January 2007 was a bad storm month for much of central and northern Europe with a series of extratropical cyclones bringing high winds and precipitation to highly populated areas between Ireland and Russia. Although Storm Kyrill on 18-19 January 2007 was the most serious for its infrastructure damage and insurance costs, Storm Franz from the preceding week on 11-12 January 2007 was actually more serious for its maritime impacts in western Europe. This contribution takes a closer look at Storm Franz, presenting an overview of its impact to energy infrastructure as well as transportation networks and societal infrastructure damage. Maritime casualties are reviewed with respect to met-ocean conditions. An analysis is carried out on water level recorders around the North Sea to assess the storm surge and short period oscillations that may reveal harbour seiches or meteotsunamis. The results are compared with wave recorders, which had a fairly good coverage across the North Sea in 2007. The issue of wave damage to offshore infrastructure was highlighted in events associated with Storm Britta on 31 October - 1 November, 2006. Offshore wind energy in northwest Europe was in a growth phase during this time, and there were questions about the extreme met-ocean conditions that could be expected in the 20 year lifetime of an offshore wind turbine.