



Monitoring report form for CDM project activity
(Version 07.0)

Complete this form in accordance with the instructions attached at the end of this form.

MONITORING REPORT

Title of the project activity	Reforestation as renewable source of wood supplies for industrial use in Brazil	
UNFCCC reference number of the project activity	Project 2569	
Version number of the PDD applicable to this monitoring report	Version 3a	
Version number of this monitoring report	1	
Completion date of this monitoring report	09/10/2019	
Monitoring period number	Second monitoring period	
Duration of this monitoring period	10/11/2010 a 31/12/2018	
Monitoring report number for this monitoring period	-	
Project participants	- Plantar S/A Planejamento, Técnica e Administração de Reflorestamentos - Plantar Carbon Ambiental Ltda	
Host Party	Brazil	
Applied methodologies and standardized baselines	AR-AM0005 - Afforestation and reforestation project activities implemented for industrial and/or commercial uses, version 1	
Sectoral scopes	14	
Amount of GHG emission reductions or net anthropogenic GHG removals achieved by the project activity in this monitoring period	Amount achieved before 1 January 2013	Amount achieved from 1 January 2013
	--	1,675,507
Amount of GHG emission reductions or net anthropogenic GHG removals estimated ex ante for this monitoring period in the PDD	929,161	

SECTION A. Description of project activity

A.1. General description of project activity

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This Monitoring Report refers to the second monitoring period of afforestation and reforestation Project Activity 2569 “Reforestation as renewable source of wood supplies for industrial use in Brazil”, currently registered under the UNFCCC, PDD version 3a and uses the methodology AR-AM0005, version 1, “Afforestation and reforestation project activities for industrial and/or commercial uses”.

The project entity started the implementation of A/R-CDM Project 2569 on 10/11/2000, which is adopted as the starting date for this project activity. The table below shows the planting schedule actually implemented by the project entity to establish the project activity.

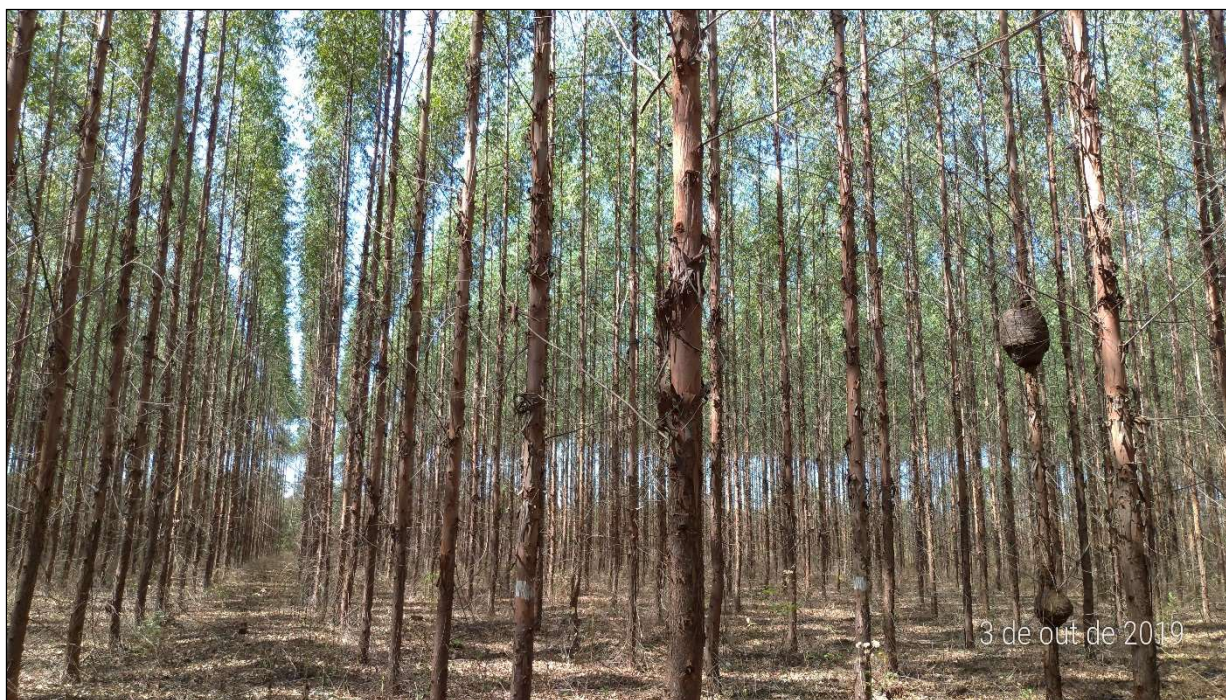
Table 1: planted area for the project activity in MG03 and MG04 farms

Year of planting	Area planted MG03/MG04 (ha)
2000	302.55
2001	1,177.01
2002	3,243.04
2003	3,133.95
2004	2,819.53
2005	965.98
TOTAL	11 642.06

For this second monitoring period the numbers of the planting area have undergone minor changes due to the updating of geo-referencing database and some variation in the planting layout (see Annex 1). So, the total planting area for this second verification is **11,569.42 ha**.

The total net anthropogenic GHG removals by sinks achieved in this monitoring period are **1,675,507 tCO₂e**.

Figure 1: MG03 plantation (Felixlândia, MG)



Source: Plantar records, 2019

A.2. Location of project activity

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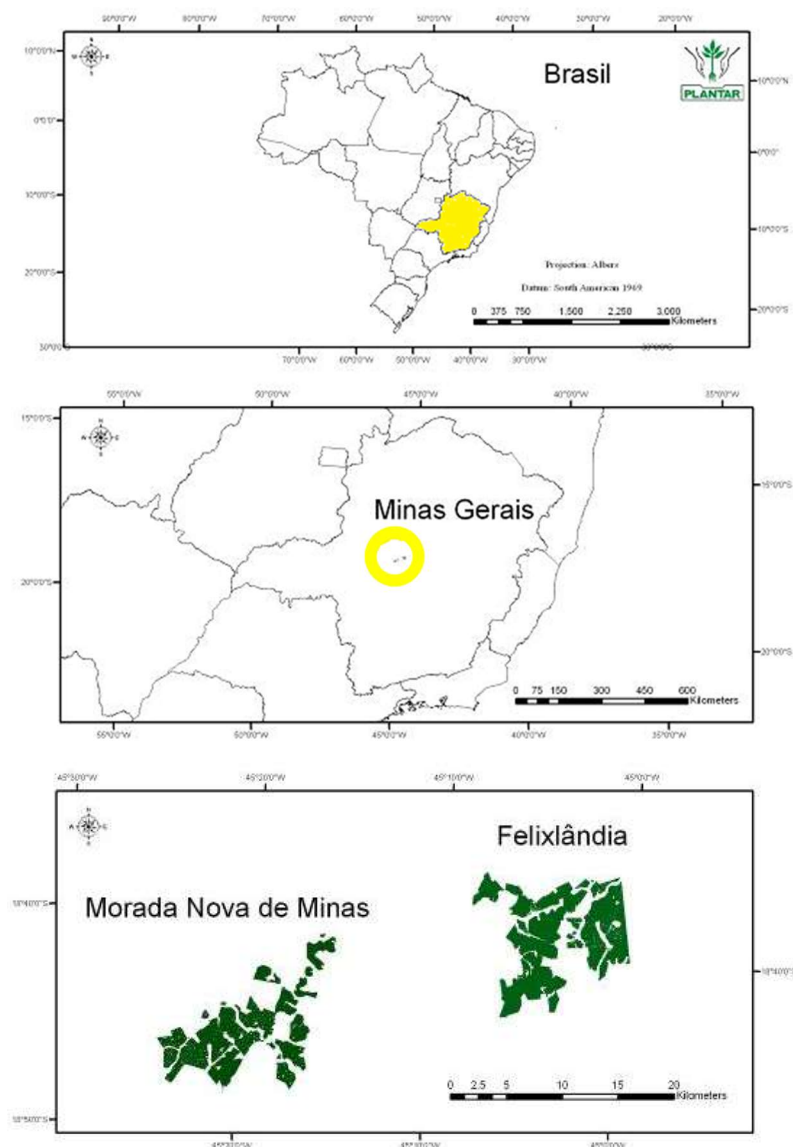
The project activity (project boundaries) is implemented in the municipalities of Felixlândia and Morada Nova de Minas, State of Minas Gerais, Brazil (refer to **Annex 1** for the complete list of stands and its coordinates).

Region	Unit Number	Plantation Farm Name	Overall geo-referenced points
Felixlândia	MG03 ¹	Jacaré/Riachão	<ul style="list-style-type: none"> - Northeast extreme point: 18°36'19S/ 45°00'38W - Southeast extreme point: 18°40'15S/ 44°59'41W - Northwest extreme point: 18°35'30S/ 45°07'07W - Southwest extreme point: 18°43'19S/ 45°06'22W
Morada Nova de Minas	MG04 ²	Buriti Grande	<ul style="list-style-type: none"> - West extreme point: 18°47'52S/ 45°23'32W - Northeast extreme point: 18°41'07S/ 45°14'35W - Southeast extreme point: 18°47'48S/ 45°17'07W

¹ Project Boundary Area: 6, 357.31 ha in 2018

² Project Boundary Area: 5, 212.11 ha in 2018

Figure 2: Project areas location maps in the State of Minas Gerais and in Brazil



A.3. Parties and project participants

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Parties involved	Project participants	Indicate if the Party involved wishes to be considered as project participant (Yes/No)
Brazil	Plantar S/A Planejamento, Técnica e Administração de Reflorestamentos	No
Brazil	Plantar Carbon Ambiental Ltda	No

A.4. References to applied methodologies and standardized baselines

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A/R Project 2569³ is based on baseline methodology AR-AM0005, "Afforestation and reforestation project activities for industrial and/or commercial uses", version 1.

A.5. Crediting period type and duration

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A/R-CDM Project 2569 adopts a fixed 30-year crediting period and uses the tCER approach to account for the net anthropogenic GHG removals by sinks. The 30-year fixed crediting period covers the duration between 10/11/2000 and 09/11/2030.

SECTION B. Implementation of project activity**B.1. Description of implemented project activity**

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The following features illustrate the technology employed by the A/R-CDM Project 2569:

- *Research and Development:* The project entity has established a research and development program aimed at providing high-yielding eucalyptus clones. With the objective of producing quality and productive sprouts, field experiments are conducted using advanced scientific protocols. The rigorous selection process and propagation methods assure the production of quality cloned sprouts for plantation purposes.
- *Reproduction of cloned sprouts:* Mini-sprouts are selected from sprout matrices, developed in the field experiments, and propagated in a plantation nursery that is fully equipped with clone gardens, water recycling devices and greenhouses with electronic controls for temperature and moisture. The production process of the sprouts takes approximately 100 days. After this period, the sprouts are taken to the field for planting.
- *Planting process:* The planting process involves minimum cultivation techniques, which minimizes soil impacts and optimizes the use of water. Fertilizers, herbicides and pest control substances are used as per recommended by silviculture practices. A summary of the planting process and its basic activities are listed below:
 - a) The selection of the area to be planted;
 - b) Division of stands and fire breaks;
 - c) Area cleaning;

³ See <https://cdm.unfccc.int/Projects/DB/TUEV-SUED1242052712.92/view>

- d) Ant prevention;
 - e) Soil preparation;
 - Fertilization
 - Definition and digging of planting lines
 - f) Planting
- *Harvesting Process*: in general, the project entity adopts the full harvesting for its harvesting activities, which is completely mechanized. The harvesting process occurs with the use of a tractor called feller. Dragging of the cut trees out of the stand is executed with a skidder. Slashing of trees, which consists of the slashing the merchantable volume of the tree, is executed with a machine called “Garra Traçadora” (Slasher). These three harvesting operation activities occur in the following order:
 - 1) Harvesting;
 - 2) Dragging;
 - 3) Slashing
 - *Productivity management practices* are implemented to ensure that the expected production results are monitored since the first planting months in a scientifically devised inventory system. The survival rates of plantings are monitored. Whenever early results indicate lower survival rates, the affected areas are replanted. To minimize the risk of fires, the project entity maintains ongoing vigilance at strategically located fire-watch towers. Fire monitoring is conducted in conjunction with fire-fighting brigades.

Figure 3: forest fires’ surveillance system



Source: Plantar records, 2019

- *Quality management system*: Operations are fully integrated into the project entity’s

quality management system, which is based on ISO 9001 standards. Each operational procedure is registered, described and monitored as per norms and standard operational procedures. Social and environmental aspects are managed by a specific department within the project entity to ensure compliance with legislation, corporate principles, and forestry certification schemes.

- *Social and environmental aspects:* The Project 2569 relies on sustainable production practices and advanced plantation technology developed by the project entity, as presented throughout this MR. The plantations are managed using sustainable management practices under the Forestry Stewardship Council certification. The production of cloned sprouts in large-scale nurseries and localized irrigation systems are designed to make the use of water and other inputs more efficient. The fire protection policies and infrastructure and the creation of preservation areas increase the biodiversity of the project area.

The starting of A/R-CDM Project 2569 consists of the period in which the project entity started the establishment of plantations (planting activities in the field). In response to the CDM, the project entity commenced implementation of this A/R project activity on 10/11/2000, which is adopted as its starting date. The table below shows the planting activities starting date in each project site.

Farm	Starting date of plantings
MG03	10/11/2000
MG04	06/08/2003

The plantation establishment activities under this project activity is based on an approximate seven-year-rotation period (up to 28 years) as per the productivity parameters and production practices for eucalyptus in Brazil followed by two harvesting cycles at 7-year intervals from the planting. The second harvesting rotation is expected to result from coppicing. As the second and last harvesting occurs, new plantations would need to be established to replace the exhausted stock as the productivity rate of the coppice phase is expected to decline in relation to the planting phase and the most updated genetic material used for sprout production. However, the harvesting and consequently the planting calendar are determined by the market demand and fluctuations and may occur throughout time.

There were no changes in the project's boundary between validation (2008) and this second verification (2018), i.e. there is no additional area included in the project boundary. The project boundary's areas from the registered shape files and the areas assessed for this second verification are compared and presented in **Annex 1** of this Monitoring Report. Some small differences were found and are due to improvements in the measurement process' accuracy.

During this second monitoring period insects' plagues (e.g. caterpillar, ants) and other events (wind) caused an early harvesting of some stands. All stands affected were replanted or managed from coppice. These occurrences are detailed, monitored and registered.

B.2. Post-registration changes**B.2.1. Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents**

>> N/A

B.2.2. Corrections

>> N/A

B.2.3. Changes to the start date of the crediting period

>> N/A

B.2.4. Inclusion of monitoring plan

>> N/A

B.2.5. Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents

>> N/A

B.2.6. Changes to project design

>> N/A

B.2.7. Changes specific to afforestation or reforestation project activity

>> N/A

SECTION C. Description of monitoring system

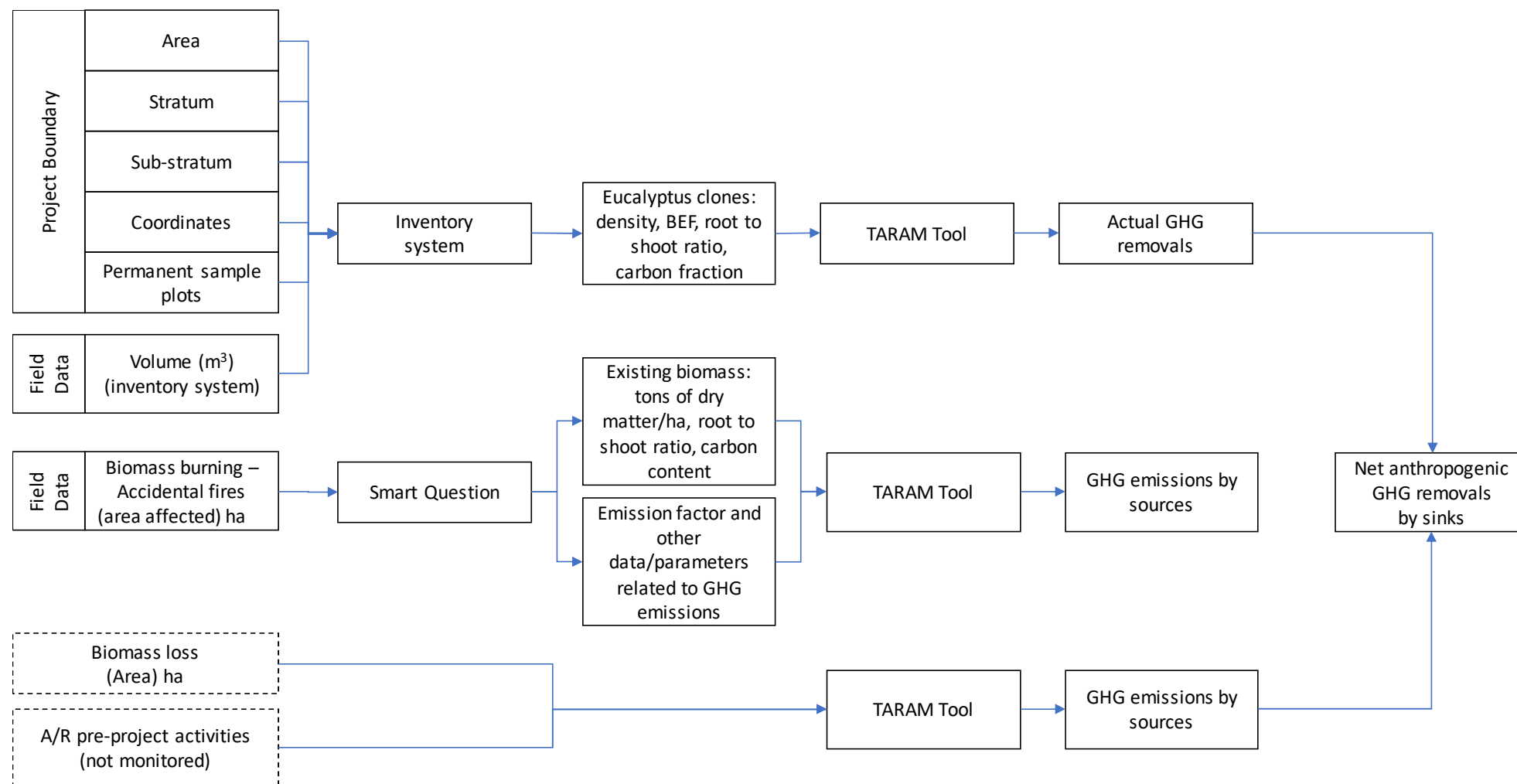
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The Monitoring Plan designed for A/R-CDM Project 2569 establishes monitoring procedures to calculate net anthropogenic GHG removals by sinks considering the project boundary, changes in the carbon pools, forest establishment and management for project and leakage emissions.

According to EB68 Annex 31 *Guidelines on application of specified versions of A/R CDM methodologies in verification of registered A/R CDM project activities*, version 01.1, various parameters are no longer required to be monitored, and therefore are not reported in this MR. These parameters are listed in Section D.2 below.

The monitoring of all relevant activities for this project activity followed the Monitoring Plan presented in the PDD 2569 version 3a as per **Figure 4** below. All data collected in the field are registered and recorded.

Figure 4: Diagram of relevant monitoring points



a) Monitoring of the actual GHG removals by sinks

Project boundary/ Field data

The project's area is in a region characterized by the same climate, soil and topography regional conditions. Hence, climate and soil variables were considered to influence carbon stock changes under the same pattern to the whole project activity area. A single stratum was defined for the project areas of the MG03 and MG04 units. This was based on the consideration that the cloned sprouts used in the project activity has a similar growth trend and morphological characteristics, and that the plantations were established under similar soil, terrain, climate, and forestry management conditions and adopted a weighted average of clone densities. The stratum was then divided into sub-strata, which were defined based on the planting dates (age class of the plantations). All stands within the project's boundary are geo-referenced and are listed in **Annex 1**. Changes on the geographical delimitations of the stands are monitored and registered in the inventory system (see also **Annex 1**).

The following activities were conducted to monitor the actual GHG removals by sinks:

- Field surveys were undertaken to verify that the delineated project boundary spatial extent and location of each stand is congruent with the *ex ante* description presented in Annex 5 of the validated A/R-CDM Project 2569 PDD version 3a. Based on standard operational procedures (IT/INV.01) field surveys were done by the inventory team to delineate project boundary and increase measurement accuracy. Any significant changes were recorded and integrated in the Forest Inventory System. Refer to **Annex 1** of this Monitoring Report.

Inventory data processing is currently conducted by *SPP INVENTARIO*, developed by INFLOR⁴.

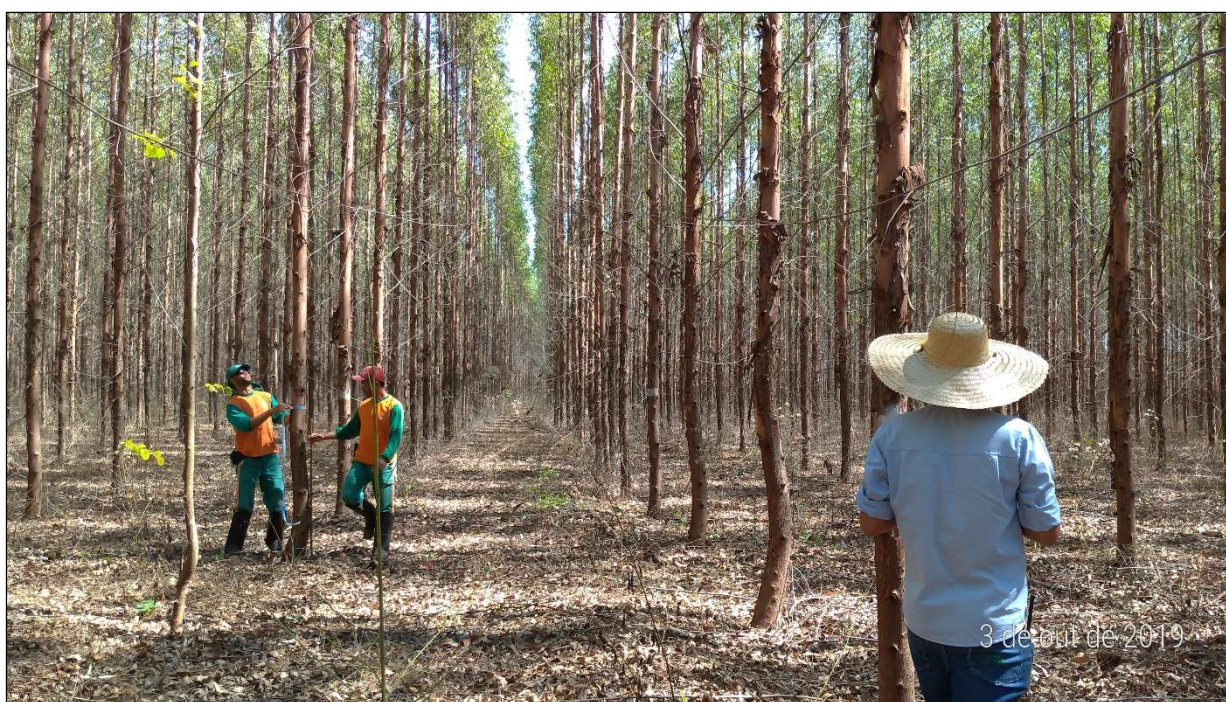
- Based on the Forestry Continuous Inventory (FCI) data, each stand annual production was calculated.
- Permanent sample plots are used to determine volume through measuring diameter at breast height (DBH) and tree height.
- Destructive sampling is used at the time of forestry inventory process (SOP IT/INV.01) to adjust the inventory system's allometric equation. Trees from outside permanent sample plots are used for this purpose.
- Following the best practices of the forestry management techniques in case sub-strata inventory discrepancy is above 10%, for a 95% confidence level, more plots should be established to reduce the sampling error. Then, any discrepancies between the area reported and the area estimated under the A/R-CDM Project 2569 in any part of the strata or sub-strata along with the species planted, including the areas of mortality due

⁴ <https://www.inflor.com.br/en/solutions/forest-management-systems/products/inventory/>

to natural factors (e.g. fire and pests) and anthropogenic factors were recorded. The project activity forest inventory adopts, by definition, that a sample plot shall be located at an interval of approximately 10 hectares and that each stand shall have at least one sample plot, regardless of the stand size, which are geo-referenced (centre of the plot) increasing conservativeness of measurement. The location of sample plots is randomly defined. All the original maps with the sample plots information are filed for future measurements. Detailed data for each tree in a permanent sample plot (eg. Height, DBH, ID) are registered in the Forestry Inventory System and will be made available to the DOE during verification⁵.

- The Geographic Information System is readily available for consultation of all issues related to the plantations.

Figure 5: forest inventory collection data



Source: Plantar records, 2019

All data collected in the field (via data collectors) follow the guidance prescribed by work instruction IT/INV.01 and are inputted in the Forestry Continuous Inventory for calculations and recording. Data on volume (m³) per hectare and area (ha) per sub-stratum are inserted in the TARAM Tool to perform calculations for mass of carbon per hectare for each sub-stratum. The actual GHG removals are then calculated.

⁵ The project entity chose not to present this information as an annex to this monitoring report due to the huge amount of information (more than 70,000 rows of an excel spreadsheet)

b) Monitoring GHG emissions by sources

Field Data

Emissions from loss of biomass in site preparation and conversion of grassland are calculated in the TARAM Tool according to the planted area.

The following three major sources of GHG emissions are recorded, reported and accounted in the calculation of actual net GHG removals by sinks from the project activity.

- GHG emissions from fossil fuel consumption;
- GHG emissions from nitrogenous fertilizer application;
- The biomass burning in the project area as a result of fire from accidental natural causes or due to anthropogenic activities outside the project activities.

However, according to EB68 Annex 31, parameters related to fossil fuel combustion and use of fertilizer are no longer required to be monitored. Hence, these parameters are not reported under this MR.

Data related to biomass burning due to fires are collected in the field and inputted in the system, which supplied the TARAM Tool with the necessary information to calculate GHG emissions by sources.

The project entity documents and records the significant activities related to forest establishment, including activities related to site preparation and vegetation affected as part of site preparation. Forestry activities/ staff responsibilities are provided in Standard Operating Procedures based on ISO rationale and constantly updated.

The following activity is conducted to monitor the GHG emissions:

- The occurrence of natural or anthropogenic disturbances such as forest fires is closely monitored by the project entity, which maintains continuous vigilance at strategically located fire-watch towers. All stands and natural preservation areas of the forestry services units are surrounded by fire breaks. Location and area data of stratum, stands and permanent sample plots are managed and recorded integrally as per the quality assurance and control systems of the project activity forestry inventory.

c) Monitoring Leakage

Leakage from the project activity is due to:

- Transportation of cloned sprouts from the nursery to the plantation sites;
- Transportation of fertilizers from the sale point to the plantation sites;

- Transportation of harvested wood to the processing facilities;
- Transportation of project personnel to the A/R site; and
- Transportation of staff for inspections and monitoring.

However, according to EB68 Annex 31, parameters related to fossil fuel combustion are no longer required to be monitored, therefore leakage parameters are not reported under this MR.

d) Monitoring Net anthropogenic GHG removals by sinks

The TARAM Tool provides all formulae to calculate the net anthropogenic GHG removals by sinks, based on field monitored data and other data parameters from other reputable sources.

Although the baseline is not monitored under this project activity, according to the A/R-CDM Project 2569 PDD version 3a, to strengthen the conservativeness of the project's net anthropogenic GHG removals by sinks, an historical annual A/R rate (8.2%) has been discounted throughout the project lifetime.

Net anthropogenic GHG removals by sinks are calculated taking all these previous elements into account.

The department responsible for each level of the monitoring plan performance is identified in the table below.

Table 2: Responsibility per activity/task performed

Activity/ task	Project Entity	Department
<i>Monitoring the project boundary – Forestry Continuous Inventory (FCI)</i>		
<ul style="list-style-type: none"> - Area - Stratum - Sub-stratum - Coordinates - Permanent sample plots - Volume (m³) 	Plantar	Forestry Planning and GIS
<i>Monitoring sources of GHG emissions in the field</i>		
<ul style="list-style-type: none"> - Biomass burning 	Plantar	Research and Development
<i>Data gathering and Project removals calculation</i>		
<ul style="list-style-type: none"> - Data gathering and calculation of net removals through spreadsheet database 	Plantar Carbon	Plantar Carbon

All relevant data will be electronically stored for 2 years after the end of the crediting period. The PP has a specific SOP (IT/INF.03) developed to manage data storage which defines back-up instructions to guarantee that data are securely maintained.

Measures to reduce uncertainty

The Project Entity uses QA/QC measures based on ISO 9001 standard in all its practices to reduce uncertainty while monitoring the carbon stock changes in the project context. Three specific areas can be exemplified as activities receiving QA/QC procedures, (1) collection of field data; (2) verification of the data collected; and (3) data and entry analysis.

Quality assurance of field monitoring

The Project Entity provides training for all personnel responsible for the monitoring, field data collection and data analysis. Personnel are trained and informed of all procedures of the data collection (e.g. how to get the data, required equipment, how to input the data, how to storage it, how to verify the data, among others).

Data collection and verification

Before starting the field monitoring per se, a monitoring schedule is elaborated which selected the sample plots that were monitored throughout the year. After the schedule was done, the sample plots had to be represented on a map with its geo-referenced position. With the sample plot map and the GPS with the coordinates in hand, the inventory team were able to go to the field and start measurement process.

Every month, during the inventory process, all inventory teams re-measured 10 sample plots inventoried in that current month. It was mandatory (by a SOP) to re-measure 05 sample plots inventoried by the team itself and 05 sample plots from another team. In the re-measurement, four key items were assessed, (1) sample plot geographical position (using a GPS); (2) area of the sample plot; (3) tree height of all trees; and (4) the diameter at breast height (DBH). If a deviation of $\pm 5\%$ was found the inventory team followed a SOP that specifically deals about non-conformities inside the project. The non-conformities procedures, depending on the seriousness, can vary from a report to the re-training of the inventory team.

Data entry and analysis

After the field data is collected, the inventory team sent the data to the office where trained personnel extracted the data, checked its consistency and uploaded into the inventory system for processing.

SECTION D. Data and parameters**D.1. Data and parameters fixed ex ante**

Data/Parameter	$B_{w,i}$
Unit	Tonnes d.m. ha ⁻¹
Description	Peak (maximum) above-ground biomass of pre-existing non-tree vegetation in stratum i
Source of data	IPCC GPG – LULUCF, Table 3.4.2
Value(s) applied	2.30
Choice of data or measurement methods and procedures	IPCC default
Purpose of data/parameter	Project emissions
Additional comments	N/A

Data/Parameter	R_G
Unit	Dimensionless
Description	Root-shoot ratio appropriate for pre-existing non-tree vegetation
Source of data	IPCC GPG – LULUCF, Table 3A.1.8 and table 3.4.3
Value(s) applied	1.60
Choice of data or measurement methods and procedures	IPCC default
Purpose of data/parameter	Project emissions
Additional comments	N/A

Data/Parameter	GWP_{N_2O}
Unit	Kg CO ₂ (kg N ₂ O) ⁻¹
Description	Global warming potential for N ₂ O
Source of data	IPCC - Fourth Assessment Report
Value(s) applied	298
Choice of data or measurement methods and procedures	IPCC default
Purpose of data/parameter	Project emissions
Additional comments	<i>“The project participants shall use the global warming potentials (GWPs) adopted by the CMP at its seventh session, in accordance with decision 4/CMP.7, to calculate the GHG emission reductions or net anthropogenic GHG removals achieved by the CDM project activity in the second commitment period of the Kyoto Protocol.”</i> Standard: CDM project standard for project activities, version 02.0, item 27.

Data/Parameter	EF_{CH_4}
Unit	Kg CO ₂ -e (kg C) ⁻¹
Description	IPCC default emission ratio for CH ₄ of biomass burning

Source of data	IPCC GPG – LULUCF, Table 3A.1.15
Value(s) applied	0.012
Choice of data or measurement methods and procedures	IPCC default
Purpose of data/parameter	Project emissions
Additional comments	N/A

Data/Parameter	GW_{PCH_4}
Unit	Kg CO ₂ (kg CH ₄) ⁻¹
Description	Global warming potential for CH ₄
Source of data	IPCC - Fourth Assessment Report
Value(s) applied	25
Choice of data or measurement methods and procedures	IPCC default
Purpose of data/parameter	Project emissions
Additional comments	<i>“The project participants shall use the global warming potentials (GWPs) adopted by the CMP at its seventh session, in accordance with decision 4/CMP.7, to calculate the GHG emission reductions or net anthropogenic GHG removals achieved by the CDM project activity in the second commitment period of the Kyoto Protocol.”</i> Standard: CDM project standard for project activities, version 02.0, item 27.

Data/Parameter	EF_{N_2O}
Unit	Kg CO ₂ -e (kg C) ⁻¹
Description	IPCC default emission ratio for N ₂ O of biomass burning
Source of data	IPCC GPG – LULUCF, Table 3A.1.15
Value(s) applied	0.007
Choice of data or measurement methods and procedures	IPCC default
Purpose of data/parameter	Project emissions
Additional comments	N/A

Data/Parameter	$\Delta C_{BSL,t}$
Unit	tCO ₂ yr ⁻¹ in year t
Description	Baseline net GHG removals by sinks for year t [sum of carbon stock changes in living biomass of grassland (above and belowground biomass) under the baseline scenario]
Source of data	Project activity
Value(s) applied	0
Choice of data or measurement methods and procedures	N/A
Purpose of data/parameter	Baseline removals
Additional comments	N/A

D.2. Data and parameters monitored

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According to EB68 Annex 31 *Guidelines on application of specified versions of A/R CDM methodologies in verification of registered A/R CDM project activities*, version 01.1, the following parameters are no longer required to be monitored (even though they remain part of

the calculations) or are excluded from monitoring (and from calculations) and, therefore are not reported in this MR:

Table 3: parameters not required to be monitored and not reported under this MR

Parameter/ PDD version 3a ID	Description	Justification for not being reported
BEF_{jk} (PDD parameter E.1.18)	Biomass expansion factor for conversion of merchantable volume to above-ground tree biomass for species j sub-stratum k	Data obtained by published literature
CF_j (PDD parameter E.1.19)	Carbon fraction of dry matter for species j	Data obtained by published literature
R_j (PDD parameter E.1.20)	Root-to-shoot ratio appropriate for species j (<i>eucalyptus</i>)	Data obtained by published literature
CF (PDD parameter E.1.40)	Carbon fraction of dry matter	Data obtained by published literature
Confidence level (PDD parameter E.1.03)	Confidence level	Data related to accounting for uncertainty
Accuracy (PDD parameter E.1.04)	Accuracy	Data related to accounting for uncertainty
Standard deviation of stratum (PDD parameter E.1.05)	Standard deviation of stratum	Data related to accounting for uncertainty
$TB_{AB,ijk,tree,m}$	Above-ground biomass per tree of stratum i species j and sub-stratum k	Intermediate values in calculation steps
$TB_{BB,ijk,tree,m}$	Below-ground biomass per tree of stratum i species j and sub-stratum k	Intermediate values in calculation steps
$PC_{AB,ijk,plot,m}$ PDD parameter E.1.23	Plot level carbon stock in above-ground biomass for stratum i species j sub-stratum k per unit area	Intermediate values in calculation steps
$PC_{BB,ijk,plot,m}$ PDD parameter E.1.24	Plot level carbon stock in below-ground biomass for stratum i species j sub-stratum k per unit area	Intermediate values in calculation steps
$E_{BiomassBurn,C,t}$ PDD parameter E.1.41	Loss of carbon stock in above-ground biomass due to burning from accidental fires	Intermediate values in calculation steps
$E_{BiomassBurn,N_2O,t}$ PDD parameter E.1.43	N ₂ O emission from biomass burning due to accidental fires	Intermediate values in calculation steps
$E_{BiomassBurn,CH_4,t}$ PDD parameter E.1.44	CH ₄ emission from biomass burning due to accidental fires	Intermediate values in calculation steps

Table 4: parameters excluded from monitoring and not reported under this MR

Parameter/ PDD version 3a ID	Description	Justification for not being reported
C_{AB,ijk,m_1} and C_{AB,ijk,m_2} PDD parameter E.1.21	Carbon stock in above-ground biomass of trees for stratum i species j sub-stratum k calculated at monitoring point m_1 and m_2	This parameter does not apply to the BEF Method calculation.
C_{BB,ijk,m_1} and C_{BB,ijk,m_2} PDD parameter E.1.22	Carbon stock in below-ground biomass of trees for stratum i species j sub-stratum k calculated at monitoring point m_1 and m_2	This parameter does not apply to the BEF Method calculation.
$\Delta C_{AB,ijk,t}$ PDD parameter E.1.29	Changes in carbon stock in below-ground biomass for stratum i species j sub-stratum k	This parameter does not apply to the BEF Method calculation.
$\Delta C_{BB,ijk,t}$ PDD parameter E.1.31	Changes in carbon stock in below-ground biomass for stratum i species j sub-stratum k	This parameter does not apply to the BEF Method calculation.
$\Delta C_{ijk,t}$ PDD parameter E.1.32	Verifiable changes in carbon stock in living biomass of trees for stratum i species j sub-stratum k	This parameter does not apply to the BEF Method calculation.
$CSP_{diesel,t}$ (PDD parameter E.1.33)	Volume of diesel consumption	Data related to fuel consumption
$E_{FuelBurn,t}$ (PDD parameter E.1.35)	CO ₂ emissions from combustion of fossil fuels within the project boundary	Data related to fuel consumption
(PDD parameter E.1.46)	Amount of synthetic fertilizer N applied per unit area	Data related to use of fertilizers
(PDD parameter E.1.47)	Area of land with N fertilized	Data related to use of fertilizers
$N_{SF-Fert,t}$ (PDD parameter E.1.48)	Annual amount of synthetic fertilizer nitrogen applied	Data related to use of fertilizers
$N_2O_{direct-N_{fertilizer},t}$ (PDD parameter E.1.51)	Direct N ₂ O emissions as a result of nitrogen application within the project boundary	Data related to use of fertilizers
n_{vf} (PDD parameter E.1.53)	Number of vehicles type v with fuel type f	Data related to fuel consumption
EF_{vf} (PDD parameter E.1.54)	Emission factor for vehicle type v with fuel type f	Data related to fuel consumption
k_{vf} (PDD parameter E.1.55)	Kilometers traveled by each of vehicle type v with fuel type f	Data related to fuel consumption
e_{vf} (PDD parameter E.1.56)	Average fuel consumption of vehicle type v with fuel type f : data related to fuel consumption	Data related to fuel consumption
$FuelConsumption_{vf}$ (PDD parameter E.1.57)	Consumption of fuel type f of vehicle type v	Data related to fuel consumption

Data/Parameter	Stratum ID
Unit	Alphanumeric

Description	Stratum identification (PDD parameter E.1.01)
Measured/calculated/default	Estimated
Source of data	Project Record – Inventory System
Value(s) of monitored parameter	N/A
Monitoring equipment	N/A
Measuring/reading/recording frequency	Every 5 years
Calculation method (if applicable)	N/A
QA/QC procedures	A single stratum was defined for the project areas of the MG03 and MG04 units. This was based on the consideration that the cloned sprouts used in the project activity has the same growth trend and morphological characteristics, and that the plantations were established under similar soil, relief, climate, and forestry management conditions and adopting a weighted average of clone densities.
Purpose of data/parameter	Project removals
Additional comments	<i>“If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants.”</i> Standard: CDM project standard for project activities, version 02.0, item 277.

Data/Parameter	Sub-stratum ID																																		
Unit	Alphanumeric																																		
Description	Sub-stratum identification (PDD parameter E.1.02)																																		
Measured/calculated/default	Estimated																																		
Source of data	Project Record – Inventory System																																		
Value(s) of monitored parameter	<table border="1"> <thead> <tr> <th>Age class</th><th>Area ha</th></tr> </thead> <tbody> <tr><td>1</td><td>1,959.56</td></tr> <tr><td>2</td><td>1,315.11</td></tr> <tr><td>3</td><td>1,061.82</td></tr> <tr><td>4</td><td>1,086.31</td></tr> <tr><td>5</td><td>1,230.80</td></tr> <tr><td>6</td><td>1,597.37</td></tr> <tr><td>7</td><td>1,292.32</td></tr> <tr><td>8</td><td>238.82</td></tr> <tr><td>9</td><td>23.62</td></tr> <tr><td>10</td><td>73.46</td></tr> <tr><td>11</td><td>47.23</td></tr> <tr><td>12</td><td>0</td></tr> <tr><td>13</td><td>0</td></tr> <tr><td>14</td><td>645.59</td></tr> <tr><td>15</td><td>502.64</td></tr> <tr><td>Total</td><td>11,569.42</td></tr> </tbody> </table>	Age class	Area ha	1	1,959.56	2	1,315.11	3	1,061.82	4	1,086.31	5	1,230.80	6	1,597.37	7	1,292.32	8	238.82	9	23.62	10	73.46	11	47.23	12	0	13	0	14	645.59	15	502.64	Total	11,569.42
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13	0																																		
14	645.59																																		
15	502.64																																		
Total	11,569.42																																		

Monitoring equipment	N/A
Measuring/reading/recording frequency	Every 5 years
Calculation method (if applicable)	N/A
QA/QC procedures	Project removals
Purpose of data/parameter	Quality Assurance System based on ISO 9001 SOP used: IT/INV.01
Additional comments	<i>"If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants."</i> Standard: CDM project standard for project activities, version 02.0, item 277.

Data/Parameter	P_{ijk}
Unit	Alphanumeric
Description	Plot in stratum i , species j , sub-stratum k (P_{ijk} = total number of sample plots in stratum i species j sub-stratum k) (PDD parameter E.1.06)
Measured/calculated/default	Calculated
Source of data	Project Record – Inventory System
Value(s) of monitored parameter	See Annex 2
Monitoring equipment	N/A
Measuring/reading/recording frequency	Every 5 years
Calculation method (if applicable)	N/A
QA/QC procedures	Quality Assurance System based on ISO 9001 SOP: IT/INV.01
Purpose of data/parameter	Project removals
Additional comments	<i>"If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants."</i> Standard: CDM project standard for project activities, version 02.0, item 277.

Data/Parameter	Sample plot ID
Unit	Alphanumeric
Description	Sample plot ID (PDD parameter E.1.07)
Measured/calculated/default	Estimated
Source of data	Project Record – Inventory System
Value(s) of monitored parameter	See Annex 2
Monitoring equipment	N/A
Measuring/reading/recording frequency	Every 5 years
Calculation method (if applicable)	N/A

QA/QC procedures	Quality Assurance System based on ISO 9001 SOP: IT/INV.01
Purpose of data/parameter	Project removals
Additional comments	<i>"If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants."</i> Standard: CDM project standard for project activities, version 02.0, item 277.

Data/Parameter	Plot location
Unit	GPS coordinates
Description	Plot location (PDD parameter E.1.08)
Measured/calculated/default	Measured
Source of data	Project Records
Value(s) of monitored parameter	See Annex 1
Monitoring equipment	N/A
Measuring/reading/recording frequency	Every 5 years
Calculation method (if applicable)	N/A
QA/QC procedures	Quality Assurance System based on ISO 9001 SOP: IT/INV.01
Purpose of data/parameter	Project boundaries
Additional comments	<i>"If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants."</i> Standard: CDM project standard for project activities, version 02.0, item 277.

Data/Parameter	Tree species
Unit	Species name
Description	Tree species (PDD parameter E.1.09)
Measured/calculated/default	Estimated
Source of data	Project Record – Inventory System
Value(s) of monitored parameter	N/A
Monitoring equipment	N/A
Measuring/reading/recording frequency	Every 5 years
Calculation method (if applicable)	N/A

QA/QC procedures	<p><i>Eucalyptus spp</i>: The project plantations are implemented with hybrid clones of <i>Eucalyptus urophylla</i>, <i>Eucalyptus Grandis</i> and <i>Eucalyptus camaldulensis</i>.</p> <p>The choice of species is aimed at achieving the highest productivity of sustainable biomass in order to accomplish self-sufficiency of charcoal consumption in the project's pig iron mill demanding the smaller land possible. Therefore, mainly <i>Eucalyptus Urograndis</i> hybrid cloned sprouts are used in the establishment of the project plantations.</p> <p>Quality Assurance System based on ISO 9001 SOP: IT/INV.01</p>
Purpose of data/parameter	Project removals
Additional comments	<p><i>"If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants."</i> Standard: CDM project standard for project activities, version 02.0, item 277.</p>

Data/Parameter	Age of Plantation
Unit	Alphanumeric
Description	Age of Plantations (PDD parameter E.1.10)
Measured/calculated/default	Measured
Source of data	Project Records - Inventory System
Value(s) of monitored parameter	See Table 9
Monitoring equipment	N/A
Measuring/reading/recording frequency	Every 5 years
Calculation method (if applicable)	N/A
QA/QC procedures	Quality Assurance System based on ISO 9001
Purpose of data/parameter	Project Removals
Additional comments	<p><i>"If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants."</i> Standard: CDM project standard for project activities, version 02.0, item 277.</p>

Data/Parameter	Number of trees
Unit	Alphanumeric
Description	Number of trees (PDD parameter E.1.11)
Measured/calculated/default	Measured
Source of data	Project Records - Inventory System
Value(s) of monitored parameter	See Annex 1
Monitoring equipment	N/A
Measuring/reading/recording frequency	Every 5 years
Calculation method (if applicable)	N/A

QA/QC procedures	Quality Assurance System based on ISO 9001
Purpose of data/parameter	Project Removals
Additional comments	<i>"If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants."</i> Standard: CDM project standard for project activities, version 02.0, item 277.

Data/Parameter	DBH
Unit	Meter
Description	Diameter at Breast Height (DBH) (PDD parameter E.1.12)
Measured/calculated/default	Measured
Source of data	Project Record – Inventory System
Value(s) of monitored parameter	Values are available in the inventory system.
Monitoring equipment	Measuring Tape Note: This equipment does not require any type of calibration control. It is replaced whenever necessary.
Measuring/reading/recording frequency	Every 5 years
Calculation method (if applicable)	N/A
QA/QC procedures	Quality Assurance System based on ISO 9001 SOP: IT/INV.01
Purpose of data/parameter	Project Removals
Additional comments	<i>"If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants."</i> Standard: CDM project standard for project activities, version 02.0, item 277.

Data/Parameter	Mean DBH
Unit	Meter
Description	Mean Diameter at Breast Height (DBH) (PDD parameter E.1.13)
Measured/calculated/default	Calculated
Source of data	Project Record

Value(s) of monitored parameter	Sub-stratum	DBH	Sub-stratum	DBH
	MG03 - YEAR: 2015 - Rotation: 1	10.87	MG03 - YEAR: 2014 - Rotation: 1	12.78
	MG03 - YEAR: 2016 - Rotation: 2	8.15	MG03 - YEAR: 2016 - Rotation: 3	7.13
	MG03 - YEAR: 2016 - Rotation: 1	9.13	MG03 - YEAR: 2011 - Rotation: 1	14.58
	MG03 - YEAR: 2017 - Rotation: 2	--	MG03 - YEAR: 2016 - Rotation: 4	7.69
	MG03 - YEAR: 2011 - Rotation: 3	14.07	MG03 - YEAR: 2010 - Rotation: 2	13.72
	MG03 - YEAR: 2013 - Rotation: 1	13.64	MG04 - YEAR: 2014 - Rotation: 2	11.83
	MG03 - YEAR: 2014 - Rotation: 2	11.21	MG04 - YEAR: 2013 - Rotation: 2	12.67
	MG03 - YEAR: 2018 - Rotation: 1	--	MG04 - YEAR: 2017 - Rotation: 2	--
	MG03 - YEAR: 2011 - Rotation: 2	14.60	MG04 - YEAR: 2004 - Rotation: 1	21.02
	MG03 - YEAR: 2017 - Rotation: 3	--	MG04 - YEAR: 2015 - Rotation: 2	9.61
	MG03 - YEAR: 2018 - Rotation: 2	--	MG04 - YEAR: 2015 - Rotation: 1	10.92
	MG03 - YEAR: 2013 - Rotation: 2	12.93	MG04 - YEAR: 2016 - Rotation: 2	7.78
	MG03 - YEAR: 2012 - Rotation: 2	13.41	MG04 - YEAR: 2005 - Rotation: 1	18.58
	MG03 - YEAR: 2015 - Rotation: 2	9.40	MG04 - YEAR: 2018 - Rotation: 2	--
	MG03 - YEAR: 2009 - Rotation: 2	10.69	MG04 - YEAR: 2016 - Rotation: 1	8.65
	MG03 - YEAR: 2008 - Rotation: 2	15.95	MG04 - YEAR: 2012 - Rotation: 2	13.79
	MG03 - YEAR: 2009 - Rotation: 1	16.10	MG04 - YEAR: 2003 - Rotation: 1	19.28
Monitoring equipment	N/A			
Measuring/reading/recording frequency	Every 5 years			
Calculation method (if applicable)	Monitored values (DBH and tree height) are inserted in the inventory system which calculates the biomass volume (m ³) at the level of tree, sample plot, stratum and sub-stratum.			
QA/QC procedures	Quality Assurance System based on ISO 9001 SOP: IT/INV.01			
Purpose of data/parameter	Project removals			
Additional comments	<i>"If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants."</i> Standard: CDM project standard for project activities, version 02.0, item 277.			

Data/Parameter	H
Unit	Meter
Description	Tree Height (PDD parameter E.1.14)
Measured/calculated/default	Measured
Source of data	Project Records
Value(s) of monitored parameter	Values are available in the inventory system.

Monitoring equipment	Type: Hypsometer Accuracy class: 0.1 meter Serial numbers: 37639 and 37640 Calibration frequency: when in usage, every trimester; when not, immediately before using it. Dates of last calibrations: 31/01/2018, 01/03/2018, 19/03/2018, 27/03/2018, 17/04/2018, 23/05/2018, 18/07/2018, 15/09/2018, 06/10/2018 and 24/11/2018
Measuring/reading/recording frequency	Every 5 years
Calculation method (if applicable)	N/A
QA/QC procedures	Quality Assurance System based on ISO 9001 SOP: IT/INV.01
Purpose of data/parameter	Project Removals
Additional comments	<i>"If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants."</i> Standard: CDM project standard for project activities, version 02.0, item 277.

Data/Parameter	Mean Tree Height				
Unit	Meter				
Description	Mean Tree Height (PDD parameter E.1.15)				
Measured/calculated/default	Calculated				
Source of data	Project Record				
Value(s) of monitored parameter		Sub-stratum	H	Sub-stratum	H
		MG03 - YEAR: 2015 - Rotation: 1	16.51	MG03 - YEAR: 2014 - Rotation: 1	19.54
		MG03 - YEAR: 2016 - Rotation: 2	10.26	MG03 - YEAR: 2016 - Rotation: 3	9.06
		MG03 - YEAR: 2016 - Rotation: 1	13.46	MG03 - YEAR: 2011 - Rotation: 1	23.43
		MG03 - YEAR: 2017 - Rotation: 2	--	MG03 - YEAR: 2016 - Rotation: 4	9.42
		MG03 - YEAR: 2011 - Rotation: 3	19.68	MG03 - YEAR: 2010 - Rotation: 2	22.72
		MG03 - YEAR: 2013 - Rotation: 1	21.34	MG04 - YEAR: 2014 - Rotation: 2	18.38
		MG03 - YEAR: 2014 - Rotation: 2	16.81	MG04 - YEAR: 2013 - Rotation: 2	20.73
		MG03 - YEAR: 2018 - Rotation: 1	--	MG04 - YEAR: 2017 - Rotation: 2	--
		MG03 - YEAR: 2011 - Rotation: 2	23.11	MG04 - YEAR: 2004 - Rotation: 1	31.62
		MG03 - YEAR: 2017 - Rotation: 3	--	MG04 - YEAR: 2015 - Rotation: 2	14.70
		MG03 - YEAR: 2018 - Rotation: 2	--	MG04 - YEAR: 2015 - Rotation: 1	17.01
		MG03 - YEAR: 2013 - Rotation: 2	20.47	MG04 - YEAR: 2016 - Rotation: 2	10.05
		MG03 - YEAR: 2012 - Rotation: 2	22.41	MG04 - YEAR: 2005 - Rotation: 1	31.89
		MG03 - YEAR: 2015 - Rotation: 2	12.12	MG04 - YEAR: 2018 - Rotation: 2	--
		MG03 - YEAR: 2009 - Rotation: 2	17.98	MG04 - YEAR: 2016 - Rotation: 1	13.09
		MG03 - YEAR: 2008 - Rotation: 2	19.32	MG04 - YEAR: 2012 - Rotation: 2	22.37
		MG03 - YEAR: 2009 - Rotation: 1	26.81	MG04 - YEAR: 2003 - Rotation: 1	30.13
Monitoring equipment	N/A				
Measuring/reading/recording frequency	Every 5 years				

Calculation method (if applicable)	Monitored values (DBH and tree height) are inserted in the inventory system which calculates the biomass volume (m ³) at the level of tree, sample plot, stratum and sub-stratum.
QA/QC procedures	Quality Assurance System based on ISO 9001 SOP: IT/INV.01
Purpose of data/parameter	Project removals
Additional comments	<i>"If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants."</i> Standard: CDM project standard for project activities, version 02.0, item 277.

Data/Parameter	$V_{ijk,m}$
Unit	m ³ tree ⁻¹ at monitoring year m
Description	Merchantable volume per tree (diameter DBH and height H) in stratum i species j and sub-stratum k (age class) (PDD parameter E.1.16)
Measured/calculated/default	Measured and calculated
Source of data	Project Record – Inventory System
Value(s) of monitored parameter	Values are available in the inventory system.
Monitoring equipment	N/A
Measuring/reading/recording frequency	Every 5 years
Calculation method (if applicable)	Monitored values (DBH and tree height) are inserted in the inventory system which calculates the biomass volume (m ³) at the level of tree, sample plot, stratum and sub-stratum.
QA/QC procedures	Quality Assurance System based on ISO 9001 SOP: IT/INV.01
Purpose of data/parameter	Project removals
Additional comments	<i>"If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants."</i> Standard: CDM project standard for project activities, version 02.0, item 277.

Data/Parameter	D_j
Unit	Tonnes d.m. m ⁻³ merchantable volume
Description	Basic wood density for species j (PDD parameter E.1.17)
Measured/calculated/default	Estimated
Source of data	Project Record
Value(s) of monitored parameter	0.4996

Monitoring equipment	Type: Marte Accuracy class: 0.01g to 2000 g Serial numbers: 276669 Calibration frequency: semestral Date of last calibration: 22/06/2011, 08/12/2011, 26/06/2012, 29/11/2012, 27/06/2013, 12/11/2013, 19/06/2014, 16/12/2014, 11/06/2015, 10/12/2015, 21/06/2016, 12/12/2016, 29/06/2017, 05/12/2017, 19/06/2018 and 07/12/2018.
Measuring/reading/recording frequency	Every five years
Calculation method (if applicable)	Calculations considered the density weighted average of all the project activity's clones.
QA/QC procedures	Quality Assurance System based on ISO 9001
Purpose of data/parameter	<ul style="list-style-type: none"> - Project removals - Project emissions – related to the emission from biomass burning due to accidental fires
Additional comments	<i>“If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants.”</i> Standard: CDM project standard for project activities, version 02.0, item 277.

Data/Parameter	$MC_{AB,ijk,m}$
Unit	Tonnes C ha ⁻¹ at monitoring year m
Description	Mean carbon stock in above-ground biomass for stratum i species j sub-stratum k (PDD parameter E.1.25)
Measured/calculated/default	Calculated
Source of data	TARAM Tool
Value(s) of monitored parameter	1,117.50
Monitoring equipment	N/A
Measuring/reading/recording frequency	Every 5 years
Calculation method (if applicable)	This calculation was processed in the TARAM Tool applying a combination of equations 18, 20 and 22 of the PDD. Results are presented in Section E of this Monitoring Report.
QA/QC procedures	Quality Assurance System based on ISO 9001
Purpose of data/parameter	Project removals
Additional comments	<i>“If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants.”</i> Standard: CDM project standard for project activities, version 02.0, item 277.

Data/Parameter	$MC_{BB,ijk,m}$
Unit	Tonnes C ha ⁻¹ at monitoring year m
Description	Mean carbon stock in below-ground biomass for stratum i species j sub-stratum k (PDD parameter E.1.26)
Measured/calculated/default	Calculated

Source of data	TARAM Tool
Value(s) of monitored parameter	379.95
Monitoring equipment	N/A
Measuring/reading/recording frequency	Every 5 years
Calculation method (if applicable)	This calculation was processed in the TARAM Tool applying a combination of equations 19, 21 and 23 of the PDD. Results are presented in Section E of this Monitoring Report.
QA/QC procedures	Quality Assurance System based on ISO 9001
Purpose of data/parameter	Project removals
Additional comments	<i>"If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants."</i> Standard: CDM project standard for project activities, version 02.0, item 277.

Data/Parameter	$A_{ijk,m}$																																				
Unit	Hectare (ha) at monitoring year m																																				
Description	Area of stratum i species j sub-stratum k (PDD parameter E.1.27)																																				
Measured/calculated/default	Measured																																				
Source of data	Project Record – Inventory System																																				
Value(s) of monitored parameter	<table> <thead> <tr> <th>Age class</th><th>Area ha</th></tr> </thead> <tbody> <tr><td>0</td><td>1,959.56</td></tr> <tr><td>1</td><td>1,315.11</td></tr> <tr><td>2</td><td>1,061.82</td></tr> <tr><td>3</td><td>1,086.31</td></tr> <tr><td>4</td><td>1,230.80</td></tr> <tr><td>5</td><td>1,597.37</td></tr> <tr><td>6</td><td>1,292.32</td></tr> <tr><td>7</td><td>238.82</td></tr> <tr><td>8</td><td>23.62</td></tr> <tr><td>9</td><td>73.46</td></tr> <tr><td>10</td><td>47.23</td></tr> <tr><td>11</td><td>0</td></tr> <tr><td>12</td><td>0</td></tr> <tr><td>13</td><td>645.59</td></tr> <tr><td>14</td><td>502.64</td></tr> <tr><td>15</td><td>494.77</td></tr> <tr><td>Total</td><td>11,569.42</td></tr> </tbody> </table>	Age class	Area ha	0	1,959.56	1	1,315.11	2	1,061.82	3	1,086.31	4	1,230.80	5	1,597.37	6	1,292.32	7	238.82	8	23.62	9	73.46	10	47.23	11	0	12	0	13	645.59	14	502.64	15	494.77	Total	11,569.42
Age class	Area ha																																				
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14	502.64																																				
15	494.77																																				
Total	11,569.42																																				
Monitoring equipment	N/A																																				
Measuring/reading/recording frequency	Every 5 years																																				
Calculation method (if applicable)	Used to calculate changes in carbon stock																																				
QA/QC procedures	Quality Assurance System based on ISO 9001 SOP: IT/INV.01																																				

Purpose of data/parameter	Project removals
Additional comments	<i>"If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants."</i> Standard: CDM project standard for project activities, version 02.0, item 277.

Data/Parameter	A_i
Unit	Hectare (ha)
Description	Area of stratum (PDD parameter E.1.27)
Measured/calculated/default	Measured
Source of data	Project Record – Inventory System
Value(s) of monitored parameter	11,569.42 (only one stratum was defined)
Monitoring equipment	N/A
Measuring/reading/recording frequency	Every 5 years
Calculation method (if applicable)	Used to calculate biomass loss in site preparation and conversion of grassland
QA/QC procedures	Quality Assurance System based on ISO 9001 SOP: IT/INV.01
Purpose of data/parameter	Project emissions
Additional comments	<i>"If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants."</i> Standard: CDM project standard for project activities, version 02.0, item 277.

Data/Parameter	$C_{AB,ijk,m}$
Unit	tonnes C at monitoring year m
Description	Changes in carbon stock in above-ground biomass for stratum i species j sub-stratum k (PDD parameter E.1.28)
Measured/calculated/default	Calculated
Source of data	TARAM Tool
Value(s) of monitored parameter	459,607
Monitoring equipment	N/A
Measuring/reading/recording frequency	Every 5 years
Calculation method (if applicable)	N/A
QA/QC procedures	Quality Assurance System based on ISO 9001
Purpose of data/parameter	Project removals
Additional comments	<i>"If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants."</i> Standard: CDM project standard for project activities, version 02.0, item 277.

Data/Parameter	$C_{BB,ijk,m}$
Unit	tonnes C at monitoring year m
Description	changes in carbon stock in below-ground biomass for stratum i species j sub-stratum k (PDD parameter E.1.29)
Measured/calculated/default	Calculated
Source of data	TARAM Tool
Value(s) of monitored parameter	156,266
Monitoring equipment	N/A
Measuring/reading/recording frequency	Every 5 years
Calculation method (if applicable)	N/A
QA/QC procedures	Quality Assurance System based on ISO 9001
Purpose of data/parameter	Project removals
Additional comments	<i>"If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants."</i> Standard: CDM project standard for project activities, version 02.0, item 277.

Data/Parameter	$A_{burn,ijk,t}$												
Unit	Ha yr ⁻¹ in year t												
Description	Annual area affected by biomass burning in stratum i species j sub-stratum k (PDD parameter E.1.36)												
Measured/calculated/default	Measured												
Source of data	Project Record												
Value(s) of monitored parameter	<table border="1"> <thead> <tr> <th>Year</th><th>Area</th></tr> </thead> <tbody> <tr> <td>2013</td><td>0.11</td></tr> <tr> <td>2014</td><td>0.57</td></tr> <tr> <td>2017</td><td>74.65</td></tr> <tr> <td>2018</td><td>1.30</td></tr> <tr> <td>Total</td><td>76.63</td></tr> </tbody> </table>	Year	Area	2013	0.11	2014	0.57	2017	74.65	2018	1.30	Total	76.63
Year	Area												
2013	0.11												
2014	0.57												
2017	74.65												
2018	1.30												
Total	76.63												
Monitoring equipment	N/A												
Measuring/reading/recording frequency	Annual												
Calculation method (if applicable)	N/A												
QA/QC procedures	Quality Assurance System based on ISO 9001 SOP: NT-SIL-11												
Purpose of data/parameter	Project emissions												
Additional comments	N/A												

Data/Parameter	$B_{ijk,t}$												
Unit	Tonnes d.m. ha ⁻¹												
Description	Average above-ground biomass before burning for stratum <i>i</i> species <i>j</i> sub-stratum <i>k</i> (PDD parameter E.1.37)												
Measured/calculated/default	Estimated												
Source of data	Project Record												
Value(s) of monitored parameter	<table> <tr> <th>Year</th><th>$B_{ijk,t}$ (t d.m. ha⁻¹)</th></tr> <tr> <td>2013</td><td>295.53</td></tr> <tr> <td>2014</td><td>136.53</td></tr> <tr> <td>2017</td><td>65.21</td></tr> <tr> <td>2018</td><td>54.39</td></tr> <tr> <td>Total</td><td>551.66</td></tr> </table>	Year	$B_{ijk,t}$ (t d.m. ha ⁻¹)	2013	295.53	2014	136.53	2017	65.21	2018	54.39	Total	551.66
Year	$B_{ijk,t}$ (t d.m. ha ⁻¹)												
2013	295.53												
2014	136.53												
2017	65.21												
2018	54.39												
Total	551.66												
Monitoring equipment	N/A												
Measuring/reading/recording frequency	Annual												
Calculation method (if applicable)	Figures are a result of an estimation of the volume (m ³) before accidental fire, times to the wood density, times to BEF, divided by the affected area.												
QA/QC procedures	N/A												
Purpose of data/parameter	Project emissions												
Additional comments	N/A												

Data/Parameter	$PP_{ijk,t}$
Unit	Dimensionless
Description	Proportion of biomass burned (PDD parameter E.1.38)
Measured/calculated/default	Measured
Source of data	TARAM Tool
Value(s) of monitored parameter	1.0 (conservatively)
Monitoring equipment	N/A
Measuring/reading/recording frequency	Annual
Calculation method (if applicable)	N/A
QA/QC procedures	N/A
Purpose of data/parameter	Project emissions
Additional comments	N/A

Data/Parameter	$E_{Non-CO_2, Biomass Burn, t}$												
Unit	Tonnes CO ₂ -e yr ⁻¹ in year t												
Description	Non-CO ₂ emission as a result of biomass burning within the project boundary due to accidental fires (PDD parameter E.1.45)												
Measured/calculated/default	Calculated												
Source of data	TARAM Tool												
Value(s) of monitored parameter	<table border="1"> <thead> <tr> <th>Year</th><th>Emissions</th></tr> </thead> <tbody> <tr> <td>2013</td><td>4</td></tr> <tr> <td>2014</td><td>8</td></tr> <tr> <td>2017</td><td>527</td></tr> <tr> <td>2018</td><td>8</td></tr> <tr> <td>Total</td><td>546</td></tr> </tbody> </table>	Year	Emissions	2013	4	2014	8	2017	527	2018	8	Total	546
Year	Emissions												
2013	4												
2014	8												
2017	527												
2018	8												
Total	546												
Monitoring equipment	N/A												
Measuring/reading/recording frequency	Every 5 years												
Calculation method (if applicable)	N/A												
QA/QC procedures	Quality Assurance System based on ISO 9001												
Purpose of data/parameter	Project emissions												
Additional comments	<i>"If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants."</i> Standard: CDM project standard for project activities, version 02.0, item 277.												

Data/Parameter	$GHG_{E, t}$																				
Unit	Tonnes CO ₂ -e yr ⁻¹ in year t																				
Description	Annual GHG emissions as a result of the implementation of the A/R CDM project activity within the project boundary (PDD parameter E.1.52)																				
Measured/calculated/default	Calculated																				
Source of data	TARAM Tool																				
Value(s) of monitored parameter	<table border="1"> <thead> <tr> <th>Year</th><th>Emissions</th></tr> </thead> <tbody> <tr> <td>2011</td><td>127,636</td></tr> <tr> <td>2012</td><td></td></tr> <tr> <td>2013</td><td>4</td></tr> <tr> <td>2014</td><td>8</td></tr> <tr> <td>2015</td><td></td></tr> <tr> <td>2016</td><td></td></tr> <tr> <td>2017</td><td>527</td></tr> <tr> <td>2018</td><td>8</td></tr> <tr> <td>Total</td><td>128,182</td></tr> </tbody> </table>	Year	Emissions	2011	127,636	2012		2013	4	2014	8	2015		2016		2017	527	2018	8	Total	128,182
Year	Emissions																				
2011	127,636																				
2012																					
2013	4																				
2014	8																				
2015																					
2016																					
2017	527																				
2018	8																				
Total	128,182																				

Monitoring equipment	N/A
Measuring/reading/recording frequency	Annual
Calculation method (if applicable)	N/A
QA/QC procedures	Quality Assurance System based on ISO 9001
Purpose of data/parameter	Project emissions
Additional comments	N/A

D.3. Implementation of sampling plan

>>

For the estimation of actual GHG removals by sinks the PP considers a Stratified Random Sampling. The forest stocks established under this project activity are very homogeneous, once they've been implemented in similar conditions of soil, climate, landscape and forestry management procedures. Thus, they have the same growth tendency and similar morphologic features for the planted genetic sprouts. So, for this second verification there is only one stratum due to the area's similarities in terms of soil and climate conditions.

After the definition of the stratum and species, there are some sub-stratums defined according to the age class found during the field inventory data collection. Furthermore, each Age Class is also divided to inform its Rotation. The definition of sample plot location consists of a random definition of plot centers, as it has a low variability in the forest for the characteristics of interest.

Taking into account the provisions of the approved methodology AR-AM0005 version 1 the project adopts a more conservative approach on sampling design patterns, plots distribution and stratification. The forest inventory has an error above 10%, considering a 95% confidence level, more plots shall be added in the sub-strata in order to lower the sampling error.

In accordance with the project activity forest inventory at least one sample plot is located at an interval of approximately 10 hectares. Each stand shall have at least one sample plot, regardless of the stand size. The sample plot is geo-referenced (centre of the plot) increasing conservativeness of measurement.

Number of sample plots

Permanent sample plots are a crucial tool to assess changes in carbon stock over the crediting period as they take into account the high covariance between observations at successive sampling events. Therefore, the project entity has a policy to be as thorough as possible to keep the monitoring error at the lowest level. In order to comply with a minimum error, the methodology included an equation to assess the minimum number of sample plots required for monitoring to keep a maximum permissible error of $\pm 10\%$ of the mean, at a 95% confidence level. According with it, the following equation was used,

$$n = \left(\frac{t_{\alpha}}{E}\right)^2 * \left(\sum_{i=1}^I W_i * s_i * \sqrt{C_i}\right) * \left(\sum_{i=1}^I W_i * \frac{s_i}{\sqrt{C_i}}\right)$$

Where:

n = sample size (number of sample plots required for monitoring)

t_{α} = t value for a significance level of α (0.05) or confidence level of 95%

N_i = number of sample units for stratum i , calculated by dividing the area of stratum i by the area of each plot

N = number of sample units of all stratum levels, $N = \sum N_i$

s_i = standard deviation of stratum i

E = allowable error ($\pm 10\%$ of the mean)

C_i = Cost to select a plot of the stratum i

i = stratum i (total number of strata I)

$$W_i = \frac{N_i}{N}$$

The project entity does not use the cost (C_i) as a variable to select a plot for the number of sampling plots. The optimal number shall be achieved without taking the cost into consideration. Rewriting the formula, excluding the C_i variable, we have the following equation:

$$n = t_{\alpha}^2 \cdot \frac{(\sum_{i=1}^I N_i S_i)^2}{E^2 * N^2}$$

Table 5 below provides all the variables and number of sample plots required for monitoring.

Table 5: number of sample plots

Calculation of the ideal number of sample plots applying the methodology equation						
Stratum	Sub-stratum	t_{α}	$N_i * S_i$	E %	N	n
i	MG03 - YEAR: 2015 - Rotation: 1	1.961	629053.33	10	172,749	427.17
-	MG03 - YEAR: 2016 - Rotation: 2	-	113035.96	-	-	-
-	MG03 - YEAR: 2016 - Rotation: 1	-	79698.75	-	-	-
-	MG03 - YEAR: 2017 - Rotation: 2	-	-	-	-	-
-	MG03 - YEAR: 2011 - Rotation: 3	-	95999.45	-	-	-
-	MG03 - YEAR: 2013 - Rotation: 1	-	703376.07	-	-	-
-	MG03 - YEAR: 2014 - Rotation: 2	-	1082442.27	--	-	-
-	MG03 - YEAR: 2018 - Rotation: 1	-	-	-	-	-
-	MG03 - YEAR: 2011 - Rotation: 2	-	486708.44	-	-	-
-	MG03 - YEAR: 2017 - Rotation: 3	-	-	-	-	-
-	MG03 - YEAR: 2018 - Rotation: 2	-	-	-	-	-
-	MG03 - YEAR: 2013 - Rotation: 2	-	1137291.43	-	-	-
-	MG03 - YEAR: 2012 - Rotation: 2	-	1368430.48	-	-	-
-	MG03 - YEAR: 2015 - Rotation: 2	-	113237.63	-	-	-
-	MG03 - YEAR: 2009 - Rotation: 2	-	93523.32	-	-	-
-	MG03 - YEAR: 2008 - Rotation: 2	-	150355.60	-	-	-
-	MG03 - YEAR: 2009 - Rotation: 1	-	158952.21	-	-	-
-	MG03 - YEAR: 2014 - Rotation: 1	-	440630.75	-	-	-
-	MG03 - YEAR: 2016 - Rotation: 3	-	69744.60	-	-	-
-	MG03 - YEAR: 2011 - Rotation: 1	-	165717.13	-	-	-
-	MG03 - YEAR: 2016 - Rotation: 4	-	26862.39	-	-	-

	MG03 - YEAR: 2010 - Rotation: 2		66891.86			
	MG04 - YEAR: 2014 - Rotation: 2		1157023.16			
	MG04 - YEAR: 2013 - Rotation: 2		1760122.34			
	MG04 - YEAR: 2017 - Rotation: 2					
	MG04 - YEAR: 2004 - Rotation: 1		3939657.64			
	MG04 - YEAR: 2015 - Rotation: 2		331809.91			
	MG04 - YEAR: 2015 - Rotation: 1		173631.60			
	MG04 - YEAR: 2016 - Rotation: 2		98768.26			
	MG04 - YEAR: 2005 - Rotation: 1		6146575.33			
	MG04 - YEAR: 2018 - Rotation: 2					
	MG04 - YEAR: 2016 - Rotation: 1		32115.70			
	MG04 - YEAR: 2012 - Rotation: 2		1828789.79			
	MG04 - YEAR: 2003 - Rotation: 1		2984467.74			

Source of data: Plantar inventory system

After applying the methodology equation for assessing the number of sample plots required for monitoring, the number of 427 sample plots was achieved.

Even though the methodology equation determined a minimum quantity of 427 sample plots for a tolerable error of 10% of the mean, the Project Entity samples more than what is required. Currently the Project Entity inventory system have 1,322 sample plots distributed in MG03 and MG04 farms.

The 1,322 samples lowered the error of the mean to a level lower than the 10% required by the methodology. Applying the stratified random sampling (methodology equation), the PE reached a percentage of 6.34%.

Location of sample plots

All the Project's sample plots are referenced on a map that comprises the geographical position, stand number, sample plot ID and their location within the sub-strata. Instructions to create and register a sample plot is in the inventory SOP. It is also important to take into consideration that the sample plots do not receive any kind of different treatment whatsoever compared to the Project stands. Due to QA/QC and management reasons, the SOP defines that there should be at least one sample plot per stand.

Uncertainty assessment

In the context of the methodology AR-AM0005, the major sources of uncertainty related to changes in the carbon stock in the living biomass pool include: natural factors such as fire and pest breaks; stand variables such as variation in the yield tables, allometric equations, biomass expansion factor (BEF), wood density, carbon fraction and errors contributed by the measurement process. Since any deviation from the variables can artificially alter the results, the Project Entity strives to be as accurate as possible. For instance, whenever feasible, the PE favors its own data over locally available data over standard parameters such as the IPCC default.

The uncertainty of carbon stock in the merchantable volume were already covered by the inventory system, indicating an error of 6.34% with a 95% confidence level.

The uncertainty of BEF and Root Shoot Ratio are to be considered very low due to the following reasons:

- The merchantable volume error is approximately 6%;
- Local data was used for the BEF and Root Shoot Ratio calculations;
- The wood density was obtained *in situ*, that is, inside the PE own plantation sites.

As for the carbon fraction, the IPCC default value was used, which is internationally accepted and commonly applied by researches.

For fire and pest breaks, the uncertainty value was already reflected on the inventory system.

SECTION E. Calculation of emission reductions or net anthropogenic removals

E.1. Calculation of baseline emissions or baseline net removals

>>

The purpose of the monitoring tool TARAM version 2/PLANTAR is to provide ex-post data parameters and calculations according to the approved methodology AR-AM0005 version 01 *Reforestation as Renewable Source of Wood Supplies for Industrial Use in Brazil* and Project Design Document version 3a of the Project Entity. The monitoring tool system uses a series of worksheets to give the most updated information about the project removals and emissions and net anthropogenic GHG removals by sinks.

Introduction

The monitoring section of the tool is divided into thirteen different spreadsheets that ultimately results in the verified net anthropogenic GHG removals by sinks. The system was designed to provide friendly usage to whoever might operate it. It was conceived in a way that it is only necessary to input the figures and all calculation is done automatically. **Table 6** below shows a summary of each individual worksheet and its function.

Table 6: Instructions spreadsheet

Monitoring Instructions (Monitoring Spreadsheets: Data, 1st ver, 2nd ver, 3rd ver, 4th ver, 5th ver, GHG monitoring, LK monitoring, GHG emissions, LK emissions, Pre-AR, tCERs and Graphs)	
Objective The purpose of the following 13 spreadsheets is to collect and storage data and provide the results of net anthropogenic removals by sinks according to the AR-AM0005 Version 01 - Reforestation as Renewable Source of Wood Supplies for Industrial Use in Brazil and the Plantar Project Design Document - Version 3a 16/02/2009 of The Plantar Group.	
Protection The cells in these monitoring spreadsheets are protected (you can not delete or modify their content), except the cells where you should input data and parameter values. The protection can be eliminated using the name of the sheet as password.	
How to use the monitoring spreadsheets The cells in these monitoring spreadsheets are color-coded, so that you can quickly identify where to input your data and parameter values or find the results of the calculations. There are instructions and data validation rules in some cells in order to assure you are inserting the correct values.	
The color of the cells and what it means:	
yellow	Yellow cells are the place where to input data and parameter values.
white	White cells have formulae and results. It is recommended not to delete or modify the content of these cells.
green	Green cells are columns and rows titles. It is recommended not to delete or modify the content of these cells.
grey	Grey cells are not used cells.
black	Black cells are "deactivated" cells due to provisions of EB68 Annex 31 <i>Guidelines on application of specified versions of A/R CDM methodologies in verification of registered A/R CDM project activities</i> , version 01.1: parameters related to burning of fossil fuel and nitrous oxide from use of fertilizers are not required to be monitored and therefore are not reported in this tool.
The worksheets and what they do:	
Data	Start your work here. In this worksheet you have to input the data and parameters values for each project verification year throughout the crediting period.
1st - 5th ver	In these worksheets provide the appropriate values according to a forestry inventory system carried out at the verifications years and that complies with the formulae and rules defined in the approved methodology AR-AM005 and in the Project Design Document.
GHG monitoring	In this worksheet you have to input the monitored data needed to calculate greenhouse gas emissions related to the forest establishment, management and harvesting.
LK monitoring	In this worksheet you have to input the monitored data needed to calculate leakage. These calculations are related to emissions outside the project boundaries that are measurable and attributable to the forest establishment, management and harvesting.
GHG emissions	This worksheet provide the calculations results of greenhouse gas emissions according to the data imputed in the worksheet GHG monitoring.
LK emissions	This worksheet provide the calculations results of leakage emissions according to the data imputed in the worksheet LK monitoring.
Pre-AR	This worksheet provide the values of the pre afforestation/reforestation rate calculated at the time of the project validation. These data are not monitored according to the approved methodology.
tCER's	This worksheet provides the monitored <i>ex-post</i> net anthropogenic greenhouse gas removals by sinks and the respective volume of tCER's.
Graphs	Here you will find charts illustrating the net anthropogenic GHG removals by sinks each time of project verifications.

All cells in the worksheets are color-coded, for instance, the yellow cells are the only ones where data and parameters values are inputted into the worksheet. In order to safeguard the integrity of the formulae and descriptions, all the other cells besides the yellow ones are protected by a security code to prevent alterations or misplacement of formulae in the worksheet.

All spreadsheets in the monitoring section ultimately serve to calculate the net anthropogenic GHG removals. Some provide only information, as the “Data” spreadsheet, and some only give results based on formulae and figures derived from other spreadsheets, as the “GHG Emission” sheet. Its results are given based on information provided by the “Data” and “GHG Monitoring” sheets. It is important to consider that there are small differences between formulae results in this report and in the spreadsheets due to rounding.

Baseline

Since the baseline scenario is the maintenance of grassland in its peak and steady state and the sum of the carbon stock changes of the living biomass in the grassland is zero, this project activity does not require monitoring of the baseline as per the CDM approved methodology AR-AM0005.

Nevertheless, the project entity decided, on a very conservative approach, to maintain a historic rate of reforestation an average rate of 8.2%, as per description in PDD. Even though the reforestation production is not this project activity’s baseline it was decided that the project entity would maintain the reforestation production prospects of 8.2% per year as an activity implemented during the pre-project period. **Table 7** summarizes the sum of carbon stock change in pre-existing A/R activities throughout the crediting period.

Table 7: Carbon stock change in pre-existing AR activities

THE PLANTAR GROUP - REFORESTATION PROJECT

APPLIED METHODOLOGY:

AR-AM0005 Version 01 - Reforestation as Renewable
Source of Wood Supplies for Industrial Use in Brazil -
Project Design Document - Version 3a 16/02/2009

Carbon stock change in pre-existing AR activities

Year _t		Sum of carbon stock changes in living biomass of trees under AR activities implemented during the pre-project period		
		Above-ground biomass	Below-ground biomass	Total
Age	Year	t CO ₂ e	t CO ₂ e	t CO ₂ e
1	2001	2,938	1,116	4,054
2	2002	13,024	4,949	17,973
3	2003	33,508	12,733	46,241
4	2004	63,445	24,109	87,554
5	2005	98,282	37,347	135,630
6	2006	139,954	53,183	193,137
7	2007	139,954	53,183	193,137
8	2008	142,598	54,187	196,786
9	2009	151,676	57,637	209,313
10	2010	170,111	64,642	234,753
11	2011	197,054	74,881	271,935
12	2012	228,408	86,795	315,204
13	2013	265,913	101,047	366,960
14	2014	265,913	101,047	366,960
15	2015	268,851	102,163	371,014
16	2016	278,937	105,996	384,933
17	2017	299,421	113,780	413,201
18	2018	329,358	125,156	454,514
19	2019	364,195	138,394	502,590
20	2020	405,867	154,230	560,097
21	2021	405,867	154,230	560,097
22	2022	408,511	155,234	563,746
23	2023	417,589	158,684	576,273
24	2024	436,024	165,689	601,714
25	2025	462,968	175,928	638,895
26	2026	494,321	187,842	682,164
27	2027	531,826	202,094	733,920
28	2028	531,826	202,094	733,920
29	2029	534,764	203,210	737,974
30	2030	544,850	207,043	751,894

At the end of this Second Monitoring Period there would have been a total of **454,514 tons of CO₂e** in above and below ground if no CDM project activity existed. Therefore, conservatively, the average rate is considered during the baseline calculation as an Accumulated Pre-Project A/R activity. In the subsequent verifications the carbon stock figures will grow, according to **Table 7** above.

E.2. Calculation of project emissions or actual net removals

>>

Project Removals

As this Monitoring Report refers to an A/R CDM project activity, this item “Project Removals” is where the amount of carbon stock in living biomass of trees at the Projects units will be verified.

To understand how the monitoring and verification is done, the tables below show all information and steps needed to obtain the amount of tCERs generated in the given crediting period.

Table 8 below is the “Data” spreadsheet which contains the parameters identified in the methodology which will be used by some formulae in further sheets. The data used for this verification period are inserted in column “2ndver”.

Table 8: Data spreadsheet

THE PLANTAR GROUP - REFORESTATION PROJECT								
APPLIED METHODOLOGY:			AR-AM0005 Version 01 - Reforestation as Renewable Source of Wood Supplies for Industrial Use in Brazil - Project Design Document - Version 3a 16/02/2009					
According to EB68 Annex 31 Guidelines on application pf specified versions of A/R CDM methodologies in verification of registered A/R CDM project activities, version 01.1, the parameters related to burning of fossil fuel and nitrous oxide from use of fertilizers are not required to be monitored (black cells), hence they are not reported in this tool.								
Data and parameters values								
Description	Notation	Unit	Data and parameters values					Sources of data
			1 st Ver.	2 nd Ver.	3 rd Ver.	4 th Ver.	5 th Ver.	
Wood density	D _j	t.d.m. m ³	0.5142	0.4996				Project data
Biomass expansion factor	BEF _{jk}	Dimensionless	1.27	1.30				Local data
Carbon fraction	CF _j	t C t.d.m	0.5	0.5				IPCC default
Root-shoot ratio	R _j	Dimensionless	0.34	0.34				Local data
Ratio of molecular weights of CO ₂ and C	44/12	Dimensionless	3.67	3.67				IPCC default
Project starting date (year)	-	Dimensionless	2000	2000				Project data
Emission factor for diesel	EF _{diesel}	kg CO ₂ l	2.83					IPCC default
Emission factor for gasoline	EF _{gasoline}	kg CO ₂ l	2.63					IPCC default
Peak above ground biomass of pre-existing non-tree vegetation	B _{w,l}	t d. m. ha	2.3	2.3				IPCC default
Root-shoot ratio appropriate for pre-existing non-tree vegetation	R _G	Dimensionless	1.6	1.6				IPCC default
Carbon fraction of dry biomass in pre-existing non-tree vegetation	CF	t C d.m.	0.5	0.5				IPCC default
Combustion efficiency	CE	Dimensionless	0.5	0.5				IPCC default
Carbon Fraction of dry matter	CF	t d.m.	0.5	0.5				IPCC default
Nitrogen/carbon ratio	N/C ratio	Dimensionless	0.01	0.01				IPCC default
Emission ratio for N ₂ O of biomass burning	EF _{N2O}	kg CO _{2-e} (kg C)	0.007	0.007				IPCC default
Emission ratio for CH ₄ of biomass burning	EF _{CH4}	kg CO _{2-e} (kg C)	0.012	0.012				IPCC default
Global warming potential for N ₂ O	GWPN _{2O}	kg CO ₂ (kg N ₂ O)	310	298				IPCC default
Global warming potential for CH ₄	GWPC _{H4}	kg CO ₂ (kg CH ₄)	21	25				IPCC default
Ratio of molecular weights of N ₂ O and nitrogen	44/28	Dimensionless	1.57	1.57				
Ratio of molecular weights of CH ₄ and carbon	16/12	Dimensionless	1.33	1.33				
Emission factor for emissions from N inputs	EF _i	N ₂ O-N (t N input	1.25%					GPG 2000, default
Fraction that volatilises as NH ₃ and NO _x for synthetic fertilizers	FRAC _{GASF}	Dimensionless	0.1					IPCC default
Fraction that volatilises as NH ₃ and NO _x for organic fertilizers	FRAC _{GASM}	Dimensionless	0.2					IPCC default
Global warming potential for N ₂ O	GWP _{N2O}	kg CO ₂ (kg N ₂ O)	310	298				IPCC default
Ratio of molecular weights of N ₂ O and nitrogen	44/28	Dimensionless	1.57					

Table 9 is a spreadsheet used to monitor and calculate the amount of changes in carbon stock in above and below-ground biomass. In the monitoring section there are 5 similar spreadsheets for each verification period.

Table 9: 2nd verification spreadsheet

THE PLANTAR GROUP - REFORESTATION PROJECT

APPLIED METHODOLOGY: AR-AM0005 Version 01 - Reforestation as Renewable Source of Wood Supplies for Industrial Use in Brazil - Project Design Document - Version 3a 16/02/2009

Stratum (i): Eucalyptus Plantations - one single site class

Species (j): Advanced Clones

Inventory Date: From: 23/01/2018
To: 20/12/2018

Second Verification year: 2018

Sub-stratum (k)		Area $A_{ijk,m}$	Actual Stand Volume $V_{ijk,m}$	Mean Carbon Stock in Above- ground Biomass $MC_{AB,ijk,m}$	Mean Carbon Stock in Below- ground Biomass $MC_{BB,ijk,m}$	Changes in Carbon Stock in Above- ground Biomass $C_{AB,ijk,m}$	Changes in Carbon Stock in Below- ground Biomass $C_{BB,ijk,m}$
Age Class	Rotation	ha	m ³ ha	t C ha	t C ha	t C	t C
TOTALS		11,569.42		1,117.50	379.95	459,607.18	156,266.44
0	No planting	1,438.46		0.00	0.00	0	0
	First	105.48		0.00	0.00	0	0
	Second	415.62		0.00	0.00	0	0
1	First			0.00	0.00	0	0
	Second	841.13		0.00	0.00	0	0
	Third	473.98		0.00	0.00	0	0
2	First	228.87	42.23	13.72	4.66	3,139	1,067
	Second	561.10	27.17	8.82	3.00	4,951	1,683
	Third	204.37	21.83	7.09	2.41	1,449	493
	Fourth	67.48	26.78	8.70	2.96	587	200
3	First	683.01	79.61	25.85	8.79	17,659	6,004
	Second	403.30	62.40	20.27	6.89	8,174	2,779
	Third			0.00	0.00	0	0
4	First	180.07	128.54	41.74	14.19	7,517	2,556
	Second	1,050.73	104.27	33.86	11.51	35,582	12,098
	Third			0.00	0.00	0	0
5	First	304.86	164.38	53.38	18.15	16,275	5,533
	Second	1,292.51	153.68	49.91	16.97	64,508	21,933
	Third			0.00	0.00	0	0
6	First			0.00	0.00	0	0
	Second	1,292.32	173.54	56.36	19.16	72,837	24,765
	Third			0.00	0.00	0	0
7	First	49.48	204.74	66.49	22.61	3,290	1,119
	Second	149.72	197.68	64.20	21.83	9,612	3,268
	Third	39.62	157.72	51.22	17.42	2,029	690
8	First			0.00	0.00	0	0
	Second	23.62	154.83	50.28	17.10	1,188	404
	Third			0.00	0.00	0	0
9	First	38.41	260.47	84.59	28.76	3,249	1,105
	Second	35.05	160.56	52.14	17.73	1,828	621
	Third			0.00	0.00	0	0
10	First			0.00	0.00	0	0
	Second	47.23	194.81	63.27	21.51	2,988	1,016
	Third			0.00	0.00	0	0
11	First			0.00	0.00	0	0
	Second			0.00	0.00	0	0
	Third			0.00	0.00	0	0
12	First			0.00	0.00	0	0
	Second			0.00	0.00	0	0
	Third			0.00	0.00	0	0
13	First	645.59	427.15	138.72	47.17	89,559	30,450
	Second			0.00	0.00	0	0
	Third			0.00	0.00	0	0
14	First	502.64	369.30	119.94	40.78	60,286	20,497
	Second			0.00	0.00	0	0
	Third			0.00	0.00	0	0
15	First	494.77	329.22	106.92	36.35	52,901	17,986
	Second			0.00	0.00	0	0
	Third			0.00	0.00	0	0
16	First			0.00	0.00	0	0
	Second			0.00	0.00	0	0
	Third			0.00	0.00	0	0
17	First			0.00	0.00	0	0
	Second			0.00	0.00	0	0
	Third			0.00	0.00	0	0
18	First			0.00	0.00	0	0
	Second			0.00	0.00	0	0
	Third			0.00	0.00	0	0
19	First			0.00	0.00	0	0
	Second			0.00	0.00	0	0
	Third			0.00	0.00	0	0
20	First			0.00	0.00	0	0
	Second			0.00	0.00	0	0
	Third			0.00	0.00	0	0

The first information provided by this sheet is the stratum, that is, the Eucalyptus Plantations – one single site class. The reason for choosing only one single stratum is due to the areas similarities in terms of soil and climate conditions. After the definition of the stratum is settled, there is the definition of plant species which is Advanced Clones. Even though Project 2569 has different clone species they all have similar densities, therefore, an average density was defined to preserve the accuracy of the Project calculations. The following figure summarizes the clone densities (for more information, please read the A/R-CDM Project 2569 PDD Reforestation as Renewable Source of Wood Supplies for Industrial Use in Brazil, Version: 03a, Section C.4 Step 2).

Parameter D_j , wood density, was monitored and the values got by 2018 inventory are as follows.

Table 10: Densities by clones

CLONE	Db (kg/m ³)
102	466
1528	500
1641	530
PL40	493
2486	498
2682	506
2769	508
3007	527
VCL	502
3011	538
3203	498
3281	488
3301	556
EXP	502
3334	543
3335	471
3336	466
3351	560
3367	537
3378	478
3486	465
3487	506
4328	552
4349	502
5426	519
6519	515
6562	473
CNI	502

Following the classification of each stand, with their respective basic wood densities, a weighted average of the densities was monitored resulting in a **499.65 Kg/m³** average basic density, a spreadsheet demonstrating this calculation will be sent to the DOE.

After the definition of the stratum and species, there are some sub-stratums defined according to the age class found during the field inventory data collecting. Furthermore, each Age Class is also divided to inform its Rotation. The first data to be inputted in the spreadsheet is the inventory date and year of the verification period, the date chosen will affect the date selected in the tCERs spreadsheet. After the date, there are two columns that need to be fed with information from the inventory system. The first one is the area in hectares for each sub-stratum and the second is the actual stand volume (m³) which is used to calculate the mean above-ground biomass.

According to the applicable methodology the *BEF* and *R_j* must be calculated considering specifications for each age class. To follow this guidance PP calculated the *BEF* and *R_j*, considering a weighted average approach according to the stem wood volume in each age class.

The project densities age class for stem wood, crown, above-ground biomass and roots are adjusted to the LADEIRA, 1999 publication figures by using interpolation method. and regression analyses. This is consistent with specific *BEF* and *R_j* to each age class. The results were different for both methods, so the PP used the most conservative values.

The updated values for *BEF* and *R_j* are 1.30 and 0.34 respectively.

After all information is provided, the monitoring tool TARAM version 2/PLANTAR uses several formulae to calculate the mean carbon stock above-ground and below-ground biomass and also the change in carbon stock of below and above-ground biomass. The descriptions of the formulae are provided below:

To calculate the Mean Carbon Stock in Above-ground Biomass, the following formulae are used:

$$MC_{AB,ijk,m} = \frac{\sum_{p=1}^{P_{ijk}} PC_{AB,ijk,plot,m}}{P_{ijk}}$$

According to the formulae numbered 18, 20, and 22 in the A/R-CDM PDD 2569, the following formula should be deducted and used to calculate the mean carbon stock in above-ground biomass:

$$MC_{AB,ijk,m} = V_{ijk} \bullet D_j \bullet BEF \bullet CF_j$$

Replacing the formula notations by the figures provided in **Tables 8** and **9** above and considering the volumes of all sub-strata:

$$MC_{AB,ijk,m} = (42.23 + 27.17 + 21.83 + 26.78 + 79.61 + 62.40 + 128.54 + 104.27 + 164.38 + 153.68 + 173.54 + 204.74 + 197.68 + 157.72 + 154.83 + 260.47 + 160.56 + 194.81 + 427.15 + 369.30 + 329.22) * 0.4996 * 1.30 * 0.5$$

$$MC_{AB,ijk,m} = 1,117.50 \text{ tC ha}$$

To calculate the Mean Carbon Stock in Below-ground Biomass the following formulae are used:

$$MC_{BB,ijk,m} = \frac{\sum_{p=1}^{P_{ijk}} PC_{BB,ijk,plot,m}}{P_{ijk}}$$

According to the formulae numbered 19, 21, and 23 in the A/R-CDM PDD 2569 version 3a, the following formula should be deducted and used to calculate the mean carbon stock in below-ground biomass:

$$MC_{BB,ijk,m} = V_{ijk} \bullet D_j \bullet BEF \bullet CF_j \bullet R_j$$

The below-ground biomass calculation is performed for second and third rotations considering the stand volume at the end of the first rotation once the roots are not removed at the end of the first rotation. The roots remain in the soil for coppicing at this stage, but are not considered in the calculations, for the sake of simplicity and conservativeness. Replacing the formula notations by the figures provided in **Tables 8** and **9** above:

$$MC_{BB,ijk,m} = (42.23 + 27.17 + 21.83 + 26.78 + 79.61 + 62.40 + 128.54 + 104.27 + 164.38 + 153.68 + 173.54 + 204.74 + 197.68 + 157.72 + 154.83 + 260.47 + 160.56 + 194.81 + 427.15 + 369.30 + 329.22) * 0.4996 * 1.30 * 0.5 * 0.34$$

$$MC_{BB,ijk,m} = 379.95 \text{ tC ha}$$

To calculate the Changes in Carbon Stock in Above-ground Biomass the following formula is used:

$$C_{AB,ijk,m} = A_{ijk,m} \bullet MC_{AB,ijk,m}$$

Replacing the formula notations by the figures and results provided in **Table 9** above and considering the areas of all sub-strata:

$$C_{AB,ijk,m} = (228.87 * 13.72) + (561.10 * 8.82) + (204.37 * 7.09) + (67.48 * 8.70) + (683.01 * 25.85) + (403.30 * 20.27) + (180.07 * 41.74) + (1,050.73 * 33.86) + (304.86 * 53.38) + (1,292.51 * 49.91) + (1,292.32 * 56.36) + (49.48 * 66.49) + (149.72 * 64.20) + (39.62 * 51.22) + (23.62 * 50.28) + (38.41 * 84.59) + (35.05 * 52.14) + (47.23 * 63.27) + (645.59 * 138.72) + (502.64 * 119.94) + (494.77 * 106.92)$$

$$C_{AB,ijk,m} = 459,607.18 \text{ tC}$$

To calculate the Changes in Carbon Stock in Below-ground Biomass the following formula is used:

$$C_{BB,ijk,m} = A_{ijk,m} \bullet MC_{BB,ijk,m}$$

Replacing the formula notations by the figures and results provided in **Table 9** above and considering the areas of all sub-strata:

$$C_{BB,ijk,m} = (228.87 * 4.66) + (561.10 * 3.00) + (204.37 * 2.41) + (67.48 * 2.96) + (683.01 * 8.79) + (403.30 * 6.89) + (180.07 * 14.19) + (1,050.73 * 11.51) + (304.86 * 18.15) + (1,292.51 * 16.97) + (1,292.32 * 19.16) + (49.48 * 22.61) + (149.72 * 21.83) + (39.62 * 17.42) + (23.62 * 17.10) + (38.41 * 28.76) + (35.05 * 17.73) + (47.23 * 21.51) + (645.59 * 47.17) + (502.64 * 40.78) + (494.77 * 36.35)$$

$$C_{BB,ijk,m} = 156,266.44 \text{ tC}$$

Project Emissions

Project emissions calculate emissions related to biomass loss and biomass burning. Emissions from fossil fuels consumption ($E_{FuelBurn,t}$) and nitrogen application ($N_2O_{direct-N_{fertilizer,t}}$) are not reported in this MR, according to the provisions of EB68 Annex 31 *Guidelines on application of specified versions of A/R CDM methodologies in verification of registered A/R CDM project activities*, version 01.1 and, therefore, are considered as zero.

After the calculation completion, the results are to be applied further in the spreadsheets to subtract it from the anthropogenic removals by the project sinks. In order to calculate GHG emissions, two spreadsheets are used, "GHG Monitoring" and "GHG Emissions". The "GHG Monitoring" comprises a very simple spreadsheet with only monitored data to be inserted into it, with no formulae whatsoever.

The columns of this spreadsheet are composed by eight different parameters which in turn are grouped into four main categories: Fuel Consumption, Biomass Loss, Biomass Burning and Nitrogen Application. The rows represent the project years. Due to the provisions of the abovementioned

guidelines, the columns regarding fuel consumption and nitrogen application were coloured in black, to highlight they are not reported in this MR.

All GHG emission parameters figures are to be stored only inside this sheet. “Biomass Loss” only contemplates the area of stratum that is used to calculate the CO₂ emissions related to the loss of existed biomass prior to the A/R Project. The emissions from loss of biomass in the site preparation and conversion of grassland are calculated. As a conservative assumption, all baseline stratum is identified as grassland in its peak and steady state, even though more than half of the baseline strata was identified as “degraded areas”.

“Biomass Burning” encompasses three parameters: annual area affected by accidental fire, average aboveground biomass and lastly, proportion of biomass burned. This spreadsheet registered the affected area in hectares and, on a conservative policy, considered that all of the affected area was burned. Finally, based on the age of the biomass burned, the amount of dry matter (tonnes) was estimated to calculate the related project emission.

Table 11: GHG monitoring spreadsheet

THE PLANTAR GROUP - REFORESTATION PROJECT

APPLIED METHODOLOGY:

AR-AM0005 Version 01 - Reforestation as Renewable Source of Wood Supplies for Industrial Use in Brazil - Project
Design Document - Version 3a 16/02/2009

According to EB68 Annex 31 Guidelines on application of specified versions of A/R CDM methodologies in verification of registered A/R CDM project activities, version 01.1, the parameters related to burning of fossil fuel and nitrous oxide from use of fertilizers are not required to be monitored (black cells), hence they are not reported in this tool.

GHG Emissions By Sources Monitoring Data

Year _t		Fuel consumption		Biomass loss	Biomass burning			Nitrogen application		
		Volume of diesel consumption CSP _{diesel, t}	Volume of gasoline consumption CSP _{gasoline, t}	Area of stratum, i A _i	Annual area affected A _{burn, ijk, t}	Average above-ground biomass B _{ijk, t}	Proportion of biomass burned PP _{ijk, t}	Synthetic fertilizer nitrogen applied	Organic fertilizer nitrogen applied	
Age	Year	litres	litres	ha	ha	t d. m. ha ⁻¹	dimension less	t	t	
1	2001	343,164		1,479.56				10.55		
2	2002	679,585		3,243.04				15.86		
3	2003	776,146		3,133.95				6.80		
4	2004	725,491		2,819.53	8.00	36.07	1.00	14.18		
5	2005	330,527		965.98	2.30	71.73	1.00	11.25		
6	2006	155,451	11,224		13.10	131.70	1.00	9.31		
7	2007	127,654	11,556		343.70	138.93	1.00	1.07		
8	2008	434,457						6.27		
9	2009	117,800	3,956		0.20	42.02	1.00	1.38		
10	2010	192,784	9,099		37.50	132.97	1.00	0.02		
11	2011									
12	2012									
13	2013				0.11	295.53	1.00			
14	2014				0.57	136.53	1.00			
15	2015									
16	2016									
17	2017				74.65	65.21	1.00			
18	2018				1.30	54.39	1.00			
19	2019									
20	2020									
21	2021									
22	2022									
23	2023									
24	2024									
25	2025									
26	2026									
27	2027									
28	2028									
29	2029									
30	2030									

The GHG Emissions spreadsheet is the counterpart of the GHG Monitoring spreadsheet; it follows the exact same principle, with an additional column - "GHG Emissions by source of GHG" -, which is the sum of the categories. The only difference is that, while the monitoring spreadsheet represents the monitored data of the GHG parameters, the emission spreadsheet, represents the formulae used to calculate the tonnes of CO₂ per year based on the monitored data.

Table 12: Calculations of the GHG emissions spreadsheet.

THE PLANTAR GROUP - REFORESTATION PROJECT

APPLIED METHODOLOGY: AR-AM0005 Version 01 - Reforestation as Renewable Source of Wood Supplies for Industrial Use in Brazil -
Project Design Document - Version 3a 16/02/2009

According to EB68 Annex 31 Guidelines on application of specified versions of A/R CDM methodologies in verification of registered A/R CDM project activities, version 01.1, the parameters related to burning of fossil fuel and nitrous oxide from use of fertilizers are not required to be monitored (black cells), hence they are not reported in this tool.

GHG Emissions By Sources

Year _t		CO2 emissions from burning of fossil fuels E _{FuelBurn,t}		Emissions from loss of biomass E _{BiomassLoss,t}		Emissions from biomass burning E _{non-CO2, Biomass Burn, t}		Nitrous oxide emissions from nitrogen N ₂ O direct-N fertilizer, t		GHG emissions by sources GHG _{E, t}	
		t CO _{2-e} yr ⁻¹ in year t		t CO _{2-e} yr ⁻¹ in year t		t CO _{2-e} yr ⁻¹ in year t		t CO _{2-e} yr ⁻¹ in year t		t CO _{2-e} yr ⁻¹ in year t	
Age	Year	annual	cumulative	annual	cumulative	annual	cumulative	annual	cumulative	annual	cumulative
1	2001	971	971	16,221	16,221	-	-	58	58	17,250	17,250
2	2002	1,923	2,894	35,555	51,775	-	-	87	145	37,565	54,815
3	2003	2,196	5,091	34,359	86,134	-	-	37	182	36,592	91,407
4	2004	2,053	7,144	30,911	117,045	27	27	78	260	33,069	124,476
5	2005	935	8,079	10,590	127,636	15	42	62	321	11,603	136,079
6	2006	469	8,549	-	127,636	160	202	51	372	680	136,759
7	2007	392	8,941	-	127,636	4,418	4,620	6	378	4,816	141,574
8	2008	1,230	10,170	-	127,636	-	4,620	34	413	1,264	142,838
9	2009	344	10,514	-	127,636	1	4,621	8	420	352	143,190
10	2010	570	11,083	-	127,636	461	5,082	0	420	1,031	144,221
11	2011			-	127,636					-	127,636
12	2012			-	127,636	-	-			-	127,636
13	2013			-	127,636	4	4			4	127,639
14	2014			-	127,636	8	12			8	127,648
15	2015			-	127,636	-	12			-	127,648
16	2016			-	127,636	-	12			-	127,648
17	2017			-	127,636	527	539			527	128,174
18	2018			-	127,636	8	546			8	128,182
19	2019			-	-	-	-			-	-
20	2020			-	-	-	-			-	-
21	2021			-	-	-	-			-	-
22	2022			-	-	-	-			-	-
23	2023			-	-	-	-			-	-
24	2024			-	-	-	-			-	-
25	2025			-	-	-	-			-	-
26	2026			-	-	-	-			-	-
27	2027			-	-	-	-			-	-
28	2028			-	-	-	-			-	-
29	2029			-	-	-	-			-	-
30	2030			-	-	-	-			-	-

To calculate the Emission from Loss of Biomass the following formula is used:

$$E_{BiomassLoss, s, t} = \sum_{i=1}^I A_i \cdot B_{w, i} \cdot (1 + R_G) \cdot CF \cdot \frac{44}{12}$$

Replacing the formula notations by the monitored figures provided in **Tables 11** and **12** above:

$$E_{BiomassLoss,t} = 11,642.06^6 * 2.3 * (1 + 1.6) * 0.5 * \frac{44}{12}$$

$$E_{BiomassLoss,t} = 127,636 \text{ tCO}_2\text{e}$$

The emissions from Biomass Burning are calculated by using the following formulae:

$$E_{Non-CO_2, Biomass Burn, t} = E_{Biomass Burn, N_2O, t} + E_{Biomass Burn, CH_4, t}$$

$$E_{Biomass Burn, N_2O, t} = E_{Biomass Burn, C, t} \cdot N/C \text{ ratio} \cdot EF_{N_2O} \cdot GWP_{N_2O} \cdot \frac{44}{28}$$

$$E_{Biomass Burn, CH_4, t} = E_{Biomass Burn, C, t} \cdot EF_{CH_4} \cdot GWP_{CH_4} \cdot \frac{16}{12}$$

$$E_{Biomass Burn, C, t} = \sum_{i=1}^I \sum_{j=1}^J \sum_{k=1}^K A_{burn,ijk,t} \cdot B_{ijk,t} \cdot PP_{ijk,t} \cdot CE \cdot CF$$

Replacing the formula notations by the monitored figures provided in **Tables 11** and **12** above:

$$E_{Biomass Burn, C, t} = (0.11 * 295.53 + 0.57 * 136.53 + 74.65 * 65.21 + 1.30 * 54.39) * 1 * 0.5 * 0.5$$

$$E_{Biomass Burn, C, t} = 1,262.23 \text{ tC}$$

$$E_{Biomass Burn, CH_4, t} = 1,262.23 * 0.012 * 25 * \frac{16}{12}$$

$$E_{Biomass Burn, CH_4, t} = 504.89 \text{ t CO}_2\text{e}$$

⁶ This value is the total project area implemented, measured in the first verification period, meaning that the loss of biomass is fixed for the future verification periods. Therefore, from the second verification on, the value of loss of biomass is 127,636 tCO₂e.

$$E_{BiomassBurn,N_2O,t} = 1,262.23 * 0.01 * 0.007 * 298 * \frac{44}{28}$$

$$E_{BiomassBurn,N_2O,t} = \mathbf{41.38 \text{ t CO}_2\text{e}}$$

$$E_{Non-CO_2,BiomassBurn,N_2O,t} = 504.89 + 41.38$$

$$E_{Non-CO_2,BiomassBurn,N_2O,t} = \mathbf{546.27 \text{ tCO}_2\text{e}}$$

The total GHG emissions by sources are calculated by using the following formula:

$$GHG_{E,t} = E_{BiomassLoss,t} + E_{Non-CO_2,BiomassBurn,t}$$

Replacing the formula notations by the results from the above formulae:

$$GHG_{E,t} = 127,636 + 546$$

$$GHG_{E,t} = \mathbf{128,182 \text{ tCO}_2\text{e}}$$

E.3. Calculation of leakage emissions

>>

The project activity leakage was assumed to occur as a result of the increased emissions measurable and attributable to the project activity from fossil fuel combustion (mobile combustion) outside the project boundary due to transportation of seedlings, fertilizers, harvested wood, labor force and staff outside the project boundaries.

However, according to EB68 Annex 31 *Guidelines on application of specified versions of A/R CDM methodologies in verification of registered A/R CDM project activities*, version 01.1, the parameters related to fuel consumption are not required to be monitored. Therefore, leakage emissions are not reported under this MR.

E.4. Calculation of emission reductions or net anthropogenic removals

>>

	Baseline GHG emissions or baseline net GHG removals (t CO ₂ e)	Project GHG emissions or actual net GHG removals (t CO ₂ e)	Leakage GHG emissions (t CO ₂ e)	GHG emission reductions or net anthropogenic GHG removals (t CO ₂ e)		
				Before 01/01/2013	From 01/01/2013	Total amount
Total	454,514	2,130,021	0	0	1,675,507	1,675,507

E.5. Comparison of emission reductions or net anthropogenic removals achieved with estimates in the registered PDD

>>

Amount achieved during this monitoring period (t CO ₂ e)	Amount estimated ex ante for this monitoring period in the PDD (t CO ₂ e)
1,675,507	929,161

E.5.1. Explanation of calculation of “amount estimated ex ante for this monitoring period in the PDD”

>>

The amount of net anthropogenic GHG removals by sinks estimated ex ante considered the implementation schedule, a regular planting and harvesting pace (approximate 7-year rotations), as well as technical data, such as productivity parameters, as described in PDD version 3a. Therefore, ex ante estimates reflected the expected results in light of such theoretical/hypothetical parameters and assumptions.

E.6. Remarks on increase in achieved emission reductions

>> N/A

E.7. Remarks on scale of small-scale project activity

>> N/A

Annex 1

List of stands within the A/R-CDM Project 2569 boundary, georeference information and maps

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG03	Buritis	01	41.52	12/5/2000	01	41.52	7934015	492554	1	40.57	492550	7934010	Mapping review	1,356.25
MG03	Buritis	01A	12.93	12/5/2000	01A	12.93	7934223	492268	1A	13.71	492272	7934209	Mapping review	1,237.50
MG03	Buritis	02	51.75	11/28/2000	02	51.75	7934231	493013	2	40.89	493040	7934179	Stand redivision/Mapping review	No plantings
									2A	2.60	492920	7933861	Stand redivision/Mapping review	1,131.22
									2B	7.18	492851	7934627	Stand redivision/Mapping review	1,111.11
									2C	1.77	493299	7934299	Stand redivision/Mapping review	1,111.11
MG03	Buritis	03	48.90	3/14/2001	03	48.90	7933676	493933	3	48.13	493930	7933663	Mapping review	1,142.86
MG03	Buritis	04	46.18	3/21/2001	04	46.18	7933260	494159	4	46.66	494168	7933255	Mapping review	1,020.00
MG03	Buritis	05	27.09	1/8/2001	05	26.25	7932918	493502	5	24.05	493484	7932953	Mapping review	No plantings
					05A	27.03	7933481	493269	5A	26.21	493267	7933479	Mapping review	1,041.33
MG03	Buritis	06	57.74	11/10/2000	06	57.74	7933097	492928	6	56.90	492926	7933091	Mapping review	1,079.17
MG03	Buritis	07	50.74	11/12/2000	07	50.74	7932874	492318	7	51.96	492320	7932863	Stand redivision/Mapping review	1,120.00
MG03	Buritis	07A	2.32	11/12/2000	07A	2.32	7933226	492090	7A	2.78	492089	7933212	Stand redivision/Mapping review	1,098.90
									7B	0.06	491991	7932690	Stand redivision/Mapping review	1,098.90
MG03	Buritis	08	22.26	11/16/2000	08	22.26	7932023	492159	8	22.58	492168	7932012	Mapping review	1,034.50
MG03	Buritis	08A	3.92	11/16/2000	08A	3.92	7932272	492111	8A	3.80	492131	7932268	Mapping review	1,037.50
MG03	Buritis	09	59.36	12/18/2000	09	59.36	7931933	493587	9	50.98	493595	7931882	Mapping review	1,075.00
MG03	Buritis	10	60.49	1/12/2001	10	60.49	7931381	493808	10	62.27	493812	7931377	Mapping review	1,098.90
MG03	Buritis	11	38.00	12/17/2001	11	38.00	7932023	491381	11	38.80	491378	7932019	Mapping review	No plantings

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG03	Buritis	12	48.98	1/31/2002	12	48.98	7932274	490480	12	22.71	490534	7932196	Stand redivision/Mapping review	1,098.90
									12A	21.33	490384	7932408	Stand redivision/Mapping review	1,111.11
									12B	5.96	489991	7932329	Stand redivision/Mapping review	1,098.90
MG03	Buritis	13	18.96	12/27/2001	13	18.96	7931611	490484	13	18.05	490472	7931607	Mapping review	1,125.00
MG03	Buritis	14	30.26	2/28/2002	14	30.26	7931357	490196	14	30.36	490199	7931351	Mapping review	No plantings
MG03	Buritis	15	59.99	4/6/2001	15	59.99	7930835	490205	15	61.37	490210	7930830	Mapping review	1,212.50
MG03	Buritis	16	63.39	4/15/2001	16	63.39	7930431	489284	16	64.56	489282	7930420	Mapping review	1,054.17
MG03	Buritis	17	46.80	2/5/2002	17	46.80	7931126	489454	17	46.73	489453	7931122	Mapping review	952.60
MG03	Buritis	18	16.51	2/13/2002	18	16.51	7931675	489012	18	16.88	489015	7931673	Mapping review	1,131.22
MG03	Buritis	19	24.93	2/15/2002	19	24.93	7932138	489017	19	24.58	489018	7932135	Mapping review	1,131.22
MG03	Buritis	20	32.00	2/20/2002	20	32.00	7931756	489556	20	32.27	489556	7931750	Mapping review	1,111.11
MG03	Buritis	21	18.57	1/11/2002	21	18.57	7931859	490001	21	9.54	490093	7931860	Stand redivision/Mapping review	1,098.90
									21A	9.18	489904	7931844	Stand redivision/Mapping review	1,098.90
MG03	Buritis	22	30.65	12/26/2001	22	30.65	7932330	489410	22	30.18	489412	7932323	Mapping review	1,098.90
MG03	Buritis	23	36.76	1/17/2002	23	31.03	7932600	489880	23	30.16	489877	7932601	Stand redivision/Mapping review	1,111.11
									23A	0.60	490232	7932513	Stand redivision/Mapping review	1,111.11
MG03	Buritis	24	20.68	12/24/2001	24	20.68	7932845	490587	24	21.66	490588	7932836	Mapping review	1,098.90
MG03	Buritis	25	52.67	11/21/2001	25	52.67	7932499	491437	25A	16.61	491071	7932533	Stand redivision/Mapping review	1,111.11
									25B	36.87	491603	7932470	Stand redivision/Mapping review	1,098.90
MG03	Buritis	26	52.11	11/15/2001	26	52.11	7933013	491501	26	52.91	491500	7933005	Mapping review	No plantings
MG03	Buritis	27	37.06	2/26/2002	27	37.06	7932880	488813	27	36.66	488815	7932869	Mapping review	1,098.90
MG03	Buritis	28	27.62	5/3/2001	28	27.62	7933136	489940	28	5.51	490012	7932920	Stand redivision/Mapping review	1,075.00

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
									28A	14.04	489956	7933088	Stand redivision/Mapping review	No plantings
									28B	7.96	489882	7933307	Stand redivision/Mapping review	No plantings
MG03	Buritis	29	30.47	5/5/2001	29	30.47	7933282	490464	29	31.11	490469	7933268	Mapping review	1,098.90
MG03	Buritis	30	34.65	5/12/2001	30	34.65	7933447	491075	30	34.93	491079	7933439	Mapping review	1,082.67
MG03	Buritis	30A	19.92	5/12/2001	30A	19.92	7933795	490632	30A	15.10	490619	7933737	Mapping review	1,107.00
MG03	Buritis	31	45.26	5/10/2001	31	45.26	7933687	491745	31	45.63	491749	7933680	Mapping review	No plantings
MG03	Buritis	32	44.77	5/16/2001	32	44.77	7934299	491796	32	44.60	491807	7934294	Mapping review	1,098.90
MG03	Buritis	33	33.95	5/24/2001	33	33.95	7934336	491049	33	35.30	491036	7934329	Mapping review	1,018.75
MG03	Buritis	34	35.09	5/30/2001	34	35.09	7934739	490620	34	32.43	490626	7934718	Mapping review	1,075.00
MG03	Buritis	35	27.97	7/10/2001	35	27.97	7935312	490817	35A	20.14	490912	7935276	Stand redivision/Mapping review	1,098.90
									35B	9.34	490588	7935364	Stand redivision/Mapping review	No plantings
MG03	Buritis	36	22.41	10/25/2001	36	22.41	7935623	491142	36	23.15	491141	7935617	Mapping review	No plantings
MG03	Buritis	37	52.79	7/20/2001	37	52.79	7935034	491495	37	35.05	491570	7934943	Stand redivision/Mapping review	1,875.33
									37A	16.62	491319	7935189	Stand redivision/Mapping review	No plantings
MG03	Buritis	38	37.36	6/22/2001	38	37.36	7935197	491966	38	23.74	492026	7935062	Stand redivision/Mapping review	No plantings
									38A	13.12	491890	7935353	Stand redivision/Mapping review	1,075.00
									38B	2.24	491774	7935470	Stand redivision/Mapping review	No plantings
MG03	Buritis	39	16.10	10/30/2001	39	16.10	7935947	491785	39	13.89	491788	7935962	Mapping review	No plantings
MG03	Buritis	39A	12.68	10/30/2001	39A	12.68	7935774	492321	39A	6.45	492413	7935791	Stand redivision/Mapping review	No plantings
									39C	4.52	492154	7935720	Stand redivision/Mapping review	No plantings
MG03	Buritis	40	28.87	11/1/2001	40	28.87	7936236	491257	40	28.53	491258	7936228	Mapping review	1,111.11
MG03	Buritis	41	39.59	12/29/2001	41	39.59	7936709	490721	41	39.34	490724	7936699	Mapping review	No plantings

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG03	Buritis	42	30.51	11/8/2001	42	30.51	7936096	490769	42	30.08	490772	7936089	Mapping review	992.38
MG03	Buritis	43	32.27	12/20/2001	43	32.27	7936531	490162	43	32.93	490167	7936523	Mapping review	No plantings
MG03	Buritis	44	29.55	11/14/2001	44	29.55	7935862	490299	44	28.81	490301	7935857	Mapping review	No plantings
MG03	Buritis	45	29.85	11/1/2001	45	29.85	7936368	489643	45	29.19	489654	7936362	Mapping review	1,098.90
MG03	Buritis	46	38.91	3/19/2002	46	38.91	7936984	489136	46	38.89	489141	7936975	Mapping review	1,012.50
MG03	Buritis	46A	4.83	3/19/2002	46A	4.83	7937174	488833	46A	5.46	488845	7937186	Mapping review	No plantings
MG03	Buritis	47	15.90	3/19/2002	47	15.90	7937680	489469	47	16.23	489464	7937678	Mapping review	1,098.90
MG03	Buritis	48	40.07	3/12/2002	48	40.07	7937126	489564	48	40.15	489566	7937117	Mapping review	No plantings
MG03	Buritis	49	28.22	3/25/2002	49	28.22	7937106	490200	49	28.87	490205	7937098	Mapping review	1,098.90
MG03	Buritis	50	37.97	2/20/2002	50	37.97	7935693	493192	50	38.41	493188	7935691	Stand redivision/Mapping review	974.20
									50A	2.26	492617	7935674	Stand redivision/Mapping review	1,098.90
MG03	Buritis	51	19.06	2/22/2002	51	19.02	7936082	493267	51	17.15	493271	7936066	Mapping review	1,282.05
MG03	Jacare	01	27.83	2/20/2003	01	27.83	7935150	497235	1	27.44	497226	7935148	Mapping review	1,089.67
MG03	Jacare	02	21.49	4/15/2003	02	21.49	7935265	496878	2	21.47	496872	7935260	Mapping review	1,066.00
MG03	Jacare	03	36.59	2/18/2003	03	36.59	7935808	497418	3	36.86	497408	7935800	Mapping review	792.50
MG03	Jacare	04	37.19	4/10/2003	04	37.19	7935821	496856	4	36.38	496845	7935812	Mapping review	843.75
MG03	Jacare	05	33.91	1/22/2003	05	33.91	7936362	497684	5	33.74	497677	7936362	Mapping review	1,007.33
MG03	Jacare	06	21.15	3/19/2003	06	21.15	7936329	496907	6	20.92	496905	7936327	Mapping review	765.00
MG03	Jacare	07	5.26	4/8/2003	07	5.26	7936696	497538	7	5.24	497529	7936690	Mapping review	762.50
MG03	Jacare	08	0.78	3/14/2003	08	0.78	7936709	497313	8	0.85	497299	7936702	Mapping review	1,012.50
MG03	Jacare	09	15.49	4/7/2003	09	15.49	7936652	496881	9	16.31	496871	7936648	Mapping review	No plantings
MG03	Jacare	10	39.84	6/4/2003	10	39.45	7937156	496849	10	36.36	496820	7937149	Stand redivision/Mapping review	1,056.25

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
									10A	0.57	497265	7936937	Stand redivision/Mapping review	1,075.00
MG03	Jacare	11	28.86	12/31/2002	11	28.86	7937072	496310	11	27.93	496312	7937060	Mapping review	1,064.67
MG03	Jacare	12	34.43	7/18/2003	12	34.43	7937744	496561	12	33.28	496555	7937731	Mapping review	1,016.67
MG03	Jacare	13	37.29	4/23/2003	13	37.29	7937701	495947	13	37.17	495938	7937689	Mapping review	1,087.50
MG03	Jacare	14	18.52	12/30/2002	14	18.52	7938241	496459	14	18.27	496451	7938231	Mapping review	1,076.50
MG03	Jacare	15	23.61	12/30/2002	15	23.61	7938238	495976	15	23.29	495971	7938227	Mapping review	1,050.00
MG03	Jacare	16	31.95	12/29/2002	16	31.95	7938730	496236	16	31.81	496233	7938721	Mapping review	1,058.33
MG03	Jacare	17	35.01	12/29/2002	17	35.01	7939178	496278	17	13.48	496526	7939115	Stand redivision/Mapping review	1,098.90
									17A	20.43	496095	7939206	Stand redivision/Mapping review	1,062.50
MG03	Jacare	18	16.00	12/28/2002	18	16.00	7939585	496266	18	15.66	496262	7939578	Mapping review	1,098.90
MG03	Jacare	19	33.48	12/27/2002	19	33.48	7939632	496788	19	33.20	496782	7939626	Mapping review	No plantings
MG03	Jacare	20	16.30	12/28/2002	20	16.36	7940019	496468	20	17.15	496461	7940008	Stand redivision/Mapping review	1,000.00
					20A	0.60	7940019	496468					Stand redivision/Mapping review	No plantings
MG03	Jacare	21	13.90	12/23/2002	21	13.90	7939902	497247	21	13.73	497242	7939895	Mapping review	No plantings
MG03	Jacare	22	18.70	12/26/2002	22	18.70	7940183	497067	22	18.61	497065	7940176	Mapping review	1,084.50
MG03	Jacare	23	24.74	12/27/2002	23	24.74	7940436	496657	23	24.46	496658	7940429	Mapping review	1,018.00
MG03	Jacare	24	22.43	12/28/2002	24	22.43	7940688	497030	24	22.74	497025	7940680	Mapping review	940.00
MG03	Jacare	25	11.63	12/21/2002	25	11.63	7940097	497539	25	11.40	497536	7940094	Mapping review	1,070.50
MG03	Jacare	26	15.12	12/21/2002	26	15.12	7940518	497512	26	15.02	497506	7940507	Mapping review	1,218.50
MG03	Jacare	27	19.99	5/21/2003	27	19.99	7940946	497444	27	19.35	497439	7940933	Mapping review	1,098.90
MG03	Jacare	28	28.14	5/26/2003	28	28.14	7940489	497966	28	27.30	497961	7940483	Mapping review	No plantings
MG03	Jacare	29	22.54	6/23/2003	29	22.54	7940978	497872					Stand redivision/Mapping review	No plantings

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
									29D	22.04	497864	7940963	Stand redivision/Mapping review	No plantings
MG03	Jacare	30	18.16	5/16/2003	30	18.16	7941514	497816	30	17.91	497811	7941509	Mapping review	1,062.50
MG03	Jacare	31	29.06	6/11/2003	31	29.06	7940878	498404	31	28.53	498398	7940868	Mapping review	1,046.00
MG03	Jacare	32	26.47	6/12/2003	32	26.47	7941421	498341	32	26.85	498333	7941400	Mapping review	1,009.67
MG03	Jacare	33	35.13	6/17/2003	33	35.13	7941929	498256	33	26.72	498219	7941974	Stand redivision/Mapping review	1,098.90
									33A	3.23	498289	7941754	Stand redivision/Mapping review	962.50
									33B	3.56	498351	7941721	Stand redivision/Mapping review	1,098.90
									33C	1.41	498429	7941693	Stand redivision/Mapping review	1,098.90
MG03	Jacare	34	23.81	7/8/2003	34	23.82	7941225	498951	34	23.71	498949	7941223	Mapping review	No plantings
MG03	Jacare	35	22.31	7/11/2003	35	22.31	7941687	498867	35	22.54	498865	7941682	Mapping review	1,568.00
MG03	Jacare	36	20.96	7/24/2003	36	20.96	7942174	498784	36	21.57	498780	7942170	Mapping review	1,080.50
MG03	Jacare	37	24.40	2/11/2003	37	24.40	7936186	498303	37	24.93	498280	7936165	Mapping review	980.50
MG03	Jacare	38	31.17	2/14/2003	38	31.17	7935374	498019	38	30.66	498000	7935363	Mapping review	1,158.33
MG03	Jacare	39	18.26	2/20/2003	39	18.26	7934670	497837	39	19.65	497832	7934642	Mapping review	1,059.50
MG03	Jacare	40	23.83	3/7/2003	40	23.83	7935132	498289	40	23.69	498275	7935127	Mapping review	1,151.00
MG03	Jacare	41	33.83	2/24/2003	41	33.83	7936228	498668	41	33.66	498650	7936215	Mapping review	814.33
MG03	Jacare	42	19.32	2/28/2003	42	19.32	7935711	498919	42	19.80	498903	7935690	Mapping review	1,087.50
MG03	Jacare	43	35.51	2/28/2003	43	35.51	7936391	499128	43	34.84	499112	7936374	Mapping review	843.33
MG03	Jacare	44	30.86	3/7/2003	44	30.86	7935901	499650	44	31.93	499630	7935888	Mapping review	1,208.33
MG03	Jacare	45	31.91	3/21/2003	45	31.91	7936492	499579	45	31.49	499563	7936487	Mapping review	803.33
MG03	Jacare	46	11.70	3/11/2003	46	11.70	7935840	500305	46	13.20	500298	7935838	Mapping review	1,050.00
MG03	Jacare	47	33.20	4/4/2003	47	33.20	7936565	500029	47	33.91	500021	7936557	Mapping review	883.33

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG03	Jacare	48	2.35	3/12/2003	48	2.35	7937025	499983	48	3.20	499966	7937011	Mapping review	1,192.00
MG03	Jacare	49	45.92	10/9/2003	49	45.92	7937274	499668	49	45.93	499660	7937272	Mapping review	1,098.90
MG03	Jacare	50	1.48	10/10/2003	50	1.48	7936738	498731	50	1.69	498718	7936731	Mapping review	1,195.50
MG03	Jacare	51	23.85	10/10/2003	51	23.85	7937086	498914	51	24.62	498891	7937075	Mapping review	1,050.00
MG03	Jacare	52	27.28	5/13/2003	52	27.28	7937131	497794	52	26.02	497784	7937126	Mapping review	No plantings
MG03	Jacare	53	20.61	3/28/2003	53	20.61	7937149	497407	53	19.68	497399	7937134	Mapping review	1,632.65
MG03	Jacare	54	47.28	9/24/2003	54	47.28	7937548	498645	54	45.33	498636	7937529	Mapping review	1,040.20
MG03	Jacare	55	30.68	10/15/2003	55	30.68	7937704	499566	55	30.51	499551	7937696	Mapping review	1,013.00
MG03	Jacare	56	38.76	9/13/2003	56	38.76	7938221	499577	56	37.96	499569	7938215	Mapping review	1,153.25
MG03	Jacare	57	32.69	9/18/2003	57	32.72	7937956	498586	57	30.21	498553	7937915	Mapping review	1,075.00
MG03	Jacare	58	11.79	8/29/2003	58	11.79	7938306	498399	58	11.40	498381	7938303	Mapping review	1,069.50
MG03	Jacare	59	7.82	7/25/2003	59	7.82	7938646	498621	59	8.49	498606	7938632	Mapping review	1,062.50
MG03	Jacare	60	19.09	9/2/2003	60	19.09	7938369	498893	60	20.06	498879	7938349	Mapping review	1,222.00
MG03	Jacare	61	16.86	9/3/2003	61	16.86	7938404	499219	61	16.62	499203	7938394	Mapping review	986.00
MG03	Jacare	62	26.78	9/10/2003	62	26.78	7938879	499503	62	26.67	499498	7938888	Mapping review	1,098.90
MG03	Jacare	63	26.61	8/6/2003	63	26.61	7939621	499416	63	22.46	499421	7939584	Mapping review	1,040.00
MG03	Jacare	64	28.82	8/11/2003	64	28.82	7939681	499173	64	27.98	499153	7939660	Mapping review	1,056.00
MG03	Jacare	65	29.18	7/30/2003	65	29.18	7940680	499149	65	30.90	499135	7940670	Mapping review	1,098.90
MG03	Jacare	66	30.41	7/2/2003	66	30.41	7940364	498738	66	29.26	498713	7940355	Mapping review	1,481.00
MG03	Jacare	67	36.33	8/16/2003	67	36.33	7939636	498798	67	37.18	498782	7939629	Mapping review	1,032.50
MG03	Jacare	68	34.85	7/2/2003	68	34.85	7940069	498302	68	33.96	498284	7940059	Mapping review	1,507.00
MG03	Jacare	69	26.36	8/22/2003	69	26.36	7939353	498276	69	26.79	498255	7939338	Mapping review	1,075.00

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG03	Jacare	70	24.52	5/29/2003	70	24.52	7939765	497975	70	24.27	497956	7939755	Mapping review	885.50
MG03	Jacare	71	21.63	5/30/2003	71	21.66	7939532	497677	71	21.57	497663	7939526	Mapping review	816.33
MG03	Jacare	72	35.34	8/30/2003	72	35.34	7938883	498034	72	34.30	498017	7938872	Mapping review	1,117.00
MG03	Jacare	73	40.70	5/21/2003	73	40.70	7939219	497353	73	39.72	497337	7939217	Mapping review	1,015.00
MG03	Jacare	74	14.84	4/26/2003	74	14.84	7938989	496841	74	14.53	496820	7938973	Mapping review	1,000.00
MG03	Jacare	75	20.74	4/28/2003	75	14.96	7938373	496861	75	14.22	496853	7938349	Stand redivision/Mapping review	1,098.90
									75A	0.38	496842	7938770	Stand redivision/Mapping review	1,098.90
									75B	0.38	496594	7938479	Stand redivision/Mapping review	1,098.90
MG03	Jacare	76	17.78	10/31/2003	76	17.88	7938556	497576	76	18.51	497566	7938554	Mapping review	1,107.50
MG03	Jacare	77	26.97	10/18/2003	77	26.97	7938304	497949	77	26.48	497933	7938295	Mapping review	740.33
MG03	Jacare	78	38.47	10/24/2003	78	38.47	7937811	497136	78	36.40	497128	7937824	Mapping review	1,178.75
MG03	Riachao	01	26.57	4/15/2002	01	26.57	7936193	492024	1	26.97	492032	7936195	Mapping review	1,098.90
MG03	Riachao	02	31.61	4/1/2002	02	31.61	7936426	492545	2	30.13	492541	7936422	Mapping review	1,117.33
MG03	Riachao	03	23.87	4/8/2002	03	23.87	7936686	492131	3	23.07	492136	7936681	Mapping review	1,037.50
MG03	Riachao	04	28.13	4/13/2002	04	28.13	7936762	491343	4	30.72	491355	7936762	Mapping review	1,021.18
MG03	Riachao	05	12.33	4/11/2002	05	12.33	7936895	491672	5	10.31	491699	7936890	Mapping review	No plantings
MG03	Riachao	06	43.89	4/23/2002	06	43.89	7937133	492746	6	42.56	492736	7937126	Mapping review	1,037.50
MG03	Riachao	07	28.68	4/25/2002	07	26.25	7937277	492011	7	24.18	491999	7937268	Stand redivision/Mapping review	1,049.52
					07A	6.08	7937216	492338	7A	3.81	492359	7937197	Stand redivision/Mapping review	No plantings
									7B	3.87	492289	7937210	Stand redivision/Mapping review	1,111.11
MG03	Riachao	08	26.36	4/15/2002	08	26.36	7937512	491514	8	25.36	491514	7937506	Mapping review	1,008.33
MG03	Riachao	09	26.55	5/17/2002	09	26.55	7937585	491050	9	25.03	491051	7937572	Mapping review	966.67

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG03	Riachao	10	42.96	5/24/2002	10	42.96	7938246	490933	10	23.89	490984	7938050	Stand redivision/Mapping review	1,112.50
									10A	15.75	490850	7938484	Stand redivision/Mapping review	No plantings
									10B	3.11	491013	7938396	Stand redivision/Mapping review	962.50
MG03	Riachao	11	45.25	5/30/2002	11	18.77	7938096	491451	11	18.64	491451	7938085	Mapping review	No plantings
					11A	26.14	7938596	491313	11A	25.84	491313	7938583	Mapping review	1,098.90
MG03	Riachao	12	28.83	6/30/2002	12	22.39	7938709	491843	12	21.53	491849	7938694	Mapping review	1,282.05
					12A	6.24	7939112	491705	12A	6.84	491711	7939090	Mapping review	1,098.90
MG03	Riachao	13	28.61	8/9/2002	13	28.61	7938287	492082	13	28.74	492085	7938275	Mapping review	1,108.33
MG03	Riachao	14	45.76	5/22/2002	14	45.76	7937805	492082	14	45.70	492086	7937794	Mapping review	1,282.05
MG03	Riachao	15	40.62	5/15/2002	15	40.62	7937711	492892	15	39.49	492881	7937701	Mapping review	1,025.00
MG03	Riachao	16	66.43	9/4/2002	16	50.89	7938277	492838	16	48.28	492844	7938257	Mapping review	1,050.00
					16A	14.96	7938705	492432	16A	16.32	492444	7938682	Mapping review	1,098.90
MG03	Riachao	17	26.45	7/30/2002	17	26.45	7939060	492146	17	26.52	492145	7939045	Mapping review	1,098.90
MG03	Riachao	18	34.63	6/17/2002	18	34.63	7939274	492741	18	34.93	492738	7939264	Mapping review	1,250.00
MG03	Riachao	19	26.29	6/26/2002	19	25.72	7938948	493056	19	24.54	493053	7938947	Mapping review	1,098.90
MG03	Riachao	20	38.41	6/12/2002	20	31.47	7938604	493394	20	31.82	493397	7938595	Mapping review	1,062.50
					20A	2.55	7939030	493338	20A	2.20	493331	7939027	Stand redivision/Mapping review	1,098.90
					20B	0.93	7938139	493432	20B	0.77	493435	7938118	Stand redivision/Mapping review	1,098.90
									20C	0.41	493066	7938482	Stand redivision/Mapping review	No plantings
MG03	Riachao	21	46.22	8/21/2002	21	46.22	7939545	493470	21	46.54	493468	7939535	Mapping review	1,098.90
MG03	Riachao	22	33.93	11/1/2002	22	33.93	7940246	492882	22	32.62	492869	7940235	Mapping review	1,200.00
MG03	Riachao	23	36.01	11/2/2002	23	36.01	7940780	492731	23	34.80	492720	7940767	Mapping review	1,100.00

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG03	Riachao	24	24.54	11/4/2002	24	24.54	7940595	492280	24	24.29	492282	7940576	Mapping review	1,150.00
MG03	Riachao	25	35.96	10/29/2002	25	35.96	7940002	492133	25	34.86	492127	7939994	Mapping review	1,033.33
MG03	Riachao	26	29.88	10/5/2002	26	29.88	7940361	491715	26	29.52	491714	7940346	Mapping review	No plantings
MG03	Riachao	27	43.05	10/24/2002	27	43.05	7939805	491463	27A	37.48	491468	7939765	Stand redivision/Mapping review	No plantings
									27B	4.45	491466	7940064	Stand redivision/Mapping review	1,111.11
MG03	Riachao	28	3.42	10/21/2002	28	3.42	7939427	491067	28	3.38	491069	7939417	Mapping review	No plantings
MG03	Riachao	29	16.84	10/19/2002	29	16.84	7939766	490913	29	16.90	490914	7939755	Mapping review	No plantings
MG03	Riachao	30	7.61	10/17/2002	30	7.61	7940251	490690	30	7.67	490692	7940242	Mapping review	No plantings
MG03	Riachao	31	35.12	10/9/2002	31	35.12	7940245	490179	31	34.87	490182	7940229	Mapping review	1,006.25
MG03	Riachao	32	32.70	10/9/2002	32	32.70	7939743	490362	32	32.21	490355	7939728	Mapping review	No plantings
MG03	Riachao	33	29.60	9/28/2002	33	29.60	7939259	490396	33	16.37	490503	7939390	Stand redivision/Mapping review	1,025.00
									33A	13.20	490284	7939082	Stand redivision/Mapping review	No plantings
MG03	Riachao	34	7.23	9/18/2002	34	7.23	7938900	490304	34	3.88	490045	7938770	Stand redivision/Mapping review	1,098.90
									34A	2.73	490668	7939064	Stand redivision/Mapping review	1,098.90
MG03	Riachao	35	30.32	9/12/2002	35	30.32	7938103	490116	35	30.32	490108	7938100	xxx	1,098.90
MG03	Riachao	36	3.55	9/20/2002	36	3.55	7937557	490499	36	3.46	490491	7937547	Mapping review	No plantings
MG03	Riachao	37	1.21	9/1/2002									xxx	No plantings
MG03	Riachao	38	5.73	9/12/2002	38	5.73	7938355	489635	38	5.93	489626	7938345	Mapping review	No plantings
MG03	Riachao	39	36.67	9/23/2002	39	36.67	7939321	489890	39A	31.55	489874	7939368	Stand redivision/Mapping review	1,075.00
									39B	4.61	490013	7938885	Stand redivision/Mapping review	1,282.05
MG03	Riachao	40	23.31	9/18/2002	40	23.31	7939174	489550	40	23.53	489551	7939162	Mapping review	1,282.05
MG03	Riachao	41	13.64	9/21/2002	41	13.64	7939062	489194	41	13.37	489196	7939055	Mapping review	1,282.05

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG03	Riachao	42	15.32	9/23/2002	42	15.32	7939446	489049	42	16.10	489035	7939437	Mapping review	1,050.00
MG03	Riachao	43	14.19	9/19/2002	43	14.19	7939767	489407	43	14.19	489407	7939757	xxx	1,282.05
MG03	Riachao	44	36.55	9/26/2002	44	36.55	7940188	489677	44	36.52	489676	7940177	Mapping review	1,156.25
MG03	Riachao	45	19.46	10/1/2002	45	19.46	7940896	489616	45	19.16	489614	7940881	Mapping review	1,282.05
MG03	Riachao	46	43.18	10/8/2002	46	43.18	7940948	489160	46	40.75	489151	7940941	Mapping review	1,282.05
MG03	Riachao	47	23.62	11/6/2002	47	23.62	7941140	488737	47	23.62	488733	7941133	xxx	900.50
MG03	Riachao	48	21.59	11/7/2002	48	21.59	7941232	488358	48	21.12	488358	7941224	Mapping review	No plantings
MG03	Riachao	49	35.18	11/20/2002	49	35.18	7941238	487369	49	25.00	487466	7941145	Stand redivision/Mapping review	No plantings
MG03	Riachao	49A	32.40	12/31/2002	49A	32.40	7940955	487147	49A	20.10	487191	7940966	Stand redivision/Mapping review	No plantings
									49B	9.88	487101	7941454	Stand redivision/Mapping review	1,098.90
									49C	8.55	486938	7941037	Stand redivision/Mapping review	1,111.11
									49D	3.52	487382	7940617	Stand redivision/Mapping review	1,111.11
MG03	Riachao	50	20.22	12/1/2002	50	20.22	7941908	486494	50	20.59	486492	7941902	Mapping review	1,098.90
MG03	Riachao	50A	26.25	12/1/2002	50A	26.25	7941609	486434	50A	26.19	486430	7941603	Mapping review	1,111.11
MG03	Riachao	51	21.07	11/8/2002	51	21.07	7940123	487353	51	21.14	487349	7940117	Mapping review	No plantings
MG03	Riachao	52	30.64	11/22/2002	52	30.64	7940716	486925	52A	20.91	487008	7940660	Stand redivision/Mapping review	No plantings
									52B	9.01	486722	7940820	Stand redivision/Mapping review	1,098.90
MG03	Riachao	53	23.77	11/13/2002	53	23.77	7941323	486279	53	23.33	486277	7941316	Mapping review	1,064.00
MG03	Riachao	54	8.65	11/13/2002	54	8.65	7940046	486938	54	8.57	486934	7940038	Mapping review	1,134.50
MG03	Riachao	55	35.22	11/23/2002	55	35.22	7940471	486681	55	35.01	486679	7940462	Mapping review	1,062.50
MG03	Riachao	56	18.21	11/23/2002	56	18.21	7941068	486105	56	18.39	486106	7941063	Mapping review	989.00
MG03	Riachao	57	23.86	11/13/2002	57	23.86	7940340	486224	57	23.47	486223	7940337	Mapping review	1,100.00

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG03	Riachao	58	26.07	11/19/2002	58	26.07	7940722	485902	58	25.71	485906	7940722	Mapping review	849.67
MG03	Riachao	59	32.39	11/21/2002	59	32.39	7939817	485644	59	32.27	485647	7939810	Mapping review	1,205.67
MG03	Riachao	60	21.55	11/14/2002	60	21.55	7940113	485501	60	21.59	485502	7940106	Mapping review	No plantings
MG03	Riachao	61	0.94	12/16/2002	61	0.94	7942933	498670	61	1.88	498618	7942900	Mapping review	No plantings
MG03	Riachao	62	28.88	12/17/2002	62	28.88	7942532	498028	62	25.61	497970	7942504	Mapping review	1,077.67
MG03	Riachao	63	24.95	12/13/2002	63	24.95	7942104	497218	63	25.18	497214	7942095	Mapping review	No plantings
MG03	Riachao	64	21.05	12/17/2002	64	21.05	7941685	497192	64	20.02	497204	7941677	Mapping review	No plantings
MG03	Riachao	65	21.38	12/12/2002	65	21.38	7942110	496669	65	21.19	496667	7942101	Mapping review	No plantings
MG03	Riachao	66	30.29	12/15/2002	66	30.29	7941710	496477	66	30.58	496485	7941700	Mapping review	1,113.00
MG03	Riachao	67	10.44	12/17/2002	67	10.44	7941274	496553	67	10.40	496551	7941264	Mapping review	1,044.50
MG03	Riachao	68	3.15	12/2/2002	68	3.15	7942404	496214	68	3.21	496210	7942394	Mapping review	1,098.90
MG03	Riachao	69	24.03	12/2/2002	69	24.03	7942170	495717	69	24.09	495713	7942162	Mapping review	No plantings
MG03	Riachao	70	31.66	11/28/2002	70	31.66	7941994	495194	70	31.49	495192	7941984	Mapping review	No plantings
MG03	Riachao	71	9.71	12/12/2002	71	9.71	7941075	495554	71	9.40	495560	7941082	Mapping review	No plantings
MG03	Riachao	72	28.63	12/11/2002	72	28.63	7941267	495311	72	28.81	495310	7941258	Mapping review	989.26
MG03	Riachao	73	8.70	11/28/2002	73	8.70	7941190	494913	73	8.56	494911	7941180	Mapping review	1,399.00
MG03	Riachao	74	36.99	11/12/2002	74	36.99	7941738	494043	74	36.91	494040	7941730	Mapping review	906.25
MG03	Riachao	75	16.72	12/11/2002	75	16.72	7940749	495075	75	16.02	495079	7940748	Mapping review	1,098.90
MG03	Riachao	76	19.79	12/9/2002	76	19.79	7940869	494632	76	21.09	494606	7940867	Mapping review	1,098.90
MG03	Riachao	77	21.57	11/26/2002	77	21.57	7941009	494164	77	19.35	494136	7941011	Mapping review	1,118.43
MG03	Riachao	78	26.89	11/8/2002	78	26.89	7941246	493777	78	26.76	493775	7941237	Mapping review	1,108.33
MG03	Riachao	79	32.49	11/11/2002	79	32.49	7941540	493390	79	32.68	493381	7941530	Mapping review	1,025.67

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG03	Riachao	80	16.68	11/27/2002	80	16.68	7940359	494881	80	17.55	494888	7940358	Mapping review	1,200.00
MG03	Riachao	81	20.38	11/26/2002	81	20.38	7940418	494480	81	16.45	494446	7940525	Stand redivision/Mapping review	1,111.11
									81A	5.55	494367	7940337	Stand redivision/Mapping review	No plantings
									81B	8.76	494257	7940230	Stand redivision/Mapping review	1,111.11
MG03	Riachao	82	35.74	11/26/2002	82	35.74	7940509	493990	82	25.23	493913	7940542	Mapping review	1,091.67
MG03	Riachao	84	12.66	12/20/2002	84	12.66	7939894	494725	84	12.54	494716	7939882	Mapping review	1,111.11
MG03	Riachao	85	32.87	12/11/2002	85	32.87	7939905	494133	85	19.99	494250	7939846	Stand redivision/Mapping review	1,111.11
									85A	13.41	493958	7939968	Stand redivision/Mapping review	953.33
MG03	Riachao	88	7.87	12/11/2002	88	7.87	7939631	494422	88	7.32	494413	7939622	Mapping review	987.50
MG03	Riachao	89	14.15	12/14/2002	89	14.15	7939211	493848	89	15.07	493852	7939187	Mapping review	No plantings
MG03	Riachao	90	24.25	12/17/2002	90	24.25	7938939	495165	90	24.05	495168	7938928	Mapping review	962.50
MG03	Riachao	91	12.07	12/17/2002	91	12.07	7938887	494452	91	11.44	494453	7938889	Mapping review	1,146.00
MG03	Riachao	92	32.17	12/18/2002	92	32.17	7938521	495067	92	33.96	495065	7938502	Mapping review	No plantings
MG03	Riachao	93	8.25	12/18/2002	93	8.25	7937823	495027	93	8.28	495029	7937812	Mapping review	1,137.50
MG03	Riachao	94	21.35	12/20/2002	94	21.35	7937482	494682	94	21.68	494680	7937470	Mapping review	962.50
MG03	Riachao	95	10.88	12/19/2002	95	10.88	7937129	495303	95	10.39	495304	7937121	Mapping review	No plantings
MG03	Riachao	96	27.75	12/23/2002	96	27.75	7936850	495639	96	16.63	495592	7936811	Stand redivision/Mapping review	1,050.00
									96A	8.81	495648	7936881	Stand redivision/Mapping review	1,062.50
MG03	Riachao	97	37.52	12/20/2002	97	37.52	7936744	494857	97	37.13	494859	7936739	Mapping review	No plantings
MG03	Riachao	98	34.08	12/18/2002	98	27.67	7937208	493404	98	28.67	493391	7937199	Halt carbonization operations and resume planting activities in the area	1,016.67
MG03	Riachao	99	25.11	12/18/2002	99	25.11	7936397	493101	99	24.70	493094	7936389	Mapping review	No plantings

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha	
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69				
							Latitude	Longitude			Longitude	Latitude			
MG03	Riachao	100	12.50	10/28/2003	100	35.60	7940929	493287	100	35.74	493278	7940919	Mapping review	1,098.90	
MG03	Riachao	100A	23.09	10/28/2003									xxx	No plantings	
MG04	Buriti Grande	01	18.20	4/24/2004	01	18.20	7929386	465431	1	18.20	465433	7929386	xxx	1,200.00	
MG04	Buriti Grande	02	29.87	4/22/2004	02	29.87	7928809	465362	2	29.87	465364	7928809	xxx	1,060.33	
MG04	Buriti Grande	03	21.72	4/27/2004	03	21.72	7928954	465770	3	21.72	465772	7928954	xxx	1,098.90	
MG04	Buriti Grande	04	19.29	4/28/2004	04	19.29	7928582	466167	4	19.53	466172	7928582	Mapping review	1,062.50	
MG04	Buriti Grande	05	6.64	4/21/2004	05	6.64	7928629	466824	5	7.65	466801	7928640	Mapping review	925.00	
MG04	Buriti Grande	06	24.12	3/24/2004	06	24.12	7928406	467334	6	24.55	467336	7928403	Mapping review	508.50	
MG04	Buriti Grande	07	22.34	3/25/2004	07	22.34	7928268	466834	7	21.92	466830	7928268	Mapping review	541.09	
MG04	Buriti Grande	08	32.29	3/10/2004	08	32.29	7927927	467548	8	31.99	467550	7927924	Mapping review	1,102.67	
MG04	Buriti Grande	09	38.96	2/21/2004	09	38.96	7927636	467229	9	38.96	467231	7927636	xxx	1,056.25	
MG04	Buriti Grande	10	25.02	3/2/2004	10	25.02	7928114	466386	10	25.01	466387	7928114	Mapping review	1,029.67	
MG04	Buriti Grande	11	19.94	3/20/2004	11	19.94	7928299	465674	11	19.89	465677	7928300	Stand redivision	492.50	
										11A	0.05	465111	7928062	Stand redivision	1,098.90
MG04	Buriti Grande	12	26.23	2/25/2004	12	26.23	7927964	465871	12	25.99	465878	7927963	Stand redivision/Mapping review	1,133.33	
										12A	0.23	465196	7928032	Stand redivision/Mapping review	1,050.00
MG04	Buriti Grande	13	31.94	2/15/2004	13	31.94	7927515	466799	13	31.94	466801	7927515	xxx	851.33	
MG04	Buriti Grande	14	15.18	3/4/2004	14	15.18	7926735	467474	14	15.18	467476	7926736	xxx	1,125.00	
MG04	Buriti Grande	15	21.56	3/8/2004	15	21.56	7927030	467352	15	21.56	467353	7927031	xxx	1,012.50	
MG04	Buriti Grande	16	20.46	4/29/2004	16	20.46	7926484	467128	16	20.46	467130	7926484	xxx	1,175.00	
MG04	Buriti Grande	17	16.69	2/7/2004	17	16.69	7927107	466641	17	16.69	466643	7927107	xxx	975.00	
MG04	Buriti Grande	18	34.99	2/5/2004	18	34.99	7927429	466133	18	35.47	466124	7927430	Mapping review	1,143.75	

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG04	Buriti Grande	19	34.22	1/29/2004	19	34.22	7927167	465575	19	33.51	465587	7927169	Mapping review	1,008.33
MG04	Buriti Grande	20	33.63	2/10/2004	20	33.63	7927730	465390	20A	24.71	465461	7927774	Stand redivision/Mapping review	1,025.00
									20B	8.38	465187	7927609	Stand redivision/Mapping review	No plantings
MG04	Buriti Grande	21	13.85	1/23/2004	21	13.85	7927491	464807	21	14.45	464786	7927498	Mapping review	1,104.50
MG04	Buriti Grande	21A	2.56	12/30/2005	21A	2.56	7927518	464936	21A	2.59	464957	7927521	Mapping review	1,098.90
MG04	Buriti Grande	22	8.63	1/28/2004	22	8.63	7927808	464856	22	8.12	464858	7927814	Mapping review	1,050.00
MG04	Buriti Grande	23	23.70	3/9/2004	23	23.70	7928110	464674	23	23.53	464676	7928111	Mapping review	1,000.00
MG04	Buriti Grande	24	7.91	3/13/2004	24	7.91	7928575	464352	24	7.91	464353	7928575	xxx	472.25
MG04	Buriti Grande	25	3.97	3/9/2004	25	3.97	7928749	464127	25	3.97	464129	7928749	xxx	1,098.90
MG04	Buriti Grande	26	13.06	7/22/2005	26	13.06	7928856	462853	26	13.06	462855	7928856	xxx	1,078.25
MG04	Buriti Grande	27	3.89	5/15/2004	27	3.89	7928355	462793	27	3.96	462794	7928353	Mapping review	1,098.90
MG04	Buriti Grande	28	20.73	5/15/2004	28	20.73	7928306	463182	28	20.85	463183	7928307	Mapping review	1,062.50
MG04	Buriti Grande	29	30.19	5/14/2004	29	30.19	7928201	463700	29	30.30	463698	7928197	Mapping review	1,134.33
MG04	Buriti Grande	30	5.47	5/17/2004	30	5.47	7928069	464019	30	5.99	464018	7928072	Mapping review	1,137.50
MG04	Buriti Grande	31	1.05	5/17/2004	31	1.05	7927901	464138	31	1.20	464138	7927908	Mapping review	1,262.50
MG04	Buriti Grande	32	12.40	5/12/2004	32	12.40	7927713	463606	32	13.24	463614	7927706	Mapping review	1,137.50
MG04	Buriti Grande	33	32.43	5/12/2004	33	32.43	7927702	463149	33	32.94	463151	7927708	Mapping review	1,048.00
MG04	Buriti Grande	34	26.12	5/7/2004	34	26.12	7927800	462762	34	26.46	462764	7927804	Mapping review	1,166.67
MG04	Buriti Grande	35	20.41	5/6/2004	35	20.41	7927057	462925	35	13.72	462844	7927049	Stand redivision/Mapping review	925.00
									35A	6.86	463095	7927072	Stand redivision/Mapping review	1,026.00
MG04	Buriti Grande	36	23.11	5/5/2004	36	23.11	7926780	463145	36	23.21	463146	7926779	Mapping review	1,104.00
MG04	Buriti Grande	37	22.09	5/3/2004	37	22.09	7927162	463492	37	21.90	463490	7927161	Mapping review	875.00

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG04	Buriti Grande	38	13.75	4/30/2004	38	13.75	7927415	463725	38	13.42	463723	7927403	Mapping review	902.50
MG04	Buriti Grande	39	10.60	4/30/2004	39	10.60	7927326	463972	39	10.50	463968	7927314	Mapping review	973.50
MG04	Buriti Grande	40	1.53	5/3/2004	40	1.53	7926987	463910	40	1.45	463909	7926983	Mapping review	975.00
MG04	Buriti Grande	41	3.24	7/13/2004	41	3.24	7926817	463735	41	3.29	463735	7926819	Mapping review	1,098.90
MG04	Buriti Grande	42	24.02	5/18/2004	42	13.20	7926527	463631	42	13.09	463634	7926526	Mapping review	1,098.90
					42A	10.57	7926567	463333	42A	10.37	463345	7926570	Mapping review	1,171.00
MG04	Buriti Grande	43	2.79	5/18/2004	43	2.79	7926498	463866	43	2.79	463868	7926498	xxx	1,136.50
MG04	Buriti Grande	44	18.33	7/13/2004	44	18.33	7926695	464089	44	16.33	464096	7926686	Mapping review	1,098.90
MG04	Buriti Grande	45	25.19	5/19/2004	45	25.19	7927017	464305	45	26.00	464303	7927013	Mapping review	1,104.33
MG04	Buriti Grande	46	26.66	7/14/2004	46	26.66	7926683	464804	46	26.66	464806	7926683	xxx	1,158.33
MG04	Buriti Grande	47	22.16	7/15/2004	47	22.16	7926315	464471	47	22.16	464472	7926315	xxx	987.50
MG04	Buriti Grande	48	25.82	7/21/2004	48	25.82	7926176	464003	48	25.82	464005	7926176	xxx	1,166.67
MG04	Buriti Grande	49	29.35	7/24/2004	49	28.97	7925673	464550	49	29.08	464551	7925673	Mapping review	1,416.67
MG04	Buriti Grande	50	19.00	7/24/2004	50	19.00	7925890	465002	50	19.00	465004	7925890	xxx	1,098.90
MG04	Buriti Grande	51	28.27	7/22/2004	51	28.27	7926302	465301	51	28.27	465302	7926303	xxx	1,098.90
MG04	Buriti Grande	52	39.08	8/3/2004	52	39.08	7926505	466116	52	39.08	466117	7926505	xxx	No plantings
MG04	Buriti Grande	53	20.75	8/6/2004	53	20.75	7926098	466386	53	20.75	466388	7926099	xxx	No plantings
MG04	Buriti Grande	54	38.93	11/24/2004	54	38.93	7925923	465832	54A	27.19	465805	7926019	Stand redivision/Mapping review	1,098.90
									54B	11.70	465896	7925707	Stand redivision/Mapping review	No plantings
MG04	Buriti Grande	55	31.10	11/22/2004	55	31.10	7925497	465456	55	31.10	465457	7925497	xxx	No plantings
MG04	Buriti Grande	56	27.37	7/28/2004	56	27.37	7925263	464937	56	27.37	464938	7925264	xxx	No plantings
MG04	Buriti Grande	57	25.68	11/20/2004	57	25.68	7924937	465315	57	25.68	465316	7924937	xxx	1,098.90

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG04	Mutuca	01	11.22	12/22/2004	01	11.22	7927678	461105	1	11.27	461107	7927679	Mapping review	914.00
MG04	Mutuca	02	11.53	12/22/2004	02	11.53	7927646	461386	2	11.54	461385	7927645	Mapping review	962.50
MG04	Mutuca	03	6.36	12/23/2004	03	6.36	7927829	461508	3	6.94	461502	7927832	Mapping review	1,050.00
MG04	Mutuca	04	29.04	6/23/2004	04	29.04	7927237	462228	4	29.04	462229	7927237	xxx	1,079.00
MG04	Mutuca	05	32.10	5/21/2004	05	32.10	7926675	462518	5	33.41	462525	7926676	Mapping review	1,020.33
MG04	Mutuca	06	29.22	5/24/2004	06	29.22	7926135	462888	6	29.75	462888	7926130	Mapping review	1,024.00
MG04	Mutuca	07	30.84	5/27/2004	07	30.84	7925563	463650	7	31.71	463649	7925559	Mapping review	1,126.00
MG04	Mutuca	08	16.41	5/26/2004	08	16.41	7925597	463113	8	16.15	463111	7925595	Mapping review	1,169.50
MG04	Mutuca	09	19.56	5/27/2004	09	19.56	7925201	463530	9	19.21	463525	7925197	Mapping review	1,012.00
MG04	Mutuca	10	7.06	6/8/2004	10	7.06	7925276	463031	10	7.17	463034	7925285	Mapping review	1,044.00
MG04	Mutuca	11	40.65	6/3/2004	11	22.52	7924602	462934	11	10.77	462912	7924510	Stand redivision/Mapping review	1,087.50
					11A	18.03	7924935	463253					Stand redivision/Mapping review	No plantings
									11B	3.77	463159	7924536	Stand redivision/Mapping review	No plantings
									11C	7.89	462866	7924731	Stand redivision/Mapping review	No plantings
									11G	19.49	463239	7924941	Stand redivision/Mapping review	No plantings
MG04	Mutuca	12	12.89	6/1/2004	12	12.89	7923980	462418	12	13.39	462425	7923978	Mapping review	973.00
MG04	Mutuca	13	14.92	5/31/2004	13	14.92	7924424	462439	13	14.92	462441	7924424	xxx	1,098.90
MG04	Mutuca	14	27.31	6/2/2004	14	27.31	7924866	462530	14	22.04	462586	7924880	Stand redivision/Mapping review	1,087.50
									14A	4.78	462332	7924854	Stand redivision/Mapping review	1,098.90
									14B	0.91	462284	7924780	Stand redivision/Mapping review	987.50
MG04	Mutuca	15	21.76	6/9/2004	15	21.76	7925396	462717	15	21.67	462720	7925401	Mapping review	1,048.00
MG04	Mutuca	16	36.30	6/14/2004	16	36.30	7925586	462388	16	36.50	462388	7925584	Mapping review	804.75

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG04	Mutuca	17	21.30	6/17/2004	17	21.30	7926175	462267	17	21.30	462268	7926176	xxx	1,079.50
MG04	Mutuca	18	27.01	6/15/2004	18	27.01	7925788	461964	18	27.13	461966	7925787	Mapping review	1,073.67
MG04	Mutuca	19	37.22	6/24/2004	19	37.22	7926690	461878	19	36.71	461880	7926684	Mapping review	1,091.00
MG04	Mutuca	20	36.69	6/25/2004	20	36.69	7926307	461485	20	36.69	461487	7926307	xxx	1,031.75
MG04	Mutuca	21	22.29	7/3/2004	21	22.29	7926068	460897	21	22.08	460900	7926068	Mapping review	1,098.90
MG04	Mutuca	22	28.44	7/7/2004	22	28.44	7925794	461222	22	28.33	461224	7925795	Mapping review	1,033.33
MG04	Mutuca	23	36.20	7/10/2004	23	36.20	7925431	461545	23	36.20	461547	7925432	xxx	936.25
MG04	Mutuca	24	0.38	12/22/2004	24	0.38	7925315	461010	24	0.38	461012	7925316	xxx	675.00
MG04	Mutuca	25	12.15	12/21/2004	25	12.15	7925424	460260	25	12.15	460261	7925424	xxx	1,098.90
MG04	Mutuca	26	15.94	9/14/2004	26	15.94	7925201	460599	26	15.90	460601	7925201	Mapping review	900.00
MG04	Mutuca	27	25.32	9/18/2004	27	25.32	7925031	461070	27	25.32	461072	7925032	xxx	866.67
MG04	Mutuca	28	10.41	9/23/2004	28	10.41	7924735	461336	28	10.41	461338	7924736	xxx	887.50
MG04	Mutuca	29	15.98	8/12/2004	29	15.98	7924832	461643	29	15.98	461645	7924833	xxx	1,162.50
MG04	Mutuca	30	23.17	8/18/2004	30	23.17	7924331	461709	30	23.17	461711	7924331	xxx	1,098.90
MG04	Mutuca	31	19.96	10/7/2004	31	19.96	7924346	461245	31	19.96	461246	7924347	xxx	847.00
MG04	Mutuca	32	12.53	10/19/2004	32	12.53	7924428	460856	32	12.53	460858	7924429	xxx	825.00
MG04	Mutuca	33	13.29	9/21/2004	33	13.29	7924660	460677	33	13.29	460679	7924660	xxx	812.50
MG04	Mutuca	34	22.99	11/27/2004	34	22.99	7924867	460289	34	22.69	460292	7924866	Mapping review	1,098.90
MG04	Mutuca	35	10.89	12/21/2004	35	10.89	7925135	459982	35	10.92	459983	7925133	Mapping review	1,098.90
MG04	Mutuca	36	12.59	12/18/2004	36	12.59	7924650	459622	36	7.02	459702	7924675	Mapping review	No plantings
MG04	Mutuca	37	34.88	12/1/2004	37	34.88	7924387	460044	37	2.14	459869	7924695	Stand redivision	No plantings
									37A	32.74	460057	7924368	Stand redivision	1,098.90

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG04	Mutuca	38	9.91	10/20/2004	38	9.91	7924214	460503	38	9.91	460504	7924214	xxx	750.00
MG04	Mutuca	39	18.31	10/16/2004	39	18.31	7923960	460796	39	18.31	460798	7923960	xxx	816.33
MG04	Mutuca	40	23.22	9/29/2004	40	23.22	7923842	461218	40	23.22	461220	7923842	xxx	816.33
MG04	Mutuca	41	24.67	8/23/2004	41	24.67	7923765	461729	41	24.62	461730	7923765	Mapping review	1,019.00
MG04	Mutuca	42	21.50	8/28/2004	42	21.50	7923288	461722	42	21.50	461724	7923288	xxx	1,098.90
MG04	Mutuca	43	21.91	9/28/2004	43	21.91	7923328	461199	43	21.88	461201	7923328	Stand redivision	773.00
									43A	0.03	460986	7923665	Stand redivision	782.00
MG04	Mutuca	44	20.62	11/17/2004	44	20.62	7923441	460748	44	7.60	460635	7923499	Stand redivision/Mapping review	No plantings
									44A	12.43	460821	7923399	Stand redivision/Mapping review	816.33
MG04	Mutuca	45	17.39	11/16/2004	45	17.39	7923817	460367	45	17.40	460369	7923818	Mapping review	937.50
MG04	Mutuca	46	20.05	11/18/2004	46	20.05	7923437	460205	46	20.05	460206	7923437	xxx	752.00
MG04	Mutuca	47	21.41	12/2/2004	47	21.41	7923965	459820	47	21.41	459822	7923965	xxx	1,030.50
MG04	Mutuca	48	13.60	12/17/2004	48	13.60	7924225	459419	48	13.52	459420	7924225	Mapping review	1,098.90
MG04	Mutuca	49	20.96	12/2/2004	49	20.96	7923671	459620	49	20.80	459623	7923670	Mapping review	1,112.50
MG04	Mutuca	50	19.67	12/8/2004	50	19.67	7923430	459355	50	19.62	459357	7923429	Mapping review	1,098.90
MG04	Mutuca	51	5.31	12/4/2004	51	5.31	7923179	459650	51	5.31	459651	7923179	xxx	1,098.90
MG04	Mutuca	52	25.13	12/9/2004	52	25.13	7923019	459063	52	25.13	459065	7923020	xxx	1,031.00
MG04	Mutuca	53	14.52	12/22/2004	53	14.52	7922726	459261	53	14.52	459262	7922727	xxx	1,098.90
MG04	Mutuca	54	11.41	12/10/2004	54	11.41	7922561	458696	54	11.41	458697	7922562	xxx	1,098.90
MG04	Mutuca	55	19.27	12/13/2004	55	19.27	7922306	458927	55	19.27	458928	7922306	xxx	1,105.50
MG04	Mutuca	56	10.94	12/11/2004	56	10.94	7922177	458312	56	10.94	458314	7922178	xxx	1,002.00
MG04	Mutuca	57	25.81	12/14/2004	57	25.81	7921921	458619	57	25.81	458621	7921921	xxx	1,098.90

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG04	Mutuca	58	18.48	4/20/2005	58	18.48	7926222	458967	58	18.48	458968	7926222	xxx	1,098.90
MG04	Mutuca	59	17.97	4/16/2005	59	17.97	7925892	459304	59	17.97	459306	7925893	xxx	1,039.00
MG04	Mutuca	60	14.83	4/6/2005	60	14.83	7925597	459587	60	14.00	459575	7925605	Mapping review	1,045.75
MG04	Mutuca	61	22.36	4/13/2005	61	22.36	7925234	459389	61	23.11	459394	7925231	Mapping review	1,032.33
MG04	Mutuca	62	19.89	12/27/2004	62	19.89	7925530	458992	62	19.89	458994	7925531	xxx	1,098.90
MG04	Mutuca	63	32.23	4/2/2005	63	32.23	7925877	458624	63	24.78	458652	7925817	Stand redivision/Mapping review	1,098.90
									63A	7.40	458536	7926080	Stand redivision/Mapping review	1,081.00
MG04	Mutuca	64	17.53	5/11/2005	64	17.53	7925283	457324	64	17.53	457326	7925283	xxx	1,098.90
MG04	Mutuca	65	45.80	5/6/2005	65	45.80	7925117	457769	65A	37.35	457769	7925189	Stand redivision/Mapping review	1,098.90
									65B	7.94	457780	7924791	Stand redivision/Mapping review	1,098.90
MG04	Mutuca	66	30.18	4/28/2005	66	30.18	7925187	458244	66	30.18	458246	7925188	xxx	1,098.90
MG04	Mutuca	67	30.76	3/21/2005	67	30.76	7925036	458622	67A	16.01	458656	7925085	Stand redivision/Mapping review	1,098.90
									67B	5.29	458452	7924782	Stand redivision/Mapping review	888.00
MG04	Mutuca	68	20.01	5/13/2005	68	20.01	7924830	459029	68	19.02	459021	7924832	Mapping review	1,250.00
MG04	Mutuca	69	43.84	6/17/2005	69	31.53	7923945	457947	69	31.53	457948	7923945	Mapping review	1,098.90
					69A	11.90	7923396	458011	69A	11.90	458012	7923396	Mapping review	1,050.00
MG04	Mutuca	70	9.65	5/14/2005	70	9.65	7924443	458169	70	9.65	458171	7924443	xxx	1,012.50
MG04	Mutuca	71	29.83	5/19/2005	71	29.83	7924206	458435	71	29.83	458436	7924206	xxx	1,098.90
MG04	Mutuca	72	36.47	6/15/2005	72	36.47	7924022	458814	72	36.39	458815	7924022	Mapping review	1,008.78
MG04	Mutuca	73	47.20	5/25/2005	73	47.20	7923296	458417	73	47.20	458419	7923297	xxx	1,170.00
MG04	Tamandua	01	11.24	6/24/2003	01	11.25	7935498	471532	1	11.25	471533	7935498	xxx	525.00
MG04	Tamandua	02	24.08	6/3/2003	02	22.68	7935097	472310	2	22.68	472311	7935098	Mapping review	1,190.50

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG04	Tamandua	03	30.38	6/6/2003	03	29.19	7934765	472487	3	29.19	472489	7934765	Mapping review	1,110.00
MG04	Tamandua	04	22.22	5/31/2003	04	20.19	7934377	472345	4	20.37	472343	7934377	Mapping review	1,056.50
MG04	Tamandua	05	9.78	5/28/2003	05	9.78	7934202	472477	5	9.68	472468	7934203	Mapping review	1,095.50
MG04	Tamandua	06	21.02	6/11/2003	06	19.15	7934741	471863	6	19.15	471865	7934741	Mapping review	1,061.50
MG04	Tamandua	07	2.66	6/11/2003	07	2.66	7934827	471669	7	2.66	471671	7934827	xxx	1,092.00
MG04	Tamandua	08	25.83	5/14/2003	08	25.83	7934710	471301	8	25.83	471303	7934710	xxx	1,166.67
MG04	Tamandua	09	12.26	5/27/2003	09	12.23	7934455	471524	9	12.11	471525	7934457	Mapping review	657.33
MG04	Tamandua	10	6.05	5/26/2003	10	6.06	7934201	471540	10	6.21	471543	7934204	Mapping review	1,000.00
MG04	Tamandua	11	26.83	5/8/2003	11	26.33	7934362	470922	11	26.33	470924	7934362	xxx	612.50
MG04	Tamandua	12	29.75	5/8/2003	12	29.75	7934479	470485	12	29.75	470486	7934479	xxx	1,018.33
MG04	Tamandua	13	21.45	4/29/2003	13	21.69	7934107	470353	13	21.36	470357	7934107	Mapping review	493.00
MG04	Tamandua	14	21.57	5/16/2003	14	21.57	7933670	470611	14	21.57	470613	7933670	xxx	1,072.50
MG04	Tamandua	15	10.62	5/14/2003	15	10.62	7933937	471005	15	10.68	471007	7933938	Mapping review	1,058.67
MG04	Tamandua	16	37.29	5/21/2003	16	37.29	7933285	470923	16	37.02	470926	7933286	Mapping review	1,009.22
MG04	Tamandua	17	20.64	5/22/2003	17	19.84	7933229	471549	17	11.88	471415	7933335	Stand redivision/Mapping review	1,087.00
									17A	7.82	471756	7933066	Stand redivision/Mapping review	1,098.90
MG04	Tamandua	18	33.31	5/23/2003	18	33.31	7932792	471432	18	33.05	471433	7932792	Mapping review	1,134.00
MG04	Tamandua	19	24.21	6/18/2003	19	24.21	7932441	470640	19	23.88	470631	7932431	Mapping review	1,055.50
MG04	Tamandua	20	25.68	6/20/2003	20	25.68	7932091	470528	20	25.37	470523	7932086	Mapping review	1,166.67
MG04	Tamandua	21	35.09	7/2/2003	21	35.09	7931297	469914	21	35.21	469915	7931297	Mapping review	1,112.50
MG04	Tamandua	22	25.05	7/7/2003	22	24.94	7931186	470206	22	24.61	470205	7931184	Mapping review	1,142.50
MG04	Tamandua	23	6.92	7/7/2003	23	6.92	7930681	469815	23	6.80	469813	7930682	Mapping review	1,112.50

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG04	Tamandua	24	14.70	7/9/2003	24	14.70	7930491	470085	24	14.82	470089	7930493	Mapping review	1,182.00
MG04	Tamandua	25	20.76	7/10/2003	25	19.38	7930254	469710	25	6.56	469697	7930180	Stand redivision/Mapping review	1,071.00
									25A	1.07	469432	7930339	Stand redivision/Mapping review	1,098.90
									25B	11.95	469732	7930287	Stand redivision/Mapping review	1,098.90
MG04	Tamandua	26	26.64	7/15/2003	26	25.12	7930291	470434	26	24.75	470425	7930295	Mapping review	1,179.50
MG04	Tamandua	27	27.23	7/21/2003	27	24.84	7930331	471239	27	24.52	471234	7930329	Mapping review	1,091.00
MG04	Tamandua	28	40.84	11/25/2003	28	37.38	7931968	465982	28	37.24	465984	7931966	Mapping review	1,059.50
MG04	Tamandua	29	25.02	11/24/2003	29	24.41	7931399	465761	29	24.65	465759	7931399	Mapping review	992.50
MG04	Tamandua	30	39.31	11/27/2003	30	36.62	7932129	466645	30	36.49	466646	7932128	Mapping review	1,086.50
MG04	Tamandua	31	34.09	12/15/2003	31	31.60	7931672	466543	31	31.70	466543	7931666	Mapping review	1,141.67
MG04	Tamandua	32	27.75	11/21/2003	32	21.38	7931212	466725	32	22.29	466728	7931210	Mapping review	1,025.00
MG04	Tamandua	33	16.12	11/20/2003	33	7.01	7931687	467439	33	15.58	467562	7931560	Stand redivision/Mapping review	950.00
					33A	8.10	7931447	467655					Stand redivision/Mapping review	No plantings
					33B	0.23	7931449	467912					Stand redivision/Mapping review	No plantings
MG04	Tamandua	34	17.90	11/19/2003	34	16.96	7931179	467766	34	17.13	467766	7931181	Mapping review	1,080.00
MG04	Tamandua	35	16.24	7/22/2003	35	15.11	7930425	468291	35	15.11	468293	7930425	Mapping review	1,112.50
MG04	Tamandua	36	21.36	1/7/2004	36	19.92	7930197	468621	36	19.58	468622	7930192	Mapping review	975.00
MG04	Tamandua	37	19.07	11/13/2003	37	18.74	7930243	468985	37	21.30	469010	7930211	Mapping review	1,128.50
MG04	Tamandua	38	1.97	11/13/2003	38	1.97	7929933	469277					Stand redivision/Mapping review	No plantings
MG04	Tamandua	39	7.59	9/1/2004	39	7.60	7929762	469495	39	7.64	469496	7929766	Mapping review	911.00
MG04	Tamandua	40	13.95	11/10/2003	40	13.47	7929478	469549	40	13.47	469548	7929477	Mapping review	1,064.50
MG04	Tamandua	41	4.80	11/11/2003	41	4.80	7929579	469243	41	5.02	469241	7929584	Mapping review	1,221.50

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG04	Tamandua	42	18.62	11/11/2003	42	17.68	7929788	468968	42	5.38	468947	7929961	Stand redivision/Mapping review	1,132.00
									42A	12.10	468972	7929712	Stand redivision/Mapping review	1,145.00
MG04	Tamandua	43	1.33	9/2/2004	43	1.33	7929504	468949	43	1.55	468945	7929500	Mapping review	948.00
MG04	Tamandua	44	18.09	9/2/2004	44	9.06	7929222	468980	44	9.48	468986	7929218	Mapping review	961.00
					44A	6.94	7929503	468603	44A	6.90	468606	7929505	Mapping review	1,098.90
					44B	1.07	7929303	468550	44B	1.07	468549	7929301	Mapping review	1,098.90
MG04	Tamandua	45	18.03	11/18/2003	45	16.71	7929767	468450	45	10.12	468481	7929680	Stand redivision/Mapping review	1,128.00
									45A	6.61	468407	7929900	Stand redivision/Mapping review	1,158.50
MG04	Tamandua	46	20.91	8/8/2003	46	19.32	7929593	468076	46	19.32	468077	7929593	Mapping review	1,027.00
MG04	Tamandua	47	14.92	10/31/2003	47	13.07	7929269	468301	47	1.98	468379	7929168	Stand redivision/Mapping review	1,068.50
									47A	6.08	468206	7929343	Stand redivision/Mapping review	1,049.50
									47B	4.74	468393	7929227	Stand redivision/Mapping review	1,026.00
MG04	Tamandua	48	0.62	11/18/2003	48	0.62	7929171	468542	48	0.65	468540	7929173	Mapping review	1,098.90
MG04	Tamandua	49	15.96	11/5/2003	49	15.43	7929062	468778	49	11.86	468757	7929026	Stand redivision/Mapping review	1,077.00
									49A	3.55	468839	7929179	Stand redivision/Mapping review	1,072.50
MG04	Tamandua	50	8.89	11/5/2003	50	8.89	7928848	469148	50	2.61	469063	7928873	Stand redivision/Mapping review	1,046.50
									50A	0.52	469001	7928823	Stand redivision/Mapping review	1,057.50
									50B	5.71	469202	7928837	Stand redivision/Mapping review	1,120.00
MG04	Tamandua	51	20.25	11/7/2003	51	20.25	7928860	469514	51	20.27	469515	7928861	Mapping review	519.80
MG04	Tamandua	52	6.06	9/9/2004	52	5.74	7928519	469358	52	6.08	469368	7928521	Mapping review	1,037.00
MG04	Tamandua	53	8.07	10/28/2003	53	7.72	7928589	469070	53	7.68	469071	7928591	Mapping review	561.60
MG04	Tamandua	54	14.15	10/29/2003	54	13.58	7928727	468705	54	9.64	468736	7928677	Stand redivision	1,095.50

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
									54A	3.94	468635	7928850	Stand redivision	1,150.00
MG04	Tamandua	55	27.42	10/30/2003	55	25.32	7928789	468179	55	24.67	468192	7928808	Mapping review	962.50
MG04	Tamandua	56	13.96	8/12/2003	56	12.28	7928804	467861	56	10.31	467845	7928742	Stand redivision/Mapping review	592.83
									56A	2.25	467954	7929058	Stand redivision/Mapping review	1,114.67
MG04	Tamandua	57	13.55	9/24/2003	57	12.96	7927920	469629	57	12.96	469631	7927921	Mapping review	1,098.90
MG04	Tamandua	58	32.98	9/24/2003	58	26.41	7928280	470028	58	16.59	469968	7928274	Stand redivision/Mapping review	1,020.00
					58A	6.06	7928240	470350	58A	13.24	470272	7928250	Stand redivision/Mapping review	968.00
									58B	0.65	469951	7927944	Stand redivision/Mapping review	975.50
MG04	Tamandua	59	23.49	9/26/2003	59	22.92	7927866	470246	59	22.92	470247	7927866	Mapping review	1,098.90
MG04	Tamandua	60	31.80	10/2/2003	60	11.34	7927668	469761	60	11.34	469763	7927668	Mapping review	987.50
					60A	9.77	7927375	469488	60A	9.76	469489	7927375	Mapping review	975.00
					60B	9.25	7927075	469611	60B	9.25	469612	7927075	Mapping review	925.00
MG04	Tamandua	61	26.30	10/17/2003	61	24.57	7927279	469977	61	24.57	469978	7927279	Mapping review	941.33
MG04	Tamandua	62	21.38	10/21/2003	62	14.38	7927570	470613	62	9.31	470650	7927525	Mapping review	1,098.90
					62A	6.57	7927369	470391	62A	7.63	470405	7927379	Mapping review	1,098.90
MG04	Tamandua	63	31.83	10/24/2003	63	31.19	7927138	470896	63	30.85	470896	7927137	Mapping review	1,027.33
MG04	Tamandua	64	11.13	10/25/2003	64	9.95	7926567	470799	64	10.01	470801	7926567	Mapping review	1,029.00
MG04	Tamandua	65	30.80	10/27/2003	65	24.34	7926855	470498	65	23.86	470502	7926860	Mapping review	987.50
					65A	6.08	7926367	470431	65A	6.59	470436	7926373	Mapping review	1,098.90
MG04	Tamandua	66	21.66	10/15/2003	66	19.59	7926844	470105	66	19.33	470113	7926850	Mapping review	1,102.60
MG04	Tamandua	67	22.82	10/13/2003	67	22.82	7926369	470022	67	23.75	470026	7926376	Mapping review	891.39
MG04	Tamandua	68	24.12	10/8/2003	68	12.61	7926422	469610	68	12.56	469614	7926426	Mapping review	1,000.00

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
					68A	11.14	7926748	469595	68A	10.99	469596	7926750	Mapping review	962.50
MG04	Tamandua	69	19.21	6/22/2005	69	19.22	7925624	467782	69	16.68	467765	7925639	Stand redivision/Mapping review	991.67
MG04	Tamandua	69A	3.47	12/30/2005					69A	2.73	467205	7925695	Stand redivision/Mapping review	1,025.00
MG04	Tamandua	70	28.66	9/13/2003	70	27.07	7925980	468450	70	24.07	468404	7925975	Stand redivision/Mapping review	1,040.00
									70A	3.34	468799	7925957	Stand redivision/Mapping review	1,018.00
MG04	Tamandua	71	14.85	9/9/2003	71	14.14	7925918	469061	71	14.25	469059	7925912	Mapping review	1,048.50
MG04	Tamandua	72	26.79	8/28/2003	72	25.49	7925829	469593	72	10.75	469544	7925735	Stand redivision/Mapping review	1,037.00
									72A	14.97	469633	7925899	Stand redivision/Mapping review	1,098.90
MG04	Tamandua	73	17.84	8/22/2003	73	16.57	7925697	470310	73	16.79	470312	7925698	Mapping review	1,037.50
MG04	Tamandua	74	5.93	8/20/2003	74	5.87	7925629	470732	74	6.10	470729	7925630	Mapping review	976.00
MG04	Tamandua	75	6.20	8/19/2003	75	6.29	7925361	470640	75	6.56	470635	7925361	Mapping review	1,046.00
MG04	Tamandua	76	29.86	9/2/2003	76	28.73	7925287	470223	76	17.92	470329	7925254	Stand redivision/Mapping review	1,001.00
									76A	10.63	470043	7925338	Stand redivision/Mapping review	1,014.00
MG04	Tamandua	77	36.73	9/8/2003	77	35.83	7925349	469563	77	35.59	469567	7925349	Mapping review	579.89
MG04	Tamandua	78	17.13	9/17/2003	78	16.47	7925495	469020	78	16.42	469023	7925488	Mapping review	981.50
MG04	Tamandua	79	9.13	9/15/2003	79	9.13	7925619	468644	79	8.92	468648	7925612	Mapping review	1,028.00
MG04	Tamandua	80	9.26	9/18/2003	80	9.26	7925222	468838	80	9.72	468847	7925213	Mapping review	1,066.67
MG04	Tamandua	81	9.81	12/28/2004	81	9.81	7924769	468557	81	9.37	468555	7924759	Mapping review	1,043.75
MG04	Tamandua	82	2.15	12/28/2004	82	2.14	7924692	468709	82	2.28	468704	7924690	Mapping review	933.33
MG04	Tamandua	83	1.63	12/28/2004	83	1.63	7924847	468918	83	1.48	468918	7924848	Mapping review	975.00
MG04	Tamandua	84	26.27	4/20/2004	84	15.75	7924989	469304	84	15.52	469308	7924990	Mapping review	1,098.90
					84A	10.22	7924724	469154	84A	9.79	469154	7924725	Mapping review	923.00

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG04	Tamandua	85	28.90	3/31/2004	85	28.86	7924848	469983	85	28.82	469985	7924848	Mapping review	927.67
MG04	Tamandua	86	25.18	4/2/2004	86	25.19	7924676	470689	86	24.94	470690	7924677	Mapping review	988.50
MG04	Tamandua	87	22.51	4/20/2004	87	22.51	7924454	469926	87	23.60	469919	7924452	Mapping review	922.50
MG04	Tamandua	88	24.29	4/16/2004	88	24.31	7924293	470441	88	20.70	470406	7924306	Mapping review	949.50
MG04	Tamandua	89	24.95	4/8/2004	89	24.99	7924090	470923	89	11.50	470911	7924278	Stand redivision/Mapping review	1,016.50
									89A	17.25	470874	7923981	Stand redivision/Mapping review	1,098.90
MG04	Tamandua	90	39.71	10/25/2004	90	39.71	7924007	469214	90	39.40	469215	7924007	Mapping review	584.38
MG04	Tamandua	91	24.25	11/11/2004	91	24.26	7923845	468650	91	23.48	468652	7923848	Mapping review	775.00
MG04	Tamandua	92	32.78	10/26/2004	92	32.78	7923324	468778	92	32.48	468780	7923323	Mapping review	703.57
MG04	Tamandua	93	33.59	10/30/2004	93	33.60	7923046	469087	93	33.00	469086	7923045	Mapping review	736.11
MG04	Tamandua	94	22.33	11/8/2004	94	22.34	7923520	469530	94	21.74	469531	7923522	Mapping review	740.00
MG04	Tamandua	95	27.61	11/4/2004	95	27.61	7923232	469905	95	27.32	469904	7923233	Mapping review	760.71
MG04	Tamandua	96	28.50	10/30/2004	96	28.50	7922810	469536	96	28.27	469536	7922810	Mapping review	750.00
MG04	Tamandua	97	25.34	11/9/2004	97	25.34	7922433	469850	97	24.83	469853	7922431	Mapping review	816.33
MG04	Tamandua	98	13.88	11/10/2004	98	13.89	7922912	470127	98	13.84	470129	7922911	Mapping review	816.33
MG04	Vitoria	01	19.59	7/9/2005	01	19.27	7924010	464919	1	19.27	464921	7924010	xxx	1,137.50
MG04	Vitoria	02	23.31	7/1/2005	02	23.18	7923860	464534	2	23.18	464535	7923860	xxx	1,116.67
MG04	Vitoria	03	21.56	7/13/2005	03	20.70	7923380	464700	3	20.72	464702	7923380	Mapping review	1,098.90
MG04	Vitoria	04	30.13	7/22/2005	04	30.08	7923697	464116	4	30.08	464118	7923697	xxx	1,083.33
MG04	Vitoria	05	33.62	7/30/2005	05	33.62	7923592	463597	5	33.60	463599	7923592	Mapping review	1,039.58
MG04	Vitoria	06	30.53	8/2/2005	06	30.42	7923029	463690	6	30.42	463691	7923030	xxx	1,033.33
MG04	Vitoria	07	27.38	8/29/2005	07	27.26	7923154	464249	7	27.26	464250	7923154	xxx	969.44

Location		Project Boundary Area - Validation 2008			Project Boundary Area - Verification 2010				Project Boundary Area - Verification 2018				Reason for changes in stands within the First Monitoring Period	#Trees per ha
UNISE	Project	Stand ID	Area ha	Planting year	Stand ID	Area ha	UTM 23K SAD69		Stand ID	Area ha	UTM 23K SAD69			
							Latitude	Longitude			Longitude	Latitude		
MG04	Vitoria	08	38.54	9/12/2005	08	37.86	7922630	464053	8	37.48	464049	7922629	Mapping review	1,050.00
MG04	Vitoria	09	34.07	9/28/2005	09	32.20	7922193	463780	9	32.20	463781	7922193	Mapping review	1,033.33
MG04	Vitoria	11	17.44	12/29/2005	11	17.44	7922194	462950	11	17.49	462952	7922193	Mapping review	1,020.83
MG04	Vitoria	12	27.32	12/22/2005	12	27.23	7922856	462960	12	27.95	462962	7922859	Mapping review	980.56
MG04	Vitoria	12A	29.37	12/31/2005	12A	29.10	7922617	462621	12A	29.12	462623	7922617	Mapping review	1,016.67
MG04	Vitoria	13	24.38	12/2/2005	13	23.27	7923274	463182	13	22.65	463197	7923285	Stand redivision/Mapping review	1,016.67
									13A	1.26	462841	7923240	Stand redivision/Mapping review	1,075.00
MG04	Vitoria	14	11.35	12/27/2005	14	11.75	7922953	462300	14	11.60	462302	7922951	Mapping review	1,006.25
MG04	Vitoria	15	11.57	12/24/2005	15	11.39	7923281	462532	15	11.59	462534	7923281	Mapping review	1,012.50
MG04	Vitoria	16	15.11	12/14/2005	16	16.61	7923664	462912	16	16.87	462905	7923663	Mapping review	1,020.00
MG04	Vitoria	17	24.04	11/16/2005	17	19.73	7924030	463414	17	19.73	463416	7924031	xxx	975.00
MG04	Vitoria	18	34.28	11/9/2005	18	37.21	7924337	463867	18	37.11	463869	7924337	Mapping review	957.14
MG04	Vitoria	19	32.37	12/30/2005	19	32.90	7924644	464492	19	32.68	464494	7924647	Mapping review	1,110.00
MG04	Vitoria	20	18.34	12/30/2005	20	18.06	7924810	464186	20	18.02	464185	7924814	Mapping review	1,075.00
MG04	Vitoria	21	6.76	11/28/2005	21	5.35	7923984	462644	21	5.59	462646	7923980	Mapping review	1,108.33
MG04	Vitoria	22	10.44	11/24/2005	22	9.75	7924251	462912	22	10.31	462914	7924250	Mapping review	1,087.50
Total		487	11,711.37		506	11,642.06			583	11,569.42				

Annex 2

List of sample plots within the A/R-CDM Project 2569 boundary and its georeference information (Decimal Degrees SIRGA S2000)

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 03	Buritis	1	7	-45.07119862	-18.68238884
MG 03	Buritis	1	8	-45.07116761	-18.68521112
MG 03	Buritis	1	9	-45.07194134	-18.68803309
MG 03	Buritis	1	10	-45.06952693	-18.68754317
MG 03	Buritis	4	1	-45.05843706	-18.69278117
MG 03	Buritis	4	2	-45.05824437	-18.69462359
MG 03	Buritis	4	3	-45.0516055	-18.69044952
MG 03	Buritis	4	4	-45.05366791	-18.69140083
MG 03	Buritis	4	5	-45.05576255	-18.69225999
MG 03	Buritis	6	1	-45.06982621	-18.6904761
MG 03	Buritis	6	2	-45.06800096	-18.69134666
MG 03	Buritis	6	3	-45.06947212	-18.69265095
MG 03	Buritis	6	4	-45.06721584	-18.69364248
MG 03	Buritis	6	5	-45.06632906	-18.69538257
MG 03	Buritis	6	6	-45.06554363	-18.69695348
MG 03	Buritis	7	1	-45.07293307	-18.69123922
MG 03	Buritis	7	2	-45.07336748	-18.69406535
MG 03	Buritis	7	3	-45.0741351	-18.69679607
MG 03	Buritis	7	4	-45.07503596	-18.69933619
MG 03	Buritis	7	5	-45.07183688	-18.69943271
MG 03	Buritis	8	7	-45.07576534	-18.7038604
MG 03	Buritis	8	8	-45.07404056	-18.70277373
MG 03	Buritis	9	22	-45.05867456	-18.70166022
MG 03	Buritis	9	23	-45.06000827	-18.70372394
MG 03	Buritis	9	24	-45.0636745	-18.70496122
MG 03	Buritis	9	25	-45.06150871	-18.70594638
MG 03	Buritis	9	26	-45.06280905	-18.70769253
MG 03	Buritis	13	6	-45.09182529	-18.706217
MG 03	Buritis	13	7	-45.09034379	-18.7076916

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 03	Buritis	15	11	-45.09600316	-18.71688912
MG 03	Buritis	15	12	-45.09445658	-18.71468118
MG 03	Buritis	15	13	-45.09281389	-18.71327088
MG 03	Buritis	15	14	-45.09172026	-18.71508134
MG 03	Buritis	15	15	-45.08952972	-18.71259759
MG 03	Buritis	15	16	-45.09574337	-18.71293196
MG 03	Buritis	16	1	-45.103238	-18.71539133
MG 03	Buritis	16	2	-45.1036395	-18.71796334
MG 03	Buritis	16	3	-45.09933956	-18.71685421
MG 03	Buritis	16	4	-45.10467403	-18.72018569
MG 03	Buritis	16	5	-45.1010073	-18.71913975
MG 03	Buritis	16	6	-45.10097289	-18.71732968
MG 03	Buritis	17	1	-45.10211688	-18.7091467
MG 03	Buritis	17	2	-45.09889454	-18.70981709
MG 03	Buritis	17	3	-45.10046769	-18.71111642
MG 03	Buritis	17	4	-45.10269054	-18.71227919
MG 03	Buritis	17	5	-45.0990912	-18.71280119
MG 03	Buritis	28	35	-45.09417102	-18.69497265
MG 03	Buritis	28	36	-45.0961083	-18.69584293
MG 03	Buritis	30	1	-45.08693338	-18.69007769
MG 03	Buritis	30	2	-45.08437826	-18.68921542
MG 03	Buritis	30	3	-45.08488454	-18.69179135
MG 03	Buritis	33	1	-45.08774401	-18.68342485
MG 03	Buritis	33	2	-45.08565035	-18.68063423
MG 03	Buritis	33	3	-45.08381697	-18.68336529
MG 03	Buritis	33	4	-45.08392148	-18.68615629
MG 03	Buritis	34	4	-45.09070187	-18.67685861
MG 03	Buritis	34	5	-45.08835305	-18.67851627
MG 03	Buritis	34	6	-45.08899828	-18.68133823
MG 03	Buritis	37	2	-45.079824	-18.673721
MG 03	Buritis	37	4	-45.080372	-18.676623
MG 03	Buritis	37	5	-45.079123	-18.67826
MG 03	Buritis	37	PC07	-45.08122118	-18.67465212
MG 03	Buritis	37	PC08	-45.08169628	-18.67664027

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 03	Buritis	37	PC09	-45.08122324	-18.67896324
MG 03	Buritis	37	PC11	-45.07972329	-18.67552041
MG 03	Buritis	37	PC12	-45.07996139	-18.67771654
MG 03	Buritis	37	PC13	-45.07951665	-18.67976836
MG 03	Buritis	42	20	-45.0894755	-18.66547773
MG 03	Buritis	42	21	-45.08789434	-18.66759623
MG 03	Buritis	42	22	-45.08698438	-18.66563934
MG 03	Buritis	42	PC07	-45.08989086	-18.6664081
MG 03	Buritis	42	PC08	-45.08789238	-18.66621369
MG 03	Buritis	42	PC09	-45.08707169	-18.66455355
MG 03	Buritis	42	PC10	-45.08620231	-18.66792382
MG 03	Buritis	42	PC11	-45.08873896	-18.66836219
MG 03	Buritis	46	41	-45.10357857	-18.65580668
MG 03	Buritis	46	42	-45.10367653	-18.65867263
MG 03	Buritis	46	43	-45.10403851	-18.66057546
MG 03	Buritis	46	44	-45.10165702	-18.66046212
MG 03	Buritis	50	7	-45.06293864	-18.67107581
MG 03	Buritis	50	8	-45.06240211	-18.66908192
MG 03	Buritis	50	9	-45.06533648	-18.66971319
MG 03	Buritis	50	10	-45.06712307	-18.67122027
MG 03	Buritis	50	PC01	-45.06878114	-18.66971362
MG 03	Buritis	50	PC02	-45.06890984	-18.67117874
MG 03	Buritis	50	PC03	-45.06629598	-18.66983662
MG 03	Buritis	50	PC04	-45.06550245	-18.67169276
MG 03	Buritis	50	PC05	-45.06332366	-18.66898296
MG 03	Buritis	50	PC06	-45.06222295	-18.67164504
MG 03	Buritis	1A	45	-45.07301664	-18.68092723
MG 03	Buritis	1A	46	-45.0740774	-18.68603975
MG 03	Buritis	5A	1	-45.06548817	-18.68895344
MG 03	Buritis	5A	2	-45.06404801	-18.68979722
MG 03	Buritis	5A	3	-45.06435727	-18.69134638
MG 03	Buritis	8A	8	-45.07614635	-18.70134178
MG 03	Buritis	8A	9	-45.07433375	-18.70117362
MG 03	Buritis	30A	1	-45.08804806	-18.68740008

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 03	Buritis	30A	2	-45.08837998	-18.68829899
MG 03	Buritis	38A	39	-45.07695803	-18.67194934
MG 03	Buritis	38A	40	-45.07758485	-18.67491826
MG 03	Jacare	1	1	-45.02686706	-18.67386875
MG 03	Jacare	1	2	-45.02735557	-18.67584617
MG 03	Jacare	1	3	-45.02625729	-18.67698628
MG 03	Jacare	2	1	-45.03004478	-18.67346372
MG 03	Jacare	2	2	-45.03042972	-18.67511337
MG 03	Jacare	3	1	-45.02561733	-18.66658514
MG 03	Jacare	3	2	-45.02641976	-18.66972737
MG 03	Jacare	3	3	-45.02356818	-18.66848214
MG 03	Jacare	3	4	-45.02469729	-18.67151111
MG 03	Jacare	4	54	-45.02833937	-18.666936
MG 03	Jacare	4	55	-45.02870063	-18.66950388
MG 03	Jacare	4	56	-45.03262184	-18.66993888
MG 03	Jacare	4	57	-45.03187643	-18.67170446
MG 03	Jacare	5	3	-45.0238249	-18.66338301
MG 03	Jacare	5	4	-45.02119661	-18.66320003
MG 03	Jacare	5	5	-45.02260718	-18.66533838
MG 03	Jacare	6	1	-45.02791405	-18.6637118
MG 03	Jacare	6	2	-45.02949676	-18.66450237
MG 03	Jacare	7	6	-45.02497246	-18.66133409
MG 03	Jacare	7	7	-45.02371043	-18.66133425
MG 03	Jacare	8	33	-45.02600177	-18.66075378
MG 03	Jacare	8	34	-45.02609766	-18.66145637
MG 03	Jacare	10	64	-45.03270164	-18.65579479
MG 03	Jacare	10	65	-45.03073645	-18.6582086
MG 03	Jacare	10	66	-45.02980315	-18.65566825
MG 03	Jacare	10	67	-45.02837103	-18.65843126
MG 03	Jacare	11	4	-45.03635861	-18.65599998
MG 03	Jacare	11	5	-45.03562691	-18.65846616
MG 03	Jacare	11	6	-45.03411381	-18.65925744
MG 03	Jacare	12	1	-45.034433	-18.65055471
MG 03	Jacare	12	2	-45.03390045	-18.65300003

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 03	Jacare	12	3	-45.03203456	-18.65169835
MG 03	Jacare	13	35	-45.0409211	-18.65078364
MG 03	Jacare	13	36	-45.03763956	-18.65060966
MG 03	Jacare	13	37	-45.04012206	-18.65295911
MG 03	Jacare	13	38	-45.03692397	-18.65372192
MG 03	Jacare	14	1	-45.03453857	-18.64637076
MG 03	Jacare	14	2	-45.03370735	-18.64804117
MG 03	Jacare	15	47	-45.03964077	-18.64652224
MG 03	Jacare	15	48	-45.03789734	-18.64831099
MG 03	Jacare	16	44	-45.03771255	-18.6416782
MG 03	Jacare	16	45	-45.0375465	-18.64405996
MG 03	Jacare	16	46	-45.03454811	-18.64317136
MG 03	Jacare	20	38	-45.03431229	-18.63005605
MG 03	Jacare	20	39	-45.03396293	-18.63208852
MG 03	Jacare	22	10	-45.02746668	-18.62909959
MG 03	Jacare	22	11	-45.02914367	-18.63016506
MG 03	Jacare	23	11	-45.0319944	-18.62808024
MG 03	Jacare	23	12	-45.03248557	-18.62597129
MG 03	Jacare	24	7	-45.02832346	-18.62454761
MG 03	Jacare	24	8	-45.02866535	-18.62608302
MG 03	Jacare	25	12	-45.02377815	-18.62978335
MG 03	Jacare	25	13	-45.02374229	-18.63115812
MG 03	Jacare	26	14	-45.02377765	-18.62617458
MG 03	Jacare	26	15	-45.02449886	-18.62754926
MG 03	Jacare	30	58	-45.02070753	-18.61576146
MG 03	Jacare	30	59	-45.02150159	-18.61942988
MG 03	Jacare	31	1	-45.01493784	-18.6222474
MG 03	Jacare	31	2	-45.01579299	-18.62362146
MG 03	Jacare	31	3	-45.01628173	-18.62515858
MG 03	Jacare	32	5	-45.01774156	-18.61990369
MG 03	Jacare	32	6	-45.01456432	-18.61950763
MG 03	Jacare	32	7	-45.0166427	-18.6178655
MG 03	Jacare	35	18	-45.01123127	-18.61510884
MG 03	Jacare	35	19	-45.01177213	-18.61696475

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 03	Jacare	36	8	-45.01192098	-18.61044875
MG 03	Jacare	36	9	-45.01236653	-18.61291166
MG 03	Jacare	37	10	-45.01581556	-18.66401006
MG 03	Jacare	37	11	-45.01727128	-18.66757692
MG 03	Jacare	38	55	-45.01859407	-18.67099206
MG 03	Jacare	38	56	-45.01952726	-18.67331017
MG 03	Jacare	38	57	-45.0197941	-18.67575536
MG 03	Jacare	39	16	-45.02094928	-18.67791838
MG 03	Jacare	39	17	-45.02060239	-18.67933414
MG 03	Jacare	40	20	-45.0162115	-18.67363918
MG 03	Jacare	40	21	-45.0172215	-18.67652609
MG 03	Jacare	41	22	-45.01271283	-18.66315688
MG 03	Jacare	41	23	-45.01321781	-18.66521899
MG 03	Jacare	41	24	-45.01386704	-18.66728109
MG 03	Jacare	42	47	-45.01186362	-18.6699129
MG 03	Jacare	42	48	-45.01023109	-18.67134202
MG 03	Jacare	43	24	-45.00830107	-18.66194396
MG 03	Jacare	43	25	-45.00910313	-18.66454839
MG 03	Jacare	43	26	-45.00984578	-18.66664325
MG 03	Jacare	44	58	-45.00523318	-18.66813485
MG 03	Jacare	44	59	-45.00223454	-18.66762681
MG 03	Jacare	44	60	-45.00426699	-18.66981795
MG 03	Jacare	45	25	-45.00477989	-18.66106073
MG 03	Jacare	45	26	-45.00477994	-18.66260734
MG 03	Jacare	45	27	-45.00395063	-18.66432582
MG 03	Jacare	46	49	-44.99747005	-18.66769032
MG 03	Jacare	46	50	-44.99770324	-18.67019906
MG 03	Jacare	47	51	-45.00004995	-18.66258181
MG 03	Jacare	47	52	-44.9986788	-18.66423262
MG 03	Jacare	47	53	-45.00137295	-18.66033485
MG 03	Jacare	48	12	-44.99965815	-18.65827807
MG 03	Jacare	48	13	-45.00097981	-18.65853285
MG 03	Jacare	50	14	-45.01363231	-18.66123591
MG 03	Jacare	50	15	-45.01276355	-18.66103073

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 03	Jacare	51	51	-45.0107966	-18.65689292
MG 03	Jacare	51	52	-45.00983054	-18.65863956
MG 03	Jacare	54	6	-45.01566113	-18.65328089
MG 03	Jacare	54	10	-45.01363533	-18.65283902
MG 03	Jacare	54	11	-45.01136558	-18.65376975
MG 03	Jacare	54	12	-45.01329373	-18.65395574
MG 03	Jacare	54	13	-45.01414805	-18.65497932
MG 03	Jacare	55	16411	-45.00779215	-18.65322721
MG 03	Jacare	55	16412	-45.00660318	-18.6536453
MG 03	Jacare	55	16413	-45.00513584	-18.65378964
MG 03	Jacare	55	27691	-45.00477995	-18.6507538
MG 03	Jacare	55	27692	-45.00382265	-18.65057635
MG 03	Jacare	55	27693	-45.00273795	-18.6501726
MG 03	Jacare	55	32071	-45.00577874	-18.65180958
MG 03	Jacare	55	32072	-45.00480342	-18.65178536
MG 03	Jacare	55	32073	-45.00385358	-18.6515474
MG 03	Jacare	55	33354	-45.00614025	-18.65213471
MG 03	Jacare	55	33355	-45.00469764	-18.65219423
MG 03	Jacare	55	33356	-45.00324069	-18.65185954
MG 03	Jacare	55	33357	-45.00791168	-18.65424964
MG 03	Jacare	55	33358	-45.00703669	-18.65457527
MG 03	Jacare	55	33359	-45.00759644	-18.65510954
MG 03	Jacare	55	50921	-45.00706703	-18.6525311
MG 03	Jacare	55	50922	-45.00572383	-18.6528196
MG 03	Jacare	55	50923	-45.00417201	-18.6527388
MG 03	Jacare	55	66261	-45.00766098	-18.65392827
MG 03	Jacare	55	66262	-45.00700912	-18.65413941
MG 03	Jacare	55	66263	-45.00627033	-18.65432331
MG 03	Jacare	56	23	-45.00355096	-18.64472399
MG 03	Jacare	56	24	-45.00298997	-18.64744982
MG 03	Jacare	56	25	-45.00492649	-18.64729451
MG 03	Jacare	56	26	-45.00613914	-18.64893342
MG 03	Jacare	57	40	-45.01699274	-18.65054121
MG 03	Jacare	57	41	-45.01366123	-18.6500969

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 03	Jacare	57	42	-45.01049636	-18.65047818
MG 03	Jacare	58	3	-45.01657144	-18.64848226
MG 03	Jacare	58	4	-45.01548729	-18.64682625
MG 03	Jacare	59	10	-45.01384714	-18.64284635
MG 03	Jacare	59	11	-45.01369423	-18.64399017
MG 03	Jacare	60	16	-45.01109928	-18.64521999
MG 03	Jacare	60	17	-45.01072819	-18.64722999
MG 03	Jacare	61	28	-45.00809095	-18.64473189
MG 03	Jacare	61	29	-45.00802899	-18.64804744
MG 03	Jacare	63	14	-45.00572699	-18.63548403
MG 03	Jacare	63	15	-45.00601978	-18.63376244
MG 03	Jacare	64	30	-45.00862882	-18.63334079
MG 03	Jacare	64	31	-45.00875058	-18.63492607
MG 03	Jacare	64	32	-45.00927795	-18.63680131
MG 03	Jacare	66	16	-45.0129256	-18.62715494
MG 03	Jacare	66	17	-45.01443864	-18.6278295
MG 03	Jacare	66	18	-45.01258409	-18.62899287
MG 03	Jacare	67	19	-45.01082728	-18.63245941
MG 03	Jacare	67	20	-45.01221836	-18.63348297
MG 03	Jacare	67	21	-45.01304819	-18.6347392
MG 03	Jacare	67	22	-45.0118525	-18.63627474
MG 03	Jacare	68	33	-45.01631452	-18.63136835
MG 03	Jacare	68	34	-45.01903183	-18.63053679
MG 03	Jacare	68	35	-45.01728774	-18.62955099
MG 03	Jacare	69	1	-45.01900689	-18.63804493
MG 03	Jacare	69	2	-45.01655828	-18.63639383
MG 03	Jacare	69	3	-45.01635861	-18.63858504
MG 03	Jacare	70	23	-45.02166262	-18.63306335
MG 03	Jacare	70	24	-45.0191247	-18.63378483
MG 03	Jacare	72	36	-45.02065533	-18.64022229
MG 03	Jacare	72	37	-45.02106113	-18.64182685
MG 03	Jacare	72	38	-45.01854641	-18.6422911
MG 03	Jacare	73	39	-45.02668953	-18.6360879
MG 03	Jacare	73	40	-45.02822689	-18.63745312

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 03	Jacare	73	41	-45.02494296	-18.63732037
MG 03	Jacare	73	42	-45.02497819	-18.63935189
MG 03	Jacare	74	18	-45.03040185	-18.63927287
MG 03	Jacare	74	19	-45.03108523	-18.64124027
MG 03	Jacare	76	43	-45.02294763	-18.64497786
MG 03	Jacare	76	44	-45.02294745	-18.64366324
MG 03	Jacare	77	45	-45.02152826	-18.64723994
MG 03	Jacare	77	46	-45.02004783	-18.64793608
MG 03	Jacare	77	47	-45.02008815	-18.64592548
MG 03	Jacare	78	20	-45.02894836	-18.64905403
MG 03	Jacare	78	21	-45.028325	-18.65089424
MG 03	Jacare	78	22	-45.02787983	-18.65284766
MG 03	Jacare	78	23	-45.02532572	-18.65298957
MG 03	Jacare	10A	71	-45.02620146	-18.65943587
MG 03	Jacare	10A	72	-45.02641794	-18.65891583
MG 03	Jacare	17A	53	-45.03867771	-18.63764496
MG 03	Jacare	17A	54	-45.03714567	-18.63910606
MG 03	Jacare	33A	62	-45.01528454	-18.61497669
MG 03	Jacare	33A	63	-45.017942	-18.61617445
MG 03	Riachao	2	1	-45.07137695	-18.6615821
MG 03	Riachao	2	2	-45.07118052	-18.66337615
MG 03	Riachao	2	3	-45.07110953	-18.66508472
MG 03	Riachao	3	12	-45.07503358	-18.6622842
MG 03	Riachao	3	13	-45.07561272	-18.66061049
MG 03	Riachao	4	25041	-45.08250534	-18.65910066
MG 03	Riachao	4	25042	-45.08342483	-18.65977574
MG 03	Riachao	4	25043	-45.08413805	-18.66028444
MG 03	Riachao	4	26821	-45.08183663	-18.65999401
MG 03	Riachao	4	26822	-45.08291169	-18.66013457
MG 03	Riachao	4	26823	-45.08369221	-18.66076874
MG 03	Riachao	4	27	-45.084117	-18.659148
MG 03	Riachao	4	27691	-45.0808567	-18.66083295
MG 03	Riachao	4	27692	-45.0813923	-18.66109707
MG 03	Riachao	4	27693	-45.08222722	-18.66163049

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 03	Riachao	4	28	-45.081991	-18.660777
MG 03	Riachao	4	29	-45.080253	-18.66262
MG 03	Riachao	4	30071	-45.0803527	-18.66110578
MG 03	Riachao	4	30072	-45.0810292	-18.66165429
MG 03	Riachao	4	30073	-45.08188541	-18.66213424
MG 03	Riachao	4	33351	-45.07896314	-18.66273262
MG 03	Riachao	4	33352	-45.07971735	-18.66312213
MG 03	Riachao	4	33353	-45.08009831	-18.66388204
MG 03	Riachao	4	33354	-45.08120849	-18.66033381
MG 03	Riachao	4	33355	-45.0822491	-18.66096564
MG 03	Riachao	4	33356	-45.08308134	-18.66151515
MG 03	Riachao	4	33357	-45.0840456	-18.6580888
MG 03	Riachao	4	33358	-45.08491656	-18.65836934
MG 03	Riachao	4	33359	-45.08554914	-18.65868626
MG 03	Riachao	4	40991	-45.08347278	-18.65850094
MG 03	Riachao	4	40992	-45.08447642	-18.65890008
MG 03	Riachao	4	40993	-45.08499409	-18.65908373
MG 03	Riachao	4	43281	-45.07934217	-18.66209451
MG 03	Riachao	4	43282	-45.08036753	-18.66287277
MG 03	Riachao	4	43283	-45.08091529	-18.66319723
MG 03	Riachao	4	43491	-45.08000267	-18.66158615
MG 03	Riachao	4	43492	-45.0806987	-18.66190257
MG 03	Riachao	4	43493	-45.08156824	-18.66242115
MG 03	Riachao	4	54261	-45.08284849	-18.65886396
MG 03	Riachao	4	54262	-45.08387494	-18.65954784
MG 03	Riachao	4	54263	-45.08483324	-18.65972386
MG 03	Riachao	4	65191	-45.07952976	-18.66182587
MG 03	Riachao	4	65192	-45.08050592	-18.66221697
MG 03	Riachao	4	65193	-45.08121938	-18.66277085
MG 03	Riachao	6	101	-45.07080023	-18.65567514
MG 03	Riachao	6	102	-45.06766881	-18.65631142
MG 03	Riachao	6	103	-45.07100118	-18.65821556
MG 03	Riachao	6	104	-45.06826943	-18.65866116
MG 03	Riachao	7	33351	-45.07896314	-18.66273262

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 03	Riachao	7	333510	-45.07423927	-18.65648283
MG 03	Riachao	7	333511	-45.07450531	-18.65577078
MG 03	Riachao	7	333512	-45.07493044	-18.65462297
MG 03	Riachao	7	33352	-45.0783495	-18.65664108
MG 03	Riachao	7	33353	-45.07863265	-18.65596533
MG 03	Riachao	7	33354	-45.07660875	-18.65723385
MG 03	Riachao	7	33355	-45.07717059	-18.65599307
MG 03	Riachao	7	33356	-45.07746002	-18.6548336
MG 03	Riachao	7	33357	-45.07523621	-18.65761816
MG 03	Riachao	7	33358	-45.07584583	-18.65623447
MG 03	Riachao	7	33359	-45.07639049	-18.65498825
MG 03	Riachao	7	43281	-45.07731224	-18.65758899
MG 03	Riachao	7	43282	-45.07811188	-18.65552369
MG 03	Riachao	7	43283	-45.07825378	-18.65464082
MG 03	Riachao	7	54261	-45.07601171	-18.65733183
MG 03	Riachao	7	54262	-45.07653767	-18.65616607
MG 03	Riachao	7	54263	-45.07691503	-18.65512479
MG 03	Riachao	7	65191	-45.07460975	-18.65764481
MG 03	Riachao	7	65192	-45.07505835	-18.65641108
MG 03	Riachao	7	65193	-45.07569672	-18.65477501
MG 03	Riachao	8	31	-45.08078594	-18.65518994
MG 03	Riachao	8	32	-45.08194526	-18.653996
MG 03	Riachao	8	34	-45.08104204	-18.6523062
MG 03	Riachao	9	33	-45.08691562	-18.65276373
MG 03	Riachao	9	34	-45.08472719	-18.65276473
MG 03	Riachao	9	35	-45.08482467	-18.65463597
MG 03	Riachao	10	105	-45.08708792	-18.64842788
MG 03	Riachao	10	106	-45.08482319	-18.64973092
MG 03	Riachao	13	94	-45.07757616	-18.64725707
MG 03	Riachao	13	95	-45.07499364	-18.64571794
MG 03	Riachao	13	96	-45.07382862	-18.64794133
MG 03	Riachao	15	107	-45.06986543	-18.6508803
MG 03	Riachao	15	108	-45.06999954	-18.6529444
MG 03	Riachao	15	109	-45.06540158	-18.65173932

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 03	Riachao	15	110	-45.06596849	-18.65316816
MG 03	Riachao	16	16	-45.07089524	-18.64606532
MG 03	Riachao	16	17	-45.07005842	-18.64775447
MG 03	Riachao	16	18	-45.0675455	-18.64689561
MG 03	Riachao	16	19	-45.06627369	-18.64838531
MG 03	Riachao	16	20	-45.06913912	-18.6446842
MG 03	Riachao	18	1	-45.06925998	-18.63662197
MG 03	Riachao	18	2	-45.06919447	-18.63935303
MG 03	Riachao	20	24	-45.06233991	-18.64148438
MG 03	Riachao	20	25	-45.06279108	-18.64323281
MG 03	Riachao	20	26	-45.06362839	-18.64485841
MG 03	Riachao	20	27	-45.06362903	-18.64657632
MG 03	Riachao	22	79	-45.07067356	-18.62893875
MG 03	Riachao	22	80	-45.06836514	-18.62994844
MG 03	Riachao	22	81	-45.06557468	-18.62834446
MG 03	Riachao	23	64	-45.07081544	-18.62309202
MG 03	Riachao	23	65	-45.06963768	-18.62472036
MG 03	Riachao	23	66	-45.06802703	-18.62641763
MG 03	Riachao	24	82	-45.0746162	-18.62526873
MG 03	Riachao	24	83	-45.07298158	-18.62705776
MG 03	Riachao	25	84	-45.07699967	-18.63090808
MG 03	Riachao	25	85	-45.07507654	-18.63299532
MG 03	Riachao	25	86	-45.07331985	-18.6307032
MG 03	Riachao	31	21	-45.09489886	-18.62701693
MG 03	Riachao	31	22	-45.09428765	-18.62838366
MG 03	Riachao	31	23	-45.09424852	-18.63043332
MG 03	Riachao	31	24	-45.09188091	-18.63001228
MG 03	Riachao	33	67	-45.08926804	-18.63587806
MG 03	Riachao	33	68	-45.09104873	-18.63757389
MG 03	Riachao	42	25	-45.10341513	-18.63552572
MG 03	Riachao	42	26	-45.10438215	-18.63669202
MG 03	Riachao	44	69	-45.09938863	-18.6273208
MG 03	Riachao	44	70	-45.09835564	-18.62933902
MG 03	Riachao	44	71	-45.09806811	-18.63121927

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 03	Riachao	44	72	-45.09806898	-18.63273253
MG 03	Riachao	47	30	-45.10823635	-18.62216048
MG 03	Riachao	47	31	-45.10678732	-18.61964054
MG 03	Riachao	53	1	-45.131501	-18.618605
MG 03	Riachao	53	2	-45.12922	-18.620423
MG 03	Riachao	54	1	-45.12445767	-18.63072271
MG 03	Riachao	54	2	-45.12413905	-18.63178864
MG 03	Riachao	55	87	-45.12889606	-18.62475788
MG 03	Riachao	55	88	-45.12743047	-18.62668484
MG 03	Riachao	55	89	-45.1267827	-18.62881759
MG 03	Riachao	55	90	-45.12389671	-18.62886537
MG 03	Riachao	56	3	-45.133489	-18.620824
MG 03	Riachao	56	4	-45.1311	-18.62255
MG 03	Riachao	57	91	-45.13108623	-18.62691161
MG 03	Riachao	57	92	-45.13185761	-18.62922681
MG 03	Riachao	58	3	-45.13463262	-18.62340797
MG 03	Riachao	58	4	-45.13427463	-18.62508291
MG 03	Riachao	58	5	-45.13411607	-18.62652935
MG 03	Riachao	59	1	-45.1347368	-18.63128422
MG 03	Riachao	59	2	-45.13597097	-18.63239493
MG 03	Riachao	59	3	-45.13787842	-18.6341892
MG 03	Riachao	62	6	-45.01570145	-18.60724136
MG 03	Riachao	62	7	-45.01793696	-18.6076979
MG 03	Riachao	62	8	-45.02284732	-18.61009523
MG 03	Riachao	66	1	-45.03190828	-18.61597559
MG 03	Riachao	66	2	-45.03415793	-18.61738258
MG 03	Riachao	66	3	-45.03361857	-18.61514874
MG 03	Riachao	67	12	-45.03350797	-18.62086498
MG 03	Riachao	67	13	-45.03254947	-18.61892402
MG 03	Riachao	72	25041	-45.04452098	-18.62185325
MG 03	Riachao	72	25042	-45.04582738	-18.6218664
MG 03	Riachao	72	25043	-45.04670824	-18.62218953
MG 03	Riachao	72	27691	-45.04375731	-18.61960673
MG 03	Riachao	72	27692	-45.04545816	-18.61933465

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 03	Riachao	72	27693	-45.04645251	-18.61955702
MG 03	Riachao	72	30071	-45.04379167	-18.61994737
MG 03	Riachao	72	30072	-45.0458983	-18.61969893
MG 03	Riachao	72	30073	-45.0466504	-18.62003865
MG 03	Riachao	72	33351	-45.04474251	-18.6227776
MG 03	Riachao	72	33352	-45.04562731	-18.62279713
MG 03	Riachao	72	33353	-45.04567752	-18.62256822
MG 03	Riachao	72	33354	-45.04436357	-18.62113718
MG 03	Riachao	72	33355	-45.04624296	-18.62125453
MG 03	Riachao	72	33356	-45.04702491	-18.62149232
MG 03	Riachao	72	33357	-45.0437102	-18.61822891
MG 03	Riachao	72	33358	-45.04490529	-18.61799464
MG 03	Riachao	72	33359	-45.0452425	-18.61762818
MG 03	Riachao	72	34191	-45.04460815	-18.62219984
MG 03	Riachao	72	34192	-45.04570677	-18.62222046
MG 03	Riachao	72	34193	-45.04647095	-18.62241508
MG 03	Riachao	72	43281	-45.04393391	-18.62044349
MG 03	Riachao	72	43282	-45.04582445	-18.62019857
MG 03	Riachao	72	43283	-45.04677337	-18.62056034
MG 03	Riachao	72	65191	-45.0438361	-18.61928964
MG 03	Riachao	72	65192	-45.0453637	-18.61895101
MG 03	Riachao	72	65193	-45.0462132	-18.61917665
MG 03	Riachao	73	4	-45.048478	-18.62058702
MG 03	Riachao	73	5	-45.04921183	-18.62133449
MG 03	Riachao	74	73	-45.05852312	-18.61415427
MG 03	Riachao	74	74	-45.05720098	-18.61569086
MG 03	Riachao	74	75	-45.05587879	-18.61713573
MG 03	Riachao	74	76	-45.05544648	-18.61885547
MG 03	Riachao	77	16411	-45.055989	-18.62308
MG 03	Riachao	77	16412	-45.05594526	-18.62171746
MG 03	Riachao	77	16413	-45.0554991	-18.62243353
MG 03	Riachao	77	27691	-45.05528779	-18.62017008
MG 03	Riachao	77	27692	-45.05468437	-18.62087474
MG 03	Riachao	77	27693	-45.05426603	-18.62153079

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 03	Riachao	77	32031	-45.05888815	-18.62310064
MG 03	Riachao	77	32032	-45.05857316	-18.6228988
MG 03	Riachao	77	32033	-45.05843092	-18.62343734
MG 03	Riachao	77	32071	-45.055799	-18.62059076
MG 03	Riachao	77	32072	-45.05530656	-18.6211692
MG 03	Riachao	77	32073	-45.05495058	-18.62179021
MG 03	Riachao	77	33351	-45.05691723	-18.62145192
MG 03	Riachao	77	33352	-45.05650861	-18.62187529
MG 03	Riachao	77	33353	-45.05617049	-18.62241542
MG 03	Riachao	77	33511	-45.05813244	-18.62265489
MG 03	Riachao	77	33512	-45.05784335	-18.62304574
MG 03	Riachao	77	33513	-45.057611	-18.62343307
MG 03	Riachao	77	33671	-45.05759399	-18.62212792
MG 03	Riachao	77	33672	-45.05698772	-18.62270904
MG 03	Riachao	77	33673	-45.05660291	-18.62348109
MG 03	Riachao	78	3	-45.05879	-18.618848
MG 03	Riachao	78	4	-45.060594	-18.620306
MG 03	Riachao	78	5	-45.058243	-18.620261
MG 03	Riachao	79	5	-45.061887	-18.616124
MG 03	Riachao	79	6	-45.065263	-18.618035
MG 03	Riachao	79	7	-45.062319	-18.618004
MG 03	Riachao	80	20	-45.04916629	-18.62880336
MG 03	Riachao	80	21	-45.04921409	-18.62716213
MG 03	Riachao	82	22	-45.05871389	-18.62493532
MG 03	Riachao	82	23	-45.05837694	-18.62760432
MG 03	Riachao	82	24	-45.05822702	-18.62634792
MG 03	Riachao	88	1	-45.054403	-18.63489
MG 03	Riachao	88	2	-45.052652	-18.634702
MG 03	Riachao	90	6	-45.04468567	-18.64098833
MG 03	Riachao	90	7	-45.04760095	-18.64124414
MG 03	Riachao	91	6	-45.05247217	-18.64115231
MG 03	Riachao	91	7	-45.05323792	-18.64180328
MG 03	Riachao	93	97	-45.04664502	-18.65087162
MG 03	Riachao	93	98	-45.04774463	-18.65164937

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 03	Riachao	94	100	-45.0522427	-18.65345828
MG 03	Riachao	94	99	-45.05031083	-18.65488784
MG 03	Riachao	96	1	-45.043841	-18.659923
MG 03	Riachao	96	2	-45.04217	-18.661666
MG 03	Riachao	98	28	-45.06247324	-18.65409255
MG 03	Riachao	98	29	-45.06347196	-18.65691449
MG 03	Riachao	98	30	-45.0650498	-18.65912269
MG 03	Riachao	10B	1	-45.086184	-18.646166
MG 03	Riachao	10B	2	-45.085217	-18.645445
MG 03	Riachao	39A	77	-45.09710799	-18.63456727
MG 03	Riachao	39A	78	-45.0963639	-18.63720439
MG 03	Riachao	85A	1	-45.05614886	-18.63073915
MG 03	Riachao	85A	2	-45.05847107	-18.63118314
MG 03	Riachao	85A	PC01	-45.05910126	-18.63058197
MG 03	Riachao	85A	PC02	-45.05741411	-18.63169417
MG 03	Riachao	85A	PC03	-45.0585711	-18.63277838
MG 03	Riachao	85A	PC04	-45.05712942	-18.63088988
MG 03	Riachao	96A	113	-45.04223275	-18.65870057
MG 03	Riachao	96A	114	-45.04076735	-18.66089207
MG 04	Buriti Grande	1	1	-45.32903084	-18.72561225
MG 04	Buriti Grande	1	2	-45.32766818	-18.72759936
MG 04	Buriti Grande	2	1	-45.32999725	-18.7295215
MG 04	Buriti Grande	2	2	-45.32949747	-18.73226833
MG 04	Buriti Grande	2	3	-45.3274202	-18.7336308
MG 04	Buriti Grande	4	3	-45.32269742	-18.73391147
MG 04	Buriti Grande	4	4	-45.32058312	-18.73507418
MG 04	Buriti Grande	5	5	-45.31646364	-18.73339814
MG 04	Buriti Grande	5	6	-45.3144149	-18.73398907
MG 04	Buriti Grande	6	1	-45.313802	-18.73523
MG 04	Buriti Grande	6	2	-45.311093	-18.736587
MG 04	Buriti Grande	6	3	-45.309039	-18.736636
MG 04	Buriti Grande	6	PC01	-45.31275596	-18.73491249
MG 04	Buriti Grande	6	PC02	-45.31176582	-18.73539373
MG 04	Buriti Grande	6	PC03	-45.3104435	-18.73487138

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Buriti Grande	6	PC04	-45.30968975	-18.73559201
MG 04	Buriti Grande	6	PC05	-45.30789693	-18.73584974
MG 04	Buriti Grande	6	PC06	-45.30717503	-18.73679511
MG 04	Buriti Grande	6	PC07	-45.3119561	-18.7362177
MG 04	Buriti Grande	6	PC08	-45.31051067	-18.73719426
MG 04	Buriti Grande	6	PC09	-45.30865472	-18.7373472
MG 04	Buriti Grande	7	1	-45.31714984	-18.73706468
MG 04	Buriti Grande	7	2	-45.31471439	-18.7376494
MG 04	Buriti Grande	7	3	-45.31306751	-18.73779424
MG 04	Buriti Grande	7	PC01	-45.31845817	-18.73643624
MG 04	Buriti Grande	7	PC02	-45.31620738	-18.73573567
MG 04	Buriti Grande	7	PC03	-45.31617737	-18.73651505
MG 04	Buriti Grande	7	PC04	-45.31447889	-18.73674271
MG 04	Buriti Grande	7	PC05	-45.3156285	-18.73743018
MG 04	Buriti Grande	7	PC06	-45.31391596	-18.73857208
MG 04	Buriti Grande	7	PC07	-45.31315823	-18.73713459
MG 04	Buriti Grande	7	PC08	-45.3115083	-18.7381115
MG 04	Buriti Grande	8	6	-45.31081042	-18.73957921
MG 04	Buriti Grande	8	7	-45.30714093	-18.73968434
MG 04	Buriti Grande	8	8	-45.30724907	-18.74197719
MG 04	Buriti Grande	9	7	-45.31419518	-18.74134086
MG 04	Buriti Grande	9	8	-45.30996625	-18.74366606
MG 04	Buriti Grande	9	9	-45.31114387	-18.74201508
MG 04	Buriti Grande	9	10	-45.30770344	-18.74492191
MG 04	Buriti Grande	10	9	-45.32258518	-18.73794214
MG 04	Buriti Grande	10	10	-45.3191104	-18.73885398
MG 04	Buriti Grande	10	11	-45.31664505	-18.73933942
MG 04	Buriti Grande	11	1	-45.326087	-18.737113
MG 04	Buriti Grande	11	2	-45.323067	-18.736582
MG 04	Buriti Grande	11	PC01	-45.32945733	-18.73821566
MG 04	Buriti Grande	11	PC02	-45.32813508	-18.73776837
MG 04	Buriti Grande	11	PC03	-45.32624411	-18.73606315
MG 04	Buriti Grande	11	PC04	-45.32402765	-18.7368763
MG 04	Buriti Grande	11	PC05	-45.32218626	-18.73639989

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Buriti Grande	11	PC06	-45.32380542	-18.73582759
MG 04	Buriti Grande	11	PC07	-45.32501705	-18.73602032
MG 04	Buriti Grande	11	PC08	-45.32681378	-18.73781564
MG 04	Buriti Grande	12	9	-45.32550707	-18.73906688
MG 04	Buriti Grande	12	10	-45.32194412	-18.74093075
MG 04	Buriti Grande	12	11	-45.32440733	-18.74065045
MG 04	Buriti Grande	13	12	-45.31827398	-18.74244001
MG 04	Buriti Grande	13	13	-45.31575094	-18.74388804
MG 04	Buriti Grande	13	14	-45.31242587	-18.74550722
MG 04	Buriti Grande	14	1	-45.31056692	-18.75052214
MG 04	Buriti Grande	14	2	-45.30837844	-18.75141993
MG 04	Buriti Grande	15	3	-45.312489	-18.74873059
MG 04	Buriti Grande	15	4	-45.30943084	-18.74781856
MG 04	Buriti Grande	16	5	-45.3119892	-18.75178079
MG 04	Buriti Grande	16	6	-45.31341348	-18.75411702
MG 04	Buriti Grande	17	7	-45.32035569	-18.74704357
MG 04	Buriti Grande	17	8	-45.31617028	-18.74822
MG 04	Buriti Grande	18	9	-45.32636775	-18.74464872
MG 04	Buriti Grande	18	10	-45.32265999	-18.74382975
MG 04	Buriti Grande	18	11	-45.32081088	-18.74594227
MG 04	Buriti Grande	18	12	-45.31741661	-18.74546658
MG 04	Buriti Grande	19	1	-45.32983295	-18.74545912
MG 04	Buriti Grande	19	2	-45.3274533	-18.74708913
MG 04	Buriti Grande	19	3	-45.32336457	-18.74746436
MG 04	Buriti Grande	21	1	-45.33559963	-18.74351379
MG 04	Buriti Grande	21	2	-45.33340403	-18.74518794
MG 04	Buriti Grande	22	1	-45.33268977	-18.74051866
MG 04	Buriti Grande	22	2	-45.33398964	-18.74185203
MG 04	Buriti Grande	23	97	-45.33681109	-18.73785512
MG 04	Buriti Grande	23	98	-45.33363686	-18.73907597
MG 04	Buriti Grande	24	1	-45.339723	-18.733959
MG 04	Buriti Grande	24	PC01	-45.338881	-18.733959
MG 04	Buriti Grande	24	PC02	-45.338881	-18.734622
MG 04	Buriti Grande	24	PC03	-45.338288	-18.73546

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Buriti Grande	26	PC01	-45.35462538	-18.73118276
MG 04	Buriti Grande	26	PC02	-45.3542491	-18.73270183
MG 04	Buriti Grande	26	PC03	-45.35195004	-18.73103417
MG 04	Buriti Grande	26	PC04	-45.35202905	-18.73254333
MG 04	Buriti Grande	28	12	-45.35143668	-18.73591193
MG 04	Buriti Grande	28	13	-45.34865649	-18.73734613
MG 04	Buriti Grande	29	15	-45.34595523	-18.73624789
MG 04	Buriti Grande	29	16	-45.34560356	-18.73865478
MG 04	Buriti Grande	29	17	-45.34340659	-18.73956471
MG 04	Buriti Grande	30	14	-45.34170785	-18.73780352
MG 04	Buriti Grande	30	15	-45.34174569	-18.74004221
MG 04	Buriti Grande	31	16	-45.34072242	-18.7408856
MG 04	Buriti Grande	31	17	-45.34057903	-18.74002052
MG 04	Buriti Grande	32	1	-45.34630278	-18.7427443
MG 04	Buriti Grande	32	2	-45.34500176	-18.74202448
MG 04	Buriti Grande	33	3	-45.35068734	-18.73997584
MG 04	Buriti Grande	33	4	-45.34870058	-18.74196117
MG 04	Buriti Grande	33	5	-45.35033906	-18.74399634
MG 04	Buriti Grande	34	18	-45.35369321	-18.73912293
MG 04	Buriti Grande	34	19	-45.35386482	-18.74150426
MG 04	Buriti Grande	34	20	-45.35306948	-18.74372864
MG 04	Buriti Grande	35	18	-45.35221736	-18.74702185
MG 04	Buriti Grande	35	19	-45.35348467	-18.74914262
MG 04	Buriti Grande	36	22	-45.348816	-18.74933185
MG 04	Buriti Grande	36	23	-45.35083964	-18.75077181
MG 04	Buriti Grande	37	93	-45.34801813	-18.74599682
MG 04	Buriti Grande	37	94	-45.34576005	-18.74804156
MG 04	Buriti Grande	38	6	-45.34391033	-18.74621635
MG 04	Buriti Grande	38	7	-45.34466393	-18.74417673
MG 04	Buriti Grande	39	24	-45.34213784	-18.74401151
MG 04	Buriti Grande	39	25	-45.34227755	-18.74698368
MG 04	Buriti Grande	40	21	-45.34294606	-18.74851079
MG 04	Buriti Grande	40	22	-45.3426635	-18.74889237
MG 04	Buriti Grande	43	26	-45.34336628	-18.75270006

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Buriti Grande	43	27	-45.34350171	-18.75354199
MG 04	Buriti Grande	45	28	-45.33900543	-18.74897833
MG 04	Buriti Grande	45	29	-45.3404418	-18.74656947
MG 04	Buriti Grande	45	30	-45.33764254	-18.75100487
MG 04	Buriti Grande	46	3	-45.33474133	-18.74999897
MG 04	Buriti Grande	46	4	-45.33537038	-18.75167155
MG 04	Buriti Grande	46	5	-45.33334838	-18.75149175
MG 04	Buriti Grande	47	6	-45.3391056	-18.75407221
MG 04	Buriti Grande	47	7	-45.33655813	-18.75593394
MG 04	Buriti Grande	48	13	-45.34215135	-18.75466278
MG 04	Buriti Grande	48	14	-45.34405468	-18.75564517
MG 04	Buriti Grande	48	15	-45.34003785	-18.7568906
MG 04	Buriti Grande	49	16	-45.33619239	-18.75962592
MG 04	Buriti Grande	49	17	-45.33660569	-18.76171158
MG 04	Buriti Grande	49	18	-45.3368011	-18.76315566
MG 04	Buriti Grande	12A	11	-45.33059055	-18.7392763
MG 04	Buriti Grande	20A	95	-45.33055961	-18.74068635
MG 04	Buriti Grande	20A	96	-45.32680801	-18.7420686
MG 04	Buriti Grande	35A	20	-45.35018202	-18.74709644
MG 04	Buriti Grande	35A	21	-45.35103171	-18.74845367
MG 04	Buriti Grande	42A	31	-45.34928082	-18.75319159
MG 04	Buriti Grande	42A	32	-45.34715333	-18.75183673
MG 04	Mutuca	1	1	-45.36981769	-18.74302991
MG 04	Mutuca	2	23	-45.36746213	-18.74050952
MG 04	Mutuca	2	24	-45.36616863	-18.74349706
MG 04	Mutuca	3	1	-45.36616405	-18.7403335
MG 04	Mutuca	3	2	-45.3649527	-18.74218153
MG 04	Mutuca	4	1	-45.35788422	-18.7452951
MG 04	Mutuca	4	2	-45.35850699	-18.74676973
MG 04	Mutuca	4	3	-45.3604111	-18.74718774
MG 04	Mutuca	5	1	-45.35653211	-18.74990117
MG 04	Mutuca	5	2	-45.35635785	-18.7518265
MG 04	Mutuca	5	3	-45.35463711	-18.75316028
MG 04	Mutuca	6	4	-45.35422622	-18.75562392

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Mutuca	6	5	-45.35146329	-18.75596883
MG 04	Mutuca	6	6	-45.35316061	-18.75763585
MG 04	Mutuca	7	1	-45.3486181	-18.7596826
MG 04	Mutuca	7	2	-45.34541301	-18.76184001
MG 04	Mutuca	7	3	-45.34324609	-18.76306128
MG 04	Mutuca	8	7	-45.35141282	-18.76030016
MG 04	Mutuca	8	8	-45.34960379	-18.76211531
MG 04	Mutuca	9	9	-45.34675476	-18.7640173
MG 04	Mutuca	9	10	-45.34586651	-18.76563254
MG 04	Mutuca	10	11	-45.35149314	-18.76320873
MG 04	Mutuca	10	12	-45.35116867	-18.76438415
MG 04	Mutuca	11	100	-45.35108808	-18.76998183
MG 04	Mutuca	11	99	-45.35334254	-18.77186909
MG 04	Mutuca	12	1	-45.35708793	-18.77673455
MG 04	Mutuca	14	101	-45.35628045	-18.76678509
MG 04	Mutuca	14	102	-45.35510638	-18.76933227
MG 04	Mutuca	15	1	-45.356532	-18.749901
MG 04	Mutuca	15	2	-45.356358	-18.751826
MG 04	Mutuca	16	4	-45.35623001	-18.75849632
MG 04	Mutuca	16	5	-45.35614502	-18.76018313
MG 04	Mutuca	16	6	-45.35747668	-18.76195158
MG 04	Mutuca	16	7	-45.35885122	-18.76304527
MG 04	Mutuca	17	13	-45.35854835	-18.75484427
MG 04	Mutuca	17	14	-45.35834422	-18.75668473
MG 04	Mutuca	18	15	-45.36134778	-18.75769806
MG 04	Mutuca	18	16	-45.36120311	-18.75953841
MG 04	Mutuca	18	17	-45.361118	-18.76143525
MG 04	Mutuca	19	18	-45.36219158	-18.74926043
MG 04	Mutuca	19	19	-45.36421642	-18.75120981
MG 04	Mutuca	19	20	-45.36017621	-18.75175549
MG 04	Mutuca	19	21	-45.3615171	-18.75347974
MG 04	Mutuca	20	8	-45.36635592	-18.75358547
MG 04	Mutuca	20	9	-45.36830521	-18.7543828
MG 04	Mutuca	20	10	-45.36414495	-18.75460178

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Mutuca	20	11	-45.36414839	-18.75620409
MG 04	Mutuca	22	25	-45.36729991	-18.7579753
MG 04	Mutuca	22	26	-45.36850246	-18.75911613
MG 04	Mutuca	22	27	-45.36977238	-18.76057437
MG 04	Mutuca	23	12	-45.36486503	-18.76012416
MG 04	Mutuca	23	13	-45.36637412	-18.76201869
MG 04	Mutuca	23	14	-45.36385409	-18.76345726
MG 04	Mutuca	23	15	-45.36611326	-18.76421184
MG 04	Mutuca	24	28	-45.37012058	-18.76355868
MG 04	Mutuca	26	29	-45.37431126	-18.76388377
MG 04	Mutuca	26	30	-45.37404768	-18.76529741
MG 04	Mutuca	27	31	-45.36952969	-18.76489358
MG 04	Mutuca	27	32	-45.36876664	-18.76659399
MG 04	Mutuca	27	33	-45.37070239	-18.76760634
MG 04	Mutuca	28	34	-45.36691995	-18.76821715
MG 04	Mutuca	28	35	-45.36683998	-18.76977332
MG 04	Mutuca	29	36	-45.36426689	-18.76693625
MG 04	Mutuca	29	37	-45.36405402	-18.76871496
MG 04	Mutuca	31	16	-45.36869642	-18.77145936
MG 04	Mutuca	31	17	-45.36781601	-18.77373806
MG 04	Mutuca	32	38	-45.37104295	-18.77089233
MG 04	Mutuca	32	39	-45.3724296	-18.77231857
MG 04	Mutuca	33	40	-45.37252198	-18.76884118
MG 04	Mutuca	33	41	-45.37405864	-18.7702671
MG 04	Mutuca	38	42	-45.37456459	-18.77293353
MG 04	Mutuca	38	43	-45.37525136	-18.77444053
MG 04	Mutuca	41	18	-45.36370497	-18.77648691
MG 04	Mutuca	41	19	-45.36326626	-18.77834308
MG 04	Mutuca	43	20	-45.36893758	-18.78056677
MG 04	Mutuca	43	21	-45.368543	-18.78233853
MG 04	Mutuca	45	3	-45.37709602	-18.77562003
MG 04	Mutuca	45	4	-45.37547634	-18.77791603
MG 04	Mutuca	46	22	-45.37823281	-18.7799157
MG 04	Mutuca	46	23	-45.37655385	-18.7813949

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Mutuca	47	24	-45.38083761	-18.77674795
MG 04	Mutuca	47	25	-45.3830896	-18.77421338
MG 04	Mutuca	49	44	-45.38442568	-18.77720046
MG 04	Mutuca	49	45	-45.38271368	-18.77939509
MG 04	Mutuca	52	26	-45.38868699	-18.78276153
MG 04	Mutuca	52	27	-45.3897087	-18.78427738
MG 04	Mutuca	52	28	-45.38971461	-18.7868495
MG 04	Mutuca	55	29	-45.38954509	-18.79013881
MG 04	Mutuca	55	30	-45.39118628	-18.79148469
MG 04	Mutuca	56	31	-45.3956576	-18.79139094
MG 04	Mutuca	56	32	-45.39645766	-18.79273855
MG 04	Mutuca	59	15	-45.387	-18.7601
MG 04	Mutuca	59	16	-45.3858	-18.7577
MG 04	Mutuca	60	PC01	-45.38411596	-18.7600545
MG 04	Mutuca	60	PC02	-45.38512446	-18.76129963
MG 04	Mutuca	60	PC03	-45.38251484	-18.76106097
MG 04	Mutuca	60	PC04	-45.38331447	-18.76224328
MG 04	Mutuca	61	PC01	-45.38656097	-18.76300481
MG 04	Mutuca	61	PC02	-45.3878653	-18.76498137
MG 04	Mutuca	61	PC03	-45.38566182	-18.76396466
MG 04	Mutuca	61	PC04	-45.38384039	-18.76405879
MG 04	Mutuca	61	PC05	-45.38567655	-18.76626926
MG 04	Mutuca	61	PC06	-45.38647079	-18.7650656
MG 04	Mutuca	68	46	-45.38938748	-18.76745721
MG 04	Mutuca	68	47	-45.38885868	-18.76945889
MG 04	Mutuca	70	48	-45.39707161	-18.77099763
MG 04	Mutuca	70	49	-45.39759125	-18.77223498
MG 04	Mutuca	72	35	-45.3931	-18.7776
MG 04	Mutuca	72	36	-45.3908	-18.7776
MG 04	Mutuca	72	37	-45.3899	-18.7758
MG 04	Mutuca	72	38	-45.3928	-18.7755
MG 04	Mutuca	72	39	-45.3905	-18.7731
MG 04	Mutuca	72	PC01	-45.389606	-18.772602
MG 04	Mutuca	72	PC02	-45.390694	-18.774618

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Mutuca	72	PC03	-45.391083	-18.776382
MG 04	Mutuca	72	PC04	-45.393662	-18.777753
MG 04	Mutuca	73	1	-45.3914275	-18.77972895
MG 04	Mutuca	73	2	-45.3954726	-18.78022483
MG 04	Mutuca	73	3	-45.39552567	-18.78233404
MG 04	Mutuca	73	4	-45.39904516	-18.78448172
MG 04	Mutuca	73	5	-45.39586893	-18.78501581
MG 04	Mutuca	14B	103	-45.35811476	-18.76917177
MG 04	Mutuca	14B	104	-45.35837735	-18.76813953
MG 04	Mutuca	43A	33	-45.37064198	-18.77867481
MG 04	Mutuca	63A	1	-45.3931	-18.7567
MG 04	Mutuca	63A	2	-45.3949	-18.7568
MG 04	Mutuca	67B	1	-45.393181	-18.768622
MG 04	Mutuca	69A	50	-45.39765892	-18.77976876
MG 04	Mutuca	69A	51	-45.39927842	-18.78084498
MG 04	Tamandua	1	1	-45.271806	-18.671656
MG 04	Tamandua	1	PC01	-45.27180629	-18.67165571
MG 04	Tamandua	1	PC02	-45.27128794	-18.67256235
MG 04	Tamandua	1	PC03	-45.27057401	-18.67188397
MG 04	Tamandua	1	PC04	-45.26938688	-18.67249432
MG 04	Tamandua	1	PC05	-45.26907257	-18.67095192
MG 04	Tamandua	2	1	-45.26441317	-18.67708177
MG 04	Tamandua	2	2	-45.26255893	-18.67412942
MG 04	Tamandua	3	1	-45.26075297	-18.67856681
MG 04	Tamandua	3	2	-45.26121954	-18.67985604
MG 04	Tamandua	3	3	-45.26305683	-18.67925667
MG 04	Tamandua	4	3	-45.25947529	-18.68223645
MG 04	Tamandua	4	4	-45.26255586	-18.68208776
MG 04	Tamandua	5	1	-45.26275182	-18.68362272
MG 04	Tamandua	5	2	-45.26098418	-18.68366103
MG 04	Tamandua	6	3	-45.26725603	-18.67784546
MG 04	Tamandua	6	4	-45.26740962	-18.67985251
MG 04	Tamandua	7	12	-45.268972	-18.67767521
MG 04	Tamandua	8	52	-45.27182136	-18.67723276

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Tamandua	8	53	-45.27339039	-18.67910408
MG 04	Tamandua	8	54	-45.27289364	-18.68101016
MG 04	Tamandua	9	16	-45.270109	-18.681854
MG 04	Tamandua	9	PC01	-45.27020057	-18.679896
MG 04	Tamandua	9	PC02	-45.27097579	-18.68173497
MG 04	Tamandua	10	105	-45.27215694	-18.68362442
MG 04	Tamandua	10	106	-45.26903548	-18.68364612
MG 04	Tamandua	11	18	-45.276632	-18.68121
MG 04	Tamandua	11	19	-45.27491	-18.682916
MG 04	Tamandua	11	20	-45.277067	-18.684118
MG 04	Tamandua	11	PC01	-45.27556564	-18.6820963
MG 04	Tamandua	11	PC02	-45.27582958	-18.68000104
MG 04	Tamandua	11	PC03	-45.27648839	-18.68328393
MG 04	Tamandua	12	4	-45.28162061	-18.67928472
MG 04	Tamandua	12	5	-45.28006476	-18.68146684
MG 04	Tamandua	12	6	-45.27893942	-18.68354924
MG 04	Tamandua	13	24	-45.282024	-18.683265
MG 04	Tamandua	13	25	-45.281058	-18.685958
MG 04	Tamandua	13	PC01	-45.28346526	-18.68110787
MG 04	Tamandua	13	PC02	-45.2827547	-18.68251025
MG 04	Tamandua	13	PC03	-45.28186807	-18.68522926
MG 04	Tamandua	13	PC04	-45.28187459	-18.68395534
MG 04	Tamandua	13	PC05	-45.28050038	-18.6844528
MG 04	Tamandua	13	PC06	-45.28148011	-18.68413993
MG 04	Tamandua	13	PC07	-45.2807545	-18.68544324
MG 04	Tamandua	13	PC08	-45.28188519	-18.68660222
MG 04	Tamandua	13	PC09	-45.27927	-18.68588425
MG 04	Tamandua	14	5	-45.27889299	-18.68743473
MG 04	Tamandua	14	6	-45.28062547	-18.68886591
MG 04	Tamandua	15	28	-45.27704545	-18.68603297
MG 04	Tamandua	15	PC03	-45.274368	-18.684962
MG 04	Tamandua	15	PC04	-45.276165	-18.687018
MG 04	Tamandua	16	29	-45.27954	-18.690909
MG 04	Tamandua	16	30	-45.275184	-18.690775

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Tamandua	16	31	-45.277276	-18.69262
MG 04	Tamandua	16	32	-45.273623	-18.692588
MG 04	Tamandua	16	PC01	-45.27728666	-18.69058856
MG 04	Tamandua	16	PC02	-45.27865448	-18.6919151
MG 04	Tamandua	16	PC03	-45.27507896	-18.69183
MG 04	Tamandua	16	PC04	-45.27600157	-18.69349162
MG 04	Tamandua	16	PC05	-45.27267232	-18.69323439
MG 04	Tamandua	17	33	-45.27331213	-18.69006115
MG 04	Tamandua	17	34	-45.27062259	-18.69246914
MG 04	Tamandua	18	7	-45.27308146	-18.69522134
MG 04	Tamandua	18	8	-45.270701	-18.69734249
MG 04	Tamandua	18	9	-45.27106225	-18.69584033
MG 04	Tamandua	19	7	-45.27973863	-18.69850926
MG 04	Tamandua	19	8	-45.27944025	-18.700051
MG 04	Tamandua	20	55	-45.28159082	-18.70151156
MG 04	Tamandua	20	56	-45.27986009	-18.70281614
MG 04	Tamandua	20	57	-45.27806207	-18.70373973
MG 04	Tamandua	21	9	-45.28344029	-18.70782313
MG 04	Tamandua	21	10	-45.28539763	-18.70860873
MG 04	Tamandua	21	11	-45.28581417	-18.71025691
MG 04	Tamandua	21	12	-45.28739721	-18.71211837
MG 04	Tamandua	22	10	-45.28217628	-18.70978146
MG 04	Tamandua	22	11	-45.28365423	-18.7116274
MG 04	Tamandua	23	58	-45.2872784	-18.71480858
MG 04	Tamandua	23	59	-45.28671334	-18.71569861
MG 04	Tamandua	24	13	-45.2836439	-18.71714224
MG 04	Tamandua	24	14	-45.28593895	-18.71735381
MG 04	Tamandua	25	1	-45.28982349	-18.71758648
MG 04	Tamandua	26	12	-45.27864006	-18.71844059
MG 04	Tamandua	26	13	-45.28324661	-18.71931126
MG 04	Tamandua	27	15	-45.27469386	-18.71901945
MG 04	Tamandua	27	16	-45.27198402	-18.718199
MG 04	Tamandua	28	17	-45.32296366	-18.70209588
MG 04	Tamandua	28	18	-45.32398163	-18.70334866

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Tamandua	28	19	-45.3225169	-18.70453403
MG 04	Tamandua	28	20	-45.32428644	-18.70539123
MG 04	Tamandua	29	21	-45.325194	-18.70789872
MG 04	Tamandua	29	22	-45.32504696	-18.70969117
MG 04	Tamandua	30	23	-45.31852315	-18.70102816
MG 04	Tamandua	30	24	-45.31720946	-18.70253583
MG 04	Tamandua	30	25	-45.31450167	-18.7027913
MG 04	Tamandua	30	26	-45.31900582	-18.70260928
MG 04	Tamandua	31	60	-45.31952255	-18.70611884
MG 04	Tamandua	31	61	-45.31605733	-18.70644227
MG 04	Tamandua	31	62	-45.3184928	-18.70789891
MG 04	Tamandua	32	63	-45.31929713	-18.71031097
MG 04	Tamandua	32	64	-45.31133329	-18.71089597
MG 04	Tamandua	33	4	-45.30926571	-18.70590644
MG 04	Tamandua	33	5	-45.30698428	-18.70825693
MG 04	Tamandua	34	28	-45.30514856	-18.71001137
MG 04	Tamandua	34	29	-45.30733237	-18.7111548
MG 04	Tamandua	35	30	-45.30139913	-18.71689946
MG 04	Tamandua	35	31	-45.30155246	-18.71851218
MG 04	Tamandua	36	1	-45.29882284	-18.71808611
MG 04	Tamandua	36	2	-45.29747947	-18.72060868
MG 04	Tamandua	37	14	-45.29545611	-18.71844314
MG 04	Tamandua	37	15	-45.29269818	-18.72141991
MG 04	Tamandua	39	1	-45.29092856	-18.72375556
MG 04	Tamandua	40	44	-45.290038	-18.725402
MG 04	Tamandua	40	45	-45.288708	-18.726915
MG 04	Tamandua	41	16	-45.29212407	-18.72447817
MG 04	Tamandua	41	17	-45.29218578	-18.7258086
MG 04	Tamandua	42	18	-45.29530856	-18.72124969
MG 04	Tamandua	42	19	-45.29479651	-18.72189592
MG 04	Tamandua	43	1	-45.29356249	-18.72633584
MG 04	Tamandua	44	1	-45.294217	-18.728913
MG 04	Tamandua	44	2	-45.29417939	-18.72891076
MG 04	Tamandua	45	22	-45.29822805	-18.72350605

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Tamandua	45	23	-45.30036943	-18.72473407
MG 04	Tamandua	46	51	-45.302183	-18.722994
MG 04	Tamandua	46	52	-45.30375	-18.72713
MG 04	Tamandua	46	PC01	-45.30187622	-18.72172222
MG 04	Tamandua	46	PC02	-45.30293526	-18.72518201
MG 04	Tamandua	46	PC03	-45.3048952	-18.7284686
MG 04	Tamandua	47	32	-45.29915306	-18.7303486
MG 04	Tamandua	47	33	-45.29955444	-18.73014382
MG 04	Tamandua	49	38	-45.29746688	-18.72929655
MG 04	Tamandua	49	39	-45.296208	-18.73095436
MG 04	Tamandua	50	42	-45.29399449	-18.73126406
MG 04	Tamandua	50	43	-45.29384123	-18.73212624
MG 04	Tamandua	51	59	-45.29056378	-18.73223671
MG 04	Tamandua	51	60	-45.28927096	-18.73069712
MG 04	Tamandua	51	PC01	-45.28970783	-18.73305989
MG 04	Tamandua	51	PC02	-45.28841827	-18.73251784
MG 04	Tamandua	51	PC03	-45.28743281	-18.73176204
MG 04	Tamandua	51	PC04	-45.28974647	-18.73171267
MG 04	Tamandua	51	PC05	-45.29130651	-18.7306392
MG 04	Tamandua	51	PC06	-45.28852631	-18.73108344
MG 04	Tamandua	51	PC07	-45.29074995	-18.73332996
MG 04	Tamandua	51	PC08	-45.29145897	-18.73152031
MG 04	Tamandua	52	1	-45.29217847	-18.73554118
MG 04	Tamandua	53	61	-45.29349275	-18.73379239
MG 04	Tamandua	53	PC01	-45.294419	-18.733472
MG 04	Tamandua	53	PC02	-45.294556	-18.734345
MG 04	Tamandua	53	PC03	-45.293331	-18.734741
MG 04	Tamandua	53	PC04	-45.294524	-18.734843
MG 04	Tamandua	54	50	-45.298628	-18.731488
MG 04	Tamandua	54	51	-45.298153	-18.731943
MG 04	Tamandua	55	107	-45.30250458	-18.73033899
MG 04	Tamandua	55	108	-45.30126999	-18.73300058
MG 04	Tamandua	56	67	-45.305134	-18.733229
MG 04	Tamandua	56	PC02	-45.30368265	-18.7293834

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Tamandua	56	PC03	-45.30490724	-18.72989656
MG 04	Tamandua	56	PC04	-45.30421566	-18.73039477
MG 04	Tamandua	56	PC05	-45.305825	-18.734902
MG 04	Tamandua	56	PC06	-45.305826	-18.735695
MG 04	Tamandua	58	52	-45.28538385	-18.73640845
MG 04	Tamandua	58	53	-45.28551271	-18.73752726
MG 04	Tamandua	60	3	-45.28633067	-18.74242173
MG 04	Tamandua	60	4	-45.28859919	-18.74294634
MG 04	Tamandua	61	77	-45.28689988	-18.74464997
MG 04	Tamandua	61	78	-45.28323598	-18.74561556
MG 04	Tamandua	61	79	-45.285038	-18.747815
MG 04	Tamandua	63	56	-45.27690822	-18.74611413
MG 04	Tamandua	63	57	-45.27689479	-18.74761119
MG 04	Tamandua	63	58	-45.27700864	-18.74928952
MG 04	Tamandua	64	85	-45.27788766	-18.75336178
MG 04	Tamandua	65	PC23	-45.27975022	-18.746927
MG 04	Tamandua	65	PC24	-45.2809862	-18.74855196
MG 04	Tamandua	65	PC25	-45.27971701	-18.74980108
MG 04	Tamandua	65	PC26	-45.28138796	-18.75054872
MG 04	Tamandua	65	PC27	-45.2798524	-18.75136443
MG 04	Tamandua	65	PC28	-45.28125811	-18.7523384
MG 04	Tamandua	66	PC31	-45.28236113	-18.74814319
MG 04	Tamandua	66	PC32	-45.28419404	-18.74929725
MG 04	Tamandua	66	PC33	-45.2859697	-18.75024352
MG 04	Tamandua	66	PC34	-45.28316119	-18.75003992
MG 04	Tamandua	66	PC35	-45.28426451	-18.75172833
MG 04	Tamandua	67	25041	-45.28602381	-18.75565147
MG 04	Tamandua	67	25042	-45.28497926	-18.75586236
MG 04	Tamandua	67	25043	-45.28342945	-18.75605816
MG 04	Tamandua	67	26821	-45.28601283	-18.75528074
MG 04	Tamandua	67	26822	-45.28484976	-18.75547889
MG 04	Tamandua	67	26823	-45.28352743	-18.7556643
MG 04	Tamandua	67	27691	-45.28571846	-18.75370687
MG 04	Tamandua	67	27692	-45.28464558	-18.7539455

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Tamandua	67	27693	-45.28369197	-18.75406654
MG 04	Tamandua	67	30071	-45.28588358	-18.75330755
MG 04	Tamandua	67	30072	-45.28471171	-18.75354325
MG 04	Tamandua	67	30073	-45.28353271	-18.75369689
MG 04	Tamandua	67	33351	-45.28653813	-18.7519496
MG 04	Tamandua	67	33352	-45.28610897	-18.75201875
MG 04	Tamandua	67	33353	-45.28553967	-18.75215856
MG 04	Tamandua	67	33354	-45.28570245	-18.75401172
MG 04	Tamandua	67	33355	-45.28455145	-18.7543485
MG 04	Tamandua	67	33356	-45.28366825	-18.75447817
MG 04	Tamandua	67	33357	-45.28639178	-18.75642537
MG 04	Tamandua	67	33358	-45.28576179	-18.7565879
MG 04	Tamandua	67	33359	-45.28532149	-18.75667121
MG 04	Tamandua	67	40991	-45.28584796	-18.75451203
MG 04	Tamandua	67	40992	-45.28472269	-18.75473985
MG 04	Tamandua	67	40993	-45.28365769	-18.75487992
MG 04	Tamandua	67	43281	-45.28622456	-18.75241597
MG 04	Tamandua	67	43282	-45.28535368	-18.75258872
MG 04	Tamandua	67	43283	-45.28389598	-18.75289994
MG 04	Tamandua	67	43491	-45.28598827	-18.75286331
MG 04	Tamandua	67	43492	-45.28519677	-18.7530618
MG 04	Tamandua	67	43493	-45.28376045	-18.75324067
MG 04	Tamandua	67	65191	-45.28609992	-18.75603637
MG 04	Tamandua	67	65192	-45.28503684	-18.75625698
MG 04	Tamandua	67	65193	-45.28442698	-18.7563465
MG 04	Tamandua	68	7	-45.28838894	-18.75266828
MG 04	Tamandua	68	8	-45.28846804	-18.75473251
MG 04	Tamandua	69	PC52	-45.30663116	-18.76003491
MG 04	Tamandua	69	PC53	-45.30445264	-18.7620539
MG 04	Tamandua	69	PC54	-45.3088133	-18.76003132
MG 04	Tamandua	70	P14	-45.29791802	-18.75801549
MG 04	Tamandua	70	P16	-45.30227867	-18.75600209
MG 04	Tamandua	70	PC13	-45.30227277	-18.75801754
MG 04	Tamandua	70	PC15	-45.29690478	-18.75911067

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Tamandua	70	PC17	-45.30009065	-18.75801201
MG 04	Tamandua	71	98	-45.29385753	-18.75705787
MG 04	Tamandua	71	99	-45.29467292	-18.75930556
MG 04	Tamandua	72	100	-45.29048867	-18.75795909
MG 04	Tamandua	72	101	-45.28977521	-18.75998684
MG 04	Tamandua	72	102	-45.28698571	-18.75974007
MG 04	Tamandua	73	103	-45.28341301	-18.76008876
MG 04	Tamandua	73	104	-45.28165884	-18.76015313
MG 04	Tamandua	74	105	-45.27882106	-18.76116701
MG 04	Tamandua	75	106	-45.27908929	-18.76409598
MG 04	Tamandua	76	108	-45.28183587	-18.76295873
MG 04	Tamandua	76	109	-45.28220065	-18.76572676
MG 04	Tamandua	77	110	-45.28769918	-18.76262613
MG 04	Tamandua	77	111	-45.28720565	-18.76487382
MG 04	Tamandua	77	112	-45.291116	-18.762717
MG 04	Tamandua	77	113	-45.29046185	-18.76473435
MG 04	Tamandua	77	PC01	-45.29138376	-18.76143163
MG 04	Tamandua	77	PC02	-45.29182347	-18.76257767
MG 04	Tamandua	77	PC03	-45.29212218	-18.76354522
MG 04	Tamandua	77	PC04	-45.29248359	-18.76460202
MG 04	Tamandua	77	PC05	-45.29019577	-18.76153772
MG 04	Tamandua	77	PC06	-45.2896505	-18.76265551
MG 04	Tamandua	77	PC07	-45.28960667	-18.76445758
MG 04	Tamandua	77	PC08	-45.28871082	-18.76168895
MG 04	Tamandua	77	PC09	-45.2878381	-18.76332847
MG 04	Tamandua	77	PC10	-45.28769932	-18.76446052
MG 04	Tamandua	77	PC11	-45.28725703	-18.76178054
MG 04	Tamandua	77	PC12	-45.28904496	-18.76511372
MG 04	Tamandua	77	PC13	-45.28741965	-18.76548854
MG 04	Tamandua	77	PC14	-45.28666631	-18.76377705
MG 04	Tamandua	78	114	-45.29452808	-18.76130648
MG 04	Tamandua	78	115	-45.29399164	-18.76295873
MG 04	Tamandua	79	116	-45.29691525	-18.76200922
MG 04	Tamandua	80	PC24	-45.2943257	-18.7654593

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Tamandua	80	PC25	-45.29573099	-18.76608069
MG 04	Tamandua	80	PC26	-45.29751921	-18.76323094
MG 04	Tamandua	81	P27	-45.29791676	-18.76810169
MG 04	Tamandua	81	P28	-45.29791081	-18.77011713
MG 04	Tamandua	81	P30	-45.29791322	-18.76608627
MG 04	Tamandua	81	PC29	-45.30009307	-18.77011364
MG 04	Tamandua	82	P64	-45.29696287	-18.77061572
MG 04	Tamandua	82	PC65	-45.29742394	-18.7684188
MG 04	Tamandua	82	PC66	-45.29732204	-18.76982886
MG 04	Tamandua	83	P50	-45.29573452	-18.76810516
MG 04	Tamandua	83	P51	-45.29503171	-18.7677086
MG 04	Tamandua	83	PC49	-45.29532724	-18.7685125
MG 04	Tamandua	85	1	-45.28289802	-18.76915999
MG 04	Tamandua	85	2	-45.28801568	-18.76861819
MG 04	Tamandua	85	3	-45.28563924	-18.76830705
MG 04	Tamandua	86	1	-45.27921267	-18.76900442
MG 04	Tamandua	86	2	-45.27756043	-18.77034016
MG 04	Tamandua	87	1	-45.28714664	-18.77020069
MG 04	Tamandua	87	2	-45.28423913	-18.77318867
MG 04	Tamandua	88	1	-45.28077371	-18.77396115
MG 04	Tamandua	88	2	-45.28228111	-18.77222308
MG 04	Tamandua	89	1	-45.27594574	-18.77299555
MG 04	Tamandua	89	2	-45.27701326	-18.77559729
MG 04	Tamandua	90	P45	-45.28919203	-18.77616809
MG 04	Tamandua	90	PC38	-45.29137438	-18.7761647
MG 04	Tamandua	90	PC39	-45.29573557	-18.77415145
MG 04	Tamandua	90	PC40	-45.29137786	-18.77818916
MG 04	Tamandua	90	PC41	-45.29355674	-18.77617032
MG 04	Tamandua	90	PC42	-45.29138041	-18.77414925
MG 04	Tamandua	90	PC43	-45.29356023	-18.77818574
MG 04	Tamandua	90	PC44	-45.29355325	-18.77415489
MG 04	Tamandua	91	P19	-45.30009074	-18.77415355
MG 04	Tamandua	91	P22	-45.29791904	-18.78020331
MG 04	Tamandua	91	P23	-45.29573909	-18.77616688

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Tamandua	91	PC18	-45.29791789	-18.77414799
MG 04	Tamandua	91	PC20	-45.29791196	-18.77617246
MG 04	Tamandua	91	PC21	-45.2979155	-18.77818789
MG 04	Tamandua	92	P31	-45.29791069	-18.78624961
MG 04	Tamandua	92	P34	-45.29388478	-18.77930592
MG 04	Tamandua	92	PC32	-45.29573311	-18.77818232
MG 04	Tamandua	92	PC33	-45.29791309	-18.78221875
MG 04	Tamandua	92	PC35	-45.29791664	-18.78423418
MG 04	Tamandua	92	PC36	-45.29573664	-18.78020678
MG 04	Tamandua	92	PC37	-45.29573067	-18.78222222
MG 04	Tamandua	93	P57	-45.29137876	-18.78423545
MG 04	Tamandua	93	P58	-45.29573419	-18.78423764
MG 04	Tamandua	93	P60	-45.2913753	-18.78222002
MG 04	Tamandua	93	PC55	-45.29288421	-18.7878211
MG 04	Tamandua	93	PC56	-45.29355423	-18.78020118
MG 04	Tamandua	93	PC59	-45.29355172	-18.78423205
MG 04	Tamandua	93	PC61	-45.29573771	-18.78625307
MG 04	Tamandua	93	PC62	-45.29355523	-18.78625651
MG 04	Tamandua	93	PC63	-45.29355772	-18.78221661
MG 04	Tamandua	94	P08	-45.28919547	-18.77818351
MG 04	Tamandua	94	PC09	-45.28701651	-18.7802023
MG 04	Tamandua	94	PC10	-45.29137183	-18.7802046
MG 04	Tamandua	94	PC11	-45.290635	-18.78212176
MG 04	Tamandua	94	PC12	-45.28919891	-18.78019894
MG 04	Tamandua	95	P01	-45.2848314	-18.78423651
MG 04	Tamandua	95	P02	-45.2825244	-18.78352603
MG 04	Tamandua	95	P07	-45.28483411	-18.78020564
MG 04	Tamandua	95	PC03	-45.28701385	-18.78423317
MG 04	Tamandua	95	PC04	-45.2848375	-18.78222107
MG 04	Tamandua	95	PC05	-45.28701992	-18.78221773
MG 04	Tamandua	95	PC06	-45.28919288	-18.78222342
MG 04	Tamandua	96	P70	-45.29137621	-18.78826631
MG 04	Tamandua	96	PC67	-45.29137274	-18.78625089
MG 04	Tamandua	96	PC68	-45.28919631	-18.78423884

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Tamandua	96	PC69	-45.28701728	-18.78625763
MG 04	Tamandua	96	PC71	-45.2891937	-18.7882697
MG 04	Tamandua	96	PC72	-45.28919975	-18.78625427
MG 04	Tamandua	42A	20	-45.29594103	-18.72393431
MG 04	Tamandua	42A	21	-45.29356387	-18.72378235
MG 04	Tamandua	45A	24	-45.29904297	-18.72228747
MG 04	Tamandua	45A	25	-45.30090178	-18.72334608
MG 04	Tamandua	47A	34	-45.30207731	-18.72809835
MG 04	Tamandua	47A	35	-45.30196808	-18.7269162
MG 04	Tamandua	47B	36	-45.29968645	-18.72906336
MG 04	Tamandua	47B	37	-45.30041001	-18.72930887
MG 04	Tamandua	49A	40	-45.29681029	-18.72820884
MG 04	Tamandua	49A	41	-45.29549096	-18.72932236
MG 04	Tamandua	50A	44	-45.29450669	-18.73211066
MG 04	Tamandua	50A	45	-45.29449385	-18.73242965
MG 04	Tamandua	50B	46	-45.29275778	-18.73134787
MG 04	Tamandua	50B	47	-45.29257134	-18.73195421
MG 04	Tamandua	54A	48	-45.296028	-18.73305
MG 04	Tamandua	54A	49	-45.297631	-18.733244
MG 04	Tamandua	56A	PC02	-45.304903	-18.729898
MG 04	Tamandua	56A	PC03	-45.304216	-18.730394
MG 04	Tamandua	56A	PC04	-45.304519	-18.730209
MG 04	Tamandua	58A	59	-45.28230512	-18.73665507
MG 04	Tamandua	58A	60	-45.28300562	-18.73793935
MG 04	Tamandua	58B	54	-45.28516766	-18.7399926
MG 04	Tamandua	58B	55	-45.28573949	-18.7402488
MG 04	Tamandua	60A	9	-45.29008792	-18.74421625
MG 04	Tamandua	60A	10	-45.29001566	-18.74616068
MG 04	Tamandua	60B	11	-45.28812772	-18.74721978
MG 04	Tamandua	60B	12	-45.28936472	-18.7486101
MG 04	Tamandua	68A	13	-45.28810786	-18.75036433
MG 04	Tamandua	68A	14	-45.28964663	-18.75139413
MG 04	Tamandua	69A	PC46	-45.31143411	-18.76125612
MG 04	Tamandua	69A	PC47	-45.31229577	-18.76032379

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Tamandua	69A	PC48	-45.31099545	-18.76003674
MG 04	Tamandua	70A	97	-45.296829	-18.758265
MG 04	Tamandua	76A	107	-45.28458245	-18.76292654
MG 04	Tamandua	84A	1	-45.29372342	-18.76892932
MG 04	Vitoria	1	1	-45.33335729	-18.77440777
MG 04	Vitoria	1	2	-45.33290473	-18.77683889
MG 04	Vitoria	2	P5	-45.33521939	-18.77555796
MG 04	Vitoria	2	P7	-45.33521609	-18.77868504
MG 04	Vitoria	2	P8	-45.33522249	-18.77712149
MG 04	Vitoria	2	PC1	-45.33690835	-18.77556396
MG 04	Vitoria	2	PC2	-45.33558703	-18.7743372
MG 04	Vitoria	2	PC3	-45.33859728	-18.77556091
MG 04	Vitoria	2	PC4	-45.33691145	-18.77712749
MG 04	Vitoria	2	PC6	-45.3386004	-18.77712444
MG 04	Vitoria	2	PC9	-45.33690505	-18.778682
MG 04	Vitoria	4	P123	-45.33859403	-18.77868799
MG 04	Vitoria	4	PC115	-45.34028935	-18.77712137
MG 04	Vitoria	4	PC116	-45.340283	-18.77868492
MG 04	Vitoria	4	PC117	-45.34197511	-18.78024537
MG 04	Vitoria	4	PC118	-45.34196882	-18.77712735
MG 04	Vitoria	4	PC119	-45.34028621	-18.77555784
MG 04	Vitoria	4	PC120	-45.34197196	-18.77868184
MG 04	Vitoria	4	PC121	-45.34028614	-18.78024845
MG 04	Vitoria	4	PC122	-45.33859716	-18.78025152
MG 04	Vitoria	5	PC124	-45.34703578	-18.78180861
MG 04	Vitoria	5	PC125	-45.34703568	-18.77712704
MG 04	Vitoria	5	PC126	-45.34365715	-18.78149853
MG 04	Vitoria	5	PC127	-45.34365777	-18.77712425
MG 04	Vitoria	5	PC128	-45.34704206	-18.78024506
MG 04	Vitoria	5	PC129	-45.34366094	-18.77868778
MG 04	Vitoria	5	PC130	-45.34703888	-18.77869057
MG 04	Vitoria	5	PC131	-45.34535309	-18.78024819
MG 04	Vitoria	5	PC132	-45.34534678	-18.78181174
MG 04	Vitoria	5	PC133	-45.3453499	-18.77868466

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Vitoria	5	PC134	-45.34366411	-18.7802513
MG 04	Vitoria	5	PC135	-45.34534672	-18.77712113
MG 04	Vitoria	6	PC85	-45.34534685	-18.78650234
MG 04	Vitoria	6	PC86	-45.34534997	-18.78337526
MG 04	Vitoria	6	PC87	-45.34366411	-18.78493287
MG 04	Vitoria	6	PC88	-45.34703589	-18.7864992
MG 04	Vitoria	6	PC89	-45.34704218	-18.78493566
MG 04	Vitoria	6	PC90	-45.34703898	-18.78337213
MG 04	Vitoria	6	PC91	-45.34366094	-18.78336934
MG 04	Vitoria	6	PC92	-45.34197509	-18.78493597
MG 04	Vitoria	6	PC93	-45.34535316	-18.78493879
MG 04	Vitoria	7	PC136	-45.33859702	-18.78493308
MG 04	Vitoria	7	PC137	-45.33860028	-18.78181505
MG 04	Vitoria	7	PC138	-45.34196878	-18.78180891
MG 04	Vitoria	7	PC139	-45.34028927	-18.78181198
MG 04	Vitoria	7	PC140	-45.34197193	-18.78337244
MG 04	Vitoria	7	PC141	-45.34028606	-18.78493905
MG 04	Vitoria	7	PC142	-45.34028292	-18.78337552
MG 04	Vitoria	7	PC143	-45.3385939	-18.78336955
MG 04	Vitoria	7	PC144	-45.336908	-18.78493614
MG 04	Vitoria	8	PC53	-45.34028284	-18.78805709
MG 04	Vitoria	8	PC54	-45.34028912	-18.79118414
MG 04	Vitoria	8	PC55	-45.34028919	-18.78649354
MG 04	Vitoria	8	PC56	-45.33859378	-18.78806016
MG 04	Vitoria	8	PC57	-45.3369111	-18.78649967
MG 04	Vitoria	8	PC58	-45.34535002	-18.78805682
MG 04	Vitoria	8	PC59	-45.34366414	-18.78962347
MG 04	Vitoria	8	PC60	-45.34028598	-18.78962061
MG 04	Vitoria	8	PC61	-45.33860014	-18.78649661
MG 04	Vitoria	8	PC62	-45.34197507	-18.78962657
MG 04	Vitoria	8	PC63	-45.34366097	-18.78805994
MG 04	Vitoria	8	PC64	-45.34197191	-18.78806304
MG 04	Vitoria	8	PC65	-45.34196876	-18.78649951
MG 04	Vitoria	9	PC103	-45.34535009	-18.79274742

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Vitoria	9	PC104	-45.34535321	-18.78962035
MG 04	Vitoria	9	PC105	-45.34366416	-18.79431406
MG 04	Vitoria	9	PC106	-45.3470391	-18.78806273
MG 04	Vitoria	9	PC107	-45.34197187	-18.7927446
MG 04	Vitoria	9	PC108	-45.3470423	-18.78962626
MG 04	Vitoria	9	PC109	-45.34197503	-18.79430813
MG 04	Vitoria	9	PC110	-45.34324029	-18.79586934
MG 04	Vitoria	9	PC111	-45.34366099	-18.79275054
MG 04	Vitoria	9	PC112	-45.34366625	-18.79066281
MG 04	Vitoria	9	PC113	-45.34534691	-18.79118389
MG 04	Vitoria	9	PC114	-45.34196872	-18.79118107
MG 04	Vitoria	11	P165	-45.35210028	-18.79430738
MG 04	Vitoria	11	P169	-45.35041418	-18.79118349
MG 04	Vitoria	11	PC164	-45.35379237	-18.79118616
MG 04	Vitoria	11	PC166	-45.35210329	-18.79118935
MG 04	Vitoria	11	PC167	-45.35041742	-18.79274702
MG 04	Vitoria	11	PC168	-45.35210652	-18.79274384
MG 04	Vitoria	12	P73	-45.34872493	-18.78649606
MG 04	Vitoria	12	PC66	-45.35210628	-18.78806229
MG 04	Vitoria	12	PC67	-45.35209978	-18.78493523
MG 04	Vitoria	12	PC68	-45.35210303	-18.78649876
MG 04	Vitoria	12	PC69	-45.35041721	-18.78805642
MG 04	Vitoria	12	PC70	-45.35379505	-18.78337754
MG 04	Vitoria	12	PC71	-45.35379097	-18.78597138
MG 04	Vitoria	12	PC72	-45.3537888	-18.78493204
MG 04	Vitoria	12	PC74	-45.35041399	-18.78650194
MG 04	Vitoria	13	P97	-45.35042025	-18.78493839
MG 04	Vitoria	13	P98	-45.35041681	-18.77868427
MG 04	Vitoria	13	PC100	-45.35041701	-18.78337487
MG 04	Vitoria	13	PC101	-45.35042004	-18.78024779
MG 04	Vitoria	13	PC102	-45.3490125	-18.77868689
MG 04	Vitoria	13	PC94	-45.34873106	-18.78025095
MG 04	Vitoria	13	PC95	-45.34872799	-18.78336899
MG 04	Vitoria	13	PC96	-45.34872479	-18.7818145

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Vitoria	13	PC99	-45.3487312	-18.78493252
MG 04	Vitoria	14	PC172	-45.35766648	-18.78337016
MG 04	Vitoria	14	PC173	-45.35885589	-18.78493142
MG 04	Vitoria	14	PC174	-45.35716687	-18.78493465
MG 04	Vitoria	14	PC175	-45.3588592	-18.78649494
MG 04	Vitoria	15	PC145	-45.35379178	-18.78181401
MG 04	Vitoria	15	PC146	-45.35548405	-18.78337433
MG 04	Vitoria	15	PC147	-45.35548077	-18.7818108
MG 04	Vitoria	15	PC148	-45.35716977	-18.78180758
MG 04	Vitoria	16	PC149	-45.35379475	-18.77868694
MG 04	Vitoria	16	PC150	-45.35210578	-18.77869013
MG 04	Vitoria	16	PC151	-45.35041357	-18.77712074
MG 04	Vitoria	16	PC152	-45.35378852	-18.78025048
MG 04	Vitoria	16	PC153	-45.35210254	-18.7771266
MG 04	Vitoria	17	P78	-45.34703877	-18.77399997
MG 04	Vitoria	17	P80	-45.34872768	-18.77399682
MG 04	Vitoria	17	PC75	-45.34704197	-18.7755635
MG 04	Vitoria	17	PC76	-45.35041983	-18.77555719
MG 04	Vitoria	17	PC77	-45.34535302	-18.77555759
MG 04	Vitoria	17	PC79	-45.3487309	-18.77556035
MG 04	Vitoria	18	P37	-45.34366092	-18.7693156
MG 04	Vitoria	18	P40	-45.34366409	-18.7755607
MG 04	Vitoria	18	P41	-45.34197516	-18.7755638
MG 04	Vitoria	18	PC29	-45.34366092	-18.77399717
MG 04	Vitoria	18	PC30	-45.34196885	-18.77243674
MG 04	Vitoria	18	PC31	-45.3450051	-18.7724402
MG 04	Vitoria	18	PC32	-45.34534985	-18.7740031
MG 04	Vitoria	18	PC33	-45.34365775	-18.77243364
MG 04	Vitoria	18	PC34	-45.34535298	-18.77087602
MG 04	Vitoria	18	PC35	-45.34070692	-18.77243904
MG 04	Vitoria	18	PC36	-45.34366407	-18.77087009
MG 04	Vitoria	18	PC38	-45.34028309	-18.77400335
MG 04	Vitoria	18	PC39	-45.34197201	-18.77400027
MG 04	Vitoria	18	PC42	-45.34197519	-18.77087319

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Vitoria	19	P44	-45.33353454	-18.76798731
MG 04	Vitoria	19	P48	-45.33859416	-18.77399738
MG 04	Vitoria	19	PC43	-45.3385974	-18.7708703
MG 04	Vitoria	19	PC45	-45.33691179	-18.76774628
MG 04	Vitoria	19	PC46	-45.33860052	-18.77243383
MG 04	Vitoria	19	PC47	-45.33521654	-18.76931286
MG 04	Vitoria	19	PC49	-45.33522294	-18.76774931
MG 04	Vitoria	19	PC50	-45.33690541	-18.76930982
MG 04	Vitoria	19	PC51	-45.3385943	-18.76931581
MG 04	Vitoria	19	PC52	-45.33690851	-18.77087336
MG 04	Vitoria	20	P155	-45.3402863	-18.77087627
MG 04	Vitoria	20	P159	-45.33860066	-18.76775226
MG 04	Vitoria	20	PC154	-45.34197204	-18.76930966
MG 04	Vitoria	20	PC156	-45.34028317	-18.76931274
MG 04	Vitoria	20	PC157	-45.34028003	-18.76774921
MG 04	Vitoria	20	PC158	-45.33997328	-18.76618623
MG 04	Vitoria	20	PC160	-45.33859754	-18.76618873
MG 04	Vitoria	21	PC161	-45.35548043	-18.77712021
MG 04	Vitoria	21	PC162	-45.35378822	-18.77555989
MG 04	Vitoria	21	PC163	-45.35516403	-18.77555728
MG 04	Vitoria	22	PC81	-45.35041339	-18.77243917
MG 04	Vitoria	22	PC82	-45.35210326	-18.77290596
MG 04	Vitoria	22	PC83	-45.35379445	-18.77399634
MG 04	Vitoria	22	PC84	-45.35210553	-18.77399953
MG 04	Vitoria	12A	PC20	-45.35717016	-18.78649818
MG 04	Vitoria	12A	PC21	-45.35548112	-18.7865014
MG 04	Vitoria	12A	PC22	-45.35717346	-18.7880617
MG 04	Vitoria	12A	PC23	-45.35210004	-18.78962583
MG 04	Vitoria	12A	PC24	-45.35548439	-18.78805589
MG 04	Vitoria	12A	PC25	-45.35379533	-18.78805909
MG 04	Vitoria	12A	PC26	-45.35547818	-18.78961943
MG 04	Vitoria	12A	PC27	-45.355772	-18.78493731
MG 04	Vitoria	12A	PC28	-45.35378911	-18.78962264
MG 04	Vitoria	13A	PC170	-45.35347017	-18.78229362

REGION	PROJECT	STAND	# PLOT	Longitude	Latitude
MG 04	Vitoria	13A	PC171	-45.35275019	-18.78285532

Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
07.0	31 May 2019	Revision to: <ul style="list-style-type: none"> • Ensure consistency with version 02.0 of the “CDM project standard for project activities” (CDM-EB93-A04-STAN); • Add a section on remarks on the observance of the scale limit of small-scale project activity during the crediting period; • Add "changes specific to afforestation or reforestation project activity" as a possible post-registration changes; • Clarify the reporting of net anthropogenic GHG removals for A/R project activities between two commitment periods; • Make editorial improvements.
06.0	7 June 2017	Revision to: <ul style="list-style-type: none"> • Ensure consistency with version 01.0 of the “CDM project standard for project activities” (CDM-EB93-A04-STAN); • Make editorial improvements.
05.1	4 May 2015	Editorial revision to correct version numbering.
05.0	1 April 2015	Revisions to: <ul style="list-style-type: none"> • Include provisions related to delayed submission of a monitoring plan; • Provisions related to the Host Party; • Remove reference to programme of activities; • Overall editorial improvement.
04.0	25 June 2014	Revisions to: <ul style="list-style-type: none"> • Include the Attachment: Instructions for filling out the monitoring report form (these instructions supersede the "Guideline: Completing the monitoring report form" (Version 04.0)); • Include provisions related to standardized baselines; • Add contact information on a responsible person(s)/ entity(ies) for completing the CDM-MR-FORM in A.6 and Appendix 1; • Change the reference number from <i>F-CDM-MR</i> to <i>CDM-MR-FORM</i>; • Editorial improvement.
03.2	5 November 2013	Editorial revision to correct table in page 1.
03.1	2 January 2013	Editorial revision to correct table in section E.5.
03.0	3 December 2012	Revision required to introduce a provision on reporting actual emission reductions or net GHG removals by sinks for the period up to 31 December 2012 and the period from 1 January 2013 onwards (EB 70, Annex 11).
02.0	13 March 2012	Revision required to ensure consistency with the "Guidelines for completing the monitoring report form" (EB 66, Annex 20).
01.0	28 May 2010	EB 54, Annex 34. Initial adoption.

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