



## Civilization at the Cosmic Shoreline

T E Moore 2 Feb 2005

The President's NASA Vision for Space Exploration is comparable in every way to the resolve by European nations of the previous millennium, who explored the Earth using their rapidly developing nautical technology. Our technology is different, but the impulse and motivations are the same. We orbit the shoreline of our safe harbor, watching the surf of aurora upon our magnetically-sheltered shores, the storms that emanate from our active and variable star, and contemplating the risks and benefits of our outward quest. We have devoted considerable resources to reconnoitering nearby with robot spacecraft, an advantage the European explorers did not enjoy. We have looked outward across the electromagnetic spectrum, unimpeded, as far as we know, by curved space, far beyond our corporeal ability to explore. We have visited the nearby major island and found it interesting but ultimately unsatisfying. We thirst for exploration of the solar system and nearby cosmos and feel ready to do undertake this broader exploration. We sense that exploration is an end in itself; that it has brought economic returns far in excess of its cost and always will. In the spirit of H.M.S Beagle, we anticipate that this exploration will bring us knowledge of our origins, evolution, and destiny. We have learned from our robotic explorations that all of nature is transient, even our neighbor, Mars. We sense that a truly intelligent species must plan to outlive its home planet. We are determined to update and assemble the tools for exploration. As we do so, we are obliged to provide as well as possible for the safety and success of our courageous explorers. The challenges of space exploration far exceed those faced by our forebears, but robotic observers will provide a level of knowledge, and support a level of predictability, unknown to earlier explorers.