

Supporting Figure S1: In vivo 23Na image of the eyes of a healthy female volunteer (age = 29 years; BMI = 21.8 kg/m2) obtained with DA-3DPR imaging and filtered with Hamming filter demonstrated in sagittal and axial view. No method for sensitivity correction was applied. First row: nominal isotropic resolution = 1.4 x 1.4 x 1.4 mm3 was achieved within 10 minutes 50 seconds by using following parameters: TR/TE = 13/0.55 ms, number of projections = 50000, readout duration = 9.2 ms. Second row: nominal isotropic resolution = 1.0 x 1.0 x 1.0 mm3 was achieved within 14 minutes 10 seconds by using following parameters: TR/TE = 17/0.55 ms, number of projections = 50000, readout duration = 13.3 ms. Third row: nominal isotropic resolution = 1.0 x 1.0 x 1.0 mm3 was achieved within 10 minutes 50 seconds by using following parameters: TR/TE = 13/0.55 ms, number of projections = 50000, readout duration = 9.3 ms. Bottom row: proton reference images obtained with 1H basic coil (Siemens, Erlangen, Germany) and T2-weighted RARE imaging: TR/TE = 2940/74 ms, FOV = 384 x 384 mm2, in-plane resolution = 0.54 x 0.54 mm2, FA = 120°.



Supporting Figure S2: In vivo 23Na image of the eyes of a healthy male volunteer (age = 30 years; BMI = 25.3 kg/m2) obtained using the same pulse sequence parameters, imaging protocol and procedure as for the female volunteer shown in Supporting Figure S1.