

Package: nirs4alldatasets (via r-universe)

July 3, 2026

Title Acquire Curated NIRS Reference Datasets ('nirs4all-datasets')

Version 0.2.0

Description R binding over the 'nirs4all-datasets' C 'ABI' ('n4ds_*'):
resolve a dataset id from the distributable catalog index into
a version-pinned download contract, fetch the canonical
'Parquet' ('Dataverse' / 'Zenodo' / 'figshare') with SHA-256
verification into a local cache, and re-verify a cached
directory offline. JSON crosses the stable C 'ABI'; analysis of
the data is left to the host.

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Encoding UTF-8

NeedsCompilation yes

SystemRequirements Cargo (Rust toolchain), rustc

RoxygenNote 7.3.2

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Config/pak/sysreqs libclang-dev

Repository <https://cranhaven.r-universe.dev>

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RemoteUrl <https://github.com/cranhaven/cranhaven.r-universe.dev>

RemoteRef package/nirs4alldatasets

RemoteSha f6fc36c49466e0ffa08ba95f2d15524974822d57

RemoteSubdir nirs4alldatasets

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n4ds_abi_version	<i>The C ABI version string.</i>
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Description

The C ABI version string.

Usage

```
n4ds_abi_version()
```

Value

The C ABI version as a string.

n4ds_fetch	<i>Download + SHA-256-verify a resolved dataset into the cache (JSON status string).</i>
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Description

Download + SHA-256-verify a resolved dataset into the cache (JSON status string).

Usage

```
n4ds_fetch(resolved_json, opts_json = "")
```

Arguments

resolved_json	A resolved contract (from n4ds_resolve) as JSON.
opts_json	Options as JSON: {cache_dir?, token?, instance?, timeout_secs?}; "" for the defaults.

Value

The fetch status as a JSON string (dir, files:[{name, relpath, path, status}]).

n4ds_resolve	<i>Resolve a dataset id against an index JSON into its download contract (JSON string).</i>
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Description

Resolve a dataset id against an index JSON into its download contract (JSON string).

Usage

```
n4ds_resolve(index_json, dataset_id)
```

Arguments

index_json	The distributable catalog index as a JSON string.
dataset_id	The dataset id to resolve.

Value

The resolved download contract as a JSON string (id, tier, instance, doi, dataset_version, files, origins).

n4ds_verify_cached	<i>Re-verify a cached dataset directory against the contract's SHA-256s (JSON report).</i>
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Description

Re-verify a cached dataset directory against the contract's SHA-256s (JSON report).

Usage

```
n4ds_verify_cached(resolved_json, dir)
```

Arguments

resolved_json	A resolved contract as JSON.
dir	The cached dataset directory.

Value

The verification report as a JSON string (dir, ok, files:[{name, relpath, status}]).

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