



national science week

Susie Halliday, School of Geography & Environmental Studies, UTAS *“Red Trees” – using infrared radiation to study vegetation*

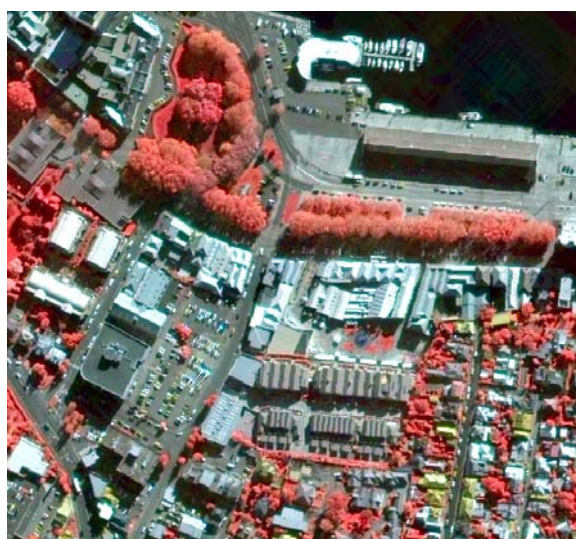
Did you know digital cameras can detect infrared radiation? If you take a picture of a remote control while a button is pressed, your photo will show a red ring where the infrared bulb is at the top of the remote control!

At the University of Tasmania, I did an Arts/Science degree, studying geography and geology subjects as my science component. This meant I learnt all about how the earth works, from how a mountain is formed to the processes that lead to it eventually becoming the soil in our backyards.

I am currently studying what impacts might be changing in vegetation in Glenorchy (Tasmania), using aerial photographs and satellite imagery.

I am doing this so that it is possible to predict what might happen in the area in the future under different circumstances such as a decrease or increase in average rainfall. I am looking at aerial photographs and satellite images from the past 42 years to see how the area has changed as well as the previous fires in the area, rainfall, vegetation types, geology, topographic moisture and the locations of buildings.

The satellite images I use to look at the areas I’m studying show the amount of infrared being emitted by objects on the ground. This is done because living plants and trees emit a lot of infrared so I can see areas where there is a lot of vegetation which might not be as easy to see in the photographs. The way that the image is shown, all the trees I see come up as bright red!



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