

FRANCE – NEW ZEALAND

Scientific impact of the DUMONT D'URVILLE programme (2006-2023)

MESRI-DAEI / MEAE

2024

http://www.enseignementsup-recherche.gouv.fr



GENERAL PRESENTATION OF THE PROGRAM

Creation: 2005

The purpose of this program is to develop excellence scientific and technological exchanges between the French and New Zealand laboratories, by promoting new scientific collaborations and integrating in the projects young researchers and PhD students.

Total budget 2008-2023 (France + New Zealand): around 150 000 €/year

>> including budget from the French part : around 50 000 € / year

>> including budget from the New Zealand part : around 100 000 € / year

Average budget per project (France + New Zealand) : around 28 000 € / year

Number of new projects submitted per year: around 18

Number of new projects funded per year : around 5

From 2006-2023 : 295 applications submitted 76 projects funded

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DATA SOURCES

Campus France (2006-2023)

- Information about the PHC Dumont d'Urville applications
- List of mobilities (from France to New Zealand)
- Survey 1 : 2006-2016 ; Survey 2 : 2017-2023
- No Call for offer in 2021 and 2022

Survey (2006-2020)

- Target: French Principal Investigators of selected projects between 2006 and 2022
- Survey 1 (2006-2015) duration: from October to November 2015
- 50% response ratio (27 respondents for 54 funded projects)
- Survey 2 (2016-2020) duration: from January to March 2024
- 55% response ratio (12 respondents for 22 funded projects)

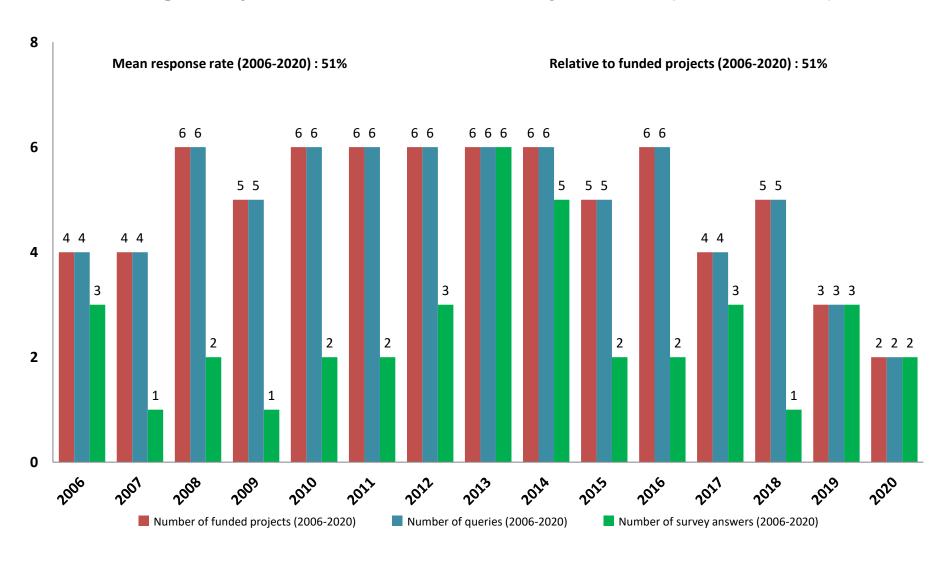
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ANSWERS TO THE SURVEYS

Average response rate to the surveys: 51 % (38 answers)





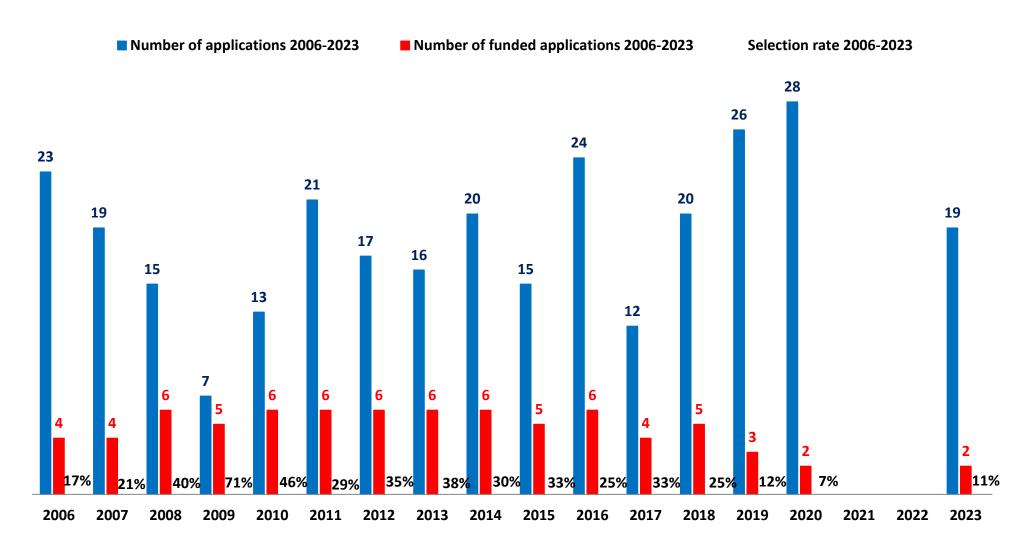
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2006-2023 KEY POINTS



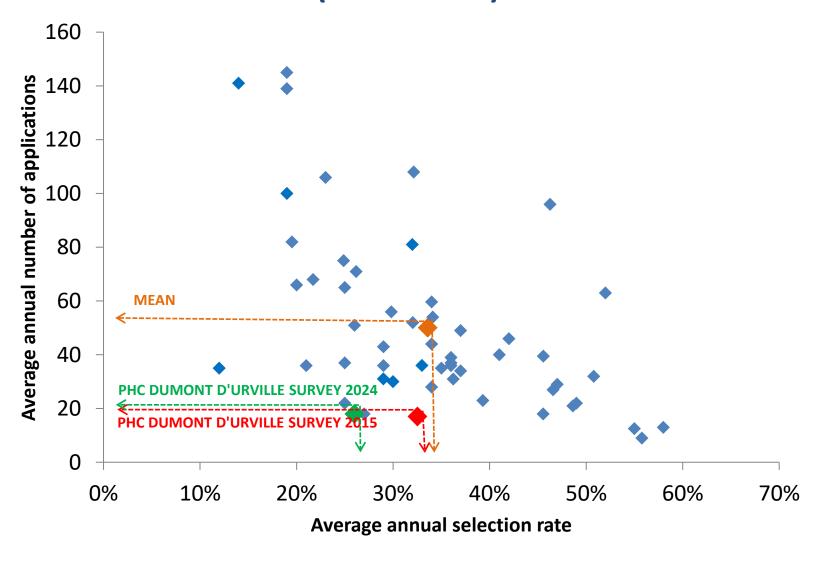
NUMBER OF APPLICATIONS AND SELECTION RATE

Average selection rate from 2006-2023: 26%





NUMBER OF APPLICATIONS VS SELECTION RATE (2006-2023)



Survey 2015 : 26 programs

Survey 2024: 53 programs



BEFORE THE DUMONT D'URVILLE PROJECT

34% of the laureates have already previously cooperated with New-Zealand (data from 38 responses)

(mean of all programs: 56%)

This previous cooperation was with the same partner for 69% of the laureates (data from 13 responses)

(mean of all programs: 46%)

This previous cooperation was financed by the PHC Dumont d'Urville for 56% of the laureates

(data from 9 responses)

(mean of all programs : 21%)

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BEFORE THE DUMONT D'URVILLE PROJECT

With which scientific collaboration program?	% of occurencies
PHC Dumont d'Urville	56%
New-Zealand institutions cofunding	22%
Others (Institut de Chirurgie Dentaire de Paris, UMR CNRS)	22%

Data from 9 responses

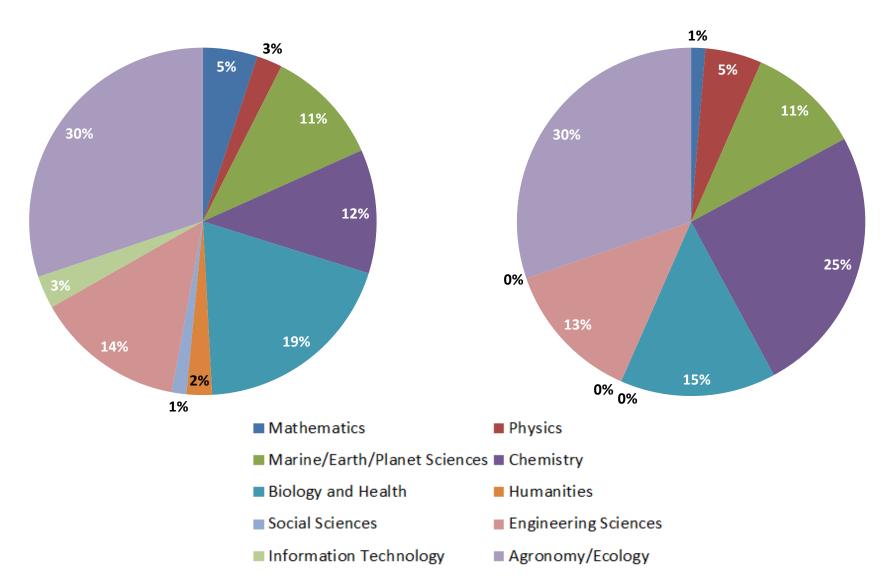
Plus 7 previous cooperations based on other exchanges (scientfic coproduction, meetings, students supervision...)

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SCIENTIFIC DOMAINS OF PROJECTS (2006-2023)

Number of applications: 295 Number of funded projects: 76





SCIENTIFIC DOMAINS: EVOLUTION 2006-2023

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DS1: Mathematics

DS2: Physics

DS3: Marine, Earth, Planet sciences

DS4 : Chemistry

DS5: Biology and Health

DS6: Humanities

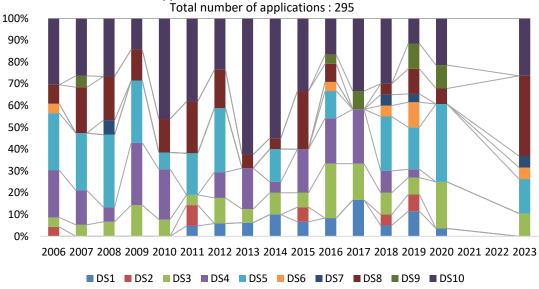
DS7: Social sciences

DS8 : Engineering sciences

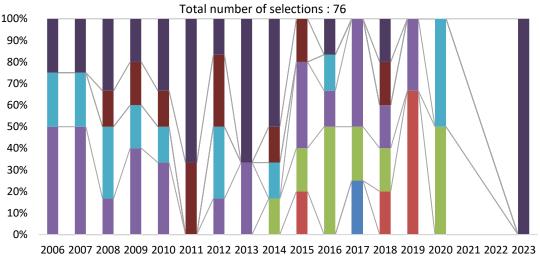
DS9: Information technology

DS10: Agronomy/Ecology

Percentage of applications filed by scientific domain each year compared to all applications filed in each scientific domain



Percentage of selections filed by scientific domain each year compared to all selections filed in each scientific domain

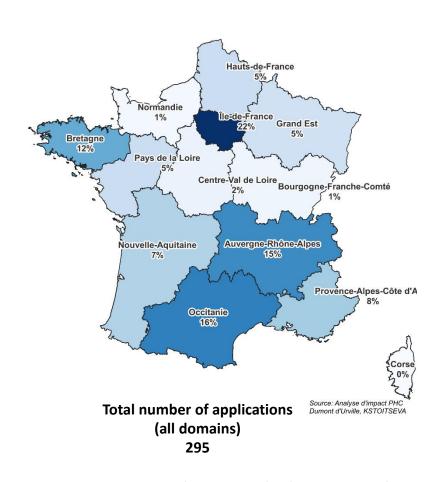


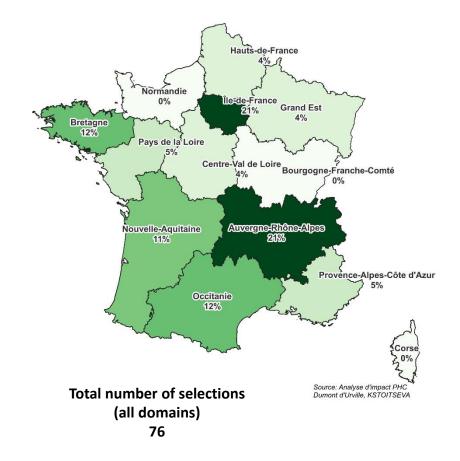


REGIONAL DISTRIBUTION OF SELECTED PROJECTS (2006-2023)

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PHC DUMONT D'URVILLE Regional percentages of applications and selections 2006-2023



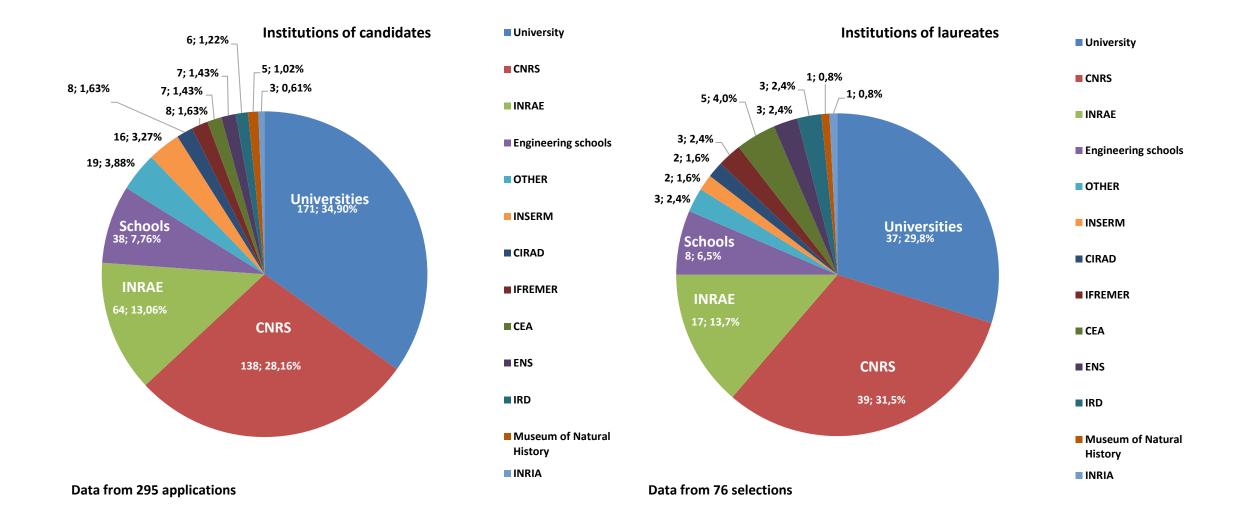


The region lle de France is the main contributor both for applications and selections followed by Occitanie for applications and ex-aequo with Auvergne-Rhône-Alpes for selections



FRENCH PARTICIPATING INSTITUTIONS (2006-2023)

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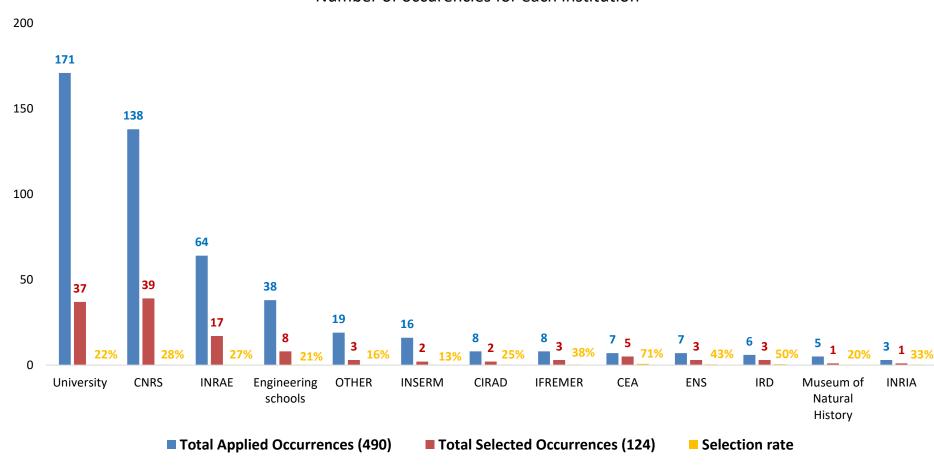




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FRENCH PARTICIPATING INSTITUTIONS (2006-2023)

Number of occurencies for each institution

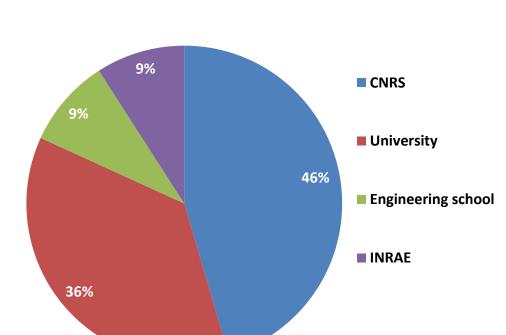




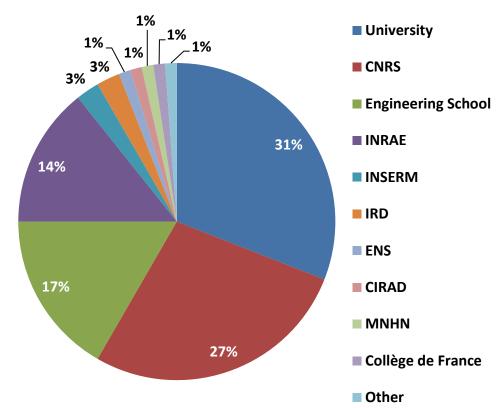
FRENCH PARTICIPATING INSTITUTIONS (2006-2020)

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PI's employers



Laboratories authorities



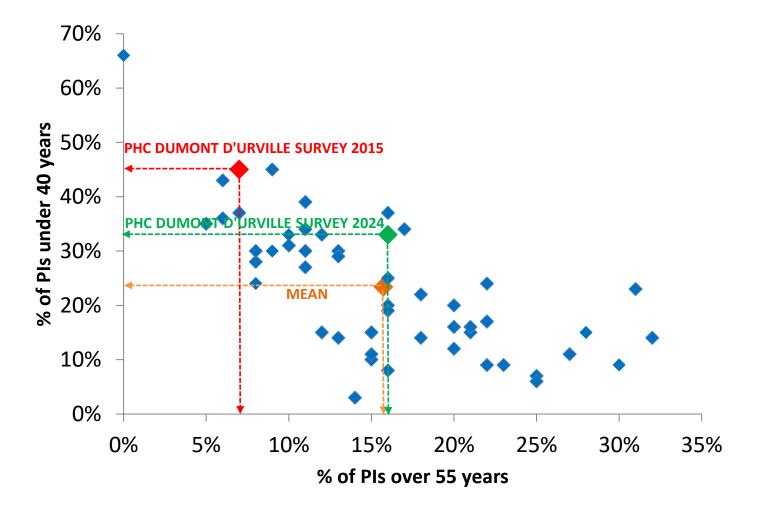
Data from 11 responses

Data from 38 responses



AGE OF FRENCH PRINCIPAL INVESTIGATORS (2006-2020)

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Survey 2015 : 26 programs

Survey 2024: 53 programs



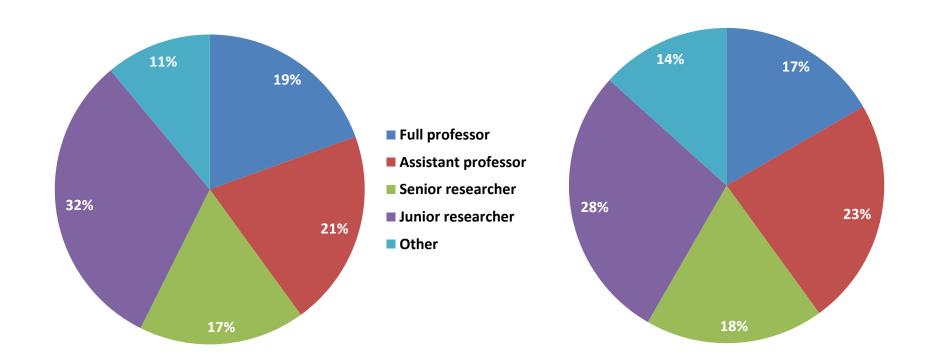
FRENCH PRINCIPAL INVESTIGATORS: STATUS (2006-2023)

(DATA FROM CAMPUS FRANCE)

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Applicants professional status

Laureates professional status



Data from 190 french applicants and 60 french laureates



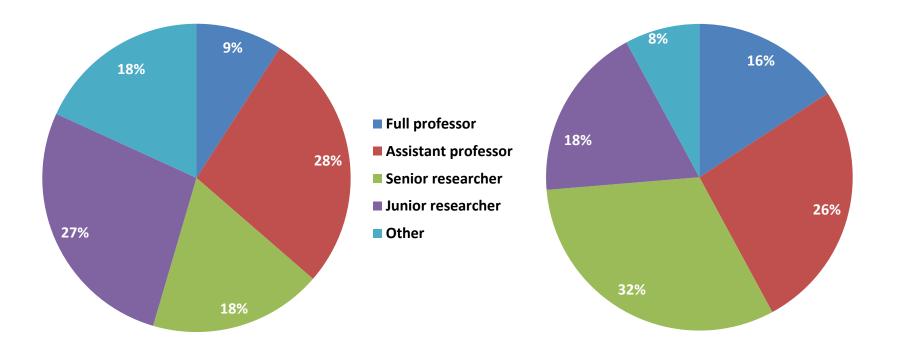
FRENCH PIS (PRINCIPAL INVESTIGATORS): STATUS (2006-2020)

(DATA FROM THE SURVEYS)

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Previous professional status (at the beginning of the project)

Current professional status

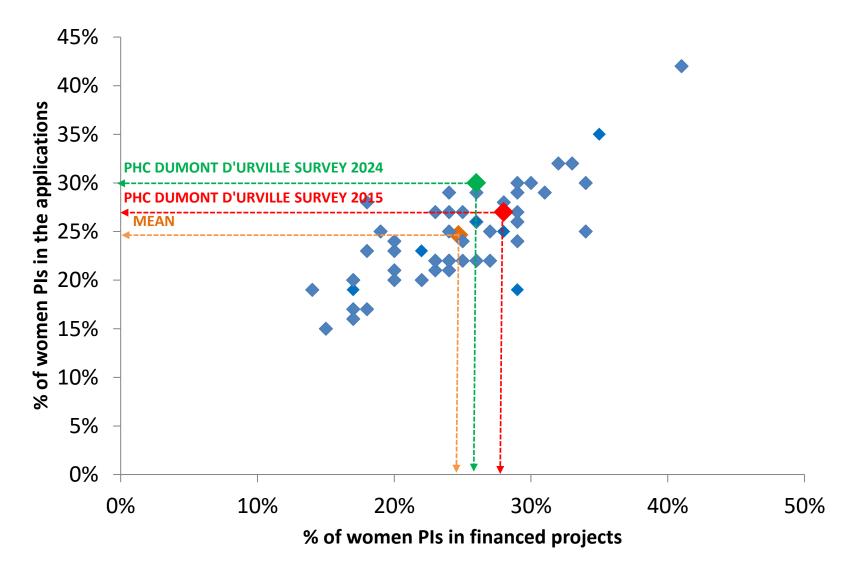


Data from 11 responses

Data from 38 responses



IMPLICATION OF WOMEN (FRANCE) (2006-2020)



Survey 2015: 26 programs

Survey 2024: 53 programs

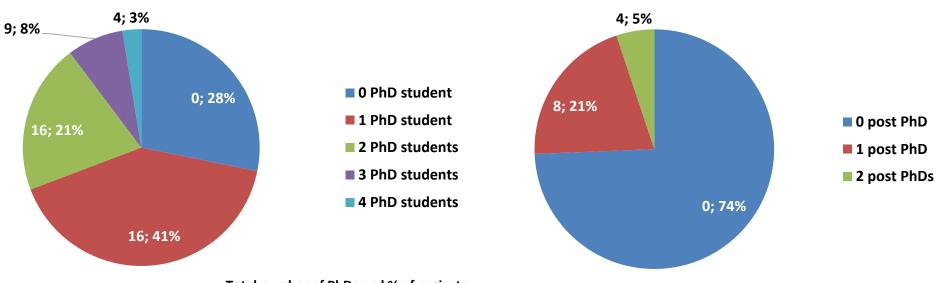


PARTICIPATION OF YOUNG RESEARCHERS (2006-2020)

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Number of post-doctoral researchers



Total number of PhDs and % of projects

Total number of postdocs and % of projects

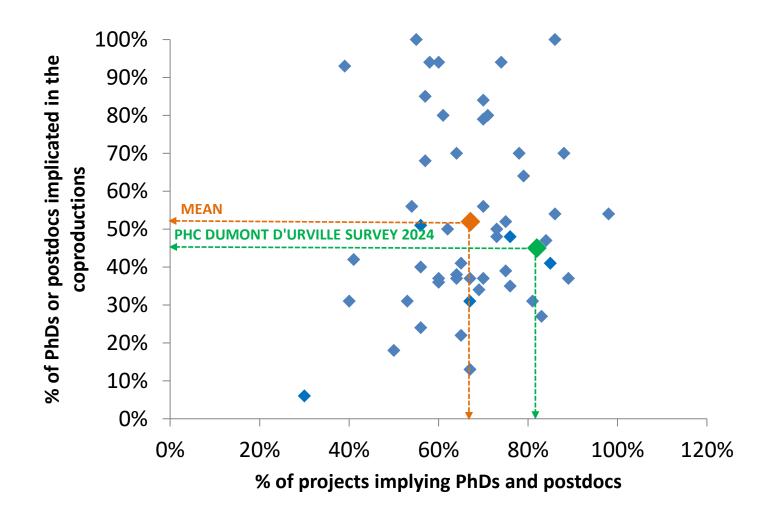
72% of projects involve at least one PhD student

26% of projects involve at least one post-doctoral researcher

Overall, 82% of projects involve at least one young researcher

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IMPLICATION OF YOUNG RESEARCHERS IN THE PUBLICATIONS (2006-2020)



Survey 2015 : not available

Survey 2024 : 53 programs



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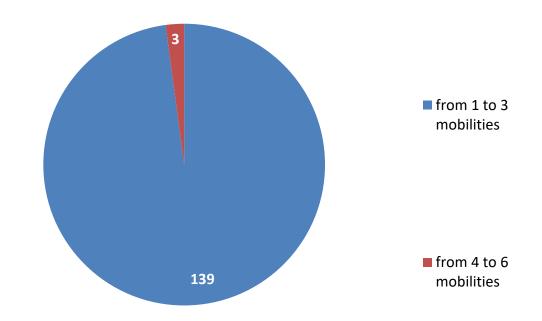
MOBILITY



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NUMBER OF MOBILITIES (2006-2023)

Number of projects vs Number of mobilities (142 selected projects)

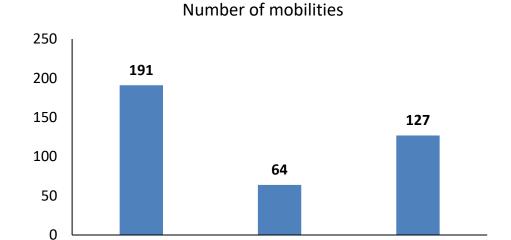


Data from 127 outgoing mobilities and 64 incoming mobilities Incoming mobilities from 2006 to 2015 Outgoing mobilities from 2006 to 2023



NUMBER AND DURATION OF MOBILITIES (2006-2023)

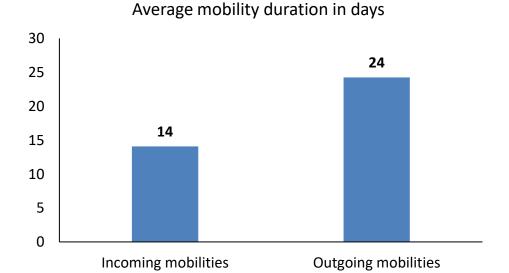
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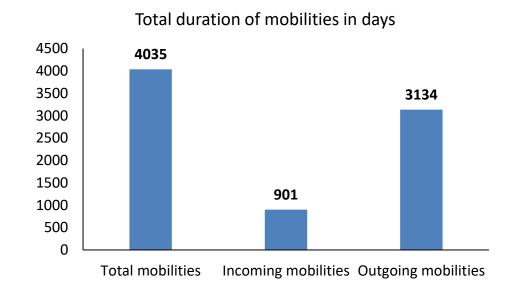


Incoming mobilities from 2006 to 2015 Outgoing mobilities from 2006 to 2023

Incoming mobilities Outgoing mobilities

Total mobilities





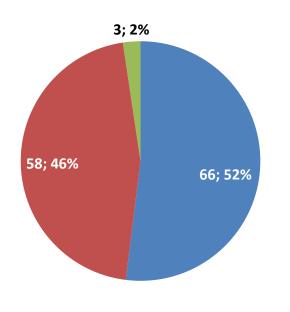


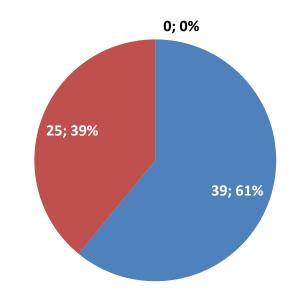
MOBILITY: DURATION

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France → New-Zealand 2006-2023

New-Zealand → France 2006-2015





- < 15 days</p>
- between 15 days and 3 months
- > 3 months

Data from 127 outgoing mobilities and 64 incoming mobilities

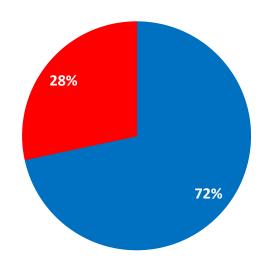


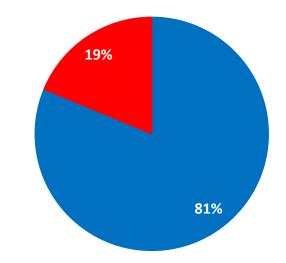
MOBILITY: GENDER DISTRIBUTION

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New-Zealand → France 2006-2015





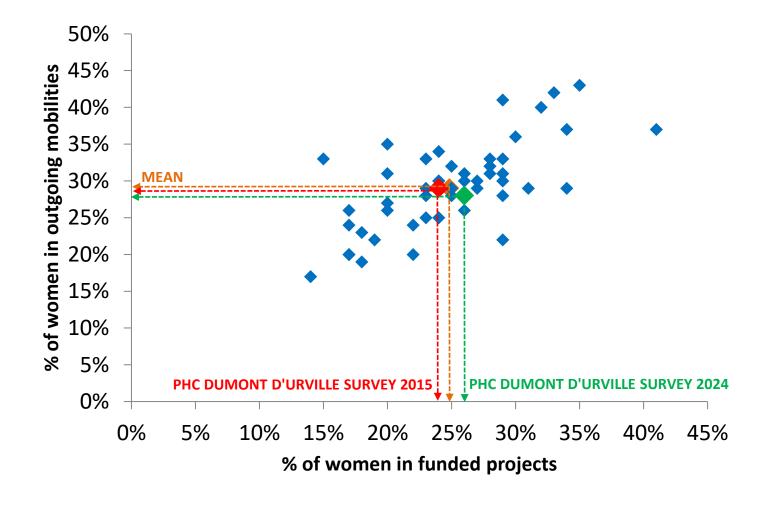
■ Men ■ Women

Data from 127 outgoing mobilities and 64 incoming mobilities



WOMEN MOBILITY FRANCE – NEW-ZEALAND (2006-2023)

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Data from 76 funded projects and 127 mobilities

Survey 2015 : 26 programs Survey 2024 : 53 programs

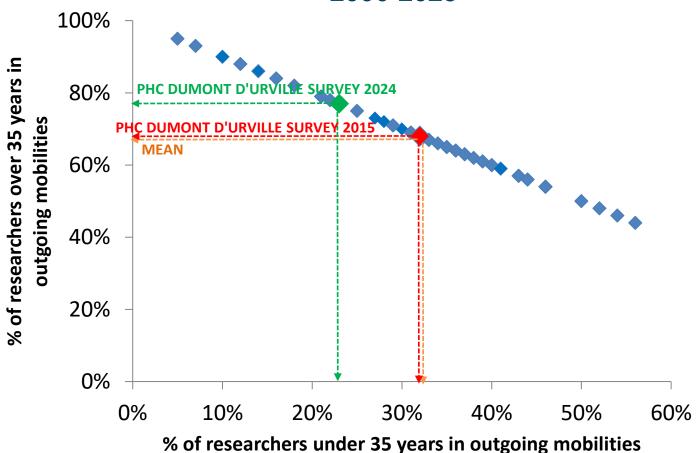
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YOUNG RESEARCHERS MOBILITY

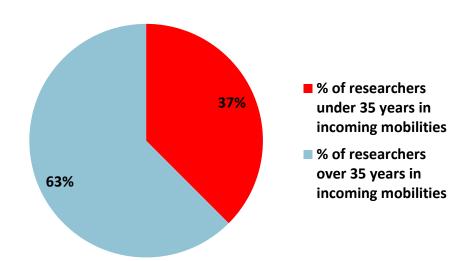


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New-Zealand → France 2006-2015



Survey 2015 : 26 programs

Survey 2024: 53 programs



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SCIENTIFIC PRODUCTION (2006-2020)



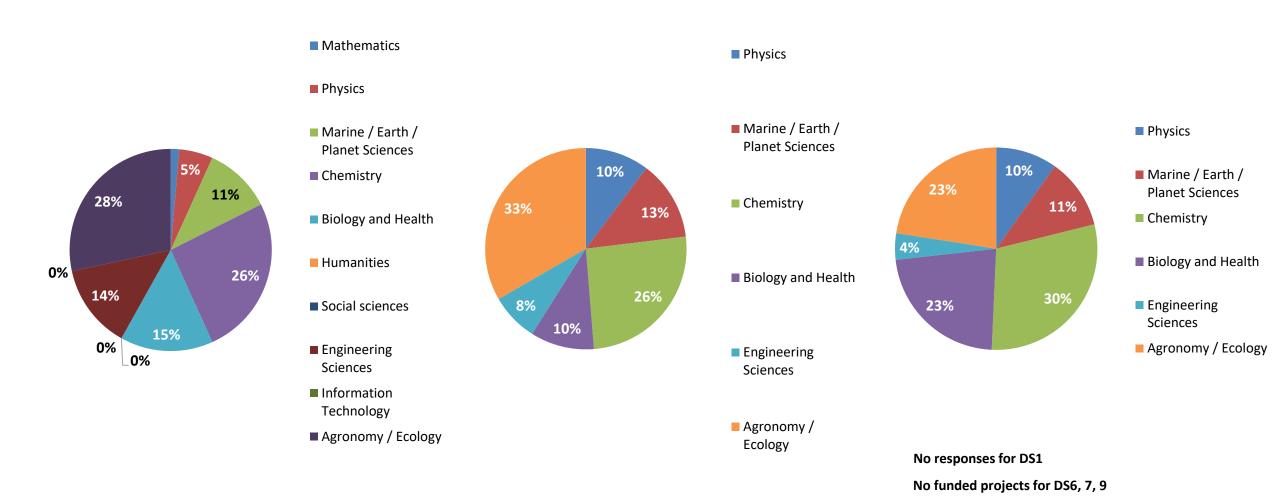
SCIENTIFIC PRODUCTION 2006-2020

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Responses to the survey 2006-2020

Coproductions 2006-2020



74 funded projects

39 responses

Analysis of 71 coproductions



SCIENTIFIC PRODUCTION (2006-2020) SURVEYS 2015+2024

	Number of funded projects 2015 survey	Number of funded projects 2015+2024 surveys	Average annual number of scientific coproductions per project 2015 survey	Average annual number of scientific coproductions per project 2015+2024 surveys
Mathematics	0	0	-	-
Physics	2	4	2,0	0,88
Marine/Earth/Planet Sciences	1	5	0	0,80
Chemistry	7	10	0,55	1,05
Biology and Health	3	4	0,15	2,00
Humanities	0	0	-	-
Social Sciences	0	0	-	-
Engineering Sciences	3	3	0,05	0,50
Information Technology	0	0	-	-
Agronomy / Ecology	11	13	0,10	0,62
TOTAL/MOYENNE	27	39	0,47	0,91

Overall average annual number of scientific coproductions per project 2015 : 0,47 vs 0,96 mean Overall average annual number of scientific coproductions per project 2015+2024 : 0,91

Surveys 2015+2024

77% of funded projects led to at least 1 scientific coproduction (not available survey 2015)

65% of scientific coproductions involve at least 1 young researcher (not available survey 2015)

The average annual rate of publication of young researchers implicated in the projects is 0,41 (not available survey 2015) The average annual rate of young researchers implicated in the scientific coproductions is 0,92 (not available survey 2015)



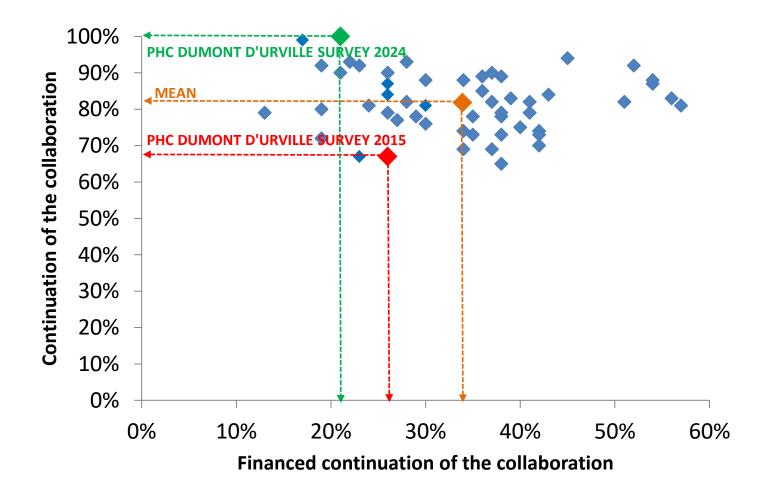
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WHAT HAPPENS AFTER A DUMONT D'URVILLE PROJECT ?



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CONTINUATION OF THE COOPERATION



Data from 38 responses (continuation) and 38 responses (financing)

Survey 2015 : 26 programs Survey 2024 : 53 programs



CONTINUATION OF THE COOPERATION

100% of the cooperations continued after the DUMONT D'URVILLE project

Which activities?	% of funded projects
Joint participation to conferences (Survey 2024)	82%
Collaborative research (Surveys 2015 and 2024)	50%
Scientific co-productions (Surveys 2015 and 2024)	37%
PhD mobilities (Survey 2024)	27%
Researchers mobility (Surveys 2015 and 2024)	16%
Co-organisation of scientific events (Survey 2024)	9%
Other (Survey 2015)	18%

Survey 2015 : 27 responses

Survey 2015 + 2024 : 38 responses

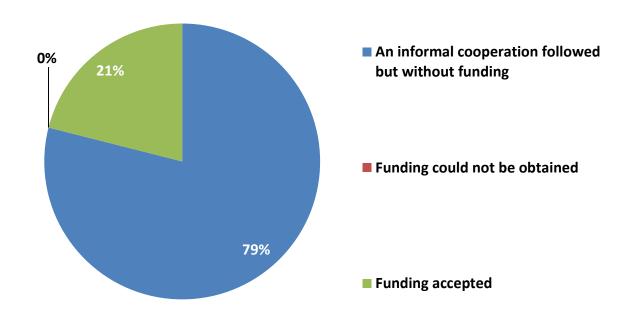
Survey 2024: 11 responses



CONTINUATION OF THE COOPERATION

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21% of cooperations have been funded following the project

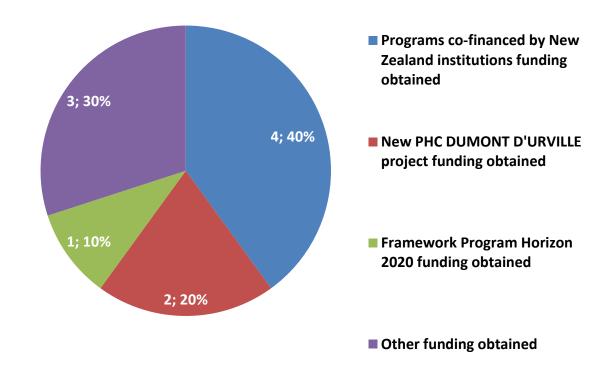




CONTINUATION OF THE COOPERATION

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What kind of funded collaborations after the PHC DUMONT D'URVILLE project?

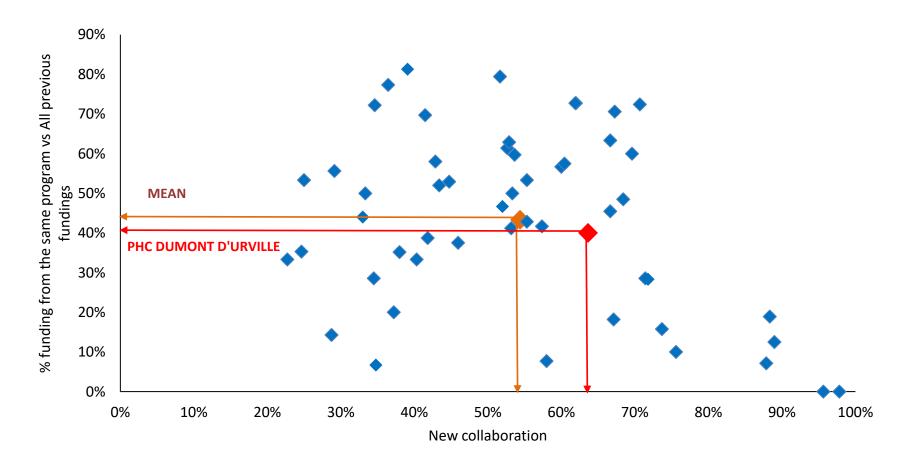




CONTINUATION OF THE COOPERATION

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What kind of funded collaborations after the PHC DUMONT D'URVILLE project?

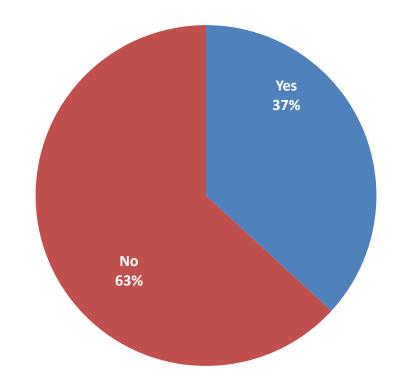




CONTINUATION OF THE COOPERATION

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Has the French New-Zealand cooperation involved new partners?

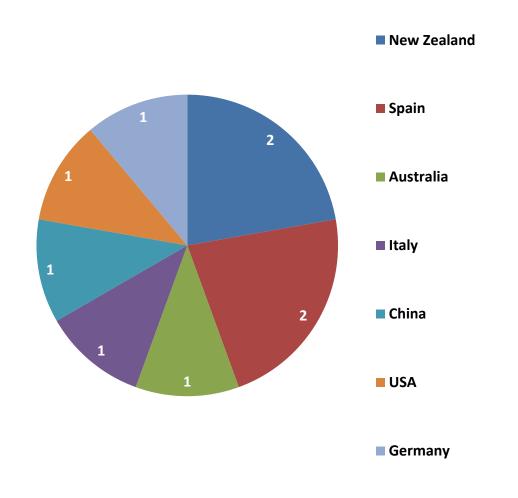




CONTINUATION OF THE COOPERATION

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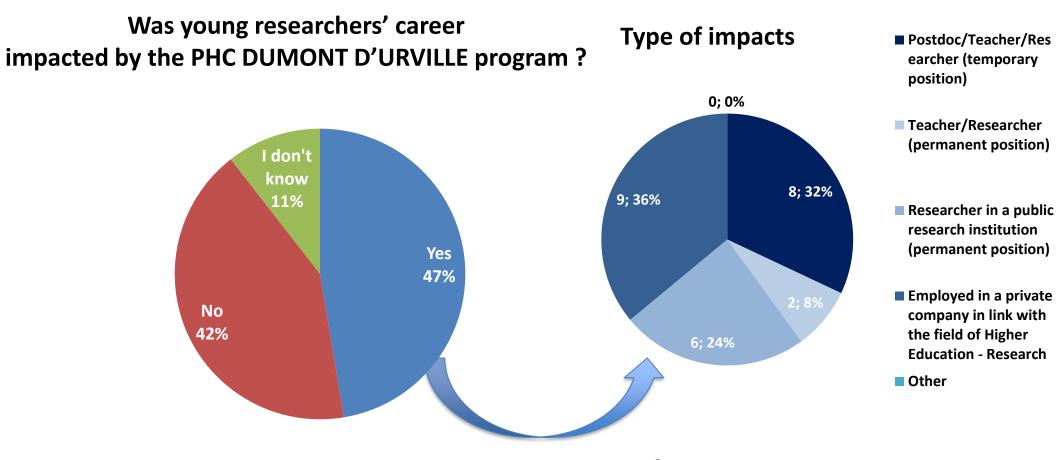
If the French New Zealand cooperation involves new partners, list with which countries





IMPACT ON YOUNG RESEARCHERS' CAREER





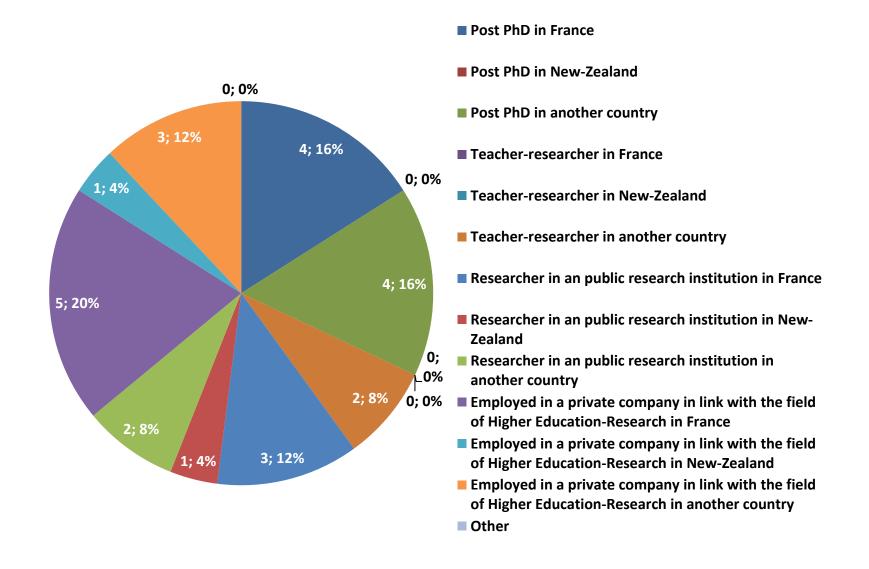
Data from 38 responses

Data from 18 positive responses for a total of 25 young researchers



IMPACT ON YOUNG RESEARCHERS' CAREER

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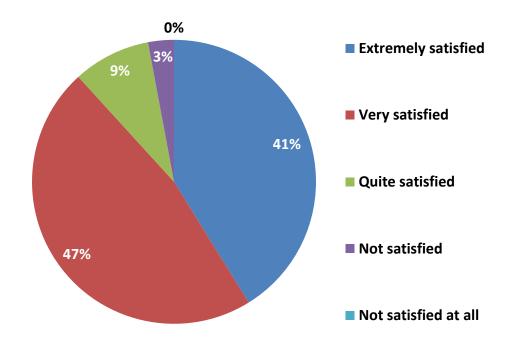




GENERAL OPINION OF FRENCH PRINCIPAL INVESTIGATORS ON THE PROGRAM

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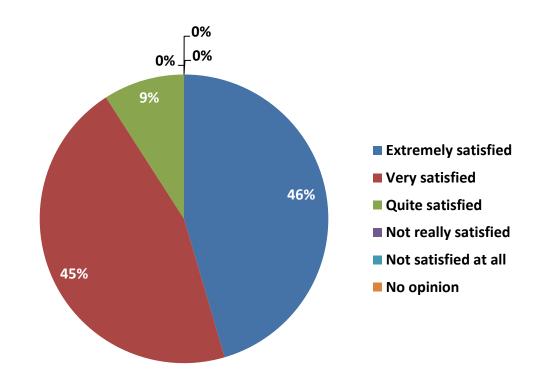
97% of French principal investigators are satisfied





OPINION OF FRENCH PRINCIPAL INVESTIGATORS ABOUT FRENCH EMBASSY HELP

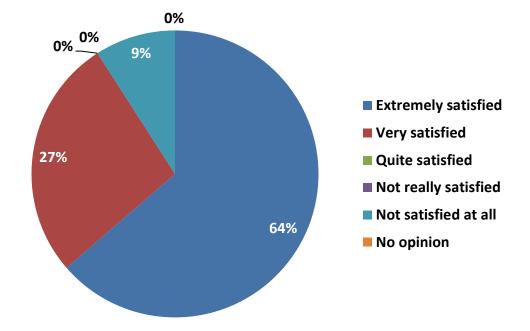
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OPINION OF FRENCH PRINCIPAL INVESTIGATORS ABOUT ADMINISTRATIVE MANAGEMENT

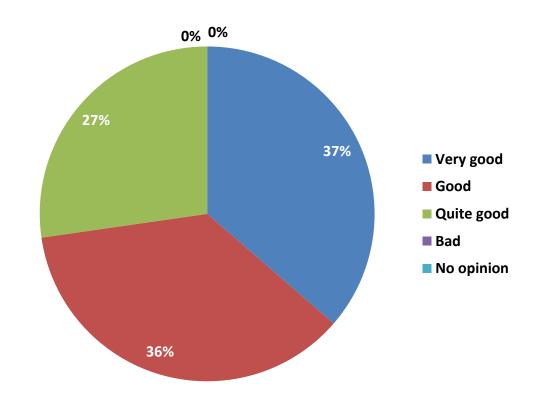






OPINION OF FRENCH PRINCIPAL INVESTIGATORS ABOUT THE UNDERSTANDING OF THE ROLE OF THE DIFFERENT FRENCH ADMINISTRATIONS

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GENERAL OPINION OF FRENCH PIS ON THE PROGRAM POSITIVE COMMENTS



Strengths of this program (Surveys 1+2; 38 responses) (Survey 2; 11 responses)	Number of occurencies (out of 102)	% of funded projects
Fostering researchers' mobility (Surveys 1+2)	21	55%
Fostering exchanges enabling scientific production (Survey 2)	6	55%
Fostering an international research cooperation (Surveys 1+2)	19	50%
Simplicity of the project application process (Surveys 1+2)	15	39%
Easy implementation (administrative flexibility) (Surveys 1+2)	13	34%
Good scientific-added value on financial investment (Survey 2)	3	27%
Helpful to initiate other fundraising (Survey 2)	3	27%
Flexibility of the program for actions co-financed with the NZ partner (Survey 2)	3	27%
Fostering the training of young researchers (Surveys 1+2)	8	21%
Helping to know the partner country (Survey 2)	2	18%
Sufficient financial means for the mobility costs (Survey 2)	2	18%
Transparency of the selection process (Surveys 1+2)	4	11%
Sufficient amount of mobility time given to collaborate (Survey 2)	1	9%
Financial autonomy towards your institution (Survey 2)	1	9%
Timetable for implementation (Survey 2)	1	9%
Sufficiently long duration of the projects (Survey 2)	0	0%
Total number of occurencies		



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GENERAL OPINION OF FRENCH PIS ON THE PROGRAM NEGATIVE COMMENTS



Weaknesses of this program (Surveys 1+2; 38 responses) (Survey 2; 11 responses)	Number of occurencies (out of 82)	% of funded projects
Too short duration of mobilities (Surveys 1+2)	15	39%
Financial means insufficient for the expenditure of mobility (transport) (Surveys 1+2)	14	37%
Insufficient financial means to cover a project (Surveys 1+2)	11	29%
Length of support too short (Surveys 1+2)	11	29%
Financial means insufficient for the expenditure of mobility (per diem) (Surveys 1+2)	6	16%
Difficult to continue the cooperation (Surveys 1+2)	5	13%
Financial autonomy towards your institution (Survey 2)	1	9%
Heaviness of the process of applications (Surveys 1+2)	3	8%
Too low number of mobilities (Surveys 1+2)	3	8%
Lack of transparency in the selection process (Surveys 1+2)	2	5%
Insufficient communication on the evaluation's results (Surveys 1+2)	2	5%
Administrative heaviness of the missions management (Surveys 1+2)	2	5%
Too long duration of mobilities (Surveys 1+2)	0	0%
Flexibility of the program for actions co-financed with the partner (Survey 2)	0	0%
Timetable for implementation (Survey 2)	0	0%
Other (Surveys 1+2)	7	18%
Total number of occurencies		



PRELIMINARY CONCLUSIONS

Preliminary conclusions suggest that the funding scheme has efficiently contributed to create (or to maintain) fruitful and long-term cooperation.

66% of new cooperations (mean of all programs : 44%)

Implication of young researchers laureates (33%) better than the general mean (23%)

Implication of women candidates (30%) better than the general mean (25%). However, the

implication of women laureates (26%) is close to the general mean (25%)

Implication of young researchers in the projects better than the general mean (82% vs 67%)

Average annual scientific coproductions per project close to the average of the other programs (0.91 vs 0.96)

Rather good rate of average annual publications for young researchers involved in the scientific coproductions (0,92)

Continuation of the cooperation (100%) better than the general mean (82%). Howerver, only 21% obtained new fundings versus 34% for the general mean

69% of the cooperations with the same previous NZ partner (mean of all programs : 46%)

This ongoing cooperation is financed by a new DUMONT D'URVILLE funding for 56% of the Pis (mean of all programs : 21%)

23% of the projects with no scientific coproduction

Only 45% of young researchers involved in the scientific coproductions (mean of all programs : 52%)

Rather low implication of french young researchers in the mobilities (23% vs 32% mean)
Rather low rate of average annual publications for young researchers involved in the projects (0,41)





COMPARISON SURVEY 2015 (2006-2015) – SURVEY 2024 (2016-2022)

- Response rate : 2015 : 50% (27 responses), 2024 : 55% (12 responses)
- Stability in the average annual number of applications (survey 1 : 5, survey 2 : 5)
- Decrease in the number of selected projects carried by young researchers (45% vs 33%)
- Progression in the number of women applicants (27% vs 30%) and laureates (24% vs 26%)
- Better participation of young french researchers to the projects (+12%)
- Decrease in the outgoing mobilities of french young researchers (-9%)
- Stability in the outgoing mobilities for women researchers (-1%)
- Clear improvement in the average annual number of scientific coproductions per project (from 0,47 to 0,91)
- Increase in the continuation of cooperations (+33%)
- Decrease in the continuation of cooperations with financing (-5%)

PRELIMINARY RECOMMANDATIONS

- Open the ongoing cooperation to new partners and apply for new fundings
- Increase the participation of young researchers to the scientific coproductions (55% of the young researchers involved in the projects are not associated to a publication)
- Promote outgoing mobilities of french young researchers



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French national ministries (MESR / MEAE) will provide a complete analysis of the survey. It will be sent to the recipients of the funding who participated in this survey.

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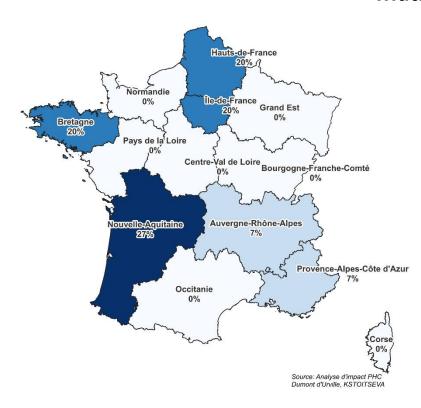
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ANNEX REGIONALISATION AND SCIENTIFIC DOMAINS (CARTOGRAPHIES)



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PHC DUMONT D'URVILLE Regional percentages of applications and selections Mathematics 2006-2023





Number of applications: 15

Number of selections: 1

Six regions are concerned for applications. Only Hauts-de-France obtained one selection.



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PHC DUMONT D'URVILLE Regional percentages of applications and selections Physics 2006-2023





Number of applications: 7

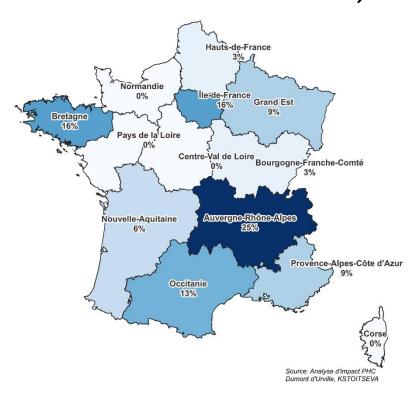
Number of selections: 4

Three regions are concerned for applications with Ile-de-France ahead but only two benefit selections (with Ile-de-France still ahead)



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PHC DUMONT D'URVILLE Regional percentages of applications and selections *Marine, Earth, Planet Sciences* 2006-2023





Number of applications: 32

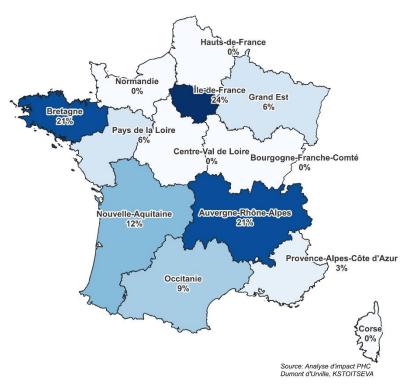
Number of selections: 8

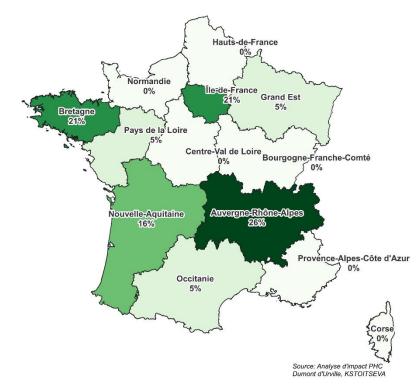
Nine regions are concerned for applications but only five benefit selections (with Auvergne-Rhône-Alpes ahead for both applications and selections)



Liberté Égalité Fraternité

PHC DUMONT D'URVILLE Regional percentages of applications and selections Chemistry 2006-2023





Number of applications: 34

Number of selections: 19

Eight regions are concerned for applications with Ile-de-France ahead and seven for selections with Auvergne-Rhône-Alpes ahead.



Liberté Égalité Fraternité

PHC DUMONT D'URVILLE Regional percentages of applications and selections Biology and Health 2006-2023





Number of applications: 57

Number of selections: 11

Eleven regions are concerned for applications but only five benefit selections (with Ile-de-France ahead for both)



Liberté Égalité Fraternité

PHC DUMONT D'URVILLE Regional percentages of applications and selections Humanities 2006-2023



NO SELECTION

Number of applications: 7

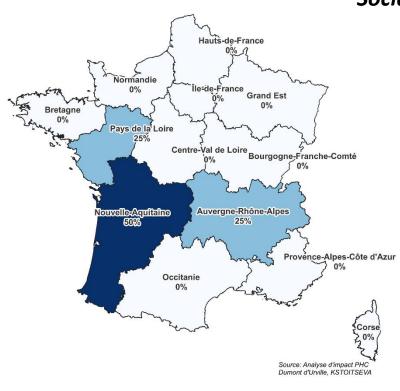
Number of selections: 0

Four regions are concerned for applications with Ile-de-France ahead. No applications selected.



Liberté Égalité Fraternité

PHC DUMONT D'URVILLE Regional percentages of applications and selections Social Sciences 2006-2023



NO SELECTION

Number of applications: 4

Number of selections: 0

Three regions are concerned for applications with Nouvelle Aquitaine ahead. No applications selected.



Liberté Égalité Fraternité

PHC DUMONT D'URVILLE Regional percentages of applications and selections Engineering Sciences 2006-2023





Number of applications: 41

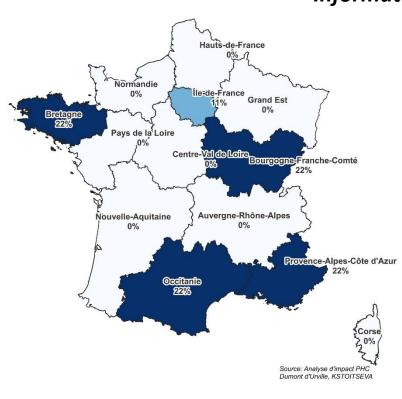
Number of selections: 10

Ten regions are concerned for applications with Auvergne-Rhône-Alpes ahead. Six regions benefit selections (with Auvergne-Rhône-Alpes still ahead)



Liberté Égalité Fraternité

PHC DUMONT D'URVILLE Regional percentages of applications and selections Information technology 2006-2023



NO SELECTION

Number of applications: 9

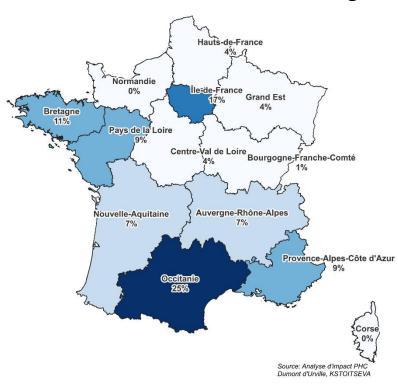
Number of selections: 0

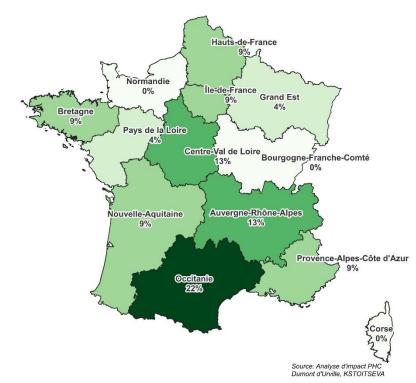
Five regions are concerned for applications. No applications selected



Liberté Égalité Fraternité

PHC DUMONT D'URVILLE Regional percentages of applications and selections Agronomy/Ecology 2006-2023





Number of applications: 89

Number of selections: 23

Twelve regions are concerned for selections with Occitanie ahead. Ten regions benefit selections (with Occitanie still ahead)