

Homework 3

1. An airplane pilot crossing the ocean at 43°N latitude has both a pressure altimeter and a radar altimeter, the latter measuring his absolute height above the sea. Flying at an airspeed of 100 m/s he maintains altitude by referring to his pressure altimeter set for a sea level pressure of 1013 hPa . He holds an indicated 6000 m altitude. At the beginning of a 1-h period he notes that his radar altimeter reads 5700 m , and at the end of the hour he notes that it reads 5950 m . In what direction and approximately how far has he drifted from his heading? Assume that the heading is eastwards.