

CONTENTS

Contents	iii
Author Index	vii
Welcome Addresses	ix
Report of the Chairperson of Session 1: T. Hamada <i>Operational Extraction of Cloud Motion Winds from Current and Future Geostationary Satellite Systems</i>	1
Report of the Chairperson of Session 2: J. Schmetz <i>Wind Tracking from Absorption Channel Data</i>	3
Report of the Chairperson of Session 3: D.E. Hinsman <i>Verification and Impact Studies of Operational Wind Data</i>	5
Report of the Chairperson of the Panel Discussion: J. Le Marshall <i>Operational Improvements</i>	7
Report of the Chairperson of the Panel Discussion: J.F.W. Purdom <i>Verification Techniques</i>	11
Report of the Chairperson of Session 4: P. Menzel <i>Future Studies and Developments</i>	15
Report of the Chairperson of Session 5: G. Szejwach <i>Conclusions and Recommendations</i>	17
KEYNOTE ADDRESS	
T. T. Fujita <i>Ground-Truth Experiment of Cloud-Drift Winds</i>	21
LECTURES	
SESSION 1	
OPERATIONAL EXTRACTION OF CLOUD MOTION WINDS FROM CURRENT AND FUTURE GEOSTATIONARY SATELLITES	
S. Takata <i>Current Status of GMS Wind and Operational Low-Level Wind Derivation in a Typhoon Vicinity from Short-Time Interval Images</i>	29
J. Le Marshall <i>An Operational System for Generating Cloud Drift Winds in the Australian Region and their Impact on Operational Numerical Weather Prediction</i>	37

R.J. Walter, Jr. <i>Current Status of the Operational Wind Extraction Program in NOAA/NESDIS</i>	43
K. Holmlund, J. Schmetz <i>Current System for Extracting Cloud Motion Vectors from Meteosat Multi-Channel Image Data</i>	45
A.B. Uspensky, A.V. Karpov <i>Cloud Motion Wind Extraction from GOMS Data</i>	55
R.R. Kelkar <i>Recent Improvements in Cloud Motion Vector Derivation from INSAT</i>	65
Jin E. Chen <i>China Meteorological Satellite FY-2 Cloud Drift Wind Processing Method</i>	71

SESSION 2

WIND TRACKING FROM ABSORPTION CHANNEL DATA

K. Holmlund <i>Operational Water Vapour Wind Vectors from Meteosat Imagery Data</i>	77
R.W. Lunnon <i>Water-Vapour Channel Winds from Synthetic Radiances</i>	85
H. Uchida <i>Wind Extraction from Water Vapor Images</i>	93
C. Velden <i>Investigation of Water Vapor Motion Winds from Geostationary Satellites</i>	99

SESSION 3

VERIFICATION AND IMPACT STUDIES OF OPERATIONAL WIND DATA

P. Menzel <i>Assigning Heights to Cloud Motion Vectors</i>	105
L. Bakst, N. Fedorova <i>Forecast of Displacement Velocity of the Basic Sites of Large-Scale Cyclonic Cloud Systems and Frontal Sections from Satellite Data</i>	117
D.E. Hinsman <i>Comparison of Verification Techniques, Is it Time for Convergence?</i>	125
G.G. Kinyoda <i>Winds: Towards Better Weather Forecasts in Africa</i>	143

R.W. Lunnon	
<i>Study of Cirrus Cloud Winds: Analysis of I.C.E. Data</i>	155
K. Onogi	
<i>Use of Low Level 'Detailed' Satellite Cloud Motion Wind around Tropical Cyclones in the JMA Numerical Weather Prediction System</i>	161
J. Schmetz	
<i>Relationship between Monthly Mean Water Vapour Wind Fields and the Upper Tropospheric Humidity</i>	167
B. Strauss	
<i>Quality Assessment of Operational Cloud-Motion Wind Data</i>	175
A. Szantai	
<i>Construction of Cloud Trajectories: A Way to Check Cloud Wind Quality</i>	185
H. Woick	
<i>Verification of Meteosat Cloud Motion Winds with Radiosonde Data</i>	191
SESSION 4	
FUTURE STUDIES AND DEVELOPMENT	
T. Inoue	
<i>The Feasibility of Extracting Low Level Wind by Tracing Low Level Moisture Observed in IR Imagery over Cloud Free Ocean Area in the Tropics</i>	197
Y. Buhler	
<i>The CMW Extraction Algorithm for MTP/MPEF</i>	205
C.M. Hayden	
<i>Recent Research in the Automated Quality Control of Cloud Motion Vectors at CIMSS/NESDIS</i>	219
G.A. Kelly	
<i>Numerical Experiments using Cloud Motion Winds at ECMWF</i>	227
J.F.W. Purdom	
<i>Cloud Motion and Height Measurements from Multiple Satellites Including Cloud Heights and Motions in Polar Regions</i>	245
Qing X. Wu	
<i>Computing Cloud Motion using a Correlation-Relaxation Algorithm - Improving Estimation by Exploiting Problem Knowledge</i>	249
List of Participants	255