



About me

ANDREY MEDVEDEV

04.09.1983



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**Institute of geography
Russian Academy of Sciences**

Cartography Department

ISIRA meeting. 25.04.2015

Professional interests

Cartography

- ❖ Atlas cartography and thematic mapping
 - ❖ Tactile cartography
 - ❖ Interactive mapping
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Geoinformatics

- ❖ Multimedia cartography
 - ❖ Spatial Data Infrastructures
 - ❖ Web-mapping, geoportals, web-services
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Remote sensing

- ❖ Big Data processing
- ❖ UAV
- ❖ Multi- and hyperspectral images

Education

Moscow State University, *Student 2000 - 2005*

Faculty of geography,

Department of cartography and geoinformatics

Institute of geography RAS, *Ph.D. Student 2000 - 2005*

Cartography department

Tempus program, *2005*

Refresher course

Career chronology

Main

- ❖ 2006-2008 junior researcher in Institute of geography RAS
- ❖ 2008 defense of the Ph.D. thesis (“Methods of creating a multimedia regional atlas”)
- ❖ 2008-2013 researcher in Institute of geography RAS
- ❖ 2013-2014 senior researcher
- ❖ since 2014 head of cartography department in Institute of geography RAS

Additional

- ❖ since 2006 lecturer in Moscow State University (cartography, geoinformatics)
- ❖ 2009-2013 chairman of the Young Scientists Society in Institute of geography RAS

Teaching practice

- ❖ Theoretical course “GIS in geoecology”
 - ❖ since 2010
- ❖ Mentor of students’ internship in department of cartography in IG RAS
 - ❖ since 2009
- ❖ Theoretical and practical course “Topography”
 - ❖ 2006-2009
- ❖ Theoretical and practical course “Satellite navigation”
 - ❖ 2006-2009
- ❖ Practical field course “Satellite images interpretation”
 - ❖ 2007, 2008, 2011
- ❖ Expeditions with the students
 - ❖ 2007-2010, 2014-2015

Project Experience

Grants of the Russian Foundation for Basic Research

Basic projects (as participant): **6**

Transdisciplinary projects (as participant): **3**

Basic projects (as a leader): **1**

Young scientists projects (as a leader): **2**

Grants of the Russian Geographical Society

Basic projects (as participant): **4**

Basic projects (as a leader): **2**

Programs and projects of Russian Academy of Sciences

Projects (as participant): “Digital Earth”, “Informatization”, “The natural environment of Russia”

Projects of the Ministry of Education and Science of the Russian Federation

Basic projects (as participant): **3**

Arctic Experience

International Polar Year (IPY) *2007-2008*

Data Center in Institute of geography RAS:

- Data management
- Metadata collecting



INTERNATIONAL 2007-2008
POLAR YEAR

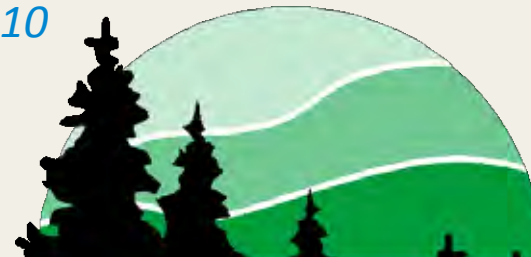
Quality of life social-oriented monitoring of the Russian North (“PPS Arctic”)

Project leader: T.K. Vlasova

Data management and mapping :

- Fieldworks (questionnaires)
- GIS and maps
- Multimedia project

2008 - 2010



PPS Arctic

Arctic Experience

SPRING: Towards Integrated Habitat Management for Geese Migrating through Russia to Arctic

Group leader of the project: P.M. Glazov

- Data management
- GIS and maps

2008-2012



WAGENINGEN UR
For quality of life

Creation of a shared system of resources assessment and forecasting of environmental components' state in Northern areas

Ministry of Education and Science of the Russian Federation

- Programming
- System organization

2008 - 2010



Arctic Experience

Methodology of spatial data system organization for Arctic environment research and monitoring

Russian Foundation for Basic Research

2012-2014

Project leader: A.A. Medvedev

- Data processing
- GIS and maps
- Programming



Population's quality of life in the Russian North in contemporary nature-ecological and socio-economic conditions

Russian Foundation for Basic Research

2013 - 2015

Project leader: T.K. Vlasova

- Data management
- GIS and maps



Arctic Experience

Basic research for the development of the Russian Arctic zone

Program of Russian Academy of Sciences

2014-2015

Project leader: A.A. Tishkov

- Big Data
- Remote sensing



Methodology development of the environmental components' remote sensing and monitoring by UAV's in the Russian North

2014-2015

Voluntary initiative

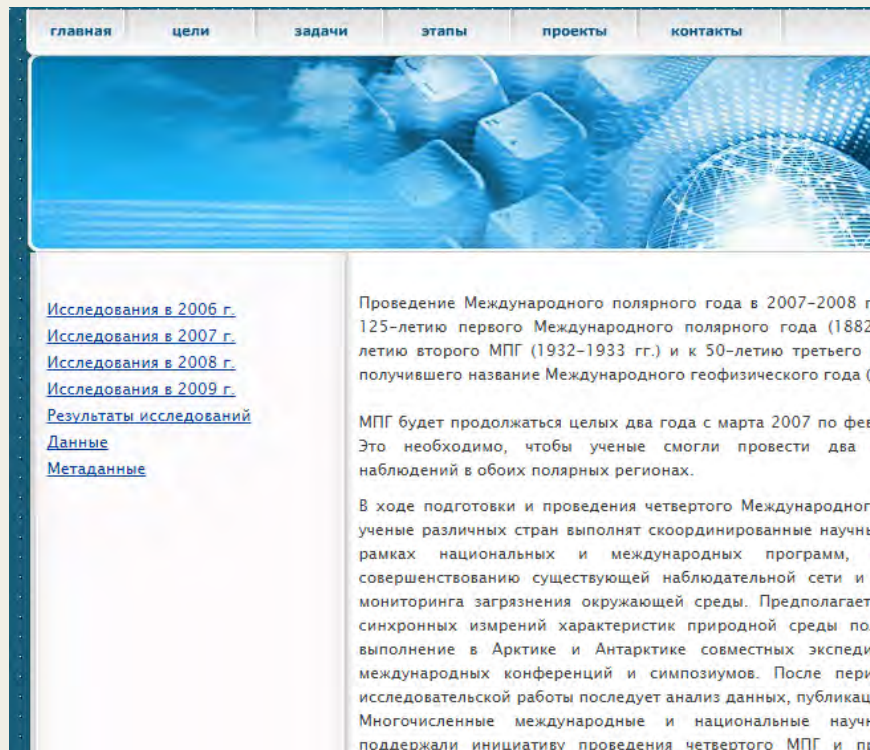
Project group:

A.A. Medvedev, P.M. Glazov, G.M. Tertitski, A.V. Kudikov

- UAV control and piloting
- Remote sensing methods development
- Data processing

About Arctic Projects

International Polar Year (IPY)

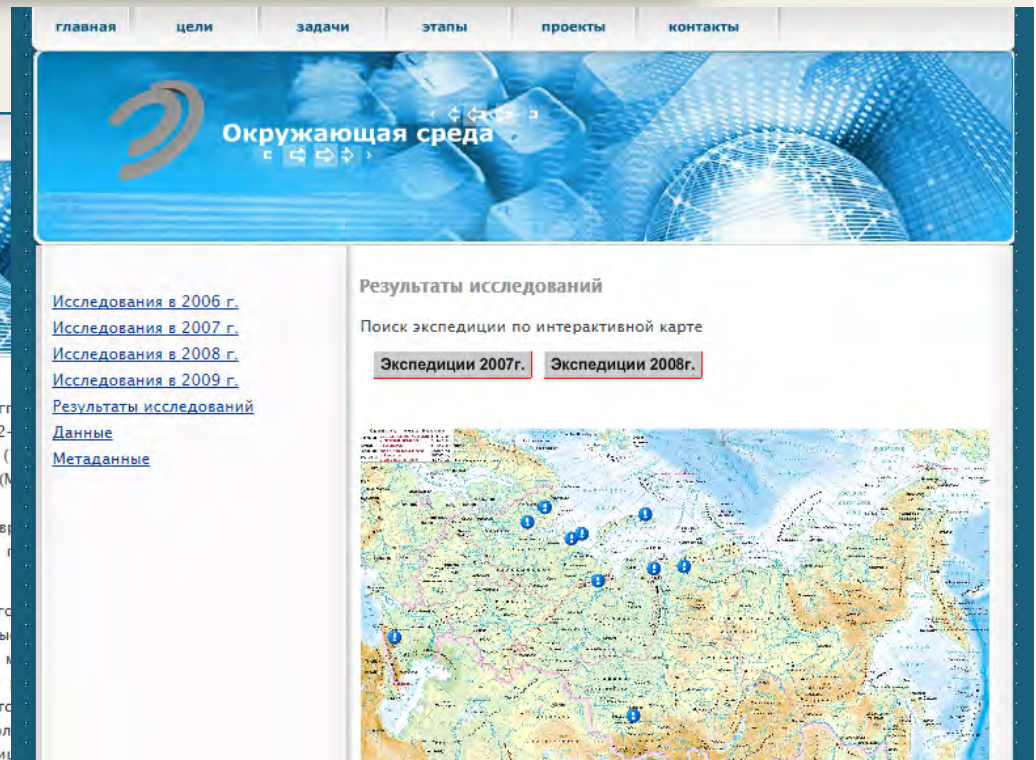


The screenshot shows the homepage of the International Polar Year website. At the top, there is a navigation menu with links: "главная", "цели", "задачи", "этапы", "проекты", and "контакты". Below the menu is a large blue banner with a graphic of ice cubes and a globe. The main content area features a list of links on the left: "Исследования в 2006 г.", "Исследования в 2007 г.", "Исследования в 2008 г.", "Исследования в 2009 г.", "Результаты исследований", "Данные", and "Метаданные". The main text area contains the following text:

Проведение Международного полярного года в 2007–2008 гг. к 125-летию первого Международного полярного года (1882–1883 гг.), к 70-летию второго МПГ (1932–1933 гг.) и к 50-летию третьего (1957–1958 гг.), получившего название Международного геофизического года (МГФГ).

МПГ будет продолжаться целых два года с марта 2007 по февраль 2009. Это необходимо, чтобы ученые смогли провести два цикла наблюдений в обоих полярных регионах.

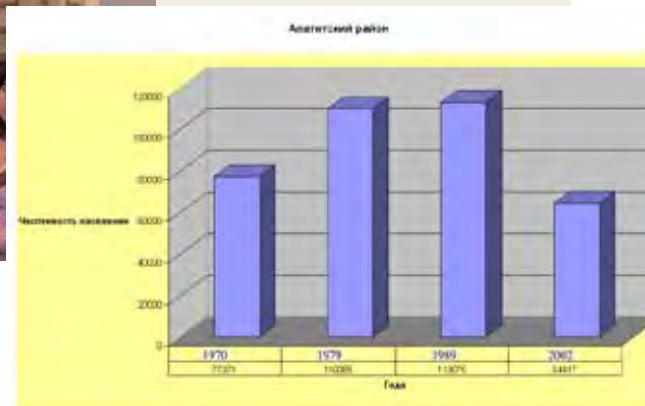
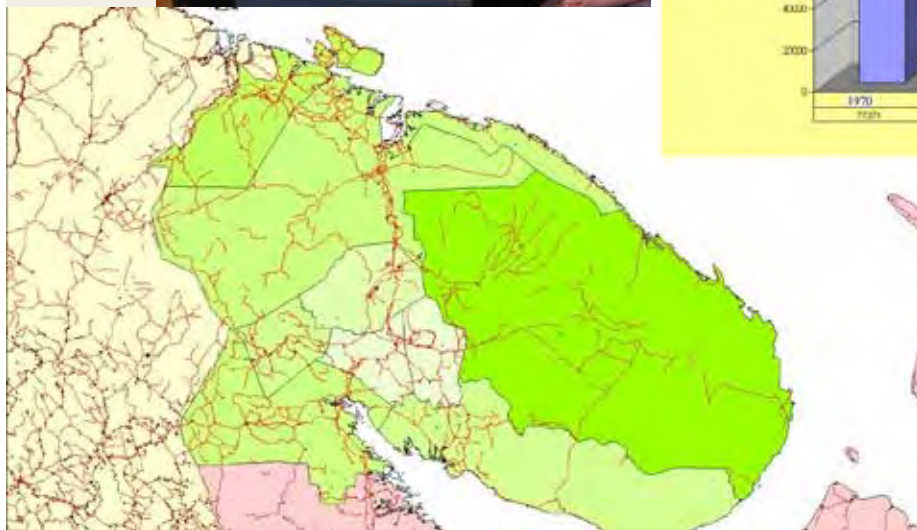
В ходе подготовки и проведения четвертого Международного полярного года ученые различных стран выполнят скоординированные научные исследования в рамках национальных и международных программ, направленных на совершенствование существующей наблюдательной сети и мониторинга загрязнения окружающей среды. Предполагается проведение синхронных измерений характеристик природной среды полярных регионов. Выполнение в Арктике и Антарктике совместных экспедиций, проведение международных конференций и симпозиумов. После периода интенсивной исследовательской работы последует анализ данных, публикации и обсуждения. Многочисленные международные и национальные научные организации поддержали инициативу проведения четвертого МПГ и приняли участие в



The screenshot shows a website titled "Окружающая среда" (Environment). The navigation menu includes "главная", "цели", "задачи", "этапы", "проекты", and "контакты". The main header features a blue banner with a globe and the text "Окружающая среда". Below the banner, there is a section titled "Результаты исследований" (Research Results) with the sub-heading "Поиск экспедиции по интерактивной карте" (Search expedition on interactive map). There are two buttons: "Экспедиции 2007г." and "Экспедиции 2008г.". Below the buttons is an interactive map of the Arctic region with several blue markers indicating expedition locations. On the left side of the page, there is a list of links: "Исследования в 2006 г.", "Исследования в 2007 г.", "Исследования в 2008 г.", "Исследования в 2009 г.", "Результаты исследований", "Данные", and "Метаданные".

About Arctic Projects

Quality of life social-oriented monitoring of the Russian North



Сферы жизнедеятельности	Проблемы	Задачи	Индикаторы
1 Духовно-культурная			
2 Управление и права			
3 Социальная			
4 Финансово-экономическая			
5 Экологическая			

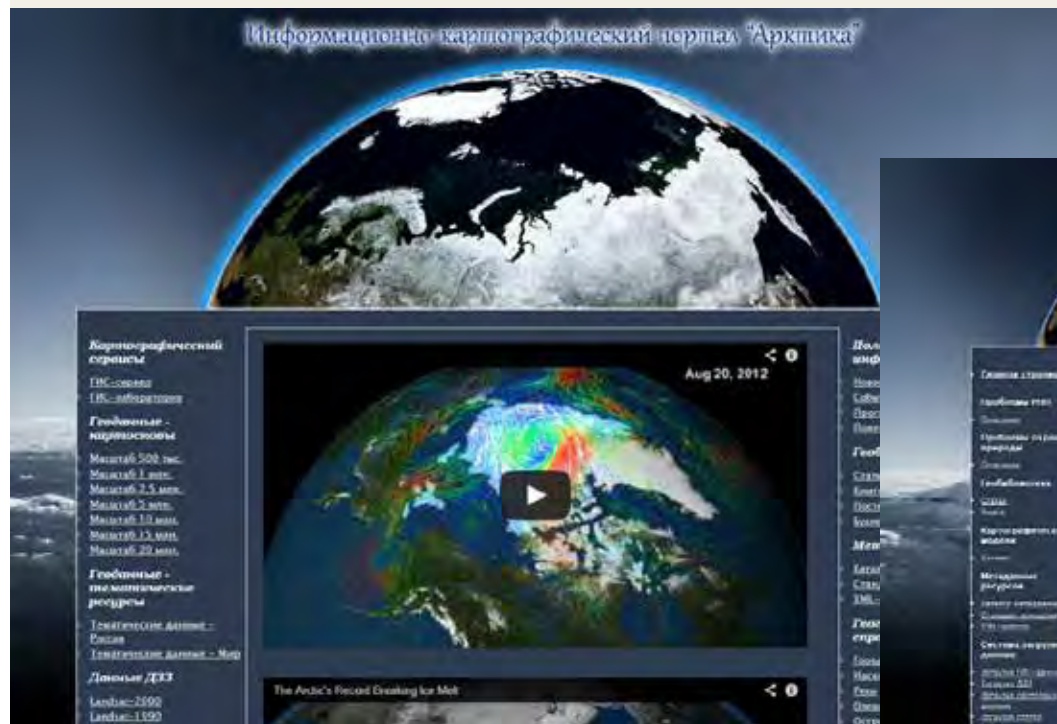
About Arctic Projects

SPRING: Towards Integrated Habitat Management for Geese Migrating through Russia to the Arctic



About Arctic Projects

Creation of a shared system of resources assessment and forecasting of environmental components' state in Northern areas



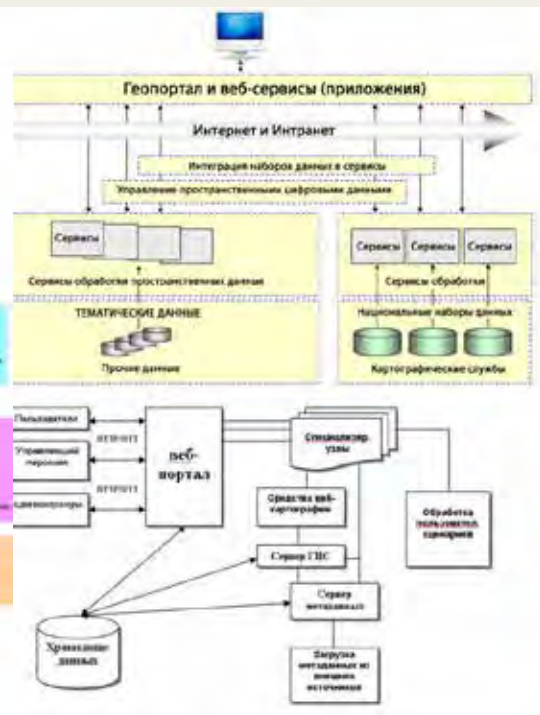
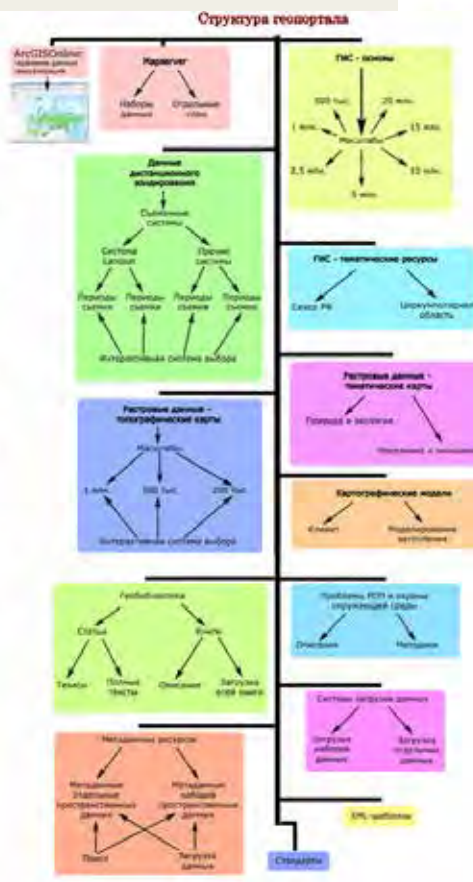
About Arctic Projects

Methodology of spatial data system organization for Arctic environment research and monitoring

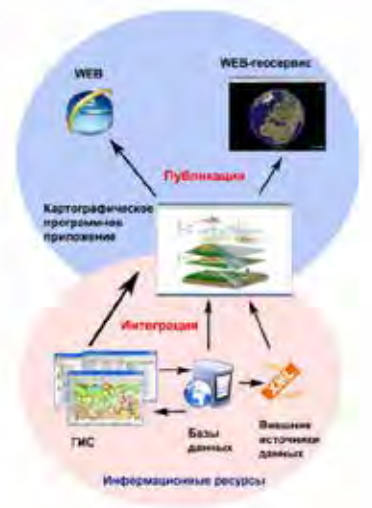
Собранные и систематизированные наборы пространственных данных



Региональные и локальные наборы данных



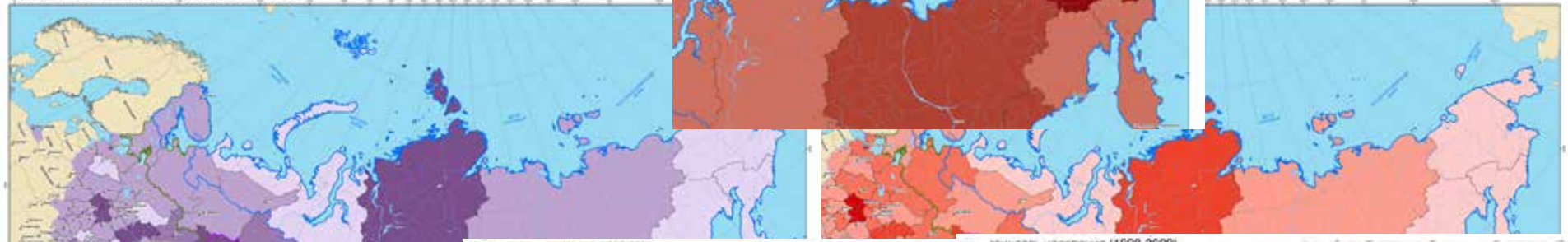
КОНЦЕПТУАЛЬНЫЕ СХЕМЫ ОРГАНИЗАЦИИ, ОБРАБОТКИ, ВИЗУАЛИЗАЦИИ И ПУБЛИКАЦИИ ДАННЫХ



About Arctic Projects

Population's quality of life in the Russian North in contemporary nature-ecological and socio-economic conditions

Численность безработных (тысяч человек)



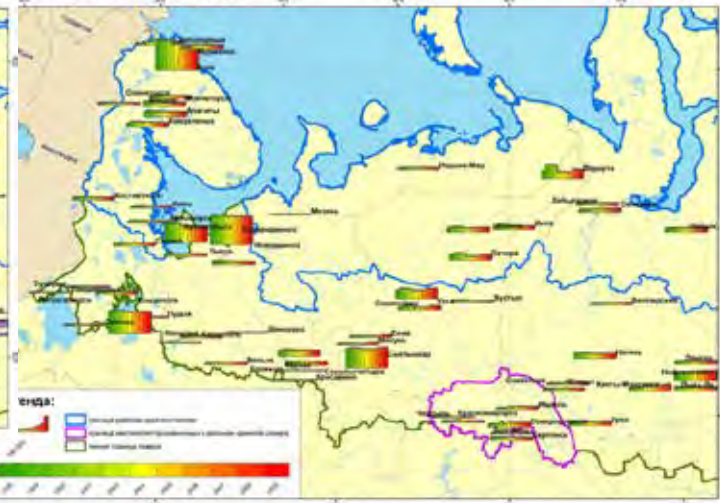
Численность безработных (1998-2009)



Количество пенсионеров (1998-2009)

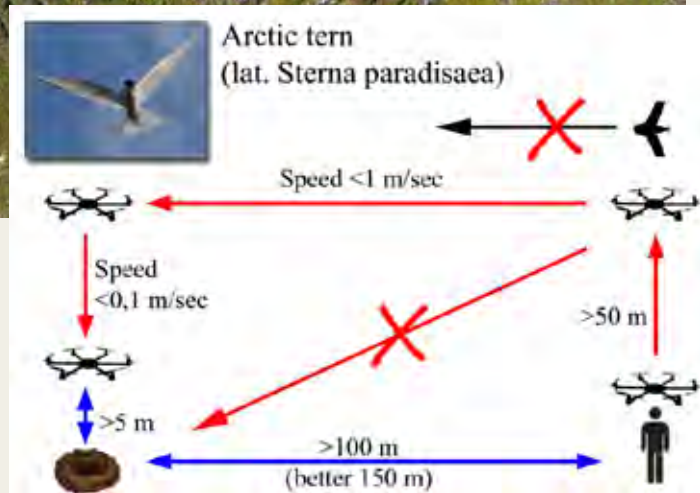


Плотность населения (1998-2009)



Nowadays

Methodology development of the environmental components remote sensing and monitoring by UAV's in the Russian North



Thank you!

Questions???