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The American Association for the Advancement of Science was founded in 1848 and incorporated in 1874. Its objectives are to further the work of scientists, to facilitate cooperation among them, to foster scientific freedom and responsibility, to improve the effectiveness of science in the promotion of human welfare, to advance education in science, and to increase public understanding and appreciation of the importance and promise of the methods of science in human progress.
COVER Earth’s magnetosphere, created by the interaction of the supersonic solar-wind plasma (blue) with the geomagnetic field. The plasma sheet (red) is a reservoir of hot (~1 kiloelectron volt) plasma originating in the solar wind and in the ionosphere. The solar wind–magnetosphere interaction drives a circulation of plasma that populates the Van Allen radiation belts (red dots) and powers auroral optical and radio emissions. See page 410. [Source, T. W. Hill; illustration by Susan Nowoslawski]

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