

Model simulations of air concentration and deposition of Cs137 from the Chernobyl accident 1986

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ECDS0062-001_V1.0.zip (30.62 MB)

Associated documentation

chern.121.tif (89.58 KB)

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ecds0062-1-1.0.zip (~30.71 MB)

Citation

Langner, J. (2019) Model simulations of air concentration and deposition of Cs137 from the Chernobyl accident 1986 (Version 1.0) [Data set]. SMHI - Swedish Meteorological and Hydrological Institute. Available at: <https://doi.org/10.5879/ft2b-vt32>

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Description

Model simulations of air concentration and deposition of Cs137 from the Chernobyl accident. Model results are available for the European domain at six hour time resolution and a geographical resolution of 50 km.

The files in this dataset correspond to part of the model results presented by Langner et al., Atmospheric Environment, 32, 4325-4333, 1998. Concentrations at ten model levels and accumulated dry, wet and total (wet+dry) deposition of Cs137 at one hour intervals for the time period 1986-04-25 19 UTC to 1986-05-10 12 UTC are stored in NetCDF-format. The model results correspond to the simulation using precipitation from KNMI. The units are Bq m⁻³ and kBq m⁻² respectively. Coordinate information is given in the NetCDF files. The NetCDF files also include surface pressure, surface geopotential and model calculated boundary layer heights at six hour intervals. Further details about the model simulations can be found in Langner et al. (1998).

Data contains personal data

No

Language

[English](#)

Time period(s) investigated

1986-04-26 – 1986-05-09

Data format / data structure

[Geospatial](#)

Data collection 1

- Mode of collection: Simulation

Research area

[Earth and related environmental sciences](#) (Standard för svensk indelning av forskningsämnen 2011)

[Environment](#) (INSPIRE topic categories)

Keywords

[Atmospheric chemistry](#), [Trace elements/trace metals](#), [Air quality](#), [Particulates](#), [Planetary boundary layer height](#), [Atmospheric pressure](#), [Deposition](#), [Pollutant concentration](#)

Publications

Langner, J., Robertson, L., Persson, C., and Ullerstig, A. Validation of the operational emergency response model at the Swedish Meteorological and Hydrological Institute using data from ETEX and the Chernobyl accident, *Atmospheric Environment*, 32, 4325-4333, 1998.

Polygon (Lon/Lat)

-11.5, 72

-11.5, 33

41, 33

41, 72

-11.5, 72

Accessibility level

Access to data through SND

Data are freely accessible

Use of data

[Things to consider when using data shared through SND](#)

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Versions

Version 1.0. 2019-07-01

Contact for questions about the data

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[DDI 2.5](#)

[DDI 3.3](#)

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[File overview \(CSV\)](#)

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