

IAF HUMAN SPACEFLIGHT SYMPOSIUM (B3)
Utilization & Exploitation of Human Spaceflight Systems (3)

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IMPACT OF THE INTERNATIONAL SPACE STATION RESEARCH RESULTS

Abstract

The International Space Station (ISS) facilitates research that benefits human lives on Earth and serves as the primary testing ground for technology development to sustain life in extreme environment of space. To date, investigators have published a wide range of ISS science results, from improved theories about the creation of stars to the outcome of data mining “omics” repositories of previously completed ISS investigations.

Because of the unique microgravity environment of the ISS laboratory and the multidisciplinary and international nature of the research, analyzing ISS scientific impacts is an exceptional challenge. As a

result, the ISS Program Science Forum (PSF), made up of senior science representatives across the ISS international partnership, uses various methods to describe the impacts of ISS research activities. One method used to evaluate the significance of scientific output from the ISS, beyond the often-used journal impact factor, is to track the article citations and the Eigenfactor of journal importance across the ISS partnership. From 1999 to October 1, 2018, the top 100 science journals as ranked by Eigenfactor (and reported by Clarivate Analytics®) have published 165 articles from ISS research.

Another method the PSF uses to describe ISS impacts includes the use of visualizations of scientific publication data to show the ISS research influence on traditional scientific fields, its global reach, and the benefits to people across the globe.