

California researchers re-create forest blazes

By Rory Carroll, Guardian

The doors clang shut, casting the laboratory into gloom, and the scientists don goggles, yellow helmets and flame-resistant jackets. Two crouch behind computers, readying measurements. Another picks up a blowtorch. The rest stand back.

Wood shavings and dry chaparral, which resembles hay, line the bed of a 30ft wind tunnel. Green shrubs, leaves and branches sit on a shelf above. The replica forest is ready for immolation.

“Computers!” shouts Jeanette Cobian, the lead engineer, signalling the start of the experiment. “Ignition!”

The scientists have just simulated a “crown fire”, in which flames leap from treetop to treetop, a spectacle firefighters dread. The computers recorded heat of more than 800C (1,472F).

“We want to know when fire will transition to a crown, and if so, how fast will it spread,” said Cobian, a mechanical engineering PhD student at the UC Riverside.

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