A platform to visualize, analyze and improve Biomass datasets: http://biomass.geo-wiki.org

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http://Geo-Wiki.org

- Geo-wiki makes GEO data easy to visualize and analyze.
- Volunteers from around the globe can input their agreement/disagreement with the existing data.
- GEOSS in action: Geo-Wiki registered on the Geo-Portal.
- A bunch of projects: landcover, agriculture, biomass, urban, human impact, regional, etc.
http://biomass.geo-wiki.org
Global forest live biomass
FAO data downscaling by IIASA (Kindermann et al., 2008)
Onboard biomass datasets

Above Ground Live Biomass
- Global Forest, 2005, res.30' details
- European Forest (JRC) details
- European Forest (Corine) details
- European Forest (GLC2000) details
- European Forest (GlobCover) details
- Russia, 2009, res.1km details
- USA, 2000, res.30m details

Load Biomass DB

Forest Woody Biomass
- Africa, 2003, res.1km details
- Europe, 2000, res.500m details
- Sweden, 2005, res.0.01deg details
- Russia, 2009, res.1km details
- Siberia, 2005, res.0.01deg details
- Mexico, 2008, res.0.01deg details
- Quebec, 2005, res.0.01deg details
Onboard biomass datasets

### Above Ground Live Biomass

<table>
<thead>
<tr>
<th>Region</th>
<th>Base year</th>
<th>Resolution</th>
<th>Provider</th>
<th>Object, units</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>2005</td>
<td>30 min</td>
<td>IIASA</td>
<td>Forest, Mg dm/ha</td>
<td>FAO data downscaling by RS</td>
</tr>
<tr>
<td>Europe</td>
<td>2005</td>
<td>1 km</td>
<td>IIASA</td>
<td>Forest, Mg dm/ha</td>
<td>FAO data downscaling by RS and forest maps</td>
</tr>
<tr>
<td>Russia</td>
<td>2009</td>
<td>1 km</td>
<td>IIASA</td>
<td>Vegetation, Mg dm/ha</td>
<td>National forest &amp; land statistics downscaling by RS</td>
</tr>
<tr>
<td>USA</td>
<td>2000</td>
<td>30 m</td>
<td>WHRC</td>
<td>Vegetation, Mg dm/ha</td>
<td>Landsat + Forest Inventory</td>
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</tbody>
</table>

### Forest Woody Biomass

<table>
<thead>
<tr>
<th>Region</th>
<th>Base year</th>
<th>Resolution</th>
<th>Provider</th>
<th>Object, units</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tropical Africa</td>
<td>2003</td>
<td>1 km</td>
<td>WHRC</td>
<td>Woody biomass, Mg dm/ha</td>
<td>MODIS + field measurements</td>
</tr>
<tr>
<td>Europe</td>
<td>2000</td>
<td>500 m</td>
<td>Joanneum Research</td>
<td>Growing Stock, m³/ha</td>
<td>MODIS + forest inventory</td>
</tr>
<tr>
<td>Russia</td>
<td>2009</td>
<td>1 km</td>
<td>IIASA</td>
<td>Growing Stock, m³/ha</td>
<td>National forest &amp; land statistics downscaling by RS</td>
</tr>
<tr>
<td>Sweden</td>
<td>2005</td>
<td></td>
<td>Gamma Remote Sensing; Friedrich Schiller Univ. Jena</td>
<td>Growing Stock, m³/ha</td>
<td>ENVISAT ASAR, MODIS VCF</td>
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<tr>
<td>Central Siberia</td>
<td>2005</td>
<td>0.01°</td>
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<td></td>
<td></td>
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<tr>
<td>Mexico</td>
<td>2008</td>
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<tr>
<td>Quebec</td>
<td>2005</td>
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</tbody>
</table>

### In Situ Forest Biomass Measurements

<table>
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<tr>
<th>Region</th>
<th>Base year</th>
<th>Provider</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Eurasia</td>
<td>1952-2007</td>
<td>IIASA</td>
<td>Main tree species, Tree height, Above ground live biomass, Stem biomass, Coarse woody debris</td>
</tr>
</tbody>
</table>
Database of field biomass measurements

Vedrova E.F., 2002

<table>
<thead>
<tr>
<th>Spec</th>
<th>H, m</th>
<th>AG LB, t/ha</th>
<th>Stem, t/ha</th>
<th>CWD, t/ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Larch</td>
<td>9.1</td>
<td>25.07</td>
<td>15.01</td>
<td>2.49</td>
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<tr>
<td>Larch</td>
<td>12.8</td>
<td>19.06</td>
<td>27.94</td>
<td>5.52</td>
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<tr>
<td>Larch</td>
<td>12.3</td>
<td>15.50</td>
<td>33.16</td>
<td>12.88</td>
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<tr>
<td>Larch</td>
<td>14.7</td>
<td>13.18</td>
<td>58.51</td>
<td>6.91</td>
</tr>
</tbody>
</table>
Tools: transparency
Tools: Info button
Tools: NDVI year profile

"This vegetation profile is a 5 years (2003–2007) mean dekadal NDVI, elaborated by JRC-MARS using the SPOT-VEGETATION products processed by VITO-BE in the frame of the MARSOP contracts."
Tools: Validation/ upload measurements option

Validate the biomass inside the polygon:
Show instructions

Vegetation class:
-- Please choose --

Above ground bm (t dm/ha)
Growing stock (m3/ha)

Method of validation:
- high resolution image
- in situ visual estimation
- in situ measurement

Confidence: Sure

Provide picture URLs (ending with .jpg/.png) if available:

More information about validation:
Google Image Date:

I used Google Earth high resolution to validate show help

Submit  Cancel
Comparison of two forest stem volume datasets for a spot in Sweden

500 m by JR  

1 km by Gamma RS
http://Russia.Geo-Wiki.org
Thank you for your attention

More information:
http://biomass.geo-wiki.org
http://www.iiasa.ac.at/Research/FOR/