

WITH NEW SOFTWARE LOADED ONTO A COMPUTER ABOARD THE INTERNATIONAL SPACE STATION, "INTERPLANETARY INTERNET" BECOMES A REALITY—REVOLUTIONIZING COMMUNICATION BETWEEN EARTH AND INSTRUMENTS FLYING IN SPACE

To communicate with spacecraft or astronauts, scientists on Earth must currently schedule a time to send or receive data, much like arranging a telephone call. The new "interplanetary internet" system functions more like the web, allowing for automatic data flow; tests have already proved this method to be four times faster than the current one. NASA is developing a "delay-tolerant networking" (DTN) protocol to work around instances when spacecraft are in low coverage situations (i.e. behind planets or suffering losses of power). NASA plans to complete DTN by 2011.

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