

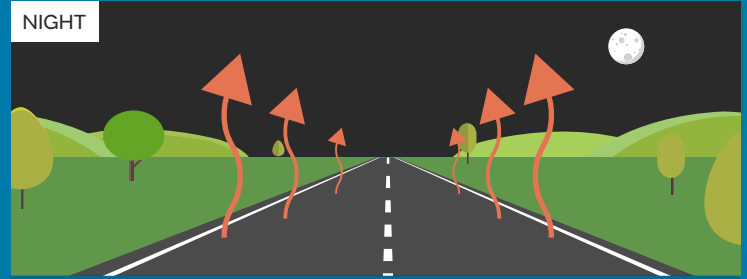
How do you know when it is time to grit?

Gritters use a Road Surface Temperature (RST) forecast to decide when to grit, rather than an air temperature forecast. RST forecast is a prediction of the temperature of the road surface. The temperature you see on our website and app is the air temperature forecast taken 1.5 metres above the ground.



DAY

- Unlike the air, road surfaces absorb energy directly from incoming solar radiation.
- The road surface heats the air in direct contact with it, then the heat transfers through the air by convection. This is what we know as air temperature.
- The surface temperature is often warmer because heating the ground is more efficient than heating the air.
- For example, on a warm summer's day, a black pavement can often be too hot to walk on, yet bare skin against the air feels fine.

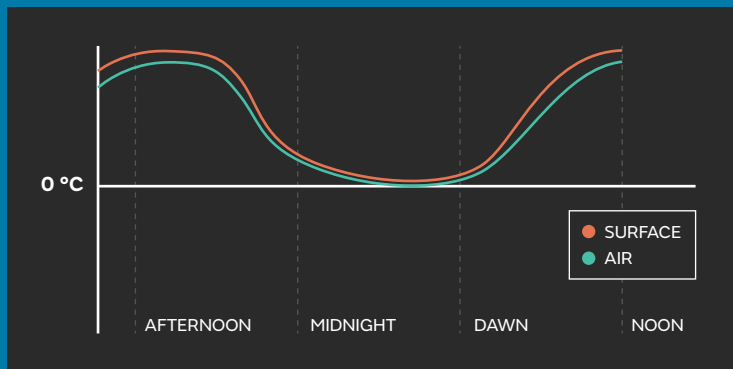


NIGHT

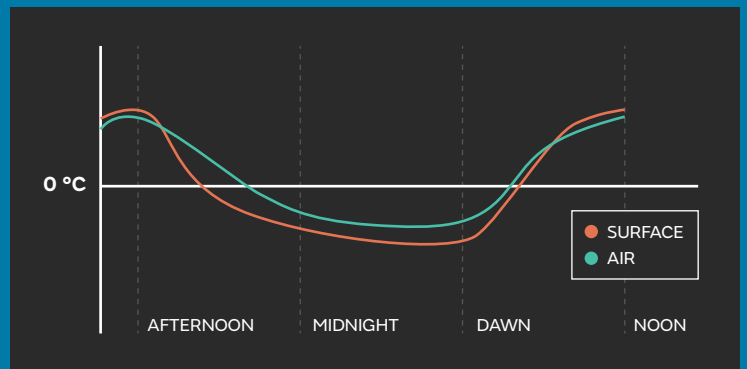
- At night, without incoming radiation, roads lose heat quicker than the air.
- In winter, this often means RSTs fall to a lower minimum temperature than the air, and do so more quickly.
- This is why you can get a frost on the roads, grass and cars, even if the air temperature is above freezing.

How does the time of the season (Oct-Apr) affect RST?

These graphs show the typical differences between RST and air temperature between Oct-Apr.



Early / Late Season



After cold snap/mid-season

What affects RST?

