

1. IDENTIFICATION INFORMATION

Name	RECCA_AH0_Nagoya
Edition	v1.0
Abbreviation	AH_Nagoya
Metadata Identifier	RECCA_AH0_Nagoya20240612161444-DIAS20221121113753-en

2. CONTACT

2.1 CONTACT on DATASET

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2.2 CONTACT on PROJECT

2.2.1 Data Integration and Analysis System

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3. DOCUMENT AUTHOR

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4. DATASET CREATOR

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5. DATE OF THIS DOCUMENT

2024-06-12

6. DATE OF DATASET

creation : 2014-04-22

7. DATASET OVERVIEW

7.1 Abstract

The anthropogenic heat was at first calculated by multiple linear regression analysis based on the technique of Kayaba et al. 1), by using the residential population and the number of employees on 1 / 2 area mesh of the Statistics Bureau, the Ministry of Internal Affairs and Communications in 2005 and 2006, and the trunk traffic lot area ratio of the digital national information in 2006.

Large anthropogenic heat from industrial sector in Nagoya city was added on the base data, which was retrieved from CO2 emissions in EAGrid2000 data of Kannari et al. 2), and calibrated with the data of Nagoya city 3). The data were arranged according to hourly variation of monthly mean.

7.2 Topic Category(ISO19139)

climatologyMeteorologyAtmosphere

7.3 Temporal Extent

Begin Date	2006-01-01
End Date	2008-12-31
Temporal Characteristics	Monthly averaged hourly data

7.4 Geographic Bounding Box

North latitude bound	35.333333
West longitude bound	136.0
Eastbound longitude	137.0
South latitude bound	34.666667

7.5 Grid

Dimension Name	Dimension Size (slice number of the dimension)	Resolution Unit
row	160	0.375 (minute)
column	160	0.25 (minute)
time	24	60 (minute)

7.6 Geographic Description

7.7 Keywords

7.7.1 Keywords on Dataset

Keyword Type	Keyword	Keyword thesaurus Name
theme	Climate	GEOSS
place	Asia > Eastern Asia > Japan	Country
theme	Human Dimensions > Habitat Conversion/Fragmentation > Urbanization/Urban Sprawl, Human Dimensions > Environmental Impacts, Human Dimensions > Public Health > Environmental Health Factors	GCMD_science

7.7.2 Keywords on Project

7.7.2.1 Data Integration and Analysis System

Keyword Type	Keyword	Keyword thesaurus Name
theme	DIAS > Data Integration and Analysis System	No_Dictionary

7.8 Online Resource

Data download site in DIAS : <https://data.diasjp.net/dl/storages/filelist/dataset:228>

7.9 Data Environmental Information

The data consist of 12 csv files. Each file is monthly average of daily course of anthropogenic heat. The first line is the header. The first row is mesh code of the 1/4 area mesh of Ministry of Internal Affairs and Communications, and from the 2nd to the 25th row are anthropogenic heat (W/m²) of each hour. The row '1' is equivalent to the mean from 0:00 to 1:00 (JST). The size of the file for one month is 4.9MB.

7.10 Distribution Information

name	version	specification
csv	1.0	

8. DATA PROCESSING

8.1 Data Processing (1)

8.1.1 General Explanation of the data producer's knowledge about the lineage of a dataset

Shown in the abstract.

13. REFERENCES

1) Kayaba et al. (2010)

<http://www.jma.go.jp/jma//kishou/books/sokkou/77/vol77p137.pdf> (in Japanese)

2) Kannari et al. (2007)

<http://www.sciencedirect.com/science/article/pii/S1352231006012787>

3) Nagoya city (2011)

<http://www.city.nagoya.jp/kankyo/cmsfiles/contents/0000011/11334/zenbun2008.pdf> (in Japanese)