Janice Stargardt is Professorial Research Fellow in Historical Archaeology and Geography in the Department of Geography, University of Cambridge and Fellow and Director of Studies in Sidney Sussex College, Cambridge. She directed excavations in Songkhla Province of South Thailand for 27 years and in the time discovered an ancient capital city, Satingpra, seven dependant sites of industry and trade as well as an extensive canal and tank system covering almost 900 sq km. Through selective coring, she has been able to recover data on the creation, expansion and contraction of that water system from a pre-urban phase in the 4th-6th century, to successive phases in the 6th-9th, 9th-12th and post-12th centuries.

She has situated the fluctuations of the Satingpra water system within the larger context of data on climate change in the Indian Ocean and the South China Sea, 5th – 15th centuries. In particular, she has been studying ENSO data revealing long-term trends of declining rainfalls in this period, punctuated by extreme pluvial events. In this perspective she has challenged this orthodox position that irrigation systems were designed to cope with aridity, by showing that the Satingpra system also managed to cope with extreme pluvials recorded in those centuries. She compares the sedimentation data retrieved by her coring programme with those gained from the Angkor irrigation system in Cambodia. She also considers the possible role of 'volcanic forcing' in relation to the record of ENSO events.

This body of research data, built up over a period of some forty years would benefit from a significant extension to the programme of digitization of textual and visual data.