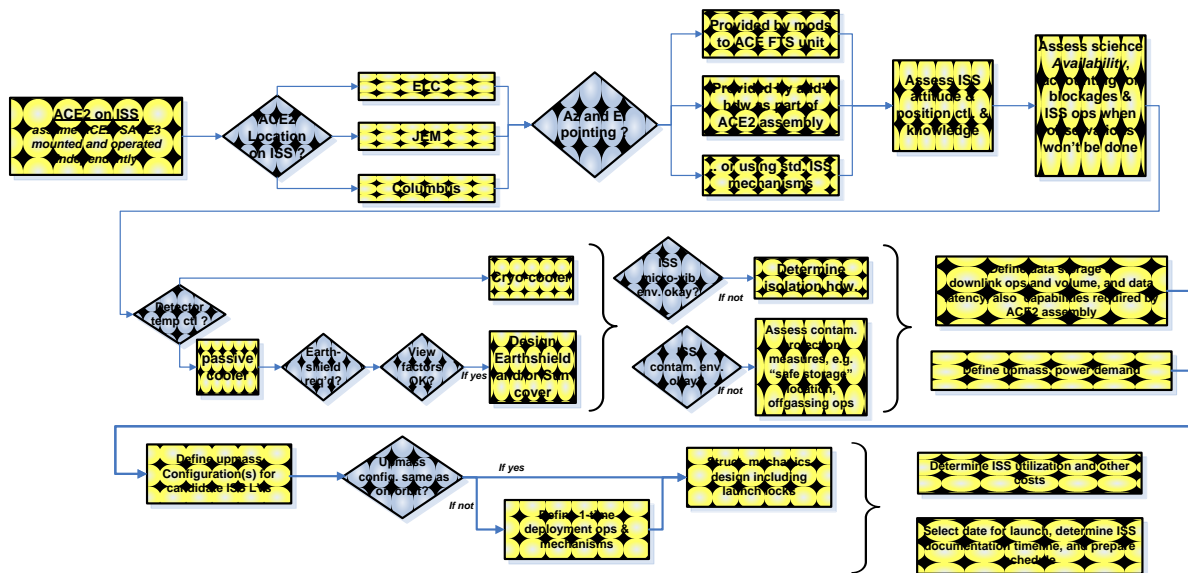


CASS Mission

Northeast is currently supporting Magellan/Bristol for an environmentally important mission to provide continuity of the atmospheric measurements now being made by the Atmospheric Chemistry Experiment (ACE) Fourier Transform Spectrometer (FTS), operating in the solar occultation mode, from the SciSat satellite. The Bristol-built SciSat spacecraft is now in its sixth year of operation, long past its *design lifetime*. The FTS was built by ABB Bomem.

Two options were investigated in 2010; to operate a replacement FTS on ISS, or fly it on another small satellite. The ISS option was attractive because Canada is an ISS Partner and it would have enabled cooperative science measurements with the NASA SAGE-3 instrument now preparing for ISS. NE developed the following *decision chart* which Bristol used to investigate the ISS option:



Northeast is currently supporting Bristol in the development of the satellite option, which includes coordination with all concerned organizations including the principal scientists.