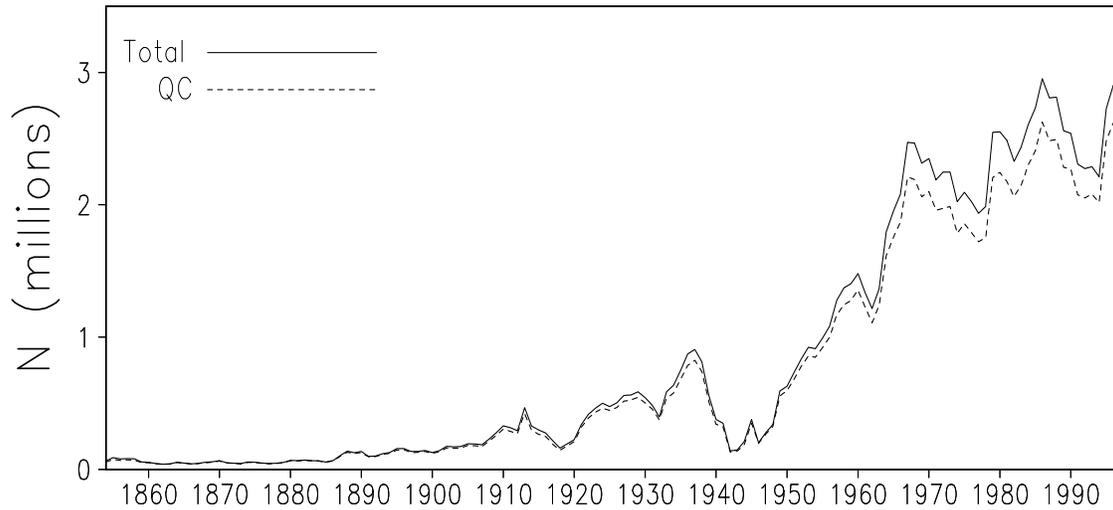


Figure 1. Frequency distributions as a percent of the total number of observations within the region for the 60°S–30°S area and the decade of the 1890s (upper panel), and the decade of the 1970s (lower panel). The solid line is the distribution of raw COADS observations, the dashed line is for QC screened observations. On the horizontal axes is the SLP anomaly in mb.

Number of Individual SLP Obs



Number of 2-D SLP Obs

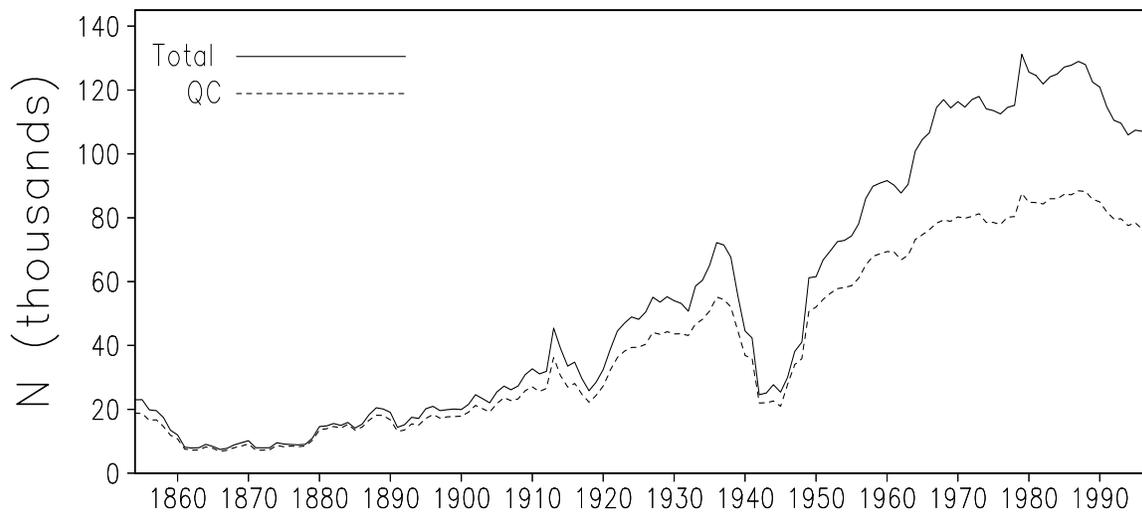


Figure 2. The number of annual individual COADS SLP observations (in millions, upper panel), and the number of annual 2° super observations (in thousands, lower panel). The solid line is the number of raw COADS observations and the dashed line is the number of QC screened observations.

SLP Station 2-d Ocean Boxes

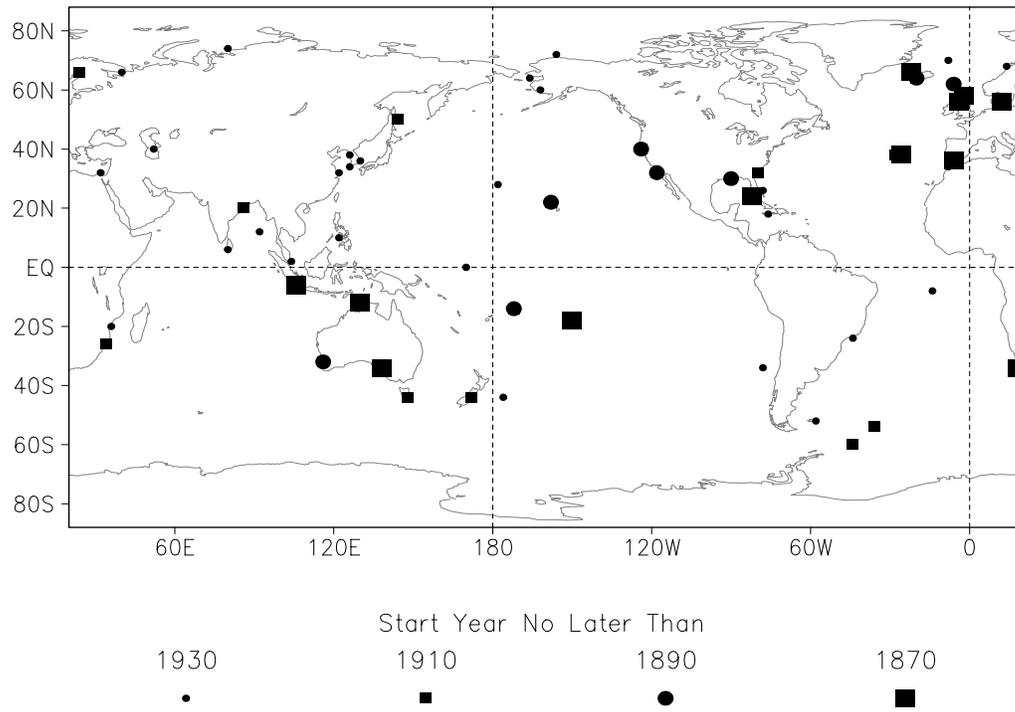


Figure 3. Locations of the 58 supplemental coastal and island SLP stations. The size and shape of the mark shows the approximate length of each record, as indicated.

Reanal SLPA S.D. (mb)

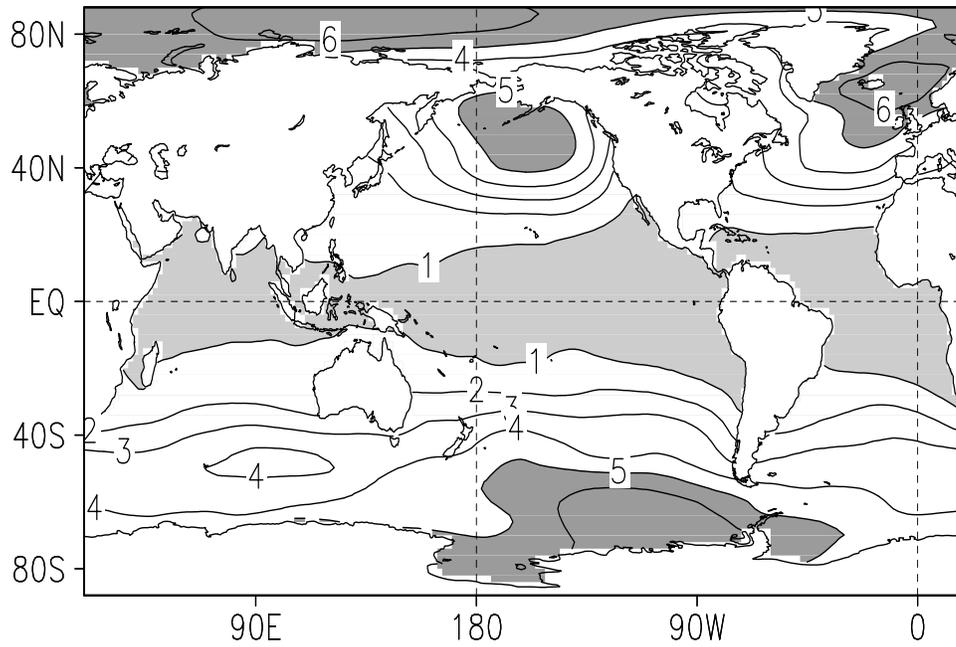
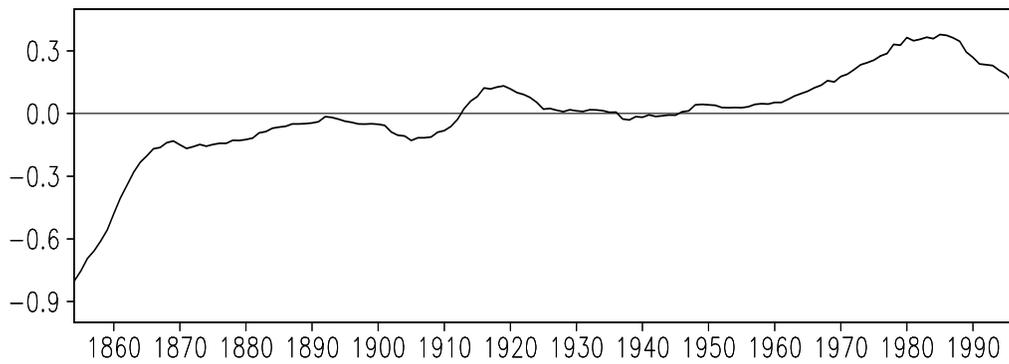


Figure 4. Standard deviation (mb) of the 1980-1999 monthly reanalysis SLP anomalies. Contour interval is 1 mb, values less than 1 mb and greater than 5 mb are shaded.

11-Yr Global Average SLPA



Regression: Annual SLPA

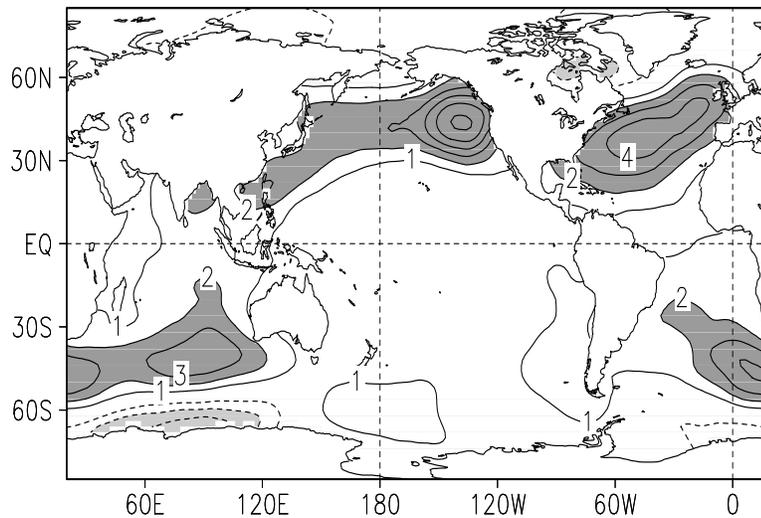


Figure 5. Correction for the reconstructed SLP anomalies. The 11-year and global average SLP anomaly (upper panel) and the regression of that time series on the uncorrected annual-average reconstructed SLP anomalies (lower panel).

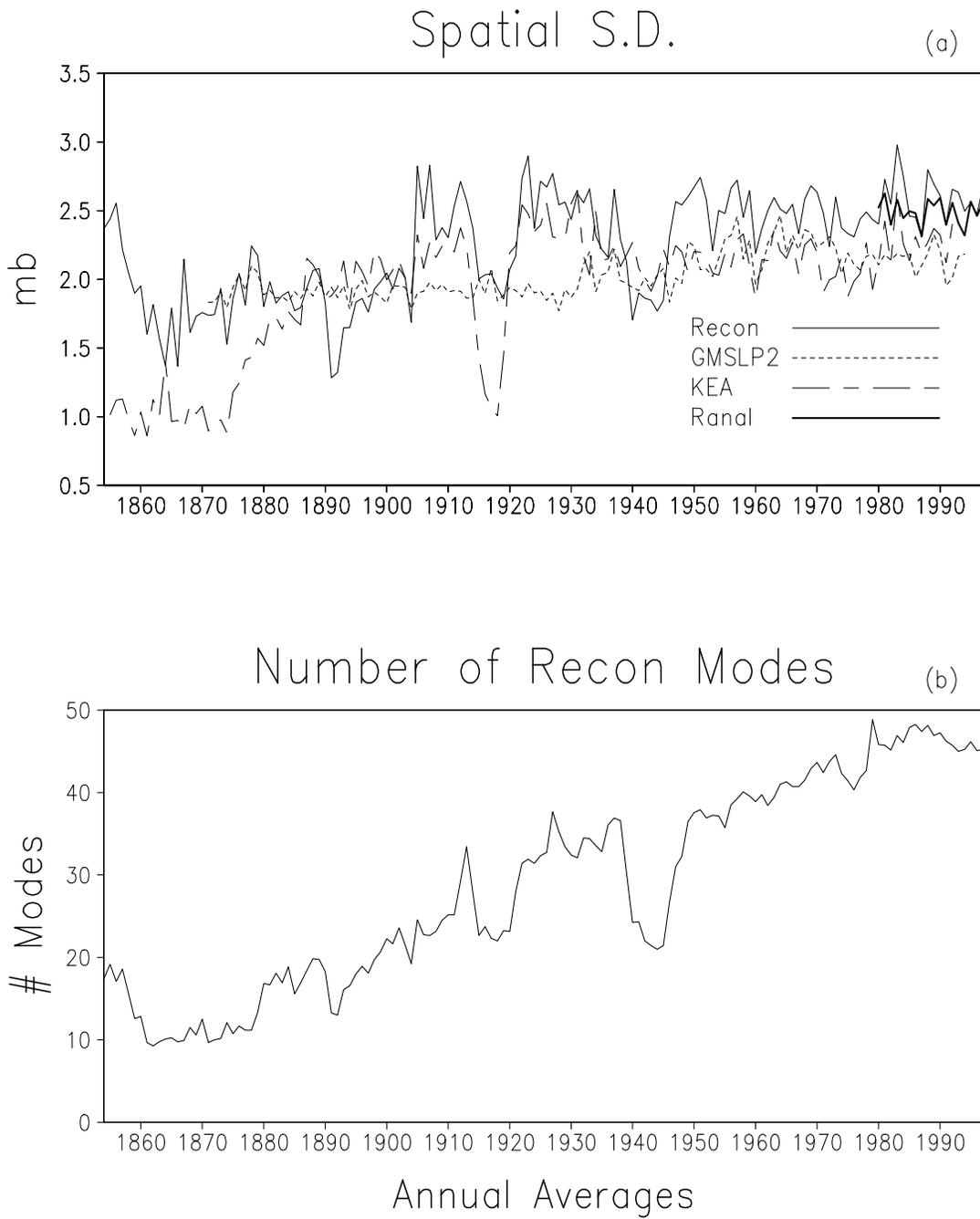


Figure 6. Spatial standard deviation (60°S - 60°N) of the reconstruction (Recon), GMSLP2, Kaplan et al. (2000, KEA), and Kalnay et al. (1996, Ranal), in the upper panel. The lower panel shows the number of modes used in the reconstruction. For both the annual averages of monthly values are shown.

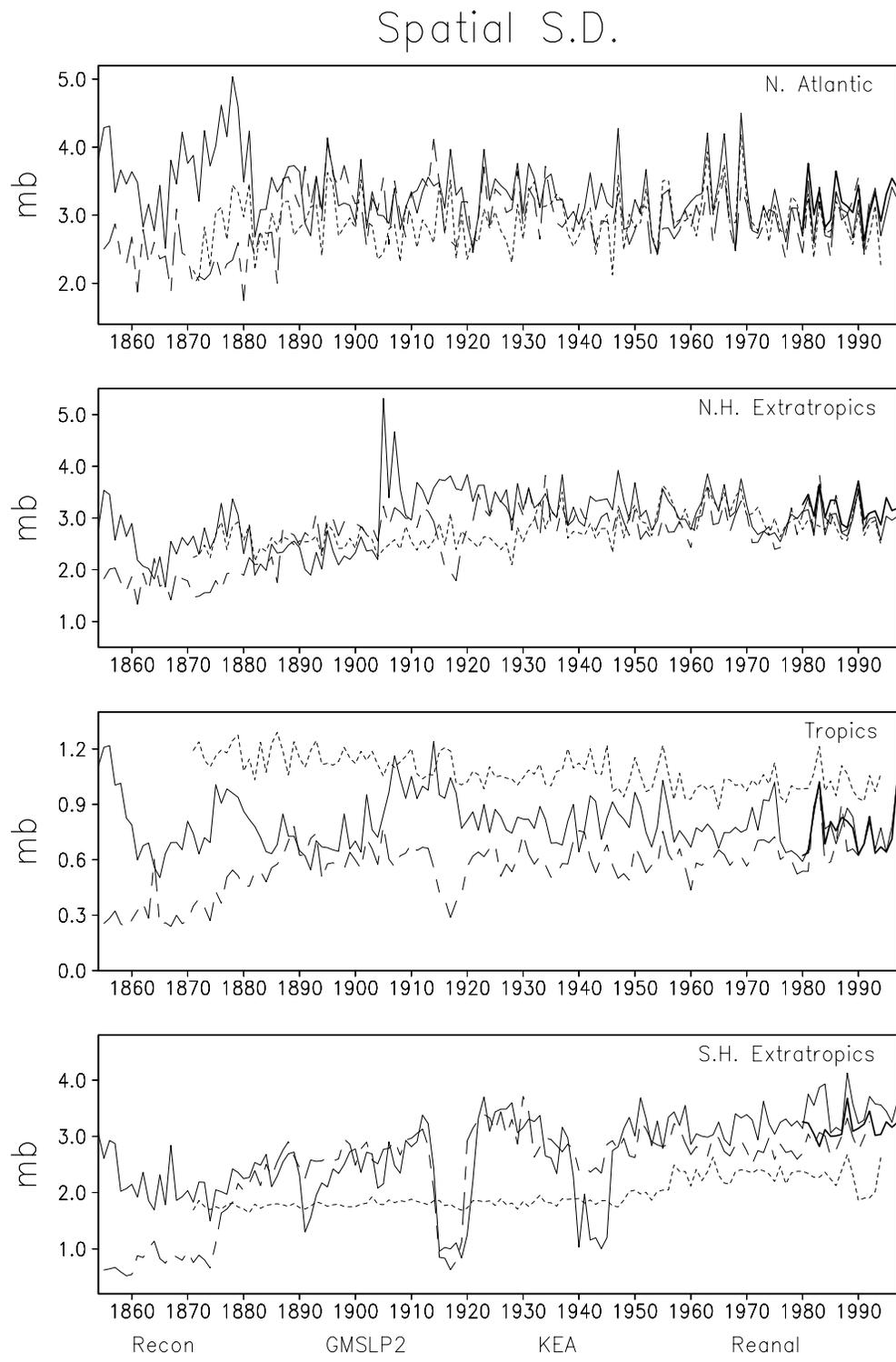


Figure 7. Spatial standard deviation, and in Fig. 6, for the North Atlantic (23°N - 60°N , 70°W - 0°W), the Northern Hemisphere extratropics (23°N - 60°N), the tropics (23°S - 23°N), and the Southern Hemisphere extratropics (60°S - 23°S).

Spatial Correlation

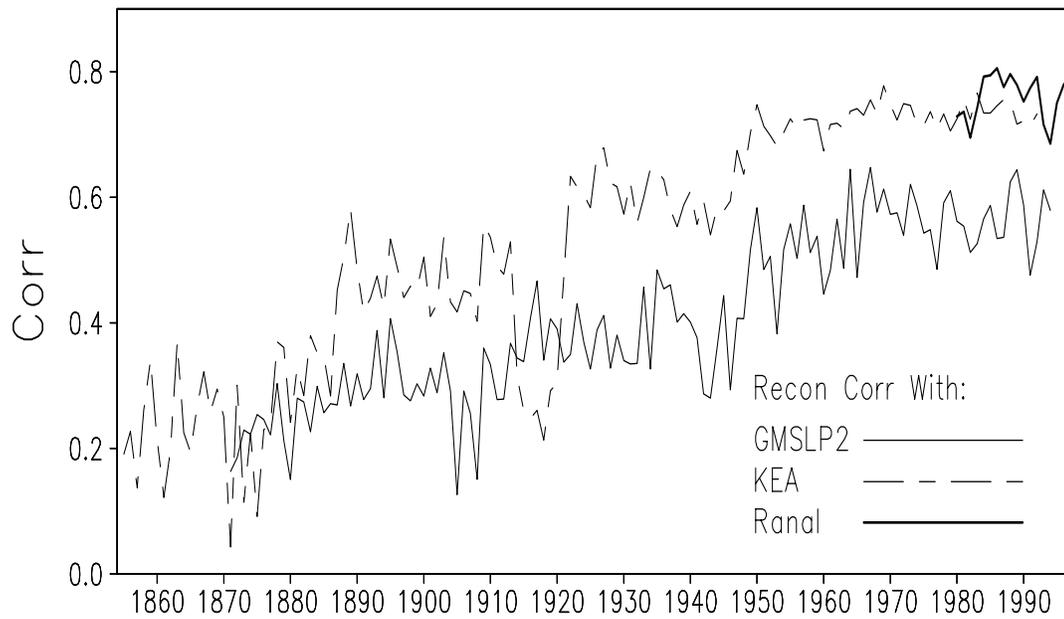


Figure 8. Spatial correlation (60°S - 60°N) between the reconstruction the comparison analyses: GMSLP2, Kaplan et al. (2000, KEA), and Kalnay et al. (1996, Ranal). Shown are annual averages of monthly values.

Recon S.D.

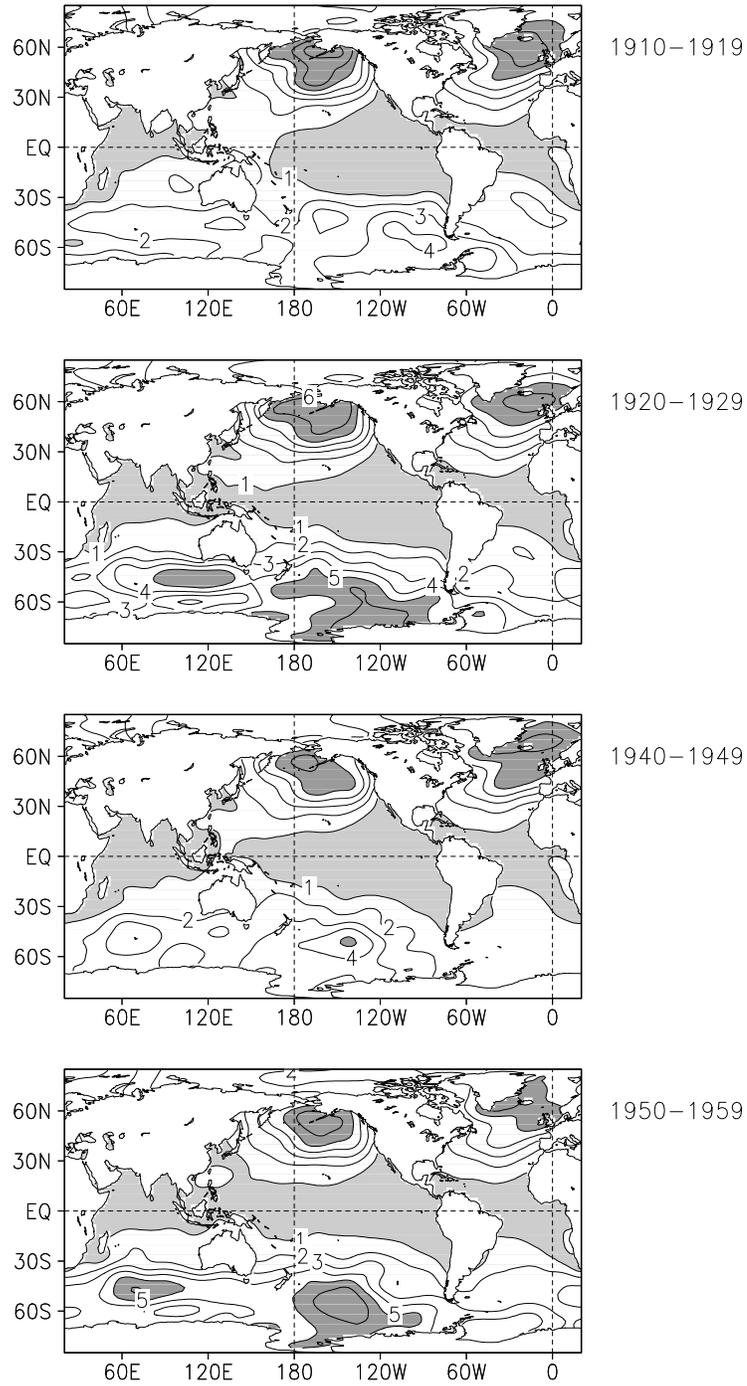


Figure 9. Temporal standard deviation (mb) of the reconstruction for 1910-1919, 1920-1929, 1940-1949, and 1950-1959. Contour interval is 1 mb, values less than 1 mb and greater than 5 mb are shaded.

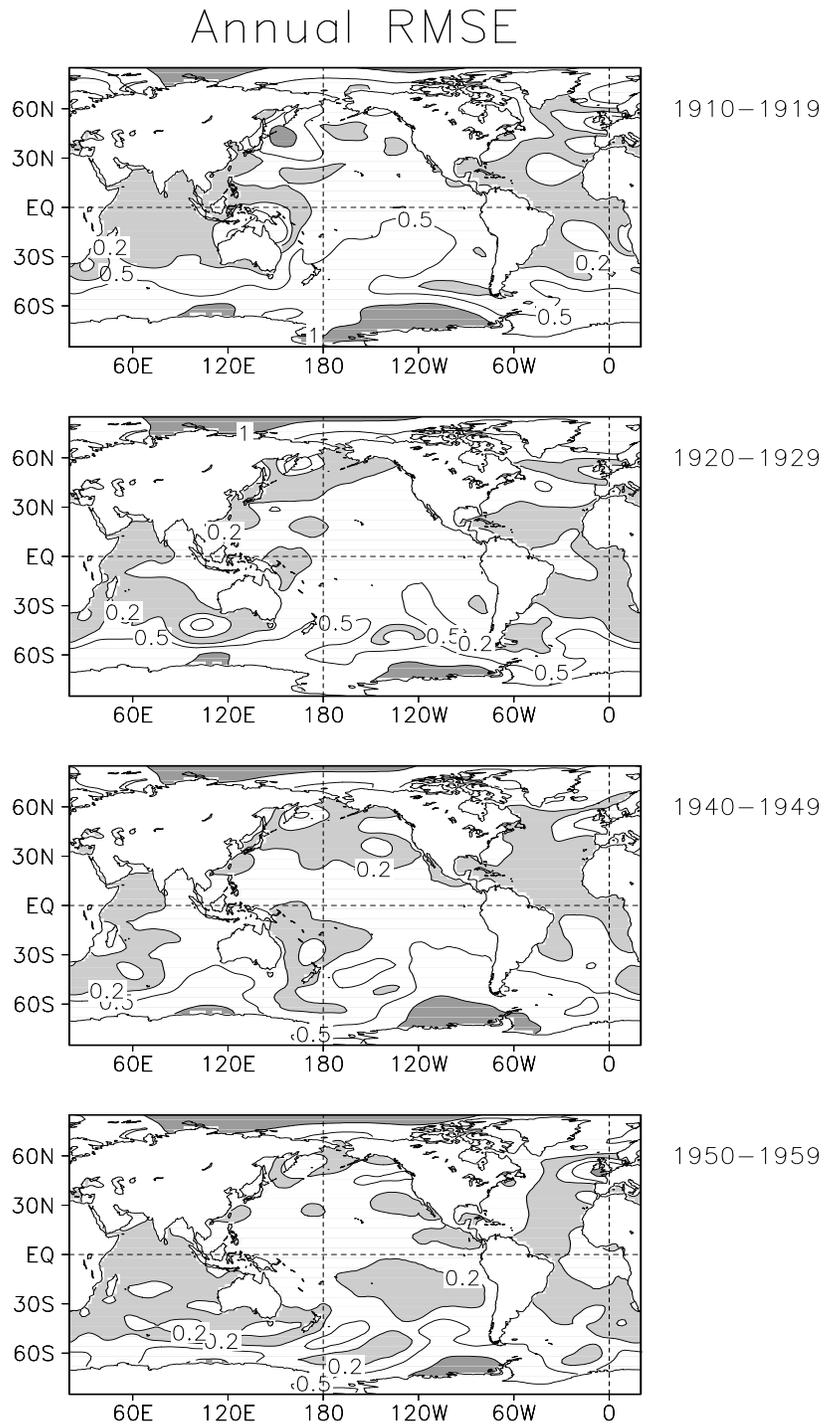


Figure 10. Normalized error estimates for annual averages of the reconstruction, averaged for the decades 1910-1919, 1920-1929, 1940-1949, and 1950-1959. The contour interval is 0.5, and the 0.2 contour is also added. Values less than 0.2 and greater than 1 are shaded.