

10 Years of Synchrotron and *sediba*

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In 2010 the first synchrotron images of the 2-million-year-old *Australopithecus sediba* fossils, from the Malapa site in South Africa were made at the European Synchrotron Radiation Facility (ESRF) in Grenoble France. The resulting data, along with that from subsequent scanning efforts, have been used in a large number of scientific and popular publications and resulted in many significant and important discoveries. This original synchrotron data continues to play an important part in research to this day. The data from these scanning efforts also produced many important images that have improved the outreach work around *Au. sediba*, ensuring quality transmission of scientific information to both the Academy and the public. This work conducted a decade ago, still provides the gold standard for imaging of these fossils. Over a decade of testing alternate methods of imaging including high resolution scanning using both industrial and military grade micro-focus computed tomography on fossils and large blocks of breccia containing hominid fossils, has demonstrated that synchrotron scanning continues to be the gold standard for imaging of the material from Malapa and thus likely other southern African Plio-Pleistocene aged fossil-bearing sites. These results hold promise for significant future discoveries and work using synchrotron radiation, particularly if beam lines can be developed that can take larger and heavier fossils, and rocks containing fossils.