ADMB
Contributed
Libraries

Steven Martell

Introduction

Simple example

Libraries

Using the Contributed Libraries in ADMB

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What are libraries?

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Contributed libraries are a series of custom functions written by contributors to the ADMB project.

E.g., code for a normal negative log likelihood

```
0.5*log(2.*PI)+log(std)+0.5*square(x-mu)/(std*std);
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```

Could be replaced with

```
dnorm(x,mu,std);
```

How to use the contributed libraries

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With version 10.2, you can now include the custom libraries in the GLOBALS_SECTION

To this you simple use:

```
GLOBALS_SECTION
  #include <library_name>
```

Example using simple.tpl

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This ...

```
PROCEDURE_SECTION
   pred_Y=a*x+b;
   f=(norm2(pred_Y-Y));
   f=nobs/2.*log(f);
```

is the same as:

```
PROCEDURE_SECTION
   pred_Y=a*x+b;
   f=dnorm(pred_Y-Y);
GLOBALS_SECTION
   #include <statsLib.h>
```

Contributed Libraries

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To date the contributed libraries are:

- statsLib
- ecolib
- qfclib

To learn more about these libraries see the ADMB documentation use
http://admb-project.org/documentation/api/

A detailed list of function prototypes and documentation for each library can be found at the above link. For example the statsLib contribution can be found at:
http://admb-project.org/documentation/api/
statsLib_8h.html

The End