1.5T ADNI-Related GE 14.0 M4 Software, TwinSpeed Gradient and 8-channel Brain Coil (Not for patient use--this protocol is for use with the ADNI phantom)

This protocol provides suggested imaging parameters for research studies that want to approximate the imaging methods used in the ADNI study using 14.0 M4 HDx software, but do not have access to an MP-RAGE pulse sequence. For more details see the document: "Use of ADNI MRI Methods for Non-ADNI Studies"

Accept the "First Operating Mode" pop-up in Series 1. Consult the scanner's user's manual to understand this choice and its implications.

*The head portion of the 16-channel head-neck-spine (HNS) can be used instead of the 8-channel brain coil for the entire study, if desired.

SERIES	1. 3 plane loc.	scan plane	3-plane	matrix/nex	256 / 128 / 1
coil	8hrbrain*	modes	(Whole Body gradient)	fov (cm)	26
etl	Officialit	IIIoucs	Calib.	slice/space	5/5
scan time	:13	pulse seq	Gradient Echo	autoshim	On
Scarr time	.13	imaging opts	Fast, Calib	autosiiiii	Oli
comments	Use 8-channel brain coil.			=	
Comments	Ose o-chamile brain con.	Ceriter at A20).		
SERIES	2. Calibration Scan.	scan plane	axial	matrix/nex	default
coil	8hrbrain*	mode	(Whole Body gradient)	fov (cm)	30
etl		SAT	(Timeso Doug gradionly	slice/space	6/0 43 slices
scan time	:13			autoshim	off
	-	_]	
comments	Used for PURE B1-corre	- ction. Be sure t	to cover phantom complete	elv	
				,	
			IMAGING PARAMETERS		ACQUISITION TIMING
SERIES	3. Sag IR-FSPGR	scan plane	IMAGING PARAMETERS Sag	matrix/nex	ACQUISITION TIMING
SERIES coil	3. Sag IR-FSPGR 8hrbrain*	scan plane mode		matrix/nex phase fov	
		•	Sag		
	8hrbrain*	mode	Sag 3D (ZOOM gradient)	phase fov	
coil	8hrbrain*	mode pulse seq	Sag 3D (ZOOM gradient) SPGR	phase fov locs/pause	192 / 192 / 1
coil #echos	8hrbrain* SCAN TIMING 1	mode pulse seq image opts.	Sag 3D (ZOOM gradient) SPGR EDR, IrPrep, Fast	phase fov locs/pause freq. direct.	192 / 192 / 1
coil #echos te	8hrbrain* SCAN TIMING 1 min full	mode pulse seq image opts.	Sag 3D (ZOOM gradient) SPGR EDR, IrPrep, Fast efgre3d_cs	phase fov locs/pause freq. direct. fc direct	192 / 192 / 1
coil #echos te Prep time	8hrbrain* SCAN TIMING 1 min full 600	mode pulse seq image opts.	Sag 3D (ZOOM gradient) SPGR EDR, IrPrep, Fast efgre3d_cs ADDITIONAL PARAMETERS	phase fov locs/pause freq. direct. fc direct phase corr	192 / 192 / 1 S/I
#echos te Prep time flip angle	8hrbrain* SCAN TIMING 1 min full 600	mode pulse seq image opts. psd name	Sag 3D (ZOOM gradient) SPGR EDR, IrPrep, Fast efgre3d_cs ADDITIONAL PARAMETERS Image acq. delay = 0	phase fov locs/pause freq. direct. fc direct phase corr	192 / 192 / 1 S/I
#echos te Prep time flip angle etl bw1/bw2	8hrbrain* SCAN TIMING 1 min full 600 8	mode pulse seq image opts. psd name	Sag 3D (ZOOM gradient) SPGR EDR, IrPrep, Fast efgre3d_cs ADDITIONAL PARAMETERS Image acq. delay = 0 turbo mode = 1	phase fov locs/pause freq. direct. fc direct phase corr autoshim	192 / 192 / 1 S/I On SCANNING RANGE 24
#echos te Prep time flip angle etl	8hrbrain* SCAN TIMING 1 min full 600 8	mode pulse seq image opts. psd name User CVs	Sag 3D (ZOOM gradient) SPGR EDR, IrPrep, Fast efgre3d_cs ADDITIONAL PARAMETERS Image acq. delay = 0 turbo mode = 1 slice resolution = 100%	phase fov locs/pause freq. direct. fc direct phase corr autoshim	192 / 192 / 1 S/I On SCANNING RANGE
#echos te Prep time flip angle etl bw1/bw2	8hrbrain* SCAN TIMING 1 min full 600 8	mode pulse seq image opts. psd name	Sag 3D (ZOOM gradient) SPGR EDR, IrPrep, Fast efgre3d_cs ADDITIONAL PARAMETERS Image acq. delay = 0 turbo mode = 1	phase fov locs/pause freq. direct. fc direct phase corr autoshim	192 / 192 / 1 S/I On SCANNING RANGE 24
#echos te Prep time flip angle etl bw1/bw2	8hrbrain* SCAN TIMING 1 min full 600 8	mode pulse seq image opts. psd name User CVs	Sag 3D (ZOOM gradient) SPGR EDR, IrPrep, Fast efgre3d_cs ADDITIONAL PARAMETERS Image acq. delay = 0 turbo mode = 1 slice resolution = 100%	phase fov locs/pause freq. direct. fc direct phase corr autoshim	192 / 192 / 1 S/I On SCANNING RANGE 24
#echos te Prep time flip angle etl bw1/bw2 scan time	8hrbrain* SCAN TIMING 1 min full 600 8	mode pulse seq image opts. psd name User CVs	Sag 3D (ZOOM gradient) SPGR EDR, IrPrep, Fast efgre3d_cs ADDITIONAL PARAMETERS Image acq. delay = 0 turbo mode = 1 slice resolution = 100%	phase fov locs/pause freq. direct. fc direct phase corr autoshim	192 / 192 / 1 S/I On SCANNING RANGE 24
#echos te Prep time flip angle etl bw1/bw2 scan time	8hrbrain* SCAN TIMING 1 min full 600 8	mode pulse seq image opts. psd name User CVs	Sag 3D (ZOOM gradient) SPGR EDR, IrPrep, Fast efgre3d_cs ADDITIONAL PARAMETERS Image acq. delay = 0 turbo mode = 1 slice resolution = 100%	phase fov locs/pause freq. direct. fc direct phase corr autoshim	192 / 192 / 1 S/I On SCANNING RANGE 24