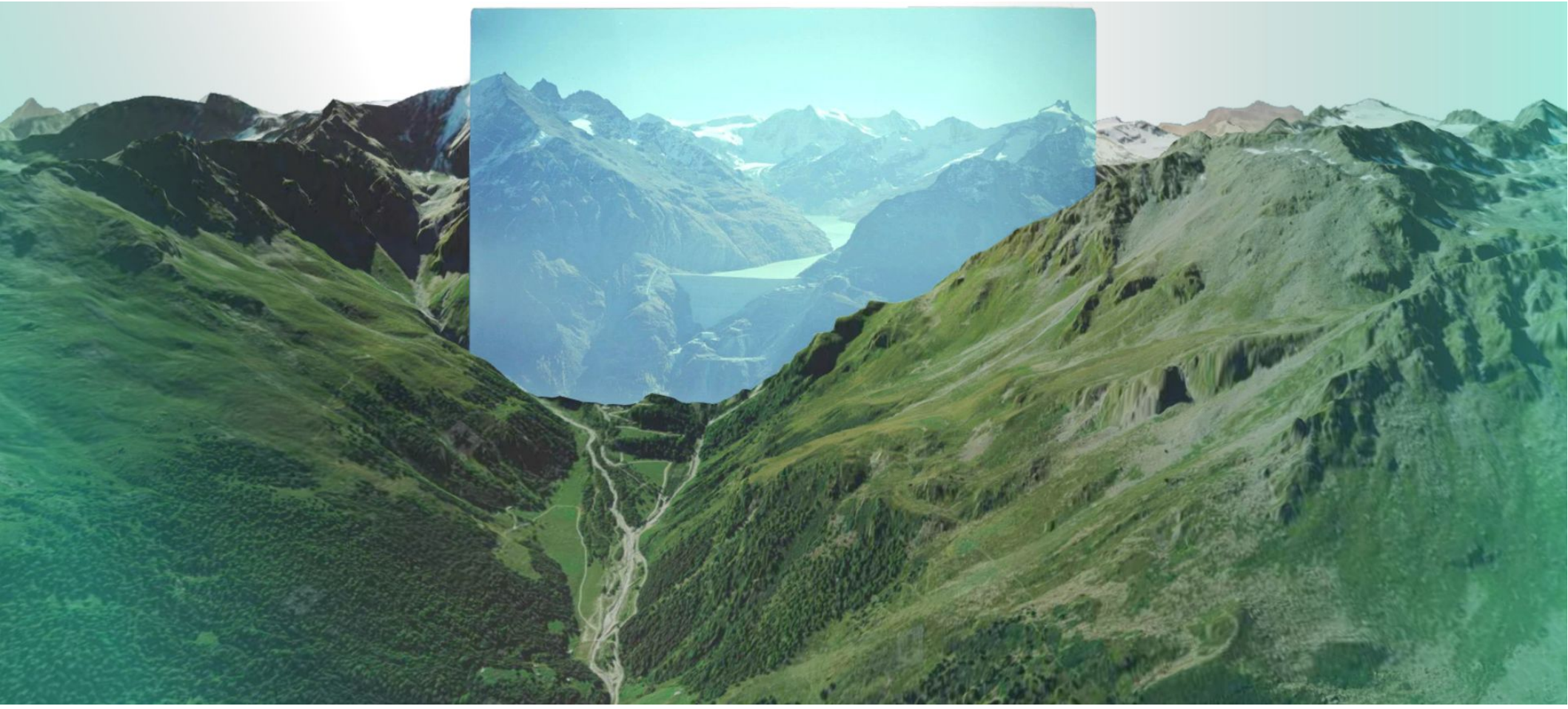
s m a p s h o t ❤ s w i s s t o p o



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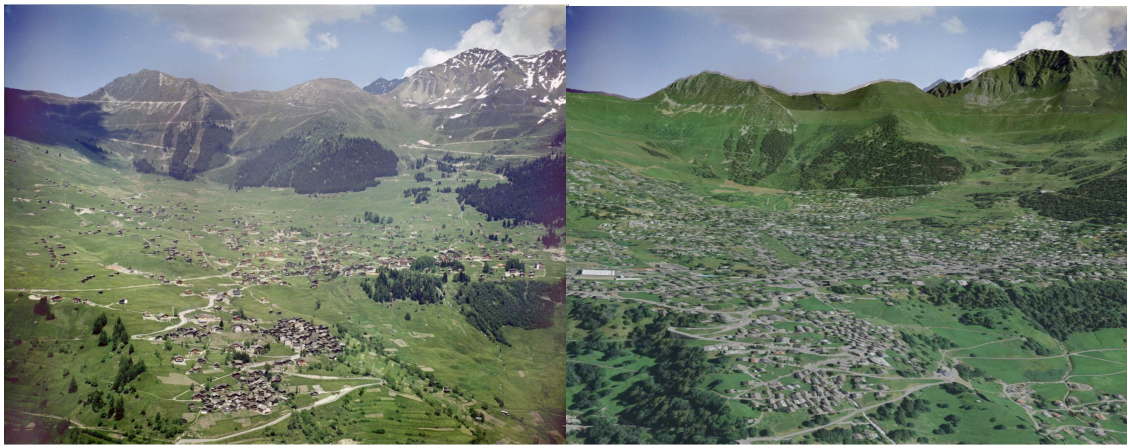
T. Produit, J. Ingensand

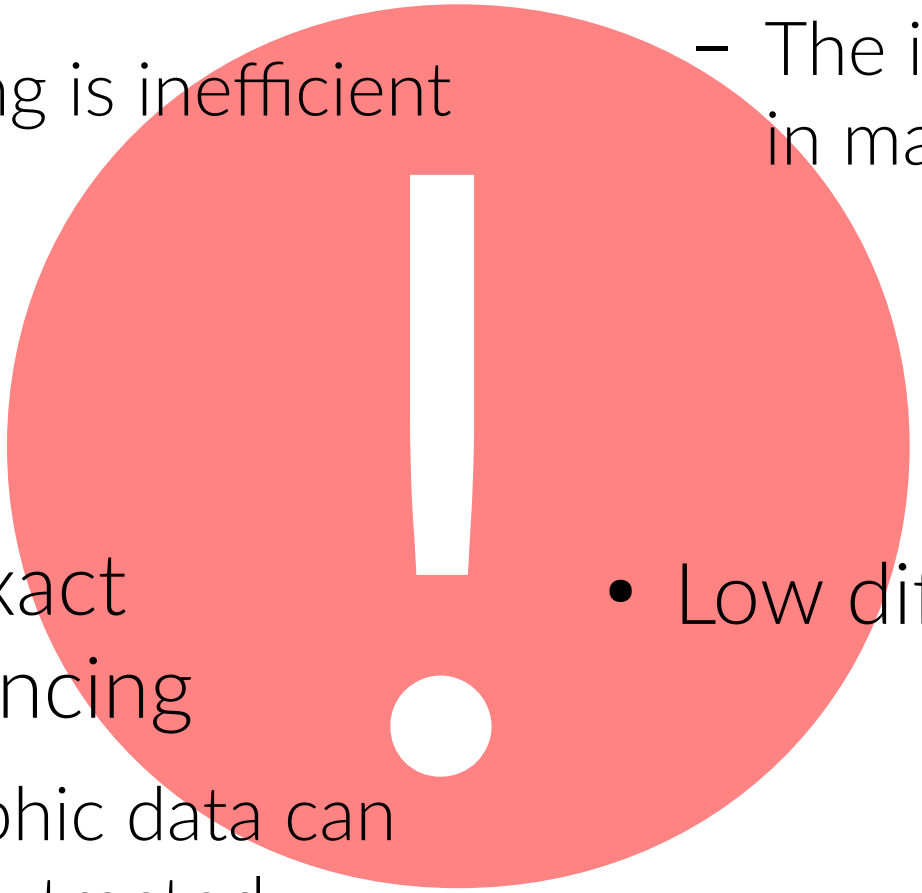
Value of historical landscape images

- Snapshots of the landscape
  - Climate change
  - Urbanization
  - Natural hazards…
- For public
  - Visualize change (in a natural way)
- For scientists
  - Measure change



Problems of historical images

- Lack of metadata
  - Searching is inefficient
- Scattered
  - The images are stored in many archives



- Lack of exact georeferencing
  - Geographic data can not be extracted
- Low diffusion

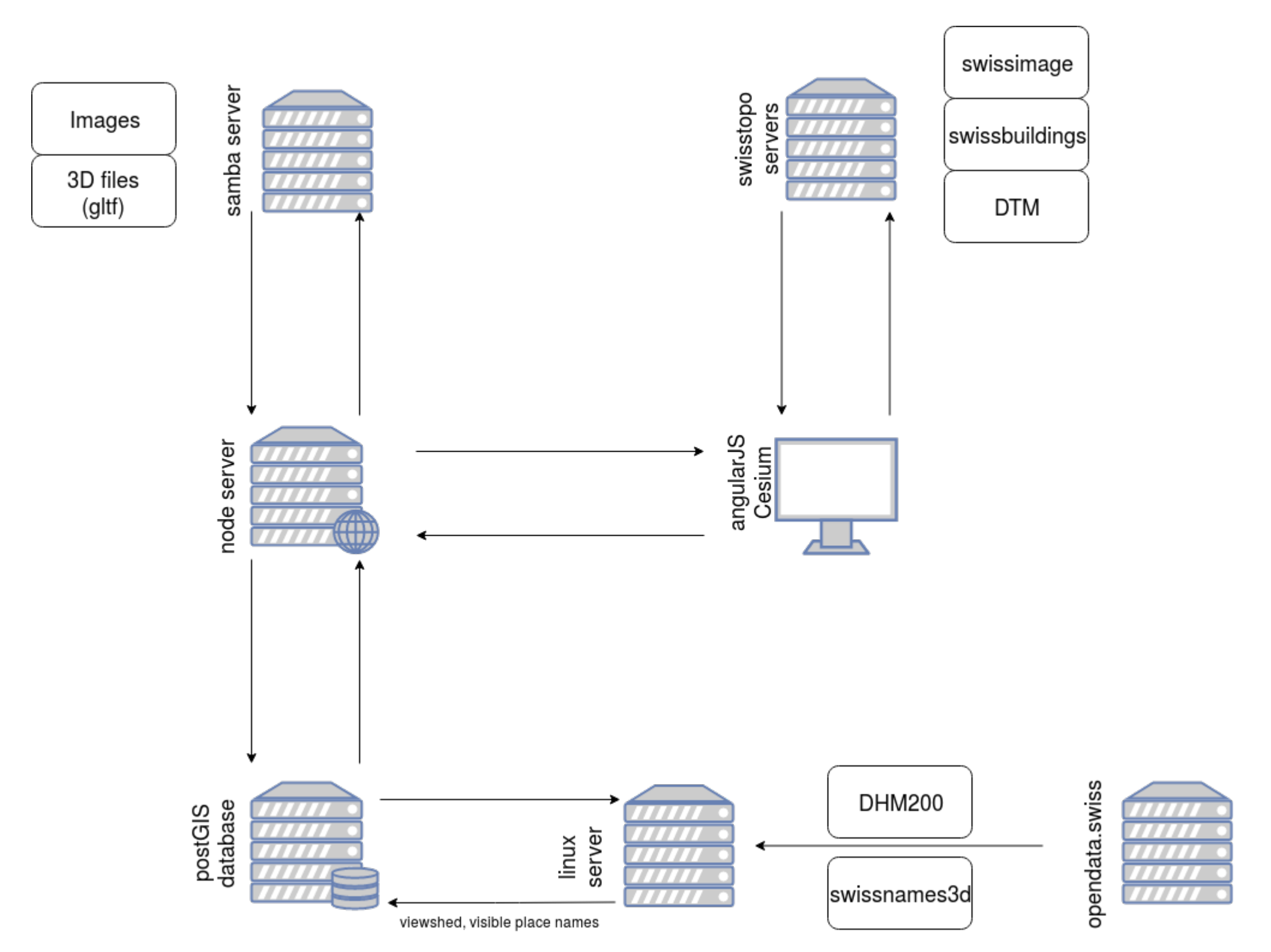
Demo

3D data

- 3D data is central in smapshot:
  - Georeferencing with 2D data is possible but:
    - The detection of control point in a 2D map is difficult for non-specialists
    - 3D buildings ease the detection of control points
  - The comparison without 3D is impossible

- Bing Maps
  - ✗ Low resolution
  - ✗ Low accuracy
  - ✗ Buildings
  - ✔ Global extent

- Swisstopo
  - ✔ High resolution
  - ✔ High accuracy
  - ✔ Buildings
  - ✗ Global extent


Images
3D files (gltf)
samba server
swisstopo servers
swissimage
swissbuildings
DTM
node server
angularJS Cesium
postGIS database
linux server
DHM200
swissnames3d
opendata.swiss
viewshed, visible place names

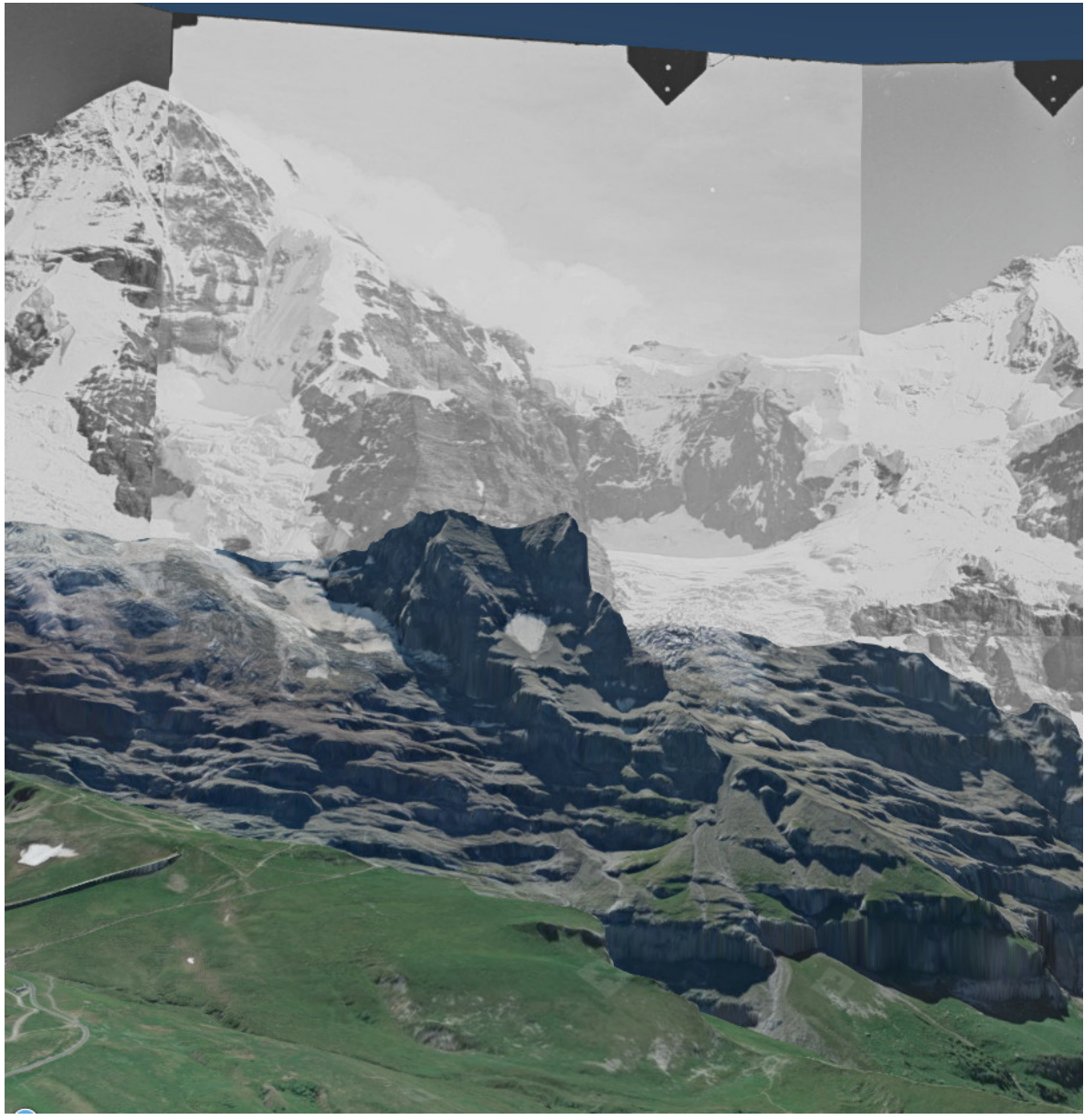
swisstopo geoservices

- Many examples
- Responsive and competent team
- swisstopo data was easy to integrate

- 3D gives one more chance to have coordinates systems errors

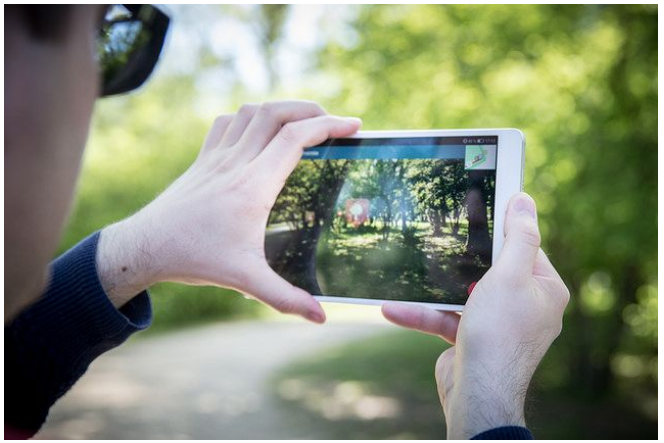
Next steps

- Insert swisstopo's terrestrial images
- Go global
- Go mobile
- Generate 3D historic models



Summary

- 3D geoservices open new opportunities
  - Augmented reality and virtual reality are no more SciFi.



- Official data have a better quality than “free” data from GAFA and al.
- The price of must be affordable for emerging businesses / services

Merci

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