A Big Earth Data Platform for Three Poles

**Concentrations of soil POPs in the Tibetan Plateau (2007-2009)**

1、Description

This data set is the spatial distribution of soil POPs in the Tibetan Plateau, including OCPs, PCBs, PBDEs and PAHs. Fourty soil samples were taken from remote sites (i.e., away from towns, roads, or other human activity) in 8 soil zones of the Tibetan Plateau in 2007. The samples were collected using a stainless steel hand-held corer.Five cores (0-5 cm), taken over an area of ~100 m2, were bulked together to form one sample. The samples were wrapped in aluminum foil twice and sealed in two plastic bags to minimize the possibility for contamination. All the samples were analyzed at Key Laboratory of Tibetan Environment Changes and Land Surface Processes, Chinese Academy of Sciences. The samples were Soxhlet-extracted, purified on an aluminium/silica column (i.d. 8 mm), a gel permeation chromatography (GPC) column subsequently, and were detected on a gas chromatograph with an ion-trap mass spectrometer (GC-MS, Finnigan Trace GC/PolarisQ) operating under MS–MS mode. A CP-Sil 8CB capillary column (50 m ×0.25 mm, film thickness 0.25 μm) was used for OCPs, PCBs and PBDEs, and a DB-5MS column (60 m ×0.25mm, film thickness 0.25 μm) was used for PAHs. Procedural blanks were prepared. The recoveries ranged from 53% to 130% for OCPs, and 58% to 92% for PAHs. The reported concentrations were not corrected for recoveries.

2、Keywords

Theme：Division,Soil division  
Discipline：Human-nature Relationship  
Places：Tibetan Plateau  
Time：2007-2009

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.18MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：37.0 | - |
| west：99.0 | - | east：80.0 |
| - | south：28.0 | - |

5、Time frame:2007-01-06 00:00:00+00:00--2010-01-05 00:00:00+00:00

6、Reference method

References to data:

WANG Xiaoping. Concentrations of soil POPs in the Tibetan Plateau (2007-2009). A Big Earth Data Platform for Three Poles, doi:10.11888/Soil.tpdc.2705032019

References to articles:

Wang, X.P., Sheng, J.J., Gong, P., Xue, Y.G., Yao, T.D., &Jones, K.C. (2012). Persistent organic pollutants in the Tibetan surface soil: Spatial distribution, air-soil exchange and implications for global cycling. Environmental Pollution, 170, 145-151.  
  
Wang, C.F., Wang, X.P., Gong, P., &Yao, T.D. (2014). Polycyclic aromatic hydrocarbons in surface soil across the Tibetan Plateau: Spatial distribution, source and air-soil exchange. Environmental Pollution, 184, 138-144.

7、Supporting project information

Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program

8、Data resource provider

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