Accessing Data from Sensor Observation Services: the `sos4R` Package

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Contents

1 Introduction

The `sos4R` package provides classes and methods for dealing with
Package `sos4R` is loaded by

1.1 OGC and Specifications

TODO: Shortly mention and link to OM, OWS Common, Sampling, Filtering, SensorML ...
TODO: Round-up of SOS specification

2 SOS Requests

2.1 GetCapabilities

2.2 DescribeSensor

2.3 GetObservation

2.4 GetObservationById

3 Creating a SOS connection

4 Requesting Data

4.1 Using Metadata

How can one extract the metadata from a SOS connection and reuse it for queries?
accessor functions, elements of the capabilities, ...

4.2 Making the Request

4.3 Data Format

explain why the returned data.frame is how it looks like
how to extract metadata

4.4 Using the Data

show/explain conversion to zoo, sp etc.
exporting
show example

5 Changing Handling Functions

TODO: explain approach, mention available non-exchangeable functions in the subsections

5.1 Parsing/Decoding

5.2 Encoding

6 Exception Handling

TODO: Explain what part of the exception report means what, link to OWS Common

7 Developing sos4R

explain 52 North
svn code repository
shortly describe the class structure, .R file naming scheme, ...

References

Chambers, J.M., 2008, Software for Data Analysis, Programming with R. Springer, New York.

specs!

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