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Our departure from Bremerhaven on July 21st, took place under such difficult weather conditions that even the pilot could not disembark in the usual way but had to use the ship's helicopter to get back to the shore. So this day saw many of us suffering from moderate or more severe seasickness. But conditions soon changed for the better, and only close to the Westkapp of Norway did we have to compromise our fast travel speed. Overall, the transit to the research area in the Greenland Sea was in good conditions, so that the laboratories could be set up easily during the steaming time and instruments could pass their performance tests. Thus, we reached the research area in a fully operational state.

The start of research coincided with the first ice contact. A hydrographic transect from east to west across the southward flowing waters and ice floes of the East Greenland Current was the first activity. The actual ice cover posed only moderate difficulties, and thus the schedule, naturally planned with appropriate additional time for the slower steaming through ice, could be met closely. Weather conditions allowed for only a short glimpse of the Greenland coast, while permanent daylight was an indicator of our short distance from the pole. Now we are performing another transect somewhat further north. We are repeating this transect with identical station positions to investigate the range of measured parameters in the southward heading flow. The current speeds there range from 25 to 80 km per day which makes this repetition equivalent to a spatial shift of the transect in a stationary ocean.

Of course, a first evaluation and interpretation of the data is done on board. While the final calibrations have to be applied later, rough estimates are possible now. A result already clear is the complete absence of Pacific Waters which flow into the Central Arctic through the Bering Strait and exit it through Fram Strait. During the 90s this was a prominent signal within the East Greenland Current. Presumably, the flow pattern has changed fundamentally so that these waters exit now through the Canadian archipelago instead of Fram Strait.

Everyone on board is well and sends best wishes, as I do.

Gereon Budéus, Chief scientist ARK XXI/1a