

Overview Field Activity Collections System (FACS) Log

Topic:	Information
USGS Activity ID YYPRJ##	04CCH01
Other ID (if any)	XSTORMS.h20040815c
Organization(s)/Program	U.S. Geological Survey, St. Petersburg, Fla.
Project/Theme	Extreme Storm Coastal Change Hazards
Area of Operation	The Western Coast of Florida
Principal Investigator(s)	D. Krohn, K. Morgan, R. Peterson, and P. Thompson of the USGS in St. Petersburg, Fla., and flown by M. Frame of Bay Air Charters, Inc.
Information Specialist(s)	K. Guy
Activity Type	Oblique Aerial Photo and Video Survey
Scientific Purpose/Goals	Post-Hurricane Charley survey to document the storm impact on the coast.
Platform	Navajo Chieftain airplane, tail number N2KK
Starting Date	August 15, 2004
Starting Port/Location	Marco Island, Fla.
Ending Date	August 15, 2004
Ending Port/Location	Fort Desoto, Fla.
Equipment Used	Two Nikon F3 cameras, Sony DCR-VX1000 Handycam video camera, Compix Titler unit, Trimble Centurion GPS, Rockwell Collins PLGR
Information to be Derived (Grain Size, Depth to Basement)	Analysis of coastal change due to extreme storms
Summary of Activity and Data Gathered	3 MiniDV tapes burned onto 2 DVDs; 34 rolls of film (approximately 1,186 slides)
Notes (include staff, shop time)	<p>Digitized by J. Subino.</p> <p>Two separate records of flight navigation were collected during the survey. The first was a continuous ASCII text file from the PLGR that recorded only latitudes and longitudes for the entire flight at 30-sec intervals. No time values were recorded by the PLGR. The second navigation record was from the Trimble Centurion GPS recorded into the subtitles of the video footage that was shot continuously during the survey. The video subtitles recorded latitude, longitude, and time in hours, minutes, and seconds using a Compix Titler unit. In order to produce a digital record of the navigation that included time, the latitude, longitude, and time were manually extracted from the video every 5 min, and these values were matched to the latitude and longitude in the PLGR file. Then the time was interpolated between these 5-min fixes using Excel to produce a 1-sec time value record for the entire flight.</p> <p>A Nikon MF-14 data back marks the time each photograph was acquired on the lower right corner of the image in day, hour, and minute format. These values were entered from the photographs into an Excel spreadsheet. It is assumed for the purposes of locating the images that the photographs were taken at a constant rate during any given minute of flight. To assign a time value in seconds to each photograph, the number of photographs taken during each minute was evenly distributed across that minute. For example: if 15 photographs were taken during minute 19:00:00, we assume that a picture was taken every 4 sec. The photographs were assigned the time values 19:00:00, 19:00:04, 19:00:08, and so on. As a result, it should be noted that the positions assigned to each photograph are an estimate of the aircraft position, not the location of the landmark photographed. The time values were then cross-referenced to the interpreted latitude and longitude values discussed above to assign approximate positions to each photograph.</p> <p>Analog and digital data are stored at the USGS St. Petersburg Office in the Extreme Storm Impact Event storage facility Rooms A142 and B267.</p>