

NWP SAF	RTTOV91 Compilers tested	Doc ID NWPSAF-MO-UD-021: Version : 1.0 Date : 18/03/2008
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Compilers tested on RTTOV-9 code

Pascal Brunel
MétéoFrance
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Roger Saunders
Met Office
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Deborah Salmond
ECMWF

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Change record			
Version	Date	Author / changed by	Remarks
0.1	11/03/08	Roger Saunders	Original draft
0.2	11/03/08	Pascal Brunel	Add SUN, NEC-SX8 and some Linux platforms
0.3	12/03/08	Deborah Salmond	Add IBM
1.0	18/03/08	Roger Saunders	Final version for release

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Compilers tested on RTTOV-9 code

The list below gives the details of the compilers and platforms on which RTTOV-9 was successfully tested before release.

Machine: HP 9000/800 HP-UX
 Operating system: HP-UX B.11.00
 Compiler: HP F95 v4.1
 Compiler options: FFLAGS = -O2 -I. -maxcontin=70

Machine: HP 9000/800 HP-UX
 Operating system: HP-UX B.11.00
 Compiler: NAGWare Fortran 95 compiler Release 4.2(505)
 Compiler options: -gline -C=all -nan -maxcontin=70 or
 -g -gline -kind=byte -w -maxcontin=200 -PIC -O0 -C -nan

Machine: Linux eld093 2.6.9-67.0.1.EL
 Operating System: #1 Fri Nov 30 11:40:11 EST 2007 i686 i686 i386
 GNU/Linux
 Compiler: ifort Intel(R) Fortran Compiler for 32-bit applications,
 Version 9.1
 Compiler Options: -cm -w95 -auto

Machine: Linux eld093 2.6.9-67.0.1.EL
 Operating System: #1 Fri Nov 30 11:40:11 EST 2007 i686 i686 i386
 GNU/Linux
 Compiler: g95 gcc version 4.0.3 (g95 0.91!) Nov 6 2006
 Compiler Options: -fcase-upper -fno-second-underscore -fno-underscoring -ftrace=full

Machine: Linux eld093 2.6.9-67.0.1.EL
 Operating System: #1 Fri Nov 30 11:40:11 EST 2007 i686 i686 i386
 GNU/Linux
 Compiler: pgf90 6.2-3 32-bit target on x86 Linux
 Compiler Options: -g -O2 -r8 -fastsse -Kieee -tp k8-32 -
 Mvect=nosizelimit or
 -O2 -r8 -fastsse -Kieee -Mvect=nosizelimit

Machine: Linux eld093 2.6.9-67.0.1.EL
 Operating System: #1 Fri Nov 30 11:40:11 EST 2007 i686 i686 i386
 GNU/Linux
 Compiler: gfortran version 4.1.2 20070626 (Red Hat 4.1.2-14)
 Compiler Options: -g -fopenmp -O3

Machine: NEC SX-6
 Compiler: sxf90 Rev.360 2006/11/30
 Compiler Options: -ftrace -Chopt -Wf,-pvctl loopcnt=200000 -Wf,-pvctl
 vwork=stack nomsg -Wf,-O nomove,-O nomsg -DRTTOV_ARCH_VECTOR -Pstack
*for all routines except rttov_tl, rttov_alloc_prof and
 rttov_alloc_predictor when you use:*
 -ftrace -Cvsafe -Wf,-pvctl loopcnt=200000 -Wf,-pvctl nomsg -Wf,-O
 nomove,-O nomsg
*There is also a section in Makefile_lib that needs to be uncommented
 so the library is created using xsar.*

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Machine: Linux arrakis 2.6.17-5mdv
 Operating System: #1 SMP Wed Sep 13 14:32:31 EDT 2006 i686 Mobile
 Intel(R) Pentium(R) 4 - M CPU 2.20GHz GNU/Linux
 Compiler: gfortran version 4.3.0 20070924 (experimental)
 Compiler Options: -g -fopenmp -O3

Machine: SUN-Fire-V440
 Operating System: Solaris9
 Compiler: SUN Studio12 (also tested with SUN Studio11)
 Compiler Options: FFLAGS= -O3 -M. -Usun -openmp

Machine: Linux DELL PowerEdge 6950
 Operating System: Linux 2.6.16.21-0.8-smp #1 SMP Mon Jul 3 18:25:39
 UTC 2006 x86_64 x86_64 x86_64 GNU/Linux
 Compiler: GFortran compiler 4.3 64bits
 Compiler Options: -g -fopenmp -O3
 Compiler: g95 0.91 Nov 30 2007
 Compiler Options: -g -O3

Machine: NEC SX-8R
 Compiler: sxf90 V2.0 for SX-8R
 NEC Corporation
 Rev.343 2006/09/30
 Compiler Options: -Chopt -Wf,-pvctl loopcnt=200000 -Wf,-pvctl nomsg -
 Wf,-O nomove,-O nomsg
 -DRTTOV_ARCH_VECTOR -I../mods

*for all routines except rttov_tl, rttov_alloc_prof and
 rttov_alloc_predictor when you use:*
 -Cvsafe -Wf,-pvctl loopcnt=200000 -Wf,-pvctl nomsg -Wf,-O nomove,-O
 nomsg -DRTTOV_ARCH_VECTOR -I../mods

*There is also a section in Makefile_lib that needs to be uncommented
 so the library is created using sxar.*

Machine: IBM Power5+ (1.9GHz)
 Operating System: AIX 5.3.0.0
 Compiler: xlf version 11.0.1.2
 Compiler Options: -g -O3 -qmaxmem=8192 -qstrict -qarch=pwr5
 -qdpc=e -qsuffix=cpp=F90 -qfree=F90 -qspillsize=860
 Link Options: -bmaxstack:0x8000000000 -qsmp -L. -L/usr/local/lib/mass
 -lmass

Machine: Linux honir
 Operating System: 2.6.4-52-default #1 Wed Apr 7 02:08:30 UTC 2004
 i686 i686
 i386 GNU/Linux
 Compiler: pgf90
 Compiler Options: -O2 -g -Kieee -Mscalarsse