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Nota di contenuto	Acid Deposition; Copyright; Preface; Contents; Summary; STATUS OF SCIENTIFIC KNOWLEDGE; Data; Meteorological Processes; Models; ISSUES; Applicability of Models To Decisions On Control Strategy; Nonlinearity; Influences of Local and Distant Sources; IMPLICATIONS FOR EMISSION-CONTROL STRATEGIES; RESEARCH NEEDS; 1 Introduction; DEPOSITION ACIDITY; ENVIRONMENTAL EFFECTS; Physical and Chemical States of Deposited Materials; Reversibility and Irreversibility; OTHER RELATED REGIONAL AIR POLLUTION PHENOMENA; PURPOSE OF THE STUDY; ORGANIZATION OF THE REPORT; NOTES; REFERENCES; 2 Atmospheric Processes TRANSPORT AND MIXINGCHEMICAL TRANSFORMATION; Homogeneous Gas-Phase Reactions; Homogeneous Aqueous-Phase Reactions; Relative Roles of Gaseous- and Aqueous-Phase Chemistry;

DEPOSITION; Dry Deposition; Wet Deposition; Attachment Processes; REFERENCES; 3 Theoretical Models of Regional Air Quality; MATERIAL BALANCE; DETERMINISTIC MODELS; Treatment of Transport and Mixing; Treatment of Transformation Chemistry; Treatment of Dry and Wet Deposition; Linearity or Nonlinearity in Theoretical Models; Physical Processes; Chemical Processes; FINDINGS AND CONCLUSIONS; REFERENCES

4 Empirical Observations and Source-Receptor Relationships

AEROMETRIC DATA AND THEIR LIMITATIONS; RELATIONSHIPS AMONG AEROMETRIC PARAMETERS; THE INFLUENCE OF METEOROLOGICAL CONDITIONS; Classification of Meteorological Conditions; Air-Mass Trajectories; STATISTICAL METHODS OF ANALYSIS; Regression on Principal Components; Empirical Orthogonal-Function Analysis; Elemental-Tracer Analysis; ANALYSIS OF HISTORICAL TRENDS; ANALYSIS OF RELATIVE BEHAVIOR OF SULFUR AND NITROGEN EMISSIONS; FINDINGS AND CONCLUSIONS; Nonlinearity; Influence of Local and Distant Sources; REFERENCES; 5 Research Needs

FIELD STUDIES

Cloud Processes; Studies of Chemical Mechanisms; Dry Deposition; Tracers; Meteorological Studies; LABORATORY STUDIES; DEVELOPMENT OF THEORETICAL MODELS; Appendix A The Chemistry of Acid Formation; GAS-PHASE REACTIONS LEADING TO GENERATION OF ACID IN THE TROPOSPHERE; Oxidation By Stable Atmospheric Molecules; Reactive Transient Species in the Troposphere; Atmospheric Oxidation of SO₂ by Reactive Transient Species; Atmospheric Oxidation of NO₂ by Reactive Transient Species; Theoretical Rates of SO₂ and NO₂ Conversion To H₂SO₄ and HONO₂ Through Gas-Phase Reactions in the Troposphere

THE SOLUTION-PHASE OXIDATION OF SO₂ IN THE TROPOSPHERE

Aqueous-Phase Oxidation of SO₂; Comparison of Reaction Pathways For Solution-Phase Oxidation of SO₂; Solution-Phase Generation of Nitric and Nitrous Acids in the Troposphere; SUMMARY; REFERENCES; Appendix B Transport and Dispersion Processes; CLASSIFICATION OF TRANSPORT PHENOMENA; LOCAL AND MESOSCALE TRANSPORT; SYNOPTIC-OR CONTINENTAL-SCALE TRANSPORT; HEMISPHERIC OR GLOBAL TRANSPORT; CONCLUSIONS; ACKNOWLEDGMENTS; REFERENCES; Appendix C Atmospheric Deposition Processes; 1. INTRODUCTION; 2. DRY-DEPOSITION PROCESSES

2.1 Mechanisms of Dry Deposition
