

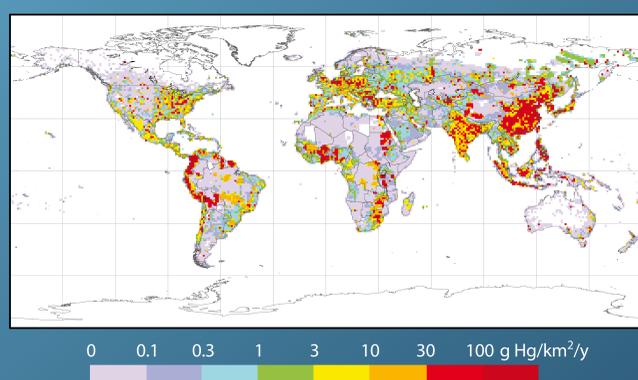
Global Atmospheric Mercury Transport: Global Mercury Assessment 2013 update

The new global mercury emissions inventory produced for UNEP's *Global Mercury Assessment 2013*¹ is now being used by air transport modellers².

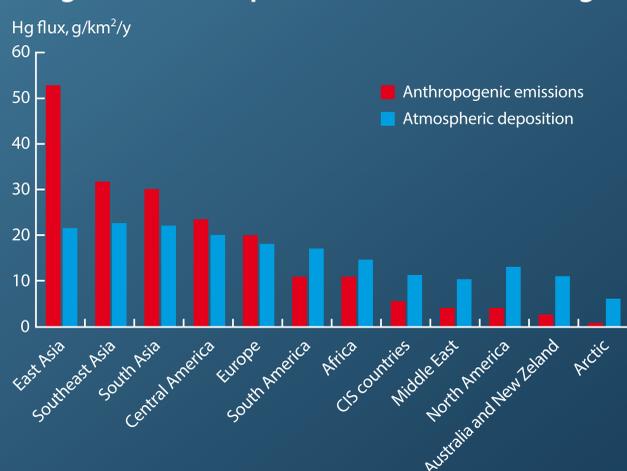
Initial results for modelled air concentrations and mercury deposition show modified patterns compared to previous work. These reflect the improved information in the new inventory concerning the locations of industrial emission sources and emissions from key sectors, in particular artisanal and small-scale gold mining.



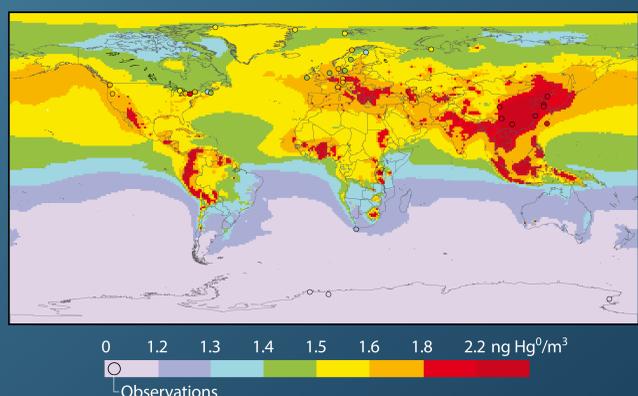
Anthropogenic emissions in 2010



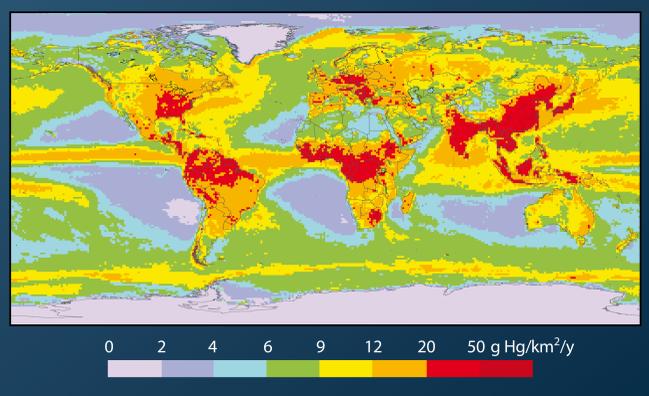
Average emission/deposition flux in different regions



Annual mean air concentration in 2010



Annual deposition (net flux) in 2010



Revised model results using the 2010 mercury emissions inventory show that anthropogenic mercury emissions in the largest source regions exceed total deposition. This means that mercury is exported from these regions to other regions by long range atmospheric transport. The opposite is the case for regions with lower emissions (e.g., the Arctic). Natural and re-emission sources also increase atmospheric loads of mercury deposited around the world.

Graphics show preliminary results from GLEMOS model runs by Meteorological Synthesising Centre-East and GRAHM model runs by Environment Canada; ensemble means for the two models.

¹ <http://www.unep.org/PDF/PressReleases/GlobalMercuryAssessment2013.pdf>

² A report on this work, which will update some of the information presented in the *GMA 2013*, will be available later in 2013.



UNEP
United Nations
Environment Programme

AMAP
Arctic Monitoring and
Assessment Programme