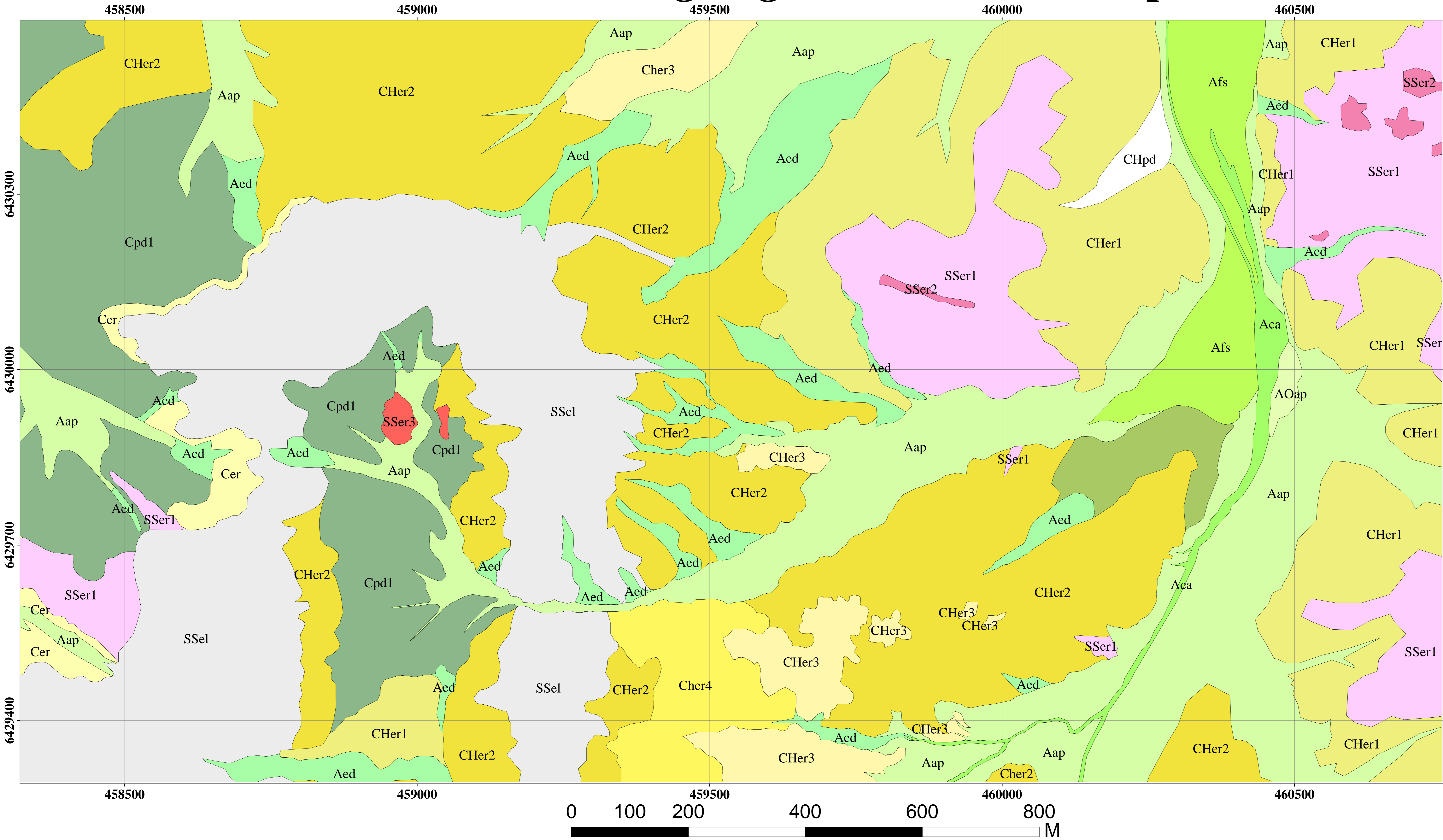


Luxemburg Regolith-Landform Map



- Key**
- Regolith**
A - Alluvial sediments
AC- Channel deposits
AO- Overbank deposits
C - Colluvial sediments
CH - Sheetflow sediments
SS - Slightly weathered bedrock

- Landforms**
a - Alluvial landform
ap - Alluvial plain
ed - Drainage depression
el- Low hills
er - Erosional rise
fs - Sheet-flood fan
pd - Depositional plain

Ratio 1:2500
WGS 84
MGA Zone 54

Compiled by
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Regolith-landform descriptions

<p>Aap</p> <p>ACa</p> <p>Aed</p> <p>Afs</p> <p>AOap</p> <p>Cer</p> <p>CHpd</p> <p>CHer1</p>	<p>Red-brown to yellow-brown, poorly-sorted clay to silt with spatially variable sub-angular to sub-rounded sand to cobble-sized clasts predominantly comprising of quartz with minor granitic, amphibolite, feldspar, muscovite and opaque clasts. Significant surface iron-oxide staining and some carbonate coated clasts and regolith carbonate fragments. Locally variable surface lag of sand to pebble-sized clasts predominantly comprising of coarse sand-sized fraction. Minor channels up to 1 m wide, surface incision, gully, rilling and contour banding on a dissected alluvial plain. Colonised by a very open chenopod shrubland with heavily grazed copperburrs, black bluebush, Bathurst burr and rock sida</p> <p>Angular to sub-rounded, poorly bedded, fine to coarse sands and gravels, arranged in fining upward sequences predominantly consisting of quartz, with magnetic opaque minerals (magnetite and maghemite) in finer fractions and minor granite and amphibolite lithic clasts in coarse fraction. Surface materials consist of coarse sand to pebble size quartz clasts and minor exposures of weathered bedrock and red brown fine silts and clays within a converging, actively incising ephemeral channel. Localised colonies of native tobacco, copperburrs and Bathurst burr shrublands.</p> <p>Red-brown unconsolidated silt and clays, with angular to sub-angular quartzose and lithic sands to small pebbles, and occasional granitic cobbles within depressions displaying minor channelling on moderately steep slopes. Surface lag predominately consists of sand sized quartz and granitic material, sparsely vegetated with rock sida.</p> <p>Slightly consolidated apedal red-brown silt and fine sand, with sand to boulder sized clasts comprising of quartz, feldspar and opaque minerals with granitic and amphibolite clasts in sand to boulder size fractions. Surface features include palaeo-channel lags defined by large pebbles and boulders, sheetflow banding and minor gullying within alluvial fan deposits. Colonised by a variably sparse to moderately dense chenopod shrubland, with black bluebush, Bathurst burr and copperburrs.</p> <p>Red-brown clays and silts with sand to cobble-sized quartz, granite lithic fragments, opaque minerals and feldspar grains. Surface shows heavy mineral and quartz sand to pebble-sized grains in contour banding with magnetic minerals (magnetite and maghemite) within a channel overbank deposit. Densely colonised by a chenopod shrubland with black bluebush and native tobacco with minor copperburrs and Bathurst burr.</p> <p>Red-brown silt to clay with fine sand to pebble-sized quartz, feldspar and sand-sized magnetic fraction and minor micas with scattered boulder-sized quartz and granitic fragments. Surface features include localised concentrations of sand-sized magnetic fractions, quartz and feldspar on a low erosional rise. Colonised predominantly by very open shrubland with sida, cottontails and Bathurst burr.</p> <p>Fine sandy silts and yellow brown clays, with coarse sand to cobble-sized quartz, feldspar and granitic clasts and minor regolith carbonate nodules and powder carbonates. Alluvial plain, with colluvial sheet flow, wind etching and minor mud flaking on surface. Colonised by a very open chenopod shrubland with black bluebush, and Bathurst burr, and minor rosewood and native tobacco.</p> <p>poorly-sorted, apedal, yellow-brown clay-silt, with powdery regolith carbonate. Sand to boulder sized granitic lithic fragments with quartz, feldspars and opaque magnetic minerals, with minor regolith carbonate nodules. Sheetflow on erosional rise with minor channelised flow. Extremely sparse chenopod shrubland with pearl bluebush and minor black bluebush.</p>	<p>CHer2</p> <p>CHer3</p> <p>CHer4</p> <p>Cpd1</p> <p>Cpd2</p> <p>SSel</p> <p>SSer1</p> <p>SSer2</p> <p>SSer3</p>	<p>Apedal yellow-brown clay to silt, with sub-angular to angular coarse sand to gravel sized quartz, feldspar and opaque minerals. Coarse sand to boulder sized granite and amphibolite fragments and powdery and nodular regolith carbonate and carbonate coated lithic fragments. Minor granite, pegmatite and quartz vein exposures with localised iron-oxide and copper secondary mineral staining. Land surface dominated by pebble to boulder sized quartz lag with sheet flow banding on a shallow erosional rise. No vegetation present.</p> <p>Silt to predominantly boulder sized milky and white quartz clasts with poorly-sorted, unconsolidated yellow-brown silts and clays. Minor silt sized powdery carbonate and boulder to coarse sand sized highly weathered granite and amphibolite clasts and opaque minerals. All grains exhibit moderate to extensive iron-oxide staining. Land surface is dominated by dense cobble to boulder sized quartz lag with sheet flow banding on a shallow erosional rise. No vegetation present.</p> <p>Yellow-brown massive, apedal carbonate-rich clays to silts with sand to cobble sized quartz, nodular carbonate and minor granite lithic fragments, sand to pebble sized feldspar, mica and opaque clasts. The land surface includes slightly consolidated yellow-brown silts and clays with powdery regolith carbonates and sand to cobble sized grains on a shallow erosional rise. Colonised by very open to open chenopod shrubland with dominant pearl bluebush with black bluebush and copperburrs.</p> <p>Red-brown silt to coarse sand-sized very angular poorly-sorted quartz with sand to pebble-sized angular lithic fragments and opaque mineral clasts showing significant iron-oxide staining and minor regolith carbonate coatings. The land surface shows concentrations of unconsolidated sand to pebble-sized fractions on a gently sloping dissected depositional plain with minor small-scale gullying and incision. Vegetation cover is a highly disturbed, very open chenopod shrubland with black bluebush, and localised sida and copperburrs.</p> <p>Yellow-brown clay to silt with silt to boulder-sized quartz, granite lithic fragments and sand to pebble sized regolith carbonate, angular feldspars and opaques all with abundant iron-oxide staining. Very minor centralised channel flow and erosion of surface fine grained particles. Quartz and heavy mineral surface banding defined by sand to pebble-sized fraction on a gently sloping depositional plain. Colonised by open chenopod shrubland with black bluebush, copperburrs and minor Bathurst burr.</p> <p>Slightly to moderately weathered massive, coarse-grained, albitic granitic bedrock with minor pegmatite and quartz veins and local occurrences of foliated medium-grained gneiss. Quartz veins are milky to rose coloured and show box-work structures after primary sulphide weathering. The landsurface includes bedrock exposures with significant iron-oxide staining and joint weathering with sand to boulder-sized angular to sub-angular minerals and composite grains from granite weathering. Minor well-sorted, unconsolidated red-brown silt/clay on the landsurface and in joints on an undulating low hill. Colonised by an open chenopod shrubland, with black bluebush and pearl bluebush, sida and copperburrs.</p> <p>Slightly to moderately weathered massive, coarse-grained, albitic granitic bedrock with minor pegmatite and quartz veins and local occurrences of foliated medium-grained gneiss. Quartz veins are milky and rose coloured and show box-work structures after primary sulphide weathering. The land surface includes bedrock exposures with significant iron-oxide staining and joint weathering with sand to boulder-sized angular to sub-angular minerals and composite grains from granite weathering. Minor well-sorted unconsolidated red-brown silt/clay on the land surface and in joints on erosional rises. Colonised by an open chenopod shrubland, with black bluebush and pearl bluebush, sida and copperburrs.</p> <p>Slightly weathered quartz veins within minor granitic bedrock, with minor joint weathering and moderate iron-oxide staining on the land surface. Exposures have minor well-sorted red-brown silts and clays on the land surface and produce angular boulder to pebble-sized quartz lag down slope. The landform is an erosional rise with no vegetation cover.</p> <p>Moderately weathered coarse grained amphibolite with mineral etching, joint weathering and surficial iron-oxide staining. Surface materials consist of pebble to boulder-sized amphibolite fragments and minor red-brown silts and clays on a small erosional rises colonised by very sparse sida and sparse black bluebush shrubs.</p>
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