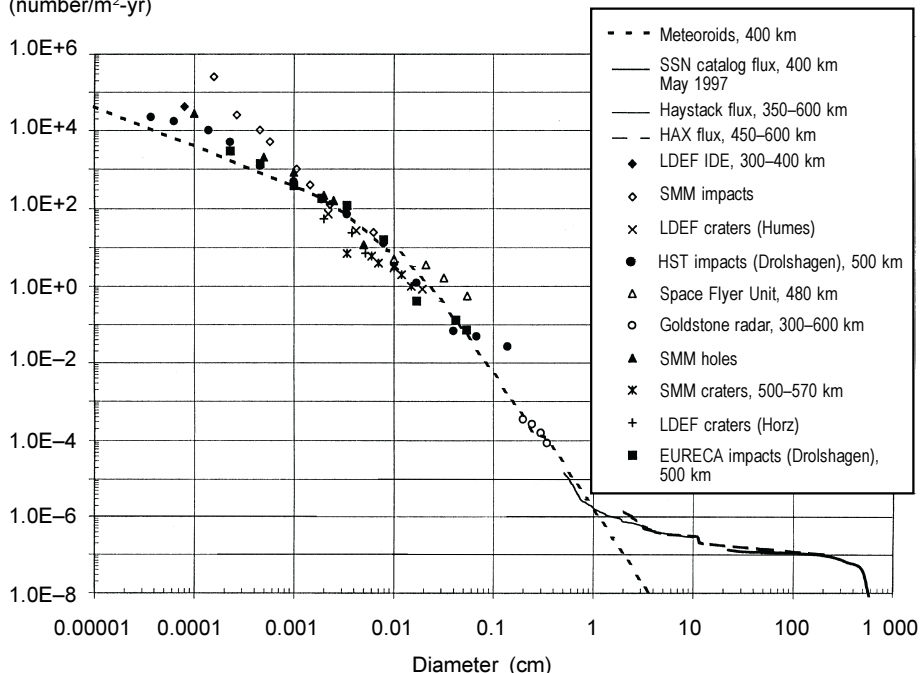


**Figure I. Approximate measured debris flux in low Earth orbit, by object size**

Cross-sectional flux of a given size and larger  
(number/m<sup>2</sup>-yr)



report, the term catalogue includes the collection of orbital elements.) The purposes of a catalogue are to provide current orbital elements, which can be used to predict orbital motion, and to provide correlation with observations of orbiting objects; to act as a historical record of orbital activity for the purposes of environment monitoring; to serve as an input to modelling the behaviour of orbiting objects; and to provide a basis for predicting future launch and operational activity.

48. The following characteristics of orbiting objects may be recorded:

(a) Regularly updated state vectors: the characteristics of the orbit of an object derived at a particular instant in time and used for orbit propagation;

(b) Mass: the launch mass, beginning of life mass and dry mass (end of life);

(c) Radar cross-section: the returned signature of an orbiting object, from which shape, orientation and size can be derived (the radar cross-section is dependent on the wavelength of the radar; therefore, the wavelength of the measurement must also be recorded);

(d) Albedo: a measure of the reflectivity of an object that characterizes the optical visibility of an object;