



International Society for Photogrammetry
Société Internationale de Photogrammétrie
Internationale Gesellschaft für Photogrammetrie

XIVth Congress Hamburg 1980
XIV^e Congrès Hamburg 1980
XIV. Kongreß Hamburg 1980

INTERNATIONAL ARCHIVES OF PHOTOGRAMMETRY
ARCHIVES INTERNATIONALES DE PHOTOGRAMMETRIE
INTERNATIONALES ARCHIV FÜR PHOTOGRAMMETRIE

Volume **XXIII** Part **B 10**
Volume **XXIII** Tome **B 10**
Band **XXIII** Teil **B 10**

Commissions **V, VI, VII**
Commissions **V, VI, VII**
Kommissionen **V, VI, VII**

SUPPLEMENT
SUPPLÉMENT
NACHTRAG

Edited by F. Ackermann, Programmdirektor
Rédigé par H. Bauer, Wissenschaftliches Sekretariat
Zusammengestellt von G. Konecny, Kongreßdirektor
G. Kupfer, Archiv

Published by the Committee of the XIVth International Congress for Photogrammetry Hamburg 1980
Publié par le Comité du XIV^e Congrès International de Photogrammétrie Hamburg 1980
Herausgegeben von dem Komitee für den XIV. Internationalen Kongreß für Photogrammetrie Hamburg 1980
Vertrieb: Photogrammetrisches Institut der Universität Bonn, Nußallee 15, D-5300 Bonn 1

COMMISSION V

Non-Topographic Photogrammetry

CONTENTS/INHALT/CONTENT	PAGE/SEITE
BADEKAS, J., PEPPES, E., STAMBOULOGLOU, E.	Low Altitude Aerial Photography 1
BAKER, W.T.	Photologging: A Close Range Photo- grammetry Tool for Highway Engineers 21
CANELLA, P., LOMBARDINI, G., VIANELLI, G.	Photogrammetric Survey of the Dome of the Orthodox Baptistery of Ravenna 34
DUNCAN, J.P., DEAN, D.P., PATE, G.C.	Pericontourography 45
GAITANDJIEFF, S.	Die Photoperspektivzeichnung als Mittel für eine Objektive Projektierung von Architektur- und Bauprojekten 55
KUREYA, M., OOSAKI, A.	Trial to Determine the Coordinates in X-Ray Stereophotography using Several Targets 65
LARSSON, R., OLSSON, R.	Precision of Geodesy Versus Photo- grammetry in Building Control 77
LIPPERT, F.G.,III, GREEN, D., VERESS, S.A., BAHNIUK, E., FRASER, C., HARRINGTON, R.	A Comparision Between Convergent and Bi-Plane X-Ray Photogrammetry Systems Used to Detect Total Joint Loosening 87
LUBOWSKI, G., WALDHÄUSL, P.	Ballonphotogrammetrie 94
MONIWA, H.	The Concept of "Photo-Variant" Self- Calibration and Its Application in Block Adjustment with Bundles 113
OSHIMA, T.	Environmental Studies by Pattern Classi- fication for Evaluating the Effect of Civil Engineering Project under Construc- tion 131

TOVEY, N.K., SOKOLOV, V.N.	Quantitative Methods for Measurement of Scanning Electron Micrographs of Soil Fabric	154
VERESS, S.A.	Contemporary Analytical Solutions in Terrestrial Photogrammetry	164
	<u>ABSTRACTS</u>	174
	Abstracts of Papers Announced But Not Received Before Closing Date	

COMMISSION VI

Economic, Professional and Educational Aspects of Photogrammetry

CONTENTS/INHALT/CONTENT	PAGE/SEITE
WOLF, P.R.	Tri-Lingual Glossary of Photogrammetry Terms 199
DATTA, M.M.	Photogrammetric Education and Course Curricula in Developing Countries 312
GRIMM, A.	Der Ursprung des Wortes PHOTOGRAMMETRIE 323
NATIONAL REPORTS	
AUSTRALIA	331
BULGARIA	341
NORWAY	347
AUSTRIA	359
SWEDEN	384
UNITED STATES OF AMERICA	397
<u>ABSTRACTS</u>	407
Abstracts of Papers Announced But Not Received Before Closing Date	

COMMISSION VII

Interpretation of Data

CONTENTS/INHALT/CONTENT	PAGE/SEITE
ANDRONIKOW, W.L.	409
Interpretation der Bodendecke nach Multizonalen Kosmischen Aufnahmen	
ANTIKIDIS, J.P.	416
Introduction to Image Quality Definition and Requirements for Remote Sensing Satellites	
BACHHUBER, R., FRANKE, C., KRICHHOF, W.	426
Untersuchungen zur Nutzung Multispektraler Fernerkundungsbilddaten für Landschafts- ökologische Problemstellungen	
BÄHR, H.-P., DENNERT-MÖLLER, E.	436
Multispektrale Klassifizierung von Watt- gebieten aus Landsat-Aufnahmen	
BALTER, B.M., EGOROV, V.V.	448
Remote Sensing of Object's State as a Statistical Estimation Problem: General Considerations and Algorithm	
BERG, A.	457
Remote Sensing Techniques Applied to Sugar Beet Diseases in Germany and Italy: Intro- duction to the Results of a European Project	
BOISSARD, P., PERRIN, R., ANDRIEU, B., VALERY, P.	463
Communication: Exploitation Numérique du Film Infrarouge Couleur Pour l'Etude de la Maladie de l'Ecorce du Hêtre (Fagus Silvatica L.)	
BOUBAKER, M.H.	473
Application de la Teledetection a l'Etude de l'Occupation du Sol Requis par les Amenagements Hydrauliques en Tunisie	
CARTER, P., SMITH, T.F.	476
Monitoring Urban Growth in the UK from Landsat Satellite Data	
DE CAROLIS, C., AMODEO, P., CERATO, C., CIAFARDINI, G., TACCONI, R.	486
Differences in the Spectral Characteristics Between Healthy and Diseased Crops Determined for Sugar Beet and Winter Barley	
DELEONIBUS, P., ERNST, J.	503
A Summary of Wind and Wave Conditions for 28 September 1978 Extracted from "Conven- tional" Data Sources	
GIERLOFF-EMDEN, H.G.	510
Timescale as Interface of Satellite Data Acquisition Systems Against Coastal Water and Tidal Region Processes	

HADEM, I., SKRAMO, G.	Fixed-Base Photogrammetry with Wing-Tip Mounted Cameras	520
HASSENPFUG, W.	Erprobung von Fernerkundungsverfahren (Satellitenbilder) bei der Umweltüberwachung sowie zur Unterstützung von Biotop-Kartierungen	528
KÖLBL, O., TRACHSLER, H.	Regional Land Use Survey Based on Point Sampling on Aerial Photographs	536
LECHI-G, G.M., ZILIOLI, Z.-E.	Image Interpretation as a Cultural Factor	550
LOHMANN, P. PIEPEN, H. VAN DER	Evaluation of Ocean Bottom Features from Ocean Color Scanner Imagery	558
MUKAI, Y., TANAKA, S., TAKEUCHI, S., NAKAJIMA, I., OHNUKI, I., WATANABE, H., HATAMURA, R.	Application of Landsat Data for the Management of Forest Resources	567
NICHOL, J., COLLINS, W.G.	Ecological Monitoring of Balancing Lakes by Multispectral Remote Sensing	580
PARTHASARATHY, V., REICHERT, P., ROY, P.S.	Spectral Separability - Using Non-Parametric Statistical Tests, with Special Reference to Kolmogrov - Smirnov Two Tailed Test	590
PLEITNER, P.K.	Applications of Airborne Thermal Infrared Scanners to Engineering Problems	596
RIOM, J.	Response Spectrale de Forets de Pins Defolies: Importance de l'Environnement de l'Arbre	607
RIOM, J.	Detection de Pins Malades dans l'Infrarouge Thermique (Bande 8-14 μ m)	614
SALVEMINI, M.	A System, Based on Visual Communication, Orientated to Non Dedicated Users, Processed by a Personal Computer, for Merging Landsat Remote Sensed Data and Planning Information in Large Metropolitan Areas. Preliminary Ideas	619
SANWALD, E.F.	Differences in the Spectral Characteristics Between Healthy and Diseased Crops as Determined for Sugar Beets and Winter Barley	628
SANWALD, E.F., REICHERT, P.-G.	State-of-the-Art in Agricultural and Forest Crop Stress and Damage Detection by the Use of Remote Sensing Techniques - A Critical Review	638
SARTORI, M.	Technische Verbesserung der Fernerkundungsinterpretation bei Gewässeruntersuchungen	648

STREIT, R.	Stand der Fernerkundung am Bayerischen Geologischen Landesamt und Erfahrungen mit der Luftbilddauswertung	655
THOREN, R.	Applications of Remote Sensing to Oceanography & Sea Ice	662
VETRELLA, S., MOCCIA, A., DE FUSCO, L.	Spectral, Morphological and Textural Data Integration for Remote Sensing Applications	726
VINOGRADOV, B.V.	Télédétection et Cartographie des Pâturages	738
	<u>ABSTRACTS</u>	748
	Abstracts of Papers Announced But Not Received Before Closing Date	
	<u>LATE PAPERS</u>	
	Announced Papers Received During Printing Process	
BLACHUT, T.J.	On-Line Analytical Aerial Triangulation (Commission III)	789
BLACHUT, T.J.	Photogrammetry in Its Historical Context (Commission III)	791
PETRIE, G.	Hardware Aspects of Digital Mapping (Commission IV)	795