HadISD Table version 1 – date 18 July 2016

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HadISD Data Format Description

1)   Tables of netCDF dimensions, attributes and global attributes

Table 1. Generic Dimensions for HadISD

Dimension Name	Dimensions	Notes
time	??? hours	Stored as compressed time – only timestamps with data are retained
long_character_length	12 characters	
character_length	4 characters	
test	61 tests	
coordinate_length	1	

Table 2. Generic Variables for HadISD

Variable Name	standard_name	long_name	units	Dimensions	comments
longitude	longitude	station_longitude	degrees_east	coordinate_length	axis = X
latitude	latitude	station_latitude	degrees_north	coordinate_length	axis = Y
altitude	altitude	station_altitude	meters	coordinate_length	axis = Z positive = up
stationname	station_name	station_name		long_character_length	
time	time	time	hours since 1973-01-01 00:00:00	time	calendar = gregorian
station_identification_code		station ID code at time step		time, long_character_length	
tas	air_temperature	Dry bulb temperatures nearest to reporting hour	degreesC	time	
tds	dew_point_temperature	Dew point temperatures nearest to reporting hour	degreesC	time	
psl	air_pressure_at_sea_level	Reported sea level pressure	hPa	time	
ws	wind_speed	Wind speed	metres per second	time	
wd	wind_direction	Wind Direction	Degrees	time	
clt	cloud_area_fraction	Total cloud cover derived in priority order GA, GF, GD - see ISD documentation	oktas 0-8	time	oktas is not a CF-compliant unit
cllow		low cloud cover derived in priority order GA, GF, GD - see ISD documentation.	oktas 0-8	time	oktas is not a CF-compliant unit

clmid		derived in priority order GA, GF, GD - see ISD documentation.	oktas 0-8	time	oktas is not a CF-compliant unit
clhigh		high cloud cover derived in priority order GA, GF, GD - see ISD documentation.	oktas 0-8	time	oktas is not a CF-compliant unit
clbase	cloud_base_altitude	Cloud base of lowest cloud layer nearest to reporting hour	metres	time	
precip	lwe_thickness_of_precipitation_amount	Depth of precipitation report	mm	time	
precipperiod		Period of precipitation report	hr	time	
wg	wind_speed_of_gust	Wind Gust speed	metres per second	time	
pastsigwx1	past_significant_weather	Station reports of past significant weather phenomena	1	time	
quality_control_flags		Quality Control status for individual obs		time, test	

Table 3. Generic Global Attributes for HadISD

Global Attribute Name	Description
title	title of product
creator_name	name of main contact author
creator_email	email of main contact author
licence	licensing statement with link to license and instructions on how to cite data product
time_coverage_start	YYYY-MM-DDTHH:MMZ
time_coverage_end	YYYY-MM-DDTHH:MMZ
summary	quick summaryof product
source	
isd_version	Version of ISD used (not filled)
cdm_data_type	Type of Climate Data Model
references	Paper describing the data product
hadisd_version	HadISD version number
isd_date	Date of download of ISD (DD-Month-YYYY)
keywords	Keywords for dataset discovery
creator_url	website of main contact author institution
institution	institution of main contact author
date_created	YYYY-MM-DD, HH:MM
qc_code_version	local version of QC code
station_information	Station ID per timestamp refers to primarysource in ISD and applies to all elements
Conventions	CF version that the netCDF file has been checked against
Metadata_Conventions	metadata CF version that the netCDF file has been checked against
featureType	Type of data held in product
processing_date	date processing started
history	Record of processing applied to file.