Assignment 2

Problem 12.2. Radiation balance at the top of the atmosphere in reanalyses
Investigate the *zonal mean*, *monthly mean* absorbed Solar radiation (ASR or top net Solar radiation) and outgoing long wave radiation at the top of the atmosphere (OLR-TOA or top net thermal radiation) as a function latitude in the ERA-interim reanalysis (http://data-portal.ecmwf.int/data/d/interim_full_mnth/) for a period of at least 5 years, *for instance* the period 1996-2000. What important climate event characterizes this period? Compare the reanalysis data with the radiatively determined ASR and OLR-TOA, and their difference. Discuss interpret the differences between the radiatively determined state and the reanalyzed state.

Hand in answer to problem 12.2 on or before 7/5/2014