

Moel y Gerddi 29-02-2012.
Impact of fire lighting on thatch temperature.

Equipment:

TESTO 875 thermal imaging camera.

Equipment parameters:

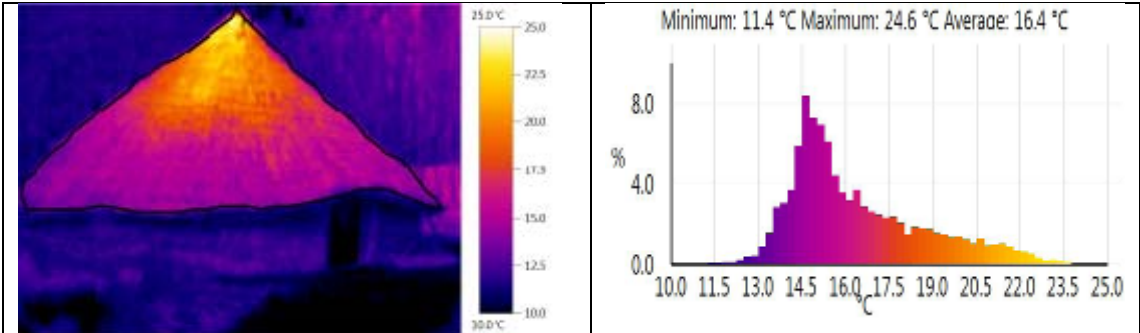
Emmissivity set to 0.95

TRefl reset after every photograph using tin foil marker.

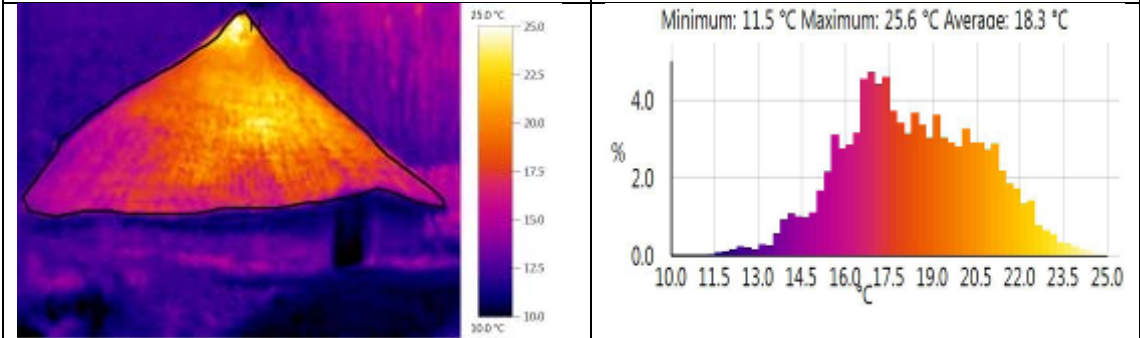
Weather conditions:

Overcast until 11:37AM. Temperature 13.3 C and 69% RH. Little to no wind.

9:11AM – before fire was lit	
9:47AM	<p>Minimum: 9.6 °C Maximum: 13.8 °C Average: 11.9 °C</p>
10:10AM	
FIRE LIT	
10:12	
	<p>Minimum: 10.2 °C Maximum: 19.4 °C Average: 14.3 °C</p>
10:21	<p>Minimum: 10.3 °C Maximum: 25.5 °C Average: 14.3 °C</p>

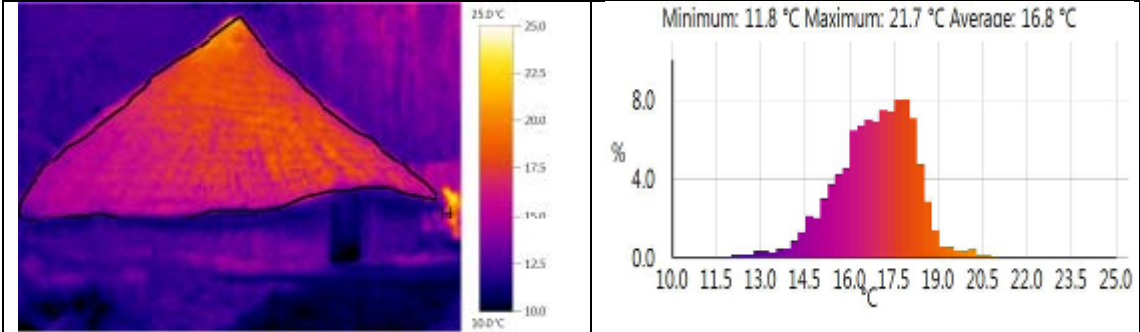


10:30

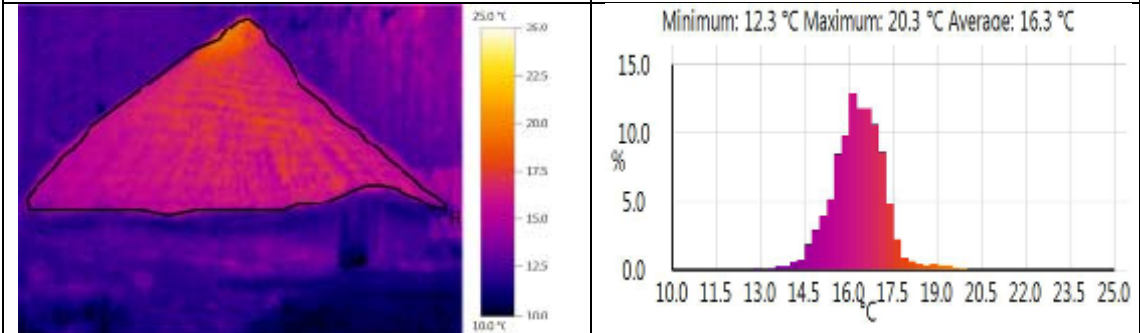


Roof temperature reaches maximum and falls from this time, even though the fire remains lit inside the house. The reason for this drop is unclear but may relate to the evaporation of moisture from the surface of the roof.

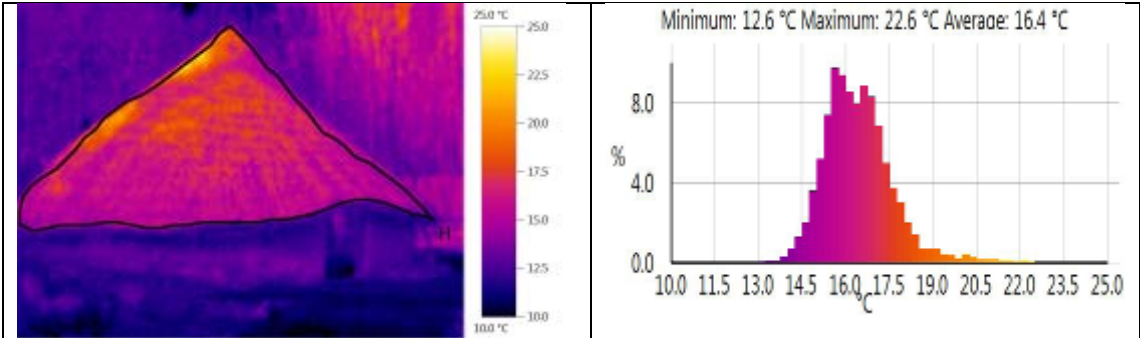
10:40



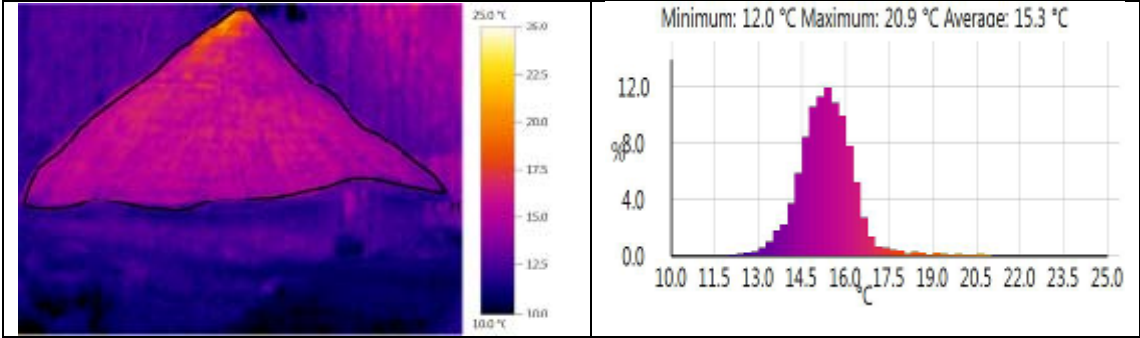
10:49



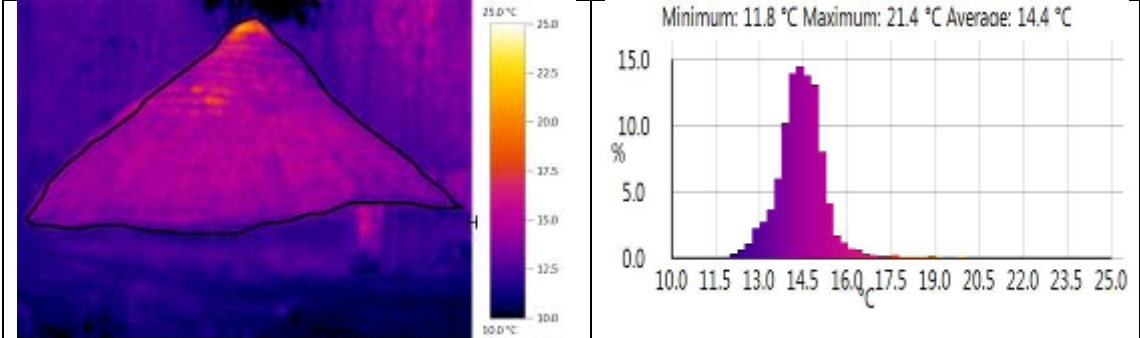
10:59



11:09

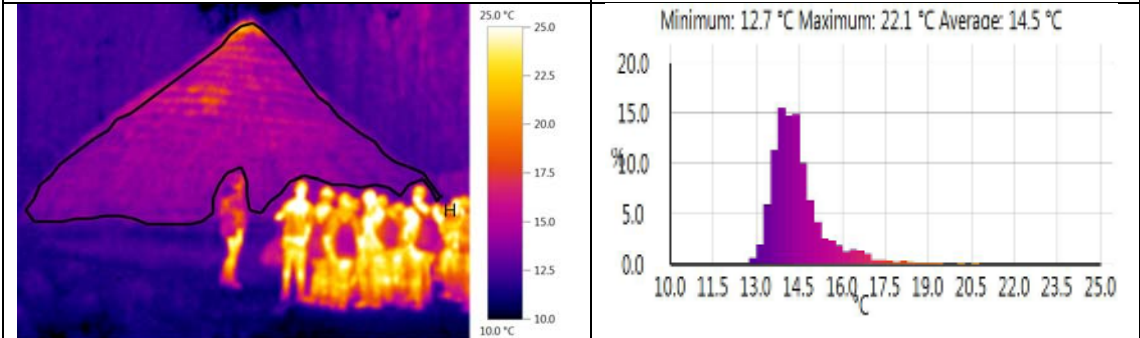


11:19



The temperature across the surface of the roof is now little higher than it was before the fire was lit – despite the fire continuing to burn inside the house.

11:29



11:37

Direct sunlight on south (left face) of house

11:39

