

Record of Environmental Consideration

Description and location of proposed action: Develop a Contrail Climatology over North America

Contrails from aircraft are expected to have impacts on the Earth's climate. In order to better quantify the effects, it is necessary to improve the current understanding of how contrails are formed and their effects on climate forcing. The objective of this project's effort is to augment on-going efforts at Langley Research Center to develop contrail climatology over a large portion of North America using an automated method applied to polar-orbiting satellite data. The data used are from the Advanced Very High Resolution Radiometer (AVHRR) instrument, and the Moderate Resolution Imaging Spectroradiometer (MODIS) instrument. The analyses will also use model-simulated parameters that describe atmospheric conditions. These parameters are derived from the Modern Era Retrospective-analysis for Research and Applications (MERRA) model results. This work effort will be performed under Task 1-079, "Develop a Contrail Climatology over North America", under the existing Science, Technology, and Research Support Services (STARSS) contract by Science Systems and Applications Inc. (SSAI) at NASA Langley Research Center. The contractor shall deliver a copy of the codes developed and a final report. All work under this project is restricted to computer modeling and data algorithms.

The project manager Dr. Malcolm K. Ko at 757-864-8892.

The duration of the proposed action is to occur from April 2010 to December 2010.

The cost of the proposed action is \$250,000.

Determination: This action is categorically exempt from further environmental assessment based on the information provided in the project description. This REC is being issued to meet a requirement of the American Recovery and Reinvestment Act.



Project Manager

3/23/10

Date



Environmental Management Branch

3/23/10

Date