

Contents

	<i>page</i>	<i>ix</i>
<i>Contributors</i>		
Introduction	1	
I. C. F. MÜLLER-WODARG, C. A.		
GRIFFITH, E. LELLOUCH, AND T. E. CRAVENS		
Prologue 1		
The genesis of <i>Cassini-Huygens</i>	10	
W.-H. IP, T. OWEN, AND D. GAUTIER		
Prologue 2		
Building a space flight instrument: a PI's perspective	22	
M. TOMASKO		
1 The origin and evolution of Titan	29	
G. TOBIE, J. I. LUNINE, J. MONTEUX,		
O. MOUSIS, AND F. NIMMO		
2 Titan's surface geology	63	
O. AHARONSON, A. G. HAYES, P. O.		
HAYNE, R. M. LOPES, A. LUCAS, AND		
J. T. PERRON		
3 Thermal structure of Titan's troposphere and middle atmosphere	102	
F. M. FLASAR, R. K. ACHTERBERG,		
AND P. J. SCHINDER		
4 The general circulation of Titan's lower and middle atmosphere	122	
S. LEBONNOIS, F. M. FLASAR,		
T. TOKANO, AND C. E. NEWMAN		
5 The composition of Titan's atmosphere	158	
B. BÉZARD, R. V. YELLE, AND C. A. NIXON		
6 Storms, clouds, and weather	190	
C. A. GRIFFITH, S. RAFKIN,		
P. RANNOU, AND C. P. MCKAY		
7 Chemistry of Titan's atmosphere	224	
V. VUITTON, O. DUTUIT, M. A. SMITH,		
AND N. BALUCANI		
8 Titan's haze	285	
R. WEST, P. LAVVAS, C. ANDERSON,		
AND H. IMANAKA		
9 Titan's upper atmosphere: thermal structure, dynamics, and energetics	322	
R. V. YELLE, D. S. SNOWDEN, AND		
I. C. F. MÜLLER-WODARG		
10 Titan's upper atmosphere/exosphere, escape processes, and rates	355	
D. F. STROBEL AND J. CUI		
11 Titan's ionosphere	376	
M. GALAND, A. J. COATES, T. E.		
CRAVENS, AND J.-E. WAHLUND		
12 Titan's magnetospheric and plasma environment	419	
J.-E. WAHLUND, R. MODOLLO,		
C. BERTUCCI, AND A. J. COATES		
<i>Index</i>	459	