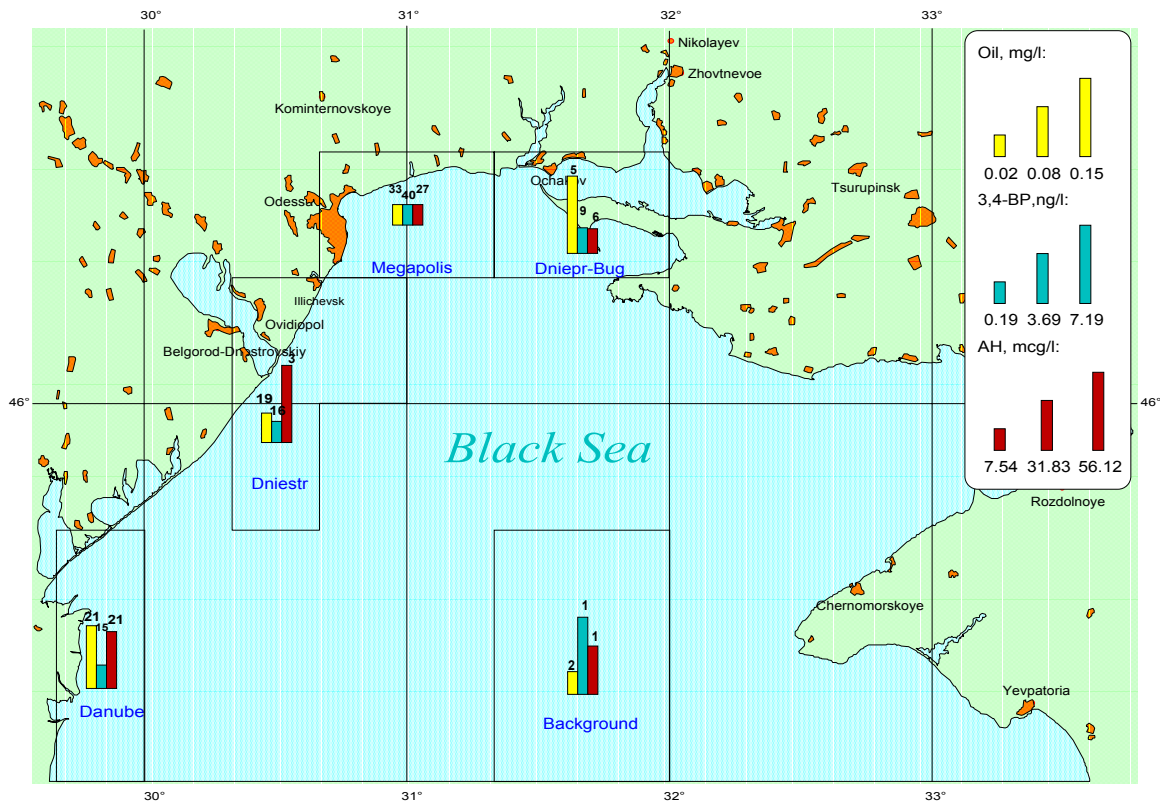


Distribution of some pollutants on NWBS polygons

In water and bottom sediments of the NWS by results of high-sensitivity and exact methods of chemical analysis wide spectrum of polluting substances is revealed: petroleum hydrocarbons, including polyaromatic hydrocarbons (3.4- benz(a)pyrene, perylene, pyrene, chryzene, phenantrene, and etc.), phenols, chlorinated hydrocarbons, heavy metals. The number of cases of detection of the majority of them in water samples and bottom sediments is close to 100 %.

The characteristic of modern state of chemical pollution of water and bottom sediments in NWS for the period 1991-1998 yy. On basis of its representative components (petroleum hydrocarbons, polycyclic aromatic hydrocarbons, chlorinated hydrocarbons is submitted as histograms in figures 1-2. The degree of chemical pollution of water of the NWS as a whole remains high. The submitted figures evidently illustrate influence of sources of pollution on water area. In the background the degree of pollution in some times is less, than near to the sources of pollution. The most polluted are the regions of the Odessa gulf, Danube and Dniestrovsky polygon, Dniepro- Bugsy liman.

a)



b)

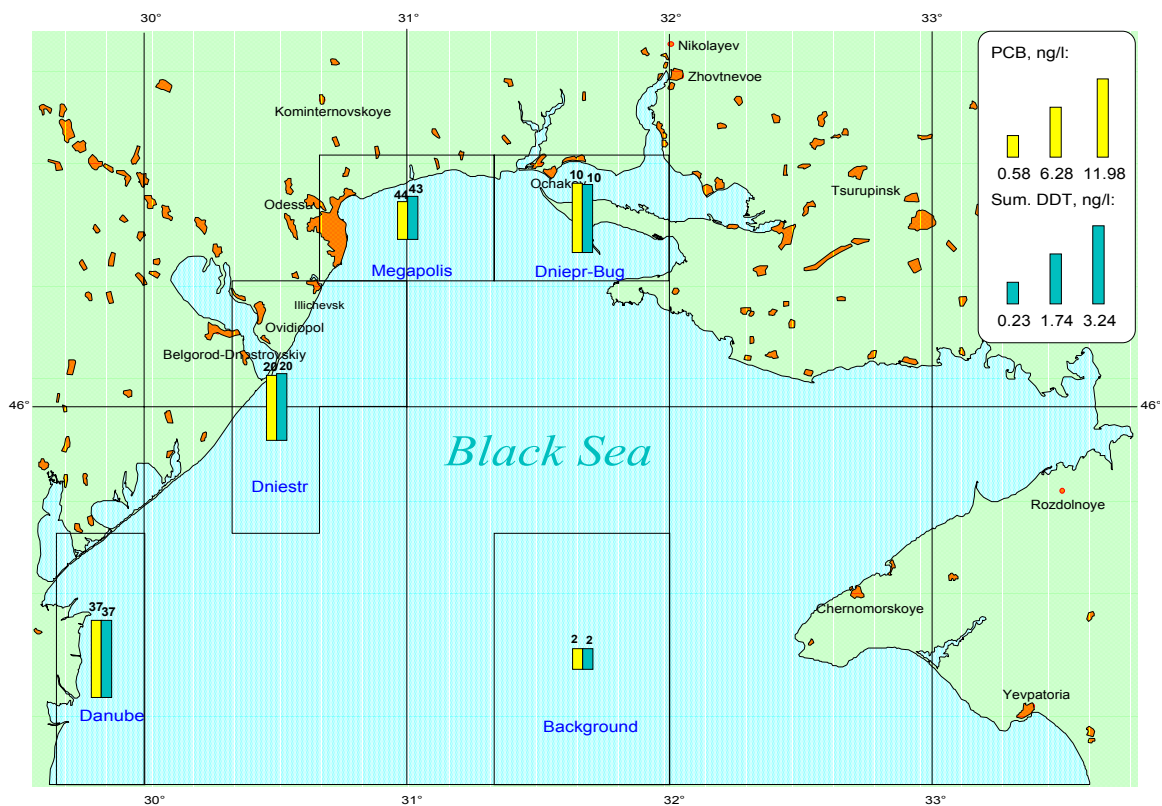
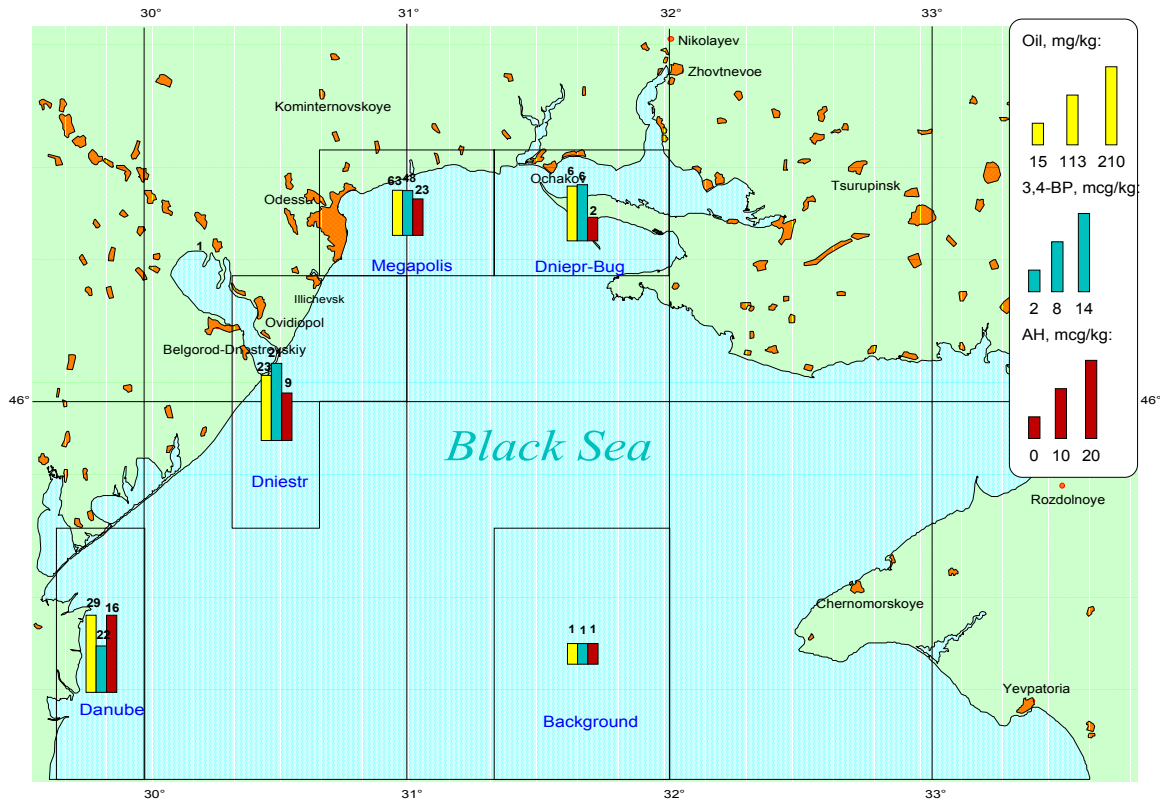


Fig. 1 Distribution of some pollutants in the NWBS seawaters (surface layer) in 1991-1998:*)
a) oil pollution: petroleum hydrocarbons, Σ aromatic hydrocarbons and 3,4 – benz(a)pyrene;
b) chlorinated hydrocarbons: Σ DDT and PCBs
 *-number above each bar signs number of observations

a)



b)

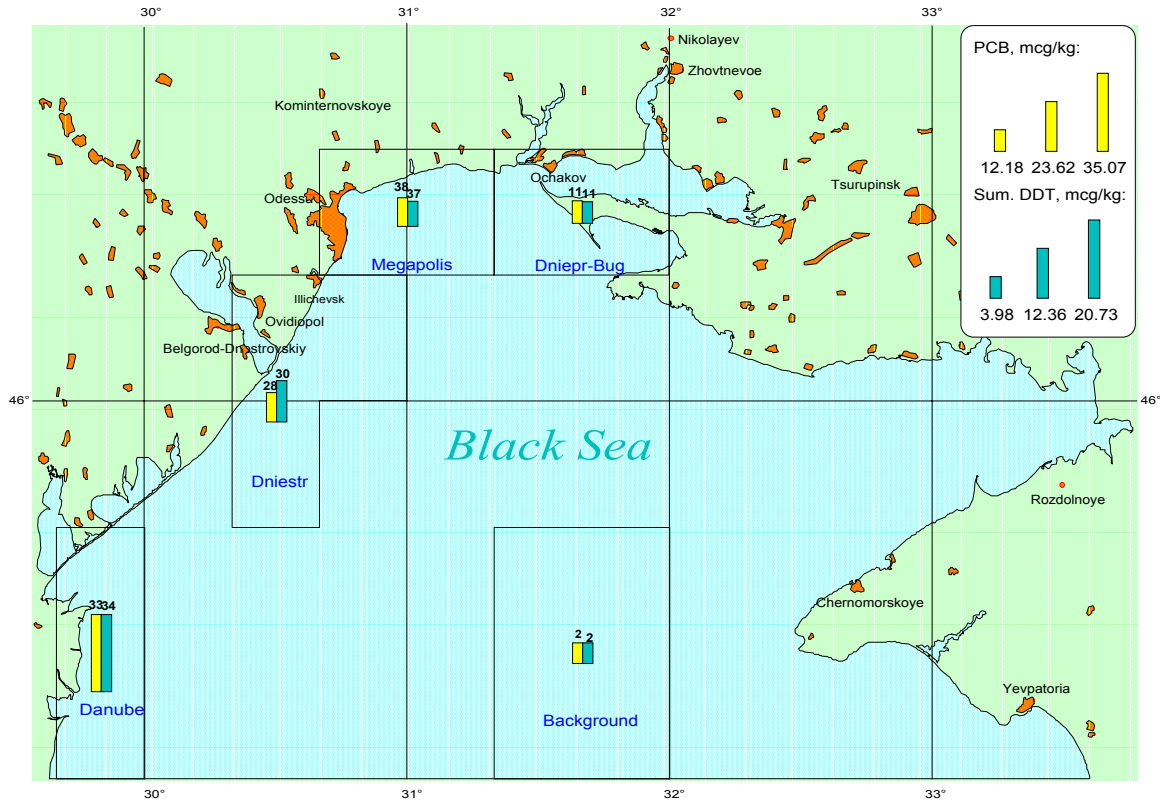


Fig. 2 Distribution of some pollutants in the NWBS sediments in 1991-1998:*)

a) oil pollution: petroleum hydrocarbons, Σ aromatic hydrocarbons and 3,4 – benz(a)pyrene;
 b) chlorinated hydrocarbons: Σ DDT and PCBs

*-number above each bar signs number of observations