

Användarinstruktion för vibrationsmätare Svantek SV 106

Om instrumentet

SV 106 hand-arm och helkroppsvibrationsmätare är designad för att bedöma effekten av mekaniska vibrationer som överförs från maskiner på människokroppen, så kallade "mänskliga vibrationer". Denna typ av vibrationer är utbredd i industrier som konstruktion, transport, jordbruk och militären, såväl som i alla arbetsmiljöer där handverktyg eller tunga fordon används. SV 106 mäter mänskliga vibrationer noggrant i enlighet med brittiska standarder ISO 2631 och ISO 5349.

Hand-arm- och helkroppsvibrationsmätaren, SV 106, är utvecklad för att uppfylla de strikta kraven i BS EN ISO 8041-standarderna. Denna standard anger riktlinjer för prestandaspecifikationer för vibrationsmätningssystem, inklusive mätområde, noggrannhet, frekvenssvar, linjäritet och temperaturdriftsområde.



Arbets- och miljömedicin Syd

Användningsområde

- Hand-arm vibration
- Helkroppsvibrationer

Hårdvarufunktioner

- Antal kanaler: 6
- Kommunikationsgränssnitt: USB-C, I/O
- Keyboard: 9 knappar
- Minne: 32 GB
- Batteri: typ AA, 4 st
- Drifttid: 12-16h
- Drifttemperaturområde: -10 °C till 50 °C
- Fuktighetsområde: upp till 90 % RH, icke-kondenserad
- Vikt: 390 gram
- Storlek: 140 x 83 x 33 mm

Funktioner för vibrationsmätning

- Standarder
 - ISO 8041
 - ISO 2631
 - ISO 5349
 - UNI ISO 2631-1:2017
 - UNI ISO 2631-2:2018
 - UNI EN ISO 5349-1:2004
 - UNI EN ISO 5349-2:2015
- Antal: kanaler 6
- Sensor typ: IEPE / MEMS
- Ingångstyp: 2 x LEMO 5-stift
- Mätområde: Givarberoende
- Frekvensområde: 0,1 - 2000 Hz
- Profiler per kanal: 2 accelerationshastighet
- Viktningsfilter: Wd, Wk, Wm, Wb, Wc, Wj, Wg, Wf, Wh, Wp, HP, KB, Vel3
- Tidskonstanter: Linjär

Användarguide

Länk till tillverkarens användarguide:

<https://www.manualslib.com/manual/1306063/Svantek-Sv-106.html>

Transport av instrument

Levereras sker genom PostNords tjänster. Utrustningen levereras i en skyddad väska. Returfraktsedel skickas med väskan. Vid retur klistra fast retursedeln på väskan, helst över den förgående fraktsedeln. Lämna in på Postnords ombud eller beställ upphämtning genom postnord.se/skicka/returer. Instrumenten ska returneras i samma skick som vid mottagandet. Placera dem i väskan så att de inte skadas under transporten.

Inställningar

Accelerometrar

Hand- armvibrationer



SV 150 – Triaxial MEMS accelerometer



Svantek SV-105 MEMS Hand-Arm accelerometer

Helkropp

SV 38V sittplatta



Inställningar steg 1



Koppla in accelerometer i port 1

Inställningar steg 2



Starta instrumentet genom att trycka "Alt" + "Start/Stop" samtidigt

Inställningar steg 3



Välj "HAV_HAV" för att använda både port 1 & 2 samt få loggdata, vibnivå, peak & max

Inställningar steg 4



Välj "HKV_HKV" för att använda både port 1 & 2 samt få loggdata, vibnivå, peak & VDV, Crest

Inställningar steg 5



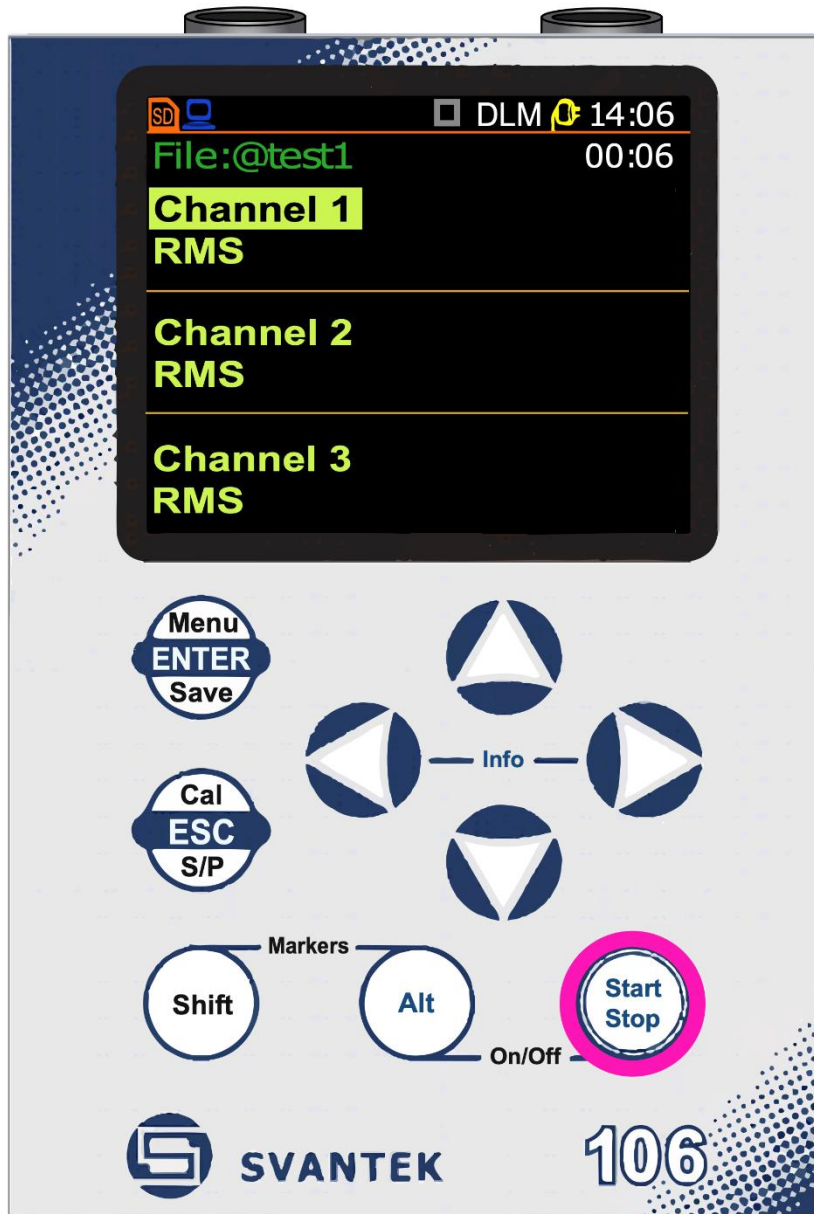
**"HAV_HKV" samtidig mätning;
port 1: hand-arm / port 2: helkropp
Loggfil, vibrationsnivå, VDV, Peak**

Inställningar steg 6



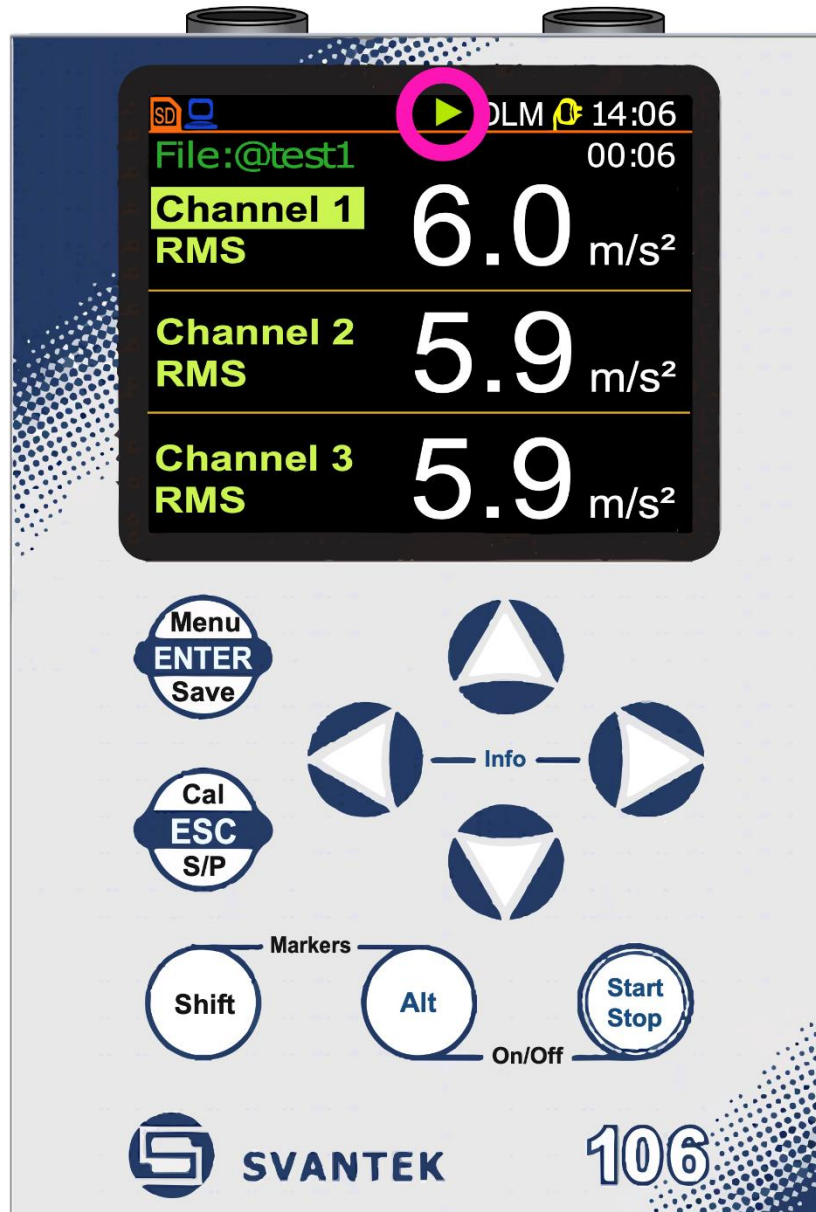
**För att läsa in accelerometer
inställningar välj "TEDS"
och bekräfta med "Enter"**

Inställningar steg 7



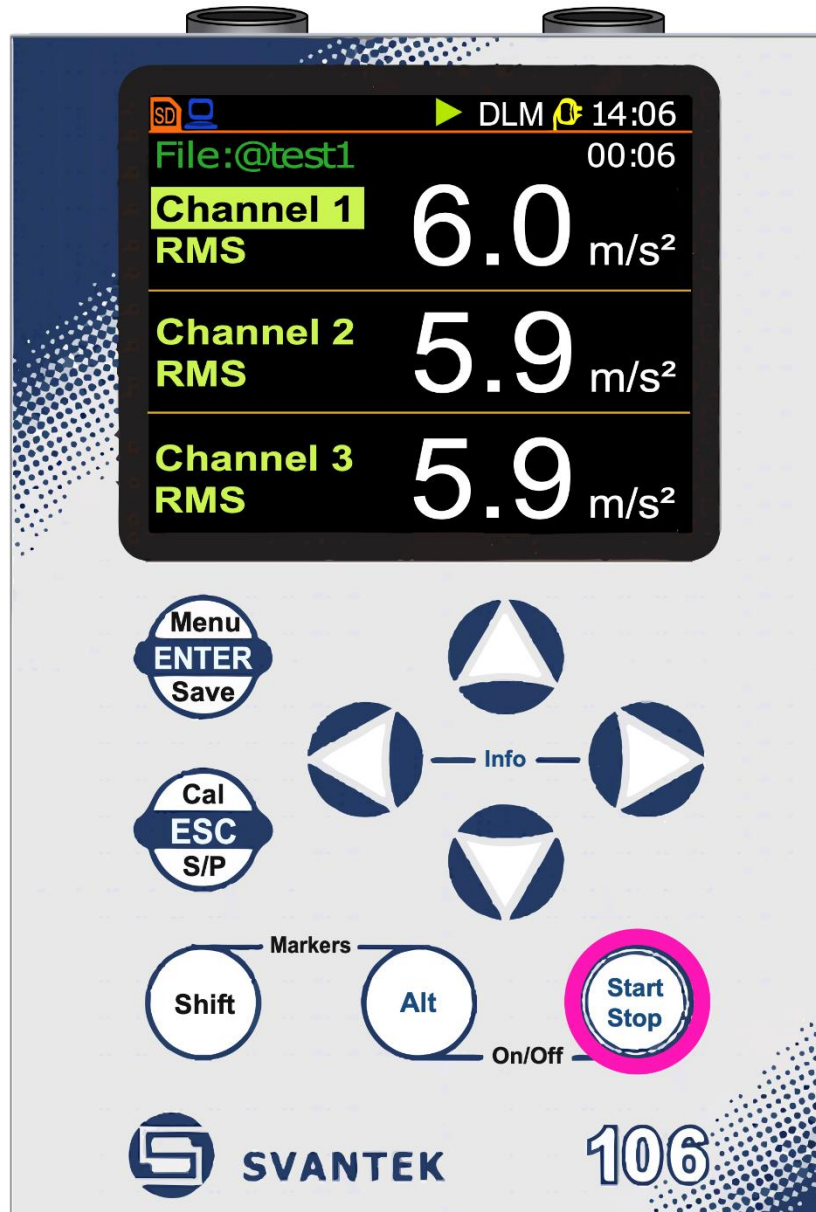
Tryck "Start/Stop" för att starta mätning

Inställningar steg 8



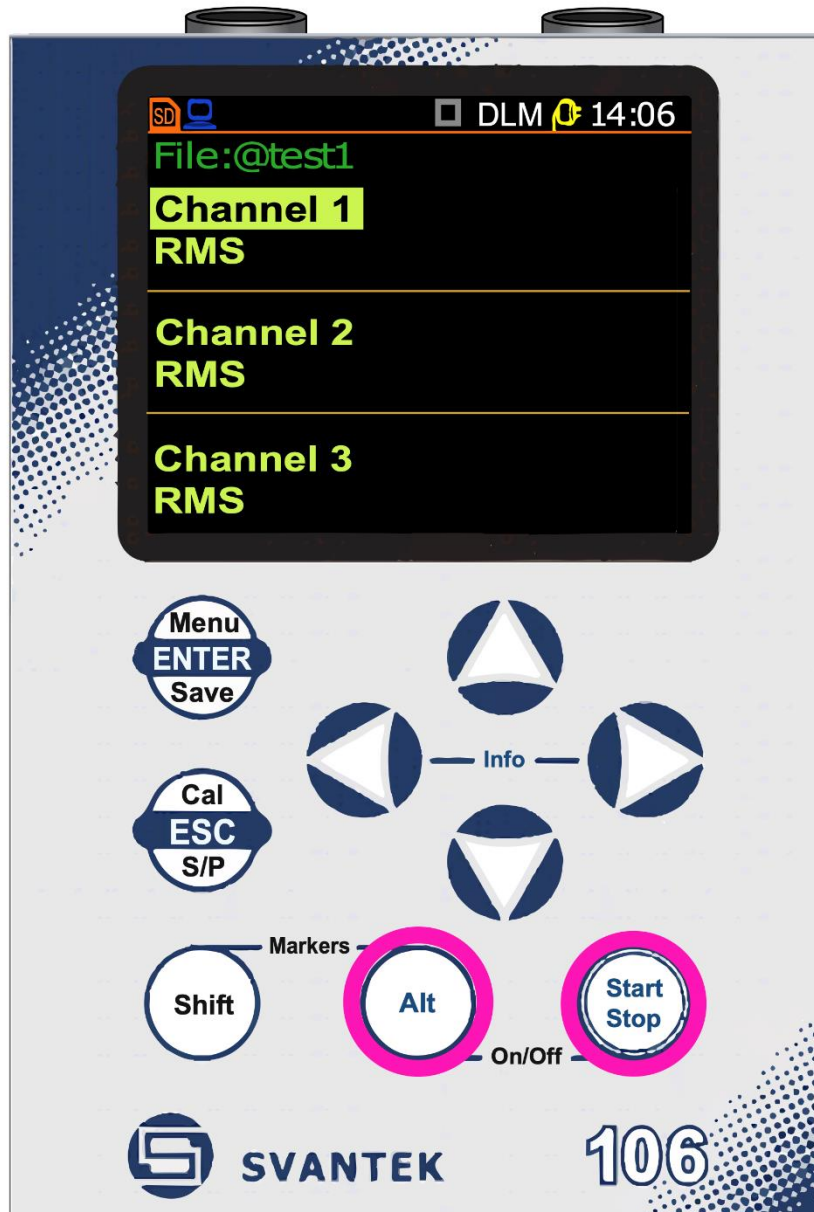
Du ser i övre raden om instrumentet håller på att mäta

Inställningar steg 9



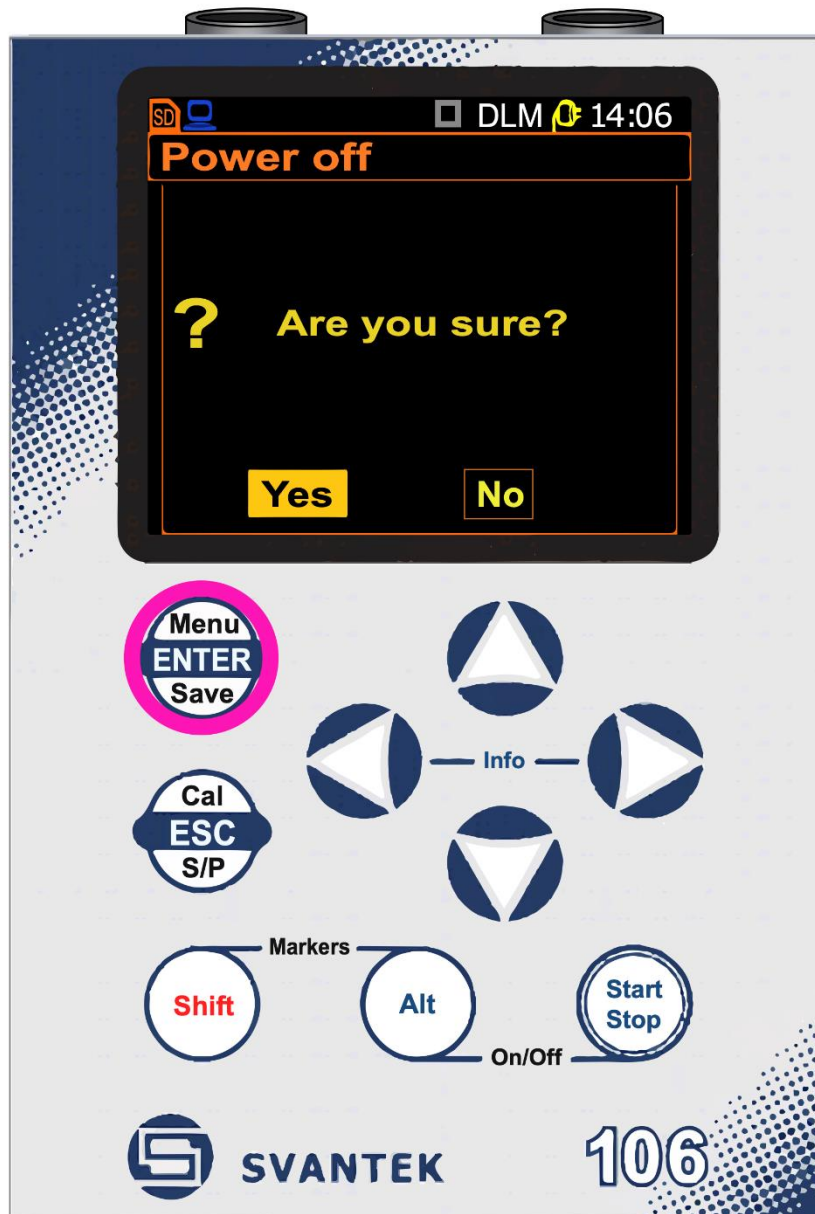
Avsluta mätning genom att trycka på "Start/Stop"

Inställningar steg 10



**För att stänga av tryck "Alt" +
"Start/Stop" samtidigt**

Inställningar steg 11



**Bekräfta avstängning genom
att välja "Yes" och
trycka "Enter"**

Provtagningsanvisningar

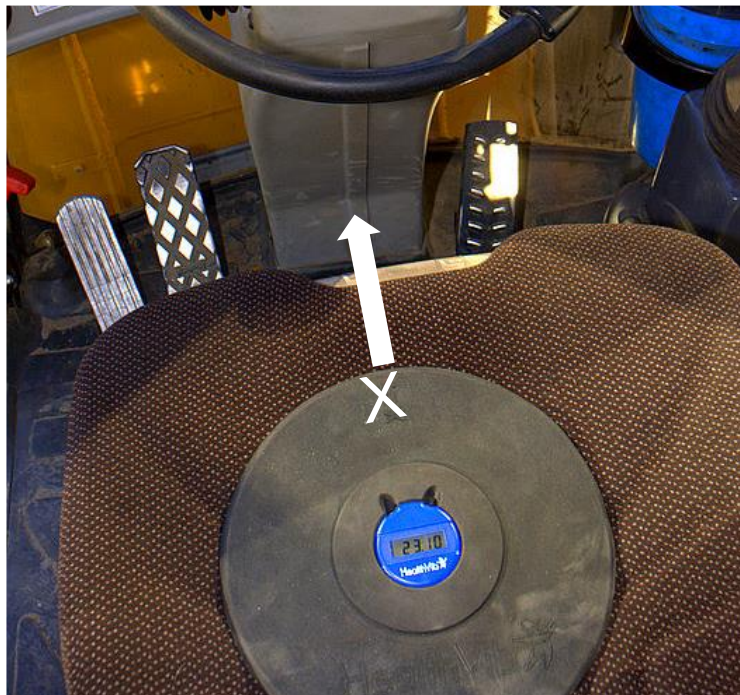
Hand- armvibrationer

- Accelerometer placeras i handflatan (om möjligt)
- Om 2 handtag, mät båda
- Eltejp: 7 varv (se bild)
- Mät för olika material (t ex trä/betong)
- Mät för olika arbetsmoment
- Mät i minst 1 minut
- Använd det högsta värdet



Helkroppsvibrationer

- Om möjligt minst 20 minuter, annars:
- Minst 3 minuter som upprepas för en total mättid om 20 minuter
- Helst: 2 timmar eller mer. T ex en hel bussrutt eller arbetspass på lager.
- Riktningen är viktig, K-faktor i x- & y-led multipliceras med 1,4 (sker automatisk i mätaren). Det beror på att ryggraden klarar "upp/ner" rörelser bättre än i sidled.



Datahantering

Programvara till instrumentet:

SvanPC++ Software

<https://svantek.com/software/svanpc-software/>



SUPERVISOR Software

<https://svantek.com/software/supervisor-software/>

Se till att före anslutning av instrument installerat:

- "SV_USB_DRV_64BIT_WIN"
- eller
- "SV_USB_DRV_32BIT_WIN"

Dess finns i : "Svan_usb_drivers" på medföljande USB-sticka.

1. Anslut instrumentet



Visar att instrumentet är anslutet:

Arbets- och miljömedicin Syd

2. För över filer från instrumentet

The screenshot displays the SvanPC++ application window. The title bar reads "SvanPC++" and the menu bar includes "File", "SVAN", "View", "Tools", and "Help". The toolbar contains several icons, with the "SVAN files" icon (a blue folder with a white document) circled in red. A tooltip for this icon is visible, showing "SVAN files" and "Access SVAN internal files".

In the bottom-left corner, a green notification box titled "Connected..." provides the following information:

```
USB: SV 106A, S/N 81070, soft ver 4.03
```

Below the notification, there is a checkbox labeled "Hide in future" which is currently unchecked.

The status bar at the bottom of the window contains the following text from left to right: "Access SVAN internal files", "SvanPC++ ver. 3.3.20 (RELEASE) (2020-02-04 12:13:41)", "USB: SV 106A, S/N 81070, soft ver 4.03", and "CAP NUM SCRL".

Arbets- och miljömedicin Syd

3. Välj data som ska föras över

The screenshot displays the SvanPC++ software interface. The main window is titled "SVAN Files" and shows the instrument "SV 106 #81070" connected to an "SD disk". A table of files is visible, with four files selected and highlighted in blue. These files are circled in red:

Name	Size	File date	File time
@HILTI.SVN	1.12 kB	2022-01-28	11:30:52
&LOG0.SVN	1014 B	2022-01-28	11:30:52
&LOG.SVN	1.29 kB	2022-01-28	11:30:52
@HILTI0.SVN	1.12 kB	2022-01-28	11:30:50

To the right, a "Folder destination" window is open, showing a list of files to be transferred. A tooltip "Download file(s) from SVAN" is visible over the transfer arrows. The "Download type" is set to "Binary".

At the bottom of the interface, a status bar shows: "SV 106A, S/N = 81070 (SD disk)", "SVAN total files = 5, SVAN selected files = 4, Logger free space [B] = 8222013441.57 GB", and "USB: SV 106A, S/N 81070, soft ver 4.03".

Arbets- och miljömedicin Syd

4. Välj data var datan ska hamna

The screenshot displays the SvanPC++ software interface. The main window is titled "SVAN Files" and shows the instrument "SV 106 #81070" connected to an "SD disk". The interface includes a menu bar (File, SVAN, View, Tools, Help) and a toolbar with options like "Delete", "Delete All", "Erase memory", and "Activate Setup".

The central area shows a list of files on the SD disk:

Name	Size	File date	File time
@HILTI.SVN	1.12 kB	2022-01-28	11:30:52
&LOG0.SVN	1014 B	2022-01-28	11:30:52
&LOG.SVN	1.29 kB	2022-01-28	11:30:52
@HILTI0.SVN	1.12 kB	2022-01-28	11:30:50
SETUP		2021-10-12	07:19:48

On the right side, a "Folder destination" dialog box is open, showing a list of folders. The folder "Vib, 211125 Testfile" is highlighted with a red box. Below the folder list, a "Time" column shows the following values:

Time
12:13:36
12:13:17
14:42:57
14:42:47
14:38:50
14:38:43
14:38:26
14:42:56
14:42:46

At the bottom of the interface, there is a status bar with the following information: "SV 106A, S/N = 81070 (SD disk)", "SVAN total files = 5, SVAN selected files = 4, Logger free space [B] = 8222013441.57 GB", and "Z:\Proc_Instrumentuthyrning\Mätdata\Vib, 211125 Testfile".

Arbets- och miljömedicin Syd

5. Välj data som ska föras över

The screenshot shows the SvanPC++ software interface. The main window is titled "SVAN Files" and displays the instrument "SV 106 #81070" connected to an "SD disk". The interface includes a menu bar (File, SVAN, View, Tools, Help) and a toolbar with various icons. A table of files is shown on the left, and a larger table of files is shown on the right. A red box highlights the "Download file(s) from SVAN" button, which is a blue arrow pointing right. Below this button are other options: "Download type" (ASCII, Binary, CSV, Merge) and "Display filter" (Results, Logger, Setup, Wave, CSV, Other). The status bar at the bottom indicates "SV 106A, S/N = 81070 (SD disk)" and "SVAN total files = 5, SVAN selected files = 4, Logger free space [B] = 8222013441.57 GB".

Name	Size	File date	File time
@HILTI.SVN	1.12 kB	2022-01-28	11:30:52
&LOG0.SVN	1014 B	2022-01-28	11:30:52
&LOG.SVN	1.29 kB	2022-01-28	11:30:52
@HILTI0.SVN	1.12 kB	2022-01-28	11:30:50
SETUP		2021-10-12	07:19:48

Name	Size	Date	Time
@HILTI0.SVN	1.12 kB	2021-11-25	12:13:36
@HILTI.SVN	1.12 kB	2021-11-25	12:13:17
@AMM5.SVN	1.12 kB	2021-11-29	14:42:57
@AMM4.SVN	1.12 kB	2021-11-29	14:42:47
@AMM3.SVN	1.12 kB	2021-11-29	14:38:50
@AMM2.SVN	1.12 kB	2021-11-29	14:38:43
@AMM1.SVN	1.12 kB	2021-11-29	14:38:26
&LOG0.SVN	1014 B	2021-11-29	14:42:56
&LOG.SVN	1.29 kB	2021-11-29	14:42:46

Download type: ASCII, Binary, CSV, Merge

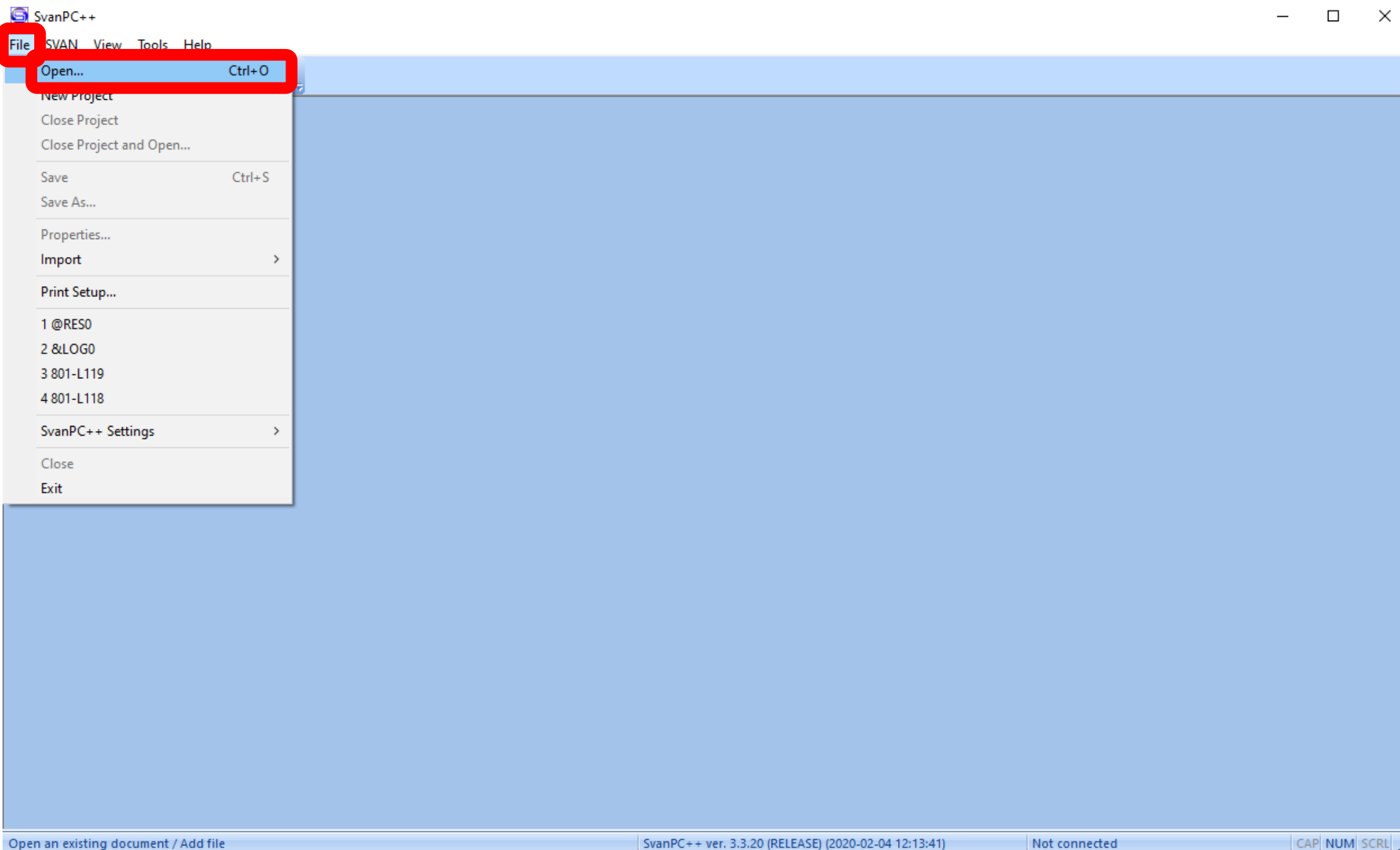
Display filter: Results, Logger, Setup, Wave, CSV, Other

SV 106A, S/N = 81070 (SD disk) | SVAN total files = 5, SVAN selected files = 4, Logger free space [B] = 8222013441.57 GB

For Help, press F1 | SvanPC++ ver. 3.3.20 (RELEASE) (2020-02-04 12:13:41) | USB: SV 106A, S/N 81070, soft ver 4.03 | CAP NUM SCRL

Arbets- och miljömedicin Syd

6. Öppna mätdata



Arbets- och miljömedicin Syd

7. Välj datafiler, 2 st per mätning

File selection dialog showing the following files:

Namn	Senast ändrad	Typ	Storlek
@HEL15	2020-04-21 12:21	SvanPC++ File	2 kB
@HEL24	2020-05-08 08:07	SvanPC++ File	2 kB
&LOG55	2020-05-08 08:07	SvanPC++ File	1 kB
&LOG52	2020-04-21 13:27	SvanPC++ File	2 kB
@HEL23	2020-04-21 13:27	SvanPC++ File	2 kB
@HEL21	2020-04-21 13:22	SvanPC++ File	2 kB
&LOG50	2020-04-21 13:22	SvanPC++ File	2 kB
@HEL19	2020-04-21 13:14	SvanPC++ File	2 kB
&LOG48	2020-04-21 13:14	SvanPC++ File	3 kB
&LOG46	2020-04-21 13:07	SvanPC++ File	3 kB
@HEL17	2020-04-21 13:07	SvanPC++ File	2 kB
&LOG44	2020-04-21 12:21	SvanPC++ File	12 kB

Filnamn: "@HEL15" "@HEL24" "&LOG55" "&LOG52" "@HEL23" "@HEL21" "&LOG50" "@HEL19" "&LOG48" "&LOG46" "@HEL17" "&LOG44"

Arbets- och miljömedicin Syd

8. Fil-par hittas enklast med tidsstämpel

The screenshot shows the SvanPC++ application interface. The main window displays a file explorer view of a network drive. The file list is as follows:

Namn	Senast ändrad	Typ	Storlek
&LOG56	2020-05-08 08:08	SvanPC++ File	2 kB
@HEL24	2020-05-08 08:07	SvanPC++ File	2 kB
&LOG55	2020-05-08 08:07	SvanPC++ File	1 kB
&LOG54	2020-04-22 10:16	SvanPC++ File	1 kB
&LOG52	2020-04-21 13:27	SvanPC++ File	2 kB
@HEL23	2020-04-21 13:27	SvanPC++ File	2 kB
&LOG51	2020-04-21 13:24	SvanPC++ File	2 kB
@HEL22	2020-04-21 13:24	SvanPC++ File	2 kB
@HEL21	2020-04-21 13:22	SvanPC++ File	2 kB
&LOG50	2020-04-21 13:22	SvanPC++ File	2 kB
@HEL20	2020-04-21 13:16	SvanPC++ File	2 kB
&LOG49	2020-04-21 13:16	SvanPC++ File	2 kB
@HEL19	2020-04-21 13:14	SvanPC++ File	2 kB
&LOG48	2020-04-21 13:14	SvanPC++ File	3 kB
@HEL18	2020-04-21 13:10	SvanPC++ File	2 kB
&LOG47	2020-04-21 13:10	SvanPC++ File	3 kB
&LOG46	2020-04-21 13:07	SvanPC++ File	3 kB
@HEL17	2020-04-21 13:07	SvanPC++ File	2 kB
@HEL16	2020-04-21 12:42	SvanPC++ File	2 kB
&LOG45	2020-04-21 12:42	SvanPC++ File	5 kB
&LOG44	2020-04-21 12:21	SvanPC++ File	12 kB
@HEL15	2020-04-21 12:21	SvanPC++ File	2 kB

The file names and their modification dates are: @HEL15 (2020-04-21 12:21), @HEL24 (&LOG55) (2020-05-08 08:07), &LOG52 (@HEL23) (2020-04-21 13:27), @HEL21 (&LOG50) (2020-04-21 13:22), @HEL19 (&LOG48) (2020-04-21 13:14), &LOG46 (@HEL17) (2020-04-21 13:07), and @HEL15 (&LOG44) (2020-04-21 12:21). These pairs are highlighted with red boxes in the original image.

The file explorer window shows the path: Den här datorn > amm\$ (\\RSFS107) (Z:) > Proc_Instrumentuthyrning > Mätdata > Vib, 200508 Diverse. The search bar contains "Sök i Vib, 200508 Diverse". The file name field at the bottom contains: "@HEL15" "@HEL24" "&LOG55" "&LOG52" "@HEL23" "@HEL21" "&LOG50" "@HEL19" "&LOG48" "&LOG46" "@HEL17" "&LOG44".

Arbets- och miljömedicin Syd

9. Kan slå ihop filer vid öppnandet av filer

The screenshot shows the SvanPC++ application interface. The main window displays a file explorer view of a network drive containing several files. A dialog box titled "Multiple Selection" is open, indicating that four files have been selected. The dialog asks, "You have selected 4 files. What would you like to do with them?" and provides three options: "Open Separately" (highlighted with a red box), "Merge & Open" (highlighted with a green box), and "Cancel".

Öppna filer separat **Slå ihop mätfiler om de är samma filformat**

File Name: "&LOG52" "&LOG57" "&LOG56" "&LOG55"

Arbets- och miljömedicin Syd

10. Spara ny fil om sammanslagning skett

The screenshot shows the SvanPC++ application interface. At the top, there is a menu bar with 'File', 'SVAN', 'View', 'Tools', and 'Help'. Below the menu bar, a window titled 'Enter the name of the resulting multifile...' is open. The address bar shows the path: 'Den här datorn > amm\$ (\\RSFS107) (Z:) > Proc_Instrumentuthyrning > Mätdata > Vib, 211125 Testfile'. A search box on the right contains the text 'Sök i Vib, 211125 Testfile'. The main area displays a file list with columns for 'Namn', 'Senast ändrad', 'Typ', and 'Storlek'. The files listed are:

Namn	Senast ändrad	Typ	Storlek
&LOG	2021-11-29 14:42	SvanPC++ File	2 kB
&LOG0	2021-11-29 14:42	SvanPC++ File	1 kB
@AMM1	2021-11-29 14:38	SvanPC++ File	2 kB
@AMM2	2021-11-29 14:38	SvanPC++ File	2 kB
@AMM3	2021-11-29 14:38	SvanPC++ File	2 kB
@AMM4	2021-11-29 14:42	SvanPC++ File	2 kB
@AMM5	2021-11-29 14:42	SvanPC++ File	2 kB
@HILTI	2021-11-25 12:13	SvanPC++ File	2 kB
@HILTI0	2021-11-25 12:13	SvanPC++ File	2 kB

At the bottom of the window, the 'Filnamn:' field contains 'Multifile' and the 'Filformat:' dropdown is set to 'SvanPC++ Files (*.svn, *.svr, *.svl, *.svt, *.wav, *.svp, *.svmt, *.svu, *.spr; *.svz)'. There are 'Spara' and 'Avbryt' buttons at the bottom right.

Arbets- och miljömedicin Syd

11. Datafil (@) resp. Loggfil (&, graf)

SvanPC++ - &LOG0

File Edit SVAN View Tools Window Help

Close file LOG0.SVN

@RES0.SVN
&LOG0.SVN

@RES0: Main results

	1	2	3	4	5	6	7	8	9
1	Main results for vibration								
2									
3	Day	Hour	Channel	Profile	Filter	Detector	Elapsed time	OvIT	Underrange
4	yyyy-MM-dd	HH:mm:ss					hh:mm:ss	%	
5	2022-01-27								
6	2022-01-27								
7	2022-01-27								
8	2022-01-27								
9	2022-01-27								
10	2022-01-27								
11									
12	ahv 1-3								
13	awv 4-6								
14									

LOG0: Logger results, pixels per sample = 3

Active function: Peak (Ch1, P1 (Wh))

Secondary y-axis: Dose

Info Start Duration ✓ Peak [m/s^2] ✓ Max [m/s^2] ✓ ahw [m/s^2] ✓ Peak [m/s^2] ✓ Max [m/s^2] ✓ ahw

Ch1, P1 (Wh) Ch1, P1 (Wh, 1 s) Ch1, P1 (Wh, Lin) Ch2, P1 (Wh) Ch2, P1 (Wh, 1 s) Ch2, P1 (V

For Help, press F1

SvanPC++ ver. 3.3.20 (RELEASE) (2020-02-04 12:13:41)

Not connected

CAP NUM SCRL

12. Datafil (@) respektive Loggfil (&, graf)

Viktigast är Loggfilen (&) då den ger möjlighet att i

- Att i efterhand bearbeta sin data
- Slå ihop mätfiler
- Ta bort delar av mätningen
- Se grafer

Datafil (@) ger enkel överblick över:

- Vibrationsnivå
- VDV
- Peak

Arbets- och miljömedicin Syd

13. Datafil (@) ger enkel överblick

SvanPC++ - [@RES0: Main results]

File Edit SVAN View Tools Window Help

Header info Main results

Close file @RES0.SVN

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Main results for vibra...															
2																
3	Day	Hour	Channel	Profile	Filter	Detector	Elapsed time	OvIT	Underrange	Units	Peak	Max	RMS	VDV	MTVV	CRF
4	yyyy-MM-dd	HH:mm:ss					hh:mm:ss	%						m/s ^{1.75}		
5	2022-01-27	10:45:42	Ch1	P1	Wh	1 s	00:01:56	0.0	0	m/s ²	49.716	12.064	5.123	-	-	-
6	2022-01-27	10:45:42	Ch2	P1	Wh	1 s	00:01:56	0.0	0	m/s ²	90.157	25.293	9.561	-	-	-
7	2022-01-27	10:45:42	Ch3	P1	Wh	1 s	00:01:56	0.0	0	m/s ²	77.002	23.442	6.745	-	-	-
8	2022-01-27	10:45:42	Ch4	P1	Wd	1 s	00:01:56	0.0	0	m/s ²	3.917	-	1.152	4.972	2.016	3.400
9	2022-01-27	10:45:42	Ch5	P1	Wd	1 s	00:01:56	0.0	0	m/s ²	3.931	-	0.763	3.648	1.744	5.152
10	2022-01-27	10:45:42	Ch6	P1	Wk	1 s	00:01:56	0.0	0	m/s ²	12.317	-	0.633	5.158	2.815	19.454
11																
12	ahv 1-3	12.779 m/s ²														
13	awv 4-6	2.035 m/s ²														
14																
15	Vibration dose mete...															
16																
17	ahv	Current exp...	Daily ex...	EAV total time	EAV time left	ELV total ...	ELV time left									
18	m/s ²	m/s ²	m/s ²	hh:mm	hh:mm	hh:mm	hh:mm									
19	12.779	0.811	12.779	00:18	00:16	01:13	01:11									
20																
21	Vibration dose mete...															
22																
23	awmax	Channel (axis)	MaxVDV	Channel (axis)	Current dose	Daily dose	Current exp...	Daily exp...	EAV total time	EAV time left	ELV total time	ELV time left				
24	m/s ²		m/s ^{1.75}		m/s ^{1.75}	m/s ^{1.75}	m/s ²	m/s ²	hh:mm	hh:mm	hh:mm	hh:mm				
25	1.613	4 (X)	6.958	4 (X)	6.958	27.638	0.102	1.613	00:46	00:44	04:03	04:02				

For Help, press F1

SvanPC++ ver. 3.3.20 (RELEASE) (2020-02-04 12:13:41)

Not connected

CAP NUM SCRL

Arbets- och miljömedicin Syd

14. Välj vilka data som önskas



SvanPC++ - [RES0 : Main results]

File Edit SVAN View Tools Window Help

Header info Main results

Close file @RES0.SVN

	1	2	3	4	5	6	7	8	9	10	11
1	Main results for vibra...										
2											
3	Day	Hour	Channel	Profile	Filter	Detector	Elapsed time	OvlT	Underrange	Units	Peak
4	yy										
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15	Vibra										
16											
17											
18											
19											
20											
21	Vibration dose mete...										
22											
23	awmax	Channel (axis)	MaxVDV	Channel (axis)	Current dose	Daily dose	Current exp...	Daily exp...	EAV total time	EAV time left	ELV total time
24	m/s^2		m/s^1.75		m/s^1.75	m/s^1.75	m/s^2	m/s^2	hh:mm	hh:mm	hh:mm
25	1.613	4 (X)	6.958	4 (X)	6.958	27.638	0.102	1.613	00:46	00:44	04:03


Channel 1, 2, 3 =   = Channel 4, 5, 6

Profil 1

1 = X

2 = Y

3 = Z



Profil 1

4 = X

5 = Y

6 = Z

Configurator

- Channel 1 (VLM)
 - Profile 1
 - Peak
 - P-P
 - Max
 - ahv
 - VDV
 - CRF
 - Profile 2
- Channel 2 (VLM)
 - Profile 1
 - Profile 2
- Channel 3 (VLM)
 - Profile 1
 - Profile 2
- Channel 4 (VLM)
 - Profile 1
 - Peak
 - P-P
 - aw
 - VDV
 - MTVV
 - CRF
 - Profile 2
- Channel 5 (VLM)
 - Profile 1
 - Profile 2
- Channel 6 (VLM)
 - Profile 1
 - Profile 2

For Help, press F1

SvanPC++ ver. 3.3.20 (RELEASE) (2020-02-04 12:13:41)

Not connected

CAP| NUM| SCRL| ...

Arbets- och miljömedicin Syd

15. Välj data med "Configurator": HAVHAV

The screenshot shows the SvanPC++ software interface. The main window displays a graph of Acceleration (m/s²) over time. The y-axis ranges from 0 to 80 m/s². The x-axis shows time from 10:45:45 to 10:47:15. A red box highlights the configurator panel on the right, which is titled "Configurator". The configurator shows a tree view of channels and profiles. Channel 1 (VLM) is selected, and its Profile 1 is expanded, showing options for Peak, P-P, Max, and ahw. Channel 2 (VLM) is also selected, and its Profile 1 is expanded, showing options for Profile 2. Channel 3 (VLM) is selected, and its Profile 1 is expanded, showing options for Profile 2. Channel 4 (VLM) is selected, and its Profile 1 is expanded, showing options for Peak, P-P, MTVV, aw, and VDV. Channel 5 (VLM) is selected, and its Profile 1 is expanded, showing options for Profile 2. Channel 6 (VLM) is selected, and its Profile 1 is expanded, showing options for Profile 2. The status bar at the bottom shows the active function as "ahw (Ch1, P1 (Wh, Lin))".

Channel 1, 2, 3 = ↓ ↓ = Channel 4, 5, 6
Profil 1
Hand-armvib
HAV:
Peak
ahw (vib-nivån)

Profil 1
Hand-armvib
HAV:
Peak
ahw (vib-nivån)

SVANTEK 106

Configurator

Channel 1 (VLM)
Profile 1
Peak
P-P
Max
ahw
Profile 2
Channel 2 (VLM)
Profile 1
Profile 2
Channel 3 (VLM)
Profile 1
Profile 2
Channel 4 (VLM)
Profile 1
Peak
P-P
MTVV
aw
VDV
Profile 2
Channel 5 (VLM)
Profile 1
Profile 2
Channel 6 (VLM)
Profile 1
Profile 2
ahw 1-3
ahw 4-6
Markers

Active function:
ahw (Ch1, P1 (Wh, Lin))

Secondary y-axis:
Dose

Acceleration

10:45:45 10:46:00 10:46:15 10:46:30 10:46:45 10:47:00 10:47:15

10:45:40.500

Start
Info -

Duration
Ch1, P1 (Wh, Lin) Ch2, P1 (Wh, Lin) Ch3, P1 (Wh, Lin) Ch4, P1 (Wd, Lin) Ch4, P1 (Wd, Lin) Ch

ahw [m/s²] ahw [m/s²] ahw [m/s²] aw [m/s²] VDV [m/s²1.75]

SvanPC++ ver. 3.3.20 (RELEASE) (2020-02-04 12:13:41) Not connected CAP NUM SCRL

Arbets- och miljömedicin Syd

16. Välj data med "Configurator": HAVHKV

The screenshot shows the SvanPC++ software interface. The main window displays a graph of acceleration data over time. The y-axis is labeled 'Acceleration' and has units of $\frac{m}{s^2}$. The x-axis shows time from 10:45:45 to 10:47:10. A red box highlights the 'Configurator' panel on the right side of the interface. The configurator panel shows a tree view of channels and profiles. The following table summarizes the settings shown in the configurator:

Channel	Profile	Peak	P-P	Max	ahw	aw	VDV
Channel 1 (VLM)	Profile 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Channel 2 (VLM)	Profile 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Channel 3 (VLM)	Profile 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Channel 4 (VLM)	Profile 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Channel 5 (VLM)	Profile 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Channel 6 (VLM)	Profile 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

The graph shows acceleration data for six channels. The y-axis ranges from 0 to 80 $\frac{m}{s^2}$. The x-axis shows time from 10:45:45 to 10:47:10. A red box highlights the configurator panel on the right side of the interface. The configurator panel shows a tree view of channels and profiles. The following table summarizes the settings shown in the configurator:

Channel 1, 2, 3 = ↓ ↓ = Channel 4, 5, 6
Profil 1
Hand-armvib
HAV:
Peak
ahw (vib-nivån)

Helkroppsvib
HKV:
aw (vib-nivån)
VDV (Stötar)

Active function: ahw (Ch1, P1 (Wh, Lin))
Secondary y-axis: Dose

Configurator

Channel 1 (VLM)
Profile 1
Peak
P-P
Max
ahw

Channel 2 (VLM)
Profile 1
Profile 2

Channel 3 (VLM)
Profile 1
Profile 2

Channel 4 (VLM)
Profile 1
Peak
P-P
MTVV
aw
VDV

Channel 5 (VLM)
Profile 1
Profile 2

Channel 6 (VLM)
Profile 1
Profile 2

ahw 1-3
aww 4-6
Markers

Info Start Duration ✓ ahw [m/s^2] ✓ ahw [m/s^2] ✓ ahw [m/s^2] ✓ aw [m/s^2] ✓ VDV [m/s^1.75] ✓
Ch1, P1 (Wh, Lin) Ch2, P1 (Wh, Lin) Ch3, P1 (Wh, Lin) Ch4, P1 (Wd, Lin) Ch4, P1 (Wd, Lin) Ch

SvanPC++ ver. 3.3.20 (RELEASE) (2020-02-04 12:13:41) Not connected CAP NUM SCRL

Arbets- och miljömedicin Syd

17. Välj data med "Configurator": HKVHKV

The screenshot displays the SvanPC++ software interface. The main window shows a graph of Acceleration (m/s²) over time. The y-axis ranges from 0 to 80, and the x-axis shows time from 10:45:45 to 10:47:10. A red box highlights the configurator panel on the right, which is titled "Configurator". The configurator shows settings for six channels (Channel 1 to Channel 6) under the heading "Channel 1 (VLM)". The settings for Channel 1, 2, 3 and Channel 4, 5, 6 are as follows:

- Channel 1 (VLM):
 - Profile 1: Peak, P-P, Max, ahw
- Channel 2 (VLM):
 - Profile 1: Profile 1
- Channel 3 (VLM):
 - Profile 1: Profile 1
- Channel 4 (VLM):
 - Profile 1: Peak, P-P, MTVV, aw, VDV
- Channel 5 (VLM):
 - Profile 1: Profile 1
- Channel 6 (VLM):
 - Profile 1: Profile 1

Below the graph, a table shows the active functions for each channel:

Info	Start	Duration	Ch1, P1 (Wh, Lin)	Ch2, P1 (Wh, Lin)	Ch3, P1 (Wh, Lin)	Ch4, P1 (Wd, Lin)	Ch5, P1 (Wd, Lin)	Ch6, P1 (Wd, Lin)
-	-	-	<input checked="" type="checkbox"/> ahw [m/s ²]	<input checked="" type="checkbox"/> ahw [m/s ²]	<input checked="" type="checkbox"/> ahw [m/s ²]	<input checked="" type="checkbox"/> aw [m/s ²]	<input checked="" type="checkbox"/> VDV [m/s ² 1.75]	<input checked="" type="checkbox"/>

At the bottom of the interface, the status bar shows "SvanPC++ ver. 3.3.20 (RELEASE) (2020-02-04 12:13:41)" and "Not connected".

Arbets- och miljömedicin Syd

18. Snabb översikt över viktiga data

SvanPC++ - [@RES0 : Main results]

File Edit SVAN View Tools Window Help

Close file @RES0.SVN

aggregation

Header info Main results

16

1 Main results for vibra...

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

Day Hour Channel Profile Filter Detector Elapsed time OvT Underrange Units Peak Max RMS VDV MTVV CRF

yyyy-MM-dd HH:mm:ss

2022-01-27 10:45:42 Ch1 P1 Wh 1 s 00:01:56 0.0 0 m/s^2 49.716 12.064 5.123 - - -

2022-01-27 10:45:42 Ch2 P1 Wh 1 s 00:01:56 0.0 0 m/s^2 90.157 25.293 9.561 - - -

2022-01-27 10:45:42 Ch3 P1 Wh 1 s 00:01:56 0.0 0 m/s^2 77.002 23.442 6.745 - - -

2022-01-27 10:45:42 Ch4 P1 Wd 1 s 00:01:56 0.0 0 m/s^2 3.917 - 1.152 4.972 2.016 3.400

2022-01-27 10:45:42 Ch5 P1 Wd 1 s 00:01:56 0.0 0 m/s^2 3.931 - 0.763 3.648 1.744 5.152

2022-01-27 10:45:42 Ch6 P1 Wk 1 s 00:01:56 0.0 0 m/s^2 12.317 - 0.633 5.158 2.815 19.454

ahv 1-3 12.779 m/s^2

awv 4-6 2.035 m/s^2

Vibration dose meter (Hand-Arm, UK, 1-3)

ahv Current exp... Daily ex... EAV total time EAV time left ELV total ... ELV time left

m/s^2 m/s^2 m/s^2 hh:mm hh:mm hh:mm hh:mm

12.779 0.811 12.779 00:18 00:16 01:13 01:11

Vibration dose meter (Whole-Body, UK, 4-6)

awmax Channel (axis) MaxVDV Channel (axis) Current dose Daily dose Current exp... Daily exp... EAV total time EAV time left ELV total time ELV time left

m/s^2 m/s^1.75 m/s^1.75 m/s^1.75 m/s^2 m/s^2 hh:mm hh:mm hh:mm hh:mm

1.613 4 (X) 6.958 4 (X) 6.958 27.638 0.102 1.613 00:46 00:44 04:03 04:02

Configurator

For Help, press F1

SvanPC++ ver. 3.3.20 (RELEASE) (2020-02-04 12:13:41)

Not connected

CAP NUM SCRL

Data från respektive profil

HAV data

Helkroppss data

Arbets- och miljömedicin Syd

19. Exportera resultat till Excel

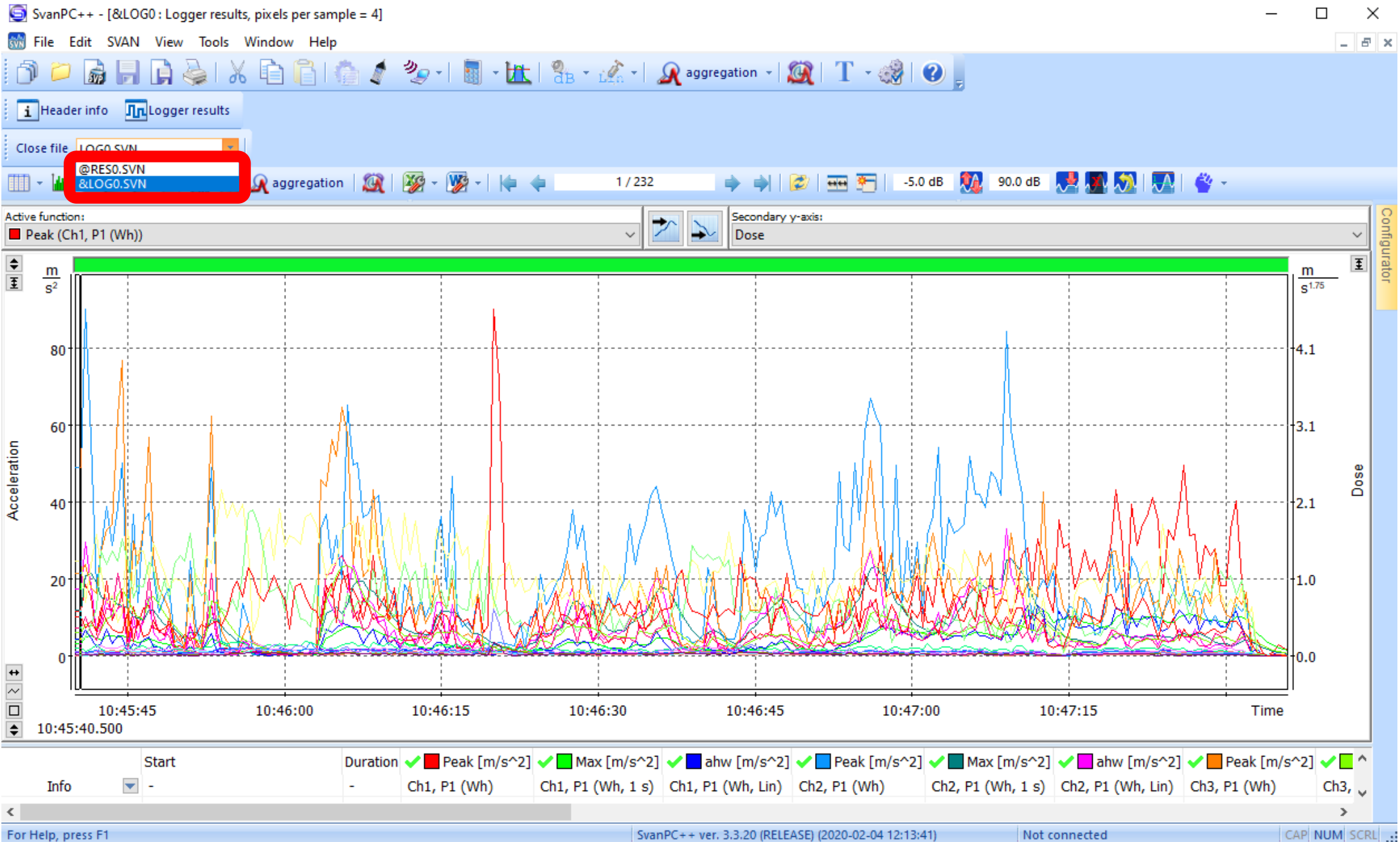
The screenshot shows the SvanPC++ software interface. The main window displays a data table with columns for Day, Hour, Channel, and various vibration metrics. A dialog box titled "Send To Microsoft Excel" is open, allowing the user to export the data. The dialog box has several options, including "Insert Position" (First Free Column, First Free Row, Selected Cell) and "Insert HeaderInfo" (Always, Never, Always with Headers). The "Always" option in the "Insert HeaderInfo" dropdown is highlighted with a red box. A red box also highlights the Excel icon in the software's toolbar.

Se till att "Always" är aktiv för att få med rubriker

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Main results for vibrat...														
2															
3	Day	Hour	Channel	Pr											
4	yyyy-MM-dd	HH:mm:ss											m/s ^{1.75}		
5	2022-01-27	10:45:42	Ch1												
6	2022-01-27	10:45:42	Ch2												
7	2022-01-27	10:45:42	Ch3												
8	2022-01-27	10:45:42	Ch4												
9	2022-01-27	10:45:42	Ch5												
10	2022-01-27	10:45:42	Ch6												
11															
12	ahv 1-3	12.779 m/s ²													
13	awv 4-6	2.035 m/s ²													
14															
15	Vibration dose meter...														
16															
17	ahv	Current exp...	Daily ex...	EAV total time	ELV time left	ELV total time	ELV time left								
18	m/s ²	m/s ²	m/s ²	hh:mm	hh:mm	hh:mm	hh:mm								
19	12.779	0.811	12.779	00:18	00:16	01:13	01:11								
20															
21	Vibration dose meter...														
22															
23	awmax	Channel (axis)	MaxVDV	Channel (axis)	Current dose	Daily dose	Current exp...	Daily exp...	EAV total time	EAV time left	ELV total time	ELV time left			
24	m/s ²		m/s ^{1.75}		m/s ^{1.75}	m/s ^{1.75}	m/s ²	m/s ²	hh:mm	hh:mm	hh:mm	hh:mm			
25	1.613	4 (X)	6.958	4 (X)	6.958	27.638	0.102	1.613	00:46	00:44	04:03	04:02			

Arbets- och miljömedicin Syd

20. Loggfil (&*), Loggade data, grafisk översikt



Arbets- och miljömedicin Syd

21. Hur få fram sammanställda data

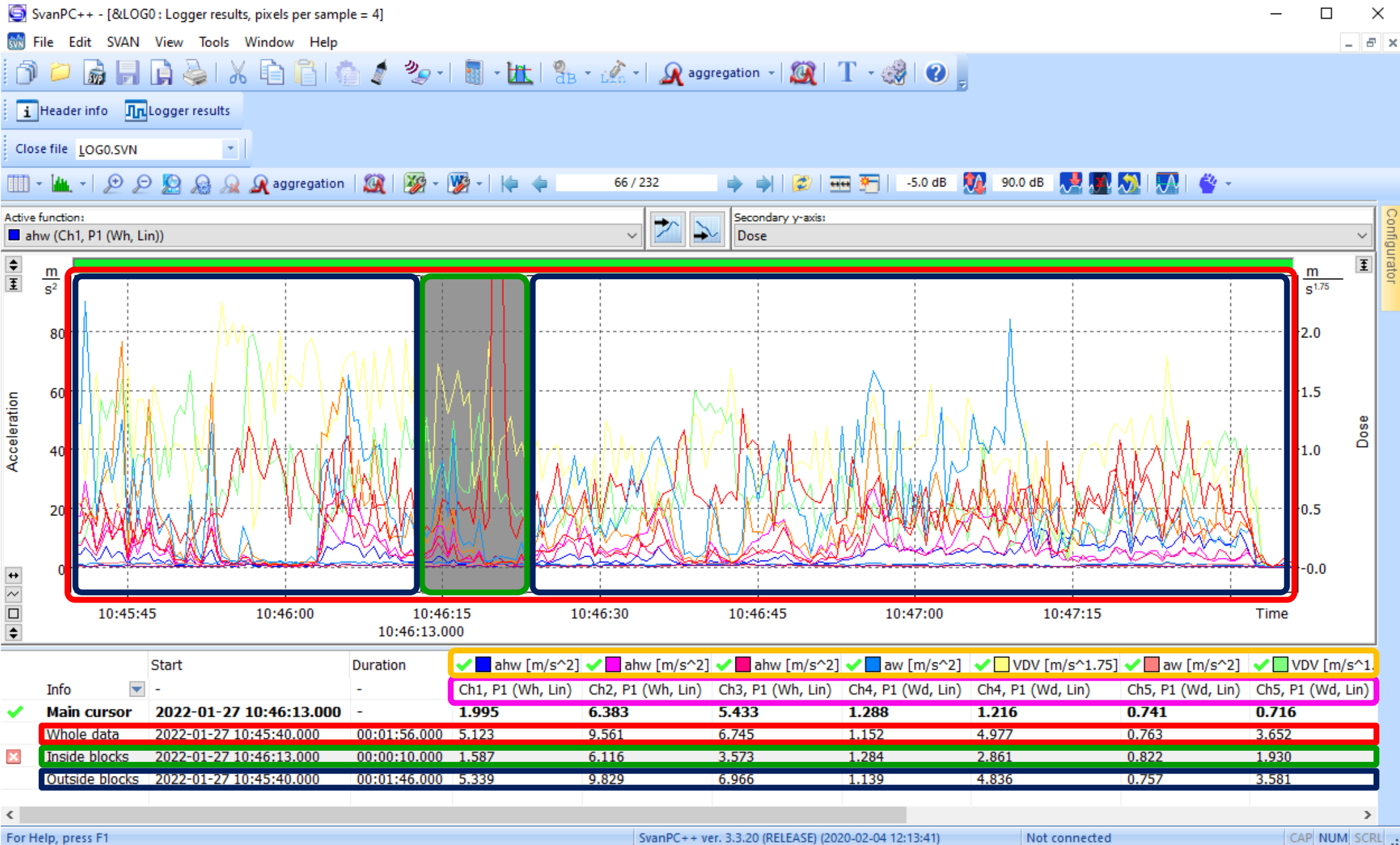
The screenshot shows the SvanPC++ software interface. The main window displays a graph with multiple colored lines representing different data channels. The x-axis is labeled 'Time' and has markers at 10:46:15, 10:46:30, 10:46:45, 10:47:00, and 10:47:15. The y-axis is labeled 'Dose' and ranges from -0.0 to 4.1. A context menu is open over the graph, listing various options. The option 'Show whole data' is highlighted in blue. A callout box with a light blue background and black text points to the menu with the text: 'Högerklicka i det nedre fönstret Välj "Show whole data"'. Below the graph, there is a table of calculated functions and their results.

Function	Result
Ch1, P1 (Wh, Lin) ahw [m/s ²]	4.467
Ch2, P1 (Wh, Lin) ahw [m/s ²]	17.378
Ch3, P1 (Wh, Lin) ahw [m/s ²]	7.413
Ch4, P1 (Wd, Lin) aw [m/s ²]	1.230
Ch4, P1 (Wd, Lin) VDV [m/s ^{1.75}]	1.288
Ch5, P1 (Wd, Lin) aw [m/s ²]	0.174
Ch5, P1 (Wd, Lin) VDV [m/s ^{1.75}]	0.219
Ch6, P1 (Wd, Lin) aw [m/s ²]	0.5

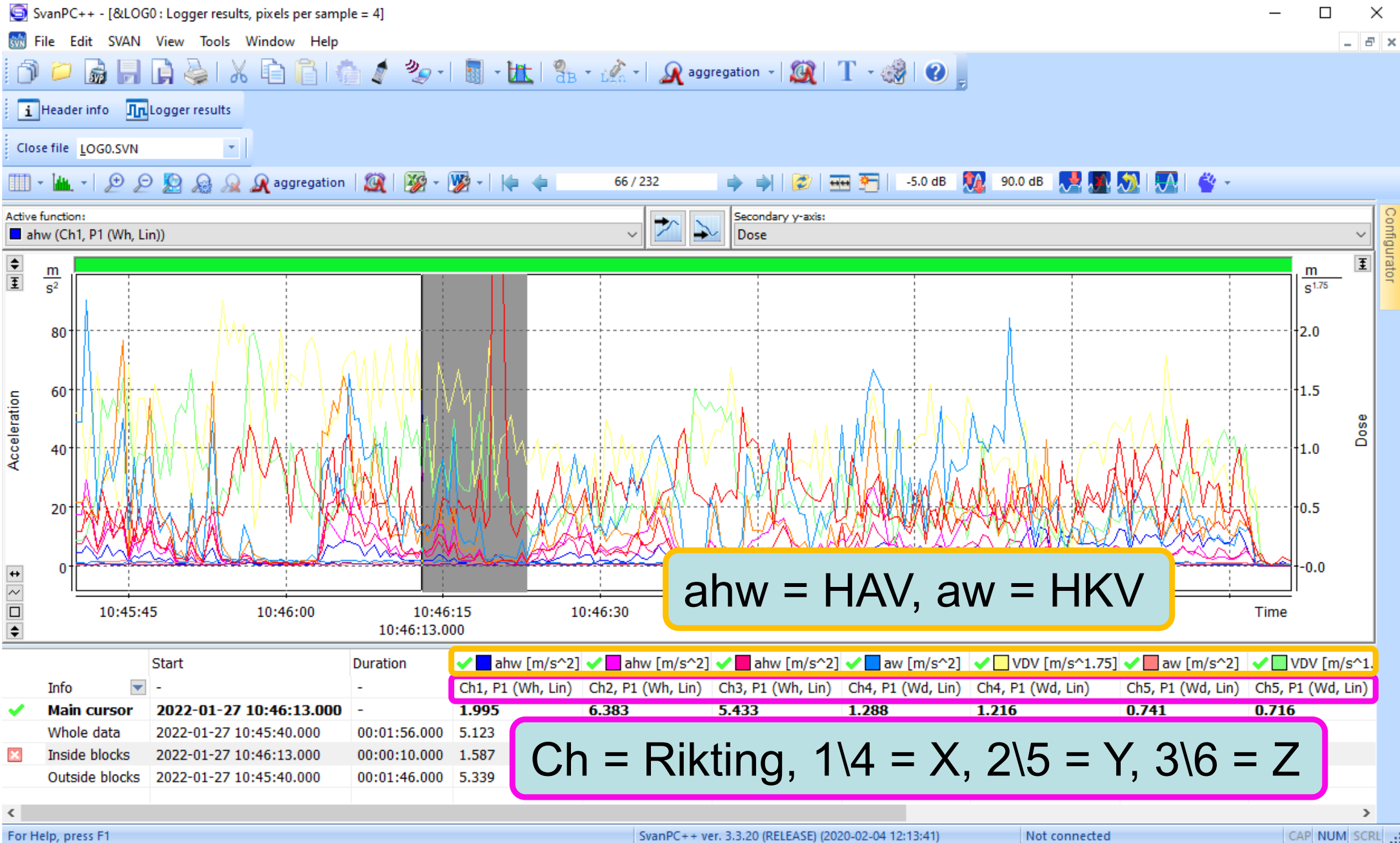
For Help, press F1 | SvanPC++ ver. 3.3.20 (RELEASE) (2020-02-04 12:13:41) | Not connected | CAP NUM SCRL

Arbets- och miljömedicin Syd

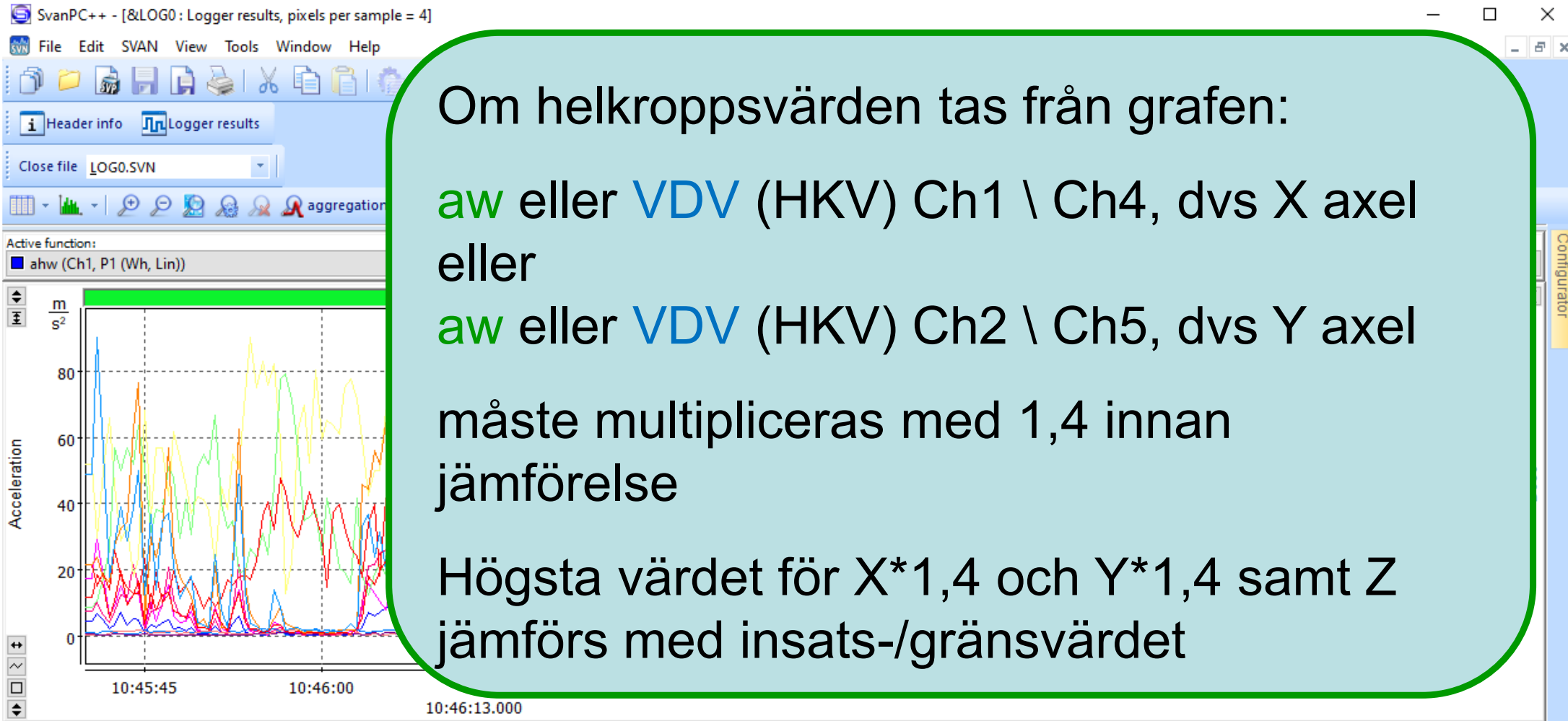
22. Markera data, få värde total, inne/utanför



23. Tolka diagramrubrikerna



24. Databearbetning helkropp



Om helkroppsvärden tas från grafen:

aw eller **VDV** (HKV) Ch1 \ Ch4, dvs X axel
eller

aw eller **VDV** (HKV) Ch2 \ Ch5, dvs Y axel

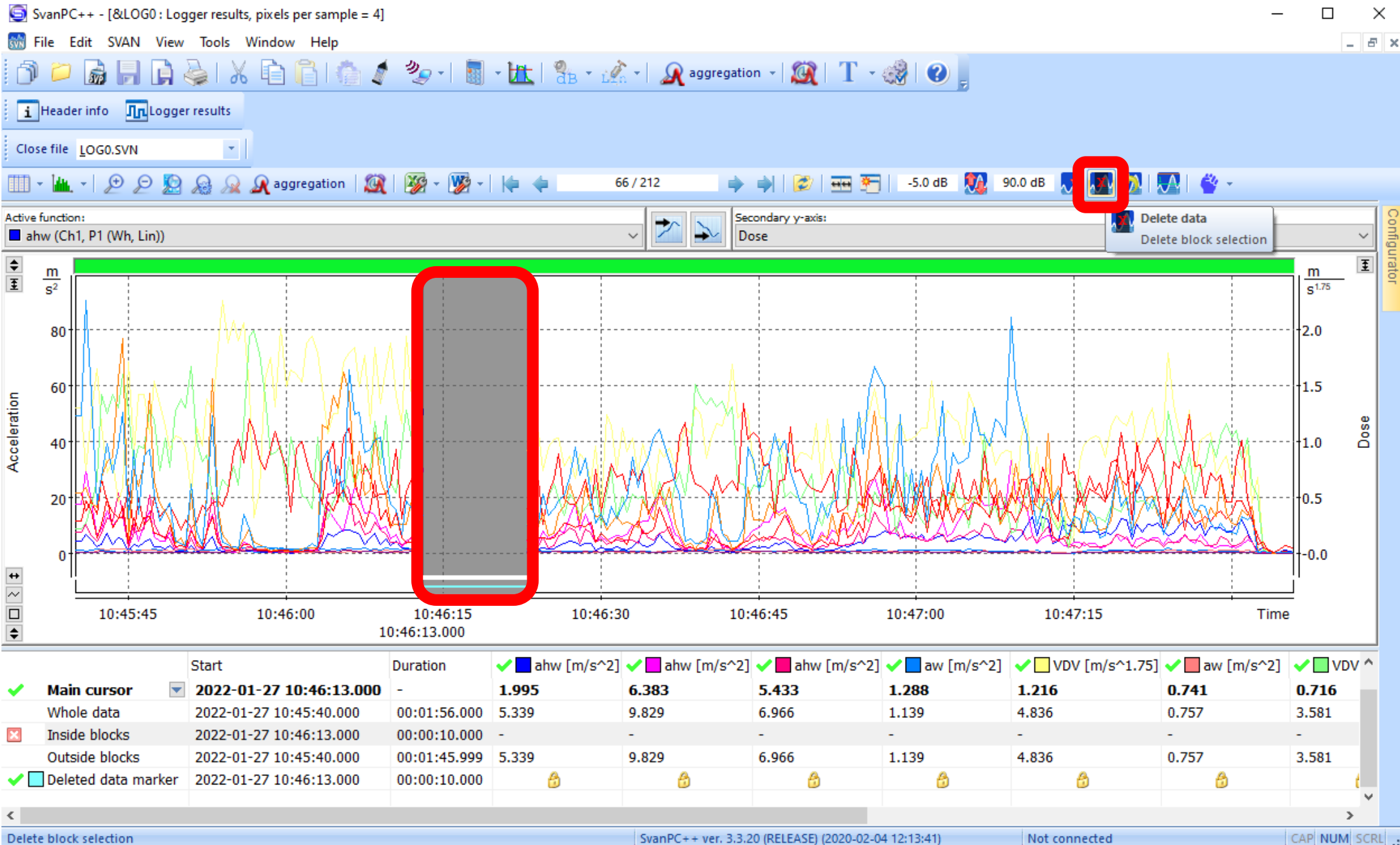
måste multipliceras med 1,4 innan
jämförelse

Högsta värdet för $X \cdot 1,4$ och $Y \cdot 1,4$ samt Z
jämförs med insats-/gränsvärdet

	Start	Duration	✓ ahw [m/s ²]	✓ ahw [m/s ²]	✓ ahw [m/s ²]	✓ aw [m/s ²]	✓ VDV [m/s ^{1.75}]	✓ aw [m/s ²]	✓ VDV [m/s ^{1.75}]
Info	-	-	Ch1, P1 (Wh, Lin)	Ch2, P1 (Wh, Lin)	Ch3, P1 (Wh, Lin)	Ch4, P1 (Wd, Lin)	Ch4, P1 (Wd, Lin)	Ch5, P1 (Wd, Lin)	Ch5, P1 (Wd, Lin)
✓ Main cursor	2022-01-27 10:46:13.000	-	1.995	6.383	5.433	1.288	1.216	0.741	0.716
Whole data	2022-01-27 10:45:40.000	00:01:56.000	5.123	9.561	6.745	1.152	4.977	0.763	3.652
✗ Inside blocks	2022-01-27 10:46:13.000	00:00:10.000	1.587	6.116	3.573	1.284	2.861	0.822	1.930
Outside blocks	2022-01-27 10:45:40.000	00:01:46.000	5.339	9.829	6.966	1.139	4.836	0.757	3.581

Arbets- och miljömedicin Syd

25. Redigera data, ta bort delar



Arbets- och miljömedicin Syd

26. Exportera graf till word

SvanPC++ - [&LOG0 : Logger results, pixels per sample = 4]

File Edit SVAN View Tools Window Help

Header info Logger results

Close file LOG0.SVN

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Active function:
 ahw (Ch1, P1 (Wh, Lin))

Send to MS Word
 Send current view to Microsoft Word

Secondary y-axis:
 Dose

Info	Start	Duration	✓ <input checked="" type="checkbox"/> ahw [m/s^2] Ch1, P1 (Wh, Lin)	✓ <input checked="" type="checkbox"/> ahw [m/s^2] Ch2, P1 (Wh, Lin)	✓ <input checked="" type="checkbox"/> ahw [m/s^2] Ch3, P1 (Wh, Lin)	✓ <input checked="" type="checkbox"/> aw [m/s^2] Ch4, P1 (Wd, Lin)	✓ <input checked="" type="checkbox"/> VDV [m/s^1.75] Ch4, P1 (Wd, Lin)	✓ <input checked="" type="checkbox"/> aw [m/s^2] Ch5, P1 (Wd, Lin)	✓ <input checked="" type="checkbox"/> VDV [m/s^1.75] Ch5, P1 (Wd, Lin)
✓ Main cursor	2022-01-27 10:46:13.000	-	1.995	6.383	5.433	1.288	1.216	0.741	0.716
Whole data	2022-01-27 10:45:40.000	00:01:56.000	5.123	9.561	6.745	1.152	4.977	0.763	3.652
✗ Inside blocks	2022-01-27 10:46:13.000	00:00:10.000	1.587	6.116	3.573	1.284	2.861	0.822	1.930
Outside blocks	2022-01-27 10:45:40.000	00:01:46.000	5.339	9.829	6.966	1.139	4.836	0.757	3.581

Send current view to Microsoft Word

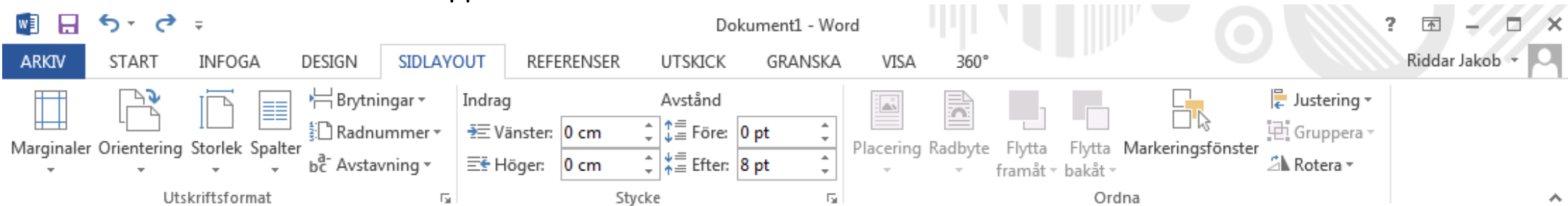
SvanPC++ ver. 3.3.20 (RELEASE) (2020-02-04 12:13:41)

Not connected

CAP NUM SCRL

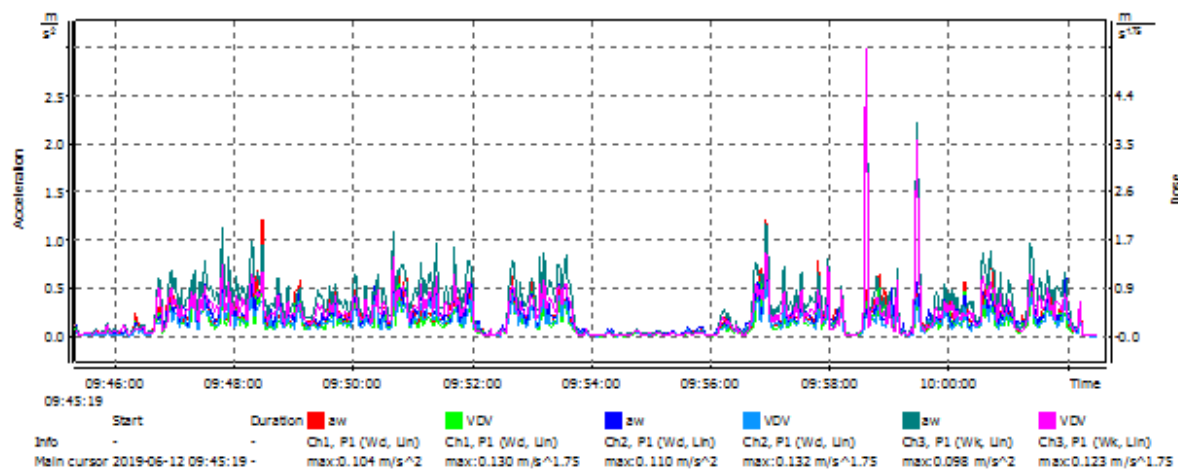
Arbets- och miljömedicin Syd

27. Graf i word till rapport



&LOG18 : Logger results, zoom out = 2x (max envelope)

Logger results, zoom out = 2x (max envelope)



Arbets- och miljömedicin Syd

28. Välj att få data i tabellform

SvanPC++ - [&LOG0 : Logger results, pixels per sample = 4]

File Edit SVAN View Tools Window Help

Header info Logger results

Close file LOG0.SVN

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-5.0 dB 90.0 dB

Table
Table form for the current view

No.	Date & time	Ch1 (VLM) P1 (Wh) Peak [m/s ²]	Ch1 (VLM) P1 (Wh, Lin) ahw [m/s ²]	Ch2 (VLM) P1 (Wh) Peak [m/s ²]	Ch2 (VLM) P1 (Wh, Lin) ahw [m/s ²]	Ch3 (VLM) P1 (Wh) Peak [m/s ²]	Ch3 (VLM) P1 (Wh, Lin) ahw [m/s ²]	Ch4 (VLM) P1 (Wd, Lin) aw [m/s ²]	Ch4 (VLM) P1 (Wd, Lin) VDV [m/s ^{1.75}]	Ch5 (VLM) P1 (Wd, Lin) aw [m/s ²]
1	2022-01-27 10:45:40.500	11.614	4.467	48.978	17.378	21.627	7.413	1.230	1.288	0.174
2	2022-01-27 10:45:41.000	18.621	6.839	90.157	29.512	23.714	10.233	0.733	0.733	0.272
3	2022-01-27 10:45:41.500	15.311	4.677	56.234	18.197	17.783	6.237	1.334	1.245	0.417
4	2022-01-27 10:45:42.000	5.559	2.291	17.579	6.166	16.406	4.169	1.567	1.641	0.646
5	2022-01-27 10:45:42.500	10.471	3.162	27.542	8.913	27.227	7.328	1.122	1.135	1.380
6	2022-01-27 10:45:43.000	19.498	7.079	38.905	15.136	32.734	12.589	0.767	0.716	1.365
7	2022-01-27 10:45:43.500	9.333	3.236	28.840	10.116	34.277	11.614	0.767	0.822	1.496
8	2022-01-27 10:45:44.000	12.303	5.370	38.459	12.303	62.373	21.380	0.484	0.457	1.396
9	2022-01-27 10:45:44.500	16.596	4.732	50.119	13.183	76.736	15.311	0.501	0.589	1.660
10	2022-01-27 10:45:45.000	3.758	0.923	12.589	2.455	5.248	1.778	1.660	1.698	1.365
11	2022-01-27 10:45:45.500	12.882	3.311	36.728	10.233	29.854	7.499	0.923	0.891	0.841
12	2022-01-27 10:45:46.000	7.852	2.427	13.964	4.315	23.988	7.852	1.349	1.413	0.902
13	2022-01-27 10:45:46.500	12.589	4.121	34.674	9.772	32.359	8.913	1.365	1.413	0.977
14	2022-01-27 10:45:47.000	13.032	5.012	37.154	15.311	56.885	20.654	1.059	1.059	1.318
15	2022-01-27 10:45:47.500	7.328	2.291	21.135	6.095	25.704	10.839	1.531	1.531	1.274
16	2022-01-27 10:45:48.000	6.839	2.427	11.350	4.266	17.783	6.166	1.365	1.334	0.804
17	2022-01-27 10:45:48.500	5.188	1.479	15.311	4.416	14.791	5.821	1.216	1.122	1.000
18	2022-01-27 10:45:49.000	9.772	2.754	17.989	7.674	11.885	5.188	0.891	0.923	0.785
19	2022-01-27 10:45:49.500	2.541	0.767	4.266	1.905	3.428	1.274	1.122	1.047	1.230
20	2022-01-27 10:45:50.000	2.692	0.759	3.388	1.274	5.370	1.479	1.012	1.023	1.479
21	2022-01-27 10:45:50.500	1.799	0.759	2.188	1.096	1.799	0.684	0.933	0.944	1.380
22	2022-01-27 10:45:51.000	8.035	2.884	24.547	8.610	21.135	5.370	0.550	0.537	1.603
23	2022-01-27 10:45:51.500	4.266	0.871	7.852	2.723	2.754	1.023	1.109	1.122	1.109
24	2022-01-27 10:45:52.000	1.603	0.624	2.600	1.122	2.089	0.668	1.023	0.955	0.861

Table form for the current view

SvanPC++ ver. 3.3.20 (RELEASE) (2020-02-04 12:13:41)

Not connected

CAP NUM SCRL

30

Arbets- och miljömedicin Syd

29. Kopiera data till andra program

The screenshot shows the SvanPC++ application window with a data table. The table has columns for channels (Ch1 to Ch5) and various measurement parameters. A context menu is open over the table, and a second window (Excel) is open in the foreground, showing the copied data pasted into a spreadsheet.

1. Klicka här (Click here) - Points to the first cell of the data table.

2. Högerklicka här (Right-click here) - Points to the context menu.

3. Välj "Copy with Headers" (Select "Copy with Headers") - Points to the "Copy with headers" option in the context menu.

4. Klistra in i t ex excel (Paste into Excel) - Points to the data pasted into the Excel spreadsheet.

	Ch1 (VLM)	Ch1 (VLM)	Ch2 (VLM)	Ch2 (VLM)	Ch3 (VLM)	Ch3 (VLM)	Ch4 (VLM)	Ch4 (VLM)	Ch5 (VLM)	Cl
	P1 (Wh)	P1 (Wh, Lin)	P1 (Wh)	P1 (Wh, Lin)	P1 (Wh)	P1 (Wh, Lin)	P1 (Wd, Lin)	P1 (Wd, Lin)	P1 (Wd, Lin)	P1
	Peak [m/s^2]	ahw [m/s^2]	Peak [m/s^2]	ahw [m/s^2]	Peak [m/s^2]	ahw [m/s^2]	aw [m/s^2]	VDV [m/s^1.75]	aw [m/s^2]	VDV
66	2022-01-27 10:46:13.000			6.383	14.125	5.433	1.288	1.216	0.741	
67	2022-01-27 10:46:13.500			4.027	8.414	3.020	1.318	1.230	1.318	
68	2022-01-27 10:46:14.000			5.957	11.614	4.074	0.700	0.724	0.507	
69	2022-01-27 10:46:14.500	10					1.820	1.718	0.841	
70	2022-01-27 10:46:15.000	9					1.531	1.567	0.944	
71	2022-01-27 10:46:15.500	4					1.318	1.303	0.646	
72	2022-01-27 10:46:16.000	7		46.774						
73	2022-01-27 10:46:16.500	2		12.023						
74	2022-01-27 10:46:17.000	2.483	1.096	7.499						
75	2022-01-27 10:46:17.500	4.217	1.445	8.710						
76	2022-01-27 10:46:18.000	2.065	0.759	7.079						
77	2022-01-27 10:46:18.500	4.266	1.072	16.218						
78	2022-01-27 10:46:19.000	1.109	0.324	2.163						
79	2022-01-27 10:46:19.500	1.549	0.447	2.188						
80	2022-01-27 10:46:20.000	0.832	0.343	3.020						
81	2022-01-27 10:46:20.500	1.884	0.692	3.673						
82	2022-01-27 10:46:21.000	1.641	0.556	3.311						
83	2022-01-27 10:46:21.500	1.905	0.537	2.951						
84	2022-01-27 10:46:22.000	1.135	0.513	2.600						
85	2022-01-27 10:46:22.500	4.467	1.479	8.610						
86	2022-01-27 10:46:23.000	1.059	0.380	2.483						
87	2022-01-27 10:46:23.500	4.898	1.531	10.116						
88	2022-01-27 10:46:24.000	5.495	1.496	10.593						
89	2022-01-27 10:46:24.500	5.689	2.113	21.135						

No.	Date & time	Peak [m/s^2]	ahw [m/s^2]	Peak [m/s^2]	ahw [m/s^2]	Peak [m/s^2]	ahw [m/s^2]	aw [m/s^2]	VDV [m/s^1.75]	aw [m/s^2]	VDV
1	2022-01-27 10:46:13.000	11.614	4.467	48.978	17.378	21.627	7.413	1.230	1.288	0.1	
2	2022-01-27 10:46:13.500	18.621	6.839	90.157	29.512	23.714	10.233	0.733	0.733	0.2	
3	2022-01-27 10:46:14.000	15.311	5.102	27.342	8.915	27.227	7.528	1.334	1.245	0.4	
4	2022-01-27 10:46:14.500	5.559	2.113	10.116	3.236	10.116	0.767	1.567	1.641	0.6	
5	2022-01-27 10:46:15.000	10.471	3.102	27.342	8.915	27.227	7.528	1.122	1.135	1.3	
6	2022-01-27 10:46:15.500	19.498	7.079	38.905	15.136	32.734	12.589	0.767	0.716	1.3	
7	2022-01-27 10:46:16.000	9.333	3.236	28.840	10.116	34.277	11.614	0.767	0.822	1.4	