



# The Guideline for

## Application for Global Research on Novel Coronavirus

### “新冠病毒数据资源与全球研究”项目申报指南

<http://chinadatalab.net>

# “The Resources for Novel Coronavirus and Global Research” “新冠病毒数据资源与全球研究” 项目申请

## Research Topics (not limited to) 研究议题（建议但不限于）：

- 基于大数据的疫情监测、预警与风险评估  
Outbreak monitoring, early warning and risk assessment based on big data
- 新冠病毒疫情传播扩散时空变化模式研究  
Spatio-temporal Patterns of the Transmission and Spread of Novel Coronavirus
- 新冠病毒疫情对中国与全球贸易与投资影响研究  
Impact of Novel Coronavirus on Trade and Investment in China and the World
- 新冠病毒疫情对地区与全球产业供应链影响研究  
Impact of Novel Coronavirus on Regional and Global Industry Supply Chain
- 新冠病毒疫情中舆情变化与公众行为规律研究  
Public Opinions and Behavior in Response to Novel Coronavirus
- 新冠病毒疫情的时空动态与季节气候环境关系研究  
Spatio-temporal dynamics of the Novel Coronavirus and seasonal climate and environment

**Deadline of Application 申请提交截止日期： 3/15/2020**

**Contact:** office@chinadatacenter.net

**Note 说明：** 国际合作项目优先考虑 (proposals with international collaboration will be given higher priority)

# Participants 支持单位



**Geocomputation Center for Social Sciences, Wuhan University**  
武汉大学社会地理计算中心



**Center for Geographic Analysis, Harvard University**  
哈佛大学地理分析中心



**RMDS Lab 研究方法与数据科学实验室**



**China Data Institute 中国数据研究所**



**MicroSoft China 微软中国**



**Vesystem Inc.和信创天科技有限公司**



**Knowledge Sharing Inc.百智享科技有限公司**



**All China Marketing Research Inc. 华通人市场研究有限公司**

# Objectives 项目目标

- ❑ 培育先期研究 To develop some pilot studies on COVID-19 for future research
- ❑ 专业数据分析 To cultivate professional data analysis
- ❑ 新方法与技术探索 To explore new methodology and technology for COVID-19 data analysis
- ❑ 鼓励可复制、可重复、可扩展研究 To encourage replicable, reproducible and expandable research
- ❑ 鼓励知识与信息共享 To promote knowledge and information sharing
- ❑ 促进国际合作 To promote international research collaborations
- ❑ 促进教研数据应用 To promote data applications in research and education
- ❑ 团队能力建设 To build the capacity for future collaborations

# Data on COVID-19 疫情数据选择

## □ Base data 基础数据

- Base maps (province, prefecture and county)
- Census data (population census and economic cen)
- Statistics (province, prefecture and county)
- Others

## □ Virus data 病毒案例

- Virus reports from gov't (country, province and city)

## □ Migration data 迁徙人口

- Daily floating population data (Baidu)
- Migration data from census (NBS)

## □ Health facility data 健康设施

- POI data (AutoNavi)
- Economic Census (NBS)

## □ Social media data 社交媒体

- Weibo
- Twitter

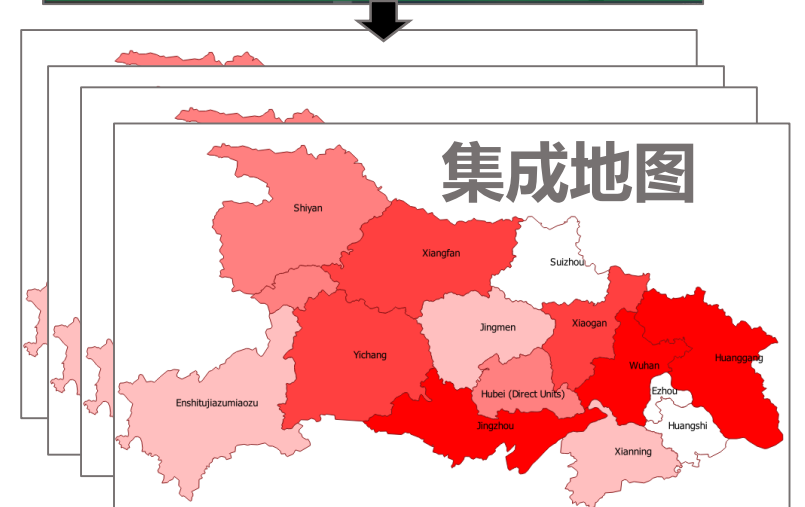
## □ Papers 论文

## □ Reports 报告

## □ Policies and regulations 政策与法规



ID	GblProv	Prov_CN	Prov_EN	GblCity	City_CN	City_EN	
1771	42	湖北省	Hubei	4201	武汉市	Wuhan	
1774	173	42	湖北省	Hubei	4202	黄石市	Huangshi
1775	174	42	湖北省	Hubei	4203	十堰市	Shiyian
1776	175	42	湖北省	Hubei	4205	宜昌市	Yichang
1777	176	42	湖北省	Hubei	4206	襄阳市	Xiangfan
1778	177	42	湖北省	Hubei	4207	鄂州市	Ezhou
1779	178	42	湖北省	Hubei	4208	荆门市	Jingmen
1780	179	42	湖北省	Hubei	4209	孝感市	Xiaogan
1781	180	42	湖北省	Hubei	4210	荆州市	Jingzhou
182	181	42	湖北省	Hubei	4211	黄冈市	Huanggang
183	182	42	湖北省	Hubei	4212	咸宁市	Xianning
184	183	42	湖北省	Hubei	4213	随州市	Suzhou
185	184	42	湖北省	Hubei	4218	恩施土家族苗族自治州	Enshi(tujiazumiao)
186	185	42	湖北省	Hubei	4290	省直行政单位	Hubei (Direct Units)
187	186	43	湖南省	Hunan	4301	长沙市	Changsha
188	187	43	湖南省	Hunan	4302	株洲市	Zhuzhou
189	188	43	湖南省	Hunan	4303	湘潭市	Xiangtan
190	189	43	湖南省	Hunan	4304	衡阳市	Hengyang
191	190	43	湖南省	Hunan	4305	邵阳市	Shaoyang
192	191	43	湖南省	Hunan	4306	岳阳市	Yueyang
193	192	43	湖南省	Hunan	4307	常德市	Changde
194	193	43	湖南省	Hunan	4308	张家界市	Zhangjiajie
195	194	43	湖南省	Hunan	4309	益阳市	Yiyang
196	195	43	湖南省	Hunan	4310	郴州市	Chenzhou



# Base Data Sources 基础数据选择



- **Government Statistics**
  - Provincial Statistics (1949 - )
  - City Statistics (1996 - )
  - County Statistics (1997 - )
- **Population Census**
  - Census 1953
  - Census 1964
  - Census 1982
  - Census 1990
  - Census 2000/2010 (province, city, county, township, GRID)
- **Economic Census**
  - Industrial Census 1995 (province, city, county, ZIP)
  - Basic Unit Census 2001 (province, city, county, ZIP)
  - Economic Census 2004/2008 (province, city, county, ZIP)
- **Establishments** (more than 7 millions companies and organizations)
- **Geography and Environment**
  - Land Use data
  - Night-Time data
- **Base Maps**
  - 2000
  - 2010
  - 2000-2010

# Tool Selection 工具选择

- ArcGIS
- GeoDa
- GAUSS
- Jupyter
- Knime
- R AnalyticFlow
- Alteryx
- ....

# Project Report 项目报告

- 标题 Title
- 关键字 Key words
- 摘要 Abstract
- 研究背景 Background (hypothesis, debates from literature)
- 数据 Data
- 方法 Methodology
- 分析 Results of the Analysis
- 总结和讨论 Conclusions and Discussions
- 致谢 Acknowledgements
- 参考文献 References
- 数据分析流程图 Diagram of flowchart for data analysis
- 数据分析工作流 Workflows for data analysis in the report

# Evaluation Criteria for Applications 项目评估准则

## □ Qualification of Applicant 申请人资质:

- Research background 研究背景
- Learning ability 学习能力
- Active participation 积极参与
- Desire to collaborate with others 合作愿望

## □ Research Plan 项目计划:

- Research plans and feasibility 研究计划可行性
- Replicable, reproducible and expandable research 项目的可复制、可重复与可扩展性
- Research results to be shared and delivered 可共享、可发布研究成果

# Deployment of Research Data, Reports, Workflows and Presentations at dataverse.harvard.edu 研究成果发布



Open source research data repository software



Researchers

Enjoy full control over your data. Receive *web visibility, academic credit, and increased citation counts*. A personal dataverse is easy to set up, allows you to display your data on your personal website, can be branded uniquely as your research program, makes your data more discoverable to the research community, and satisfies data management plans. [Want to set up your personal dataverse?](#)



Journals

Seamlessly manage the submission, review, and publication of data associated with published articles. Establish an *unbreakable link* between *articles in your journal* and *associated data*. Participate in the open data movement by using Dataverse as part of your journal data policy or list of repository recommendations. [Want to find out more about journal dataverses?](#)



Institutions

Establish a research data management solution for your community. Federate with a growing list of Dataverse repositories worldwide for increased discoverability of your community's data. Participate in the drive to set norms for sharing, preserving, citing, exploring, and analyzing research data. [Want to install a Dataverse repository?](#)



Developers

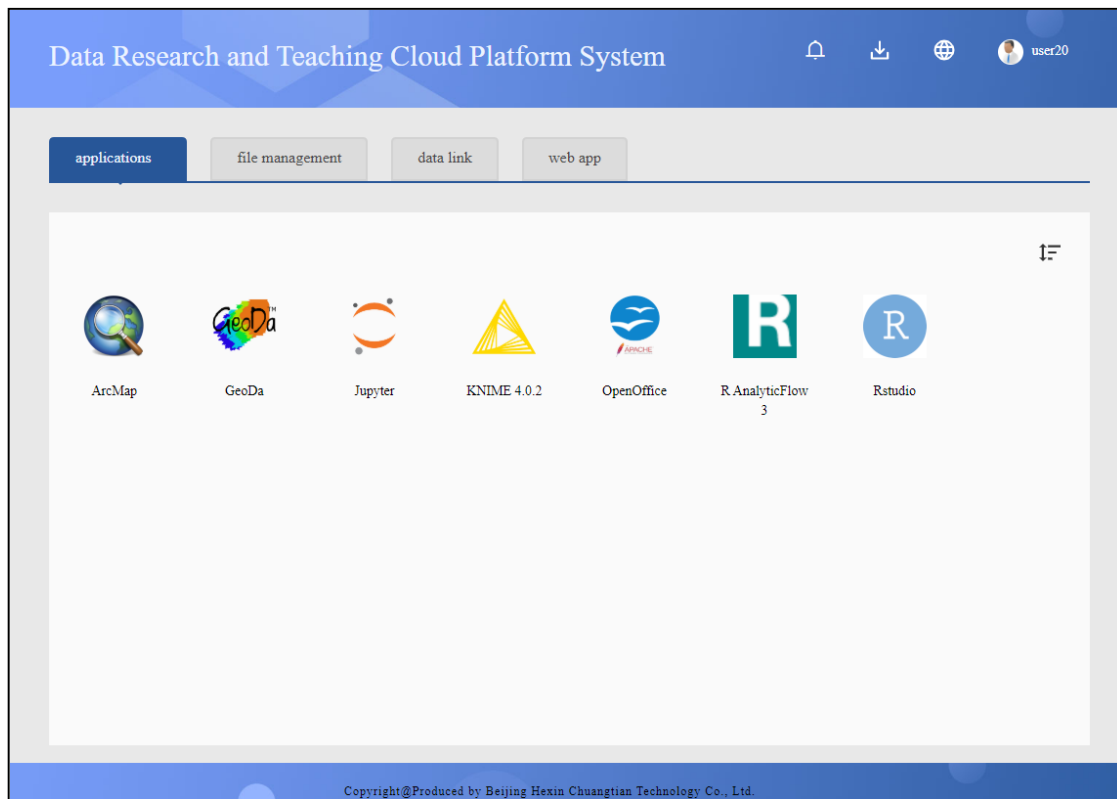
Participate in a vibrant and growing community that is helping to drive the norms for sharing, preserving, citing, exploring, and analyzing research data. Contribute code extensions, documentation, testing, and/or standards. *Integrate research analysis, visualization and exploration tools*, or other research and data archival systems with Dataverse. [Want to contribute?](#)

A screenshot of a web browser displaying the Dataverse website. The browser's address bar shows the URL "dataverse.harvard.edu/dataverse/2019ncov". The page header includes the Harvard Dataverse logo and navigation links like "Add Data", "Search", "About", "User Guide", "Support", "Sign Up", and "Log In". The main heading is "Resources for COVID-19 (China Data Lab)", with "Contact" and "Share" links. Below the heading are four category buttons: "Data", "Development Code", "News Report", and "Research Papers". A search bar is present with a "Find" button and a link to "Advanced Search". The search results section shows "1 to 6 of 6 Results" and lists items such as "Data (China Data Lab)", "Research Papers (China Data Lab)", "Workflows (China Data Lab)", "Web Sites (China Data Lab)", and "News Report (China Data Lab)", all dated "2020-2-11". A "Feedback" button is visible at the bottom right.

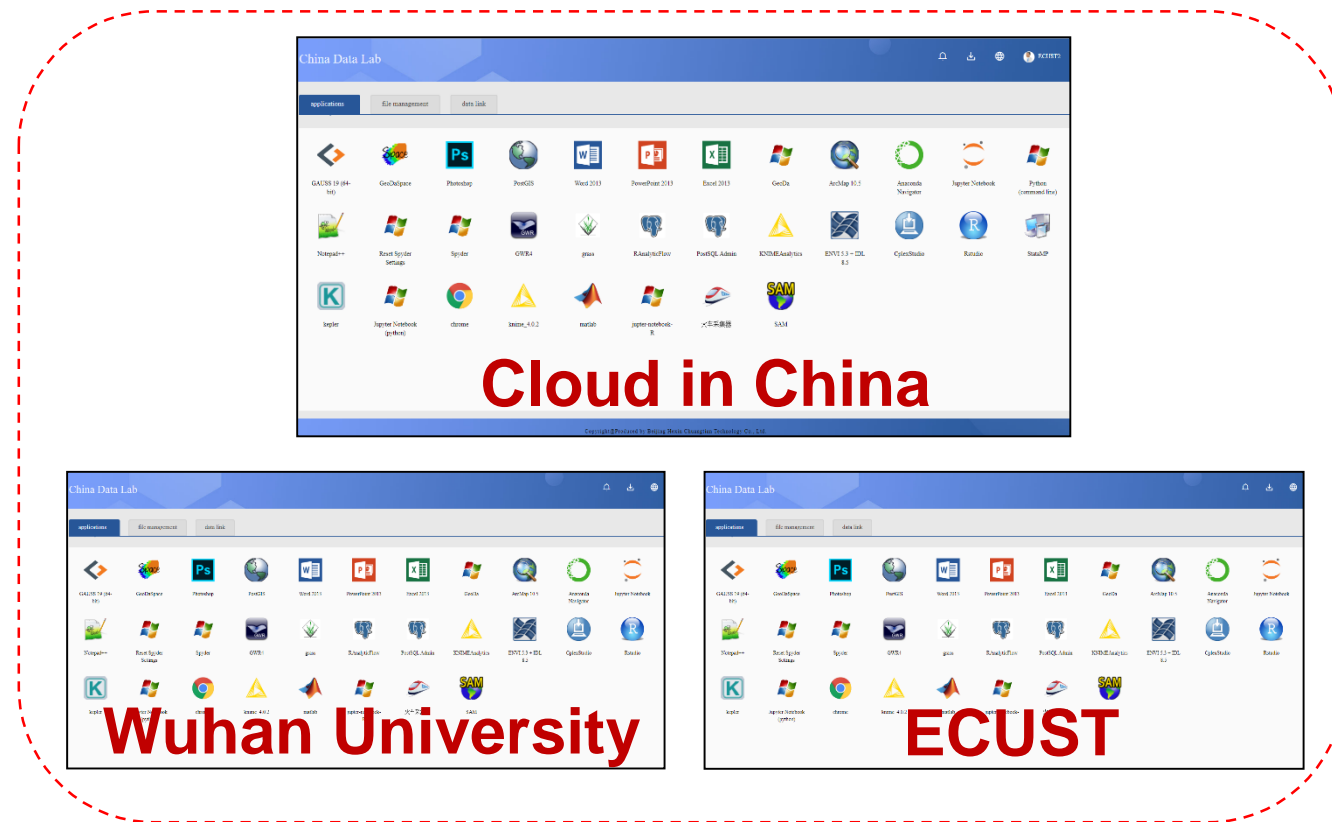
# Deployment of Executable Workflows on CDL Cloud

## 可执行 workflow 数据案例发布

### CDL in Harvard



### CDL in China



<http://harvard.chinadatalab.org>

<http://chinadatalab.org>

# Executable Workflow Data Analysis from DataVerse

Tool source: <https://www.knime.com/>



## Workflows for download on dataverse.harvard.edu

**HARVARD Dataverse**

Harvard Dataverse > China Data Lab Dataverse > Resources for COVID-19 > Workflows > COVID19 Stats Analysis

**COVID19 Stats Analysis**

Tao Hu, 2020, "COVID19 Stats Analysis", <https://doi.org/10.7910/DVN/FWOPW2>, Harvard Dataverse, DRAFT VERSION

**Description** This dataset saves workflows related to the COVID-19 statistics analysis. (2020-02-20)

**Subject** Medicine, Health and Life Sciences; Computer and Information Science; Social Sciences

**Keyword** workflow, statistics, map

1 to 3 of 3 Files

- covid19\_stats\_confirmed.knwf  
 Unknown - 98.8 KB - 2020-2-20 - 0 Downloads  
 MD5: 301780709c59bec212ec9de6cb7522cd  
 Copy and paste the following link to the executable workflow on your "veappc://88D2AA413AED9040FAE30B4D4FBE0916B56E161735A7"
- covid19\_stats\_death.knwf  
 Unknown - 99.7 KB - 2020-2-20 - 0 Downloads  
 MD5: 4b55d67e49361f8952ae1d4e0c2f6885  
 This workflow demonstrates the analysis of death cases in province  
 veappc://88D2AA413AED9040FAE30B4D4FBE0916B56E161735A7
- covid19\_stats\_recovered.knwf  
 Unknown - 98.2 KB - 2020-2-20 - 0 Downloads  
 MD5: cfb5e9f11f29c9aa0a01f7f511744098  
 This workflow demonstrates the analysis of recovered cases in provi  
 veappc://88D2AA413AED9040FAE30B4D4FBE0916B56E161735A7

## Executable workflows on harvard.chinadatalab.org

**Cases analysis in province level**

GroupBy (group by province) → Row Filter (nation) → Concatenate → Row Filter (hubei) → Row Filter (hubei) → Constant Value Column (add non-hubei id) → GroupBy (group by province) → Concatenate → Transpose → Column Rename (copy column name) → Row Filter (delete 1st row) → RowID → String To Number → String Manipulation → Line Plot → Image Writer (Port) (Export map)

**Choropleth map visualization in province level**

Province Map → Column Filter → Joiner → Rule Engine Color Manager (set color to group) → OSM Map to Image → OSM Viewer → Image Writer (Port) (Export map)

**Cases analysis in city level**

Row Filter (exclude nation) → GroupBy (group by province) → Sorter (Node 24) → Row Filter (Top 20 cities) → Transpose → Insert Column Header (Node 156) → Row Filter (delete 1st row) → RowID → Column Auto Type Cast → String Manipulation → Line Plot → Image Writer (Port) (Export map)

**Recovered Cases till 02-16**

Excel Reader (XLS) → Row Filter → GroupBy → Sorter → Row Filter → Transpose → Insert Column Header → Row Filter → RowID → Column Auto Type Cast → String Manipulation → Line Plot → Image Writer (Port) (Export map)

**Visualizations:**

- Recovered Cases till 02-16: Map of China showing recovered cases by province.
- Choropleth map visualization in province level: Map of China showing case density by province.
- Cases analysis in city level: Map of China showing top 20 cities.
- Network graph: A complex network graph representing relationships between various entities.

# Sample Work: Religious Diversity and Regional Development

## 研究案例：宗教多样性与地区发展



The screenshot shows the article page for "Religious diversity and regional development in China" in the journal "China Economic Review". The page includes the Elsevier logo, the journal title, volume and issue information, the authors' names, a DOI link, and a highlights section. The abstract is also visible at the bottom.

Get Access Export

China Economic Review  
Volume 46, December 2017, Pages 1-9

Religious diversity and regional development in China

Zheng Ying <sup>a, b</sup>, Shibao Liu <sup>c</sup>, Shuming Bao <sup>d, e, f, g</sup>, Jianbo Zhou <sup>a</sup>

Show more

<https://doi.org/10.1016/j.chieco.2017.08.003> Get rights and content

Highlights

- Identify possible impacts of religious diversity on regional development at province level under the same political regime
- Apply fragmentation and polarization indices as measures of religious diversity
- Solve the endogeneity issue with the fixed-effect two-stage regression

Abstract

This paper investigates possible impacts of religious diversity on regional development in China. We developed the religious fragmentation and polarization indices as measurements for the religious diversity by using the religious site data from the 2004 economic Census data in China. The results from the panel data regressions within national coverage suggest that the religious diversity has positive and significant impacts on regional development in general. The results from the panel data regressions within regional coverage also suggest that religious fragmentation has a positive and significant association with the economic development in the eastern region of China while religious polarization has a positive and significant association with the economic development in the central and western regions of China.

**Aim:** Test the impacts of religious diversity on regional development in China

**Findings from previous studies:** Religious diversity may have positive or negative impacts on economic development

**Background of this study:** Test the impacts of religious diversity on regional development under the same political regime at sub-national level (province) in a peaceful environment

# Data 数据

Name	Format	Description
Data_religion.xlsx	Excel	The number of religion sites of different types at different provinces from 1987 to 2004
Data_statistics.xlsx	Excel	variables included in the regression analysis, including real income per capita, average education attainment, investment in physical capital, policy variable, Growth rate of labor & tech, dep.
province_boundary.shp	Shape	the boundaries of provinces in mainland China

---

# Methodology 方法

Measurements of religious diversity: fragmentation and polarization indices

**Fragmentation:**  $FRAG_i = 1 - \sum_{j=1}^J \left( \frac{n_{ij}}{N_i} \right)^2$

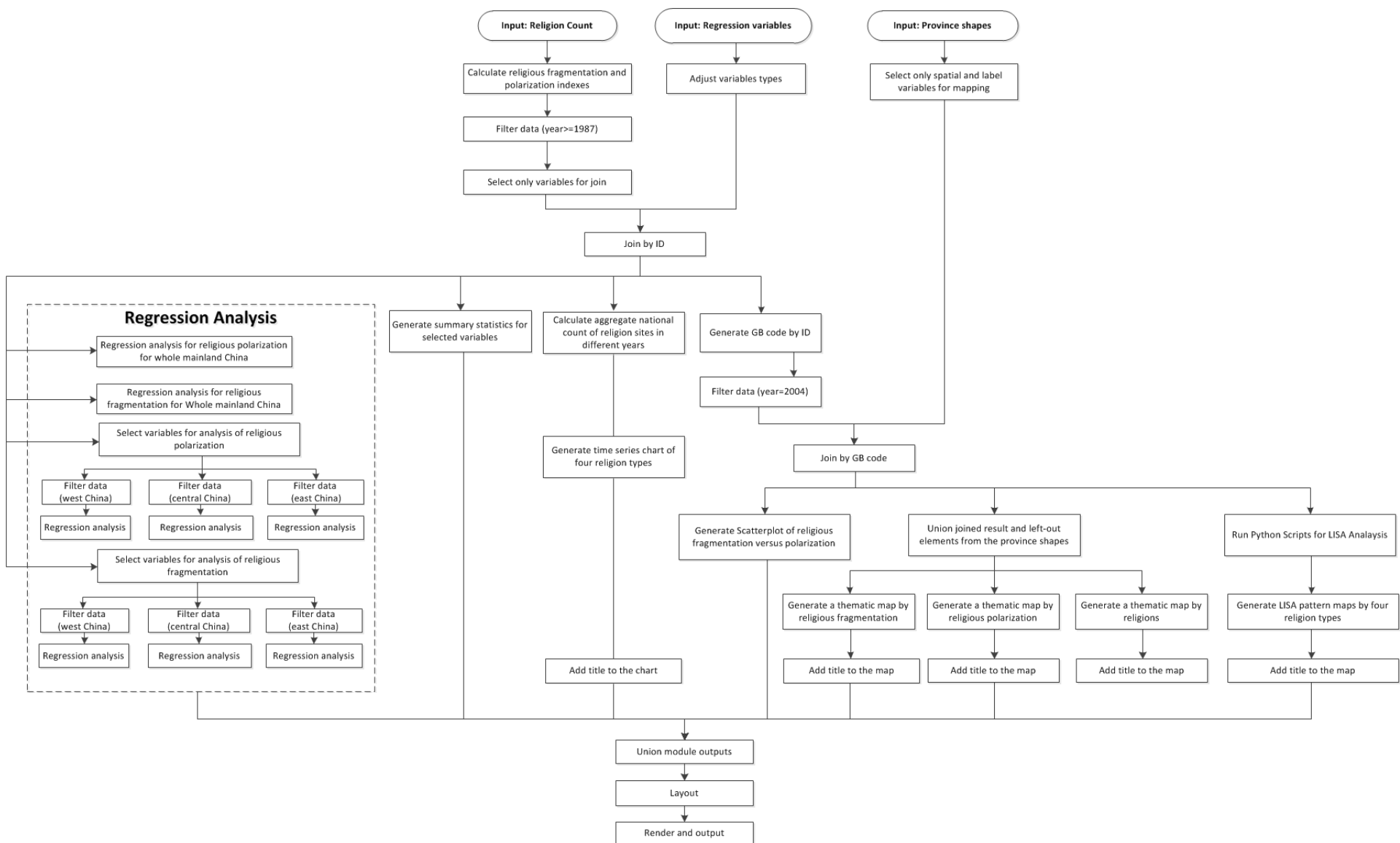
**Polarization:**  $POL_i = 1 - \sum_{j=1}^J \left( \frac{0.5 - \pi_{ij}}{0.5} \right)^2 \pi_{ij}$

**Regression:**  $\ln \frac{Y(t)}{L(t)} = \beta_0 + \beta_1 \ln s_k + \beta_2 \ln s_h + \beta_3 (n + g + \delta) + u$

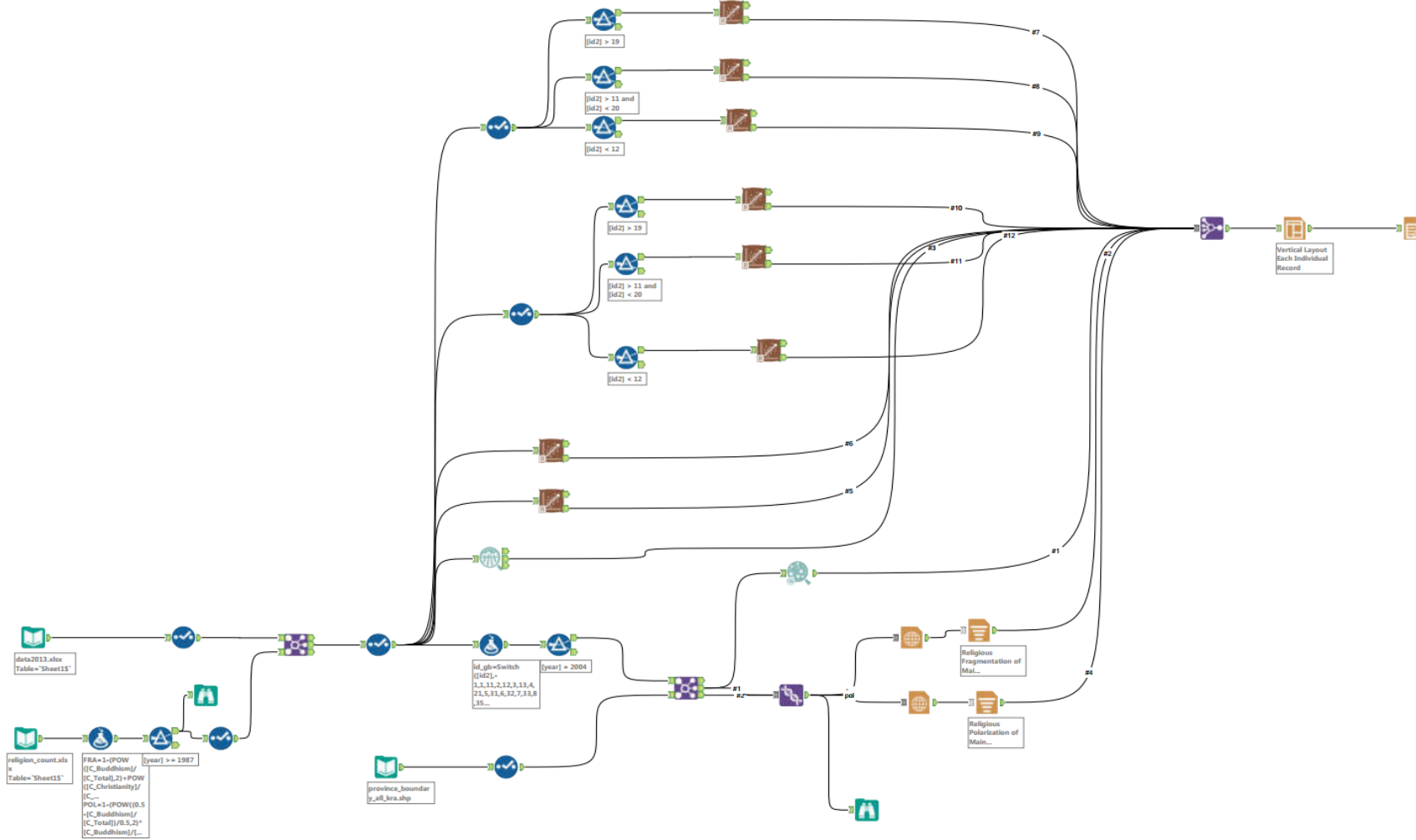
**Moran's I test for spatial autocorrelation:**

$$I(d) = \frac{\sum_i^n \sum_{j \neq i}^n w_{ij} (x_i - \bar{x})(x_j - \bar{x})}{S^2 \sum_i^n \sum_{j \neq i}^n w_{ij}}$$

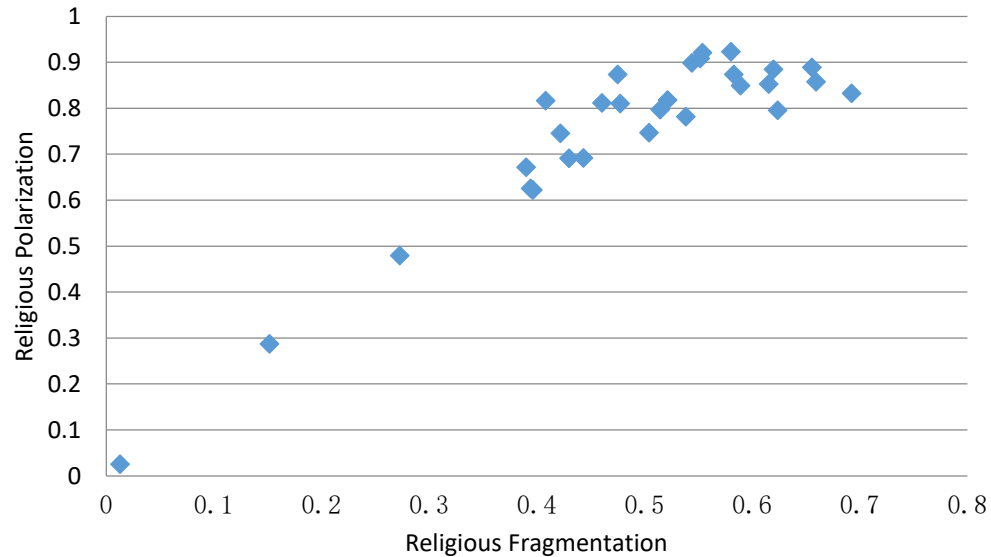
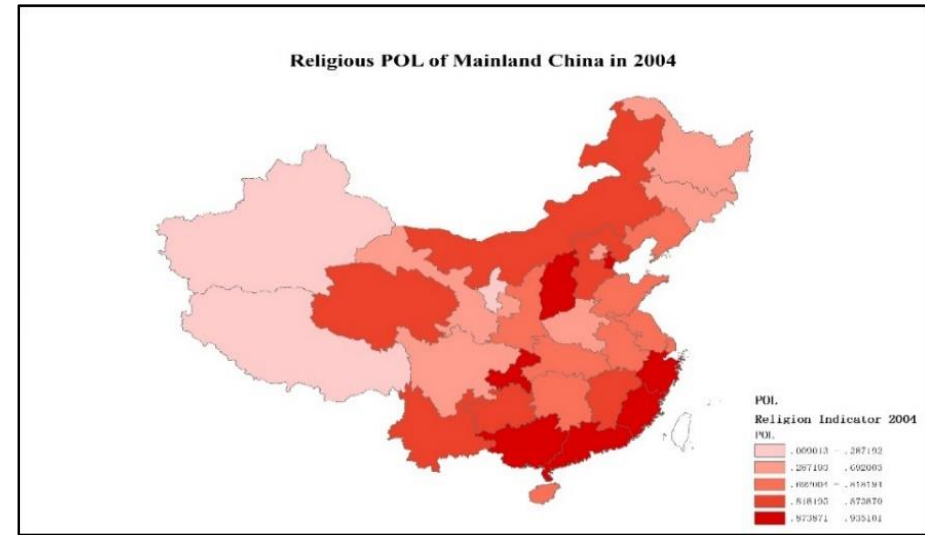
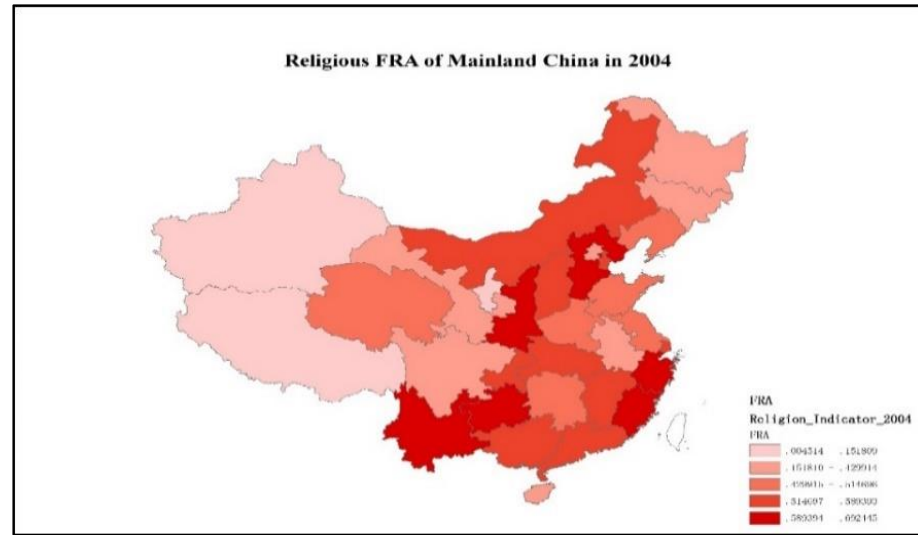
# The Flowchart for Data Analysis 概念性数据分析流程图



# The Workflow for Data Analysis 技术性数据分析 workflow



# Results from Analysis 数据分析结果



	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Whole	East	Central	West	Whole	East	Central	West
frag	0.482*** (4.31)	0.550*** (3.89)	0.0433 (0.44)	-0.243 (-0.88)				
(n+g+δ)	-0.00281	-0.00185	-0.0169*	-0.0484***	-0.00286	-0.00271	-0.0178*	-0.0458***
	(-0.54)	(-0.36)	(-1.71)	(-3.58)	(-0.54)	(-0.51)	(-1.81)	(-3.37)
lnedu	-0.415*** (-2.91)	0.221 (0.89)	0.213 (1.08)	-0.565*** (-3.63)	-0.402*** (-2.77)	0.202 (0.77)	0.203 (1.03)	-0.580*** (-3.77)
lnicap	0.0198 (0.67)	0.227*** (5.30)	0.0638** (1.99)	0.0990** (2.22)	0.0275 (0.91)	0.235*** (5.21)	0.0734** (2.27)	0.0919** (2.08)
lnpub	-0.119*** (-2.84)	-0.281*** (-5.49)	0.0840 (1.53)	-0.128** (-2.00)	-0.131*** (-3.08)	-0.308*** (-5.81)	0.0880 (1.60)	-0.108* (-1.69)
pol					0.141 (1.52)	0.165 (1.29)	-0.0408 (-0.50)	0.417* (1.69)
_cons	6.967*** (24.91)	6.089*** (13.18)	6.469*** (15.20)	7.690*** (23.02)	7.067*** (24.19)	6.233*** (12.04)	6.570*** (15.32)	7.333*** (20.27)
N	504	180	144	180	504	180	144	180
R <sup>2</sup>	0.972	0.987	0.994	0.982	0.971	0.986	0.994	0.982
A-R <sup>2</sup>	0.969	0.984	0.992	0.978	0.968	0.983	0.992	0.978
F Sta.	727.2	503.6	794.4	363.0	701.5	461.6	794.8	368.3

# Conclusions and Discussions 结论和讨论

- The results from the panel data regressions within national coverage suggest that the religious diversity has positive and significant impacts on regional development in general.
- The results from the panel data regressions within regional coverage suggest that religious fragmentation has a positive and significant association with the economic development in the eastern region of China while religious polarization has a positive and significant association with the economic development in the central and western regions of China.

# References 参考文献

- Ying, Zheng, Shibao Liu, Shuming Bao and Jianbo Zhou, 2017. Religious Diversity and Regional Development. China. China Economic Review, Vol. 46, P1-9. <https://doi.org/10.1016/j.chieco.2017.08.003>.
- Alesina, A., & Zhuravskaya, E. (2011). Segregation and the quality of government in a cross section of countries. American Economic Review, 101 (5), 1872–1911.
- Alesina, A., Harnoss, J., & Rapoport, H. (2016). Birthplace diversity and economic prosperity. Journal of Economic Growth, 21 (2), 1-38.
- Knack, S., & Barro, R. (1998). The Determinants of Economic Growth. Determinants of economic growth: MIT.
- Kodila-Tedika, O. (2012). Determinants of Peace : A Cross-Country Analysis. (Vol.2, pp.180-200). University Library of Munich, Germany.
- Lu H, Page S E. (1998). Diversity and Optimality. Research in Economics.
- Mankiw, N. G., Weil, D. N., & Romer, D. (1992). A contribution to economic growth. , 107(2), 407-437.
- Montalvo, J.G. and M. Reynal-Querol, 2003. Religious polarization and economic development. Economics Letters, 80 (2), 201-210.
- Montalvo, J.G., Reynal-Querol, M. (2000). “The effect of ethnic and religious conflict on growth”, IVIE WP-EC 2000-04. An updated version can be found in <http://www.wcfio.harvard.edu/programs/prpes>.
- Okten, C., & Osili, U. O. (2004). Contributions in heterogeneous communities: evidence from Indonesia. Journal of Population Economics, 17(4), 603-626.
- Ottaviano, Gianmarco, and Giovanni Peri. (2003) . “The Economic Value of Cultural Diversity: Evidence from US Cities.” University of California, Davis. Unpublished.

# The List of Documents for Report 结果文件列表

Documents	Description	File
Workflows	Workflow files	*.yxmd
Flowcharts	The flowchart of workflows	*.doc
Case study report	Word or PDF file	Religion_study.docx
Case study presentation	Presentation file	Religion_case.pptx
Data	Religious data table in Excel	Data_religion.xlsx
	Statistical table in Excel	Data_statistics.xlsx
	Province map in Shape file	Province_boundary.shp
Output files	Output files	Output_religion.pdf

# Output Files 结果输出文件

Description	Format
Map of Religious Fragmentation by Province in 2004	Map
Map of Religious Polarization by Province in 2004	Map
Scatterplot of Religious fragmentation versus Religious polarization in 2004	Chart
Summary statistics of regression variables	Text
Regression analysis (Residual table, coefficient table, ANOVA Analysis, Basic Diagnostic Plots)	Text

# The Cloud Platform for Global Research on Novel Coronavirus

## Global Research on Novel Coronavirus

新冠病毒数据资源与全球研究实验云平台



A white login form is centered on the page. It features a globe icon in the top right corner. The form contains two input fields: the first is for an account name, with a person icon on the left and the placeholder text 'Please enter an account name'; the second is for a password, with a lock icon on the left, the placeholder text 'Please enter your password', and a small eye icon on the right to toggle visibility. Below the password field is a checkbox labeled 'Remember password'. At the bottom of the form is a blue button with the text 'login' in white.

# Qs & As 问题与回答

**Q: Where we can find the data for the project?**

A: Most aggregated data can be found from dataVerse at Harvard for public access. Some microdata and basic data will be located on the cloud with restricted access. All participants are also encouraged to collect the data from other sources and share with participants of other research groups. For those data on the wish list from other sources, we can help reach out to other data sources for possible support.

**Q: Where will be the data depository for the final research data and reports?**

A: We'll use dataVerse at Harvard primarily for data depository, which is free and linked to the online map viewer (WorldMap) and the cloud platform for COVID-19 study.

**Q: What are the criteria for evaluating our applications?**

All applications will be reviewed by the review committee with some leading scholars and professionals from Harvard, Wuhan Univ., Peking Univ., RMDS and China Data Institute. For those pilot projects, we hope that the project will help those participants to shape and build their research ideas for other grant applications, and also learn new methodology and technology for future development. Thus, we'll pay more attention to the applicants' learning ability, active participation, and desire to collaborate with others.

**Q: What support can those participants receive?**

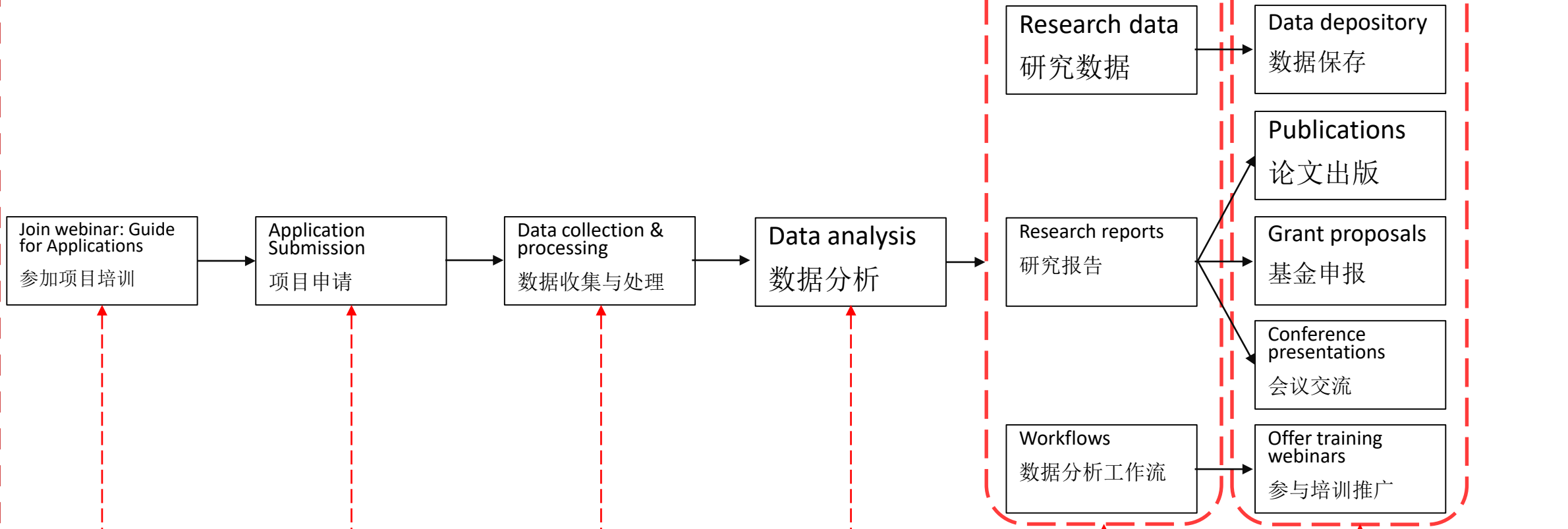
A: Each participants will receive a package of various support during the whole process, including webinars for project application, training webinars for data, methodology and technology, research data we can offer, cloud platform account, depository support for research data and reports, opportunity for offering training workshops, and recommendations for publications.

**Q: Who will own the copyright of those research results or publications from the project?**

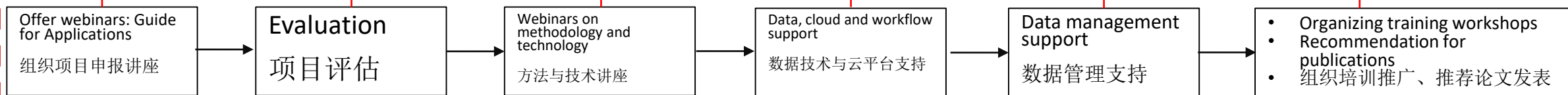
A: The author(s) will own the copyright. The organizer would like to have distribution right for those research results from the project, including derived research data, research reports, workflows and presentations. The author(s) may acknowledge the support of the China Data Lab in their publications.

# Project Flowchart: Commitments and Support 项目流程

## Commitments by Project Participants 项目参与方承诺:

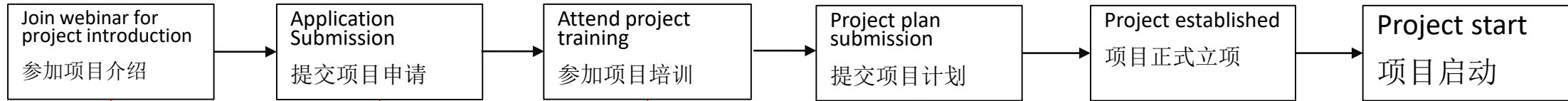


## Support by China Data Lab 项目组织方提供支持:

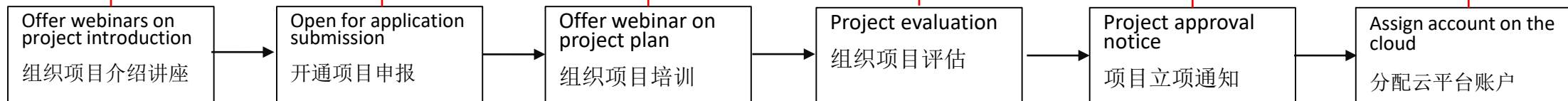


# Project Flowchart 项目申报流程

## Project Participants 项目申请方:



## China Data Lab 项目组织方:



# Training Workshops on Workflows with Knime workflow 培训 讲座

1. **Training on building workflows using Knime** -2019/11/21 (1 hr 28 mins)

<https://chinadatainstitute.my.webex.com/recordingservice/sites/chinadatainstitute.my/recording/playback/e9cedc5354194819891e3ee6f9fd1aa3>

Password: 9xJUTmSe

2. **Spatial Statistical Analysis with Knime**, Lingbo Liu-2019/11/27 (1 hr 17 mins)

<https://chinadatainstitute.my.webex.com/recordingservice/sites/chinadatainstitute.my/recording/playback/6691ea0040f8456d81acffb1930e3186>

Password: Pi8qgAMn

3. **Industrial co-agglomeration analysis with Knime**, Lu Chen-2019/11/29 (1 hr 35 mins)

<https://chinadatainstitute.my.webex.com/recordingservice/sites/chinadatainstitute.my/recording/playback/5b6be24540694592861b73788f48ebe4>

Password: Tb3sarph

4. **Online training on workflow tool KNIME**-2020/02/07 (1 hr 5 mins)

<https://chinadatainstitute.my.webex.com/recordingservice/sites/chinadatainstitute.my/recording/playback/f45fec687cb644198b0c7686ee85153c>

This recording does not require a password.

# Project Introduction and Application 项目介绍与项目申请

## Project Introductions in PPT:

- ❑ An Introduction to the Data Resources for Covid-19 Studies

<https://doi.org/10.7910/DVN/OTYQUY>

- ❑ Global Research on COVID-19

<https://doi.org/10.7910/DVN/9ZIDYR>

## The Online Applications:

- ❑ The Online Application in English

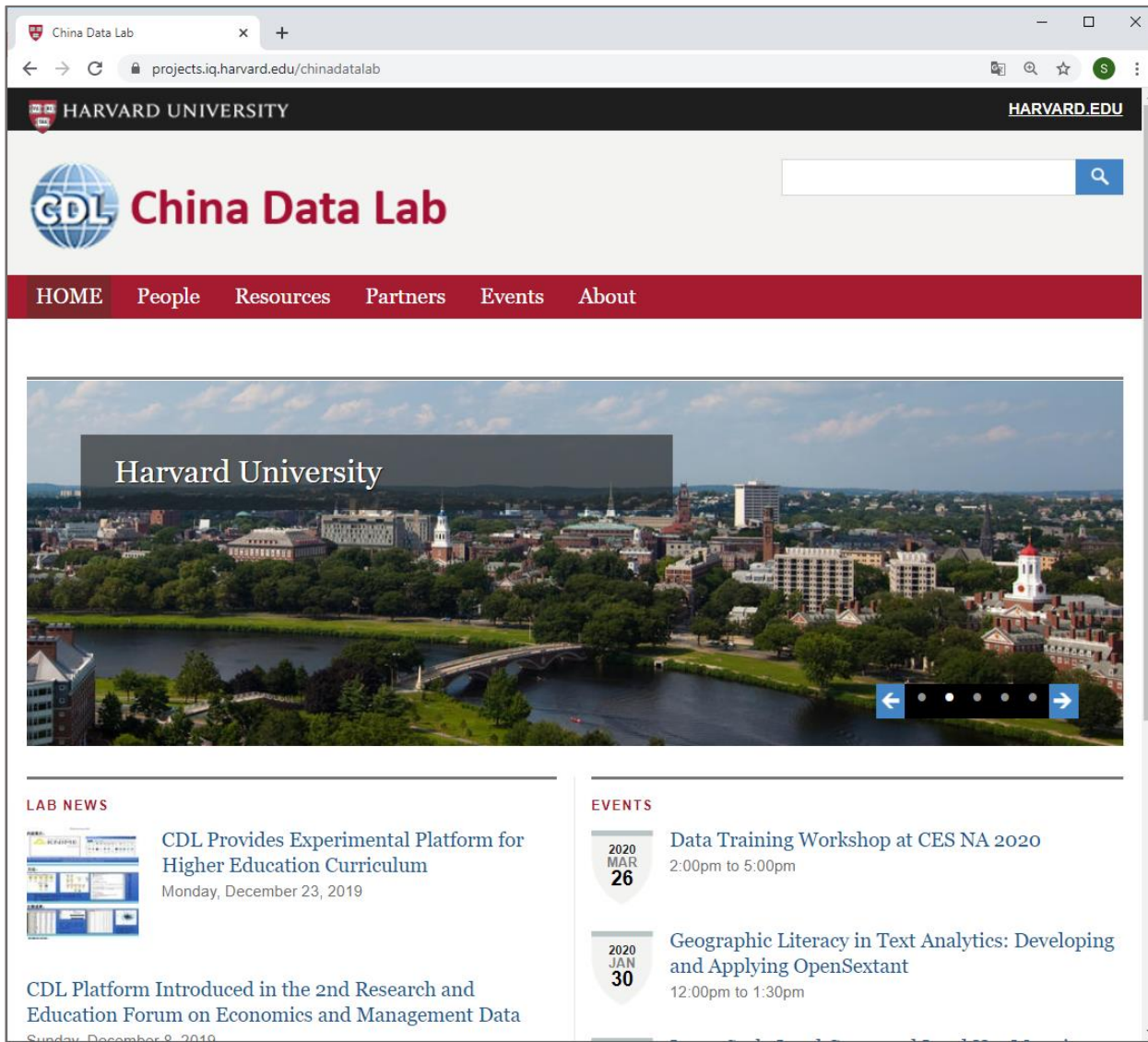
[https://harvard.az1.qualtrics.com/jfe/form/SV\\_9Qy3p1jOE1SbIKF](https://harvard.az1.qualtrics.com/jfe/form/SV_9Qy3p1jOE1SbIKF)

- ❑ The Online Application in Chinese

[https://harvard.az1.qualtrics.com/jfe/form/SV\\_djwCFDTkJtOGiBT](https://harvard.az1.qualtrics.com/jfe/form/SV_djwCFDTkJtOGiBT)

# Project Home: Resources for COVID-19 项目网站

<http://chinadatalab.net>



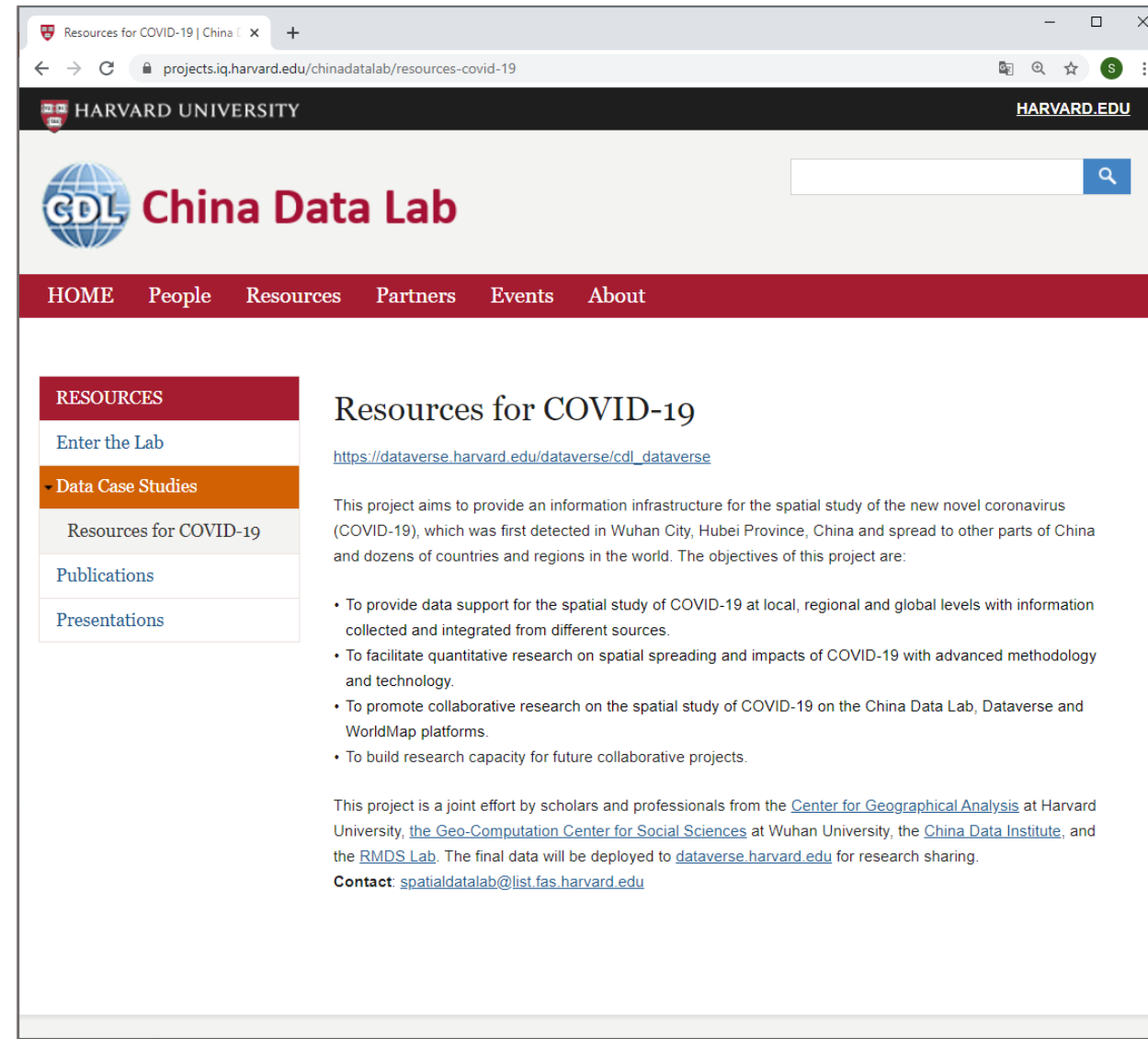
The screenshot shows the main homepage of the China Data Lab. At the top, there is a navigation bar with the Harvard University logo and the text "HARVARD UNIVERSITY" and "HARVARD.EDU". Below this is the "GDL China Data Lab" logo and a search bar. A red navigation bar contains the following links: HOME, People, Resources, Partners, Events, and About. The main content area features a large banner image of Harvard University with the text "Harvard University" overlaid. Below the banner, there are two columns of content: "LAB NEWS" and "EVENTS".

LAB NEWS

- CDL Provides Experimental Platform for Higher Education Curriculum  
Monday, December 23, 2019
- CDL Platform Introduced in the 2nd Research and Education Forum on Economics and Management Data  
Sunday, December 8, 2019

EVENTS

- 2020 MAR 26 Data Training Workshop at CES NA 2020  
2:00pm to 5:00pm
- 2020 JAN 30 Geographic Literacy in Text Analytics: Developing and Applying OpenSextant  
12:00pm to 1:30pm



The screenshot shows the "Resources for COVID-19" page. It features the same navigation bar as the homepage. Below the navigation bar, there is a "RESOURCES" section with a list of links: Enter the Lab, Data Case Studies, Resources for COVID-19, Publications, and Presentations. The "Resources for COVID-19" link is highlighted. The main content area is titled "Resources for COVID-19" and includes a link to the dataverse: [https://dataverse.harvard.edu/dataverse/cdl\\_dataverse](https://dataverse.harvard.edu/dataverse/cdl_dataverse). Below this, there is a paragraph describing the project's goals and objectives, followed by a list of four bullet points. At the bottom, there is a paragraph about the project's joint effort and a contact email: [spatialdatalab@list.fas.harvard.edu](mailto:spatialdatalab@list.fas.harvard.edu).

RESOURCES

- Enter the Lab
- Data Case Studies
- Resources for COVID-19
- Publications
- Presentations

## Resources for COVID-19

[https://dataverse.harvard.edu/dataverse/cdl\\_dataverse](https://dataverse.harvard.edu/dataverse/cdl_dataverse)

This project aims to provide an information infrastructure for the spatial study of the new novel coronavirus (COVID-19), which was first detected in Wuhan City, Hubei Province, China and spread to other parts of China and dozens of countries and regions in the world. The objectives of this project are:

- To provide data support for the spatial study of COVID-19 at local, regional and global levels with information collected and integrated from different sources.
- To facilitate quantitative research on spatial spreading and impacts of COVID-19 with advanced methodology and technology.
- To promote collaborative research on the spatial study of COVID-19 on the China Data Lab, Dataverse and WorldMap platforms.
- To build research capacity for future collaborative projects.

This project is a joint effort by scholars and professionals from the [Center for Geographical Analysis](#) at Harvard University, [the Geo-Computation Center for Social Sciences](#) at Wuhan University, the [China Data Institute](#), and the [RMDS Lab](#). The final data will be deployed to [dataverse.harvard.edu](https://dataverse.harvard.edu) for research sharing.

Contact: [spatialdatalab@list.fas.harvard.edu](mailto:spatialdatalab@list.fas.harvard.edu)

# Websites and Contacts 主要网站与联系方式

中国数据实验室项目网站 **China Data Lab**

<https://projects.iq.harvard.edu/chinadatalab>

中国数据在线 **China Data Online**

<http://china-data-online.com>

联系方式 **Contacts**

[SpatialDataLab@list.fas.harvard.edu](mailto:SpatialDataLab@list.fas.harvard.edu)

[office@chinadatacenter.net](mailto:office@chinadatacenter.net)