	0.75	7.1	7.4	7.8	9.4	5.4	3.9	11.7
27	00-00	332	1.20	1.45	1.74	1.76	0.74	7.2	7.8	7.0	6.2	5.4	3.7	10.9
27	03-00	341	1.05	1.30	1.70	1.83	0.67	6.7	7.0	7.3	7.8	5.3	3.8	12.5
27	06-00	320	1.11	1.36	1.71	1.79	0.73	6.8	6.8	6.2	6.2	5.6	4.1	11.7
27	09-00	304	1.19	1.49	1.92	1.98	0.77	7.7	7.9	6.8	5.5	5.9	4.2	13.3
27	12-00	276	1.38	1.74	2.16	2.37	0.86	8.5	8.5	8.3	7.0	6.5	4.4	11.7
27	15-00	217	1.71	2.05	2.80	3.15	1.16	9.7	9.6	9.4	8.6	8.3	5.3	14.8
27	18-00	261	1.51	1.91	2.44	2.53	0.94	9.2	9.2	8.3	8.6	6.9	4.4	12.5
27	21-00	226	1.77	2.17	2.63	2.74	1.12	10.0	10.1	10.2	10.2	7.9	5.4	13.3
28	00-00	221	1.79	2.33	2.85	3.05	1.13	9.9	9.9	9.4	10.2	8.1	5.3	13.3
28	03-00	219	1.77	2.15	2.60	2.68	1.10	9.7	9.6	9.8	10.2	8.2	5.7	14.1
28	06-00	235	1.82	2.30	3.08	3.31	1.12	9.6	9.6	10.2	10.9	7.6	5.4	16.4
28	09-00	231	1.84	2.40	3.08	3.15	1.11	10.2	10.7	10.5	10.2	7.7	5.1	14.8
28	12-00	229	1.61	1.99	2.52	2.62	1.03	10.1	10.4	9.0	8.6	7.8	4.6	14.1
28	15-00	212	1.91	2.30	2.73	2.80	1.23	10.1	10.1	10.5	10.9	8.5	4.5	14.8
28	18-00	234	1.85	2.23	2.68	2.77	1.20	9.7	9.6	9.0	9.4	7.6	4.8	13.3
28	21-00	240	1.90	2.28	2.98	3.35	1.18	9.7	9.7	9.0	9.4	7.5	4.5	14.1
29	00-00	247	1.64	1.99	2.43	2.50	1.05	9.8	9.9	8.6	8.6	7.3	4.1	14.1
29	03-00	278	1.60	2.02	2.41	2.46	0.99	9.2	9.8	9.4	7.8	6.4	3.8	14.1
29	06-00	286	1.61	2.00	2.39	2.48	1.04	8.7	9.7	8.6	7.0	6.3	3.9	14.1
29	09-00	311	1.54	1.90	2.32	2.43	0.95	8.1	9.0	9.6	9.4	5.8	3.9	13.3
29	12-00	305	1.56	1.89	2.37	2.55	1.01	8.2	9.1	10.7	9.4	5.9	3.9	14.1
29	15-00	284	1.50	1.88	2.40	2.45	0.98	8.4	9.0	7.8	7.8	6.3	4.1	13.3
29	18-00	285	1.61	2.05	2.45	2.49	1.05	8.0	8.1	8.1	6.2	6.3	4.2	12.5
29	21-00	285	1.65	2.11	2.53	2.73	1.02	8.5	8.9	8.1	7.0	6.3	4.2	13.3
30	00-00	303	1.72	2.15	2.77	2.93	1.04	8.3	9.3	9.1	10.2	5.9	3.9	12.5
30	03-00	302	1.55	1.98	2.29	2.33	0.96	8.4	9.0	9.4	7.8	5.9	3.9	13.3

PARAMETROS CALCULADOS PELO METODO DIRECTO SMIGUEL OUT 2006

DIA	HORA	NA	HS (m)	H10 (m)	H100 (m)	HMAX (m)	HMED (m)	THS (s)	TH10 (s)	TH100 (s)	THMAX (s)	TZ (s)	TC (s)	TMAX (s)
30	06-00	323	1.55	1.96	2.29	2.32	0.98	7.4	8.4	9.9	9.4	5.6	3.7	12.5
30	09-00	311	1.57	1.93	2.44	2.47	1.01	7.7	7.7	9.1	10.2	5.8	3.9	12.5
30	12-00	339	1.28	1.61	2.28	2.38	0.82	7.1	7.7	8.3	9.4	5.3	3.5	13.3
30	15-00	330	1.49	1.87	2.31	2.56	0.96	7.5	8.3	7.8	8.6	5.4	3.8	12.5
30	18-00	320	1.55	1.91	2.38	2.75	0.98	7.3	8.1	7.8	7.0	5.6	3.9	11.7
30	21-00	291	1.40	1.73	2.11	2.14	0.90	8.1	8.9	9.1	10.2	6.2	4.1	12.5
31	00-00	298	1.43	1.78	2.36	2.50	0.87	7.7	7.9	7.6	7.8	6.0	4.1	11.7
31	03-00	302	1.43	1.79	2.33	2.64	0.90	7.5	7.9	8.3	7.8	5.9	4.3	11.7
31	06-00	289	1.31	1.65	2.18	2.25	0.82	7.6	7.5	7.3	7.8	6.2	4.2	12.5
31	09-00	334	1.37	1.71	2.24	2.28	0.84	6.8	7.2	7.8	7.0	5.4	4.0	12.5
31	12-00	307	1.84	2.23	2.89	3.13	1.14	7.4	7.2	7.6	7.0	5.8	4.1	11.7
31	15-00	300	1.94	2.38	2.84	2.85	1.25	7.8	7.8	7.8	9.4	6.0	4.0	11.7
31	18-00	281	2.01	2.46	2.99	3.04	1.27	8.0	8.0	9.1	8.6	6.3	4.2	11.7
31	21-00	291	1.71	2.07	2.70	2.96	1.08	7.9	8.1	7.3	7.8	6.2	4.3	11.7

DIA	HORA	NA	HS (m)	H10 (m)	H100 (m)	HMAX (m)	HMED (m)	THS (s)	TH10 (s)	TH100 (s)	THMAX (s)	TZ (s)	TC (s)	TMAX (s)
01	00-00	273	1.73	2.23	2.93	3.17	1.09	8.1	8.2	8.3	7.8	6.6	4.6	11.7
01	03-00	290	1.67	2.12	3.10	3.66	1.03	7.5	7.9	8.3	7.8	6.2	4.4	10.9
01	06-00	278	1.72	2.16	2.66	2.87	1.10	7.6	7.5	6.8	6.2	6.4	4.7	11.7
01	09-00	290	1.57	1.97	2.37	2.45	1.01	7.4	7.5	7.3	8.6	6.2	4.3	11.7
01	12-00	284	1.72	2.13	2.61	2.64	1.10	7.5	7.5	8.3	8.6	6.3	4.5	10.9
01	15-00	310	1.47	1.87	2.28	2.37	0.90	7.7	7.8	8.6	7.8	5.8	3.9	11.7
01	18-00	273	1.39	1.76	2.21	2.40	0.88	7.9	8.1	8.3	7.8	6.6	4.3	10.9
01	21-00	276	1.27	1.59	2.14	2.57	0.80	7.9	8.0	7.8	7.8	6.5	4.1	12.5
02	00-00	251	1.43	1.83	2.30	2.44	0.89	8.5	8.5	8.1	6.2	7.1	4.5	14.1
02	03-00	235	1.44	1.80	2.29	2.33	0.91	9.9	10.6	10.9	10.9	7.6	4.2	15.6
02	06-00	251	1.42	1.75	2.08	2.19	0.86	9.1	9.0	9.4	10.2	7.1	4.6	16.4
02	09-00	231	1.21	1.49	2.01	2.10	0.79	9.7	10.0	10.5	10.9	7.7	4.7	17.2
02	12-00	213	1.34	1.69	2.36	2.51	0.82	11.4	11.3	10.9	10.2	8.4	4.5	15.6
02	15-00	223	1.30	1.70	2.32	2.33	0.80	10.7	10.3	9.4	9.4	8.0	4.3	16.4
02	18-00	207	1.25	1.61	2.36	2.70	0.79	11.4	11.5	10.9	10.9	8.6	5.0	15.6
02	21-00	214	1.28	1.55	1.93	1.95	0.81	10.7	10.5	10.2	9.4	8.4	4.7	17.2
03	00-00	206	1.25	1.55	1.79	1.85	0.79	11.4	11.9	12.9	13.3	8.7	4.3	17.2
03	03-00	215	1.32	1.59	2.05	2.09	0.80	11.4	11.9	11.7	10.9	8.3	3.5	15.6
03	06-00	231	1.29	1.69	2.07	2.18	0.74	11.6	12.2	11.7	10.9	7.7	3.7	16.4
03	09-00	225	1.15	1.50	1.98	2.18	0.68	11.4	11.5	10.5	11.7	7.9	4.0	14.8
03	12-00	240	1.29	1.57	1.90	2.07	0.81	10.5	11.0	10.9	10.2	7.5	3.4	14.8
03	15-00	252	1.27	1.57	2.00	2.04	0.76	10.2	10.7	10.7	10.9	7.1	3.5	14.8
03	21-00	230	1.10	1.42	1.94	2.05	0.67	10.3	10.7	10.9	10.9	7.7	4.1	14.1
04	00-00	229	1.05	1.34	1.86	2.05	0.63	10.2	10.8	10.2	10.9	7.8	4.7	14.1
04	03-00	249	0.94	1.16	1.42	1.43	0.56	10.0	10.0	9.8	10.9	7.2	4.2	14.1
04	09-00	254	0.77	0.99	1.29	1.36	0.48	9.7	9.9	10.4	10.2	7.0	4.2	14.1
04	12-00	289	0.85	1.11	1.37	1.45	0.50	9.4	10.0	9.6	10.2	6.2	3.5	12.5
04	15-00	302	0.71	0.90	1.18	1.22	0.43	8.5	9.2	9.4	10.2	5.9	3.5	11.7
04	18-00	292	0.76	0.98	1.23	1.24	0.44	8.9	9.6	9.9	10.2	6.1	3.8	13.3
04	21-00	306	0.67	0.82	1.09	1.18	0.42	8.4	8.6	9.1	8.6	5.9	3.8	12.5
05	00-00	273	0.62	0.76	0.91	0.93	0.39	8.5	8.5	9.6	9.4	6.6	4.0	14.8
05	03-00	279	0.60	0.74	0.85	0.86	0.38	8.6	8.7	8.6	9.4	6.4	3.8	12.5
05	06-00	278	0.57	0.71	0.93	1.03	0.35	8.6	9.3	8.9	8.6	6.4	4.3	13.3
05	09-00	210	0.54	0.67	0.86	0.90	0.33	8.1	7.8	6.6	6.2	6.0	4.1	13.3
05	12-00	196	0.51	0.63	0.73	0.74	0.33	8.0	8.3	8.6	7.8	6.1	4.2	13.3
05	15-00	338	0.46	0.57	0.76	0.91	0.29	8.0	8.8	8.9	8.6	5.3	3.2	14.1
05	18-00	361	0.45	0.57	0.72	0.80	0.29	7.4	8.2	9.2	8.6	5.0	3.0	11.7
05	21-00	283	0.46	0.57	0.73	0.77	0.28	8.5	9.7	8.9	8.6	6.3	3.9	14.1
06	00-00	272	0.45	0.56	0.71	0.77	0.30	8.5	8.7	8.9	8.6	6.6	4.6	14.8
06	03-00	272	0.44	0.55	0.69	0.80	0.28	9.1	9.3	9.1	9.4	6.6	4.0	14.8
06	06-00	324	0.41	0.52	0.63	0.65	0.25	8.1	9.3	9.1	10.9	5.5	3.2	13.3
06	09-00	341	0.44	0.54	0.70	0.71	0.27	7.9	9.0	10.4	10.9	5.3	3.2	14.1
06	12-00	309	0.42	0.53	0.64	0.65	0.27	8.2	8.2	9.6	10.2	5.8	3.6	13.3
06	15-00	322	0.39	0.50	0.63	0.64	0.24	8.4	10.7	12.0	8.6	5.5	3.4	16.4
06	18-00	340	0.40	0.51	0.69	0.74	0.26	7.6	9.6	12.0	11.7	5.3	3.4	15.6

DIA	HORA	NA	HS (m)	H10 (m)	H100 (m)	HMAX (m)	HMED (m)	THS (s)	TH10 (s)	TH100 (s)	THMAX (s)	TZ (s)	TC (s)	TMAX (s)
06	21-00	264	0.41	0.52	0.61	0.68	0.25	9.6	10.7	10.2	11.7	6.8	3.8	15.6
07	00-00	225	0.43	0.53	0.66	0.71	0.28	10.1	10.4	11.3	11.7	7.6	4.6	14.8
07	03-00	237	0.47	0.58	0.79	0.85	0.30	10.3	10.4	9.8	10.9	7.6	4.1	15.6
07	06-00	263	0.55	0.73	0.93	1.03	0.32	10.3	10.5	10.4	10.2	6.8	3.7	14.1
07	09-00	150	0.61	0.81	0.98	1.00	0.36	10.2	10.3	10.5	10.2	7.7	4.4	13.3
07	12-00	378	0.52	0.66	0.79	0.89	0.33	7.2	8.5	9.8	11.7	4.7	2.8	12.5
07	15-00	351	0.53	0.68	0.83	0.85	0.33	8.1	9.1	9.6	10.2	5.1	2.9	12.5
07	18-00	385	0.58	0.74	0.94	1.07	0.35	7.4	8.8	9.4	10.2	4.7	2.8	13.3
07	21-00	331	0.53	0.68	0.79	0.83	0.31	8.9	9.8	10.2	10.9	5.4	2.7	13.3
08	00-00	427	0.58	0.74	0.94	1.06	0.38	5.9	7.4	8.2	6.2	4.2	2.9	12.5
08	03-00	453	0.65	0.81	1.01	1.24	0.43	5.0	6.1	6.2	7.8	4.0	3.0	11.7
08	06-00	479	0.70	0.88	1.17	1.24	0.45	4.7	4.8	4.8	3.9	3.7	3.0	11.7
08	09-00	447	0.78	0.96	1.20	1.23	0.51	4.9	4.9	6.2	3.9	4.0	2.9	10.2
08	12-00	424	0.97	1.18	1.41	1.45	0.64	4.8	4.6	4.3	4.7	4.2	3.4	12.5
08	15-00	444	1.00	1.27	1.64	1.75	0.64	4.8	5.0	4.7	3.9	4.0	3.3	10.9
08	18-00	409	1.28	1.57	1.92	1.99	0.84	5.1	5.1	6.1	6.2	4.4	3.6	10.9
08	21-00	382	1.53	1.97	2.65	3.20	0.98	5.7	5.9	5.5	4.7	4.7	3.7	9.4
09	00-00	313	2.00	2.48	3.08	3.28	1.32	6.6	6.7	6.5	6.2	5.7	4.3	12.5
09	03-00	314	2.25	2.88	3.71	3.93	1.40	7.2	7.3	8.1	7.8	5.7	4.3	10.2
09	06-00	310	2.11	2.54	3.01	3.25	1.30	7.3	7.2	8.6	7.8	5.8	4.4	10.9
09	09-00	316	2.16	2.79	3.63	3.67	1.33	7.1	7.2	7.6	7.8	5.7	4.1	10.9
09	12-00	325	2.00	2.48	2.95	3.03	1.24	6.9	7.2	6.8	6.2	5.5	4.2	10.2
09	15-00	337	1.89	2.34	3.05	3.23	1.18	6.6	6.7	5.7	4.7	5.3	4.1	9.4
09	18-00	310	2.21	2.75	3.53	4.24	1.43	6.8	6.8	7.3	6.2	5.8	4.3	11.7
09	21-00	290	2.89	3.60	4.47	4.53	1.84	7.5	7.5	7.6	7.8	6.2	4.5	10.9
10	00-00	292	2.56	3.11	3.88	3.99	1.60	7.6	7.6	7.0	7.0	6.1	4.7	10.9
10	03-00	271	2.69	3.42	4.47	4.62	1.68	8.0	8.1	8.3	9.4	6.6	4.7	10.9
10	06-00	261	2.77	3.48	4.13	4.47	1.80	8.4	8.5	8.6	8.6	6.9	4.7	11.7
10	09-00	272	2.64	3.17	3.87	4.36	1.69	7.9	8.2	7.8	7.0	6.6	4.8	10.9
10	12-00	293	2.33	2.96	3.72	3.78	1.49	7.3	7.7	8.3	8.6	6.1	4.6	10.2
10	15-00	293	2.35	2.85	3.40	3.45	1.49	7.5	7.7	7.6	7.0	6.1	4.2	10.2
11	00-00	311	1.87	2.35	3.00	3.15	1.18	7.2	7.1	7.3	7.8	5.8	4.2	10.9
11	03-00	326	1.76	2.21	2.71	2.76	1.13	7.0	7.4	7.8	7.0	5.5	3.9	10.2
11	09-00	325	2.01	2.57	3.21	3.58	1.27	6.9	6.7	7.0	7.0	5.5	4.1	10.2
11	12-00	321	2.09	2.56	2.93	3.05	1.32	6.6	6.8	6.8	7.0	5.6	4.2	10.9
11	15-00	319	2.23	2.80	3.85	4.38	1.41	6.8	6.8	6.8	6.2	5.6	4.3	11.7
11	18-00	312	2.09	2.56	3.30	3.47	1.33	6.8	6.9	7.0	7.0	5.7	4.3	10.9
11	21-00	321	1.87	2.32	2.99	3.19	1.20	7.1	7.2	7.8	7.8	5.6	4.0	11.7
12	00-00	309	2.15	2.64	3.69	4.17	1.37	7.1	7.2	8.1	7.8	5.8	4.1	10.9
12	03-00	312	2.11	2.62	3.41	3.63	1.38	7.2	7.4	7.6	7.0	5.7	4.3	10.9
12	09-00	295	2.22	2.70	3.59	4.55	1.45	7.5	7.4	7.3	7.0	6.1	4.3	10.9
12	12-00	296	2.25	2.78	3.33	3.64	1.43	7.4	7.6	7.6	7.0	6.0	4.5	10.9
12	15-00	303	2.10	2.59	3.43	4.03	1.34	7.3	7.4	7.3	7.0	5.9	4.2	10.2
12	18-00	289	1.97	2.46	3.26	3.58	1.26	7.6	7.6	7.0	7.0	6.2	4.2	11.7
13	00-00	334	1.55	1.93	2.34	2.49	0.96	7.1	7.4	7.0	6.2	5.4	3.9	10.9

DIA	HORA	NA	HS (m)	H10 (m)	H100 (m)	HMAX (m)	HMED (m)	THS (s)	TH10 (s)	TH100 (s)	THMAX (s)	TZ (s)	TC (s)	TMAX (s)
13	03-00	303	1.62	2.03	2.75	3.02	1.02	7.5	7.8	7.6	8.6	5.9	4.1	10.9
13	15-00	292	1.23	1.49	1.80	1.83	0.78	7.5	7.4	7.0	7.8	6.1	4.0	11.7
13	18-00	278	1.16	1.38	1.62	1.63	0.76	7.7	8.0	7.0	7.8	6.4	4.1	13.3
13	21-00	291	1.02	1.29	1.65	1.84	0.64	7.5	7.7	7.6	7.8	6.1	4.3	11.7
14	03-00	281	0.95	1.21	1.47	1.66	0.61	7.5	7.4	7.3	7.0	6.4	4.8	11.7
14	06-00	264	0.94	1.20	1.56	1.70	0.61	7.7	8.0	7.0	7.0	6.8	5.3	12.5
14	12-00	288	0.86	1.08	1.48	1.72	0.55	7.3	7.4	7.0	6.2	6.2	4.6	12.5
14	15-00	306	0.86	1.04	1.31	1.34	0.56	7.1	7.3	7.6	7.8	5.9	3.7	10.9
14	21-00	335	0.82	1.05	1.45	1.67	0.52	7.1	7.2	7.0	6.2	5.3	3.5	11.7
15	00-00	356	0.78	1.00	1.18	1.23	0.50	7.1	7.9	7.6	8.6	5.0	3.3	14.1
15	09-00	357	1.10	1.34	1.61	1.66	0.72	6.1	6.6	6.8	5.5	5.0	3.6	15.6
15	21-00	303	1.58	1.93	2.61	3.41	1.01	7.5	7.7	7.3	7.8	5.9	4.2	12.5
16	06-00	289	1.41	1.76	2.11	2.27	0.94	7.9	8.4	10.4	10.9	6.2	4.1	16.4
16	15-00	308	1.51	1.94	2.36	2.49	0.93	8.2	9.1	7.8	9.4	5.8	3.9	14.1
16	18-00	309	1.26	1.58	2.12	2.37	0.79	8.1	9.1	8.6	7.8	5.8	3.7	14.8
16	21-00	303	1.16	1.46	1.77	1.92	0.73	8.2	9.3	8.1	6.2	5.9	3.9	14.8
17	00-00	324	1.37	1.69	2.19	2.43	0.89	7.1	7.9	10.7	8.6	5.5	3.7	15.6
17	03-00	327	1.55	1.90	2.52	2.83	1.02	6.8	7.3	7.8	8.6	5.5	3.9	12.5
17	06-00	338	1.41	1.73	2.32	2.46	0.91	6.8	7.4	7.0	7.8	5.3	3.8	12.5
17	09-00	331	1.52	1.87	2.37	2.49	0.96	6.7	7.0	7.3	7.8	5.4	3.9	14.1
17	12-00	329	1.35	1.74	2.26	2.41	0.88	6.6	7.3	8.3	7.0	5.4	3.8	12.5
17	15-00	327	1.51	1.96	2.66	3.07	0.97	7.0	7.7	9.6	9.4	5.5	3.9	13.3
17	18-00	357	1.45	1.80	2.39	2.55	0.93	6.3	6.6	5.9	5.5	5.0	3.8	14.1
17	21-00	329	1.49	1.81	2.15	2.17	0.98	6.6	7.0	6.8	6.2	5.4	4.1	15.6
18	00-00	349	1.46	1.82	2.22	2.34	0.93	6.5	6.8	6.0	5.5	5.1	3.9	12.5
18	03-00	320	1.69	2.11	2.57	2.66	1.09	7.0	6.8	5.5	5.5	5.6	4.1	12.5
18	06-00	340	2.01	2.50	3.09	3.24	1.29	6.3	6.2	6.8	7.0	5.3	4.0	14.1
18	09-00	314	1.90	2.34	3.14	3.56	1.23	6.7	6.6	6.2	6.2	5.7	4.2	11.7
18	12-00	290	2.26	2.82	3.41	3.55	1.43	7.3	7.5	7.6	7.8	6.2	4.7	10.9
18	15-00	267	1.89	2.32	2.90	3.49	1.26	8.2	8.0	7.8	7.0	6.7	4.5	13.3
18	18-00	271	1.45	1.73	2.09	2.31	0.92	8.3	8.5	9.4	10.9	6.6	4.3	14.8
18	21-00	247	1.45	1.81	2.20	2.20	0.90	9.3	9.7	9.8	10.9	7.3	4.8	17.2
19	00-00	254	1.49	1.82	2.18	2.33	0.98	8.7	8.7	8.9	6.2	7.0	4.9	18.0
19	03-00	259	1.55	1.90	2.29	2.36	0.98	8.9	9.0	10.4	7.8	6.9	4.6	14.8
19	06-00	244	1.31	1.66	2.03	2.09	0.84	9.3	10.0	10.9	10.9	7.3	4.4	14.8
19	09-00	279	1.02	1.32	1.62	1.70	0.60	9.8	10.9	9.9	12.5	6.4	3.6	18.0
19	12-00	257	0.89	1.13	1.28	1.31	0.54	10.5	11.4	10.4	10.9	7.0	3.6	15.6
19	15-00	253	1.00	1.32	1.64	1.74	0.59	10.5	11.3	10.2	9.4	7.1	3.6	17.2
19	18-00	268	1.01	1.30	1.69	1.83	0.61	10.2	11.9	11.2	10.9	6.7	3.5	18.0
19	21-00	245	0.85	1.10	1.40	1.49	0.51	11.0	12.8	9.8	10.2	7.3	3.6	19.5
20	00-00	217	0.87	1.11	1.48	1.54	0.53	12.7	14.7	14.8	13.3	8.3	4.1	17.2
20	03-00	213	0.89	1.11	1.44	1.45	0.54	13.4	14.1	14.5	12.5	8.4	4.0	18.8
20	06-00	240	0.74	0.90	1.07	1.09	0.46	11.2	12.2	14.1	14.8	7.4	3.8	17.2
20	09-00	237	0.67	0.85	1.08	1.12	0.41	10.4	12.0	12.9	13.3	7.5	4.3	17.2
20	12-00	120	0.73	0.90	0.98	0.98	0.45	13.5	13.6	14.1	14.1	9.4	4.1	18.0

DIA	HORA	NA	HS (m)	H10 (m)	H100 (m)	HMAX (m)	HMED (m)	THS (s)	TH10 (s)	TH100 (s)	THMAX (s)	TZ (s)	TC (s)	TMAX (s)
20	15-00	218	0.67	0.83	1.12	1.22	0.40	13.0	13.9	15.2	14.8	8.2	3.6	17.2
20	18-00	228	0.78	0.96	1.10	1.10	0.46	12.6	13.6	13.3	11.7	7.8	3.9	18.8
20	21-00	252	0.69	0.86	1.26	1.37	0.41	11.4	13.0	15.4	17.2	7.1	3.6	17.2
21	00-00	291	0.78	0.98	1.24	1.34	0.49	9.0	12.0	12.2	6.2	6.2	3.5	18.0
21	03-00	254	0.85	1.05	1.31	1.43	0.54	10.5	12.2	13.0	11.7	7.0	3.8	18.8
21	06-00	255	0.94	1.20	1.39	1.42	0.58	10.7	11.5	10.4	7.8	7.0	3.9	18.8
21	09-00	237	0.95	1.14	1.39	1.46	0.63	10.1	11.0	16.0	15.6	7.5	4.7	19.5
21	12-00	242	1.20	1.47	1.85	1.88	0.76	9.6	10.7	10.9	9.4	7.4	5.1	15.6
21	15-00	234	1.12	1.36	1.71	1.71	0.73	9.5	10.1	12.9	14.8	7.6	5.0	18.8
21	18-00	229	1.23	1.50	1.83	1.86	0.81	9.6	10.0	9.8	7.8	7.8	4.8	19.5
21	21-00	226	1.20	1.49	1.83	1.84	0.76	10.7	10.5	7.4	7.0	7.9	4.8	16.4
22	00-00	243	1.03	1.37	1.82	1.85	0.64	10.2	11.7	14.5	14.1	7.4	4.6	18.8
22	03-00	223	0.96	1.18	1.48	1.49	0.60	11.1	11.9	12.9	14.1	8.0	5.0	17.2
22	06-00	265	1.07	1.33	1.68	1.95	0.66	9.7	10.6	11.5	14.1	6.7	3.5	15.6
22	09-00	312	1.03	1.28	1.54	1.63	0.64	8.4	9.3	8.6	8.6	5.8	3.2	15.6
22	12-00	355	1.17	1.47	2.00	2.26	0.75	7.2	8.2	11.3	10.9	5.1	3.5	15.6
22	15-00	360	1.40	1.69	2.12	2.37	0.93	6.1	7.1	7.2	10.9	5.0	3.7	13.3
22	18-00	342	1.66	2.05	2.94	3.30	1.10	6.3	6.0	6.2	5.5	5.3	4.1	15.6
23	03-00	311	2.13	2.65	3.32	3.52	1.34	6.8	6.7	7.0	6.2	5.8	4.4	13.3
23	06-00	296	2.00	2.53	3.22	3.52	1.27	7.4	7.6	7.6	7.0	6.1	4.5	11.7
23	09-00	280	1.67	2.17	3.13	3.41	1.02	7.9	8.0	7.8	7.8	6.4	4.4	14.1
23	12-00	326	1.63	2.00	2.65	2.74	1.07	7.1	7.3	6.8	7.0	5.5	4.0	12.5
23	15-00	325	1.93	2.36	3.11	3.60	1.28	6.8	6.9	6.8	5.5	5.5	4.0	12.5
23	21-00	296	2.70	3.42	4.48	4.78	1.71	7.6	7.6	7.3	8.6	6.0	4.5	12.5
24	00-00	289	3.18	4.01	4.88	4.96	1.95	7.9	8.1	7.8	8.6	6.2	4.7	11.7
24	03-00	255	4.19	5.16	6.32	6.95	2.66	8.2	8.7	8.9	9.4	7.0	5.1	13.3
24	06-00	231	4.92	6.02	8.20	8.59	3.13	9.2	9.3	9.8	9.4	7.7	5.6	14.1
24	06-41	225	4.94	6.12	8.19	8.45	3.17	9.5	9.7	9.0	8.6	7.9	5.6	14.1
24	07-43	211	5.29	6.63	8.68	8.83	3.35	10.3	10.4	10.5	10.2	8.5	5.8	14.1
24	08-13	208	5.41	6.56	8.23	8.47	3.40	10.7	10.7	10.9	10.9	8.6	6.0	14.8
24	08-43	205	4.94	6.00	7.19	7.24	3.15	10.3	9.9	10.2	9.4	8.7	5.5	14.8
24	12-00	232	4.06	5.14	6.50	6.70	2.49	10.1	10.4	11.3	9.4	7.7	5.1	14.8
24	15-00	222	3.85	4.71	5.82	6.04	2.45	10.3	10.1	9.4	7.8	8.1	5.2	17.2
24	18-00	225	4.24	5.25	7.22	7.62	2.62	10.9	11.1	10.5	10.9	7.9	5.2	17.2
24	21-00	201	4.37	5.34	6.87	7.08	2.91	11.5	12.0	14.5	15.6	8.9	5.6	17.2
25	00-00	198	4.13	5.14	6.05	6.24	2.60	11.8	11.8	14.8	14.8	9.0	5.3	18.0
25	03-00	159	4.05	5.31	6.48	6.74	2.52	11.7	12.5	11.3	10.9	8.8	5.9	18.8
25	06-00	206	3.43	4.37	6.05	6.59	2.15	11.9	12.8	15.2	14.8	8.7	5.8	20.3
25	09-00	185	4.25	5.59	7.50	7.76	2.60	12.2	12.5	12.1	12.5	9.7	6.7	19.5
25	12-00	191	3.69	4.64	5.91	6.23	2.35	12.0	12.6	12.5	14.8	9.4	5.6	18.0
25	15-00	211	2.91	3.73	5.06	5.10	1.75	12.1	12.8	15.6	15.6	8.5	5.1	19.5
25	18-00	237	2.75	3.40	4.12	4.26	1.71	10.0	11.6	12.9	11.7	7.5	4.8	17.2
25	21-00	229	3.16	3.99	4.74	4.88	1.92	11.4	11.9	13.3	12.5	7.8	4.8	16.4
26	00-00	262	2.96	3.72	4.53	4.71	1.92	9.0	9.8	9.6	12.5	6.8	4.7	16.4
26	03-00	280	3.09	3.76	4.44	4.53	2.02	7.7	7.8	7.3	7.8	6.4	4.8	14.1

DIA	HORA	NA	HS (m)	H10 (m)	H100 (m)	HMAX (m)	HMED (m)	THS (s)	TH10 (s)	TH100 (s)	THMAX (s)	TZ (s)	TC (s)	TMAX (s)
26	06-00	269	3.71	4.67	5.90	5.94	2.36	8.2	8.4	9.1	9.4	6.7	4.9	13.3
26	09-00	250	4.12	5.21	7.09	7.22	2.59	8.5	8.3	8.9	8.6	7.2	5.2	14.8
26	12-00	230	4.00	5.08	5.98	5.98	2.46	9.3	9.5	8.6	8.6	7.7	5.3	13.3
26	15-00	236	3.24	4.11	5.72	6.41	2.00	9.6	9.3	11.3	10.9	7.6	5.1	13.3
26	18-00	236	3.09	3.89	4.82	4.92	1.98	9.1	9.7	9.8	8.6	7.6	5.1	15.6
26	21-00	224	3.34	4.28	5.30	5.37	2.06	10.2	10.2	10.9	10.9	8.0	5.5	15.6
27	00-00	220	2.88	3.50	3.99	4.02	1.79	11.1	11.6	14.5	13.3	8.1	4.9	18.8
27	03-00	209	3.24	4.02	5.18	5.42	1.99	11.5	11.9	10.2	8.6	8.6	4.9	16.4
27	06-00	232	2.91	3.51	4.07	4.17	1.79	10.5	11.5	9.4	8.6	7.7	4.5	17.2
27	09-00	230	2.71	3.34	4.63	5.35	1.71	10.6	11.2	12.1	12.5	7.8	5.0	15.6
27	12-00	213	2.93	3.70	4.35	4.36	1.84	11.2	12.2	9.4	7.8	8.4	4.9	18.0
27	15-00	228	2.58	3.20	4.14	4.32	1.53	11.4	11.9	11.3	11.7	7.8	4.4	18.0
27	18-00	207	2.64	3.25	4.21	4.43	1.66	11.4	13.6	13.7	16.4	8.7	4.8	17.2
27	21-00	207	2.60	3.22	3.94	3.98	1.61	12.2	13.3	14.1	14.1	8.6	5.2	18.8
28	00-00	230	2.24	2.74	3.39	3.62	1.37	10.2	10.6	12.9	14.1	7.8	5.2	16.4
28	03-00	200	2.30	2.92	3.55	3.69	1.39	12.0	12.3	13.7	13.3	9.0	5.8	17.2
28	06-00	224	1.76	2.27	3.00	3.02	1.12	10.6	10.6	9.8	10.9	8.0	5.2	15.6
28	12-00	202	1.92	2.41	2.96	2.97	1.16	12.1	12.1	13.3	14.1	8.8	4.7	17.2
28	18-00	275	1.49	1.89	2.46	2.73	0.93	9.7	10.7	11.7	11.7	6.5	3.6	15.6
29	00-00	362	1.60	2.02	2.51	2.75	1.05	6.1	6.4	5.7	6.2	4.9	3.8	12.5
29	03-00	345	2.21	2.70	3.65	4.18	1.43	6.0	5.9	5.5	6.2	5.2	4.3	13.3
29	06-00	296	3.09	3.93	4.86	5.43	1.95	7.0	6.9	6.8	6.2	6.0	4.7	11.7
29	09-00	290	3.19	4.06	5.64	6.11	2.02	7.5	7.2	7.0	7.0	6.2	4.8	10.2
29	12-00	254	4.42	5.48	6.95	7.11	2.77	8.4	8.5	8.3	7.8	7.0	5.4	10.9
29	15-00	251	3.96	4.96	6.20	6.84	2.58	8.5	8.6	8.3	8.6	7.1	4.9	11.7
29	18-00	254	4.49	5.73	7.43	8.55	2.81	8.6	8.4	8.3	8.6	7.0	5.4	12.5
29	21-00	239	4.95	6.45	8.99	9.50	3.03	8.7	8.7	8.6	8.6	7.5	5.4	12.5
30	00-00	228	4.05	5.32	6.39	6.58	2.54	9.3	9.2	9.4	9.4	7.8	5.2	12.5
30	03-00	210	3.81	5.04	7.02	7.19	2.36	9.9	10.2	10.5	10.2	8.5	5.8	13.3
30	06-00	217	3.49	4.35	5.47	5.71	2.18	10.1	10.1	9.8	10.2	8.2	5.9	14.1
30	09-00	219	3.32	4.01	5.37	5.93	2.09	9.9	9.7	9.4	10.2	8.2	5.5	14.8
30	12-00	249	2.90	3.60	4.08	4.11	1.79	9.3	9.5	9.8	10.2	7.2	4.8	13.3
30	15-00	252	2.75	3.57	4.60	4.78	1.68	9.3	9.1	9.1	10.2	7.1	4.6	13.3
30	18-00	250	2.43	3.11	4.22	4.76	1.50	8.8	8.7	8.9	8.6	7.1	4.8	13.3
30	21-00	269	2.40	3.02	3.75	3.85	1.46	8.4	8.8	8.3	7.8	6.7	4.6	12.5

DIA	HORA	NA	HS (m)	H10 (m)	H100 (m)	HMAX (m)	HMED (m)	THS (s)	TH10 (s)	TH100 (s)	THMAX (s)	TZ (s)	TC (s)	TMAX (s)
01	00-00	259	2.38	3.00	3.88	4.67	1.48	8.9	9.1	10.4	10.2	6.9	5.0	12.5
01	03-00	273	2.14	2.74	3.65	3.93	1.30	8.7	8.7	9.4	10.2	6.6	4.4	13.3
01	06-00	270	2.26	2.83	3.40	3.62	1.43	8.8	9.3	8.6	8.6	6.7	4.5	12.5
01	09-00	244	2.22	2.70	3.21	3.29	1.41	9.2	9.6	10.2	8.6	7.3	4.8	15.6
01	18-00	198	2.64	3.35	4.53	4.71	1.61	12.7	13.1	12.5	12.5	9.0	4.8	18.8
01	21-00	227	1.99	2.45	3.08	3.23	1.29	10.0	10.0	9.8	10.2	7.8	4.8	17.2
02	00-00	214	2.21	2.66	3.28	3.53	1.41	11.6	12.6	12.1	12.5	8.3	4.9	17.2
02	03-00	204	2.33	2.98	4.39	4.40	1.44	12.2	12.5	12.1	11.7	8.8	4.8	15.6
02	09-00	221	1.92	2.32	2.74	2.78	1.20	11.1	11.1	12.9	14.1	8.0	5.0	14.8
02	12-00	258	1.66	2.11	2.80	2.93	1.05	9.4	9.9	9.1	8.6	6.9	4.5	15.6
02	15-00	256	1.73	2.18	2.71	2.73	1.04	10.0	10.8	8.9	7.8	7.0	4.1	17.2
02	18-00	273	1.50	1.84	2.28	2.41	0.99	9.1	9.9	12.2	11.7	6.5	3.7	14.8
02	21-00	300	1.55	1.86	2.15	2.22	1.01	7.8	7.8	10.4	10.2	6.0	3.8	15.6
03	00-00	317	1.51	1.87	2.49	2.54	0.96	7.4	8.2	10.2	10.2	5.6	3.9	13.3
03	03-00	313	1.57	1.96	2.66	2.79	1.01	7.6	8.0	8.6	5.5	5.7	3.9	13.3
03	06-00	281	1.66	2.09	2.50	2.54	1.07	8.5	9.4	8.1	8.6	6.4	4.0	14.1
03	09-00	312	1.36	1.71	2.16	2.23	0.87	7.5	7.8	7.0	6.2	5.7	3.9	12.5
03	12-00	321	1.37	1.72	2.19	2.25	0.86	7.5	8.4	7.6	8.6	5.6	3.8	16.4
03	18-00	255	1.74	2.24	2.87	2.91	1.10	9.5	10.7	11.7	11.7	7.0	4.0	15.6
03	21-00	271	1.69	2.16	2.80	3.51	1.06	9.0	9.9	9.6	9.4	6.6	4.2	14.1
04	00-00	288	1.84	2.30	2.95	3.24	1.17	8.3	8.6	7.3	5.5	6.2	4.0	14.1
04	03-00	285	1.91	2.32	3.04	3.16	1.24	8.5	9.2	9.1	10.2	6.3	4.2	14.8
04	06-00	308	1.86	2.35	3.01	3.23	1.16	8.2	9.1	9.6	9.4	5.8	3.8	15.6
04	12-00	312	2.04	2.58	3.11	3.19	1.31	7.0	7.1	6.0	6.2	5.7	4.2	14.8
04	15-00	298	2.51	2.99	3.76	4.02	1.64	7.2	7.5	7.8	5.5	6.0	4.3	12.5
04	18-00	283	2.75	3.51	4.68	4.87	1.73	7.7	7.7	7.6	8.6	6.3	4.5	13.3
04	21-00	292	2.73	3.33	3.95	4.09	1.73	7.7	7.9	6.8	6.2	6.1	4.4	12.5
05	00-00	273	2.90	3.54	4.56	5.33	1.86	8.1	7.8	7.0	7.0	6.6	4.6	15.6
05	03-00	265	2.96	3.67	4.73	5.00	1.83	8.3	8.4	8.1	7.8	6.7	4.6	14.8
05	06-00	244	2.79	3.41	4.68	4.92	1.72	9.7	10.1	9.8	10.2	7.3	4.7	17.2
05	09-00	253	2.33	3.02	4.07	4.33	1.44	9.2	9.6	12.2	12.5	7.1	4.2	14.1
05	12-00	249	2.19	2.70	3.63	3.75	1.40	9.2	9.6	9.0	9.4	7.2	4.7	15.6
05	15-00	220	2.55	3.21	4.10	4.23	1.65	10.6	10.6	11.3	11.7	8.1	4.9	15.6
05	18-00	186	2.80	3.44	4.57	4.92	1.79	12.1	12.5	11.7	10.9	9.6	5.6	17.2
05	21-00	208	2.14	2.56	3.54	3.60	1.33	11.2	11.3	11.7	11.7	8.6	5.1	16.4
06	03-00	249	2.01	2.46	3.08	3.11	1.27	9.4	9.6	9.4	9.4	7.2	4.2	14.8
06	09-00	253	2.13	2.60	3.06	3.32	1.34	10.1	10.8	10.4	11.7	7.1	4.3	14.8
06	12-00	304	1.77	2.34	3.26	3.54	1.08	8.5	9.5	10.4	11.7	5.9	4.1	14.1
06	15-00	305	1.98	2.45	2.87	2.95	1.29	7.7	8.1	7.6	7.0	5.9	4.1	13.3
06	21-00	277	1.91	2.31	2.87	3.16	1.25	8.6	9.4	10.2	9.4	6.5	4.2	14.8
07	00-00	294	1.79	2.21	3.01	3.18	1.15	7.8	7.8	7.0	6.2	6.1	3.9	13.3
07	03-00	311	1.92	2.35	2.87	2.95	1.26	7.1	7.4	6.5	5.5	5.7	4.3	12.5
07	06-00	294	2.16	2.65	3.83	4.48	1.42	7.4	7.5	7.0	7.0	6.1	4.5	14.8
07	09-00	281	2.52	3.11	4.05	4.37	1.62	8.0	8.2	8.9	7.8	6.4	4.3	17.2
07	12-00	286	2.71	3.40	4.52	4.85	1.74	7.6	7.8	7.3	7.8	6.3	4.7	12.5

DIA	HORA	NA	HS (m)	H10 (m)	H100 (m)	HMAX (m)	HMED (m)	THS (s)	TH10 (s)	TH100 (s)	THMAX (s)	TZ (s)	TC (s)	TMAX (s)
07	15-00	270	2.79	3.41	4.24	4.44	1.84	8.0	8.0	9.1	7.8	6.6	4.6	13.3
07	18-00	247	2.61	3.23	4.05	4.10	1.71	8.7	8.8	8.2	8.6	7.3	4.8	14.1
07	21-00	252	2.25	2.84	3.56	3.80	1.42	8.7	9.3	8.9	8.6	7.1	4.9	12.5
08	00-00	237	2.28	2.86	3.71	3.97	1.43	9.1	9.1	9.4	10.2	7.5	5.2	14.1
08	03-00	247	1.99	2.40	3.05	3.38	1.30	9.2	9.2	9.8	9.4	7.2	5.0	14.1
08	06-00	228	2.27	2.71	3.12	3.13	1.50	9.6	9.3	8.2	8.6	7.8	5.1	17.2
08	09-00	238	1.75	2.17	2.83	2.92	1.10	9.9	10.5	10.2	9.4	7.5	4.9	14.8
08	12-00	220	1.63	1.98	2.43	2.44	1.03	10.4	10.4	10.2	8.6	8.1	5.1	15.6
08	15-00	220	1.65	1.98	2.32	2.43	1.06	10.2	10.6	10.9	10.2	8.1	4.4	14.1
08	18-00	223	1.81	2.29	2.95	3.11	1.12	10.0	10.1	9.8	10.2	8.0	5.5	15.6
08	21-00	213	1.66	1.96	2.42	2.56	1.08	10.2	10.2	11.7	11.7	8.4	4.9	14.8
09	00-00	228	1.46	1.93	2.65	2.72	0.92	10.4	10.4	10.5	10.2	7.9	4.9	14.8
09	03-00	229	1.35	1.66	1.96	2.07	0.84	10.2	10.5	10.5	10.9	7.8	5.3	13.3
09	06-00	237	1.30	1.64	2.10	2.11	0.81	9.8	9.8	9.8	10.2	7.6	5.1	15.6
09	09-00	249	1.19	1.54	2.09	2.22	0.75	9.5	10.0	9.0	9.4	7.2	4.8	12.5
09	12-00	230	0.94	1.19	1.62	1.87	0.58	10.1	10.1	9.8	10.2	7.7	4.5	15.6
09	15-00	224	0.96	1.13	1.41	1.42	0.65	9.5	9.3	9.4	9.4	8.0	5.3	14.1
09	18-00	237	1.00	1.21	1.74	1.91	0.63	9.5	9.7	9.4	8.6	7.5	4.9	15.6
09	21-00	239	0.83	1.03	1.31	1.36	0.53	9.3	9.6	9.0	10.2	7.5	4.7	14.1
10	00-00	273	0.74	0.92	1.20	1.21	0.46	9.0	9.8	10.2	10.2	6.6	4.4	13.3
10	03-00	276	0.74	0.92	1.20	1.38	0.46	8.6	9.0	9.1	7.0	6.5	3.8	12.5
10	06-00	345	0.71	0.90	1.11	1.15	0.45	7.4	8.3	8.9	6.2	5.2	3.1	11.7
10	09-00	385	0.68	0.84	1.04	1.22	0.44	6.6	7.9	9.2	8.6	4.7	3.1	10.9
10	12-00	390	0.66	0.83	1.17	1.31	0.42	6.4	7.1	8.2	7.8	4.6	3.1	13.3
10	15-00	437	0.73	0.90	1.16	1.33	0.47	5.3	5.9	6.4	8.6	4.1	3.1	11.7
10	18-00	425	0.89	1.10	1.42	1.45	0.58	5.0	5.1	4.9	5.5	4.2	3.3	10.9
10	21-00	432	0.89	1.13	1.50	1.62	0.60	4.9	5.0	4.3	4.7	4.2	3.3	10.2
11	00-00	391	0.89	1.12	1.41	1.55	0.59	5.2	5.3	6.6	9.4	4.6	3.5	11.7
11	03-00	397	0.94	1.17	1.50	1.53	0.59	5.6	5.7	5.5	5.5	4.5	3.5	10.2
11	06-00	394	0.88	1.09	1.32	1.35	0.57	5.7	5.8	5.5	4.7	4.6	3.6	9.4
11	09-00	368	0.98	1.19	1.44	1.56	0.63	6.1	6.1	6.4	7.0	4.9	3.5	12.5
11	12-00	353	0.98	1.20	1.40	1.59	0.64	6.2	6.1	7.8	7.0	5.1	3.8	12.5
11	15-00	327	1.02	1.25	1.62	1.90	0.68	6.9	7.5	6.2	7.8	5.5	3.8	14.8
11	18-00	318	1.09	1.38	1.74	1.92	0.68	7.3	7.5	7.3	7.8	5.6	4.1	12.5
11	21-00	319	1.12	1.40	1.72	1.85	0.71	7.5	8.3	7.0	8.6	5.6	3.9	13.3
12	00-00	284	1.15	1.43	1.83	1.95	0.72	8.9	10.0	10.7	9.4	6.3	4.0	14.8
12	03-00	239	1.33	1.64	1.88	1.89	0.84	10.0	10.4	12.1	12.5	7.5	4.3	16.4
12	06-00	245	1.42	1.81	2.87	3.06	0.87	10.1	10.9	9.4	7.8	7.3	4.5	18.0
12	09-00	233	1.78	2.23	2.68	2.77	1.07	10.8	11.3	12.5	14.1	7.7	4.6	15.6
12	12-00	244	1.55	1.94	2.39	2.42	0.97	10.3	11.4	10.5	10.9	7.3	4.4	17.2
12	15-00	229	1.56	1.92	2.35	2.36	0.92	11.5	11.5	10.5	9.4	7.8	4.1	14.8
12	18-00	252	1.51	1.85	2.10	2.17	0.94	10.6	11.5	12.2	12.5	7.1	3.7	15.6
12	21-00	282	1.44	1.81	2.30	2.35	0.93	9.1	10.7	11.2	11.7	6.4	3.9	16.4
13	00-00	301	1.59	2.04	2.67	2.92	1.00	8.4	10.4	11.7	10.9	6.0	3.7	14.8
13	03-00	296	1.65	2.02	2.37	2.43	1.04	8.1	8.6	9.1	11.7	6.0	4.1	14.1

DIA	HORA	NA	HS (m)	H10 (m)	H100 (m)	HMAX (m)	HMED (m)	THS (s)	TH10 (s)	TH100 (s)	THMAX (s)	TZ (s)	TC (s)	TMAX (s)
13	06-00	323	1.64	2.11	2.63	3.09	1.02	7.3	8.4	8.9	6.2	5.5	4.0	13.3
13	09-00	304	1.85	2.32	2.92	3.21	1.17	7.5	7.6	7.0	7.0	5.9	4.1	13.3
13	12-00	315	1.78	2.20	3.06	3.32	1.13	7.1	7.3	7.3	7.0	5.7	4.2	11.7
13	18-00	298	2.11	2.59	3.47	3.60	1.36	7.4	7.1	7.0	7.0	6.0	4.3	12.5
13	21-00	327	2.18	2.66	3.34	3.84	1.35	6.8	6.8	6.2	6.2	5.5	4.3	10.2
14	00-00	321	2.29	2.87	3.71	3.95	1.42	7.2	7.3	7.3	7.0	5.6	4.2	11.7
14	03-00	310	2.31	2.94	3.95	4.07	1.46	7.1	7.0	5.7	5.5	5.8	4.4	14.1
14	06-00	315	2.35	2.94	3.82	4.14	1.46	7.2	7.3	7.0	7.0	5.7	4.5	11.7
14	09-00	289	2.28	2.78	3.44	3.58	1.49	7.4	7.5	7.8	7.0	6.2	4.3	11.7
14	12-00	301	2.26	2.83	3.61	3.67	1.44	7.3	7.3	6.8	6.2	5.9	4.4	11.7
14	15-00	310	2.10	2.57	3.04	3.21	1.34	7.3	7.1	7.6	7.8	5.8	4.2	10.9
14	18-00	299	2.16	2.74	3.33	3.60	1.41	7.5	7.7	7.3	8.6	6.0	4.5	12.5
14	21-00	304	1.79	2.27	2.67	2.75	1.13	7.3	7.3	7.0	6.2	5.9	4.3	10.9
15	00-00	294	1.78	2.25	2.94	3.24	1.13	7.4	7.5	6.8	7.0	6.1	4.7	13.3
15	03-00	270	1.70	2.13	2.67	2.82	1.08	8.0	7.8	7.3	7.8	6.6	4.7	13.3
15	06-00	260	1.81	2.29	2.95	2.98	1.11	8.7	9.6	8.6	8.6	6.9	4.1	14.8
15	09-00	320	1.67	2.11	2.72	2.88	1.01	8.2	8.7	9.4	9.4	5.6	3.4	14.8
15	12-00	325	1.44	1.76	2.15	2.31	0.89	8.2	8.9	9.6	7.8	5.5	3.3	13.3
15	15-00	348	1.25	1.58	2.14	2.41	0.76	8.1	9.0	8.9	10.2	5.1	3.0	14.1
15	18-00	345	1.22	1.55	1.94	2.07	0.75	8.2	9.8	8.1	7.0	5.2	2.9	13.3
15	21-00	282	1.31	1.66	2.01	2.06	0.77	9.5	10.1	10.2	8.6	6.3	3.2	15.6
16	00-00	296	1.27	1.58	1.93	1.96	0.80	8.2	8.2	9.9	9.4	6.1	3.6	14.1
16	03-00	283	1.47	1.88	2.48	2.54	0.93	8.3	8.1	7.6	6.2	6.3	4.3	13.3
16	06-00	292	1.63	2.10	2.80	2.89	1.02	8.0	8.4	8.1	7.8	6.1	3.9	12.5
16	09-00	302	1.84	2.31	2.82	2.90	1.20	7.4	7.8	8.1	8.6	5.9	4.1	13.3
16	12-00	281	2.47	3.11	3.86	4.11	1.61	8.2	8.5	8.3	7.0	6.4	4.5	12.5
16	15-00	261	3.04	3.84	5.57	6.05	1.87	8.8	8.7	8.1	8.6	6.9	4.5	13.3
16	18-00	249	3.12	3.86	4.47	4.52	2.01	8.9	8.7	8.2	7.8	7.2	4.8	14.1
17	00-00	276	2.73	3.34	4.23	4.36	1.74	8.0	8.3	7.6	7.8	6.5	4.4	13.3
17	03-00	248	3.26	4.22	5.57	5.87	2.03	8.7	8.9	7.8	8.6	7.2	4.7	12.5
17	06-00	265	2.97	3.55	4.50	4.92	1.85	8.4	8.5	9.6	10.2	6.7	4.6	12.5
17	09-00	254	3.26	4.04	4.64	4.81	2.07	8.7	8.6	8.1	8.6	7.0	4.8	12.5
17	12-00	260	3.14	3.86	4.32	4.38	2.01	8.7	8.5	9.1	8.6	6.9	4.8	13.3
17	18-00	264	2.65	3.35	4.07	4.48	1.68	8.4	8.5	8.3	8.6	6.8	4.7	12.5
17	21-00	276	2.11	2.57	3.05	3.18	1.34	8.2	8.4	8.6	7.0	6.5	4.3	11.7
18	00-00	279	2.11	2.61	3.41	3.79	1.34	8.4	8.6	8.6	8.6	6.4	4.1	11.7
18	03-00	274	2.31	2.85	3.39	3.57	1.47	8.2	8.2	8.1	7.8	6.5	4.5	11.7
18	06-00	290	2.69	3.37	4.74	5.29	1.61	7.8	8.0	8.6	8.6	6.2	4.4	10.9
18	12-00	270	2.93	3.61	4.85	5.77	1.84	8.2	8.1	8.9	7.8	6.6	4.7	13.3
18	15-00	269	2.54	3.13	3.93	4.06	1.59	8.1	8.4	7.8	7.8	6.7	4.6	12.5
18	18-00	297	2.20	2.73	3.42	3.58	1.38	7.7	7.7	8.3	8.6	6.0	4.4	10.9
18	21-00	260	2.61	3.25	4.19	4.66	1.67	8.2	8.2	8.1	7.8	6.9	4.9	11.7
19	00-00	278	2.57	3.32	4.49	4.96	1.56	8.2	8.3	8.3	8.6	6.4	4.6	11.7
19	03-00	264	2.53	3.44	4.57	4.80	1.58	7.8	8.1	8.9	9.4	6.8	4.9	12.5
19	06-00	267	2.21	2.76	3.30	3.53	1.41	8.0	8.0	8.1	7.8	6.7	4.9	13.3

DIA	HORA	NA	HS (m)	H10 (m)	H100 (m)	HMAX (m)	HMED (m)	THS (s)	TH10 (s)	TH100 (s)	THMAX (s)	TZ (s)	TC (s)	TMAX (s)
19	09-00	270	2.15	2.57	3.21	3.36	1.40	7.8	8.1	8.6	7.8	6.6	5.0	11.7
19	12-00	263	2.35	2.96	3.73	4.01	1.53	8.0	7.9	6.5	6.2	6.8	5.0	11.7
19	15-00	273	2.03	2.64	3.48	4.03	1.29	7.9	7.8	8.3	8.6	6.6	4.6	12.5
19	18-00	277	1.67	2.06	2.59	2.69	1.07	7.7	7.7	7.8	7.0	6.4	4.7	13.3
19	21-00	277	1.66	2.13	2.92	3.10	1.05	7.8	7.4	7.8	7.8	6.5	4.8	12.5
20	00-00	282	1.93	2.50	3.16	3.46	1.17	7.6	7.7	7.6	7.0	6.3	4.7	12.5
20	03-00	275	1.63	2.01	2.49	2.66	1.06	7.7	8.1	7.6	7.8	6.5	4.8	12.5
20	06-00	280	1.49	1.88	2.27	2.33	0.95	7.6	7.5	7.8	7.8	6.4	4.8	14.1
20	09-00	270	1.41	1.74	2.29	2.49	0.91	7.6	7.1	7.3	7.8	6.6	4.9	12.5
20	12-00	286	1.27	1.59	2.00	2.06	0.80	7.6	7.9	9.1	10.9	6.3	4.7	12.5
20	15-00	261	1.30	1.61	2.01	2.17	0.82	8.7	9.3	9.9	10.2	6.8	4.8	12.5
20	18-00	241	1.36	1.66	2.11	2.13	0.86	9.2	9.5	9.8	8.6	7.4	4.8	13.3
20	21-00	232	1.40	1.71	2.12	2.17	0.92	9.2	9.1	9.0	8.6	7.7	4.7	14.1
21	00-00	285	1.24	1.56	2.09	2.66	0.77	8.7	8.5	8.3	9.4	6.3	3.8	14.1
21	03-00	267	1.24	1.54	1.84	1.89	0.77	8.8	9.1	8.6	8.6	6.7	4.4	13.3
21	06-00	272	1.09	1.43	1.79	1.84	0.66	8.8	9.1	8.9	7.8	5.9	3.6	12.5
21	09-00	319	1.05	1.31	1.61	1.62	0.64	8.0	8.5	7.6	7.0	5.6	3.4	12.5
21	12-00	349	1.06	1.31	1.71	1.92	0.70	6.8	7.2	8.1	9.4	5.1	3.5	12.5
21	15-00	347	1.27	1.58	2.05	2.35	0.81	6.9	7.2	6.5	7.8	5.2	3.7	12.5
21	18-00	357	1.40	1.74	2.29	2.40	0.88	6.4	7.1	6.4	6.2	5.0	3.5	13.3
21	21-00	329	1.71	2.13	2.82	3.05	1.08	7.1	7.5	8.3	5.5	5.4	3.8	11.7
22	00-00	326	1.74	2.09	2.64	2.76	1.11	6.8	6.9	6.5	6.2	5.5	4.0	10.9
22	03-00	326	2.01	2.54	3.21	3.36	1.24	6.9	7.1	7.8	7.0	5.5	4.2	11.7
22	06-00	335	1.94	2.39	3.14	3.35	1.21	6.7	6.7	6.2	7.0	5.3	4.0	11.7
22	09-00	329	2.02	2.61	3.55	3.72	1.25	6.8	6.9	6.8	7.0	5.4	4.0	11.7
22	12-00	321	1.86	2.32	3.00	3.42	1.16	6.9	6.7	6.8	6.2	5.6	4.1	10.9
22	15-00	324	1.85	2.30	2.84	2.89	1.19	6.8	7.0	6.8	6.2	5.5	4.1	10.9
22	18-00	329	1.92	2.45	3.20	3.22	1.18	6.7	6.9	7.0	6.2	5.5	4.0	10.2
23	00-00	293	2.25	2.88	3.76	4.05	1.42	7.7	7.6	7.3	7.8	6.1	4.3	11.7
23	03-00	281	2.40	2.92	3.65	3.88	1.46	9.0	9.5	9.4	7.8	6.4	4.4	15.6
23	06-00	265	2.43	2.98	3.48	3.61	1.56	8.8	9.5	9.1	8.6	6.7	4.3	14.1
23	09-00	263	2.31	2.98	3.80	3.92	1.48	9.1	9.3	9.4	10.9	6.8	4.5	14.8
23	12-00	271	2.26	2.88	3.80	4.02	1.39	8.9	9.6	9.6	8.6	6.6	4.4	13.3
23	18-00	315	2.21	2.82	3.71	3.97	1.36	7.1	7.4	7.6	7.8	5.7	4.2	14.1
23	21-00	298	2.34	2.81	3.41	3.56	1.53	7.7	7.8	7.0	6.2	6.0	4.4	12.5
24	00-00	294	2.34	3.01	3.82	4.00	1.48	7.3	7.3	7.3	7.0	6.1	4.4	10.9
24	03-00	309	2.30	2.99	4.37	4.83	1.42	7.1	7.4	7.3	7.0	5.8	4.4	10.9
24	06-00	289	2.31	2.81	3.60	3.77	1.49	7.4	7.0	7.3	7.0	6.2	4.4	10.9
24	09-00	296	2.22	2.82	3.60	3.70	1.43	7.2	7.3	6.8	7.0	6.0	4.4	10.9
24	15-00	314	1.67	2.09	2.52	2.61	1.05	7.5	7.8	6.2	7.0	5.7	3.9	13.3
24	18-00	301	1.84	2.35	3.00	3.18	1.13	7.8	8.3	8.1	9.4	5.9	4.3	13.3
24	21-00	261	2.03	2.54	3.28	3.67	1.25	9.5	9.4	8.9	8.6	6.9	4.6	14.1
25	00-00	213	2.42	3.02	3.45	3.46	1.53	10.9	11.2	10.2	12.5	8.4	5.0	15.6
25	03-00	232	2.40	2.99	3.59	3.68	1.50	10.3	10.3	11.7	10.9	7.7	4.7	15.6
25	06-00	246	2.48	3.17	3.84	3.86	1.55	9.3	9.3	9.8	8.6	7.3	4.6	14.8

DIA	HORA	NA	HS (m)	H10 (m)	H100 (m)	HMAX (m)	HMED (m)	THS (s)	TH10 (s)	TH100 (s)	THMAX (s)	TZ (s)	TC (s)	TMAX (s)
25	09-00	249	2.25	2.85	3.52	3.53	1.41	9.6	10.3	9.0	7.8	7.2	4.8	15.6
25	12-00	221	2.17	2.79	3.58	3.60	1.34	10.9	12.1	12.1	11.7	8.1	4.9	16.4
25	15-00	225	2.05	2.64	3.55	3.55	1.29	10.1	10.1	7.8	7.8	8.0	5.0	15.6
25	18-00	210	2.29	2.96	3.38	3.46	1.44	10.8	10.7	10.5	9.4	8.5	5.1	14.8
25	21-00	224	1.87	2.32	3.11	3.20	1.21	10.2	10.3	9.4	10.9	8.0	5.2	15.6
26	00-00	211	1.93	2.40	3.07	3.12	1.21	10.5	9.9	10.9	10.9	8.5	5.6	15.6
26	03-00	220	1.62	2.00	2.48	2.53	1.02	10.3	10.2	9.8	8.6	8.1	4.6	14.8
26	06-00	249	1.80	2.22	3.20	3.23	1.10	9.6	9.4	9.4	9.4	7.2	4.3	13.3
26	09-00	302	1.29	1.65	2.18	2.56	0.77	9.0	9.3	8.6	9.4	5.9	3.5	13.3
26	18-00	335	2.31	2.83	3.69	4.47	1.46	6.2	6.1	6.8	7.0	5.4	4.2	9.4
26	21-00	294	2.92	3.60	4.61	4.93	1.93	6.9	7.2	7.6	7.0	6.1	4.6	11.7
27	00-00	284	3.36	4.15	5.04	5.27	2.04	7.9	7.9	8.3	8.6	6.3	4.9	10.9
27	03-00	270	3.31	4.24	5.36	5.72	2.04	8.2	8.3	8.3	7.8	6.6	5.0	10.9
27	06-00	258	3.32	4.24	5.85	6.74	2.08	8.4	8.8	8.6	8.6	6.9	5.0	12.5
27	09-00	252	3.15	3.87	4.74	5.03	1.95	8.9	8.8	9.4	7.8	7.1	4.8	13.3
27	12-00	228	3.36	4.16	5.22	5.31	2.15	9.8	9.3	9.4	9.4	7.9	5.3	14.8
27	15-00	242	3.23	4.03	5.30	5.51	2.03	9.5	10.2	11.3	11.7	7.4	5.0	13.3
27	18-00	241	3.03	3.67	4.87	4.98	2.00	9.0	8.9	9.8	9.4	7.4	4.9	13.3
27	21-00	237	3.01	3.80	4.74	5.03	1.96	9.1	9.3	8.6	9.4	7.6	5.0	14.1
28	03-00	230	2.50	3.16	4.13	4.15	1.56	10.1	10.0	11.3	10.9	7.8	4.8	14.8
28	06-00	226	2.78	3.41	4.64	5.19	1.73	10.3	10.6	10.2	9.4	7.9	4.7	14.8
28	09-00	242	2.88	3.57	4.49	4.50	1.80	10.0	10.4	10.2	10.2	7.4	4.6	15.6
28	12-00	276	2.54	3.11	3.76	4.42	1.62	8.5	8.8	10.2	10.2	6.5	4.4	13.3
28	15-00	273	2.78	3.40	4.49	5.33	1.70	8.5	9.0	7.8	7.8	6.6	4.6	13.3
28	18-00	274	2.62	3.32	4.11	4.23	1.61	8.5	8.8	8.1	6.2	6.5	4.5	14.8
28	21-00	286	2.38	2.98	3.58	3.69	1.52	8.0	8.2	7.8	8.6	6.2	4.5	12.5
29	00-00	276	2.31	2.86	4.11	4.50	1.47	8.3	8.0	7.6	7.8	6.5	4.3	14.1
29	03-00	278	2.33	2.85	3.77	3.88	1.43	8.6	8.8	9.9	10.2	6.5	4.3	14.1
29	06-00	256	2.52	3.13	4.00	4.17	1.61	9.0	9.4	9.6	10.2	7.0	4.5	14.8
29	09-00	267	3.10	3.77	4.53	4.66	2.01	8.6	8.5	8.9	9.4	6.7	4.6	14.1
29	12-00	285	2.61	3.39	4.30	4.41	1.66	7.9	8.6	7.6	7.8	6.3	4.5	13.3
29	15-00	275	2.91	3.62	4.99	5.37	1.82	8.2	8.5	8.6	7.8	6.5	4.6	13.3
29	18-00	273	2.80	3.47	4.31	4.52	1.79	8.6	8.9	7.8	7.0	6.6	4.7	14.1
29	21-00	243	3.24	4.13	5.23	5.47	2.02	9.0	8.8	10.2	10.2	7.4	4.7	14.1
30	00-00	248	2.84	3.54	4.55	4.98	1.79	8.9	9.2	9.8	8.6	7.2	5.0	16.4
30	03-00	253	2.44	3.22	4.38	4.47	1.50	9.6	10.4	10.2	9.4	7.1	4.8	14.8
30	06-00	240	2.36	2.90	3.56	3.69	1.50	9.6	10.4	12.1	11.7	7.5	5.0	14.1
30	09-00	219	2.63	3.21	3.99	3.99	1.71	10.5	10.3	10.9	10.9	8.2	5.1	16.4
30	12-00	210	2.68	3.25	4.14	4.25	1.74	10.5	10.6	10.2	10.9	8.5	5.2	14.8
30	15-00	238	2.22	2.80	3.57	3.66	1.35	10.0	10.0	10.2	9.4	7.5	4.3	15.6
30	18-00	234	2.01	2.47	2.99	3.00	1.30	10.7	10.9	11.3	10.9	7.6	4.4	14.1
30	21-00	253	2.42	3.04	4.13	4.27	1.46	10.2	11.3	12.2	10.2	7.1	4.4	14.8
31	00-00	252	2.66	3.31	4.00	4.09	1.66	10.1	11.5	12.2	12.5	7.1	4.6	16.4
31	03-00	266	2.73	3.42	4.30	4.75	1.70	9.5	10.0	9.6	10.9	6.7	4.5	14.1
31	06-00	241	3.04	3.73	4.54	4.60	1.88	10.2	10.3	10.9	13.3	7.4	5.2	15.6

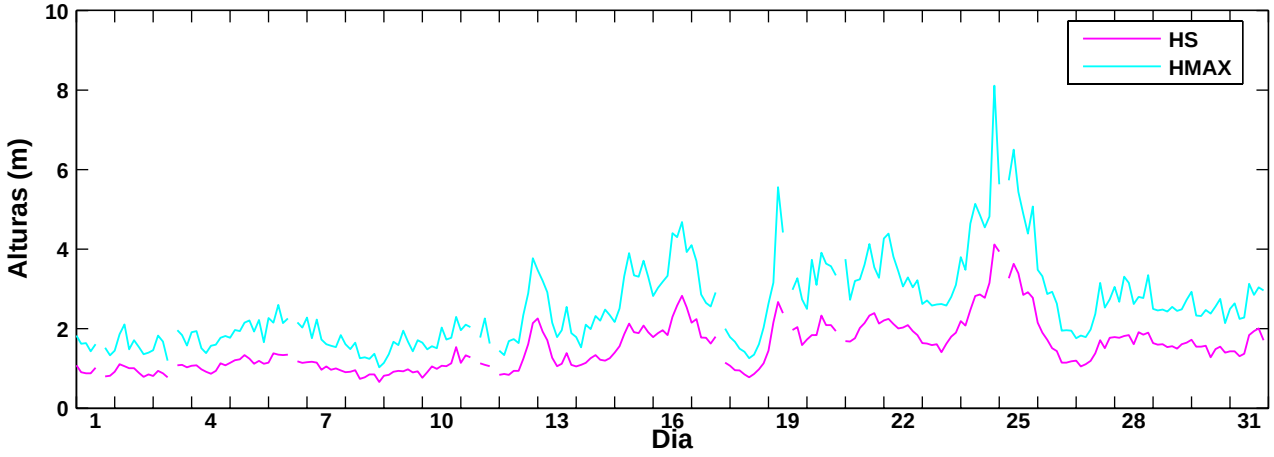
DIA	HORA	NA	HS (m)	H10 (m)	H100 (m)	HMAX (m)	HMED (m)	THS (s)	TH10 (s)	TH100 (s)	THMAX (s)	TZ (s)	TC (s)	TMAX (s)
31	09-00	253	2.51	3.11	4.05	4.51	1.50	9.6	10.2	9.6	8.6	7.1	4.7	14.8
31	12-00	238	2.49	3.05	3.88	3.89	1.56	10.2	10.1	9.8	11.7	7.5	4.9	14.8
31	15-00	231	2.40	3.14	4.35	4.87	1.46	10.7	11.3	11.7	11.7	7.8	4.8	16.4

ANEXO B

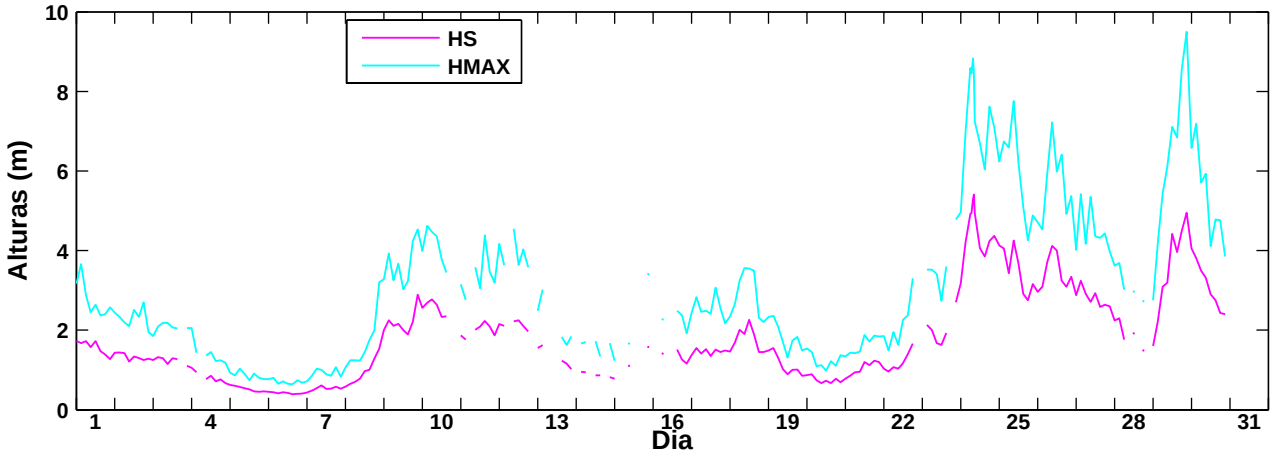
Gráficos temporais de HS, HMAX, TZ, TMAX, THS e THMAX

SMIGUEL

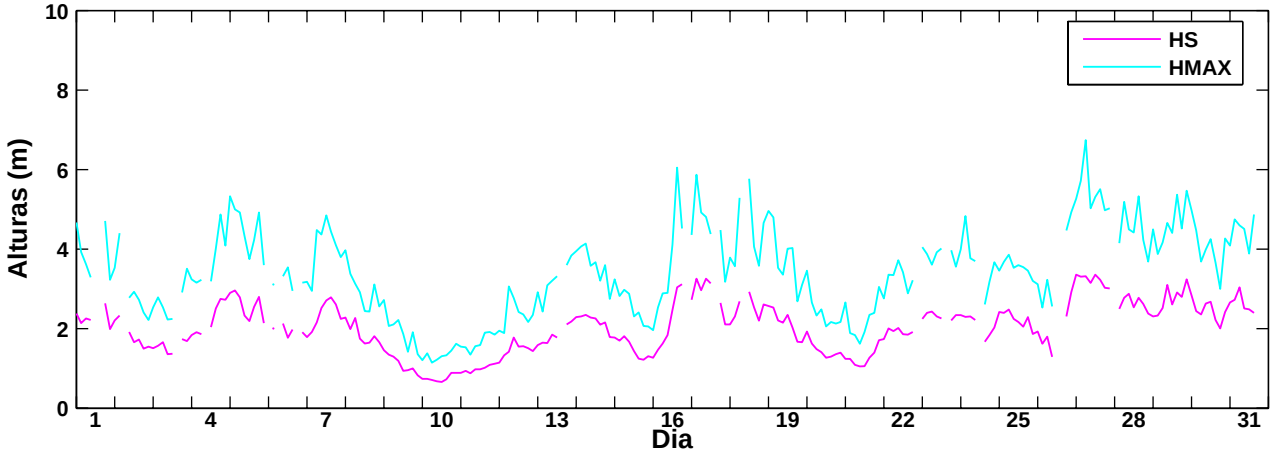
Séries temporais − Outubro 2006



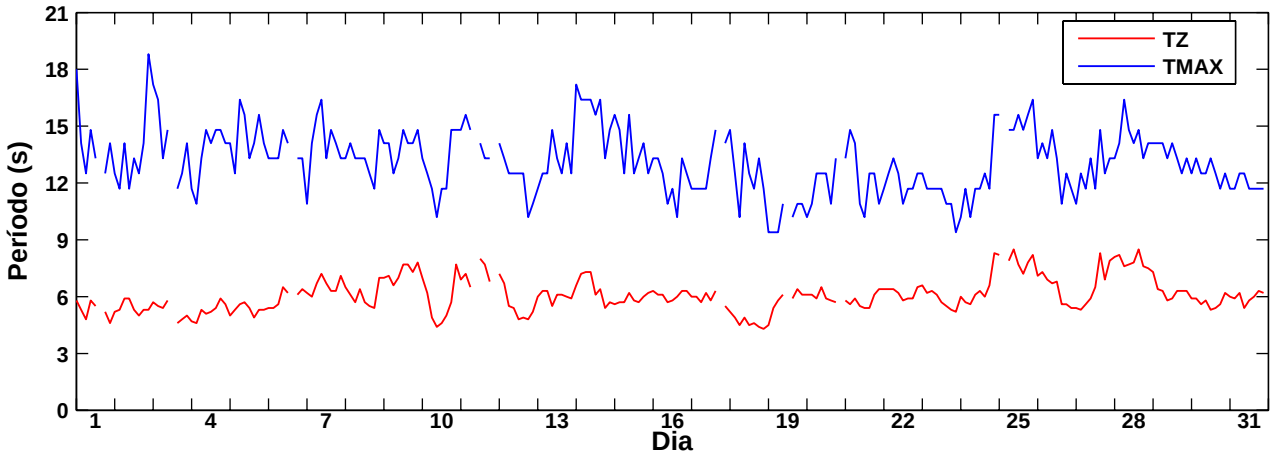
Séries temporais − Novembro 2006



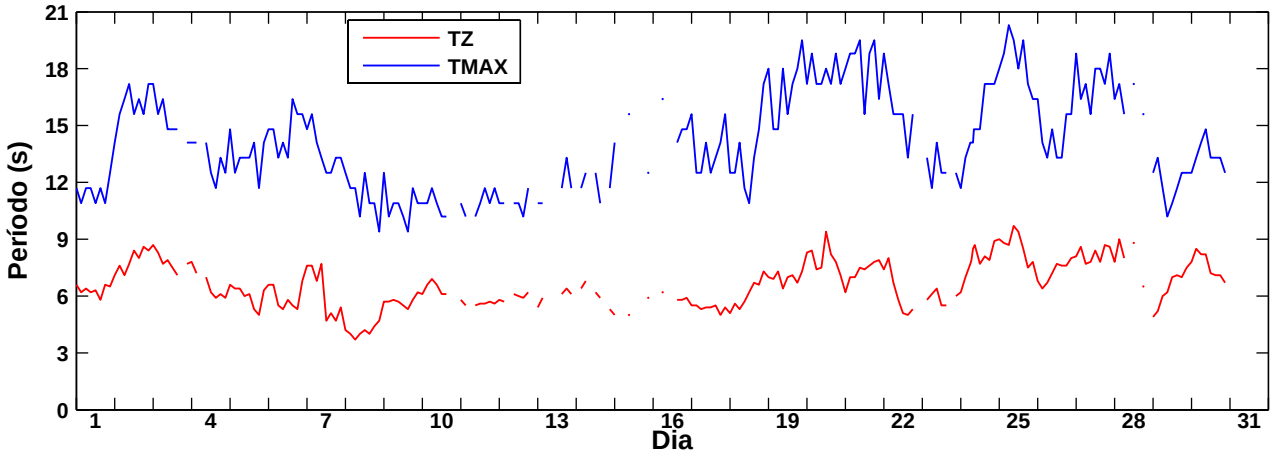
Séries temporais − Dezembro 2006



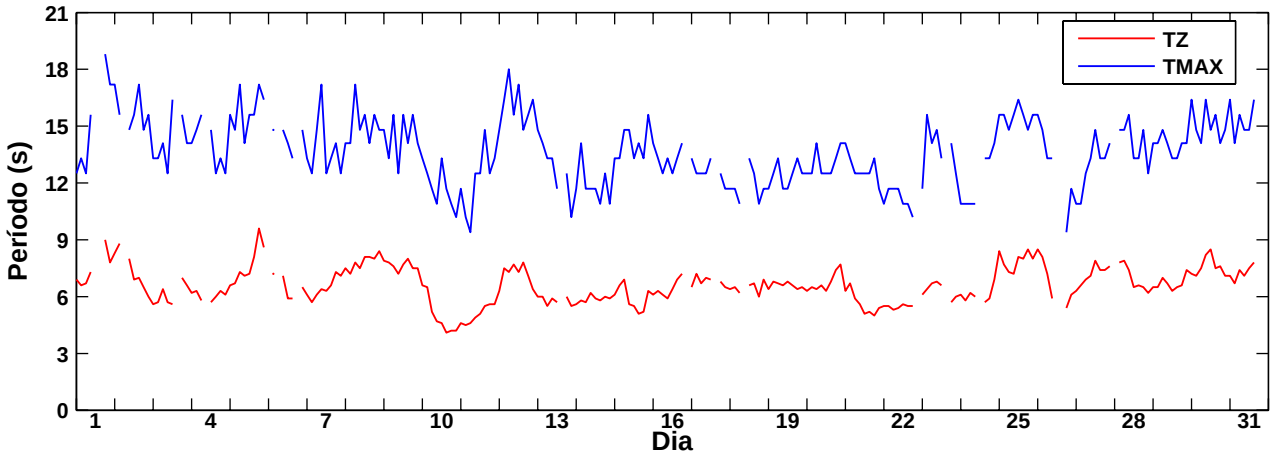
SMIGUEL
Séries temporais − Outubro 2006

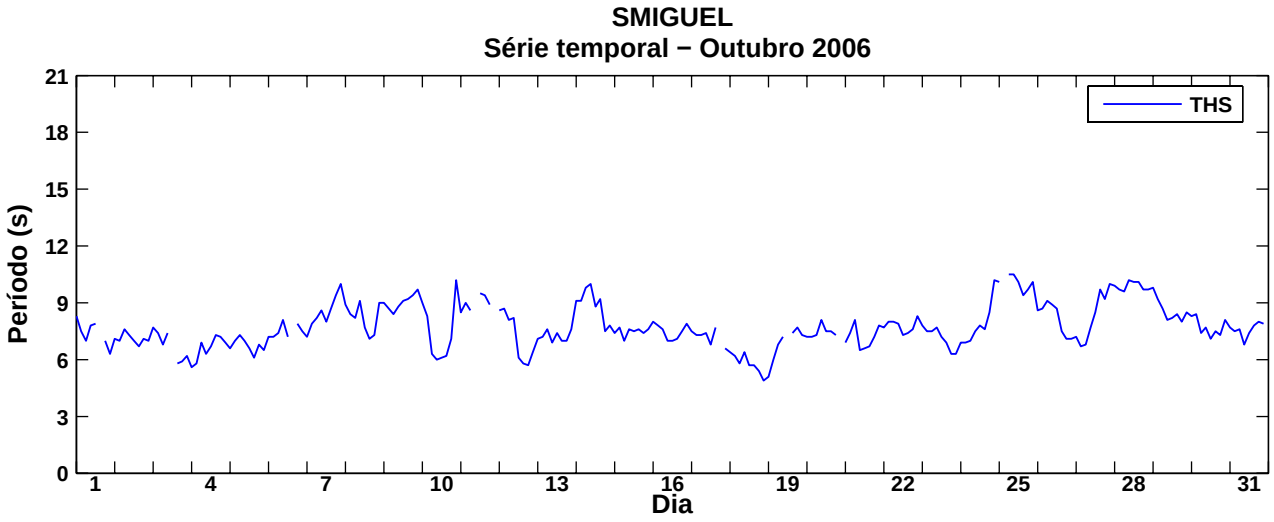


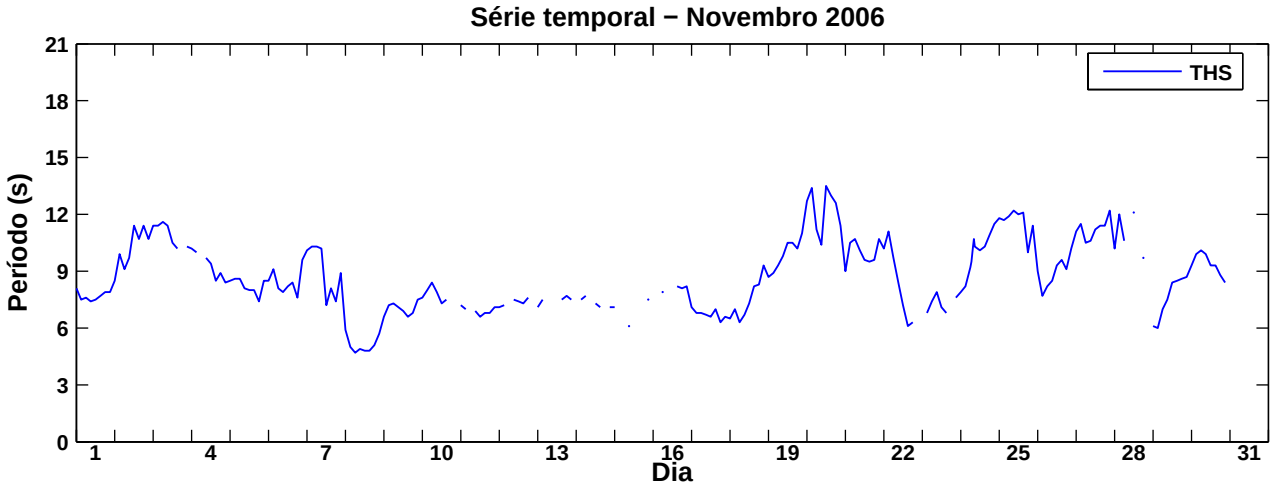
Séries temporais − Novembro 2006

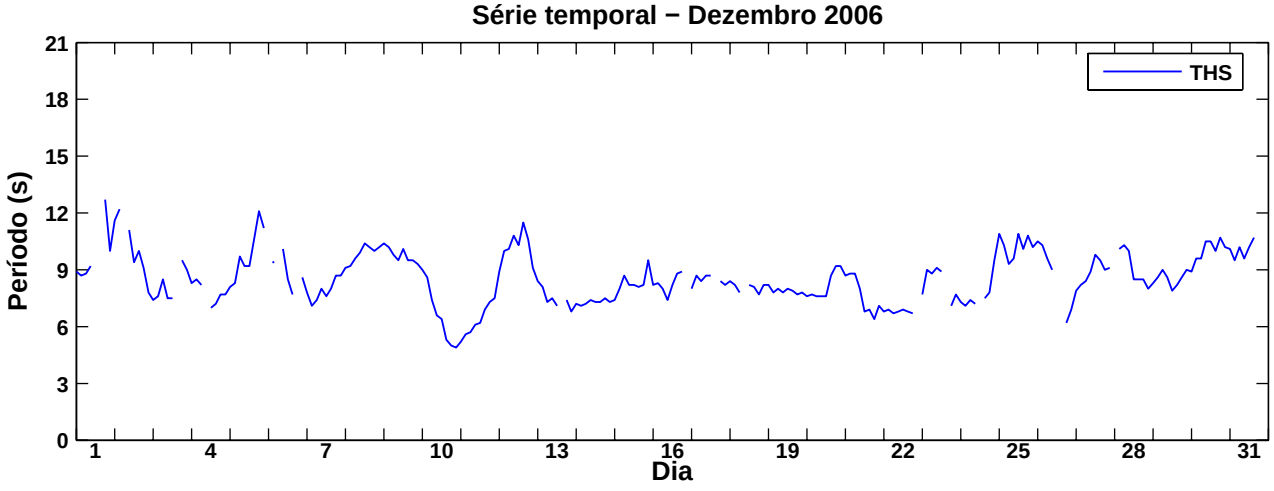


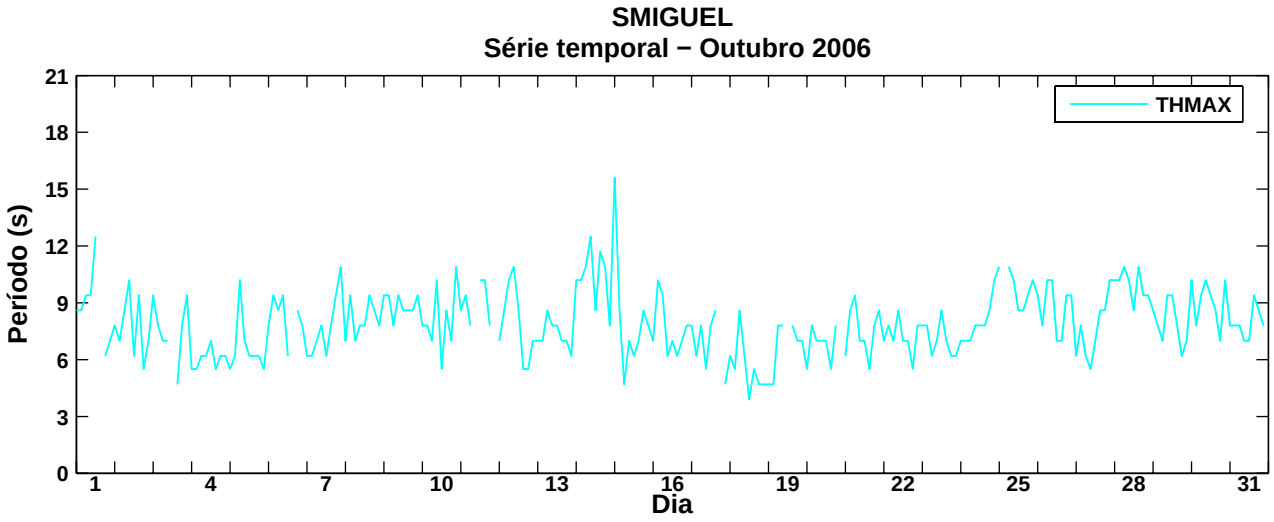
Séries temporais − Dezembro 2006

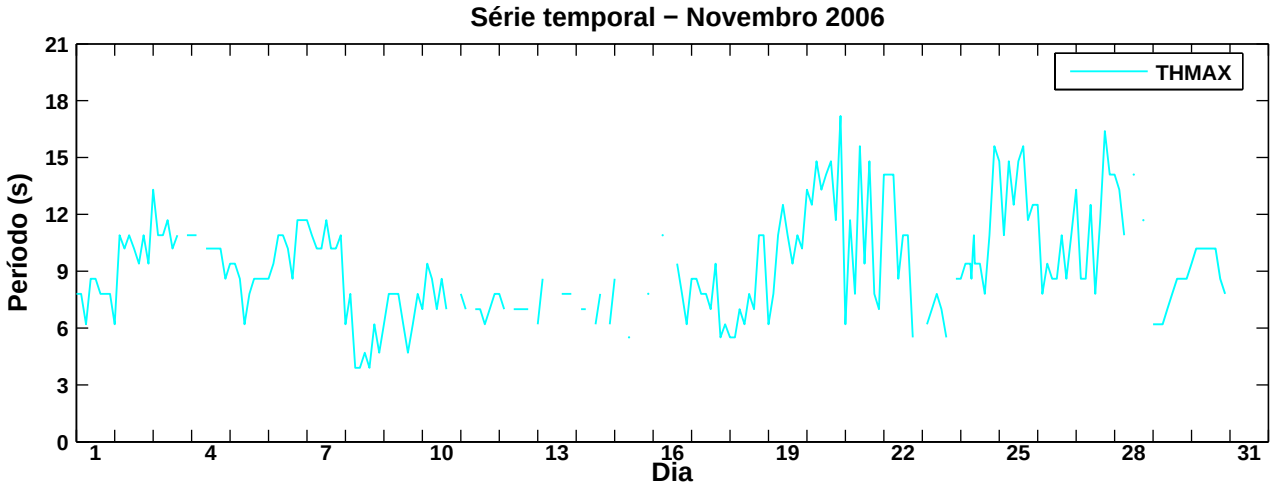


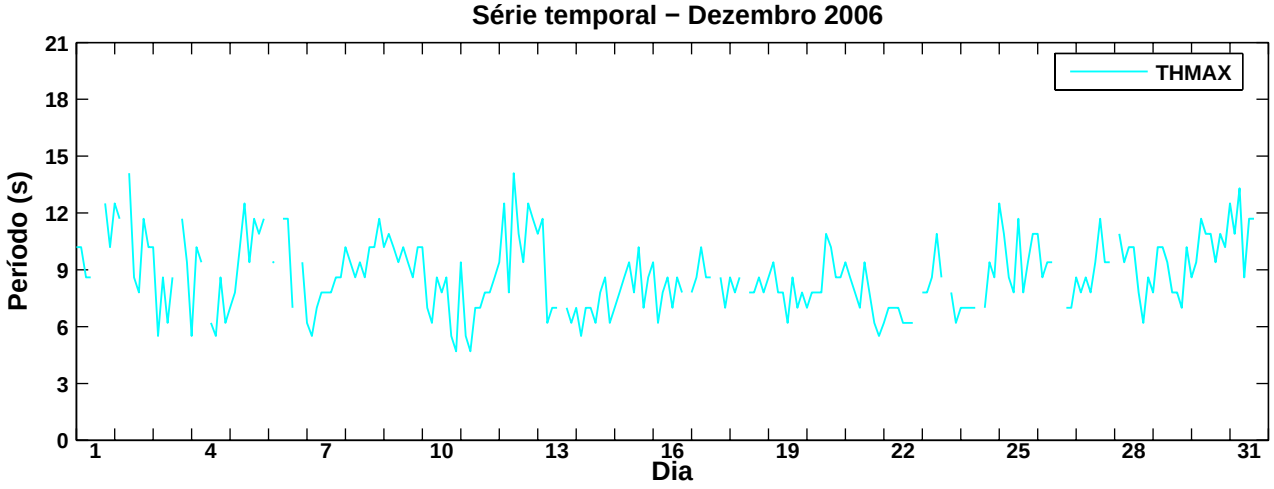

SMIGUEL
Série temporal − Outubro 2006
THS
Período (s)
Dia
0
3
6
9
12
15
18
21
1
4
7
10
13
16
19
22
25
28
31


Série temporal − Novembro 2006
THS
Período (s)
Dia
0
3
6
9
12
15
18
21
1
4
7
10
13
16
19
22
25
28
31


Série temporal − Dezembro 2006
THS
Período (s)
Dia
0
3
6
9
12
15
18
21
1
4
7
10
13
16
19
22
25
28
31


SMIGUEL
Série temporal − Outubro 2006
THMAX
Período (s)
Dia


Série temporal − Novembro 2006
THMAX
Período (s)
Dia


Série temporal − Dezembro 2006
THMAX
Período (s)
Dia

ANEXO C

Tabelas de ocorrências conjuntas HMAX - THMAX, H100 - TH100, H10 - TH10, HS - THS, HS - TZ e HMAX - TMAX

THMAX / HMAX	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0																				
1.0- 1.5		1		2	2	9	3	6	1									24	10.0	7.8
1.5- 2.0			2	7	13	18	8	8	8		2							66	27.6	7.8
2.0- 2.5			2	2	5	14	3	6	6	1				1				40	16.7	8.2
2.5- 3.0			1	3	2	16	10	3	6									41	17.2	8.0
3.0- 3.5			2	1	3	14	4	4	4									32	13.4	7.8
3.5- 4.0				1	2	10	1											14	5.9	7.1
4.0- 4.5				1	1	5		1										8	3.3	7.3
4.5- 5.0						4	2											6	2.5	7.8
5.0- 5.5						1	1		1									3	1.3	8.9
5.5- 6.0						1			2									3	1.3	9.9
6.0- 6.5																				
6.5- 7.0									1									1	0.4	10.2
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5									1									1	0.4	10.2
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA		1	7	17	28	92	32	28	30	1	2			1				239	100	
%		0.4	2.9	7.1	11.7	38.5	13.4	11.7	12.6	0.4	0.8			0.4				100		
MED		1.3	2.4	2.3	2.3	2.7	2.6	2.2	3.0	2.2	1.8			2.2						

THMAX

MED 7.9 MIN 3.9 MAX 15.6

DES.PAD 1.7 ASSIM 0.52 CURT 3.92

HMAX

MED 2.57 MIN 1.03 MAX 8.11

DES.PAD 1.07 ASSIM 1.46 CURT 6.23

THMAX / HMAX	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0					1	1	5	3	6	4			1					21	9.8	10.0
1.0- 1.5		2	1		2	3	3		10	2	1	1	3	1		1		30	14.0	10.1
1.5- 2.0		1		1	4	7	1	3	1		1	2	3					24	11.2	9.0
2.0- 2.5				1	4	7	2	2	15	1								32	14.9	9.2
2.5- 3.0				2	2	3	2		2	1			1					13	6.0	8.4
3.0- 3.5			2	1	2	11	1	1	1									19	8.8	7.3
3.5- 4.0				1	2	11	1					1	2					18	8.4	8.3
4.0- 4.5					3	4	2		1	2		1			1			14	6.5	9.2
4.5- 5.0						3	4	1	1		2							11	5.1	9.2
5.0- 5.5					1		1		1		1			1				5	2.3	10.8
5.5- 6.0							1	1	2									4	1.9	9.6
6.0- 6.5						2			1				2					5	2.3	11.1
6.5- 7.0							1	3	1				1					6	2.8	10.4
7.0- 7.5						1	1	1	1					1				5	2.3	10.3
7.5- 8.0									1		1							2	0.9	11.7
8.0- 8.5							1		1									2	0.9	9.8
8.5- 9.0							1	1	1									3	1.4	9.4
9.0- 9.5																				
9.5-10.0							1											1	0.5	8.6
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA		3	3	6	21	53	28	16	46	10	6	5	13	3	1	1		215	100	
%		1.4	1.4	2.8	9.8	24.7	13.0	7.4	21.4	4.7	2.8	2.3	6.0	1.4	0.5	0.5		100		
MED		1.4	2.6	2.7	2.7	3.2	3.8	3.9	2.8	1.9	4.3	2.4	3.1	4.5	4.4	1.4				

THMAX

MED 9.3 MIN 3.9 MAX 17.2

DES.PAD 2.6 ASSIM 0.56 CURT 2.95

HMAX

MED 3.12 MIN 0.64 MAX 9.50

DES.PAD 1.98 ASSIM 1.03 CURT 3.48

TABELA DE OCORRENCIAS CONJUNTAS SMIGUEL DEZ 2006

THMAX / HMAX	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0																				
1.0- 1.5			1	1	1	2	2	1	2									10	4.4	7.8
1.5- 2.0			1	1		6	3	4	1		1							17	7.5	8.3
2.0- 2.5					2	5	5	2	8	3	1							26	11.4	9.4
2.5- 3.0				2	4	7	5	4	3	2			2					29	12.7	8.7
3.0- 3.5				2	5	11	2	7	6	1	1							35	15.4	8.4
3.5- 4.0					3	12	9	3	6	5	1							39	17.1	8.9
4.0- 4.5				2	3	11	5	1	5	2	2							31	13.6	8.5
4.5- 5.0						7	5	3	6	1	1	1						24	10.5	9.3
5.0- 5.5						5	2	3	1									11	4.8	8.5
5.5- 6.0						2	1			1								4	1.8	9.0
6.0- 6.5							1											1	0.4	8.6
6.5- 7.0							1											1	0.4	8.6
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5																				
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA			2	8	18	68	41	28	38	15	7	1	2					228	100	
%			0.9	3.5	7.9	29.8	18.0	12.3	16.7	6.6	3.1	0.4	0.9					100		
MED			1.5	2.9	3.1	3.6	3.6	3.3	3.4	3.6	3.5	4.6	2.8							

THMAX

MED 8.7 MIN 4.7 MAX 14.1

DES.PAD 1.9 ASSIM 0.36 CURT 2.70

HMAX

MED 3.42 MIN 1.15 MAX 6.74

DES.PAD 1.12 ASSIM 0.10 CURT 2.49

TH100 / H100	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0							1											1	0.4	8.3
1.0- 1.5				2	4	10	11	7	1									35	14.6	8.0
1.5- 2.0			2	6	11	22	13	10	6									70	29.3	7.8
2.0- 2.5				1	8	13	9	8	3	1								43	18.0	8.1
2.5- 3.0				1	3	11	3	12	3									33	13.8	8.3
3.0- 3.5				1	9	13	4		2									29	12.1	7.3
3.5- 4.0					2	8	2											12	5.0	7.5
4.0- 4.5						3	1	1										5	2.1	7.9
4.5- 5.0						1	2	1	1									5	2.1	8.9
5.0- 5.5						1		1	1									3	1.3	9.0
5.5- 6.0								1	1									2	0.8	10.4
6.0- 6.5																				
6.5- 7.0																				
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5									1									1	0.4	10.2
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA			2	11	37	82	46	41	19	1								239	100	
%			0.8	4.6	15.5	34.3	19.2	17.2	7.9	0.4								100		
MED			1.6	1.9	2.4	2.5	2.2	2.4	3.0	2.0										

TH100

MED 8.0 MIN 4.5 MAX 11.2

DES.PAD 1.4 ASSIM 0.19 CURT 2.58

H100

MED 2.42 MIN 0.97 MAX 8.09

DES.PAD 1.02 ASSIM 1.57 CURT 7.10

TH100 / H100	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0					1		7	9	5	1	2		1					26	12.1	9.8
1.0- 1.5			2		2	5		6	3		3	2	3	2	1			29	13.5	10.4
1.5- 2.0			1		2	5	2	2	7	2	2		1					24	11.2	9.4
2.0- 2.5				1	2	7	6	4	9	4								33	15.3	9.1
2.5- 3.0				3	5	6	2	1				1						18	8.4	7.5
3.0- 3.5				1	4	12	2	1			1							21	9.8	7.6
3.5- 4.0				1	1	5	4					1	2					14	6.5	8.9
4.0- 4.5						3	3	3		1	1	1						12	5.6	9.5
4.5- 5.0					1	1		3			1	1						7	3.3	9.8
5.0- 5.5								2	2					1				5	2.3	11.2
5.5- 6.0						1	1	2		1	1							6	2.8	9.6
6.0- 6.5							2	1		1			1	1				6	2.8	11.3
6.5- 7.0							1			1			1					3	1.4	11.4
7.0- 7.5							2		3									5	2.3	9.7
7.5- 8.0											1							1	0.5	12.1
8.0- 8.5								2	1									3	1.4	9.9
8.5- 9.0							1		1									2	0.9	9.6
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA			3	6	18	45	33	36	31	11	12	6	9	4	1			215	100	
%			1.4	2.8	8.4	20.9	15.3	16.7	14.4	5.1	5.6	2.8	4.2	1.9	0.5			100		
MED			1.4	2.8	2.6	2.9	3.4	2.9	2.9	3.2	2.8	3.0	3.1	3.4	1.4					

TH100

MED 9.4 MIN 4.3 MAX 16.0

DES.PAD 2.4 ASSIM 0.62 CURT 2.95

H100

MED 2.94 MIN 0.61 MAX 8.99

DES.PAD 1.89 ASSIM 1.08 CURT 3.60

TH100 / H100	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0																				
1.0- 1.5			1	1	3	1	2	4	1									13	5.7	7.8
1.5- 2.0			1	1	1	3	4	3	2		1							16	7.0	8.4
2.0- 2.5					2	6	3	9	7	2	2							31	13.6	9.3
2.5- 3.0					5	7	8	5	3	3	2							33	14.5	8.8
3.0- 3.5					4	10	11	8	6		1							40	17.5	8.5
3.5- 4.0				1	6	11	2	10	4	2	2							38	16.7	8.7
4.0- 4.5						6	7	5	3	3	4							28	12.3	9.4
4.5- 5.0						4	8	5	2	1	1							21	9.2	9.1
5.0- 5.5							2	1	1	1								5	2.2	9.5
5.5- 6.0						1	2											3	1.3	8.2
6.0- 6.5																				
6.5- 7.0																				
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5																				
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA			2	3	21	49	49	50	29	12	13							228	100	
%			0.9	1.3	9.2	21.5	21.5	21.9	12.7	5.3	5.7							100		
MED			1.5	2.3	2.8	3.3	3.5	3.1	3.2	3.6	3.3									

TH100

MED 8.8 MIN 4.3 MAX 12.9

DES.PAD 1.7 ASSIM 0.21 CURT 2.63

H100

MED 3.22 MIN 1.04 MAX 5.85

DES.PAD 1.04 ASSIM -0.01 CURT 2.38

TH10 / H10	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0				1		2	4	1										8	3.3	8.3
1.0- 1.5			1	4	14	35	18	17	3									92	38.5	7.8
1.5- 2.0				2	1	16	14	8	3	1								45	18.8	8.3
2.0- 2.5				1	5	22	10	11	3									52	21.8	8.1
2.5- 3.0				1	4	16	4											25	10.5	7.4
3.0- 3.5					1	5												6	2.5	7.3
3.5- 4.0						2	1	2	1									6	2.5	8.9
4.0- 4.5								1		1								2	0.8	10.5
4.5- 5.0									2									2	0.8	10.6
5.0- 5.5								1										1	0.4	9.9
5.5- 6.0																				
6.0- 6.5																				
6.5- 7.0																				
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5																				
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA			1	9	25	98	51	41	12	2								239	100	
%			0.4	3.8	10.5	41.0	21.3	17.2	5.0	0.8								100		
MED			1.4	1.6	1.8	2.0	1.7	1.9	2.4	2.9										

TH10

MED 8.0 MIN 4.9 MAX 11.3

DES.PAD 1.2 ASSIM 0.25 CURT 2.72

H10

MED 1.89 MIN 0.80 MAX 5.41

DES.PAD 0.77 ASSIM 1.32 CURT 5.30

TH10 / H10	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0			2		1	2	10	11	6		3	4						39	18.1	9.6
1.0- 1.5			1	1	1	7	3	2	10	7	2		2					36	16.7	9.7
1.5- 2.0				2	2	12	6	5	7	6	1							41	19.1	8.9
2.0- 2.5					7	10	3		1		1							22	10.2	7.6
2.5- 3.0				1	7	12			1		1							22	10.2	7.5
3.0- 3.5						2	5			3		2						12	5.6	9.9
3.5- 4.0					1	2		4		3	2							12	5.6	10.0
4.0- 4.5						1	1	2	2	1	1							8	3.7	9.9
4.5- 5.0							2		1		1							4	1.9	9.9
5.0- 5.5							3	2	2	2	2							11	5.1	10.2
5.5- 6.0							1				1							2	0.9	10.4
6.0- 6.5							1	3										4	1.9	9.4
6.5- 7.0									2									2	0.9	10.5
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5																				
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA			3	4	19	48	35	29	32	22	15	6	2					215	100	
%			1.4	1.9	8.8	22.3	16.3	13.5	14.9	10.2	7.0	2.8	0.9					100		
MED			1.0	1.9	2.3	2.2	2.4	2.4	2.2	2.4	3.0	1.7	1.1							

TH10

MED 9.2 MIN 4.6 MAX 14.7

DES.PAD 2.1 ASSIM 0.33 CURT 2.44

H10

MED 2.31 MIN 0.50 MAX 6.63

DES.PAD 1.46 ASSIM 1.02 CURT 3.31

TH10 / H10	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0				1		2	1	2										6	2.6	8.0
1.0- 1.5				5	2	3	2	4	2									18	7.9	7.6
1.5- 2.0						7	7	9	10	3								36	15.8	9.3
2.0- 2.5					4	13	8	12	9	2								48	21.1	8.8
2.5- 3.0					3	22	9	11	7	1	3							56	24.6	8.6
3.0- 3.5						3	15	5	10	4	1	1						39	17.1	9.5
3.5- 4.0						3	10	2	2									17	7.5	8.7
4.0- 4.5						1	5	1	1									8	3.5	8.9
4.5- 5.0																				
5.0- 5.5																				
5.5- 6.0																				
6.0- 6.5																				
6.5- 7.0																				
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5																				
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA				6	9	54	57	46	41	10	4	1						228	100	
%				2.6	3.9	23.7	25.0	20.2	18.0	4.4	1.8	0.4						100		
MED				1.1	2.2	2.4	2.9	2.3	2.5	2.5	3.0	3.3								

TH10

MED 8.8 MIN 5.0 MAX 13.1

DES.PAD 1.5 ASSIM 0.15 CURT 2.94

H10

MED 2.53 MIN 0.83 MAX 4.24

DES.PAD 0.80 ASSIM -0.07 CURT 2.37

THS / HS	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0				4	10	14	13	8	1									50	20.9	7.7
1.0- 1.5			1	6	16	36	11	8	1									79	33.1	7.4
1.5- 2.0				1	5	31	13	10	5									65	27.2	8.1
2.0- 2.5					7	17	5											29	12.1	7.3
2.5- 3.0					1	6		2	1									10	4.2	8.1
3.0- 3.5							1		2									3	1.3	9.7
3.5- 4.0									2									2	0.8	10.3
4.0- 4.5									1									1	0.4	10.2
4.5- 5.0																				
5.0- 5.5																				
5.5- 6.0																				
6.0- 6.5																				
6.5- 7.0																				
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5																				
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA			1	11	39	104	43	28	13									239	100	
%			0.4	4.6	16.3	43.5	18.0	11.7	5.4									100		
MED			1.1	1.1	1.4	1.6	1.4	1.4	2.5											

THS

MED 7.7 MIN 4.9 MAX 10.5

DES.PAD 1.1 ASSIM 0.37 CURT 2.76

HS

MED 1.52 MIN 0.66 MAX 4.12

DES.PAD 0.61 ASSIM 1.28 CURT 5.09

TABELA DE OCORRENCIAS CONJUNTAS SMIGUEL NOV 2006

THS / HS	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5						3	6	2	2									13	6.0	8.6
0.5- 1.0			3	2		8	10	3	8	4	2	3						43	20.0	9.0
1.0- 1.5			1	1	7	9	6	11	10	6								51	23.7	8.9
1.5- 2.0				1	7	15	4		1		1							29	13.5	7.5
2.0- 2.5					10	12	2		1		1							26	12.1	7.4
2.5- 3.0						4	2	3	3	4	2							18	8.4	9.7
3.0- 3.5						4		3	2	3								12	5.6	9.5
3.5- 4.0							2	1	1		1							5	2.3	9.8
4.0- 4.5							4	2	2	3	1							12	5.6	10.0
4.5- 5.0							1	2	1									4	1.9	9.4
5.0- 5.5									2									2	0.9	10.5
5.5- 6.0																				
6.0- 6.5																				
6.5- 7.0																				
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5																				
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA			4	4	24	55	37	27	33	20	8	3						215	100	
%			1.9	1.9	11.2	25.6	17.2	12.6	15.3	9.3	3.7	1.4						100		
MED			0.9	1.0	1.8	1.7	1.7	2.1	2.0	2.2	2.4	0.8								

THS

MED 8.7 MIN 4.7 MAX 13.5

DES.PAD 1.9 ASSIM 0.27 CURT 2.41

HS

MED 1.84 MIN 0.39 MAX 5.41

DES.PAD 1.16 ASSIM 1.01 CURT 3.34

THS / HS	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0			1	5	4	1	1	3	1									16	7.0	6.9
1.0- 1.5					4	7	11	8	4									34	14.9	8.5
1.5- 2.0					5	19	12	7	12	2								57	25.0	8.6
2.0- 2.5					4	20	15	13	11	2	1							66	28.9	8.7
2.5- 3.0					1	7	18	4	7		2							39	17.1	8.8
3.0- 3.5						1	9	5	1									16	7.0	8.9
3.5- 4.0																				
4.0- 4.5																				
4.5- 5.0																				
5.0- 5.5																				
5.5- 6.0																				
6.0- 6.5																				
6.5- 7.0																				
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5																				
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA			1	5	18	55	66	40	36	4	3							228	100	
%			0.4	2.2	7.9	24.1	28.9	17.5	15.8	1.8	1.3							100		
MED			0.9	0.9	1.6	2.0	2.2	2.0	2.1	2.0	2.6									

THS

MED 8.5 MIN 4.9 MAX 12.7

DES.PAD 1.4 ASSIM 0.15 CURT 3.06

HS

MED 2.02 MIN 0.66 MAX 3.36

DES.PAD 0.64 ASSIM -0.06 CURT 2.34

TABELA DE OCORRENCIAS CONJUNTAS SMIGUEL OUT 2006

TZ / HS	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0			10	21	7	12												50	20.9	5.8
1.0- 1.5			10	40	23	5	1											79	33.1	5.8
1.5- 2.0			1	25	26	9	4											65	27.2	6.4
2.0- 2.5				12	16	1												29	12.1	6.0
2.5- 3.0				1	6	2	1											10	4.2	6.6
3.0- 3.5					1	2												3	1.3	7.4
3.5- 4.0							2											2	0.8	8.4
4.0- 4.5							1											1	0.4	8.3
4.5- 5.0																				
5.0- 5.5																				
5.5- 6.0																				
6.0- 6.5																				
6.5- 7.0																				
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5																				
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA			21	99	79	31	9											239	100	
%			8.8	41.4	33.1	13.0	3.8											100		
MED			1.0	1.4	1.7	1.5	2.5													

TZ

MED 6.1 MIN 4.3 MAX 8.5

DES.PAD 0.9 ASSIM 0.63 CURT 3.15

HS

MED 1.52 MIN 0.66 MAX 4.12

DES.PAD 0.61 ASSIM 1.28 CURT 5.09

TABELA DE OCORRENCIAS CONJUNTAS SMIGUEL NOV 2006

TZ / HS	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5				7	4	2												13	6.0	6.1
0.5- 1.0		1	6	7	12	12	4	1										43	20.0	6.4
1.0- 1.5			2	13	11	19	6											51	23.7	6.7
1.5- 2.0			2	16	9		2											29	13.5	6.0
2.0- 2.5				16	7	2		1										26	12.1	6.1
2.5- 3.0					7	6	5											18	8.4	7.4
3.0- 3.5					4	3	5											12	5.6	7.5
3.5- 4.0					1	1	2	1										5	2.3	8.0
4.0- 4.5						8	2	2										12	5.6	8.0
4.5- 5.0						3	1											4	1.9	7.9
5.0- 5.5							2											2	0.9	8.6
5.5- 6.0																				
6.0- 6.5																				
6.5- 7.0																				
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5																				
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA		1	10	59	55	56	29	5										215	100	
%		0.5	4.7	27.4	25.6	26.0	13.5	2.3										100		
MED		0.7	0.9	1.5	1.6	2.1	2.7	3.0												

TZ

MED 6.7 MIN 3.7 MAX 9.7

DES.PAD 1.2 ASSIM 0.11 CURT 2.39

HS

MED 1.84 MIN 0.39 MAX 5.41

DES.PAD 1.16 ASSIM 1.01 CURT 3.34

TABELA DE OCORRENCIAS CONJUNTAS SMIGUEL DEZ 2006

TZ / HS	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0			9	2	2	2	1											16	7.0	5.4
1.0- 1.5				14	11	9												34	14.9	6.3
1.5- 2.0				20	19	10	8											57	25.0	6.5
2.0- 2.5				12	29	18	7											66	28.9	6.7
2.5- 3.0					25	9	3	2										39	17.1	7.0
3.0- 3.5					6	10												16	7.0	7.1
3.5- 4.0																				
4.0- 4.5																				
4.5- 5.0																				
5.0- 5.5																				
5.5- 6.0																				
6.0- 6.5																				
6.5- 7.0																				
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5																				
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA			9	48	92	58	19	2										228	100	
%			3.9	21.1	40.4	25.4	8.3	0.9										100		
MED			0.8	1.7	2.2	2.2	2.0	2.7												

TZ

MED 6.6 MIN 4.1 MAX 9.6

DES.PAD 1.0 ASSIM 0.08 CURT 2.97

HS

MED 2.02 MIN 0.66 MAX 3.36

DES.PAD 0.64 ASSIM -0.06 CURT 2.34

TABELA DE OCORRENCIAS CONJUNTAS SMIGUEL OUT 2006

TMAX / HMAX	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0																				
1.0- 1.5										3	4	3	12			1	1	24	10.0	13.9
1.5- 2.0									5	7	14	14	19		5	1	1	66	27.6	13.4
2.0- 2.5									1	3	7	11	10	6	2			40	16.7	13.8
2.5- 3.0								1	6	11	5	8	10					41	17.2	12.6
3.0- 3.5								2	5	6	8	5	5		1			32	13.4	12.4
3.5- 4.0									5	1	4	2	1	1				14	5.9	12.2
4.0- 4.5									2	3	2			1				8	3.3	12.1
4.5- 5.0									1	2	1	1	1					6	2.5	12.4
5.0- 5.5										1				1	1			3	1.3	14.6
5.5- 6.0								1					1	1				3	1.3	13.3
6.0- 6.5																				
6.5- 7.0													1					1	0.4	14.8
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5														1				1	0.4	15.6
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA								4	25	37	45	44	60	11	9	2	2	239	100	
%								1.7	10.5	15.5	18.8	18.4	25.1	4.6	3.8	0.8	0.8	100		
MED								3.6	3.0	2.8	2.5	2.3	2.2	3.7	2.4	1.6	1.6			

TMAX

MED 13.1 MIN 9.4 MAX 18.8

DES.PAD 1.7 ASSIM 0.29 CURT 3.10

HMAX

MED 2.57 MIN 1.03 MAX 8.11

DES.PAD 1.07 ASSIM 1.46 CURT 6.23

TABELA DE OCORRENCIAS CONJUNTAS SMIGUEL NOV 2006

TMAX / HMAX	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0										1	3	5	7	3	1		1	21	9.8	14.2
1.0- 1.5									2	3	4	4	4	1		5	7	30	14.0	15.0
1.5- 2.0									2	4	2	1	1	4	1	4	5	24	11.2	15.1
2.0- 2.5									2	2	3	1	12	5	4	2	1	32	14.9	14.6
2.5- 3.0									2	1	5		1	3		1		13	6.0	13.3
3.0- 3.5								2	7	2	2	2	2	2				19	8.8	12.0
3.5- 4.0									9	3	2	1			1	1	1	18	8.4	12.3
4.0- 4.5									3	3		2				3	3	14	6.5	14.3
4.5- 5.0									3	1	1	2	1	1	2			11	5.1	13.3
5.0- 5.5										1				2	1		1	5	2.3	15.8
5.5- 6.0												2	2					4	1.9	13.9
6.0- 6.5									1			1				1	2	5	2.3	15.3
6.5- 7.0										1	1	1	1				2	6	2.8	15.2
7.0- 7.5									1			1	2			1		5	2.3	14.2
7.5- 8.0																1	1	2	0.9	18.4
8.0- 8.5													2					2	0.9	14.5
8.5- 9.0											1		2					3	1.4	13.6
9.0- 9.5																				
9.5-10.0											1							1	0.5	12.5
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA								2	32	22	25	23	37	21	10	19	24	215	100	
%								0.9	14.9	10.2	11.6	10.7	17.2	9.8	4.7	8.8	11.2	100		
MED								3.2	3.5	3.0	3.0	3.2	3.3	2.5	3.0	3.0	3.2			

TMAX

MED 14.1 MIN 9.4 MAX 20.3

DES.PAD 2.6 ASSIM 0.33 CURT 2.13

HMAX

MED 3.12 MIN 0.64 MAX 9.50

DES.PAD 1.98 ASSIM 1.03 CURT 3.48

TABELA DE OCORRENCIAS CONJUNTAS SMIGUEL DEZ 2006

TMAX / HMAX	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0																				
1.0- 1.5								1	2	2	1	2	2					10	4.4	12.2
1.5- 2.0									2	1	6	2	3	2	1			17	7.5	13.2
2.0- 2.5											6	5	7	5	2	1		26	11.4	14.2
2.5- 3.0									3		3	9	10	3		1		29	12.7	13.8
3.0- 3.5									3	6	2	6	9	6		2	1	35	15.4	13.8
3.5- 4.0									4	6	6	2	11	6	3	1		39	17.1	13.6
4.0- 4.5								1	1	3	6	6	10	2	1	1		31	13.6	13.6
4.5- 5.0									1	3	5	2	6	2	2	2	1	24	10.5	14.1
5.0- 5.5									2			3	5	1				11	4.8	13.6
5.5- 6.0									1		1	2						4	1.8	12.5
6.0- 6.5												1						1	0.4	13.3
6.5- 7.0											1							1	0.4	12.5
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5																				
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA								2	19	21	37	40	63	27	9	8	2	228	100	
%								0.9	8.3	9.2	16.2	17.5	27.6	11.8	3.9	3.5	0.9	100		
MED								2.9	3.4	3.5	3.3	3.4	3.5	3.3	3.5	3.7	3.9			

TMAX

MED 13.7 MIN 9.4 MAX 18.8

DES.PAD 1.8 ASSIM 0.10 CURT 2.67

HMAX

MED 3.42 MIN 1.15 MAX 6.74

DES.PAD 1.12 ASSIM 0.10 CURT 2.49

ANEXO D

Listagem dos parâmetros espectrais HM0, T02, TP, SMAX e direccionais THTP1, SPRTP1, THHF1, THLF1 e N

Código de símbolos:

HM0 (m) - Altura significativa, $Hm0 = 4\sqrt{M0}$;

T02 (s) - Período médio, $T02 = \sqrt{\frac{M0}{M2}}$;

M0 (m^2) - Momento espectral de ordem zero;

M2 ($m^2.s^{-2}$) - Momento espectral de ordem dois;

NG - Número de grupos utilizados no cálculo dos espectros;

THHF1 (°) - Direcção média relativa às altas frequências (períodos menores que 8 segundos);

THLF1 (°) - Direcção média relativa às baixas frequências (períodos maiores que 8 segundos);

Utilizando estimadores dos espectros cruzados em 20 bandas de frequência, são determinados os seguintes parâmetros:

TP (s) - Período de pico;

SMAX ($m^2.s$) - Máxima ordenada espectral;

THTP1 (°) - Direcção média do período de pico;

SPRTP1 (°) - Dispersão no período de pico;

N - Expoente da distribuição cosseno no período de pico;

As estimativas das ordenadas dos espectros são calculadas pelo método directo de estimação do espectro, aplicando o algoritmo "FAST FOURIER TRANSFORM" aos dados agrupados em blocos de 200 segundos, e efectuando a média sobre todos os blocos considerados válidos. É aplicada a janela cosseno aos primeiros e últimos 64 pontos de cada bloco.

Intervalo de tempo entre valores ..... 0.78 s

Número de ordenadas do espectro 127

Resolução em frequência do espectro ..... 0.005 Hz

Frequência de corte do espectro ..... 0.635 Hz

Número de graus de liberdade ..... 2 * NG

NOTA: Todas as direcções apresentadas estão referidas ao Norte verdadeiro.

DIA	HORA	NG	HM0 (m)	T02 (s)	TP (s)	SMAX (m2.s)	THTP1 (graus)	SPRTP1 (graus)	THHF1 (graus)	THLF1 (graus)	N
01	00-00	9	1.16	5.0	13.3	0.702	270	52	286	286	1.4
01	03-00	9	1.00	4.5	10.0	0.589	290	36	320	279	5.2
01	06-00	9	1.02	4.0	9.1	0.496	278	37	325	274	2.7
01	09-00	9	0.99	5.1	13.3	0.503	285	50	341	278	3.1
01	12-00	9	1.08	4.8	12.5	0.651	283	47	310	279	2.5
01	18-00	9	0.92	4.6	8.0	0.420	307	35	47	275	14.7
01	21-00	9	0.91	4.1	8.0	0.382	309	47	71	277	13.0
02	00-00	9	1.04	4.7	12.5	0.586	278	48	314	272	1.4
02	03-00	9	1.23	5.0	7.0	0.900	318	50	317	274	6.3
02	06-00	9	1.14	5.5	7.0	0.745	6	73	326	274	11.0
02	09-00	9	1.09	5.4	8.0	0.827	316	64	311	277	14.7
02	12-00	9	1.11	4.6	8.0	0.697	304	44	335	253	14.2
02	15-00	9	0.99	4.5	8.0	0.495	304	50	92	263	12.1
02	18-00	9	0.90	4.5	16.7	0.547	178	40	104	259	3.3
02	21-00	9	0.94	4.8	15.4	0.357	190	49	100	257	1.9
03	00-00	9	0.92	5.3	15.4	0.843	174	37	106	248	3.6
03	03-00	9	1.07	5.4	15.4	1.167	190	23	127	229	10.7
03	06-00	9	0.98	5.2	15.4	0.432	175	41	128	227	2.8
03	09-00	9	0.88	5.4	15.4	0.826	171	42	130	203	3.8
03	15-00	9	1.20	4.3	15.4	0.531	163	43	120	198	1.5
03	18-00	9	1.28	4.4	14.3	0.801	169	40	121	204	3.3
03	21-00	9	1.15	4.6	6.2	0.670	130	33	128	210	7.8
04	00-00	9	1.22	4.4	6.2	0.740	137	29	130	219	9.8
04	03-00	9	1.23	4.4	6.2	0.698	134	30	130	216	8.6
04	06-00	9	1.08	4.7	14.3	1.029	176	26	131	212	8.2
04	09-00	9	1.04	4.6	13.3	0.625	173	37	134	194	3.8
04	12-00	9	0.98	4.8	6.2	0.591	146	36	136	194	1.6
04	15-00	9	1.06	5.1	6.2	0.850	165	33	152	204	2.9
04	18-00	9	1.25	5.5	7.0	1.245	175	24	140	190	8.1
04	21-00	9	1.18	5.1	7.0	1.047	182	24	154	180	7.2
05	00-00	9	1.28	4.4	14.3	0.892	171	42	174	186	2.3
05	03-00	9	1.37	5.1	8.0	1.366	200	23	171	194	7.5
05	06-00	9	1.38	5.1	8.0	0.968	185	24	168	189	7.5
05	09-00	9	1.48	5.4	7.0	1.244	191	23	172	190	8.3
05	12-00	9	1.39	5.0	7.0	1.317	198	21	180	200	9.2
05	15-00	9	1.26	4.5	7.0	0.898	196	25	184	207	6.4
05	18-00	9	1.33	4.7	15.4	1.027	173	30	177	201	7.2
05	21-00	9	1.26	5.0	6.2	0.839	184	28	166	196	4.8
06	00-00	9	1.30	5.1	14.3	1.016	177	40	181	219	2.7
06	03-00	9	1.52	4.9	14.3	1.417	170	34	195	218	3.1
06	06-00	9	1.46	5.2	10.5	1.061	280	35	178	220	5.6
06	09-00	9	1.44	6.0	14.3	1.296	177	27	164	213	9.3
06	12-00	9	1.47	5.7	6.2	1.263	177	45	200	219	0.5
06	18-00	9	1.32	5.6	14.3	1.250	174	29	195	202	5.5
06	21-00	9	1.27	6.2	7.0	1.025	150	42	201	208	1.3

DIA	HORA	NG	HM0 (m)	T02 (s)	TP (s)	SMAX (m2.s)	THTP1 (graus)	SPRTP1 (graus)	THHF1 (graus)	THLF1 (graus)	N
07	00-00	9	1.26	5.8	7.0	1.074	153	46	213	224	3.8
07	03-00	9	1.27	5.8	13.3	1.125	183	36	257	227	3.6
07	06-00	9	1.29	6.2	11.8	1.656	224	54	254	229	0.7
07	09-00	9	1.02	7.0	11.8	0.824	232	60	141	227	1.7
07	12-00	9	1.10	6.2	6.2	0.741	167	47	174	227	0.9
07	15-00	9	1.05	5.6	13.3	0.788	178	33	246	224	5.3
07	18-00	9	1.11	5.7	10.5	1.255	283	39	253	231	2.9
07	21-00	9	0.99	6.7	12.5	1.350	164	35	221	209	3.9
08	00-00	9	0.94	6.0	10.0	0.877	258	49	230	225	1.0
08	03-00	9	1.01	5.7	10.0	0.834	258	45	251	215	0.9
08	06-00	9	1.04	5.2	10.0	0.977	275	46	281	237	2.7
08	09-00	9	0.79	5.5	10.0	0.595	212	53	247	193	0.5
08	12-00	9	0.87	5.1	11.8	0.600	179	31	245	191	5.0
08	15-00	9	0.94	5.0	11.8	0.544	178	33	267	202	3.8
08	18-00	9	0.94	4.9	11.8	0.583	175	31	275	207	6.6
08	21-00	9	0.72	6.5	11.8	0.513	172	41	197	198	3.3
09	00-00	9	0.84	5.9	11.8	0.785	175	34	265	181	3.9
09	03-00	9	0.91	6.7	10.5	0.734	219	54	281	220	1.0
09	06-00	9	0.99	5.9	9.1	1.100	297	29	256	228	9.3
09	09-00	9	0.98	6.7	10.0	1.031	285	40	245	244	4.3
09	12-00	9	0.94	7.4	10.0	1.212	290	41	197	246	4.2
09	15-00	9	1.04	7.2	10.5	1.483	272	45	257	236	2.1
09	18-00	9	0.97	6.5	11.1	1.352	288	35	270	254	9.5
09	21-00	9	0.99	7.3	11.1	1.480	281	33	220	245	7.2
10	00-00	9	0.80	6.2	10.0	0.806	275	43	211	213	2.2
10	03-00	9	0.98	5.8	9.1	1.082	272	30	281	215	5.4
10	06-00	9	1.19	4.5	10.0	1.209	289	31	288	243	4.5
10	09-00	9	1.19	4.1	10.0	0.735	288	45	277	267	3.5
10	12-00	9	1.22	4.3	9.1	0.592	262	42	269	237	1.7
10	15-00	9	1.17	4.7	5.5	0.684	278	30	265	235	3.3
10	18-00	9	1.23	5.4	10.5	0.854	293	34	283	287	8.9
10	21-00	9	1.64	7.2	11.8	4.272	291	21	275	287	20.3
11	00-00	9	1.17	6.5	12.5	0.931	291	44	233	285	6.0
11	03-00	9	1.46	6.9	12.5	2.026	292	29	264	285	8.1
11	06-00	9	1.37	5.9	11.8	2.033	295	33	280	291	9.6
11	12-00	9	1.14	7.7	11.1	1.735	287	34	238	274	5.6
11	15-00	9	1.15	7.2	11.1	1.720	289	36	265	276	5.4
11	18-00	9	1.14	6.6	10.0	1.397	289	28	272	278	9.8
12	00-00	9	0.91	7.0	10.5	0.751	285	49	306	281	3.6
12	03-00	9	0.91	6.2	11.1	0.897	255	53	239	255	1.5
12	06-00	9	0.94	4.9	11.1	0.992	284	39	247	273	5.9
12	09-00	9	1.09	5.0	10.5	1.532	296	31	249	288	8.7
12	12-00	9	1.04	4.4	10.5	0.669	293	46	196	285	4.7
12	15-00	9	1.33	4.6	4.9	0.933	209	35	197	245	1.6
12	18-00	9	1.79	4.7	5.5	2.942	219	26	215	254	5.7

DIA	HORA	NG	HM0 (m)	T02 (s)	TP (s)	SMAX (m2.s)	THTP1 (graus)	SPRTP1 (graus)	THHF1 (graus)	THLF1 (graus)	N
12	21-00	9	2.35	5.1	6.2	3.698	222	30	212	256	3.9
13	00-00	9	2.45	5.7	8.0	3.644	250	26	204	248	5.3
13	03-00	9	2.12	6.0	9.1	3.284	259	25	202	231	7.4
13	06-00	9	1.79	5.8	9.1	2.484	269	24	269	270	7.4
13	09-00	9	1.36	5.2	8.0	1.087	253	31	282	238	3.4
13	12-00	9	1.15	5.8	8.0	0.814	246	34	220	249	2.7
13	15-00	9	1.23	5.7	7.0	1.220	250	39	265	240	1.4
13	18-00	9	1.55	5.8	7.0	2.161	267	27	276	264	3.9
13	21-00	9	1.21	5.4	8.0	0.811	268	32	286	266	3.3
14	00-00	9	1.16	6.3	15.4	1.130	229	58	275	264	0.8
14	03-00	9	1.21	6.9	16.7	0.958	185	46	288	259	2.3
14	06-00	9	1.24	6.7	13.3	1.193	289	25	292	267	19.4
14	09-00	9	1.41	6.9	12.5	1.753	291	21	291	266	25.6
14	12-00	9	1.56	5.8	15.4	2.333	179	35	298	264	5.4
14	15-00	9	1.35	5.6	15.4	1.612	166	37	287	252	6.0
14	18-00	9	1.43	5.0	11.1	0.980	287	26	285	258	10.3
14	21-00	9	1.46	5.2	16.7	1.601	166	38	292	256	7.5
15	00-00	9	1.62	5.1	15.4	2.129	173	40	288	249	3.3
15	03-00	9	1.72	5.2	16.7	1.558	170	38	286	255	4.6
15	06-00	9	2.03	5.5	7.0	2.497	292	19	288	266	9.9
15	09-00	9	2.32	5.7	7.0	3.732	286	16	288	254	13.3
15	12-00	9	2.16	5.5	8.0	2.419	285	23	288	242	7.8
15	15-00	9	2.07	5.3	8.0	2.507	282	23	288	240	6.6
15	18-00	9	2.23	5.6	8.0	3.648	286	19	288	247	13.3
15	21-00	9	2.03	5.9	8.0	2.878	290	17	292	245	14.5
16	00-00	9	1.96	6.1	8.0	2.218	292	21	292	254	7.4
16	03-00	9	2.05	5.9	8.0	2.696	293	23	295	244	6.3
16	06-00	9	2.08	5.9	7.0	2.511	291	18	295	245	12.8
16	09-00	9	2.05	5.5	6.2	2.473	295	17	292	256	12.6
16	12-00	9	2.44	5.6	7.0	3.572	295	20	292	255	8.5
16	15-00	9	2.74	5.7	7.0	5.966	292	21	285	254	8.2
16	18-00	9	3.10	6.0	9.1	7.024	295	18	290	262	16.0
16	21-00	9	2.75	6.0	8.0	5.716	292	21	286	267	8.6
17	00-00	9	2.32	5.7	8.0	4.103	285	23	288	260	6.6
17	03-00	9	2.40	5.6	8.0	4.983	280	22	294	256	7.2
17	06-00	9	2.00	5.4	7.0	2.243	287	21	288	251	8.6
17	09-00	9	1.90	5.9	7.0	2.601	278	26	283	264	9.2
17	12-00	9	1.80	5.3	8.0	1.413	284	26	298	267	10.8
17	15-00	9	1.88	6.0	8.0	2.614	293	25	300	274	9.7
17	21-00	9	1.25	5.1	7.0	0.882	291	23	294	248	8.2
18	00-00	9	1.14	4.8	6.2	0.620	289	23	288	226	6.9
18	03-00	9	1.06	4.6	6.2	0.526	287	24	287	231	7.3
18	06-00	9	1.09	4.5	6.2	0.485	285	27	291	229	6.9
18	09-00	9	0.93	4.4	6.2	0.329	276	31	285	203	3.1
18	12-00	9	0.88	4.0	11.8	0.286	175	44	288	205	3.2

DIA	HORA	NG	HM0 (m)	T02 (s)	TP (s)	SMAX (m2.s)	THTP1 (graus)	SPRTP1 (graus)	THHF1 (graus)	THLF1 (graus)	N
18	15-00	9	0.95	4.2	12.5	0.477	174	31	285	210	8.8
18	18-00	9	1.11	4.1	4.9	0.451	276	24	278	216	5.6
18	21-00	9	1.26	4.0	4.9	0.995	274	30	266	195	3.0
19	00-00	9	1.54	4.3	5.5	1.663	277	31	256	186	3.2
19	03-00	9	2.21	4.9	6.2	4.748	267	29	255	211	3.0
19	06-00	9	2.84	5.7	7.0	9.002	265	25	249	228	4.5
19	09-00	9	2.50	5.8	8.0	7.351	268	28	254	226	3.9
19	15-00	9	2.12	5.6	8.0	4.668	278	25	274	224	5.2
19	18-00	9	2.19	6.0	8.0	5.768	254	26	261	230	3.9
19	21-00	9	1.69	5.6	8.0	3.505	265	30	276	223	2.8
20	00-00	9	1.80	5.8	8.0	3.753	265	30	279	228	3.3
20	03-00	9	1.97	5.6	8.0	4.886	256	32	271	233	2.2
20	06-00	9	2.05	5.7	8.0	3.692	262	31	274	266	2.9
20	09-00	9	2.59	6.2	8.0	4.988	257	36	269	279	2.1
20	12-00	9	2.28	5.7	8.0	3.589	268	31	276	279	2.9
20	15-00	9	2.22	5.6	8.0	3.357	281	31	276	274	2.5
20	18-00	9	2.13	5.5	7.0	2.553	275	30	273	261	3.6
21	00-00	9	1.84	5.5	7.0	2.142	277	27	264	286	4.9
21	03-00	9	1.85	5.4	8.0	1.887	277	29	261	290	5.6
21	06-00	9	1.95	5.5	14.3	2.287	292	44	243	287	3.8
21	09-00	9	2.18	5.1	6.2	2.291	257	32	238	276	2.5
21	12-00	9	2.32	5.2	7.0	4.246	264	32	239	258	2.4
21	15-00	9	2.47	5.4	8.0	4.603	266	31	248	258	3.4
21	18-00	9	2.53	5.7	8.0	6.948	264	23	253	263	6.6
21	21-00	9	2.24	6.1	8.0	5.482	268	31	242	259	2.7
22	00-00	9	2.42	6.2	9.1	5.612	258	32	231	255	2.4
22	03-00	9	2.37	6.4	9.1	5.466	264	32	246	256	2.5
22	06-00	9	2.34	6.2	8.0	5.716	249	28	255	261	3.3
22	09-00	9	2.10	5.8	9.1	4.190	269	30	244	256	3.1
22	12-00	9	2.20	5.5	8.0	4.212	254	33	254	264	2.2
22	15-00	9	2.27	5.8	8.0	5.213	247	29	257	265	3.7
22	18-00	9	2.11	5.7	9.1	3.927	266	26	259	262	6.7
22	21-00	9	2.02	6.4	10.0	6.264	277	19	262	271	12.5
23	00-00	9	1.72	6.3	10.0	2.311	282	23	243	269	7.9
23	03-00	9	1.78	6.2	7.0	2.384	253	27	254	261	4.5
23	06-00	9	1.68	6.0	8.0	1.989	260	32	258	268	2.7
23	09-00	9	1.64	5.8	8.0	2.011	250	39	223	248	1.0
23	12-00	9	1.55	5.3	7.0	1.832	237	45	219	226	0.3
23	15-00	9	1.70	5.0	8.0	1.950	246	34	234	233	2.6
23	18-00	9	1.93	5.0	8.0	2.255	250	27	230	248	5.4
23	21-00	9	2.08	5.0	8.0	2.611	256	34	225	241	2.4
24	00-00	9	2.30	5.6	7.0	4.332	224	39	214	224	1.0
24	03-00	9	2.24	5.4	8.0	4.418	247	36	237	233	1.4
24	06-00	9	2.57	5.5	7.0	4.615	244	36	259	247	1.4
24	09-00	9	2.93	5.7	8.0	7.625	245	31	257	246	3.0

DIA	HORA	NG	HM0 (m)	T02 (s)	TP (s)	SMAX (m2.s)	THTP1 (graus)	SPRTP1 (graus)	THHF1 (graus)	THLF1 (graus)	N
24	12-00	9	3.16	6.1	9.1	10.499	244	31	256	242	2.7
24	15-00	9	3.06	5.9	9.1	8.922	250	33	285	256	2.0
24	18-00	9	3.32	6.4	10.0	13.779	261	21	289	264	9.1
24	21-00	9	4.55	8.3	11.1	44.017	256	17	281	258	16.2
25	00-00	9	4.22	7.6	12.5	20.123	265	22	284	264	9.5
25	06-00	9	3.45	7.6	12.5	16.636	278	19	296	274	16.3
25	09-00	9	3.82	8.2	12.5	20.507	274	22	296	271	15.0
25	12-00	9	3.59	7.3	12.5	12.345	282	22	293	276	15.9
25	15-00	9	2.93	7.0	12.5	9.572	280	21	288	271	18.4
25	18-00	9	3.04	7.4	11.8	13.520	277	19	298	272	32.1
25	21-00	9	2.84	7.8	11.8	10.766	274	22	289	275	14.3
26	00-00	9	2.20	6.7	9.1	3.742	285	22	293	276	7.3
26	03-00	9	1.97	6.8	10.5	4.459	272	17	276	267	17.8
26	06-00	9	1.88	6.9	11.1	4.591	279	21	275	268	15.4
26	09-00	9	1.65	6.5	10.0	2.966	273	25	275	262	9.0
26	12-00	9	1.56	6.3	11.1	2.475	278	26	255	256	9.1
26	15-00	9	1.26	5.2	10.5	1.031	273	33	255	245	5.3
26	18-00	9	1.25	5.0	8.0	0.901	276	29	264	238	4.3
26	21-00	9	1.31	5.2	10.5	1.161	274	41	269	257	1.8
27	00-00	9	1.26	4.9	9.1	0.912	275	34	262	245	3.1
27	03-00	9	1.19	5.1	8.0	0.727	261	34	251	228	3.0
27	06-00	9	1.20	5.2	8.0	0.683	274	31	259	235	3.2
27	09-00	9	1.32	5.6	10.0	1.170	284	30	266	267	5.8
27	12-00	9	1.48	6.2	9.1	1.931	300	28	265	278	6.7
27	15-00	9	1.76	7.4	11.8	4.472	283	21	257	264	28.4
27	18-00	9	1.62	6.6	11.1	2.928	284	20	266	276	13.9
27	21-00	9	1.85	7.5	11.1	6.315	277	25	271	260	10.7
28	00-00	9	1.90	7.8	11.1	5.649	281	24	266	264	6.6
28	03-00	9	1.80	7.8	11.1	4.683	279	21	271	259	9.5
28	06-00	9	1.98	7.6	10.5	5.572	279	19	269	272	15.8
28	09-00	9	2.00	7.8	11.1	8.236	273	24	271	269	14.1
28	12-00	9	1.69	7.1	11.1	4.312	273	20	274	273	9.7
28	15-00	9	1.98	7.4	11.1	5.374	279	19	240	269	12.0
28	18-00	9	2.05	7.2	11.1	3.960	282	20	240	281	16.9
28	21-00	9	1.95	6.8	11.1	4.402	276	23	239	271	12.1
29	00-00	9	1.75	6.4	11.8	3.685	272	20	232	266	17.0
29	03-00	9	1.72	5.8	11.8	3.650	274	21	195	259	12.1
29	06-00	9	1.78	5.6	10.5	4.040	275	17	190	270	17.3
29	09-00	9	1.64	5.3	10.0	1.880	276	25	198	259	7.2
29	12-00	9	1.72	5.3	11.8	2.531	271	25	194	262	6.3
29	15-00	9	1.67	5.7	11.8	2.599	278	31	166	271	4.3
29	18-00	9	1.69	5.6	10.5	2.295	277	23	175	260	9.5
29	21-00	9	1.78	5.9	11.1	3.207	272	22	209	271	9.3
30	00-00	9	1.86	5.6	11.1	3.516	265	24	189	257	8.8
30	03-00	9	1.73	5.6	10.0	3.384	268	24	153	261	6.0

PARAMETROS ESPECTRAIS E DIRECCIONAIS SMIGUEL OUT 2006

DIA	HORA	NG	HM0 (m)	T02 (s)	TP (s)	SMAX (m2.s)	THTP1 (graus)	SPRTP1 (graus)	THHF1 (graus)	THLF1 (graus)	N
30	06-00	9	1.75	5.3	10.0	2.557	281	26	146	260	10.8
30	09-00	9	1.76	5.3	9.1	2.449	267	25	153	259	7.2
30	12-00	9	1.45	4.9	11.1	1.750	264	36	146	265	3.4
30	15-00	9	1.66	5.0	11.1	1.771	271	31	132	251	4.8
30	18-00	9	1.73	5.2	10.5	3.019	280	23	130	267	9.3
30	21-00	9	1.54	5.7	10.0	3.086	286	21	136	257	18.4
31	00-00	9	1.55	5.7	10.5	1.684	270	29	140	255	7.8
31	03-00	9	1.57	5.8	10.0	2.553	277	33	137	252	5.5
31	06-00	9	1.37	5.7	10.0	1.152	279	38	135	252	4.6
31	09-00	9	1.43	5.2	11.1	0.989	243	41	130	233	1.1
31	12-00	9	1.98	5.5	8.0	4.326	161	30	125	198	6.2
31	15-00	9	2.12	5.4	8.0	3.419	160	37	122	175	3.6
31	18-00	9	2.19	5.9	10.0	5.842	186	46	123	175	2.3
31	21-00	9	1.86	5.9	9.1	3.864	168	41	119	187	4.6

DIA	HORA	NG	HM0 (m)	T02 (s)	TP (s)	SMAX (m2.s)	THTP1 (graus)	SPRTP1 (graus)	THHF1 (graus)	THLF1 (graus)	N
01	00-00	9	1.86	6.2	9.1	4.945	170	32	123	178	6.3
01	03-00	9	1.83	6.0	9.1	3.669	171	38	126	196	5.1
01	06-00	9	1.71	5.8	8.0	2.673	159	34	132	178	3.8
01	09-00	9	1.71	5.8	8.0	2.863	150	28	132	186	6.3
01	12-00	9	1.84	5.8	9.1	2.766	155	40	131	173	6.5
01	15-00	9	1.57	5.5	9.1	2.545	164	46	127	193	2.7
01	18-00	9	1.45	5.9	8.0	2.121	145	40	125	205	2.4
01	21-00	9	1.39	6.0	8.0	1.773	143	35	124	229	6.5
02	00-00	9	1.53	6.6	8.0	1.773	131	39	116	250	6.3
02	03-00	9	1.58	6.8	12.5	3.414	283	17	119	251	41.1
02	06-00	9	1.46	6.8	13.3	1.731	283	24	118	265	12.0
02	09-00	9	1.31	7.1	8.0	1.520	136	39	121	275	3.2
02	12-00	9	1.40	7.9	13.3	3.206	282	18	112	270	21.5
02	15-00	9	1.48	7.6	12.5	2.449	283	21	100	272	13.7
02	18-00	9	1.32	8.0	13.3	2.454	281	22	102	271	17.1
02	21-00	9	1.35	7.5	13.3	2.148	283	23	104	272	8.8
03	00-00	9	1.34	7.6	13.3	3.534	283	18	98	277	21.4
03	03-00	9	1.42	6.7	13.3	4.446	277	17	91	270	23.0
03	06-00	9	1.39	7.2	13.3	4.490	282	17	36	276	22.5
03	09-00	9	1.27	7.3	13.3	3.275	282	18	103	275	18.8
03	12-00	9	1.37	6.0	12.5	2.468	273	23	50	264	8.2
03	15-00	9	1.35	6.0	11.8	2.606	277	22	9	277	9.6
03	21-00	9	1.15	6.9	11.8	1.643	276	25	114	260	6.8
04	00-00	9	1.16	7.7	11.8	2.790	279	20	337	263	15.0
04	03-00	9	0.97	6.5	11.8	1.459	280	30	117	255	4.5
04	09-00	9	0.78	6.3	11.1	0.741	272	38	142	255	2.6
04	12-00	9	0.88	5.4	10.5	1.188	278	36	108	246	3.9
04	15-00	9	0.77	5.1	10.5	0.718	271	42	123	252	2.8
04	18-00	9	0.79	5.6	11.1	0.956	283	30	125	237	8.9
04	21-00	9	0.73	5.1	11.1	0.592	274	40	116	236	5.1
05	00-00	9	0.65	5.7	10.0	0.498	260	43	108	215	1.6
05	03-00	9	0.65	5.6	10.0	0.613	267	43	127	227	2.8
05	06-00	9	0.61	6.0	9.1	0.432	267	42	166	223	2.5
05	09-00	8	0.59	5.7	10.0	0.269	261	51	121	218	1.5
05	12-00	8	0.57	5.8	10.0	0.282	251	53	112	202	1.3
05	15-00	9	0.52	4.7	10.5	0.209	217	51	149	197	0.4
05	18-00	9	0.52	4.2	10.0	0.277	255	44	211	227	1.4
05	21-00	9	0.50	5.6	10.0	0.186	239	48	160	207	0.7
06	00-00	9	0.49	6.0	9.1	0.192	218	50	120	186	0.4
06	03-00	9	0.47	5.9	9.1	0.234	254	47	267	203	0.8
06	06-00	9	0.45	4.7	10.0	0.164	231	46	242	200	0.2
06	09-00	9	0.50	4.7	9.1	0.186	242	53	259	211	0.9
06	12-00	9	0.47	5.0	9.1	0.133	203	58	219	178	0.5
06	15-00	9	0.44	4.9	14.3	0.164	192	50	258	187	1.0
06	18-00	9	0.47	4.8	14.3	0.190	239	54	252	227	0.3

DIA	HORA	NG	HM0 (m)	T02 (s)	TP (s)	SMAX (m2.s)	THTP1 (graus)	SPRTP1 (graus)	THHF1 (graus)	THLF1 (graus)	N
06	21-00	9	0.45	6.0	12.5	0.204	268	49	237	227	2.0
07	00-00	8	0.48	6.8	11.8	0.285	263	54	144	218	2.8
07	03-00	9	0.51	6.5	11.8	0.383	283	45	120	229	7.0
07	06-00	9	0.58	6.1	11.1	0.654	281	26	136	249	9.0
07	09-00	7	0.64	7.2	10.5	0.898	276	34	134	247	4.9
07	12-00	9	0.61	4.0	10.5	0.389	279	43	124	232	5.0
07	15-00	9	0.64	4.4	10.5	0.706	286	32	118	244	4.6
07	18-00	9	0.69	4.1	10.0	0.530	285	36	129	246	6.0
07	21-00	9	0.57	4.2	10.0	0.367	283	36	125	241	7.5
08	00-00	9	0.73	3.9	10.0	0.399	270	42	133	222	2.9
08	03-00	9	0.79	3.7	9.1	0.299	284	44	141	244	5.5
08	06-00	9	0.85	3.6	10.0	0.365	286	39	150	249	4.4
08	09-00	9	0.89	3.5	10.0	0.501	282	33	157	228	7.9
08	12-00	9	1.08	3.9	4.0	0.616	129	26	145	225	4.1
08	15-00	9	1.12	3.9	4.5	0.682	129	27	146	229	4.7
08	18-00	9	1.39	4.1	4.9	0.893	149	37	150	221	1.2
08	21-00	9	1.71	4.4	6.2	1.872	194	26	161	198	6.2
09	00-00	9	2.05	5.2	8.0	2.683	190	27	149	184	10.8
09	03-00	9	2.49	5.7	9.1	5.466	187	18	150	185	19.4
09	06-00	9	2.27	5.7	9.1	4.373	184	25	168	196	8.4
09	09-00	9	2.25	5.4	9.1	5.109	173	25	164	180	7.2
09	12-00	9	2.14	5.4	8.0	4.740	166	21	154	163	11.1
09	15-00	9	2.07	5.2	8.0	3.700	169	24	156	181	7.9
09	18-00	9	2.44	5.5	8.0	5.616	183	25	155	184	6.0
09	21-00	9	2.89	5.7	8.0	10.945	179	25	160	181	7.8
10	00-00	9	2.65	6.0	8.0	7.780	170	30	158	186	3.3
10	03-00	9	2.99	6.4	9.1	10.863	181	25	157	174	5.8
10	06-00	9	2.87	6.3	9.1	11.079	188	26	157	190	5.4
10	09-00	9	2.91	6.3	9.1	11.909	193	23	165	198	6.3
10	12-00	9	2.51	5.9	8.0	7.928	170	29	144	188	3.4
10	15-00	9	2.52	5.7	8.0	8.469	174	27	142	188	5.6
11	00-00	9	2.00	5.4	8.0	3.824	179	33	137	212	4.4
11	03-00	9	1.96	5.2	8.0	2.917	184	29	130	205	4.7
11	09-00	9	2.18	5.3	8.0	5.238	182	20	126	210	15.1
11	12-00	9	2.19	5.3	8.0	4.461	180	27	127	191	6.6
11	15-00	9	2.30	5.3	8.0	4.419	172	32	121	182	2.6
11	18-00	9	2.23	5.4	8.0	4.305	160	31	115	173	3.6
11	21-00	9	2.07	5.3	8.0	3.734	165	27	124	170	5.8
12	00-00	9	2.36	5.5	8.0	5.698	158	25	128	180	5.4
12	03-00	9	2.31	5.4	8.0	4.560	145	29	119	169	3.8
12	09-00	9	2.34	5.6	9.1	5.647	149	25	124	177	7.0
12	12-00	9	2.39	5.7	9.1	6.345	142	28	122	147	5.2
12	15-00	9	2.29	5.6	8.0	4.591	134	28	121	147	4.4
12	18-00	9	2.09	5.7	9.1	4.923	131	27	123	156	6.5
13	00-00	9	1.67	5.1	9.1	1.930	145	29	131	189	4.7

DIA	HORA	NG	HM0 (m)	T02 (s)	TP (s)	SMAX (m2.s)	THTP1 (graus)	SPRTP1 (graus)	THHF1 (graus)	THLF1 (graus)	N
13	03-00	9	1.71	5.4	8.0	3.259	135	29	136	197	3.9
13	15-00	9	1.29	5.5	8.0	1.570	135	27	143	216	4.7
13	18-00	9	1.22	5.5	8.0	1.186	137	31	141	238	3.8
13	21-00	9	1.10	5.9	8.0	1.387	131	27	147	223	6.9
14	03-00	9	1.06	6.2	8.0	0.896	130	26	145	225	7.0
14	06-00	9	0.98	6.4	7.0	0.779	131	31	146	223	3.7
14	12-00	9	0.91	5.9	7.0	0.513	131	28	161	221	5.7
14	15-00	9	0.96	5.2	8.0	0.707	133	31	173	234	8.1
14	21-00	9	0.92	4.8	7.0	0.550	126	31	233	260	5.1
15	00-00	9	0.91	4.5	7.0	0.479	130	27	250	233	9.2
15	09-00	9	1.21	4.5	7.0	0.499	292	52	302	269	5.1
15	21-00	9	1.67	5.4	10.5	1.433	302	23	300	285	13.7
16	06-00	9	1.61	5.8	10.0	1.359	299	21	298	284	12.1
16	15-00	9	1.71	5.7	15.4	1.872	238	55	294	281	0.8
16	18-00	9	1.36	5.1	11.1	0.886	297	30	294	283	8.8
16	21-00	9	1.34	5.6	12.5	1.239	298	24	285	289	20.0
17	00-00	9	1.51	5.0	14.3	1.301	273	53	296	286	2.2
17	03-00	9	1.72	5.1	10.0	1.331	298	21	295	283	18.0
17	06-00	9	1.56	4.9	14.3	1.022	240	54	291	274	0.3
17	09-00	9	1.66	5.1	7.0	1.279	285	26	285	273	5.1
17	12-00	9	1.53	4.9	15.4	1.018	198	53	287	269	0.8
17	15-00	9	1.68	5.1	11.1	1.277	292	25	288	278	15.6
17	18-00	9	1.64	4.8	4.9	0.969	277	25	275	271	4.7
17	21-00	9	1.68	5.1	12.5	1.099	298	40	276	268	4.4
18	00-00	9	1.64	5.0	6.2	1.242	285	27	266	269	4.6
18	03-00	9	1.88	5.2	11.1	1.970	303	28	273	275	12.7
18	06-00	9	2.16	5.0	6.2	2.556	266	33	251	257	2.0
18	09-00	9	2.04	5.4	7.0	3.042	279	27	267	262	4.2
18	12-00	9	2.36	6.0	8.0	5.437	288	19	264	253	10.4
18	15-00	9	2.10	6.1	8.0	3.707	277	21	271	262	7.3
18	18-00	9	1.57	6.1	8.0	2.175	278	20	268	258	9.5
18	21-00	9	1.49	6.9	18.2	1.617	197	31	283	247	7.1
19	00-00	9	1.62	6.7	16.7	1.875	181	41	293	249	1.6
19	03-00	9	1.67	6.5	16.7	2.347	194	37	293	257	5.5
19	06-00	9	1.38	6.7	16.7	1.793	187	27	298	249	9.4
19	09-00	9	1.16	6.0	16.7	1.315	201	37	324	247	3.2
19	12-00	9	0.97	6.1	16.7	1.211	187	39	175	243	5.1
19	15-00	9	1.12	6.4	15.4	2.335	196	29	174	242	7.5
19	18-00	9	1.09	5.9	15.4	1.509	197	32	150	244	4.1
19	21-00	9	0.91	6.3	15.4	1.208	183	35	150	237	3.2
20	00-00	9	1.00	7.7	15.4	2.537	188	34	142	219	5.9
20	03-00	9	0.93	7.2	15.4	1.894	191	31	161	225	9.6
20	06-00	9	0.84	6.7	15.4	1.278	185	26	168	222	9.4
20	09-00	9	0.76	7.2	14.3	0.775	179	33	136	217	5.9
20	12-00	8	0.77	7.5	15.4	1.254	177	36	147	196	3.5

DIA	HORA	NG	HM0 (m)	T02 (s)	TP (s)	SMAX (m2.s)	THTP1 (graus)	SPRTP1 (graus)	THHF1 (graus)	THLF1 (graus)	N
20	15-00	9	0.69	6.9	14.3	0.828	193	34	151	218	10.6
20	18-00	9	0.84	7.1	14.3	1.291	190	25	151	221	8.4
20	21-00	9	0.78	6.4	15.4	1.019	173	34	133	215	3.7
21	00-00	9	0.92	5.6	16.7	1.119	175	25	141	219	11.6
21	03-00	9	0.97	6.3	16.7	1.240	168	31	148	239	4.5
21	06-00	9	1.02	6.3	16.7	1.407	171	23	140	239	11.8
21	09-00	9	1.07	6.9	16.7	1.305	165	21	124	177	16.6
21	12-00	9	1.32	7.2	15.4	1.758	169	24	127	165	13.1
21	15-00	9	1.24	7.1	15.4	1.954	178	26	134	167	7.3
21	18-00	9	1.28	6.9	16.7	1.388	178	31	140	173	5.8
21	21-00	9	1.30	7.4	15.4	2.216	170	24	130	168	8.6
22	00-00	9	1.15	7.2	16.7	1.894	165	29	141	158	7.9
22	03-00	9	1.05	7.6	15.4	2.255	174	28	148	172	7.0
22	06-00	9	1.20	5.9	15.4	2.121	174	29	192	183	9.1
22	09-00	9	1.15	5.0	15.4	1.762	167	30	214	198	6.5
22	12-00	9	1.33	4.7	15.4	1.850	156	36	220	190	2.5
22	15-00	9	1.65	4.8	14.3	2.870	164	28	252	191	6.5
22	18-00	9	1.86	4.9	5.5	2.335	265	22	264	212	8.0
23	03-00	9	2.25	5.5	7.0	4.784	284	28	262	215	5.1
23	06-00	9	2.18	5.9	7.0	4.120	271	24	274	229	5.8
23	09-00	9	1.82	6.2	8.0	2.381	272	44	249	235	2.5
23	12-00	9	1.88	5.2	8.0	2.429	268	40	264	224	2.5
23	15-00	9	2.09	5.0	8.0	1.930	285	38	264	245	4.4
23	21-00	9	3.05	6.0	8.0	6.605	270	25	262	270	6.2
24	00-00	9	3.37	6.2	8.0	10.709	264	31	265	279	2.8
24	03-00	9	4.55	6.9	9.1	28.906	270	20	269	271	8.3
24	06-00	8	5.19	7.5	10.0	42.832	278	24	285	283	8.7
24	06-41	9	5.19	7.5	10.5	35.735	285	25	283	283	5.0
24	07-43	9	5.64	8.3	11.1	54.903	286	20	284	285	13.5
24	08-13	9	5.90	8.5	11.8	64.311	288	20	282	285	14.1
24	08-43	9	5.00	7.8	11.8	27.458	286	27	281	283	4.7
24	12-00	9	4.41	7.7	11.8	26.045	280	26	271	281	7.4
24	15-00	9	4.06	7.7	14.3	16.293	282	23	276	281	10.4
24	18-00	9	4.67	8.0	15.4	22.473	287	22	283	284	28.0
24	21-00	9	4.72	8.4	15.4	22.866	282	19	279	282	25.9
25	00-00	9	4.33	8.2	15.4	14.970	284	23	284	279	31.3
25	03-00	8	4.36	8.7	15.4	22.099	290	17	282	286	48.6
25	06-00	9	3.81	8.6	16.7	21.224	290	18	294	288	36.6
25	09-00	9	4.52	9.7	15.4	26.126	287	16	292	287	30.8
25	12-00	9	3.95	8.9	14.3	20.861	290	17	288	289	36.7
25	15-00	9	3.12	8.3	16.7	14.416	295	14	281	290	65.6
25	18-00	9	3.03	7.3	15.4	9.460	297	18	270	290	19.6
25	21-00	9	3.37	7.5	15.4	18.861	297	16	265	292	46.8
26	00-00	9	3.32	6.4	15.4	7.246	292	21	251	291	11.7
26	03-00	9	3.50	6.2	8.0	8.995	257	25	243	282	5.4

DIA	HORA	NG	HM0 (m)	T02 (s)	TP (s)	SMAX (m2.s)	THTP1 (graus)	SPRTP1 (graus)	THHF1 (graus)	THLF1 (graus)	N
26	06-00	9	4.08	6.6	9.1	18.615	266	23	248	274	5.7
26	09-00	9	4.29	6.9	10.0	21.290	277	25	244	277	5.1
26	12-00	9	4.37	7.7	10.0	32.952	266	23	261	267	6.1
26	15-00	9	3.48	7.4	10.0	14.723	273	23	269	276	8.4
26	18-00	9	3.24	7.2	10.5	13.608	278	21	264	279	10.7
26	21-00	9	3.65	8.0	11.1	17.058	285	16	265	287	17.2
27	00-00	9	3.10	7.6	11.1	7.161	275	25	272	281	6.6
27	03-00	9	3.55	8.3	16.7	12.931	293	18	276	284	43.4
27	06-00	9	3.07	7.3	14.3	7.910	294	25	276	286	21.8
27	09-00	9	2.98	7.7	15.4	8.182	293	20	283	289	25.9
27	12-00	9	3.17	7.8	15.4	15.302	287	13	284	286	62.7
27	15-00	9	2.75	7.4	15.4	9.965	291	20	287	289	43.1
27	18-00	9	2.84	7.9	15.4	12.037	291	15	277	287	39.8
27	21-00	9	2.77	8.3	15.4	12.445	295	15	277	291	52.7
28	00-00	9	2.49	7.9	14.3	9.095	292	15	285	289	66.6
28	03-00	9	2.48	8.9	14.3	9.838	292	18	281	287	57.3
28	06-00	9	1.88	7.6	14.3	4.714	290	25	274	286	22.9
28	12-00	9	2.10	8.3	14.3	8.810	292	18	262	289	57.3
28	18-00	9	1.59	5.6	13.3	2.877	297	28	206	287	21.3
29	00-00	9	1.88	4.7	4.9	1.929	157	30	166	279	4.4
29	03-00	9	2.41	5.0	5.5	4.478	158	25	164	274	5.7
29	06-00	9	3.23	5.8	7.0	11.294	171	27	169	239	5.0
29	09-00	9	3.34	6.0	8.0	13.803	181	30	172	215	3.1
29	12-00	9	4.77	7.1	9.1	38.499	178	22	188	192	8.5
29	15-00	9	4.14	6.7	9.1	21.856	177	35	186	195	2.0
29	18-00	9	4.83	7.0	9.1	37.082	179	26	184	182	4.9
29	21-00	9	5.46	7.5	9.1	52.819	189	22	197	199	7.5
30	00-00	9	4.36	7.5	10.0	36.442	198	29	226	211	3.9
30	03-00	9	4.09	8.2	11.1	30.205	220	25	214	214	5.7
30	06-00	9	3.81	8.2	11.8	25.308	232	18	230	221	16.0
30	09-00	9	3.46	7.7	10.5	18.582	225	20	241	224	9.3
30	12-00	9	2.97	6.8	11.1	9.432	235	24	261	224	7.3
30	15-00	9	2.97	7.0	10.5	12.805	238	24	266	247	6.9
30	18-00	9	2.60	6.8	10.5	8.986	243	29	264	240	4.2
30	21-00	9	2.46	6.4	10.0	6.980	253	30	269	252	3.3

DIA	HORA	NG	HM0 (m)	T02 (s)	TP (s)	SMAX (m2.s)	THTP1 (graus)	SPRTP1 (graus)	THHF1 (graus)	THLF1 (graus)	N
01	00-00	9	2.57	6.9	10.5	9.392	265	23	276	264	14.6
01	03-00	9	2.31	6.4	10.0	5.024	263	33	274	272	1.9
01	06-00	9	2.47	6.3	10.5	6.075	284	21	278	280	14.7
01	09-00	9	2.39	6.8	11.8	5.078	293	21	273	285	26.7
01	18-00	9	2.80	8.5	14.3	15.429	285	21	282	284	27.3
01	21-00	9	2.13	7.2	14.3	3.612	287	25	279	284	11.4
02	00-00	9	2.40	7.7	14.3	9.079	289	13	271	286	61.6
02	03-00	9	2.39	8.0	13.3	12.012	296	13	281	293	67.8
02	09-00	9	2.07	7.7	14.3	5.530	289	13	271	287	47.6
02	12-00	9	1.81	6.6	10.5	2.431	288	21	272	292	10.6
02	15-00	9	1.88	6.6	13.3	4.010	297	21	275	292	28.2
02	18-00	9	1.68	5.7	12.5	2.863	298	21	268	297	13.8
02	21-00	9	1.67	5.3	12.5	1.814	296	23	268	290	17.2
03	00-00	9	1.69	5.4	11.1	1.384	299	27	270	295	11.4
03	03-00	9	1.78	5.4	13.3	1.766	298	25	275	293	14.6
03	06-00	9	1.85	5.8	13.3	2.914	293	19	277	295	26.7
03	09-00	9	1.50	5.3	7.0	1.149	293	26	273	290	5.8
03	12-00	9	1.55	5.3	13.3	1.310	298	31	264	289	11.5
03	18-00	9	1.95	6.4	12.5	5.096	301	15	266	298	31.1
03	21-00	9	1.84	6.1	12.5	3.054	297	23	257	293	28.5
04	00-00	9	1.98	5.6	11.1	3.966	295	25	252	287	9.7
04	03-00	9	2.12	5.8	12.5	2.763	297	27	255	295	7.3
04	06-00	9	2.04	5.5	11.8	3.982	292	21	233	285	13.0
04	12-00	9	2.21	5.5	7.0	2.578	263	27	225	290	5.1
04	15-00	9	2.69	5.6	6.2	4.620	240	34	238	286	2.0
04	18-00	9	2.87	6.0	7.0	5.538	246	31	237	290	3.2
04	21-00	9	2.91	5.9	9.1	5.601	279	26	231	279	5.6
05	00-00	9	3.03	6.1	8.0	8.159	261	28	253	281	3.9
05	03-00	9	3.25	6.4	8.0	8.276	258	28	265	277	3.3
05	06-00	9	2.98	6.8	13.3	8.176	293	22	282	287	31.0
05	09-00	9	2.57	6.8	13.3	6.552	294	21	276	288	29.8
05	12-00	9	2.28	6.7	12.5	3.471	284	23	269	283	13.2
05	15-00	9	2.82	7.6	11.8	9.443	286	18	275	284	23.0
05	18-00	9	3.03	9.0	13.3	20.359	288	16	269	288	44.6
05	21-00	9	2.24	8.1	13.3	7.150	292	22	270	284	11.6
06	03-00	9	2.11	6.4	12.5	5.281	279	20	244	281	11.0
06	09-00	9	2.22	6.3	12.5	6.934	297	21	238	287	13.0
06	12-00	9	1.92	5.8	11.8	4.502	279	22	221	265	16.7
06	15-00	9	2.22	5.5	11.8	4.452	283	26	239	269	9.1
06	21-00	9	2.09	5.9	11.8	5.060	287	20	244	279	9.8
07	00-00	9	1.89	5.5	11.8	3.013	289	29	236	273	8.0
07	03-00	9	2.09	5.3	7.0	2.346	273	31	237	278	3.4
07	06-00	9	2.32	5.6	7.0	3.565	263	24	250	285	6.3
07	09-00	9	2.68	5.9	11.1	4.233	293	22	243	289	15.4
07	12-00	9	2.99	6.1	9.1	5.763	278	21	251	283	11.5

DIA	HORA	NG	HM0 (m)	T02 (s)	TP (s)	SMAX (m2.s)	THTP1 (graus)	SPRTP1 (graus)	THHF1 (graus)	THLF1 (graus)	N
07	15-00	9	3.00	6.1	8.0	6.959	272	23	280	281	6.8
07	18-00	9	2.81	6.7	10.0	7.815	274	16	278	277	23.6
07	21-00	9	2.35	6.8	9.1	4.973	280	19	281	284	10.9
08	00-00	9	2.38	7.2	9.1	5.924	281	18	283	285	12.2
08	03-00	9	2.15	6.9	10.0	3.782	287	25	281	287	7.0
08	06-00	9	2.46	7.2	9.1	4.830	285	20	279	284	9.4
08	09-00	9	1.84	7.2	13.3	4.250	286	22	287	283	13.6
08	12-00	9	1.71	7.7	12.5	4.424	274	18	294	266	23.8
08	15-00	9	1.70	6.9	12.5	4.135	286	19	300	284	19.7
08	18-00	9	1.92	8.0	12.5	5.261	290	18	295	277	26.8
08	21-00	9	1.71	7.5	10.5	3.975	289	21	301	285	14.4
09	00-00	9	1.52	7.5	11.8	3.206	282	25	303	286	6.5
09	03-00	9	1.43	7.6	11.8	3.185	281	21	310	278	15.8
09	06-00	9	1.45	7.4	11.1	3.356	289	19	298	283	12.9
09	09-00	9	1.30	7.0	11.8	2.448	285	23	296	278	9.6
09	12-00	9	0.98	7.1	11.1	1.494	283	28	175	272	6.3
09	15-00	9	1.04	7.3	11.1	1.197	286	36	131	272	5.6
09	18-00	9	1.06	7.1	10.5	1.643	291	22	324	274	16.3
09	21-00	9	0.87	6.8	10.5	0.847	286	28	166	272	9.4
10	00-00	9	0.78	6.2	10.0	0.533	286	35	149	264	3.7
10	03-00	9	0.75	5.5	10.5	0.533	290	41	149	248	2.7
10	06-00	9	0.78	4.4	10.5	0.547	279	41	180	236	3.6
10	09-00	9	0.77	4.1	10.0	0.439	288	32	207	252	4.3
10	12-00	9	0.76	4.0	11.1	0.346	291	52	214	249	4.9
10	15-00	9	0.84	3.8	10.0	0.375	288	45	227	227	4.3
10	18-00	9	0.99	3.9	4.5	0.554	270	34	233	225	5.2
10	21-00	9	1.04	3.9	4.5	0.591	271	31	247	216	6.5
11	00-00	9	1.00	4.2	4.9	0.564	268	39	253	201	5.3
11	03-00	9	1.02	4.2	5.5	0.624	278	34	258	216	4.0
11	06-00	9	0.98	4.2	4.9	0.492	269	39	256	230	2.3
11	09-00	9	1.08	4.4	5.5	0.450	269	38	261	276	4.0
11	12-00	9	1.06	4.6	6.2	0.419	255	47	264	272	2.1
11	15-00	9	1.20	5.1	12.5	0.821	289	31	264	274	10.3
11	18-00	9	1.19	5.2	13.3	0.611	282	33	257	271	11.5
11	21-00	9	1.24	5.3	11.8	1.049	290	29	273	280	9.0
12	00-00	9	1.28	6.0	11.8	1.930	282	23	273	277	17.0
12	03-00	9	1.44	6.8	11.8	2.654	283	22	264	281	16.5
12	06-00	9	1.51	6.9	11.1	2.848	293	24	264	287	14.0
12	09-00	9	1.93	7.4	10.5	4.253	288	23	268	284	18.4
12	12-00	9	1.69	6.8	14.3	3.674	292	22	270	287	13.6
12	15-00	9	1.62	7.1	13.3	4.581	292	17	252	290	20.1
12	18-00	9	1.68	6.3	13.3	3.311	289	26	242	287	11.2
12	21-00	9	1.60	5.6	11.8	2.244	287	29	247	290	9.3
13	00-00	9	1.80	5.6	13.3	2.835	283	25	236	279	8.8
13	03-00	9	1.84	5.7	12.5	3.348	284	32	232	278	5.3

DIA	HORA	NG	HM0 (m)	T02 (s)	TP (s)	SMAX (m2.s)	THTP1 (graus)	SPRTP1 (graus)	THHF1 (graus)	THLF1 (graus)	N
13	06-00	9	1.77	5.3	12.5	1.592	280	39	219	276	4.1
13	09-00	9	2.06	5.6	7.0	2.057	264	33	226	278	5.5
13	12-00	9	1.93	5.5	7.0	2.294	255	31	220	280	5.6
13	18-00	9	2.26	5.7	8.0	4.852	253	31	193	260	12.7
13	21-00	9	2.35	5.3	7.0	3.425	243	32	190	233	3.4
14	00-00	9	2.48	5.5	8.0	4.732	256	34	188	259	5.9
14	03-00	9	2.51	5.6	7.0	4.192	225	33	182	269	3.5
14	06-00	9	2.60	5.7	8.0	5.148	238	31	173	239	5.4
14	09-00	9	2.46	5.7	7.0	4.038	219	40	174	249	1.7
14	12-00	9	2.43	5.6	8.0	4.247	243	38	181	277	3.7
14	15-00	9	2.27	5.5	9.1	3.387	255	33	167	267	4.6
14	18-00	9	2.34	5.8	9.1	3.658	248	35	161	262	4.1
14	21-00	9	1.95	5.6	7.0	2.897	178	38	206	261	1.3
15	00-00	9	1.96	6.0	7.0	2.519	191	46	261	272	1.0
15	03-00	9	1.80	6.3	7.0	2.143	188	48	260	281	1.0
15	06-00	9	1.95	6.4	10.5	2.588	289	19	257	281	19.1
15	09-00	9	1.86	5.2	11.8	2.620	281	23	21	288	11.7
15	12-00	9	1.62	5.0	13.3	1.811	286	28	98	278	7.8
15	15-00	9	1.46	4.6	11.1	2.164	286	24	94	284	11.5
15	18-00	9	1.46	4.6	10.5	1.994	286	25	94	291	7.4
15	21-00	9	1.44	5.5	14.3	1.969	292	30	106	288	6.3
16	00-00	9	1.40	5.4	8.0	1.222	229	61	105	280	1.4
16	03-00	9	1.57	5.9	8.0	1.650	191	50	125	267	3.2
16	06-00	9	1.76	5.7	8.0	2.186	185	38	128	271	3.6
16	09-00	9	1.97	5.4	8.0	4.200	178	23	121	231	10.4
16	12-00	9	2.72	6.1	9.1	8.700	188	29	117	206	5.5
16	15-00	9	3.21	6.4	10.0	12.172	183	21	120	191	14.5
16	18-00	9	3.31	6.6	10.0	15.173	184	22	124	185	9.7
17	00-00	9	2.85	6.0	10.5	7.961	179	27	115	174	8.9
17	03-00	9	3.40	6.7	10.0	17.891	182	27	123	179	11.1
17	06-00	9	3.11	6.3	10.0	10.464	172	30	125	163	6.0
17	09-00	9	3.38	6.5	10.0	17.376	172	23	125	162	12.7
17	12-00	9	3.38	6.6	10.5	12.830	166	23	132	165	11.9
17	18-00	9	2.86	6.4	10.0	10.098	161	26	139	162	6.6
17	21-00	9	2.27	6.0	9.1	5.207	154	29	144	157	6.8
18	00-00	9	2.28	5.9	10.0	6.325	157	29	134	161	5.9
18	03-00	9	2.45	6.1	9.1	7.017	167	25	127	161	7.2
18	06-00	9	2.83	6.2	9.1	9.108	165	25	139	166	5.6
18	12-00	9	2.97	6.2	10.0	10.599	212	34	140	198	4.8
18	15-00	9	2.68	6.3	9.1	8.506	194	36	156	188	2.3
18	18-00	9	2.30	5.6	9.1	5.485	164	41	153	182	1.0
18	21-00	9	2.69	6.4	9.1	8.782	188	33	156	185	2.0
19	00-00	9	2.74	6.4	9.1	8.275	192	33	176	192	3.1
19	03-00	9	2.48	6.3	9.1	7.464	202	35	192	207	2.5
19	06-00	9	2.40	6.5	9.1	8.615	196	30	195	203	4.0

DIA	HORA	NG	HM0 (m)	T02 (s)	TP (s)	SMAX (m2.s)	THTP1 (graus)	SPRTP1 (graus)	THHF1 (graus)	THLF1 (graus)	N
19	09-00	9	2.32	6.3	9.1	5.192	195	35	179	222	2.0
19	12-00	9	2.49	6.4	8.0	6.928	190	35	195	222	1.5
19	15-00	9	2.17	6.2	8.0	5.287	181	37	210	234	1.3
19	18-00	9	1.81	6.1	8.0	3.582	191	39	218	244	1.9
19	21-00	9	1.74	6.1	8.0	2.364	175	42	180	237	0.8
20	00-00	9	2.06	6.2	8.0	4.640	182	42	198	246	0.6
20	03-00	9	1.77	6.2	8.0	3.173	215	47	237	253	1.3
20	06-00	9	1.61	6.1	8.0	2.234	215	45	226	255	0.7
20	09-00	9	1.51	6.3	7.0	1.698	190	53	190	256	0.4
20	12-00	9	1.40	6.0	10.5	1.636	280	21	201	260	10.7
20	15-00	9	1.43	6.7	10.0	2.124	280	18	253	266	19.1
20	18-00	9	1.46	6.9	10.0	2.844	280	16	225	272	28.6
20	21-00	9	1.47	6.9	11.1	2.478	285	19	177	266	15.0
21	00-00	9	1.36	5.8	10.5	1.817	278	24	161	262	8.6
21	03-00	9	1.32	6.3	11.8	1.974	274	23	170	264	8.7
21	06-00	8	1.26	5.6	11.1	1.578	277	25	168	255	6.9
21	09-00	9	1.14	5.0	10.5	1.527	278	27	155	255	4.9
21	12-00	9	1.22	4.8	10.5	1.082	276	33	144	253	2.8
21	15-00	9	1.42	4.8	10.5	1.704	284	23	133	259	12.8
21	18-00	9	1.55	4.7	10.5	1.327	284	26	139	256	15.1
21	21-00	9	1.89	5.1	10.5	3.423	274	21	142	246	14.3
22	00-00	9	1.83	5.1	10.5	2.280	283	21	132	237	20.5
22	03-00	9	2.23	5.5	8.0	3.760	152	36	136	229	3.7
22	06-00	9	2.14	5.2	7.0	2.949	144	35	138	224	1.9
22	09-00	9	2.22	5.3	7.0	4.522	140	29	137	226	4.2
22	12-00	9	2.02	5.3	7.0	3.440	139	31	138	226	3.8
22	15-00	9	2.01	5.2	7.0	2.807	147	36	142	225	2.5
22	18-00	9	2.03	5.3	7.0	3.242	154	34	149	263	3.0
23	00-00	9	2.45	5.8	7.0	4.318	155	30	155	265	4.3
23	03-00	9	2.67	6.4	12.5	8.117	286	15	161	271	23.4
23	06-00	9	2.68	6.4	12.5	8.741	285	16	169	271	28.8
23	09-00	9	2.65	6.7	12.5	10.084	286	18	175	269	14.6
23	12-00	9	2.39	6.3	12.5	6.018	283	23	164	269	8.7
23	18-00	9	2.45	5.6	7.0	3.643	179	41	181	260	1.6
23	21-00	9	2.65	5.8	11.1	5.374	277	20	187	260	10.6
24	00-00	9	2.57	5.8	8.0	5.251	191	44	175	252	1.3
24	03-00	9	2.56	5.9	7.0	5.673	180	35	182	238	2.8
24	06-00	9	2.43	5.8	7.0	5.134	186	40	198	247	1.3
24	09-00	9	2.45	5.8	8.0	4.952	202	34	188	250	2.0
24	15-00	9	1.84	5.3	11.8	1.940	280	29	265	270	5.2
24	18-00	9	2.00	6.0	11.8	3.762	279	18	275	275	17.2
24	21-00	9	2.18	6.5	11.8	5.049	277	14	277	275	26.1
25	00-00	9	2.62	8.0	13.3	12.118	277	11	278	276	86.9
25	03-00	9	2.61	7.4	12.5	8.752	278	21	281	268	16.4
25	06-00	9	2.71	6.8	13.3	6.993	276	19	281	273	12.6

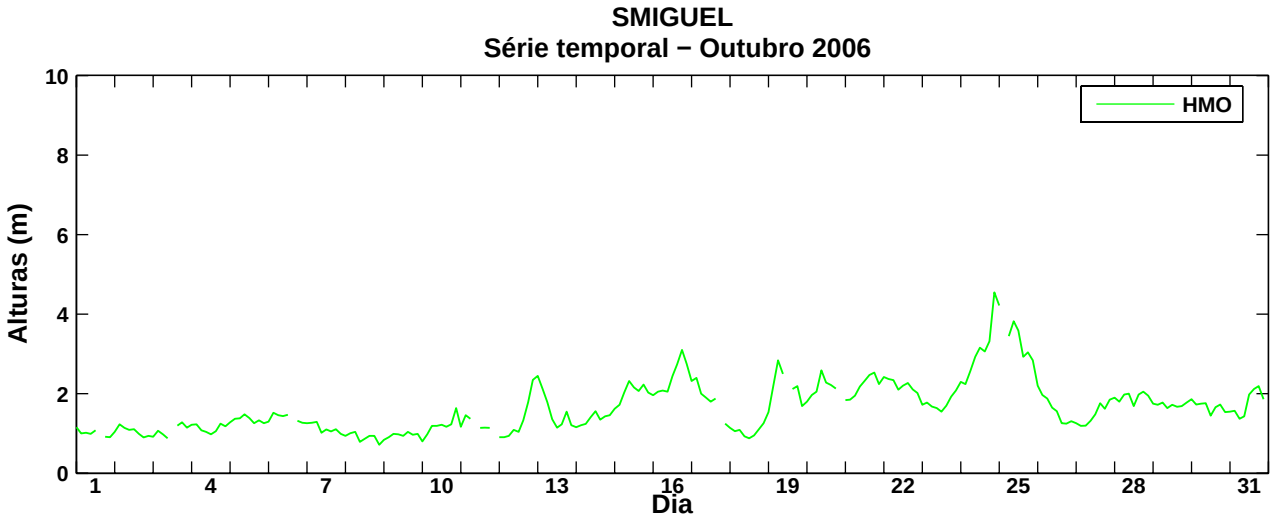
DIA	HORA	NG	HM0 (m)	T02 (s)	TP (s)	SMAX (m2.s)	THTP1 (graus)	SPRTP1 (graus)	THHF1 (graus)	THLF1 (graus)	N
25	09-00	9	2.37	6.8	13.3	4.376	276	22	282	274	14.8
25	12-00	9	2.32	7.9	13.3	8.919	277	15	284	277	25.8
25	15-00	9	2.11	7.3	13.3	4.830	276	19	284	273	17.2
25	18-00	9	2.47	8.0	11.8	7.939	279	14	276	275	19.0
25	21-00	9	2.07	7.5	12.5	6.219	281	15	280	275	23.9
26	00-00	9	2.03	8.2	11.1	6.348	280	13	289	280	24.1
26	03-00	9	1.72	7.3	12.5	3.974	289	21	285	288	11.2
26	06-00	9	1.91	6.7	11.8	4.012	287	20	236	276	11.0
26	09-00	9	1.40	5.4	10.5	2.022	281	19	234	270	14.1
26	18-00	9	2.48	5.2	6.2	5.377	181	32	177	248	3.6
26	21-00	9	3.20	5.7	7.0	10.841	185	34	179	227	2.2
27	00-00	9	3.61	6.5	8.0	16.038	210	27	229	233	4.5
27	03-00	9	3.56	6.7	9.1	17.506	211	33	251	233	2.3
27	06-00	9	3.41	6.7	9.1	14.506	225	40	251	252	0.8
27	09-00	9	3.25	6.7	9.1	9.031	228	36	257	252	1.8
27	12-00	9	3.51	7.4	11.1	12.704	273	21	247	254	10.4
27	15-00	9	3.48	7.4	10.5	16.668	270	22	257	256	11.1
27	18-00	9	3.28	6.9	10.0	10.406	262	28	259	258	4.1
27	21-00	9	3.23	7.1	10.0	10.066	259	22	259	262	8.0
28	03-00	9	2.68	7.5	12.5	9.372	276	23	263	268	8.5
28	06-00	9	2.99	7.4	12.5	10.976	276	21	241	267	14.5
28	09-00	9	3.22	7.2	12.5	16.220	281	17	252	272	25.6
28	12-00	9	2.71	6.1	12.5	7.519	282	21	255	270	11.0
28	15-00	8	2.97	6.4	12.5	9.758	280	20	246	274	22.3
28	18-00	9	2.90	6.4	12.5	8.839	276	23	246	268	10.2
28	21-00	9	2.68	6.1	8.0	4.722	273	29	254	276	3.5
29	00-00	9	2.46	6.0	8.0	4.914	273	25	245	266	6.1
29	03-00	9	2.50	6.2	8.0	5.358	270	21	245	271	10.1
29	06-00	9	2.73	6.4	11.8	6.108	281	28	238	276	9.1
29	09-00	9	3.33	6.3	11.8	11.984	278	23	236	276	11.8
29	12-00	9	2.95	6.1	12.5	6.599	285	25	241	278	11.7
29	15-00	9	3.28	6.4	11.8	7.854	279	25	239	272	10.3
29	18-00	9	3.11	6.3	13.3	6.028	281	27	232	271	8.1
29	21-00	9	3.32	6.7	8.0	8.366	261	28	233	268	3.8
30	00-00	9	3.03	6.9	12.5	7.713	280	17	247	272	20.6
30	03-00	9	2.66	7.1	12.5	7.048	277	19	247	272	12.2
30	06-00	9	2.60	7.2	11.8	7.611	279	25	242	270	7.3
30	09-00	9	2.85	7.5	12.5	10.520	276	19	243	270	16.6
30	12-00	9	2.79	7.7	11.8	10.892	278	17	261	276	20.9
30	15-00	9	2.38	7.0	13.3	6.100	283	18	227	282	16.9
30	18-00	9	2.22	7.0	13.3	7.120	284	20	219	278	13.0
30	21-00	9	2.70	7.0	14.3	8.121	286	17	222	277	18.2
31	00-00	9	2.87	6.8	13.3	13.107	286	20	233	278	16.1
31	03-00	9	2.90	6.4	13.3	9.929	278	19	236	272	13.8
31	06-00	9	3.31	7.5	13.3	18.396	273	16	225	271	19.2

PARAMETROS ESPECTRAIS E DIRECCIONAIS SMIGUEL DEZ 2006

DIA	HORA	NG	HM0 (m)	T02 (s)	TP (s)	SMAX (m2.s)	THTP1 (graus)	SPRTP1 (graus)	THHF1 (graus)	THLF1 (graus)	N
31	09-00	9	2.68	6.9	13.3	8.977	270	20	229	268	9.7
31	12-00	9	2.65	7.0	12.5	8.241	277	21	233	272	10.5
31	15-00	9	2.67	7.8	13.3	10.999	280	19	233	274	13.1

ANEXO E

Gráficos temporais de HM0, T02, TP, THTP1, SPRTP1, THHF1 E THLF1


SMIGUEL
Série temporal − Outubro 2006
HMO
Alturas (m)
Dia
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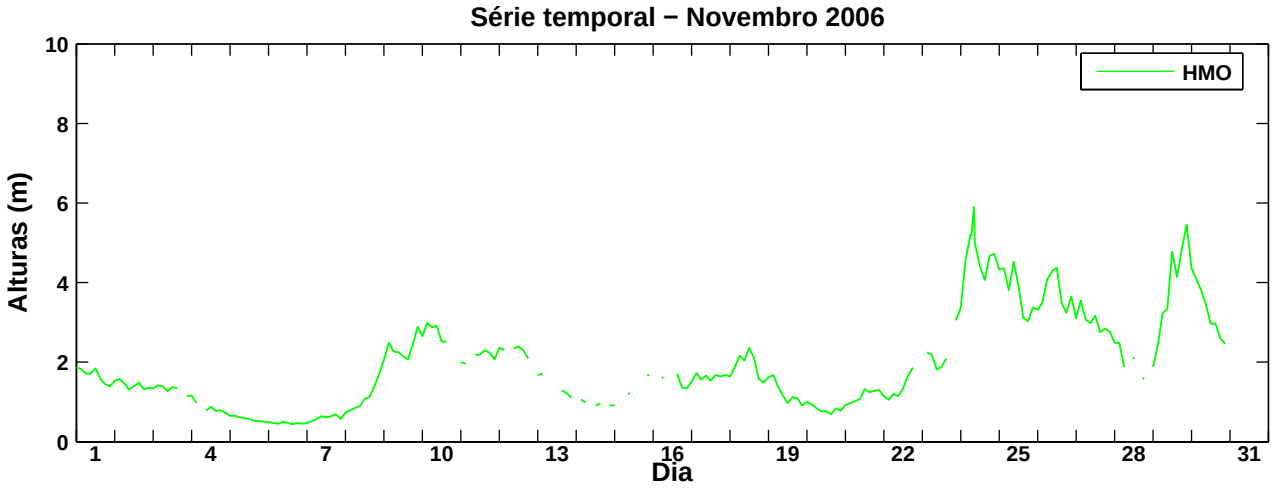
2
4
6
8
10
1
4
7
10
13
16
19
22
25
28
31


Série temporal − Novembro 2006
HMO
Alturas (m)
Dia
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2
4
6
8
10
1
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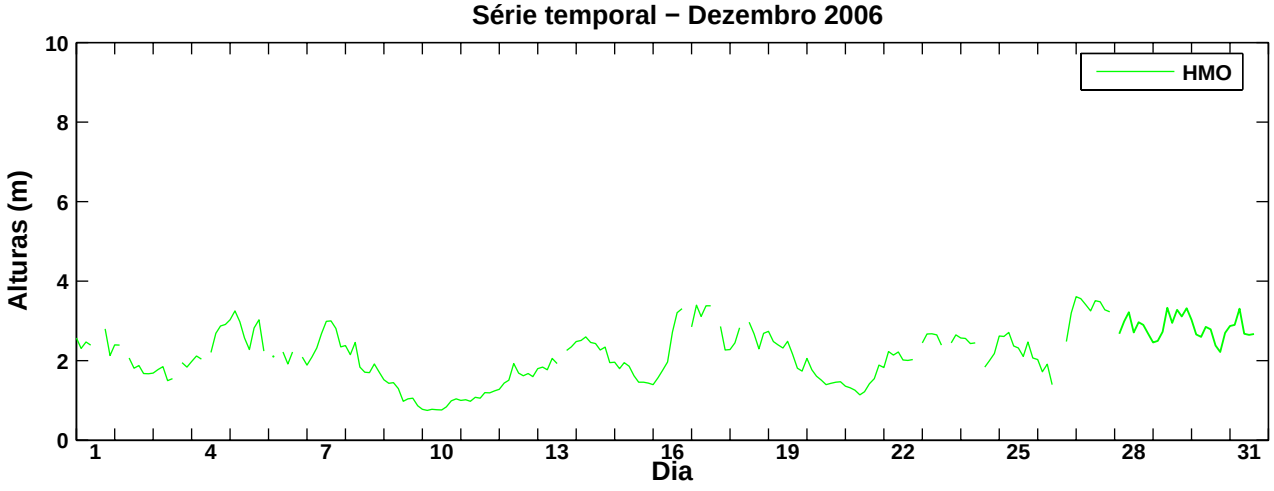
16
19
22
25
28
31


Série temporal − Dezembro 2006
HMO
Alturas (m)
Dia
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2
4
6
8
10
1
4
7
10
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16
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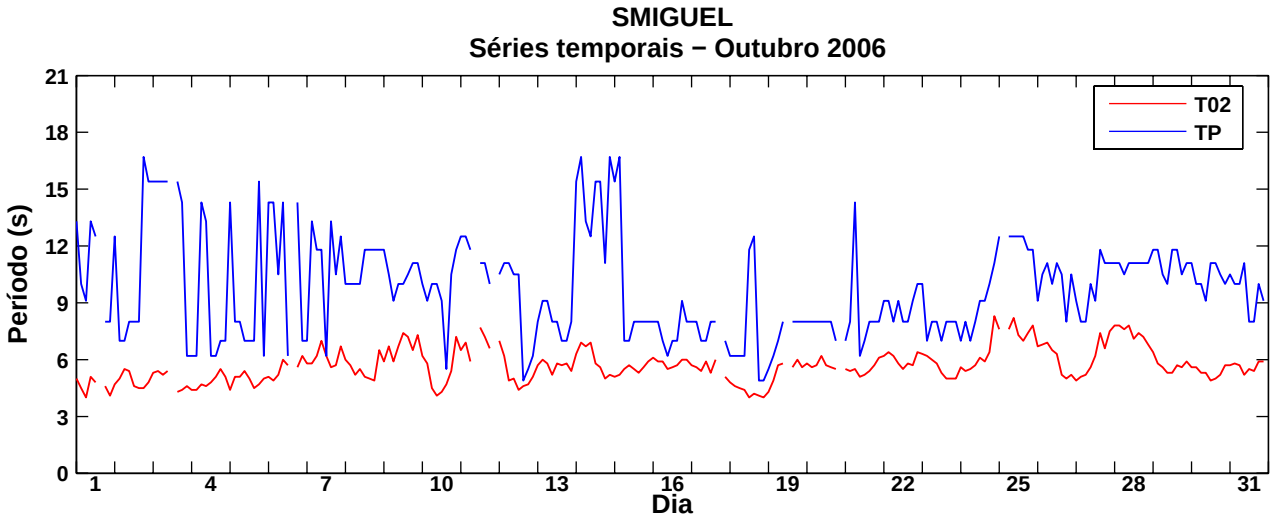
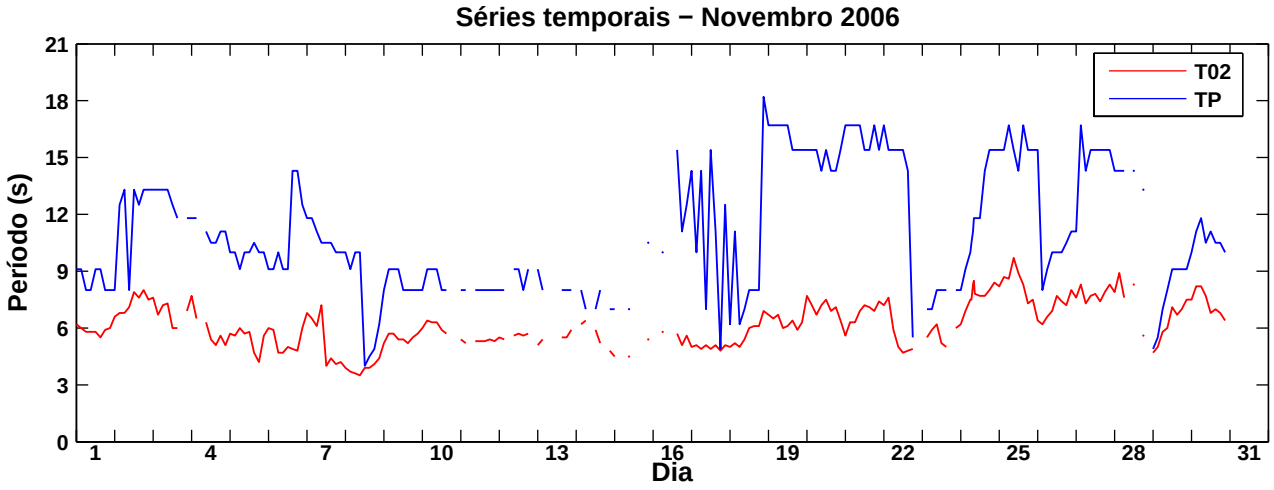
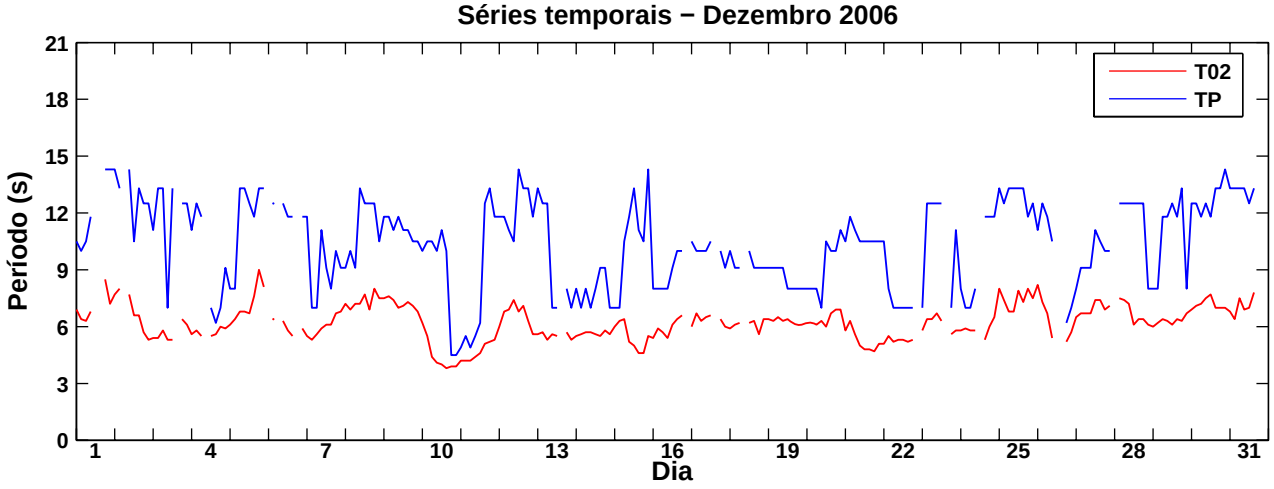
22
25
28
31

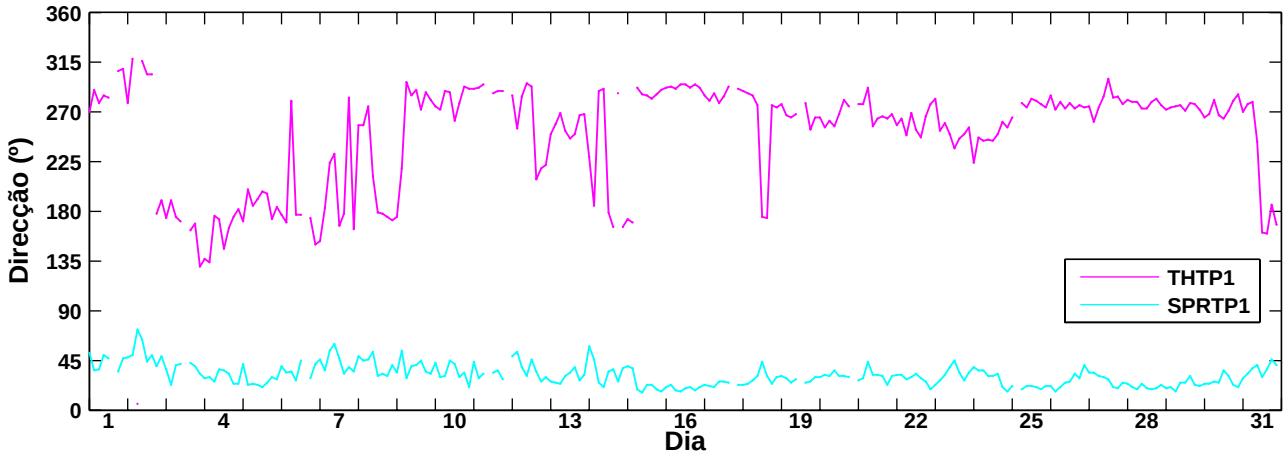

SMIGUEL
Séries temporais − Outubro 2006
Período (s)
Dia
T02
TP


Séries temporais − Novembro 2006
Período (s)
Dia
T02
TP


Séries temporais − Dezembro 2006
Período (s)
Dia
T02
TP

SMIGUEL

Séries temporais − Outubro 2006



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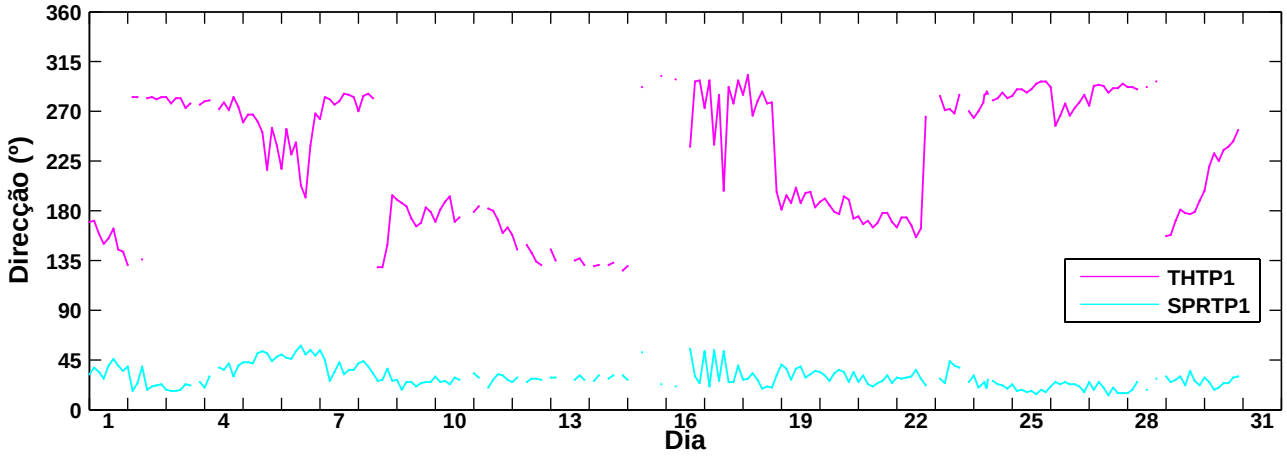
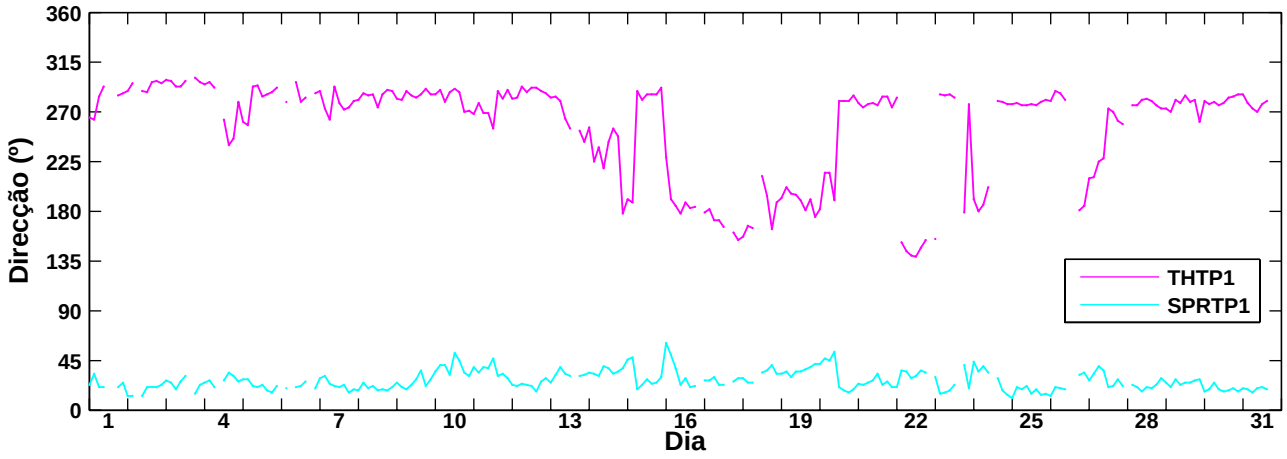
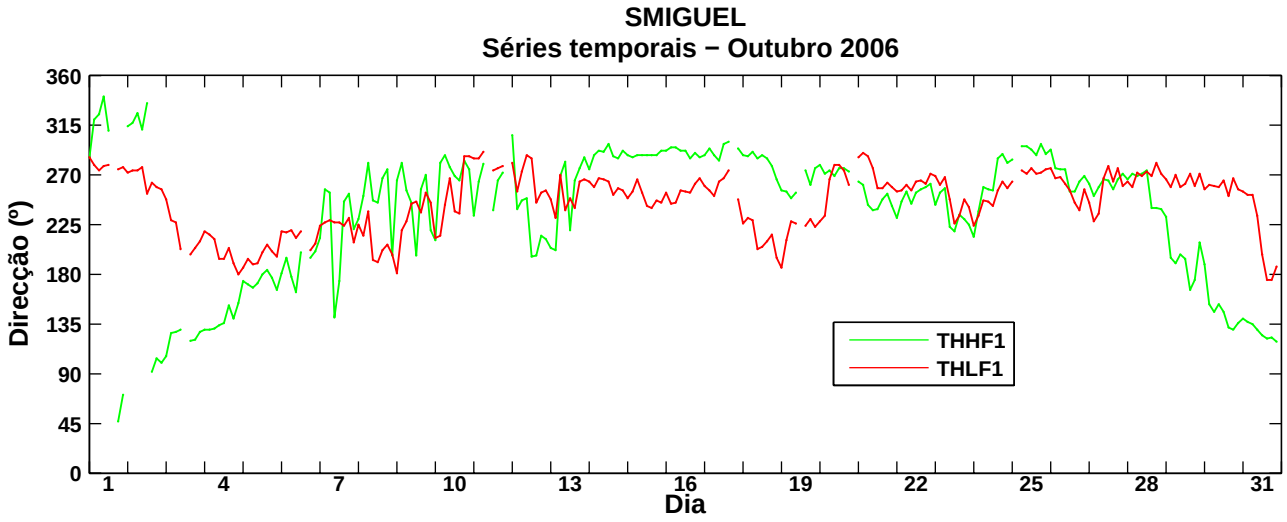
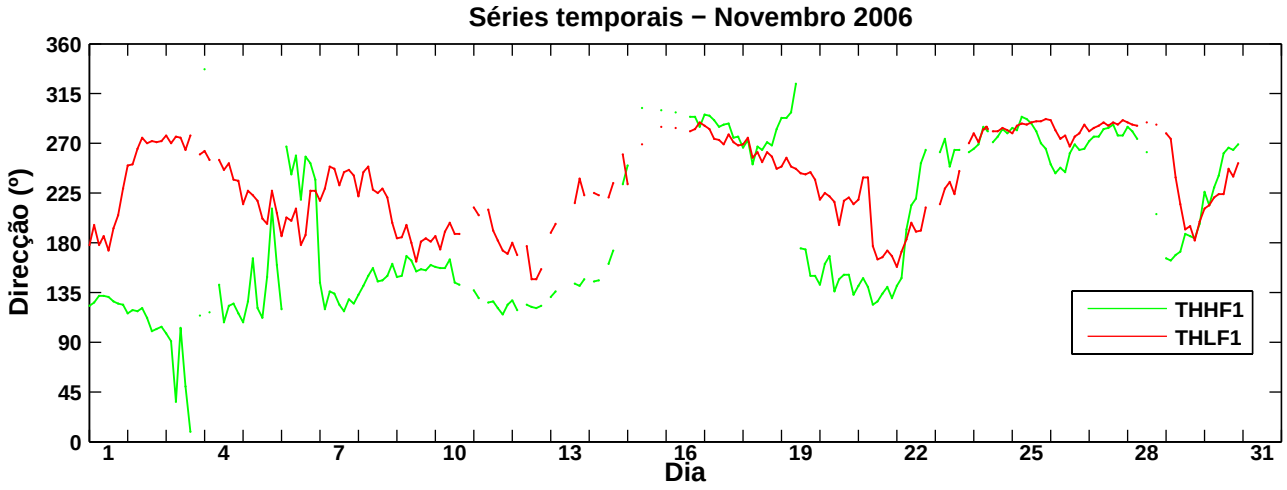
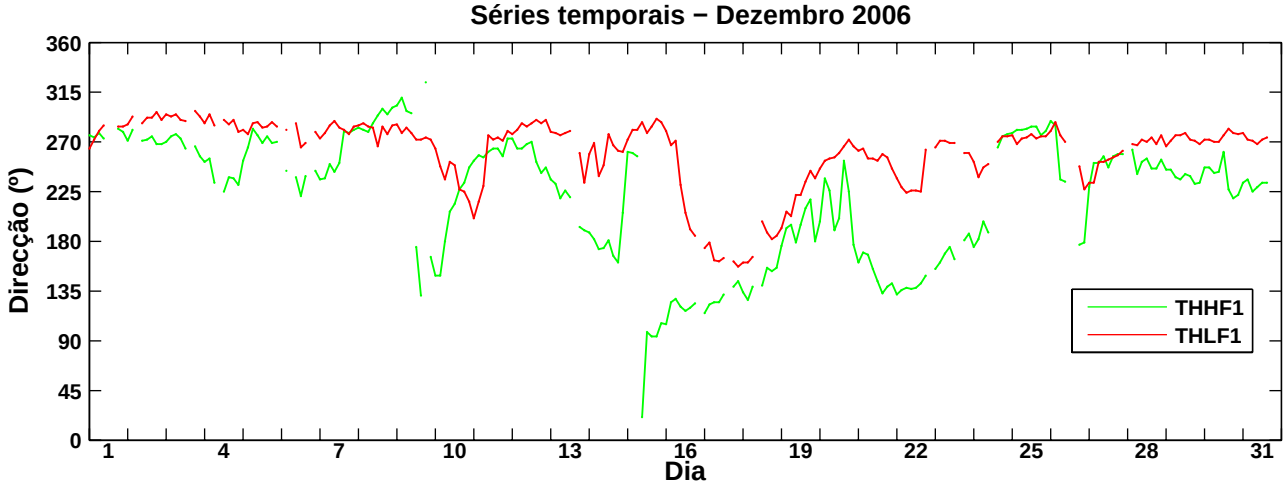


Séries temporais − Dezembro 2006




SMIGUEL
Séries temporais − Outubro 2006
Direcção (º)
Dia
THHF1
THLF1


Séries temporais − Novembro 2006
Direcção (º)
Dia
THHF1
THLF1


Séries temporais − Dezembro 2006
Direcção (º)
Dia
THHF1
THLF1

ANEXO F

Tabelas de ocorrências conjuntas HM0-T02, HM0-TP, HM0-THTP1 e TP-THTP1

T02 / HM0	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0			11	10	8	3												32	13.4	5.5
1.0- 1.5			28	42	12	4												86	36.0	5.3
1.5- 2.0			3	35	12	8												58	24.3	5.9
2.0- 2.5			1	32	8	2												43	18.0	5.8
2.5- 3.0				6	2	2												10	4.2	6.1
3.0- 3.5				1	3	2												6	2.5	6.6
3.5- 4.0						1	1											2	0.8	7.8
4.0- 4.5						1												1	0.4	7.6
4.5- 5.0							1											1	0.4	8.3
5.0- 5.5																				
5.5- 6.0																				
6.0- 6.5																				
6.5- 7.0																				
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5																				
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA			43	126	45	23	2											239	100	
%			18.0	52.7	18.8	9.6	0.8											100		
MED			1.2	1.7	1.7	2.0	4.2													

T02

MED 5.7 MIN 4.0 MAX 8.3

DES.PAD 0.9 ASSIM 0.60 CURT 3.13

HM0

MED 1.65 MIN 0.72 MAX 4.55

DES.PAD 0.64 ASSIM 1.30 CURT 5.36

T02 / HM0	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5			3	2	3													8	3.7	5.5
0.5- 1.0		4	9	12	12	5												42	19.5	5.6
1.0- 1.5		2	3	9	14	14	1											43	20.0	6.4
1.5- 2.0			7	19	8	1												35	16.3	5.5
2.0- 2.5				25	3	1	2											31	14.4	5.8
2.5- 3.0				3	6	4	1											14	6.5	6.7
3.0- 3.5				1	4	8	1											14	6.5	7.0
3.5- 4.0					1		5											6	2.8	8.0
4.0- 4.5					3	4	3											10	4.7	7.6
4.5- 5.0					1	2	2	1										6	2.8	7.8
5.0- 5.5						4												4	1.9	7.6
5.5- 6.0							2											2	0.9	8.4
6.0- 6.5																				
6.5- 7.0																				
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5																				
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA		6	22	71	55	43	17	1										215	100	
%		2.8	10.2	33.0	25.6	20.0	7.9	0.5										100		
MED		0.9	1.0	1.7	1.8	2.6	3.8	4.5												

T02

MED 6.2 MIN 3.5 MAX 9.7

DES.PAD 1.2 ASSIM 0.20 CURT 2.49

HM0

MED 1.99 MIN 0.44 MAX 5.90

DES.PAD 1.24 ASSIM 1.01 CURT 3.34

T02 / HM0	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0		2	4	1	2	1												10	4.4	5.0
1.0- 1.5		1	8	9	7	5												30	13.2	5.7
1.5- 2.0			1	24	17	7	1											50	21.9	6.1
2.0- 2.5				28	21	10	4											63	27.6	6.3
2.5- 3.0				8	28	11	2											49	21.5	6.6
3.0- 3.5				1	17	4		1										23	10.1	6.7
3.5- 4.0					2	1												3	1.3	6.9
4.0- 4.5																				
4.5- 5.0																				
5.0- 5.5																				
5.5- 6.0																				
6.0- 6.5																				
6.5- 7.0																				
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5																				
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA		3	13	71	94	39	7	1										228	100	
%		1.3	5.7	31.1	41.2	17.1	3.1	0.4										100		
MED		1.0	1.1	2.0	2.4	2.3	2.4	3.0												

T02

MED 6.2 MIN 3.8 MAX 9.0

DES.PAD 0.9 ASSIM -0.06 CURT 3.06

HM0

MED 2.18 MIN 0.75 MAX 3.61

DES.PAD 0.67 ASSIM -0.10 CURT 2.32

TABELA DE OCORRENCIAS CONJUNTAS SMIGUEL OUT 2006

TP / HM0	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0					2		3	2	7	10	2	1		4	1			32	13.4	11.2
1.0- 1.5			3	1	10	11	10	4	16	8	5	5	6	5	2			86	36.0	9.9
1.5- 2.0				2		5	12	3	13	18			2	2	1			58	24.3	10.0
2.0- 2.5					4	8	21	6	2	2								43	18.0	8.0
2.5- 3.0						3	5			1	1							10	4.2	8.5
3.0- 3.5								3	1	1	1							6	2.5	10.3
3.5- 4.0											2							2	0.8	12.5
4.0- 4.5											1							1	0.4	12.5
4.5- 5.0										1								1	0.4	11.1
5.0- 5.5																				
5.5- 6.0																				
6.0- 6.5																				
6.5- 7.0																				
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5																				
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA			3	3	16	27	51	18	39	41	12	6	8	11	4			239	100	
%			1.3	1.3	6.7	11.3	21.3	7.5	16.3	17.2	5.0	2.5	3.3	4.6	1.7			100		
MED			1.2	1.5	1.4	1.8	1.9	1.9	1.4	1.6	2.2	1.1	1.4	1.2	1.3					

TP

MED 9.8 MIN 4.9 MAX 16.7

DES.PAD 2.7 ASSIM 0.56 CURT 2.71

HM0

MED 1.65 MIN 0.72 MAX 4.55

DES.PAD 0.64 ASSIM 1.30 CURT 5.36

TABELA DE OCORRENCIAS CONJUNTAS SMIGUEL NOV 2006

TP / HM0	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5								3	1	1	1		2					8	3.7	11.3
0.5- 1.0						4	1	3	17	6			3	5	3			42	19.5	11.3
1.0- 1.5			3			1	7			4	3	8		10	6		1	43	20.0	12.5
1.5- 2.0			2	1	2	1	8	5	3	2	2	1	4	2	2			35	16.3	10.2
2.0- 2.5				1	1	3	16	6	1				3					31	14.4	8.7
2.5- 3.0							4	3	2	1				4				14	6.5	10.9
3.0- 3.5						1	3		3	1			1	4	1			14	6.5	11.8
3.5- 4.0							1			2			1		2			6	2.8	13.1
4.0- 4.5								2	3	2			1	2				10	4.7	11.6
4.5- 5.0								3						3				6	2.8	12.2
5.0- 5.5								1	2	1								4	1.9	10.4
5.5- 6.0										2								2	0.9	11.5
6.0- 6.5																				
6.5- 7.0																				
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5																				
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA			5	2	3	10	40	26	32	22	6	9	15	30	14		1	215	100	
%			2.3	0.9	1.4	4.7	18.6	12.1	14.9	10.2	2.8	4.2	7.0	14.0	6.5		0.5	100		
MED			1.4	2.1	1.8	1.6	2.1	2.4	1.8	2.4	1.3	1.4	1.9	2.2	1.7		1.5			

TP

MED 11.1 MIN 4.0 MAX 18.2

DES.PAD 3.3 ASSIM 0.25 CURT 1.96

HM0

MED 1.99 MIN 0.44 MAX 5.90

DES.PAD 1.24 ASSIM 1.01 CURT 3.34

TABELA DE OCORRENCIAS CONJUNTAS SMIGUEL DEZ 2006

TP / HM0	< 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	>18	SOMA	%	MED
0.0- 0.5																				
0.5- 1.0			2						6	2								10	4.4	9.3
1.0- 1.5			2	2	1		1		10	11	1	1	1					30	13.2	10.2
1.5- 2.0						6	7		7	10	10	9	1					50	21.9	10.9
2.0- 2.5					1	14	9	11	4	8	6	7	3					63	27.6	9.9
2.5- 3.0					1	3	4	7	5	6	13	8	2					49	21.5	11.0
3.0- 3.5						1	4	2	9	2	2	3						23	10.1	10.3
3.5- 4.0							1	1		1								3	1.3	9.4
4.0- 4.5																				
4.5- 5.0																				
5.0- 5.5																				
5.5- 6.0																				
6.0- 6.5																				
6.5- 7.0																				
7.0- 7.5																				
7.5- 8.0																				
8.0- 8.5																				
8.5- 9.0																				
9.0- 9.5																				
9.5-10.0																				
10.0-10.5																				
10.5-11.0																				
11.0-11.5																				
11.5-12.0																				
12.0-12.5																				
12.5-13.0																				
13.0-13.5																				
13.5-14.0																				
14.0-14.5																				
14.5-15.0																				
>15.0																				
SOMA			4	2	3	24	26	21	41	40	32	28	7					228	100	
%			1.8	0.9	1.3	10.5	11.4	9.2	18.0	17.5	14.0	12.3	3.1					100		
MED			1.0	1.0	2.1	2.2	2.4	2.7	2.0	1.9	2.3	2.3	2.2							

TP

MED 10.4 MIN 4.5 MAX 14.3

DES.PAD 2.3 ASSIM -0.37 CURT 2.18

HM0

MED 2.18 MIN 0.75 MAX 3.61

DES.PAD 0.67 ASSIM -0.10 CURT 2.32

TABELA DE OCORRENCIAS CONJUNTAS SMIGUEL OUT 2006

THTP1 / HM0	0 30	30 60	60 90	90 120	120 150	150 180	180 210	210 240	240 270	270 300	300 330	330 360	SOMA	%	MED
.0- .5															
.5- 1.0					1	12	1	2	2	11	3		32	13.4	232
1.0- 1.5	1				3	18	11	3	9	37	4		86	36.0	244
1.5- 2.0						6		2	13	37			58	24.3	266
2.0- 2.5						1	1	2	19	20			43	18.0	267
2.5- 3.0									6	4			10	4.2	268
3.0- 3.5									3	3			6	2.5	267
3.5- 4.0										2			2	.8	278
4.0- 4.5									1				1	.4	265
4.5- 5.0									1				1	.4	256
5.0- 5.5															
5.5- 6.0															
6.0- 6.5															
6.5- 7.0															
7.0- 7.5															
7.5- 8.0															
8.0- 8.5															
8.5- 9.0															
9.0- 9.5															
9.5-10.0															
10.0-10.5															
10.5-11.0															
11.0-11.5															
11.5-12.0															
12.0-12.5															
12.5-13.0															
13.0-13.5															
13.5-14.0															
14.0-14.5															
14.5-15.0															
>15.0															
SOMA	1				4	37	13	9	54	114	7		239	100	
%	.4				1.7	15.5	5.4	3.8	22.6	47.7	2.9		100		
MED	1.1				1.1	1.2	1.3	1.5	2.1	1.7	1.1				

THTP1

MED 257 MIN 6 MAX 318

DES.PAD .80 ASSIM 2.18 CURT .61

HM0

MED 1.65 MIN .72 MAX 4.55

DES.PAD .64 ASSIM 1.30 CURT 5.36

TABELA DE OCORRENCIAS CONJUNTAS SMIGUEL NOV 2006

THTP1 / HM0	0 30	30 60	60 90	90 120	120 150	150 180	180 210	210 240	240 270	270 300	300 330	330 360	SOMA	%	MED
.0- .5							2	3	3				8	3.7	234
.5- 1.0					5	5	6	2	7	17			42	19.5	237
1.0- 1.5					10	11	6			16			43	20.0	202
1.5- 2.0					3	8	5	1	3	13	2		35	16.3	232
2.0- 2.5					5	9	6		2	9			31	14.4	199
2.5- 3.0						4	3	2	1	4			14	6.5	222
3.0- 3.5						1	1	1	1	10			14	6.5	269
3.5- 4.0								1	1	4			6	2.8	275
4.0- 4.5						1	1	1	2	5			10	4.7	257
4.5- 5.0						2				4			6	2.8	253
5.0- 5.5							1			3			4	1.9	264
5.5- 6.0										2			2	.9	287
6.0- 6.5															
6.5- 7.0															
7.0- 7.5															
7.5- 8.0															
8.0- 8.5															
8.5- 9.0															
9.0- 9.5															
9.5-10.0															
10.0-10.5															
10.5-11.0															
11.0-11.5															
11.5-12.0															
12.0-12.5															
12.5-13.0															
13.0-13.5															
13.5-14.0															
14.0-14.5															
14.5-15.0															
>15.0															
SOMA					23	41	31	11	20	87	2		215	100	
%					10.7	19.1	14.4	5.1	9.3	40.5	.9		100		
MED					1.5	1.9	1.9	1.9	1.7	2.3	1.8				

THTP1				HM0			
MED 231	MIN 126	MAX 303		MED 1.99	MIN .44	MAX 5.90	
DES.PAD 1.07	ASSIM .63	CURT -1.58		DES.PAD 1.24	ASSIM 1.01	CURT 3.34	

TABELA DE OCORRENCIAS CONJUNTAS SMIGUEL DEZ 2006

THTP1 / HM0	0 30	30 60	60 90	90 120	120 150	150 180	180 210	210 240	240 270	270 300	300 330	330 360	SOMA	%	MED
.0- .5															
.5- 1.0									1	9			10	4.4	283
1.0- 1.5								1	3	26			30	13.2	279
1.5- 2.0						3	6	2	1	37	1		50	21.9	272
2.0- 2.5					4	8	9	1	10	31			63	27.6	247
2.5- 3.0						3	6	3	3	34			49	21.5	261
3.0- 3.5						3	4	2	5	9			23	10.1	242
3.5- 4.0								2		1			3	1.3	230
4.0- 4.5															
4.5- 5.0															
5.0- 5.5															
5.5- 6.0															
6.0- 6.5															
6.5- 7.0															
7.0- 7.5															
7.5- 8.0															
8.0- 8.5															
8.5- 9.0															
9.0- 9.5															
9.5-10.0															
10.0-10.5															
10.5-11.0															
11.0-11.5															
11.5-12.0															
12.0-12.5															
12.5-13.0															
13.0-13.5															
13.5-14.0															
14.0-14.5															
14.5-15.0															
>15.0															
SOMA					4	17	25	11	23	147	1		228	100	
%					1.8	7.5	11.0	4.8	10.1	64.5	.4		100		
MED					2.1	2.5	2.4	2.6	2.3	2.1	2.0				

THTP1				HM0			
MED 262	MIN 139	MAX 301		MED 2.18	MIN .75	MAX 3.61	
DES.PAD .76	ASSIM 2.67	CURT 1.29		DES.PAD .67	ASSIM -.10	CURT 2.32	

TABELA DE OCORRENCIAS CONJUNTAS SMIGUEL OUT 2006

THTP1 / TP	0 30	30 60	60 90	90 120	120 150	150 180	180 210	210 240	240 270	270 300	300 330	330 360	SOMA	%	MED
.0- 1.0															
1.0- 2.0															
2.0- 3.0															
3.0- 4.0															
4.0- 5.0							1			2			3	1.3	254
5.0- 6.0								1		2			3	1.3	259
6.0- 7.0					4	3	1	1	2	5			16	6.7	213
7.0- 8.0	1					3	4	2	6	10	1		27	11.3	255
8.0- 9.0						2	2		26	16	5		51	21.3	266
9.0-10.0						1			10	6	1		18	7.5	268
10.0-11.0							1	2	4	32			39	16.3	275
11.0-12.0						6		2	5	28			41	17.2	264
12.0-13.0						2			1	9			12	5.0	270
13.0-14.0						2	1			3			6	2.5	229
14.0-15.0						7				1			8	3.3	181
15.0-16.0						8	2	1					11	4.6	180
16.0-17.0						3	1						4	1.7	175
17.0-18.0															
>18.0															
SOMA	1				4	37	13	9	54	114	7		239	100	
%	.4				1.7	15.5	5.4	3.8	22.6	47.7	2.9		100		
MED	7.0				6.2	12.4	9.7	9.5	8.5	9.8	8.0				

THTP1				TP			
MED 257	MIN 6	MAX 318		MED 9.8	MIN 4.9	MAX 16.7	
DES.PAD .80	ASSIM 2.18	CURT .61		DES.PAD 2.67	ASSIM .56	CURT 2.71	

TABELA DE OCORRENCIAS CONJUNTAS SMIGUEL NOV 2006

THTP1 / TP	0 30	30 60	60 90	90 120	120 150	150 180	180 210	210 240	240 270	270 300	300 330	330 360	SOMA	%	MED
.0- 1.0															
1.0- 2.0															
2.0- 3.0															
3.0- 4.0															
4.0- 5.0					3	1				1			5	2.3	153
5.0- 6.0						1			1				2	.9	212
6.0- 7.0							1		1	1			3	1.4	250
7.0- 8.0					4	1				5			10	4.7	213
8.0- 9.0					12	13	6		3	6			40	18.6	176
9.0-10.0					4	8	7	1	4	2			26	12.1	191
10.0-11.0							1	5	8	17	1		32	14.9	266
11.0-12.0								3	1	17	1		22	10.2	275
12.0-13.0									1	5			6	2.8	284
13.0-14.0										9			9	4.2	283
14.0-15.0						2	3	1	1	8			15	7.0	250
15.0-16.0						9	7	1		13			30	14.0	228
16.0-17.0						6	5			3			14	6.5	195
17.0-18.0															
>18.0							1						1	.5	197
SOMA					23	41	31	11	20	87	2		215	100	
%					10.7	19.1	14.4	5.1	9.3	40.5	.9		100		
MED					7.6	11.3	12.3	11.3	9.6	11.8	10.8				

THTP1			TP		
MED 231	MIN 126	MAX 303	MED 11.1	MIN 4.0	MAX 18.2
DES.PAD 1.07	ASSIM .63	CURT -1.58	DES.PAD 3.27	ASSIM .25	CURT 1.96

TABELA DE OCORRENCIAS CONJUNTAS SMIGUEL DEZ 2006

THTP1 / TP	0 30	30 60	60 90	90 120	120 150	150 180	180 210	210 240	240 270	270 300	300 330	330 360	SOMA	%	MED
.0- 1.0															
1.0- 2.0															
2.0- 3.0															
3.0- 4.0															
4.0- 5.0									2	2			4	1.8	270
5.0- 6.0									1	1			2	.9	274
6.0- 7.0							1		2				3	1.3	226
7.0- 8.0					4	4	6	2	6	2			24	10.5	202
8.0- 9.0						3	8	5	6	4			26	11.4	221
9.0-10.0						4	7	3	2	5			21	9.2	216
10.0-11.0						6	3	1	4	27			41	18.0	262
11.0-12.0										40			40	17.5	284
12.0-13.0										31	1		32	14.0	285
13.0-14.0										28			28	12.3	285
14.0-15.0										7			7	3.1	289
15.0-16.0															
16.0-17.0															
17.0-18.0															
>18.0															
SOMA					4	17	25	11	23	147	1		228	100	
%					1.8	7.5	11.0	4.8	10.1	64.5	.4		100		
MED					7.0	8.8	8.2	8.3	7.7	11.6	12.5				

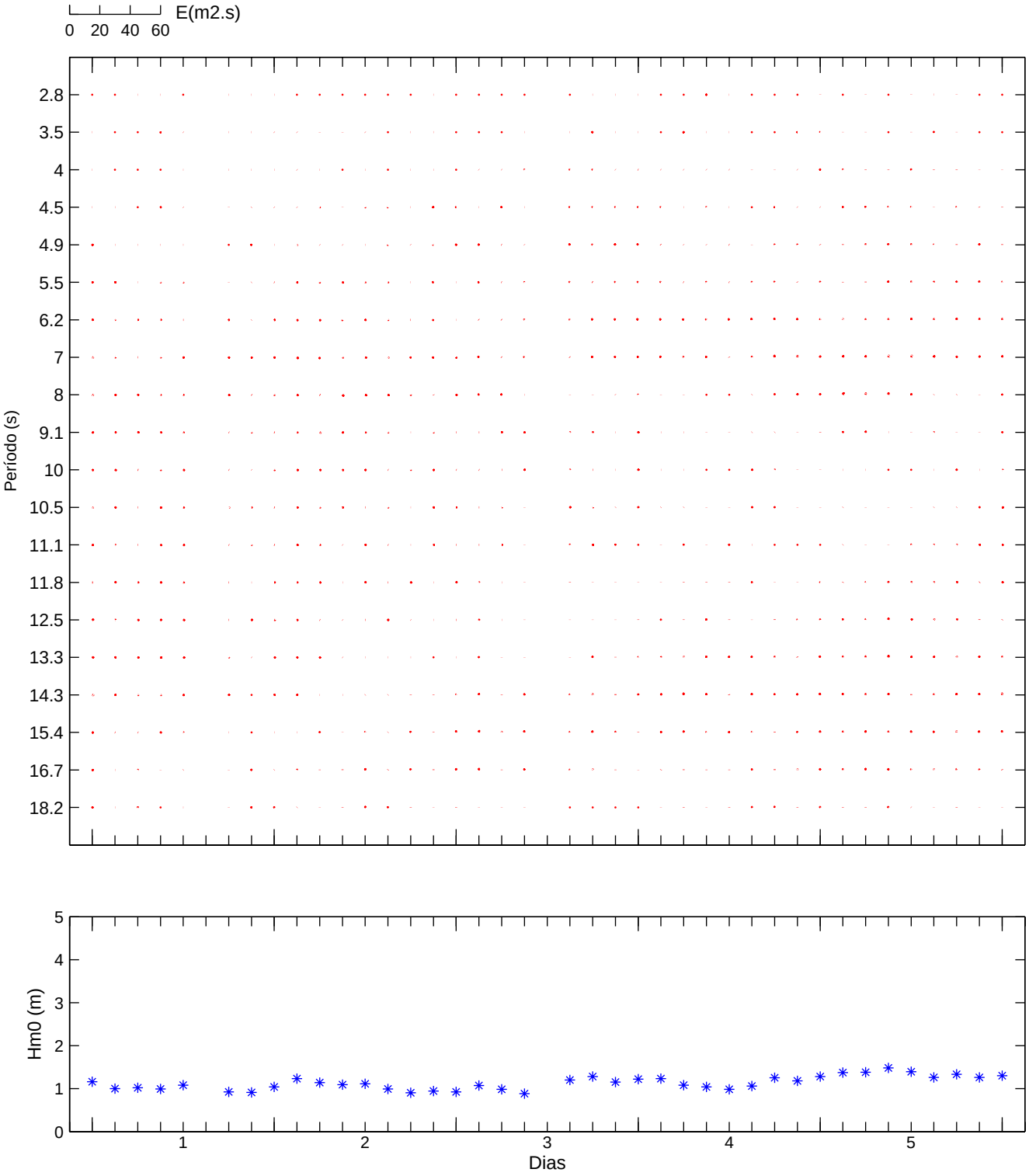
THTP1			TP		
MED 262	MIN 139	MAX 301	MED 10.4	MIN 4.5	MAX 14.3
DES.PAD .76	ASSIM 2.67	CURT 1.29	DES.PAD 2.34	ASSIM -.37	CURT 2.18

ANEXO G

Evolução temporal da distribuição de energia e da direcção média por banda de frequência

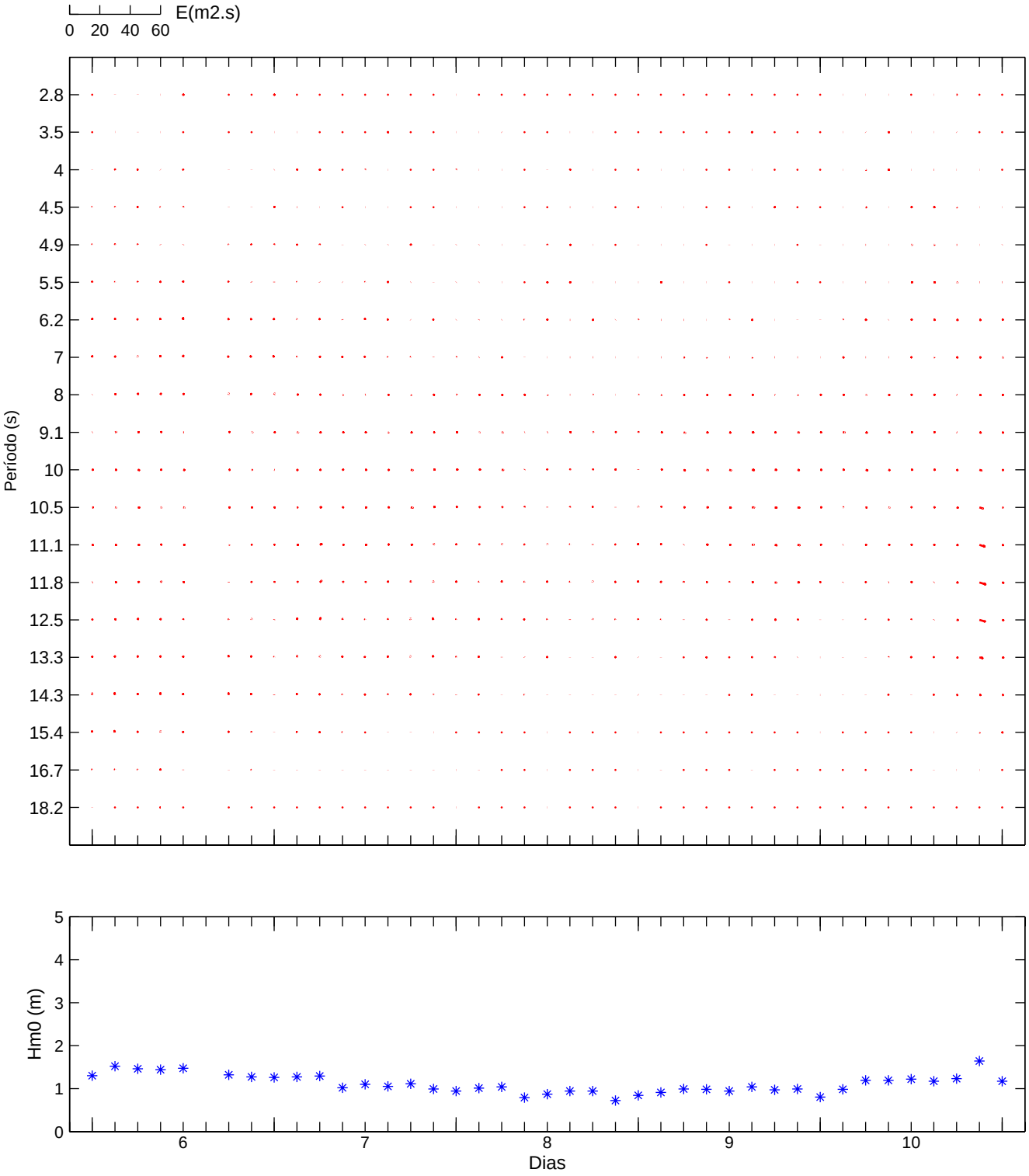
EVOLUÇÃO TEMPORAL DA DISTRIBUIÇÃO DE ENERGIA E DA DIRECÇÃO MÉDIA

POR BANDA DE FREQUÊNCIA − SMIGUEL 2006 OUT 1−5



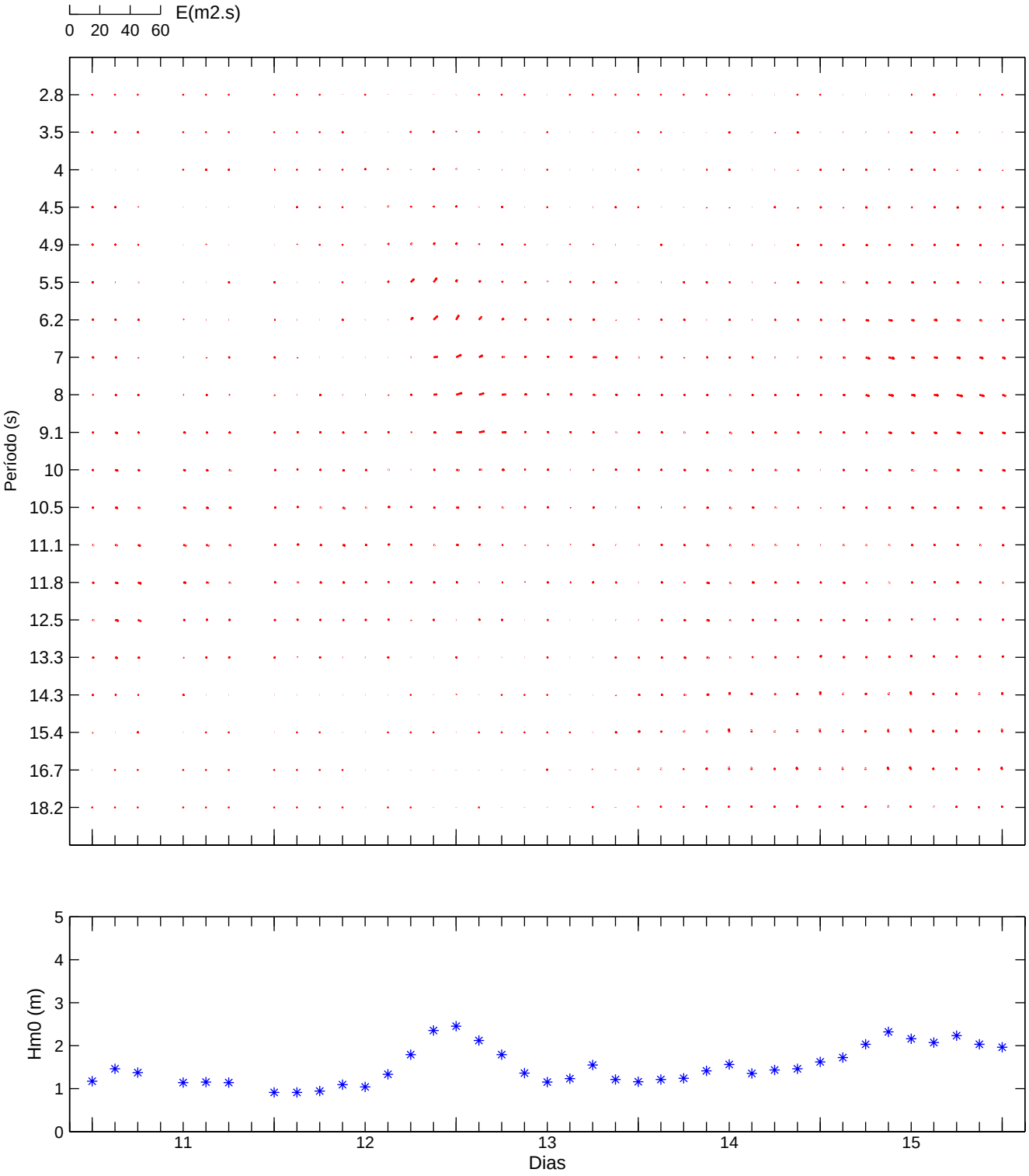
EVOLUÇÃO TEMPORAL DA DISTRIBUIÇÃO DE ENERGIA E DA DIRECÇÃO MÉDIA

POR BANDA DE FREQUÊNCIA − SMIGUEL 2006 OUT 6−10



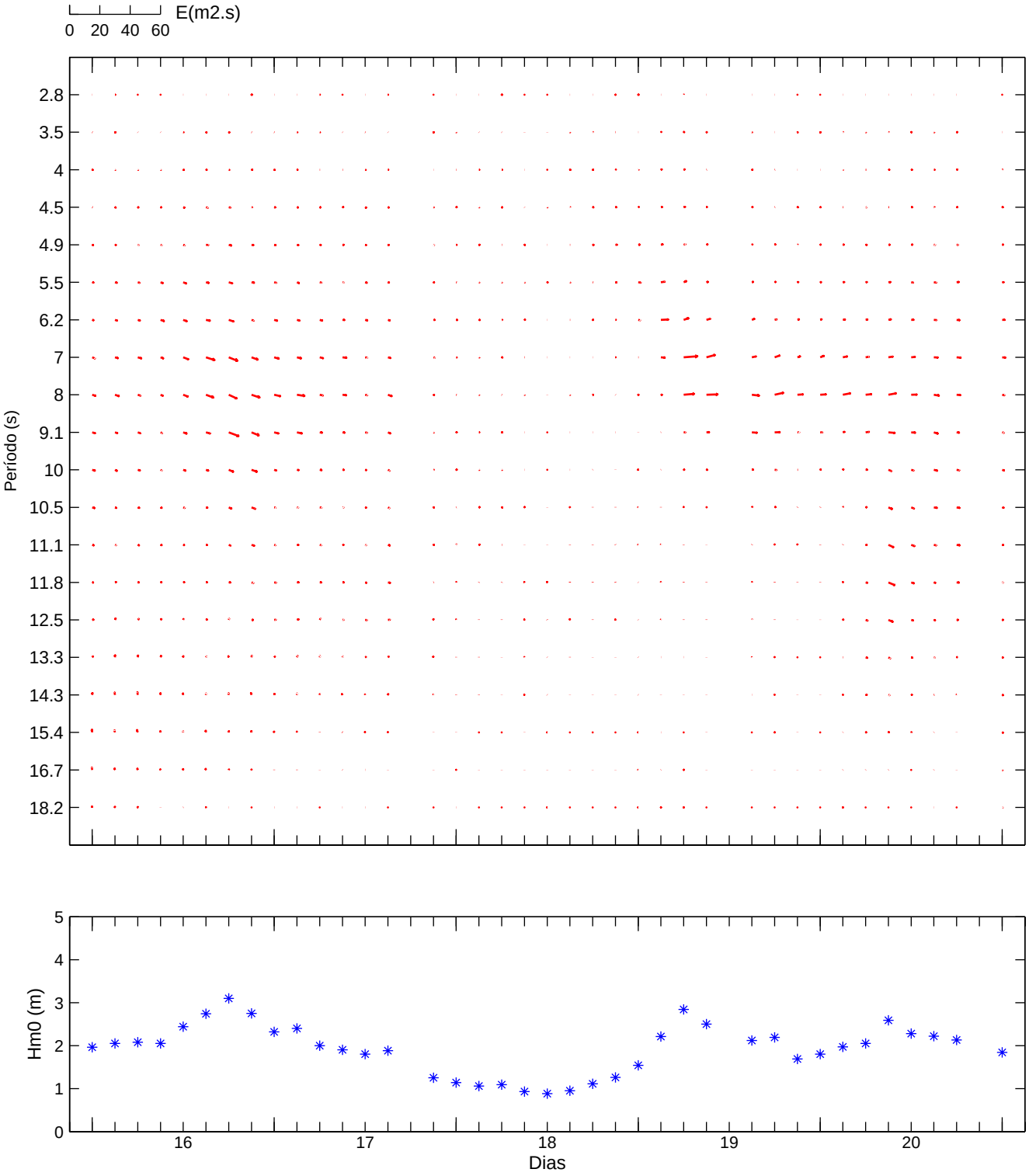
EVOLUÇÃO TEMPORAL DA DISTRIBUIÇÃO DE ENERGIA E DA DIRECÇÃO MÉDIA

POR BANDA DE FREQUÊNCIA − SMIGUEL 2006 OUT 11−15



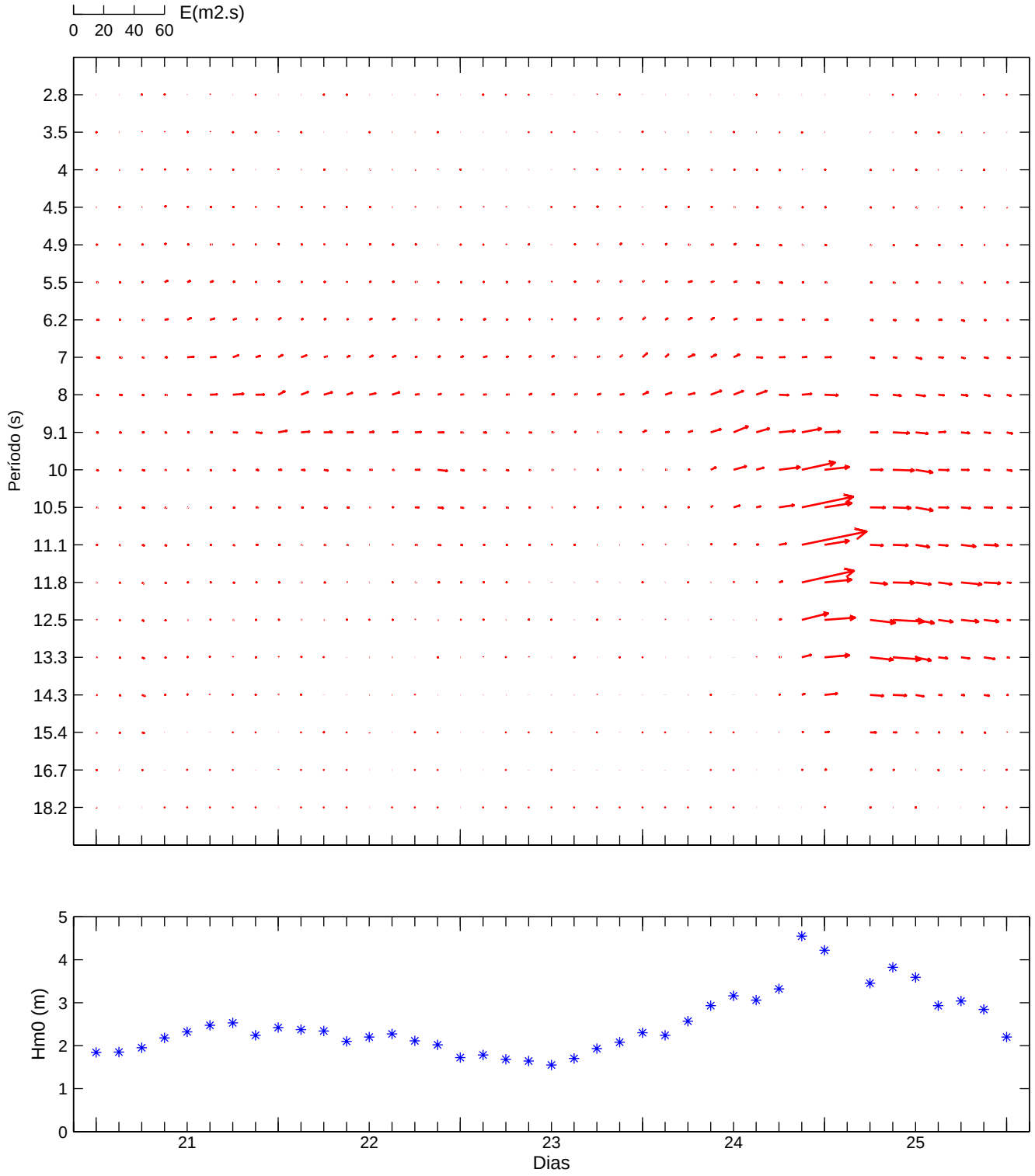
EVOLUÇÃO TEMPORAL DA DISTRIBUIÇÃO DE ENERGIA E DA DIRECÇÃO MÉDIA

POR BANDA DE FREQUÊNCIA − SMIGUEL 2006 OUT 16−20



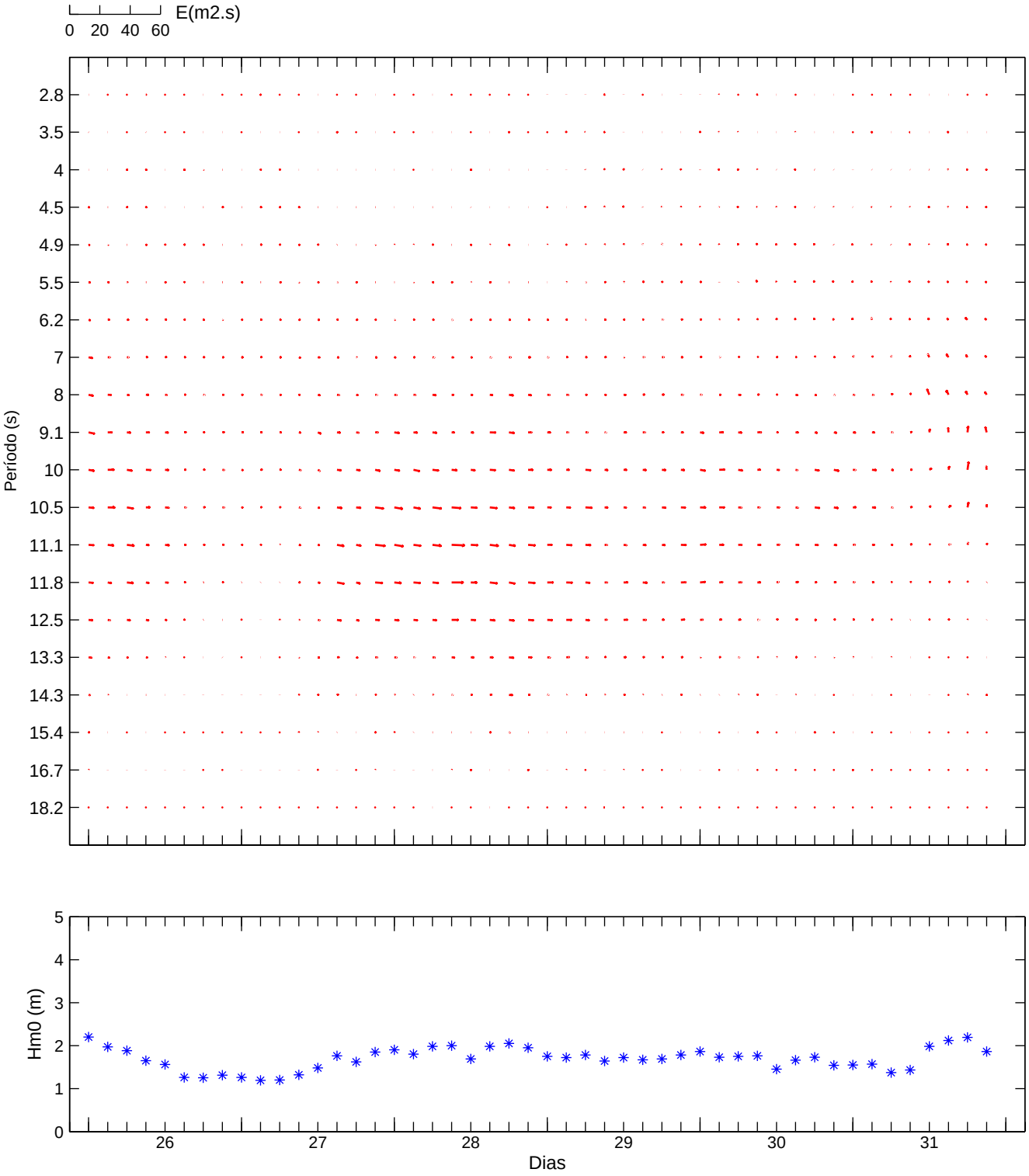
EVOLUÇÃO TEMPORAL DA DISTRIBUIÇÃO DE ENERGIA E DA DIRECÇÃO MÉDIA

POR BANDA DE FREQUÊNCIA − SMIGUEL 2006 OUT 21−25



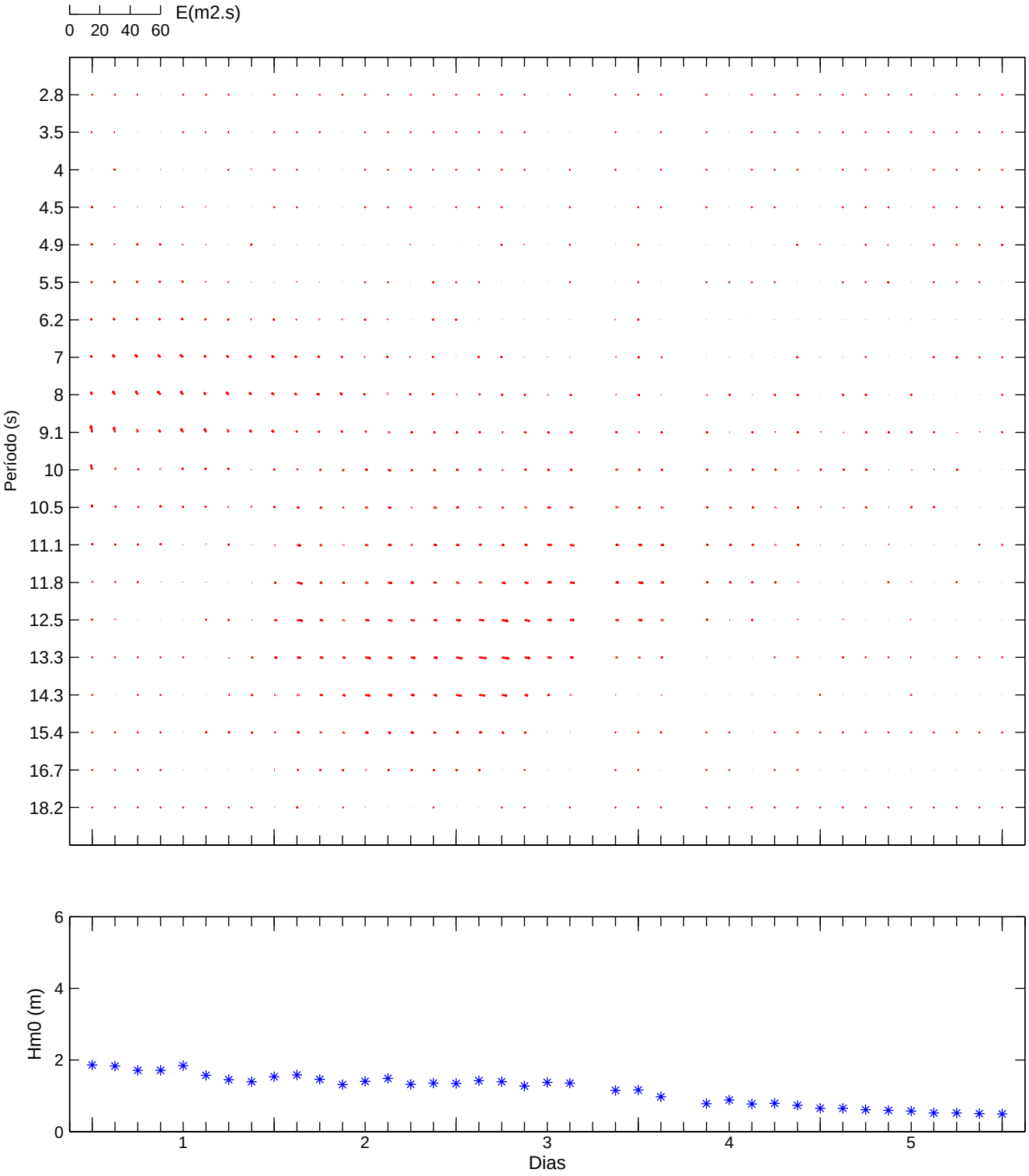
EVOLUÇÃO TEMPORAL DA DISTRIBUIÇÃO DE ENERGIA E DA DIRECÇÃO MÉDIA

POR BANDA DE FREQUÊNCIA − SMIGUEL 2006 OUT 26−31



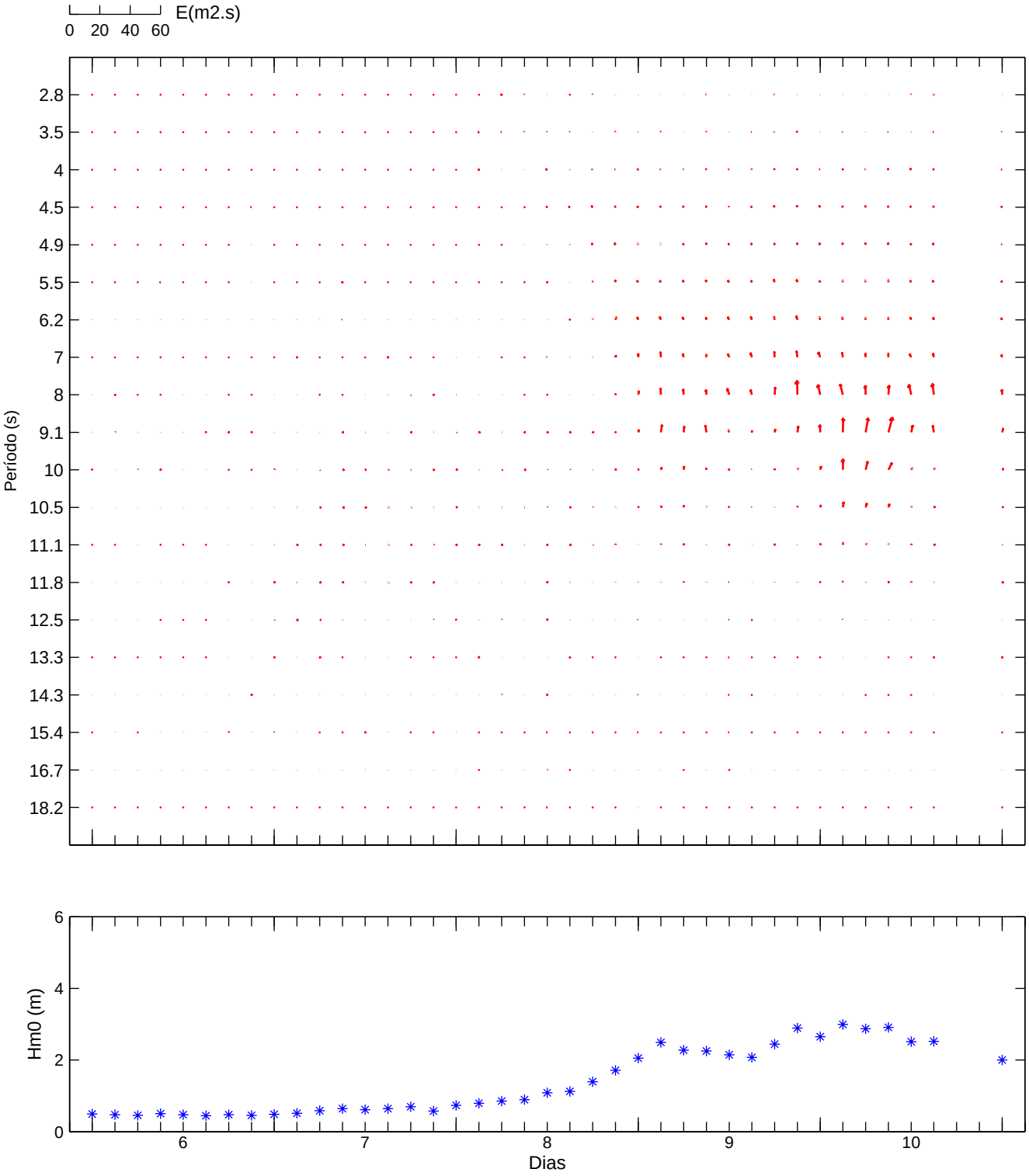
EVOLUÇÃO TEMPORAL DA DISTRIBUIÇÃO DE ENERGIA E DA DIRECÇÃO MÉDIA

POR BANDA DE FREQUÊNCIA − SMIGUEL 2006 NOV 1−5



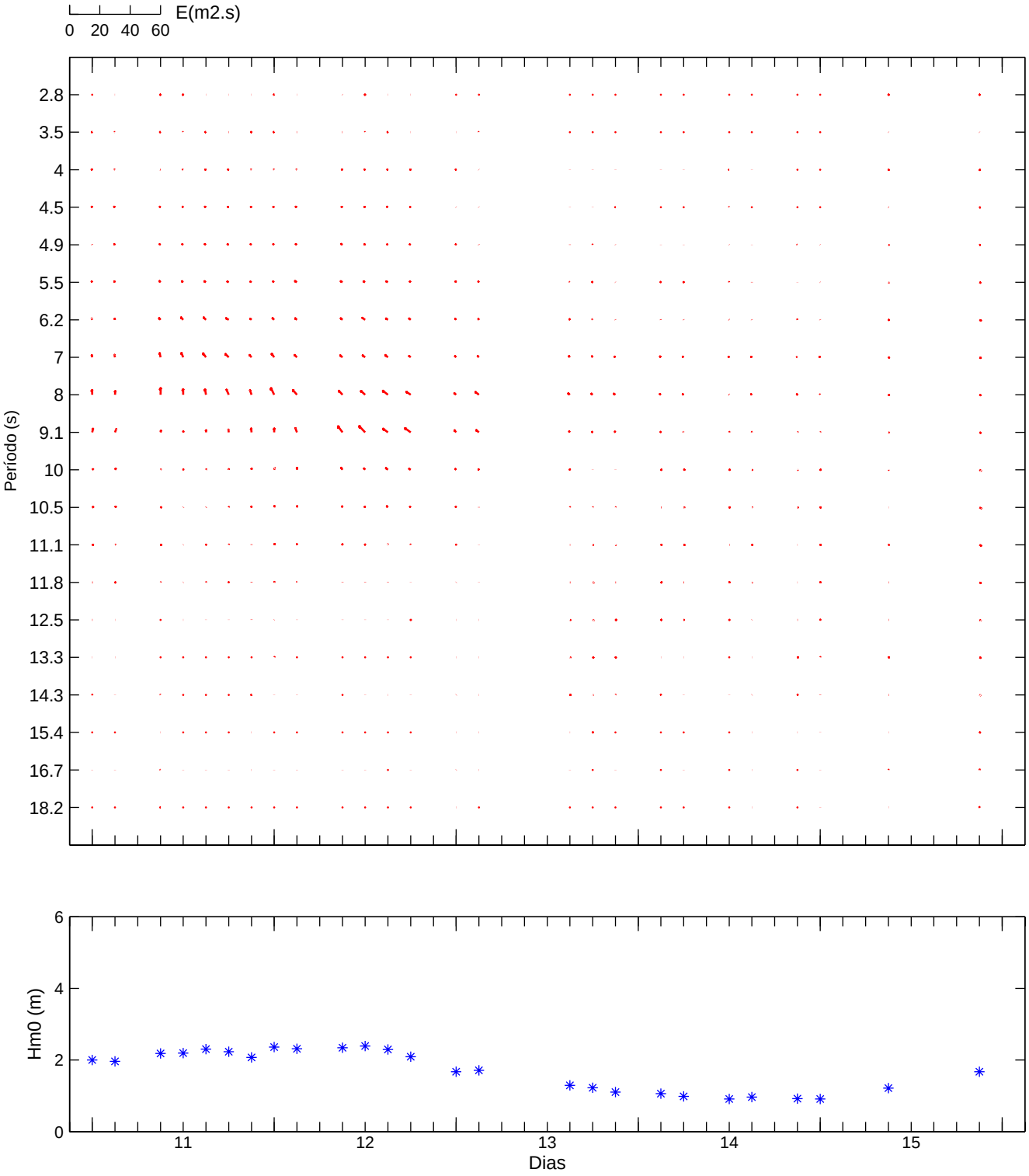
EVOLUÇÃO TEMPORAL DA DISTRIBUIÇÃO DE ENERGIA E DA DIRECÇÃO MÉDIA

POR BANDA DE FREQUÊNCIA − SMIGUEL 2006 NOV 6−10



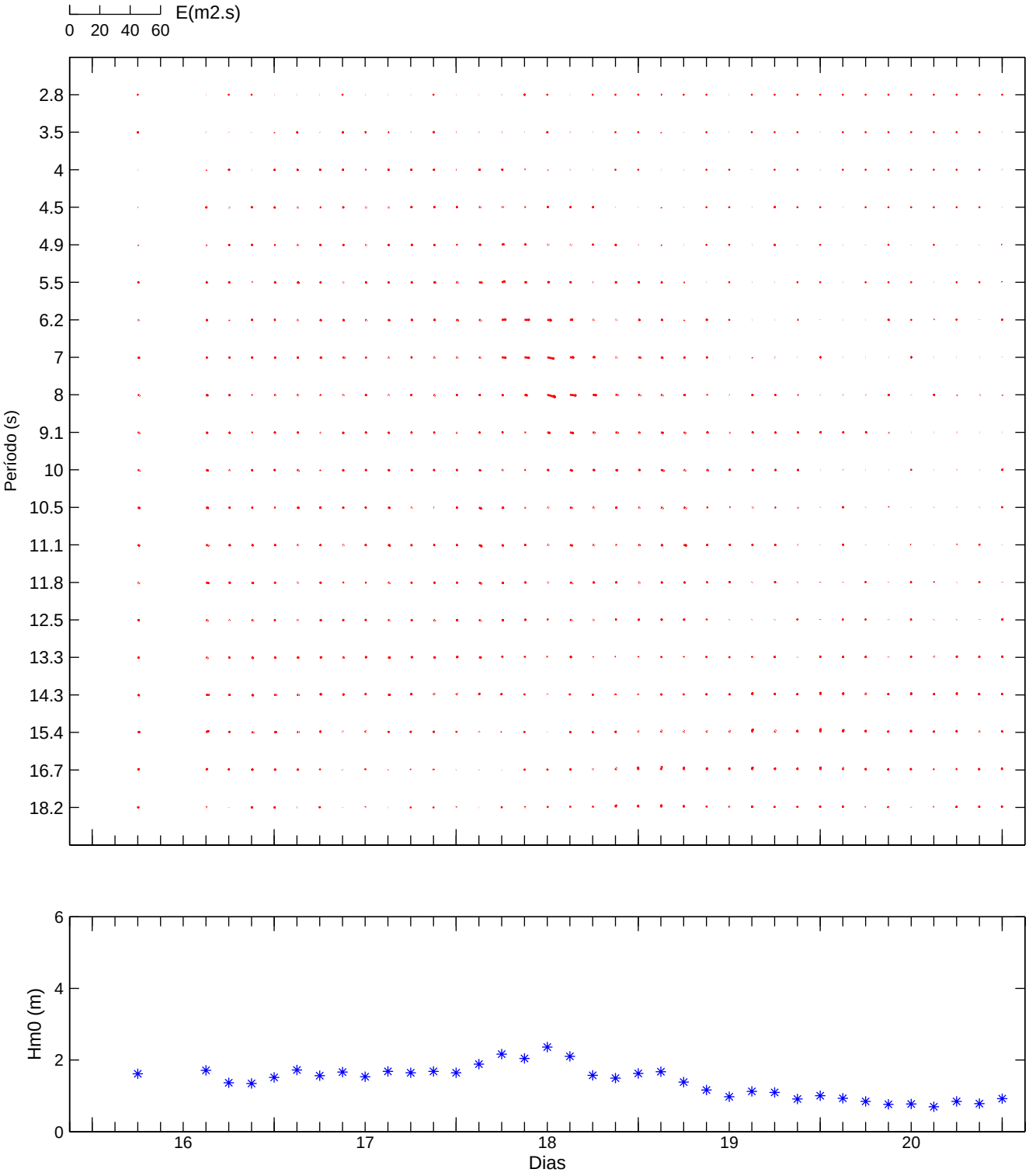
EVOLUÇÃO TEMPORAL DA DISTRIBUIÇÃO DE ENERGIA E DA DIRECÇÃO MÉDIA

POR BANDA DE FREQUÊNCIA − SMIGUEL 2006 NOV 11−15



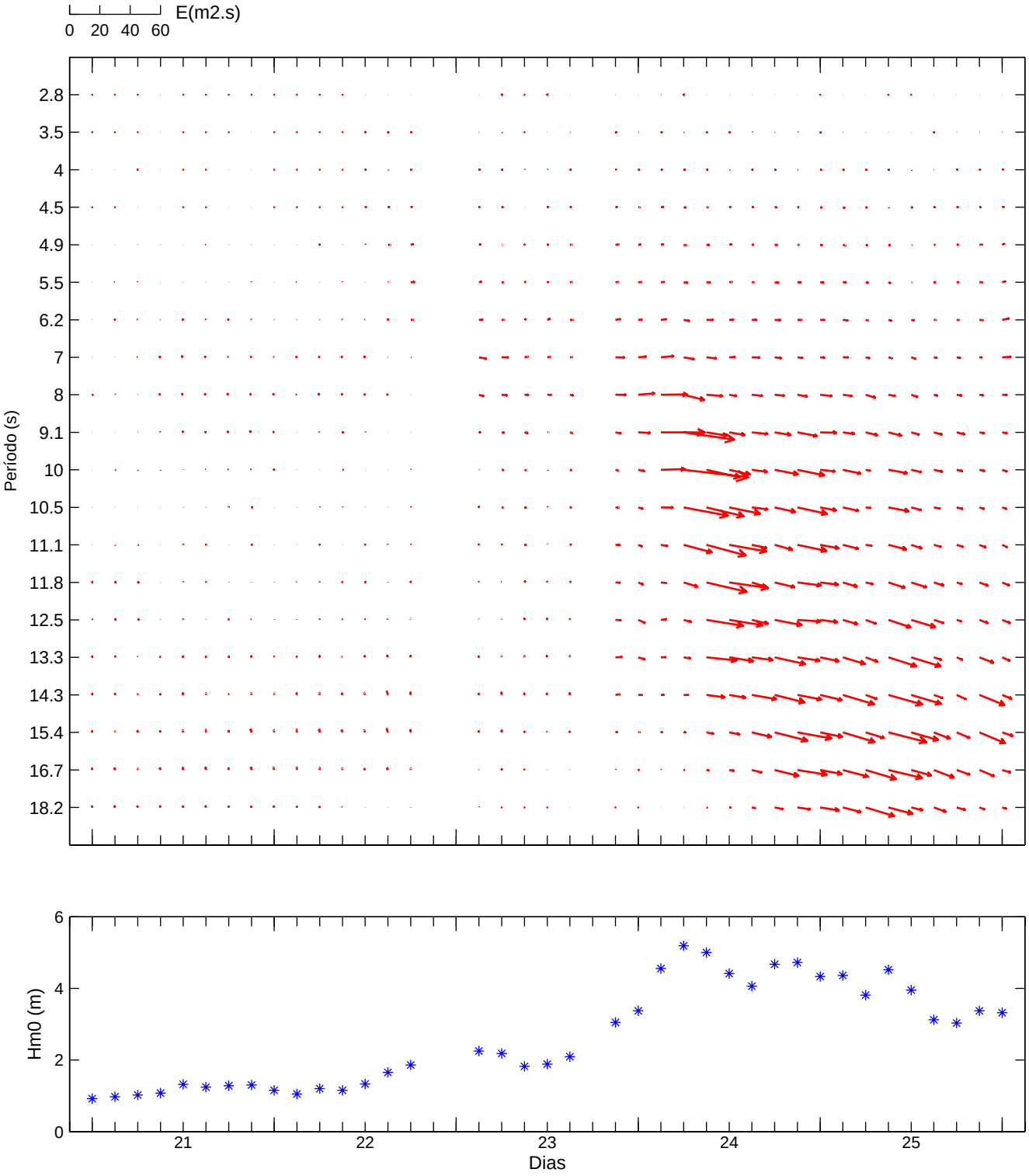
EVOLUÇÃO TEMPORAL DA DISTRIBUIÇÃO DE ENERGIA E DA DIRECÇÃO MÉDIA

POR BANDA DE FREQUÊNCIA − SMIGUEL 2006 NOV 16−20



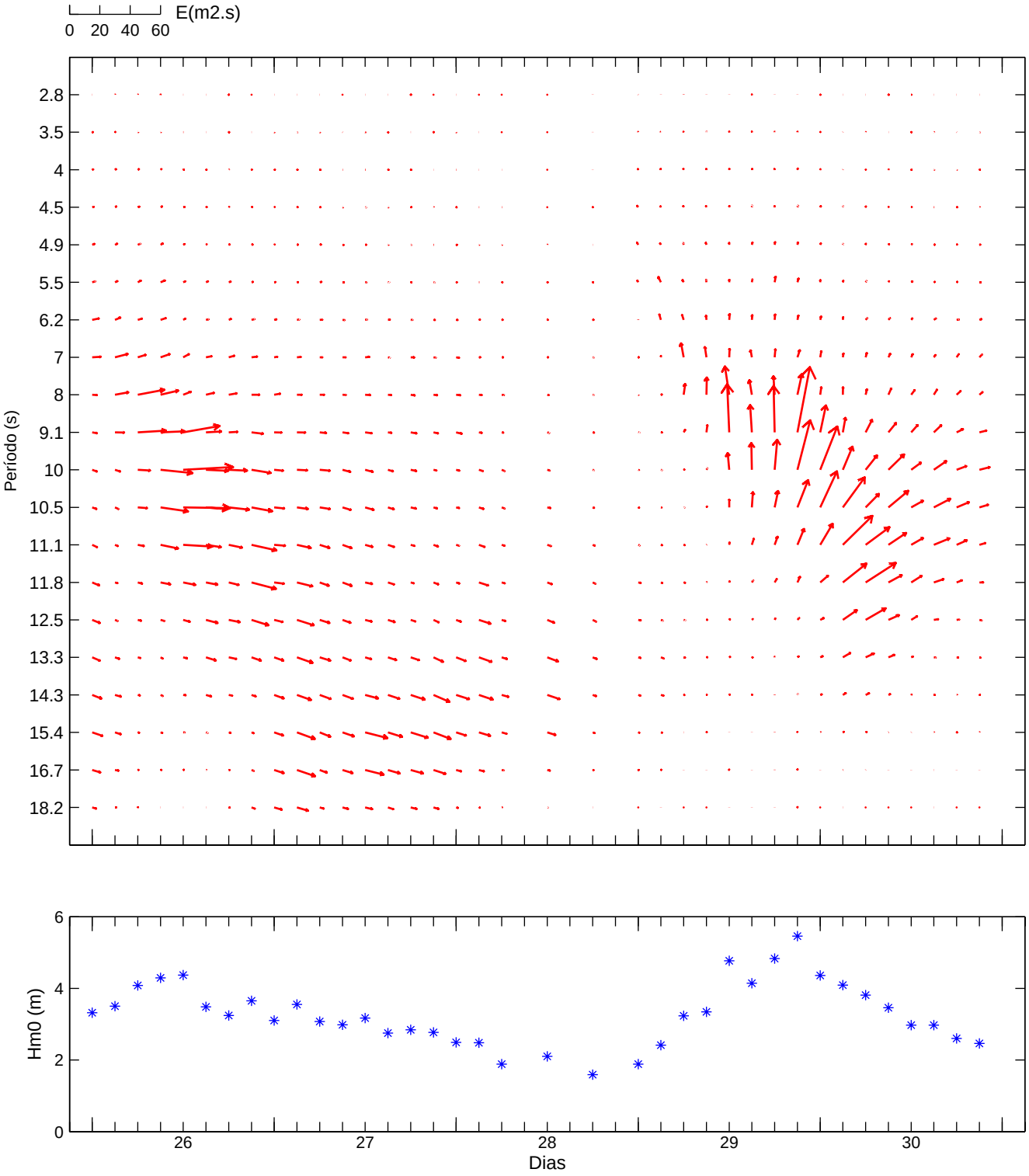
EVOLUÇÃO TEMPORAL DA DISTRIBUIÇÃO DE ENERGIA E DA DIRECÇÃO MÉDIA

POR BANDA DE FREQUÊNCIA − SMIGUEL 2006 NOV 21−25



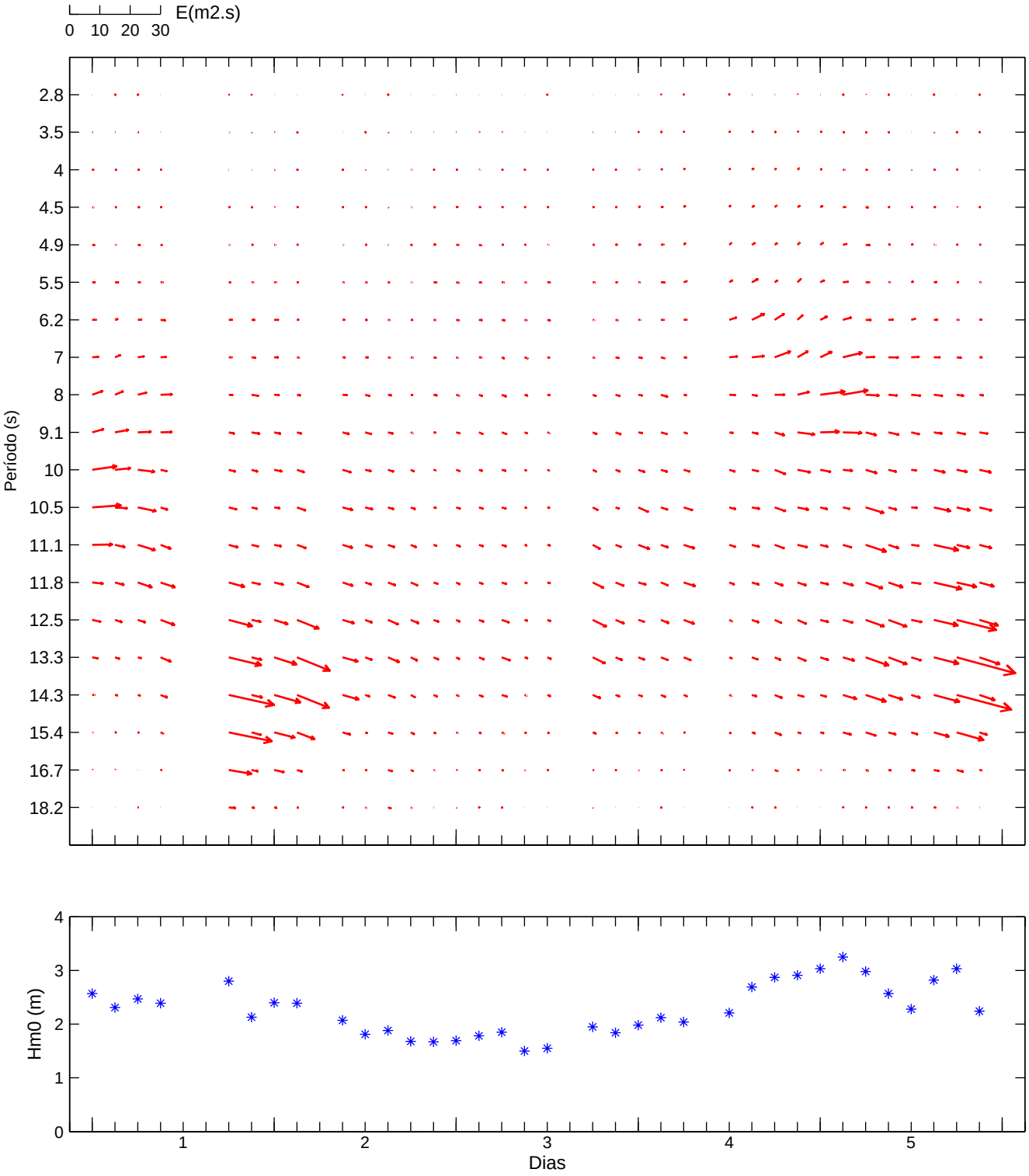
EVOLUÇÃO TEMPORAL DA DISTRIBUIÇÃO DE ENERGIA E DA DIRECÇÃO MÉDIA

POR BANDA DE FREQUÊNCIA − SMIGUEL 2006 NOV 26−30



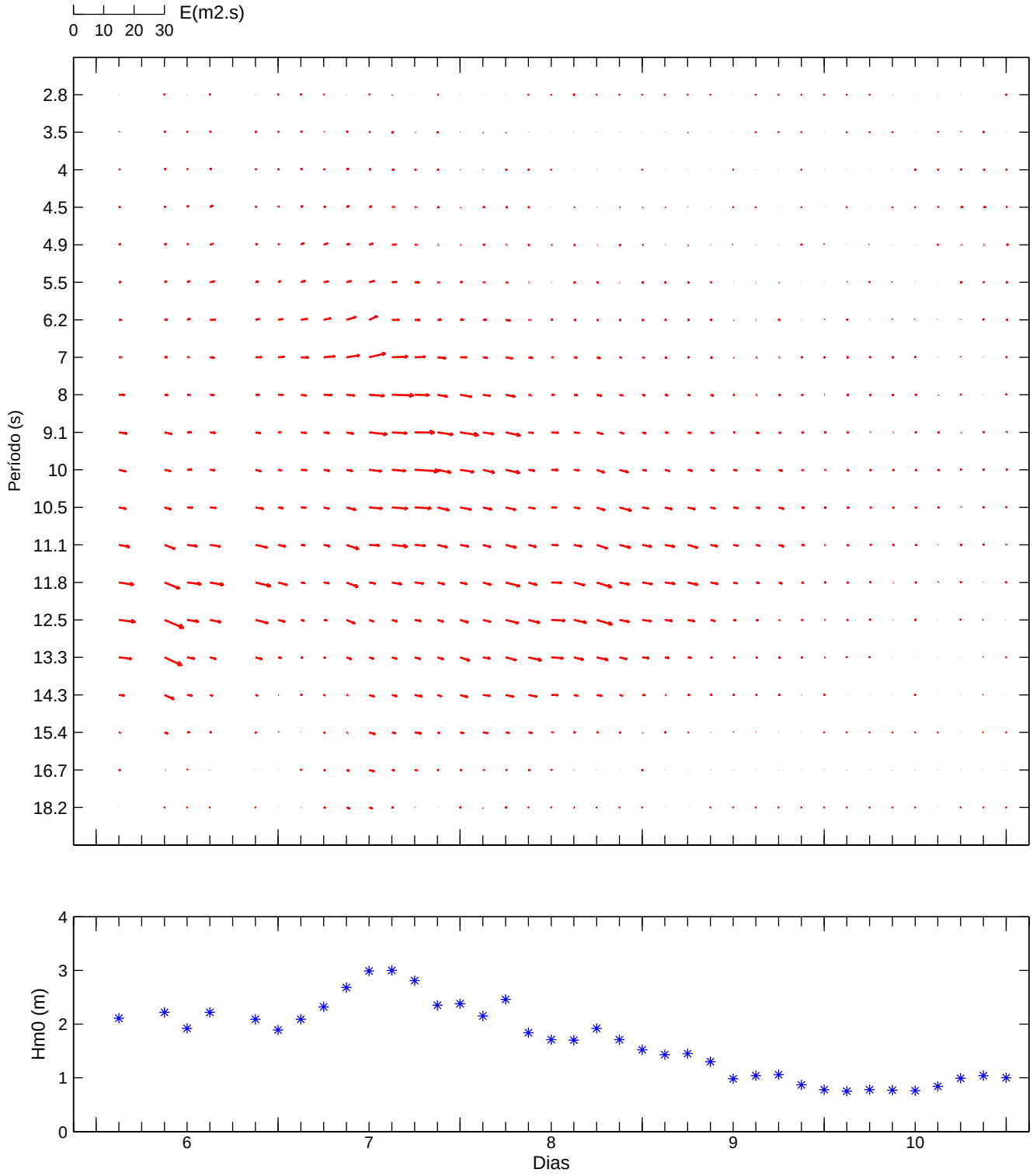
EVOLUÇÃO TEMPORAL DA DISTRIBUIÇÃO DE ENERGIA E DA DIRECÇÃO MÉDIA

POR BANDA DE FREQUÊNCIA − SMIGUEL 2006 DEZ 1−5



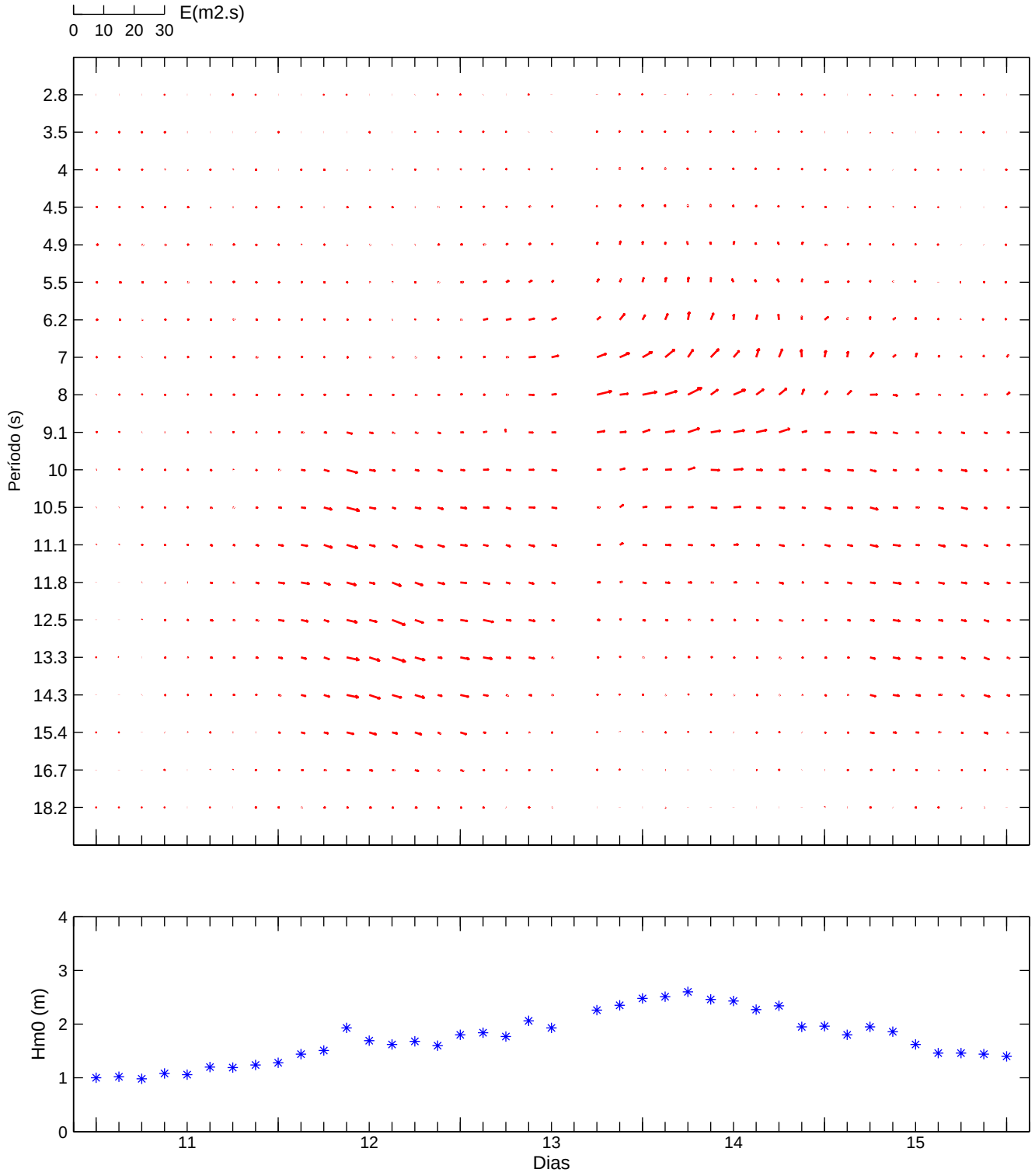
EVOLUÇÃO TEMPORAL DA DISTRIBUIÇÃO DE ENERGIA E DA DIRECÇÃO MÉDIA

POR BANDA DE FREQUÊNCIA − SMIGUEL 2006 DEZ 6−10



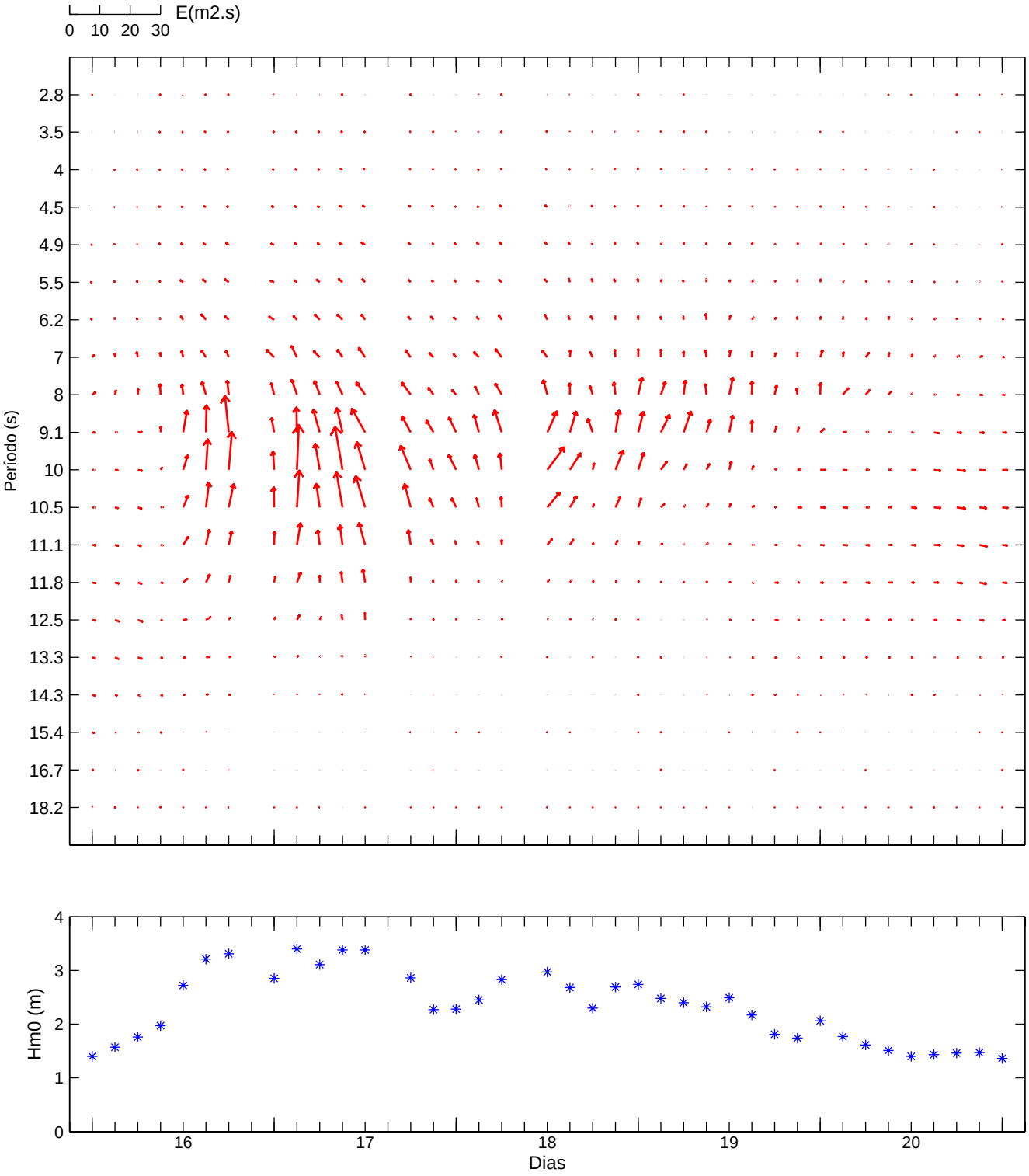
EVOLUÇÃO TEMPORAL DA DISTRIBUIÇÃO DE ENERGIA E DA DIRECÇÃO MÉDIA

POR BANDA DE FREQUÊNCIA − SMIGUEL 2006 DEZ 11−15



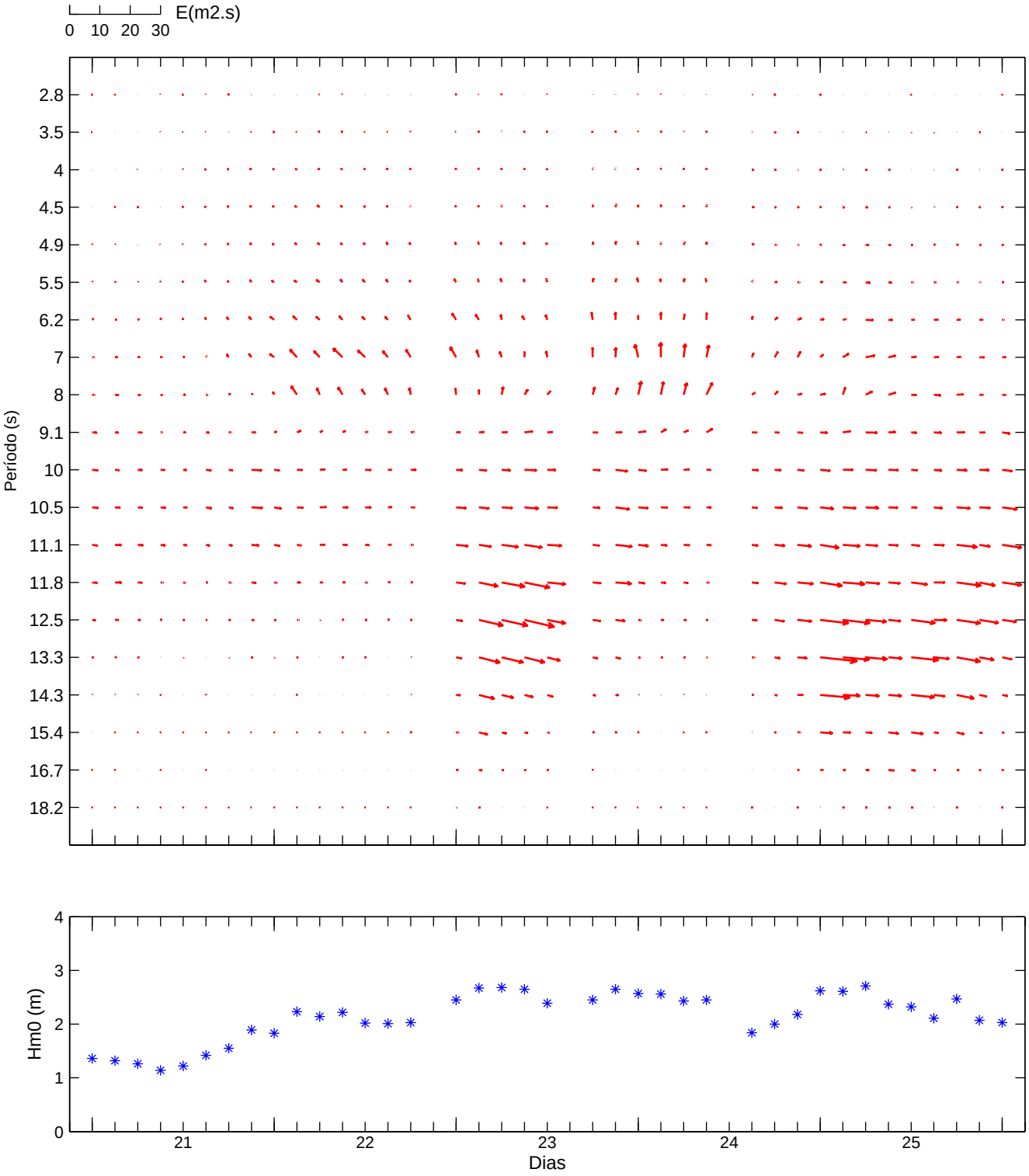
EVOLUÇÃO TEMPORAL DA DISTRIBUIÇÃO DE ENERGIA E DA DIRECÇÃO MÉDIA

POR BANDA DE FREQUÊNCIA − SMIGUEL 2006 DEZ 16−20



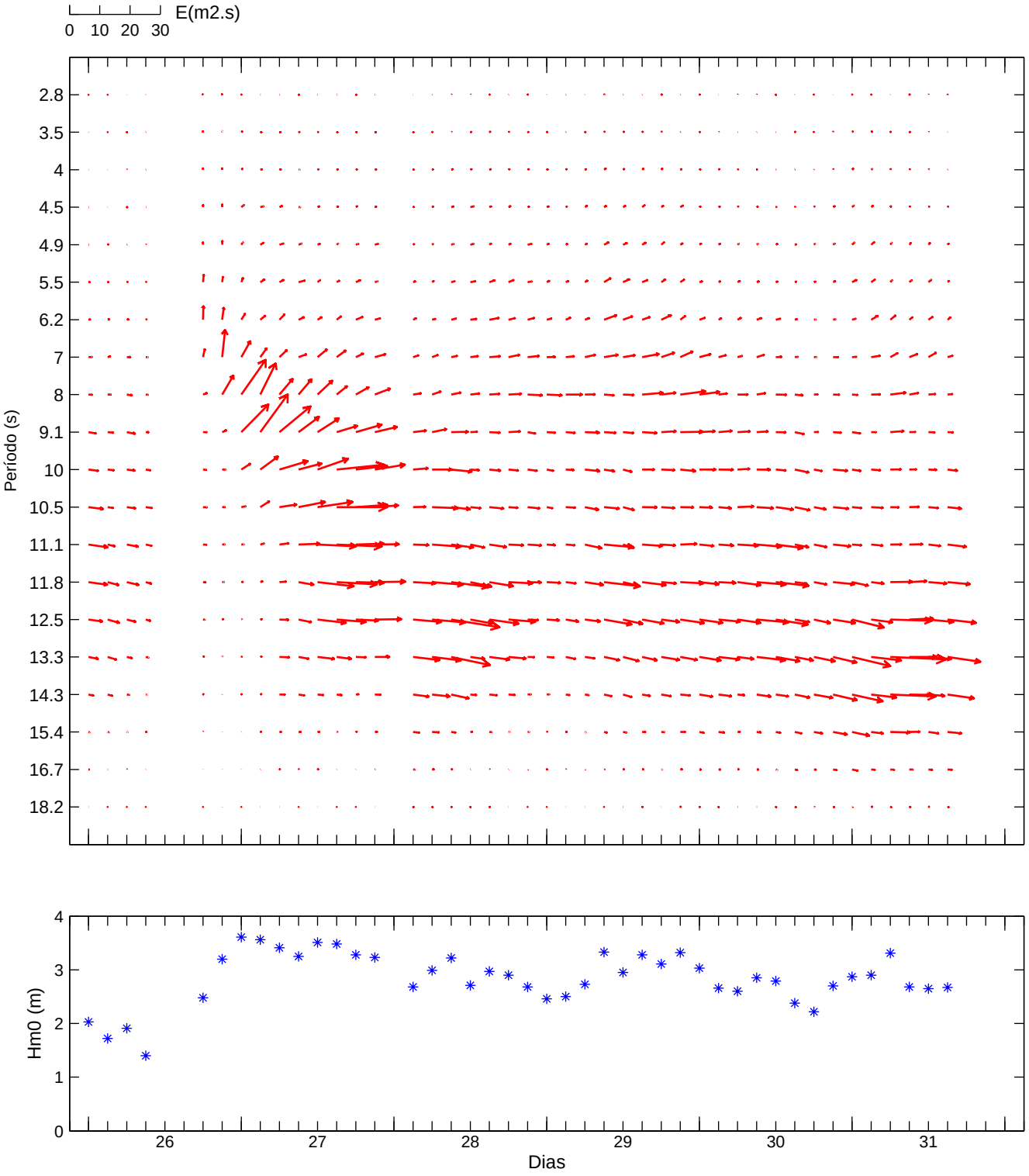
EVOLUÇÃO TEMPORAL DA DISTRIBUIÇÃO DE ENERGIA E DA DIRECÇÃO MÉDIA

POR BANDA DE FREQUÊNCIA − SMIGUEL 2006 DEZ 21−25



EVOLUÇÃO TEMPORAL DA DISTRIBUIÇÃO DE ENERGIA E DA DIRECÇÃO MÉDIA

POR BANDA DE FREQUÊNCIA − SMIGUEL 2006 DEZ 26−31

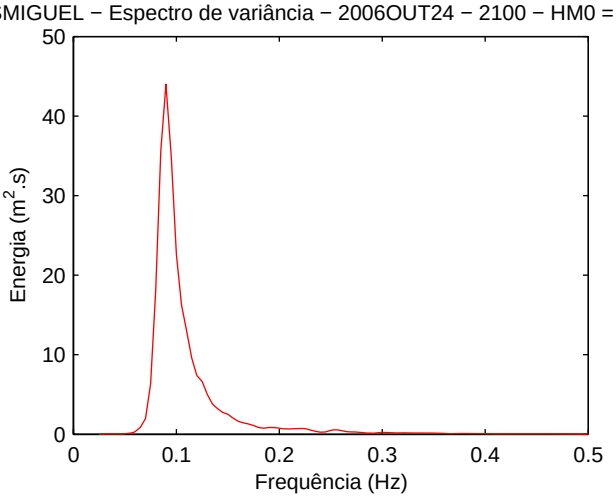


ANEXO H

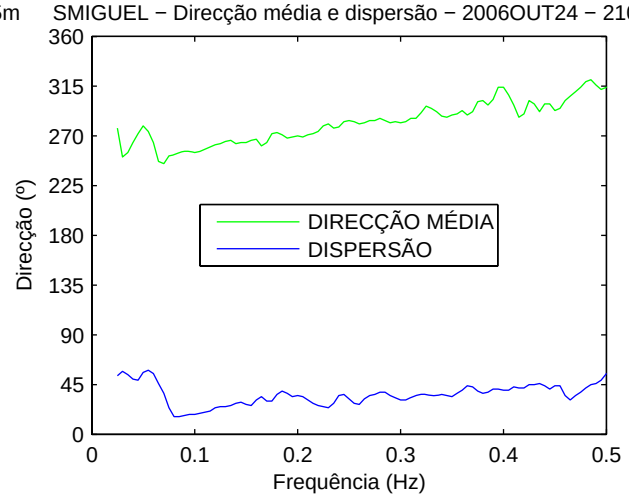
Gráficos de distribuição de energia, direcção média e dispersão,
para os registos em que HM0 ≥ 4.0metros

NOTA: No mês de Dezembro não se verificaram nenhumas ocorrências de HM0 ≥ 4.0 metros.

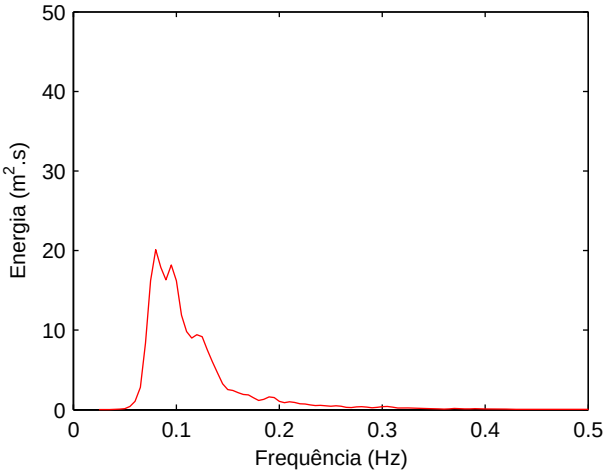
SMIGUEL − Espectro de variância − 2006OUT24 − 2100 − HM0 = 4.55m



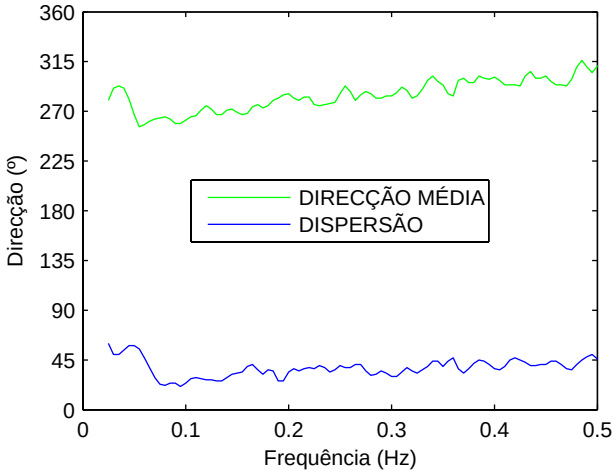
SMIGUEL − Direcção média e dispersão − 2006OUT24 − 2100



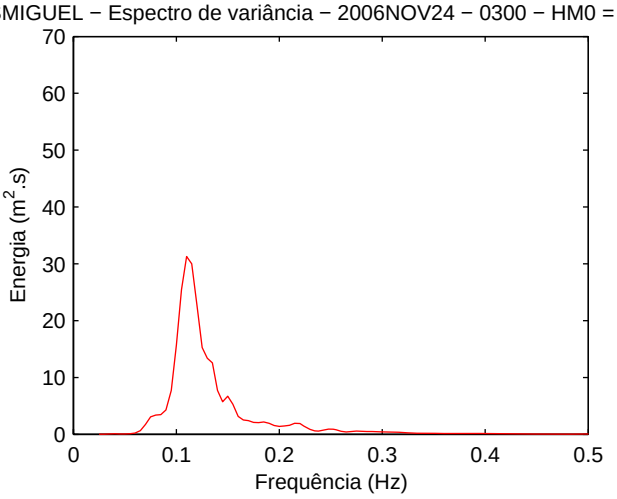
SMIGUEL − Espectro de variância − 2006OUT25 − 0000 − HM0 = 4.22m



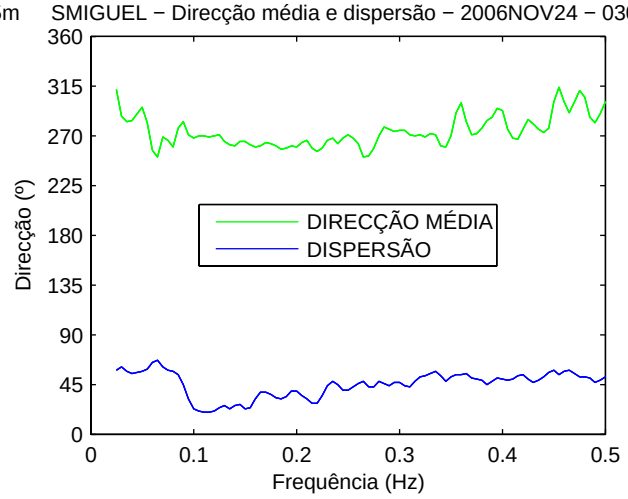
SMIGUEL − Direcção média e dispersão − 2006OUT25 − 0000



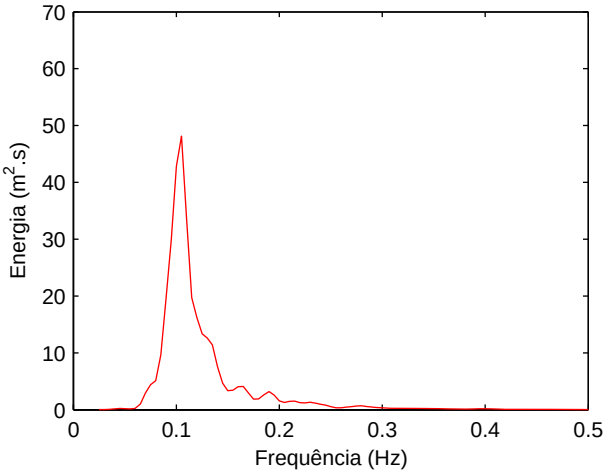
SMIGUEL − Espectro de variância − 2006NOV24 − 0300 − HM0 = 4.55m



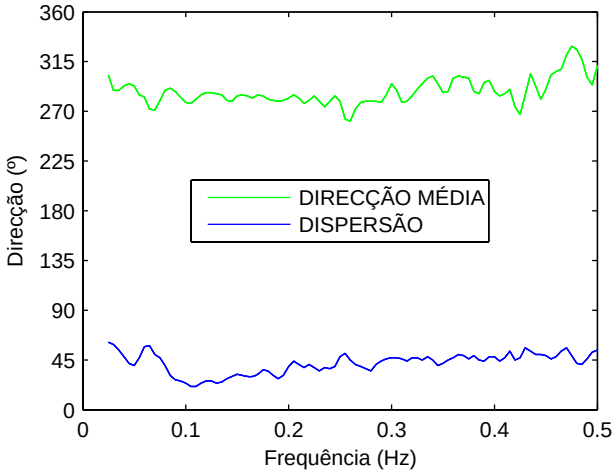
SMIGUEL − Direcção média e dispersão − 2006NOV24 − 0300



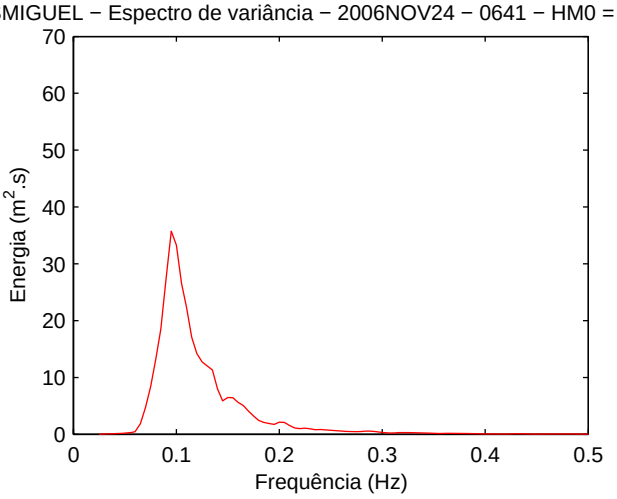
SMIGUEL − Espectro de variância − 2006NOV24 − 0600 − HM0 = 5.19m



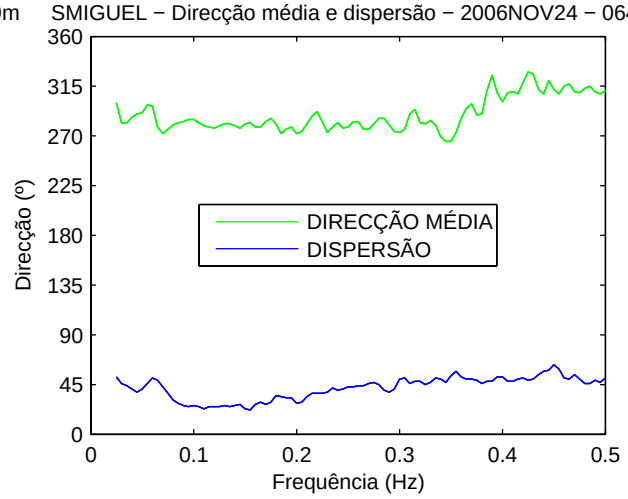
SMIGUEL − Direcção média e dispersão − 2006NOV24 − 0600



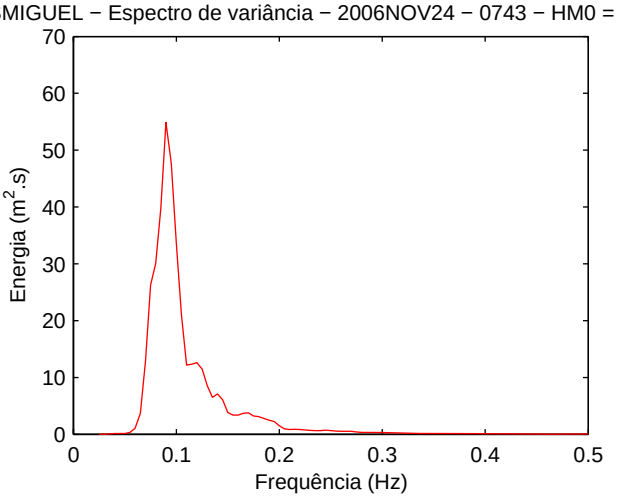
SMIGUEL − Espectro de variância − 2006NOV24 − 0641 − HM0 = 5.19m



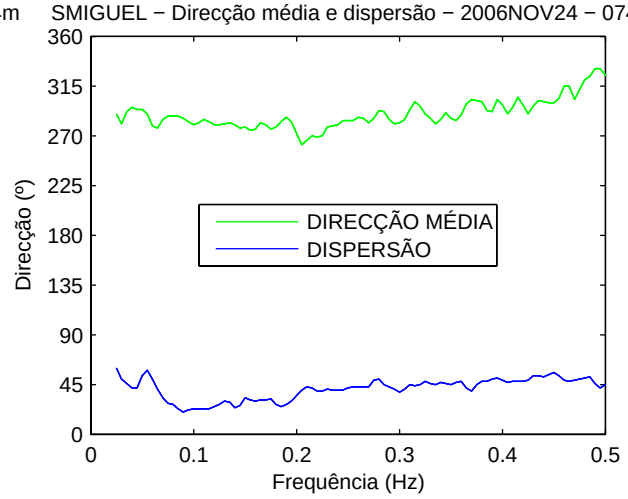
SMIGUEL − Direcção média e dispersão − 2006NOV24 − 0641



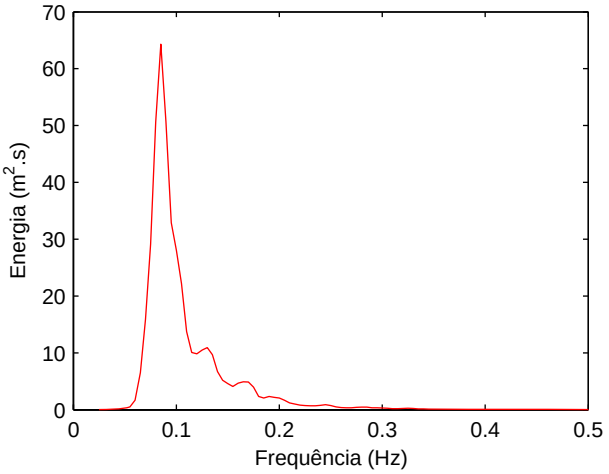
SMIGUEL − Espectro de variância − 2006NOV24 − 0743 − HM0 = 5.64m



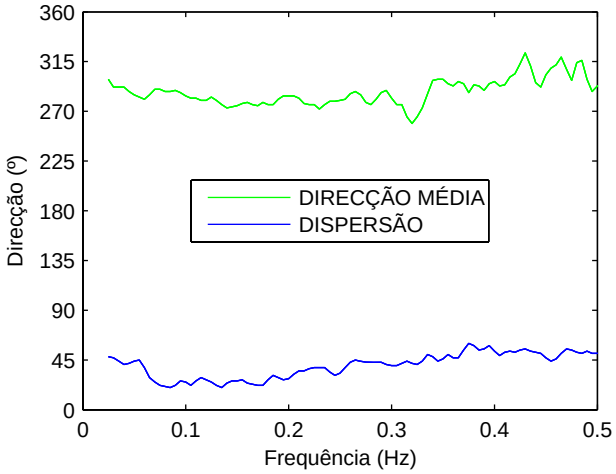
SMIGUEL − Direcção média e dispersão − 2006NOV24 − 0743



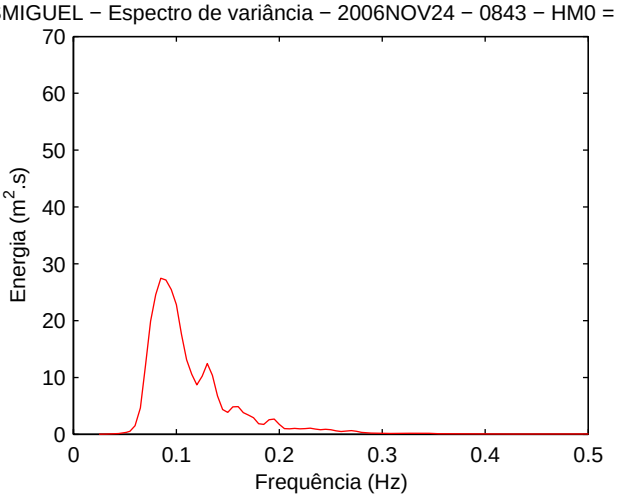
SMIGUEL − Espectro de variância − 2006NOV24 − 0813 − HM0 = 5.90m



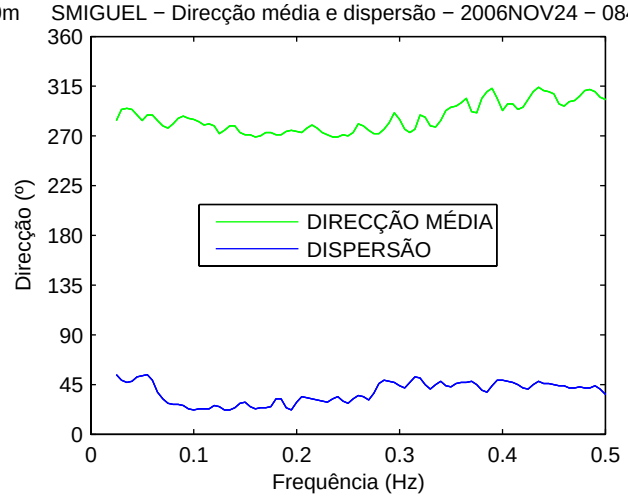
SMIGUEL − Direcção média e dispersão − 2006NOV24 − 0813



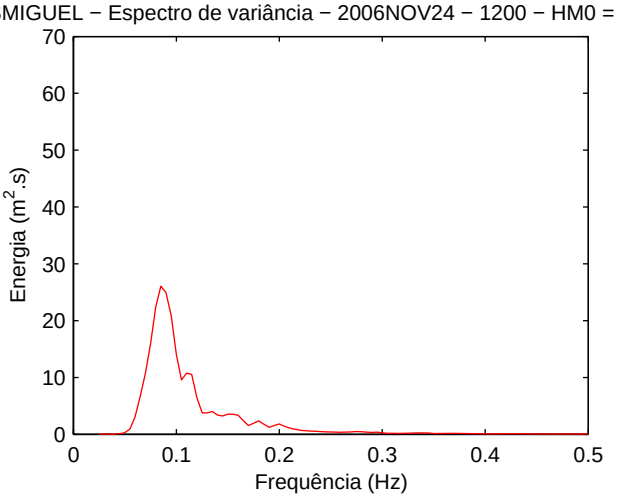
SMIGUEL − Espectro de variância − 2006NOV24 − 0843 − HM0 = 5.00m



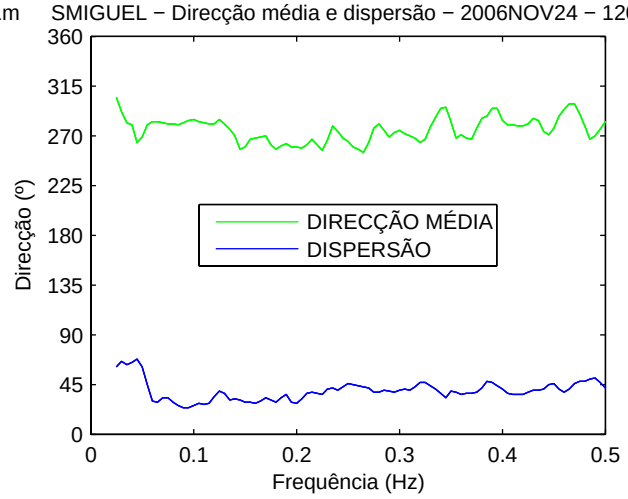
SMIGUEL − Direcção média e dispersão − 2006NOV24 − 0843



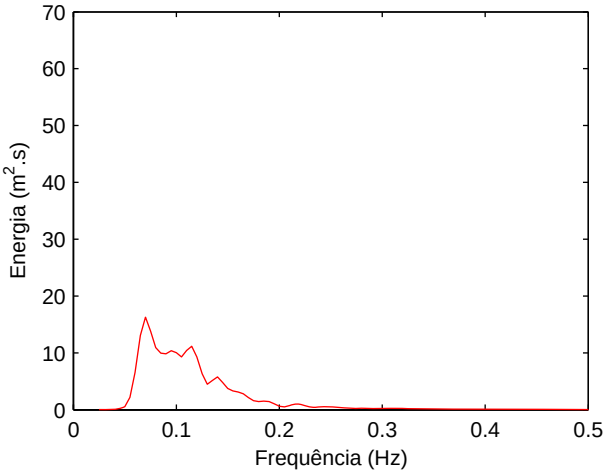
SMIGUEL − Espectro de variância − 2006NOV24 − 1200 − HM0 = 4.41m



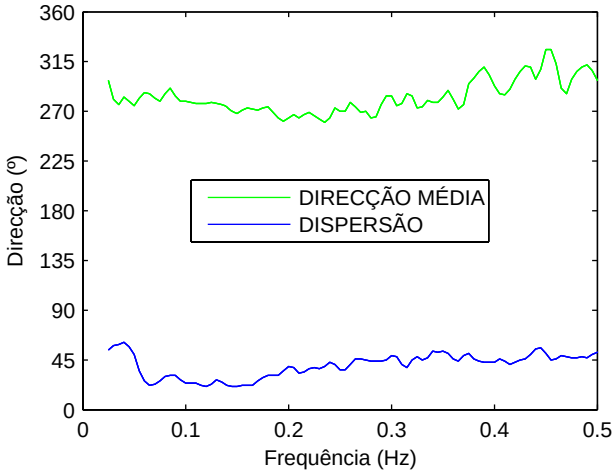
SMIGUEL − Direcção média e dispersão − 2006NOV24 − 1200



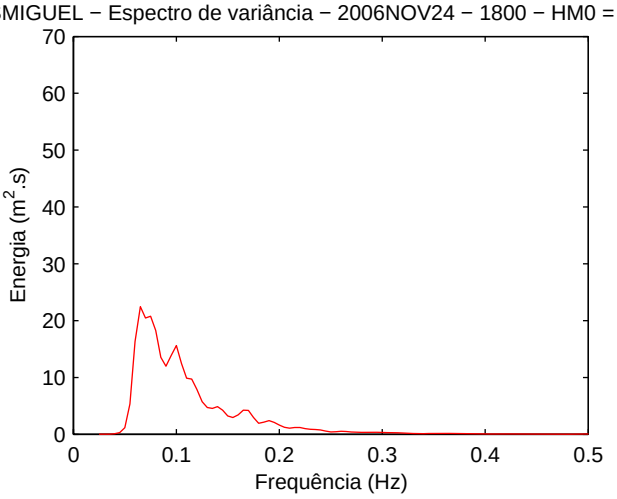
SMIGUEL − Espectro de variância − 2006NOV24 − 1500 − HM0 = 4.06m



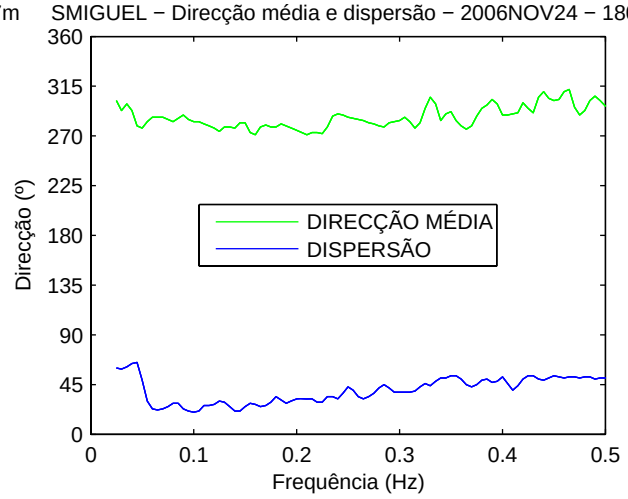
SMIGUEL − Direcção média e dispersão − 2006NOV24 − 1500



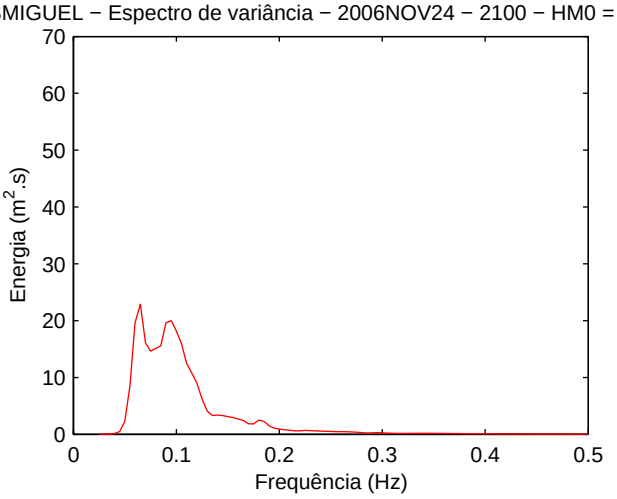
SMIGUEL − Espectro de variância − 2006NOV24 − 1800 − HM0 = 4.67m



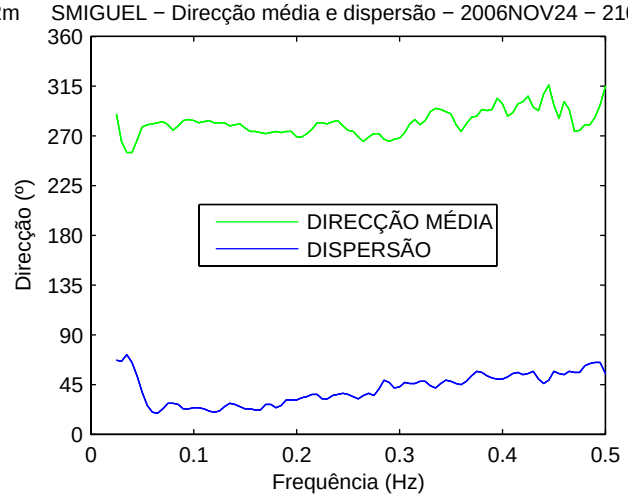
SMIGUEL − Direcção média e dispersão − 2006NOV24 − 1800



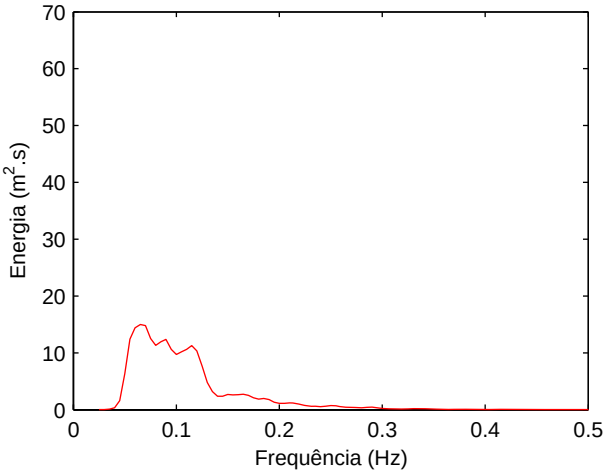
SMIGUEL − Espectro de variância − 2006NOV24 − 2100 − HM0 = 4.72m



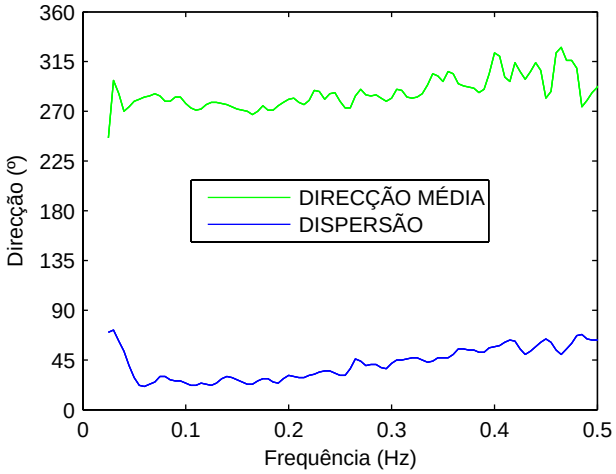
SMIGUEL − Direcção média e dispersão − 2006NOV24 − 2100



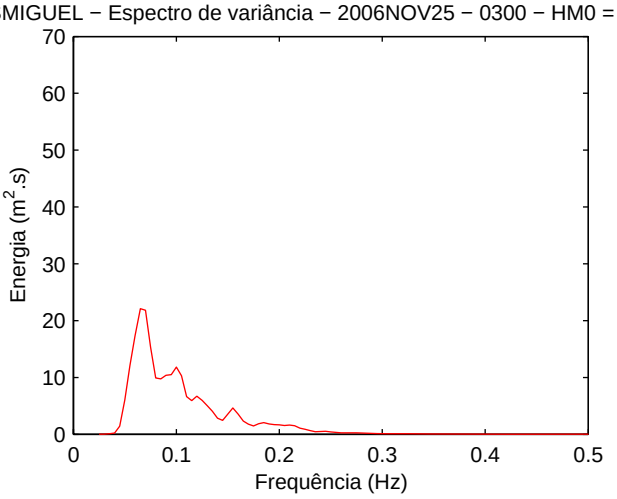
SMIGUEL − Espectro de variância − 2006NOV25 − 0000 − HM0 = 4.33m



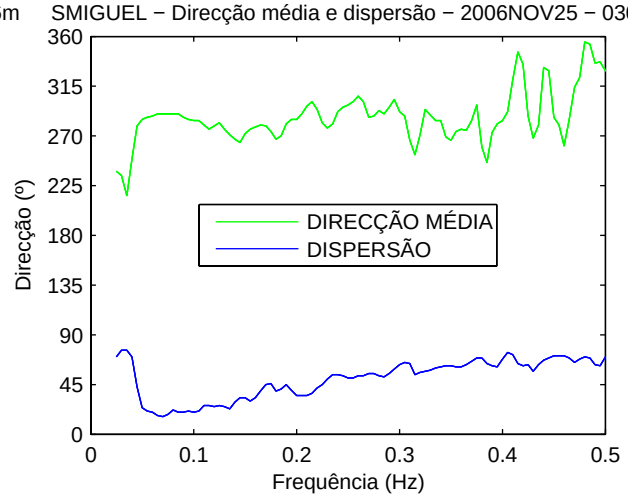
SMIGUEL − Direcção média e dispersão − 2006NOV25 − 0000



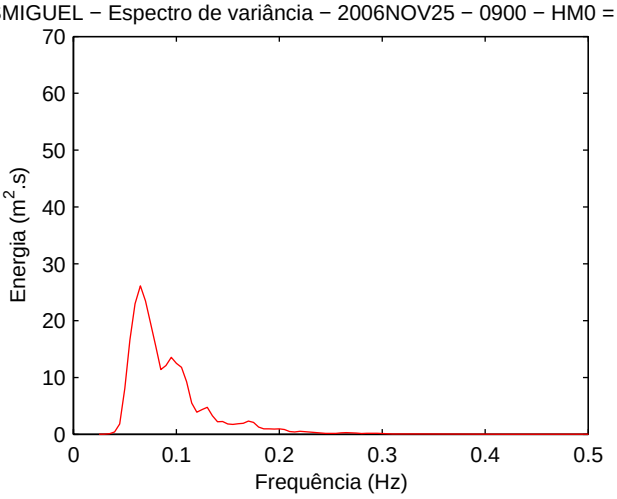
SMIGUEL − Espectro de variância − 2006NOV25 − 0300 − HM0 = 4.36m



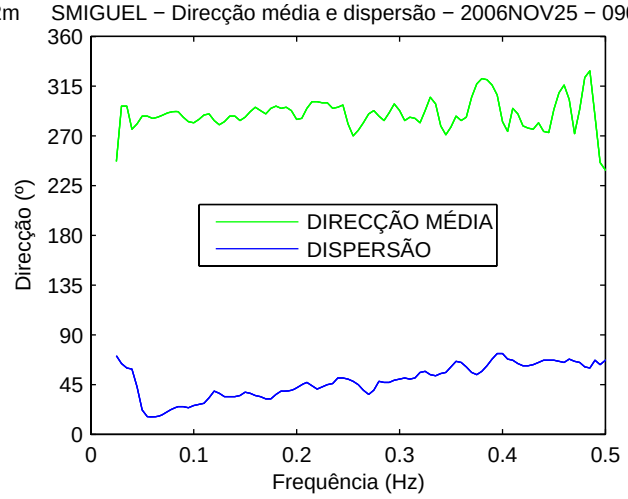
SMIGUEL − Direcção média e dispersão − 2006NOV25 − 0300



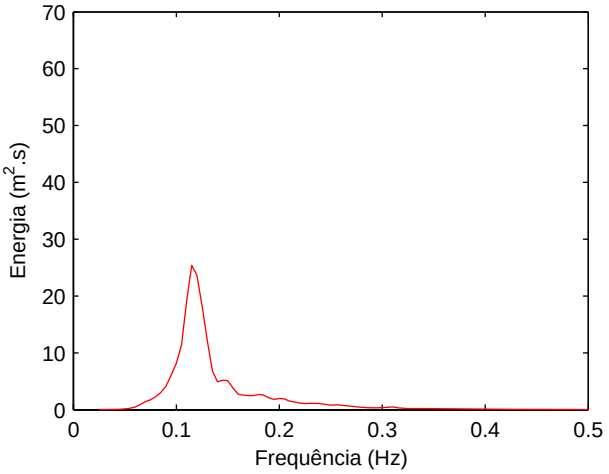
SMIGUEL − Espectro de variância − 2006NOV25 − 0900 − HM0 = 4.52m



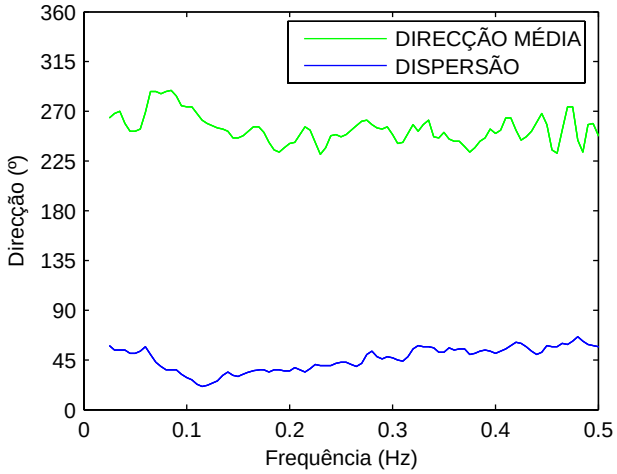
SMIGUEL − Direcção média e dispersão − 2006NOV25 − 0900



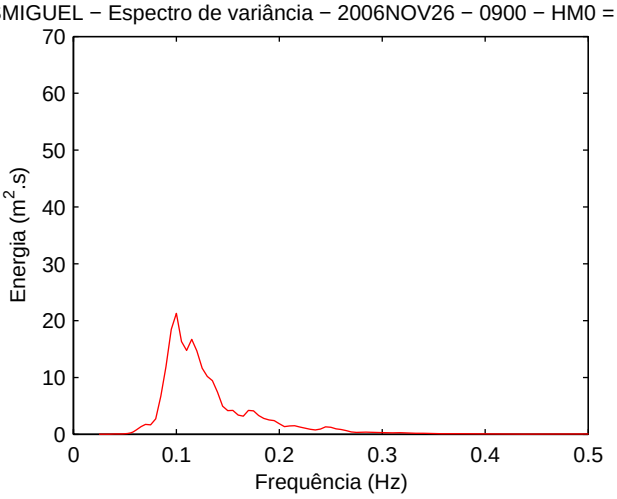
SMIGUEL − Espectro de variância − 2006NOV26 − 0600 − HM0 = 4.08m



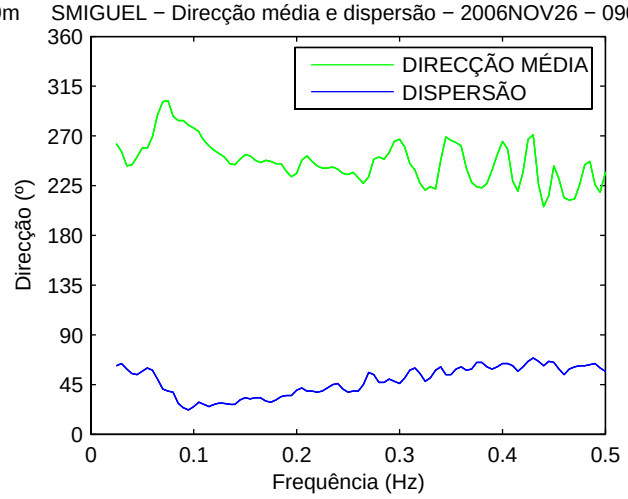
SMIGUEL − Direcção média e dispersão − 2006NOV26 − 0600



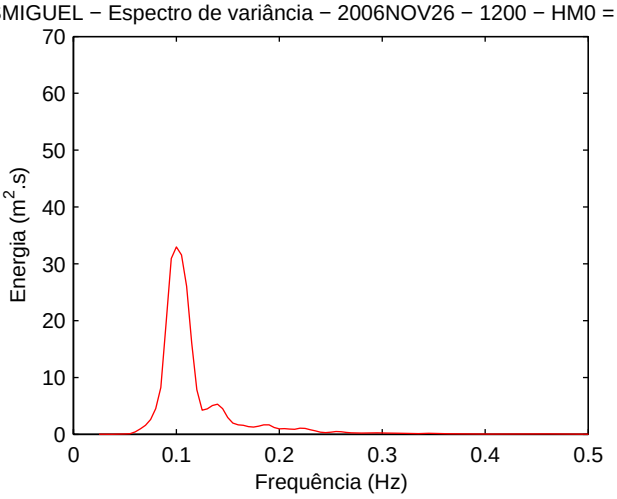
SMIGUEL − Espectro de variância − 2006NOV26 − 0900 − HM0 = 4.29m



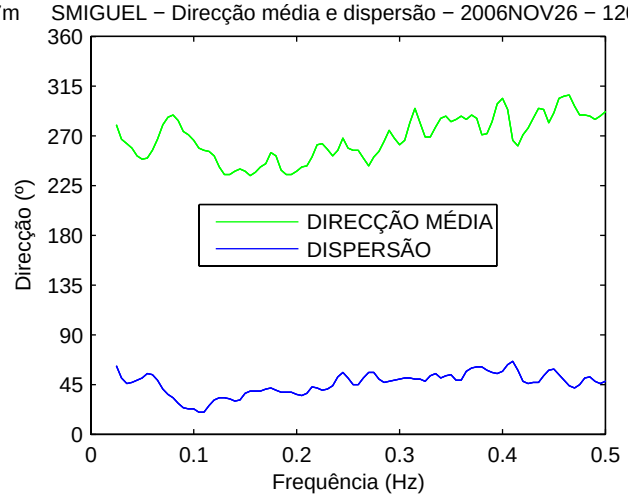
SMIGUEL − Direcção média e dispersão − 2006NOV26 − 0900



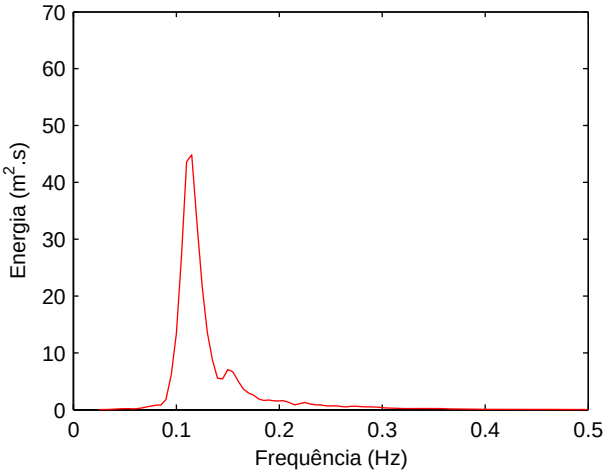
SMIGUEL − Espectro de variância − 2006NOV26 − 1200 − HM0 = 4.37m



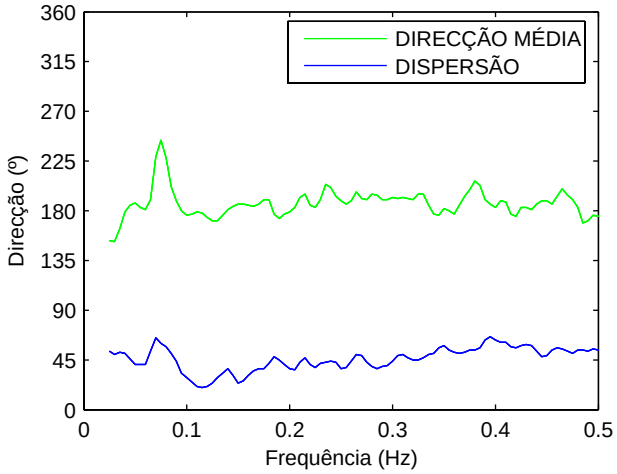
SMIGUEL − Direcção média e dispersão − 2006NOV26 − 1200



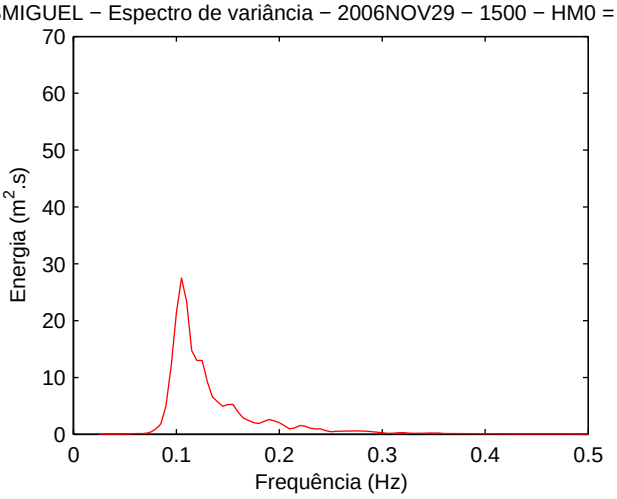
SMIGUEL − Espectro de variância − 2006NOV29 − 1200 − HM0 = 4.77m



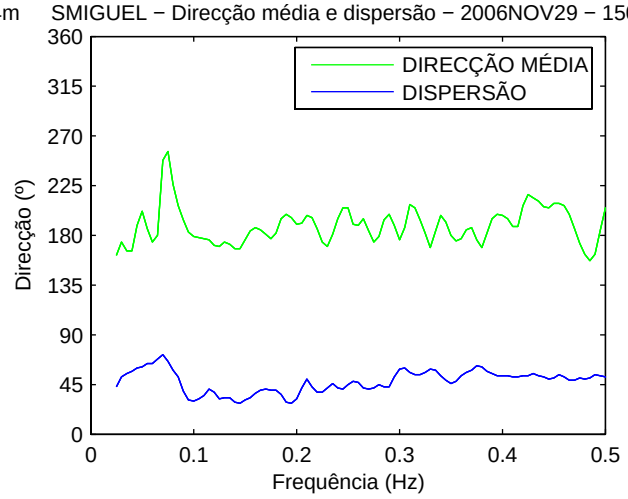
SMIGUEL − Direcção média e dispersão − 2006NOV29 − 1200



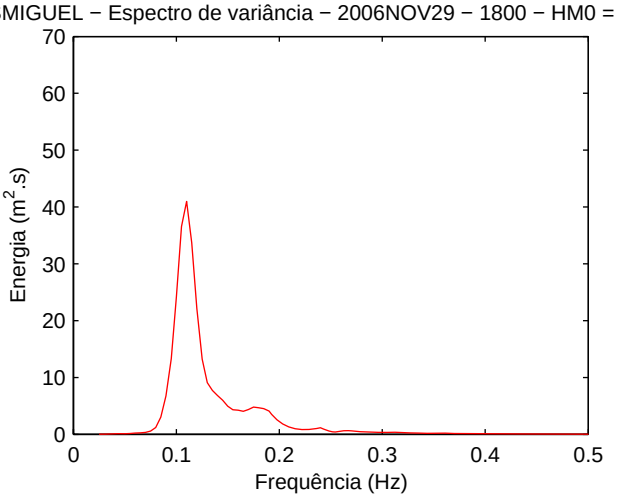
SMIGUEL − Espectro de variância − 2006NOV29 − 1500 − HM0 = 4.14m



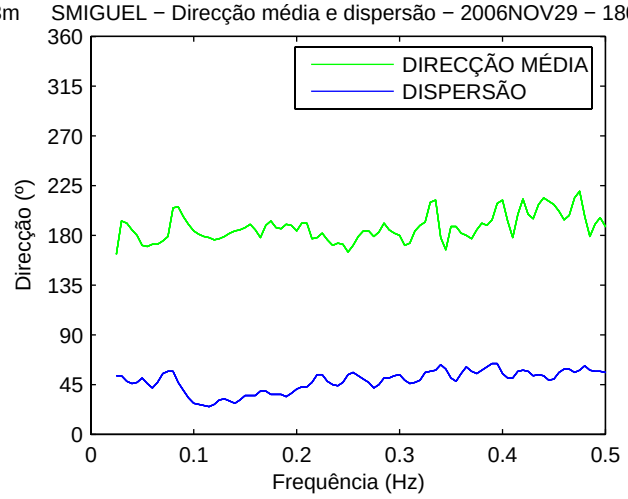
SMIGUEL − Direcção média e dispersão − 2006NOV29 − 1500



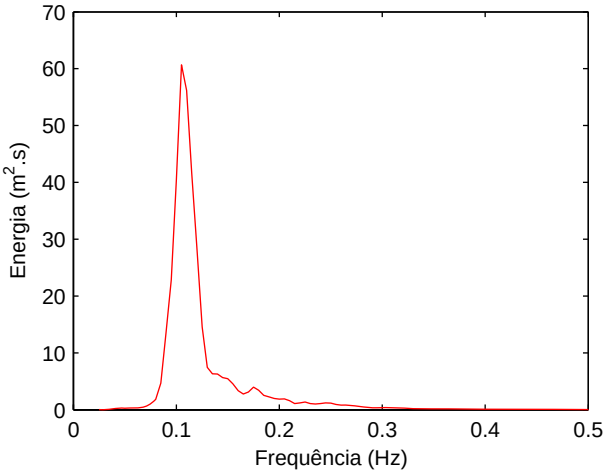
SMIGUEL − Espectro de variância − 2006NOV29 − 1800 − HM0 = 4.83m



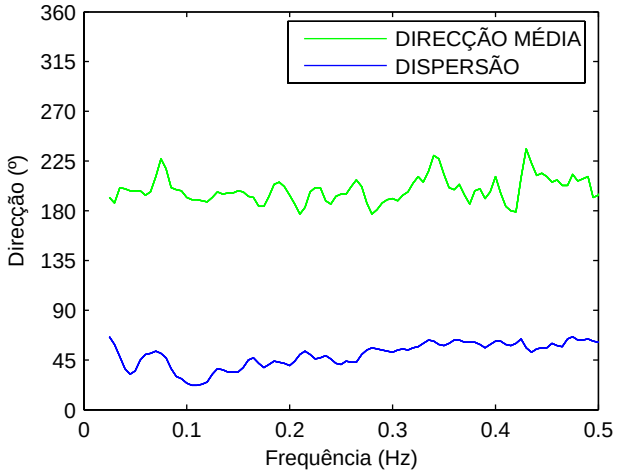
SMIGUEL − Direcção média e dispersão − 2006NOV29 − 1800



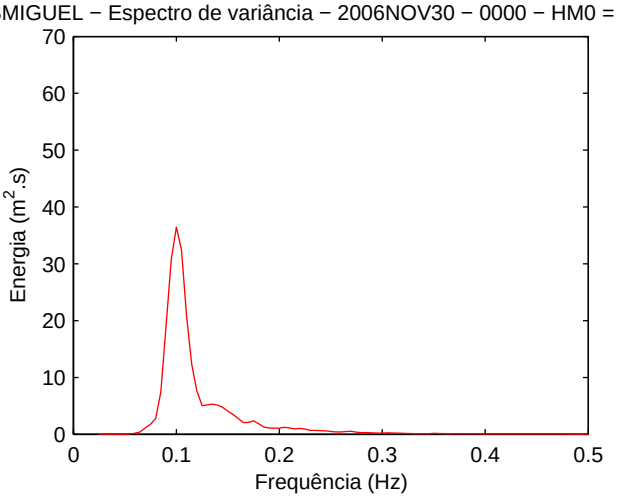
SMIGUEL − Espectro de variância − 2006NOV29 − 2100 − HM0 = 5.46m



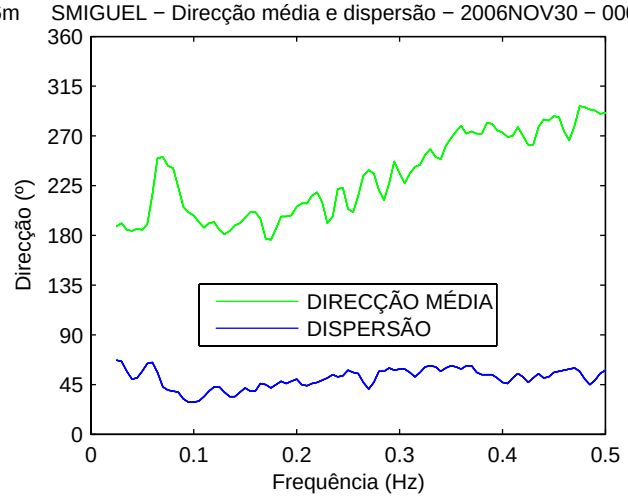
SMIGUEL − Direcção média e dispersão − 2006NOV29 − 2100



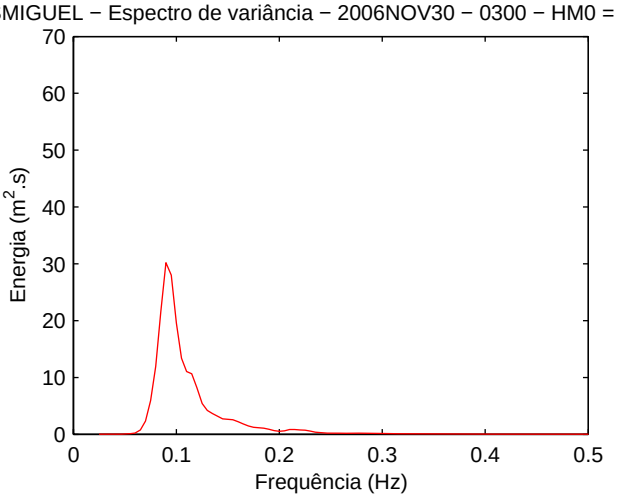
SMIGUEL − Espectro de variância − 2006NOV30 − 0000 − HM0 = 4.36m



SMIGUEL − Direcção média e dispersão − 2006NOV30 − 0000



SMIGUEL − Espectro de variância − 2006NOV30 − 0300 − HM0 = 4.09m



SMIGUEL − Direcção média e dispersão − 2006NOV30 − 0300