

# 河南省 历代旱涝等水文气候史料

(包括旱、涝、蝗、风、雹、霜、大雪、寒、暑)

河南省水文总站编

一九八二年

# 前 言

河南地处中原,系我国历史上的文化摇篮,许多朝代都曾在河南建都。从西周至北宋定为国都、陪都先后长达二千余年,其中洛阳建都九百余年,开封建都二百余年。因此本省有十分丰富的各种历史文献、文物、地方志等,记载有水、旱、蝗、雹、霜、大雪、寒、暖等水文气候异常变化灾情资料。

历史上的水文气候变化,曾给人类活动带来过重大影响。例如明朝崇祯年间西北、华北六省连续六年大旱、清光绪年间连续三年大旱,都曾造成严重灾害。近年世界性的灾害天气频繁出现,对人类造成重大威胁,如1968~1973年西非的严重干旱造成了世界性的粮食紧张。许多事实说明,当大的水、旱等自然灾害来临时,再预防和补救就很难,而如在农业、水利、交通、建筑等各种生产建设的规划设计中,恰当地研究使用历史上曾发生过的各种严重的水、旱等自然灾害的水文、气象资料,就可起到早期预防的目的,反之,就要受到大自然的惩罚。因此,对于防御水、旱等大的自然灾害来说,了解和研究历史上曾发生过的各种最严重的水文、气候反常情况则具有战略意义。同时,我省的农业生产规划和水利建设等方面都须研究当地的气候规律、未来降水多少的趋势以及旱涝规律,亦需长期的水旱气候资料。此外,这些旱涝史料还可对探讨历史上特大旱、涝的发生与太阳活动之间的关系,防洪抗旱标准的提出,水资源的合理开发、利用以及进行超长期的水文、气象趋势估报均可提供重要的科学资料。为此我们本着古为今用的原则,用了两年多的时间,共查阅了近二百种象二十六史那样的全国性史书(如竹书纪年、史记及历代各朝的帝纪、五行志、会要等)和本省的地方志以及解放后的洪水调查和实测降水量资料,收集到有记载以来的水、旱、蝗、雹、霜、大雪严寒等长系列的约一百万字的水文、气候历史资料。其中西周初期(公元前900年)以前的旱、涝史料记载较略欠详,且有小的间断缺记。在整编过程中对水、旱资料记载发生的年代及地点进行了考证,校勘工作。为了查阅、应用和整编、叙述上的方便;对水、旱灾情还进行了级别划分及其分类的整编工作。

现将整理、汇编中的有关事项,分述如下:

## 一、资料来源和内容:

资料收集的地区范围,主要为河南省及有关邻省陕西、山西、河北、山东、江苏、安徽、湖北等省的部分大水、大旱资料;收集的起迄时间自公元前24世纪(夏朝)到解放前的历史水、旱、蝗、雹、霜、大雪、严寒、黄河清等水文、气候资料以及近代实测的降水量资料。资料来源主要分以下七类:

1. 史书类:主要有竹书纪年、二十六史及各朝之会要,如史记、前后汉书、魏书、晋书、新旧唐书、新旧五代史、隋书、宋史、金史、元史、明史、清史稿等;还有秦会要订补、西汉会要、东汉会要、三国会要、唐会要、明会要等;另外还有北堂书钞、十六国春秋及辑补、资治通鉴、续博物志、横云山人集、古今图书集成、续文献通考等。其中的帝本纪、五行志、列传部分及会要均记载有系统的水、旱等气候资料,可以增补地方志多数只记载明朝以后灾情的不足。史书类的详细名称可参见资料来源目录附表。

2. 地方志类:主要有宋朝通志、省通志、府(州)志、郡(县)志等。地方志中的《灾异》、《祥异》、《五行》、《大事记》是记载水、旱等灾情的主要部分,其他如《艺文》、《杂记》、《城池》、《建置》、《蠲恤》、《食货》、《列传》等卷中,有时亦能找到有价值的大水、大旱的旁证材料。

3. 宫廷档案、实录类：“宫廷档案”目前较易收集的主要是清朝的奏摺和提本，情节一般较可靠，系地方官吏因遭受水、旱灾害向朝廷所写的奏报；《实录》是朝廷根据地方奏报综合编写的全国性大事记，内容简要，成书的主要有《明实录》、《清实录》、《东华录》等。

4. 水利、河渠专著类：主要有水经注及注译、予河志、淮系年表、黄河年表、至正河防纪要、河渠见闻、行水金鉴、河防一览等，内容主要记载有河道决口、迁徙、改道以及有关水利措施等。

5. 碑文、刻记以及与历史水、旱有关的文物史料：如沿河的寺院、庙宇、宗堂、桥梁因受大水、大旱兴废、迁移而立的碑记，还有民国河南公报、河南水灾等。

6. 解放后各单位调查的洪水资料及近代仪器观测的降水资料。

7. 其他资料：如沿河私人的日记手稿、账本及歌谣等。

## 二、整编原则：

1. 史料中所记载的水、旱、蝗、雹、霜、大雪、严寒、黄河清等资料，凡影响农业欠收、气候异常者均加以摘录整编；水、旱造成饥荒、振济等记载亦予收入。各条资料来源出处，均按资料来源编号列出。

2. 为了便于查阅、使用，灾情发生的地区范围均按现今的地名注出，经过古今地名考证后，分别列入所在的史料分区内。对原文中的各朝代年号及大水年份中的阴历月、日均换算为公元年数及阳历月、日。

3. 根据历史旱、涝灾情记载与用近代仪器观测之降水量资料所划分的旱、涝灾情等级亦专栏刊出。

## 三、旱涝史料的分区：

我省的水旱史料，受历代建都的影响，建都之地水、旱灾情记载较详细，非建都之地灾情记载较略或缺记。在唐朝（公元618年）以前，历代建都多在西安、洛阳一带，故公元618年以前所收集到的旱涝史料，多属于豫西一带，其他地区的灾情资料很少。因此，在公元618年以前全省的历史旱涝资料不分区，唐朝开始后，全省各地区历史文献记载的水、旱灾害资料开始增多，加上河南地处东亚季风区，南北降水量悬殊很大，且在旱、涝发生的时间上、地区上常不一致，为使旱、涝史料便于今后的分析、应用和整编叙述上的方便，对全省的旱、涝史料按分区整编。根据历史时期所发生的大水、大旱在时间上的相同性和在地区上的一致性，并考虑近期实际观测的水文、气象要素（如暴雨、径流、年降水量的均值及其在年内的分配，形成暴雨的天气成因等）的相似性，将全省划分为五个分区：

1. 豫西区：主要包括黄河流域的伊、洛、沁水系和京广线以西淮河流域的沙颍河水系部分；
2. 豫北区：主要包括海河流域的漳卫河水系，马颊河水系和黄河流域的金堤河水系；
3. 豫东区：主要包括京广线以东淮河流域的开封、商邱、许昌、周口地区所属县（市）；
4. 豫南区：主要包淮河流域的本干、淮南及洪汝河水系的县（市）；
5. 唐白丹区：主要包括长江流域的唐白河、丹江水系部分，亦即整个南阳地区的所属县（市）；

各分区具体包括的县(市)范围详见附图1“河南省水系及水文气候史料分区图”。

## 四、旱涝灾情等级划分说明：

根据历史文献中有关旱、涝灾情的记载，受旱涝范围大小，持续时间长短、对农业生产所受的影响程度及其对人民的生活、生命、财产所造成的损失多少，将水(涝)划分“水年”、“大水年”、“特大洪水年”三级，将旱亦划分为“旱年”、“大旱年”、“特大干旱年”三级，降水量接近正常的大有年或无灾情记载的年份均划为一级，即一般正常年。以上七级的划分标准如下：

一级：特大洪水年，系指全省性或某流域两个水系以上皆大水，造成沿河决口，泛滥成灾，漂民居庐舍，淹死人畜，冲毁大面积农田，谷禾无收等。

二级：大水年，系指两个地区以上的河流发生大水，沿河两岸成灾，冲走人畜，造成沿岸农田受灾减产，或一个地区发生大水，灾情很严重。

三级：水年，系指降水时间持续长，如淫雨两月余，但降水强度不大，河流洪峰流量不太高或几个县局部发生暴雨致使流域面积较小的河流山洪暴发等。

四级：一般正常年，系指无水、旱灾情记载或农业丰稔，大有年的年份。

五级：旱年，系指受灾面积为几个县，在时间上为夏秋有一个季节干旱或春冬有一个季节无雨大旱以及夏秋旱蝗等，造成农作物减产者。

六级：大旱年，系指受灾面积在两个分区以上，时间上是春夏、夏秋和秋冬连旱，持续数月干旱以至年内均旱或夏秋有一个季节严重干旱，例如能造成作物严重减产，人民逃荒外出，河水流量大减，有降水记载的系列，年雨量少于350~450毫米者。

七级：特大干旱年，系指受灾面积大，全省性干旱，邻省亦旱，干旱持续时间长，且常为跨年度2~5年连旱，干旱灾情严重，造成江河断流、枯竭，农作物枯死，形成赤地千里，历史上有人相食等的悲惨情景。

对于有仪器观测降水量资料的旱涝灾情等级划分：在干旱灾情方面，主要是根据作物生长期的需水量与有效降雨的比值，并参考各地区统计的受灾面积多少，而划分各年或季节的旱与大旱；在水(涝)灾情方面，主要是汛期一、三、七天的暴雨量多少，季节降雨量占多年平均季雨量的比值大小及各地区统计的受灾面积多少，而划分为年的或季节的水、大水和特大洪水。

关于不同旱、涝灾情等级及其所包括旱、涝史料类别情况详见下表：

不同旱涝灾情等级所包括之旱涝史料类别情况表

| 旱 涝 灾 情 级       | 类 别 序 号 | 旱 涝 史 料 类 别 记 载       |
|-----------------|---------|-----------------------|
| 1        级(特大水) | 1       | 大水，舟行树梢               |
|                 | 2       | 夏秋淫雨百日成灾              |
|                 | 3       | 大霖雨，平地水深数尺            |
|                 | 4       | 天下州五十大水，河及支川皆溢，人皆巢舟以居 |
| 2        级(大水)  | 5       | 夏秋大水                  |
|                 | 6       | 夏大水                   |
|                 | 7       | 秋大水                   |
|                 | 8       | 大霖雨逾旬，洪水泛滥，漂没禾稼庐舍     |
|                 | 9       | 史书只记大水者               |
| 3        级(水)   | 10      | 春夏水或秋冬水               |
|                 | 11      | 夏秋水                   |
|                 | 12      | 史书只记载年水者              |
|                 | 13      | 春冬皆大水                 |
|                 | 14      | 夏旱秋大水或夏大水秋旱           |
|                 | 15      | 特大雪，雪深丈余者             |
|                 | 16      | 淫雨不止，但不为灾者            |
| 4        级(一般年) | 17      | 大有年                   |
|                 | 18      | 无旱、涝记载                |
|                 | 19      | 春旱或冬旱者                |
|                 | 20      | 局地水或局地旱蝗              |
|                 | 21      | 夏旱秋水或夏水秋旱             |
| 5        级(旱)   | 22      | 春夏旱或夏旱                |
|                 | 23      | 秋旱或秋冬旱                |
|                 | 24      | 夏秋旱                   |
|                 | 25      | 冬春不雨                  |
|                 | 26      | 局地大旱或河清               |
|                 | 27      | 旱或数州蝗、饥者              |
|                 | 28      | 史书只记载年旱者              |

| 旱涝灾情级   | 类别序号 | 旱涝史料类别记载        |
|---------|------|-----------------|
| 6级(大旱)  | 29   | 夏秋大旱            |
|         | 30   | 大旱炎热禾枯萎         |
|         | 31   | 大旱自去冬至今年七月始雨    |
|         | 32   | 春夏大旱或秋冬大旱       |
|         | 33   | 夏连月无雨或秋大旱禾尽枯    |
|         | 34   | 史书只载年大旱者        |
| 7级(特大旱) | 35   | 大旱, 终年无雨        |
|         | 36   | 连岁大旱, 是岁尤甚      |
|         | 37   | 大旱赤地千里人相食, 死者过半 |
|         | 38   | 大旱河川、井泉皆竭       |

为了了解历史时期发生大水、大旱在时间上和空间上的分布情况, 便于今后在农业区划、水资源的合理利用、暴雨移置以及设计洪水遭遇方面加以借鉴, 所以又将历代水文气候史料中发生的大水、大旱(包括特大旱、涝)的灾情记载, 按照历史纪年与全省水文气候史料分区的顺序以及同时周围邻省的灾情情况。加以单独汇总编辑成河南省历代大水、大旱史料年表(详见另册)。

五、资料的整理与汇编:

这本史料的整理汇编工作, 是在总站党委的直接领导下由总站各水文分站的同志参加收集资料, 按年代顺序对灾情系统整理、校对、考证, 并对旱、涝史料作了分区、等级划分及其所含灾情类别分析的基础上汇编而成。由于时间仓促和水平有限, 对史料的审编和旱、涝等级、灾情类别的划分, 不免有遗漏和不妥之处, 诚希有关单位提出宝贵意见, 以便今后进一步补充和修订。

参加前期资料收集的同志较多不一一列出, 最后负责总的资料校勘、汇总、考证及编纂者为王邨同志, 分区资料的整理、审查、考证、汇编者为吕声美、王松梅同志。

在资料收集过程中, 黄委会、河南省气象局研究所、省地理研究所、南京地理研究所、省图书馆等单位。都曾提供了大量的旱、涝史料, 并给予大力支持及帮助; 在定稿过程中, 水科院叶永毅同志、中科院南京地理所徐近之同志都曾对所汇编的资料名称、内容及附表说明, 提出过宝贵建议和改进意见, 在此表示感谢。

六、存在问题及今后意见

公元前2650年至公元前900年共1750年历史时期内, 因尚无纸及活字版的发明, 其灾情的记载极为简略, 多数只记有某年大水或大旱, 主要来源于竹书记年等历史文献, 其中, 有公元前2045年~1831年、1760~1557年、1388~1192年、1113~903年四个较长阶段共813年中的灾情记载有中断、缺记。今后需要进一步广泛地收集上述四个阶段时期内的有关历史文物、文献, 如出土的文物、甲骨文的记载研究等, 以便逐渐充实历史水、旱灾情的记载。

| 公元     | 水  |    | 旱  |    | 发生地区 |    |    |    |     |     | 备注                            |
|--------|----|----|----|----|------|----|----|----|-----|-----|-------------------------------|
|        | 大水 | 特水 | 大旱 | 特旱 | 予西   | 予北 | 予东 | 予南 | 唐白丹 | 全省  |                               |
| -2697至 |    |    |    |    |      |    |    |    |     |     | 凡“(√)”符号者为史书只记有灾情，而未书发生具体地区者。 |
| -2597  | ✓  |    |    |    |      |    |    |    |     | (√) |                               |
| -2297  |    | ✓  |    |    |      |    |    |    |     | (√) |                               |
| -2286  | ✓  |    |    |    |      |    |    |    |     | (√) |                               |
| -2283  |    |    |    |    |      |    |    |    |     |     |                               |
| -2205  | ✓  |    |    |    |      |    |    |    |     | (√) |                               |
| -2204  | ✓  |    |    |    |      |    |    |    |     | (√) |                               |
| -2203  | ✓  |    |    |    |      |    |    |    |     | (√) |                               |
| -2202  | ✓  |    |    |    |      |    |    |    |     | (√) |                               |
| -2201  | ✓  |    |    |    |      |    |    |    |     | (√) |                               |
| -2108  | ✓  |    |    |    |      |    |    |    |     | (√) |                               |
| -2045  | ✓  |    |    |    |      |    |    |    |     | (√) |                               |
| -1809  |    |    |    | ✓  | ✓    |    |    |    |     |     |                               |
| -1804  |    |    | ✓  |    | ✓    |    |    |    |     |     |                               |
| -1777  |    |    | ✓  |    | ✓    |    |    |    |     |     |                               |
| -1766  |    |    | ✓  |    |      |    |    |    |     | ✓   |                               |
| -1765  |    |    | ✓  |    |      |    |    |    |     | ✓   |                               |
| -1764  |    |    | ✓  |    |      |    |    |    |     | ✓   |                               |
| -1763  |    |    |    | ✓  |      |    |    |    |     | ✓   |                               |
| -1762  |    |    | ✓  |    |      |    |    |    |     | ✓   |                               |
| -1761  |    |    | ✓  |    |      |    |    |    |     | ✓   |                               |
| -1760  | ✓  |    | ✓  |    |      |    |    |    |     | ✓   |                               |
| -1557  | ✓  |    |    |    | ✓    |    |    |    |     |     | 五次因水迁都                        |
| -1534  | ✓  |    |    |    | ✓    |    |    |    |     |     |                               |
| -1525  | ✓  |    |    |    | ✓    |    |    |    |     |     |                               |
| -1517  | ✓  |    |    |    |      | ✓  |    |    |     |     |                               |
| -1388  | ✓  |    |    |    |      |    |    |    |     | (√) | 伊、河、洛竭                        |
| -1192  |    |    | ✓  |    |      | ✓  |    |    |     |     |                               |
| -1130  |    |    |    | ✓  | ✓    |    |    |    |     |     |                               |
| -1122  |    |    | ✓  |    |      |    |    |    |     | (√) |                               |
| -1120  |    |    | ✓  |    |      |    |    |    |     | (√) |                               |

| 公 元  | 水  |    | 旱  |    | 发 生 地 区 |    |    |    |     |     | 备 注                |
|------|----|----|----|----|---------|----|----|----|-----|-----|--------------------|
|      | 大水 | 特水 | 大旱 | 特旱 | 予西      | 予北 | 予东 | 予南 | 唐白丹 | 全省  |                    |
| -873 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) | 连年书旱<br><br>连续六年大旱 |
| -865 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -858 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -858 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -856 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -855 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -854 |    |    |    |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -853 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -828 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -826 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -825 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -824 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -823 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -822 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -803 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -782 |    |    |    | ✓  | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -781 |    |    |    | ✓  | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -780 |    |    | ✓  |    | ✓       |    |    |    |     |     |                    |
| -721 |    |    | ✓  |    |         |    | ✓  |    |     |     |                    |
| -711 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -699 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -687 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -683 | ✓  |    |    |    |         |    | ✓  |    |     |     |                    |
| -682 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -670 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -669 | ✓  |    |    |    | ✓       |    | ✓  |    |     |     |                    |
| -659 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -658 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -657 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -650 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -647 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |                    |
| -639 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                    |
| -624 |    |    |    | ✓  | ✓       | ✓  | ✓  |    |     | ✓   |                    |
| -622 |    |    | ✓  |    | ✓       |    |    |    |     |     |                    |

| 公 元  | 水  |    | 旱  |    | 发 生 地 区 |    |    |    |     |     | 备 注            |
|------|----|----|----|----|---------|----|----|----|-----|-----|----------------|
|      | 大水 | 特水 | 大旱 | 特旱 | 予西      | 予北 | 予东 | 予南 | 唐白丹 | 全省  |                |
| -617 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) | 黄 河 徙          |
| -602 | ✓  |    |    |    |         |    |    |    |     |     |                |
| -586 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | (✓) |                |
| -568 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                |
| -550 | ✓  |    |    |    | ✓       |    |    |    |     |     |                |
| -549 | ✓  |    |    |    |         | ✓  |    |    |     |     |                |
| -526 |    |    | ✓  |    | ✓       |    | ✓  |    |     |     |                |
| -523 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |                |
| -517 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                |
| -494 |    |    | ✓  |    | ✓       |    | ✓  |    |     | (✓) |                |
| -493 |    |    | ✓  |    | ✓       |    | ✓  |    |     | (✓) |                |
| -492 |    |    | ✓  |    | ✓       |    | ✓  |    |     |     |                |
| -484 |    |    | ✓  |    |         | ✓  |    |    |     |     |                |
| -477 | ✓  |    |    |    |         |    | ✓  |    |     |     |                |
| -366 | ✓  |    |    |    | ✓       |    | ✓  |    |     |     |                |
| -338 |    |    | ✓  |    | ✓       |    | ✓  |    |     |     | 陕西大旱予西旱        |
| -314 |    |    |    |    |         |    |    |    |     |     |                |
| -310 | ✓  |    |    |    | ✓       |    |    |    |     |     |                |
| -309 | ✓  |    |    |    |         | ✓  |    |    |     |     |                |
| -282 | ✓  |    |    |    |         | ✓  |    |    |     |     |                |
| -239 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | (✓) |                |
| -235 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |                |
| -208 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |                |
| -207 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |                |
| -205 |    |    |    |    |         |    |    |    |     |     | 陕西、关中大旱        |
| -190 |    |    | ✓  |    |         |    | ✓  |    |     |     |                |
| -185 | ✓  |    |    |    |         |    |    |    | ✓   |     |                |
| -184 |    | ✓  |    |    | ✓       |    |    |    |     |     | 江汉皆大水<br>河、伊洛汝 |
| -180 |    | ✓  |    |    |         |    |    |    | ✓   |     |                |
| -177 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |                |
| -157 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |                |
| -147 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |                |
| -145 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | (✓) |                |

| 公 元  | 水  |    | 旱  |    | 发 生 地 区 |    |    |    |     |     | 备 注  |
|------|----|----|----|----|---------|----|----|----|-----|-----|------|
|      | 大水 | 特水 | 大旱 | 特旱 | 予西      | 予北 | 予东 | 予南 | 唐白丹 | 全省  |      |
| -135 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| -130 | ✓  |    |    |    |         | ✓  |    | ✓  |     |     |      |
| -129 |    |    | ✓  |    |         |    | ✓  |    |     |     |      |
| -120 |    |    | ✓  |    |         |    | ✓  |    |     |     |      |
| -115 | ✓  |    |    |    | ✓       |    |    |    |     |     |      |
| -107 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |      |
| -105 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |      |
| -100 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |      |
| -86  | ✓  |    |    |    | ✓       |    | ✓  |    |     |     |      |
| -71  |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| -66  | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| -51  |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   | 枯旱三年 |
| -52  |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   | "    |
| -53  |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   | "    |
| -48  | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| -39  | ✓  |    |    |    | ✓       | ✓  | ✓  | ✓  |     | ✓   |      |
| -30  | ✓  |    |    |    | ✓       |    |    |    |     |     |      |
| -29  |    | ✓  |    |    |         | ✓  |    |    |     |     |      |
| -23  | ✓  |    |    |    | ✓       |    |    |    |     |     |      |
| -14  |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |      |
| -13  |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |      |
| -12  | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| -7   | ✓  |    |    |    | ✓       |    | ✓  |    |     |     |      |
| 2    |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| 15   | ✓  |    |    |    |         | ✓  |    |    |     |     |      |
| 18   |    |    | ✓  |    |         |    |    |    | ✓   |     | 荆、扬州 |
| 19   |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   | 东 关  |
| 22   |    |    |    | ✓  | ✓       | ✓  | ✓  |    |     | ✓   |      |
| 23   | ✓  |    |    |    | ✓       |    |    |    |     |     |      |
| 26   |    |    | ✓  |    | ✓       |    |    |    |     |     |      |
| 30   | ✓  |    |    |    | ✓       |    |    |    |     |     |      |
| 31   | ✓  |    |    |    | ✓       |    |    |    |     |     |      |
| 60   | ✓  |    |    |    | ✓       |    |    |    |     |     |      |

| 公 元 | 水  |    | 旱  |    | 发 生 地 区 |    |    |    |     |     | 备 注   |
|-----|----|----|----|----|---------|----|----|----|-----|-----|-------|
|     | 大水 | 特水 | 大旱 | 特旱 | 予西      | 予北 | 予东 | 予南 | 唐白丹 | 全省  |       |
| 64  | ✓  |    |    |    | ✓       |    |    |    |     |     | 沙颍河大水 |
| 76  |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |       |
| 80  |    |    | ✓  |    | ✓       |    |    |    |     |     |       |
| 83  | ✓  |    |    |    |         |    | ✓  |    |     |     |       |
| 87  | ✓  |    | ✓  |    | ✓       |    |    |    |     |     |       |
| 95  |    |    | ✓  |    | ✓       |    |    |    |     |     |       |
| 98  | ✓  |    |    |    | ✓       |    | ✓  |    |     |     |       |
| 100 | ✓  |    |    |    | ✓       |    |    |    |     |     |       |
| 106 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |       |
| 107 | ✓  |    |    |    | ✓       |    |    |    |     |     |       |
| 108 |    |    | ✓  |    | ✓       |    |    |    |     |     |       |
| 121 | ✓  |    |    |    | ✓       | ✓  |    |    |     | ✓   |       |
| 122 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |       |
| 129 | ✓  |    |    |    | ✓       | ✓  | ✓  | ✓  |     | ✓   |       |
| 134 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |       |
| 145 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |       |
| 148 | ✓  |    |    |    | ✓       |    |    |    |     |     |       |
| 151 |    |    | ✓  |    | ✓       |    | ✓  |    |     |     |       |
| 152 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |       |
| 155 |    | ✓  |    |    | ✓       |    |    |    | ✓   |     |       |
| 159 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |       |
| 168 | ✓  |    |    |    | ✓       |    |    |    |     |     |       |
| 172 | ✓  |    |    |    | ✓       |    |    |    |     |     |       |
| 174 | ✓  |    |    |    | ✓       |    |    |    |     | (✓) |       |
| 176 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |       |
| 189 | ✓  |    |    |    | ✓       |    |    |    |     |     |       |
| 194 |    |    | ✓  |    | ✓       | ✓  |    |    |     |     |       |
| 212 | ✓  |    |    |    | ✓       |    | ✓  |    | ✓   | ✓   |       |
| 213 | ✓  |    |    |    | ✓       |    | ✓  |    |     |     |       |
| 220 | ✓  |    |    |    | ✓       |    |    |    |     |     |       |
| 223 |    | ✓  |    |    | ✓       |    |    |    |     |     |       |
| 227 | ✓  |    | ✓  |    | ✓       |    |    |    |     |     |       |
| 228 |    |    | ✓  |    | ✓       |    | ✓  |    |     | (✓) |       |

| 公 元 | 水  |    | 旱  |    | 发 生 地 区 |    |    |    |     |     | 备 注      |
|-----|----|----|----|----|---------|----|----|----|-----|-----|----------|
|     | 大水 | 特水 | 大旱 | 特旱 | 予西      | 予北 | 予东 | 予南 | 唐白丹 | 全省  |          |
| 230 | ✓  |    |    |    | ✓       |    |    |    |     |     |          |
| 237 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |          |
| 268 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |          |
| 271 |    | ✓  |    |    | ✓       | ✓  | ✓  |    |     | ✓   |          |
| 273 |    |    | ✓  |    | ✓       |    |    |    |     |     |          |
| 276 | ✓  |    |    |    |         | ✓  |    |    | ✓   |     |          |
| 278 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |          |
| 283 | ✓  |    |    |    |         | ✓  |    |    |     |     |          |
| 287 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |          |
| 288 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |          |
| 295 | ✓  |    |    |    | ✓       | ✓  | ✓  | ✓  |     | ✓   |          |
| 297 |    |    | ✓  |    | ✓       |    |    |    |     |     | 陕西大旱，予西旱 |
| 309 |    |    |    | ✓  | ✓       | ✓  | ✓  |    | ✓   | (✓) |          |
| 311 |    |    | ✓  |    | ✓       |    |    |    |     |     |          |
| 312 | ✓  |    |    |    |         |    |    | ✓  |     |     |          |
| 320 | ✓  |    |    |    |         | ✓  |    |    |     |     | 河北大水     |
| 322 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |          |
| 325 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |          |
| 329 |    |    | ✓  |    | ✓       |    |    |    |     |     |          |
| 330 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |          |
| 331 | ✓  |    |    |    |         | ✓  |    |    |     |     |          |
| 333 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |          |
| 334 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |          |
| 336 |    |    | ✓  |    | ✓       | ✓  |    |    |     |     |          |
| 340 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |          |
| 344 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |          |
| 346 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | (✓) |          |
| 358 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |          |
| 359 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |          |
| 372 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) | 江 苏 旱    |
| 381 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |          |
| 384 |    |    |    |    |         |    |    |    |     |     | 河南水，陕西大水 |
| 385 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |          |

| 公 元 | 水  |    | 旱  |    | 发 生 地 区 |    |    |    |     |     | 备 注  |
|-----|----|----|----|----|---------|----|----|----|-----|-----|------|
|     | 大水 | 特水 | 大旱 | 特旱 | 予西      | 予北 | 予东 | 予南 | 唐白丹 | 全省  |      |
| 386 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |      |
| 399 | ✓  |    |    |    |         |    |    |    | ✓   |     |      |
| 401 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |      |
| 405 |    |    | ✓  |    |         |    |    | ✓  |     |     |      |
| 413 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |      |
| 414 |    |    |    | ✓  | ✓       | ✓  | ✓  |    |     | ✓   |      |
| 415 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| 418 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| 431 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| 461 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| 464 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |      |
| 469 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |      |
| 473 |    |    | ✓  |    |         | ✓  |    |    |     |     |      |
| 482 | ✓  |    |    |    | ✓       | ✓  | ✓  | ✓  |     | ✓   |      |
| 487 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |      |
| 491 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| 492 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| 493 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| 496 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| 500 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| 510 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| 512 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| 513 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| 516 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| 518 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |      |
| 520 | ✓  |    |    |    |         | ✓  | ✓  |    |     | (✓) |      |
| 521 | ✓  |    |    |    |         | ✓  |    |    |     |     |      |
| 522 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |      |
| 527 | ✓  |    |    |    | ✓       |    |    |    |     |     |      |
| 532 | ✓  |    |    |    | ✓       |    |    |    |     |     |      |
| 536 |    |    | ✓  |    | ✓       |    |    |    |     |     | 关中大饥 |
| 547 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | (✓) |      |
| 558 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |      |

| 公 元 | 水  |    | 旱  |    | 发 生 地 区 |    |    |    |     |     | 备 注      |
|-----|----|----|----|----|---------|----|----|----|-----|-----|----------|
|     | 大水 | 特水 | 大旱 | 特旱 | 予西      | 予北 | 予东 | 予南 | 唐白丹 | 全省  |          |
| 564 |    |    |    |    |         |    |    |    |     |     | 山东大水     |
| 568 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |          |
| 573 |    |    | ✓  |    | ✓       |    |    |    |     |     |          |
| 576 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | (✓) |          |
| 586 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |          |
| 594 |    |    | ✓  |    | ✓       |    |    |    |     |     |          |
| 598 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |          |
| 602 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |          |
| 607 |    | ✓  |    |    | ✓       | ✓  | ✓  |    |     | ✓   |          |
| 612 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |          |
| 617 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |          |
| 621 |    |    | ✓  |    | ✓       | ✓  | ✓  | ✓  | ✓   | (✓) |          |
| 627 |    |    | ✓  |    | ✓       |    |    |    |     |     |          |
| 629 | ✓  |    |    |    |         |    |    |    | ✓   |     |          |
| 633 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |          |
| 636 | ✓  |    |    |    |         |    |    | ✓  |     |     |          |
| 637 |    | ✓  |    |    | ✓       |    |    |    |     |     |          |
| 643 |    |    | ✓  |    | ✓       |    |    |    |     |     |          |
| 644 | ✓  |    |    |    | ✓       | ✓  | ✓  | ✓  | ✓   | ✓   |          |
| 653 |    |    | ✓  |    |         |    |    | ✓  |     |     | 654年予北大水 |
| 655 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |          |
| 668 |    |    | ✓  |    | ✓       |    |    |    |     |     |          |
| 677 |    |    | ✓  |    |         | ✓  |    | ✓  |     |     |          |
| 680 | ✓  |    |    |    |         | ✓  | ✓  |    |     |     |          |
| 681 | ✓  |    |    |    |         | ✓  | ✓  |    |     |     |          |
| 682 |    | ✓  |    |    | ✓       |    |    |    |     |     |          |
| 683 |    |    | ✓  |    |         | ✓  |    |    |     |     |          |
| 687 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | (✓) |          |
| 692 | ✓  |    |    |    | ✓       |    |    |    |     |     |          |
| 699 | ✓  |    |    |    | ✓       |    |    |    |     |     |          |
| 705 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |          |
| 706 | ✓  |    |    |    | ✓       |    |    |    |     |     |          |
| 707 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓   |          |

| 公 元 | 水  |    | 旱  |    | 发 生 地 区 |    |    |    |     |    | 备 注 |
|-----|----|----|----|----|---------|----|----|----|-----|----|-----|
|     | 大水 | 特水 | 大旱 | 特旱 | 予西      | 予北 | 予东 | 予南 | 唐白丹 | 全省 |     |
| 716 | ✓  |    |    |    | ✓       |    |    |    |     |    |     |
| 717 | ✓  |    |    |    | ✓       |    |    |    |     |    |     |
| 720 | ✓  |    |    |    | ✓       |    |    |    | ✓   |    |     |
| 722 |    | ✓  |    |    | ✓       |    |    |    |     |    |     |
| 722 | ✓  |    |    |    |         |    | ✓  | ✓  | ✓   | ✓  |     |
| 726 |    | ✓  |    |    |         | ✓  |    |    |     |    |     |
| 726 | ✓  |    |    |    | ✓       |    | ✓  | ✓  |     | ✓  |     |
| 727 | ✓  |    |    |    |         | ✓  |    |    | ✓   |    |     |
| 730 | ✓  |    |    |    | ✓       |    |    |    |     |    |     |
| 741 | ✓  |    |    |    | ✓       |    |    |    |     |    |     |
| 754 | ✓  |    |    |    | ✓       |    |    |    |     |    |     |
| 746 | ✓  |    |    |    | ✓       |    | ✓  |    |     |    |     |
| 766 | ✓  |    |    |    | ✓       |    |    | ✓  |     |    |     |
| 785 |    |    |    | ✓  |         | ✓  | ✓  |    |     | ✓  |     |
| 785 |    |    | ✓  |    | ✓       |    |    |    |     |    |     |
| 787 | ✓  |    |    |    | ✓       |    | ✓  | ✓  |     | ✓  |     |
| 790 |    |    | ✓  |    | ✓       | ✓  | ✓  | ✓  | ✓   | ✓  |     |
| 792 |    | ✓  |    |    |         | ✓  | ✓  | ✓  | ✓   | ✓  |     |
| 792 | ✓  |    |    |    | ✓       |    |    |    |     |    |     |
| 799 | ✓  |    |    |    |         | ✓  |    |    |     |    |     |
| 805 |    |    | ✓  |    |         | ✓  |    |    |     |    |     |
| 809 |    |    | ✓  |    |         |    |    | ✓  |     |    |     |
| 817 | ✓  |    |    |    |         | ✓  |    |    |     |    |     |
| 820 | ✓  |    |    |    |         |    | ✓  |    |     |    |     |
| 822 | ✓  |    |    |    |         |    | ✓  | ✓  |     |    |     |
| 824 | ✓  |    |    |    |         |    | ✓  |    |     |    |     |
| 827 | ✓  |    |    |    |         |    | ✓  |    |     |    |     |
| 828 | ✓  |    |    |    |         |    | ✓  |    |     |    |     |
| 830 | ✓  |    |    |    | ✓       |    | ✓  |    |     |    |     |
| 835 |    |    | ✓  |    | ✓       |    |    |    |     |    |     |
| 838 | ✓  |    |    |    | ✓       |    |    |    |     |    |     |
| 839 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓  |     |
| 858 | ✓  |    |    |    |         | ✓  |    |    |     |    |     |

| 公 元 | 水  |    | 旱  |    | 发 生 地 区 |    |    |    |     |     | 备 注    |
|-----|----|----|----|----|---------|----|----|----|-----|-----|--------|
|     | 大水 | 特水 | 大旱 | 特旱 | 予西      | 予北 | 予东 | 予南 | 唐白丹 | 全省  |        |
| 860 | ✓  |    |    |    |         |    | ✓  | ✓  |     |     | 予西局部大水 |
| 861 |    |    | ✓  |    | ✓       |    | ✓  | ✓  |     | ✓   |        |
| 862 |    |    | ✓  |    | ✓       |    |    | ✓  |     |     |        |
| 863 | ✓  |    |    |    | ✓       |    | ✓  |    |     |     |        |
| 865 | ✓  |    |    |    | ✓       |    |    |    |     |     |        |
| 868 |    |    | ✓  |    | ✓       |    |    |    |     |     |        |
| 910 | ✓  |    |    |    |         |    | ✓  |    |     |     |        |
| 924 | ✓  |    |    |    |         |    | ✓  |    |     |     |        |
| 893 |    |    | ✓  |    | ✓       | ✓  |    |    |     | (✓) |        |
| 925 |    | ✓  |    |    | ✓       |    |    |    |     |     |        |
| 925 | ✓  |    |    |    |         | ✓  | ✓  |    |     | ✓   |        |
| 931 | ✓  |    |    |    | ✓       |    |    | ✓  |     |     |        |
| 932 | ✓  |    |    |    |         |    | ✓  |    |     |     |        |
| 939 | ✓  |    |    |    | ✓       |    |    |    |     |     |        |
| 943 |    |    | ✓  |    | ✓       |    | ✓  |    |     | (✓) |        |
| 944 | ✓  |    |    |    | ✓       |    |    |    |     |     |        |
| 946 | ✓  |    |    |    |         |    | ✓  |    |     |     |        |
| 952 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |        |
| 953 | ✓  |    |    |    |         |    | ✓  |    | ✓   |     |        |
| 961 | ✓  |    |    |    |         |    |    | ✓  |     |     |        |
| 962 |    |    | ✓  |    |         | ✓  | ✓  |    |     | ✓   |        |
| 964 |    |    | ✓  |    | ✓       |    |    |    |     |     |        |
| 965 | ✓  |    |    |    | ✓       | ✓  |    |    |     |     |        |
| 968 | ✓  |    |    |    |         | ✓  | ✓  |    |     |     |        |
| 969 | ✓  |    |    |    |         | ✓  | ✓  |    |     |     |        |
| 972 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |        |
| 983 |    | ✓  |    |    | ✓       |    |    |    |     |     |        |
| 989 |    |    | ✓  |    | ✓       | ✓  | ✓  | ✓  |     | ✓   |        |
| 990 |    |    | ✓  |    |         |    | ✓  |    |     |     |        |
| 991 |    |    | ✓  |    |         |    | ✓  |    |     |     |        |
| 992 | ✓  |    |    |    | ✓       |    |    |    |     |     |        |
| 993 | ✓  |    |    |    |         | ✓  | ✓  |    |     |     |        |
| 996 | ✓  |    |    |    | ✓       |    |    |    |     |     |        |

| 公 元  | 水  |    | 旱  |    | 发 生 地 区 |    |    |    |     |     | 备 注               |
|------|----|----|----|----|---------|----|----|----|-----|-----|-------------------|
|      | 大水 | 特水 | 大旱 | 特旱 | 予西      | 予北 | 予东 | 予南 | 唐白丹 | 全省  |                   |
| 1004 |    |    | ✓  |    |         |    | ✓  |    |     |     | 予西局部大水            |
| 1007 | ✓  |    |    |    |         |    |    |    | ✓   |     |                   |
| 1014 | ✓  |    |    |    | ✓       |    |    |    |     |     |                   |
| 1020 | ✓  |    |    |    |         |    | ✓  |    |     |     |                   |
| 1024 |    |    | ✓  |    |         | ✓  | ✓  |    |     |     |                   |
| 1026 | ✓  |    |    |    | ✓       |    | ✓  |    |     |     |                   |
| 1043 |    |    | ✓  |    |         |    | ✓  |    |     |     |                   |
| 1046 |    |    | ✓  |    |         |    | ✓  |    |     |     |                   |
| 1048 | ✓  |    |    |    |         | ✓  | ✓  |    |     |     |                   |
| 1050 | ✓  |    |    |    |         |    | ✓  |    |     |     |                   |
| 1051 |    |    | ✓  |    |         |    | ✓  |    |     |     |                   |
| 1056 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓   |                   |
| 1064 | ✓  |    |    |    |         |    | ✓  |    | ✓   |     |                   |
| 1070 |    |    | ✓  |    |         | ✓  |    |    |     |     |                   |
| 1074 |    |    | ✓  |    |         |    | ✓  |    |     |     |                   |
| 1082 | ✓  |    |    |    |         | ✓  |    |    |     |     |                   |
| 1084 |    | ✓  |    |    | ✓       |    |    |    |     |     |                   |
| 1093 | ✓  |    |    |    |         | ✓  | ✓  | ✓  |     | ✓   |                   |
| 1099 | ✓  |    |    |    | ✓       | ✓  |    |    |     | ✓   |                   |
| 1107 | ✓  |    |    |    | ✓       |    |    |    |     |     |                   |
| 1110 | ✓  |    |    |    |         |    |    | ✓  |     |     |                   |
| 1118 | ✓  |    |    |    |         |    |    | ✓  |     |     |                   |
| 1137 |    |    | ✓  |    |         |    |    | ✓  |     |     |                   |
| 1142 |    |    | ✓  |    | ✓       |    |    |    |     |     |                   |
| 1152 | ✓  |    |    |    |         |    |    |    | ✓   |     | 1163年予南大水<br>汉江大水 |
| 1192 | ✓  |    |    |    |         |    |    |    | (✓) |     |                   |
| 1195 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | (✓) |                   |
| 1199 |    |    | ✓  |    | ✓       |    |    |    |     |     | 1217年南阳大水         |
| 1212 |    |    | ✓  |    | ✓       |    | ✓  |    |     |     |                   |
| 1215 |    |    | ✓  |    |         |    |    | ✓  |     |     |                   |
| 1220 | ✓  |    |    |    | ✓       |    |    |    | ✓   | ✓   |                   |
| 1248 |    |    | ✓  |    | ✓       | ✓  | ✓  | ✓  | ✓   | (✓) |                   |
| 1265 | ✓  |    |    |    |         |    | ✓  |    |     |     |                   |

| 公 元  | 水  |    | 旱  |    | 发 生 地 区 |    |    |    |     |    | 备 注       |
|------|----|----|----|----|---------|----|----|----|-----|----|-----------|
|      | 大水 | 特水 | 大旱 | 特旱 | 予西      | 予北 | 予东 | 予南 | 唐白丹 | 全省 |           |
| 1267 | ✓  |    |    |    |         |    | ✓  |    |     |    | 1320年予南大水 |
| 1282 |    |    | ✓  |    |         |    | ✓  |    |     |    |           |
| 1283 | ✓  |    |    |    | ✓       | ✓  |    |    | ✓   | ✓  |           |
| 1297 |    |    | ✓  |    |         |    |    |    | ✓   |    |           |
| 1298 | ✓  |    |    |    |         |    | ✓  |    |     |    |           |
| 1302 | ✓  |    |    |    |         |    | ✓  |    |     |    |           |
| 1303 | ✓  |    |    |    |         |    |    |    | ✓   |    |           |
| 1308 | ✓  |    |    |    |         | ✓  |    |    |     |    |           |
| 1308 |    |    | ✓  |    |         |    |    | ✓  |     |    |           |
| 1310 | ✓  |    |    |    | ✓       |    |    |    |     |    |           |
| 1319 | ✓  |    |    |    |         | ✓  | ✓  |    |     |    |           |
| 1324 | ✓  |    |    |    |         |    | ✓  |    |     |    |           |
| 1326 |    |    | ✓  |    | ✓       | ✓  |    |    |     | ✓  |           |
| 1327 |    |    | ✓  |    |         | ✓  |    |    |     |    |           |
| 1328 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓  |           |
| 1329 |    |    |    | ✓  | ✓       | ✓  | ✓  | ✓  |     | ✓  |           |
| 1330 |    |    | ✓  |    |         | ✓  |    | ✓  |     | ✓  |           |
| 1334 |    |    | ✓  |    | ✓       | ✓  | ✓  |    |     | ✓  |           |
| 1336 | ✓  |    |    |    |         |    |    |    | ✓   |    |           |
| 1337 | ✓  |    |    |    | ✓       | ✓  | ✓  |    |     | ✓  |           |
| 1340 | ✓  |    |    |    | ✓       |    |    |    |     |    |           |
| 1342 |    |    | ✓  |    |         | ✓  |    |    |     |    |           |
| 1343 | ✓  |    |    |    |         |    | ✓  |    |     |    |           |
| 1344 |    | ✓  |    |    |         |    | ✓  |    |     |    |           |
| 1344 | ✓  |    |    |    | ✓       | ✓  |    |    |     | ✓  |           |
| 1347 |    |    | ✓  |    | ✓       | ✓  |    |    |     |    |           |
| 1349 | ✓  |    |    |    |         |    | ✓  |    |     |    |           |
| 1354 | ✓  |    | ✓  |    | ✓       | ✓  |    |    |     |    |           |
| 1358 |    |    | ✓  |    |         | ✓  |    |    |     |    |           |
| 1362 |    |    | ✓  |    | ✓       |    |    |    |     |    |           |
| 1366 | ✓  |    |    |    | ✓       |    | ✓  |    |     |    |           |
| 1371 |    |    | ✓  |    | ✓       | ✓  |    |    |     |    |           |
| 1372 |    |    | ✓  |    |         |    | ✓  |    |     | ✓  |           |