

# LGP Baseline Measurements 06/07 Season

## General Site Description

Site Name: Gondwana General Vicinity



Geographical coordinates	Latitude and Longitude S74 38.125 E164 13.297	GPS
Elevation	0~400 m asl	Map
Slope	Degrees	Note if estimated or measured
Date (s) visited	9 November 2006 to 8 December 2006	
Aspect		
Samples taken? Soil samples along transects in the area		
Photos taken? Yes		
Aerial Photos available? Satellite imagery		

## Soil Parameters

Geomorphological characteristics	<input type="checkbox"/> Pro-Glacial <input type="checkbox"/> Nival - Chionophilous <input type="checkbox"/> Periglacial <input type="checkbox"/> Fluvial <input checked="" type="checkbox"/> Coastal <input type="checkbox"/> Fell-Field	<input checked="" type="checkbox"/> Slope <input type="checkbox"/> Plateau <input checked="" type="checkbox"/> Valley <input type="checkbox"/> Landslide <input type="checkbox"/> Scree slope <input type="checkbox"/> Rock wall <input type="checkbox"/> Other
Rock Lithology	<input type="checkbox"/> Siliceous rock <input type="checkbox"/> Calcareous rock	Rock type
Soil Typology	<input type="checkbox"/> Soil Absence <input checked="" type="checkbox"/> Soil Presence	<input type="checkbox"/> Mineral soil <input checked="" type="checkbox"/> Organic soil <input type="checkbox"/> Other
Surface Lithology	<input checked="" type="checkbox"/> Outcropping Rock <input type="checkbox"/> Loose Material <input checked="" type="checkbox"/> Glacial <input type="checkbox"/> Fluvial <input type="checkbox"/> Eolic <input checked="" type="checkbox"/> Coastal <input checked="" type="checkbox"/> Scree Slope, Debris	
Surface Texture	% Blocks ( $\varnothing > 25\text{cm}$ ) % Pebbles ( $5\text{cm} < \varnothing < 25\text{cm}$ ) % Gravel ( $0.2\text{cm} < \varnothing < 5\text{cm}$ ) % Sand and finer material ( $\varnothing < 0.2\text{cm}$ ) <b>All types present</b>	

## Vegetation

Plants and Lichens	<p>Species type/name</p> <p>Lichens present:</p> <p><i>Umbilicaria decussate</i></p> <p><i>Pleopsidium sp</i></p> <p><i>Usnea sp.</i></p> <p><i>Rhizocarpon sp.</i></p> <p><i>Xanthoria sp.</i></p> <p><i>Candelaria sp.</i></p> <p>Moss also present (species unknown)</p> <p>Some algae present in costal sites and around the lake (species unknown)</p> <p>Common</p> <p>Good spots: Moraine site S74 36.928 E164 15.100</p> <p>Lake site (Iago 17): S74 36.825 E164 12.995</p> <p>Also moss beds near Gondwana Station itself</p>
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## Fauna

Mammals	Weddell Seals on sea ice around Gondwana
Birds	Skua colony around Gondwana
Invertebrates	Nematodes: <i>Panagrolaimus davidi</i> , <i>Plectus murrayi</i> , <i>Scottinema lindsayae</i> , <i>Eudorylaimus antarcticus</i> , <i>Plectus frigophilus</i> . Mites: species unknown. Collembolans: species unknown

Glacial

N/A

Aquatic Non-Marine Systems

N/A

Aquatic Marine Systems

CTD data (current, temperature, depth)	Limited, -1.8C°, >100m within 800m from coastline
Sea ice cover: when, where, how thick, light transmission	Annual fast ice (typically breaks out Dec/Jan), entire region excluding Terra Nova bay polyna, ~2.5m, <1 microeinstein. In November 2006 sea ice in Gondwana vicinity was 2.9-3.0 m thick, surface snow cover ranged from 0 to 30 cm deep.
Tide/current information	Limited swell, some evidence for periodic influx of large water masses
Chlorophyll-a (water samples)	Negligible during period of thick ice cover
Sediment cores	None taken (as far as I know)
Images using drop camera	Performed by NIWA scientists in 6 shallow water locations (8-27 m depth range) adjacent to coastline. Seafloor ranged from coarse barren sediments to complex habitats with diverse and abundant fauna.

Environmental (AWS)

See <http://www.climantartide.it/>