Table 23 Snow (Extent)

	DATA OPTION 1: Landsat ETM	**DATA OPTION 2: MODIS**
Spatial Dimensions		
Area to cover	185km x 185km per scene	2500 km per swath
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
Temporal Dimensions		
When	Approx 9.45am	Approx 10.30am (Terra) and 1.30pm (Aqua)
How often	Every 16 days	Daily
Variable to map	Snow extent	Snow extent
Environmental Restrictions	Cloud cover Terrain shadows	Cloud cover Terrain shadows
Processing technique **(Output)**	Image classification or feature detection Land-cover type map Note: The ability to map specific targets will depend on their form and extent.	Image classification or feature detection Land-cover type map Note: The ability to map specific targets will depend on their 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	Dozier (1989)	Hall et al. (2002)

Dozier, J. (1989). "Spectral signature of alpine snow cover from the Landsat Thematic Mapper." Remote Sensing of Environment, 28, 9-22.

Hall, D., Riggs, G., Salomonson, V., DiGirolamo, N. and Bayr, K. (2002). "MODIS snow-cover products." Remote Sensing of Environment, 83(1-2), 181-194.