

Interpreting the Fire Temperature RGB



Product Benefits

- Useful for fire monitoring during both day and night, even for fires that are much smaller than the pixel size.
- Provides qualitative information on fire intensity (temperature) — cooler fires appear more red, hotter fires appear yellow to white.
- During the day, ice and water clouds are seen in the image in different colours (former have green and latter have blue shades).



Product Limitations

- Fires are seen only in cloud-free areas.
- Smoke is usually not detectable with this RGB (unless very thick with larger particles).
- Burnt areas are not well seen.
- Clouds are not seen at night.
- Dry regions and hot land surfaces may both appear in red hues.
- Red component can saturate at a relatively low temperature, false alarms can appear as red pixels.

Ref: <https://user.eumetsat.int/resources/user-guides/fire-temperature-rgb-quick-guide>



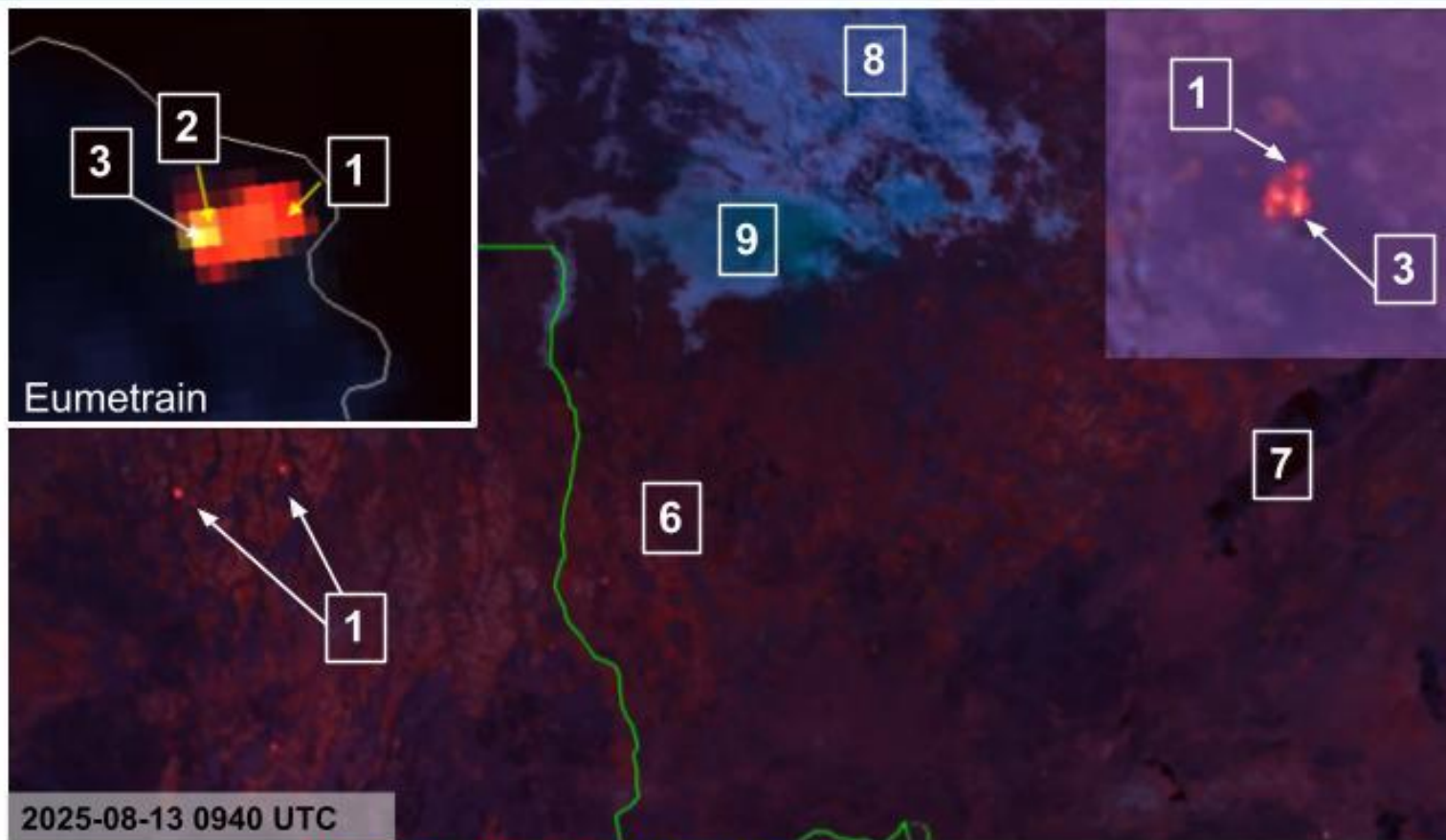
Quick Guide



Fire Temperature RGB

Interpretation

- 1 Warm fire, Hot spot
- 2 Very warm fire
- 3 Hot fire
- 4 Extreme intense fire
- 5 Burn Scars
- 6 Land surface (Day/Night)
- 7 Water, snow, ice
- 8 Water cloud (day)
- 9 Ice cloud (day)

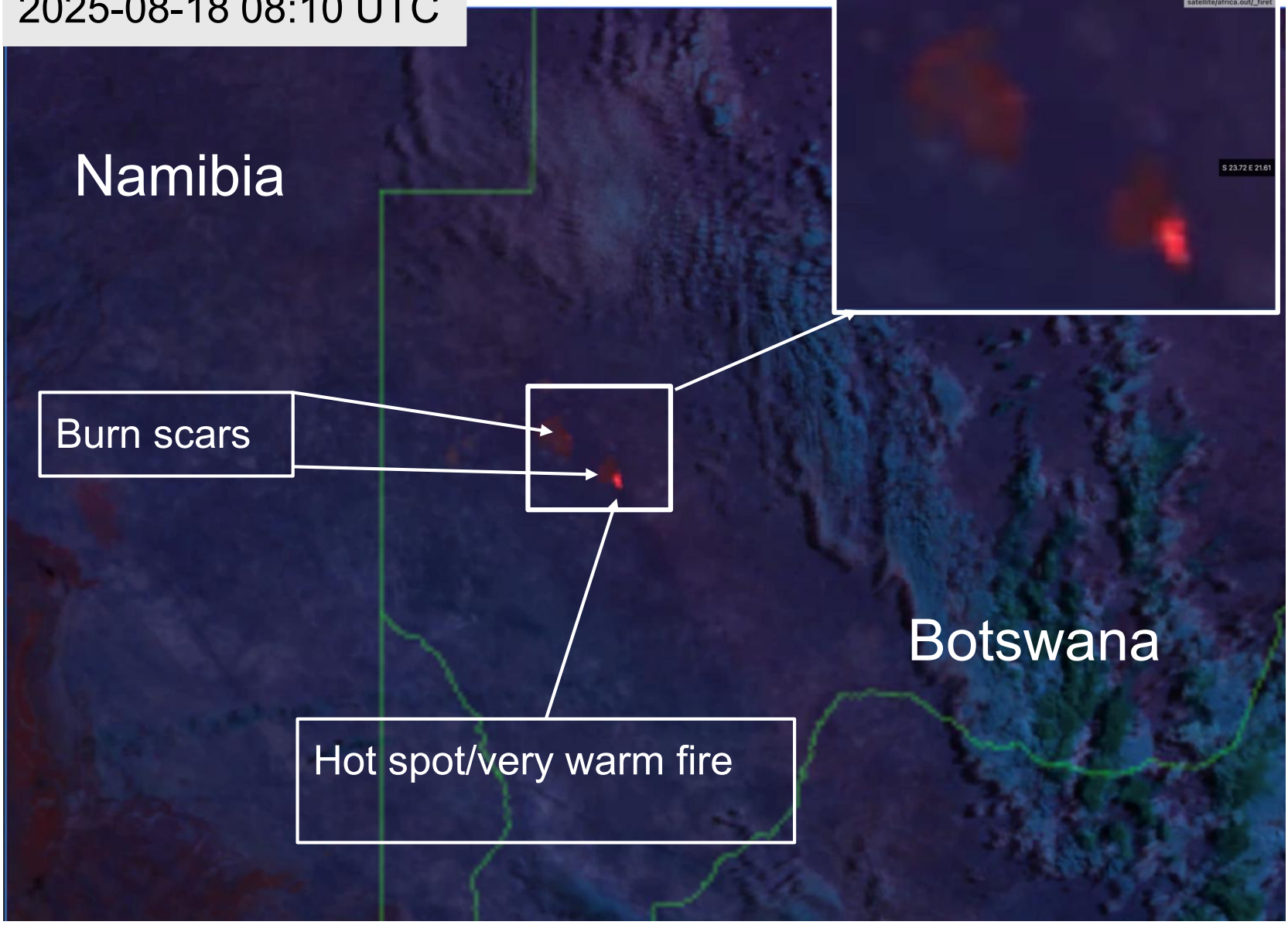


RGB = IR 3.7; NIR 2.2; NIR 1.6





2025-08-18 08:10 UTC





Animation



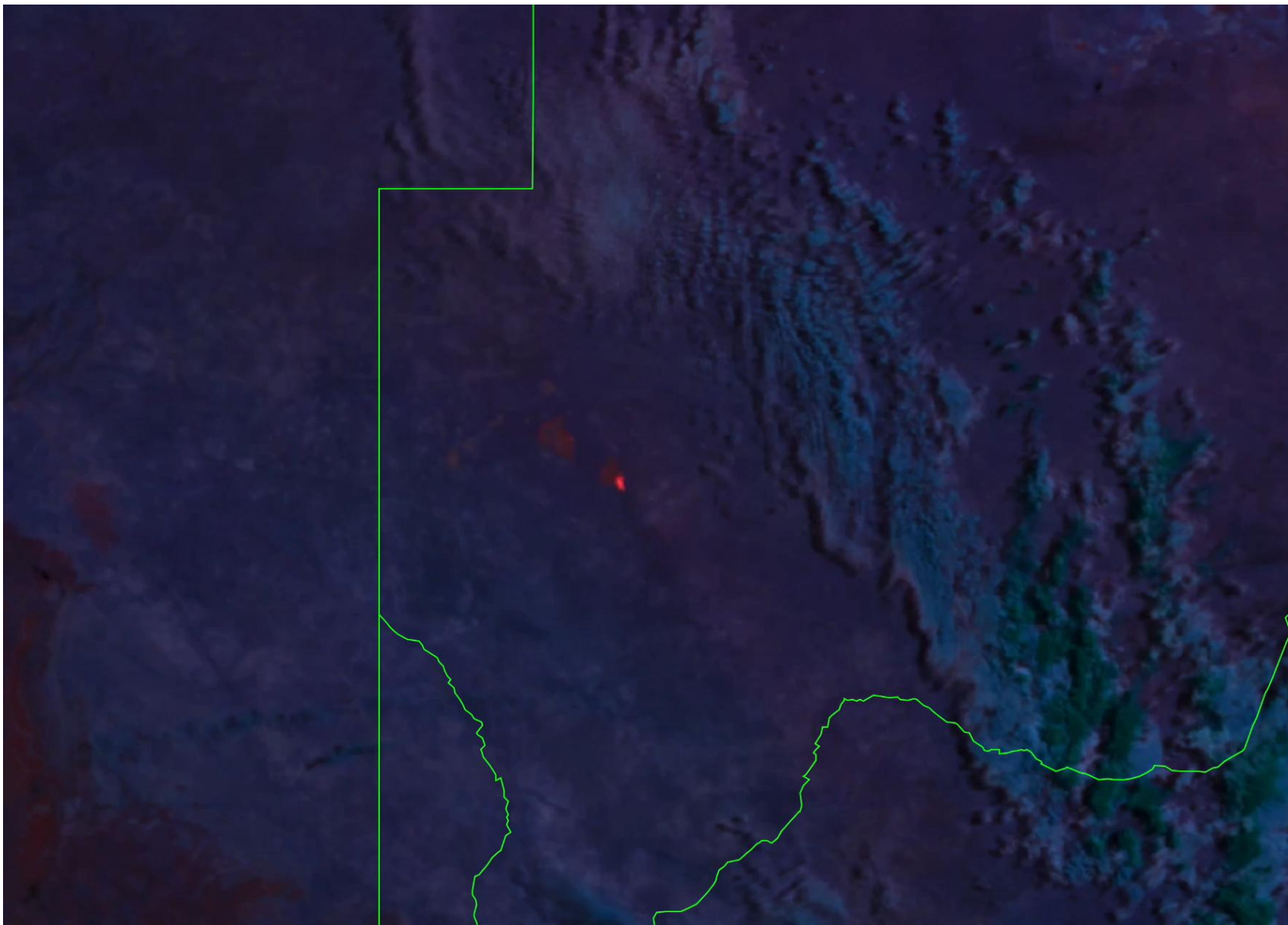
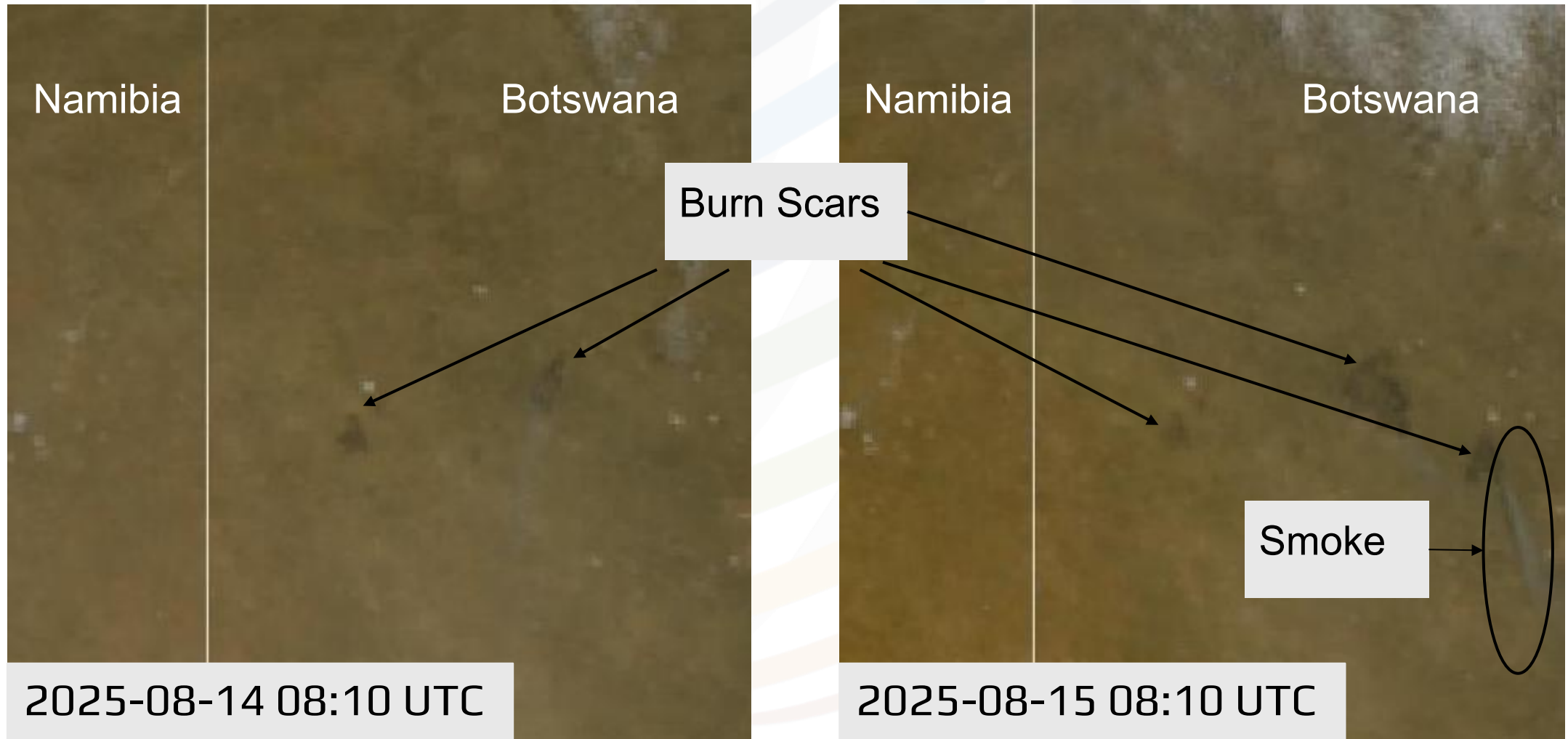




Image Comparison



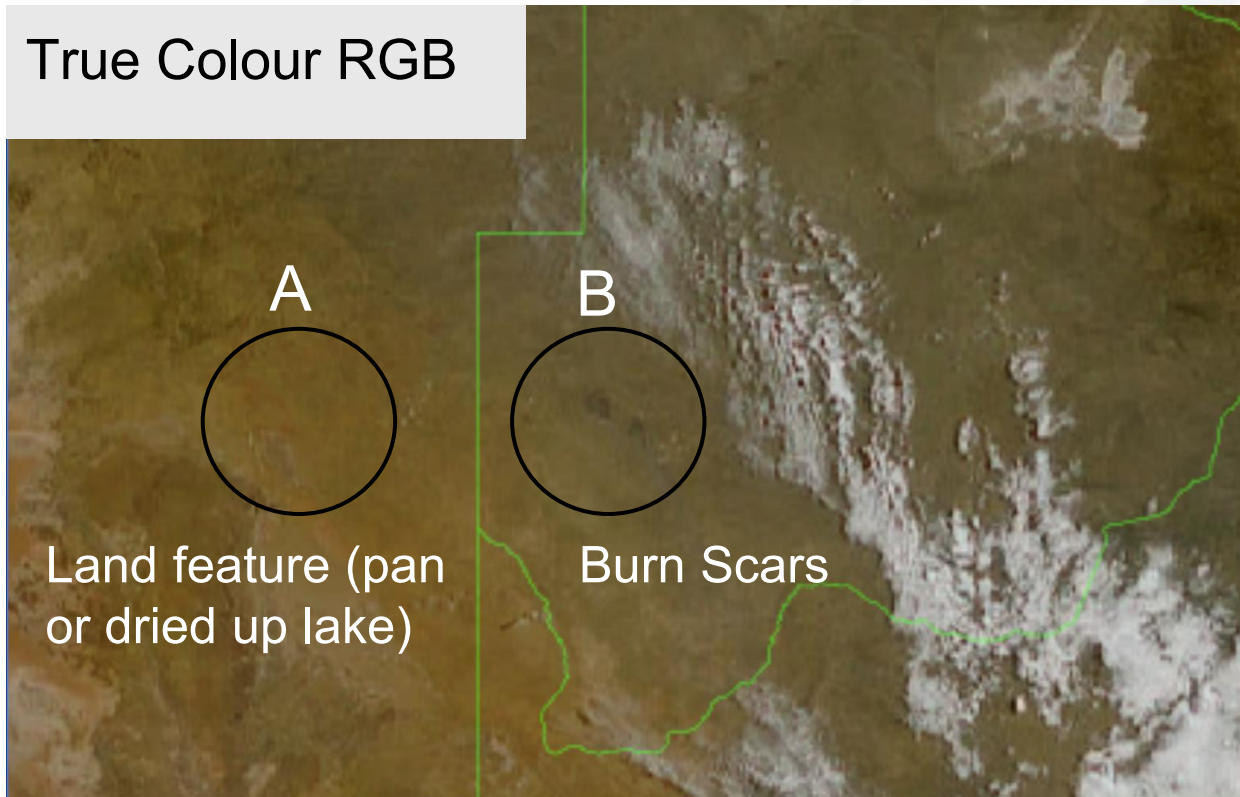
True Colour RGB



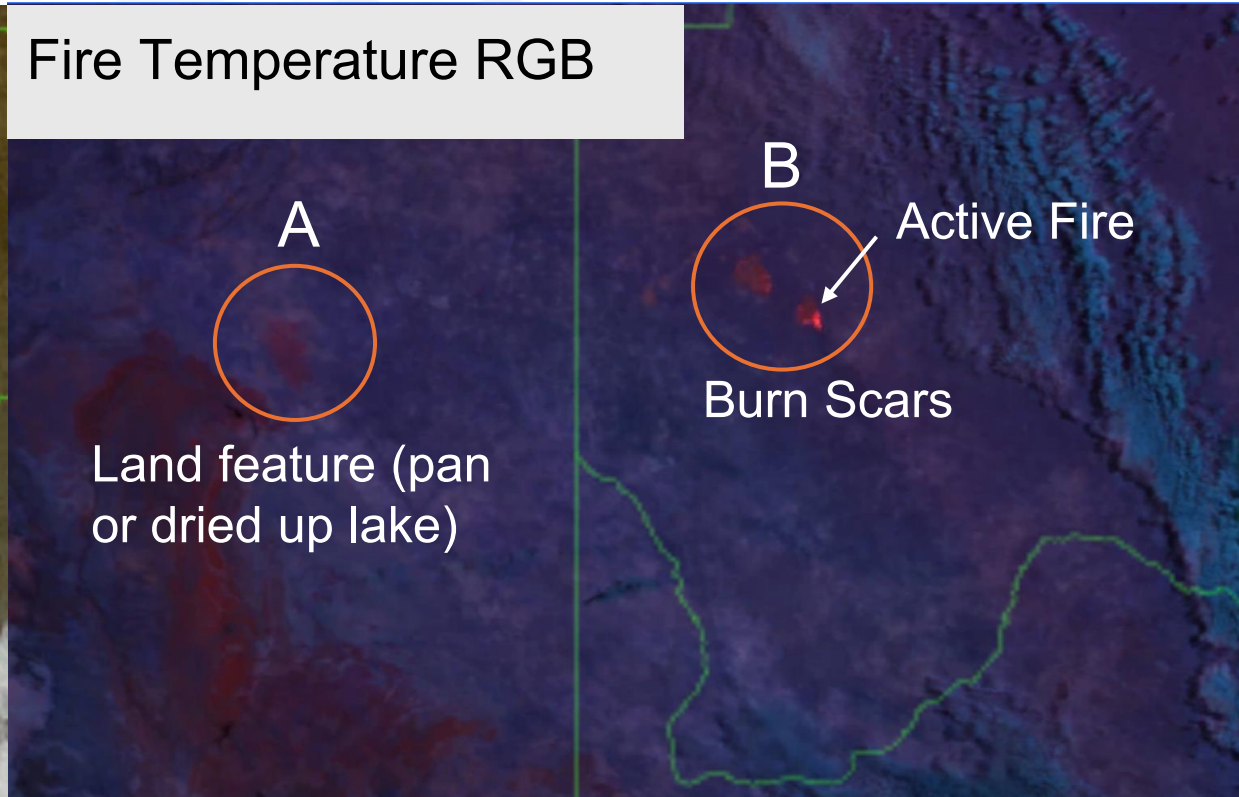


Product Comparison

True Colour RGB

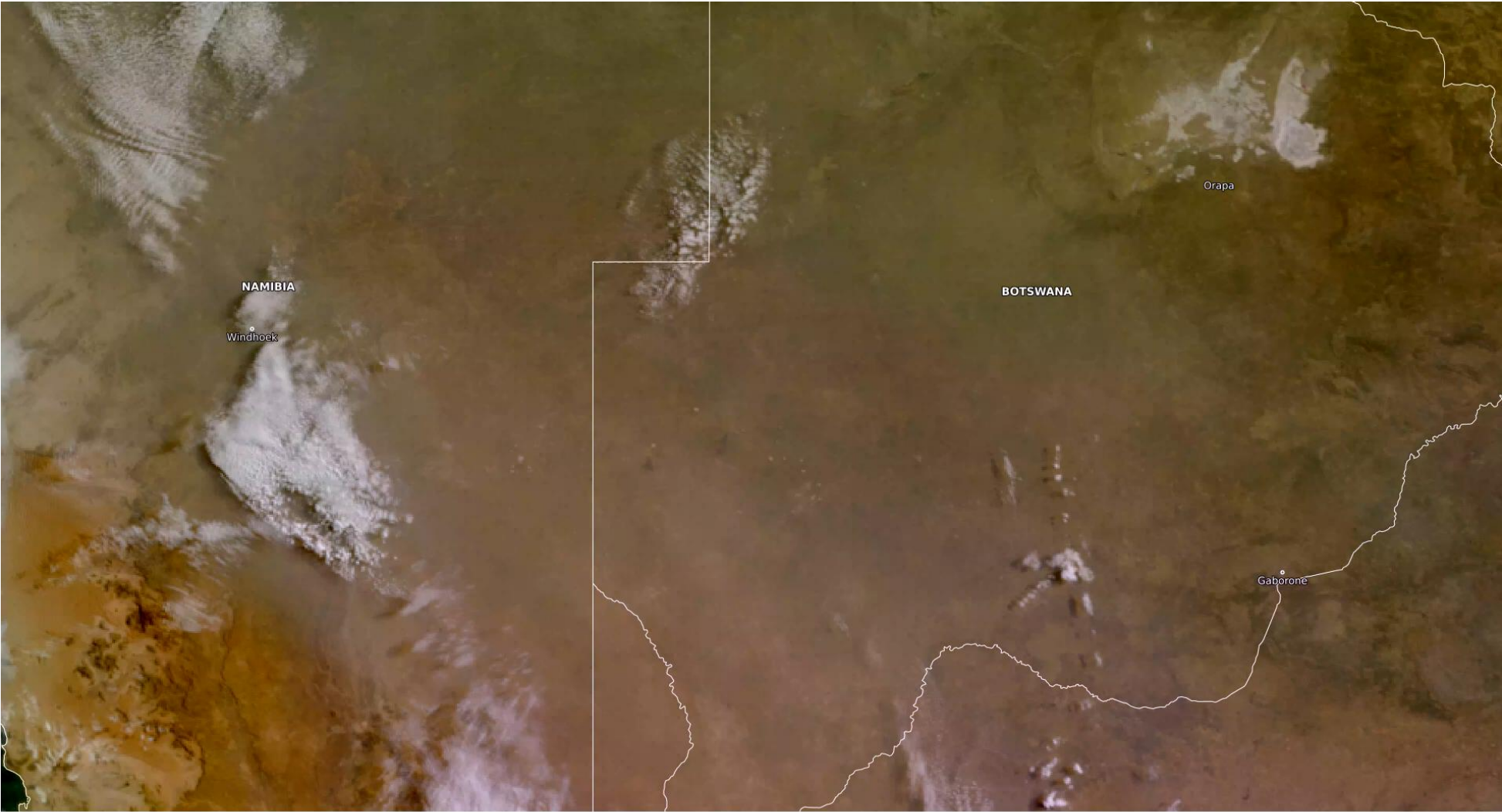


Fire Temperature RGB





Animation



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2025-08-14 06:45:00 UTC





Practice applying your new knowledge by answering the questions on the Moodle page