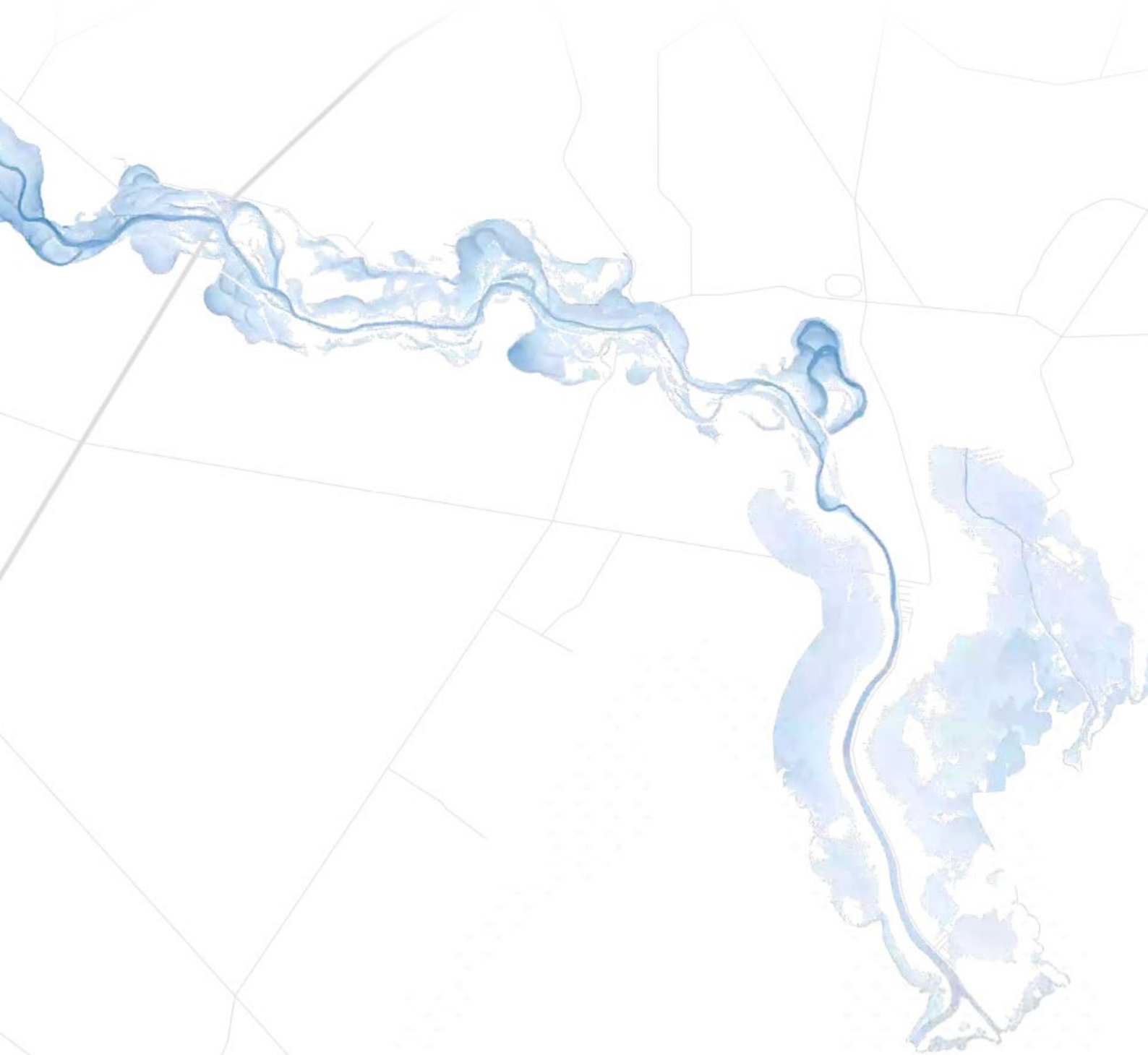
FLOODING IN SOUTHERN ALPS OF CANTERBURY, NEW ZEALAND

ICEYE
FLOOD SOLUTIONS

FLOOD BRIEFING SERIES
WITH ICEYE SAR SATELLITE CONSTELLATION DATA



AREA OF FLOODING BY LOCATIONS

ASHBURTON
30 KM²

HINDS
27 KM²

SELWYN
11.4 KM²

EVENT OVERVIEW

A TOTAL AREA OF 68.4 KM²

of flooding were observed in Canturbury, New Zealand

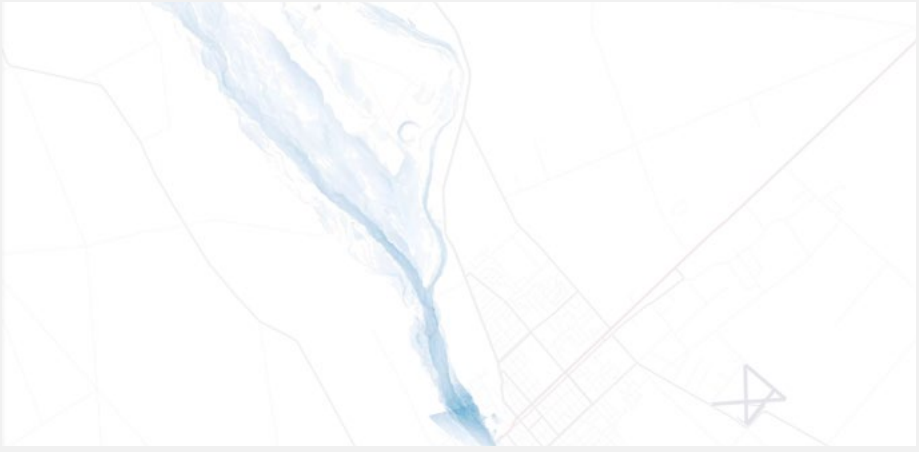
AVERAGE WATER DEPTH OF 65 CM

was estimated in the flooded area in Ashburton.

TORRENTIAL RAINS CAUSED WIDESPREAD FLOODING IN THE CANTERBURY REGION OF THE SOUTH ISLAND, NEW ZEALAND

Up to 400mm of rain[1] fell across the Canterbury region between May 27th and May 31st, causing the Ashburton, Hinds, and Selwyn rivers to rise quickly[2]. This resulted in widespread flooding and significant damage to property and roads. Three month of rain in just three days[3] overwhelmed the Hinds, Ashburton, and Selwyn Rivers. These rivers are a rare geologic feature known as braided rivers and carry large amounts of sediment from the mountains to the sea in wide, winding paths. Large amounts of rain quickly expand these rivers across their wide courses.

Using SAR images of the impacted area combined with auxiliary data, ICEYE produced an analysis capturing the extent and depth of the flooding. According to ICEYE, a total area of 27 km^2 was inundated in the Hinds area, 11.4 km^2 in the Selwyn area and 30 km^2 in the Ashburton area. The average water depth of the flooded area in the City of Hinds was around 31 cm. Meanwhile, in the hamlet of Selwyn Huts, that average flood depth rose to 40 cm. And in Ashburton, it climbed all the way to 65 cm.



Visualization of ICEYE's flood analysis from Ashburton, New Zealand

References

[1] https://www.trtworld.com/asia/new-zealand-military-deployed-to-evacuate-hundreds-from-severe-floods-47124

[2] https://www.rnz.co.nz/news/political/443795/canterbury-flooding-adverse-event-declared-in-region

[3] https://www.nzherald.co.nz/nz/weather-what-caused-the-canterbury-flood-three-questions-answered

BENEFITS FOR INSURANCE & GOVERNMENT

MORE EFFICIENT **DEPLOYMENT OF RESPONSE ASSETS**

SUPPORT MORE **ADVANCE PAYMENTS**

EXPEDITED **INDIVIDUAL ASSISTANCE**

EQUITABLE AND **FAIR** DISASTER RELIEF

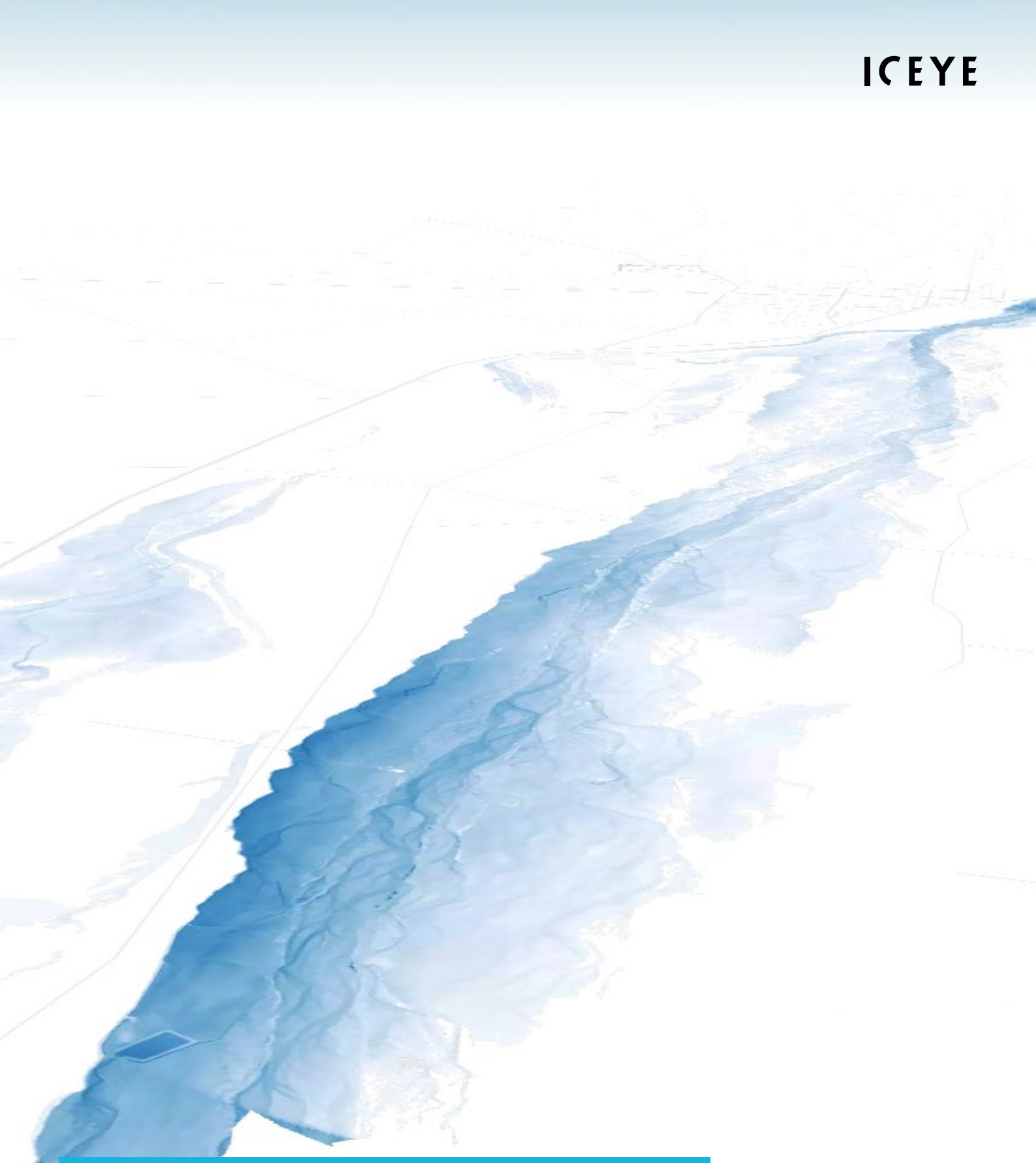
REVOLUTIONIZING THE **CLAIMS PROCESS**

REDUCE FRAUD

ICEYE'S 24/7 FLOOD MONITORING SOLUTIONS SUPPORT GOVERNMENT ORGANIZATIONS AND THE INSURANCE INDUSTRY IN RAPID RESPONSE TO FLOODING EVENTS

- (Re)insurers and government organisations can estimate the total insured and uninsured losses in a matter of **hours or days, rather than weeks or months**
- **Disaster relief and emergency funds can be prioritized** into the worst-hit areas and adjusters directed to locations that could not be instantly resolved
- An automated, pre-emptive impacted customer outreach process can be initiated, **improving claims excellence levels** through enhanced contact speed, contact ease and claim execution helping people to get back to normal quicker
- **Emergency accommodations** can be proactively and accurately booked and assigned to impacted customers, while also taking into account local Covid-19 restrictions.

ICEYE



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