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ASI ISS SCIENCE DIRECTORY: ARCHIVING AND DISSEMINATING THE RESULTS OF THE
ITALIAN SPACE AGENCY SCIENCE ON THE INTERNATIONAL SPACE STATION

Abstract

Pursuing the ASI/NASA Memorandum of Understanding for the MPLM logistic modules , the Italian Space Agency has access to the International Space Station utilization resources. In this frame, ASI has carried out over the years a thorough ISS Utilization programme including on board scientific experiments , mostly in the field of the Life Sciences. Since 2001, ASI have developed and operated on board 23 payloads and sponsored 66 on-board investigations. Further payloads and investigations are currently being developed or implemented to be demonstrated on board in the near future. The ASI Utilization Program have involved so far more than 130 principal and co-investigators. These investigations produced a large amount of data of different categories, such as digital information, video and photo recordings, biological samples, tissues and other physical materials. Eventually, the results of the investigations have been subject of publications on scientific journals and congress proceedings. ASI has recently developed a web-based portal collecting comprehensive information relevant to ASI Utilization outcomes, including experiments overview, raw science data, available papers and references to all known dissemination products following up with the on-orbit investigations. The tool, named “ASI ISS Science Directory”, has been developed and supplied by Kayser Italia S.r.l., the ASI provider of industrial services for supporting the national utilization of the ISS. The portal, built on a set of integrated databases, allows external users to perform different typologies of queries by means of a web interface. Specifically, it provides information on the investigation name, scientific discipline, reference to the Principal Investigator, description of the publications associated to the investigation, with reference to the journal or proceeding and a link to the publisher web site. Upon individual registration to the portal, the user can upload publicly available papers, reference to publications and other information relevant to investigations performed on the ISS under ASI sponsorship. The registered user can also receive updates on new posted information and news about future events providing opportunities for dissemination and publication. Moreover, information on the data produced by each investigations are available, such as category, quantity, date of collection, increment and, as applicable, crew member demonstrating the investigation on board. Reference to the data custodian entity is also provided. The present paper describes the content of the portal and the features available for the user. Finally, it reports the up-to-date statistics on investigations, publications and archived data.