SPACE EARTH MANKIND

太空·地球·人类

嚴濟慈題

献给国际空间年

ESPECIALLY FOR INTERNATIONAL SPACE YEAR

总主编　王大珩　潘厚任

国际空间年中国筹委会
Chinese Preparatoty Committee For International Space Year

广西科学技术出版社
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宋健 一九九二年

六月廿二日

总主编简历

王大珩，男，现年78岁，中国科学院学部委员，著名光学家，我国应用光学事业奠基人之一。早年，他毕业于清华大学物理系，之后在英国留学并工作将近十年，专攻应用光学，有重要创新。新中国成立以来，他的主要业绩是创办中科院长春光机所，任所长并指导业务30余年，使该所成为在我国成立最早并在国际有声誉的从事应用光学和光学工程的科研和发展基地，为新中国现代化建设和光学事业的发展作出了突出贡献。王大珩也由于他在近代国防光学方面的贡献，在1985年国家科技进步奖的一项特等奖中，名排首位。1986年3月，他和王淦昌、杨家墀、陈芳允四位学部委员上书党中央，对跟踪世界战略性高技术发展提出建议，得到中央领导同志的极大关注和大力支持。同年3月3日邓小平同志作了批示："这个建议十分重要"，并强调指出："此事宜速决断不可拖延。"之后，经过200多名专家学者的全面论证和反复修改，1986年11月中央政治局和国务院批准了"高技术研究发展计划纲要"，即"863"计划，因此而斐声科技界。十余年来，他曾任中科院技术科学部主任。他以近年来在业务上联系到空间光学和遥感技术而被聘为中科院空间科学与应用研究中心的名誉主

任。他还是国际宇航科学院的院士。1988年起，我国参加国际空间年活动，他任国际空间年中国筹备委员会主任。他现任中国光学学会理事长，还曾是中国科协第三届副主席和北京科协主席。

潘厚任，男，现年55岁。江苏省苏州市人，研究员。1959年毕业于南京大学数学天文系，主修天文学。早期在中科院地球物理所从事空间科学与探测研究，任研究组长。设计研制了我国首批箭载、星载空间环境探测仪器，如微流星、太阳短波辐射探测仪等。1965—1968年先后在中科院科学仪器设计院和中国空间技术院从事我国第一、第二颗人造卫星的设计研制，为总体组成员和副组长。1969—1979年在空间物理所从事星载和弹载环境探测器的设计研制和标定工作，任空间光学室负责人。1979—1983年在中科院空间科技中心负责天文卫星探测仪器分系统的测试工作。1984—1988年，担任中科院空间能源处长，作为国家科委专家组专家，组织和促进了中美、中德空间科学的合作与交流。1988—1990年调任中国大恒公司总工程师兼副总经理。1991年起任中科院空间领导小组办公室常务副主任，现为空间科学与应用总体部副主任。1987年起被选为中国空间科学学会理事。在国内、外会议和刊物上发表了40余篇论文、报告和著作。所参与和负责的工作有7项获国家级和中科院科技奖。

1988—1992年，作为国际空间年中国筹委会(ISY-CPC)协调员和王大珩主席的助手，积极组织协调了国际空间年活动。

Brief biography of the general chief editor

Wang Da - Heng, Age 78, Member of Chinese Academy of Sciences, Prof. of Applied Optics.

Graduated at Qinghua University, Major in physics, 1936. Postgraduate Studies and research works on applied optics and optical glass manufacture in U. K. 1938—1948. After the establishment of New China, Wang's achievements have been mainly connected with the establishment of Scientific Instrument Research Lab. and later on transformed as the Changchun Institute of Optics and Fine Mechanics of Academia Sinica having been director of this institute for more than 30 years. At his scientific and technical direction the institute has been known as the earliest institute of this kind in China and later has been known as one of the prominent institute working in applied optics and optical engineering. For his achievement Wang has been awarded national prize of the advancement of science and technology supergrade, Wang listed leader.

1986, Wang and 3 other members of CAS raised an important proposal to the goverment for development of high technology in China. As the results the nation has now set a 863-high tech. program, which are now in full swing and reflects profound influence on the modernization of Science and Technology in China.

Wang entered the realm of space science and technology

through his late efforts on space optics and remote sensing. Since 1983, he has been the director of division of technological sciences, he is now fellow of International Academy of Astronautics, honorary director of the Center for Space Science and Applied Research, CAS. Since 1988, he is also the Chairman of China Preperatory Committee for International Space Year. The later being a world wide activity supported by the United Nations.

Pan Hou-Ren, Male, age 55, bo- in Suzhou, Jiangsu Province. Research Professor, graduated at Nanjing University in 1959, majored Astronomy. After graduation he engaged in research on space science and explorations as the head of research group in Institute of Geophysics, CAS. Designed and developed the Chinese first space detectors, such as detectors for micrometeorites and solar short wave radiations onboard rockets and satellites. In 1965—1968, he went in for designing and developing the Chinese 1st and 2nd satellites, as a member and deputy head of spacecraft engineering group in Institute of Scientific Instrumentation, CAS and in Institute of Spacecraft Engineering, CAST, successively. In 1969—1979, he designed and developed detectors and probes for space environment borne on satellites and rockets, taken up the head of space optics lab. of Institute of Space Physics. In 1979—1983, he was responsible for the test and checkout of space instruments of astronomical satellite in Center of Space Science & Technology, CAS. From 1984 to 1988, he had been Division head of Space Research and Engineerings, HQ of CAS, organized and promoted the Sino-American co-op as well as Sino-Germany co-op on space science and application as a mem-

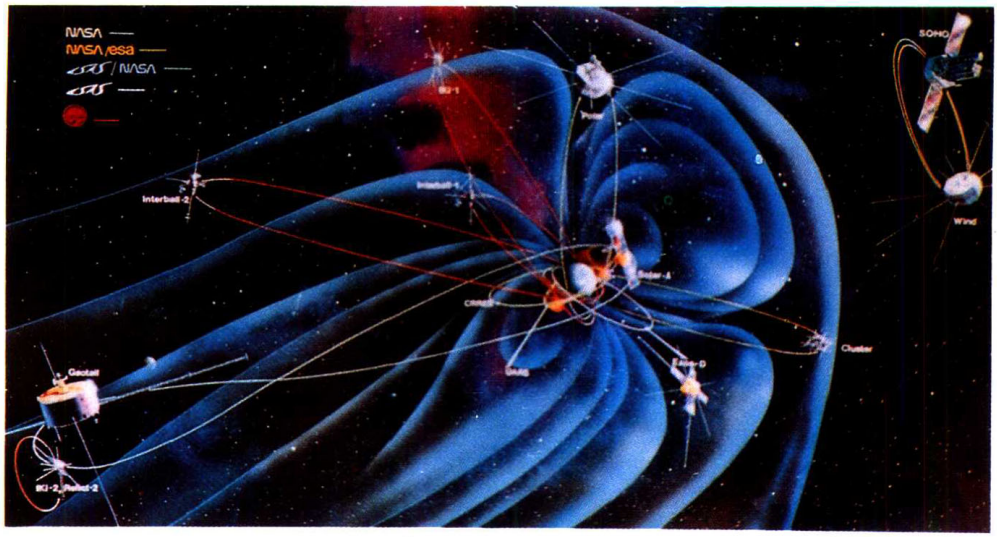
ber of experts appointed by SSTCC. During 1988—1990, he accepted the post of Vice - President and Chief Engineer of China Da Heng Corporation. Since 1991, he was in Office of Space Research Leading Group, CAS; appointed as Deputy Director of General Establishment of Space Science & Application, concurrently Division head of Space Remote Sensing Technology, HQ/CAS. Since 1987, he has been twice elected Member of Council, Chinese Society of Space Research. Over 40 papers or wrightings presented/published at/in domestic & international conferences/publications. 7 collective awards of State and CAS S&T had been given. In 1988—1992, as a coordinator and the assistant of prof. Wang Da-Heng, Chairman of ISY—CPC, actively organized and coordinated the International Space Year activities.

CAS: Chinese Academy of Sciences

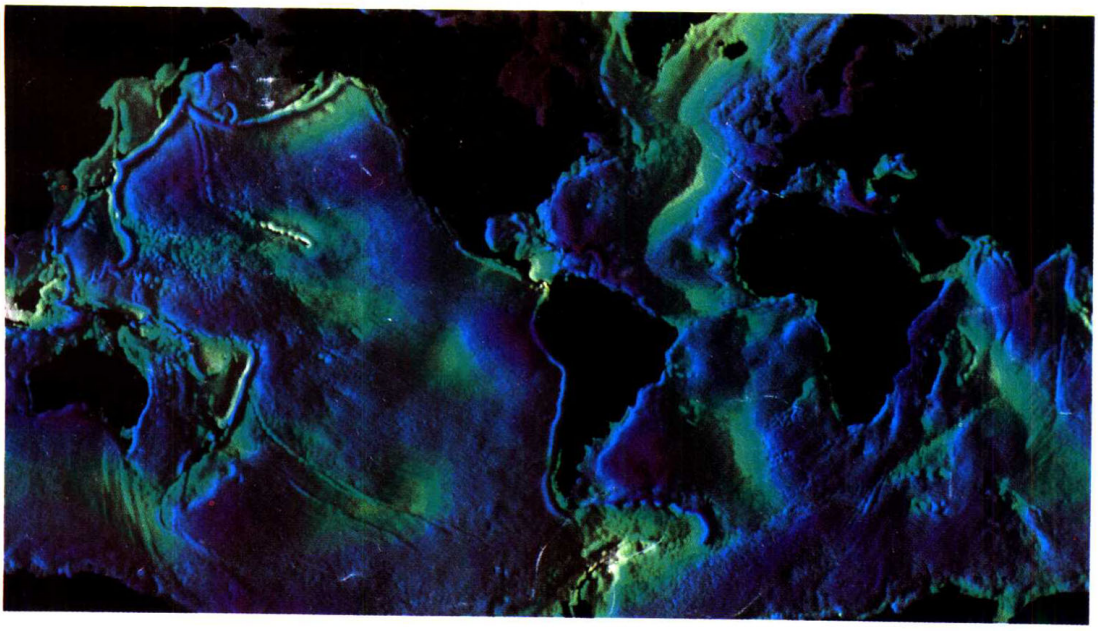
CAST: Chinese Academy of Space Technology

SSTCC: State Science and Technology Commission of China

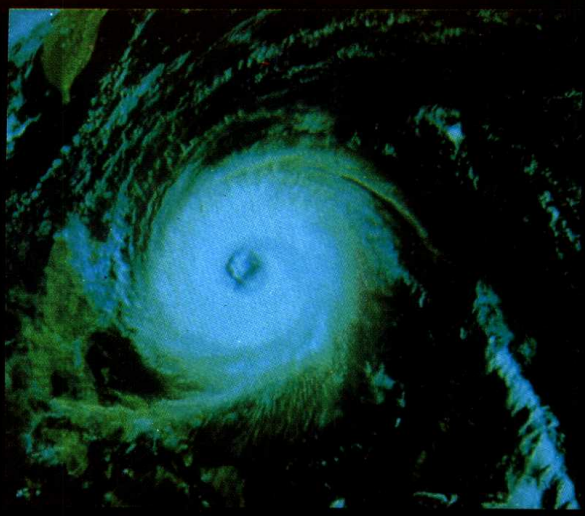
ISY-CPC: Chinese Preparatory Committee for International Space Year



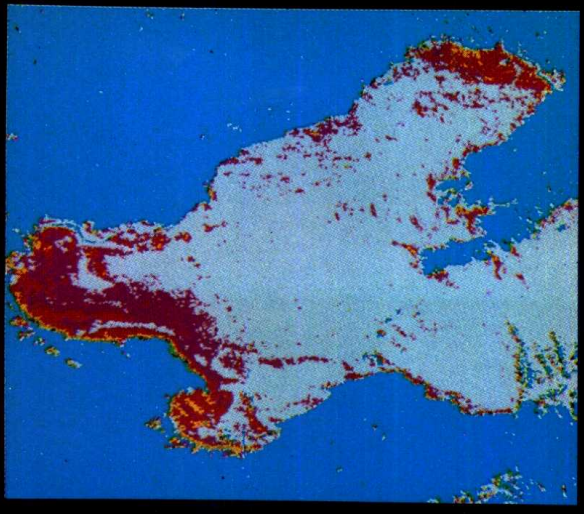
Ⅰ—9 磁层的结构及90年代在磁层各部位的探测卫星。



Ⅱ—9 全球海面变化。

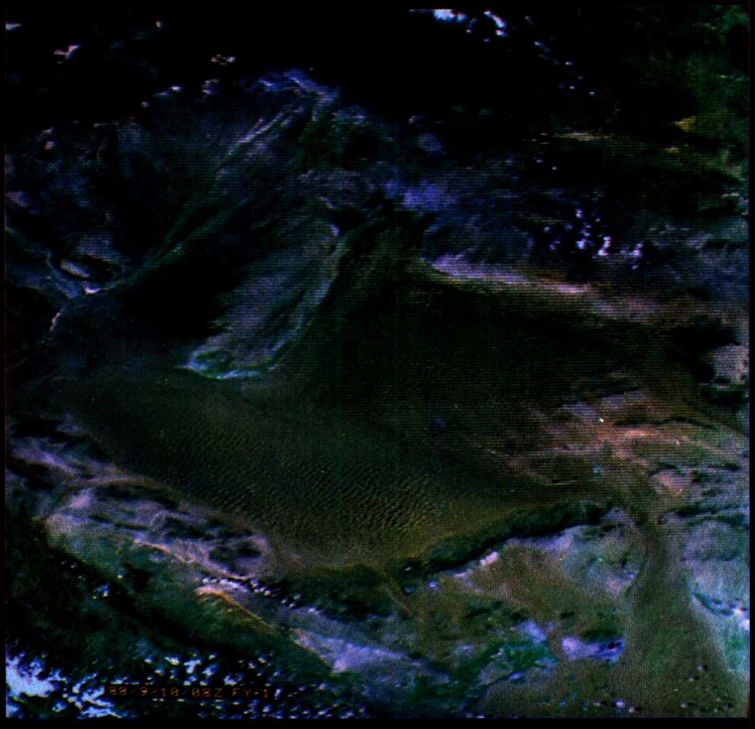


Ⅱ—17台风云系图像



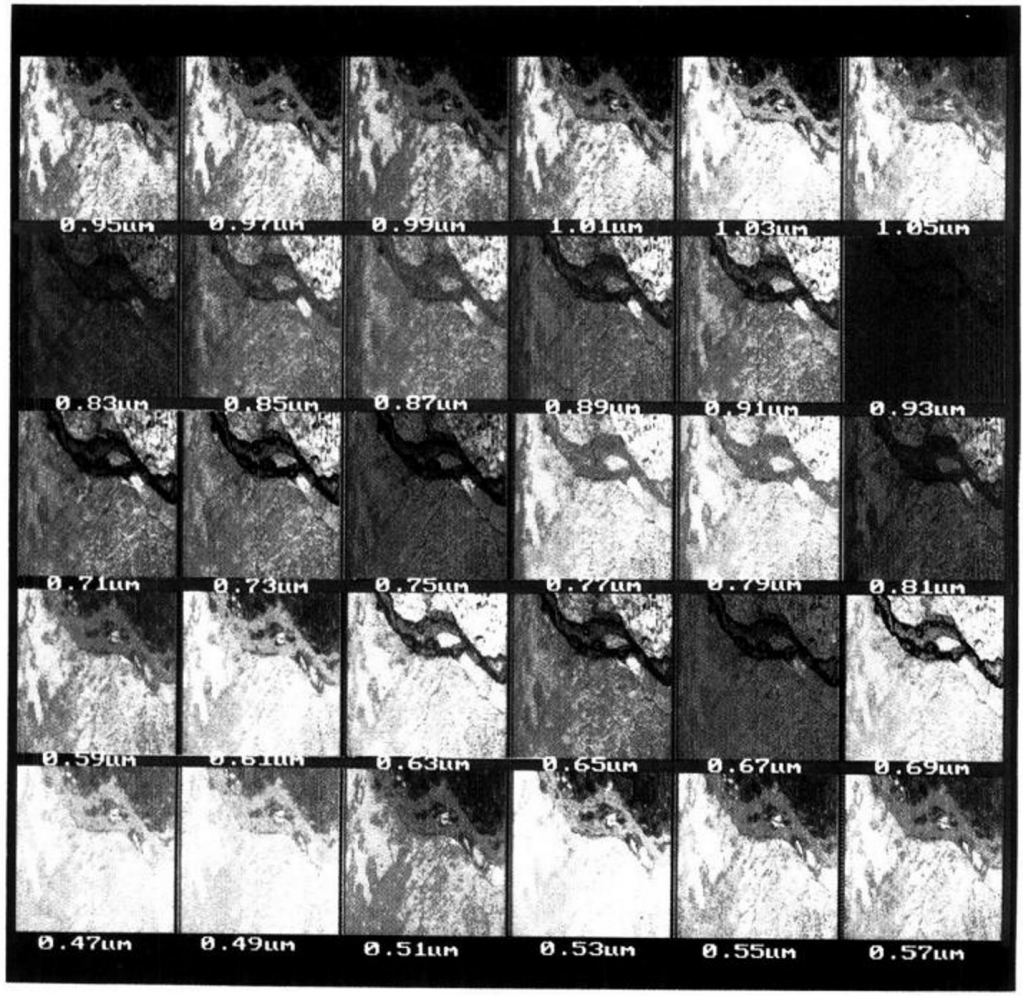
Ⅱ—18渤海湾叶绿素分布图

Ⅱ—19天山地区积雪图

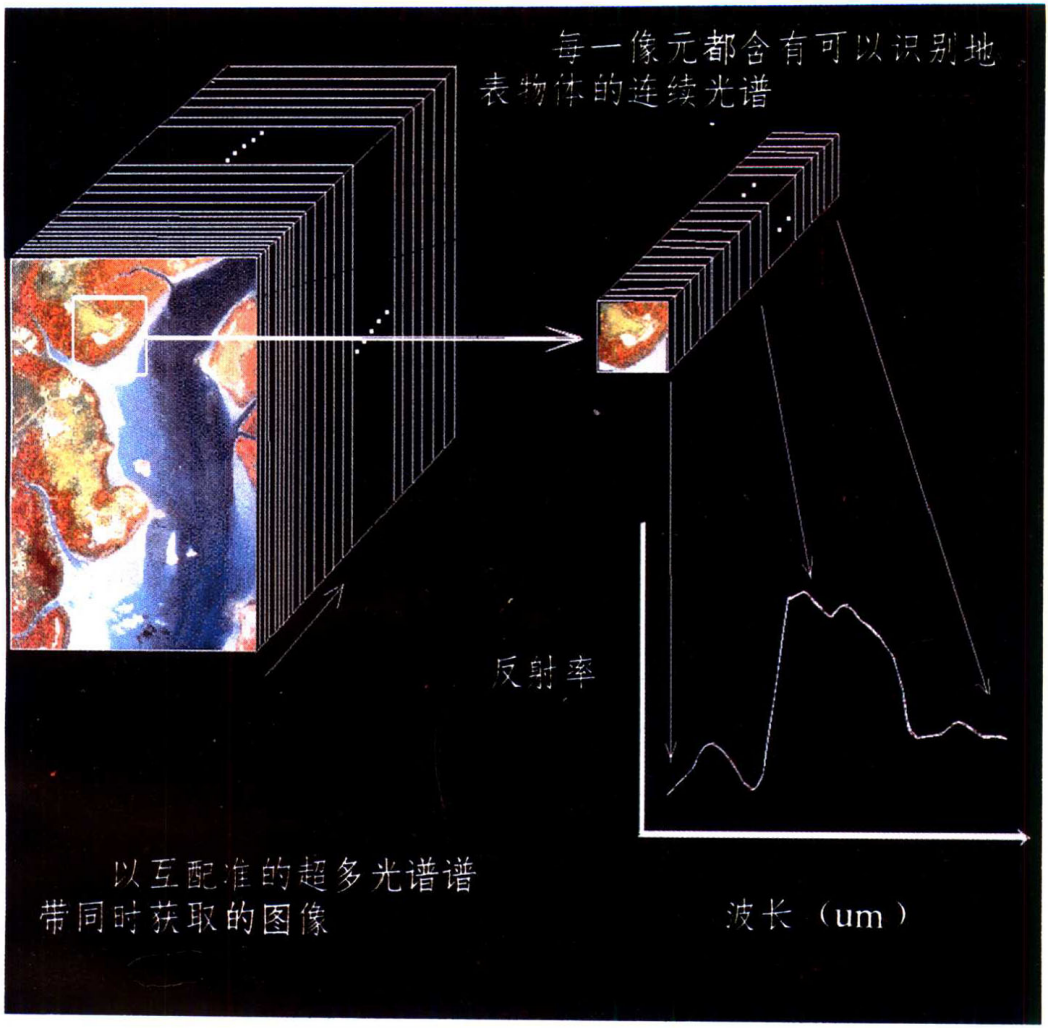


Ⅱ—20巴丹吉林沙漠地貌图

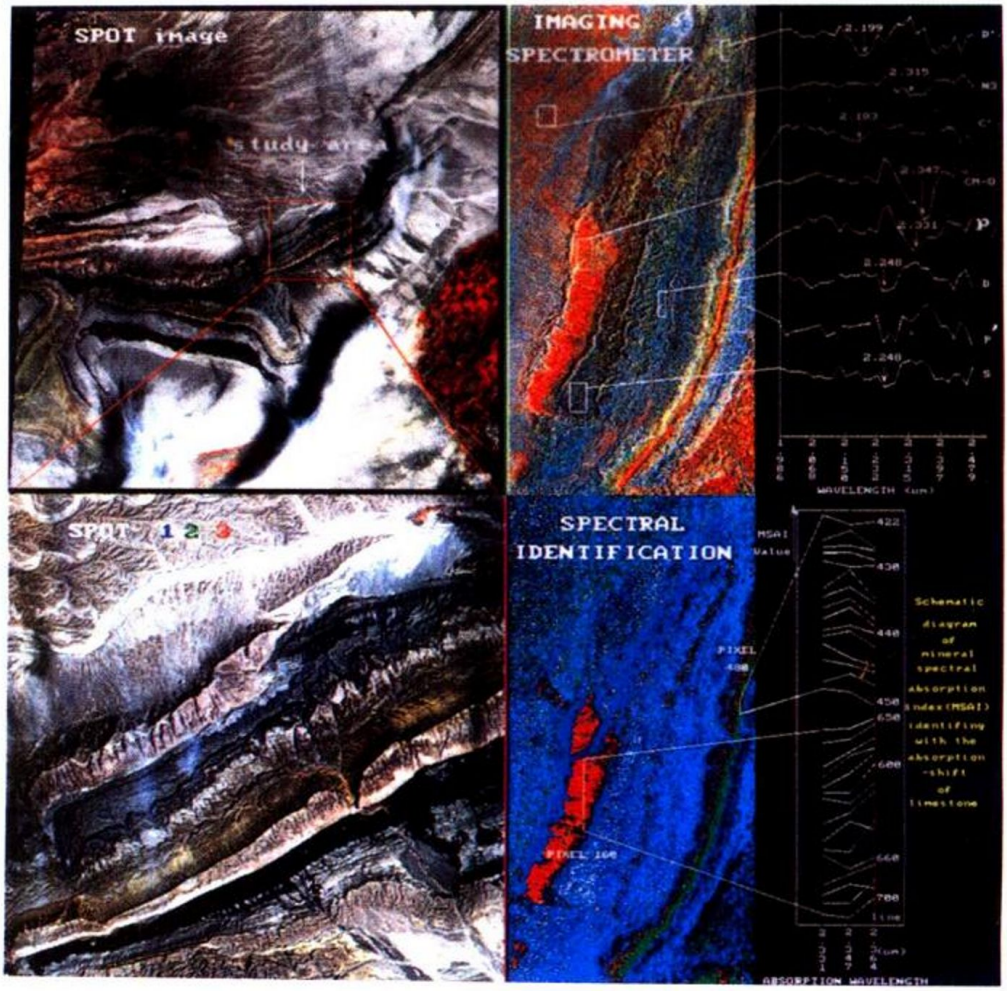
Ⅱ—21全中国范围的十天植被指数图



Ⅱ—25 中国科学院上海技术物理研究所 71 通道成像光谱仪可见光的 30 个通道图像。(每幅图像下方的数字为各波段的中心波长)

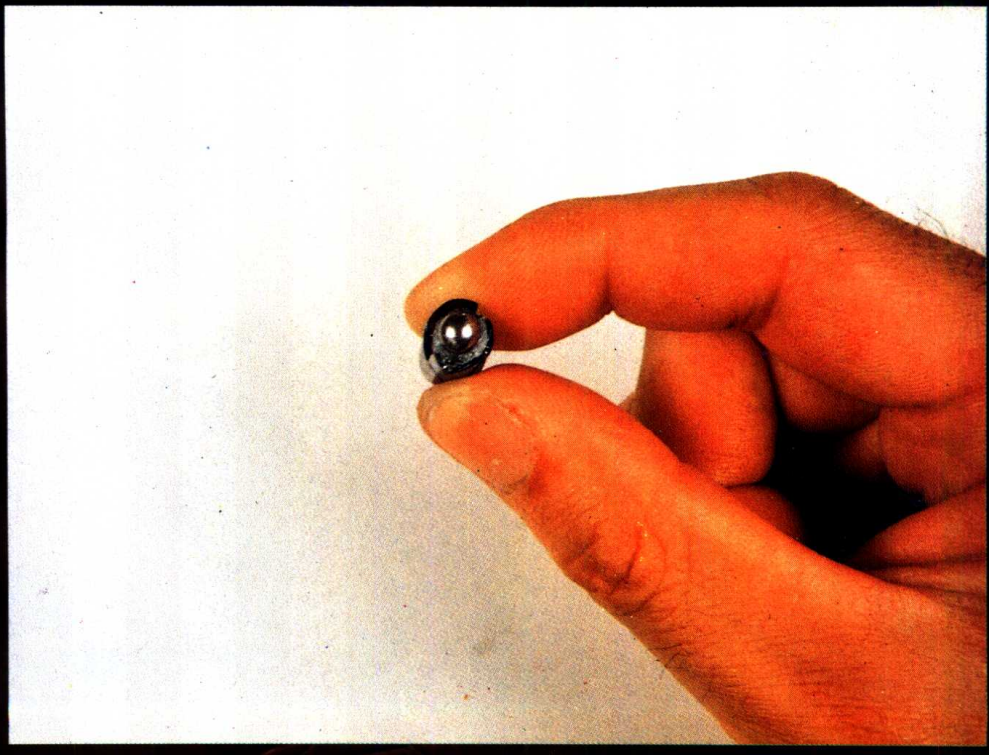


Ⅱ—24 成像光谱仪信息的谱像合一示意图。



Ⅱ—26 成像光谱图像与 SPOT 图像对比。右上图为光谱信息的提取，CM—O 和 P 曲线为寒武—奥陶和二叠系的灰岩其主要的吸收特征仅相差 16nm。右下图为根据光谱吸收处理的图像，寒武—奥陶与二叠系的灰岩明显地得到了区分。

Ⅳ—2 (a)



Ⅳ—2 (b)