6. MONITORING DATA - DISPLAY, ANALYSIS AND INTERPRETATION

6.1 Introduction

The preceding four chapters have discussed the pathways of the chemical species of interest (especially the acidic compounds of sulfur and nitrogen) from their emission at source through transport and dispersion in the atmosphere and how they are transformed before being deposited onto the earth's surface. This chapter will review and discuss the actual observations made by monitoring the atmosphere and the deposition on a routine basis with networks, and by shorter term studies or experiments using airborne observational platforms and/or special ground stations and networks. The data so collected provide an essential input to:

(a) understanding the physical and chemical processes described in Chapters 3, 4 and 5;

(b) the parameterization of these processes in LRT models;

(c) the improvement and verification of models, and

(d) studies of the effects of acidic deposition and other pollutants on the ecosystem, man-made structures and human beings.

In addition, these data are useful in their own right in the more general sense of:

(a) documenting the existence of long range transport of pollutants and the link with acid deposition in various parts of the world,