

Joint Exploration of the Twilight Zone Ocean Network (JETZON)

Decade Programme

© Marley Parker

Lead Institution

National Oceanography Centre UK

Contact:
Dr Adrian Martin
adrian.martin@noc.ac.uk
Jess Denham
jessica.denham@noc.ac.uk

JETZON ALREADY LINKS TO

- 23 projects
- 2 SCOR working groups
- 1 Ocean Decade Contribution

DECADE CHALLENGES ADDRESSED

CHALLENGE 1: Understand and beat marine pollution

CHALLENGE 2: Protect and restore ecosystems and biodiversity

CHALLENGE 3: Sustainably feed the global population

CHALLENGE 4: Develop a sustainable and equitable ocean economy

CHALLENGE 5: Unlock oceanbased solutions to climate change

CHALLENGE 7: Expand the Global Ocean Observing System

OCEAN BASINS

North Atlantic South Atlantic North Pacific South Pacific Indian Arctic Southern



@Ocean_JETZON
#oceantwilightzone

Summary

JETZON focuses on the ocean region spanning globally from 200m to 1000m depth. This contains the largest and least exploited fish stocks of the world's oceans. The Twilight Zone also plays a major role in global chemical cycles and the storage of carbon dioxide. However, it is poorly understood. This ignorance is dangerous. The Twilight Zone is under multiple stresses, including fishing, deep-sea mining, climate change and proposed carbon dioxide mitigation methods. With the majority of the Twilight Zone outside national boundaries, its size and inaccessibility means that its study is only possible through coordinated international action. This is the aim of JETZON.

Duration: 08/06/2021 - 31/12/2030

Priority Activities (first two years)

- Establish a range of linked projects covering the full global scope of the Twilight Zone
- Develop the next generation of Twilight Zone scientists with an emphasis on multi-disciplinarity, improving access from all backgrounds and nations

"Below the sunlit surface, the Twilight Zone plays a global role storing carbon and recycling nutrients. Home to organisms from bacteria to giant squid, the research vital to its sustainable development requires a world-spanning effort, harnessing all our skills and technology."

Dr Adrian Martin

