**Experiments**

During the first experiment of this project, software developed at the University of Memphis and UCF’s Philosophy Department analyzed astronaut reports. E2i developed a mixed reality simulated environment to induce experiences like those described by astronauts in space flight. Researchers at Prodigy utilized the space simulator while implementing a neurophenomenological experiment during the experiment to evaluate the experience of AWCH. This experiment showed that the simulation did induce the experience of AWCH for many and there were associated physiological responses of experiences compared to non-experiencers.

The second experiment sought to determine if only visuals were enough to induce the experience of AWCH. A new simulation was created that used Northrup Grumman’s 120°, 6 foot tall Virtual Immersive Portable Environment (VIPE). A neurophenomenological approach was employed.

**Results**

Results from both experiments showed that simulation is capable of eliciting feeling of AWCH and that several physiological markers are able to differentiate between experiencers and non-experiencers of AWCH. The higher a person rated in religious and spiritual practices, the more likely he would experience AWCH. A neurophenomenological approach is effective at evaluating complex constructs of affective states.

**Research Applications**

- Understand astronauts’ experiences during space flights for future expeditions such as long duration and commercial flights
- Understand physiological markers of awe and wonder
- Provide valuable entertainment information for Kennedy Space Center, museums, amusement parks, simulations for demonstrations, and video games