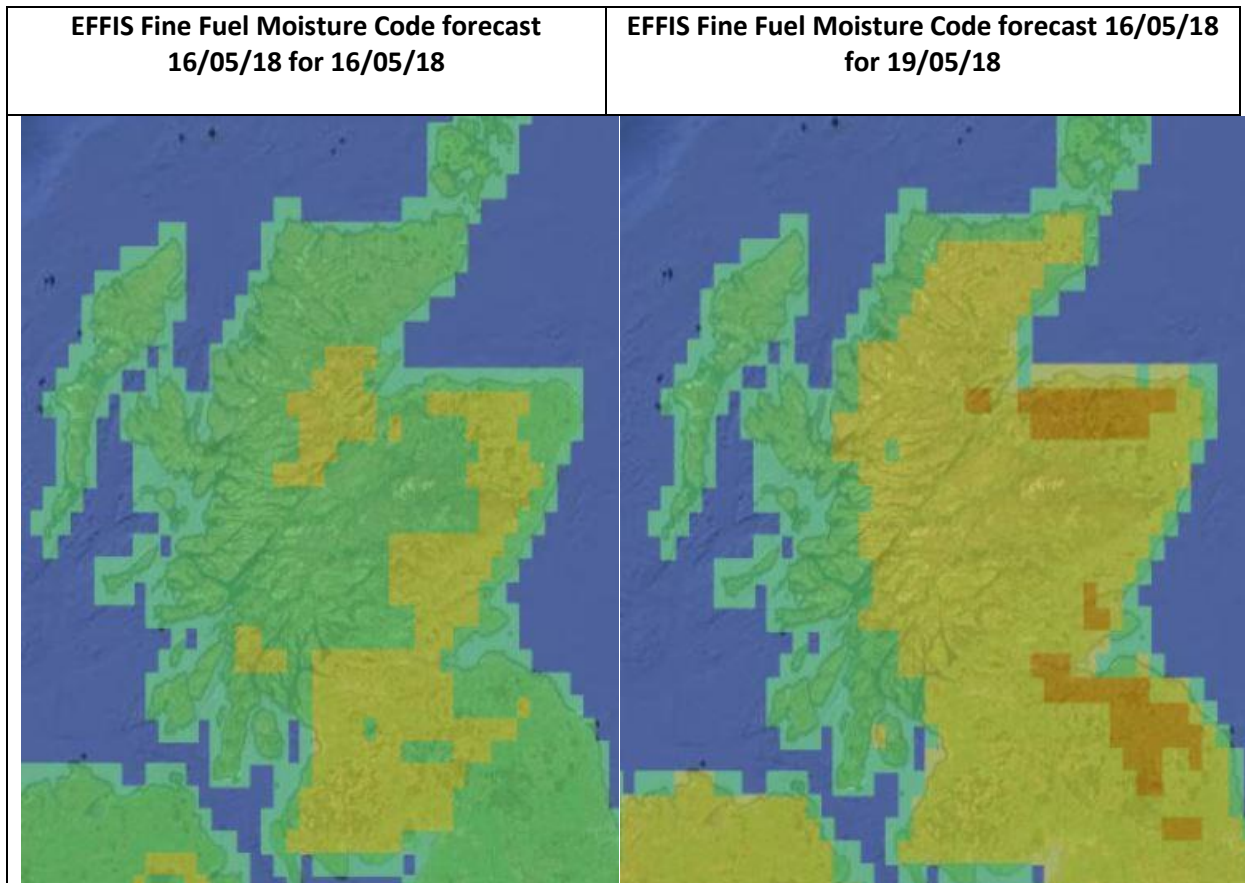


Wildfire Danger Assessment for Wednesday 16<sup>th</sup> May to Thursday 24<sup>th</sup> May 2018.

Wildfire danger assessments are made on a broad area basis. For more local risk assessments both the seasonal condition of fuels and local weather conditions should be taken into account.

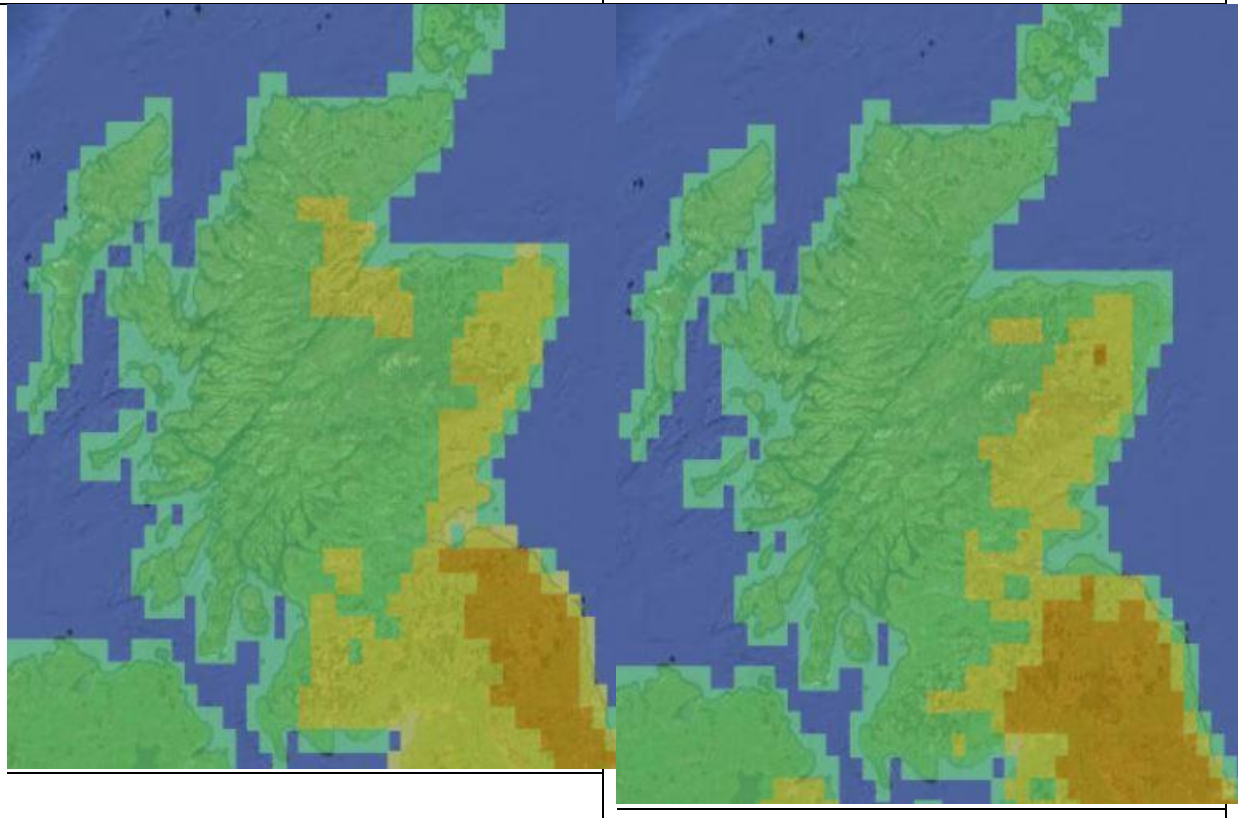


Images courtesy of European Forest Fire Information Service (EFFIS)

The EFFIS FFMC forecast for the period 16/05/18 - 19/05/18 indicates a high and growing ignition potential highest in the east, south west and south east of Scotland and then spreading to cover the whole of Scotland apart from the Western Isles and the West.

**EFFIS Fine Fuel Moisture Code forecast  
16/05/18 for 20/05/18**

**EFFIS Fine Fuel Moisture Code forecast 16/05/18  
for 24/05/18**



**The EFFIS FFMC forecast for the period 20/05/18 - 24/05/18 indicates a continuing high ignition potential highest in the east, south east and parts south west of Scotland.**

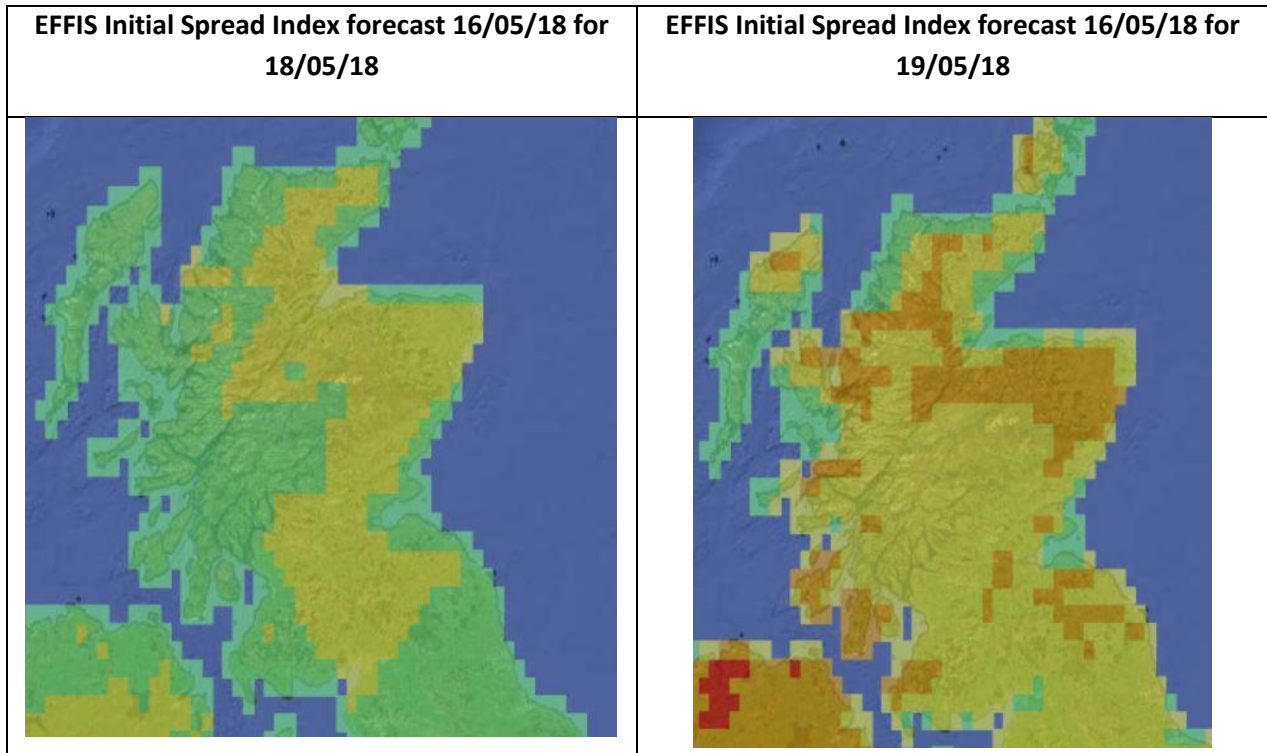
**EFFIS FFMC Fire Danger class bands:**

The scientific evidence indicates that significant numbers of wildfires often occur in the UK in the spring when FFMC is at or above 80. Any yellow area on the map indicates an FFMC of more than 83 and the brown areas are over 86. This indicates a high ignition potential (fire hazard).

Spot readings for areas immediately west of the elevated fire risk zones on the maps above indicate some FFMC values over 80 through this period. There is a gradient of higher values in the east and lower values in the west.

The seasonal condition of the fuels (vegetation) will also be different between the south of the country and the north, with the start of the growing season being later in the north than the south. Altitude will have a similar affect, with growth starting later the higher in the hills your location is.

EFFIS Initial Spread Index forecast 16<sup>th</sup> – 11<sup>th</sup> May 2018



Images courtesy of EFFIS

The Initial Spread Index (ISI) is based on FFMC, plus an additional factor for wind. **This ISI forecast for the period 18/05/18 to 19/05/18 indicates the potential for extreme fire behaviour in north east, central and south east Scotland on Friday. The day with the highest index values Saturday 19<sup>th</sup>, indicates the potential for extreme fire behaviour over most of Scotland.**

Table 1 EFFIS Fine Fuel Moisture Code (FFMC) & Initial Spread Index (ISI) fire danger class bands:

	EFFIS FFMC Fire Danger classes				
	Very Low	Low	Moderate	High	Very High
	Green	Yellow	Brown	Red	Black
<b>FFMC</b>	< 82.7	82.7 - 86.1	86.1 - 89.2	89.2 - 93	>= 93
<b>ISI</b>	< 3.2	3.2 - 5	5 - 7.5	7.5 - 13.4	>= 13.4

The EFFIS system is based on the Canadian Fire Weather Index system, of which FFMC is a sub-index. FFMC looks at the dead fuel moisture of the litter layer on the soil surface.

EFFIS fire danger classes were originally created to support decision making in Mediterranean areas. The equivalent fire danger with typical grass and shrub fuel types in the British Isles is significantly lower. European Forest Fire Information Service (EFFIS) can be viewed at:

[http://effis.jrc.ec.europa.eu/static/effis\\_current\\_situation/index.html](http://effis.jrc.ec.europa.eu/static/effis_current_situation/index.html)

The weather data that is used in the EFFIS Fire Weather Index model is from the European Centre for Medium Range Forecasts (ECMWF).

**General weather forecast information:**

There is an anti-cyclonic high pressure weather system developing over UK, creating a period of fine dry and warm weather. This weather pattern will continue for some time. By Sunday a weak weather patterns will pass the west of Scotland moving towards Iceland. These will bring in some rain to the west, which is not forecast to cross the country to the east.

**Discussion:**

**In the east there is likely to be sunshine, warmth, wind, moderate relative humidity from today onwards. These are conditions that will gradually dry dead out fuels after the rain last weekend. The live fuel moisture of heather will stay low until the plants start growing.**

There are large areas of semi-natural vegetation with a lot of last year's dead vegetation. We are now in the spring transition period when plants gradually "green-up", which draws water into the new growth raising the moisture content of the vegetation. At lower altitudes the grass has started growing. However many shrub fuels such as heather, which are higher up, have not started growing yet with a delayed start to the spring in the hills due to the long winter.

Semi-natural vegetation in eastern areas will have both a high ignition potential and high potential spread rates from 16<sup>th</sup> until at least 24<sup>th</sup> May. Should a wildfire ignition occur on the days with high wind speeds it is likely extreme fire behaviour will occur.

The Muirburn Season has finished and we are going to have some fine days through the weekend into next week, and through some of next week. Land managers should be considering what fire prevention activities are appropriate. The messages to the public are that they should exercise great caution in the north east, south east and central areas of Scotland.

**Fire Danger for period:**

**The north east, south east and central Scotland, will have Very High Fire Danger conditions from 16<sup>th</sup> to 24<sup>th</sup> of May 2018**

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