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Global Register of Migratory Species
www.groms.de

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Global Register of Migratory Species

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The GROMS database is based on Microsoft Access. It provides information on 4358 migratory species, contains more than 1000 GIS maps and 5600 citations of which some are given as full text documents.

[Contributors](#)

[Disclaimer](#)

[Opening the Database](#)

[Printable PDF version of this CD Guide](#)




Name	Size	Type	Date Modified
biblio		File Folder	03/02/2003 17:01
D-Mapper_GROMS		File Folder	03/02/2003 17:03
Geodata		File Folder	03/02/2003 17:03
Getting_Started		File Folder	03/02/2003 17:05
Software		File Folder	03/02/2003 17:05
Autorun.exe	7 KB	Application	06/06/2001 15:12
autorun.inf	1 KB	Setup Information	06/03/2002 14:07
Gromsaccess97.mdb	95,864 KB	Microsoft Access Application	21/01/2004 13:51
gromsaccess2000.mdb	114,824 KB	Microsoft Access Application	21/01/2004 13:19
besmich.txt	5 KB	Text Document	20/03/2002 12:26
Readme.txt	5 KB	Text Document	11/03/2002 17:31
Start.html	5 KB	HTML Document	06/03/2002 17:29
UserGuide.pdf	1,667 KB	Adobe Acrobat Document	13/11/2003 17:24

To open click one of the db files depending on your version of MS Access

To open the database, you need Microsoft Access. Double click one of the Microsoft Access database files that is compatible to your version of Microsoft Access. The files are located direct in your CD-ROM directory.

For those who do not have MS Access to run the database, there are still GIS-maps, full text documents and interactive flyway maps that are accessible through the use of software given in this CD. The following table guides you through the rest of the content.

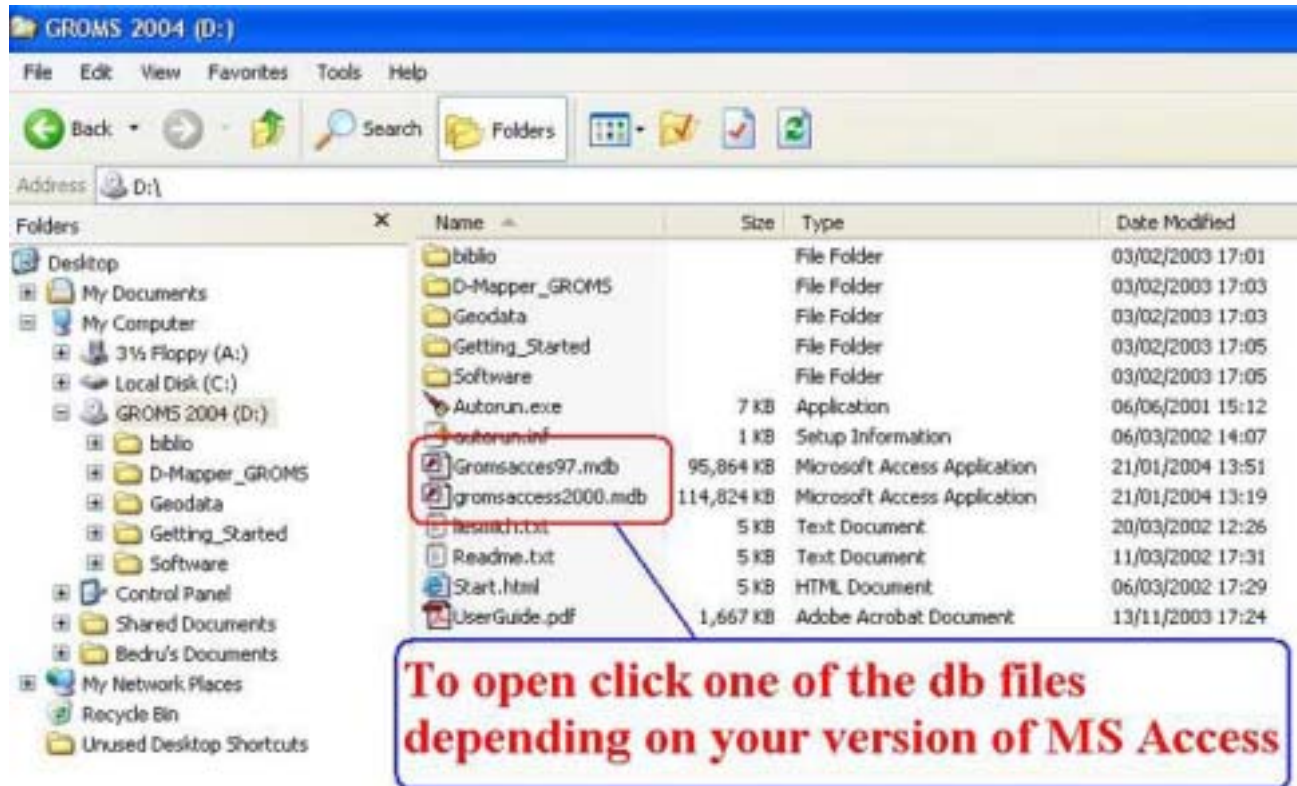
Map Resources	Full Text Documents	Flyway Animations	Frequently Asked Questions
			

For detailed information how to use the GROMS database,

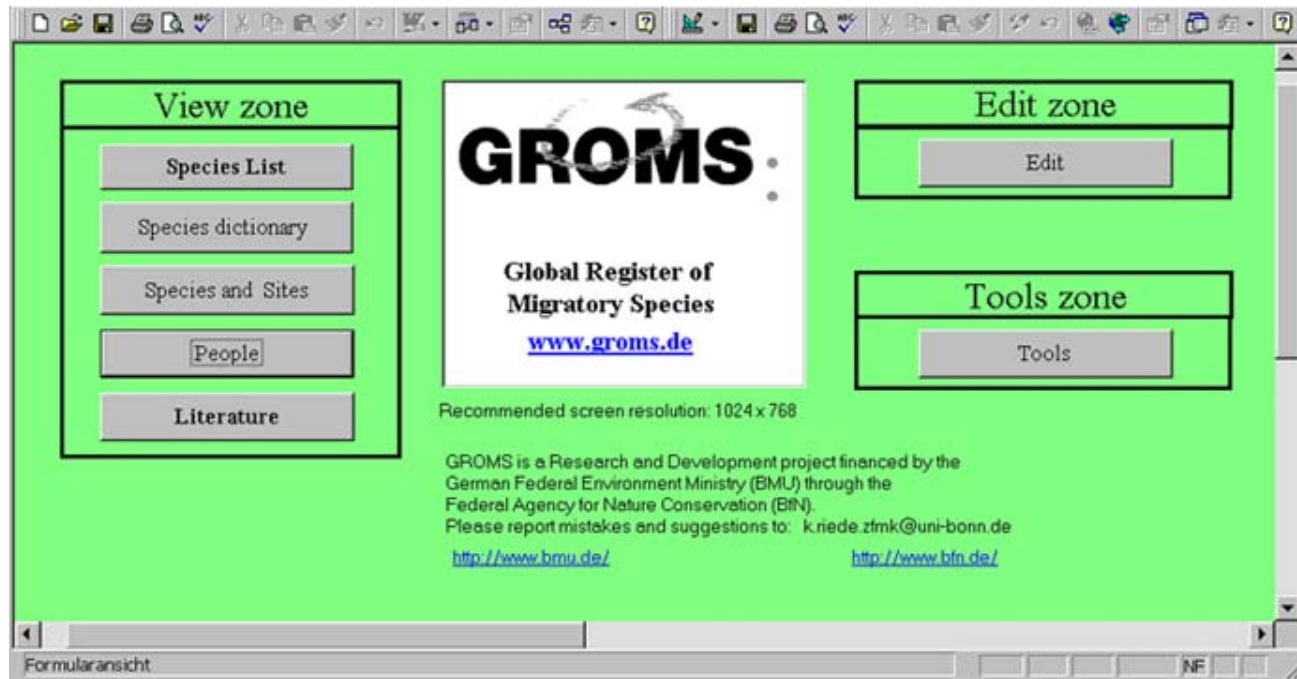


see the [GROMS Database Users guide](#)

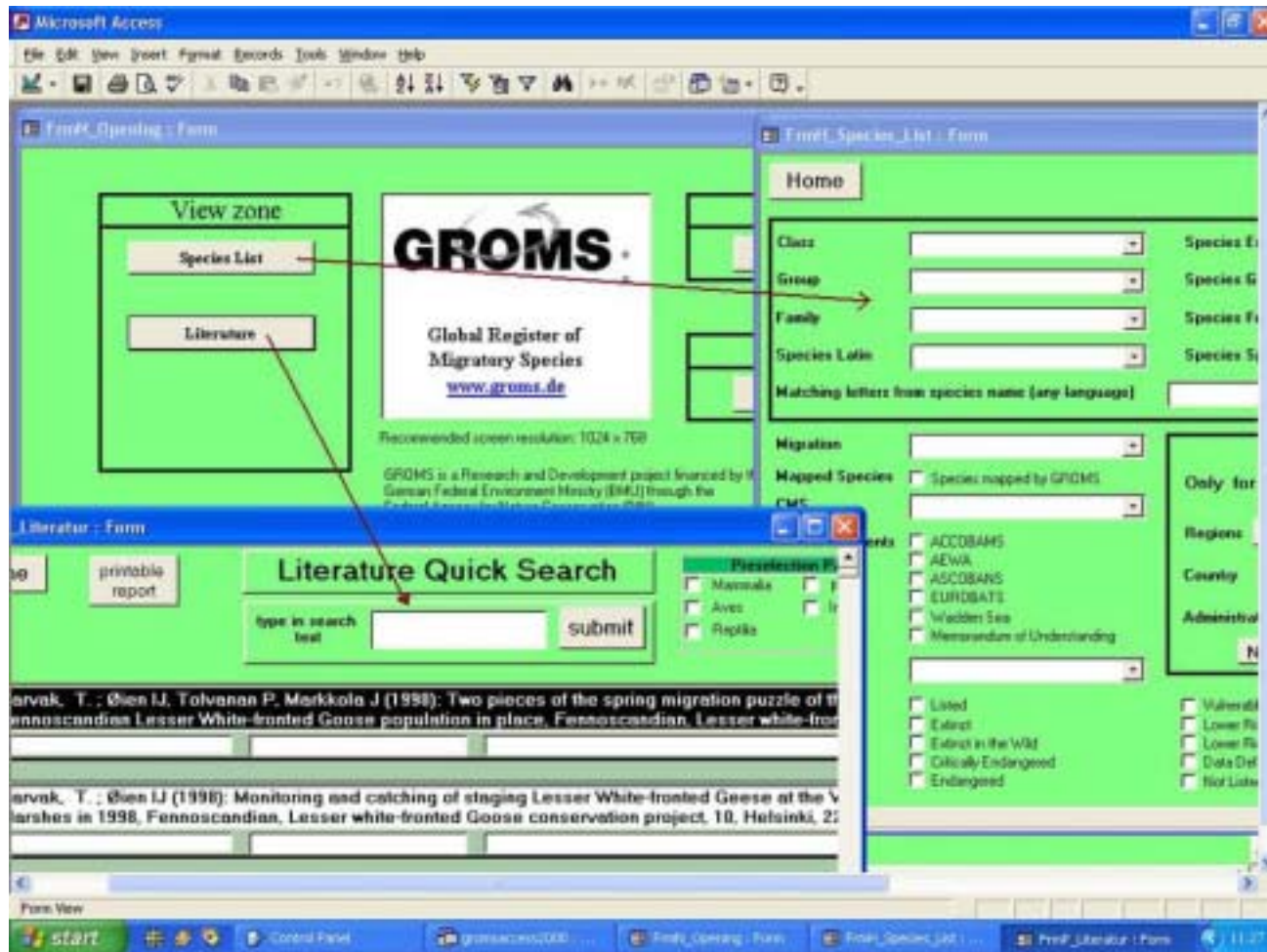
Location of the Database files



Open the Windows Explorer by clicking with the right mouse button on 'Start' (in the lower left corner of the screen). In the following pop-up-menu, click with the left mouse button on 'Explorer'. Click with the left mouse button on the letter of your CD-ROM drive. In the parent directory of your CD-ROM, you have three versions (gromsaccess97.mdb, gromsaccess2000.mdb and gromsaccess2003.mdb) of the same database. The database that is given in three versions is almost identical in content. Due to problems associated with conversion of old files by latest Access software, useful attributes could be lost if only the older version were presented. Run only one of the database files that is compatible with your Microsoft Access software.



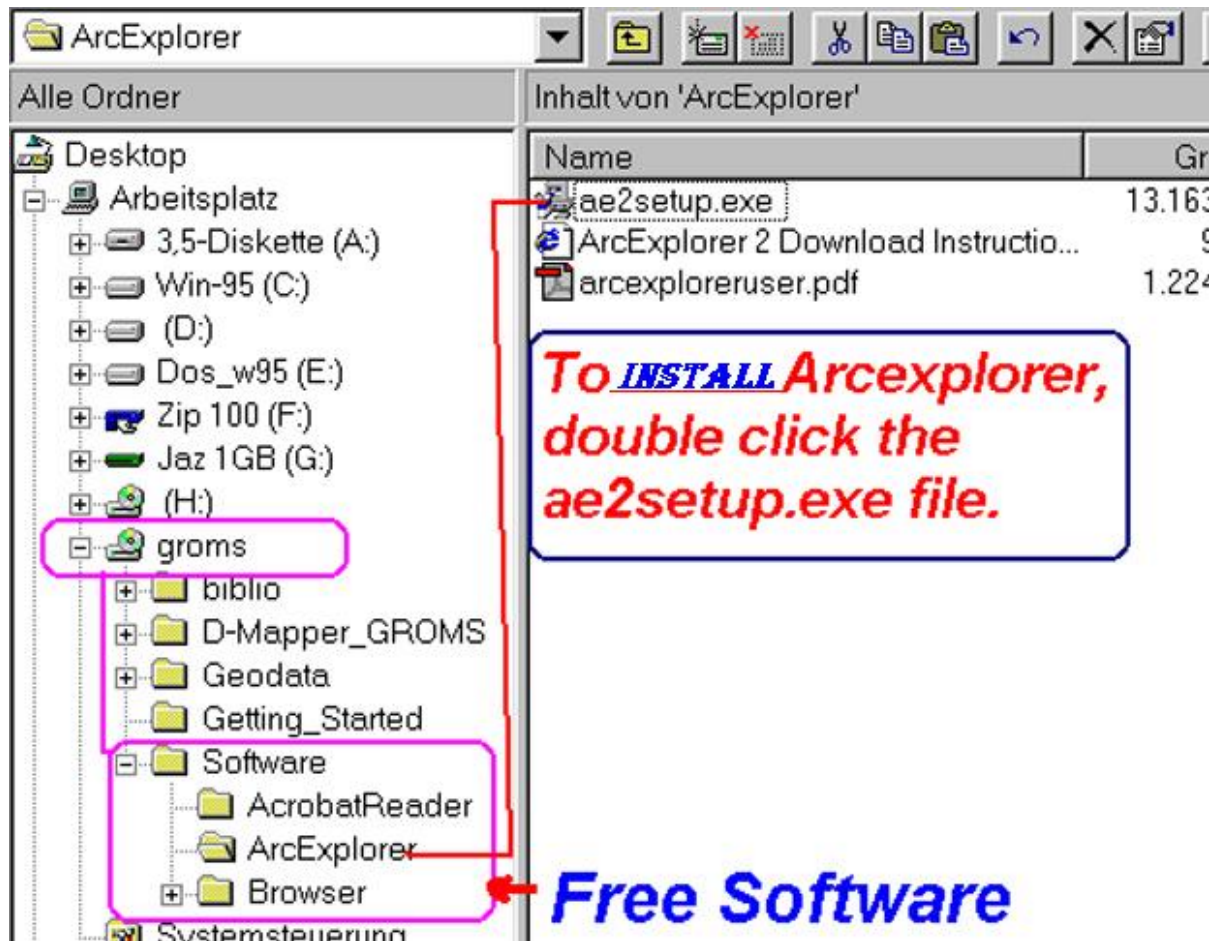
Upon successfully opening the database, the first interface of the database should appear like the picture on the left. Species and literature search buttons bring additional interfaces in which users are required to fill your query criteria. see below



The GROMS database contains a chain of user friendly interfaces. It is possible to make a complex query only by selecting certain criteria. Almost all criteria required to construct essential queries are presented in the interfaces as buttons, lists or radio buttons. [See the GROMS User guide for details](#)

Please read the [GROMS user guide](#) for best use of the database

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Using Map Resources

To display maps, you need ArcView or ArcExplorer (included in this CD):

To install Arcexplorer:
Switch to the directory "Software/ArcExplorer" on the CD-ROM. Double-Click with the left mouse button on the file *ae2setup.exe* and follow the instructions on the screen. (See also www.esri.com)

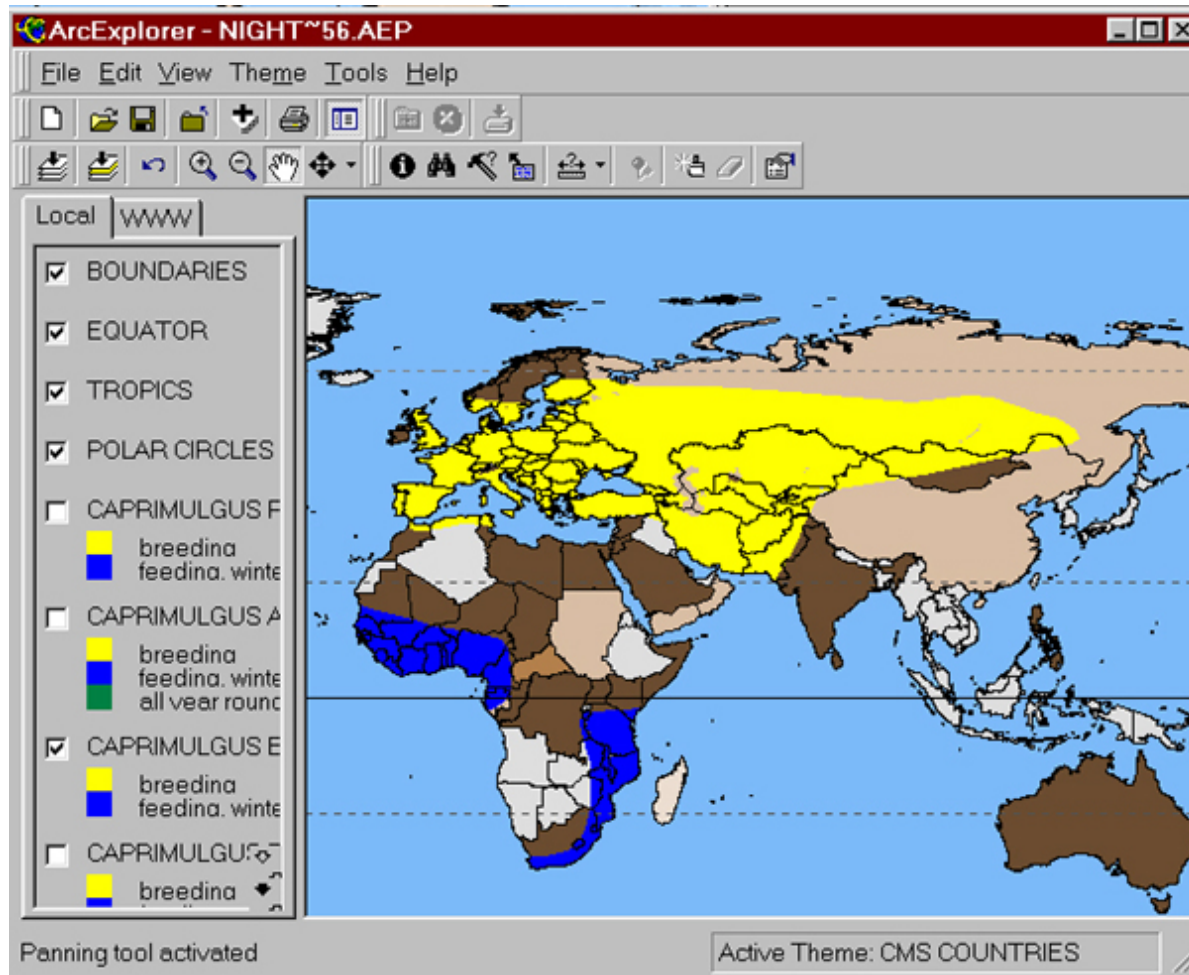
[Meta data](#) for GIS Maps in this CD

Map resources are located here

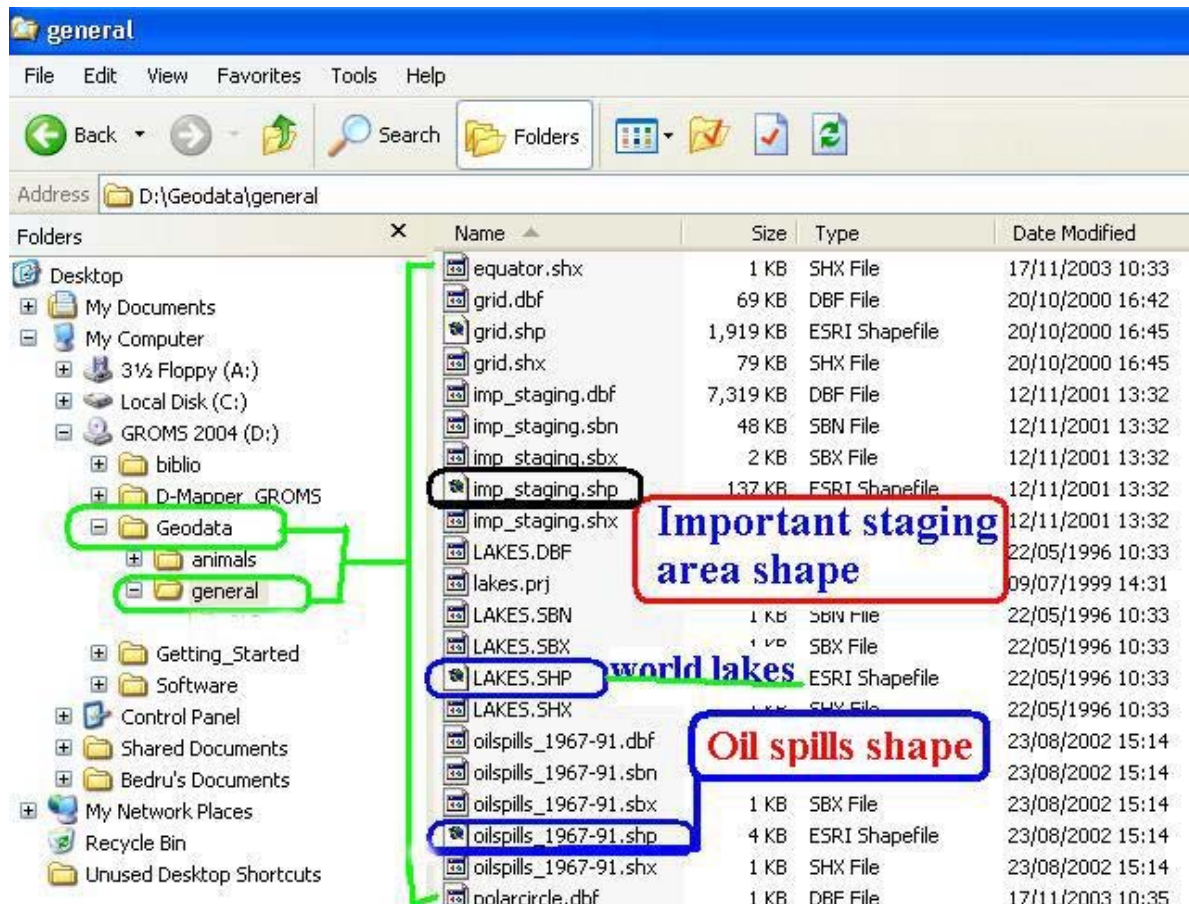
Name	Size	Type	Date Modified
animals		File Folder	03/02/2003 17:03
general		File Folder	18/11/2003 17:05
bat1.AEP	5 KB	ArcExplorer Project	21/11/2003 20:26
bat2.AEP	9 KB	ArcExplorer Project	21/11/2003 20:26
bat3.AEP	11 KB	ArcExplorer Project	21/11/2003 20:26
bee1.AEP	10 KB	ArcExplorer Project	21/11/2003 20:26
bee2.AEP	10 KB	ArcExplorer Project	21/11/2003 20:26
bee3.AEP	9 KB	ArcExplorer Project	21/11/2003 20:26
bee4.AEP	9 KB	ArcExplorer Project	21/11/2003 20:26
bee5.AEP	10 KB	ArcExplorer Project	21/11/2003 20:26
cuculi1.AEP	5 KB	ArcExplorer Project	21/11/2003 20:26
cuculi2.AEP	9 KB	ArcExplorer Project	21/11/2003 20:26
cuculi3.AEP	9 KB	ArcExplorer Project	21/11/2003 20:26
cuculi4.AEP	9 KB	ArcExplorer Project	1/2003 20:26
cuculi5.AEP	9 KB	ArcExplorer Project	1/2003 20:26
cuculi6.AEP	9 KB	ArcExplorer Project	1/2003 20:26
cuculi7.AEP	9 KB	ArcExplorer Project	1/2003 20:26
cuculi8.AEP	9 KB	ArcExplorer Project	1/2003 20:26
cuculi9.AEP	9 KB	ArcExplorer Project	1/2003 20:26
emu.AEP	6 KB	ArcExplorer Project	21/11/2003 20:26
fishes1.AEP	10 KB	ArcExplorer Project	21/11/2003 20:26
fishes2.AEP	9 KB	ArcExplorer Project	21/11/2003 20:26
fishes3.AEP	10 KB	ArcExplorer Project	21/11/2003 20:26
fishes4.AEP	6 KB	ArcExplorer Project	21/11/2003 20:26
hoopoes.AEP	5 KB	ArcExplorer Project	21/11/2003 20:26
nightjars1.AEP	9 KB	ArcExplorer Project	21/11/2003 20:26
nightjars2.AEP	11 KB	ArcExplorer Project	21/11/2003 20:26
nightjars3.AEP	11 KB	ArcExplorer Project	21/11/2003 20:26

Project files: there are as many as 6 spp per project!

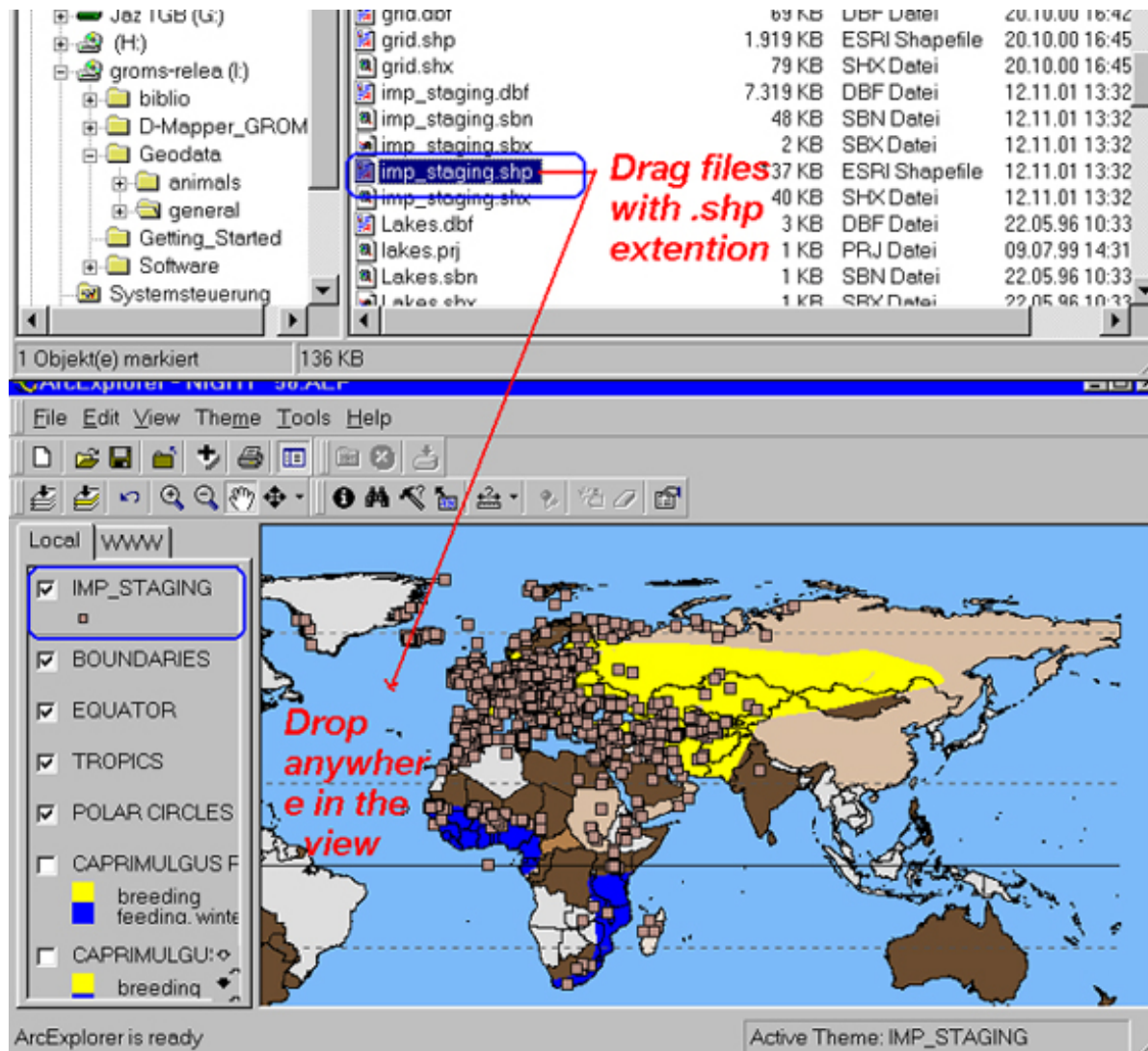
Arcexplorer files are located in the parent directory of 'Geodata'. These files are opened by using the Arcexplorer software included in this CD. The source map files (shape files) are also included in subfolders. The folder "animal" contains Arcview shape files that can be viewed and modified by major commercial GIS software like ESRI's Arcview. If you successfully install Arcexplorer, double clicking one of these '.aep' files should result in an interface like the one below



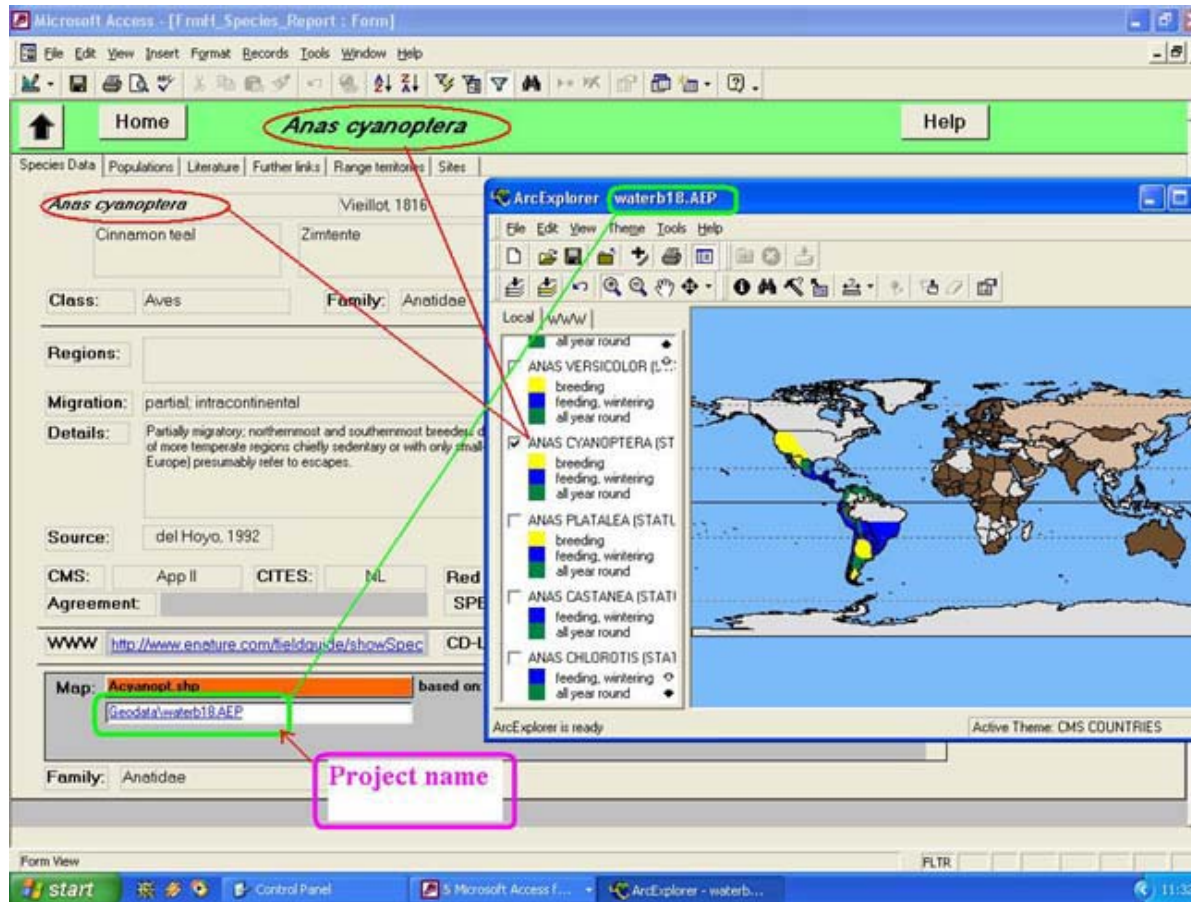
If you successfully installed Arcexplorer, double clicking one of the above '.aep' files should result in an interface like this one



In addition to these map resources, you can find important digital map information in the 'General' folder. These files are also shape files. Diverse themes ranging from Oil spills information up to Ramsar sites and staging areas are given as GIS layers in this directory. There are also ancillary geographic layers like rivers, lakes, roads and so on that are produced by ESRI. Arc explorer users can simply drag the file with .shp extension (*.shp) and drop it in an already opened Arcexplorer view. Further analysis of these data by using them as input layer is possible.



Click on the desired shape file, hold on and drag to an open Arcexplorer. Then drop it anywhere in the view. Your shape file should be displayed when you turn 'the display button' on by clicking the small white rectangular box before the file name on the left block of the Arcexplorer view.



In the database, a link to a bundle of species map (a project) is given at bottom left corner of species main page (see picture below). The project contains up to 6 species and additional support reference data. Once maps are displayed in Arcexplorer, select the specific species you are interested and close the others. This can be achieved by activating and deactivating the 'display button'. As mentioned above, additional layers can be added to your view from the 'Goedata/general' directory. Simply drag the file of your interest and drop it in the open view. If it is not promptly displayed, check for the display radio button (see picture below). Make sure that the file you dragged is a shape file or has a ".shp" ending.

For more information on how to use the ArcExplorer with in the GROMS: See page 150f of [UserGuide.pdf](#) . To learn ESRI ArcExplorer, see the user manual [arcexploreruser.pdf](#).

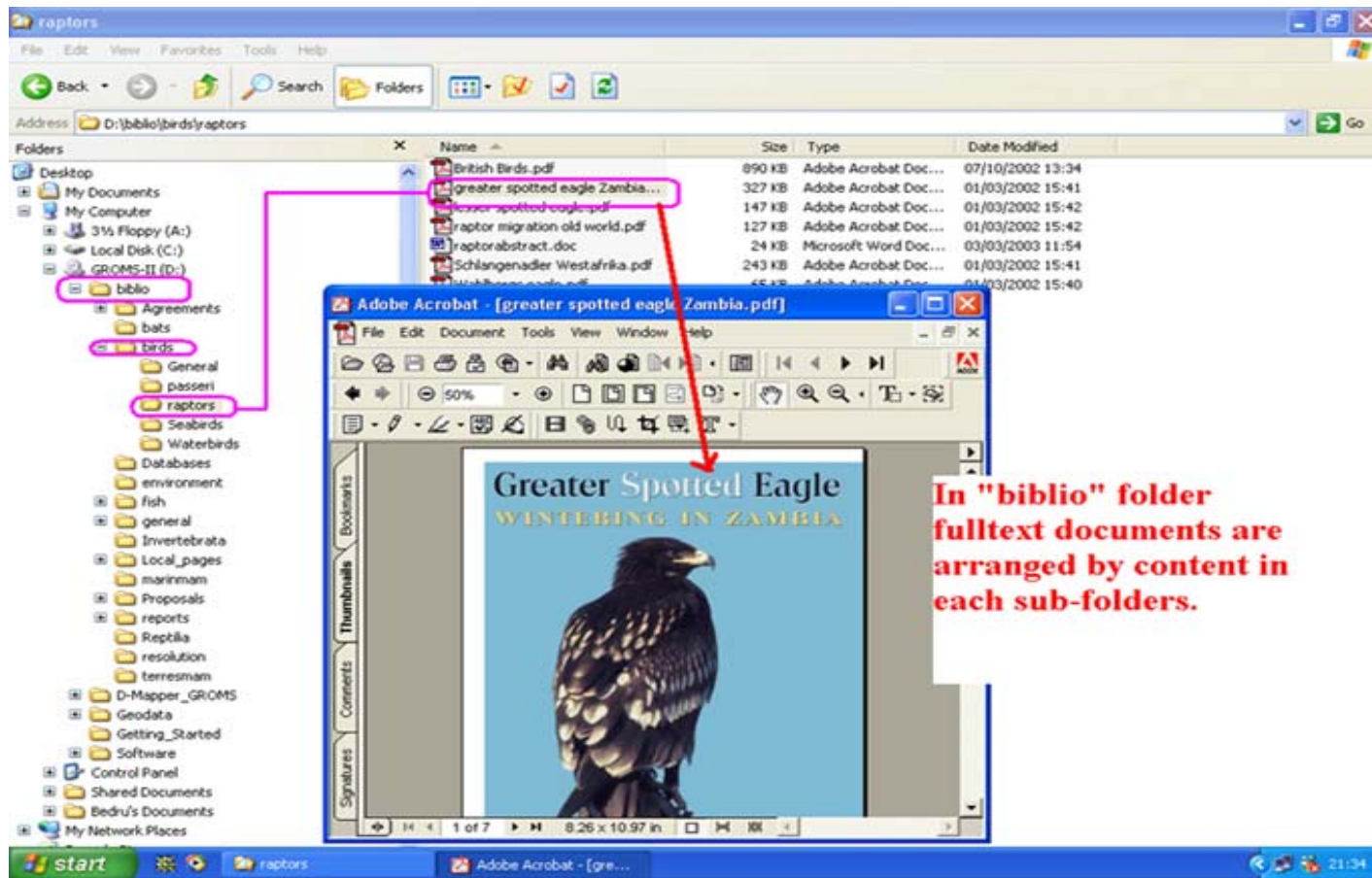
[Meta data](#) for GIS Maps in this CD

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Full Text Documents

Accessible full text documents are prepared and given in PDF, html or Word document formats. They can be accessed by navigating to the 'biblio' folder. Documents are stored structurally by theme in each sub-folder. The folder name is assumed to give you a hint or two on the type of files it contains.

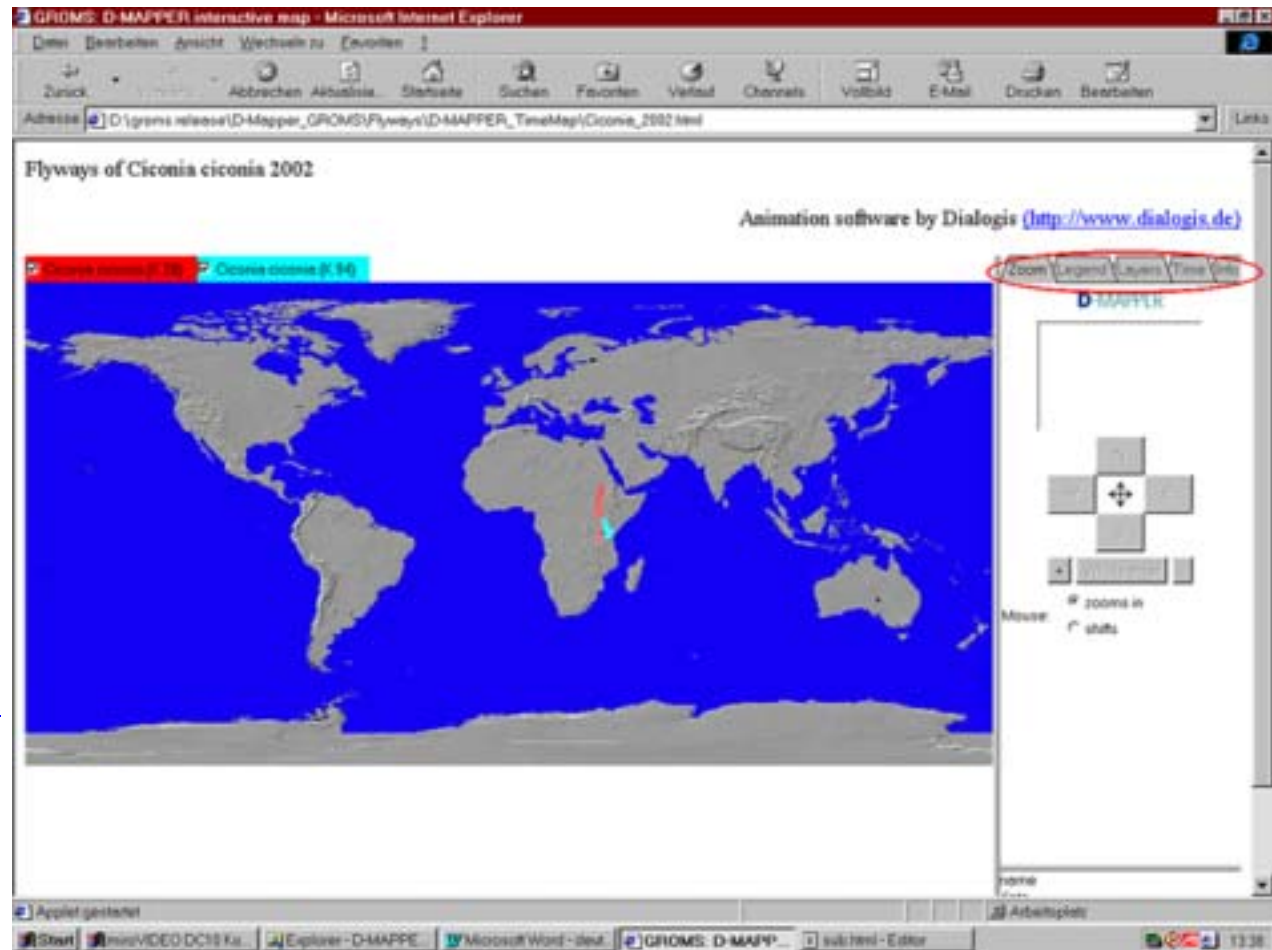
A free Acrobat Reader software included in this CD to enable you read the PDF documents. Please find the software in the 'AcrobatReader' sub-folder, from 'Software' folder and follow the installation guide.



**Your CD-ROM
directory/biblio/..... contains a
range of full text documents.**

Flyway animations/ Interactive maps

- Flyway animation: *Ciconia ciconia*
[Flyways of the year 2002](#)
[Flyways of the year 2000](#)
[Flyways of the year 1999](#)
- [Flyway animation: *Grus canadensis*](#)
- [Flyway animation: *Spheniscus humboldti*](#)
- [Flyway animation: *Aquila pomarina*](#)
- [Flyway animation: Humboldt: Ecuador and Peru](#)



Please notice that this page contains information of a type (application/x-java-vm) that can only be viewed with the appropriate Plug-in. So if you have a problem viewing these pages correctly, probably you have an older browser that does not contain the required Plug-in. Either install the browser included in this CD or download the required plug-in.

Important link to [Download Plug-in](#)

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Frequently Asked Questions (FAQs)

These are some of the questions that we received after the release of the first CD-ROM.

I searched for a direct link in the opening page that leads me to the database on CD page. How can I access the database?

There is no direct hyperlink in the opening page. The size the database files are far too big to use hyperlink conveniently. A hyperlink would require users to download the database either to their hard disk or temporary memory every time it is activated. This is not a convenient way of utilising computer memory for such big files. Instead, users are advised to start the database files manually. The database files can be found in the parent directory of the CD-ROM. There is information about how to find the [location of the database files](#) in the CD.

Why are three Access database files given in the CD?

It is assumed that the diverse users of this CD may as well use different versions Microsoft Access software. Conversion of access database files from older versions to latest and vice-versa leads to serious loss in database attribute. Providing different versions of the same database is believed to avoid such problem.

I don't have the Microsoft Access program that is required to run the database. Is there any other means I can open the database?

The database is a Microsoft access database file. therefore, Microsoft access is required to open the database. However, a variety of information produced by GROMS and others is accessible without using the database. Highly flexible [digital maps](#), [animated migration flyways](#) and [full text documents](#) are readily accessible with software that are included in this CD. The [opening page](#) directs you how to access those products that do not require the use of Microsoft access or the database.

The animated flyway map does not run. what is the problem?

[Animated migration flyways](#) are readily displayed on Internet browsers that support x-java-vm application. That means you need the appropriate plug-in to view them correctly. So if you have a problem viewing these pages correctly, probably you have an older browser that does not contain the required Plug-in. Either install the browser included in this CD or download [the required plug-in](#).

What is the need to produce a CD version of GROMS while everything is available online?

Ease of dissemination and technical feasibility are the major factors for the production of a CD version. Internet access is limited in areas where the GROMS product can be of importance, like the wintering range states of Africa. Moreover, the CD allows a huge variety of more sophisticated queries, by accessing the "core tables" of the database, using MS-Access.

I have an Arcview GIS programme running in my computer. How can I make use of GROMS products with it?

The GROMS output presents ample data both on biological as well as spatial aspects. GIS files that combined both aspects are given in Arcview shape format. They are located in your CD-ROM drive/geodata/... These Arcview based shape files can also be accessed by other relevant GIS software too.

Where are the source files for the Arcexplorer projects?

The source files for our AEP are the shape files mentioned above. A certain number of individual shapes are bundled in an AEP based on their taxonomic relevance. Therefore, you should expect a number of shape files behind one AEP.

I have certain relevant digital data at my possession. Can I combine them with GROMS products?

Yes. You are encouraged to use the digital maps along with other compatible digital data you have. It is possible to have unlimited perspectives by overlaying, intersecting or merging thematically different layers. If you think your data may be useful for other users too, please contact us. We will gladly include new relevant data pertaining migratory species in the next editions. As the main goal of GROMS is bringing scattered information together, the data you supply will get wide distribution thereby providing helpful information to some one else somewhere in the globe and helping the efforts in the conservation of migratory species.

I have problem overlaying my own shape files to the Arcexplorer viewed layers in this CD.

Probably you are using different map reference system or map projection type. GROMS is using WGS-84 map projection system with Lat/Lon decimal degrees units. Please check you digital map for those attribute and convert to compatible system.

What type of file formats can I overlay in Arcexplorer?

You can use Arcexplorer to display, overlay and query locally stored GIS data. The following file formats are supported by Arcexplorer.

- Image formats such as MrSID, JPEG, ADRG, ERDAS, GIF, TIFF, GeoTIFF, ArcInfo Grid, CIB, NITF, and many others.
- Military formats—Vector Product Format (VPF).
- CAD formats—DXF, DWG, and DGN.

Please pay attention to projection and map reference systems whenever you try to overlay layers from different sources.

Why do I encounter differences between GROMS GIS distribution maps and other GIS layers?

Most of our maps are still on a global scale, and should be viewed on a global scale. A GIS allows you to zoom in "infinitely" - this does not make sense (imagine to look at a paper map in global scale with a microscope!). If you zoom to inadequate scales (e.g. below 1:1.000.000), you will encounter differences with respect to borders of continents, lakes or islands.

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