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Fraction images derived from NOAA AVHRR data for studying the deforestation in the Brazilian Amazon

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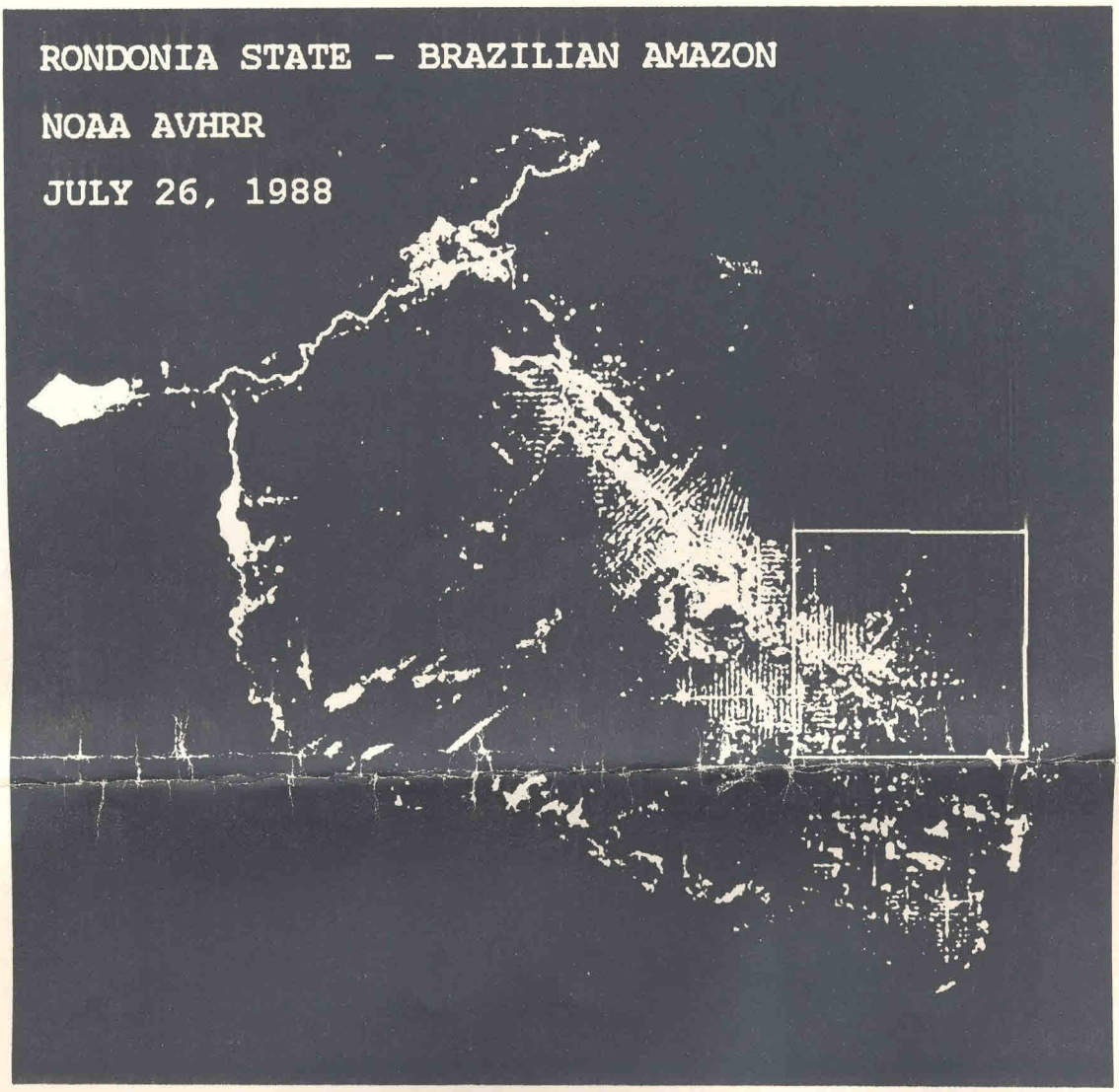

Figure 1. Colour composite of fraction images (Vegetation = Red, Soil = Green, and Shade = Blue) for NOAA AVHRR data acquired on 26 July 1988 over Rondonia State located in the Brazilian Amazon.

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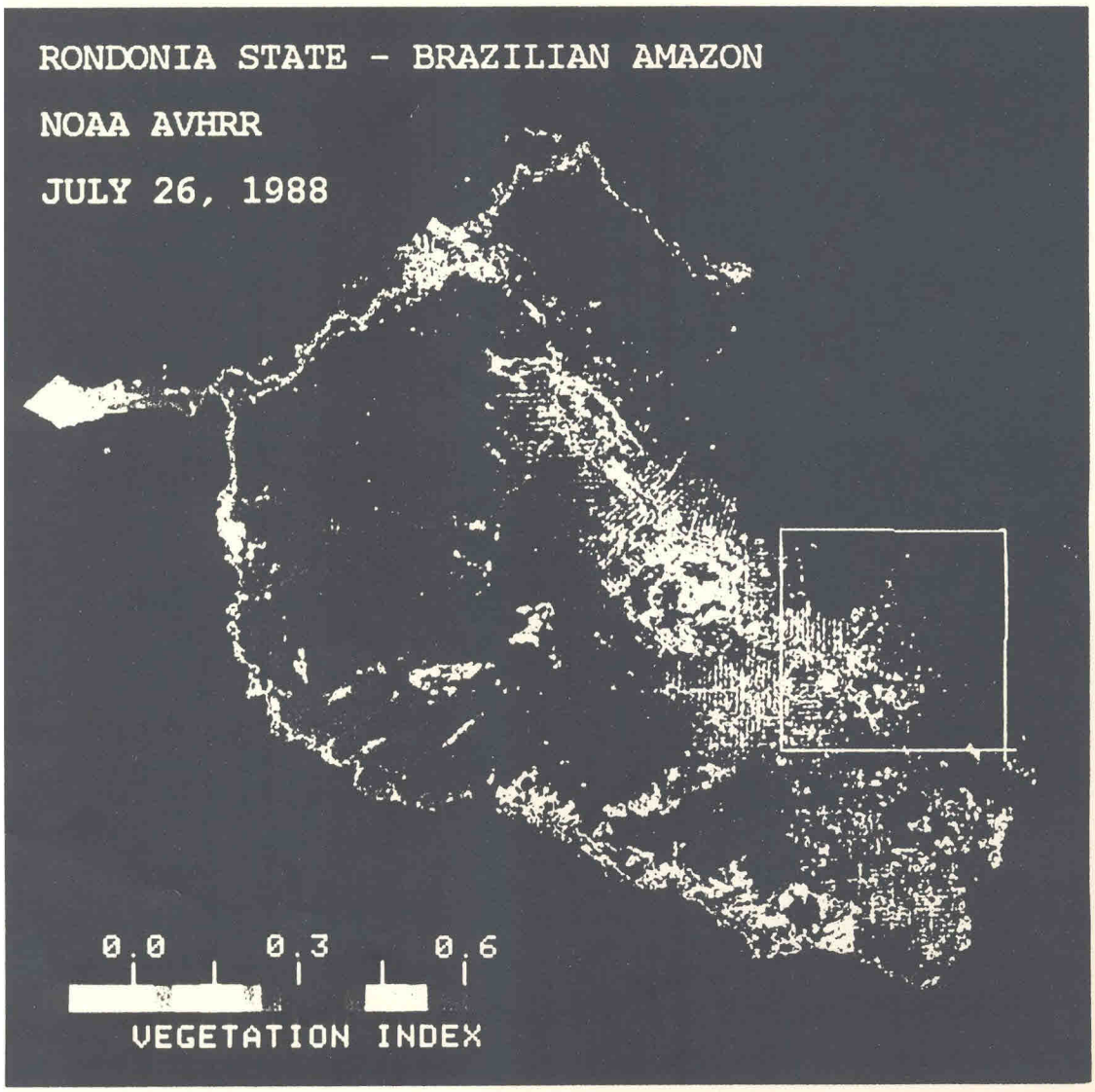

Figure 2. The NDVI image derived from NOAA AVHRR data acquired on 26 July 1988 over Rondonia State.

Fraction images derived from National Oceanic and Atmospheric Administration's (NOAA) Advanced Very High Resolution Radiometer (AVHRR) images contain useful information for studying tropical deforestation. Vegetation, soil and shade fraction images are formed by the proportion amount of each component within the pixel. These values are estimated using the two reflective channels (0·58–0·68 μm and 0·725–1·1 μm) and the reflective component of the 3·55–3·95 μm channel (Kaufman and Nakajima 1993, Kaufman and Remer 1993). The end-members for AVHRR image to run the Constrained Least Squares (CLS) Method

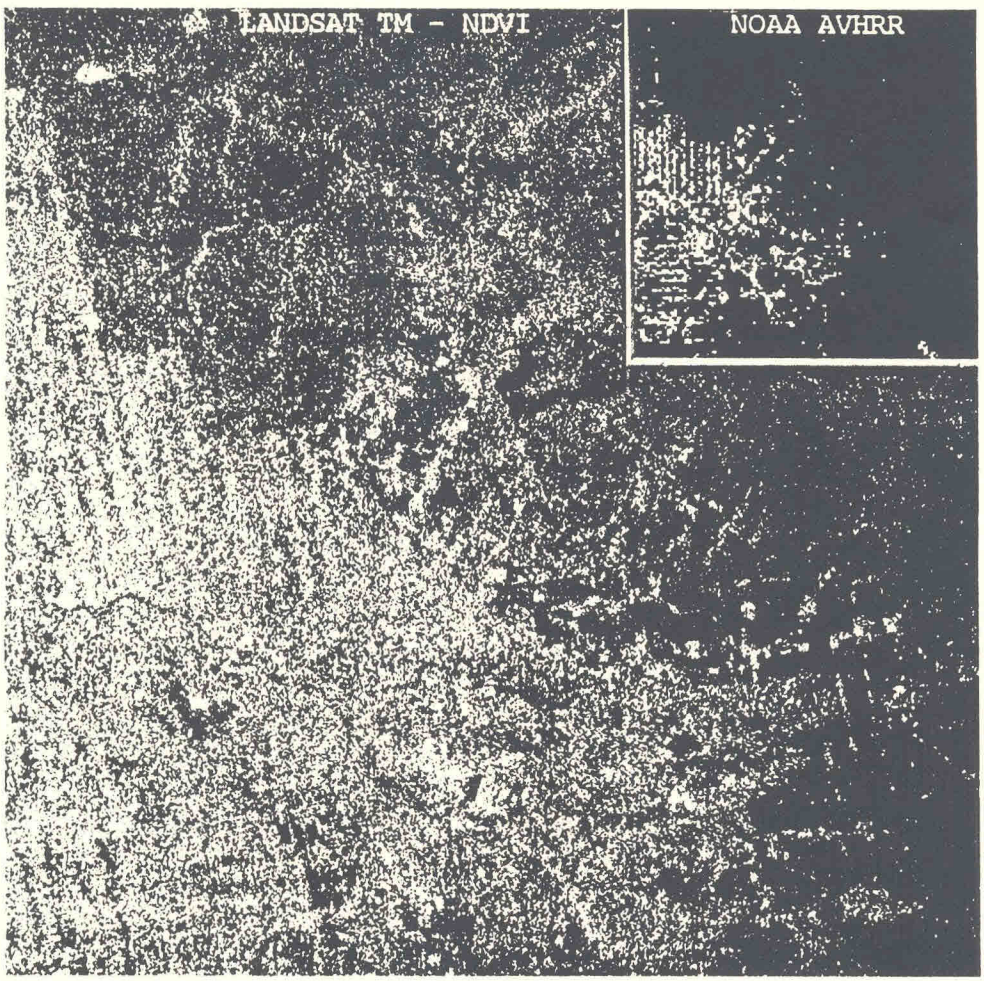

Figure 4. The NDVI images derived from TM and AVHRR images over the same region.

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