

Tentative estimation of extreme sea levels in the English Channel by the year 2050

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Summary. Extreme sea levels with various return periods are estimated to rise from the present situation to higher levels during the next half a century at seventeen tide-gauge stations of the English Channel. The possible increase is ascribed to local/regional relative sea-level rise, to global sea-level rise, and to an increase in maximum surge height. This would produce more frequently sea-level events greatly exceeding the present level of highest astronomical tide, with increased risk of coastal flooding and erosion. The area potentially more at risk seems located in the central part of the English coast, between Weymouth and Portsmouth.