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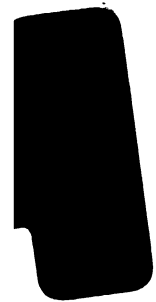
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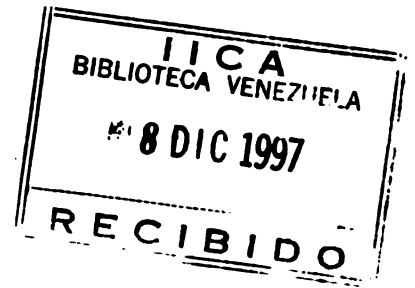
**THE IMPACTS OF THE PROCISUR
PROGRAM: AN INTERNATIONAL STUDY**

Robert E. Evenson, YALE UNIVERSITY
Elmar R. da Cruz, EMBRAPA

PROGRAMA COOPERATIVO DE INVESTIGACIÓN
AGRÍCOLA DEL CONO SUR

BID/IICA





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PRESENTACION

Este Estudio Internacional sobre el Impacto del Programa PROCISUR ("The Impacts of the PROCISUR Program: an International Study"), ha sido elaborado por el Dr. Robert E. Evenson, con la cooperación del Dr. Elmar Rodriguez da Cruz, como una de las partes de la Evaluación Económica del Programa, que se complementa con los estudios nacionales, presentados por separado.

El Dr. Evenson consultor de alto nivel de la Universidad de Yale fue contratado especialmente por el IICA/BID/PROCISUR para realizar este análisis, referente a la etapa de consolidación del Programa a partir de 1984.

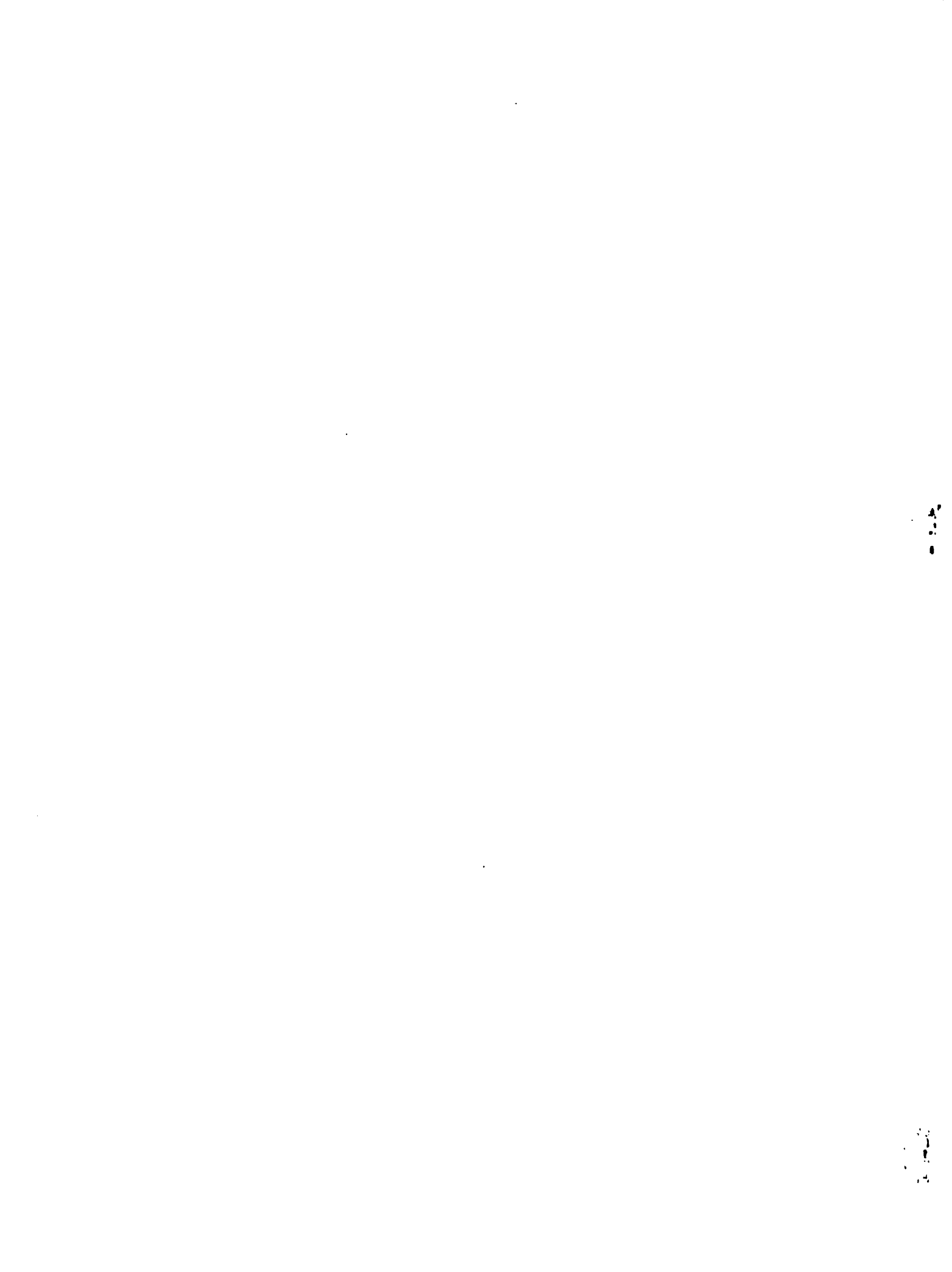
Montevideo, agosto de 1989

IICA/BID/PROCISUR

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THE IMPACTS OF THE PROCISUR PROGRAM: AN INTERNATIONAL STUDY

Robert E. Evenson *
Elmar R. da Cruz **

I - INTRODUCTION

The Agricultural Research Cooperative Program for the South Cone Region was signed in 1978 between the countries of Argentina, Bolivia, Brazil, Chile, Paraguay and Uruguay. The funding was provided by the Inter-American Development Bank (IADB), by IICA (Inter-American Institute for Cooperation in Agriculture) and by the participating countries. The administration was put into the hands of IICA and the implementation was assigned to:

INTA - Instituto Nacional de Tecnología Agropecuaria - Argentina.
IBTA - Instituto Boliviano de Tecnología Agropecuaria - Bolivia.
EMBRAPA- Empresa Brasileira de Pesquisa Agropecuaria - Brazil.
INIA - Instituto de Investigaciones Agropecuarias - Chile.
DIEAF - Direccion de Invest. y Extension Agrop. y Florestal- Paraguay.
CIAAB - Centro Invest. Agrícolas Alberto Boerger. - Uruguay.

The implementation of the program started in 1980, with emphasis in the cooperation of corn, wheat, soybeans and beefcattle. Starting in 1984, a second stage of PROCISUR, called IICA/BID/PROCISUR, was implemented. In this new stage the training activities of the reciprocal cooperation were emphasized, with the addition of winter cereals, summer cereals, oilseeds and cattle in general. The main instruments of support to the program are:

- Production Systems
- Information and Documentation
- Technology Transfer
- Training (capacitation)
- Communication
- Administration.

* Professor, Economic Growth Center, Yale University - New Haven-CT.

** Economist, Planning Dept. - EMBRAPA - Brasilia- DF.

The authors wish to express their gratitude to the economists of the member countries, which produced the national studies. Their results provided useful information for the preparation of this paper. Aldo Biondolillo and Gabriel Parellada (INTA), Gustavo Ferreira (CIAB), Claudio Ortiz and Arturo Campos (INIA), Raul Ferrari (DIEAF) and Antonio Flavio Dias Avila (EMBRAPA) were the authors of these studies. In addition, Milton Medeiros coordinated the processing of all PROCISUR data. Edmundo Gastal, the Coordinator of the PROCISUR program, facilitated all the meetings of the group involved.

PROCISUR facilitated a fruitful interchange of experiences and capacitation among the participating countries. The interchange of genetic and other research material was speeded up in amounts never experienced before. This interchange highlighted the importance that a regional level program such as this can have on the participating countries. The impact on greater productivity of the member institutions was recognized by all parties involved.

Of particular importance is the impact of PROCISUR in the smaller countries such as Uruguay, Bolivia and Paraguay. Regional teams by commodity were setup in order to enhance the critical mass of knowledge and the interchange of genetic material among neighboring countries. The direct benefits of this program are many, speeding up the achievement of national research and extension goals, and at the same time enriching the stock of scientific knowledge. Therefore the broader issue of technological development in these smaller countries was put into a higher dimension, with features of integrated actions.

In summary, the PROCISUR program of support to National Agricultural Research Centers (NARC's) in Brazil, Argentina, Chile, Paraguay and Bolivia entails specialized activities designed to enhance international transfer of research findings.

Despite of the fact that PROCISUR's experience and its visible benefits were recognized by all member countries, the directive committee of PROCISUR decided that it would be appropriate the realization of a study to analyze the impact of the program in the participating countries.

Such an evaluation of the program requires that the "enhancement" feature of PROCISUR be built into the evaluation model. This requires some degree of methodological extension to existing methods. In this paper we develop such an extension and apply it to an evaluation of the PROCISUR program as it affects productivity change in wheat, maize, and soybean production in the member countries since the inception of the program in 1978.

We organize the paper as follows. Section II summarizes PROCISUR activities and provides examples of PROCISUR involvement in some countries. Section III presents the basic methodology used in the national studies and develops the methodological extensions required for data analysis and estimates of program impacts in the framework of the international study. Section IV reports a summary of the results of the national studies. Section V covers our estimates of PROCISUR impacts. The final section draws policy conclusions. The appendices enclose the national studies of each individual participating country.

II - PROCISUR ACTIVITIES AND SOME EXAMPLES OF ITS ACTIONS.

Most PROCISUR activities can be associated with a receiving and a sending country. They can further be classified according to whether they are oriented to wheat, maize, soybeans or to general support activities.

The following describes the distinction between sending and receiving countries or regions:

1. Support for observation travel from country A to country B. A is the receiving country. B the sending country.

2. Support for participation in congresses and seminars by scientists from country A but hosted by country B. A is the receiving country. All countries are sending countries if it is an international seminar. B is the sending country if it is a national seminar.

3. Support for administrative and technical assistance by scientists from country A in country B. A is the sending country. B the receiving country.

4. Support for administrative and technical assistance and support by scientists from non-member countries and international centers in country A. A is the receiving country.

5. Support for post graduate courses by researchers from country A in country B or a non-member country. A is the receiving country.

6. Support for scientific consultants from country A to work in country B. Country B is the receiving country.

7. Support for scientific consultants from non-member countries to work in country A. Country A is the receiving country.

8. Support for scientific consultants from International Agricultural Research Centers to work in country A. A is the receiving country.

9. Support for attendance and participation in technical meetings held in country A. Country B is the receiving country.

10. Support for attendance in technical courses in country A by researchers from country B. B is the receiving country.

For each of these 10 categories, data on PROCISUR support (in U.S. dollars) was obtained for the years 1980 to 1988.

Some examples will be useful to illustrate the PROCISUR program. In terms of corn, the breeding component of PROCISUR involved a joint program with the neighboring countries. The program was successful in the release of several genetic materials, including "Comuesto Cono Sur I", from grains of the "flint" class, of high quality (orange colouring). This composite grain was obtained from a recombination of eight germplasms coming from Brazil, Uruguay, Paraguay, Bolivia, Chile (one of each, making five), plus three from Argentina. A convergent-divergent selection method was applied in southern Brazil, Uruguay, Paraguay and Argentina to speed up its adoption among local farmers.

In terms of wheat, a typical example of a PROCISUR contribution to the wheat program is in Brazil. The south cone yield trials (ERCOS), takes place in several locations of the member countries, and the Chilean variety ONDE INIA had the highest yields (6.1 tons/ha) in a trial performed in Brasilia-DF. With some local adaptations, this variety may soon be recommended for the whole central Brazil.

In terms of soybeans, Brazil is actively engaged in helping the Argentinian, Paraguayan and Bolivian soybean programs, via PROCISUR. Emphasis is given on the Brazilian integrated pest management control system, and on Brazilian germplasm. The variety CARCARANA INTA (Argentina), for example, had Brazilian origin. The variety DOKO, from Brazil, is among the most used in the Bolivian agriculture. Paraguay soybeans technology was brought from Brazil, and most of the local producers are Brazilians.

Yields of maize, wheat and soybeans display an upward trend in all regions analyzed. The individual country studies show graphs of these yields. Notice the case of Brazil, Chile, Argentina and Uruguay, where yields increased at a higher rate in the 80.s. The studies of Bolivia and Paraguay also show significant yield increases in the 80.s. By approximating the research stocks of these countries, PROCISUR can be seen as a useful program to enhance productivity.

III - METHODOLOGY

III.1 - Methodology of the national studies.

With some variations, the national studies used a methodology designed to measure the effects on yields (expressed as an index) of corn wheat and soybeans, from the observations of national research stock, PROCISUR stock, extension, weather variables, and in some cases, of policy variables.

The names of the individual variables used in the basic data sets are:

Y_{ijt} - Productivity index for each region (country) i , for each crop j , in each year t . The base period was 66-68.

X_{ijt} - Yields for each region (country) i , for each crop j , for each year t ($t=1966-1987$), in kg/ha.

Z_{ijt} - Research stock for each region(country) i , for each crop j , for each year t in 1000 US\$ Dollars. A research stock is defined as the weighted sum of past research expenditures, with t having zero weight, $t-1 = 0.2$, $t-2 = 0.4$, $t-3 = 0.6$, $t-4 = 0.8$, and $t-5$ backwards = unity.

E_{ijt} -Extension intensity for each region (country) i , for each crop j , for each year t . Extension was computed as a weighted sum of past number of extension agents, with weights defined as $t=0.5$, $t-1 = 1.0$, $t-2 = 1.0$, and $t-3 = 0.5$, divided by the acreage (in hectares) of harvested area (averaged over the whole period).

P_{ijt} - Research stock of Procisur expenditures, from contry A to B, in 1000 US\$ Dollars.

The model utilized to estimate the variables, took the form of Zellner's SUR - Seemingly Unrelated Regression, with three equations, one for each crop. No cross-simmetry restrictions were imposed in these first versions of the model.

The model can then be written as:

$$Y_{ijt} = f(Z_{ijt}, E_{ijt}, P_{ijt})$$

Some interactions between the research stock terms were also attempted in some of the countries, as shown in the individual studies.

Brazil was split into three regions: S.Faulo, Parana and Santa Catarina. Argentina was split into four regions: La Pampa, Buenos Aires, Cordoba and Santa Fe.

Paraguay, Bolivia, Uruguay and Chile had only one region (the whole

country).

Uruguay used a different methodological approach to measure the research impact on productivity. A duality model was used, and the dependent variable was an aggregate index for the whole agricultural sector (for annual crops).

This aggregate index was specified as the dependent variable of an output supply function, with explanatory variables being Z1-land, Z2-research stock, Z3-PROCISUR expenditures and Z4-square of land. The input demand functions, to be estimated under the duality model, were X1 (fertilizer levels), X2 (machinery) and X3 (labor use). The estimation used Zellner's seemingly unrelated regression approach, under the specification of the Generalized Leontieff model, with four equations:

- Equation 1 - Aggregate output supply - (Y).
- Equation 2 - Fertilizer Input Demand - (-X1).
- Equation 3 - Machinery Input Demand - (-X2).
- Equation 4 - Labor Input Demand - (-X3).

The major objective of these national studies was to investigate whether or not the national research and extension programs were important to the yields of each crop. The role of PROCISUR as such was dependent on the net effects of the program. This can be dealt with only in the international study.

III -2 -METHODOLOGY OF THE INTERNATIONAL STUDY.

Productivity decomposition methods have been used in a number of national studies (e.g. da Cruz, Evenson (1988) for Brazil).

These methods require the creation of a research variable(s) that consider the timing relationship between research spending and its ultimate productivity impact. They also must consider the spatial relationship between the location of the region where productivity is measured (e.g., a state or province) and the location and orientation of the research program. For some regions there may be an experiment station located in the region and this station may have as its chief responsibility the development of improved technology for the region. For some regions, a station may not be located in the region, but one may be located in a nearby or similar region (from a geo-climatic perspective). It is expected that technology produced outside the region will "spill-in" to the region.

The spill-in of technology is relevant to regions even where a local research program exists. It is also relevant when the receiving region is in a different country from the origin region. Indeed it is this spill-in that the PROCISUR program seeks to facilitate.

Spill-in of technology can be considered to be of three basic types:

Direct - as when the technology originating in region A is directly adapted in region B.

Semi-direct - as when the technology originating in region A is modified or adapted by the research programs in region B to be better suited to the conditions in B.

Indirect (or Germplasmic) as when the research and technical discoveries originating in region A enhance and stimulate the technological research undertaken in region B. This can be thought of as "germplasm" spill-in when the term germplasm is broadly defined to include biological, mechanical and intellectual materials that serve as parents to the further development of materials.

The PROCISUR program does not support the development of the origin technology or germplasm but is designed to facilitate and enhance more international spillin, chiefly of the indirect type.

Thus if we are to measure its impact we require international data and we require an interaction specification to test for a PROCISUR impact. We have the further econometric problem that the PROCISUR activities might be responsive to productivity changes and thus be endogenous in the model. Simultaneous equations estimates will be required to deal with this problem. Finally, we also have to deal with the fact that geo-climate factors affect spill-in (and spill-out) and these must be taken into account.

Table 1 provides a summary of variables used in this study. The original variables are defined from various sources for each of the 14 states, 20 years and 3 commodities. Variables are also created for each state, year and commodity, but they utilize geo-climate weights and PROCISUR investments as well as data from other states or regions.

The key dependent variable is the yield index for the crop. It is considered the measure of productivity change. Ideally, of course, we would like to have a total factor productivity measure but this is not feasible. By indexing it on the first 5 years in each state we are eliminating differences in levels of yields for that period between our observations. Yield levels may differ for many reasons including soil quality and we do not wish to attribute these to research of PROCISUR variables.

TABLE 1 - VARIABLES USED IN PROCISUR ANALYSIS.

I - ORIGINAL VARIABLES: 14 states: 1966-87: wheat, maize, soybeans.

LIYIELD: LOG OF STATE YIELD INDEX.

This variable is created for each commodity and state, by dividing crop yields per hectare in period t by average crop yields for the 1966-70 period.

LCRESEXP: LOG OF STATE RESEARCH.

This variable is constructed as the cumulated sum of research expenditures (in constant U.S. dollars), directed to the commodity since 1980 (lag weights of 0, 0.2, 0.4, 0.6, 0.8, 1.0, 1.0 etc. are used).

• LEXTA: LAG OF STATE EXTENSION. This is defined as field extension staff (for all crops) per hectare of cultivated land (.25, .50, .25, 0.0, 0.0, --).

LRESEX: LOG OF STATE RESEARCH MULTIPLIED BY STATE EXTENSION
NOTATION: LCRESF*EXTEN1.

LSRNR: LOG OF STATE RESEARCH + NEIGHBOR RESEARCH.

GOOD, POOR, BAD: Dummy variables for exceptionally good, poor or exceptionally bad weather.

BRMT, etc: dummy variables for states.

This includes six states in Brazil (Rio Grande do Sul:RS, Mato Grosso:MT, Minas Gerais:MG, Sao Paulo:SP, Parana:PR, Santa Catarina:SC)

Four states in Argentina (SANTAFE, CORDOBA, BUENOS AIRES, LAFAMPA) and Chile, Uruguay, Paraguay and Bolivia.

CREATED VARIABLES (INTERNATIONAL STUDY):

The key variables in this study are the variables measuring research by geo-climatic neighbors.

LRNGH1 = LOG OF NEIGHBOR RESEARCH:

This variable is defined as:

$LN \left(\sum_j G_{1,j} \& R_j \right)$ where $j \neq 1$.

The index j is defined for states. $G_{1,j}$ is the "geo-climate impediment"

weight measuring the loss in region i associated with using technology that is optimal in region i .

Table 2 Estimated Yield Trends

<u>State</u>	<u>Maize</u>	<u>Wheat</u>	<u>Soy</u>
Argentina			
Buenos Aires	.0186	.0209	.0344
Cordoba	.0361	.0263	.0520
LaPampa	.0710	.0285	-
Santa Fe	.0247	.0283	.0340
Bolivia	.0090	.0039	.0165
Brazil			
Minas Gerais	.0232	.0237	.0508
Mato Grosso	.0164	.0092	.0128
Parana	.0171	.0076	.0209
Rio Grande do Sul	.0164	.0139	.0128
Santa Catarina	.0144	.0190	.0095
Sao Paulo	.0220	.0172	.0197
Chile	-	.0171	-
Paraguay	.0180	.0193	.0032
Uruguay	-	.0230	.0674

This weight is estimated as follows:

First subjective weights were defined for the regions 1.9, 2.1, 1.7, 3.8, 3.9, 5.7, 5.1, 4.1, 4.3, 4.4, 6.1 and 6.8, the regions of the PROCISUR project, as shown in map 1. These were then computed to interstate regional weights by fractional procedures. Then in the estimation (see below) interaction on was carried out for $k = 1, 2, 3$ to determine appropriate weights.

B1.LPRNGH1 : LOG OF NEIGHBOR RESEARCH*PROCISUR

This variable is defined as:

$\ln \left(\sum_j G_{ij} \&R_{ij} \cdot PR_{ij} \right)$ for $i \neq j$.

PR_{ij} is the cumulated expenditure by PROCISUR on activities where i is the receiving of benefitting region and j is the origin or sending region.

This is the key variable of the study. It measures the indirect PROCISUR impact on the relative value of spill-in research. The FR_{ij} variable is presumed to be the same for each of the states in Brazil and Argentina.

The estimation procedure requires a simultaneous equations method because we cannot presume that the variable B1.LPRNGH1 is exogenous, i.e., unaffected by productivity in the sending and receiving regions. The demand for PROCISUR estimates will be higher from the strong research programs. We utilize as an identifying variable:

LN YIELDA = LOG OF NEIGHBOR YIELD.

YEAR is also used to identify this variable.

Table 2 reports a summary of estimated changes in this yield index. It is the coefficient b in the regression:

$LN YIELDA = a + b \text{ YEAR} + c \text{ GOOD} + d \text{ POOR}$.

IV - SUMMARY OF THE RESULTS OF THE NATIONAL STUDIES.

BRAZIL.

SUMMARY OF THE RESULTS FOR CORN.

Only an international study can be able to pick-up the relevant NET impacts of the PROCISUR program. However the Brazilian national study was important to show the relevance of the domestic research efforts, which are being benefited from the PROCISUR program.

Three equations were estimated for Brazil, using Zellner's Seemingly Unrelated Regression - SUR:

- Y1 - Productivity index for S. Paulo
- Y2 - Productivity index for Parana
- Y3 - Productivity index for Rio Grande do Sul.

In all equations, the local research stock was highly significant. The smallest t value was 3.7 (see the national study- appendix 1- for details). The elasticity of the research stock of S. Paulo on the corn productivity index in that state was 0.76. This result fully captures the yield increases that are happening in Sao Paulo over the last ten years. Significant elasticities were also found for the case of Parana and Rio Grande do Sul, in terms of research stock for the southern region. The figures are 0.4 and 0.21 respectively. The interaction of PROCISUR stock (from Argentina to Brazil) and the research stock in the south, produced elasticities of 0.1 for S. Paulo and Parana. This results suggests that part of yield increases in both states may be due to the PROCISUR program.

RESULTS FOR WHEAT:

Wheat in Brazil is a success story of research efforts. The elasticities of local research stock in all three states were highly significant (the minimum t value was 3.2). For S. Paulo, the elasticity is 0.21 for Parana it is 0.29, and for Rio Grande do Sul it is 0.43.

RESULTS FOR SOYBEANS:

Soybean productivity equations had significant values of the own region research stocks. The minimum t value was 2.01, as the national study shows. The corresponding elasticities were 0.36 for S. Paulo research, 0.46 for Parana and 0.65 for Rio Grande do Sul.

ARGENTINA

RESULTS FOR CORN:

Four equations were estimated using Zellner's seemingly unrelated regression approach. An yield productivity index was constructed for four provinces: Santa Fe, Córdoba, La Pampa, and Buenos Aires. The novelty about the argentinian study is the introduction of economic policy and financial variables, including the exchange rate gap between the black market of the dollar and the official rate. This variable was important in explaining yield indices, as farmers may use more or less technological levels on the crops, depending on the expected foreign exchange earnings (which is of a highly speculative nature, hence the importance of the gap).

The regression coefficients show a significant statistic for the corn research in the province of Córdoba on the other regions. Extension in each province was also found to be significant. Another important result is the significant estimate of the interaction of the PROCISUR and local research, for the case of corn.

RESULTS FOR WHEAT:

The province with best estimates of its research stock was Santa Fe. The exchange rate gap is also highly significant in explaining yields. PROCISUR investments in wheat were statistically significant for the pampean region.

RESULTS FOR SOYBEANS:

The provinces of Santa Fe, Córdoba and Buenos Aires had all significant estimates of their own research stock in the case of soybeans. In fact, the soybean equation brought the best results for the argentinian study. The country study has the necessary details.

URUGUAY

In terms of output supply, the most significant variable is research stock (Z2), with a t-value of 7.56 and PROCISUR expenditures 4.32. The impact of the research variable on productivity is the result of the joint effort of the national agricultural center (CIAAB), PROCISUR and international research centers like ISNAR and CIMMYT, on the annual crops of Uruguay.

In terms of fertilizer demand all 2 variables are significant. More land increases fertilizer demand (negative Z1 coefficient) at a decreasing rate (positive Z4 coefficient). Furthermore, an increase in research stock increases the demand for fertilizer.

In terms of machinery demand (equation 3) all Z variables are also significant. More machinery reduces the demand for land (positive Z1 coefficient) at a decreasing rate. Increases in the research stock have a highly significant positive impact on machinery use. It is an indication that the modernization of the Uruguayan agriculture is dependent on the intensification of machinery use, as it is the case of advanced economies under competitive markets.

Finally, in terms of labor demand (the last equation), again all Z variables are significant.

Prices have a strong effect in the output decisions of Uruguayan farmers. A ten percent increase in output prices will result in a 2.62 percent increase in output supply, for example. A ten percent increase in fertilizer price will decrease 2.69 percent output supply, and so on.

Of particular interest in the present analysis, is the impact of the research variables, Z2 and Z3.

A ten percent increase in the research stock will result in a 6.27 and 0.9 percent increase in output supply each year. It also causes the employment of labor per farm to increase 2.62 and 0.8 percent, and fertilizer use to increase 3.98 and 0.8 percent. The biggest impact is on machinery use, which would increase 6.34 and 1.8 percent as a result of a 10% increase in the research stock. These effects are all estimated holding prices and other Z variables constant.

As Evenson (1982) argues, the research effects can be thought as shifters. The weighted effect of research on all input use is a weighted average of all input use. A ten percent increase in the research stock will result in an increase of input use by 3.45 % (this is a weighted average of the elasticities of fertilizer, machinery and labor demand with respect to Z2, with per farm expenditure shares as weights). Using Evenson's (1982) approach, we have an estimate that a research investment program that increases the research stock variable by 10%, will cause an increase in output of 6.27% and in inputs of 3.45%, creating a net output per unit input of 2.783%. This is a measure of total factor productivity gain produced by a technology shift. A figure of 2.783% is very high for international standards. In the case of Brazil, Evenson (1982) computed a total factor productivity gain of 0.507%.

This total factor productivity elasticity can now be converted into a marginal product of research expenditure, so that the internal rate of return can be computed. The marginal product of a research expenditure of 1000 new pesos in 1965, using Evenson's (1982) approach, is:

We have an estimate that an increment to research expenditure in 1980 of 1000 new pesos would produce an increment to agricultural product of 12545 new pesos in 1985. The increment to output will continue indefinitely, as we are dealing with a research PROGRAM, not with a single technology, so that we can regard the expenditure of 1000 new pesos as an investment yielding an income stream of 12545 new pesos beginning in the fifth year after spending, and continuing into perpetuity. The resulting internal rates of return on this investment, for CIAAB and PROCISUR, are 92.10 and 109.5%, very high figures for international standards.

This is an important analysis for PROCISUR investments in Uruguay, given that the PROCISUR Program started only in 1980. The t ratio of the Z2 variable is 6.27 for CIAAB and 4.32 for PROCISUR, thus, the significance of the research variable was reinforced.

BOLIVIA

The Bolivian study utilized Ordinary Least Squares for estimation of the coefficients.

For wheat, results indicate that the interaction of Brazil/Bolivia research stocks was significant (t value of 2.38), and positive, with an elasticity estimate of .012338.

For soybeans the results of one of the equations show that the bolivian research stock was significant, (t value of 2.08) and an elasticity estimate of .276.

Finally, for corn, the results were again satisfactory. The interaction of the research stock Bolivia/ EMBRAPA was significant with a t value of 3.37 and an elasticity estimate of .544. Overall, these results suggest the importance of EMBRAPA's research on the bolivian agriculture, facilitated by PROCISUR. PROCISUR interaction with local research stock is also positive in some of the results.

PARAGUAY

In terms of wheat, the results were also satisfactory. Extension was significant at ten per cent (t value of 1.61) and an elasticity estimate of 0.137. PROCISUR was also important with a t value of 2.67, and an elasticity estimate of 0.001

For corn, results suggest impacts of the research stock in Buenos Aires and the interaction of PROCISUR/PARAGUAY.

Finally, for soybeans, some especial characteristics prevail in the area. Most of paraguayan soybeans is produced by brazilian farmers. A especial model may be required to handle this pattern, which involve cultural and other variables, independent of the paraguayan research and extension.

CHILE

For the case of Chile, wheat was selected as a candidate to measure PROCISUR effects.

Chile is the country which best illustrates the effects of PROCISUR. In the model, a NET effect could be measured. The interaction of INIA stock and PROCISUR stock provided an elasticity estimate of 0.0956, and the stock of Buenos Aires research on wheat provided an elasticity estimate of 0.0845. Both have a total positive impact of 0.1801. Because INIA research and Buenos Aires research are substitutes, their interaction provided an estimate of -0.0713, which has to be subtracted from the positive impact. Thus the net effect of PROCISUR in Chile is 0.1088. This elasticity estimate indicated that a ten percent increase in PROCISUR stock will have a one percent impact on Chilean productivity. Due to lack of data on other international cooperation programs, some variables (like CIMMYT) investment were omitted. Part of the PROCISUR effect may be attributable to omitted variables.

V - RESULTS OF THE INTERNATIONAL STUDY.

A. Estimation of Weights - WTS.

Table 3 reports R^2 values for the first equation and for the system for alternative values of λ . These parameters are the weights.

Table 3 - λ PARAMETERS.

	<u>MAIZE</u>		<u>WHEAT</u>		<u>SOY</u>	
	$R^2(1)$	$R^2(2)$	$R^2(1)$	$R^2(2)$	$R^2(1)$	$R^2(2)$
$\lambda = 1$	.5987	.7374	.7215	.6910	.7438	.7098
$\lambda = 2$	.5015	.7238	.7012	.6922	.7429	.7202
$\lambda = 3$	.4377	.7044	.6735	.6878	.7351	.7177

These results show that $\lambda = 1$ is the superior weight estimate in all 3 crops.

B. ESTIMATION OF THE SYSTEM AND RESULTS.

Table 4 shows three stage least squares (3SLS) estimates for the 3 commodities. Our major concern is with the first equation. 4A shows estimates for maize, 4B for wheat and 4C for soybeans.

TABLE 4-A WHEAT ESTIMATES

MODEL: D1	SSE	5.418985	F RATIO	33.82
	DFE	285	APPROX PROB>F	0.0001
DEP VAR: LIYIELD	MSE	0.019014	R-SQUARE	0.7230
	OBJ	5.161540		

COND STAGE STATISTICS

VARIABLE	DF	PARAMETER ESTIMATE	STANDARD ERROR	T RATIO	APPROX PROB>T!	VARIABLE LABEL
INTERCEPT	1	-1.697238	0.353086	-4.7786	0.0001	
INT	1	0.066769	0.064940	1.0298	0.3040	
IMS	1	0.185186	0.058316	3.1755	0.0017	
BRSP	1	0.193409	0.054286	3.5628	0.0004	
PPR	1	-0.113290	0.043195	-2.6227	0.0092	
ISC	-1	0.205438	0.052659	3.9013	0.0001	
ANTAFE	1	0.882602	0.152266	5.7965	0.0001	
CORDOBA	1	0.800717	0.165318	4.8435	0.0001	
ENOS	1	0.636489	0.155774	4.0860	0.0001	
PAMPA	1	0.765424	0.156944	4.8770	0.0001	
URUGUAY	1	-0.170906	0.097748	-1.7484	0.0815	
PARAGUAY	1	0.752567	0.230604	3.2635	0.0012	
BOLIVIA	1	0.189973	0.053521	3.5495	0.0005	
CHILE	1	0.770951	0.232005	3.3230	0.0010	
LCRESEXP	1	0.005068784	0.00319775	1.5701	0.1129	
LNCHI	1	0.061160	0.013214	4.6284	0.0001	LOG OF NEIGH RES
1.LPRNGHI	1	0.005107843	0.002213921	2.3071	0.0213	LOG OF NEIGH RES+PROCI SUR
LSAMP	1	1.63273E-11	6.90371E-11	0.2365	0.8132	LOG OF STATE RES+NEIGH RES
RESEX	1	-0.000682703	0.001484122	-0.4600	0.6459	LOG OF STATE RES+NEW STATE EXT
ETA	1	-0.084573	0.025999	-3.2529	0.0013	LOG OF 4 YEAR AVE. STATE EXTENSION
GOOD	1	0.211680	0.049844	4.3338	0.0001	
POGR	1	-0.211788	0.021790	-9.7196	0.0001	
AD	1	-0.626204	0.048639	-12.6748	0.0001	

TABLE 4-A - Cont.d

MODEL: D2 SSE 14808.7 F RATIO 35.26
 DFE 291 PROB>F 0.0001
 VAR: LPRNGH MSE 50.889004 R-SQUARE 0.6597
 LOG OF NEIGH RES:PROCISUR

VARIABLE	DF	PARAMETER ESTIMATE	STANDARD ERROR	T RATIO	PROB>|T|	VARIABLE LABEL
INTERCEPT	1	-2330.52	323.278024	-7.2090	0.0001	
MT	1	-4.252225	2.296719	-1.8514	0.0551	
BRNG	1	0.402382	2.157248	0.1865	0.8522	
PCSP	1	0.376615	2.153117	0.1749	0.8613	
PR	1	0.563582	2.156096	0.2614	0.7940	
BRSC	1	-0.154605	2.151193	-0.0719	0.9428	
SANTAFE	1	0.594935	2.165618	0.2327	0.8161	
ROGSA	1	0.938727	2.150928	0.4364	0.6628	
ENOS	1	0.483954	2.154697	0.2246	0.6224	
LAPAMPA	1	-4.574998	2.398121	-1.9077	0.0574	
URUGUAY	1	-1.365270	2.176989	-0.6271	0.5311	
PARAGUAY	1	1.629336	2.167649	0.7517	0.4529	
BOLIVIA	1	1.754310	2.169110	0.8091	0.4191	
CHILE	1	-0.188442	2.272907	-0.0829	0.9340	
ITRESA	1	-0.579470	0.162813	-3.5551	0.0004	
YIELDA	1	21.240264	5.061163	4.1967	0.0001	
YEAR	1	1.186782	0.164061	7.2338	0.0001	

LOG OF 4 YEAR AVE. STATE RESEARCH
 LOG OF 4 YEAR AVE. NEIGH YIELD

TABLE 4-B - MAIZE ESTIMATES

DEL: DI	SSE	6.588099	F RATIO	24.15
	DFE	243	APPROX PROB	0.0001
DEP VAR: LIYIELD	MSE	0.027112	R-SQUARE	0.6653
	OBJ	5.069070		

SECOND STAGE STATISTICS

VARIABLE	DF	PARAMETER ESTIMATE	STANDARD ERROR	T RATIO	APPROX PROB>|T|	VARIABLE LABEL
INTERCEPT	1	-1.555614	0.376604	-4.1306	0.0001	
INT	1	0.109806	0.055924	1.9635	0.0507	
...MG	1	0.114020	0.069366	1.6437	0.1015	
BRSP	1	0.145039	0.064339	2.2543	0.0251	
...PR	1	0.018054	0.051522	0.3504	0.7263	
...SC	1	0.122416	0.061964	1.9756	0.0493	
SANTAFE	1	0.551767	0.181293	3.0435	0.0026	
CORDOBA	1	0.583012	0.192496	3.0287	0.0027	
...ENOS	1	0.535715	0.180984	2.9600	0.0034	
...PANKA	1	0.944884	0.186380	5.0697	0.0001	
PARAGUAY	1	0.610892	0.268233	2.2775	0.0236	
...LIVIA	1	-0.053948	0.062314	-0.8657	0.3875	
...RESEXP	1	0.011130	0.003786348	2.9396	0.0036	
...LANGHI	1	0.061788	0.013820	4.4768	0.0001	LOG OF NEIGH RES
...RLFRNGHI	1	0.013387	0.00335048	3.9955	0.0001	LOG OF NEIGH RES*PROCISUR
...RESEX	1	0.0009038473	0.001820717	0.4806	0.6312	LOG OF STATE RES*NEW STATE EXT
...SKNR	1	-4.02504E-10	1.52296E-10	-2.6429	0.0088	LOG OF STATE RES*NEIGH RES
...LEXTA	1	-0.071193	0.029963	-2.3760	0.0183	LOG OF 4 YEAR AVE. STATE EXTENSION
...JOD	1	0.086905	0.065111	1.3347	0.1832	
...JDR	1	-0.142996	0.026848	-5.3260	0.0001	
...BAD	1	-0.305896	0.047648	-6.4200	0.0001	

TABLE 4 - B - Cont.d

MODEL: D2 SSE 11177.44 F RATIO 35.72
 DFE 249 PROB>F 0.0001
 EP VAR: LPRNGH MSE 44.889321 R-SQUARE 0.6676
 LOG OF NEIGH RES*PROCSUR

VARIABLE	DF	PARAMETER ESTIMATE	STANDARD ERROR	T RATIO	PROB>|T|	VARIABLE LABEL
INTERCEPT	1	-2557.17	392.906831	-6.5083	0.0001	
INT	1	-4.368869	2.220522	-1.9675	0.0502	
BXMG	1	-0.464589	2.032891	-0.2287	0.8193	
BRSP	1	0.136795	2.022263	0.0676	0.9461	
IPR	1	0.279323	2.025055	0.1379	0.8904	
ISC	1	0.042325	2.020176	0.0210	0.9833	
SANTAFE	1	-3.693571	2.067634	-1.7864	0.0753	
CORDOBA	1	-2.878628	2.025996	-1.4208	0.1566	
ENDS	1	-3.362474	2.042107	-1.6466	0.1009	
LAFAMPA	1	-7.478934	2.319643	-3.2242	0.0014	
PARAGUAY	1	-0.502887	2.029464	-0.2476	0.8045	
LIVIA	1	0.358817	2.022703	0.1774	0.8593	
TRESA	1	-0.624067	0.164804	-3.7867	0.0002	LOG OF 4 YEAR AVE. STATE RESEARCH
LNYIELDA	1	17.251910	6.599347	2.6142	0.0095	LOG OF 4 YEAR AVE. NEIGH YIELD
WAR	1	1.301974	0.199443	6.5290	0.0001	

TABLE 4 -C - SOYBEANS ESTIMATES

MODEL: D1	SSE	4.892131	F RATIO	29.41
	DFE	211	APPROX PROB	0.0001
VAR: LIYIELD	MSE	0.023185	R-SQUARE	0.7360
	DBJ	3.680640		

SECOND STAGE STATISTICS

VARIABLE	DF	PARAMETER ESTIMATE	STANDARD ERROR	T RATIO	APPROX PROB	VARIABLE LABEL
INTERCEPT	1	-1.382163	0.424459	-3.2563	0.0013	
BRMT	1	-0.377635	0.076819	-4.9159	0.0001	
BRMG	1	0.269072	0.075701	3.5544	0.0005	
SP	1	-0.015737	0.069175	-0.2275	0.8203	
PR	1	0.062937	0.048825	1.2890	0.1938	
ERSC	1	-0.128030	0.066416	-1.9277	0.0552	
CANTAFE	1	0.285174	0.228099	1.2502	0.2126	
RDBBA	1	0.257787	0.237072	1.0874	0.2781	
BUENOS	1	0.213653	0.223563	0.9557	0.3403	
URUSUAY	1	-0.430102	0.153316	-2.8053	0.0055	
RAGUAY	1	0.286110	0.325310	0.8795	0.3801	
LIVIA	1	-0.00382379	0.067744	-0.0564	0.9559	
LCRESEXP	1	-0.00202008	0.004030247	-0.5012	0.6167	
INGHI	1	0.090445	0.014291	6.3290	0.0001	LOG OF NEIGH RES
LPANSHI	1	0.009354513	0.002825564	3.4876	0.0003	LOG OF NEIGH RES*PROCEUR
LSRNR	1	-2.52806E-10	9.93834E-11	-2.5437	0.0117	LOG OF STATE RES*NEIGH RES
LRESEX	1	-0.0066175	0.001907655	-3.4399	0.0006	LOG OF STATE RES*NEW STATE EXT
EXTA	1	-0.030516	0.037893	-0.8055	0.4214	LOG OF 4 YEAR AVE. STATE EXTENSION
MOD	1	0.201270	0.057021	3.5297	0.0005	
POOR	1	-0.183855	0.028090	-6.5451	0.0001	
AD	1	-0.384043	0.041014	-9.3638	0.0001	

TABLE 4 C - Cont.d

MODEL: D2 SSE 11326.65 F RATIO 29.31
 DFE 217 PROB>F 0.0001
 DEP VAR: LPRNGHI MSE 52.196554 R-SQUARE 0.6541
 LOG OF NEIGH RES+PROCSUR

VARIABLE	DF	PARAMETER ESTIMATE	STANDARD ERROR	T RATIO	PROB>|T|	VARIABLE LABEL
INTERCEPT	1	-2565.36	392.117521	-6.5423	0.0001	
BRNT	1	-0.906031	2.942273	-0.3079	0.7584	
BRNG	1	0.465022	2.182172	0.2131	0.8314	
SP	1	0.840519	2.187596	0.3842	0.7012	
PR	1	0.402912	2.184165	0.1845	0.8538	
BRSC	1	0.036961	2.178366	0.0170	0.9965	
INTAFE	1	-1.035446	2.229813	-0.4644	0.6429	
IRDOBA	1	0.486812	2.399149	0.2029	0.8394	
BUENOS	1	0.529708	2.211068	0.2396	0.8109	
URUGUAY	1	-1.930186	2.926850	-0.6595	0.5103	
PARAGUAY	1	2.571068	2.217626	1.1594	0.2476	
BOLIVIA	1	2.848053	2.217665	1.2843	0.2004	
LISTRESA	1	-1.050151	0.240200	-4.3720	0.0001	LOG OF 4 YEAR AVE. STATE RESEARCH
YIELDA	1	20.517550	6.515792	3.1489	0.0019	LOG OF 4 YEAR AVE. NEIGH YIELD
EAR	1	1.308378	0.198716	6.5842	0.0001	

Our chief concern is with the PROCISUR variable. B1.LPRNGH1 and its impact on productivity. Note the estimated "impact elasticity" for the neighbor's research is the coefficient for LRNGH1 plus the coefficient for B1.LPRNGH1 times the mean level of the PROCISUR variable. This is a measure of the net effect of PROCISUR in each state.

The dummy variables for regions in table 4 serve as a type of time trend variable in the first equation since the dependent variable is defined to be equal to one for the first period in each state. Thus year was not included in the first equation (experiments show that its inclusion affected maize but not wheat or soybeans).

The results of the national studies indicate that state research contributes to state productivity in all crops under study.

The international study shows that neighbor's research contributes in all three crops. PROCISUR approximates neighbor's research stock.

The PROCISUR Program enhances the impact of neighbor's research in all three crops. The average elasticities for the PROCISUR region as a whole are as follows:

	WHEAT	MAIZE	SOYBEANS
LRNGH1	.061	.062	.090
B1.LPRNGH1	.005	.013	.009
TOTAL	.066	.075	.099

All the above elasticities are significant (t ratios above 2.0), as shown in tables 4A, 4B and 4C.

VI - POLICY RECOMMENDATIONS.

Given the fact that the above elasticity estimates are averages of the aggregate PROCISUR region, in order to compute the PROCISUR impact for each region, one has to multiply the total elasticities by the mean level of PROCISUR stock in each region. These elasticities are quite high, given the relatively small levels of PROCISUR expenditures. In order to illustrate this point, a ten percent increase in PROCISUR stock will result in yield increases of 0.99 percent (almost one percent) for soybeans yields. This suggests a very high productivity of PROCISUR, given the indirect effect of the interaction of the research stocks of the neighboring regions.

It is important to emphasize the nature of these effects. Of the three spillover effects mentioned in this paper (direct, semi-direct and indirect), we are essentially covering here the indirect effect, which approximates research stocks. This effect is more durable, of a cumulative nature.

These results are not final. Tests for serial correlation and related matters have not been undertaken. Nevertheless they appear to indicate that the PROCISUR program has had an impact. Given the low level of expenditures in the PROCISUR, virtually any measurable impact would yield a high rate of return. One limitation of the model is that international cooperation other than PROCISUR has been omitted. It is possible, for example, that some of PROCISUR estimates are biased upwards due to the omission of CIMMYT or CIAT investments. We recommend further studies to incorporate explicitly the major sources of interactions between international agencies and local research stocks. For example there may exist interactions between PROCISUR, PROCIANDINO and other IICA cooperation programs.

In general, multilateral cooperation programs such as PROCISUR tend to be more fruitful than bilateral programs. We are working on an extension of this work, in order to compare the internal rates of return of PROCISUR Program with IARC's (International Agricultural Research Centers) and national programs. The results so far appear to support the thesis of a high productivity of PROCISUR. In another international study (Evenson, 1988) the productivity elasticity of IARC research in Latin America was 0.0317 for the maize, millets and sorghum program. The figure of 0.075 found above for maize in the PROCISUR Program compares favourably, suggesting an opportunity for more investments in PROCISUR, given its high productivity.

REFERENCES

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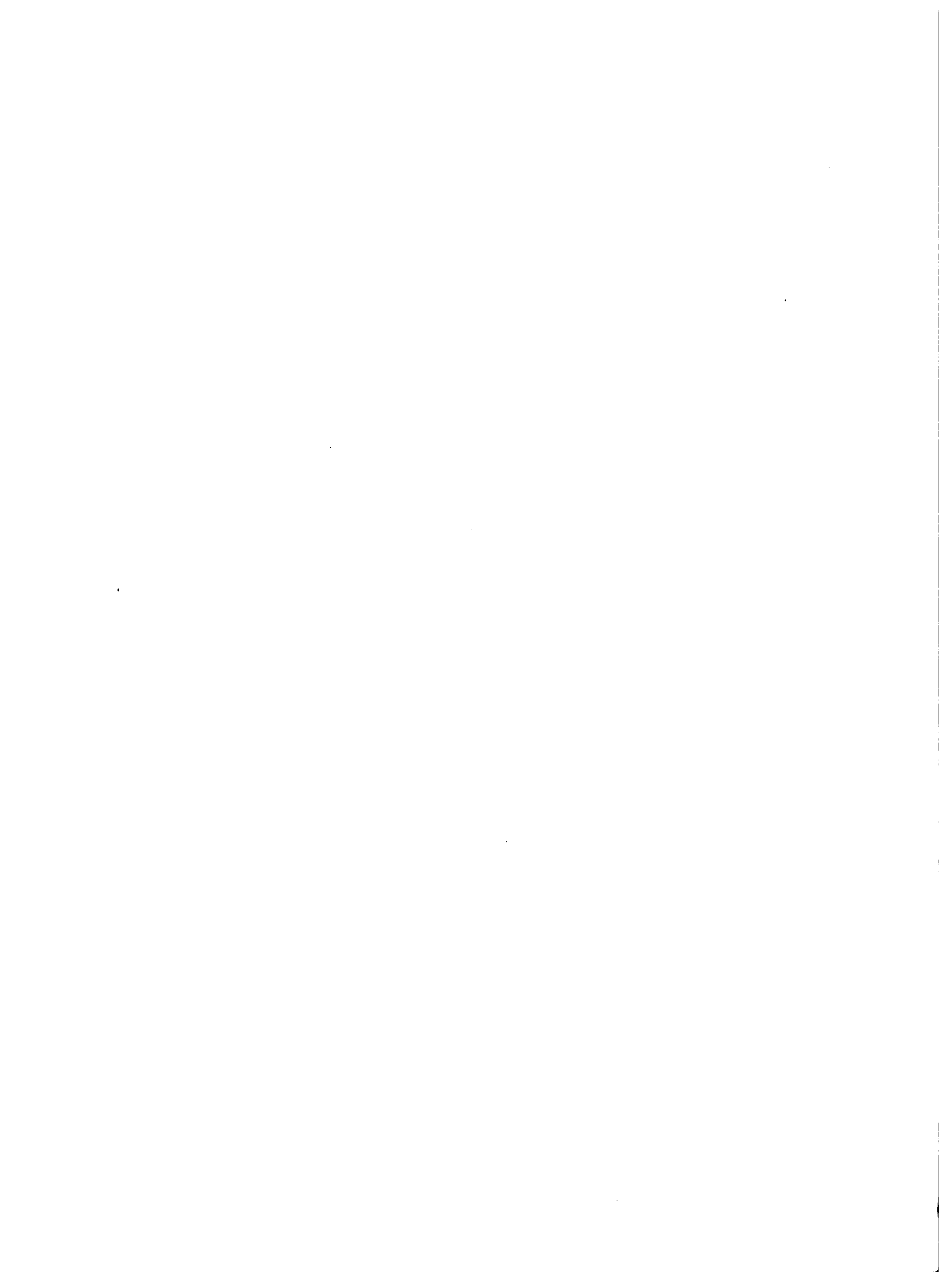
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APPENDIX

MEANS OF THE

VARIABLES USED IN THE MODEL.



VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
----- STATE=BULIVIA -----							
YEAR	22	1.976500E+03	6.493387E+00	1966.0000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP	22	1.117800E+07	9.936757E+06	0.0000	3.193800E+07	2.118524E+06	2.459160E+08
POOR	22	1.363636E-01	3.512501E-01	0.0000	1.000000E+00	7.488677E-02	3.000000E+00
BAD	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
GOOD	22	4.545455E-02	2.132007E-01	0.0000	1.000000E+00	4.545455E-02	1.000000E+00
YINGHI	22	1.050458E+00	1.542242E-01	0.8374	1.361264E+00	3.288070E-02	2.311007E+01
RNGHI	22	7.821712E+06	9.563205E+06	234229.1511	3.311341E+07	2.038822E+06	1.720777E+08
PRNGHI	22	2.316062E+10	4.338655E+10	-0.0500	1.534255E+11	9.250044E-09	5.095337E+11
LIYIELD	22	4.596758E-02	8.840216E-02	-0.0000	2.008641E-01	1.884740E-02	1.011287E+00
BOLIVIA	22	1.000000E+00	0.000000E+00	1.0000	1.000000E+00	0.000000E+00	2.200000E+01
BRMG	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRHT	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
CORDOBA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN	22	9.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
MAREA	22	7.290909E+01	9.262876E+00	48.0000	8.600000E+01	1.974852E+00	1.604000E+03
EXTENA	22	3.566312E+05	0.000000E+00	356631.1818	3.566312E+05	0.000000E+00	7.845886E+06
EXTA	22	2.044384E-04	2.597326E-05	0.0001	2.411455E-04	5.537518E-06	4.497644E-03
STRESA	22	7.117106E-04	8.386258E-05	0.0005	8.398032E-04	1.797956E-05	1.565762E-02
NYIELDA	22	9.401727E+06	8.837709E+06	0.0000	2.810550E+07	1.884206E+06	2.068380E+08
LCRESEXP	22	1.052805E+00	1.737685E-01	0.7806	1.361649E+00	3.704757E-02	2.316170E+01
LSTRESA	22	1.437446E+01	4.813852E+00	0.0000	1.727931E+01	1.026317E+00	3.162380E+02
LNYIELDA	22	1.354371E+01	5.640410E+00	0.0000	1.715148E+01	1.202539E+00	2.979617E+02
LRNGHI	22	3.861933E-02	1.635980E-01	-0.2477	3.086967E-01	3.487920E-02	8.496252E-01
LPRNGHI	22	1.505289E+00	1.446005E+00	12.3641	1.731545E+01	3.082892E-01	3.311636E+02
LEXTA	22	8.754079E+00	1.190251E+01	0.0000	2.575648E+01	2.537624E+00	1.925897E+02
LRESEX	22-7	254981E+00	1.248903E-01	-7.6083	7.082343E+00	2.662670E-02	1.596096E+02
LRSRNX	22	9.534269E-03	4.069885E-03	0.0000	1.440386E-02	8.677023E-04	2.097539E-01
LRSRNR	22	1.309359E+08	1.655599E+08	0.0000	5.721768E+08	3.529749E+07	2.880589E+09
LRSRNR	22	3.938857E+11	7.413567E+11	0.0000	2.651087E+12	1.580578E+11	8.665486E+12
LRRRATIO	22	2.279313E+04	4.300385E+04	0.0000	1.632702E+05	9.168451E+03	5.014488E+05

LOG OF 4 YEAR AVE. STATE RESEARCH
 LOG OF 4 YEAR AVE. NEIGH YIELD
 LOG OF NEIGH RES
 LOG OF NEIGH RES*PROCIUSUR
 LOG OF 4 YEAR AVE. STATE EXTENSION
 LOG OF STATE RES*NEW STATE EXT
 LOG OF STATE RES*NEIGH RES
 LOG OF STATE RES*NEIGH RES*PROCIUSUR
 LOG OF STATE RES*RATIO

MEANS FOR MAIZE BY STATE

10:09 TUESDAY, JUNE 27, 1989

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.976500E+03	6.493587E+00	1966.000	1.987000E+03	1	4.348300E+04
CRESEXP	22	9.275794E+05	1.131539E+06	31567.530	3.786422E+06	241245	2.040675E+07
POOR	22	2.727273E-01	4.558423E-01	0.000	1.000000E+00	0	6.000000E+00
BAD	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
GOOD	22	9.090909E-02	2.942449E-01	0.000	1.000000E+00	0	2.000000E+00
YINGHI	22	1.012697E+00	1.494106E-01	0.813	1.292340E+00	0	2.227934E+01
RNGHI	22	1.501745E+07	1.508049E+07	188213.645	5.028104E+07	3215172	3.303840E+08
PRNGHI	22	1.083243E+10	2.228343E+10	0.000	8.837162E+10	4750843640	2.383134E+11
LIYIELD	22	1.401587E-01	1.755140E-01	-0.183	4.369336E-01	0	3.083492E+00
BOLIVIA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRMG	22	1.000000E+00	0.000000E+00	1.000	1.000000E+00	0	2.200000E+01
BRMT	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
CORDOBA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
EXTEN	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
MAREA	22	8.646364E+02	2.526229E+02	300.000	1.189000E+03	54	1.902200E+04
EXTENA	22	1.950078E+06	0.000000E+00	1950077.864	1.950078E+06	0	4.290171E+07
EXTA	22	4.433856E-04	1.295450E-04	0.000	6.097192E-04	0	9.754482E-03
STRESA	22	1.497376E-03	4.857102E-04	0.001	2.119915E-03	0	3.294272E-02
NYIELDA	22	4.472828E+05	4.587269E+05	0.000	1.484130E+06	97801	9.840221E+06
LCRESEXP	22	1.031730E+00	1.640901E-01	0.726	1.306413E+00	0	2.269806E+01
LSTRESA	22	1.187884E+01	2.919674E+00	0.000	1.514693E+01	0	2.828530E+02
LNYIELDA	22	1.891943E-02	1.616789E-01	0.000	1.421034E+01	1	2.613346E+02
LRNGHI	22	1.573171E+01	1.622076E+00	-0.320	2.672849E-01	0	4.162275E-01
LPRNGHI	22	8.629403E+00	1.169705E+01	0.000	1.773314E+01	0	3.460376E+02
LEXTA	22	6.572650E+00	4.114611E-01	-7.527	6.156379E+00	2	1.898459E+02
LRESEX	22	1.879679E-02	8.170034E-03	0.000	2.987568E-02	0	4.135293E-01
LSRNX	22	2.130281E+08	2.282099E+08	1949871.591	7.616035E+08	48654506	4.686618E+09
LSRNP	22	1.590222E+11	3.319567E+11	0.000	1.338559E+12	70773396200	3.498488E+12
LSRRATIO	22	4.786064E+03	8.860602E+03	0.000	3.129562E+04	1889	1.052934E+05

STATE=BRMG

LOG OF 4 YEAR AVE. STATE RESEARCH
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 LOG OF STATE RES*RATIO

MEANS FOR MAIZE BY STATE

10:09 TUESDAY, JUNE 27, 1989

VARIABLE LABEL

N

MEAN

STANDARD
DEVIATION

MINIMUM
VALUE

MAXIMUM
VALUE

STD ERROR
OF MEAN

SUM

STATE=BRMT

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.976500E+03	6.493587E+00	1966.0000	1.987000E+03	1	4.348300E+04
CRESEXP	22	8.479032E+05	1.538976E+06	0.0000	5.129634E+06	328111	1.865387E+07
POOR	22	3.181818E-01	4.767313E-01	0.0000	1.000000E+00	0	7.000000E+00
BAD	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
GOOD	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
YINGHI	22	1.035252E+00	1.457262E-01	0.8451	1.290505E+00	0	2.277554E+01
RNGHI	22	1.815181E+07	1.782460E+07	234225.1511	5.992178E+07	3800217	3.993398E+08
PRNGHI	22	8.812245E+09	1.836786E+10	0.0000	7.399913E+10	3916040516	1.938694E+11
LIYIELD	22	1.341937E-01	1.339874E-01	-0.1709	4.975098E-01	0	2.952261E+00
BOLIVIA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
BRMG	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
BRPR	22	1.000000E+00	0.000000E+00	1.0000	1.000000E+00	0	2.200000E+01
BRRS	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
CORDOBA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
EXTEN	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
MAREA	22	1.479091E+02	7.979432E+01	11.0000	2.920000E+02	17	3.254000E+03
EXTENA	22	5.870395E+05	0.000000E+00	587039.5455	5.870395E+05	0	1.291487E+07
EXTA	22	5.19576E-04	1.359267E-04	0.0000	4.974111E-04	0	5.543068E-03
SYRESA	22	1.65781E-04	4.653717E-04	0.0001	1.559173E-03	0	1.796472E-02
NYIELDA	22	1.824117E+05	3.465160E+05	0.0000	1.204352E+06	73877	4.013057E+06
LCRESEXP	22	1.090957E+00	1.580534E-01	0.8576	1.364914E+00	0	2.400106E+01
LSTRESA	22	8.518135E+00	5.853154E+00	0.0000	1.545054E+01	1	1.873990E+02
LNYIELDA	22	7.356910E+00	5.474338E+00	0.0000	1.400145E+01	1	1.618520E+02
LRNGHI	22	7.699418E-02	1.454369E-01	-0.1536	3.110917E-01	0	1.693872E+00
LPRNGHI	22	8.549411E+00	1.158931E+01	12.3641	1.790855E+01	0	3.507356E+02
LEXTA	22	7.405796E+00	9.529350E-01	0.0000	2.502732E+01	2	1.880871E+02
LRESEX	22	8.305791E-03	7.110936E-03	-9.6322	-6.401436E+00	0	1.629275E+02
LSRNR	22	3.866648E+08	2.830261E+08	0.0000	2.323083E-02	0	1.827274E+02
LSRNR	22	1.297434E+11	2.775485E+11	0.0000	9.258241E+08	60341364	5.250626E+09
LSRRATIO	22	3.201793E+03	6.019950E+03	0.0000	1.143327E+12	59173539312	2.854356E+12
				0.0000	2.085122E+04	1283	7.043944E+04

LOG OF 4 YEAR AVE. STATE RESEARCH
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 LOG OF STATE RES*RATIO

MEANS FOR MAIZE BY STATE

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.976500E+03	6.493587E+00	1966.000	1.987000E+03	1	4.348300E+04
CRESEXP	22	5.477970E+05	7.994369E+05	11277.558	2.682489E+06	170441	1.205153E+07
POOR	22	1.363636E-01	3.512501E-01	0.000	1.000000E+00	0	3.000000E+00
BAD	22	4.545455E-02	2.132007E-01	0.000	1.000000E+00	0	1.000000E+00
GOOD	22	4.545455E-02	2.132007E-01	0.000	1.000000E+00	0	1.000000E+00
YINGHI	22	9.808277E-01	1.518540E-01	0.771	1.244347E+00	0	2.157821E+01
RNGHI	22	1.172861E+07	1.224519E+07	147052.953	4.087796E+07	2610683	2.580295E+08
PRNGHI	22	1.303922E+10	2.717131E+10	0.000	1.094268E+11	5792942215	2.868629E+11
LIYIELD	22	1.312322E-01	1.760418E-01	-0.306	4.320730E-01	0	2.887103E+00
BOLIVIA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRMG	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRMT	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRSC	22	1.000000E+00	0.000000E+00	1.000	1.000000E+00	0	2.200000E+01
BRSP	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
CORDOSA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
EXTEN	22	5.937727E+02	4.057132E+02	80.000	1.333000E+03	86	1.306300E+04
WAREA	22	3.488967E+06	0.000000E+00	3488967.091	3.488967E+06	0	7.675728E+07
EXTENA	22	1.701858E-04	1.162846E-04	0.000	3.820615E-04	0	3.744088E-03
EXTA	22	5.632896E-04	4.118341E-04	0.000	1.275736E-03	0	1.292352E-02
STRESA	22	1.861939E+06	2.240075E+06	8268.830	7.011342E+06	477586	4.096265E+07
NYIELDA	22	1.030694E+00	1.699202E-01	0.752	1.324570E+00	0	2.267527E+01
LCRESEXP	22	1.200136E+01	1.731445E+00	9.331	1.480226E+01	0	2.640300E+02
LSTRESA	22	1.292265E+01	2.326661E+00	9.020	1.576304E+01	0	2.842984E+02
LNYIELDA	22	1.716174E-02	1.659908E-01	-0.284	2.810881E-01	0	3.775582E-01
LNRNGHI	22	1.545496E+01	1.634002E+00	11.899	1.752610E+01	0	3.400092E+02
LPRNGHI	22	8.691983E+00	1.178213E+01	0.691	2.541852E+01	3	1.912236E+02
LEXTA	22	7.833202E+00	9.401634E-01	-9.430	6.664232E+00	0	1.723304E+02
LRESEXP	22	8.125332E-03	6.607591E-03	0.001	1.977333E-02	0	1.787573E-01
LRSRX	22	1.597447E+08	1.812016E+08	1372087.876	6.050859E+08	38632301	3.514384E+09
LRSNR	22	1.855931E+11	3.945618E+11	0.000	1.619763E+12	84120865054	4.083049E+12
LRRATIO	22	6.971514E+03	1.294213E+04	0.000	4.532613E+04	2759	1.533735E+05

STATE=BRPR

LOG OF 4 YEAR AVE. STATE RESEARCH
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 LOG OF STATE RES*RATIO

MEANS FOR MAIZE BY STATE

10:09 TUESDAY, JUNE 27, 1989 5

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.976500E+03	6.493587E+00	1966.000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP	22	5.477970E+05	7.994369E+05	11277.558	2.682489E+06	1.704405E+05	1.205153E+07
POOR	22	1.363636E-01	3.512501E-01	0.000	1.000000E+00	7.488677E-02	3.000000E+00
BAD	22	9.090909E-02	2.942449E-01	0.000	1.000000E+00	6.273323E-02	2.000000E+00
GOOD	22	4.545455E-02	2.132007E-01	0.000	1.000000E+00	4.545455E-02	1.000000E+00
YINGHI	22	1.011262E+00	1.621718E-01	0.791	1.295732E+00	3.457513E-02	2.224777E+01
RNGH1	22	1.521029E+07	1.595286E+07	205218.287	5.346169E+07	3.401160E+06	3.346264E+08
PRNGH1	22	1.650132E+10	3.395559E+10	0.000	1.347283E+11	7.239435E+09	3.630291E+11
LIYIELD	22	1.201543E-01	1.841030E-01	-0.255	4.476012E-01	3.925089E-02	2.643396E+00
BOLIVIA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMG	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMT	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
SRPR	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CORDOBA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
SUENOS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CHJLE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN	22	4.601364E+02	2.888005E+02	177.000	9.640000E+02	6.157248E+01	1.012300E+04
MAREA	22	4.320713E+06	6.000000E+00	4320713.000	4.320713E+06	0.000000E+00	9.505569E+07
EXTENA	22	1.064955E-04	6.684094E-05	0.000	2.231113E-04	1.425054E-05	2.342900E-03
EXTA	22	3.532929E-04	2.30276E-04	0.000	7.715162E-04	4.913075E-05	7.772444E-03
STRESA	22	1.861939E+06	2.240075E+06	8268.830	7.011342E+06	4.775855E+05	4.096266E+07
NYIELDA	22	1.054301E+00	1.813172E-01	0.760	1.360544E+00	3.865696E-02	2.319463E+01
LCRESEXP	22	1.200136E+01	1.731445E+00	9.331	1.480226E+01	3.691453E-01	2.640300E+02
LSTRESA	22	1.292265E+01	2.326661E+00	9.020	1.576304E+01	4.960457E-01	2.842984E+02
LNYIELDA	22	3.859047E-02	1.737189E-01	-0.275	3.078846E-01	3.703699E-02	8.489904E-01
LRNGH1	22	1.572116E+01	1.615421E+00	12.232	1.779448E+01	3.444088E-01	3.458655E+02
LPRNGH1	22	8.782346E+00	1.190392E+01	0.000	2.562265E+01	2.537925E+00	1.932116E+02
LEXTA	22	8.147011E+00	6.373944E-01	-8.833	7.167153E+00	1.358930E-01	1.792342E+02
LRESEX	22	4.987122E-03	3.877493E-03	0.001	1.195815E-02	8.266844E-04	1.097167E-01
LSRNR	22	2.072362E+08	2.360882E+08	1914803.598	7.913536E+08	5.033418E+07	4.559197E+09
LSRNP	22	2.345991E+11	4.922793E+11	0.000	1.994428E+12	1.049543E+11	5.161180E+12
LSRRATIO	22	6.857983E+03	1.266881E+04	0.000	4.513335E+04	2.700999E+03	1.508756E+05

STATE=BRRS

LOG OF 4 YEAR AVE. STATE RESEARCH
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 LOG OF STATE RES*RATIO

MEANS FOR MAIZE BY STATE

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.976500E+03	6.493587E+00	1966.000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP	22	5.477970E+05	7.994369E+05	11277.558	2.682489E+06	1.704405E+05	1.205153E+07
POOR	22	1.818182E-01	3.947710E-01	0.000	1.000000E+00	8.416546E-02	4.000000E+00
BAD	22	9.090909E-02	2.942449E-01	0.000	1.000000E+00	6.273323E-02	2.000000E+00
GOOD	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
YINGHI	22	1.007952E+00	1.646958E-01	0.787	1.311596E+00	3.511327E-02	2.217495E+01
PRNGHI	22	1.521029E+07	1.595286E+07	205218.287	5.346169E+07	7.239435E+09	3.346264E+08
LIYIELD	22	1.650132E+10	3.395596E+10	0.000	1.347283E+11	3.401160E+06	3.630291E+11
BOLIVIA	22	1.445660E-01	1.807980E-01	-0.120	4.345382E-01	3.854627E-02	3.180453E+00
BRMG	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMT	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE	22	1.000000E+00	0.000000E+00	1.000	1.000000E+00	0.000000E+00	2.200000E+01
CORDOBA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN	22	3.801364E+02	1.250921E+02	100.000	5.970000E+02	2.666972E+01	8.363000E+03
MAREA	22	1.167297E+06	0.000000E+00	1167296.909	1.167297E+06	0.000000E+00	2.568053E+07
EXTENA	22	3.256552E-04	1.071639E-04	0.000	5.114380E-04	2.284742E-05	7.164415E-03
EXTA	22	1.081734E-03	3.842778E-04	0.000	1.705222E-03	8.192830E-05	3.379915E-02
STRESA	22	1.861939E+06	2.240075E+06	8268.830	7.011342E+06	4.775255E+05	4.096266E+07
NYIELDA	22	1.051412E+00	1.794391E-01	0.754	1.371863E+00	3.822655E-02	2.313107E+01
LCRESEXP	22	1.200136E+01	1.731445E+00	9.331	1.480226E+01	3.691453E-01	2.640300E+02
LSTRESA	22	1.292265E+01	2.326661E+00	9.020	1.576304E+01	4.960457E-01	2.842984E+02
LNFIELDA	22	3.613709E-02	1.717538E-01	-0.282	3.161698E-01	3.661803E-02	7.950160E-01
LRNGHI	22	1.572116E+01	1.615421E+00	12.232	1.779448E+01	3.444088E-01	3.458655E+02
LRNGHI	22	8.782346E+00	1.190392E+01	0.000	2.562653E+01	2.537925E+00	1.932116E+02
LEXTA	22	6.917079E+00	4.782293E-01	-8.112	6.374060E+00	1.019588E-01	1.521757E+02
LRSEXP	22	1.476952E-02	7.037593E-03	0.003	2.687948E-02	1.500420E-03	3.249294E-01
LSRNX	22	2.072362E+08	2.360882E+08	1914803.598	7.913536E+08	5.033418E+07	4.559197E+09
LSRNP	22	2.345991E+11	4.922793E+11	0.000	1.994282E+12	1.049543E+11	5.161180E+12
LSRRATIO	22	6.857983E+03	1.266881E+04	0.000	4.513335E+04	2.700999E+03	1.508756E+05

LOG OF 4 YEAR AVE. STATE RESEARCH
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 LOG OF STATE RES*NEIGH RES*RATIO

MEANS FOR MAIZE BY STATE

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.976500E+03	6.493587E+00	1966.000	1.987000E+03	1	4.348300E+04
CRESEXP	22	7.938135E+05	4.070020E+05	146587.650	1.469927E+06	86773	1.746390E+07
POOR	22	1.363636E-01	3.512501E-01	0.000	1.000000E+00	0	3.000000E+00
BAD	22	9.090909E-02	2.942449E-01	0.000	1.000000E+00	0	2.000000E+00
GOOD	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
YINGHI	22	1.016006E+00	1.451908E-01	0.818	1.291360E+00	0	2.235214E+01
RNGHI	22	1.617791E+07	1.681445E+07	86677.835	5.623161E+07	3584853	3.559139E+08
PRNGHI	22	1.160960E+10	2.404310E+10	0.000	9.612945E+10	5126005745	2.554112E+11
LIYIELD	22	1.709175E-01	1.613807E-01	-0.098	4.298717E-01	0	3.760186E+00
BOLIVIA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRMG	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRMT	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRRR	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
SANTAFE	22	1.000000E+00	0.000000E+00	1.000	1.000000E+00	0	2.000000E+01
CORDOBA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
EXTEN	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
MAREA	22	8.646364E+02	2.526229E+02	300.000	1.189000E+03	54	1.902200E+04
EXTENA	22	2.497200E+06	0.000000E+00	2497199.818	2.497200E+06	0	5.493840E+07
EYTA	22	3.462424E-04	1.011625E-04	0.000	4.761333E-04	0	7.617332E-03
STRESA	22	1.169310E-03	3.00749E-04	0.000	1.555454E-03	0	2.57271E-02
NYIELDA	22	6.234446E+05	4.872566E+05	44355.180	1.611189E+06	103883	1.371578E+07
LCRESEXP	22	1.035828E+00	1.561767E-01	0.774	1.317214E+00	0	2.278822E+01
LSTRESA	22	1.341184E+01	6.634730E-01	11.895	1.420072E+01	0	2.950604E+02
LNYIELDA	22	1.295774E+01	9.966540E-01	10.700	1.429248E+01	0	2.850704E+02
LRNGHI	22	2.437966E-02	1.506219E-01	-0.257	2.755188E-01	0	5.363526E-01
LPRNGHI	22	1.568118E+01	1.838528E+00	11.370	1.784499E+01	0	3.449860E+02
LEXTA	22	8.652079E+00	1.172795E+01	0.000	2.528896E+01	3	1.903457E+02
LRESEX	22	6.819951E+00	4.114611E-01	-7.774	6.403680E+00	0	1.500389E+02
LSRNR	22	1.549679E-02	5.835081E-03	0.005	2.352495E-02	0	3.409294E-01
LSRNR	22	2.254761E+08	2.386228E+08	1031065.684	7.985296E+08	50874562	4.960474E+09
LSRNR	22	1.634029E+11	3.398041E+11	0.000	1.365108E+12	72446483422	3.594864E+12
LSRRATIO	22	4.531683E+03	8.350699E+03	0.000	2.987899E+04	1780	9.5969703E+04

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 LOG OF STATE RES*NEIGH RES
 LOG OF STATE RES*NEIGH RES*PROCCISUR
 LOG OF STATE RES*RATIO

MEANS FOR MAIZE BY STATE

VARIABLE	LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
----- STATE=BUENOS -----								
YEAR		22	1.976500E+03	6.493587E+00	1966.00000	1.987000E+03	1	4.348300E+04
CRESEXP		22	5.066785E+06	5.821166E+06	0.00000	1.858861E+07	1241077	1.114693E+08
POOR		22	3.181816E-01	4.767313E-01	0.00000	1.000000E+00	0	7.000000E+00
BAD		22	1.818182E-01	3.947710E-01	0.00000	1.000000E+00	0	4.000000E+00
GOOD		22	4.545455E-02	2.132007E-01	0.00000	1.000000E+00	0	1.000000E+00
YNGHI		22	1.179467E+00	2.683546E-01	0.77109	1.616373E+00	0	2.594828E+01
RNGHI		22	6.883027E+06	7.410156E+06	85712.10870	2.442897E+07	1579851	1.514266E+08
PRNGHI		22	8.633175E+09	1.796169E+10	0.00000	6.319903E+10	3829445110	1.899298E+11
LIYIELD		22	1.814759E-01	1.976439E-01	-0.28067	4.671135E-01	0	3.992469E+00
BOLIVIA		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
BRMG		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
BRMT		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
BRPR		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
BRRS		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
BRSC		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
BRSP		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
SANTAFE		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
CORDOBA		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
BUENOS		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
LAPAMPA		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
URUGUAY		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
PARAGUAY		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
CHILE		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
EXTEN		22	9.322727E+01	1.164119E+01	48.00000	1.060000E+02	2	2.051000E+03
MAREA		22	4.231286E+03	0.000000E+00	4231.28591	4.231286E+03	0	9.308829E+04
EXTENA		22	2.203285E-02	2.751218E-03	0.01134	2.505149E-02	0	4.847226E-01
EYTA		22	7.534245E-02	1.173462E-02	0.03270	8.700935E-02	0	1.657534E-00
STRESA		22	3.773971E+06	5.168624E+06	0.00000	1.708628E+07	1101954	8.302737E+07
NYIELDA		22	1.110222E+00	2.271096E-01	0.68417	1.474940E+00	0	2.442505E+01
LCRESEXP		22	1.347106E+01	4.576575E+00	0.00000	1.673806E+01	1	2.963633E+02
LSTRESA		22	1.239916E+01	5.267702E+00	0.00000	1.665379E+01	1	2.727815E+02
LNYIELDA		22	8.355347E-02	2.129097E-01	-0.37955	3.886171E-01	0	1.838176E+00
LRNGHI		22	1.487979E+01	1.656266E+00	11.35875	1.701128E+01	0	3.273554E+02
LPRNGHI		22	6.522264E+00	1.090947E-01	-0.00000	2.486955E+01	2	1.434898E+02
LLEXTA		22	2.601262E+00	1.947384E-01	-3.22630	-2.440821E+00	0	5.722777E+01
LRSEXP		22	9.863038E-01	4.366462E-01	0.00000	1.421999E+00	0	2.163868E+01
LRSEX		22	1.097667E+08	1.240749E+08	0.00000	4.088936E+08	26452866	2.414868E+09
LSRNR		22	1.410853E+11	2.948185E+11	0.00000	1.052371E+12	62855520479	3.103877E+12
LSRNRPR		22	8.878666E+03	1.865576E+04	0.00000	7.040888E+04	3977	1.953306E+05
LSRRATIO		22	8.878666E+03	1.865576E+04	0.00000	7.040888E+04		

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MEANS FOR MAIZE BY STATE

10:09 TUESDAY, JUNE 27, 1989 9

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.976500E+03	6.493587E+00	1966.0000	1.987000E+03	1	4.348300E+04
CRESEXP	22	1.834345E+06	1.876972E+06	0.0000	5.255144E+06	400172	4.035559E+07
POOR	22	9.090909E-02	2.942449E-01	0.0000	1.000000E+00	0	2.000000E+00
BAD	22	9.090909E-02	2.942449E-01	0.0000	1.000000E+00	0	2.000000E+00
GOOD	22	4.545455E-02	2.132007E-01	0.0000	1.000000E+00	0	1.000000E+00
YINGHI	22	1.095518E+00	2.253811E-01	0.7720	1.481972E+00	0	2.410139E+01
RNGHI	22	1.019502E+07	1.150460E+07	113450.9145	3.814700E+07	2452790	2.242904E+08
PRNGHI	22	1.351291E+10	2.807067E+10	0.0000	9.817877E+10	5984687491	2.972841E+11
LIYIELD	22	2.466474E-01	3.242621E-01	-0.4796	7.439157E-01	0	5.426244E+00
BOLIVIA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
BRMG	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
CORDOBA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
BUENOS	22	1.000000E+00	0.000000E+00	1.0000	1.000000E+00	0	2.200000E+01
LAPAMPA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
EXTEN	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
MAREA	22	1.587965E+03	0.000000E+00	53.0000	6.500000E+01	1	1.292000E+03
EXTENA	22	3.715447E-02	2.388102E-03	0.0334	4.093289E-02	0	8.173984E-01
EXTA	22	1.290960E-01	7.932351E-03	0.1171	1.413759E-01	0	2.491139E+00
STRESA	22	2.576769E+06	3.202800E+06	0.0000	9.399488E+06	682839	5.668891E+07
NYIELDA	22	1.067031E+00	1.887299E-01	0.7930	1.397233E+00	0	2.347469E+01
LCRESEXP	22	1.256061E+01	4.309315E+00	0.0000	1.547472E+01	0	2.763333E+02
LSTRESA	22	1.204695E+01	5.160135E+00	0.0000	1.605617E+01	1	2.650330E+02
LNFIELDA	22	4.989617E-02	1.775196E-01	-0.2320	3.344937E-01	0	1.097716E+00
LRNGHI	22	1.523610E+01	1.687328E+00	11.6391	1.745696E+01	0	3.351941E+02
LPRNGHI	22	6.645259E+00	1.111479E+01	0.0000	2.531006E+01	2	1.461957E+02
LEXTA	22	2.049018E+00	6.188473E-02	-2.1445	-1.956333E+00	0	4.507839E+01
LRSRX	22	1.582942E+00	7.005032E-01	0.0000	2.269955E+00	0	3.482472E+01
LSRNR	22	1.524620E+08	1.792885E+08	0.0000	5.903141E+08	38224437	3.354165E+09
LSRNRPR	22	2.067232E+11	4.302903E+11	0.0000	1.516609E+12	91738204189	4.547911E+12
LSRRATIO	22	8.946937E+03	1.917621E+04	0.0000	7.617862E+04	4088	1.968326E+05

STATE=CORDOBA

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MEANS FOR MAIZE BY STATE

VARIABLE	LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR		22	1977	6.493587E+00	1966.00000	1.987000E+03	1	4.348300E+04
CRESEXP		22	244159	3.262958E+05	0.00000	9.556013E+05	69566	5.371491E+06
POOR		22	0	3.512501E-01	0.00000	1.000000E+00	0	3.000000E+00
BAD		22	0	2.132007E-01	0.00000	1.000000E+00	0	1.000000E+00
GOOD		22	0	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
YINGHI		22	1	1.788280E-01	0.71787	1.330233E+00	0	2.261022E+01
RNGHI		22	8439852	9.461271E+06	69925.58790	3.088678E+07	2017150	1.856767E+08
PRNGHI		22	6885838506	1.432386E+10	0.00000	5.036244E+10	3053857725	1.514884E+11
LIYIELD		22	1	4.986121E-01	-0.23240	1.364020E+00	0	1.250161E+01
BOLIVIA		22	0	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
BRMG		22	0	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
BRMT		22	0	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
BRPR		22	0	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
BRRS		22	0	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
BRSC		22	0	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
BRSP		22	0	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
SANTAFE		22	0	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
CORDOBA		22	0	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
BUENOS		22	0	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
LAPAMPA		22	1	0.000000E+00	1.00000	1.000000E+00	0	2.200000E+01
URUGUAY		22	0	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
PARAGUAY		22	0	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
CHILE		22	0	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
EXTEN		22	17	3.670698E+00	12.00000	2.600000E+01	0	0.000000E+00
EXTENA		22	578	0.000000E+00	577.95409	5.779541E+02	0	1.271499E+04
EXTENA		22	0	6.351194E-03	0.02076	4.498627E-02	0	6.453800E-01
EYTA		22	0	1.970120E-02	0.08132	1.495659E-01	0	2.262290E+00
STRESA		22	223141	3.722290E+05	0.00000	1.159867E+06	79359	4.909107E+06
LCRESEXP		22	1	1.675954E-01	0.00000	1.422624E+00	0	2.432270E+01
LOG OF 4 YEAR AVE. STATE RESEARCH		22	7	6.465189E+00	0.00000	1.377010E+01	0	1.508268E+02
LOG OF 4 YEAR AVE. NEIGH YIELD		22	6	6.328762E+00	0.00000	1.396382E+01	1	1.333588E+02
LOG OF NEIGH RES		22	0	1.523355E-01	-0.18085	3.525028E-01	0	1.965555E+00
LOG OF NEIGH RES*PROCISUR		22	15	1.762303E+00	11.15519	1.724584E+01	0	3.301555E+02
LOG OF NEIGH RES*NEW STATE EXT		22	6	1.080656E+01	0.00000	2.464251E+01	2	1.421343E+02
LOG OF 4 YEAR AVE. STATE EXTENSION		22	-2	1.763093E-01	-2.50935	1.899350E+00	0-5	0.36732E+01
LOG OF STATE RES*NEIGH RES		22	1	7.84527E-01	0.00000	2.045949E+00	0	1.541391E+01
LOG OF STATE RES*NEIGH RES		22	102729310	1.357620E+08	0.00000	4.253139E+08	28944556	2.260045E+09
LOG OF STATE RES*NEIGH RES*PROCISUR		22	92641499569	1.934492E+11	0.00000	6.884195E+11	41243512586	2.038113E+12
LOG OF STATE RES*NEIGH RES*RATIO		22	4748	1.006136E+04	0.00000	3.901289E+04	2145	1.044505E+05

STATE=LAPAMPA

MEANS FOR MAIZE BY STATE

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.976500E+03	6.493587E+00	1966.000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP	22	3.712770E+06	4.512469E+06	81504.720	1.655196E+07	9.620617E+05	8.1688095E+07
POOR	22	2.272727E-01	4.289320E-01	0.000	1.000000E+00	9.144862E-02	5.000000E+00
BAD	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
GOOD	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
YINGHI	22	1.059225E+00	1.745074E-01	0.833	1.385831E+00	3.720511E-02	2.331835E+01
RNGHI	22	1.447945E+07	1.452454E+07	120879.206	4.749158E+07	3.096642E+06	3.185480E+08
PRNGH1	22	1.618375E+10	2.956215E+10	0.000	8.506426E+10	6.302671E+09	3.560426E+11
LIYIELD	22	1.409293E-01	1.489622E-01	-0.179	3.894001E-01	3.175885E-02	3.100444E+00
BOLIVIA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMG	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CORDOBA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CHTLE	22	1.000000E+00	0.000000E+00	1.000	1.000000E+00	0.000000E+00	2.200000E+01
EXTEN	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
MAREA	22	4.597579E+05	2.243566E+05	117349.206	6.384365E+05	4.783299E+04	1.011467E+07
EXTENA	22	6.134318E+05	0.000000E+00	613431.818	6.134318E+05	0.000000E+00	1.349550E+07
EXTA	22	7.494850E-01	3.657401E-01	0.191	1.040762E+00	7.797605E-02	1.648867E+01
STRESA	22	2.519099E+00	1.277815E+00	0.671	3.642667E+00	2.724311E-01	5.420197E+01
NYIELDA	22	2.814990E+06	3.338014E+06	81504.720	1.256148E+07	7.116669E+05	6.192977E+07
LGRESEXP	22	1.060367E+00	1.720163E-01	0.780	1.348072E+00	3.667399E-02	2.332208E+01
LSTRESA	22	1.431503E+01	1.481001E+00	11.308	1.662202E+01	3.157504E-01	3.149307E+02
LNYIELDA	22	4.601180E-02	1.627930E-01	-0.248	2.986756E-01	3.470758E-02	1.012260E+00
LRNGHI	22	1.563832E+01	1.735047E+00	11.703	1.767606E+01	3.699132E-01	3.440431E+02
LPRNGHI	22	7.716128E+00	1.158051E+01	0.000	2.516667E+01	2.468972E+00	1.697548E+02
LEXTA	22	7.490219E-01	6.572166E-01	-0.399	1.292716E+00	1.401191E-01	1.647848E+01
LRESEX	22	3.697018E+01	2.076236E+01	8.644	5.954356E+01	4.426549E+00	8.133578E+02
LSRNR	22	2.256422E+08	2.390878E+08	1366952.377	7.894058E+08	5.097368E+07	4.954135E+09
LSRNP	22	2.586310E+11	4.740381E+11	0.000	1.304497E+12	1.010653E+11	5.629882E+12
LSRRATIO	22	8.155558E+03	1.527467E+04	0.000	5.761249E+04	3.256571E+03	1.794229E+05

STATE=PARAGUAY

LOG OF 4 YEAR AVE. STATE RESEARCH
 LOG OF 4 YEAR AVE. NEIGH YIELD
 LOG OF NEIGH RES
 LOG OF NEIGH RES*PROCI SUR
 LOG OF 4 YEAR AVE. STATE EXTENSION
 LOG OF STATE RES*NEW STATE EXT
 LOG OF STATE RES*NEIGH RES
 LOG OF STATE RES*NEIGH RES*PROCI SUR
 LOG OF STATE RES*RATIO

MEANS FOR MAIZE BY STATE

10:09 TUESDAY, JUNE 27, 1989 12

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
----- STATE=SANTAFE -----							
YEAR	22	1.976500E+03	6.493587E+00	1966.00000	1.987000E+03	1	4.348300E+04
CRESEXP	22	8.363009E+05	1.169221E+06	0.00000	3.463630E+06	249279	1.839862E+07
POOR	22	7.27273E-01	4.558423E-01	0.00000	1.000000E+00	0	6.000000E+00
BAD	22	4.54545E-02	2.132007E-01	0.00000	1.000000E+00	0	1.000000E+00
GOOD	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
YINGHI	22	1.086826E+00	2.212175E-01	0.00000	0.000000E+00	0	0.000000E+00
PRNGHI	22	1.010427E+07	1.077449E+07	85556.07920	3.516820E+07	2297128	2.222939E+08
LIYIELD	22	1.285466E+10	2.679811E+10	0.00000	9.493626E+10	5713376544	2.828025E+11
BOLIVIA	22	1.763418E-01	2.747513E-01	-0.40453	5.837641E-01	0	3.879520E+00
BRMG	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
BRMT	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
CORDOBA	22	1.000000E+00	0.000000E+00	1.00000	1.000000E+00	0	2.200000E+01
BUENUS	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
EXTEN	22	4.959091E+01	3.762713E+00	39.00000	7.000000E+00	0	0.000000E+00
MAREA	22	1.925747E+03	0.000000E+00	1925.74682	1.925747E+03	1	1.091000E+03
EXTENA	22	2.575152E-02	1.953898E-03	0.02025	2.804107E-02	0	4.236643E+04
EXTA	22	9.35140E-02	7.312304E-03	0.07270	9.814374E-02	0	5.665335E-01
STRESA	22	4.944676E+05	7.119035E+05	0.00000	2.241625E+06	151778	1.965731E+09
NYIELDA	22	1.051359E+00	1.980825E-01	0.00000	0.000000E+00	0	0.000000E+00
LCRESEXP	22	7.495476E+00	7.064065E+00	0.00000	1.384949E+00	0	2.312991E+01
LSTRESA	22	1.028765E+01	4.606233E+00	0.00000	1.505783E+01	2	1.649005E+02
LNYIELDA	22	3.259649E-02	1.933315E-01	0.00000	1.462271E+01	1	2.263282E+02
LRNGHI	22	1.523465E+01	1.744472E+00	-0.38536	3.256631E-01	0	7.171227E-01
LPRNGHI	22	6.629789E+00	1.108920E+01	11.35669	1.737565E+01	0	3.351623E+02
LLEXTA	22	2.418614E+00	8.641313E-02	-2.62143	2.321322E+00	2	1.458554E+02
LRESEX	22	9.497193E-01	4.398187E-01	0.00000	1.381975E+00	0	5.320950E+01
LRSNR	22	1.327929E+08	1.705084E+08	0.00000	5.295567E+08	36352516	2.921444E+09
LRSNPR	22	1.889046E+11	3.956950E+11	0.00000	1.421621E+12	84362452059	4.155901E+12
LRRRATIO	22	8.163519E+03	1.712407E+04	0.00000	6.438185E+04	3651	1.795974E+05

LOG OF 4 YEAR AVE. STATE RESEARCH
 LOG OF 4 YEAR AVE. NEIGH YIELD
 LOG OF NEIGH RES
 LOG OF NEIGH RES*PROCISUR
 LOG OF 4 YEAR AVE. STATE EXTENSION
 LOG OF STATE RES*NEW STATE EXT
 LOG OF STATE RES*NEIGH RES
 LOG OF STATE RES*NEIGH RES*PROCISUR
 LOG OF STATE RES*RATIO

MEANS FOR WHEAT BY STATE

10:09 TUESDAY, JUNE 27, 1989 13

VARIABLE	LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
----- STATE=BULIVIA -----								
YEAR		22	1.976500E+03	6.493587E+00	1966.0000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP		22	1.117800E+07	9.936757E+06	0.0000	3.193800E+07	2.118524E+06	2.459160E+08
POOR		22	3.181818E-01	4.767313E-01	0.0000	1.000000E+00	1.016395E-01	7.000000E+00
BAD		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
GOOD		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
YINGHI		22	1.140856E+00	1.583474E-01	0.9500	1.447816E+00	3.375978E-02	2.509883E+01
PRNGH1		22	1.172918E+07	1.209270E+07	329952.4070	3.849459E+07	2.578173E+06	2.580419E+08
PRNGH1		22	4.835866E+10	8.246240E+10	0.0000	2.610837E+11	1.758104E+10	1.063891E+12
LIYIELD		22	1.188495E-01	1.313302E-01	-0.1342	3.174415E-01	2.799969E-02	2.614689E+00
BOLIVIA		22	1.000000E+00	0.000000E+00	1.0000	1.000000E+00	0.000000E+00	2.200000E+01
BRMG		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRMT		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
CORDOBA		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
CHILE		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
MAREA		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
EXTENA		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
EXTA		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
STRESA		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
NYIELDA		22	7.290909E+01	9.262876E+00	48.0000	8.600000E+01	1.974852E+00	1.604000E+03
LCRESEXP		22	3.566312E+05	0.000000E+00	356631.1818	3.566312E+05	0.000000E+00	7.845886E+06
LSTRESA		22	0.044384E-04	2.597326E-05	0.0000	2.411455E-04	5.537518E-06	4.497644E-03
LNYIELDA		22	7.156517E-04	8.360456E-05	0.0000	8.243811E-04	1.782455E-05	1.574456E-02
LPRNGH1		22	1.045759E+07	9.487944E+06	0.0000	3.036900E+07	2.022836E+06	2.300670E+08
LEXTA		22	1.437446E+01	4.813852E+00	0.7156	1.345682E+01	4.297760E-02	2.292100E+01
LRESEXP		22	1.427691E+01	4.797221E+00	0.0000	1.727931E+01	1.026317E+00	3.162380E+02
LNYIELDA		22	2.299926E-02	1.947935E-01	0.0000	1.722893E+01	1.032771E+00	3.162380E+02
LPRNGH1		22	1.549641E+01	1.496313E+00	-0.3346	2.969008E-01	4.153011E-02	5.059837E-01
LEXTA		22	9.121894E+00	1.238415E+01	12.7067	1.746603E+01	3.190149E-01	3.409211E+02
LRESEX		22	7.249299E+00	1.234567E-01	0.0000	2.628811E+01	2.640309E+00	2.006817E+02
LRSRNR		22	1.013132E-02	3.519358E-03	0.0000	1.417905E-02	7.503297E-04	2.228889E-01
LRSRNR		22	1.956540E+08	2.089519E+08	0.0000	6.651599E+08	4.454870E+07	4.304389E+09
LRSRNR		22	8.212168E+11	1.407326E+12	0.0000	4.511346E+12	3.000430E+11	1.806677E+13
LRSRNR		22	3.174716E+04	5.136969E+04	0.0000	1.489372E+05	1.095205E+04	6.984376E+05

LOG OF 4 YEAR AVE. STATE RESEARCH
 LOG OF 4 YEAR AVE. NEIGH YIELD
 LOG OF NEIGH RES
 LOG OF NEIGH RES*PROCI SUR
 LOG OF 4 YEAR AVE. STATE EXTENSION
 LOG OF STATE RES*NEW STATE EXT
 LOG OF STATE RES*NEIGH RES
 LOG OF STATE RES*NEIGH RES*PROCI SUR
 LOG OF STATE RES*NEIGH RES*RATIO

MEANS FOR WHEAT BY STATE

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.976500E+03	6.493587E+00	1966.000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP	22	1.105363E+05	1.163675E+05	0.000	3.415597E+05	2.480964E+04	2.431800E+06
POOR	22	4.545455E-02	2.132007E-01	0.000	1.000000E+00	4.545455E-02	1.000000E+00
BAD	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
GOOD	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
YINGHI	22	1.154282E+00	1.429311E-01	0.963	1.445526E+00	3.047302E-02	2.539421E+01
RNGHI	22	2.354576E+07	2.279178E+07	425925.261	7.233826E+07	4.859224E+06	5.180068E+08
PRNGHI	22	3.186527E+10	5.619919E+10	0.000	1.891004E+11	1.198171E+10	7.010353E+08
LIYIELD	22	1.198856E-01	1.804574E-01	-0.147	4.254851E-01	3.847365E-02	2.637483E+00
SOLIVIA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMG	22	1.000000E+00	0.000000E+00	1.000	1.000000E+00	0.000000E+00	2.200000E+01
BRMT	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CORDOBA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
MAREA	22	8.646364E+02	2.526229E+02	300.000	1.189000E+03	5.385939E+01	1.902200E+04
EXTENA	22	1.950078E+06	0.000000E+00	1950077.864	1.950078E+06	0.000000E+00	4.290171E+07
EXTA	22	4.433856E-04	1.295450E-04	0.000	6.097192E-04	2.761910E-05	9.754482E-03
STRESA	22	1.538353E-03	4.554060E-04	0.001	2.064789E-03	9.709289E-05	3.38243785E-02
NYIELDA	22	7.037909E+05	6.665675E+05	0.000	2.076753E+06	1.421127E+05	1.548340E+07
LCRESEXP	22	9.989654E-01	1.833814E-01	0.645	1.260553E+00	3.909705E-02	2.197724E+01
LSTRESA	22	8.336501E+00	5.331563E+00	0.000	1.274128E+01	1.136693E+00	1.834030E+02
LNYIELDA	22	1.236208E+01	3.006733E+00	0.000	1.454632E+01	6.410377E-01	2.719657E+02
LRNGHI	22	1.771930E-02	1.890121E-01	-0.439	2.315506E-01	4.029751E-02	3.898246E-01
LPRNGHI	22	1.620818E+01	1.558294E+00	12.962	1.809686E+01	3.322294E-01	3.565759E+02
LEXTA	22	8.014680E+00	1.201246E+01	0.000	2.596554E+01	2.561065E+00	1.763230E+02
LRESEX	22	6.533016E+00	3.704024E-01	-7.527	6.182705E+00	7.897005E-02	1.427264E+02
LRSNR	22	2.003631E-02	8.064159E-03	0.000	2.983515E-02	1.719284E-03	4.407988E-01
LRSNPR	22	2.799550E+08	2.958138E+08	0.000	9.216818E+08	6.306772E+07	6.159011E+09
LSSRRATIO	22	3.948924E+11	6.986494E+11	0.000	2.333025E+12	1.489525E+11	8.687633E+12
	22	8.568623E+03	1.521564E+04	0.000	5.163646E+04	3.243985E+03	1.885097E+05

STATE=BRMG

LOG OF 4 YEAR AVE. STATE RESEARCH
 LOG OF 4 YEAR AVE. NEIGH YIELD
 LOG OF NEIGH RES
 LOG OF NEIGH RES*PROCI SUR
 LOG OF 4 YEAR AVE. STATE EXTENSION
 LOG OF STATE RES*NEW STATE EXT
 LOG OF STATE RES*NEIGH RES
 LOG OF STATE RES*NEIGH RES*PROCI SUR
 LOG OF STATE RES*RATIO

STATE=BRMT

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1977	6	1966.0000	1.987000E+03	1	4.348300E+04
CRESEXP	22	0	0	0.0000	0.000000E+00	0	0.000000E+00
POOR	22	0	0	0.0000	1.000000E+00	0	5.000000E+00
BAD	22	0	0	0.0000	1.000000E+00	0	1.000000E+00
GOOD	22	0	0	0.0000	0.000000E+00	0	0.000000E+00
YINGHI	22	1	0	0.9597	1.448137E+00	0	2.551956E+01
RNGHI	22	23462068	22951929	345019.0460	7.340184E+07	4893368	5.161655E+08
PRNGHI	22	27342896153	49057688345	0.0000	1.653227E+11	10459134298	6.015437E+11
LIYIELD	22	-0	0	-1.7093	2.769959E-01	0	0.000000E+00
BOLIVIA	22	0	0	0.0000	0.000000E+00	0	0.000000E+00
BRMG	22	0	0	0.0000	0.000000E+00	0	0.000000E+00
BRMT	22	1	0	1.0000	1.000000E+00	0	2.200000E+01
BRPR	22	0	0	0.0000	0.000000E+00	0	0.000000E+00
BRRS	22	0	0	0.0000	0.000000E+00	0	0.000000E+00
BRSC	22	0	0	0.0000	0.000000E+00	0	0.000000E+00
BRSP	22	0	0	0.0000	0.000000E+00	0	0.000000E+00
SANTAFE	22	0	0	0.0000	0.000000E+00	0	0.000000E+00
CORDOBA	22	0	0	0.0000	0.000000E+00	0	0.000000E+00
BUENOS	22	0	0	0.0000	0.000000E+00	0	0.000000E+00
LAPAMPA	22	0	0	0.0000	0.000000E+00	0	0.000000E+00
URUGUAY	22	0	0	0.0000	0.000000E+00	0	0.000000E+00
PARAGUAY	22	0	0	0.0000	0.000000E+00	0	0.000000E+00
CHILE	22	0	0	0.0000	0.000000E+00	0	0.000000E+00
EXTEN	22	148	80	11.0000	2.920000E+02	17	3.254000E+03
MAREA	22	587040	0	587039.5455	5.870395E+05	0	1.291487E+07
EXTENA	22	0	0	0.0000	4.974111E-04	0	5.543068E-03
EXTA	22	0	0	0.0001	1.713684E-03	0	1.895954E-02
STRESA	22	276828	479410	0.0000	1.589517E+06	102211	6.090218E+06
NYIELDA	22	1	0	0.8308	1.352392E+00	0	2.423208E+01
LCRESEXP	22	0	0	0.0000	0.000000E+00	0	0.000000E+00
LSTRESA	22	8	5	0.0000	1.427894E+01	1	1.795306E+02
LNYIELDA	22	0	0	-0.1854	3.018750E-01	0	1.855450E+00
LRNGHI	22	16	2	12.7514	1.811146E+01	0	3.558287E+02
LPRNGHI	22	8	12	0.0000	2.583116E+01	3	1.751753E+02
LEXTA	22	-7	1	-9.6322	-6.369110E+00	0	-1.607663E+02
LRESEX	22	0	0	0.0000	2.446959E-02	0	2.053533E-01
LSRNX	22	0	0	0.0000	0.000000E+00	0	0.000000E+00
LSRNP	22	0	0	0.0000	0.000000E+00	0	0.000000E+00
LSRRATIO	22	0	0	0.0000	0.000000E+00	0	0.000000E+00

LOG OF 4 YEAR AVE. STATE RESEARCH
 LOG OF 4 YEAR AVE. NEIGH YIELD.
 LOG OF NEIGH RES
 LOG OF NEIGH RES*PROXCISUR
 LOG OF 4 YEAR AVE. STATE EXTENSION
 LOG OF STATE RES*NEW STATE EXT
 LOG OF STATE RES*NEIGH RES
 LOG OF STATE RES*NEIGH RES*PROXCISUR
 LOG OF STATE RES*RATIO

MEANS FOR WHEAT BY STATE

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.976500E+03	6.493587E+00	1966.000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP	22	2.852204E+06	3.032333E+06	24806.490	9.187033E+06	6.464956E+05	6.274848E+07
POOR	22	9.090909E-02	2.942449E-01	0.000	1.000000E+00	6.273323E-02	2.000000E+00
BAD	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
GOOD	22	1.363636E-01	3.512501E-01	0.000	1.000000E+00	7.488677E-02	3.000000E+00
YINGHI	22	1.164302E+00	1.586478E-01	0.954	1.486338E+00	3.382382E-02	2.561465E+01
RNGHI	22	2.146952E+07	2.124907E+07	509751.316	6.900497E+07	4.530317E+06	4.723295E+08
PRNGHI	22	3.663918E+10	6.468068E+10	0.000	2.155026E+11	1.378997E+10	8.060620E+11
LIYIELD	22	3.084855E-02	1.520120E-01	-0.325	2.471103E-01	3.240907E-02	6.786682E-01
BOLIVIA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMG	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC	22	1.000000E+00	0.000000E+00	1.000	1.000000E+00	0.000000E+00	2.200000E+01
BRSP	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CORDOBA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN	22	5.937727E+02	4.057132E+02	80.000	1.333000E+03	8.649835E+01	1.306300E+04
WAREA	22	3.488967E+06	0.000000E+00	3488967.091	3.488967E+06	0.000000E+00	7.675728E+07
EXTENA	22	1.701858E-04	1.162846E-04	0.000	3.820615E-04	2.479197E-05	3.744088E-03
EXTA	22	5.853842E-04	4.054439E-04	0.000	1.307407E-03	9.644092E-05	1.237845E-02
STRESA	22	1.351266E+06	2.564760E+06	0.000	7.953773E+06	5.468086E+05	4.697278E+07
NYIELDA	22	1.000794E+00	1.852011E-01	0.678	1.277513E+00	3.948501E-02	2.201748E+01
LCRESEXP	22	1.364698E+01	2.084238E+00	10.119	1.603330E+01	4.443610E-01	3.002336E+02
LSTRESA	22	1.263149E+01	3.576015E+00	0.000	1.588916E+01	7.624089E-01	3.778928E+02
LNYIELDA	22	1.592957E-02	1.884905E-01	-0.389	2.449153E-01	4.018631E-02	3.504506E-01
LRNGHI	22	1.615013E+01	1.479458E+00	13.142	1.804969E+01	3.154215E-01	3.553028E+02
LPRNGHI	22	8.057779E+00	1.207717E+01	0.000	2.609624E+01	2.574862E+00	1.772711E+02
LXETA	22	7.64087E+00	9.015327E-01	-9.430	6.639709E+00	1.922074E-01	1.708099E+02
LRSEXP	22	8.443839E-03	6.624683E-03	0.000	2.024969E-02	1.412387E-03	1.857645E-01
LRSNR	22	3.284726E+08	3.422953E+08	5158102.503	1.106378E+09	7.297761E+07	7.226397E+09
LRSNPR	22	5.726207E+11	1.013247E+12	0.000	3.355469E+12	2.160250E+11	1.259766E+13
LRRRATIO	22	1.390094E+04	2.517844E+04	0.000	8.241323E+04	5.368060E+03	3.058207E+05

STATE=BRPR

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 LOG OF STATE RES*NEW STATE EXT
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 LOG OF STATE RES*RATIO

MEANS FOR WHEAT BY STATE

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.974500E+03	6.493587E+00	1966.000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP	22	2.852204E+06	3.032333E+06	24806.490	9.187033E+06	6.464956E+05	6.274848E+07
POOR	22	1.363636E-01	3.512501E-01	0.000	1.000000E+00	7.488677E-02	3.000000E+00
BAD	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
GOOD	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
YINGHI	22	1.173503E+00	1.620342E-01	0.946	1.512614E+00	3.454580E-02	2.581706E+01
RNGHI	22	2.406656E+07	2.376648E+07	524549.470	7.576012E+07	5.067031E+06	5.294644E+08
LNFIELD	22	7.961221E-02	1.117660E-01	-0.070	3.488482E-01	2.382860E-02	1.751469E+11
BOLIVIA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMG	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP	22	1.000000E+00	0.000000E+00	1.000	1.000000E+00	0.000000E+00	2.200000E+01
SANTAFE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CORDOBA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN	22	4.601364E+02	2.888005E+02	177.000	9.640000E+02	6.157248E+01	1.012300E+04
MAREA	22	4.320713E+06	0.000000E+00	4320713.000	4.320713E+06	0.000000E+00	9.505569E+07
EXTENA	22	1.064955E-04	6.684094E-05	0.000	2.23113E-04	1.425054E-05	2.342900E-03
EXTA	22	3.666745E-04	2.317955E-04	0.000	7.607541E-04	4.929979E-05	8.766840E-03
STRESA	22	1.35126E+06	2.564760E+06	0.000	7.953773E+06	5.468086E+05	4.697278E+07
NYIELDA	22	1.032910E+00	2.012730E-01	0.687	1.320505E+00	4.291155E-02	2.272401E+01
LCRESEXP	22	1.364698E+01	2.084238E+00	10.119	1.603330E+01	4.443610E-01	3.002336E+02
LSTRESA	22	1.263149E+01	3.576015E+00	0.000	1.588916E+01	7.624089E-01	2.778928E+02
LNFIELDA	22	1.369387E-02	1.995928E-01	-0.376	2.780146E-01	4.255333E-02	3.012650E-01
LRNGHI	22	1.624538E+01	1.509866E+00	13.170	1.814308E+01	3.219046E-01	3.573984E+02
LPRNGHI	22	8.123406E+00	1.217536E+01	0.000	2.632313E+01	2.595795E+00	1.787149E+02
LEXTA	22	8.105194E+00	6.362485E-01	-8.833	7.181200E+00	1.356486E-01	1.783143E+02
LREXEH	22	5.152036E-03	4.013317E-03	0.000	1.178289E-02	8.556420E-04	1.133448E-01
LRSRNR	22	3.683497E+08	3.825032E+08	5307842.960	1.214695E+09	8.154996E+07	8.103694E+09
LRSRNR	22	7.035760E+11	1.252059E+12	0.000	4.218528E+12	2.669399E+11	1.547867E+13
LRRRATIO	22	1.484891E+04	2.638565E+04	0.000	9.080241E+04	5.625440E+03	3.266760E+05

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MEANS FOR WHEAT BY STATE

10:09 TUESDAY, JUNE 27, 1989 18

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.976500E+03	6.493587E+00	1966.000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP	22	2.852204E+06	3.032333E+06	24806.490	9.187033E+06	6.464956E+05	6.274848E+07
POOR	22	9.090909E-02	2.942449E-01	0.000	1.000000E+00	6.273323E-02	2.000000E+00
BAD	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
GOOD	22	4.545455E-02	2.132007E-01	0.000	1.000000E+00	4.545455E-02	0.000000E+00
YINGHI	22	1.156190E+00	1.608458E-01	0.949	1.517720E+00	3.429244E-02	2.543619E+01
RNGHI	22	2.406656E+07	2.376648E+07	524549.470	7.576012E+07	5.067031E+06	5.294644E+08
PRNGHI	22	4.498128E+10	7.980120E+10	0.000	2.709319E+11	1.701367E+10	9.895876E+01
LIYIELD	22	1.991669E-01	1.491988E-01	-0.043	4.678363E-01	3.180929E-02	4.381672E+00
BOLIVIA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMG	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMT	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE	22	1.000000E+00	0.000000E+00	1.000	1.000000E+00	0.000000E+00	2.200000E+01
CORDOBA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN	22	3.801364E+02	1.250921E+02	100.000	5.970000E+02	2.666972E+01	8.363000E+03
MAREA	22	1.167297E+06	0.000000E+00	1167296.909	1.167297E+06	0.000000E+00	2.568053E+07
EXTENA	22	3.256552E-04	1.071639E-04	0.000	5.114380E-04	2.284742E-05	7.164415E-03
EXTA	22	1.127334E-03	3.70553E-04	0.000	1.761763E-03	7.902399E-05	2.473535E-02
STRESA	22	1.35126E+06	2.564760E+06	0.000	7.953773E+06	5.468086E+05	4.697278E+07
NYIELDA	22	1.040343E+00	2.018235E-01	0.681	1.331796E+00	4.302891E-02	2.288754E+01
LCRESEXP	22	1.364698E+01	2.084238E+00	10.119	1.603330E+01	4.443610E-01	3.002336E+02
LSTRESA	22	1.263149E+01	3.576015E+00	0.000	1.588916E+01	7.624089E-01	2.778928E+02
LNYIELDA	22	2.097273E-02	1.992293E-01	-0.385	2.865284E-01	4.247582E-02	4.614001E-01
LRNGHI	22	1.624538E+01	1.509856E+00	13.170	1.814308E+01	3.219046E-01	3.573984E+02
LPRNGHI	22	8.123406E+00	1.217536E+01	0.000	2.632513E+01	2.595795E+00	1.787149E+02
LEXTA	22	6.862188E+00	4.274516E-01	-8.112	6.341441E+00	9.113298E-02	1.509681E+02
LRESEX	22	1.524290E+02	7.446224E-03	0.000	2.799292E+02	1.587540E-02	3.353439E-01
LRSRNX	22	3.683497E+08	3.825032E+08	5307842.960	1.214685E+09	8.154996E+07	8.103694E+09
LRSNPR	22	7.035760E+11	1.252059E+12	0.000	4.218528E+12	2.669399E+11	1.547867E+13
LSRRATIO	22	1.484891E+04	2.638565E+04	0.000	9.080241E+04	5.625440E+03	3.266760E+05

STATE=BRSC

LOG OF 4 YEAR AVE. STATE RESEARCH
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 LOG OF 4 YEAR AVE. STATE EXTENSION
 LOG OF STATE RES*NEW STATE EXT
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 LOG OF STATE RES*RATIO

MEANS FOR WHEAT BY STATE

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.976500E+03	6.493587E+00	1966.000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP	22	6.360591E+05	5.390344E+05	44355.180	1.687169E+06	1.149225E+05	1.399330E+07
POOR	22	2.272727E-01	4.289320E-01	0.000	1.000000E+00	9.144862E-02	5.000000E+00
BAD	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
GOOD	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
YINGHI	22	1.139022E+00	1.450869E-01	0.926	1.432606E+00	3.093263E-02	2.505848E+01
RNGHI	22	2.282601E+07	2.241634E+07	300663.866	7.171467E+07	4.779179E+06	5.021722E+08
LNFIELD	22	2.734290E+10	4.905769E+10	0.000	1.653227E+11	1.045913E+10	6.015437E+11
BOLIVIA	22	1.289975E-01	1.235515E-01	-0.067	3.085975E-01	2.634126E-02	2.837946E+00
BRMG	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMT	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE	22	1.000000E+00	0.000000E+00	1.000	1.000000E+00	0.000000E+00	2.200000E+01
CORDOBA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN	22	8.646364E+02	2.526229E+02	300.000	1.189000E+03	5.385939E+01	1.902200E+04
MAREA	22	2.497200E+06	0.000000E+00	2497199.818	2.497200E+06	0.000000E+00	5.493840E+07
EXTENA	22	3.462424E-04	1.011625E-04	0.000	4.761333E-04	2.156791E-05	7.617332E-03
EYTA	22	1.201309E-03	3.556292E-04	0.000	1.612405E-03	7.582039E-05	2.564289E-02
STRESA	22	7.111688E+05	5.475832E+05	44355.180	1.823025E+06	1.167451E+05	1.564571E+07
NYIELDA	22	1.015755E+00	1.760009E-01	0.708	1.279799E+00	3.752352E-02	2.234662E+01
LCRESEXP	22	1.285716E+01	1.162744E+00	10.700	1.433856E+01	2.478979E-01	2.828576E+02
LSTRESA	22	1.309635E+01	9.997453E-01	10.700	1.441601E+01	2.131464E-01	2.881196E+02
LNFIELD	22	1.069759E-03	1.755584E-01	-0.345	2.467029E-01	3.742917E-02	2.353669E-02
LRNGHI	22	1.613051E+01	1.639738E+00	12.614	1.808821E+01	3.495934E-01	3.548712E+02
LPRNGHI	22	7.962512E+00	1.193453E+01	0.000	2.583116E+01	2.544449E+00	1.751753E+02
LEXTA	22	6.780317E+00	3.704024E-01	-7.774	6.430028E+00	7.897005E-02	1.491670E+02
LRESEX	22	1.606153E-02	5.579528E-03	0.004	2.310647E-02	1.189559E+00	3.533537E-01
LSRNX	22	3.154701E+08	3.214158E+08	3217098.790	1.028287E+09	6.852607E+07	6.940342E+09
LSRNP	22	3.841056E+11	6.914278E+11	0.000	2.310728E+12	1.474129E+11	8.450324E+12
LSRRATIO	22	8.414063E+03	1.483836E+04	0.000	5.291016E+04	3.163549E+03	1.851094E+05

STATE=BRSP

LOG OF 4 YEAR AVE. STATE RESEARCH
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 LOG OF STATE RES*RATIO

MEANS FOR WHEAT BY STATE

10:09 TUESDAY, JUNE 27, 1989 20

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
STATE=BUENOS							
YEAR	22	1.976500E+03	6.493587E+00	1966.0000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP	22	5.270084E+06	6.966083E+06	0.0000	2.101946E+07	1.485174E+06	1.159419E+08
POOR	22	1.363636E-01	3.512501E-01	0.0000	1.000000E+00	7.488677E-02	3.000000E+00
BAD	22	9.090909E-02	2.942449E-01	0.0000	1.000000E+00	6.273323E-02	2.000000E+00
GOOD	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
YINGHI	22	1.236567E+00	2.025828E-01	0.9279	1.712969E+00	4.319080E-02	2.720447E+01
RNGHI	22	1.200888E+07	1.226147E+07	227986.4630	3.753674E+07	2.614154E+06	2.641953E+08
PRNGHI	22	2.552850E+10	4.410993E+10	0.0000	1.361422E+11	9.404268E+09	5.616271E+11
LIYIELD	22	1.417996E-01	2.054949E-01	-0.2395	5.656537E-01	4.381165E-02	3.119592E+00
BOLIVIA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRMG	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRMT	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
CORDOBA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA	22	1.000000E+00	0.000000E+00	1.0000	1.000000E+00	0.000000E+00	2.200000E+01
URUGUAY	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN	22	9.322727E+01	1.164119E+01	48.0000	1.060000E+02	2.481910E+00	2.051000E+03
WARA	22	4.231286E+03	0.000000E+00	4.31.2859	4.231286E+03	0.000000E+00	9.308829E+04
EXTENA	22	2.203285E-02	2.751218E-03	0.0113	2.505149E-02	5.865617E-04	4.847226E-01
EXTA	22	7.65457E-02	6.510361E-03	0.0000	8.673496E-02	2.027615E-03	1.693220E+00
STRESA	22	4.088144E+06	5.354900E+06	0.0000	1.702375E+07	1.141668E+06	8.993918E+07
NYIELDA	22	1.063886E+00	2.431447E-01	0.5870	1.416116E+00	5.183862E-02	2.340550E+01
LCRESEXP	22	1.315342E+01	4.603887E+00	0.0000	1.686096E+01	9.815520E-01	2.893752E+02
LSTRESA	22	1.306143E+01	4.511156E+00	0.0000	1.665012E+01	9.617818E-01	2.873514E+02
LNYIELDA	22	3.464646E-02	2.451257E-01	-0.5328	3.479180E-01	5.226098E-02	7.622221E-01
LRNGHI	22	8.803264E+00	1.198907E+01	12.3370	1.744083E+01	3.375403E-01	3.404976E+02
LRNGHI	22	8.803264E+00	1.198907E+01	0.0000	2.563697E+01	2.556078E+00	1.936718E+02
LEXTA	22	2.574370E+00	1.568984E-01	-3.2263	2.444899E+00	3.345085E-02	5.663614E+01
LRESEX	22	1.039946E+00	3.814198E-01	0.0000	1.418568E+00	8.131897E-02	2.287822E+01
LSRNR	22	1.909820E+08	2.071471E+08	0.0000	6.329055E+08	4.416391E+07	4.201605E+09
LSRNR	22	4.170542E+11	7.245628E+11	0.0000	2.284921E+12	1.544773E+11	9.175192E+12
LSRRATIO	22	1.645635E+04	2.836550E+04	0.0000	1.005785E+05	6.047545E+03	3.620398E+05

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 LOG OF STATE RES*NEIGH RES
 LOG OF STATE RES*NEIGH RES*PROCSISUR
 LOG OF STATE RES*RATIO

MEANS FOR WHEAT BY STATE

VARIABLE LABEL N MEAN STANDARD DEVIATION MINIMUM VALUE MAXIMUM VALUE STD ERROR OF MEAN SUM

----- STATE=CHILE -----

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.976500E+03	6.493587E+00	1966.000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP	22	7.550539E+06	5.440926E+06	643479.760	1.697933E+07	1.160009E+06	1.661119E+08
POOR	22	2.727273E-01	4.558423E-01	0.000	1.000000E+00	9.718591E-02	6.090000E+00
BAD	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
GOOD	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
YINGHI	22	1.200068E+00	1.773820E-01	0.937	1.603261E+00	3.781796E-02	2.640149E+01
RNGHI	22	1.094414E+07	1.170726E+07	123516.312	3.676224E+07	2.495996E+06	2.407711E+08
PRNGHI	22	4.815556E+10	8.225922E+10	0.000	2.219508E+11	1.753773E+10	5.784184E-01
LIYIELD	22	2.629175E-02	2.106719E-01	-0.319	5.139400E-01	4.491541E-02	5.094222E+12
BOLIVIA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMG	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRNT	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
SRSP	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CORDOBA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CHILE	22	1.000000E+00	0.000000E+00	0.000	1.000000E+00	0.000000E+00	2.000000E+00
EXTEN	22	3.245408E+05	1.064355E+05	106641.400	5.626471E+05	2.269213E+04	7.139899E+06
MAREA	22	6.059986E+05	0.000000E+00	605998.636	6.059986E+05	0.000000E+00	1.333197E+07
EXTENA	22	5.355472E-01	1.756366E-01	0.176	9.284627E-01	3.744585E-02	1.178204E+01
EXTA	22	1.766091E+00	5.953941E-01	0.616	2.733925E+00	1.269395E-01	3.865401E+01
STRESA	22	5.791176E+06	4.737457E+06	643479.760	1.477750E+07	1.010029E+06	1.274059E+08
NYIELDA	22	1.150746E+00	1.422436E-01	0.982	1.457947E+00	3.032643E-02	2.531642E+01
LCRESEXP	22	1.547202E+01	9.891742E-01	13.375	1.664751E+01	2.108927E-01	3.403844E+02
LSTRESA	22	1.512334E+01	1.076535E+00	13.375	1.650862E+01	2.295180E-01	3.327135E+02
LNYIELDA	22	1.333348E-01	1.209093E-01	-0.018	3.770292E-01	2.577795E-02	2.933365E+00
LRNGHI	22	1.525993E+01	1.753479E+00	11.724	1.741998E+01	3.738431E-01	3.357184E+02
LPRNGHI	22	9.032215E+00	1.229308E+01	0.000	2.612572E+01	2.621065E+00	1.987087E+02
LEXTA	22	4.953560E-01	4.261332E-01	-0.485	1.005701E+00	9.085190E-02	1.089783E+01
LRSEXP	22	1.716204E+01	9.926773E+00	8.238	4.113615E+01	2.116395E+00	5.975648E+02
LRSRNX	22	2.784901E+08	1.947999E+08	1651986.930	6.1199997E+08	4.153149E+07	3.926783E+09
LRSNPR	22	7.938298E+11	1.359475E+12	0.000	3.693594E+12	2.898411E+11	1.746426E+13
LRSRRATIO	22	3.204914E+04	5.203798E+04	0.000	1.6565718E+05	1.109453E+04	7.050810E+05

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 LOG OF STATE RES*RATIO

MEANS FOR WHEAT BY STATE

VARIABLE	LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR		22	1.976500E+03	6.493587E+00	1966.0000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP		22	4.255775E+06	4.925922E+06	0.0000	1.318480E+07	1.050210E+06	9.362705E+07
POOR		22	2.272727E-01	4.289320E-01	0.0000	1.000000E+00	9.144862E-02	5.000000E+00
BAD		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
GOOD		22	4.545455E-02	2.132007E-01	0.0000	1.000000E+00	4.545455E-02	1.000000E+00
YINGHI		22	1.191123E+00	1.807980E-01	0.9394	1.600840E+00	3.854626E-02	2.620471E+01
RNGHI		22	1.656402E+07	1.718491E+07	410773.0090	5.420931E+07	3.663834E+06	3.644083E+08
PRNGHI		22	4.324116E+10	7.391445E+10	0.0000	2.271171E+11	1.575861E+10	9.513056E+11
LIYIELD		22	3.319492E-01	2.805031E-01	-0.2187	8.562351E-01	5.980347E-02	7.302283E+00
BOLIVIA		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRMG		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRRT		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
CORDOBA		22	1.000000E+00	0.000000E+00	1.0000	1.000000E+00	0.000000E+00	2.200000E+01
BUENOS		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
CHILE		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN		22	5.900000E+01	3.792223E+00	53.0000	6.500000E+01	8.085046E-01	1.298000E+03
MAREA		22	1.587965E+03	0.000000E+00	1587.9650	1.587965E+03	0.000000E+00	3.493523E+04
EXTENA		22	3.715447E-02	2.388102E-03	0.0334	4.093289E-02	5.091451E-04	8.173984E-01
EXTA		22	1.297258E-01	7.921631E-02	0.1169	1.426374E-01	1.638897E-03	2.853967E+00
STRESA		22	2.448525E+06	2.842389E+06	0.0000	1.60163E+06	6.059994E+05	5.386756E+07
NYIELDA		22	1.028048E+00	1.917693E-01	0.7306	1.348665E+00	4.088535E-02	2.261705E+01
LCRESEXP		22	1.300491E+01	4.575162E+00	0.0000	1.639458E+01	9.754279E-01	2.861080E+02
LSTRESA		22	1.262406E+01	4.400771E+00	0.0000	1.591477E+01	9.382475E-01	2.777293E+02
LNYIELDA		22	1.077564E-02	1.890496E-01	-0.3139	2.991151E-01	4.030551E-02	2.370640E-01
LRNGHI		22	1.584488E+01	1.500569E+00	12.9258	1.780836E+01	3.199225E-01	3.485873E+02
LPRNGHI		22	9.004455E+00	1.225657E+01	0.0000	2.614873E+01	2.613109E+00	1.980980E+02
LEXTA		22	2.044139E+00	6.176380E-02	-2.1472	1.947464E+00	1.316809E-02	4.491706E+01
LREXEX		22	1.660785E+00	6.088823E-01	0.0000	2.270010E+00	1.298141E-01	3.653727E+01
LRSNR		22	2.601205E+08	2.849997E+08	0.0000	8.887387E+08	6.076214E+07	5.722651E+09
LRSNPR		22	6.974036E+11	1.195948E+12	0.0000	3.717737E+12	2.549770E+11	1.534288E+13
LSRRATIO		22	2.058450E+04	3.550389E+04	0.0000	1.251674E+05	7.569455E+03	4.528591E+05

LOG OF 4 YEAR AVE. STATE RESEARCH
 LOG OF 4 YEAR AVE. NEIGH YIELD
 LOG OF NEIGH RES
 LOG OF NEIGH RES*PROCI SUR
 LOG OF 4 YEAR AVE. STATE EXTENSION
 LOG OF STATE RES*NEW STATE EXT
 LOG OF STATE RES*NEIGH RES
 LOG OF STATE RES*NEIGH RES*PROCI SUR
 LOG OF STATE RES*RATIO

VARIABLE LABEL N MEAN STANDARD DEVIATION MINIMUM VALUE MAXIMUM VALUE STD ERROR OF MEAN SUM

STATE=PARAGUAY

VARIABLE	LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR		22	1.976500E+03	6.493587E+00	1966.000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP		22	3.712770E+06	4.512469E+06	81504.720	1.655196E+07	9.620617E+05	8.168095E+07
POOR		22	9.090909E-02	2.942449E-01	0.000	1.000000E+00	6.273323E-02	2.000000E+00
BAD		22	4.545455E-02	2.132007E-01	0.000	1.000000E+00	4.545455E-02	1.000000E+00
GOOD		22	4.545455E-02	2.132007E-01	0.000	1.000000E+00	4.545455E-02	1.000000E+00
YINGH1		22	1.151983E+00	1.478888E-01	0.962	1.453348E+00	3.153001E-02	2.534362E+01
RNGH1		22	2.060895E+07	1.994621E+07	453053.086	6.164004E+07	4.252546E+06	4.533970E+08
PRNGH1		22	5.516594E+10	9.602346E+10	0.000	3.725776E+11	2.047227E+10	1.213651E+12
LIYIELD		22	4.240297E-02	2.352131E-01	-0.658	3.923083E-01	5.014761E-02	9.328653E-01
BOLIVIA		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMG		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMT		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CORDOBA		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY		22	1.000000E+00	0.000000E+00	1.000	1.000000E+00	0.000000E+00	2.200000E+01
CHILE		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN		22	4.597579E+05	2.243566E+05	117349.206	6.384365E+05	4.783299E+04	1.011467E+07
MARENA		22	6.134318E+05	0.000000E+00	613431.918	6.134318E+05	0.000000E+00	1.349550E+07
EXTENA		22	7.494850E-01	3.657401E-01	0.191	1.040762E+00	7.797605E-02	1.648867E+01
EXTA		22	2.589704E+00	1.245260E+00	0.675	3.642677E+00	2.654903E-01	5.697344E+01
STRESA		22	3.341220E+06	4.024356E+06	81504.720	1.493931E+07	8.579956E+05	7.350685E+07
NYIELDA		22	1.045066E+00	1.937115E-01	0.717	1.328403E+00	4.129942E-02	2.299144E+01
LCRESEXP		22	1.431503E+01	1.481001E+00	11.308	1.662202E+01	3.157504E-01	3.149307E+02
LSTRESA		22	1.422164E+01	1.464951E+00	11.308	1.651951E+01	3.123287E-01	3.128762E+02
LNFIELDA		22	2.734637E-02	1.883747E-01	-0.333	2.839777E-01	4.016161E-02	6.016202E-01
LRNGH1		22	1.608240E+01	1.526705E+00	13.024	1.793682E+01	3.254947E-01	3.538129E+02
LPRNGH1		22	9.121279E+00	1.240582E+01	0.000	2.664371E+01	2.644929E+00	2.006681E+02
LEXTA		22	7.877266E-01	6.451282E-01	-0.391	1.292771E+00	1.375418E-01	1.732999E+01
LREXSE		22	3.837619E+01	2.043353E+01	8.844	6.017580E+01	4.356442E+00	8.442761E+02
LSRNR		22	3.205875E+08	3.266702E+08	5123312.862	1.024582E+09	6.964633E+07	7.0522925E+09
LSRNP		22	8.749403E+11	1.5466435E+12	0.000	6.112239E+12	3.297011E+11	1.924869E+13
LSRRATIO		22	2.109290E+04	3.501360E+04	0.000	1.078152E+05	7.464925E+03	4.640438E+05

MEANS FOR WHEAT BY STATE

VARIABLE	LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
----- STATE=SANTAFE -----								
YEAR		22	1.976500E+03	6.493587E+00	1966.0000	1.987000E+03	1.384437E+00	4.3483300E+04
CRESEXP		22	6.233146E+05	8.926474E+05	0.0000	2.509037E+06	1.903131E+05	1.371292E+07
POOR		22	3.636364E-01	4.923660E-01	0.0000	1.000000E+00	1.049728E-01	8.000000E+00
BAD		22	4.545455E-02	2.132007E-01	0.0000	1.000000E+00	4.545455E-02	1.000000E+00
GOOD		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
YINGHI		22	1.179252E+00	1.743384E-01	0.9385	1.596027E+00	3.716906E-02	2.594355E+01
RNGHI		22	1.904858E+07	1.952033E+07	403373.9320	6.074405E+07	4.161749E+06	4.190583E+08
PRNGHI		22	4.080103E+10	6.951190E+10	0.0000	2.132805E+11	1.481999E+10	8.976226E+11
LIYIELD		22	3.587858E-01	2.480429E-01	-0.2039	7.343359E-01	5.288293E-02	7.893288E+00
BOLIVIA		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRMG		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRMT		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
CORDOBA		22	1.000000E+00	0.000000E+00	1.0000	1.000000E+00	0.000000E+00	2.200000E+01
BUENOS		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
CHILE		22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN		22	4.959091E+01	3.762713E+00	39.0000	5.400000E+01	8.022131E-01	1.091000E+03
MAREA		22	1.925747E+03	0.000000E+00	1925.7468	1.925747E+03	0.000000E+00	4.236543E+04
EXTENA		22	2.575152E-02	1.953898E-03	0.0203	2.804107E-02	4.165725E-04	5.665335E-01
FYTA		22	8.998070E-02	5.761394E-03	0.0709	9.814374E-02	1.441534E-03	1.279751E+00
STRESA		22	5.462799E+05	6.812841E+05	0.0000	2.102469E+06	1.452503E+00	1.201316E+07
NYIELDA		22	1.011284E+00	2.145268E-01	0.5781	1.325416E+00	4.573726E-02	2.224824E+01
LCRESEXP		22	7.742971E+00	6.708266E+00	0.0000	1.473541E+01	1.430207E+00	1.703454E+02
LSTRESA		22	1.108936E+01	4.042263E+00	0.0000	1.455862E+01	8.618134E-01	2.439559E+02
LNIELDA		22	1.190874E-02	2.248993E-01	-0.5480	2.817261E-01	3.286607E-01	3.512594E+02
LRNGHI		22	1.5966634E+01	1.541555E+00	12.9076	1.792218E+01	3.260610E+00	1.975194E+02
LPRNGHI		22	8.978154E+00	1.222372E+01	0.0000	2.608587E+01	2.606106E+00	1.706790E+02
LEXTA		22	2.411001E+00	8.005553E-02	-2.6467	2.321322E+00	1.706790E-02	5.304202E+01
LRESEX		22	1.022367E+00	3.894961E-01	0.0000	1.375918E+00	8.304084E-02	2.49208E+01
LRSNR		22	2.498515E+08	2.999344E+08	0.0000	8.950885E+08	6.394623E+07	5.496733E+09
LRSNPR		22	5.820865E+11	9.998307E+11	0.0000	3.132739E+12	2.128399E+11	1.280590E+13
LSRRATIO		22	1.473299E+04	2.517095E+04	0.0000	8.670769E+04	5.366464E+03	3.241257E+05

LOG OF 4 YEAR AVE. STATE RESEARCH
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 LOG OF STATE RES*NEW STATE EXT
 LOG OF STATE RES*NEIGH RES
 LOG OF STATE RES*NEIGH RES*PROCI SUR
 LOG OF STATE RES*RATIO

MEANS FOR WHEAT BY STATE

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
----- STATE=URUGUAY -----							
YEAR	22	1.976500E+03	6.493587E+00	1966.000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP	22	1.204401E+06	8.088318E+05	130689.000	2.735007E+06	1.724435E+05	2.649683E+07
POOR	22	2.272727E-01	4.289320E-01	0.000	1.000000E+00	9.144862E-02	5.000000E+00
BAD	22	4.545455E-02	2.132007E-01	0.000	1.000000E+00	4.545455E-02	1.000000E+00
GOOD	22	4.545455E-02	2.132007E-01	0.000	1.000000E+00	4.545455E-02	1.000000E+00
YINGHI	22	1.158763E+00	1.480320E-01	0.951	1.466846E+00	3.156053E-02	2.549278E+01
RNGHI	22	2.571436E+07	2.599924E+07	418666.960	8.221215E+07	5.543058E+06	5.657160E+08
PRNGHI	22	6.010589E+10	1.035821E+11	0.000	3.151954E+11	2.208379E+10	1.322329E+12
LIYIELD	22	1.575866E-01	2.759121E-01	-0.513	5.986143E-01	5.882465E-02	3.466905E+00
BOLIVIA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMG	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMT	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CORDOBA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY	22	1.000000E+00	0.000000E+00	1.000	1.000000E+00	0.000000E+00	2.200000E+01
CHILE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN	0						
EXTEN	0						
MAREA	22	2.900000E-06	0.000000E+00	0.000	2.900000E-06	0.000000E+00	6.380000E-05
EXTA	22	1.015090E-05	0.000000E+00	0.000	1.015090E-05	0.000000E+00	2.232000E-04
STRESA	22	6.962831E+05	5.471936E+05	0.000	1.816649E+06	1.166621E+05	1.531823E+07
NYIELDA	22	1.096307E+01	1.701032E-01	0.810	1.355727E+01	3.626613E-02	2.411876E+01
LCRESEXP	22	1.369796E+01	8.952318E-01	11.781	1.482164E+01	1.908641E-01	3.013552E+02
LSTRESA	22	1.255157E+01	2.954123E+00	0.000	1.441250E+01	6.298211E-01	2.761345E+02
LNYIELDA	22	8.011035E-02	1.587668E-01	-0.210	3.043379E-01	3.384920E-02	1.762428E+00
LPRNGHI	22	1.623328E+01	1.615664E+00	12.945	1.822481E+01	3.444607E-01	3.571322E+02
LPRNGHI	22	8.215153E+01	1.231337E+01	0.000	2.647646E+01	2.625219E+00	1.807334E+02
LEXTA	22	1.149804E+01	0.000000E+00	-11.498	1.149804E+01	0.000000E+00	2.529368E+02
LRESEX	22	1.273984E-04	2.998435E-05	0.000	1.462869E-04	6.392684E-06	2.802765E-03
LSRNR	22	3.709652E+08	3.843754E+08	4932137.830	1.218519E+09	8.194911E+07	8.161234E+09
LSRNR	22	8.749139E+11	1.511337E+12	0.000	4.627455E+12	3.222181E+11	1.924811E+13
LSRRATIO	22	1.697715E+04	2.913091E+04	0.000	8.656848E+04	6.210730E+03	3.734972E+05

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 LOG OF STATE RES*NEIGH RES*RATIO

MEANS FOR SOY BY STATE

VARIABLE LABEL N MEAN STANDARD DEVIATION MINIMUM VALUE MAXIMUM VALUE STD ERROR OF MEAN SUM

STATE=BOLIVIA

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.976500E+03	6.493587E+00	1966.0000	1.987000E+03	1.384437E+00	4.348300E+04
RESEXP	22	1.117800E+07	9.936757E+06	0.0000	3.193800E+07	2.118524E+06	2.459160E+08
POOR	22	2.727273E-01	4.558423E-01	0.0000	1.000000E+00	9.718591E-02	6.000000E+00
BAD	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
GOOD	22	4.545455E-02	2.132007E-01	0.0000	1.000000E+00	4.545455E-02	1.000000E+00
YINGHI	22	9.952574E-01	2.805377E-01	0.6246	1.418063E+00	5.981084E-02	2.189566E+01
PRNGH1	22	1.018084E+07	1.161785E+07	124496.6370	3.699845E+07	2.476933E+06	2.239785E+08
PRNGH2	22	4.998375E+10	9.628775E+10	0.0000	3.363467E+11	2.052862E+10	1.099642E+12
YIELD	22	1.755477E-01	1.813453E-01	-0.2289	4.146598E-01	3.866294E-02	3.862049E+00
BOLIVIA	22	1.000000E+00	0.000000E+00	1.0000	1.000000E+00	0.000000E+00	2.200000E+01
BRMG	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRMT	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
JORDOBA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
APAMPA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
JRUGUAY	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
YIELD	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
AREA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
EXTENA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
EXTA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
STRESA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
YIELD	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
CRESEXP	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
STRESA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
NYIELDA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
PRNGH1	22	1.509099E+01	1.810846E+00	-0.4706	2.795503E-01	4.020069E-02	3.897367E-01
PRNGH2	22	8.996742E+00	1.223854E+01	11.7320	1.742639E+01	3.860736E-01	3.320018E+02
EXTA	22	2.500380E+00	1.184458E-01	0.0000	2.654141E+01	2.609266E+00	1.979283E+02
RESEX	22	1.001967E-02	3.491848E-03	-7.5374	7.092410E+00	2.525272E-02	1.595083E+02
SRNR	22	1.708166E+08	2.001065E+08	0.0000	1.430222E-02	7.444646E-04	2.204327E-01
SRNPR	22	8.503928E+11	1.645145E+12	0.0000	6.393076E+08	4.266285E+07	3.759766E+09
SRRATIO	22	3.477589E+04	6.416425E+04	0.0000	5.811838E+12	3.507461E+11	1.870864E+13

LOG OF 4 YEAR AVE. STATE RESEARCH
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MEANS FOR SOY BY STATE

10:09 TUESDAY, JUNE 27, 1989 28

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
----- STATE=BRMG -----							
YEAR	22	1.976500E+03	6.493587E+00	1966.000	1.987000E+03	1	1.4.348300E+04
CRESEXP	22	9.456274E+05	7.547214E+05	62393.790	2.140192E+06	160907	2.080380E+07
POOR	22	2.272727E-01	4.289320E-01	0.000	1.000000E+00	0	5.000000E+00
BAD	22	1.818182E-01	3.947710E-01	0.000	1.000000E+00	0	4.000000E+00
GOOD	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
YINGHI	22	9.203480E-01	2.421596E-01	0.591	1.280357E+00	0	2.024766E+01
RNGHI	22	1.949854E+07	2.019670E+07	74581.605	6.467340E+07	4305951	4.289679E+08
PRNGHI	22	1.086964E+10	2.096217E+10	0.000	6.689600E+10	4469149104	2.391321E+11
LIYIELD	22	3.797518E-01	3.986171E-01	-0.898	8.212559E-01	0	8.354539E+00
BOLIVIA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRMG	22	1.000000E+00	0.000000E+00	1.000	1.000000E+00	0	2.200000E+01
BRMT	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
CORDOBA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
LAPANPA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
EXTEN	22	8.646354E+02	2.526229E+02	300.000	1.189000E+03	54	1.902200E+04
MAREA	22	1.950078E+06	0.000000E+00	1950077.864	1.950078E+06	0	4.290171E+07
EXTENA	22	4.433856E-04	1.295450E-04	0.000	6.097192E-04	0	9.754482E-03
EXTA	22	1.520196E-03	4.657049E-04	0.000	2.091711E-03	0	3.34411E-02
STRESA	22	6.586178E+05	7.156952E+05	13416.200	2.359312E+06	152587	1.448959E+07
NYIELDA	22	1.003579E+00	1.717799E-01	0.642	1.259261E+00	0	2.207874E+01
LCRESEXP	22	1.325629E+01	1.183704E+00	11.041	1.457641E+01	0	2.916384E+02
LSTRESA	22	1.262775E+01	1.446952E+00	9.504	1.467388E+01	0	2.778106E+02
LNYIELDA	22	1.110504E-02	1.779201E-01	-0.443	2.305252E-01	0	2.443110E-01
LNRNGHI	22	1.577239E+01	1.972629E+00	11.220	1.798486E+01	0	3.469926E+02
LPRNGHI	22	7.627716E+00	1.143798E+01	0.000	2.492640E+01	2	1.678098E+02
LEXTA	22	6.548437E+00	3.809178E-01	-7.527	6.169773E+00	0	1.440656E+02
LRESEX	22	1.979760E-02	7.673478E-03	0.006	3.042293E-02	0	4.355471E-01
LRSRNX	22	2.775585E+08	2.952963E+08	823471.986	9.427057E+08	62957389	6.106287E+09
LRSRNP	22	1.572308E+11	3.038234E+11	0.000	9.633747E+11	64775363386	3.450978E+12
LSRRATIO	22	3.535810E+03	6.532171E+03	0.000	2.547608E+04	1393	7.778783E+04

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MEANS FOR SOY BY STATE

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.976500E+03	6.493587E+00	1966.0000	1.987000E+03	1	4.348300E+04
CRESEXP	22	1.445003E+05	2.070151E+05	0.0000	6.510128E+05	44136	3.179006E+06
POOR	22	9.090909E-02	2.942449E-01	0.0000	1.000000E+00	0	2.000000E+00
BAD	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
GOOD	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
YINGHI	22	1.116397E+00	2.328676E-01	0.7443	1.459763E+00	0	2.456074E+01
RNGHI	22	2.117709E+07	2.156143E+07	139412.9580	6.934402E+07	4596912	4.658960E+08
PRNGHI	22	1.141341E+10	2.255807E+10	0.0000	7.138313E+10	4809397729	2.510951E+11
LIYIELD	9	7.879408E-03	7.769377E-02	-0.0857	1.114273E-01	0	7.091467E-02
BOLIVIA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
BRMG	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
BRMT	22	1.000000E+00	0.000000E+00	1.0000	1.000000E+00	0	2.200000E+01
BRPR	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
CORDOBA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0	0.000000E+00
EXTEN	22	1.479091E+02	7.979432E+01	11.0000	2.920000E+02	17	3.254000E+03
MAREA	22	5.870395E+05	0.000000E+00	587039.5455	5.870395E+05	0	1.291487E+07
EXTENA	22	2.519576E-04	1.359267E-04	0.0000	4.974111E-04	0	5.543068E-03
EYTA	22	8.400391E-04	4.537492E-04	0.0001	1.686428E-03	0	1.848097E-02
STRESA	22	3.943875E+05	7.306610E+05	0.0000	2.486760E+06	0	8.676525E+06
NYIELDA	22	1.067356E+00	1.636459E-01	0.7443	1.315573E+00	0	2.348184E+01
LCRESEXP	22	8.217629E+00	5.339144E+00	0.0000	1.338628E+01	1	1.807878E+02
LSTRESA	22	8.059423E+00	5.567107E+00	0.0000	1.472649E+01	1	1.773073E+02
LNYIELDA	22	5.365931E-02	1.566332E-01	-0.2953	2.742722E-01	0	1.180505E+00
LRNGHI	22	1.593770E+01	1.832252E+00	11.8452	1.805459E+01	0	3.505293E+02
LPRNGHI	22	7.628624E+00	1.144114E+01	-9.6322	6.385143E+00	2	1.678297E+02
LEXTA	22	7.344746E+00	8.860835E-01	0.0000	2.499133E+01	0	1.615844E+02
LSTATE	22	9.111459E-03	7.536228E-03	0.0000	2.483517E-02	0	2.004521E-01
LRESX	22	2.571822E+08	2.915662E+08	0.0000	9.282588E+08	62162119	5.658007E+09
LSRNR	22	1.475828E+11	2.946092E+11	0.0000	9.555549E+11	62810886200	3.246822E+12
LSRNRPR	22	3.0195556E+03	5.739513E+03	0.0000	2.199642E+04	1224	6.643024E+04
LSRRATIO							

STATE=BRMT

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MEANS FOR SOY BY STATE

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.976500E+03	6.493587E+00	1966.000	1.987000E+03	1	1.4.348300E+04
CRESEXP	22	3.023824E+06	3.583352E+06	0.000	1.086569E+07	763973	6.652413E+07
POOR	22	2.272727E-01	4.289320E-01	0.000	1.000000E+00	0	5.000000E+00
BAD	22	9.090909E-02	2.942449E-01	0.000	1.000000E+00	0	2.000000E+00
GOOD	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
YINGHI	22	9.364077E-01	2.390651E-01	0.627	1.300338E+00	0	2.060097E+01
RNGHI	22	1.700504E+07	1.779527E+07	114455.442	5.736853E+07	3793964	3.741108E+08
PRNGHI	22	1.178525E+10	2.296856E+10	0.000	7.222891E+10	4896912502	2.592756E+11
LIYIELD	22	2.495067E-01	2.170224E-01	-0.103	5.126129E-01	0	5.489148E+00
BOLIVIA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRMG	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRMT	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRPR	22	1.000000E+00	0.000000E+00	1.000	1.000000E+00	0	2.200000E+01
BRRS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
CORDOBA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
EXTEN	22	5.937727E+02	4.057132E+02	80.000	1.333000E+03	86	1.306300E+04
EXTENA	22	3.488967E+06	0.000000E+00	3488967.091	3.488967E+06	0	7.675728E+07
EXTA	22	1.701858E-04	1.162846E-04	0.000	3.820615E-04	0	3.744088E-03
STRESA	22	5.745979E-04	4.070662E-04	0.000	1.277599E-03	0	1.261113E-02
NYIELDA	22	1.484888E+06	1.926892E+06	0.000	5.804181E+06	389495	3.266754E+07
LCRESEXP	22	9.944946E-01	1.747361E-01	0.627	1.268745E+00	0	2.187888E+01
LSTRESA	22	1.065186E+01	6.778133E+00	0.000	1.620112E+01	1	2.343408E+02
LNYIELDA	22	1.235828E+01	3.441956E+00	0.000	1.557409E+01	1	2.718823E+02
LRNGHI	22	-2.093236E-02	1.821858E-01	-0.467	2.380280E-01	0	4.605118E-01
LPRNGHI	22	1.569353E+01	1.839192E+00	11.648	1.786501E+01	0	3.452577E+02
LEXTA	22	7.646955E+00	1.146755E+01	0.000	2.500311E+01	2	1.682330E+02
LREX	22	-7.794401E+00	9.148270E-01	-9.430	-6.662773E+00	0	-1.714768E+02
LRSR	22	8.110025E-03	6.473298E-03	0.000	1.931203E-02	0	1.784206E-01
LRSNR	22	2.595271E+08	2.913658E+08	0.000	9.294345E+08	62119408	5.709596E+09
LRSNPR	22	1.872087E+11	3.667874E+11	0.000	1.170189E+12	78199339170	4.118591E+12
LSRRATIO	22	4.757585E+03	8.853761E+03	0.000	3.422862E+04	1888	1.046669E+05

STATE=BKPR

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MEANS FOR SOY BY STATE

VARIABLE LABEL N MEAN STANDARD DEVIATION MINIMUM VALUE MAXIMUM VALUE STD ERROR OF MEAN SUM

----- STATE=BKRS -----

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.976500E+03	6.493587E+00	1966.000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP	22	3.023824E+06	3.583352E+06	0.000	1.086569E+07	7.639733E+05	6.652413E+07
POOR	22	9.090909E-02	2.942449E-01	0.000	1.000000E+00	6.273323E-02	2.000000E+00
BAD	22	1.818182E-01	3.947710E-01	0.000	1.000000E+00	8.416546E-02	4.000000E+00
GOOD	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
YINGHI	22	9.797807E-01	2.690447E-01	0.613	1.363649E+00	5.736052E-02	2.155518E+01
PRNGHI	22	1.975227E+07	2.074015E+07	169245.600	6.689117E+07	4.421815E+06	4.345499E+08
LIYIELD	22	1.603147E+10	3.121994E+10	0.000	1.000482E+11	6.656114E+09	3.526924E+11
BOLIVIA	22	1.929774E-01	2.014663E-01	-0.316	4.231998E-01	4.295277E-02	4.245503E+00
BRMG	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMT	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE	22	1.000000E+00	0.000000E+00	1.000	1.000000E+00	0.000000E+00	2.200000E+01
CORDOBA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN	22	4.601364E+02	2.888005E+02	177.000	9.640000E+02	6.157248E+01	1.012300E+04
MAREA	22	4.320713E+06	0.000000E+00	4320713.000	4.320713E+06	0.000000E+00	9.505569E+07
EXTENA	22	1.064955E-04	6.684094E-05	0.000	2.231113E-04	1.425054E-05	2.342900E-03
EXTA	22	3.601941E-04	2.305261E-04	0.000	7.527692E-04	4.914832E-05	7.921271E-03
STRESA	22	1.484880E+06	1.826892E+06	0.000	5.804181E+06	3.894946E+05	3.266754E+07
NYIELDA	22	1.021274E+00	1.899570E-01	0.613	1.316802E+00	4.049897E-02	2.246802E+01
LCRESEXP	22	1.065186E+01	6.778133E+00	0.000	1.620112E+01	1.445103E+00	2.343408E+02
LSTRESA	22	1.235828E+01	3.441956E+00	0.000	1.557409E+01	7.338276E-01	2.718823E+02
LNYIELDA	22	3.544392E-03	1.949174E-01	-0.489	2.752063E-01	4.155654E-02	7.797662E-02
LRNGHI	22	1.586807E+01	1.782761E+00	12.039	1.801858E+01	3.800860E-01	3.490976E+02
LPRNGHI	22	7.746246E+00	1.161604E+01	-8.833	2.532892E+01	2.476548E+00	1.704174E+02
LEXTA	22	8.123819E+00	6.339695E-01	0.000	1.151584E-02	8.292253E-04	1.787240E+02
LRSEXP	22	4.951955E-03	3.889412E-03	0.000	1.151584E-02	8.292253E-04	1.089430E-01
LSRNR	22	3.014098E+08	3.396653E+08	0.000	1.083712E+09	7.241689E+07	6.631015E+09
LSRNRPR	22	2.545475E+11	4.981669E+11	0.000	1.568071E+12	1.062095E+11	5.600045E+12
LSRRATIO	22	5.599114E+03	1.046922E+04	0.000	4.098865E+04	2.232045E+03	1.231805E+05

LOG OF 4 YEAR AVE. STATE RESEARCH
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 LOG OF STATE RES-NEW STATE EXT
 LOG OF STATE RES-NEIGH RES
 LOG OF STATE RES-NEIGH RES*PROCISUR
 LOG OF STATE RES-RATIO

MEANS FOR SOY BY STATE

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.976500E+03	6.493587E+00	1966.000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP	22	3.023824E+06	3.583352E+06	0.000	1.086569E+07	7.639733E+05	6.652413E+07
POOR	22	2.727273E-01	4.558423E-01	0.000	1.000000E+00	9.718591E-02	6.000000E+00
BAD	22	1.363636E-01	3.512501E-01	0.000	1.000000E+00	7.488677E-02	3.000000E+00
GOOD	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
YINGHI	22	1.004173E+00	2.720350E-01	0.603	1.409010E+00	5.799806E-02	2.209181E+01
RNGHI	22	1.975227E+07	2.074015E+07	169245.600	6.689117E+07	4.421815E+06	4.345499E+08
PRNGHI	22	1.603147E+10	3.121994E+10	0.000	1.000482E+11	6.656114E+09	3.526924E+11
LIYIELD	22	1.105317E-02	1.916702E-01	-0.395	1.981154E-01	4.086421E-02	2.431696E-01
BOLIVIA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMG	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMT	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE	22	1.000000E+00	0.000000E+00	1.000	1.000000E+00	0.000000E+00	2.200000E+01
CORDOBA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
LAPANPA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN	22	3.801364E+02	1.250921E+02	100.000	5.970000E+02	2.666972E+01	8.363000E+03
MAREA	22	1.167297E+06	0.000000E+00	1167296.909	1.167297E+06	0.000000E+00	2.568053E+03
EXTENA	22	3.256552E-04	1.071639E-04	0.000	5.114380E-04	2.284742E-05	7.164415E-03
EXTA	22	1.104981E-03	3.779433E-04	0.000	1.733492E-03	7.91177E-05	2.430995E-02
STRESA	22	1.484888E+06	1.826892E+06	0.000	5.804181E+06	3.894946E+05	3.266754E+07
NYIELDA	22	1.019996E+00	1.924549E-01	0.603	1.326143E+00	4.103153E-02	2.243992E+01
LCRESEXP	22	1.065186E+01	6.778133E+00	0.000	1.620112E+01	1.445103E+00	2.343408E+02
LSTRESA	22	1.235828E+01	3.441956E+00	0.000	1.557409E+01	7.338276E-01	2.718223E+02
LNFIELDA	22	1.742976E-03	1.981557E-01	-0.506	2.822744E-01	4.224693E-02	3.834548E-02
LRNGHI	22	1.586807E+01	1.782761E+00	12.039	1.801858E+01	3.800860E-01	3.490976E+02
LPRNGHI	22	7.746246E+00	1.161604E+01	0.000	2.532892E+01	2.476548E+00	1.704174E+02
LEXTA	22	-6.883234E+00	4.375125E-01	-8.112	-6.357617E+00	9.327798E-02	1.514311E+02
LRESEX	22	1.472309E-02	7.097726E-03	0.000	2.699756E-02	1.513240E-03	3.239079E-01
LRSNPR	22	3.014098E+08	3.396653E+08	0.000	1.083712E+09	7.241689E+07	6.631015E+09
LRSNPR	22	2.545475E+11	4.981669E+11	0.000	1.568071E+12	1.062095E+11	5.600045E+12
LRSRATIO	22	5.599114E+03	1.046922E+04	0.000	4.098863E+04	2.232045E+03	1.231805E+05

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 LOG OF STATE RES*NEIGH RES*RATIO

MEANS FOR SOY BY STATE

VARIABLE	LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
----- STATE=BRSP -----								
YEAR		22	1.976500E+03	6.493587E+00	1966.000	1.987000E+03	1	4.348300E+04
CRESEXP		22	7.906390E+05	6.836835E+05	67658.490	2.211061E+06	145762	1.739406E+07
POOR		22	1.363636E-01	3.512501E-01	0.000	1.000000E+00	0	3.000000E+00
BAD		22	9.090909E-02	2.942449E-01	0.000	1.000000E+00	0	2.000000E+00
GOOD		22	9.090909E-02	2.942449E-01	0.000	1.000000E+00	0	2.000000E+00
YINGHI		22	9.610094E-01	2.361030E-01	0.648	1.321046E+00	0	2.114221E+01
RNGHI		22	1.885188E+07	2.042286E+07	112701.615	6.633735E+07	4354169	4.147415E+08
PRNGHI		22	1.198296E+10	2.336299E+10	0.000	7.349588E+10	4981006141	2.636252E+11
LIYIELD		22	1.732197E-01	1.665909E-01	-0.182	3.901092E-01	0	3.810834E+00
BOLIVIA		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRMG		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRMT		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRPR		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRRS		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRSC		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
BRSP		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
SANTAFE		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
COROOBA		22	1.000000E+00	1.000000E+00	1.000	1.000000E+00	0	2.200000E+01
BUENOS		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
LAPAMPA		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
URUGUAY		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
PARAGUAY		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
CHILE		22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0	0.000000E+00
EXTEN		22	8.646364E+02	2.526229E+02	300.000	1.189000E+03	54	1.902200E+04
MAREA		22	2.497200E+06	0.000000E+00	2497199.818	2.497200E+06	0	5.493840E+07
EXTENA		22	3.462424E-04	1.011625E-04	0.000	4.761333E-04	0	7.617332E-03
EXTA		22	1.187130E-03	3.636717E-04	0.000	1.633430E-03	0	2.611685E-02
STRESA		22	6.942867E+05	4.781102E+05	67658.490	1.619874E+06	101933	1.527431E+07
NYIELDA		22	1.011771E+00	1.667852E-01	0.648	1.272257E+00	0	2.25897E+01
LCRESEXP		22	1.312275E+01	1.072238E+00	11.122	1.460898E+01	0	2.887005E+02
LSTRESA		22	1.314288E+01	8.950660E-01	11.122	1.429786E+01	0	2.891434E+02
LNYIELDA		22	1.848109E-03	1.707928E-01	-0.434	2.407927E-01	0-4	0.65841E-02
LNGHI		22	1.574242E+01	1.885920E+00	11.632	1.801026E+01	0	3.463331E+02
LPRNGHI		22	7.652176E+00	1.147537E+01	0.000	2.502050E+01	2	1.683479E+02
LEXTA		22	6.795738E+00	3.809178E-01	-7.774	6.417073E+00	0-1	4.95062E+02
LREXST		22	1.590489E-02	5.604855E-03	0.005	2.323741E-02	0	3.499075E-01
LRSNR		22	2.657714E+08	2.977559E+08	1253493.072	9.691213E+08	63481774	5.846971E+09
LSRNPR		22	1.720797E+11	3.369750E+11	0.000	1.073700E+12	71843317522	3.785753E+12
LSRRATIO		22	3.904974E+03	7.264906E+03	0.000	2.841422E+04	1549	8.590943E+04

LOG OF 4 YEAR AVE. STATE RESEARCH
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 LOG OF STATE RES*RATIO

MEANS FOR SOY BY STATE

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	22	1.976500E+03	6.493587E+00	1966.00000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP	22	3.838463E+06	5.115591E+06	0.00000	1.568907E+07	1.090648E+06	8.444619E+07
POOR	22	9.090909E-02	2.942449E-01	0.00000	1.000000E+00	6.273232E-02	2.000000E+00
BAD	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
GOOD	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
YINGHI	22	9.219007E-01	2.906038E-01	0.50797	1.288133E+00	6.195693E-02	2.028182E+01
RNGHI	22	8.782738E+06	9.329521E+06	0.00000	1.918179E+11	1.308987E+10	7.141685E+11
PRNGHI	22	3.246221E+10	6.139693E+10	-0.11507	6.647157E-01	5.491196E-02	5.905317E+00
LIYIELD	22	2.684235E-01	2.575599E-01	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BOLIVIA	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BRMG	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BRMT	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
CORDOBA	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA	22	1.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN	22	9.322727E+01	1.164119E+01	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
MAREA	22	4.231286E+03	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
EXTENA	22	2.203285E-02	2.751218E-03	0.01134	2.505149E-02	5.865617E-04	4.847225E-01
EXTA	22	7.679675E-07	9.503710E-03	0.03970	8.590769E-02	2.076199E-03	1.687548E+00
STRESA	22	4.181573E+06	5.343014E+06	0.00000	1.736414E+07	1.139134E+06	9.199460E+07
NYIELDA	22	1.099363E+00	2.633342E-01	0.00000	1.510062E+00	5.614304E-02	2.418598E+01
LCRESEXP	22	1.288112E+01	4.515611E+00	0.00000	1.656848E+01	9.627314E-01	2.833847E+02
LSTRESA	22	1.307118E+01	4.560493E+00	0.00000	1.666992E+01	9.723003E-01	2.875659E+02
LNYIELDA	22	6.326180E-02	2.675754E-01	-0.67734	4.121508E-01	5.704728E-02	1.391760E+00
LRNGHI	22	1.499657E+00	1.868261E+00	10.95479	1.720100E+01	3.983146E-01	3.299246E+02
LPRNGHI	22	8.752565E+00	1.195542E+01	0.00000	2.597981E+01	2.548904E+00	1.925564E+02
LEXTA	22	1.037612E+00	1.567367E-01	-3.22630	-2.454482E+00	3.341649E-02	5.671003E+01
LRSEX	22	1.077728E+00	1.195542E+01	0.00000	2.597981E+01	2.548904E+00	1.925564E+02
LRSRNR	22	1.374329E+08	3.850674E-01	0.00000	1.420255E+00	8.209665E-02	2.282747E+01
LRSNPR	22	5.194006E+11	9.841041E+11	0.00000	4.893100E+08	3.295708E+07	3.023522E+09
LSSRRATIO	22	2.837065E+04	5.580431E+04	0.00000	3.144370E+12	2.098117E+11	1.142681E+13

STATE=BUENOS

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MEANS FOR SOY BY STATE

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VARIABLE	LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR		22	1.976500E+03	6.493587E+00	1966.00000	1.987000E+03	1.384437E+00	4.342300E+04
CRESEXP		22	2.319138E+06	2.580845E+06	0.00000	7.420739E+06	5.502380E+05	5.102104E+07
POOR		22	1.363636E-01	3.512501E-01	0.00000	1.000000E+00	7.488677E-02	3.000000E+00
BAD		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
GOOD		22	4.545455E-02	2.132007E-01	0.00000	1.000000E+00	4.545455E-02	1.000000E+00
YINGHI		22	9.167448E-01	2.104112E-01	0.62665	1.215469E+00	4.485982E-02	2.016839E+01
RNGHI		22	1.216317E+07	1.377031E+07	69706.47900	4.359652E+07	2.935840E+06	2.675898E+08
PRNGHI		22	5.301528E+10	1.002298E+11	0.00000	3.135597E+11	2.136907E+10	1.166336E+12
LIYIELD		16	3.972812E-01	3.481296E-01	-0.55397	7.769729E-01	8.703241E-02	6.256495E+00
BOLIVIA		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BRMG		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BRMT		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
CORDOBA		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
CHILE		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN		22	5.900000E+01	3.792223E+00	53.00000	6.500000E+01	8.085046E-01	1.298000E+03
MAREA		22	1.587965E+03	0.000000E+00	1587.96500	1.587965E+03	0.000000E+00	3.493523E+04
EXTA		22	3.715447E-02	2.388102E-03	0.03338	4.093289E-02	5.091451E-04	8.173984E-01
EXTA		22	1.93537E-01	7.859788E-03	0.11682	1.420056E-01	1.575712E-03	2.845791E+00
STRESA		22	2.267029E+06	2.635353E+06	0.00000	7.583385E+06	5.618591E+05	4.987464E+07
NYIELDA		22	1.051760E+00	2.074505E-01	0.62665	1.390100E+00	4.422860E-02	2.313872E+01
LCRESEXP		22	1.267161E+01	4.377094E+00	0.00000	1.581979E+01	9.331956E-01	2.787754E+02
LSRESA		22	1.247894E+01	4.429877E+00	0.00000	1.584147E+01	9.444529E-01	2.745367E+02
LNYIELDA		22	3.087179E-02	2.059387E-01	-0.46736	3.293756E-01	4.390628E-02	6.791793E-01
LPRNGHI		22	1.521946E+01	1.949708E+00	11.15205	1.759049E+01	2.601971E+01	3.348281E+02
LEXTA		22	8.941729E+00	1.220432E+01	0.00000	2.647126E+01	4.156791E-01	1.967180E+02
LRESEX		22	2.046992E+00	6.141499E-02	-2.14715	1.951888E+00	1.309372E-02	4.503383E+01
LRSNEX		22	1.637828E+00	6.123315E-01	0.00000	2.249578E+00	1.305495E-01	3.603222E+01
LRSNPR		22	1.853884E+08	2.183725E+08	0.00000	6.896878E+08	4.655718E+07	1.806844E+09
LRSNPR		22	8.209461E+11	1.553630E+12	0.00000	4.907483E+12	3.312351E+11	4.076508E+13
LSSRATIO		22	3.243623E+04	6.463329E+04	0.00000	2.422052E+05	1.377986E+04	7.135970E+05

LOG OF 4 YEAR AVE. STATE RESEARCH
 LOG OF 4 YEAR AVE. NEIGH YIELD
 LOG OF NEIGH RES
 LOG OF NEIGH RES*PROCI SUR
 LOG OF 4 YEAR AVE. STATE EXTENSION
 LOG OF STATE RES*NEW STATE EXT
 LOG OF STATE RES*NEIGH RES
 LOG OF STATE RES*NEIGH RES*PROCI SUR
 LOG OF STATE RES*RATIO

MEANS FOR SOY BY STATE

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
----- STATE=PARAGUAY -----							
YEAR	22	1.976500E+03	6.493587E+00	1966.000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP	22	3.712770E+06	4.512469E+06	81504.720	1.655196E+07	9.620617E+05	8.168095E+07
POOR	22	1.363636E-01	3.512501E-01	0.000	1.000000E+00	7.488677E-02	3.000000E+00
BAD	22	9.090909E-02	2.942449E-01	0.000	1.000000E+00	6.273323E-02	2.000000E+00
GOOD	22	9.090909E-02	2.942449E-01	0.000	1.000000E+00	6.273323E-02	2.000000E+00
YINGHI	22	9.895027E-01	2.531054E-01	0.657	1.359749E+00	5.396222E-02	2.176900E+01
RNGHI	22	1.592975E+07	1.671824E+07	98855.385	5.199645E+07	3.56341E+06	3.504546E+08
PRNGHI	22	5.440645E+10	1.078414E+11	0.000	3.421166E+11	2.299186E+10	1.196942E+12
LIYIELD	22	7.242963E-03	1.174447E-01	-0.210	2.412567E-01	2.503930E-02	1.593452E-01
BOLIVIA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMG	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRMT	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CORDOBA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN	22	0.000000E+00	0.000000E+00	0.000	0.000000E+00	0.000000E+00	0.000000E+00
MAREA	22	4.597579E+05	2.243566E+05	117349.206	6.384365E+05	4.783299E+04	1.011467E+07
EXTENA	22	6.134318E+05	0.000000E+00	613431.818	6.134318E+05	7.797605E-02	1.648867E+01
EXTA	22	7.494850E-01	3.657401E-01	0.191	1.040762E+00	0.000000E+00	1.349550E+07
STRESA	22	5.537995E+00	1.246042E+00	0.673	3.642667E+00	2.656570E-01	5.619357E+01
NYIELDA	22	3.153130E+06	3.782975E+06	81504.720	1.413298E+07	8.065329E+05	6.936886E+07
LOG OF 4 YEAR AVE. STATE RESEARCH	22	1.042137E+00	1.876415E-01	0.665	1.337290E+00	4.000530E-02	2.292702E+01
LOG OF 4 YEAR AVE. NEIGH YIELD	22	1.431503E+01	1.481001E+00	11.308	1.662202E+01	3.157504E-01	3.149307E+02
LOG OF NEIGH RES	22	1.415722E+01	1.477101E+00	11.308	1.646402E+01	3.149191E-01	3.114587E+02
LOG OF NEIGH RES*PROCISUR	22	5.19649E-02	1.857035E-01	-0.408	2.906454E-01	3.959212E-02	5.543228E-01
LOG OF 4 YEAR AVE. STATE EXTENSION	22	5.57036E+01	1.908245E+01	11.501	1.776669E+01	4.068392E-01	3.425480E+02
LOG OF STATE RES*NEW STATE EXT	22	8.72412E+00	1.211719E+00	0.000	2.655842E+01	2.583394E+00	1.951931E+02
LOG OF STATE RES*NEIGH RES	22	7.742058E-01	6.390180E-01	-0.395	1.292716E+00	1.362391E-01	1.703253E+01
LOG OF STATE RES*NEIGH RES*PROCISUR	22	3.773114E+01	2.044627E+01	8.817	5.997295E+01	4.359159E+00	8.300851E+02
LOG OF STATE RES*NEIGH RES*EXTEN	22	2.490727E+08	2.737257E+08	1117897.838	8.642858E+08	5.835853E+07	5.479600E+09
LOG OF STATE RES*NEIGH RES*EXTEN	22	8.786392E+11	1.758396E+12	0.000	5.523248E+12	3.748912E+11	1.933006E+13
LOG OF STATE RES*NEIGH RES*EXTEN	22	2.171177E+04	3.979271E+04	0.000	1.291882E+05	8.4838834E+03	4.776590E+05

MEANS FOR SOY BY STATE

10:09 TUESDAY, JUNE 27, 1989 37

VARIABLE	LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR		22	1.976500E+03	6.493587E+00	1966.00000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP		22	4.506608E+05	4.151289E+05	0.00000	1.350434E+06	8.850579E+04	9.914538E+06
POOR		22	3.181818E-01	4.767313E-01	0.00000	1.000000E+00	1.016395E-01	7.000000E+00
BAD		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
GOOD		22	9.090909E-02	2.942449E-01	0.00000	1.000000E+00	6.273323E-02	2.000000E+00
YLNHGI		22	8.949965E-01	2.561103E-01	0.54021	1.249260E+00	5.460289E-02	1.968992E+01
RNGHI		22	1.353340E+07	1.492844E+07	78383.42100	4.726861E+07	3.182755E+06	2.977348E+08
PRNGHI		22	4.658450E+10	8.808148E+10	0.00000	2.753940E+11	1.877904E+10	1.024859E+12
LIYIELD		22	3.391708E-01	3.016949E-01	-0.14681	7.273722E-01	6.432157E-02	7.461757E+00
BOLIVIA		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BRMG		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BRMT		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
CORDOBA		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
PARAGUAY		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
CHILE		22	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN		22	4.959091E+01	3.762713E+00	39.00000	5.400000E+01	8.022131E-01	1.091000E+03
MAREA		22	1.925747E+03	0.000000E+00	1925.74682	1.925747E+03	0.000000E+00	2.200000E+01
EXTENA		22	2.575152E-02	1.953898E-03	0.02025	2.804107E-02	4.165725E-04	5.665335E-01
EXTA		22	4.951563E-02	7.249675E-03	0.07009	9.814374E-02	1.543717E-03	1.5959356E+00
STRESA		22	6.035240E+05	8.352023E+05	0.00000	2.561522E+06	1.780657E+05	1.327753E+07
NYIELDA		22	1.036985E+00	2.209176E-01	0.00000	1.388441E+00	4.709979E-02	2.281367E+02
LCRESEXP		22	1.141516E+01	3.913390E+00	0.00000	1.411594E+01	8.343375E-01	2.511336E+02
LSTRESA		22	1.045643E+01	4.675629E+00	0.00000	1.475611E+01	9.968474E-01	2.300415E+02
LNFIELDA		22	1.250377E-02	2.298349E-01	-0.60072	3.281817E-01	4.900097E-02	2.750828E-01
LRNGHI		22	1.537783E+01	1.912239E+00	11.26937	1.767136E+01	4.076908E-01	3.383122E+02
LPRNGHI		22	8.891856E+00	1.213865E+01	0.00000	2.634147E+01	2.587969E+00	1.956208E+02
LXETA		22	4.16712E+00	8.588850E+02	-2.64674	2.321322E+00	1.831149E-02	5.315766E+01
LRESEX		22	9.666948E-01	4.464286E-01	0.00000	1.394582E+00	9.517889E-02	2.126729E+01
LSRNR		22	1.835460E+08	2.097145E+08	0.00000	6.672407E+08	4.477128E+07	4.038011E+09
LSRNR		22	6.391109E+11	1.208790E+12	0.00000	3.829131E+12	2.577148E+11	1.406044E+13
LSRRATIO		22	2.272663E+04	4.502397E+04	0.00000	1.676382E+05	9.599142E+03	4.999858E+05

STATE=SANTAFE

LOG OF 4 YEAR AVE. STATE RESEARCH
 LOG OF 4 YEAR AVE. NEIGH YIELD
 LOG OF NEIGH RES
 LOG OF NEIGH RES*PROCI SUR
 LOG OF 4 YEAR AVE. STATE EXTENSION
 LOG OF STATE RES*NEW STATE EXT
 LOG OF STATE RES*NEIGH RES
 LOG OF STATE RES*NEIGH RES*PROCI SUR
 LOG OF STATE RES*RATIO

MEANS FOR SOY BY STATE

10:09 TUESDAY, JUNE 27, 1989 38

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
----- STATE=URUGUAY -----							
YEAR	22	1.976500E+03	6.493587E+00	1966.0000	1.987000E+03	1.384437E+00	4.348300E+04
CRESEXP	22	3.883025E+05	3.802350E+05	0.0000	1.222572E+06	8.106638E+04	8.542655E+06
POOR	22	9.090909E-02	2.942449E-01	0.0000	1.000000E+00	6.273323E-02	2.000000E+00
BAD	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
GOOD	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
YINGHI	22	1.072273E+00	2.233220E-01	0.7412	1.368473E+00	4.761240E-02	2.359002E+01
RNGHI	22	2.238779E+07	2.393775E+07	169245.6000	7.653429E+07	5.103544E+06	4.925314E+08
PRNGHI	22	4.445176E+10	8.325490E+10	0.0000	2.438167E+11	1.775000E+10	9.779388E+11
LIYIELD	9	6.875130E-02	2.427609E-01	-0.4431	3.671428E-01	8.092031E-02	6.187617E-01
BOLIVIA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRMG	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRMT	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRPR	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRRS	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRSC	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BRSP	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
SANTAFE	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
CORDOBA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
BUENOS	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
LAPAMPA	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
URUGUAY	22	1.000000E+00	0.000000E+00	1.0000	1.000000E+00	0.000000E+00	2.200000E+01
PARAGUAY	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
CHILE	22	0.000000E+00	0.000000E+00	0.0000	0.000000E+00	0.000000E+00	0.000000E+00
EXTEN	0						
MAREA	0						
EXTENA	22	2.900000E-06	0.000000E+00	0.0000	2.900000E-06	0.000000E+00	6.380000E-05
EXTA	22	1.015000E-05	0.000000E+00	0.0000	1.015000E-05	0.000000E+00	2.233000E-04
STRESA	22	6.697328E+05	5.270684E+05	0.0000	1.756495E+06	1.123714E+05	1.473412E+07
NYIELDA	22	1.082886E+00	1.765780E-01	0.7412	1.363496E+00	3.764657E-02	2.382350E+01
LCRESEXP	22	1.124345E+01	3.869934E+00	0.0000	1.401647E+01	8.250728E-01	2.473559E+02
LSTRESA	22	1.250267E+01	2.954750E+00	0.0000	1.437883E+01	6.299549E-01	2.750587E+02
LNYIELDA	22	6.653019E-02	1.672112E-01	-0.2994	3.100517E-01	3.564954E-02	1.463664E+00
LRNGHI	22	1.593912E+01	1.842191E+00	12.0391	1.815325E+01	3.927563E-01	3.506607E+02
LPRNGHI	22	7.010890E+00	1.172108E+01	0.0000	2.621968E+01	2.498942E+00	1.542396E+02
LEXTA	22	1.149804E+01	0.000000E+00	-11.4980	1.149804E+01	0.000000E+00	2.529568E+02
LRESEX	22	1.269021E-04	2.999072E-05	0.0000	1.459451E-04	6.394042E-06	2.791846E-03
LSRNR	22	3.000145E+08	3.343943E+08	0.0000	1.072740E+09	7.129310E+07	6.600319E+09
LSRNP	22	6.073080E+11	1.138474E+12	0.0000	3.251061E+12	2.427235E+11	1.336078E+13
LSRRATIO	22	1.218511E+04	2.360565E+04	0.0000	8.919673E+04	5.032742E+03	2.680723E+05

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MEANS FOR MAIZE

VARIABLE	LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR								
CRESEXP		264	1.976500E+03	6.356339E+00	1966.00000	1.987000E+03	U 5.217960E+05	
POOR		264	2.257087E+06	4.723994E+06	0.00000	3.193800E+07	290742	5.958710E+08
BAD		264	1.969697E-01	3.984646E-01	0.00000	1.000000E+00	0	5.200000E+01
GOOD		264	5.681818E-02	2.319346E-01	0.00000	1.000000E+00	0	1.500000E+01
YINGHI		264	2.651515E-02	1.609666E-01	0.00000	1.000000E+00	0	7.000000E+00
RNGHI		264	1.046994E+00	1.857442E-01	0.71787	1.616373E+00	841504	2.764064E+02
PRNGHI		264	1.245164E+07	1.367283E+07	69925.58790	5.992178E+07	1692868505	3.487596E+12
LIYIELD		264	1.321059E+10	2.750586E+10	0.00000	1.534235E+11	0	4.841847E+01
BOLIVIA		264	1.834033E-01	2.628179E-01	-0.47956	1.364020E+00	0	2.200000E+01
BRMG		264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
BRMT		264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
BRPR		264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
BRRS		264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
BRSC		264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
BRSP		264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
SANTAFE		264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
CORDOBA		264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
BUENOS		264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
LAPAMPA		264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
URUGUAY		264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
PARAGUAY		264	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
CHILE		264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
EXTEN		264	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
MAREA		264	3.861340E+04	1.421426E+05	11.00000	6.384363E+05	8748	1.019394E+07
EXTENA		264	1.249140E+05	1.427685E+06	577.95409	4.320713E+06	87868	3.297730E+08
EXTA		264	7.213397E-02	2.296402E-01	0.00007	3.642667E+00	0	1.904337E+01
STRESA		264	2.434928E-01	7.779255E-01	0.00007	3.642667E+00	0	6.428210E+01
NYIELDA		264	2.177002E+06	4.167773E+06	0.00000	2.810550E+07	256509	5.747285E+08
LCRESEXP		264	1.061858E+00	1.771395E-01	0.68021	1.474940E+00	0	2.803304E+02
LSTRESA		264	1.165528E+01	4.725806E+00	0.00000	1.727931E+01	0	3.076995E+03
LNYIELDA		264	1.161093E+01	4.701210E+00	0.00000	1.715148E+01	0	3.065286E+03
LRNGHI		264	4.601694E-02	1.683400E-01	-0.38536	3.886171E-01	0	1.214847E+01
LPRNGHI		264	1.544179E+01	1.664769E+00	11.15519	1.790855E+01	0	4.076633E+03
LREXTA		264	7.901312E+00	1.130707E+01	0.00000	2.575648E+01	1	2.085946E+03
LRESEX		264	4.963406E+00	2.934031E+00	-9.63219	1.292716E+00	0-1	3.10339E+03
LSRNR		264	3.439202E+00	1.172219E+01	0.00000	5.954356E+01	1	9.079493E+02
LSRNRPR		264	1.754763E+08	2.078306E+08	0.00000	9.258241E+08	12791089	4.632574E+10
LSRRATIO		264	1.990693E+11	4.241767E+11	0.00000	2.651087E+12	26106270401	5.255429E+13
		264	7.907717E+03	1.822386E+04	0.00000	1.632703E+05	1122	2.087637E+06

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MEANS FOR WHEAT

10:09 TUESDAY, JUNE 27, 1989 40

VARIABLE	LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR		308	1.976500E+03	6.354613E+00	1966.0000	1.987000E+03	0	6.08/620E+05
CRESEXP		308	3.105757E+06	5.171321E+06	0.0000	3.193800E+07	294663	9.565731E+08
POOR		308	1.785714E-01	3.836163E-01	0.0000	1.000000E+00	0	5.500000E+01
BAD		308	2.922078E-02	1.686989E-01	0.0000	1.000000E+00	0	9.000000E+00
GOOD		308	2.922078E-02	1.686989E-01	0.0000	1.000000E+00	0	9.000000E+00
YINGHI		308	1.174462E+00	1.646656E-01	0.8926	1.712969E+00	0	3.617342E+02
RNGHI		308	1.932090E+07	2.011404E+07	123516.3120	8.221215E+07	1146104	5.953302E+09
PRNGHI		308	4.006835E+10	7.127805E+10	0.0000	3.725776E+11	4061443605	1.234105E+13
LIYIELD		308	1.325626E-01	2.507749E-01	-1.7093	8.562351E-01	0	4.082928E+01
BOLIVIA		308	7.142857E-02	2.579585E-01	0.0000	1.000000E+00	0	2.200000E+01
BRMG		308	7.142857E-02	2.579585E-01	0.0000	1.000000E+00	0	2.200000E+01
BRMT		308	7.142857E-02	2.579585E-01	0.0000	1.000000E+00	0	2.200000E+01
BRPR		308	7.142857E-02	2.579585E-01	0.0000	1.000000E+00	0	2.200000E+01
BRRS		308	7.142857E-02	2.579585E-01	0.0000	1.000000E+00	0	2.200000E+01
BRSC		308	7.142857E-02	2.579585E-01	0.0000	1.000000E+00	0	2.200000E+01
BRSP		308	7.142857E-02	2.579585E-01	0.0000	1.000000E+00	0	2.200000E+01
SANTAFE		308	7.142857E-02	2.579585E-01	0.0000	1.000000E+00	0	2.200000E+01
CORDOBA		308	7.142857E-02	2.579585E-01	0.0000	1.000000E+00	0	2.200000E+01
BUENOS		308	7.142857E-02	2.579585E-01	0.0000	1.000000E+00	0	2.200000E+01
LAPAMPA		308	7.142857E-02	2.579585E-01	0.0000	1.000000E+00	0	2.200000E+01
URUGUAY		308	7.142857E-02	2.579585E-01	0.0000	1.000000E+00	0	2.200000E+01
CHILE		308	7.142057E-02	2.579585E-01	0.0000	1.000000E+00	0	2.200000E+01
EXTEN		286	6.060782E+04	1.590756E+05	11.0000	6.384365E+05	9406	1.733384E+07
MAREA		286	1.199658E+06	1.382178E+06	577.9541	4.320713E+06	81730	3.431049E+08
EXTENA		308	1.000827E-01	2.495301E-01	0.0000	1.040762E+00	0	3.082547E+01
EXTA		308	3.401109E-01	8.493502E-01	0.0000	3.642667E+00	0	1.047542E+02
STRESA		308	2.550729E+06	4.477942E+06	0.0000	3.036900E+07	255154	7.856245E+08
NYIELDA		308	1.053036E+00	1.918450E-01	0.5791	1.457947E+00	0	3.243351E+02
LCRESEXP		308	1.138381E+01	5.638362E+00	0.0000	1.727931E+01	0	3.506214E+03
LSTRESA		308	1.222013E+01	4.381803E+00	0.0000	1.722893E+01	0	3.763801E+03
LNYIELDA		308	3.439796E-02	1.886361E-01	-0.5480	3.770292E-01	0	1.059457E+01
LRNGHI		308	1.594262E+01	1.563037E+00	11.7241	1.822481E+01	0	4.910327E+03
LPRNGHI		308	8.524278E+00	1.190642E+01	0.0000	2.664371E+01	1	2.625478E+03
LEXTA		308	5.009957E+00	3.533109E+00	-11.4980	1.292716E+00	0	1.543067E+03
LRESEX		308	5.006951E+00	1.300132E+01	0.0000	6.017506E+01	1	1.542141E+03
LRSRNX		308	2.568359E+08	3.041542E+08	0.0000	1.218519E+09	17330796	7.910545E+10
LRSRNP		308	5.845531E+11	1.103349E+12	0.0000	6.112239E+12	62869162293	1.800424E+14
LSRRATIO		308	1.616088E+04	3.094734E+04	0.0000	1.656718E+05	1763	4.977551E+06

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APPENDIX 1: GEO-CLIMATE REGIONS



- 1. TROPICAL**
- 1.1 Semi-hot equatorial. Ex. Jakarta, Indonesia
- 1.2 Semi-hot tropical. Ex. Rio de Janeiro, Brazil
- 1.3 Dry semi-hot tropical. Ex. Accra, Ghana
- 1.4 Hot tropical. Ex. Madras, India
- 1.5 Semiarid tropical. Ex. Niamey, Niger
- 1.6 Cool tropical. Ex. Hamilton, Bermuda
- 1.7 Humid tierra templada. Ex. San José, Costa Rica
- 1.8 Dry tierra templada. Ex. Tabora, Tanzania
- 1.9 Cool winter hot tropical. Ex. Calcutta, India
- 2. TIERRA FRIA**
- 2.1 Semi-tropical tierra fria. Ex. Bulawayo, Rhodesia
- 2.2 Low tierra fria. Ex. Tananarive, Madagascar
- 2.3 Medium tierra fria. Ex. Mexico City, Mexico
- 2.4. High tierra fria. Ex. La Paz, Bolivia
- 2.5 Low andine. Ex. Puno, Peru
- 2.6 High andine. Ex. Cerro de Pasco, Peru
- 2.7 Andine mist forest. Ex. Pango-rango, Indonesia
- 2.8 Andine tundra
- 2.9 Andine sub-glacial desert
- 3. DESERT**
- 3.1 Hot tropical desert. Ex. Massawa, Ethiopia
- 3.2 Hot subtropical desert. Ex. Cairo, U.A.R.
- 3.3 Semi-hot or cool tropical desert. Ex. Lima, Peru
- 3.4 Cool subtropical desert. Ex. Walvis Bay, S.W. Africa
- 3.5 Tropical highland desert. Ex. Las Anod, Somalia
- 3.7 Continental desert. Ex. Kashgar, China
- 3.8 Pampasean desert. Ex. Mendoza, Argentina
- 3.9 Patagonian desert. Ex. Col. Sar-miento, Argentina
- 4. SUBTROPICAL**
- 4.1 Humid subtropical. Ex. Porto Alegre, Brazil
- 4.2 Monsoon subtropical. Ex. Lahore, Pakistan
- 4.3 Hot semi-tropical. Ex. Asunción, Paraguay
- 4.4 Semi-hot semi-tropical. Ex. Miami, Fl., U.S.A.
- 4.5 Semi-mediterranean subtropical. Ex. Cherat, Pakistan
- 5. PAMPEAN**
- 5.1 Typical pampean. Ex. Nueve de Julio, Argentina
- 5.2 Highland pampean. Ex. Pigüé, Argentina
- 5.3 Subtropical pampean. Ex. Houston, Tex., U.S.A.
- 5.4 Marine pampean. Ex. Christchurch, N. Zealand
- 5.5 Monsoon peri-pampean. Ex. Córdoba, Argentina
- 5.7 Semiarid peri-pampean. Ex. San Angelo, Tex., U.S.A.
- 5.8 Patagonian grassland. Ex. Fairlie, N. Zealand
- 5.9 Semiarid patagonian. Ex. Lago Argentino, Argentina

- 6. MEDITERRANEAN**
- 6.1 Subtropical mediterranean. Ex. Sevilla, Spain
- 6.2 Marine mediterranean. Ex. San Francisco, Cal., U.S.A.
- 6.3 Cool marine mediterranean. Ex. Seattle, Wash., U.S.A.
- 6.4 Tropical mediterranean. Ex. Funchal, Madeira
- 6.5 Temperate mediterranean. Ex. Marseille, France
- 6.6 Cold temperate mediterranean. Ex. Erzurum, Turkey
- 6.7 Continental mediterranean. Ex. Thessaloniki, Greece
- 6.8 Subtropical semiarid mediterranean. Ex. Murcia, Spain
- 6.9 Continental semiarid mediterranean. Ex. Teheran, Iran
- 7. MARINE**
- 7.1 Warm marine. Ex. Auckland, N. Zealand
- 7.2 Cool marine. Ex. London, U.K.
- 7.3 Cold marine. Ex. Sitka, Alaska, U.S.A.
- 7.4 Polar marine. Ex. Heard Island
- 7.5 Warm temperate. Ex. Bordeaux, France
- 7.6 Cool temperate. Ex. Berlin, Germany
- 7.7 Cold temperate. Ex. Helsinki, Finland
- 7.8 Humid patagonian. Ex. Ushuaia, Argentina

MEANS FOR SOY

VARIABLE LABEL	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	SUM
YEAR	264	1.9/6500E+03	6.356333E+00	1966.00000	1.987000E+03	0	5.217960E+05
CRESEXP	264	2.736631E+06	4.851963E+06	0.00000	3.193800E+07	298618	7.224706E+08
POOR	264	1.742424E-01	3.800383E-01	0.00000	1.000000E+00	0	4.600000E+01
BAD	264	6.439394E-02	2.459196E-01	0.00000	1.000000E+00	0	1.700000E+01
GOOD	264	3.030303E-02	1.717454E-01	0.00000	1.000000E+00	0	8.000000E+00
YINGHI	264	9.757327E-01	2.542585E-01	0.50797	1.459763E+00	1124952	2.575934E+02
RNGHI	264	1.658457E+07	1.827831E+07	57227.72100	7.653429E+07	4164088121	4.378325E+09
PRNGHI	264	2.991818E+10	6.765842E+10	0.00000	3.421166E+11	0	7.898400E+12
LIYIELD	232	1.993929E-01	2.738140E-01	-0.89798	8.212559E-01	0	4.625915E+01
BOLIVIA	264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
BRMG	264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
BRMT	264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
BRPR	264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
BRRS	264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
BRSC	264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
BRSP	264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
SANTAFE	264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
CORDOBA	264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
BUENOS	264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
LAPAMPA	264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
URUGUAY	264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
PARAGUAY	264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
CHILE	264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
EXTEN	264	0.000000E+00	0.000000E+00	0.00000	0.000000E+00	0	0.000000E+00
EXTENA	264	8.333333E-02	2.769103E-01	0.00000	1.000000E+00	0	2.200000E+01
MAREA	242	4.212217E+04	1.479884E+05	11.00000	6.384365E+05	9513	1.019357E+07
EXTA	242	1.362646E+06	1.438439E+06	1587.96500	4.320713E+06	92466	3.297502E+08
STRESA	264	6.968959E-02	2.302334E-01	0.00000	1.040762E+00	0	1.839805E+01
NYIE' DA	264	2.379740E-01	7.843869E-01	0.00001	3.642667E+00	0	6.282512E+01
LCRESEXP	264	2.263846E+06	4.316027E+06	0.00000	2.958450E+07	265633	5.976553E+08
LSTRESA	264	1.038862E+00	1.920913E-01	0.00000	1.517063E+00	0	2.742595E+02
LNYIELDA	264	1.195442E+01	4.906592E+00	0.00000	1.727931E+01	0	3.155968E+03
LRNGHI	264	1.231065E+01	3.967015E+00	0.00000	1.720276E+01	0	3.250011E+03
LPRNGHI	264	2.009504E-02	1.937588E-01	-0.67734	4.121508E-01	0	5.305091E+00
LEXTA	264	1.558971E+01	1.855432E+00	10.95479	1.815325E+01	1	4.115683E+03
LRESEX	264	8.126180E+00	1.156033E+01	-11.49804	2.655842E+01	1	2.145311E+03
LSRNR	264	5.708835E+00	3.309358E+00	0.00000	1.292716E+00	0	1.507132E+03
LSRNRPR	264	3.454668E+00	1.187175E+01	0.00000	5.997295E+01	1	9.120325E+02
LSRRATIO	264	2.407608E+08	2.762862E+08	0.00000	1.083712E+09	17004241	6.356085E+10
	264	4.574162E+11	1.051719E+12	0.00000	5.811838E+12	64728839088	1.207579E+14
	264	1.468520E+04	3.764483E+04	0.00000	2.422052E+05	2317	3.929693E+06

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**PROGRAMA COOPERATIVO DE
INVESTIGACION AGRICOLA DEL CONO SUR**

ATN/TF-2434-RE

PROCISUR

**Sede: Andes 1365, Piso 8
(Casilla de Correo 1217)**

Teléfonos: 92 04 24 - 92 01 60

Telex: 22571 IICA UY

Fax: 005982921318

Montevideo, Uruguay

