Mean-sea level at Skagen, 1992-2005.

Note by C.C.Tscherning, 2006-05-03. (Translated 2007-01-30).

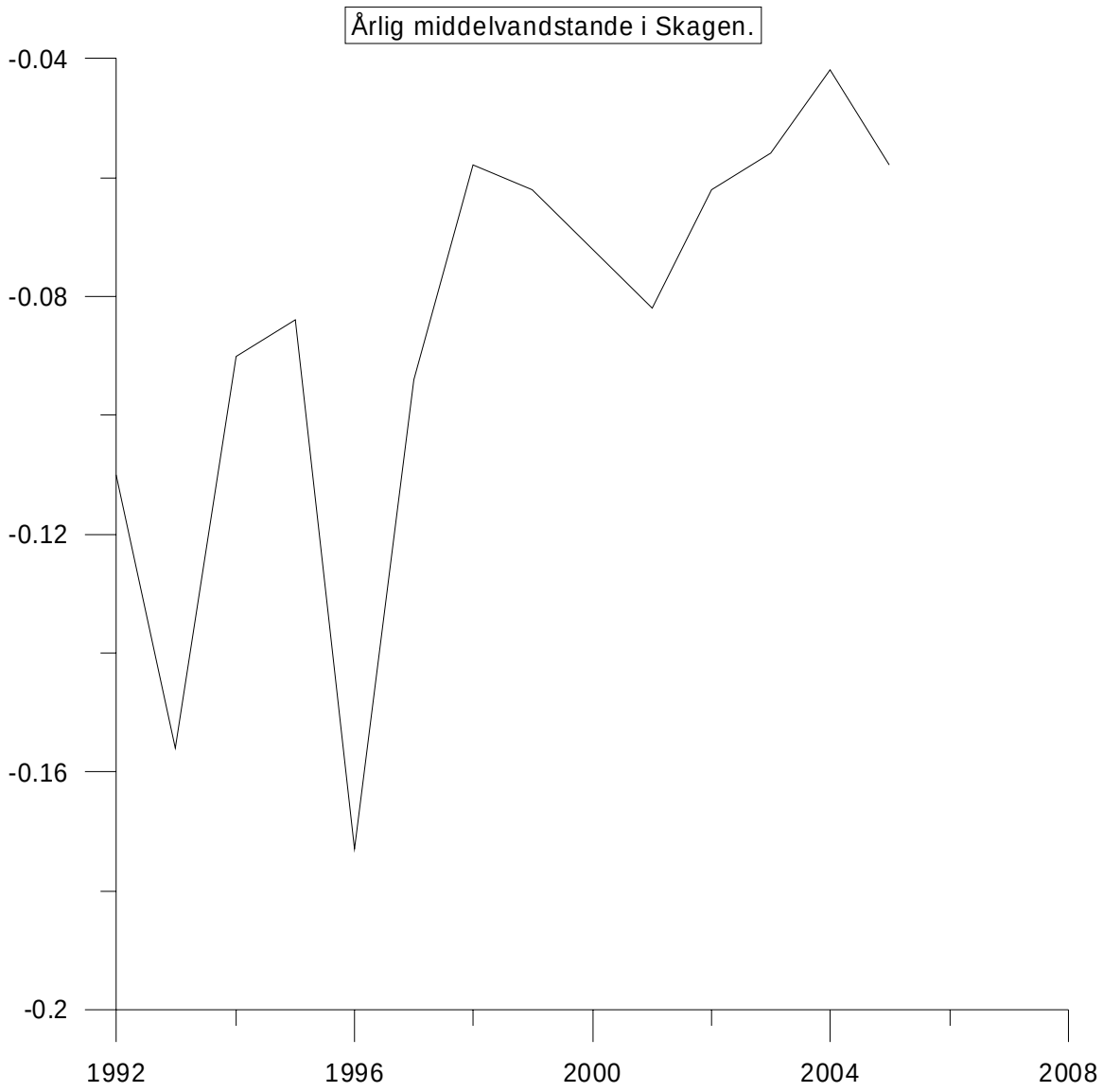
Monthly values of emean-sea level war received from Dr. Palle Bo Nielsen, Royal Danish Administration of Navigation and Hydrography (http://www.fomfrv.dk/en/index.php), and from these annual mean values were computed.

Year	Months	Mean	Annual variation (standard-deviations). Units: m.
1992	7	-0.110	0.060
1993	9	-0.156	0.125
1994	12	-0.090	0.131
1995	12	-0.084	0.102
1996	12	-0.173	0.115
1997	12	-0.094	0.098
1998	12	-0.058	0.103
1999	12	-0.062	0.096
2001	11	-0.082	0.109
2002	12	-0.062	0.107
2003	12	-0.056	0.105
2004	12	-0.042	0.099
2005	12	-0.058	0.124

As expected, there is a sea-level raise around 5 mm per year. But a more detailed analysis is needed. An analysis of the yearly distribution of tide-gauge data is needed, before one can conclude that a simple mean-value gives the best estimate of mean-sea level. There are also two outliers in 1993 and 1996, which require an explanation.

I will estimatet hat 1 cm over the ladt 10 years originate from the temperature increase in the (known) temperature increase of the North-Sea of 1 deg. C.

The effect of post-glacial rebound will probably not exceed +1 mm per year in the area. Consequently must the increase in sea-level really express a subsidence of the area in the vicinity of the tide-gauge. This must be investigated. Otherwise may the origin of the subsidence be related to the fact that the tide-gauge has been established in an area of the harbour where subsidence takes place due to the it is placed on filled-in land. Hopefully is the height of the tide-gauge being controlled by the Danish National Survey and Cadastre (KMS). This will be verified. (Note 2007-01-30: it is being controlled, and a subsidence has been noted).



Annual Mean-sea level at Skagen.