

CONTENTS

Preface	105	Introduction The Editors
Contributors	105	Climatic context P.M.Kelly
1 1:DATA ACQUISITION AND PREPARATION	107	The Arctic G.C.Jacoby; L.B.Brubaker & H.Garfinkel; M.P.Lawson & K.C.Kuivinen
1 Introduction	118	Western North America L.B.Brubaker
The Editors	126	Eastern North America E.R.Cook; L.E.Conkey; R.L.Phipps
2 Sampling strategies	135	Alpine Europe O.U.Bräker
V.C.LaMarche Jr.; E.R.Cook; M.G.L.Baillie	137	Tatra Mountains Z.Bednarz
8 Measurement of densitometric properties of wood	142	Europe D.Eckstein; J.R.Pilcher
F.H.Schweingruber	150	European Russia T.T.Bitvinskas
12 The influence of temperature and precipitation on vessel area and ring width of oak and beech	151	The Mediterranean area A.V.Munaut; F.Serre-Bachet
D.Eckstein & E.Frisse	155	Asia Zheng Sizhong, Wu Xiangding & Lin Zhenyao; M.K.Hughes
12 Stable isotopes in tree rings	159	5:CLIMATE RECONSTRUCTIONS
A.Long	159	Introduction The Editors
18 Oxygen-18, Carbon-13, and Carbon-14 in tree rings	160	An illustration of alternative transfer function methods in Switzerland J.Guiot, A.L.Berger & A.V.Munaut
T.M.L.Wigley	163	A long-term drought sequence for the Hudson Valley, New York E.R.Cook
21 Chronology development and analysis	165	Temperature reconstructions in the northeastern United States L.E.Conkey
D.A.Graybill; M.K.Hughes; R.W.Aniol & B.Schmidt	168	Extension of riverflow records in Argentina R.L.Holmes, C.W.Stockton & V.C.LaMarche Jr.
32 2:DATA ANALYSIS	170	Preliminary estimates of summer streamflow for Tasmania D.A.Campbell
32 Introduction	177	Preliminary temperature reconstructions for Tasmania V.C.LaMarche Jr. & A.B.Pittock
The Editors	185	Reconstructed annual precipitation for California H.C.Fritts & G.A.Gordon
33 The climate-growth response	191	An overview of dendroclimatic techniques, procedures, and prospects H.C.Fritts
H.C.Fritts; M.K.Hughes & S.J.Milsom	199	BIBLIOGRAPHY
38 Response functions	215	SPECIES INDEX
J.Guiot, A.L.Berger & A.V.Munaut; D.W.Brett; J.P.Cropper	219	SUBJECT INDEX
50 Transfer functions		
G.R.Lofgren & J.H.Hunt; B.M.Gray		
58 Verification of dendroclimatic reconstructions		
G.A.Gordon; B.M.Gray & J.R.Pilcher		
62 Climatic reconstructions from tree rings		
A.B.Pittock; J.P.Cropper		
67 The design of palaeoenvironmental data networks for estimating large-scale patterns of climate		
J.E.Kutzbach & P.J.Guetter		
78 3:THE SOUTHERN HEMISPHERE		
78 Introduction		
The Editors		
79 Climatic context		
M.J.Salinger		
82 Southern Africa		
T.G.J.Dyer; V.C.LaMarche Jr.		
84 Argentina and Chile		
R.L.Holmes; J.A.Boninsegna		
90 Australasia		
John Ogden; P.W.Dunwiddie		
105 4:THE NORTHERN HEMISPHERE		