Figures from:


www.atmos-chem-phys.net/7/875/2007/

Fig. 4. Comparison of measured and modelled size distributions from Hamilton, Egbert, and Simco.

The data shows variations in the size distribution of particles, with different colored regions indicating different concentrations. The x-axis represents the particle diameter in nm, and the y-axis represents the particle diameter in nm. The color gradient at the bottom of the graph indicates the number of particles per cm$^3$ on a logarithmic scale.

This figure illustrates the diversity of particle sizes present in the aerosol samples, with peaks indicating high concentrations of particles in specific size ranges. The variations can be attributed to different sources or environmental conditions, as suggested by the authors in their study.
Figure 2. Quality of a PCA representation of aerosol size distributions for various parameter values. The open triangles represent the noise components, the black squares represent the mixed components, and the open circles represent the signal components. The solid line represents the number of signal components. The number of signal components depends on the number of components retained, as shown on the y-axis.

a) Egbert 2003

(Σ Unused Eigenvalues)^{1/2}

Number of Components Retained

[Graph showing the relationship between the number of components retained and the cumulative sum of unused eigenvalues for the signal, mixed, and noise components.]
c) Hamilton 2000

(Number of Components Retained)

(Σ Unused Eigenvalues)
Atmos.

\[ \sum_{n=0}^{20} (\text{Unused Eigenvalues}) \]

Number of Components Retained

\[ \left( \sum_{j=25}^{30} (\text{Unused Eigenvalues}) \right)^{1/2} \]

Number of Components Retained

e) Hamilton 1999
Figure 1. (a)Facial images used as the training set.
Figure 1. (b) The average face $\Psi$.

Figure 2. Seven of the eigensfaces calculated from the input images of Figure 1.
Figure 5. An original face image and its projection onto the face space defined by the eigenfaces of Figure 2.
Figure 4. Three images and their projections onto the face space defined by the eigenfaces of Figure 1. The relative measures of distance from face space are (a) 29.8, (b) 59.5, (c) 5217.4. Images (a) and (b) are in the original training set.