Kaiko

MIGRATION GUIDE

Insurance Funds

HTTP REST

Amberdata → Kaiko

2026

www.kaiko.com

1 At a glance

What this endpoint gives you. Historical insurance fund balances of derivatives exchanges: the size of the fund backing liquidations, per pool, over time.

What changes for you

- **Coverage: OKX (`okex`) and Bybit (`bbit`) only.**
- **The pool is identified differently per exchange.** Amberdata uses an `instrument` in the path; Kaiko uses query parameters: `base_asset` + `quote_asset` on OKX, `settle_currency` on Bybit (see §3).
- **A sampled time series.** Kaiko returns one row per `interval` (`1m` , `1h` , `4h` , `1d`), with the exchange update time in `exchange_timestamp` .
- **New fields:** `fund_usd` (USD value of the fund, when available) and `settle_currency` . `underlying` becomes an **array**.
- **Latest value by default.** Without `start_time` / `end_time` , Kaiko returns a single row: the latest fund balance. Send dates to get a history (default `interval` `1d` , newest first).
- **New API grammar:** every parameter is a query parameter; `class` is required.

Coverage & distribution

Data type: Exchange insurance fund balances
Exchanges: OKX (`okex`), Bybit (`bbit`)
Markets: `perpetual-future` , `future`
Granularity: Kaiko `1m` , `1h` , `4h` , `1d`
Distribution: REST API

2 Endpoint & authentication

	Amberdata (today)	Kaiko (new)
Method	GET	GET
Base URL	`https://api.amberdata.com/markets`	`https://api.kaiko.io`
Path	`/futures/insurance-fund/{instrument}`	`/market-data/derivatives/insurance-funds`
Auth	API key header `x-api-key`	API key header `X-Api-Key` (same mechanism, new key)

Kaiko API family: New API grammar

This endpoint uses Kaiko's new `market-data` grammar: every parameter is a query parameter and responses share the `data` + `meta` envelope. Kaiko's Classic (versioned) endpoints, such as Trades, use a different URL structure and envelope.

3 Request parameters

All Kaiko parameters are query parameters. Required: `exchange`, `class`, plus `base_asset` and `quote_asset` on OKX, or `settle_currency` on Bybit. Optional: `start_time`, `end_time`, `interval`, `sort`, `page_size`.

Amberdata param	Kaiko param	Change	Notes
`instrument` (path, required) — OKX	`base_asset` + `quote_asset`	RENAMED	Required on OKX. Lower case, e.g. `BTC-USD` → `base_asset=btc` & `quote_asset=usd`.
`instrument` (path, required) — Bybit	`settle_currency`	RENAMED	Required on Bybit. The pool is identified by its settlement currency, lower case: Amberdata `BTC` → `settle_currency=btc` (inverse contracts pool); `settle_currency=usdt` for the USDT pool.
`exchange` (query, required)	`exchange`	RENAMED	One exchange per call. `okex` (unchanged), `bybit` → `bbit` (see §6).
—	`class`	NEW	Required. `perpetual-future` or `future`.
`startDate` (optional)	`start_time`	RENAMED	Inclusive lower bound on both sides. Amberdata: seconds, milliseconds or ISO 8601; maximum range 731 days; last 24 hours when omitted. **Optional on Kaiko.** ISO 8601 UTC. **Without dates, Kaiko returns only the latest value** (one row).
`endDate` (optional)	`end_time`	RENAMED	Exclusive upper bound on both sides. ISO 8601 UTC on Kaiko.
—	`interval`	NEW	Optional. Sampling interval: `1m`, `1h`, `4h`, `1d` (default).
`sortDirection` (optional)	`sort`	RENAMED	Amberdata: `asc` by default, only within the last 24 hours. Kaiko: `asc` or `desc` (default, newest first).
—	`page_size`	NEW	Optional. 1 to 1000 rows per page; `1` when no dates are sent (latest value). Follow `meta.next_url` for the next page.
`timeFormat` (optional)	—	REMOVED	Kaiko always returns ISO 8601.
`api-version` (header, optional)	`api_version`	RENAMED	A query parameter on Kaiko, e.g. `2026-10-01`.
`Accept-Encoding` (header, required)	`Accept-Encoding`	IDENTICAL	Supported by Kaiko.

Error codes

Common to Kaiko's New API grammar endpoints:

- `400` : invalid parameter (value, format or precision not accepted).
- `403 not_entitled` : the requested asset or instrument is outside your licence. Lists are authorised all or nothing.
- `403 history_out_of_entitlement` : the time window goes beyond your key's history entitlement, including the default window when no dates are sent.
- `404 unknown_instrument` : a code that is not an instrument of the requested `class` / exchange; the response names it.

4 Response envelope & metadata

The fields around the data, the wrapper your parser reads before reaching the numbers. This envelope is **identical on every Amberdata endpoint**.

Amberdata field	Kaiko field	Change	Notes
`status`	—	REMOVED	HTTP-style status integer (200). Not in the Kaiko body; rely on the HTTP status code.
`title`	—	REMOVED	"OK" label, no direct Kaiko equivalent.
`description`	—	REMOVED	Free-text status description.
`payload.data`	`data`	RENAMED	**Array** holding the insurance fund rows (see §5), now at the top level.
`payload.metadata`	`meta`	RENAMED	Metadata object, after `data`.
`payload.metadata.api-version`	`meta.api_version`	RENAMED	Date version of the API used, e.g. `2023-09-30` on Amberdata, `2026-10-01` on Kaiko.
—	`meta.count`	NEW	Number of items returned in `data` on this page.
`payload.metadata.next`	`meta.next_url`	RENAMED	Full URL of the next page when results are paginated (a cursor URL on Amberdata). Call it as-is until it is no longer returned.
—	`meta.url`	NEW	The query as requested, with every parameter it carries.

5 Response - data fields

One row per interval and pool. All Kaiko numeric values are decimal strings.

Amberdata field	Kaiko field	Change	Notes
`exchange`	`exchange`	RENAMED	Kaiko exchange code (`okex` , `bbit`).

Amberdata field	Kaiko field	Change	Notes
`instrument`	`base_asset`, `quote_asset`, `settle_currency`	RENAMED	Pool identifiers. On Bybit, `base_asset` and `quote_asset` are `null` and the pool is identified by `settle_currency`.
`underlying`	`underlying`	RENAMED	**String → array of strings**, lower case (e.g. `["btc-usdt"]`, `["usdt"]`).
`exchangeTimestamp`	`exchange_timestamp`	RENAMED	Time of the exchange update. Human-readable string by default on Amberdata; ISO 8601 on Kaiko.
`exchangeTimestampNanoseconds`	—	REMOVED	No Kaiko equivalent.
—	`timestamp`	NEW	Start of the sampling interval (e.g. `17:00` for a `1h` row whose `exchange_timestamp` is `17:12`).
`fund`	`fund`	RENAMED	Same name; fund balance in the pool currency; number → decimal string.
—	`fund_usd`	NEW	Fund balance in USD; `null` when not available (e.g. OKX in the sample reviewed).

6 Exchange & instrument names

Kaiko identifies venues and instruments with its own normalized codes, which differ from Amberdata's names. Codes can also differ by market for the same venue (e.g. Binance spot and options).

Reference

The mapping rules and the full code lists apply to every endpoint and are described in the **Exchange, Asset & Instrument Mapping** migration guide (`exchange-instrument-asset-codes.pdf`).

7 Will your values change?

Short answer

Fund balances come from the exchanges, so values should match for the same pool and time. Differences come from sampling: Kaiko returns one value per interval.

- **Sampling.** Each Kaiko row carries the exchange update reported within the interval (`exchange_timestamp`); align on `exchange_timestamp` to compare with Amberdata.
- **Pool definition on Bybit.** Kaiko identifies Bybit pools by settlement currency: Amberdata `BTC` is `settle_currency=btc` on Kaiko. Checked: both return a fund of `5090.87948226` BTC.
- **Number representation.** Kaiko returns decimal strings; compare as decimals.

8 Before / after example

Request

Amberdata

```
GET https://api.amberdata.com/markets
    /futures/insurance-fund/BTC
    ?exchange=bybit
x-api-key: <your key>
```

Kaiko

```
GET https://api.kaiko.io
    /market-data/derivatives/insurance-funds
    ?exchange=bbit
    &class=perpetual-future
    &settle_currency=btc
    &interval=1h

# OKX: base_asset + quote_asset instead
    ?exchange=okex
    &class=perpetual-future
    &base_asset=btc
    &quote_asset=usdt
X-Api-Key: <your key>
```

Response

Real samples on the same pool (Bybit BTC). The fund balance is identical on both sides: `5090.87948226` BTC.

Amberdata


```
{
  "status": 200,
  "title": "OK",
  "description": "Successful request",
  "payload": {
    "metadata": {
      "next": null,
      "api-version": "2023-09-30"
    },
    "data": [
      {
        "instrument": "BTC",
        "exchange": "bybit",
        "exchangeTimestamp": "2026-10-31 17:15:00
000",
        "exchangeTimestampNanoseconds": 0,
        "fund": 5090.87948226,
        "underlying": "BTC"
      },
      ...
    ]
  }
}
```


Kaiko


```
{
  "data": [
    {
      "exchange": "bbit",
      "base_asset": null,
      "quote_asset": null,
      "settle_currency": "btc",
      "timestamp": "2026-11-01T17:00:00.000Z",
      "exchange_timestamp":
"2026-11-01T17:24:00.000Z",
      "fund": "5090.87948226",
      "fund_usd": "397015520.8",
      "underlying": ["btc"]
    },
    ...
  ],
  "meta": {
    "api_version": "2026-10-01",
    "count": 24,
    "next_url": null,
    "url": "https://api.kaiko.io/market-data/
derivatives/insurance-funds?..."
  }
}
```