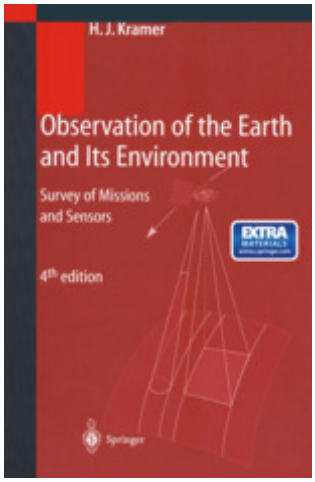

Observation of the Earth and its Environment – Survey of Missions and Sensors

Author: Herbert J. Kramer

(4th edition 2002, pp. 1514, 522 illustrations, 857 tables, Springer Verlag, ISBN: 3-540-42388-5)

Motivated by his employment at the German Remote Sensing Data Center (DFD) of the German Aerospace Center (DLR) and driven by his desire to accumulate a complete as possible compendium of all Earth observation missions conducted so far Dr. Herbert J. Kramer started his survey of missions and sensors in 1989). He was so successful in doing this, that over the years, his collection grew into a book published by the renowned Springer Verlag and was high in demand that a 4th edition was finally completed in 2002. This was also the year of Herbert Kramer's retirement from DLR. The 4th edition of "**Observation of the Earth and its Environment – Survey of Missions and Sensors"** was sold out after a couple of years, no reprint was provided by Springer.

In 2003, Herbert Kramer received an invitation from ESA to put the mission descriptions of the 4th edition on the ESA Earth Observation Portal (eoPortal) with the opportunity to update the actual status of the ongoing missions and to add new ones.

The eoPortal aims to open the door to the world of Earth Observation resources by giving access to a large variety of information and services and aims to provide a single access point for Earth Observation.

The eoPortal "Satellite-Missions" page was so successful that Herbert Kramer has expanded and updated his Earth and environment observation descriptions since 2003 up to this date (May 2015), thus providing a unique, unprecedented overview of almost all globally flown Earth observation missions so far, complete with spacecraft designs and instrumentation as well as mission goals and peculiarities.
Having spent over 30 years in space operations myself, I have to say this data base contains a wealth of essential information "at your fingertips" and covers all aspects of Earth observation techniques ranging from spacecraft/instrument design to the final data products. As far as I could research – not even NASA has such a complete data base, covering also international projects.
This book review is written to acknowledge the tremendous effort invested by Herbert Kramer over the years and to spread the information to a wider audience of interested space/earth-observation enthusiasts.

To find your way to the appropriate eoPortal pages the following basic links are provided:
Observation of the Earth and its Environment – Survey of Missions and Sensors (4th edition)

Directory (TOC)
The Directory /Table of contents (TOC) of the (expanded) 4th book edition can be viewed at
https://directory.eoportal.org/c/document_library/get_file?folderId=238965&name=DLFE-2412.pdf
The sheer size of the entries is overwhelming and gives a good impression of the effort invested over more than 25 years by Herbert Kramer, requiring competence and endurance to keep abreast with the ever increasing new developments.
>History (Mission Descriptions), Glossary and Acronyms
History (Mission Descriptions), Glossary and Acronym chapters of the 4th edition can be found at:
https://directory.eoportal.org/web/eoportal/kramer
In the History (Mission Descriptions) part you will find the description of more than 2000 spaceborne sensors as presented in the 4th edition.

ESA eoPortal (May 2015)
> EO Satellite Missions Data Base
https://directory.eoportal.org/web/eoportal/satellite-missions/s
Categorized from A to Z and by Space Agency, there are over 600 in-depth articles of satellite missions from 1959 to 2020. The missions database can be filtered by a range of criteria using the Search Missions filter drop down menus, enabling you to find specific missions easily.
> EO Airborne Sensors
https://directory.eoportal.org/web/eoportal/airborne-sensors
See the complementary database of Airborne Sensors containing detailed information of almost 40 flight campaigns from the last 20 years.
> EO Earth Observation Events
https://events.eoportal.org/web/eoportal/events
This database is constantly being updated with the latest mission details and information, including upcoming EO missions.

The eoPortal managers and Herbert J. Kramer welcome feedback and any new information on missions which can be submitted via the contact page **of the eoPortal**.

The above mentioned eoPortal articles are based on the 4th edition of Herbert J. Kramer's "Observation of the Earth and its Environment" book.