# Front page template

Bob Yantosca and Philippe Le Sager
*School of Epngineering and Applied Sciences, Harvard University*

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## Contents

# 1 Routine/Function Prologues

## 1.1 Fortran: Module Interface GC_SomethingIncludeFile.h

This include file contains the various parameters that will allow the module and routine to do stuff to various things in various routines in various places.

**PUBLIC TYPES:**

```
TYPE t_GeosChemSomething
   !%%% declare stuff here %%%
END TYPE t_GeosChemSomething
```

**PUBLIC MEMBER FUNCTIONS:**

```
None
```

**PUBLIC DATA MEMBERS:**

```
INTEGER(ESMF_KIND_I8), PUBLIC, PARAMETER :: myIntParam   ! INTEGER value
REAL(ESMF_KIND_I8),    PUBLIC, PARAMETER :: myRealParam  ! REAL*8 value
```

**REVISION HISTORY:**

```
 21 May 2008 - R. Yantosca - Initial Version
```

**REMARKS:**

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## 1.2 Fortran: Module Interface GC_SomethingMod.F90

This module contains the data type to declare a Something object and the methods to work with the Something object.

**INTERFACE:**

```
MODULE GC_SomethingMod
```

**USES:**

```
USE ESMF_Mod
IMPLICIT NONE
```

**PUBLIC TYPES:**

```
TYPE t_GeosChemSomething
   !... declare stuff here
END TYPE t_GeosChemSomething
```

**PUBLIC MEMBER FUNCTIONS:**

```
PUBLIC :: GC_SomethingRoutine1
PUBLIC :: GC_SomethingFunction1
```

**PUBLIC DATA MEMBERS:**

```
INTEGER(ESMF_KIND_I4), PUBLIC :: myPublicVariable  ! public data variable
```

**REVISION HISTORY:**

```
21 May 2008 - R. Yantosca - Initial Version
```

**REMARKS:**

```
Protex is great!
```

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### 1.2.1 GC_SomethingRoutine1

This routine does something to the input variable and returns the result in the output variable.

**INTERFACE:**

```
SUBROUTINE GC_SomethingRoutine1( input, inpout, output, status )
```

**INPUT PARAMETERS:**

```
INTEGER(ESMF_KIND_I4), INTENT(IN) :: input   ! Input variable
```

**INPUT/OUTPUT PARAMETERS:**

```
INTEGER(ESMF_KIND_I4), INTENT(IN) :: inpout  ! In/out variable
```

**OUTPUT PARAMETERS:**

```
INTEGER(ESMF_KIND_I4), INTENT(IN) :: output  ! Output variable
```

**REVISION HISTORY:**

```
21 May 2008 - R. Yantosca - Initial Version
```

**REMARKS:**

```
Protex is great!
```

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### 1.2.2 GC_SomethingFunction1

This function does something to the input variable and returns the result in the value variable.

**INTERFACE:**

```
FUNCTION GC_SomethingFunction1( input ) RESULT( value )
```

**INPUT PARAMETERS:**

```
INTEGER(ESMF_KIND_I4), INTENT(IN) :: input   ! Input variable
```

**OUTPUT PARAMETERS:**

```
INTEGER(ESMF_KIND_I4), INTENT(IN) :: value   ! Output variable
```

**REVISION HISTORY:**

```
21 May 2008 - R. Yantosca - Initial Version
```

**REMARKS:**

```
Protex is great!
```

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### 1.2.3 GC_Routine.F90

This routine takes in an input variable, does something to it, and then sends out an output variable.

**INTERFACE:**

```
SUBROUTINE GC_Routine( input, output )
```

**USES:**

```
USE GC_SomethingMod
```

**INPUT PARAMETERS:**

```
REAL(ESMF_KIND_R8), INTENT(IN) :: input    ! input variable
```

**OUTPUT PARAMETERS:**

```
REAL(ESMF_KIND_R8), INTENT(IN) :: output   ! output variable
```

**BUGS:**

```
None known at this time
```

**SEE ALSO:**

```
GC_SomethingMod.F90
```

**SYSTEM ROUTINES:**

```
None
```

**FILES USED:**

```
GC_SomethingMod.F90
```

**REVISION HISTORY:**

```
21 May 2008 - R. Yantosca - Initial version
```

**REMARKS:**

```
Protex is great!
```