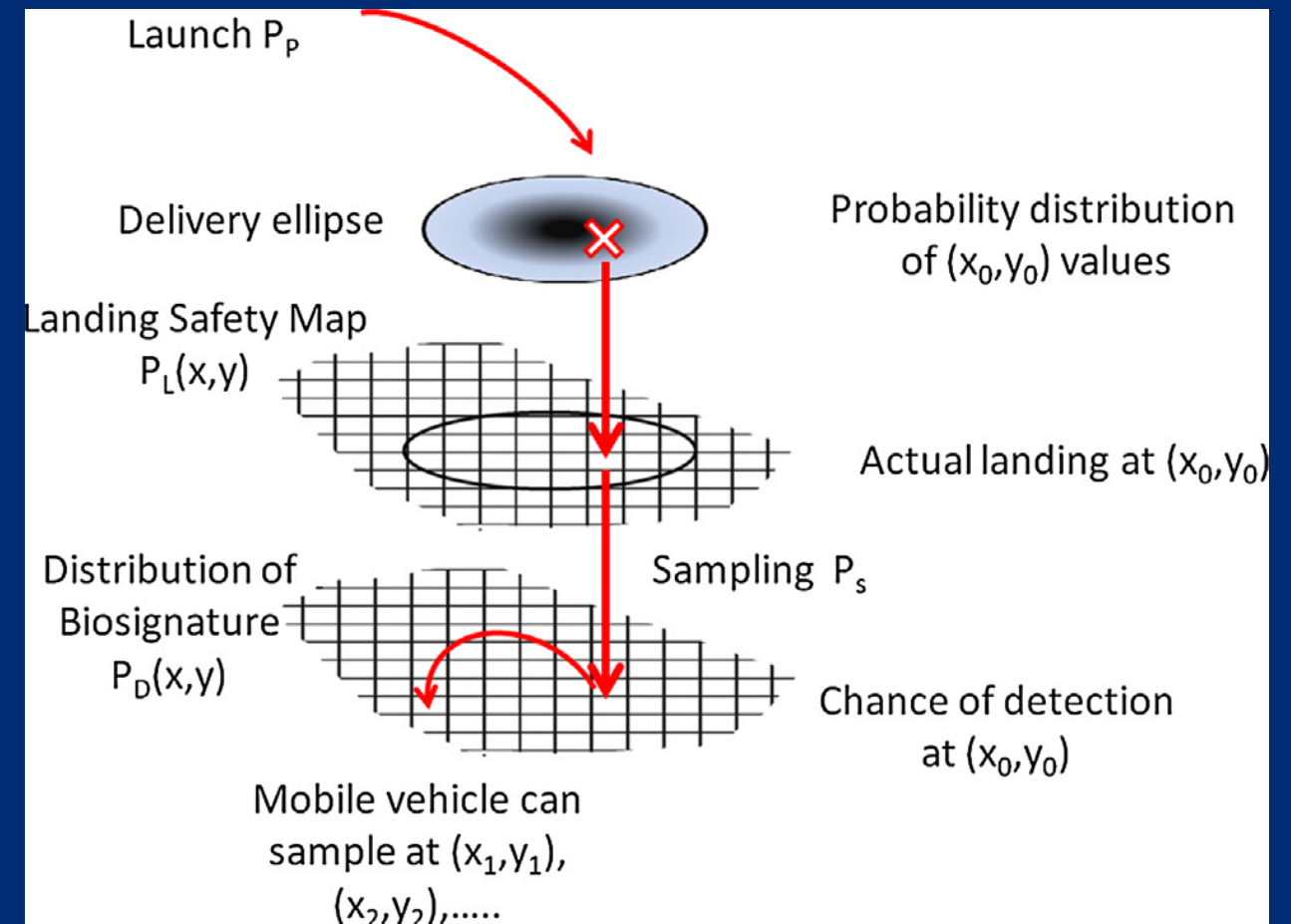
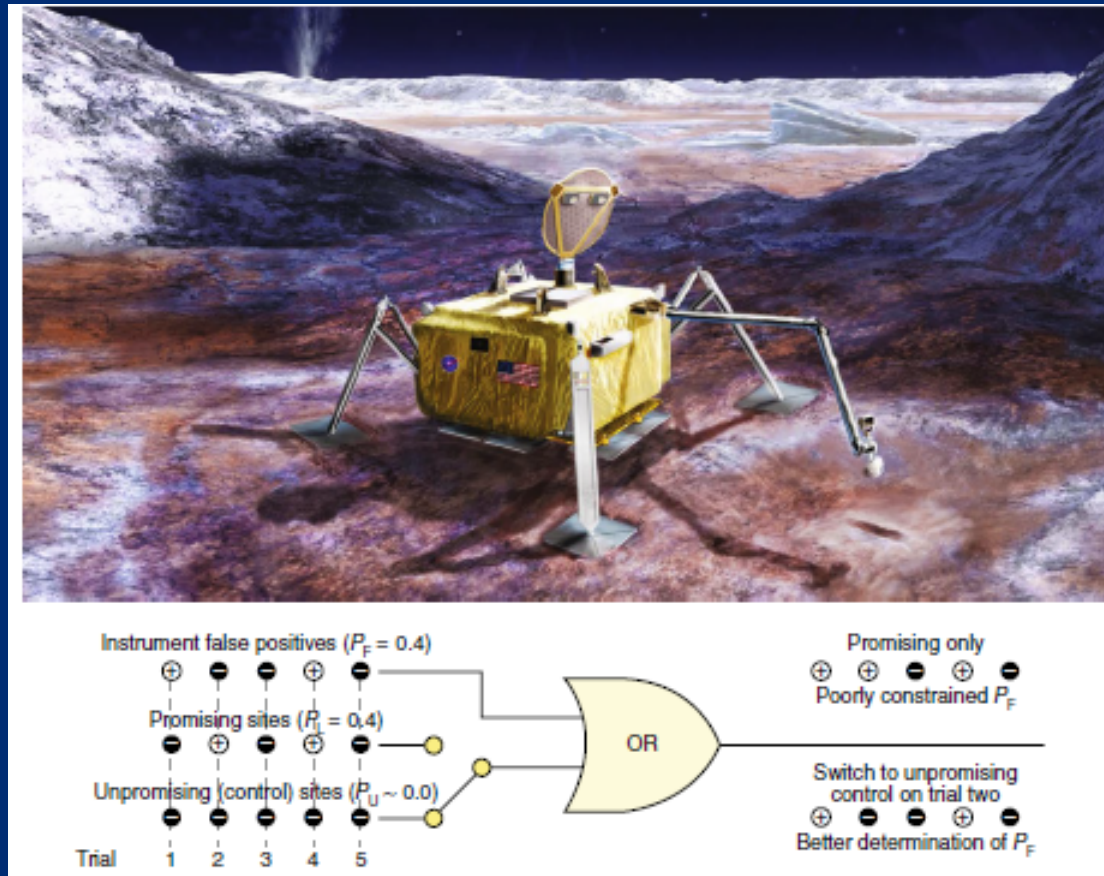


Defining Expected Science Value from Missions

Long range planning and road-mapping efforts for Planetary Science prioritize future missions perceived to return high “Science Value per Dollar.” However, little attention has been devoted to the numerator. Probabilistic science value metrics can be defined using information theory. Similar approaches (qv Operations Research) can define value of mobility or other enhancements.



Probabilistic science value metrics defined using information theory and operations research enable the quantification of potential “science value” of potential spacecraft missions.