Early Detection of Boreal Forest Fire

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Related International Research Project
JAMP Japanese Arctic Monitoring Program
CAMP Community Arctic Modeling Program
IGBP NES

Description of the Program
Under the global warming trend, arctic boreal forest fire occurrences tend to increase. In 2003 more than 20,000,000 ha of forest burned. These large scale boreal forest fire gives a great impact to carbon budget in atmosphere and terrestrial ecosystem.

If we take into account the fire occurrence and its influence from the view point of carbon budget, boreal forest is no more sink but source of carbon to atmosphere. As to reduce the forest fire occurrence and damages to ecosystem, it is important to improve the detection algorism using Satellite images. The international cooperative program of early detection of boreal forest fire is under the way to establishment based on consortium among universities and institutes in Japan and foreign countries.