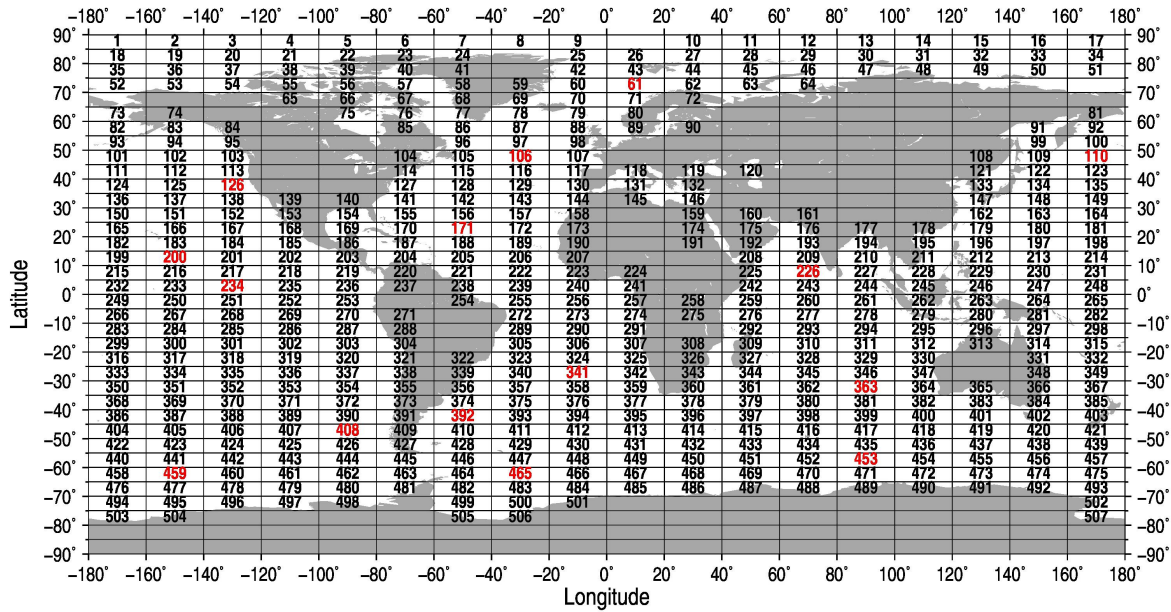


Supporting Information



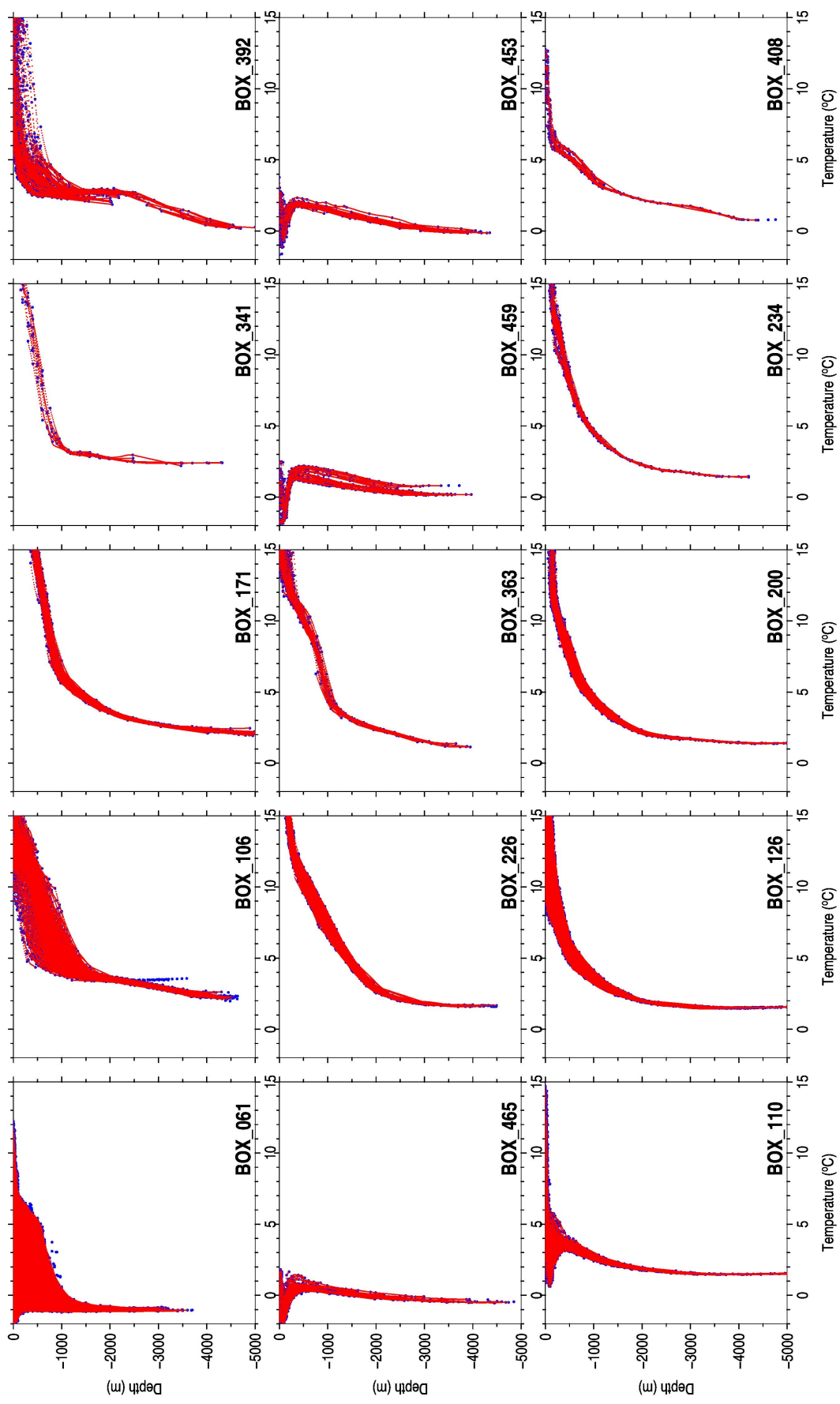


Figure. S2. Quality-controlled temperature profiles for observed profiles (blue) and for the vertically interpolated profiles (red). The sequential numbers of the selected boxes are marked in red in Fig. S1

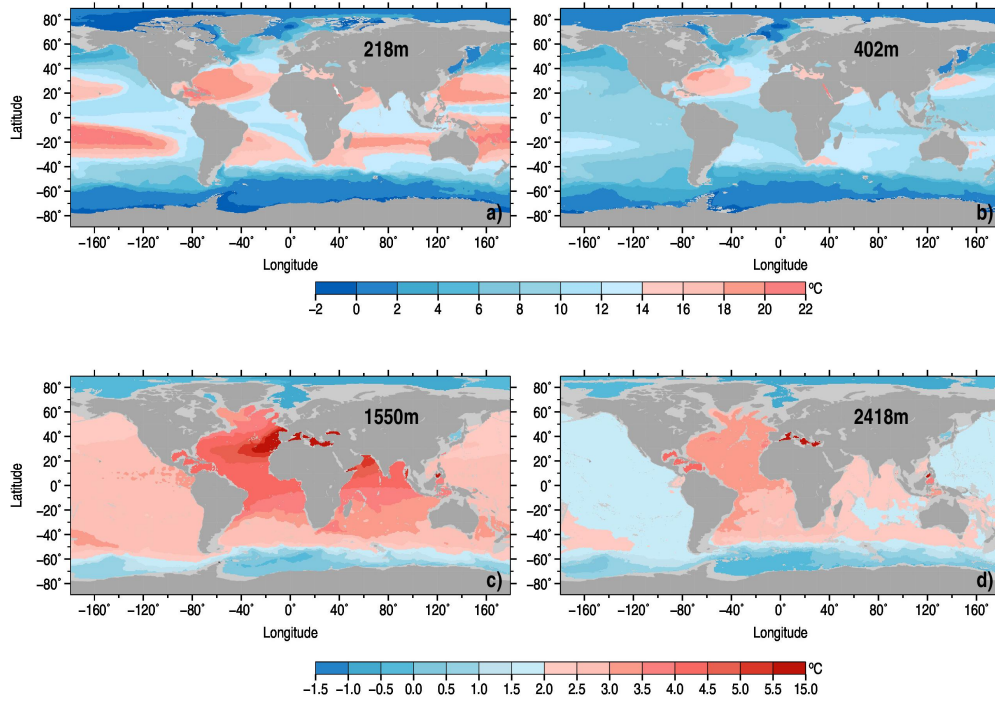


Figure. S3. Annual reference climate temperature fields for selected depth levels

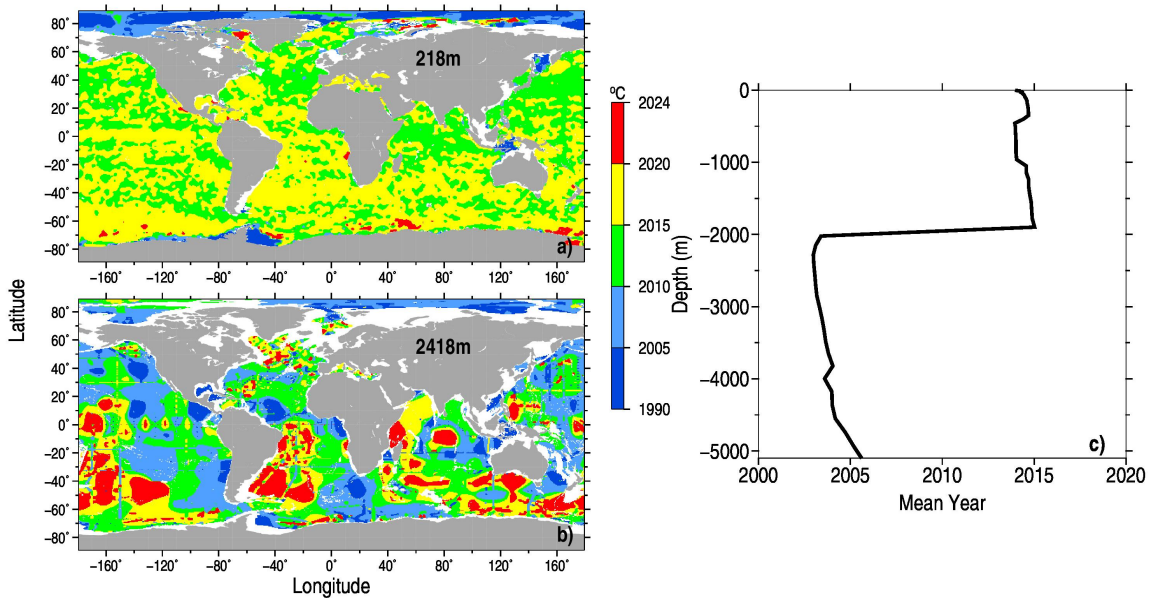


Figure. S4. Climatology median year for the depth level 218 m (a), 2418 m (b), and vertical profile of the area-averaged median year (c)

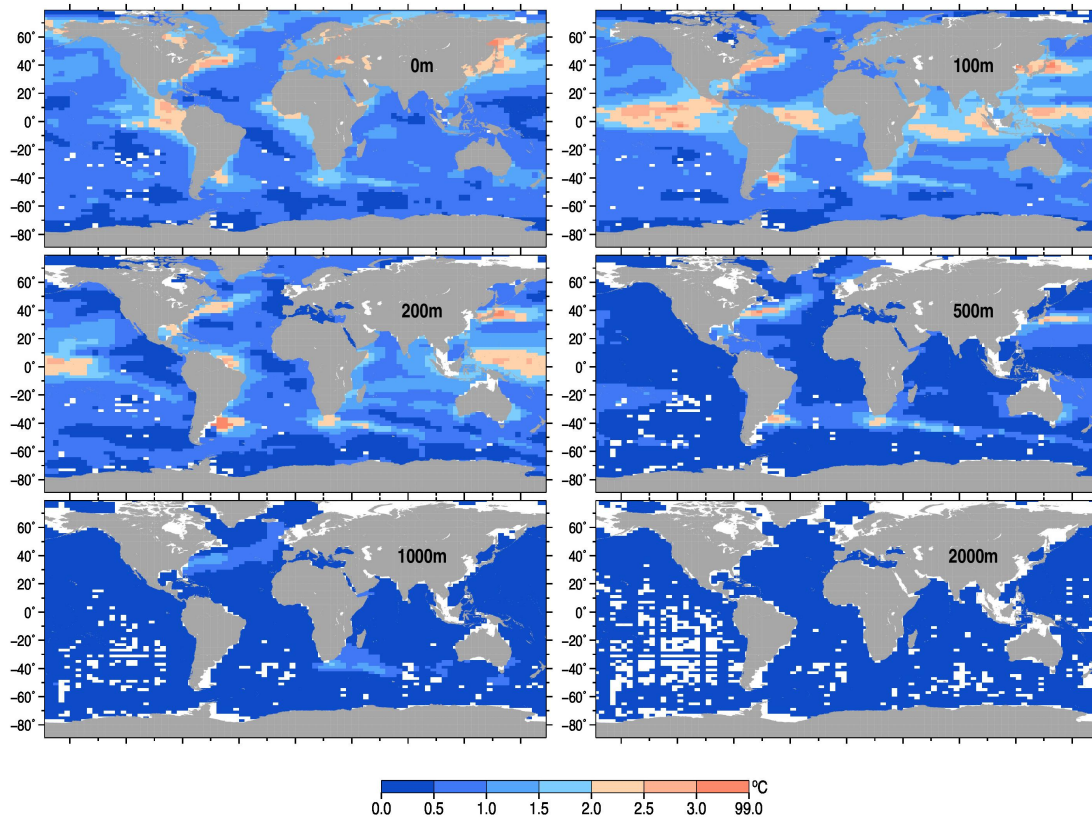


Figure. S5. The standard deviation of temperature anomalies within 2x4-degree latitude/longitude boxes

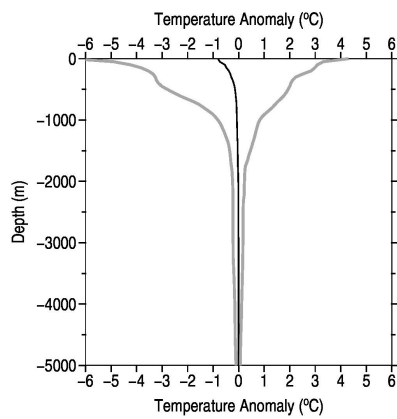


Figure. S6. The minimum/maximum temperature anomaly limits (gray) as the 1st and 99th quantiles respectively. Overall median anomaly profile is shown in black.

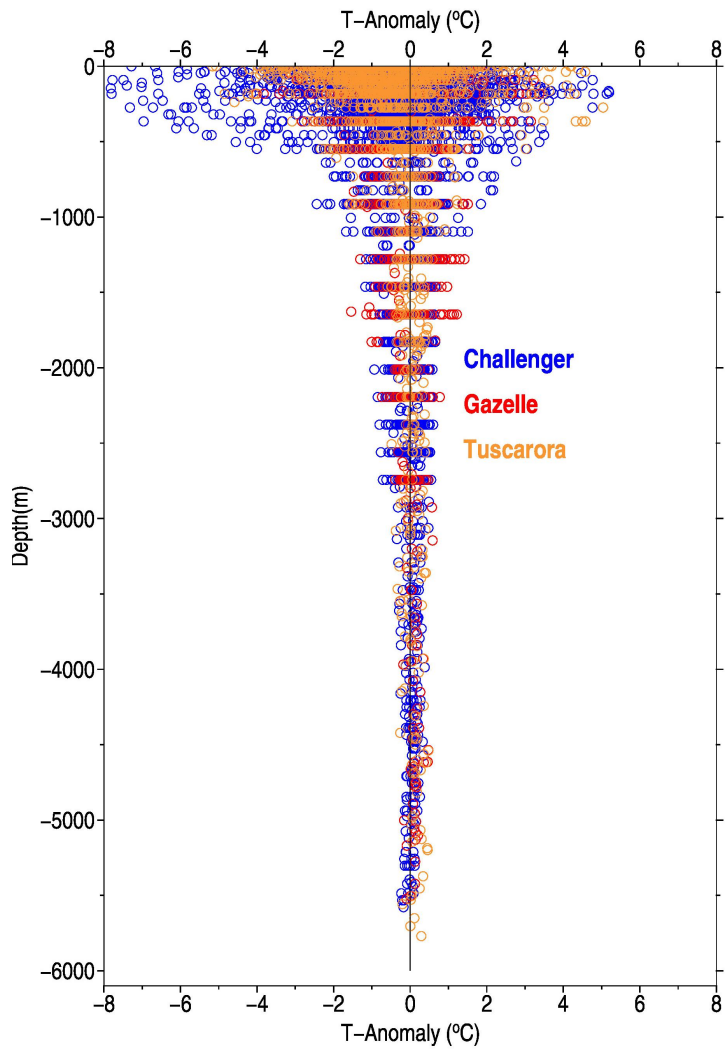


Figure. S7. Distribution of temperature anomalies versus depth for quality-controlled and adjusted “Challenger”, “Gazelle”, and “Tuscarora” temperature profiles.

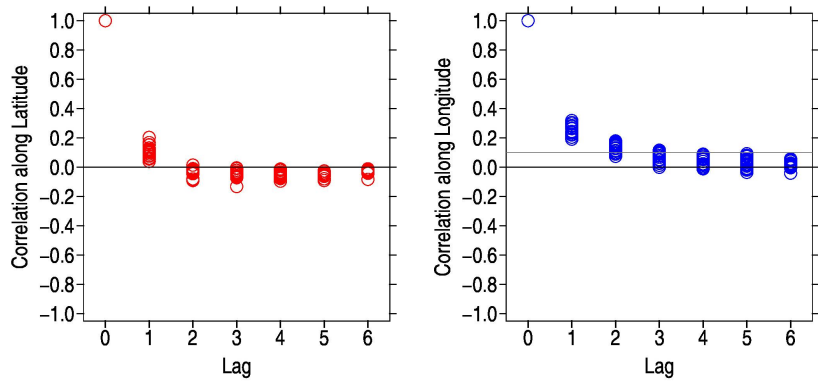


Figure. S8 Spatial autocorrelations in east-west and north-south directions using box-averaged anomalies for the best sampled periods 1945-69, 1970-1989, and 1990-2009.