## User's Profile

## 13t Survey - 2009

## $1^{\text {st }}$ Survey about the User's Profile from the CPTEC



User's Profile
1st Survey - 2009

## Goal

Raising of indicators about:
$>$ The services and products from CPTEC and its applicabilities.
$>$ The user's profile from the CPTEC.

## Justification

The CPTEC doesn't know the profile, the needs and expectations from its users.

The Ministry of Science and Technology itself - MCT (2001) indicates the need for knowledge about the user's profile of services in order to improve the quality of them.

## Benefits

Support the CPTEC management, always focusing on the users, on planning and on the taking of decisions, looking for economical and financial resources, on definitions of strategies, on revision of the current services and products, and on the creation of others.

## Made by: CG / CPTEC / INPE

Coordination: Luiz Augusto Toledo Machado
Responsible for the Survey: Luiz Tadeu da Silva
Work Field: from 11/24/2009 to 02/28/2010
Survey Forms: Eletronic and printed forms on Portuguese, English and Spanish versions.

## Greatfulness

## Development

Felipe Odorizi de Mello Ana Paula Teixeira Tavares Bianca Antunes S. R. Alves José Alberto da Silva Ferreira José da Silva Azevedo Neto Luciana Maria de Castro Mira
Marcos Ribeiro de Araújo
Pedro Henrique de Souza Gonçalves Sávio Carvalho

## Translation

Bruno Evangelista Moraes
Daniel Andres Rodriguez
Luiz Tadeu da Silva

## Collaborators

Carlos Frederico de Angelis
Célia Joseli do Nascimento (MCT)
Claudinei de Camargo
Eliana Maria Kalil Mello (OBT/INPE)
Éricka dos Santos Baptista Gonçalves
Evair Sérgio da Silva
Flávio de Carvalho Magina
José Luiz Moreira
Laís Caroline de Sousa Queiroz Silva
Lívia Regina Gonçalves Teixeira
Marcos Paulo Salgueiro de Moraes
Mirian Caetano
Paulo Augusto Sobral Escada
Roberto Carlos Duarte de Freitas
Wanderley Oliveira Mendes
William Escobar Lino

## Precision adopted for exhibition of percentages

On frames and grafics, one decimal fraction.
Such precision may cause the addition of percentages different from 100\% for a same variable.

## Data displayed in graphs

The six first data will be normally identified and its exhibition will be in descending order.
The others will be added, identified and shown as "Others".
When abroad appears, the data will be added and shown as "Abroad".

Sample error and trustworthiness level
Sample error calculated: $1.6 \%$ for more or less.
Trustworthiness level about the results of the survey: $95.5 \%$.

## User's Profile

$1^{\text {st }}$ Survey - 2009

## Results



## Initial Sample

## Total 3354



## Efective sample

## 2791

$$
\begin{gathered}
2742 \\
98.2 \%
\end{gathered}
$$

## Universe and efective sample



## User's Profile

1t Survey - 2009

## Characterization of the users



No. of participants: Brazil and Abroad


## No. of Participants per Countries

| Countries | Number of Participants |  |  |  | Total | $\%$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | IF | $\%$ | CF | $\%$ |  |  |
| Brazil | 2656 | 96.9 | 45 | 91.8 | 2701 | 96.8 |
| Uruguay | 30 | 1.1 | 2 | 4.1 | 32 | 1.1 |
| Argentina | 22 | 0.8 |  | 0.0 | 22 | 0.8 |
| Peru | 13 | 0.5 |  | 0.0 | 13 | 0.5 |
| Bolivia | 4 | 0.1 |  | 0.0 | 4 | 0.1 |
| United States | 3 | 0.1 | 1 | 2.0 | 4 | 0.1 |
| Chile | 2 | 0.1 |  | 0.0 | 2 | 0.1 |
| Colombia | 2 | 0.1 |  | 0.0 | 2 | 0.1 |
| Equator | 2 | 0.1 |  | 0.0 | 2 | 0.1 |
| Venezuela | 2 | 0.1 |  | 0.0 | 2 | 0.1 |
| Cape Verde | 1 | 0.0 |  | 0.0 | 1 | 0.0 |
| Costa Rica | 1 | 0.0 |  | 0.0 | 1 | 0.0 |
| Cuba | 1 | 0.0 |  | 0.0 | 1 | 0.0 |
| Denmark | 1 | 0.0 |  | 0.0 | 1 | 0.0 |
| Spain | 1 | 0.0 |  | 0.0 | 1 | 0.0 |
| Mozambique |  | 0.0 | 1 | 2.0 | 1 | 0.0 |
| Paraguay | 1 | 0.0 |  | 0.0 | 1 | 0.0 |
| Total | 2742 | 100 | 49 | 100 | 2791 | 100 |

## User's Profile

1tt Survey - 2009

## Individual Forms: 2742



## No. of individual forms per states

 and abroad

## No. of Individual Forms per Gender, States and Abroad <br> (27 states)

| States | Number of Participants |  |  |  | Total | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female | \% | Male | \% |  |  |
| SP | 212 | 38.7 | 656 | 29.9 | 868 | 31.7 |
| RJ | 73 | 13.3 | 249 | 11.3 | 322 | 11.7 |
| RS | 40 | 7.3 | 241 | 11.0 | 281 | 10.2 |
| MG | 46 | 8.4 | 208 | 9.5 | 254 | 9.3 |
| PR | 38 | 6.9 | 165 | 7.5 | 203 | 7.4 |
| SC | 39 | 7.1 | 142 | 6.5 | 181 | 6.6 |
| BA | 12 | 2.2 | 87 | 4.0 | 99 | 3.6 |
| ES | 10 | 1.8 | 44 | 2.0 | 54 | 2.0 |
| DF | 6 | 1.1 | 44 | 2.0 | 50 | 1.8 |
| GO | 6 | 1.1 | 40 | 1.8 | 46 | 1.7 |
| PE | 10 | 1.8 | 26 | 1.2 | 36 | 1.3 |
| MS | 5 | 0.9 | 30 | 1.4 | 35 | 1.3 |
| MT | 6 | 1.1 | 29 | 1.3 | 35 | 1.3 |
| CE | 4 | 0.7 | 28 | 1.3 | 32 | 1.2 |
| PB | 4 | 0.7 | 19 | 0.9 | 23 | 0.8 |
| PA | 3 | 0.5 | 19 | 0.9 | 22 | 0.8 |
| AC | 5 | 0.9 | 15 | 0.7 | 20 | 0.7 |
| MA | 3 | 0.5 | 17 | 0.8 | 20 | 0.7 |
| RN | 3 | 0.5 | 13 | 0.6 | 16 | 0.6 |
| AL | 3 | 0.5 | 10 | 0.5 | 13 | 0.5 |
| SE | 2 | 0.4 | 10 | 0.5 | 12 | 0.4 |
| AM | 4 | 0.7 | 7 | 0.3 | 11 | 0.4 |
| RO | 2 | 0.4 | 6 | 0.3 | 8 | 0.3 |
| TO |  | 0.0 | 7 | 0.3 | 7 | 0.3 |
| PI |  | 0.0 | 6 | 0.3 | 6 | 0.2 |
| AP |  | 0.0 | 1 | 0.0 | 1 | 0.0 |
| RR |  | 0.0 | 1 | 0.0 | 1 | 0.0 |
| Total Brazil | 536 | 97.8 | 2120 | 96.6 | 2656 | 96.9 |
| Total Abroad | 12 | 2.2 | 74 | 3.4 | 86 | 3.1 |
| Total | 548 | 100 | 2194 | 100 | 2742 | 100 |
|  |  | 20.0 |  | 80.0 |  |  |

## No. of individual forms per regions and abroad



## No. of participants of individual forms per gender

## No. of participants of individual forms according to the average of age

| Categories | Number of <br> Participants | $\%$ | Average of age in <br> years |
| :---: | :---: | :---: | :---: |
| Born until 1950 | 164 | 6.0 | 64 |
| from 1951 to 1970 | 1150 | 41.9 | 48 |
| from 1971 to 1996 | 1428 | 52.1 | 30 |
| Total | 2742 | 100 | 40 |

## No. of participants of individual forms per age

## Iotal <br> 2742

## from 1971 to <br> 1996 <br> 1428 <br> 52.1 \%

Born until 1950
164
6.0\%

## No. of participants of individual forms per occupations



## No. of

 Individual Forms per Ocupations (171 types)| Categories | Number of <br> Participants | $\%$ |
| :--- | :---: | :---: |
| Agriculturist Engineer/Agronomist | 198 | 7.2 |
| Government Employee | 160 | 5.8 |
| Geographer | 150 | 5.5 |
| Administrator | 132 | 4.8 |
| Student | 124 | 4.5 |
| Meteorologist | 121 | 4.4 |
| Mechanical Engineer | 106 | 3.9 |
| Civil Enginner | 101 | 3.7 |
| Biologist | 101 | 3.7 |
| Professor | 95 | 3.5 |
| Entrepreneur | 92 | 3.4 |
| Military | 77 | 2.8 |
| Software Analyst/ Software | 68 | 2.5 |
| Electrical Engineer / Electronic / Telecommunicatio | 63 | 2.3 |
| Agriculturist/Agricultural Producer | 58 | 2.1 |
| Doctor | 53 | 1.9 |
| Lawyer | 43 | 1.6 |
| Technician | 33 | 1.2 |
| Technician in Eletroeletronic /Eletronics /Eletrotechnician / Telecomm | 33 | 1.2 |
| Physicist | 32 | 1.2 |
| Arquitect | 29 | 1.1 |
| Chemical Engineer | 27 | 1.0 |
| Jornalist | 26 | 0.9 |
| Bank Clerk | 26 | 0.9 |
| Economist | 25 | 0.9 |
| Consultant | 25 | 0.9 |
| Industrial worker | 23 | 0.8 |
| Airplane Pilot - Commercial | 22 | 0.8 |
| Assistant/Administrative Assistant | 677 | 0.8 |
| Others | 24.7 |  |
|  | 2742 | 100 |

## No. of individual forms per position <br> (150 types)

Others
1684

Administrador /
Manager / Leader
278


Scale deformation
( $n / 4$ )

| Categories | Number of Participants | \% |
| :---: | :---: | :---: |
| Administrator / Manager / Leader | 278 | 10.1 |
| Engineer | 235 | 8.6 |
| Director | 147 | 5.4 |
| Chief / Controller / Coordinator / Supervisor | 134 | 4.9 |
| Technical | 133 | 4.9 |
| Analyst | 131 | 4.8 |
| Teacher | 125 | 4.6 |
| Advisor / Consultant / Specialist | 121 | 4.4 |
| Student | 117 | 4.3 |
| Assistant / Helper | 107 | 3.9 |
| Entrepreneur / Owner Partner | 100 | 3.6 |
| Autonomous | 100 | 3.6 |
| Geographer | 78 | 2.8 |
| Scientist / Researcher | 63 | 2.3 |
| Weatherman | 61 | 2.2 |
| Biologist | 60 | 2.2 |
| Trainee | 52 | 1.9 |
| Retired | 51 | 1.9 |
| Doctor | 38 | 1.4 |
| Farmer / Cattle Raiser / Rural Producer | 27 | 1.0 |
| Agent / Auditor / Tax | 27 | 1.0 |
| Physical | 24 | 0.9 |
| Seller | 22 | 0.8 |
| Lawyer | 22 | 0.8 |
| Commander | 21 | 0.8 |
| Fellow | 19 | 0.7 |
| Secretary | 17 | 0.6 |
| Architect | 17 | 0.6 |
| Operator | 16 | 0.6 |
| Others | 399 | 14.6 |
| Total | 2742 | 100 |



## No. of

 Organization Forms per Academic Formation (166 types)| Categories | Number of Participants | \% |
| :---: | :---: | :---: |
| Administration | 256 | 9.3 |
| Agricultural Engineering / Agronomy | 226 | 8.2 |
| Technical | 207 | 7.5 |
| Geography | 178 | 6.5 |
| Meteorologia | 133 | 4.9 |
| Mechanical Engineering | 132 | 4.8 |
| Life Sciences | 121 | 4.4 |
| Civil Engineering | 119 | 4.3 |
| Systems Analysis / Computer Science / Computer / Proc. Data / IT | 94 | 3.4 |
| Law | 92 | 3.4 |
| Electrical Engineering / Electronics / Telecommunications | 81 | 3.0 |
| Biomedical Science / Medicine | 56 | 2.0 |
| Sanitary Engineering / Environmental | 44 | 1.6 |
| Agricultural Technical / Agriculture / Farming | 42 | 1.5 |
| Economics | 41 | 1.5 |
| Chemical Engineering | 39 | 1.4 |
| Accounting Sciences | 38 | 1.4 |
| Physics | 38 | 1.4 |
| Electrical / Electronic Technician / Electronics / Electrical / Telecomm | 33 | 1.2 |
| Pedagogy | 31 | 1.1 |
| Architecture and Urbanism | 30 | 1.1 |
| History | 27 | 1.0 |
| Media | 27 | 1.0 |
| Mathematics | 25 | 0.9 |
| Oceanography | 23 | 0.8 |
| Tourism | 22 | 0.8 |
| Forestry | 21 | 0.8 |
| Technical Administration | 21 | 0.8 |
| Physical Education | 19 | 0.7 |
| Others | 526 | 19.2 |
| Total | 2742 | 100 |

## No. of individual forms per schoolarity



## User's Profile

1st Survey - 2009

## Companies: 49



## No. of company forms per states and abroad

|  | States | Number of Participants | \% |
| :---: | :---: | :---: | :---: |
|  | SP | 16 | 32.7 |
|  | RS | 6 | 12.2 |
|  | RJ | 5 | 10.2 |
| 10\% | MG | 5 | 10.2 |
|  | PR | 3 | 6.1 |
|  | GO | 3 | 6.1 |
| FOTHIS DEM | SC | 2 | 4.1 |
|  | MS | 2 | 4.1 |
|  | RO | 1 | 2.0 |
|  | PE | 1 | 2.0 |
| (11 States) | ES | 1 | 2.0 |
|  | Total Brazil | 45 | 91.8 |
|  | Total Abroad | 4 | 8.2 |
|  | Total | 49 | 100 |

No. of company forms per regions and abroad

$$
\begin{aligned}
& \text { South } \\
& 11 \\
& 22.4 \%
\end{aligned}
$$

Total
49

Northeast
1
$2.0 \%$

North
1
2.0\% average in years of establishment

| Categories | Number of <br> Participants | $\%$ | Average of age <br> in years |
| :---: | :---: | :---: | :---: |
| Established until 1950 | 5 | 10.2 | 74 |
| from 1951 to 1970 | 4 | 8.2 | 47 |
| from 1971 to 2006 | 40 | 81.6 | 14 |
| Total | 49 | 100 | 23 |

## No. of company forms per position of the

 survey's respondents

No. of company forms per position of the respondents

| Categories | Number of <br> Participants | $\%$ |
| :--- | :---: | :---: |
| Entrepreneur/ Owner Partner | 14 | 28.6 |
| Director/CEO | 11 | 22.4 |
| Administrator / Manager / Leader | 9 | 18.4 |
| Chief/Controller / Coordinator / Supervisor | 5 | 10.2 |
| Engineer | 3 | 6.1 |
| Meteorologist | 2 | 4.1 |
| Superintendent | 1 | 2.0 |
| Pilot | 1 | 2.0 |
| Instructor | 1 | 2.0 |
| Scientist/Researcher | 1 | 2.0 |
| Communication Advisor | 1 | 2.0 |
|  | 49 | 100 |

## No. of company forms per type of company



## No. of company forms by the sector of the company



## User's Profile

1tt Survey - 2009

# Indicators of Management 



## Economic activities developed by participants



Note: In this question occurred the possibility of multiple indications, so there's the possibility about the number of indications being bigger than the participants.

## Economic activities developed by participants

| Categories | Indication of the Participants |  |  |  | Total | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | IF | \% | CF | \% |  |  |
| Meteorology | 952 | 10.5 | 13 | 8.4 | 965 | 10.4 |
| Tourism \& Entertainment | 881 | 9.7 | 8 | 5.2 | 889 | 9.6 |
| Agriculture | 724 | 8.0 | 20 | 12.9 | 744 | 8.0 |
| Education | 664 | 7.3 | 5 | 3.2 | 669 | 7.2 |
| Information and Communication | 571 | 6.3 | 6 | 3.9 | 577 | 6.2 |
| Sports | 563 | 6.2 | 6 | 3.9 | 569 | 6.1 |
| Natural Disasters | 514 | 5.6 | 9 | 5.8 | 523 | 5.6 |
| Air Transport and Inland Navigational | 449 | 4.9 | 12 | 7.7 | 461 | 5.0 |
| Hydrology | 389 | 4.3 | 7 | 4.5 | 396 | 4.3 |
| Remote Sensing | 367 | 4.0 | 5 | 3.2 | 372 | 4.0 |
| Livestock/Fish | 355 | 3.9 | 10 | 6.5 | 365 | 3.9 |
| Commercial | 325 | 3.6 | 10 | 6.5 | 335 | 3.6 |
| Building | 294 | 3.2 | 6 | 3.9 | 300 | 3.2 |
| Energy | 293 | 3.2 | 6 | 3.9 | 299 | 3.2 |
| Health | 292 | 3.2 | 2 | 1.3 | 294 | 3.2 |
| Reforestation | 284 | 3.1 | 6 | 3.9 | 290 | 3.1 |
| Oceanography | 214 | 2.4 | 1 | 0.6 | 215 | 2.3 |
| Industrial | 190 | 2.1 | 8 | 5.2 | 198 | 2.1 |
| Surveillance / Justice / Forensic | 149 | 1.6 | 1 | 0.6 | 150 | 1.6 |
| Military | 96 | 1.1 | 1 | 0.6 | 97 | 1.0 |
| Real Estate | 65 | 0.7 | 1 | 0.6 | 66 | 0.7 |
| Others | 475 | 5.2 | 12 | 7.7 | 487 | 5.3 |
| Total | 9106 | 100 | 155 | 100 | 9261 | 100 |

Note: In this question occurred the possibility of multiple indications, so there's the possibility about the number of indications being bigger than the participants.

Does the easy access to the products and services from the CPTEC, incentivized the improvement of infrastructure ${ }^{1 ?}$

## Total <br> 2791



1 - Acquisition of computers, software's, hardware's, etc.

Did the use of products and services from the CPTEC generated money savings?


Total 2791

Estimated savings in 2009 generated by the participants by the use of the products and services from the CPTEC.


Estimated savings in 2009 generated by the participants by the use of the products and services from the CPTEC.

World

| Categories | Number of Participants |  |  |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | IF | \% | CF | \% | IF and CF | \% |
| US\$ 500 to US\$ $\mathbf{2 5 , 0 0 0}$ | 546 | 19.9 | 19 | 38.8 | 565 | 20.2 |
| Not Applicable | 2011 | 73.3 | 25 | 51.0 | 2036 | 72.9 |
| US\$ 25,001 to US\$ 50,000 | 111 | 4.0 | 2 | 4.1 | 113 | 4.0 |
| US\$ 50,001 to US\$ 100,000 | 36 | 1.3 |  | 0.0 | 36 | 1.3 |
| More than US\$ 200,000 | 22 | 0.8 | 3 | 6.1 | 25 | 0.9 |
| US\$ 100,001 to US\$ 200,000 | 16 | 0.6 |  | 0.0 | 16 | 0.6 |
| Total | 2742 | 100 | 49 | 100 | 2791 | 100 |


| Average in US\$ / Categories | No. of IF + CF | Estimation of Average of Economy in US\$ |  |
| :---: | :---: | :---: | :---: |
|  |  | Annual | Monthly |
| 12,500 | 565 | 7,062,500 | 588,541.67 |
| Not Apllicable | 2036 | 0 | 0,00 |
| 37,500 | 113 | 4,237,500 | 353,125.00 |
| 75,000 | 36 | 2,700,000 | 225,000.00 |
| 200,000 | 25 | 5,000,000 | 416,666.67 |
| 150,000 | 16 | 2,400,000 | 200,000.00 |
| Total | 2791 | 21,400,000 | 1,783,333.34 |
| Average per Participant ( $2791-2036=755$ ) |  | 28,344.37 | 2,362.03 |

Estimated savings in 2009 generated by the participants by the use of the products and services from the CPTEC.

Brazil

| Categories | Number of Participants |  |  |  | Total | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | IF | \% | OF | \% |  |  |
| US\$ 500 to US\$ 25,000 | 534 | 74.7 | 19 | 82.6 | 553 | 74.9 |
| Not Applicable | 1941 | 73.1 | 22 | 48.9 | 1963 | 72.7 |
| US\$ 25,001 to US\$ 50,000 | 107 | 15.0 | 1 | 4.3 | 108 | 14.6 |
| US\$ 50,001 to US\$ 100,000 | 36 | 5.0 |  | 0.0 | 36 | 4.9 |
| More than US\$ 200,000 | 22 | 3.1 | 3 | 13.0 | 25 | 3.4 |
| US\$ 100,001 to US\$ 200,000 | 16 | 2.2 |  | 0.0 | 16 | 2.2 |
| Total | 2656 | 100 | 45 | 100 | 2701 | 100 |


| Average in US\$ / Categories | No. of IF + CF | Estimation of Average of Economy in US\$ |  |
| :---: | :---: | :---: | :---: |
|  |  | Annual | Monthly |
| 12,500 | 553 | 6,912,500 | 576,041.67 |
| Not Applicable | 1963 | 0,00 | 0,00 |
| 37,500 | 108 | 4,050,000 | 337,500.00 |
| 75,000 | 36 | 2,700,000 | 225,000.00 |
| 200,000 | 25 | 5,000,000 | 416,666.67 |
| 150,000 | 16 | 2,400,000 | 200,000.00 |
| Total | 2701 | 21,062,500.00 | 1,755,208.34 |
| Average per Participant ( $2701-1963=738$ ) |  | 28,539.97 | 2,378.33 |

By the use of the products and services from the CPTEC did the participants hire new people?


By the use of the products and services from the CPTEC did the participants hire new people?

## World

| Categories | Number of Participants |  | Total | \% | Types of Hiring |  |  |  |  |  | Total of Contracts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Fellowships |  | Hired |  | Third Party Contractor |  |  |  |
|  | IF | CF |  |  | IF | CF | IF | CF | IF | CF | IF | CF |
| No | 680 | 23 |  | 703 | 25.2 | - | - | - | - | - | - | - | - |
| Not Applicable | 2015 | 24 | 2039 | 73.1 | - | - | - | - | - | - | - | - |
| Yes | 47 | 2 | 49 | 1.7 | 40 | 5 | 94 | 1 | 104 | 1 | 238 | 7 |
| Total | 2742 | 49 | 2791 | 100 | 45 |  | 95 |  | 105 |  | 245 |  |
|  | 2791 |  |  |  |  |  |  |  |  |  |  |  |

By the use of the products and services from the CPTEC did the participants hire new people?

## Brazil

| Categories | Number of Participants |  | Total | \% | Types of Hiring |  |  |  |  |  | Total of Contracts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Fellowships |  |  |  |  | arty <br> ctor |  |  |
|  | IF | CF |  |  | IF | CF | IF | CF | IF | CF | IF | CF |
| No | 653 | 21 |  | 674 | 25.2 | - | - | - | - | - | - | - | - |
| Not Applicable | 1959 | 22 | 1981 | 73.1 | - | - | - | - | - | - | - | - |
| Yes | 44 | 2 | 46 | 1.7 | 39 | 5 | 91 | 1 | 104 | 1 | 234 | 7 |
| Total | 2656 | 45 | 2701 | 100 | 44 |  | 92 |  | 105 |  | 241 |  |
|  | 2701 |  |  |  |  |  |  |  |  |  |  |  |

Does the respondents has the interest in participating in courses or seminars offered by the CPTEC / INPE?


Suggestions of the participants about the courses and seminars which the CPTEC could perform


## 972 indications

 for 45 dififerent coursesMeteorological and Environmental
Satellites: Analisys and Interpretation of Images 95

Meteorology Applied to
Agriculture 59


Note: In this question occurred the possibility of multiple indications, so there's the possibility about the number of indications being bigger than the participants.

## Suggestions of the participants about the courses and seminars which the CPTEC could perform

| Courses and Seminars | No. of Indications |  |
| :---: | :---: | :---: |
|  | Total | \% |
| Basic Meteorology for Municipal Agents, Educators and Laypeople | 144 | 14.8 |
| Meteorological and Environmental Satellites: Analisys and Interpretation of Images | 95 | 9.8 |
| Weather Forecast for Educators and Laypeople | 67 | 6.9 |
| Meteorology applied to agriculture | 59 | 6.1 |
| Climate Changes and its Environmental Impacts | 58 | 6.0 |
| Database: Access, Analisys and Interpretation | 52 | 5.3 |
| Applied Meteorology to Aviation and Navegation | 48 | 4.9 |
| Climate for Municipal Agents, Educators and Laypeople | 28 | 2.9 |
| Numerical Modeling | 27 | 2.8 |
| Geoprocessing | 24 | 2.5 |
| Winds and Storms | 22 | 2.3 |
| Using and Interpretation of the Information provided by the CPTEC | 18 | 1.9 |
| Numerical Prediction: Analisys and interpretation of the data | 15 | 1.5 |
| Meteorology and the Actions of the Civil Defense | 15 | 1.5 |
| Hydrometeorology | 14 | 1.4 |


| Courses and Seminars | No. of Indications |  |
| :---: | :---: | :---: |
|  | Total | \% |
| Energy: Wind / Renewables | 13 | 1.3 |
| Ocean Forecast: Analisys and interpretation of the data | 13 | 1.3 |
| Brazilian Regions Climate | 11 | 1.1 |
| Natural Disasters | 11 | 1.1 |
| Environmental Education | 11 | 1.1 |
| Setup and Operation of Meteorological Station | 10 | 1.0 |
| Air Quality | 10 | 1.0 |
| Climate and Agriculture: How the weather forecast can help the country side man | 10 | 1.0 |
| Meteorology and the Environment | 6 | 0.6 |
| Sinotic Meteorology | 6 | 0.6 |
| Meteograms: Analysis and Interpretation of the data | 5 | 0.5 |
| Weather Changes and its impacts in Agriculture and Livestock | 5 | 0.5 |
| Grads | 5 | 0.5 |
| Radar: Analysis and Interpretation of Images | 4 | 0.4 |
| Burns | 4 | 0.4 |


| Courses and Seminars | No. of Indications |  |
| :--- | :---: | :---: |
|  | Total | $\%$ |
| Basic Meteorology for media <br> professionals | 4 | 0.4 |
| Climate: analysis and interpretation of <br> data | 3 | 0.3 |
| Climate and Meteorology: Evaluation of <br> environmental impacts | 3 | 0.3 |
| Weather and Health | 3 | 0.3 |
| Astronomy | 3 | 0.3 |
| Meteorology applied to various areas | 3 | 0.3 |
| Climate X Bussiness | 2 | 0.2 |
| Climate X Health | 2 | 0.2 |
| Weather: forecasting and the degree of <br> reliability | 2 | 0.2 |
| UV Radiation | 131 | 13.5 |
| WempAK | 1 | 0.2 |
| Geostatistics | 1 | 0.1 |
| Conservation of Water Resources and Tourism | 1 | 0.1 |
| Warious | 1 | 3 |


| Total of Indications | 972 | 100 |
| :--- | :--- | :--- |

Note: In this question occurred the possibility of multiple indications, so there's the possibility about the number of indications being bigger than the participants.

User's Profile<br>1t Survey - 2009

# Indicators of the Products and Services from the CPTEC 



## How did the participants know about the products and services

 provided by the CPTEC/INPE?

How did the participants know about the products and services provided by the CPTEC/INPE?

| Categories | Number of Participants |  |  | Total |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | IF | $\%$ | CF | $\%$ | IF and CF | $\%$ |
| INPE's Sites | 611 | 22.3 | 10 | 20.4 | 621 | 22.3 |
| Search Sites | 533 | 19.4 | 5 | 10.2 | 538 | 19.3 |
| Professionals Related to the Area | 465 | 17.0 | 15 | 30.6 | 480 | 17.2 |
| Friends | 412 | 15.0 | 4 | 8.2 | 416 | 14.9 |
| Newspapers, Radio, Magazine and <br> Television | 361 | 13.2 | 5 | 10.2 | 366 | 13.1 |
| Others | 146 | 5.3 | 5 | 10.2 | 151 | 5.4 |
| Congresses, Symposiuns and <br> Seminars | 123 | 4.5 | 4 | 8.2 | 127 | 4.6 |
| Other Sites | 62 | 2.3 | 1 | 2.0 | 63 | 2.3 |
| Events INPE | 29 | 1.1 |  | 0.0 | 29 | 1.0 |
|  | 2742 | 100 | 49 | 100 | 2791 | 100 |

## Evaluation of importance of the products and services from the

 CPTEC to the participants of the Survey?Observed Database


Evaluation of importance of the products and services from the CPTEC to the participants of the Survey?

## Observed Database

| Categories | IF | CF | Total | $\%$ |
| :---: | :---: | :---: | :---: | :---: |
| 0 to $30 \%$ | 616 | 10 | 626 | 22.4 |
| $31 \%$ to $60 \%$ | 572 | 10 | 582 | 20.9 |
| $61 \%$ to $100 \%$ | 779 | 12 | 791 | 28.3 |
| Does not use | 775 | 17 | 792 | 28.4 |
| Total | 2742 | 49 | 2791 | 100 |

## Evaluation of importance of the products and services from the

 CPTEC to the participants of the Survey?Climate


Evaluation of importance of the products and services from the CPTEC to the participants of the Survey?

## Climate

| Categories | IF | CF | Total | $\%$ |
| :---: | :---: | :---: | :---: | :---: |
| 0 to $30 \%$ | 233 | 3 | 236 | 8.5 |
| $31 \%$ to $60 \%$ | 543 | 7 | 550 | 19.7 |
| $61 \%$ to $100 \%$ | 1629 | 35 | 1664 | 59.6 |
| Does not use | 2742 | 4 | 341 | 12.2 |
| Total | 49 | 2791 | 100 |  |

## Evaluation of importance of the products and services from the

 CPTEC to the participants of the Survey?
## Education



Evaluation of importance of the products and services from the CPTEC to the participants of the Survey?

## Education

| Categories | IF | CF | Total | $\%$ |
| :---: | :---: | :---: | :---: | :---: |
| 0 to $30 \%$ | 754 | 14 | 768 | 27.5 |
| $31 \%$ to $60 \%$ | 535 | 11 | 546 | 19.6 |
| $61 \%$ to $100 \%$ | 536 | 2 | 538 | 19.3 |
| Does not use | 917 | 22 | 939 | 33.6 |
| Total | 2742 | 49 | 2791 | 100 |

## Evaluation of importance of the products and services from the

 CPTEC to the participants of the Survey?
## Energy



Evaluation of importance of the products and services from the CPTEC to the participants of the Survey?

## Energy

| Categories | IF | CF | Total | $\%$ |
| :---: | :---: | :---: | :---: | :---: |
| 0 to $30 \%$ | 889 | 13 | 902 | 32.3 |
| $31 \%$ to $60 \%$ | 452 | 7 | 459 | 16.4 |
| $61 \%$ to $100 \%$ | 360 | 6 | 366 | 13.1 |
| Does not use | 1041 | 2742 | 49 | 2791 |
| Total |  |  | 38.1 |  |

## Evaluation of importance of the products and services from the

 CPTEC to the participants of the Survey?
## Ocean Waves



Evaluation of importance of the products and services from the CPTEC to the participants of the Survey?

## Ocean Waves

| Categories | IF | CF | Total | $\%$ |
| :---: | :---: | :---: | :---: | :---: |
| 0 to $30 \%$ | 909 | 16 | 925 | 33.1 |
| $31 \%$ to $60 \%$ | 397 | 6 | 403 | 14.4 |
| $61 \%$ to $100 \%$ | 461 | 3 | 464 | 16.6 |
| Does not use | 975 | 24 | 999 | 35.8 |
| Total | 2742 | 2791 | 100 |  |

## Evaluation of importance of the products and services from the

 CPTEC to the participants of the Survey?
## Weather Forecast



Evaluation of importance of the products and services from the CPTEC to the participants of the Survey?

Weather Forecast

| Categories | IF | CF | Total | $\%$ |
| :--- | :---: | :---: | :---: | :---: |
| 0 to $30 \%$ | 120 | 1 | 121 | 4.3 |
| $31 \%$ to $60 \%$ | 342 | 6 | 348 | 12.5 |
| $61 \%$ to $100 \%$ | 2079 | 40 | 2119 | 75.9 |
| Does not use | 201 | 2 | 203 | 7.3 |
| Total | 2742 | 49 | 2791 | 100 |

## Evaluation of importance of the products and services from the

 CPTEC to the participants of the Survey?Numerical Prediction


Evaluation of importance of the products and services from the CPTEC to the participants of the Survey?

## Numerical Prediction

| Categories | IF | CF | Total | $\%$ |
| :--- | :---: | :---: | :---: | :---: |
| 0 to $30 \%$ | 445 | 4 | 449 | 16.1 |
| $31 \%$ to $60 \%$ | 439 | 7 | 446 | 16.0 |
| $61 \%$ to $100 \%$ | 1141 | 27 | 1168 | 41.8 |
| Does not use | 717 | 11 | 728 | 26.1 |
| Total | 2742 | 49 | 2791 | 100 |

## Evaluation of importance of the products and services from the

 CPTEC to the participants of the Survey?Air Quality


Evaluation of importance of the products and services from the CPTEC to the participants of the Survey?

## Air Quality

| Categories | IF | CF | Total | $\%$ |
| :---: | :---: | :---: | :---: | :---: |
| 0 to $30 \%$ | 681 | 11 | 692 | 24.8 |
| $31 \%$ to $60 \%$ | 526 | 6 | 532 | 19.1 |
| $61 \%$ to $100 \%$ | 607 | 8 | 615 | 22.0 |
| Does not use | 928 | 24 | 952 | 34.1 |
| Total | 2742 | 49 | 2791 | 100 |

## Evaluation of importance of the products and services from the

 CPTEC to the participants of the Survey?Meteorological and Environmental Satellites


Evaluation of importance of the products and services from the CPTEC to the participants of the Survey?

## Meteorological and Environmental Satellites

| Categories | IF | CF | Total | $\%$ |
| :---: | :---: | :---: | :---: | :---: |
| 0 to $30 \%$ | 443 | 4 | 447 | 16.0 |
| $31 \%$ to $60 \%$ | 465 | 10 | 475 | 17.0 |
| $61 \%$ to $100 \%$ | 1197 | 19 | 1216 | 43.6 |
| Does not use | 637 | 16 | 653 | 23.4 |
| Total | 2742 | 49 | 2791 | 100 |

## Evaluation of importance of the products and services from the CPTEC to the participants of the Survey?

| Categories | Observed <br> Database | Climate | Education | Energy | Ocean Waves | Weather Forecast | Numerical Prediction | Air Quality | Meteorological and Environmental Satellites | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 to 30\% | 626 | 236 | 768 | 902 | 925 | 121 | 449 | 692 | 447 | 5166 |
| 31\% to 60\% | 582 | 550 | 546 | 459 | 403 | 348 | 446 | 532 | 475 | 4341 |
| 61\% to 100\% | 791 | 1664 | 538 | 366 | 464 | 2119 | 1168 | 615 | 1216 | 8941 |
| Does not use | 792 | 341 | 939 | 1064 | 999 | 203 | 728 | 952 | 653 | 6671 |
| Total | 2791 | 2791 | 2791 | 2791 | 2791 | 2791 | 2791 | 2791 | 2791 | 25119 |
| Categories | Observed <br> Database | Climate | Education | Energy | Ocean Waves | Weather Forecast | Numerical Prediction | Air Quality | Meteorological and Environmental Satellites | Total |
| 0 to 30\% | 626 | 236 | 768 | 902 | 925 | 121 | 449 | 692 | 447 |  |
| Position | 5 | 8 | 3 | 2 | 1 | 9 | 6 | 4 | 7 | 5166 |
| 31\% to 60\% | 582 | 550 | 546 | 459 | 403 | 348 | 446 | 532 | 475 | 4341 |
| Position | 1 | 2 | 3 | 6 | 8 | 9 | 7 | 4 | 5 |  |
| 61\% to 100\% | 791 | 1664 | 538 | 366 | 464 | 2119 | 1168 | 615 | 1216 | 8941 |
| Position | 5 | 2 | 7 | 9 | 8 | 1 | 4 | 6 | 3 |  |
| Total | 1999 | 2450 | 1852 | 1727 | 1792 | 2588 | 2063 | 1839 | 2138 | 18448 |
| \% | 10.8 | 13.3 | 10.0 | 9.4 | 9.7 | 14.0 | 11.2 | 10.0 | 11.6 |  |
| Position | 5 | 2 | 6 | 9 | 8 | 1 | 4 | 7 | 3 | 100 |

Nota: In this question occurred the possibility of multiple indications (services and products x tracks of percentage of importance), so the same can be bigger or smaller than the number of participants.

## From the services and products offered by the CPTEC/INPE, which ones are used more often?

Weather Forecast<br>1549

## 4425 <br> indications



Note: In this question occurred the possibility of multiple indications, so the same can be bigger or smaller than the number of participants.

## From the services and products offered by the CPTEC/INPE, which ones are used more often?

| Services and Products from CPTEC | No. of Indications | $\%$ |
| :--- | ---: | ---: |
| Weather Forecast | 1549 | 35.0 |
| Numerical Prediction | 715 | 16.2 |
| Satellites Images | 710 | 16.0 |
| Climate | 377 | 8.5 |
| Observed Database | 240 | 5.4 |
| Oceanical Prediction | 235 | 5.3 |
| Education / Educational Material / Educational Videos | 90 | 2.0 |
| Air Quality | 84 | 1.9 |
| Rainfall | 73 | 1.6 |
| Burns | 68 | 1.5 |
| Winds | 68 | 1.5 |
| All | 51 | 1.2 |
| Radar | 35 | 0.8 |
| Energy | 33 | 0.7 |
| Data Collection Plataform | 26 | 0.6 |
| Rays | 19 | 0.4 |
| Climate Changes | 16 | 0.4 |
| Meteorological Alerts | 15 | 0.3 |
| Ultraviolet Index | 12 | 0.3 |
| LIM | 3 | 0.1 |
| Web Seal | 3 | 0.1 |
| News | 3 | 0.1 |
|  | 100 |  |

Note: In this question occurred the possibility of multiple indications, so the same can be bigger or smaller than the number of participants.

## Suggestions sent by the participants related to the services and

 products from the CPTEC/INPE;| Suggestions sent by the participants of the Survey | No. of suggestions | $\%$ |
| :--- | :--- | :--- |
| Weather forecast and meteorological alerts by email, cellphone, radio and TV | 314 | 15.7 |
| Are adequated | 279 | 14.0 |
| Observed Database: free access, easy and fast, history and update often | 127 | 6.4 |
| Satellites: updated images, with subtitles, high definition, animation and easy access | 121 | 6.1 |
| Products by cities: rainfall data, climatological information, climitology and numerical <br> model data | 96 | 4.8 |
| PCD: network expansion, new products and easy and fast access | 85 | 4.3 |
| CPTEC website: ease of finding information, objective and non-scientific texts with no <br> writing erros, instructions and glossary | 76 | 3.8 |
| Education: develop materials on environmental education, meteorology, climate, etc.. | 60 | 3.0 |
| Waves: alerts by e-mail and clear analysis on the subject | 52 | 2.6 |
| Radar: general information | 48 | 2.4 |
| Agriculture: develop specific services for the sector | 39 | 2.0 |
| Numerical prediction: fast and easy access, animation, simple graphics, history, assertive, <br> and frequent updates for all cities in the country | 33 | 1.7 |
| Training: at distance and in various parts of the country | 29 | 1.5 |
| Marketing: broader dissemination of products and services from the CPTEC | 27 | 1.4 |
| Meteograms: single model for every city in the country | 18 | 0.9 |
| Climate: updated data, detailed analysis, its effects on the population and economy | 18 | 0.9 |
| Civil Defense: services related to municipal civil defense | 16 | 0.8 |
| Air Quality: General Information | 13 | 0.7 |
| User services: online service with the presence of a meteorologist to solve doubts | 11 | 0.6 |
| UV: General Information | 11 | 0.6 |
| Other suggestions | 26.3 |  |
|  | 100 |  |

## To the participants' objetives the products and services from the CPTEC/INPE are:

Adequated

Not applicable 137

Inadequated 75
92.4\%

Escale deformation
( $\mathrm{n} / 10$ )

From the services and products requested to the CPTEC/INPE in 2009, how much were actually used?


1 to 5; 6 to 10; 11 to 15; 16 to 20; and More than 20: Tracks of the number of services and products Number of participants and its respective percentage

## No. and types of works developed by the participants from the services and products provided by the CPTEC



Note: In this question occurred the possibility of the participant indicate the number of works that have been developed, so the same can be bigger or smaller than the number of participants.

No. and types of works developed by the participants from the services and products provided by the CPTEC

| Types of Works | Number of Works developed by Participants |  | Total | \% |
| :---: | :---: | :---: | :---: | :---: |
|  | IF | CF |  |  |
| Presentations | 3518 | 23 | 3541 | 15.3 |
| Consultancies | 3018 | 283 | 3301 | 14.3 |
| Projects | 2070 | 22 | 2092 | 9.0 |
| Applied Research | 1959 | 3 | 1962 | 8.5 |
| Articles | 1116 | 0 | 1116 | 4.8 |
| Participation in Congresses | 496 | 5 | 501 | 2.2 |
| Dissertations | 154 | 0 | 154 | 0.7 |
| Doctoral Thesis | 82 | 0 | 82 | 0.4 |
| Other Works | 10252 | 160 | 10412 | 45.0 |
| Total | 22665 | 496 | 23161 | 100 |

Note: In this question occurred the possibility of the participant indicate the number of works that have been developed, so the same can be bigger or smaller than the number of participants.

## No. of participants who developed works from the services and products provided by the CPTEC



Note: In this question occurred the possibility of the participant indicate or not the number of works that have been developed, so the same can be smaller or equal to the number of participants.

No. of participants who developed works from the services and products provided by the CPTEC

| Types of Works | Number of Participants which developed Works |  | Total | \% |
| :---: | :---: | :---: | :---: | :---: |
|  | IF | CF |  |  |
| Presentations | 386 | 6 | 392 | 20.8 |
| Consultancies | 193 | 7 | 200 | 10.6 |
| Projects | 346 | 6 | 352 | 18.6 |
| Applied Research | 220 | 3 | 223 | 11.8 |
| Articles | 216 | 0 | 216 | 11.4 |
| Participation in Congresses | 132 | 2 | 134 | 7.1 |
| Dissertations | 95 | 0 | 95 | 5.0 |
| Doctoral Thesis | 46 | 0 | 46 | 2.4 |
| Other Works | 225 | 5 | 230 | 12.2 |
| Total | 1859 | 29 | 1888 | 100 |

Note: In this question occurred the possibility of the participant indicate or not the number of works that have been developed, so the same can be smaller or equal to the number of participants.

## From the services and products provided by the CPTEC

## Average number of works developed VS No. of Participants

| Types of Works | Average Number of <br> Works <br> vs No. of Participants |
| :--- | ---: |
| Presentations (3541 / 392 part.) | 9 |
| Consultancies (3301 / 200 part.) | 17 |
| Projects (2092 / 352 part.) | 6 |
| Applied Research (1962 / 223 part.) | 9 |
| Articles (1116 / 216 part.) | 5 |
| Participation in Congresses (501 / 134 part.) | 4 |
| Dissertations (154 / 95 part.) | 2 |
| Doctoral Thesis (82 / 46 part.) | 2 |
| Other Works (10412 / 230 part.) | 45 |
| Total Average (23.161 / 1.888 part.) |  |

User's Profile
1st Survey-2009

## Indicators of Quality



## Evaluation of the participants related to the general

 quality of the services and products from the CPTEC

## Evaluation of the participants related to the general quality of the services and products from the CPTEC

| Categories |  | Number of Participants |  |  |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\%$ | CF | $\%$ | IF and CF | $\%$ |  |
| Good | 1399 | 51.0 | 28 | 57.1 | 1427 | 51.1 |  |
| Excellent | 1214 | 44.3 | 20 | 40.8 | 1234 | 44.2 |  |
| Acceptable | 108 | 3.9 | 1 | 2.0 | 109 | 3.9 |  |
| Unsatisfactory | 19 | 0.7 | - | 0.0 | 19 | 0.7 |  |
| Bad | 2 | 0.1 | - | 0.0 | 2 | 0.1 |  |
| Total |  | 2742 | 100 | 49 | 100 | 2791 |  |

## Evaluation of the participants related to the degree of

 ease to access the services and products from the CPTEC

Evaluation of the participants related to the degree of ease to access the services and products from the CPTEC

| Categories |  | Number of Participants |  |  |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\%$ | CF | $\%$ | IF and CF | $\%$ |  |
| Good | 1399 | 51.0 | 28 | 57.1 | 1427 | 51.1 |  |
| Excellent | 1214 | 44.3 | 20 | 40.8 | 1234 | 44.2 |  |
| Acceptable | 108 | 3.9 | 1 | 2.0 | 109 | 3.9 |  |
| Unsatisfactory | 19 | 0.7 | - | 0.0 | 19 | 0.7 |  |
| Bad | 2 | 0.1 | - | 0.0 | 2 | 0.1 |  |
| Total |  | 2742 | 100 | 49 | 100 | 2791 |  |

User's Profile
1ts Survey - 2009

## Estimation"Brazil"



## Estimation "Brazil"

## Considering

| Ref | Data | No. | $\%$ |
| :---: | :--- | :---: | :---: |
|  | Universe: users registered on the CPTEC in 2009 (Brazil) | 10844 | 100 |
| Estimate | Number of participants who reported estimated savings | 738 | 6.8 |
|  | Universe: users/day in 2009 | 59978 | 100 |

738: 2701 participants from the survey (less) 1963 that chose for "not applicable"
$6.8 \%$ : Percentage of importance that informed the estimated savings, of the universe of users 59978: No. users from CPTEC in 2009 (Google Analytics)
4079: 6.8\% of 59978
552.7\%: percentage variation of 738 for 4079 participants

Estimates using the average of the no. of users from the CPTEC website in 2009 (Google Analytics)

## Estimation "Brazil"

## Estimated savings generated by the participants in 2009 to the

 participants by the using of the services and products from the CPTEC| Ref | No. of Participants | Estimate Average of Savings in US\$ |  |
| :---: | :---: | :---: | :---: |
|  |  |  | Monthly |
| Participants of the <br> Survey | 738 | $21,062,500$ | $1,755,208$ |
|  | Average per Participant | 28,540 | 2,378 |
| Estimate | 4079 | $116,414,550$ | $9,701,212$ |
|  | Average per Participant | 28,540 | 2,378 |

738: 2701 participants from Brazil (less) 1963 that chose for "not applicable"
552.7\%: percentage variation of 738 for 4079 participants

4079: 738 participants from Brazil x 552.7\%

By using the services and products from the CPTEC, did the participants hire new staff?

| Ref | No. of Participants |  |
| :---: | :---: | :---: |
|  | Total of Employees hired |  |
| Participants of the <br> Survey | 46 | 241 |
|  | Average per Participant | 5 |
| Estimate | 254 | 1333 |
|  | Average per Participant | 5 |

46: No. of participants from Brazil that hired
552.7\%: percentabe variation of 738 for 4079 participants

254: 46 participants from Brazil x 552.7\%

## User's Profile 1st Survey - 2009

## Thank You!

## Luiz Tadeu luiz.tadeu@cptec.inpe.br



