



OCEANOGRAPHY DIVISION

TIDES SECTION

STEN TSN Joana Reis
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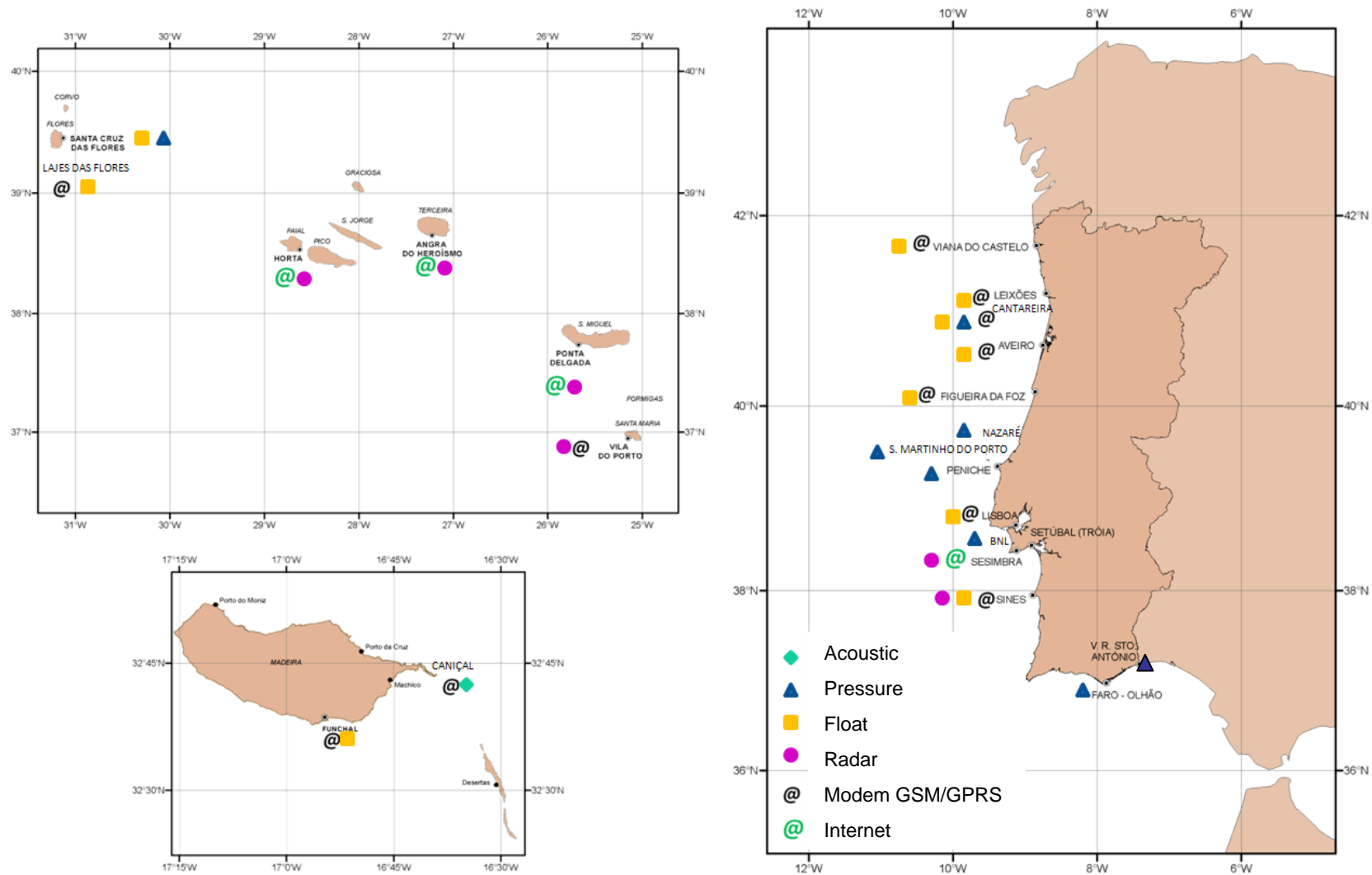


Tabela de Marés – Volume I:
 Continental Portugal
 Azores Archipelago
 Madeira Archipelago

Tabela de Marés – Volume II:
 Cabo Verde
 Guiné-Bissau
 S. Tomé e Príncipe
 Angola
 Moçambique
 Macau



PORTO VIANA DO CASTELO

JULHO		AGOSTO		SETEMBRO	
hora	Altura	hora	Altura	hora	Altura
16	2 70 24	1	2 4 34	16	2 4 34
17	2 00 10	2	2 50 14	17	2 00 10
18	1 20 00	3	2 50 14	18	1 20 00
19	0 40 00	4	2 50 14	19	0 40 00
20	0 00 00	5	2 50 14	20	0 00 00
21	0 00 00	6	2 50 14	21	0 00 00
22	0 00 00	7	2 50 14	22	0 00 00
23	0 00 00	8	2 50 14	23	0 00 00
24	0 00 00	9	2 50 14	24	0 00 00
25	0 00 00	10	2 50 14	25	0 00 00
26	0 00 00	11	2 50 14	26	0 00 00
27	0 00 00	12	2 50 14	27	0 00 00
28	0 00 00	13	2 50 14	28	0 00 00
29	0 00 00	14	2 50 14	29	0 00 00
30	0 00 00	15	2 50 14	30	0 00 00
31	0 00 00	16	2 50 14	31	0 00 00

2-9

- GLOSS (Global Sea Level Observing System)
 - Portuguese GLOSS stations: Funchal, Ponta Delgada, Santa Cruz das Flores, Cascais
- NEAMTWS (North Eastern Atlantic, Mediterranean and Connected Seas Tsunami Warning System)
 - Operational stations: Ponta Delgada, Cascais, Sesimbra, Sines, Lagos (connected to our NTWC)
 - Future stations: Leixões, Peniche, Madeira
- Angola, Porto Amboim
 - Meteorological and Oceanographic Survey, including deployment of 2 pressure tide gauges (1 just for hydrographic survey, 1 to record data for at least 1 year)
- Other PALOP (Portuguese Speaking African Countries)
 - Cooperation when needed or asked for.



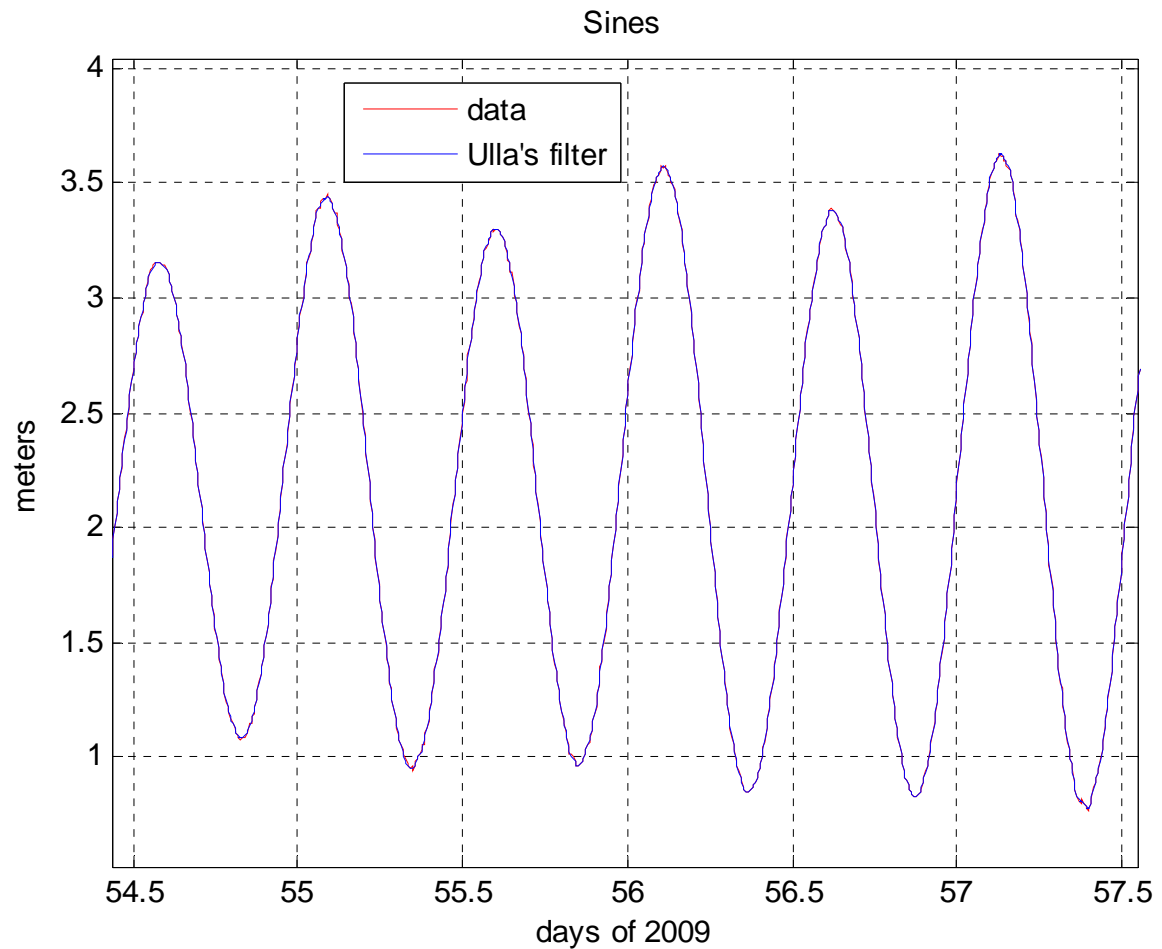
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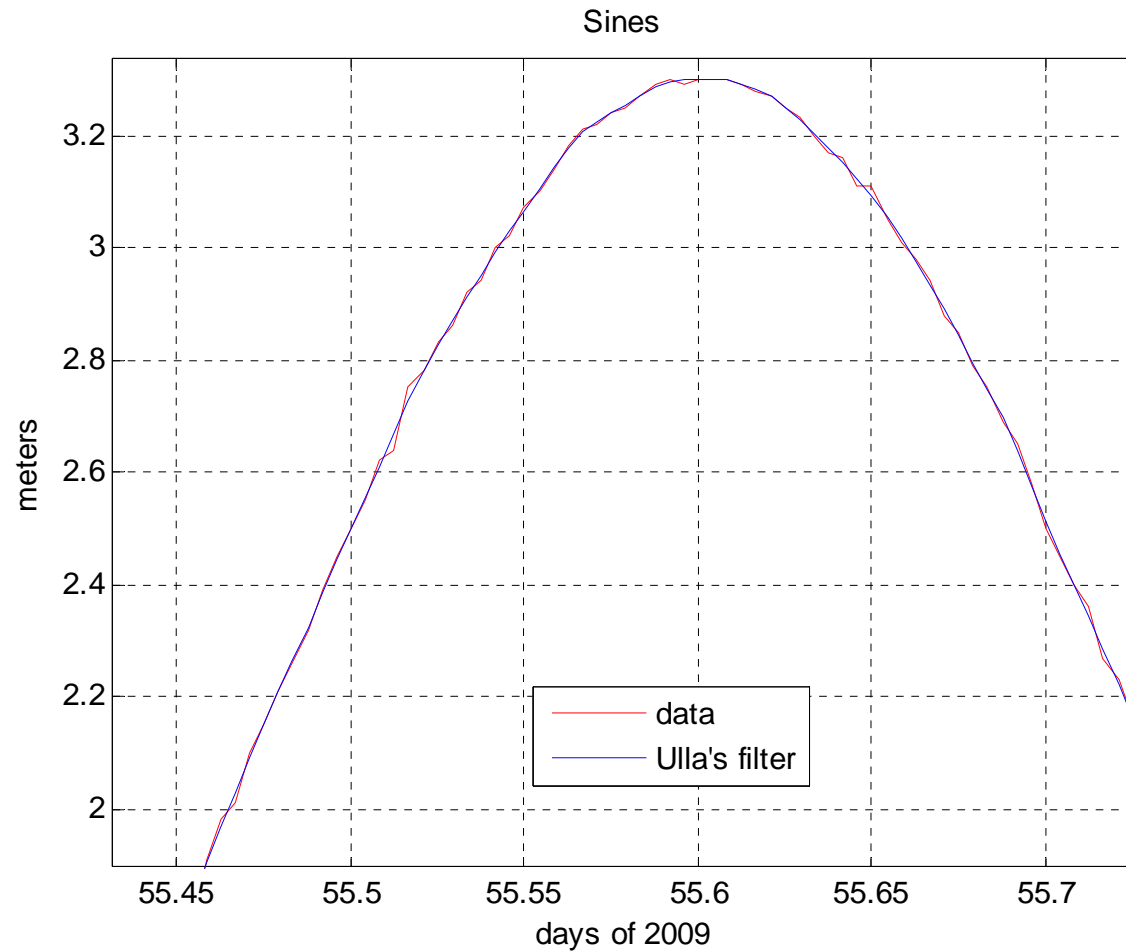
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- It has been drawn for tidal data
 - At 6 minutes interval
 - Tide gauge using a stilling well
(which means very low noise)
- It's a weighted average of eleven values:
 - The weights are:
-1 -5 -5 20 70 98 70 20 -5 -5 -1

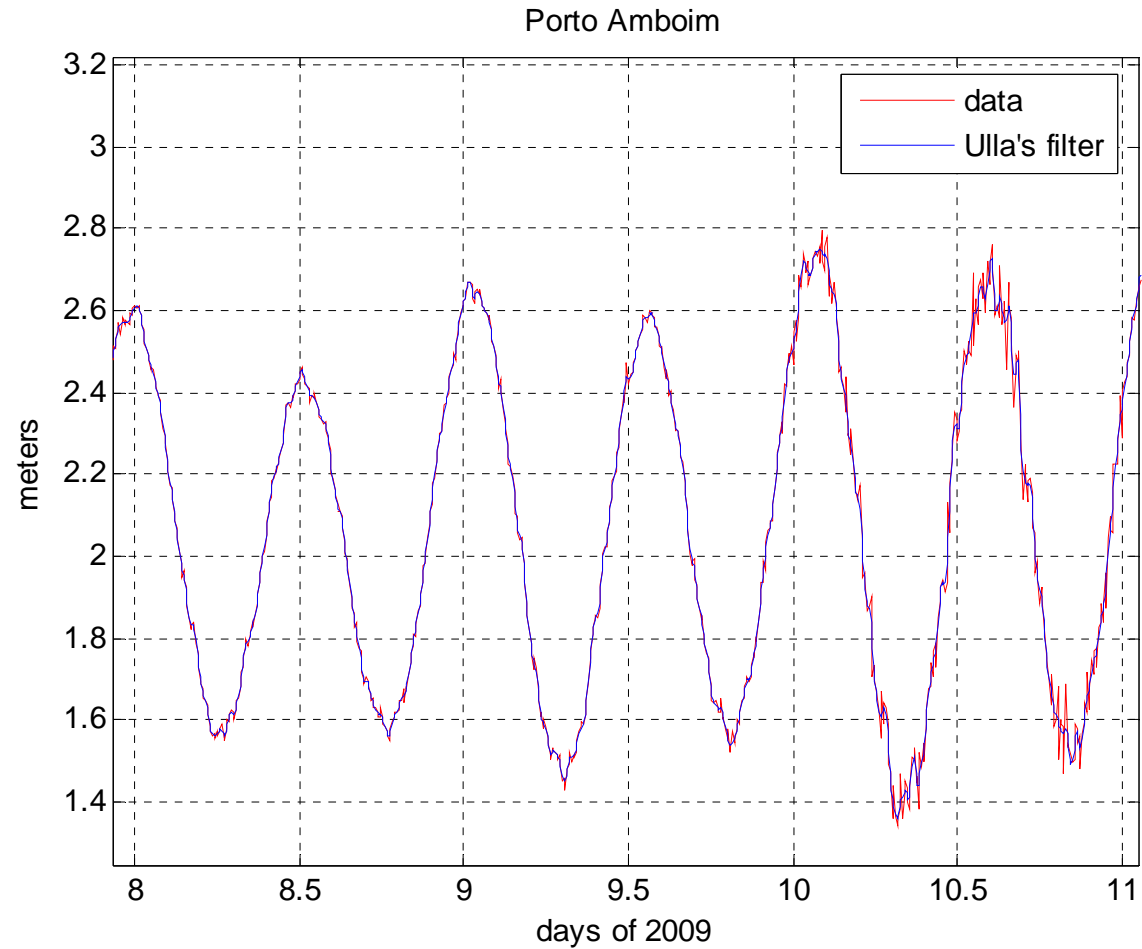
When
there is
a stilling
well



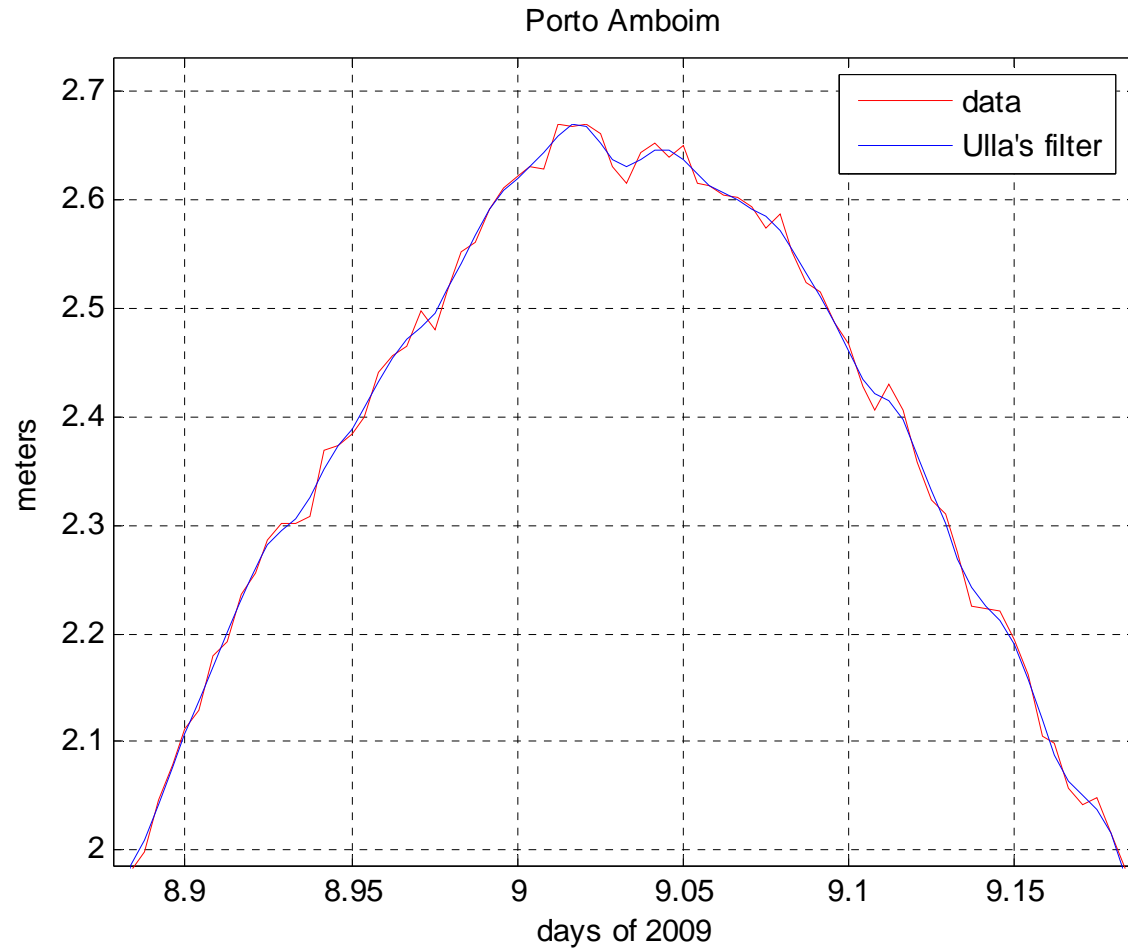
An almost
bad
situation



When
there is
no stilling
well



A “good”
situation



A “bad”
situation

