STATISTICS FOR THE AUSTRALIAN RAIN TECHNOLOGIES

Since 2009, Professor Ray Chambers has been working with Australian Rain Technologies on research aimed at developing an economically effective and environmentally friendly process for increasing the amount of rain that falls across Australia. The ATLANT technology uses an array to generate negatively charged ions which are then, via wind uplift, transferred to the cloud layer, with the aim of encouraging the creation of negatively charged particles and eventually the formation of rain droplets. If successful, the technology will provide low cost and low energy rain enhancement at target locations around Australia. Since it is impossible to directly measure the extend of droplet formation in clouds due to the presence of the charged ions, Ray's role has been to use statistical methods to indirectly measure the degree of success of the project by assessing the increase in actual rainfall following operation of ATLANT. His work has led to the development of new non-parametric bootstrapping techniques for spatio-temporal rainfall data that have so far shown a 90% chance of increased rainfall, with an estimated average 10% increase, in three successive annual trials of ATLANT near Adelaide.

Related video

For further information, contact Professor Ray Chambers.