

SciGRID_gas

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OpenMode: Freiburg, May 2021

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Knowledge for Tomorrow



Gas Network Model: SciGRID_gas

For scientists

Gas transport model data set

User expandable

Data model

Python

Open source

CC by

Open data

OSM data

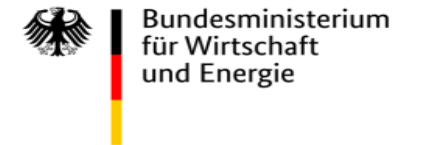


Non-OSM data

Repeatable (GitHub)

Gefördert durch:

For static gas-transport model



aufgrund eines Beschlusses des Deutschen Bundestages

Heuristic data generation

Europe wide



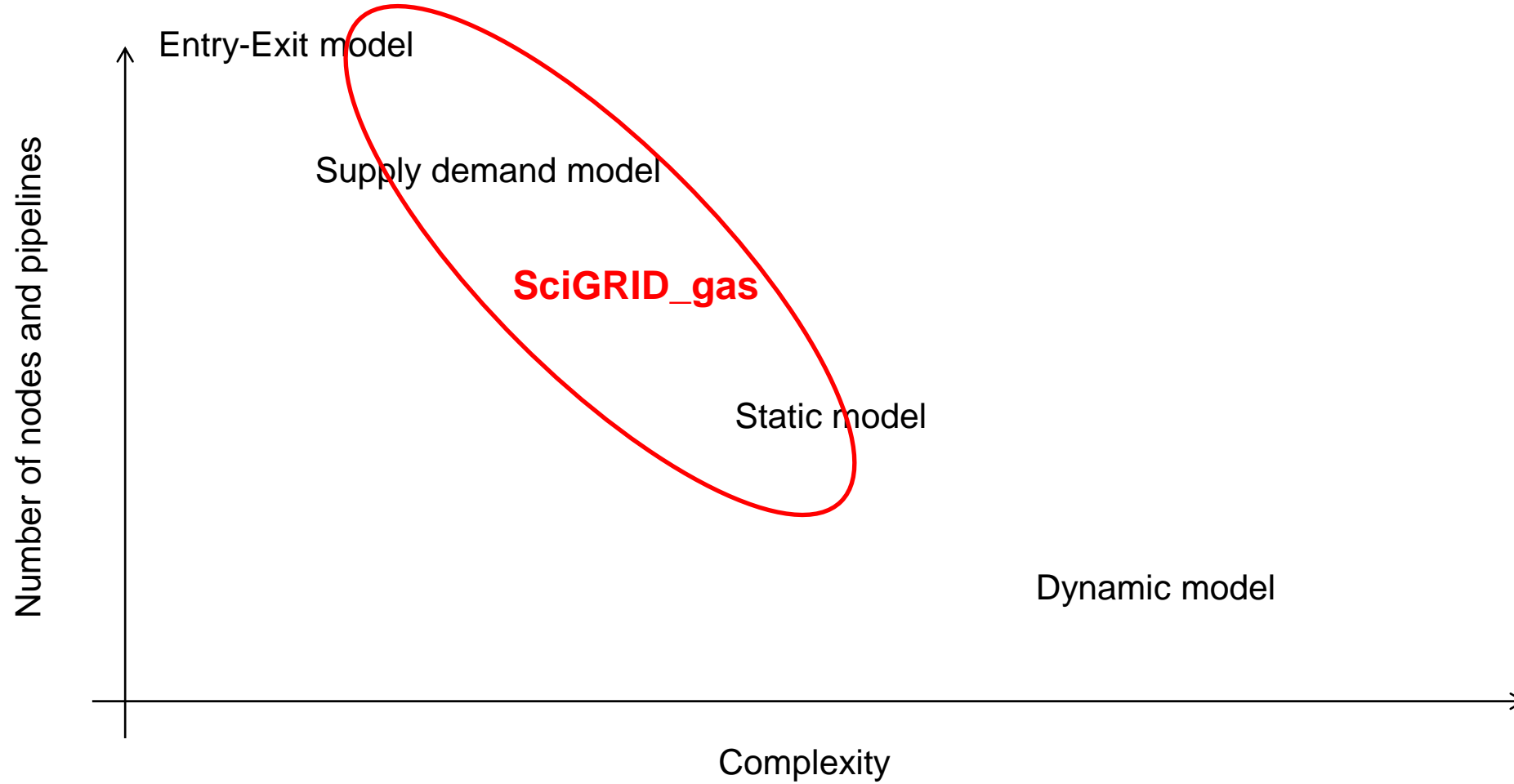
Modelling Environment

- Existing models and data only with restrictive copy/user right
- Missing information on simplification and assumptions
- Pipelines underground
- Facility data commercially sensitive

POWERFUL
but
SPARSE



Gas Network Model: Fundamentals



How to Build an Open Gas Transport Data Set?

Data Sources

- OSM
- INET
- GSE
- GIE
- LKD-eu
- EntsoG
- IGU
- GB
- NO
- CONS
- GEM



1. **Loading** data from sources
Many raw data sets
2. **Converting** into SciGRID_gas structures
Many component data sets
3. **Combining** into single data set
Single component data set
4. Generation of **missing attributes**
Single filled component data set
5. **Simplifying** data set
Single network data set 4 modelling



**Single
network
data set**




Homepage & Newsletter & Data download & Code download

www.gas.scigrid.de

<https://zenodo.org>

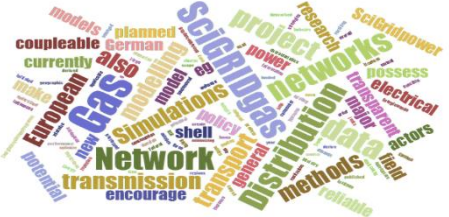
<https://github.com/>



Archives
General Information
Motivation and Approach
Contact
Imprint

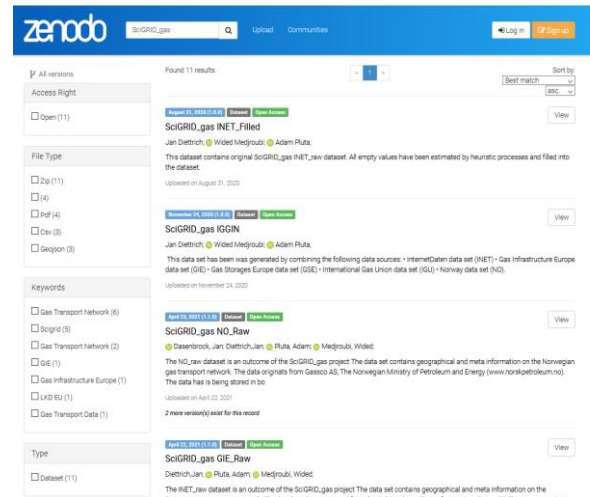
General information

Welcome to the SciGRID_gas project webpage.



SciGRID_gas is a three year project funded by the German Federal Ministry of Trade and Industry (BMWi) within the funding of the **6. Energieforschungsprogramm der Bundesregierung**.

The intention of SciGRID_gas is to develop methods in order to create an automated network model of the existing gas distribution network. Gas distribution networks are fundamental for simulations by the gas transport modelling community to derive major dynamic characteristics. Such simulations have a large scope of application, for example, they can be used to preform case scenarios, to model the gas consumption, to minimizing leaks and to



zenodo

SciGRID_gas

Found 11 results

Sort by: Best match

Access Right: Open (11)

File Type: zip (11), pdf (4), doc (2), ceajson (8)

Keywords: gas Transport network (6), scigrd (5), gas Transport network (2), gIE (1), gas Infrastructure Europe (1), IVD EU (1), gas Transport Data (1)

Type: Dataset (11)

August 25, 2020 (1.0.0) **Download** **Open Access**

SciGRID_gas INET_Filled

Jan Diettrich @ Wided Medjroub @ Adem Pluta

This dataset contains original SciGRID_gas INET_raw dataset. All empty values have been estimated by heuristic processes and filled into the dataset.

Updated on August 25, 2020

November 24, 2020 (1.0.0) **Download** **Open Access**

SciGRID_gas IGGN

Jan Diettrich @ Wided Medjroub @ Adem Pluta

This data set has been generated by combining the following data sources - InternetData data set (INET) - Gas Infrastructure Europe data set (GIE) - Gas Storages Europe data set (GSE) - International Gas Union data set (IGU) - Norway data set (NO).

Updated on November 24, 2020

April 25, 2021 (0.1.0) **Download** **Open Access**

SciGRID_gas NO_Raw

Daasbroek, Jan Diettrich-Jan @ Pluta, Adem @ Medjroub, Wided

The NO_Raw dataset is an outcome of the SciGRID_gas project. The data set contains geographical and meta information on the Norwegian gas transport network. The data originates from Gasco AS. The Norwegian Ministry of Petroleum and Energy (www.norwegianpetroleum.no). The data has is being stored in to

Updated on April 25, 2021

2 new versions/1 view for this record

April 25, 2021 (0.1.0) **Download** **Open Access**

SciGRID_gas GIE_Raw

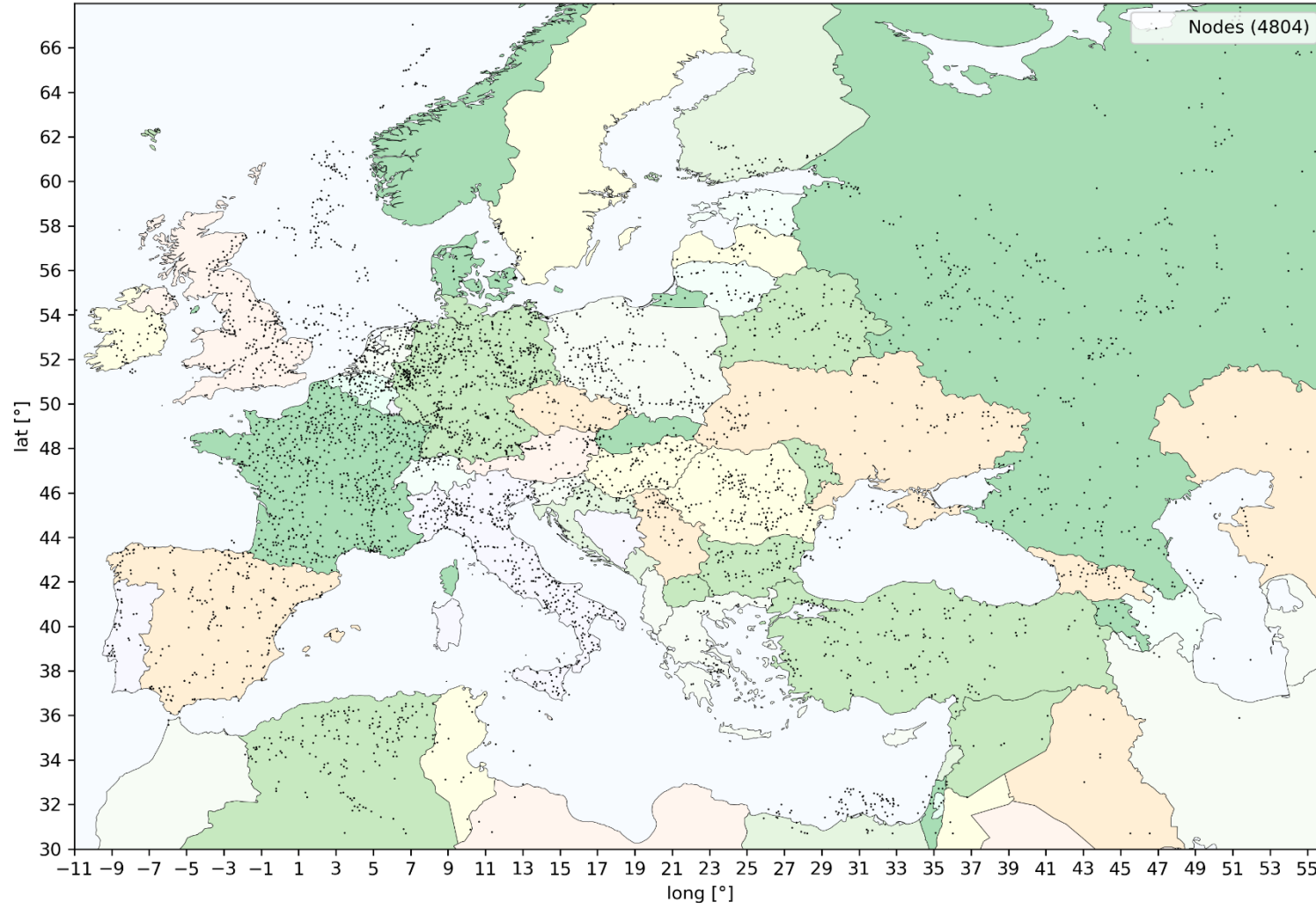
Diettrich-Jan @ Pluta, Adem @ Medjroub, Wided

The INET_Raw dataset is an outcome of the SciGRID_gas project. The data set contains geographical and meta information on the InternetData gas transport network. The data has been retrieved from the IGD Database. Data reference is Europe (GIE) is an abbreviation

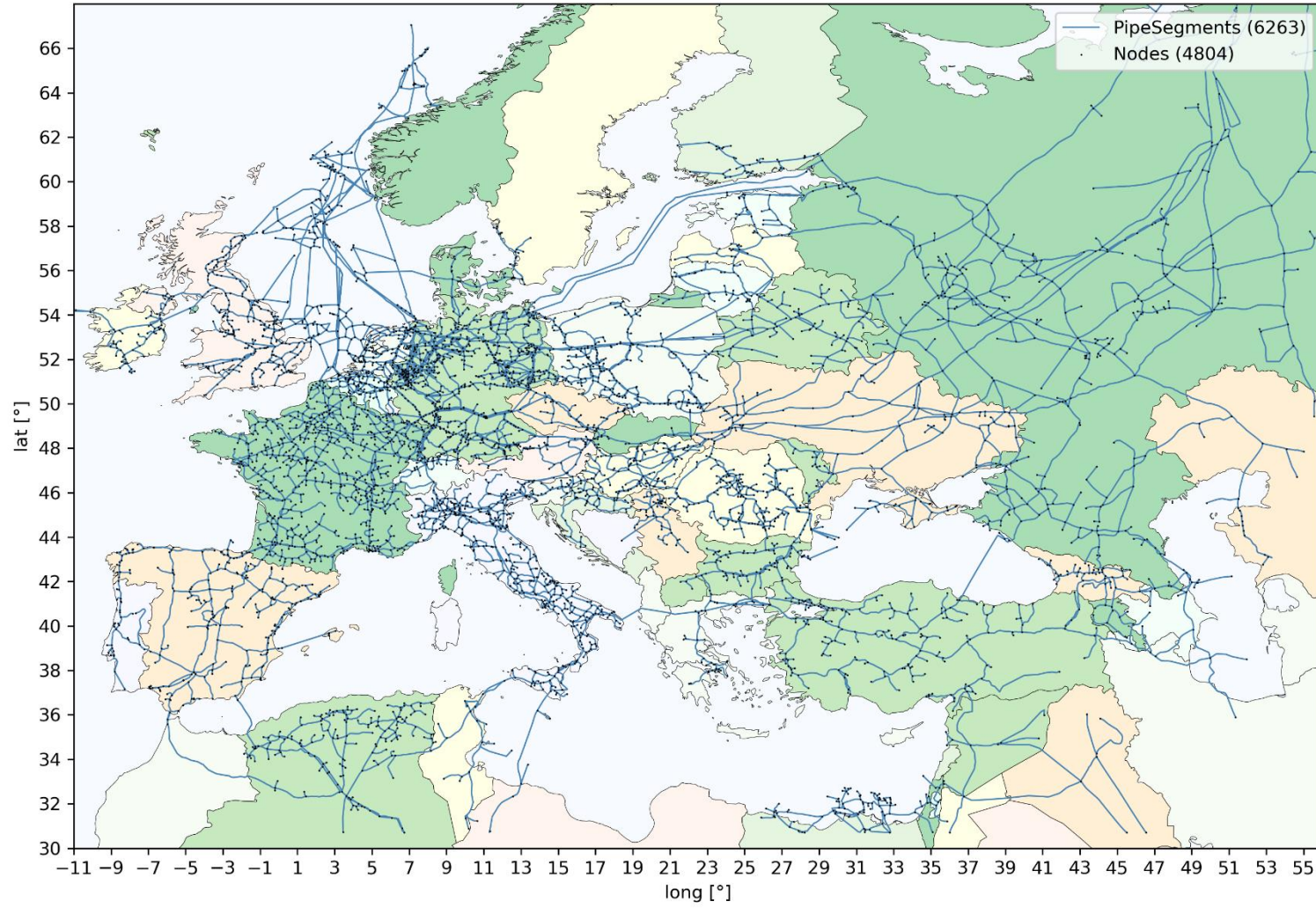
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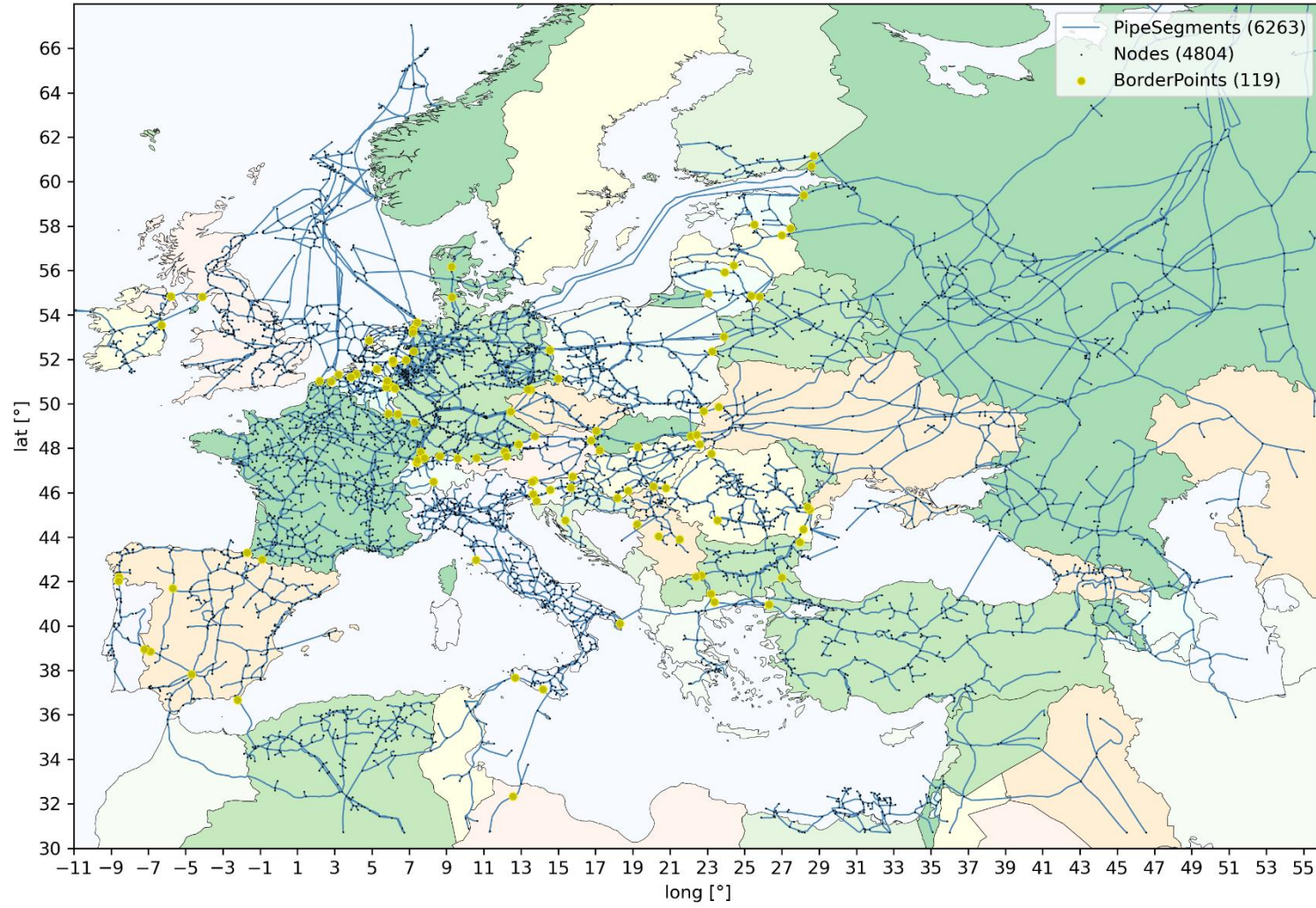
Data set



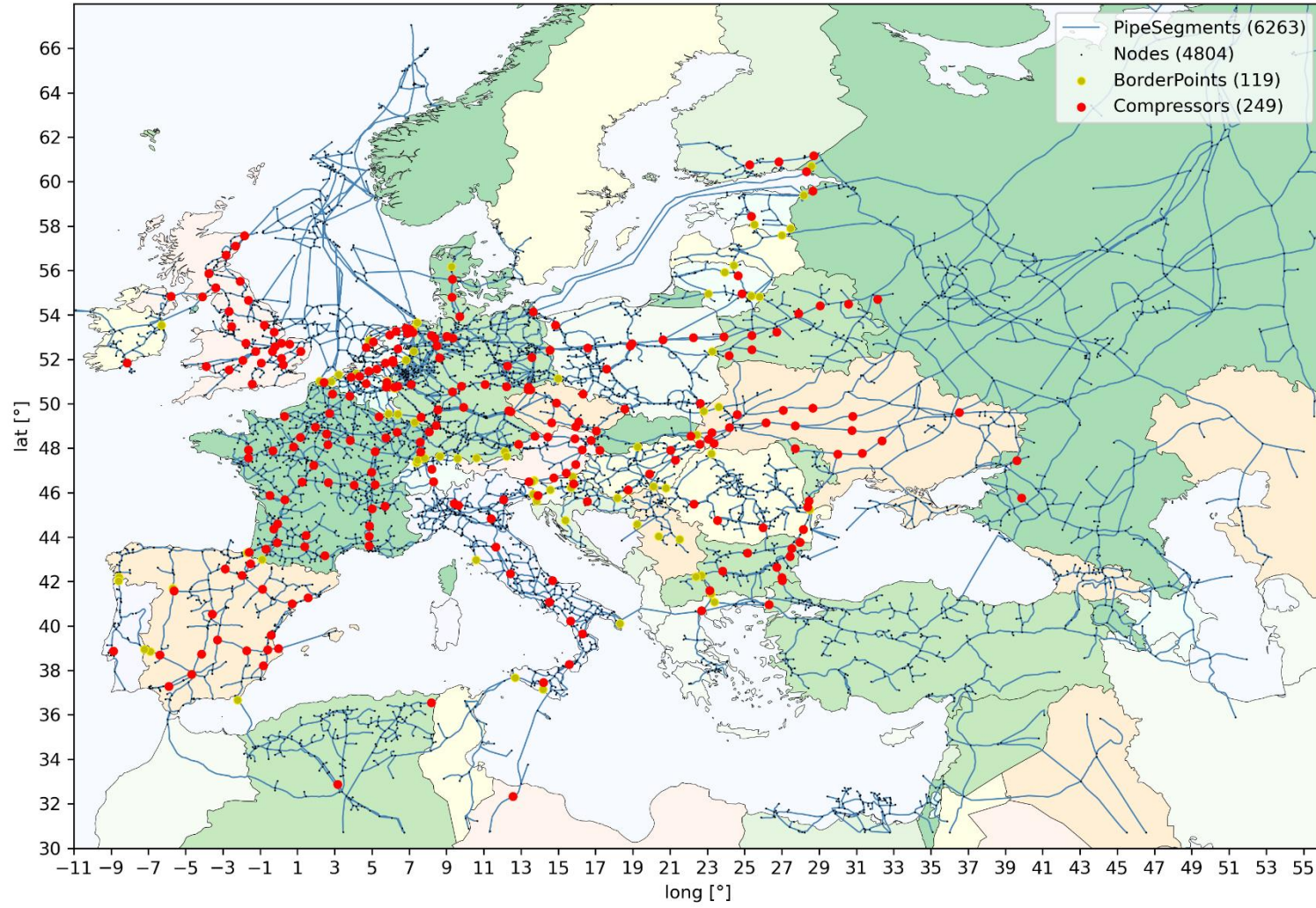
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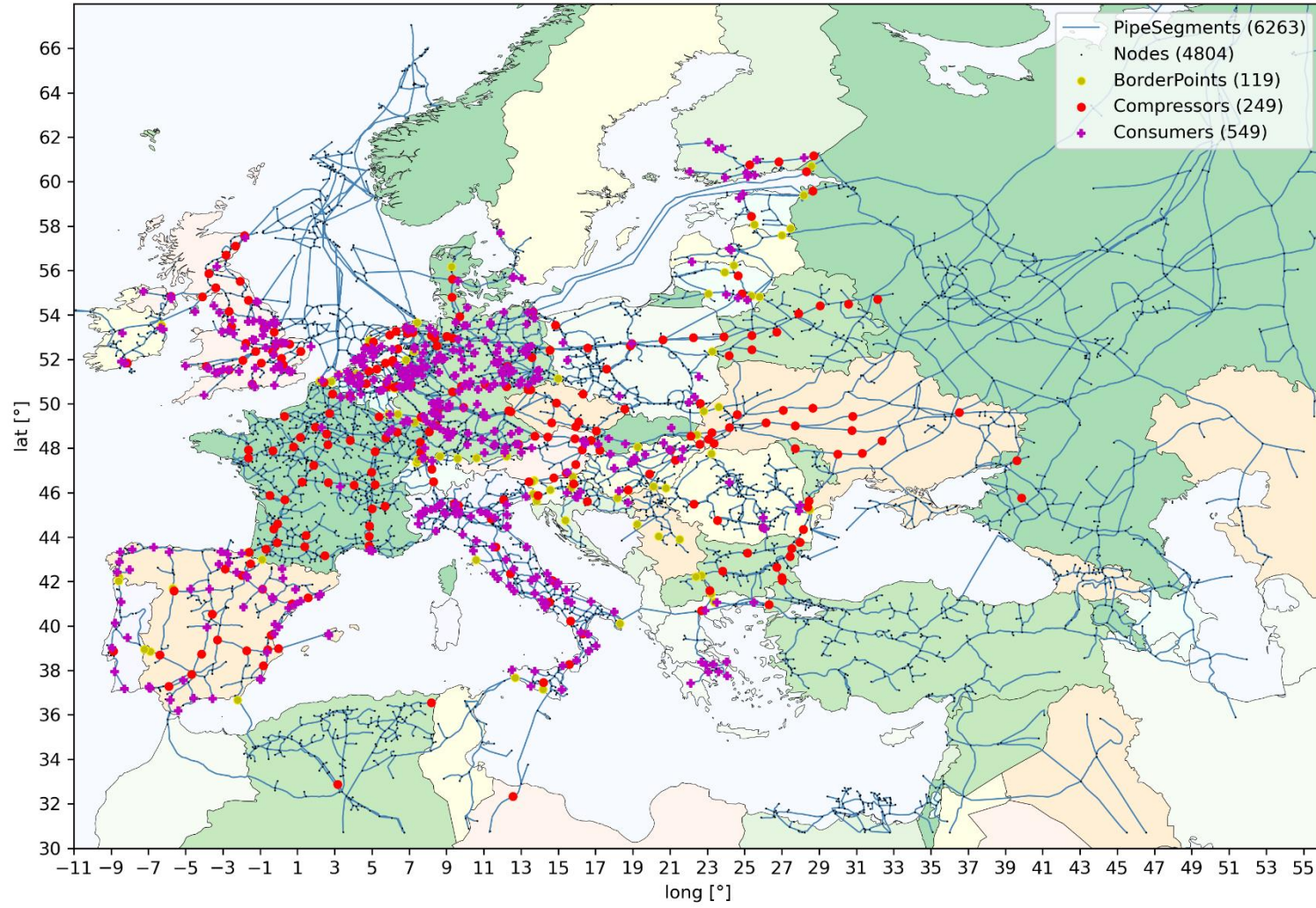
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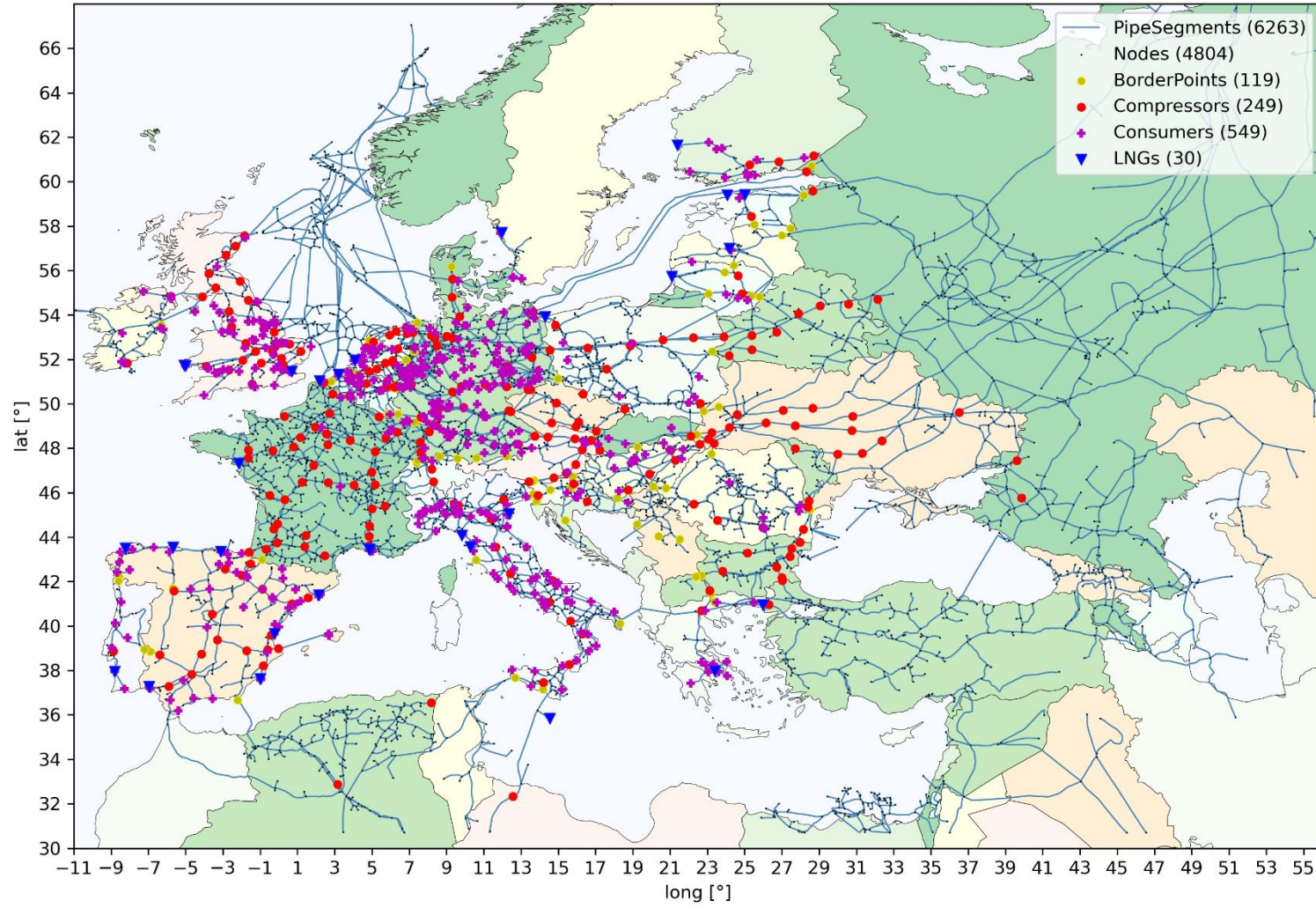
Data set



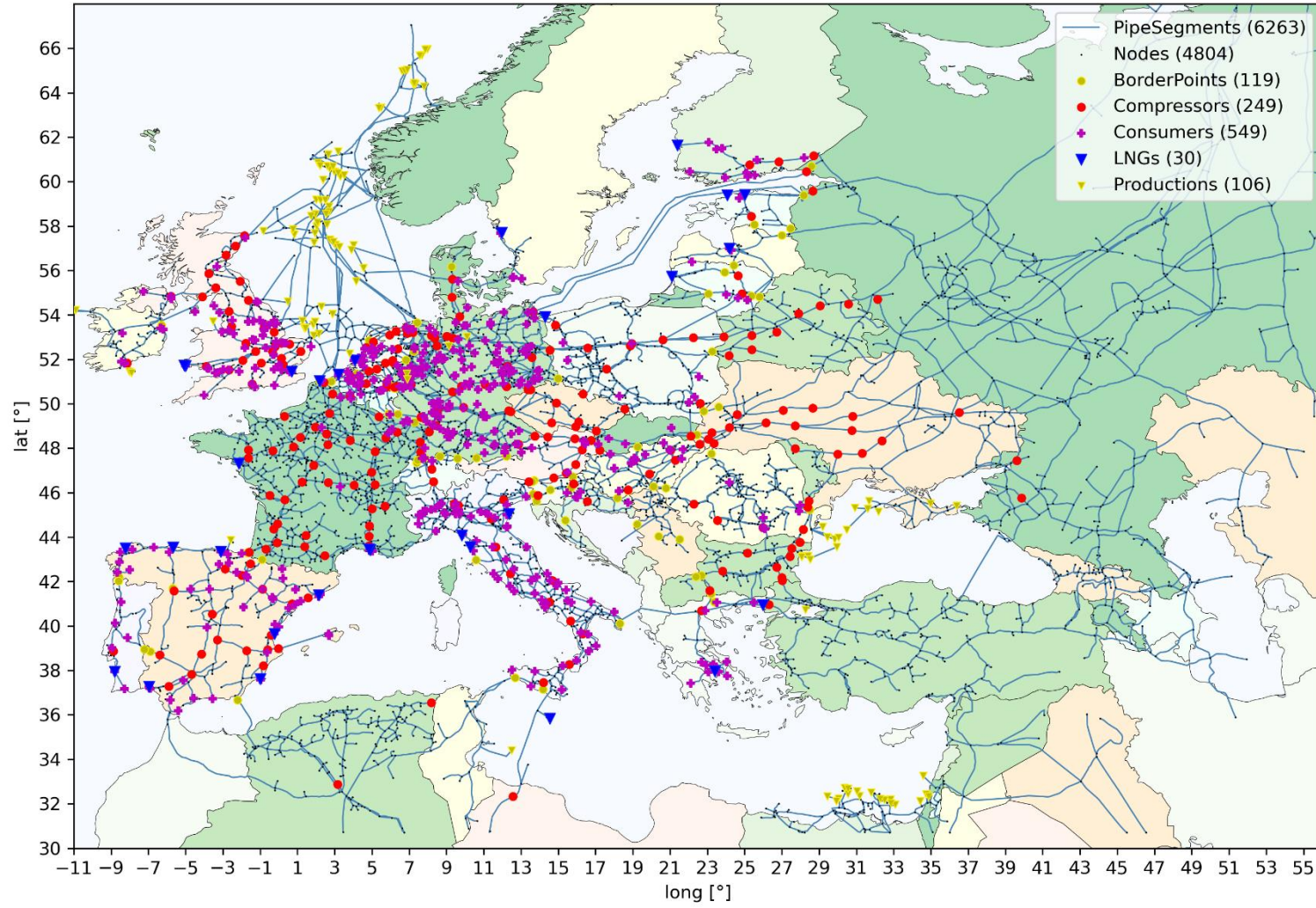
Data set



Data set



Data set



Data set

