

Solo is a software application to interactively display and edit Doppler radar. Solo provides a polar view of data with interactive editing capabilities. HawkEdit is a merger of the LROSE visualization tool, HawkEye, with the original Solo editing functions. HawkEdit is the result of a collaboration of software developers, atmospheric scientists, and radar experts in the academic, research, and observational areas and provides interactive editing of data through a script editor and spreadsheet interface.

IMPORT / EXPORT

- recognizes, displays and offers interactive editing of airborne and ground-based radar and lidar data.
- import DORADE and CfRadial files. (Together with RadxConvert, HawkEdit can import most all radar and lidar data file formats.)
- save changes as binary data in CfRadial format
- snap and save images of the displays
- zoom-in to closely inspect data
- interactively pan across the display
- undo and redo edits.
- RHI displays and multiple window displays coming soon

BOUNDARY EDITOR

HawkEdit visualizes polar data and offers interactive boundary drawing on the polar display. Boundaries define areas to include or exclude sections of data, where the script editing functions respect user-defined boundary definitions.

DOWNLOAD

HawkEdit is a Mac application ready for installation. HawkEdit is part of the LROSE suite of tools for Linux and MacOS (see poster #79 by Jen DeHart on Tuesday, August 29 3-4:30pm.).

• • •		
File Time O	verlays Show Click	Boundary L
SPOL		
2015/05/28		
23:55:27.828		DBZ F
Elev	0.46	_
Az	5.00	PID
Fixed ang	0	
Sweep	2	VEL_F
N samp	122	
N gates	983	VEL_HV_F
Gate len	0.1500	
Pulse width	1.50	WIDTH_F
PRF mode	fixed	
PRF	1	NCP_F
Nyquist	26.7	
Max range	147.5	ZDRM_F
U-A range	149.9	
Scan mode	azimuth_surveillance	ZDR_F
Pol mode	hv_alt	
Lat	-100	RHOHV_F
Lon	-100	
Alt(km)	1	KDP_F
Sun el (deg)	20.701	
Sun az (deg)	281.491	PHIDP_F

ACKNOWLEDGEMENTS & MORE INFORMATION

http://lrose.net/, http://wiki.lrose.net/index.php/Main Page

From Solo to HawkEdit: Interactive processing and display of radar data

B. Javornik^a, A.J. DesRosiers^b, B. Klotz^a, J.C. DeHart^b, T.Y. Cha^a, M.M. Bell^b, M.J. Dixon^a, and W.C. Lee^a ^a National Center for Atmospheric Research, Boulder, CO, USA https://github.com/NCAR/Irose-HawkEdit



Lee, W. -C., Walther, C., & Oye, R. (1994). DOppler RAdar Data Exchange Format DORADE (No. NCAR/TN-403+1A). University Corporation for Atmospheric Research. doi:10.5065/D6X63JVB https://www.eol.ucar.edu/software/solo-ii PySolo Github: https://pypi.org/project/pysolo/ https://github.com/Alex-DesRosiers/HawkEdit Testing Data

^b Colorado State University, Fort Collins, CO, USA

NSF Award 2103785.



SCRIPT EDITOR

using aircraft wind, local wind, or gate data as initial

• work on a single sweep, scan, or

volume, or in batch mode with multiple

COLOR SCALE EDITOR

HawkEdit offers an interactive color scale selection, including import of a color scale file and the ability to edit the color scales that visualize the field data. Save edited color scale in parameter file coming soon.

QUALITY CONTROL

HawkEdit Instructional videos demonstrate HawkEdit in action for common quality control of airborne and ground-based radar data. HawkEdit has an evolving test bed of data inputs, expected outputs, and QC data editing scripts.