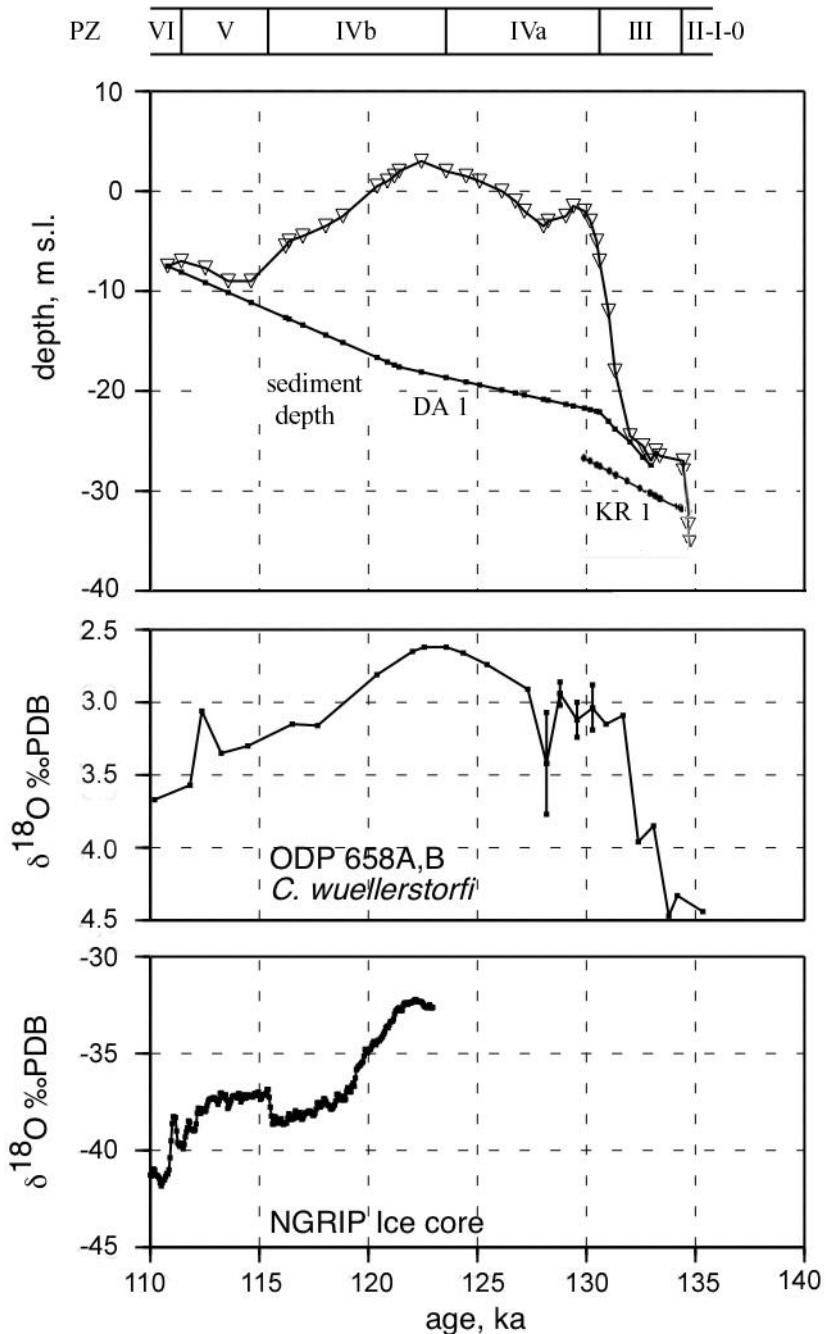


Locations and stratigraphic columns of cores Krummland KR 1 and Dagebüll DA 1. Pollen zones (Selle 1962, Behre 1962, Mueller 1974) are shown in Roman numerals.



Upper: Relative sea level curve for Eemian, after U/Th & ESR-datings, with stratigraphic data from Dagebuell DA 1 (GIK 14350), and Krummland KR 1 (GIK 14356), which is corrected 7 m for ice tectonics. Middle:  $\delta^{18}\text{O}$ -record of *C. wuellerstorfi* in ODP 658A, B (Tiedemann 1991). Lower:  $\delta^{18}\text{O}$ -record of NGRIP ice core, Greenland (North Greenland Ice Core Project members (2004).

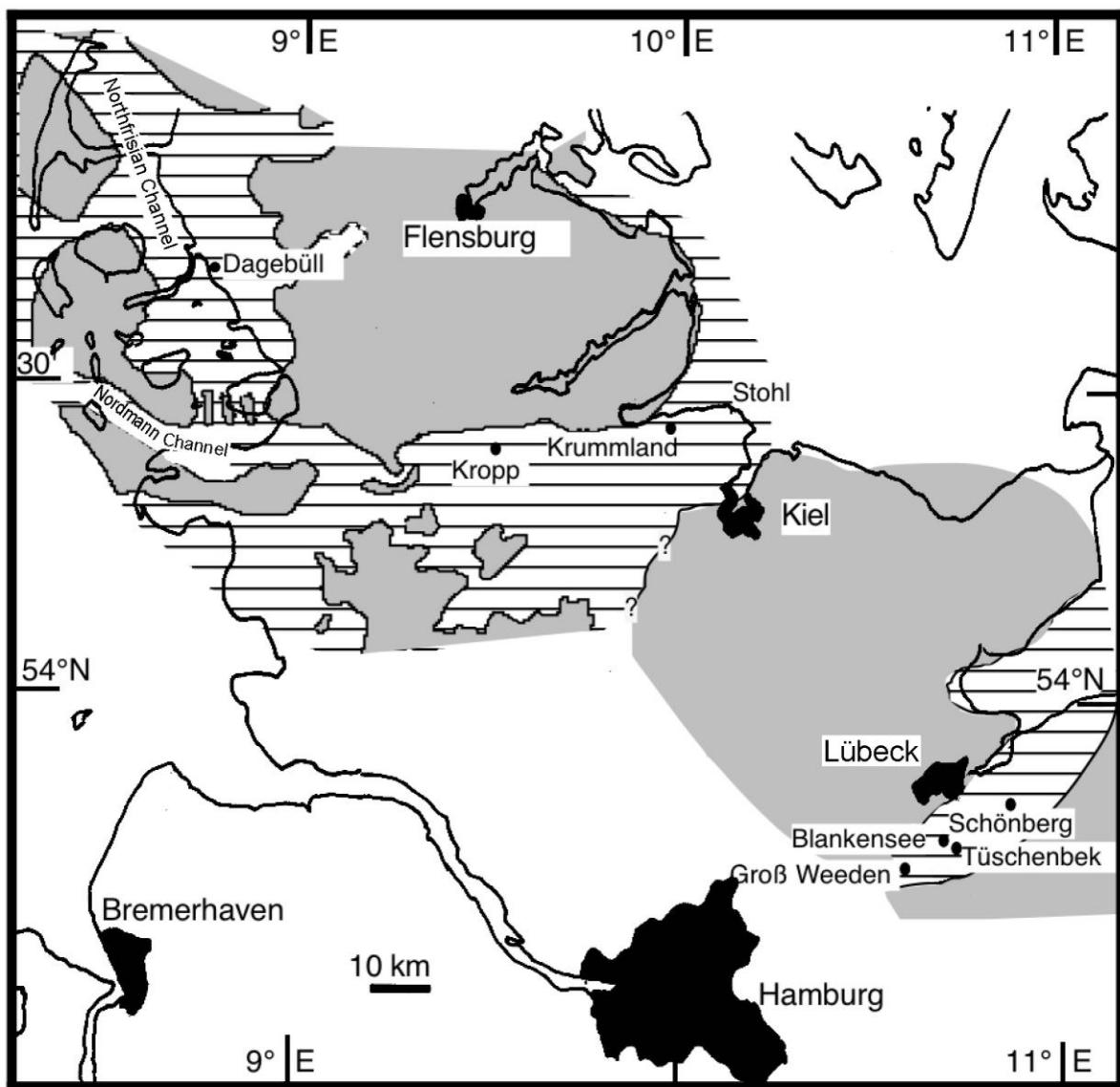


Fig. 1: Locations of investigated coreholes and outcrops in the Eemian Sea of Schleswig Holstein. Stippled areas = land, parallel lines = Eemian sea

Climatic episodes, time scale, stratigraphical classification, and depositional depths and of the Eemian used for the construction of the sea level curve, and correlation of pollen zonations of Zagwijn (1961) and Mueller (1974).

Age in years B.P.	Depositional depth in meters	Source	Stratigraphy	Climate episodes	Holland after Zagwijn (1961)	North Germany after Müller (1974)
110,800	0-1 m	MIS 5.4 extrapolated U-Th age	Upper Olander Beds	post-temperate cold Eemian 600+ yrs	E6a <i>Picea</i> <i>Pinus-Picea-Abies-Alnus</i>	VI a <i>Pinus-Picea</i> <i>Alnus</i> decline
111,400	1-1.5 m	extrapolated U-Th age	Upper Olander Beds	Temperate Eemian ~4000 yrs	E5 <i>Carpinus</i> <i>Pinus-Picea-Carpinus</i>	V a, b <i>Pinus-Picea-Carpinus</i> <i>Abies</i>
115,400	7-8 m					
120,900	18-20 m	extrapolated U-Th age	Lower Olander Beds	warm middle Eemian ~15,200 yrs	E4b <i>Taxus</i> <i>Quercus-Corylus-Ulmus-Fraxinus-Tilia</i>	IV b <i>Carpinus. Picea</i> <i>Quercetum mixtum, Taxus</i>
122,200	20-21 m	MIS 5.5.1 & U-Th & ESR DA 1	Turritella Clay with <i>Abra alba</i>		E4a <i>Corylus</i> <i>Corylus-Quercus-Alnus</i>	IV a <i>Carpinus</i> <i>Quercetum mixtum, Taxus, Corylus</i>
126,700	19-20 m	interpolated	Turritella Clay DA 1			
130,600	11-15 m	U-Th DA 1 KR 1 32.7 m	Senescens Sand DA 1 Laminated Clay KR 1	1. Eemian warm phase 2730 yrs.	E3b <i>Quercus-Corylus</i>	III c <i>Quercus-Tilia-Taxus</i> <i>Corylus</i>
132,000	0-1 m DA 1, 9-10 m KR 1			cold-temperate 1070 yrs.	E3a <i>Quercus-Ulmus-Fraxinus</i>	III a, b <i>Quercus-Corylus</i> <i>Ulmus, Fraxinus</i>
133,330	4-5 m					
134,400	4-5 m					
	3-5 m	KR 1 Kropp	lacustrine	early cold Eemian	E2b <i>Pinus</i> <i>Pinus-Quercus-Alnus</i>	I-II a, b <i>Pinus-Quercus-Ulmus</i>
	0-3 m		marine sands	c. 300 yrs.	E2a <i>Pinus- Ulmus</i>	<i>Pinus-Betula</i>
					E1 <i>Betula-Pinus</i>	<i>Betula-Pinus</i>