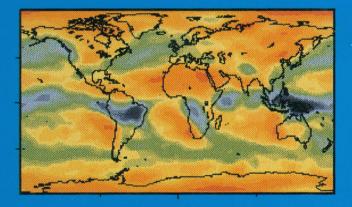
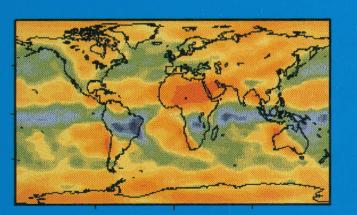
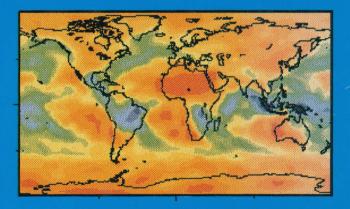
# **Climate Change Atlas**

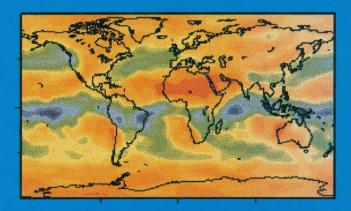
**Greenhouse Simulations from the Model Evaluation Consortium for Climate Assessment** 

#### **Ann Henderson-Sellers and Ann-Maree Hansen**









## Climate Change Atlas

Greenhouse Simulations from the Model Evaluation Consortium for Climate Assessment

by

### Ann Henderson-Sellers

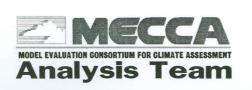
and

Ann-Maree Hansen

*Climatic Impacts Centre, Macquarie University, North Ryde, NSW, Australia* 

OGIE U. KLIMATOLOGIE SNHAUSER STR. 2 - MMID HANNOVER





**ninted on acid-free paper** 





KLUWER ACADEMIC PUBLISHERS

### **Table of Contents**

1.	Introduction	1
	Introduction	3
	Interpreting the atlas information	5
	Atlas layout	7
	Overview of the atlas maps	12
	Caveats	14
	Acknowledgements	14
	References	15
2.	<b>Confidence in Predictions</b>	17
	Temperature increase agreement	19
	Precipitation increase agreement	23
	Precipitation decrease agreement	27
	Snow Cover agreement	31
	Sea-Ice agreement	35
	Temperature signals for warming	
	agreement	39
	Precipitation signals for wetting	
	agreement	43
	Precipitation signals for drying	
	agreement	47
3.	Simulated Climates	51
	Temperature	53
	Mean (Control: present)	53
	Standard Deviation (Control:	
	present)	59
	Standard Deviation (Enhanced:	
	greenhouse)	65

3. Simulated Climates cont.	
Mean Differences (Greenhouse -	
present)	71
Signal to Noise (Greenhouse	
"signal")	77
	00
Precipitation	83
Mean (Control: present)	83
Standard Deviation (Control:	
present)	89
Standard Deviation (Enhanced:	
greenhouse)	95
Mean Differences (Greenhouse -	
present)	101
Signal to Noise (Greenhouse	
"signal")	107
Snow Cover	113
Mean (Control)	113
Frequency (Control: present)	119
Frequency (Enhanced: green-	
house)	125
Snow Depth	131
Mean Differences (Greenhouse -	
present)	131
Sea-ice Extent	137
Mean (Control)	137
Frequency (Control: present)	143
Frequency (Enhanced:	
greenhouse)	149
Mean Differences (Greenhouse -	
present)	155