PROJECT AWE: Capturing the Experience of Totality

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Background

- The Total Solar Eclipse (TSE) is considered to be one of the most awe-inspiring and immersive nature events.
- Phenomenological research on the experience of totality has indicated the range of intense emotions experienced within a short period of time - Sense of wrongness, Primal fear, Awe, Connectedness, Euphoria, Desire to repeat (Russo, 2012).
- The central component of the totality experience is awe.
- Laboratory research using fMRI technology has shown distinct changes in brain activity when people are shown awe-inspiring images.
- Technology now exists to capture brainwave activity in the field using EEG headsets.

Below (left) is a comedic depiction of what we experience during totality, drawn by eclipse chaser Bill Kramer over a decade ago. The tech now exists to show what eclipse chasers will experience, just as Bill predicted. Below (right) is the webpage of a similarly designed study with marathon runners by the co-investigator.

Project AWE In 2024

- Project AWE will be the first study that will capture biosensory data from a small number of participants as they experience the total solar eclipse of April 2024.
- Ten participants will be purposively selected to wear the EEG headsets and EKG chest strap to record sensory data as they observe the total solar eclipse from 1st to 4th contact. The research’s focal point is on the totality experience, lasting approximately 4 mins 26 seconds.
- Brief questionnaires will also be completed before and after totality (but not during), to quickly capture subjective emotions as they occur.
- Sensory data will be recorded, downloaded and then analysed using purpose-written program that analyses and interprets sensory data.
- This study will help us understand the key changes in areas of the brain we experience the intense emotions of totality.

We know that the Annular Solar Eclipse (ASE) does not elicit awe and personal transformation like the TSE. However, the ASE gives us an opportunity to test the research protocol and refine processes for Project AWE in 2024.
Uniquely, for the ASE in October, we have opted to share the data capture during this pilot LIVE!

Project AWE - the Pilot (October ASE):

- Five participants will be purposively selected to wear the EEG headsets and EKG chest strap to record sensory data as they observe the whole ASE, with the focus on annularity lasting 4 min 55 seconds on location at the Solar Eclipse Village in Garner State Park.
- Brief questionnaires will also be used, to determine the least-intrusive and most efficient measures.
- Three of these participants will have their recordings transmitted to the project website, with a 7-second delay that may be impacted by poor phone reception.
- The project website will be shared on the Moonshadow Marquee main screen, with a live interview with slooh.com occurring soon after annularity to discuss the project.
- The protocol will be refined to minimize issues for PROJECT AWE IN 2024.