

Broader Use of the International Data Collection Service (IDCS) Channels

NOAA-WP-11 discusses the expanded use of the International Data Collection System (IDCS) channels. To support a broader use of the International Data Collection Service channels, the National Oceanic and Atmospheric Administration recognizes the critical importance of realtime observations during catastrophic events. The IDCS has the capability to provide authorities with meaningful information on natural as well as man-made events. The system can be use as an instrument for obtaining data to on events that may lead to loss of life. As an observational tool, the IDCS can be used to monitor global events that impact regions or whole nations.

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INTRODUCTION

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BACKGROUND

During the darkest days surrounding “9/11”, the pollution from the rubble and debris created an environmental nightmare in the New York area. A thick cloud of ash rained down on the city after the World Trade Center attacks. The US Environmental Protection Agency had to monitor the quality of the air to determine any serious health treats. The continuous monitoring of the air required a vast network of sensors to track pollutants in the air. NOAA provided special support to the EPA via the GOES Data Collection System to support this operation. A platform was mounted at ground zero to provide realtime monitoring of the air quality throughout the cleanup of the debris.

NOAA currently maintains a tsunami warning system that consists of a series of environmental platforms stationed in the Pacific Ocean which contain wave monitoring instruments. When a tsunami event is triggered, the Pacific Tsunami Warning Center (PTWC) issues bulletins to Pacific Rim countries.

Within minutes of getting a seismic signal that an earthquake occurred off the west coast of Northern Sumatra, Indonesia, NOAA issued a bulletin indicating no threat of a tsunami to Hawaii, the West Coast of North America or to other coasts in the Pacific Basin

The primary support for the PTWC is done through the GOES Data Collection System.

PURPOSE

After the Indian Ocean tsunami, NOAA proposed a plan to provide support through the use of the IDCS channels and the GOES-9 spacecraft. That proposal would have enabled the National Oceanic and Atmospheric Administration to better detect and provide notification of dangerous tsunamis in the Western Pacific and Eastern Indian Oceans.

Using the same analogy, NOAA believes the IDCS should be used as the base for international support for catastrophic events world wide. As an international tool for the collection of in-situ data, the IDCS is ideal for monitoring dangerous events worldwide. The International Data Collection System is designed to support mobile data collection platforms on ships, ocean buoys, aircraft or balloons which move from the telecommunications field of view of one geostationary spacecraft to another. Along with using the existing NOAA DCS facilities and infrastructure, the IDCS is the ideal tool to provide continuous international support for catastrophic events. In the event of a crisis or during normal operational periods, the primary responsibility of the IDCS should always be maintained.

SYNOPSIS

NOAA believes that CGMS should further investigate the possibilities of using the IDCS along with the existing DCS infrastructure and existing technologies to provide international support of catastrophic events. This may entail the development of realtime event monitoring and/or resource coordination and inexpensive “off the shelf” equipment.

SUMMARY

NOAA believes the use of the IDCS to provide international support for catastrophic events will reduce the loss of lives and property damage. The need for realtime in-situ observations will aid in the recovery and rescue process following any event that devastates whole communities. Along with its primary role, the IDCS should be expanded to respond to major events worldwide.