

Conventions for Submitting Data and Product Files to the IVS Data Centers

Valid as of August 2, 2021

Introduction

The IVS is supported by three **Primary Data Centers** (DCs) that have identical holdings of all IVS data and product files. The DCs are the Crustal Dynamics Data Information System (**CDDIS**), the Federal Agency for Cartography and Geodesy (**BKG**), and the Paris Observatory (**OPAR**). They serve as the main method for disseminating IVS data and products. To ensure common holdings among the three centers, the DCs mirror each other several times per day.

To fulfill their main purpose, the data centers furnish two principal functions:

- *Download*: Provide access and public availability of files to all users (e.g., via ftp or https).
- *Upload*: Allow the submission of files by IVS components (e.g., via ftp or cURL) for **ingest** into the repository.

The download of files can be accomplished fairly easily using a web browser and does not require the user to know the ins and outs of the file format or naming. For the upload, however, the submitter needs to be aware of the conventions and rules regarding filenames, compression, and file formats.

After some developing time, the DCs use a *new ingest software* as of **August 2, 2021**. This document describes the conventions and rules that the data and product submitters have to adhere to in order for their files to be accepted and ingested into the IVS data holdings. A filename mismatch, wrong compression type, or failure of the validation check (e.g., missing header/footer or block structure issue in SINEX files, missing start or stop times in session related files) results in the rejection of the file. The strict enforcement of the filename conventions and the stricter quality checks of the file content will cause some files that used to pass with the old ingest system to be rejected in the new one.

Description of file types, compression types, and naming conventions

The following table covers the file types of IVS data files (ivsdata), IVS product files (ivsproducts), and product description files (ivsdocuments). For the file name convention, we use the following key:

- aaa Analysis Center 3-letter code
- ccccc solution 5-character code
- CC 2-character database code as in master file
- <ssssss> session code (max. 6 characters) as in master file
- <GPSweek> GPS week
- d day of the GPS week (as in <GPSweek>d)
- dd day of the month
- hhmm hours and minutes (of report submission)
- mm month of the year
- MMM month of the year in 3 uppercase letters
- nn 2-character station code (as in ns-codes.txt control file)
- nnn 3-digit version number for database
- <nnnnnnnn> up to 8-character station code (as in ns-codes.txt control file)
- <SUBM> Submitting agency
- YY 2-digit year
- YYYY 4-digit year

File type	Name convention	Compression	Example
schedule file	<ssssss>.skd		r11002.skd
session notes	<ssssss>.txt		r11002.txt
vex file	<ssssss>.vex		r11002.vex
correlator notes	<ssssss>.corr		r11002.corr
log files	<ssssss>nn.log		r11002ht.log
full log files	<ssssss>nn_full.log	.bz2	r11002k2_full.log.bz2
cable files	<ssssss>nn.cb		r11002ht.cb
wx files	<ssssss>nn.wx		r11002ht.wx
PRC files	<ssssss>nn.prc		r11002yg.prc
SNAP files	<ssssss>nn.snp		r11002ht.snp
OPS summary	<ssssss>-sumops.txt		r11002-sumops.txt
analysis reports	<ssssss>-<SUBM>-analysis-report-yyyyymmdd-hhmm.txt		r11002-IVS-analysis-report-20210622-1451.txt
spool files	<ssssss>-<SUBM>-analysis-spoolfile-yyyyymmdd-hhmm.txt		r11002-USNO-analysis-spoolfile-20210625-0939.txt
SWIN files	yyyyymmdd_<ssssss>_vnnn_sw in.tar	.bz2	20210607_r11002_v001_swin.tar.bz2
MK3 database	yyMMMddCC_Vnnn	.gz	21JUN07XA_V001.gz
NGS cards	yyMMMddCC_Nnnn	.gz	21JUN07XA_N001.gz
vgosDB	yyMMMddCC	.tgz	21JUN07XA.tgz
CRF	aaaccccc.crf	.gz	opa2021a.crf.gz
	aaaccccc.stats.crf	.gz	opa2021a.stats.crf.gz
EOPi	aaaccccc.eopi	.gz	usn2020d.eopi.gz
	aaaccccc.stats.eopi	.gz	usn2020d.stats.eopi.gz
EOPS	aaaccccc.eops	.gz	gsf2020a.eops.gz
	aaaccccc.stats.eops	.gz	gsf2020a.stats.eops.gz
	aaaccccc.eoxy	.gz	gsf2020a.eoxy.gz
	aaaccccc.stats.eoxy	.gz	gsf2020a.stats.eoxy.gz
TRF	aaaccccc.trf	.gz	asi2019a.trf.gz
	aaaccccc.stats.trf	.gz	asi2019a.stats.trf.gz
Int SINEX	yyMMMddCC_aaaccccc.sni	.gz	21MAY31XU_bkg2020a.sni.gz
Daily SINEX	yyMMMddCC_aaaccccc.snx	.gz	21JUN07XA_bkg2020a.snx.gz
TROP	aaa<ssssss>.tro	.gz	vier4773.tro.gz
	aaa<GPSweek>d.stat	.gz	ivs20192.stat.gz
	aaa<GPSweek>d.trc	.gz	ivs20192.trc.gz
	<nnnnnnnn>_<GPSweek>d.eps	.gz	hart15m_20192.eps.gz
	aaaccccc<ssssss>.trl	.gz	bkg2020at2113.trl.gz
DOCS	aaaccccc.crf.txt		opa2021a.crf.txt
	aaaccccc.eopi.txt		usn2020d.eopi.txt
	aaaccccc.eops.txt		gsf2020a.eops.txt
	aaaccccc.trf.txt		asi2019a.trf.txt
	aaaccccc.dsni.txt		bkg2020a.dsni.txt
	aaaccccc.dsnx.txt		bkg2020a.dsnx.txt

Note that the extension used for the compression type needs to be added to the filename, as indicated in the examples. When submitting a file, the conventions outlined in this table need to be met for a successful ingest.