SharpED

ONLINE SERVICE / PUBLIC API / FREE PREVIEW

SharpED Temporary Online Service & API Terms

Terms governing hosted access to machine-learning processing of crystallographic electron-density maps.

PREVIEW ENDS	PROVIDER
31 October 2026 · 23:59 Europe/Prague	Institute of Physics of the Czech Academy of Sciences

SERVICE SUMMARY

- Web application and documented API access are covered by the same hosted-service terms.
- Scientific maps are processed remotely; HTTPS protects transmission, not end-to-end plaintext confidentiality.
- Outputs are experimental ML reconstructions and require independent crystallographic validation.
- Original and inferred maps each have a separate one-hour deletion timer starting at upload to the API server.

1. Provider and scope

1.1 The SharpED online service (the "Service") is provided by Fyzikální ústav AV ČR, v. v. i. (Institute of Physics of the Czech Academy of Sciences, v. v. i.), a public research institution under Czech law, ID No. 68378271, registered office Na Slovance 1999/2, 182 00 Prague 8, Czech Republic (the "Provider").

1.2 These Terms govern remote use of the hosted SharpED Service during the Free Preview Period through its browser interface at sharped.fzu.cz and through the Provider's documented user-facing API at jana.fzu.cz (the "Public API"), including associated job submission, status checking and result download.

1.3 The Public API presently permits model discovery and authenticated submission, monitoring and download of processing jobs. Published endpoints, accepted formats, size limits and model names may change; the current API documentation governs technical integration details. This agreement does not govern any internal worker-to-server API.

1.4 These Terms do not provide or distribute any downloadable application, local software installation, model architecture, model weights or source code. The separate Jana2020 crystallographic software and its associated documentation are governed by their own applicable software-licence terms, rather than by this hosted-service agreement.

1.5 SharpED and Jana2020 share a user-account database and identity infrastructure, but remain distinct products. Jana2020 software licence terms are published at https://jana.fzu.cz/license. Merely using a shared account or logging in through Jana2020 does not incorporate the Jana2020 software licence into these SharpED Terms, grant a licence to Jana2020, or change the access rights conferred here.

2. Acceptance, accounts and API credentials

2.1 The User accepts these SharpED Terms through the electronic acceptance procedure made available by the Provider before using SharpED. Registration for a shared Jana2020 account or acceptance of Jana2020-specific documents alone is not acceptance of these SharpED Terms. A User acting for an organisation confirms authority to accept these Terms. A User who does not agree must not submit scientific data or use SharpED.

2.2 SharpED uses the user-account database shared with Jana2020, including its sign-in infrastructure, for account registration and authentication. The Public API uses SharpED user-specific API tokens, ordinarily transmitted in an Authorization: Bearer header, and separate job tokens or identifiers for submitted requests. A SharpED API token is an access credential, not a software licence or a guarantee of service availability.

2.3 The User must protect account credentials, API tokens and job tokens against unauthorised access; must not embed API tokens in publicly available code or client-side scripts; and must notify the Provider promptly of suspected compromise. The Provider may revoke or rotate tokens for security and operational reasons.

2.4 The Provider will identify the applicable version and commencement date of these SharpED Terms at the point of acceptance. Automated access through the documented Public API is permitted within published limits. Access to a shared Jana2020 account does not itself confer entitlement to use SharpED without acceptance of these Terms.

3. Free Preview Period and future terms

3.1 The Service is supplied without a service fee from publication of these Terms until 31 October 2026 at 23:59, Europe/Prague local time (the "Free Preview Period"). The User bears its own internet, equipment and third-party costs.

3.2 Rights of access under these Terms expire automatically at the end of the Free Preview Period. Free access creates no entitlement to continued availability or free use after that date.

3.3 From 1 November 2026, the Service may be discontinued, restricted or made available under new terms, including a possible distinction between academic, non-commercial and commercial uses. Further use requires acceptance of the then-current terms and any separately agreed fees.

3.4 There is no automatic conversion into a paid subscription and no charge arises merely from use during the Free Preview Period. The Provider may suspend or end the preview earlier where reasonably required by security, maintenance, capacity, law or operational circumstances.

3.5 A material revision of these Terms does not authorise a new use of scientific data submitted under an earlier version. Where a revision requires renewed agreement, it applies to later submissions after appropriate notice and acceptance.

4. Limited right to use the Service

4.1 During the Free Preview Period the Provider grants the User a limited, non-exclusive, non-transferable and revocable right to access the hosted Service, through its web interface or documented Public API, and to use the returned Output Data for lawful purposes subject to these Terms.

4.2 Subject to applicable law and third-party rights, Output Data may be used for research, teaching, publications, internal work or commercial activity. This right does not grant permission to reproduce, implement, extract, reverse engineer or distribute the SharpED software, models or protected method, save where mandatory law provides otherwise.

4.3 The separate Jana2020 software licence, including any applicable academic or commercial restrictions or fees, governs use of Jana2020 software and does not by itself restrict the User's permitted use of SharpED Output Data under these Terms. Likewise, these Terms do not waive or replace conditions applicable to separately licensed Jana2020 software.

5. Input Data, Output Data and rights

5.1 "Input Data" means electron-density maps, selected elements, model choice, processing parameters and any other scientific content submitted by the User. "Output Data" means processed maps or other scientific files made available to the User as a result of a submitted job. Account, authentication and service metadata are addressed separately in Clause 7 and the SharpED Privacy Notice.

5.2 The User retains all rights and interests that it has in Input Data. The Provider claims no ownership of Input Data or Output Data. Subject to applicable law and third-party rights, the User may use the Output Data without restriction.

5.3 If the Provider would acquire any transferable economic right in Output Data solely from operating the Service, it grants the User a perpetual, worldwide, royalty-free, irrevocable, transferable and sublicensable right to use, reproduce, modify and distribute that Output Data for any lawful purpose.

5.4 The User grants the Provider the limited rights needed to receive, temporarily store, copy, convert, process, transmit, return and delete Input Data and Output Data as necessary to carry out the requested job and administer the related retrieval and deletion lifecycle. No broader content-use licence is granted.

5.5 The User is responsible for having all necessary rights and permissions to submit Input Data, including compliance with confidentiality, contractual restrictions, intellectual-property rights and applicable law.

6. Remote processing, security and scientific-data lifecycle

6.1 The Service operates through a job workflow. The Public API or web application accepts a request and associated data, the processing queue holds a job pending execution, authorised compute workers retrieve work for remote GPU processing, and a completed result is returned through the Service for user download. Individual jobs can be pending, processing, completed or failed.

6.2 Connections to the documented Public API and to the Provider's remote processing worker use HTTPS/TLS. TLS protects data while they cross the network; the Service necessarily handles unencrypted map content at authorised endpoints and in computer memory during conventional machine-learning inference. The Service does not offer end-to-end encryption that prevents the Provider from accessing plaintext, nor does it perform fully homomorphically encrypted inference.

6.3 Two independent 60-minute retention periods apply to scientific map files in active API-server storage: (a) an original Input Data map uploaded by the User is automatically deleted 60 minutes after its upload to the API server; and (b) an inferred Output Data map uploaded by the processing worker is automatically deleted 60 minutes after that separate upload to the API server. Each period begins at the respective upload, regardless of when processing finishes or the User downloads the result.

6.4 An original map may expire while a job is queued or processing, potentially preventing retry or recovery. An inferred map is available for download only until its own 60-minute period expires, even if the User has not downloaded it. Processing workers use temporary working storage and are configured to remove job-specific files after processing or failure, subject to technical limitations. The one-hour rule concerns active API-server map storage; the existence and retention of backups, caches and other copies outside that storage, if any, must be verified and explained separately in the data-handling notice.

6.5 The Provider will not use Input Data or Output Data to train, fine-tune, validate, test or benchmark machine-learning models; improve SharpED or other products; conduct independent scientific research; derive statistics from the scientific content; or engage in advertising or profiling. The scientific content is processed only to fulfil the User's request, subject to exceptional handling strictly necessary for security incidents or legal obligations.

6.6 Provider personnel do not routinely inspect individual scientific maps. Access may occur only when reasonably necessary to maintain the Service, investigate an incident, prevent misuse or comply with applicable law, with access limited to authorised personnel. Nothing in these Terms promises that scientific data are encrypted at rest, that every transient memory page is unswappable, or that physical deletion of SSD storage occurs immediately.

6.7 The User must retain independent copies of all Input Data and promptly download and preserve any Output Data within the applicable 60-minute period starting when the worker uploads that result to the API server. The Service is not an archive, backup or permanent file repository; expired, lost or deleted results may be impossible to recover.

7. Accounts, operational records and connection data

7.1 SharpED relies on a user database shared with Jana2020 for identity and account administration. The Provider and supporting systems may therefore process shared account identifiers and registration details as well as SharpED-specific API credentials or token records, job identifiers and status, model selection, operational timestamps, request or file metadata, queue information, aggregate operational statistics and security or diagnostic records where required for the operation and protection of the Service.

7.2 The 60-minute deletion rules in Clause 6 apply to original and inferred scientific map files held in active API-server storage, not to account registration details in the shared Jana2020 database. Authentication credentials, access-token records, job metadata, network connection information and records required for security, service administration or legal compliance may be subject to different retention periods. These Terms do not assert that such records are erased upon expiry of a map.

7.3 The Provider publishes a Jana2020 privacy policy for data connected with Jana2020 registration and use (https://jana.fzu.cz/docs/GDPR_JANA.pdf). Because SharpED shares account infrastructure with Jana2020, the Provider must also make available appropriate privacy information covering any additional SharpED-specific processing, including purposes, legal bases, retention, recipients and data-subject rights where required by applicable law. The Jana2020 software privacy notice must not be assumed, without verification, to cover every SharpED API or job-processing activity.

7.4 IP addresses and other connection data are technically processed by web servers, authentication systems and network-security infrastructure. Nothing in the scientific-map retention period limits retention that is lawful and necessary for shared user-account administration or other separately disclosed personal-data processing.

8. Machine-learning output and scientific validation

8.1 SharpED is an experimental machine-learning service that reconstructs or enhances features of crystallographic electron-density maps. Output Data are algorithmic reconstructions, not raw diffraction observations, verified structural determinations or certification of a crystal structure.

8.2 Outputs can contain artefacts, plausible but incorrect or hallucinated peaks, misplaced atoms, omitted real features, altered densities or other errors. Accuracy depends on the input and selected model and cannot be guaranteed for any particular job.

8.3 Before drawing, publishing, communicating or acting on any conclusion derived from Output Data, the User must independently assess them against original diffraction measurements, established crystallographic methods, structural refinement, chemical plausibility and appropriate expert judgement.

8.4 The User alone decides whether and how to rely on Output Data and bears responsibility for interpretation and further use. Outputs must not serve as the sole basis of a scientific conclusion, publication, patent or regulatory assertion, or any clinical, safety-critical or other high-impact decision.

9. User responsibilities and prohibited conduct

9.1 The User must not include patient records, personal data about identifiable individuals, passwords, access tokens, malware, classified information, unlawfully obtained content or content subject to restrictions incompatible with the stated processing workflow within scientific Input Data. Ordinary account and authentication information submitted to the designated sign-in mechanisms is not scientific Input Data for this purpose.

9.2 The User must comply with published file-format and file-size limits (the Public API currently documents XPLOR uploads up to 100 MB), model availability, queue restrictions and reasonable API polling intervals. Automated requests through the documented Public API are authorised, but abusive automation, security probing, excessive loading, evasion of limits and resale of access are prohibited.

9.3 Except where mandatory law prohibits restriction, the User must not attempt to obtain model weights, source code, protected know-how or confidential implementation details, or interfere with the integrity, availability or security of the Service.

9.4 The User must safeguard all job identifiers and tokens, promptly report suspected credential exposure and keep independent copies of scientific inputs and results.

10. Service availability and technical changes

10.1 The Service is an experimental preview provided on an “as available” and best-efforts basis. The Provider makes no commitment regarding uptime, minimum capacity, completion time, support response time or uninterrupted access.

10.2 Individual jobs may be delayed, fail, time out, lose connectivity or require resubmission. A compute-worker outage does not necessarily result in automatic re-queuing or recovery of the same job. Users should check job status and retain the original input for resubmission if necessary.

10.3 The Provider may modify models, supported formats, upload limits, queue management, technical interfaces, capacity and maintenance arrangements, and may suspend use for security, operational, legal or abuse-prevention reasons. Changes shall not authorise new secondary uses of scientific data submitted under earlier terms.

11. Provider intellectual property

11.1 The Service, its software, models, model weights, architecture, interfaces, documentation, marks, know-how and protected methods are owned by the Provider or its licensors. Except for hosted access expressly granted in Clause 4, no software, patent, trade-secret or other intellectual-property licence is granted.

11.2 No right is granted to reproduce, deploy or commercially exploit the SharpED method outside the hosted Service. This restriction does not limit the User's rights to Output Data under Clause 5.

12. Disclaimer of warranties

12.1 To the maximum extent permitted by applicable law, the Service and Output Data are provided without express, implied or statutory warranties, including accuracy, scientific validity, completeness, reproducibility, fitness for a particular purpose, non-infringement, security or continuous availability.

12.2 The Provider does not warrant that any specific atom, peak, bond, structure or feature will be identified, preserved or reconstructed correctly, or that any input or job will be processed successfully.

12.3 The Provider does not individually review, validate or certify Input Data or Output Data and assumes no obligation to judge their suitability for the User's intended scientific or other use.

13. Limitation of liability

13.1 Nothing in these Terms excludes or limits liability that cannot lawfully be excluded or limited, including liability for intentional harm, gross negligence, harm to natural rights or protection afforded by mandatory law to consumers or other weaker parties.

13.2 Subject to Clause 13.1 and to the maximum extent permitted by applicable law, use of the Service and Output Data is at the User's own risk. The Provider is not liable for incorrect scientific interpretations, decisions, publications or other consequences arising from reliance on unverified Output Data.

13.3 Subject to Clause 13.1, the Provider is not liable for loss or corruption of data, research delay, loss of profit or opportunity, publication consequences, inability to reproduce a result or indirect or consequential loss arising from service interruption, failed processing or use of Output Data.

13.4 No contractual right to a refund, service credit or other payment arises merely because the free preview is unavailable, a job fails or Output Data are incomplete or incorrect, except where mandatory law requires otherwise.

14. Suspension and termination

14.1 The User may stop using the Service at any time. The Provider may suspend access or revoke a token where the User breaches these Terms, threatens system security or capacity, or where suspension is reasonably required by law or operational necessity.

14.2 These Terms and the right to access the free preview terminate automatically at the end of the Free Preview Period. Provisions on rights to scientific data, Provider intellectual property, exclusions and limits of liability, confidentiality, applicable law and dispute resolution survive as necessary to give them effect.

15. Applicable law and disputes

15.1 These Terms are governed by Czech law, without prejudice to mandatory rights that cannot lawfully be excluded.

15.2 Disputes are subject to courts having jurisdiction under Czech procedural law. Applicable mandatory consumer-protection and jurisdiction rules remain unaffected where the User qualifies as a consumer.

16. Miscellaneous and contact

16.1 If any provision is invalid or unenforceable, the remaining provisions remain effective. Failure to enforce a provision is not a waiver.

16.2 Questions about the Service and these Terms may be sent to sharped@fzu.cz. Questions relating to personal-data processing may also be directed to the contact identified in the applicable SharpED Privacy Notice.

16.3 Provider: Fyzikální ústav AV ČR, v. v. i. (Institute of Physics of the Czech Academy of Sciences, v. v. i.), Na Slovance 1999/2, 182 00 Prague 8, Czech Republic; ID No. 68378271.