



Global Session

Friday, 01 November 2019

Regional Statement

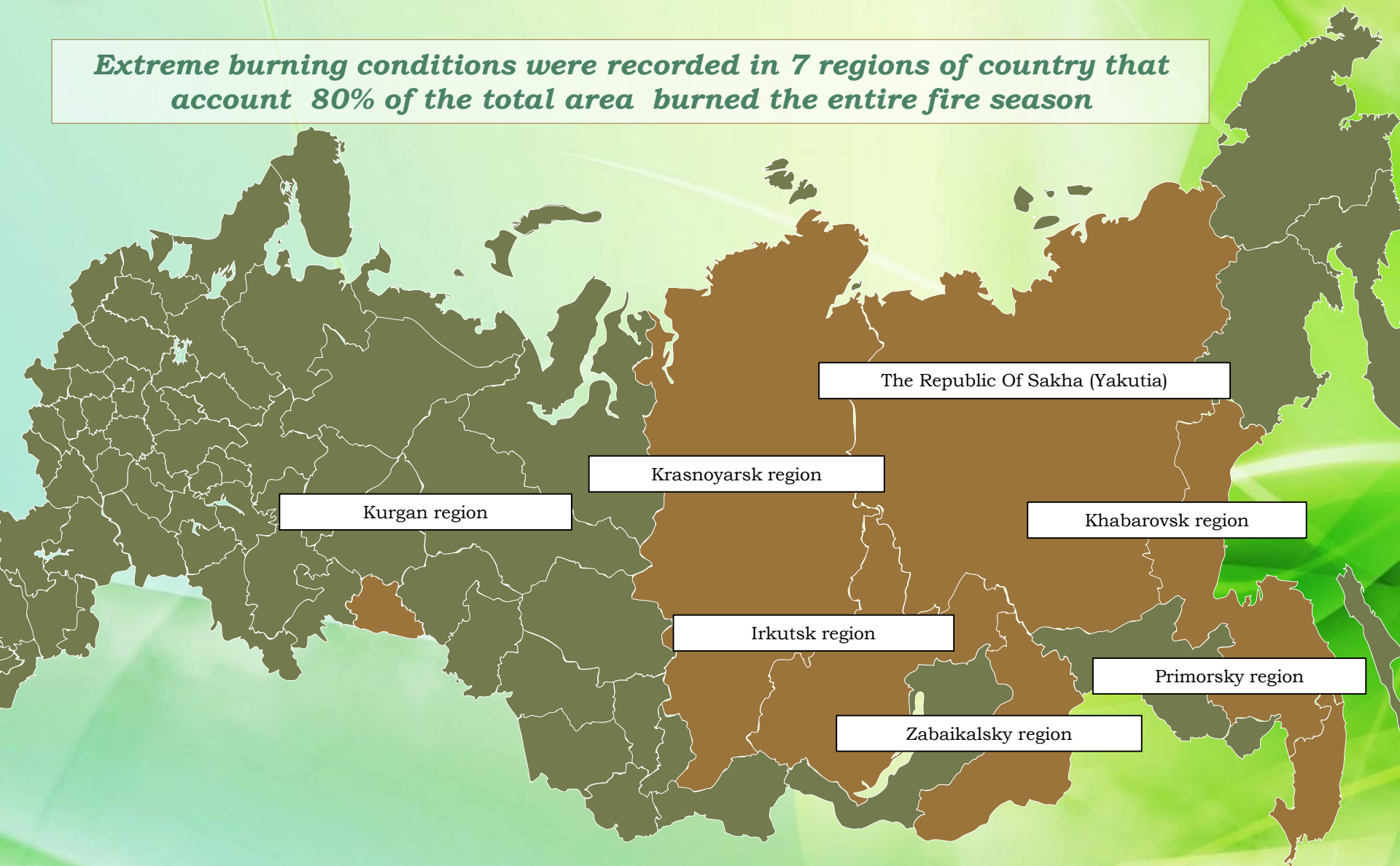
EURASIAN WILDLAND FIRE NETWORK Russian Federation

Andrey Eritsov

Aerial Forest Fire Center, Avialesookhrana
Pushkino, Moscow, Russia



Extreme burning conditions were recorded in 7 regions of country that account 80% of the total area burned the entire fire season



| COLOR ON THE MAP | COMPREHENSIVE FIRE HAZARD INDEX | FIRE DANGER RATING INDEX |
|------------------|---------------------------------|--------------------------|
| Safe | 0-300 | I |
| Low | 301-1000 | II |
| Moderate | 1001-4000 | III |
| High | 4001-10000 | IV |
| Extreme | Over 10001 | V |



FIRE DANGER RATING BASED ON NESTEROV INDEX

$$\sum_{1}^n \left[t^{\circ} (t^{\circ} - \tau) \right]$$

n
 τ
 t°

- the number of days after a rain
- dew point of current air temperature
- air temperature at 13:00

FEBRUARY



MARCH



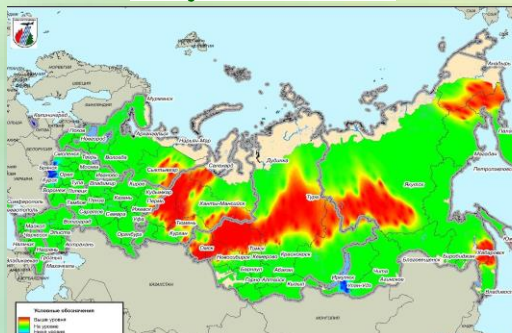
APRIL



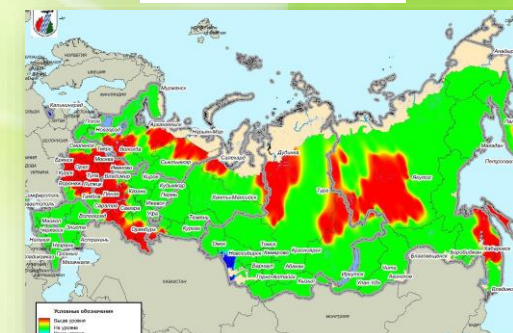
MAY



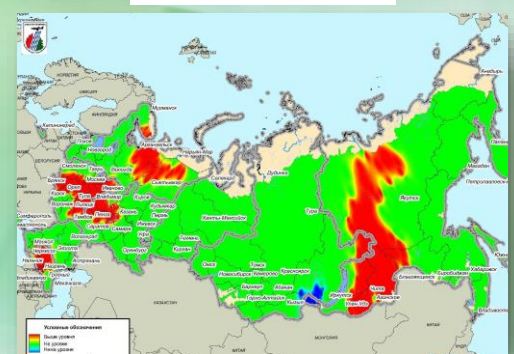
JUNE



JULY



AUGUST



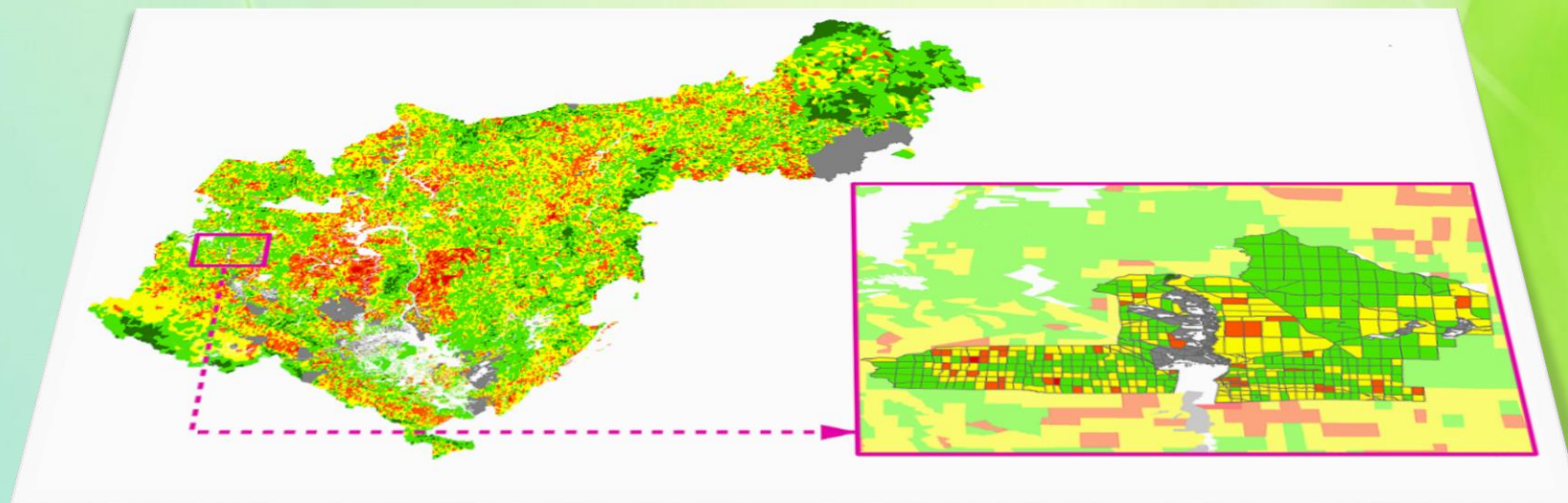
SEPTEMBER



OCTOBER

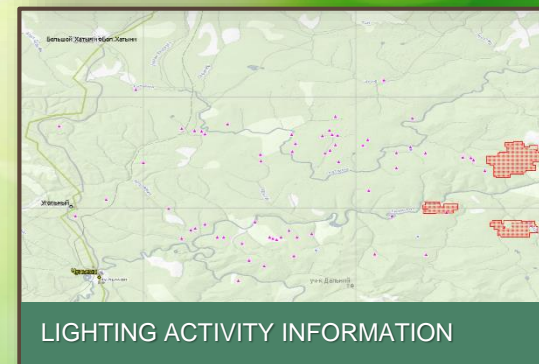
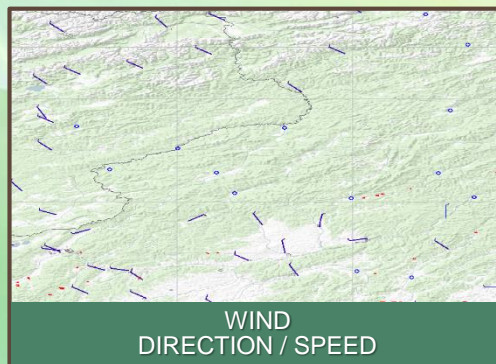
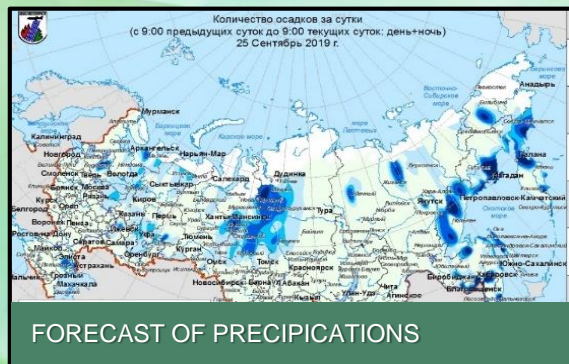
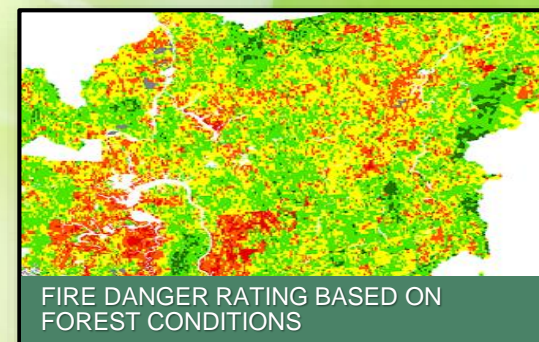
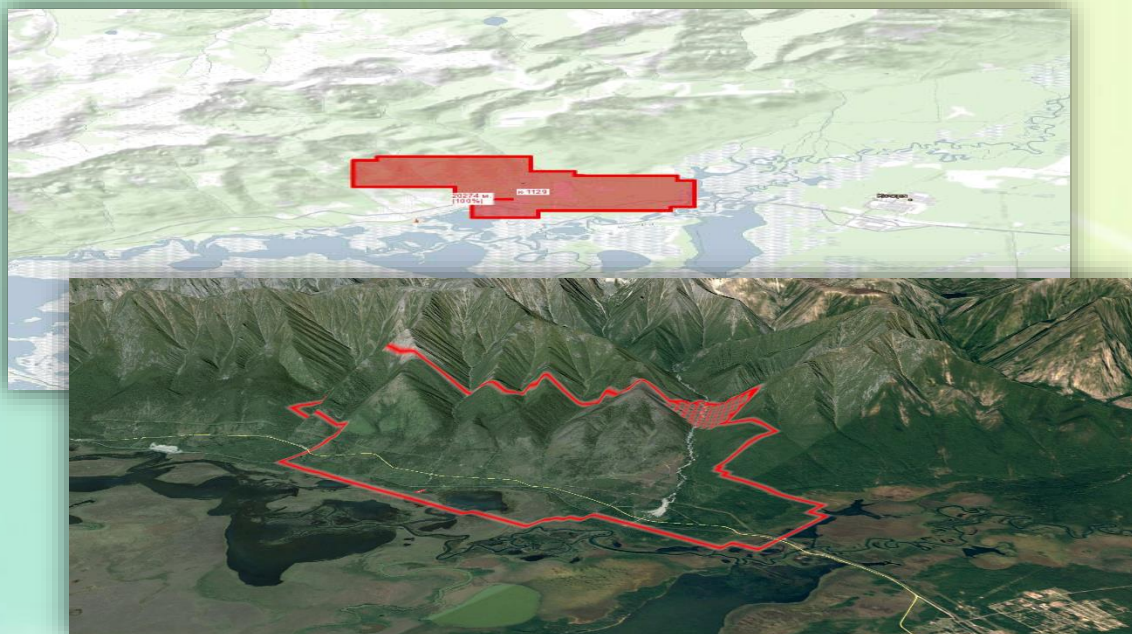


Irkutsk regional map of fire danger rating based on forest conditions



| Color on the map | Fire danger rating | Fire danger index |
|------------------|--------------------|-------------------|
| Red | Extreme | I |
| Orange | High | II |
| Yellow | Moderate | III |
| Light green | Low | IV |
| Dark green | Safe | V |

Forecast for spreading of forest fire





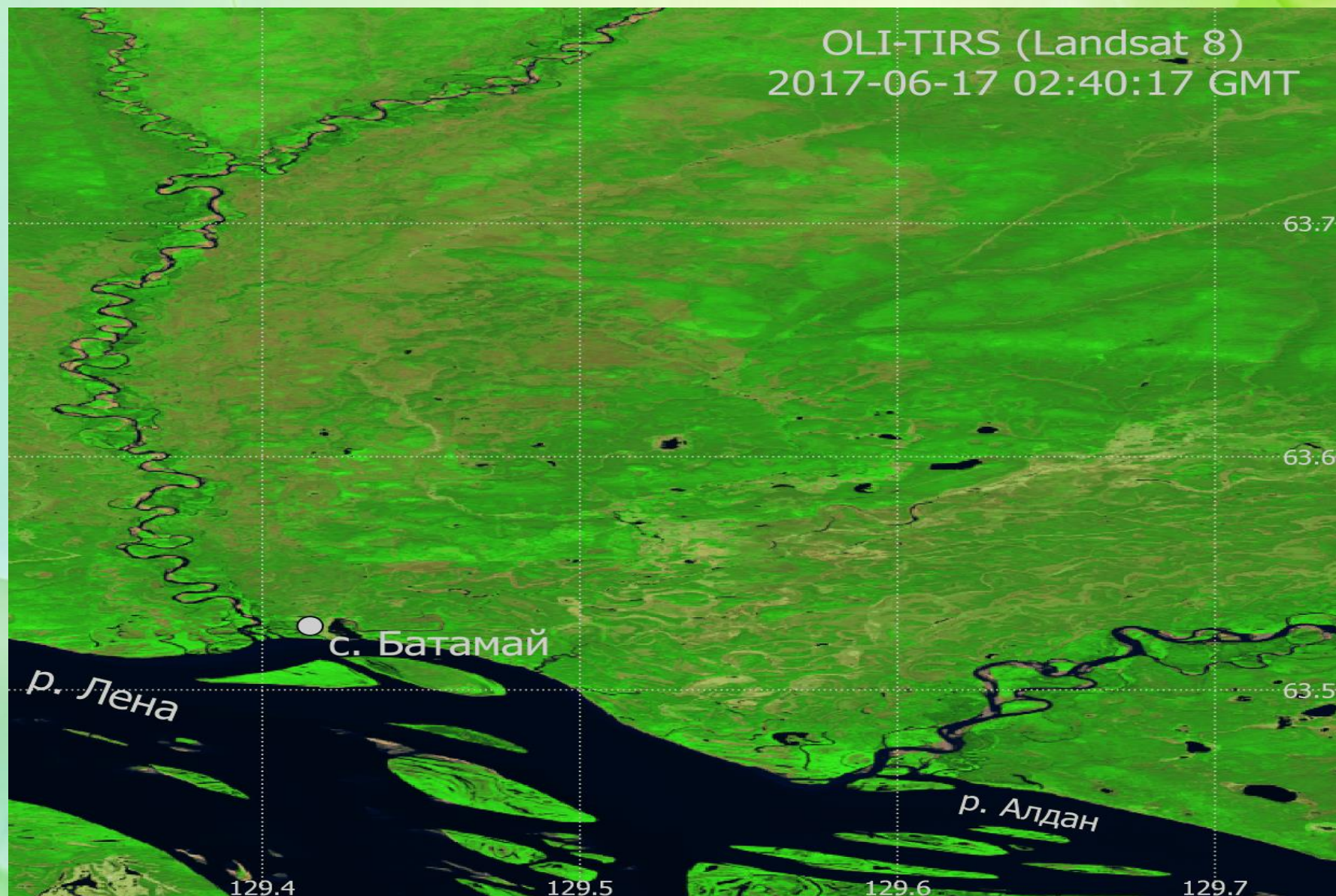
Ground protection



Aerial protection



ISDM-Rosleskhoz





The Federal Headquarters also makes decisions based on regional requests:

- on the definition of specific regions in which it is necessary to extinguish forest fires using explosive materials;
- on the definition of specific regions in which it is necessary to extinguish forest fires using artificial precipitation technologies;
- on inter-regional maneuvering by forces and fire extinguishing means;
- on the determination of specific regions in which assistance is needed in stabilizing the forest fire situation and preventing and eliminating emergencies in forests by the forces of the Federal Reserve

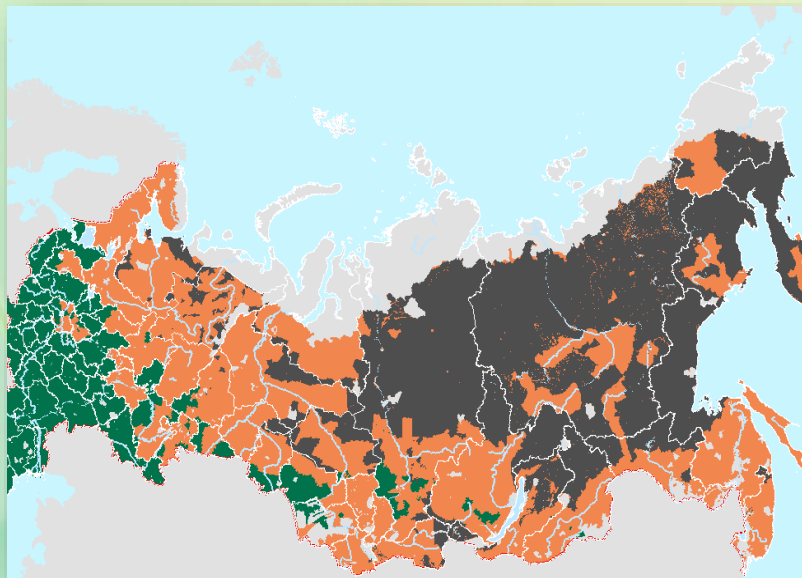






Total Forest lands

1 170,2
mln. ha



Ground forces fire management zones-
72.7 million hectares

Aerial fire management zones-
482.2 million hectares

Aerial fire management zones-
/control zone - 482.2 million hectares

Over 30 thousand fire-fighters

Over 300 aircraft
3 900 smokejumpers/hellirappellers

Information system based on remote sensing used fore design making support(ISDM-Rosleskhoz)

Fire management provided with the use of aviation based on regional authorities decision



Forest plan of the region

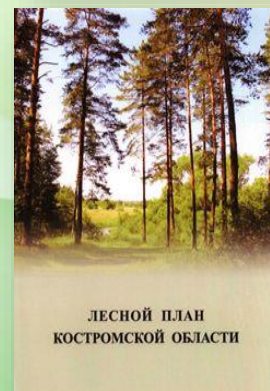
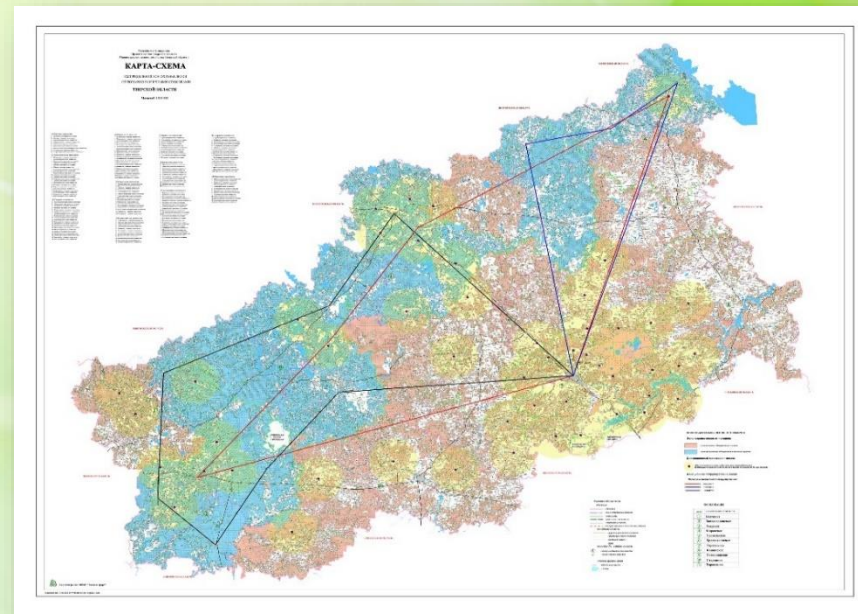
- Developed for 10 years period
- Establishes conceptual approaches and key volumetric indicators

Forestry Regulation of the District

- Developed for 10 years period
- Requirements of the preventive measures and operations to be provided

Forest Use Project for the companies

- A specific list of fire prevention measures with deadlines





Forest District Fire Management Plan

Regional Forest Fire Management Plan

Interregional Forest Fire Management Plan

- Features of the organization of fire protection
- The list of fire fighting forces
- Regulation of deployment of firefighting forces
- List of ongoing fire management organizational measures
- Procedures for deployment of additional regional and federal reserved forces





AUTOMATED SYSTEM FOR DEVELOPMENT OF FIRE MANAGEMENT PLANS

15

СВОДНЫЕ ПЛАНЫ

Панель: Данные Карта Отчеты Справочники Индикаторы Настройки

Лесничество: Алтайское

Процесс утверждения плана тушения

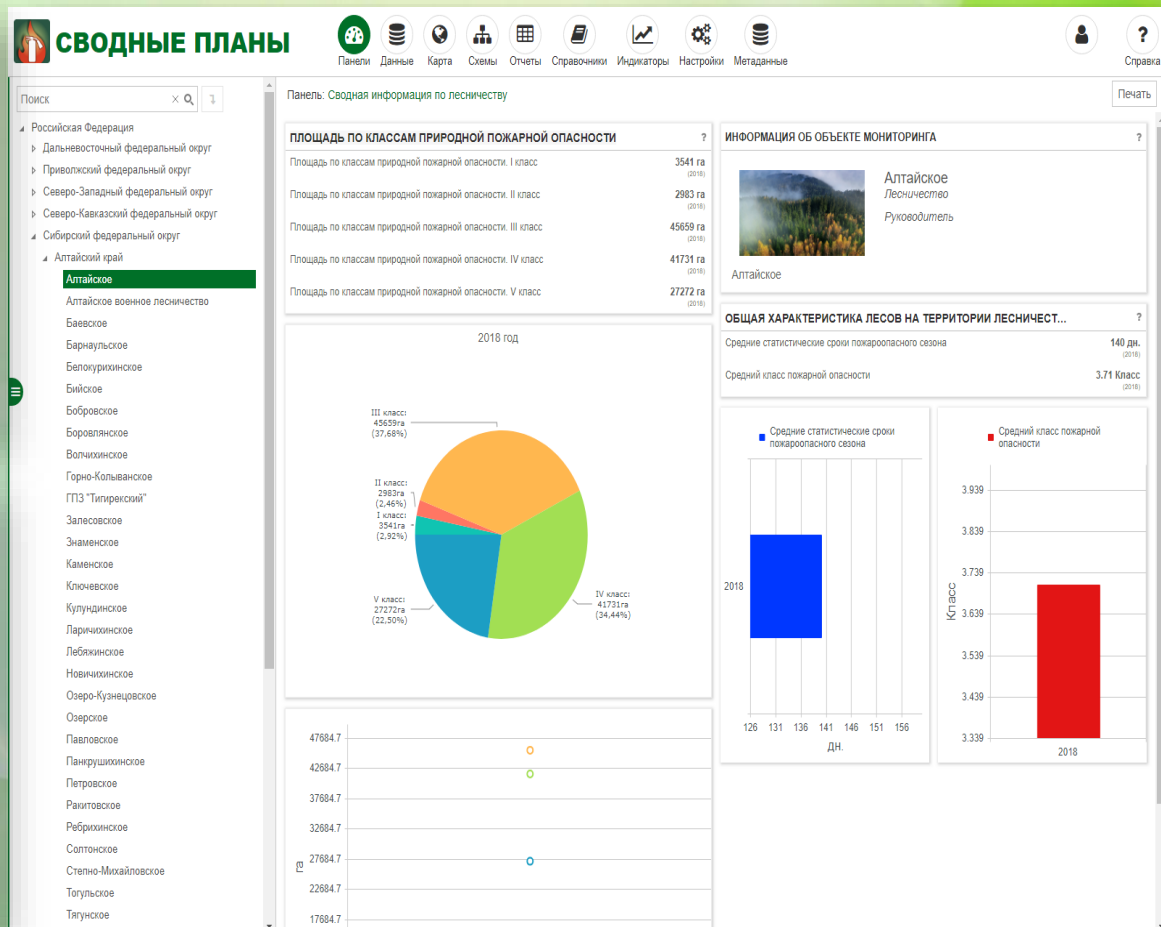
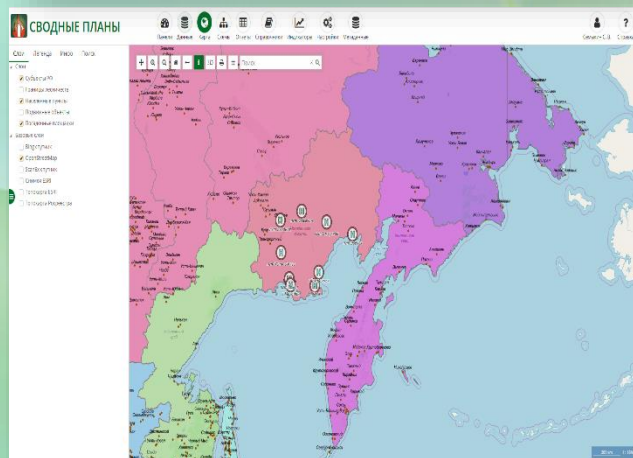
| Дата | Статус | Инициатор |
|------------|-----------------|---------------|
| 10.11.2018 | В работе | Бокорев С. С. |
| 10.11.2018 | На согласовании | Бокорев С. С. |

Регистр записей

| Дата | Автор записи | Результат | Замечание | Дата комментария | Комментарий разработ. | Автор комментария | Принято |
|------|--------------|-----------|-----------|------------------|-----------------------|-------------------|---------|
|------|--------------|-----------|-----------|------------------|-----------------------|-------------------|---------|

Записки

| Дата | Автор записки | Записка | Положить/выбросить... |
|------|---------------|---------|-----------------------|
|------|---------------|---------|-----------------------|



Access of the maximum firefighting forces to information related to the operations

- Forest fire map
- Burning area in daily dynamics
- Number of resources and their locations

Information exchange

- Tasks
- Availability of resources
- Confirmation of tasks/orders and reports

Automation of calculation processes

- Calculation of the required forces and means
- Extinguishing performance calculation
- Prediction of fire management and fire damage costs
- Preparation of recommendations

ISDM-Rosleskhoz





Need of development of new technologies and approaches on wildfire risk assessment using modern and advanced experiences

Development of educational programs and need of public propaganda on fire prevention

Increase of forest fire preventive measures

Development of procedures on Interagency and Interregional Cooperation on Fire Management

Strengthening international cooperation on the transboundary fire management issues

Need of solving the issues of forest protection on extended areas / control zones

THANK YOU FOR YOUR ATTENTION



WWW.AVIALES.RU