

The NOAA National Oceanographic Data Center's Interoperable Archive of Ocean Climate Data and Information

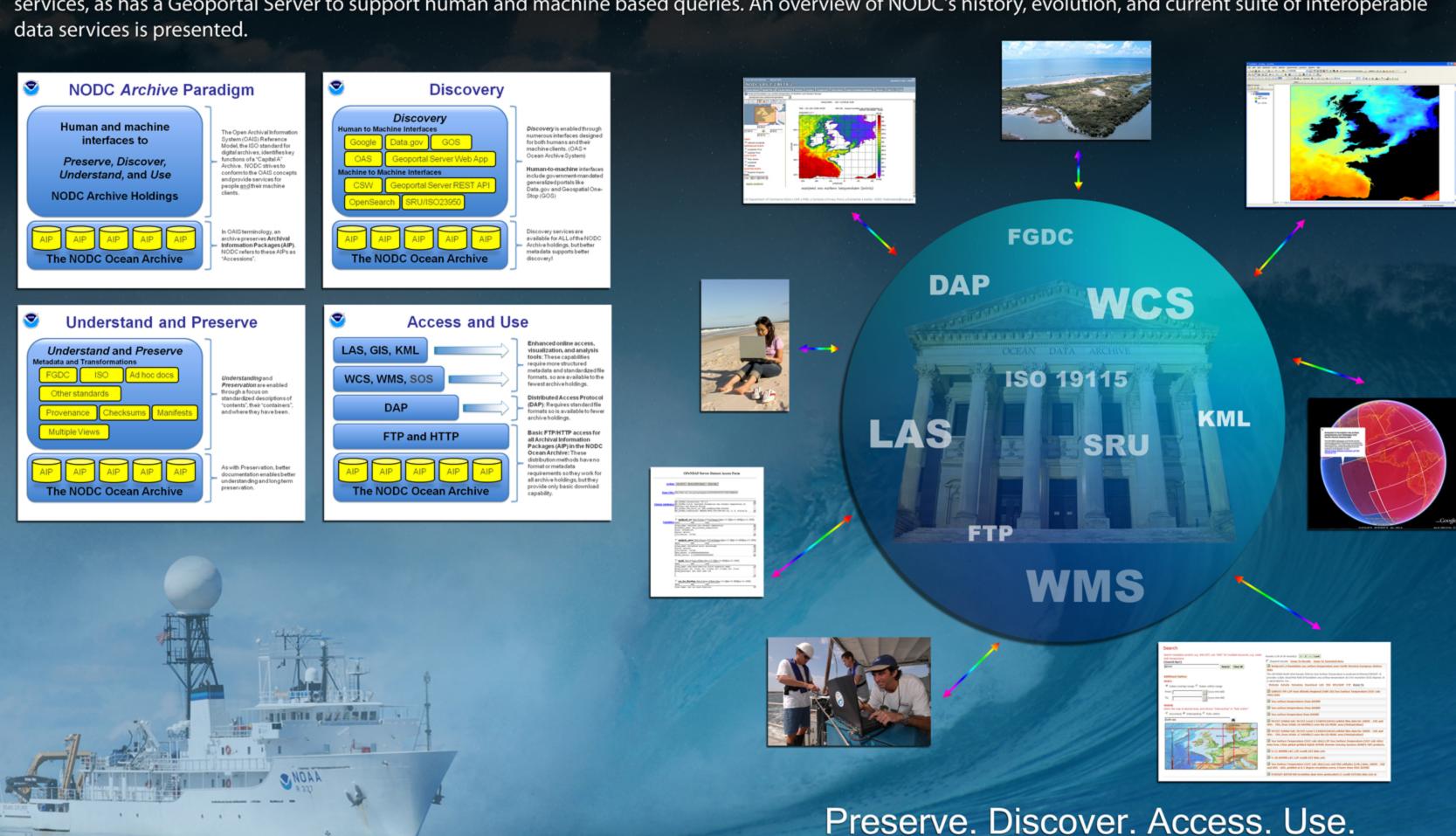


Kenneth S. Casey

NOAA/NESDIS National Oceanographic Data Center, Silver Spring, MD, USA

Opening its doors in 1961, the NOAA National Oceanographic Data Center (NODC) recently celebrated its Fiftieth anniversary of acquiring, archiving, assessing, and providing access to ocean data and information. The NODC archive has evolved over the years from a disparate collection of databases to a unified Archive Management System, and most recently has begun incorporating a wide range of internationally accepted interoperable data tools and services. These standardsbased services include discovery services like the OGC Catalog Service for the Web (CSW) and the Search and Retrieval by URL (SRU) profile of ISO 23950. Data access and use services like OPeNDAP's Data Access Protocol (DAP) and the OGC Web Mapping Service (WMS) and Web Coverage Service (WCS) are also supported, and the entire framework is supported by FGDC metadata and increasingly metadata conformant with ISO 19115.

Online browse, visualization and analysis systems like the Live Access Server (LAS) and an ArcGIS Server have recently joined the list of supported tools and services, as has a Geoportal Server to support human and machine based queries. An overview of NODC's history, evolution, and current suite of interoperable



1961: NODC dedicated.

1967: "Accession

1968: First magnetic

1970s-1990s: Multiple inventory databases with Catalog Database wrapper. Scope of collections

1992: NOAA libran catalog goes online (up to 9600 baud!)

1999: Accession Tracking Data Base (ATDB) implemented

2003: NODC "parameter neutral Archive Management System emerges 2003: DODS, precursor to OPeNDAP, goes live

2006: First automated data stream (GHRSST)

Mar 2010: Web Accessible Folders (WAF) of metadata Apr 2010: THREDDS Data Server goes live Server goes live

Jun 2010: Live Access Sep 2011: Geoportal Server and ArcGIS Server go live

