

```

/** ----- THE MASTER SCRIPT -----
/**
/** FILE NAME:          00_MASTER.txt
/** AUTHOR:            RENEE SCHICKER
/** THIS SCRIPT CREATED: 15 DECEMBER 2008
/** LAST UPDATED/MODIFIED: 10 JUNE 2009
/**
/** The scripts may be supplied in a more readily useable format if the work is acknowledged
/** CONTACT:      Renee_Schicker@hotmail.com
/**
/** !!!! --- NOTES ---!!!!:      First need to create workspace:
/**                                CREATEWORKSPACE d:\Renee_gis\output_data\Organised
/**                                Then set it/ move to it:
/**                                WORKSPACE d:\Renee_gis\output_data\Organised
/**
/** PURPOSE:      Run a series of scripts, can choose which to run and which to skip. Is ideal
/**                for unsupervised overnight or few days (depending on the computer)
/**                processing of all data.
/**
/** STARTS IN:          ARC
/**
/** SCRIPTS USED:      01_kill_data.txt      02_Setup.txt
/**                    def_proj.aml          03_DEM.txt
/**                    04_Inventory.txt      05_Geology.txt
/**                    06_Soil.txt           07_LandCover.txt
/**                    Selected_LI.txt       08_Roads.txt
/**                    09_Faults.txt         10_rivers.txt
/**                    11_rain.txt
/**
/**
/** SCRIPTS WITHIN SCRIPTS:      CheckProgEdit.txt      CheckProgGrid.txt
/**                               04a_create.txt          04b_union.txt
/**                               04c_compile.txt         04d_Dropltem.txt
/**                               05a_Join_QMAPs.txt
/**
/** VECTOR DATA:
/** COVERAGES:
/**      nzfsl      New Zealand Soil
/**      nzgeology   New Zealand Geology
/**      river_cl    New Zealand River Classification
/**      lc_ni_nzmg  North Island Land cover
/**
/**      geol_units  (Auckland)      from
/**                  d:\renee_gis\Use_in_ARC\GNS_QMAP\Auckland\covers\geol_units
/**      geol_units  (Waikato)       from
/**                  d:\renee_gis\Use_in_ARC\GNS_QMAP\Waikato\covers\geol_units
/**
/** SHAPEFILES:
/**      EW_bnd      Waikato Regional Council Boundary
/**                  - use instead - only the coast might be a little off.
/**

```

```

/**      RS_Waikato_R   Waikato Region Boundary
/**
/**      - Modified regional boundary - copied district
/**      boundaries, then cut to region shape using the EW
/**      boundary as a guide.
/**
/**      waikato_lsi     Waikato Landslide Inventory GEONET
/**      - obtained from excel moved to Access and
/**      converted to SHP file
/**
/**      landsl_p        Waikato Landslides GNS polygon from QMAP
/**      - has shape but no details about landslides and Waikato
/**      region is limited to a third of the area (West Coast). Need
/**      Auckland and Rotorua (which has not been developed yet)
/**      to make up the regional area
/**
/**      landsl_l        Waikato Landslides GNS line from QMAP
/**      - Same comment applies as for landsl_p.
/**
/**      ni_roads        North Island Roads
/**      1millfaults     New Zealand Fault Lines
/**      Rotorua_mask    Masked area of Rotorua area (i digitised) not covered by
/**      QMAP for the Waikato Region
/**
/**  RASTER DATA:
/**  GRIDS:
/**      north25         North Island Digital Elevation Model (25 m resolution)
/**      mean_rain        1998 Mean Annual Rainfall
/**      max_rain         1998 Max Rainfall
/**
/**  .....SOME HISTORY.....
/**
/**  15 DECEMBER 2008    0_parent.txt created after I decided having all the processes in one
/**                      script was a bit messy (easy to lose where everything is) so split into
/**                      individual scripts properly and reduced the combined script into a
/**                      master script which would run other scripts (no longer have the
/**                      contents of the other scripts). As a result it saves time searching for
/**                      mistakes amongst a mass script by having it all broken up.
/**
/**  17 DECEMBER 2008    &RUN 9_fault.txt and &RUN 10_rds_buff.txt added
/**
/**  19 JANUARY 2009     &Run 11_river_buff.txt added
/**
/**  02 MARCH 2009      CheckProgEdit.txt and CheckProgGrid.txt scripts made to save
/**                      having to write the process out many times (these are used in the
/**                      scripts that are used in this script).
/**
/**  09-10 MARCH 2009   Formatted and listed everything, added descriptions and history.
/**
/**  11 MARCH 2009      Modified and updated some scripts. Created new 06_Simpl_Soil.txt
/**                      script. Changed name from 0_parent.txt to 00_MASTER.txt
/**
/**  12 MARCH 2009      Fixed &RUN filepaths for landcover, DEM, Rain, faults, roads, rivers.
/**                      Added &SETVAR to faults, roads and rivers.
/**                      Changed name of 4_simplify_geol.txt to 05_Simpl_geol.txt.
/**
/**  17 MARCH 2009      Added Join_QMAPS.txt in SIMPLIFY_GEOL routine.
/**
/**  26 MARCH 2009      MSOIL in 06_Simpl_Soil.txt changed to Mountain Soil instead of
/**                      Pumice Soil found it earlier in Iri metadata.

```

```

/** Modified Join_QMAP script and loop_master2.txt script.
/** 30 MARCH 2009 Updated 06_Simpl_Soil.txt script. 8.38 am. Test run.
/** Removed outdated LS_Inventory.txt and updated the section.
/** 27 APRIL 2009 Check script is consistent with others (File names), update script
/** information.
/** 08 MAY 2009 Fixed a filepath problem in 12_DEM_Slope.txt.
/** 11 MAY 2009 Added &CALL/&ROUTINE RASTERISE to run 15_Rasterise.txt from
/** here. This converts vector data to raster data with pixel size to
/** match the DEM. Have modified 13_Rain.txt so the rain raster layers
/** converted to vector, edited to implement classes and converted
/** back to raster so instead of 1000m pixel size, now set as 25m.
/** 12 MAY 2009 Added some kill statements to clean up data not needed.
/** 19 MAY 2009 Modified the no_islands shapefiles.
/** 20 MAY 2009 Separate Input data and output data directories, so workspace is set
/** to a separate output folder, so reduces the chance of deleting input
/** data by accident. Added &CALL &ROUTINE KILL_DATA
/** 26-27 MAY 2009 Created a process which successfully grouped the DEM derived data
/** into the desired classes and can convert the GRID data to COVER.
/** 28 MAY 2009 Re-classed geology and soils further, have made changes to
/** 05_geology.txt, 06_Simpl_Soil.txt, and rasterising process.
/** 10 JUNE 2009 kill_data.txt is now first operation. Convert and Existence processes
/** have been combined to make 02_Setup.txt. DEM.txt is now run
/** before Inventory.txt so the DEM boundary can be used in the
/** inventory processing. 04_Inventory.txt sub-scripts were renamed
/** 04a_create.txt, 04b_union.txt, 04c_Compile.txt and
/** 04d_Droptem.txt respectively and changes made to &RUN
/** commands in 04_inventory.txt.
/** the clip and rasterise processes have been built into each of the
/** variables' individual scripts (geology, soil, Iri, landcover, faults,
/** roads) and the scripts originally made for clipping and rasterising
/** are now made redundant.
/** Processes in DEM_Reclassed.txt script were combined with
/** 12_DEM_Slope.txt with an added procedure to create a regional
/** boundary based on the DEM boundary and this is in the new
/** 04_DEM.txt script. All variables will now be clipped by the DEM_Bnd
/** instead of region_bnd.
/** 30 SEPTEMBER 2009 Added workspaces to correspond to each script to keep data
/** organised sensibly. Added Selected_LI routine and scripts to
/** process.
/** *****
/** *****

```

```

/* Processes called ONLY contain comments and a script to run (e.g. &RUN d:\file_path\script.txt)
/* PROCESSES TO CALL ON/OFF:
/** LIST of routines to call:

```

```

&CALL Create_wrkspc
WORKSPACE D:\Renee_GIS\Output_data\Organised

```

/*	/* Script run:	Author:	Last Updated:
&CALL Kill_data	/* 01_Kill_Data.txt	Renee Schicker	30 SEPTEMBER 2009
&CALL Setup	/* 02_Setup.txt	Renee Schicker	30 SEPTEMBER 2009
&CALL Projection	/* def_proj.aml	Paul Berkowitz	APRIL 2004
&CALL DEM	/* 03_DEM.txt	Renee Schicker	30 SEPTEMBER 2009
&CALL Selected_LI	/* Selected_LI.txt	Renee Schicker	30 SEPTEMBER 2009
&CALL LS_Inventory	/* 04_Inventory.txt	Renee Schicker	10 JUNE 2009
&CALL Geology	/* 05_geology.txt	Renee Schicker	30 SEPTEMBER 2009
&CALL Soil	/* 06_Soil.txt	Renee Schicker	30 SEPTEMBER 2009
&CALL Landcover	/* 07_LandCover.txt	Renee Schicker	30 SEPTEMBER 2009
&CALL Roads	/* 08_Roads.txt	Renee Schicker	30 SEPTEMBER 2009
&CALL Faults	/* 09_Fault.txt	Renee Schicker	30 SEPTEMBER 2009
&CALL Rivers	/* 10_Rivers.txt	Renee Schicker	30 SEPTEMBER 2009
&CALL Rain	/* 11_Rain.txt	Renee Schicker	30 SEPTEMBER 2009

```

&TYPE Done running.
&TYPE
&TYPE PLEASE LEAVE THIS OPEN UNTIL I RETURN.
&TYPE
&TYPE Thanks.
&TYPE
&RETURN

```

```

/*=====
&ROUTINE Create_wrkspc
CREATEWORKSPACE D:\Renee_GIS\Output_data\Organised
CREATEWORKSPACE D:\Renee_GIS\Output_data\Organised\02_Setup
CREATEWORKSPACE D:\Renee_GIS\Output_data\Organised\03_DEM
CREATEWORKSPACE D:\Renee_GIS\Output_data\Organised\04_Inventory
CREATEWORKSPACE D:\Renee_GIS\Output_data\Organised\05_Geology
CREATEWORKSPACE D:\Renee_GIS\Output_data\Organised\06_Soil
CREATEWORKSPACE D:\Renee_GIS\Output_data\Organised\07_LandCover
CREATEWORKSPACE D:\Renee_GIS\Output_data\Organised\08_Roads
CREATEWORKSPACE D:\Renee_GIS\Output_data\Organised\09_Faults
CREATEWORKSPACE D:\Renee_GIS\Output_data\Organised\10_Rivers
CREATEWORKSPACE D:\Renee_GIS\Output_data\Organised\11_Rain
LISTWORKSPACES
&RETURN
/*****

```

```

&ROUTINE Kill_data
/* Deletes any existing output data from previous runs. might have to check Grid files though.
&RUN d:\renee_gis\scripts\01_kill_data.txt
&RETURN

```

```

/*****

&ROUTINE Setup
/* Check input covers exist
WORKSPACE D:\Renee_GIS\Output_Data\Organised\02_Setup
&RUN d:\renee_gis\scripts\29Sept\02_Setup.txt
WORKSPACE D:\Renee_GIS\Output_Data\Organised
&RETURN
/*****

&ROUTINE Projection
/* set projection for all covers and grids in current working directory
/* Use Paul Berkowitz's script
WORKSPACE d:\renee_gis\input_data
&RUN d:\renee_gis\scripts\def_proj.aml
WORKSPACE D:\Renee_GIS\Output_Data\Organised\02_Setup
&RUN d:\renee_gis\scripts\def_proj.aml
WORKSPACE D:\Renee_GIS\Output_Data\Organised
&RETURN
/*****

&ROUTINE DEM
/* Clip to selected area
WORKSPACE D:\Renee_GIS\Output_Data\Organised\03_DEM
&RUN d:\renee_gis\scripts\03_DEM.txt
WORKSPACE D:\Renee_GIS\Output_Data\Organised
&RETURN
/*****

&ROUTINE Selected_LI
WORKSPACE D:\Renee_GIS\Output_Data\Organised\04_Inventory
&RUN D:\Renee_GIS\Scripts\Selected_LI.txt
WORKSPACE D:\Renee_GIS\Output_Data\Organised
&RETURN
/*****

&ROUTINE LS_Inventory
WORKSPACE D:\Renee_GIS\Output_Data\Organised\04_Inventory
/* Combine the two QMAP landslide covers and process the GeoNet landslide catalogue.
/* Run the landslide inventory script Waikato 1996-2008
&RUN d:\renee_gis\scripts\04_Inventory.txt
WORKSPACE D:\Renee_GIS\Output_Data\Organised
&RETURN
/*****

&ROUTINE Geology
/* Select and simplify/rename classes for Rotorua geology
WORKSPACE D:\Renee_GIS\Output_Data\Organised\05_Geology
&RUN d:\renee_gis\scripts\05_Geology.txt
WORKSPACE D:\Renee_GIS\Output_Data\Organised
&RETURN

```

```

/*****

&ROUTINE Soil
/* Simplify NZSC soil classes from 73 different classes to 16.
WORKSPACE D:\Renee_GIS\Output_Data\Organised\06_Soil
&RUN d:\renee_gis\scripts\06_Soil.txt
WORKSPACE D:\Renee_GIS\Output_Data\Organised
&RETURN
/*****

&ROUTINE Landcover
/* Simplify landcover classes by classification as stated in Land Cover 2 LCDB2 metadata
WORKSPACE D:\Renee_GIS\Output_Data\Organised\07_LandCover
&RUN d:\renee_gis\scripts\07_LandCover.txt
WORKSPACE D:\Renee_GIS\Output_Data\Organised
&RETURN
/*****

&ROUTINE ROADS
/* Buffer roads can change the 5 distance variables in the script (m)
WORKSPACE D:\Renee_GIS\Output_Data\Organised\08_Roads
&RUN d:\renee_gis\scripts\08_Roads.txt
WORKSPACE D:\Renee_GIS\Output_Data\Organised
&RETURN
/*****

&ROUTINE Faults
/* Buffer faults can change the 6 distance variables in the script (m)
WORKSPACE D:\Renee_GIS\Output_Data\Organised\09_Faults
&RUN d:\renee_gis\scripts\09_Faults.txt
WORKSPACE D:\Renee_GIS\Output_Data\Organised
&RETURN
/*****

&ROUTINE RIVERS
/* Buffer roads can change the 4 distance variables in the script (m)
WORKSPACE D:\Renee_GIS\Output_Data\Organised\10_Rivers
&RUN d:\renee_gis\scripts\10_Rivers.txt
WORKSPACE D:\Renee_GIS\Output_Data\Organised
&RETURN
/*****

&ROUTINE Rain
/* 'clip' 1998 mean and max Rain to region
WORKSPACE D:\Renee_GIS\Output_Data\Organised\11_Rain
&RUN d:\renee_gis\scripts\11_Rain.txt
WORKSPACE D:\Renee_GIS\Output_Data\Organised
&RETURN
/*****

```