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Forest Fires in the Boreal Zone of Russia

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Artificial precipitation and use of explosive on firefighting
Information System of Distance Monitoring
Information system of Distance Monitoring
Forest Fire Management in Russia

Ground forces protection area
Area protected by aerial fire centers
Area of aerial fire management / use of space detect
Other categories
Temperature anomalies in Boreal Zone

April – June 2019
April-June 2020

Temperature anomalies to compare to average 30 years data
Trend of acting fires in Northern territories


2018 2019 2020


Trend of acting fires in Northern territories


2018 2019 2020

Trend of acting fires in Northern territories


2018 2019 2020

Trend of acting fires in Northern territories
Tension of a fire season
Forest Fires caused by lightning

- Total / Russia
- Krasnoyarsk reg.
- Republic Sakha (Yakutia)

[Graph showing trends from 1990 to 2020 for different regions in Russia]
Map of population density and prevailing winds in June (fragment)

- **Prevailing wind**
- **Settlements**
  - Population size, thousand ppl
    - <=2
    - (2;7]
    - (7;20]
    - (20;60]
    - >60
- **Spots of indigenous people residence**

Population density, ppl / 1000 ha

- 0
- 0 - 0,001
- 0,00001 - 0,05
- 0,05 - 0,1
- 0,1 - 0,5
- 0,5 - 1
- 1 - 2
- 2 - 4
- >4
Outcomes / Recommendations

• Fire danger rating by Nesterov index is increasing in northern areas more than the average annual temperature

• The share of forest fires among landscape fires is increasing

• Number and area burned are increasing in the northern territories

• The share of forest fires in summer period destructed forest significantly increased

• The share of forest fires caused by lightning increased, although this process is cyclical and a slight decline is predicted

• Issues related to the spread of smoke require special attention, including in the context of changing prevailing winds

• Decided to develop aerial forest fire centers in Northern territories

• Essential funding for acquisitions of fire fighting equipment and aerial means provided for fire management in Northern territories

• Recommended to develop interagency and interregional cooperation on fire management
Thank you for attention!
Спасибо!

Russia

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