EVALUATION OF RATES FROM AN EOF
RECONSTRUCTION OF SEA LEVEL FOR 1950 TO 2002

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Monthly global maps of sea level variations from 1950 to 2002 are computed from tide gauge observations and altimetry using EOF reconstruction. EOFs from TOPEX/Poseidon and Jason-1 for the period from 1993-2003 are used in the procedure. Sea level trends (other than modelled post-glacial rebound) are left in the tide gauge observations in order to evaluate the recovered long-term trend in sea level and compare these to calculations made only with tide gauges. In addition to the altimetry EOFs, additional spatial patterns are also examined. These patterns include a globally uniform mode, modes from Antarctic and Greenland ice sheet melting, and a map of long-term thermosteric sea level change. The additional modes are included in various combinations in order to quantify their effect on the recovered rates.