



Mining Product: EVADE Software

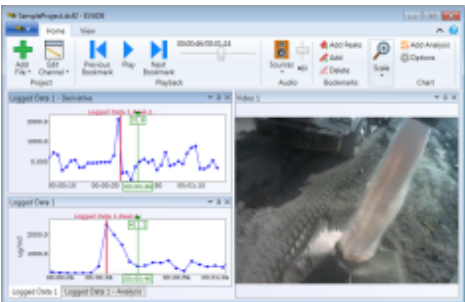
Original creation date: August 2014

Authors: AB Cecala, GP Cole, WR Reed, J Britton

The Enhanced Video Analysis of Dust Exposure (EVADE) software program merges video files and logged data files, allowing the user to view them simultaneously to help identify exposure sources. Need help getting started? Try the [video tutorial](#).

Now running as Version 2.4.3, it remains the software component for Helmet-CAM and is also finding use in other sectors. The Helmet-CAM procedure was developed by researchers at the National Institute for Occupational Safety and Health (NIOSH) and is a technique that uses a video camera worn by the worker to provide a visual record of the worker’s activities concurrently with data collected by a real-time data logging aerosol monitor also worn by the worker. Updates for version 2.4.3 include:

- Added data importer for the HD-7204 Personal Aerosol Compliance Monitor.
- Fix for missing help file bug. (2.4.1)
- Installation of the .NET Framework is no longer required. (2.4)
- Performance and security optimizations.
- Improvements to AM520 importer to better support international users.



Software (Windows) - June 2022

Version: 2.4.3

[Offline Installer \(140 MB\)](#)

[Online Installer \(0.52 MB\)](#)

NIOSHTIC2 Number: [20050241](#)

Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 2014-134c, 2016 Dec

Feature History



New features for EVADE 2.3 include:

- **Video import plugin support.** Expanding upon the same plugin mechanism used to create custom analyses and data importers, EVADE now supports creating custom video importers. This can be useful when a video needs pulled from a video monitoring management system.
- **New importers:** A file importer has been added for the Nanozen DustCount personal aerosol monitor. (*Mention of any company or product does not constitute endorsement by NIOSH.*)
- **Issue reporting added.** An entry has been added to the file menu, **Report Bug or Issue**. This will bring up a web page to enable logging of a bug or other issue found that will automatically be forwarded to NIOSH.

New features for EVADE 2.2 include:

- **6/4/2020: New Importer.** A new file importer has been added for the Nanozen DustCount personal aerosol monitor.
- **11/26/2019: Video window overlays.** Added the capability to overlay the reading from any log or analysis channel on a video channel.
- **11/26/2019: New analyses.** Time-weighted average, standard deviation, and threshold analyses have been added.

- **11/26/2019: Chart labels** Added option for charts to change the font size of the axis labels.
- **11/26/2019: Bug fix** Fixed issue where timestamps of bookmarks in the bookmarks window were not accounting for project start time.

New features for EVADE 2.1 include:

- Addition of log file importer for the AM520.
- Addition of extracting units for the AM510 importer.
- Update to the Airtec Diesel importer
- Update to the PDR1500 importer to handle European notation of using commas in place of decimal points.
- Update of the Generic CSV importer to handle European notation of using commas in place of decimal points.

New features for EVADE 2.0 include:

- **Share project bug fix** (3/20/2017): Eliminates "..error while packaging the file..." error that was occurring when Share Project was used from the File menu.
- **Usage metrics added** (3/15/2017): A voluntary option has been added to allow the application to report usage metrics to help improve the quality and reliability of the EVADE software.
- **Expansion beyond just dust exposure.** EVADE has become more generic to allow the playback of any video stream against any logged data stream.
- **Multiple channels.** Multiple video channels and multiple logged data channels can now be created in a single project.
- **File stitching.** Multiple files, video, or logged data can be added to a single channel for seamless playback.
- **Advanced windowing interface.** All playback channel, project editor, and bookmark windows are now "drag and drop" capable. This enables them to be stacked or grouped in any configuration and docked or undocked from the main program window. This is especially beneficial for large multi-channel projects and computers with multiple monitors.
- **Redesigned project editor.** A new project editor provides a visual reference for all channels. Each imported video or logged data file can be offset in time to get all data streams correctly synchronized.
- **Share a project.** A project can now be packaged and transferred to another computer where it can be opened and viewed, complete with all video and logged data.
- **Basic data analyses.** Simple analysis functions such as Max, Min, Mean, Derivative, and others are now available to apply to any logged data channel.
- **User-defined analyses and file importers.** There is now a facility for creating custom data import and analyses functions. This is accomplished by creating a custom plugin that is placed in a specific EVADE folder and made immediately available for use without recompiling the program.
- **Improved installation program.** A new installer allows EVADE to be installed without the need for Administrative Rights. In addition, on startup, the EVADE software will automatically check to see if there are any updates that can be downloaded (if the PC has an Internet connection).

Additional resources (also bundled in the offline installer):

- [Sample video and log files](#)  - Download this ZIP file and extract to a local folder.
- [Sample shared project](#) - Download this DCFX file and open with EVADE 2.4

- [Plugin framework](#)  - A Visual Studio project containing the framework to create a custom analysis or importer plugin.
- [RI 9696: Guidelines for Performing a Helmet-CAM Respirable Dust Survey and Conducting Subsequent Analysis with the Enhanced Video Analysis of Dust Exposures \(EVADE\) Software](#) 
- [Video tutorial](#) - A video tutorial describing the use of NIOSH developed software called EVADE.

Installation Notes:

Online Installer

- Click the download icon and select RUN.

Offline Installer

- Download and unzip the offline installer to a local folder.
- Open the Installer folder and run **setup.exe**.

Send any questions or comments regarding EVADE to mining@cdc.gov.

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