

Zarr Chunked Compressed & Cloud-ready N-Dimensional Arrays

Josh Moore
SciPy 2023 | Tools Plenary Session
2023-07

Zarr Update

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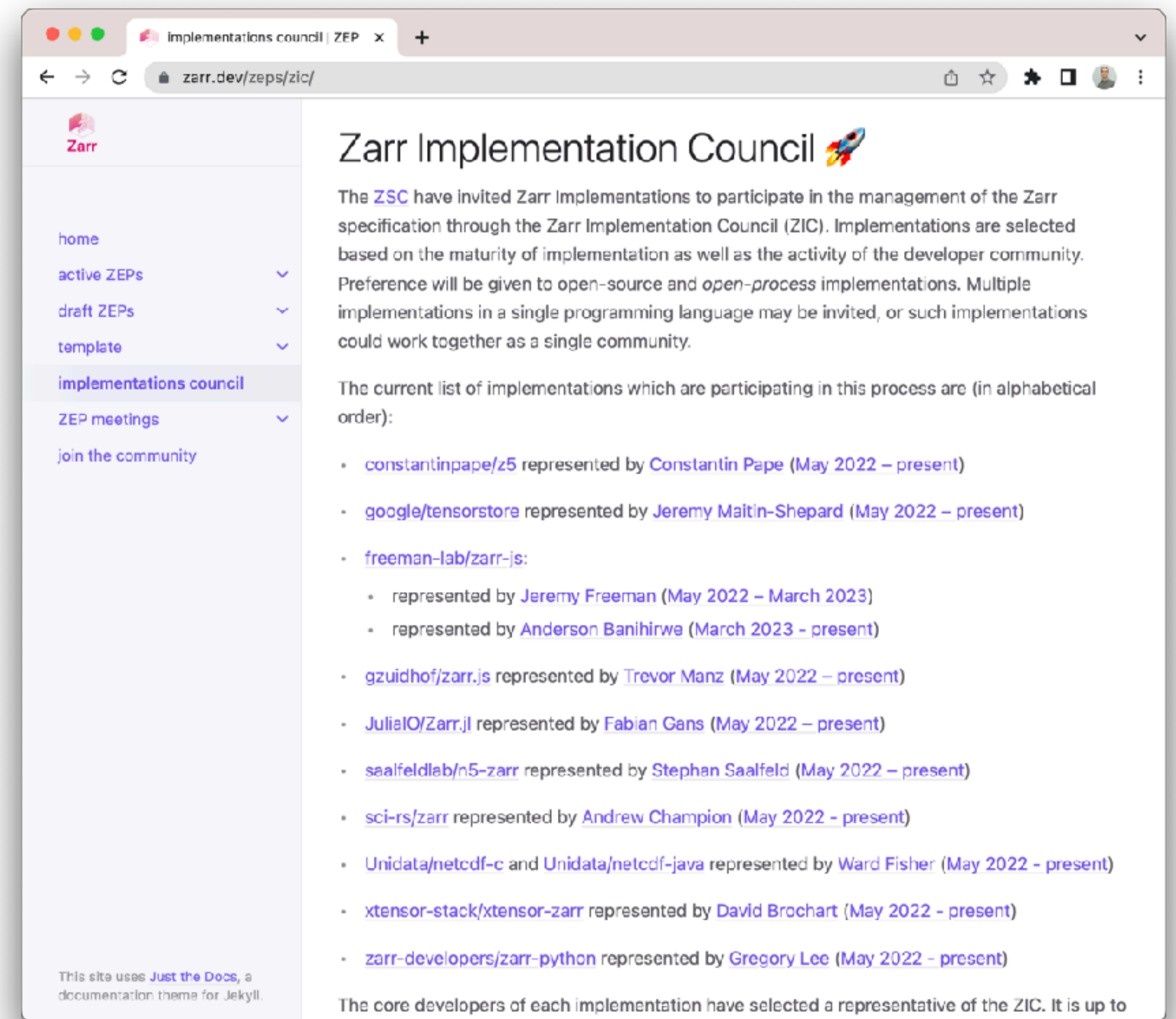
CHAN
ZUCKERBERG
INITIATIVE



Sanket Verma
@MSanKeys963

Zarr Update

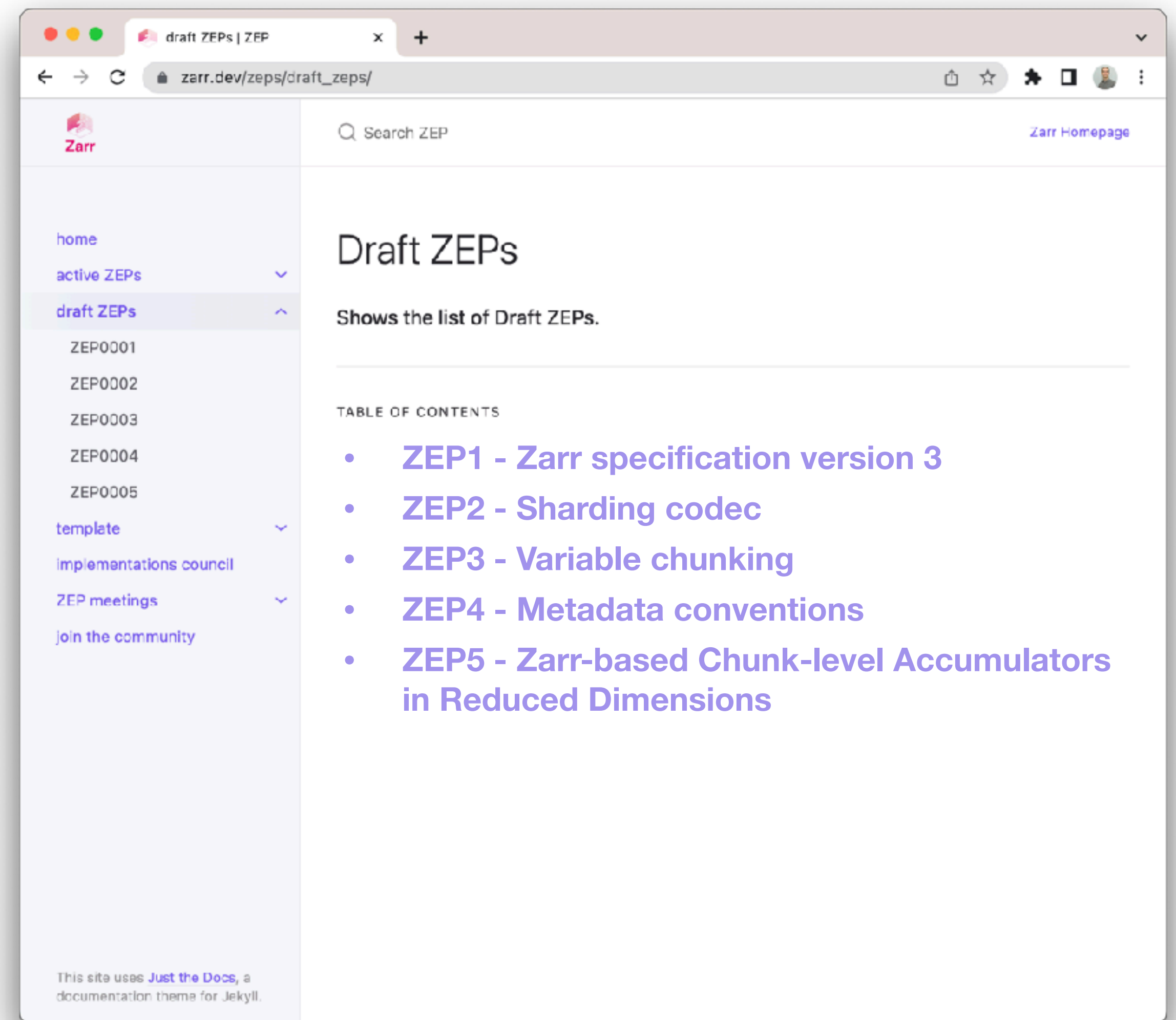
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<https://zarr.dev/zeps/zic>

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https://zarr.dev/zeps/draft_zeps

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Create an array

```
a = await zarrita.Array.create_async(
    store / 'array',
    shape=(6, 10),
    dtype='int32',
    chunk_shape=(2, 5),
    codecs=[zarrita.codecs.blosc_codec()],
    attributes={'question': 'life', 'answer': 42}
)
await a.async[:, :].set(np.ones((6, 10), dtype='int32'))
```

Open an array

```
a = await zarrita.Array.open_async(store / 'array')
assert np.array_equal(await a.async[:, :].get(), np.ones((6, 10), dtype='int32'))
```

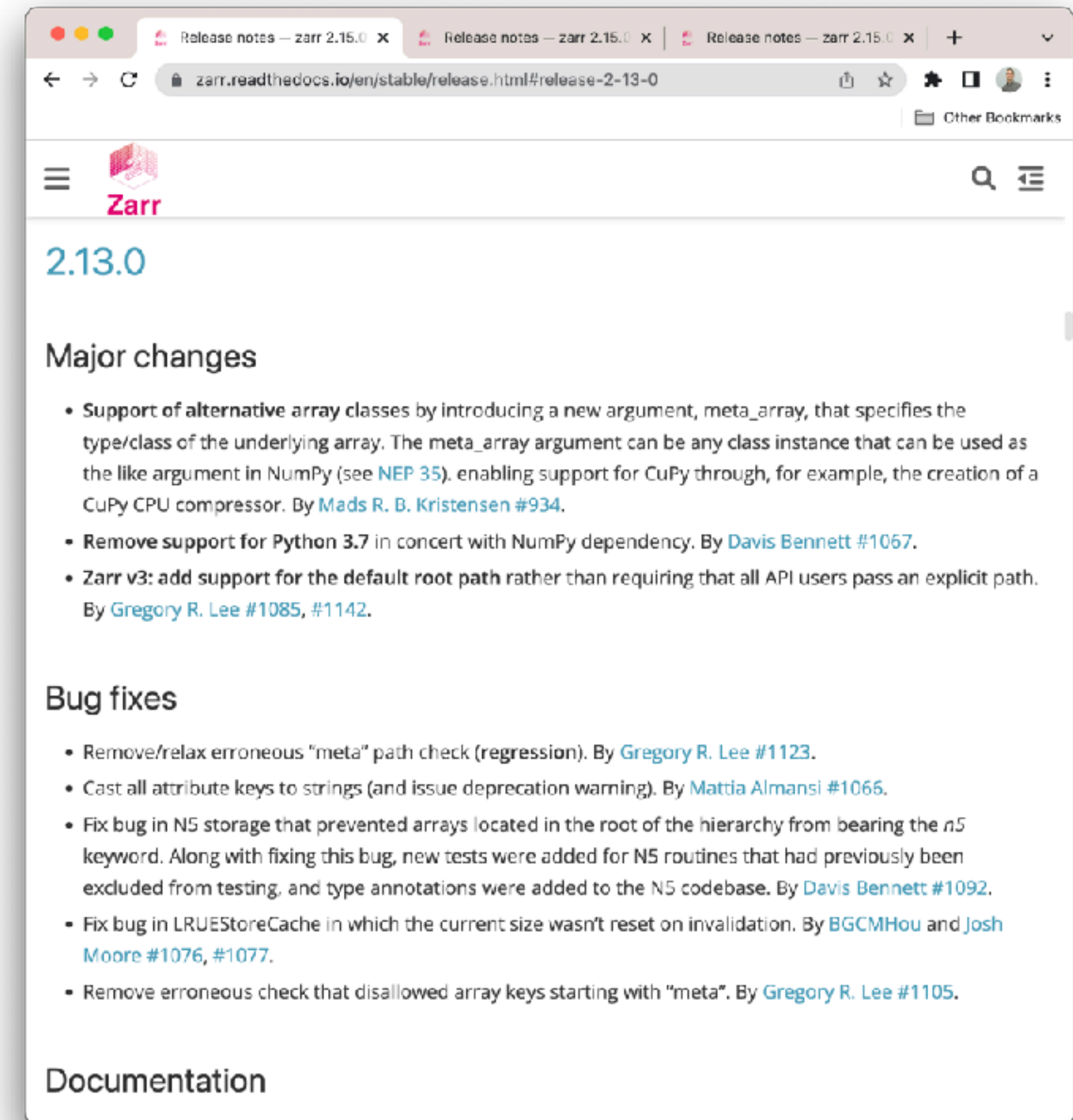
Create an array with sharding

```
a = await zarrita.Array.create_async(
    store / 'sharding',
    shape=(16, 16),
    dtype='int32',
    chunk_shape=(16, 16),
    chunk_key_encoding=('v2', '.'),
    codecs=[
        zarrita.codecs.sharding_codec(
            chunk_shape=(8, 8),
            codecs=[zarrita.codecs.blosc_codec()]
        ),
    ],
)
data = np.arange(0, 16 * 16, dtype='int32').reshape((16, 16))
await a.async[:, :].set(data)
assert np.array_equal(await a.async[:, :].get(), data)
```

<https://github.com/scalableminds/zarrita>

Zarr Update

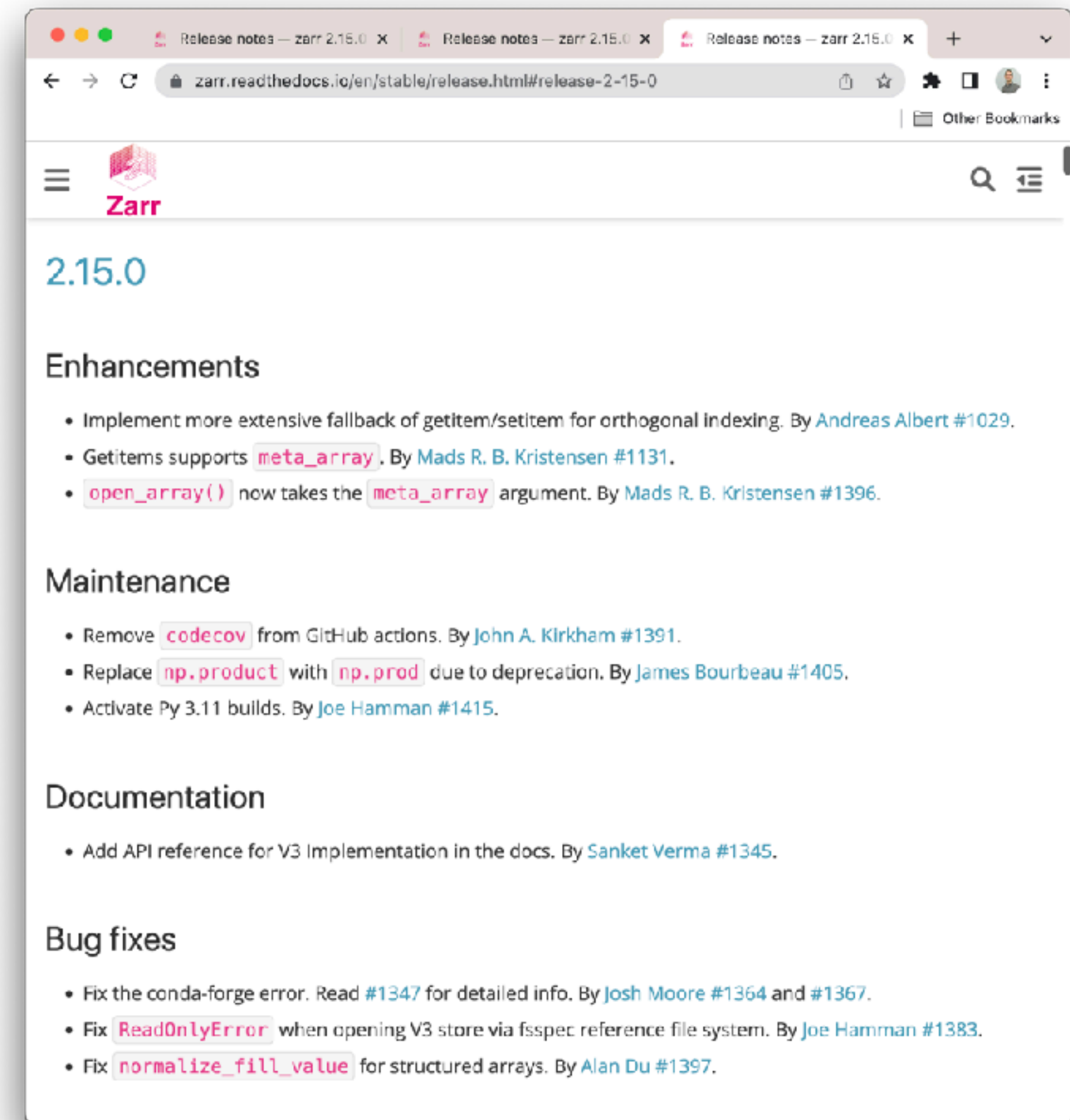
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<https://zarr.readthedocs.io/en/stable/release.html#release-2-13-0>

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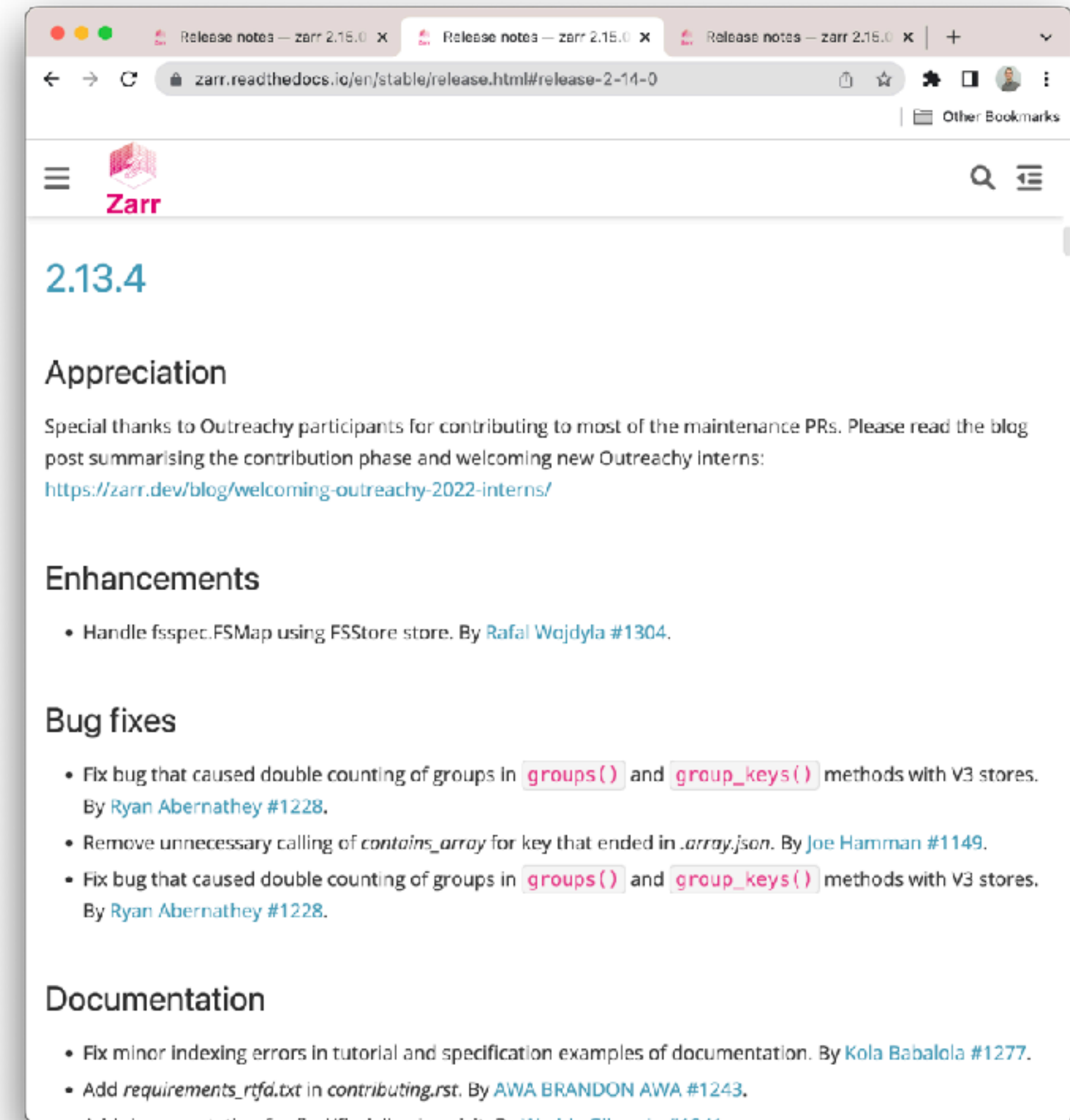
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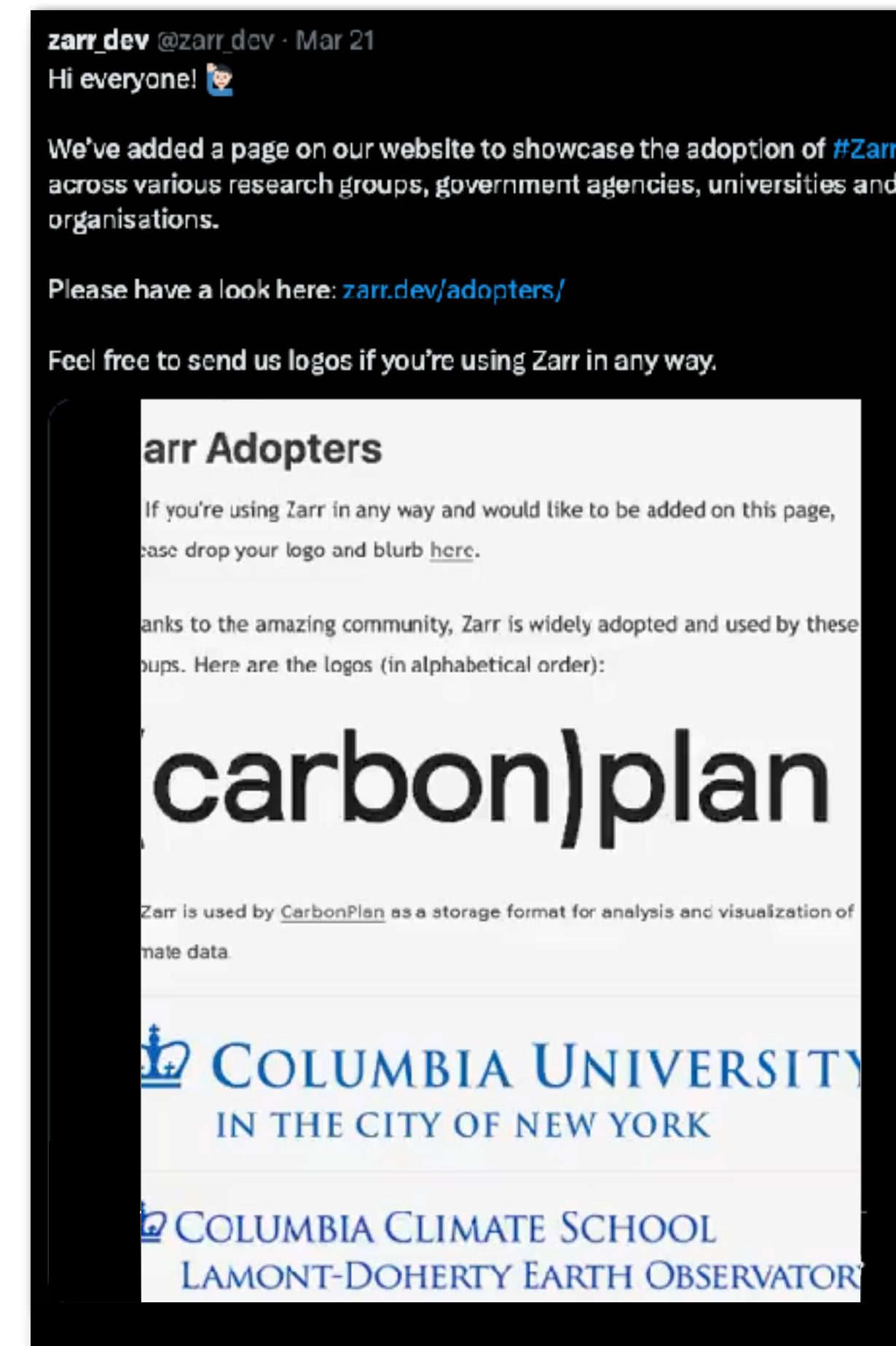
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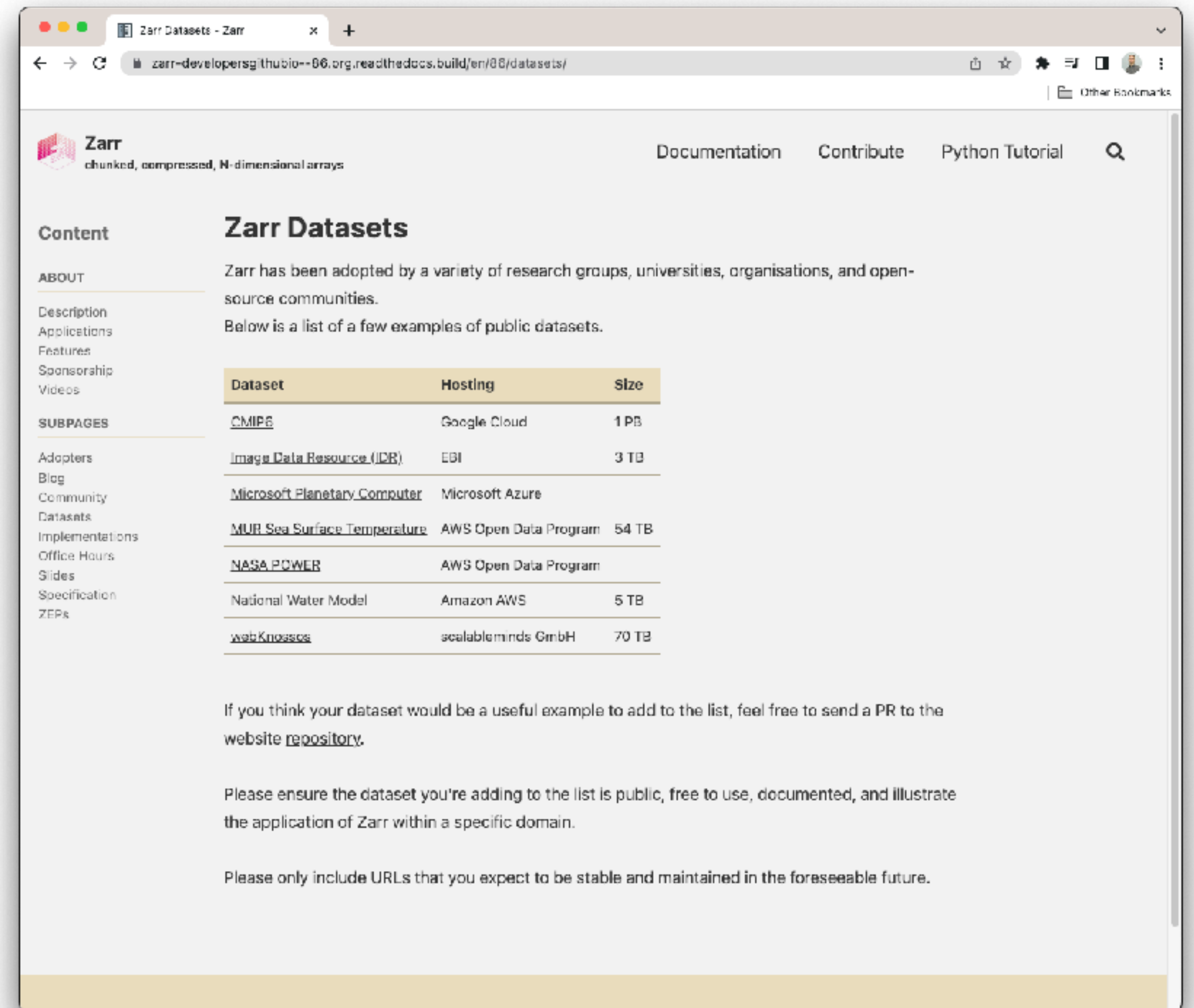
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<https://zarr.dev/adopters>

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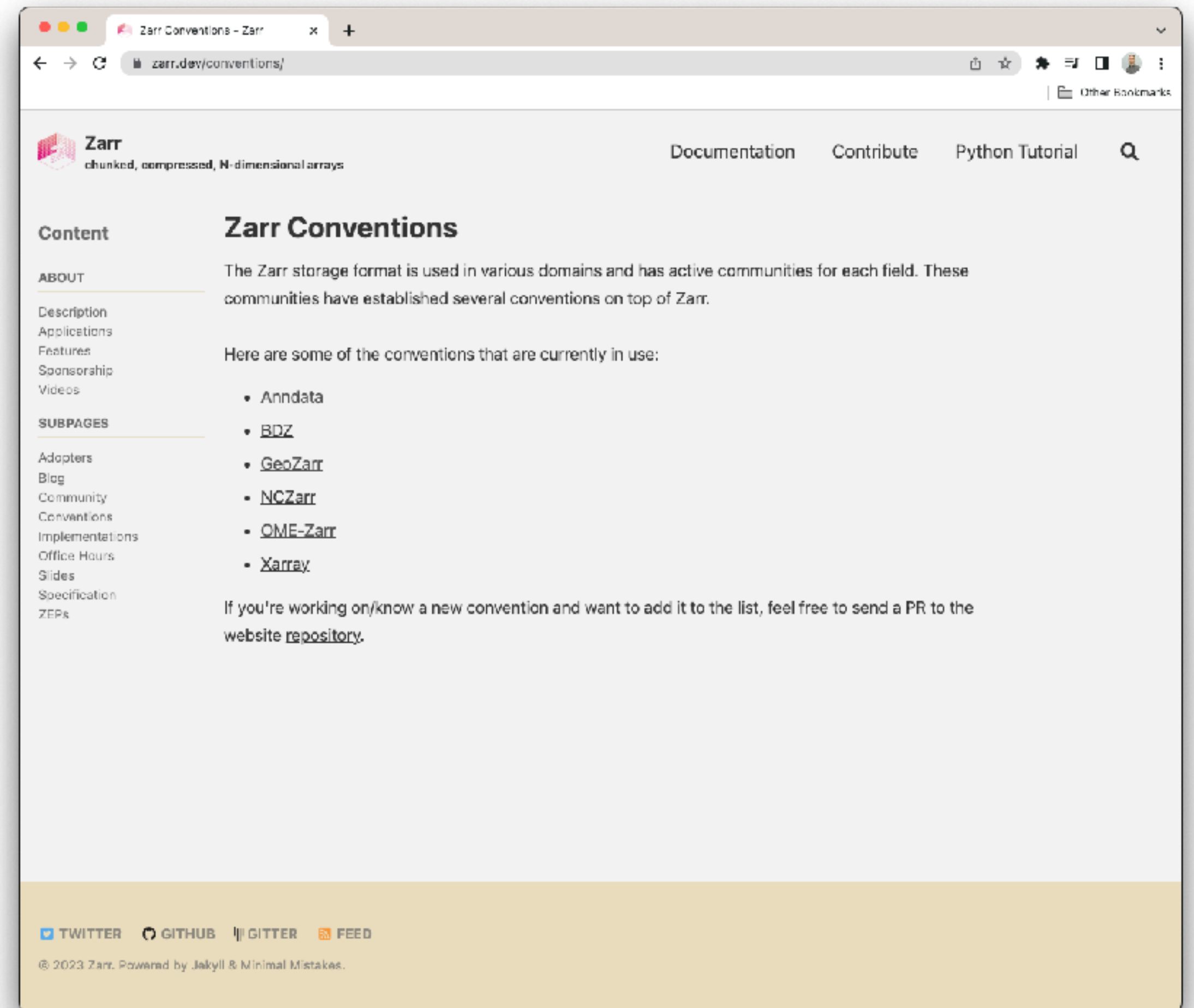
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<https://zarr.dev/datasets>

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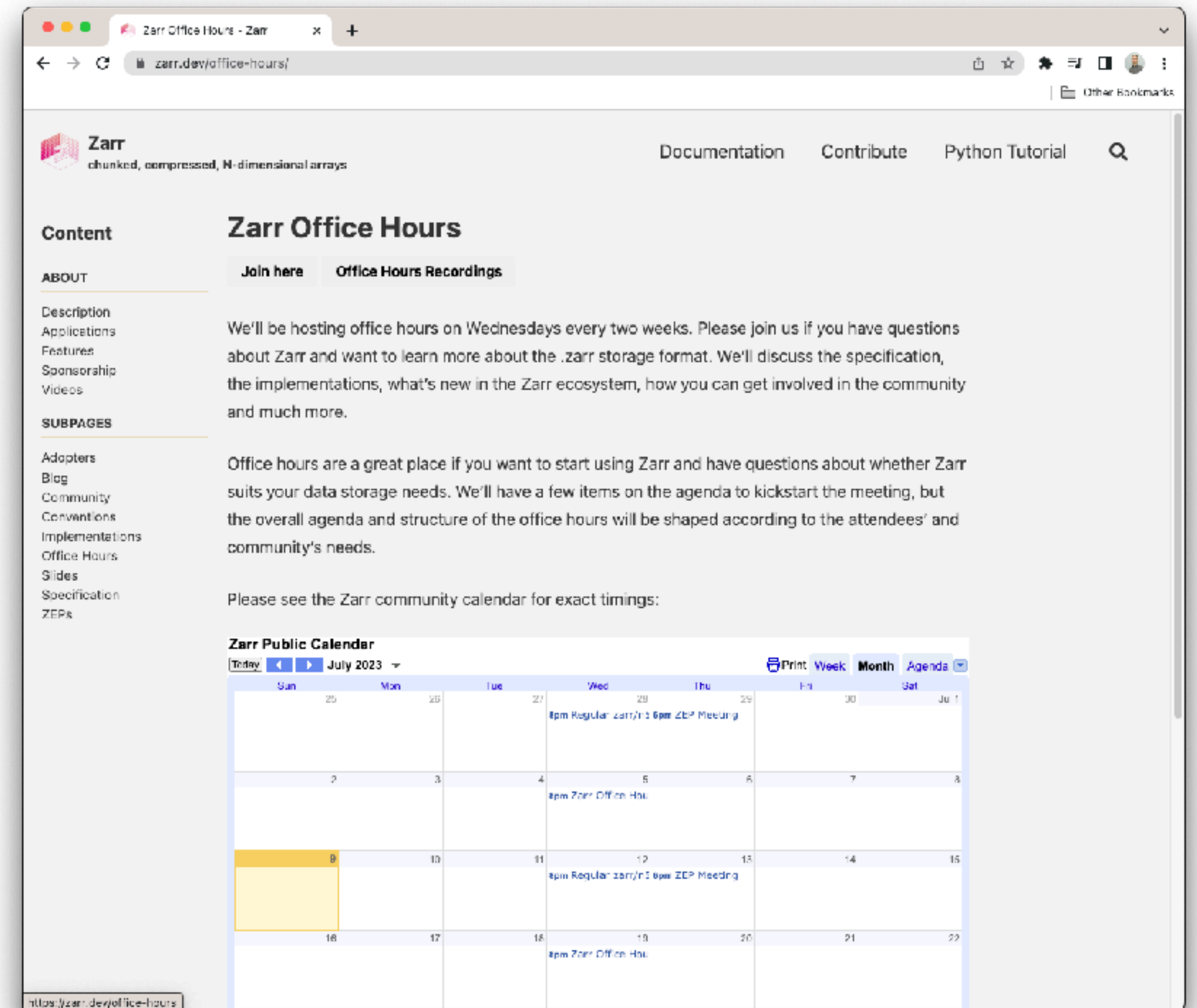
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<https://zarr.dev/conventions>

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<https://github.com/zarr-developers/community>



<https://gitter.im/zarr-developers/community>



https://twitter.com/zarr_dev



<https://zarr.dev/community-calls>

or come sprint with us!