FireWatch Pro – Bushfire Information in Real Time

FireWatch Pro is a national fire monitoring website which uses satellite information to track current and recent bushfire hotspots around the country. The latest satellite data of previously burned areas, greenness of vegetation and lightning strikes in addition to current fires can be overlaid with the Bureau of Meteorology's NWP forecast products, radar data and IR imagery.

How to Access

- Go to *http://srss.landgate.wa.gov.au* then select Fire.
- This launces the FireWatch main page and from here you can access the general public version called My FireWatch or the more comprehensive product called FireWatch Pro by clicking the corresponding Launch button.
- For first time users registration is required. Enter details including a password and access is granted immediately.
- Access to the public version My FireWatch does not require registration.
- My FireWatch provides satellite data of fires burning & lightning strikes occurring over the last 3 days, greenness of vegetation and previous burnt areas. This data is also available to the public via mobiles devices.
- FireWatch Pro provides the same satellite data as My FireWatch but with additional features useful for fire weather forecasting as described below.
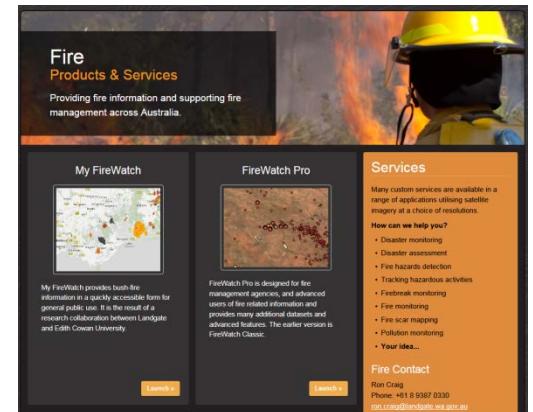

Figure 1: Main page of FireWatch to launch FireWatch Pro.

How to Use

Satellite Data

FireWatch Pro uses information received from satellites to display the following critical fire data:

- Location of current hot spots burning for last 72 hours. Data is updated every 2-4 hours.
- Location of lightning strikes for the last 72 hours updated every 10 minutes.
- Fire burnt areas available as daily, weekly and yearly maps.
- Results of fire detection algorithms customized to Australian conditions.
- Satellite Visible and IR imagery.
- Enhanced greenness imagery for the last month.

To access this data simply toggle on/off these parameters accessed via the legend on the left side of the website.
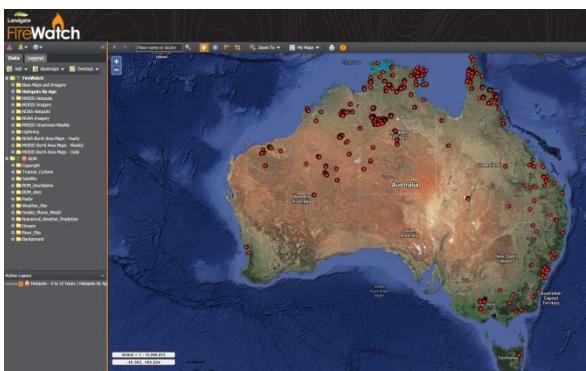

Figure 2: This map shows current hot spots.

Navigation

Navigation of the site is very easy via the navigation menu located to the left of the active map. Expanding the menu items allows further spatial and temporal refinements to the displayed parameters. To add or remove a layer simply tick or untick the desired parameter.
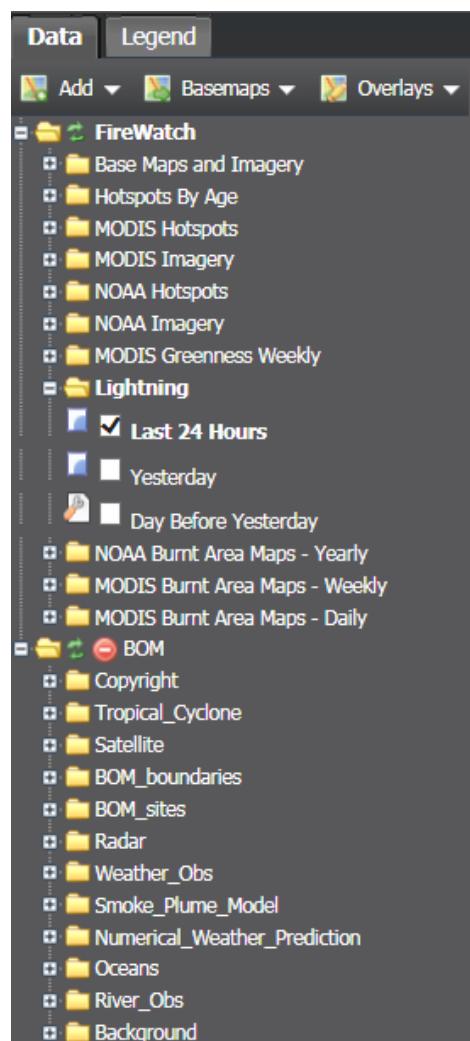

Figure 3: Image of Legend from FireWatch Pro

Overlaid Data

FireWatch Pro allows for the overlay of external data to the critical fire information provided via satellite. To add Bureau of Meteorology products select the following sequence from the Navigation Menu:

Add → Add Services → BoM → +

This will load the following BoM products to the menu available for overlay:

- NWP forecasted wind and MSLP
- Radar rainfall echoes
- Surface observations
- Infrared satellite imagery
- Smoke Plumes
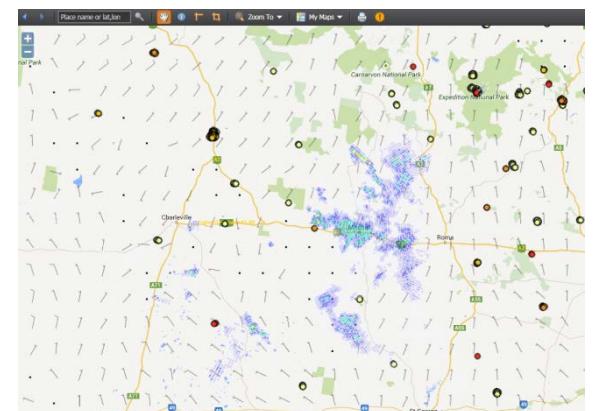- BoM boundary maps
- Tropical cyclone tracks

Figure 4: Hot spots overlaid with NWP 10m winds and radar

FireWatch delivers critical fire information as soon as it's available assisting the forecaster with real time forecasts during severe events.

Value is added to the forecasting process by providing a common platform when briefing fire agency personnel and access to visualized NWP products in any location via the web.