

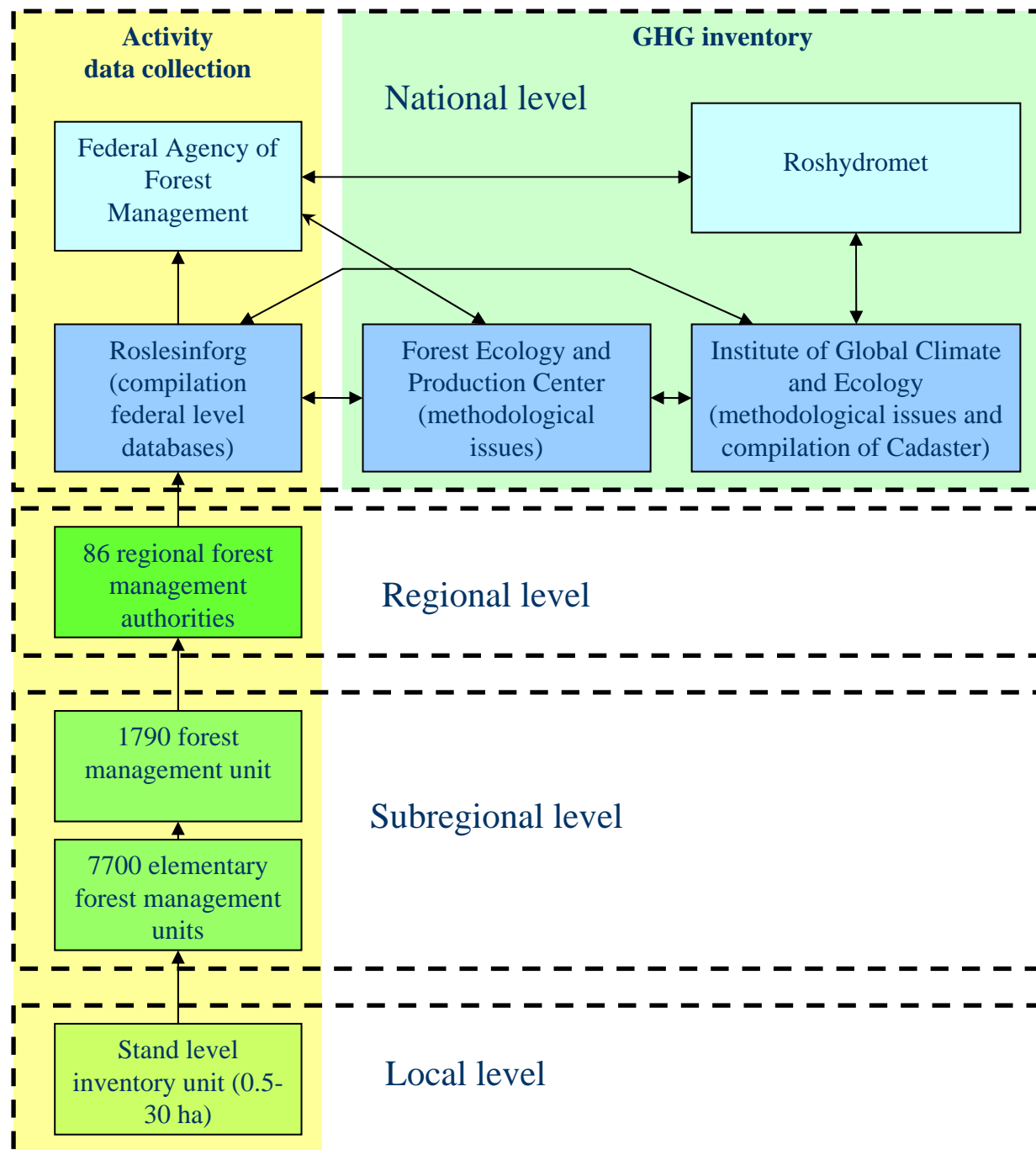
Emissions and Removals from the Forest Management in the Russian Federation

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*Role of Forestry in Meeting National Commitments of the
Russian Federation under Kyoto Protocol,*
UNFCCC side-event, 06 June, 2008, Bonn, Germany



**National
system of
GHG
inventory in
forest
sector
(NIR 1990-
2006)**

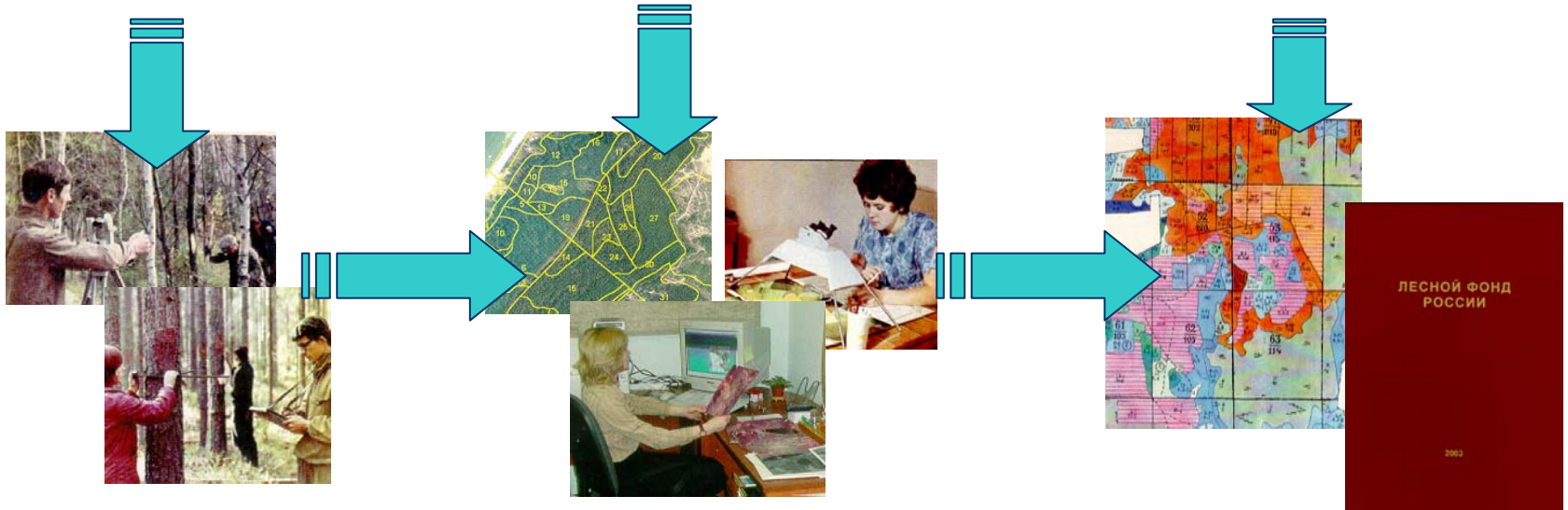


ACTIVITY DATA COLLECTION

Russian forest inventory system has a long story. First whole-country reference-book "State Forest Fund Account" (SFFA) was published in 1961, subsequent reference-books were issued with 5-years intervals.

The collection of forestry data implies ground-based surveys and remote methods or combination of efforts.

The collected data are further processed for mapping and reporting on forest areas and stocks



ACTIVITY DATA COLLECTION

The first SFFA computer database were created in 1988. From 1998, SFFA databases are compiled each year. From 2003, generalized SFFA databases and forestry statistical data are available in «Roslesinforg» web-site

www.roslesinforg.ru

Annual data on:

State Forest Fund
Account

Forest exploitation

Forest fires

Федеральное агентство лесного хозяйства
ФГУП «РОСЛЕСИНФОРГ»

ДОКУМЕНТЫ И ПРОДУКТЫ / ОБЩИЕ

В данном разделе размещены документы официального, нормативного и общего информационного характера, предоставляемые Федеральным агентством лесного хозяйства и Министерством природных ресурсов Российской Федерации.

- Статистическая отчетность
 - Лесной фонд и лесопользование
 - на 01.01.2007 г.
 - на 01.01.2006 г.
 - на 01.01.2005 г.
 - на 01.01.2003 г.
 - Сведения государственного статистического наблюдения по лесопользованию
 - 2007
 - 2006
 - 2005
 - 2004
 - Сведения по действующим договорам аренды участков лесного фонда
 - 2006
 - 2005
 - 2004
 - Сведения о лесных пожарах
- Программные продукты
 - Ответственные исполнители и телефоны

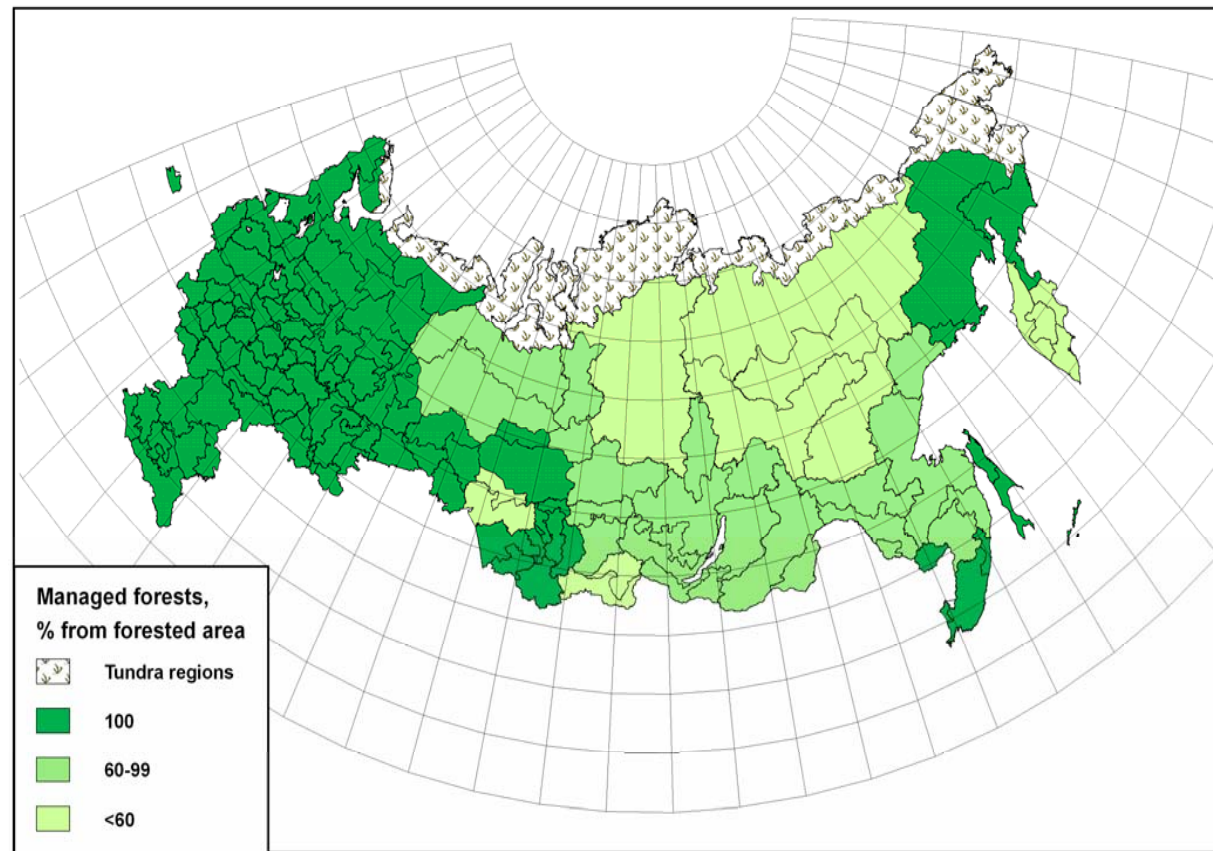
Сайт оптимизирован под MS Internet Explorer

SELECTION OF MANAGED FORESTS

Managed forest lands form an area with a system of direct human activities on deployment, conservation, protection and renewal in accordance with national regulation and sustainable forest management.

The selection of managed forests were performed based on category of forest purpose in SFFA.

Managed forested lands are about 71% of total forest area and 76% of total growing stock.



CO₂ budget in woody biomass

Stock change method (IPCC Tier 2) :

$$\Delta C_{FLB} = (C_{t_2} - C_{t_1}) / (t_2 - t_1) \quad (1)$$

$$C_t = \sum_{ij} [V_{ij} \cdot D_{ij} \cdot BEF_{ij} \cdot (1 + R_{ij})] \cdot CF \quad (2)$$

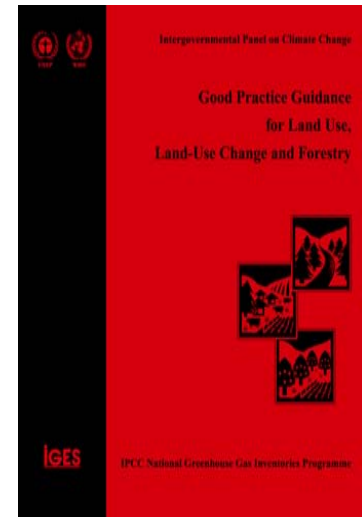
Country-specific EF_{ij} is applied: $EF_{ij} = D_{ij} \cdot BEF_{ij} \cdot (1 + R_{ij})$.

With this Equation (2) is transformed into Equation (3)

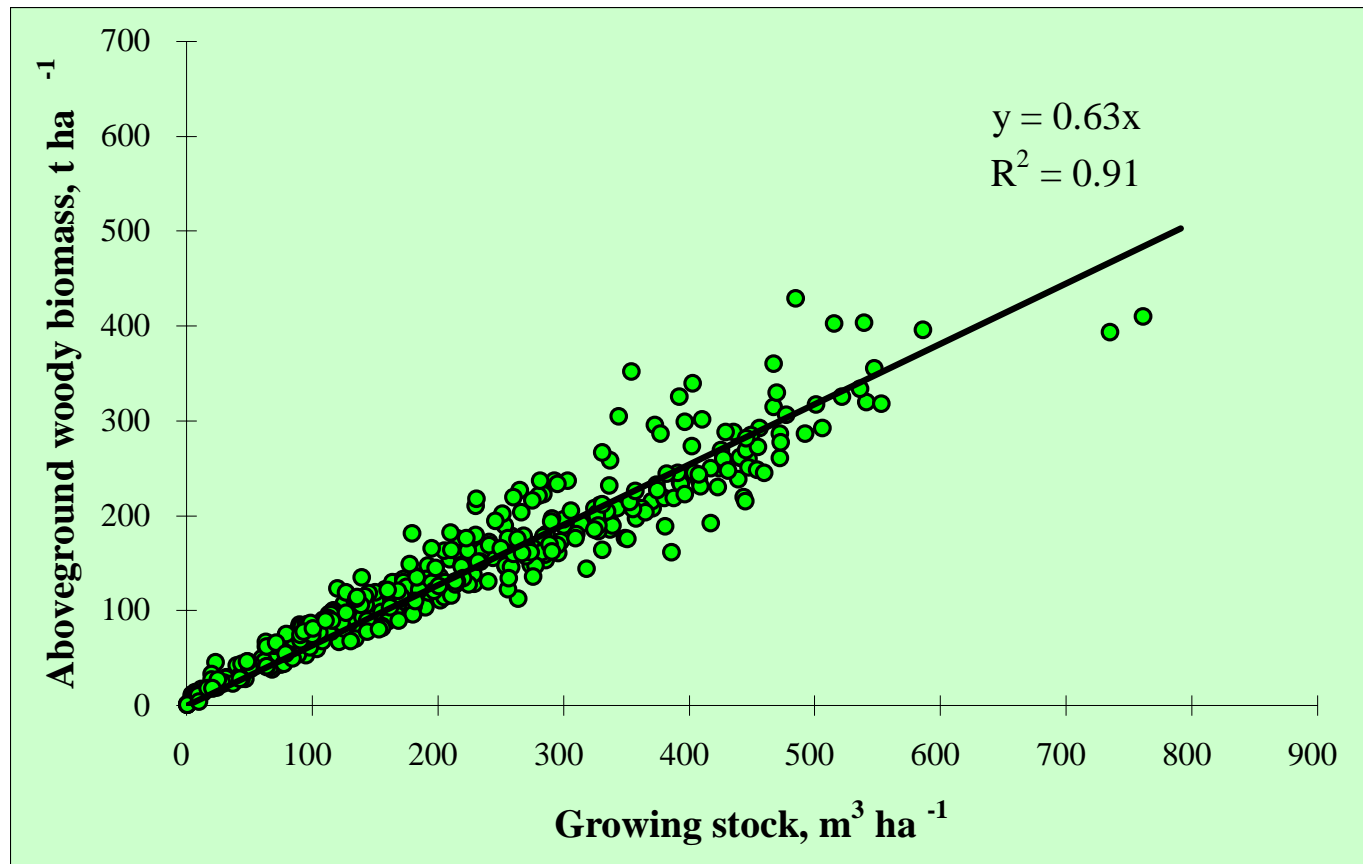
$$C_t = \sum_{ij} [V_{ij} \cdot EF_{ij}] \cdot CF \quad (3)$$

Parameters EF_{ij} are taken from scientific literature (Isaev et al., 1993; Zamolodchikov et al., 2003)

The calculations are performed for each age group of each tree species.



Identification of country-specific EF_{ij} values (example for pine stands)



GHG INVENTORY ESTIMATES

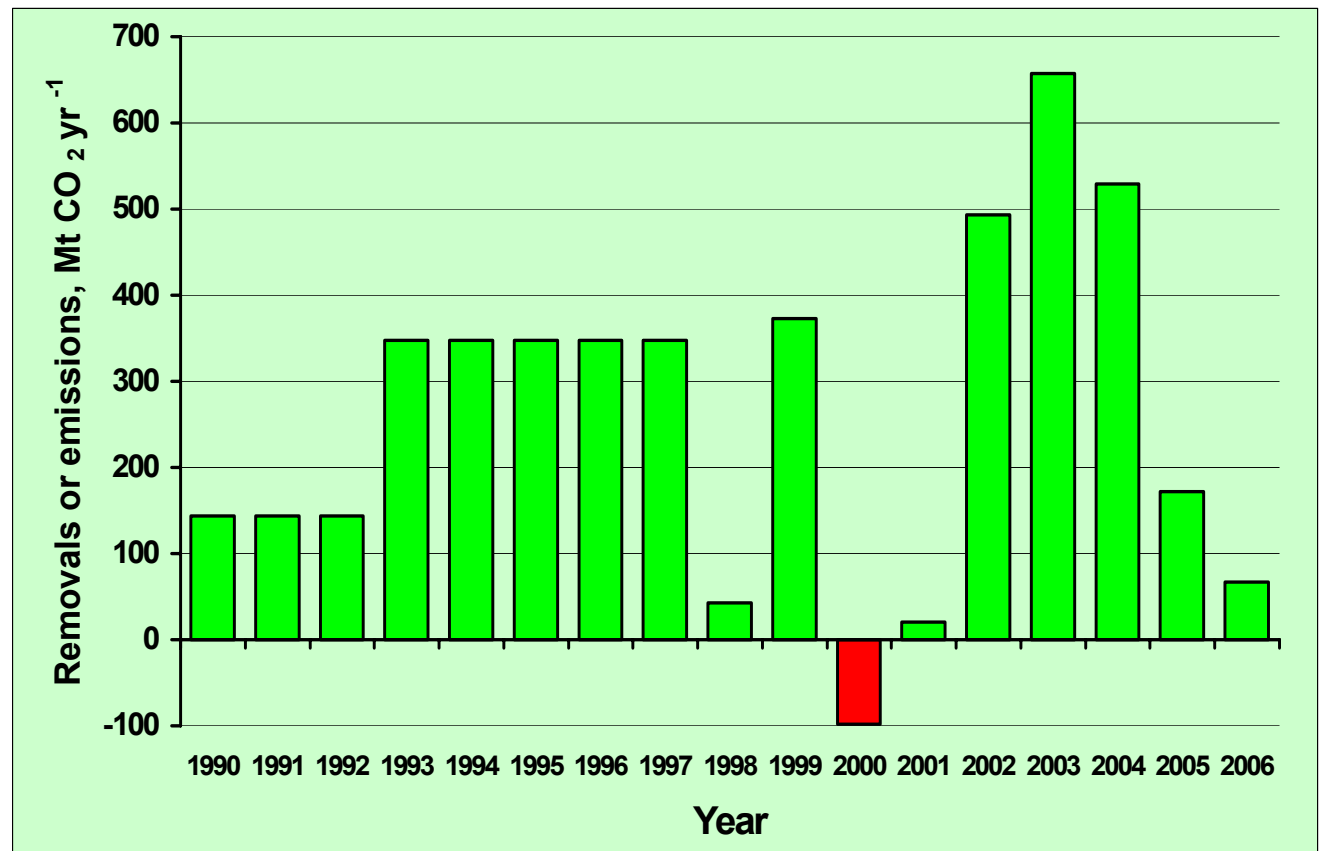
Annual CO₂ emissions and removals in forest biomass

Positive –
removals.

Negative –
emissions.

Mean for
1990-2006
260 Mt CO₂ yr⁻¹

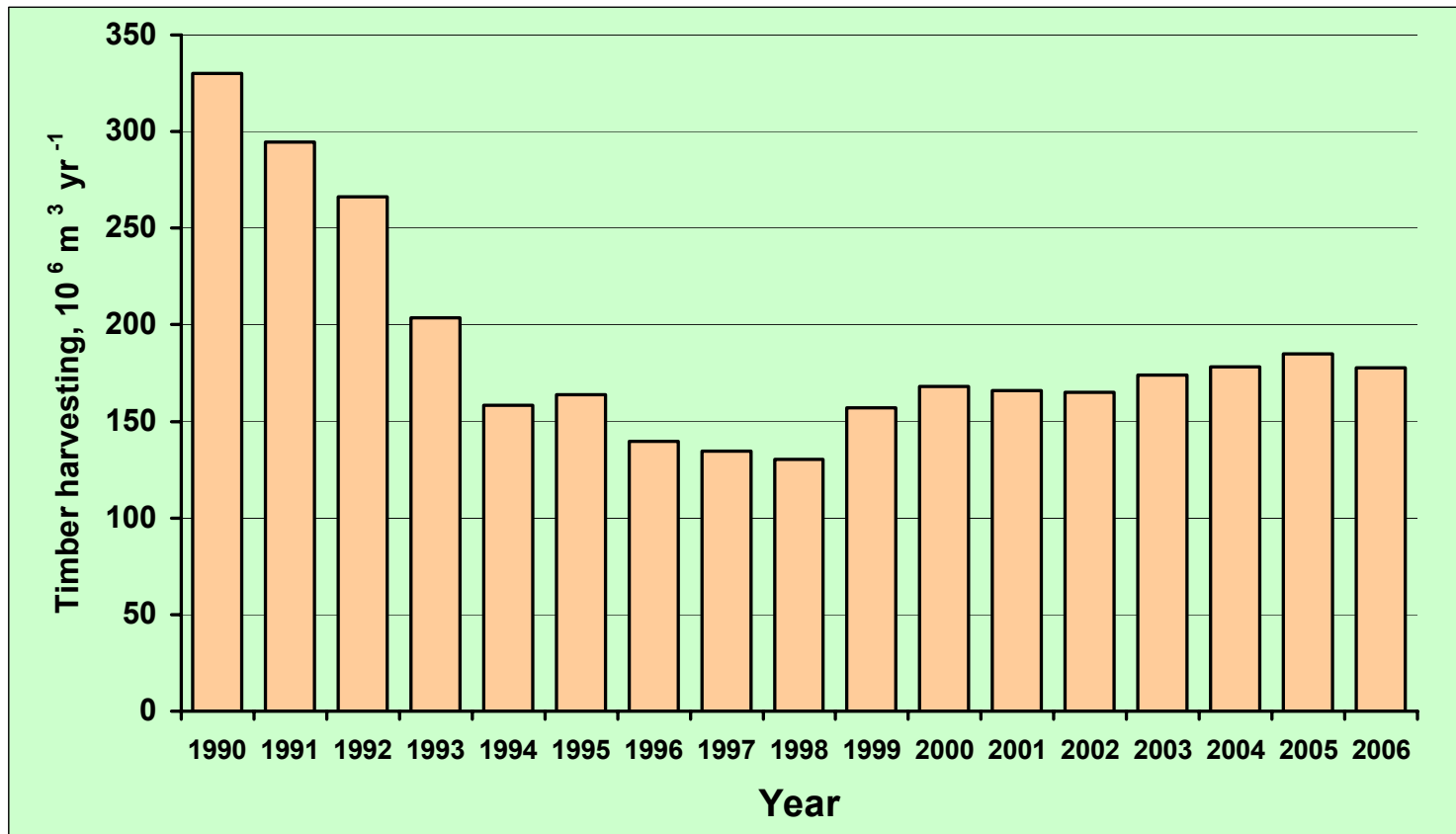
(NIR 1990-
2006)



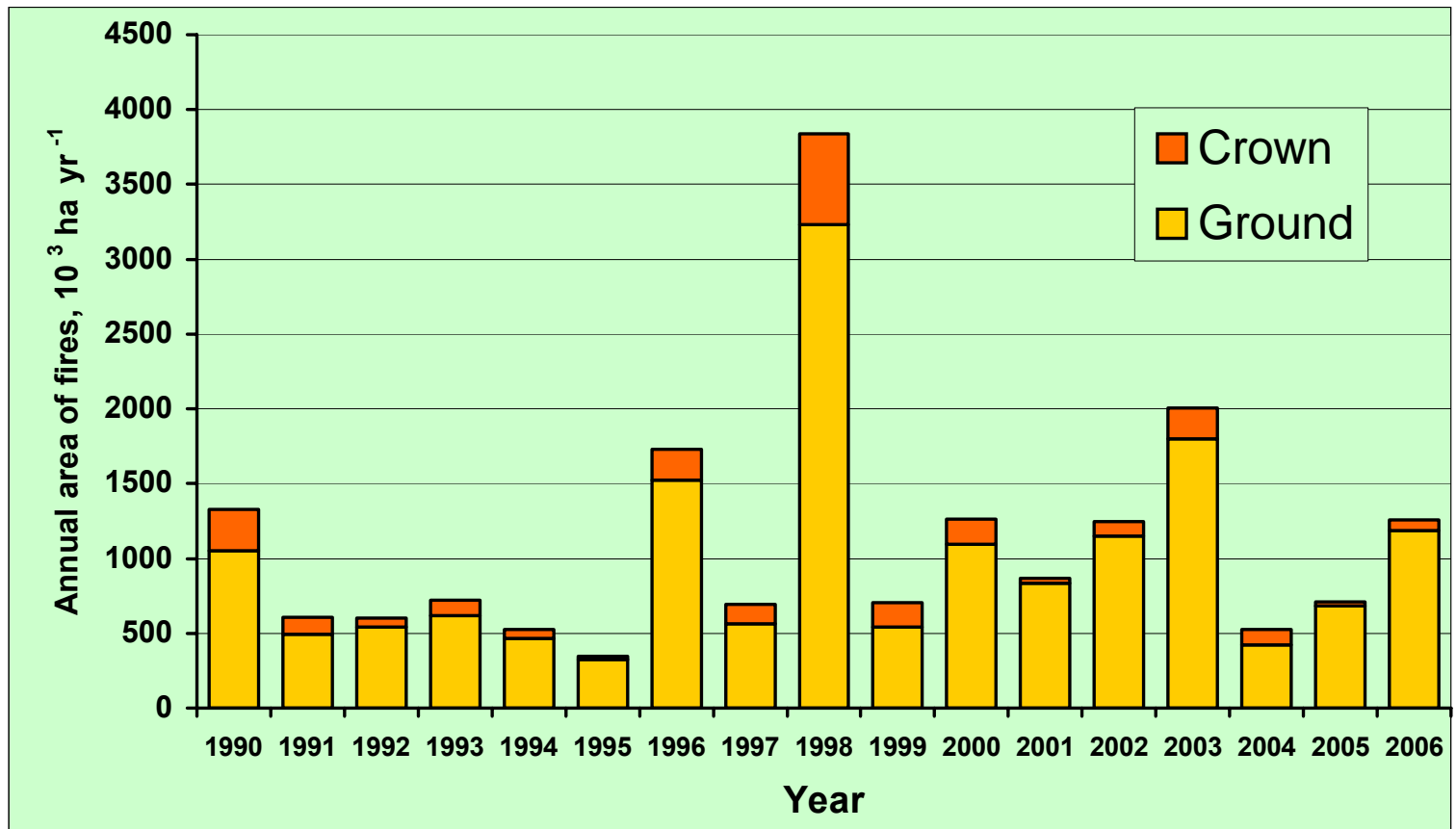
Questions

- Why managed forests of Russia are carbon sink?
- What are causes of interannual variability of CO₂ removals?

Timber harvesting in Russian Federation

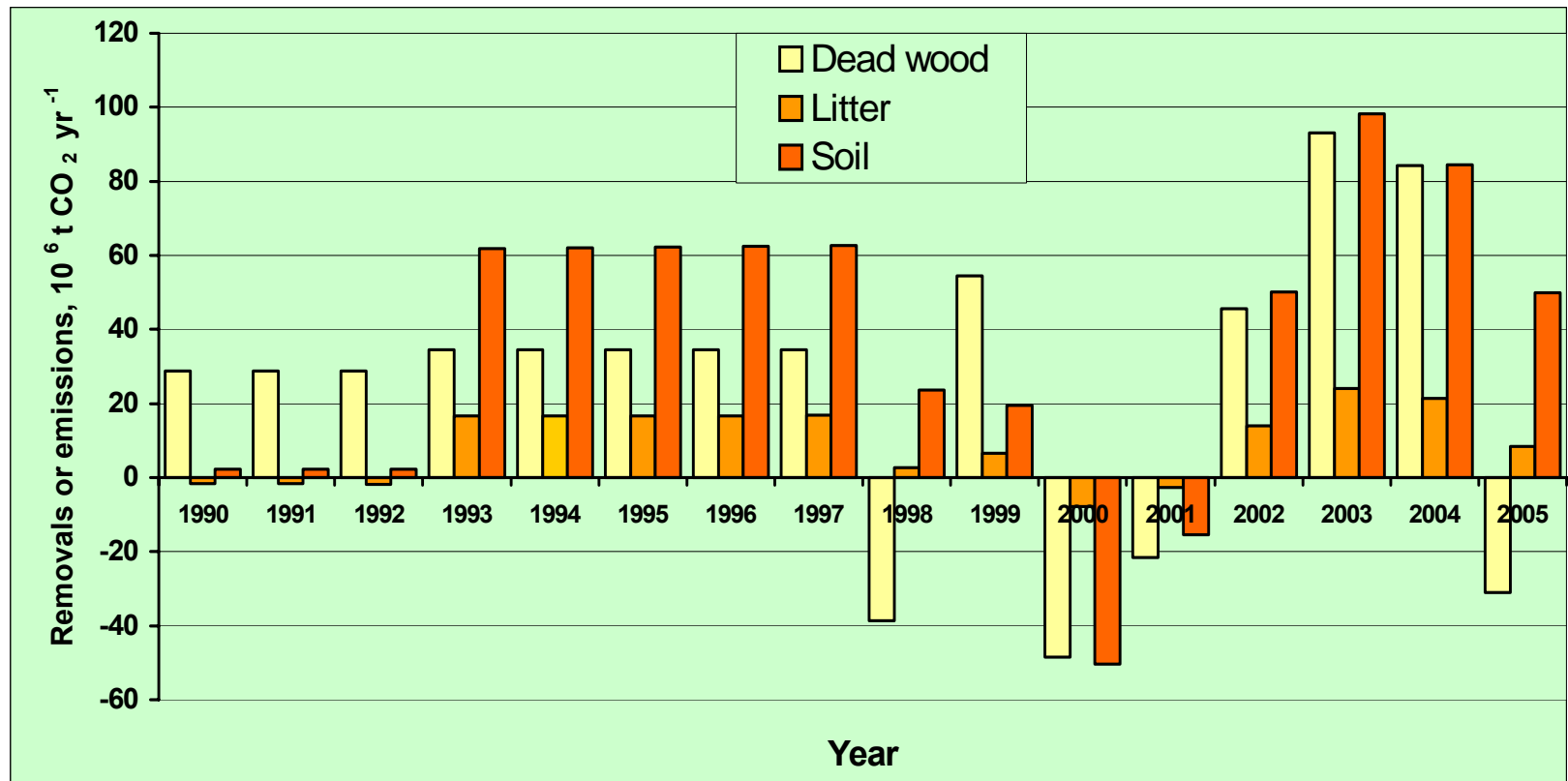


Forest fires areas in Russian Federation



NEXT STEPS

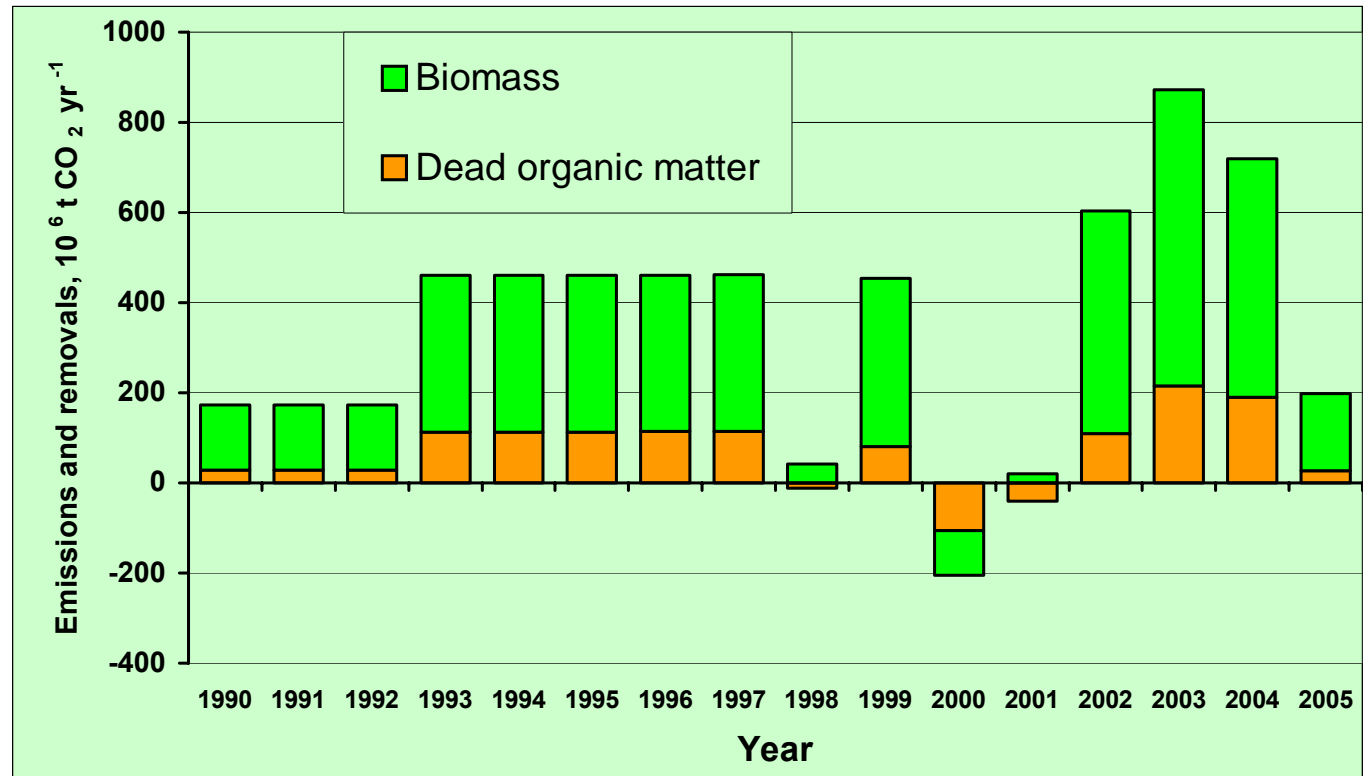
Estimation of CO₂ emissions and removals by dead wood, litter and soil: stage of scientific exploration



NEXT STEPS

Annual CO₂ emissions and removals in total forest carbon

Means for
1990-2005
Biomass
272 Mt CO₂ yr⁻¹
DOM
70 Mt CO₂ yr⁻¹
Total carbon
342 Mt CO₂ yr⁻¹





*Thank you very
much!*