AO 91 (Rev. 08/09) Criminal Complaint

UNITED STATES DISTRICT COURT
for the
Eastern District of Virginia

MAR 7 2016

CLE... U.S. ...
ALEXANDRIA, ...
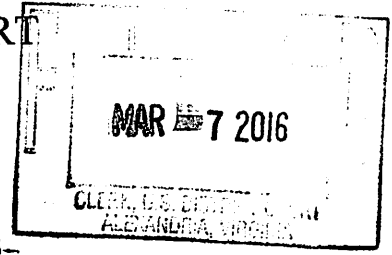
United States of America v. Mohan Nirala _Defendant(s)_	))))))) Case No. 1:16mj105–

CRIMINAL COMPLAINT

I, the complainant in this case, state that the following is true to the best of my knowledge and belief.

On or about the date(s) of __March 2013 to September 2013__ in the county of _____Fairfax_____ in the

__Eastern__ District of _____Virginia_____ , the defendant(s) violated:

Code Section	_Offense Description_
18 U.S.C.§ 793(e)	Unauthorized retention of defense information

This criminal complaint is based on these facts:
Please see the attached affidavit

☑ Continued on the attached sheet.

Reviewed by AUSA/SAUSA:

AUSA Ronald L. Walutes, Jr.

Complainant's signature

FBI SA Kevin McDonald

Printed name and title

Sworn to before me and signed in my presence.

Date: ____03/07/2016____

/s/
Theresa Carroll Buchanan
United States Magistrate Judge
Judge's signature

City and state: _____Alexandria, VA_____

The Honorable Theresa C. Buchanan
Printed name and title

IN THE UNITED STATES DISTRICT COURT FOR THE

EASTERN DISTRICT OF VIRGINIA

Alexandria Division

UNITED STATES OF AMERICA	)	
	)	CRIMINAL NO. 1:16CR124 (GBL)
v.	)	
	)	
MOHAN L. NIRALA,	)	
	)	

PROTECTIVE ORDER

This matter comes before the Court upon the Government's Motion for Protective Order to prevent the unauthorized disclosure or dissemination of classified national security information and documents which will be reviewed by or made available to, or are otherwise in the possession of, the defendants and/or defense counsel in this case.

Pursuant to the authority granted under Section 3 of the Classified Information Procedures Act, 18 U.S.C. App. III (1994) (CIPA); the Security Procedures Established Pursuant to Pub. L. 96-456, 94 Stat. 2025, by the Chief Justice of the United States for the Protection of Classified Information (reprinted following CIPA Section 9); Rules 16(d) and 57 of the Federal Rules of Criminal Procedure; the general supervisory authority of the Court; and in order to protect the national security,

IT IS ORDERED:

1.   The Court finds that this case will involve classified national security information, the storage, handling and control of which requires special security precautions, and access to which requires a security clearance and a "need to know."

2.   The purpose of this Order is to establish the procedures that must be followed by all defense counsel of record, their respective defendant(s), all other counsel involved in this case, any Court personnel, and all other individuals who receive access to classified national security information or documents in connection with this case.

3.   The procedures set forth in this Protective Order and the Classified Information Procedures Act will apply to all pretrial, trial, post-trial, and appellate aspects concerning this case, and may be modified from time to time by further order of the Court acting under Fed. R. Crim. P. 16(d), Sections 3 and 9 of CIPA, and its inherent supervisory authority to ensure a fair and expeditious trial.

4.   As used herein, the terms "classified national security information and documents,"

"classified information" and "classified documents" refer to:

a. any classified document or information which has been classified by any Executive Branch agency in the interests of national security or pursuant to Executive Order 13526 or its predecessor Orders as "CONFIDENTIAL," "SECRET," or "TOP SECRET," or additionally controlled as "SENSITIVE COMPARTMENTED INFORMATION (SCI)," or any information contained in such document;

b. any document or information, regardless of its physical form or characteristics, now or formerly in the possession of a private party, which has been derived from United States government information that was classified, regardless whether such document or information has subsequently been classified by the government pursuant to Executive Order 13526 or its predecessor Orders as "CONFIDENTIAL," "SECRET," or "TOP SECRET" or additionally controlled as "SENSITIVE COMPARTMENTED INFORMATION (SCI)";

c. verbal classified information known to the defendants or defense counsel; or,

d. any document and information as to which the defendants or defense counsel have been notified orally or in writing that such documents or information contains classified information.

5. The words "documents" or "information" shall include, but are not limited to, all written or printed matter of any kind, formal or informal, including originals, conforming copies and non-conforming copies (whether different from the original by reason of notation made on such copies or otherwise), and further include, but are not limited to:

a. papers; correspondence; memoranda; notes; letters; reports; summaries; photographs; maps; charts and graphs; interoffice and intra-office communications; notations of any sort concerning conversations, meetings, or other communications; bulletins; teletypes, telegrams, and telefacsimiles; invoices; worksheets; and drafts, alterations, modifications, changes and amendments of any kind to the foregoing;

b. graphic or oral records or representations of any kind, including, but not limited to, photographs, charts, graphs, microfiche, microfilm, videotapes, sound recordings of any kind, and motion pictures;

c. electronic, mechanical or electric records of any kind, including, but not limited to, tapes, cassettes, disks, recordings, films, typewriter ribbons, word processing or other computer tapes or disks, and all manner of

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electronic data processing storage; and,

d.   information acquired orally.

6.   All classified documents, and information contained therein, shall remain classified unless the documents bear a clear indication that they have been declassified by the agency or department that is the originating agency of the document or the information contained therein (hereinafter, the "originating agency").

7.   As used herein, the term "declassified information" refers to any and all classified documents, materials and information that have been marked as declassified by the Originating Agency and provided by the Government to defense counsel as part of discovery in this case.   Pursuant to Rule 16(d) of the Federal Rules of Criminal Procedure, all declassified information shall be governed by the following provisions:

a.   The Defense shall not disclose any declassified information to any person other than the defendant, witnesses which they may be interviewing or preparing for trial, and attorneys, law clerks, secretaries, translators, technical and other experts, and investigators, involved in the representation of the defendant in this case.

b.   The declassified information is now and will forever remain the property of the United States Government.   At the conclusion of this case the defense counsel, defense counsel employees, and anyone else who obtains declassified information through discovery from the Government will return the declassified information and all copies thereof to the Government.

c.   The Defense will store the declassified information in a secure place and will use reasonable care to ensure that the declassified information is not disclosed to third persons, including the media, in violation of this agreement.

d.   The Government will mark the declassified information with the inscription "U.S. Government Property; May Not Be Used Without U.S. Government Permission."   If the defense makes any further copies of any of the declassified information, the inscription must be included on the copies. Further, if the Defense makes use of the declassified information in a filing or other document, the filing or document must include the inscription.

e.   If the Defense releases custody of any of the declassified information, or their copies, summaries or transcripts thereof, to any person described in subparagraph (a), the defense shall provide such recipients with copies of this Order, and advise them that such information is the property of the

United States Government and that any unauthorized use may constitute a violation of law or contempt of court.

f.   Nothing herein constitutes a waiver of any right of the defendant, nor does anything herein restrict in any way the right of the defense to use the declassified information in connection with any pleading or proceeding in this case.

g.   The above provisions in no way modify or alter the obligation of all counsel to handle classified information in a manner consistent with CIPA and such protective orders as may be entered by this Court in this case.

8.   "Access to classified information" means having access to, reviewing, reading, learning, or otherwise coming to know in any manner any classified information.

9.   "Secure area" shall mean a physical facility accredited for the storage, handling, and control of classified information.

10.   In accordance with the provisions of CIPA and the Security Procedures, the Court designates Maura L. Peterson as Classified Information Security Officer for this case, and Daniel O. Hartenstine, Joan B. Kennedy, Michael P. Macisso, Carli V. Rodriguez-Feo, Harry J. Rucker, W. Scooter Slade, Debra M. Guerrero-Randall and Matthew S. Juntz as Alternate Classified Information Security Officers, for the purpose of providing security arrangements necessary to protect from unauthorized disclosure any classified documents or information to be made available in connection with this case. Defense counsel shall seek guidance from the Classified Information Security Officer with regard to appropriate storage, handling, transmittal, and use of classified documents and information.

11.   The Court has been advised that the following government attorneys working on this case, Ronald L. Walutes, Jr. and Casey Arrowood, have the requisite Security clearances to have access to the classified documents and information that relate to this case.   All references to government attorneys, or attorneys for the government, as used in this Order, refer only to the attorneys listed in this paragraph.

12.   No defendant, counsel for a defendant, employee of counsel for a defendant, or defense witness shall have access to any classified information involved in this case unless that person shall first have:

a.   received the necessary security clearance as determined by the Department of Justice Security Officer working in conjunction with the CISO, and approval from the Court (as set forth below in paragraph 13), or the Government for access to the particular classified information in question; approval by the Court shall not occur but upon a showing to the Court's satisfaction of a "need to know" the particular classified information; and

   b.   signed the Memorandum of Understanding ("MOU") in the form attached
        hereto agreeing to comply with the terms of this Order.

13.   Subject to the provisions of paragraph 12, the following attorney for the defense
      and her approved employees (collectively referred to herein as "the defense"), shall
      be given access to classified documents and information as required by the
      government's discovery obligations and otherwise as necessary to prepare for
      proceedings in this case: Whitney E.C. Minter.   Any additional person whose
      assistance the defense reasonably requires may only have access to classified
      information in this case after obtaining from the Court -- with prior notice to the
      government -- an approval for access to the appropriate level of classification on a
      need to know basis, and after satisfying the other requirements described in this
      Order for access to classified information.   The substitution, departure, or removal
      for any reason from this case of defense counselor anyone associated with the
      defense as an employee or witness or otherwise, shall not release that person from
      the provisions of this order or the Memorandum of Understanding executed in
      connection with this Order.

14.   Unless already holding an appropriate security clearance, and approved for access
      to classified information in this case, for the purpose of establishing security
      clearances necessary for access to classified information that may be involved in
      this case, Standard Form 86 ("Security Investigation Data for Sensitive Position"),
      attached releases, and full fingerprints shall be completed and submitted to the
      Classified Information Security Officer forthwith by defense counsel, all persons
      whose assistance the defense reasonably requires, and by such Court personnel as
      the Court requires for its assistance.   The Classified Information Security Officer
      shall take all reasonable steps to process all security clearance applications.

15.   The Classified Information Security Officer shall arrange for an appropriately
      approved secure area for the use of the defense.   The Classified Information
      Security Officer shall establish procedures to assure that the secure area is
      accessible to the defense, and the defendants (if such access should be determined
      by the Court to be necessary) and authorized witnesses accompanied by defense
      counsel, during normal business hours and at other times on reasonable request as
      approved by the Classified Information Security Officer in consultation with the
      United States Marshals Service.   The secure area shall contain a separate working
      area for the defense, and will be outfitted with any secure office equipment
      requested by the defense that is reasonable and necessary to the preparation of the
      defendant's defense in this case.   The Classified Information Security Officer, in
      consultation with defense counsel, shall establish procedures to assure that the
      secure area may be maintained and operated in the most efficient manner consistent
      with the protection of classified information.   No documents containing classified
      information may be removed from this secure area unless authorized by the
      Classified Information Security Officer.   The Classified Information Security

Officer shall not reveal to the government the content of any conversations she or he may hear among the defense, nor reveal the nature of documents being reviewed by them, or the work generated by them.   In addition, the presence of the Classified Information Security Officer shall not operate as a waiver of, limit, or otherwise render inapplicable, the attorney-client privilege.

16.   If it is necessary for a defendant to review or discuss classified matters, or otherwise meet with defense counsel, in the Secure Area, this will only occur under appropriate supervision to ensure that the defendant does not escape, attempt to escape, cause physical injury to himself or others, or remove, copy, alter, or destroy classified information, or obtain access to classified information the defendant is not entitled to review, and to ensure that the defendant does not use the opportunity to review the classified materials to circumvent any applicable security restrictions, including the Special Administrative Measures imposed by the Bureau of Prisons, other prison regulations, and the other orders of this Court governing discovery in this case.

17.   Access to Classified Information.   Defense counsel and her employees, and the defendant (if such access should be determined by the Court to be necessary) and defense witnesses when accompanied by defense counsel, shall have access to classified information only as follows:

a.   All classified information produced by the government to the defense, in discovery or otherwise, and all classified information possessed, created, or maintained by the defense, shall be stored, maintained, and used only in the secure area established by the Classified Information Security Officer.

b.   The defense shall have free access to the classified information made available to them in the secure area, and shall be allowed to take notes and prepare documents with respect to those materials.

c.   No person, including the defense, shall copy or reproduce any classified information in any form, except with the approval of the Classified Information Security Officer or in accordance with the procedures established by the Classified Information Security Officer for the operation of the secure area.

d.   All documents prepared by the defense (including without limitation, pleadings or other documents intended for filing with the Court) that do or may contain classified information, shall be transcribed, recorded, typed, duplicated, copied, or otherwise prepared only by persons who have received an appropriate approval for access to classified information, and in the secure area on approved word processing equipment and in accordance with the procedures approved by the Classified Information Security Officer.   All such documents and any associated materials (such as notes,

drafts, copies, typewriter ribbons, magnetic recordings, exhibits) containing classified information shall be maintained in the secure area unless and until the Classified Information Security Officer determines that those documents or associated materials are unclassified in their entirety. None of these materials shall be disclosed to counsel for the government.

e.   The defense shall discuss classified information only within the secure area or in another area authorized by the Classified Information Security Officer, and shall not discuss classified information over any standard commercial telephone instrument or office intercommunication system.

f.   The defense shall not disclose, without prior approval of the Court, the contents of any classified documents or information to any person not authorized pursuant to this Order, except the Court, Court personnel, and the attorneys for the government, who have been identified by the Classified Information Security Officer as having the appropriate clearances and the need to know that information. Counsel for the government shall be given an opportunity to be heard in response to any defense request for disclosure to a person not named in this Order. Any person approved by the Court for disclosure under this paragraph shall be required to obtain the appropriate security clearance, to sign and submit to the Court the Memorandum of Understanding appended to this Order, and to comply with all terms and conditions of this Order. If preparation of the defense requires that Classified information be disclosed to persons not named in this Order, the Classified Information Security Officer shall promptly seek to obtain security clearances for them at the request of defense counsel.

18.   Procedures for the public disclosure of classified information by the defense shall be those provided in Sections 5 and 6 of CIPA. No classified information may be disclosed by the defense except:

a.   to the Court, court personnel, and government attorneys and their agents and employees identified by the Classified Information Security Officer as holding proper approvals for access to classified information;

b.   to representatives of the agency or department originating the classified information who have been identified by the Classified Information Security Officer as holding proper security clearances and having the need to know the classified information;

c.   in accordance with the procedures of CIPA and the procedures established by the Classified Information Security Officer; and

d.   to persons who have been authorized to have access to classified

information pursuant to this Order or to CIPA. To facilitate the defense filing of notices required under Section 5 of CIPA, the Classified Information Security Officer shall make arrangements with the appropriate agencies for a determination of the classification level, if any, of materials or information either within the possession of the defense or about which the defense has knowledge and which the defense intends to use in any way at any pretrial proceeding or at trial. Nothing submitted by the defense to the Classified Information Security Officer pursuant to this paragraph shall be made available to counsel for the government unless so ordered by the Court, or so designated by the defense. Any and all items which are classified shall be listed in the defendant's Section 5 notice.

19.	Any unauthorized disclosure of classified information may constitute violations of United States criminal laws. In addition, any violation of the terms of this Order shall be immediately brought to the attention of the Court and may result in a charge of contempt of Court and possible referral for criminal prosecution. Any breach of this Order will also result in the termination of a person's access to classified information. Persons subject to this order are advised that direct or indirect unauthorized disclosure, retention, or negligent handling of classified documents or information could cause serious damage, and in some cases exceptionally grave damage, to the national security of the United States or may be used to the advantage of a foreign nation against the interests of the United States. This Order is to ensure that those authorized by the Order to receive classified information will never divulge the classified information disclosed to them to anyone who is not now authorized to receive it, without prior written authorization from the originating agency and in conformity with this Order.

20.	Unless otherwise ordered by the Court, with due notice to the government, all classified information to which the defendant, defense counsel, defense counsel employees, or any defense witness has access in this case is now and will remain the property of the government. The defendant, defense counsel, defense counsel employees, and defense witnesses shall return all classified information in their possession obtained through discovery from the government in this case, or for which they are responsible because of access to classified information t upon demand of the Classified Information Security Officer. The notes, summaries, and other documents prepared by the defense that do or may contain classified information shall remain at all times in the custody of the Classified Information Security Officer for the duration of this case. At the conclusion of this case, all such notes, summaries, and other documents are to be destroyed by the Classified Information Security Officer in the presence of defense counsel if so requested.

21.	A copy of this Order shall be issued forthwith to counsel for the defendants, who shall be responsible for advising the defendants, defense counsel employees, and defense witnesses of the contents of this Order. The defendants, defense counsel, defense counsel employees, and defense witnesses to be provided access to

classified information shall execute the Memorandum of Understanding appended to this Order, and defense counsel shall file executed originals with the Court and the Classified Information Security Officer and serve executed original of such document upon the government. The execution and filing of the Memorandum of Understanding is a condition precedent for the defendant, defense counsel, defense counsel employees, and defense witnesses to have access to classified information.

22. Until further order of this Court, any motion, memorandum, or other document filed by the Defense that defense counsel knows, or has reason to believe, contains classified information in whole or in part, or any document the proper classification of which defense counsel is unsure, shall be filed under seal with the Court through the Classified Information Security Officer or an appropriately cleared designee. Pleadings filed under seal with the Classified Information Security Officer or his designee shall be marked "Filed In Camera and Under Seal with the Classified Information Security Officer" and shall include in the introductory paragraph a statement that the item is being filed under seal pursuant to this Order, but need not be accompanied by a separate motion to seal. The date and time of physical submission to the Classified Information Security Officer or his designee shall be considered as the date and time of court filing, and should occur no later than 4:00 p.m. The Classified Information Security Officer shall promptly examine the document and, in consultation with representatives of the appropriate Government agencies, determine whether the document contains classified information. If the Classified Information Security Officer determines that the document contains classified information, he or she shall ensure that the classified portions of the document, and only those portions, are marked with the appropriate classification marking and that the document remains under seal. All portions of any document filed by the Defense that do not contain classified information shall immediately be unsealed by the Classified Information Security Officer and placed in the public record by defense counsel. The Classified Information Security Officer shall make arrangements for prompt delivery under seal to the Court and counsel for the Government any document to be filed by the Defense that contains classified information. At the time of physical submission to the Classified Information Security Officer or his designee, defense counsel shall file on the public record in the CM/ECF system a notice of filing, which will serve to notify the Court that a classified filing has been made. This notice shall contain only the case caption and the unclassified title of the filing.

23. Any document filed by the Government containing classified information shall be filed under seal with the Court through the Classified Information Security Officer or an appropriately cleared designee. Pleadings filed under seal with the Classified Information Security Officer or his designee shall be "Filed In Camera and Under Seal with the Classified Information Security Officer" and shall include in the introductory paragraph a statement that the item is being filed under seal pursuant to this Order, but need not be accompanied by a separate motion to seal. The date and time of physical submission to the Classified Information Security Officer or

his designee shall be considered the date and time of filing, and should occur no later than 4:00pm. The Classified Information Security Officer shall make arrangements for prompt delivery under seal to the Court and defense counsel document to be filed by the Government that contains classified information. At the time of physical submission to the Classified Information Security Officer or his designee, the Government shall file on the public record in the CM/ECF system a notice of filing, which will serve to notify the Court that a classified filing has been made. This notice shall contain only the case caption and the unclassified title of the filing.

ORDERED this _____ day of June, 2016, at Alexandria, Virginia.

                                              /s/
                              Gerald Bruce Lee
                              United States District Judge

                              Gerald Bruce Lee
                              United States District Judge

IN THE UNITED STATES DISTRICT COURT FOR THE

EASTERN DISTRICT OF VIRGINIA

Alexandria Division

UNITED STATES OF AMERICA	)	
	)	
v.	)	Criminal No. 1:16CR124
	)	
MOHAN L. NIRALA,	)	
Defendant.	)	

ORDER

Upon the motion of the defendant, Mohan L. Nirala, by and through counsel, and with the agreement of the government, by and through its counsel, it is hereby,

I. Discovery and Inspection

ORDERED pursuant to FED. R. CRIM. P. 16(a), that no later than seven calendar days before trial, unless for good cause shown:

1. The government shall disclose to the defendant and make available for inspection, copying, or photographing: any relevant written or recorded statements made by the defendant, or copies thereof, within the possession, custody, or control of the government, the existence of which is known, or by the exercise of due diligence may become known, to the attorney for the government; that portion of any written record containing the substance of any relevant oral statement made by the defendant whether before or after arrest in response to interrogation by any person then known to the defendant to be a government agent; recorded testimony of the defendant before a grand jury which relates to the offense charged; and the substance of any other relevant oral statement made by the defendant whether before or after arrest in response to

interrogation by any person then known by the defendant to be a government agent if the government intends to use that statement at trial.

2. The government shall furnish to the defendant such copy of his prior criminal record, if any, as is within the possession, custody, or control of the government, the existence of which is known, or by the exercise of due diligence may become known, to the attorney for the government.

3. The government shall permit the defendant to inspect and copy or photograph books, papers, documents, data, photographs, tangible objects, buildings or places, or copies or portions thereof, which are within the possession, custody or control of the government, and which are material to the preparation of his defense or are intended for use by the government as evidence in chief at the trial, or were obtained from or belong to the defendant.

4. The government shall permit the defendant to inspect and copy or photograph any results or reports of physical or mental examinations, and of scientific tests or experiments, or copies thereof, which are within the possession, custody, or control of the government, the existence of which is known, or by the exercise of due diligence may become known to the attorney for the government, and which are material to the preparation of the defense or are intended for use by the government as evidence in chief at the trial.

It is further ORDERED that

5. The government shall disclose to the defendant no later than ten business days before trial, a written summary of testimony the government intends to use under Rules 702, 703, or 705, FEDERAL RULES OF EVIDENCE, at trial, unless the expert testimony is to be offered in response to a previously-noticed expert of a defendant, in which case the disclosure pursuant to this paragraph must be provided not later than five business days prior to trial. This summary

shall describe the witnesses' opinions, the bases and reasons therefor, and the witnesses' qualifications. In an appropriate case, and for good cause shown, either party may move the Court for an Order requesting earlier or later disclosure of expert witness notice and summaries.

It is further ORDERED pursuant to FED. R. CRIM. P. 16(b), that upon government compliance with the foregoing,

6. The defendant shall permit the government to inspect and copy or photograph books, papers, documents, data, photographs, tangible objects, or copies or portions thereof, which the defendant intends to use in the defendant's case-in-chief at trial.

7. The defendant shall permit the government to inspect and copy or photograph any results or reports of physical or mental examination and of scientific test or experiments made in connection with the particular case, or copies thereof, within the possession or control of the defendant, which the defendant intends use in the defendant's case-in-chief at trial or which were prepared by a witness whom the defendant intends to call at the trial when the results or reports relate to his testimony.

8. The defendant shall disclose to the government no later than ten business days before trial, a written summary of testimony the defendant intends to use under Rules 702, 703, and 705, FEDERAL RULES OF EVIDENCE, as evidence at trial unless the expert testimony is to be offered in response to a previously-noticed expert of the government, in which case the disclosure pursuant to this paragraph must be provided not later than five business days prior to trial. This summary shall describe the witnesses' opinions, the bases and reasons therefor, and the witnesses' qualifications. In an appropriate case, and for good cause shown, either party may move the Court for an Order requesting earlier or later disclosure of expert witness notice and summaries.

II. FEDERAL RULE OF EVIDENCE 404(b)

It is further ORDERED that, no later than seven calendar days before trial, the government shall provide notice to the defendant, in accordance with FED. R. EVID. 404(b), of the general nature of any evidence of other crimes, wrongs, or acts of defendant which it intends to introduce at trial, except that, upon motion of the government and for good cause shown, the court may excuse such pretrial notice.

III. Brady Material

It is further ORDERED that the government shall comply with its obligations to produce promptly exculpatory material as required by Brady v. Maryland, 373 U.S. 83 (1963) and United States v. Agurs, 427 U.S. 97 (1976).

IV. Jencks/Giglio Materials

It is further ORDERED that, no later than five calendar days before trial, the government shall produce to the defendant the Jencks Act and Giglio materials for the witnesses who will testify in the government's case in chief.

Counsel for the defendant may disclose the contents of said Jencks Act and Giglio materials to his client, but may not provide his client with said documents or reproductions thereof.

At the request of the government and consistent with the ethical responsibilities of defense counsel, all Jencks Act, Giglio materials and reproductions thereof shall be returned to the United States Attorney's Office forthwith at the conclusion of the litigation of the case.

It is further ORDERED pursuant to FED. R. CRIM. P. 26.2, that no later than five calendar days prior to trial, the defendant, by and through his counsel, shall produce to the government the statements of any witness, other than the defendant, who will testify on behalf of the defendant.

V. Notice of Alibi

It is further ORDERED pursuant to FED. R. CRIM. P. 12.1 that, no later than 20 calendar days before trial, the defendant, by and through counsel, shall comply with Rule 12.1(a) if the defendant intends to offer a defense of alibi, and further that the defendant and the government shall comply with Rules 12.1(b) and (c) within the time period set out in those rules, except upon motion of the parties and for good cause shown.

VI. Stipulations

It is further ORDERED that the parties shall file proposed stipulations with the Court no later than three business days before trial. Additional stipulations may be submitted thereafter by the parties upon approval by the Court.

/s/
Gerald Bruce Lee
United States District Judge

_____
Gerald Bruce Lee
United States District Judge

Date: 6/8/16
Alexandria, Virginia

We ask for this:

Dana J. Boente
United States Attorney

Whitney E.C. Minter
Counsel for Defendant

By: _____
Ronald L. Walutes, Jr.
Assistant United States Attorney

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division

UNITED STATES OF AMERICA,	)	
	)	
v.	)	**Docket No. 1:16CR124**
	)	
MOHAN NIRALA,	)	
	)	
Defendant.	)	

DEFENDANT'S NOTICE OF FILING

The defendant, by and through his attorneys, has this day filed the attached Memorandums

of Understanding from Whitney Minter and Todd Richman.

> Respectfully submitted,
> MOHAN NIRALA
> By Counsel,
> Geremy C. Kamens,
> Federal Public Defender
>
> By: _____/s/_____
> Whitney E.C. Minter
> Va. Bar # 47193
> Assistant Federal Public Defender
> Attorney for Mr. Nirala
> 1650 King Street, Suite 500
> Alexandria, Virginia   22314
> (703) 600-0855 (telephone)
> (703) 600-0880 (facsimile)
> Whitney_Minter@fd.org (email)

CERTIFICATE OF SERVICE

I hereby certify that on June 9, 2016, I will electronically file the foregoing pleading with

the Clerk of the Court using the CM/ECF system, which will then send a notification of such

filing (NEF) to the following:

Ronald Walutes, Esq.
Assistant United States Attorney
2100 Jamieson Avenue
Alexandria, Virginia 22314
(703) 299-3700
ron.walutes@usdoj.gov

Pursuant to the Electronic Case Filing Policies and Procedures, a courtesy copy of the

foregoing pleading will be delivered to Chambers within one business day of the electronic

filing.

By: _____/s/_____

Whitney E.C. Minter
Va. Bar # 47193
Assistant Federal Public Defender
Attorney for Mr. Nirala
1650 King Street, Suite 500
Alexandria, Virginia   22314
(703) 600-0855 (telephone)
(703) 600-0880 (facsimile)
Whitney_Minter@fd.org (email)

IN THE UNITED STATES DISTRICT COURT FOR THE

EASTERN DISTRICT OF VIRGINIA

Alexandria Division

UNITED STATES	)	
	)	
v.	)	CRIMINAL NO. 1:16CR124 (GBL)
	)	
MOHAN NIRALA,	)	
Defendant.	)	

MEMORANDUM OF UNDERSTANDING
REGARDING RECEIPT OF CLASSIFIED INFORMATION

Having familiarized myself with the applicable statutes, regulations, and orders, related to,

but not limited to, Title 18 United States Code, including unauthorized disclosure of

classified information, espionage and related offenses; The Intelligence Agents Identities

Protection Act, Title 50 U.S.C. Section 421; Title 18 U.S.C. Section 641; Title 50 U.S.C.

Section 783; 28 C.F.R. 17 et seq., and Executive Orders 12356 and 13526; I understand that I may

be the recipient of information and documents that concern the present and future security of the

United States and belong to the United States, and that such documents and information together

with the methods and sources of collecting it are classified by the United States Government.

In consideration for the disclosure of classified information and documents:

(1)   I agree that I shall never divulge, publish, or reveal either by word, conduct or any

other means, such classified documents and information unless specifically

authorized in writing to do so by an authorized representative of the United States

Government; or as expressly authorized by the Court pursuant to the Classified

Information Procedures Act and the Protective Order entered in the case of United

States v. Nirala, Cr. No. 1:16CR124, Eastern District of Virginia.

(2)   I agree that this Memorandum and any other non-disclosure agreement signed by

me will remain forever binding on me.

(3)   I have received, read, and understand the Protective Order entered by the United

States District Court for the Eastern District of Virginia in the case of <u>United States</u>

<u>v. Nirala</u>, Cr. No. 1:16CR124, relating to classified information, and I agree to

comply with the provisions thereof.

Todd Richman   _5-9-16_
Print Name   Date

Todd M. Rich
Signature

3

IN THE UNITED STATES DISTRICT COURT FOR THE

EASTERN DISTRICT OF VIRGINIA

Alexandria Division

UNITED STATES	)	
	)	
v.	)	CRIMINAL NO. 1:16CR124 (GBL)
	)	
MOHAN NIRALA,	)	
Defendant.	)	

MEMORANDUM OF UNDERSTANDING
REGARDING RECEIPT OF CLASSIFIED INFORMATION

Having familiarized myself with the applicable statutes, regulations, and orders, related to,

but not limited to, Title 18 United States Code, including unauthorized disclosure of

classified information, espionage and related offenses; The Intelligence Agents Identities

Protection Act, Title 50 U.S.C. Section 421; Title 18 U.S.C. Section 641; Title 50 U.S.C.

Section 783; 28 C.F.R. 17 et seq., and Executive Orders 12356 and 13526; I understand that I may

be the recipient of information and documents that concern the present and future security of the

United States and belong to the United States, and that such documents and information together

with the methods and sources of collecting it are classified by the United States Government.

In consideration for the disclosure of classified information and documents:

(1)   I agree that I shall never divulge, publish, or reveal either by word, conduct or any

         other means, such classified documents and information unless specifically

         authorized in writing to do so by an authorized representative of the United States

         Government; or as expressly authorized by the Court pursuant to the Classified

         Information Procedures Act and the Protective Order entered in the case of United

         States v. Nirala, Cr. No. 1:16CR124, Eastern District of Virginia.

2

(2)   I agree that this Memorandum and any other non-disclosure agreement signed by

me will remain forever binding on me.

(3)   I have received, read, and understand the Protective Order entered by the United

States District Court for the Eastern District of Virginia in the case of <u>United States</u>

<u>v. Nirala</u>, Cr. No. 1:16CR124, relating to classified information, and I agree to

comply with the provisions thereof.

_____   _____
Print Name   Date

_____
Signature

3

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division**

UNITED STATES OF AMERICA,	)	
	)	
v.	)	**Case No. 1:16CR124**
	)	**Hon. Gerald Bruce Lee**
MOHAN NIRALA,	)	**Trial Date: August 8, 2016**
	)	
Defendant.	)	

DEFENDANT'S MOTION TO CONTINUE HEARING

COMES NOW the defendant, Mohan Nirala, by counsel, Whitney E.C. Minter & Todd M. Richman, Assistant Federal Public Defenders, and Alan Yamamoto, Esq., and moves this Honorable Court to continue his trial date to a date on or after September 12, 2016. In support of this Motion, defendant states as follows:

1. On May 25, 2016, the grand jury issued an indictment charging Mr. Nirala with five counts of violating 18 U.S.C. §793(e) and two counts of violating 18 U.S.C. §1001.

2. On June 8, 2016, this Court held an arraignment and trial was scheduled for August 8, 2016. Motions are due on June 22, to be argued July 15. Motions pursuant to the Classified Information Procedures Act (CIPA) are to be argued on July 5. At the time of the hearing, counsel for Mr. Nirala requested a trial date in January 2017, as the result of appointed counsel's leave, scheduled for September through December of this year. As discussed below, defense counsel for Mr. Nirala can now be available for a trial scheduled for September 2016 or later.

3. Two of Mr. Nirala's appointed attorneys are scheduled to be in trial, beginning July 11. That case has previously been continued, due to the voluminous discovery

provided to the defense shortly before the trial was due to start. This included 36,000 pages of discovery, primarily in a foreign language, and a hard drive containing 1 terabyte of additional discovery, also substantially in a foreign language. As a result of the demands of the existing trial, current counsel is unable to zealously represent Mr. Nirala under the current scheduling order and Todd Richman, of the Office of the Federal Public Defender, will be assisting in Mr. Nirala's defense[1]. Unfortunately, Mr. Richman does not yet have the same familiarity with the case that Mr. Yamamoto or Ms. Minter do, nor does he have an established relationship with the client.

4.   This case is complex because it involves classified discovery that requires a top secret clearance to review. In order to make use of the classified discovery at trial, counsel will have to engage in CIPA litigation. This requires that defense counsel be able to review the discovery, determine a trial strategy and decide what discovery and evidence will be necessary for trial, in advance of the currently scheduled hearing date of July 5. Defense counsel received the discovery in a SCIF on June 13, 2016. This includes, however, a disc of emails that cannot currently be reviewed, as a secure computer has not yet been provided, as well as the files of the case agents, which are also classified and were not previously available to counsel.[2] Defense

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[1]   Mr. Richman is one of the attorneys with the necessary security clearance to represent Mr. Nirala in this matter.

[2]   While Ms. Minter and Mr. Yamamoto have previously been provided access to the government's copy of the discovery, it was within the United States Attorney's Office SCIF, and counsel's ability to work with the material has been limited. Further, Mr. Yamamoto has only previously seen a small portion of the discovery, as the government has continued

counsel has not had the necessary time to review the discovery and determine what

information is necessary for trial, in order to file the necessary pleadings under CIPA.

Likewise, counsel has not had the necessary time to determine what other motions

should be filed in advance of the June 22 deadline for standard motions filing.

5.   Accordingly, counsel for Mr. Nirala hereby ask the Court to continue this matter to

a date on or after September 12, 2016. This will permit Mr. Richman to become

familiar with the case and to allow Mr. Yamamoto to complete his other trial and

zealously represent Mr. Nirala.[3]

6.   A proposed order is attached.

For all of the foregoing reasons, defendant respectfully requests that the Court continue his

trial until a date on or after September 12, 2016 and to continue the current motions deadlines

accordingly.

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investigating the matter since his original review. Neither counsel have yet been given access to
a computer to review the aforementioned emails.

[3]   At the time of the arraignment, Ms. Minter advised the Court that she was
concerned about reassigning the matter to a new attorney within the office who would not have
an established relationship with Mr. Nirala. In light of the current scheduling order, however,
there is no other way for the Office of the Federal Public Defender to fulfill its ethical
responsibilities. Furthermore, Mr. Yamamoto's appointment to the case will aid in providing
consistent representation to Mr. Nirala. Therefore, at this time, counsel for Mr. Nirala
collectively believe it is in Mr. Nirala's best interests to proceed with trial at a time when his
counsel can be fully prepared.

Respectfully submitted,
Mohan Nirala
By Counsel,
Geremy C. Kamens,
Federal Public Defender

By: _____/s/_____

Todd M. Richman
Va. Bar # 41834
Whitney E.C. Minter
Va. Bar # 47193
Assistant Federal Public Defender
Attorneys for Mohan Nirala
1650 King Street, Suite 500
Alexandria, Virginia   22314
(703) 600-0855 (telephone)
(703) 600-0880 (facsimile)
Whitney_Minter@fd.org (email)

By: _____/s/_____

Alan H. Yamamoto VSB #25872
Attorney for Hinda Osman Dhirane
Law Offices of Alan H. Yamamoto
643 S. Washington Street
Alexandria, Virginia 22314
Phone: (703) 684-4700
Fax: (703) 684-6643
yamamoto.law@verizon.net

<u>CERTIFICATE OF SERVICE</u>

I hereby certify that on June 14, 2016, I will electronically file the foregoing pleading

with the Clerk of the Court using the CM/ECF system, which will then send a notification of

such filing (NEF) to the following:

Ronald Walutes, Esq.
Assistant United States Attorney
2100 Jamieson Avenue
Alexandria, Virginia 22314
(703) 299-3700
ron.walutes@usdoj.gov

Pursuant to the Electronic Case Filing Policies and Procedures, a courtesy copy of the

foregoing pleading will be delivered to Chambers within one business day of the electronic

filing.

By: _____/s/_____
Whitney E.C. Minter
Virginia Bar Number 47193
Attorney for Mohan Nirala
Assistant Federal Public Defender
1650 King Street, Suite 500
Alexandria, Virginia 22314
(703) 600-0855 (telephone)
(703) 600-0880 (facsimile)
Whitney_Minter@fd.org (electronic mail)

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          IN THE UNITED STATES DISTRICT COURT FOR THE
                  EASTERN DISTRICT OF VIRGINIA
                       Alexandria Division

UNITED STATES OF AMERICA,        )
                                 )
          Plaintiff,             )    CR. NO. 16-cr-124
                                 )
     vs.                         )
                                 )
  MOHAN NIRALA,                  )
                                 )
          Defendant.             )
                                 )
 _____)
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                    TRANSCRIPT OF ARRAIGNMENT

                          June 8, 2016

                             - - -

BEFORE: THE HONORABLE GERALD BRUCE LEE
              UNITED STATES DISTRICT JUDGE

APPEARANCES:

FOR THE GOVERNMENT: OFFICE OF THE UNITED STATES ATTORNEY
                    BY: RONALD WALUTES, ESQ.

FOR THE DEFENDANT: OFFICE OF THE FEDERAL PUBLIC DEFENDER
                   BY: WHITNEY MINTER, ESQ.

ALSO PRESENT: ALAN YAMAMOTO, ESQ.

                             - - -

OFFICIAL COURT REPORTER: RENECIA A. WILSON, RMR,CRR
                         U.S. District Court
                         401 Courthouse Square
                         Alexandria, VA 22314
                         (703)501-1580

1   (Thereupon, the following was heard in open

2   court at 10:16 a.m.)

3   THE CLERK: 1:16 criminal 124, United States

4   versus Nirala Mohan.

5   Would counsel please note your appearances.

6   MR. WALUTES: Your Honor, good morning. It's

7   Ron Walutes, and I'm joined by Casey Arrowwood from

8   National Security Division. Good morning.

9   THE COURT: Good morning.

10   MS. MINTER: Good morning, Your Honor.

11   Whitney Minter on behalf of Mr. Nirala who is present.

12   I'm joined by Alan Yamamoto which is a matter I'll take

13   up with the Court when it's appropriate.

14   THE COURT: Okay. Well, let's arraign

15   Mr. Nirala.

16   Come up, Mr. Nirala, with your counsel,

17   please.

18   Good morning.

19   MR. NIRALA: Good morning.

20   THE COURT: Can you tell me your name,

21   please.

22   MR. NIRALA: Mohan Nirala.

23   THE COURT: Good morning, Mr. Nirala.

24   The clerk will arraign the defendant.

25   THE CLERK: Has the defendant received a copy

1 of the indictment?

2   MS. MINTER: He has.

3   MR. NIRALA: Yes.

4   THE CLERK: Does the defendant waive formal

5 reading?

6   MS. MINTER: He would waive formal reading.

7 He's reviewed that with counsel.

8   THE CLERK: And how would the defendant like

9 to plea, guilty or not guilty?

10   MS. MINTER: At the time, we would enter a

11 plea of not guilty and request a trial by jury.

12   THE COURT: All right. How much time do you

13 all think the case would require for trial?

14   MS. MINTER: Your Honor, I obviously can't

15 speak to the government's evidence. I think on our end

16 it would probably take one day. I imagine the

17 government's case would take 1 to 2 days.

18   MR. WALUTES: I think that's accurate, Your

19 Honor.

20   THE COURT: Okay.

21   August 8th.

22   MS. MINTER: Your Honor, if I may, we have

23 some rather unique scheduling considerations in this case

24 that I would raise with the Court. And I will tell the

25 Court at the outset that we are going to be requesting a

1   trial date in January.

2   I realize that's an extraordinary request.

3   But, the reasons are as follows. One of the things that

4   we would like to take up with the Court this morning is

5   to request that the Court appoint Mr. Yamamoto as

6   co-counsel. He was retained by Mr. Nirala prior to --

7   during the target phase of this case, prior to the

8   issuance of the criminal complaint. He is familiar with

9   the facts of the case and he has an established

10   relationship with Mr. Nirala.

11   Unfortunately, Mr. Nirala is not in a

12   financial position to retain him and that's why our

13   office has been appointed. We are happy to represent

14   Mr. Nirala. We intend to keep doing so. But, I do

15   think, given our interactions over the past few weeks,

16   Mr. Yamamoto has been graciously continuing to work on

17   the case and to meet with Mr. Nirala and myself. And I

18   feel he is definitely an asset to the case.

19   Two complicating factors that arise from

20   that, Your Honor, if the Court were willing to appoint

21   Mr. Yamamoto as co-counsel, one is that Mr. Yamamoto and

22   I are counsel -- co-counsel as to co-defendants in

23   another very complicated case that has been proceeding in

24   front of Judge Trenga for two years. That matter is

25   scheduled to go to trial currently in July.

1   There has been some discussion by the

2 government of another brief continuance, but certainly

3 sometime between mid July and mid August, that matter

4 will be going to trial. And it's proving to be

5 essentially all consuming, Your Honor.

6   THE COURT: How long a trial is that one

7 going to be?

8   MS. MINTER: I think in terms of actually

9 sitting, Your Honor, that the case will --

10   THE COURT: You can have a seat, Mr. Nirala.

11   MS. MINTER: Will be approximately -- I think

12 it will take about a week and a half. I think it

13 actually be about five to six days.

14   THE COURT: I have dates in October if that's

15 what you want. I mean, tell me -- you're going to tell

16 me why you need it in January, so I'm listening.

17   MS. MINTER: And then the second complicating

18 factor, Your Honor, is my schedule. I am due to be out

19 of the office between mid September and the end of

20 December of this year.

21   Certainly, of course --

22   THE COURT: You are the only lawyer in the

23 Public Defender's Office who could take this case?

24   MS. MINTER: I am not, Your Honor.

25   THE COURT: Okay.

1   MS. MINTER: As a general matter, we

2   certainly try and avoid transferring cases if possible

3   because of the -- the unsettling nature to the clients,

4   of being transferred from one lawyer to another. I've

5   certainly been cognizant of that fact as the case has

6   proceeded.

7   What I will tell the Court is we are limited

8   in terms of attorneys who have the requisite clearance to

9   handle this particular case. We certainly do have other

10   lawyers. I don't --

11   THE COURT: Do you have other lawyers who

12   have security clearance, Ms. Minter?

13   MS. MINTER: I'm sorry.

14   THE COURT: Do you have other lawyers who

15   have security clearance?

16   MS. MINTER: We do, we certainly do. But

17   it's a limited number. But I suggest to the Court it

18   poses a unique set of circumstances in terms of the

19   inability to properly prepare for this case before I am

20   scheduled to be out on leave and the difficulty of

21   transferring it within the office. Certainly we stand

22   prepared --

23   THE COURT: You just said Mr. Yamamoto has

24   been in the case pre-indictment so he knows the case very

25   well, I suspect.

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 1              MS. MINTER:  He does, Your Honor, he does.
 2              THE COURT:  Uh-huh.
 3              MS. MINTER:  However, as I said the Public
 4    Defender's Office obviously has been appointed.  We
 5    intend to continue representing Mr. Nirala --
 6              THE COURT:  I'm unfamiliar when you were
 7    appointed.
 8              MS. MINTER:  I'm sorry, Your Honor.
 9              THE COURT:  I'm unfamiliar with when you were
10    appointed.
11              MS. MINTER:  Your Honor, we were appointed in
12    early March --
13              THE COURT:  Okay.
14              MS. MINTER:  -- to this case.
15              THE COURT:  So you have several months into
16    the case.
17              MS. MINTER:  Correct, Your Honor.
18              THE COURT:  All right.  Well, so you want a
19    date in January.  You want Mr. Yamamoto in the case.  I
20    ordinarily would have no problem with that, but this is
21    not a capital case, is it?
22              MS. MINTER:  It is not, Your Honor.
23              THE COURT:  Well, the difficulty I have is
24    the Fourth Circuit has this person, Larry Dash, who is in
25    charge of court-appointed counsel and court-appointed
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1 compensation. And if you're able to persuade him that I

2 should appoint a second counsel, I'll be happy to do so.

3 But I'd have to have a written motion. You'd have to

4 spell it all out and in great detail.

5   And, so far, I'm, you know, I'm not

6 optimistic of what will happen. But I can't just orally

7 appoint Mr. Yamamoto, as much as I would like to without

8 you going through all the steps. And if you do that,

9 then I'm happy to recommend it. But you've got to

10 justify it and spell it out in great detail because the

11 way things are down there in the Fourth Circuit, they are

12 very tight about CJA counsel.

13   MS. MINTER: Understood, Your Honor. We're

14 happy to do that.

15   THE COURT: Okay. All right.

16   So, when in January do you want? And, is

17 that the only reason that I should continue the case or

18 just because of your schedule? It's just that I want to

19 know because I have to make a record for speedy trial

20 purposes.

21   MS. MINTER: Your Honor, in terms of why we

22 could not otherwise be prepared in say October or

23 November, yes, I think that's a fair characterization.

24 And as I said, our office stands prepared to represent

25 Mr. Nirala. But as a general matter, we take very

1   seriously our relationships with our clients and we try

2   very hard not to reassign cases within the office.

3   Obviously, I view all of my colleagues as

4   more fully competent than I am and I know that --

5   THE COURT: For the purpose of Speedy Trial

6   Act, can you give me a record to make?

7   MS. MINTER: Your Honor, I would submit to

8   the Court that I have an established relationship with

9   Mr. Nirala and I feel that it would be detrimental to the

10 case to reassign it within our office. If it were to

11 come to that we're, again, happy to do that but we feel

12 it is in the best interest of justice and --

13   THE COURT: Is this a complicated case,

14 Ms. Minter? Is this a case where classified information

15 is at stake and you have --

16   MS. MINTER: There is --

17   THE COURT: -- a need to have outside

18 additional counsel who is experience and works -- are

19 those the things you want to tell me?

20   MS. MINTER: Certainly, Your Honor. There is

21 classified information contained in the case. We have

22 begun reviewing that already. Given the posture of the

23 case, we do not yet have access to our own skiff in order

24 to review that. But the government has provided an

25 initial review of the discovery.

1   I will tell the Court that it's not -- it's

2   not a matter of a couple pages. There is a significant,

3   although not overwhelming amount of classified discovery.

4   And the case requires representation by counsel with a

5   top secret clearance.

6   As I indicated, we have a limited number of

7   individuals who are positioned to do that. And I don't

8   think given the current timetable, security clearances,

9   that there's any way that any additional lawyers could

10   receive a clearance prior to January. So, we would have

11   to reassign the case within the three other individuals

12   in our office who currently possess the requisite

13   security clearance, Your Honor.

14   So, in the interest of being fully prepared

15   for trial, I would submit to the Court that there is --

16   there is a need for, of course, qualified counsel, but

17   qualified counsel that possesses the requisite security

18   clearance which makes transferring the case, excuse me,

19   within our office difficult.

20   But I would also submit to the Court that it

21   is in the interest of justice for Mr. Nirala to continue

22   working with his original appointed counsel with whom he

23   has a relationship.

24   THE COURT: All right. What's the

25   government's position?

1   MR. WALUTES: Your Honor, first, we
2 completely support Mr. Yamamoto's appointment if that's
3 able to be -- to occur. He does --
4   THE COURT: Is there a written document --
5   MR. WALUTES: I understand, Your Honor, but
6 he does have the top secret clearance. He has seen much
7 of the classified material and he still is cleared. I've
8 check with the classified information security officer
9 before today to make sure of that. He also predates me
10 on this case. He has worked pre-indictment for over a
11 year with this individual.
12   And actually, the originally AUSA was Andy
13 Peterson and I was put on the case after he left the
14 office.
15   As to the other, Your Honor, we don't believe
16 the case needs to go out that far. The government is not
17 joining that motion. We think it is very concise. It is
18 about the defendant removing top secret information from
19 a facility that is extremely secured in Springfield and
20 taking it to his home where it's recovered at the time of
21 a search in his house and then two years later at the
22 time of arrest two different batches of secured
23 materials. That's this case, Your Honor.
24   So, I know that Judge Trenga's case which
25 counsel has mentioned has been continued already once.

1   The government is apparently seeking another continuance

2   in that case. So, we're asking that it be set in August.

3   I don't care whether it's early August or late August or

4   early September.

5   But Your Honor, this case has gone on for a

6   couple of years. The defense has had every opportunity

7   to resolve it. And just putting out deadlines to the

8   government's mind, Your Honor, just continues the case

9   needlessly.

10   But we believe it is a fairly concise case

11   but it does have classified information, Your Honor.

12   There is, I would say, a significant volume, over

13   500 pages of top secret documents that we have recovered

14   from the defendant's home.

15   THE COURT: Okay.

16   Mr. Yamamoto, I know you're not in the case,

17   but can you come to the podium, please.

18   MR. YAMAMOTO: Yes, Your Honor.

19   THE COURT: I want to make sure I understand

20   from the standpoint of the record. How long have you

21   been representing Mr. Nirala?

22   MR. YAMAMOTO: Probably two and a half years.

23   THE COURT: Two and a half years. Okay, in

24   this case?

25   MR. YAMAMOTO: In this case, yeah. He came

1   to me initially because he was the target of an

2   investigation. That investigation has been ongoing until

3   recently when he was formally charged.

4   THE COURT: Are you available August 9th for

5   trial?

6   MR. YAMAMOTO: I am with Ms. Whitney --

7   Ms. Minter on this, we're both in the same case with

8   Judge Trenga, so I don't think I am available August 9th.

9   THE COURT: Are you available September 26th,

10   or that's right, that would be a problem with her. She

11   has to leave September.

12   MR. YAMAMOTO: She will be out on maternity

13   leave from September through January.

14   THE COURT: Well, when is Judge Trenga's

15   trial? Have you had any indications it's actually going

16   to go?

17   MR. YAMAMOTO: Well, it's presently scheduled

18   for July 11th. My understanding is the government is

19   going to seek a continuance to some date in August and

20   trying to get a date worked out.

21   THE COURT: All right. Then, I'm prepared to

22   set the case for July 11th, 11th through 14th.

23   MR. YAMAMOTO: Pardon, Your Honor.

24   THE COURT: I'm prepared to set the trial

25   today for July 11th through the 14th.

1 MR. YAMAMOTO: Your Honor, if Judge Trenga's

2 case does not get continued, we will be in trial in that

3 case on July 11th.

4 THE COURT: I understand. I'll take that

5 chance. I'll take that chance. I'll talk to him today,

6 find out if he's going to go.

7 MR. YAMAMOTO: Your Honor, the other issues

8 are there are potentially CIPA hearings in this case.

9 THE COURT: Okay. And will that take -- do

10 you think that will take more than a couple days or --

11 MR. YAMAMOTO: We need to go through the

12 materials to determine which materials we would like to

13 use and which materials the government intends to use and

14 then we'd have to schedule the CIPA hearings. We have to

15 get through that materials first.

16 THE COURT: I thought Mr. Walutes said you

17 already reviewed most of it.

18 MR. YAMAMOTO: I've looked at -- well --

19 THE COURT: It was taken from his home

20 allegedly. That's what he said.

21 MR. YAMAMOTO: When I looked at the material

22 before the second search warrant, when I looked at the

23 material, there were maybe 20 pages or so. My

24 understanding is there was a search warrant conducted

25 within the last couple months in which apparently several

1   hundred pages were retrieved which I was not aware of.

2   THE COURT: Well, here's what I'd like to do.

3   I'm not going to go to January. And if you all can

4   confer, I'm prepared to do it in August. I can do it the

5   8th through the 10th or the 15th through the 17th. And

6   I'm sure that we have plenty of time between now and then

7   to do whatever hearings need to be done on CIPA or any

8   other motions, okay. I'm not going to go to January.

9   You've been in the case two and a half years.

10   MS. MINTER: Your Honor, if I may, a couple

11 things for the record.

12   First, obviously at this point, Mr. Yamamoto

13 is not in the case. And the only counsel of record that

14 Mr. Nirala has is the Office of the Public Defender who

15 was appointed in early March.

16   The government began, as I understand it,

17 investigating this case in late 2013. Mr. Nirala was

18 first interviewed in early 2014.

19   So, the government has over essentially two

20 and a half year head start on the Office of the Public

21 Defender. We're certainly cognizant of the Court's

22 schedule and the government's interest in moving cases

23 along, but for the government to now having issued a

24 criminal complaint in early March of this year after two

25 and a half years of investigation to suddenly say that

1 there is an urgency and a timetable puts us in a very

2 difficult position because we have not had the benefit of

3 two and a half years to get up to speed on the case.

4   THE COURT: Rarely does the defense have two

5 and a half years to get ready for trial, Ms. Minter.

6   Let me do this. I've tried to offer you all

7 what I was going to do. I'm not willing to go to

8 January, and so I'm willing to do it in August. And I

9 have August 8th, August 15th. What date works for you?

10   MS. MINTER: Your Honor, another thing that I

11 would point out to the Court is that the reason for the

12 continuances in the other case that Mr. Yamamoto and I

13 are both heavily involved in and I'm not avoiding

14 answering the Court's questions, but --

15   THE COURT: If you'd answer it first, that

16 would help me.

17   MS. MINTER: Your Honor, as of this moment,

18 we -- I am available at any date in August. I do not

19 think that we can be prepared for trial properly in

20 August. The reason for the continuance is --

21   THE COURT: I thought you said you've been in

22 the case since March.

23   MS. MINTER: I have, Your Honor.

24   THE COURT: All right.

25   MS. MINTER: However, as of this moment, we

1   do not have a skiff in which to review. The government

2   is correct that they have been gracious about letting us

3   use their skiff. But we don't have a place that we can

4   maintain our own copy of the documents. We have not been

5   able to make notes on the documents or anything along

6   those lines. Any note taking that we've done has to

7   remain in the U.S. Attorney's Office.

8   So while we have been able to view the

9   documents, our availability to work with them and prepare

10   has been very limited.

11   I would also tell the Court that the reason

12   for the -- the reason for the continuance --

13   THE COURT: I understand you've made your

14   record. You've told me. I'm happy that you're

15   expecting. You're going to have a child. I think that's

16   wonderful. But I can't let this case go on until January

17   or February or March of next year. I'm just not going to

18   do it.

19   So I'll set it for trial August 8th. I'm

20   going to set it for jury trial for three days. All

21   motions are due by June 27th. Responses are due by

22   July 6th.

23   We can have a hearing on July 15th. If there

24   are any motion that requires the presentation of

25   witnesses or evidence, we can select a date certain at

1 the time you file your motions by calling chambers, pick

2 a date certain for hearing on those motions.

3 We can have a CIPA hearing July 19th if that

4 date works.

5 MS. MINTER: Your Honor -- Your Honor as of

6 this moment, I have every reason to believe that we will

7 be in trial in the other matter with Judge Trenga on that

8 date.

9 THE COURT: All right. Then we'll have the

10 hearing on July 5th.

11 So to be clear, the CIPA hearing will be

12 July 5th. That will be at 10 o'clock. And I know that

13 Mr. Yamamoto knows the protocol for CIPA hearing. I know

14 the government does.

15 And, is there a discovery order in the case?

16 MS. MINTER: There is, Your Honor.

17 THE COURT: If you can pass it up, please.

18 There's also a protective order here. Is

19 there any objection to the protective order?

20 MS. MINTER: Your Honor, it is an agreed

21 order and I believe both -- yes, both parties have

22 executed it.

23 THE COURT: All right.

24 MS. MINTER: Your Honor, if the Court would

25 permit me to make the record. The complicating factor in

1   this case is -- with the current timetable is that the

2   basis for the continuance in the matter before Judge

3   Trenga was the recent production of one terabyte of

4   electronic discovery and 36,000 pages of written

5   discovery, the majority of which are in Somali.

6   So the defense in that case has been

7   scrambling, for lack of a better word, to be prepared. I

8   don't fundamentally feel that I can be prepared to

9   effectively represent Mr. Nirala under this timetable

10   given the demands of the other case as well.

11   THE COURT: Thank you. I need you all to

12   sign this memorandum of understanding. I stamped it.

13   That needs to be signed by you all.

14   MS. MINTER: Your Honor, typically, we file

15   those electronically.

16   THE COURT: Okay.

17   MS. MINTER: And, we're certainly happy to do

18   that.

19   MR. WALUTES: Your Honor, the Court

20   classified information security officer is going to be

21   Ms. Peterson. She needs -- until Your Honor's heard the

22   case, there is nobody who could authorize the CIPA

23   proceedings to begin. We have a copy for defense of all

24   the materials. She's ready to open the skiff once you

25   enter the CIPA order, and she'll collect from the parties

```
1   the --
2             THE COURT:  Signature, all right.  Thank you
3   very much.  You all are excused.
4             And file a written motion, Ms. Minter, about
5   why Mr. Yamamoto should be appointed.  I'll call Mr. Dash
6   today.
7             MS. MINTER:  Thank you, Your Honor.
8             THE COURT:  Uh-huh.
9             (Proceeding concluded at 10:37 a.m.)
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CERTIFICATE OF REPORTER

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2

3   I, Renecia Wilson, an official court

4   reporter for the United State District Court of Virginia,

5   Alexandria Division, do hereby certify that I reported by

6   machine shorthand, in my official capacity, the

7   proceedings had upon the arraignment in the case of

8   United States of America vs. Mohan Nirala.

9   I further certify that I was authorized and

10   did report by stenotype the proceedings and evidence in

11   said hearing, and that the foregoing pages, numbered 1 to

12   20, inclusive, constitute the official transcript of said

13   proceedings as taken from my shorthand notes.

14   IN WITNESS WHEREOF, I have hereto subscribed

15   my name this _15th_ day of _June_, 2016.

16

17   _____/s/_____
                                 Renecia Wilson, RMR, CRR
18   Official Court Reporter

19

20

21

22

23

24

25

IN THE UNITED STATES DISTRICT COURT FOR THE

EASTERN DISTRICT OF VIRGINIA

Alexandria Division

UNITED STATES OF AMERICA	)	
	)	
v.	)	No. 1:16CR124
	)	
MOHAN L. NIRALA,	)	Judge Gerald Bruce Lee
Defendant.	)	

PLEA AGREEMENT

Dana J. Boente, United States Attorney for the Eastern District of Virginia, Ronald L.

Walutes, Jr., Assistant United States Attorney, Brandon L. Van Grack, Trial Attorney, National

Security Division, the defendant, Mohan L. Nirala, and the defendant's standby counsel, Alan

Yamamoto and Todd Richman, have entered into an agreement pursuant to Rule 11 of the

Federal Rules of Criminal Procedure.   The terms of the agreement are as follows:

1.   **Offense and Maximum Penalties**

The defendant agrees to plead guilty to Count 3 of the Indictment, which charges the

defendant with the Willful Retention of National Defense Information, in violation of Title 18,

United States Code, Section 793(e).   The maximum penalties for this offense are ten years of

imprisonment, a fine of $250,000, a $100 special assessment, and three years of supervised

release.   The defendant understands that this supervised release term is in addition to any prison

term the defendant may receive, and that a violation of a term of supervised release could result

in the defendant being returned to prison for the full term of supervised release.

2.   **Factual Basis for the Plea**

The defendant will plead guilty because the defendant is in fact guilty of the charged

offense.   The defendant admits the facts set forth in the statement of facts filed with this plea

agreement and agrees that those facts establish guilt of the offense charged beyond a reasonable

doubt.   The statement of facts, which is hereby incorporated into this plea agreement,

constitutes a stipulation of facts.

3.   **Assistance and Advice of Counsel**

The defendant is satisfied that the defendant's standby attorneys have rendered effective

assistance.   The defendant understands that by entering into this agreement, defendant

surrenders certain rights as provided in this agreement.   The defendant understands that the

rights of criminal defendants include the following:

      a.   the right to plead not guilty and to persist in that plea;

      b.   the right to a jury trial;

      c.   the right to be represented by counsel – and if necessary have the court

            appoint counsel – at trial and at every other stage of the proceedings; and

      d.   the right at trial to confront and cross-examine adverse witnesses, to be

            protected from compelled self-incrimination, to testify and present

            evidence, and to compel the attendance of witnesses.

4.   **Role of the Court and the Probation Office**

The defendant understands that the Court has jurisdiction and authority to impose any

sentence within the statutory maximum described above but that the Court will determine the

defendant's actual sentence in accordance with Title 18, United States Code, Section 3553(a).

The defendant understands that the Court has not yet determined a sentence and the Court, after

considering the factors set forth in Title 18, United States Code, Section 3553(a), may impose a

sentence within the statutory sentencing range, subject only to review by higher courts for

reasonableness.   The United States makes no promise or representation concerning what sentence the defendant will receive, and the defendant cannot withdraw a guilty plea based upon the actual sentence.   Further, in accordance with Rule 11(c)(1)(B) of the Federal Rules of Criminal Procedure, the United States and the defendant will recommend to the Court that pursuant to Section 2M3.3(a)(1) of the Sentencing Guidelines, the Base Offense Level is Level 29.   Additionally, the United States and the defendant agree that, pursuant to Section 3B1.3 of the Sentencing Guidelines, the defendant is subject to a two-level increase in the offense level because the defendant abused a position of public trust in a manner that significantly facilitated the commission or concealment of the offense.   The government agrees not to seek an obstruction enhancement for the *pro se* filings in the case.   The parties further agree that if the defendant clearly accepts responsibility for the crime to which he is pleading guilty and pleads guilty prior to trial next week, he should receive the two-level reduction in offense level pursuant to U.S.S.G. § 3E1.1(a).

5.   **Waiver of Appeal, FOIA, and Privacy Act Rights**

The defendant also understands that Title 18, United States Code, Section 3742 affords a defendant the right to appeal the sentence imposed.   Nonetheless, the defendant knowingly waives the right to appeal the conviction and any sentence within the statutory maximum described above (or the manner in which that sentence was determined) on the grounds set forth in Title 18, United States Code, Section 3742 or on any ground whatsoever, in exchange for the concessions made by the United States in this plea agreement.   This agreement does not affect the rights or obligations of the United States as set forth in Title 18, United States Code, Section 3742(b).   The defendant also hereby waives all rights, whether asserted directly or by a representative, to request or receive from any department or agency of the United States any

records pertaining to the investigation or prosecution of this case, including without limitation any records that may be sought under the Freedom of Information Act, Title 5, United States Code, Section 552, or the Privacy Act, Title 5, United States Code, Section 552a.

6. **Special Assessment**

Before sentencing in this case, the defendant agrees to pay a mandatory special assessment of one hundred dollars ($100.00) per count of conviction.

7. **Payment of Monetary Penalties**

The defendant understands and agrees that, pursuant to Title 18, United States Code, Section 3613, whatever monetary penalties are imposed by the Court will be due and payable immediately and subject to immediate enforcement by the United States as provided for in Section 3613. Furthermore, the defendant agrees to provide all of his financial information to the United States and the Probation Office and, if requested, to participate in a pre-sentencing debtor's examination. If the Court imposes a schedule of payments, the defendant understands that the schedule of payments is merely a minimum schedule of payments and not the only method, nor a limitation on the methods, available to the United States to enforce the judgment. If the defendant is incarcerated, the defendant agrees to participate in the Bureau of Prisons' Inmate Financial Responsibility Program, regardless of whether the Court specifically directs participation or imposes a schedule of payments.

8. **Forfeiture of Pension Related to Federal Service**

The defendant agrees, pursuant to 5 U.S.C. § 8312, to forfeit any interest in any annuity or retirement payments arising from his federal service as a result of his conviction in this case.

9. **Immunity from Further Prosecution in this District**

The United States will not further criminally prosecute the defendant in the Eastern

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District of Virginia for the specific conduct described in the Indictment.

10. Dismissal of Other Counts

As a condition of the execution of this agreement and the Court's acceptance of the defendant's plea of guilty, the United States will move to dismiss the remaining counts of the indictment against this defendant.

11. Breach of the Plea Agreement and Remedies

This agreement is effective when signed by the defendant, the defendant's standby attorneys, and an attorney for the United States. The defendant agrees to entry of this plea agreement at the date and time scheduled with the Court by the United States (in consultation with the defendant's standby attorneys). If the defendant withdraws from this agreement, or commits or attempts to commit any additional federal, state, or local crimes, or intentionally gives materially false, incomplete, or misleading testimony or information, or otherwise violates any provision of this agreement, then:

a. The United States will be released from its obligations under this agreement, including any obligation to seek a downward departure or a reduction in sentence. The defendant, however, may not withdraw the guilty plea entered pursuant to this agreement;

b. The defendant will be subject to prosecution for any federal criminal violation, including, but not limited to, perjury and obstruction of justice, that is not time-barred by the applicable statute of limitations on the date this agreement is signed. Notwithstanding the subsequent expiration of the statute of limitations, in any such prosecution, the defendant agrees to waive any statute-of-limitations defense; and

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c.   Any prosecution, including the prosecution that is the subject of this agreement, may be premised upon any information provided, or statements made, by the defendant, and all such information, statements, and leads derived therefrom may be used against the defendant. The defendant waives any right to claim that statements made before or after the date of this agreement, including the statement of facts accompanying this agreement or adopted by the defendant and any other statements made pursuant to this or any other agreement with the United States, should be excluded or suppressed under Fed. R. Evid. 410, Fed. R. Crim. P. 11(f), or any other provision of the Constitution or federal law.

Any alleged breach of this agreement by either party shall be determined by the Court in an appropriate proceeding at which the defendant's disclosures and documentary evidence shall be admissible and at which the moving party shall be required to establish a breach of the plea agreement by a preponderance of the evidence. The proceeding established by this paragraph does not apply, however, to the decision of the United States whether to file a motion based on "substantial assistance" as that phrase is used in Rule 35(b) of the Federal Rules of Criminal Procedure. The defendant agrees that the decision whether to file such a motion rests in the sole discretion of the United States.
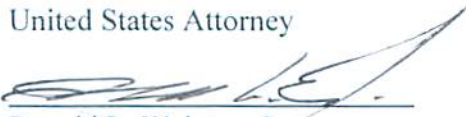
12.   **Nature of the Agreement and Modifications**

This written agreement constitutes the complete plea agreement between the United States, the defendant, and the defendant's standby counsel. The defendant and his standby attorneys acknowledge that no threats, promises, or representations have been made, nor agreements reached, other than those set forth in writing in this plea agreement, to cause the

defendant to plead guilty.   Any modification of this plea agreement shall be valid only as set

forth in writing in a supplemental or revised plea agreement signed by all parties.

<div style="margin-left: 40%;">

Dana J. Boente
United States Attorney
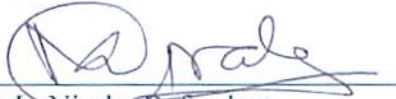
By: _____

Ronald L. Walutes, Jr.
Assistant United States Attorney

_____

Brandon L. Van Grack
Trial Attorney, National Security Division

</div>

Defendant's Signature: I hereby agree that I have consulted with my standby counsel and fully understand all rights with respect to the pending indictment.   Further, I fully understand all rights with respect to Title 18, United States Code, Section 3553 that may apply in my case.   I have read this plea agreement and carefully reviewed every part of it with my standby counsel.   I understand this agreement and voluntarily agree to it.

Date: 9/15/16

Mohan L. Nirala, Defendant

Defense Standby Counsel Signature: I am standby counsel for the defendant in this case. I have fully explained to the defendant the defendant's rights with respect to the pending indictment.   Further, I have reviewed Title 18, United States Code, Section 3553, and I have fully explained to the defendant the provisions that may apply in this case.   I have carefully reviewed every part of this plea agreement with the defendant.   To my knowledge, the defendant's decision to enter into this agreement is an informed and voluntary one.

Date: 9/15/16

Alan Yamamoto, Esquire
Todd Richman, Esquire
Standby Counsel for the Defendant

8

IN THE UNITED STATES DISTRICT COURT FOR THE

EASTERN DISTRICT OF VIRGINIA

FILED
IN OPEN COURT

SEP 16 2016

CLERK, U.S. DISTRICT COURT
ALEXANDRIA, VIRGINIA

Alexandria Division

UNITED STATES OF AMERICA	)	
	)	
v.	)	CRIMINAL NO.: 1:16CR124
	)	
	)	Judge Gerald Bruce Lee
MOHAN L. NIRALA,	)	
Defendant.	)	

STATEMENT OF FACTS

The United States and the defendant, Mohan L. Nirala, stipulate that the allegations in Count Three of the Indictment and the following facts are true and correct, and that had the matter gone to trial the United States would have proven them beyond a reasonable doubt.

1. The defendant, Mohan L. Nirala, was a full-time government employee and imagery scientist at the United States National Geospatial-Intelligence Agency (NGA). Nirala was employed in this capacity in the Eastern District of Virginia from February 2009, until he was suspended on January 2, 2014 and terminated in 2015. As a condition of his employment at NGA, Nirala signed Classified Information Nondisclosure Agreements where he agreed not to retain classified information outside his secure workplace. He confirmed in writing that "the unauthorized disclosure, unauthorized retention, or negligent handling of classified information by me could cause damage or irreparable injury to the United States . . . ." Nirala signed these agreements on March 2, 2009.

2. Nirala worked at NGA's headquarters in Springfield, Virginia. NGA is the nation's primary source of geospatial intelligence, or GEOINT, for the Department of Defense and the United States Intelligence Community. As a Department of Defense combat support agency

and a member of the Intelligence Community, NGA provides GEOINT in support of United States national security and defense, as well as disaster relief. GEOINT is the exploitation and analysis of imagery and geospatial information that describes, assesses, and visually depicts physical features and geographically referenced activities on Earth.

3. On September 11, 2013, NGA Security personnel were notified that Nirala had included classified information in the submission of an Equal Employment Opportunity (EEO) complaint. The EEO counselor attempted to work with him to have the classified material removed or redacted for several months, but ultimately remained concerned about Nirala's continued mishandling of classified information.

4. On January 2, 2014, Nirala signed two Classified Information Nondisclosure Agreements when his clearances were suspended. Nirala's signature appears beneath the acknowledgement "I reaffirm . . . that I have returned all classified information in my custody . . . ."

5. Eight days later, on January 10, 2014, a federal search warrant was executed on Nirala's residence. The search recovered over 20 classified documents, five that contained classification markings. An OCA review by NGA determined the documents ranged in classification from SECRET to TOP SECRET. One classified document bore evidence of an attempted obliteration by hand of the classification markings. The documents had dates from November 8, 2011 through July 18, 2013 and were removed from Nirala's place of work in the Eastern District of Virginia. Nirala's residence is not an approved location for classified documents from NGA.

6.   During the January 10, 2014 search of Nirala's residence, Nirala falsely stated to FBI special agents that he did not bring any classified documents home, when in truth and in fact, as Nirala then and there knew, he had removed documents classified by the United States government from his authorized place of work and stored them at unauthorized locations inside his home and elsewhere.

7.   On March 8, 2016, the FBI executed an arrest warrant charging Nirala with a violation of 18 U.S.C. § 793(e).   FBI special agents went to Nirala's residence in Laurel, Maryland to execute the arrest warrant.   The agents knocked and announced with words to the effect "FBI, we have a warrant, come to the door."   After several more knock and announces, Mr. Nirala responded "Hold on. Hold on."   FBI agents again repeated instructions for compliance; however, these attempts were met with silence.   FBI special agents proceeded to make a forced entry after receiving no further responses.   When agents opened the basement door, Nirala exited the basement staircase and was taken into custody without further incident.

7.   During a protective sweep of the basement, FBI special agents observed a large white duct-taped FedEx box underneath the unfinished basement stairs.   The FBI subsequently sought and obtained a federal search warrant for the contents of the seized FedEx box.   Inside the box, the FBI discovered 349 pages of documents which bore a classified banner and portion markings at the TOP SECRET level and another 189 pages which were marked at the SECRET level.   Many of the documents also had markings indicating that they contained Sensitive Compartmented Information.   These documents were removed from Nirala's work space at NGA in Springfield, Virginia, without authorization.   Comingled with these marked classified documents was a copy of the 2014 federal search warrant which had been previously executed

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on his residence.

8.   The marked classified material willfully retained by Nirala contains sensitive intelligence sources and methods involving the exploitation and analysis of imagery and geospatial (e.g. mapping, charting, and geodesy) information used to describe, assess, and visually depict physical features and geographically referenced activities on Earth. Count Three charges the unlawful retention of a TOP SECRET document, which contains classified images, emails, and a presentation drafted by Nirala. The document, in part, is properly classified by Nirala himself. The material is properly classified at the TOP SECRET level, as its unauthorized disclosure could reasonably be expected to cause exceptionally grave damage to the national security of the United States.

9.   This statement of facts includes those facts necessary to support the plea agreement between the defendant and the government.   It does not include each and every fact known to the defendant or the government, nor is it intended to be a complete enumeration of all of the facts surrounding the defendant's case.

10.   The actions of the defendant as recounted above were in all respects knowing and deliberate, reflecting an intention to commit the crime of willful retention of national defense information, and were not committed by mistake, accident, or other innocent reason.
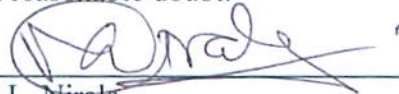
Respectfully submitted,

Dana J. Boente
United States Attorney

By: _____

Ronald L. Walutes, Jr.
Assistant United States Attorney
Brandon L. Van Grack
Trial Attorney, National Security Division

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After consulting with my standby counsel and pursuant to the plea agreement entered into this day between the defendant, Mohan L. Nirala, and the United States, I hereby stipulate that the above Statement of Facts is true and accurate, and that had the matter proceeded to trial, the United States would have proved the same beyond a reasonable doubt.

_____
Mohan L. Nirala
Defendant

I am Mohan L. Nirala's standby counsel.   I have carefully reviewed the above Statement of Facts with him.   To my knowledge, his decision to stipulate to these facts is an informed and voluntary one.

_____
Alan Yamamoto, Esquire
Todd Richman, Esquire
Standby Counsel for Mohan L. Nirala

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IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division

UNITED STATES OF AMERICA,	)	
	)	
v.	)	Case No. 1:16-cr-124 (GBL)
	)	
MOHAN NIRALA,	)	Sentencing: December 16, 2016
	)	
Defendant.	)	

DEFENDANT'S MOTION TO REAPPOINT
STANDBY COUNSEL AS DEFENSE COUNSEL

COMES NOW the defendant, Mohan Nirala, by his standby counsel, Todd M. Richman, Assistant Federal Public Defender, and Alan Yamamoto, Esq., and moves this Honorable Court to re-appoint his standby counsel as defense counsel for purposes of all further proceedings in this matter. In support of this Motion, defendant states as follows:

1. On March 9, 2016, following Mr. Nirala's arrest on a Criminal Complaint, the Office of the Federal Public Defender was appointed to represent Mr. Nirala. On June 8, 2016, this Court appointed Alan Yamamoto (who had represented Mr. Nirala prior to the institution of charges), to assist in the representation.

2.   On May 25, 2016, the grand jury issued an indictment charging Mr. Nirala with five counts of violating 18 U.S.C. §793(e) and two counts of violating 18 U.S.C. §1001.

3. On September 8, 2016, this Court granted Mr. Nirala's motion to proceed *pro se*, but ordered defense counsel to remain in the case as standby counsel.

4. On September 13, 2016, this Court heard and denied several motions that Mr. Nirala had filed and argued *pro se*.

5.   On September 16, 2016, Mr. Nirala entered a Plea Agreement and pleaded guilty.

Sentencing was scheduled for December 16, 2016.

6.   Since the entry of his guilty plea, Mr. Nirala has requested that his standby counsel

file this motion seeking their re-appointment as defense counsel for purposes of the

sentencing and any further proceedings in this matter. Attached as an exhibit to this

Motion is a Declaration executed by Mr. Nirala requesting that counsel be re-

appointed.

For all of the foregoing reasons, defendant respectfully requests that the Court re-appoint

Todd M. Richman and Alan Yamamoto as defense counsel. For the Court's convenience, a

proposed Order is submitted with this Motion.

Respectfully submitted,
MOHAN NIRALA

By Standby Counsel,
Geremy C. Kamens,
Federal Public Defender

By: _____/s/_____
Todd M. Richman
Va. Bar # 41834
Assistant Federal Public Defender
Standby Counsel for Mohan Nirala
1650 King Street, Suite 500
Alexandria, Virginia   22314
(703) 600-0845 (telephone)
(703) 600-0880 (facsimile)
Todd_Richman@fd.org (email)

By: _____/s/_____
Alan H. Yamamoto VSB #25872
Standby Counsel for Mohan Nirala
Law Offices of Alan H. Yamamoto
643 S. Washington Street
Alexandria, Virginia 22314
Phone: (703) 684-4700
Fax: (703) 684-6643
yamamoto.law@verizon.net

<u>CERTIFICATE OF SERVICE</u>

       I hereby certify that on October 24, 2016, I will electronically file the foregoing pleading with the Clerk of the Court using the CM/ECF system, which will then send a notification of such filing (NEF) to the following:

Ronald Walutes, Esq.
Assistant United States Attorney
2100 Jamieson Avenue
Alexandria, Virginia 22314
(703) 299-3700
ron.walutes@usdoj.gov

       Pursuant to the Electronic Case Filing Policies and Procedures, a courtesy copy of the foregoing pleading will be delivered to Chambers within one business day of the electronic filing.

                By: /s/
                Todd M. Richman
                Virginia Bar Number 41834
                Standby Counsel for Mohan Nirala
                Assistant Federal Public Defender
                1650 King Street, Suite 500
                Alexandria, Virginia 22314
                (703) 600-0845 (telephone)
                (703) 600-0880 (facsimile)
                Todd_Richman@fd.org (electronic mail)

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division

UNITED STATES OF AMERICA,	)	
	)	
v.	)	Case No. 1:16-cr-124 (GBL)
	)	
	)	
MOHAN NIRALA,	)	
	)	
Defendant.	)	
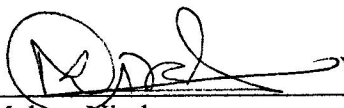
DECLARATION OF MOHAN NIRALA

I, Mohan Nirala, pursuant to 28 U.S.C. § 1746, declare as follows:

1. I am the defendant in the above-captioned case.

2. Sentencing is scheduled in this case for December 16, 2016 on a single count of willfully retaining national defense information in violation of 18 U.S.C. § 793(e).

3. From September 8, 2016 until the present, I have represented myself, *pro se*, in this matter, with the assistance, in a standby capacity, of Assistant Federal Public Defender Todd M. Richman, and Alan Yamamoto, Esq. I represented myself *pro se* because I wished to file motions in my own defense that my attorneys refused to pursue on my behalf.

4. Prior to September 8, 2016, Mr. Richman and Mr. Yamamoto had represented me in this matter as defense counsel.

5. Since the entry of my guilty plea, I have determined that I no longer wish to represent myself, and I hereby request that Mr. Richman and Mr. Yamamoto be re-appointed as defense counsel to represent me at sentencing and in any further proceedings in this case.

I declare under penalty of perjury that the foregoing is true and correct.

October 2⁰, 2016.

_____
Mohan, Nirala

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division**

UNITED STATES OF AMERICA,	)	
	)	
v.	)	**Case No. 1:16-cr-124**
	)	
MOHAN NIRALA,	)	
	)	
Defendant.	)	

ORDER

Upon consideration of Defendant's Motion to Reappoint Standby Counsel as Defense Counsel, for good cause shown, and for the reasons stated in the Motion, it is hereby ORDERED that the Motion is GRANTED. And it is FURTHER ORDERED that Todd M. Richman, Esq., and Alan Yamamoto, Esq., are hereby reappointed as counsel for the defendant for purposes of further proceedings in this matter.

October ___, 2016   _____
Alexandria, VA   The Honorable Gerald Bruce Lee
                                                    United States District Judge

JP1.1　　　　**REAL-TIME MULTI-SATELLITE PRECIPITATION ESTIMATION AND ASSIMILATION**

Mohan Nirala* and Paul Houser
NASA Goddard Space Flight Center, Greenbelt, Maryland

1. INTRODUCTION

Rain measurements from rain gauges have been used from centuries globally covering only land areas. The satellite observation was recognized after the first launch of Defense and Meteorological satellite program (DMSP) satellite in 1987, equipped with multi frequency passive microwave radiometer Special Sensor Microwave Imager (SSM/I). The SSM/I gave better precipitation data globally over both land and ocean regularly. It is recognized that satellite-based data are a foremost tool for measuring precipitation. NASA initiated a new research program to measure precipitation from space under its Mission to Planet Earth program in the 1990s (Smith et al. 1994, 1998, Nirala and Cracknell 2002 a, b). As a result, the Tropical Rainfall Measuring Mission (TRMM), a collaborative mission between NASA and NASDA, was launched in 1997 to measure tropical and subtropical rain (Simpson et al. 1996 and Kummerow et al. 2000). Motivated by better results as compared to SSM/I and the success of TRMM, and recognizing the need for more comprehensive global precipitation measurements, NASA and NASDA have now planned a new mission, the Global Precipitation Measurement (GPM) mission (Shepherd et al. 2002). The primary goal of GPM is to extend TRMM's rainfall time series while making substantial improvements in precipitation observations, specifically in terms of measurement accuracy, sampling frequency, Earth coverage, and spatial resolution.

GPM will acquire global precipitation data sufficient to resolve the diurnal cycle using a core spacecraft operating in a 65° inclination orbit and a constellation of dedicated and existing spacecraft operating in various orbits, mostly Sun-synchronous, spaced approximately three hours apart (Shepherd et al 2002). The spacecraft will be supported by an array of ground validation and calibration sites that provides ground-based observations of rain and clouds at specific geographic locations. The mission consists of a Dual-frequency Precipitation Radar (DPR) and the GPM Microwave Imager (GMI), and a constellation of precipitation-measuring spacecraft. The GPM core spacecraft is planned to launch in fiscal year 2008 with -

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operational orbit at 65° inclination and 400 km circular orbit. One NASA constellation spacecraft is also planned for launch in the same timeframe to a sun-synchronous orbit of 635 km. DMSP satellites will continue to fill two constellation slots. The objectives of GPM are: (1) to provide improved climate observations and prediction, (2) to improve the accuracy of precipitation forecasts and weather prediction, and (3) to provide improved understanding of the global water cycle, including flood and fresh water resources prediction. The GMI will have, as a minimum, the same capabilities as the TMI. As a result of its constellation operation GPM will provide diurnally-resolved, near global coverage of precipitation at surface resolution of 10 km. In order to make rainfall measurements on a global basis every three hours, up to eight satellite will be required.

The TRMM TMI data is currently available and used in precipitation measurements. The spatial resolution of the TMI ranges from 5 km at 85.5 GHz to 45 km at 10.65 GHz. The TMI operates on 5 frequencies of 10.65, 19.35, 22.235, 37.0 and 85.5 GHz. The TMI is similar to the Special Sensor Microwave Imager (SSM/I) instrument flown on the Defense Meteorological Satellite Program (DMSP). TRMM mission provides daily precipitation estimate between 40° N to 40° S longitude that can be used for the Global Land-surface Data Assimilation System (GLDAS). The DMSP SSM/I data can be used to get precipitation beyond the tropics. Data assimilation merges a range of diverse data fields with model prediction to provide the model with the best estimate of the current state of the natural environment so can then make more accurate prediction. Data assimilation offers an attractive way to merge and interpret hydrological information provided by satellite and ground- based observations.

The goal of this paper is to study of the space-borne retrieved rainfall and related products using GLDAS. The main aims of this investigation are diagnosis to ascertain the causes of errors with satellite precipitation products, improvement of satellite precipitation products and evaluation to estimate the quality of satellite precipitation products in terms of systematic and random error and comparison of various satellite derived rain product with ground data. This research will place emphasis on merging different satellite observations of precipitation to develop a high resolution spatial coverage, hourly temporal coverage precipitation product using TMI, SSM/I data. Observation, corrections and elimination of error in

precipitation estimation will be carried out using findings from several projects such as Global Precipitation Climatology Project (GPCP), Global Precipitation Measurement (GPM) and International satellite Cloud Climatology Project (ISCCP) etc. The emphasis of this research will be also on assimilation of remotely sensed observations of precipitation using TMI, SSM/I, with UCAR Community Land Model and development of assimilation methods making best use of all available data and information, identification of errors and accuracy of the data assimilation products. This research is still in the preliminary stage to utilize and improve the existing real-time multi-satellite precipitation estimation in the hydrological models and compare the results with several other precipitation product and observations.

2. MULTI-SATELLITE PRECIPITATION

The techniques to enable the high temporal and spatial resolution combined precipitation data can facilitate the use of hydrological model to determine the impact of precipitation uncertainties on the model output. This research is in the preliminary stage in this direction to determine the precipitation uncertainties. High-quality estimates of the amount, temporal evolution, and spatial distribution of precipitation are important for a wide range of scientific and applications-related research such as weather forecasting, flood prediction and control, water resources prediction, hurricane monitoring. Although, measurement of less dynamic and more homogenous meteorological fields such as pressure or even temperature, accurate measurement of precipitation is particularly challenging due to its highly stochastic and rapidly changing nature. It is quite common to observe a wide range of precipitation rates within a given time frame at a given location. Significant research has been done to improve the temporal and spatial resolution of precipitation estimation. Furthermore, precipitating systems generally exhibit non-homogeneous spatial distributions of rain rates over local to regional domains. High temporal and spatial sampling of precipitation is preferred in many research and applications problems. Over land, rain gauges and radars are often appropriate for this purpose but generally lack sufficient coverage in particular area. Ground-based radar suffers from instrument error, calibration error, topographic blocking, beam broadening, beam overshoot, and non-unique reflectivity rain rate relationships. More than two-thirds of the Earth is covered with ocean. This suggests that satellite estimation is the only mean to get global coverage. Several Microwave radiometers and rain radars flown on low altitude satellites have offered the more accurate retrievals, although they are limited by the intrinsic sampling capabilities intrinsic to low-earth orbits. Morrissey and Janowiak (1996) found that pentad

and monthly estimates of rainfall introduces temporal sub-sampling uncertainties that introduce conditional bias, which can cause over-estimation or under-estimation of precipitation depending upon the ambient precipitation rate. For a 3-hourly sampling scheme, the bias is close to zero but increases markedly for a 12-hour sampling scheme. Li et al. (1996) demonstrated that the start-up time of a sampling scheme is as important as the sampling scheme itself, due to bias introduced by the diurnal cycle of precipitation. For arbitrary start-up times, they found a minimal bias for a 3-hourly sampling scheme relative to a 12-hourly scheme. Soman et al. (1995) found similar results using Darwin radar data. In light of these findings and others, 3-hourly sampling is a reasonable and actually an attainable goal with today's and the near future's mix of satellite assets. Combined precipitation estimation is used to derive long term precipitation statistics and utilization as an input in hydrological models.

There are several rainfall data products in varieties of data processing and analyzing techniques. Adler et al. (2000) are currently using a combination of TRMM and geosynchronous Infrared IR (geo-IR) data to provide 3-hourly estimates of precipitation over 50°N-50°S using an approach based on TRMM real-time multi-satellite algorithm 3B42. This product initially uses a combination of TRMM estimates and TRMM calibrated SSM/I estimates. Significant Improvement has been done in the passive microwave algorithm development. However, because of the low Earth orbit sampling properties of TRMM and DMSP satellites leave spatial gaps at the 3-hour time resolution, microwave-calibrated geo-IR estimates are used to fill the gaps (Shepherd et al 2002). Clearly, the evolving era of merged multiple satellite rain estimates underpinned by a reliable calibrating source such as TRMM represents a valuable testbed for developing the GPM constellation mission's data processing system. Moreover, there are genuine scientific concerns with the current techniques used to estimate precipitation from geo-IR data streams in order to achieve high temporal resolution (Shepherd et al 2002).

The precipitation estimates are available from several satellites and ground observations which their own sources of strengths and weaknesses. The geostationary observations provide better temporal resolution and diurnal coverage of the precipitation systems. The current TRMM approach to achieve high temporal precipitation sampling, i.e., to estimate 3-hourly rainfall maps, employs geo-IR measurements to fill temporal gaps not sampled by the TRMM satellite. While the robust temporal coverage provided by geosynchronous infrared data has been an unchallenged asset of the world's geostationary satellite network, geo-IR retrieval algorithms have been problematic since the first attempts to use them began in the mid 1970s. However, the accuracy of the IR data

rain estimate is not that good as compared to the microwave rain measurements. The major shortcoming is that they suffer from underlying weak statistical relationships between IR radiances at cloud top (generally represented as equivalent black body temperatures or (EBBTs)) and rainfall at the surface (Shepherd et al. 2002). In the recent reviews of Bellerby et al. (2000) and Ba and Gruber (2001) concerning several well-established geo-IR techniques used in the operational community, these problems are underscored. The IR rain estimation techniques are based on cloud top temperature, brightness etc. The standard assumption behind IR techniques is that cold cloud tops (e.g., cloud EBBTs below some threshold) are directly associated with precipitating cumulonimbus clouds. The geo-IR techniques largely perform as convective precipitation algorithms and several attempts have been made with marginal success to classify cold clouds into convective or stratiform categories according to EBBT texture signatures (Shepherd et al 2002). However, high-level cirrus and other non-precipitating clouds often exhibit cloud-top temperatures below the screening threshold, which can create false precipitation estimates. This results in inherent overestimation of rainfall when cirrus and other cold cloud tops are present. The relationship between infrared radiance and surface precipitation is very weak but it may be better and useful in the deep convection systems in tropics. If the estimates are later bias-adjusted according to a microwave algorithm, the procedure which the TRMM algorithm incorporates, the average rain rates applied to the true raining areas must be underestimated to compensate for assigning positive rain rates to the false areas. Geo-IR techniques are also generally found to underestimate rainfall from stratocumulus clouds, which are ubiquitous in mid-latitude coastal regions, because much of the drizzle regions of the stratocumulus decks have cloud top temperatures warmer than the precipitation cutoff (shepherd et al 2002). In the case of altostratus and multi-layered cloud systems, geo-IR-techniques exhibit variable performance according to the ambient thermal conditions. Further difficulties are introduced by the inability of these techniques to sense any direct information on rainfall occurring below the cloud bases of precipitating clouds as Bellerby et al. (2000) has discussed. In addition, geo-IR techniques must apply significant downscale averaging to achieve any meaningful accuracy. For these reasons and other more subtle problems, 3-hourly estimates using geo-IR calibration and merging techniques are susceptible to significant uncertainties. Microwave measurements are used to adjust the IR based techniques. In general, Infrared techniques possess bias and precision uncertainties for 3-hour estimates exceeding 20% and 50%, respectively, with little room to improve because there are no meaningful physics tools to exploit in making the estimates (Shepherd et al. 2002). Currently several rain estimation methods use IR techniques to get better temporal coverage despite the drawbacks in accuracy assessment as compared to Microwave techniques.

Measurement of precipitation in global scale with better resolution is long-term objectives of the several research communities. It is the GPM, which represents the next generation of space-based precipitation estimation and builds upon valuable techniques with knowledge and experience gained during the TRMM mission. In the GPM era, up to nine constellation satellites will provide more accurate and physically-based microwave precipitation estimates on a global basis with ~5% bias and ~20% precision uncertainty for 3-hourly products (Shepherd et al. 2002). Such direct measurements of precipitation and hydrometeor structure mitigate errors introduced by non-precipitating clouds, diverse macro cloud physics, and varying precipitation types. It is very useful for data assimilation research and several other scientific issues to have better global precipitation and not only in the tropics. GPM's Dual Frequency Precipitation Radar (DPR) and up to nine passive microwave radiometers (PMRs) on the constellation satellite of GPM will provide an excellent means to cross-calibrate similar precipitation-measuring instruments in space and on the ground validation sites. Thus, GPM will enable improved measurements of light rain, warm rain, snow, and other modes of frozen precipitation. The DPR will better detect explicit precipitation microphysics than was possible from the single frequency TRMM Precipitation Radar (PR), thereby leading to improvements in latent heating algorithms and mass spectra properties associated with the highly varying drop size distribution (DSD). GPM satellites will be used for weather forecasting and environmental research with microwave radiometers able to provide better precipitation measurements. GPM is also important because from an end-user perspective it will almost seamlessly advance a rainfall product line from the TRMM era in which acquiring the first complete and accurate tropical climatology of rainfall was the major objective, to an era where high frequency sampling, complete global coverage, microphysical variability, and thorough error quantification will become a reality (Shepherd et al. 2002). All of these new capabilities are needed for a significant improvement in our understanding of the global water and energy cycle and in detecting actual accelerations or decelerations in the water cycle that are associated with changes in the Earth's climate system, particularly in terms of global temperatures. While TRMM provides the rain data, the GPM will extend the future comprehensive with near-global coverage precipitation and improve observation of light rain in high latitudes.

3. ALGORITHMS AND DATA ANALYSIS

The TMI and SSM/I data will be used in the algorithm as an input to the model (i.e. CLM), which are describe in more detail in the next section. The Goddard Profiling Algorithm (GPROF) is based on Kummerow et al. (1996) and Olson et al. (1999). GPROF is a multi-channel physical approach for estimating rainfall and vertical structure of rainfall microphysics from satellite-based passive microwave observations (such as SSM/I and TMI). The GPROF-SSM/I estimates are computed from the SSM/I SDRs as part of the RT Data Set, while the GPROF-TMI estimates are computed by TSDIS as 2A12RT. The current version (denoted as "5" in TRMM) applies a Bayesian inversion method to the observed microwave brightness temperatures using an extensive library of cloud-model-based relations between hydrometeor profiles and microwave brightness temperatures (Huffman et al 2002). Each hydrometeor profile is associated with a surface precipitation rate. GPROF includes a procedure that accounts for inhomogeneities of the rainfall within the satellite instantaneous field of view (IFOV). Over land and coastal surface areas the algorithm reduces to a scattering-type procedure using only the higher-frequency channels such as 37 and 85.5 GHz. This loss of information arises from the physics of the emission signal in the lower frequencies when the underlying surface is land or other than all water. This algorithm is applied to both the TMI and SSM/I data and the estimates are used as input to RT Data Set processing. Satellite Data Records (SDR) containing level 2 (scan-pixel) SSM/I brightness temperature (T_b) data are provided by the Department of the Navy, Fleet Numerical Meteorological and Oceanographic Center, Monterey, CA (Turk et al 2000). Each file contains a "contact" of down-linked data, which can be up to 2 orbits. The data have had some quality control, and are converted from sensor units to antenna temperature T_a, then to T_b, as well as providing numerous other physical quantities and metadata (Huffman et al 2002). These data are used as input to GPROF-SSM/I for use in RT Data Set processing. TSDIS algorithm 2A12RT contains level 2 (scan-pixel) GPROF estimates of precipitation based on TMI data. These are provided by TSDIS. Each file contains an orbit of estimates. These data are used as input to RT Data Set processing. The TMI data provided by TSDIS will be also used as input in the NCAR Community Land Model (CLM) to assimilate the precipitation data product.

Combined microwave (TMI, SSM/I) High Quality (HQ) precipitation measurement provides a global 0.25°x0.25° averaged 3-hourly combination of all available SSM/I and TMI estimates (Huffman et al. 2002). The GPROF-SSM/I is probability-matched to 2A12RT. The GPROF-SSM/I and 2A12RT estimates are gridded to a 0.25°x0.25° global grid for a 3-hour period centered on the major synoptic times (00Z, 03Z, 06Z, 09Z, 12Z, 15Z, 18Z, 21Z) and the GPROF-SSM/I estimates are calibrated to 2A12RT. The rain rate produced in each grid box is the pixel-weighted average of all grid boxes contributing during the 3 hours. Additional fields in the data file include the number of pixels, the number of pixels with non-zero rain, and the number of pixels for which the estimate is "ambiguous," or highly uncertain. The SSM/I data are available in the latitude band 85° N-S, but GPROF-SSM/I only returns estimates in the band 70° N-S. Additionally, GPROF-SSM/I is unable to provide estimates in regions with frozen or icy surfaces.

The brightness temperature data in high frequencies are subjected to a discrimination process and each pixels are tested for presence of rain and no rain. These data are processed using the algorithm and an output 3B40RT is generated. The units of the Real Time data set estimates are mm/hour for the precipitation and random error estimates, dimensionless for the source field, and number of pixels for the other fields. The global grid on which each precipitation values are presented is 0.25°x-.25° (Cylindrical Equal Distance) global array of points. The spatial resolution of the products is 0.25°x0.25°.

3.1 *Model and assimilation*

The land surface parameterization used with the Community Climate Model (CCM3) and the Climate System Model (CSM1), the NCAR LSM has been modified as part of the development of the next version of these climate models (Bonan et al. 2001). This new model is known as the Community Land Model (CLM2). The TRMM monthly precipitation observations will be used as the precipitation input to test the model in 0.5° or higher resolution Global grid. The precipitation data processing using TMI, SSM/I and CLM model is shown in figure 1 and an example of CLM2 rain (1979-1983) shown in figure 2. Previous study (Bonan et al 2001) shows that precipitation is slightly under-estimated in winter and autumn, but the overall the model reasonably produces the annual cycle, especially the summer precipitation. Globally, the model simulates precipitation over land, which agrees with the observations. Annual precipitation is particularly well simulated for certain river basins such as Mississippi basin, Amazon River. Precipitation is over estimated by more than 45% for Congo, Yukon basins. However, model accurately, reproduces the annual precipitation. The case studies are always required for improvements in the model performance; we are in the preliminary stage of incorporating into CLM precipitation.

We have tested the GLDAS approach for total precipitation estimation using SSM/I and TMI microwave data. GLDAS is an offline land model driven by

atmospheric observations and analysis data. GLDAS is a 0.25° and higher resolution near-real time. GLDAS is a combined effort led by researchers at NASA's Goddard Space Flight Center and NOAA's National Centers for Environmental Prediction (NCEP), in collaboration with researchers at Princeton, the University of Washington and the National Weather Service (NWS) office of Hydrology (Houser et al. 2000, Rodell et al. 2002) The uncertainties of the atmospheric parameters will be minimized using GLDAS. The model assumptions and initial land conditions for modeling and data assimilation is provided by GLDAS. Improvements in assimilating TMI and SSM/I rain rate to improve hydrological cycle and climate parameters are key scientific research objectives. The 3-hour rain rate derived from TMI, SSM/I and other data shows improvement in global precipitation analysis. TMI, SSM/I rain data gives much better results as compared to Geostationary Infrared data. The results provided and illustrated in this paper shows that the precipitation assimilation using microwave data can improve the climate and other application significantly. Higgins rain gauge daily accumulated data (0.25° x 0.25° grid) and NEXt generation RADar (NEXRAD) stage IV hourly radar data for continental U.S. is used in this study. Precipitation derived from Geostationary IR, Microwave data is compared with Higgins gauge data and stage IV NEXRAD data from NOAA.

4. TRMM AND OTHER DATA RAIN ESTIMATE

Near-real time satellite-derived precipitation data sets are derived from NASA/GSFC (Huffman 2001) and the U.S. Naval Research Laboratory (NRL). The NRL produces precipitation based on both geostationary satellite infrared cloud top temperature measurements and microwave observation techniques (Turk et al. 2000). These precipitation datasets have a spatial resolution of 0.25° x 0.25° and a temporal resolution of 3 hours with 60° S to 60° N coverage.

The system to produce the "TRMM and Other Data" estimates in real-time was developed (Huffman et al. 2002) to apply new concepts in merging quasi-global precipitation estimates and to take advantage of the increasing availability of input data sets in near real time. The product is produced quasi-operationally on a best-effort basis at TSDIS, with on-going scientific development by a research team in the GSFC Laboratory for Atmospheres. There are three "TRMM and Other Data" products (Huffman et al. 2002):

4.1 *3B40RT (High Quality, or HQ)*

This data product merges all available SSM/I and TMI microwave precipitation estimates into a "high-quality" (HQ) precipitation estimate. The SSM/I estimates are computed with the GPROF 5.0-SSMI algorithm and the TMI estimates are computed with the

GPROF 5.0-TMI algorithm (the real-time TRMM 2A12 product). Before merger the SSM/I are calibrated to the TMI using separate global land and ocean matched histograms (Huffman et all 2002). All the fields are on a 0.25° x 0.25° grid. Grid box edges are on multiples of 0.25°. All fields are 1440x720 grid boxes (0-360° E, 90° N-S). The first grid box center is at (0.125° E, 89.875° N). Files are produced every 3 hours on synoptic observation hours (00 UTC, 03 UTC, ..., 21 UTC) as an accumulation of all HQ swath data observed within +/-90 minutes of the nominal file time. Estimates are only computed for the band 70° N-S. Figure 3 shows the precipitation estimation at 12 Z on February 4, 2002.

4.2 *3B41RT (Variable Rain rate Infrared, or VAR)*

This is the precipitation estimate from geostationary infrared (IR) observations using spatially and temporally varying calibration by the HQ. The algorithm is a probability-matched threshold approach that ensures that the histogram of grid box-average IR precipitation rates matches the histogram of grid box-average HQ precipitation rates locally (Huffman et al. 2002). As such, the colder an IR pixel is than the zero-precipitation threshold brightness temperature, the higher the rain rate it receives. It was referred as the variable-rain rate (VAR) infrared algorithm. All fields are 1440x480 grid boxes (0-360° E, 60° N-S). The first grid box center is at (0.125° E, 59.875° N). Files are produced every hour from the on-hour IR image (except for the half-past image for GMS), with fill-in by the half-past image (except for GMS, where the on-hour image is used for fill-in). Valid estimates are only provided in the band 50° N-S. Figure 4 shows the infrared precipitation estimate on February 4, 2002 at 12 Z.

4.3 *3B42RT (Merger of HQ and VAR)*

It is a merger of 3B40RT (HQ) and 3B41RT (VAR). The current scheme is simple replacement for each grid box the HQ value is used if available, and otherwise the VAR value is used (Huffman et al. 2002). All fields are 1440x480 grid boxes (0-360° E, 60° N-S). The first grid box center is at (0.125° E, 59.875° N). Files are produced every 3 hours on synoptic observation hours (00 UTC, 03 UTC, ..., 21 UTC) using that hour's 3B40RT and 3B41RT data sets. Valid estimates are only provided in the band 50° N-S. Both precipitation and random error are scaled by 100 before conversion to 2-byte integer. Thus, units are 0.01 mm/h. To recover the original floating-point values in mm/h, divide by 100. Missings are given the 2-byte-integer missing value, -31999. The remaining fields are in numbers of pixels, except the source variable, which is dimensionless. The merged precipitation estimate on February 4, 2002 at 12Z is shown in Figure 5.

The validity of the ambiguous/missing pixels is difficult to determine but the validity of the rain or no rain data is examined. 3B40RT precipitation values that are highly likely to be artifacts (number of ambiguous pixels at least 40% of the total number of pixels) are encoded as (-p - 0.01), where "P" is the original precipitation value, before conversion to scaled 2-byte-integer (Huffman et al. 2002). The estimated value in grid boxes is determined and the non-negative precipitation values are checked. 3B41RT and 3B42RT precipitation values outside the $50°$ N-S latitude band are considered experimental and are encoded as (-p 0.01), where "P" is the original precipitation value, before conversion to scaled 2-byte-integer (Huffman et al 2002). The 3B42RT "source of estimate" field only has three discrete values, 1, 0, 100, which correspond to "no estimate", "HQ", and "VAR".

Despite a number of areas in which precipitation estimation improvements are being sought and there are numerous similar data sets. There are several errors and difficulties in the rain accuracy estimation, which can be fixed. All the attributes of being fine-scaled in space and time, quasi-global, near-real-time, inter-calibrated, and formed by combining multiple data sources. The closest is the set of estimates based on Turk (1999), which uses individual SSM/I overpasses to calibrate geo-IR precipitation estimates. Several SSM/I-based data sets are available as gridded single-sensor data sets with significant data voids in cold-land, snow-covered, and ice-covered areas, including those computed with the GPROF 6.0 algorithm (based on Kummerow et al. 1996) and the NOAA Scattering algorithm (Grody 1991), among others. Other daily, single-sensor data sets are available for open-water regions based on SSM/I data (Wentz and Spencer 1998) or MSU data (Spencer 1993). Numerous daily single-sensor or combination data sets are available at the regional scale, but are not really "similar."

5. DATA ANALYSIS AND ERROR DETECTION

Validation and inter-comparison study is performed using satellite products and Higgins rain gauge and NEXRAD radar data. We compare the difference between satellite derived global precipitation such as Geostationary IR total precipitation in mm for October 9, 2002 (Shown in figure 6), TMI and SSM/I total precipitation (figure 7), NASA Merged total precipitation (figure 8) with GLDAS model derived total precipitation (figure 9). We found over all good agreement among microwave total precipitation products. Geostatinary IR total precipitation is also agreed well with microwave total precipitation data except some spots.

Another set of precipitation data product not global but on US continental scale are compared and validated which are illustrated in figure 10 to 15. Figure 10 shows the Geostationary IR total precipitation for November 1, 2002 in mm; TMI and SSM/I total precipitation is shown in figure 11; NASA merged total precipitation is shown in figure 12; and GLDAS total precipitation is shown in Figure 13. The ground validation product such Higgins gauge total precipitation and stage IV radar total precipitation is shown in figure 14 and 15 respectively. One can confer from these images that the microwave products such as TMI and SSM/I total precipitation agree well with NASA merged total precipitation and also with ground validation data such as Higgins total precipitation and NEXRAD radar total precipitation. The performance of GLDAS model total precipitation is reasonably well as compared to microwave product and ground validation total precipitation. The performance of the Geostationary IR total precipitation product is not that good as compared to microwave data products and ground validation datasets, one can conclude that there is precipitation over estimation in North-western region of United States.

Several types of known errors in the precipitation dataset especially in the SSM/I datasets are detected. Built-in hot- and cold-load calibration checks are used to convert counts to Antenna Temperature (T_a). An algorithm has been developed to convert T_a to Brightness Temperature (T_b) for the several different channels eliminating cross-channel leakage. The systematic navigation corrections are applied. All pixels with non-physical T_b and local calibration errors are deleted. Accuracies in the T_b's are within the uncertainties of the precipitation estimation techniques. For the most part, tests show only small differences among the SSM/I sensors flying on different platforms. The SSM/I scattering field is probably not reliable and must be small in snow filled land areas. Some satellites experienced significant drifting of the equator-crossing time during their period of service. There is no direct effect on the accuracy of the SSM/I data, but it is possible that the systematic change in sampling time could introduce biases in the resulting SSM/I-only precipitation estimates (Huffman et al. 2002).

Because of the similarity in frequencies, TMI error detection/correction is quite similar to that of the SSM/I. The TMI is a modified SSM/I with the 10 GHz channels added. Built-in hot- and cold-load calibration checks are used to convert counts to Antenna Temperature (T_a). An algorithm converts T_a to Brightness Temperature (T_b) for the various channels eliminating cross-channel leakage. The systematic navigation corrections are applied to remove the sampling error. All pixels with non-physical T_b and local

calibration errors are deleted. Accuracies in the T_b's are within the uncertainties of the precipitation estimation techniques. For the most part, tests show stable cross-calibration with the fleet of SSM/I's. The GROF has strong correlation coefficient with gauge data, which is above 0.77 (Huffman et al 2002). There is no direct effect on the accuracy of the TMI data, but the continually changing diurnal sampling can cause significant fluctuations in the resulting TMI-only precipitation estimates (Huffman et al. 2002). The observations uniformity on pixel to pixel basis and warm bias correction of the TMI can provide precise radiometric calibration.

6. DISCUSSION AND CONCLUSION

The results presented in this research shows that the microwave rain estimation is much superior that the infrared estimation. The microwave total precipitation estimation agrees well with each other and also with the ground validation datasets including NEXRAD total precipitation. Good agreements are found in microwave total precipitation and the GLDAS model total precipitation. The performance of the model in total precipitation estimation and assimilation is reasonably good.

Improvements have been made in TRMM passive microwave rain estimation. The accuracy of the precipitation products can be subdivided into systematic departures from the true answer (bias) and random fluctuations about the true answer (sampling), as discussed in Huffman (1997). The former are the biggest problem for climatological averages, since they will not average out. However, for short averaging periods the low number of samples and/or inaccuracies in algorithm can provide a more serious problem for SSM/I and TMI. The distribution of precipitation over the day as sampled may not be the true precipitation value. For VAR, the sampling is good, but the algorithm likely has substantial RMS error due to the weak physical connection between IR T_b's and precipitation. Accordingly, the "random error" is assumed to be dominant, and estimates could be computed as discussed in Huffman (1997). Random error cannot be corrected. The "bias error" is likely small, or at least contained. This is less true over land, where the lower-frequency microwave channels are not useful for precipitation estimation with our current state of knowledge. Studies of the sub-monthly bias have not yet been performed. The cause of shift in orbit can contribute significant amount of error and can grow by time say days, weeks. The over flight times to the nearest minute is generally reliable. The error sources can be also minimized by assessing how accurate one can estimate the start time and position of each orbit.

The Real Time data set inter-comparison results are still being developed. The time series of the global images shows good continuity in time and space across the geo-IR data boundaries.

Several precipitation measurements are in different scales and formats, different variability and the different uncertainties depending on sensor techniques which makes difficult to get precipitation in desired scale and time. Precipitation and the associated latent heating play important roles in controlling the Earth's general circulation, which leads to the variations in weather systems and climate processes. In addition, atmospheric processes are intricately linked to hydrologic, oceanic, and land surface processes through precipitation fluxes. GLDAS project and other agencies seek to determine the Earth system's variability, forcing, responses, change consequences, and likelihood of predictability. The measurement of precipitation at temporal and spatial scales concomitant with the actual scales of rain production, sorting, distribution, and fallout becomes essential.

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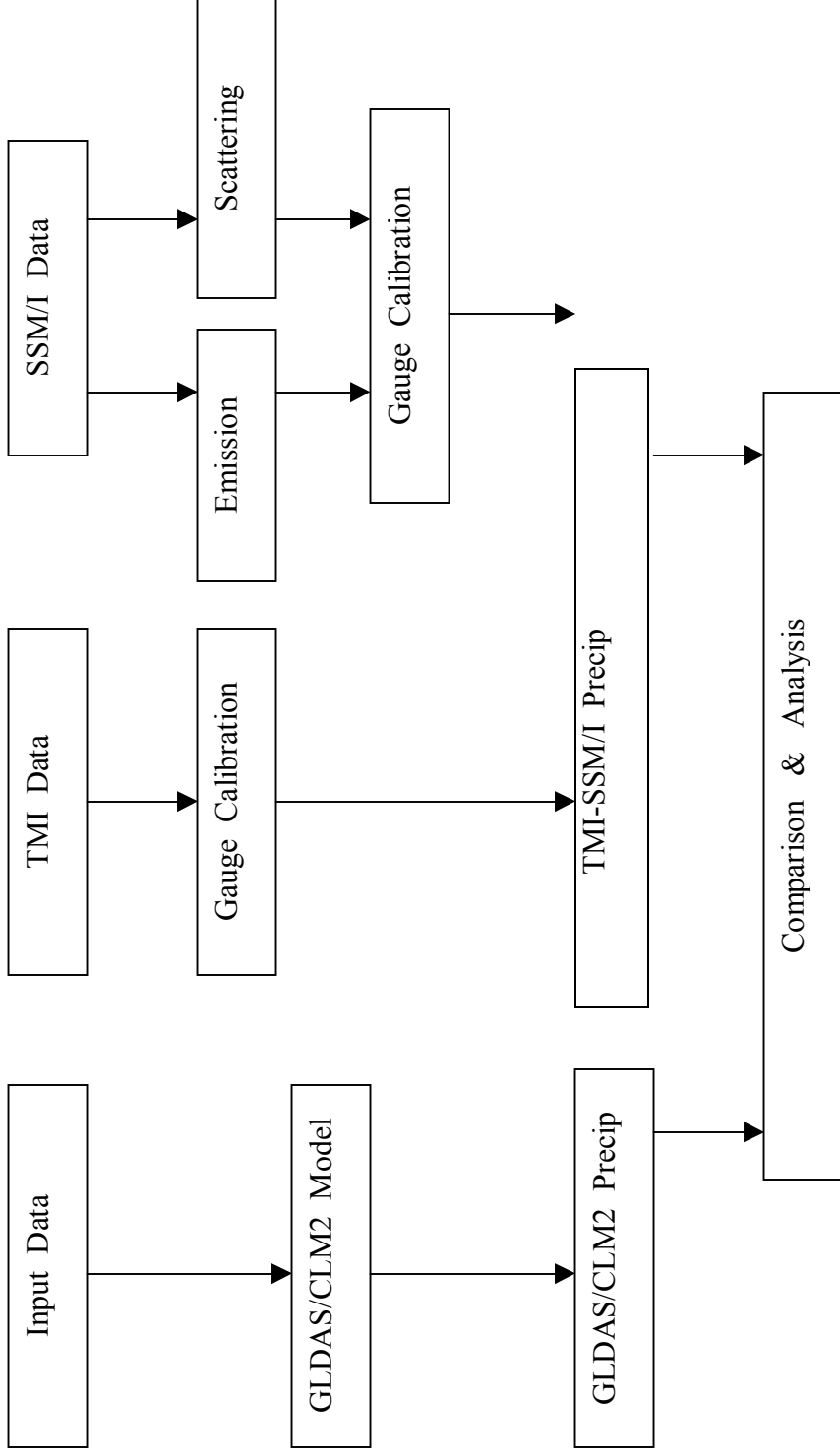
Figure 1: Precipitation data processing using TMI, SSM/I and GLDAS/CLM2 model.

HQ (mm/h)

0   2   4   6   8   10+

12Z 04 Feb 2002
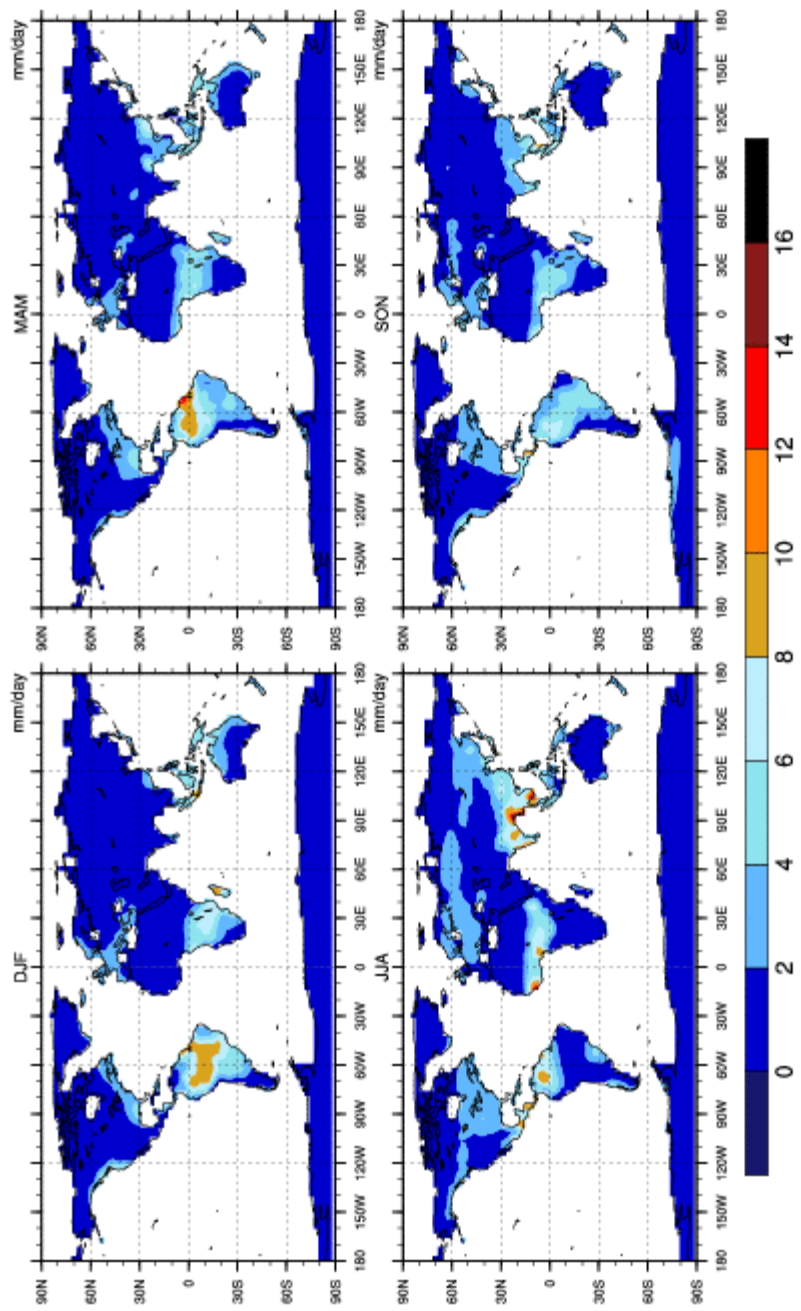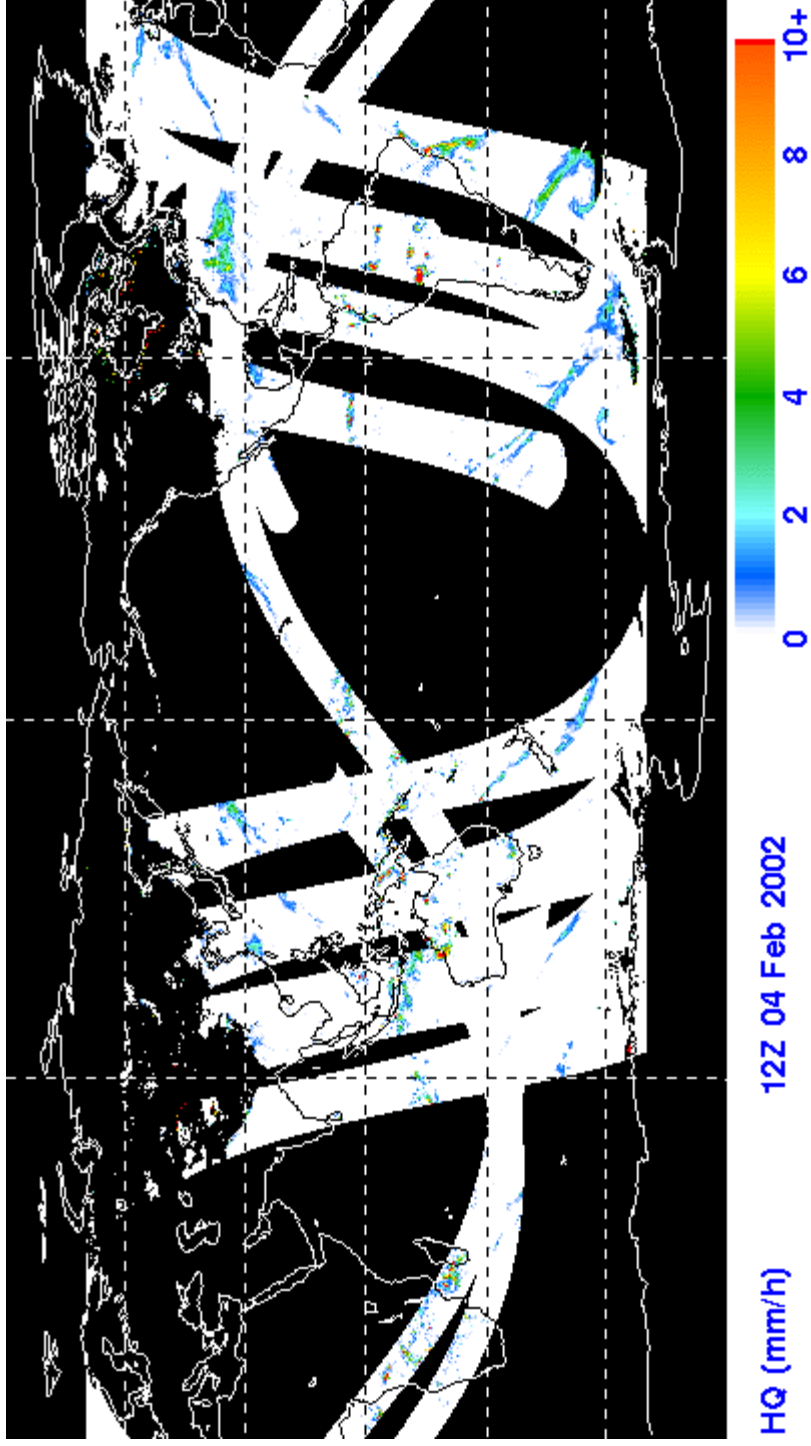
Figure 3: TMI and SSM/I merged Precipitation estimation (3B40RT) at 12 Z on February 4, 2002.

1

VAR (mm/h)   12Z 04 Feb 2002
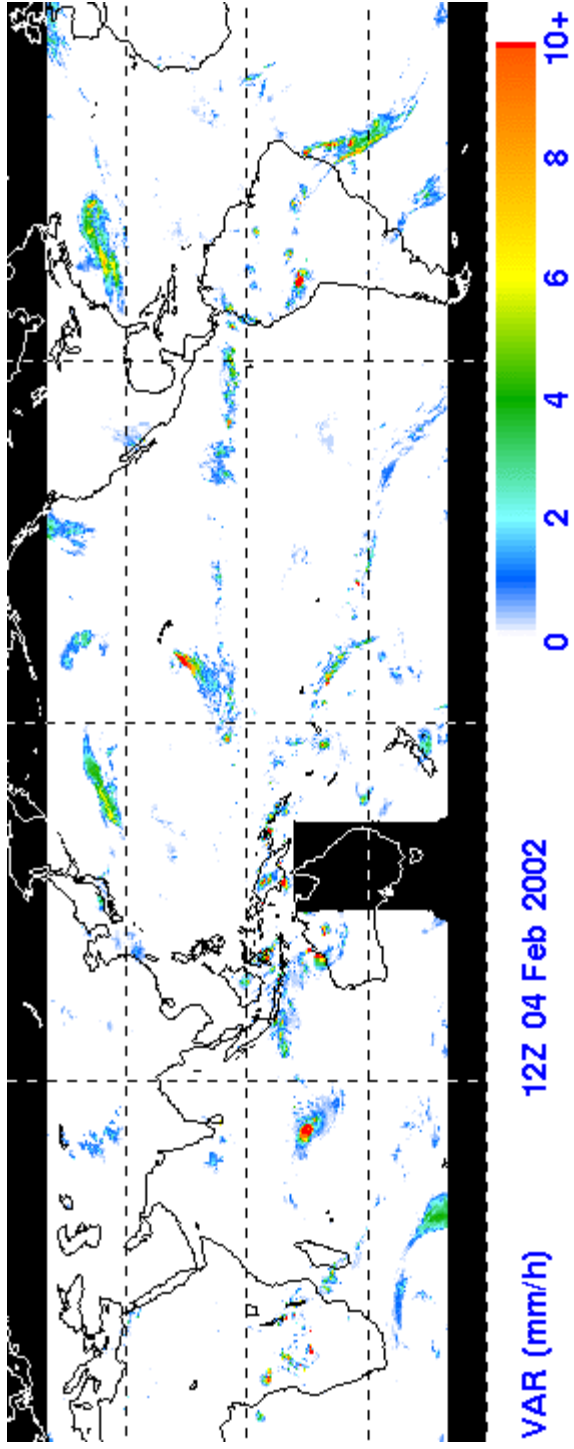
Figure 4: Geostationary IR Precipitation estimation (3B41RT) at 12 Z on February 4, 2002

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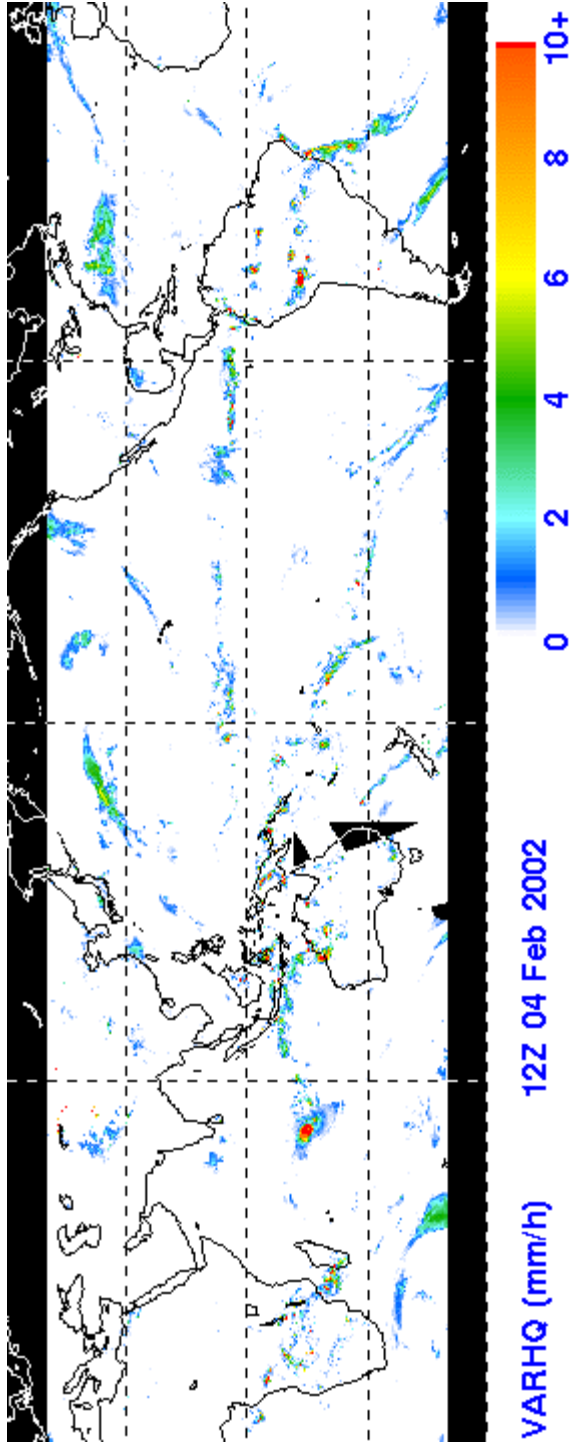
Figure 5: Merged TMI, SSM/I and Geo-IR Precipitation estimation (3B42RT) at 12 Z on February 4, 2002
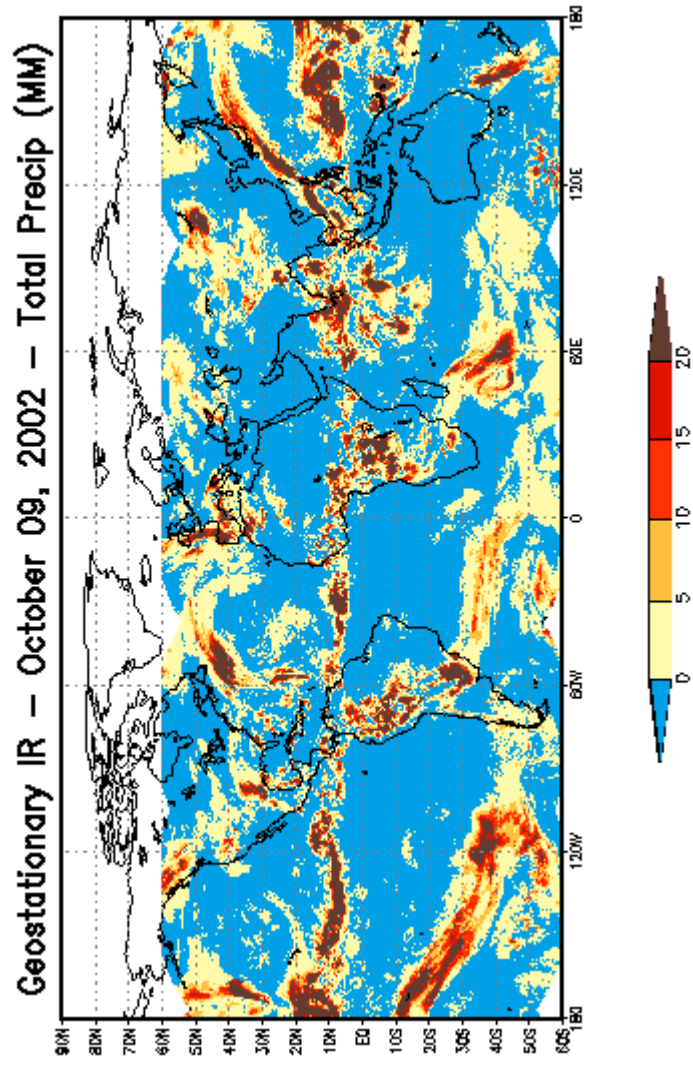
Figure 6: Total Precipitation estimation using Geostationary InfraRed Data
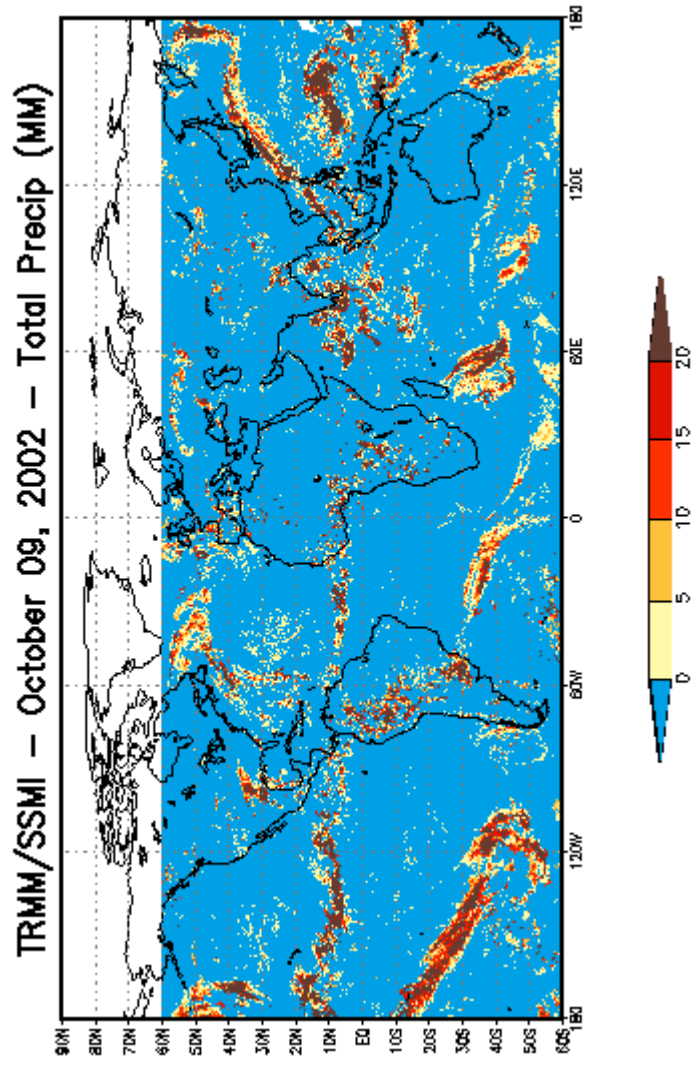
Figure 7: TRMM-TMI/DMSP-SSM/I Total Precipitation
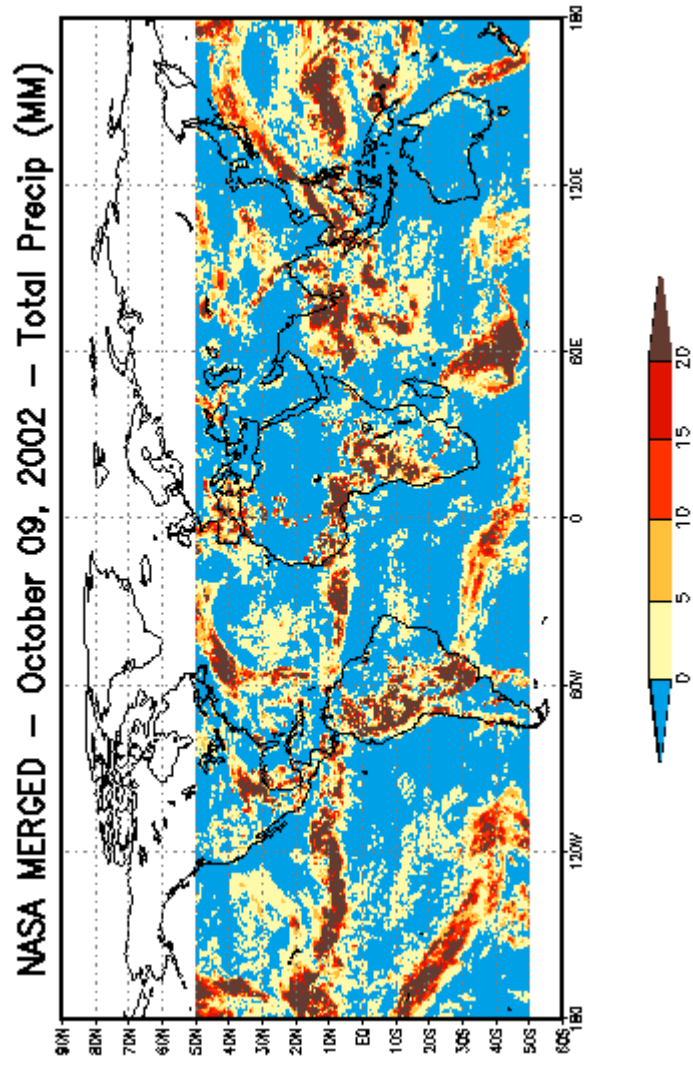
Figure 8: NASA merged (Microwave and IR) Total Precipitation
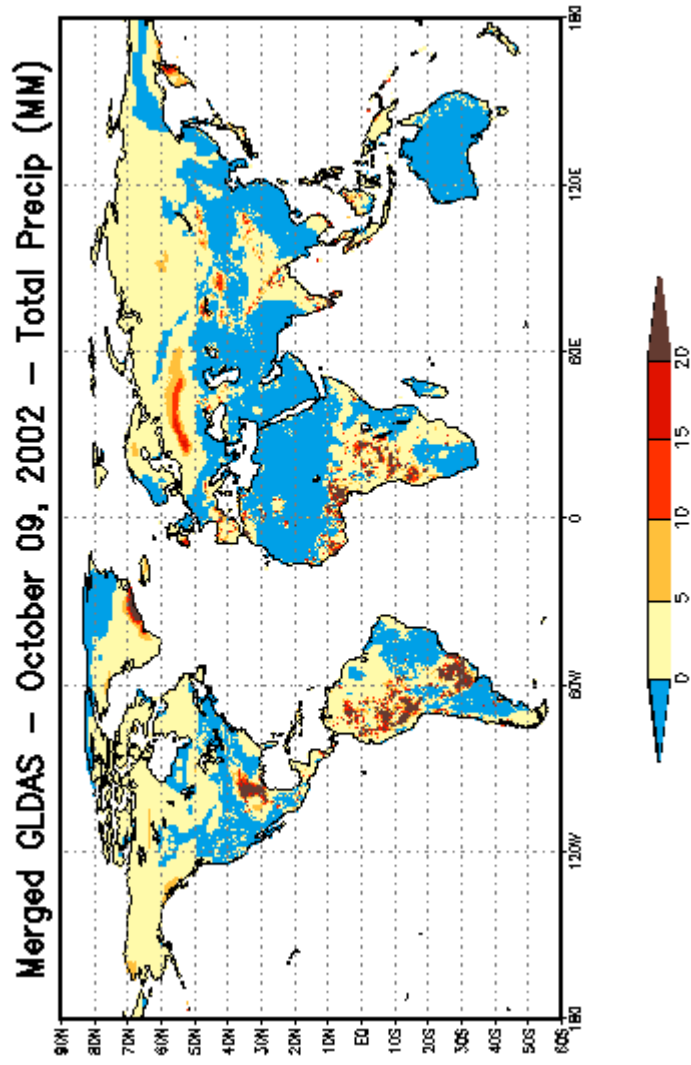
Figure 9: Merged (Microwave and Infrared) GLDAS Total Precipitation
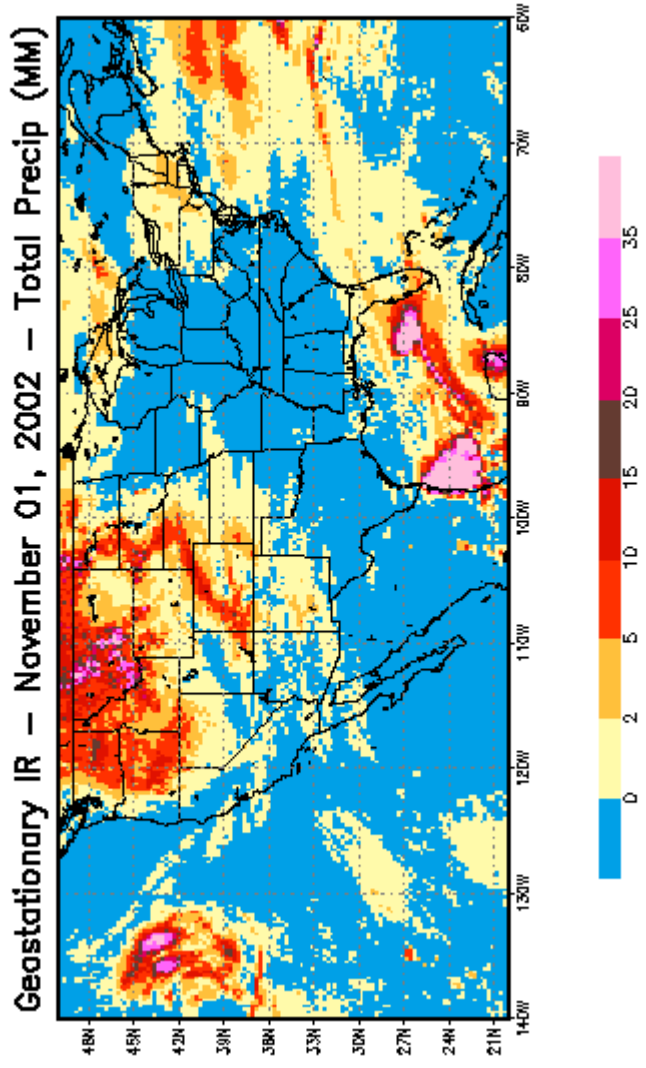
Figure 10: Geostationary InfraRed Total Precipitation
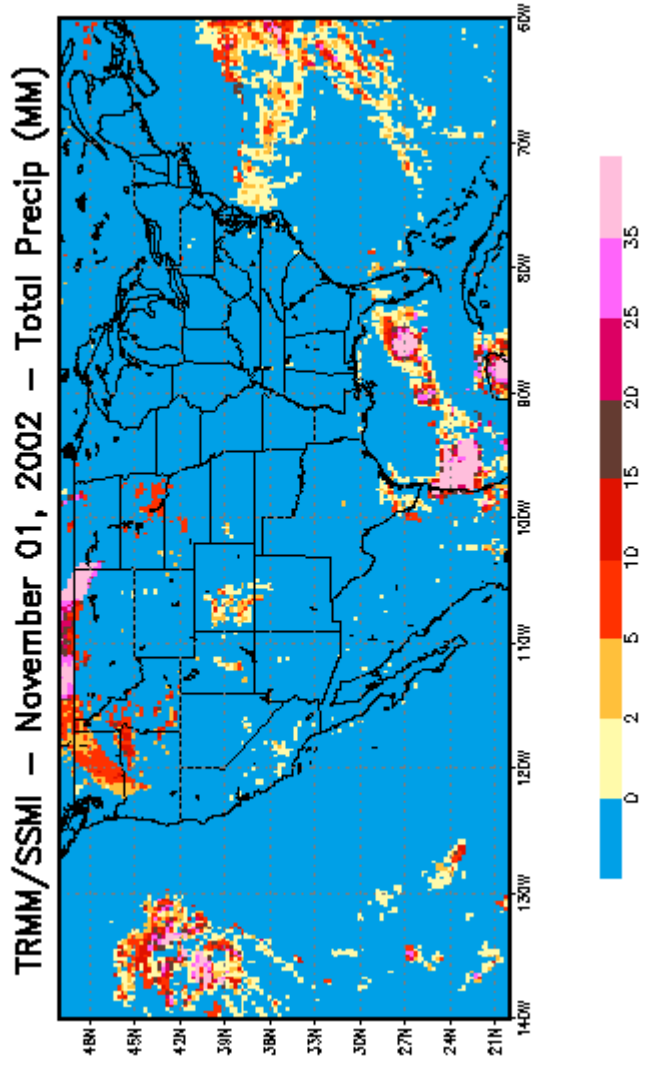
Figure 11: TRMM-TMI/DMSP-SSM/I Total Precipitation
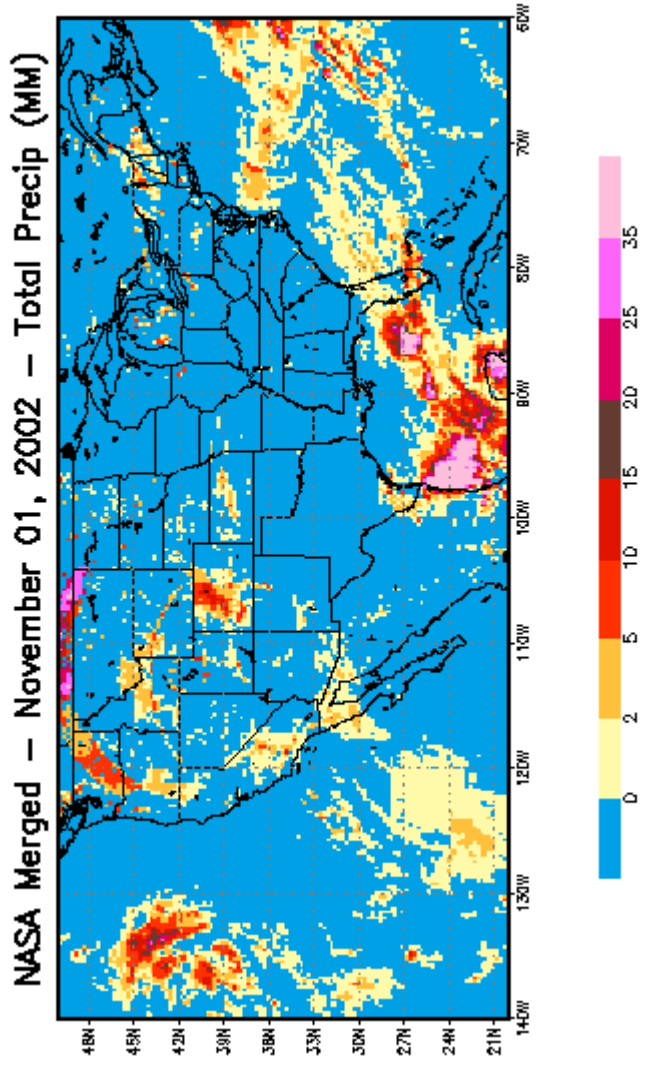
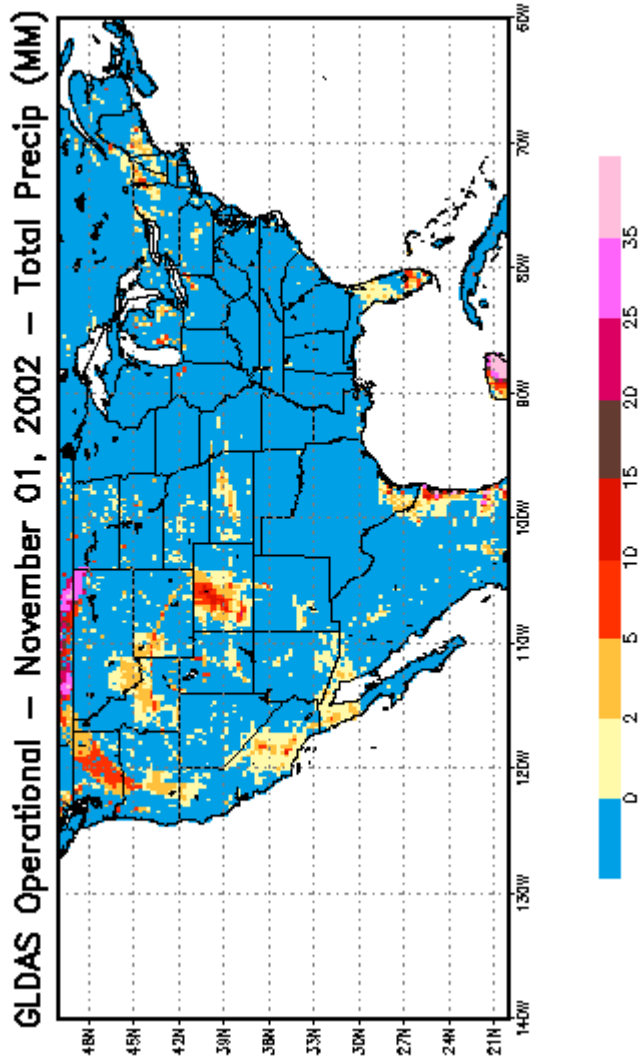Figure 12: NASA Microwave/Infrared merged Total Precipitation

Figure 13: GLDAS Merged Total Precipitation
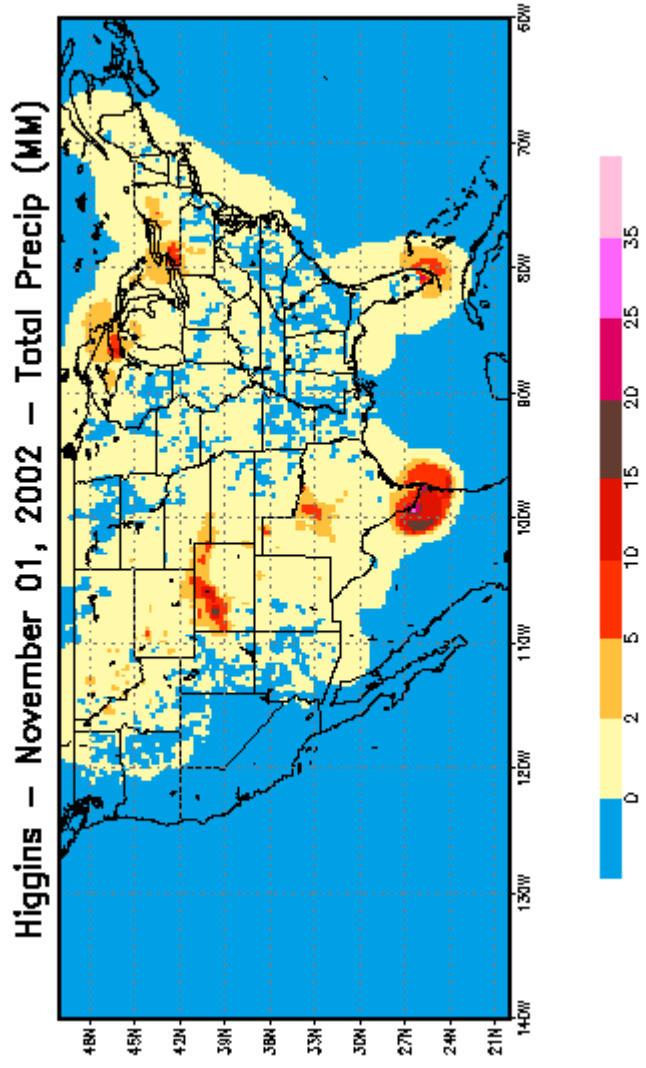
Higgins — November 01, 2002 — Total Precip (MM)
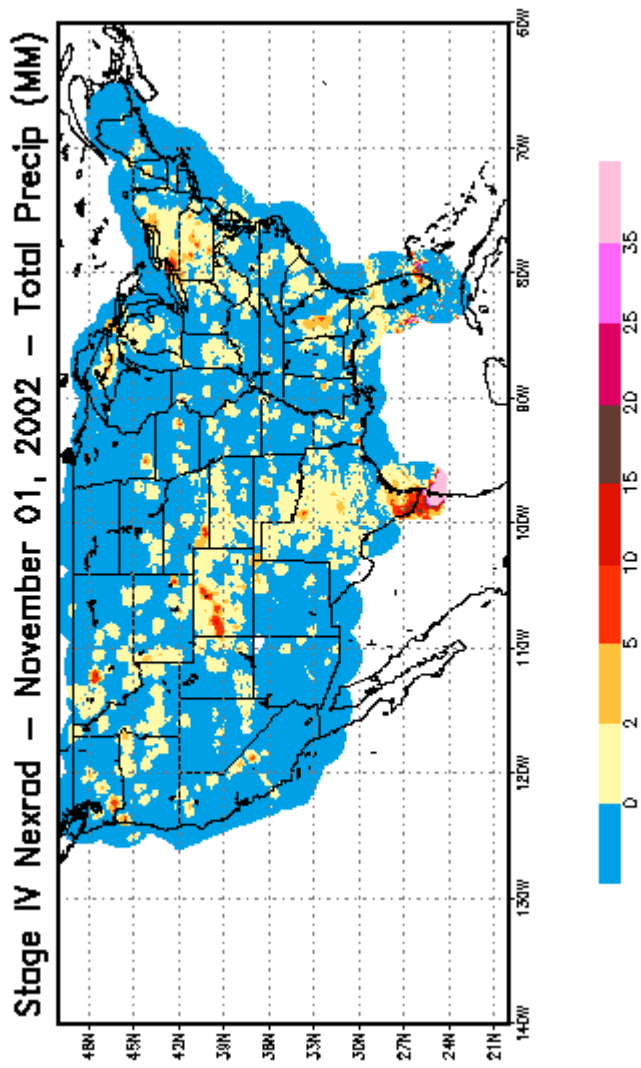
Figure 14: Higgins Rain Gauge Total Precipitation

Figure 15: Nexrad Ground-based Radar Total Precipitation