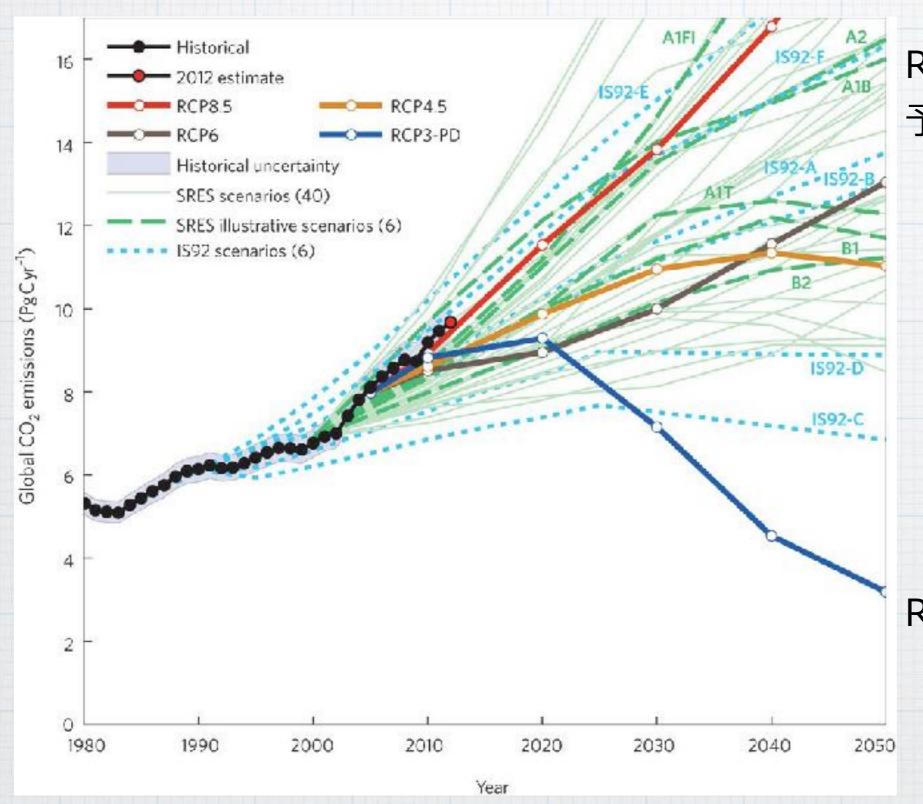
IPCC 1.5度特別報告書を読み解く

自然エネルギーネットまつもと学習会 2018年11月26日 平島 安人

現在のCO₂排出状況とRCPシナリオ



RCP8.5は4℃上昇が 予想されるシナリオ

RCP3でも2℃上昇

温室効果ガス濃度、史上最高更新

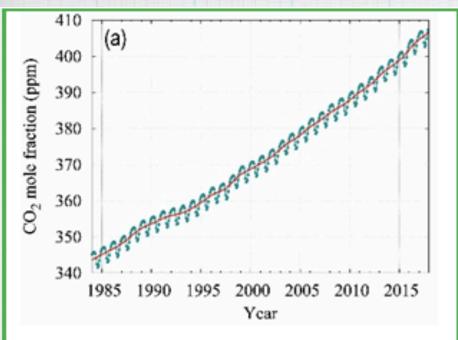


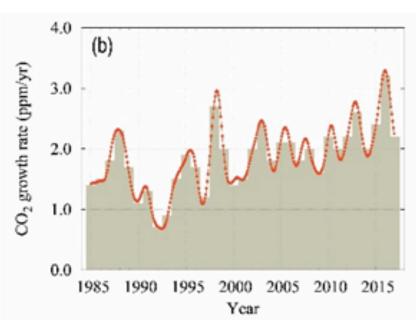
Greenhouse gas levels in atmosphere reach new record

Tags: Greenhouse gases WMO Atmosphere Climate change

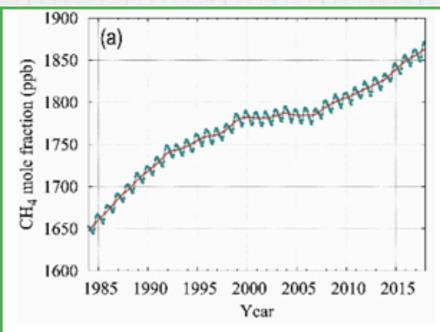
20 Published 20 November 2018

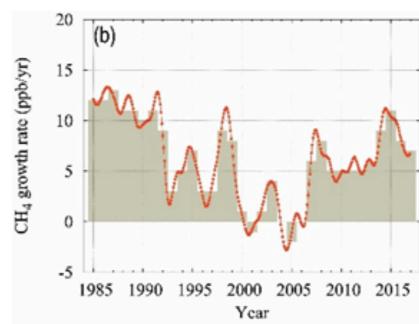
Press Release Number: 22112018



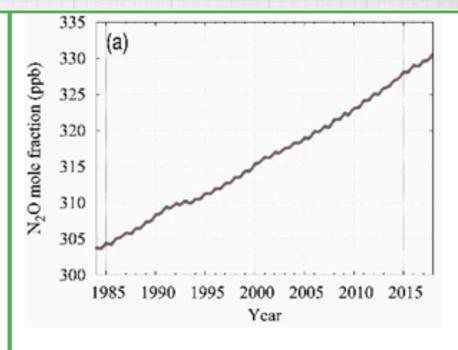


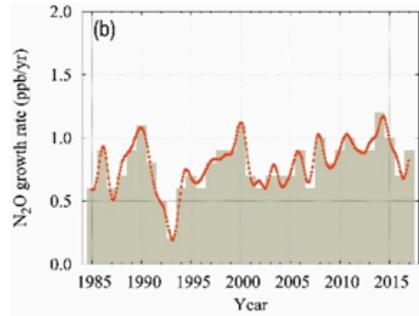
Globally averaged CO₂ mole fraction (a) and its growth rate (b) from 1984 to 2017. Increases in successive annual means are shown as the shaded columns in (b). The red line in (a) is the monthly mean with the seasonal variation removed; the blue dots and line depict the monthly averages. Observations from 129 stations have been used for this analysis.





Globally averaged CH₄ mole fraction (a) and its growth rate (b) from 1984 to 2017. Increases in successive annual means are shown as the shaded columns in (b). The red line in (a) is the monthly mean with the seasonal variation removed; the blue dots and line depict the monthly averages. Observations from 126 stations have been used for this analysis.





Globally averaged N₂O mole fraction (a) and its growth rate (b) from 1984 to 2017. Increases in successive annual means are shown as the shaded columns in (b). The red line in (a) is the monthly mean with the seasonal variation removed, in this plot it is overlapping with the blue dots and line that depict the monthly averages. Observations from 96 stations have been used for this analysis.

People Are Laughing At The Way This Teenager Explained Global Warming To Trump After His Tweet



Brutal and Extended Cold Blast could shatter ALL RECORDS - Whatever happened to Global Warming?

Translate Tweet

9:23am · 22 Nov 2018 · Twitter for iPhone

90,754 REPLIES 28,038 RETWEETS 110,832 LIKES



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「猛烈で長期化した冷たい突風が あらゆる記録を打ち破るかも 一地球温暖化はいったいどうなったんだ」



Astha Sarmah @thebuttcracker7

Replying to @realDonaldTrump

I am 54 years younger than you. I just finished high school with average marks. But even I can tell you that WEATHER IS NOT CLIMATE. If you want help understanding that, I can lend you my encyclopedia from when I was in 2nd grade. It has pictures and everything.

Translate Tweet

5:25pm · 22 Nov 2018 · Twitter for Android

259 REPLIES **3,457** RETWEETS **16,270** LIKES

「私はあなたより54歳年下、平均点で高校を卒業したばかりよ。 でも私はあなたに気象と気候は違うって教えてあげられるわ。 勉強するなら私が2年生の時から使っている百科事典を貸すわよ」

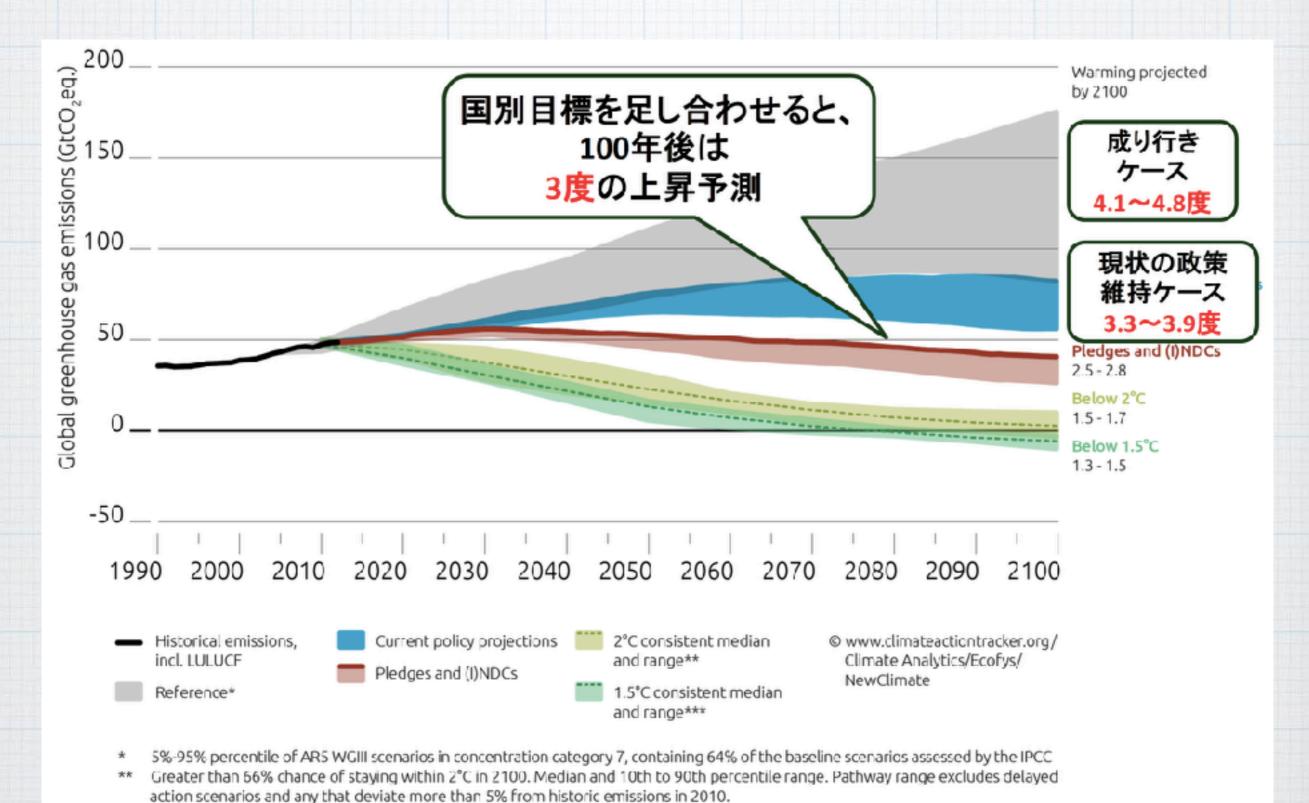
パリ協定のおさらい:何を決めたのか

- 持続可能な開発及び貧困を撲滅するための努力の文脈(筋道)において、気候変動の脅威に対する世界全体による対応強化が目的
- 単界の気温上昇を2℃より十分に低く(well below 2 degrees)抑える:2℃目標
- № 1.5℃までに抑える努力も追求する
- 今世紀後半には人間活動によるGHG排出量を実質的にせ口にする:人為起源の排出と人為起源の吸収とをバランスさせる(自然界の吸収能力ではない)

パリ協定:どのように実行するのか

- 勢 効力を発揮するのは2020年から
- 『緩和策』と「適応策」を進める
- 多 各国の義務:国別貢献目標の提出
 - NDC: Nationally Determined Contribution
 - 作成・提出・維持の義務、目標達成への国内対策の義務
 - 目標達成は義務ではない
- グローバルストックテイクの実施
- ♪ パリ協定ルールはCOP24(12月、ポーランド)で決定

国別目標 (NDC) では足りない



*** Greater than or equal to 50% chance of staying below 1.5°C in 2100. Median and 10th to 90th percentile range. Pathway range excludes delayed action scenarios and any that deviate more than 5% from historic emissions in 2010.

出典: Climate Action Tracker(2017)

グローバルストックテイクとタラノア対話

グローバルストックテイク

■ 国際社会全体の気候変動対策の進捗を5年ごとに評価し対策強化につ なげる、2023年開始

タラノア対話

- タラノア:フィジーの言葉「包摂的、参加型、透明な対話プロセス」
- 役割:促進的対話(グローバルストックテイクに先行)
- ∮ タラノア対話の進め方
 - 我々はどこにいるのか? (Where are we?)
 - どこへ行きたいのか? (Where do we want to go?)
 - どうやって行くのか? (How do we get there?)

IPCC SR15の経緯

- 2℃目標では足りないと脆弱国が強く主張
- IPCC AR5は2℃上昇まで、1.5℃の知見なし
- ・ パリ協定の決定書で、UNFCCCがIPCCに1.5℃の特別報告書執筆を要請

IPCCの役割

- Intergovernmental Panel on Climate Change
 - : 国連気候変動に関する政府間パネル
- 政策決定のために科学的知見を提供する
- IPCCの役割
 - ቇ 調査し報告する
 - 独自な調査はしない
 - 政策提言禁止、何かを迫ることをしない

IPCC報告書の位置付けと重要性

科学的知見: IPCC

国際交渉:UNFCCC

1990年 第1次評価報告書

1992年 国連環境開発会議(地球サミット)

1995年 第2次評価報告書

1994年 気候変動枠組条約発効

1997年 COP3 京都議定書採択

2001年 第3次評価報告書

2001年 COP7 マラケシュ合意

2007年 第4次評価報告書

2010年 カンクン合意

2013~14年 第5次評価報告書

2015年 COP21 パリ協定採択

2020~22年 第6次評価報告書(予定)

2023年 第1回グローバルストックテイク



Scoping

The outline is drafted and developed by experts nominated by governments and observer organizations



Government and Expert Review - 2nd Order Draft

The 2nd draft of the report and 1st draft of the Summary for Policymakers (SPM) is reviewed by governments and experts



Final draft report and SPM

Authors prepare final drafts of the report and SPM which are sent to governments



😂 images: www.ipec.ch/AC©right.pd



Approval of Outline

The Panel then approves the outline



Expert Review -1st Order Draft

Authors prepare a 1st draft which is reviewed by experts



Government review of final draft SPM

Governments review the final draft SPM in preparation for its approval

Peer reviewed and internationally available scientific technical and socio-economic literature, manuscripts made available for IPCC review and selected non-peer reviewed literature produced by other relevant institutions including industry



Nomination of authors

Governments and observer organizations nominate experts as authors



Selection of authors

Bureaux select authors



Approval & acceptance of report

Working Group/Panel approves SPMs and accepts reports



IPCC報告書 発行プロセス

- 公平で包括的
- 政策決定者向け要約 (SPM)は、IPCC総会 で、政府交渉団と議長団 が1週間にわたり一言一 句交渉し採択
- 執筆者 91名(40力国)
- 執筆貢献者 133名
- 評価文献 6,000件
- 査読者 1,113名
- ▶ コメント 42,001件

https://www.ipcc.ch/img/graphics/WP_AR6_en_web.jpg

IPCC reports are extensively reviewed





The first draft of an IPCC report is prepared by the authors based on scientific, technical and socio economic literature in scientific journals and other relevant publications. This First Order Drait is reviewed by hundreds of experts from all over the world.

January-February 2018

After the expert review of the First Order Draft, author teams prepare a Second Order Braft of the report, considering the review comments received; a first draft of the report's Summary for Policymakers (SPM) is also prepared. These drafts are subject to simultaneous review by experts and governments.

December 2018

The report feeds into the climate negotiations at COP 24

SECOND

DRAFT REVIEW

Hollowing receipt of the review comments, author teams prepare final drafts of the full report and SPM, considering review comments received. The final draft of the report is distributed to governments for a final round of written. comments on the SPM, before governments meet in plenary session to approve the SPM line by line and accept the underlying report

The report and its Summary for Policymakers is considered for approval by scientists and governments

The IPCC report on 1.5°C in numbers

Ninety-one authors from 40 countries have been involved in the assessment and writing of the Special Report on 1.5 degrees. Chapter teams comprise three Coordinating Lead Authors (CLAs) and a team. of Lead Authors, who are responsible for developing the chapter's content. Review Editors are responsible for ensuring the integrity of the review process. A further 133 Contributing Authors added their expertise to the report. The report has over 6,000 cited references to the scientific literature.

Authors



Coordinating lead authors 14 8888888888888

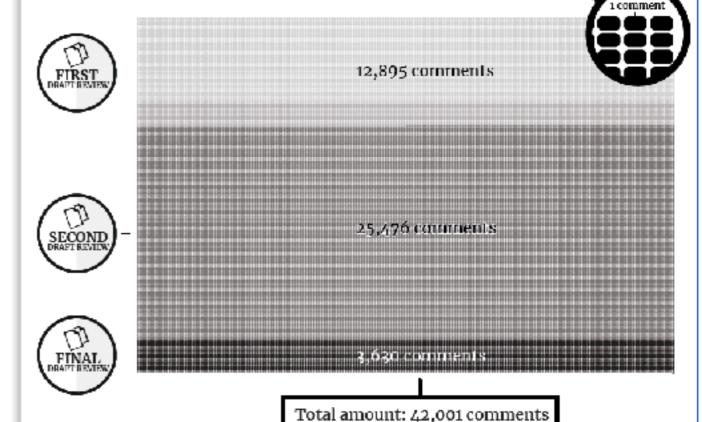
Lead authors 60

Review editors 17 8888888888888 ጸጸጸጸ

All comments submitted through this review process are addressed by authors, and a written response is provided to each comment.

Review comments

All comments are made public after the report has been published.





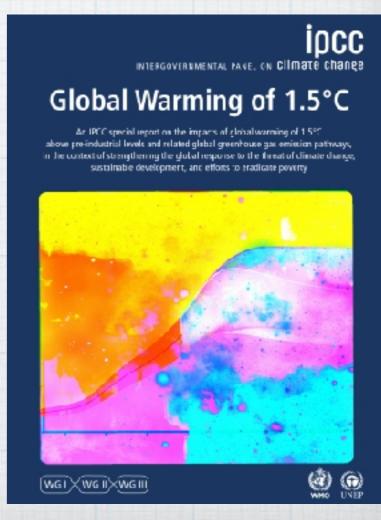


IPCC 1.5℃特別報告書

- Special Report on Global Warming of 1.5 °C (SR15)
- GLOBAL WARMING OF 1.5 °C: an IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global

response to the threat of climate change, sustainable development, and efforts to eradicate poverty

1.5℃の地球温暖化:気候変動の脅威への世界的 な対応の強化、持続可能な開発及び貧困撲滅への 努力の文脈(筋道)における、工業化以前の水準 から 1.5℃の地球温暖化による影響及び関連する 地球全体での温室効果ガス(GHG)排出経路に 関するIPCC 特別報告書



IPCC SR15の構成

- **序文**
- セクションA1.5℃の地球温暖化を理解すること
- ・ セクションB 予想される気候変動、その影響の可能性とリスク
- セクションC1.5℃の地球温暖化と整合する排出経路とシステムの転換
- ・ セクションD 持続可能な開発の概念および貧困撲滅の努力において世界的な対 応を強化すること