

Method Note

PMOD File Management & Starting Preferences for Bruker PET Data

Introduction

This note describes tips for file management and preference settings for Bruker PET study data. These are recommendations for initial use and do not detail specific analysis workflows.

PMOD Database

Processing data from the PMOD Database can facilitate easier file management and image processing. Files can be easily re-saved to the database following processing to allow users to "pick-up" where last processing ended. VOIs can be saved in the database and "associated" with the file for subsequent retrieval. Multi-modal studies including cross-platform data can be easily grouped.

Database and File Import

Typical approaches for importing Bruker PET data to the PMOD Database include:

- For PET studies acquired using ParaVision 360, data can be transferred directly via the PMOD DICOM server. If the ParaVision 360 DICOM export is configured for the PMOD Database, data will be immediately available in the PMOD Database after selecting Export to DICOM in ParaVision. Your PMOD must be active during the transfer.
- For PET studies acquired using the Albira Software Suite, first select the Import Button and AUTODETECT as below.



• At the dialogue select the Set Input Files (as below), and select data files for import. (Where available select the "....CT-SPECT-PET-ForFusion" version).

Inner Die Lemat Commission		The Part LALDES Y New 30 7. Cheat Hear 17 Nethesh Query 17 19 1 EB
Image File Format Conversion		
Scan fold		♦ ► ⊕ □ Subbid. □ Det
Set input files	Add files	A X Remove A 🔛 🚍 Load
Set files to list		

Merging Studies in Database

Users may find it helpful to Merge individual scan study data.

• To Merge study data, highlight the files from the database and select Merge as shown in the example below.

Pmod			▼ (→ □)	All DBs 🕴 New 🔽 🗙 Clear Filter 🗧	🖯 Refresh Query 🖉 오	🗟 🖨 Import 🔻 🕑 DIC
Subject (Name , ID) *		•		Birth Date: : .		τ AI [] Τ] Τ] Τ] Τ] Τ]
escription (Study, Series)				Nodification:	- • nt •	T All Pri
• • •	iт ж маge т	Study Date:	: 📼 🔻	LastUse: : .		Locked Grp •
Jbjects [3] 💿						Preview of selected series
Subject ID	Subject Name	Modification Date	Sex	Date of Birth		>
ET CT-2	PET CT-2	2023-03-20 08:57:49.336	M	2022.01.17		
ET CT-1 42	7-00 PET CT MP	2023-03-20 08:57:49:335	M	2022.01.17		
Add to "Selected for loadi eries [1]	ing"	Intil Edit Subject	S Delete Subject(s) V Create new Subject	M Associate Images Automatically	Bo Merge =\$ Split	utgecta
ELCL-5	ner y vescopoli	2009FET PT	2023.03.13 11.36.37 2023.03	2000 90105 IIII0 2002-03-20 00 57	2023-03-20 091 1	
Add Selected series	Add All series		2008 Edit 💿 Delete — 共 Assis	an to Project Group 🔻 県 回動間		
Compon						

Save and Apply Macros

Processing routines such as Rotations, Mirroring, and Filtering may be saved for recall.

- Perform all desired processing for a representative image file.
- Once complete, select the Series Information & Editing > Image History menu and select Save Macro as shown below.

Mexicol Data Device Street Status INIT Classes Table Initial Data Devices Initial Data Devices <t< th=""><th>Savine Information</th><th>2 Editor We</th><th>3</th><th></th><th>PET GT-1 PET GT-1 2022 01.17</th><th></th><th>1.1103132023 8 1 137 1 1</th></t<>	Savine Information	2 Editor We	3		PET GT-1 PET GT-1 2022 01.17		1.1103132023 8 1 137 1 1
Budget comments: Budget comments: Budget comments: Budget comments: Budget comments: Budget comments: <th>Contract Contractor</th> <th>a coung un</th> <th>laste</th> <th>C</th> <th></th> <th></th> <th></th>	Contract Contractor	a coung un	laste	C			
Details Data Tool User M In	Subject I study in Su Age, Weight, Siz Subject Image Stab (v.) Vereil spa Bounding box ~X Units (Memory rep Manufacturer / Moi	Modanity Modanity Modanity Modanity Modanity Modanity Stubject ID: Stubject ID: Study ID: stubject ID: somments: comments: comments: description: z, frames): cing(x, y, z): description: z, frames): cing(x, y, z): description: z, frames): cing(x, y, z): description: z, frames): description: z, manes): description: description: description: z, manes): description: descript	Image: Selection of the selection	0126ent 126e 125+,68.375, 0, 12 AT Ph Carred 14220230313/32262	5- [mm] Inter [DECYGCATDTINNOF] / [PET CF-1] PET [268 PE	84 Q	AUTOC iew xis Co mod
Image: Control of the second	No	Operativ		Date	Teel	lleer	- I *
Details Database PET CT-1 PET / 200 PET -2101/351/3601/PMnob-). Altianes used. Al silos used.	1	=> LOAD	20	23.03.21 08.06:33	PROJECT.TRACKER	User1	W :
Save Macro	Details Databar	PET CT-1	PET 2:89 PET <2101/3561/ at Report	3601P/Pmod>] All tra	mes used. All slices used.		E E

• The Macro may be recalled and applied to additional data by executing at the Load With Processing menu when opening new data, or at the Image Processing tab>Ext tab>Macro selection at the pull-down menu.

Presets & Applications Settings

Users may set default scaling, units, and views for data at the Presets and Applications Settings menus. The preferences below are suitable for many preclinical imaging facilities.

Configurations and User Settings

- Select the Configurations and User Settings button > Presets tab as shown below.
- Set Default Species, Activate Oncology View and set Default SUV unit to %ID/ml.



Applications Settings

• To set default modality Max and Min display scale and color table, first set a preset for a representative dataset at the View module as shown at left below. Then, at the Applications settings > Display menu, select the desired color table and preset for each modality as shown at right below.

	upar	Hybrid Control Protocol	2 * 🗹 Synt	tronza ♥ A T L ,	×
	\wedge	Control area located. Right of imag	nell 🕶 🗹 F	usion interpolation	Starting window size: O Default Maximized O Last used
87 197	Cold Cold	X plane orientation in a contract or the second or the sec	multi-image Z disp	slag)	anow in uvering show in the sur Got 20 • [mm] Ø VOls Stelet name //D
	PETHighO value above threshold appear in rightmost col CTHighContrast <1712/3117/3218//Pmod>	Y plane rows x cols 1		x 1 x 1	Color bar
	Save 4 Load	Z plane rows x cols 1 Custom rows x cols 2 4th Quadrant: MIP Orthogonal plane indication: Crosslines		x 1 x 3 ♥ ♥ ▲ 11 ♥ Center	Report Print subject header Print subject header Print subject header Print subject header Print image with white background
		Fusion orthogonal indication: Crosslines		👻 🔺 🔝 🗹 Center	Color bar orientation: Horizontal Paper format: A4
		Default color table: Gray	▼ 4 ► 3 ▼ 4 ► 3		VOI D finition
		MR: Gray	$\tau \leftrightarrow \pi$	MRHighCentrast <17 • • ×	VOI list location: Left of image controls
		CT: Gray	$\tau \leftrightarrow \exists$	CTHighContrast <17 👻 😁 🗙	Number of undo steps: 10
		Color table minimax modes: [4D] Global Color table adjustment	* 4 • 0	No WIL& COLOR INI V () ×	Minimal duration [150 [mseconds] Restore layout with undo Synchronize VOIs with series
		Set lower t	reshold to zero (ex	cept for CT and MR data)	
		4 •		V Ok	× Cancel

• In the Fusion module, check the "Reset to Standard Orientations" box in the Applications Settings > PFUS tab menu as shown below.

~	6 🗈 🔊 P	rotocol Reslicing:	Trilinear	▼ Na	aN 🔻	>	
	\sim						
							~
	Paths Display PFUS						^
	i and bispint i rec						
	Combin	ned Matching Page Iormalization Templat	e when star	ting			
	Template	Image PET HFS (S	PM5)	-			
	🛄, AU	TODETECT 👻				4 Þ 🐵 X	
		Set lower color ta	ble thresho	ld to zero			
	Use as Reference:	CT for PET/CT	CT for SP	ECT/CT 🗹 N	IR for Pi	ET/MR	
	Landing page:	Matching			•	I b after input image loading.	
	Landing page:	Reference			* 4	after reference image loading	
	Default matching	Lastused			•	•	
	🕑 Species recognitio	PRIMATE RAT 3000.0 1500.0	MOUSE 550.0	Maximal vol	ume (cc	m] 🐵	
	Comparison page:	Three row layout h	vo images a	and their fusio	on image	e 🔻 🖣 (Initial)	
	Reorient to Standard	d Orientation					
			~	Ok		× Cancel	

Bruker BioSpin

info@bruker.com bruker.com