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Title: Testing non-invasive biometric sensors in parabolic flight as a proof-of-concept for monitoring well-being while performing mission tasks

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Category (1st Choice): Technology & Technology Testing

Category (2nd Choice): Microgravity Sciences

Abstract:

Biometric parameters such as heart rate, heart rate variability, respiration rate and heart rhythm are important markers of health for astronauts and spaceflight participants. Non-invasive, lightweight biometric sensors are desirable to minimize any interference with astronaut activities. In this presentation, the International Institute for Astronautical Sciences describes its testing of the Stark Industries ISANSYS Lifetouch Patch in parabolic flight, and its subsequent deployment as a non-human-tended payload in suborbital flight, and future plans for deployment as a passive biomonitor for astronauts and spaceflight participants on suborbital and orbital flight.