The Probability of a White Christmas
For many a white Christmas means a complete covering of snow, ideally falling between midnight and midday on the 25th. However, the definition used by those placing and taking bets, is for a single snow flake (perhaps amongst a shower of rain and snow mixed) to be observed falling in the 24 hours of $25^{\text {th }}$ of December.

Snow occurs most frequently in the months December to March. Early December is relatively snow free with a tendency of snowfall later in the month. There were 126 days with snow in December over a 42 year period at Dublin Airport. Snow fell on Christmas Day in the years $1950,1956,1962,1964,1970,1984,1990,1993,1995,1999,2000,2004$ and 2010 since records began in 1941 at Dublin Airport. The maximum dept of snow recorded on Christmas Day was 20 cm in 2010. (Statistics provided by Met Eireann in November 2017.)

What is the probability of snow falling in Dublin Airport on Christmas Day?


