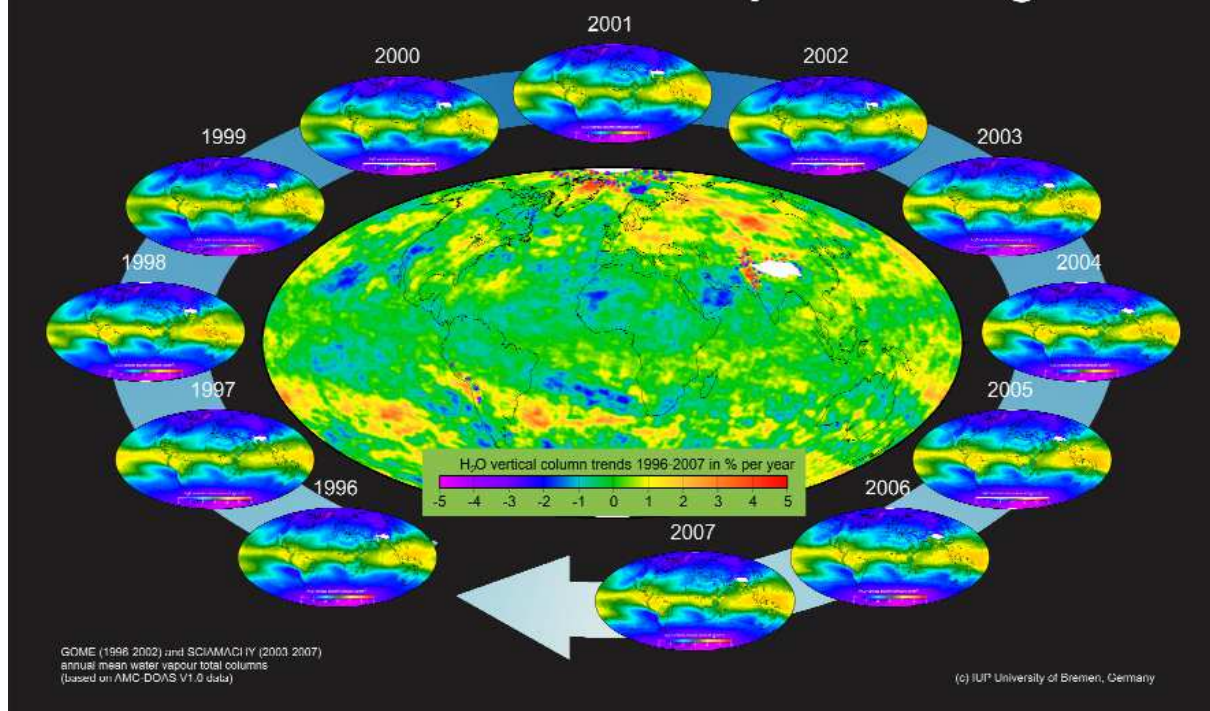


GOME & SCIAMACHY Measure Global Water Vapour Changes



Global water vapour total columns have been derived from measurements of the Global Ozone Monitoring Experiment (GOME) on ERS-2 and the Scanning Imaging Absorption Spectrometer (SCIAMACHY) on ENVISAT in the spectral region around 700 nm using the Air Mass Corrected Differential Optical Absorption Spectroscopy (AMC-DOAS) method. From these data, gridded daily means with a spatial resolution of $0.5^\circ \times 0.5^\circ$ have been determined. They are further averaged to get monthly and annual means. For each spatial grid point, linear trends were then derived based on the monthly means from GOME (1996-2002) and SCIAMACHY (2003-2007). Because GOME and SCIAMACHY measurements had different spatial and temporal sampling and resolution, the trend fit considered a potential offset / jump in the time series when switching from GOME to SCIAMACHY data (see Mieruch et al., 2008). Courtesy: Stefan Noël, Sebastian Mieruch (all U. Bremen).