

PREFACE

The purpose of the volume is to provide source material for students, geologists and geophysicists in the form of a collection of brief articles on geophysical and remote sensing methodologies suitable for regolith exploration. The articles do not contain detailed information on how each method works, but are rather intended as a guide to selecting the appropriate method for a particular exploration or environmental problem.

A number of factors contributed to the initiation of this project. Firstly, a realisation that there is very little material available on regolith geophysics that could be used by mineral exploration professionals to make important decisions about the application or deterrence of certain geophysical or remote sensing techniques. Secondly, the scarcity of material on this topic that can be used for teaching purposes at undergraduate university level. Thirdly, the success of Brad Pillans' booklet titled "Regolith dating methods", a CRC LEME publication, showed that there is a lot of interest among the professional community in practical, off-the-shelf material in regolith exploration methodologies.

The booklet contains twelve articles. Each article describes a remote sensing or a geophysical technique suitable for regolith exploration. The papers are organised in a similar structure, with the intention of aiding the reader in the comparison of the methods. After a brief general description, the advantages and pitfalls of each method are presented, as well as the likely product of a survey. This is followed by one or more case histories, the organisational requirements of a field survey, the likely costs, and finally addresses of the main organisations providing the service.

We believe that with this volume CRCLEME is providing a service to the exploration and environmental geophysics community as well as providing a valuable aid for teaching mineral exploration students.

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Editor

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Landsat Thematic Mapper

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