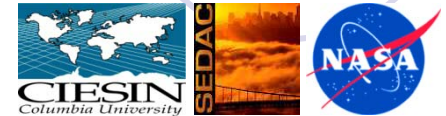


Status Report on the CODATA Global Roads Data Development Working Group

Global Roads Open Access Data Set (gROADS), a project of the
CODATA Global Roads Data Development Working Group

Alex de Sherbinin and Robert S. Chen, CIESIN, Columbia University



Presentation to the 22nd CODATA International Conference, 24-27 October 2010
Cape Town, South Africa

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CODATA-Roads milestones

- Workshop representing users and producers of roads data at CIESIN/Lamont Campus (October 2007)
- CODATA working group formed out of subset of participants, subsequently adding two members (Jan 2008)
- Becomes a Task Group of UN-GAID e-SDDC (UN Global Alliance on ICT for Development Open Access to and Application of Scientific Data in Developing Countries) (May 2008)
- Listed as a deliverable of the Group on Earth Observations (GEO) 2009-2011 Work Plan (October 2008)
- Listed as a milestone in the Interim United Nations Spatial Data Infrastructure Framework (November 2008)
- Received NASA-SERVIR Grant (March 2009)
- Received Gates AGCommons Grant (April 2009)
- Released gROADS catalog of national level roads data sets (October 2009)



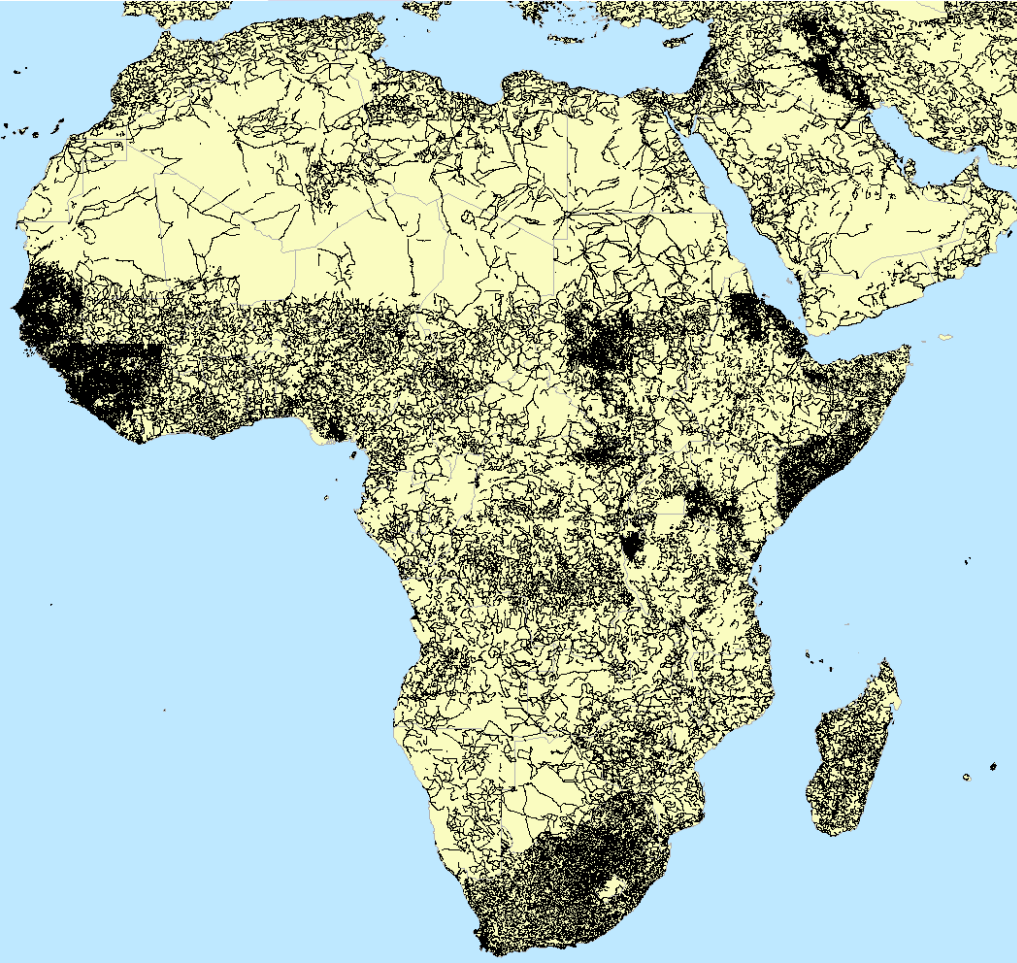
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gROADS Goal



To develop a global roads open access data set (gROADS) that is:

1. globally consistent model (UNSDI-T v.2)
2. spatially accurate (~50m positional accuracy)
3. topologically integrated
4. focused on roads between settlements (not streets)
5. up-to-date and with the possibility of frequent updates
6. well documented
7. freely distributed (on attribution only basis)



CODATA-Roads partners (1)

1. Center for International Earth Science Information Network (CIESIN) (WG co-chair A. de Sherbinin) – *data cataloging and cleaning, coordination function for SERVIR project, AGCommons*
2. Centro Internacional de Agricultura Tropical (CIAT) (WG member G. Hyman) – *contributing Latin America roads data*
3. Chinese Academy of Sciences, Institute for Remote Sensing Applications (WG member J. Wang) – *staff on secondment*
4. Geographic Information Support Team, ITOS/UTA (WG member K. Payne) – *providing a baseline for gROADS v.1*
5. GISCorps – *providing volunteer GIS staff*
6. Global Road Inventory Project (GRIP), Netherlands Environmental Assessment Agency (PBL) – *data and methods sharing*
7. Global Spatial Data Infrastructure Association (GSDI) (WG member H. Onsrud) – *endorsed the network, advice on licensing*



CODATA-Roads partners (2)

8. Google Mapmaker (F. Lamy and J. Pfund) – *provided gROADS Kenya data for comparison purposes, provided feedback on MM*
9. iMMAP (WG co-chair O. Cottray) – *AGCommons coordinator*
10. International Management and Mine Action Programs (IMMAP) (WG co-chair O. Cottray) – *lead on AGCommons project*
11. National institute for Advance Industrial Science and Technology (AIST), GEO Grid, and University of Tokyo (WG member K. Iwao) – *collaborating on SERVIR project, developing semi-automated road feature extraction software and WFS-Transactional*
12. OpenStreetMap (WG member M. Maron) – *massive community of data developers committed to open data*
13. Regional Center for Mapping of Resources for Development (RCMRD) (collaborating on SERVIR and AGCommons projects)



CODATA-Roads partners (3)

14. Tracks4Africa (WG member J. Groenewald) – *GPS tracks for spatial validation of existing data, advice on AGCommons work*
15. UNOSAT/SAFER project – *developing RS-derived roads data for one or more countries*
16. World Food Programme – *access to ITHACA, collaboration on AGCommons project*
17. World Resources Institute – *exchange of data and information on methods for extraction of roads from remote sensing imagery*



gROADS releases

Visit www.groads.org

The screenshot shows the gROADS website interface. At the top is the CIESIN Columbia University logo. Below it is a navigation bar with links for Dashboard, Home, View, Edit, Administration, Account, and Wiki Help. The main content area is titled 'Global Roads Data' and includes a list of items: 1. News & Updates, 2. Workshop Agenda, 3. Presentations & Participants, 4. Methods & Data Sources. The main text describes the Global Roads Data Development Working Group and lists the characteristics of the gROADS data set, such as being globally consistent, spatially accurate, and topologically integrated. It also mentions the UN-GAID e-SDDC and the Global Spatial Data Infrastructure Association (GSDI) as sponsors and endorers of the initiative.

gROADS Catalog v.1

1. Catalog of 360+ national and regional data sets

gROADS v.1 roads data set release in 2010 with data from:

1. University of Georgia's Information Technology Outreach Services (ITOS), compiled for the UN's Geographic Information Support Team (GIST)
2. Netherland's PBL Global Roads Inventory Project (GRIP)
3. Open Street Map
4. CIESIN data development activities

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Task Group proposal

Overall goal: provide improved roads data to the world community on an open access basis

- Release version one of the gROADS global dataset and develop the infrastructure necessary for regular updates and releases
- Pilot test and refine innovative methodologies for roads data development
- Experiment with opening the geospatial data management system (in ArcSDE) for regional data custodians to add data
- Come up with an appropriate licensing and trademark approach for the dissemination of gROADS data

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Want to learn more or help out?

- Visit www.groads.org
- Sign up for the ROADSDATA discussion list to exchange information on data sets
- Send us your data!
 - Contact Alex de Sherbinin at amd155@columbia.edu

