Thunderstorms are related to various types of severe weather across the Mediterranean and Europe, and every year cause great amounts of damage and destruction, including the loss of life. As part of the European Union FLASH project, an attempt has been made to use regional lightning observations, from the ZEUS network, to nowcast thunderstorms in real time across the entire region. To achieve this we used the WDSS-II software package from NOAA/NSSL to cluster the lightning into thunderstorms every 15 minutes. From these clusters, the motion vectors and direction of motion of storms are calculated objectively. We have used the entire year of 2008 to derive statistics to validate our nowcasting algorithm. The results show that we are generally successful in nowcasting the location of thunderstorms out to 3 hours, especially for strong thunderstorms that are likely to be the most damaging. We have developed a simple graphical interface on the internet to show real time nowcasts of thunderstorms across Europe (flashproject.org).