Consideration is given to the nature, origin, dynamics and interaction of certain distinctive synoptic-scale flow features that prevail at near tropopause-levels in the extra-tropics. These features include vortex-like signatures poleward of the jet-stream in the lower stratosphere, the band of intense isentropic PV gradient that characterizes the jet-stream itself at the tropopause break(s), and the strip- and vortex-like signatures of low PV often found equatorward of the jet in the upper-troposphere. It is shown that the scale, structure, amplitude and relative location of these features is such that both their self dynamics and their interaction can dominate flow development at these levels; strongly influence across-tropopause transport; instigate major development at the surface; account for and sustain deep, persistent and quasi-stationary blocks; and contribute seminally to analysis and forecast errors in NWP.