Factsheet Data

Work Package 3 – Resilient Coastal Laboratories

- What is the general need for the use of data?
- What is the availability and frequency of data?
- Since when (temporal) and in what area (spatial) is data being gathered?
- Which parameters are used for calculations and presentations?
- Which data formats are present?
- Who is responsible for the data?
- Who has access to the data?
- Which applications are used to convert data into information?

Disclaimer

This sheet shortly explains what is meant by each type of data listed

Terrestrial Beach and dune measurements (manually on site)	Manually measured areas as beaches and dunes
Bathymetric measurements (transects)	Submerged coastal transect measurement by echo sounders
Lidar	Laser imaging detection and ranging, height profiles above water
Aero photogrammetry (DOP)	Digital Orthogonal areal Photos
Defined transects - terrestrial (spacing)	Definition of transects above water
Defined transects - bathymetric (spacing)	Definition of transects under water
Stretches/Sites of nourishments	Information available of nourishment sites
Waves (in some place nearby)	Available wave data
Wind	Available wind data
Storm events	Available storm surge data
Grainsize	Available grainsize data
Mean annual tidal parameters	Available data on tidal parameters

This factsheet has been compiled with upmost care. Data is available to partners for use in the project. Availability for (external) partners and for use in other projects is subject of conditions specified by the owner of the data and can differ per partner. Permits for usage is required.

Availability of data (availability (frequency/y))

Kind of data	AK (B)	DCA (DK)	LKN.SH (D)	NLWKN (D)	RWS (NL)
Terrestrial Beach and dune measurements (manually by GPS on site)	No	1/1	1/1	No	No
Bathymetric measurements (transects)	1/1	1/1	1/5	1/1	1/1 (1/3 full coast grids)
Lidar	2/1	1/1	1/1	1/1	1/1
Aero photogrammetry (DOP)	1/3	1/1	1/1	1/1	1/3
Defined transects - terrestrial (spacing)	No (sections 200 m)	100-1000 m	500 m / 100 m	100 m- 500 m	200 m
Defined transects - bathymetric (spacing)	No (sections 200 m)	100-1000 m	50 m	100 m- 500 m	200 m
Stretches/Sites of nourishments	Yes	Yes	Yes	Yes	Yes
Waves (in some place nearby)	Yes	Yes	Yes	Yes	Yes
Wind	Yes	Yes	Yes	Yes	Yes
Storm events	Yes	Yes	Yes	Post processing	Post processing
Grainsize	Yes	Yes	Yes	Yes	Yes
Mean annual tidal parameters	Yes	Yes	Yes	Yes	Yes

Availability of data (since)

Kind of data	AK (B)	DCA (DK)	LKN.SH (D)	NLWKN (D)	RWS (NL)
Beach and dune measurements	> 1983	> 1957	> 1971	> 1980	> 1964
Bathymetric measurements	dig. 1996 kalk 1954	> 1957	> 1971	> 1980	> 1964
Lidar	> 2005	> 2005	> 1999	> 1999	> 1996
Aero photogrammetry (DOP)	> 1983	> 2008	> 2003	> 2003	> 1960
Defined transects - terrestrial (spacing)	No	> 1873	> 1954	>1980	> 1850
Defined transects - bathymetric (spacing)	No	> 1873	> 1954	>1980	> 1850
Stretches/Sites of nourishments	> 2008	> 1978	> 1972	> 1952	> 1953
Waves	> 1978	> 1991	> 1987	> 1979	> 19??
Wind	> 1978	> 1972	> 1950	> 1950	> 1901
Storm events	> 1978	> 1887	> 1900	> 1962	> 1901
Grainsize	> 2000	> 1992	1972-1992	?	> 1980
Mean annual tidal parameters	>1970	> 1979	> 1936	> 1941	> 1901

Availability of data (used parameters)

Kind of data	AK (B)	DCA (DK)	LKN.SH (D)	NLWKN (D)	RWS (NL)
Beach and dune measurements	X,Y,Z,DX,ID, date	X,Y,Z,ID,date	X,Y,Z,DX,ID,date	X,Y,Z,ID,date	X,Y,Z,DX,ID,date
Bathymetric measurements	X,Y,Z,DX,ID, date	X,Y,Z,ID,date	X,Y,Z,DX,ID,date	X,Y,Z,ID,date	X,Y,Z,DX,ID,date
Lidar	X,Y,Z (date)	X,Y,Z,ID,date	X,Y,Z (date)	X,Y,Z (date)	X,Y,Z (date)
Aero photogrammetry (DOP)	?	RGB, x,y,z	RGB (date)	RGB	RGB (since 199?)
Defined transects - terrestrial (spacing)	No	X,Y,Z,ID	X1,Y1,X2,Y2,ID	X,Y,°	X0,Y0,°,L,ID
Defined transects - bathymetric (spacing)	No	X,Y,Z,ID	X1,Y1,X2,Y2,ID	X,Y,°	X0,Y0,°,L,ID
Stretches/Sites of nourishments	Area, date, volume	Area, date, volume	Area, date, volume	Area, date, volume	Area, date, volume
Waves	H_{mo}, T_{02}, dir	H_{mo}, T_{02}, dir	Energy flux (n, p)	?	H_{mo}, T_{02}, dir
Wind	Windspeed, dir & gust	u, dir	„Windaktion“	u, dir	u, dir
Storm events	Height, duration	Post processing	Height, duration	Post processing	Post processing
Grainsize	Percentiles	Percentiles	Percentiles	Percentiles	Percentiles
Mean annual tidal parameters	HW,LW, DE, DF,…	Post processing	HW, LW, D_E, D_F	Tidal Characteristic Numbers	Post processing

Availability of data (used formats)

Kind of data	AK (B)	DCA (DK)	LKN.SH (D)	NLWKN (D)	RWS (NL)
Beach and dune measurements	ASCII, GSF	ASCII	ASCII	ASCII	ASCII, NETCDF
Bathymetric measurements	ASCII, GSF	ASCII	ASCII	ASCII	ASCII, NETCDF
Lidar	ASCII, GSF	ASCII	ASCII, GRID	ASCII, GRID	ASCII, NETCDF
Aero photogrammetry (DOP)	TIFF	TIFF	TIFF/TFW	TIFF	TIFF
Defined transects - terrestrial (spacing)	No	ASCII, Shape	ASCII, Shape	ASCII	ASCII, EXCEL, SHP
Defined transects - bathymetric (spacing)	No	ASCII, Shape	ASCII, Shape	ASCII	ASCII, EXCEL, SHP
Stretches/Sites of nourishments	Literature	ASCII, Shape	ASCII, EXCEL, Shape	Shape	EXCEL
Waves	ASCII	ASCII	ASCII	ASCII	Waterinfo.rws.nl
Wind	ASCII	ASCII	ASCII	ASCII	Waterinfo.rws.nl
Storm events	ASCII PDF	Post processing	EXCEL	analogous	Post processing
Grainsize	Literature	?	ASCII, analogous	ASCII	Literature
Mean annual tidal parameters	ASCII	ASCII	EXCEL	ASCII	Post processing

Availability of data (responsibilities)

Kind of data	AK (B)	DCA (DK)	LKN.SH (D)	NLWKN (D)	RWS (NL)
Beach and dune measurements	AK	DCA	LKN	NLWKN	RWS
Bathymetric measurements	AK	DCA	LKN	NLWKN/BSH	RWS (some waterboards)
Lidar	AK	DCA	LKN	NLWKN	RWS
Aero photogrammetry (DOP)	AK	DCA	LKN	NLWKN	RWS
Defined transects - terrestrial (spacing)	No	DCA	LKN	NLWKN	RWS
Defined transects - bathymetric (spacing)	No	DCA	LKN	NLWKN	RWS
Stretches/Sites of nourishments	AK	DCA	LKN	NLWKN	RWS
Waves	AK	DCA	LKN	NLWKN	RWS
Wind	AK	DCA/DMI	LKN/DWD	NLWKN/DWD	KNMI
Storm events	AK	DCA	LKN/WSV	NLWKN/DWD/ WSV	RWS
Grainsize	AK	DCA	LKN	NLWKN/LBEG	RWS
Mean annual tidal parameters	AK	DMI	LKN/WSV	WSV	RWS

Availability of data (sources)

Kind of data	AK (B)	DCA (DK)	LKN.SH (D)	NLWKN (D)	RWS (NL)
Beach and dune measurements	AK	DCA	LKN	NLWKN	RWS/Deltares
Bathymetric measurements	AK	DCA	LKN	NLWKN	RWS/Deltares
Lidar	AK	DCA	LKN	NLWKN	RWS
Aero photogrammetry (DOP)	AK	DCA	LKN	NLWKN	RWS
Defined transects - terrestrial (spacing)	No	DCA	LKN	NLWKN	RWS
Defined transects - bathymetric (spacing)	No	DCA	LKN	NLWKN	RWS
Stretches/Sites of nourishments	AK	DCA	LKN	NLWKN	RWS
Waves	AK	DCA	LKN	NLWKN	Waterinfo.rws.nl
Wind	AK	DCA	LKN	DWD/NLWKN	Waterinfo.rws.nl
Storm events	AK	DCA	LKN	DWD	RWS
Grainsize	AK	DCA	LKN	NLWKN/LBEG	RWS
Mean annual tidal parameters	AK	DMI	LKN	WSV	Waterinfo.rws.nl

Availability of data (used applications)

Kind of data	AK (B)	DCA (DK)	LKN.SH (D)	NLWKN (D)	RWS (NL)
Beach and dune measurements	CARIS, GIS	KI-menu	HYDROM	EXCEL-Tool/GIS	MorphAn
Bathymetric measurements	CARIS	KI-menu	HYDROM	EXCEL-Tool/GIS	MorphAn
Lidar	CARIS, GIS	GIS	LASER, GISMO, GIS	GIS	MorphAn, GIS, WMS
Aero photogrammetry (DOP)	GIS	GIS	GIS	GIS	GIS
Defined transects – terrestrial (spacing)	No	GIS	HYDROM, GIS	Excel-Tool	MorphAn, Excel, GIS
Defined transects - bathymetric (spacing)	No	GIS	HYDROM, GIS	Excel-Tool	MorphAn, Excel, GIS
Stretches/Sites of nourishments	Literature	GIS	HYDROM, GIS	GIS	Excel
Waves	HMS-software	Excel, S+	HADDOCK, HYDROM	-	Online
Wind	HMS-software	Excel, S+	HYDROM, STW, EXCEL-Macro	-	Online
Storm events	Post Processing	Excel	HYDROM	EXCEL	Post processing
Grainsize	Literature	Excel	No	EXCEL	Literature
Mean annual tidal parameters	Post Processing	Excel	WISKI, EXCEL	EXCEL	Post processing