Using the Scientific Databases Subscribed to by the "Lucian Blaga" Central University Library in the Year 2005

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Abstract

The paper discusses some issues related to the online scientific databases subscribed to by the "Lucian Blaga" Central University Library in the year 2005. The study presents the four main online collections (ProQuest, Chadwyck Healey, JSTOR, SpringerLink) as well as the major problems related to their use. The different statistics, tables and graphics show an increasing interest in such online databases, which encourages the library management to make available such information sources to its users in the future too. It can also be observed that the databases were accessed by a great number of teachers, PhD students and undergraduate students both from the University and the Central University Library. Though the users' searching methods sometimes lacked the necessary professionalism, these electronic products seem to be a great help in the scientific activity of the readers.

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Introduction

Online scientific collections are more and more appreciated as they are used in the "Lucian Blaga" Central University Library. Our library has been offering such electronic information since the year 1996. If at that time users were not quite familiar with the research in such online databases, in the last few years we can say that they favoured this type of information source. The statistics prove this.

The library makes great financial efforts in order to offer online access to prestigious scientific databases; therefore it is extremely important for us to know in what manner and how often the readers use them.

The present paper analyzes in what measure these collections are used. This will be achieved by studying and interpreting the statistics made for the year 2005. This analysis may also provide us with information which should guide us in our future acquisitions; for, as it is well known, it is difficult to select the online products to be subscribed to. The electronic market offers rich resources, the progress is great, the editors and vendors have quickly developed new strategies, making partnerships, offering new products. The result is a confusing and extremely varied assortment of possibilities that is open to libraries.

Overwhelmed by an amalgam of offers, libraries are really in a difficult situation. Which are the most suitable collections to subscribe to? It is necessary to analyze all the aspects of the offers coherently: the percentage of fulltext information and texts with abstracts as compared to the price of the product.

This paper offers some important directions in this respect.

Databases subscribed to in the year 2005

In the year 2005 the "Lucian Blaga" Central University Library subscribed to the following online scientific databases:

1. **ProQuest – access in BCU ("Lucian Blaga" Central University Library) and UBB ("Babeş-Bolyai" University)**
2. **Chadwyck Healey – access in BCU and UBB**
3. **JSTOR – access in BCU**
4. **SpringerLink – access in BCU and UBB**.

1. PROQUEST

The ProQuest collection contains over 10000 fulltext publications and reference works. It is one of the most prestigious databases. It comprises the following 12 modules: ProQuest. ABI.Inform Global, ProQuest. Academic Research Library, ProQuest. PsychINFO Database, ProQuest. Medical Library, ProQuest. Biology Journals, ProQuest. Computing, ProQuest. Social Sciences Plus Text, ProQuest. Criminal Justice Periodical Index.

1.1. Global ProQuest statistics

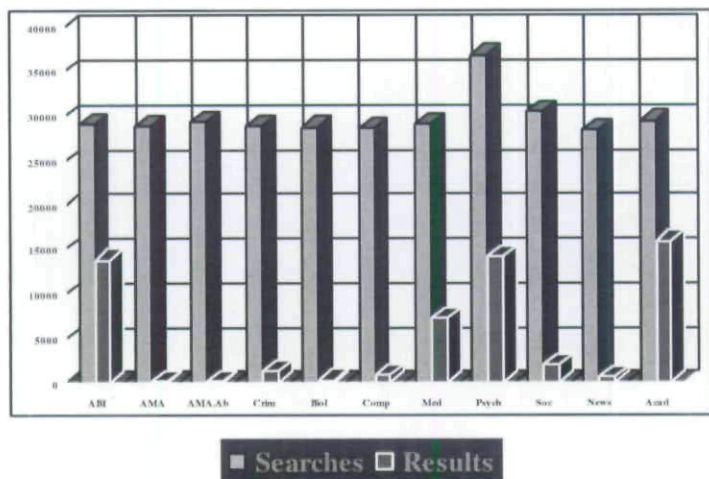*Table 1. Global ProQuest statistics for the year 2005*

01.01.2005.–31.12.2005. PERIOD				
Databases	No.sear ches	Cit/Ab str.	Full Text	Total results
ABI/INFORM Global	29033	2403	11374	13777
AMA Titles	28933	119	36	155
AMA Titles: Abstracts&Indexing	29267	5	0	5
Criminal Justice	28940	360	942	1302
ProQuest Biology Journals	28751	25	202	227
ProQuest Computing	28653	155	547	702
ProQuest Medical Library	29028	644	6546	7190
ProQuest Psychology Journals	36801	3868	10184	14052
ProQuest Social Science Journals	30421	326	1521	1847
U.S. National Newspaper Abstracts (3)	28464	574	0	574
Academic Research Library	29425	4167	11691	15858
TOTAL	327716	12646	43043	55689

The statistics show the number of searches, the number of downloaded articles with abstracts and the downloaded fulltext articles from each database module. At the number of searches each "click" on the "search" button was counted.

The total number of searches 327716 and the total number of downloaded articles 55689 indicates a wide research activity in these collections.

These statistic data can be illustrated in different combinations that may offer us a suggestive image about the way the subscribed to collections were used.
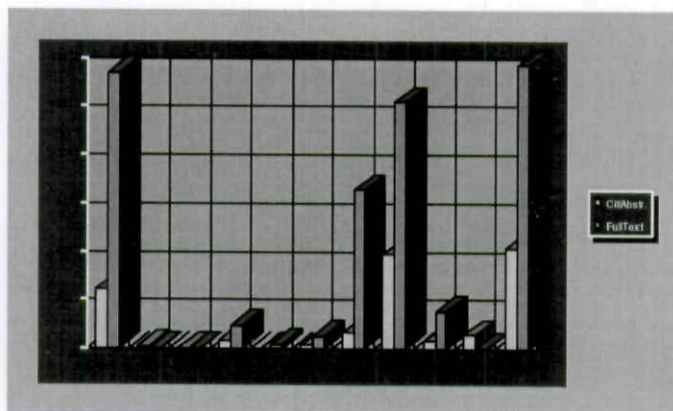
Graphic 1. The searches/results relation

■ Searches □ Results

The great difference between the number of searches and that of results indicates somehow a lack of expertise in searching. It suggests the fact that the searches are imprecise and made on far too general subjects. This increases the research time considerably, since to reduce the search to a narrower field one has to survey maybe tens, hundreds of articles.

The search interface in ProQuest is complex. It allows one to search according to different criteria, to combine different searching keys. All this requires some kind of expertise. The statistics presented above prove clearly that either the users lack this expertise, or the subjects searched for are not covered in the database.

Graphic 2. The articles with abstracts/fulltext article relation

The data (articles with abstracts/full text articles) have been presented comparatively for each ProQuest database module. Two observations can be made:
– from each module more articles were downloaded with abstracts than fulltext articles; this suggests that in a research it is often enough the abstract of an article (it provides you with a general view upon the respective domain of study and the entire content of the article is not necessary)
– the greatest number of articles (with abstract or fulltext) were downloaded from the following domains: ABI. InformGlobal (economy, business), Academic Research Library, PsychINFO and Medical Library.

1.2. ProQuest statistics on the IP-s of the servers

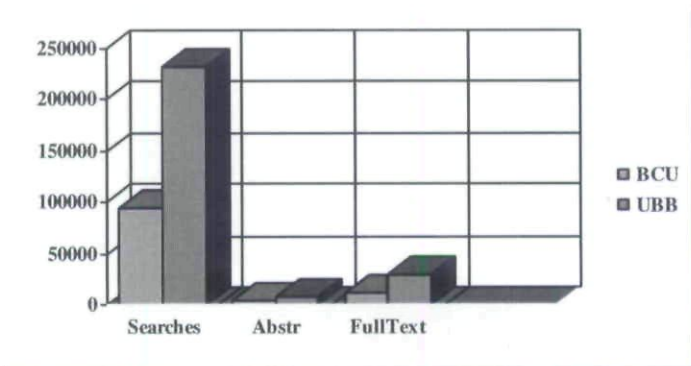*Table 2. ProQuest statistics on the IP-s of the servers*

	Searches	Cit/Abstr.	Fulltext	Total
Accesses BCU	95036	3805	12580	16385 R=5.8(search/result)
Accesses UBB	232213	8802	30374	39176 R=5.9(search/result)

These statistics show the great number of searches that were made in the two locations, the library and the university and in all its sub-locations.

The two categories of data presented above in the table show how many searches were made from the library (Accesses BCU) and how many from the university (Accesses UBB). It can be observed that 2.4 times more searches were made from the university than from the library centre, and 2.39 more articles were downloaded from UBB than from BCU.

It is interesting that the relation between *searches/results* is almost equal (5.8 in BCU and 5.9 in UBB); this proves the same lack of expertise. We may suppose once again either that the search interface being rather complex is not properly used, or that many searches were unsuccessful, therefore the database does not cover the subjects searched for. Anyway the greater number of searches indicates the great need of research.
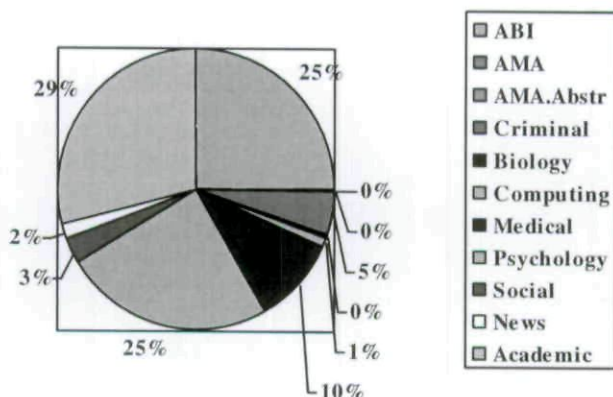
Graphic 3. BCU/UBB comparison

1.3. Searches from the "Lucian Blaga" Central University Library

Table 3. Accesses from BCU

	Searches	Cit/ Abstract	Fulltext	Total
ABI/INFORM Global	8277	775	3301	4076
AMA Titles	8320	34	14	48
AMA. Titles: Abstracts	8438	0	0	0

& Indexing				
Criminal Justice Periodicals	8297	153	673	826
ProQuest Biology Journals	8196	15	64	79
ProQuest Computing	8116	10	150	160
ProQuest Medical Library	8290	231	1392	1623
ProQuest Psychology Journals	11800	911	3105	4016
ProQuest Social Science Journals	8763	146	355	501
US National Newspaper	8109	269	0	269
Academic Research Library	8430	1261	3526	4787
Subtotal	95036	3805	12580	16385

Graphic 4. Fulltext BCU – covered area according to domains

In Graphic 4 the fulltext articles in percents are represented that were downloaded from BCU from all the ProQuest modules. The greatest number of fulltext articles was downloaded from the following modules:
1. Academic Research Library – 29%
2. ABI.InformGlobal – 25%
3. PsychINFO – 25%

4. Medical Library – 10%
5. Criminal Justice – 5%

These data suggest the fact that the modules enumerated above are well represented in the database, the number of fulltext articles found and downloaded being high. The Academic Research module covers almost all the academic disciplines; the ABI. InformGlobal module covers economic and business disciplines; the PsychINFO module contains psychology and all that is related to this domain; the Medical Library module covers medical disciplines.
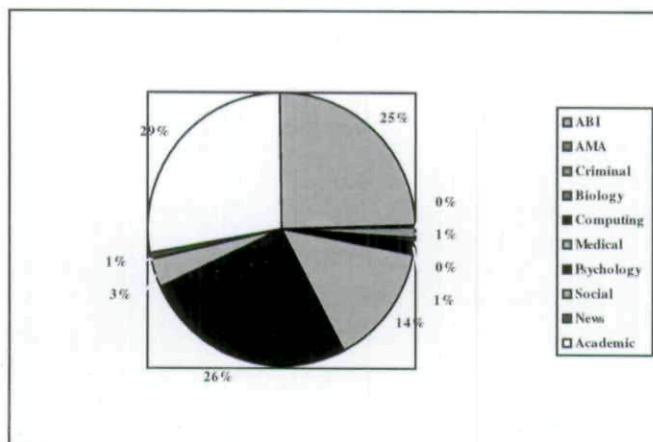
1.4. Accesses from the "Babeş-Bolyai" University

Table 4 presents according to modules the number of searches made from the university (all its locations) and the number of articles with abstracts and fulltext articles that were downloaded. In Graphic 5 the number of fulltext articles is represented in percents downloaded from each domain.

Table 4. Accesses from UBB

	Searches	Cit/Abstr.	Fulltext	Total
ABI/INFORMGlobal	20714	1626	8063	9689
AMA Titles	20569	84	22	106
AMA. Titles: Abstracts & Index	20787	5	0	5
Criminal Justice Periodicals	20601	207	269	476
ProQuest Biology Journals	20513	10	138	148
ProQuest Computing	20495	145	397	542
ProQuest Medical Library	20694	314	5118	5522
ProQuest Psychology Journals	24958	2957	7078	10035
ProQuest Social Science Journals	21616	180	1166	1346
US National Newspaper	20313	303	0	303
Academic Research Library	20953	2881	8123	11004
Subtotal	232213	8802	30374	39176

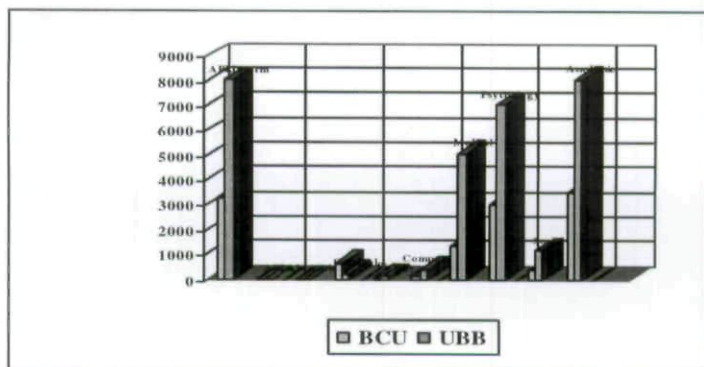*Graphic 5. Fulltext UBB – covered area according to domains*

It is easy to point out which were the frequently used domains in the university:

1. Academic Research Library – 29%
2. PsychINFO – 26%
3. ABI.InformGlobal – 25%
4. Biology – 14%
5. Social Sciences – 3%

It can be stated once more that the most appreciated and the best represented module of the ProQuest collection is the Academic Research Library.

Graphic 6. Fulltext – comparison between BCU and UBB

Graphic 6 illustrates the comparison between the fulltext articles downloaded from BCU and UBB made according to modules on the bases of the data extracted from Table 1 and 2. The only module in which the articles downloaded from BCU are more numerous than those downloaded from UBB is Criminal Justice; in all the other modules the number of articles downloaded from UBB is much greater than of those downloaded from BCU.

1.5. Comparison with the previous year

Since the Academic Research Library was the most frequently used module of the collection, a comparison of the years 2004 and 2005 for this module may be proposed.

Table 5. Academic Research Library – monthly statistics 2004

Month	Searches	Cit/Abstract	Fulltext	Total
January	1113	97	754	851
February	1921	321	1085	1406
March	3882	308	2471	2779
April	1875	147	813	960
May	2865	314	3226	3640
June	1341	585	4402	4987
July	731	80	2308	2388
August	618	48	323	371
September	826	87	448	535
October	1571	293	803	1096
November	2228	575	1335	1910
December	1757	298	923	1221

Table 6. Academic Research Library – monthly statistics 2005

Month	Searches	Cit/Abstract	Fulltext	Total
January	2542	429	1235	1664
February	1614	177	657	834
March	3279	387	1360	1747
April	3032	376	874	1250
May	2893	401	1012	1413
June	1792	199	596	795
July	1550	415	818	1233
August	1211	107	342	449
September	1199	138	373	511
October	3377	500	1521	2021
November	5154	664	1949	2613
December	2907	550	1380	1930

Graphic 7 reflects the fact that there were months when there was a more intensive activity in this module in the year 2004 than in the year 2005, namely in February, March, May, June, July; in the other months the activity was greater in the year 2005. On the whole, these scientific collections were used more often in 2005 than in 2004, and this is reflected in the annual report presented in Table 7. It can be observed here that, compared with the previous year, there was an 85% increase in searches, a 53% increase in the articles with abstracts and a 7% increase in the total of downloaded articles (with abstract or fulltext).

It is a positive aspect, which means we should take this need of research into consideration in the future as well, and which compels us to purchase such online products in the following years too.
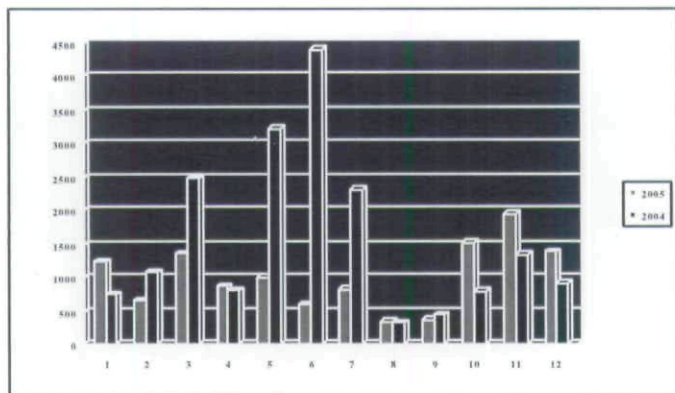
Graphic 7. Academic Research Library 2004–2005

Table 7. Annual report. Increases in comparison with the previous year

Time Frame – January 2005–December 2005				
Client 65090 – CENTRAL UNIVERSITY LIBRARY IN CLUJ				
Searches	Database	Cit/Abstract	Any FT Format	Total
30118	ABI/INFORM Global	2462	11743	14205
30033	AMA Titles	119	36	155
30390	AMA Titles: Abstracts & Indexing	5	0	5
30026	Criminal Justice Periodicals	373	952	1325
29853	ProQuest Biology Journals	34	223	257
29733	ProQuest Computing	155	553	708
30129	ProQuest Medical Library	654	6879	7533
38388	ProQuest Psychology Journals	3987	10901	14888
31584	ProQuest Social Science Journals	352	1588	1940
29544	U.S. National Newspaper Abstracts	616	0	616
30550	Academic Research Library	4343	12117	16460
340348	Grand Total	13100	44992	58092
183535	Previous Year	8588	45896	54484

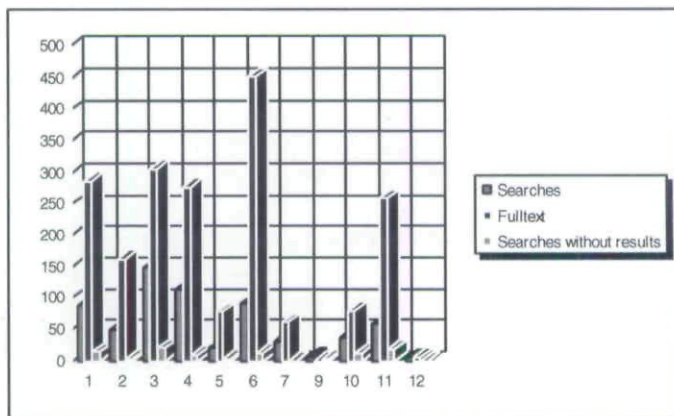|				
85%	% Increase	53%	-2%	7%
43259	Total of Unique Searches (Search Button Pressed)			

2. CHADWYCK HEALEY

The collection comprises 4 modules: History online, Literature online, European Sources online and PCI. Fulltext (new name – Periodicals Archive).

2.1. British History online

Table 8. History online statistics

Month	Sessions	Searches	Results	Fulltext	Searches without results
January	103	89	34146	288	13
February	59	50	45356	161	3
March	123	148	52210	305	20
April	171	113	41010	277	8
May	46	20	19720	77	1
June	91	91	36832	452	11
July	10	32	6156	61	0
September	4	5	722	0	3
October	33	38	11773	79	11
November	71	58	37055	260	17
December	10	4	2066	6	0

Graphic 8. History online monthly statistics

It can be observed that in this collection the searches were precise, the number of downloaded fulltext articles being high compared with the search results. This is due to the fact that, from the beginning, the searches have been made in a specialized database, consequently, a simple search key leads to quite exact results. This fact makes us believe that it is preferable to orientate ourselves towards the acquisition of specialized scientific collections, smaller databases focalised on a certain domain. Searches are more efficient in these collections.

A large product that covers a multitude of domains, with a complex search interface requires an expertise in the use of Booleans operators and keyword combinations.

Our interest is to offer our users online products that should be used easily and successfully as often as possible. We are often confronted with situations when the user complains: "I haven't found anything, the database is not good." And this happens only because the respective user simply does not know how to search the database. It is a frustrating experience both from his point of view and from the librarian's, since the library allocates important amounts of money in order to purchase these products, and the institution's interest is that they should be used as efficiently as possible. We must consider that hard as the librarian might try to assist each user in searching the database, he/she can never guide everyone who accesses these collections either from the university, or from the library.
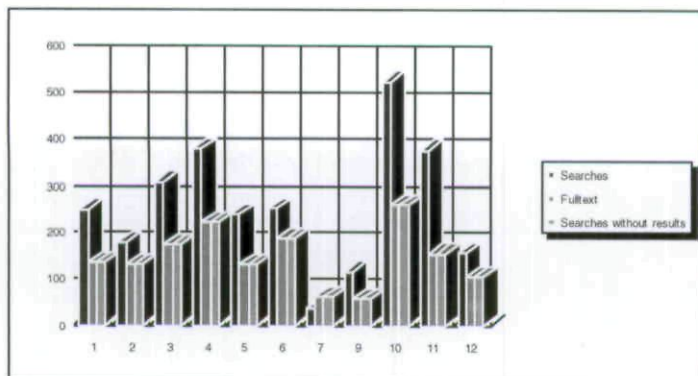
2.2. Literature online

It comprises 350000 works of prose, drama and poetry, 128 fulltext periodicals of Anglo-American literature and the authors' complete biography.
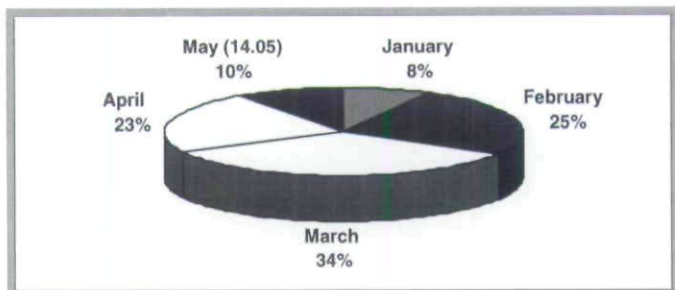
Table 9. Literature online monthly statistics

Month	Sessions	Searches	Results	Fulltext	Searches without results
January	46	248	58524	135	148
February	35	178	8966	131	120
March	57	308	145578	174	161
April	62	380	992288	220	241
May	56	237	22020	130	132
June	36	251	514186	187	103
July	10	35	1411	62	26
September	11	116	98724	58	57
October	46	524	326121	260	282
November	57	378	8676822	153	236
December	14	156	28302	104	64

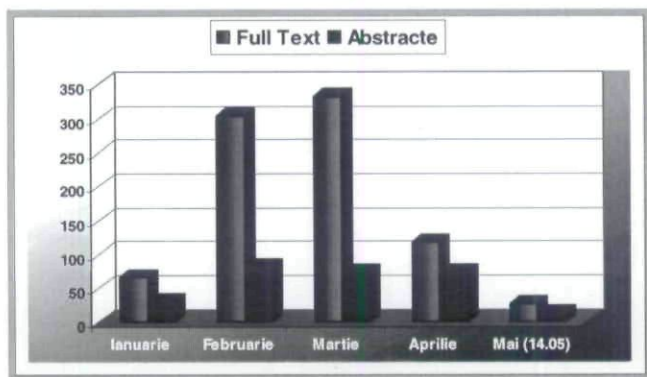*Graphic 9. Literature online monthly statistics*

In this collection the searches were made rather imprecisely, the number of searches without results being very high. This must be due again to the lack of expertise in searching, the search interface being quite complex, but we cannot exclude the fact that the database may not cover well the domains of literature (it contains only Anglo-American literature).

Graphic 10. Searches made until May

Graphic 11. Fulltext articles accessed until May

2.3. European Sources online

Table 10. European Sources online monthly statistics

Month	Sessions	Searches	Results	Fulltext
January	1	2	415	1

February	14	41	4061	10
March	42	90	16159	106
April	51	51	8288	58
May	32	19	2028	43
June	26	10	3464	11
July	6	6	4295	3
September	7	7	3532	2
October	69	37	6300	48
November	34	83	14070	62
December	13	41	9903	67

In this collection fewer searches were made, though it is an important database that offers specialized information on European institutions, governments, administrations or other organizations. This type of information is difficult to access otherwise.

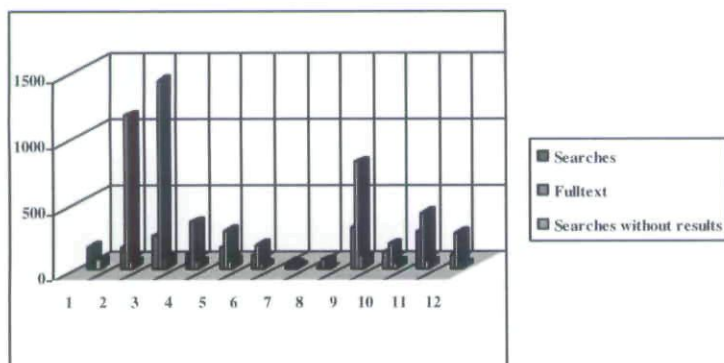### 2.4. PCI Fulltext (Periodicals Archive)

The collection comprises 15 million articles from 4700 scientific reviews from the domains of art and socio-humanistic sciences; 400 of these are fulltext.

Table 11. Periodicals Archive monthly statistics

Month	Sessions	Searches	Results	Fulltext	Searches without results
January	59	171	16078293	36	73
February	99	167	622922	1160	54
March	120	252	16121959	1422	93
April	94	123	238526	359	58
May	69	160	509840	286	62
June	44	103	239387	184	42
July	24	52	7913	31	21
August	16	22	10485	73	5

September	56	322	129674	813	98
October	40	128	28628	189	50
November	75	284	360688	428	56
December	59	105	1589338	278	39

Graphic 12. Periodicals Archive monthly statistics

The number of accessed fulltext articles is high compared with the number of searches.

3. The JSTOR database, Arts & Science Collection

It comprises fulltext articles from the following domains: anthropology, ecology, economy, education, finance, history, language and literature, mathematics, philosophy, political sciences, population studies, sociology, statistics.
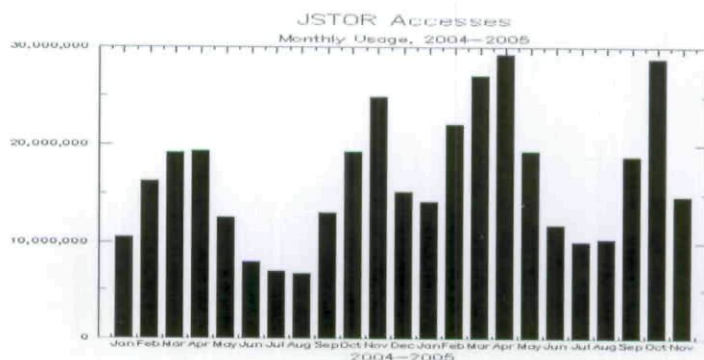
Table 12. JSTOR monthly statistics

	browsing				viewing		printing				
	title-list	vol/iss	TO Cs	Cita-tions	pages	(artic-les)	jprint	pdf	ps	Sear-ches	total
2005/01	102	185	213	75	1,169	500	0	539	0	869	3,152
2005/02	62	68	79	5	528	320	0	327	0	422	1,491
2005/03	153	247	420	12	3,497	1,486	0	1,292	3	1,537	7,161
2005/04	172	277	359	10	1,278	708	0	879	0	986	3,961
2005/05	57	137	110	1	979	487	0	619	0	563	2,466

2005/06	65	96	234	19	1,157	435	0	638	0	563	2,772
2005/07	14	13	5	0	355	313	0	1,534	0	376	2,297
2005/08	1	0	0	0	2	2	0	10	0	31	44
2005/09	10	26	77	5	213	98	0	153	0	165	649
2005/10	29	87	78	3	821	417	0	923	1	592	2,534
2005/11	53	191	311	12	2,638	1,395	0	1,390	0	1,651	6,246
2005/12	23	61	65	27	620	314	0	288	0	319	1,403
Totals	741	1,388	1,951	169	13,257	6,475	0	8,592	4	8,074	34,176

Altogether 13257 pages and 6475 articles were viewed and 8592 PDF articles were downloaded in the year 2005.

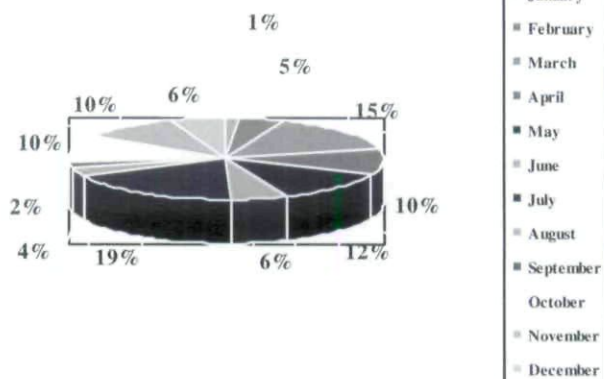*Graphic 13. Activity in JSTOR, in 2004 and 2005*

4. The SpringerLink database

It offers access to 1200 fulltext periodicals edited by Springer Verlag and Kluwer Academic Publisher. Domains: chemistry, informatics, economy, engineering, environmental studies, law, medicine, mathematics, biology, physics, astronomy, geology.

Table 13. SpringerLink monthly statistics

January	145
February	507
March	1584
April	1094
May	1276
June	623
July	1938
August	389
September	256
October	1072
November	1083
December	625
Total html	586
Total PDF	10006
Total	10592

Graphic 14. Fulltext articles accessed from SpringerLink

The collection was much used, the number of downloaded articles being 10952. The activity was almost uniformly distributed in the 12 months, the most intensive period of activity being July.

Conclusions

The statistics presented above show an extensive activity in the online scientific collections our library has subscribed to. This indicates a great need for research.

The databases were accessed by teachers, PhD students and undergraduate students both from the upper and lower years. This is gratifying.

It is worth emphasizing that professionalism is essential in searching in order to use these electronic products efficiently.

Our library will continue to subscribe to databases. This modality of research becomes more and more preferred by library users. One can quickly search the databases and the scientific information is permanently actualized, this being a very important aspect. However, for a university library, which offers its users scientific information from numerous domains, the selection of the online products which are to be subscribed to remains a major problem. The choices have to cover all these domains, but between the limits of an allocated budget.