

ABSTRACT

Poster title: The draft logs that formed the base for the uniform abstract logs (1853).

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Prior to the Brussels Conference in 1853, Lt. M.F. Maury together with the Dutch naval officer Lt. M.H. Jansen already prepared a draft model of a meteorological abstract log for use on board ships. As this model could be useful for the Maritime Conference, a field test with the draft, initiated by Lt. Jansen, was carried out in May and June 1853 on board of two Dutch naval frigates cruising the North Sea. The 'Universal Abstract Log' of the Brussels Conference (Brussels log) is mainly based on the experience gained with these two logbooks. One of the original drafts, preserved at KNMI, is exhibited showing the tested parameters.

Compared to the Brussels log additional observations of saltiness, the transparency of the seawater and the radiation were required in the draft. Simultaneous air temperature observations in the full sunshine were carried out with thermometers equipped with white, black or bluish (seawater coloured) painted bulbs in order to estimate the radiation (white and black bulb) and the thermionic emission of the seawater (bluish bulb). Transparency observations were carried out with a precursor of the Secchi disk. Saltiness was calculated from the specific gravity observations. The saltiness and transparency observations were not required for the Brussels log anymore. Optional radiation observations were recommended but should be noted in the column 'Remarks' of the Brussels log.

In order to separate different temperatures in the draft all of the dry and wet bulb air temperatures were noted in degrees Celsius, seawater temperatures on the other hand in degrees Fahrenheit. The Brussels Conference recommended the use of thermometers equipped with both scales.

In addition to the sea surface temperature also two extra columns for the seawater temperature at 50 and 100 fathoms depth were added to the draft. Because the observation was relative easy to make the Brussels Conference recommended seawater temperature observations at 25, 50 and 100 fathoms depth.

After the Brussels Conference it was mandatory that the mercury barometer was equipped with an attached thermometer. Before the Conference the air temperature was used instead.

Also exhibited are two early versions of the American abstract log. Because navy officers were scientifically more respected than merchantmen during the 19th century two kind of

logs were prepared. One detailed 24-columns log from 1857 for use in the navy and a simplified 17-columns log from 1856 for use on board merchant ships.

Despite the loss of almost all of the Dutch abstract logs during World War II there are still 128 original abstract logs from the period 1854 –1860 available at KNMI.