koordinates

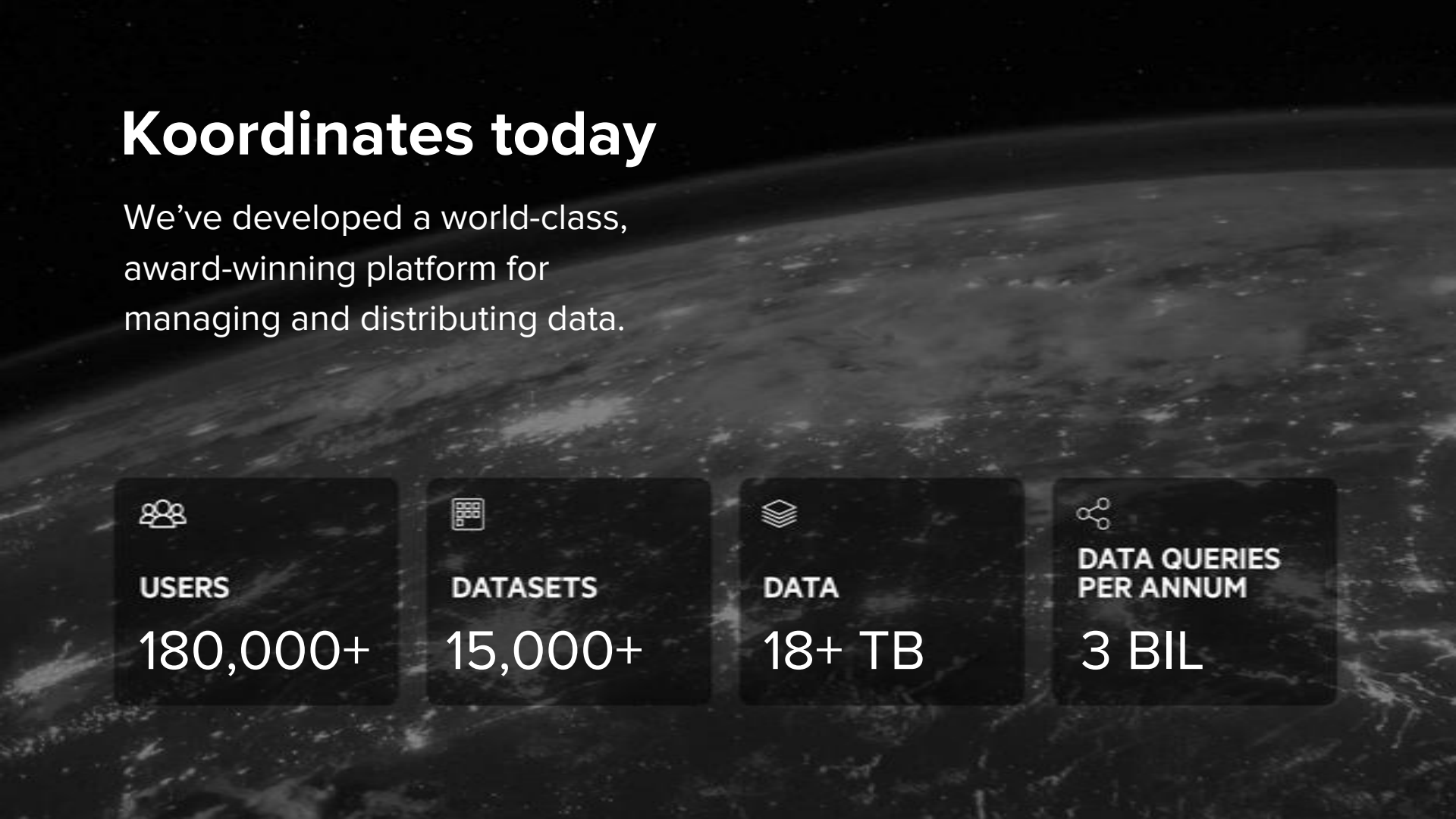
Git and GitHub are knocking on geospatial's door

Jonathan Ball
Product Manager

DALL-E Instructions: octocat knocking on mapping departments door, maps on the wall, digital art

Koordinates today

We've developed a world-class, award-winning platform for managing and distributing data.

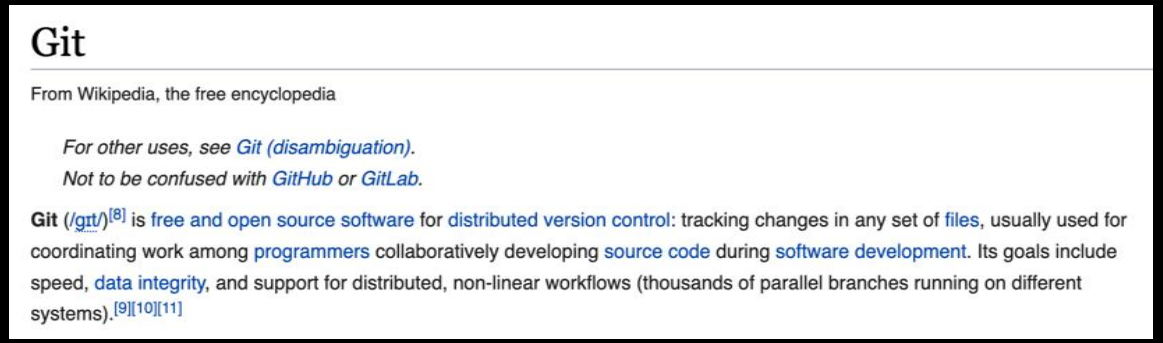


Outline

- Introduction
- Defining GIT
- Why is it knocking?
- Kart for Data

DALL-E Instructions: squid and cat making a map

Define Git & Github



Git

From Wikipedia, the free encyclopedia

For other uses, see Git (disambiguation).
Not to be confused with GitHub or GitLab.

Git (/gɪt/)[8] is free and open source software for distributed version control: tracking changes in any set of files, usually used for coordinating work among programmers collaboratively developing source code during software development. Its goals include speed, data integrity, and support for distributed, non-linear workflows (thousands of parallel branches running on different systems).[9][10][11]

Concept,
Principals,
Code

GitHub

From Wikipedia, the free encyclopedia

Not to be confused with Git or GitLab.

GitHub, Inc. (/ˈgɪthʌb/[a]) is an Internet hosting service for software development and version control using Git. It provides the distributed version control of Git plus access control, bug tracking, software feature requests, task management, continuous integration, and wikis for every project.[5] Headquartered in California, it has been a subsidiary of Microsoft since 2018.[6]

Hosting Service,
Tools,
UI

Geospatial data storage is fundamentally different

git

```
#define TIFFTAG_PERSAMPLE        65563 /* interface for per sample tags */
#define     PERSAMPLE_MERGED         0 /* present as a single value */
#define     PERSAMPLE_MULTI          1 /* present as multiple values */
```

git storage and tools optimised for text-like source code

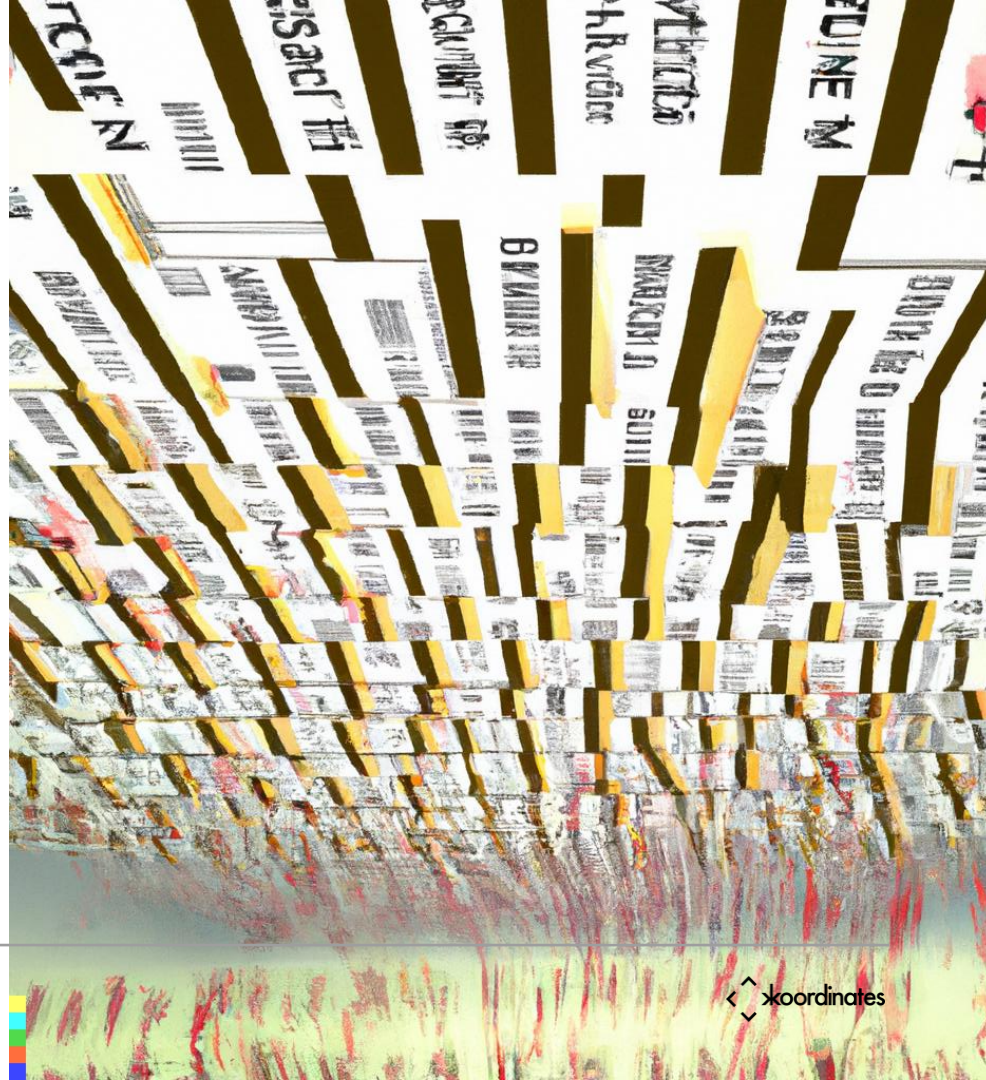
geospatial data

id	appellation	affected_survey
2734	Lot 72 DP 27795	
2743	Part Allot B DP 1375	
3258	Lot 73 DP 27795	

SQL tables common, vector geometries, rasters + grids

So why GIT is knocking on geospatial's door...

Good science requires repeatable methodology and data



DALL-E Instructions: data from a research project being easy to find 5 years later, 3d render

Data as an Asset

DALL-E Instructions: protecting valuable data, photo

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Kart

Distributed version-control
for geospatial and tabular data

Download For Your OS GitHub

Geospatial and Tabular Data in Git

Kart stores geospatial and tabular data in Git, providing version control at the row and cell level.

Built on Git, works like Git

Uses standard Git repositories and Git-like CLI commands. If you know Git, you'll feel right at home with Kart.

Supports current GIS workflows

Provides repository working copies as GIS databases and files. Edit directly in common GIS software without plugins.

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