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Thesis Title	*Modelling the turbidity effects in the global ocean*
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Summary	Turbidity directly affects the physical characteristics of the global ocean. These effects were studied in the present thesis, where four experiments were conducted with a different parameterization each, using a numerical model. The turbidity in the first two experiments is distributed evenly, and has low value in the first and high in the second. An increase in turbidity causes the SST of the global ocean to increase in the extra-tropics. In the tropics, the SST decreases, while there is an increase of the chlorophyll produced by the biological model. Both are consequences of the strengthening of equatorial upwelling. The third experiment calculates the turbidity via a chlorophyll concentration climatology, which is unevenly distributed in the global ocean. The mean value of the turbidity of the third experiment is between the turbidity of the previous two experiments. Thus, the ocean temperature and circulation of the third experiment have values between the ones of the first two. The exception is the chlorophyll produced from the biological model, which is increased at longitudes of 20 0 N and 20 0 S over the previous two experiments. The fourth experiment calculates the turbidity from the chlorophyll concentration produced by the biological model. The produced chlorophyll differs from the climatology in different areas and therefore the tropical Atlantic of the fourth experiment is less turbid than the third experiment, while the Pacific is more turbid. As a result, the equatorial upwelling in the tropical Atlantic weakens and in the Pacific it strengthens. This causes increase of the SST in the central tropical Atlantic, and decrease in the central tropical Pacific.
Key words	turbidity, penetration, modelling, global ocean, chlorophyll
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