



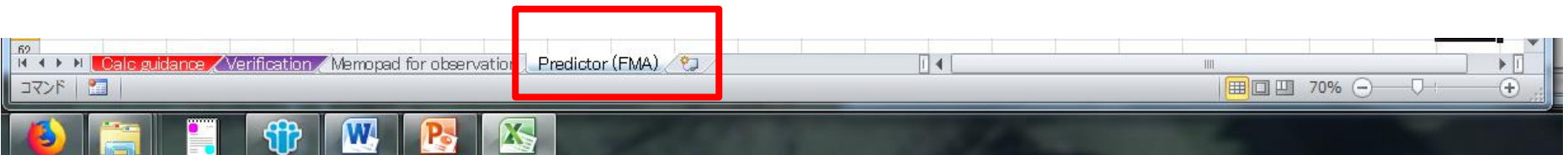
How to apply this “Producing
Guidance” Excel tool to an
operational climate prediction

In this training seminar, we used these following excel tools to produce guidance for coming February to April 2018

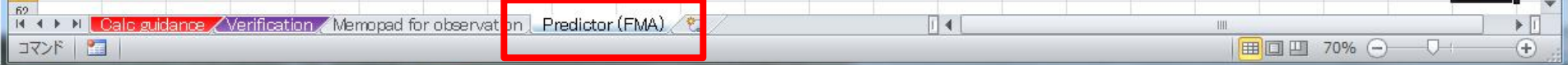
 ProducingGuidance_precipitation.xlsx	2018/01/26 14:49	Microsoft Excel ...	69 KB
 ProducingGuidance_temperature.xlsx	2018/01/31 9:02	Microsoft Excel ...	101 KB

What should we do to generate another 3-month after getting back to your country for operational use?

The point is to modify the indices in “Predictor (XXX)” tab for another 3-month



Now, I would like to explain how to change that indices step by step



“Predictor (XXX)” tab consists of two parts,

[1] Hindcast 3-month mean indices

These are available via TCC website

[2] Forecast 3-month mean indices

ProducingGuidance_precipitation.xlsx - Micro

ファイル ホーム 挿入 ページレイアウト 数式 データ 校閲 表示 開発 アドイン

ABC スpell チェック リサーチ チェック 類義語 辞典 翻訳 言語 コメントの表示/非表示 コメントの削除 前へ 次へ 全てのコメントの表示 インクの表示 シートの保護 ブックの保護 共有 範囲の編集 変更履歴 変更

W61

YEAR	NINO3 SS	NINO3.4	NINOWES	IOBW SS	WIO SST	EIO SST	IOBW RAI	WIO RAIN	EIO RAIN	SAMOI R/	WNP RAIN	SEAsia R/	MC RA
1981	-0.51	-0.33	-0.09	-0.19	-0.21	-0.22	-0.03	-0.02	0.1	0.28	0.1	0.18	0.
1982	-0.03	-0.04	-0.09	-0.15	-0.21	-0.25	-0.03	-0.01	0.12	0.06	-0.15	-0.18	0.
1983	2.19	1.77	-0.41	0.23	0.01	0.03	0.28	0.19	-0.66	-1.58	-1.28	-1.75	-
1984	-1.1	-1.25	0.12	-0.43	-0.48	-0.42	0.27	-0.05	0.69	0.79	0.99	1.44	-0.
1985	-1.35	-1.33	-0.01	-0.5	-0.68	-0.41	0.12	-0.2	0.84	0.91	0.43	0.66	0.
1986	-0.56	-0.39	-0.13	-0.26	-0.34	-0.34	-0.07	0	-0.1	0.3	0.39	0.54	0.
1987	0.83	0.88	-0.39	-0.09	-0.15	-0.17	0.06	0.09	-0.3	-0.91	-0.93	-1.26	0.
1988	-0.45	-0.29	-0.13	0.12	0.28	0.29	0.27	0.2	0.88	0.28	-0.32	-0.39	0.
1989	-1.6	-1.61	0.31	-0.35	-0.36	-0.23	0.01	-0.1	0.81	1.28	1.33	1.78	-0.
1990	-0.11	-0.03	-0.01	0.01	0	-0.07	0.01	-0.09	-0.24	-0.3	-0.27	-0.54	-0.
1991	0.1	0.16	-0.18	0.09	0.08	0.05	-0.07	-0.02	-0.15	-0.21	-0.23	-0.44	0.
1992	1.31	1.42	-0.52	0.2	0.02	0.12	-0.11	-0.06	-0.81	-1.45	-1.22	-1.67	-0.
1993	-0.18	-0.14	-0.5	-0.16	0.01	-0.1	-0.13	0.13	-0.13	-0.34	-0.45	-0.6	0.
1994	-0.48	-0.33	-0.24	-0.04	0.16	-0.04	0.04	0.01	0.45	0.06	-0.26	-0.44	0.
1995	0.89	0.9	-0.36	0.09	0.04	-0.02	0.05	0.04	-0.6	-0.93	-0.94	-1.25	-0.
1996	-0.13	-0.32	0.31	-0.15	-0.02	-0.14	-0.02	0.02	0.28	0.78	0.9	1.19	-0.
1997	-0.05	-0.13	0	-0.13	-0.25	-0.07	-0.01	-0.01	-0.13	-0.03	0.31	0.22	-0.
1998	2.59	2.02	-0.35	0.68	0.58	0.42	0.35	0.2	-0.85	-1.73	-1.35	-1.9	-1.
1999	-0.85	-1.03	0.38	-0.21	-0.05	-0.05	-0.35	-0.09	0.43	1.21	0.95	1.42	0.
2000	-1.16	-1.15	0.35	-0.27	-0.22	-0.31	-0.11	-0.16	0.28	0.86	0.88	1.26	0.
2001	-0.15	-0.11	0.35	-0.11	-0.1	-0.01	-0.34	-0.06	-0.11	0.71	0.95	1.34	0.
2002	0.25	0.19	0.2	0.25	0.33	0.26	-0.06	-0.07	-0.36	0.1	0.45	0.58	-0.
2003	0.64	0.75	-0.04	0.42	0.37	0.46	0.28	0.12	-0.08	-0.59	-0.79	-1.07	0.
2004	0.39	0.43	0.17	0.22	0.31	0.22	0.01	-0.01	0.01	-0.07	-0.09	-0.06	0.
2005	0.57	0.64	0.04	0.28	0.27	0.23	0.01	-0.02	-0.49	-0.56	-0.37	-0.69	-0.
2006	-0.38	-0.43	0.39	-0.14	-0.15	0	-0.3	-0.18	0.23	0.95	0.94	1.4	0.
2007	0.66	0.62	0.16	0.27	0.16	0.21	0.03	0	-0.22	-0.41	-0.48	-0.54	0.
2008	-1.64	-1.55	0.31	-0.19	-0.13	-0.05	0.06	-0.03	0.46	0.88	0.88	1.27	0.
2009	-0.81	-0.61	0.35	0.04	0.19	0.17	-0.1	-0.01	0.2	0.57	0.35	0.61	0.
2010	1.14	1.29	0.02	0.48	0.54	0.44	-0.1	0.16	-0.56	-0.89	-0.71	-1.11	-0.

UNIT K K K K K K mm/day mm/day mm/day mm/day mm/day mm/day

Forecast 3-month mean indices for February - April 2018 (Initial month: January 2018)
 Paste the data of the selected predictors to the sheet "Calc_guidance."
 Forecast Indices are available on the TCC website (registration is required; <http://ds.data.jma.go.jp/tcc/too/gpv/indices/>)

INDEX	NINO3 SS	NINO3.4	NINOWES	IOBW SS	WIO SST	EIO SST	IOBW RAI	WIO RAIN	EIO RAIN	SAMOI R/	WNP RAIN	SEAsia R/	MC RA
UNIT	K	K	K	K	K	K	mm/day	mm/day	mm/day	mm/day	mm/day	mm/day	mm/day
2018	-0.7	-0.67	0.54	0	0.05	0.09	-0.3	-0.02	0.24	0.97	1.42	2.2	0.

[1] How to find "Hindcast 3-month mean indices" from TCC website


Tokyo Climate Center
 WMO Regional Climate Center in RA II (Asia)
 

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HOME > Ensemble Model Prediction

JMA's Ensemble Prediction System (Products of GPC Tokyo)

JMA operates the ensemble prediction system of an atmospheric global circulation model (AGCM) for one-month prediction and atmosphere-ocean coupled global circulation model (CGCM) for three-month and warm/cold season prediction. Ensemble prediction products, verification charts and description of the ensemble prediction system are available on this page.

Notice	Main Products
<ul style="list-style-type: none"> 29 September 2017 Announcement: Due to an update of our account management policy for products of GPC Tokyo, an account inactive over 3 years may be deleted after notification. 14 March 2017 Announcement: Launch of the JMA's Global Ensemble Prediction System for one-month prediction 17 June 2015 The SST index time-series forecast product of Three-month Model Prediction is available. 29 May 2015 JMA's Seasonal Ensemble Prediction System will be upgraded next month. The new model description about JMA/MRI-CPS2 and hindcast gridded data are available. Please refer to the "TCC News No. 40" for details. 28 August 2014 	<div style="border: 1px solid gray; padding: 5px;"> <p>One-month Prediction</p> <ul style="list-style-type: none"> One-month Prediction (25 Jan 2018) Z500, T850 & SLP (Northern Hemisphere) (25 Jan 2018) Stream Function, Velocity Potential & Surface Air Temperature (60N-60S) (25 Jan 2018) Verification (28 Jan 2018) Hindcast Verification NEW One-month Probabilistic Forecasts at station points </div> <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>Three-month Prediction</p> <ul style="list-style-type: none"> Three-month Prediction (16 Jan 2018) Z500, T850 & SLP (Northern Hemisphere) (16 Jan 2018) Stream Function, Velocity Potential & Surface Air Temperature (60N-60S) (16 Jan 2018) Verification (05 Jan 2018) Hindcast Verification (JMA/MRI-CPS2) Probabilistic Forecast and Verification (16 Jan 2018) SST Index Time-series Forecast (16 Jan 2018) </div> <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>Warm/Cold Season Prediction</p> <ul style="list-style-type: none"> Warm/Cold Season Prediction (18 Oct 2017) Z500, T850 & SLP (Northern Hemisphere) (18 Oct 2017) Stream Function, Velocity Potential & Surface Air Temperature (60N-60S) (18 Oct 2017) Verification (05 Sep 2017) Hindcast Verification (JMA/MRI-CPS2) Probabilistic Forecast and Verification (18 Oct 2017) </div> <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>Model Descriptions</p> </div>
	<div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>Monthly Discussion on Seasonal Climate Outlooks <small>last updated : 24 Jan 2018</small></p> <p>This product is intended to assist NMHSs in the Asia-Pacific region in interpreting GPC Tokyo's three-month prediction and warm/cold season prediction products.</p> </div> <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>Forecast Products in Support of Early Warnings for Extreme Weather Events <small>last updated : 24 Jan 2018</small></p> <p>Early warning products for extreme weather events covering the period up to two weeks ahead. (Only registered NMHSs can access this page.)</p> <ul style="list-style-type: none"> Application If you have any questions about ID and/or password, please e-mail to: tcc@met.kishou.go.jp </div> <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>Download GPC Long-range Forecast (LRF) Products</p> <ul style="list-style-type: none"> Download Gridded data File. (Only registered NMHSs can access this page.) Application If you have any questions about ID and/or password, please e-mail to: tcc@met.kishou.go.jp </div>

ID and Password for TCC NWP products such as...

- Gridded data file
- Statistical Downscaling
- Early Warnings for Extreme Weather Events (2 weeks ahead)

ID : _____


PW : _____

If you have any questions, please feel free to contact tcc@met.kishou.go.jp

ID and PW on a red striped sheet



[1] How to find “Hindcast 3-month mean indices” from TCC website

 **気象庁**
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Home | World Climate | Climate System Monitoring | El Niño Monitoring | NWP Model Prediction | Global Warming | Climate in Japan | Training

HOME > Ensemble Model Prediction > Download Gridded Data File

Download Gridded Data File

Notice

- 14 March 2017
Announcement: [Launch of the JMA's Global Ensemble Prediction System for one-month prediction](#)
- 17 June 2015
JMA's new Seasonal Ensemble Prediction System (JMA/MRI-CPS2) is implemented. The operational gridded data and indices are available.
- 29 May 2015
JMA's Seasonal Ensemble Prediction System will be upgraded next month. The hindcast gridded data for JMA/MRI-CPS2 is available.

Main Products

NWP Model Prediction

- Global EPS for one-month prediction (22 Nov 2017)
 - Daily Statistics
 - All Members
 - Systematic Errors
- Seasonal EPS (12 Nov 2017)
 - Statistics
 - All Members
 - Indices**
 - Systematic Errors

Hindcast Gridded Data

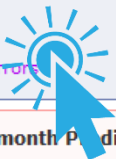
- Global EPS for one-month prediction **NEW**
 - Daily data
- Seasonal EPS
 - Monthly mean data

Animation of One-month Prediction

- Seven-days running mean (23 Nov 2017)

Tips

- Q&A





[1] How to find “Hindcast 3-month mean indices” from TCC website

Home	World Climate	Climate System Monitoring	El Niño Monitoring	NWP Model Prediction	Global Warming	Climate in Japan	Training Module	Press release	Links
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HOME > Ensemble Model Prediction > Download Gridded Data File > Indices and Gridded Data

Indices and Gridded Data

Introduction

TCC provides a set of indices and gridded forecast data which can be of use for producing three-month and warm/cold season forecasts. With the use of historical climate data (monthly/three-month mean temperature and/or precipitation), you can find which indices have good correlation with the observation data in your country and produce statistical guidance for three-month and warm/cold season forecasts.

Before downloading these data, it is recommended to read through a lecture materials used for the TCC Training Seminar.

Indices and gridded forecast data

> Download Indices and Gridded forecast data ([Definition of Indices](#))

***** NOTICE *****

The provision of gridded forecast data named 'GPV_*.csv' was discontinued in February 2014. Instead, users can get a text dump (csv) at a specific point/in a bounding box from a GRIB2 file which is available on the material used for the TCC Training Seminar in 2013).

- Operational forecast (201506-present)
 - > For Three-month Forecast (updated every month)
 - > For Warm/Cold Season Forecast (updated in February, March and April for Warm Season (June - August), in September and October)
- The data made from old model is here:
 - > For Three-month Forecast

(201002-201505)

> For Warm/Cold Season Forecast

(201002-201505)

- Hindcast(JMA/MRI-CPS2) indices (each initial month)
 - > For Three-month Forecast
 - > For Warm/Cold Season Forecast



Tutorial materials for the TCC training seminar

- 2013

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Name

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- [October/](#)
- [November/](#)
- [December/](#)

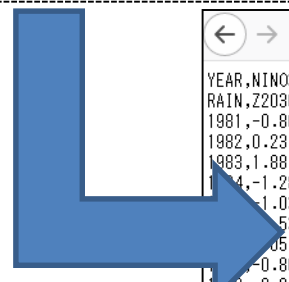


[1] How to find “Hindcast 3-month mean indices” from TCC website

Index of /indices/hindcast_indices/3-mon/February

Name

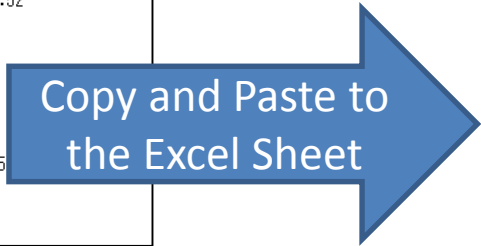
- [Parent Directory](#)
- [Indices for March-April-May \(Initial: February\)](#)
- [Indices for March \(Initial: February\)](#)
- [Indices for April \(Initial: February\)](#)
- [Indices for May \(Initial: February\)](#)



ds.data.jma.go.jp/tcc/tcc/gpv/indices/hindcast_indices/3-mon/February/Ind

YEAR	NINO3	SST	NINO3.4	NINOWEST	SST	IOBW	SST	WIO	SST	EIO	SST	IOBW	RAIN	WIO	RAIN	EIO	RAIN	SAMOI	RAIN	WNP	RAIN	SEAsia	RAIN	MC	RAIN	DL
1981	-0.80	-0.73	-0.10	-0.21	-0.10	-0.23	0.03	0.17	0.43	0.24	0.56	0.59	0.05	-2.36	-5.19	-6.96	-6.93	-3.52	-0.34	-0.35	-0.51					
1982	0.23	0.31	-0.14	-0.16	-0.15	-0.12	0.10	0.10	-0.24	-0.11	0.04	0.24	-0.10	0.73	-4.37	-8.09	-8.58	-7.90	-0.31	-0.29	-0.17					
1983	1.88	1.31	-0.37	0.22	-0.02	0.20	0.27	0.09	-0.80	-1.47	-1.53	-1.87	0.34	3.19	-6.00	-14.35	-9.73	-6.93	-0.25	-0.15	0.76					
1984	-1.28	-1.22	0.09	-0.43	-0.54	-0.38	-0.04	-0.03	0.36	0.67	0.75	0.90	0.44	-3.00	-3.55	0.84	3.22	-1.37	-0.15	-0.18	-0.53					
1985	-0.80	-0.95	0.02	-0.38	-0.44	-0.37	-0.35	-0.16	0.14	1.07	1.31	1.80	-0.26	-2.67	-6.09	-5.29	-14.77	-15.25	-0.41	-0.45	-0.75					
1986	0.53	-0.40	-0.12	-0.33	-0.45	-0.30	0.10	-0.12	0.11	0.44	0.51	0.58	0.20	-1.66	-8.71	-11.91	-12.91	-7.20	-0.54	-0.48	-0.54					
1987	0.05	1.05	-0.22	0.07	-0.07	0.11	0.29	0.19	-0.33	-1.12	-1.32	-1.66	0.03	5.87	-8.36	-16.01	-15.92	-8.48	-0.43	-0.37	0.23					
1988	-0.80	-0.47	-0.01	0.22	0.23	0.21	0.24	-0.07	0.62	0.22	-0.43	-0.52	0.74	-1.05	4.85	5.42	1.67	-6.06	0.13	0.00	0.25					
1989	-0.94	-1.06	0.25	-0.36	-0.35	-0.45	-0.29	-0.22	0.13	1.08	1.42	1.74	-0.58	-3.50	-9.17	-2.12	4.93	5.32	-0.16	-0.21	-0.87					
1990	0.42	0.38	0.00	0.05	0.10	0.05	0.06	-0.08	-0.18	-0.16	-0.23	-0.26	-0.12	1.54	-0.88	2.49	8.71	4.19	0.04	-0.04	-0.03					
1991	0.19	0.26	-0.30	0.04	0.12	0.03	0.17	0.18	0.25	-0.38	-0.86	-1.25	0.58	-0.05	-0.15	-4.13	-4.16	-3.15	-0.09	-0.05	0.14					
1992	1.42	1.35	-0.41	-0.13	0.04	0.10	-0.02	0.03	-0.48	-1.47	-1.62	-2.05	0.18	6.97	-1.43	-3.47	-5.21	-8.06	-0.01	-0.05	0.45					
1993	0.36	0.33	-0.50	-0.18	-0.04	-0.20	0.12	0.11	-0.08	-0.43	-0.80	-0.95	-0.08	1.05	-7.75	-11.30	-7.44	-1.85	-0.34	-0.20	-0.23					
1994	-0.49	-0.18	-0.18	-0.12	-0.01	-0.04	0.11	0.06	0.27	0.24	0.11	0.15	0.16	-0.99	-1.16	-1.83	-2.30	-3.63	-0.13	-0.17	-0.17					
1995	0.72	0.65	-0.24	0.06	-0.00	0.03	0.03	-0.04	-0.12	-0.75	-1.02	-1.24	0.34	2.91	1.22	-3.55	-5.15	-3.41	-0.06	-0.00	0.35					
1996	-0.25	-0.34	0.11	-0.06	0.05	-0.07	-0.01	0.11	-0.11	0.28	0.62	0.74	0.13	-2.37	-2.02	1.88	1.19	-1.61	0.03	-0.01	-0.20					
1997	0.12	0.01	-0.07	-0.16	-0.13	-0.10	-0.29	0.22	-0.25	-0.21	0.41	0.02	-1.10	-0.07	-4.41	-1.03	4.28	-0.16	-0.08	-0.08	-0.33					
1998	2.05	1.36	-0.26	0.58	0.46	0.54	0.45	0.31	-0.77	-1.84	-1.77	-2.23	-0.64	2.83	10.06	3.39	1.67	1.28	0.27	0.28	1.23					
1999	-1.10	-1.22	0.36	-0.26	-0.02	-0.11	-0.31	0.05	0.39	1.32	1.43	2.13	-0.10	-3.42	2.09	10.82	5.45	-1.51	0.30	0.17	-0.54					
2000	-1.03	-1.05	0.37	-0.24	-0.17	-0.30	-0.37	-0.29	0.06	1.11	1.60	1.99	-0.38	-3.38	-1.31	7.65	13.05	10.83	0.16	0.11	-0.52					
2001	-0.13	-0.08	0.24	-0.07	-0.10	-0.06	-0.19	-0.07	0.10	0.47	0.47	0.89	0.00	-1.64	2.48	9.49	3.11	-2.85	0.25	0.20	-0.13					
2002	0.32	0.35	0.13	0.27	0.17	0.21	-0.02	0.02	-0.25	-0.07	0.12	0.08	-0.64	1.12	8.23	8.67	6.61	5.82	0.23	0.19	0.28					
2003	0.05	0.25	-0.01	0.27	0.28	0.25	0.18	0.17	0.33	-0.26	-0.68	-0.85	0.21	1.47	7.18	1.86	-1.56	1.44	0.15	0.17	0.47					
2004	0.40	0.43	0.27	0.25	0.27	0.24	0.09	0.10	0.06	-0.03	-0.22	-0.29	0.19	0.36	7.97	5.87	7.39	13.58	0.38	0.45	0.45					
2005	0.24	0.43	0.04	0.27	0.22	0.26	0.09	-0.10	-0.15	-0.50	-0.55	-0.88	-0.23	0.99	8.45	5.26	4.64	4.91	0.19	0.23	0.46					
2006	-0.47	-0.48	0.31	-0.01	0.04	0.05	-0.10	-0.19	0.23	0.55	0.79	0.28	-2.59	1.14	4.25	6.29	10.15	0.16	0.17	-0.10						
2007	-0.11	-0.08	0.04	0.23	0.09	0.06	0.05	-0.25	-0.29	-0.32	-0.47	-0.56	0.79	0.07	5.35	6.30	7.11	7.51	0.24	0.25	0.39					
2008	-1.12	-1.16	0.22	-0.20	-0.15	-0.17	-0.33	-0.21	0.57	1.23	1.20	1.60	-0.19	-3.31	1.55	12.58	13.28	6.47	0.45	0.37	-0.5					
2009	-0.26	-0.20	0.33	-0.01	0.16	-0.04	-0.34	-0.18	-0.32	0.67	1.22	1.39	-0.33	-1.82	2.51	6.09	6.53	8.51	0.17	0.18	-0.16					
2010	0.90	1.00	0.15	0.54	0.50	0.60	0.26	0.11	0.11	-0.45	-0.80	-1.05	0.11	4.77	7.27	-2.63	-4.45	2.95	0.15	0.20	0.90					

unit,K,K,K,K,K,K,mm/day,mm/day,mm/day,mm/day,mm/day,mm/day,mm/day,mm/day,m,m,m,m,K,K,K,K





[2] Forecast 3-month mean indices

HOME > Ensemble Model Prediction > Download Gridded Data File > Indices and Gridded Data

Indices and Gridded Data

Introduction

TCC provides a set of indices and gridded forecast data which can be of use for producing three-month and warm/cold season forecast (monthly/three-month mean temperature and/or precipitation), you can find which indices have good correlation with the observation data in your country for warm/cold season forecasts. Before downloading these data, it is recommended to read through a lecture materials used for the TCC Training Seminar.

Indices and gridded forecast data

> Download Indices and Gridded forecast data ([Definition of Indices](#))

***** NOTICE *****

The provision of gridded forecast data named 'GPV_*.csv' was discontinued in February 2014. Instead, users can get a text dump (csv) at a specific point/in a bounding box from a GRIB2 file which is available on the material used for the TCC Training Seminar in 2013).

- Operational forecast (201506-present)
 - For Three-month Forecast (updated every month)
 - For Warm/Cold Season Forecast (updated in February, March and April for Warm Season (June - August), in September and October)
- The data made from old model is here:
 - For Three-month Forecast
 - (201002-201505)
 - For Warm/Cold Season Forecast
 - (201002-201505)
 - Hindcast(JMA/MRI-CPS2) indices (each initial month)
 - For Three-month Forecast
 - For Warm/Cold Season Forecast

Tutorial materials for the TCC training seminar

- 2013

[page top](#)

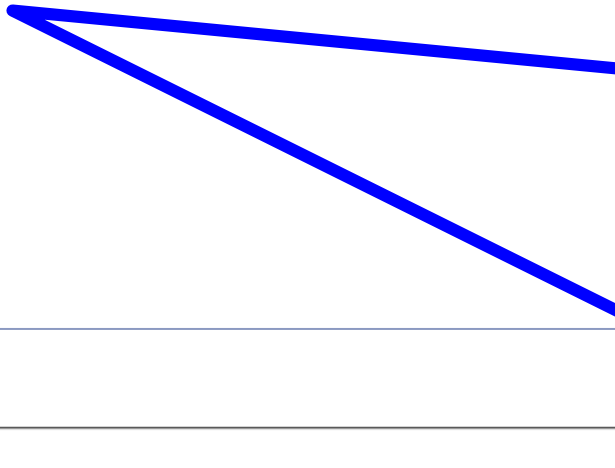
Index of /in

Name

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- [201712/](#)
- [201711/](#)
- [201710/](#)
- [201709/](#)
- [201708/](#)
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- [201706/](#)
- [201705/](#)
- [201704/](#)
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- [201702/](#)
- [201701/](#)
- [201612/](#)
- [201611/](#)

In this training seminar, we used "201801" dataset for seasonal prediction. In case for the prediction for 3-month from March to May, we use "201802" (not available now) instead.



[2] Forecast 3-month mean indices

Index of /indices/gpv_indices/3-mon/201801

[Name](#)

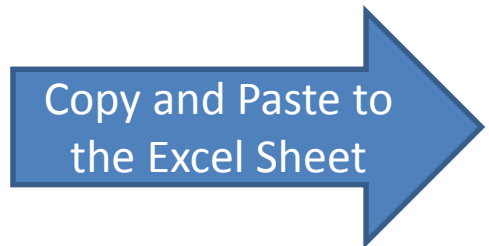
[Parent Directory](#)

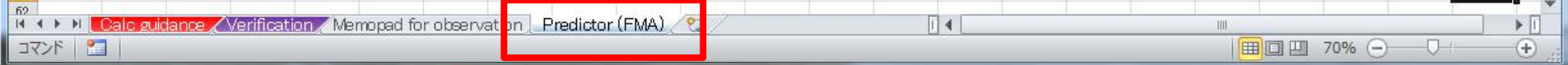
[INDEX_201801.csv](#)



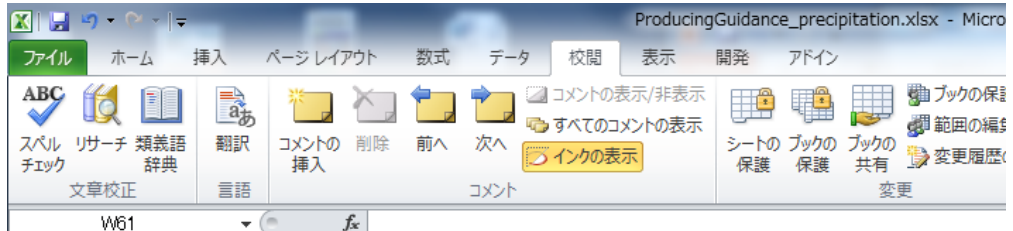
ds.data.jma.go.jp/tcc/tcc/gpv/indices/gpv_indices/3-mon/201801/INDEX_201801.csv

INDEX	,NIN03SST	,NIN04SST	,NIN05SST	,IOBW SST	,WIO SST	,EIO SST	,IOBWRAIN	,WIO RAIN	,EIO RAIN	,SAMOIRAI	,WNP RAIN	,SEAsiaRA	,MC RAIN	,DL RAIN	,Z5002030						
,Z5003040	,Z5004050	,Z5005060	,THICKMID	,THICKNH	,THICKTRO	,NIN03.4SST															
UNIT	K	K	K	K	K	mm/day	mm/day	mm/day	mm/day	mm/day	mm/day	mm/day	mm/day	mm/day	K						
FMA	-0.70	0.54	0.00	0.05	0.09	-0.30	-0.02	0.24	0.97	1.42	2.20	0.03	-3.05	12.23	19.85	16.42	12.47	0.69	0.61	-0.07	-0.67
February	-0.80	0.65	-0.05	-0.02	0.12	-0.53	-0.07	0.35	1.36	1.78	2.90	0.26	-3.42	17.22	26.00	22.23	14.66	0.88	0.72	0.02	-0.78
March	-0.63	0.53	0.01	0.05	0.10	-0.11	0.00	0.26	0.91	1.30	1.96	0.03	-2.97	10.66	17.64	13.17	8.62	0.62	0.55	-0.12	-0.67
April	-0.67	0.43	0.04	0.12	0.07	-0.27	-0.01	0.12	0.68	1.22	1.78	-0.19	-2.78	9.18	16.40	14.36	14.41	0.58	0.57	-0.10	-0.58





Now, we can change hindcast indices and forecast indices for another 3-month

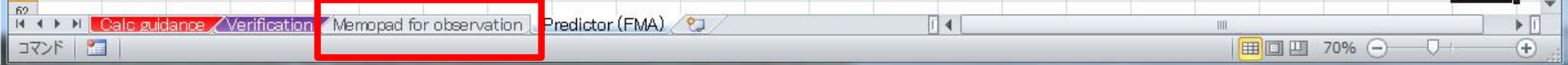


[1] Hindcast 3-month mean indices for March to May

YEAR	NINO3 SS	NINO3.4	NINOWES	IOBW SS	WIO SST	EIO SST	IOBW RAI	WIO RAIN	EIO RAIN	SAMOI R/	WNP RAIN	SEAAsia R/	MC RA
1981	-0.61	-0.33	-0.09	-0.19	-0.21	-0.22	-0.03	-0.02	0.1	0.28	0.1	0.18	0.
1982	-0.03	-0.04	-0.09	-0.15	-0.21	-0.25	-0.03	-0.01	0.12	0.06	-0.15	-0.18	0.
1983	2.19	1.77	-0.41	0.23	0.01	0.03	0.28	0.19	-0.66	-1.58	-1.28	-1.75	-
1984	-1.1	-1.25	0.12	-0.43	-0.48	-0.42	0.27	-0.05	0.69	0.79	0.99	1.44	-0.
1985	1.35	-1.13	-0.11	-0.5	-0.68	-0.41	0.12	0.2	0.84	0.91	0.43	0.66	0.
1986	0.56	-0.3	0.3	-0.2	-0.2	-0.34	-0.7	0	-0.1	0.3	0.39	0.54	0.
1987	0.83	0.3	-0.49	0.09	0.15	0.17	0.06	0.7	-0.3	-0.91	-0.93	-1.26	0.
1988	0.45	-0.3	-0.3	0.1	0.09	0.23	0.27	0.2	0.88	0.26	-0.32	-0.39	0.
1989	-1.0	-1.61	0.31	-0.35	-0.36	-0.23	0.01	-0.1	0.81	1.28	1.33	1.78	-0.
1990	-0.11	-0.03	-0.01	0.01	0	-0.07	0.01	-0.09	-0.24	-0.3	-0.27	-0.54	-0.
1991	0.1	0.16	-0.18	0.09	0.08	0.05	-0.07	-0.02	-0.15	2.2	-0.23	-0.44	0.
1992	-1.31	1.12	0.2	0.2	0.2	0.12	0.1	-0.06	0.11	0.45	-0.22	-1.05	-0.
1993	-1.1	0.4	0.5	0.16	0.01	0.1	0.13	-0.13	-0.3	-0.3	-0.4	0.6	0.
1994	-1.4	-0.3	0.24	-0.04	0.16	-0.04	0.01	0.01	0.5	0.0	-0.2	-0.4	0.
1995	0.89	0.9	-0.36	0.09	0.04	-0.02	0.05	0.04	-0.6	-0.93	-0.94	-1.25	-0.
1996	-0.13	-0.32	0.31	-0.15	-0.02	-0.14	-0.02	0.02	0.28	0.78	0.9	1.19	-0.
1997	-0.05	-0.13	0	-0.13	-0.25	-0.07	-0.01	-0.01	-0.13	-0.03	0.31	0.22	-0.
1998	2.59	2.0	-0.5	0.68	0.58	0.42	0.35	0.3	0.85	-1.73	-1.35	-1.9	-1.
1999	-0.35	-1.0	0.8	0.2	-0.05	0.05	0.35	-0.9	0.43	1.1	0.95	1.42	0.
2000	-0.16	-1.1	0.5	0.2	-0.22	-0.31	1.1	-0.8	0.28	0.8	0.88	1.26	0.
2001	-0.15	-0.11	0.35	-0.11	-0.1	-0.01	-0.34	-0.06	-0.11	0.7	0.95	1.34	0.
2002	0.25	0.19	0.2	0.25	0.33	0.26	-0.06	-0.07	-0.36	0.1	0.45	0.58	-0.
2003	0.64	0.75	-0.04	0.42	0.37	0.46	0.28	0.12	-0.08	-0.59	-0.79	-1.07	0.
2004	0.39	0.43	0.17	0.22	0.31	0.22	0.01	-0.01	0.01	-0.07	-0.09	-0.06	0.
2005	0.57	0.64	0.04	0.28	0.27	0.23	0.01	-0.02	-0.49	-0.56	-0.37	-0.69	-0.
2006	-0.38	-0.43	0.39	-0.14	-0.15	0	-0.3	-0.18	0.23	0.95	0.94	1.4	0.
2007	0.66	0.62	0.16	0.27	0.16	0.21	0.03	0	-0.22	-0.41	-0.48	-0.54	0.
2008	-1.64	-1.55	0.31	-0.19	-0.13	-0.05	0.06	-0.03	0.46	0.88	0.88	1.27	0.
2009	-0.81	-0.61	0.35	0.04	0.19	0.17	-0.1	-0.01	0.2	0.57	0.35	0.61	0.
2010	1.14	1.29	0.02	0.48	0.54	0.44	-0.1	0.16	-0.56	-0.89	-0.71	-1.11	-0.

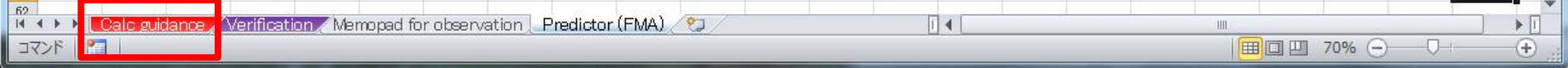
[2] Forecast: March to May (not available now)

INDEX	NINO3 SS	NINO3.4	NINOWES	IOBW SS	WIO SST	EIO SST	IOBW RAI	WIO RAIN	EIO RAIN	SAMOI R/	WNP RAIN	SEAAsia R/	MC RA
UNIT	K	K	K	K	K	K	mm/day	mm/day	mm/day	mm/day	mm/day	mm/day	mm/day
198			0.5		0.05	0.09	-0.3	-0.02	0.24	0.97	1.42	2.2	0.



Next, do not forget to change “target Forecast month” in the “Memopad for observation” tab

		Forecast Month: From 3 To 5			
Year	Month	Monthly Precip. <small>Set blank for missing</small>	3-month Precip.	30-year Time Series of 3-month Precipitation <small>Paste the below data to the sheet "Calc"</small>	
1980	1			1981	554.2 <small>Paste values only,</small>
1980	2			1982	1108
1980	3			1983	971.6
1980	4			1984	696.8
1980	5			1985	438.8
1980	6			1986	546.2
1980	7			1987	972
1980	8			1988	238.2
1980	9			1989	1020.8
1980	10			1990	389.9
1980	11			1991	147.1
1980	12			1992	1336.9
1981	1	0		1993	523.7
1981	2	11.8		1994	216.2
1981	3	123.9	135.7	1995	129.5
1981	4	94.2	229.9	1996	625.7
1981	5	336.1	554.2	1997	468.8
1981	6	106.4	536.7	1998	627.6
1981	7	317.2	759.7	1999	378.3
1981	8	101.2	524.8	2000	796.9
1981	9	381.9	800.3	2001	351.5
1981	10	111.6	594.7	2002	526.7
1981	11	69.8	563.3	2003	372.1
1981	12	5.4	186.8	2004	445.9
1982	1	16	91.2	2005	593.5
1982	2	23.1	44.5	2006	679.1
1982	3	30.6	69.7	2007	441.4
1982	4	310	363.7	2008	504.1
1982	5	767.4	1108	2009	474.6
1982	6	205.9	1283.3	2010	273
1982	7	296.2	1269.5		
1982	8	872	1374.1		



Please find better predictors for individual 3-month. Do not use same predictors for another periods. Imagine the correlation and regression coefficients are different from season to season.

Year	Observation (Precipitation)	Rank	Predictor 1	Predictor 2	Predictor 3	Forecast (guidance)	square error	Probabilistic F
1981	554.2	12	-0.51	-0.02	-0.25	4.829	0.001	34%
1982	1108	2	0.03	-0.01	-0.29	4.906	0.746	29%
1983	971.6	5	2.19	0.19	-0.26	4.845	0.545	33%
1984	696.8	7	-1.1	-0.05	-0.12	4.730	0.166	40%
1985	438.8	21	-1.35	-0.2	-0.48	5.170	0.352	16%
1986	546.2	13	-0.56	0	-0.36	4.835	0.000	33%
1987	972	4	0.83	0.09	-0.39	4.892	0.478	30%
1988	238.2	39	-0.45	0.2	0.04	4.252	0.104	71%
1989	1020.8	3	-1.6	-0.1	-0.05	4.715	0.878	41%
1990	389.9	44	-0.11	-0.09	0.12	4.851	0.166	32%
1991	147.1	34	0.1	-0.02	0.05	4.778	1.679	37%
1992	1336.9	6	1.31	-0.06	-0.31	5.232	0.664	14%
1993	523.7	5	-0.18	0.13	-0.31	4.609	0.030	48%
1994	216.2	28	3.835	-0.45	-0.45	4.872	1.076	31%
1995	129.5	30	3.99	0.04	-0.11	4.864	2.221	32%
1996	625.7	10	0.13	0.02	0.1	4.636	0.134	46%
1997	468.8	18	-0.05	-0.1	-0.13	4.823	0.029	34%
1998	627.6	9	2.59	0.21	0.2	4.657	0.122	45%
1999	378.3	23	-0.85	-0.05	0.05	4.648	0.056	45%
2000	796.9	3	-1.16	-0.16	0.1	4.813	0.250	35%
2001	351.5	22	-0.15	-0.06	0.36	4.665	0.112	44%
2002	526.7	4	0.25	-0.07	0.13	4.864	0.005	32%
2003	372.1	24	0.64	0.12	0.18	4.519	0.016	54%
2004	445.9	26	0.39	0.22	0.22	4.721	0.016	41%
2005	593.5	11	0.57	-0.02	0.13	4.814	0.015	35%
2006	679.1	8	-1.08	-0.18	0.21	4.944	0.026	27%
2007	441.4	25	0.66	0.29	0.29	4.709	0.016	41%
2008	504.1	20	-1.64	-0.05	0.65	4.221	0.267	73%
2009	474.6	17	-0.81	-0.1	0.32	4.478	0.036	57%
2010	273	26	1.14	0.16	0.06	4.578	0.264	50%
This year						4.747	507.64	39%
Normal	561.64	4.749	0.062	-0.154	0.000			
The lower limit of near normal	440.10	4.580						
The upper limit of near normal	609.60	4.969						
Single Regression	slope		0.04	-0.93	-0.48			
	intercept		4.75	4.75	4.75			
	Correlation		0.062	-0.154	-0.210			
Multi Regression	slope		0.16	-2.01	-0.50			
	intercept		4.75					
	Correlation		0.335					

That's it.