

55th IISL COLLOQUIUM ON THE LAW OF OUTER SPACE (E7)  
Legal Evidence from Outer Space (4)

Author: Mr. Alvaro Fabricio Dos Santos  
Advocacy General of the Union - AGU, Brazil, alvaro.santos@agu.gov.br

THE USE OF SATELLITE IMAGES FOR PROSECUTING PERSONS AND COMPANIES THAT  
HAVE CAUSED DEFORESTATION IN THE AMAZON REGION

**Abstract**

At the request of the Brazilian Government, the Brazilian National Institute for Space Research (INPE) has used satellite imagery to make a systematic study of Amazon deforestation since April, 1989. INPE's projects related to Amazon, namely PRODES and DETER, include the use of remote sensing satellite images for deforestation assessment. Data obtained using these projects are fundamental to define the measures that will be taken by the Brazilian Government, including public policies of prevention and surveillance where deforestation has increased. According to PRODES data, the Amazon's deforestation reached 7.000 km<sup>2</sup> from August 2009 to July 2010. One of the causes of deforestation is the use of the areas for livestock, especially to raise cattle. It is cheaper to overthrow the forest to transform it in a pasture area than invest money in research and technology. The Amazon is the region in Brazil where the herd of cattle has been more increased in the last years. According to the Brazilian Institute of Geography and Statistics (IBGE), since 1995, 70% of the overthrown areas in the Amazon region have been used for raising cattle. In order to change this scenario, the Federal Public Prosecution (MPF), the Brazilian governmental institution that is in charge of defending collectives and social rights (including the environment's defense), has taken measures to punish ranchers and fridge companies that do not obey the environmental legislation. In 2009, several lawsuits were proposed by MPF against persons and companies that caused 157,000 hectares of deforestation in the Brazilian State of Para (who was the champion of deforestation over the past four years). In such lawsuits, MPF claimed the amount of US\$ 1 billion to compensate damages caused by deforestation. The Brazilian judicial courts have taken into account data from PRODES and DETER to validate the deforestation and to convict those who have overthrown the forest. This paper presents an overview of the succeeded actions undertaken by MPF to mitigate Amazon's deforestation, based on data provided by INPE's projects, as well as the brief history of the program "Legalized Meat", implemented by MPF to enhance the consumption of meat produced in farms committed with the sustainable livestock.