213th Meeting of the
American Astronomical Society
with HAD and HEAD
4-8 January 2009
Long Beach, CA

2009 International Year of Astronomy

Control Number	765
Presentation Preference	Poster
Title	**Design And Development The Ixo Mirrors By Innovative Slumping Glass Technologies**
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Category	34. Instrumentation: Space Missions

At INAF Brera Astronomical Observatory development activities are ongoing aiming at the design and development of the IXO mirrors based on slumping glass technique. Our approach is based on the use of thermal slumping of thin glass optics and it presents a number of innovative solution for the implementation. In particular our approach foresees the use of a ceramic mould made of SiC for thermal shaping of the glass segments, which occurs exerting a proper pressure during the moulding process. A thin layer (a few hundred Angstroms) of Pt or Ir is previously deposited on the glass segment, to prevent the adhesion on the SiC mould surface. Therefore this coating not only acts as a release agent of the process but, at the same time, it has also the role of reflecting layer of the X-ray mirror (in a sense like it was the role of gold in the Ni electroforming replication method used for the XMM shells). SiC is chosen for its very good T/M characteristics and, in particular, a very high thermal conductivity and very low CTE. SiC mould will be produced via injection moulding process, followed by a the application of a cladding layer (a few tens microns) application of CVD SiC for allowing a superpolishing of the surface until a roughness of a few Angstrom rms is achieved. Once the mirror segments are produced, they are integrated in petals by means of air-bearings supports, that allows us to maintain the proper shape of the segments without deformations. The segments are stacked into the petals by the use of connecting ribs, glued to the front surface of each mirror and to the rear of the next one.