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EVALUATION OF THE PSA INSTRUMENT APPLIED IN THE PROJECT FOR RECOVERY OF CLIMATE AND BIODIVERSITY SERVICES IN THE SOUTHEAST CORRIDOR OF THE BRAZILIAN ATLANTIC FOREST

An analysis of the environmental, economic, and social dimensions

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LIST OF ABBREVIATIONS

BAU	Business As Usual
AGC	Above ground carbon
ANA	National Agency for Water and Basic Sanitation
BAU	Business As Usual
CAR	Rural Environmental Registry
CMA	Project for Recovery of Climate and Biodiversity Services in the Southeast Corridor of the Brazilian Atlantic Forest – "Conexão Mata Atlântica"
CRS	Constant Returns to Scale
DAP	Declaration of Eligibility for Pronaf
DD	Differences for Differences (Diff in Diff)
DEA	Data Envelopment Analysis
DMU	Decision Making Unit
EMBRAPA	Brazilian Agricultural Research Corporation
ICMBio	Chico Mendes Institute for Biodiversity Conservation
INPE	National Institute for Space Research
IPCC	The Intergovernmental Panel on Climate Change
MMQ	Least Squares Method
OLS	Ordinary Least Squares
PRODES	Amazon Deforestation Calculation Program
PRONAF	National Program for the Strengthening of Family Agriculture
PSE	Payments for Environmental Services
SAF	Agroforestry Systems
SiBBR	Brazilian Biodiversity Information Facility Repository
SOC	Soil Organic Carbon
VRS	Variable Returns to Scale
WRI	World Resources Institute

LIST OF ABBREVIATIONS

Ind 1	Increase around native vegetation conserved/under restoration (free from threats)
Ind 2	Increase in pasture area with rotational management
Index 3	Increased diversity in pastures (of forages, trees, silvopastoral systems)
Ind 4	Crop area (production system with organic or agroecological management)
Ind 5	Agroforestry Systems (AFS)
Ind 6	Investment in the production or property system (Support for sustainable value chains/certifications/technological leap)
Ind 7	Leveraged resource for production or ownership systems
Ind 8	Increase in properties with rural sanitation among those who proposed to take this action in their Action Plan
Ind 9	Properties with implementation of the Human/Fauna Coexistence Plan among those who proposed to do this action in their Action Plan
Ind 10	Properties with meliponiculture among those who proposed to carry out this action in their Action Plan
Ind 11	Number of beneficiaries who proposed to expand the practices supported by the project (contractual or Action Plan)
Ind 12	Increase of restoration areas and agrosilvopastoral systems through own resources or others, which are not exclusive to the project
Ind 13	Land use change in the watershed (comparison between 2018 and 2022)
Ind 14	Incidence of fires in the project areas

INTRODUCTION

According to the contract established through Public Selection No. 001/2022, this report is the last of a succession of products delivered.

This document aims to systematize the methodology, models, and indicators to evaluate the payment for environmental services (PES) instrument applied in the CMA Project (Recovery of Climate and Biodiversity Services in the Southeast Corridor of the Brazilian Atlantic Forest) in the environmental, economic, and social dimensions. It also aims to synthesize all the results obtained by the analyses.

In a previous study conducted by the technical team, recent initiatives of PES programs in Brazil were surveyed. They found that all of them are designed to encourage the maintenance or restoration of environments that provide ecosystem services. In Chart 1, three large projects are presented, with their respective values.

Box 01 - PES projects in Brazil, including the CMA

Description	Area (ha)	Prop.	Values Paid (BRL)
"Programa Produtor de Água" – MG (2007-2015)	6.135	186	3.774.768
"Proambiente – RS" (2000-2006)	~300	1.768	1.600.000
Tax Exemption for RPPN/PR (2018-2020)	8.059	20	701.013
"Conexão Mata Atlântica" - CMA	16.892	1.032	24.643.137

In the case of the CMA Project, the PES program was conceived at the initiative of the federal government, through the Ministry of Science, Technology, and Innovation and with the governments of the states of São Paulo, Minas Gerais, and Rio de Janeiro. It has technical and financial support from the GEF (*Global Environment Facility*), with the Inter-American Development Bank (IDB) as the implementing agency and FINATEC as the executing agency of the resources.

The MCTI is responsible for central project coordination, implementing the monitoring and evaluation systems, and chairing the Institutional Coordination Committee (ICC). In addition, the project has three components:

- Component 1 (C1) - Institutional capacity building for managing and monitoring carbon stocks and biodiversity.
- Component 2 (C2) - Increase Paraíba do Sul Basin carbon stocks.
- Component 3 (C3) - Increase protected areas' effectiveness and financial sustainability in the Southeastern Corridor of the Atlantic Forest of Brazil.

Table 2 summarizes the PES modalities of the Atlantic Forest Connection.

Table 02 - PES methods with area, properties, and amounts paid up to May 22.

Description	Area (ha)	Prop.	Values Paid (BRL)
São Paulo			
PSA Protection	10.586	406	13.200.255
PSA Multiple-use - Conservation	2.833	240	2.565.735
PES Multiple Use - Macaúba	-	2	
PSA Fence	220k meters	191	
Rio de Janeiro			
PSA Protection	2.643	25	5.703.092
Minas Gerais			
Planting	830	168	3.174.235
PSA Fence	1.251 meters		

The study shows that PES in Brazil (and other examples in other countries), when applied in a structured manner with governance, transparency, and legal certainty, is a mechanism capable of generating many benefits for all involved by ensuring a financial return for those who restore and conserve forests and landscapes.

This document proposes to compose the actions of C1, in which it made use of the "Theory of Change" using the techniques of Business as Usual (BAU), Ordinary Least Squares (OLS), Differences for Differences (DD) and Data Envelopment Analysis (DEA).

Each methodology will be conceptually described in the following sections, along with the presentation of the indicators used to respond and confirm the generation of benefits as seen in other PES programs.

Finally, some final considerations will be described with a synthesis of the objective results throughout the trajectory of the study.

ASSESSMENT METHODOLOGIES

Evaluation is the process of making value judgments about the activities and results of a project, policy, or strategy.

Impact evaluation necessarily involves two elements: (I) building a detailed and accurate description of the performance of a program and (ii) comparing it with a pre-established criterion or standard to judge performance (COTTA, 1998).

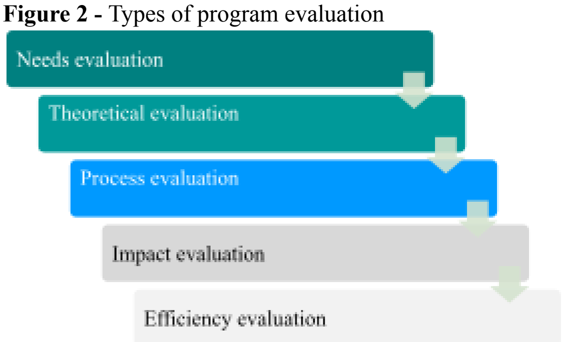
There is an extensive range of evaluation methods that can be performed. Program evaluation is only one evaluation category, just as impact evaluation becomes a subcategory of program evaluation. This can be better observed in Figure 1.

Figure 1 - What is the evaluation

Source: ENAP and J-PAL (2022).

Specifically, regarding program evaluation, there are at least five types of evaluations namely: needs, theoretical, process, impact, and efficiency (Figure 2).

Figure 2 - Types of program evaluation



Source: ENAP and J-PAL (2022).

A needs assessment comprises a systematic study that identifies the nature, scope and causes of a need. This type of evaluation defines and describes the target population to be served and determines the intervention necessary to solve the need (COSTA; CASTANHAR, 2003).

The theoretical evaluation evaluates the theory behind the program, verifying its viability, feasibility, and its ability to meet the needs of the target population.

Specifically, the theoretical evaluation describes the theory and, therefore, gives rise to the nomenclature of the so-called "Theory of Change," as well as determining the quality of the project through a literature review, expert panel, and interviews (COTTA, 1998).

Process evaluation, in turn, is known as "from theory to practice." While the theory of change tells how the program should work, process evaluation studies what happens in practice and, therefore, evaluates the implementation of a program. In other words, process evaluation is descriptive evidence. It is performed during the implementation of the program in which it measures progress against the objectives that can be achieved by the program team or external partner and predicts continuous and frequent monitoring (COSTA; CASTANHAR, 2003).

In the past, the impact evaluation aimed to identify the changes attributable to the program. This evaluation subcategory measures how much progress toward the objectives is caused by the program. Preferably, the impact evaluation is performed externally with the support of the program teams. It is point-in-time and limited in time and provides causal evidence. Furthermore, it is designed before implementation, with a determination of the results after the program is implemented (FINKLER; DELL'AGLIO, 2013). The impact evaluation is measured by subtracting the influence that these same beneficiaries would obtain, in the hypothetical case of not participating in the program (counterfactual), from the result of the beneficiaries after participating in the program (COSTA; CASTANHAR, 2003).

Usually, the impact is evaluated for three main reasons: i) to improve the program, that is, to generate information focused on the design or reformulation of the program, with the purpose of improving its performance and results (finding concrete solutions and implementing them in the short term, in addition to understanding the relative importance of the program components and processes); ii) to make public spending more efficient by issuing a judgment on the efficient use of resources (helpful in making decisions regarding the allocation of resources) and continuity of the program, as it is of interest to high-level decision makers (e.g., governors, mayors, legislators); and iii) to generate knowledge about public policies, that is, generate public goods, contributing to knowledge in social and economic sciences (produces knowledge about the mechanisms and effects of an intervention, as well as serving as a basis for innovations and new approaches, with the potential to replications and scale gains) (COSTA; CASTANHAR, 2003).

The impact is evaluated when there are causal questions unanswered when there is uncertainty about the best intervention strategy to tackle a problem, when a pilot program is being implemented, when it is planned to scale up a program, when a program is being implemented gradually or when the program incorporates new services or beneficiaries (FINKLER; DELL'AGLIO, 2013).

Finally, there is the evaluation of efficiency. It is a cost-benefit analysis because it compares the benefits (results) of the program with its costs (resources used). Such evaluation involves monetizing the costs and benefits and is usually performed ex-ante. Regarding the cost-effectiveness analysis, the efficiency evaluation compares the change in the primary impact variable with the program's costs. It thus allows for the comparison of the relative impact of different interventions. In this case, it is usually performed ex-post (COTTA, 1998). The efficiency evaluation will be better addressed using the Data Envelopment Analysis method.

Given the above, evaluation methodologies include evaluating the best use of resources in the search for the best possible result and bringing continuous improvement in strategies, programs, and public policies (COTTA, 1998). Some of these evaluation methods will be addressed in the following topics.

Theory of Change

As discussed, the theoretical evaluation gave rise to the so-called “Theory of Change.” The theory of change is a broad and illustrated description of how change is expected to occur in a particular context. More specifically, it is a means of being aware of how far you go (results) and how you arrive (processes), as it details all the implicit changes that must occur between a program's activities and its long-term goals. term (SANTOS et al., 2022).

Regarding the Atlantic Forest Connection Project, the theory of change supported the evaluations of PES and other actions by identifying the mechanisms by which the intervention provides results of interest (WIIK et al., 2020). In other words, the theory of change aims, in the project, to describe the path of impact from the results and to the desired behavioral change at the individual and collective level, translating into changes in policies, institutional structures, and practices that contribute to improved environmental status and reduced stress in social-ecological systems (TENGBERG; VALENCIA, 2018).

In the workshop held with the project components of each state, it was decided that two types of indicators would be used to assess the impact of the program. The first type of indicators would be collected by the managers of each state, while the second type of indicators would be geospatial indicators collected in remote sensing systems, such as the one provided by the National Institute for Space Research (INPE), among others.

To ensure an adequate control group, the geospatial data of the neighbors of the participating properties were also considered. This was done so that the counterfactual of the program could be measured. By comparing the data from the participating properties with that of their neighbors, the impact of the program could be accurately assessed. This approach would help to identify the specific effects of the program on the participating properties, which would be useful for future program evaluations and improvements.

The first grouping of indicators considered fourteen indices that were agreed upon by each state. These indicators were used to measure the impact of the program on various aspects of agriculture and rural development.

1. Increase around native vegetation conserved/under restoration (free from threats)
2. Increase in pasture area with rotational management
3. Increased diversity in pastures (of forages, trees, silvopastoral systems)
4. Crop area (production system with organic or agroecological management)
5. Agroforestry Systems (AFS)
6. Investment in the production or property system (Support for sustainable value chains/certifications/technological leap)
7. Leveraged resources for production or ownership systems
8. Increase in properties with rural sanitation among those who proposed taking this action in their Action Plan
9. Properties with the implementation of the Human/Fauna Coexistence Plan among those who proposed to do this action in their Action Plan
10. Properties with meliponiculture among those who proposed to carry out this action in their Action Plan
11. Number of beneficiaries who proposed expanding the practices supported by the project (contractual or Action Plan)
12. Increase in restoration areas and agrosilvopastoral systems through own resources or others, which are not exclusive to the project
13. Land use change in the watershed (comparison between 2018 and 2022)
14. Incidence of fires in the project areas

Each state was responsible for submitting one or more indicators listed above individually, i.e., by producer participating in the CMA Thus, each beneficiary producer is considered an analytical observation.

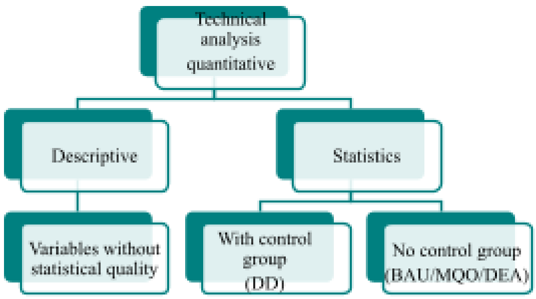
In the same workshop, it was determined that the search for secondary data of the geospatial indicators listed below would be carried out::

I. Degradation avoided;
II. Tree cover (source: INPE);
III. Biomass Density (Source: INPE);
IV. CO_2 emissions (Source: INPE and WRI);
V. Land use (Source: INPE and WRI):
   a. Forest;
   b. Agriculture;
   c. No vegetated area;
VI. Fire and fire scars (Source: INPE and WRI);
VII. Pasture Quality (Source: INPE and WRI);
VIII. Occurrences of flora species (Source: SiBBr);
IX. Occurrence of fauna species (Source: SiBBr and ICMBio);
X. Soil organic carbon stock (SOC) (Source: EMBRAPA 2017);
XI. Aboveground organic carbon (CCA) stocks (Source: Englund et al. 2017);
XII. Water quality (Source: ANA).

These indicators were considered as criteria to evaluate degradation (from I to VII) and baseline data (from VII to XII), and both should be measured by a remote sensing system in a temporal evaluation that considers the beginning of the program in each state until the last available measurement by the methods. The unit of observation was the agricultural property identified through the CAR number (Rural Environmental Registry), where the perimeter of the areas under analysis is available. This information collected the indicators' data on the digital remote sensing platforms of the properties participating in the program (treatment group) and their neighbors (properties not participating in the same municipality) as a control group. To ensure a better sampling power, it was indicated that the number of properties considered in the control group should be at least the same as in the treatment group. Additionally, it is important to note that neighboring (control) farms may have sociodemographic characteristics that are similar to those of the participating group (GERTLER et al., 2016).

After the period established for data collection, it was found that state managers could not submit all the agreed data due to a lack of data or poor statistical quality (e.g.,, an insufficient number of observations). Therefore, we opted for descriptive data analysis without taking into account the statistical quality of the data that was submitted.. Figure 3 shows the analysis model that was established at the end of the data collection period after systematization:

Figure 03 - Model of the result analysis performed by the team based on the type of indicator/variable collected and made available



Source: IBS (2023).

Of the desired geospatial data, the following indicators were available under the conditions established for statistical inference within the temporal and geographic space of the CMA:

a) Land use change;
b) Suppression of forests;
c) Fire Alert;
d) Fire scar.

The premise is that the indicators are presented in a time interval between 2018 and 2022, measured by area, and occurred within rural properties participating in the CMA and control properties (non-participating).

To determine the study's sample size, we considered the universe of participants in the CMA and nonparticipating properties in the vicinity.

In summary, a range of methodological tools was adopted to assess the change/impact of the available indicator data about the participation of producers and properties in the CMA program in the three states, and to determine whether there was any impact on the indicators, and if so, how much of an impact occurred. Figure 3,shows the analysis model that was considered based on the available types of indicator data. Below, we list the methods with this objective in ascending order of statistical robustness, along with the impact evaluation:

a) Descriptive evaluation: Data without assumptions of a minimum number of observations or without information segregated by property were subject to a descriptive analysis, which has no statistical effect but indicates a result in qualitative terms. There is no possibility of affirming causality between the observed and the program, but it exhibits signs of trends that will be measured in the other methods;
b) Business as Usual (BAU): Quasi-experiment methods in which some statistical assumptions are disregarded, such as randomness of the data or harmonization of the frequency distribution and standard deviation. In this case, the objective is to metrically observe the evolution trend of an indicator over time, considering participation in the program.
c) Data envelopment analysis (DEA): nonparametric measurement of the performance of each producer against indicators that contribute to production (*inputs)* and indicators that indicate the product obtained by participation in the program (*outputs*). It does not allow for the assessment of impact. Still, it does allow for the evaluation of the relative efficiency in the use of funds received and products delivered by program participants.
d) Ordinary Least Squares (OLS): experimental method in which the effect on the participation of the CMA program

under a given indicator is required from the data, compliance with statistical assumptions that respond with a significance level. In this case, metric results are seen of how much the participation of properties in the program causes an impact on the analyzed indicator.

e) Differences for Differences (DD): robust experimental method in which the impact of one or more indicators on rural properties is measured compared to other nonparticipating properties chosen at random. The data must meet the assumptions of normality, heteroscedasticity, and collinearity.

In summary, the methods chosen to assess the program's impact on the participating properties, except for DEA, are based on a list of indicators presented above. The difference between these methods is their statistical robustness, which depends on the quality of the data collected and determines the suitability of the statistical tool. The statistical quality of the data guides the choice of method to be used The following describes each method in more detail:

Business as Usual (BAU)

The term 'business as usual' (BAU) refers to the normal conduct of business operations, regardless of the circumstances or events that may represent a potential negative impact. It also means maintaining the *status quo* (FEI; QING, 2012).

In contemporary times, with the increasing focus on sustainability and sustainable development, the BAU approach is widely criticized for advocating traditional/conventional business management practices that fail to give due importance to socio environmental problems and emphasize business models that ignores such problems (DASGUPTA, 2008; LAVILLE, 2009).

The BAU scenario was used in the study by Alves and Diniz (2022) to analyze the the projection of reduced CO_2 emissions resulting from avoided deforestation due to land use changes in the Brazilian Amazon.for the period from 2006 to 2020, in addition to projecting the BAU scenario based on a linear regression model of the reduced emissions data from 2021 to 2030.".

The BAU scenario is the current evaluation model for the CMA Project as outlined in the program document entitled *"Recovery and protection of climate and biodiversity services in the Southeast Atlantic Forest corridor of* Brazil". This document estimates the carbon benefits by evaluating emissions related to changes in land use achieved in the CMA project investments compared to the BAU scenario. In a BAU scenario, it is assumed that i) the emission sources are mainly from forest degradation within protected areas and private reserves at an estimated rate of 2 (two) tons of CO_2 e ha $^{-1}$ per year. This assumption is based on the documented biomass loss associated with forest degradation linked to illegal logging and the associated consequences of boundary effects along the periphery of native patches; and ii) Carbon sinks would not have occurred because farmers do not have the incentives or capacity to adopt and implement improved pastures, agroforestry and silvopastoral systems, productive timber plantations, and regeneration of native forests.

This basic model assumes that the carbon benefits would be obtained with 100% compliance with the signed PES contracts. The sensitivity analysis compares this BAU scenario with other results, considering the entire spectrum of project execution (from 0% to 100% execution). This range was chosen because there may be hidden incentives for breaching PES contracts or incorrect outcome measurements that inflate the PES carbon impact. In addition iii) the carbon coefficients were calculated following the guidelines of *The Intergovernmental Panel on Climate Change* (IPCC) for the evaluation of above- and below-ground biomass.

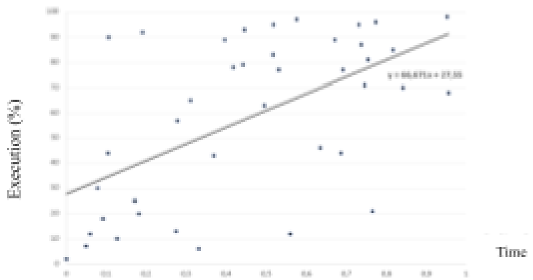
The BAU scenario in the Atlantic Forest Connection Project will be based on simple linear regression (CHEIN, 2019). In other words, the BAU scenario will analyze each indicator in relation to the execution level, enabling us to predict the execution behavior based on the indicator value. To achieve this, we will utilize the following general equation:

$$\mathbf{Y=a+bx}$$

where Y = explained variable, that is, execution level; a = intercept or coefficient; b = effect on the analyzed indicator; and x = indicator.

Figure 4 shows an example of the line of behavior of the observations for each indicator.

Figure 4 - Example of the BAU



The BAU method, while commonly used as a reference to verify trends and processes, does not take into account the statistical effect of factors other than the indicator being analyzed. This factor, often referred to as the error term in data analysis overviews, is crucial for accurate analysis. In order to address this limitation and enhance the significance of the analysis results, a different method will be discussed.

In the BAU analysis, the Microsoft Excel system was utilized to obtain the results

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Ordinary least squares (OLS)

The ordinary least squares (OLS) method is a mathematical optimization technique used to find the best fit for a dataset by minimizing the sum of the squares of the differences between the estimated value and the observed data (HAIR et al., 2009). OLS is widely widely employed in econometrics as the primary form of estimation, aiming to adjust the parameters of a model function to improve its fit with the dataset (GUARIENTI, 2014). This method is particularly useful for parameter estimation in multiple linear regression (MEMÓRIA, 2004).

To clarify, the ordinary least squares (OLS) method is utilized to examine the relationship between variables and an outcome variable, which is a latent or dependent variable that cannot be directly observed. OLS helps determine which set of variables best explains the outcome variable, understand the relationship between the outcome variable and predictors, control for the effects of other predictor variables, and project the value of the outcome variable using a set of independent variables, also known as predictors (GUJARATI, 2011). Furthermore, OLS enables the development of forecasting models (SANTOS, 2017).

The model of analysis of multiple linear regression, using the precepts of the OLS, is illustrated in the equation below. Each indicator influences the explanation of the execution level and is considered an independent variable.

To evaluate the CMA project, each indicator presented for the study will be considered as a factor to explain the execution of the project itself so that one can adequately estimate what the property would be like without the project's actions. The demonstrative equation for the OLS is:

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + ... + \beta_{14} x_{14} + \varepsilon$$

where Y = explained variable, that is, execution level; β_0 = intercept or coefficient; $\beta_1 ... \beta_{14}$ = effect on the analyzed indicator (from 1 to 14); and $x_{1...14}$ = indicators 1 to 14 as previously presented.

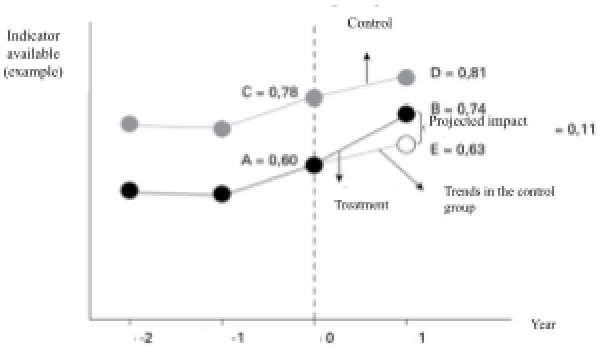
Jamovi software was used to calculate the results of this model.

Differences for Differences (DD)

When collecting the data for each treatment and control property, as well as the information from the indicators mentioned in the previous section, the differences for the differences (DD) analysis method was used. The difference-in-differences method compares the changes in results over time (from the beginning of the program to the last data available by the remote sensing system for each indicator) between the properties participating in the program (the treatment group) and properties that are not (the control group).

Figure 6 shows an example of the use of the DD technique to measure the impact of the program. Both groups (treatment and control) will be observed over time in relation to each proposed indicator. At the end of the evaluation, the means of the observations will take a similar design to that shown in Figure 4. The impact will be evaluated based on the trend difference between the untreated and treatment groups.

Figure 6 - Example of the DD method



Source: Adapted from Gertler et al. (2016).

Therefore, according to Gertler et al. (2016), the summary model is computed as follows:

IMPACT DD = (BA) – (DC)

where IMPACT DD = effective impact caused by the program; A = indicator at baseline of the treatment group; B = evolution of the indicator in the treated group; C = indicator at baseline of the control group; and D = indicator evolution in the control group.

The team input the indicator data into the software Stata v. 14, and Jamovi performed the statistical calculations to apply the Difference for the Difference.

Data Envelopment Analysis (DEA)

Data Envelopment Analysis (DEA) is a deterministic and nonparametric technique that was developed to determine the relative efficiency of *Decision-Making Units* (DMU) (ANDRADE), 2015; CASADO, 2007; SILVA, 2017). DEA is a methodology capable of evaluating the efficiency of different sectors (ULUCAN; ATICI, 2010), and for this purpose, the construction of production frontiers of production units (DMUs) is performed to evaluate the relative efficiency of the operation plans performed by the DMUs since it is assumed that there is the use of similar technological processes to transform multiple inputs into multiple products. These boundaries are also considered a reference source for establishing efficient goals for each DMU (SAMPIERI; COLLADO; LÚCIO, 2013).

The method can evaluate the efficiency of different public and private sectors (ULUCAN; ATICI, 2010), and according to Silva (2017), it is essential for companies/farmers to evaluate the performance of others in the same sector. In this sense, the DEA methodology allows, through *benchmarking,* the identification of the best practices that result in greater efficiency. Piot-Lepetit and Nzongang (2014) state that the concept of *benchmarking* is based on the principle that in a highly competitive environment, only companies (or rural producers, in this case) will survive that manage to optimize their resources and results, i.e., those with high levels of performance. Applied in DEA, *benchmarking* can be defined as establishing a comparative benchmark representing the optimal performance point; that is, it means the ideal results model against a certain number of resources.

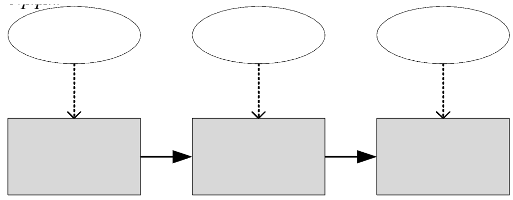
When applying DEA, the orientation of the model should be chosen, either by *input* or *output* (CASADO, 2007). According to Sant'Anna (2002), input and output have a broad meaning when used in DEA since the former refers to the resources utilized, which limit the result depending on how they are conducted. In addition, for the application of the DEA methodology, it is necessary to follow some protocols, such as the homogeneity of the DMUs, the minimum number of DMUs, the pattern of selection of *inputs* and *outputs,* and the format of the data, in addition to not accepting missing data (SILVA, 2017).

Among the various DEA application models, Silva (2017) points to two main ones: the CRS (*Constant Returns to Scale*), translated as "Constant Returns to Scale," whose *outputs* are proportional to the *inputs*, i.e., the model is linear, and VRS (*Variable Returns to Scale*), in which the return to scale is variable, and the *benchmarking* is in the form of a curve, i.e., the *outputs* are not necessarily proportional to the *inputs*, or Furthermore, the potentiation of the input does not immediately impact the optimization of the output, since the final result is supported according to how the processing is conducted (FERRAZ et al ., 2019).

Thus, DEA differs from other performance analysis techniques by allowing, in addition to identifying the most and least efficient DMUs, the frontiers for performance improvement (BENITO et al., 2021). This frontier, or *benchmark*, is determined by projecting the inefficient DMUs onto the efficiency frontier. It allows decision-making to be oriented to inputs (minimizing them and maximizing or maintaining outputs) and oriented to outputs (when desired). the maximization of results while maintaining resources) (CASADO, 2007).

Casado (2007) uses a practical example to explain the fundamental assumption of the DEA technique. The author argues that if a DMU named "A" can produce X(A) units from Y(A) inputs, then DMU "B" could have the same degree of execution if it meets the protocols, being homogeneous and being homogeneous operating efficiently. This example can be better visualized in Figure 7.

Figure 7 - Example of DEA application



Source: Based on Married (2007).

DEA is widely used to evaluate public services, whether in ATER, transportation, education, or health (CUNHA, 2021; CERVEIRA et al., 2022).

In the case of the CMA Project, the technique for analyzing the DEA data was chosen precisely because it provides the best practices to be followed to achieve efficiency and define goals for inefficient DMUs (ANGULO-MEZA et al., 2019). In this evaluation, the VRS model will be used, in which the return to scale is variable, and the *benchmarking* is in a curve format (FERRAZ et al., 2019), with *output* orientation based on the following formula:

Max θ

Subject to: $x_{i0} - \sum_{k=1}^{n} x_{ik}\lambda_k \geq -\theta y_{j0} + \sum_{k=1}^{n} y \,, \quad \sum_{k=1}^{n} \lambda_k = 1 \quad \lambda_k \geq 0 \forall k$

Where: Θ: efficiency; $_{vi}$: weights of the *inputs*; u_i: weights of the *outputs*; x_{ik}: *inputs* i of the *DMUk*; y_{jk}: *outputs* j of the *DMUk*; x_{i0}: *inputs* i of *DMU* 0; y_{j0}: *outputs* j of the *DMU* 0; λ_K: k-th coordinate of *DMU* 0.

In the case of the CMA, the received values of PSAs, CVS, and the size of the areas of the properties were considered as *inputs,* and the inverse of the size of the areas considered degraded, the size of the recovered areas, and the size of the preserved areas (the result of the subtraction of recovered and degraded areas). as *output*.

SIAD v 3.0 software was used for this analysis.

SUMMARY OF RESULTS

For all the indicators agreed upon by the state managers, the appropriate descriptive analyses are presented in product 04.

Table 03 illustrates the summary of the results obtained by the descriptive analyses:

Table 03 - Summary of descriptive results

Indicators/States	Minas Gerais	São Paulo	Rio de Janeiro
Index 1. Increase around native vegetation conserved/under restoration	👍	👍	👍
Ind 2. Increase in pasture area with rotational management	✖	👍	✖
Ind 3. Increment of diversity in pastures	👍	👍	👍
Index 4. Crop area	👍	👍	⚠
Ind 5. SAF	👍	👍	⚠
Ind 6. Investment in the production or property system	✖	👍	⚠
Ind 7. Leveraged resource for production or ownership systems	✖	✖	⚠
Ind 8. Increase of properties with rural sanitation among those who proposed to take this action in their Action Plan	✖	👍	✖
Ind 9. Properties with implementation of the Human/Fauna Coexistence Plan among those that proposed to do this action in their Action Plan	✖	👎	✖
Ind 10. Properties with meliponiculture among those that proposed to carry out this action in their Action Plan	✖	👍	✖
Ind 11. Number of beneficiaries who proposed to expand the practices supported by the project	⚠	👎	⚠
Ind 12. Increase of restoration areas and agrosilvopastoral systems through own resources or others, which are not exclusive to the project	✖	✖	⚠
Ind 13. Land use change in the watershed	✖	✖	⚠
Ind 14. Incidence of fires in the project areas	⚠	✖	⚠

⚠ Indicator matched but not delivered

✖ Indicator not combined

👍 Positive influence

👎 No influence

Business As Usual (BAU)

In the following table, the results for the environmental indicators obtained from remote sensing platforms of the municipalities where there is at least one participating property were summarized, and the same indicators of the participating properties for applying the BAU method.

Table 04 - Summary of results in BAU

Indicators/States	Minas Gerais	São Paulo	Rio de Janeiro	Considerations
Fire outbreaks (number of outbreaks)	⇈	⇈	⋎	The results indicate that the indicators of producers in Rio de Janeiro, when analyzed using the BAU method, exhibit a deviation from the trends observed in neighboring properties of participating producers. However, the method does not provide statistical significance to confirm this detachment. Therefore, although the results may suggest such detachment and lack of influence, it cannot be conclusively confirmed.
Fire scar (hectares)	⇈	⇈	⋎	
Pastures (hectares)	⇈	⇈	⋎	
Mining (hectares)	⇈	n/a	⋎	
Deforestation (hectares)	⇈	⇈	⋎	

	Detachment of the trend in BAU	
	No influence	

Ordinary least squares (OLS)

In the following table, the OLS methods processed the results of indicators sent by the states with statistical quality. Data from the state of Rio de Janeiro could not be analyzed by this method.

Table 05 - Summary of results in OLS

Indicators/States	Minas Gerais	São Paulo
Index 1. Increase around native vegetation conserved/under restoration	Significance at 95%, with explanatory power of 13.7%. Farmer participation in 100% of CMA shares brings average gain of 1.4 hectares of increase in primary vegetation.	Due to the heteroscedasticity of the data, it is not possible to state any results.
Ind 2. Increase in pasture area with rotational management	No analysis	Significance at 99%, with explanatory power of 9.17%. Each percentage point of execution corresponds to 3.84 hectares of average implantation of rotated pasture.
Ind 3. Increment of diversity in pastures	Significance at 99%, with explanatory power of 13.9%. Farmer participation in 100% of CMA shares brings average gain of 5.61 hectares of diversified pasture	Significance at 95%, with explanatory power of 20.6%, the cutoff of properties with increased biodiversity of up to 50 hectares. Each percentage point of CMA project execution corresponds to 5.00 hectares of average increase in biodiversity in the pasture
Index 4. Organic cultivation area	No analysis	Significance at 90%, with explanatory power of 2.36%. Each percentage point of project execution corresponds to 0.68 hectares of average increase in organic cultivation.
Ind 5. SAF	Significance of 99%, which proves that, for 100% project execution, there is an increase in properties by 3.6 hectares on average of areas with AFS	The model did not obtain minimal significance to prove an effect on the average enlargement of areas with APS.

Differences for Differences (DD)

The following table summarizes the results of the geospatial data measurements for each state using the DD method.

Table 06 - Summary of results in DD

Indicators/States	Minas Gerais	São Paulo	Rio de Janeiro
Land use change (hectares)	There is no causality	There is positive causality for recovery in degraded areas	There is positive causality for recovery in degraded areas
Clearance of forests (hectares)	There is no causality	There is no causality	There is no causality
Fire Alert (hectares)	There is no causality	There is no causality	There is no causality
Fire scar (hectares)	There is no causality	There is no causality	There is no causality

There was a statistical indication of positive causality in the states of São Paulo and Rio de Janeiro regarding the recovery indicators of degraded areas. There is the possibility of deepening this result through more robust methods. Unfortunately, only the data for São Paulo were subject to further analysis of the data with the values available.

With this information, it was possible to estimate, in hectares, how much there is in gain per real (R$) invested in the project by each type of program (PES Protection, PES Multiple Use, and CVS). In this case, we present the statistical model and its considerations.

Table 01 - Descriptive statistics for recovered areas in SP

	Recovery
No.	545
Omitted	0
Mean	9,50
Standard deviation	1,16
Minimum	6,80
Maximum	13,0
Shapiro–Wilk W	0,995
p Shapiro–Wilk	0,084

Table 02 - Measures of Model Fit

Global Model Test					
R	R²	F	gl1	gl2	p
0,402	0,162	34,8	3	541	< 0,0 01

Table 03 - Verification of assumptions

Normality Tests	Statistics	p
Shapiro–Wilk	0,997	0,496
Kolmogorov–Smirnov	0,0300	0,709
Anderson–Darling	0,446	0,281
Heteroskedasticity Tests	**Statistics**	**p**
Breusch–Pagan	1,61	0,658
Goldfeld-Quandt	1,12	0,172
Harrison-McCabe	0,473	0,177
Collinearity Statistics	**FIV**	**Tolerance**
PES_PROTECTION values	1,08	0.925
PES_MULTIPLE_USE values	1,18	0.849
Values of CVS_TOTAL	1,16	0.861

Table 04 - Model coefficients

Predictor	Estimates	Standard error	t	p
Intercept	9,01998	0,06927	130,212	<0,001
PES_PROTECTION values	0,02037	0,00218	9,362	< 0,001
PES_MULTIPLE_USE values	0,02266	0,00395	5,729	< 0,001
Values CVS_TOTAL	-0,00117	0,00340	-0,345	0.730

Tables 1, 2, 3, and 4 are the extractions of the statistical results of the following equational model:

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \varepsilon$$

where Y = Area under-recovery (log-transformed into m^2);β_0 is the coefficient or intercept,β_1 is the coefficient of the indicator x_1; x_1 is the amount in thousand reais (R$) received by each producer in the Protection PES program;β_2 is the coefficient of the indicator x_2; x_2 is the amount in thousand reais (R$) received by each producer in the Multiple Use PES program;β_3 is the coefficient of the indicator x_3; x_3 is the amount in thousand reais (R$) received by each producer in the CVS - Sustainable Value Chain program; ε is the estimated error in the model.

The model in question has an explanatory power of 16.20% (referring to R^2 - Table 2) and a significance of 99% (*p* - Table 2), which allows us to state that it is a model with robustness to confirm the effectiveness of the result. The data assumptions were met regarding normality, heteroscedasticity, and collinearity, as shown in Table 3. The sample universe is 545 farmers participating in the CMA project and receiving amounts in at least one PES or CVS program (Table 1).

With this information, it can be stated that the equation below represents the effective impact of the payments made by the CMA to the producers regarding the recovery of degraded areas:

$$e^{recovery/10000} = e^{9{,}01998+\left(0{,}02037*\frac{PES_{prot}}{1000}\right)+\left(0{,}02266*\frac{PESuse}{1000}\right)+\left(0*\frac{CVS}{1000}\right)}$$

It is observed that the values of PES Protection, PES Multiple Use, and CVS are in thousands of reais to facilitate the calculation. Therefore, the insertion of raw data in reais is considered. The CVS values were not significant, i.e., in the analyzed model, CVS had no effect on the recovery areas (no significance assumption, seen in Table 8). As the recovery areas are in m^2, finally, as the data were normalized by the Napierian logarithm, the reversion to the data in natural numbers was considered.

An analysis performed simulated a data set considering a value of R$ 100,000.00 on a 100% scale for PES protection, 50% for each type of PES, and 100% for PES multiple use.

Table 05 - Results of the amounts invested per average area recovered

Area/R$	100.000 PES Prot	50.000 PES Prot e 50.000 PES Use	100.000 PES Use	No investment
Recovery of degraded areas in hectares	6,34 ha	7,11ha	7,97 ha	0,83 ha

That is, for every R$ 100,000.00 invested in the CMA for Payments for Environmental Services, there is a gain in recovery area between 6.34 and 7.97 hectares, depending on the type of PES to be applied. When there is no investment, the improvement in the area recovered for the region is 0.83 hectares in the study period.

Adopting the differences for differences method, the counterfactual of the project, when the value of R$ 100,000.00 is simulated, is the additional degraded area recovered between 5.51 and 7.14 hectares in the three years of measurement of the project.

Considering the data from previous studies of the project, in which it has been estimated the capture of 2 (two) tons of CO_2 e ha $^{-1}$ per year, we have that during these three years, carbon capture of 3.67 to 4.76 tons of CO_2_e.

Data Envelopment Analysis

Regarding the efficiency analysis results, Appendix I presents the result individualized by a producer of the 792 participants of the CMA in the state of São Paulo. This set of producers presented the data on PES and CVS values and property areas in hectares (for the model *input*) and degraded areas (1/ha), and recovery and preservation (ha) for model output. Below is a table with the list of the ten most efficient producers:

Table 07 - Ranking of the first 10 most efficient producers (no slack)

CAR	Municipality	Type of PES	Total area (ha)	Preserved area (ha)
35323060102817	Nativity of Serra/SP	Multiple Use	2,62	0,51
35323060149505	Nativity of Serra/SP	Multiple Use	6,14	3,16
35499040153026	São José dos Campos/SP	Multiple Use	7,16	2,43
35499040354598	São José dos Campos/SP	Multiple Use	3,64	0,24
35500010074378	São Luiz do Paraitinga/SP	Multiple Use	155,72	17,81
35233050173615	Itariri/SP	Multiple Use	3,06	0,43
35233050197088	Itariri/SP	Multiple Use	9,64	0,97
35233050201008	Itariri/SP	Multiple Use	30,68	6,54
35233050213629	Itariri/SP	Multiple Use	7,38	3,73
35233050216563	Itariri/SP	Multiple Use	280,97	17,56

* Preserved area is the net area between the area under recovery minus the area under degradation

CONCLUSIONS

Several aspects regarding the impact of the CMA Project on socio-environmental and economic indicators can be concluded. The levels and methods of interpreting the collected data were described, including descriptive and statistical analyses, with the latter utilizing different models.

In the state of Minas Gerais, the indicators that exhibited the strongest statistical robustness were: a) an increase in conserved or under restoration native vegetation, b) enhanced diversity in pastures, and c) expansion of Agroforestry Systems (AFS) areas. These indicators showed significant positive correlations with programmed participation. In other words, participation in the project had a positive effect on these three indicators

To ensure a more comprehensive understanding of the impact, the most robust methodology possible was adopted. The chosen approach that best meets this need was the parametric analysis of differences for differences. This method clearly highlighted a significant impact of producer participation in the project on the recovery of degraded areas in the states of São Paulo and Rio de Janeiro, as compared to those who do not participate. Furthermore, in São Paulo, it was observed that this impact varies based on the amount and type of payment for services. The amount paid had a positive continuous variation, indicating that higher payments were associated with larger areas reclaimed. Only the Multiple Use and Protection Payment for Ecosystem Services (PES) exhibited such an impact.

Based on the data obtained and the various methods applied,, it is possible to conclude by the different methods applied that there were positive results that distinguished the producers who participated in the project, especially regarding the environmental indicators. The analysis conducted indicated that the most effective tool for mitigating environmental degradation is multiple-use Payment for Ecosystem Services (PES), followed by PES protection. Other typologies and actions, such as Conservation Value Scenarios (CVS), showed some differences but with limited statistical significance compared to.

Furthermore, it is estimated that approximately 4 tons of carbon capture are achieved for every 100,000 reais invested in the program over a three-year period.

It is strongly recommended to prioritize the use of multiple-use PES in future projects, as it yields more favorable results in terms of area recovery, avoided degradation, and greater CO2 equivalent capture. Additionally, it is advisable to impose restrictions on producers who indicate degraded areas. The study was unable to establish a direct link between participation in the CMA program and the reduction of degraded areas. However, if such a requirement is implemented, it is anticipated that the area reclaimed will likely increase.

Based on the data collected in the three states, the ideal profile of a Payment for Ecosystem Services (PES) program can be determined. For projects with values exceeding R$ 120,000.00 per contiguous area, it is recommended to solely apply the Multiple Use PES. However, for projects below this value, it is advisable to combine the Multiple Use PES with PES protection.

The analyses conducted in this study did not reveal any significant impact of actions such as sustainable value chains (CVS).

Furthermore, it is necessary to impose restrictions within the program regarding the indication of degraded areas, regardless of the significance of the recovery actions

.

Lessons Learned

- ***Ex-post* analysis:** based on the theory of change, it is essential to design the impact evaluation in a way that helps define which data to collect and which variables to measure. This understanding allows us to answer the question of "why" a program generates specific results and, consequently, enables the definition of more generalizable knowledge and mechanisms for replicating programs in different contexts.;

- The lack of standardization of the indicators resulted in a a significant bias in the statistical analysis of the results.
- It is recommended to focus on a select few indicators that represent a high impact on the program's objectives. These indicators should be measurable and objective..

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APPENDIX I - TABLE OF RELATIVE EFFICIENCY RESULTS

DMU/ Producer	Rank	Efficiency	Benchmark(lambda)
1FIN	1	100,00%	322PLU(0.804214);460SEL(0.195786)
2FIN	1	100,00%	239IBS(0.630408);460SEL(0.369592)
3FIN	1	100,00%	62FIN(0.2389);460SEL(0.7611)
5FIN	1	100,00%	62FIN(0.087827);328PLU(0.136727);460SEL(0.775446)
7FIN	1	100,00%	62FIN(0.042223);322PLU(0.352929);460SEL(0.604848)
8FIN	1	100,00%	239IBS(0.08388);322PLU(0.408203);460SEL(0.507917)
11FIN	1	100,00%	62FIN(0.518507);322PLU(0.288794);460SEL(0.192698)
14FIN	1	100,00%	62FIN(0.199215);239IBS(0.054099);322PLU(0.746686)
17FIN	1	100,00%	62FIN(0.555882);322PLU(0.308415);460SEL(0.135703)
18FIN	1	100,00%	239IBS(0.340192);322PLU(0.659808)
19FIN	1	100,00%	239IBS(0.858711);322PLU(0.141289)
20FIN	1	100,00%	62FIN(0.016368);218IBS(0.709893);322PLU(0.176224);495SEL(0.097515)
25FIN	1	100,00%	25FIN(1)
26FIN	1	100,00%	460SEL(1)
27FIN	1	100,00%	239IBS(0.219136);322PLU(0.780864)
29FIN	1	100,00%	62FIN(0.078102);322PLU(0.857382);495SEL(0.064516)
31FIN	1	100,00%	218IBS(0.52557);239IBS(0.47443)
32FIN	1	100,00%	322PLU(0.854573);460SEL(0.145427)
33FIN	1	100,00%	239IBS(0.353224);322PLU(0.646776)
34FIN	1	100,00%	62FIN(0.231895);322PLU(0.380382);460SEL(0.387723)
35FIN	1	100,00%	62FIN(0.172787);322PLU(0.78844);460SEL(0.038772)
36FIN	1	100,00%	239IBS(0.177123);322PLU(0.435154);460SEL(0.387723)
39FIN	1	100,00%	62FIN(0.204321);322PLU(0.446728);460SEL(0.348951)
40FIN	1	100,00%	239IBS(0.629587);322PLU(0.003956);460SEL(0.366457)
42FIN	1	100,00%	239IBS(0.630408);460SEL(0.369592)
43FIN	1	100,00%	62FIN(0.146096);239IBS(0.42951);322PLU(0.308077);460SEL(0.116317)
46FIN	1	100,00%	239IBS(0.326475);322PLU(0.673525)
47FIN	1	100,00%	62FIN(0.360316);322PLU(0.445823);460SEL(0.193862)
48FIN	1	100,00%	62FIN(0.934492);328PLU(0.065508)
49FIN	1	100,00%	218IBS(0.690266);322PLU(0.251762);460SEL(0.057972)
50FIN	1	100,00%	239IBS(0.630408);460SEL(0.369592)
52FIN	1	100,00%	62FIN(0.102172);322PLU(0.897828)
54FIN	1	100,00%	25FIN(0.13677);322PLU(0.391732);495SEL(0.471498)
55FIN	1	100,00%	62FIN(0.224055);322PLU(0.775945)
56FIN	1	100,00%	62FIN(0.059485);218IBS(0.050915);322PLU(0.8896)
57FIN	1	100,00%	62FIN(0.336371);322PLU(0.658281);328PLU(0.005348)
59FIN	1	100,00%	62FIN(0.953862);322PLU(0.034407);495SEL(0.01173)
60FIN	1	100,00%	239IBS(0.180041);322PLU(0.819959)
62FIN	1	100,00%	62FIN(1)
63FIN	1	100,00%	62FIN(0.796862);322PLU(0.203138)
65FIN	1	100,00%	62FIN(0.069825);218IBS(0.427971);322PLU(0.502204)
66FIN	1	100,00%	25FIN(0.544949);218IBS(0.234154);322PLU(0.030451);495SEL(0.190447)
68FIN	1	100,00%	62FIN(0.240882);322PLU(0.571435);495SEL(0.187683)
69FIN	1	100,00%	62FIN(0.201848);328PLU(0.009411);495SEL(0.788741)
70FIN	1	100,00%	62FIN(0.639179);322PLU(0.360821)
71FIN	1	100,00%	62FIN(0.933155);328PLU(0.066845)
72FIN	1	100,00%	239IBS(0.391975);322PLU(0.608025)
73FIN	1	100,00%	62FIN(0.104586);322PLU(0.895414)
74FIN	1	100,00%	62FIN(0.584875);322PLU(0.415125)
76FIN	1	100,00%	62FIN(0.745989);328PLU(0.254011)
77FIN	1	100,00%	62FIN(0.11481);322PLU(0.791349);495SEL(0.093842)
78FIN	1	100,00%	239IBS(0.146776);322PLU(0.853224)
79FIN	1	100,00%	62FIN(0.296862);322PLU(0.703138)
80FIN	1	100,00%	62FIN(0.078003);322PLU(0.917987);328PLU(0.004011)
81FIN	1	100,00%	239IBS(0.778807);322PLU(0.221193)
82FIN	1	100,00%	62FIN(0.025528);322PLU(0.898225);495SEL(0.076246)
84FIN	1	100,00%	62FIN(0.379565);322PLU(0.344775);495SEL(0.27566)
85FIN	1	100,00%	62FIN(0.309217);328PLU(0.37701);495SEL(0.313774)
86FIN	1	100,00%	62FIN(0.893048);328PLU(0.106952)
87FIN	1	100,00%	62FIN(0.921561);322PLU(0.078439)
88FIN	1	100,00%	62FIN(0.227273);322PLU(0.772727)
89FIN	1	100,00%	239IBS(0.160151);322PLU(0.839849)
91FIN	1	100,00%	62FIN(0.061948);322PLU(0.064152);495SEL(0.8739)
92FIN	1	100,00%	62FIN(0.089711);218IBS(0.317204);322PLU(0.593085)
93FIN	1	100,00%	62FIN(0.136899);218IBS(0.212176);322PLU(0.650925)
94FIN	1	100,00%	62FIN(0.082182);322PLU(0.916481);328PLU(0.001337)
95FIN	1	100,00%	239IBS(0.191701);322PLU(0.808299)
96FIN	1	100,00%	239IBS(0.076132);322PLU(0.923868)
97FIN	1	100,00%	239IBS(0.528464);322PLU(0.471536)
98FIN	1	100,00%	62FIN(0.594565);328PLU(0.063259);495SEL(0.342176)
99FIN	1	100,00%	62FIN(0.07607);218IBS(0.404058);322PLU(0.519872)
100FIN	1	100,00%	62FIN(0.087722);218IBS(0.06061);322PLU(0.785731);495SEL(0.065938)
101FIN	1	100,00%	62FIN(0.098954);322PLU(0.901046)
102FIN	1	100,00%	62FIN(0.018091);322PLU(0.847012);495SEL(0.134897)
103FIN	1	100,00%	62FIN(0.366664);239IBS(0.633336)
104FIN	1	100,00%	62FIN(0.458456);239IBS(0.541544)
105FIN	1	100,00%	25FIN(0.299031);218IBS(0.272142);272IBS(0.310903);322PLU(0.117925)
106FIN	1	100,00%	62FIN(1)
107FIN	1	100,00%	62FIN(0.080043);218IBS(0.136978);322PLU(0.782979)
109FIN	1	100,00%	62FIN(0.228882);322PLU(0.771118)
110FIN	1	100,00%	62FIN(0.087742);218IBS(0.31244);322PLU(0.599818)
111FIN	1	100,00%	239IBS(0.995269);460SEL(0.004731)
112FIN	1	100,00%	62FIN(0.269076);322PLU(0.595221);460SEL(0.135703)
113FIN	1	100,00%	62FIN(0.351021);322PLU(0.617961);460SEL(0.031018)
114FIN	1	100,00%	62FIN(0.115447);322PLU(0.884553)
116FIN	1	100,00%	62FIN(0.318442);322PLU(0.565241);460SEL(0.116317)
117FIN	1	100,00%	62FIN(0.302099);460SEL(0.697901)
118FIN	1	100,00%	62FIN(0.087691);322PLU(0.912309)
119FIN	1	100,00%	62FIN(0.014922);322PLU(0.678858);460SEL(0.30622)
121FIN	1	100,00%	62FIN(0.189685);322PLU(0.769259);495SEL(0.041056)
124FIN	1	100,00%	62FIN(0.495929);322PLU(0.333983);495SEL(0.170088)
125FIN	1	100,00%	125FIN(1)
126FIN	1	100,00%	62FIN(0.484328);460SEL(0.515672)
127FIN	1	100,00%	62FIN(0.442431);322PLU(0.513581);495SEL(0.043988)
129FIN	1	100,00%	322PLU(0.337616);460SEL(0.662384)
130FIN	1	100,00%	62FIN(0.331416);322PLU(0.381194);495SEL(0.28739)
131FIN	1	100,00%	62FIN(0.75543);322PLU(0.24457)
133FIN	1	100,00%	62FIN(0.369592);239IBS(0.630408)
139FIN	1	100,00%	62FIN(0.77367);328PLU(0.047153);460SEL(0.077545);495SEL(0.101632)
140FIN	1	100,00%	62FIN(0.186945);460SEL(0.813055)
141FIN	1	100,00%	62FIN(0.509374);322PLU(0.489289);328PLU(0.001337)
142FIN	1	100,00%	62FIN(0.079981);239IBS(0.920019)
143FIN	1	100,00%	62FIN(0.520589);322PLU(0.423692);495SEL(0.055718)
144FIN	1	100,00%	62FIN(0.224554);460SEL(0.775446)
147FIN	1	100,00%	62FIN(0.133903);322PLU(0.168195);460SEL(0.697901)
149FIN	1	100,00%	62FIN(0.323363);322PLU(0.506549);495SEL(0.170088)
150FIN	1	100,00%	62FIN(0.103406);239IBS(0.14837);322PLU(0.680893);495SEL(0.067331)
151FIN	1	100,00%	460SEL(1)
152FIN	1	100,00%	239IBS(0.608306);460SEL(0.391694)
155FIN	1	100,00%	62FIN(0.436018);322PLU(0.215031);460SEL(0.348951)
159FIN	1	100,00%	62FIN(0.824866);328PLU(0.175134)
162FIN	1	100,00%	62FIN(0.160626);218IBS(0.485626);322PLU(0.353748)
164FIN	1	100,00%	239IBS(0.100823);322PLU(0.899177)
165FIN	1	100,00%	239IBS(0.122428);322PLU(0.877572)
166FIN	1	100,00%	239IBS(1)
168FIN	1	100,00%	62FIN(0.007273);239IBS(0.079446);322PLU(0.719419);460SEL(0.193862)
169FIN	1	100,00%	62FIN(0.722251);328PLU(0.108815);495SEL(0.168935)
170FIN	1	100,00%	62FIN(0.199857);322PLU(0.528737);460SEL(0.271406)
171FIN	1	100,00%	62FIN(0.033726);322PLU(0.694868);460SEL(0.271406)
172FIN	1	100,00%	239IBS(0.146433);322PLU(0.853567)
173FIN	1	100,00%	25FIN(0.828646);239IBS(0.019307);322PLU(0.152047)
174FIN	1	100,00%	62FIN(0.221875);322PLU(0.398156);460SEL(0.379969)
176IBS	1	100,00%	62FIN(0.637751);328PLU(0.158411);495SEL(0.203838)
178IBS	1	100,00%	62FIN(0.044106);218IBS(0.539371);322PLU(0.329966);495SEL(0.086556)
179IBS	1	100,00%	62FIN(0.222779);322PLU(0.769199);328PLU(0.008021)
183IBS	1	100,00%	62FIN(0.163628);218IBS(0.085126);322PLU(0.473029);495SEL(0.278217)
184IBS	1	100,00%	184IBS(1)
185IBS	1	100,00%	184IBS(0.211567);328PLU(0.075626);495SEL(0.712808)
187IBS	1	100,00%	62FIN(0.465406);322PLU(0.534594)
189IBS	1	100,00%	189IBS(1)
191IBS	1	100,00%	191IBS(1)
195IBS	1	100,00%	62FIN(0.92246);328PLU(0.07754)
196IBS	1	100,00%	62FIN(0.42779);322PLU(0.504761);495SEL(0.067449)
198IBS	1	100,00%	62FIN(0.103972);218IBS(0.807025);322PLU(0.051395);495SEL(0.037608)
201IBS	1	100,00%	62FIN(0.500074);322PLU(0.444207);495SEL(0.055718)
205IBS	1	100,00%	62FIN(0.089184);322PLU(0.553044);495SEL(0.357771)
207IBS	1	100,00%	239IBS(0.526063);322PLU(0.473937)
208IBS	1	100,00%	62FIN(0.194779);218IBS(0.02634);322PLU(0.555005);495SEL(0.223875)
209IBS	1	100,00%	62FIN(0.576428);322PLU(0.423572)
214IBS	1	100,00%	25FIN(0.445242);272IBS(0.0905);322PLU(0.464258)
217IBS	1	100,00%	239IBS(0.409122);322PLU(0.590878)
218IBS	1	100,00%	218IBS(1)
220IBS	1	100,00%	62FIN(0.409287);322PLU(0.523265);495SEL(0.067449)
221IBS	1	100,00%	62FIN(0.054507);322PLU(0.634643);495SEL(0.31085)
222IBS	1	100,00%	62FIN(0.714644);328PLU(0.009075);495SEL(0.276281)
223IBS	1	100,00%	62FIN(0.382542);322PLU(0.617458)
225IBS	1	100,00%	62FIN(0.092069);322PLU(0.863943);495SEL(0.043988)
226IBS	1	100,00%	25FIN(0.173064);218IBS(0.467814);322PLU(0.023003);495SEL(0.336118)
227IBS	1	100,00%	62FIN(0.933155);328PLU(0.066845)
229IBS	1	100,00%	62FIN(0.39584);322PLU(0.126154);495SEL(0.478006)
231IBS	1	100,00%	62FIN(0.307067);322PLU(0.581496);495SEL(0.111437)
233IBS	1	100,00%	62FIN(0.375375);322PLU(0.442807);495SEL(0.181818)
235IBS	1	100,00%	25FIN(0.117339);239IBS(0.005298);322PLU(0.729818);495SEL(0.147545)
236IBS	1	100,00%	62FIN(0.041976);218IBS(0.46609);322PLU(0.458655);495SEL(0.033278)
237IBS	1	100,00%	239IBS(0.664952);322PLU(0.335048)
239IBS	1	100,00%	239IBS(1)
240IBS	1	100,00%	62FIN(0.146147);322PLU(0.72482);495SEL(0.129032)
241IBS	1	100,00%	62FIN(0.065425);218IBS(0.385538);322PLU(0.240059);495SEL(0.308978)
242IBS	1	100,00%	62FIN(0.059558);218IBS(0.068471);322PLU(0.572006);495SEL(0.299965)
243IBS	1	100,00%	25FIN(0.042257);322PLU(0.542357);495SEL(0.415386)
245IBS	1	100,00%	239IBS(0.576818);322PLU(0.423182)
247IBS	1	100,00%	247IBS(1)
251IBS	1	100,00%	62FIN(0.264457);218IBS(0.212864);322PLU(0.385792);495SEL(0.136887)
252IBS	1	100,00%	252IBS(1)
254IBS	1	100,00%	25FIN(0.157752);218IBS(0.044907);322PLU(0.668227);495SEL(0.129113)
255IBS	1	100,00%	62FIN(0.074006);239IBS(0.039269);322PLU(0.742274);495SEL(0.144451)
258IBS	1	100,00%	25FIN(0.551153);239IBS(0.018848);322PLU(0.429999)
260IBS	1	100,00%	62FIN(0.971038);322PLU(0.028962)
262IBS	1	100,00%	62FIN(0.262671);322PLU(0.737329)
264IBS	1	100,00%	62FIN(0.231673);239IBS(0.214013);322PLU(0.554314)
265IBS	1	100,00%	62FIN(0.407845);322PLU(0.430864);495SEL(0.16129)
267IBS	1	100,00%	62FIN(0.264513);239IBS(0.607483);322PLU(0.128004)
270IBS	1	100,00%	62FIN(0.687842);328PLU(0.084899);495SEL(0.227259)
272IBS	1	100,00%	272IBS(1)
273IBS	1	100,00%	62FIN(0.068937);218IBS(0.844838);322PLU(0.066052);495SEL(0.020173)
274IBS	1	100,00%	62FIN(0.068743);218IBS(0.732056);322PLU(0.199201)
277IBS	1	100,00%	62FIN(0.111275);218IBS(0.153168);322PLU(0.735557)
278IBS	1	100,00%	62FIN(0.150442);322PLU(0.849558)
279IBS	1	100,00%	62FIN(0.010345);218IBS(0.331021);322PLU(0.658634)
280IBS	1	100,00%	62FIN(0.961786);322PLU(0.038214)
282IBS	1	100,00%	62FIN(1)

285IBS	1	100,00%	62FIN(0.150845);322PLU(0.849155)
286IBS	1	100,00%	62FIN(1)
287IBS	1	100,00%	62FIN(0.041432);322PLU(0.958568)
288IBS	1	100,00%	62FIN(0.962591);322PLU(0.037409)
289IBS	1	100,00%	62FIN(0.669348);322PLU(0.330652)
291IBS	1	100,00%	62FIN(0.014471);218IBS(0.364822);322PLU(0.620707)
292IBS	1	100,00%	62FIN(0.19992);322PLU(0.80008)
293IBS	1	100,00%	62FIN(0.014332);218IBS(0.380536);322PLU(0.605133)
296PLU	1	100,00%	62FIN(0.437166);328PLU(0.562834)
300PLU	1	100,00%	62FIN(0.450596);218IBS(0.264467);322PLU(0.284937)
301PLU	1	100,00%	62FIN(0.088863);239IBS(0.256545);322PLU(0.654592)
302PLU	1	100,00%	62FIN(0.109033);218IBS(0.542951);322PLU(0.348016)
304PLU	1	100,00%	62FIN(0.102649);239IBS(0.130595);322PLU(0.766756)
306PLU	1	100,00%	62FIN(0.740097);239IBS(0.259903)
310PLU	1	100,00%	62FIN(0.11014);218IBS(0.736051);322PLU(0.153809)
311PLU	1	100,00%	62FIN(0.188955);239IBS(0.074163);322PLU(0.736883)
312PLU	1	100,00%	25FIN(0.228133);239IBS(0.203418);322PLU(0.391375);495SEL(0.177073)
314PLU	1	100,00%	62FIN(0.18189);239IBS(0.297264);322PLU(0.520846)
315PLU	1	100,00%	239IBS(0.810014);322PLU(0.189986)
318PLU	1	100,00%	62FIN(0.370166);239IBS(0.629834)
319PLU	1	100,00%	62FIN(0.80615);328PLU(0.19385)
320PLU	1	100,00%	62FIN(0.209926);218IBS(0.460126);322PLU(0.329947)
321PLU	1	100,00%	62FIN(1)
322PLU	1	100,00%	322PLU(1)
323PLU	1	100,00%	62FIN(1)
325PLU	1	100,00%	62FIN(0.315768);322PLU(0.684232)
326PLU	1	100,00%	25FIN(0.054653);239IBS(0.214646);322PLU(0.362503);495SEL(0.368198)
327PLU	1	100,00%	62FIN(0.899733);328PLU(0.100267)
328PLU	1	100,00%	328PLU(1)
330PLU	1	100,00%	62FIN(1)
331PLU	1	100,00%	62FIN(0.911765);328PLU(0.088235)
332PLU	1	100,00%	62FIN(1)
334PLU	1	100,00%	62FIN(0.140753);239IBS(0.163268);322PLU(0.69598)
338PLU	1	100,00%	62FIN(0.165133);239IBS(0.834867)
339PLU	1	100,00%	62FIN(0.342857);239IBS(0.083216);322PLU(0.573927)
341PLU	1	100,00%	62FIN(1)
344SEL	1	100,00%	344SEL(1)
354SEL	1	100,00%	460SEL(0.38675);661SEL(0.61325)
357SEL	1	100,00%	344SEL(0.217865);460SEL(0.782135)
361SEL	1	100,00%	460SEL(1)
363SEL	1	100,00%	460SEL(0.206897);653SEL(0.793103)
364SEL	1	100,00%	460SEL(1)
367SEL	1	100,00%	379SEL(0.074389);460SEL(0.925611)
368SEL	1	100,00%	344SEL(0.496135);460SEL(0.405937);653SEL(0.097928)
369SEL	1	100,00%	344SEL(0.057835);460SEL(0.942165)
370SEL	1	100,00%	344SEL(0.431179);460SEL(0.568821)
373SEL	1	100,00%	344SEL(0.339655);460SEL(0.660345)
374SEL	1	100,00%	374SEL(1)
375SEL	1	100,00%	460SEL(0.075894);653SEL(0.26083);661SEL(0.663276)
377SEL	1	100,00%	344SEL(0.668266);460SEL(0.331734)
378SEL	1	100,00%	344SEL(0.492958);460SEL(0.507042)
379SEL	1	100,00%	379SEL(1)
381SEL	1	100,00%	344SEL(0.637647);460SEL(0.014583);653SEL(0.347771)
382SEL	1	100,00%	344SEL(0.449201);460SEL(0.550799)
383SEL	1	100,00%	344SEL(0.253842);460SEL(0.746158)
384SEL	1	100,00%	344SEL(0.187871);460SEL(0.812129)
388SEL	1	100,00%	460SEL(0.205986);661SEL(0.794014)
393SEL	1	100,00%	460SEL(1)
394SEL	1	100,00%	344SEL(0.235617);379SEL(0.079221);661SEL(0.685162)
396SEL	1	100,00%	344SEL(0.571915);460SEL(0.288465);653SEL(0.13962)
397SEL	1	100,00%	460SEL(0.025223);661SEL(0.974777)
398SEL	1	100,00%	460SEL(0.19886);653SEL(0.520241);661SEL(0.280899)
399SEL	1	100,00%	344SEL(0.627163);460SEL(0.372837)
405SEL	1	100,00%	460SEL(0.031971);653SEL(0.399292);661SEL(0.568737)
410SEL	1	100,00%	460SEL(1)
411SEL	1	100,00%	460SEL(0.466697);661SEL(0.533303)
412SEL	1	100,00%	344SEL(0.685031);460SEL(0.124882);653SEL(0.190087)
414SEL	1	100,00%	460SEL(0.445066);661SEL(0.554934)
416SEL	1	100,00%	344SEL(0.877988);460SEL(0.122012)
419SEL	1	100,00%	460SEL(1)
421SEL	1	100,00%	344SEL(0.538247);460SEL(0.168308);653SEL(0.293445)
422SEL	1	100,00%	344SEL(0.261225);460SEL(0.738775)
423SEL	1	100,00%	423SEL(1)
426SEL	1	100,00%	460SEL(0.38675);661SEL(0.61325)
431SEL	1	100,00%	344SEL(0.450891);460SEL(0.549109)
432SEL	1	100,00%	62FIN(0.273153);218IBS(0.176492);322PLU(0.402004);495SEL(0.148351)
437SEL	1	100,00%	460SEL(1)
439SEL	1	100,00%	460SEL(0.153929);653SEL(0.424457);661SEL(0.421614)
440SEL	1	100,00%	344SEL(0.258862);460SEL(0.741138)
441SEL	1	100,00%	460SEL(0.084917);661SEL(0.915083)
443SEL	1	100,00%	460SEL(0.127796);661SEL(0.872204)
444SEL	1	100,00%	62FIN(0.526146);322PLU(0.473854)
446SEL	1	100,00%	460SEL(0.048028);661SEL(0.951972)
447SEL	1	100,00%	460SEL(1)
449SEL	1	100,00%	460SEL(0.084538);653SEL(0.915462)
452SEL	1	100,00%	379SEL(0.060574);460SEL(0.939426)
453SEL	1	100,00%	344SEL(0.312421);460SEL(0.583417);653SEL(0.104162)
454SEL	1	100,00%	344SEL(0.660185);460SEL(0.258276);653SEL(0.08154)
455SEL	1	100,00%	460SEL(0.08643);661SEL(0.91357)
456SEL	1	100,00%	344SEL(0.589657);460SEL(0.244279);653SEL(0.166064)
457SEL	1	100,00%	460SEL(0.49993);661SEL(0.50007)
459SEL	1	100,00%	460SEL(0.379029);661SEL(0.620971)
460SEL	1	100,00%	460SEL(1)
461SEL	1	100,00%	344SEL(0.808415);379SEL(0.03942);460SEL(0.029269);618SEL(0.122896)
465SEL	1	100,00%	465SEL(1)
466SEL	1	100,00%	62FIN(0.648192);328PLU(0.250696);495SEL(0.101112)
467SEL	1	100,00%	460SEL(1)
468SEL	1	100,00%	62FIN(0.727675);322PLU(0.272325)
475SEL	1	100,00%	62FIN(0.891711);328PLU(0.108289)
476SEL	1	100,00%	460SEL(0.136624);661SEL(0.863376)
477SEL	1	100,00%	460SEL(0.025643);661SEL(0.974357)
481SEL	1	100,00%	62FIN(0.505413);322PLU(0.247648);460SEL(0.246939)
482SEL	1	100,00%	460SEL(0.311474);661SEL(0.688526)
484SEL	1	100,00%	344SEL(0.799379);460SEL(0.200081);653SEL(0.00054)

486SEL	1	100,00%	62FIN(0.630432);322PLU(0.340242);495SEL(0.029326)
489SEL	1	100,00%	460SEL(0.02483);661SEL(0.97517)
490SEL	1	100,00%	62FIN(0.097204);218IBS(0.87956);322PLU(0.023236)
493SEL	1	100,00%	344SEL(0.577892);460SEL(0.080483);653SEL(0.341625)
494SEL	1	100,00%	344SEL(0.190228);460SEL(0.809772)
495SEL	1	100,00%	495SEL(1)
496SEL	1	100,00%	496SEL(1)
502SEL	1	100,00%	239IBS(0.039942);322PLU(0.785583);460SEL(0.174475)
503SEL	1	100,00%	62FIN(0.015628);322PLU(0.553287);495SEL(0.431085)
504SEL	1	100,00%	504SEL(1)
505SEL	1	100,00%	62FIN(0.109363);218IBS(0.28022);322PLU(0.183922);460SEL(0.426495)
506SEL	1	100,00%	62FIN(0.282838);239IBS(0.717162)
507SEL	1	100,00%	62FIN(0.104421);218IBS(0.836837);322PLU(0.058743)
508SEL	1	100,00%	239IBS(0.187929);322PLU(0.812071)
509SEL	1	100,00%	62FIN(0.186945);460SEL(0.813055)
510SEL	1	100,00%	62FIN(0.489725);322PLU(0.181829);495SEL(0.328446)
512SEL	1	100,00%	25FIN(0.417146);322PLU(0.137014);460SEL(0.387723);495SEL(0.058116)
513SEL	1	100,00%	62FIN(0.580451);322PLU(0.419549)
514SEL	1	100,00%	62FIN(0.382944);322PLU(0.617056)
515SEL	1	100,00%	62FIN(0.23433);218IBS(0.145503);322PLU(0.426305);460SEL(0.193862)
516SEL	1	100,00%	62FIN(0.806138);460SEL(0.193862)
517SEL	1	100,00%	62FIN(0.096182);322PLU(0.569507);495SEL(0.334311)
518SEL	1	100,00%	62FIN(0.373595);239IBS(0.626405)
520SEL	1	100,00%	62FIN(0.097112);239IBS(0.08155);322PLU(0.410352);460SEL(0.410986)
522SEL	1	100,00%	62FIN(0.291122);322PLU(0.107705);495SEL(0.601173)
523SEL	1	100,00%	62FIN(0.18661);328PLU(0.035956);495SEL(0.777435)
527SEL	1	100,00%	62FIN(0.289962);239IBS(0.384827);322PLU(0.325211)
529SEL	1	100,00%	218IBS(0.583463);460SEL(0.062022);653SEL(0.354515)
530SEL	1	100,00%	62FIN(0.51897);322PLU(0.290415);495SEL(0.190616)
531SEL	1	100,00%	62FIN(0.264007);322PLU(0.60696);495SEL(0.129032)
532SEL	1	100,00%	62FIN(0.292677);218IBS(0.427466);322PLU(0.279857)
534SEL	1	100,00%	62FIN(0.535616);218IBS(0.099781);322PLU(0.339661);495SEL(0.024943)
541SEL	1	100,00%	62FIN(0.109362);218IBS(0.654582);322PLU(0.064105);495SEL(0.171951)
542SEL	1	100,00%	62FIN(0.692513);328PLU(0.307487)
545SEL	1	100,00%	545SEL(1)
551SEL	1	100,00%	62FIN(0.408164);322PLU(0.477467);495SEL(0.11437)
552SEL	1	100,00%	62FIN(0.32657);218IBS(0.506693);322PLU(0.166737)
553SEL	1	100,00%	62FIN(0.383728);218IBS(0.456944);322PLU(0.159328)
558SEL	1	100,00%	62FIN(0.500933);322PLU(0.010536);460SEL(0.488531)
559SEL	1	100,00%	62FIN(0.744652);328PLU(0.255348)
560SEL	1	100,00%	239IBS(1)
561SEL	1	100,00%	561SEL(1)
563SEL	1	100,00%	62FIN(1)
565SEL	1	100,00%	565SEL(1)
566SEL	1	100,00%	62FIN(0.063909);322PLU(0.1498);460SEL(0.786291)
567SEL	1	100,00%	62FIN(0.010246);322PLU(0.293856);328PLU(0.082798);495SEL(0.6131)
568SEL	1	100,00%	239IBS(0.236626);322PLU(0.763374)
570SEL	1	100,00%	62FIN(0.286051);218IBS(0.224187);322PLU(0.350773);495SEL(0.138989)
571SEL	1	100,00%	62FIN(0.61784);322PLU(0.238465);495SEL(0.143695)
572SEL	1	100,00%	62FIN(0.371604);239IBS(0.628396)
573SEL	1	100,00%	62FIN(0.131574);218IBS(0.723082);322PLU(0.145344)
574SEL	1	100,00%	62FIN(0.473016);239IBS(0.526984)
575SEL	1	100,00%	62FIN(0.692926);239IBS(0.241559);322PLU(0.065515)
576SEL	1	100,00%	62FIN(0.665441);239IBS(0.330149);322PLU(0.00441)
577SEL	1	100,00%	62FIN(0.576462);239IBS(0.086753);328PLU(0.064072);495SEL(0.272713)
580SEL	1	100,00%	62FIN(0.492822);328PLU(0.150005);495SEL(0.357173)
581SEL	1	100,00%	62FIN(0.099373);322PLU(0.474132);460SEL(0.426495)
582SEL	1	100,00%	62FIN(0.967914);328PLU(0.032086)
583SEL	1	100,00%	583SEL(1)
585SEL	1	100,00%	460SEL(0.821277);653SEL(0.172955);661SEL(0.005768)
589SEL	1	100,00%	589SEL(1)
590SEL	1	100,00%	460SEL(0.078977);653SEL(0.921023)
591SEL	1	100,00%	460SEL(0.120859);661SEL(0.879141)
592SEL	1	100,00%	344SEL(0.066844);379SEL(0.077787);460SEL(0.855369)
594SEL	1	100,00%	344SEL(0.801935);460SEL(0.198065)
595SEL	1	100,00%	344SEL(0.440416);460SEL(0.559584)
596SEL	1	100,00%	344SEL(0.784607);379SEL(0.171595);460SEL(0.043798)
598SEL	1	100,00%	344SEL(0.55455);379SEL(0.168318);460SEL(0.24556);618SEL(0.031573)
602SEL	1	100,00%	602SEL(1)
610SEL	1	100,00%	344SEL(0.061626);379SEL(0.120464);460SEL(0.81791)
614SEL	1	100,00%	460SEL(1)
617SEL	1	100,00%	344SEL(0.713267);460SEL(0.286733)
618SEL	1	100,00%	618SEL(1)
619SEL	1	100,00%	344SEL(0.588877);460SEL(0.411123)
622SEL	1	100,00%	344SEL(0.667973);460SEL(0.16157);653SEL(0.170457)
623SEL	1	100,00%	460SEL(1)
624SEL	1	100,00%	344SEL(0.450057);379SEL(0.14493);618SEL(0.405013)
625SEL	1	100,00%	344SEL(0.601076);460SEL(0.226623);653SEL(0.172301)
626SEL	1	100,00%	344SEL(0.688485);460SEL(0.311515)
627SEL	1	100,00%	62FIN(0.407756);218IBS(0.514455);322PLU(0.077788)
631SEL	1	100,00%	460SEL(0.492886);661SEL(0.507114)
633SEL	1	100,00%	344SEL(0.384692);460SEL(0.548038);653SEL(0.06727)
634SEL	1	100,00%	344SEL(0.74445);460SEL(0.057434);618SEL(0.198116)
635SEL	1	100,00%	344SEL(0.772567);379SEL(0.06866);460SEL(0.158773)
637SEL	1	100,00%	460SEL(0.055521);618SEL(0.944479)
640SEL	1	100,00%	344SEL(0.691207);460SEL(0.163601);653SEL(0.145192)
641SEL	1	100,00%	344SEL(0.334161);460SEL(0.665839)
644SEL	1	100,00%	460SEL(1)
645SEL	1	100,00%	618SEL(0.111111);661SEL(0.888889)
646SEL	1	100,00%	460SEL(1)
648SEL	1	100,00%	344SEL(0.500688);460SEL(0.252507);653SEL(0.246804)
649SEL	1	100,00%	344SEL(0.548703);460SEL(0.086186);653SEL(0.365112)
651SEL	1	100,00%	460SEL(0.180049);661SEL(0.819951)
653SEL	1	100,00%	653SEL(1)
655SEL	1	100,00%	344SEL(0.698673);460SEL(0.105659);653SEL(0.195668)
656SEL	1	100,00%	460SEL(1)
657SEL	1	100,00%	460SEL(1)
658SEL	1	100,00%	344SEL(0.742449);460SEL(0.257551)
659SEL	1	100,00%	344SEL(0.733054);379SEL(0.011621);618SEL(0.255325)

660SEL	1	100,00%	460SEL(0.078977);653SEL(0.921023)
661SEL	1	100,00%	661SEL(1)
662SEL	1	100,00%	344SEL(0.635731);460SEL(0.08252);653SEL(0.281749)
664SEL	1	100,00%	62FIN(0.171312);322PLU(0.784699);495SEL(0.043988)
665SEL	1	100,00%	62FIN(0.161495);218IBS(0.478386);322PLU(0.360119)
666SEL	1	100,00%	62FIN(0.269044);322PLU(0.45955);460SEL(0.271406)
667SEL	1	100,00%	62FIN(0.020457);218IBS(0.711555);322PLU(0.053964);460SEL(0.214023)
668SEL	1	100,00%	184IBS(0.270418);328PLU(0.433315);495SEL(0.296267)
669SEL	1	100,00%	62FIN(0.188712);322PLU(0.307248);460SEL(0.50404)
670SEL	1	100,00%	62FIN(0.1809);218IBS(0.481201);322PLU(0.230222);460SEL(0.031018);495SEL(0.076659)
671SEL	1	100,00%	322PLU(0.75334);460SEL(0.24666)
674SEL	1	100,00%	62FIN(0.298531);218IBS(0.353913);322PLU(0.083905);460SEL(0.263652)
675SEL	1	100,00%	62FIN(0.10083);218IBS(0.312987);322PLU(0.547411);460SEL(0.038772)
676SEL	1	100,00%	62FIN(0.101422);218IBS(0.857529);322PLU(0.041049)
678SEL	1	100,00%	62FIN(0.828037);328PLU(0.03626);460SEL(0.135703)
679SEL	1	100,00%	62FIN(0.96782);322PLU(0.03218)
680SEL	1	100,00%	62FIN(0.159655);322PLU(0.679054);495SEL(0.16129)
682SEL	1	100,00%	184IBS(0.245397);328PLU(0.145432);495SEL(0.609171)
683SEL	1	100,00%	62FIN(0.292588);218IBS(0.301152);322PLU(0.40626)
686SEL	1	100,00%	62FIN(0.695093);322PLU(0.304907)
687SEL	1	100,00%	62FIN(0.709208);460SEL(0.290792)
688SEL	1	100,00%	322PLU(0.81295);460SEL(0.18705)
691SEL	1	100,00%	62FIN(0.103107);218IBS(0.844188);322PLU(0.041282);495SEL(0.011423)
692SEL	1	100,00%	62FIN(0.377005);328PLU(0.622995)
693SEL	1	100,00%	62FIN(1)
694SEL	1	100,00%	239IBS(0.586077);322PLU(0.413923)
696SEL	1	100,00%	62FIN(0.3862);218IBS(0.31397);322PLU(0.29983)
697SEL	1	100,00%	62FIN(0.071451);218IBS(0.926048);322PLU(0.002501)
700SEL	1	100,00%	62FIN(0.067528);218IBS(0.432623);322PLU(0.414263);495SEL(0.085585)
701SEL	1	100,00%	62FIN(0.311581);322PLU(0.223152);460SEL(0.465268)
702SEL	1	100,00%	62FIN(0.186945);460SEL(0.813055)
703SEL	1	100,00%	62FIN(0.002422);322PLU(0.784331);460SEL(0.213248)
704SEL	1	100,00%	62FIN(0.268235);322PLU(0.588308);460SEL(0.143458)
705SEL	1	100,00%	705SEL(1)
711SEL	1	100,00%	344SEL(0.463089);460SEL(0.536911)
717SEL	1	100,00%	460SEL(1)
718SEL	1	100,00%	344SEL(0.708816);460SEL(0.291184)
721SEL	1	100,00%	344SEL(0.079817);460SEL(0.920183)
723SEL	1	100,00%	344SEL(0.840903);460SEL(0.159097)
724SEL	1	100,00%	344SEL(0.789668);379SEL(0.009191);460SEL(0.178332);618SEL(0.022809)
725SEL	1	100,00%	460SEL(0.038955);661SEL(0.961045)
728SEL	1	100,00%	344SEL(0.565413);460SEL(0.434587)
729SEL	1	100,00%	344SEL(0.91368);460SEL(0.08632)
730SEL	1	100,00%	344SEL(0.690106);460SEL(0.050356);653SEL(0.259538)
735SEL	1	100,00%	344SEL(0.599566);460SEL(0.395851);653SEL(0.004583)
741SEL	1	100,00%	460SEL(1)
743SEL	1	100,00%	344SEL(0.642918);460SEL(0.092768);653SEL(0.264314)
744SEL	1	100,00%	344SEL(0.482165);460SEL(0.517835)
747SEL	1	100,00%	344SEL(0.790949);460SEL(0.209051)
748SEL	1	100,00%	344SEL(0.662303);379SEL(0.03449);460SEL(0.303207)
750SEL	1	100,00%	344SEL(0.442926);460SEL(0.557074)
760SEL	1	100,00%	344SEL(0.066319);460SEL(0.933681)
762SEL	1	100,00%	344SEL(0.254762);460SEL(0.745238)
764SEL	1	100,00%	460SEL(0.278712);661SEL(0.721288)
768SEL	1	100,00%	460SEL(0.286884);661SEL(0.713116)
769SEL	1	100,00%	344SEL(0.729451);460SEL(0.144205);653SEL(0.126344)
770SEL	1	100,00%	460SEL(0.08828);661SEL(0.91172)
772SEL	1	100,00%	460SEL(0.063187);653SEL(0.351446);661SEL(0.585367)
774SEL	1	100,00%	344SEL(0.811033);460SEL(0.188967)
775SEL	1	100,00%	344SEL(0.936344);460SEL(0.063656)
783SEL	1	100,00%	460SEL(1)
785SEL	1	100,00%	344SEL(0.552411);460SEL(0.447589)
788SEL	1	100,00%	344SEL(0.53659);460SEL(0.421697);653SEL(0.041714)
789SEL	1	100,00%	460SEL(1)
790SEL	1	100,00%	379SEL(0.010627);460SEL(0.989373)
792SEL	1	100,00%	460SEL(0.441988);661SEL(0.558012)
53FIN	451	99,01%	239IBS(0.783608);322PLU(0.216392)
213IBS	451	99,01%	62FIN(0.965947);328PLU(0.008693);495SEL(0.02536)
433SEL	451	99,01%	460SEL(1)
451SEL	451	99,01%	344SEL(0.828257);460SEL(0.10521);653SEL(0.066533)
600SEL	451	99,01%	344SEL(0.376328);460SEL(0.623672)
786SEL	451	99,01%	379SEL(0.276153);460SEL(0.723847)
37FIN	457	98,04%	62FIN(0.11732);218IBS(0.697391);322PLU(0.185289)
206IBS	457	98,04%	62FIN(0.671891);328PLU(0.058415);495SEL(0.269694)
263IBS	457	98,04%	62FIN(0.113729);322PLU(0.884907);328PLU(0.001364)
519SEL	457	98,04%	62FIN(0.063258);322PLU(0.593607);460SEL(0.343135)
75FIN	461	97,09%	62FIN(0.083511);218IBS(0.199623);322PLU(0.716866)
180IBS	461	97,09%	62FIN(0.335731);322PLU(0.476996);495SEL(0.187273)
473SEL	461	97,09%	62FIN(0.03476);460SEL(0.96524)
569SEL	461	97,09%	62FIN(0.487149);328PLU(0.061272);495SEL(0.451579)
128FIN	465	96,15%	62FIN(0.321802);322PLU(0.678198)
365SEL	465	96,15%	460SEL(1)
385SEL	465	96,15%	344SEL(0.420709);653SEL(0.135844);661SEL(0.443447)
415SEL	465	96,15%	344SEL(0.550687);460SEL(0.449313)
479SEL	465	96,15%	460SEL(1)
630SEL	465	96,15%	460SEL(0.20966);618SEL(0.79034)
761SEL	465	96,15%	344SEL(0.175868);460SEL(0.295269);653SEL(0.528863)
781SEL	465	96,15%	344SEL(0.788355);379SEL(0.08866);460SEL(0.122984)
22FIN	473	95,95%	191IBS(1)
28FIN	474	95,24%	239IBS(1)
238IBS	474	95,24%	239IBS(0.10048);322PLU(0.89952)
535SEL	474	95,24%	62FIN(0.302999);239IBS(0.530776);322PLU(0.166224)
599SEL	474	95,24%	460SEL(1)
546SEL	478	94,41%	125FIN(0.428382);328PLU(0.237569);583SEL(0.334048)
611SEL	479	94,34%	344SEL(0.363109);460SEL(0.636891)
395SEL	480	93,46%	379SEL(0.046273);460SEL(0.015918);618SEL(0.937808)
499SEL	480	93,46%	460SEL(1)
684SEL	480	93,46%	62FIN(0.85266);328PLU(0.14734)
778SEL	480	93,46%	379SEL(0.456142);460SEL(0.543858)
427SEL	484	92,59%	344SEL(0.113476);460SEL(0.886524)
436SEL	484	92,59%	62FIN(0.62313);218IBS(0.151019);322PLU(0.037991);460SEL(0.18786)

268IBS	486	91,74%	62FIN(0.988342);328PLU(0.011658)
120FIN	487	90,91%	62FIN(0.647655);328PLU(0.096684);495SEL(0.255661)
134FIN	487	90,91%	62FIN(0.233889);239IBS(0.630408);460SEL(0.135703)
122FIN	489	88,50%	322PLU(0.583762);460SEL(0.416238)
4FIN	490	87,72%	62FIN(0.253074);322PLU(0.200236);460SEL(0.546689)
276IBS	491	86,21%	62FIN(0.647988);328PLU(0.010034);495SEL(0.341978)
216IBS	492	85,47%	62FIN(0.155092);322PLU(0.835523);328PLU(0.009385)
391SEL	492	85,47%	344SEL(0.786792);460SEL(0.213208)
791SEL	492	85,47%	460SEL(1)
51FIN	495	84,75%	62FIN(0.286129);239IBS(0.112717);322PLU(0.601154)
420SEL	496	84,23%	379SEL(0.344858);565SEL(0.655142)
244IBS	497	83,56%	25FIN(0.199909);184IBS(0.204411);189IBS(0.479348);545SEL(0.116332)
211IBS	498	83,02%	189IBS(0.090008);545SEL(0.909992)
773SEL	499	82,69%	344SEL(0.231844);602SEL(0.768156)
181IBS	500	82,64%	62FIN(0.852794);328PLU(0.147206)
488SEL	500	82,64%	62FIN(0.847891);322PLU(0.099709);328PLU(0.012584);495SEL(0.039816)
722SEL	500	82,64%	344SEL(0.611157);460SEL(0.105464);653SEL(0.28338)
250IBS	503	82,46%	25FIN(0.184948);218IBS(0.392095);495SEL(0.056575);545SEL(0.366382)
372SEL	504	80,90%	423SEL(0.159766);653SEL(0.342585);661SEL(0.497649)
335PLU	505	80,65%	62FIN(0.061728);239IBS(0.247443);322PLU(0.690829)
525SEL	505	80,65%	62FIN(0.612277);460SEL(0.387723)
500SEL	507	80,21%	379SEL(0.710245);565SEL(0.289755)
442SEL	508	79,37%	344SEL(0.004518);460SEL(0.995482)
715SEL	508	79,37%	344SEL(0.327551);460SEL(0.672449)
261IBS	510	78,74%	25FIN(0.186191);272IBS(0.213154);322PLU(0.600655)
597SEL	511	78,01%	379SEL(0.20229);565SEL(0.79771)
429SEL	512	77,52%	344SEL(0.099318);460SEL(0.148931);653SEL(0.751751)
284IBS	513	76,92%	62FIN(0.098954);322PLU(0.901046)
586SEL	514	76,81%	379SEL(0.556197);565SEL(0.443803)
203IBS	515	76,34%	62FIN(0.530169);322PLU(0.469831)
407SEL	515	76,34%	62FIN(0.935237);322PLU(0.064763)
555SEL	515	76,34%	62FIN(0.099894);218IBS(0.597032);322PLU(0.128599);460SEL(0.174475)
629SEL	518	75,19%	379SEL(0.761129);565SEL(0.098555);705SEL(0.140317)
194IBS	519	75,19%	62FIN(1)
212IBS	520	74,63%	25FIN(0.024959);322PLU(0.908553);328PLU(0.066488)
579SEL	521	74,07%	62FIN(0.569995);239IBS(0.191299);379SEL(0.062208);460SEL(0.176497)
677SEL	521	74,07%	62FIN(0.360257);460SEL(0.639743)
290IBS	523	73,53%	62FIN(0.041181);322PLU(0.950699);328PLU(0.003221);495SEL(0.004898)
609SEL	523	73,53%	344SEL(0.070543);460SEL(0.929457)
782SEL	525	72,99%	344SEL(0.354502);379SEL(0.227026);460SEL(0.188348);618SEL(0.230125)
643SEL	526	72,46%	344SEL(0.825725);379SEL(0.051407);460SEL(0.122868)
462SEL	527	72,40%	379SEL(0.509681);565SEL(0.036637);705SEL(0.453682)
305PLU	528	72,25%	191IBS(0.222258);247IBS(0.078912);496SEL(0.69883)
230IBS	529	72,02%	25FIN(0.029298);184IBS(0.403296);189IBS(0.234872);545SEL(0.332534)
200IBS	530	71,61%	252IBS(0.257988);496SEL(0.233167);545SEL(0.508845)
402SEL	531	71,43%	344SEL(0.464886);460SEL(0.276192);653SEL(0.258923)
83FIN	532	70,92%	239IBS(0.305075);328PLU(0.694925)
483SEL	533	70,58%	374SEL(0.391531);379SEL(0.043257);602SEL(0.565211)
408SEL	534	70,42%	460SEL(0.336485);653SEL(0.663515)
540SEL	535	69,93%	25FIN(0.773215);272IBS(0.099341);328PLU(0.054576);495SEL(0.072868)
771SEL	535	69,93%	344SEL(0.337103);460SEL(0.134871);653SEL(0.528026)
145FIN	537	69,44%	62FIN(0.756571);322PLU(0.057322);460SEL(0.186107)
578SEL	537	69,44%	62FIN(0.033431);239IBS(0.540073);460SEL(0.426495)
295PLU	539	69,25%	191IBS(1)
544SEL	540	69,12%	125FIN(0.041668);328PLU(0.017548);583SEL(0.940784)
294PLU	541	68,97%	62FIN(0.676646);328PLU(0.081784);495SEL(0.24157)
736SEL	541	68,97%	344SEL(0.606911);460SEL(0.393089)
16FIN	543	68,49%	62FIN(0.539384);239IBS(0.18921);460SEL(0.271406)
136FIN	543	68,49%	62FIN(0.23602);322PLU(0.570119);460SEL(0.193862)
45FIN	545	68,03%	239IBS(0.589849);322PLU(0.410151)
257IBS	546	67,57%	25FIN(0.413782);322PLU(0.571078);328PLU(0.01514)
193IBS	547	67,11%	62FIN(0.364188);239IBS(0.489585);322PLU(0.146227)
228IBS	547	67,11%	239IBS(1)
246IBS	547	67,11%	25FIN(0.125725);184IBS(0.791416);495SEL(0.082859)
253IBS	547	67,11%	62FIN(0.035826);239IBS(0.964174)
281IBS	547	67,11%	62FIN(0.455016);239IBS(0.544984)
487SEL	547	67,11%	344SEL(0.578883);460SEL(0.421117)
537SEL	547	67,11%	62FIN(0.106549);239IBS(0.893451)
557SEL	547	67,11%	62FIN(0.186945);460SEL(0.813055)
780SEL	547	67,11%	460SEL(1)
355SEL	556	66,67%	344SEL(0.193463);460SEL(0.806537)
404SEL	556	66,67%	344SEL(0.103249);460SEL(0.896751)
720SEL	556	66,67%	344SEL(0.088376);460SEL(0.911624)
275IBS	559	65,79%	62FIN(0.089702);322PLU(0.910298)
360SEL	559	65,79%	344SEL(0.477787);460SEL(0.522213)
271IBS	561	65,36%	62FIN(0.426647);328PLU(0.01208);495SEL(0.561272)
390SEL	561	65,36%	344SEL(0.758731);374SEL(0.194202);460SEL(0.047067)
403SEL	561	65,36%	344SEL(0.416457);460SEL(0.583543)
386SEL	564	64,52%	62FIN(0.550501);328PLU(0.061353);495SEL(0.388146)
434SEL	564	64,52%	344SEL(0.08651);460SEL(0.91349)
681SEL	564	64,52%	62FIN(0.418745);322PLU(0.581255)
389SEL	567	64,10%	344SEL(0.794864);379SEL(0.025966);460SEL(0.00647);618SEL(0.1727)
158FIN	568	63,69%	460SEL(1)
182IBS	568	63,69%	62FIN(0.947305);322PLU(0.052695)
188IBS	568	63,69%	25FIN(0.12898);322PLU(0.780683);328PLU(0.090337)
190IBS	568	63,69%	328PLU(0.195104);495SEL(0.591181);583SEL(0.213715)
210IBS	568	63,69%	184IBS(0.549614);189IBS(0.158459);495SEL(0.291926)
366SEL	568	63,69%	344SEL(0.878685);460SEL(0.121315)
672SEL	568	63,69%	62FIN(0.184872);218IBS(0.47307);322PLU(0.342058)
6FIN	575	63,29%	460SEL(1)
21FIN	575	63,29%	328PLU(0.059716);495SEL(0.609758);583SEL(0.330526)
409SEL	575	63,29%	344SEL(0.357039);460SEL(0.019074);653SEL(0.623886)
413SEL	575	63,29%	344SEL(0.7999);460SEL(0.2001)
425SEL	575	63,29%	374SEL(0.400241);379SEL(0.061925);460SEL(0.390503);618SEL(0.147332)
445SEL	575	63,29%	460SEL(1)
448SEL	575	63,29%	460SEL(1)
458SEL	575	63,29%	344SEL(0.280447);460SEL(0.719553)
463SEL	575	63,29%	344SEL(0.370416);460SEL(0.629584)

547SEL	575	63,29%	184IBS(0.071713);322PLU(0.529083);328PLU(0.027792);495SEL(0.371412)
690SEL	575	63,29%	62FIN(0.486323);322PLU(0.513677)
30FIN	586	62,90%	328PLU(0.162433);465SEL(0.409206);495SEL(0.16734);545SEL(0.261021)
337PLU	587	62,50%	239IBS(0.125171);322PLU(0.874829)
554SEL	588	62,11%	62FIN(0.797587);322PLU(0.200261);328PLU(0.002152)
67FIN	589	61,35%	239IBS(0.328532);322PLU(0.671468)
219IBS	590	61,10%	496SEL(0.384606);545SEL(0.615394)
603SEL	591	60,79%	379SEL(0.826112);496SEL(0.018378);565SEL(0.15551)
538SEL	592	60,34%	125FIN(0.002339);328PLU(0.260075);583SEL(0.737586)
358SEL	593	60,24%	344SEL(0.815796);460SEL(0.184204)
469SEL	593	60,24%	344SEL(0.933904);460SEL(0.066096)
521SEL	593	60,24%	62FIN(0.962273);328PLU(0.037727)
699SEL	593	60,24%	25FIN(0.023745);218IBS(0.690306);328PLU(0.013638);495SEL(0.272311)
756SEL	593	60,24%	460SEL(1)
353SEL	598	59,17%	344SEL(0.846446);460SEL(0.153554)
620SEL	598	59,17%	379SEL(0.038608);460SEL(0.961392)
485SEL	600	57,80%	62FIN(0.888576);322PLU(0.111424)
739SEL	600	57,80%	344SEL(0.247127);379SEL(0.335893);460SEL(0.41698)
10FIN	602	57,47%	25FIN(0.221019);322PLU(0.124994);328PLU(0.03363);460SEL(0.620357)
175FIN	602	57,47%	62FIN(0.448081);322PLU(0.330917);460SEL(0.221002)
313PLU	602	57,47%	62FIN(0.38901);239IBS(0.61099)
343SEL	602	57,47%	460SEL(1)
536SEL	602	57,47%	239IBS(0.630408);460SEL(0.369592)
543SEL	602	57,47%	328PLU(0.293042);379SEL(0.153654);460SEL(0.507054);583SEL(0.046249)
621SEL	602	57,47%	460SEL(1)
712SEL	602	57,47%	344SEL(0.825562);379SEL(0.070663);460SEL(0.103775)
232IBS	610	57,14%	62FIN(0.255595);328PLU(0.059971);495SEL(0.684434)
708SEL	611	56,22%	379SEL(0.476778);460SEL(0.523222)
160FIN	612	56,18%	62FIN(0.267828);218IBS(0.495944);328PLU(0.095252);495SEL(0.140977)
608SEL	613	56,03%	379SEL(0.489635);460SEL(0.26362);618SEL(0.246745)
779SEL	614	55,84%	379SEL(0.859445);602SEL(0.140555)
472SEL	615	55,64%	379SEL(0.744336);565SEL(0.255664)
501SEL	616	54,95%	460SEL(1)
639SEL	616	54,95%	344SEL(0.808983);379SEL(0.113636);460SEL(0.077381)
650SEL	616	54,95%	344SEL(0.735166);460SEL(0.215737);653SEL(0.049097)
695SEL	616	54,95%	62FIN(0.480244);218IBS(0.323305);322PLU(0.196451)
673SEL	620	54,87%	125FIN(0.183651);328PLU(0.508649);583SEL(0.3077)
550SEL	621	53,74%	125FIN(0.065579);328PLU(0.41442);583SEL(0.520001)
430SEL	622	53,48%	344SEL(0.565712);379SEL(0.065366);618SEL(0.285501);661SEL(0.08342)
324PLU	623	53,19%	239IBS(0.421468);322PLU(0.578532)
727SEL	624	52,91%	374SEL(0.448041);379SEL(0.069038);460SEL(0.482921)
316PLU	625	52,36%	62FIN(0.363353);239IBS(0.487896);322PLU(0.148751)
347SEL	625	52,36%	344SEL(0.245057);460SEL(0.754943)
562SEL	627	51,69%	125FIN(0.337589);328PLU(0.662411)
197IBS	628	51,45%	184IBS(0.426572);252IBS(0.284489);496SEL(0.28894)
177IBS	629	51,02%	184IBS(0.646937);495SEL(0.319435);583SEL(0.033628)
132FIN	630	50,76%	62FIN(0.022428);239IBS(0.717162);322PLU(0.26041)
636SEL	631	50,75%	379SEL(0.181892);460SEL(0.495426);618SEL(0.322683)
186IBS	632	50,51%	239IBS(0.501715);322PLU(0.498285)
12FIN	633	50,25%	239IBS(0.630408);460SEL(0.369592)
345SEL	634	49,51%	460SEL(1)
283IBS	635	49,02%	62FIN(0.396219);322PLU(0.603781)
333PLU	635	49,02%	239IBS(0.827503);322PLU(0.172497)
654SEL	637	48,81%	379SEL(0.765641);496SEL(0.223136);565SEL(0.011222)
652SEL	638	48,54%	344SEL(0.430192);460SEL(0.569808)
435SEL	639	48,31%	379SEL(0.513528);460SEL(0.486472)
491SEL	639	48,31%	344SEL(0.523316);460SEL(0.476684)
604SEL	641	47,62%	344SEL(0.667552);460SEL(0.332448)
763SEL	642	47,39%	379SEL(0.475781);460SEL(0.524219)
478SEL	643	46,73%	344SEL(0.381288);460SEL(0.22233);653SEL(0.396382)
511SEL	643	46,73%	62FIN(0.997139);328PLU(0.002861)
9FIN	645	46,51%	379SEL(0.298565);460SEL(0.701435)
13FIN	645	46,51%	239IBS(0.224554);460SEL(0.775446)
371SEL	645	46,51%	344SEL(0.158463);460SEL(0.841537)
61FIN	648	46,30%	239IBS(1)
351SEL	648	46,30%	460SEL(1)
638SEL	650	45,87%	344SEL(0.384611);460SEL(0.615389)
167FIN	651	45,66%	62FIN(0.829731);328PLU(0.169431);495SEL(0.000838)
153FIN	652	44,84%	62FIN(0.701752);460SEL(0.298248)
115FIN	653	44,64%	62FIN(1)
303PLU	654	44,25%	247IBS(0.101752);328PLU(0.007208);465SEL(0.788126);545SEL(0.102914)
716SEL	655	43,48%	344SEL(0.249419);460SEL(0.14322);653SEL(0.607361)
584SEL	656	43,29%	344SEL(0.197924);460SEL(0.481136);589SEL(0.32094)
138FIN	657	43,10%	62FIN(0.24463);239IBS(0.615789);460SEL(0.13958)
642SEL	657	43,10%	379SEL(0.889437);460SEL(0.110563)
336PLU	659	42,55%	62FIN(0.216491);239IBS(0.333266);322PLU(0.450243)
90FIN	660	42,02%	62FIN(0.553285);322PLU(0.408534);328PLU(0.038182)
266IBS	661	41,84%	328PLU(0.166015);495SEL(0.130732);583SEL(0.703253)
224IBS	662	41,32%	25FIN(0.549036);218IBS(0.438091);272IBS(0.012873)
156FIN	663	40,98%	62FIN(0.186945);460SEL(0.813055)
329PLU	663	40,98%	62FIN(0.765428);328PLU(0.061255);495SEL(0.173317)
526SEL	665	40,54%	125FIN(0.030396);328PLU(0.073398);583SEL(0.896207)
146FIN	666	40,49%	62FIN(1)
428SEL	667	40,00%	379SEL(0.615303);460SEL(0.384697)
539SEL	668	39,64%	125FIN(0.073245);328PLU(0.361323);496SEL(0.060846);583SEL(0.504586)
202IBS	669	39,53%	25FIN(0.86713);184IBS(0.096595);328PLU(0.036275)
470SEL	670	39,37%	344SEL(0.777923);460SEL(0.222077)
616SEL	671	39,06%	344SEL(0.361372);460SEL(0.175851);589SEL(0.462778)
719SEL	672	38,91%	460SEL(1)
380SEL	673	38,76%	344SEL(0.499794);460SEL(0.453808);653SEL(0.046398)
346SEL	674	38,46%	344SEL(0.428424);460SEL(0.571576)
199IBS	675	38,17%	62FIN(0.234032);328PLU(0.059913);495SEL(0.706055)
588SEL	675	38,17%	344SEL(0.746967);460SEL(0.253033)
137FIN	677	38,02%	62FIN(0.507566);328PLU(0.072064);495SEL(0.420371)
317PLU	678	37,97%	184IBS(0.574529);328PLU(0.241754);496SEL(0.170462);561SEL(0.013255)
154FIN	679	37,88%	62FIN(0.186945);460SEL(0.813055)
248IBS	680	37,74%	328PLU(0.625732);495SEL(0.318572);583SEL(0.055696)
689SEL	680	37,74%	239IBS(1)
733SEL	682	37,59%	344SEL(0.738908);379SEL(0.239592);460SEL(0.0215)
161FIN	683	37,45%	239IBS(0.558299);322PLU(0.441701)
362SEL	683	37,45%	460SEL(1)
417SEL	685	37,04%	344SEL(0.827788);460SEL(0.172212)
401SEL	686	36,63%	460SEL(1)
556SEL	686	36,63%	239IBS(1)
41FIN	688	36,36%	184IBS(0.100588);495SEL(0.100778);583SEL(0.798634)
759SEL	689	36,10%	379SEL(0.086502);460SEL(0.88791);589SEL(0.025587)
607SEL	690	35,59%	460SEL(1)
632SEL	691	35,58%	379SEL(0.969);565SEL(0.031)
709SEL	692	35,46%	379SEL(0.238503);460SEL(0.415632);589SEL(0.345865)
784SEL	693	35,34%	460SEL(1)
23FIN	694	34,84%	62FIN(0.342942);328PLU(0.043228);460SEL(0.25989);661SEL(0.35394)
732SEL	695	34,10%	379SEL(0.609847);460SEL(0.300916);618SEL(0.089237)
765SEL	696	33,56%	344SEL(0.40217);460SEL(0.59783)
601SEL	697	33,27%	379SEL(0.564891);565SEL(0.435109)
524SEL	698	32,79%	239IBS(0.518224);379SEL(0.23996);460SEL(0.241816)
438SEL	699	32,74%	379SEL(0.831241);565SEL(0.168759)
256IBS	700	32,68%	239IBS(0.279835);322PLU(0.720165)
234IBS	701	32,36%	62FIN(0.640602);328PLU(0.359398)
269IBS	702	32,01%	184IBS(0.12643);252IBS(0.578666);496SEL(0.294904)
587SEL	703	31,46%	379SEL(0.933531);565SEL(0.066469)
298PLU	704	31,35%	62FIN(1)
767SEL	705	31,25%	344SEL(0.364796);460SEL(0.135186);589SEL(0.500018)
424SEL	706	31,23%	247IBS(0.005419);328PLU(0.017506);465SEL(0.697745);545SEL(0.279331)
38FIN	707	30,86%	62FIN(0.709208);460SEL(0.290792)
606SEL	708	30,40%	379SEL(0.044143);460SEL(0.448776);661SEL(0.507082)
15FIN	709	30,25%	252IBS(0.507698);379SEL(0.294962);460SEL(0.165244);496SEL(0.032097)
751SEL	710	30,21%	344SEL(0.590787);460SEL(0.201204);653SEL(0.208009)
738SEL	711	30,12%	379SEL(0.061084);460SEL(0.938916)
726SEL	712	30,02%	379SEL(0.589782);602SEL(0.410218)
400SEL	713	29,85%	379SEL(0.004623);460SEL(0.995377)
464SEL	714	29,61%	379SEL(0.968634);565SEL(0.031366)
215IBS	715	29,50%	62FIN(0.786806);322PLU(0.213194)
613SEL	716	28,90%	344SEL(0.76867);460SEL(0.23133)
776SEL	717	28,35%	184IBS(0.056608);328PLU(0.13466);495SEL(0.550598);496SEL(0.258134)
406SEL	718	28,17%	379SEL(0.692933);460SEL(0.307067)
392SEL	719	27,98%	379SEL(0.791923);602SEL(0.208077)
340PLU	720	27,93%	62FIN(0.60466);239IBS(0.39534)
497SEL	721	27,78%	379SEL(0.044208);460SEL(0.955792)
492SEL	722	27,62%	247IBS(0.001215);328PLU(0.112696);465SEL(0.263807);545SEL(0.622282)
593SEL	723	27,55%	460SEL(1)
734SEL	724	27,47%	344SEL(0.166202);460SEL(0.833798)
663SEL	725	27,42%	125FIN(0.057753);328PLU(0.008088);583SEL(0.934158)
44FIN	726	25,91%	62FIN(0.186945);460SEL(0.813055)
450SEL	727	25,77%	344SEL(0.311236);460SEL(0.688764)
745SEL	728	25,45%	344SEL(0.119171);460SEL(0.880829)
352SEL	729	25,22%	379SEL(0.985757);705SEL(0.014243)
564SEL	730	25,15%	184IBS(0.011782);328PLU(0.465326);496SEL(0.339033);561SEL(0.183859)
259IBS	731	25,12%	125FIN(0.047268);328PLU(0.008587);496SEL(0.758892);583SEL(0.185253)
24FIN	732	24,81%	62FIN(0.379643);460SEL(0.620357)
605SEL	732	24,81%	252IBS(0.005859);328PLU(0.104951);460SEL(0.127739);661SEL(0.761451)
549SEL	734	24,75%	379SEL(0.372752);460SEL(0.627248)
740SEL	735	24,44%	379SEL(0.66817);565SEL(0.33183)
123FIN	736	24,27%	328PLU(0.370781);379SEL(0.029824);460SEL(0.293546);618SEL(0.30585)
204IBS	737	24,27%	328PLU(0.122495);465SEL(0.530573);495SEL(0.185826);496SEL(0.161106)
387SEL	738	24,21%	374SEL(0.491831);379SEL(0.118636);460SEL(0.389533)
376SEL	739	24,15%	379SEL(0.589617);460SEL(0.329278);589SEL(0.081106)
349SEL	740	23,64%	379SEL(0.422747);460SEL(0.500183);589SEL(0.077069)
307PLU	741	23,51%	125FIN(0.451908);328PLU(0.548092)
480SEL	742	23,38%	379SEL(0.406151);460SEL(0.097078);618SEL(0.496771)
356SEL	743	23,14%	379SEL(0.524266);565SEL(0.046578);705SEL(0.429156)
108FIN	744	23,11%	184IBS(0.191148);252IBS(0.506509);496SEL(0.302343)
418SEL	745	22,73%	344SEL(0.428703);460SEL(0.571297)
308PLU	746	22,68%	62FIN(0.376604);239IBS(0.623396)
685SEL	747	21,69%	62FIN(0.92316);460SEL(0.07684)
749SEL	748	21,36%	379SEL(0.745383);460SEL(0.254617)
713SEL	749	20,96%	344SEL(0.746591);460SEL(0.253409)
342SEL	750	20,81%	379SEL(0.336866);565SEL(0.358221);705SEL(0.304913)
157FIN	751	20,20%	328PLU(0.322881);379SEL(0.197423);460SEL(0.479695)
612SEL	752	19,92%	344SEL(0.945512);374SEL(0.016233);460SEL(0.038255)
192IBS	753	19,87%	125FIN(0.226994);239IBS(0.403453);583SEL(0.369553)
628SEL	754	19,86%	379SEL(0.80087);705SEL(0.19913)
135FIN	755	19,80%	62FIN(0.418415);460SEL(0.581585)
64FIN	756	19,01%	62FIN(0.532156);328PLU(0.460996);495SEL(0.006848)
698SEL	757	18,52%	62FIN(0.689822);460SEL(0.310178)
309PLU	758	18,25%	239IBS(1)
533SEL	759	18,21%	62FIN(0.518583);322PLU(0.326328);460SEL(0.155089)
615SEL	760	18,12%	379SEL(0.432136);460SEL(0.567864)
706SEL	761	17,96%	379SEL(0.783532);705SEL(0.216468)
350SEL	762	17,30%	344SEL(0.713958);460SEL(0.286042)
731SEL	763	17,27%	379SEL(0.020007);460SEL(0.081029);653SEL(0.898964)
753SEL	764	16,86%	379SEL(0.1645);460SEL(0.757815);589SEL(0.077685)
548SEL	765	16,10%	62FIN(0.622424);239IBS(0.107858);379SEL(0.205936);460SEL(0.063782)
163FIN	766	15,96%	125FIN(0.067118);379SEL(0.889052);705SEL(0.043831)
777SEL	767	15,49%	379SEL(0.778762);565SEL(0.221238)
297PLU	768	15,29%	62FIN(0.97377);328PLU(0.02623)
299PLU	768	15,29%	62FIN(1)
766SEL	770	14,97%	460SEL(1)
474SEL	771	14,86%	328PLU(0.227945);379SEL(0.344957);460SEL(0.427098)
58FIN	772	14,47%	184IBS(0.346174);328PLU(0.059568);495SEL(0.448662);496SEL(0.145596)
737SEL	773	14,35%	344SEL(0.602728);460SEL(0.397272)
742SEL	774	14,12%	344SEL(0.365117);460SEL(0.634883)
647SEL	775	13,48%	460SEL(1)
528SEL	776	13,05%	239IBS(1)
471SEL	777	12,89%	328PLU(0.221202);495SEL(0.730075);583SEL(0.048724)
787SEL	778	12,55%	379SEL(0.028697);565SEL(0.590555);705SEL(0.380748)
249IBS	779	12,48%	239IBS(0.9369);322PLU(0.0631)
752SEL	780	12,36%	344SEL(0.407508);460SEL(0.592492)

757SEL	781	11,81%	379SEL(0.145018);460SEL(0.15128);661SEL(0.703702)
758SEL	782	11,26%	379SEL(0.870529);565SEL(0.012149);705SEL(0.117322)
498SEL	783	10,31%	379SEL(0.753773);460SEL(0.246227)
707SEL	784	9,64%	379SEL(0.78659);565SEL(0.21341)
148FIN	785	9,07%	328PLU(0.714604);495SEL(0.124153);583SEL(0.161243)
746SEL	786	8,25%	379SEL(0.943762);460SEL(0.056238)
714SEL	787	6,53%	379SEL(0.959872);460SEL(0.040128)
755SEL	788	6,40%	62FIN(1)
710SEL	789	6,33%	344SEL(0.165616);460SEL(0.834384)
359SEL	790	5,66%	191IBS(0.030348);247IBS(0.018455);328PLU(0.182552);496SEL(0.768645)
348SEL	791	5,55%	460SEL(1)
754SEL	792	4,48%	125FIN(0.291268);379SEL(0.403497);496SEL(0.214603);565SEL(0.090632)