Irish Meteorological Society Annual General Meeting, 27th October 2022

Secretary's Report October 2021 to September 2022

The Society's activities during the first half of the reporting year were affected by Covid, with talks taking place by zoom until March when in-person talks resumed. Subsequent to this most talks were in person, but some were on zoom, attendance at the in-person talks has been disappointing despite an increase in membership numbers.

The IMS committee met remotely on 6 occasions. Current paid membership is 110, which is an increase of 30 over 2020 and 2021.

8 lectures were held since the last AGM, recordings are available on the IMS website: https://irishmetsociety.org/talks/

September 29th 2022 Professor Peter Thorne spoke on the main takeaways from the 6th IPCC Assessment Report.

June 23rd 2022 "Weather wanderings of an Irishman from around the world" by Dr Eddy Graham In this easy-going talk, Eddy brought us on a personal journey, how the love of the Irish weather and its landscape, experienced as a child in Ireland, helped him make progress on the wider international field of meteorology and climatology.

May 26th 2022. Airwaves from the Tong-Hunga volcanic eruption bu Sr Stephen Burt. The violent eruption of the large subterranean volcano Tonga—Hunga Ha'apai in the south Pacific Ocean on 15 January 2022 blew an eruption cloud at least 40 km into the atmosphere and generated a pressure wave which radiated outward from the volcano at close to the speed of sound. This pressure wave was detected across the entire globe, and was first detected in the British and Irish Isles some 14 hours after the eruption. This presentation discusses the event, the largest of its kind since the cataclysmic eruption of Krakatoa in 1883.

April 28th 2022. Compound Events: Are We Truly Prepared? By Professor Fiachra O'Loughlin Extreme events are common across the globe and with climate change these events may become more destructive. Historically, these extreme events have been studied as univariate problems with compounding factors not addressed or ignored. This has potentially major consequences when we look at the impacts or try to prepare for future events. This leads to the question are we truly prepared for our future weather events?

23rd March 2022 WMO day Talk: Early Warning and Early Action by Evelyn Cusack The theme of WMO day. March 23rd for 2022 was "Early Warning and Early Action. Hydrometeorological and Climate Information for Disaster Risk Reduction", the talk by Met Éireann's Evelyn Cusack addressed this theme.

24th February Ensemble Forecasting: Probabilities, Chaos and Butterflies" Dr Alan Hally, Met Éireann In his talk Alan brought us through the development of ensemble prediction systems from the butterfly effect to the Met Éireann Irish Regional Ensemble Prediction System (IREPS), showing how ensembles can be used operationally to improve warnings of severe weather, using storm Eunice a case study

25th November 2021. Dr Eadaoin Doddy Clarke spoke on the prevalence of low-wind-power events in Ireland.

Renewable energy is continuing to grow in Ireland. Energy systems will rely on the intermittent energy from renewable sources. These events are especially challenging when electricity demand is high, for example during winter. It's important to quantify the duration and frequency of low-power-events, so that we can better manage electricity supply in a future with more wind energy.

21st October 2021 Dr Walther Camaro and Dr Ned Dwyer from MaREI, editors of **the Status of Ireland's Climate 2020** gave an overview of the synthesis report of Observations of the Essential Climate Variables in the Irish Climate System, which is part of the Global Climate Observing System

Séamus Walsh,

Secretary,

Irish Meteorological Society