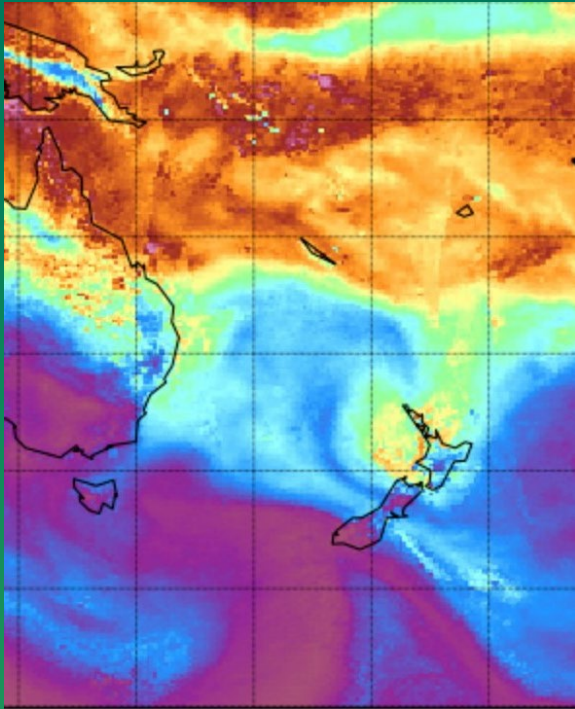


# NZ Atmospheric River January 2023



Credit : CIMSS

Generated by convective activity associated with an Atmospheric River, heavy rainfall occurred in Auckland on 27<sup>th</sup> January 2023. Event totals of over 250mm were widespread with over 40mm in 15 minutes at the peak of the event. Four fatalities occurred. Over 350 homes had severe damage, and another 1000 had partial damage. Infrastructure impacts included the closure of, and flooding of Auckland Airport terminal. There was limited public information throughout the event which led to significant criticism. The case-study provides great learnings for risk appetite, process, training, roles and responsibilities, and planning for unusual, but credible natural hazard events. The information listed below has been sourced from the official review, media (print and online), and publicly available data. Five of the 25 learnings covered are shown below.

Event	Impact	Learning areas
The communication process did not move away from 9-5 business as usual.	The declaration of a state of emergency was delayed for the BAU communication approval. Its role in unlocking resources was not understood. (NZ Herald)	Training Emergency plans and testing Policy and planning
NZ Transport social media staff. The regular shift finished at 8pm and the worker went home with no additional rostering. (Review)	The impact of this social media role in a civic emergency wasn't understood.	Emergency plans and testing Business continuity Communication
Large numbers of office workers were working from home (TVNZ) and event happened on a Friday	Reliance on team that had not worked together. Declining availability of resources during event (NZ Herald)	Policy and planning Risk appetite Culture and behavior
Communication sent to a person with the same name as the Mayor (NZ Herald)	Severity of the situation was not understood by those in authority.	Policy and planning Culture and behavior Emergency plans and testing Training
A superstar in town. Elton John was playing Eden Park on 27th January with the concert cancelled after 25% of the audience was already in place. (NZ Herald)	11,000 people stranded	Physical risk assessments. Policy and planning

Resources	Associated Services
<ul style="list-style-type: none"> <li>Official review</li> <li>Rainfall data – official</li> <li>Rainfall data – unofficial</li> <li>Photographic evidence</li> <li>Media articles</li> <li>Academic papers</li> <li>Economic assessment</li> </ul>	<ul style="list-style-type: none"> <li>Flood warning systems</li> <li>Community education</li> <li>Dam safety programs</li> <li>Climate Disclosure</li> <li>SFARP and ALARP</li> <li>Directors' duties</li> </ul>
Value to managing risk in...	Useful to
<ul style="list-style-type: none"> <li>Public Safety</li> <li>Critical Infrastructure</li> <li>Governance, risk, and compliance</li> <li>Climate disclosure</li> <li>Critical Infrastructure</li> <li>Systems and processes</li> <li>Engineering</li> </ul>	<ul style="list-style-type: none"> <li>Regulators</li> <li>Insurance</li> <li>Dam owners</li> <li>Critical infrastructure owners</li> <li>Engineering</li> <li>Disaster &amp; emergency managers</li> <li>Boards</li> <li>Aviation</li> </ul>