

Table 17 Fire (Fire scars)

	DATA OPTION 1: Landsat ETM	DATA OPTION 2: MODIS
<i>Spatial Dimensions</i>		
Area to cover	185km x 185km per scene	2500km swath width
Mapping unit	15m panchromatic 30m multi-spectral	250 m (bands 1-2) 500 m (bands 3-7) 1000 m (bands 8-36)
Positional accuracy	Dependent on geo-referencing process	Dependent on geo-referencing process
<i>Temporal Dimensions</i>		
When	Approx 9.45am	Approx 10:30 am (Terra) and 1:30 pm (Aqua)
How often	Every 16 days	Daily
Variable to map	Fire scars (burnt features and age)	Fire scars (burnt features and age)
Environmental Restrictions	Cloud cover	Cloud cover
Processing technique (Output)	Image classification or feature detection (Vegetation type map and target features) Note: The ability to map specific targets will depend on their growth form and extent.	Image classification or feature detection (Vegetation type map and target features) Note: The ability to map specific targets will depend on their growth form and extent
Resources – Hardware and Software	PC Image processing software GIS with image classification module (e.g. ARCGIS Image Analyst)	PC Image processing software GIS with image classification module (e.g. ARCGIS Image Analyst)
Resource – Personnel	Trained in image classification Experience with Landsat data Knowledge of area to be mapped	Trained in image classification Experience with MODIS data Knowledge of area to be mapped
References: Note these are some example references	Pereira and Setzer (1993)	Justice et al. (2002)

Justice, C., Giglio, L., Korontzi, S., Owens, J., Morissette, J., Roy, D., Descloitres, J., Alleaume, S., Petitcolin, F. and Kaufman, Y. (2002). "The MODIS fire products." Remote Sensing of Environment, 83(1-2), 244-262.

Pereira, M. and Setzer, A. (1993). "Spectral characteristics of fire scars in Landsat-5 TM images of Amazonia." International Journal of Remote Sensing, 14(11), 2061-2078.