



[Calibration / Validation Subgroup on Land Product Validation](#)

GOFC-Fire
Satellite Product Validation Workshop

[Gulbenkian Foundation](#)

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Lisbon, Portugal

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Last Update:

Brazilian Validation of AVHRR Fire Pixels

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For many years Brazil has been conducting an operational fire monitoring program based on fire pixels detected in AVHRR images of the NOAA-series weather satellites. Information is processed on near-real time and field crews with helicopters and ground vehicles verify during many months as many AVHRR fire detections as possible; up to 150 fire sites/day are visited to check the formal permits required to burn, when information about the fire events is registered and digital pictures of the sites are taken. All fire data is added to a Geographical Information System database. The system is being improved every year, particularly since 1998 when the PROARCO initiative was started within the Brazilian Environmental Institute, IBAMA to monitor and control fires in the Amazon region with support of the World Bank. The fire pixel detection is done by the Brazilian Space Institute, INPE, using NOAA imagery received from its two stations. False fire alarms almost do not exist now as the algorithm has been corrected for sun glint in exposed soils and water bodies. Location of the fires as reported by the field crews present maximum errors of 2 km. The following Internet sites present updated information about AVHRR fire monitoring in Brazil:

<http://www2.ibama.gov.br/proarco/relatorio/index0.html>

<http://www.cptec.inpe.br/products/queimadas/queimap.html>