TM5-ZOOM - Bug #354

Size distribution of online calculated mineral dust emissions

04/08/2015 03:32 PM - Twan van Noije

Status:	Closed		**Start date:**	04/08/2015	
Priority:	Normal		**Due date:**		
Assignee:	Twan van Noije		**% Done:**	0%	
Category:	Aerosols		**Estimated time:**	0.00 hour	
Target version:					

Description
The online calculation of mineral dust emissions involves a mapping of the size distribution obtained using the sectional model of Tegen et al. (JGR, 2002) onto the log-normal accumulation and coarse modes of M7. This part of the calculation has been modified, resulting in two to three times higher emissions in the accumulation mode. For details, see the new comments in the code.
The attached figures show the impacts on the simulated annual mean dust load, aerosol optical depth (AOD) and contribution from mineral dust, as well as a comparison of the simulated annual mean, summer (JJA) and winter (DJF) AOD field with correction for stratospheric aerosols included with MODIS.

History

#1 - 04/10/2015 02:22 PM - Twan van Noije

- File DD_mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_modes-mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_2006.eps added

- File DD_mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_modes-mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_rel_2006.eps added

- File AOD_mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_modes-mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_2006.eps added

- File AOD_mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_modes-mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_rel_2006.eps added

- File DD_AOD_mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_modes-mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_2006.eps added

- File DD_AOD_mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_modes-mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_rel_2006.eps added

- File AOD_mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_modes_saod-modis_2006.eps added

- File AOD_mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_modes_saod-modis_2006_DJF.eps added

- File AOD_mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_modes_saod-modis_2006_JJA.eps added

- Status changed from In Progress to Resolved

#2 - 04/10/2015 02:27 PM - Twan van Noije

- Status changed from Resolved to Closed

Files

DD_mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_modes-mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_2006.eps	545 KB	04/10/2015	Twan van Noije
DD_mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_modes-mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_rel_2006.eps	600 KB	04/10/2015	Twan van Noije
AOD_mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_modes-mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_2006.eps	592 KB	04/10/2015	Twan van Noije
AOD_mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_modes-mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_rel_2006.eps	614 KB	04/10/2015	Twan van Noije
DD_AOD_mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_modes-mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_2006.eps	598 KB	04/10/2015	Twan van Noije
DD_AOD_mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_modes-mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_rel_2006.eps	682 KB	04/10/2015	Twan van Noije
AOD_mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_modes_saod-modis_2006.eps	701 KB	04/10/2015	Twan van Noije
AOD_mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_modes_saod-modis_2006_DJF.eps	954 KB	04/10/2015	Twan van Noije
AOD_mp_bcri_aii_oc2pom2_msa_soa24_oa16_seff_modes_saod-modis_2006_JJA.eps	1.20 MB	04/10/2015	Twan van Noije