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**REG-6** GIS and bioinformatics technologies  
and mathematical methods in study of  
Baikal

## Ontology Driven Geospatial Representation and Visualization

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# Aims

- Development of lake Baikal knowledge base
  - Development of interface for knowledge base enlargement
  - Development of services based on knowledge base
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# Ontology

- Tree like data structure
  - Complex queries
  - Easy to combine different ontology
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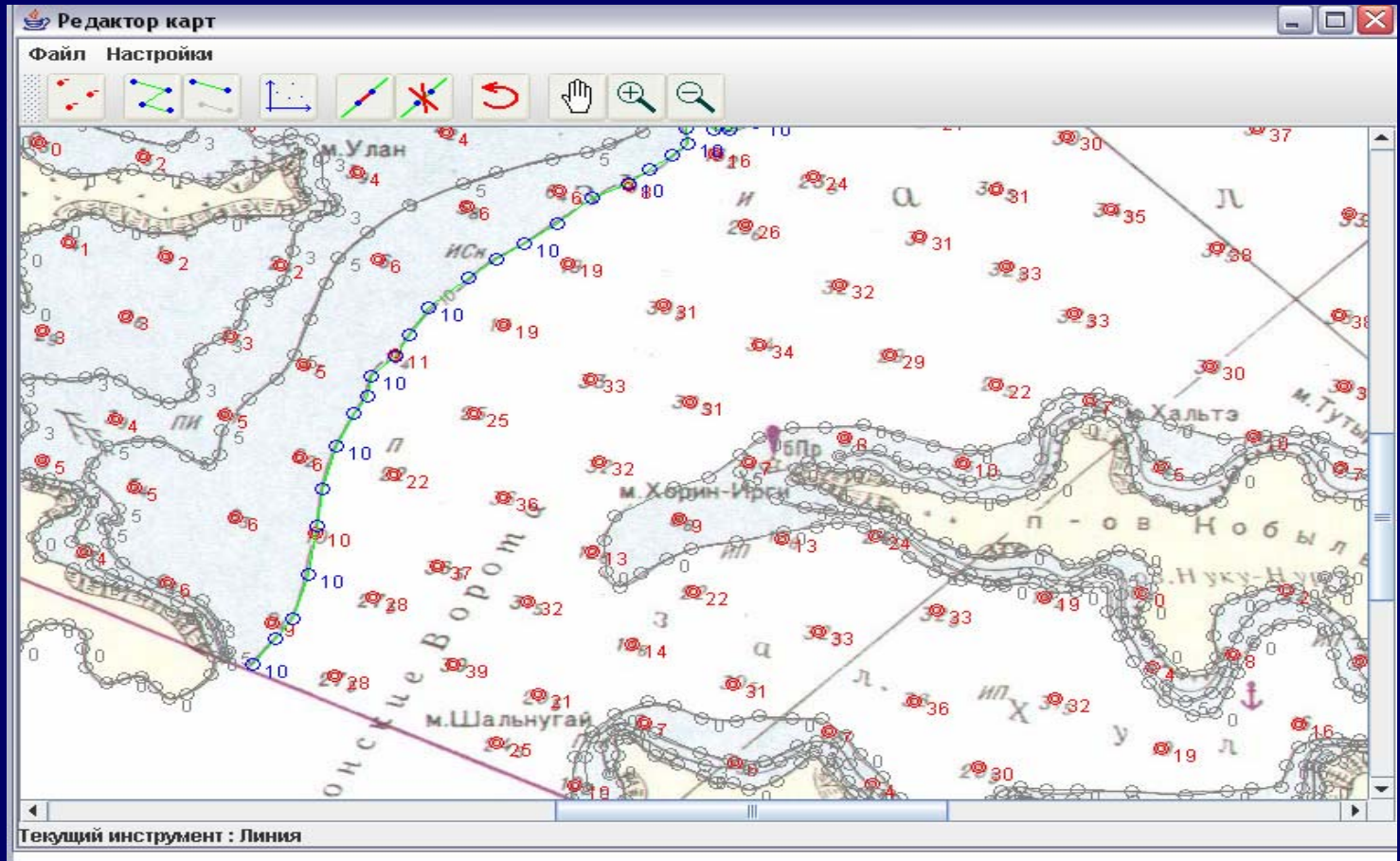


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# Interface

- Enlargement of knowledge base by paper maps
  - 4 vectirization tools:
    - Point
    - Line
    - Closed line
    - Spline
  - Extending tools by metadata
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# Interface



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# Services

- 3D model of lake
  - Depth finding service
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# Future of the project

- Development of large amount of ontologies
  - Development of different web services
  - Interface improving
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