

All Authors and Affiliations

JAMES PAUL MASON ^{1,2} ALEXANDRA WERTH ^{3,4} COLIN G. WEST ³ ALLISON A. YOUNGBLOOD ^{1,5}
DONALD L. WOODRASKA ¹ COURTNEY PECK ^{6,7} ARVIND J. ARADHYA ⁸ YIJIAN CAI,⁸ DAVID CHAPARRO ⁸
JAMES W. ERIKSON,⁸ KUSHIK GANESAN,⁸ T. R. GEERDTS,⁸ THI D HOANG,⁸ YAN JIN,⁸ HAIXIN LIU ⁸
NOAH LORDI,⁸ ZHENG LUO ⁸ THANMAY S. MENON ⁸ JOSEPHINE C. MEYER ⁸ EMMA E NELSON ⁸
KRISTIN A. OLIVER ⁸ JORGE L RAMIREZ ORTIZ ⁸ ANDREW OSBORNE ⁸ ALYX PATTERSON,⁸ NICK PELLATZ,⁸
JOHN PITTEN,⁸ NANAKO SHITARA,⁸ DANIEL STECKHAHN,⁸ ASEEM VISAL,⁸ HONGDA WANG,⁸ CHAORAN WANG,⁸
EVAN WICKENDEN,⁸ JOHN WILSON ⁸ MENGYU WU ⁸ NIKOLAY YEGOVTSSEV,⁸ INGRID H ZIMMERMANN ⁸
JAMES HOLLAND AARON,³ JUMANA T. ABDULLAH,³ JONATHAN M. ABRAMS,³ RILEY ABRASHOFF,³
ANDRES B. ACEVEDO ³ IKER ACHA ³ DANIELA M. MEZA ACOSTA,³ MEGAN M. ADAM,³ DANTE Q. ADAMS,³
KALVYN N ADAMS,³ ELENA R ADAMS ³ ZAINAB A. AKBAR,³ USHMI H. AKRUWALA ³ ADEL AL-GHAZWI ³
BATOOL H. ALABBAS,³ AREEJ A. ALAWADHI,³ YAZEED A. ALHARBI,³ MOHAMMED S. ALAHMED ³
MOHAMMED A. ALBAKR,³ YUSEF J. ALBALUSHI ³ JONATHAN ALBAUM,³ AHMED ALDHAMEN,³ NOLAN ALES,³
MOHAMMAD ALESMAIL,³ ABDOLELAH ALHABEEB ³ DANIA ALHAMLI ³ ISEHAQ ALHUSEINI ³ SUHAIL ALKAABI,³
TAMEEM ALKHEZZI ³ MOHAMED ALKUBAISI,³ NASSER ALLANQAWI,³ MARTIN ALLSBROOK,³
YOUSEF A. ALMOHSEN,³ JUSTIN THOMAS ALMQUIST,³ TEEB ALNAJI,³ YOUSEF A ALNASRALLAH,³
NICHOLAS ALONZI,³ MESHAL ALOSAIMI ³ EMEEN ALQABANI,³ AVA L. ALTENBERN,³ ABDULLAH ALTOKHAIS,³
SALEH A. ALYAMI,³ FEDERICO AMELJENDA,³ HAMZI AMER,³ MEGGAN AMOS ³ HUNTER J. ANDERSON,³
CARTER ANDREW,³ JESSE C ANDRINGA,³ ABIGAIL ANGWIN,³ GABREECE VAN ANNE,³ ANDREW ARAMIANS ³
CAMILA VILLAMIL ARANGO,³ JACK. W. ARCHIBALD,³ BRIAN A. ARIAS-ROBLES,³ MARYAM ARYAN,³ KEVIN ASH,³
JUSTIN ASTALOS ³ N. S. ATCHLEY-RIVERS,³ DAKOTA N. AUGENSTEIN,³ BRYCE W. AUSTIN,³ ABHINAV AVULA ³
MATTHEW C. AYCOCK,³ ABDULRAHMAN A. BAFLAH ³ SAHANA BALAJI,³ BRIAN BALAJONDA,³ LEO M BALCER,³
JAMES O. BALDWIN ³ DAVID J BANDA,³ TITUS BARD,³ ABBY BARMORE,³ GRANT M. BARNES ³
LOGAN D. W. BARNHART,³ KEVIN M. BARONE ³ JESSICA L. BARTMAN,³ CLAIRE BASSEL,³
CATALINA S BASTIAS ³ BATCHIMEG BAT-ULZII,³ JASLEEN BATRA,³ LEXI BATTIST,³ JOSHUA BAY,³
SIMONE BEACH ³ SARA BEARD,³ QUINN I BEATO ³ RYAN BEATTIE,³ THOMAS BEATTY,³
TRISTAN DE LA BEAUJARDIERE ³ JACOB N. BEAUPREZ ³ M. G. BECK,³ LILY BECK,³ SIMONE E. BECKER,³
BRADEN BEHR,³ TIMOTHY A. BEHRER,³ JOSHUA BEIJER,³ BRENNAN J. BELEI,³ ANNELENE L. BELKNAP,³
AISLYN BELL ³ CADEN BENCE,³ EVAN BENKE ³ NAOMI BERHANU ³ ZACHARY D. BERRIMAN-ROZEN,³
CHRISANNA BERTUCCIO ³ OWEN A. BERV,³ BLAINE B. BIEDIGER,³ SAMUEL J BIEHLE ³ BRENNEN BILLIG,³
JACOB BILLINGSLEY,³ JAYCE A. BILLMAN,³ GABRIELLE E. BISACCA,³ CASSIDY A. BLAKE,³
GUILLERMO BLANDON ³ OLIVIA BLEVINS ³ ETHAN BLOUIN,³ TAYLOR A. BOEYINK,³ MATTHEW BONDAR ³
LAUREN BONE,³ ALBERTO ESPINOSA DE LOS MONTEROS BONILLA ³ WILLIAM T BORELLI,³ LUKE R. BORGERDING,³
TROY BOWEN,³ CHRISTINE BOYER,³ AIDAN BOYER,³ AIDAN P. BOYLE ³ TOM BOYNE,³ DONOVAN BRANCH,³
ARIANA E. BRECL,³ DAVID J. BRENNAN,³ ALEXANDER J BRIMHALL,³ JENNIFER L. BROCKMAN,³ SARAH BROOKINS,³
GABRIEL T. BROWN,³ CAMERON L. BROWN,³ RYAN BROWN,³ JORDI BROWNLOW,³ GRANT BRUMAGE-HELLER,³
PRESTON J. BRUMLEY ³ SAMUEL BRYAN ³ A. BRZOSTOWICZ,³ MARYAM BUHAMAD,³ GIGI BULLARD-CONNOR,³
J. R. RAMIREZ BUNSOW ³ ANNEMARIE C. BURNS,³ JOHN J. BURRITT,³ NICHOLAS DAVID BURTON,³
TAYLOR BURTON,³ CELESTE BUSCH,³ B. W. BUXTON,³ MALENA C.TOUPS,³ CARTER C. CABBAGE,³
BREONNA CAGE,³ JACKSON R. CAHN,³ ANDREW J CAMPBELL ³ BRADEN P. CANALES,³ ALEJANDRO R. CANCIO,³
LUKE CAREY,³ EMMA L. CARILLION,³ MICHAEL ANDREW CARPENDER,³ EMILY CARPENTER,³ SHIVANK CHADDA ³
PAIGE CHAMBERS,³ JASEY CHANDERS,³ OLIVIA M. CHANDLER,³ ETHAN C. CHANG,³ MITCHELL G. CHAPMAN,³
LOGAN T. CHAPMAN,³ S. CHAVALI ³ LUIS CHAVEZ,³ KEVIN CHEN ³ LILY CHEN,³ SAM CHEN,³
JUDY CHEN ³ JENISHA CHHETRI,³ BRADYN CHILES,³ KATHERINE E CHRISTIANSEN,³ NICHOLAS A. CISNE ³
ALEXIS CISNEROS,³ DAVID B. CLARK,³ EVELYN CLARKE ³ PETER C CLARKSON,³ ALEXIS R. CLAUSI,³
BROOKE COCHRAN,³ RYAN W. COE,³ AISLINN COLEMAN-PLANTE,³ JAKE R. COLLERAN,³ ZACHARY COLLERAN,³
CURRAN COLLIER,³ NATHANIEL A. COLLINS,³ SARAH COLLINS,³ JACK C. COLLINS ³ MICHAEL COLOZZI ³
AURORA COLTER ³ REBECCA A. CONE ³ THOMAS C. CONROY,³ REESE CONTI ³ CHARLES J. CONTIZANO,³
DESTINY J. COOL,³ NICHOLAS M. COOPER,³ JESSICA S CORBITT,³ JONAS COURTNEY,³ OLIVIA COURTNEY ³
CORBEN L. COX,³ WILMSEN B. CRAIG,³ JOSHUA B. CREANY ³ ANASTASIA CREWS,³ K. A. CROCKER,³
A. J. CROTEAU ³ CHRISTIAN J. CROW,³ ZOE CRUSE ³ AVRIL CRUZ,³ TYLER L. CURNOW,³
HAYDEN CURRENT,³ RILEY T. CURRY,³ LIBBY CUTLER,³ AIDAN ST. CYR,³ FEDERICK M. DABBERDT,³
JOHNSTON DABOUB,³ OLIVIA DAMGAARD ³ SWAGATAM DAS,³ EMMA A. B. DAVIS ³ ELYSE DEBARROS ³
SEAN DEEL,³ MEGAN E. DELASANTOS,³ TIANYUE DENG,³ ZACHARY DERWIN,³ OM DESAI,³ JOHN S. DIAS,³
KENZIE A. DICE,³ R. DICK,³ CYRUS A. DICKEN,³ HENRY DIETRICK,³ ALEXIS M. DINSER,³ ALYSSA M. DIXON ³

THOMAS J. DIXON ³, HELEN C. DO, ³ CHRIS H DOAN, ³ CONNOR DOANE, ³ JOSHUA DODRILL ³,
 TIMOTHY DOERMER, ³ J. DOMINGUEZ, ³ EMERSON N. DOMKE, ³ CAROLINE R. DORAN, ³ JACKSON A. DORR, ³
 PHILIP DORRICO ³, DANIELLE C. DRESDNER ³, MICHAEL DRISCOLL, ³ KAILER H. DRISCOLL, ³
 SHERIDAN J. DUNCAN, ³ CHRISTIAN DUNLAP, ³ GABRIELLE M. DUNN, ³ TIEN Q. DUONG, ³
 TOMI OSHIMA DUPEYRON ³, PETER DVORAK, ³ ANDREW EAST, ³ ANDREW N. EAST, ³ BREE EDWARDS, ³
 LAUREN EHRLICH ³, SARA I. ELBASHIR, ³ RASCE ENGELHARDT, ³ JACOB ENGELSTAD ³, COLIN ENGLAND, ³
 ANDREW ENRICH, ³ ABBEY ERICKSON, ³ BENJAMIN ERICKSON, ³ NATHAN EVANS, ³ CALVIN A EWING ³,
 ELIZABETH A. EYESON, ³ IAN FABER, ³ AVERY M. FAILS, ³ JOHN T FAUNTLEROY ³, KEVIN FELL, ³ ZITIAN FENG, ³
 LOGAN D. FENWICK, ³ RYANN FIFE, ³ JOHN ALFRED D. FIGUEIRINHAS, ³ JEAN-PAUL FISCH ³, EMMALEE FISCHER, ³
 JULES FISCHER-WHITE, ³ AIDAN F. FITTON, ³ ALEXANDER FIX ³, LYDIA FLACKETT, ³ FERNANDO FLORES, ³
 AIDAN FLOYD, ³ LEONARDO DEL FOCO, ³ ADEDUNI FOLARIN ³, AIDAN E. FORBES, ³ ELISE FORTINO, ³
 BENJAMIN L. FOUGERE, ³ ALEXANDRA A. FOWLER ³, MARGARET FOX ³, JAMES M. FRENCH, ³
 KATHERINE V. FRENCH ³, CALVIN R. FUCHS, ³ BETHANY E. S. FUHRMAN ³, SEBASTIAN FURNEY ³,
 GABRIELA GALARRAGA, ³ SKYLAR GALE ³, KEALA C. GAPIN, ³ A. J. GARSCADDEN, ³ RACHEL GASSER, ³
 LILY GAYOU, ³ EMILY E. GEARHART, ³ JANE GEISMAN, ³ JULIANNE R. GENESER, ³ SL GENNE ³,
 JULIA G GENTILE, ³ ELEANOR GENTRY, ³ JACOB D. GEORGE ³, NATHANIEL JAMES GEORGIADIS, ³
 PHILLIP GERHARDSTEIN, ³ CLINT GERSABECK, ³ BANDAR ABU GHAITH, ³ DORSA GHIASSI, ³ B. C. GIEBNER, ³
 DALTON GILMARTIN, ³ CONNOR B. GILPATRICK, ³ MICHAEL GJINI, ³ OLIVIA GOLDEN, ³ NATHAN T. GOLDING, ³
 C. A. GOLDSBERRY, ³ ANGEL R. GOMEZ, ³ ANGEL A. GOMEZ, ³ SEAN GOPALAKRISHNAN, ³ MARIAM GOPALANI, ³
 NICHOLAS GOTLIB, ³ ALAINA S. GRAHAM, ³ MICHAEL J GRAY, ³ ALANNAH H. GREGORY, ³ JOSHUA A. GREGORY, ³
 KRISTYN GRELL, ³ JUSTUS GRIEGO, ³ NICHOLAS F. GRIFFIN ³, KYLE J. GRIFFIN ³, MATT GUERRERO ³,
 NICOLE GUNDERSON ³, MUTIAN GUO, ³ E. R. GUSTAVSSON, ³ GRACE K. HACH, ³ L. N. HAILE, ³
 JESSICA HAINES ³, JACK J. MC HALE, ³ RYDER BUCHANAN HALES, ³ MARK S. HALEY, ³ JACQUELINE L. HALL, ³
 SEAN R. HAMILTON ³, SOONHEE HAN, ³ TYLER HAND, ³ LUKE C. HANLEY, ³ CONNOR M HANSEN, ³
 JOSHUA A. HANSEN, ³ JONATHAN HANSSON, ³ TONY YUNFEI HAO ³, NICHOLAS HARATSARIS, ³ ISABELLE HARDIE, ³
 DILLON F. HARDWICK, ³ CAMERON T. HARES ³, LOGAN SWOUS HARRIS, ³ COYLE M. HARRIS, ³ OMER HART, ³
 KYLE HASHIRO, ³ ELSIE HATTENDORF, ³ CALDER HAUBRICH, ³ ELIJAH HAWAT ³, GRIFFIN A. HAYRYNEN, ³
 DANIELLE A. HEINTZ, ³ TIM HELLWEG, ³ ANGEL HERNANDEZ ³, EMANUEL HERRERA, ³ ROBERT N. HERRINGTON ³,
 TIM HERWIG ³, TROY M. HESSE, ³ QUINN HIATT, ³ LEA PEARL HIBBARD, ³ IMARI R. HICKS, ³ ANDREW J. HICKS, ³
 NIGEL HIGHHOUSE ³, ANNALISE K. HILDEBRAND, ³ PAULA HILL, ³ HALLIE HILL, ³ EVAN HINTSA, ³
 ANNA E. HIRSCHMANN, ³ TRAVIS HITT, ³ ELLA HO ³, ISABELLE J. HOFF, ³ ALEX HOFFMAN ³,
 BLAKE A. HOGAN ³, LINDA HORNE, ³ TIMOTHY J HOUCK, ³ NOAH H. HOWELL, ³ E. M. HRUDKA, ³ J. HU, ³
 JIANYANG HUANG, ³ CHENQI HUANG, ³ SHANCHENG HUANG ³, ZACHARY A. HUDSON ³, NATHAN C. HUDSON, ³
 TYLER J. HUEBSCH, ³ OWEN HULL, ³ SAMUEL C HUNTER, ³ TROY HUSTED ³, ABIGAIL P. HUTABARAT, ³
 LESLIE HUYNH, ³ ANTONIO E. SAMOUR II ³, YOLANDE IDOINE, ³ JULIA A. INGRAM, ³ TARO IOVAN, ³
 SAMUEL A. ISERT, ³ ANTONIO SALCIDO-ALCANTARA JR, ³ ALAN A JAIMES, ³ CONNOR JAMESON, ³ J. R. JARRIEL, ³
 SAM JARVIS, ³ JOSH JENKINS, ³ ALEXANDER V. JENSEN, ³ JACOB JEONG ³, LUKE A. JESERITZ, ³ TREVOR JESSE, ³
 SOO YEUN JI, ³ YUFAN JIANG, ³ OWEN JOHNSON ³, MATTHEW JOHNSON, ³ SAWYER JOHNSON, ³ JULIA JOHNSTON, ³
 BRAEDON Y. JOHNSTON, ³ OLIVIA M. JONES, ³ M. R. JONES, ³ TARA JOURABCHI, ³ TONY A. HOUSE JR., ³
 PARKER JUELS, ³ SABRINA J. H. T. KAINZ, ³ EMILY KAISER, ³ NICOLAS IAN KALLEMEYN, ³ MADISON H. KALMUS, ³
 ETASH KALRA ³, MARGARET KAMENETSKIY, ³ JEERAKIT KANOKTHIPPAYAKUN ³, SHAUN D. KAPLA, ³
 BRENNAN J. KARSH, ³ CADEN J. KEATING, ³ MORGAN A. KELLEY, ³ MICHAEL P. KELLEY ³, NICHOLAS KELLY, ³
 JAMES KELLY, ³ TEAGAN KELLY ³, CHRISTOPHER M KELLY, ³ KELLEN KENNEDY, ³ CAYLA J. KENNEDY, ³
 FORREST KENNEDY, ³ ABIGAIL KENNEDY, ³ LIANA KERR-LAYTON ³, MARILYN KETTERER ³, IBRAHEEM A. KHAN, ³
 USMAN KHAN, ³ SAPRIYA KHANAL, ³ JACK L. KIECHLIN, ³ DOMINIC KILLIAN, ³ KEVIN KIM, ³ BRIAN T. KIM, ³
 MATTHEW M. KIM, ³ JAKE KIM, ³ ASPEN KIMLICKO, ³ ISABEL M KIPP, ³ HUNTER B. KIRKPATRICK, ³
 NATALIE KISSNER, ³ EMILY R. KITE, ³ OLIVIA R. KLEINHAUS ³, PHILIP WHITING KNOTT ³, WILL KOCH, ³
 GRETA KOENIG, ³ EMILY KOKE, ³ THOMAS KOKES, ³ YASH S. KOTHAMDI ³, ZACK KRAJNAK ³,
 ZOE M. KRESEK ³, DYLAN KRIEGMAN ³, JAKE E. KRITZBERG ³, DAVIS J. KRUEGER, ³ BARTLOMIEJ KUBIAK, ³
 KIRSTEN KUEHL, ³ CHRISANNE KUESTER ³, NICOLAS A. KUIPER, ³ AMAN PRIYADARSHI KUMAR ³,
 DANIEL KWIATKOWSKI, ³ QUINTIN Y. LAFEMINA, ³ KYLE LAHMERS ³, ANTONIA LAM, ³ KALIN LANDREY, ³
 MAXWELL B. LANTZ ³, ZACHARY LARTER, ³ MEGAN LAUZON, ³ RIAN LAWLOR, ³ TYLER LEARNED, ³ E. C. LEE, ³
 JUNWON LEE, ³ ADRIANNA J. LEE, ³ JUSTIN LEE, ³ ALEXIS YING-SHAN LEE, ³ CHRISTIAN J LEE, ³
 NATHANIEL F. LEE, ³ LINZHI LEIKER, ³ DYLAN LENGERICH, ³ CECILIA LEONI, ³ ADRIENNE R. LEZAK, ³
 DAVID Y. LI ³, ISAAC LI, ³ RYAN Z. LIAO, ³ BRIDGET LINDERS, ³ MORGAN I LINGER, ³ KATHERINE B. LINNANE ³,
 SAM LIPPINCOTT ³, BARRETT LISTER, ³ SHELBY D LITTON, ³ NIANZI LIU, ³ STEVEN Y. LIU ³,
 TIMOTHY W. LOGAN ³, NATHAN LONDRES, ³ MIA C. LONERGAN ³, EMILY LOOKHOFF, ³ CHRISTIAN LOPEZ, ³

JUSTIN LORING ³, JEFFREY LUCCA ³, DAX LUKIANOW ³, NATHAN M. CHEANG ³, WILLIAM MACDONALD ³,
 CLAIRE A. MADONNA ³, KASEY O. MADSEN ³, TIFFANY E. MAKSIMUK ³, MACGUIRE MALLORY ³, RYAN A. MALONE ³,
 BLAKE MALY ³, XANDER R. MANZANARES ³, AIMEE S. MARAVI ³, SERAFIMA M. MARCUS ³, NASREEN MARIKAR ³,
 JOSIE A. MARQUEZ ³, MATHEW J. MARQUEZ ³, LAUREN MARSH ³, TONI MARSH ³, LOGAN S. MARTIN ³,
 ALEXA M. MARTINEZ ³, JOSE R. MARTINEZ ³, HAZELIA K. MARTINEZ ³, CARA MARTYR ³, MIRNA MASRI ³,
 GIORGIO MATESSI ³, ADAM IZZ KHAN MOHD REDUAN MATHAVAN ³, RANDI M. MATHIESON ³, KABIR P. MATHUR ³,
 GRAHAM MAUER ³, VICTORIA A. MAYER ³, LIAM MAZZOTTA ³, GLEN S. MCCAMMON ³, ROWAN MCCONVEY ³,
 TYLER MCCORMICK ³, ANDREW MCCOY ³, KELLEEN MCENTEE ³, MEAGHAN V. MCGARVEY ³, RILEY M. MCGILL ³,
 JAMES K. MCINTYRE ³, FINBAR K. MCKEMEY ³, ZANE MCMORRIS ³, JESSE J. MCMULLAN ³, ELLA MCQUAID ³,
 CADEN MCVEY ³, KYLE MCCURRY ³, MATEO M. MEDELLIN ³, MELISSA MEDIALDEA ³, AMAR MEHIDIC ³,
 STELLA MEILLON ³, JONAH B. MEISELMAN-ASHEN ³, SARAH MELLETT ³, DOMINIC MENASSA ³, CITLALI MENDEZ ³,
 PATRICIA MENDOZA-ANSEMI ³, RILEY MENKE ³, SARAH MESGINA ³, WILLIAM J. MEWHIRTER ³, ETHAN MEYER ³,
 AYA M. MIFTEN ³, ETHAN J. MILES ³, ANDREW MILLER ³, JOSHUA B. MILLER ³, EMILY B. MILLICAN ³,
 SARAH J. MILLICAN ³, DYLAN P. MILLS ³, JOSH MINIMO ³, JAY H. MISENER ³, ALEXANDER J. MITCHELL ³,
 ALEXANDER Z. MIZZI ³, LUIS MOLINA-SAEZ ³, TYLER S MOLL ³, HAYDEN MOLL ³, MAXIMUS MONTANO ³,
 MICHAEL MONTOYA ³, ELI MONYEK ³, JACQUELINE RODRIGUEZ MORA ³, GAVIN MORALES ³, GENARO MORALES ³,
 ANNALISE M. MORELOCK ³, CORA MORENCY ³, ANGEL J. MORENO ³, REMY MORGAN ³, ALEXANDER P. MOSS ³,
 BRANDON A. MUCKENTHALER ³, ALEXANDER MUELLER ³, OWEN T. MULCAHY ³, ARIA T. MUNDY ³,
 ALEXIS A. MUNIZ ³, MAXWELL J. MURPHY ³, MADALYN C. MURPHY ³, RYAN C. MURPHY ³, TYLER MURREL ³,
 ANDREW J. MUSGRAVE ³, MICHAEL S. MYER ³, KSHMYA NANDU ³, ELENA R. NAPOLETANO ³, ABDULAZIZ NAQI ³,
 ANOOTHY NARAYAN ³, LIEBE NASSER ³, BRENNKA NEELAND ³, MOLLY NEHRING ³, MAYA LI NELSON ³,
 LENA P. NGUYEN ³, LENA NGUYEN ³, LEONARDO NGUYEN ³, VALERIE A. NGUYEN ³, KHOA D NGUYEN ³,
 KELSO NORDEN ³, COOPER NORRIS ³, DARIO NUNES-VALDES ³, ROSEMARY O. NUSSBAUM ³, CIAN O'SULLIVAN ³,
 IAN O'NEILL ³, S. H. OAKES ³, ANAND ODBAYAR ³, CALEB OGLE ³, SEAN OISHI-HOLDER ³, NICHOLAS OLGUIN ³,
 NATHANIEL P. OLSON ³, JASON ONG ³, ELENA N. OPP ³, DAN ORBIDAN ³, RYAN OROS ³, ALTHEA E. ORT ³,
 MATTHEW OSBORN ³, AUSTIN OSOGWIN ³, GRANT OTTO ³, JESSICA OUDAKKER ³, IGOR OVERCHUK ³,
 HANNAH M. PADGETTE ³, JACQUELINE PADILLA ³, MALLORY PALIZZI ³, MADELEINE L. PALMGREN ³, ADLER PALOS ³,
 LUKE J. PAN ³, NATHAN L. PARKER ³, SASHA R. PARKER ³, EVAN J. PARKINSON ³, ANISH PARULEKAR ³,
 PAIGE J. PASTOR ³, KAJAL PATEL ³, AKHIL PATEL ³, NEIL S. PATEL ³, SAMUEL PATTI ³, CATHERINE PATTON ³,
 GENEVIEVE K. PAYNE ³, MATTHEW P. PAYNE ³, HARRISON M. PEARL ³, CHARLES B. BECK VON PECCOZ ³,
 ALEXANDER J. PEDERSEN ³, LILY M. PELSTER ³, MUNISETTHA E. PEOU ³, J. S. PEREZ ³, FREDDY PEREZ ³,
 ANNELESE PESCE ³, AUDREY J. PETERSEN ³, B. PETERSON ³, ROMEO S.L. PETRIC ³, JOSHUA PETTINE ³,
 ETHAN J. PHALEN ³, ALEXANDER V. PHAM ³, DENISE M. PHAN ³, CALLIE C PHERIGO ³, LANCE PHILLIPS ³,
 JUSTIN PHILLIPS ³, KRISTA PHOMMATHA ³, ALEX PIETRAS ³, TAWANCHAI P. PINE ³, SEDIQUE PITSUEAN-MEIER ³,
 ANDREW M. PIXLEY ³, WILL PLANTZ ³, WILLIAM C. PLUMMER ³, KAITLYN E. PLUTT ³, AUDREY E. PLZAK ³,
 KYLE POHLE ³, HYDEN POLIKOFF ³, MATTHEW POLLARD ³, MADELYN POLLY ³, TREVOR J. PORTER ³,
 NICHOLAS K. PRICE ³, GALE H. PRINSTER ³, HENRY AUSTIN PROPPER ³, JOSH QUARDERER ³, MEGAN S. QUINN ³,
 OLIVER QUINONEZ ³, DEVON QUISPE ³, CAMERON RAGSDALE ³, A. L. RAHN ³, M. RAKHMONOVA ³,
 ANOUSH K RALAPANAWA ³, NIDHI RAMACHANDRA ³, NATHANIEL RAMIREZ ³, ARIANA C. RAMIREZ ³,
 SACHA RAMIREZ ³, PARKER RANDOLPH ³, ANURAG RANJAN ³, FREDERICK C RANKIN ³, SARAH GRACE RAPAPORT ³,
 NICHOLAS O RATAJCZYK ³, MIA G. V. RAY ³, BRIAN D. REAGAN ³, JOHN C. RECCHIA ³, BROOKLYN J. REDDY ³,
 JOSEPH REED ³, CHARLIE REED ³, JUSTIN REEVES ³, EILEEN N. REH ³, FERIN J. VON REICH ³,
 ANDREA B. REYNA ³, ALEXANDER REYNOLDS ³, HOPE REYNOLDS ³, MATTHEW RIPPEL ³, GUILLERMO A. RIVAS ³,
 ANNA LINNEA RIVES ³, AMANDA M. ROBERT ³, SAMUEL M. ROBERTSON ³, MAEVE RODGERS ³,
 STEWART ROJEC ³, ANDRES C. ROMERO ³, RYAN ROSASCO ³, BETH ROSSMAN ³, MICHAEL ROTTER ³,
 TYNDALL ROUNSEFELL ³, CHARLOTTE ROUSE ³, ALLIE C. ROUTLEDGE ³, MARC G. ROY ³, ZOE A. ROY ³,
 RYAN RUGER ³, KENDALL RUGGLES-DELGADO ³, IAN C. RULE ³, MADIGAN RUMLEY ³, BRENTON M. RUNYON ³,
 COLLIN RUPRECHT ³, BOWMAN RUSSELL ³, SLOAN RUSSELL ³, DIANA RYDER ³, DAVID SAEB ³, J. SALAZAR ³,
 VIOLETA SALAZAR ³, MAXWELL SALDI ³, JOSE A. SALGADO ³, ADAM D. SALINDEHO ³, ETHAN S. SANCHEZ ³,
 GUSTAVO SANCHEZ-SANCHEZ ³, DARIAN SARFARAZ ³, SUCHETA SARKAR ³, GINN A. SATO ³, CARL SAVAGE ³,
 MARCUS T. SCHALLER ³, BENJAMIN T. SCHECK ³, JARED A. W. SCHLENKER ³, MATTHEW J SCHOFFER ³,
 STEPHANIE H. SCHUBERT ³, COURTNEY SCHULTZE ³, GRACE K SCHUMACHER ³, KASPER SEGLEM ³,
 LAUREN SERIO ³, OCTAVE SEUX ³, HANNAN SHAHBA ³, CALLIE D. SHANAHAN ³, SHAJESH SHARMA ³,
 NATHAN SHAVER ³, TIMOTHY SHAW ³, ARLEE K. SHELBY ³, EMMA SHELBY ³, GRACE SHELCHUK ³,
 TUCKER SHELDRAKE ³, DANIEL P. SHERRY ³, KYLE Z. SHI ³, AMANDA M. SHIELDS ³, KYUNGEUN SHIN ³,
 MICHAEL C. SHOCKLEY ³, DOMINICK SHOHA ³, JADON SHORTMAN ³, MITCHELL SHUTTLEWORTH ³, LISA SIBRELL ³,

MOLLY G. SICKLER,³ NATHAN SILES,³ H. K. SILVESTER ³, CONOR SIMMONS,³ DYLAN M. SIMONE ³,
 ANNA SIMONE,³ SAVI SINGH,³ MAYA A. SINGH,³ MADELINE SINKOVIC,³ LEO SIPOWICZ ³, CHRIS SJOROOS,³
 RYAN SLOCUM,³ COLIN SLYNE,³ KORBEN SMART,³ ALEXANDRA N. SMITH,³ KELLY SMITH,³ COREY SMITH,³
 ELENA K. SMITH ³, SAMANTHA M. SMITH,³ PAIGE E. SMITH,³ TREVOR J SMITH,³ G. L. SNYDER,³
 DANIEL A. SOBY,³ ARMAN S. SOHAIL,³ WILLIAM J. SOLORIO ³, LINCOLN SOLT,³ CAITLIN SOON,³
 AVA A SPANGLER,³ BENJAMIN C. SPICER,³ ASHISH SRIVASTAVA ³, EMILY STAMOS ³, PETER STARBUCK,³
 ETHAN K. STARK,³ TRAVIS STARLING,³ CAITLYN STAUDENMIER,³ SHEEN L. STEINBARTH,³
 CHRISTOPHER H. STEINSBERGER,³ TYLER STEPANIAK ³, ELLIE N. STEWARD,³ TREY STEWART,³ T. C. STEWART,³
 COOPER N. STRATMEYER,³ GRANT L. STRATTON,³ JORDIN L. STRIBLING,³ S. A SULAIMAN ³,
 BRANDON J SULLIVAN,³ M. E. SUNDELL,³ SOHAN N. SUR ³, ROHAN SURI,³ JASON R. SWARTZ,³
 JOSHUA D. SWEENEY,³ KONNER SYED,³ EMI SZABO,³ PHILIP SZEREMETA ³, MICHAEL-TAN D. TA,³
 NOLAN C. TANGUMA,³ KYLE TAULMAN ³, NICOLE TAYLOR,³ ELEANOR TAYLOR,³ LIAM C. TAYLOR ³,
 K. E. TAYMAN,³ YESICA TELLEZ,³ RICHARD TERRILE,³ COREY D TESDAHL,³ QUINN N. THIELMANN,³
 GERIG THOMAN,³ DANIEL THOMAS,³ JEFFREY J. THOMAS,³ WILLIAM N. THOMPSON ³, NOAH R. THORNALLY ³,
 DARIEN P. TOBIN,³ KELLY TON,³ NATHANIEL J. TOON ³, KEVIN TRAN ³, BRYN TRAN,³
 MAEDEE TRANK-GREENE,³ EMILY D. TRAUTWEIN,³ ROBERT B. TRAXLER,³ JUDAH TRESSLER,³
 TYSON R. TROFINO,³ THOMAS TROISI,³ BENJAMIN L. TRUNKO,³ JOSHUA K. TRUONG ³, JULIA TUCKER,³
 THOMAS D UMBRIGHT,³ C. H. UPHOFF,³ ZACHARY T. UPTHEGROVE ³, SHREENIJA VADAYAR,³
 WHITNEY VALENCIA,³ MIA M. VALLERY,³ ELEANOR VANETTEN,³ JOHN D. VANN ³, ILIAN VARELA,³
 ALEXANDR VASSILYEV,³ NICHOLAS J. VAVER,³ ANJALI A. VELAMALA,³ EVAN VENDETTI,³ NANCY ORTIZ VENEGAS,³
 ADITYA V. VEPA ³, MARCUS T. VESS,³ JENNA S. VETA,³ ANDREW VICTORY,³ JESSICA VINSON,³
 CONNOR MAKLAIN VOGEL,³ MICHAELA WAGONER,³ STEVEN P. WALLACE,³ LOGAN WALLACE,³ CAROLINE WALLER,³
 JIAWEI WANG,³ KEENAN WARBLE,³ N. R. D. WARD-CHENE,³ JAMES ADAM WATSON,³ ROBERT J. WEBER,³
 AIDAN B. WEGNER,³ ANTHONY A WEIGAND ³, AMANDA M. WEINER ³, AYANA WEST,³
 ETHAN BENJAMIN WEXLER ³, NICOLA H. WHEELER,³ JAMISON R. WHITE,³ ZACHARY WHITE,³ OLIVER S. WHITE,³
 LLOYD C. WHITTALL ³, ISAAC WILCOVE,³ BLAKE C. WILKINSON,³ JOHN S. WILLARD,³ ABIGAIL K. WILLIAMS ³,
 SAJAN WILLIAMS,³ ORION K. WILSON,³ EVAN M. WILSON ³, TIMOTHY R. WILSON,³ CONNOR B. WILSON,³
 BRIAHN WITKOFF,³ AUBREY M. WOLFE,³ JACKSON R. WOLLE,³ TRAVIS M. WOOD,³ AIDEN L. WOODARD,³
 KATELYNN WOOTTEN,³ CATHERINE XIAO ³, JIANING YANG,³ ZHANCHAO YANG,³ TRENTON J. YOUNG,³
 ISABEL YOUNG,³ THOMAS ZENNER,³ JIAQI ZHANG ³, TIANWEI ZHAO ³, TIANNIE ZHAO,³ NOAH Y. ZHAO,³
 CHONGRUI ZHOU ³, JOSH J ZIEBOLD,³ LUCAS J. ZIEGLER,³ JAMES C. ZYGMUNT,³ AND JINHUA ZHANG³

(PHYSICS 1140 CLASS AND TAs)

H. J. LEWANDOWSKI ^{3,4}

¹ *Laboratory for Atmospheric and Space Physics, University of Colorado at Boulder, 3665 Discovery Dr., Boulder, CO 80303-7814, USA*

² *Applied Physics Laboratory, Johns Hopkins University, 11100 Johns Hopkins Rd., Laurel, MD 20723, USA*

³ *University of Colorado at Boulder, Boulder, CO 80309-0390, USA*

⁴ *JILA, National Institute of Standards and Technology and University of Colorado, Boulder, Colorado 80309, USA*

⁵ *NASA Goddard Space Flight Center, 8800 Greenbelt Rd., Greenbelt, MD 20771, USA*

⁶ *Cooperative Institute for Research in Environmental Sciences, University of Colorado, Boulder, CO 80309, USA*

⁷ *NOAA National Centers for Environmental Information, 325 Broadway, Boulder, CO 80305, USA*

⁸ *Department of Physics, University of Colorado at Boulder, Boulder, CO 80309-0390, USA*